## Addendum I

From data-month September 2002 onwards, the printed ISC Bulletins have been generated directly from the ISC Relational Database.

From data-month October 2002, a new location program ISCloc has been used in operations. Also, the IASPEI standard seismic phase list has now been adopted by the ISC, please see the last pages of this Bulletin for details.

From data-month January 2003 onwards, an updated regionalisation scheme has been adopted (Young,J.B., B.W.Presgrave, H.Aichele, D.A.Wiens, E.A.Flinn The Flinn-Engdahl Regionalisation Scheme: the 1995 Revision, Physics of the Earth and Planetary Interiors 96 (1996), 223-297)

These developments have prompted the need to review and revise the format of the Bulletin.

The following example illustrates the changes :-

**September 2002**

*NEIC **01** 18:45:41.7±1.7,21°.70S×179°.55W,h600km,mb4.6/6,*
*Error ellipse: s-maj=75.5km s-min=25.7km az=151.0*
*IDC **01** 18:45:46.3±2.6,21°.76S×179°.70W,h627km,37km,mb3.5/4,*
*mb1 3.7/4,mb1mx3.2/14,Error ellipse: s-maj=83.2km*
*s-min=20.6km az=159.0*
**ISC 01 18:45:41.7±1.4,22°.1S×0°.2×179°.3W×0°.2,h600km,n22,**
**σ1§55/24,mb4.4/9,1C,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HBZ** | **Hicks Bay** | **15.60** | **187** | *e*P | | **P** | **18 48 53.1** | **-2.1** |
| **URZ** | **Urewera** | **16.41** | **190** | P | | **P** | **18 49 01.5** | **-1.1** |
| **MRZ** | **Mangatainoka R** | **19.02** | **192** | *e*P | | **P** | **18 49 26.7** | **+0.3** |
| **DIW** | **D'Urville Isla** | **19.52** | **195** | *e*P | | **P** | **18 49 27.3** | **-3.6** |
| **CAW** | **Cannon Point** | **19.55** | **193** | *e*P | | **P** | **18 49 31.7** | **+0.5** |
| **OTW** | **Orongorongo Tu** | **19.73** | **193** | *e*P | | **P** | **18 49 33.0** | **+0.2** |
| **MOW** | **Moikau** | **19.82** | **192** | *e*P | | **P** | **18 49 35.5** | **+1.9** |
| **THZ** | **Tophouse** | **20.68** | **197** | *e*P | | **P** | **18 49 42.0** | **+0.5** |
| **KHZ** | **Kahutara** | **21.14** | **195** | P | | **P** | **18 49 46.2** | **+0.8** |
| **ARMA** | **Armidale** | **27.28** | **246** | *e*P | | **P** | **18 50 42.4** | **+2.3** |
| | 4.9nm,0.5s | | | | | | | |
| **CTA** | **Charters Tower** | **32.13** | **267** | ⇑*i*P | | **P** | **18 51 22.3** | **+0.5** |
| | 13nm,0.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.00** | **246** | *e*P | | **P** | **18 51 55.3** | **+1.5** |
| | 3.1nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **42.97** | **259** | P | | **P** | **18 52 50.1** | **+0.4** |
| | 9.8nm,0.5s,baz=92,slow=8.2,SNR=47 | | | | | | | |
| ASAR | | | | S | | **S** | **18 58 31.3** | **-1.6** |
| | 1.0nm,0.8s,baz=95,slow=15,SNR=5.7 | | | | | | | |
| **ASPA** | **Alice Springs** | **42.97** | **259** | *e*P | | **P** | **18 52 50.1** | **+0.4** |
| **WRA** | **Warramunga Arr** | **43.18** | **264** | P | | **P** | **18 52 51.0** | **-0.4** |
| | 1.8nm,0.3s,baz=96,slow=7.8,SNR=93 | | | | | | | |
| WRA | | | | S | | **S** | **18 58 33.0** | **-2.9** |
| | 0.3nm,0.9s,baz=99,slow=14,SNR=3.0 | | | | | | | |
| **KAKA** | **Kakadu** | **46.79** | **273** | *e*P | | **P** | **18 53 18.2** | **-0.7** |
| | 14nm,0.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.61** | **264** | *e*P | | **P** | **18 53 54.3** | **+0.1** |
| | 12nm,0.3s | | | | | | | |
| **MBWA** | **Marble Bar** | **56.31** | **259** | *e*P | | **P** | **18 54 27.1** | **-0.1** |
| | 11nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.48** | **290** | P | | **P** | **18 57 38.1** | **+1.7** |
| | 1.3nm,0.8s,baz=135,slow=3.1,SNR=8.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.23** | **349** | PKP | | **PKiKP** | **19 03 43.7** | **-1.2** |
| | 0.7nm,0.6s,baz=282,slow=4.2,SNR=3.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **136.91** | **342** | PKP | | **PKiKP** | **19 03 57.3** | **-1.3** |
| | 3.7nm,1.1s,baz=158,slow=3.2,SNR=3.4 | | | | | | | |
| **MLR** | **Muntele Rosu** | **148.83** | **325** | PKPbc | | **PKiKP** | **19 04 22.7** | **-1.0** |
| | 0.2nm,0.7s,baz=1.2,slow=23,SNR=2.3 | | | | | | | |

*Epicentral Estimates*

Origin times - The superscripts have been removed and a simpler format adopted.
Magnitudes - All magnitudes that were reported to the ISC are now shown. Only two per agency were allowed in the past.
Error Ellipses - The keywords have been shortened.

*Observational Data*

The station code, station name, epicentral distance and azimuth are all shown in **bold** for Initial phases. For Secondary phases, only the station code (in normal font) is repeated.

*Phase ID's* - The Operator's identification is shown in normal font. The Operator's residual is no longer printed. When the arrival time of an initial or secondary phase has contributed to the location - the ISC's identification, the arrival time and the ISC's travel-time residual are all shown in **bold** .

*Phase Parameters* - The following parameters are included on supplementary lines where appropriate :-

Component, amplitude and period (or logA/T) - reported by the Operator.
Station magnitude estimate - computed by the ISC.
Slowness, Back-Azimuth, Signal-to-Noise ratio - measured by the Operator.

## Addendum II

From data-month January 2006 the ISC hypocentres are computed using the AK135 earth velocity model ( *Kennett, B.L.N. Engdahl, E.R. & Buland R., 1995. Constraints on seismic velocities in the Earth from travel times, Geophys J Int, 122, 108-124; B.L.N. Kennett, 2005. Seismological tables: ak135. Research School of Earth Sciences, the Australian National University, Canberra* ) and then reviewed by the ISC seismologists. The ISC still produces the hypocentre solutions based on Jeffreys-Bullen travel time tables (agency code ISCJB), yet these solutions are no longer reviewed.

The ISC is planning to re-compute the entire ISC dataset using AK135 once new location procedures are designed, tested, discussed and approved by the ISC Governing Council. Until that time the automatic ISCJB locations will continue to be produced alongside the AK135 solutions to observe the long-time continuity of the ISC Bulletin.

## Addendum III

From data month January 2009 the ISC hypocentres are computed using the new ISC location algorithm and all reported IASPEI seismic phases, for which ak135 predictions are available. This algorithm is described in: *Bondár, I. and D.A. Storchak (2011), Improved location procedures at the International Seismological Centre, Geophys. J. Int., 186, 1220-1244, doi:10.1111/j.1365-246X.2011.05107.x*

The alternative locations based on JB-tables are still produced with the original location algorithm for consistency with the past data. It is still the plan that by the middle of calendar year 2014 all ISC locations (1960-2008) are going to be re-computed with the new locatin algorithm and ak135 as part of the ISC Bulletin Re-Build project, sponsored by the US NSF and several agencies from Japan, China and India.

*AFAD **01** 00:06:05.0±0.0, 39.°09N×23.°78E, h6km±4km, MW3.9*
*IDC **01** 00:06:08.7±0.9, 39.°09N×24.°27E, h0km, mb3.6/11, mbtmp3.6/18, ML3.5/5, MS2.7/5, Error ellipse: s-maj=15.1km s-min=13.9km az=101.0*
*ISK **01** 00:06:09.3, 39.°17N×24.°26E, h9km, ML3.6/18*
*ATH **01** 00:06:10.7, 39.°12N×24.°22E, h14km, ML3.6/26, Error ellipse: s-maj=0.9km s-min=0.5km az=109.0*
*THE **01** 00:06:10.3, 39.°13N×24.°23E, h9km, ML3.8/12, Error ellipse: s-maj=0.8km s-min=0.4km az=113.0*
*SOF **01** 00:06:10.8, 39.°29N±0.°03×24.°38E±0.°02, h10km, MD3.7/9*
*MCSM **01** 00:06:12.0±0.7, 39.°N±7.°×2.°4E±.°, h10km, mb4.1, mB3.8, MLv3.9, Mw(mB)2.8*
**ISC 01 00:06:09.7**±1.0**, 39.°12N**±0.°01×**24.°24E**±0.°01**, h9**km±8km**,**
**n203,** σ**1.°05**/276**, mb3.4**/10**, 27C-14D, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKY | Skiros Island | 0.34 | 135 | P | Pb | 00 06 17.5 | -0.4 |
| SKY | | | | S | Sb | 00 06 22.3 | -1.2 |
| | 21µm,0.2s | | | | | | |
| SKY | Skiros Island | 0.34 | 135 | P | Pb | 00 06 17.5 | -0.4 |
| SKY | | | | S | Sb | 00 06 22.7 | -0.7 |
| SKY | | | | AML | AML | 00 06 23.3 | |
| | comp=N,39114µm,0.2s | | | | | | |
| SKY | | | | AML | AML | 00 06 23.5 | |
| | comp=E,42348µm,0.2s | | | | | | |
| KYMI | Kymi, Euboea I | 0.50 | 193 | P | Pb | 00 06 19.9 | -0.7 |
| KYMI | | | | S | Sb | 00 06 27.5 | -0.4 |
| KYMI | Kymi, Euboea I | 0.50 | 193 | P | Pb | 00 06 19.9 | -0.7 |
| KYMI | | | | S | Sb | 00 06 26.8 | -1.1 |
| KYMI | | | | AML | AML | 00 06 28.6 | |
| | comp=N,8439µm,0.4s | | | | | | |
| KYMI | | | | AML | AML | 00 06 30.8 | |
| | comp=E,10454µm,0.3s | | | | | | |
| EFSA | Agios Efstrati | 0.72 | 54 | P | Pb | 00 06 24.4 | +0.1 |
| EFSA | | | | S | Sb | 00 06 34.3 | 0.0 |
| EFSA | | | | AML | AML | 00 06 35.2 | |
| | comp=N,17289µm,0.5s | | | | | | |
| EFSA | | | | AML | AML | 00 06 37.4 | |
| | comp=E,37000µm,0.5s | | | | | | |
| NEO | Neokhori | 0.81 | 284 | P | Pg | 00 06 25.1 | -0.2 |
| NEO | | | | S | Sb | 00 06 36.9 | -0.1 |
| | comp=E,15µm,0.4s | | | | | | |
| NEO | Neokhori | 0.81 | 284 | P | Pg | 00 06 25.4 | +0.1 |
| NEO | | | | S | Sg | 00 06 36.5 | +0.6 |
| NEO | | | | AML | AML | 00 06 39.2 | |
| | comp=N,39239µm,0.5s | | | | | | |
| NEO | | | | AML | AML | 00 06 39.9 | |
| | comp=E,22436µm,0.4s | | | | | | |
| DION | Dionisos Attik | 1.07 | 193 | P | Pn | 00 06 31.1 | +0.3 |
| DION | | | | S | Sn | 00 06 46.1 | +0.3 |
| | comp=E,9µm,0.4s | | | | | | |
| DION | Dionisos Attik | 1.07 | 193 | P | Pn | 00 06 30.7 | -0.1 |
| DION | | | | S | Sb | 00 06 44.1 | -0.3 |
| DION | | | | AML | AML | 00 06 50.1 | |
| | comp=E,10851µm,0.7s | | | | | | |
| DION | | | | AML | AML | 00 06 52.8 | |
| | comp=N,11762µm,0.4s | | | | | | |
| LIA | Limnos Island | 1.07 | 43 | P | Pn | 00 06 30.4 | -0.4 |
| LIA | | | | S | Sn | 00 06 45.3 | -0.5 |
| LIA | Limnos Island | 1.07 | 43 | P | Pn | 00 06 30.5 | -0.4 |
| LIA | | | | S | Sb | 00 06 44.8 | +0.4 |
| LIA | | | | AML | AML | 00 06 47.1 | |
| | comp=N,31712µm,0.4s | | | | | | |
| LIA | | | | AML | AML | 00 06 47.4 | |
| | comp=E,25173µm,0.6s | | | | | | |
| PTL | Penteli | 1.11 | 195 | P | Pb | 00 06 31.0 | 0.0 |
| PTL | | | | S | Sn | 00 06 47.2 | +0.4 |
| | comp=E,2µm,0.5s | | | | | | |
| PTL | Penteli | 1.11 | 195 | P | Pb | 00 06 30.9 | 0.0 |
| PTL | | | | S | Sb | 00 06 45.3 | -0.2 |
| PTL | | | | AML | AML | 00 06 49.0 | |
| | comp=N,3664µm,0.5s | | | | | | |
| PTL | | | | AML | AML | 00 06 51.2 | |
| | comp=E,4684µm,0.6s | | | | | | |
| VIL2 | Platees | 1.18 | 220 | P | Pg | 00 06 32.2 | -0.2 |
| VIL2 | | | | S | Sg | 00 06 47.1 | -0.6 |
| VIL2 | | | | AML | AML | 00 06 52.9 | |
| | comp=N,12368µm,0.6s | | | | | | |
| VIL2 | | | | AML | AML | 00 06 54.7 | |
| | comp=E,12070µm,0.4s | | | | | | |
| PSRA | Psara | 1.19 | 119 | P | Pn | 00 06 32.3 | -0.1 |
| PSRA | | | | S | Sb | 00 06 47.5 | -0.2 |
| VILL | Villia | 1.20 | 218 | P | Pg | 00 06 32.0 | -0.7 |
| VILL | | | | S | Sn | 00 06 49.5 | +0.5 |
| | comp=E,7µm,0.5s | | | | | | |
| ATHU | Athens Univers | 1.20 | 197 | P | Pg | 00 06 32.3 | -0.5 |
| ATHU | | | | S | Sn | 00 06 49.6 | +0.5 |
| ATHU | Athens Univers | 1.20 | 197 | P | Pg | 00 06 32.2 | -0.5 |
| ATHU | | | | S | Sg | 00 06 48.0 | -0.4 |
| ATHU | | | | AML | AML | 00 06 51.0 | |
| | comp=N,2172µm,0.4s | | | | | | |
| ATHU | | | | AML | AML | 00 06 56.2 | |
| | comp=E,1066µm,0.7s | | | | | | |
| ATH | Athens Observa | 1.22 | 200 | P | Pb | 00 06 32.5 | -0.3 |
| ATH | | | | S | Sn | 00 06 50.0 | +0.6 |
| | comp=E,3µm,0.2s | | | | | | |
| ATH | Athens Observa | 1.22 | 200 | P | Pb | 00 06 32.6 | -0.3 |
| ATH | | | | S | Sg | 00 06 48.0 | -0.8 |
| ATH | | | | AML | AML | 00 06 52.6 | |
| | comp=N,6330µm,0.3s | | | | | | |
| ATH | | | | AML | AML | 00 06 54.2 | |
| | comp=E,4335µm,0.2s | | | | | | |
| OUR | Ouranopolis | 1.23 | 351 | Pn | Pb | 00 06 32.8 | -0.3 |
| OUR | | | | Sn | Sg | 00 06 48.8 | -0.5 |
| OUR | Ouranopolis | 1.23 | 351 | P | Pb | 00 06 32.8 | -0.3 |
| OUR | | | | S | Sb | 00 06 49.2 | +0.1 |
| | comp=E,3µm,0.5s | | | | | | |
| OUR | Ouranopolis | 1.23 | 351 | P | Pb | 00 06 32.7 | -0.3 |
| OUR | | | | S | Sg | 00 06 48.2 | -1.1 |
| OUR | | | | AML | AML | 00 06 52.4 | |
| | comp=E,7656µm,0.5s | | | | | | |
| OUR | | | | AML | AML | 00 06 52.4 | |
| | comp=N,5878µm,0.5s | | | | | | |
| SIGR | SIGRI | 1.26 | 85 | Pn | Pg | 00 06 33.3 | -0.6 |
| SIGR | | | | Sn | Sn | 00 06 51.1 | +0.6 |
| SIGR | SIGRI | 1.26 | 85 | P | Pg | 00 06 33.3 | -0.6 |
| SIGR | | | | S | Sn | 00 06 50.9 | +0.4 |
| | comp=N,2µm,0.6s | | | | | | |
| SIGR | SIGRI | 1.26 | 85 | P | Pg | 00 06 33.5 | -0.4 |
| SIGR | | | | S | Sn | 00 06 49.9 | -0.6 |
| SIGR | | | | AML | AML | 00 06 53.9 | |
| | comp=E,3436µm,0.6s | | | | | | |
| SIGR | | | | AML | AML | 00 06 55.7 | |
| | comp=N,5742µm,0.6s | | | | | | |
| AXAR | Agios Charalam | 1.28 | 255 | P | Pn | 00 06 33.5 | -0.3 |
| AXAR | | | | S | Sn | 00 06 51.8 | +0.7 |
| | comp=N,6µm,0.4s | | | | | | |
| AXAR | Agios Charalam | 1.28 | 255 | P | Pn | 00 06 33.6 | -0.2 |
| AXAR | | | | S | Sb | 00 06 49.6 | -1.0 |
| AXAR | | | | AML | AML | 00 06 55.9 | |
| | comp=N,13403µm,0.4s | | | | | | |
| AXAR | | | | AML | AML | 00 06 55.9 | |
| | comp=E,8989µm,0.5s | | | | | | |
| VLY | Voula,Athens | 1.31 | 196 | P | Pn | 00 06 33.8 | -0.4 |
| VLY | | | | S | Sn | 00 06 52.4 | +0.6 |
| | comp=E,3µm,0.5s | | | | | | |
| VLY | Voula,Athens | 1.31 | 196 | P | Pn | 00 06 34.0 | -0.2 |
| VLY | | | | S | Sb | 00 06 50.2 | -1.1 |
| VLY | | | | AML | AML | 00 06 54.7 | |
| | comp=N,6869µm,0.6s | | | | | | |
| VLY | | | | AML | AML | 00 06 56.9 | |
| | comp=E,5915µm,0.5s | | | | | | |
| PLG | Polygyros | 1.40 | 334 | P | Pn | 00 06 34.8 | -0.6 |
| PLG | | | | S | Sb | 00 06 53.9 | 0.0 |
| | comp=E,1µm,0.5s | | | | | | |
| PLG | Polygyros | 1.40 | 334 | P | Pn | 00 06 34.7 | -0.7 |
| PLG | | | | S | Sb | 00 06 52.1 | -1.7 |
| PLG | | | | AML | AML | 00 06 57.8 | |
| | comp=N,3029µm,0.5s | | | | | | |
| PLG | | | | AML | AML | 00 06 58.2 | |
| | comp=E,2542µm,0.4s | | | | | | |
| AGG | Agios Georgios | 1.49 | 267 | Pn | Pn | 00 06 36.5 | -0.2 |
| AGG | | | | Sn | Sg | 00 06 57.6 | +0.1 |
| AGG | Agios Georgios | 1.49 | 267 | P | Pn | 00 06 36.5 | -0.2 |
| AGG | | | | S | Sb | 00 06 57.1 | +0.6 |
| | comp=E,2µm,0.7s | | | | | | |
| AGG | Agios Georgios | 1.49 | 267 | P | Pn | 00 06 36.4 | -0.2 |
| AGG | | | | S | Sn | 00 06 54.4 | -1.8 |
| AGG | | | | AML | AML | 00 07 01.6 | |
| | comp=E,5034µm,0.5s | | | | | | |
| AGG | | | | AML | AML | 00 07 06.5 | |
| | comp=N,5270µm,0.7s | | | | | | |
| LOUT | Loutraki | 1.50 | 222 | P | Pn | 00 06 36.6 | -0.2 |
| LOUT | Loutraki | 1.50 | 222 | P | Pn | 00 06 36.6 | -0.2 |
| LOUT | | | | S | Sn | 00 06 54.9 | -1.6 |
| LOUT | | | | AML | AML | 00 07 00.1 | |
| | comp=N,1091µm,0.3s | | | | | | |
| LOUT | | | | AML | AML | 00 07 02.5 | |
| | comp=E,1176µm,0.7s | | | | | | |
| DLFA | Delphi | 1.50 | 245 | P | Pn | 00 06 36.3 | -0.5 |
| DLFA | | | | S | Sn | 00 06 55.1 | -1.5 |
| KOCA | Canakkale, Ayv | 1.52 | 75 | P | Pb | 00 06 37.3 | -0.8 |
| KOCA | | | | S | Sn | 00 06 56.2 | -0.8 |
| KOCA | | | | *i* AML | AML | 00 07 04.0 | |
| | comp=E,849nm,0.6s | | | | | | |
| KOCA | | | | *i* AML | AML | 00 07 12.0 | |
| | comp=E,537nm,0.6s | | | | | | |
| THAS | Thassos island | 1.53 | 14 | P | Pn | 00 06 36.3 | -0.9 |
| THAS | Thassos island | 1.53 | 14 | P | Pn | 00 06 36.8 | -0.4 |
| THAS | | | | S | Sn | 00 06 55.9 | -1.3 |
| THAS | | | | AML | AML | 00 07 02.2 | |
| | comp=E,3640µm,0.3s | | | | | | |
| THAS | | | | AML | AML | 00 07 02.9 | |
| | comp=N,2125µm,0.3s | | | | | | |
| LRSO | Larissa Observ | 1.53 | 292 | P | Pn | 00 06 37.6 | +0.4 |
| LRSO | Larissa Observ | 1.53 | 292 | P | Pn | 00 06 37.2 | 0.0 |
| LRSO | | | | S | Sn | 00 06 55.7 | -1.6 |
| EAG2 | Marmaro, Chios | 1.57 | 111 | P | Pb | 00 06 38.1 | -0.7 |
| EAG2 | | | | S | Sn | 00 06 57.9 | -0.2 |
| EAG2 | | | | AML | AML | 00 07 05.0 | |
| | comp=E,11308µm,0.4s | | | | | | |
| EAG2 | | | | AML | AML | 00 07 06.6 | |
| | comp=N,20993µm,0.4s | | | | | | |
| BOZC | Bozcaada | 1.58 | 62 | P | Pn | 00 06 37.9 | 0.0 |
| BOZC | | | | S | Sn | 00 06 56.6 | -1.8 |
| BOZC | | | | *i* AML | AML | 00 07 03.0 | |
| | comp=N,511nm,0.6s | | | | | | |
| BOZC | | | | *i* AML | AML | 00 07 08.0 | |
| | comp=N,218nm,0.4s | | | | | | |
| PRK | Paraskevi | 1.58 | 85 | P | Pn | 00 06 37.9 | 0.0 |
| PRK | Paraskevi | 1.58 | 85 | P | Pn | 00 06 38.0 | 0.0 |
| PRK | | | | S | Sn | 00 06 57.2 | -1.3 |
| PRK | | | | AML | AML | 00 07 05.4 | |
| | comp=E,7539µm,0.6s | | | | | | |
| PRK | | | | AML | AML | 00 07 08.5 | |
| | comp=N,3740µm,0.8s | | | | | | |
| CHOS | Chios island | 1.60 | 117 | P | Pb | 00 06 38.6 | -0.8 |
| CHOS | Chios island | 1.60 | 117 | P | Pn | 00 06 38.3 | +0.2 |
| CHOS | | | | S | Sn | 00 06 57.7 | -1.2 |
| CHOS | | | | AML | AML | 00 07 07.0 | |
| | comp=N,1570µm,0.6s | | | | | | |
| CHOS | | | | AML | AML | 00 07 11.2 | |
| | comp=E,2343µm,0.7s | | | | | | |
| TYRN | Tyrnavos | 1.66 | 291 | P | Pn | 00 06 39.0 | 0.0 |
| TYRN | Tyrnavos | 1.66 | 291 | P | Pn | 00 06 38.8 | -0.1 |
| TYRN | | | | S | Sn | 00 06 58.1 | -2.3 |
| LIT | Litokhoron | 1.67 | 307 | P | Pn | 00 06 38.9 | -0.2 |
| GADA | Gvkgeada | 1.67 | 50 | Pn | Pn | 00 06 39.0 | -0.1 |
| GADA | | | | Sn | Sn | 00 07 00.5 | -0.1 |
| SMTH | Samothraki Isl | 1.68 | 36 | P | Pn | 00 06 38.4 | -0.8 |
| SMTH | Samothraki Isl | 1.68 | 36 | P | Pn | 00 06 38.4 | -0.8 |
| SMTH | | | | S | Sn | 00 06 59.1 | -1.8 |
| KOKK | Kokkinochori, | 1.71 | 354 | P | Pn | 00 06 39.3 | -0.4 |
| KOKK | Kokkinochori, | 1.71 | 354 | P | Pn | 00 06 39.2 | -0.4 |
| KOKK | | | | S | Sn | 00 07 00.2 | -1.4 |
| HORT | Hortiatis | 1.72 | 330 | Pn | Pn | 00 06 39.6 | -0.2 |
| HORT | Hortiatis | 1.72 | 330 | P | Pn | 00 06 40.0 | +0.1 |
| HORT | Hortiatis | 1.72 | 330 | P | Pn | 00 06 40.0 | +0.1 |
| HORT | | | | S | Sn | 00 07 01.1 | -0.9 |
| HORT | | | | AML | AML | 00 07 08.2 | |
| | comp=N,939µm,0.8s | | | | | | |
| HORT | | | | AML | AML | 00 07 08.2 | |
| | comp=E,814µm,0.7s | | | | | | |
| TNSA | Tinos | 1.74 | 155 | P | Pn | 00 06 40.0 | 0.0 |
| TNSA | | | | S | Sn | 00 07 00.6 | -1.6 |
| EPID | Epidavros | 1.74 | 211 | P | Pn | 00 06 39.7 | -0.4 |
| EPID | Epidavros | 1.74 | 211 | P | Pn | 00 06 39.5 | -0.6 |
| EPID | | | | S | Sn | 00 07 00.4 | -2.0 |
| KARB | zmir-Karabur | 1.76 | 104 | P | Pn | 00 06 40.8 | +0.5 |
| KARB | | | | S | Sg | 00 07 06.1 | 0.0 |
| KARB | | | | *i* AML | AML | 00 07 09.0 | |
| | comp=E,124nm,0.8s | | | | | | |
| KARB | | | | *i* AML | AML | 00 07 12.0 | |
| | comp=E,167nm,0.8s | | | | | | |
| EZN | Ezine | 1.76 | 66 | Pn | Pn | 00 06 39.8 | -0.6 |
| EZNE | Ezine-Canakkal | 1.77 | 68 | Pn | Pb | 00 06 41.1 | -1.1 |
| THL | Klokotos Trika | 1.78 | 285 | P | Pn | 00 06 40.8 | +0.2 |
| THL | Klokotos Trika | 1.78 | 285 | P | Pn | 00 06 40.4 | -0.2 |
| THL | | | | S | Sn | 00 07 02.5 | -0.8 |
| THL | | | | AML | AML | 00 07 13.8 | |
| | comp=N,556µm,0.5s | | | | | | |
| THL | | | | AML | AML | 00 07 14.3 | |
| | comp=E,557µm,0.5s | | | | | | |
| KALE | Kalithea | 1.79 | 247 | P | Pn | 00 06 40.7 | -0.2 |
| KALE | Kalithea | 1.79 | 247 | P | Pn | 00 06 40.7 | -0.2 |
| KALE | | | | S | Sg | 00 07 08.8 | +1.4 |
| KALE | | | | AML | AML | 00 07 13.7 | |
| | comp=N,3264µm,0.6s | | | | | | |
| KALE | | | | AML | AML | 00 07 16.0 | |
| | comp=E,2886µm,0.8s | | | | | | |
| THE | Thessaloniki | 1.80 | 327 | P | Pn | 00 06 41.3 | +0.4 |
| THE | Thessaloniki | 1.80 | 327 | P | Pn | 00 06 41.1 | +0.2 |
| THE | | | | S | Sn | 00 07 02.0 | -1.9 |
| THE | | | | AML | AML | 00 07 12.2 | |
| | comp=E,372µm,0.5s | | | | | | |
| THE | | | | AML | AML | 00 07 13.4 | |
| | comp=N,408µm,0.4s | | | | | | |
| KVLA | Kavala | 1.82 | 4 | P | Pn | 00 06 40.6 | -0.6 |
| KVLA | | | | S | Sn | 00 07 03.1 | -1.3 |
| SOH | Sokhos | 1.83 | 338 | P | Pn | 00 06 41.6 | +0.2 |
| SOH | Sokhos | 1.83 | 338 | P | Pn | 00 06 41.5 | +0.1 |
| YDRA | Hydra | 1.87 | 199 | P | Pn | 00 06 41.4 | -0.3 |
| ANX | Ano Chora | 1.88 | 255 | P | Pn | 00 06 42.4 | +0.3 |
| ANX | Ano Chora | 1.88 | 255 | P | Pn | 00 06 42.5 | +0.3 |
| KAVA | Kavala | 1.89 | 6 | P | Pn | 00 06 41.7 | -0.4 |
| KAVA | Kavala | 1.89 | 6 | P | Pn | 00 06 41.6 | -0.4 |
| GUR | Goura | 1.90 | 232 | P | Pn | 00 06 42.3 | -0.1 |
| AYVA | Ayvalik | 1.91 | 84 | P | Pn | 00 06 43.0 | +0.6 |
| AYVA | | | | S | Sg | 00 07 11.3 | +0.1 |
| AYVA | | | | *i* AML | AML | 00 07 13.0 | |
| | comp=N,589nm,0.7s | | | | | | |
| AYVA | | | | *i* AML | AML | 00 07 14.0 | |
| | comp=N,333nm,0.6s | | | | | | |
| KRND | KRANIDI | 1.93 | 207 | P | Pn | 00 06 42.1 | -0.6 |
| KRND | KRANIDI | 1.93 | 207 | P | Pn | 00 06 42.2 | -0.5 |
| EFP | Efpalio | 1.95 | 250 | P | Pn | 00 06 43.0 | 0.0 |
| KLV | Kalavryta, Ach | 1.96 | 237 | P | Pn | 00 06 42.8 | -0.3 |
| KLV | Kalavryta, Ach | 1.96 | 237 | P | Pn | 00 06 42.7 | -0.3 |
| ZEYE | Izmir, Urla-Ze | 1.98 | 116 | P | Pn | 00 06 43.5 | +0.2 |
| ZEYE | | | | S | Sb | 00 07 10.9 | +0.4 |
| ZEYE | | | | *i* AML | AML | 00 07 20.0 | |
| | comp=N,185nm,0.6s | | | | | | |
| ZEYE | | | | *i* AML | AML | 00 07 22.0 | |
| | comp=N,113nm,0.5s | | | | | | |
| COMU | Canakkale | 1.98 | 60 | Pn | Pn | 00 06 44.0 | +0.6 |
| URLA | Izmir | 1.99 | 112 | P | Pn | 00 06 44.0 | +0.4 |
| URLA | | | | S | Sg | 00 07 13.9 | +0.2 |
| URLA | | | | *i* AML | AML | 00 07 21.0 | |
| | comp=N,240nm,0.8s | | | | | | |
| URLA | | | | *i* AML | AML | 00 07 28.0 | |
| | comp=N,259nm,1.2s | | | | | | |
| SRS | Serrai | 2.06 | 346 | P | Pn | 00 06 44.1 | -0.4 |
| ENZZ | Sultanice-Enez | 2.09 | 44 | Pn | Pn | 00 06 45.3 | +0.5 |
| IZMD | zmir-Dikili- | 2.10 | 93 | P | Pn | 00 06 45.5 | +0.4 |
| IZMD | | | | S | Sg | 00 07 18.0 | +0.9 |
| IZMD | | | | *i* AML | AML | 00 07 28.0 | |
| | comp=N,145nm,1.1s | | | | | | |
| IZMD | | | | *i* AML | AML | 00 07 30.0 | |
| | comp=N,82nm,0.6s | | | | | | |
| GELI | Tayfur-Gelibol | 2.15 | 53 | Pn | Pn | 00 06 45.9 | +0.3 |
| PVO | Paravola | 2.18 | 258 | P | Pn | 00 06 46.3 | +0.3 |
| ENEZ | Enez | 2.19 | 42 | Pn | Pn | 00 06 45.9 | -0.3 |
| BUHA | Balikesir, Bur | 2.23 | 79 | P | Pn | 00 06 47.4 | +0.5 |
| BUHA | | | | S | Sb | 00 07 18.9 | +0.9 |
| BUHA | | | | *i* AML | AML | 00 07 36.0 | |
| | comp=N,267nm,0.6s | | | | | | |
| BUHA | | | | *i* AML | AML | 00 07 43.0 | |
| | comp=N,252nm,1.1s | | | | | | |
| KZN | Kozani | 2.24 | 303 | P | Pn | 00 06 46.9 | -0.1 |
| NVR | Nevrokopi | 2.25 | 353 | P | Pn | 00 06 47.5 | +0.5 |
| ALN | Alexandroupoli | 2.25 | 37 | Pn | Pn | 00 06 46.9 | -0.2 |
| ALN | Alexandroupoli | 2.25 | 37 | P | Pn | 00 06 46.4 | -0.7 |
| ALN | | | | S | Sn | 00 07 13.7 | -1.3 |
| RDO | Rodhopi | 2.26 | 26 | Pn | Pn | 00 06 46.7 | -0.5 |
| RDO | Rodhopi | 2.26 | 26 | P | Pn | 00 06 46.9 | -0.3 |
| APE | Apeiranthos | 2.29 | 153 | P | Pn | 00 06 47.8 | +0.2 |
| APE | Apeiranthos | 2.29 | 153 | ⇑P | Pg | 00 06 54.4 | +0.9 |
| APE | Apeiranthos | 2.29 | 153 | P | Pn | 00 06 47.4 | -0.2 |
| APE | | | | S | Sn | 00 07 14.5 | -1.4 |
| APE | | | | AML | AML | 00 07 25.8 | |
| | comp=E,1321µm,0.8s | | | | | | |
| APE | | | | AML | AML | 00 07 26.7 | |
| | comp=N,1610µm,0.6s | | | | | | |
| LPK | Lapseki | 2.31 | 56 | Pn | Pn | 00 06 48.6 | +0.7 |
| DGB | zmir | 2.33 | 116 | P | Pn | 00 06 48.7 | +0.5 |
| DGB | | | | S | Sg | 00 07 24.7 | +0.2 |
| DGB | | | | *i* AML | AML | 00 07 30.0 | |
| | comp=N,84nm,0.8s | | | | | | |
| DGB | | | | *i* AML | AML | 00 07 30.0 | |
| | comp=N,65nm,0.5s | | | | | | |
| ERIK | Erikli-Kesan | 2.34 | 48 | Pn | Pn | 00 06 47.9 | -0.4 |
| VAY | Valandovo | 2.54 | 330 | *e*Pn | Pb | 00 06 55.5 | 0.0 |
| RZN | Rozhen | 2.60 | 8 | ⇑*i*P | Pn | 00 06 52.2 | +0.1 |
| RZN | | | | S | Sn | 00 07 22.7 | -1.2 |
| KDZ | Kurdzhali | 2.65 | 18 | Pn | Pn | 00 06 52.3 | -0.2 |
| KDZ | Kurdzhali | 2.65 | 18 | ⇑*i*P | Pn | 00 06 52.3 | -0.2 |
| KDZ | | | | S | Sn | 00 07 23.4 | -1.3 |
| STEP | BALIKESIR_Sava | 2.71 | 83 | P | Pn | 00 06 54.5 | +1.0 |
| STEP | | | | S | Sg | 00 07 35.7 | -1.1 |
| STEP | | | | *i* AML | AML | 00 07 42.0 | |
| | comp=N,316nm,0.8s | | | | | | |
| STEP | | | | *i* AML | AML | 00 07 44.0 | |
| | comp=N,323nm,0.9s | | | | | | |
| UKOP | Uzunkopru-Edir | 2.72 | 42 | Pn | Pn | 00 06 54.0 | +0.5 |
| FNA | Florina | 2.76 | 308 | Pn | Pn | 00 06 54.7 | +0.6 |
| PEHC | Pehcevo | 2.85 | 339 | *i* Pn | Pn | 00 06 56.3 | +1.0 |
| KKB | Krupnik | 2.85 | 343 | ⇑*i*P | Pn | 00 06 56.1 | +0.8 |
| KKB | | | | S | Sn | 00 07 28.5 | -1.3 |
| PLD | Plovdiv | 3.05 | 7 | Pn | Pn | 00 06 57.8 | -0.3 |
| PLD | Plovdiv | 3.05 | 7 | ⇑*i*P | Pn | 00 06 58.4 | +0.3 |
| PLD | | | | S | Sn | 00 07 34.0 | -0.7 |
| DIM | Dimitrovgrad | 3.10 | 19 | P | Pn | 00 06 58.9 | +0.2 |
| OHR | Ohrid | 3.30 | 308 | *i* Pn | Pn | 00 07 03.5 | +1.8 |
| ANKY | Antikythira Is | 3.33 | 193 | P | Pn | 00 07 01.4 | -0.5 |
| PGB | Panagyurishte | 3.39 | 359 | *e*P | Pn | 00 07 03.7 | +0.9 |
| VTS | Vitosha | 3.58 | 348 | ⇑*i*P | Pn | 00 07 06.3 | +0.8 |
| VTS | | | | S | Sn | 00 07 47.1 | -0.8 |
| JMB | Yambol | 3.79 | 27 | ⇑*i*P | Pn | 00 07 07.9 | -0.4 |
| IDI | Anoyia | 3.86 | 172 | Pn | Pn | 00 07 08.6 | -0.6 |
| | comp=N,16nm,0.4s,baz=348,slow=12,SNR=13 | | | | | | |
| IDI | | | | Sn | Sn | 00 07 51.8 | -3.0 |
| | comp=N,3.4nm,0.3s,baz=290,slow=15,SNR=1.8 | | | | | | |
| ELND | Elena | 4.00 | 17 | ⇑P | Pn | 00 07 11.9 | +0.8 |
| PVL | Pavlikeni | 4.06 | 10 | P | Pn | 00 07 12.9 | +0.9 |
| MPEP | Malo Peshtene | 4.25 | 355 | P | Pn | 00 07 15.9 | +1.3 |
| VALD | Valchedram | 4.61 | 353 | P | Pn | 00 07 20.1 | +0.7 |
| PRD | Provadia | 4.69 | 30 | P | Pn | 00 07 21.1 | +0.5 |
| PRD | | | | S | Sn | 00 08 14.0 | -1.2 |
| NEF | NEVSHA | 4.73 | 28 | P | Pn | 00 07 21.5 | +0.3 |
| NEF | | | | S | Sn | 00 08 14.9 | -1.3 |
| VLAD | Vladila | 4.88 | 1 | ⇑P | Pn | 00 07 25.1 | +1.9 |
| BAIL | Bailesti | 4.94 | 352 | ⇑P | Pn | 00 07 24.9 | +0.9 |
| PDG | Podgorica | 5.03 | 313 | ⇓P | Pn | 00 07 26.8 | +1.6 |
| PUNG | Punghina | 5.25 | 350 | ⇓P | Pn | 00 07 29.8 | +1.6 |
| PSN | Preselentsi | 5.38 | 32 | P | Pn | 00 07 30.5 | +0.4 |
| HUMR | Humele | 5.43 | 6 | ⇑P | Pn | 00 07 31.5 | +0.7 |
| ICOR | Ion Corvin | 5.66 | 27 | ⇑P | Pn | 00 07 34.9 | +1.0 |
| TIP | Timpagrande | 5.81 | 273 | P | Pn | 00 07 38.7 | +2.6 |
| | comp=N,8.8nm,0.8s,comp=N,0.0nm | | | | | | |
| HERR | Herculane | 5.92 | 347 | ⇓P | Pn | 00 07 37.4 | 0.0 |
| MDVR | Moldovita | 5.96 | 342 | ⇑P | Pn | 00 07 38.5 | +0.3 |
| HARR | Harsova | 6.21 | 25 | ⇑P | Pn | 00 07 42.3 | +0.8 |
| ARR | Arges | 6.25 | 3 | ⇓P | Pn | 00 07 43.0 | +0.9 |
| LOT | Lotru | 6.33 | 357 | ⇑P | Pn | 00 07 43.6 | +0.3 |
| VOIR | | 6.34 | 5 | ⇑P | Pn | 00 07 43.9 | +0.5 |
| VOIR | | 6.34 | 5 | P | Pn | 00 07 43.7 | +0.3 |
| | comp=N,10nm,0.8s,comp=N,0.0nm | | | | | | |
| GZR | Gura Zlata | 6.36 | 351 | ⇓P | Pn | 00 07 44.0 | +0.3 |
| NEHR | Nehoiu | 6.49 | 13 | ⇓P | Pn | 00 07 47.3 | +2.0 |
| MLR | Muntele Rosu | 6.49 | 11 | Pn | Pn | 00 07 46.8 | +1.3 |
| | baz=186,slow=8.2 | | | | | | |
| MLR | | | | Sn | Sn | 00 08 59.9 | +0.2 |
| | comp=N,0.8nm,0.3s,baz=160,slow=18,SNR=1.0 | | | | | | |
| MLR | | | | LR | LR | 00 10 52.7 | |
| | comp=N,78nm,18.7s,baz=178,slow=44 | | | | | | |
| MLR | Muntele Rosu | 6.49 | 11 | ⇓P | Pn | 00 07 46.9 | +1.5 |
| MLR | Muntele Rosu | 6.49 | 11 | P | Pn | 00 07 46.7 | +1.3 |
| | comp=N,23nm,0.7s,comp=N,0.1nm | | | | | | |
| TPGR | Topolog | 6.52 | 27 | ⇓P | Pn | 00 07 47.1 | +1.3 |
| CFR | Carcaliu | 6.71 | 24 | ⇑P | Pn | 00 07 49.8 | +1.5 |
| BZS | Buzias | 6.78 | 344 | ⇑P | Pn | 00 07 49.7 | +0.5 |
| SURR | Surduc | 6.81 | 347 | ⇓P | Pn | 00 07 50.9 | +1.1 |
| COVR | Voineasa-Covas | 6.88 | 12 | ⇑P | Pn | 00 07 52.5 | +1.8 |
| SPBR | Spulber | 6.88 | 15 | ⇑P | Pn | 00 07 52.0 | +1.3 |
| DOPR | Dopca | 6.90 | 7 | ⇑P | Pn | 00 07 52.6 | +1.7 |
| PLOR5 | Plostina Array | 6.96 | 14 | P | Pn | 00 07 55.2 | +3.4 |
| | comp=N,16nm,0.6s,comp=N,0.1nm | | | | | | |
| PLOR | Plostina | 6.96 | 14 | ⇓P | Pn | 00 07 53.7 | +1.9 |
| PLOR3 | Plostina Array | 6.96 | 14 | P | Pn | 00 07 54.6 | +2.8 |
| | comp=N,11nm,0.8s,comp=N,0.1nm | | | | | | |
| VRI | Vrincioaia | 6.99 | 14 | ⇓P | Pn | 00 07 53.8 | +1.6 |
| VRI | Vrincioaia | 6.99 | 14 | P | Pn | 00 07 55.9 | +3.7 |
| | comp=N,11nm,0.7s,comp=N,186nmcomp=N,0.1nm | | | | | | |
| TURR | Turia | 7.05 | 10 | ⇓P | Pn | 00 07 54.3 | +1.2 |
| OZUR | | 7.07 | 9 | ⇓P | Pn | 00 07 54.5 | +1.3 |
| BR105 | Keskin Array S | 7.29 | 82 | P | Pn | 00 07 58.3 | +1.9 |
| | comp=N,2.6nm,0.6s,comp=N,39nmcomp=N,0.0nm | | | | | | |
| BR106 | Keskin Array S | 7.29 | 82 | P | Pn | 00 07 57.9 | +1.5 |
| | comp=N,1.7nm,0.5s,comp=N,31nmcomp=N,0.0nm | | | | | | |
| BRTR | Keskin Array B | 7.30 | 82 | Pn | Pn | 00 07 58.6 | +2.0 |
| | comp=N,0.6nm,0.3s,baz=259,slow=12,SNR=24 | | | | | | |
| BRTR | | | | Sn | Sn | 00 09 17.2 | -2.5 |
| | baz=267,slow=16,SNR=1.0 | | | | | | |
| BRTR | | | | LR | LR | 00 10 58.4 | |
| | comp=N,19nm,19.2s,baz=274,slow=40 | | | | | | |
| | comp=N,1.7nm,0.5s | | | | | | |
| SIRR | Siria | 7.39 | 346 | ⇑P | Pn | 00 07 58.1 | +0.3 |
| MARR | Marisel-Cluj | 7.60 | 354 | ⇑P | Pn | 00 08 01.3 | +0.6 |
| TESR | Tescani | 7.60 | 13 | ⇓P | Pn | 00 08 02.4 | +1.9 |
| TESR | Tescani | 7.60 | 13 | P | Pn | 00 08 02.7 | +2.2 |
| VAE | Valguarnera | 7.90 | 261 | Pn | Pn | 00 08 07.7 | +3.0 |
| | comp=N,3.2nm,0.5s,baz=41,slow=19,SNR=2.7 | | | | | | |
| VAE | | | | Sn | Sn | 00 09 31.7 | -2.5 |
| | comp=N,0.2nm,0.3s,baz=11,slow=19,SNR=2.2 | | | | | | |
| MORH | Mrgy, Hungar | 8.20 | 332 | ⇑P | Pn | 00 08 09.8 | +1.0 |
| MILM | Milestii Mici | 8.48 | 22 | ⇑P | Pn | 00 08 15.0 | +2.4 |
| BURAR | Bucovina Array | 8.52 | 4 | ⇑P | Pn | 00 08 14.6 | +1.3 |
| SORM | Soroca | 9.49 | 17 | ⇑P | Pn | 00 08 27.9 | +1.5 |
| SORM | Soroca | 9.49 | 17 | P | Pn | 00 08 27.4 | +0.9 |
| KOLS | Kolonicke sedl | 9.91 | 352 | *e*PN | Pn | 00 08 38.3 | +6.0 |
| SOKA | Soboth | 10.13 | 321 | *e*Pn | Pn | 00 08 36.1 | +0.8 |
| | comp=N,2.0nm,1.6s | | | | | | |
| VYHS | Vyhne | 10.15 | 339 | *e*PN | Pn | 00 08 39.9 | +4.4 |
| MMAI | Mount Meron Ar | 10.89 | 121 | Pn | Pn | 00 08 46.0 | +0.2 |
| | comp=N,1.0nm,0.3s,baz=302,slow=12,SNR=7.4 | | | | | | |
| | comp=N,0.6nm,0.3s | | | | | | |
| MOA | Molln | 11.33 | 324 | *e*Pn | Pn | 00 08 54.4 | +2.7 |
| | comp=N,1.7nm,1.0s | | | | | | |
| ABTA | Abfaltersbach | 11.48 | 315 | *e*Pn | Pn | 00 08 54.2 | +0.4 |
| | comp=N,1.9nm,0.8s | | | | | | |
| BIOA | Bad Ischl, Aus | 11.52 | 322 | *e*Pn | Pn | 00 08 56.6 | +2.4 |
| | comp=N,3.1nm,1.0s | | | | | | |
| AKASG | Malin Array Be | 12.11 | 15 | LR | LR | 00 13 45.8 | |
| | comp=N,22nm,21.7s,baz=206,slow=38 | | | | | | |
| GERES | GERESS Array B | 12.32 | 326 | Pn | Pn | 00 09 07.8 | +2.5 |
| | comp=N,0.1nm,0.3s,baz=135,slow=13,SNR=1.7 | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | |
| EIL | Elat | 12.92 | 134 | Pn | Pn | 00 09 12.9 | -0.5 |
| | comp=N,0.2nm,0.3s,baz=18,slow=19,SNR=1.9 | | | | | | |
| | comp=N,1.5nm,0.7s | | | | | | |
| DAVOX | Davos/Dischmat | 13.00 | 311 | Pn | Pn | 00 09 14.7 | +0.1 |
| | comp=N,0.1nm,0.3s,baz=158,slow=16,SNR=2.0 | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | |
| BELG | Belogornoye | 20.91 | 43 | P | P | 00 10 51.9 | -0.4 |
| | comp=N,6.9nm,0.8s,baz=248,slow=2.9,SNR=3.1 | | | | | | |
| BELG | | | | LR | LR | 00 20 03.6 | |
| | comp=N,33nm,18.0s,baz=263,slow=40 | | | | | | |
| | comp=N,6.9nm,0.8s | | | | | | |
| ESDC | Sonseca Array | 21.77 | 280 | P | P | 00 11 01.4 | -0.3 |
| | comp=N,0.9nm,0.6s,baz=76,slow=11,SNR=9.9 | | | | | | |
| | comp=N,0.9nm,0.6s | | | | | | |
| HFS | Hagfors | 22.06 | 346 | P | P | 00 11 04.8 | +0.2 |
| | comp=N,3.6nm,1.1s,baz=183,slow=17,SNR=3.6 | | | | | | |
| | comp=N,3.6nm,1.1s | | | | | | |
| FINES | FINESS Array B | 22.38 | 2 | P | P | 00 11 10.3 | +2.4 |
| | comp=N,1.6nm,0.9s,baz=149,slow=16,SNR=3.2 | | | | | | |
| | comp=N,1.6nm,0.9s | | | | | | |
| NOA | NORSAR Array B | 23.39 | 344 | P | P | 00 11 17.6 | -1.0 |
| | comp=N,0.3nm,0.8s,baz=159,slow=10.0,SNR=2.8 | | | | | | |
| | comp=N,0.3nm,0.8s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EKA | Eskdalemuir Ar | 24.45 | 321 | P | P | 00 11 28.4 | -0.2 |
| | comp=N,0.3nm,0.4s,baz=128,slow=11,SNR=1.6 | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | |
| ARCES | ARCESS Array B | 30.49 | 1 | LR | LR | 00 25 18.9 | |
| | comp=N,29nm,18.3s,baz=174,slow=38 | | | | | | |
| TORD | Torodi Ar. Bea | 32.66 | 224 | P | P | 00 12 42.6 | +0.5 |
| | comp=N,1.6nm,0.4s,baz=29,slow=9.2,SNR=24 | | | | | | |
| | comp=N,1.6nm,0.4s | | | | | | |
| KURBB | Kurchatov Arra | 39.32 | 55 | P | P | 00 13 38.6 | -0.3 |
| | comp=N,0.2nm,0.5s,baz=278,slow=8.6,SNR=2.1 | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 42.32 | 60 | P | P | 00 14 03.9 | +0.2 |
| | comp=N,0.3nm,0.6s,baz=256,slow=4.9,SNR=2.0 | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 42.89 | 49 | P | P | 00 14 08.5 | +0.4 |
| | comp=N,0.3nm,0.3s,baz=255,slow=5.7,SNR=2.2 | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | |
| SONM | Songino Array | 57.60 | 52 | P | P | 00 16 00.4 | +0.5 |
| | comp=N,1.8nm,0.6s,baz=294,slow=11,SNR=3.3 | | | | | | |
| | comp=N,1.8nm,0.6s | | | | | | |

*IDC **01** 00:17:41.3±1.0, 37°.36N×141°.76E, h0$^{km}$, mb3.9/12, mbtmp3.8/15, ML3.3/3, MS3.1/14, Error ellipse: s-maj=24.2km s-min=19.0km az=97.0*

*NIED **01** 00:17:42.1, 36°.73N×141°.80E, h48$^{km}$, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$4.25; $M_{\theta\theta}$0.81; $M_{\phi\phi}$-5.06; $M_{r\theta}$3.40; $M_{\theta\phi}$-2.40; $M_{\phi r}$6.59; Fault plane solution: $M_0$9.01000×$10^{14}$ NP1:$\phi_s$27.00000°, δ73.00000°, λ96.00000°. NP2:$\phi_s$187.00000°, δ18.00000°, λ71.00000°.*

*JMA **01** 00:17:42.1±0.3, 36°.7N±0°.8×14°2E±°, h48$^{km}$±4$^{km}$, MV3.9/37, E OFF FUKUSHIMA PREF*

*NEIC **01** 00:17:43.4±1.6, 36°.81N±0°.07×141°.9E±0°.1, h34$^{km}$±8$^{km}$, mb4.2/10, Error ellipse: s-maj=12.0km s-min=10.0km az=112.0*

**ISC 01 00:17:39.3**±2.0**, 36°.82N**±0°.05×**141°.87E**±0°.06**, h7**$^{km}$±11$^{km}$**, n80,** σ1$^{s}$**73**/69**, mb4.1**/18**, MS3.4**/9**, 6D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ONAJ | Iwakimizuishiy | 0.90 | 288 | ⇓P | Pb | 00 17 58.1 | +0.8 |
| JFK | Kawauchi | 0.96 | 305 | P | Pn | 00 17 59.4 | +0.1 |
| JHO | Hitachi | 1.06 | 259 | ⇓P | Pb | 00 17 59.7 | -0.4 |
| JHO | | | | ⇓eS | Sb | 00 18 12.7 | -1.5 |
| JFFD | Fukushimafurud | 1.08 | 285 | P | Pb | 00 18 00.5 | +0.2 |
| JHYU | Hitachinakayam | 1.14 | 245 | ⇓P | Pn | 00 18 01.1 | -0.6 |
| JHYU | | | | ⇓eS | Sb | 00 18 13.9 | -2.3 |
| JMM | Marumori | 1.35 | 321 | P | Pg | 00 18 05.6 | +0.4 |
| JMM | Marumori | 1.35 | 321 | | Pg | 00 18 05.5 | +0.3 |
| JMM | Marumori | 1.35 | 321 | ⇓iP | Pg | 00 18 05.6 | +0.4 |
| JOTO | OTAMA OYAMA | 1.43 | 301 | P | Pb | 00 18 07.1 | +0.8 |
| JOTO | | | | S | Sg | 00 18 25.0 | -0.2 |
| JIO | Ouri | 1.68 | 346 | P | Pb | 00 18 10.8 | +0.2 |
| JIO | | | | S | Sg | 00 18 30.9 | -2.4 |
| JOU | Okura | 1.81 | 329 | P | Pg | 00 18 13.6 | -0.4 |
| JOU | | | | eS | Sg | 00 18 35.8 | -1.7 |
| JFY | Yanaizu | 1.82 | 289 | eP | Pn | 00 18 12.7 | +1.6 |
| JAG | Ashikaga | 1.98 | 259 | i P | Pn | 00 18 13.3 | 0.0 |
| JYS | Shirataka | 2.00 | 315 | P | Pb | 00 18 15.9 | -0.2 |
| JKT | Katashina | 2.10 | 269 | P | Pn | 00 18 16.2 | +1.2 |
| JMK | Ichinoseki | 2.19 | 347 | P | Pb | 00 18 18.6 | -0.6 |
| JNS | Sasagawa | 2.26 | 297 | P | Pb | 00 18 19.4 | -1.1 |
| BSO1 | Boso 1 | 2.28 | 199 | P | Pn | 00 18 18.6 | +1.7 |
| MJAR | Matsushiro Arr | 2.95 | 266 | Pn | Pn | 00 18 28.0 | +1.3 |
| | 2.7nm,0.3s,baz=84,slow=10,SNR=61 | | | | | | |
| MJAR | | | | Sn | Sn | 00 19 04.3 | +1.9 |
| | 1.2nm,0.3s,baz=80,slow=32,SNR=10 | | | | | | |
| MJAR | | | | LR | LR | 00 19 51.9 | |
| | comp=Z,286nm,19.9s,baz=180,slow=44 | | | | | | |
| | 19nm,0.5s | | | | | | |
| MAJO | Matsushiro | 2.96 | 266 | P | Pn | 00 18 28.9 | +2.2 |
| MAJO | Matsushiro | 2.96 | 266 | Pn | Pn | 00 18 27.6 | +0.8 |
| MJB9 | Matsu-Tunnel | 2.96 | 266 | Pn | Pn | 00 18 27.8 | +1.1 |
| JSD | Sado | 3.12 | 294 | P | Pn | 00 18 31.7 | +2.8 |
| JSD | Sado | 3.12 | 294 | Pn | Pn | 00 18 30.6 | +1.7 |
| JGF | Kuroka | 3.84 | 253 | P | Pn | 00 18 43.1 | +4.1 |
| JGF | Kuroka | 3.84 | 253 | Pn | Pn | 00 18 41.6 | +2.6 |
| JTM | Tenmabayashi | 4.01 | 351 | P | Pn | 00 18 44.6 | +3.5 |
| JTM | Tenmabayashi | 4.01 | 351 | Pn | Pn | 00 18 44.3 | +3.1 |
| JHJ2 | Mitsune | 4.07 | 205 | P | Pn | 00 18 47.3 | +5.3 |
| JHJ2 | Mitsune | 4.07 | 205 | Pn | Pn | 00 18 43.5 | +1.6 |
| JHJ | Hachijo jima 2 | 4.07 | 205 | Pn | Pn | 00 18 42.8 | +0.8 |
| | 6.4nm,0.3s,baz=118,slow=22,SNR=9.0 | | | | | | |
| JHJ | | | | Sn | Sn | 00 19 26.1 | -3.9 |
| | 10.0nm,0.3s,baz=308,slow=16,SNR=1.5 | | | | | | |
| INU | Inuyama | 4.19 | 251 | P | Pn | 00 18 48.0 | +4.3 |
| INU | Inuyama | 4.19 | 251 | Pn | Pn | 00 18 45.0 | +1.3 |
| ERM | Erimo | 5.28 | 11 | P | Pn | 00 19 00.7 | +2.1 |
| ERM | Erimo | 5.28 | 11 | Pn | Pn | 00 18 59.6 | +1.0 |
| JMN | Monobe | 7.22 | 247 | P | Pn | 00 19 29.5 | +4.1 |
| JMN | Monobe | 7.22 | 247 | Pn | Pn | 00 19 27.6 | +2.2 |
| ASAJ | Asahikawa | 7.31 | 4 | Pn | Pn | 00 19 20.2 | -6.3 |
| | 0.9nm,0.3s,baz=175,slow=18,SNR=2.0 | | | | | | |
| | 5.3nm,0.5s | | | | | | |
| JCJ | Chichijima | 9.70 | 178 | LR | LR | 00 24 06.0 | |
| | comp=Z,19nm,21.7s,baz=322,slow=38 | | | | | | |
| JNU | Nakatsue | 9.74 | 251 | LR | LR | 00 23 55.7 | |
| | comp=Z,56nm,19.4s,baz=30,slow=38 | | | | | | |
| USRK | Ussuriysk Ar. | 10.52 | 317 | Pn | Pn | 00 20 14.2 | +3.7 |
| | 0.2nm,0.3s,baz=125,slow=14,SNR=1.2 | | | | | | |
| KSRS | Korea Array | 11.15 | 277 | Pn | Pn | 00 20 21.6 | +2.4 |
| | 0.1nm,0.3s,baz=90,slow=14,SNR=1.6 | | | | | | |
| KSRS | | | | LR | LR | 00 24 39.5 | |
| | comp=Z,100nm,18.5s,baz=85,slow=38 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| KLR | Kul'dur | 14.42 | 332 | LR | LR | 00 26 36.7 | |
| | comp=Z,61nm,19.2s,baz=272,slow=38 | | | | | | |
| MA2 | Magadan | 23.49 | 11 | LR | LR | 00 32 42.8 | |
| | comp=Z,16nm,19.3s,baz=2.0,slow=39 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.73 | 121 | T | T | 00 52 48.0 | |
| | baz=314,slow=75,SNR=22 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 27.73 | 121 | T | T | 00 52 47.3 | |
| | baz=314,slow=75,SNR=15 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 27.75 | 121 | T | T | 00 52 45.4 | |
| | baz=314,slow=75,SNR=15 | | | | | | |
| ULN | Ulaanbaatar | 27.77 | 304 | P | P | 00 23 29.0 | +0.1 |
| ULN | | | | IAmb | IAmb | 00 23 36.7 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| SONM | Songino Array | 28.20 | 304 | P | P | 00 23 33.6 | +0.9 |
| SONM | Songino Array | 28.20 | 304 | P | P | 00 23 33.0 | +0.3 |
| | comp=Z,2.3nm,0.7s,baz=98,slow=11,SNR=5.1 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| H11S1 | WAKE ISLAND Hy | 28.44 | 123 | T | T | 00 53 58.6 | |
| | baz=315,slow=76,SNR=7.3 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 28.44 | 123 | T | T | 00 53 37.3 | |
| | baz=315,slow=76,SNR=7.0 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 28.46 | 123 | T | T | 00 53 44.9 | |
| | baz=315,slow=76,SNR=7.5 | | | | | | |
| CMAR | Chiang Mai Arr | 41.80 | 256 | LR | LR | 00 44 26.0 | |
| | comp=Z,26nm,18.3s,baz=130,slow=38 | | | | | | |
| ZAA0 | Zalesovo Array | 42.33 | 313 | P | P | 00 25 32.5 | -1.1 |
| ZAA0 | | | | IAmb | IAmb | 00 25 35.1 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 42.33 | 313 | P | P | 00 25 33.4 | -0.2 |
| ZALV | Zalesovo Beam | 42.33 | 313 | P | P | 00 25 34.3 | +0.7 |
| | comp=Z,1.5nm,0.6s,baz=96,slow=7.0,SNR=8.9 | | | | | | |
| ZALV | | | | PcP | PcP | 00 27 27.2 | +0.1 |
| | comp=Z,0.6nm,0.4s,baz=42,slow=2.4,SNR=2.3 | | | | | | |
| ZALV | | | | LR | LR | 00 43 40.7 | |
| | comp=Z,26nm,20.1s,baz=85,slow=37 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| MK31 | Makanchi Array | 44.54 | 302 | P | P | 00 25 51.7 | +0.1 |
| MK31 | | | | IAmb | IAmb | 00 26 03.9 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| MKAR | Makanchi Array | 44.54 | 302 | P | P | 00 25 50.8 | -0.9 |
| MKAR | Makanchi Array | 44.54 | 302 | P | P | 00 25 52.1 | +0.4 |
| | comp=Z,1.4nm,0.8s,baz=84,slow=11,SNR=8.0 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| KURK | Kurchatov | 46.35 | 308 | P | P | 00 26 05.9 | 0.0 |
| KURK | | | | IAmb | IAmb | 00 26 18.1 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 46.42 | 308 | P | P | 00 26 06.8 | +0.4 |
| | comp=Z,1.2nm,0.5s,baz=84,slow=8.4,SNR=12 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| ILAR | Eielson Array | 49.48 | 32 | P | P | 00 26 31.3 | +1.3 |
| | comp=Z,0.2nm,0.6s,baz=277,slow=7.2,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| AAK | Ala-Archa | 50.91 | 299 | LR | LR | 00 49 29.0 | |
| | comp=Z,80nm,18.0s,baz=104,slow=38 | | | | | | |
| KK31 | Karatay Array | 53.55 | 300 | P | P | 00 27 01.2 | +0.4 |
| KKAR | Karatay Array | 53.55 | 300 | P | P | 00 27 00.6 | -0.1 |
| CHGR | Chuyangaron | 56.08 | 296 | P | P | 00 27 19.6 | +0.3 |
| SIMJ | Simiganj | 56.19 | 296 | P | P | 00 27 19.9 | -0.3 |
| SIMJ | | | | IAmb | IAmb | 00 27 21.7 | |
| | comp=Z,7.6nm,1.2s | | | | | | |
| ARU | Arti | 56.76 | 319 | LR | LR | 00 53 14.0 | |
| | comp=Z,28nm,18.5s,baz=81,slow=38 | | | | | | |
| WRA | Warramunga Arr | 56.90 | 188 | P | P | 00 27 31.7 | +6.7 |
| | comp=Z,0.4nm,0.5s,baz=1.2,slow=7.5,SNR=6.1 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| ABKAR | Akbulak array | 58.35 | 310 | P | P | 00 27 33.9 | -1.1 |
| ABKAR | | | | IAmb | IAmb | 00 27 35.8 | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| ASAR | Alice Springs | 60.63 | 188 | P | P | 00 27 57.9 | +6.9 |
| | comp=Z,0.6nm,0.7s,baz=1.4,slow=5.0,SNR=5.2 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| SPITS | Spitsbergen Ar | 60.80 | 349 | P | P | 00 27 49.4 | -2.1 |
| | comp=Z,3.4nm,0.7s,baz=13,slow=13,SNR=2.0 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| ARCES | ARCESS Array B | 64.32 | 340 | P | P | 00 28 14.8 | -0.3 |
| | comp=Z,0.9nm,0.8s,baz=64,slow=10,SNR=2.1 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| FINES | FINESS Array B | 69.17 | 332 | P | P | 00 28 46.1 | -0.1 |
| FINES | FINESS Array B | 69.17 | 332 | P | P | 00 28 45.6 | -0.5 |
| | comp=Z,1.4nm,0.8s,baz=93,slow=3.8,SNR=6.0 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| NOA | NORSAR Array B | 74.52 | 337 | P | P | 00 29 18.2 | -0.1 |
| | comp=Z,1.1nm,1.0s,baz=24,slow=9.2,SNR=2.8 | | | | | | |
| NOA | | | | LR | LR | 01 07 08.8 | |
| | comp=Z,10.0nm,18.2s,baz=45,slow=40 | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | |
| AKASG | Malin Array Be | 74.69 | 323 | P | P | 00 29 18.9 | -0.6 |
| | comp=Z,0.6nm,0.4s,baz=44,slow=7.0,SNR=4.3 | | | | | | |
| AKASG | | | | LR | LR | 01 04 18.1 | |
| | comp=Z,19nm,18.8s,baz=70,slow=38 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| BORG | Borgarnes | 77.90 | 353 | LR | LR | 01 05 18.0 | |
| | comp=Z,16nm,18.2s,baz=259,slow=37 | | | | | | |
| MLR | Muntele Rosu | 79.78 | 320 | LR | LR | 01 06 54.0 | |
| | comp=Z,31nm,18.8s,baz=114,slow=37 | | | | | | |

*IDC **01** 00:31:36.5±4.2, 3°.47N×125°.31E, h89$^{km}$±37$^{km}$, mb3.7/11, mbtmp4.0/11, Error ellipse: s-maj=51.6km s-min=12.2km az=72.0*

*NEIC **01** 00:31:41.4±1.4, 3°.5N±0°.1×125°.5E±0°.2, h126$^{km}$±4$^{km}$, mb4.4/24, Error ellipse: s-maj=24.8km s-min=13.3km az=64.0*

*DJA **01** 00:31:43.1±0.8, 3°N±6°×12°6E±°, h144$^{km}$±7$^{km}$, M4.6/11, mb4.7/4, mB5.3/4, MLv4.5/11, Mw(mB)4.7/4*

**ISC 01 00:31:43.0**±0.5**, 3°.55N**±0°.07×**125°.76E**±0°.09**, h150**$^{km}$**, n50,** σ**1$^{s}$71**/52**, mb4.1**/21**, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 3.19 | 150 | Pn | Pn | 00 32 31.4 | -1.4 |
| TNTI | Ternate | 3.19 | 150 | P | Pn | 00 32 31.5 | -1.4 |
| KMSI | Cibinong | 3.45 | 211 | P | Pn | 00 32 35.4 | -0.7 |
| GTOI | Gorontalo | 3.99 | 224 | P | Pn | 00 32 44.2 | +1.0 |
| LBMI | Labuha | 4.51 | 157 | P | Pn | 00 32 48.7 | -1.3 |
| LUWI | Luwuk | 5.45 | 213 | Pn | Pn | 00 33 05.1 | +2.7 |
| LUWI | Luwuk | 5.45 | 213 | P | Pn | 00 33 03.3 | +0.9 |
| | 66nm,0.6s,6μm0.9nm | | | | | | |
| TOLI2 | Tolitoli | 5.53 | 244 | Pn | Pn | 00 33 04.1 | +0.6 |
| SANI | Sanana | 5.56 | 178 | P | Pn | 00 33 01.0 | -3.0 |
| | 86nm,0.7s,8μm | | | | | | |
| NLAI | Namlea | 6.87 | 169 | P | Pn | 00 33 19.7 | -1.7 |
| | 94nm,0.8s,4μm | | | | | | |
| FAKI | Fak Fak | 9.13 | 135 | Pn | Pn | 00 33 49.8 | -1.8 |
| MTN | Manton Dam | 17.14 | 162 | P | P | 00 35 31.6 | -1.3 |
| MTN | | | | IAmb | IAmb | 00 35 48.3 | |
| | comp=Z,13nm,1.0s | | | | | | |
| KNRA | Kununurra | 19.33 | 171 | P | Pn | 00 35 57.3 | -2.3 |
| TPUB | Ta-pu | 20.26 | 346 | P | P | 00 36 06.1 | -0.7 |
| TPUB | | | | IAmb | IAmb | 00 36 49.5 | |
| | comp=Z,18nm,1.0s | | | | | | |
| FITZ | Fitzroy Crossi | 21.51 | 180 | P | P | 00 36 19.4 | -0.8 |
| COEN | Coen | 24.51 | 136 | P | P | 00 36 49.8 | +1.0 |
| COEN | | | | IAmb | IAmb | 00 37 12.3 | |
| | comp=Z,32nm,1.5s | | | | | | |
| WB0 | Warramunga Arr | 24.67 | 160 | P | P | 00 36 49.7 | -0.4 |
| WB0 | | | | IAmb | IAmb | 00 36 51.6 | |
| | comp=Z,10nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 24.82 | 160 | P | P | 00 36 50.6 | -0.9 |
| WRA | Warramunga Arr | 24.82 | 160 | P | P | 00 36 51.0 | -0.5 |
| | comp=Z,5.1nm,0.7s,baz=340,slow=10,SNR=54 | | | | | | |
| WRA | | | | S | S | 00 41 10.1 | +6.9 |
| | comp=Z,0.4nm,1.0s,baz=347,slow=17,SNR=1.9 | | | | | | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 24.82 | 160 | P | P | 00 36 50.8 | -0.7 |
| WB2 | | | | IAmb | IAmb | 00 36 54.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| WR0 | Warramunga Arr | 24.90 | 160 | P | P | 00 36 51.3 | -1.0 |
| AS31 | Alice Springs | 28.19 | 164 | P | P | 00 37 21.2 | -0.5 |
| ASAR | Alice Springs | 28.19 | 164 | P | P | 00 37 21.2 | -0.5 |
| ASAR | Alice Springs | 28.19 | 164 | P | P | 00 37 21.3 | -0.4 |
| | comp=Z,0.5nm,0.4s,baz=342,slow=7.2,SNR=9.5 | | | | | | |
| ASAR | | | | PcP | PcP | 00 40 32.6 | +0.7 |
| | comp=Z,0.2nm,0.4s,baz=350,slow=2.5,SNR=2.5 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| KSRS | Korea Array | 33.80 | 3 | P | P | 00 38 12.7 | +1.9 |
| | comp=Z,1.8nm,0.5s,baz=178,slow=10,SNR=7.6 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| BBOO | Buckleboo | 37.45 | 166 | P | P | 00 38 42.1 | +0.1 |
| STKA | Stephens Creek | 38.31 | 158 | P | P | 00 38 49.3 | +0.1 |
| STKA | Stephens Creek | 38.31 | 158 | P | P | 00 38 49.5 | +0.2 |
| | comp=Z,2.3nm,0.5s,baz=347,slow=12,SNR=4.5 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| USRK | Ussuriysk Ar. | 40.86 | 7 | P | P | 00 39 10.9 | +0.8 |
| | comp=Z,1.7nm,0.6s,baz=194,slow=9.3,SNR=3.4 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| SONM | Songino Array | 47.17 | 342 | P | P | 00 39 58.2 | -2.3 |
| | comp=Z,0.6nm,0.3s,baz=184,slow=12,SNR=1.7 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 57.16 | 326 | P | P | 00 41 13.9 | -0.3 |
| MKAR | Makanchi Array | 57.16 | 326 | P | P | 00 41 13.4 | -0.8 |
| | comp=Z,0.6nm,0.6s,baz=116,slow=8.4,SNR=6.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 61.37 | 328 | P | P | 00 41 42.7 | -0.3 |
| | comp=Z,0.6nm,0.7s,baz=129,slow=6.8,SNR=5.7 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| LBZ | Lake Benmore | 62.08 | 145 | P | P | 00 41 48.8 | +0.9 |
| RTZ | Ruatahuna | 63.16 | 137 | P | P | 00 41 55.4 | +0.2 |
| NIUE | Niue | 67.09 | 112 | P | P | 00 42 21.8 | +0.9 |
| ABKAR | Akbulak array | 71.68 | 321 | P | P | 00 42 47.6 | -0.9 |
| O16K | Kokwok River B | 79.95 | 30 | P | P | 00 43 38.6 | +3.4 |
| O16K | | | | IAmb | IAmb | 00 43 40.7 | |
| | comp=Z,16nm,1.3s | | | | | | |
| VOI | Vohitsoka | 81.11 | 247 | P | P | 00 43 41.3 | -1.1 |
| C19K | Lookout Ridge | 81.25 | 20 | P | P | 00 43 43.8 | +1.8 |
| C19K | | | | IAmb | IAmb | 00 44 09.5 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| G19K | Purcell Mounta | 81.58 | 24 | P | P | 00 43 45.0 | +1.2 |
| G19K | | | | IAmb | IAmb | 00 43 45.5 | |
| | comp=Z,4.7nm,1.2s | | | | | | |
| D19K | Kuna River | 81.64 | 21 | P | P | 00 43 45.6 | +1.5 |
| H19K | Roundabout Mou | 81.73 | 24 | P | P | 00 43 47.0 | +2.5 |
| H19K | | | | IAmb | IAmb | 00 43 48.1 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| B20K | Meade River | 82.27 | 20 | P | P | 00 43 49.2 | +1.9 |
| B20K | | | | IAmb | IAmb | 00 44 23.0 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| B21K | Ikpikpuk River | 83.08 | 20 | P | P | 00 43 53.5 | +2.0 |
| B21K | | | | IAmb | IAmb | 00 44 15.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| C23K | Itkillik River | 84.49 | 20 | P | P | 00 44 00.2 | +1.6 |
| C23K | | | | IAmb | IAmb | 00 44 01.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| ILAR | Eielson Array | 85.68 | 25 | P | P | 00 44 04.6 | -0.2 |
| | comp=Z,0.2nm,0.9s,baz=238,slow=5.2,SNR=2.5 | | | | | | |
| | comp=Z,0.2nm,0.9s | | | | | | |
| ARCES | ARCESS Array B | 90.28 | 340 | P | P | 00 44 25.3 | -1.3 |
| | comp=Z,1.7nm,0.9s,baz=94,slow=7.3,SNR=4.5 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| FINES | FINESS Array B | 91.53 | 332 | P | P | 00 44 31.4 | -1.0 |
| | comp=Z,1.0nm,0.9s,baz=103,slow=2.5,SNR=4.5 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| TXAR | Lajitas Array | 122.47 | 52 | PKP | PKiKP | 00 50 23.1 | +1.4 |
| | comp=Z,0.1nm,0.4s,baz=18,slow=4.4,SNR=3.5 | | | | | | |

*NIC **01** 00:50:16.6, 34°.42N×33°.83E, h17$^{km}$, Ml2.3/9*

*ISK **01** 00:50:16.9, 34°.59N×33°.85E, h18$^{km}$, ML2.4/10*

*AFAD **01** 00:50:16.7±0.0, 34°.59N×34°.11E, h4$^{km}$±3$^{km}$, ML2.5*

*GRAL **01** 00:50:17.5±0.3, 34°.37N×34°.13E, h0$^{km}$±2$^{km}$, MD3.2*

*GII **01** 00:50:18.3±0.4, 34°.364N±0°.002×33°.784E±0°.001, h31$^{km}$, Md2.2/9, Mws2.4/14, confirmed*

**ISC 01 00:50:16.0**±1.0**, 34°.41N**±0°.02×**33°.91E**±0°.03**, h29**$^{km}$±11$^{km}$**, n73,** σ**0$^{s}$95**/100**, 3D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LAR1C | Larnaka City C | 0.57 | 335 | S | Sb | 00 50 35.6 | +0.2 |
| PARAL | Paralimni | 0.60 | 11 | ⇓P | Pb | 00 50 28.4 | +0.4 |
| PARAL | | | | S | Sb | 00 50 37.6 | +1.4 |
| PARAL | | | | AML | AML | 00 50 38.1 | |
| | 0.9nm,0.5s | | | | | | |
| PARAL | | | | AML | AML | 00 50 38.5 | |
| | 0.7nm,0.4s | | | | | | |
| PAR1C | Paralimni Civi | 0.63 | 5 | P | Pb | 00 50 28.8 | +0.3 |
| PAR1C | | | | S | Sn | 00 50 39.2 | +1.2 |
| MVOU | Mavrovouni | 0.65 | 340 | ⇓eP | Pb | 00 50 28.5 | -0.4 |
| MVOU | | | | S | Sb | 00 50 38.2 | +0.6 |
| MVOU | | | | AML | AML | 00 50 38.8 | |
| | 0.3nm,0.3s | | | | | | |
| MVOU | | | | AML | AML | 00 50 38.9 | |
| | 0.3nm,0.3s | | | | | | |
| ASGA | Asgata | 0.66 | 305 | ⇓P | Pb | 00 50 28.8 | -0.2 |
| ASGA | | | | S | Sb | 00 50 37.6 | -0.4 |
| ASGA | | | | AML | AML | 00 50 39.7 | |
| | 0.3nm,0.3s | | | | | | |
| ASGA | | | | AML | AML | 00 50 40.0 | |
| | 0.4nm,0.2s | | | | | | |
| CSS | Mathiatis | 0.73 | 320 | Pg | Pb | 00 50 28.6 | -1.6 |
| CSS | | | | Sg | Sb | 00 50 37.2 | -2.7 |
| CSS | Mathiatis | 0.73 | 320 | P | Pb | 00 50 29.4 | -0.9 |
| CSS | | | | S | Sb | 00 50 37.7 | -2.2 |
| CSS | Mathiatis | 0.73 | 320 | P | Pb | 00 50 29.5 | -0.7 |
| CSS | | | | S | Sb | 00 50 39.2 | -0.8 |
| CSS | | | | AML | AML | 00 50 42.3 | |
| | 0.2nm,0.5s | | | | | | |
| CSS | | | | AML | AML | 00 50 42.3 | |
| | 0.2nm,0.5s | | | | | | |
| ATHAL | Athalassa | 0.85 | 330 | P | Pb | 00 50 32.6 | +0.5 |
| ATHAL | | | | S | Sb | 00 50 44.4 | +1.3 |
| ATHAL | | | | AML | AML | 00 50 48.5 | |
| | 0.3nm,0.5s | | | | | | |
| ATHAL | | | | AML | AML | 00 50 49.7 | |
| | 0.4nm,0.6s | | | | | | |
| TROD | Troodos | 1.01 | 302 | P | Pn | 00 50 34.3 | -0.2 |
| TROD | | | | S | Sb | 00 50 48.6 | +0.4 |
| TROD | | | | AML | AML | 00 50 51.0 | |
| | 0.2nm,0.3s | | | | | | |
| TROD | | | | AML | AML | 00 50 51.0 | |
| | 0.2nm,0.3s | | | | | | |
| LEF | Lefka | 1.10 | 311 | Pg | Pn | 00 50 36.3 | +0.8 |
| LEF | | | | Sg | Sn | 00 50 49.8 | +0.1 |
| EREN | Erenkoy | 1.14 | 11 | Pg | Pn | 00 50 35.9 | -0.2 |
| EREN | | | | Sg | Sn | 00 50 50.2 | -0.6 |
| NATA | Nata | 1.17 | 289 | P | Pn | 00 50 37.1 | +0.7 |
| NATA | | | | S | Sb | 00 50 53.6 | +1.4 |
| NATA | | | | AML | AML | 00 50 56.1 | |
| | 0.6nm,0.6s | | | | | | |
| NATA | | | | AML | AML | 00 51 01.7 | |
| | 0.8nm,0.6s | | | | | | |
| ALFC | Alefka | 1.31 | 305 | P | Pn | 00 50 39.1 | +0.7 |
| ALFC | | | | S | Sn | 00 50 56.6 | +1.6 |
| ALFC | | | | AML | AML | 00 50 57.7 | |
| | 0.5nm,0.3s | | | | | | |
| ALFC | | | | AML | AML | 00 50 59.0 | |
| | 0.4nm,0.6s | | | | | | |
| AKMS | Akamas | 1.43 | 296 | P | Pn | 00 50 40.7 | +0.6 |
| AKMS | | | | S | Sn | 00 50 59.3 | +1.4 |
| AKMS | | | | AML | AML | 00 51 00.7 | |
| | 0.2nm,0.5s | | | | | | |
| AKMS | | | | AML | AML | 00 51 01.8 | |
| | 0.2nm,0.4s | | | | | | |
| BHL | Bhannes | 1.53 | 109 | eP | Pn | 00 50 41.4 | -0.2 |
| DQRL | Deir Qamar | 1.55 | 116 | eP | Pn | 00 50 41.8 | +0.1 |
| HNTI | Hanita | 1.69 | 141 | S | Sn | 00 51 03.9 | -0.5 |
| HNTI | Hanita | 1.69 | 141 | P | Pn | 00 50 43.8 | +0.1 |
| HWQ | Hawqa | 1.69 | 94 | eP | Pn | 00 50 44.2 | +0.4 |
| QRWL | Qaraoun | 1.71 | 120 | eP | Pn | 00 50 44.4 | +0.5 |
| ZAHL | Zahle | 1.73 | 108 | eP | Pn | 00 50 44.6 | +0.4 |
| AKKU | Akkuyu-Mersin | 1.77 | 351 | Pn | Pn | 00 50 44.7 | -0.1 |
| AKKU | | | | Sn | Sn | 00 51 05.1 | -1.3 |
| GULN | MERSIN_Gulnar | 1.80 | 351 | P | Pn | 00 50 45.4 | +0.3 |
| GULN | | | | S | Sn | 00 51 06.2 | -0.8 |
| IKL | Isikli | 1.84 | 354 | Pn | Pn | 00 50 45.7 | +0.1 |
| IKL | | | | Sn | Sn | 00 51 06.7 | -1.3 |
| RCY | Rachaya | 1.84 | 119 | eP | Pn | 00 50 46.7 | +0.8 |
| RCY | | | | eS | Sn | 00 51 08.3 | 0.0 |
| TEKE | Tekeli-Mersin | 1.85 | 340 | Pn | Pn | 00 50 45.9 | +0.1 |
| TEKE | | | | Sn | Sn | 00 51 07.2 | -1.1 |
| SHBL | Chebaa | 1.86 | 124 | eP | Pn | 00 50 47.1 | +1.0 |
| MMA0B | Mount Meron ar | 1.86 | 138 | P | Pn | 00 50 46.8 | +0.7 |
| MMA0B | Mount Meron ar | 1.86 | 138 | S | Sn | 00 51 08.6 | -0.1 |
| BEIL | Beino | 1.89 | 85 | eP | Pn | 00 50 47.2 | +0.9 |
| BEIL | | | | eS | Sn | 00 51 09.2 | 0.0 |
| GEM | Giv'at Ha'Em | 1.89 | 129 | S | Sn | 00 51 09.1 | 0.0 |
| GEM | Giv'at Ha'Em | 1.89 | 129 | P | Pn | 00 50 47.3 | +0.9 |
| NATI | Neve Ativ | 1.90 | 126 | S | Sn | 00 51 09.6 | +0.1 |
| NATI | Neve Ativ | 1.90 | 126 | P | Pn | 00 50 47.5 | +1.0 |
| BLGI | Bet Lehem HaGe | 1.98 | 147 | S | Sn | 00 51 10.8 | -0.7 |
| BLGI | Bet Lehem HaGe | 1.98 | 147 | P | Pn | 00 50 48.0 | +0.4 |
| OFRI | \`Ofer | 1.99 | 153 | S | Sn | 00 51 10.9 | -1.0 |
| OFRI | \`Ofer | 1.99 | 153 | P | Pn | 00 50 48.2 | +0.3 |
| KEBE | Keben-Mersin | 2.04 | 356 | Pn | Pn | 00 50 48.6 | +0.1 |
| KEBE | | | | Sn | Sn | 00 51 11.8 | -1.3 |
| TEVE | Tevekalti-Mers | 2.06 | 350 | Pn | Pn | 00 50 49.1 | +0.3 |
| KIZK | Mersin | 2.08 | 5 | Pn | Pn | 00 50 49.4 | +0.4 |
| KIZK | Mersin | 2.08 | 5 | P | Pn | 00 50 49.5 | +0.5 |
| KIZK | | | | S | Sn | 00 51 10.7 | -3.2 |
| KIZK | | | | i AML | AML | 00 51 16.0 | |
| | comp=N,32nm,0.7s | | | | | | |
| KSHT | Keshet | 2.13 | 131 | S | Sn | 00 51 15.8 | +0.5 |
| KSHT | Keshet | 2.13 | 131 | P | Pn | 00 50 51.2 | +1.5 |
| GAZI | Gazipasa | 2.24 | 325 | Pn | Pn | 00 50 52.4 | +1.2 |
| MMLI | Mount Malkishu | 2.33 | 147 | S | Sn | 00 51 20.8 | +0.5 |
| MMLI | Mount Malkishu | 2.33 | 147 | P | Pn | 00 50 52.8 | +0.2 |
| SLTI | Sal'it | 2.36 | 156 | P | Pn | 00 50 53.5 | +0.7 |
| SLTI | Sal'it | 2.36 | 156 | S | Sn | 00 51 20.0 | -0.8 |
| HMDT | Nahal Hemdat | 2.54 | 147 | S | Sn | 00 51 25.5 | +0.2 |
| HMDT | Nahal Hemdat | 2.54 | 147 | P | Pn | 00 50 56.4 | +1.1 |
| DED | Mersin | 2.65 | 16 | P | Pn | 00 50 56.6 | -0.2 |
| DED | | | | S | Sn | 00 51 26.8 | -1.3 |
| DED | | | | i AML | AML | 00 51 29.0 | |
| | comp=E,28nm,0.6s | | | | | | |
| KKBE | Karaman, Kazim | 2.92 | 345 | P | Pn | 00 51 02.4 | +1.8 |
| KKBE | | | | S | Sn | 00 51 35.8 | +1.1 |
| GULE | Gulek | 2.96 | 14 | P | Pn | 00 51 02.7 | +1.5 |
| GULE | | | | S | Sn | 00 51 36.1 | +0.3 |
| GULE | | | | i AML | AML | 00 51 39.0 | |
| | comp=E,26nm,0.7s | | | | | | |
| AMAZ | Amatzia | 2.99 | 163 | S | Sn | 00 51 35.9 | -0.5 |
| AMAZ | Amatzia | 2.99 | 163 | P | Pn | 00 51 01.5 | 0.0 |
| KERG | Konya-Eregli | 3.01 | 3 | P | Pn | 00 51 03.1 | +1.2 |
| KERG | | | | S | Sn | 00 51 37.3 | +0.3 |
| DSI | Dead Sea | 3.09 | 156 | S | Sn | 00 51 38.3 | -0.5 |
| DSI | Dead Sea | 3.09 | 156 | P | Pn | 00 51 03.6 | +0.7 |
| HASA | Hatay-Hassa-Ha | 3.15 | 41 | P | Pn | 00 51 03.6 | -0.1 |
| HASA | | | | S | Sn | 00 51 38.3 | -1.9 |
| HASA | | | | i AML | AML | 00 51 42.0 | |
| | comp=E,34nm,1.1s | | | | | | |
| HASA | | | | i AML | AML | 00 52 04.0 | |
| | comp=N,24nm,1.5s | | | | | | |
| YTIR | Yattir | 3.20 | 161 | S | Sn | 00 51 41.1 | -0.7 |
| YTIR | Yattir | 3.20 | 161 | P | Pn | 00 51 04.6 | +0.1 |
| MSBI | Mazada | 3.32 | 158 | P | Pn | 00 51 06.2 | +0.3 |
| MSBI | Mazada | 3.32 | 158 | S | Sn | 00 51 43.9 | -0.5 |
| KZIT | Kziot | 3.51 | 173 | S | Sn | 00 51 47.8 | -1.5 |
| KZIT | Kziot | 3.51 | 173 | P | Pn | 00 51 09.4 | +0.7 |
| PRNI | Paran | 4.15 | 167 | S | Sn | 00 52 03.6 | -1.4 |
| PRNI | Paran | 4.15 | 167 | P | Pn | 00 51 18.0 | +0.5 |
| HRFI | Mount Harif | 4.46 | 167 | S | Sn | 00 52 11.6 | -1.1 |
| HRFI | Mount Harif | 4.46 | 167 | P | Pn | 00 51 22.6 | +0.8 |
| MBRI | Mt Berech | 4.68 | 169 | P | Pn | 00 51 25.1 | +0.3 |
| MBRI | Mt Berech | 4.68 | 169 | S | Sn | 00 52 17.6 | -0.5 |

**JMA 01 00:55:42.7**±0.3**, 31°N**±2°×**13°9E**±°**, h457**$^{km}$**, MV3.5**/21**,**
**NEAR TORISHIMA IS, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHCJ | Hachijojimakas | 2.48 | 11 | eP | P | 00 56 46.7 | +0.1 |
| JHJ2 | Mitsune | 2.52 | 11 | P | P | 00 56 47.9 | +1.1 |
| BSO1 | Boso 1 | 4.27 | 20 | P | P | 00 57 02.3 | +2.4 |
| BSO1 | | | | eS | S | 00 58 04.5 | +1.4 |
| BSO3 | Boso 3 | 4.29 | 14 | eP | P | 00 57 02.3 | +1.8 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JIE | Ise | 4.30 | 331 | eP | P | 00 57 01.5 | +0.7 |
| CBIJ | Chichi jima | 4.38 | 143 | P | P | 00 57 02.2 | +0.4 |
| CBIJ | | | | eS | S | 00 58 03.7 | -2.3 |
| BSO4 | Boso 4 | 4.44 | 12 | P | P | 00 57 03.3 | +1.3 |
| BSO4 | | | | S | S | 00 58 08.1 | +1.4 |
| JHH2 | Haha-jima-NKT2 | 4.76 | 146 | eS | S | 00 58 10.7 | -1.8 |
| JAG | Ashikaga | 5.78 | 2 | P | P | 00 57 15.3 | +0.4 |
| JAG | | | | eS | S | 00 58 26.3 | -4.0 |
| JHO | Hitachi | 6.06 | 10 | P | P | 00 57 18.6 | +0.8 |
| JHO | | | | S | S | 00 58 32.9 | -2.7 |

*NEIC **01** 00:59:48.7±1.1, 35°.05N±0°.02×97°.60W±0°.01, h5$^{km}$±1$^{km}$, Error ellipse: s-maj=2.7km s-min=2.5km az=342.0*

**TUL 01 00:59:49.2**±1.0**, 35°.05N**±0°.02×**97°.59W**±0°.02**, h7**$^{km}$±5$^{km}$**, ML2.1, mb_Lg2.0**/29(NEIC)**, ML2.1**/36(NEIC)**, Error ellipse: s-maj=2.5km s-min=1.7km az=139.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNO | Franklin | 0.26 | 37 | Pg | Pg | 00 59 54.4 | 0.0 |
| FNO | | | | Sg | Sg | 00 59 59.1 | +1.1 |
| FNO | | | | IAML | | 01 00 02.5 | |
| | comp=E,237nm,0.7s | | | | | | |
| OKCSW | OKLAHOMA CITY | 0.38 | 19 | Pg | Pg | 00 59 56.8 | +0.1 |
| X34A | Smith Ranch, M | 0.49 | 204 | Pg | Pg | 00 59 58.6 | 0.0 |
| ADOK | Arcadia Dam | 0.63 | 17 | Pg | Pg | 01 00 00.4 | -1.0 |
| WMOK | Wichita Mounta | 1.02 | 253 | Pg | Pg | 01 00 07.4 | -1.5 |
| WMOK | | | | Sg | Sg | 01 00 21.5 | -0.7 |
| CSTR | Hydro, Custer | 1.08 | 304 | Pg | Pg | 01 00 09.6 | -0.3 |
| CSTR | | | | Sg | Sg | 01 00 24.0 | +0.1 |
| OK031 | S. Brethren Rd | 1.09 | 34 | Pg | Pg | 01 00 09.1 | -1.1 |
| OK031 | | | | Sg | Sg | 01 00 24.4 | -0.1 |
| LOOK | Love County | 1.10 | 162 | Pg | Pg | 01 00 10.1 | -0.3 |
| LOOK | | | | IAML | | 01 00 31.0 | |
| | comp=E,43nm,0.3s | | | | | | |
| LOOK | | | | IAML | | 01 00 35.5 | |
| | comp=N,42nm,0.3s | | | | | | |
| OK052 | Battle Ridge R | 1.14 | 34 | Pg | Pg | 01 00 10.0 | -1.1 |
| DEOK | Depew | 1.20 | 48 | Pg | Pg | 01 00 10.9 | -1.2 |
| DEOK | | | | IAML | | 01 00 33.7 | |
| | comp=N,30nm,0.4s | | | | | | |
| QUOK | Quay | 1.33 | 32 | | Pn | 01 00 13.3 | -0.9 |
| OK048 | Pawnee Station | 1.47 | 21 | | Pn | 01 00 15.8 | -0.3 |
| WTFS | Witchita Falls | 1.47 | 210 | | Pn | 01 00 15.6 | -0.5 |
| CROK | Carrier | 1.49 | 348 | | Pn | 01 00 16.2 | -0.2 |
| OK051 | E0350 and S346 | 1.58 | 23 | | Pn | 01 00 17.2 | -0.5 |
| BLOK | Blackwell | 1.74 | 10 | Pn | Pn | 01 00 18.6 | -1.2 |
| U32A | Winter Ranch, | 1.76 | 320 | Pn | Pn | 01 00 19.3 | -0.8 |
| U32A | | | | IAmb_Lg | | 01 00 43.8 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| ELIS | Ellis County | 1.80 | 305 | Pn | Pn | 01 00 21.5 | +0.8 |
| GC02 | Grant County # | 1.81 | 353 | Pn | Pn | 01 00 20.3 | -0.5 |
| OK032 | Salt Plains WL | 1.82 | 344 | Pn | Pn | 01 00 21.2 | +0.2 |
| X37A | Clayton | 1.88 | 103 | Pn | Pn | 01 00 22.4 | +0.6 |
| KAN13 | South Haven SW | 1.96 | 3 | Pn | Pn | 01 00 22.5 | -0.5 |
| KAN13 | | | | IAmb_Lg | | 01 00 53.0 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| KAN17 | Caldwell West | 2.00 | 356 | Pn | Pn | 01 00 24.2 | +0.8 |
| FW03 | Perrin-Whitt E | 2.04 | 191 | IAmb_Lg | | 01 00 54.4 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| FW06 | Azle | 2.07 | 179 | IAmb_Lg | | 01 00 57.4 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| KAN09 | Caldwell North | 2.09 | 359 | IAmb_Lg | | 01 00 59.3 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| SMWD | Samnorwood | 2.17 | 272 | Pn | Pn | 01 00 25.1 | -0.7 |
| SMWD | | | | IAmb_Lg | | 01 01 03.0 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| PLPT | Palo Pinto | 2.31 | 195 | IAmb_Lg | | 01 01 01.6 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| RLO | Rose Lookout | 2.37 | 61 | Pn | Pn | 01 00 28.1 | -0.5 |
| HHAR | Hobbs | 3.22 | 66 | IAmb_Lg | | 01 01 39.2 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| MIAR | Mount Ida | 3.34 | 97 | Pn | Pn | 01 00 41.6 | -0.3 |
| SN05 | Snyder 5 | 3.49 | 233 | IAmb_Lg | | 01 01 48.9 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| X40A | Basin Creek Fa | 3.96 | 97 | IAmb_Lg | | 01 02 04.8 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| MGMO | Mountain Grove | 4.80 | 62 | IAmb_Lg | | 01 02 31.5 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| R40A | Maddies Statio | 5.37 | 51 | IAmb_Lg | | 01 02 39.3 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| MNHN | Monahans | 5.69 | 231 | IAmb_Lg | | 01 03 00.3 | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| T25A | Trinidad | 5.90 | 293 | IAmb_Lg | | 01 03 03.8 | |
| | comp=Z,2.7nm,0.9s | | | | | | |

*IDC **01** 01:25:26.9±1.1, 34°.28N×26°.26E, h0$^{km}$, mb3.7/7, mbtmp3.6/12, ML3.7/3, Error ellipse: s-maj=22.4km s-min=15.2km az=5.0*

*ATH **01** 01:25:34.3, 34°.48N×26°.13E, h16$^{km}$±3$^{km}$, ML2.6/3, Error ellipse: s-maj=4.8km s-min=1.8km az=348.0*

*THE **01** 01:25:35.3, 34°.56N×26°.12E, h15$^{km}$±2$^{km}$, ML2.1/3, Error ellipse: s-maj=3.4km s-min=1.2km az=167.0*

**ISC 01 01:25:31.0**±1.6**, 34°.32N**±0°.07×**26°.16E**±0°.04**, h31**$^{km}$±12$^{km}$**, n40,** σ**2.s14**/49**, mb3.7**/7**, Crete**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZKR | Zakros | 0.80 | 3 | P | Pb | 01 25 46.2 | -0.3 |
| ZKR | Zakros | 0.80 | 3 | P | Pb | 01 25 46.2 | -0.3 |
| ZKR | | | | S | Sb | 01 25 55.3 | -1.7 |
| ZKR | | | | AML | AML | 01 26 01.6 | |
| | comp=N,629µm,0.4s | | | | | | |
| ZKR | | | | AML | AML | 01 26 02.9 | |
| | comp=E,1589µm,0.6s | | | | | | |
| KSTL | Kastelli Herak | 1.33 | 318 | P | Pn | 01 25 51.6 | -1.9 |
| KSTL | | | | S | Sn | 01 26 04.6 | -5.7 |
| | comp=E,85nm,0.7s | | | | | | |
| KSTL | Kastelli Herak | 1.33 | 318 | P | Pn | 01 25 53.2 | -0.3 |
| KSTL | | | | S | Sn | 01 26 05.2 | -5.1 |
| KSTL | | | | AML | AML | 01 26 16.9 | |
| | comp=N,656µm,0.5s | | | | | | |
| KSTL | | | | AML | AML | 01 26 20.6 | |
| | comp=E,412µm,0.5s | | | | | | |
| IDI | Anoyia | 1.43 | 313 | Pn | Pb | 01 25 57.4 | +0.3 |
| | comp=E,4.0nm,0.3s,baz=136,slow=9.5,SNR=48 | | | | | | |
| IDI | | | | Sn | Sb | 01 26 15.5 | +0.5 |
| | comp=E,6.4nm,0.3s,baz=126,slow=22,SNR=6.6 | | | | | | |
| IDI | Anoyia | 1.43 | 313 | P | Pb | 01 25 57.4 | +0.3 |
| KARP | Karpathos | 1.48 | 33 | P | Pb | 01 25 58.2 | +0.3 |
| KARP | Karpathos | 1.48 | 33 | P | Pb | 01 25 58.2 | +0.3 |
| KARP | | | | S | Sn | 01 26 14.1 | +0.3 |
| KARP | | | | AML | AML | 01 26 25.1 | |
| | comp=N,472µm,0.2s | | | | | | |
| KARP | | | | AML | AML | 01 26 28.4 | |
| | comp=E,640µm,0.5s | | | | | | |
| GVD | Gavdhos | 1.79 | 288 | P | Pn | 01 26 02.4 | +2.6 |
| GVD | Gavdhos | 1.79 | 288 | P | Pn | 01 26 02.1 | +2.3 |
| IMMV | Iera Moni Meta | 2.13 | 303 | P | Pn | 01 26 06.8 | +2.3 |
| IMMV | Iera Moni Meta | 2.13 | 303 | P | Pn | 01 26 07.4 | +3.0 |
| SANT | Santorini | 2.13 | 344 | P | Pn | 01 26 07.0 | +2.4 |
| THR6 | Thira Island, | 2.13 | 343 | P | Pn | 01 26 05.8 | +1.3 |
| SNT5 | Nea Kammeni, S | 2.18 | 343 | P | Pn | 01 26 06.8 | +1.6 |
| THR5 | Thira Island, | 2.20 | 343 | P | Pn | 01 26 06.8 | +1.3 |
| SAP3 | Santorini-Thir | 2.22 | 343 | P | Pn | 01 26 07.4 | +1.6 |
| RODP | Rodopos | 2.33 | 303 | P | Pn | 01 26 10.0 | +2.7 |
| RODP | | | | S | Sn | 01 26 37.2 | +2.2 |
| | comp=E,18nm,0.6s | | | | | | |
| ARG | Arkhangelos | 2.48 | 40 | P | Pn | 01 26 12.0 | +2.6 |
| ARG | | | | S | Sn | 01 26 39.4 | +0.7 |
| | comp=E,52nm,0.5s | | | | | | |
| ARG | Arkhangelos | 2.48 | 40 | P | Pn | 01 26 12.3 | +3.0 |
| APE | Apeiranthos | 2.79 | 350 | P | Pn | 01 26 15.0 | +1.3 |
| ANKY | Antikythira Is | 2.81 | 304 | P | Pn | 01 26 16.3 | +2.4 |
| ANKY | Antikythira Is | 2.81 | 304 | P | Pn | 01 26 17.0 | +3.1 |
| VLI | Veliai | 3.56 | 313 | P | Pn | 01 26 25.2 | +1.0 |
| VLI | Veliai | 3.56 | 313 | P | Pn | 01 26 25.2 | +1.0 |
| VLI | | | | S | Sn | 01 27 05.5 | +0.3 |
| KRND | KRANIDI | 3.92 | 322 | P | Pn | 01 26 32.1 | +3.0 |
| DION | Dionisos Attik | 4.17 | 335 | P | Pn | 01 26 35.1 | +2.6 |
| ITM | Ithomi | 4.48 | 311 | P | Pn | 01 26 38.0 | +1.2 |
| MMAI | Mount Meron Ar | 7.81 | 97 | Pn | Pn | 01 27 20.2 | -2.4 |
| | comp=E,1.7nm,0.3s,baz=267,slow=12,SNR=11 | | | | | | |
| MMAI | | | | Sn | Sn | 01 28 46.1 | -3.9 |
| | comp=E,1.5nm,0.3s,baz=296,slow=27,SNR=1.8 | | | | | | |
| | comp=E,0.7nm,0.3s | | | | | | |
| BRTR | Keskin Array B | 8.05 | 46 | Pn | Pn | 01 27 26.9 | +0.9 |
| | comp=E,0.4nm,0.8s,baz=196,slow=9.9,SNR=2.3 | | | | | | |
| EIL | Elat | 8.78 | 119 | Pn | Pn | 01 27 34.2 | -1.7 |
| | comp=E,0.3nm,0.3s,baz=356,slow=4.1,SNR=12 | | | | | | |
| EIL | | | | Sn | Sn | 01 29 06.2 | -7.7 |
| | comp=E,0.3nm,0.3s,baz=352,slow=15,SNR=1.9 | | | | | | |
| | comp=E,1.4nm,0.6s | | | | | | |
| VAE | Valguarnera | 10.04 | 292 | Pn | Pn | 01 27 55.2 | +2.1 |
| | comp=E,1.9nm,0.4s,baz=95,slow=17,SNR=1.9 | | | | | | |
| AKASG | Malin Array Be | 16.53 | 7 | Pn | Pn | 01 29 21.2 | +0.8 |
| | comp=E,0.5nm,0.3s,baz=194,slow=10,SNR=2.1 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| ESDC | Sonseca Array | 24.58 | 291 | P | P | 01 30 48.8 | +0.4 |
| | comp=E,0.6nm,0.6s,baz=80,slow=9.2,SNR=10.0 | | | | | | |
| | comp=E,0.6nm,0.6s | | | | | | |
| HFS | Hagfors | 27.09 | 346 | P | P | 01 31 09.5 | -1.2 |
| | comp=E,2.1nm,1.0s,baz=160,slow=8.9,SNR=2.0 | | | | | | |
| | comp=E,2.1nm,1.0s | | | | | | |
| FINES | FINESS Array B | 27.14 | 360 | P | P | 01 31 10.1 | -1.1 |
| | comp=E,0.5nm,0.8s,baz=192,slow=13,SNR=1.2 | | | | | | |
| | comp=E,0.5nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 30.61 | 232 | P | P | 01 31 43.0 | +0.6 |
| | comp=E,0.2nm,0.3s,baz=30,slow=8.4,SNR=14 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 41.02 | 50 | P | P | 01 33 11.2 | +0.1 |
| | comp=E,1.0nm,0.5s,baz=276,slow=8.5,SNR=11 | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 43.55 | 56 | P | P | 01 33 32.8 | +0.8 |
| | comp=E,1.0nm,0.5s,baz=278,slow=7.1,SNR=9.5 | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 45.00 | 46 | P | P | 01 33 43.6 | +0.3 |
| | comp=E,0.6nm,0.4s,baz=279,slow=11,SNR=2.5 | | | | | | |
| | comp=E,0.6nm,0.4s | | | | | | |

*NEIC **01** 02:04:55.1±0.6, 36°.83N±0°.01×98°.45W±0°.02, h5$^{km}$±1$^{km}$, Error ellipse: s-maj=3.4km s-min=2.5km az=135.0*

**TUL 01 02:04:55.1**±0.5**, 36°.83N**±0°.02×**98°.45W**±0°.02**, h2**$^{km}$±1$^{km}$**, ML2.4, mb_Lg2.2**/37(NEIC)**, ML2.5**/41(NEIC)**, Error ellipse: s-maj=2.5km s-min=1.2km az=144.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OK032 | Salt Plains WL | 0.20 | 97 | | Pg | 02 04 59.7 | +0.9 |
| OK032 | | | | Sg | Sg | 02 05 02.7 | +1.3 |
| OK032 | | | | IAML | | 02 05 04.7 | |
| | 960nm,0.2s | | | | | | |
| KAN14 | Manchester OK | 0.41 | 72 | Pg | Pg | 02 05 03.5 | +0.5 |
| KAN14 | | | | Sg | Sg | 02 05 09.6 | +1.2 |
| KAN14 | | | | IAML | | 02 05 09.9 | |
| | comp=N,302nm,0.3s | | | | | | |
| KAN14 | | | | IAML | | 02 05 17.8 | |
| | comp=E,291nm,0.1s | | | | | | |
| OK038 | West end E0370 | 0.42 | 214 | Pg | Pg | 02 05 03.7 | +0.6 |
| OK038 | | | | Sg | Sg | 02 05 09.8 | +1.3 |
| NOKA | Waynoka | 0.43 | 244 | Pg | Pg | 02 05 03.8 | +0.4 |
| NOKA | | | | Sg | Sg | 02 05 10.1 | +1.1 |
| NOKA | | | | IAML | | 02 05 12.6 | |
| | comp=E,336nm,0.2s | | | | | | |
| NOKA | | | | IAML | | 02 05 16.2 | |
| | comp=N,365nm,0.3s | | | | | | |
| GC02 | Grant County # | 0.48 | 87 | Pg | Pg | 02 05 04.7 | +0.5 |
| GC02 | | | | Sg | Sg | 02 05 11.4 | +1.0 |
| CROK | Carrier | 0.50 | 130 | Pg | Pg | 02 05 05.0 | +0.4 |
| CROK | | | | Sg | Sg | 02 05 12.1 | +1.1 |
| CROK | | | | IAML | | 02 05 12.4 | |
| | comp=E,332nm,0.3s | | | | | | |
| CROK | | | | IAML | | 02 05 12.4 | |
| | comp=N,376nm,0.3s | | | | | | |
| KAN05 | Bluff City Nor | 0.54 | 59 | Pg | Pg | 02 05 06.0 | +0.5 |
| KAN05 | | | | Sg | Sg | 02 05 13.6 | +1.0 |
| KAN05 | | | | IAML | | 02 05 14.4 | |
| | comp=N,368nm,0.2s | | | | | | |
| KAN05 | | | | IAML | | 02 05 19.3 | |
| | comp=E,320nm,0.2s | | | | | | |
| KAN08 | Anthony NE Sta | 0.55 | 44 | Pg | Pg | 02 05 06.0 | +0.3 |
| KAN08 | | | | Sg | Sg | 02 05 13.2 | +0.3 |
| KAN17 | Caldwell West | 0.59 | 68 | Pg | Pg | 02 05 06.9 | +0.4 |
| KAN17 | | | | Sg | Sg | 02 05 15.3 | +1.1 |
| KAN17 | | | | IAML | | 02 05 24.7 | |
| | comp=N,257nm,0.3s | | | | | | |
| KAN12 | Harper NE Stat | 0.59 | 38 | Pg | Pg | 02 05 06.7 | +0.2 |
| KAN12 | | | | IAML | | 02 05 18.8 | |
| | comp=N,403nm,0.4s | | | | | | |
| U32A | Winter Ranch, | 0.63 | 225 | Pg | Pg | 02 05 07.3 | +0.2 |
| U32A | | | | Sg | Sg | 02 05 16.2 | +0.9 |
| U32A | | | | IAML | | 02 05 16.9 | |
| | comp=N,171nm,0.4s | | | | | | |
| KAN01 | Argonia South | 0.64 | 59 | Pg | Pg | 02 05 07.8 | +0.4 |
| KAN09 | Caldwell North | 0.73 | 65 | Pg | Pg | 02 05 09.4 | +0.2 |
| KS21 | Milan North St | 0.78 | 54 | Pg | Pg | 02 05 10.2 | +0.1 |
| KAN13 | South Haven SW | 0.80 | 76 | Pg | Pg | 02 05 10.5 | +0.1 |
| KAN13 | | | | Sg | Sg | 02 05 20.9 | 0.0 |
| BLOK | Blackwell | 0.99 | 93 | Pg | Pg | 02 05 13.8 | -0.4 |
| BLOK | | | | Sg | Sg | 02 05 27.7 | +0.6 |
| ELIS | Ellis County | 1.09 | 226 | Pg | Pg | 02 05 15.9 | 0.0 |
| ELIS | | | | IAML | | 02 05 43.3 | |
| | comp=E,146nm,0.2s | | | | | | |
| CSTR | Hydro, Custer | 1.20 | 189 | | Pg | 02 05 16.8 | -1.2 |
| OK048 | Pawnee Station | 1.28 | 108 | | Pg | 02 05 19.1 | -0.6 |
| OK029 | Liberty Lake | 1.31 | 142 | | Pg | 02 05 19.6 | -0.5 |
| OK029 | | | | IAML | | 02 05 40.2 | |
| | comp=E,91nm,0.3s | | | | | | |
| OK029 | | | | IAML | | 02 05 40.6 | |
| | comp=E,88nm,0.2s | | | | | | |
| OK051 | E0350 and S346 | 1.34 | 103 | | Pg | 02 05 20.3 | -0.5 |
| ADOK | Arcadia Dam | 1.46 | 143 | | Pn | 02 05 21.3 | -1.2 |
| QUOK | Quay | 1.55 | 114 | | Pn | 02 05 23.4 | -0.4 |
| T35A | Sooner Cattle | 1.56 | 86 | | Pn | 02 05 23.4 | -0.5 |
| OK031 | S. Brethren Rd | 1.57 | 123 | | Pn | 02 05 23.8 | -0.2 |
| OK052 | Battle Ridge R | 1.57 | 122 | | Pn | 02 05 23.6 | -0.4 |
| OKCSW | OKLAHOMA CITY | 1.64 | 150 | IAmb_Lg | | 02 05 50.0 | |
| | comp=Z,16nm,0.7s | | | | | | |
| FNO | Franklin | 1.78 | 151 | Pn | Pn | 02 05 26.9 | -0.1 |
| DEOK | Depew | 1.86 | 121 | Pn | Pn | 02 05 27.9 | -0.1 |
| WMOK | Wichita Mounta | 2.10 | 187 | Pn | Pn | 02 05 31.5 | +0.1 |
| SMWD | Samnorwood | 2.25 | 221 | Pn | Pn | 02 05 34.0 | +0.6 |
| X34A | Smith Ranch, M | 2.28 | 167 | Pn | Pn | 02 05 34.7 | +0.9 |
| TUL3 | Leonard | 2.33 | 112 | Pn | Pn | 02 05 34.8 | +0.2 |
| TUL3 | | | | IAmb_Lg | | 02 06 12.1 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| RLO | Rose Lookout | 2.84 | 102 | Pn | Pn | 02 05 40.5 | -1.0 |
| AMTX | Amarillo | 3.26 | 234 | Pn | Pn | 02 05 48.0 | +0.6 |
| U38A | Gravette | 3.29 | 96 | Pn | Pn | 02 05 47.6 | -0.2 |
| U38A | | | | IAmb_Lg | | 02 06 43.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| X37A | Clayton | 3.36 | 131 | Pn | Pn | 02 05 48.7 | +0.1 |
| X37A | | | | IAmb_Lg | | 02 06 48.0 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| RTBA | Rita Blanca | 3.47 | 265 | Pn | Pn | 02 05 48.2 | -2.1 |
| RTBA | | | | IAmb_Lg | | 02 06 50.0 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| HHAR | Hobbs | 3.67 | 97 | Pn | Pn | 02 05 52.7 | -0.3 |
| DKNS | Dickens | 3.75 | 213 | Pn | Pn | 02 05 54.6 | +0.6 |
| DKNS | | | | IAmb_Lg | | 02 06 53.2 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| APMT | Aspermont | 3.75 | 202 | Pn | Pn | 02 05 54.9 | +0.8 |
| APMT | | | | IAmb_Lg | | 02 07 02.4 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| KSCO | Kaye Shedlock' | 3.96 | 305 | IAmb_Lg | | 02 07 00.2 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| PLPT | Palo Pinto | 4.01 | 178 | IAmb_Lg | | 02 07 06.5 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| S39A | Bolivar | 4.18 | 77 | Pn | Pn | 02 06 00.1 | +0.1 |
| S39A | | | | IAmb_Lg | | 02 07 11.8 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| SN05 | Snyder 5 | 4.42 | 208 | IAmb_Lg | | 02 07 17.8 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| POST | Post | 4.51 | 215 | IAmb_Lg | | 02 07 30.6 | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| MIAR | Mount Ida | 4.58 | 118 | Pn | Pn | 02 06 05.0 | -0.4 |
| MGMO | Mountain Grove | 4.96 | 84 | Pn | Pn | 02 06 09.6 | -1.1 |
| MGMO | | | | IAmb_Lg | | 02 07 31.3 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| X40A | Basin Creek Fa | 5.13 | 115 | Pn | Pn | 02 06 10.8 | -2.2 |
| X40A | | | | IAmb_Lg | | 02 07 51.4 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| FCAR | Ozark Folk Cen | 5.19 | 98 | IAmb_Lg | | 02 07 46.9 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| WLAR | White Oak Lake | 5.38 | 124 | Pn | Pn | 02 06 13.9 | -2.4 |
| BRDY | Brady | 5.55 | 185 | IAmb_Lg | | 02 08 01.4 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| T42A | Van Buren | 5.90 | 86 | IAmb_Lg | | 02 08 06.6 | |
| | comp=Z,4.3nm,0.9s | | | | | | |

**UCR 01 02:09:44.9**±0.9**, 9°.45N×84°.58W, h21**$^{km}$±4$^{km}$**, MW3.5, Costa Rica**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BITO | Garabito Jaco | 0.17 | 348 | eP | Pb | 02 09 49.3 | -1.6 |
| BITO | | | | eS | Sb | 02 09 53.7 | -1.3 |
| LLNJ | Naranjito | 0.48 | 87 | eP | Pb | 02 09 55.0 | +0.5 |
| TRB2 | Turrubares | 0.48 | 16 | eP | Pb | 02 09 54.2 | -0.4 |
| CBL1 | Cabuya | 0.52 | 285 | eP | Pb | 02 09 54.5 | -0.9 |
| ABE2 | San Pablo | 0.58 | 64 | eP | Pb | 02 09 56.0 | -0.7 |
| SANTA | Santa Ana | 0.62 | 39 | eP | Pb | 02 09 56.5 | -0.7 |
| LCR2 | La Lucha 2 | 0.64 | 63 | eP | Pb | 02 09 56.7 | -0.9 |
| TCS1 | Tacares | 0.65 | 26 | eP | Pb | 02 09 57.5 | -0.2 |
| BELE | Belen | 0.65 | 37 | eP | Pb | 02 09 57.1 | -0.7 |
| LUJA | Lujan | 0.69 | 47 | eP | Pb | 02 09 58.7 | +0.3 |
| SJS | Escuela Geolog | 0.71 | 47 | eP | Pb | 02 09 58.3 | -0.4 |
| BUS1 | Rivas | 0.83 | 83 | eP | Pb | 02 09 59.6 | -1.3 |
| MTEVE | Monteverde | 0.89 | 344 | eP | Pn | 02 10 02.7 | +0.3 |
| VICA | Volcano Irazu | 0.90 | 54 | eP | Pb | 02 10 02.4 | +0.3 |
| JTS | Las Juntas de | 0.91 | 336 | eP | Pb | 02 10 01.0 | -1.0 |
| RAFA | San Farael, Vo | 0.91 | 57 | eP | Pb | 02 10 01.9 | -0.3 |
| SOCE | Pocosol | 0.93 | 358 | eP | Pb | 02 10 02.1 | -0.2 |
| VTCV | VTCV, Calle Va | 1.00 | 58 | eP | Pb | 02 10 03.4 | -0.1 |
| ARE1 | Arenal 1 | 1.01 | 352 | eP | Pb | 02 10 03.6 | -0.2 |
| VACR | Volcan Arenal | 1.02 | 355 | eP | Pb | 02 10 03.9 | 0.0 |
| CEDE | Laguna Cedeo | 1.03 | 353 | eP | Pn | 02 10 04.3 | 0.0 |
| CUI | Cuipilapa | 1.33 | 335 | eP | Pn | 02 10 08.2 | -0.1 |
| DRK0 | Durika | 1.33 | 98 | eP | Pn | 02 10 07.7 | -0.8 |

*IDC **01** 02:23:43.4±1.3, 2°.86S×147°.45E, h0$^{km}$, mb3.9/5, mbtmp3.9/5, MS3.8/38, Error ellipse: s-maj=99.0km s-min=24.9km az=121.0*

*NEIC **01** 02:23:48.2±1.6, 2°.75S±0°.07×147°.3E±0°.1, h20$^{km}$±7$^{km}$, mb4.4/19, Error ellipse: s-maj=20.4km s-min=10.0km az=82.0*

*GCMT **01** 02:23:48.2±0.4, 2°.90S±0°.02×147°.59E±0°.03, h20$^{km}$±1$^{km}$, MW4.8/76, Moment Tensor Solution. s9,c9; s76,c95; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.30±.10; $M_{\theta\theta}$0.27±.07; $M_{\phi\phi}$-0.56±.08; $M_{r\theta}$0.69±.20; $M_{\theta\phi}$1.53±.07; $M_{\phi r}$0.25±.14; Best double couple: $M_0$1.76600×$10^{16}$ NP1:$\phi_s$100.00000°, $\delta$77.00000°, $\lambda$23.00000°. NP2: $\phi_s$5.00000°, $\delta$67.00000°, $\lambda$166.00000°. Principal axes: T 1.7730, Plg26.0000°, Azm324.0000°; N -0.0140, Plg63.0000°, Azm128.0000°; P -1.7600, Plg7.0000°, Azm231.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 01 02:23:49.0**±0.8**, 2°.8S**±0°.1×**147°.3E**±0°.3**, h32**$^{km}$**, n70,** σ**0.s97**/29**, mb4.4**/15**, MS3.9**/37**, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MANU | Manus Island | 0.77 | 3 | Pn | Pn | 02 24 02.7 | -1.0 |
| HNR | Honiara | 14.16 | 118 | LR | LR | 02 32 11.1 | |
| | comp=Z,5µm,18.6s,baz=275,slow=36 | | | | | | |
| GUMO | Guam | 16.48 | 352 | LR | LR | 02 34 00.3 | |
| | comp=Z,139nm,18.1s,baz=146,slow=37 | | | | | | |
| CTA | Charters Tower | 17.19 | 183 | LR | LR | 02 34 56.2 | |
| | comp=Z,22nm,19.3s,baz=359,slow=39 | | | | | | |
| CTAO | Charters Tower | 17.19 | 183 | Pn | Pn | 02 27 46.7 | -0.3 |
| WB0 | Warramunga Arr | 21.05 | 216 | P | P | 02 28 31.3 | +0.8 |
| WB0 | | | | IAmb | IAmb | 02 28 35.8 | |
| | comp=Z,27nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 21.12 | 215 | P | P | 02 28 31.1 | -0.1 |
| WR0 | | | | IAmb | IAmb | 02 28 36.1 | |
| | comp=Z,22nm,1.2s | | | | | | |
| WRAB | Tennant Creek | 21.21 | 216 | P | P | 02 28 32.8 | +0.6 |
| WRAB | | | | IAmb | IAmb | 02 28 39.4 | |
| | comp=Z,28nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 21.21 | 216 | P | P | 02 28 31.8 | -0.5 |
| WB2 | | | | IAmb | IAmb | 02 28 36.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 21.22 | 216 | P | P | 02 28 32.4 | +0.1 |
| WRA | Warramunga Arr | 21.22 | 216 | P | P | 02 28 32.0 | -0.4 |
| | comp=Z,7.8nm,0.9s,baz=42,slow=10,SNR=17 | | | | | | |
| WRA | | | | LR | LR | 02 37 38.9 | |
| | comp=Z,434nm,19.1s,baz=30,slow=39 | | | | | | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| EIDS | Eidsvold | 22.71 | 171 | P | P | 02 28 48.8 | +0.6 |
| DAV | Davao City (W) | 23.82 | 294 | LR | LR | 02 38 20.6 | |
| | comp=Z,233nm,18.3s,baz=130,slow=37 | | | | | | |
| AS31 | Alice Springs | 24.45 | 211 | P | P | 02 29 05.3 | +0.1 |
| ASAR | Alice Springs | 24.45 | 211 | P | P | 02 29 04.9 | -0.3 |
| ASAR | Alice Springs | 24.45 | 211 | P | P | 02 29 04.8 | -0.4 |
| | comp=Z,4.0nm,0.7s,baz=37,slow=7.1,SNR=24 | | | | | | |
| ASAR | | | | LR | LR | 02 38 48.4 | |
| | comp=Z,361nm,21.1s,baz=42,slow=37 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| FITZ | Fitzroy Crossi | 26.12 | 233 | P | P | 02 29 20.0 | -0.4 |
| DZM | Mont Dzumac | 26.66 | 137 | LR | LR | 02 38 10.8 | |
| | comp=Z,448nm,20.8s,baz=295,slow=33 | | | | | | |
| KAPI | Kappang | 27.59 | 265 | LR | LR | 02 41 15.3 | |
| | comp=Z,138nm,19.6s,baz=89,slow=38 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 28.50 | 41 | T | T | 02 59 19.8 | |
| | baz=222,slow=76,SNR=416 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 28.51 | 41 | T | T | 02 59 19.1 | |
| | baz=222,slow=76,SNR=306 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 28.52 | 41 | T | T | 02 59 20.7 | |
| | baz=222,slow=76,SNR=107 | | | | | | |
| STKA | Stephens Creek | 29.40 | 190 | LR | LR | 02 41 38.5 | |
| | comp=Z,279nm,18.2s,baz=12,slow=37 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.51 | 40 | T | T | 03 00 35.3 | |
| | baz=221,slow=76,SNR=110 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.53 | 40 | T | T | 03 00 36.5 | |
| | baz=221,slow=76,SNR=375 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.53 | 40 | T | T | 03 00 35.8 | |
| | baz=221,slow=76,SNR=501 | | | | | | |
| JCJ | Chichijima | 30.15 | 351 | LR | LR | 02 40 30.1 | |
| | comp=Z,74nm,20.4s,baz=168,slow=33 | | | | | | |
| FORT | Forrest | 33.24 | 211 | P | P | 02 30 25.0 | +1.6 |
| JOW | Kunigami | 34.75 | 329 | LR | LR | 02 42 22.1 | |
| | comp=Z,207nm,20.4s,baz=308,slow=32 | | | | | | |
| JHJ | Hachijo jima 2 | 36.45 | 349 | LR | LR | 02 43 14.3 | |
| | comp=Z,52nm,20.1s,baz=127,slow=32 | | | | | | |
| JNU | Nakatsue | 38.99 | 338 | LR | LR | 02 46 33.2 | |
| | comp=Z,60nm,18.6s,baz=160,slow=35 | | | | | | |
| MJAR | Matsushiro Arr | 40.07 | 349 | LR | LR | 02 47 24.2 | |
| | comp=Z,56nm,18.1s,baz=160,slow=35 | | | | | | |
| NWAO | Narrogin (SRO) | 41.13 | 220 | LR | LR | 02 49 28.9 | |
| | comp=Z,333nm,20.0s,baz=111,slow=38 | | | | | | |
| KSRS | Korea Array | 43.94 | 338 | LR | LR | 02 48 30.1 | |
| | comp=Z,74nm,19.1s,baz=145,slow=34 | | | | | | |
| URZ | Urewera | 44.56 | 146 | LR | LR | 02 47 37.8 | |
| | comp=Z,240nm,21.6s,baz=31,slow=32 | | | | | | |
| USRK | Ussuriysk Ar. | 48.79 | 345 | LR | LR | 02 52 42.9 | |
| | comp=Z,51nm,18.6s,baz=146,slow=36 | | | | | | |
| CMAR | Chiang Mai Arr | 52.10 | 296 | LR | LR | 02 53 14.3 | |
| | comp=Z,27nm,21.3s,baz=100,slow=34 | | | | | | |
| KLR | Kul'dur | 53.57 | 347 | LR | LR | 02 55 59.6 | |
| | comp=Z,35nm,18.0s,baz=275,slow=36 | | | | | | |
| RAR | Rarotonga | 54.57 | 114 | LR | LR | 02 55 22.2 | |
| | comp=Z,28nm,18.0s,baz=291,slow=35 | | | | | | |
| SONM | Songino Array | 61.82 | 330 | LR | LR | 02 59 20.8 | |
| | comp=Z,58nm,20.8s,baz=109,slow=34 | | | | | | |
| VNDA | Vanda | 75.05 | 177 | P | P | 02 35 25.9 | -1.1 |
| VNDA | | | | IAmb | IAmb | 02 35 45.1 | |
| | comp=Z,3.2nm,1.4s | | | | | | |
| VNDA | Vanda | 75.05 | 177 | P | P | 02 35 25.3 | -1.7 |
| | comp=Z,0.6nm,0.9s,baz=354,slow=3.9,SNR=2.9 | | | | | | |
| VNDA | | | | LR | LR | 03 06 25.7 | |
| | comp=Z,65nm,18.0s,baz=346,slow=34 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 75.28 | 320 | LR | LR | 03 09 11.8 | |
| | comp=Z,71nm,19.0s,baz=81,slow=36 | | | | | | |
| ZALV | Zalesovo Beam | 76.52 | 327 | LR | LR | 03 09 36.7 | |
| | comp=Z,72nm,19.0s,baz=96,slow=36 | | | | | | |
| KDAK | Kodiak Island | 76.97 | 28 | LR | LR | 03 03 31.2 | |
| | comp=Z,60nm,21.4s,baz=265,slow=31 | | | | | | |
| L19K | White Mountain | 78.09 | 24 | P | P | 02 35 44.8 | +0.3 |
| L19K | | | | IAmb | IAmb | 02 36 05.5 | |
| | comp=Z,6.2nm,1.2s | | | | | | |
| CNPM | China Poot | 78.39 | 27 | P | P | 02 35 46.8 | +0.6 |
| AAK | Ala-Archa | 79.36 | 314 | LR | LR | 03 10 48.6 | |
| | comp=Z,89nm,21.6s,baz=168,slow=36 | | | | | | |
| E19K | Redstone River | 80.02 | 19 | P | P | 02 35 56.2 | +1.2 |
| E19K | | | | IAmb | IAmb | 02 35 58.1 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| C19K | Lookout Ridge | 80.24 | 17 | P | P | 02 35 57.8 | +1.6 |
| C19K | | | | IAmb | IAmb | 02 35 58.8 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| IMAR | Indian Mountai | 80.42 | 21 | P | P | 02 35 57.8 | +0.6 |
| D22K | Ayikyak River | 82.22 | 18 | P | P | 02 36 08.4 | +1.7 |
| ILAR | Eielson Array | 82.45 | 23 | P | P | 02 36 07.0 | -1.0 |
| | comp=Z,0.5nm,0.7s,baz=262,slow=4.7,SNR=8.0 | | | | | | |
| ILAR | | | | LR | LR | 03 08 00.2 | |
| | comp=Z,28nm,21.5s,baz=248,slow=32 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.5nm,0.7s | | | | | | |
| **J25K** | **Salcha River,** | **82.99** | **24** | P | **P** | **02 36 10.7** | **-0.2** |
| J25K | | | | IAmb | IAmb | 02 36 13.6 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **C23K** | **Itkillik River** | **83.32** | **18** | P | **P** | **02 36 14.1** | **+1.8** |
| C23K | | | | IAmb | IAmb | 02 36 14.8 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **M27K** | **Edge Creek, AK** | **83.69** | **26** | P | **P** | **02 36 14.6** | **+0.1** |
| M27K | | | | IAmb | IAmb | 02 36 17.7 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **BCAR** | **Beaver Creek A** | **83.95** | **26** | P | **P** | **02 36 17.0** | **+1.2** |
| **BMAR** | **Burnt Mountain** | **84.33** | **21** | P | **P** | **02 36 18.7** | **+1.1** |
| **MAW** | **Mawson** | **85.29** | **203** | LR | LR | 03 13 59.5 | |
| | comp=Z,39nm,18.1s,baz=91,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **87.12** | **180** | LR | LR | 03 16 07.8 | |
| | comp=Z,48nm,18.5s,baz=38,slow=36 | | | | | | |
| **DLBC** | **Dease Lake** | **88.53** | **31** | LR | LR | 03 10 08.5 | |
| | comp=Z,84nm,19.8s,baz=272,slow=32 | | | | | | |
| **INK** | **Inuvik** | **88.60** | **21** | LR | LR | 03 13 43.4 | |
| | comp=Z,63nm,20.2s,baz=240,slow=34 | | | | | | |
| **BBB** | **Bella Bella** | **88.87** | **38** | LR | LR | 03 09 42.3 | |
| | comp=Z,95nm,20.2s,baz=255,slow=31 | | | | | | |
| **ARU** | **Arti** | **91.64** | **326** | LR | LR | 03 17 55.4 | |
| | comp=Z,86nm,21.3s,baz=93,slow=35 | | | | | | |
| **AKTO** | **Aktyubinsk** | **91.71** | **320** | LR | LR | 03 17 49.9 | |
| | comp=Z,78nm,20.8s,baz=138,slow=35 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **91.83** | **48** | LR | LR | 03 11 39.6 | |
| | comp=Z,64nm,19.5s,baz=306,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **95.17** | **52** | P | **P** | **02 37 10.3** | **+0.5** |
| | comp=Z,0.3nm,0.6s,baz=253,slow=6.3,SNR=2.4 | | | | | | |
| NVAR | | | | LR | LR | 03 10 53.5 | |
| | comp=Z,75nm,21.7s,baz=272,slow=30 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.22** | **28** | LR | LR | 03 24 05.3 | |
| | comp=Z,24nm,18.2s,baz=309,slow=38 | | | | | | |
| **KIRV** | **Kirov** | **96.53** | **329** | LR | LR | 03 22 58.1 | |
| | comp=Z,85nm,18.9s,baz=78,slow=37 | | | | | | |
| **PFO** | **Pinyon Flats O** | **96.73** | **57** | LR | LR | 03 12 37.4 | |
| | comp=Z,52nm,20.6s,baz=270,slow=30 | | | | | | |

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*NEIC **01** 02:26:32.8±1.1, 18°.6N±0°.2×67°.9W±0°.1, h90km±28km, ML2.3/20, Md3.1/8(RSPR), Error ellipse: s-maj=28.9km s-min=10.9km az=155.0*
*RSPR **01** 02:26:34.4, 18°.62N×67°.86W, h91km±2km, MD3.1/8*
*SDD **01** 02:26:35.4±2.3, 18°.57N×67°.84W, h88km±25km, MD2.7, ML2.2, MW2.3*
*OSPL **01** 02:26:36.2±1.6, 18°.57N×67°.82W, h86km±20km, ML2.2*
**ISC 01 02:26:34.4**±1.9, **18°.58N**±0°.10×**67°.84W**±0°.05, **h87**km±14km, **n41**, σ**0$^{s}$77**/60, **13C-9D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCDR** | **Punta Cana, DR** | **0.52** | **263** | Pn | **Pn** | **02 26 46.8** | **-2.1** |
| PCDR | | | | IAML | | 02 27 07.8 | |
| | comp=N,142nm,1.4s | | | | | | |
| PCDR | | | | IAML | | 02 27 20.6 | |
| | comp=E,102nm,1.8s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.52** | **263** | *i* P | **Pn** | **02 26 51.1** | **+2.2** |
| PCDR | | | | *e*S | **Sn** | **02 26 59.6** | **-0.1** |
| PCDR | | | | IAML | | 02 27 05.5 | |
| | comp=Z,84nm,1.4s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.70** | **99** | ⇑*e*P | **Pn** | **02 26 50.9** | **+0.2** |
| **AGPR** | **Aguadilla, PR** | **0.70** | **99** | *e*S | **Sn** | **02 27 03.2** | **+0.4** |
| **AGPR** | **Aguadilla, PR** | **0.70** | **99** | | **Pn** | **02 26 50.7** | **+0.1** |
| AGPR | | | | | **Sn** | **02 27 02.9** | **+0.2** |
| AGPR | | | | IAML | | 02 27 08.7 | |
| | comp=N,83nm,2.4s | | | | | | |
| AGPR | | | | IAML | | 02 27 29.3 | |
| | comp=E,110nm,1.9s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.70** | **99** | ⇑*e*Pg | **Pn** | **02 26 49.8** | **-0.8** |
| AGPR | | | | ⇑*e*Sg | **Sn** | **02 27 01.6** | **-1.2** |
| AGPR | | | | IAML | | 02 27 06.0 | |
| | comp=E,52nm,1.0s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.70** | **99** | *i* P | **Pn** | **02 26 50.8** | **+0.2** |
| AGPR | | | | *e*S | **Sn** | **02 27 03.0** | **+0.2** |
| AGPR | | | | IAML | | 02 27 08.3 | |
| | comp=Z,61nm,1.1s | | | | | | |
| **LSP** | **Las Mesas** | **0.82** | **119** | ⇑*e*P | **Pn** | **02 26 52.0** | **+0.1** |
| **LSP** | **Las Mesas** | **0.82** | **119** | *e*S | **Sn** | **02 27 06.2** | **+1.2** |
| **LSP** | **Las Mesas** | **0.82** | **119** | | **Pn** | **02 26 52.0** | **+0.1** |
| LSP | | | | | **Sn** | **02 27 06.2** | **+1.2** |
| **CRPR** | **Cabo Rojo, PR** | **0.90** | **129** | ⇓*e*P | **Pn** | **02 26 52.8** | **+0.2** |
| **CRPR** | **Cabo Rojo, PR** | **0.90** | **129** | *e*S | **Sn** | **02 27 07.7** | **+1.4** |
| **CRPR** | **Cabo Rojo, PR** | **0.90** | **129** | Pn | **Pn** | **02 26 52.4** | **-0.3** |
| CRPR | | | | Sn | **Sn** | **02 27 06.8** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **0.90** | **129** | ⇓*e*Pg | **Pn** | **02 26 51.5** | **-1.2** |
| CRPR | | | | IAML | | 02 27 05.7 | |
| | comp=E,40nm,2.8s | | | | | | |
| CRPR | | | | ⇑*e*Sg | **Sn** | **02 27 06.4** | **0.0** |
| CRPR | | | | IAML | | 02 27 34.4 | |
| | comp=N,37nm,1.8s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **0.90** | **129** | *i* P | **Pn** | **02 26 52.9** | **+0.2** |
| CRPR | | | | ⇑*e*S | **Sn** | **02 27 06.5** | **0.0** |
| CRPR | | | | IAML | | 02 27 13.5 | |
| | comp=Z,45nm,1.2s | | | | | | |
| **MLPR** | **Magueyes Islan** | **0.97** | **129** | ⇓*e*P | **Pn** | **02 26 53.0** | **-0.5** |
| **MLPR** | **Magueyes Islan** | **0.97** | **129** | *e*S | **Sn** | **02 27 08.2** | **+0.4** |
| **MLPR** | **Magueyes Islan** | **0.97** | **129** | Pn | **Pn** | **02 26 52.4** | **-1.1** |
| MLPR | | | | Sn | **Sn** | **02 27 06.2** | **-1.6** |
| **MLPR** | **Magueyes Islan** | **0.97** | **129** | ⇑*e*Pg | **Pn** | **02 26 53.2** | **-0.3** |
| MLPR | | | | ⇓*e*Sg | **Sn** | **02 27 06.9** | **-0.9** |
| MLPR | | | | IAML | | 02 27 17.1 | |
| | comp=E,17nm,2.3s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.06** | **102** | ⇓*e*P | **Pn** | **02 26 54.5** | **0.0** |
| **AOPR** | **Arecibo Observ** | **1.06** | **102** | *e*S | **Sn** | **02 27 09.3** | **-0.3** |
| **AOPR** | **Arecibo Observ** | **1.06** | **102** | Pn | **Pn** | **02 26 54.1** | **-0.5** |
| AOPR | | | | Sn | **Sn** | **02 27 08.8** | **-0.8** |
| AOPR | | | | IAML | | 02 27 10.6 | |
| | comp=N,54nm,0.3s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.06** | **102** | ⇑*e*Pg | **Pn** | **02 26 54.7** | **+0.2** |
| AOPR | | | | ⇓*e*Sg | **Sn** | **02 27 09.5** | **-0.2** |
| AOPR | | | | IAML | | 02 27 11.9 | |
| | comp=N,51nm,0.2s | | | | | | |
| AOPR | | | | IAML | | 02 27 12.3 | |
| | comp=E,117nm,0.2s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **1.11** | **107** | ⇑*e*P | **Pn** | **02 26 55.2** | **0.0** |
| **UUPR** | **Utuado, UPR, P** | **1.11** | **107** | *e*S | **Sn** | **02 27 11.0** | **+0.2** |
| **UUPR** | **Utuado, UPR, P** | **1.11** | **107** | Pn | **Pn** | **02 26 53.6** | **-1.6** |
| UUPR | | | | Sn | **Sn** | **02 27 10.4** | **-0.5** |
| **MIDR** | **Miches** | **1.21** | **290** | ⇑*e*Pg | **Pn** | **02 26 56.3** | **-0.1** |
| MIDR | | | | ⇑*e*Sg | **Sn** | **02 27 13.1** | **+0.1** |
| MIDR | | | | IAML | | 02 27 34.0 | |
| | comp=N,35nm,2.5s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **1.25** | **94** | *e*S | **Sn** | **02 27 14.2** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **1.25** | **94** | Pn | **Pn** | **02 26 56.6** | **-0.3** |
| EMPR | | | | Sn | **Sn** | **02 27 13.6** | **-0.2** |
| **OBIP** | **Obispado Ponce** | **1.29** | **114** | ⇓*e*P | **Pn** | **02 26 58.0** | **+0.7** |
| **OBIP** | **Obispado Ponce** | **1.29** | **114** | *e*S | **Sn** | **02 27 15.7** | **+1.1** |
| **OBIP** | **Obispado Ponce** | **1.29** | **114** | Pn | **Pn** | **02 26 57.2** | **-0.1** |
| OBIP | | | | Sn | **Sn** | **02 27 14.6** | **0.0** |
| OBIP | | | | IAML | | 02 27 24.1 | |
| | comp=E,24nm,2.4s | | | | | | |
| OBIP | | | | IAML | | 02 27 29.9 | |
| | comp=N,25nm,3.0s | | | | | | |
| **CELP** | **Cerrillos** | **1.30** | **112** | ⇑*e*P | **Pn** | **02 26 57.8** | **+0.4** |
| **CELP** | **Cerrillos** | **1.30** | **112** | *e*S | **Sn** | **02 27 15.4** | **+0.6** |
| **CELP** | **Cerrillos** | **1.30** | **112** | Pn | **Pn** | **02 26 57.6** | **+0.1** |
| CELP | | | | Sn | **Sn** | **02 27 15.0** | **+0.2** |
| CELP | | | | IAML | | 02 27 55.4 | |
| | comp=N,25nm,2.6s | | | | | | |
| **CELP** | **Cerrillos** | **1.30** | **112** | ⇑*e*Pg | **Pn** | **02 26 57.9** | **+0.4** |
| CELP | | | | ⇓*e*Sg | **Sn** | **02 27 15.5** | **+0.6** |
| **SJG** | **San Juan** | **1.67** | **106** | *e*S | **Sn** | **02 27 23.7** | **+0.4** |
| **GCPR** | **Guaynabo City** | **1.69** | **99** | *e*S | **Sn** | **02 27 25.0** | **+1.3** |
| **HUMP** | **Col San Antoni** | **1.94** | **103** | ⇓*e*P | **Pn** | **02 27 06.0** | **+0.3** |
| **HUMP** | **Col San Antoni** | **1.94** | **103** | *e*S | **Sn** | **02 27 29.3** | **-0.3** |
| **HUMP** | **Col San Antoni** | **1.94** | **103** | Pn | **Pn** | **02 27 05.2** | **-0.5** |
| HUMP | | | | Sn | **Sn** | **02 27 28.9** | **-0.6** |
| HUMP | | | | IAML | | 02 28 00.9 | |
| | comp=N,14nm,3.0s | | | | | | |
| HUMP | | | | IAML | | 02 28 07.5 | |
| | comp=E,14nm,2.3s | | | | | | |

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*VIE **01** 02:30:39.4±0.3, 50°.11N×18°.51E, h0km, mb2.5/6, ml2.7/5, Error ellipse: s-maj=5.0km s-min=2.4km az=151.0, Suspected Mining induced.*
*IPEC **01** 02:30:40.0±0.1, 49°.99N×18°.60E, h1km, ML2.6/4, Error ellipse: s-maj=2.0km s-min=1.1km az=164.0*
*IDC **01** 02:30:40.7±1.1, 49°.92N×18°.48E, h0km, mbtmp3.2/7, ML2.8/7, Error ellipse: s-maj=19.5km s-min=7.6km az=139.0*
*PRU **01** 02:30:41.4, 49°.97N×18°.50E, h0km*
**ISC 01 02:30:38.4**±0.6, **50°.05N**±0°.03×**18°.60E**±0°.02, **h0**km, **n55**, σ**1$^{s}$39**/89, **12C-3D, Poland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAC** | **Raciborz** | **0.26** | **278** | *e*PG | **Pb** | **02 30 46.6** | **+0.5** |
| RAC | | | | *e*SG | **Sb** | **02 30 51.5** | **+0.4** |
| **OKC** | **Ostrava-Krasne** | **0.36** | **235** | *e*PG | **Pg** | **02 30 46.9** | **+1.6** |
| OKC | | | | *e*SG | **Sg** | **02 30 51.7** | **+1.8** |
| | comp=Z,242nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.73** | **249** | *e*Pg | **Pg** | **02 30 53.4** | **+0.9** |
| | baz=72 | | | | | | |
| MORC | | | | *e*Sg | **Sg** | **02 31 02.4** | **+0.4** |
| | 75nm,0.3s,baz=72 | | | | | | |
| **MORC** | **Moravsky Berou** | **0.73** | **249** | ⇑P | **Pg** | **02 30 53.7** | **+1.2** |
| MORC | | | | ⇓S | **Sg** | **02 31 03.5** | **+1.5** |
| **OJC** | **Ojcow** | **0.79** | **77** | *e*Pg | **Pb** | **02 30 55.8** | **+0.8** |
| OJC | | | | *e*Sg | **Sb** | **02 31 07.2** | **+0.9** |
| **LANS** | **Liptovska Anna** | **1.06** | **148** | *e*PG | **Pb** | **02 31 00.1** | **+0.5** |
| LANS | | | | *e*SG | **Sb** | **02 31 14.4** | **+0.3** |
| LANS | | | | *e*LG | Lg | 02 31 18.7 | |
| **KRLC** | **Kraliky** | **1.17** | **272** | *e*PG | **Pg** | **02 31 01.6** | **+0.7** |
| KRLC | | | | *e*SG | **Sg** | **02 31 17.0** | **+0.9** |
| | comp=Z,86nm,0.7s | | | | | | |
| **NIE** | **Niedzica** | **1.27** | **119** | *e*Pg | **Pn** | **02 31 05.0** | **+1.6** |
| NIE | | | | *e*Sg | **Sn** | **02 31 23.9** | **+2.7** |
| **JAVC** | **Velka Javorina** | **1.33** | **207** | *e*Pg | **Pg** | **02 31 04.3** | **+0.3** |
| | baz=28 | | | | | | |
| **JAVC** | **Velka Javorina** | **1.33** | **207** | *e*PG | **Pg** | **02 31 04.4** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **1.50** | **283** | *e*PG | **Pn** | **02 31 07.6** | **+1.0** |
| DPC | | | | *e*SG | **Sn** | **02 31 27.9** | **+1.1** |
| | comp=Z,59nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **1.50** | **241** | *e*Pg | **Pn** | **02 31 06.8** | **+0.3** |
| | baz=62 | | | | | | |
| VRAC | | | | *e*Sg | **Sg** | **02 31 26.1** | **-0.4** |
| | 56nm,0.8s,baz=62 | | | | | | |
| **VRAC** | **Vranov** | **1.50** | **241** | Pg | **Pn** | **02 31 06.9** | **+0.3** |
| | 9.2nm,0.3s,baz=66,slow=16,SNR=78 | | | | | | |
| VRAC | | | | Lg | Lg | 02 31 25.2 | |
| | 12nm,0.3s,baz=154,slow=17,SNR=3.5 | | | | | | |
| **VRAC** | **Vranov** | **1.50** | **241** | ⇑P | **Pn** | **02 31 06.5** | **-0.1** |
| VRAC | | | | ⇑S | **Sb** | **02 31 27.1** | **+0.5** |
| **VYHS** | **Vyhne** | **1.56** | **174** | *e*PG | **Pn** | **02 31 07.3** | **-0.1** |
| VYHS | | | | *e*SG | **Sn** | **02 31 28.5** | **+0.1** |
| **KSP** | **Ksiaz** | **1.68** | **299** | *e*Pb | **Pn** | **02 31 09.9** | **+0.9** |
| KSP | | | | *e*Pg | **Pg** | **02 31 11.7** | **+1.2** |
| KSP | | | | *e*Sg | **Sg** | **02 31 33.2** | **+1.0** |
| **UPC** | **Upice** | **1.72** | **287** | *e*PG | **Pb** | **02 31 11.6** | **+0.7** |
| UPC | | | | *e*SG | **Sg** | **02 31 35.7** | **+2.0** |
| **KRUC** | **Moravsky** | **1.74** | **236** | *e*Pn | **Pn** | **02 31 10.8** | **+0.9** |
| | baz=56 | | | | | | |
| KRUC | | | | *e*Sg | **Sn** | **02 31 33.5** | **+0.7** |
| | 52nm,0.8s,baz=56 | | | | | | |
| **MODS** | **Modra-Piesok** | **1.89** | **208** | *e*PG | **Pn** | **02 31 12.1** | **+0.2** |
| MODS | | | | *e*SG | **Sb** | **02 31 37.5** | **-0.3** |
| MODS | | | | *e*LG | Lg | 02 31 42.8 | |
| **KECS** | **Kecovo** | **1.99** | **141** | *e*PN | **Pn** | **02 31 14.0** | **+0.6** |
| KECS | | | | *e*SN | **Sb** | **02 31 41.4** | **+0.5** |
| KECS | | | | *e*LG | Lg | 02 31 46.8 | |
| **ZST** | **Bratislava** | **2.10** | **209** | *e*SN | **Sn** | **02 31 42.1** | **+0.5** |
| ZST | | | | *e*LG | Lg | 02 31 47.7 | |
| **TREC** | **Trest** | **2.16** | **251** | *e*PN | **Pn** | **02 31 16.2** | **+0.6** |
| TREC | | | | *e*PG | **Pb** | **02 31 18.1** | **-0.3** |
| **CRVS** | **Cervenica-Dubn** | **2.19** | **120** | *e*PG | **Pg** | **02 31 21.4** | **+1.0** |
| **PSZ** | **Piszkesteto** | **2.29** | **158** | ⇓P | **Pn** | **02 31 18.5** | **+0.9** |
| PSZ | | | | ⇑S | **Sn** | **02 31 46.2** | **-0.4** |
| **GOPC** | **GO Pecny, Ondr** | **2.46** | **268** | *e*PG | **Pb** | **02 31 23.5** | **-0.1** |
| **PRU** | **Pruhonice** | **2.62** | **270** | *e*SG | **Sb** | **02 32 00.7** | **+1.8** |
| | comp=Z,16nm,0.5s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **2.64** | **114** | *e*PN | **Pn** | **02 31 23.3** | **+1.0** |
| KOLS | | | | *e* | | 02 31 31.3 | |
| KOLS | | | | *e*LG | Lg | 02 32 19.3 | |
| **CONA** | **Conrad Observa** | **2.78** | **221** | *e*Pn | **Pn** | **02 31 24.2** | **-0.1** |
| | 1.2nm,0.3s | | | | | | |
| **RONA** | **Rosalia, Austr** | **2.80** | **214** | Pn | **Pn** | **02 31 24.9** | **+0.4** |
| | 1.6nm,0.3s | | | | | | |
| **ZVC** | **Zvikov** | **2.92** | **260** | *e*PN | **Pn** | **02 31 26.4** | **+0.3** |
| ZVC | | | | *e*PG | **Pb** | **02 31 31.1** | **-0.3** |
| **CKRC** | **Cesky Krumlov** | **3.06** | **248** | *e*PN | **Pn** | **02 31 28.5** | **+0.5** |
| CKRC | | | | *e*PG | **Pb** | **02 31 34.3** | **+0.6** |
| CKRC | | | | *e*SG | **Sb** | **02 32 13.8** | **+2.2** |
| | comp=Z,18nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.09** | **287** | Pg | **Pb** | **02 31 36.8** | **+2.6** |
| BRG | | | | Sg | **Sg** | **02 32 17.9** | **+0.3** |
| BRG | | | | Amp | | 02 32 23.0 | |
| | comp=Z,13nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.39** | **256** | *e*PN | **Pn** | **02 31 33.5** | **+0.9** |
| KHC | | | | *e*PG | **Pb** | **02 31 41.1** | **+1.7** |
| KHC | | | | *e*SG | **Sg** | **02 32 25.7** | **-1.7** |
| | comp=Z,29nm,0.6s | | | | | | |
| **GERES** | **GERESS Array B** | **3.42** | **251** | Pn | **Pn** | **02 31 33.6** | **+0.6** |
| | comp=Z,0.8nm,0.3s,baz=68,slow=16,SNR=10 | | | | | | |
| GERES | | | | Pg | **Pb** | **02 31 40.5** | **+0.7** |
| | comp=Z,3.3nm,0.3s,baz=67,slow=18,SNR=27 | | | | | | |
| GERES | | | | Lg | Lg | 02 32 27.3 | |
| | comp=Z,4.9nm,0.3s,baz=74,slow=26,SNR=10 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **3.46** | **217** | *e*Pn | **Pn** | **02 31 34.2** | **+0.6** |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **MOA** | **Molln** | **3.60** | **234** | *e*Pn | **Pn** | **02 31 35.4** | **-0.1** |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **CLL** | **Collm** | **3.78** | **292** | *e*Pn | **Pn** | **02 31 39.0** | **+1.1** |
| CLL | | | | *e*Pg | **Pg** | **02 31 50.0** | **-0.8** |
| CLL | | | | *e*Sg | **Sg** | **02 32 40.0** | **+0.3** |
| | comp=Z,18nm,0.8s | | | | | | |
| CLL | | | | AMS | AMS | 03 34 00.0 | |
| | comp=Z,100nm,19.0s | | | | | | |
| **MORH** | **Mrgy, Hungar** | **3.83** | **180** | ⇑P | **Pn** | **02 31 38.6** | **-0.1** |
| MORH | | | | ⇓S | **Sn** | **02 32 22.9** | **-1.5** |
| **BIOA** | **Bad Ischl, Aus** | **4.04** | **236** | *e*Pn | **Pn** | **02 31 42.0** | **+0.6** |
| | comp=Z,0.5nm,0.2s | | | | | | |
| **DRGR** | | **4.25** | **138** | ⇑P | **Pn** | **02 31 45.8** | **+1.3** |
| DRGR | | | | ⇑S | **Sn** | **02 32 34.7** | **-0.2** |
| **MARR** | **Marisel-Cluj** | **4.52** | **137** | ⇑P | **Pn** | **02 31 49.5** | **+1.3** |
| MARR | | | | ⇑S | **Sn** | **02 32 40.8** | **-0.7** |
| **BZS** | **Buzias** | **4.88** | **154** | ⇑P | **Pn** | **02 31 53.8** | **+0.8** |
| **BURAR** | **Bucovina Array** | **5.00** | **117** | ⇑P | **Pn** | **02 31 56.7** | **+1.9** |
| **BSD** | **Bornholm Skovb** | **5.55** | **338** | *i* P | **Pn** | **02 32 03.2** | **+1.1** |
| **TURR** | **Turia** | **6.38** | **126** | ⇑P | **Pn** | **02 32 15.4** | **+1.9** |
| **LUNU** | **Lund** | **6.41** | **333** | *i* P | **Pn** | **02 32 15.0** | **+1.1** |
| **DAVOX** | **Davos/Dischmat** | **6.66** | **244** | Pn | **Pn** | **02 32 18.7** | **+1.1** |
| | comp=Z,0.8nm,0.3s,baz=54,slow=14,SNR=13 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **02 33 29.1** | **-5.3** |
| | baz=12,slow=22 | | | | | | |
| DAVOX | | | | Lg | Lg | 02 34 08.9 | |
| | comp=Z,0.3nm,0.3s,baz=163,slow=19,SNR=2.4 | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **6.83** | **80** | Pn | **Pn** | **02 32 20.7** | **+1.0** |
| | comp=Z,0.4nm,0.3s,baz=273,slow=12,SNR=2.1 | | | | | | |
| AKASG | | | | Lg | Lg | 02 34 05.5 | |
| | comp=Z,0.3nm,0.3s,baz=270,slow=26,SNR=1.2 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **BJUU** | **Bjuv** | **6.91** | **333** | *i* P | **Pn** | **02 32 21.9** | **+1.1** |
| **DEL** | **Delary** | **7.03** | **338** | *i* P | **Pn** | **02 32 23.4** | **+0.9** |
| **FABU** | **Falkenberg** | **7.80** | **336** | *i* P | **Pn** | **02 32 34.6** | **+1.7** |
| **HFS** | **Hagfors** | **10.49** | **346** | Pn | **Pn** | **02 33 08.3** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=13,SNR=1.5 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **11.77** | **342** | Pn | **Pn** | **02 33 25.8** | **-1.6** |
| | baz=151,slow=13,SNR=3.8 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **12.16** | **17** | Pn | **Pn** | **02 33 31.3** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=201,slow=12,SNR=17 | | | | | | |
| FINES | | | | Sn | **Sn** | **02 35 42.4** | **-6.5** |
| | comp=Z,0.1nm,0.3s,baz=193,slow=18,SNR=2.3 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **19.83** | **7** | Pn | **P** | **02 35 09.6** | **-0.7** |
| | baz=191,slow=14,SNR=2.0 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |

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*IDC **01** 02:39:18.2±0.8, 41°.05N×78°.79E, h0km, mb3.9/13, mbtmp3.8/18, ML3.2/5, MS3.5/4, Error ellipse: s-maj=15.1km s-min=12.9km az=40.0*
*KRNET **01** 02:39:19.5±0.1, 41°.27N×78°.76E, mb4.0*
*SOME **01** 02:39:19.3, 41°.27N×78°.65E, h0km*
*NNC **01** 02:39:21.1±1.1, 41°.23N×78°.63E, h0km, mb4.6, mpv4.3, Error ellipse: s-maj=7.3km s-min=5.6km az=160.0*
*MOS **01** 02:39:22.6±1.0, 41°.11N×78°.79E, h16km, mb4.4/4, Error ellipse: s-maj=8.0km s-min=4.4km az=121.9*
**ISC 01 02:39:21.2**±1.9, **41°.14N**±0°.04×**78°.71E**±0°.03, **h10**km±11km, **n141**, σ**2$^{s}$02**/182, **mb3.9**/15, **MS3.8**/3, **40C-29D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRZ** | **Przheval'sk** | **1.36** | **350** | ⇑*i*P | **Pn** | **02 39 43.4** | **-3.1** |
| | baz=48 | | | | | | |
| PRZ | | | | ⇑*i*S | **Sn** | **02 40 00.6** | **-4.2** |
| | baz=48 | | | | | | |
| **PRZ** | **Przheval'sk** | **1.36** | **350** | *i* P | **Pn** | **02 39 43.4** | **-3.1** |
| PRZ | | | | *i* S | **Sn** | **02 40 00.6** | **-4.2** |
| **KDJ** | **Kajisay** | **1.52** | **311** | ⇓*e*P | **Pn** | **02 39 46.7** | **-1.9** |
| | baz=7.0 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sn** | **02 40 06.7** | **-1.8** |
| | baz=7.0 | | | | | | |
| **KDJ** | **Kajisay** | **1.52** | **311** | ⇓*e*PN | **Pn** | **02 39 46.7** | **-1.9** |
| **SATY** | **Saty** | **1.93** | **353** | *e*P | **Pn** | **02 39 54.9** | **+0.6** |
| | 194nm,0.3s | | | | | | |
| SATY | | | | *e*S | **Sn** | **02 40 20.6** | **+1.8** |
| | 257nm,0.3s | | | | | | |
| **SATY** | **Saty** | **1.93** | **353** | Pg | **Pn** | **02 39 54.8** | **+0.6** |
| | 194nm,0.3s | | | | | | |
| SATY | | | | Lg | Lg | 02 40 20.6 | |
| | 257nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.02** | **7** | *e*P | **Pn** | **02 39 56.2** | **+0.7** |
| | 78nm,0.6s | | | | | | |
| UZB | | | | *e*S | **Sn** | **02 40 22.3** | **+1.3** |
| | 225nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.02** | **7** | *e*PN | **Pn** | **02 39 55.4** | **-0.1** |
| UZB | | | | pmax | pmax | | |
| | comp=Z,39nm,0.6s | | | | | | |
| **ZHN** | **Zhinishke** | **2.04** | **354** | *e*P | **Pn** | **02 39 56.7** | **+1.0** |
| | comp=Z,117nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sn** | **02 40 23.9** | **+2.6** |
| | comp=Z,390nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **2.04** | **354** | Pg | **Pn** | **02 39 56.7** | **+1.0** |
| | comp=Z,120nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 02 40 23.9 | |
| | comp=Z,390nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.04** | **354** | *e*PN | **Pn** | **02 39 56.4** | **+0.7** |
| ZHN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.1s | | | | | | |
| **NRN** | **Naryn** | **2.06** | **279** | ⇓*e*P | **Pn** | **02 39 57.4** | **+1.2** |
| | baz=75 | | | | | | |
| NRN | | | | ⇓*i*S | **Sb** | **02 40 25.9** | **+1.1** |
| | baz=75 | | | | | | |
| **NRN** | **Naryn** | **2.06** | **279** | ⇓*e*PN | **Pn** | **02 39 57.4** | **+1.2** |
| NRN | | | | *i* S | **Sb** | **02 40 25.9** | **+1.1** |
| **SHLS** | **Shalkode** | **2.10** | **15** | *e*P | **Pb** | **02 39 59.5** | **+0.2** |
| | comp=Z,144nm,0.3s | | | | | | |
| SHLS | | | | *e*S | **Sg** | **02 40 28.6** | **0.0** |
| | comp=Z,843nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.10** | **15** | *e*PN | **Pb** | **02 40 00.1** | **+0.7** |
| SHLS | | | | pmax | pmax | | |
| | comp=Z,22nm,0.2s | | | | | | |
| **ULHL** | **Ulahol** | **2.15** | **302** | P | **Pn** | **02 40 00.5** | **+3.1** |
| | SNR=58 | | | | | | |
| **ULHL** | **Ulahol** | **2.15** | **302** | ⇑*e*P | **Pn** | **02 39 58.0** | **+0.6** |
| | baz=98 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sn** | **02 40 26.3** | **+2.0** |
| | baz=98 | | | | | | |
| **ULHL** | **Ulahol** | **2.15** | **302** | *e*PN | **Pn** | **02 39 58.0** | **+0.6** |
| ULHL | | | | *i* S | **Sn** | **02 40 26.3** | **+2.0** |
| **TNSS** | **Tian-Shan** | **2.31** | **326** | *e*P | **Pn** | **02 40 01.6** | **+1.9** |
| | comp=Z,208nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **02 40 32.2** | **+0.3** |
| | comp=Z,300nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.31** | **326** | Pg | **Pn** | **02 40 01.6** | **+1.9** |
| | comp=Z,184nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 02 40 32.2 | |
| | comp=Z,287nm,0.7s | | | | | | |
| **KPKS** | **Kokpek** | **2.33** | **360** | *e*P | **Pn** | **02 40 01.1** | **+1.4** |
| | comp=Z,174nm,0.4s | | | | | | |
| KPKS | | | | *e*S | **Sn** | **02 40 30.8** | **+2.4** |
| | comp=Z,492nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.33** | **360** | Pg | **Pn** | **02 40 01.1** | **+1.4** |
| | comp=Z,174nm,0.5s | | | | | | |
| KPKS | | | | Lg | Lg | 02 40 30.8 | |
| | comp=Z,492nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.33** | **360** | *e*PN | **Pn** | **02 40 01.1** | **+1.4** |
| KPKS | | | | pmax | pmax | | |
| | comp=Z,49nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.37** | **329** | ⇑Pn | **Pn** | **02 40 02.0** | **+1.6** |
| | comp=Z,195nm,0.6s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 02 40 34.8 | |
| | comp=Z,562nm,0.9s | | | | | | |
| **MDOK** | **Medeo** | **2.37** | **329** | PN | **Pn** | **02 40 01.9** | **+1.6** |
| MDOK | | | | | | 02 40 34.4 | |
| **KURS** | **Kuram** | **2.38** | **351** | *e*P | **Pn** | **02 40 02.8** | **+2.4** |
| | comp=Z,266nm,0.6s | | | | | | |
| KURS | | | | *e*S | **Sb** | **02 40 33.6** | **-0.1** |
| | comp=Z,174nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **2.38** | **351** | Pg | **Pn** | **02 40 02.8** | **+2.4** |
| | comp=Z,267nm,0.8s | | | | | | |
| KURS | | | | Lg | Lg | 02 40 33.6 | |
| | comp=Z,174nm,0.7s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.41** | **331** | *e*P | **Pn** | **02 40 03.2** | **+2.3** |
| | comp=Z,225nm,0.6s | | | | | | |
| KOTS | | | | *e*S | **Sn** | **02 40 34.4** | **+3.9** |
| | comp=Z,764nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.41** | **331** | Pg | **Pn** | **02 40 03.2** | **+2.3** |
| | comp=Z,185nm,0.5s | | | | | | |
| KOTS | | | | Lg | Lg | 02 40 34.4 | |
| | comp=Z,764nm,0.8s | | | | | | |
| **KNDC** | **Almaty** | **2.45** | **329** | ⇑Pg | **Pn** | **02 40 04.1** | **+2.7** |
| | comp=Z,315nm,0.5s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 02 40 37.6 | |
| | comp=Z,632nm,0.8s | | | | | | |
| **KNDC** | **Almaty** | **2.45** | **329** | PN | **Pn** | **02 40 04.0** | **+2.7** |
| KNDC | | | | | | 02 40 37.6 | |
| **AAA** | **Alma-Ata** | **2.46** | **328** | *e*P | **Pn** | **02 40 04.5** | **+3.0** |
| | comp=Z,293nm,0.3s | | | | | | |
| AAA | | | | *e*S | **Sb** | **02 40 37.4** | **+1.3** |
| | comp=Z,535nm,0.4s | | | | | | |
| **AAA** | **Alma-Ata** | **2.46** | **328** | Pg | **Pn** | **02 40 04.5** | **+3.0** |
| | comp=Z,346nm,0.6s | | | | | | |
| AAA | | | | Lg | Lg | 02 40 37.4 | |
| | comp=Z,612nm,0.6s | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.47** | **304** | ⇓*e*P | **Pn** | **02 40 02.2** | **+0.5** |
| | baz=1.0 | | | | | | |
| BOOM | | | | ⇓*i*S | **Sn** | **02 40 33.5** | **+1.4** |
| | baz=1.0 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.47** | **304** | *e*PN | **Pn** | **02 40 02.2** | **+0.5** |
| **KASK** | **Kaskelen** | **2.59** | **324** | ⇑Pg | **Pn** | **02 40 06.2** | **+3.0** |
| KASK | | | | ⇓Lg | Lg | 02 40 43.0 | |
| **MTBS** | **Maitube** | **2.62** | **320** | *e*P | **Pn** | **02 40 06.7** | **+3.0** |
| | comp=Z,212nm,0.4s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **02 40 40.2** | **-0.2** |
| | comp=Z,224nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **2.62** | **320** | Pg | **Pn** | **02 40 06.6** | **+3.0** |
| | comp=Z,212nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 02 40 40.2 | |
| | comp=Z,266nm,0.6s | | | | | | |
| **KST** | **Kastek** | **2.79** | **314** | *e*P | **Pn** | **02 40 09.9** | **+3.8** |
| | comp=Z,148nm,0.7s | | | | | | |
| KST | | | | *e*S | **Sb** | **02 40 45.9** | **+0.2** |
| | comp=Z,516nm,0.8s | | | | | | |
| **KST** | **Kastek** | **2.79** | **314** | Pg | **Pn** | **02 40 09.9** | **+3.8** |
| | comp=Z,148nm,0.7s | | | | | | |
| KST | | | | Lg | Lg | 02 40 45.9 | |
| | comp=Z,516nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.92** | **309** | P | **Pn** | **02 40 12.3** | **+4.3** |
| | SNR=130 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.92** | **309** | ⇑Pg | **Pn** | **02 40 11.8** | **+3.8** |
| | comp=Z,42nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 02 40 50.6 | |
| | comp=Z,128nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.92** | **309** | ⇑*i*P | **Pn** | **02 40 08.5** | **+0.5** |
| | baz=6.0 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sn** | **02 40 44.1** | **+0.8** |
| | baz=6.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.92** | **309** | *e*PN | **Pn** | **02 40 08.5** | **+0.5** |
| **BLB** | **Baldybastay** | **2.96** | **357** | Pg | **Pn** | **02 40 11.9** | **+3.4** |
| | comp=Z,501nm,0.7s | | | | | | |
| BLB | | | | Lg | Lg | 02 40 49.6 | |
| | comp=Z,535nm,0.9s | | | | | | |
| **KTBS** | **Karatobe** | **2.98** | **330** | *e*P | **Pn** | **02 40 12.7** | **+4.1** |
| | comp=Z,106nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **02 40 51.0** | **+0.1** |
| | comp=Z,429nm,0.7s | | | | | | |
| **KTBS** | **Karatobe** | **2.98** | **330** | Pg | **Pn** | **02 40 12.7** | **+4.1** |
| | comp=Z,106nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 02 40 51.0 | |
| | comp=Z,430nm,0.9s | | | | | | |
| **CHKK** | **Chushkaly** | **3.00** | **335** | *e*P | **Pb** | **02 40 13.4** | **-1.3** |
| | comp=Z,95nm,0.3s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **02 40 52.2** | **+0.8** |
| | comp=Z,563nm,0.5s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CHKK** | **Chushkaly** | **3.00** | **335** | Pg | **Pb** | **02 40 13.4** | **-1.3** |
| | comp=Z,95nm,0.4s | | | | | | |
| CHKK | | | | Lg | Lg | 02 40 52.2 | |
| | comp=Z,562nm,0.8s | | | | | | |
| **DGS** | **Degeres** | **3.03** | **315** | *e*P | **Pn** | **02 40 13.9** | **+4.6** |
| | comp=Z,188nm,0.6s | | | | | | |
| DGS | | | | *e*S | **Sb** | **02 40 53.0** | **+0.5** |
| | comp=Z,273nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **3.03** | **315** | Pg | **Pn** | **02 40 13.9** | **+4.6** |
| | comp=Z,190nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 02 40 53.0 | |
| | comp=Z,254nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.14** | **348** | *e*P | **Pb** | **02 40 16.1** | **-1.1** |
| | comp=Z,77nm,0.5s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **02 40 56.8** | **+1.2** |
| | comp=Z,320nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.14** | **348** | Pg | **Pb** | **02 40 16.1** | **-1.1** |
| | comp=Z,77nm,0.5s | | | | | | |
| ARXS | | | | Lg | Lg | 02 40 56.8 | |
| | comp=Z,320nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.14** | **348** | *e*PN | **Pn** | **02 40 12.4** | **+1.5** |
| **KBK** | **Karagaybulak** | **3.19** | **300** | P | **Pb** | **02 40 17.7** | **-0.4** |
| | SNR=50 | | | | | | |
| **KBK** | **Karagaybulak** | **3.19** | **300** | ⇓*e*P | **Pn** | **02 40 12.5** | **+0.9** |
| | baz=97 | | | | | | |
| KBK | | | | ⇓*e*S | **Sn** | **02 40 51.3** | **+1.5** |
| | baz=97 | | | | | | |
| **KBK** | **Karagaybulak** | **3.19** | **300** | ⇓*e*PN | **Pn** | **02 40 12.5** | **+0.9** |
| KBK | | | | *i* S | **Sn** | **02 40 51.3** | **+1.5** |
| **KNOS** | **Konyrlen** | **3.24** | **6** | Pg | **Pb** | **02 40 18.1** | **-0.8** |
| | comp=Z,60nm,0.6s | | | | | | |
| KNOS | | | | Lg | Lg | 02 40 59.9 | |
| | comp=Z,376nm,1.4s | | | | | | |
| **DJR** | **Jarkent** | **3.29** | **14** | *e*P | **Pb** | **02 40 18.9** | **-0.8** |
| | comp=Z,31nm,0.4s | | | | | | |
| DJR | | | | *e*S | **Sb** | **02 41 01.2** | **+1.3** |
| | comp=Z,171nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **3.29** | **14** | Pg | **Pb** | **02 40 18.9** | **-0.8** |
| | comp=Z,31nm,0.4s | | | | | | |
| DJR | | | | Lg | Lg | 02 41 01.2 | |
| | comp=Z,168nm,0.5s | | | | | | |
| **UCH** | **Uchtor** | **3.33** | **291** | P | **Pn** | **02 40 15.6** | **+1.9** |
| | SNR=16 | | | | | | |
| **UCH** | **Uchtor** | **3.33** | **291** | ⇑*i*P | **Pn** | **02 40 14.9** | **+1.2** |
| | baz=88 | | | | | | |
| UCH | | | | ⇑*i*S | **Sn** | **02 40 55.2** | **+1.7** |
| | baz=88 | | | | | | |
| **UCH** | **Uchtor** | **3.33** | **291** | *e*PN | **Pn** | **02 40 14.9** | **+1.2** |
| **ARLS** | **Aral** | **3.37** | **284** | ⇑*i*P | **Pn** | **02 40 15.4** | **+1.3** |
| | baz=81 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **02 40 56.2** | **+1.9** |
| | baz=81 | | | | | | |
| **ARLS** | **Aral** | **3.37** | **284** | *i* PN | **Pn** | **02 40 15.4** | **+1.3** |
| ARLS | | | | *i* S | **Sn** | **02 40 56.2** | **+1.9** |
| **KRBS** | **Karabastau** | **3.40** | **320** | *e*P | **Pb** | **02 40 20.0** | **-1.7** |
| | comp=Z,31nm,0.6s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **02 41 03.2** | **+0.1** |
| | comp=Z,53nm,0.8s | | | | | | |
| **FRU1** | **Bishkek** | **3.47** | **300** | ⇓*i*P | **Pn** | **02 40 16.3** | **+0.9** |
| | baz=98 | | | | | | |
| FRU1 | | | | ⇓*i*S | **Sn** | **02 40 58.2** | **+1.6** |
| | baz=98 | | | | | | |
| **FRU1** | **Bishkek** | **3.47** | **300** | ⇓*i*PN | **Pn** | **02 40 16.3** | **+0.9** |
| FRU1 | | | | *i* S | **Sn** | **02 40 58.2** | **+1.6** |
| **CHMS** | **Chumysh** | **3.48** | **304** | P | Pn | 02 40 20.9 | +5.4 |
| | SNR=17 | | | | | | |
| **CHMS** | **Chumysh** | **3.48** | **304** | ⇑Pg | Pn | 02 40 20.3 | +4.8 |
| | comp=Z,35nm,0.8s | | | | | | |
| CHMS | | | | ⇓Lg | Lg | 02 41 08.3 | |
| | comp=Z,56nm,0.6s | | | | | | |
| **CHMS** | **Chumysh** | **3.48** | **304** | ⇑*e*P | **Pn** | **02 40 16.1** | **+0.6** |
| | baz=1.0 | | | | | | |
| CHMS | | | | ⇑*e*S | **Sn** | **02 40 57.8** | **+0.9** |
| | baz=1.0 | | | | | | |
| **CHMS** | **Chumysh** | **3.48** | **304** | *e*PN | **Pn** | **02 40 16.1** | **+0.6** |
| **AAK** | **Ala-Archa** | **3.49** | **297** | P | **Pn** | **02 40 18.5** | **+2.9** |
| | SNR=20 | | | | | | |
| **AAK** | **Ala-Archa** | **3.49** | **297** | Pn | **Pn** | **02 40 18.0** | **+2.4** |
| | comp=Z,9.3nm,0.3s,baz=133,slow=13,SNR=22 | | | | | | |
| AAK | | | | Lg | Lg | 02 41 10.3 | |
| | comp=Z,7.6nm,0.3s,baz=295,slow=19,SNR=8.1 | | | | | | |
| | comp=Z,9.7nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.49** | **297** | ⇓Pg | **Pb** | **02 40 22.4** | **-0.7** |
| | comp=Z,34nm,0.5s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 02 41 11.7 | |
| | comp=Z,121nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **3.49** | **297** | ⇑*i*P | **Pn** | **02 40 16.7** | **+1.1** |
| | baz=95 | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **02 40 58.5** | **+1.4** |
| | baz=95 | | | | | | |
| **AAK** | **Ala-Archa** | **3.49** | **297** | *c i*PN | **Pn** | **02 40 17.9** | **+2.3** |
| **USP** | **Ospenovka** | **3.78** | **306** | P | **Pb** | **02 40 27.5** | **-0.6** |
| | SNR=14 | | | | | | |
| **USP** | **Ospenovka** | **3.78** | **306** | ⇓*i*P | **Pn** | **02 40 20.3** | **+0.7** |
| | baz=4.0 | | | | | | |
| USP | | | | ⇓*i*S | **Sn** | **02 41 04.8** | **+0.6** |
| | baz=4.0 | | | | | | |
| **USP** | **Ospenovka** | **3.78** | **306** | *e*PN | **Pn** | **02 40 20.3** | **+0.7** |
| **SGDS** | **Sogindy** | **3.81** | **309** | Pg | **Pb** | **02 40 28.5** | **-0.1** |
| | comp=Z,6.0nm,0.3s | | | | | | |
| SGDS | | | | Lg | Lg | 02 41 17.6 | |
| | comp=Z,77nm,1.0s | | | | | | |
| **SGDS** | **Sogindy** | **3.81** | **309** | *e*PN | Pn | 02 40 24.9 | +4.9 |
| **AML** | **Almayashu** | **3.89** | **286** | P | **Pb** | **02 40 31.0** | **+0.9** |
| | SNR=6.0 | | | | | | |
| **AML** | **Almayashu** | **3.89** | **286** | ⇑*e*P | **Pn** | **02 40 22.5** | **+1.1** |
| | baz=84 | | | | | | |
| AML | | | | ⇑*i*S | **Sn** | **02 41 08.8** | **+1.5** |
| | baz=84 | | | | | | |
| **AML** | **Almayashu** | **3.89** | **286** | *e*PN | **Pn** | **02 40 22.5** | **+1.1** |
| **EKS2** | **Erkin-Say** | **3.98** | **294** | P | **Pb** | **02 40 33.2** | **+1.6** |
| | SNR=37 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.98** | **294** | ⇑*i*P | **Pn** | **02 40 23.7** | **+1.2** |
| | baz=92 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **02 41 10.6** | **+1.3** |
| | baz=92 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.98** | **294** | *e*PN | **Pn** | **02 40 23.7** | **+1.2** |
| **SFK** | **Sufi-Kurgan** | **4.12** | **256** | ⇑*i*P | **Pn** | **02 40 27.0** | **+2.6** |
| | baz=54 | | | | | | |
| SFK | | | | ⇑*i*S | **Sn** | **02 41 16.1** | **+3.3** |
| | baz=54 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.12** | **256** | *i* PN | **Pn** | **02 40 27.0** | **+2.6** |
| SFK | | | | *i* S | **Sn** | **02 41 16.1** | **+3.3** |
| **MRKS** | **Merke** | **4.39** | **293** | *e*P | **Pb** | **02 40 38.9** | **+0.4** |
| | comp=Z,25nm,0.5s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **02 41 35.8** | **+4.2** |
| | comp=Z,35nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **4.39** | **293** | Pg | **Pb** | **02 40 38.9** | **+0.4** |
| | comp=Z,25nm,0.8s | | | | | | |
| MRKS | | | | Lg | Lg | 02 41 35.8 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **MNAS** | **Manas** | **4.83** | **288** | ⇓*i*P | **Pn** | **02 40 35.4** | **+1.3** |
| | baz=87 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sn** | **02 41 30.9** | **+0.7** |
| | baz=87 | | | | | | |
| **MNAS** | **Manas** | **4.83** | **288** | *e*PN | **Pn** | **02 40 35.4** | **+1.3** |
| **BTLS** | **Baital** | **5.18** | **320** | *e*P | **Pb** | **02 40 52.6** | **+0.7** |
| | comp=Z,8.7nm,0.6s | | | | | | |
| BTLS | | | | *e*S | **Sb** | **02 41 59.4** | **+5.1** |
| | comp=Z,41nm,0.8s | | | | | | |
| **BTLS** | **Baital** | **5.18** | **320** | Pg | **Pb** | **02 40 52.6** | **+0.7** |
| | comp=Z,8.8nm,0.9s | | | | | | |
| BTLS | | | | Lg | Lg | 02 41 59.4 | |
| | comp=Z,41nm,0.9s | | | | | | |
| **TRKS** | **Terek-Say** | **5.71** | **276** | ⇑*i*P | **Pn** | **02 40 47.7** | **+1.5** |
| | baz=74 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sn** | **02 41 52.1** | **+0.2** |
| | baz=74 | | | | | | |
| **TRKS** | **Terek-Say** | **5.71** | **276** | *i* PN | **Pn** | **02 40 47.7** | **+1.5** |
| **MAKZ** | **Makanchi** | **6.14** | **21** | ⇓Pg | **Pb** | **02 41 10.8** | **+2.6** |
| | comp=Z,6.9nm,0.8s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 02 42 35.6 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **6.22** | **23** | ⇓Pn | **Pn** | **02 40 54.5** | **+1.5** |
| | comp=Z,0.7nm,0.3s,baz=205,slow=14,SNR=27 | | | | | | |
| MK31 | | | | ⇓Pg | **Pb** | **02 41 11.9** | **+2.4** |
| | comp=Z,5.8nm,0.6s,baz=199,slow=15,SNR=5.2 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 02 42 36.7 | |
| | comp=Z,20nm,0.8s,baz=212,slow=28,SNR=4.9 | | | | | | |
| **MK31** | **Makanchi Array** | **6.22** | **23** | *i* PN | **Pn** | **02 40 54.5** | **+1.5** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **6.22** | **23** | Pn | **Pn** | **02 40 51.8** | **-1.2** |
| | comp=Z,0.7nm,0.3s,baz=202,slow=11,SNR=19 | | | | | | |
| MKAR | | | | Sn | **Sn** | **02 42 03.9** | **-0.3** |
| | comp=Z,0.8nm,0.3s,baz=225,slow=9.8,SNR=2.9 | | | | | | |
| MKAR | | | | Lg | Lg | 02 42 30.4 | |
| | comp=Z,1.1nm,0.3s,baz=197,slow=20,SNR=4.7 | | | | | | |
| MKAR | | | | LR | LR | 02 43 05.6 | |
| | comp=Z,19nm,20.8s,baz=212,slow=36 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **6.40** | **291** | ⇑Pg | Pb | 02 41 17.6 | +4.9 |
| | comp=Z,8.0nm,0.6s,baz=107,slow=16,SNR=13 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 02 42 42.5 | |
| | comp=Z,25nm,0.9s,baz=108,slow=26,SNR=5.5 | | | | | | |
| **KK31** | **Karatay Array** | **6.40** | **291** | *e*PN | Pg | 02 41 21.3 | -2.5 |
| **KKAR** | **Karatay Array** | **6.40** | **291** | ⇑*i*P | **Pn** | **02 40 57.1** | **+1.5** |
| | baz=89 | | | | | | |
| KKAR | | | | ⇑*i*S | **Sn** | **02 42 08.2** | **-0.6** |
| | baz=89 | | | | | | |
| **KKAR** | **Karatay Array** | **6.40** | **291** | *e*PN | **Pn** | **02 40 57.1** | **+1.5** |
| **IUG** | **Iuzhnay** | **6.58** | **282** | *e*P | Pb | 02 41 21.7 | +5.9 |
| | comp=Z,54nm,0.8s | | | | | | |
| IUG | | | | *e*S | **Sg** | **02 42 49.6** | **-2.7** |
| | comp=Z,61nm,1.4s | | | | | | |
| **BRLS** | **Borolday** | **6.87** | **289** | *e*P | Pb | 02 41 27.7 | +7.1 |
| | comp=Z,3.7nm,0.6s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **02 42 59.5** | **-2.1** |
| | comp=Z,8.2nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **7.16** | **65** | *e*Pn | **Pn** | **02 41 09.2** | **+3.1** |
| WMQ | | | | smax | smax | | |
| | comp=N,33nm,1.1s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,24nm,0.9s | | | | | | |
| **ZSN** | **Zaisan** | **7.70** | **33** | *e*P | **Pb** | **02 41 36.9** | **+2.1** |
| | comp=E,6.9nm,0.3s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **02 43 14.6** | **+8.0** |
| | comp=E,10nm,0.7s | | | | | | |
| **OTUK** | **Ortayu** | **8.43** | **330** | ⇑Pn | **Pn** | **02 41 24.4** | **+1.0** |
| | comp=E,4.2nm,0.6s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 02 43 45.8 | |
| | comp=E,56nm,1.3s | | | | | | |
| **OTUK** | **Ortayu** | **8.43** | **330** | P | **Pn** | **02 41 24.4** | **+1.0** |
| **KURBB** | **Kurchatov Arra** | **9.49** | **359** | Pn | **Pn** | **02 41 38.0** | **+0.2** |
| | baz=184,slow=12,SNR=9.5 | | | | | | |
| KURBB | | | | Lg | Lg | 02 44 14.8 | |
| | comp=E,0.1nm,0.3s,baz=171,slow=31,SNR=5.5 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **9.49** | **359** | ⇓Pg | Pn | 02 42 13.6 | +36 |
| | comp=E,3.0nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 02 44 21.2 | |
| | comp=E,55nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **9.58** | **360** | ⇑Pn | **Pn** | **02 41 39.0** | **-0.1** |
| | comp=E,1.8nm,0.7s | | | | | | |
| KURK | | | | ⇓Pg | | 02 42 15.5 | |
| | comp=E,7.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **9.58** | **360** | *i* P | **Pn** | **02 41 40.3** | **+1.2** |
| **BRVK** | **Borovoye** | **13.22** | **337** | *i* P | **Pn** | **02 42 31.8** | **+2.9** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **13.46** | **16** | Pn | **Pn** | **02 42 32.5** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=201,slow=15,SNR=1.6 | | | | | | |
| ZALV | | | | Sn | **Sn** | **02 45 02.6** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=187,slow=21,SNR=2.6 | | | | | | |
| ZALV | | | | Lg | Lg | 02 46 26.5 | |
| | comp=Z,0.6nm,0.3s,baz=202,slow=26,SNR=2.3 | | | | | | |
| ZALV | | | | LR | LR | 02 48 17.0 | |
| | comp=Z,40nm,18.3s,baz=236,slow=40 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.12** | **310** | P | **Pn** | **02 43 21.8** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=111,slow=8.6,SNR=2.1 | | | | | | |
| AKTO | | | | S | Sn | 02 46 21.4 | -9.3 |
| | comp=Z,0.9nm,0.5s,baz=18,slow=14,SNR=1.8 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **ARU** | **Arti** | **20.14** | **326** | P | **P** | **02 43 54.0** | **-1.2** |
| | comp=Z,2.0nm,0.4s,baz=88,slow=7.5,SNR=4.4 | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **ARU** | **Arti** | **20.14** | **326** | *c i*P | **P** | **02 43 54.3** | **-0.9** |
| ARU | | | | | | 02 44 10.1 | |
| ARU | | | | SS | Sn | 02 48 05.3 | +22 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,12nm,2.7s | | | | | | |
| **SONM** | **Songino Array** | **20.79** | **62** | P | **P** | **02 44 00.7** | **-1.9** |
| | comp=Z,1.1nm,0.5s,baz=262,slow=10.0,SNR=2.0 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **BELG** | **Belogornoye** | **23.90** | **309** | P | **P** | **02 44 34.2** | **-0.6** |
| | comp=Z,17nm,0.9s,baz=87,slow=6.1,SNR=4.5 | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **26.43** | **288** | P | **P** | **02 44 56.6** | **-1.4** |
| | comp=Z,0.7nm,0.5s,baz=90,slow=2.0,SNR=2.2 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **KBZ** | **Khabaz** | **26.43** | **288** | *i* P | **P** | **02 44 55.7** | **-2.3** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **KIV** | **Kislovodsk** | **26.56** | **288** | *e*P | **P** | **02 44 59.3** | **0.0** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.48** | **137** | P | **P** | **02 45 13.7** | **-2.9** |
| | comp=Z,1.2nm,0.3s,baz=329,slow=8.5,SNR=1.7 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **ANN** | **Anapa** | **30.19** | **291** | *e*P | **P** | **02 45 29.6** | **-1.9** |
| ANN | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| **OBN** | **Obninsk** | **30.89** | **311** | *e*P | **P** | **02 45 36.6** | **-1.0** |
| OBN | | | | *e* | | 02 46 38.2 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **34.05** | **283** | P | **P** | **02 46 06.0** | **+0.3** |
| | comp=Z,1.1nm,0.8s,baz=97,slow=7.8,SNR=9.3 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **VSU** | **Vasula** | **36.67** | **316** | *i* P | **P** | **02 46 27.1** | **-0.7** |
| VSU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **37.34** | **321** | P | **P** | **02 46 33.2** | **-0.3** |
| | comp=Z,1.0nm,0.7s,baz=114,slow=14,SNR=4.1 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.41** | **334** | P | **P** | **02 46 50.1** | **-0.7** |
| | comp=Z,2.0nm,0.8s,baz=96,slow=7.3,SNR=9.9 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **43.36** | **319** | P | **P** | **02 47 22.9** | **-0.4** |
| | comp=Z,0.9nm,0.7s,baz=99,slow=13,SNR=2.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.50** | **320** | P | **P** | **02 47 31.4** | **-1.1** |
| | comp=Z,0.7nm,0.6s,baz=86,slow=8.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.50** | **320** | P | **P** | **02 47 31.0** | **-1.5** |
| | comp=Z,0.6nm,0.7s,baz=86,slow=7.9,SNR=4.8 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.73** | **272** | P | **P** | **02 50 41.3** | **-2.5** |
| | comp=Z,0.5nm,0.8s,baz=15,slow=6.6,SNR=4.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.69** | **128** | P | **P** | **02 51 27.8** | **-1.4** |
| | comp=Z,0.9nm,0.8s,baz=338,slow=5.2,SNR=8.3 | | | | | | |
| WRA | | | | LR | LR | 03 29 49.1 | |
| | comp=Z,53nm,18.2s,baz=76,slow=38 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **82.32** | **131** | P | **P** | **02 51 41.8** | **-1.4** |
| | comp=Z,0.6nm,0.5s,baz=330,slow=5.5,SNR=6.1 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **TSUM** | **Tsumeb** | **82.50** | **237** | LR | LR | 03 31 28.5 | |
| | comp=Z,38nm,19.6s,baz=142,slow=38 | | | | | | |
| **BBTS** | **Babate** | **84.37** | **284** | LR | LR | 03 34 37.9 | |
| | comp=Z,22nm,18.2s,baz=326,slow=39 | | | | | | |

**IDC 01 02:40:50.0**±2.1**, 4°.73S**×**147°.14E, h0**$^{km}$**, mb3.4**/2**, mbtmp3.5**/3**, ML2.7**/1**, MS2.2**/1**, Error ellipse: s-maj=176.1km s-min=32.0km az=121.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **15.29** | **183** | LR | LR | 02 49 49.0 | |
| | comp=Z,7.9nm,18.3s,baz=315,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.60** | **218** | P | P | 02 45 20.1 | +0.1 |
| | baz=43,slow=11,SNR=5.9 | | | | | | |
| | 1.6nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **22.75** | **213** | P | P | 02 45 53.9 | -0.1 |
| | 1.5nm,1.1s,baz=43,slow=7.6,SNR=8.5 | | | | | | |
| | 1.5nm,1.1s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.06** | **39** | T | T | 03 16 46.6 | |
| | baz=223,slow=76,SNR=118 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.07** | **39** | T | T | 03 16 49.0 | |
| | baz=223,slow=76,SNR=126 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.08** | **39** | T | T | 03 16 42.8 | |
| | baz=223,slow=76,SNR=95 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.10** | **38** | T | T | 03 18 02.4 | |
| | baz=221,slow=76,SNR=50 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31.11** | **38** | T | T | 03 18 04.1 | |
| | baz=221,slow=76,SNR=107 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.12** | **38** | T | T | 03 18 03.7 | |
| | baz=221,slow=76,SNR=115 | | | | | | |
| **ILAR** | **Eielson Array** | **84.26** | **23** | P | P | 02 53 23.4 | +0.1 |
| | 0.3nm,0.8s,baz=250,slow=4.9,SNR=2.9 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

*RSNC* ***01*** *02:50:02.1*±*1.2, 11°N*±*8°*×*7°0W*±*°, h0*$^{km}$*, M2.6, mb3.8, ML2.6*
*FUNV* ***01*** *02:50:03.3, 10°.44N*×*69°.51W, h5*$^{km}$*, MW3.2*
**ISC 01 02:50:00.2**±2.9**, 10°.56N**±0°.05×**69°.56W**±0°.03**, h1**$^{km}$±19$^{km}$**, n13, σ1**$^{s}$**07**/22**, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TEPV** | **Terepaima** | **0.69** | **149** | *e*S | **Sg** | **02 50 21.8** | **-0.8** |
| **JACV** | **Jacura** | **0.89** | **54** | *e*P | **Pn** | **02 50 19.7** | **-0.2** |
| JACV | | | | *e*S | **Sn** | **02 50 33.6** | **+0.1** |
| **TURV** | **Turiamo** | **1.69** | **94** | *e*P | **Pn** | **02 50 31.6** | **+0.7** |
| TURV | | | | *e*S | **Sb** | **02 50 53.6** | **-0.5** |
| **BENV** | **Beln** | **2.02** | **107** | *e*P | **Pn** | **02 50 36.9** | **+1.4** |
| BENV | | | | *e*S | **Sn** | **02 51 01.1** | **-0.3** |
| **BAUV** | **El Baul** | **2.19** | **137** | *e*P | **Pn** | **02 50 38.1** | **+0.2** |
| BAUV | | | | *e*S | **Sn** | **02 51 03.8** | **-1.9** |
| **TACV** | **Tcata** | **2.53** | **99** | *e*P | **Pn** | **02 50 44.0** | **+1.5** |
| TACV | | | | *e*S | **Sn** | **02 51 14.1** | **+0.1** |
| **SOCV** | **Socops** | **2.60** | **210** | *e*P | **Pn** | **02 50 44.3** | **+0.9** |
| SOCV | | | | *e*S | **Sn** | **02 51 14.5** | **-1.2** |
| **URIC** | **Uribia, Colomb** | **2.65** | **296** | P | **Pn** | **02 50 44.2** | **+0.1** |
| URIC | | | | S | **Sn** | **02 51 14.9** | **-1.9** |
| **CRJC** | **Cerrejon, Guaj** | **3.30** | **278** | P | **Pn** | **02 50 53.6** | **+0.4** |
| CRJC | | | | S | **Sn** | **02 51 33.0** | **-0.1** |
| **CAPV** | **Capacho** | **3.82** | **226** | *e*P | **Pn** | **02 51 01.1** | **+0.7** |
| **OCAC** | **Ocana** | **4.37** | **238** | P | **Pn** | **02 51 08.9** | **+1.0** |
| **PCRV** | **Puerto La Cruz** | **4.86** | **94** | *e*P | **Pn** | **02 51 15.8** | **+1.2** |
| **SJCC** | **San Jacinto, C** | **5.57** | **264** | P | **Pn** | **02 51 25.5** | **+1.1** |
| SJCC | | | | S | **Sn** | **02 52 30.3** | **+1.1** |

*IDC* ***01*** *02:50:13.2*±*0.7, 47°.36N*×*27°.40W, h0*$^{km}$*, mb3.8/16, mbtmp3.8/18, ML4.0/2, MS3.3/19, Error ellipse: s-maj=21.3km s-min=14.4km az=5.0*
*NEIC* ***01*** *02:50:15.6*±*1.2, 47°.3N*±*0°.1*×*27°.5W*±*0°.1, h10*$^{km}$±*1*$^{km}$*, mb4.5/40, Error ellipse: s-maj=19.1km s-min=9.4km az=153.0*
**ISC 01 02:50:14.3**±0.6**, 47°.4N**±0°.1×**27°.42W**±0°.08**, h6**$^{km}$**, n91, σ0**$^{s}$**84**/73**, mb4.3**/31**, MS3.3**/18**, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PVIS** | **Viseu** | **15.51** | **108** | *e*P | **Pn** | **02 53 55.3** | **+1.8** |
| | 37nm,2.0s | | | | | | |
| **PBRG** | **Braganca** | **15.72** | **103** | *e*P | **Pn** | **02 53 55.3** | **-1.0** |
| **PNCL** | **Nicolau / Gran** | **16.63** | **117** | *e*P | **Pn** | **02 54 07.5** | **-0.4** |
| | 40nm,1.8s | | | | | | |
| **PESTR** | **Estremoz** | **16.74** | **113** | *e*P | **P** | **02 54 12.5** | **+0.9** |
| **MESJ** | **Messejana** | **16.99** | **117** | Pn | **Pn** | **02 54 12.6** | **+0.1** |
| **MESJ** | **Messejana** | **16.99** | **117** | *e*P | **Pn** | **02 54 12.5** | **+0.1** |
| | 32nm,1.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **17.07** | **53** | P | **P** | **02 54 14.5** | **-0.5** |
| | baz=263,slow=9.8 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **MORF** | **Marmelete** | **17.08** | **119** | Pn | **Pn** | **02 54 12.8** | **-0.8** |
| MORF | | | | IAmb | IAmb | 02 54 55.1 | |
| | comp=Z,35nm,1.3s | | | | | | |
| **MORF** | **Marmelete** | **17.08** | **119** | *e*P | **Pn** | **02 54 14.1** | **+0.5** |
| **PBEJ** | **Beja** | **17.09** | **116** | *e*P | **Pn** | **02 54 13.7** | **0.0** |
| **PVAQ** | **Vaqueiros** | **17.58** | **117** | P | **Pn** | **02 54 19.6** | **-0.2** |
| **PVAQ** | **Vaqueiros** | **17.58** | **117** | *e*P | **P** | **02 54 20.6** | **-0.3** |
| | comp=Z,36nm,1.8s | | | | | | |
| **PAB** | **San Pablo** | **18.43** | **107** | P | **P** | **02 54 31.4** | **+1.1** |
| **ESBB** | **Sonseca Array** | **18.61** | **106** | P | **Pn** | **02 54 33.9** | **+1.3** |
| **ESDC** | **Sonseca Array** | **18.61** | **106** | P | **Pn** | **02 54 34.8** | **+2.3** |
| **ESDC** | **Sonseca Array** | **18.61** | **106** | P | **P** | **02 54 32.1** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=296,slow=13,SNR=28 | | | | | | |
| ESDC | | | | LR | LR | 03 00 19.3 | |
| | comp=Z,109nm,18.3s,baz=282,slow=33 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **CEST** | **Esterri de Car** | **20.77** | **93** | P | Pn | 02 54 57.6 | -0.7 |
| CEST | | | | IAmb | IAmb | 02 55 01.9 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **MDT** | **Midelt** | **22.59** | **122** | LR | LR | 03 01 53.9 | |
| | comp=Z,43nm,22.0s,baz=328,slow=31 | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **23.65** | **79** | P | **P** | **02 55 26.9** | **+0.5** |
| **TUE** | **Stuetta** | **24.99** | **78** | P | **P** | **02 55 40.5** | **+1.7** |
| **DAVOX** | **Davos/Dischmat** | **25.26** | **77** | P | **P** | **02 55 42.5** | **+1.3** |
| | comp=Z,1.4nm,0.7s,baz=317,slow=14,SNR=4.9 | | | | | | |
| DAVOX | | | | LR | LR | 03 04 43.3 | |
| | comp=Z,52nm,19.4s,baz=268,slow=34 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **SCHQ** | **Schefferville** | **25.58** | **302** | P | **P** | **02 55 43.7** | **-0.2** |
| SCHQ | | | | IAmb | IAmb | 02 55 54.4 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **SCHQ** | **Schefferville** | **25.58** | **302** | P | **P** | **02 55 43.6** | **-0.2** |
| | comp=Z,2.9nm,0.8s,baz=83,slow=6.9,SNR=3.9 | | | | | | |
| SCHQ | | | | LR | LR | 03 03 57.9 | |
| | comp=Z,73nm,20.8s,baz=165,slow=32 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **25.97** | **44** | LR | LR | 03 04 12.3 | |
| | comp=Z,16nm,19.4s,baz=270,slow=32 | | | | | | |
| **HFS** | **Hagfors** | **26.98** | **47** | LR | LR | 03 04 43.3 | |
| | comp=Z,20nm,18.7s,baz=261,slow=32 | | | | | | |
| **GERES** | **GERESS Array B** | **27.27** | **71** | LR | LR | 03 05 35.6 | |
| | comp=Z,72nm,21.2s,baz=268,slow=34 | | | | | | |
| **KEST** | **Kesra** | **29.60** | **100** | P | **P** | **02 56 20.4** | **+0.3** |
| | comp=Z,3.0nm,0.9s,baz=335,slow=5.6,SNR=4.3 | | | | | | |
| KEST | | | | LR | LR | 03 06 39.2 | |
| | comp=Z,93nm,18.9s,baz=260,slow=33 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **VAE** | **Valguarnera** | **32.08** | **92** | LR | LR | 03 07 09.5 | |
| | comp=Z,43nm,20.6s,baz=320,slow=32 | | | | | | |
| **FINES** | **FINESS Array B** | **33.13** | **45** | P | **P** | **02 56 51.0** | **+0.1** |
| **FINES** | **FINESS Array B** | **33.13** | **45** | P | **P** | **02 56 50.0** | **-0.8** |
| | comp=Z,1.4nm,0.8s,baz=260,slow=14,SNR=5.2 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **33.85** | **30** | P | **P** | **02 56 55.1** | **-1.9** |
| | comp=Z,1.6nm,0.9s,baz=280,slow=7.2,SNR=4.0 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **MLR** | **Muntele Rosu** | **36.24** | **73** | LR | LR | 03 12 26.6 | |
| | comp=Z,45nm,19.1s,baz=316,slow=37 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.52** | **63** | P | **P** | **02 57 19.4** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=287,slow=8.5,SNR=2.0 | | | | | | |
| AKASG | | | | LR | LR | 03 11 54.9 | |
| | comp=Z,48nm,19.1s,baz=275,slow=36 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **41.89** | **135** | P | **P** | **02 58 04.4** | **-1.0** |
| **TORD** | **Torodi Ar. Bea** | **41.89** | **135** | P | **P** | **02 58 04.3** | **-1.1** |
| TORD | | | | IAmb | IAmb | 02 58 05.6 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **41.89** | **135** | P | **P** | **02 58 04.4** | **-1.0** |
| | comp=Z,9.8nm,0.8s,baz=348,slow=8.0,SNR=53 | | | | | | |
| TORD | | | | LR | LR | 03 14 29.2 | |
| | comp=Z,98nm,18.1s,baz=351,slow=35 | | | | | | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **ANTO** | **Ankara** | **43.27** | **77** | P | **P** | **02 58 17.5** | **+1.0** |
| ANTO | | | | IAmb | IAmb | 02 58 18.3 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **43.90** | **77** | P | **P** | **02 58 21.3** | **-0.4** |
| | comp=Z,0.8nm,0.9s,baz=308,slow=4.4,SNR=5.6 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **DBIC** | **Dimbokro** | **44.90** | **147** | LR | LR | 03 16 01.4 | |
| | comp=Z,31nm,19.5s,baz=62,slow=34 | | | | | | |
| **BOZ** | **Bozeman (W)** | **55.23** | **302** | P | **P** | **02 59 48.4** | **+0.3** |
| BOZ | | | | IAmb | IAmb | 02 59 56.1 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **55.63** | **298** | P | **P** | **02 59 50.5** | **-0.6** |
| | comp=Z,1.0nm,0.8s,baz=50,slow=8.4,SNR=8.6 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **LOHW** | **Long Hollow** | **55.77** | **299** | P | **P** | **02 59 52.1** | **+0.1** |
| LOHW | | | | IAmb | IAmb | 03 00 00.6 | |
| | comp=Z,6.7nm,1.5s | | | | | | |
| **BPMT** | **Black Pine Rid** | **55.80** | **303** | P | **P** | **02 59 52.8** | **+0.6** |
| **IMW** | **Indian Meadow** | **55.80** | **300** | P | **P** | **02 59 53.0** | **+0.6** |
| **DLMT** | **Dillon** | **55.93** | **302** | P | **P** | **02 59 53.5** | **+0.4** |
| DLMT | | | | IAmb | IAmb | 03 00 02.6 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **FXWY** | **Fox Creek** | **56.00** | **300** | P | **P** | **02 59 53.3** | **-0.5** |
| **REDW** | **Red Top Meadow** | **56.06** | **299** | P | **P** | **02 59 55.4** | **+1.2** |
| **H10N2** | **ASCENSION HYDR** | **56.12** | **165** | T | T | 04 00 00.0 | |
| | baz=323,slow=3.4,SNR=2004 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **56.13** | **165** | T | T | 04 00 00.0 | |
| | baz=323,slow=3.4,SNR=2008 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **56.14** | **165** | T | T | 04 00 00.0 | |
| | baz=323,slow=3.4,SNR=2995 | | | | | | |
| **NEW** | **Newport** | **56.78** | **307** | LR | LR | 03 21 43.3 | |
| | comp=Z,48nm,20.0s,baz=280,slow=33 | | | | | | |
| **RDMU** | **Red Mountain** | **56.93** | **296** | P | **P** | **03 00 00.9** | **+0.6** |
| RDMU | | | | IAmb | IAmb | 03 00 03.2 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **57.19** | **165** | T | T | 04 01 24.4 | |
| | baz=350,slow=74,SNR=5.9 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H10S2 | ASCENSION HYDR | 57.19 | 165 | T | T | 04 01 24.8 | |
| | baz=230,slow=74,SNR=4.4 | | | | | | |
| P18A | Preston Nutter | 57.91 | 295 | P | P | 03 00 07.3 | -0.1 |
| HLID | Hailey | 58.04 | 301 | P | P | 03 00 08.2 | +0.2 |
| SPUT | South Promonto | 58.23 | 298 | P | P | 03 00 09.8 | +0.4 |
| SPUT | | | | IAmb | IAmb | 03 00 12.1 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| TMUT | Trail Mountain | 58.70 | 295 | P | P | 03 00 13.4 | +0.4 |
| TMUT | | | | IAmb | IAmb | 03 00 21.2 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| ILAR | Eielson Array | 58.73 | 334 | P | P | 03 00 12.9 | +0.5 |
| | comp=Z,0.8nm,1.1s,baz=38,slow=4.9,SNR=6.4 | | | | | | |
| ILAR | | | | LR | LR | 03 24 38.4 | |
| | comp=Z,37nm,18.2s,baz=292,slow=35 | | | | | | |
| | comp=Z,0.8nm,1.1s | | | | | | |
| DUG | Dugway, Tooele | 59.13 | 297 | P | P | 03 00 16.1 | +0.4 |
| DUG | | | | IAmb | IAmb | 03 00 24.4 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| IMAR | Indian Mountai | 59.73 | 338 | P | P | 03 00 19.9 | +0.6 |
| MSU | Marysvale | 59.78 | 295 | P | P | 03 00 20.8 | +0.5 |
| MVU | Marysvale | 59.80 | 295 | P | P | 03 00 19.9 | -0.6 |
| TCRU | Three Creeks R | 59.88 | 296 | P | P | 03 00 22.2 | +1.2 |
| BBB | Bella Bella | 60.00 | 316 | LR | LR | 03 23 37.5 | |
| | comp=Z,38nm,18.2s,baz=249,slow=33 | | | | | | |
| TXAR | Lajitas Array | 60.10 | 282 | P | P | 03 00 23.1 | +0.7 |
| | comp=Z,0.2nm,0.6s,baz=57,slow=9.8,SNR=3.9 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| PSUT | Pine Spring | 60.79 | 296 | P | P | 03 00 26.8 | -0.4 |
| PSUT | | | | IAmb | IAmb | 03 00 41.8 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| Q12A | Willow Creek R | 61.06 | 297 | P | P | 03 00 31.3 | +2.3 |
| Q12A | | | | IAmb | IAmb | 03 00 35.2 | |
| | comp=Z,5.3nm,1.0s | | | | | | |
| CCUT | Cedar City | 61.11 | 295 | P | P | 03 00 29.8 | +0.4 |
| WVOR | Wild Horse Val | 61.17 | 302 | P | P | 03 00 29.7 | +0.1 |
| WVOR | | | | IAmb | IAmb | 03 00 38.8 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| BMN | Battle Mountai | 61.61 | 300 | P | P | 03 00 33.1 | +0.4 |
| BMN | | | | IAmb | IAmb | 03 00 41.8 | |
| | comp=Z,2.7nm,1.0s | | | | | | |
| J05D | Fort Rock, OR | 62.11 | 304 | P | P | 03 00 36.7 | +0.8 |
| CMIG | Matias Romero | 62.39 | 265 | LR | LR | 03 26 15.6 | |
| | comp=Z,62nm,19.6s,baz=318,slow=35 | | | | | | |
| TPH | Tonopah | 63.12 | 298 | P | P | 03 00 43.5 | +0.6 |
| MZP | Montezuma Peak | 63.46 | 298 | P | P | 03 00 44.9 | -0.4 |
| MZP | | | | IAmb | IAmb | 03 00 46.6 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 63.50 | 43 | P | P | 03 00 44.5 | -0.3 |
| | comp=Z,1.2nm,0.8s,baz=317,slow=6.7,SNR=10.0 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| NVAR | Mina Array Bea | 63.54 | 299 | P | P | 03 00 45.6 | -0.1 |
| | comp=Z,0.2nm,0.4s,baz=51,slow=7.1,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| GRAC | Grapevine Rang | 63.91 | 297 | P | P | 03 00 47.5 | -0.4 |
| GSC | Goldstone, Bar | 64.68 | 295 | P | P | 03 00 53.1 | +0.1 |
| GSC | | | | IAmb | IAmb | 03 01 02.4 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| FURI | Furi | 67.36 | 102 | LR | LR | 03 29 33.6 | |
| | comp=Z,28nm,18.1s,baz=341,slow=35 | | | | | | |
| MKAR | Makanchi Array | 67.97 | 44 | P | P | 03 01 13.9 | 0.0 |
| MKAR | Makanchi Array | 67.97 | 44 | P | P | 03 01 13.7 | -0.1 |
| | comp=Z,0.9nm,0.8s,baz=309,slow=6.3,SNR=5.9 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| SIV | San Ignacio | 69.90 | 215 | P | P | 03 01 26.2 | +0.1 |
| | comp=Z,0.3nm,0.4s,baz=1.6,slow=5.7,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| SONM | Songino Array | 77.02 | 30 | P | P | 03 02 08.6 | +0.6 |
| SONM | | | | IAmb | IAmb | 03 02 09.6 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| SONM | Songino Array | 77.02 | 30 | P | P | 03 02 08.5 | +0.6 |
| | comp=Z,2.2nm,0.8s,baz=337,slow=6.6,SNR=4.0 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| ULN | Ulaanbaatar | 77.22 | 30 | P | P | 03 02 09.8 | +0.8 |
| ULN | | | | IAmb | IAmb | 03 02 11.2 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| CMAR | Chiang Mai Arr | 98.74 | 51 | LR | LR | 03 51 24.3 | |
| | comp=Z,13nm,18.7s,baz=90,slow=37 | | | | | | |
| WRA | Warramunga Arr | 148.89 | 35 | PKPbc | PKPbc | 03 10 01.4 | -1.6 |
| | comp=Z,1.2nm,0.7s,baz=322,slow=4.2,SNR=5.5 | | | | | | |
| VNDA | Vanda | 149.50 | 184 | | PKiKP | 03 10 03.4 | -0.5 |
| VNDA | Vanda | 149.50 | 184 | PKPbc | PKPbc | 03 10 02.9 | +0.1 |
| | comp=Z,2.2nm,1.1s,baz=217,slow=5.1,SNR=6.7 | | | | | | |
| ASAR | Alice Springs | 152.05 | 39 | PKPbc | PKPbc | 03 10 08.9 | -1.6 |
| | comp=Z,0.9nm,0.7s,baz=334,slow=2.7,SNR=4.3 | | | | | | |

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*NEIC **01** 02:59:39.9±1.4, 15°.53S±0°.08×178°.4W±0°.1, h426km±8km, mb4.2/41, Error ellipse: s-maj=21.0km s-min=5.8km az=120.0*

*IDC **01** 02:59:42.3±1.5, 15°.47S×178°.72W, h441km±15km, mb3.5/10, mbtmp4.3/12, Error ellipse: s-maj=18.1km s-min=12.5km az=157.0*

**ISC 01 02:59:41.5**±0.5**, 15°.46S**±0°.10×**178°.51W**±0°.08**, h450**km**, n80,** σ1s**38**/83**, mb4.1**/29**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 4.00 | 235 | P | P | 03 00 54.8 | -1.9 |
| MSVF | Nonsavu | 4.00 | 235 | P | P | 03 00 55.0 | -1.7 |
| | 76nm,0.4s,baz=84,slow=9.7,SNR=73 | | | | | | |
| AFI | Afiamalu | 6.70 | 78 | P | P | 03 01 20.0 | -3.2 |
| NIUE | Niue | 8.95 | 115 | P | P | 03 01 44.7 | -2.6 |
| LIFNC | LIFOU | 14.54 | 247 | P | P | 03 02 46.7 | -1.0 |
| DZM | Mont Dzumac | 15.68 | 243 | P | P | 03 03 02.0 | +1.9 |
| DZM | | | | IAmb | IAmb | 03 03 37.1 | |
| | comp=Z,16nm,1.3s | | | | | | |
| DZM | Mont Dzumac | 15.68 | 243 | P | P | 03 03 00.7 | +0.6 |
| | comp=Z,4.7nm,0.7s,baz=104,slow=19,SNR=2.4 | | | | | | |
| RTZ | Ruatahuna | 23.40 | 189 | P | P | 03 04 11.2 | -2.4 |
| RTZ | | | | IAmb | IAmb | 03 04 39.5 | |
| | comp=Z,9.8nm,1.0s | | | | | | |
| BKZ | Black Stump Fm | 24.02 | 190 | P | P | 03 04 16.7 | -2.4 |
| BKZ | | | | IAmb | IAmb | 03 04 31.9 | |
| | comp=Z,19nm,1.3s | | | | | | |
| QRZ | Quartz Range | 26.44 | 195 | P | P | 03 04 40.5 | -0.1 |
| THZ | Tophouse | 27.24 | 194 | P | P | 03 04 46.3 | -1.3 |
| PPT | Papeete | 27.81 | 98 | P | P | 03 04 57.4 | +4.4 |
| | comp=Z,16nm,0.7s,baz=250,slow=17,SNR=2.6 | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | |
| INZ | Inchbonnie | 28.50 | 196 | P | P | 03 04 57.5 | -1.2 |
| FOZ | Fox Glacier | 29.70 | 197 | P | P | 03 05 08.2 | -0.9 |
| EIDS | Eidsvold | 30.09 | 246 | P | P | 03 05 12.5 | -0.3 |
| EIDS | | | | IAmb | IAmb | 03 05 13.1 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| MLZ | Mavora Lakes | 31.87 | 198 | P | P | 03 05 26.9 | -1.0 |
| MLZ | | | | IAmb | IAmb | 03 05 50.1 | |
| | comp=Z,27nm,1.3s | | | | | | |
| STKA | Stephens Creek | 39.77 | 239 | P | P | 03 06 34.0 | -0.1 |
| STKA | Stephens Creek | 39.77 | 239 | P | P | 03 06 34.1 | 0.0 |
| | comp=Z,4.2nm,0.7s,baz=66,slow=8.4,SNR=6.7 | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| BBOO | Buckleboo | 44.54 | 239 | P | P | 03 07 11.8 | -0.1 |
| BBOO | | | | IAmb | IAmb | 03 07 46.5 | |
| | comp=Z,29nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 44.84 | 257 | P | P | 03 07 13.9 | -0.5 |
| WR0 | | | | IAmb | IAmb | 03 07 28.3 | |
| | comp=Z,13nm,1.4s | | | | | | |
| WB0 | Warramunga Arr | 44.98 | 257 | P | P | 03 07 14.8 | -0.8 |
| WB0 | | | | IAmb | IAmb | 03 07 16.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| WB2 | Warramunga Arr | 45.02 | 257 | P | P | 03 07 14.7 | -1.1 |
| WB2 | | | | IAmb | IAmb | 03 07 19.1 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 45.02 | 257 | P | P | 03 07 15.7 | -0.1 |
| WRAB | | | | IAmb | IAmb | 03 07 18.4 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 45.03 | 257 | P | P | 03 07 15.1 | -0.8 |
| WRA | Warramunga Arr | 45.03 | 257 | P | P | 03 07 15.2 | -0.7 |
| | comp=Z,5.1nm,0.7s,baz=96,slow=8.3,SNR=71 | | | | | | |
| WRA | | | | PcP | PcP | 03 08 49.1 | +1.3 |
| | comp=Z,0.3nm,0.3s,baz=84,slow=4.1,SNR=4.7 | | | | | | |
| WRA | | | | S | S | 03 13 21.0 | +0.1 |
| | comp=Z,0.3nm,0.6s,baz=100,slow=13,SNR=2.3 | | | | | | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| AS31 | Alice Springs | 45.40 | 252 | P | P | 03 07 18.5 | -0.3 |
| ASAR | Alice Springs | 45.40 | 252 | P | P | 03 07 19.0 | +0.2 |
| | comp=Z,54nm,0.4s,baz=84,slow=8.3,SNR=825 | | | | | | |
| ASAR | | | | PcP | PcP | 03 08 49.8 | +0.7 |
| | comp=Z,1.3nm,0.4s,baz=100,slow=4.1,SNR=4.8 | | | | | | |
| ASAR | | | | S | S | 03 13 25.8 | -0.5 |
| | comp=Z,0.6nm,0.7s,baz=82,slow=16,SNR=4.3 | | | | | | |
| FORT | Forrest | 51.00 | 243 | P | P | 03 08 00.4 | -0.3 |
| FITZ | Fitzroy Crossi | 53.37 | 259 | P | P | 03 08 18.3 | +0.3 |
| SOEI | Soe | 56.00 | 269 | P | P | 03 08 38.7 | +2.0 |
| PSA00 | Pilbara Seismi | 58.46 | 254 | P | P | 03 08 53.4 | 0.0 |
| PSA00 | | | | IAmb | IAmb | 03 09 22.8 | |
| | comp=Z,11nm,1.5s | | | | | | |
| NWAO | Narrogin (SRO) | 60.29 | 241 | P | P | 03 09 05.7 | +0.1 |
| MORW | Morawa | 61.39 | 245 | P | P | 03 09 12.8 | -0.1 |
| SBA | Scott Base | 62.84 | 183 | P | P | 03 09 24.1 | +2.6 |
| VNDA | Vanda | 62.86 | 185 | P | P | 03 09 22.4 | +0.7 |
| VNDA | | | | IAmb | IAmb | 03 10 04.4 | |
| | comp=Z,4.6nm,1.2s | | | | | | |
| VNDA | Vanda | 62.86 | 185 | P | P | 03 09 22.9 | +1.3 |
| | comp=Z,0.4nm,0.7s,baz=355,slow=8.0,SNR=2.0 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| MJAR | Matsushiro Arr | 65.90 | 323 | P | P | 03 09 41.9 | +0.1 |
| | comp=Z,1.9nm,0.7s,baz=159,slow=6.3,SNR=4.6 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| CASY | Casey | 68.31 | 204 | P | P | 03 09 56.6 | +0.5 |
| CASY | | | | IAmb | IAmb | 03 10 07.7 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| KSRS | Korea Array | 72.83 | 318 | P | P | 03 10 24.5 | +1.1 |
| | comp=Z,0.8nm,0.5s,baz=120,slow=3.0,SNR=2.4 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| QSPA | South Pole Qui | 74.58 | 180 | P | P | 03 10 34.5 | +1.3 |
| QSPA | | | | IAmb | IAmb | 03 10 35.6 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 74.58 | 180 | P | P | 03 10 34.1 | +0.9 |
| | comp=Z,5.3nm,0.8s,baz=359,slow=2.1,SNR=28 | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| L18K | Granite Mounta | 79.32 | 10 | P | P | 03 11 00.9 | +2.0 |
| L18K | | | | IAmb | IAmb | 03 11 03.3 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| J17K | VABM Dome | 80.05 | 9 | P | P | 03 11 04.3 | +1.5 |
| J17K | | | | IAmb | IAmb | 03 11 46.5 | |
| | comp=Z,13nm,1.4s | | | | | | |
| CAST | Castle Rocks | 81.27 | 12 | P | P | 03 11 09.5 | +0.3 |
| G19K | Purcell Mounta | 82.93 | 9 | P | P | 03 11 19.1 | +1.6 |
| G19K | | | | IAmb | IAmb | 03 11 42.7 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| H21K | Melozitna Rive | 83.17 | 10 | P | P | 03 11 20.6 | +1.8 |
| H21K | | | | IAmb | IAmb | 03 12 02.3 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| CCB | Clear Creek Bu | 83.23 | 13 | P | P | 03 11 19.8 | +0.7 |
| CCB | | | | IAmb | IAmb | 03 11 20.7 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| IMAR | Indian Mountai | 83.30 | 10 | P | P | 03 11 20.9 | +1.4 |
| L27K | Beaver Creek, | 83.32 | 16 | P | P | 03 11 20.3 | +0.7 |
| BCAR | Beaver Creek A | 83.33 | 16 | P | P | 03 11 21.1 | +1.4 |
| SCRK | Sand Creek | 83.53 | 15 | P | P | 03 11 21.8 | +1.0 |
| IL31 | | 83.54 | 13 | P | P | 03 11 21.8 | +1.2 |
| IL31 | | | | IAmb | IAmb | 03 11 22.4 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ILAR | Eielson Array | 83.54 | 13 | P | P | 03 11 21.1 | +0.4 |
| ILAR | Eielson Array | 83.54 | 13 | P | P | 03 11 21.5 | +0.9 |
| | comp=Z,1.0nm,0.6s,baz=229,slow=5.4,SNR=31 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| POKR | Poker Plat Res | 83.72 | 13 | P | P | 03 11 20.6 | -1.0 |
| POKR | | | | IAmb | IAmb | 03 11 23.2 | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| J25K | Salcha River, | 83.74 | 14 | P | P | 03 11 22.9 | +1.1 |
| G21K | Allakaket | 83.83 | 10 | P | P | 03 11 23.9 | +1.8 |
| J26L | Joseph Creek | 84.07 | 14 | P | P | 03 11 25.1 | +1.6 |
| M30M | Minto, Yukon | 84.35 | 18 | P | P | 03 11 25.9 | +1.1 |
| TXAR | Lajitas Array | 84.78 | 58 | P | P | 03 11 31.1 | +3.3 |
| | comp=Z,0.2nm,0.6s,baz=224,slow=3.8,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| MAW | Mawson | 86.11 | 200 | P | P | 03 11 34.7 | +1.3 |
| | comp=Z,4.3nm,0.7s,baz=143,slow=7.3,SNR=12 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| ARCES | ARCESS Array B | 123.90 | 350 | PKP | PKiKP | 03 17 47.8 | +0.5 |
| | comp=Z,1.8nm,0.6s,baz=48,slow=1.8,SNR=14 | | | | | | |
| FINES | FINESS Array B | 130.82 | 345 | PKP | PKiKP | 03 18 02.1 | +0.9 |
| | comp=Z,1.2nm,0.8s,baz=35,slow=5.1,SNR=2.7 | | | | | | |
| BRTR | Keskin Array B | 142.97 | 317 | PKP | PKPdf | 03 18 22.8 | -0.7 |
| | comp=Z,2.6nm,0.7s,baz=62,slow=1.6,SNR=17 | | | | | | |
| DPC | Dobruska-Polom | 143.19 | 344 | *e*PKP | PKPdf | 03 18 23.5 | 0.0 |
| MMAI | Mount Meron Ar | 144.69 | 306 | PKP | PKiKP | 03 18 28.9 | -1.7 |
| | comp=Z,13nm,0.7s,baz=61,slow=6.8,SNR=7.1 | | | | | | |
| KHC | Kasperske Hory | 145.00 | 346 | *e*PKP | PKiKP | 03 18 28.8 | -1.8 |
| CKRC | Cesky Krumlov | 145.11 | 345 | *e*PKP | PKiKP | 03 18 29.0 | -1.9 |
| GERES | GERESS Array B | 145.23 | 346 | PKPbc | PKiKP | 03 18 29.4 | -1.8 |
| | comp=Z,1.0nm,0.5s,baz=20,slow=3.1,SNR=7.5 | | | | | | |
| CONA | Conrad Observa | 145.52 | 343 | *e*PKP | PKiKP | 03 18 31.0 | -0.8 |
| | comp=Z,3.3nm,0.8s | | | | | | |
| RONA | Rosalia, Austr | 145.60 | 342 | *e*PKP | PKiKP | 03 18 31.2 | -0.7 |
| | comp=Z,6.3nm,1.1s | | | | | | |
| MOA | Molln | 146.02 | 345 | *e*PKP | PKiKP | 03 18 32.0 | -0.8 |
| | comp=Z,1.8nm,0.6s | | | | | | |
| SOKA | Soboth | 146.89 | 343 | *e*PKP | PKiKP | 03 18 33.5 | -1.2 |
| | comp=Z,0.8nm,0.5s | | | | | | |
| RETA | Reutte | 147.16 | 348 | *e*PKP | PKPab | 03 18 34.9 | -1.3 |
| | comp=Z,1.4nm,0.5s | | | | | | |
| WTTA | Wattenberg | 147.19 | 347 | *e*PKiKP | PKPab | 03 18 35.1 | -1.4 |
| | comp=Z,3.4nm,0.6s | | | | | | |
| MOTA | Moosalm | 147.22 | 348 | *e*PKP | PKPab | 03 18 35.1 | -1.6 |
| | comp=Z,3.0nm,1.0s | | | | | | |
| MYKA | Terra Mystica | 147.31 | 344 | *i* PKP | PKiKP | 03 18 34.6 | -0.9 |
| | comp=Z,1.4nm,0.4s | | | | | | |
| ABTA | Abfaltersbach | 147.48 | 346 | *e*PKP | PKiKP | 03 18 35.3 | -0.6 |
| | comp=Z,3.3nm,0.7s | | | | | | |
| DAVA | Damuels | 147.51 | 349 | *e*PKiKP | PKPab | 03 18 36.0 | -1.8 |
| | comp=Z,0.8nm,0.3s | | | | | | |
| FETA | Feichten | 147.61 | 348 | *e*PKiKP | PKPab | 03 18 36.4 | -1.8 |
| | comp=Z,0.7nm,0.6s | | | | | | |

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*SDD **01** 03:07:30.2±0.9, 18°.08N×68°.53W, h96km±23km, MD3.0, ML2.2, MW1.9*

*NEIC **01** 03:07:32.6±1.7, 17°.9N±0°.2×68°.5W±0°.1, h75km±29km, ML2.4/12, Md2.7/2(RSPR), Error ellipse: s-maj=35.0km s-min=11.0km az=196.0*

*RSPR **01** 03:07:33.0, 17°.98N×68°.48W, h84km±8km*

**ISC 01 03:07:28.1**±3.2**, 17°.9N**±0°.2×**68°.7W**±0°.1**, h95**km**, n27,** σ1s**57**/31**, 10C-2D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCDR | Punta Cana, DR | 0.69 | 23⇑ | *e*P | Pn | 03 07 46.8 | +1.9 |
| PCDR | Punta Cana, DR | 0.69 | 23 | *e*S | Sn | 03 07 57.9 | +0.4 |
| PCDR | Punta Cana, DR | 0.69 | 23 | | Pn | 03 07 46.8 | +1.9 |
| PCDR | | | | | Sn | 03 07 57.8 | +0.3 |
| PCDR | | | | IAML | | 03 08 15.8 | |
| | comp=E,96nm,2.3s | | | | | | |
| MIDR | Miches | 1.16 | 342⇑ | *e*Pg | Pn | 03 07 49.9 | -0.1 |
| MIDR | | | ⇑ | *e*Sg | Sn | 03 08 03.9 | -2.5 |
| MIDR | | | | IAML | | 03 08 46.9 | |
| | comp=N,22nm,2.7s | | | | | | |
| CRPR | Cabo Rojo, PR | 1.48 | 85⇓ | *e*P | Pn | 03 07 55.2 | +1.4 |
| CRPR | Cabo Rojo, PR | 1.48 | 85 | *e*S | Sn | 03 08 11.9 | -1.5 |
| CRPR | Cabo Rojo, PR | 1.48 | 85 | | Pn | 03 07 55.1 | +1.2 |
| CRPR | Cabo Rojo, PR | 1.48 | 85 | | Sn | 03 08 11.9 | -1.5 |
| CRPR | Cabo Rojo, PR | 1.48 | 85⇑ | *e*Pg | Pn | 03 07 54.0 | +0.1 |
| CRPR | | | | IAML | | 03 08 06.7 | |
| | comp=N,41nm,1.8s | | | | | | |
| CRPR | | | | IAML | | 03 08 17.6 | |
| | comp=E,44nm,2.1s | | | | | | |
| CRPR | | | | IAML | | 03 08 26.1 | |
| | comp=N,27nm,1.8s | | | | | | |
| LSP | Las Mesas | 1.53 | 79⇓ | *e*P | Pn | 03 07 56.2 | +1.7 |
| LSP | Las Mesas | 1.53 | 79 | *e*S | Sn | 03 08 12.4 | -2.1 |
| LSP | Las Mesas | 1.53 | 79 | | Pn | 03 07 56.2 | +1.7 |
| LSP | | | | | Sn | 03 08 12.4 | -2.1 |
| MLPR | Magueyes Islan | 1.54 | 86⇑ | *e*Pg | Pn | 03 07 53.8 | -0.9 |
| MLPR | | | | IAML | | 03 08 03.3 | |
| | comp=E,25nm,2.2s | | | | | | |
| MLPR | | | ⇑ | *e*Sg | Sn | 03 08 11.7 | -3.0 |
| MLPR | | | | IAML | | 03 08 17.6 | |
| | comp=N,25nm,1.8s | | | | | | |
| MLPR | | | | IAML | | 03 08 45.5 | |
| | comp=N,27nm,2.2s | | | | | | |
| AGPR | Aguadilla, PR | 1.59 | 68 | Pn | Pn | 03 07 55.2 | +0.1 |
| AOPR | Arecibo Observ | 1.87 | 75 | *e*S | Sn | 03 08 21.1 | -1.2 |
| AOPR | Arecibo Observ | 1.87 | 75 | | Sn | 03 08 21.1 | -1.2 |
| AOPR | Arecibo Observ | 1.87 | 75 | Pn | Pn | 03 07 58.9 | 0.0 |
| AOPR | | | | IAML | | 03 09 04.1 | |
| | comp=E,32nm,1.2s | | | | | | |
| AOPR | | | | IAML | | 03 09 11.5 | |
| | comp=N,24nm,1.7s | | | | | | |
| AOPR | Arecibo Observ | 1.87 | 75⇑ | *e*Pg | Pn | 03 07 58.0 | -0.8 |
| AOPR | | | | IAML | | 03 08 22.5 | |
| | comp=N,23nm,1.1s | | | | | | |
| AOPR | | | | IAML | | 03 08 22.6 | |
| | comp=N,23nm,1.1s | | | | | | |
| AOPR | | | | IAML | | 03 08 30.8 | |
| | comp=E,26nm,1.8s | | | | | | |
| UUPR | Utuado, UPR, P | 1.89 | 78⇑ | *e*P | Pn | 03 08 00.4 | +1.4 |
| UUPR | Utuado, UPR, P | 1.89 | 78 | *e*S | Sn | 03 08 22.0 | -0.6 |
| UUPR | Utuado, UPR, P | 1.89 | 78 | | Pn | 03 08 00.4 | +1.4 |
| UUPR | | | | | Sn | 03 08 22.0 | -0.6 |
| UUPR | Utuado, UPR, P | 1.89 | 78 | IAML | | 03 08 23.2 | |
| | comp=E,50nm,0.3s | | | | | | |
| UUPR | | | | IAML | | 03 08 25.9 | |
| | comp=N,40nm,0.4s | | | | | | |
| CELP | Cerrillos | 1.99 | 84⇑ | *e*P | Pn | 03 08 01.9 | +1.5 |
| CELP | Cerrillos | 1.99 | 84 | *e*S | Sn | 03 08 27.1 | +2.0 |
| CELP | Cerrillos | 1.99 | 84 | | Pn | 03 08 01.9 | +1.5 |
| CELP | | | | | Sn | 03 08 27.1 | +2.0 |
| CELP | Cerrillos | 1.99 | 84 | IAML | | 03 09 06.0 | |
| | comp=N,20nm,2.5s | | | | | | |
| CELP | Cerrillos | 1.99 | 84⇑ | *e*Pg | Pn | 03 07 58.9 | -1.5 |
| CELP | | | | IAML | | 03 09 05.2 | |
| | comp=N,19nm,2.5s | | | | | | |

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*BNS **01** 03:47:28.1±0.5, 51°.49N×16°.64E, h2km, ML3.7*

*MCSM **01** 03:47:30.3±1.0, 52°N±5°×1°6E±°, h3km±9km, mb3.8, MLv4.0*

*DNK **01** 03:47:31.9±2.6, 51°.64N×15°.76E, h0km±58km, ML3.2*

*IDC **01** 03:47:31.7±0.5, 51°.57N×16°.04E, h0km, mb3.5/4, mbtmp3.5/12, ML3.3/8, MS3.6/2, Error ellipse: s-maj=10.2km s-min=6.0km az=108.0*

*IPEC **01** 03:47:31.2±0.2, 51°.60N×16°.21E, h1km, ML3.3/4, Error ellipse: s-maj=1.6km s-min=1.0km az=33.0*

*BGR **01** 03:47:32.4±0.4, 51°.55N×16°.15E, h1km, ML3.6/16, Error ellipse: s-maj=4.4km s-min=2.2km az=27.0*

*PRU **01** 03:47:34.3, 51°.49N×16°.10E, h0km*

*UPP **01** 03:47:35.6±2.4, 51°.81N×15°.48E, h0km, ML2.1*

*LDG **01** 03:47:37.1±0.3, 51°.43N×15°.70E, h1km, Ml3.8/17, Error ellipse: s-maj=8.5km s-min=4.2km az=154.0, Suspected Mining induced.*

**ISC 01 03:47:29.9**±0.5**, 51°.67N**±0°.03×**16°.14E**±0°.02**, h0**km**, n174,** σ1s**51**/247**, mb3.4**/4**, 2C-3D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.83 | 173 | *i* Pg | Pg | 03 47 46.2 | +0.5 |
| KSP | | | | *e*Sg | Sg | 03 47 55.8 | -0.7 |
| KSP | Ksiaz | 0.83 | 173 | *e*Pg | Pg | 03 47 46.3 | +0.5 |
| KSP | | | | *e*Sg | Sg | 03 47 55.8 | -0.7 |
| KSP | Ksiaz | 0.83 | 173 | P | Pg | 03 47 46.0 | +0.2 |
| CHVC | Chvalec | 1.08 | 183 | *e*PG | Pb | 03 47 51.1 | -0.4 |
| CHVC | | | | *e*SG | Sg | 03 48 04.2 | -0.4 |
| | comp=Z,379nm,0.4s | | | | | | |
| UPC | Upice | 1.16 | 184 | *e*PG | Pg | 03 47 52.4 | +0.3 |
| UPC | | | | *e*SG | Sg | 03 48 06.0 | -1.2 |
| DPC | Dobruska-Polom | 1.32 | 175 | *e*PG | Pg | 03 47 54.9 | -0.3 |
| DPC | | | | *e*SG | Sg | 03 48 10.7 | -1.6 |
| | comp=Z,266nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 1.32 | 175 | *e*Pg | Pg | 03 47 55.0 | -0.3 |
| DPC | | | | *e*Sg | Sg | 03 48 10.8 | -1.6 |
| DPC | Dobruska-Polom | 1.32 | 175 | P | Pg | 03 47 54.7 | -0.5 |
| PVCC | Panska Ves | 1.51 | 222 | *e*PG | Pg | 03 47 59.3 | +0.5 |
| PVCC | | | | *e*SG | Sn | 03 48 19.8 | +1.3 |
| | comp=Z,958nm,0.5s | | | | | | |
| BRG | Berggiesshubel | 1.59 | 241 | Pn | Pn | 03 47 59.4 | +0.1 |
| BRG | | | | Pg | Pg | 03 48 01.3 | +1.0 |
| BRG | | | | Sg | Sg | 03 48 21.7 | +0.8 |
| BRG | | | | Amp | | 03 48 21.9 | |
| | comp=Z,404nm,0.5s | | | | | | |
| BRG | Berggiesshubel | 1.59 | 241 | *e*Pn | Pn | 03 47 59.5 | +0.2 |
| BRG | | | | *e*Sg | Sg | 03 48 21.5 | +0.5 |
| KRLC | Kraliky | 1.64 | 165 | *e*PG | Pn | 03 48 00.2 | +0.1 |
| KRLC | | | | *e*SG | Sn | 03 48 21.4 | -0.5 |
| | comp=Z,292nm,0.3s | | | | | | |
| RUE | Ruedersdorf | 1.67 | 300 | *e*P | Pn | 03 47 57.3 | -3.0 |
| GKP | Gorka Klasztor | 1.74 | 22 | *e*P | Pn | 03 47 59.2 | -2.2 |
| FBE | Freiberg | 1.90 | 248 | *e*Pn | Pb | 03 48 04.9 | -0.5 |
| FBE | | | | *e*Sg | Sg | 03 48 30.9 | +0.1 |
| PRA | Prague | 1.93 | 215 | *e*PN | Pn | 03 48 04.2 | +0.3 |
| PRA | | | | *e*PG | Pg | 03 48 06.7 | -0.1 |
| PRA | | | | *e*SG | Sb | 03 48 30.7 | +0.2 |
| GOPC | GO Pecny, Ondr | 1.95 | 207 | *e*PN | Pn | 03 48 04.6 | +0.3 |
| GOPC | | | | *e*PG | Pb | 03 48 06.5 | +0.2 |
| PRU | Pruhonice | 1.96 | 212 | *e*PN | Pn | 03 48 04.6 | +0.2 |
| PRU | | | | *e*PG | Pb | 03 48 06.4 | -0.1 |
| PRU | | | | *e*SG | Sb | 03 48 31.0 | -0.4 |
| | comp=Z,192nm,0.5s | | | | | | |
| CLL | Collm | 1.99 | 261 | *i* Pn | Pn | 03 48 05.3 | +0.5 |
| CLL | | | | *e*Pg | Pg | 03 48 08.0 | -0.1 |
| CLL | | | | *i* x | x | 03 48 12.1 | |
| CLL | | | | *i* Sg | Sg | 03 48 35.4 | +1.5 |
| | comp=Z,255nm,0.4s | | | | | | |
| CLL | Collm | 1.99 | 261 | *e*Pn | Pn | 03 48 05.3 | +0.5 |
| CLL | Collm | 1.99 | 261 | P | Pn | 03 48 05.1 | +0.3 |
| HSKC | Hora Svate Kat | 2.01 | 239 | *e*PG | Pg | 03 48 07.8 | -0.5 |
| HSKC | | | | *e*SG | Sg | 03 48 33.5 | -0.8 |
| | comp=Z,485nm,0.9s | | | | | | |
| RAC | Raciborz | 2.05 | 140 | *e*PG | Pg | 03 48 09.4 | +0.2 |
| RAC | | | | *e*SG | Sb | 03 48 34.8 | +0.8 |
| MORC | Moravsky Berou | 2.09 | 154 | *e*Pn | Pn | 03 48 06.1 | -0.1 |
| | baz=336 | | | | | | |
| MORC | | | | *e*Sg | Sb | 03 48 34.3 | -0.9 |
| | comp=Z,239nm,0.7s,baz=336 | | | | | | |
| MORC | Moravsky Berou | 2.09 | 154 | *e*PN | Pn | 03 48 06.2 | -0.1 |
| MORC | | | | *e*SG | Sb | 03 48 34.4 | -0.8 |
| MORC | Moravsky Berou | 2.09 | 154 | *e*Pn | Pn | 03 48 06.2 | -0.1 |
| MORC | | | | *e*Sg | Sb | 03 48 35.5 | +0.3 |
| OKC | Ostrava-Krasne | 2.23 | 144 | *e*PG | Pg | 03 48 12.0 | -0.6 |
| OKC | | | | *e*SG | Sb | 03 48 39.7 | +0.5 |
| OKC | Ostrava-Krasne | 2.23 | 144 | *e*Pn | Pn | 03 48 07.7 | -0.4 |
| OKC | | | | *e*Sg | Sb | 03 48 39.3 | +0.1 |
| VRAC | Vranov | 2.38 | 173 | *e*Pn | Pn | 03 48 10.3 | +0.2 |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | Sb | 03 48 43.4 | 0.0 |
| | comp=Z,128nm,0.4s,baz=354 | | | | | | |
| VRAC | Vranov | 2.38 | 173 | *e*PN | Pn | 03 48 10.4 | +0.3 |
| VRAC | | | | *e*SG | Sb | 03 48 43.5 | 0.0 |
| VRAC | Vranov | 2.38 | 173 | Pn | Pn | 03 48 10.2 | +0.1 |
| | comp=Z,10nm,0.3s,baz=352,slow=16,SNR=62 | | | | | | |
| VRAC | | | | Lg | Lg | 03 48 41.4 | |
| | comp=Z,12nm,0.3s,baz=258,slow=20,SNR=4.1 | | | | | | |
| | comp=Z,44nm,0.3s | | | | | | |
| TREC | Trest | 2.41 | 190 | *e*SG | Sb | 03 48 44.9 | +0.5 |
| MAUC | Maruska | 2.54 | 154 | *e*PG | Pg | 03 48 17.9 | -0.7 |
| KRUC | Moravsky | 2.61 | 176 | *e*Pn | Pn | 03 48 13.6 | +0.3 |
| | baz=358 | | | | | | |
| KRUC | | | | *e*Sg | Sb | 03 48 50.7 | +0.5 |
| | comp=Z,94nm,0.5s,baz=358 | | | | | | |
| TANN | Tannenbergstha | 2.64 | 243 | *e*Pn | Pn | 03 48 14.6 | +0.8 |
| TANN | | | | *e*Sg | Sg | 03 48 54.7 | +0.1 |
| WERD | Werda | 2.71 | 245 | *e*Pn | Pn | 03 48 15.3 | +0.7 |
| OJC | Ojcow | 2.73 | 121 | *e*Pn | Pn | 03 48 13.9 | -1.0 |
| OJC | | | | *e*Pg | Pg | 03 48 22.1 | -0.1 |
| OJC | | | | *e*Sg | Sg | 03 48 58.1 | +0.6 |
| OJC | Ojcow | 2.73 | 121 | *e*Pn | Pn | 03 48 14.2 | -0.8 |
| OJC | Ojcow | 2.73 | 121 | P | Pn | 03 48 13.8 | -1.2 |
| JAVC | Velka Javorina | 2.98 | 160 | *e*Pn | Pn | 03 48 18.7 | +0.3 |
| | baz=342 | | | | | | |
| JAVC | Velka Javorina | 2.98 | 160 | *e*PN | Pn | 03 48 18.8 | +0.3 |
| KHC | Kasperske Hory | 3.02 | 214 | *e*PN | Pn | 03 48 19.4 | +0.4 |
| KHC | | | | *e*PG | Pb | 03 48 25.2 | +0.7 |
| KHC | | | | *e*SN | Sn | 03 48 55.5 | -0.4 |
| KHC | | | | *e*SG | Sg | 03 49 04.9 | -2.0 |
| | comp=Z,111nm,0.4s | | | | | | |
| KHC | Kasperske Hory | 3.02 | 214 | P | Pn | 03 48 18.4 | -0.6 |
| MOX | Moxa | 3.02 | 252 | *e*Pn | Pn | 03 48 19.7 | +0.7 |
| MOX | | | | *e*Pg | Pg | 03 48 28.3 | +0.5 |
| MANZ | Manzenberg | 3.06 | 238 | *e*Pn | Pn | 03 48 20.6 | +1.1 |
| CKRC | Cesky Krumlov | 3.08 | 203 | *e*PN | Pn | 03 48 20.9 | +1.1 |
| CKRC | | | | *e*PG | Pb | 03 48 26.8 | +1.2 |
| CKRC | | | | *e*SG | Sg | 03 49 06.1 | -2.7 |
| | comp=Z,109nm,0.5s | | | | | | |
| ROTZ | Rotzenmuhle | 3.14 | 234 | *e*Pn | Pn | 03 48 21.2 | +0.6 |
| GEC2 | GERESS Array S | 3.23 | 210 | *e*Pn | Pn | 03 48 22.2 | +0.3 |
| GEC2 | | | | *e*Sg | Sg | 03 49 10.8 | -2.7 |
| GERES | GERESS Array B | 3.23 | 210 | Pn | Pn | 03 48 21.8 | -0.1 |
| | comp=Z,7.3nm,0.3s,baz=30,slow=13,SNR=120 | | | | | | |
| GERES | | | | Pg | Pb | 03 48 28.8 | +0.7 |
| | comp=Z,17nm,0.3s,baz=32,slow=17,SNR=40 | | | | | | |
| GERES | | | | Lg | Lg | 03 49 09.0 | |
| | comp=Z,22nm,0.3s,baz=14,slow=25,SNR=12 | | | | | | |
| | comp=Z,15nm,0.3s | | | | | | |
| WET | Wettzell | 3.27 | 221 | *e*Pn | Pn | 03 48 23.0 | +0.5 |
| LANS | Liptovska Anna | 3.30 | 138 | *e*PN | Pn | 03 48 23.7 | +0.9 |
| LANS | | | | *e*PG | Pg | 03 48 33.0 | -0.1 |
| LANS | | | | *e*SG | Sg | 03 49 14.1 | -1.7 |
| RGN | Rugen | 3.35 | 331 | *e*P | Pn | 03 48 25.2 | +1.8 |
| MODS | Modra-Piesok | 3.38 | 167 | *e*PN | Pn | 03 48 24.7 | +0.8 |
| MODS | | | | *e*PG | Pg | 03 48 34.2 | -0.4 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| MODS | | | | eSG | Sg | 03 49 18.6 | +0.3 |
| NIE | Niedzica | 3.48 | 129 | ePn | Pn | 03 48 26.7 | +1.4 |
| NIE | | | | ePg | Pg | 03 48 37.1 | +0.5 |
| NIE | | | | eSg | Sg | 03 49 21.7 | +0.1 |
| NIE | Niedzica | 3.48 | 129 | P | Pn | 03 48 27.1 | +1.8 |
| ZST | Bratislava | 3.53 | 169 | eSG | Sg | 03 49 21.8 | -1.4 |
| BSD | Bornholm Skovb | 3.53 | 349 | eP | Pn | 03 48 27.4 | +1.4 |
| BSD | Bornholm Skovb | 3.53 | 349 | i P | Pn | 03 48 26.0 | +0.1 |
| BSD | | | | i S | Sn | 03 49 06.5 | -1.8 |
| BSD | | | | IAML | | 03 49 40.3 | |
| | comp=Z,30nm,0.8s | | | | | | |
| CLZ | Clausthal | 3.59 | 275 | ePn | Pn | 03 48 28.9 | +2.1 |
| VYHS | Vyhne | 3.62 | 150 | ePN | Pn | 03 48 27.1 | -0.1 |
| VYHS | | | | ePG | Pg | 03 48 40.7 | +1.5 |
| VYHS | | | | eSG | Sg | 03 49 23.9 | -2.2 |
| GRF | Grafenberg Arr | 3.70 | 240 | ePn | Pn | 03 48 29.2 | +1.0 |
| CONA | Conrad Observa | 3.75 | 183 | i Pn | Pn | 03 48 29.3 | +0.3 |
| | comp=Z,3.9nm,0.3s,SNR=16 | | | | | | |
| RONA | Rosalia, Austr | 3.97 | 178 | i Pn | Pn | 03 48 32.5 | +0.5 |
| | comp=Z,2.0nm,0.2s | | | | | | |
| MOA | Molln | 4.01 | 198 | i Pn | Pn | 03 48 32.9 | +0.4 |
| | comp=Z,28nm,0.3s,SNR=49 | | | | | | |
| KECS | Kecovo | 4.24 | 137 | ePN | Pn | 03 48 36.0 | +0.3 |
| KECS | | | | ePG | Pg | 03 48 50.5 | -0.6 |
| KECS | | | | eSG | Sg | 03 49 45.0 | -1.1 |
| LUNU | Lund | 4.28 | 339 | P | Pn | 03 48 37.1 | +0.8 |
| LUNU | Lund | 4.28 | 339 | i P | Pn | 03 48 37.0 | +0.8 |
| LUNU | | | | P | Pb | 03 48 37.1 | -8.9 |
| LUNU | | | | i S | Sn | 03 49 27.6 | +0.7 |
| BIOA | Bad Ischl, Aus | 4.30 | 203 | i Pn | Pn | 03 48 37.0 | +0.5 |
| | comp=Z,21nm,0.3s,SNR=26 | | | | | | |
| CRVS | Cervenica-Dubn | 4.39 | 127 | ePN | Pn | 03 48 38.8 | +1.0 |
| CRVS | | | | ePG | Pg | 03 48 54.7 | +0.7 |
| ARSA | Arzberg | 4.44 | 185 | ePn | Pn | 03 48 39.9 | +1.4 |
| | comp=Z,8.0nm,0.3s,SNR=13 | | | | | | |
| PSZ | Piszkesteto | 4.47 | 146 | ⇓P | Pn | 03 48 40.2 | +1.2 |
| MPLH | Magyarpolny | 4.59 | 168 | P | Pn | 03 48 40.1 | -0.4 |
| KWP | Kalwaria Pacla | 4.65 | 113 | P | Pn | 03 48 41.3 | 0.0 |
| BJUU | Bjuv | 4.79 | 339 | P | Pn | 03 48 43.8 | +0.6 |
| BJUU | | | | S | Sn | 03 49 37.9 | -1.4 |
| BJUU | Bjuv | 4.79 | 339 | P | Pn | 03 48 43.8 | +0.6 |
| BJUU | | | | i P | Pn | 03 48 44.1 | +0.9 |
| BJUU | | | | i S | Sn | 03 49 37.2 | -2.0 |
| BJUU | | | | S | Sn | 03 49 37.9 | -1.4 |
| KOLS | Kolonicke sedl | 4.79 | 122 | ePN | Pn | 03 48 44.3 | +1.0 |
| KOLS | | | | ePG | Pg | 03 49 04.9 | +3.3 |
| KOLS | | | | eSG | Sg | 03 50 02.4 | -1.3 |
| LESA | Schwarzleotal | 4.81 | 209 | i Pn | Pn | 03 48 44.0 | +0.4 |
| | comp=Z,2.9nm,0.3s | | | | | | |
| KBA | Koelnbreinsper | 4.94 | 203 | ePn | Pn | 03 48 46.3 | +0.8 |
| | comp=Z,21nm,0.4s,SNR=16 | | | | | | |
| DEL | Delary | 5.00 | 345 | P | Pn | 03 48 47.3 | +1.2 |
| DEL | | | | S | Sn | 03 49 43.7 | -0.7 |
| DEL | Delary | 5.00 | 345 | i P | Pn | 03 48 47.0 | +1.0 |
| DEL | | | | P | Pn | 03 48 47.3 | +1.2 |
| DEL | | | | i S | Sn | 03 49 42.7 | -1.7 |
| DEL | | | | S | Sn | 03 49 43.7 | -0.7 |
| SOKA | Soboth | 5.04 | 189 | ePn | Pn | 03 48 47.3 | +0.4 |
| | comp=Z,1.0nm,0.2s,SNR=5.5 | | | | | | |
| WATA | Walderalm | 5.25 | 216 | ePn | Pn | 03 48 50.9 | +1.1 |
| | comp=Z,4.5nm,0.3s,SNR=9.0 | | | | | | |
| OBKA | Obir | 5.27 | 192 | i Pn | Pn | 03 48 50.4 | +0.5 |
| | comp=Z,1.3nm,0.3s | | | | | | |
| WTTA | Wattenberg | 5.29 | 215 | ePn | Pn | 03 48 50.1 | -0.3 |
| | comp=Z,2.6nm,0.2s,SNR=6.9 | | | | | | |
| MYKA | Terra Mystica | 5.30 | 199 | i Pn | Pn | 03 48 50.8 | +0.5 |
| | comp=Z,1.5nm,0.3s | | | | | | |
| VXJU | Vaexsjoe | 5.31 | 353 | P | Pn | 03 48 52.3 | +1.9 |
| VXJU | | | | S | Sn | 03 49 51.4 | -0.8 |
| VXJU | Vaexsjoe | 5.31 | 353 | P | Pn | 03 48 52.3 | +1.9 |
| VXJU | | | | S | Sn | 03 49 51.4 | -0.8 |
| MOTA | Moosalm | 5.43 | 219 | ePn | Pn | 03 48 51.6 | -0.6 |
| | comp=Z,1.7nm,0.2s | | | | | | |
| KOE | Koeppel | 5.45 | 260 | ePn | Pn | 03 48 52.5 | +0.2 |
| KOE | | | | i Sn | Sn | 03 49 57.5 | +1.9 |
| | comp=Z,28nm,0.8s | | | | | | |
| RETA | Reutte | 5.45 | 222 | ePn | Pn | 03 48 51.8 | -0.6 |
| | comp=Z,2.3nm,0.4s | | | | | | |
| ABTA | Abfaltersbach | 5.47 | 207 | i Pn | Pn | 03 48 53.7 | +1.1 |
| | comp=Z,2.6nm,0.4s,SNR=8.2 | | | | | | |
| SQTA | Sankt Quirin | 5.49 | 218 | i Pn | Pn | 03 48 53.8 | +0.8 |
| | comp=Z,5.5nm,0.2s,SNR=5.9 | | | | | | |
| OSKU | Oskarshamn | 5.54 | 360 | P | Pn | 03 48 55.6 | +2.0 |
| OSKU | | | | S | Sn | 03 49 56.9 | -1.0 |
| OSKU | Oskarshamn | 5.54 | 360 | P | Pn | 03 48 55.6 | +2.0 |
| OSKU | | | | S | Sn | 03 49 56.9 | -1.0 |
| BYXU | Byxelkrok | 5.66 | 5 | P | Pn | 03 48 57.5 | +2.3 |
| BYXU | | | | S | Sn | 03 49 59.3 | -1.4 |
| BYXU | Byxelkrok | 5.66 | 5 | P | Pn | 03 48 57.5 | +2.3 |
| BYXU | | | | S | Sn | 03 49 59.3 | -1.4 |
| MORH | Mrgy, Hungar | 5.70 | 162 | ⇑P | Pn | 03 48 57.1 | +1.3 |
| MORH | Mrgy, Hungar | 5.70 | 162 | P | Pn | 03 48 56.0 | +0.3 |
| | comp=Z,3.2nm,0.6s,comp=Z,0.0nm | | | | | | |
| FABU | Falkenberg | 5.71 | 341 | P | Pn | 03 48 56.8 | +1.0 |
| FABU | | | | S | Sn | 03 50 01.0 | -1.0 |
| FABU | Falkenberg | 5.71 | 341 | i P | Pn | 03 48 56.7 | +0.9 |
| FABU | | | | P | Pn | 03 48 56.8 | +1.0 |
| FABU | | | | S | Sn | 03 50 01.0 | -1.0 |
| BGG | Burgeitz | 5.75 | 259 | ePn | Pn | 03 48 57.4 | +0.9 |
| GNOU | Gnosjoe | 5.80 | 347 | P | Pn | 03 48 58.5 | +1.3 |
| GNOU | Gnosjoe | 5.80 | 347 | P | Pn | 03 48 58.5 | +1.3 |
| FETA | Feichten | 5.84 | 219 | ePn | Pn | 03 48 58.3 | +0.5 |
| | comp=Z,1.5nm,0.4s | | | | | | |
| EKSU | Eksjoe | 5.94 | 356 | P | Pn | 03 49 00.8 | +1.8 |
| EKSU | Eksjoe | 5.94 | 356 | P | Pn | 03 49 00.8 | +1.8 |
| DAVA | Damuels | 5.99 | 225 | ePn | Pn | 03 48 59.6 | -0.2 |
| | comp=Z,1.6nm,0.4s | | | | | | |
| ONAU | Onsala | 6.25 | 339 | i P | Pn | 03 49 04.0 | +0.9 |
| ONAU | | | | i S | Sn | 03 50 12.5 | -2.6 |
| KLL | Kalltalsperre | 6.27 | 264 | ePn | Pn | 03 49 04.4 | +0.9 |
| BORU | Boraas | 6.29 | 343 | P | Pn | 03 49 05.5 | +1.7 |
| BORU | Boraas | 6.29 | 343 | P | Pn | 03 49 05.5 | +1.7 |
| BORU | | | | i P | Pn | 03 49 05.6 | +1.7 |
| BORU | | | | i S | Sn | 03 50 16.9 | +0.5 |
| DREG | Dreilaegerbach | 6.31 | 265 | ePn | Pn | 03 49 05.0 | +0.8 |
| DAVOX | Davos/Dischmat | 6.38 | 222 | Pn | Pn | 03 49 05.6 | +0.3 |
| | comp=Z,1.1nm,0.3s,baz=34,slow=13,SNR=11 | | | | | | |
| DAVOX | | | | Lg | Lg | 03 50 51.1 | |
| | comp=Z,2.4nm,0.3s,baz=190,slow=21,SNR=5.6 | | | | | | |
| | comp=Z,2.8nm,0.4s | | | | | | |
| CDF | Champ du Feu | 6.57 | 244 | ePn | Pn | 03 49 08.4 | +0.6 |
| CDF | Champ du Feu | 6.57 | 244 | ePg | Pg | 03 49 31.8 | -3.9 |
| CDF | | | | eSg | Sg | 03 50 52.8 | -8.0 |
| | comp=Z,105nm,0.9s | | | | | | |
| LNKU | Linkoeping | 6.58 | 357 | P | Pn | 03 49 09.6 | +1.8 |
| LNKU | Linkoeping | 6.58 | 357 | P | Pn | 03 49 09.6 | +1.8 |
| FKPU | Falk | 6.65 | 349 | P | Pn | 03 49 11.5 | +2.7 |
| FKPU | Falk | 6.65 | 349 | P | Pn | 03 49 11.5 | +2.7 |
| TUE | Stuetta | 6.85 | 223 | P | Pn | 03 49 13.5 | +1.8 |
| VIKU | Vikbolandet | 6.86 | 2 | P | Pn | 03 49 13.8 | +2.1 |
| VIKU | Vikbolandet | 6.86 | 2 | P | Pn | 03 49 13.8 | +2.1 |
| BZS | Buzias | 7.06 | 147 | ⇓P | Pn | 03 49 15.5 | +1.1 |
| SURR | Surduc | 7.12 | 144 | ⇓P | Pn | 03 49 16.4 | +1.2 |
| HINF | Hinteralfeld | 7.14 | 241 | ePn | Pn | 03 49 15.9 | +0.3 |
| HINF | Hinteralfeld | 7.14 | 241 | ePg | Pg | 03 49 43.9 | -2.8 |
| HINF | | | | eSg | Sb | 03 51 09.5 | +9.0 |
| | comp=Z,36nm,1.0s | | | | | | |
| BURAR | Bucovina Array | 7.15 | 121 | ⇑P | Pn | 03 49 16.9 | +1.1 |
| NACGM | Naroch | 7.16 | 59 | eP | Pn | 03 49 15.9 | +0.2 |
| | baz=247 | | | | | | |
| ASKU | Askersund | 7.28 | 355 | P | Pn | 03 49 19.8 | +2.4 |
| ASKU | Askersund | 7.28 | 355 | P | Pn | 03 49 19.8 | +2.4 |
| HAU | Haudompre | 7.31 | 244 | ePn | Pn | 03 49 18.3 | +0.4 |
| HAU | | | | eSg | Sb | 03 51 14.5 | +9.1 |
| | comp=Z,43nm,0.7s | | | | | | |
| NYNU | Nynaeshamn | 7.43 | 7 | P | Pn | 03 49 21.5 | +2.1 |
| NYNU | | | | S | Sn | 03 50 42.5 | -1.9 |
| NYNU | Nynaeshamn | 7.43 | 7 | P | Pn | 03 49 21.5 | +2.1 |
| NYNU | | | | S | Sn | 03 50 42.5 | -1.9 |
| NASU | Vaermlandsnaes | 7.47 | 348 | P | Pn | 03 49 21.9 | +1.9 |
| NASU | Vaermlandsnaes | 7.47 | 348 | P | Pn | 03 49 21.9 | +1.9 |
| MEZF | Maizieres J'vi | 7.80 | 250 | eSg | Sb | 03 51 29.5 | +10 |
| | comp=Z,56nm,1.2s | | | | | | |
| NRTU | Norrtaelje | 8.15 | 9 | P | Pn | 03 49 31.4 | +2.1 |
| NRTU | Norrtaelje | 8.15 | 9 | P | Pn | 03 49 31.4 | +2.1 |
| KIEV | Kiev | 8.27 | 92 | P | Pn | 03 49 29.8 | -1.2 |
| | comp=Z,52nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 8.28 | 92 | Pn | Pn | 03 49 30.6 | -0.5 |
| | comp=Z,2.5nm,0.3s,baz=281,slow=12,SNR=10 | | | | | | |
| AKASG | | | | Sn | Sn | 03 51 00.9 | -4.4 |
| | comp=Z,1.5nm,0.3s,baz=275,slow=23,SNR=4.0 | | | | | | |
| AKASG | | | | Lg | Lg | 03 51 55.1 | |
| | comp=Z,0.3nm,0.3s,baz=190,slow=38,SNR=2.2 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| CABF | La Chapelle | 8.30 | 236 | ePn | Pn | 03 49 30.3 | -1.3 |
| CABF | La Chapelle | 8.30 | 236 | ePg | Pg | 03 50 03.8 | -5.1 |
| CABF | | | | eSg | Sg | 03 51 46.1 | -10 |
| | comp=Z,87nm,1.3s | | | | | | |
| UDD | Uddeholm | 8.56 | 351 | P | Pn | 03 49 36.3 | +1.3 |
| UDD | Uddeholm | 8.56 | 351 | P | Pn | 03 49 36.3 | +1.3 |
| HFS | Hagfors | 8.60 | 352 | Pn | Pn | 03 49 36.1 | +0.6 |
| | comp=Z,0.3nm,0.3s,baz=164,slow=13,SNR=18 | | | | | | |
| HFS | | | | Sn | Sn | 03 51 10.5 | -2.5 |
| | comp=Z,0.3nm,0.3s,baz=161,slow=24,SNR=1.9 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| OSTU | Oestervaala | 8.60 | 3 | P | Pn | 03 49 37.2 | +1.7 |
| OSTU | Oestervaala | 8.60 | 3 | P | Pn | 03 49 37.2 | +1.7 |
| LPL | La Plagne | 8.75 | 229 | eP | Pn | 03 49 42.1 | +4.2 |
| LPL | La Plagne | 8.75 | 229 | ePg | Pg | 03 50 12.6 | -4.9 |
| LPL | | | | eSg | Sg | 03 51 59.1 | -12 |
| | comp=Z,28nm,1.3s | | | | | | |
| LPG | La Plagne | 8.76 | 229 | ePn | Pn | 03 49 38.2 | +0.2 |
| LPG | La Plagne | 8.76 | 229 | ePg | Pg | 03 50 13.5 | -4.1 |
| LPG | | | | eSg | Sg | 03 52 01.1 | -10 |
| | comp=Z,6.8nm,0.6s | | | | | | |
| LOR | Lormes | 9.12 | 246 | ePn | Pn | 03 49 42.5 | -0.2 |
| LOR | | | | eSg | Sn | 03 52 12.0 | +46 |
| | comp=Z,22nm,1.0s | | | | | | |
| MBDF | Montbardon | 9.34 | 226 | ePn | Pn | 03 49 46.8 | +1.0 |
| MBDF | | | | eSg | Sn | 03 52 18.8 | +47 |
| | comp=Z,0.6nm,0.3s | | | | | | |
| SSF | Saint Saulge | 9.44 | 246 | ePn | Pn | 03 49 45.6 | -1.4 |
| SSF | Saint Saulge | 9.44 | 246 | ePg | Pn | 03 50 26.2 | +39 |
| SSF | | | | eSg | Sn | 03 52 21.1 | +47 |
| | comp=Z,45nm,1.5s | | | | | | |
| SMF | Signal de Mont | 9.49 | 243 | ePg | Pn | 03 50 27.3 | +40 |
| SMF | | | | eSg | Sn | 03 52 23.0 | +48 |
| | comp=Z,20nm,0.9s | | | | | | |
| ORIF | Oris-en-Rattie | 9.60 | 229 | eP | Pn | 03 49 53.4 | +4.0 |
| ORIF | | | | eSg | Sn | 03 52 26.1 | +48 |
| | comp=Z,3.4nm,0.5s | | | | | | |
| AVF | Avril sur Loir | 9.68 | 245 | ePn | Pn | 03 49 49.9 | -0.4 |
| AVF | | | | eSg | Sn | 03 52 29.9 | +50 |
| | comp=Z,16nm,0.9s | | | | | | |
| SBF | Sospel | 9.75 | 220 | ePn | Pn | 03 49 49.5 | -1.9 |
| NOA | NORSAR Array B | 9.78 | 346 | Pn | Pn | 03 49 51.5 | -0.3 |
| | baz=163,slow=11,SNR=6.3 | | | | | | |
| NOA | | | | Lg | Lg | 03 52 44.6 | |
| | baz=148,slow=12,SNR=1.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| VIVF | Saint-Julien-l | 10.23 | 233 | ePn | Pn | 03 49 57.6 | -0.3 |
| VIVF | | | | eSg | Sn | 03 52 45.4 | +52 |
| | comp=Z,20nm,1.2s | | | | | | |
| PGF | Pioggiola | 10.33 | 211 | ePn | Pn | 03 49 59.1 | -0.3 |
| SMRF | Simiane la Rot | 10.46 | 227 | eSg | Sn | 03 52 51.6 | +53 |
| | comp=Z,1.1nm,0.5s | | | | | | |
| LMR | La Mourre | 10.57 | 222 | ePn | Pn | 03 50 02.3 | -0.2 |
| FINES | FINESS Array B | 11.21 | 25 | Pn | Pn | 03 50 10.7 | -0.5 |
| | comp=Z,0.6nm,0.3s,baz=210,slow=11,SNR=22 | | | | | | |
| FINES | | | | Sn | Sn | 03 52 10.2 | -6.9 |
| | comp=Z,0.5nm,0.3s,baz=202,slow=22,SNR=6.0 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| EKA | Eskdalemuir Ar | 12.05 | 295 | Pn | Pn | 03 50 20.4 | -2.4 |
| | baz=102,slow=14 | | | | | | |
| MTLF | Montolieu | 12.55 | 234 | eSg | | 03 53 56.8 | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ARCES | ARCESS Array B | 18.47 | 10 | Pn | P | 03 51 45.3 | -1.6 |
| | comp=Z,0.1nm,0.3s,baz=190,slow=14,SNR=8.2 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 40.10 | 59 | LR | LR | 04 12 40.1 | |
| | comp=Z,42nm,19.7s,baz=42,slow=38 | | | | | | |
| TORD | Torodi Ar. Bea | 40.15 | 202 | P | P | 03 55 07.3 | -0.2 |
| | comp=Z,0.6nm,0.9s,baz=12,slow=9.6,SNR=2.8 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 42.14 | 69 | P | P | 03 55 25.5 | +1.7 |
| | comp=Z,0.2nm,0.5s,baz=321,slow=3.9,SNR=3.2 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| SJG | San Juan | 71.26 | 276 | LR | LR | 04 24 47.8 | |
| | comp=Z,70nm,21.2s,baz=54,slow=31 | | | | | | |
| PDAR | Pinedale Array | 74.83 | 322 | P | P | 03 59 14.3 | +2.2 |
| | comp=Z,0.4nm,0.6s,baz=50,slow=6.0,SNR=5.8 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 83.63 | 310 | P | P | 04 00 03.0 | +2.8 |
| | comp=Z,0.3nm,0.7s,baz=34,slow=3.6,SNR=4.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |

**RSNC 01 03:55:38.6±0.0,7°N±1°×7°3W±°,h140km±3km,M3.2,mb3.6, mB5.3,ML2.9,MLv3.6,Mw(mB)4.7,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BARC | Barichara | 0.19 | 190 | P | Pn | 03 55 56.7 | -1.3 |
| BARC | | | | S | Sn | 03 56 12.1 | -0.5 |
| PAMC | Pamplona, Colo | 0.71 | 39 | P | Pn | 03 55 59.5 | -1.2 |
| PAMC | | | | S | Sn | 03 56 16.8 | -0.7 |
| RUSC | La Rusia | 0.88 | 176 | P | Pn | 03 56 00.6 | -1.4 |
| RUSC | | | | S | Sn | 03 56 19.6 | -0.2 |
| PTBC | PUERTO BERRIO, | 1.32 | 260 | P | Pn | 03 56 03.2 | -2.3 |
| PTBC | | | | S | Sn | 03 56 24.6 | -1.4 |
| TAMC | Tame, Arauca | 1.39 | 104 | P | Pn | 03 56 05.1 | -1.2 |
| TAMC | | | | S | Sn | 03 56 27.1 | -0.3 |
| SPBC | San Pablo de B | 1.45 | 219 | P | Pn | 03 56 05.5 | -1.5 |
| SPBC | | | | S | Sn | 03 56 28.5 | -0.1 |
| OCAC | Ocana | 1.46 | 353 | P | Pn | 03 56 05.1 | -2.1 |
| OCAC | | | | S | Sn | 03 56 27.2 | -1.8 |
| ZARC | Zaragoza, Cauc | 1.84 | 293 | P | Pn | 03 56 09.1 | -2.1 |
| ZARC | | | | S | Sn | 03 56 34.6 | -1.6 |
| NORC | Norcasia | 2.09 | 235 | P | Pn | 03 56 12.6 | -1.7 |
| NORC | | | | S | Sn | 03 56 41.5 | -0.2 |
| CHIC | Chingaza | 2.21 | 195 | P | Pn | 03 56 14.9 | -1.3 |
| CHIC | | | | S | Sn | 03 56 45.2 | +0.3 |
| ROSC | El Rosal | 2.25 | 211 | P | Pn | 03 56 16.7 | +0.1 |
| ROSC | | | | S | Sn | 03 56 48.9 | +3.2 |
| CVER | Cruz Verde, Cu | 2.42 | 202 | P | Pn | 03 56 18.2 | -0.6 |
| CVER | | | | S | Sn | 03 56 50.5 | +0.8 |
| UREC | San Jos de Ur | 2.55 | 292 | P | Pn | 03 56 16.5 | -3.4 |
| UREC | | | | S | Sn | 03 56 48.1 | -3.7 |
| VILC | Villavicencio, | 2.71 | 192 | P | Pn | 03 56 20.1 | -1.9 |
| VILC | | | | S | Sn | 03 56 55.1 | -0.3 |
| PTGC | Puerto Gaitan, | 2.76 | 158 | P | Pn | 03 56 20.0 | -2.5 |
| PTGC | | | | S | Sn | 03 56 53.4 | -3.0 |
| RECRC | Villamaria, Ca | 2.84 | 231 | P | Pn | 03 56 25.0 | +0.9 |
| RECRC | | | | S | Sn | 03 57 01.9 | +2.8 |
| DBBC | Dabeiba | 3.05 | 275 | P | Pn | 03 56 24.4 | -1.9 |
| DBBC | | | | S | Sn | 03 56 59.6 | -3.5 |
| ANIL | Santa Ana | 3.19 | 225 | P | Pn | 03 56 28.2 | -0.2 |
| ANIL | | | | S | Sn | 03 57 07.7 | +0.9 |
| ARGC | Ariguani, Magd | 3.25 | 341 | P | Pn | 03 56 26.7 | -2.1 |
| ARGC | | | | S | Sn | 03 57 06.0 | -1.6 |
| PRAC | Prado | 3.50 | 210 | P | Pn | 03 56 29.9 | -2.3 |
| PRAC | | | | S | Sn | 03 57 12.4 | -1.2 |
| ORTC | Ortega, Tolima | 3.53 | 216 | P | Pn | 03 56 31.0 | -1.6 |
| ORTC | | | | S | Sn | 03 57 14.4 | 0.0 |
| APAC | Apartado, Choc | 3.58 | 288 | P | Pn | 03 56 30.2 | -2.9 |
| APAC | | | | S | Sn | 03 57 13.2 | -2.1 |
| PLMC | San Jos del P | 3.63 | 239 | P | Pn | 03 56 32.3 | -1.6 |
| PLMC | | | | S | Sn | 03 57 16.6 | 0.0 |
| SJCC | San Jacinto, C | 3.69 | 327 | P | Pn | 03 56 30.3 | -4.3 |
| SJCC | | | | S | Sn | 03 57 12.2 | -5.9 |
| URMC | La Uribe, Meta | 3.72 | 199 | P | Pn | 03 56 33.7 | -1.3 |
| URMC | | | | S | Sn | 03 57 18.0 | -0.7 |
| LCBC | Los crdobas, | 3.80 | 303 | P | Pn | 03 56 33.3 | -2.7 |
| LCBC | | | | S | Sn | 03 57 21.8 | +1.4 |
| CRJC | Cerrejon, Guaj | 4.22 | 4 | P | Pn | 03 56 37.2 | -4.4 |
| CRJC | | | | S | Sn | 03 57 25.1 | -5.5 |
| YOTC | Yotoco, Valle | 4.22 | 229 | P | Pn | 03 56 39.3 | -2.4 |
| SMRC | Santa Marta, M | 4.48 | 346 | P | Pn | 03 56 41.2 | -3.8 |
| SMRC | | | | S | Sn | 03 57 29.7 | -7.0 |
| CAPC | Capurgana | 4.55 | 294 | P | Pn | 03 56 41.4 | -4.5 |
| CAPC | | | | S | Sn | 03 57 33.7 | -4.6 |
| PIZC | Pizarro, Choco | 4.56 | 247 | P | Pn | 03 56 46.5 | +0.5 |
| PIZC | | | | S | Sn | 03 57 37.7 | -0.8 |
| JAMC | Jamundi, Valle | 4.99 | 225 | P | Pn | 03 56 49.7 | -2.2 |
| | 3.0nm,0.5s,0.0nm | | | | | | |
| JAMC | | | | S | Sn | 03 57 50.0 | +1.0 |
| | 3.0nm,0.5s,0.0nm | | | | | | |
| MALC | Bahia Malaga | 4.99 | 237 | P | Pn | 03 56 51.8 | 0.0 |
| MALC | | | | S | Sn | 03 57 50.2 | +1.4 |
| URIC | Uribia, Colomb | 5.02 | 13 | P | Pn | 03 56 47.3 | -4.9 |
| URIC | | | | S | Sn | 03 57 43.5 | -6.0 |
| GARC | Garzon, Huila | 5.13 | 207 | P | Pn | 03 56 51.3 | -2.5 |
| GARC | | | | S | Sn | 03 57 48.9 | -3.5 |
| POPC | Popayan, Colom | 5.49 | 220 | P | Pn | 03 56 58.6 | 0.0 |
| | 3.4nm,1.0s | | | | | | |
| POPC | | | | S | Sn | 03 57 59.7 | -1.2 |
| | 3.4nm,1.0s | | | | | | |
| FLOC | Florencia | 5.73 | 206 | P | Pn | 03 57 00.1 | -1.6 |
| | 16nm,0.5s | | | | | | |
| BBAC | Balboa, Cauca | 6.25 | 221 | P | Pn | 03 57 08.2 | -0.6 |
| BBAC | | | | S | Sn | 03 58 17.1 | -2.1 |
| GR1C | Gorgona, Isla | 6.25 | 233 | P | Pn | 03 57 08.3 | -0.3 |
| BCIP | Isla Barro Col | 7.04 | 290 | P | Pn | 03 57 15.3 | -3.8 |

*IDC 01 04:01:48.9±1.7,37°01N×141°23E,h84km±15km,mb3.5/8, mbtmp3.9/11,MS2.5/1,Error ellipse: s-maj=16.1km s-min=10.7km az=90.0*

*NIED 01 04:01:51.6,37°01N×140°84E,h95km,MW3.9,Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-5.76; $M_{\theta\theta}$7.00; $M_{\phi\phi}$-1.24; $M_{r\theta}$5.05; $M_{\theta\phi}$-0.97; $M_{\phi r}$1.94; Fault plane solution: $M_0$8.47000×$10^{14}$ NP1: $\phi_s$258.00000°,δ66.00000°,λ-108.00000°. NP2: $\phi_s$117.00000°,δ30.00000°,λ-55.00000°.*

*JMA 01 04:01:51.6±0.1,37°0N±0°4×140°8E±0°7,h95km,MD3.8/39, MV4.0/39,EASTERN FUKUSHIMA PREF*

*JMA Felt II J1 at EASTERN FUKUSHIMA PREF .*

*NEIC 01 04:01:51.1±1.9,36°98N±0°05×141°0E±0°1,h89km±3km, mb4.4/21,Error ellipse: s-maj=12.4km s-min=6.3km az=103.0*

**ISC 01 04:01:51.0±0.7,37°02N±0°04×140°96E±0°06,h94km±5km, n98,σ1§22/94,mb4.2/21,10D,Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ONAJ | Iwakimizuishiy | 0.15 | 303 | ⇓P | Pn | 04 02 05.1 | +0.6 |
| ONAJ | | | | ⇓eS | Sn | 04 02 14.7 | +0.2 |
| ONAJ | Iwakimizuishiy | 0.15 | 303 | A | A | 04 02 05.1 | |
| | comp=E,15nm,0.3s,comp=N,15nm,0.3s | | | | | | |
| JFFD | Fukushimafurud | 0.33 | 283 | i P | Pn | 04 02 05.7 | +0.6 |
| JFFD | | | | S | Sn | 04 02 15.7 | +0.1 |
| JFK | Kawauchi | 0.35 | 349 | ⇓P | Pn | 04 02 05.9 | +0.6 |
| JFK | | | | ⇓eS | Sn | 04 02 16.3 | +0.4 |
| JHO | Hitachi | 0.51 | 218 | P | Pn | 04 02 06.5 | +0.3 |
| JHO | | | | eS | Sn | 04 02 17.2 | -0.5 |
| JHO | Hitachi | 0.51 | 218 | A | A | 04 02 06.5 | |
| | comp=E,15nm,0.2s,comp=N,14nm,0.3s | | | | | | |
| JOTO | OTAMA OYAMA | 0.73 | 318 | P | Pn | 04 02 08.4 | +0.1 |
| JOTO | | | | eS | Sn | 04 02 21.0 | -0.1 |
| JHYU | Hitachinakayam | 0.74 | 204 | A | A | 04 02 08.7 | |
| | comp=E,14nm,0.7s,comp=N,13nm,0.7s | | | | | | |
| JSB | Shiboa | 0.83 | 267 | A | A | 04 02 09.1 | |
| | comp=E,8.0nm,0.6s,comp=N,8.0nm,1.2s | | | | | | |
| JMM | Marumori | 0.86 | 351 | P | Pn | 04 02 10.0 | +0.6 |
| JMM | Marumori | 0.86 | 351 | Pn | Pn | 04 02 10.0 | +0.6 |
| JMM | | | | Sn | Sn | 04 02 23.4 | +0.1 |
| JMM | Marumori | 0.86 | 351 | ⇓P | Pn | 04 02 09.9 | +0.6 |
| JMM | | | | ⇓eS | Sn | 04 02 23.2 | 0.0 |
| JMM | Marumori | 0.86 | 351 | A | A | 04 02 09.9 | |
| | comp=E,7.0nm,0.6s,comp=N,5.0nm,0.5s | | | | | | |
| JYT | Yasato | 1.00 | 218 | A | A | 04 02 11.1 | |
| | comp=E,36nm,0.3s,comp=N,41nm,0.3s | | | | | | |
| JFY | Yanaizu | 1.07 | 292 | ⇓P | Pn | 04 02 11.7 | -0.2 |
| JFY | | | | ⇓eS | Sn | 04 02 27.1 | -0.4 |
| JYAR | Yonezawaarcadi | 1.10 | 324 | A | A | 04 02 12.5 | |
| | comp=E,8.0nm,0.9s,comp=N,9.0nm,0.9s | | | | | | |
| JAG | Ashikaga | 1.35 | 244 | P | Pn | 04 02 14.8 | -0.2 |
| JAG | | | | eS | Sn | 04 02 31.6 | -1.7 |
| JOU | Okura | 1.36 | 350 | eP | Pn | 04 02 15.9 | +0.6 |
| JOU | | | | eS | Sn | 04 02 34.2 | +0.5 |
| JOU | Okura | 1.36 | 350 | A | A | 04 02 15.9 | |
| | comp=E,5.0nm,0.7s,comp=N,6.0nm,0.5s | | | | | | |
| JKT | Katashina | 1.39 | 260 | eP | Pn | 04 02 16.0 | +0.3 |
| JYS | Shirataka | 1.39 | 330 | ⇓P | Pn | 04 02 16.1 | +0.4 |
| JYS | | | | ⇓eS | Sn | 04 02 34.5 | +0.3 |
| JIO | Ouri | 1.47 | 12 | P | Pn | 04 02 17.0 | +0.5 |
| JIO | | | | eS | Sn | 04 02 35.3 | -0.5 |
| JNS | Sasagawa | 1.53 | 302 | eP | Pn | 04 02 16.9 | -0.4 |
| JUON | Uonuma | 1.53 | 278 | P | Pn | 04 02 17.3 | 0.0 |
| JUON | | | | eS | Sn | 04 02 36.5 | -0.8 |
| JYA | Atsumi | 1.85 | 328 | A | A | 04 02 22.0 | |
| | comp=E,3.0nm,0.7s,comp=N,5.0nm,0.9s | | | | | | |
| MJAR | Matsushiro Arr | 2.26 | 259 | P | Pn | 04 02 26.1 | -0.6 |
| | comp=N,9.7nm,0.3s,baz=81,slow=14,SNR=30 | | | | | | |
| MJAR | | | | S | Sn | 04 02 57.5 | +3.4 |
| | comp=N,84nm,0.5s,baz=80,slow=18,SNR=12 | | | | | | |
| MAJO | Matsushiro | 2.26 | 259 | P | Pn | 04 02 27.6 | +0.9 |
| MAJO | Matsushiro | 2.26 | 259 | Pn | Pn | 04 02 27.6 | +0.9 |
| MJB9 | Matsu-Tunnel | 2.26 | 259 | Pn | Pn | 04 02 27.4 | +0.7 |
| JSD | Sado | 2.37 | 296 | Pn | Pn | 04 02 27.4 | -0.8 |
| JGF | Kuroka | 3.23 | 245 | P | Pn | 04 02 40.6 | +0.8 |
| JGF | Kuroka | 3.23 | 245 | Pn | Pn | 04 02 40.3 | +0.5 |
| JSG | Sagara | 3.25 | 225 | P | Pn | 04 02 39.9 | 0.0 |
| JSG | Sagara | 3.25 | 225 | Pn | Pn | 04 02 40.9 | +1.0 |
| INU | Inuyama | 3.60 | 244 | P | Pn | 04 02 45.4 | +0.8 |
| INU | Inuyama | 3.60 | 244 | Pn | Pn | 04 02 44.9 | +0.3 |
| JTM | Tenmabayashi | 3.76 | 1 | P | Pn | 04 02 47.3 | +0.5 |
| JTM | Tenmabayashi | 3.76 | 1 | Pn | Pn | 04 02 47.3 | +0.5 |
| JHJ | Hachijo jima 2 | 4.01 | 194 | P | Pn | 04 02 48.7 | -1.5 |
| | comp=N,191nm,0.3s,baz=335,slow=17,SNR=55 | | | | | | |
| JHJ | | | | S | Sn | 04 03 34.1 | -2.0 |
| | comp=N,265nm,0.3s,baz=238,slow=23,SNR=11 | | | | | | |
| JHJ2 | Mitsune | 4.01 | 194 | P | Pn | 04 02 49.0 | -1.2 |
| JHJ2 | Mitsune | 4.01 | 194 | Pn | Pn | 04 02 49.2 | -1.0 |
| ERM | Erimo | 5.27 | 18 | P | Pn | 04 03 06.9 | -0.3 |
| ERM | Erimo | 5.27 | 18 | Pn | Pn | 04 03 05.8 | -1.5 |
| JEM | Erimo | 5.27 | 18 | P | Pn | 04 03 07.3 | 0.0 |
| JMN | Monobe | 6.65 | 242 | P | Pn | 04 03 26.4 | +0.3 |
| JMN | Monobe | 6.65 | 242 | Pn | Pn | 04 03 25.8 | -0.3 |
| ASAJ | Asahikawa | 7.20 | 9 | P | Pn | 04 03 32.0 | -1.5 |
| | comp=N,4.6nm,0.3s,baz=214,slow=13,SNR=7.9 | | | | | | |
| ASAJ | | | | S | Sn | 04 04 49.0 | -4.7 |
| | comp=N,7.8nm,0.6s,baz=88,slow=33,SNR=2.3 | | | | | | |
| JKA | Kamikawa-asahi | 7.20 | 9 | Pn | Pn | 04 03 32.2 | -1.3 |
| USRK | Ussuriysk Ar. | 9.89 | 319 | Pn | Pn | 04 04 10.3 | +0.2 |
| USA0B | Ussuriysk Arra | 9.89 | 319 | Pn | Pn | 04 04 10.1 | 0.0 |
| JCJ | Chichijima | 9.95 | 174 | Pn | Pn | 04 04 10.0 | -1.0 |
| JCJ | Chichijima | 9.95 | 174 | P | Pn | 04 04 03.4 | -7.7 |
| | comp=N,45nm,0.3s,baz=338,slow=19,SNR=23 | | | | | | |
| JCJ | | | | S | Sn | 04 05 43.3 | -17 |
| | comp=N,15nm,0.3s,baz=287,slow=23,SNR=2.1 | | | | | | |
| KLR | Kul'dur | 13.92 | 334 | LR | LR | 04 09 26.6 | |
| | comp=N,23nm,21.5s,baz=282,slow=33 | | | | | | |
| XLT | XiLinHaoTe | 20.09 | 298 | eP | Pn | 04 06 20.0 | +0.3 |
| XLT | | | | PP | PnPn | 04 06 42.1 | +4.0 |
| XLT | | | | sP | sP | 04 06 50.5 | +3.3 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| HHC | Hu-ho-hao-te | 23.13 | 289 | eP | P | 04 06 47.1 | -2.0 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,50nm,4.0s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.45 | 120 | T | T | 04 37 53.0 | |
| | baz=313,slow=75 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.46 | 120 | T | T | 04 37 53.6 | |
| | baz=313,slow=75 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.47 | 120 | T | T | 04 37 54.4 | |
| | baz=313,slow=75 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.16 | 122 | T | T | 04 38 43.9 | |
| | baz=314,slow=76 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.16 | 122 | T | T | 04 38 41.7 | |
| | baz=314,slow=76 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.18 | 122 | T | T | 04 38 42.6 | |
| | baz=314,slow=76 | | | | | | |
| PZH | PanZhiHua | 34.74 | 264 | P | P | 04 08 33.2 | +0.9 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | |
| ZALV | Zalesovo Beam | 41.66 | 312 | P | P | 04 09 29.4 | -0.4 |
| | comp=Z,1.1nm,0.4s,baz=96,slow=9.0,SNR=2.4 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| RDOG | Red Dog Mine | 43.68 | 27 | P | P | 04 09 43.5 | -2.5 |
| MK31 | Makanchi Array | 43.82 | 302 | P | P | 04 09 47.9 | +0.5 |
| MKAR | Makanchi Array | 43.82 | 302 | P | P | 04 09 47.2 | -0.2 |
| MKAR | Makanchi Array | 43.82 | 302 | P | P | 04 09 47.0 | -0.5 |
| | comp=Z,0.5nm,0.6s,baz=86,slow=10.0,SNR=6.3 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| F17K | Baldwin Pennin | 43.91 | 29 | P | P | 04 09 46.6 | -1.3 |
| E18K | Tukpahlearik C | 44.38 | 28 | P | P | 04 09 52.5 | +0.9 |
| E18K | | | | IAmb | IAmb | 04 09 58.8 | |
| | comp=Z,4.7nm,1.2s | | | | | | |
| C18K | Utukok River | 44.45 | 26 | P | P | 04 09 53.4 | +1.2 |
| C18K | | | | IAmb | IAmb | 04 10 27.1 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| C19K | Lookout Ridge | 45.13 | 26 | P | P | 04 09 59.2 | +1.6 |
| C19K | | | | IAmb | IAmb | 04 10 23.2 | |
| | comp=Z,8.5nm,1.4s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **D19K** | **Kuna River** | **45.52** | **27** | P | **P** | **04 10 02.3** | **+1.6** |
| D19K | | | | IAmb | IAmb | 04 10 02.9 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.72** | **308** | P | **P** | **04 10 02.0** | **-0.5** |
| | comp=Z,0.7nm,0.4s,baz=84,slow=8.7,SNR=8.0 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **K20K** | **Telida** | **46.55** | **34** | P | **P** | **04 10 09.1** | **+0.3** |
| K20K | | | | IAmb | IAmb | 04 10 28.8 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **RSO** | **Redoubt South** | **47.14** | **38** | P | **P** | **04 10 11.5** | **-2.2** |
| **E22K** | **Anaktuvuk Pass** | **47.79** | **28** | P | **P** | **04 10 20.2** | **+1.9** |
| **ILAR** | **Eielson Array** | **49.70** | **32** | P | **P** | **04 10 33.0** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=276,slow=6.9,SNR=9.1 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **50.52** | **29** | P | **P** | **04 10 40.7** | **+1.5** |
| **SCRK** | **Sand Creek** | **51.02** | **33** | P | **P** | **04 10 43.8** | **+0.7** |
| **BCAR** | **Beaver Creek A** | **52.11** | **34** | P | **P** | **04 10 52.3** | **+1.2** |
| **I28M** | **Miner Creek** | **52.56** | **31** | P | **P** | **04 10 56.6** | **+2.1** |
| I28M | | | | IAmb | IAmb | 04 11 34.6 | |
| | comp=Z,2.4nm,1.2s | | | | | | |
| **KK31** | **Karatay Array** | **52.82** | **300** | P | **P** | **04 10 57.7** | **+1.0** |
| **EPYK** | **Eagle Plains** | **53.72** | **30** | P | **P** | **04 11 05.2** | **+2.3** |
| **I30M** | **Mount Dempster** | **54.08** | **31** | P | **P** | **04 11 06.0** | **+0.4** |
| I30M | | | | IAmb | IAmb | 04 11 08.6 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **G31M** | **Satah River** | **54.57** | **29** | P | **P** | **04 11 10.3** | **+1.3** |
| **WB0** | **Warramunga Arr** | **56.82** | **187** | P | **P** | **04 11 24.9** | **-0.7** |
| **WR0** | **Warramunga Arr** | **56.99** | **187** | P | **P** | **04 11 26.2** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 04 11 45.1 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **57.00** | **187** | P | **P** | **04 11 26.0** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 04 12 02.9 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.00** | **187** | P | **P** | **04 11 26.3** | **-0.6** |
| **WRA** | **Warramunga Arr** | **57.00** | **187** | P | **P** | **04 11 26.1** | **-0.7** |
| | comp=Z,1.1nm,0.4s,baz=3.1,slow=7.1,SNR=50 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **57.67** | **310** | P | **P** | **04 11 30.2** | **-1.1** |
| ABKAR | | | | IAmb | IAmb | 04 11 54.4 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **60.73** | **187** | P | **P** | **04 11 52.6** | **0.0** |
| | comp=Z,0.6nm,0.5s,baz=2.1,slow=5.5,SNR=6.0 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **EIDS** | **Eidsvold** | **62.78** | **170** | P | **P** | **04 12 07.9** | **+1.5** |
| EIDS | | | | IAmb | IAmb | 04 12 25.4 | |
| | comp=Z,9.4nm,1.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **74.06** | **337** | P | **P** | **04 13 15.6** | **-0.7** |
| | comp=Z,0.3nm,0.6s,baz=39,slow=6.0,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **74.08** | **322** | P | **P** | **04 13 15.7** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=46,slow=6.6,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.38** | **96** | T | T | 07 06 34.7 | |
| | baz=291,slow=76,SNR=4.6 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.40** | **96** | T | T | 07 06 35.7 | |
| | baz=291,slow=76,SNR=4.3 | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.40** | **96** | T | T | 07 06 35.9 | |
| | baz=291,slow=76,SNR=5.0 | | | | | | |

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*NEIC **01** 04:04:41.8±1.0, 35.03N±0.01×97.59W±0.02, h5km±1km, Error ellipse: s-maj=2.8km s-min=2.7km az=128.0*

**TUL 01 04:04:42.6**±1.3**, 35.05N**±0.01×**97.59W**±0.01**, h5**km±3km**, ML2.0, mb_Lg2.2**/39(NEIC)**, ML2.1**/36(NEIC)**, Error ellipse: s-maj=1.7km s-min=1.5km az=168.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FNO** | **Franklin** | **0.26** | **37** | Pg | Pg | 04 04 47.6 | 0.0 |
| FNO | | | | Sg | Sg | 04 04 50.7 | -0.3 |
| FNO | | | | IAML | | 04 04 55.7 | |
| | comp=E,362nm,0.5s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.37** | **19** | Pg | Pg | 04 04 49.5 | -0.4 |
| OKCSW | | | | IAML | | 04 05 01.5 | |
| | comp=N,144nm,0.5s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.49** | **204** | Pg | Pg | 04 04 52.3 | +0.2 |
| X34A | | | | Sg | Sg | 04 04 57.8 | -0.8 |
| X34A | | | | IAML | | 04 05 00.7 | |
| | comp=N,97nm,0.6s | | | | | | |
| **ADOK** | **Arcadia Dam** | **0.62** | **16** | Pg | Pg | 04 04 54.1 | -0.6 |
| **OK029** | **Liberty Lake** | **0.75** | **8** | Pg | Pg | 04 04 56.9 | -0.1 |
| OK029 | | | | Sg | Sg | 04 05 07.0 | +0.2 |
| OK029 | | | | IAML | | 04 05 15.7 | |
| | comp=N,56nm,0.3s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.03** | **253** | Pg | Pg | 04 05 01.2 | -1.2 |
| WMOK | | | | Sg | Sg | 04 05 14.8 | -0.9 |
| **CSTR** | **Hydro, Custer** | **1.08** | **304** | Pg | Pg | 04 05 02.3 | -0.9 |
| CSTR | | | | Sg | Sg | 04 05 17.2 | -0.1 |
| **OK031** | **S. Brethren Rd** | **1.09** | **34** | Pg | Pg | 04 05 02.4 | -1.0 |
| OK031 | | | | Sg | Sg | 04 05 17.6 | 0.0 |
| **LOOK** | **Love County** | **1.11** | **162** | Pg | Pg | 04 05 02.3 | -1.5 |
| LOOK | | | | IAML | | 04 05 24.4 | |
| | comp=N,60nm,0.2s | | | | | | |
| LOOK | | | | IAML | | 04 05 24.6 | |
| | comp=E,64nm,0.3s | | | | | | |
| **OK052** | **Battle Ridge R** | **1.14** | **34** | Pg | Pg | 04 05 03.5 | -0.9 |
| OK052 | | | | Sg | Sg | 04 05 18.8 | -0.4 |
| **DEOK** | **Depew** | **1.19** | **48** | Pg | Pg | 04 05 04.2 | -1.2 |
| DEOK | | | | IAML | | 04 05 25.6 | |
| | comp=E,59nm,0.3s | | | | | | |
| DEOK | | | | IAML | | 04 05 28.6 | |
| | comp=N,43nm,0.4s | | | | | | |
| **QUOK** | **Quay** | **1.33** | **32** | | Pn | 04 05 06.5 | -1.2 |
| **OK048** | **Pawnee Station** | **1.46** | **21** | | Pn | 04 05 08.9 | -0.7 |
| **WTFS** | **Witchita Falls** | **1.47** | **210** | | Pn | 04 05 08.5 | -1.3 |
| **CROK** | **Carrier** | **1.48** | **348** | | Pn | 04 05 09.4 | -0.6 |
| **OK051** | **E0350 and S346** | **1.57** | **23** | | Pn | 04 05 10.8 | -0.3 |
| **TUL3** | **Leonard** | **1.70** | **59** | | Pn | 04 05 12.7 | -0.2 |
| **OK038** | **West end E0370** | **1.70** | **327** | | Pn | 04 05 12.2 | -0.7 |
| **BLOK** | **Blackwell** | **1.73** | **10** | Pn | Pn | 04 05 13.4 | +0.1 |
| **Z35A** | **Perchaven, San** | **1.74** | **171** | Pn | Pn | 04 05 13.2 | -0.2 |
| **U32A** | **Winter Ranch,** | **1.75** | **319** | Pn | Pn | 04 05 13.8 | +0.2 |
| **ELIS** | **Ellis County** | **1.80** | **305** | Pn | Pn | 04 05 14.4 | 0.0 |
| **GC02** | **Grant County #** | **1.81** | **353** | Pn | Pn | 04 05 13.8 | -0.6 |
| **OK032** | **Salt Plains WL** | **1.82** | **344** | Pn | Pn | 04 05 14.8 | +0.3 |
| **X37A** | **Clayton** | **1.88** | **104** | Pn | Pn | 04 05 15.8 | +0.5 |
| X37A | | | | IAmb_Lg | | 04 05 43.8 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KAN14** | **Manchester OK** | **1.93** | **351** | Pn | Pn | 04 05 16.4 | +0.4 |
| **KAN13** | **South Haven SW** | **1.96** | **3** | Pn | Pn | 04 05 17.0 | +0.5 |
| KAN13 | | | | IAmb_Lg | | 04 05 45.2 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **KAN17** | **Caldwell West** | **1.99** | **356** | Pn | Pn | 04 05 17.5 | +0.6 |
| **FW03** | **Perrin-Whitt E** | **2.05** | **191** | Pn | Pn | 04 05 17.9 | +0.3 |
| FW03 | | | | IAmb_Lg | | 04 05 50.8 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **FW06** | **Azle** | **2.07** | **179** | Pn | Pn | 04 05 16.3 | -1.8 |
| **KAN01** | **Argonia South** | **2.10** | **356** | Pn | Pb | 04 05 19.9 | -1.3 |
| KAN01 | | | | IAmb_Lg | | 04 05 54.2 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **SMWD** | **Samnorwood** | **2.18** | **272** | Pn | Pn | 04 05 20.8 | +1.3 |
| **PLPT** | **Palo Pinto** | **2.31** | **195** | Pn | Pn | 04 05 21.1 | -0.3 |
| **RLO** | **Rose Lookout** | **2.37** | **61** | Pn | Pn | 04 05 22.5 | +0.4 |
| RLO | | | | IAmb_Lg | | 04 06 00.9 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **2.96** | **216** | IAmb_Lg | | 04 06 19.8 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **DKNS** | **Dickens** | **3.08** | **244** | IAmb_Lg | | 04 06 23.5 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **3.21** | **67** | Pn | Pn | 04 05 34.0 | +0.3 |
| HHAR | | | | IAmb_Lg | | 04 06 32.6 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **3.34** | **98** | Pn | Pn | 04 05 36.3 | +0.8 |
| **SN07** | **Snyder 07** | **3.37** | **235** | IAmb_Lg | | 04 06 32.4 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **SN05** | **Snyder 5** | **3.49** | **233** | IAmb_Lg | | 04 06 41.1 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **3.94** | **198** | Pn | Pn | 04 05 42.8 | -0.9 |
| **X40A** | **Basin Creek Fa** | **3.95** | **97** | IAmb_Lg | | 04 06 56.0 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **4.12** | **11** | IAmb_Lg | | 04 07 03.9 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **4.33** | **51** | IAmb_Lg | | 04 07 05.1 | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.35** | **85** | Pn | Pn | 04 05 48.5 | -0.7 |
| WHAR | | | | IAmb_Lg | | 04 07 12.6 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.41** | **257** | IAmb_Lg | | 04 07 14.0 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.79** | **62** | Pn | Pn | 04 05 54.4 | -1.0 |
| **JCT** | **Junction City** | **4.93** | **203** | Pn | Pn | 04 05 55.4 | -1.9 |
| **OZNA** | **Ozona** | **5.08** | **217** | Pn | Pn | 04 05 58.7 | -0.7 |
| **R40A** | **Maddies Statio** | **5.36** | **51** | IAmb_Lg | | 04 07 34.2 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.62** | **68** | IAmb_Lg | | 04 07 56.0 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **MNHN** | **Monahans** | **5.70** | **231** | IAmb_Lg | | 04 07 53.3 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **P40A** | **Paris** | **6.28** | **43** | IAmb_Lg | | 04 08 03.5 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.79** | **68** | IAmb_Lg | | 04 08 37.0 | |
| | comp=Z,3.1nm,0.8s | | | | | | |

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*FUNV **01** 04:12:18.0, 11.34N×70.42W, h2km, MW3.2*

*RSNC **01** 04:12:21.1±0.0, 11°N±4°×7°0W±°, h16km±5km, M3.5, mb4.0, mB4.5, ML3.0, Mw(mB)3.7*

**ISC 01 04:12:20.1**±2.7**, 11.33N**±0.04×**70.41W**±0.03**, h26**km±25km**, n25, σ0.85**/37**, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUA1** | **Aruba** | **1.23** | **18** | P | **Pn** | **04 12 41.6** | **-0.1** |
| AUA1 | | | | S | **Sn** | **04 12 57.4** | **-0.1** |
| **JACV** | **Jacura** | **1.56** | **99** | *e*P | **Pn** | **04 12 46.3** | **0.0** |
| JACV | | | | *e*S | **Sb** | **04 13 07.8** | **0.0** |
| **URIC** | **Uribia, Colomb** | **1.60** | **284** | P | **Pn** | **04 12 47.0** | **+0.3** |
| URIC | | | | S | **Sn** | **04 13 07.8** | **+1.2** |
| **TEPV** | **Terepaima** | **1.80** | **139** | *e*P | **Pn** | **04 12 50.3** | **+0.7** |
| TEPV | | | | *e*S | **Sn** | **04 13 12.8** | **+1.1** |
| **MCQV** | **Machiques** | **2.45** | **239** | *e*P | **Pn** | **04 12 58.2** | **-0.2** |
| MCQV | | | | *e*S | **Sn** | **04 13 28.2** | **+0.7** |
| **CRJC** | **Cerrejon, Guaj** | **2.45** | **263** | P | **Pn** | **04 12 58.0** | **-0.5** |
| CRJC | | | | S | **Sn** | **04 13 26.8** | **-0.9** |
| **TURV** | **Turiamo** | **2.67** | **109** | *e*P | **Pn** | **04 13 00.8** | **-0.6** |
| TURV | | | | *e*S | **Sn** | **04 13 33.7** | **+0.8** |
| **SOCV** | **Socops** | **3.06** | **188** | *e*P | **Pn** | **04 13 06.9** | **+0.1** |
| SOCV | | | | *e*S | **Sn** | **04 13 43.2** | **+0.6** |
| **BENV** | **Beln** | **3.07** | **116** | *e*P | **Pn** | **04 13 06.7** | **-0.4** |
| BENV | | | | *e*S | **Sn** | **04 13 44.0** | **+0.9** |
| **BAUV** | **El Baul** | **3.32** | **135** | *e*P | **Pn** | **04 13 10.3** | **-0.1** |
| BAUV | | | | *e*S | **Sn** | **04 13 48.6** | **-0.4** |
| **TACV** | **Tcata** | **3.52** | **109** | *e*P | **Pn** | **04 13 13.3** | **0.0** |
| TACV | | | | *e*S | **Sn** | **04 13 52.6** | **-1.5** |
| **SMRC** | **Santa Marta, M** | **3.75** | **268** | P | **Pn** | **04 13 16.7** | **+0.4** |
| SMRC | | | | S | **Sn** | **04 13 59.0** | **-0.7** |
| **CAPV** | **Capacho** | **3.92** | **209** | *e*P | **Pn** | **04 13 17.7** | **-1.2** |
| CAPV | | | | *e*S | **Sn** | **04 14 02.6** | **-1.6** |
| **ARGC** | **Ariguani, Magd** | **4.05** | **249** | P | **Pn** | **04 13 20.4** | **-0.1** |
| **OCAC** | **Ocana** | **4.20** | **223** | P | **Pn** | **04 13 23.0** | **+0.3** |
| **SJCC** | **San Jacinto, C** | **4.90** | **254** | P | **Pn** | **04 13 32.5** | **+0.2** |
| **TAMC** | **Tame, Arauca** | **5.05** | **196** | P | **Pn** | **04 13 34.5** | **+0.2** |
| | 23nm,0.6s | | | | | | |
| **CACV** | **CAICARA DEL OR** | **5.34** | **134** | *e*P | Pn | 04 13 43.6 | +5.5 |
| **BARC** | **Barichara** | **5.45** | **210** | P | **Pn** | **04 13 38.5** | **-1.4** |
| **PCRV** | **Puerto La Cruz** | **5.78** | **101** | *e*P | **Pn** | **04 13 44.1** | **-0.2** |
| **ZARC** | **Zaragoza, Cauc** | **5.81** | **229** | P | **Pn** | **04 13 45.1** | **+0.3** |
| | 15nm,1.0s,402nm | | | | | | |
| **RUSC** | **La Rusia** | **6.01** | **206** | P | **Pn** | **04 13 48.6** | **+0.7** |
| | 4.9nm,0.6s | | | | | | |
| **UREC** | **San Jos de Ur** | **6.18** | **235** | P | **Pn** | **04 13 51.9** | **+2.1** |
| | 3.9nm,0.5s,392nm | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **6.21** | **220** | P | **Pn** | **04 13 49.2** | **-1.1** |
| **SPBC** | **San Pablo de B** | **6.70** | **213** | P | **Pn** | **04 13 58.1** | **+1.1** |

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*IDC **01** 04:13:48.0±1.1, 50.34N×130.26W, h0km, mb3.8/4, mbtmp3.7/14, ML3.5/10, MS3.6/59, Error ellipse: s-maj=17.8km s-min=10.2km az=67.0*

*PGC **01** 04:13:48.0±0.8, 50.25N×130.23W, h10km, MLSn3.4/30, Mw4.5, 205km west of Pt. Hardy, Bc Vancouver Island, Canada Region*

*NEIC **01** 04:13:48, 50.25N×130.23W, h7km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-0.10; $M_{\theta\theta}$-3.92; $M_{\phi\phi}$3.15; $M_{r\theta}$-0.63; $M_{\theta\phi}$4.97; $M_{\phi r}$-2.54; Fault plane solution: $M_0$6.60000×$10^{15}$ NP1:$\phi_s$161.00000°, δ80.00000°, λ161.00000°. NP2:$\phi_s$254.00000°, δ71.00000°, λ11.00000°. Principal axes: T 6.9630, Plg21.0000°, Azm116.0000°; N -0.7090, Plg68.0000°, Azm313.0000°; P -6.2540, Plg6.0000°, Azm209.0000°;*

*NEIC **01** 04:13:50.7±2.0, 50.56N±0.07×129.9W±0.1, h10km±2km, mb4.0/113, Mwr4.3/13, Mwr4.5(OTT) Error ellipse: s-maj=16.9km s-min=9.6km az=234.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.01; $M_{\theta\theta}$-0.84; $M_{\phi\phi}$0.83; $M_{r\theta}$-0.34; $M_{\theta\phi}$2.43; $M_{\phi r}$1.93; Fault plane solution: $M_0$3.23000×$10^{15}$ NP1:$\phi_s$80.43000°, δ52.63000°, λ-0.08000°. NP2:$\phi_s$170.48000°, δ89.94000°, λ-142.63000°. Principal axes: T 3.2153, Plg25.0000°, Azm299.0000°; N 0.0255, Plg53.0000°, Azm171.0000°; P -3.2408, Plg25.0000°, Azm42.0000°;*

*NEIC **01** 04:13:50.7, 50.55N×129.89W, h10km*

**ISC 01 04:13:51.6**±3.4**, 50.31N**±0.04×**130.12W**±0.05**, h33**km±28km**, n477, σ1.36**/428**, mb4.0**/15**, MS3.6**/51**, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.31** | **74** | | **Pn** | **04 14 11.5** | **-2.2** |
| **HOLB** | **Holberg** | **1.31** | **74** | P | **Pn** | **04 14 11.5** | **-2.2** |
| HOLB | | | | S | **Sn** | **04 14 27.4** | **-2.6** |
| **PACB** | **Port Alice, BC** | **1.69** | **85** | Pn | **Pn** | **04 14 16.2** | **-2.5** |
| PACB | | | | Sn | **Sn** | **04 14 36.2** | **-3.0** |
| **PHC** | **Port Hardy** | **1.76** | **76** | Pn | **Pn** | **04 14 17.9** | **-1.9** |
| PHC | | | | Sn | **Sn** | **04 14 39.0** | **-2.0** |
| **HG4B** | **Hotspring** | **2.10** | **342** | Pn | **Pn** | **04 14 21.7** | **-2.9** |
| **JEDB** | **Jedway, Haida** | **2.10** | **342** | Pn | **Pn** | **04 14 21.6** | **-2.9** |
| JEDB | | | | Sn | **Sn** | **04 14 47.5** | **-2.1** |
| **BBB** | **Bella Bella** | **2.27** | **33** | Pn | **Pn** | **04 14 24.5** | **-2.2** |
| **BBB** | **Bella Bella** | **2.27** | **33** | Pn | **Pn** | **04 14 25.6** | **-1.1** |
| | 25nm,0.3s,baz=232,slow=5.3,SNR=147 | | | | | | |
| BBB | | | | Sn | **Sn** | **04 14 52.7** | **-0.7** |
| | 36nm,0.3s,baz=322,slow=23,SNR=14 | | | | | | |
| BBB | | | | LR | LR | 04 15 23.5 | |
| | comp=Z,1μm,18.2s,baz=200,slow=42 | | | | | | |
| | 112nm,0.6s | | | | | | |
| **BBB** | **Bella Bella** | **2.27** | **33** | Pn | **Pn** | **04 14 25.6** | **-1.1** |
| BBB | | | | Sn | **Sn** | **04 14 51.8** | **-1.6** |
| **WOSB** | **Woss** | **2.28** | **92** | Pn | **Pn** | **04 14 25.0** | **-2.0** |
| **NCHR** | **NEPTUNE Canada** | **2.43** | **163** | Sn | **Sn** | **04 14 53.5** | **-3.7** |
| **KEMO** | **NEPTUNE Canada** | **2.47** | **164** | Pn | Pn | 04 14 26.2 | -3.1 |
| **BNB** | **Barry Inlet** | **2.49** | **336** | Pn | **Pn** | **04 14 27.3** | **-2.7** |
| **ETB** | **Estevan Point** | **2.50** | **110** | Pn | **Pn** | **04 14 28.5** | **-1.3** |
| **NCRB** | **Newcastle Ridg** | **2.60** | **86** | Pn | **Pn** | **04 14 30.0** | **-1.5** |
| **NCSB** | **Newcastle Ridg** | **2.60** | **86** | Pn | **Pn** | **04 14 30.1** | **-1.4** |
| NCSB | | | | Sn | **Sn** | **04 14 59.8** | **-2.3** |
| **GDR** | **Gold River** | **2.69** | **100** | Pn | **Pn** | **04 14 30.0** | **-2.5** |
| GDR | | | | Sn | **Sn** | **04 15 02.3** | **-1.5** |
| **HG1B** | **Mitchell Dam** | **2.92** | **335** | Pn | **Pn** | **04 14 33.2** | **-2.4** |
| **BUTB** | **Butedale** | **2.95** | **20** | Pn | **Pn** | **04 14 35.3** | **-0.9** |
| BUTB | | | | Sn | **Sn** | **04 15 09.7** | **-0.8** |
| **CBB** | **Campbell River** | **3.07** | **93** | Sn | **Sn** | **04 15 11.7** | **-1.6** |
| **GRIB** | **Gribbell Islan** | **3.10** | **11** | Pn | **Pn** | **04 14 37.2** | **-1.0** |
| **BNAB** | **Bonilla** | **3.21** | **354** | Pn | **Pn** | **04 14 37.8** | **-1.9** |
| BNAB | | | | Sn | **Sn** | **04 15 13.7** | **-3.1** |
| **DIB** | **Dawson Inlet,** | **3.25** | **334** | Pn | **Pn** | **04 14 37.8** | **-2.5** |
| **DIB** | **Dawson Inlet,** | **3.25** | **334** | Pn | **Pn** | **04 14 37.7** | **-2.6** |
| **OZB** | **Mount Ozzard** | **3.29** | **112** | Pn | **Pn** | **04 14 40.3** | **-0.6** |
| **OZB** | **Mount Ozzard** | **3.29** | **112** | Pn | **Pn** | **04 14 38.6** | **-2.3** |
| OZB | | | | Sn | **Sn** | **04 15 16.0** | **-2.9** |
| **HWKB** | **Hawksbury Isla** | **3.35** | **10** | Sn | **Sn** | **04 15 19.7** | **-0.7** |
| **GRNB** | **Grenville Isla** | **3.55** | **2** | Pn | **Pn** | **04 14 43.2** | **-1.2** |
| **GRNB** | **Grenville Isla** | **3.55** | **2** | Pn | **Pn** | **04 14 43.3** | **-1.1** |
| GRNB | | | | Sn | **Sn** | **04 15 23.4** | **-1.8** |
| **BFSB** | **Bamfield** | **3.56** | **113** | Pn | **Pn** | **04 14 43.9** | **-0.6** |
| **B928** | **Bamfield** | **3.56** | **113** | Pn | **Pn** | **04 14 42.9** | **-1.5** |
| **MBLB** | **Minette Bay Lo** | **3.85** | **13** | Pn | **Pn** | **04 14 48.1** | **-0.3** |
| **KITB** | **Kitimat** | **3.89** | **13** | Pn | **Pn** | **04 14 48.5** | **-0.5** |
| KITB | | | | Sn | **Sn** | **04 15 30.5** | **-2.9** |
| **RUBB** | **Prince Rupert** | **4.03** | **359** | Pn | **Pn** | **04 14 50.1** | **-0.8** |
| **PFB** | **Port Renfrew** | **4.09** | **113** | Pn | **Pn** | **04 14 49.9** | **-1.9** |
| PFB | | | | Sn | **Sn** | **04 15 36.7** | **-1.8** |
| **SHB** | **Sechelt** | **4.09** | **98** | Pn | **Pn** | **04 14 51.0** | **-1.0** |
| **CLRS** | **Cowichan Lake** | **4.17** | **109** | Pn | **Pn** | **04 14 52.1** | **-0.8** |
| **SYMB** | **Survey Mountai** | **4.48** | **111** | Pn | **Pn** | **04 14 56.9** | **-0.3** |
| **BIB** | **Bowen Island** | **4.50** | **99** | Pn | **Pn** | **04 14 58.0** | **+0.7** |
| **GOBB** | **Galiano Island** | **4.50** | **105** | Pn | **Pn** | **04 14 57.5** | **0.0** |
| **WPB** | **Watts Point** | **4.50** | **96** | Pn | **Pn** | **04 14 57.3** | **-0.2** |
| **UBRB** | **Upper Baezaeko** | **4.57** | **53** | Pn | **Pn** | **04 14 59.4** | **+1.0** |
| **HNBB** | **Haney** | **4.99** | **99** | Pn | **Pn** | **04 15 03.9** | **-0.3** |
| **V35K** | **Ketchikan** | **5.11** | **350** | P | **Pn** | **04 15 04.9** | **-0.9** |
| | baz=170 | | | | | | |
| **V35K** | **Ketchikan** | **5.11** | **350** | Pn | **Pn** | **04 15 05.1** | **-0.7** |
| V35K | | | | Sn | **Sn** | **04 16 02.7** | **-1.0** |
| **LLLB** | **Lillooet** | **5.27** | **84** | Pn | **Pn** | **04 15 07.9** | **-0.1** |
| **FSJB** | **Fort St James** | **5.48** | **38** | Pn | **Pn** | **04 15 10.7** | **-0.2** |
| FSJB | | | | Sn | **Sn** | **04 16 11.8** | **-1.0** |
| **CRAG** | **Craig** | **5.48** | **342** | P | **Pn** | **04 15 09.6** | **-1.3** |
| | baz=160 | | | | | | |
| **RPW** | **Rockport** | **5.92** | **105** | Pn | **Pn** | **04 15 17.1** | **+0.1** |
| **U33K** | **Whale Pass** | **6.09** | **344** | P | **Pn** | **04 15 18.6** | **-0.7** |
| | baz=162 | | | | | | |
| **U33K** | **Whale Pass** | **6.09** | **344** | Pn | **Pn** | **04 15 18.9** | **-0.3** |
| U33K | | | | Sn | **Sn** | **04 16 27.2** | **-0.6** |
| **LON** | **Longmire** | **6.56** | **120** | | **Pn** | **04 15 28.1** | **+2.3** |
| **T35M** | **Bob Quinn** | **6.69** | **359** | | **Pn** | **04 15 25.0** | **-2.5** |
| **T35M** | **Bob Quinn** | **6.69** | **359** | P | **Pn** | **04 15 26.4** | **-1.1** |
| | baz=180 | | | | | | |
| **T35M** | **Bob Quinn** | **6.69** | **359** | Pn | **Pn** | **04 15 28.4** | **+0.9** |
| **G03D** | **McMinnville, O** | **6.88** | **135** | | **Pn** | **04 15 31.6** | **+1.5** |
| **B08A** | **Colville Reser** | **7.31** | **101** | Pn | **Pn** | **04 15 35.9** | **-0.2** |
| **SIT** | **Sitka** | **7.44** | **337** | P | **Pn** | **04 15 36.8** | **-0.8** |
| | baz=154 | | | | | | |
| **BMTB** | **Bullhead Mount** | **7.49** | **37** | Pn | **Pn** | **04 15 40.4** | **+1.9** |
| BMTB | | | | Sn | **Sn** | **04 17 02.1** | **-0.1** |
| **HOOD** | **Mount Hood Mea** | **7.57** | **128** | | **Pn** | **04 15 42.1** | **+2.4** |
| **S32K** | **Killisnoo** | **7.64** | **342** | P | **Pn** | **04 15 39.8** | **-0.8** |
| | baz=159 | | | | | | |
| **H04D** | **Lebanon** | **7.65** | **136** | Pn | **Pn** | **04 15 43.5** | **+2.9** |
| **S34M** | **Telegraph Cree** | **7.65** | **356** | P | **Pn** | **04 15 40.1** | **-0.5** |
| | baz=176 | | | | | | |
| **H04A** | **Detroit Lake** | **7.77** | **133** | Pn | **Pn** | **04 15 44.3** | **+1.9** |
| **BUCK** | **Buck Mountain** | **7.80** | **139** | Pn | **Pn** | **04 15 45.8** | **+3.0** |
| **NBC4** | **NorthernBC 4** | **7.84** | **43** | Pn | **Pn** | **04 15 44.6** | **+1.2** |
| **DLBC** | **Dease Lake** | **8.15** | **0** | Pn | **Pn** | **04 15 48.3** | **+0.7** |
| | 0.6nm,0.3s,baz=197,slow=14,SNR=13 | | | | | | |
| DLBC | | | | Lg | Lg | 04 18 02.8 | |
| | 0.2nm,0.3s,baz=293,slow=24,SNR=1.7 | | | | | | |
| DLBC | | | | LR | LR | 04 18 44.9 | |
| | comp=Z,447nm,18.2s,baz=221,slow=37 | | | | | | |
| | 5.2nm,0.6s | | | | | | |
| **DLBC** | **Dease Lake** | **8.15** | **0** | P | **Pn** | **04 15 47.2** | **-0.4** |
| | baz=181 | | | | | | |
| **DLBC** | **Dease Lake** | **8.15** | **0** | Pn | **Pn** | **04 15 47.8** | **+0.3** |
| **C09A** | **Chrisman Ranch** | **8.17** | **103** | | **Pn** | **04 15 47.9** | **0.0** |
| **BDMTA** | **Bald Mountain** | **8.18** | **52** | Pn | **Pn** | **04 15 49.8** | **+1.8** |
| **I04A** | **Tendick Farm,** | **8.37** | **138** | Pn | **Pn** | **04 15 53.8** | **+3.2** |
| **R32K** | **Eaglecrest** | **8.39** | **344** | P | **Pn** | **04 15 49.8** | **-1.0** |
| | baz=161 | | | | | | |
| **NBC5** | **NorthernBC 5** | **8.46** | **28** | Pn | **Pn** | **04 15 53.7** | **+1.9** |
| **S31K** | **Pelican** | **8.47** | **337** | P | **Pn** | **04 15 50.7** | **-1.1** |
| | baz=153 | | | | | | |
| **DBO** | **Dodson Butte** | **8.60** | **144** | | **Pn** | **04 15 57.5** | **+3.7** |
| **BRLDA** | **Berland Lookou** | **8.68** | **59** | | **Pn** | **04 15 53.5** | **-1.4** |
| **NEW** | **Newport** | **8.74** | **99** | Pn | **Pn** | **04 15 57.6** | **+2.0** |
| | 0.3nm,0.3s,baz=291,slow=10,SNR=4.0 | | | | | | |
| NEW | | | | Lg | Lg | 04 18 26.9 | |
| | baz=14,slow=23,SNR=1.9 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **NEW** | **Newport** | **8.74** | **99** | P | **Pn** | **04 15 55.0** | **-0.6** |
| | baz=288 | | | | | | |
| **R31K** | **City Hall, Gus** | **8.76** | **340** | P | **Pn** | **04 15 54.9** | **-0.9** |
| | baz=156 | | | | | | |
| **Q32M** | **Nakina River** | **8.76** | **353** | P | **Pn** | **04 15 55.3** | **-0.8** |
| | baz=171 | | | | | | |
| **Q32M** | **Nakina River** | **8.76** | **353** | Pn | **Pn** | **04 15 56.2** | **+0.1** |
| **K02D** | **Willamette Mer** | **8.81** | **147** | | **Pn** | **04 15 58.9** | **+2.2** |
| **TOAD** | **Toad River Com** | **9.02** | **16** | P | **Pn** | **04 15 59.2** | **-0.2** |
| | baz=201 | | | | | | |
| **PINE** | **Pine Mountain** | **9.03** | **133** | Pn | **Pn** | **04 16 03.0** | **+3.2** |
| **R33M** | **Jennings River** | **9.12** | **357** | Pn | **Pn** | **04 15 58.8** | **-2.2** |
| **R33M** | **Jennings River** | **9.12** | **357** | P | **Pn** | **04 16 00.7** | **-0.3** |
| | baz=177 | | | | | | |
| **HUMO** | **Hull Mountain** | **9.14** | **145** | Pn | **Pn** | **04 16 03.8** | **+2.6** |
| **J05D** | **Fort Rock, OR** | **9.29** | **136** | Pn | **Pn** | **04 16 06.2** | **+2.9** |
| **L02F** | **Cave Junction** | **9.36** | **149** | | **Pn** | **04 16 07.7** | **+3.6** |
| **KSXB** | **Camp Six Broad** | **9.52** | **151** | | **Pn** | **04 16 09.5** | **+3.1** |
| **P32M** | **Atlin** | **9.53** | **349** | P | **Pn** | **04 16 06.1** | **-0.4** |
| | baz=166 | | | | | | |
| **PLBC** | **Pleasant Camp** | **9.85** | **341** | P | **Pn** | **04 16 09.6** | **-1.1** |
| | baz=156 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **10.00** | **146** | Pn | **Pn** | **04 16 16.1** | **+3.1** |
| **YBH** | **Yreka Blue Hor** | **10.00** | **146** | Pn | **Pn** | **04 16 15.4** | **+2.4** |
| | 0.1nm,0.3s,baz=338,slow=16,SNR=13 | | | | | | |
| YBH | | | | LR | LR | 04 19 36.6 | |
| | comp=Z,628nm,19.8s,baz=328,slow=35 | | | | | | |
| | 4.2nm,1.0s | | | | | | |
| **P29M** | **Windy Craggy** | **10.31** | **338** | P | **Pn** | **04 16 15.6** | **-1.6** |
| | baz=152 | | | | | | |
| **WHY** | **Whitehorse** | **10.72** | **347** | | **Pn** | **04 16 20.9** | **-1.9** |
| **WHY** | **Whitehorse** | **10.72** | **347** | P | **Pn** | **04 16 21.4** | **-1.3** |
| | baz=164 | | | | | | |
| **PNL** | **Peninsula** | **10.78** | **334** | P | **Pn** | **04 16 22.3** | **-1.2** |
| | baz=147 | | | | | | |
| **N32M** | **Quiet Lake** | **11.00** | **352** | | **Pn** | **04 16 24.1** | **-2.4** |
| **N32M** | **Quiet Lake** | **11.00** | **352** | P | **Pn** | **04 16 25.2** | **-1.3** |
| | baz=170 | | | | | | |
| **O30N** | **Mendenhall** | **11.02** | **344** | P | **Pn** | **04 16 25.9** | **-0.9** |
| | baz=160 | | | | | | |
| **WVOR** | **Wild Horse Val** | **11.16** | **130** | Pn | **Pn** | **04 16 30.1** | **+1.1** |
| **HATC** | **Hat Creek Radi** | **11.25** | **144** | Pn | **Pn** | **04 16 32.0** | **+1.8** |
| **MSO** | **Missoula** | **11.27** | **102** | P | **Pn** | **04 16 29.5** | **-0.8** |
| | baz=294 | | | | | | |
| **PINM** | **Pinnacle** | **11.38** | **333** | P | **Pn** | **04 16 30.3** | **-1.4** |
| | baz=146 | | | | | | |
| **YUK6** | **Outpost Mounta** | **11.62** | **340** | P | **Pn** | **04 16 33.8** | **-1.4** |
| | baz=153 | | | | | | |
| **N31M** | **Braeburn, Yuko** | **11.64** | **346** | P | **Pn** | **04 16 34.5** | **-0.8** |
| | baz=162 | | | | | | |
| **N30M** | **Aishikik Lake** | **11.84** | **343** | P | **Pn** | **04 16 36.2** | **-1.7** |
| | baz=158 | | | | | | |
| **O28M** | **Mount Upton** | **11.92** | **335** | P | **Pn** | **04 16 38.0** | **-1.3** |
| | baz=148 | | | | | | |
| **MESA** | **MESA** | **11.96** | **330** | P | **Pn** | **04 16 38.6** | **-1.2** |
| | baz=141 | | | | | | |
| **YUK8** | **Steele Glacier** | **12.25** | **338** | P | **Pn** | **04 16 42.7** | **-1.1** |
| | baz=150 | | | | | | |
| **GRNC** | **Granite Creek** | **12.33** | **332** | | **Pn** | **04 16 42.6** | **-2.3** |
| **ORV** | **Oroville** | **12.35** | **147** | | **Pn** | **04 16 47.9** | **+2.8** |
| **CRQE** | **Cirque** | **12.76** | **330** | P | **Pn** | **04 16 49.7** | **-1.0** |
| | baz=140 | | | | | | |
| **YUK3** | **Moose Creek** | **12.85** | **337** | P | **Pn** | **04 16 50.2** | **-1.7** |
| | baz=149 | | | | | | |
| **PAHR** | **Pah Rah Range** | **13.02** | **140** | | **Pn** | **04 16 57.4** | **+3.1** |
| **AFDM** | **Forest Hills D** | **13.08** | **147** | Pn | **Pn** | **04 16 58.2** | **+3.2** |
| **EGMT** | **Eagleton** | **13.52** | **92** | Pn | **Pn** | **04 17 00.7** | **-0.3** |
| **M27K** | **Edge Creek, AK** | **13.70** | **336** | P | **Pn** | **04 17 02.2** | **-1.2** |
| | baz=147 | | | | | | |
| **P23K** | **Montague Islan** | **13.81** | **321** | P | **Pn** | **04 17 03.6** | **-1.2** |
| | baz=127 | | | | | | |
| **N25K** | **Chitina, Valde** | **13.89** | **330** | P | **Pn** | **04 17 05.2** | **-0.8** |
| | baz=138 | | | | | | |
| **M26K** | **Nabesna, AK** | **14.03** | **335** | P | **Pn** | **04 17 07.2** | **-0.7** |
| | baz=144 | | | | | | |
| **WAKR** | **Walker** | **14.03** | **143** | Pn | **P** | **04 17 12.9** | **-2.8** |
| **KVN** | **Kaiserville** | **14.11** | **138** | Pn | **Pn** | **04 17 11.3** | **+2.1** |
| **ELK** | **Elko** | **14.12** | **127** | Pn | **Pn** | **04 17 11.0** | **+1.5** |
| **ELK** | **Elko** | **14.12** | **127** | Pn | **Pn** | **04 17 12.5** | **+3.1** |
| | 0.1nm,0.3s,baz=304,slow=3.6,SNR=1.4 | | | | | | |
| ELK | | | | LR | LR | 04 22 39.3 | |
| | comp=Z,217nm,18.8s,baz=328,slow=37 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **KLU** | **Klutina** | **14.24** | **328** | Pn | **Pn** | **04 17 10.6** | **-0.2** |
| **L27K** | **Beaver Creek,** | **14.28** | **338** | P | **Pn** | **04 17 10.5** | **-0.8** |
| | baz=148 | | | | | | |
| **RYN** | **Ryan** | **14.29** | **140** | | **Pn** | **04 17 12.8** | **+1.2** |
| **IMW** | **Indian Meadow** | **14.53** | **109** | Pn | **Pn** | **04 17 14.8** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **14.55** | **140** | Pn | **Pn** | **04 17 17.8** | **+2.6** |
| **NVAR** | **Mina Array Bea** | **14.55** | **140** | Pn | **Pn** | **04 17 17.7** | **+2.5** |
| | baz=327,slow=12,SNR=13 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **NV11** | **Mina Array Sit** | **14.61** | **140** | Pn | **Pn** | **04 17 17.9** | **+2.0** |
| **FXWY** | **Fox Creek** | **14.62** | **110** | Pn | **Pn** | **04 17 15.1** | **-1.1** |
| **LHV** | **Little Huntoon** | **14.62** | **141** | Pn | **Pn** | **04 17 18.4** | **+2.5** |
| **L26K** | **Log Cabin Wild** | **14.63** | **336** | P | **Pn** | **04 17 15.3** | **-0.7** |
| | baz=145 | | | | | | |
| **DAWY** | **Dawson** | **14.66** | **344** | P | **Pn** | **04 17 16.2** | **-0.2** |
| | baz=156 | | | | | | |
| **HVU** | **Hansel Valley** | **14.73** | **119** | Pn | **Pn** | **04 17 17.1** | **-0.5** |
| **TPAW** | **Teton Pass** | **14.75** | **110** | Pn | **Pn** | **04 17 16.3** | **-1.7** |
| **YKA** | **Yellowknife Ar** | **14.87** | **29** | Pn | **Pn** | **04 17 17.6** | **-1.6** |
| | 0.1nm,0.3s,baz=226,slow=12,SNR=5.4 | | | | | | |
| YKA | | | | LR | LR | 04 23 48.8 | |
| | comp=Z,96nm,19.4s,baz=284,slow=40 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| **REDW** | **Red Top Meadow** | **14.88** | **110** | Pn | **Pn** | **04 17 19.5** | **-0.1** |
| **SNOW** | **Snow King Moun** | **14.88** | **110** | Pn | **Pn** | **04 17 19.3** | **-0.5** |
| **LOHW** | **Long Hollow** | **14.89** | **109** | Pn | **Pn** | **04 17 19.9** | **+0.1** |
| **MDPB** | **Devils Postpil** | **14.93** | **144** | | **Pn** | **04 17 22.8** | **+2.4** |

MDPB IAmb IAmb 04 17 29.4
comp=Z,7.7nm,1.2s
**RLMT Red Lodge 14.94 102** Pn **Pn** **04 17 19.7 -0.9**
**SCM Sheep Creek Mo 14.96 327** P **Pn** **04 17 19.6 -1.0**
baz=133
**OMMB Old Mammoth Mi 14.98 144** Pn **Pn** **04 17 22.6 +1.5**
OMMB IAmb IAmb 04 17 30.7
comp=Z,11nm,1.3s
**BRSE Bradley Lake S 15.07 317** P **Pn** **04 17 21.1 -0.9**
baz=120
**KDAK Kodiak Island 15.12 308** LR LR 04 21 44.2
comp=Z,571nm,20.0s,baz=175,slow=32
**BGU Big Grassy Mou 15.16 122** Pn **Pn** **04 17 23.3 -0.1**
BGU IAmb IAmb 04 17 32.3
comp=Z,8.8nm,1.4s
**K27K Chicken 15.17 340** P **Pn** **04 17 22.8 -0.4**
baz=150
**PAX Paxson 15.19 332** P **Pn** **04 17 22.8 -0.7**
baz=140
**SML Sawmill 15.30 326** Pn **Pn** **04 17 23.8 -1.2**
**SML Sawmill 15.30 326** P **Pn** **04 17 24.2 -0.8**
baz=131
**TPH Tonopah 15.30 138** Pn **Pn** **04 17 26.5 +1.3**
**I30M Mount Dempster 15.31 350** Pn **Pn** **04 17 23.0 -2.2**
I30M IAmb IAmb 04 17 36.9
comp=Z,6.8nm,1.1s
**RC01 Rabbit Creek A 15.39 322** P **Pn** **04 17 25.4 -0.6**
baz=126
**HOM Homer 15.43 316** P **Pn** **04 17 25.6 -1.1**
baz=118
**PMR Palmer 15.46 324** P **Pn** **04 17 26.6 -0.3**
baz=129
**MZP Montezuma Peak 15.55 139** Pn **P** **04 17 31.2 -1.4**
MZP IAmb IAmb 04 17 36.8
comp=Z,8.8nm,1.0s
**SCRK Sand Creek 15.58 337** P **Pn** **04 17 28.5 -0.1**
baz=145
**DSP Deep Springs 15.59 141** Pn **P** **04 17 32.1 -0.6**
DSP IAmb IAmb 04 17 37.0
comp=Z,9.1nm,1.2s
**SII Sitkinak Islan 15.60 303** P **Pn** **04 17 28.3 -0.5**
baz=104
**WAT6 Susitna Watana 15.62 329** P **Pn** **04 17 29.2 0.0**
baz=134
**Q12A Willow Creek R 15.62 130** Pn **Pn** **04 17 30.8 +1.4**
**EGAK Eagle 15.63 342** Pn **Pn** **04 17 27.3 -1.9**
EGAK IAmb IAmb 04 17 42.1
comp=Z,7.6nm,1.2s
**EGAK Eagle 15.63 342** P **Pn** **04 17 29.1 -0.1**
baz=153
**DUG Dugway, Tooele 15.79 123** Pn **Pn** **04 17 32.8 +1.2**
DUG IAmb IAmb 04 17 39.3
comp=Z,19nm,1.4s
**DUG Dugway, Tooele 15.79 123** P **Pn** **04 17 31.7 +0.1**
baz=315,SNR=8.3
**DHY Denali Highway 15.85 330** Pn **Pn** **04 17 31.9 -0.3**
**DHY Denali Highway 15.85 330** P **Pn** **04 17 31.6 -0.5**
baz=136
**SPR3 Spring Creek 3 15.90 129** Pn **P** **04 17 35.1 -1.4**
**J26L Joseph Creek 15.91 338** Pn **Pn** **04 17 32.0 -0.9**
**J26L Joseph Creek 15.91 338** P **Pn** **04 17 33.0 +0.1**
baz=147
**BW06 Boulder Array 16.00 110** P **Pn** **04 17 33.7 -0.6**
baz=305
**PDAR Pinedale Array 16.00 110** Pn **Pn** **04 17 34.4 +0.1**
**PDAR Pinedale Array 16.00 110** Pn **P** **04 17 36.4 -1.1**
comp=Z,0.1nm,0.3s,baz=311,slow=9.6,SNR=8.2
PDAR LR LR 04 23 29.7
comp=Z,121nm,19.4s,baz=300,slow=36
comp=Z,1.0nm,0.9s
**SUA Susitna One 16.00 322** Pn **Pn** **04 17 34.3 +0.2**
**SUA Susitna One 16.00 322** P **Pn** **04 17 33.4 -0.7**
baz=125,SNR=10
**I28M Miner Creek 16.02 345** P **Pn** **04 17 33.6 -0.7**
baz=157
**Q19K Cape Douglas, 16.05 312** P **Pn** **04 17 33.3 -1.4**
baz=113
**WAT1 Susitna Watana 16.06 328** P **Pn** **04 17 34.3 -0.5**
baz=133
**O20K Slope Mountain 16.07 316** P **Pn** **04 17 33.3 -1.6**
baz=118
**P19K Oil Pt 16.15 314** P **Pn** **04 17 35.1 -0.8**
baz=116
**LAO LASA Array 16.22 94** P **Pn** **04 17 37.6 +0.6**
baz=292
**CHIR Chirikof Islan 16.24 300** P **Pn** **04 17 35.5 -1.6**
baz=100
**S11A Rachel 16.31 135** Pn **Pn** **04 17 38.5 +0.4**
**CWC Cottonwood Cre 16.36 143** P **Pn** **04 17 39.2 +0.4**
baz=331
**NLU North Lily Min 16.36 122** Pn **Pn** **04 17 40.4 +1.4**
NLU IAmb IAmb 04 17 45.4
comp=Z,14nm,1.5s
**SPU Mount Spurr 16.37 320** Pn **Pn** **04 17 40.0 +1.2**
**N20K Mount Spurr 16.45 320** P **Pn** **04 17 39.6 -0.1**
baz=122
**J25K Salcha River, 16.45 336** Pn **Pn** **04 17 39.2 -0.5**
**J25K Salcha River, 16.45 336** P **Pn** **04 17 39.9 +0.2**
baz=144
**I27K Kandik River 16.46 343** P **Pn** **04 17 40.3 +0.5**
baz=154
**EPYK Eagle Plains 16.46 351** P **Pn** **04 17 40.3 +0.4**
baz=165
**PSUT Pine Spring 16.49 129** Pn **P** **04 17 42.1 -0.9**
PSUT IAmb IAmb 04 17 47.1
comp=Z,12nm,1.3s
**I26K Coal Creek Min 16.51 341** Pn **Pn** **04 17 40.1 -0.2**
I26K IAmb IAmb 04 17 47.7
comp=Z,16nm,1.2s
**I26K Coal Creek Min 16.51 341** P **Pn** **04 17 40.9 +0.6**
baz=150
**H29M Whitestone 16.51 348** Pn **Pn** **04 17 39.9 -0.5**
H29M IAmb IAmb 04 17 50.8
comp=Z,15nm,1.2s
**H29M Whitestone 16.51 348** P **Pn** **04 17 40.5 +0.1**
baz=161
**VES Vestal, Richgr 16.52 147** P **Pn** **04 17 41.2 +0.5**
baz=334
**SKT Skwentna 16.61 323** P **Pn** **04 17 41.6 -0.1**
baz=125
**WCT Wildcat Mounta 16.64 139** Pn **P** **04 17 44.2 -0.2**
**TPNV Topopah Spring 16.66 138** P **Pn** **04 17 42.9 +0.2**
baz=327,SNR=22
**HDA Harding Lake 16.71 334** Pn **Pn** **04 17 41.8 -1.2**
**MCK McKinley 16.81 330** P **Pn** **04 17 44.2 0.0**
baz=135
**FURC Furnace Creek, 16.82 140** P **Pn** **04 17 45.6 +1.2**
baz=329
**PRN Pahroc Range 16.82 134** Pn **P** **04 17 45.8 -0.7**
PRN IAmb IAmb 04 17 48.4
comp=Z,16nm,1.5s
**MPMC Manual Prospec 16.92 143** P **Pn** **04 17 46.7 +0.7**
baz=331,SNR=8.4
**Q17K Contact Creek 16.94 308** P **Pn** **04 17 45.9 -0.1**
baz=107
**IL31 16.98 335** Pn **Pn** **04 17 45.4 -0.8**
**ILAR Eielson Array 16.98 335** Pn **Pn** **04 17 45.0 -1.2**
**ILAR Eielson Array 16.98 335** Pn **Pn** **04 17 46.7 +0.4**
baz=143,slow=9.7,SNR=13
ILAR LR LR 04 23 50.1
comp=Z,223nm,18.4s,baz=122,slow=36
comp=Z,0.8nm,1.0s
**P18K Big Mountain, 16.99 312** P **Pn** **04 17 46.5 0.0**
baz=112
**G30M tAoh Zraii Nji 17.01 352** P **Pn** **04 17 46.8 +0.1**
baz=167
**H27K Steamboat Moun 17.01 344** P **Pn** **04 17 47.5 +0.8**
baz=155
**R17L Mt. Peulik Vol 17.01 306** P **Pn** **04 17 46.0 -0.7**
baz=105
**WRH Wood River Hil 17.09 333** **Pn** **04 17 48.5 +0.9**
**G29M Pine Creek 17.13 349** Pn **Pn** **04 17 46.5 -1.8**
G29M IAmb IAmb 04 18 01.8
comp=Z,15nm,1.3s
**G29M Pine Creek 17.13 349** P **Pn** **04 17 48.7 +0.5**
baz=163
**CCB Clear Creek Bu 17.14 334** Pn **Pn** **04 17 47.9 -0.3**
**GWY Greenwater Val 17.14 140** Pn **P** **04 17 50.2 +0.2**
GWY IAmb IAmb 04 17 55.5
comp=Z,12nm,1.4s
**PKM Mcpherson Peak 17.14 150** P **Pn** **04 17 48.7 -0.1**
baz=337
**O18K Koktuh Hills 17.15 313** P **Pn** **04 17 47.7 -0.8**
baz=113
**M20K Styx River 17.18 321** P **Pn** **04 17 48.4 -0.5**
baz=122
**PRP Porcupine Dome 17.22 338** **Pn** **04 17 48.4 -1.1**
**PRP Porcupine Dome 17.22 338** P **Pn** **04 17 48.9 -0.6**
baz=145
**N19K Bonanza Creek 17.23 317** P **Pn** **04 17 48.9 -0.6**
baz=117
**MSU Marysvale 17.36 126** Pn **P** **04 17 52.9 +0.3**
**POKR Poker Plat Res 17.39 335** P **Pn** **04 17 51.4 0.0**
baz=141
**P17A Butcher Ranch, 17.43 121** **P** **04 17 54.0 +0.6**
**NEA2 Nenana 17.47 332** Pn **Pn** **04 17 52.1 -0.3**
**NEA2 Nenana 17.47 332** P **Pn** **04 17 51.7 -0.7**
baz=136
**MDM Murphy Dome 17.49 334** Pn **Pn** **04 17 50.4 -2.3**
**P17K Kvichak River 17.50 311** P **Pn** **04 17 51.8 -1.0**
baz=109
**CCUT Cedar City 17.50 130** Pn **P** **04 17 54.2 0.0**
**SHPR Sheep Range 17.51 136** **P** **04 17 55.2 +1.0**
**G27K Doyon Strip 17.56 345** Pn **Pn** **04 17 52.5 -1.1**
G27K IAmb IAmb 04 18 12.6
comp=Z,14nm,1.5s
**G27K Doyon Strip 17.56 345** P **Pn** **04 17 53.3 -0.2**
baz=155
**SBC Santa Barbara 17.59 150** P **Pn** **04 17 54.3 +0.2**
baz=337
**F30M Barrier River 17.59 353** P **Pn** **04 17 54.4 +0.5**
baz=168
**Q16A Castle Valley 17.59 123** P **P** **04 17 55.7 +0.6**
**P18A Preston Nutter 17.60 120** Pn **Pn** **04 17 54.9 +0.4**
**SZCU Shurtz Canyon 17.60 130** Pn **Pn** **04 17 54.6 +0.1**
SZCU IAmb IAmb 04 18 00.4
comp=Z,21nm,1.5s
**FFC Flin Flon 17.63 65** Pn **Pn** **04 17 52.2 -2.2**
FFC IAmb IAmb 04 17 59.3
comp=Z,7.5nm,0.9s
**CAST Castle Rocks 17.67 326** **Pn** **04 17 55.0 +0.2**
**CAST Castle Rocks 17.67 326** P **Pn** **04 17 55.1 +0.2**
baz=128
**M19K Big River Lodg 17.70 320** **P** **04 17 56.9 +0.9**
M19K IAmb IAmb 04 18 00.5
comp=Z,15nm,1.2s
**M19K Big River Lodg 17.70 320** P **Pn** **04 17 55.0 -0.4**
baz=120
**MTPU Mount Pierson 17.71 127** Pn **P** **04 17 57.1 +0.5**
MTPU IAmb IAmb 04 18 09.0
comp=Z,14nm,1.5s
**BPAW Bear Paw Mtn. 17.73 329** **Pn** **04 17 54.5 -1.2**
BPAW IAmb IAmb 04 18 00.6
comp=Z,9.0nm,1.1s
**BPAW Bear Paw Mtn. 17.73 329** P **Pn** **04 17 54.8 -0.8**
baz=132,SNR=5.5
**EDW2 Edwards Air Fo 17.77 146** P **Pn** **04 17 56.8 +0.4**
baz=334
**N18K Kilae Creek 17.79 316** P **Pn** **04 17 55.9 -0.5**
baz=114
**L20K Farewell, AK 17.80 322** P **Pn** **04 17 56.8 +0.3**
baz=123
**SRU San Rafael Swe 17.81 121** Pn **Pn** **04 17 57.2 +0.3**
SRU IAmb IAmb 04 18 03.2
comp=Z,13nm,1.5s
**GSC Goldstone, Bar 17.85 142** P **P** **04 18 00.6 +2.7**
GSC IAmb IAmb 04 18 05.0
comp=Z,18nm,1.4s
**GSC Goldstone, Bar 17.85 142** P **Pn** **04 17 57.6 +0.1**
baz=331
**CHGN Chignik 17.86 301** P **Pn** **04 17 57.3 0.0**
baz=98
**K22A Casper 17.91 106** P **P** **04 17 59.9 +1.3**
**K22A Casper 17.91 106** P **Pn** **04 17 58.4 +0.2**
baz=303
**H25L Birch Creek 17.91 339** P **Pn** **04 17 58.2 +0.4**
baz=146,SNR=5.4
**I23K Minto, Yukon-K 17.95 333** Pn **Pn** **04 17 56.8 -1.5**
**I23K Minto, Yukon-K 17.95 333** P **Pn** **04 17 58.6 +0.2**
baz=137
**LCMT Little Creek M 17.99 131** P **P** **04 18 00.1 +0.7**
**F28M Old Crow 18.03 348** P **P** **04 18 00.2 +0.6**
baz=160
**FYU Fort Yukon 18.03 340** Pn **Pn** **04 17 57.4 -1.9**
**L19K White Mountain 18.03 321** **P** **04 18 00.9 +1.3**
L19K IAmb IAmb 04 18 04.5
comp=Z,18nm,1.2s
**L19K White Mountain 18.03 321** P **Pn** **04 17 59.6 +0.2**
baz=120,SNR=6.5
**CHUM Lake Minchumin 18.04 327** P **P** **04 18 00.0 +0.5**
baz=129
**G26K Porcupine Rive 18.07 343** P **P** **04 18 00.8 +0.9**
baz=151
**H24K Noodor Dome 18.07 336** P **P** **04 18 01.4 +1.4**
**H24K Noodor Dome 18.07 336** P **P** **04 18 00.9 +0.9**
baz=141
**TUQ Turquoise Moun 18.09 140** P **P** **04 18 01.6 +1.0**
baz=329,SNR=5.5
**PKCU Pink Cliffs 18.11 128** **P** **04 18 02.5 +1.5**
PKCU IAmb IAmb 04 18 17.0
comp=Z,21nm,1.5s
**M18K Stony River 18.11 318** P **Pn** **04 18 00.6 +0.3**
baz=117
**INK Inuvik 18.14 356** P **Pn** **04 18 00.3 -0.2**
baz=173
**KNB Kanab 18.19 130** P **P** **04 18 04.7 +3.0**
KNB IAmb IAmb 04 18 28.1
comp=Z,15nm,1.4s
**MLY Manley 18.28 332** **P** **04 18 01.7 -0.7**
**MLY Manley 18.28 332** P **Pn** **04 18 03.5 +1.1**
baz=134
**V12A Nelson 18.30 137** **Pn** **04 18 05.7 +2.8**
**N17K Nushagak Hills 18.32 314** P **P** **04 18 03.1 +0.3**
baz=112
**K20K Telida 18.35 324** P **Pn** **04 18 05.6 +2.3**
K20K IAmb IAmb 04 18 10.3
comp=Z,13nm,1.3s
**K20K Telida 18.35 324** P **Pn** **04 18 04.0 +0.7**
baz=124
**G25K Bearman Lake 18.39 340** P **Pn** **04 18 05.6 +1.9**
baz=146
**HEC Hector,Ludlow 18.45 142** P **Pn** **04 18 05.9 +1.2**
baz=331
**E29M Blow River 18.54 351** P **Pn** **04 18 05.7 +0.2**
baz=164
**HMU Henry Mountain 18.54 124** P **Pn** **04 18 07.5 +1.5**
**BMAR Burnt Mountain 18.64 342** **Pn** **04 18 07.8 +1.1**
**G24K Hadweenzic Riv 18.65 338** P **Pn** **04 18 07.0 +0.1**
baz=144
**RSSD Black Hills 18.71 99** P **Pn** **04 18 08.5 +0.6**
baz=298
**GMRC Granite Mounta 18.76 140** P **Pn** **04 18 09.8 +1.2**
baz=330
**M17K Holitna River 18.77 317** P **Pn** **04 18 10.0 +1.7**
**M17K Holitna River 18.77 317** P **Pn** **04 18 08.4 0.0**
baz=114
**F26K Sheenjek River 18.79 343** P **Pn** **04 18 08.9 +0.4**
baz=151,SNR=8.0
**L18K Granite Mounta 18.81 319** P **Pn** **04 18 09.7 +0.9**
L18K IAmb IAmb 04 18 14.7
comp=Z,17nm,1.2s
**L18K Granite Mounta 18.81 319** P **Pn** **04 18 09.1 +0.3**
baz=118
**E27K Coleen River 18.81 347** P **Pn** **04 18 09.2 +0.5**
baz=157
**J20K Nowinta River 18.86 327** P **Pn** **04 18 09.5 +0.2**
J20K IAmb IAmb 04 18 16.2
comp=Z,19nm,1.4s
**J20K Nowinta River 18.86 327** P **P** **04 18 09.1 +0.5**
baz=126
**U15A North Rim 18.91 130** P **Pn** **04 18 12.6 +2.0**
U15A IAmb IAmb 04 18 18.9
comp=Z,8.3nm,1.2s
**E28M Babbage River 18.93 349** **Pn** **04 18 10.0 -0.2**
**E28M Babbage River 18.93 349** P **Pn** **04 18 10.3 +0.2**
baz=161
**F25K Christian Rive 18.99 342** P **Pn** **04 18 11.5 +0.5**
baz=148
**H22K Ishtalitna Cre 19.08 333** P **P** **04 18 11.1 0.0**
baz=135
**MURC Murrieta 19.21 145** P **Pn** **04 18 13.6 -0.3**
baz=334
**W13A Hualapai Mount 19.25 136** P **Pn** **04 18 16.1 +1.5**
**J19K Poorman 19.29 325** P **Pn** **04 18 15.3 +0.8**
J19K IAmb IAmb 04 18 19.0
comp=Z,12nm,1.1s
**J19K Poorman 19.29 325** P **P** **04 18 13.8 +0.5**
baz=124
**G23K Bananza Creek 19.30 336** **Pn** **04 18 15.5 +0.8**
G23K IAmb IAmb 04 18 32.7
comp=Z,12nm,1.5s
**G23K Bananza Creek 19.30 336** P **Pn** **04 18 14.8 +0.1**
baz=139
**BELC Belle Mtn. Jos 19.31 142** P **Pn** **04 18 14.9 -0.2**
baz=332,SNR=11
**M16K Timber Creek 19.31 315** P **Pn** **04 18 15.5 +0.7**
**M16K Timber Creek 19.31 315** P **P** **04 18 13.9 +0.3**
baz=111
**I20K Naaghedeneel 19.34 328** P **P** **04 18 14.7 +0.8**
baz=127
**H21K Melozitna Rive 19.34 331** P **Pn** **04 18 16.1 +0.9**
H21K IAmb IAmb 04 18 20.1
comp=Z,12nm,1.2s
**H21K Melozitna Rive 19.34 331** P **P** **04 18 14.5 +0.6**
baz=132
**F24K Squaw Lake 19.41 339** P **Pn** **04 18 15.7 -0.4**
baz=144
**J18K Innoko River 19.42 323** P **Pn** **04 18 16.3 +0.2**
J18K IAmb IAmb 04 18 23.9
comp=Z,8.1nm,1.0s
**J18K Innoko River 19.42 323** P **P** **04 18 15.3 +0.6**
baz=121
**L17K Donlin 19.45 318** P **P** **04 18 15.8 +0.7**
baz=115
**PFO Pinyon Flats O 19.48 144** P **Pn** **04 18 19.6 +2.4**
PFO IAmb IAmb 04 18 21.3
comp=Z,17nm,1.4s
**PFO Pinyon Flats O 19.48 144** P **Pn** **04 18 18.9 +1.8**
comp=Z,0.1nm,0.3s,baz=324,slow=9.2,SNR=7.3
PFO LR LR 04 25 07.8
comp=Z,66nm,18.5s,baz=323,slow=35
comp=Z,3.1nm,1.1s
**PFO Pinyon Flats O 19.48 144** P **Pn** **04 18 17.4 +0.3**
baz=333
**TPFO Pinon Flats 19.48 144** P **Pn** **04 18 17.0 -0.2**
baz=333
**IRM Iron Mountain 19.52 140** P **P** **04 18 16.8 +0.7**
baz=330
**N15K Kwethluk River 19.57 312** P **P** **04 18 16.8 +0.4**
baz=107
**K17K Iditarod 19.70 320** P **Pn** **04 18 20.4 +0.9**
**K17K Iditarod 19.70 320** P **P** **04 18 18.4 +0.5**
baz=116
**COLD Coldfoot 19.74 337** P **P** **04 18 19.0 +0.8**
baz=140
**SMCO Snowmass 19.76 115** P **Pn** **04 18 21.1 +0.2**
SMCO IAmb IAmb 04 18 24.6
comp=Z,6.5nm,1.2s
**L16K Owhat River 19.79 316** P **P** **04 18 19.3 +0.5**
baz=112
**PDMCI Parker Dam,Lak 19.81 138** P **Pn** **04 18 20.6 -0.3**
baz=328
**BC3 Big Chuckawall 19.83 142** P **P** **04 18 20.4 +0.8**
baz=331,SNR=6.5
**G22K Bettles 19.85 335** P **P** **04 18 20.1 +0.6**
baz=137
**IMAR Indian Mountai 19.85 331** P **Pn** **04 18 21.7 +0.4**
**O14K Tigyukauivet M 19.90 309** P **P** **04 18 19.8 -0.2**
baz=103
**M15K Kasigluk River 20.00 313** P **P** **04 18 22.0 +0.8**
baz=108
**MONP2 Monument Peak 20.13 145** P **P** **04 18 23.9 +0.9**
baz=334
**G21K Allakaket 20.13 332** P Pn 04 18 24.8 +0.2
**G21K Allakaket 20.13 332** P **P** **04 18 23.8 +1.2**
baz=133
**E23K Chandalar 20.24 339** P **P** **04 18 24.5 +0.7**
baz=142,SNR=6.0
**MVCO Mesa Verde 20.28 122** P Pn 04 18 26.4 -0.3
MVCO IAmb IAmb 04 18 49.2
comp=Z,12nm,1.4s
**MVCO Mesa Verde 20.28 122** P **P** **04 18 25.9 +1.3**
baz=317,SNR=5.3
**SWSC Sam W. Stewart 20.32 143** P **P** **04 18 25.3 +0.6**
baz=333
**J17K VABM Dome 20.32 321** P Pn 04 18 26.4 -0.3
**J17K VABM Dome 20.32 321** P **P** **04 18 25.4 +0.9**
baz=117
**H19K Roundabout Mou 20.45 328** Pn 04 18 27.5 -0.7
**H19K Roundabout Mou 20.45 328** P **P** **04 18 27.1 +1.2**
baz=126
**F22K John River 20.46 336** P **P** **04 18 26.3 +0.3**
baz=137
**IKP In-Ko-Pah, Jac 20.46 144** P Pn 04 18 28.0 -0.8
baz=334
**YUH Yuha Desert 20.54 144** P Pn 04 18 30.4 +0.9
YUH IAmb IAmb 04 18 32.4
comp=Z,14nm,1.4s
**GLA Glamis 20.61 141** P **P** **04 18 29.4 +1.4**
baz=331
**F21K Alatna River 20.61 334** P **P** **04 18 27.7 0.0**
F21K IAmb IAmb 04 18 37.1
comp=Z,6.0nm,1.1s
**F21K Alatna River 20.61 334** P **P** **04 18 28.2 +0.4**
baz=134
**D25K Kavik River 20.62 344** P **P** **04 18 28.3 +0.5**
baz=150
**M14K Bethel 20.62 313** P **P** **04 18 27.9 +0.2**
baz=106
**Y14A Wickenburg 20.62 136** P Pn 04 18 31.0 +0.5
**L15K Ungalak Mounta 20.68 315** P **P** **04 18 29.3 +0.9**
baz=109
**TOLK Toolik Lake Re 20.69 340** P **P** **04 18 28.5 -0.1**
**TOLK Toolik Lake Re 20.69 340** P **P** **04 18 30.0 +1.3**
baz=143
**S22A 4UR Ranch, Cre 20.82 118** P Pn 04 18 32.8 -0.4
**S22A 4UR Ranch, Cre 20.82 118** P Pn 04 18 32.3 -0.8
baz=314,SNR=14
**E22K Anaktuvuk Pass 20.83 337** P **P** **04 18 29.9 -0.2**
baz=138
**C26K Camden Bay 20.89 346** P Pn 04 18 32.6 -0.7
baz=153
**J16K Anvik River 20.89 320** P **P** **04 18 31.5 +0.7**
**J16K Anvik River 20.89 320** P **P** **04 18 31.5 +0.7**
baz=114
**H18K Honhosa River 20.91 326** P **P** **04 18 31.1 +0.2**
H18K IAmb IAmb 04 18 37.3
comp=Z,9.7nm,1.1s
**H18K Honhosa River 20.91 326** P **P** **04 18 32.4 +1.5**
baz=122
**K15K Wolf Creek Mou 20.91 317** P **P** **04 18 31.2 +0.2**
baz=111
**X16A Lo Mia Camp, P 20.94 132** P Pn 04 18 34.6 +0.2
X16A IAmb IAmb 04 18 39.3
comp=Z,6.8nm,1.1s
**G19K Purcell Mounta 21.02 329** P **P** **04 18 32.9 +0.7**
G19K IAmb IAmb 04 18 38.7
comp=Z,7.4nm,1.0s
**G19K Purcell Mounta 21.02 329** P **P** **04 18 33.7 +1.6**
baz=126
**ESJX Sierra Juarez 21.10 145** P **P** **04 18 36.8 +3.4**
ESJX IAmb IAmb 04 18 39.6
comp=Z,11nm,1.4s
**L14K Kuka Creek 21.12 314** P **P** **04 18 33.2 0.0**
baz=107
**F20K Avaraart Lake 21.15 332** P **P** **04 18 34.9 +1.5**
baz=130
**I17K Unalakleet 21.18 321** P **P** **04 18 34.3 +0.4**
baz=116
**H17K Granite Mounta 21.37 324** P **P** **04 18 37.6 +1.8**
**H17K Granite Mounta 21.37 324** P **P** **04 18 36.2 +0.4**
baz=119
**G18K Tagagawik 21.41 327** P **P** **04 18 39.0 +2.6**
**G18K Tagagawik 21.41 327** P **P** **04 18 37.2 +0.9**
baz=123
**X18A Snowflake 21.58 129** P **P** **04 18 41.2 +2.6**
**F19K Shaleruckik Mo 21.65 330** P **P** **04 18 40.2 +1.3**
F19K IAmb IAmb 04 18 44.4
comp=Z,11nm,1.2s
**F19K Shaleruckik Mo 21.65 330** P **P** **04 18 39.8 +1.0**
baz=126
**ULM Lac du Bonnet 21.77 77** P **P** **04 18 41.6 +1.2**
**ULM Lac du Bonnet 21.77 77** P **P** **04 18 41.9 +1.5**
comp=Z,7.7nm,1.0s,baz=304,slow=14,SNR=4.8
ULM LR LR 04 27 13.7
comp=Z,223nm,21.2s,baz=262,slow=37
comp=Z,7.7nm,1.0s
**E19K Redstone River 21.86 332** P **P** **04 18 42.8 +1.6**
E19K IAmb IAmb 04 18 51.9
comp=Z,9.3nm,1.1s
**E19K Redstone River 21.86 332** P **P** **04 18 41.8 +0.6**
baz=129
**G17K Kiwalik Mounta 21.91 325** P **P** **04 18 41.3 -0.4**
baz=120
**E20K Nigu River 22.07 334** P **P** **04 18 43.5 0.0**
baz=132
**F18K Selawik 22.13 328** P **P** **04 18 43.6 -0.4**
baz=123
**K30B Basset 22.23 98** P **P** **04 18 45.1 -0.2**
**AGMN Agassiz Nation 22.32 82** P **P** **04 18 48.1 +1.9**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AGMN | | | | IAmb | IAmb | 04 18 59.2 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| C21K | Knifeblade Rid | 22.32 | 337 | P | P | 04 18 46.7 | +0.7 |
| | baz=135 | | | | | | |
| B21K | Ikpikpuk River | 22.61 | 338 | P | P | 04 18 49.4 | +0.2 |
| | baz=136 | | | | | | |
| T25A | Trinidad | 22.63 | 116 | P | P | 04 18 52.5 | +2.6 |
| T25A | | | | IAmb | IAmb | 04 18 59.6 | |
| | comp=Z,9.5nm,1.5s | | | | | | |
| T25A | Trinidad | 22.63 | 116 | P | P | 04 18 50.1 | +0.2 |
| | baz=314 | | | | | | |
| D19K | Kuna River | 22.77 | 333 | P | P | 04 18 52.7 | +1.8 |
| D19K | | | | IAmb | IAmb | 04 19 11.3 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| D19K | Kuna River | 22.77 | 333 | P | P | 04 18 50.4 | -0.6 |
| | baz=129 | | | | | | |
| F33A | 5 Mile Ranch, | 22.91 | 88 | P | P | 04 18 53.6 | +1.1 |
| F33A | | | | IAmb | IAmb | 04 18 59.8 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| G15K | Niukluk | 22.96 | 323 | P | P | 04 18 52.7 | -0.2 |
| | baz=114 | | | | | | |
| TUC | Tucson | 22.99 | 134 | P | P | 04 18 55.4 | +1.9 |
| TUC | | | | IAmb | IAmb | 04 18 57.9 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| TUC | Tucson | 22.99 | 134 | P | P | 04 18 53.9 | +0.3 |
| | baz=327 | | | | | | |
| ANMO | Albuquerque | 23.07 | 123 | P | P | 04 18 56.5 | +2.1 |
| ANMO | | | | IAmb | IAmb | 04 18 57.8 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| ANMO | Albuquerque | 23.07 | 123 | LR | LR | 04 27 59.4 | |
| | comp=Z,74nm,18.5s,baz=42,slow=37 | | | | | | |
| ANMO | Albuquerque | 23.07 | 123 | P | P | 04 18 54.0 | -0.4 |
| | baz=319 | | | | | | |
| B20K | Meade River | 23.52 | 337 | P | P | 04 18 58.4 | +0.2 |
| | baz=133 | | | | | | |
| ECSD | EROS Data Cent | 23.62 | 93 | P | P | 04 18 59.9 | +0.3 |
| | baz=298 | | | | | | |
| RTBA | Rita Blanca | 24.08 | 115 | P | P | 04 19 06.3 | +2.2 |
| RTBA | | | | IAmb | IAmb | 04 19 39.3 | |
| | comp=Z,7.1nm,1.3s | | | | | | |
| C17K | DeLong Mountai | 24.29 | 331 | P | P | 04 19 05.1 | -0.5 |
| | baz=122 | | | | | | |
| B18K | Kokolik River | 24.36 | 333 | P | P | 04 19 06.3 | +0.1 |
| | baz=126 | | | | | | |
| EYMN | Ely | 25.20 | 80 | P | P | 04 19 14.4 | +0.5 |
| | baz=290 | | | | | | |
| AMTX | Amarillo | 25.79 | 116 | P | P | 04 19 21.7 | +2.2 |
| AMTX | Amarillo | 25.79 | 116 | P | P | 04 19 19.8 | +0.3 |
| | baz=315 | | | | | | |
| MNTX | Cornudas Mount | 26.14 | 126 | P | P | 04 19 23.0 | +0.3 |
| | baz=322 | | | | | | |
| VHRN | Van Horn | 27.07 | 127 | P | P | 04 19 33.8 | +2.6 |
| WMOK | Wichita Mounta | 27.58 | 112 | P | P | 04 19 36.1 | +0.5 |
| | baz=314 | | | | | | |
| RES | Resolute Bay | 28.48 | 19 | LR | LR | 04 32 13.1 | |
| | comp=Z,60nm,19.9s,baz=10.0,slow=39 | | | | | | |
| TUL3 | Leonard | 28.60 | 107 | P | P | 04 19 44.3 | -0.3 |
| | baz=311 | | | | | | |
| TXAR | Lajitas Array | 28.92 | 126 | P | P | 04 19 50.1 | +2.5 |
| | comp=Z,0.5nm,0.9s,baz=327,slow=6.1,SNR=6.8 | | | | | | |
| TXAR | | | | LR | LR | 04 32 09.4 | |
| | comp=Z,137nm,18.2s,baz=318,slow=38 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| LPIG | La Paz | 30.35 | 142 | LR | LR | 04 32 52.2 | |
| | comp=Z,71nm,18.6s,baz=346,slow=38 | | | | | | |
| OXF | Oxford | 33.47 | 102 | P | P | 04 20 27.2 | -0.3 |
| | baz=311 | | | | | | |
| SHEM | Shemya Is, Ala | 34.06 | 296 | LR | LR | 04 31 58.4 | |
| | comp=Z,62nm,19.1s,baz=322,slow=32 | | | | | | |
| ACSO | Alum Creek Sta | 34.14 | 89 | P | P | 04 20 32.9 | -0.5 |
| | baz=303 | | | | | | |
| SADO | Sadowa | 34.29 | 79 | LR | LR | 04 35 03.9 | |
| | comp=Z,137nm,19.9s,baz=255,slow=37 | | | | | | |
| FRB | Frobisher Bay | 34.61 | 44 | LR | LR | 04 34 54.6 | |
| | comp=Z,101nm,19.1s,baz=220,slow=37 | | | | | | |
| TKL | Tuckaleechee C | 36.31 | 96 | LR | LR | 04 36 04.3 | |
| | comp=Z,265nm,18.1s,baz=313,slow=37 | | | | | | |
| SCHQ | Schefferville | 37.56 | 58 | LR | LR | 04 35 43.8 | |
| | comp=Z,109nm,21.1s,baz=230,slow=35 | | | | | | |
| SFJD | Kangerlussuaq | 41.28 | 36 | LR | LR | 04 39 03.9 | |
| | comp=Z,142nm,18.5s,baz=298,slow=37 | | | | | | |
| CMIG | Matias Romero | 43.52 | 127 | LR | LR | 04 41 42.8 | |
| | comp=Z,31nm,21.0s,baz=358,slow=38 | | | | | | |
| MA2 | Magadan | 43.77 | 314 | LR | LR | 04 39 06.3 | |
| | comp=Z,83nm,20.7s,baz=84,slow=35 | | | | | | |
| TEIG | Tepich | 44.57 | 117 | LR | LR | 04 43 08.8 | |
| | comp=Z,41nm,20.1s,baz=63,slow=39 | | | | | | |
| TIXI | Tiksi | 46.45 | 335 | LR | LR | 04 43 22.1 | |
| | comp=Z,49nm,18.1s,baz=14,slow=38 | | | | | | |
| APG | El Apazote | 47.58 | 123 | LR | LR | 04 44 09.2 | |
| | comp=Z,5.1nm,18.1s,baz=8.5,slow=38 | | | | | | |
| SPITS | Spitsbergen Ar | 50.16 | 9 | LR | LR | 04 44 10.9 | |
| | comp=Z,46nm,19.6s,baz=284,slow=36 | | | | | | |
| YAK | Yakutsk | 51.45 | 324 | LR | LR | 04 46 26.3 | |
| | comp=Z,95nm,18.2s,baz=17,slow=38 | | | | | | |
| BORG | Borgarnes | 52.80 | 31 | LR | LR | 04 45 20.4 | |
| | comp=Z,46nm,19.5s,baz=322,slow=36 | | | | | | |
| JTS | Las Juntas de | 54.47 | 121 | LR | LR | 04 49 12.3 | |
| | comp=Z,31nm,18.2s,baz=341,slow=39 | | | | | | |
| ASAJ | Asahikawa | 56.35 | 300 | LR | LR | 04 44 43.4 | |
| | comp=Z,30nm,21.0s,baz=134,slow=33 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 57.87 | 262 | T | T | 05 26 18.2 | |
| | baz=42,slow=75,SNR=126 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 57.87 | 262 | T | T | 05 26 18.6 | |
| | baz=42,slow=75,SNR=170 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 57.88 | 262 | T | T | 05 26 19.4 | |
| | baz=42,slow=75,SNR=135 | | | | | | |
| KLR | Kul'dur | 58.67 | 311 | LR | LR | 04 48 03.9 | |
| | comp=Z,60nm,20.8s,baz=8.0,slow=35 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 58.89 | 262 | T | T | 05 27 32.0 | |
| | baz=46,slow=74,SNR=14 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 58.90 | 262 | T | T | 05 27 32.3 | |
| | baz=46,slow=74,SNR=14 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 58.91 | 262 | T | T | 05 27 36.3 | |
| | baz=46,slow=74,SNR=10 | | | | | | |
| ARCES | ARCESS Array B | 59.14 | 10 | LR | LR | 04 48 54.6 | |
| | comp=Z,36nm,21.8s,baz=351,slow=36 | | | | | | |
| SJG | San Juan | 59.68 | 98 | LR | LR | 04 50 50.0 | |
| | comp=Z,27nm,19.2s,baz=16,slow=37 | | | | | | |
| MJAR | Matsushiro Arr | 63.91 | 296 | LR | LR | 04 48 21.3 | |
| | comp=Z,14nm,21.2s,baz=10.0,slow=32 | | | | | | |
| SDV | Santo Domingo | 63.93 | 109 | LR | LR | 04 56 23.3 | |
| | comp=Z,41nm,18.1s,baz=290,slow=40 | | | | | | |
| NOA | NORSAR Array B | 64.75 | 20 | LR | LR | 04 51 28.7 | |
| | comp=Z,34nm,20.5s,baz=340,slow=35 | | | | | | |
| ROSC | El Rosal | 64.94 | 115 | LR | LR | 04 57 32.4 | |
| | comp=Z,49nm,18.4s,baz=148,slow=40 | | | | | | |
| HFS | Hagfors | 66.09 | 19 | LR | LR | 04 52 42.8 | |
| | comp=Z,52nm,18.2s,baz=319,slow=35 | | | | | | |
| PCRV | Puerto La Cruz | 66.63 | 103 | LR | LR | 04 54 29.5 | |
| | comp=Z,38nm,20.0s,slow=37 | | | | | | |
| FINES | FINESS Array B | 66.98 | 12 | LR | LR | 04 53 42.0 | |
| | comp=Z,43nm,21.0s,baz=332,slow=36 | | | | | | |
| JCJ | Chichijima | 68.25 | 286 | LR | LR | 04 47 48.9 | |
| | comp=Z,22nm,21.4s,baz=324,slow=30 | | | | | | |
| PPT | Papeete | 69.72 | 200 | LR | LR | 04 48 16.5 | |
| | comp=Z,44nm,20.0s,baz=128,slow=30 | | | | | | |
| JNU | Nakatsue | 70.54 | 298 | LR | LR | 04 52 15.2 | |
| | comp=Z,22nm,21.8s,baz=28,slow=33 | | | | | | |
| ZALV | Zalesovo Beam | 72.05 | 339 | LR | LR | 04 58 42.9 | |
| | comp=Z,43nm,20.0s,baz=18,slow=37 | | | | | | |
| ARU | Arti | 73.39 | 355 | LR | LR | 04 58 59.6 | |
| | comp=Z,24nm,19.7s,baz=356,slow=37 | | | | | | |
| RAR | Rarotonga | 75.88 | 208 | LR | LR | 04 49 57.0 | |
| | comp=Z,34nm,19.4s,baz=251,slow=29 | | | | | | |
| GUMO | Guam | 76.51 | 275 | LR | LR | 04 52 03.6 | |
| | comp=Z,22nm,21.2s,baz=244,slow=30 | | | | | | |
| KURBB | Kurchatov Arra | 76.52 | 342 | P | P | 04 25 38.7 | +0.7 |
| | comp=Z,0.2nm,0.3s,baz=24,slow=5.7,SNR=5.8 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| VRAC | Vranov | 76.74 | 22 | LR | LR | 04 59 23.4 | |
| | comp=Z,44nm,19.6s,baz=331,slow=36 | | | | | | |
| DAVOX | Davos/Dischmat | 77.30 | 27 | LR | LR | 05 02 46.5 | |
| | comp=Z,56nm,18.0s,baz=317,slow=38 | | | | | | |
| AKASG | Malin Array Be | 77.84 | 13 | LR | LR | 04 59 49.0 | |
| | comp=Z,37nm,18.2s,baz=339,slow=36 | | | | | | |
| MDP | Montagnes des | 78.09 | 96 | LR | LR | 05 04 48.0 | |
| | comp=Z,25nm,18.8s,baz=284,slow=39 | | | | | | |
| ESDC | Sonseca Array | 78.70 | 39 | LR | LR | 04 59 21.0 | |
| | comp=Z,28nm,19.1s,baz=27,slow=35 | | | | | | |
| MKAR | Makanchi Array | 79.31 | 338 | P | P | 04 25 54.2 | +0.6 |
| | comp=Z,1.1nm,0.8s,baz=33,slow=4.6,SNR=6.5 | | | | | | |
| MKAR | | | | LR | LR | 05 04 06.6 | |
| | comp=Z,54nm,19.9s,baz=44,slow=38 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| MLR | Muntele Rosu | 82.35 | 17 | LR | LR | 05 02 32.3 | |
| | comp=Z,70nm,20.6s,baz=304,slow=36 | | | | | | |
| MDT | Midelt | 84.25 | 44 | LR | LR | 05 00 08.9 | |
| | comp=Z,22nm,18.5s,baz=251,slow=33 | | | | | | |
| LPAZ | La Paz | 85.68 | 122 | LR | LR | 05 09 47.7 | |
| | comp=Z,34nm,18.6s,baz=240,slow=39 | | | | | | |
| VAE | Valguarnera | 87.17 | 28 | LR | LR | 05 05 50.5 | |
| | comp=Z,34nm,18.4s,baz=319,slow=36 | | | | | | |
| GNI | Garni | 89.81 | 4 | LR | LR | 05 09 21.7 | |
| | comp=Z,15nm,22.0s,baz=328,slow=37 | | | | | | |
| BBTS | Babate | 93.17 | 63 | LR | LR | 05 06 29.4 | |
| | comp=Z,34nm,19.6s,baz=319,slow=34 | | | | | | |
| CMAR | Chiang Mai Arr | 99.05 | 313 | LR | LR | 05 13 47.8 | |
| | comp=Z,22nm,18.2s,baz=30,slow=36 | | | | | | |

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*IDC **01** 04:23:10.8±1.0, 64°.05N×24°.07E, h0km, mbtmp2.6/3, ML1.8/3, Error ellipse: s-maj=14.5km s-min=8.0km az=82.0*
*UPP **01** 04:23:11.7±0.6, 64°.13N×23°.65E, h0km, ML2.3*
*HEL **01** 04:23:11.4±0.1, 64°.10N×23°.74E, h0km, ML1.7, Explosion*
**ISC 01 04:23:10.0**±0.7**, 64°.04N**±0°.02×**23°.71E**±0°.02**, h0km, n44, σ1s.14**/73**, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OBF8 | Ulkokalla | 0.31 | 338 | PG | Pg | 04 23 16.0 | +0.1 |
| OBF8 | | | | SG | Sg | 04 23 19.8 | -0.1 |
| OBF0 | Syolatti, Pyha | 0.51 | 27 | PG | Pg | 04 23 19.7 | -0.1 |
| | baz=210 | | | | | | |
| OBF0 | | | | SG | Sg | 04 23 26.0 | -0.4 |
| OBF0 | | | | MSG | | 04 23 26.5 | |
| | comp=Z,13nm,0.2s | | | | | | |
| OUF | Merijarvi | 0.55 | 54 | PG | Pg | 04 23 20.3 | -0.2 |
| OUF | | | | SG | Sg | 04 23 27.7 | 0.0 |
| OUF | | | | MSG | | 04 23 28.0 | |
| | comp=Z,9.1nm,0.2s | | | | | | |
| OBF4 | Vikkela, Lumij | 0.98 | 37 | PG | Pg | 04 23 28.4 | -0.4 |
| OBF4 | | | | MSG | | 04 23 40.2 | |
| | comp=Z,5.0nm,0.2s | | | | | | |
| OBF4 | | | | SB | Sg | 04 23 40.9 | -0.6 |
| VAF | Ylistaro | 1.11 | 205 | PB | Pn | 04 23 32.9 | +0.2 |
| | baz=25 | | | | | | |
| VAF | | | | MSG | | 04 23 46.7 | |
| | comp=Z,8.5nm,0.2s | | | | | | |
| VAF | | | | SG | Sn | 04 23 48.0 | -0.6 |
| UMAU | Umeaa | 1.35 | 264 | P | Pb | 04 23 36.2 | +0.2 |
| UMAU | | | | S | Sn | 04 23 55.0 | +0.5 |
| UMAU | Umeaa | 1.35 | 264 | PB | Pn | 04 23 36.0 | +0.1 |
| | baz=83 | | | | | | |
| UMAU | | | | SB | Sb | 04 23 53.9 | +0.2 |
| ODEU | Stanfors | 1.36 | 287 | P | Pg | 04 23 36.0 | +0.1 |
| ODEU | | | | S | Sb | 04 23 54.7 | +0.6 |
| SJUU | Sjulsmark | 1.72 | 329 | P | Pn | 04 23 41.6 | +0.5 |
| SJUU | | | | S | Sb | 04 24 04.6 | -0.1 |
| SUF | Sumiainen | 1.73 | 139 | PG | Pg | 04 23 42.9 | -0.1 |
| | baz=320 | | | | | | |
| SUF | | | | MSG | | 04 24 03.8 | |
| | comp=Z,4.3nm,0.2s | | | | | | |
| SUF | | | | SN | Sg | 04 24 06.9 | +1.6 |
| KALU | Kalix | 1.83 | 355 | P | Pn | 04 23 43.4 | +0.8 |
| KALU | | | | S | Sn | 04 24 07.0 | +0.6 |
| KALU | Kalix | 1.83 | 355 | PN | Pn | 04 23 43.2 | +0.6 |
| | baz=171 | | | | | | |
| KALU | | | | SG | Sn | 04 24 07.0 | +0.6 |
| SVAU | Svanoeiden | 1.86 | 286 | P | Pb | 04 23 44.1 | -0.7 |
| SVAU | | | | S | Sb | 04 24 09.2 | +0.6 |
| NIF | Nilsia | 1.94 | 108 | PG | Pb | 04 23 45.9 | -0.3 |
| NIF | | | | SG | Sg | 04 24 11.9 | -0.3 |
| KEF | Keuruu | 1.96 | 164 | PG | Pg | 04 23 46.9 | -0.5 |
| KEF | | | | MSG | | 04 24 11.0 | |
| | comp=Z,4.9nm,0.2s | | | | | | |
| KEF | | | | SG | Sg | 04 24 13.2 | +0.5 |
| TOF | Tornio | 2.06 | 7 | PG | Pn | 04 23 47.0 | +1.2 |
| TOF | | | | MSG | | 04 24 11.0 | |
| | comp=Z,5.5nm,0.2s | | | | | | |
| TOF | | | | SG | Sn | 04 24 13.0 | +0.9 |
| LILU | Lilltraesk | 2.08 | 309 | P | Pn | 04 23 47.2 | +1.3 |
| HUSU | Husum | 2.12 | 253 | P | Pb | 04 23 49.2 | 0.0 |
| HUSU | | | | S | Sb | 04 24 17.0 | +1.0 |
| HUSU | Husum | 2.12 | 253 | PG | Pb | 04 23 49.3 | 0.0 |
| | baz=69 | | | | | | |
| HUSU | | | | SG | Sb | 04 24 16.8 | +0.8 |
| BREU | Bredtraesk | 2.27 | 268 | P | Pn | 04 23 50.1 | +1.4 |
| KAF | Kangasniemi | 2.27 | 147 | PG | Pb | 04 23 51.8 | +0.1 |
| KAF | | | | MSG | | 04 24 19.6 | |
| | comp=Z,5.1nm,0.2s | | | | | | |
| KAF | | | | SG | Sg | 04 24 21.8 | -1.0 |
| KPF | Kankaanpaa | 2.34 | 199 | PB | Pb | 04 23 52.9 | -0.1 |
| KPF | | | | SB | Sb | 04 24 23.1 | +0.8 |
| RANF | Ranua | 2.37 | 32 | PB | Pn | 04 23 50.8 | +0.7 |
| RANF | | | | SB | Sn | 04 24 20.3 | +0.5 |
| HARU | Harads | 2.42 | 333 | P | Pn | 04 23 52.2 | +1.4 |
| RMF | Romuvaara | 2.73 | 84 | PB | Pb | 04 23 58.3 | -1.4 |
| RMF | | | | MSG | | 04 24 31.5 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| RMF | | | | SG | Sb | 04 24 33.9 | +0.2 |
| RNF | Rovaniemi | 2.75 | 20 | PN | Pn | 04 23 56.5 | +1.2 |
| RNF | | | | SB | Sn | 04 24 29.9 | +0.7 |
| FIA0 | FINESS Array S | 2.83 | 156 | PB | Pb | 04 24 00.2 | -1.1 |
| | baz=344 | | | | | | |
| FIA0 | | | | MSG | | 04 24 35.9 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| FIA0 | | | | SB | Sb | 04 24 36.2 | -0.2 |
| FINES | FINESS Array B | 2.83 | 156 | Pn | Pb | 04 23 59.8 | -1.4 |
| | comp=Z,0.4nm,0.3s,baz=344,slow=16,SNR=14 | | | | | | |
| FINES | | | | Lg | Lg | 04 24 35.8 | |
| | comp=Z,1.0nm,0.3s,baz=343,slow=26,SNR=16 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| HEMU | Hemsoen | 2.90 | 244 | PN | Pn | 04 23 59.1 | +1.8 |
| | baz=55 | | | | | | |
| HEMU | | | | SN | Sb | 04 24 35.8 | -2.7 |
| MSF | Maaselka | 2.94 | 48 | SN | Sn | 04 24 35.0 | +1.1 |
| RAF | Rauma | 3.16 | 197 | SG | Sb | 04 24 48.0 | +2.0 |
| KLF | Kolari | 3.21 | 2 | PB | Pn | 04 24 03.8 | +2.3 |
| | baz=185 | | | | | | |
| KLF | | | | SG | Sb | 04 24 46.5 | -0.8 |
| KU6 | Riekki | 3.29 | 50 | PN | Pn | 04 24 03.8 | +1.1 |
| | baz=232 | | | | | | |
| OLKF | Oulanka, Finla | 3.31 | 44 | PN | Pn | 04 24 04.2 | +1.1 |
| OLKF | | | | SN | Sn | 04 24 43.9 | +0.9 |
| JOF | Joensuu | 3.59 | 105 | PN | Pn | 04 24 08.8 | +1.9 |
| MEF | Metsahovi | 3.85 | 175 | SG | Sg | 04 25 12.4 | -1.2 |
| VJF | Virojoki | 3.95 | 151 | SG | Sg | 04 25 16.0 | -0.7 |
| AAL | Aland | 4.25 | 206 | SG | Sg | 04 25 24.8 | -1.6 |
| HEF | Hetta | 4.38 | 360 | PG | Pb | 04 24 27.5 | -0.2 |
| VRF | Varrio | 4.44 | 30 | PN | Pn | 04 24 18.6 | +0.2 |
| VRF | | | | SN | Sn | 04 25 08.7 | -2.0 |
| RAJF | Raja-Jooseppi | 4.82 | 21 | SN | Sn | 04 25 18.9 | -1.3 |
| I37NO | I37NO | 5.45 | 340 | I | I | 04 54 35.1 | |
| | baz=158,slow=325,SNR=1.8 | | | | | | |
| ARCES | ARCESS Array B | 5.56 | 7 | Pn | Pn | 04 24 33.7 | -0.2 |
| | comp=Z,0.1nm,0.3s,baz=182,slow=17,SNR=7.7 | | | | | | |
| ARCES | | | | Sn | Sn | 04 25 33.4 | -5.0 |
| | comp=Z,0.1nm,0.3s,baz=181,slow=21,SNR=1.9 | | | | | | |
| ARCES | | | | Lg | Lg | 04 25 58.8 | |
| | comp=Z,0.1nm,0.3s,baz=185,slow=32,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| HFS | Hagfors | 6.12 | 235 | Pn | Pn | 04 24 40.9 | -0.7 |
| | comp=Z,0.1nm,0.3s,baz=42,slow=18,SNR=1.8 | | | | | | |
| HFS | | | | Sn | Sn | 04 25 51.8 | -0.4 |
| | comp=Z,0.2nm,0.3s,baz=50,slow=25,SNR=4.6 | | | | | | |
| HFS | | | | Lg | Lg | 04 26 21.4 | |
| | comp=Z,0.1nm,0.3s,baz=52,slow=26,SNR=3.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |

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*GCG **01** 04:32:26.1±0.3, 13°.48N×91°.42W, h14km±17km, MD3.4*
*CATAC **01** 04:32:29.1±0.7, 13°.78N×91°.22W, h8km±7km, ML3.5*
**ISC 01 04:32:31.5**±2.8**, 13°.8N**±0°.1×**91°.27W**±0°.09**, h34km**±4km**, n21, σ0s.56**/31**, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SULM | Suchitepequez, | 0.56 | 330 | eP | Pn | 04 32 43.9 | +0.9 |
| FUG | Fuego 3 | 0.75 | 34 | eP | Pb | 04 32 46.4 | 0.0 |
| RTAL | Retalhuleu | 0.81 | 330 | iP | Pn | 04 32 45.4 | -1.1 |
| RTAL | | | | iS | Sn | 04 32 57.0 | -0.4 |
| RTAL | | | | IAML | | 04 33 01.5 | |
| | comp=Z,350nm,1.0s | | | | | | |
| PCG | Pacaya | 0.86 | 49 | eP | Pb | 04 32 48.1 | -0.1 |
| STG3 | Santiaguito 3, | 0.93 | 342 | eP | Pn | 04 32 48.4 | +0.1 |
| CHTG | Tecpan | 0.98 | 17 | iP | Pn | 04 32 48.4 | -0.7 |
| CHTG | | | | iS | Sb | 04 33 03.1 | +0.1 |
| CHTG | | | | IAML | | 04 33 05.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| SOKI | Kika Raxquin | 1.00 | 353 | iP | Pn | 04 32 49.2 | -0.4 |
| SOKI | | | | iS | Sn | 04 33 02.7 | 0.0 |
| SOKI | | | | IAML | | 04 33 08.8 | |
| | comp=Z,320nm,1.0s | | | | | | |
| NBG | Las Nubes | 1.18 | 50 | eP | Pb | 04 32 53.3 | -0.3 |
| NUBE | Las Nubes | 1.45 | 87 | iP | Pn | 04 32 54.5 | -1.0 |
| NUBE | | | | iS | Sn | 04 33 13.0 | -0.4 |
| NUBE | | | | IAML | | 04 33 14.7 | |
| | comp=Z,610nm,1.0s | | | | | | |
| QUIS | Sacapulas | 1.47 | 7 | iP | Pn | 04 32 56.5 | +0.7 |
| QUIS | | | | IAML | | 04 32 57.1 | |
| | comp=Z,630nm,1.0s | | | | | | |
| QUIS | | | | iS | Sb | 04 33 17.1 | +0.2 |
| CEVE | Cerro Verde | 1.60 | 90 | iP | Pn | 04 32 57.3 | -0.3 |
| CEVE | | | | iS | Sn | 04 33 18.1 | +0.8 |
| CEVE | | | | IAML | | 04 33 20.1 | |
| | comp=Z,1μm,1.0s | | | | | | |
| JAYA | Jayaque - finc | 1.78 | 95 | iP | Pn | 04 32 59.2 | -0.8 |
| JAYA | | | | iS | Sn | 04 33 21.2 | -0.3 |
| JAYA | | | | IAML | | 04 33 23.5 | |
| | comp=Z,2μm,1.0s | | | | | | |
| PMON | Piamonte | 1.91 | 93 | iS | Pn | 04 33 01.2 | -0.5 |
| LALI | Alcalda de L | 1.93 | 100 | iP | Pn | 04 33 01.6 | -0.3 |
| LALI | | | | iS | Sn | 04 33 25.4 | +0.5 |
| LALI | | | | IAML | | 04 33 27.1 | |
| | comp=Z,93nm,1.0s | | | | | | |
| PANCS | Alcalda de | 2.04 | 96 | iP | Pn | 04 33 03.4 | -0.2 |
| PANCS | | | | iS | Sn | 04 33 28.1 | +0.2 |
| PANCS | | | | IAML | | 04 33 30.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| LOMA | Loma Larga | 2.05 | 95 | iP | Pn | 04 33 03.6 | -0.1 |
| LOMA | | | | iS | Sn | 04 33 29.0 | +0.8 |
| LOMA | | | | IAML | | 04 33 34.5 | |
| | comp=Z,270nm,1.0s | | | | | | |
| COEG | Centro de Oper | 2.33 | 95 | iP | Pn | 04 33 07.9 | +0.3 |
| COEG | | | | IAML | | 04 33 08.7 | |
| | comp=Z,110nm,1.0s | | | | | | |
| TECO | Alcaldia de Te | 2.44 | 96 | iP | Pn | 04 33 08.8 | -0.1 |
| TECO | | | | IAML | | 04 33 44.5 | |
| | comp=Z,110nm,1.0s | | | | | | |
| SCLA | Alcaldia de Sa | 2.47 | 92 | iP | Pn | 04 33 09.5 | 0.0 |
| PACA | Pacayal | 2.89 | 97 | iP | Pn | 04 33 16.0 | +0.8 |
| PACA | | | | IAML | | 04 33 56.3 | |
| | comp=Z,380nm,1.0s | | | | | | |
| CNCH | Conchagua | 3.39 | 99 | iP | Pn | 04 33 21.8 | -0.3 |

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*NOU **01** 04:38:15.0, 30°.25S×175°.38W, h425km, mb4.4/7, Kermadec Islands Region*
*IDC **01** 04:38:19.7±1.2, 29°.11S×179°.10W, h336km±11km, mb3.2/6, mbtmp4.1/7, Error ellipse: s-maj=20.0km s-min=16.7km az=131.0*
**ISC 01 04:38:20.0**±0.7**, 29°.40S**±0°.07×**178°.9W**±0°.1**, h350km, n92, σ2s.05**/122**, mb3.5**/6**, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RIZ | Raoul Island | 0.86 | 80 | P | Pn | 04 39 03.8 | -1.4 |
| RIZ | | | | S | S | 04 39 35.9 | -5.6 |
| GLKZ | Green Lake | 0.86 | 81 | P | Pn | 04 39 03.5 | -1.7 |
| GLKZ | | | | S | S | 04 39 40.5 | -1.0 |
| RAO | Raoul Island | 0.87 | 80 | P | Pn | 04 39 04.4 | -0.9 |
| | 818nm,0.2s,baz=92,slow=12,SNR=12 | | | | | | |
| RAO | | | | S | S | 04 39 33.0 | -8.6 |
| | 680nm,0.3s,baz=79,slow=20,SNR=2.3 | | | | | | |
| MXZ | Matakaoa Point | 8.46 | 195 | P | Pn | 04 40 22.4 | +2.9 |
| MXZ | Matakaoa Point | 8.46 | 195 | P | Pn | 04 40 21.8 | +2.3 |
| MXZ | | | | S | S | 04 41 55.3 | -1.9 |
| OUZ | Omahuta | 8.60 | 226 | P | P | 04 40 24.2 | +0.5 |
| WCZ | Waipu Caves | 8.65 | 219 | P | P | 04 40 25.3 | +1.0 |
| HAZ | Te Kaha | 8.78 | 198 | P | Pn | 04 40 22.3 | -0.9 |
| HAZ | | | | S | S | 04 42 02.9 | -1.1 |
| PUZ | Puketiti | 8.96 | 195 | P | Pn | 04 40 26.4 | +0.9 |
| PUZ | | | | S | S | 04 42 04.8 | -3.3 |
| URZ | Urewera | 9.43 | 200 | P | Pn | 04 40 32.4 | +1.3 |
| URZ | Urewera | 9.43 | 200 | P | Pn | 04 40 33.2 | +2.2 |
| | 19nm,0.3s,baz=348,slow=4.2,SNR=52 | | | | | | |
| URZ | | | | S | S | 04 42 17.5 | -0.9 |
| | 19nm,0.3s,baz=346,slow=21,SNR=18 | | | | | | |
| KMRZ | Kaimai | 9.45 | 206 | P | P | 04 40 37.0 | +3.8 |
| RAGZ | Rawiri | 9.57 | 198 | P | Pn | 04 40 34.6 | +1.8 |
| RAGZ | | | | S | S | 04 42 20.3 | -1.2 |
| MUGZ | Murupara | 9.74 | 201 | P | Pn | 04 40 35.9 | +1.2 |
| MUGZ | | | | S | S | 04 42 23.6 | -1.5 |
| HRRZ | Handcock Road | 9.81 | 203 | P | P | 04 40 39.2 | +1.9 |
| SNGZ | Shannon Statio | 9.86 | 197 | P | Pn | 04 40 37.7 | +1.5 |
| SNGZ | | | | S | S | 04 42 26.2 | -1.6 |
| PRGZ | Paritu Road | 9.86 | 195 | P | Pn | 04 40 39.1 | +2.9 |
| PRGZ | | | | S | S | 04 42 25.9 | -2.0 |
| ALRZ | Allen Road | 9.95 | 202 | P | Pn | 04 40 39.1 | +1.9 |
| KNZ | Kokohu | 10.00 | 196 | P | Pn | 04 40 38.4 | +0.6 |
| KNZ | | | | S | S | 04 42 30.1 | -0.8 |
| TLZ | Tolley Road | 10.03 | 206 | P | P | 04 40 42.7 | +3.0 |
| RAHZ | Arahi | 10.05 | 198 | P | Pn | 04 40 39.5 | +1.0 |
| RAHZ | | | | S | S | 04 42 31.4 | -0.7 |
| MTHZ | Maungataniwha | 10.06 | 199 | P | Pn | 04 40 40.1 | +1.5 |
| MTHZ | | | | S | S | 04 42 29.9 | -2.5 |
| MHGZ | Mahia Peninsul | 10.08 | 194 | P | P | 04 40 42.7 | +2.5 |
| MHGZ | | | | S | S | 04 42 31.3 | -1.2 |
| WHHZ | Waihua | 10.16 | 197 | P | Pn | 04 40 41.7 | +1.9 |
| WHHZ | | | | S | S | 04 42 33.1 | -1.4 |
| NMHZ | Naumai | 10.30 | 199 | P | Pn | 04 40 42.6 | +1.1 |
| NMHZ | | | | S | S | 04 42 36.4 | -1.1 |
| ARHZ | Aropaoanui | 10.40 | 198 | P | Pn | 04 40 43.4 | +0.8 |
| ARHZ | | | | S | S | 04 42 36.5 | -3.2 |
| RATZ | Rangitukua | 10.42 | 204 | P | Pn | 04 40 45.2 | +2.4 |
| BKZ | Black Stump Fm | 10.46 | 200 | P | Pn | 04 40 43.2 | -0.1 |
| BKZ | Black Stump Fm | 10.46 | 200 | P | Pn | 04 40 43.9 | +0.6 |
| BKZ | | | | S | S | 04 42 36.5 | -4.4 |
| HIZ | Hauiti | 10.46 | 208 | P | P | 04 40 49.0 | +4.6 |
| KATZ | Kakaramea | 10.54 | 204 | P | P | 04 40 47.3 | +1.8 |
| NTVZ | North Tongarir | 10.66 | 203 | P | Pn | 04 40 47.6 | +1.8 |
| TMVZ | Te Maari | 10.66 | 203 | P | Pn | 04 40 47.6 | +1.7 |
| TMVZ | | | | S | S | 04 42 44.4 | -1.3 |
| KRVZ | Karewarewa | 10.67 | 204 | P | Pn | 04 40 47.5 | +1.6 |
| ETVZ | East Tongariro | 10.68 | 203 | P | Pn | 04 40 47.7 | +1.6 |
| ETVZ | | | | S | S | 04 42 44.8 | -1.3 |
| WTVZ | West Tongariro | 10.70 | 204 | P | Pn | 04 40 47.9 | +1.6 |
| NNVZ | North Ngauruho | 10.71 | 204 | P | Pn | 04 40 48.0 | +1.6 |
| NNVZ | | | | S | S | 04 42 46.2 | -0.5 |
| KWHZ | Kaweka Forest | 10.71 | 200 | P | Pn | 04 40 47.1 | +0.7 |
| KWHZ | | | | S | S | 04 42 43.6 | -3.0 |
| TWVZ | Taurewa | 10.72 | 204 | P | Pn | 04 40 46.9 | +0.4 |
| OTVZ | Oturere | 10.72 | 203 | P | Pn | 04 40 43.8 | -2.8 |
| SNVZ | South Ngauruho | 10.75 | 203 | P | Pn | 04 40 48.2 | +1.2 |
| SNVZ | | | | S | S | 04 42 49.3 | +1.7 |
| NGZ | Ngauruhoe | 10.75 | 204 | P | Pn | 04 40 48.7 | +1.8 |
| FWVZ | Far West T-bar | 10.84 | 204 | P | Pn | 04 40 47.9 | -0.2 |
| WHVZ | Whangaehu Hut | 10.85 | 203 | P | Pn | 04 40 47.9 | -0.4 |
| TRVZ | Turoa | 10.88 | 203 | P | Pn | 04 40 49.2 | +0.6 |
| WNVZ | Wahianoa | 10.89 | 203 | P | Pn | 04 40 48.1 | -0.5 |
| WNVZ | | | | S | S | 04 42 50.9 | +0.1 |
| MOVZ | Moawhango | 10.91 | 202 | P | Pn | 04 40 48.7 | 0.0 |
| MOVZ | | | | S | S | 04 42 46.7 | -4.4 |
| KAHZ | Kahuranaki | 10.93 | 197 | P | Pn | 04 40 49.4 | +0.4 |
| KAHZ | | | | S | S | 04 42 49.2 | -2.3 |
| KRHZ | Kereru | 10.93 | 200 | P | Pn | 04 40 47.9 | -1.1 |
| KRHZ | | | | S | S | 04 42 48.3 | -3.2 |
| PKVZ | Pokaka | 10.95 | 204 | P | Pn | 04 40 50.1 | +0.9 |
| VRZ | Vera Road | 11.02 | 207 | P | P | 04 40 52.7 | +2.1 |
| PXZ | Pawanui | 11.16 | 197 | P | Pn | 04 40 51.4 | -0.2 |
| PXZ | | | | S | S | 04 42 50.6 | -5.7 |
| PNHZ | Pukenui | 11.23 | 200 | P | Pn | 04 40 51.1 | -1.5 |
| PNHZ | | | | S | S | 04 42 53.9 | -4.2 |
| PKE | Pukeiti | 11.40 | 209 | P | P | 04 40 58.3 | +3.4 |
| NEZ | North Egmont | 11.41 | 209 | P | P | 04 40 59.4 | +4.3 |
| TSZ | Takapari Road | 11.44 | 200 | P | Pn | 04 40 53.7 | -1.2 |
| TSZ | | | | S | S | 04 42 56.0 | -6.7 |
| PRHZ | Porangahau | 11.44 | 197 | P | Pn | 04 40 54.2 | -0.7 |
| PRHZ | | | | S | S | 04 42 59.2 | -3.5 |
| KHEZ | Kahui Hut | 11.47 | 209 | P | P | 04 41 00.3 | +4.6 |
| | 220nm,1.3s | | | | | | |
| ANWZ | Angora Road | 11.66 | 198 | P | P | 04 40 58.4 | +0.7 |
| ANWZ | | | | S | S | 04 43 02.8 | -4.7 |
| PRWZ | Pori Road | 11.89 | 199 | P | P | 04 41 00.4 | +0.2 |
| PRWZ | | | | S | S | 04 43 05.4 | -7.1 |
| BFZ | Birch Farm | 11.93 | 198 | P | P | 04 40 53.2 | -7.6 |
| BFZ | | | | S | S | 04 43 06.6 | -6.9 |
| MRZ | Mangatainoka R | 12.10 | 200 | P | P | 04 41 01.5 | -1.1 |
| MRZ | | | | S | S | 04 43 11.9 | -5.2 |
| HOWZ | Holdsworth Sta | 12.34 | 200 | P | P | 04 41 04.9 | -0.4 |
| HOWZ | | | | S | S | 04 43 16.1 | -6.0 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OGWZ | Otaki Gorge | 12.37 | 201 | P | P | 04 41 04.1 | -1.5 |
| OGWZ | | | | S | S | 04 43 17.8 | -5.0 |
| TMWZ | Te Maipa | 12.43 | 199 | P | P | 04 41 06.2 | 0.0 |
| TMWZ | | | | S | S | 04 43 17.7 | -6.1 |
| KIW | Kapiti Island | 12.50 | 202 | P | P | 04 41 06.3 | -0.7 |
| KIW | | | | S | S | 04 43 20.0 | -5.3 |
| MTW | Mount Morrison | 12.58 | 200 | P | P | 04 41 08.0 | 0.0 |
| MTW | | | | S | S | 04 43 20.3 | -6.7 |
| CAW | Cannon Point | 12.67 | 201 | P | P | 04 41 07.7 | -1.2 |
| CAW | | | | S | S | 04 43 23.5 | -5.2 |
| TRWZ | Traveller | 12.75 | 199 | P | P | 04 41 10.7 | +0.9 |
| TRWZ | | | | S | S | 04 43 25.7 | -4.8 |
| DUWZ | D'Urville Isla | 12.79 | 205 | P | P | 04 41 08.9 | -1.4 |
| DUWZ | | | | S | S | 04 43 27.2 | -4.1 |
| MSWZ | Moikau Station | 12.89 | 200 | P | P | 04 41 10.5 | -0.8 |
| MSWZ | | | | S | S | 04 43 26.1 | -7.2 |
| SNZO | South Karori | 12.97 | 202 | P | P | 04 41 11.8 | -0.4 |
| | 28nm,1.2s | | | | | | |
| TUWZ | Tuamarina | 13.34 | 204 | P | P | 04 41 16.3 | +0.1 |
| TUWZ | | | | S | S | 04 43 32.7 | -10 |
| NNZ | Nelson | 13.36 | 206 | P | P | 04 41 14.2 | -2.3 |
| NNZ | | | | S | S | 04 43 41.2 | -1.5 |
| KHZ | Kahutara | 14.35 | 203 | P | P | 04 41 28.1 | +0.8 |
| DZM | Mont Dzumac | 15.09 | 296 | P | Pn | 04 41 37.1 | -0.9 |
| | 8.4nm,0.5s,baz=135,slow=17,SNR=14 | | | | | | |
| STKA | Stephens Creek | 33.96 | 256 | P | P | 04 44 32.5 | +0.8 |
| | 1.4nm,0.5s,baz=90,slow=10,SNR=3.7 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| ASAR | Alice Springs | 42.39 | 266 | P | P | 04 45 41.3 | -0.3 |
| | 0.7nm,0.6s,baz=100,slow=6.7,SNR=15 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 43.29 | 272 | P | P | 04 45 47.7 | -1.0 |
| | 0.6nm,0.4s,baz=109,slow=7.8,SNR=11 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| QSPA | South Pole Qui | 60.70 | 180 | P | P | 04 47 59.3 | +4.1 |
| | 0.6nm,0.5s,baz=100,slow=6.1,SNR=9.4 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| KSRS | Korea Array | 83.09 | 320 | P | P | 04 50 07.3 | +0.3 |
| | 0.6nm,0.4s,baz=141,slow=6.0,SNR=4.3 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| NVAR | Mina Array Bea | 88.04 | 43 | P | P | 04 50 32.8 | +1.3 |
| | 1.0nm,0.7s,baz=225,slow=9.4,SNR=9.9 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 119.84 | 314 | PKP | PKiKP | 04 56 28.1 | -0.6 |
| | 0.6nm,0.5s,baz=111,slow=2.2,SNR=7.6 | | | | | | |
| ARCES | ARCESS Array B | 137.45 | 348 | PKP | PKPdf | 04 56 59.8 | -1.7 |
| | 1.2nm,0.8s,baz=64,slow=2.1,SNR=5.8 | | | | | | |
| FINES | FINESS Array B | 143.95 | 340 | PKP | PKPbc | 04 57 11.3 | -0.9 |
| | 3.9nm,0.5s,baz=55,slow=4.2,SNR=38 | | | | | | |
| NB2 | NORSAR Subarra | 147.65 | 351 | PKP | PKPbc | 04 57 22.2 | -0.8 |
| | comp=Z,2.5nm,0.6s,baz=12,slow=2.9 | | | | | | |
| NOA | NORSAR Array B | 147.65 | 351 | PKPbc | PKPbc | 04 57 22.6 | -0.4 |
| | comp=Z,2.8nm,0.7s,baz=15,slow=4.3,SNR=12 | | | | | | |
| HFS | Hagfors | 148.12 | 348 | PKPbc | PKPbc | 04 57 23.6 | -0.6 |
| | comp=Z,2.3nm,0.5s,baz=14,slow=3.1,SNR=16 | | | | | | |
| AKASG | Malin Array Be | 150.04 | 323 | PKPbc | PKiKP | 04 57 29.0 | -0.9 |
| | comp=Z,3.1nm,0.5s,baz=48,slow=2.7,SNR=10 | | | | | | |
| MMAI | Mount Meron Ar | 150.52 | 286 | PKPbc | PKiKP | 04 57 32.6 | +1.0 |
| | comp=Z,4.2nm,0.5s,baz=61,slow=5.8,SNR=7.6 | | | | | | |
| BRTR | Keskin Array B | 151.44 | 300 | PKPbc | PKiKP | 04 57 32.4 | -1.0 |
| | comp=Z,0.5nm,0.4s,baz=135,slow=2.6,SNR=4.5 | | | | | | |
| TORD | Torodi Ar. Bea | 163.81 | 182 | PKPab | PKPab | 04 58 38.3 | +1.8 |
| | comp=Z,0.3nm,0.4s,baz=199,slow=3.3,SNR=8.1 | | | | | | |

**IDC 01 05:35:19.7**±29.0**, 9.̊16S**×**154.̊71E, h0**km**, mb3.6**/3**, mbtmp3.6**/3**, MS3.3**/1**, Error ellipse: s-maj=483.3km s-min=96.6km az=31.0, D'Entrecasteaux Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 17.08 | 140 | LR | LR | 05 45 06.9 | |
| | comp=Z,107nm,19.0s,baz=22,slow=34 | | | | | | |
| WRA | Warramunga Arr | 22.41 | 239 | P | P | 05 40 19.9 | -0.3 |
| | 0.8nm,0.9s,baz=65,slow=10,SNR=5.1 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| ASAR | Alice Springs | 24.57 | 232 | P | P | 05 40 41.9 | +0.2 |
| | 0.4nm,0.4s,baz=69,slow=7.9,SNR=5.6 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| STKA | Stephens Creek | 25.67 | 206 | P | P | 05 40 51.5 | 0.0 |
| | 3.1nm,0.8s,baz=22,slow=11,SNR=5.1 | | | | | | |
| | 3.1nm,0.8s | | | | | | |

**IDC 01 06:00:07.9**±3.1**, 54.̊18N**×**86.̊50E, h0**km**, mbtmp3.0**/2**, ML2.6**/2**, Error ellipse: s-maj=24.2km s-min=13.8km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.02 | 258 | I | I | 06 06 40.0 | |
| | baz=79,slow=317,SNR=4.8 | | | | | | |
| ZALV | Zalesovo Beam | 1.02 | 258 | Pg | Pg | 06 00 26.1 | -1.2 |
| | 0.8nm,0.3s,baz=77,slow=17,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 06 00 41.8 | |
| | 2.3nm,0.3s,baz=80,slow=28,SNR=7.1 | | | | | | |
| KURBB | Kurchatov Arra | 6.04 | 237 | Pn | Pn | 06 01 38.8 | +0.4 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=1.2 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 7.86 | 202 | Pn | Pn | 06 02 04.4 | +0.9 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=5.4 | | | | | | |
| MKAR | | | | Sn | Sn | 06 03 35.1 | +2.0 |
| | 0.1nm,0.3s,baz=23,slow=24,SNR=2.5 | | | | | | |
| | 0.2nm,0.2s | | | | | | |

*SJA **01** 06:19:00.5±0.7, 31.̊35S×72.̊42W, h12km±2km, ML4.4, MW4.2*
*IDC **01** 06:19:03.5±0.5, 31.̊40S×71.̊84W, h0km, mb4.6/13, mbtmp4.5/19, ML4.4/6, MS3.8/25, Error ellipse: s-maj=21.1km s-min=12.8km az=88.0*
*NEIC **01** 06:19:05.3±1.1, 31.̊37S±0.̊04×72.̊08W±0.̊06, h10km±1km, mb4.9/185, ML4.7(GUC), Error ellipse: s-maj=8.3km s-min=6.6km az=293.0*
*GUC **01** 06:19:06.1±0.7, 31.̊43S×72.̊02W, h25km±4km, ML4.7*
*VAO **01** 06:19:24.5±0.7, 31.̊01S×71.̊14W, h145km, mb4.4*
**ISC 01 06:19:05.0**±1.3**, 31.̊40S**±0.̊02×**72.̊03W**±0.̊04**, h12**km±8km**, n283, σ1.̊32**/241**, mb4.9**/97**, MS3.9**/20**, 18C-3D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CO06 | Fray Jorge | 0.79 | 25 | | Pn | 06 19 22.2 | +0.2 |
| CO06 | Fray Jorge | 0.79 | 25 | ⇑iP | Pn | 06 19 22.2 | +0.2 |
| CO06 | | | | iS | Sn | 06 19 32.7 | -1.1 |
| CO02 | Combarbal | 0.90 | 78 | Pg | Pn | 06 19 23.5 | 0.0 |
| CO02 | Combarbal | 0.90 | 78 | iP | Pn | 06 19 23.6 | 0.0 |
| CO02 | | | | IAML | | 06 19 43.2 | |
| | comp=Z,16μm,1.4s | | | | | | |
| CO02 | Combarbal | 0.90 | 78 | ⇓iP | Pn | 06 19 23.5 | 0.0 |
| CO02 | | | | iS | Sb | 06 19 34.5 | -0.1 |
| CO03 | El Pedregal | 1.27 | 65 | | Pg | 06 19 29.5 | 0.0 |
| CO03 | El Pedregal | 1.27 | 65 | iP | Pg | 06 19 29.5 | 0.0 |
| CO03 | | | | IAML | | 06 19 54.6 | |
| | comp=Z,5μm,0.5s | | | | | | |
| CO03 | El Pedregal | 1.27 | 65 | ⇓iP | Pg | 06 19 29.4 | -0.2 |
| CO03 | | | | iS | Sn | 06 19 45.6 | -0.1 |
| CO03 | | | | IAML | | 06 19 46.9 | |
| | comp=E,20μm,0.3s | | | | | | |
| VA06 | Catapilco | 1.32 | 152 | | Pb | 06 19 29.6 | 0.0 |
| GO04 | Tololo Observa | 1.61 | 41 | | Pn | 06 19 33.8 | +0.3 |
| GO04 | Tololo Observa | 1.61 | 41 | iP | Pn | 06 19 34.0 | +0.5 |
| GO04 | Tololo Observa | 1.61 | 41 | eP | Pn | 06 19 34.0 | +0.5 |
| GO04 | | | | iS | Sn | 06 19 53.8 | -0.6 |
| CO05 | La Serena | 1.62 | 25 | | Pn | 06 19 34.0 | +0.6 |
| CO05 | La Serena | 1.62 | 25 | ⇑iP | Pn | 06 19 34.0 | +0.6 |
| CO05 | | | | iS | Sn | 06 19 54.1 | 0.0 |
| VA01 | Torpederas | 1.65 | 169 | | Pn | 06 19 33.8 | 0.0 |
| VA01 | Torpederas | 1.65 | 169 | iP | Pn | 06 19 33.4 | -0.5 |
| VA01 | | | | iS | Sg | 06 19 57.5 | -0.7 |
| VA01 | Torpederas | 1.65 | 169 | eP | Pn | 06 19 33.9 | 0.0 |
| VA01 | | | | eS | Sn | 06 19 52.9 | -2.1 |
| ROCH | El Roble | 1.79 | 152 | ⇑iP | Pn | 06 19 36.5 | +0.6 |
| ROCH | | | | iS | Sn | 06 19 57.8 | -1.0 |
| ROCH | | | | IAML | | 06 19 59.9 | |
| | comp=N,9μm,0.3s | | | | | | |
| VA03 | San Esteban | 1.85 | 138 | | Pb | 06 19 38.0 | -0.9 |
| VA03 | San Esteban | 1.85 | 138 | iP | Pb | 06 19 38.0 | -0.9 |
| VA03 | | | | iS | Sg | 06 20 05.6 | +1.0 |
| VA03 | | | | IAML | | 06 20 07.1 | |
| | comp=Z,4μm,0.8s | | | | | | |
| VA03 | San Esteban | 1.85 | 138 | ⇑iP | Pb | 06 19 38.0 | -0.9 |
| VA03 | | | | iS | Sn | 06 19 59.6 | -0.4 |
| VA03 | | | | IAML | | 06 20 04.5 | |
| | comp=E,12μm,0.3s | | | | | | |
| MT02 | Curacav | 2.00 | 158 | | Pn | 06 19 39.1 | +0.4 |
| MT02 | Curacav | 2.00 | 158 | iP | Pn | 06 19 39.0 | +0.3 |
| MT02 | | | | iS | Sb | 06 20 07.8 | +1.5 |
| MT02 | | | | IAML | | 06 20 19.8 | |
| | comp=Z,981nm,0.6s | | | | | | |
| MT02 | Curacav | 2.00 | 158 | ⇑iP | Pn | 06 19 38.9 | +0.3 |
| MT02 | | | | iS | Sn | 06 20 02.0 | -1.7 |
| PEL | Peldehue | 2.08 | 147 | ⇑iP | Pn | 06 19 40.8 | +1.0 |
| PEL | | | | iS | Sn | 06 20 04.3 | -1.3 |
| CO01 | Juntas del Tor | 2.18 | 50 | | Pb | 06 19 43.2 | -1.4 |
| CO01 | Juntas del Tor | 2.18 | 50 | iP | Pn | 06 19 42.5 | +1.1 |
| CO01 | | | | iS | Sg | 06 20 13.7 | -1.5 |
| CO01 | | | | IAML | | 06 20 16.8 | |
| | comp=Z,3μm,0.5s | | | | | | |
| CO01 | Juntas del Tor | 2.18 | 50 | ⇑iP | Pb | 06 19 43.0 | -1.5 |
| CO01 | | | | iS | Sn | 06 20 09.2 | +0.8 |
| MT10 | Hacienda Santa | 2.26 | 146 | ⇑iP | Pn | 06 19 43.5 | +1.2 |
| MT10 | | | | iS | Sn | 06 20 09.3 | -0.8 |
| MT05 | Renca | 2.27 | 152 | Pn | Pb | 06 19 44.8 | -1.2 |
| MT05 | Renca | 2.27 | 152 | iP | Pn | 06 19 44.0 | +1.7 |
| MT05 | | | | IAML | | 06 20 26.0 | |
| | comp=Z,2μm,0.2s | | | | | | |
| MT05 | Renca | 2.27 | 152 | eP | Pb | 06 19 44.6 | -1.3 |
| MT05 | | | | iS | Sn | 06 20 08.5 | -1.8 |
| MT05 | | | | IAML | | 06 20 17.2 | |
| | comp=E,5μm,0.3s | | | | | | |
| VA05 | Santo Domingo | 2.28 | 171 | | Pn | 06 19 42.6 | +0.1 |
| VA05 | Santo Domingo | 2.28 | 171 | ⇑iP | Pn | 06 19 42.5 | +0.1 |
| VA05 | | | | iS | Sn | 06 20 08.6 | -1.8 |
| VA05 | | | | IAML | | 06 20 09.6 | |
| | comp=E,4μm,0.3s | | | | | | |
| MT14 | Cerro Cal¡n | 2.36 | 148 | ⇑iP | Pn | 06 19 44.9 | +1.2 |
| MT14 | | | | iS | Sn | 06 20 11.5 | -1.1 |
| MT14 | | | | IAML | | 06 20 14.4 | |
| | comp=E,6μm,0.4s | | | | | | |
| RTLS | Leoncito | 2.36 | 101 | iP | Pb | 06 19 47.4 | -0.3 |
| RTLS | | | | iS | Sg | 06 20 21.2 | +0.1 |
| MT16 | CCHEN | 2.39 | 148 | | Pn | 06 19 45.4 | +1.4 |
| MT16 | CCHEN | 2.39 | 148 | ⇑iP | Pn | 06 19 45.3 | +1.2 |
| MT16 | | | | iS | Sn | 06 20 13.0 | -0.3 |
| FCH | Farellones | 2.42 | 143 | eP | Pn | 06 19 45.9 | +1.2 |
| FCH | | | | iS | Sn | 06 20 14.6 | +0.1 |
| MT03 | Universidad Ad | 2.45 | 149 | | Pn | 06 19 46.1 | +1.2 |
| MT03 | Universidad Ad | 2.45 | 149 | iP | Pn | 06 19 45.6 | +0.6 |
| MT03 | | | | iS | Sb | 06 20 19.7 | +0.4 |
| MT03 | | | | IAML | | 06 20 24.8 | |
| | comp=Z,2μm,0.2s | | | | | | |
| MT03 | Universidad Ad | 2.45 | 149 | ⇑iP | Pn | 06 19 46.1 | +1.2 |
| MT03 | | | | iS | Sn | 06 20 13.8 | -1.1 |
| MT09 | Talagante | 2.53 | 160 | Pn | Pn | 06 19 47.4 | +1.4 |
| MT09 | Talagante | 2.53 | 160 | ⇑iP | Pn | 06 19 47.2 | +1.2 |
| MT09 | | | | iS | Sn | 06 20 15.6 | -1.2 |
| MT09 | | | | IAML | | 06 20 19.0 | |
| | comp=E,4μm,0.4s | | | | | | |
| MT15 | Las Vizcachas | 2.54 | 150 | eP | Pn | 06 19 47.3 | +1.1 |
| MT15 | | | | iS | Sn | 06 20 17.0 | -0.1 |
| MT15 | | | | IAML | | 06 20 20.9 | |
| | comp=E,4μm,0.2s | | | | | | |
| MT01 | Popeta | 2.55 | 165 | | Pn | 06 19 46.7 | +0.6 |
| MT01 | Popeta | 2.55 | 165 | iP | Pn | 06 19 45.9 | -0.2 |
| MT01 | | | | iS | Sb | 06 20 20.0 | -2.0 |
| MT01 | | | | IAML | | 06 20 33.8 | |
| | comp=Z,811nm,0.5s | | | | | | |
| MT01 | Popeta | 2.55 | 165 | ⇑iP | Pn | 06 19 46.6 | +0.5 |
| MT01 | | | | iS | Sn | 06 20 14.7 | -2.4 |
| MT04 | Ro Olivares | 2.56 | 142 | iP | Pn | 06 19 48.3 | +1.7 |
| MT04 | | | | iS | Sb | 06 20 23.3 | +0.7 |
| MT04 | | | | IAML | | 06 20 24.4 | |
| | comp=Z,1μm,0.2s | | | | | | |
| MT04 | Ro Olivares | 2.56 | 142 | eP | Pn | 06 19 48.0 | +1.4 |
| MT04 | | | | iS | Sn | 06 20 19.1 | +1.3 |
| LCO | Las Campanas | 2.64 | 26 | Pn | Pn | 06 19 48.0 | +0.4 |
| LCO | Las Campanas | 2.64 | 26 | iP | Pn | 06 19 47.6 | 0.0 |
| LCO | | | | iS | Sn | 06 20 22.0 | +2.3 |
| LCO | | | | IAML | | 06 20 31.5 | |
| | comp=Z,3μm,0.7s | | | | | | |
| MT12 | Pirque | 2.64 | 152 | ⇑iP | Pn | 06 19 48.5 | +1.0 |
| MT12 | | | | iS | Sn | 06 20 18.8 | -0.7 |
| MT12 | | | | IAML | | 06 20 21.2 | |
| | comp=E,4μm,0.4s | | | | | | |
| MT08 | Bocatoma Ro | 2.66 | 141 | | Pn | 06 19 50.1 | +2.3 |
| MT08 | Bocatoma Ro | 2.66 | 141 | iP | Pn | 06 19 49.7 | +1.8 |
| MT08 | | | | iS | Sb | 06 20 25.8 | +0.5 |
| MT08 | | | | IAML | | 06 20 26.6 | |
| | comp=Z,1μm,0.3s | | | | | | |
| MT08 | Bocatoma Ro | 2.66 | 141 | eP | Pn | 06 19 50.2 | +2.3 |
| MT08 | | | | iS | Sn | 06 20 22.1 | +2.0 |
| MT13 | San Alfonso | 2.77 | 148 | iP | Pn | 06 19 50.5 | +1.2 |
| MT13 | | | | iS | Sb | 06 20 27.6 | -0.8 |
| MT13 | | | | IAML | | 06 20 33.2 | |
| | comp=Z,1μm,0.3s | | | | | | |
| MT13 | San Alfonso | 2.77 | 148 | ⇓iP | Pn | 06 19 50.9 | +1.7 |
| MT13 | | | | iS | Sn | 06 20 22.9 | +0.3 |
| MT13 | | | | IAML | | 06 20 24.3 | |
| | comp=E,4μm,0.4s | | | | | | |
| ZON | Zonda | 2.86 | 94 | | Pb | 06 19 54.4 | -1.7 |
| ZON | Zonda | 2.86 | 94 | iP | Pb | 06 19 54.0 | -2.1 |
| ZON | | | | iS | Sb | 06 20 32.6 | +1.5 |
| ZON | | | | IAML | | 06 20 42.8 | |
| | comp=Z,1μm,0.9s | | | | | | |
| LMEL | Las Melosas | 2.89 | 148 | iP | Pn | 06 19 52.6 | +1.6 |
| LMEL | | | | iS | Sb | 06 20 30.3 | -1.7 |
| LMEL | Las Melosas | 2.89 | 148 | ⇑iP | Pn | 06 19 52.6 | +1.6 |
| LMEL | | | | iS | Sn | 06 20 25.3 | -0.5 |
| AC05 | El Transito | 2.97 | 31 | Pn | Pn | 06 19 53.6 | +1.5 |
| AC05 | El Transito | 2.97 | 31 | iP | Pn | 06 19 53.5 | +1.5 |
| AC05 | | | | IAML | | 06 20 45.6 | |
| | comp=Z,2μm,0.8s | | | | | | |
| BO01 | Tunca | 3.09 | 165 | Pn | Pn | 06 19 54.3 | +0.7 |
| BO01 | Tunca | 3.09 | 165 | iP | Pn | 06 19 54.2 | +0.6 |
| BO01 | | | | IAML | | 06 20 49.7 | |
| | comp=Z,547nm,1.0s | | | | | | |
| BO03 | Pichilemu | 3.09 | 179 | ⇑iP | Pn | 06 19 53.4 | -0.2 |
| BO03 | | | | iS | Sn | 06 20 26.2 | -4.3 |
| AC04 | Llanos de Chal | 3.29 | 15 | Pn | Pn | 06 19 56.0 | -0.2 |
| AC04 | Llanos de Chal | 3.29 | 15 | iP | Pn | 06 19 55.5 | -0.8 |
| AC04 | | | | IAML | | 06 21 08.7 | |
| | comp=Z,713nm,0.9s | | | | | | |
| BO02 | Sierra Bellavi | 3.54 | 163 | iP | Pn | 06 20 00.8 | +0.9 |
| BO02 | | | | IAML | | 06 21 15.4 | |
| | comp=Z,586nm,1.1s | | | | | | |
| GO05 | Huala | 3.61 | 179 | iP | Pn | 06 19 59.6 | -1.1 |
| GO05 | Huala | 3.61 | 179 | ⇑iP | Pn | 06 20 00.2 | -0.5 |
| GO05 | | | | eS | Sn | 06 20 39.1 | -4.1 |
| GO03 | Copiap | 4.10 | 23 | iP | Pn | 06 20 07.3 | -0.2 |
| GO03 | | | | iS | Sn | 06 20 57.4 | +2.0 |
| ML02 | Panimavida | 4.38 | 174 | iP | Pn | 06 20 11.7 | +0.3 |
| ML02 | | | | IAML | | 06 21 50.0 | |
| | comp=Z,299nm,0.8s | | | | | | |
| VA04 | Juan Fernndez | 6.17 | 247 | | Pn | 06 20 35.9 | 0.0 |
| H03N1 | Juan Fernandez | 6.17 | 249 | Pn | Pn | 06 20 37.0 | +1.4 |
| | baz=122,slow=21 | | | | | | |
| H03N1 | | | | T | T | 06 27 25.1 | |
| | baz=77,slow=72,SNR=1825 | | | | | | |
| H03N3 | Juan Fernandez | 6.18 | 249 | Pn | Pn | 06 20 36.5 | +0.6 |
| | baz=122,slow=21 | | | | | | |
| H03N3 | | | | T | T | 06 27 25.8 | |
| | baz=77,slow=72,SNR=1368 | | | | | | |
| H03N2 | Juan Fernandez | 6.18 | 249 | Pn | Pn | 06 20 37.3 | +1.4 |
| | baz=122,slow=21 | | | | | | |
| H03N2 | | | | T | T | 06 27 25.5 | |
| | baz=77,slow=72,SNR=1317 | | | | | | |
| H03S3 | Juan Fernandez | 6.29 | 246 | Pn | Pn | 06 20 37.6 | +0.3 |
| | baz=158,slow=75 | | | | | | |
| H03S3 | | | | T | T | 06 27 45.1 | |
| | baz=85,slow=75,SNR=26 | | | | | | |
| H03S1 | Juan Fernandez | 6.30 | 245 | Pn | Pn | 06 20 37.3 | -0.1 |
| | baz=158,slow=75 | | | | | | |
| H03S1 | | | | T | T | 06 27 36.1 | |
| | baz=85,slow=75,SNR=18 | | | | | | |
| H03S2 | Juan Fernandez | 6.31 | 245 | Pn | Pn | 06 20 37.3 | -0.3 |
| | baz=158,slow=75 | | | | | | |
| H03S2 | | | | T | T | 06 27 29.4 | |
| | baz=85,slow=75,SNR=23 | | | | | | |
| LVC | Limon Verde | 9.18 | 18 | Pn | Pn | 06 21 15.8 | -1.8 |
| LVC | Limon Verde | 9.18 | 18 | Pn | Pn | 06 21 15.4 | -2.2 |
| | comp=Z,1.0nm,0.3s,baz=175,slow=12,SNR=8.2 | | | | | | |
| LVC | | | | Sn | Sn | 06 22 58.4 | -2.6 |
| | comp=Z,1.6nm,0.3s,baz=1.4,slow=16,SNR=1.7 | | | | | | |
| LVC | | | | LR | LR | 06 25 06.4 | |
| | comp=Z,407nm,20.2s,baz=212,slow=40 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| PLCA | Paso Flores | 9.39 | 173 | Pn | Pn | 06 21 20.4 | +0.2 |
| | comp=Z,2.3nm,0.3s,baz=90,slow=24,SNR=61 | | | | | | |
| PLCA | | | | LR | LR | 06 25 08.4 | |
| | comp=Z,433nm,19.4s,baz=0.0,slow=39 | | | | | | |
| | comp=Z,5.2nm,0.3s | | | | | | |
| TRQA | Tornquist | 10.60 | 132 | | Pn | 06 21 37.3 | +0.6 |
| ITQB | Itaqui | 13.39 | 87 | | Pn | 06 22 15.9 | +1.1 |
| ITQB | Itaqui | 13.39 | 87 | eP | Pn | 06 22 17.4 | +2.6 |
| CPUP | Villa Florida | 13.83 | 72 | Pn | Pn | 06 22 18.9 | -1.9 |
| CPUP | Villa Florida | 13.83 | 72 | Pn | Pn | 06 22 20.2 | -0.7 |
| | comp=Z,0.1nm,0.3s,baz=86,slow=15,SNR=1.6 | | | | | | |
| CPUP | | | | Sn | Sn | 06 24 46.4 | -8.0 |
| | comp=Z,0.2nm,0.3s,baz=108,slow=19,SNR=1.4 | | | | | | |
| CPUP | | | | LR | LR | 06 28 03.2 | |
| | comp=Z,449nm,20.8s,baz=250,slow=40 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| CPUP | Villa Florida | 13.83 | 72 | eP | Pn | 06 22 21.9 | +1.0 |
| PB18 | Visviri | 13.94 | 10 | | Pn | 06 22 23.9 | +1.0 |
| RODS | Rosario do Sul | 14.49 | 90 | eP | Pn | 06 22 32.4 | +2.5 |
| LPAZ | La Paz | 15.45 | 14 | P | Pn | 06 22 44.4 | +1.0 |
| LPAZ | La Paz | 15.45 | 14 | Pn | Pn | 06 22 44.6 | +1.2 |
| | comp=Z,0.7nm,0.3s,baz=196,slow=6.9,SNR=40 | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| CRSM | Crissiumal (Br | 16.14 | 81 | eP | P | 06 22 54.0 | -1.0 |
| ALGR | Alto Alegre (B | 16.64 | 86 | eP | P | 06 22 60.0 | -0.7 |
| BBSD | Serra de San D | 17.54 | 39 | eP | Pn | 06 23 09.5 | 0.0 |
| ITAB | Concordia | 17.84 | 82 | eP | P | 06 23 13.5 | -0.2 |
| AQDB | Aquidauana | 18.25 | 57 | | Pn | 06 23 17.2 | -1.0 |
| AQDB | Aquidauana | 18.25 | 57 | eP | P | 06 23 18.5 | +0.2 |
| SIV | San Ignacio | 18.30 | 36 | P | Pn | 06 23 18.2 | -0.7 |
| | comp=Z,0.2nm,0.3s,baz=207,slow=8.4,SNR=50 | | | | | | |
| SIV | | | | LR | LR | 06 30 56.3 | |
| | comp=Z,140nm,20.9s,baz=275,slow=39 | | | | | | |
| | comp=Z,7.2nm,0.6s | | | | | | |
| PTGB | Pitanga | 18.82 | 74 | eP | P | 06 23 22.7 | -2.0 |
| PTLB | Pontes e Lacer | 19.77 | 40 | P | P | 06 23 34.9 | -0.1 |
| PTLB | Pontes e Lacer | 19.77 | 40 | eP | P | 06 23 34.9 | -0.1 |
| NNA | Nana | 19.82 | 346 | P | Pn | 06 23 36.9 | -0.3 |
| | comp=Z,1.0nm,0.3s,baz=209,slow=17,SNR=2.2 | | | | | | |
| NNA | | | | LR | LR | 06 29 30.7 | |
| | comp=Z,130nm,20.3s,baz=172,slow=32 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| LDASE | Londrina, Braz | 20.18 | 72 | eP | P | 06 23 38.5 | -1.0 |
| PCMB | Pacaembu | 20.95 | 67 | eP | P | 06 23 47.1 | -0.8 |
| VILB | Vilhena | 21.34 | 33 | P | P | 06 23 51.5 | -0.6 |
| VILB | Vilhena | 21.34 | 33 | eP | P | 06 23 51.8 | -0.3 |
| SALV | Santo Antonio | 21.44 | 48 | eP | P | 06 23 52.3 | -0.8 |
| FRTB | Fartura | 21.47 | 74 | eP | P | 06 23 52.6 | -0.9 |
| ETMB | Extrema | 22.14 | 15 | P | P | 06 24 01.4 | +0.7 |
| ETMB | | | | IAmb | IAmb | 06 24 04.7 | |
| | comp=Z,24nm,0.8s | | | | | | |
| ETMB | Extrema | 22.14 | 15 | eP | P | 06 24 02.0 | +1.4 |
| ITRB | Iturama | 22.71 | 64 | eP | P | 06 24 05.5 | -1.2 |
| SPB | Sao Paulo | 23.13 | 76 | P | P | 06 24 11.4 | +0.4 |
| SPB | Sao Paulo | 23.13 | 76 | eP | P | 06 24 11.3 | +0.3 |
| CZSB | Cruzeiro do Su | 23.55 | 358 | P | P | 06 24 16.0 | +0.6 |
| CZSB | | | | IAmb | IAmb | 06 24 23.6 | |
| | comp=Z,37nm,1.2s | | | | | | |
| CZSB | Cruzeiro do Su | 23.55 | 358 | eP | P | 06 24 17.3 | +2.0 |
| VAO | Valinhos | 23.77 | 76 | P | P | 06 24 16.2 | -1.3 |
| VAO | | | | IAmb | IAmb | 06 24 43.8 | |
| | comp=Z,60nm,1.4s | | | | | | |
| VAO | Valinhos | 23.77 | 76 | eP | P | 06 24 16.7 | -0.8 |
| SAML | Samuel | 23.80 | 22 | P | P | 06 24 17.7 | -0.1 |
| SAML | Samuel | 23.80 | 22 | eP | P | 06 24 18.0 | +0.2 |
| ARAG | Araguaiana, MT | 24.17 | 54 | eP | P | 06 24 20.7 | -0.6 |
| PDRB | Porto dos Gac | 24.24 | 39 | eP | P | 06 24 22.3 | +0.4 |
| IPMB | Ipameri, GO | 25.36 | 64 | eP | P | 06 24 31.1 | -1.0 |
| BDFB | Brasilia | 26.94 | 60 | P | P | 06 24 45.5 | -1.0 |
| BDFB | | | | IAmb | IAmb | 06 24 46.5 | |
| | comp=Z,19nm,0.7s | | | | | | |
| BDFB | Brasilia | 26.94 | 60 | P | P | 06 24 45.8 | -0.8 |
| | comp=Z,23nm,0.9s,baz=231,slow=8.5,SNR=28 | | | | | | |
| BDFB | | | | LR | LR | 06 36 41.9 | |
| | comp=Z,760nm,18.5s,baz=230,slow=40 | | | | | | |
| | comp=Z,23nm,0.9s | | | | | | |
| TBTG | Tabatinga, AM | 27.14 | 5 | P | P | 06 24 49.2 | +1.1 |
| SNDB | Serra Nova Dou | 27.20 | 49 | eP | P | 06 24 48.2 | -0.5 |
| ARNL | Arenillas | 28.72 | 343 | P | P | 06 25 01.4 | -0.9 |
| ARNL | | | | IAmb | IAmb | 06 25 05.3 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| SMTB | Santa Maria do | 31.93 | 51 | eP | P | 06 25 30.9 | +0.2 |
| OTAV | Otavalo | 32.05 | 348 | eP | P | 06 25 36.2 | +4.1 |
| RPN | Rapa Nui | 32.72 | 268 | LR | LR | 06 34 46.7 | |
| | comp=Z,122nm,18.1s,baz=108,slow=29 | | | | | | |
| PMSA | Palmer Station | 33.77 | 174 | LR | LR | 06 39 38.0 | |
| | comp=Z,161nm,18.4s,baz=340,slow=37 | | | | | | |
| BOAV | Boa Vista | 35.34 | 20 | IAmb | IAmb | 06 26 01.1 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| ROSC | El Rosal | 36.10 | 356 | P | P | 06 26 09.1 | +1.8 |
| | comp=Z,11nm,0.5s,baz=121,slow=9.8,SNR=11 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| BAUV | El Baul | 40.29 | 6 | P | P | 06 26 42.2 | +0.1 |
| BAUV | | | | IAmb | IAmb | 06 26 43.6 | |
| | comp=Z,38nm,1.1s | | | | | | |
| MDP | Montagnes des | 40.74 | 30 | LR | LR | 06 45 59.9 | |
| | comp=Z,185nm,18.3s,baz=199,slow=40 | | | | | | |
| BELA | Belgrano 2 | 49.44 | 170 | P | P | 06 27 54.6 | +0.2 |
| BELA | | | | IAmb | IAmb | 06 27 56.7 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| CMIG | Matias Romero | 52.97 | 332 | LR | LR | 06 46 30.9 | |
| | comp=Z,44nm,18.8s,baz=176,slow=31 | | | | | | |
| TEIG | Tepich | 53.64 | 341 | P | P | 06 28 26.2 | -0.2 |
| SNAA | Sanae | 53.99 | 159 | P | P | 06 28 29.1 | +0.6 |
| SNAA | | | | IAmb | IAmb | 06 28 30.1 | |
| | comp=Z,19nm,1.3s | | | | | | |
| SNAA | Sanae | 53.99 | 159 | P | P | 06 28 28.3 | -0.2 |
| | comp=Z,6.6nm,0.8s,baz=288,slow=7.0,SNR=12 | | | | | | |
| SNAA | | | | LR | LR | 06 50 11.4 | |
| | comp=Z,74nm,19.2s,baz=238,slow=35 | | | | | | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 58.83 | 180 | P | P | 06 29 04.1 | +0.9 |
| QSPA | | | | IAmb | IAmb | 06 29 04.8 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 58.83 | 180 | P | P | 06 29 03.7 | +0.5 |
| | comp=Z,4.7nm,0.6s,baz=158,slow=1.7,SNR=67 | | | | | | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| 833A | Chaparral WMA, | 64.86 | 333 | P | P | 06 29 43.9 | 0.0 |
| SBA | Scott Base | 65.62 | 191 | P | P | 06 29 50.1 | +1.8 |
| SBA | | | | IAmb | IAmb | 06 29 51.6 | |
| | comp=Z,17nm,1.7s | | | | | | |
| HPIG | | 66.30 | 327 | IAmb | IAmb | 06 29 56.0 | |
| | comp=Z,14nm,1.2s | | | | | | |
| VNDA | Vanda | 66.65 | 191 | P | P | 06 29 57.0 | +2.1 |
| VNDA | | | | IAmb | IAmb | 06 30 07.7 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| VNDA | Vanda | 66.65 | 191 | P | P | 06 29 57.0 | +2.1 |
| | comp=Z,1.7nm,0.7s,baz=115,slow=6.9,SNR=16 | | | | | | |
| VNDA | | | | LR | LR | 06 57 06.4 | |
| | comp=Z,31nm,18.4s,baz=154,slow=34 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| JCT | Junction City | 66.95 | 334 | P | P | 06 29 57.6 | +0.2 |
| BRDY | Brady | 67.38 | 335 | IAmb | IAmb | 06 30 01.9 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| SAND | Sanderson | 67.38 | 332 | IAmb | IAmb | 06 30 02.6 | |
| | comp=Z,13nm,1.1s | | | | | | |
| W50A | Signal Mountai | 67.41 | 348 | IAmb | IAmb | 06 30 01.1 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 67.48 | 330 | P | P | 06 30 02.0 | +1.1 |
| TXAR | Lajitas Array | 67.48 | 330 | P | P | 06 30 02.0 | +1.1 |
| | comp=Z,2.7nm,0.7s,baz=153,slow=8.4,SNR=42 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| TKL | Tuckaleechee C | 67.61 | 350 | IAmb | IAmb | 06 30 02.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| PLAL | Pickwick Lake | 67.73 | 346 | IAmb | IAmb | 06 30 03.1 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| V52A | Sevierville | 67.76 | 350 | IAmb | IAmb | 06 30 03.1 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| OZNA | Ozona | 67.85 | 333 | IAmb | IAmb | 06 30 05.1 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| PLPT | Palo Pinto | 68.53 | 336 | IAmb | IAmb | 06 30 09.1 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| Z35A | Perchaven, San | 68.64 | 337 | P | P | 06 30 08.5 | +0.6 |
| SGCY | Sterling City | 68.73 | 334 | IAmb | IAmb | 06 30 10.2 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| WVT | Waverly | 68.79 | 346 | P | P | 06 30 08.8 | +0.1 |
| MNHN | Monahans | 68.86 | 332 | IAmb | IAmb | 06 30 11.4 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| WTFS | Witchita Falls | 69.45 | 337 | P | P | 06 30 12.8 | -0.1 |
| WTFS | | | | IAmb | IAmb | 06 30 14.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| T47A | Sharon Grove | 69.48 | 347 | IAmb | IAmb | 06 30 14.1 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| SN07 | Snyder 07 | 69.70 | 334 | IAmb | IAmb | 06 30 16.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| POST | Post | 69.90 | 334 | IAmb | IAmb | 06 30 17.2 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,8.0nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **70.22** | **335** | IAmb | IAmb | 06 30 19.2 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **70.39** | **341** | IAmb | IAmb | 06 30 19.5 | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **TUL3** | **Leonard** | **70.57** | **340** | | **P** | **06 30 20.6** | **+0.8** |
| TUL3 | | | | IAmb | IAmb | 06 30 21.1 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **P57A** | **Homestead Farm** | **70.74** | **355** | IAmb | IAmb | 06 30 22.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **70.78** | **343** | IAmb | IAmb | 06 30 22.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **QUOK** | **Quay** | **71.09** | **339** | IAmb | IAmb | 06 30 24.4 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **MSTX** | **Muleshoe** | **71.19** | **333** | P | **P** | **06 30 24.2** | **+0.4** |
| **CCM** | **Cathedral Cave** | **71.38** | **344** | P | **P** | **06 30 24.8** | **+0.1** |
| CCM | | | | IAmb | IAmb | 06 30 26.0 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **OK051** | **E0350 and S346** | **71.44** | **339** | IAmb | IAmb | 06 30 26.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **71.55** | **342** | IAmb | IAmb | 06 30 27.2 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **P48A** | **Milroy** | **71.59** | **349** | IAmb | IAmb | 06 30 26.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **71.59** | **335** | IAmb | IAmb | 06 30 28.0 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **R40A** | **Maddies Statio** | **71.85** | **343** | IAmb | IAmb | 06 30 28.7 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **121A** | **Cookes Peak, D** | **72.02** | **329** | IAmb | IAmb | 06 30 31.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KAN13** | **South Haven SW** | **72.10** | **339** | | **P** | **06 30 29.9** | **+0.8** |
| **KAN09** | **Caldwell North** | **72.26** | **339** | IAmb | IAmb | 06 30 31.7 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **P40A** | **Paris** | **72.98** | **344** | IAmb | IAmb | 06 30 35.5 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **L56A** | **Greenwood** | **73.35** | **356** | IAmb | IAmb | 06 30 37.6 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **73.43** | **343** | IAmb | IAmb | 06 30 37.8 | |
| | comp=Z,9.8nm,1.0s | | | | | | |
| **L61B** | **Northampton** | **73.48** | **359** | IAmb | IAmb | 06 30 39.0 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **73.51** | **331** | P | **P** | **06 30 38.4** | **+0.6** |
| **ANMO** | **Albuquerque** | **73.51** | **331** | LR | LR | 06 59 04.6 | |
| | comp=Z,55nm,18.5s,baz=244,slow=33 | | | | | | |
| **R32A** | **Long Quarter,** | **73.78** | **338** | IAmb | IAmb | 06 30 40.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **N41A** | **Harden Midland** | **73.83** | **345** | IAmb | IAmb | 06 30 39.5 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro** | **74.35** | **72** | P | **P** | **06 30 42.9** | **0.0** |
| | comp=Z,5.8nm,0.6s,baz=213,slow=4.7,SNR=10.0 | | | | | | |
| DBIC | | | | LR | LR | 07 00 41.4 | |
| | comp=Z,105nm,20.8s,baz=204,slow=34 | | | | | | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **CBKS** | **Cedar Bluff** | **74.46** | **338** | IAmb | IAmb | 06 30 44.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **74.61** | **334** | P | **P** | **06 30 45.5** | **+1.4** |
| T25A | | | | IAmb | IAmb | 06 30 46.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **W18A** | **Petrified Fore** | **75.06** | **329** | IAmb | IAmb | 06 30 49.5 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **I63A** | **Otisfield** | **75.09** | **1** | IAmb | IAmb | 06 30 49.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **L40A** | **Anamosa** | **75.20** | **345** | IAmb | IAmb | 06 30 48.0 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **75.26** | **327** | IAmb | IAmb | 06 30 50.8 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **SDCO** | **Great Sand Dun** | **75.56** | **333** | P | **P** | **06 30 50.0** | **+0.4** |
| **MAW** | **Mawson** | **75.67** | **164** | P | **P** | **06 30 50.3** | **+0.7** |
| | comp=Z,13nm,0.9s,baz=204,slow=5.9,SNR=30 | | | | | | |
| MAW | | | | LR | LR | 07 07 17.1 | |
| | comp=Z,68nm,18.1s,baz=240,slow=38 | | | | | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **LONY** | **Lake Ozonia** | **75.69** | **358** | IAmb | IAmb | 06 30 51.5 | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| **JFWS** | **Jewell Farm** | **75.82** | **346** | IAmb | IAmb | 06 30 51.7 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **YUH** | **Yuha Desert** | **76.02** | **323** | IAmb | IAmb | 06 30 54.9 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **SADO** | **Sadowa** | **76.08** | **355** | IAmb | IAmb | 06 30 52.7 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **SADO** | **Sadowa** | **76.08** | **355** | LR | LR | 07 10 39.1 | |
| | comp=Z,18nm,18.1s,baz=66,slow=41 | | | | | | |
| **SUR** | **Sutherland** | **76.09** | **119** | LR | LR | 07 00 27.0 | |
| | comp=Z,72nm,19.8s,baz=231,slow=33 | | | | | | |
| **MVCO** | **Mesa Verde** | **76.30** | **331** | IAmb | IAmb | 06 30 56.4 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **Q24A** | **Divide** | **76.49** | **334** | IAmb | IAmb | 06 30 57.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **I42A** | **Draeger Farm,** | **76.50** | **348** | IAmb | IAmb | 06 30 55.5 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **F62A** | **Pittston Farm,** | **76.95** | **1** | IAmb | IAmb | 06 30 59.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **W13A** | **Hualapai Mount** | **76.97** | **326** | IAmb | IAmb | 06 31 00.4 | |
| | comp=Z,9.4nm,1.5s | | | | | | |
| **F64A** | **Sherman** | **76.97** | **3** | P | **P** | **06 30 57.5** | **+0.4** |
| F64A | | | | IAmb | IAmb | 06 30 59.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **PFO** | **Pinyon Flats O** | **77.06** | **323** | LR | LR | 06 58 29.3 | |
| | comp=Z,47nm,18.0s,baz=146,slow=31 | | | | | | |
| **TRQ** | **Mont Tremblant** | **77.29** | **358** | IAmb | IAmb | 06 31 00.2 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SMCO** | **Snowmass** | **77.37** | **333** | IAmb | IAmb | 06 31 03.0 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **ISCO** | **Idaho Springs** | **77.39** | **334** | IAmb | IAmb | 06 31 02.5 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **PQI** | **Presque Isle** | **77.79** | **3** | IAmb | IAmb | 06 31 03.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **HMU** | **Henry Mountain** | **77.87** | **330** | IAmb | IAmb | 06 31 05.8 | |
| | comp=Z,19nm,1.6s | | | | | | |
| **KNB** | **Kanab** | **78.03** | **328** | IAmb | IAmb | 06 31 06.5 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **78.08** | **342** | IAmb | IAmb | 06 31 04.6 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **D62A** | **Allapoint, All** | **78.16** | **2** | P | **P** | **06 31 03.7** | **0.0** |
| **E46A** | **Sault Ste Mari** | **78.19** | **351** | IAmb | IAmb | 06 31 04.7 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **78.47** | **334** | IAmb | IAmb | 06 31 08.5 | |
| | comp=Z,9.6nm,1.3s | | | | | | |
| **BATG** | **Bathurst New B** | **78.49** | **4** | P | **P** | **06 31 06.0** | **+0.4** |
| BATG | | | | IAmb | IAmb | 06 31 07.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SPMN** | **Marine on St.** | **78.56** | **345** | IAmb | IAmb | 06 31 06.5 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **PHWY** | **Pilot Hill** | **78.65** | **335** | IAmb | IAmb | 06 31 09.1 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **O20A** | **White River Ci** | **78.69** | **332** | IAmb | IAmb | 06 31 09.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **LDAQ** | **Lac Daran** | **79.00** | **1** | IAmb | IAmb | 06 31 10.0 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **GWY** | **Greenwater Val** | **79.19** | **325** | P | **P** | **06 31 10.1** | **+0.1** |
| **ISA** | **Isabella, Lake** | **79.69** | **323** | IAmb | IAmb | 06 31 15.4 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **TSUM** | **Tsumeb** | **79.92** | **106** | LR | LR | 07 03 02.8 | |
| | comp=Z,80nm,18.2s,baz=338,slow=33 | | | | | | |
| **K22A** | **Casper** | **80.21** | **335** | IAmb | IAmb | 06 31 17.6 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **81.28** | **118** | LR | LR | 07 05 31.3 | |
| | comp=Z,59nm,18.0s,baz=196,slow=34 | | | | | | |
| **SPUT** | **South Promonto** | **81.40** | **330** | IAmb | IAmb | 06 31 23.6 | |
| | comp=Z,20nm,1.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **81.45** | **333** | P | **P** | **06 31 22.5** | **+0.5** |
| | comp=Z,0.6nm,0.6s,baz=136,slow=6.2,SNR=7.8 | | | | | | |
| PDAR | | | | LR | LR | 07 04 23.9 | |
| | comp=Z,26nm,18.2s,baz=118,slow=33 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **81.47** | **324** | IAmb | IAmb | 06 34 22.6 | |
| | comp=Z,5.7nm,0.4s | | | | | | |
| **LHV** | **Little Huntoon** | **81.72** | **325** | IAmb | IAmb | 06 31 26.2 | |
| | comp=Z,8.1nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.76** | **325** | P | **P** | **06 31 23.8** | **0.0** |
| **NVAR** | **Mina Array Bea** | **81.76** | **325** | P | **P** | **06 31 25.2** | **+1.4** |
| | comp=Z,3.2nm,0.9s,baz=156,slow=6.3,SNR=18 | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **AGMN** | **Agassiz Nation** | **82.16** | **344** | IAmb | IAmb | 06 31 25.8 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **CASY** | **Casey** | **82.62** | **181** | P | **P** | **06 31 27.7** | **+0.1** |
| **YERR** | **Yerington** | **82.65** | **325** | IAmb | IAmb | 06 31 30.6 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **PNTR** | **Pine Nut** | **82.91** | **325** | IAmb | IAmb | 06 31 32.5 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **PAHR** | **Pah Rah Range** | **83.28** | **325** | IAmb | IAmb | 06 31 33.7 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **83.32** | **70** | P | **P** | **06 31 31.9** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **83.32** | **70** | P | **P** | **06 31 31.8** | **-0.3** |
| TORD | | | | IAmb | IAmb | 06 31 32.8 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.32** | **70** | P | **P** | **06 31 32.0** | **-0.1** |
| | comp=Z,8.0nm,0.7s,baz=260,slow=2.0,SNR=45 | | | | | | |
| TORD | | | | LR | LR | 07 06 35.5 | |
| | comp=Z,87nm,19.8s,baz=182,slow=34 | | | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **ULM** | **Lac du Bonnet** | **83.99** | **345** | P | **P** | **06 31 34.3** | **-0.4** |
| | comp=Z,3.4nm,0.8s,baz=185,slow=4.8,SNR=3.9 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **SCHQ** | **Schefferville** | **85.99** | **3** | P | **P** | **06 31 44.4** | **-0.3** |
| | comp=Z,4.9nm,0.9s,baz=196,slow=7.4,SNR=4.9 | | | | | | |
| SCHQ | | | | LR | LR | 07 12 36.7 | |
| | comp=Z,38nm,18.2s,baz=208,slow=37 | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **PINE** | **Pine Mountain** | **87.16** | **327** | IAmb | IAmb | 06 31 53.4 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **K02D** | **Willamette Mer** | **87.65** | **325** | P | **P** | **06 31 53.8** | **+0.6** |
| **I05D** | **Terrebonne, OR** | **87.77** | **327** | IAmb | IAmb | 06 31 56.0 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **NEW** | **Newport** | **88.99** | **332** | LR | LR | 07 09 10.8 | |
| | comp=Z,54nm,18.4s,baz=154,slow=34 | | | | | | |
| **MDT** | **Midelt** | **90.18** | **51** | LR | LR | 07 11 28.1 | |
| | comp=Z,26nm,20.5s,baz=241,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **119.88** | **208** | PKP | **PKPdf** | **06 37 54.4** | **-1.5** |
| | comp=Z,0.3nm,0.5s,baz=152,slow=2.0,SNR=2.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **120.41** | **46** | PKP | **PKPdf** | **06 37 54.6** | **-1.2** |
| | comp=Z,1.3nm,0.5s,baz=263,slow=2.9,SNR=6.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **120.53** | **60** | PKP | **PKPdf** | **06 37 56.4** | **-0.3** |
| | comp=Z,1.2nm,0.7s,baz=195,slow=1.4,SNR=6.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **121.65** | **24** | PKP | **PKiKP** | **06 37 58.1** | **+0.3** |
| | comp=Z,1.2nm,0.7s,baz=272,slow=3.4,SNR=2.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.03** | **210** | PKP | **PKPdf** | **06 38 00.8** | **-1.1** |
| | comp=Z,0.6nm,0.5s,baz=158,slow=1.7,SNR=19 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **125.78** | **271** | T | T | 08 57 01.8 | |
| | baz=115,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **125.79** | **271** | T | T | 08 57 00.1 | |
| | baz=115,slow=75 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **125.80** | **271** | T | T | 08 57 01.9 | |
| | baz=115,slow=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **126.12** | **272** | T | T | 08 57 27.3 | |
| | baz=116,slow=75 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **126.14** | **272** | T | T | 08 57 31.2 | |
| | baz=116,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **126.14** | **272** | T | T | 08 57 28.5 | |
| | baz=116,slow=75 | | | | | | |
| **EKS2** | **Erkin-Say** | **150.66** | **58** | P | **PKiKP** | **06 38 57.8** | **+0.1** |
| | SNR=5.2 | | | | | | |
| **AML** | **Almayashu** | **150.70** | **59** | P | **PKiKP** | **06 38 58.0** | **-0.1** |
| | SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.92** | **40** | PKP | **PKPdf** | **06 38 51.7** | **+0.2** |
| | comp=Z,14nm,0.8s,baz=300,slow=2.8,SNR=13 | | | | | | |
| KURBB | | | | PKPbc | **PKiKP** | **06 38 57.7** | **-0.1** |
| | comp=Z,14nm,0.8s,baz=309,slow=2.6,SNR=49 | | | | | | |
| **USP** | **Ospenovka** | **151.06** | **56** | P | **PKiKP** | **06 38 58.4** | **+0.1** |
| | SNR=7.9 | | | | | | |
| **UCH** | **Uchtor** | **151.28** | **58** | P | **PKiKP** | **06 38 59.8** | **+0.4** |
| | SNR=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **151.92** | **57** | P | **PKPbc** | **06 38 59.9** | **-0.1** |
| | SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.99** | **30** | PKP | **PKPdf** | **06 38 52.8** | **-0.2** |
| | comp=Z,1.5nm,0.5s,baz=280,slow=2.7,SNR=9.5 | | | | | | |
| ZALV | | | | PKPbc | **PKPbc** | **06 38 59.6** | **+0.1** |
| | comp=Z,34nm,0.7s,baz=297,slow=3.2,SNR=96 | | | | | | |
| **ULHL** | **Ulahol** | **152.53** | **58** | P | **PKiKP** | **06 39 02.3** | **+0.6** |
| | SNR=5.3 | | | | | | |
| **KSH** | **Kashi** | **152.81** | **64** | PKPbc | **PKPbc** | **06 39 01.4** | **-0.6** |
| **MKAR** | **Makanchi Array** | **154.98** | **45** | PKP | **PKPdf** | **06 38 57.3** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=356,slow=0.8,SNR=14 | | | | | | |
| MKAR | | | | PKPbc | **PKPbc** | **06 39 06.1** | **-0.2** |
| | comp=Z,3.1nm,0.7s,baz=313,slow=2.1,SNR=23 | | | | | | |
| **KSRS** | **Korea Array** | **162.48** | **296** | PKPab | **PKPab** | **06 39 56.7** | **+2.1** |
| | comp=Z,0.6nm,0.3s,baz=81,slow=2.5,SNR=7.4 | | | | | | |
| **SONM** | **Songino Array** | **163.54** | **4** | PKPab | **PKPab** | **06 40 00.5** | **+1.5** |
| | comp=Z,0.9nm,0.5s,baz=343,slow=4.6,SNR=4.3 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **170.13** | **344** | *e*P | **PKPdf** | **06 39 07.4** | **-5.4** |
| **NJ2** | **Nanjing** | **170.71** | **277** | *e*P | **PKPdf** | **06 39 13.0** | **-0.2** |
| **PZH** | **PanZhiHua** | **172.68** | **130** | PKP | **PKPdf** | **06 39 14.2** | **-0.3** |
| **XAN** | **Xi'an** | **177.25** | **343** | PKP | **PKPdf** | **06 39 19.6** | **+4.1** |

*CRAAG **01** 06:36:55.0, 36.53°N×4.19E, Ml3.1, Algerie 04km Sw Iboudraren*

*MDD **01** 06:37:00.4±1.5, 36.80°N×4.06°E, h0km, Mb3.6/4, M_mb2.9/4, Error ellipse: s-maj=12.9km s-min=7.0km az=122.0*

**ISC 01 06:36:53.7**±1.0**, 36.60°N**±0.05°×**4.42°E**±0.05°**, h13**km**, n17, σ2.17s/21, 4C, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATKB** | **Taksebt** | **0.25** | **288** | P | **Pg** | **06 36 59.2** | **+0.1** |
| **ATKJ** | **Tikjda** | **0.29** | **238** | P | **Pg** | **06 36 58.4** | **-1.3** |
| **AKET** | **Djebel Ketaf** | **0.70** | **219** | P | **Pg** | **06 37 06.4** | **-1.0** |
| **ATAF** | **Djebel Tarf** | **0.73** | **189** | P | **Pb** | **06 37 09.4** | **+1.0** |
| **AKED** | **El Kharrouba** | **0.81** | **274** | P | **Pg** | **06 37 08.8** | **-0.6** |
| **SET** | **Setif** | **0.88** | **116** | P | **Pg** | **06 37 10.0** | **-0.8** |
| **ADJB** | **Djebel Djouab** | **0.91** | **241** | P | **Pn** | **06 37 12.4** | **+0.1** |
| **ABA** | **Alger-Bouzarea** | **1.13** | **281** | P | **Pg** | **06 37 15.9** | **+0.4** |
| **ABSD** | **Ouled Sidi Bra** | **1.17** | **189** | P | **Pg** | **06 37 16.8** | **+0.5** |
| **ACHR** | **Chrea** | **1.25** | **263** | P | **Pg** | **06 37 18.1** | **+0.2** |
| **ABKD** | **Sidi Amar** | **1.70** | **269** | P | **Pb** | **06 37 25.8** | **+1.0** |
| **AFRS** | **Ain Fares** | **1.87** | **179** | P | **Pb** | **06 37 27.7** | **-0.1** |
| **AFDJ** | **Sidi Ladjel** | **1.91** | **232** | P | **Pg** | **06 37 32.8** | **+2.4** |
| **ETOS** | **Mallorca** | **3.41** | **339** | P | **Pn** | **06 37 48.1** | **+1.5** |
| ETOS | | | | ⇑*i*Vmb_V | | 06 37 50.6 | |
| | 87nm,SNR=2.2 | | | | | | |
| ETOS | | | | S | **Sn** | **06 38 26.4** | **-0.5** |
| **EIBI** | **Ibiza** | **3.44** | **316** | P | **Pn** | **06 37 48.8** | **+1.8** |
| EIBI | | | | ⇑*i*Vmb_V | | 06 37 51.3 | |
| | 90nm,SNR=1.2 | | | | | | |
| EIBI | | | | S | **Sn** | **06 38 25.8** | **-1.8** |
| **EVIV** | **Cofrentes, Val** | **5.13** | **303** | P | **Pn** | **06 38 12.9** | **+2.7** |
| EVIV | | | | ⇑*i*Vmb_V | | 06 38 13.6 | |
| | 91nm,SNR=1.1 | | | | | | |
| EVIV | | | | S | **Sn** | **06 39 05.2** | **-4.1** |
| **ETOB** | **Tobarra** | **5.16** | **295** | P | **Pn** | **06 38 12.6** | **+1.8** |
| ETOB | | | | ⇑*i*Vmb_V | | 06 38 15.0 | |
| | 81nm,SNR=1.2 | | | | | | |
| ETOB | | | | S | **Sn** | **06 39 04.1** | **-6.1** |

*SGS **01** 06:41:42.5, 28.86°N×34.71°E, h24km, Ml1.5*

**GII 01 06:41:23.5**±0.3**, 28.818°N**±0.002°×**33.080°E**±0.002°**, h31**km**, Mws2.3, 1C-1D, confirmed, Egypt**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAYS** | **Tayyib Ism** | **1.60** | **99** | P | Pn | 06 41 49.7 | +0.1 |
| **HAQS** | **Haql** | **1.63** | **81** | P | Pn | 06 41 48.9 | -1.2 |
| **HQLS** | | **1.80** | **74** | P | Pn | 06 41 51.2 | -1.3 |
| **JMOS** | **Jabal al Moall** | **1.81** | **78** | P | Pn | 06 41 51.6 | -1.0 |
| **BDAS** | **Al Bad`** | **1.82** | **102** | P | Pn | 06 41 53.0 | +0.3 |
| **EIL** | **Elat** | **1.84** | **62** | P | Pn | 06 41 51.1 | -1.9 |
| **EIL** | **Elat** | **1.84** | **62** | S | Sn | 06 42 12.0 | -3.3 |
| **EIL** | **Elat** | **1.84** | **62** | ⇓*i*P | Pn | 06 41 51.0 | -2.0 |
| **MBRI** | **Mt Berech** | **1.87** | **58** | P | Pn | 06 41 51.5 | -2.0 |
| MBRI | | | | S | Sn | 06 42 13.4 | -2.8 |
| **MBRI** | **Mt Berech** | **1.87** | **58** | ⇑*i*P | Pn | 06 41 51.4 | -2.1 |
| **AQBJ** | **Aqaba** | **1.94** | **62** | P | Pn | 06 41 53.1 | -1.3 |
| **KRABS** | **KRABS** | **2.04** | **110** | P | Pb | 06 41 58.3 | -1.6 |
| **HRFI** | **Mount Harif** | **2.10** | **54** | P | Pn | 06 41 54.9 | -1.6 |
| HRFI | | | | S | Sn | 06 42 19.2 | -2.3 |
| **HRFI** | **Mount Harif** | **2.10** | **54** | S | Sn | 06 42 19.0 | -2.5 |
| **HRFI** | **Mount Harif** | **2.10** | **54** | P | Pn | 06 41 54.7 | -1.9 |
| **PRNI** | **Paran** | **2.27** | **47** | P | Pn | 06 41 57.5 | -1.4 |
| **PRNI** | **Paran** | **2.27** | **47** | S | Sn | 06 42 23.7 | -2.2 |
| **PRNI** | **Paran** | **2.27** | **47** | P | Pn | 06 41 56.7 | -2.2 |
| **KZIT** | **Kziot** | **2.38** | **28** | P | Pn | 06 41 57.6 | -2.8 |

**IDC 01 06:44:31.3**±2.6**, 54.28°N×85.91°E, h0**km**, mbtmp2.7**/2**, ML2.4**/2**, Error ellipse: s-maj=18.6km s-min=10.5km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.72** | **243** | I | I | 06 50 10.0 | |
| | baz=62,slow=318,SNR=3.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.72** | **243** | Pg | Pg | 06 44 43.8 | -1.3 |
| | 0.6nm,0.3s,baz=59,slow=18,SNR=4.2 | | | | | | |
| ZALV | | | | Lg | Lg | 06 44 55.5 | |
| | 5.9nm,0.3s,baz=63,slow=29,SNR=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.81** | **234** | Pn | Pn | 06 45 59.9 | +1.3 |
| | 0.1nm,0.3s,baz=51,slow=14,SNR=4.3 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.84** | **199** | Pn | Pn | 06 46 27.4 | +0.8 |
| | 0.1nm,0.3s,baz=23,slow=14,SNR=6.1 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*NEIC **01** 06:58:01.5±1.9, 17.8°S±0.1°×178.8°W±0.1°, h519km±8km, mb4.3/31, Error ellipse: s-maj=16.8km s-min=14.6km az=90.0*

*IDC **01** 06:58:06.8±9.2, 17.66°S×179.02°W, h578km±111km, mb3.1/8, mbtmp4.0/8, Error ellipse: s-maj=39.3km s-min=26.0km az=103.0*

**ISC 01 06:58:02.8**±0.6**, 17.7°S**±0.1°×**178.9°W**±0.1°**, h539**km**, n45, σ0.95s/45, mb4.3**/25**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.79** | **62** | P | **P** | **06 59 55.6** | **-2.8** |
| **NIUE** | **Niue** | **8.58** | **100** | P | P | 07 00 01.3 | -4.8 |
| **PINNC** | **Pines Island,** | **13.75** | **247** | P | **P** | **07 00 57.6** | **-1.9** |
| **DZM** | **Mont Dzumac** | **14.49** | **250** | P | **P** | **07 01 06.1** | **-1.2** |
| **KOUNC** | **Koumac, New Ca** | **16.18** | **257** | P | **P** | **07 01 23.9** | **-0.6** |
| **THZ** | **Tophouse** | **24.98** | **195** | P | **P** | **07 02 43.1** | **-0.8** |
| THZ | | | | IAmb | IAmb | 07 03 03.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KHZ** | **Kahutara** | **25.45** | **193** | P | **P** | **07 02 46.8** | **-1.1** |
| KHZ | | | | IAmb | IAmb | 07 03 27.9 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.09** | **195** | P | **P** | **07 02 52.4** | **-1.2** |
| LTZ | | | | IAmb | IAmb | 07 03 14.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **WKZ** | **Wanaka** | **28.87** | **198** | P | **P** | **07 03 16.9** | **-1.1** |
| **EIDS** | **Eidsvold** | **28.93** | **250** | P | **P** | **07 03 19.0** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 07 03 19.8 | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.63** | **199** | P | **P** | **07 03 24.9** | **+0.4** |
| **ARMA** | **Armidale** | **29.67** | **239** | P | **P** | **07 03 26.4** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 07 03 27.2 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.16** | **199** | P | **P** | **07 03 29.4** | **+0.4** |
| **CTAO** | **Charters Tower** | **33.06** | **260** | P | **P** | **07 03 54.7** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 07 04 18.9 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **33.48** | **232** | P | **P** | **07 03 57.9** | **+0.2** |
| CAN | | | | IAmb | IAmb | 07 04 00.9 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **36.96** | **230** | P | **P** | **07 04 26.9** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.35** | **241** | P | **P** | **07 04 38.2** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.35** | **241** | P | **P** | **07 04 39.1** | **+1.2** |
| | comp=Z,3.2nm,0.4s,baz=86,slow=10.0,SNR=9.6 | | | | | | |
| | comp=Z,3.2nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.12** | **241** | P | **P** | **07 05 16.5** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 07 05 53.1 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.06** | **259** | P | **P** | **07 05 22.5** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 07 06 01.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.22** | **260** | P | **P** | **07 05 23.6** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 07 05 27.2 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.24** | **259** | P | **P** | **07 05 23.9** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 07 05 25.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.25** | **259** | P | **P** | **07 05 24.4** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.25** | **259** | P | **P** | **07 05 24.3** | **-0.6** |
| | comp=Z,1.1nm,0.6s,baz=96,slow=7.2,SNR=30 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **44.43** | **254** | P | **P** | **07 05 25.9** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 07 05 27.0 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.43** | **254** | P | **P** | **07 05 25.7** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.43** | **254** | P | **P** | **07 05 26.6** | **+0.3** |
| | comp=Z,10nm,0.4s,baz=88,slow=8.1,SNR=179 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 06 58.7** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=112,slow=4.3,SNR=2.3 | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **49.70** | **244** | P | **P** | **07 06 04.5** | **-1.2** |
| **KNRA** | **Kununurra** | **50.09** | **264** | P | **P** | **07 06 08.7** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **52.64** | **260** | P | **P** | **07 06 27.5** | **+0.3** |
| **MBWA** | **Marble Bar** | **57.71** | **256** | P | **P** | **07 07 02.3** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 07 07 09.0 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **CASY** | **Casey** | **66.12** | **205** | P | **P** | **07 07 57.4** | **+1.0** |
| **QSPA** | **South Pole Qui** | **72.33** | **180** | P | **P** | **07 08 34.3** | **+0.5** |
| **QSPA** | **South Pole Qui** | **72.33** | **180** | P | **P** | **07 08 34.5** | **+0.7** |
| | comp=Z,1.1nm,0.6s,baz=325,slow=0.9,SNR=12 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **N15K** | **Kwethluk River** | **79.10** | **9** | P | **P** | **07 09 10.9** | **-0.2** |
| N15K | | | | IAmb | IAmb | 07 09 42.8 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **P18K** | **Big Mountain,** | **79.23** | **12** | P | **P** | **07 09 11.7** | **-0.2** |
| P18K | | | | IAmb | IAmb | 07 09 36.0 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **YERR** | **Yerington** | **79.27** | **43** | P | **P** | **07 09 13.5** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **79.59** | **44** | P | **P** | **07 09 15.7** | **+1.2** |
| | comp=Z,0.3nm,0.6s,baz=226,slow=6.2,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **O18K** | **Koktuh Hills** | **79.66** | **12** | P | **P** | **07 09 13.9** | **-0.2** |
| O18K | | | | IAmb | IAmb | 07 09 15.0 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **KVN** | **Kaiserville** | **80.05** | **44** | P | **P** | **07 09 17.6** | **+0.8** |
| **J05D** | **Fort Rock, OR** | **80.44** | **39** | P | **P** | **07 09 20.1** | **+1.3** |
| **K15K** | **Wolf Creek Mou** | **80.92** | **8** | P | **P** | **07 09 21.7** | **+1.1** |
| K15K | | | | IAmb | IAmb | 07 09 58.6 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **85.81** | **13** | P | **P** | **07 09 44.4** | **-0.4** |
| | comp=Z,0.3nm,0.4s,baz=228,slow=5.3,SNR=6.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.26** | **58** | P | **P** | **07 09 49.6** | **+1.7** |
| | comp=Z,0.3nm,0.7s,baz=214,slow=6.0,SNR=4.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.51** | **44** | P | **P** | **07 09 54.1** | **+0.4** |
| | comp=Z,0.3nm,0.5s,baz=206,slow=6.4,SNR=4.6 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |

**IDC 01 06:59:23.6**±2.5**, 54.18°N×86.38°E, h0**km**, mbtmp2.8**/2**, ML2.4**/2**, Error ellipse: s-maj=20.2km s-min=12.6km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.95** | **256** | I | I | 07 06 05.0 | |
| | baz=73,slow=316,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.95** | **256** | Pg | Pg | 06 59 40.2 | -1.6 |
| | 1.9nm,0.3s,baz=73,slow=18,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 06 59 55.6 | |
| | 3.1nm,0.3s,baz=78,slow=29,SNR=16 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.98** | **237** | Pn | Pn | 07 00 54.9 | +1.6 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=11 | | | | | | |
| KURBB | | | | Lg | Lg | 07 02 32.0 | |
| | baz=55,slow=32,SNR=1.6 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.84** | **201** | Pn | Pn | 07 01 19.4 | +0.5 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=7.5 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*REY **01** 07:08:39.4, 64.62°N×17.44°W, h6km*

*IDC **01** 07:08:41.4±1.2, 64.50°N×17.64°W, h0km, mb3.5/4, mbtmp3.5/6, ML3.4/2, MS3.0/6, Error ellipse: s-maj=45.1km s-min=22.0km az=49.0*

**ISC 01 07:08:39.1**±0.7**, 64.62°N**±0.02°×**17.46°W**±0.02°**, h13**km±5km**, n66, σ1.50s/82, mb3.5**/4**, Iceland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKIS** | **Kista** | **0.07** | **320** | P | **Pg** | **07 08 41.2** | **-0.8** |
| | baz=316 | | | | | | |
| IKIS | | | | S | **Sg** | **07 08 43.1** | **-0.8** |
| | baz=316 | | | | | | |
| **IVON** | **Vonarskard** | **0.14** | **292** | P | **Pg** | **07 08 42.6** | **-0.1** |
| | baz=291 | | | | | | |
| IVON | | | | S | **Sg** | **07 08 45.5** | **+0.3** |
| | baz=291 | | | | | | |
| **IDJK** | **Dyngjujokull** | **0.15** | **141** | P | **Pg** | **07 08 42.6** | **-0.3** |
| | baz=143 | | | | | | |
| IDJK | | | | S | **Sg** | **07 08 45.7** | **0.0** |
| | baz=143 | | | | | | |
| **IGRF** | **Grimsfjall** | **0.23** | **159** | P | **Pg** | **07 08 44.2** | **0.0** |
| | baz=160 | | | | | | |
| IGRF | | | | S | **Sg** | **07 08 47.1** | **-0.6** |
| | baz=160 | | | | | | |
| **IURH** | **Urdarhals** | **0.24** | **34** | P | **Pg** | **07 08 44.3** | **0.0** |
| | baz=32 | | | | | | |
| IURH | | | | S | **Sg** | **07 08 48.6** | **+0.7** |
| | baz=32 | | | | | | |
| **IHUS** | **Husbondi** | **0.34** | **195** | P | **Pb** | **07 08 46.1** | **-1.0** |
| | baz=196 | | | | | | |
| IHUS | | | | S | **Sb** | **07 08 51.3** | **-1.1** |
| | baz=196 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **IBJK** | **Bruarjokull** | **0.34** | **116** | P | **Pb** | **07 08 45.8** | **-1.4** |
| | baz=117 | | | | | | |
| IBJK | | | | S | **Sb** | **07 08 51.1** | **-1.5** |
| | baz=117 | | | | | | |
| **ISKR** | **Skrokkalda** | **0.40** | **262** | P | **Pb** | **07 08 47.1** | **-1.1** |
| | baz=262 | | | | | | |
| **IJOK** | **Jokulheimar** | **0.45** | **227** | P | **Pb** | **07 08 47.8** | **-1.2** |
| | baz=228 | | | | | | |
| IJOK | | | | S | **Sb** | **07 08 54.8** | **-0.8** |
| | baz=228 | | | | | | |
| **THOR** | **Thorvaldshraun** | **0.46** | **47** | P | **Pb** | **07 08 47.9** | **-1.2** |
| | baz=46 | | | | | | |
| THOR | | | | S | **Sb** | **07 08 54.7** | **-1.2** |
| | baz=46 | | | | | | |
| **IKRE** | **Kreppuhraun** | **0.49** | **70** | P | **Pb** | **07 08 48.3** | **-1.4** |
| | baz=70 | | | | | | |
| IKRE | | | | S | **Sb** | **07 08 55.4** | **-1.4** |
| | baz=70 | | | | | | |
| **IASK** | **Askja** | **0.55** | **38** | P | **Pb** | **07 08 49.4** | **-1.4** |
| | baz=38 | | | | | | |
| **IMKO** | **Mokollar** | **0.60** | **53** | P | **Pb** | **07 08 50.3** | **-1.2** |
| | baz=52 | | | | | | |
| IMKO | | | | S | **Sb** | **07 08 59.1** | **-0.8** |
| | baz=52 | | | | | | |
| **IIEY** | **Innrieyrar** | **0.60** | **209** | P | **Pb** | **07 08 50.3** | **-1.3** |
| | baz=210 | | | | | | |
| IIEY | | | | S | **Sb** | **07 08 59.1** | **-0.9** |
| | baz=210 | | | | | | |
| **IKSK** | **Karasker** | **0.63** | **137** | P | **Pb** | **07 08 50.2** | **-1.9** |
| | baz=137 | | | | | | |
| IKSK | | | | S | **Sb** | **07 08 59.2** | **-1.6** |
| | baz=137 | | | | | | |
| **IKAL** | **Kalfafell** | **0.68** | **188** | P | **Pb** | **07 08 51.7** | **-1.2** |
| | baz=189 | | | | | | |
| IKAL | | | | S | **Sb** | **07 09 01.7** | **-0.6** |
| | baz=189 | | | | | | |
| **ISVA** | **Svartarkot** | **0.72** | **7** | P | **Pb** | **07 08 52.3** | **-1.3** |
| | baz=6.3 | | | | | | |
| ISVA | | | | S | **Sb** | **07 09 03.0** | **-0.5** |
| | baz=6.3 | | | | | | |
| **IVSH** | **V-Sauoahnukur** | **0.77** | **75** | P | **Pb** | **07 08 52.9** | **-1.5** |
| | baz=75 | | | | | | |
| IVSH | | | | S | **Sb** | **07 09 03.1** | **-1.6** |
| | baz=75 | | | | | | |
| **IVAT** | **Vatnsfell** | **0.77** | **236** | P | **Pb** | **07 08 53.5** | **-0.9** |
| | baz=236 | | | | | | |
| **IKVI** | **Kvisker** | **0.78** | **145** | P | **Pb** | **07 08 52.7** | **-1.9** |
| | baz=145 | | | | | | |
| IKVI | | | | S | **Sb** | **07 09 04.0** | **-1.1** |
| | baz=145 | | | | | | |
| **IHOX** | **Haoxl** | **0.80** | **152** | P | **Pn** | **07 08 53.7** | **-2.5** |
| | baz=153 | | | | | | |
| IHOX | | | | S | **Sn** | **07 09 05.4** | **-2.6** |
| | baz=153 | | | | | | |
| **IFAG** | **Fagurholsmyri** | **0.83** | **154** | P | **Pb** | **07 08 54.0** | **-1.3** |
| | baz=155 | | | | | | |
| IFAG | | | | S | **Sn** | **07 09 06.0** | **-2.5** |
| | baz=155 | | | | | | |
| **IADA** | **Aoalbol** | **0.90** | **63** | P | **Pb** | **07 08 55.0** | **-1.5** |
| | baz=63 | | | | | | |
| IADA | | | | S | **Sb** | **07 09 06.8** | **-1.7** |
| | baz=63 | | | | | | |
| **ISTE** | **Stelbrattur** | **0.96** | **285** | P | **Pg** | **07 08 56.1** | **-1.6** |
| | baz=285 | | | | | | |
| **IMEL** | **Melhnausar** | **1.01** | **19** | P | **Pg** | **07 08 57.0** | **-1.6** |
| | baz=19 | | | | | | |
| **ISNB** | **Snabyli** | **1.03** | **210** | P | **Pn** | **07 08 57.8** | **-1.4** |
| | baz=211 | | | | | | |
| ISNB | | | | S | **Sn** | **07 09 11.7** | **-1.8** |
| | baz=211 | | | | | | |
| **IREN** | **Reynihlio** | **1.06** | **13** | P | **Pg** | **07 08 57.7** | **-1.8** |
| | baz=12 | | | | | | |
| **ILOD** | **Lodnugiljahaus** | **1.06** | **214** | P | **Pn** | **07 08 58.8** | **-0.9** |
| | baz=214 | | | | | | |
| **ISLY** | **Slysaalda** | **1.08** | **223** | P | **Pn** | **07 08 59.0** | **-1.0** |
| | baz=223 | | | | | | |
| **IHES** | **Hestalda** | **1.08** | **239** | P | **Pn** | **07 08 59.2** | **-0.8** |
| | baz=239 | | | | | | |
| **IKVO** | **Krokottuvotn** | **1.12** | **12** | P | **Pb** | **07 08 58.7** | **-1.8** |
| | baz=12 | | | | | | |
| **IRJU** | **Rjupnafell** | **1.14** | **208** | P | **Pn** | **07 08 59.8** | **-0.9** |
| | baz=209 | | | | | | |
| **IFED** | **Fedgar** | **1.14** | **239** | P | **Pn** | **07 09 00.2** | **-0.6** |
| | baz=240 | | | | | | |
| **IGRS** | **Grimsstaoir** | **1.17** | **28** | P | **Pb** | **07 08 59.6** | **-1.5** |
| | baz=28 | | | | | | |
| **IMJO** | **Mjoaskard** | **1.19** | **235** | P | **Pg** | **07 09 01.0** | **-1.0** |
| | baz=236 | | | | | | |
| **IAUS** | **Austmannsbunga** | **1.19** | **217** | P | **Pn** | **07 09 00.7** | **-0.9** |
| | baz=218 | | | | | | |
| **IGYG** | **Gygjarholskot** | **1.24** | **255** | P | **Pg** | **07 09 01.7** | **-1.3** |
| | baz=255 | | | | | | |
| **IHVO** | **Lagu-Hvolar** | **1.26** | **210** | P | **Pg** | **07 09 02.0** | **-1.3** |
| | baz=210 | | | | | | |
| **IGOD** | **Go??abunga** | **1.27** | **221** | P | **Pg** | **07 09 02.3** | **-1.2** |
| | baz=221 | | | | | | |
| **IGHA** | **Grjothals** | **1.27** | **15** | P | **Pn** | **07 09 01.3** | **-1.3** |
| | baz=15 | | | | | | |
| **IHAU** | **Haukadalur** | **1.27** | **240** | P | **Pb** | **07 09 01.8** | **-1.1** |
| | baz=240 | | | | | | |
| **IGRA** | **Granastaoir** | **1.30** | **358** | P | **Pn** | **07 09 01.8** | **-1.2** |
| | baz=358 | | | | | | |
| **IDIM** | **Dimmadalss** | **1.36** | **9** | P | **Pn** | **07 09 03.1** | **-0.8** |
| | baz=8.8 | | | | | | |
| **IHLA** | **Hella** | **1.38** | **344** | P | **Pn** | **07 09 03.2** | **-0.9** |
| | baz=344 | | | | | | |
| **IESK** | **Eystri-Skogar** | **1.41** | **219** | P | **Pg** | **07 09 04.4** | **-1.7** |
| | baz=220 | | | | | | |
| **ISAU** | **Saurbar** | **1.44** | **245** | P | **Pb** | **07 09 04.4** | **-1.3** |
| | baz=245 | | | | | | |
| **IHED** | **Heoinshofoi** | **1.47** | **2** | P | **Pn** | **07 09 04.3** | **-0.9** |
| | baz=2.1 | | | | | | |
| IHED | | | | S | **Sg** | **07 09 24.9** | **-1.4** |
| | baz=2.1 | | | | | | |
| **IBRE** | **Brettingsstaoi** | **1.52** | **353** | P | **Pn** | **07 09 05.2** | **-0.7** |
| | baz=353 | | | | | | |
| **IGIL** | **Gilhagi** | **1.53** | **17** | P | **Pn** | **07 09 04.9** | **-1.2** |
| | baz=17 | | | | | | |
| **IASM** | **Asmuli** | **1.59** | **242** | P | **Pb** | **07 09 06.9** | **-1.4** |
| | baz=242 | | | | | | |
| IASM | | | | S | **Sg** | **07 09 28.8** | **-1.4** |
| | baz=242 | | | | | | |
| **ISIG** | **Siglufjorour** | **1.64** | **339** | P | **Pn** | **07 09 06.9** | **-0.6** |
| | baz=338 | | | | | | |
| **IASB** | **`sbjarnarst** | **1.67** | **276** | P | **Pb** | **07 09 08.2** | **-1.4** |
| | baz=276 | | | | | | |
| **ISOL** | **Solvholt** | **1.67** | **247** | P | **Pb** | **07 09 08.8** | **-1.0** |
| | baz=247 | | | | | | |
| **IKRO** | **Krokur** | **1.68** | **253** | P | **Pb** | **07 09 08.2** | **-1.6** |
| | baz=254 | | | | | | |
| **IHRN** | **Hraun** | **1.86** | **324** | P | **Pn** | **07 09 10.4** | **-0.3** |
| | baz=324 | | | | | | |
| **JMIC** | **Jan Mayen** | **7.23** | **24** | LR | LR | 07 12 47.2 | |
| | comp=Z,67nm,20.3s,baz=278,slow=33 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **11.71** | **136** | Pn | **Pn** | **07 11 28.4** | **+2.6** |
| | baz=322,slow=13 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **13.70** | **295** | LR | LR | 07 16 00.3 | |
| | comp=Z,42nm,20.9s,baz=88,slow=32 | | | | | | |
| **HFS** | **Hagfors** | **15.03** | **93** | LR | LR | 07 17 57.4 | |
| | comp=Z,40nm,20.1s,baz=246,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **19.70** | **79** | P | **Pn** | **07 13 12.8** | **+3.6** |
| | 0.1nm,0.3s,baz=279,slow=11,SNR=2.2 | | | | | | |
| FINES | | | | LR | LR | 07 19 55.0 | |
| | comp=Z,35nm,19.0s,baz=230,slow=34 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **VRAC** | **Vranov** | **23.66** | **114** | LR | LR | 07 23 36.6 | |
| | comp=Z,38nm,18.2s,baz=264,slow=38 | | | | | | |
| **ESDC** | **Sonseca Array** | **26.20** | **156** | P | **P** | **07 14 18.6** | **+5.3** |
| | 0.9nm,0.8s,baz=347,slow=10,SNR=5.2 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **45.73** | **332** | P | P | 07 17 04.1 | +4.7 |
| | 0.5nm,0.9s,baz=28,slow=6.0,SNR=6.2 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **DLBC** | **Dease Lake** | **47.12** | **318** | LR | LR | 07 36 38.7 | |
| | comp=Z,54nm,19.0s,baz=38,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **53.09** | **156** | P | **P** | **07 17 57.9** | **+1.9** |
| | 0.8nm,1.1s,baz=9.6,slow=6.8,SNR=2.2 | | | | | | |
| | 0.8nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **53.21** | **293** | P | P | 07 18 01.0 | +4.0 |
| | 0.4nm,0.7s,baz=58,slow=6.7,SNR=4.0 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*MOS **01** 07:12:07.7±3.0, 53°.61N×91°.14E, h10km, mb3.9/1, Error ellipse: s-maj=9.3km s-min=6.9km az=70.3*
*IDC **01** 07:12:08.8±3.1, 53°.51N×90°.90E, h0km, mbtmp3.2/3, ML2.7/3, Error ellipse: s-maj=27.0km s-min=22.6km az=52.0*
*NNC **01** 07:12:13.2±2.9, 53°.25N×90°.38E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=21.5km s-min=15.5km az=64.0, Suspected Mining explosion.*
**ISC 01 07:12:04.6**±0.8**, 53°.63N**±0°.03×**91°.07E**±0°.02**, h0km, n32,** σ**1s.86**/47**, 6C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABNR** | **Abakan** | **0.24** | **66** | PG | **Pg** | **07 12 08.7** | **-0.4** |
| **VEH** | **Verkhnyaya Baz** | **0.59** | **230** | PG | **Pb** | **07 12 17.4** | **-0.4** |
| **TBTR** | **Tabat** | **0.73** | **197** | PG | **Pg** | **07 12 19.3** | **+0.7** |
| **CERR** | **Cheremushki** | **0.80** | **165** | PG | **Pb** | **07 12 21.6** | **+0.2** |
| CERR | | | | | | 07 12 30.9 | |
| **DJO** | **Djoy, Khakassi** | **0.85** | **174** | PG | **Pb** | **07 12 22.5** | **+0.2** |
| DJO | | | | | | 07 12 33.3 | |
| **SHRR** | **Shira** | **1.02** | **329** | PG | **Pg** | **07 12 24.1** | **0.0** |
| **LUZB** | **Luzhba, Kemero** | **1.29** | **272** | PG | **Pg** | **07 12 29.0** | **-0.4** |
| LUZB | | | | | | 07 12 48.4 | |
| **ARDR** | **Aradan** | **1.77** | **126** | PN | **Pb** | **07 12 37.7** | **-0.2** |
| ARDR | | | | S | **Sb** | **07 13 00.7** | **+0.1** |
| **TASR** | **Tashtagol** | **2.11** | **247** | PN | **Pb** | **07 12 43.4** | **-0.3** |
| TASR | | | | | | 07 13 13.2 | |
| **MINR** | **Mina** | **2.23** | **54** | PN | **Pg** | **07 12 47.2** | **-0.2** |
| MINR | | | | | | 07 13 16.6 | |
| **MALIN** | **Malinovka, Kuz** | **2.28** | **266** | PN | **Pb** | **07 12 46.5** | **0.0** |
| MALIN | | | | S | **Sg** | **07 13 20.6** | **+3.0** |
| **KOTO** | **Kotino, Kuzbas** | **2.52** | **285** | PN | **Pn** | **07 12 47.2** | **+0.5** |
| KOTO | | | | S | **Sg** | **07 13 27.0** | **+1.6** |
| **TEL** | **Teeli** | **2.67** | **192** | PN | **Pb** | **07 12 53.2** | **0.0** |
| TEL | | | | S | **Sg** | **07 13 32.4** | **+2.2** |
| **ORY** | **Orie** | **2.74** | **58** | PN | **Pb** | **07 12 54.0** | **-0.3** |
| ORY | | | | S | **Sb** | **07 13 29.0** | **+0.6** |
| **VCHU** | **Verkh-Chumysh,** | **2.77** | **279** | PN | **Pb** | **07 12 55.4** | **+0.5** |
| VCHU | | | | S | **Sg** | **07 13 34.2** | **+0.8** |
| **POMOR** | **Pomortsevo, Ku** | **2.79** | **288** | PN | **Pb** | **07 12 56.5** | **+1.2** |
| POMOR | | | | S | **Sg** | **07 13 34.8** | **+0.5** |
| **YALR** | **Yailyu, Altay** | **2.81** | **230** | PN | **Pb** | **07 12 55.4** | **-0.2** |
| YALR | | | | S | **Sg** | **07 13 33.5** | **-1.3** |
| **ELT** | **Eltsovka** | **2.91** | **265** | PN | **Pb** | **07 12 57.1** | **-0.3** |
| ELT | | | | | | 07 13 35.1 | |
| **ARTR** | **Artybash** | **2.95** | **233** | PN | **Pg** | **07 13 00.8** | **-0.2** |
| ARTR | | | | | | 07 13 38.9 | |
| **HVS** | **Khovu-Aksy** | **2.97** | **146** | PN | **Pb** | **07 12 58.8** | **+0.4** |
| HVS | | | | S | **Sg** | **07 13 38.1** | **-1.9** |
| **SALR** | **Pechorkino, Sa** | **3.27** | **286** | PN | **Pb** | **07 13 03.3** | **0.0** |
| SALR | | | | | | 07 13 48.6 | |
| **I46RU** | **ZALESOVO INFRA** | **3.72** | **277** | I | I | 07 34 10.0 | |
| | 0.1nm,1.1s,baz=92,slow=320,SNR=11 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.72** | **277** | ⇑Pg | **Pg** | **07 13 14.8** | **-1.1** |
| | 1.0nm,0.7s | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | 07 14 01.5 | |
| | 12nm,1.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.72** | **277** | Pn | **Pb** | **07 13 07.8** | **-3.3** |
| | 0.7nm,0.3s,baz=96,slow=15,SNR=5.7 | | | | | | |
| ZALV | | | | Lg | Lg | 07 14 02.9 | |
| | 2.8nm,0.3s,baz=96,slow=26,SNR=11 | | | | | | |
| | 2.0nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **8.19** | **254** | ⇓Pn | **Pn** | **07 14 05.5** | **+0.9** |
| | 5.2nm,1.3s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **07 15 35.5** | **-2.3** |
| | 10.0nm,1.3s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 07 16 19.7 | |
| | 18nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **8.19** | **254** | P | **Pn** | **07 14 07.8** | **+3.2** |
| KURK | | | | | | 07 15 40.9 | |
| **KURBB** | **Kurchatov Arra** | **8.28** | **254** | Pn | **Pn** | **07 14 07.8** | **+2.0** |
| | 0.1nm,0.3s,baz=66,slow=15,SNR=17 | | | | | | |
| KURBB | | | | Sn | **Sn** | **07 15 40.9** | **+0.9** |
| | 0.1nm,0.3s,baz=67,slow=25,SNR=7.5 | | | | | | |
| KURBB | | | | Lg | Lg | 07 16 26.0 | |
| | 0.1nm,0.3s,baz=64,slow=30,SNR=8.7 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.28** | **254** | ⇓Pn | **Pn** | **07 14 07.1** | **+1.2** |
| | 3.8nm,0.6s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **07 15 38.0** | **-2.1** |
| | 22nm,0.8s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 07 16 18.6 | |
| | 25nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.28** | **254** | P | **Pn** | **07 14 07.1** | **+1.2** |
| KURBB | | | | S | **Sn** | **07 15 37.9** | **-2.1** |
| **MK31** | **Makanchi Array** | **8.86** | **223** | ⇑Pn | **Pn** | **07 14 16.4** | **+2.7** |
| | 0.3nm,0.5s,baz=33,slow=9.4,SNR=12 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **07 15 48.9** | **-5.4** |
| | 2.4nm,1.1s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 16 39.2 | |
| | 9.5nm,1.2s,baz=22,slow=29,SNR=4.5 | | | | | | |
| **MK31** | **Makanchi Array** | **8.86** | **223** | P | **Pn** | **07 14 16.4** | **+2.7** |
| MK31 | | | | S | **Sn** | **07 15 48.8** | **-5.4** |
| **MKAR** | **Makanchi Array** | **8.86** | **223** | Pn | **Pn** | **07 14 16.5** | **+2.7** |
| | 0.3nm,0.3s,baz=40,slow=12,SNR=13 | | | | | | |
| MKAR | | | | Sn | **Sn** | **07 15 53.1** | **-1.1** |
| | 0.1nm,0.3s,baz=33,slow=22,SNR=3.1 | | | | | | |
| MKAR | | | | Lg | Lg | 07 16 44.7 | |
| | 0.1nm,0.3s,baz=32,slow=31,SNR=5.1 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

*MOS **01** 07:18:30.1±1.1, 62°.10N×174°.75E, h8km, mb4.2/1, Error ellipse: s-maj=30.3km s-min=12.7km az=92.3*
*IDC **01** 07:18:31.5±2.3, 62°.23N×174°.77E, h0km, mb3.7/10, mbtmp3.7/12, ML3.3/2, MS3.2/11, Error ellipse: s-maj=56.9km s-min=22.5km az=1.0*
*NERS **01** 07:18:33.8, 62°.47N×174°.60E, h0km*
**ISC 01 07:18:33.6**±0.9**, 62°.32N**±0°.07×**174°.85E**±0°.07**, h10km, n28,** σ**2s.50**/27**, mb3.9**/10**, MS3.3**/6**, Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANDR** | **Anadyr'** | **2.69** | **25** | *e*P | **Pn** | **07 19 18.3** | **+1.4** |
| ANDR | | | | Pgmax | | 07 19 19.0 | |
| | 150nm,0.5s | | | | | | |
| ANDR | | | | *e*Pg | **Pb** | **07 19 21.1** | **-0.8** |
| ANDR | | | | *e*Sg | **Sb** | **07 19 56.4** | **+1.5** |
| ANDR | | | | Sgmax | | 07 20 16.5 | |
| | 2μm,0.8s | | | | | | |
| **ANDR** | **Anadyr'** | **2.69** | **25** | *e*P | **Pn** | **07 19 18.3** | **+1.4** |
| ANDR | | | | *e*S | **Sb** | **07 19 56.4** | **+1.5** |
| ANDR | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| **PVDR** | **Provideniya** | **5.76** | **63** | *e* | **Pb** | **07 20 12.5** | **-1.6** |
| PVDR | | | | *e* | | 07 21 56.3 | |
| **BILL** | **Bilibino** | **6.78** | **332** | *e*P | **Pn** | **07 20 15.8** | **+2.8** |
| BILL | | | | *e*S | **Sn** | **07 21 34.4** | **+4.4** |
| BILL | | | | *e*Sg | **Sg** | **07 22 02.6** | **-8.2** |
| BILL | | | | Sgmax | | 07 22 26.5 | |
| | comp=Z,80nm,1.2s | | | | | | |
| **BILL** | **Bilibino** | **6.78** | **332** | *e*P | **Pn** | **07 20 15.8** | **+2.8** |
| BILL | | | | *e*S | **Sn** | **07 21 34.4** | **+4.4** |
| BILL | | | | smax | smax | | |
| | comp=N,10.0nm,1.2s | | | | | | |
| **EVEN** | **Evensk** | **7.34** | **274** | *e*P | **Pn** | **07 20 22.5** | **+1.8** |
| EVEN | | | | Pmax | | 07 20 23.7 | |
| | comp=N,10.0nm,0.4s | | | | | | |
| EVEN | | | | Sgmax | | 07 22 03.7 | |
| | comp=N,290nm,0.8s | | | | | | |
| EVEN | | | | *e*S | Sg | 07 22 17.3 | -12 |
| **SHEM** | **Shemya Is, Ala** | **9.63** | **183** | LR | LR | 07 24 58.5 | |
| | comp=N,60nm,18.0s,baz=316,slow=41 | | | | | | |
| **SEY** | **Seymchan** | **10.35** | **283** | *e*P | **Pn** | **07 21 03.8** | **+1.9** |
| **SEY** | **Seymchan** | **10.35** | **283** | Pn | **Pn** | **07 21 03.0** | **+1.1** |
| | comp=N,0.6nm,0.3s,baz=82,slow=17,SNR=5.8 | | | | | | |
| | comp=N,1.8nm,0.4s | | | | | | |
| **SEY** | **Seymchan** | **10.35** | **283** | *e*P | **Pn** | **07 21 03.8** | **+1.9** |
| **MA2** | **Magadan** | **12.00** | **268** | LR | LR | 07 26 37.4 | |
| | comp=N,88nm,18.2s,baz=69,slow=41 | | | | | | |
| **KDAK** | **Kodiak Island** | **16.76** | **91** | LR | LR | 07 29 33.5 | |
| | comp=N,120nm,19.6s,baz=307,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **17.04** | **65** | P | **P** | **07 22 33.7** | **+0.2** |
| | baz=244,slow=5.6,SNR=9.3 | | | | | | |
| ILAR | | | | LR | LR | 07 29 38.2 | |
| | comp=N,46nm,19.6s,baz=200,slow=39 | | | | | | |
| | comp=N,0.9nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **19.69** | **317** | LR | LR | 07 30 28.3 | |
| | comp=N,48nm,20.2s,baz=166,slow=36 | | | | | | |
| **INK** | **Inuvik** | **21.77** | **52** | P | **P** | **07 23 25.6** | **+0.6** |
| | comp=N,2.0nm,0.8s,baz=300,slow=9.3,SNR=1.7 | | | | | | |
| | comp=N,2.0nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **26.12** | **241** | LR | LR | 07 35 31.0 | |
| | comp=N,50nm,18.3s,baz=128,slow=39 | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.65** | **346** | P | **P** | **07 27 00.9** | **-0.6** |
| | comp=N,0.7nm,0.6s,baz=25,slow=6.9,SNR=5.4 | | | | | | |
| ARCES | | | | LR | LR | 07 47 46.1 | |
| | comp=N,35nm,18.8s,baz=327,slow=38 | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **49.43** | **304** | P | **P** | **07 27 23.1** | **-0.1** |
| **KURBB** | **Kurchatov Arra** | **49.54** | **304** | P | **P** | **07 27 23.1** | **-1.0** |
| | comp=N,1.2nm,0.8s,baz=46,slow=8.3,SNR=12 | | | | | | |
| | comp=N,1.2nm,0.8s | | | | | | |
| **PFO** | **Pinyon Flats O** | **51.03** | **91** | LR | LR | 07 48 16.4 | |
| | comp=N,28nm,18.7s,baz=282,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.09** | **298** | P | **P** | **07 27 35.9** | **+0.1** |
| | comp=N,0.3nm,0.5s,baz=46,slow=6.2,SNR=3.6 | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **54.29** | **342** | P | **P** | **07 27 58.9** | **-0.4** |
| | comp=N,1.3nm,0.6s,baz=42,slow=8.8,SNR=7.5 | | | | | | |
| FINES | | | | LR | LR | 07 53 19.8 | |
| | comp=N,25nm,20.5s,baz=142,slow=38 | | | | | | |
| | comp=N,1.3nm,0.6s | | | | | | |
| **ANMO** | **Albuquerque** | **54.59** | **81** | LR | LR | 07 52 29.2 | |
| | comp=N,22nm,18.7s,baz=180,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **56.33** | **351** | P | **P** | **07 28 15.2** | **+1.1** |
| | comp=N,0.8nm,0.7s,baz=11,slow=7.7,SNR=3.2 | | | | | | |
| | comp=N,0.8nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **57.02** | **349** | P | **P** | **07 28 19.5** | **+0.7** |
| | comp=N,0.7nm,0.5s,baz=355,slow=1.8,SNR=6.3 | | | | | | |
| | comp=N,0.7nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **60.57** | **83** | P | **P** | **07 28 43.5** | **-0.6** |
| | comp=N,0.1nm,0.6s,baz=338,slow=6.8,SNR=2.1 | | | | | | |
| TXAR | | | | LR | LR | 07 57 10.9 | |
| | comp=N,21nm,18.1s,baz=34,slow=38 | | | | | | |
| | comp=N,0.1nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **62.67** | **359** | P | **P** | **07 28 56.6** | **-1.3** |
| | comp=N,0.5nm,0.5s,baz=335,slow=6.5,SNR=2.2 | | | | | | |
| | comp=N,0.5nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **64.06** | **336** | P | **P** | **07 29 06.4** | **-0.7** |
| | comp=N,1.7nm,0.7s,baz=21,slow=6.2,SNR=4.1 | | | | | | |
| | comp=N,1.7nm,0.7s | | | | | | |

*NOU **01** 08:04:24.2, 35°.76S×178°.27E, h249km, mb3.8/10, Off E. Coast of N. Island, N.Z.*
*WEL **01** 08:04:29.8±1.3, 35°S±7°×17°8E±1°1, h33km, M3.6/11, ML3.7/14, MLv3.6/11, Error ellipse: s-maj=0.0km s-min=0.0km az=66.0, confirmed*
**ISC 01 08:04:23.9**±3.4**, 35°.8S**±0°.2×**178°.3E**±0°.2**, h242**km±15km**, n28,** σ**1s.90**/36**, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.75** | **180** | P | **Pn** | **08 05 04.5** | **+1.0** |
| **MXZ** | **Matakaoa Point** | **1.75** | **180** | P | **Pn** | **08 05 04.5** | **+1.0** |
| MXZ | | | | S | **S** | **08 05 29.4** | **-5.3** |
| **WIZ** | **White Island** | **1.94** | **207** | P | **Pn** | **08 05 08.2** | **+3.0** |
| **HAZ** | **Te Kaha** | **1.99** | **192** | P | **Pn** | **08 05 06.4** | **+0.8** |
| HAZ | | | | S | **S** | **08 05 37.1** | **-1.4** |
| **RUGZ** | **Raukumara Rang** | **2.21** | **193** | P | **Pn** | **08 05 08.6** | **+0.8** |
| RUGZ | | | | S | **S** | **08 05 39.5** | **-3.1** |
| **PUZ** | **Puketiti** | **2.26** | **181** | P | **Pn** | **08 05 09.6** | **+1.4** |
| PUZ | | | | S | **S** | **08 05 41.4** | **-1.7** |
| **KUZ** | **Kuaotunu** | **2.29** | **245** | P | **Pn** | **08 05 08.8** | **+0.3** |
| **KUZ** | **Kuaotunu** | **2.29** | **245** | P | **Pn** | **08 05 08.7** | **+0.3** |
| **GRZ** | **Great Barrier** | **2.35** | **258** | P | **Pn** | **08 05 08.9** | **-0.2** |
| **TWGZ** | **Tauwhareparae** | **2.38** | **186** | P | **Pn** | **08 05 11.4** | **+2.0** |
| TWGZ | | | | S | **S** | **08 05 45.6** | **+0.3** |
| **OPRZ** | **Ohinepanea** | **2.48** | **214** | P | **Pn** | **08 05 12.7** | **+2.5** |
| **MARZ** | **Manawahe** | **2.54** | **211** | P | **Pn** | **08 05 13.7** | **+2.7** |
| **MWZ** | **Matawai** | **2.60** | **194** | P | **Pn** | **08 05 13.2** | **+1.6** |
| MWZ | | | | S | **S** | **08 05 48.6** | **-0.7** |
| **EDRZ** | **Edgecumbe** | **2.62** | **208** | P | **Pn** | **08 05 14.4** | **+2.5** |
| **URZ** | **Urewera** | **2.63** | **201** | P | **Pn** | **08 05 13.5** | **+1.6** |
| **TKGZ** | **Te Karaka** | **2.66** | **188** | P | **Pn** | **08 05 14.0** | **+1.8** |
| TKGZ | | | | S | **S** | **08 05 50.0** | **-0.2** |
| **TOZ** | **Tahuroa Road** | **2.96** | **229** | P | **Pn** | **08 05 18.3** | **+2.9** |
| **RTZ** | **Ruatahuna** | **3.00** | **200** | P | **Pn** | **08 05 17.2** | **+1.2** |
| RTZ | | | | S | **S** | **08 05 57.1** | **0.0** |
| **WCZ** | **Waipu Caves** | **3.22** | **266** | P | **Pn** | **08 05 18.7** | **+0.3** |
| **TLZ** | **Tolley Road** | **3.36** | **220** | P | **Pn** | **08 05 23.2** | **+3.3** |
| **BKZ** | **Black Stump Fm** | **3.65** | **203** | P | **Pn** | **08 05 24.9** | **+1.6** |
| **OUZ** | **Omahuta** | **3.89** | **277** | P | **Pn** | **08 05 26.4** | **+0.4** |
| **OUZ** | **Omahuta** | **3.89** | **277** | P | **Pn** | **08 05 26.2** | **+0.2** |
| **BFZ** | **Birch Farm** | **5.13** | **198** | P | **Pn** | **08 05 41.9** | **+0.9** |
| **SNZO** | **South Karori** | **6.18** | **206** | P | **Pn** | **08 05 54.3** | **+0.3** |
| **QRZ** | **Quartz Range** | **6.76** | **220** | P | **Pn** | **08 06 02.1** | **+0.7** |
| | 30nm,1.6s | | | | | | |
| **KHZ** | **Kahutara** | **7.57** | **208** | P | **Pn** | **08 06 11.2** | **-0.4** |
| **ODZ** | **Otahua Downs** | **10.92** | **210** | P | **Pn** | **08 06 54.9** | **+0.9** |

*NOU **01** 08:11:49.8, 42°.82S×173°.68E, h157km, MLv3.6/6, South Island, New Zealand*
*WEL **01** 08:11:57.3±0.5, 42°S±3°×17°4E±°, h15km±3km, M2.7/9, ML3.0/10, MLv2.7/9, Error ellipse: s-maj=0.0km s-min=0.0km az=139.6, confirmed*
**ISC 01 08:11:57.5**±0.9**, 41°.79S**±0°.04×**174°.20E**±0°.04**, h18**km±3km**, n24,** σ**0s.61**/34**, 1C, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMWZ** | **Cape Campbell** | **0.05** | **13** | ⇑P | **Pb** | **08 12 00.8** | **+0.1** |
| CMWZ | | | | S | **Sg** | **08 12 03.7** | **+0.8** |
| **WDFS** | **Ward Fire Stat** | **0.06** | **234** | P | **Pb** | **08 12 00.7** | **0.0** |
| WDFS | | | | S | **Sg** | **08 12 03.3** | **+0.3** |
| **SEDS** | **Seddon Fire St** | **0.15** | **323** | P | **Pb** | **08 12 01.9** | **+0.2** |
| SEDS | | | | S | **Sg** | **08 12 05.2** | **+0.6** |
| **KEKS** | **Kekerengu Vall** | **0.23** | **225** | P | **Pb** | **08 12 03.0** | **-0.1** |
| **BSWZ** | **Blackbirch Sta** | **0.26** | **288** | P | **Pg** | **08 12 03.2** | **-0.1** |
| BSWZ | | | | S | **Sg** | **08 12 07.5** | **+0.3** |
| **MGCS** | **Blenheim Marlb** | **0.34** | **326** | S | **Sg** | **08 12 09.2** | **-0.5** |
| **TUWZ** | **Tuamarina** | **0.41** | **332** | P | **Pb** | **08 12 06.8** | **+0.5** |
| TUWZ | | | | S | **Sg** | **08 12 12.8** | **+1.1** |
| **BWRS** | **Waikakaho Road** | **0.42** | **328** | P | **Pg** | **08 12 06.1** | **+0.1** |
| **TCW** | **Tory Channel** | **0.59** | **6** | P | **Pb** | **08 12 08.9** | **-0.3** |
| TCW | | | | S | **Sb** | **08 12 17.9** | **+0.7** |
| **HAVS** | **Havelock** | **0.61** | **329** | P | **Pg** | **08 12 09.3** | **-0.2** |
| **BHW** | **Baring Head** | **0.63** | **53** | P | **Pn** | **08 12 10.5** | **-1.1** |
| BHW | | | | S | **Sn** | **08 12 20.9** | **-0.3** |
| **WEL** | **Wellington** | **0.66** | **40** | P | **Pn** | **08 12 10.9** | **-1.1** |
| WEL | | | | S | **Sn** | **08 12 22.1** | **+0.1** |
| **KHZ** | **Kahutara** | **0.79** | **218** | P | **Pn** | **08 12 13.3** | **-0.5** |
| **KHZ** | **Kahutara** | **0.79** | **218** | P | **Pn** | **08 12 13.3** | **-0.5** |
| KHZ | | | | S | **Sn** | **08 12 25.9** | **+0.7** |
| **PLWZ** | **Palliser** | **0.82** | **74** | P | **Pn** | **08 12 13.4** | **-0.9** |
| **NNZ** | **Nelson** | **0.84** | **313** | P | **Pg** | **08 12 13.5** | **-0.4** |
| NNZ | | | | S | **Sg** | **08 12 25.5** | **+0.4** |
| **MSWZ** | **Moikau Station** | **0.87** | **65** | P | **Pn** | **08 12 14.4** | **-0.6** |
| **CAW** | **Cannon Point** | **0.95** | **44** | P | **Pn** | **08 12 15.7** | **-0.2** |
| **PAWZ** | **Paruwai Farm** | **1.01** | **66** | P | **Pn** | **08 12 16.0** | **-0.8** |
| **QRZ** | **Quartz Range** | **1.59** | **307** | P | **Pb** | **08 12 26.4** | **+0.1** |
| **BFZ** | **Birch Farm** | **1.90** | **55** | P | **Pg** | **08 12 34.5** | **+0.5** |
| **KHEZ** | **Kahui Hut** | **2.50** | **357** | P | **Pg** | **08 12 44.5** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **3.15** | **34** | P | **Pb** | **08 12 53.9** | **+0.8** |
| **HIZ** | **Hauiti** | **3.32** | **9** | P | **Pb** | **08 12 56.0** | **+0.2** |

*IDC **01** 08:52:14.5±1.2, 5°.52N×82°.69W, h0km, mb3.8/10, mbtmp4.0/14, ML3.3/3, MS3.3/24, Error ellipse: s-maj=35.0km s-min=17.5km az=33.0*
*NEIC **01** 08:52:14.8±2.2, 5°.53N±0°.06×82°.66W±0°.09, h5km±6km, mb4.4/39, Error ellipse: s-maj=12.9km s-min=8.6km az=72.0*
*RSNC **01** 08:52:15.3±0.4, 6°N±2°×8°2W±°, h0km, M4.9, mb5.1, mB5.4, ML3.6, Mw(mB)4.8*
*UPA **01** 08:52:15.2±0.7, 5°.67N×82°.60W, h1km±16km, MW4.5*
*UCR **01** 08:52:17.9±1.9, 5°.82N×82°.65W, h9km±999km, MW4.0*
*CATAC **01** 08:53:01.1±2.0, 8°.84N×83°.42W, h20km±5km, MB5.0, mb4.7, ML4.1*
**ISC 01 08:52:17.8**±3.1**, 5°.51N**±0°.05×**82°.61W**±0°.05**, h26**km±24km**, n266,** σ**2s.21**/272**, mb4.3**/26**, MS3.4**/19**, 24C-11D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GMAL** | **Guarumal, Vera** | **2.62** | **31** | P | **Pn** | **08 52 55.1** | **-3.4** |
| GMAL | | | | S | **Sn** | **08 53 25.8** | **-3.8** |
| **GMAL** | **Guarumal, Vera** | **2.62** | **31** | *e*P | **Pn** | **08 52 55.1** | **-3.4** |
| GMAL | | | | *e*S | **Sn** | **08 53 26.6** | **-3.0** |
| **GMAL** | **Guarumal, Vera** | **2.62** | **31** | *e*P | **Pn** | **08 52 55.1** | **-3.4** |
| **MARI3** | **Mariato, Verag** | **2.67** | **37** | ⇓*e*P | **Pn** | **08 52 56.6** | **-2.5** |
| **PTPM** | **Petroterminale** | **2.69** | **354** | ⇑*e*P | **Pn** | **08 52 55.9** | **-3.5** |
| PTPM | | | | *e*S | **Sn** | **08 53 28.6** | **-2.6** |
| **PEDE3** | **Pedregal, Chir** | **2.86** | **4** | *e*P | **Pn** | **08 52 59.0** | **-2.7** |
| **TOSI3** | **Tonosi** | **2.86** | **49** | *e*P | **Pn** | **08 52 59.0** | **-2.8** |
| TOSI3 | | | | *e*S | **Sn** | **08 53 33.2** | **-2.3** |
| **LOCO3** | **Loma Colorada,** | **2.88** | **4** | *e*P | **Pn** | **08 52 59.4** | **-2.7** |

LOMA3 **Las Lomas, Chi** 2.91 4 *e*P Pn 08 52 59.9 -2.6
DVD **David** 2.91 3⇓*e*P Pn 08 52 60.0 -2.5
DVD *e*S Sn 08 53 35.0 -1.6
MESA3 **La Mesa, Verag** 2.98 28 *e*P Pn 08 53 01.0 -2.4
MESA3 *e*S Sn 08 53 35.9 -2.4
CDITO **Canoas** 3.05 355 *i* P Pn 08 53 01.2 -3.2
PTJ1 **Puerto Jimnez** 3.08 347 *i* P Pn 08 53 02.1 -2.7
PTJ1 *i* S Sn 08 53 40.1 -0.7
PTJ1 **Puerto Jimnez** 3.08 347 *e*P Pn 08 53 01.9 -2.9
PTJ1 *e*S Sn 08 53 39.6 -1.2
PTJ1 **Puerto Jimnez** 3.08 347 *e*P Pn 08 53 01.6 -3.2
JIME **Puerto Jimenez** 3.09 347 *e*P Pn 08 53 01.8 -3.1
PESE3 **Pese, Herrera** 3.10 40 *e*P Pn 08 53 03.1 -2.0
EDAD **Golfito** 3.17 350 *e*P Pn 08 53 01.8 -4.2
BCO2 **Palmira** 3.19 2⇑*i*P Pn 08 53 03.7 -2.8
BCO2 *e*S Sn 08 53 42.9 -0.8
AZU **Azuero** 3.24 46 P Pn 08 53 04.4 -2.7
AZU S Sn 08 53 42.6 -2.3
AZU **Azuero** 3.24 46⇓*i*P Pn 08 53 04.8 -2.2
AZU *e*S Sn 08 53 42.2 -2.7
AZU **Azuero** 3.24 46⇓*i*P Pn 08 53 04.6 -2.4
PEDA3 **Pedasi** 3.26 52 *e*P Pn 08 53 04.8 -2.5
PEDA3 *e*S Sn 08 53 41.3 -3.9
BRU2 **Volcan** 3.26 359 Pn 08 53 04.8 -2.7
BRU2 **Volcan** 3.26 359 *i* P Pn 08 53 04.6 -2.8
BRU2 **Volcan** 3.26 359⇑*i*P Pn 08 53 04.7 -2.7
BRU2 *e*S Sn 08 53 44.0 -1.6
BRU2 **Volcan** 3.26 359⇑*e*P Pn 08 53 04.7 -2.8
LNBQ3 **Los Naranjos,** 3.26 3 *e*P Pn 08 53 04.7 -2.7
LNBQ3 *e*S Sn 08 53 44.4 -1.1
CHIT3 **Chitre** 3.26 42 *e*P Pn 08 53 05.2 -2.2
CHIT3 *e*S Sn 08 53 44.9 -0.5
MLIR3 **Monte Lirio, C** 3.27 356 *e*P Pn 08 53 05.5 -2.0
MLIR3 *e*S Sn 08 53 43.3 -2.2
VITO **San Vito** 3.30 354 *e*P Pn 08 53 06.0 -2.0
CHGR2 **Aguacate** 3.43 8 *e*P Pn 08 53 07.9 -1.8
CHGR2 *e*S Sn 08 53 48.7 -1.0
EDP2 **Potrero Grande** 3.52 351 *e*P Pn 08 53 08.3 -2.6
EDPN **Palmar Norte** 3.53 346 *e*P Pn 08 53 07.8 -3.2
EDBA **Buenos Aires** 3.69 350 *e*P Pn 08 53 10.4 -2.7
OCHAL **Ojochal** 3.71 344 *i* P Pn 08 53 10.2 -3.2
OCHAL IAML 08 53 11.2
comp=Z,660nm,1.0s
BURE **Buenos Aires** 3.71 349⇑*e*P Pn 08 53 10.6 -2.9
DRK0 **Durika** 3.78 350 *i* P Pn 08 53 11.6 -3.0
DRK0 IAML 08 53 13.3
comp=Z,2µm,1.0s
DRK0 *i* S Pn 08 53 18.6 +4.0
DRK0 **Durika** 3.78 350 *e*P Pn 08 53 12.3 -2.3
DRK0 **Durika** 3.78 350 *e*P Pn 08 53 12.1 -2.5
CNI2 **El Empalme, Bo** 3.89 2 *e*P Pn 08 53 14.6 -1.4
CNI2 *e*S Sn 08 53 58.3 -2.5
ZELE **Perez Zeledon** 3.98 344⇑*i*P Pn 08 53 14.5 -2.9
BRIBI **Bribri** 4.09 357 *e*P Pn 08 53 17.3 -1.4
BUS1 **Rivas** 4.17 344⇑*e*P Pn 08 53 17.4 -2.9
SVQ2 **Quepos** 4.19 339 *e*P Pn 08 53 17.3 -2.7
LLNJ **Naranjito** 4.20 340 *e*P Pn 08 53 17.3 -3.0
ZANG **Zanguenga, Cho** 4.37 38⇑*e*P Pn 08 53 23.1 +0.4
ZANG **Zanguenga, Cho** 4.37 38 *e*P Pn 08 53 23.0 +0.4
ABE2 **San Pablo** 4.40 341 *e*P Pn 08 53 21.4 -1.9
LCR2 **La Lucha 2** 4.42 342 Pn Pn 08 53 20.8 -2.7
LCR2 **La Lucha 2** 4.42 342 *i* P Pn 08 53 20.8 -2.7
LCR2 IAML 08 53 21.6
comp=Z,380nm,1.0s
LCR2 **La Lucha 2** 4.42 342⇑*i*P Pn 08 53 21.0 -2.5
REPA **Paraso** 4.46 344⇑*e*P Pn 08 53 22.8 -1.2
VINA **Juan Vinas** 4.50 346⇑*e*P Pn 08 53 22.1 -2.4
TAGO **Cartago** 4.51 343 *e*P Pn 08 53 22.6 -2.1
ACOS **Acosta** 4.52 340⇑*i*P Pn 08 53 21.6 -3.3
PCAYA **Pacayas** 4.53 345 *e*P Pn 08 53 23.0 -2.0
BITO **Garabito Jaco** 4.54 334 *e*P Pn 08 53 22.2 -2.7
RVSTA **Santa Teresita** 4.55 347 *e*P Pn 08 53 23.7 -1.5
FLAM **Flamenco Islan** 4.55 42 *e*P Pn 08 53 24.4 -0.7
BCIP **Isla Barro Col** 4.55 37 Pn Pn 08 53 24.3 -0.9
BCIP **Isla Barro Col** 4.55 37 P Pn 08 53 23.9 -1.2
BCIP S Sn 08 54 15.4 -1.9
BCIP **Isla Barro Col** 4.55 37 *e*P Pn 08 53 24.2 -0.9
BCIP **Isla Barro Col** 4.55 37 *e*P Pn 08 53 24.2 -0.9
TRIO **Tres Rios** 4.57 343⇑*e*P Pn 08 53 23.0 -2.6
RAFA **San Farael, Vo** 4.57 345 *i* P Pn 08 53 23.7 -2.0
RAFA **San Farael, Vo** 4.57 345⇑*e*P Pn 08 53 23.0 -2.7
VTCV **VTCV, Calle Va** 4.58 346 *e*P Pn 08 53 22.6 -3.0
AMPA **Desamparados** 4.58 342⇑*e*P Pn 08 53 22.6 -3.1
UPA **Univ. de Panam** 4.60 41 *e*P Pn 08 53 24.6 -1.2
UPA *e*S Sn 08 54 16.5 -2.0
CVTQ **Turrialba Volc** 4.61 346 *e*P Pn 08 53 24.0 -2.1
VICA **Volcano Irazu** 4.61 345⇑*e*P Pn 08 53 23.0 -3.3
LUJA **Lujan** 4.62 342⇑*e*P Pn 08 53 24.4 -1.7
VTR0 **Volcan Turrial** 4.62 346 *e*P Pn 08 53 24.4 -2.0
CVTR **Volcan Turrial** 4.62 346 *e*P Pn 08 53 23.8 -2.5
SJS3 **Mercedes San J** 4.62 342 *e*P Pn 08 53 23.7 -2.5
CENT **San Jose** 4.62 342 *e*P Pn 08 53 25.2 -0.9
SJS **Escuela Geolog** 4.62 342 *e*P Pn 08 53 23.5 -2.7
LUPE **Guadalupe** 4.63 342⇑*e*P Pn 08 53 23.7 -2.7
MEXI **Barrio Mexico** 4.63 342 *e*P Pn 08 53 24.4 -2.0
LCOCO **El Coco** 4.64 348 *e*P Pn 08 53 25.2 -1.0
CORON **Coronado** 4.64 343⇑*e*P Pn 08 53 24.6 -1.9
SANTA **Santa Ana** 4.66 341 *e*P Pn 08 53 23.8 -2.8
FRIJ **El Hiral** 4.67 38 *e*P Pn 08 53 25.7 -1.0
RVLA **Villa Bonita** 4.67 348 *e*P Pn 08 53 25.7 -1.0
CVIMO **Finca Echandi** 4.67 344⇑*e*P Pn 08 53 23.7 -3.3
DOMI **Santo Domingo** 4.67 342 *e*P Pn 08 53 24.9 -2.0
BELE **Belen** 4.70 341 *e*P Pn 08 53 24.2 -3.0
HDC **Heredia** 4.70 342 Pn 08 53 25.1 -2.2
HDC **Heredia** 4.70 342 *e*P Pn 08 53 25.2 -2.0
HDC **Heredia** 4.70 342⇑*i*P Pn 08 53 24.7 -2.5
HDC3 **Heredia 3** 4.70 342 *i* P Pn 08 53 25.1 -2.2
HDC3 IAML 08 53 26.9
comp=Z,1µm,1.0s
CBL1 **Cabuya** 4.74 329⇓*e*P Pn 08 53 24.8 -2.8
TCS1 **Tacares** 4.80 340 *i* P Pn 08 53 26.1 -2.5
TCS1 IAML 08 53 32.8
comp=Z,2µm,1.0s
TCS1 **Tacares** 4.80 340 *e*P Pn 08 53 25.4 -3.2
ARZA **Esparza** 4.89 336 *e*P Pn 08 53 27.1 -2.7
CARI **Cariari** 4.95 347 *e*P Pn 08 53 30.0 -0.5
PTAC **Punta Ardita,** 5.04 71 P Pn 08 53 31.7 -0.2
PTAC S Sn 08 54 27.0 -2.4
PTAC **Punta Ardita,** 5.04 71⇓*i*P Pn 08 53 32.0 +0.2
GR1C **Gorgona, Isla** 5.09 119 P Pn 08 53 29.0 -3.5
GR1C S Sn 08 54 24.6 -5.8
NYURE **Nandayure** 5.16 330⇓*e*P Pn 08 53 31.0 -2.5
ITAL **Pital** 5.17 342 *e*P Pn 08 53 33.3 -0.4
SOCE **Pocosol** 5.23 338 Pn 08 53 32.7 -1.8
SOCE **Pocosol** 5.23 338 *i* P Pn 08 53 32.8 -1.6
SOCE *i* S Pn 08 53 36.3 +1.9
SOCE IAML 08 53 43.6
comp=Z,430nm,1.0s
MTEVE **Monteverde** 5.25 335⇓*i*P Pn 08 53 33.9 -1.0
PIZC **Pizarro, Choco** 5.26 96 P Pn 08 53 34.3 -0.5
comp=Z,187nm,0.8s
PIZC S Sn 08 54 33.2 -1.5
comp=Z,187nm,0.8s
JUNT **Juntas** 5.28 334⇓*i*P Pn 08 53 32.6 -2.4
JTS **Las Juntas de** 5.28 334 Pn Pn 08 53 32.6 -2.5
JTS **Las Juntas de** 5.28 334 Pn Pn 08 53 32.7 -2.4
comp=Z,100nm,0.3s,baz=93,slow=15,SNR=208
JTS Sn Sn 08 54 32.9 -2.3
comp=Z,31nm,0.3s,baz=244,slow=23,SNR=10
JTS **Las Juntas de** 5.28 334 P Pn 08 53 32.6 -2.5
comp=Z,181nm,0.5s,comp=Z,8µm
JTS **Las Juntas de** 5.28 334 *e*P Pn 08 53 32.9 -2.3
JTS *e*S Sn 08 54 32.0 -3.3
JTS **Las Juntas de** 5.28 334 *e*P Pn 08 53 32.3 -2.9
TUNA **La Fortuna** 5.32 338 *e*P Pn 08 53 34.9 -0.7
VACR **Volcan Arenal** 5.33 338⇑*e*P Pn 08 53 33.9 -2.0
TUMC **Tumaco** 5.34 133 P Pn 08 53 33.2 -2.7
comp=Z,254nm,0.8s
TUMC S Sn 08 54 30.8 -5.8
comp=Z,254nm,0.8s
ARE1 **Arenal 1** 5.34 337⇑*e*P Pn 08 53 34.3 -1.6
CEDE **Laguna Cedeo** 5.36 337⇑*e*P Pn 08 53 34.2 -2.0
NICO **Nicoya** 5.38 329 *e*P Pn 08 53 34.0 -2.4
TOTI **Torti** 5.45 51 *e*P Pn 08 53 39.6 +2.1
CNAS **Canas** 5.47 333 *e*P Pn 08 53 36.3 -1.4
COVE **Coope Vega, Sa** 5.47 341 *i* P Pn 08 53 36.2 -1.5
COVE IAML 08 53 37.0
comp=Z,300nm,1.0s
MALC **Bahia Malaga** 5.47 106 P Pn 08 53 36.6 -1.1
MALC S Sn 08 54 39.2 -0.6
UPD2 **Meteti** 5.47 56 *e*P Pn 08 53 40.0 +2.3

BAGA **Bagaces** 5.63 332 *e*P Pn 08 53 37.8 -2.2
CUI **Cuipilapa** 5.70 334⇓*e*P Pn 08 53 38.6 -2.3
DELF **Filadelfia** 5.70 329 *e*P Pn 08 53 39.9 -1.0
COLC **Colonia** 5.72 334 *e*P Pn 08 53 39.9 -1.4
VERA **Finca Concepci** 5.76 337 *e*P Pn 08 53 39.7 -2.0
ALIBA **Liberia Airpor** 5.82 330 *e*P Pn 08 53 40.7 -1.9
GPS2 **Hotel Rincn d** 5.87 333 *e*P Pn 08 53 42.0 -1.3
GPS3 **Bodega del ICE** 5.88 333 *e*P Pn 08 53 43.2 -0.1
CAPC **Capurgana** 6.07 59 P Pn 08 53 46.9 +0.9
comp=Z,157nm,0.5s,comp=Z,4µm
LCRUZ **La Cruz** 6.28 332 *e*P Pn 08 53 46.7 -2.2
PLMC **San Jos del P** 6.33 95 P Pn 08 53 48.9 -0.8
comp=Z,58nm,0.7s,comp=Z,2µm
PLMC S Sn 08 54 59.3 -2.0
comp=Z,58nm,0.7s,comp=Z,2µm
JAMC **Jamundi, Valle** 6.35 111 P Pn 08 53 48.3 -1.7
comp=Z,67nm,0.5s,comp=Z,2µm
JAMC S Sn 08 54 59.3 -2.5
comp=Z,67nm,0.5s,comp=Z,2µm
YOTC **Yotoco, Valle** 6.43 103 P Pn 08 53 49.3 -1.7
comp=Z,148nm,0.8s,comp=Z,2µm
YOTC S Sn 08 55 00.8 -2.9
comp=Z,148nm,0.8s,comp=Z,2µm
APAC **Apartado, Choc** 6.44 68 P Pn 08 53 53.6 +2.5
comp=Z,154nm,0.5s,comp=Z,2µm
APAC S Sn 08 55 05.6 +1.7
comp=Z,154nm,0.5s,comp=Z,2µm
PAC1 **Pacto, Paraso** 6.46 144 P Pn 08 53 48.4 -3.1
DBBC **Dabeiba** 6.54 76 P Pn 08 53 53.8 +1.3
DBBC S Sn 08 55 05.1 -1.2
CMBC **Cumbal** 6.59 133 P Pn 08 53 51.3 -2.3
POPC **Popayan, Colom** 6.62 116 P Pn 08 53 51.9 -1.8
comp=Z,126nm,0.5s,comp=Z,2µm
OTAV **Otavalo** 6.69 141 Pn Pn 08 53 52.3 -2.6
OTAV **Otavalo** 6.69 141 *e*P Pn 08 53 52.5 -2.4
JAPN **Al SSO del Vol** 6.70 333 *i* P Pn 08 53 54.2 -0.4
JAPN IAML 08 53 58.6
comp=Z,100nm,1.0s
JAPN *i* S Pb 08 54 06.6 -7.0
GCUF **Volcan Galeras** 6.77 129 P Pn 08 53 54.2 -1.8
comp=Z,69nm,0.7s,comp=Z,1µm
TULM **Tulcn-Chalpat** 6.78 135 Pn 08 53 55.3 -0.8
TULM **Tulcn-Chalpat** 6.78 135 P Pn 08 53 56.4 +0.3
comp=Z,38nm,1.1s,comp=Z,2µm
IMBA **Imbabura, San** 6.82 140 Pn 08 53 56.5 -0.2
ESPN **Las Esperanzas** 6.84 346 Pn 08 53 55.2 -1.4
CRUC **La Cruz** 6.88 125 P Pn 08 53 57.0 -0.4
ACON **Acoyapa** 6.89 339 Pn 08 53 55.6 -1.7
ACON **Acoyapa** 6.89 339 *i* P Pn 08 53 55.5 -1.8
ACON IAML 08 53 58.0
comp=Z,87nm,1.0s
ACON **Acoyapa** 6.89 339 *e*P Pn 08 53 54.3 -3.0
UREC **San Jos de Ur** 7.38 72 P Pn 08 54 05.7 +1.8
comp=Z,54nm,0.5s,comp=Z,1µm
UREC **San Jos de Ur** 7.38 72⇓*i*P Pn 08 54 05.6 +1.7
UREC *e*S Sn 08 55 25.2 -1.7
ANTS **Antisana-Sarah** 7.44 143 Pn 08 54 05.1 -0.2
SLOR **San Lorenzo -** 7.44 146 Pn 08 54 05.5 +0.2
ORTC **Ortega, Tolima** 7.51 102 P Pn 08 54 06.8 +0.9
comp=Z,60nm,0.7s,comp=Z,943nm
BOAB **BOACO BROADBAN** 7.52 337 Pn Pn 08 54 04.3 -1.6
BOAB **BOACO BROADBAN** 7.52 337 *i* P Pn 08 54 04.7 -1.2
BOAB IAML 08 54 22.1
comp=Z,36nm,1.0s
SAPS **Ciudad Sandino** 7.60 331 *i* P Pn 08 54 08.3 +1.3
HUEN 7.64 333 *i* P Pn 08 54 07.8 +0.3
HUEN IAML 08 54 48.0
comp=Z,38nm,1.0s
COPN **Copaltepe** 7.70 330 *i* P Pn 08 54 09.8 +1.4
COPN IAML 08 54 11.1
comp=Z,88nm,1.0s
GARC **Garzon, Huila** 7.83 115 P Pn 08 54 11.6 +1.1
comp=Z,99nm,0.7s,comp=Z,3µm
MOM2 **El Cardon** 7.87 331 *i* P Pn 08 54 12.7 +2.0
PRAC **Prado** 7.91 103 P Pn 08 54 12.0 +0.7
comp=Z,83nm,0.7s,comp=Z,859nm
MACN **El Madrono** 7.99 330 *i* P Pn 08 54 11.2 -1.1
MACN *i* S Pn 08 54 13.5 +1.2
CNGA **Al SSO del Vol** 8.03 330 *i* P Pn 08 54 09.6 -3.3
CNGA *i* S Pn 08 54 12.6 -0.3
CNGN **Cerro Negro** 8.03 330 *i* P Pn 08 54 13.3 +0.4
CNGN IAML 08 54 18.1
comp=Z,120nm,1.0s
BRAN **Las Pilas** 8.05 333 *i* P Pn 08 54 06.4 -6.8
BRAN IAML 08 55 38.0
comp=Z,880nm,1.0s
ROSC **El Rosal** 8.29 94 Pn Pn 08 54 18.8 +2.0
ROSC **El Rosal** 8.29 94 Pn Pn 08 54 19.4 +2.7
comp=Z,4.8nm,0.3s,baz=283,slow=6.6,SNR=7.3
ROSC Sn Sn 08 55 58.0 +8.2
comp=Z,1.1nm,0.3s,baz=14,slow=22,SNR=1.2
comp=Z,11nm,0.4s
PKGN **Cerro Pekin** 8.31 329 *i* P Pn 08 54 17.9 +1.1
LIMN **Finca el Limon** 8.36 334 *i* P Pn 08 54 16.9 -0.7
LIMN IVmB_BB 08 54 18.1
comp=Z,530nm,1.0s
LIMN IAML 08 54 18.5
comp=Z,53nm,1.0s
LIMN IAmb IAmb 08 54 18.6
comp=Z,32nm,0.5s
CRIN **San Cristobal** 8.38 329 *i* P Pn 08 54 16.8 -0.9
SJCC **San Jacinto, C** 8.56 59 P Pn 08 54 22.7 +2.5
comp=Z,91nm,1.1s
VILC **Villavicencio,** 9.00 99 P Pn 08 54 29.6 +3.3
CNCH **Conchagua** 9.27 327 *i* P Pn 08 54 31.8 +1.7
CNCH IAML 08 54 34.8
comp=Z,240nm,1.0s
CNCH IVmB_BB 08 54 34.8
comp=Z,3µm,1.0s
CNCH IAmb IAmb 08 54 34.8
comp=Z,85nm,0.5s
LCND **La Caada** 9.33 326 *i* P Pn 08 54 32.4 +1.6
LCND IVmB_BB 08 54 33.8
comp=Z,1µm,1.0s
LCND IAML 08 54 35.1
comp=Z,91nm,1.0s
LCND IAmb IAmb 08 54 35.2
comp=Z,49nm,0.7s
ARGC **Ariguani, Magd** 9.35 62 P Pn 08 54 34.1 +3.1
comp=Z,58nm,0.8s
ARNL **Arenillas** 9.35 164 Pn 08 54 31.2 +0.2
TGUH **Tegucigalpa,Un** 9.65 332 Pn Pn 08 54 35.8 +0.6
TGUH **Tegucigalpa,Un** 9.65 332 *i* P Pn 08 54 36.2 +1.0
RANC **El Ranchito** 9.66 325 *i* P Pn 08 54 37.0 +1.7
RANC IAML 08 54 40.3
comp=Z,120nm,1.0s
RANC IVmB_BB 08 54 40.3
comp=Z,2µm,1.0s
RANC IAmb IAmb 08 54 44.8
comp=Z,46nm,0.5s
PACA **Pacayal** 9.70 325 *i* P Pn 08 54 37.8 +1.8
PACA IVmB_BB 08 54 42.2
comp=Z,8µm,1.0s
PACA IAML 08 54 55.3
comp=Z,670nm,1.0s
PQSS **Presa 15 de Se** 9.96 324 *i* P Pn 08 54 41.5 +2.1
PQSS IAML 08 54 42.3
comp=Z,67nm,1.0s
PQSS IAmb IAmb 08 54 42.4
comp=Z,32nm,0.9s
PQSS IVmB_BB 08 54 44.1
comp=Z,880nm,1.0s
PAMC **Pamplona, Colo** 10.02 79 P Pn 08 54 43.8 +3.2
TECO **Alcaldia de Te** 10.03 323 *i* P Pn 08 54 41.0 +0.7
UESV **Universidad de** 10.11 323 *i* P Pn 08 54 38.4 -3.0
SCLA **Alcaldia de Sa** 10.12 324 *i* P Pn 08 54 44.2 +2.5
SCLA IAmb IAmb 08 54 45.4
comp=Z,34nm,0.5s
SCLA IAML 08 54 45.5
comp=Z,75nm,1.0s
SCLA IVmB_BB 08 54 45.5
comp=Z,870nm,1.0s
COEG **Centro de Oper** 10.15 323 *i* P Pn 08 54 44.3 +2.2
COEG IAmb IAmb 08 54 54.3
comp=Z,35nm,0.5s
COEG IAML 08 55 04.4
comp=Z,85nm,1.0s
COEG IVmB_BB 08 55 04.4
comp=Z,920nm,1.0s
PMON **Piamonte** 10.49 321 *i* P Pn 08 54 49.3 +2.6
PMON IAML 08 54 53.7
comp=Z,260nm,1.0s
PMON IVmB_BB 08 54 53.7
comp=Z,3µm,1.0s
JAYA **Jayaque - finc** 10.53 321 *i* P Pn 08 54 49.8 +2.5

NUBE **Las Nubes** 10.92 320 *i* P Pn 08 54 55.4 +2.7
MTO3 **Montecristo** 11.05 324 Pn Pn 08 54 56.6 +2.1
MTO3 **Montecristo** 11.05 324 *i* P Pn 08 54 56.3 +1.8
MTO3 IAmb IAmb 08 54 57.7
comp=Z,21nm,0.6s
MTO3 IVmB_BB 08 54 59.7
comp=Z,550nm,1.0s
APG **El Apazote** 12.19 321 LR LR 08 59 20.8
comp=Z,16nm,20.9s,baz=126,slow=35
SDV **Santo Domingo** 12.35 74 Pn Pn 08 55 11.4 -0.9
SDV **Santo Domingo** 12.35 74 Pn Pn 08 55 12.6 +0.3
comp=Z,1.1nm,0.3s,baz=260,slow=12,SNR=18
SDV Sn Sn 08 57 25.4 -3.9
comp=Z,0.8nm,0.3s,baz=68,slow=18,SNR=2.5
comp=Z,20nm,0.8s
SDV **Santo Domingo** 12.35 74 P Pn 08 55 13.0 +0.7
comp=Z,24nm,0.8s
SDV **Santo Domingo** 12.35 74 *e*P Pn 08 55 12.0 -0.3
HUEH **Huehuetenango** 13.08 319 Pn 08 55 23.7 +1.4
TEIG **Tepich** 15.63 340 LR LR 09 01 39.0
comp=Z,142nm,18.4s,baz=120,slow=36
TBTG **Tabatinga, AM** 15.93 127 Pn 08 55 59.4 -1.0
TBTG IAmb IAmb 08 56 05.3
comp=Z,54nm,1.3s
TBTG **Tabatinga, AM** 15.93 127 P Pn 08 55 57.9 -2.5
TBTG **Tabatinga, AM** 15.93 127 *e*P Pn 08 55 59.0 -1.4
CZSB **Cruzeiro do Su** 16.46 143 Pn 08 56 05.7 -1.5
CZSB IAmb IAmb 08 56 06.9
comp=Z,36nm,1.3s
CZSB **Cruzeiro do Su** 16.46 143 *e*P Pn 08 56 05.2 -1.9
CMIG **Matias Romero** 16.63 315 LR LR 09 01 26.4
comp=Z,144nm,21.3s,baz=187,slow=33
NNA **Nana** 18.31 162 LR LR 09 02 29.6
comp=Z,36nm,18.2s,baz=314,slow=34
PCRV **Puerto La Cruz** 18.40 74 P P 08 56 31.0 -0.2
comp=Z,0.2nm,0.3s,baz=270,slow=4.0,SNR=2.7
PCRV LR LR 09 05 20.7
comp=Z,63nm,19.0s,slow=42
comp=Z,10.0nm,1.1s
TLIG **Tlapa** 19.67 309 *i* P Pn 08 57 02.1 +15
CELP **Cerrillos** 20.03 50 Pn Pn 08 56 51.1 +0.3
CELP IAmb IAmb 08 56 55.5
comp=Z,25nm,0.9s
AOPR **Arecibo Observ** 20.06 49 P P 08 56 49.9 +0.5
TEFE **Tefe** 20.07 116 *e*P P 08 56 49.5 +0.1
SJG **San Juan** 20.38 51 P P 08 56 52.9 +0.1
comp=Z,14nm,0.6s,baz=286,slow=7.4,SNR=5.8
SJG LR LR 09 04 15.2
comp=Z,50nm,22.0s,baz=225,slow=35
comp=Z,14nm,0.6s
HUMP **Col San Antoni** 20.63 51 P P 08 56 56.0 +0.5
ETMB **Extrema** 22.34 133 P P 08 57 13.0 -1.0
ETMB IAmb IAmb 08 57 13.8
comp=Z,31nm,1.4s
ETMB **Extrema** 22.34 133 *e*P P 08 57 12.9 -1.0
SAML **Samuel** 24.12 126 P P 08 57 30.2 -1.5
SAML IAmb IAmb 08 57 32.1
comp=Z,7.9nm,0.8s
SAML **Samuel** 24.12 126 *e*P P 08 57 30.5 -1.3
LPAZ **La Paz** 25.97 147 P P 08 57 49.3 0.0
LPAZ IAmb IAmb 08 58 02.8
comp=Z,9.9nm,1.5s
LPAZ **La Paz** 25.97 147 P P 08 57 49.6 +0.3
comp=Z,1.7nm,0.9s,baz=348,slow=6.9,SNR=5.7
LPAZ LR LR 09 08 59.9
comp=Z,150nm,20.1s,baz=310,slow=39
comp=Z,1.7nm,0.9s
LPAZ **La Paz** 25.97 147 *e*P P 08 57 47.8 -1.5
Z47A **Carrollton** 28.01 350 P P 08 58 06.8 +0.1
MDP **Montagnes des** 29.84 89 LR LR 09 10 42.3
comp=Z,64nm,18.9s,baz=223,slow=37
SIV **San Ignacio** 30.19 135 LR LR 09 10 38.6
comp=Z,130nm,20.3s,baz=298,slow=36
WVT **Waverly** 30.84 352 P P 08 58 30.6 -1.2
WVT IAmb IAmb 08 58 31.2
comp=Z,3.6nm,0.7s
TXAR **Lajitas Array** 30.94 322 P P 08 58 33.1 +0.1
comp=Z,0.2nm,0.8s,baz=142,slow=8.9,SNR=3.1
TXAR LR LR 09 11 49.8
comp=Z,21nm,19.6s,baz=146,slow=38
comp=Z,0.2nm,0.8s
LCAR **Lake Charles** 31.41 347 IAmb IAmb 08 58 36.2
comp=Z,4.9nm,0.7s
MNHN **Monahans** 31.89 326 IAmb IAmb 08 58 46.8
comp=Z,3.8nm,1.1s
CGM3 **Cape Girardeau** 32.28 349 IAmb IAmb 08 58 45.0
comp=Z,9.1nm,1.2s
T42A **Van Buren** 32.31 347 IAmb IAmb 08 58 43.8
comp=Z,3.9nm,0.7s
LPIG **La Paz** 32.41 308 LR LR 09 09 43.3
comp=Z,29nm,18.9s,baz=60,slow=32
CCM **Cathedral Cave** 33.33 348 P P 08 58 52.3 -1.4
CCM IAmb IAmb 08 58 53.2
comp=Z,5.1nm,0.8s
ANMO **Albuquerque** 36.64 326 P P 08 59 22.1 -0.5
ANMO **Albuquerque** 36.64 326 LR LR 09 15 27.7
comp=Z,38nm,21.1s,baz=222,slow=38
H03N2 **Juan Fernandez** 38.90 175 T T 09 40 48.2
baz=354,slow=76,SNR=12
H03N1 **Juan Fernandez** 38.90 175 T T 09 40 49.4
baz=354,slow=76,SNR=14
H03N3 **Juan Fernandez** 38.91 175 T T 09 40 47.7
baz=354,slow=76,SNR=14
MVCO **Mesa Verde** 39.42 327 IAmb IAmb 08 59 47.8
comp=Z,6.2nm,1.0s
CPUP **Villa Florida** 40.04 143 LR LR 09 15 52.4
comp=Z,57nm,20.1s,baz=11,slow=35
BDFB **Brasilia** 40.20 122 LR LR 09 16 56.6
comp=Z,74nm,18.3s,baz=314,slow=37
RPN **Rapa Nui** 41.48 217 LR LR 09 13 47.1
comp=Z,46nm,19.0s,baz=68,slow=31
SRU **San Rafael Swe** 41.90 327 P P 09 00 06.0 -0.5
SRU IAmb IAmb 09 00 08.3
comp=Z,4.1nm,0.8s
PFO **Pinyon Flats O** 42.05 316 LR LR 09 17 02.3
comp=Z,38nm,18.4s,baz=124,slow=35
PDAR **Pinedale Array** 44.11 331 P P 09 00 24.6 +0.3
comp=Z,0.7nm,0.7s,baz=129,slow=12,SNR=7.0
PDAR LR LR 09 20 33.2
comp=Z,16nm,18.7s,baz=138,slow=38
comp=Z,0.7nm,0.7s
HWUT **Hardware Ranch** 44.25 329 IAmb IAmb 09 00 26.8
comp=Z,3.8nm,0.8s
SNOW **Snow King Moun** 45.21 331 IAmb IAmb 09 00 38.7
comp=Z,5.5nm,1.1s
TPAW **Teton Pass** 45.32 331 P P 09 00 32.4 -1.7
TPAW IAmb IAmb 09 00 39.5
comp=Z,3.0nm,0.9s
FLWY **Flagg Ranch** 45.65 332 IAmb IAmb 09 00 40.6
comp=Z,4.8nm,0.9s
ELK **Elko** 45.65 325 LR LR 09 20 35.6
comp=Z,47nm,18.6s,baz=150,slow=37
NVAR **Mina Array Bea** 46.05 320 P P 09 00 40.9 +1.1
comp=Z,1.9nm,0.9s,baz=137,slow=7.6,SNR=12
NVAR LR LR 09 20 25.0
comp=Z,69nm,18.6s,baz=90,slow=37
comp=Z,1.9nm,0.9s
MDPB **Devils Postpil** 46.08 319 P P 09 00 40.8 +0.7
MDPB IAmb IAmb 09 00 42.1
comp=Z,3.2nm,0.8s
HLID **Hailey** 47.12 328 P P 09 00 47.1 -1.0
BOZ **Bozeman (W)** 47.22 332 IAmb IAmb 09 00 53.0
comp=Z,3.4nm,0.9s
WVOR **Wild Horse Val** 48.69 325 IAmb IAmb 09 01 03.9
comp=Z,4.6nm,1.1s
NEW **Newport** 51.75 331 LR LR 09 24 17.0
comp=Z,27nm,21.0s,baz=128,slow=37
BBB **Bella Bella** 59.68 329 LR LR 09 30 07.1
comp=Z,32nm,19.3s,baz=245,slow=38
YKA **Yellowknife Ar** 61.54 344 P P 09 02 32.4 0.0
comp=Z,2.1nm,0.8s,baz=140,slow=6.7,SNR=3.8
comp=Z,2.1nm,0.8s
DLBC **Dease Lake** 64.18 335 LR LR 09 33 54.1
comp=Z,49nm,18.8s,baz=131,slow=39
ILAR **Eielson Array** 74.25 336 P P 09 03 52.1 -0.2
comp=Z,0.4nm,0.8s,baz=110,slow=4.9,SNR=4.5
comp=Z,0.4nm,0.8s
ESDC **Sonseca Array** 77.77 51 P P 09 04 15.6 +2.6
comp=Z,0.6nm,0.8s,baz=261,slow=6.4,SNR=2.0
comp=Z,0.6nm,0.8s
TORD **Torodi Ar. Bea** 83.24 77 P P 09 04 43.6 +0.8
comp=Z,1.0nm,0.9s,baz=285,slow=2.8,SNR=4.1
comp=Z,1.0nm,0.9s
NOA **NORSAR Array B** 87.08 29 P P 09 05 02.6 +1.4
comp=Z,0.9nm,0.9s,baz=275,slow=4.4,SNR=2.8
NOA LR LR 09 39 52.7
comp=Z,8.3nm,21.3s,baz=295,slow=33

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.9nm,0.9s | | | | | | |
| VRAC | Vranov | 91.84 | 40 | LR | LR | 09 39 09.9 | |
| | comp=Z,26nm,20.2s,baz=250,slow=31 | | | | | | |

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*IDC* ***01*** *09:02:19.0±2.1, 0°.17N×127°.23E, h0km, mb3.6/3, mbtmp3.7/3, Error ellipse: s-maj=168.5km s-min=26.4km az=66.0*
*DJA* ***01*** *09:02:37.4±0.6, 0°N±3°×12°7E±°, h126km±7km, M4.0/10, mb3.8/1, MLv4.0/10*
**ISC 01 09:02:35.6**±1.2**, 0°.01N**±0°.08×**127°.32E**±0°.09**, h150km, n10,** σ1s.**51**/12**, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LBMI | Labuha | 0.67 | 164 | P | Pn | 09 02 59.0 | +1.1 |
| LBMI | | | | S | Sn | 09 03 14.7 | -0.3 |
| TNTI | Ternate | 0.76 | 4 | P | Pn | 09 02 58.1 | -0.4 |
| SANI | Sanana | 2.44 | 213 | P | Pn | 09 03 16.1 | +0.1 |
| SANI | | | | S | Sn | 09 03 44.8 | -2.3 |
| NLAI | Namlea | 3.24 | 184 | P | Pn | 09 03 27.3 | +1.3 |
| KMSI | Cibinong | 3.38 | 280 | P | Pn | 09 03 28.3 | +0.5 |
| GTOI | Gorontalo | 4.35 | 278 | P | Pn | 09 03 43.7 | +3.3 |
| MRSI | Marisa | 5.39 | 275 | P | Pn | 09 03 53.4 | -0.8 |
| WRA | Warramunga Arr | 20.99 | 161 | P | P | 09 07 06.9 | -0.4 |
| | 1.5nm,0.4s,baz=340,slow=11,SNR=22 | | | | | | |
| | 1.5nm,0.4s | | | | | | |
| ASAR | Alice Springs | 24.39 | 165 | P | P | 09 07 40.3 | +0.2 |
| | 0.9nm,0.7s,baz=343,slow=11,SNR=22 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 60.94 | 326 | P | P | 09 12 32.7 | -0.1 |
| | 0.3nm,0.3s,baz=117,slow=7.3,SNR=4.9 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

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*IDC* ***01*** *09:20:59.4±1.6, 10°.46S×123°.93E, h0km, mb4.3/4, mbtmp4.1/6, ML3.8/2, MS3.2/1, Error ellipse: s-maj=75.7km s-min=30.0km az=54.0*
*NEIC* ***01*** *09:21:01.3±1.2, 10°.56S±0°.06×123°.91E±0°.07, h10km±1km, mb4.1/8, Error ellipse: s-maj=12.3km s-min=9.9km az=264.0*
*DJA* ***01*** *09:21:04.6±0.5, 10°S±5°×12°4E±°, h10km, M4.2/10, mb4.5/4, MLv4.1/10*
**ISC 01 09:21:02.7**±0.6**, 10°.57S**±0°.06×**123°.96E**±0°.07**, h27km, n46,** σ1s.**36**/47**, mb4.2**/8**, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BATI | Baumata | 0.47 | 321 | P | Pb | 09 21 10.0 | -2.4 |
| SOEI | Soe | 0.86 | 20 | P | Pn | 09 21 20.9 | +1.7 |
| SOEI | Soe | 0.86 | 20 | | Pn | 09 21 20.4 | +1.2 |
| SOEI | Soe | 0.86 | 20 | P | Pn | 09 21 20.5 | +1.3 |
| MMRI | Maumere | 2.57 | 318 | P | Pn | 09 21 44.5 | +2.0 |
| MMRI | Maumere | 2.57 | 318 | | Pn | 09 21 42.3 | -0.2 |
| MMRI | Maumere | 2.57 | 318 | P | Pn | 09 21 43.9 | +1.4 |
| BASI | Baing, Sumba | 3.35 | 276 | P | Pn | 09 21 55.5 | +2.3 |
| BSSI | Bau Bau, Buton | 5.58 | 322 | P | Pn | 09 22 25.4 | +1.4 |
| | 36nm,1.1s,0.2nm | | | | | | |
| PLAI | Plampang | 6.34 | 285 | P | Pn | 09 22 36.1 | +1.7 |
| PLAI | Plampang | 6.34 | 285 | P | Pn | 09 22 35.8 | +1.4 |
| | 50nm,0.8s,0.2nm | | | | | | |
| KNRA | Kununurra | 6.90 | 138 | | Pn | 09 22 42.1 | 0.0 |
| TWSI | Taliwang, Sumb | 7.21 | 284 | P | Pn | 09 22 48.2 | +1.8 |
| | 30nm,1.0s,0.2nm | | | | | | |
| MTN | Manton Dam | 7.38 | 109 | Pn | Pn | 09 22 50.3 | +1.7 |
| FITZ | Fitzroy Crossi | 7.66 | 168 | P | Pn | 09 22 56.1 | +3.6 |
| FITZ | Fitzroy Crossi | 7.66 | 168 | | Pn | 09 22 53.6 | +1.1 |
| SAUI | Saumlaki | 7.69 | 71 | Pn | Pn | 09 22 52.6 | -0.3 |
| MBWA | Marble Bar | 11.29 | 201 | Pn | Pn | 09 23 43.0 | +0.8 |
| PSA00 | Pilbara Seismi | 11.63 | 199 | Pn | Pn | 09 23 46.8 | -0.2 |
| WB0 | Warramunga Arr | 13.59 | 133 | Pn | Pn | 09 24 13.7 | -0.2 |
| WRA | Warramunga Arr | 13.67 | 134 | Pn | Pn | 09 24 15.2 | +0.4 |
| WRA | Warramunga Arr | 13.67 | 134 | Pn | Pn | 09 24 15.8 | +0.9 |
| | 0.5nm,0.3s,baz=306,slow=14,SNR=24 | | | | | | |
| WRA | | | | Sn | Sn | 09 26 42.9 | -3.1 |
| | 1.0nm,0.3s,baz=307,slow=25,SNR=9.0 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 13.67 | 134 | | Pn | 09 24 15.8 | +0.9 |
| WB2 | Warramunga Arr | 13.68 | 134 | | Pn | 09 24 15.7 | +0.7 |
| WR0 | Warramunga Arr | 13.82 | 134 | | Pn | 09 24 17.7 | +0.8 |
| WRKA | Warakurna | 14.97 | 165 | P | Pn | 09 24 34.7 | +2.2 |
| AS31 | Alice Springs | 16.11 | 145 | | Pn | 09 24 48.4 | +1.0 |
| ASAR | Alice Springs | 16.11 | 145 | Pn | Pn | 09 24 47.6 | +0.2 |
| ASAR | Alice Springs | 16.11 | 145 | Pn | Pn | 09 24 49.2 | +1.8 |
| | 0.5nm,0.3s,baz=320,slow=12,SNR=38 | | | | | | |
| ASAR | | | | Sn | Sn | 09 27 45.2 | -0.2 |
| | 0.5nm,0.3s,baz=310,slow=21,SNR=16 | | | | | | |
| | 1.6nm,0.4s | | | | | | |
| AS01 | Alice Springs | 16.13 | 145 | P | P | 09 24 50.0 | -0.8 |
| QIS | Mount Isa | 18.03 | 125 | P | P | 09 25 13.7 | +1.9 |
| PMG | Port Moresby | 22.87 | 89 | LR | LR | 09 38 17.6 | |
| | comp=Z,61nm,19.4s,baz=144,slow=45 | | | | | | |
| STKA | Stephens Creek | 26.75 | 145 | P | P | 09 26 40.4 | +0.2 |
| MJAR | Matsushiro Arr | 48.74 | 15 | P | P | 09 29 44.9 | -0.2 |
| | 1.3nm,0.6s,baz=192,slow=9.3,SNR=4.0 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| MK31 | Makanchi Array | 68.15 | 331 | P | P | 09 32 01.2 | +0.8 |
| MKAR | Makanchi Array | 68.15 | 331 | P | P | 09 32 01.3 | +0.9 |
| MKAR | Makanchi Array | 68.15 | 331 | P | P | 09 32 01.1 | +0.6 |
| | 3.7nm,0.6s,baz=135,slow=7.5,SNR=49 | | | | | | |
| | 3.7nm,0.6s | | | | | | |
| MAKZ | Makanchi | 68.31 | 330 | P | P | 09 32 02.2 | +0.8 |
| MAKZ | | | | IAmb | IAmb | 09 32 02.6 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| KK31 | Karatay Array | 72.26 | 322 | P | P | 09 32 25.1 | -0.5 |
| KK31 | | | | IAmb | IAmb | 09 32 29.7 | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| KKAR | Karatay Array | 72.26 | 322 | P | P | 09 32 25.2 | -0.5 |
| KKAR | | | | IAmb | IAmb | 09 32 29.7 | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| ZAA0 | Zalesovo Array | 72.32 | 337 | P | P | 09 32 26.3 | +0.6 |
| ZALV | Zalesovo Beam | 72.32 | 337 | P | P | 09 32 25.8 | +0.1 |
| ZALV | Zalesovo Beam | 72.32 | 337 | P | P | 09 32 25.4 | -0.3 |
| | comp=Z,3.2nm,0.6s,baz=138,slow=4.1,SNR=6.8 | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 72.60 | 332 | P | P | 09 32 28.2 | +0.7 |
| | comp=Z,0.8nm,0.6s,baz=144,slow=5.9,SNR=8.0 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| KURK | Kurchatov | 72.62 | 332 | P | P | 09 32 28.6 | +1.0 |
| KURK | | | | IAmb | IAmb | 09 32 29.3 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| ABKAR | Akbulak array | 81.69 | 323 | P | P | 09 33 18.3 | -0.3 |

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*IDC* ***01*** *09:38:00.6±1.3, 25°.48N×105°.71E, h0km, mb3.6/6, mbtmp3.7/6, Error ellipse: s-maj=83.5km s-min=20.9km az=63.0*
**ISC 01 09:38:05.7**±1.3**, 25°.5N**±0°.3×**105°.8E**±0°.5**, h35km, n6,** σ0s.**39**/6**, mb3.5**/6**, Southeastern China**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SONM | Songino Array | 22.28 | 1 | P | P | 09 43 00.2 | +0.3 |
| | 1.0nm,0.6s,baz=183,slow=11,SNR=5.7 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 28.27 | 325 | P | P | 09 43 55.8 | +0.1 |
| | 0.1nm,0.3s,baz=133,slow=10.0,SNR=2.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| ZALV | Zalesovo Beam | 32.40 | 337 | P | P | 09 44 31.5 | -0.5 |
| | 1.8nm,0.6s,baz=134,slow=7.8,SNR=5.5 | | | | | | |
| | 1.8nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 32.65 | 327 | P | P | 09 44 34.2 | 0.0 |
| | 1.8nm,0.6s,baz=131,slow=9.8,SNR=16 | | | | | | |
| | 1.8nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 53.04 | 146 | P | P | 09 47 19.3 | -0.2 |
| | 0.6nm,1.0s,baz=332,slow=8.7,SNR=2.5 | | | | | | |
| | 0.6nm,1.0s | | | | | | |
| ASAR | Alice Springs | 55.97 | 149 | P | P | 09 47 41.1 | +0.2 |
| | 0.3nm,0.7s,baz=328,slow=6.5,SNR=2.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

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**NNC 01 09:50:02.1**±8.2**, 37°.72N×71°.75E, h0km, mb3.9, mpv3.5, 1C-3D, Error ellipse: s-maj=64.7km s-min=52.1km az=168.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAK | Ala-Archa | 5.34 | 22 | P | Pn | 09 51 23.4 | +0.2 |
| | 2.4nm,0.3s | | | | | | |
| AAK | | | | ⇓S | Sn | 09 52 25.6 | +0.2 |
| | 20nm,0.7s | | | | | | |
| KK31 | Karatay Array | 5.46 | 350 | ⇓P | Pn | 09 51 26.3 | +1.6 |
| | 1.1nm,0.2s,baz=160,slow=10,SNR=80 | | | | | | |
| KK31 | | | | ⇓S | Sn | 09 52 30.5 | +2.3 |
| | 7.5nm,0.4s,baz=174,slow=24,SNR=5.6 | | | | | | |
| AB31 | Akbulak array | 14.35 | 327 | P | Pn | 09 53 22.7 | -3.6 |
| | 0.5nm,0.3s,baz=134,slow=14,SNR=42 | | | | | | |
| AB31 | | | | ⇑S | Sn | 09 56 02.9 | -3.1 |
| | 1.4nm,0.5s,baz=155,slow=23,SNR=8.0 | | | | | | |

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*HEL* ***01*** *09:59:52.8±0.2, 64°.78N×30°.79E, h0km, ML2.2, Explosion*
*IDC* ***01*** *09:59:53.4±2.8, 64°.73N×31°.17E, h0km, mbtmp2.9/3, ML2.3/3, Error ellipse: s-maj=44.5km s-min=10.7km az=99.0*
*KOLA* ***01*** *09:59:55.8, 64°.89N×30°.92E, h0km, ML2.5, Error ellipse: s-maj=19.7km s-min=9.7km az=150.0, Karelia*
**ISC 01 09:59:52.6**±0.9**, 64°.82N**±0°.02×**30°.69E**±0°.04**, h0km, n39,** σ1s.**78**/65**, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RMF | Romuvaara | 0.68 | 209 | PG | Pg | 10 00 05.3 | -0.3 |
| | baz=30 | | | | | | |
| RMF | | | | MSG | | 10 00 14.1 | |
| | comp=Z,34nm,0.2s | | | | | | |
| RMF | | | | SG | Sg | 10 00 14.5 | 0.0 |
| KU6 | Riekki | 1.26 | 345 | PG | Pg | 10 00 16.4 | -0.3 |
| | baz=163 | | | | | | |
| KU6 | | | | MSG | | 10 00 32.2 | |
| | comp=Z,15nm,0.2s | | | | | | |
| KU6 | | | | SB | Sg | 10 00 33.2 | +0.2 |
| MSF | Maaselka | 1.30 | 329 | PG | Pg | 10 00 17.2 | -0.3 |
| | baz=148 | | | | | | |
| MSF | | | | SG | Sg | 10 00 34.8 | +0.5 |
| OLKF | Oulanka, Finla | 1.60 | 341 | PG | Pn | 10 00 22.6 | +0.5 |
| OLKF | | | | MSG | | 10 00 42.0 | |
| | comp=Z,23nm,0.2s | | | | | | |
| OLKF | | | | SN | Sg | 10 00 44.2 | +0.2 |
| NIF | Nilsia | 1.91 | 223 | PG | Pn | 10 00 27.0 | +0.7 |
| JOF | Joensuu | 1.92 | 171 | *e*P | Pn | 10 00 26.7 | +0.2 |
| JOF | Joensuu | 1.92 | 171 | PG | Pn | 10 00 26.0 | -0.5 |
| | baz=350 | | | | | | |
| RANF | Ranua | 2.03 | 308 | PG | Pn | 10 00 29.4 | +1.5 |
| | baz=124 | | | | | | |
| RANF | | | | SB | Sb | 10 00 55.4 | -0.5 |
| OBF4 | Vikkela, Lumij | 2.39 | 272 | PB | Pn | 10 00 34.2 | +1.3 |
| | baz=91 | | | | | | |
| OBF4 | | | | MSG | | 10 01 04.8 | |
| | comp=Z,19nm,0.2s | | | | | | |
| OBF4 | | | | SG | Sb | 10 01 07.0 | +0.7 |
| OUF | Merijarvi | 2.61 | 263 | PN | Pn | 10 00 37.3 | +1.4 |
| OUF | | | | MSG | | 10 01 10.8 | |
| | comp=Z,14nm,0.2s | | | | | | |
| OUF | | | | SB | Sb | 10 01 12.3 | -0.3 |
| RNF | Rovaniemi | 2.64 | 315 | PN | Pn | 10 00 37.8 | +1.4 |
| RNF | | | | SB | Sb | 10 01 13.5 | -0.1 |
| OBF0 | Syolatti, Pyha | 2.79 | 266 | PB | Pb | 10 00 41.8 | -1.5 |
| OBF0 | | | | MSG | | 10 01 16.2 | |
| | comp=Z,8.9nm,0.2s | | | | | | |
| OBF0 | | | | SG | Sg | 10 01 22.8 | +0.6 |
| SUF | Sumiainen | 2.91 | 226 | PN | Pn | 10 00 41.6 | +1.5 |
| SUF | | | | MSG | | 10 01 18.8 | |
| | comp=Z,6.7nm,0.2s | | | | | | |
| TOF | Tornio | 2.94 | 298 | PB | Pn | 10 00 42.4 | +1.9 |
| TOF | | | | MSG | | 10 01 20.9 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| TOF | | | | SB | Sb | 10 01 21.2 | -1.2 |
| APA0 | Apatity Array | 2.96 | 17 | P | Pn | 10 00 42.2 | +1.5 |
| APA0 | | | | S | Sn | 10 01 19.0 | +2.2 |
| APA | Apatity | 2.98 | 21 | P | Pn | 10 00 42.3 | +1.3 |
| APA | | | | S | Sn | 10 01 16.1 | -1.3 |
| VRF | Varrio | 2.98 | 352 | PN | Pn | 10 00 42.1 | +1.1 |
| | baz=166 | | | | | | |
| VRF | | | | MSG | | 10 01 21.4 | |
| | comp=Z,6.7nm,0.2s | | | | | | |
| VRF | | | | SG | Sb | 10 01 24.0 | +0.6 |
| SGF | Sodankyl | 3.13 | 329 | PN | Pn | 10 00 43.4 | +0.3 |
| SGF | | | | SB | Sb | 10 01 26.6 | -1.2 |
| OBF8 | Ulkokalla | 3.16 | 264 | PN | Pn | 10 00 44.4 | +0.9 |
| KALU | Kalix | 3.25 | 292 | PN | Pn | 10 00 46.3 | +1.6 |
| KALU | | | | SB | Sb | 10 01 31.0 | 0.0 |
| KAF | Kangasniemi | 3.35 | 218 | PN | Pn | 10 00 48.1 | +2.0 |
| KAF | | | | SG | Sb | 10 01 33.6 | -0.3 |
| LVZ | Lovozero | 3.48 | 26 | P | Pn | 10 00 48.8 | +0.8 |
| LVZ | | | | S | Sn | 10 01 28.1 | -1.8 |
| LVZ | Lovozero | 3.48 | 26 | PN | Pn | 10 00 48.6 | +0.7 |
| RUF | Ruokolahti | 3.49 | 194 | PN | Pn | 10 00 48.5 | +0.5 |
| KLF | Kolari | 3.67 | 315 | PN | Pn | 10 00 52.1 | +1.7 |
| KLF | | | | SG | Sg | 10 01 48.3 | -1.8 |
| KEF | Keuruu | 3.72 | 227 | PN | Pn | 10 00 53.3 | +2.1 |
| KEF | | | | SB | Sb | 10 01 43.0 | -1.7 |
| VAF | Ylistaro | 3.96 | 247 | *e*P | Pn | 10 00 49.0 | -5.5 |
| VAF | Ylistaro | 3.96 | 247 | PB | Pb | 10 00 59.7 | -3.5 |
| VAF | | | | SG | Sb | 10 01 55.8 | +4.3 |
| FINES | FINESS Array B | 3.98 | 214 | Pn | Pn | 10 00 55.6 | +0.9 |
| | comp=Z,0.2nm,0.3s,baz=33,slow=13,SNR=14 | | | | | | |
| FINES | | | | Sn | Sn | 10 01 42.1 | +0.1 |
| | comp=Z,0.4nm,0.3s,baz=30,slow=20,SNR=2.5 | | | | | | |
| FINES | | | | Lg | Lg | 10 01 53.7 | |
| | comp=Z,1.9nm,0.3s,baz=30,slow=31,SNR=12 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| UMAU | Umeaa | 4.45 | 262 | PN | Pn | 10 01 00.7 | -0.4 |
| | baz=77 | | | | | | |
| UMAU | | | | SG | Sb | 10 02 10.6 | +5.0 |
| VJF | Virojoki | 4.53 | 200 | SG | Sb | 10 02 12.5 | +4.7 |
| HEF | Hetta | 4.57 | 325 | PG | Pb | 10 01 14.6 | +1.1 |
| HEF | | | | SG | Sb | 10 02 13.5 | +4.6 |
| TERR | Teriberka | 4.73 | 19 | P | Pn | 10 01 05.5 | +0.4 |
| TERR | | | | S | Sn | 10 01 57.9 | -2.7 |
| PRVG | Vayda Guba | 4.99 | 6 | P | Pn | 10 01 10.0 | +1.4 |
| PRVG | | | | S | Sn | 10 02 02.8 | -4.1 |
| ARCES | ARCESS Array B | 5.15 | 339 | Pn | Pn | 10 01 11.4 | +0.5 |
| | comp=Z,0.6nm,0.3s,baz=158,slow=14,SNR=50 | | | | | | |
| ARCES | | | | Sn | Sn | 10 02 09.7 | -1.2 |
| | comp=Z,0.3nm,0.3s,baz=152,slow=25,SNR=3.1 | | | | | | |
| ARCES | | | | Lg | Lg | 10 02 29.6 | |
| | comp=Z,0.8nm,0.3s,baz=158,slow=33,SNR=9.4 | | | | | | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| VADS | Vadso | 5.36 | 355 | P | Pn | 10 01 14.0 | +0.4 |
| VADS | | | | S | Sn | 10 02 14.2 | -1.6 |
| I37NO | I37NO | 6.38 | 317 | I | I | 10 36 30.0 | |
| | baz=128,slow=312,SNR=2.4 | | | | | | |
| FAUS | Fauske | 6.76 | 299 | P | Pn | 10 01 35.4 | +2.5 |
| FAUS | | | | S | Sn | 10 02 49.5 | -1.0 |
| NOA | NORSAR Array B | 9.63 | 256 | Pn | Pn | 10 02 12.7 | +0.4 |
| | baz=58,slow=12,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |

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*IDC* ***01*** *10:03:59.3±1.4, 9°.02S×116°.11E, h0km, mb3.7/6, mbtmp3.8/7, ML3.9/1, MS3.0/5, Error ellipse: s-maj=39.8km s-min=21.2km az=55.0*
*DJA* ***01*** *10:04:01.3±0.4, 8°S±5°×11°7E±°, h10km, M4.3/7, mb4.4/1, MLv4.3/7*
**ISC 01 10:04:02.2**±0.8**, 8°.31S**±0°.07×**116°.68E**±0°.05**, h10km, n21,** σ1s.**60**/16**, mb3.8**/6**, MS3.2**/3**, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.47 | 155 | P | Pg | 10 04 11.9 | +0.5 |
| PLAI | Plampang | 1.20 | 116 | P | Pn | 10 04 24.5 | -0.6 |
| SRBI | Singaraja | 1.47 | 279 | P | Pn | 10 04 27.3 | -1.5 |
| DNP | Denpasar | 1.50 | 256 | P | Pb | 10 04 29.7 | -0.5 |
| ABJI | Asem Bagus | 2.48 | 282 | P | Pg | 10 04 55.1 | +5.4 |
| JAGI | Jajag, Banyuwa | 2.51 | 266 | P | Pn | 10 04 40.9 | -2.2 |
| BSSI | Bau Bau, Buton | 4.35 | 61 | P | Pn | 10 05 06.1 | -2.3 |
| KAPI | Kappang | 4.47 | 43 | Pn | Pb | 10 05 21.0 | +0.1 |
| | 3.9nm,0.3s,baz=223,slow=14,SNR=3.8 | | | | | | |
| KAPI | | | | Sn | Sg | 10 06 24.6 | -1.4 |
| | 3.3nm,0.3s,baz=254,slow=20,SNR=1.8 | | | | | | |
| KAPI | | | | LR | LR | 10 07 43.6 | |
| | comp=Z,133nm,19.8s,baz=280,slow=42 | | | | | | |
| | 11nm,0.4s | | | | | | |
| PWJI | Pagerwojo | 4.84 | 273 | P | Pn | 10 05 14.7 | -0.4 |
| BNSI | Bone | 5.16 | 41 | P | Pn | 10 05 18.9 | -0.7 |
| DAV | Davao City (W) | 17.67 | 30 | LR | LR | 10 15 12.7 | |
| | comp=Z,60nm,21.8s,baz=179,slow=36 | | | | | | |
| WRA | Warramunga Arr | 20.64 | 126 | P | P | 10 08 40.5 | -1.6 |
| | 3.6nm,0.8s,baz=300,slow=12,SNR=28 | | | | | | |
| | 3.6nm,0.8s | | | | | | |
| ASAR | Alice Springs | 22.48 | 135 | P | P | 10 09 00.1 | -1.9 |
| | 2.7nm,0.8s,baz=310,slow=9.8,SNR=20 | | | | | | |
| | 2.7nm,0.8s | | | | | | |
| NWAO | Narrogin (SRO) | 24.50 | 179 | LR | LR | 10 19 11.9 | |
| | comp=Z,71nm,18.8s,baz=46,slow=38 | | | | | | |
| CTA | Charters Tower | 30.91 | 115 | LR | LR | 10 25 22.8 | |
| | comp=Z,5.1nm,18.7s,baz=290,slow=41 | | | | | | |
| CMAR | Chiang Mai Arr | 31.84 | 327 | LR | LR | 10 23 47.9 | |
| | comp=Z,66nm,18.6s,baz=235,slow=37 | | | | | | |
| KSRS | Korea Array | 46.72 | 12 | P | P | 10 12 36.5 | +5.0 |
| | 0.5nm,0.6s,baz=200,slow=6.5,SNR=4.2 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| SONM | Songino Array | 56.63 | 352 | P | P | 10 13 48.5 | +2.9 |
| | 0.7nm,0.7s,baz=174,slow=7.5,SNR=4.3 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| HEH | HeiHe | 59.06 | 8 | *e*P | P | 10 14 02.7 | +0.3 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 62.82 | 334 | P | P | 10 14 29.6 | +1.4 |
| | comp=Z,1.2nm,1.0s,baz=147,slow=5.4,SNR=5.6 | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| KURBB | Kurchatov Arra | 67.35 | 335 | P | P | 10 14 58.4 | +0.9 |
| | comp=Z,0.2nm,0.4s,baz=126,slow=4.7,SNR=1.8 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |

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*NEIC* ***01*** *10:11:13.7±0.6, 35°.03N±0°.01×97°.59W±0°.02, h5km±1km, Error ellipse: s-maj=3.1km s-min=2.8km az=285.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; Mrr-0.27; Mθθ1.46; Mφφ-1.19; Mrθ0.06; Mθφ-0.39; Mφr-1.07; Fault plane solution: M0 1.76000×$10^{14}$ NP1: φs319.47000°, δ73.85000°, λ-30.45000°. NP2: φs58.76000°, δ60.87000°, λ-161.43000°. Principal axes: T 1.5442, Plg8.0000°, Azm11.0000°; N 0.3736, Plg56.0000°, Azm114.0000°; P -1.9178, Plg33.0000°, Azm276.0000°;*
*NEIC* ***01*** *10:11:13.6, 35°.03N×97°.59W, h5km*
*ANF* ***01*** *10:11:14.3±0.2, 35°.07N×97°.59W, h5km, Error ellipse: s-maj=3.1km s-min=2.8km az=131.0*
*TUL* ***01*** *10:11:14±0.6, 35°.04N±0°.02×97°.59W±0°.02, h6km±5km, ML3.2, mb_Lg3.5/139(NEIC), ML3.4/35(NEIC), Mwr3.4/50(NEIC), Error ellipse: s-maj=2.5km s-min=2.1km az=110.0*
**ISC 01 10:11:14.3**±1.1**, 35°.06N**±0°.03×**97°.61W**±0°.03**, h10km**±8km**, n157,** σ0s.**96**/154**, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNO | Franklin | 0.26 | 41 | Pg | Pg | 10 11 19.8 | +0.3 |
| FNO | | | | IAML | | 10 11 27.5 | |
| | comp=E,6μm,0.9s | | | | | | |
| OKCSW | OKLAHOMA CITY | 0.37 | 22 | Pg | Pg | 10 11 21.8 | +0.2 |
| OKCSW | | | | Sg | Sg | 10 11 26.8 | +0.2 |
| OKCSW | | | | IAML | | 10 11 31.0 | |
| | comp=N,2μm,1.0s | | | | | | |
| X34A | Smith Ranch, M | 0.50 | 202 | | Pg | 10 11 24.1 | +0.2 |
| X34A | | | | IAML | | 10 11 32.2 | |
| | comp=N,2μm,0.7s | | | | | | |
| X34A | | | | IAML | | 10 11 38.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| ADOK | Arcadia Dam | 0.62 | 18 | Pg | Pg | 10 11 26.4 | +0.1 |
| OK029 | Liberty Lake | 0.74 | 9 | | Pg | 10 11 28.6 | 0.0 |
| OK029 | | | | Sg | Sb | 10 11 39.7 | +0.1 |
| WMOK | Wichita Mounta | 1.02 | 252 | | Pg | 10 11 32.6 | -1.3 |
| WMOK | Wichita Mounta | 1.02 | 252 | P | Pg | 10 11 32.7 | -1.2 |
| | baz=73,SNR=92 | | | | | | |
| WMOK | | | | S | Sg | 10 11 47.0 | -0.1 |
| | baz=73 | | | | | | |
| CSTR | Hydro, Custer | 1.06 | 304 | | Pg | 10 11 34.4 | -0.2 |
| OK031 | S. Brethren Rd | 1.09 | 35 | Pg | Pg | 10 11 34.3 | -0.9 |
| OK031 | | | | IAML | | 10 11 51.5 | |
| | comp=E,920nm,0.6s | | | | | | |
| OK031 | | | | IAML | | 10 11 51.5 | |
| | comp=E,961nm,0.5s | | | | | | |
| LOOK | Love County | 1.12 | 162 | Pg | Pg | 10 11 35.0 | -0.8 |
| OK052 | Battle Ridge R | 1.14 | 35 | | Pg | 10 11 35.2 | -1.0 |
| DEOK | Depew | 1.19 | 49 | | Pg | 10 11 36.1 | -1.1 |
| DEOK | | | | IAML | | 10 11 57.3 | |
| | comp=E,645nm,0.5s | | | | | | |
| DEOK | | | | IAML | | 10 11 59.0 | |
| | comp=N,728nm,0.7s | | | | | | |
| QUOK | Quay | 1.33 | 33 | | Pn | 10 11 38.4 | -0.6 |
| OK048 | Pawnee Station | 1.46 | 22 | | Pn | 10 11 40.7 | 0.0 |
| CROK | Carrier | 1.47 | 348 | | Pn | 10 11 41.4 | +0.4 |
| WTFS | Witchita Falls | 1.47 | 209 | Pg | Pn | 10 11 40.6 | -0.3 |
| OK051 | E0350 and S346 | 1.57 | 23 | | Pn | 10 11 42.5 | +0.3 |
| OK038 | West end E0370 | 1.69 | 327 | | Pn | 10 11 45.1 | +1.2 |
| TUL3 | Leonard | 1.71 | 60 | | Pn | 10 11 44.9 | +0.8 |
| TUL3 | Leonard | 1.71 | 60 | P | Pn | 10 11 44.9 | +0.8 |
| | baz=240,SNR=40 | | | | | | |
| TUL3 | | | | S | Sb | 10 12 08.0 | +0.7 |
| | baz=240 | | | | | | |
| BLOK | Blackwell | 1.73 | 10 | | Pn | 10 11 45.5 | +1.1 |
| U32A | Winter Ranch, | 1.74 | 320 | | Pn | 10 11 45.6 | +1.1 |
| Z35A | Perchaven, San | 1.75 | 170 | | Pn | 10 11 44.7 | -0.1 |
| ELIS | Ellis County | 1.79 | 305 | | Pn | 10 11 46.3 | +1.0 |
| GC02 | Grant County # | 1.80 | 353 | | Pb | 10 11 47.0 | -0.4 |
| OK032 | Salt Plains WL | 1.81 | 344 | | Pn | 10 11 47.0 | +1.5 |
| X37A | Clayton | 1.90 | 104 | | Pn | 10 11 47.6 | +0.9 |
| X37A | | | | IAmb_Lg | | 10 12 15.7 | |
| | comp=Z,294nm,0.7s | | | | | | |
| NOKA | Waynoka | 1.90 | 326 | | Pn | 10 11 48.5 | +1.7 |
| KAN14 | Manchester OK | 1.91 | 351 | | Pn | 10 11 48.0 | +1.0 |
| KAN13 | South Haven SW | 1.95 | 3 | | Pn | 10 11 48.7 | +1.2 |
| KAN17 | Caldwell West | 1.98 | 356 | | Pn | 10 11 49.1 | +1.2 |
| T35A | Sooner Cattle | 2.05 | 25 | | Pn | 10 11 49.4 | +0.5 |
| T35A | | | | IAmb_Lg | | 10 12 20.9 | |
| | comp=Z,220nm,1.0s | | | | | | |
| FW03 | Perrin-Whitt E | 2.05 | 191 | | Pn | 10 11 49.7 | +0.8 |
| KAN05 | Bluff City Nor | 2.05 | 354 | | Pn | 10 11 49.2 | +0.2 |
| KAN09 | Caldwell North | 2.07 | 360 | | Pn | 10 11 49.9 | +0.8 |
| KAN09 | | | | IAmb_Lg | | 10 12 25.6 | |
| | comp=Z,268nm,1.0s | | | | | | |
| FW06 | Azle | 2.08 | 179 | | Pn | 10 11 50.6 | +1.3 |
| KAN01 | Argonia South | 2.09 | 357 | | Pn | 10 11 50.2 | +0.8 |
| KAN01 | | | | IAmb_Lg | | 10 12 26.0 | |
| | comp=Z,171nm,0.8s | | | | | | |
| SMWD | Samnorwood | 2.16 | 272 | | Pn | 10 11 51.8 | +1.4 |
| KAN08 | Anthony NE Sta | 2.18 | 352 | | Pn | 10 11 51.6 | +0.9 |
| KS21 | Milan North St | 2.22 | 359 | | Pn | 10 11 52.3 | +1.0 |
| PLPT | Palo Pinto | 2.32 | 195 | | Pn | 10 11 54.0 | +1.5 |
| PLPT | | | | IAmb_Lg | | 10 12 26.5 | |
| | comp=Z,122nm,0.9s | | | | | | |
| FW07 | Weatherford | 2.36 | 184 | | Pn | 10 11 54.8 | +1.7 |
| RLO | Rose Lookout | 2.38 | 62 | | Pn | 10 11 54.4 | +1.0 |
| RLO | | | | IAmb_Lg | | 10 12 35.0 | |
| | comp=Z,177nm,0.7s | | | | | | |
| FW16 | Waxahatchie | 2.64 | 167 | IAmb_Lg | | 10 12 39.8 | |
| | comp=Z,158nm,0.9s | | | | | | |
| TREL | Terrell | 2.65 | 151 | IAmb_Lg | | 10 12 42.7 | |
| | comp=Z,131nm,0.7s | | | | | | |
| FW13 | Cleburne | 2.71 | 177 | IAmb_Lg | | 10 12 42.4 | |
| | comp=Z,106nm,0.9s | | | | | | |
| Z38A | Mt. Pleasant | 2.82 | 129 | | Pn | 10 11 59.0 | -0.5 |
| Z38A | | | | IAmb_Lg | | 10 12 49.5 | |
| | comp=Z,144nm,0.8s | | | | | | |
| U38A | Gravette | 2.96 | 61 | | Pn | 10 12 02.9 | +1.6 |
| ABTX | Abilene, Hawle | 2.96 | 215 | Pn | Pn | 10 12 03.0 | +1.5 |
| ABTX | Abilene, Hawle | 2.96 | 215 | P | Pn | 10 12 02.3 | +0.8 |
| | baz=35,SNR=18 | | | | | | |
| ABTX | | | | S | Sn | 10 12 39.0 | +1.9 |
| | baz=35 | | | | | | |
| WHTX | Lake Whitney, | 3.06 | 178 | | Pn | 10 12 04.2 | +1.4 |
| WHTX | Lake Whitney, | 3.06 | 178 | P | Pn | 10 12 03.9 | +1.1 |
| | baz=358,SNR=13 | | | | | | |
| WHTX | | | | S | Sn | 10 12 41.2 | +1.7 |
| | baz=358 | | | | | | |
| DKNS | Dickens | 3.08 | 244 | | Pn | 10 12 05.1 | +2.1 |
| HHAR | Hobbs | 3.22 | 67 | | Pn | 10 12 06.0 | +1.0 |
| HHAR | | | | IAmb_Lg | | 10 13 04.5 | |
| | comp=Z,142nm,0.8s | | | | | | |
| AMTX | Amarillo | 3.35 | 268 | | Pn | 10 12 08.7 | +1.9 |
| AMTX | | | | IAmb_Lg | | 10 13 08.9 | |
| | comp=Z,94nm,0.8s | | | | | | |
| AMTX | Amarillo | 3.35 | 268 | P | Pn | 10 12 08.5 | +1.6 |
| | baz=86 | | | | | | |
| MIAR | Mount Ida | 3.35 | 98 | | Pn | 10 12 08.5 | +1.7 |
| MIAR | | | | IAmb_Lg | | 10 13 06.4 | |
| | comp=Z,96nm,0.7s | | | | | | |
| MIAR | Mount Ida | 3.35 | 98 | P | Pn | 10 12 08.2 | +1.4 |
| | baz=280,SNR=45 | | | | | | |
| MIAR | | | | S | Sn | 10 12 48.3 | +1.5 |
| | baz=280 | | | | | | |
| SN07 | Snyder 07 | 3.36 | 235 | | Pn | 10 12 08.0 | +1.1 |
| SN07 | | | | IAmb_Lg | | 10 13 04.5 | |
| | comp=Z,122nm,0.8s | | | | | | |
| 237A | Washetta, Mont | 3.40 | 153 | | Pn | 10 12 08.0 | +0.6 |
| 237A | | | | IAmb_Lg | | 10 13 10.1 | |
| | comp=Z,140nm,0.8s | | | | | | |
| R32A | Long Quarter, | 3.47 | 346 | | Pn | 10 12 08.7 | +0.2 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| R32A | | | | IAmb_Lg | | 10 13 09.5 | |
| | comp=Z,125nm,0.7s | | | | | | |
| SN05 | Snyder 5 | 3.49 | 232 | | Pn | 10 12 09.6 | +0.9 |
| SN05 | | | | IAmb_Lg | | 10 13 13.2 | |
| | comp=Z,145nm,0.8s | | | | | | |
| POST | Post | 3.80 | 239 | | Pn | 10 12 14.6 | +1.6 |
| POST | | | | IAmb_Lg | | 10 13 15.1 | |
| | comp=Z,84nm,0.8s | | | | | | |
| BRDY | Brady | 3.94 | 198 | | Pn | 10 12 15.2 | +0.3 |
| BRDY | | | | IAmb_Lg | | 10 13 24.7 | |
| | comp=Z,82nm,0.9s | | | | | | |
| WLAR | White Oak Lake | 3.96 | 109 | Pn | Pn | 10 12 16.1 | +1.0 |
| WLAR | | | | IAmb_Lg | | 10 13 20.6 | |
| | comp=Z,74nm,0.8s | | | | | | |
| X40A | Basin Creek Fa | 3.97 | 97 | | Pn | 10 12 15.6 | +0.4 |
| X40A | | | | IAmb_Lg | | 10 13 25.5 | |
| | comp=Z,77nm,0.7s | | | | | | |
| KSU1 | Kansas State U | 4.11 | 11 | | Pn | 10 12 17.9 | +0.8 |
| KSU1 | Kansas State U | 4.11 | 11 | P | Pn | 10 12 18.0 | +0.8 |
| | baz=191,SNR=9.2 | | | | | | |
| KSU1 | | | | S | Sn | 10 13 06.6 | +1.3 |
| | baz=191 | | | | | | |
| NATX | Nacogdoches | 4.11 | 142 | S | Sn | 10 13 07.4 | +2.0 |
| | baz=324 | | | | | | |
| CBKS | Cedar Bluff | 4.12 | 336 | Pn | Pn | 10 12 18.4 | +1.1 |
| CBKS | | | | IAmb_Lg | | 10 13 36.6 | |
| | comp=Z,84nm,0.8s | | | | | | |
| CBKS | Cedar Bluff | 4.12 | 336 | P | Pn | 10 12 18.6 | +1.3 |
| | baz=155 | | | | | | |
| CBKS | | | | S | Sn | 10 13 06.3 | +0.7 |
| | baz=155 | | | | | | |
| 435B | Jarrell | 4.27 | 180 | | Pn | 10 12 19.3 | -0.1 |
| 435B | Jarrell | 4.27 | 180 | P | Pn | 10 12 19.9 | +0.6 |
| | baz=360 | | | | | | |
| 435B | | | | S | Sn | 10 13 10.3 | +1.1 |
| | baz=360 | | | | | | |
| SGCY | Sterling City | 4.30 | 224 | | Pn | 10 12 20.3 | +0.4 |
| SGCY | | | | IAmb_Lg | | 10 13 29.9 | |
| | comp=Z,88nm,0.9s | | | | | | |
| UALR | University of | 4.33 | 92 | | Pn | 10 12 20.6 | +0.4 |
| UALR | | | | IAmb_Lg | | 10 13 38.4 | |
| | comp=Z,75nm,0.8s | | | | | | |
| S39A | Bolivar | 4.34 | 52 | | Pn | 10 12 21.2 | +0.8 |
| S39A | | | | IAmb_Lg | | 10 13 34.3 | |
| | comp=Z,64nm,0.8s | | | | | | |
| WHAR | Wooly Hollow | 4.36 | 85 | | Pn | 10 12 21.2 | +0.6 |
| WHAR | | | | IAmb_Lg | | 10 13 34.1 | |
| | comp=Z,87nm,0.8s | | | | | | |
| Z41A | Richland Creek | 4.37 | 113 | | Pn | 10 12 20.1 | -0.7 |
| Z41A | | | | IAmb_Lg | | 10 13 40.9 | |
| | comp=Z,70nm,0.8s | | | | | | |
| RTBA | Rita Blanca | 4.39 | 290 | | Pn | 10 12 21.9 | +0.7 |
| MSTX | Muleshoe | 4.40 | 257 | | Pn | 10 12 22.5 | +1.2 |
| MSTX | Muleshoe | 4.40 | 257 | P | Pn | 10 12 22.6 | +1.2 |
| | baz=75,SNR=13 | | | | | | |
| MSTX | | | | S | Sn | 10 13 13.8 | +1.0 |
| | baz=75 | | | | | | |
| FCAR | Ozark Folk Cen | 4.55 | 78 | | Pn | 10 12 23.3 | +0.1 |
| MGMO | Mountain Grove | 4.80 | 63 | IAmb_Lg | | 10 13 56.8 | |
| | comp=Z,140nm,0.7s | | | | | | |
| JCT | Junction City | 4.93 | 203 | | Pn | 10 12 28.4 | -0.1 |
| JCT | Junction City | 4.93 | 203 | P | Pn | 10 12 28.7 | +0.2 |
| | baz=22,SNR=13 | | | | | | |
| JCT | | | | S | Sn | 10 13 25.3 | -0.3 |
| | baz=22 | | | | | | |
| CCAR | Cane Creek | 4.95 | 102 | | Pn | 10 12 29.5 | +0.8 |
| ODSA | Odessa | 5.06 | 236 | Pn | Pn | 10 12 32.6 | +2.3 |
| OZNA | Ozona | 5.08 | 217 | | Pn | 10 12 30.7 | +0.1 |
| OZNA | | | | IAmb_Lg | | 10 14 03.9 | |
| | comp=Z,76nm,0.8s | | | | | | |
| MLDN | Muldoon | 5.28 | 175 | IAmb_Lg | | 10 14 12.7 | |
| | comp=Z,62nm,0.9s | | | | | | |
| HKT | Hockley | 5.31 | 163 | | Pn | 10 12 33.3 | -0.4 |
| LCAR | Lake Charles | 5.35 | 77 | | Pn | 10 12 34.4 | +0.1 |
| LCAR | | | | IAmb_Lg | | 10 14 12.9 | |
| | comp=Z,48nm,0.9s | | | | | | |
| R40A | Maddies Statio | 5.37 | 52 | | Pn | 10 12 34.7 | +0.3 |
| R40A | | | | IAmb_Lg | | 10 14 13.0 | |
| | comp=Z,100nm,1.0s | | | | | | |
| P38A | Dawn | 5.59 | 34 | Pn | Pn | 10 12 38.5 | +1.0 |
| P38A | | | | IAmb_Lg | | 10 14 11.1 | |
| | comp=Z,58nm,0.8s | | | | | | |
| KSCO | Kaye Shedlock' | 5.63 | 316 | IAmb_Lg | | 10 14 28.2 | |
| | comp=Z,75nm,0.8s | | | | | | |
| KSCO | Kaye Shedlock' | 5.63 | 316 | S | Sn | 10 13 42.0 | -0.9 |
| | baz=133 | | | | | | |
| T42A | Van Buren | 5.63 | 68 | | Pn | 10 12 40.2 | +2.1 |
| T42A | | | | IAmb_Lg | | 10 14 18.4 | |
| | comp=Z,62nm,0.7s | | | | | | |
| HNDO | Hondo | 5.70 | 195 | | Pn | 10 12 38.7 | -0.3 |
| HNDO | | | | IAmb_Lg | | 10 14 15.5 | |
| | comp=Z,73nm,0.9s | | | | | | |
| MNHN | Monahans | 5.70 | 231 | | Pn | 10 12 39.0 | -0.1 |
| MNHN | | | | IAmb_Lg | | 10 14 25.4 | |
| | comp=Z,68nm,0.8s | | | | | | |
| T25A | Trinidad | 5.89 | 293 | | Pn | 10 12 43.3 | +1.5 |
| T25A | | | | IAmb_Lg | | 10 14 27.0 | |
| | comp=Z,75nm,0.9s | | | | | | |
| T25A | Trinidad | 5.89 | 293 | P | Pn | 10 12 42.0 | +0.2 |
| | baz=109 | | | | | | |
| CCM | Cathedral Cave | 5.93 | 58 | P | Pn | 10 12 43.0 | +0.9 |
| | baz=241 | | | | | | |
| CCM | | | | S | Sn | 10 13 51.9 | +1.8 |
| | baz=241 | | | | | | |
| N35A | Tabor | 5.99 | 14 | | Pn | 10 12 43.1 | 0.0 |
| DRIO | Del Rio | 6.17 | 205 | | Pn | 10 12 45.6 | +0.1 |
| 735A | Kenedy | 6.19 | 182 | IAmb_Lg | | 10 14 42.7 | |
| | comp=Z,61nm,0.9s | | | | | | |
| P40A | Paris | 6.29 | 43 | | Pn | 10 12 48.0 | +0.9 |
| SAND | Sanderson | 6.36 | 218 | | Pn | 10 12 48.0 | -0.2 |
| SAND | | | | IAmb_Lg | | 10 14 50.3 | |
| | comp=Z,56nm,0.9s | | | | | | |
| PECS | Pecos | 6.41 | 237 | Pn | Pn | 10 12 49.2 | +0.4 |
| PECS | | | | IAmb_Lg | | 10 14 40.9 | |
| | comp=Z,51nm,0.9s | | | | | | |
| FVM | French Village | 6.47 | 61 | IAmb_Lg | | 10 14 51.6 | |
| | comp=Z,86nm,0.7s | | | | | | |
| N38A | Joes South For | 6.68 | 30 | Pn | Pn | 10 12 52.0 | -0.5 |
| Y45A | Yeager Farm, C | 6.77 | 98 | Pn | Pn | 10 12 53.2 | -0.4 |
| OXF | Oxford | 6.77 | 92 | | Pn | 10 12 54.2 | +0.5 |
| OXF | | | | IAmb_Lg | | 10 15 03.6 | |
| | comp=Z,65nm,1.0s | | | | | | |
| OXF | Oxford | 6.77 | 92 | P | Pn | 10 12 53.6 | -0.1 |
| | baz=277,SNR=7.0 | | | | | | |
| OXF | | | | S | Sn | 10 14 09.4 | -1.4 |
| | baz=277 | | | | | | |
| HALT | Halls | 6.80 | 80 | IAmb_Lg | | 10 14 53.2 | |
| | comp=Z,85nm,0.7s | | | | | | |
| CGM3 | Cape Girardeau | 6.80 | 69 | IAmb_Lg | | 10 15 01.9 | |
| | comp=Z,59nm,0.9s | | | | | | |
| OGNE | Ogallala | 6.83 | 331 | | Pn | 10 12 55.7 | +1.1 |
| OGNE | Ogallala | 6.83 | 331 | P | Pn | 10 12 55.8 | +1.1 |
| | baz=148 | | | | | | |
| OGNE | | | | S | Sn | 10 14 11.2 | -1.4 |
| | baz=148 | | | | | | |
| 833A | Chaparral WMA, | 6.89 | 193 | IAmb_Lg | | 10 15 10.0 | |
| | comp=Z,38nm,0.9s | | | | | | |
| 833A | Chaparral WMA, | 6.89 | 193 | P | Pn | 10 12 55.8 | +0.4 |
| | baz=12 | | | | | | |
| ALPN | Alpine | 6.90 | 229 | | Pn | 10 12 56.0 | +0.2 |
| ALPN | | | | IAmb_Lg | | 10 15 11.8 | |
| | comp=Z,43nm,0.8s | | | | | | |
| SDCO | Great Sand Dun | 6.91 | 295 | | Pn | 10 12 56.8 | +0.9 |
| SDCO | Great Sand Dun | 6.91 | 295 | P | Pn | 10 12 56.5 | +0.7 |
| | baz=111,SNR=19 | | | | | | |
| Q24A | Divide | 7.18 | 305 | Pn | Pn | 10 13 00.6 | +0.9 |
| Q24A | | | | IAmb_Lg | | 10 15 00.3 | |
| | comp=Z,58nm,0.7s | | | | | | |
| Q24A | Divide | 7.18 | 305 | P | Pn | 10 13 00.1 | +0.5 |
| | baz=121 | | | | | | |
| UTMT | University of | 7.23 | 77 | IAmb_Lg | | 10 15 15.7 | |
| | comp=Z,86nm,0.8s | | | | | | |
| S44A | Carbondale | 7.23 | 66 | IAmb_Lg | | 10 15 10.1 | |
| | comp=Z,80nm,0.7s | | | | | | |
| ANMO | Albuquerque | 7.26 | 272 | P | Pn | 10 13 00.9 | +0.2 |
| | baz=87 | | | | | | |
| MNTX | Cornudas Mount | 7.32 | 245 | P | Pn | 10 13 01.9 | +0.6 |
| | baz=61 | | | | | | |
| MNTX | | | | S | Sn | 10 14 25.4 | +1.0 |
| | baz=61 | | | | | | |
| 146A | Union | 7.51 | 106 | IAmb_Lg | | 10 15 32.8 | |
| | comp=Z,31nm,1.1s | | | | | | |
| VHRN | Van Horn | 7.53 | 238 | | Pn | 10 13 05.0 | +0.7 |
| VHRN | | | | IAmb_Lg | | 10 15 21.1 | |
| | comp=Z,59nm,1.0s | | | | | | |
| BRIGG | Briggsdale | 7.65 | 318 | IAmb_Lg | | 10 15 22.6 | |
| | comp=Z,54nm,0.8s | | | | | | |
| SCIA | State Center | 7.65 | 25 | Pn | Pn | 10 13 05.0 | -0.8 |
| SCIA | State Center | 7.65 | 25 | P | Pn | 10 13 05.9 | +0.1 |
| | baz=208 | | | | | | |
| SCIA | | | | S | Sn | 10 14 31.4 | -1.1 |
| | baz=208 | | | | | | |
| TX31 | Lajitas Ar. Si | 7.68 | 224 | | Pn | 10 13 05.7 | -0.6 |
| TXAR | Lajitas Array | 7.68 | 224 | | Pn | 10 13 06.3 | 0.0 |
| K30B | Basset | 7.76 | 349 | Pn | Pn | 10 13 08.8 | +1.5 |
| N41A | Harden Midland | 7.76 | 41 | Pn | Pn | 10 13 08.0 | +0.7 |
| PLAL | Pickwick Lake | 7.82 | 88 | | Pn | 10 13 07.5 | -0.7 |
| Q44A | Meyer Farm, Va | 7.87 | 58 | IAmb_Lg | | 10 15 38.6 | |
| | comp=Z,76nm,0.8s | | | | | | |
| ISCO | Idaho Springs | 7.93 | 309 | | Pn | 10 13 10.5 | +0.5 |
| ISCO | | | | IAmb_Lg | | 10 15 39.5 | |
| | comp=Z,30nm,0.9s | | | | | | |
| ISCO | Idaho Springs | 7.93 | 309 | P | Pn | 10 13 10.7 | +0.7 |
| | baz=124 | | | | | | |
| WVT | Waverly | 8.04 | 80 | Pn | Pn | 10 13 09.8 | -1.3 |
| HDIL | Hopedale | 8.56 | 48 | | Pn | 10 13 18.2 | -0.1 |
| HDIL | Hopedale | 8.56 | 48 | P | Pn | 10 13 18.0 | -0.3 |
| | baz=232,SNR=5.2 | | | | | | |
| L40A | Anamosa | 8.59 | 34 | | Pn | 10 13 17.4 | -1.3 |
| L40A | | | | IAmb_Lg | | 10 15 55.0 | |
| | comp=Z,58nm,0.8s | | | | | | |
| ECSD | EROS Data Cent | 8.70 | 5 | | Pn | 10 13 19.5 | -0.6 |
| ECSD | EROS Data Cent | 8.70 | 5 | P | Pn | 10 13 19.5 | -0.6 |
| | baz=185,SNR=13 | | | | | | |
| X48A | Hartselle | 8.71 | 91 | Pn | Pn | 10 13 19.6 | -0.8 |
| PHWY | Pilot Hill | 8.77 | 318 | Pn | Pn | 10 13 21.7 | +0.2 |
| PHWY | | | | IAmb_Lg | | 10 16 01.4 | |
| | comp=Z,34nm,0.8s | | | | | | |
| N23A | Red Feather La | 8.79 | 314 | IAmb_Lg | | 10 16 03.9 | |
| | comp=Z,48nm,0.8s | | | | | | |
| L42A | Oliver, Polo | 9.31 | 40 | | Pn | 10 13 28.4 | -0.1 |
| L42A | | | | IAmb_Lg | | 10 16 12.0 | |
| | comp=Z,47nm,0.9s | | | | | | |
| Y49A | Blount Mountai | 9.32 | 94 | Pn | Pn | 10 13 28.5 | -0.3 |
| SUSD | Miller | 9.43 | 354 | IAmb_Lg | | 10 16 26.3 | |
| | comp=Z,42nm,0.8s | | | | | | |
| I37A | Lemond, Waseca | 9.51 | 19 | IAmb_Lg | | 10 16 32.6 | |
| | comp=Z,42nm,1.0s | | | | | | |
| PV18 | Skein Mesa, Pa | 9.62 | 293 | Pn | Pn | 10 13 33.8 | +0.7 |
| PV20 | West Nyswonger | 9.69 | 293 | Pn | Pn | 10 13 33.8 | -0.2 |
| JFWS | Jewell Farm | 9.71 | 34 | IAmb_Lg | | 10 16 28.0 | |
| | comp=Z,40nm,0.7s | | | | | | |
| K22A | Casper | 10.28 | 320 | Pn | Pn | 10 13 42.5 | +0.5 |

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**IDC 01 10:14:21.1±2.5, 19°.86S×178°.63W, h0km, mb3.6/5, mbtmp3.6/5, Error ellipse: s-maj=96.9km s-min=29.0km az=149.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 44.09 | 256 | P | P | 10 22 30.9 | -0.4 |
| | 1.5nm,0.7s,baz=98,slow=8.0,SNR=22 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 44.11 | 262 | P | P | 10 22 31.6 | +0.1 |
| | 0.3nm,0.3s,baz=96,slow=7.6,SNR=38 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| MJAR | Matsushiro Arr | 69.35 | 324 | P | P | 10 25 30.5 | -0.1 |
| | 0.4nm,0.5s,baz=134,slow=5.3,SNR=2.1 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 80.97 | 44 | P | P | 10 26 37.7 | -0.2 |
| | 0.1nm,0.4s,baz=230,slow=6.5,SNR=1.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| ILAR | Eielson Array | 87.83 | 13 | P | P | 10 27 12.1 | +0.3 |
| | 0.4nm,1.0s,baz=211,slow=5.1,SNR=2.4 | | | | | | |
| | 0.4nm,1.0s | | | | | | |

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*IDC 01 10:35:14.2±2.2, 4°.22N×125°.57E, h89km±20km, mb3.9/14, mbtmp4.2/15, MS2.4/1, Error ellipse: s-maj=38.7km s-min=11.0km az=76.0*

*DJA 01 10:35:16.5±0.4, 4°N±4°×12°6E±°, h48km±14km, M4.6/12, mB5.2/6, mb4.7/9, MLv4.6/12, Mw(mB)4.6/6*

*NEIC 01 10:35:16.8±1.7, 4°.19N±0°.07×125°.83E±0°.09, h101km±6km, mb4.4/38, Error ellipse: s-maj=12.8km s-min=9.1km az=68.0*

**ISC 01 10:35:16.3±0.4, 4°.22N±0°.05×125°.82E±0°.08, h107km, n81, σ1s.30/82, mb4.4/35, 1C, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DAV | Davao City (W) | 2.84 | 355 | Pn | Pn | 10 36 00.7 | +0.6 |
| DAV | Davao City (W) | 2.84 | 355 | P | Pn | 10 35 58.1 | -2.0 |
| | 98nm,0.3s,baz=92,slow=4.1,SNR=1.5 | | | | | | |
| DAV | | | | S | Sn | 10 36 31.1 | -2.8 |
| | 176nm,0.3s,baz=54,slow=16,SNR=2.1 | | | | | | |
| TNTI | Ternate | 3.76 | 156 | Pn | Pn | 10 36 10.5 | -1.8 |
| TNTI | Ternate | 3.76 | 156 | P | Pn | 10 36 10.4 | -1.9 |
| GTOI | Gorontalo | 4.54 | 218 | P | Pn | 10 36 21.4 | -1.4 |
| MRSI | Marisa | 5.37 | 226 | P | Pn | 10 36 34.0 | -0.1 |
| | 123nm,0.5s,0.5nm | | | | | | |
| TOLI2 | Tolitoli | 5.91 | 239 | Pn | Pn | 10 36 40.1 | -1.3 |
| LUWI | Luwuk | 6.05 | 210 | Pn | Pn | 10 36 43.0 | -0.3 |
| LUWI | Luwuk | 6.05 | 210 | P | Pn | 10 36 43.6 | +0.3 |
| | 119nm,0.8s,2μm0.4nm | | | | | | |
| SANI | Sanana | 6.23 | 178 | P | Pn | 10 36 41.9 | -3.9 |
| | 27nm,0.4s,2μm0.3nm | | | | | | |
| MYLDM | Lahad Datu | 7.36 | 278 | Pn | Pn | 10 37 03.6 | +2.5 |
| SWI | Sorong | 7.42 | 133 | P | Pn | 10 37 00.3 | -1.6 |
| | 37nm,0.6s,0.2nm | | | | | | |
| NLAI | Namlea | 7.52 | 170 | P | Pn | 10 37 00.3 | -3.0 |
| | 19nm,0.6s,2μm | | | | | | |
| FAKI | Fak Fak | 9.57 | 138 | Pn | Pn | 10 37 29.5 | -1.6 |
| FAKI | Fak Fak | 9.57 | 138 | P | Pn | 10 37 30.3 | -0.8 |
| KKM | Kota Kinabalu | 9.74 | 281 | Pn | Pn | 10 37 34.0 | +0.5 |
| SBUM | Sibu | 13.69 | 263 | Pn | Pn | 10 38 25.8 | -0.3 |
| SOEI | Soe | 13.97 | 186 | P | P | 10 38 41.3 | +7.0 |
| MTN | Manton Dam | 17.75 | 163 | P | P | 10 39 13.9 | -2.1 |
| MTN | | | | IAmb | IAmb | 10 39 15.4 | |
| | comp=Z,15nm,1.1s | | | | | | |
| YULB | Yu-li | 19.55 | 347 | P | P | 10 39 33.2 | -2.5 |
| TPUB | Ta-pu | 19.62 | 346 | P | P | 10 39 35.2 | -1.3 |
| TPUB | | | | IAmb | IAmb | 10 39 36.7 | |
| | comp=Z,17nm,0.8s | | | | | | |
| KNRA | Kununurra | 19.98 | 172 | P | P | 10 39 40.8 | +0.5 |
| FITZ | Fitzroy Crossi | 22.18 | 180 | P | P | 10 40 03.0 | -0.8 |
| MANU | Manus Island | 22.41 | 106 | P | P | 10 40 06.3 | 0.0 |
| MANU | | | | IAmb | IAmb | 10 40 25.8 | |
| | comp=Z,28nm,1.1s | | | | | | |
| JOW | Kunigami | 22.61 | 6 | P | P | 10 40 09.6 | +1.5 |
| UBPT | Khong Chiam | 22.84 | 300 | P | P | 10 40 11.3 | +0.7 |
| UBPT | | | | IAmb | IAmb | 10 40 12.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| COEN | Coen | 24.95 | 137 | P | P | 10 40 29.5 | -0.5 |
| COEN | | | | IAmb | IAmb | 10 40 31.1 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| WB0 | Warramunga Arr | 25.28 | 161 | P | P | 10 40 33.1 | +0.3 |
| WRAB | Tennant Creek | 25.43 | 161 | P | P | 10 40 34.1 | 0.0 |
| WRA | Warramunga Arr | 25.43 | 161 | P | P | 10 40 34.0 | -0.1 |
| WRA | Warramunga Arr | 25.43 | 161 | P | P | 10 40 34.1 | -0.1 |
| | comp=Z,7.3nm,0.5s,baz=342,slow=10,SNR=192 | | | | | | |
| | comp=Z,7.3nm,0.5s | | | | | | |
| WB2 | Warramunga Arr | 25.43 | 161 | P | P | 10 40 34.1 | -0.2 |
| WB2 | | | | IAmb | IAmb | 10 40 35.9 | |
| | comp=Z,12nm,0.6s | | | | | | |
| WR0 | Warramunga Arr | 25.51 | 161 | P | P | 10 40 35.0 | +0.1 |
| WR0 | | | | IAmb | IAmb | 10 40 36.6 | |
| | comp=Z,9.5nm,0.4s | | | | | | |
| AS31 | Alice Springs | 28.82 | 164 | P | P | 10 41 04.7 | +0.1 |
| ASAR | Alice Springs | 28.82 | 164 | P | P | 10 41 04.7 | +0.1 |
| ASAR | Alice Springs | 28.82 | 164 | P | P | 10 41 04.5 | -0.1 |
| | comp=Z,1.5nm,0.3s,baz=344,slow=7.5,SNR=59 | | | | | | |
| ASAR | | | | PcP | PcP | 10 44 12.9 | +1.0 |
| | comp=Z,0.3nm,0.7s,baz=338,slow=2.1,SNR=2.2 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| JNU | Nakatsue | 29.14 | 9 | P | P | 10 41 06.9 | -0.4 |
| JNU | | | | IAmb | IAmb | 10 41 08.0 | |
| | comp=Z,17nm,1.0s | | | | | | |
| CTA | Charters Tower | 31.41 | 141 | LR | LR | 10 55 24.4 | |
| | comp=Z,7.1nm,21.1s,baz=344,slow=38 | | | | | | |
| PZH | PanZhiHua | 31.96 | 316 | P | P | 10 41 35.5 | +3.1 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,90nm,5.1s | | | | | | |
| KSAR | Wonju Array Be | 33.12 | 3 | P | P | 10 41 43.5 | +1.4 |
| KSRS | Korea Array | 33.13 | 3 | P | P | 10 41 43.1 | +0.8 |
| | comp=Z,3.3nm,0.5s,baz=182,slow=9.9,SNR=23 | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| KS19 | Wonju Array Si | 33.18 | 3 | P | P | 10 41 43.4 | +0.7 |
| KS19 | | | | IAmb | IAmb | 10 41 43.8 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| MJAR | Matsushiro Arr | 34.12 | 18 | P | P | 10 41 50.0 | -1.0 |
| | comp=Z,1.5nm,0.8s,baz=188,slow=8.9,SNR=6.0 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| FORT | Forrest | 34.87 | 177 | P | P | 10 41 57.4 | +0.1 |
| JMM | Marumori | 36.17 | 20 | P | P | 10 42 09.7 | +1.3 |
| LZH | Lanzhou | 37.63 | 330 | ⇑P | P | 10 42 20.1 | -0.9 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,22nm,1.4s | | | | | | |
| BBOO | Buckleboo | 38.09 | 166 | P | P | 10 42 25.3 | +0.6 |
| BBOO | | | | IAmb | IAmb | 10 42 33.0 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| EIDS | Eidsvold | 38.29 | 141 | P | P | 10 42 26.9 | +0.4 |
| EIDS | | | | IAmb | IAmb | 10 42 27.2 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| HHC | Hu-ho-hao-te | 38.66 | 343 | *e*P | P | 10 42 34.9 | +5.4 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,43nm,4.2s | | | | | | |
| SHL | Shillong | 38.86 | 307 | P | P | 10 42 32.1 | +0.5 |
| SHL | | | | IAmb | IAmb | 10 42 32.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| JTM | Tenmabayashi | 38.90 | 19 | P | P | 10 42 32.5 | +1.1 |
| STKA | Stephens Creek | 38.91 | 158 | P | P | 10 42 32.4 | +0.8 |
| STKA | Stephens Creek | 38.91 | 158 | P | P | 10 42 32.2 | +0.6 |
| | comp=Z,4.2nm,0.6s,baz=330,slow=8.5,SNR=10 | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| USA0B | Ussuriysk Arra | 40.19 | 7 | P | P | 10 42 43.4 | +1.4 |
| USA0B | | | | IAmb | IAmb | 10 42 43.9 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 40.19 | 7 | P | P | 10 42 43.2 | +1.2 |
| USRK | Ussuriysk Ar. | 40.19 | 7 | P | P | 10 42 42.8 | +0.8 |
| | comp=Z,6.7nm,0.7s,baz=192,slow=6.8,SNR=20 | | | | | | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| ARMA | Armidale | 42.37 | 146 | P | P | 10 43 01.4 | +1.2 |
| ARMA | | | | IAmb | IAmb | 10 43 11.7 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| JKA | Kamikawa-asahi | 42.40 | 18 | P | P | 10 43 01.9 | +1.8 |
| JKA | | | | IAmb | IAmb | 10 43 15.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| CAN | Canberra | 44.95 | 153 | P | P | 10 43 22.1 | +1.2 |
| CAN | | | | IAmb | IAmb | 10 43 42.7 | |
| | comp=Z,10nm,1.1s | | | | | | |
| HEH | HeiHe | 45.89 | 1 | *e*P | P | 10 43 28.3 | +0.4 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| SONM | Songino Array | 46.55 | 342 | P | P | 10 43 31.2 | -2.1 |
| | comp=Z,0.4nm,0.4s,baz=141,slow=7.4,SNR=2.0 | | | | | | |
| SONM | | | | PcP | PcP | 10 45 06.2 | +0.3 |
| | comp=Z,1.2nm,0.6s,baz=145,slow=5.3,SNR=5.4 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| MK31 | Makanchi Array | 56.64 | 325 | P | P | 10 44 47.8 | -0.5 |
| MKAR | Makanchi Array | 56.64 | 325 | P | P | 10 44 47.8 | -0.5 |
| MKAR | Makanchi Array | 56.64 | 325 | P | P | 10 44 47.6 | -0.7 |
| | comp=Z,1.0nm,0.5s,baz=122,slow=8.3,SNR=17 | | | | | | |
| MKAR | | | | PcP | PcP | 10 45 43.2 | -0.2 |
| | comp=Z,1.0nm,0.5s,baz=121,slow=3.4,SNR=8.1 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| MAKZ | Makanchi | 56.83 | 325 | P | P | 10 44 49.1 | -0.5 |
| ARSB | Arslanbob | 59.88 | 316 | P | P | 10 45 11.5 | +0.4 |
| KURBB | Kurchatov Arra | 60.84 | 328 | P | P | 10 45 15.7 | -1.6 |
| | comp=Z,0.9nm,0.5s,baz=126,slow=6.9,SNR=11 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| KURK | Kurchatov | 60.84 | 328 | P | P | 10 45 18.5 | +1.2 |
| KURK | | | | IAmb | IAmb | 10 45 25.9 | |
| | comp=Z,3.2nm,0.3s | | | | | | |
| KKAR | Karatay Array | 62.26 | 317 | P | P | 10 45 27.2 | +0.2 |
| ATKA | Atka Island | 68.61 | 35 | P | P | 10 46 08.5 | +0.8 |
| ABKAR | Akbulak array | 71.20 | 321 | P | P | 10 46 23.0 | -0.7 |
| CNBA | Chernabura Isl | 77.70 | 35 | P | P | 10 47 01.3 | +0.1 |
| H23K | Yukon River | 83.97 | 24 | P | P | 10 47 36.5 | +2.2 |
| H23K | | | | IAmb | IAmb | 10 47 37.0 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| I23K | Minto, Yukon-K | 84.01 | 25 | P | P | 10 47 36.3 | +1.8 |
| I23K | | | | IAmb | IAmb | 10 47 36.4 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| VNDA | Vanda | 84.03 | 173 | P | P | 10 47 35.4 | +1.1 |
| VNDA | Vanda | 84.03 | 173 | P | P | 10 47 34.7 | +0.4 |
| | comp=Z,0.3nm,0.5s,baz=330,slow=7.4,SNR=5.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| ILAR | Eielson Array | 85.05 | 25 | P | P | 10 47 39.5 | -0.3 |
| | comp=Z,0.2nm,0.5s,baz=241,slow=5.1,SNR=5.4 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| ARCES | ARCESS Array B | 89.68 | 340 | P | P | 10 48 00.6 | -1.3 |
| | comp=Z,0.7nm,0.4s,baz=83,slow=7.4,SNR=7.0 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| FINES | FINESS Array B | 90.97 | 332 | P | P | 10 48 06.3 | -1.8 |
| | comp=Z,0.8nm,0.7s,baz=89,slow=7.4,SNR=3.3 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| HFS | Hagfors | 97.17 | 332 | P | P | 10 48 35.5 | -1.0 |
| | comp=Z,0.4nm,0.3s,baz=73,slow=4.9,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| TORD | Torodi Ar. Bea | 121.91 | 288 | PKP | PKPdf | 10 53 58.5 | -0.6 |
| | comp=Z,0.4nm,0.8s,baz=67,slow=0.9,SNR=4.3 | | | | | | |

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*IDC 01 10:44:00.8±1.1, 8°.26S×116°.71E, h0km, mb3.8/7, mbtmp3.8/8, ML3.6/1, MS2.9/3, Error ellipse: s-maj=34.3km s-min=18.4km az=63.0*

*DJA 01 10:44:02.3±0.2, 8°S±3°×11°7E±°, h10km, M4.4/13, mb4.6/3, MLv4.3/13*

**ISC 01 10:44:02.3±0.6, 8°.24S±0°.05×116°.69E±0°.04, h10km, n23, σ0s.93/26, mb3.9/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.53 | 159 | P | Pg | 10 44 12.7 | +0.1 |
| TWSI | | | | S | Sb | 10 44 21.0 | -0.4 |
| PLAI | Plampang | 1.22 | 119 | P | Pn | 10 44 25.6 | +0.1 |
| PLAI | | | | S | Sn | 10 44 42.7 | +0.6 |
| SRBI | Singaraja | 1.47 | 276 | P | Pn | 10 44 28.4 | -0.5 |
| SRBI | | | | S | Sb | 10 44 48.5 | -0.1 |
| DNP | Denpasar | 1.53 | 253 | P | Pb | 10 44 30.3 | -0.5 |
| DNP | | | | S | Sb | 10 44 50.2 | 0.0 |
| ABJI | Asem Bagus | 2.47 | 280 | P | Pn | 10 44 44.0 | +1.3 |
| JAGI | Jajag, Banyuwa | 2.52 | 265 | P | Pn | 10 44 42.3 | -1.1 |
| BSSI | Bau Bau, Buton | 4.31 | 61 | P | Pn | 10 45 07.5 | -0.5 |
| BASI | Baing, Sumba | 4.31 | 117 | P | Pn | 10 45 08.2 | +0.2 |
| KAPI | Kappang | 4.42 | 44 | Pn | Pn | 10 45 08.9 | -0.6 |
| | 3.3nm,0.3s,baz=201,slow=6.7,SNR=18 | | | | | | |
| KAPI | | | | Sn | Sn | 10 46 00.6 | -0.4 |
| | 3.3nm,0.3s,baz=218,slow=17,SNR=4.4 | | | | | | |
| | 11nm,0.2s | | | | | | |
| PWJI | Pagerwojo | 4.84 | 272 | P | Pn | 10 45 16.4 | +1.1 |
| BNSI | Bone | 5.11 | 42 | P | Pn | 10 45 18.6 | -0.4 |
| | 53nm,1.1s,0.2nm | | | | | | |
| UGM | Wanagama | 6.12 | 273 | P | Pn | 10 45 33.1 | +0.2 |
| DAV | Davao City (W) | 17.60 | 30 | LR | LR | 10 56 21.3 | |
| | comp=Z,38nm,19.0s,baz=192,slow=42 | | | | | | |
| WRA | Warramunga Arr | 20.67 | 126 | P | P | 10 48 42.0 | -0.6 |
| | 5.1nm,0.8s,baz=301,slow=12,SNR=36 | | | | | | |
| WRA | | | | LR | LR | 10 58 02.9 | |
| | comp=Z,40nm,20.1s,baz=6.0,slow=41 | | | | | | |
| | 5.1nm,0.8s | | | | | | |
| ASAR | Alice Springs | 22.52 | 135 | P | P | 10 49 01.9 | -0.6 |
| | 2.0nm,0.6s,baz=313,slow=8.8,SNR=24 | | | | | | |
| | 2.0nm,0.6s | | | | | | |
| CMAR | Chiang Mai Arr | 31.79 | 327 | LR | LR | 11 03 39.3 | |
| | comp=Z,19nm,20.3s,baz=185,slow=37 | | | | | | |
| STKA | Stephens Creek | 33.00 | 139 | P | P | 10 50 38.4 | +0.6 |
| | 2.5nm,0.7s,baz=311,slow=12,SNR=4.7 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| KSRS | Korea Array | 46.66 | 12 | P | P | 10 52 32.1 | +1.0 |
| | 0.4nm,0.5s,baz=178,slow=40,SNR=2.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| SONM | Songino Array | 56.57 | 352 | P | P | 10 53 44.9 | -0.3 |
| | 0.6nm,0.5s,baz=180,slow=8.6,SNR=2.8 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| KSH | Kashi | 60.66 | 325 | P | P | 10 54 15.4 | +1.5 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 62.76 | 334 | P | P | 10 54 26.4 | -1.5 |
| | comp=Z,0.7nm,0.8s,baz=145,slow=7.9,SNR=4.7 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 67.30 | 335 | P | P | 10 54 59.4 | +2.2 |
| | comp=Z,0.2nm,0.2s,baz=136,slow=5.7,SNR=3.9 | | | | | | |
| | comp=Z,0.2nm,0.2s | | | | | | |
| CPUP | Villa Florida | 145.15 | 189 | PKPbc | PKPbc | 11 03 38.9 | -1.5 |
| | comp=Z,2.0nm,0.7s,baz=87,slow=4.6,SNR=4.8 | | | | | | |

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*NEIC 01 11:25:35.4±0.8, 9°.26S±0°.07×118°.21E±0°.07, h120km±8km, mb4.2/27, Error ellipse: s-maj=10.9km s-min=10.2km az=195.0*

*DJA 01 11:25:37.0±0.3, 9°S±4°×11°8E±°, h102km±6km, M4.6/18, mb4.7/8, mB4.9/3, MLv4.7/18, Mw(mB)4.2/3*
*IDC 01 11:25:39.1±2.6, 8°.98S×118°.40E, h143km±22km, mb3.7/11, mbtmp4.1/13, Error ellipse: s-maj=27.1km s-min=9.9km az=62.0*
**ISC 01 11:25:35.4±0.5, 9°.13S±0°.05×118°.38E±0°.05, h100km, n83, σ2s.12/63, mb4.2/23, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PLAI | Plampang | 0.66 | 296 | P | Pn | 11 25 55.7 | +3.2 |
| PLAI | Plampang | 0.66 | 296 | P | Pn | 11 25 55.6 | +3.1 |
| PLAI | | | | S | Sn | 11 26 08.8 | +3.5 |
| TWSI | Taliwang, Sumb | 1.52 | 284 | P | Pn | 11 26 04.8 | +2.9 |
| TWSI | | | | S | Sn | 11 26 24.8 | +2.7 |
| BASI | Baing, Sumba | 2.43 | 117 | P | Pn | 11 26 16.9 | +3.4 |
| DNP | Denpasar | 3.16 | 278 | P | Pn | 11 26 24.0 | +0.8 |
| SRBI | Singaraja | 3.29 | 288 | P | Pn | 11 26 26.9 | +1.8 |
| BSSI | Bau Bau, Buton | 3.63 | 35 | P | Pn | 11 26 32.7 | +3.1 |
| MMRI | Maumere | 3.85 | 83 | P | Pn | 11 26 35.5 | +3.0 |
| MMRI | Maumere | 3.85 | 83 | Pn | Pn | 11 26 35.4 | +2.8 |
| MMRI | Maumere | 3.85 | 83 | P | Pn | 11 26 35.2 | +2.7 |
| JAGI | Jajag, Banyuwa | 4.22 | 279 | P | Pn | 11 26 38.1 | +0.4 |
| JAGI | Jajag, Banyuwa | 4.22 | 279 | Pn | Pn | 11 26 35.9 | -1.8 |
| JAGI | Jajag, Banyuwa | 4.22 | 279 | P | Pn | 11 26 38.0 | +0.4 |
| KAPI | Kappang | 4.31 | 19 | Pn | Pn | 11 26 41.6 | +2.8 |
| KAPI | Kappang | 4.31 | 19 | P | Pn | 11 26 42.3 | +3.5 |
| | 76nm,0.7s,baz=168,slow=12,SNR=19 | | | | | | |
| KAPI | | | | S | Sn | 11 27 28.3 | +0.4 |
| | 39nm,0.6s,baz=266,slow=21,SNR=1.8 | | | | | | |
| BNSI | Bone | 5.00 | 20 | P | Pn | 11 26 53.2 | +5.1 |
| | 106nm,0.7s,972nm0.3nm | | | | | | |
| BATI | Baumata | 5.32 | 102 | P | Pn | 11 26 54.9 | +2.4 |
| | 102nm,0.5s,2μm0.9nm | | | | | | |
| BBSI | Bau Bau | 5.51 | 49 | P | Pn | 11 26 59.3 | +4.2 |
| SOEI | Soe | 5.85 | 97 | Pn | Pn | 11 27 01.9 | +2.2 |
| SOEI | Soe | 5.85 | 97 | P | Pn | 11 27 01.7 | +2.0 |
| | 72nm,0.6s,0.5nm | | | | | | |
| PWJI | Pagerwojo | 6.59 | 279 | P | Pn | 11 27 11.3 | +1.6 |
| UGM | Wanagama | 7.86 | 278 | Pn | Pn | 11 27 24.9 | -2.1 |
| UGM | Wanagama | 7.86 | 278 | P | Pn | 11 27 27.6 | +0.6 |
| BBJI | Bungbulang | 10.74 | 278 | P | Pn | 11 28 06.7 | +0.4 |
| | 17nm,1.2s | | | | | | |
| FITZ | Fitzroy Crossi | 11.37 | 142 | Pn | Pn | 11 28 13.7 | -1.0 |
| MBWA | Marble Bar | 12.04 | 174 | P | Pn | 11 28 27.1 | +3.5 |
| MBWA | Marble Bar | 12.04 | 174 | Pn | Pn | 11 28 21.3 | -2.3 |
| KNRA | Kununurra | 12.05 | 124 | Pn | Pn | 11 28 24.0 | +0.2 |
| PSA00 | Pilbara Seismi | 12.46 | 174 | P | Pn | 11 28 33.0 | +3.8 |
| PSA00 | Pilbara Seismi | 12.46 | 174 | Pn | Pn | 11 28 27.3 | -1.8 |
| MTN | Manton Dam | 13.06 | 108 | P | Pn | 11 28 38.7 | +1.6 |
| MTN | Manton Dam | 13.06 | 108 | Pn | Pn | 11 28 36.5 | -0.6 |
| GIRL | Giralia | 14.02 | 196 | Pn | Pn | 11 28 46.6 | -2.9 |
| KDU | Kakadu | 14.29 | 106 | P | Pn | 11 28 54.6 | +1.5 |
| FAKI | Fak Fak | 15.11 | 67 | P | Pn | 11 29 03.6 | 0.0 |
| FAKI | Fak Fak | 15.11 | 67 | Pn | Pn | 11 29 03.2 | -0.4 |
| FAKI | | | | IAmb | IAmb | 11 29 06.3 | |
| | comp=Z,24nm,0.9s | | | | | | |
| KKM | Kota Kinabalu | 15.22 | 352 | Pn | Pn | 11 29 04.2 | -0.9 |
| MEEK | Meekatharra | 17.42 | 179 | P | P | 11 29 33.6 | +1.6 |
| WB0 | Warramunga Arr | 18.76 | 126 | P | P | 11 29 45.1 | -1.6 |
| WRA | Warramunga Arr | 18.81 | 127 | P | P | 11 29 45.4 | -1.9 |
| WRA | Warramunga Arr | 18.81 | 127 | P | P | 11 29 48.4 | +1.1 |
| | comp=Z,0.8nm,0.5s,baz=301,slow=12,SNR=22 | | | | | | |
| WRA | | | | S | S | 11 33 05.6 | -11 |
| | comp=Z,0.5nm,0.6s,baz=342,slow=35,SNR=1.5 | | | | | | |
| WRAB | Tennant Creek | 18.81 | 127 | P | P | 11 29 45.8 | -1.5 |
| WRAB | | | | IAmb | IAmb | 11 30 05.4 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 18.82 | 127 | P | P | 11 29 45.7 | -1.6 |
| WR0 | Warramunga Arr | 18.98 | 126 | P | P | 11 29 48.3 | -0.8 |
| WR0 | | | | IAmb | IAmb | 11 30 15.7 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| MORW | Morawa | 19.96 | 186 | P | P | 11 29 56.5 | -3.2 |
| MORW | | | | IAmb | IAmb | 11 30 12.8 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| AS31 | Alice Springs | 20.73 | 136 | P | P | 11 30 06.3 | -1.7 |
| ASAR | Alice Springs | 20.73 | 136 | P | P | 11 30 07.4 | -0.6 |
| ASAR | Alice Springs | 20.73 | 136 | P | P | 11 30 10.6 | +2.6 |
| | comp=Z,1.0nm,0.5s,baz=317,slow=9.1,SNR=33 | | | | | | |
| ASAR | | | | S | S | 11 33 53.6 | -0.5 |
| | comp=Z,0.7nm,0.5s,baz=305,slow=21,SNR=5.1 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| KULM | Kulim | 22.74 | 308 | P | P | 11 30 26.7 | -2.6 |
| KULM | | | | IAmb | IAmb | 11 30 31.1 | |
| | comp=Z,13nm,1.1s | | | | | | |
| NWAO | Narrogin (SRO) | 23.71 | 182 | P | P | 11 30 34.5 | -3.8 |
| NWAO | | | | IAmb | IAmb | 11 30 55.7 | |
| | comp=Z,28nm,1.1s | | | | | | |
| COEN | Coen | 24.76 | 104 | P | P | 11 30 45.9 | -2.0 |
| COEN | | | | IAmb | IAmb | 11 30 55.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| PMG | Port Moresby | 28.41 | 93 | P | P | 11 31 19.2 | -1.5 |
| STKA | Stephens Creek | 31.25 | 140 | P | P | 11 31 46.8 | +1.1 |
| | comp=Z,1.3nm,0.7s,baz=284,slow=24,SNR=2.0 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 33.45 | 325 | P | P | 11 32 04.8 | -0.3 |
| | comp=Z,1.0nm,0.7s,baz=152,slow=6.0,SNR=6.3 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| YHNB | Yeheng | 33.72 | 5 | P | P | 11 32 07.0 | -0.4 |
| TOO | Toolangi | 37.43 | 143 | P | P | 11 32 37.4 | -1.6 |
| TOO | | | | IAmb | IAmb | 11 32 47.7 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| PZH | PanZhiHua | 38.93 | 336 | P | P | 11 32 53.1 | +1.4 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.3s | | | | | | |
| KSRS | Korea Array | 47.19 | 10 | P | P | 11 33 57.8 | -0.2 |
| | comp=Z,1.6nm,0.8s,baz=186,slow=10.0,SNR=11 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| HHC | Hu-ho-hao-te | 50.12 | 353 | *e*P | P | 11 34 21.9 | +1.4 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,73nm,4.4s | | | | | | |
| USRK | Ussuriysk Ar. | 54.49 | 12 | P | P | 11 34 51.5 | -1.2 |
| | comp=Z,6.7nm,0.5s,baz=192,slow=6.3,SNR=24 | | | | | | |
| | comp=Z,6.7nm,0.5s | | | | | | |
| ULN | Ulaanbaatar | 57.62 | 351 | P | P | 11 35 14.0 | -1.1 |
| SONM | Songino Array | 57.70 | 350 | P | P | 11 35 13.8 | -1.8 |
| SONM | | | | IAmb | IAmb | 11 35 16.5 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| SONM | Songino Array | 57.70 | 350 | P | P | 11 35 13.2 | -2.4 |
| | comp=Z,1.1nm,0.6s,baz=172,slow=9.7,SNR=4.8 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| HEH | HeiHe | 59.65 | 7 | *e*P | P | 11 35 27.6 | -1.3 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| MK31 | Makanchi Array | 64.29 | 333 | P | P | 11 35 58.0 | -2.2 |
| MK31 | | | | IAmb | IAmb | 11 35 59.0 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 64.29 | 333 | P | P | 11 35 58.0 | -2.1 |
| MKAR | Makanchi Array | 64.29 | 333 | P | P | 11 35 58.0 | -2.2 |
| | comp=Z,3.1nm,0.7s,baz=152,slow=7.3,SNR=22 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| MAKZ | Makanchi | 64.44 | 333 | P | P | 11 35 59.0 | -2.1 |
| ARSB | Arslanbob | 65.25 | 324 | P | P | 11 36 04.1 | -2.5 |
| ARSB | | | | IAmb | IAmb | 11 36 05.5 | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| GAR | Garm | 65.45 | 320 | P | P | 11 36 05.1 | -2.9 |
| CHGR | Chuyangaron | 65.98 | 320 | P | P | 11 36 07.8 | -3.5 |
| SIMJ | Simiganj | 66.08 | 319 | P | P | 11 36 08.8 | -3.2 |
| SIMJ | | | | IAmb | IAmb | 11 36 09.8 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| KKAR | Karatay Array | 67.79 | 324 | P | P | 11 36 20.2 | -2.5 |
| KURBB | Kurchatov Arra | 68.81 | 334 | P | P | 11 36 26.5 | -2.2 |
| | comp=Z,1.7nm,0.5s,baz=138,slow=5.9,SNR=19 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| KURK | Kurchatov | 68.84 | 334 | P | P | 11 36 26.6 | -2.3 |
| KURK | | | | IAmb | IAmb | 11 36 27.6 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| MAW | Mawson | 68.91 | 200 | P | P | 11 36 29.1 | -0.1 |
| | comp=Z,0.7nm,0.3s,baz=44,slow=5.0,SNR=4.5 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| ZAA0 | Zalesovo Array | 68.94 | 340 | P | P | 11 36 27.1 | -2.4 |
| ZAA0 | | | | IAmb | IAmb | 11 36 27.6 | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 68.94 | 340 | P | P | 11 36 26.9 | -2.6 |
| ZALV | Zalesovo Beam | 68.94 | 340 | P | P | 11 36 27.0 | -2.5 |
| | comp=Z,3.4nm,0.6s,baz=147,slow=5.8,SNR=14 | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| VNDA | Vanda | 71.96 | 171 | P | P | 11 36 45.3 | -2.3 |
| SBA | Scott Base | 72.97 | 170 | P | P | 11 36 50.0 | -3.5 |
| BRVK | Borovoye | 74.19 | 332 | P | P | 11 36 58.7 | -2.4 |
| BRVK | | | | IAmb | IAmb | 11 36 59.7 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| QSPA | South Pole Qui | 80.87 | 180 | P | P | 11 37 38.1 | -0.1 |
| | comp=Z,1.4nm,1.0s,baz=298,slow=3.0,SNR=2.5 | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | |

**RSNC 01 11:53:55.8±0.0, 10°N±1°×7°4W±°, h66km±4km, M2.8, mb3.8, mB4.9, ML2.8, Mw(mB)4.2, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARGC | Ariguani, Magd | 0.46 | 240 | P | Pn | 11 54 06.1 | -1.8 |
| ARGC | | | | S | Sn | 11 54 15.4 | -1.4 |
| SMRC | Santa Marta, M | 1.13 | 341 | P | Pn | 11 54 12.6 | -3.2 |
| SMRC | | | | S | Sn | 11 54 27.7 | -3.0 |
| CRJC | Cerrejon, Guaj | 1.32 | 45 | P | Pn | 11 54 15.7 | -2.7 |
| CRJC | | | | S | Sn | 11 54 33.0 | -2.3 |
| CRJC | | | | S | Sn | 11 54 33.0 | -2.3 |
| SJCC | San Jacinto, C | 1.33 | 262 | P | Pn | 11 54 15.6 | -2.9 |
| SJCC | | | | S | Sn | 11 54 33.4 | -2.1 |
| OCAC | Ocana | 1.91 | 164 | P | Pn | 11 54 24.1 | -2.2 |
| OCAC | | | | S | Sn | 11 54 49.2 | -0.3 |
| ZARC | Zaragoza, Cauc | 2.77 | 201 | P | Pn | 11 54 37.9 | 0.0 |
| ZARC | | | | S | Sn | 11 55 09.7 | -0.5 |
| LCBC | Los crdobas, | 2.78 | 244 | P | Pn | 11 54 37.5 | -0.5 |
| LCBC | | | | S | Sn | 11 55 08.2 | -2.2 |
| UREC | San Jos de Ur | 2.86 | 216 | P | Pn | 11 54 39.8 | +0.7 |
| PAMC | Pamplona, Colo | 2.96 | 157 | P | Pn | 11 54 40.0 | -0.8 |
| PAMC | | | | S | Sn | 11 55 14.6 | -0.8 |
| SDV | Santo Domingo | 3.38 | 110 | P | Pn | 11 54 45.6 | -0.8 |
| SDV | | | | S | Sn | 11 55 23.3 | -2.1 |
| BARC | Barichara | 3.54 | 169 | P | Pn | 11 54 47.0 | -1.5 |
| BARC | | | | S | Sn | 11 55 28.9 | -0.4 |
| PTBC | PUERTO BERRIO, | 3.58 | 190 | P | Pn | 11 54 47.9 | -1.1 |
| PTBC | | | | S | Sn | 11 55 30.0 | -0.1 |
| CAPC | Capurgana | 3.75 | 248 | P | Pn | 11 54 45.7 | -5.6 |
| CAPC | | | | S | Sn | 11 55 26.6 | -7.7 |
| TAMC | Tame, Arauca | 4.16 | 151 | P | Pn | 11 54 55.6 | -1.3 |
| TAMC | | | | S | Sn | 11 55 42.4 | -1.9 |
| RUSC | La Rusia | 4.24 | 170 | P | Pn | 11 54 58.2 | -0.2 |
| RUSC | | | | S | Sn | 11 55 46.8 | 0.0 |
| NORC | Norcasia | 4.61 | 193 | P | Pn | 11 55 03.0 | -0.1 |
| PLMC | San Jos del P | 5.69 | 205 | P | Pn | 11 55 16.7 | -1.2 |
| BCIP | Isla Barro Col | 5.99 | 262 | P | Pn | 11 55 17.1 | -4.7 |

**IDC 01 11:58:58.7±2.2, 0°.52N×127°.41E, h0km, mb3.2/3, mbtmp3.3/3, Error ellipse: s-maj=155.1km s-min=28.4km az=66.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 21.44 | 162 | P | P | 12 03 50.0 | +1.3 |
| | 0.7nm,0.4s,baz=341,slow=11,SNR=26 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| ASAR | Alice Springs | 24.86 | 166 | P | P | 12 04 22.2 | -1.0 |
| | 0.2nm,0.4s,baz=346,slow=7.5,SNR=8.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 60.57 | 326 | P | P | 12 09 11.2 | +0.1 |
| | 0.2nm,0.5s,baz=131,slow=5.9,SNR=2.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC 01 12:38:00.2±1.0, 60°.49S×27°.31W, h0km, mb3.9/4, mbtmp3.9/4, MS3.4/11, Error ellipse: s-maj=51.3km s-min=25.9km az=88.0*
**ISC 01 12:38:01.9±1.0, 60°.5S±0°.2×27°.4W±0°.3, h10km, n18, σ0s.82/6, mb3.9/4, MS3.3/10, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMSA | Palmer Station | 17.22 | 240 | LR | LR | 12 47 35.8 | |
| | comp=Z,246nm,20.1s,baz=82,slow=33 | | | | | | |
| QSPA | South Pole Qui | 29.74 | 180 | P | P | 12 44 08.5 | +0.4 |
| | 2.3nm,0.9s,baz=194,slow=2.3,SNR=5.5 | | | | | | |
| QSPA | | | | LR | LR | 12 55 26.9 | |
| | comp=Z,105nm,21.6s,baz=211,slow=35 | | | | | | |
| | 2.3nm,0.9s | | | | | | |
| PLCA | Paso Flores | 32.96 | 287 | LR | LR | 12 57 16.7 | |
| | comp=Z,60nm,18.5s,baz=152,slow=35 | | | | | | |
| CPUP | Villa Florida | 39.81 | 316 | P | P | 12 45 35.1 | +0.2 |
| | 0.9nm,0.3s,baz=170,slow=12,SNR=1.7 | | | | | | |
| CPUP | | | | LR | LR | 13 03 59.5 | |
| | comp=Z,30nm,18.6s,baz=168,slow=39 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| SUR | Sutherland | 42.06 | 70 | LR | LR | 12 59 48.1 | |
| | comp=Z,32nm,21.4s,baz=212,slow=31 | | | | | | |
| VNDA | Vanda | 42.12 | 183 | P | P | 12 45 53.4 | 0.0 |
| | 0.6nm,0.9s,baz=161,slow=5.4,SNR=2.5 | | | | | | |
| VNDA | | | | LR | LR | 13 01 34.9 | |
| | comp=Z,22nm,21.7s,baz=192,slow=34 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| H04S2 | CROZET ISLANDS | 45.95 | 110 | T | T | 13 36 19.4 | |
| | baz=223,slow=74,SNR=63 | | | | | | |
| H04S3 | CROZET ISLANDS | 45.96 | 110 | T | T | 13 36 18.5 | |
| | baz=223,slow=74,SNR=52 | | | | | | |
| H04S1 | CROZET ISLANDS | 45.97 | 110 | T | T | 13 36 18.4 | |
| | baz=223,slow=74,SNR=40 | | | | | | |
| BDFB | Brasilia | 47.23 | 332 | LR | LR | 13 07 33.9 | |
| | comp=Z,27nm,18.1s,baz=178,slow=38 | | | | | | |
| BOSA | Boshof | 47.30 | 72 | LR | LR | 13 02 29.9 | |
| | comp=Z,56nm,19.7s,baz=207,slow=31 | | | | | | |
| LBTB | Lobatse | 50.51 | 70 | LR | LR | 13 04 55.2 | |
| | comp=Z,17nm,18.6s,baz=168,slow=32 | | | | | | |
| TORD | Torodi Ar. Bea | 76.99 | 29 | P | P | 12 49 55.1 | +0.6 |
| | 0.5nm,0.5s,baz=202,slow=5.3,SNR=9.6 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| STKA | Stephens Creek | 87.52 | 171 | LR | LR | 13 26 49.8 | |
| | comp=Z,57nm,20.4s,baz=202,slow=34 | | | | | | |
| PPT | Papeete | 89.49 | 234 | LR | LR | 13 23 03.9 | |
| | comp=Z,40nm,19.6s,baz=190,slow=30 | | | | | | |
| ZALV | Zalesovo Beam | 144.22 | 69 | PKP | PKPbc | 12 57 34.2 | -0.6 |
| | 0.4nm,0.4s,baz=208,slow=2.8,SNR=1.6 | | | | | | |
| SONM | Songino Array | 150.78 | 95 | PKPbc | PKPbc | 12 57 52.4 | -1.0 |
| | 0.8nm,0.7s,baz=207,slow=1.6,SNR=3.9 | | | | | | |
| ILAR | Eielson Array | 152.82 | 305 | PKPbc | PKPbc | 12 57 56.6 | -0.7 |
| | 0.6nm,1.1s,baz=93,slow=2.0,SNR=3.4 | | | | | | |

**IDC 01 12:39:06.4±53.0, 14°.31S×171°.40E, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=920.6km s-min=124.5km az=68.0, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| STKA | Stephens Creek | 32.36 | 232 | P | P | 12 45 37.7 | 0.0 |
| | 1.1nm,0.4s,baz=36,slow=8.7,SNR=4.8 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 35.81 | 256 | P | P | 12 46 08.0 | +0.1 |
| | 0.4nm,0.4s,baz=89,slow=8.3,SNR=12 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| ASAR | Alice Springs | 36.56 | 250 | P | P | 12 46 14.0 | -0.3 |
| | 1.5nm,0.5s,baz=76,slow=9.6,SNR=38 | | | | | | |
| | 1.5nm,0.5s | | | | | | |

*IDC 01 12:54:41.8±1.7, 7°.70S×125°.03E, h0km, mb3.6/2, mbtmp3.5/4, ML3.6/2, Error ellipse: s-maj=211.0km s-min=29.6km az=61.0*
*DJA 01 12:54:54.4±0.6, 9°S±5°×12°4E±°, h94km±7km, M3.8/7, mb4.1/2, mB5.2/1, MLv3.6/7, Mw(mB)4.6/1*
**ISC 01 12:54:53.3±1.2, 8°.6S±0°.1×123°.78E±0°.10, h100km, n14, σ2s.16/16, Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | Soe | 1.25 | 158 | P | Pn | 12 55 19.7 | +3.0 |
| SOEI | Soe | 1.25 | 158 | P | Pn | 12 55 18.9 | +2.2 |
| SOEI | | | | S | Sn | 12 55 37.6 | +3.2 |
| MMRI | Maumere | 1.53 | 268 | P | Pn | 12 55 20.5 | +0.6 |
| BATI | Baumata | 1.61 | 184 | P | Pn | 12 55 22.6 | +1.6 |
| BATI | | | | S | Sn | 12 55 43.1 | +1.1 |
| BASI | Baing, Sumba | 3.55 | 243 | P | Pn | 12 55 44.9 | -1.6 |
| PLAI | Plampang | 5.94 | 267 | P | Pn | 12 56 21.6 | +2.8 |
| PLAI | Plampang | 5.94 | 267 | P | Pn | 12 56 20.6 | +1.8 |
| DRS | Darwin Rock St | 7.97 | 119 | P | Pn | 12 56 46.8 | +0.4 |
| MTN | Manton Dam | 8.37 | 121 | P | Pn | 12 56 52.2 | +0.3 |
| KDU | Kakadu | 9.46 | 116 | P | Pn | 12 57 06.2 | -0.5 |
| WRA | Warramunga Arr | 15.22 | 139 | Pn | Pn | 12 58 19.1 | -3.9 |
| | 0.3nm,0.3s,baz=321,slow=13,SNR=23 | | | | | | |
| WRA | | | | Sn | Sn | 13 00 58.1 | -13 |
| | 0.4nm,0.3s,baz=320,slow=25,SNR=9.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| ASAR | Alice Springs | 17.85 | 148 | P | P | 12 58 52.9 | -1.8 |
| | 0.1nm,0.3s,baz=324,slow=12,SNR=13 | | | | | | |
| ASAR | | | | S | Sn | 13 02 00.6 | -14 |
| | 0.5nm,1.0s,baz=311,slow=22,SNR=2.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 66.35 | 330 | P | P | 13 05 31.7 | +0.3 |
| | 0.3nm,0.5s,baz=140,slow=7.0,SNR=3.6 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 70.44 | 337 | P | P | 13 05 55.8 | -0.9 |
| | 0.4nm,0.4s,baz=139,slow=6.2,SNR=1.7 | | | | | | |
| | 0.4nm,0.4s | | | | | | |

**IDC 01 13:04:37.6±8.0, 17°.83S×176°.16W, h0km, mb3.6/3, mbtmp3.6/3, Error ellipse: s-maj=349.1km s-min=41.0km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 46.75 | 259 | P | P | 13 13 09.7 | +0.6 |
| | 0.2nm,0.3s,baz=94,slow=7.6,SNR=27 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| ASAR | Alice Springs | 46.87 | 254 | P | P | 13 13 09.1 | -0.9 |
| | 0.4nm,0.5s,baz=91,slow=7.6,SNR=9.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| ILAR | Eielson Array | 85.34 | 12 | P | P | 13 17 16.2 | 0.0 |
| | 0.2nm,0.5s,baz=202,slow=4.6,SNR=2.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*NOU 01 13:09:43.1, 37°.19S×179°.60E, h0km, MLv4.1/8, Off E. Coast of N. Island, N.Z.*
*WEL 01 13:09:49.4±1.1, 37°S±5°×17°9E±°, h12km, M3.5/15, ML3.8/18, MLv3.5/15, Error ellipse: s-maj=0.0km s-min=0.0km az=98.6, confirmed*
**ISC 01 13:09:47.9±2.7, 37°.18S±0°.07×179°.2E±0°.1, h18km±8km, n30, σ1s.25/37, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 0.78 | 240 | P | Pn | 13 10 03.6 | -0.4 |
| MXZ | Matakaoa Point | 0.78 | 240 | P | Pn | 13 10 03.5 | -0.4 |
| MXZ | | | | S | Sg | 13 10 13.3 | -0.1 |
| PUZ | Puketiti | 1.14 | 218 | P | Pg | 13 10 10.5 | +0.5 |
| PUZ | | | | S | Sg | 13 10 25.8 | +0.9 |
| HAZ | Te Kaha | 1.23 | 242 | P | Pb | 13 10 10.5 | -0.2 |
| HAZ | | | | S | Sn | 13 10 27.8 | +1.3 |
| TWGZ | Tauwhareparae | 1.36 | 223 | P | Pg | 13 10 13.8 | -0.5 |
| TWGZ | | | | S | Sg | 13 10 32.0 | 0.0 |
| RUGZ | Raukumara Rang | 1.41 | 236 | P | Pg | 13 10 14.7 | -0.4 |
| RUGZ | | | | S | Sb | 13 10 33.0 | +1.4 |
| CNGZ | Carnagh Statio | 1.50 | 210 | P | Pg | 13 10 16.3 | -0.6 |
| WIZ | White Island | 1.60 | 257 | P | Pn | 13 10 15.4 | +0.1 |
| WSRZ | White Island S | 1.61 | 257 | P | Pb | 13 10 16.9 | -0.2 |
| TKGZ | Te Karaka | 1.63 | 219 | P | Pb | 13 10 16.9 | -0.6 |
| MWZ | Matawai | 1.73 | 228 | P | Pb | 13 10 18.6 | -0.6 |
| WHRZ | Whale Island | 1.86 | 248 | P | Pb | 13 10 20.9 | -0.5 |
| RIGZ | Rimuhau | 1.88 | 215 | P | Pb | 13 10 20.6 | -1.1 |
| RAGZ | Rawiri | 1.90 | 226 | P | Pb | 13 10 21.1 | -1.1 |
| URZ | Urewera | 1.95 | 236 | P | Pb | 13 10 21.8 | -1.0 |
| URZ | Urewera | 1.95 | 236 | P | Pb | 13 10 21.6 | -1.2 |
| URZ | | | | S | Sn | 13 10 44.8 | +0.7 |
| OPRZ | Ohinepanea | 2.17 | 251 | P | Pn | 13 10 24.1 | +1.0 |
| KMRZ | Kaimai | 2.64 | 254 | P | Pn | 13 10 30.5 | +0.9 |
| KUZ | Kuaotunu | 2.78 | 278 | P | Pn | 13 10 31.1 | -0.4 |
| KUZ | | | | S | Sn | 13 11 00.1 | -4.6 |
| BKZ | Black Stump Fm | 2.89 | 226 | P | Pn | 13 10 34.1 | +1.0 |
| TOZ | Tahuroa Road | 2.96 | 258 | P | Pn | 13 10 34.2 | +0.3 |
| GRZ | Great Barrier | 3.11 | 286 | P | Pn | 13 10 36.4 | +0.4 |
| KBAZ | Karaka Road Bo | 3.41 | 270 | P | Pn | 13 10 41.4 | +1.2 |
| HIZ | Hauiti | 3.65 | 247 | P | Pn | 13 10 45.9 | +2.3 |
| WCZ | Waipu Caves | 4.06 | 286 | P | Pn | 13 10 50.3 | +1.1 |
| OUZ | Omahuta | 4.90 | 292 | P | Pn | 13 11 02.5 | +1.8 |
| OUZ | Omahuta | 4.90 | 292 | P | Pn | 13 11 02.3 | +1.6 |
| QRZ | Quartz Range | 6.31 | 233 | P | Pn | 13 11 20.7 | +0.6 |
| KHZ | Kahutara | 6.79 | 218 | P | Pn | 13 11 26.7 | +0.2 |
| ODZ | Otahua Downs | 10.14 | 217 | P | Pn | 13 12 12.5 | -0.1 |

**NOU 01 13:16:41.9, 18°.90S×169°.39E, h196km, MLv3.8/12, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RTV | Rentapao | 1.43 | 320 | P | Pn | 13 17 15.2 | +0.5 |
| DVP | Devils Point | 1.63 | 315 | P | Pn | 13 17 17.0 | +0.5 |
| LIFNC | LIFOU | 2.75 | 227 | P | Pn | 13 17 27.6 | -0.8 |
| MARNC | Mare, Loyalty | 2.87 | 206 | P | Pn | 13 17 30.0 | +0.2 |
| YATNC | Mamie plateau, | 3.92 | 216 | P | Pn | 13 17 41.6 | -0.9 |
| PINNC | Pines Island, | 4.12 | 206 | P | Pn | 13 17 45.4 | +0.4 |
| DZM | Mont Dzumac | 4.19 | 221 | P | Pn | 13 17 46.3 | +0.3 |
| NOUC | Port Laguerre | 4.30 | 222 | P | Pn | 13 17 47.7 | +0.4 |
| ONTNC | Ouen Toro | 4.37 | 219 | P | Pn | 13 17 48.6 | +0.5 |
| KOUNC | Koumac, New Ca | 5.08 | 250 | P | Pn | 13 17 57.7 | +0.5 |

*IDC 01 13:17:06.6±1.0, 47°.03S×13°.63W, h0km, mb4.0/5, mbtmp4.0/5, MS3.9/18, Error ellipse: s-maj=70.6km s-min=23.0km az=88.0*
*NEIC 01 13:17:09.4±1.1, 47°.04S±0°.10×14°.4W±0°.2, h10km±1km, mb4.3/7, Error ellipse: s-maj=27.7km s-min=6.9km az=57.0*
**ISC 01 13:17:08.8±0.6, 47°.1S±0°.1×14°.2W±0°.2, h10km, n44, σ1s.22/25, mb4.2/9, MS3.8/18, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SUR | Sutherland | 30.40 | 74 | LR | LR | 13 32 15.5 | |
| | comp=Z,268nm,21.2s,baz=222,slow=30 | | | | | | |
| PMSA | Palmer Station | 31.95 | 218 | LR | LR | 13 34 54.7 | |
| | comp=Z,96nm,19.4s,baz=66,slow=33 | | | | | | |
| GO09 | Cerro Castillo | 37.36 | 242 | P | P | 13 24 20.4 | -0.9 |
| TSUM | Tsumeb | 38.05 | 54 | LR | LR | 13 36 06.6 | |
| | comp=Z,164nm,20.9s,baz=160,slow=30 | | | | | | |
| LBTB | Lobatse | 38.45 | 69 | LR | LR | 13 37 18.8 | |
| | comp=Z,215nm,19.3s,baz=214,slow=32 | | | | | | |
| CPUP | Villa Florida | 39.65 | 286 | LR | LR | 13 38 21.9 | |
| | comp=Z,124nm,20.9s,baz=136,slow=32 | | | | | | |
| PLCA | Paso Flores | 40.31 | 258 | LR | LR | 13 38 48.5 | |
| | comp=Z,104nm,20.6s,baz=136,slow=32 | | | | | | |
| BDFB | Brasilia | 42.02 | 307 | LR | LR | 13 39 30.5 | |
| | comp=Z,74nm,21.2s,baz=148,slow=32 | | | | | | |
| MAW | Mawson | 42.89 | 147 | P | P | 13 25 05.1 | -1.7 |
| | 1.9nm,0.9s,baz=240,slow=8.1,SNR=4.2 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| QSPA | South Pole Qui | 43.19 | 180 | P | P | 13 25 10.3 | +0.8 |
| QSPA | | | | IAmb | IAmb | 13 25 12.7 | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| QSPA | South Pole Qui | 43.19 | 180 | P | P | 13 25 09.1 | -0.4 |
| | comp=Z,3.9nm,1.0s,baz=214,slow=6.7,SNR=8.8 | | | | | | |
| QSPA | | | | LR | LR | 13 40 57.5 | |
| | comp=Z,77nm,21.4s,baz=210,slow=33 | | | | | | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| MATP | Matopo | 43.61 | 67 | LR | LR | 13 40 11.6 | |
| | comp=Z,111nm,18.4s,baz=240,slow=32 | | | | | | |
| LMEL | Las Melosas | 43.69 | 267 | P | P | 13 25 13.6 | -0.4 |
| LMEL | | | | IAmb | IAmb | 13 25 20.8 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| H04S2 | CROZET ISLANDS | 43.89 | 115 | T | T | 14 11 48.3 | |
| | baz=245,slow=75,SNR=71 | | | | | | |
| H04S3 | CROZET ISLANDS | 43.89 | 115 | T | T | 14 11 49.7 | |
| | baz=245,slow=75,SNR=71 | | | | | | |
| H04S1 | CROZET ISLANDS | 43.90 | 115 | T | T | 14 11 49.2 | |
| | baz=245,slow=75,SNR=92 | | | | | | |
| SIV | San Ignacio | 49.49 | 293 | LR | LR | 13 44 59.6 | |
| | comp=Z,135nm,18.9s,baz=118,slow=34 | | | | | | |
| LVC | Limon Verde | 49.89 | 280 | LR | LR | 13 44 54.2 | |
| | comp=Z,108nm,22.0s,baz=161,slow=33 | | | | | | |
| LPAZ | La Paz | 53.82 | 286 | LR | LR | 13 47 53.4 | |
| | comp=Z,122nm,21.9s,baz=115,slow=34 | | | | | | |
| DBIC | Dimbokro | 54.15 | 12 | P | P | 13 26 33.6 | -0.5 |
| DBIC | | | | IAmb | IAmb | 13 26 42.1 | |
| | comp=Z,2.4nm,1.0s | | | | | | |
| VNDA | Vanda | 55.66 | 179 | P | P | 13 26 44.8 | +0.5 |
| VNDA | Vanda | 55.66 | 179 | P | P | 13 26 43.6 | -0.7 |
| | comp=Z,1.0nm,1.0s,baz=228,slow=9.0,SNR=5.4 | | | | | | |
| VNDA | | | | LR | LR | 13 48 12.4 | |
| | comp=Z,92nm,20.9s,baz=168,slow=34 | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| CASY | Casey | 59.35 | 157 | P | P | 13 27 11.5 | +1.0 |
| CASY | | | | IAmb | IAmb | 13 27 25.5 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| MBAR | Mbarara | 60.59 | 54 | LR | LR | 13 49 57.9 | |
| | comp=Z,86nm,21.4s,baz=132,slow=33 | | | | | | |
| TOA0 | Torodi Ar. Sit | 61.62 | 18 | P | P | 13 27 27.0 | +0.4 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TOA0 | | | | IAmb | IAmb | 13 27 32.1 | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| TORD | Torodi Ar. Bea | 61.62 | 18 | P | P | 13 27 25.1 | -1.5 |
| | comp=Z,0.9nm,0.7s,baz=187,slow=2.5,SNR=5.6 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| FURI | Furi | 72.84 | 56 | LR | LR | 13 58 57.4 | |
| | comp=Z,115nm,18.4s,baz=190,slow=35 | | | | | | |
| RPN | Rapa Nui | 73.92 | 247 | LR | LR | 13 55 51.2 | |
| | comp=Z,49nm,18.5s,baz=168,slow=31 | | | | | | |
| ESDC | Sonseca Array | 86.85 | 8 | P | P | 13 29 51.7 | -1.4 |
| | comp=Z,2.2nm,1.3s,baz=185,slow=3.1,SNR=3.3 | | | | | | |
| | comp=Z,2.2nm,1.3s | | | | | | |
| IDI | Anoyia | 89.20 | 31 | LR | LR | 14 09 33.5 | |
| | comp=Z,137nm,18.7s,baz=3.0,slow=35 | | | | | | |
| PALK | Pallekele | 98.64 | 89 | LR | LR | 14 05 43.2 | |
| | comp=Z,89nm,20.6s,baz=359,slow=30 | | | | | | |
| I30M | Mount Dempster | 144.61 | 322 | PKPdf | PKPab | 13 36 44.1 | +1.0 |
| E29M | Blow River | 144.92 | 328 | PKPdf | PKPab | 13 36 45.4 | +1.4 |
| G29M | Pine Creek | 145.15 | 325 | PKPdf | PKPbc | 13 36 45.8 | +0.9 |
| D27M | Malcolm River | 145.86 | 329 | PKPdf | PKPdf | 13 36 45.1 | -1.3 |
| E27K | Coleen River | 146.31 | 328 | PKPbc | PKPdf | 13 36 48.4 | +1.3 |
| BCAR | Beaver Creek A | 147.09 | 318 | | PKPdf | 13 36 49.0 | +0.4 |
| I26K | Coal Creek Min | 147.44 | 323 | PKPab | PKPbc | 13 36 53.2 | +1.6 |
| BMAR | Burnt Mountain | 147.58 | 327 | PKPbc | PKPdf | 13 36 51.4 | +2.0 |
| E24K | Your Creek | 148.83 | 329 | PKPbc | PKPbc | 13 36 55.7 | +0.4 |
| ILAR | Eielson Array | 149.09 | 322 | PKPbc | PKPbc | 13 36 56.2 | +0.2 |
| ILAR | Eielson Array | 149.09 | 322 | PKPbc | PKPbc | 13 36 55.9 | -0.1 |
| | comp=Z,2.0nm,0.7s,baz=116,slow=2.9,SNR=22 | | | | | | |
| H23K | Yukon River | 149.91 | 325 | PKPbc | PKPbc | 13 36 57.7 | -0.3 |
| KSRS | Korea Array | 150.64 | 95 | PKPbc | PKPdf | 13 36 57.8 | +2.7 |
| | comp=Z,0.9nm,0.8s,baz=235,slow=4.0,SNR=4.9 | | | | | | |

*IDC **01** 13:35:38.1±17.0, 41.°34N×141.°66E, h0km, mb3.5/4, mbtmp3.5/4, MS2.1/1, Error ellipse: s-maj=453.9km s-min=35.7km az=170.0*

*JMA **01** 13:35:55.1±0.1, 42.°0N±0.°3×141.°5E±0.°5, h110km±1km, MV2.7/38, S OFF TOMAKOMAI*

**ISC 01 13:35:55.0**±1.0, **42.°05N**±0.°07×**141.°53E**±0.°05, **h114**km±7km, **n26**, σ**0.s51**/30, **mb3.5**/4, **Hokkaido region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JKB | Kayabe | 0.40 | 246 | P | Pn | 13 36 11.3 | -0.4 |
| JKB | | | | eS | Sn | 13 36 23.8 | -0.4 |
| JNB | Noboribetsu | 0.55 | 319 | i P | Pn | 13 36 12.3 | -0.3 |
| JNB | | | | S | Sn | 13 36 25.3 | -0.6 |
| JIAM | Iburiatsuma | 0.64 | 27 | P | Pn | 13 36 13.6 | +0.3 |
| JIAM | | | | S | Sn | 13 36 27.5 | +0.5 |
| JOT | Ohata | 0.76 | 208 | i P | Pn | 13 36 14.0 | -0.2 |
| JOT | | | | S | Sn | 13 36 28.8 | +0.1 |
| JEW | Eniwo | 0.79 | 356 | P | Pn | 13 36 14.7 | +0.2 |
| JEW | | | | S | Sn | 13 36 29.1 | -0.2 |
| JYM2 | Yakumo 2 | 0.86 | 275 | i P | Pn | 13 36 15.2 | +0.1 |
| JNBK | Urakawa-nobuka | 0.94 | 75 | i P | Pn | 13 36 16.1 | +0.2 |
| JNBK | | | | S | Sn | 13 36 32.2 | +0.6 |
| JBT2 | Biratori 2 | 0.96 | 40 | P | Pn | 13 36 16.3 | +0.3 |
| JBT2 | | | | S | Sn | 13 36 32.6 | +0.6 |
| JSR | Shiriuchi | 0.98 | 238 | P | Pn | 13 36 16.4 | +0.1 |
| JOMM | Oshimamatsumae | 1.25 | 246 | i P | Pn | 13 36 19.5 | +0.4 |
| JCH | Churui | 1.47 | 67 | i P | Pn | 13 36 22.0 | +0.3 |
| JCH | | | | S | Sn | 13 36 41.5 | -0.5 |
| JOSM | Okushiri--Mats | 1.53 | 272 | P | Pn | 13 36 22.1 | -0.2 |
| JOSM | | | | S | Sn | 13 36 43.1 | 0.0 |
| JHR | Hokuryu | 1.70 | 5 | P | Pn | 13 36 25.1 | +0.7 |
| JKK2 | Kamakawa 2 | 2.03 | 26 | P | Pn | 13 36 28.5 | 0.0 |
| JKK2 | | | | eS | Sn | 13 36 53.3 | -0.9 |
| JAR | Ashorobuto | 2.07 | 52 | i P | Pn | 13 36 28.6 | -0.4 |
| JAR | | | | eS | Sn | 13 36 53.5 | -1.6 |
| USRK | Ussuriysk Ar. | 7.30 | 290 | LR | LR | 13 40 29.9 | |
| | comp=Z,14nm,20.7s,baz=2.8,slow=38 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.92 | 128 | T | T | 14 14 43.6 | |
| | baz=322,slow=75,SNR=4.2 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.93 | 128 | T | T | 14 14 44.3 | |
| | baz=322,slow=75,SNR=0.8 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.94 | 128 | T | T | 14 14 45.0 | |
| | baz=322,slow=75,SNR=0.8 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 31.77 | 130 | T | T | 14 15 45.6 | |
| | baz=323,slow=74 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 31.77 | 130 | T | T | 14 15 46.0 | |
| | baz=323 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 31.79 | 130 | T | T | 14 15 47.3 | |
| | baz=323 | | | | | | |
| ZALV | Zalesovo Beam | 38.75 | 308 | P | P | 13 43 08.2 | +0.3 |
| | 0.4nm,0.3s,baz=82,slow=8.2,SNR=2.2 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 41.70 | 297 | P | P | 13 43 32.3 | -0.1 |
| | 0.2nm,0.5s,baz=91,slow=8.6,SNR=0.9 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 43.13 | 304 | P | P | 13 43 43.5 | -0.4 |
| | 0.9nm,0.5s,baz=77,slow=9.1,SNR=8.7 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| ILAR | Eielson Array | 45.27 | 35 | P | P | 13 44 01.1 | +0.3 |
| | 0.4nm,0.7s,baz=277,slow=5.3,SNR=6.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*IDC **01** 13:52:40.0±0.6, 7.°26N×34.°21W, h0km, mb4.1/23, mbtmp4.1/25, ML4.2/2, MS3.9/74, Error ellipse: s-maj=20.1km s-min=13.5km az=150.0*

*NEIC **01** 13:52:42.4±1.3, 7.°22N±0.°06×34.°04W±0.°09, h10km±1km, mb4.6/32, Error ellipse: s-maj=16.2km s-min=9.6km az=69.0*

*GCMT **01** 13:52:45.4±0.2, 7.°23N±0.°01×34.°10W±0.°01, h16km±1km, MW5.0/118, Moment Tensor Solution. s49,c64; s118,c185; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.10±.08; $M_{\theta\theta}$0.33±.08; $M_{\phi\phi}$-0.23±.07; $M_{r\theta}$0.94±.24; $M_{\theta\phi}$-3.18±.08; $M_{\phi r}$0.48±.21; Best double couple: $M_0$3.36000×$10^{16}$ NP1:$\phi_s$268.00000°,δ83.00000°, λ-164.00000°. NP2:$\phi_s$176.00000°,δ74.00000°, λ-7.00000°. Principal axes: T 3.2840, Plg7.0000°, Azm41.0000°; N 0.1520, Plg72.0000°, Azm291.0000°; P -3.4360, Plg17.0000°, Azm133.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 01 13:52:42.2**±0.4, **7.°20N**±0.°08×**34.°13W**±0.°07, **h15**km, **n136**, σ**1.s18**/76, **mb4.4**/34, **MS4.0**/72, **Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NBCL | Cascavel-CE | 12.09 | 200 | eP | Pn | 13 55 31.2 | -2.8 |
| SACV | Santiago Islan | 12.88 | 52 | Pn | Pn | 13 55 41.1 | -3.9 |
| RCBR | Riachuelo | 13.06 | 188 | Pn | Pn | 13 55 46.9 | -0.5 |
| RCBR | Riachuelo | 13.06 | 188 | Pn | Pn | 13 55 45.9 | -1.6 |
| | 5.0nm,0.3s,baz=64,slow=18,SNR=60 | | | | | | |
| RCBR | | | | Sn | Sn | 13 57 58.0 | -15 |
| | 0.5nm,0.3s,baz=63,slow=22,SNR=1.4 | | | | | | |
| RCBR | | | | LR | LR | 13 59 35.6 | |
| | comp=Z,257nm,19.5s,baz=68,slow=32 | | | | | | |
| | 10nm,0.3s | | | | | | |
| RCBR | Riachuelo | 13.06 | 188 | eP | Pn | 13 55 46.6 | -0.9 |
| NBPB | Pedra_Branca-C | 13.78 | 203 | eP | Pn | 13 55 54.9 | -2.3 |
| TMAB | Tom-Au,PA,Br | 16.87 | 236 | eP | Pn | 13 56 36.6 | -1.5 |
| MDP | Montagnes des | 18.52 | 265 | P | P | 13 56 58.1 | -0.3 |
| | 0.2nm,0.3s,baz=79,slow=15,SNR=2.4 | | | | | | |
| MDP | | | | LR | LR | 14 02 26.5 | |
| | comp=Z,183nm,19.7s,baz=72,slow=32 | | | | | | |
| | 8.7nm,0.9s | | | | | | |
| BBTS | Babate | 18.79 | 65 | P | Pn | 13 57 04.2 | +2.5 |
| | 15nm,0.5s,baz=163,slow=7.9,SNR=3.7 | | | | | | |
| BBTS | | | | LR | LR | 14 02 24.2 | |
| | comp=Z,471nm,20.9s,baz=130,slow=31 | | | | | | |
| MCPB | Macapa, AP | 19.40 | 248 | eP | P | 13 57 08.0 | 0.0 |
| PRPB | Parauapebas | 20.53 | 230 | eP | P | 13 57 19.9 | -0.4 |
| SMTB | Santa Maria do | 20.85 | 220 | eP | P | 13 57 23.9 | +0.1 |
| SDBA | SAO DESIDERIO | 22.23 | 209 | eP | P | 13 57 38.9 | +0.3 |
| ITTB | Itaituba | 24.43 | 243 | eP | P | 13 58 00.9 | +0.2 |
| H10N3 | ASCENSION HYDR | 24.62 | 127 | T | T | 14 23 34.9 | |
| | baz=306,slow=75,SNR=275 | | | | | | |
| H10N2 | ASCENSION HYDR | 24.63 | 127 | T | T | 14 23 35.1 | |
| | baz=306,slow=75,SNR=364 | | | | | | |
| H10N1 | ASCENSION HYDR | 24.64 | 127 | T | T | 14 23 36.4 | |
| | baz=306,slow=75,SNR=438 | | | | | | |
| H10S3 | ASCENSION HYDR | 25.18 | 129 | T | T | 14 24 29.5 | |
| | baz=306,slow=74,SNR=285 | | | | | | |
| H10S2 | ASCENSION HYDR | 25.19 | 129 | T | T | 14 24 30.1 | |
| | baz=274,slow=74,SNR=213 | | | | | | |
| NPGB | Novo Progresso | 25.47 | 237 | eP | P | 13 58 09.6 | -0.4 |
| SNDB | Serra Nova Dou | 25.58 | 222 | eP | P | 13 58 11.1 | +0.1 |
| BDFB | Brasilia | 26.54 | 211 | P | P | 13 58 20.1 | +0.4 |
| BDFB | | | | IAmb | IAmb | 13 58 23.4 | |
| | comp=Z,16nm,1.0s | | | | | | |
| BDFB | Brasilia | 26.54 | 211 | P | P | 13 58 20.1 | +0.4 |
| | comp=Z,9.3nm,0.9s,baz=54,slow=8.7,SNR=8.1 | | | | | | |
| BDFB | | | | LR | LR | 14 08 03.4 | |
| | comp=Z,738nm,18.9s,baz=349,slow=35 | | | | | | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| BOAV | Boa Vista | 26.72 | 261 | P | P | 13 58 20.8 | -0.6 |
| H05S1 | Guadeloupe/Mar | 27.18 | 288 | T | T | 14 26 30.0 | |
| | SNR=17 | | | | | | |
| H05N1 | Guadeloupe/Mar | 27.84 | 291 | T | T | 14 27 25.2 | |
| | SNR=6.4 | | | | | | |
| DBIC | Dimbokro | 29.06 | 89 | P | P | 13 58 40.7 | -1.6 |
| DBIC | | | | IAmb | IAmb | 13 59 15.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| DBIC | Dimbokro | 29.06 | 89 | P | P | 13 58 42.0 | -0.3 |
| | comp=Z,3.3nm,0.7s,baz=268,slow=11,SNR=3.9 | | | | | | |
| DBIC | | | | LR | LR | 14 08 02.5 | |
| | comp=Z,170nm,19.0s,baz=234,slow=32 | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| PDRB | Porto dos Gac | 29.24 | 230 | eP | P | 13 58 44.5 | +0.6 |
| SJG | San Juan | 33.01 | 292 | LR | LR | 14 09 37.8 | |
| | comp=Z,264nm,22.0s,baz=138,slow=31 | | | | | | |
| SAML | Samuel | 33.10 | 241 | P | P | 13 59 18.9 | +1.0 |
| SAML | Samuel | 33.10 | 241 | eP | P | 13 59 19.4 | +1.4 |
| BAUV | El Baul | 33.62 | 275 | P | P | 13 59 23.2 | +0.7 |
| SIV | San Ignacio | 35.25 | 229 | LR | LR | 14 13 23.1 | |
| | comp=Z,845nm,18.7s,baz=98,slow=35 | | | | | | |
| BBSD | Serra de San D | 35.67 | 227 | eP | P | 13 59 41.2 | +1.0 |
| TOA0 | Torodi Ar. Sit | 35.72 | 78 | P | P | 13 59 39.6 | -1.0 |
| TOA0 | | | | IAmb | IAmb | 13 59 42.2 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 35.72 | 78 | P | P | 13 59 39.9 | -0.8 |
| TORD | | | | IAmb | IAmb | 13 59 42.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 35.72 | 78 | P | P | 13 59 39.8 | -0.9 |
| | comp=Z,5.3nm,0.8s,baz=277,slow=8.9,SNR=24 | | | | | | |
| TORD | | | | LR | LR | 14 12 10.6 | |
| | comp=Z,300nm,20.8s,baz=260,slow=33 | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| MDT | Midelt | 37.42 | 43 | LR | LR | 14 13 11.8 | |
| | comp=Z,218nm,19.7s,baz=178,slow=33 | | | | | | |
| ROSC | El Rosal | 40.03 | 269 | P | P | 14 00 18.9 | +1.4 |
| ROSC | | | | IAmb | IAmb | 14 00 23.9 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| ROSC | El Rosal | 40.03 | 269 | P | P | 14 00 18.0 | +0.5 |
| | comp=Z,5.2nm,0.5s,baz=105,slow=20,SNR=2.0 | | | | | | |
| ROSC | | | | LR | LR | 14 16 20.7 | |
| | comp=Z,225nm,19.3s,baz=90,slow=36 | | | | | | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| CPUP | Villa Florida | 40.23 | 213 | LR | LR | 14 16 37.1 | |
| | comp=Z,322nm,18.6s,baz=49,slow=36 | | | | | | |
| LPAZ | La Paz | 40.95 | 235 | P | P | 14 00 25.6 | +0.2 |
| LPAZ | La Paz | 40.95 | 235 | P | P | 14 00 25.2 | -0.1 |
| | comp=Z,3.9nm,0.8s,baz=59,slow=5.9,SNR=15 | | | | | | |
| LPAZ | | | | LR | LR | 14 16 51.4 | |
| | comp=Z,299nm,18.8s,baz=61,slow=36 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| LPAZ | La Paz | 40.95 | 235 | eP | P | 14 00 25.3 | -0.1 |
| CZSB | Cruzeiro do Su | 41.23 | 250 | P | P | 14 00 26.7 | -0.3 |
| CZSB | Cruzeiro do Su | 41.23 | 250 | eP | P | 14 00 29.5 | +2.5 |
| ESDC | Sonseca Array | 42.16 | 35 | P | P | 14 00 35.4 | +1.1 |
| | comp=Z,0.7nm,0.7s,baz=236,slow=11,SNR=2.8 | | | | | | |
| ESDC | | | | LR | LR | 14 15 04.2 | |
| | comp=Z,177nm,20.1s,baz=218,slow=32 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| ANTS | Antisana-Sarah | 44.59 | 262 | P | P | 14 00 56.6 | +1.6 |
| ANTS | | | | IAmb | IAmb | 14 01 12.4 | |
| | comp=Z,15nm,1.1s | | | | | | |
| LVC | Limon Verde | 45.14 | 228 | LR | LR | 14 20 15.0 | |
| | comp=Z,403nm,19.7s,baz=54,slow=37 | | | | | | |
| ATAH | Atahualpa | 46.39 | 253 | LR | LR | 14 21 14.1 | |
| | comp=Z,217nm,19.6s,baz=76,slow=37 | | | | | | |
| NNA | Nana | 46.56 | 246 | LR | LR | 14 20 27.6 | |
| | comp=Z,321nm,19.3s,baz=58,slow=36 | | | | | | |
| H09W1 | TRISTAN DA CUN | 48.56 | 157 | T | T | 14 53 48.0 | |
| | SNR=10 | | | | | | |
| KEST | Kesra | 48.83 | 48 | P | P | 14 01 29.1 | +1.7 |
| | comp=Z,2.8nm,0.9s,baz=263,slow=21,SNR=4.1 | | | | | | |
| KEST | | | | LR | LR | 14 20 50.7 | |
| | comp=Z,246nm,21.9s,baz=202,slow=35 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| JTS | Las Juntas de | 50.29 | 277 | LR | LR | 14 22 56.4 | |
| | comp=Z,42nm,22.0s,baz=94,slow=36 | | | | | | |
| VAE | Valguarnera | 53.27 | 48 | LR | LR | 14 24 28.8 | |
| | comp=Z,237nm,21.2s,baz=296,slow=36 | | | | | | |
| TKL | Tuckaleechee C | 53.45 | 309 | LR | LR | 14 19 43.9 | |
| | comp=Z,137nm,21.7s,baz=123,slow=30 | | | | | | |
| TEIG | Tepich | 53.95 | 290 | LR | LR | 14 23 04.8 | |
| | comp=Z,38nm,21.1s,baz=56,slow=34 | | | | | | |
| EKA | Eskdalemuir Ar | 53.96 | 21 | P | P | 14 02 05.7 | +0.4 |
| | comp=Z,0.7nm,0.5s,baz=209,slow=7.3,SNR=3.7 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| SADO | Sadowa | 54.05 | 322 | LR | LR | 14 21 10.6 | |
| | comp=Z,108nm,19.0s,baz=144,slow=32 | | | | | | |
| SCHQ | Schefferville | 54.22 | 337 | P | P | 14 02 08.0 | +0.7 |
| | comp=Z,1.7nm,0.3s,baz=166,slow=8.3,SNR=2.4 | | | | | | |
| SCHQ | | | | LR | LR | 14 23 00.9 | |
| | comp=Z,109nm,18.9s,baz=124,slow=34 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| DAVOX | Davos/Dischmat | 54.48 | 36 | LR | LR | 14 22 19.4 | |
| | comp=Z,243nm,21.3s,baz=263,slow=33 | | | | | | |
| APG | El Apazote | 55.70 | 283 | LR | LR | 14 25 21.2 | |
| | comp=Z,6.1nm,21.0s,baz=74,slow=35 | | | | | | |
| TSUM | Tsumeb | 57.30 | 118 | LR | LR | 14 21 26.5 | |
| | comp=Z,152nm,21.6s,baz=331,slow=30 | | | | | | |
| GERES | GERESS Array B | 57.76 | 35 | P | P | 14 02 33.1 | +0.3 |
| | comp=Z,0.4nm,0.2s,baz=236,slow=6.6,SNR=1.8 | | | | | | |
| GERES | | | | LR | LR | 14 24 25.7 | |
| | comp=Z,157nm,20.9s,baz=278,slow=33 | | | | | | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| BORG | Borgarnes | 58.16 | 6 | LR | LR | 14 22 06.4 | |
| | comp=Z,76nm,19.5s,baz=195,slow=30 | | | | | | |
| PLCA | Paso Flores | 58.28 | 212 | LR | LR | 14 28 07.7 | |
| | comp=Z,772nm,18.1s,baz=54,slow=36 | | | | | | |
| CLL | Collm | 58.62 | 33 | eSx | Sx | 14 10 43.0 | |
| VRAC | Vranov | 59.65 | 36 | LR | LR | 14 25 23.8 | |
| | comp=Z,113nm,21.5s,baz=244,slow=33 | | | | | | |
| CMIG | Matias Romero | 60.00 | 286 | LR | LR | 14 28 50.3 | |
| | comp=Z,29nm,18.2s,baz=6.0,slow=36 | | | | | | |
| MGMO | Mountain Grove | 60.44 | 309 | P | P | 14 02 51.4 | -0.2 |
| MGMO | | | | IAmb | IAmb | 14 03 01.7 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| SFJD | Kangerlussuaq | 60.76 | 353 | LR | LR | 14 21 55.6 | |
| | comp=Z,53nm,21.4s,baz=173,slow=29 | | | | | | |
| FRB | Frobisher Bay | 61.60 | 343 | LR | LR | 14 25 41.9 | |
| | comp=Z,102nm,21.3s,baz=190,slow=32 | | | | | | |
| NOA | NORSAR Array B | 63.37 | 23 | P | P | 14 03 11.1 | +0.2 |
| | comp=Z,0.9nm,0.8s,baz=233,slow=9.5,SNR=3.5 | | | | | | |
| NOA | | | | LR | LR | 14 26 42.6 | |
| | comp=Z,135nm,20.9s,baz=230,slow=32 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| HFS | Hagfors | 63.81 | 24 | P | P | 14 03 13.8 | +0.1 |
| | comp=Z,1.4nm,0.6s,baz=205,slow=8.8,SNR=6.5 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| MLR | Muntele Rosu | 64.10 | 43 | P | P | 14 03 16.4 | +0.4 |
| MLR | Muntele Rosu | 64.10 | 43 | LR | LR | 14 30 12.2 | |
| | comp=Z,89nm,19.7s,baz=258,slow=35 | | | | | | |
| BRDY | Brady | 64.84 | 301 | P | P | 14 03 20.1 | -0.9 |
| MBAR | Mbarara | 65.16 | 94 | LR | LR | 14 29 57.4 | |
| | comp=Z,37nm,21.3s,baz=190,slow=34 | | | | | | |
| SUR | Sutherland | 65.42 | 130 | LR | LR | 14 25 44.9 | |
| | comp=Z,102nm,21.5s,baz=301,slow=30 | | | | | | |
| LBTB | Lobatse | 66.33 | 121 | LR | LR | 14 26 44.4 | |
| | comp=Z,114nm,21.3s,baz=288,slow=31 | | | | | | |
| ULM | Lac du Bonnet | 66.61 | 322 | LR | LR | 14 28 54.3 | |
| | comp=Z,90nm,19.0s,baz=102,slow=33 | | | | | | |
| BOSA | Boshof | 67.36 | 125 | P | P | 14 03 40.1 | +2.8 |
| | comp=Z,2.9nm,0.8s,baz=306,slow=13,SNR=2.6 | | | | | | |
| BOSA | | | | LR | LR | 14 26 29.9 | |
| | comp=Z,122nm,21.9s,baz=318,slow=30 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| SAND | Sanderson | 67.39 | 299 | P | P | 14 03 37.7 | +0.2 |
| SAND | | | | IAmb | IAmb | 14 03 43.1 | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| AKASG | Malin Array Be | 67.72 | 38 | P | P | 14 03 39.1 | 0.0 |
| | comp=Z,1.6nm,0.8s,baz=261,slow=5.2,SNR=1.7 | | | | | | |
| AKASG | | | | LR | LR | 14 32 05.0 | |
| | comp=Z,25nm,20.6s,baz=232,slow=35 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| EIL | Elat | 68.30 | 61 | LR | LR | 14 33 59.2 | |
| | comp=Z,259nm,21.2s,baz=252,slow=36 | | | | | | |
| BRTR | Keskin Array B | 68.36 | 50 | P | P | 14 03 44.3 | +0.8 |
| | comp=Z,1.0nm,0.6s,baz=253,slow=5.4,SNR=5.7 | | | | | | |
| BRTR | | | | LR | LR | 14 35 32.7 | |
| | comp=Z,31nm,19.3s,baz=260,slow=38 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 68.68 | 299 | P | P | 14 03 45.7 | 0.0 |
| | comp=Z,0.5nm,0.4s,baz=98,slow=6.7,SNR=7.3 | | | | | | |
| TXAR | | | | LR | LR | 14 30 58.0 | |
| | comp=Z,63nm,22.0s,baz=58,slow=34 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| MMAI | Mount Meron Ar | 68.96 | 58 | LR | LR | 14 35 58.6 | |
| | comp=Z,43nm,19.5s,baz=210,slow=38 | | | | | | |
| FINES | FINESS Array B | 69.75 | 26 | P | P | 14 03 51.5 | 0.0 |
| | comp=Z,0.6nm,0.6s,baz=240,slow=4.7,SNR=1.6 | | | | | | |
| FINES | | | | LR | LR | 14 30 51.3 | |
| | comp=Z,112nm,21.0s,baz=242,slow=33 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| SDCO | Great Sand Dun | 70.90 | 307 | P | P | 14 04 00.6 | +1.1 |
| ANMO | Albuquerque | 71.43 | 304 | LR | LR | 14 31 09.6 | |
| | comp=Z,132nm,21.3s,baz=196,slow=32 | | | | | | |
| N23A | Red Feather La | 71.58 | 311 | P | P | 14 04 05.3 | +1.8 |
| N23A | | | | IAmb | IAmb | 14 04 06.0 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| S22A | 4UR Ranch, Cre | 71.95 | 307 | P | P | 14 04 06.9 | +1.1 |
| ARCES | ARCESS Array B | 72.96 | 19 | P | P | 14 04 11.2 | +0.4 |
| | comp=Z,0.4nm,0.5s,baz=242,slow=5.7,SNR=1.8 | | | | | | |
| ARCES | | | | LR | LR | 14 32 14.7 | |
| | comp=Z,38nm,20.2s,baz=202,slow=33 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| OBN | Obninsk | 73.12 | 35 | LR | LR | 14 35 31.7 | |
| | comp=Z,37nm,19.3s,baz=183,slow=35 | | | | | | |
| O20A | White River Ci | 73.25 | 310 | P | P | 14 04 13.9 | +0.6 |
| PDAR | Pinedale Array | 74.45 | 312 | P | P | 14 04 19.8 | -0.6 |
| | comp=Z,0.9nm,0.6s,baz=102,slow=7.5,SNR=10 | | | | | | |
| PDAR | | | | LR | LR | 14 32 27.2 | |
| | comp=Z,63nm,21.8s,baz=107,slow=32 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| LPIG | La Paz | 74.50 | 293 | LR | LR | 14 35 00.5 | |
| | comp=Z,45nm,21.8s,baz=62,slow=34 | | | | | | |
| P18A | Preston Nutter | 74.75 | 309 | P | P | 14 04 22.7 | +0.4 |
| P18A | | | | IAmb | IAmb | 14 04 41.7 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| HMU | Henry Mountain | 75.06 | 307 | P | P | 14 04 24.5 | +0.5 |
| HMU | | | | IAmb | IAmb | 14 04 41.1 | |
| | comp=Z,6.8nm,1.3s | | | | | | |
| PMSA | Palmer Station | 75.17 | 193 | LR | LR | 14 34 11.4 | |
| | comp=Z,38nm,21.0s,baz=16,slow=33 | | | | | | |
| LOHW | Long Hollow | 75.28 | 313 | P | P | 14 04 26.2 | +1.1 |
| FLWY | Flagg Ranch | 75.38 | 314 | P | P | 14 04 26.7 | +1.0 |
| FLWY | | | | IAmb | IAmb | 14 04 42.0 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| SPITS | Spitsbergen Ar | 75.40 | 9 | LR | LR | 14 29 30.7 | |
| | comp=Z,56nm,20.5s,baz=228,slow=29 | | | | | | |
| FXWY | Fox Creek | 75.59 | 313 | P | P | 14 04 27.7 | +0.8 |
| RES | Resolute Bay | 75.59 | 346 | LR | LR | 14 35 43.8 | |
| | comp=Z,38nm,18.8s,baz=56,slow=34 | | | | | | |
| KBZ | Khabaz | 75.68 | 47 | LR | LR | 14 40 25.6 | |
| | comp=Z,31nm,19.7s,baz=278,slow=38 | | | | | | |
| HWUT | Hardware Ranch | 75.86 | 311 | P | P | 14 04 28.4 | -0.1 |
| HWUT | | | | IAmb | IAmb | 14 04 36.5 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| MTPU | Mount Pierson | 76.20 | 307 | P | P | 14 04 31.5 | +0.8 |
| MTPU | | | | IAmb | IAmb | 14 04 38.0 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| MSU | Marysvale | 76.21 | 308 | P | P | 14 04 30.8 | +0.3 |
| MVU | Marysvale | 76.23 | 308 | P | P | 14 04 31.4 | +0.6 |
| GNI | Garni | 76.89 | 51 | LR | LR | 14 40 14.9 | |
| | comp=Z,26nm,21.4s,baz=271,slow=37 | | | | | | |
| CCUT | Cedar City | 77.12 | 307 | P | P | 14 04 36.8 | +1.1 |
| CCUT | | | | IAmb | IAmb | 14 04 42.7 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| SPR3 | Spring Creek 3 | 77.90 | 308 | P | P | 14 04 41.0 | +0.8 |
| ELK | Elko | 78.61 | 310 | LR | LR | 14 35 26.6 | |
| | comp=Z,74nm,22.0s,baz=106,slow=33 | | | | | | |
| YKA | Yellowknife Ar | 79.25 | 332 | P | P | 14 04 44.6 | -2.1 |
| | comp=Z,1.2nm,1.0s,baz=86,slow=4.4,SNR=3.2 | | | | | | |
| YKA | | | | LR | LR | 14 34 55.1 | |
| | comp=Z,89nm,21.7s,baz=113,slow=32 | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| BELG | Belogornoye | 79.30 | 38 | LR | LR | 14 37 24.0 | |
| | comp=Z,33nm,21.1s,baz=237,slow=34 | | | | | | |
| PFO | Pinyon Flats O | 79.68 | 303 | LR | LR | 14 37 13.7 | |
| | comp=Z,81nm,20.5s,baz=100,slow=34 | | | | | | |
| NEW | Newport | 80.01 | 318 | LR | LR | 14 38 06.2 | |
| | comp=Z,86nm,18.5s,baz=90,slow=34 | | | | | | |
| TPH | Tonopah | 80.17 | 307 | P | P | 14 04 53.2 | +0.7 |
| RPN | Rapa Nui | 80.25 | 241 | LR | LR | 14 37 31.2 | |
| | comp=Z,92nm,18.1s,baz=72,slow=34 | | | | | | |
| KIRV | Kirov | 80.53 | 32 | LR | LR | 14 39 56.3 | |
| | comp=Z,40nm,19.0s,baz=255,slow=35 | | | | | | |
| KVN | Kaiserville | 80.83 | 308 | P | P | 14 04 55.7 | -0.4 |
| NVAR | Mina Array Bea | 81.02 | 308 | P | P | 14 04 55.3 | -1.8 |
| | comp=Z,0.2nm,0.4s,baz=82,slow=6.3,SNR=3.6 | | | | | | |
| NVAR | | | | LR | LR | 14 37 03.8 | |
| | comp=Z,66nm,21.6s,baz=100,slow=33 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| YBH | Yreka Blue Hor | 84.20 | 311 | LR | LR | 14 38 47.5 | |
| | comp=Z,68nm,21.6s,baz=105,slow=33 | | | | | | |
| ARU | Arti | 85.54 | 34 | LR | LR | 14 43 34.1 | |
| | comp=Z,85nm,18.1s,baz=268,slow=36 | | | | | | |
| AKTO | Aktyubinsk | 85.87 | 40 | LR | LR | 14 45 31.7 | |
| | comp=Z,49nm,18.1s,baz=254,slow=37 | | | | | | |
| BBB | Bella Bella | 86.81 | 322 | LR | LR | 14 41 16.2 | |
| | comp=Z,101nm,18.9s,baz=75,slow=34 | | | | | | |
| INK | Inuvik | 86.83 | 338 | LR | LR | 14 42 07.8 | |
| | comp=Z,65nm,19.8s,baz=59,slow=34 | | | | | | |
| DLBC | Dease Lake | 87.00 | 328 | LR | LR | 14 39 49.6 | |
| | comp=Z,95nm,21.3s,baz=98,slow=33 | | | | | | |
| WSAR | Wadi Sarin | 89.72 | 67 | LR | LR | 14 46 60.0 | |
| | comp=Z,69nm,20.3s,baz=308,slow=36 | | | | | | |
| ILAR | Eielson Array | 92.98 | 337 | P | P | 14 05 52.9 | -1.9 |
| | comp=Z,0.3nm,1.0s,baz=79,slow=4.7,SNR=2.2 | | | | | | |
| ILAR | | | | LR | LR | 14 46 13.4 | |
| | comp=Z,113nm,18.8s,baz=74,slow=35 | | | | | | |
| | comp=Z,0.3nm,1.0s | | | | | | |
| KURBB | Kurchatov Arra | 98.48 | 36 | P | P | 14 06 20.2 | +0.1 |
| | comp=Z,0.3nm,0.5s,baz=262,slow=4.6,SNR=4.2 | | | | | | |
| KURBB | | | | LR | LR | 14 50 45.8 | |
| | comp=Z,48nm,19.6s,baz=175,slow=35 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| KDAK | Kodiak Island | 98.52 | 332 | LR | LR | 14 51 23.7 | |
| | comp=Z,85nm,18.1s,baz=84,slow=36 | | | | | | |
| AAK | Ala-Archa | 98.61 | 45 | LR | LR | 14 53 13.4 | |
| | comp=Z,41nm,20.8s,baz=304,slow=37 | | | | | | |

*SJA **01** 13:52:52.9±0.7, 33.°90S×72.°20W, h23km±1km, ML3.6, MW3.9*

*GUC **01** 13:52:55.7±0.8, 33.°92S×72.°09W, h30km±8km, ML3.6*

**ISC 01 13:52:55.1**±1.1, **33.°92S**±0.°02×**72.°11W**±0.°05, **h22**km±10km, **n50**, σ**1.s04**/84, **8D**, **Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VA05 | Santo Domingo | 0.49 | 58⇓ | iP | Pn | 13 53 05.6 | -1.2 |
| VA05 | | | | eS | Sb | 13 53 12.5 | +0.7 |
| VA05 | | | | IAML | | 13 53 13.5 | |
| | comp=E,11μm,0.4s | | | | | | |
| BO03 | Pichilemu | 0.59 | 168⇓ | iP | Pb | 13 53 06.7 | -0.1 |
| BO03 | | | | eS | Sb | 13 53 14.8 | +0.1 |
| BO03 | | | | IAML | | 13 53 15.7 | |
| | comp=N,5μm,0.3s | | | | | | |
| MT01 | Popeta | 0.71 | 86 | i P | Pn | 13 53 08.9 | -1.0 |
| MT01 | | | | i S | Sn | 13 53 19.6 | -0.6 |
| MT01 | | | | IAML | | 13 53 20.9 | |
| | comp=Z,2μm,0.6s | | | | | | |
| MT01 | Popeta | 0.71 | 86⇓ | iP | Pn | 13 53 08.9 | -1.0 |
| MT01 | | | | eS | Sb | 13 53 18.7 | +0.4 |
| MT01 | | | | IAML | | 13 53 19.4 | |
| | comp=N,3μm,0.2s | | | | | | |
| MT09 | Talagante | 0.94 | 82 | eP | Pn | 13 53 12.4 | -0.8 |
| MT09 | | | | eS | Sb | 13 53 24.8 | -0.2 |
| MT09 | | | | IAML | | 13 53 27.4 | |
| | comp=N,3μm,0.3s | | | | | | |
| BO01 | Tunca | 0.97 | 119 | i P | Pn | 13 53 12.6 | -0.8 |
| BO01 | | | | i S | Sn | 13 53 28.0 | +1.4 |
| BO01 | Tunca | 0.97 | 119 | eP | Pn | 13 53 12.2 | -1.2 |
| VA01 | Torpederas | 0.97 | 23 | i P | Pb | 13 53 12.5 | -0.8 |
| VA01 | | | | i S | Sn | 13 53 26.4 | -0.2 |
| VA01 | Torpederas | 0.97 | 23 | eP | Pb | 13 53 12.9 | -0.4 |
| VA01 | | | | eS | Sn | 13 53 26.0 | -0.5 |
| MT02 | Curacav | 1.04 | 51 | i P | Pb | 13 53 13.8 | -0.7 |
| MT02 | | | | i S | Sb | 13 53 29.3 | +1.5 |
| MT02 | | | | IAML | | 13 53 30.5 | |
| | comp=Z,718nm,0.5s | | | | | | |
| MT02 | Curacav | 1.04 | 51⇓ | iP | Pb | 13 53 13.9 | -0.6 |
| MT02 | | | | eS | Sn | 13 53 27.3 | -1.1 |
| MT02 | | | | IAML | | 13 53 33.6 | |
| | comp=E,1μm,0.3s | | | | | | |
| GO05 | Huala | 1.10 | 172 | i P | Pb | 13 53 14.8 | -0.7 |
| GO05 | | | | i S | Sb | 13 53 30.4 | +1.1 |
| GO05 | Huala | 1.10 | 172 | eP | Pb | 13 53 14.7 | -0.7 |
| GO05 | | | | eS | Sn | 13 53 28.7 | -1.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| GO05 | | | | IAML | | 13 53 32.9 | |
| | comp=E,2µm,0.2s | | | | | | |
| **BO04** | **La Punta** | **1.25** | **94** | ⇓*i*P | **Pb** | **13 53 17.3** | **-0.7** |
| BO04 | | | | IAML | | 13 53 37.9 | |
| | comp=N,1µm,0.2s | | | | | | |
| **MT05** | **Renca** | **1.26** | **66** | *i* P | **Pb** | **13 53 18.3** | **+0.1** |
| MT05 | | | | IAML | | 13 53 48.9 | |
| | comp=Z,535nm,0.3s | | | | | | |
| **MT05** | **Renca** | **1.26** | **66** | *e*P | **Pb** | **13 53 19.0** | **+0.8** |
| **MT12** | **Pirque** | **1.31** | **82** | ⇓*i*P | **Pb** | **13 53 18.3** | **-0.8** |
| MT12 | | | | *e*S | **Sb** | **13 53 35.1** | **-0.4** |
| MT12 | | | | IAML | | 13 53 44.4 | |
| | comp=E,3µm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **1.32** | **44** | *e*P | **Pb** | **13 53 18.5** | **-0.8** |
| ROCH | | | | *e*P | **Pb** | **13 53 18.5** | **-0.8** |
| ROCH | | | | *e*S | **Sb** | **13 53 35.6** | **-0.3** |
| ROCH | | | | *e*S | **Sn** | **13 53 35.7** | **+0.3** |
| ROCH | | | | IAML | | 13 53 40.2 | |
| | comp=N,2µm,0.3s | | | | | | |
| **MT15** | **Las Vizcachas** | **1.37** | **77** | *e*P | **Pb** | **13 53 19.3** | **-0.8** |
| MT15 | | | | *e*S | **Sn** | **13 53 36.1** | **-0.5** |
| MT15 | | | | IAML | | 13 53 43.4 | |
| | comp=E,2µm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **1.40** | **73** | *i* P | **Pb** | **13 53 19.8** | **-0.8** |
| MT03 | | | | *i* S | **Sb** | **13 53 40.4** | **+2.3** |
| MT03 | | | | IAML | | 13 53 41.7 | |
| | comp=Z,652nm,0.2s | | | | | | |
| **MT03** | **Universidad Ad** | **1.40** | **73** | *e*P | **Pb** | **13 53 19.8** | **-0.8** |
| MT03 | | | | IAML | | 13 53 43.0 | |
| | comp=E,2µm,0.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **1.40** | **129** | *i* P | **Pb** | **13 53 19.9** | **-0.8** |
| BO02 | | | | *i* S | **Sb** | **13 53 40.7** | **+2.5** |
| BO02 | | | | IAML | | 13 53 45.4 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **1.40** | **129** | *e*P | **Pn** | **13 53 19.4** | **-0.1** |
| BO02 | | | | *e*S | **Sb** | **13 53 37.9** | **-0.2** |
| BO02 | | | | IAML | | 13 53 44.4 | |
| | comp=N,3µm,0.4s | | | | | | |
| **MT16** | **CCHEN** | **1.41** | **70** | *e*P | **Pb** | **13 53 20.1** | **-0.7** |
| MT16 | | | | *e*S | **Sn** | **13 53 37.1** | **-0.4** |
| **MT14** | **Cerro Cal¡n** | **1.41** | **69** | *e*P | **Pb** | **13 53 20.2** | **-0.6** |
| MT14 | | | | *e*S | **Sb** | **13 53 38.4** | **-0.1** |
| MT14 | | | | IAML | | 13 53 49.2 | |
| | comp=E,1µm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **1.42** | **57** | ⇓*i*P | **Pb** | **13 53 20.3** | **-0.7** |
| PEL | | | | *e*S | **Sb** | **13 53 38.7** | **+0.1** |
| PEL | | | | IAML | | 13 53 47.5 | |
| | comp=E,1µm,0.5s | | | | | | |
| **MT13** | **San Alfonso** | **1.53** | **84** | *i* P | **Pb** | **13 53 22.0** | **-0.9** |
| MT13 | | | | *i* S | **Sb** | **13 53 43.7** | **+1.9** |
| MT13 | | | | IAML | | 13 53 46.9 | |
| | comp=Z,928nm,0.3s | | | | | | |
| **MT13** | **San Alfonso** | **1.53** | **84** | ⇓*e*P | **Pb** | **13 53 21.8** | **-1.0** |
| MT13 | | | | *e*S | **Sb** | **13 53 41.4** | **-0.4** |
| MT13 | | | | IAML | | 13 53 47.4 | |
| | comp=E,3µm,0.3s | | | | | | |
| **LMEL** | **Las Melosas** | **1.59** | **88** | *i* P | **Pb** | **13 53 23.0** | **-0.9** |
| LMEL | | | | *i* S | **Sb** | **13 53 45.1** | **+1.5** |
| **LMEL** | **Las Melosas** | **1.59** | **88** | *e*P | **Pb** | **13 53 22.8** | **-1.0** |
| LMEL | | | | *e*S | **Sb** | **13 53 44.2** | **+0.7** |
| LMEL | | | | IAML | | 13 53 50.6 | |
| | comp=N,2µm,0.2s | | | | | | |
| **FCH** | **Farellones** | **1.63** | **69** | *e*P | **Pb** | **13 53 23.8** | **-0.9** |
| FCH | | | | *e*S | **Sb** | **13 53 45.2** | **+0.3** |
| FCH | | | | IAML | | 13 53 51.8 | |
| | comp=N,1µm,0.3s | | | | | | |
| **MT04** | **Ro Olivares** | **1.72** | **73** | *i* P | **Pb** | **13 53 24.9** | **-1.3** |
| MT04 | | | | *i* S | **Sb** | **13 53 48.6** | **+1.1** |
| MT04 | | | | IAML | | 13 53 56.2 | |
| | comp=Z,375nm,0.5s | | | | | | |
| **VA03** | **San Esteban** | **1.74** | **49** | *i* P | **Pb** | **13 53 24.9** | **-1.6** |
| VA03 | | | | *i* S | **Sb** | **13 53 48.2** | **+0.3** |
| VA03 | | | | IAML | | 13 53 56.8 | |
| | comp=Z,869nm,0.5s | | | | | | |
| **VA03** | **San Esteban** | **1.74** | **49** | *e*P | **Pb** | **13 53 24.9** | **-1.6** |
| VA03 | | | | *e*S | **Sb** | **13 53 47.1** | **-0.8** |
| VA03 | | | | IAML | | 13 53 54.1 | |
| | comp=E,2µm,0.5s | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.81** | **75** | *i* P | **Pb** | **13 53 26.4** | **-1.3** |
| MT08 | | | | IAML | | 13 53 55.4 | |
| | comp=Z,320nm,0.7s | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.81** | **75** | *e*P | **Pb** | **13 53 26.3** | **-1.3** |
| MT08 | | | | *e*S | **Sb** | **13 53 50.1** | **+0.2** |
| MT08 | | | | IAML | | 13 54 02.3 | |
| | comp=N,449nm,0.5s | | | | | | |
| **ML02** | **Panimavida** | **1.92** | **163** | *i* P | **Pn** | **13 53 26.8** | **+0.3** |
| ML02 | | | | IAML | | 13 54 09.9 | |
| | comp=Z,682nm,0.8s | | | | | | |
| **ML02** | **Panimavida** | **1.92** | **163** | *e*P | **Pb** | **13 53 28.4** | **-1.1** |
| ML02 | | | | *e*S | **Sb** | **13 53 53.5** | **+0.4** |
| ML02 | | | | IAML | | 13 54 01.9 | |
| | comp=E,1µm,0.7s | | | | | | |
| **CO02** | **Combarbal** | **2.87** | **19** | *i* P | **Pn** | **13 53 39.6** | **0.0** |
| CO02 | | | | IAML | | 13 54 33.2 | |
| | comp=Z,240nm,0.8s | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.87** | **69** | *i* P | **Pb** | **13 53 44.7** | **-1.0** |
| ARCO | | | | IAML | | 13 54 34.9 | |
| | comp=Z,126nm,0.5s | | | | | | |
| **RFA** | **San Rafael** | **3.13** | **107** | *i* P | **Pn** | **13 53 45.0** | **+1.8** |
| **RTLS** | **Leoncito** | **3.17** | **49** | *i* P | **Pn** | **13 53 45.7** | **+1.7** |
| RTLS | | | | IAML | | 13 54 44.6 | |
| | comp=Z,380nm,0.5s | | | | | | |
| **CO03** | **El Pedregal** | **3.30** | **22** | *i* P | **Pn** | **13 53 46.5** | **+1.0** |
| CO03 | | | | IAML | | 13 54 43.3 | |
| | comp=Z,99nm,0.6s | | | | | | |
| **CO03** | **El Pedregal** | **3.30** | **22** | *e*P | **Pn** | **13 53 46.7** | **+1.2** |
| CO03 | | | | *e*S | **Sn** | **13 54 23.9** | **-0.2** |
| CO03 | | | | IAML | | 13 54 44.6 | |
| | comp=E,165nm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **3.90** | **17** | *i* P | **Pn** | **13 53 54.0** | **+0.1** |
| **DOCA** | **Reserva Natura** | **3.91** | **42** | *i* P | **Pn** | **13 53 56.1** | **+1.9** |
| DOCA | | | | IAML | | 13 55 09.3 | |
| | comp=Z,241nm,0.7s | | | | | | |
| **ACCO** | **Cerro Coronel** | **4.21** | **39** | *i* P | **Pn** | **13 54 00.4** | **+2.2** |
| ACCO | | | | IAML | | 13 55 19.1 | |
| | comp=Z,60nm,0.5s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **4.52** | **35** | *i* P | **Pn** | **13 54 04.2** | **+1.8** |
| ACDV | | | | IAML | | 13 55 21.5 | |
| | comp=Z,43nm,1.3s | | | | | | |
| **AC05** | **El Transito** | **5.30** | **18** | *i* P | **Pn** | **13 54 13.2** | **0.0** |
| AC05 | | | | IAML | | 13 55 50.8 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **ACHE** | **Chepes** | **5.36** | **61** | *i* P | **Pn** | **13 54 15.7** | **+1.8** |

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*NNC **01** 14:14:22.9±6.7, 40°.07N×77°.15E, h0km, mb3.4, mpv2.9, Error ellipse: s-maj=79.3km s-min=44.1km az=78.0*

**KRNET 01 14:14:24.2**±0.1**, 42°.19N×80°.05E, mb2.2, 8C-6D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRZ** | **Przheval'sk** | **1.25** | **284** | ⇓*e*P | Pg | 14 14 47.1 | -1.1 |
| | baz=85 | | | | | | |
| PRZ | | | | ⇓*e*S | Sg | 14 15 03.7 | -0.8 |
| | baz=85 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.73** | **255** | ⇑*i*P | Pn | 14 14 54.1 | -1.9 |
| | baz=55 | | | | | | |
| TARG | | | | ⇑*i*S | Sn | 14 15 16.1 | -2.9 |
| | baz=55 | | | | | | |
| **KDJ** | **Kajisay** | **2.13** | **269** | ⇑*i*P | Pn | 14 14 59.5 | -1.7 |
| | baz=69 | | | | | | |
| KDJ | | | | ⇑*i*S | Sn | 14 15 25.2 | -3.3 |
| | baz=69 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.44** | **291** | Pg | Pg | 14 15 18.9 | +8.0 |
| | 3.9nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 14 15 57.8 | |
| | 2.4nm,0.5s | | | | | | |
| **KNDC** | **Almaty** | **2.49** | **295** | ⇑Pg | Pg | 14 15 18.2 | +6.3 |
| | 15nm,0.4s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 14 16 01.6 | |
| | 14nm,0.3s | | | | | | |
| **ULHL** | **Ulahol** | **2.83** | **272** | ⇓*i*P | Pn | 14 15 09.3 | -1.5 |
| | baz=72 | | | | | | |
| ULHL | | | | ⇓*i*S | Sn | 14 15 42.6 | -3.1 |
| | baz=72 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.06** | **277** | ⇓*i*P | Pn | 14 15 12.6 | -1.4 |
| | baz=77 | | | | | | |
| BOOM | | | | ⇓*i*S | Sn | 14 15 47.4 | -4.0 |
| | baz=77 | | | | | | |
| **KST** | **Kastek** | **3.13** | **287** | Pg | Pb | 14 15 22.0 | +1.2 |
| | 1.2nm,0.3s | | | | | | |
| KST | | | | Lg | Lg | 14 16 02.7 | |
| | 3.2nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.37** | **284** | ⇑Pg | Pn | 14 15 16.8 | -1.4 |
| | 2.2nm,0.9s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 14 16 00.2 | |
| | 1.9nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.54** | **297** | Pg | Pg | 14 15 33.8 | +1.7 |
| | 0.7nm,0.7s | | | | | | |
| KRBS | | | | Lg | Lg | 14 16 22.9 | |
| | 1.7nm,0.9s | | | | | | |

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*BJI **01** 14:27:48.8±0.0, 12°.00S×166°.81E, h121km, mb5.0/36, mB4.8/7*

*IDC **01** 14:27:53.9±0.6, 12°.43S×166°.75E, h167km±5km, mb4.1/19, mbtmp4.5/20, MS3.2/5, Error ellipse: s-maj=11.8km s-min=9.7km az=95.0*

*NEIC **01** 14:27:55.5±1.2, 12°.41S±0°.10×166°.8E±0°.1, h179km±7km, mb4.7/57, Error ellipse: s-maj=18.9km s-min=13.6km az=77.0*

*NOU **01** 14:27:55.4, 12°.42S×166°.71E, h173km, mb4.6/38, Santa Cruz Islands*

**ISC 01 14:27:55.9**±1.0**, 12°.47S**±0°.06×**166°.77E**±0°.08**, h186**km±9km**, n415, σ0ˢ.82**/431**, mb4.7**/61**, 4C, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **7.35** | **294** | Pn | Pn | 14 29 37.9 | -2.9 |
| **LIFNC** | **LIFOU** | **8.27** | **177** | P | **Pn** | **14 29 51.9** | **-0.9** |
| **LIFNC** | **LIFOU** | **8.27** | **177** | Pn | Pn | 14 29 51.0 | -1.8 |
| **KOUNC** | **Koumac, New Ca** | **8.38** | **196** | P | **Pn** | **14 29 54.8** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **8.38** | **196** | Pn | **Pn** | **14 29 54.2** | **0.0** |
| **YATNC** | **Mamie plateau,** | **9.54** | **179** | P | **Pn** | **14 30 09.5** | **+0.2** |
| **DZM** | **Mont Dzumac** | **9.55** | **182** | P | **Pn** | **14 30 11.4** | **+1.8** |
| **DZM** | **Mont Dzumac** | **9.55** | **182** | Pn | **Pn** | **14 30 10.8** | **+1.1** |
| **DZM** | **Mont Dzumac** | **9.55** | **182** | P | **Pn** | **14 30 09.5** | **-0.1** |
| | 12nm,0.7s,baz=41,slow=17,SNR=21 | | | | | | |
| DZM | | | | S | **S** | **14 31 54.9** | **-1.4** |
| | 19nm,0.8s,baz=30,slow=20,SNR=7.2 | | | | | | |
| DZM | | | | LR | LR | 14 32 47.1 | |
| | comp=Z,108nm,19.4s,baz=63,slow=31 | | | | | | |
| **NOUC** | **Port Laguerre** | **9.59** | **183** | P | **Pn** | **14 30 10.9** | **+0.9** |
| **ONTNC** | **Ouen Toro** | **9.79** | **182** | Pn | **Pn** | **14 30 12.6** | **0.0** |
| **PINNC** | **Pines Island,** | **10.11** | **176** | P | **Pn** | **14 30 16.8** | **0.0** |
| **PINNC** | **Pines Island,** | **10.11** | **176** | Pn | **Pn** | **14 30 18.6** | **+1.9** |
| **EIDS** | **Eidsvold** | **19.59** | **227** | P | **P** | **14 32 11.4** | **+1.4** |
| **EIDS** | **Eidsvold** | **19.59** | **227** | P | **P** | **14 32 10.4** | **+0.5** |
| EIDS | | | | IAmb | IAmb | 14 32 12.2 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **TV1H** | **Townsville Har** | **20.36** | **248** | P | **P** | **14 32 18.7** | **+0.5** |
| **CTA** | **Charters Tower** | **21.09** | **246** | P | **P** | **14 32 25.7** | **-0.3** |
| | comp=Z,1.7nm,0.7s,baz=75,slow=11,SNR=26 | | | | | | |
| CTA | | | | pP | pP | 14 32 53.1 | -4.3 |
| | comp=Z,1.2nm,0.9s,baz=61,slow=15,SNR=5.2 | | | | | | |
| **CTAO** | **Charters Tower** | **21.09** | **246** | P | **P** | **14 32 26.0** | **0.0** |
| **CTAO** | **Charters Tower** | **21.09** | **246** | P | **P** | **14 32 24.5** | **-1.5** |
| CTAO | | | | IAmb | IAmb | 14 32 26.8 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **RAO** | **Raoul Island** | **21.94** | **142** | P | **P** | **14 32 36.0** | **+1.3** |
| | comp=Z,276nm,0.3s,baz=306,slow=17,SNR=3.5 | | | | | | |
| **MTSU** | **Mount Surprise** | **22.37** | **253** | P | **P** | **14 32 39.6** | **+0.6** |
| **ARMA** | **Armidale** | **22.70** | **216** | P | **P** | **14 32 43.2** | **+1.2** |
| **ARMA** | **Armidale** | **22.70** | **216** | P | **P** | **14 32 42.5** | **+0.5** |
| **COEN** | **Coen** | **23.02** | **264** | P | **P** | **14 32 44.4** | **-0.4** |
| COEN | | | | IAmb | IAmb | 14 32 46.2 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **OUZ** | **Omahuta** | **23.48** | **166** | P | **P** | **14 32 50.1** | **+1.4** |
| **QLP** | **Quilpie** | **25.40** | **233** | P | **P** | **14 33 06.5** | **+0.2** |
| **TOZ** | **Tahuroa Road** | **26.34** | **164** | P | **P** | **14 33 15.8** | **+1.2** |
| TOZ | | | | IAmb | IAmb | 14 33 17.0 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **MXZ** | **Matakaoa Point** | **27.03** | **160** | P | **P** | **14 33 22.4** | **+1.6** |
| **CMSA** | **Cobar Meteorol** | **27.15** | **222** | P | **P** | **14 33 22.9** | **+1.0** |
| **URZ** | **Urewera** | **27.29** | **162** | P | **P** | **14 33 24.5** | **+1.5** |
| **RTZ** | **Ruatahuna** | **27.57** | **163** | P | **P** | **14 33 25.5** | **-0.2** |
| RTZ | | | | IAmb | IAmb | 14 33 28.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **BKZ** | **Black Stump Fm** | **27.95** | **164** | P | **P** | **14 33 29.9** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **27.95** | **164** | P | **P** | **14 33 29.6** | **+0.6** |
| **QRZ** | **Quartz Range** | **28.69** | **171** | P | **P** | **14 33 38.1** | **+2.6** |
| **QRZ** | **Quartz Range** | **28.69** | **171** | P | **P** | **14 33 36.6** | **+1.1** |
| **BFZ** | **Birch Farm** | **29.31** | **165** | P | **P** | **14 33 40.6** | **-0.4** |
| **TUWZ** | **Tuamarina** | **29.52** | **169** | P | **P** | **14 33 43.3** | **+0.5** |
| **SNZO** | **South Karori** | **29.56** | **168** | P | **P** | **14 33 45.2** | **+2.1** |
| **THZ** | **Tophouse** | **29.67** | **171** | P | **P** | **14 33 44.2** | **0.0** |
| **STKA** | **Stephens Creek** | **30.14** | **226** | P | **P** | **14 33 48.6** | **+0.2** |
| | comp=Z,2.5nm,0.9s,baz=34,slow=7.9,SNR=4.1 | | | | | | |
| STKA | | | | PcP | **PcP** | **14 36 44.9** | **-0.3** |
| | comp=Z,3.9nm,0.8s,baz=92,slow=2.2,SNR=4.8 | | | | | | |
| STKA | | | | LR | LR | 14 44 49.7 | |
| | comp=Z,87nm,19.1s,baz=30,slow=34 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **KHZ** | **Kahutara** | **30.41** | **170** | P | **P** | **14 33 50.5** | **-0.1** |
| **LTZ** | **Lake Taylor** | **30.57** | **172** | P | **P** | **14 33 52.0** | **-0.2** |
| **OXZ** | **Oxford** | **31.08** | **173** | P | **P** | **14 33 56.4** | **-0.1** |
| OXZ | | | | IAmb | IAmb | 14 33 58.9 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **31.35** | **174** | P | **P** | **14 34 00.9** | **+2.0** |
| **WB0** | **Warramunga Arr** | **31.90** | **253** | P | **P** | **14 34 02.5** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 14 34 06.8 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.98** | **252** | P | **P** | **14 34 04.1** | **-0.7** |
| **WRA** | **Warramunga Arr** | **31.98** | **252** | P | **P** | **14 34 03.4** | **-1.3** |
| | comp=Z,2.9nm,0.8s,baz=83,slow=9.1,SNR=24 | | | | | | |
| WRA | | | | pP | pP | 14 34 40.1 | -2.1 |
| | comp=Z,1.7nm,0.8s,baz=83,slow=8.5,SNR=2.7 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 36 50.3** | **0.0** |
| | comp=Z,0.7nm,1.0s,baz=71,slow=3.8,SNR=4.7 | | | | | | |
| WRA | | | | ScP | **ScP** | **14 40 18.8** | **+2.4** |
| | comp=Z,1.4nm,0.8s,baz=84,slow=3.3,SNR=9.7 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **ODZ** | **Otahua Downs** | **32.63** | **175** | P | **P** | **14 34 10.7** | **+0.7** |
| **AS01** | **Alice Springs** | **33.05** | **246** | P | **P** | **14 34 13.3** | **-0.8** |
| **AS31** | **Alice Springs** | **33.09** | **246** | P | **P** | **14 34 13.0** | **-1.4** |
| **ASAR** | **Alice Springs** | **33.09** | **246** | P | **P** | **14 34 12.5** | **-1.9** |
| **ASAR** | **Alice Springs** | **33.09** | **246** | P | **P** | **14 34 13.1** | **-1.3** |
| | comp=Z,5.0nm,0.7s,baz=70,slow=9.5,SNR=78 | | | | | | |
| ASAR | | | | pP | pP | 14 34 49.9 | -2.5 |
| | comp=Z,7.4nm,0.8s,baz=74,slow=9.4,SNR=11 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 36 52.8** | **-0.6** |
| | comp=Z,1.7nm,0.8s,baz=80,slow=3.4,SNR=6.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **14 40 22.2** | **+2.1** |
| | comp=Z,1.7nm,0.9s,baz=77,slow=2.8,SNR=9.1 | | | | | | |
| ASAR | | | | LR | LR | 14 46 45.4 | |
| | comp=Z,76nm,18.7s,baz=53,slow=34 | | | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **RAR** | **Rarotonga** | **33.12** | **110** | P | **P** | **14 34 15.1** | **+0.5** |
| | comp=Z,12nm,0.9s,baz=297,slow=4.5,SNR=2.0 | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **33.32** | **179** | P | **P** | **14 34 15.5** | **-0.5** |
| **KDU** | **Kakadu** | **33.47** | **266** | P | **P** | **14 34 17.5** | **-0.2** |
| **GUMO** | **Guam** | **33.79** | **319** | LR | LR | 14 46 27.4 | |
| | comp=Z,32nm,19.2s,baz=232,slow=33 | | | | | | |
| **SYZ** | **Scrubby Hill** | **34.01** | **177** | P | **P** | **14 34 24.0** | **+2.1** |
| **BBOO** | **Buckleboo** | **34.63** | **229** | P | **P** | **14 34 27.8** | **+0.3** |
| **BBOO** | **Buckleboo** | **34.63** | **229** | P | **P** | **14 34 27.3** | **-0.2** |
| BBOO | | | | IAmb | IAmb | 14 34 41.1 | |
| | comp=Z,38nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **34.76** | **265** | P | **P** | **14 34 28.6** | **-0.2** |
| MTN | | | | IAmb | IAmb | 14 35 08.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MULG** | **Mulgathing** | **35.06** | **234** | P | **P** | **14 34 30.8** | **-0.5** |
| **KNRA** | **Kununurra** | **36.98** | **260** | P | **P** | **14 34 46.9** | **-0.7** |
| **WRKA** | **Warakurna** | **38.38** | **245** | P | **P** | **14 34 58.9** | **-0.5** |
| **FORT** | **Forrest** | **40.08** | **237** | P | **P** | **14 35 13.5** | **+0.2** |
| **FORT** | **Forrest** | **40.08** | **237** | P | **P** | **14 35 12.2** | **-1.1** |
| FORT | | | | IAmb | IAmb | 14 35 24.3 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **JGF** | **Kuroka** | **55.32** | **331** | P | **P** | **14 37 09.7** | **-0.8** |
| JGF | | | | IAmb | IAmb | 14 37 11.2 | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **JMN** | **Monobe** | **55.61** | **327** | P | **P** | **14 37 13.2** | **+0.7** |
| **JMN** | **Monobe** | **55.61** | **327** | P | **P** | **14 37 12.1** | **-0.4** |
| **JMM** | **Marumori** | **55.69** | **335** | P | **P** | **14 37 11.9** | **-1.0** |
| JMM | | | | IAmb | IAmb | 14 37 13.6 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **55.69** | **332** | P | **P** | **14 37 11.6** | **-1.4** |
| | comp=Z,7.8nm,0.9s,baz=164,slow=7.5,SNR=17 | | | | | | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **55.70** | **332** | P | **P** | **14 37 11.9** | **-1.1** |
| MJB9 | | | | IAmb | IAmb | 14 37 13.0 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **56.82** | **324** | P | **P** | **14 37 20.9** | **-0.2** |
| **JNU** | **Nakatsue** | **56.82** | **324** | P | **P** | **14 37 20.5** | **-0.6** |
| JNU | | | | IAmb | IAmb | 14 37 21.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **YULB** | **Yu-li** | **57.01** | **309** | P | **P** | **14 37 22.8** | **+0.3** |
| YULB | | | | IAmb | IAmb | 14 37 24.3 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **SSLB** | **Suanglung** | **57.49** | **309** | P | **P** | **14 37 24.9** | **-1.0** |
| SSLB | | | | IAmb | IAmb | 14 37 29.1 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **JTM** | **Tenmabayashi** | **58.09** | **337** | P | **P** | **14 37 29.3** | **-0.4** |
| **JTM** | **Tenmabayashi** | **58.09** | **337** | P | **P** | **14 37 29.1** | **-0.7** |
| **ERM** | **Erimo** | **58.41** | **339** | P | **P** | **14 37 33.1** | **+1.2** |
| **ERM** | **Erimo** | **58.41** | **339** | P | **P** | **14 37 32.5** | **+0.6** |
| **JKA** | **Kamikawa-asahi** | **60.47** | **340** | P | **P** | **14 37 46.2** | **+0.2** |
| **KSRS** | **Korea Array** | **61.62** | **325** | P | **P** | **14 37 53.3** | **-0.5** |
| | comp=Z,3.5nm,0.8s,baz=138,slow=7.4,SNR=24 | | | | | | |
| KSRS | | | | PcP | **PcP** | **14 38 34.5** | **+0.9** |
| | comp=Z,1.9nm,0.9s,baz=145,slow=5.1,SNR=4.5 | | | | | | |
| KSRS | | | | LR | LR | 15 03 04.8 | |
| | comp=Z,9.7nm,19.6s,baz=340,slow=34 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **61.63** | **325** | P | **P** | **14 37 53.3** | **-0.6** |
| **YSS** | **Yuzh-Sakhalins** | **62.95** | **342** | P | **P** | **14 38 02.2** | **-0.2** |
| **USA0B** | **Ussuriysk Arra** | **64.67** | **333** | P | **P** | **14 38 14.3** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **64.67** | **333** | P | **P** | **14 38 13.2** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** | **64.67** | **333** | P | **P** | **14 38 14.2** | **+0.5** |
| | comp=Z,14nm,0.9s,baz=144,slow=6.3,SNR=25 | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **65.09** | **181** | P | **P** | **14 38 16.9** | **+0.9** |
| VNDA | | | | IAmb | IAmb | 14 38 18.0 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **65.09** | **181** | P | **P** | **14 38 16.6** | **+0.6** |
| | comp=Z,2.9nm,0.7s,baz=348,slow=8.0,SNR=30 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **SBA** | **Scott Base** | **65.38** | **180** | P | **P** | **14 38 19.3** | **+1.4** |
| SBA | | | | IAmb | IAmb | 14 38 20.7 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **CASY** | **Casey** | **65.43** | **202** | P | **P** | **14 38 18.2** | **-0.2** |
| **MDJ** | **Mudanjiang** | **66.07** | **332** | P | **P** | **14 38 23.2** | **+0.4** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,60nm,3.6s | | | | | | |
| **DL2** | **Dalian** | **66.22** | **323** | P | **P** | **14 38 24.2** | **+0.4** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,37nm,0.8s | | | | | | |
| **CN2** | **Changchun** | **67.48** | **329** | P | **P** | **14 38 31.7** | **0.0** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | |
| **BNX** | **BinXian** | **67.94** | **331** | ⇑P | **P** | **14 38 34.5** | **0.0** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | |
| **LYN** | **LuoYang** | **69.56** | **314** | *e*P | **P** | **14 38 44.2** | **-0.6** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,120nm,4.5s | | | | | | |
| **HEH** | **HeiHe** | **71.32** | **335** | *e*P | **P** | **14 38 55.2** | **+0.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **XAN** | **Xi'an** | **71.82** | **312** | ⇑P | **P** | **14 38 58.8** | **+0.3** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **72.60** | **324** | *e*P | **P** | **14 39 03.8** | **+0.8** |
| XLT | | | | PcP | **PcP** | **14 39 20.4** | **+0.9** |
| XLT | | | | pP | pP | 14 39 36.4 | -11 |
| XLT | | | | sP | pwP | 14 39 48.4 | -1.1 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **72.72** | **301** | ⇑P | **P** | **14 39 05.3** | **+1.0** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **72.96** | **352** | P | **P** | **14 39 05.5** | **+0.9** |
| **MA2** | **Magadan** | **72.96** | **352** | P | **P** | **14 39 03.8** | **-0.9** |
| MA2 | | | | IAmb | IAmb | 14 39 43.9 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.60** | **294** | P | **P** | **14 39 09.6** | **+0.2** |
| | comp=Z,5.4nm,0.9s,baz=121,slow=4.5,SNR=25 | | | | | | |
| CMAR | | | | pP | pP | 14 39 50.2 | -2.1 |
| | comp=Z,0.4nm,0.4s,baz=113,slow=5.8,SNR=1.5 | | | | | | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **73.72** | **294** | P | **P** | **14 39 09.7** | **-0.3** |
| **BTO** | **Baotou** | **74.42** | **319** | *e*P | **P** | **14 39 16.6** | **+2.9** |
| BTO | | | | pP | pP | 14 39 48.2 | -9.3 |
| BTO | | | | sP | **pwP** | **14 40 02.4** | **+0.7** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,28nm,0.8s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,180nm,6.7s | | | | | | |
| **SII** | **Sitkinak Islan** | **76.04** | **21** | P | **P** | **14 39 21.8** | **-0.7** |
| | baz=219 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **76.15** | **19** | P | **P** | **14 39 22.5** | **-0.5** |
| | baz=217 | | | | | | |
| **PLK4** | **Peulik 4** | **76.15** | **19** | P | **P** | **14 39 22.5** | **-0.7** |
| PLK4 | | | | IAmb | IAmb | 14 39 24.4 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **O15K** | **Ungalikthiuk R** | **76.35** | **17** | P | **P** | **14 39 23.7** | **-0.4** |
| | baz=214 | | | | | | |
| **LZH** | **Lanzhou** | **76.46** | **312** | *e*P | **P** | **14 39 27.0** | **+1.5** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | |
| **P16K** | **Nushagak River** | **76.77** | **18** | P | **P** | **14 39 24.9** | **-1.5** |
| | baz=215 | | | | | | |
| **Q17K** | **Contact Creek** | **76.80** | **19** | P | **P** | **14 39 25.8** | **-1.0** |
| | baz=218 | | | | | | |
| **OHAK** | **Old Harbor** | **76.86** | **21** | P | **P** | **14 39 28.0** | **+1.0** |
| **OHAK** | **Old Harbor** | **76.86** | **21** | P | **P** | **14 39 26.3** | **-0.8** |
| OHAK | | | | IAmb | IAmb | 14 40 02.8 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **OHAK** | **Old Harbor** | **76.86** | **21** | P | **P** | **14 39 26.2** | **-0.8** |
| | baz=220 | | | | | | |
| **M14K** | **Bethel** | **77.11** | **15** | P | **P** | **14 39 28.1** | **-0.2** |
| | baz=211 | | | | | | |
| **N15K** | **Kwethluk River** | **77.11** | **16** | P | **P** | **14 39 27.7** | **-0.7** |
| N15K | | | | IAmb | IAmb | 14 39 29.8 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **N15K** | **Kwethluk River** | **77.11** | **16** | P | **P** | **14 39 28.2** | **-0.2** |
| | baz=213 | | | | | | |
| **P17K** | **Kvichak River** | **77.37** | **18** | P | **P** | **14 39 29.0** | **-0.8** |
| | baz=217 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **77.39** | **19** | P | **P** | **14 39 29.5** | **-0.6** |
| | baz=218 | | | | | | |
| **L14K** | **Kuka Creek** | **77.44** | **15** | P | **P** | **14 39 29.5** | **-0.6** |
| | baz=211 | | | | | | |
| **KDAK** | **Kodiak Island** | **77.54** | **21** | P | **P** | **14 39 29.6** | **-1.2** |
| | baz=221 | | | | | | |
| **QSPA** | **South Pole Qui** | **77.54** | **180** | P | **P** | **14 39 31.1** | **+0.1** |
| **QSPA** | **South Pole Qui** | **77.54** | **180** | P | **P** | **14 39 31.2** | **+0.2** |
| | comp=Z,8.1nm,0.9s,baz=352,slow=0.9,SNR=34 | | | | | | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **N16K** | **Nishlik Lake** | **77.73** | **17** | P | **P** | **14 39 31.3** | **-0.6** |
| | baz=214 | | | | | | |
| **GAMB** | **Gambell** | **77.79** | **10** | P | **P** | **14 39 32.5** | **+0.5** |
| | baz=202 | | | | | | |
| **P18K** | **Big Mountain,** | **77.91** | **19** | P | **P** | **14 39 31.5** | **-1.4** |
| | baz=218 | | | | | | |
| **L15K** | **Ungalak Mounta** | **78.02** | **15** | P | **P** | **14 39 33.2** | **-0.2** |
| | baz=212 | | | | | | |
| **M16K** | **Timber Creek** | **78.13** | **16** | P | **P** | **14 39 34.5** | **+0.4** |
| M16K | | | | IAmb | IAmb | 14 39 36.2 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **M16K** | **Timber Creek** | **78.13** | **16** | P | **P** | **14 39 34.1** | **+0.1** |
| | baz=214 | | | | | | |
| **N17K** | **Nushagak Hills** | **78.23** | **17** | P | **P** | **14 39 33.7** | **-0.8** |
| | baz=216 | | | | | | |
| **O18K** | **Koktuh Hills** | **78.28** | **19** | P | **P** | **14 39 33.6** | **-1.3** |
| | baz=218 | | | | | | |
| **J14K** | **Nanvaranak Lak** | **78.45** | **13** | P | **P** | **14 39 36.5** | **+0.9** |
| | baz=210 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **78.54** | **15** | P | **P** | **14 39 36.3** | **+0.1** |
| **K15K** | **Wolf Creek Mou** | **78.54** | **15** | P | **P** | **14 39 36.9** | **+0.7** |
| | baz=212 | | | | | | |
| **L16K** | **Owhat River** | **78.57** | **16** | P | **P** | **14 39 36.6** | **+0.2** |
| | baz=214 | | | | | | |
| **M17K** | **Holitna River** | **78.87** | **17** | P | **P** | **14 39 38.2** | **+0.2** |
| **M17K** | **Holitna River** | **78.87** | **17** | P | **P** | **14 39 38.6** | **+0.5** |
| | baz=216 | | | | | | |
| **L17K** | **Donlin** | **79.23** | **16** | P | **P** | **14 39 40.9** | **+0.9** |
| | baz=215 | | | | | | |
| **M18K** | **Stony River** | **79.40** | **17** | P | **P** | **14 39 41.7** | **+0.8** |
| | baz=217 | | | | | | |
| **J16K** | **Anvik River** | **79.61** | **14** | P | **P** | **14 39 42.4** | **+0.4** |
| J16K | | | | IAmb | IAmb | 14 39 43.8 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **J16K** | **Anvik River** | **79.61** | **14** | P | **P** | **14 39 43.0** | **+1.0** |
| | baz=212 | | | | | | |
| **K17K** | **Iditarod** | **79.71** | **16** | P | **P** | **14 39 43.2** | **+0.6** |
| K17K | | | | IAmb | IAmb | 14 39 44.2 | |
| | comp=Z,15nm,1.0s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| K17K | Iditarod | 79.71 | 16 | P | P | 14 39 43.2 | +0.6 |
| | baz=215 | | | | | | |
| L18K | Granite Mounta | 79.74 | 16 | P | P | 14 39 42.4 | -0.3 |
| L18K | | | | IAmb | IAmb | 14 39 44.5 | |
| | comp=Z,13nm,1.0s | | | | | | |
| L18K | Granite Mounta | 79.74 | 16 | P | P | 14 39 43.2 | +0.4 |
| | baz=216 | | | | | | |
| J17K | VABM Dome | 80.08 | 15 | P | P | 14 39 44.6 | +0.1 |
| J17K | VABM Dome | 80.08 | 15 | P | P | 14 39 45.1 | +0.6 |
| | baz=214 | | | | | | |
| L19K | White Mountain | 80.23 | 17 | P | P | 14 39 45.6 | +0.2 |
| | baz=218 | | | | | | |
| F14K | Arctic Creek | 80.29 | 11 | P | P | 14 39 46.8 | +1.2 |
| | baz=207 | | | | | | |
| G15K | Niukluk | 80.32 | 12 | P | P | 14 39 46.5 | +0.7 |
| | baz=209 | | | | | | |
| SONM | Songino Array | 80.41 | 324 | P | P | 14 39 47.0 | +0.2 |
| | comp=Z,3.8nm,0.6s,baz=140,slow=5.3,SNR=25 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| M20K | Styx River | 80.50 | 18 | P | P | 14 39 46.5 | -0.4 |
| | baz=220 | | | | | | |
| O22K | Cooper Landing | 80.54 | 20 | P | P | 14 39 46.9 | -0.1 |
| | baz=223 | | | | | | |
| J18K | Innoko River | 80.74 | 16 | P | P | 14 39 48.4 | +0.3 |
| | baz=216 | | | | | | |
| L20K | Farewell, AK | 80.74 | 17 | P | P | 14 39 48.5 | +0.3 |
| | baz=219 | | | | | | |
| GTA | Gaotai | 80.77 | 314 | *e*P | P | 14 39 49.8 | +0.9 |
| GTA | | | | sP | pP | 14 40 29.3 | -4.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,14nm,1.5s | | | | | | |
| SUA | Susitna One | 80.93 | 19 | P | P | 14 39 48.9 | -0.4 |
| | baz=222 | | | | | | |
| RC01 | Rabbit Creek A | 80.98 | 20 | P | P | 14 39 49.9 | +0.6 |
| | baz=223 | | | | | | |
| G16K | Koyuk River | 81.02 | 13 | P | P | 14 39 50.1 | +0.7 |
| | baz=210 | | | | | | |
| H17K | Granite Mounta | 81.17 | 14 | P | P | 14 39 50.2 | -0.1 |
| | baz=213 | | | | | | |
| PWL | Port Wells | 81.28 | 20 | P | P | 14 39 50.9 | -0.1 |
| | baz=224 | | | | | | |
| M22K | Willow | 81.34 | 19 | P | P | 14 39 51.0 | -0.2 |
| | baz=222 | | | | | | |
| K20K | Telida | 81.38 | 17 | P | P | 14 39 53.0 | +1.5 |
| | baz=219 | | | | | | |
| J19K | Poorman | 81.46 | 16 | P | P | 14 39 52.1 | +0.3 |
| | baz=217 | | | | | | |
| G17K | Kiwalik Mounta | 81.48 | 13 | P | P | 14 39 52.2 | +0.3 |
| | baz=212 | | | | | | |
| PMR | Palmer | 81.55 | 20 | P | P | 14 39 51.6 | -0.7 |
| | baz=223 | | | | | | |
| KNK | Knik Glacier | 81.64 | 20 | P | P | 14 39 52.9 | 0.0 |
| | baz=224 | | | | | | |
| GLI | Glacier Island | 81.72 | 21 | P | P | 14 39 53.0 | -0.3 |
| | baz=225 | | | | | | |
| CUT | Chulitna | 81.78 | 19 | P | P | 14 39 53.4 | -0.1 |
| | baz=222 | | | | | | |
| SML | Sawmill | 81.97 | 20 | P | P | 14 39 54.6 | 0.0 |
| | baz=224 | | | | | | |
| EYAK | Cordova Ski Ar | 81.97 | 22 | P | P | 14 39 54.2 | -0.3 |
| | baz=227 | | | | | | |
| J20K | Nowinta River | 82.00 | 16 | P | P | 14 39 54.9 | +0.3 |
| J20K | Nowinta River | 82.00 | 16 | P | P | 14 39 55.7 | +1.1 |
| | baz=218 | | | | | | |
| F17K | Baldwin Pennin | 82.15 | 12 | P | P | 14 39 56.4 | +1.1 |
| | baz=212 | | | | | | |
| M23K | Glacier View | 82.16 | 20 | P | P | 14 39 55.2 | -0.4 |
| | baz=225 | | | | | | |
| G18K | Tagagawik | 82.26 | 14 | P | P | 14 39 56.2 | +0.2 |
| | baz=214 | | | | | | |
| SCM | Sheep Creek Mo | 82.32 | 20 | P | P | 14 39 55.8 | -0.6 |
| | baz=225 | | | | | | |
| I20K | Naaghedeneel | 82.40 | 16 | P | P | 14 39 56.7 | 0.0 |
| | baz=218 | | | | | | |
| H19K | Roundabout Mou | 82.48 | 15 | P | P | 14 39 57.7 | +0.6 |
| | baz=216 | | | | | | |
| KLU | Klutina | 82.56 | 21 | P | P | 14 39 57.6 | -0.1 |
| | baz=226 | | | | | | |
| E17K | Hotham Inlet | 82.58 | 12 | P | P | 14 39 58.4 | +0.8 |
| | baz=211 | | | | | | |
| BGLC | Bering Glacier | 82.59 | 23 | P | P | 14 39 57.5 | -0.2 |
| | baz=229 | | | | | | |
| F18K | Selawik | 82.63 | 13 | P | P | 14 39 58.1 | +0.2 |
| | baz=213 | | | | | | |
| WAT1 | Susitna Watana | 82.63 | 19 | P | P | 14 39 57.5 | -0.5 |
| | baz=224 | | | | | | |
| BMRM | Bremner River | 82.67 | 22 | P | P | 14 39 58.0 | -0.3 |
| | baz=228 | | | | | | |
| WAT6 | Susitna Watana | 82.72 | 19 | P | P | 14 39 58.5 | -0.1 |
| | baz=225,SNR=5.4 | | | | | | |
| BPAW | Bear Paw Mtn. | 82.83 | 17 | P | P | 14 39 59.0 | -0.1 |
| | baz=221 | | | | | | |
| G19K | Purcell Mounta | 82.83 | 14 | P | P | 14 40 00.0 | +1.1 |
| | baz=216 | | | | | | |
| H20K | Anotleneega Mo | 82.85 | 15 | P | P | 14 39 59.9 | +0.8 |
| | baz=218 | | | | | | |
| D17K | Noatak River | 82.88 | 11 | P | P | 14 40 00.1 | +1.0 |
| | baz=210 | | | | | | |
| M24K | Tolsona, Glenn | 82.90 | 20 | P | P | 14 39 59.6 | +0.1 |
| | baz=226 | | | | | | |
| C16K | Lisburne Hills | 82.98 | 10 | P | P | 14 40 00.2 | +0.6 |
| | baz=207 | | | | | | |
| CRQE | Cirque | 83.08 | 22 | P | P | 14 40 00.3 | -0.2 |
| | baz=229 | | | | | | |
| N25K | Chitina, Valde | 83.10 | 21 | P | P | 14 40 00.8 | +0.2 |
| | baz=228,SNR=6.8 | | | | | | |
| E18K | Tukpahlearik C | 83.12 | 12 | P | P | 14 40 01.2 | +0.8 |
| | baz=212 | | | | | | |
| MESA | MESA | 83.14 | 23 | P | P | 14 40 00.6 | -0.2 |
| | baz=230 | | | | | | |
| MCK | McKinley | 83.17 | 18 | P | P | 14 40 00.2 | -0.6 |
| | baz=223 | | | | | | |
| DHY | Denali Highway | 83.19 | 19 | P | P | 14 40 01.0 | 0.0 |
| | baz=225,SNR=5.4 | | | | | | |
| GOMU | GeErMu | 83.19 | 309 | P | P | 14 40 02.5 | +0.5 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| RDOG | Red Dog Mine | 83.22 | 11 | P | P | 14 40 01.9 | +1.0 |
| | baz=210 | | | | | | |
| F19K | Shaleruckik Mo | 83.24 | 13 | P | P | 14 40 01.5 | +0.6 |
| | baz=215 | | | | | | |
| HARP | HAARP | 83.45 | 20 | P | P | 14 40 02.8 | +0.6 |
| | baz=227 | | | | | | |
| H21K | Melozitna Rive | 83.52 | 16 | P | P | 14 40 03.3 | +0.8 |
| | baz=220,SNR=7.9 | | | | | | |
| MCARA | McCarthy VSAT | 83.52 | 22 | P | P | 14 40 02.7 | +0.2 |
| | baz=229 | | | | | | |
| SNCC | San Nicolas Is | 83.53 | 54 | P | P | 14 40 03.6 | +0.4 |
| | baz=251 | | | | | | |
| C17K | DeLong Mountai | 83.54 | 11 | P | P | 14 40 03.0 | +0.5 |
| | baz=210 | | | | | | |
| MLY | Manley | 83.60 | 17 | P | P | 14 40 02.8 | -0.2 |
| | baz=222 | | | | | | |
| PAX | Paxson | 83.73 | 20 | P | P | 14 40 04.0 | +0.3 |
| | baz=227 | | | | | | |
| PINM | Pinnacle | 83.74 | 24 | P | P | 14 40 03.7 | -0.1 |
| | baz=232 | | | | | | |
| NEA2 | Nenana | 83.76 | 18 | P | P | 14 40 03.3 | -0.4 |
| | baz=223 | | | | | | |
| MAW | Mawson | 83.78 | 202 | P | P | 14 40 04.0 | +0.1 |
| | comp=Z,4.4nm,0.7s,baz=123,slow=8.2,SNR=13 | | | | | | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| CTG | Chitna Glacier | 83.87 | 23 | P | P | 14 40 04.0 | -0.5 |
| | baz=231 | | | | | | |
| E19K | Redstone River | 83.88 | 13 | P | P | 14 40 05.0 | +0.8 |
| | baz=215 | | | | | | |
| F20K | Avaraart Lake | 83.89 | 14 | P | P | 14 40 05.2 | +0.9 |
| | baz=217,SNR=8.8 | | | | | | |
| G21K | Allakaket | 84.00 | 15 | P | P | 14 40 05.7 | +0.7 |
| | baz=219 | | | | | | |
| C18K | Utukok River | 84.06 | 11 | P | P | 14 40 05.6 | +0.4 |
| | baz=211,SNR=6.8 | | | | | | |
| H22K | Ishtalitna Cre | 84.08 | 16 | P | P | 14 40 05.0 | -0.3 |
| | baz=221,SNR=8.0 | | | | | | |
| I23K | Minto, Yukon-K | 84.08 | 17 | P | P | 14 40 04.6 | -0.7 |
| | baz=223 | | | | | | |
| O28M | Mount Upton | 84.19 | 23 | P | P | 14 40 06.3 | 0.0 |
| | baz=232 | | | | | | |
| M26K | Nabesna, AK | 84.20 | 21 | P | P | 14 40 05.9 | -0.1 |
| | baz=229,SNR=7.7 | | | | | | |
| K24K | Donnelly Dome | 84.21 | 19 | P | P | 14 40 06.1 | +0.1 |
| | baz=226 | | | | | | |
| CRAG | Craig | 84.21 | 30 | P | P | 14 40 05.3 | -0.8 |
| | baz=238 | | | | | | |
| HDA | Harding Lake | 84.27 | 18 | P | P | 14 40 06.2 | -0.1 |
| | baz=225,SNR=33 | | | | | | |
| COLA | College | 84.32 | 18 | P | P | 14 40 06.3 | -0.2 |
| | baz=224 | | | | | | |
| P29M | Windy Craggy | 84.47 | 25 | P | P | 14 40 07.5 | 0.0 |
| | baz=234 | | | | | | |
| L26K | Log Cabin Wild | 84.49 | 21 | P | P | 14 40 07.8 | +0.3 |
| | baz=229 | | | | | | |
| H23K | Yukon River | 84.53 | 17 | P | P | 14 40 07.6 | 0.0 |
| | baz=223,SNR=11 | | | | | | |
| D19K | Kuna River | 84.54 | 12 | P | P | 14 40 08.1 | +0.5 |
| | baz=214 | | | | | | |
| IL31 | | 84.54 | 18 | P | P | 14 40 07.2 | -0.3 |
| IL31 | | | | IAmb | IAmb | 14 40 07.8 | |
| | comp=Z,18nm,0.8s | | | | | | |
| ILAR | Eielson Array | 84.54 | 18 | P | P | 14 40 07.0 | -0.7 |
| ILAR | Eielson Array | 84.54 | 18 | P | P | 14 40 06.8 | -0.9 |
| | comp=Z,12nm,0.6s,baz=246,slow=5.2,SNR=195 | | | | | | |
| ILAR | | | | pP | pP | 14 40 48.9 | -4.1 |
| | comp=Z,1.1nm,0.7s,baz=244,slow=4.7,SNR=1.4 | | | | | | |
| ILAR | | | | PKKPbc | PKKPdf | 14 58 16.3 | +3.7 |
| | comp=Z,0.3nm,0.7s,baz=342,slow=3.2,SNR=5.3 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| B18K | Kokolik River | 84.56 | 11 | P | P | 14 40 08.5 | +0.9 |
| | baz=211 | | | | | | |
| F21K | Alatna River | 84.56 | 14 | P | P | 14 40 07.6 | -0.2 |
| F21K | Alatna River | 84.56 | 14 | P | P | 14 40 08.2 | +0.5 |
| | baz=219 | | | | | | |
| M27K | Edge Creek, AK | 84.56 | 21 | P | P | 14 40 08.5 | +0.5 |
| | baz=230,SNR=5.3 | | | | | | |
| POKR | Poker Plat Res | 84.62 | 18 | P | P | 14 40 07.1 | -1.0 |
| | baz=225,SNR=8.2 | | | | | | |
| YUK8 | Steele Glacier | 84.67 | 23 | P | P | 14 40 08.8 | +0.1 |
| | baz=232,SNR=7.1 | | | | | | |
| YUK3 | Moose Creek | 84.71 | 22 | P | P | 14 40 08.0 | -0.8 |
| | baz=231 | | | | | | |
| C19K | Lookout Ridge | 84.75 | 12 | P | P | 14 40 09.9 | +1.2 |
| | baz=213 | | | | | | |
| E20K | Nigu River | 84.76 | 13 | P | P | 14 40 09.6 | +0.9 |
| | baz=216 | | | | | | |
| G22K | Bettles | 84.83 | 15 | P | P | 14 40 09.9 | +0.9 |
| | baz=221,SNR=9.3 | | | | | | |
| J25K | Salcha River, | 84.90 | 19 | P | P | 14 40 09.8 | +0.3 |
| | baz=227,SNR=28 | | | | | | |
| SCRK | Sand Creek | 84.91 | 20 | P | P | 14 40 09.6 | -0.1 |
| | baz=228,SNR=13 | | | | | | |
| PLBC | Pleasant Camp | 84.94 | 25 | P | P | 14 40 09.5 | -0.3 |
| | baz=235 | | | | | | |
| H24K | Noodor Dome | 85.01 | 17 | P | P | 14 40 09.1 | -0.9 |
| | baz=224 | | | | | | |
| D20K | Etivluk River | 85.04 | 13 | P | P | 14 40 11.0 | +1.0 |
| | baz=216 | | | | | | |
| L27K | Beaver Creek, | 85.04 | 21 | P | P | 14 40 10.3 | +0.1 |
| | baz=230 | | | | | | |
| G23K | Bananza Creek | 85.06 | 16 | P | P | 14 40 10.8 | +0.6 |
| | baz=222,SNR=17 | | | | | | |
| F22K | John River | 85.10 | 15 | P | P | 14 40 12.0 | +1.6 |
| | baz=220,SNR=5.1 | | | | | | |
| YUK4 | Talbot Arm | 85.13 | 23 | P | P | 14 40 11.6 | +0.7 |
| | baz=233 | | | | | | |
| EDW2 | Edwards Air Fo | 85.27 | 53 | P | P | 14 40 13.2 | +1.2 |
| | baz=251 | | | | | | |
| BFSC | Mount Baldy Ra | 85.33 | 54 | P | P | 14 40 12.0 | -0.4 |
| | baz=252 | | | | | | |
| J26L | Joseph Creek | 85.40 | 19 | P | P | 14 40 12.7 | +0.7 |
| | baz=228 | | | | | | |
| E21K | Killik River | 85.40 | 14 | P | P | 14 40 13.0 | +1.1 |
| | baz=218,SNR=15 | | | | | | |
| PRP | Porcupine Dome | 85.48 | 18 | P | P | 14 40 12.2 | -0.3 |
| | baz=226 | | | | | | |
| K27K | Chicken | 85.58 | 20 | P | P | 14 40 13.1 | +0.3 |
| K27K | Chicken | 85.58 | 20 | P | P | 14 40 12.8 | 0.0 |
| | baz=230 | | | | | | |
| H04A | Detroit Lake | 85.64 | 43 | P | P | 14 40 13.4 | -0.2 |
| CWC | Cottonwood Cre | 85.70 | 51 | P | P | 14 40 14.4 | +0.1 |
| | baz=251 | | | | | | |
| LRMC | Laurel Mtn Rad | 85.70 | 52 | P | P | 14 40 14.7 | +0.4 |
| | baz=252 | | | | | | |
| G24K | Hadweenzic Riv | 85.74 | 17 | P | P | 14 40 14.2 | +0.7 |
| | baz=225,SNR=25 | | | | | | |
| C21K | Knifeblade Rid | 85.79 | 13 | P | P | 14 40 15.0 | +1.3 |
| | baz=218,SNR=13 | | | | | | |
| O30N | Mendenhall | 85.80 | 24 | P | P | 14 40 13.9 | -0.2 |
| | baz=235 | | | | | | |
| N30M | Aishikik Lake | 85.81 | 24 | P | P | 14 40 14.2 | +0.2 |
| | baz=234 | | | | | | |
| M29M | Somme Creek | 85.86 | 22 | P | P | 14 40 13.6 | -0.8 |
| | baz=233 | | | | | | |
| H25L | Birch Creek | 85.91 | 17 | P | P | 14 40 14.1 | -0.3 |
| | baz=226 | | | | | | |
| B20K | Meade River | 85.98 | 12 | P | P | 14 40 15.4 | +0.7 |
| | baz=215 | | | | | | |
| MPMC | Manual Prospec | 86.03 | 52 | P | P | 14 40 16.0 | +0.1 |
| | baz=252 | | | | | | |
| D22K | Ayikyak River | 86.04 | 14 | P | P | 14 40 16.1 | +1.1 |
| | baz=220,SNR=16 | | | | | | |
| I26K | Coal Creek Min | 86.07 | 19 | P | P | 14 40 15.3 | +0.1 |
| | baz=229 | | | | | | |
| PFO | Pinyon Flats O | 86.08 | 55 | P | P | 14 40 16.7 | +0.6 |
| | baz=252 | | | | | | |
| TPFO | Pinon Flats | 86.08 | 55 | P | P | 14 40 16.5 | +0.3 |
| | baz=252 | | | | | | |
| P32M | Atlin | 86.14 | 26 | P | P | 14 40 15.0 | -0.7 |
| | baz=238 | | | | | | |
| E23K | Chandalar | 86.16 | 15 | P | P | 14 40 16.3 | +0.6 |
| | baz=222,SNR=10 | | | | | | |
| NVAR | Mina Array Bea | 86.17 | 49 | P | P | 14 40 16.7 | +0.1 |
| | comp=Z,1.5nm,0.8s,baz=233,slow=8.2,SNR=6.7 | | | | | | |
| NVAR | | | | pP | pP | 14 40 58.0 | -4.2 |
| | comp=Z,0.6nm,0.7s,baz=234,slow=3.7,SNR=2.1 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| G25K | Bearman Lake | 86.18 | 17 | P | P | 14 40 17.1 | +1.4 |
| | baz=226,SNR=5.5 | | | | | | |
| B21K | Ikpikpuk River | 86.20 | 13 | P | P | 14 40 16.6 | +0.9 |
| | baz=218,SNR=8.5 | | | | | | |
| F24K | Squaw Lake | 86.22 | 16 | P | P | 14 40 16.6 | +0.6 |
| F24K | | | | IAmb | IAmb | 14 40 17.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| F24K | Squaw Lake | 86.22 | 16 | P | P | 14 40 16.8 | +0.8 |
| | baz=224,SNR=15 | | | | | | |
| EGAK | Eagle | 86.37 | 20 | P | P | 14 40 16.5 | -0.1 |
| | baz=230,SNR=13 | | | | | | |
| L29M | L29M | 86.39 | 22 | P | P | 14 40 16.8 | -0.1 |
| | baz=233 | | | | | | |
| E24K | Your Creek | 86.46 | 15 | P | P | 14 40 17.2 | +0.1 |
| E24K | Your Creek | 86.46 | 15 | P | P | 14 40 17.9 | +0.7 |
| | baz=224,SNR=6.9 | | | | | | |
| DAWY | Dawson | 86.52 | 21 | P | P | 14 40 16.6 | -0.9 |
| | baz=232 | | | | | | |
| HEC | Hector,Ludlow | 86.55 | 53 | P | P | 14 40 18.5 | +0.2 |
| | baz=252 | | | | | | |
| BELC | Belle Mtn. Jos | 86.56 | 54 | P | P | 14 40 18.3 | -0.3 |
| | baz=253 | | | | | | |
| M30M | Minto, Yukon | 86.57 | 23 | P | P | 14 40 16.9 | -0.8 |
| | baz=235 | | | | | | |
| D23K | Nanushuk River | 86.58 | 14 | P | P | 14 40 18.9 | +1.3 |
| | baz=221 | | | | | | |
| TOLK | Toolik Lake Re | 86.61 | 15 | P | P | 14 40 17.6 | -0.2 |
| TOLK | | | | IAmb | IAmb | 14 40 19.5 | |
| | comp=Z,18nm,1.4s | | | | | | |
| TOLK | Toolik Lake Re | 86.61 | 15 | P | P | 14 40 18.8 | +1.0 |
| | baz=222,SNR=5.3 | | | | | | |
| FURC | Furnace Creek, | 86.64 | 52 | P | P | 14 40 18.8 | +0.2 |
| | baz=252 | | | | | | |
| I27K | Kandik River | 86.75 | 19 | P | P | 14 40 18.2 | -0.4 |
| | baz=230,SNR=6.8 | | | | | | |
| P33M | Teslin, Yukon | 86.85 | 26 | P | P | 14 40 19.2 | -0.1 |
| | baz=238 | | | | | | |
| F25K | Christian Rive | 86.88 | 16 | P | P | 14 40 20.5 | +1.3 |
| | baz=226,SNR=7.7 | | | | | | |
| G26K | Porcupine Rive | 86.97 | 17 | P | P | 14 40 20.4 | +0.8 |
| | baz=228,SNR=15 | | | | | | |
| B22K | Teshekpuk Lake | 87.02 | 13 | P | P | 14 40 20.9 | +1.3 |
| | baz=219 | | | | | | |
| K29M | Barlow Dome | 87.05 | 22 | P | P | 14 40 19.7 | -0.5 |
| | baz=234 | | | | | | |
| TUQ | Turquoise Moun | 87.05 | 53 | P | P | 14 40 20.7 | -0.1 |
| | baz=253 | | | | | | |
| D24K | Happy Valley | 87.17 | 15 | P | P | 14 40 21.4 | +0.9 |
| | baz=223 | | | | | | |
| H27K | Steamboat Moun | 87.18 | 19 | P | P | 14 40 20.7 | +0.1 |
| | baz=230 | | | | | | |
| DLBC | Dease Lake | 87.18 | 28 | P | P | 14 40 20.3 | -0.6 |
| | baz=241 | | | | | | |
| I28M | Miner Creek | 87.19 | 20 | P | P | 14 40 20.6 | -0.2 |
| | baz=232 | | | | | | |
| R33M | Jennings River | 87.23 | 27 | P | P | 14 40 20.7 | -0.4 |
| | baz=240 | | | | | | |
| C23K | Itkillik River | 87.25 | 14 | P | P | 14 40 21.8 | +1.0 |
| | baz=222,SNR=6.4 | | | | | | |
| TPNV | Topopah Spring | 87.25 | 51 | P | P | 14 40 21.4 | -0.5 |
| | baz=252 | | | | | | |
| M31M | Drury Creek, Y | 87.28 | 24 | P | P | 14 40 21.2 | 0.0 |
| | baz=237 | | | | | | |
| IRM | Iron Mountain | 87.29 | 54 | P | P | 14 40 22.2 | +0.3 |
| | baz=253 | | | | | | |
| F26K | Sheenjek River | 87.37 | 17 | P | P | 14 40 21.7 | +0.2 |
| | baz=228 | | | | | | |
| G27K | Doyon Strip | 87.51 | 18 | P | P | 14 40 22.2 | 0.0 |
| | baz=230 | | | | | | |
| C24K | Franklin Bluff | 87.61 | 14 | P | P | 14 40 23.5 | +1.0 |
| | baz=223 | | | | | | |
| I29M | Ogilvie Camp, | 87.68 | 20 | P | P | 14 40 23.2 | +0.2 |
| | baz=233 | | | | | | |
| FARO | Faro, Yukon | 87.71 | 24 | P | P | 14 40 23.5 | +0.3 |
| | baz=238 | | | | | | |
| D25K | Kavik River | 87.90 | 15 | P | P | 14 40 24.1 | +0.1 |
| | baz=226,SNR=10 | | | | | | |
| PDMCI | Parker Dam,Lak | 88.12 | 54 | P | P | 14 40 26.0 | +0.3 |
| | baz=254 | | | | | | |
| I30M | Mount Dempster | 88.25 | 21 | P | P | 14 40 25.0 | -0.8 |
| I30M | Mount Dempster | 88.25 | 21 | P | P | 14 40 25.1 | -0.8 |
| | baz=235 | | | | | | |
| E27K | Coleen River | 88.42 | 17 | P | P | 14 40 27.6 | +1.2 |
| | baz=230 | | | | | | |
| 214A | Organ Pipe Nat | 88.55 | 57 | P | P | 14 40 28.5 | +0.6 |
| | baz=254 | | | | | | |
| F28M | Old Crow | 88.56 | 18 | P | P | 14 40 26.8 | -0.3 |
| | baz=232 | | | | | | |
| C26K | Camden Bay | 88.68 | 15 | P | P | 14 40 27.1 | -0.4 |
| | baz=227 | | | | | | |
| G29M | Pine Creek | 88.70 | 19 | P | P | 14 40 27.5 | -0.3 |
| | baz=233 | | | | | | |
| C27K | Jago River | 88.79 | 15 | P | P | 14 40 28.5 | +0.4 |
| | baz=228 | | | | | | |
| EPYK | Eagle Plains | 88.80 | 20 | P | P | 14 40 27.6 | -0.7 |
| | baz=235 | | | | | | |
| D27M | Malcolm River | 89.28 | 16 | P | P | 14 40 30.5 | 0.0 |
| | baz=231 | | | | | | |
| E28M | Babbage River | 89.28 | 17 | P | P | 14 40 30.8 | +0.4 |
| | baz=232 | | | | | | |
| G30M | tAoh Zraii Nji | 89.32 | 19 | P | P | 14 40 30.0 | -0.7 |
| | baz=235 | | | | | | |
| E29M | Blow River | 89.63 | 18 | P | P | 14 40 32.6 | +0.6 |
| | baz=233 | | | | | | |
| F30M | Barrier River | 89.82 | 19 | P | P | 14 40 32.8 | -0.1 |
| | baz=235 | | | | | | |
| G31M | Satah River | 89.92 | 20 | P | P | 14 40 34.1 | +0.7 |
| | baz=237 | | | | | | |
| D28M | Stokes Point | 89.95 | 17 | P | P | 14 40 34.0 | +0.5 |
| | baz=233 | | | | | | |
| NEW | Newport | 90.17 | 40 | P | P | 14 40 34.6 | -0.5 |
| | baz=252 | | | | | | |
| TUC | Tucson | 90.31 | 57 | P | P | 14 40 37.3 | +1.1 |
| | baz=256 | | | | | | |
| HLID | Hailey | 90.55 | 45 | P | P | 14 40 37.4 | +0.3 |
| | baz=253 | | | | | | |
| DUG | Dugway, Tooele | 90.76 | 49 | P | P | 14 40 38.5 | +0.3 |
| | baz=254 | | | | | | |
| INK | Inuvik | 90.92 | 19 | P | P | 14 40 39.2 | +1.2 |
| | baz=238 | | | | | | |
| MSO | Missoula | 91.80 | 42 | P | P | 14 40 42.7 | 0.0 |
| | baz=254 | | | | | | |
| 121A | Cookes Peak, D | 92.82 | 57 | P | P | 14 40 48.5 | +0.5 |
| | baz=257 | | | | | | |
| BOZ | Bozeman (W) | 93.01 | 44 | P | P | 14 40 48.4 | -0.1 |
| | baz=255 | | | | | | |
| PDAR | Pinedale Array | 93.78 | 47 | P | P | 14 40 51.5 | -0.6 |
| | comp=Z,0.2nm,0.5s,baz=245,slow=2.2,SNR=2.6 | | | | | | |
| PDAR | | | | pP | pP | 14 41 33.9 | -4.1 |
| | comp=Z,0.3nm,0.6s,baz=264,slow=4.5,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| S22A | 4UR Ranch, Cre | 94.71 | 53 | P | P | 14 40 57.1 | +0.5 |
| | baz=258 | | | | | | |
| TROLL | Troll, Antarti | 95.06 | 185 | ⇑P | P | 14 40 57.2 | -0.2 |
| | comp=Z,582nm,0.6s | | | | | | |
| MK31 | Makanchi Array | 95.24 | 317 | P | P | 14 40 58.5 | 0.0 |
| MKAR | Makanchi Array | 95.24 | 317 | P | P | 14 40 58.2 | -0.3 |
| MKAR | Makanchi Array | 95.24 | 317 | P | P | 14 40 58.4 | -0.1 |
| | comp=Z,9.6nm,0.6s,baz=92,slow=6.5,SNR=131 | | | | | | |
| MKAR | | | | PKKPbc | PKKPdf | 14 57 50.0 | -3.0 |
| | comp=Z,2.7nm,0.6s,baz=270,slow=3.6,SNR=34 | | | | | | |
| ZALV | Zalesovo Beam | 95.30 | 324 | P | P | 14 40 57.8 | -0.7 |
| | comp=Z,4.5nm,0.7s,baz=116,slow=4.3,SNR=18 | | | | | | |
| ZALV | | | | PKKPbc | PKKPdf | 14 57 50.1 | -3.0 |
| | comp=Z,1.4nm,0.4s,baz=297,slow=2.1,SNR=7.0 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 95.62 | 61 | P | P | 14 41 00.7 | -0.1 |
| | comp=Z,0.3nm,0.5s,baz=257,slow=5.0,SNR=4.9 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| YKA | Yellowknife Ar | 95.77 | 27 | P | P | 14 40 59.3 | -1.2 |
| | comp=Z,1.1nm,0.5s,baz=269,slow=4.6,SNR=4.2 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 98.42 | 320 | P | P | 14 41 11.4 | -1.3 |
| | comp=Z,0.8nm,0.5s,baz=94,slow=4.1,SNR=7.1 | | | | | | |
| KURBB | | | | PKKPbc | PKKPbc | 14 57 42.1 | -2.4 |
| | comp=Z,1.0nm,0.5s,baz=280,slow=2.8,SNR=8.1 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| SPITS | Spitsbergen Ar | 112.65 | 354 | PKiKP | PKiKP | 14 46 09.3 | -0.1 |
| | comp=Z,1.4nm,0.6s,baz=70,slow=5.5,SNR=5.1 | | | | | | |
| BJO1 | Bjornoya | 115.39 | 351 | *e*PKPdf | PKiKP | 14 46 12.9 | -1.8 |
| HAMF | Hammerfest | 117.56 | 347 | *e*PKPdf | PKPdf | 14 46 18.4 | -0.6 |
| ARCES | ARCESS Array B | 117.96 | 346 | PKP | PKPdf | 14 46 19.4 | -0.4 |
| | comp=Z,4.7nm,0.3s,baz=77,slow=2.0,SNR=87 | | | | | | |
| ARCES | | | | PKKPbc | PKKPbc | 14 56 39.4 | -3.8 |
| | comp=Z,1.6nm,0.7s,baz=174,slow=2.3,SNR=5.9 | | | | | | |
| LPAZ | La Paz | 118.65 | 116 | PKP | PKPdf | 14 46 22.9 | -0.6 |
| | comp=Z,1.9nm,0.7s,baz=280,slow=3.6,SNR=6.6 | | | | | | |
| KTK1 | Kautokeino | 118.89 | 346 | *e*PKPdf | PKPdf | 14 46 20.9 | -0.7 |
| TRO | Tromso | 119.37 | 348 | *e*PKPdf | PKPdf | 14 46 21.9 | -0.6 |
| JOF | Joensuu | 120.62 | 338 | *e*P | PKPdf | 14 46 23.0 | -2.1 |
| SCHQ | Schefferville | 120.68 | 33 | PKP | PKPdf | 14 46 25.0 | -0.5 |
| | comp=Z,3.1nm,0.5s,baz=272,slow=2.0,SNR=3.6 | | | | | | |
| STEI | Steigen | 121.54 | 348 | *e*PKPdf | PKPdf | 14 46 26.3 | -0.4 |
| LOF | Lofoten | 121.71 | 349 | *e*PKPdf | PKiKP | 14 46 27.4 | +0.2 |
| FAUS | Fauske | 121.99 | 347 | *e*PKPdf | PKPdf | 14 46 27.1 | -0.5 |
| CPUP | Villa Florida | 122.33 | 132 | PKP | PKPdf | 14 46 28.9 | -0.6 |
| | comp=Z,2.8nm,0.6s,baz=298,slow=2.7,SNR=7.9 | | | | | | |
| KBZ | Khabaz | 122.85 | 314 | PKP | PKiKP | 14 46 30.4 | +0.3 |
| | comp=Z,2.5nm,0.7s,baz=138,slow=2.3,SNR=6.7 | | | | | | |
| KONS | Konsvik | 123.20 | 348 | *e*PKPdf | PKPdf | 14 46 29.7 | -0.2 |
| STOK | Stokkvaagen | 123.36 | 348 | *e*PKPdf | PKPdf | 14 46 29.9 | -0.3 |
| KEF | Keuruu | 123.38 | 340 | *e*P | PKPdf | 14 46 29.2 | -1.2 |
| FINES | FINESS Array B | 123.46 | 339 | PKP | PKPdf | 14 46 30.1 | -0.5 |
| | comp=Z,3.0nm,0.6s,baz=65,slow=1.4,SNR=26 | | | | | | |
| FINES | | | | PKKPbc | PKKPab | 14 56 20.2 | +0.5 |
| | comp=Z,1.4nm,0.6s,baz=172,slow=3.9,SNR=9.5 | | | | | | |
| VAF | Ylistaro | 123.48 | 341 | *e*P | PKPdf | 14 46 30.4 | -0.1 |
| BOSA | Boshof | 124.75 | 222 | PKP | PKPdf | 14 46 34.1 | -0.2 |
| | comp=Z,1.4nm,0.5s,baz=174,slow=2.6,SNR=4.8 | | | | | | |
| ARBE | Arbavere | 124.83 | 337 | *e*P | PKPdf | 14 46 33.4 | +0.2 |
| SIV | San Ignacio | 124.87 | 120 | PKP | PKPdf | 14 46 33.8 | -0.8 |
| | comp=Z,3.3nm,0.7s,baz=226,slow=1.9,SNR=13 | | | | | | |
| MEF | Metsahovi | 124.90 | 338 | *e*P | PKPdf | 14 46 33.0 | -0.3 |
| NSS | Namsos | 125.14 | 347 | *e*PKPdf | PKPdf | 14 46 33.4 | -0.3 |
| MTSE | Matsula | 126.15 | 337 | *e*P | PKPdf | 14 46 35.9 | +0.1 |
| PABE | Paberze | 128.25 | 334 | *e*P | PKPdf | 14 46 37.7 | -2.2 |
| NB2 | NORSAR Subarra | 128.33 | 345 | PKPdf | PKPdf | 14 46 39.9 | -0.1 |
| | comp=Z,1.3nm,0.6s,baz=31,slow=1.9 | | | | | | |
| NOA | NORSAR Array B | 128.33 | 345 | PKP | PKPdf | 14 46 39.9 | -0.1 |
| | comp=Z,2.3nm,0.7s,baz=31,slow=2.0,SNR=12 | | | | | | |
| HFS | Hagfors | 128.44 | 343 | PKP | PKPdf | 14 46 39.6 | -0.5 |
| | comp=Z,2.4nm,0.6s,baz=93,slow=5.9,SNR=10 | | | | | | |
| NC602 | NORSAR Array S | 128.51 | 345 | *e*PKPdf | PKPdf | 14 46 40.4 | +0.1 |
| AKASG | Malin Array Be | 128.60 | 327 | PKP | PKPdf | 14 46 40.7 | 0.0 |
| | comp=Z,0.9nm,0.5s,baz=66,slow=2.2,SNR=5.2 | | | | | | |
| HYA | Hoyanger | 129.36 | 348 | *e*PKPdf | PKPdf | 14 46 41.8 | -0.1 |
| BRTR | Keskin Array B | 130.66 | 312 | PKP | PKPdf | 14 46 45.3 | +0.1 |
| | comp=Z,1.3nm,0.6s,baz=155,slow=4.5,SNR=6.9 | | | | | | |
| BLS5 | Blasjo | 130.89 | 347 | *e*PKPdf | PKiKP | 14 46 46.0 | +0.2 |
| MMAI | Mount Meron Ar | 131.20 | 303 | PKP | PKPdf | 14 46 46.3 | -0.1 |
| | comp=Z,1.5nm,0.5s,baz=58,slow=16,SNR=2.2 | | | | | | |
| SNART | Snartemo | 131.69 | 346 | *e*PKPdf | PKPdf | 14 46 45.2 | -1.1 |
| BDFB | Brasilia | 135.67 | 128 | PKP | PKPdf | 14 46 55.2 | 0.0 |
| | comp=Z,4.4nm,0.6s,baz=213,slow=3.2,SNR=7.0 | | | | | | |
| EKA | Eskdalemuir Ar | 136.52 | 352 | PKP | PKPdf | 14 46 55.4 | -0.1 |
| | comp=Z,1.3nm,0.4s,baz=7.9,slow=2.3,SNR=10 | | | | | | |
| RONA | Rosalia, Austr | 137.08 | 331 | *e*PKiKP | PKiKP | 14 46 59.3 | +0.5 |
| | comp=Z,3.5nm,0.7s | | | | | | |
| CONA | Conrad Observa | 137.12 | 331 | *i* PKP | PKPdf | 14 46 56.9 | -0.1 |
| | comp=Z,2.2nm,0.6s | | | | | | |
| GERES | GERESS Array B | 137.42 | 334 | PKP | PKiKP | 14 46 59.2 | -0.2 |
| | comp=Z,1.1nm,0.5s,baz=343,slow=1.0,SNR=5.9 | | | | | | |
| SOKA | Soboth | 138.41 | 331 | *i* PKP | PKPdf | 14 46 58.8 | -0.6 |
| SOKA | | | | *e*PKiKP | PKiKP | 14 47 01.4 | -0.2 |
| | comp=Z,3.9nm,0.9s | | | | | | |
| KBA | Koelnbreinsper | 138.91 | 332 | *e*PKiKP | PKiKP | 14 47 03.3 | +0.6 |
| | comp=Z,2.6nm,0.8s | | | | | | |
| LESA | Schwarzleotal | 138.95 | 333 | *e*PKiKP | PKiKP | 14 47 02.7 | +0.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,4.2nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **139.52** | **334** | *e*PKiKP | **PKiKP** | **14 47 04.1** | **+0.1** |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **ABTA** | **Abfaltersbach** | **139.53** | **333** | *e*PKP | **PKPdf** | **14 47 01.5** | **0.0** |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **139.69** | **334** | *e*PKiKP | **PKiKP** | **14 47 04.2** | **0.0** |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **SQTA** | **Sankt Quirin** | **139.74** | **334** | *e*PKiKP | **PKiKP** | **14 47 04.5** | **+0.2** |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **FETA** | **Feichten** | **140.10** | **334** | *e*PKiKP | **PKiKP** | **14 47 05.5** | **+0.4** |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **DAVA** | **Damuels** | **140.24** | **335** | *e*PKiKP | **PKiKP** | **14 47 05.4** | **+0.1** |
| | comp=Z,3.7nm,0.5s | | | | | | |
| **KEST** | **Kesra** | **149.15** | **322** | PKPbc | **PKiKP** | **14 47 23.5** | **-0.5** |
| | comp=Z,27nm,0.6s,baz=132,slow=0.5,SNR=40 | | | | | | |
| **PBRG** | **Braganca** | **150.23** | **350** | *e*PKPab | **PKPab** | **14 47 32.3** | **+0.5** |
| **PCAB** | **Cabril** | **150.52** | **352** | *e*PKPbc | **PKPbc** | **14 47 26.2** | **+0.3** |
| **POLO** | **Lamas de Olo** | **150.82** | **352** | *e*PKPbc | **PKiKP** | **14 47 27.1** | **-0.1** |
| **PVRL** | **Vila Real** | **150.90** | **351** | *e*PKPbc | **PKiKP** | **14 47 27.5** | **+0.2** |
| **PVIS** | **Viseu** | **151.48** | **351** | *e*PKPbc | **PKiKP** | **14 47 28.4** | **-0.1** |
| **ESDC** | **Sonseca Array** | **151.69** | **345** | PKP | **PKPdf** | **14 47 22.3** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=342,slow=3.1,SNR=2.0 | | | | | | |
| ESDC | | | | PKPbc | **PKiKP** | **14 47 29.1** | **+0.1** |
| | comp=Z,8.1nm,0.8s,baz=10,slow=2.6,SNR=50 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **14 47 38.5** | **+0.5** |
| | comp=Z,4.5nm,0.6s,baz=12,slow=3.9,SNR=12 | | | | | | |
| **MTE** | **Manteigas** | **151.73** | **351** | *e*PKPbc | **PKiKP** | **14 47 29.2** | **+0.1** |
| **PCAS** | **Casmilo, Conde** | **152.21** | **352** | *e*PKPbc | **PKPbc** | **14 47 29.8** | **0.0** |
| **PCBR** | **Castelo Branco** | **152.27** | **350** | *e*PKPbc | **PKiKP** | **14 47 30.3** | **+0.2** |
| **PMRV** | **Marv??o** | **152.66** | **350** | *e*PKPbc | **PKPbc** | **14 47 30.8** | **0.0** |
| **PMTG** | **Montargil** | **153.14** | **351** | *e*PKPbc | **PKPbc** | **14 47 31.8** | **0.0** |
| **PBAR** | **Barrancos** | **153.81** | **349** | *e*PKPab | **PKPab** | **14 47 47.6** | **+0.7** |
| **PBEJ** | **Beja** | **154.10** | **350** | *e*PKPab | **PKPab** | **14 47 49.2** | **+1.1** |
| **MESJ** | **Messejana** | **154.34** | **351** | *e*PKPab | **PKPab** | **14 47 50.5** | **+1.3** |
| **MORF** | **Marmelete** | **154.93** | **351** | *e*PKPab | **PKPab** | **14 47 53.1** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **165.43** | **274** | PKP | **PKPdf** | **14 47 38.7** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=76,slow=3.0,SNR=4.0 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **14 48 37.6** | **-0.7** |
| | comp=Z,4.9nm,0.9s,baz=71,slow=7.4,SNR=20 | | | | | | |

**KRSC 01 14:38:56.8**±0.9**, 54°.31N×162°.41E, h33**km±10km**, Ml3.5,**
**Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **0.47** | **302** | *e*P | Pn | 14 39 07.2 | +0.1 |
| MKZ | | | | *e*S | Sn | 14 39 14.7 | +0.5 |
| **TUMD** | **Tumrok D** | **1.47** | **308** | *e*P | Pb | 14 39 22.5 | -1.1 |
| TUMD | | | | *e*S | Sb | 14 39 40.7 | -1.1 |
| **TUMR** | **Tumrok** | **1.63** | **307** | *e*P | Pb | 14 39 25.0 | -1.3 |
| **KII** | **Karymskiy** | **1.76** | **262** | *e*P | Pb | 14 39 27.2 | -1.4 |
| KII | | | | *e*S | Sb | 14 39 49.4 | -0.9 |
| **SPN** | **Mys Shipunski** | **1.87** | **230** | *e*P | Pn | 14 39 27.9 | +1.5 |
| SPN | | | | *e*S | Sn | 14 39 50.7 | +1.9 |
| **BZGR** | **Bezymyannyi-Gr** | **1.90** | **330** | *e*P | Pn | 14 39 29.0 | +2.0 |
| **KMNR** | **Kamenistaya** | **1.91** | **320** | *e*P | Pb | 14 39 29.7 | -1.4 |
| **KBTR** | **Krutoberegovo** | **1.91** | **7** | *e*P | Pb | 14 39 29.1 | -1.9 |
| **BZP** | **Bezymyannyi-Pe** | **1.93** | **327** | *e*P | Pb | 14 39 29.7 | -1.7 |
| **BZMR** | **Bezymyannaya** | **1.96** | **327** | *e*P | Pb | 14 39 30.3 | -1.8 |
| **BZWR** | **Bezymyannyi-We** | **1.98** | **327** | *e*P | Pb | 14 39 30.4 | -2.0 |
| **CIRR** | **Tsirk** | **2.04** | **333** | *e*P | Pb | 14 39 31.4 | -1.9 |
| **KPT** | **Kopyto** | **2.08** | **324** | *e*P | Pb | 14 39 32.0 | -1.9 |
| **NLC** | **Nalytchevo** | **2.15** | **239** | *e*S | Sb | 14 39 58.6 | -2.7 |
| **KLY** | **Klyuchi** | **2.24** | **334** | *e*P | Pn | 14 39 32.8 | +1.3 |
| KLY | | | | *e*S | Sn | 14 40 00.2 | +2.2 |
| **KOZ** | **Kozyrevsk** | **2.27** | **321** | *e*P | Pb | 14 39 35.0 | -2.2 |
| **SMAR** | **Somma** | **2.39** | **245** | *e*P | Pb | 14 39 36.7 | -2.5 |
| SMAR | | | | *e*S | Sb | 14 40 05.6 | -2.8 |
| **KRER** | **Koryakskii** | **2.40** | **246** | *e*P | Pb | 14 39 37.0 | -2.4 |
| **UGLR** | **Uglovaya** | **2.40** | **244** | *e*P | Pn | 14 39 36.6 | +2.8 |
| **AVH** | **Avacha** | **2.42** | **246** | *e*P | Pb | 14 39 37.5 | -2.2 |
| **KRX** | **Arik** | **2.43** | **248** | *e*P | Pb | 14 39 37.1 | -2.8 |
| **KOK** | **Koryaka** | **2.46** | **247** | *e*P | Pn | 14 39 37.6 | +2.9 |
| **DALK** | **Dalny** | **2.53** | **241** | *e*P | Pn | 14 39 37.9 | +2.4 |
| **SRDR** | **Sredinnyy** | **2.53** | **324** | *e*P | Pn | 14 39 37.7 | +2.2 |
| **PET** | **Petropavlovsk** | **2.58** | **241** | *e*P | Pn | 14 39 38.7 | +2.5 |
| PET | | | | *e*S | Sn | 14 40 09.8 | +3.4 |
| **ESO** | **Esso** | **2.67** | **309** | *e*P | Pn | 14 39 39.8 | +2.3 |
| **GNL** | **Ganaly** | **2.71** | **259** | *e*P | Pb | 14 39 41.8 | -2.8 |
| **KRMR** | **Karymshinskiy** | **2.95** | **242** | *e*P | Pb | 14 39 45.1 | -3.6 |
| KRMR | | | | *e*S | Sn | 14 40 19.1 | +3.5 |
| **MTVR** | **Mutnovka** | **3.13** | **236** | *e*P | Pn | 14 39 46.6 | +2.7 |
| **GRL** | **Gorelyy** | **3.14** | **238** | *e*P | Pn | 14 39 47.5 | +3.5 |
| **ASAK** | **Asacha** | **3.32** | **236** | *e*P | Pb | 14 39 50.8 | -4.3 |

*TIR **01** 14:40:00.8, 38°.34N×20°.32E, h25km±2km, Ml2.4*
*THE **01** 14:40:04.0, 38°.42N×20°.49E, h10km, ML2.8/6, Error ellipse: s-maj=1.0km s-min=0.2km az=103.0*
*ATH **01** 14:40:04.2, 38°.43N×20°.45E, h6km±2km, ML2.5/15, Error ellipse: s-maj=2.1km s-min=0.7km az=115.0*
**ISC 01 14:40:04.0**±0.8**, 38°.43N**±0°.02×**20°.47E**±0°.03**, h10**km±5km**,**
**n35,** σ0s.**47**/61**, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FSK** | **Fiskardo** | **0.08** | **68** | P | **Pg** | **14 40 06.0** | **-0.4** |
| FSK | | | | S | **Sg** | **14 40 07.9** | **-0.3** |
| | 19µm,0.2s | | | | | | |
| **FSK** | **Fiskardo** | **0.08** | **68** | P | **Pg** | **14 40 06.2** | **-0.2** |
| FSK | | | | S | **Sg** | **14 40 08.1** | **-0.1** |
| FSK | | | | AML | AML | 14 40 08.2 | |
| | comp=E,54984µm,0.3s | | | | | | |
| FSK | | | | AML | AML | 14 40 08.5 | |
| | comp=N,16421µm,0.2s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.20** | **201** | P | **Pg** | **14 40 08.4** | **+0.1** |
| DMLN | | | | S | **Sg** | **14 40 11.5** | **+0.3** |
| **DMLN** | **Damoulianata-K** | **0.20** | **201** | P | **Pg** | **14 40 08.4** | **+0.1** |
| DMLN | | | | S | **Sg** | **14 40 11.7** | **+0.5** |
| **SMHA** | **Samh** | **0.23** | **141** | P | **Pg** | **14 40 08.5** | **-0.2** |
| SMHA | | | | S | **Sg** | **14 40 12.5** | **+0.6** |
| SMHA | | | | AML | AML | 14 40 12.5 | |
| | comp=N,10982µm,1.8s | | | | | | |
| SMHA | | | | AML | AML | 14 40 12.6 | |
| | comp=E,11392µm,0.3s | | | | | | |
| **LXRA** | **Lixouri, Kepha** | **0.23** | **185** | P | **Pg** | **14 40 09.0** | **+0.3** |
| LXRA | | | | S | **Sg** | **14 40 12.8** | **+0.9** |
| **EVGI** | **Lefkada island** | **0.24** | **38** | P | **Pg** | **14 40 08.9** | **-0.2** |
| EVGI | | | | S | **Sg** | **14 40 12.7** | **+0.3** |
| | comp=E,3µm,0.1s | | | | | | |
| **EVGI** | **Lefkada island** | **0.24** | **38** | P | **Pg** | **14 40 09.1** | **0.0** |
| EVGI | | | | S | **Sg** | **14 40 12.8** | **+0.3** |
| **VLS** | **Valsamata** | **0.27** | **158** | P | **Pg** | **14 40 09.3** | **-0.2** |
| VLS | | | | S | **Sg** | **14 40 13.2** | **+0.1** |
| | comp=E,3µm,0.1s | | | | | | |
| **VLS** | **Valsamata** | **0.27** | **158** | P | **Pg** | **14 40 09.3** | **-0.2** |
| VLS | | | | S | **Sg** | **14 40 13.5** | **+0.3** |
| VLS | | | | AML | AML | 14 40 13.9 | |
| | comp=N,4525µm,0.1s | | | | | | |
| VLS | | | | AML | AML | 14 40 13.9 | |
| | comp=E,7451µm,0.1s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.33** | **163** | P | **Pg** | **14 40 10.3** | **-0.2** |
| PSDA | | | | S | **Sg** | **14 40 15.0** | **+0.1** |
| | comp=E,4µm,0.2s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.33** | **163** | P | **Pg** | **14 40 10.4** | **-0.1** |
| PSDA | | | | S | **Sg** | **14 40 15.3** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **0.34** | **33** | P | **Pg** | **14 40 10.5** | **-0.3** |
| NYDR | | | | S | **Sg** | **14 40 15.7** | **+0.4** |
| | comp=E,1µm,0.2s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.34** | **33** | P | **Pg** | **14 40 10.5** | **-0.3** |
| NYDR | | | | S | **Sg** | **14 40 15.7** | **+0.4** |
| **LKD2** | **Lefkada island** | **0.39** | **23** | P | **Pg** | **14 40 11.5** | **-0.3** |
| | baz=30 | | | | | | |
| LKD2 | | | | S | **Sg** | **14 40 17.3** | **+0.3** |
| | baz=30 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=N,1.9nm,0.2s,baz=30 | | | | | | |
| **LKD2** | **Lefkada island** | **0.39** | **23** | P | **Pg** | **14 40 11.4** | **-0.3** |
| LKD2 | | | | S | **Sg** | **14 40 17.3** | **+0.3** |
| **LKD2** | **Lefkada island** | **0.39** | **23** | P | **Pg** | **14 40 11.5** | **-0.3** |
| LKD2 | | | | S | **Sg** | **14 40 17.6** | **+0.6** |
| **TSLK** | **Tsoukalades, L** | **0.42** | **21** | P | **Pg** | **14 40 12.2** | **-0.2** |
| TSLK | | | | S | **Sg** | **14 40 18.5** | **+0.5** |
| | comp=N,848nm,0.3s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.42** | **21** | P | **Pg** | **14 40 12.3** | **0.0** |
| TSLK | | | | S | **Sg** | **14 40 18.7** | **+0.7** |
| TSLK | | | | AML | AML | 14 40 19.7 | |
| | comp=N,1426µm,0.3s | | | | | | |
| TSLK | | | | AML | AML | 14 40 19.9 | |
| | comp=E,1856µm,0.2s | | | | | | |
| **LTHK** | **Lithakia** | **0.78** | **158** | P | **Pg** | **14 40 18.2** | **-0.7** |
| LTHK | | | | S | **Sb** | **14 40 30.0** | **-0.1** |
| LTHK | | | | AML | AML | 14 40 30.9 | |
| | comp=N,1487µm,0.3s | | | | | | |
| LTHK | | | | AML | AML | 14 40 32.6 | |
| | comp=E,830µm,0.2s | | | | | | |
| **PVO** | **Paravola** | **0.85** | **77** | P | **Pg** | **14 40 20.5** | **0.0** |
| **RLS** | **Riolos of Patr** | **0.87** | **115** | P | **Pg** | **14 40 20.1** | **-0.7** |
| RLS | | | | S | **Sb** | **14 40 33.7** | **+0.8** |
| RLS | | | | AML | AML | 14 40 34.8 | |
| | comp=E,145µm,0.3s | | | | | | |
| RLS | | | | AML | AML | 14 40 35.2 | |
| | comp=N,150µm,0.2s | | | | | | |
| **DRO** | **Drossia** | **1.09** | **115** | P | **Pg** | **14 40 24.3** | **-0.7** |
| DRO | | | | AML | AML | 14 40 45.5 | |
| | comp=E,596µm,0.3s | | | | | | |
| DRO | | | | AML | AML | 14 40 45.6 | |
| | comp=N,401µm,0.4s | | | | | | |
| **EFP** | **Efpalio** | **1.13** | **90** | P | **Pb** | **14 40 25.3** | **-0.3** |
| EFP | | | | S | **Sn** | **14 40 41.7** | **+0.3** |
| EFP | | | | AML | AML | 14 40 47.3 | |
| | comp=E,792µm,0.5s | | | | | | |
| EFP | | | | AML | AML | 14 40 47.3 | |
| | comp=N,429µm,0.4s | | | | | | |
| **EVR** | **Evrytania** | **1.16** | **65** | P | **Pb** | **14 40 26.3** | **+0.1** |
| EVR | | | | S | **Sn** | **14 40 42.8** | **+0.5** |
| EVR | | | | AML | AML | 14 40 49.9 | |
| | comp=E,181µm,0.7s | | | | | | |
| EVR | | | | AML | AML | 14 40 50.2 | |
| | comp=N,139µm,0.7s | | | | | | |
| **JAN** | **Janina** | **1.26** | **14** | P | **Pb** | **14 40 28.2** | **+0.2** |
| JAN | | | | AML | AML | 14 40 49.1 | |
| | comp=N,240µm,0.3s | | | | | | |
| JAN | | | | AML | AML | 14 40 50.7 | |
| | comp=E,237µm,0.4s | | | | | | |
| **KALE** | **Kalithea** | **1.32** | **91** | P | **Pn** | **14 40 27.7** | **-0.7** |
| KALE | | | | AML | AML | 14 40 51.9 | |
| | comp=E,369µm,0.5s | | | | | | |
| KALE | | | | AML | AML | 14 40 53.5 | |
| | comp=N,371µm,0.5s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **1.38** | **106** | P | **Pn** | **14 40 28.8** | **-0.5** |
| KLV | | | | AML | AML | 14 40 51.2 | |
| | comp=E,68µm,0.6s | | | | | | |
| KLV | | | | AML | AML | 14 40 55.5 | |
| | comp=N,101µm,0.6s | | | | | | |
| **KEK** | **Kerkira** | **1.38** | **338** | P | **Pn** | **14 40 29.0** | **-0.3** |
| KEK | | | | AML | AML | 14 40 54.7 | |
| | comp=E,146µm,0.2s | | | | | | |
| KEK | | | | AML | AML | 14 40 54.8 | |
| | comp=N,188µm,0.5s | | | | | | |
| **SRN** | **Sarande** | **1.50** | **346** | P | **Pn** | **14 40 30.4** | **-0.5** |
| | baz=351 | | | | | | |
| SRN | | | | S | **Sb** | **14 40 51.5** | **+0.6** |
| | baz=351 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,0.1nm,0.3s,baz=351 | | | | | | |
| **GUR** | **Goura** | **1.56** | **108** | P | **Pn** | **14 40 31.8** | **0.0** |
| GUR | | | | AML | AML | 14 40 58.9 | |
| | comp=E,251µm,0.3s | | | | | | |
| GUR | | | | AML | AML | 14 40 59.6 | |
| | comp=N,330µm,0.4s | | | | | | |
| **AGG** | **Agios Georgios** | **1.57** | **67** | P | **Pn** | **14 40 32.7** | **+0.7** |
| AGG | | | | AML | AML | 14 40 59.5 | |
| | comp=E,165µm,0.4s | | | | | | |
| AGG | | | | AML | AML | 14 41 01.2 | |
| | comp=N,229µm,0.4s | | | | | | |
| **SCTE** | **Santa Cesarea** | **2.26** | **317** | P | **Pn** | **14 40 39.9** | **-1.5** |
| | baz=321 | | | | | | |
| SCTE | | | | S | **Sn** | **14 41 08.6** | **-0.6** |
| | baz=321 | | | | | | |
| SCTE | | | | AMP | | | |
| | comp=E,0.1nm,0.3s,baz=321 | | | | | | |
| **FNA** | **Florina** | **2.46** | **16** | P | **Pn** | **14 40 44.8** | **+0.6** |
| | baz=18 | | | | | | |
| FNA | | | | S | **Sb** | **14 41 18.1** | **-0.5** |
| | baz=18 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.0nm,0.4s,baz=18 | | | | | | |
| **NOCI** | **Noci** | **3.53** | **313** | P | **Pn** | **14 40 58.9** | **+0.1** |
| | baz=316 | | | | | | |

*IDC **01** 14:51:20.1±3.5, 0°.48S×97°.17E, h0km, mb3.5/4, mbtmp3.4/5, ML3.5/1, Error ellipse: s-maj=145.5km s-min=24.6km az=58.0*
**ISC 01 14:51:23.3**±3.0**, 0°.5S**±0°.4×**97°.2E**±0°.7**, h21**km**, n9,** σ0s.**64**/6**,**
**mb3.6**/4**, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **18.89** | **5** | P | **P** | **14 55 42.4** | **-0.2** |
| | 0.1nm,0.3s,baz=194,slow=10,SNR=1.2 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.63** | **253** | T | T | 15 24 21.7 | |
| | baz=73 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.63** | **253** | T | T | 15 24 12.7 | |
| | baz=73 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.64** | **253** | T | T | 15 24 25.4 | |
| | baz=73 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.19** | **120** | P | **P** | **14 59 06.7** | **-0.1** |
| | 0.2nm,0.6s,baz=301,slow=9.0,SNR=1.4 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **42.42** | **126** | P | **P** | **14 59 16.9** | **0.0** |
| | 0.8nm,1.0s,baz=297,slow=7.4,SNR=4.2 | | | | | | |
| | 0.8nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.85** | **346** | P | **P** | **15 00 06.8** | **-0.6** |
| | 0.5nm,0.5s,baz=153,slow=8.2,SNR=5.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.19** | **351** | P | **P** | **15 00 55.3** | **+0.9** |
| | 0.5nm,0.5s,baz=152,slow=6.5,SNR=1.8 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **145.07** | **33** | PKPbc | **PKPbc** | **15 10 59.3** | **-0.2** |
| | 0.1nm,0.4s,baz=316,slow=2.5,SNR=1.3 | | | | | | |

*IDC **01** 15:02:44.2±1.4, 57°.45S×147°.69E, h0km, mb4.0/6, mbtmp4.1/6, MS3.8/11, Error ellipse: s-maj=76.2km s-min=17.6km az=84.0*
*NEIC **01** 15:02:45.8±1.3, 57°.5S±0°.1×147°.7E±0°.3, h10km±2km, mb4.5/20, Error ellipse: s-maj=28.7km s-min=16.9km az=63.0*
**ISC 01 15:02:45.7**±0.8**, 57°.48S**±0°.08×**147°.7E**±0°.2**, h10**km**, n47,**
σ0s.**85**/28**, mb4.4**/12**, MS3.7**/11**, West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CASY** | **Casey** | **19.29** | **228** | P | **Pn** | **15 07 11.2** | **-0.2** |
| **TOO** | **Toolangi** | **19.97** | **355** | P | **P** | **15 07 18.5** | **+0.6** |
| TOO | | | | IAmb | IAmb | 15 07 26.5 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **20.11** | **57** | LR | LR | 15 13 59.1 | |
| | comp=Z,190nm,18.4s,baz=218,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **20.72** | **171** | P | **P** | **15 07 25.3** | **-0.5** |
| VNDA | | | | IAmb | IAmb | 15 07 30.2 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **20.72** | **171** | P | **P** | **15 07 25.8** | **0.0** |
| | comp=Z,6.6nm,1.0s,baz=341,slow=12,SNR=18 | | | | | | |
| VNDA | | | | LR | LR | 15 14 43.7 | |
| | comp=Z,183nm,18.5s,baz=348,slow=35 | | | | | | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **21.48** | **169** | P | **P** | **15 07 32.4** | **-1.5** |
| SBA | | | | IAmb | IAmb | 15 07 36.5 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **25.91** | **337** | P | **P** | **15 08 15.7** | **-2.1** |
| BBOO | | | | IAmb | IAmb | 15 08 45.1 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **25.94** | **348** | P | **P** | **15 08 18.6** | **+0.5** |
| **STKA** | **Stephens Creek** | **25.94** | **348** | P | **P** | **15 08 18.6** | **+0.6** |
| | comp=Z,2.9nm,0.6s,baz=166,slow=10.0,SNR=5.6 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **URZ** | **Urewera** | **27.22** | **58** | LR | LR | 15 17 46.5 | |
| | comp=Z,227nm,21.1s,baz=290,slow=33 | | | | | | |
| **FORT** | **Forrest** | **29.95** | **325** | P | **P** | **15 08 53.7** | **-0.1** |
| **H01W1** | **Cape Leeuwin H** | **31.85** | **301** | T | T | 15 42 48.9 | |
| | baz=144,slow=76,SNR=39 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **31.85** | **301** | T | T | 15 42 49.2 | |
| | baz=144,slow=76,SNR=53 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **31.86** | **301** | T | T | 15 42 50.5 | |
| | baz=144,slow=76,SNR=39 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **32.11** | **307** | LR | LR | 15 18 57.4 | |
| | comp=Z,160nm,21.6s,baz=172,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.62** | **180** | P | **P** | **15 09 17.8** | **+0.4** |
| QSPA | | | | IAmb | IAmb | 15 09 19.5 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **32.62** | **180** | P | **P** | **15 09 18.0** | **+0.7** |
| | comp=Z,3.1nm,1.0s,baz=354,slow=1.1,SNR=7.5 | | | | | | |
| QSPA | | | | LR | LR | 15 22 52.8 | |
| | comp=Z,207nm,19.2s,baz=20,slow=37 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **35.22** | **338** | P | **P** | **15 09 39.8** | **-0.2** |
| | comp=Z,1.2nm,0.8s,baz=158,slow=8.2,SNR=22 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 12 11.4** | **+0.6** |
| | comp=Z,0.5nm,0.9s,baz=151,slow=4.0,SNR=2.1 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **35.22** | **338** | P | **P** | **15 09 39.8** | **-0.3** |
| **MAW** | **Mawson** | **37.24** | **219** | P | **P** | **15 09 57.4** | **+0.6** |
| | comp=Z,1.4nm,0.7s,baz=129,slow=12,SNR=4.4 | | | | | | |
| MAW | | | | LR | LR | 15 24 08.4 | |
| | comp=Z,231nm,20.9s,baz=110,slow=34 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **37.35** | **358** | LR | LR | 15 23 56.0 | |
| | comp=Z,20nm,18.4s,baz=176,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **37.93** | **29** | LR | LR | 15 21 33.7 | |
| | comp=Z,197nm,20.8s,baz=217,slow=30 | | | | | | |
| **WR0** | **Warramunga Arr** | **38.70** | **340** | P | **P** | **15 10 07.7** | **-2.0** |
| WR0 | | | | IAmb | IAmb | 15 10 15.5 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **38.75** | **340** | P | **P** | **15 10 09.7** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 15 10 38.9 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **38.75** | **340** | P | **P** | **15 10 09.8** | **-0.3** |
| **WRA** | **Warramunga Arr** | **38.75** | **340** | P | **P** | **15 10 09.7** | **-0.4** |
| | comp=Z,3.2nm,0.8s,baz=168,slow=7.7,SNR=40 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **38.76** | **340** | P | **P** | **15 10 10.1** | **0.0** |
| **KOUNC** | **Koumac, New Ca** | **38.85** | **25** | P | **P** | **15 10 11.4** | **+0.5** |
| **WB0** | **Warramunga Arr** | **38.91** | **340** | P | **P** | **15 10 10.8** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 15 10 16.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **41.63** | **319** | P | **P** | **15 10 34.4** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **42.60** | **328** | P | **P** | **15 10 41.6** | **-0.2** |
| **COEN** | **Coen** | **43.57** | **354** | P | **P** | **15 10 49.9** | **+0.2** |
| COEN | | | | IAmb | IAmb | 15 10 55.8 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **44.09** | **333** | P | **P** | **15 10 53.4** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 15 11 04.8 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **MTN** | **Manton Dam** | **46.30** | **337** | P | **P** | **15 11 11.2** | **-0.2** |
| **PMG** | **Port Moresby** | **47.96** | **359** | LR | LR | 15 29 34.3 | |
| | comp=Z,134nm,18.7s,baz=182,slow=34 | | | | | | |
| **HNR** | **Honiara** | **48.87** | **16** | LR | LR | 15 27 18.3 | |
| | comp=Z,1µm,21.1s,baz=176,slow=30 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **54.91** | **237** | T | T | 16 12 29.6 | |
| | baz=139,slow=75,SNR=14 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **54.91** | **237** | T | T | 16 12 27.9 | |
| | baz=139,slow=75,SNR=18 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **54.93** | **237** | T | T | 16 12 23.2 | |
| | baz=139,slow=75,SNR=18 | | | | | | |
| **PMSA** | **Palmer Station** | **55.71** | **164** | LR | LR | 15 33 50.0 | |
| | comp=Z,53nm,18.6s,baz=190,slow=34 | | | | | | |
| **H08S2** | **Diego Garcia H** | **75.62** | **278** | T | T | 16 37 31.5 | |
| | baz=146,slow=76,SNR=36 | | | | | | |
| **H08S1** | **Diego Carcia H** | **75.64** | **278** | T | T | 16 37 32.8 | |
| | baz=146,slow=76,SNR=46 | | | | | | |
| **H08S3** | **Diego Garcia H** | **75.64** | **278** | T | T | 16 37 31.1 | |
| | baz=146,slow=76,SNR=48 | | | | | | |
| **H03S2** | **Juan Fernandez** | **80.94** | **142** | T | T | 16 44 50.3 | |
| | baz=201,slow=74,SNR=20 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.94** | **142** | T | T | 16 44 51.6 | |
| | baz=201,slow=74,SNR=20 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.96** | **142** | T | T | 16 45 03.5 | |
| | baz=201,slow=74,SNR=25 | | | | | | |
| **FINES** | **FINESS Array B** | **150.93** | **303** | PKPbc | **PKPbc** | **15 22 35.3** | **-1.7** |
| | comp=Z,1.3nm,0.6s,baz=137,slow=3.9,SNR=5.9 | | | | | | |

*IDC **01** 15:16:36.4±1.8, 29°.93S×178°.39W, h89km±31km, mb3.4/4, mbtmp3.7/4, MS2.7/1, Error ellipse: s-maj=58.6km s-min=35.6km az=25.0*
**ISC 01 15:16:36.8**±1.1**, 29°.8S**±0°.2×**178°.3W**±0°.2**, h100**km**, n10,**
σ**1s.14**/7**, mb3.8**/4**, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.65** | **33** | P | **Pn** | **15 16 52.4** | **-1.4** |
| | 469nm,0.3s,baz=270,slow=20,SNR=2.6 | | | | | | |
| RAO | | | | S | **Sn** | **15 17 08.2** | **+1.7** |
| | 374nm,0.3s,baz=246,slow=20,SNR=1.6 | | | | | | |
| **RPZ** | **Rata Peaks** | **16.27** | **208** | LR | LR | 15 25 38.4 | |
| | comp=Z,29nm,20.4s,baz=129,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **34.34** | **256** | P | **P** | **15 23 14.2** | **+0.2** |
| | 2.8nm,0.9s,baz=97,slow=17,SNR=3.3 | | | | | | |
| | 2.8nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **42.86** | **266** | P | **P** | **15 24 25.1** | **-0.3** |
| | 0.3nm,0.6s,baz=106,slow=7.3,SNR=7.6 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.80** | **272** | P | **P** | **15 24 33.3** | **+0.3** |
| | 0.4nm,0.5s,baz=111,slow=8.0,SNR=13 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.31** | **180** | P | **P** | **15 26 35.1** | **+0.3** |
| | 1.4nm,1.0s,baz=18,slow=6.0,SNR=2.4 | | | | | | |
| | 1.4nm,1.0s | | | | | | |
| **H03S2** | **Juan Fernandez** | **81.03** | **124** | T | T | 16 57 44.1 | |
| | baz=238,slow=74,SNR=9.9 | | | | | | |
| **H03S1** | **Juan Fernandez** | **81.04** | **124** | T | T | 16 57 45.1 | |
| | baz=238,slow=74,SNR=13 | | | | | | |
| **H03S3** | **Juan Fernandez** | **81.05** | **124** | T | T | 16 57 44.0 | |
| | baz=238,slow=74,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **144.49** | **340** | PKP | **PKPdf** | **15 36 00.8** | **0.0** |
| | 0.7nm,0.4s,baz=58,slow=3.4,SNR=10 | | | | | | |

*NEIC **01** 15:22:25.2±1.8, 55°.98N±0°.07×149°.3W±0°.1, h10km±2km, ML3.7/52, ML3.5(AEIC), Error ellipse: s-maj=12.2km s-min=10.0km az=175.0*
*AEIC **01** 15:22:30.8±1.8, 56°.02N±0°.08×149°.4W±0°.1, h12km±7km, Error ellipse: s-maj=12.0km s-min=8.7km az=157.0*
**ISC 01 15:22:25.1**±1.2**, 56°.1N**±0°.1×**149°.37W**±0°.07**, h10**km**, n225,**
σ**1s.19**/229**, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.46** | **300** | P | **Pn** | **15 23 05.9** | **+0.6** |
| **OHAK** | **Old Harbor** | **2.46** | **300** | Pn | **Pn** | **15 23 05.8** | **+0.5** |
| OHAK | | | | | **Sn** | **15 23 33.2** | **-2.2** |
| OHAK | | | | IAML | | 15 23 34.5 | |
| | comp=N,220nm,0.2s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.48** | **316** | Pn | **Pn** | **15 23 06.1** | **+0.7** |
| KDAK | | | | Sn | **Sn** | **15 23 33.5** | **-2.2** |
| **SII** | **Sitkinak Islan** | **2.73** | **283** | P | **Pn** | **15 23 09.7** | **+0.7** |
| **SII** | **Sitkinak Islan** | **2.73** | **283** | Pn | **Pn** | **15 23 09.6** | **+0.6** |
| SII | | | | IAML | | 15 23 48.1 | |
| | comp=E,234nm,0.3s | | | | | | |
| **SYI** | **Shuyak Island** | **3.05** | **329** | Pn | **Pn** | **15 23 13.8** | **+0.5** |
| SYI | | | | IAML | | 15 23 51.0 | |
| | comp=N,129nm,0.2s | | | | | | |
| SYI | | | | IAML | | 15 23 51.1 | |
| | comp=E,155nm,0.4s | | | | | | |
| **R18K** | **Karluk** | **3.18** | **301** | Pn | **Pn** | **15 23 15.7** | **+0.6** |
| R18K | | | | Sn | **Sn** | **15 23 51.1** | **-2.0** |
| R18K | | | | IAML | | 15 23 52.9 | |
| | comp=N,225nm,0.4s | | | | | | |
| R18K | | | | IAML | | 15 23 53.4 | |
| | comp=E,220nm,0.4s | | | | | | |
| **CHIR** | **Chirikof Islan** | **3.52** | **269** | Pn | **Pn** | **15 23 20.2** | **+0.4** |
| CHIR | | | | Sn | **Sn** | **15 23 58.5** | **-3.1** |
| CHIR | | | | IAML | | 15 24 00.1 | |
| | comp=N,102nm,0.5s | | | | | | |
| CHIR | | | | IAML | | 15 24 00.6 | |
| | comp=E,98nm,0.3s | | | | | | |
| **CNPM** | **China Poot** | **3.63** | **345** | Pn | **Pn** | **15 23 21.4** | **+0.1** |
| CNPM | | | | IAML | | 15 24 04.4 | |
| | comp=N,96nm,0.5s | | | | | | |
| CNPM | | | | IAML | | 15 24 06.1 | |
| | comp=E,80nm,0.4s | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.70** | **323** | Pn | **Pn** | **15 23 24.1** | **+1.8** |
| **KAPH** | **Katmai Pasha** | **3.71** | **316** | | **Pn** | **15 23 24.6** | **+2.0** |
| **KAHG** | **Katmai Hook Gl** | **3.73** | **313** | | **Pn** | **15 23 25.0** | **+2.2** |
| **Q23K** | **Middleton Isla** | **3.76** | **24** | Pn | **Pn** | **15 23 22.7** | **-0.3** |
| Q23K | | | | IAML | | 15 24 04.5 | |
| | comp=E,146nm,1.4s | | | | | | |
| Q23K | | | | IAML | | 15 24 35.0 | |
| | comp=N,136nm,1.4s | | | | | | |
| **MID** | **Middleton Isla** | **3.76** | **24** | P | **Pn** | **15 23 22.9** | **-0.2** |
| **MID** | **Middleton Isla** | **3.76** | **24** | Pn | **Pn** | **15 23 22.4** | **-0.6** |
| MID | | | | IAML | | 15 24 04.5 | |
| | comp=E,134nm,1.4s | | | | | | |
| MID | | | | IAML | | 15 24 35.0 | |
| | comp=N,137nm,1.4s | | | | | | |
| **BRSE** | **Bradley Lake S** | **3.78** | **349** | | **Pn** | **15 23 23.5** | **+0.1** |
| **BRLK** | **Bradley Lake** | **3.81** | **348** | Pn | **Pn** | **15 23 23.8** | **0.0** |
| BRLK | | | | IAML | | 15 24 09.2 | |
| | comp=E,88nm,0.2s | | | | | | |
| **KCE** | **Katmai Mt Cerb** | **3.85** | **307** | | **Pn** | **15 23 26.7** | **+2.2** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| ACHA | Angle Creek He | 3.90 | 306 | Pn | Pn | 15 23 26.8 | +1.7 |
| KABU | Katmai Buttres | 3.91 | 307 | | Pn | 15 23 27.7 | +2.4 |
| AU22 | Augustine Moun | 3.96 | 329 | | Pn | 15 23 28.4 | +2.6 |
| ANCK | Angle Creek | 3.97 | 305 | | Pn | 15 23 28.1 | +2.0 |
| AUCH | Augustine Cone | 3.98 | 328 | | Pn | 15 23 28.2 | +2.0 |
| KVTA | Katmai Vly 10 | 3.98 | 308 | | Pn | 15 23 28.4 | +2.2 |
| KAHC | Katmai Hardscr | 4.01 | 313 | | Pn | 15 23 28.6 | +1.9 |
| KAHC | Katmai Hardscr | 4.01 | 313 | | Pn | 15 23 28.6 | +1.9 |
| SEW | Seward | 4.07 | 359 | Pn | Pn | 15 23 26.8 | -0.5 |
| P23K | Montague Islan | 4.10 | 14 | | Pn | 15 23 27.7 | 0.0 |
| PLK3 | Peulik 3 | 4.13 | 296 | | Pn | 15 23 30.0 | +1.8 |
| PLK4 | Peulik 4 | 4.15 | 295 | Pn | Pn | 15 23 29.6 | +1.0 |
| PLK4 | | | | IAML | | 15 24 21.0 | |
| | comp=E,85nm,0.7s | | | | | | |
| P19K | Oil Pt | 4.16 | 332 | Pn | Pn | 15 23 28.9 | +0.3 |
| PLK2 | Peulik 2 | 4.18 | 297 | | Pn | 15 23 30.8 | +1.9 |
| CNTC | Contact Creek | 4.18 | 305 | | Pn | 15 23 30.7 | +1.6 |
| PLK1 | Peulik 1 | 4.34 | 297 | | Pn | 15 23 32.9 | +1.9 |
| O20K | Slope Mountain | 4.40 | 338 | | Pn | 15 23 33.0 | +1.0 |
| PLBL | Peulik Blue Cr | 4.41 | 295 | | Pn | 15 23 34.2 | +2.2 |
| O22K | Cooper Landing | 4.45 | 358 | Pn | Pn | 15 23 32.6 | +0.1 |
| SLKM | Skilak Lake | 4.50 | 355 | | Pn | 15 23 33.2 | 0.0 |
| PLK5 | Peulik 5 | 4.54 | 299 | | Pn | 15 23 36.0 | +2.2 |
| P18K | Big Mountain, | 4.59 | 319 | Pn | Pn | 15 23 35.0 | +0.4 |
| HIN | Hinchinbrook I | 4.62 | 18 | Pn | Pn | 15 23 34.9 | -0.1 |
| HIN | | | | IAML | | 15 24 27.4 | |
| | comp=N,75nm,0.4s | | | | | | |
| HIN | | | | IAML | | 15 24 28.0 | |
| | comp=E,53nm,0.4s | | | | | | |
| KAIM | Kayak Island | 4.70 | 32 | Pn | Pn | 15 23 36.5 | +0.5 |
| KAIM | | | | IAML | | 15 24 29.6 | |
| | comp=E,70nm,1.4s | | | | | | |
| KAIM | | | | IAML | | 15 24 29.8 | |
| | comp=N,95nm,0.9s | | | | | | |
| RED | Redoubt Volcan | 4.74 | 339 | | Pn | 15 23 37.5 | +0.9 |
| RSO | Redoubt South | 4.77 | 339 | Pn | Pn | 15 23 36.9 | -0.3 |
| RDT | Redoubt | 4.81 | 342 | | Pn | 15 23 38.3 | +0.7 |
| PWL | Port Wells | 4.86 | 6 | Pn | Pn | 15 23 38.0 | -0.1 |
| PWL | | | | IAML | | 15 24 36.0 | |
| | comp=N,61nm,0.7s | | | | | | |
| ANNE | Aniakchak Nort | 4.89 | 284 | | Pn | 15 23 39.7 | +1.0 |
| EYAK | Cordova Ski Ar | 4.90 | 21 | P | Pn | 15 23 39.5 | +0.8 |
| EYAK | Cordova Ski Ar | 4.90 | 21 | Pn | Pn | 15 23 38.9 | +0.2 |
| O18K | Koktuh Hills | 4.92 | 323 | Pn | Pn | 15 23 39.6 | +0.6 |
| P17K | Kvichak River | 4.94 | 313 | | Pn | 15 23 41.0 | +1.7 |
| GLI | Glacier Island | 4.99 | 13 | Pn | Pn | 15 23 39.9 | -0.1 |
| GLI | | | | IAML | | 15 24 37.5 | |
| | comp=E,34nm,0.6s | | | | | | |
| RAGM | Ragged Mountai | 5.01 | 28 | Pn | Pn | 15 23 40.0 | -0.3 |
| SUCK | Suckling Hills | 5.01 | 34 | Pn | Pn | 15 23 40.6 | +0.3 |
| SUCK | | | | IAML | | 15 24 36.8 | |
| | comp=E,42nm,0.6s | | | | | | |
| CHGN | Chignik | 5.06 | 277 | Pn | Pn | 15 23 41.5 | +0.6 |
| CHGN | | | | IAML | | 15 24 40.2 | |
| | comp=N,44nm,0.1s | | | | | | |
| RC01 | Rabbit Creek A | 5.06 | 358 | Pn | Pn | 15 23 41.0 | +0.1 |
| RC01 | | | | IAML | | 15 24 37.8 | |
| | comp=E,70nm,0.4s | | | | | | |
| RC01 | | | | IAML | | 15 24 39.2 | |
| | comp=N,58nm,0.5s | | | | | | |
| HMT | Hamilton | 5.08 | 30 | Pn | Pn | 15 23 41.3 | 0.0 |
| NICHA | Nichawak Mount | 5.08 | 32 | | Pn | 15 23 41.9 | +0.6 |
| GOAT | Goat Mountain | 5.16 | 26 | | Pn | 15 23 43.0 | +0.5 |
| BGLC | Bering Glacier | 5.21 | 36 | | Pn | 15 23 43.6 | +0.7 |
| GRIN | Grindle Hills | 5.32 | 35 | | Pn | 15 23 44.4 | -0.2 |
| SPU | Mount Spurr | 5.34 | 346 | Pn | Pn | 15 23 44.6 | -0.2 |
| SNH | Sunshine Point | 5.40 | 37 | Pn | Pn | 15 23 45.8 | +0.1 |
| DIV | Divide | 5.43 | 19 | Pn | Pn | 15 23 45.6 | -0.6 |
| KHIT | Khitrov Hills | 5.46 | 34 | | Pn | 15 23 46.9 | +0.3 |
| SUA | Susitna One | 5.48 | 353 | Pn | Pn | 15 23 46.1 | -0.7 |
| N19K | Bonanza Creek | 5.48 | 333 | Pn | Pn | 15 23 46.8 | -0.1 |
| P16K | Nushagak River | 5.52 | 306 | | Pn | 15 23 49.0 | +1.7 |
| BMRM | Bremner River | 5.53 | 25 | Pn | Pn | 15 23 47.0 | -0.4 |
| O17K | Koliganek Bris | 5.56 | 315 | | Pn | 15 23 49.0 | +1.3 |
| PMR | Palmer | 5.56 | 1 | P | Pn | 15 23 49.4 | +1.6 |
| PMR | Palmer | 5.56 | 1 | Pn | Pn | 15 23 48.6 | +0.8 |
| WAX | Waxell Ridge | 5.60 | 35 | Pn | Pn | 15 23 48.6 | +0.2 |
| STLK | Strandline Lak | 5.62 | 348 | | Pn | 15 23 49.3 | +0.7 |
| BARK | Barkley Ridge | 5.68 | 37 | | Pn | 15 23 50.2 | +0.7 |
| MESA | MESA | 5.71 | 40 | Pn | Pn | 15 23 50.6 | +0.5 |
| CRQM | Cirque | 5.75 | 32 | Pn | Pn | 15 23 50.4 | -0.1 |
| GHO | Glory Hole Cre | 5.75 | 2 | Pn | Pn | 15 23 51.3 | +0.8 |
| KLU | Klutina | 5.75 | 17 | Pn | Pn | 15 23 50.8 | +0.3 |
| N18K | Kilae Creek | 5.77 | 326 | Pn | Pn | 15 23 51.2 | +0.4 |
| SML | Sawmill | 5.80 | 5 | Pn | Pn | 15 23 51.6 | +0.4 |
| M23K | Glacier View | 5.83 | 8 | | Pn | 15 23 52.1 | +0.6 |
| TGL | Tana Glacier | 5.84 | 33 | Pn | Pn | 15 23 51.7 | 0.0 |
| O16K | Kokwok River B | 5.86 | 311 | Pn | Pn | 15 23 53.5 | +1.6 |
| ISLE | Juniper Island | 5.88 | 36 | Pn | Pn | 15 23 52.8 | +0.5 |
| BAGL | Bagley Icefiel | 5.88 | 38 | | Pn | 15 23 52.7 | +0.5 |
| SCM | Sheep Creek Mo | 5.90 | 9 | Pn | Pn | 15 23 53.9 | +1.3 |
| CNBA | Chernabura Isl | 5.95 | 262 | Pn | Pn | 15 23 53.4 | +0.3 |
| RKAV | Rock Avalanche | 6.02 | 42 | | Pn | 15 23 55.2 | +1.0 |
| VRDI | Verde Repeater | 6.04 | 28 | Pn | Pn | 15 23 54.9 | +0.3 |
| SKT | Skwentna | 6.05 | 350 | Pn | Pn | 15 23 55.9 | +1.3 |
| N17K | Nushagak Hills | 6.09 | 321 | Pn | Pn | 15 23 56.2 | +1.1 |
| N25K | Chitina, Valde | 6.10 | 22 | Pn | Pn | 15 23 55.2 | -0.1 |
| KIAG | Kiagna River | 6.12 | 34 | | Pn | 15 23 56.0 | +0.4 |
| SAMH | Samovar Hills | 6.12 | 45 | | Pn | 15 23 56.5 | +0.9 |
| GLB | Gilahina Butte | 6.13 | 26 | Pn | Pn | 15 23 55.9 | +0.2 |
| M20K | Styx River | 6.17 | 343 | Pn | Pn | 15 23 57.4 | +1.2 |
| GRNC | Granite Creek | 6.17 | 37 | Pn | Pn | 15 23 56.4 | 0.0 |
| TABL | Table Mountain | 6.18 | 41 | Pn | Pn | 15 23 57.1 | +0.5 |
| BALM | Baldy | 6.21 | 33 | | Pn | 15 23 57.1 | +0.3 |
| MCARA | McCarthy VSAT | 6.29 | 29 | Pn | Pn | 15 23 58.9 | +1.1 |
| PTPK | Patty Peak | 6.29 | 32 | | Pn | 15 23 58.9 | +0.9 |
| M24K | Tolsona, Glenn | 6.30 | 14 | Pn | Pn | 15 23 58.2 | +0.2 |
| PCA | Pinnacle | 6.31 | 46 | Pn | Pn | 15 23 58.3 | +0.1 |
| SDPT | Sand Point | 6.32 | 268 | P | Pn | 15 23 59.3 | +1.1 |
| SDPT | Sand Point | 6.32 | 268 | Pn | Pn | 15 23 59.1 | +0.9 |
| M18K | Stony River | 6.41 | 331 | | Pn | 15 23 59.8 | +0.4 |
| M19K | Big River Lodg | 6.42 | 338 | Pn | Pn | 15 23 59.5 | -0.1 |
| O15K | Ungalikthiuk R | 6.43 | 303 | | Pn | 15 24 01.6 | +1.9 |
| PNL | Peninsula | 6.44 | 52 | P | Pn | 15 24 00.8 | +0.9 |
| PNL | Peninsula | 6.44 | 52 | | Pn | 15 24 00.5 | +0.6 |
| WASW | Wrangell South | 6.48 | 22 | | Pn | 15 24 01.9 | +1.3 |
| CTGM | Chitina Glacie | 6.48 | 37 | Pn | Pn | 15 24 01.0 | +0.4 |
| BCPM | Bancas Point | 6.49 | 49 | Pn | Pn | 15 24 01.1 | +0.5 |
| LOGN | Logan Glacier | 6.50 | 39 | Pn | Pn | 15 24 01.0 | +0.2 |
| WACK | Wrangell Chich | 6.50 | 22 | | Pn | 15 24 01.9 | +1.0 |
| WAT6 | Susitna Watana | 6.61 | 7 | | Pn | 15 24 03.1 | +0.8 |
| N16K | Nishlik Lake | 6.65 | 316 | | Pn | 15 24 04.2 | +1.5 |
| HARP | HAARP | 6.73 | 17 | | Pn | 15 24 05.3 | +1.5 |
| O28M | Mount Upton | 6.76 | 42 | | Pn | 15 24 05.4 | +0.9 |
| L19K | White Mountain | 6.77 | 338 | Pn | Pn | 15 24 04.2 | -0.1 |
| M17K | Holitna River | 6.81 | 325 | Pn | Pn | 15 24 05.2 | +0.2 |
| WAT7 | Susitna Watana | 6.81 | 2 | | Pn | 15 24 06.3 | +1.2 |
| PS1A | Pavlof South-1 | 7.01 | 270 | | Pn | 15 24 09.1 | +1.3 |
| N15K | Kwethluk River | 7.02 | 310 | Pn | Pn | 15 24 09.6 | +1.7 |
| PVV | Pavlof Volcano | 7.05 | 270 | | Pn | 15 24 09.3 | +1.1 |
| M16K | Timber Creek | 7.07 | 319 | Pn | Pn | 15 24 10.0 | +1.5 |
| PS4A | Pavlof South-4 | 7.09 | 269 | | Pn | 15 24 09.8 | +0.9 |
| DHY | Denali Highway | 7.12 | 7 | Pn | Pn | 15 24 09.9 | +0.5 |
| O29M | Mount Kennedy | 7.12 | 49 | Pn | Pn | 15 24 07.3 | -2.0 |
| HAG | Hague Volcano | 7.12 | 269 | | Pn | 15 24 10.3 | +1.0 |
| O14K | Tigyukauivet M | 7.14 | 302 | Pn | Pn | 15 24 11.3 | +1.8 |
| S12K | Black Hills | 7.15 | 272 | Pn | Pn | 15 24 10.2 | +0.6 |
| PN7A | Pavlof North-7 | 7.16 | 270 | | Pn | 15 24 11.5 | +1.7 |
| M26K | Nabesna, AK | 7.16 | 25 | Pn | Pn | 15 24 10.2 | +0.4 |
| P29M | Windy Craggy | 7.17 | 55 | Pn | Pn | 15 24 10.2 | +0.2 |
| PAX | Paxson | 7.22 | 14 | Pn | Pn | 15 24 11.3 | +0.7 |
| L18K | Granite Mounta | 7.24 | 332 | Pn | Pn | 15 24 11.6 | +0.8 |
| YUK2 | White River | 7.25 | 34 | | Pn | 15 24 13.1 | +2.0 |
| YUK8 | Steele Glacier | 7.25 | 40 | | Pn | 15 24 13.6 | +2.3 |
| RND | Reindeer | 7.39 | 2 | Pn | Pn | 15 24 13.1 | +0.2 |
| M27K | Edge Creek, AK | 7.40 | 28 | Pn | Pn | 15 24 14.3 | +1.1 |
| S31K | Pelican | 7.43 | 70 | Pn | Pn | 15 24 11.2 | -2.2 |
| YUK7 | Dusty Glacier | 7.43 | 48 | | Pn | 15 24 15.1 | +1.4 |
| MENT | Mentasta | 7.48 | 20 | Pn | Pn | 15 24 14.9 | +0.7 |
| M15K | Kasigluk River | 7.55 | 313 | | Pn | 15 24 17.3 | +2.2 |
| YUK6 | Outpost Mounta | 7.57 | 45 | | Pn | 15 24 17.2 | +1.7 |
| L17K | Donlin | 7.63 | 327 | | Pn | 15 24 18.1 | +1.8 |
| K20K | Telida | 7.71 | 344 | Pn | Pn | 15 24 19.1 | +1.8 |
| L16K | Owhat River | 7.72 | 322 | Pn | Pn | 15 24 17.3 | 0.0 |
| P30M | Million Dollar | 7.74 | 53 | Pn | Pn | 15 24 18.2 | +0.5 |
| R31K | City Hall, Gus | 7.77 | 67 | | Pn | 15 24 19.2 | +1.2 |
| SIT | Sitka | 7.83 | 77 | P | Pn | 15 24 16.6 | -2.3 |
| SIT | Sitka | 7.83 | 77 | Pn | Pn | 15 24 15.7 | -3.2 |
| YUK5 | Granite Creek | 7.88 | 45 | | Pn | 15 24 21.5 | +1.8 |
| L27K | Beaver Creek, | 8.01 | 25 | Pn | Pn | 15 24 22.4 | +1.1 |
| BCAR | Beaver Creek A | 8.02 | 26 | Pn | Pn | 15 24 22.8 | +1.2 |
| FALS | False Pass | 8.07 | 267 | P | Pn | 15 24 23.9 | +1.6 |
| FALS | False Pass | 8.07 | 267 | Pn | Pn | 15 24 22.6 | +0.3 |
| K17K | Iditarod | 8.09 | 329 | Pn | Pn | 15 24 22.4 | 0.0 |
| BPAW | Bear Paw Mtn. | 8.12 | 355 | Pn | Pn | 15 24 22.8 | -0.1 |
| SKAG | Skagway | 8.25 | 60 | P | Pn | 15 24 25.0 | +0.3 |
| SKAG | Skagway | 8.25 | 60 | Pn | Pn | 15 24 25.9 | +1.3 |
| S32K | Killisnoo | 8.26 | 74 | Pn | Pn | 15 24 23.2 | -1.6 |
| BESE | Bessie Mountai | 8.26 | 66 | Pn | Pn | 15 24 24.1 | -0.7 |
| ISLZ | Isanotski Laza | 8.27 | 267 | | Pn | 15 24 26.0 | +0.9 |
| N30M | Aishikik Lake | 8.37 | 45 | Pn | Pn | 15 24 27.2 | +0.8 |
| R32K | Eaglecrest | 8.38 | 68 | Pn | Pn | 15 24 26.2 | -0.2 |
| SCRK | Sand Creek | 8.40 | 16 | Pn | Pn | 15 24 26.3 | -0.5 |
| O30N | Mendenhall | 8.42 | 50 | Pn | Pn | 15 24 27.8 | +0.7 |
| L15K | Ungalak Mounta | 8.43 | 317 | | Pn | 15 24 28.8 | +1.6 |
| SSLS | Shishaldin Sou | 8.44 | 267 | | Pn | 15 24 28.8 | +1.4 |
| HDA | Harding Lake | 8.47 | 7 | Pn | Pn | 15 24 29.0 | +1.2 |
| J20K | Nowinta River | 8.49 | 346 | Pn | Pn | 15 24 30.1 | +2.1 |
| M29M | Somme Creek | 8.50 | 37 | Pn | Pn | 15 24 29.3 | +1.1 |
| J19K | Poorman | 8.56 | 341 | Pn | Pn | 15 24 29.2 | +0.3 |
| NEA2 | Nenana | 8.57 | 1 | Pn | Pn | 15 24 29.4 | +0.3 |
| CCB | Clear Creek Bu | 8.66 | 4 | Pn | Pn | 15 24 30.3 | 0.0 |
| L14K | Kuka Creek | 8.72 | 313 | Pn | Pn | 15 24 33.2 | +2.1 |
| K27K | Chicken | 8.79 | 21 | Pn | Pn | 15 24 32.0 | -0.1 |
| J25K | Salcha River, | 8.82 | 11 | Pn | Pn | 15 24 32.8 | +0.3 |
| K15K | Wolf Creek Mou | 8.83 | 320 | Pn | Pn | 15 24 34.4 | +1.7 |
| WESE | West Dahl East | 8.83 | 266 | | Pn | 15 24 34.1 | +1.4 |
| IL31 | | 8.84 | 7 | Pn | Pn | 15 24 32.8 | +0.1 |
| ILAR | Eielson Array | 8.84 | 7 | Pn | Pn | 15 24 32.8 | +0.1 |
| WHY | Whitehorse | 8.90 | 53 | Pn | Pn | 15 24 33.9 | +0.2 |
| N31M | Braeburn, Yuko | 8.91 | 47 | Pn | Pn | 15 24 34.8 | +1.0 |
| J26L | Joseph Creek | 8.95 | 16 | Pn | Pn | 15 24 34.4 | 0.0 |
| MDM | Murphy Dome | 8.96 | 3 | Pn | Pn | 15 24 35.2 | +0.8 |
| P32M | Atlin | 9.07 | 61 | Pn | Pn | 15 24 36.0 | -0.1 |
| L29M | L29M | 9.08 | 34 | Pn | Pn | 15 24 37.4 | +1.3 |
| U33K | Whale Pass | 9.09 | 83 | Pn | Pn | 15 24 33.6 | -2.5 |
| I23K | Minto, Yukon-K | 9.13 | 0 | Pn | Pn | 15 24 36.3 | -0.4 |
| POKR | Poker Plat Res | 9.15 | 5 | Pn | Pn | 15 24 37.4 | +0.4 |
| M30M | Minto, Yukon | 9.16 | 39 | Pn | Pn | 15 24 37.6 | +0.3 |
| CRAG | Craig | 9.18 | 87 | P | Pn | 15 24 35.2 | -2.3 |
| CRAG | Craig | 9.18 | 87 | Pn | Pn | 15 24 34.3 | -3.1 |
| EGAK | Eagle | 9.64 | 21 | Pn | Pn | 15 24 45.6 | +1.9 |
| Q32M | Nakina River | 9.65 | 65 | Pn | Pn | 15 24 45.3 | +1.2 |
| P33M | Teslin, Yukon | 9.69 | 58 | Pn | Pn | 15 24 44.3 | -0.2 |
| AKBBA | Akutan Broad B | 9.70 | 265 | | Pn | 15 24 45.3 | +0.8 |
| AKGG | Akutan Green G | 9.70 | 266 | | Pn | 15 24 45.3 | +0.7 |
| ZRO | Akutan Zero | 9.72 | 265 | | Pn | 15 24 45.7 | +0.8 |
| I26K | Coal Creek Min | 9.77 | 16 | Pn | Pn | 15 24 47.0 | +1.5 |
| H21K | Melozitna Rive | 9.79 | 352 | Pn | Pn | 15 24 45.7 | 0.0 |
| K29M | Barlow Dome | 9.80 | 32 | Pn | Pn | 15 24 46.9 | +0.8 |
| H23K | Yukon River | 9.81 | 360 | Pn | Pn | 15 24 47.6 | +1.5 |
| H24K | Noodor Dome | 9.85 | 4 | Pn | Pn | 15 24 46.9 | +0.3 |
| M31M | Drury Creek, Y | 9.85 | 45 | Pn | Pn | 15 24 48.2 | +1.6 |
| UNV | Unalaska Valle | 10.10 | 265 | P | Pn | 15 24 50.0 | 0.0 |
| IMAR | Indian Mountai | 10.19 | 350 | Pn | Pn | 15 24 51.8 | +0.6 |
| FARO | Faro, Yukon | 10.28 | 46 | Pn | Pn | 15 24 54.1 | +1.6 |
| R33M | Jennings River | 10.39 | 64 | Pn | Pn | 15 24 54.1 | 0.0 |
| I28M | Miner Creek | 10.48 | 22 | Pn | Pn | 15 24 57.8 | +2.4 |
| J30M | Hart River | 10.70 | 32 | Pn | Pn | 15 24 59.7 | +1.4 |
| G23K | Bananza Creek | 10.71 | 359 | Pn | Pn | 15 24 59.4 | +1.1 |
| G24K | Hadweenzic Riv | 10.73 | 4 | Pn | Pn | 15 24 58.6 | 0.0 |
| FYU | Fort Yukon | 10.74 | 9 | Pn | Pn | 15 24 58.8 | +0.1 |
| I30M | Mount Dempster | 11.17 | 29 | Pn | Pn | 15 25 05.3 | +0.6 |
| MMPY | Sheldon Lake, | 11.32 | 47 | Pn | Pn | 15 25 07.9 | +1.1 |
| F20K | Avaraart Lake | 11.44 | 347 | Pn | Pn | 15 25 09.3 | +1.1 |
| BMAR | Burnt Mountain | 11.64 | 9 | Pn | Pn | 15 25 11.1 | 0.0 |
| E24K | Your Creek | 12.08 | 2 | Pn | Pn | 15 25 17.9 | +0.8 |
| G29M | Pine Creek | 12.14 | 22 | Pn | Pn | 15 25 18.3 | +0.3 |
| E21K | Killik River | 12.62 | 352 | Pn | Pn | 15 25 25.2 | +0.7 |

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*IDC **01** 15:25:25.6±0.4, 5°.43S×102°.65E, h0km, mb4.8/29, mbtmp4.8/30, ML4.5/1, MS4.2/14, Error ellipse: s-maj=17.8km s-min=10.9km az=58.0*

*NEIC **01** 15:25:28.8, 5°.55S×102°.63E, h22km*

*NEIC **01** 15:25:28.8, 5°.45S×103°.13E, h22km, Moment Tensor Solution. Duration: 1s1 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.98; $M_{\theta\theta}$-0.84; $M_{\phi\phi}$-0.14; $M_{r\theta}$0.34; $M_{\theta\phi}$0.56; $M_{\phi r}$-0.19; Fault plane solution: $M_0$1.13000×$10^{16}$ NP1: $\phi_s$119.40000°, δ55.03000°, λ90.37000°. NP2: $\phi_s$298.76000°, δ34.97000°, λ89.48000°. Principal axes: T 1.0485, Plg80.0000°, Azm31.0000°; N 0.1713, Plg0.0000°, Azm299.0000°; P -1.2198, Plg10.0000°, Azm209.0000°;*

*DJA **01** 15:25:29.1±0.3, 6°S±2°×10°2E±°, h39km±3km, M5.1/46, mb5.2/46, mB5.5/23, MLv5.4/22, Mw(mB)5.0/23, MwMwp5.5/2, Mwp5.7/2*

*NEIC **01** 15:25:29±1.6, 5°.57S±0°.05×102°.60E±0°.07, h23km±3km, mb5.1/94, Mww4.6/13, Error ellipse: s-maj=9.6km s-min=7.4km az=101.0*

*MOS **01** 15:25:30.3±1.0, 5°.32S×102°.76E, h23km, mb5.2/61, MS5.0/8, Error ellipse: s-maj=8.4km s-min=4.5km az=112.3*

**ISC 01 15:25:30.3**±0.3, **5°.53S**±0°.04×**102°.61E**±0°.05, **h34**km, **n460**, σ**1s28**/444, **mb5.0**/153, **MS4.4**/31, **32C-22D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MNAI | Manna | 1.22 | 16 | Pn | Pb | 15 25 51.7 | -1.2 |
| MNAI | Manna | 1.22 | 16 | P | Pb | 15 25 51.7 | -1.2 |
| LWLI | Liwa | 1.53 | 71 | P | Pn | 15 25 55.4 | 0.0 |
| KASI | Kota Agung | 1.88 | 90 | P | Pn | 15 26 00.9 | +0.9 |
| BLSI | Bandar Lampung | 2.63 | 87 | P | Pn | 15 26 11.8 | +1.4 |
| PMBI | Palembang | 3.37 | 40 | P | Pn | 15 26 22.7 | +2.1 |
| PMBI | Palembang | 3.37 | 40 | Pn | Pn | 15 26 21.7 | +1.1 |
| PMBI | Palembang | 3.37 | 40 | P | Pn | 15 26 23.2 | +2.6 |
| PPSI | Pulau Pagai | 3.78 | 317 | P | Pn | 15 26 27.3 | +1.0 |
| SKJI | Sukabumi | 4.19 | 111 | P | Pn | 15 26 32.4 | +0.6 |
| DBJI | Dramaga | 4.24 | 104 | P | Pn | 15 26 34.3 | +1.7 |
| CBJI | Citeko | 4.31 | 102 | P | Pn | 15 26 36.0 | +2.5 |
| CNJI | Cibinong | 4.83 | 112 | P | Pn | 15 26 40.3 | -0.3 |
| PPBI | Pangkal Pinang | 4.86 | 47 | P | Pn | 15 26 42.5 | +1.4 |
| | 294nm,0.8s,5μm3μm | | | | | | |
| PDSI | Padang | 5.07 | 335 | P | Pn | 15 26 44.2 | +0.2 |
| | 291nm,0.6s,4μm2.4nm | | | | | | |
| LEM | Lembang | 5.14 | 105 | P | Pn | 15 26 47.3 | +2.2 |
| | 455nm,0.9s,5μm1.7nm | | | | | | |
| LEM | Lembang | 5.14 | 105 | P | Pn | 15 26 48.2 | +3.1 |
| LEM | | | | pmax | pmax | | |
| | comp=Z,455nm,0.9s | | | | | | |
| BBJI | Bungbulang | 5.36 | 111 | P | Pn | 15 26 47.9 | -0.2 |
| SISI | Saibi | 5.46 | 320 | P | Pn | 15 26 50.1 | +0.7 |
| | comp=Z,212nm,0.6s,comp=Z,5μmcomp=Z,2.0nm | | | | | | |
| XMI | Christmas Isla | 5.76 | 148 | P | Pn | 15 26 50.3 | -3.2 |
| XMIS | Christmas Isla | 5.76 | 149 | | Pn | 15 26 47.6 | -5.9 |
| BKNI | Bangkinang | 6.03 | 345 | Pn | Pn | 15 26 57.3 | +0.1 |
| BKNI | Bangkinang | 6.03 | 345 | P | Pn | 15 26 58.2 | +1.0 |
| | comp=Z,361nm,0.8s,comp=Z,2.4nm | | | | | | |
| CMJI | Cimerak | 6.21 | 111 | P | Pn | 15 26 59.5 | -0.2 |
| | comp=Z,333nm,0.5s,comp=Z,5μmcomp=Z,1.7nm | | | | | | |
| TPRI | Tanjung Pinang | 6.69 | 17 | P | Pn | 15 27 09.2 | +3.0 |
| | comp=Z,154nm,0.9s,comp=Z,2μmcomp=Z,0.6nm | | | | | | |
| PBSI | Pulau Batu | 6.95 | 321 | P | Pn | 15 27 09.6 | -0.3 |
| | comp=Z,187nm,1.0s,comp=Z,2.5nm | | | | | | |
| SMRI | Semarang | 7.93 | 101 | P | Pn | 15 27 22.7 | -0.6 |
| | comp=Z,166nm,0.8s | | | | | | |
| YOGI | Yogyakarta | 7.96 | 107 | P | Pn | 15 27 23.4 | -0.4 |
| | comp=Z,198nm,1.7s,comp=Z,5μmcomp=Z,253μm | | | | | | |
| UGM | Wanagama | 8.21 | 107 | P | Pn | 15 27 28.6 | +1.5 |
| UGM | Wanagama | 8.21 | 107 | Pn | Pn | 15 27 26.5 | -0.6 |
| UGM | Wanagama | 8.21 | 107 | P | Pn | 15 27 27.3 | +0.2 |
| GSI | Gunungsitoli | 8.45 | 323 | P | Pn | 15 27 30.1 | -0.4 |
| GSI | Gunungsitoli | 8.45 | 323 | Pn | Pn | 15 27 29.8 | -0.7 |
| GSI | Gunungsitoli | 8.45 | 323 | P | Pn | 15 27 30.1 | -0.4 |
| | comp=Z,47nm,0.4s | | | | | | |
| COCO | West Island | 8.73 | 220 | P | Pn | 15 27 34.2 | -0.1 |
| COCO | West Island | 8.73 | 220 | | Pn | 15 27 33.3 | -1.0 |
| COCO | West Island | 8.73 | 220 | P | Pn | 15 27 33.8 | -0.5 |
| COCO | | | | pmax | pmax | | |
| | comp=Z,2μm,1.0s | | | | | | |
| PWJI | Pagerwojo | 9.46 | 106 | P | Pn | 15 27 44.3 | 0.0 |
| | comp=Z,177nm,0.7s | | | | | | |
| GRJI | Gresik | 9.91 | 98 | P | Pn | 15 27 50.9 | +0.5 |
| SNSI | Sinabang, Aceh | 10.08 | 321 | P | Pn | 15 27 53.0 | +0.2 |
| | comp=Z,156nm,0.7s | | | | | | |
| STKI | Sintang | 10.46 | 58 | P | Pn | 15 28 00.5 | +2.5 |
| | comp=Z,90nm,0.8s | | | | | | |
| KULM | Kulim | 10.93 | 350 | Pn | Pn | 15 28 03.3 | -1.1 |
| MLSI | Meulaboh, Aceh | 11.54 | 327 | P | Pn | 15 28 11.9 | -0.9 |
| | comp=Z,53nm,0.6s,comp=Z,913nm | | | | | | |
| ABJI | Asem Bagus | 11.76 | 102 | P | Pn | 15 28 17.4 | +1.6 |
| JAGI | Jajag, Banyuwa | 11.82 | 105 | P | Pn | 15 28 16.6 | -0.1 |
| JAGI | Jajag, Banyuwa | 11.82 | 105 | Pn | Pn | 15 28 15.5 | -1.2 |
| JAGI | Jajag, Banyuwa | 11.82 | 105 | P | Pn | 15 28 16.2 | -0.5 |
| | comp=Z,285nm,0.8s,comp=Z,3μm | | | | | | |
| SBUM | Sibu | 12.45 | 51 | Pn | Pn | 15 28 29.3 | +4.0 |
| SRBI | Singaraja | 12.77 | 102 | P | Pn | 15 28 29.9 | +0.3 |
| | comp=Z,135nm,0.6s | | | | | | |
| SURA | Surathani | 14.90 | 348 | P | Pn | 15 28 59.5 | +0.8 |
| PLAI | Plampang | 15.40 | 103 | P | Pn | 15 29 02.5 | -2.7 |
| PLAI | Plampang | 15.40 | 103 | P | Pn | 15 29 01.6 | -3.6 |
| | comp=Z,190nm,0.8s | | | | | | |
| KAPI | Kappang | 17.08 | 89 | P | Pn | 15 29 26.0 | -0.6 |
| | comp=Z,1.6nm,0.3s,baz=292,slow=10,SNR=2.2 | | | | | | |
| KAPI | | | | LR | LR | 15 36 38.6 | |
| | comp=Z,621nm,18.9s,baz=262,slow=40 | | | | | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| KAPI | Kappang | 17.08 | 89 | ⇑eP | Pn | 15 29 26.5 | -0.1 |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,27nm,1.3s | | | | | | |
| KKM | Kota Kinabalu | 17.80 | 50 | P | P | 15 29 36.0 | -0.2 |
| BSSI | Bau Bau, Buton | 17.80 | 93 | P | P | 15 29 35.6 | -0.5 |
| DLV | T Lat | 18.32 | 19 | P | P | 15 29 42.0 | 0.0 |
| BASI | Baing, Sumba | 18.39 | 106 | P | P | 15 29 41.3 | -1.3 |
| MYLDM | Lahad Datu | 19.11 | 56 | Pn | Pn | 15 29 52.7 | +1.2 |
| MYLDM | | | | IAmb | IAmb | 15 30 24.9 | |
| | comp=Z,156nm,1.0s | | | | | | |
| TOLI2 | Tolitoli | 19.31 | 71 | P | Pn | 15 29 53.5 | -0.5 |
| TOLI2 | Tolitoli | 19.31 | 71 | P | P | 15 29 52.4 | -0.3 |
| TOLI2 | | | | IAmb | IAmb | 15 29 55.4 | |
| | comp=Z,156nm,1.3s | | | | | | |
| MMRI | Maumere | 19.72 | 100 | P | P | 15 29 56.8 | -0.4 |
| MMRI | Maumere | 19.72 | 100 | P | P | 15 29 54.2 | -3.0 |
| MMRI | | | | IAmb | IAmb | 15 30 11.1 | |
| | comp=Z,75nm,0.7s | | | | | | |
| MMRI | Maumere | 19.72 | 100 | P | P | 15 29 55.3 | -1.9 |
| | comp=Z,82nm,0.5s,comp=Z,2μm | | | | | | |
| SRDT | SRDT | 20.05 | 350 | P | Pn | 15 30 02.5 | -0.2 |
| MRSI | Marisa | 20.20 | 73 | P | Pn | 15 30 03.0 | -1.6 |
| | comp=Z,257nm,0.8s,comp=Z,2μm | | | | | | |
| LUWI | Luwuk | 20.61 | 78 | P | P | 15 30 06.8 | -0.2 |
| LUWI | | | | IAmb | IAmb | 15 30 32.2 | |
| | comp=Z,122nm,0.9s | | | | | | |
| GTOI | Gorontalo | 21.27 | 74 | P | P | 15 30 12.6 | -1.4 |
| | comp=Z,48nm,0.8s | | | | | | |
| BATI | Baumata | 21.36 | 104 | P | P | 15 30 13.9 | -1.1 |
| SOEI | Soe | 21.86 | 102 | P | P | 15 30 20.1 | -0.4 |
| SOEI | Soe | 21.86 | 102 | P | P | 15 30 17.6 | -2.9 |
| SOEI | Soe | 21.86 | 102 | P | P | 15 30 19.7 | -0.8 |
| | comp=Z,186nm,0.8s,comp=Z,2μm | | | | | | |
| MBWA | Marble Bar | 22.73 | 135 | P | P | 15 30 35.5 | +5.9 |
| PSA00 | Pilbara Seismi | 23.09 | 135 | P | P | 15 30 33.4 | +0.1 |
| PSA00 | Pilbara Seismi | 23.09 | 135 | P | P | 15 30 41.3 | +8.0 |
| PSAD3 | Pilbara Seismi | 23.09 | 136 | P | P | 15 30 33.2 | 0.0 |
| | comp=Z,40nm,1.0s,SNR=2.0 | | | | | | |
| SANI | Sanana | 23.58 | 82 | P | P | 15 30 37.5 | -0.7 |
| | comp=Z,46nm,1.0s | | | | | | |
| PHRA | Phrae | 24.00 | 354 | P | P | 15 30 41.6 | -0.5 |
| CM31 | Chiang Mai Arr | 24.11 | 351 | P | P | 15 30 41.9 | -1.2 |
| CM31 | | | | IAmb | IAmb | 15 30 44.7 | |
| | comp=Z,44nm,1.1s | | | | | | |
| CMAR | Chiang Mai Arr | 24.11 | 351 | P | P | 15 30 42.8 | -0.3 |
| CMAR | Chiang Mai Arr | 24.11 | 351 | P | P | 15 30 42.7 | -0.5 |
| | comp=Z,21nm,0.8s,baz=182,slow=8.7,SNR=100 | | | | | | |
| CMAR | | | | PcP | PcP | 15 34 25.4 | +1.4 |
| | comp=Z,3.2nm,0.9s,baz=227,slow=3.1,SNR=5.6 | | | | | | |
| CMAR | | | | LR | LR | 15 40 40.9 | |
| | comp=Z,497nm,21.1s,baz=190,slow=38 | | | | | | |
| | comp=Z,21nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 24.11 | 351 | P | P | 15 30 42.8 | -0.3 |
| CHTO | Chiang Mai | 24.46 | 352 | P | P | 15 30 45.2 | -1.1 |
| CHTO | | | | IAmb | IAmb | 15 30 49.4 | |
| | comp=Z,30nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 24.46 | 352 | P | P | 15 30 45.2 | -1.1 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | |
| NLAI | Namlea | 24.52 | 86 | P | P | 15 30 46.8 | -0.2 |
| | comp=Z,37nm,0.8s | | | | | | |
| PALK | Pallekele | 25.29 | 300 | LR | LR | 15 40 31.6 | |
| | comp=Z,277nm,18.3s,baz=225,slow=36 | | | | | | |
| QIZ | Qiongzhong | 25.43 | 16 | P | P | 15 30 56.7 | +1.6 |
| QIZ | | | | S | S | 15 35 25.0 | +5.1 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,330nm,16.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,360nm,15.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,530nm,17.2s | | | | | | |
| QIZ | Qiongzhong | 25.43 | 16 | P | P | 15 30 55.4 | +0.3 |
| FITZ | Fitzroy Crossi | 25.73 | 121 | P | P | 15 30 57.8 | -0.1 |
| DAV | Davao City (W) | 26.12 | 62 | LR | LR | 15 42 03.2 | |
| | comp=Z,377nm,19.4s,baz=192,slow=38 | | | | | | |
| SLVN | Son La | 26.73 | 3 | P | P | 15 31 07.0 | +0.1 |
| KNRA | Kununurra | 27.57 | 113 | P | P | 15 31 13.6 | -0.9 |
| KNRA | | | | IAmb | IAmb | 15 31 35.0 | |
| | comp=Z,37nm,0.8s | | | | | | |
| KNRA | Kununurra | 27.57 | 113 | P | P | 15 31 13.1 | -1.4 |
| | comp=Z,54nm,0.7s,SNR=7.3 | | | | | | |
| DRS | Darwin Rock St | 28.75 | 106 | P | P | 15 31 25.4 | +0.4 |
| MTN | Manton Dam | 29.05 | 106 | P | P | 15 31 28.0 | +0.2 |
| MTN | Manton Dam | 29.05 | 106 | P | P | 15 31 26.9 | -0.8 |
| MTN | | | | IAmb | IAmb | 15 32 03.7 | |
| | comp=Z,29nm,0.6s | | | | | | |
| MTN | Manton Dam | 29.05 | 106 | P | P | 15 31 27.0 | -0.8 |
| | comp=Z,30nm,1.0s,SNR=3.7 | | | | | | |
| FAKI | Fak Fak | 29.67 | 86 | P | P | 15 31 33.7 | +0.5 |
| H08S2 | Diego Garcia H | 29.99 | 264 | T | T | 16 02 39.7 | |
| | baz=88,slow=76,SNR=334 | | | | | | |
| H08S3 | Diego Garcia H | 30.00 | 264 | T | T | 16 02 40.4 | |
| | baz=88,slow=76,SNR=462 | | | | | | |
| H08S1 | Diego Carcia H | 30.01 | 264 | T | T | 16 03 04.3 | |
| | baz=88,slow=76,SNR=254 | | | | | | |
| KDU | Kakadu | 30.31 | 106 | P | P | 15 31 38.5 | -0.3 |
| KDU | Kakadu | 30.31 | 106 | P | P | 15 31 37.1 | -1.7 |
| | comp=Z,37nm,0.6s,SNR=5.8 | | | | | | |
| NWAO | Narrogin (SRO) | 30.47 | 155 | LR | LR | 15 42 17.4 | |
| | comp=Z,757nm,21.8s,baz=335,slow=33 | | | | | | |
| H01W3 | Cape Leeuwin H | 31.09 | 161 | T | T | 16 04 12.9 | |
| | baz=338,slow=76,SNR=46 | | | | | | |
| H01W2 | Cape Leeuwin H | 31.10 | 161 | T | T | 16 04 21.9 | |
| | baz=338,slow=76,SNR=70 | | | | | | |
| H01W1 | Cape Leeuwin H | 31.10 | 161 | T | T | 16 04 17.3 | |
| | baz=338,slow=76,SNR=64 | | | | | | |
| WRKA | Warakurna | 31.35 | 131 | P | P | 15 31 47.7 | -0.3 |
| PZH | PanZhiHua | 31.86 | 359 | P | P | 15 31 56.7 | +4.2 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.8s | | | | | | |
| GYA | Guiyang | 32.04 | 7 | ⇓P | P | 15 31 58.4 | +4.3 |
| GYA | | | | S | S | 15 37 10.0 | +6.0 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,170nm,5.5s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,300nm,18.7s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,450nm,18.1s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,280nm,24.2s | | | | | | |
| SHL | Shillong | 32.62 | 342 | P | P | 15 31 58.4 | -0.9 |
| SHL | Shillong | 32.62 | 342 | P | P | 15 31 58.4 | -0.9 |
| SHL | | | | pmax | pmax | | |
| | comp=Z,60nm,0.5s | | | | | | |
| HYB | Hyderabad | 32.94 | 314 | eP | P | 15 32 01.9 | 0.0 |
| HYB | | | | esP | pP | 15 32 11.8 | +0.1 |
| WB0 | Warramunga Arr | 33.99 | 117 | IAmb | IAmb | 15 32 22.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 34.01 | 118 | P | P | 15 32 11.3 | 0.0 |
| | comp=Z,4.6nm,0.4s,baz=304,slow=9.5,SNR=50 | | | | | | |
| WRA | | | | PcP | PcP | 15 34 48.7 | -0.3 |
| | comp=Z,1.4nm,0.6s,baz=303,slow=2.0,SNR=3.2 | | | | | | |
| WRA | | | | S | S | 15 37 33.3 | -1.3 |
| | comp=Z,0.7nm,0.8s,baz=288,slow=15,SNR=2.7 | | | | | | |
| WRA | | | | LR | LR | 15 47 27.9 | |
| | comp=Z,233nm,19.9s,baz=64,slow=39 | | | | | | |
| | comp=Z,4.6nm,0.4s | | | | | | |
| WRAB | Tennant Creek | 34.01 | 118 | P | P | 15 32 10.8 | -0.6 |
| WRAB | | | | IAmb | IAmb | 15 32 41.9 | |
| | comp=Z,21nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 34.01 | 118 | ⇑eP | P | 15 32 10.7 | -0.6 |
| WRAB | | | | pmax | pmax | | |

comp=Z,11nm,1.0s
**YULB Yu-li 34.05 32** P **P** **15 32 12.8 +1.2**
**WR0 Warramunga Arr 34.19 118** IAmb IAmb 15 32 33.9
comp=Z,17nm,0.7s
**FORT Forrest 34.68 139** P **P** **15 32 18.5 +1.5**
**FORT Forrest 34.68 139** P P 15 32 26.4 +9.5
**ASPA Alice Springs 35.10 124** P **P** **15 32 21.4 +0.6**
comp=Z,9.0nm,1.0s,SNR=8.0
**ASAR Alice Springs 35.10 124** P **P** **15 32 20.6 -0.2**
**ASAR Alice Springs 35.10 124** P **P** **15 32 21.3 +0.5**
comp=Z,4.4nm,0.8s,baz=302,slow=8.1,SNR=61
ASAR S **S** **15 37 49.8 -1.8**
comp=Z,2.9nm,1.1s,baz=292,slow=15,SNR=6.4
ASAR LR LR 15 47 36.2
comp=Z,468nm,20.6s,baz=293,slow=38
comp=Z,4.4nm,0.8s
**AS31 Alice Springs 35.10 124** P **P** **15 32 20.8 0.0**
**AS01 Alice Springs 35.14 124** P **P** **15 32 21.4 +0.3**
**YHNB Yeheng 35.14 31** P **P** **15 32 21.7 +0.6**
**YOJ Yonaguni jima 35.83 33** P **P** **15 32 26.9 0.0**
YOJ IAmb IAmb 15 32 56.7
comp=Z,30nm,1.0s
**YOJ Yonaguni jima 35.83 33** P **P** **15 32 26.9 0.0**
YOJ pmax pmax
comp=Z,30nm,1.0s
**ENH Enshi 36.21 10** P **P** **15 32 30.0 -0.1**
**ENH Enshi 36.21 10** P **P** **15 32 28.4 -1.7**
**CD2 Chengdu 36.25 2** P **P** **15 32 29.6 -0.9**
CD2 S **S** **15 38 13.9 +5.0**
CD2 pmax pmax
comp=Z,20nm,0.5s
CD2 pmax pmax
comp=Z,80nm,5.3s
CD2 LR LR
comp=Z,830nm,17.1s
CD2 LR LR
comp=Z,710nm,17.2s
CD2 LR LR
comp=Z,970nm,17.4s
**LSA Lhasa 36.72 343** P **P** **15 32 36.2 +1.3**
LSA pmax pmax
comp=Z,28nm,0.9s
**LSA Lhasa 36.72 343** P **P** **15 32 36.3 +1.3**
LSA IAmb IAmb 15 32 36.9
comp=Z,36nm,0.9s
**LSA Lhasa 36.72 343** P **P** **15 32 36.3 +1.3**
LSA pmax pmax
comp=Z,36nm,0.9s
**JMJ Miyako jima 2 37.38 35** P **P** **15 32 40.5 +0.4**
**OOD Oodnadatta 38.43 129** P **P** **15 32 49.7 +0.7**
**MULG Mulgathing 38.50 134** P **P** **15 32 50.0 +0.5**
**QIS Mount Isa 38.88 116** P **P** **15 32 53.6 +0.7**
**QIS Mount Isa 38.88 116** P **P** **15 32 51.7 -1.2**
comp=Z,24nm,1.1s,SNR=4.2
**XAN Xi'an 39.81 8** P **P** **15 32 59.4 -1.0**
XAN pP pP 15 33 09.3 -0.8
XAN pmax pmax
comp=Z,57nm,0.9s
XAN LR LR
comp=Z,360nm,18.7s
XAN LR LR
comp=Z,550nm,16.5s
XAN LR LR
comp=Z,520nm,19.0s
**NJ2 Nanjing 40.45 21** *e*P **P** **15 33 08.4 +2.7**
NJ2 pmax pmax
comp=Z,10.0nm,0.7s
**COEN Coen 40.79 105** P **P** **15 33 09.4 +0.5**
**COEN Coen 40.79 105** P **P** **15 33 08.0 -0.8**
**COEN Coen 40.79 105** P **P** **15 33 07.1 -1.7**
comp=Z,25nm,0.9s,SNR=3.5
**LYN LuoYang 40.94 12** P **P** **15 33 10.0 +0.3**
LYN pmax pmax
comp=Z,60nm,0.7s
LYN pmax pmax
comp=Z,140nm,3.9s
**BBOO Buckleboo 41.32 135** P **P** **15 33 13.5 +0.5**
**BBOO Buckleboo 41.32 135** P **P** **15 33 13.4 +0.5**
**BBOO Buckleboo 41.32 135** P **P** **15 33 13.2 +0.2**
comp=Z,33nm,2.7s,SNR=1.4
**LZH Lanzhou 41.42 2** P **P** **15 33 14.8 +1.0**
LZH pmax pmax
comp=Z,31nm,1.5s
**LCRK Leigh Creek 41.65 131** P **P** **15 33 18.0 +2.3**
**GOMU GeErMu 42.15 351** P **P** **15 33 20.2 +0.1**
GOMU pP pP 15 33 28.6 -1.2
GOMU pmax pmax
comp=Z,27nm,1.3s
**MTSU Mount Surprise 42.58 111** P **P** **15 33 25.3 +1.8**
**HTT Hallett 43.67 134** P **P** **15 33 28.7 -3.5**
**TIA Tai'an 43.70 17** P **P** **15 33 30.5 -1.7**
TIA pmax pmax
comp=Z,12nm,0.6s
TIA pmax pmax
comp=Z,54nm,3.7s
TIA LR LR
comp=Z,280nm,19.5s
TIA LR LR
comp=Z,220nm,18.0s
TIA LR LR
comp=Z,480nm,22.1s
**HNS HongShan 44.18 14** ⇓P **P** **15 33 35.8 -0.2**
HNS pmax pmax
comp=Z,20nm,0.7s
HNS LR LR
comp=Z,550nm,16.7s
HNS LR LR
comp=Z,340nm,15.9s
HNS LR LR
comp=Z,670nm,18.1s
**PMG Port Moresby 44.31 98** P **P** **15 33 37.7 +0.2**
**PMG Port Moresby 44.31 98** P **P** **15 33 37.6 +0.1**
**PMG Port Moresby 44.31 98** P **P** **15 33 36.8 -0.7**
**PMG Port Moresby 44.31 98** LR LR 15 55 34.3
comp=Z,130nm,18.6s,baz=260,slow=41
**PMG Port Moresby 44.31 98** *ce*P **P** **15 33 36.9 -0.6**
PMG pmax pmax
comp=Z,32nm,1.0s
**CTA Charters Tower 44.79 113** P **P** **15 33 41.8 +0.6**
**CTA Charters Tower 44.79 113** P **P** **15 33 41.6 +0.4**
comp=Z,0.5nm,0.7s,baz=308,slow=9.1,SNR=9.6
CTA LR LR 15 53 32.6
comp=Z,19nm,21.1s,baz=280,slow=38
**CTAO Charters Tower 44.79 113** P **P** **15 33 41.4 +0.2**
**CTAO Charters Tower 44.79 113** P **P** **15 33 40.6 -0.6**
CTAO IAmb IAmb 15 33 55.0
comp=Z,24nm,0.8s
**CTAO Charters Tower 44.79 113** P **P** **15 33 40.6 -0.6**
CTAO pmax pmax
comp=Z,24nm,0.9s
**GTA Gaotai 44.79 357** ⇑P **P** **15 33 41.4 +0.3**
GTA pmax pmax
comp=Z,28nm,1.2s
**QLP Quilpie 44.85 122** P **P** **15 33 42.7 +1.0**
comp=Z,32nm,0.6s,SNR=3.4
**STKA Stephens Creek 44.88 131** P **P** **15 33 43.2 +1.4**
**STKA Stephens Creek 44.88 131** P **P** **15 33 42.5 +0.7**
**STKA Stephens Creek 44.88 131** P **P** **15 33 42.2 +0.4**
comp=Z,4.3nm,1.2s,SNR=2.4
**STKA Stephens Creek 44.88 131** P **P** **15 33 42.8 +1.0**
comp=Z,11nm,0.7s,baz=302,slow=6.8,SNR=31
STKA LR LR 15 53 57.5
comp=Z,343nm,19.9s,baz=312,slow=38
comp=Z,11nm,0.7s
**STKA Stephens Creek 44.88 131** ⇑*e*P **P** **15 33 41.9 +0.1**
**TV1H Townsville Har 45.11 112** P **P** **15 33 44.8 +1.0**
**BTO Baotou 46.41 8** *e*P **P** **15 33 55.4 +1.6**
BTO pP **sP** **15 34 07.9 +0.1**
BTO sP pP 15 34 13.2 +10
BTO PP **PP** **15 35 45.9 +2.5**
BTO pmax pmax
comp=Z,30nm,0.9s
BTO pmax pmax
comp=Z,230nm,4.4s
**JNU Nakatsue 46.87 33** P **P** **15 33 57.6 +0.1**
**JNU Nakatsue 46.87 33** P P **15 33 56.2 -1.3**
JNU IAmb IAmb 15 33 59.8
comp=Z,17nm,1.0s
**HHC Hu-ho-hao-te 46.88 9** *e*P **P** **15 33 58.6 +1.1**
HHC pmax pmax
comp=Z,18nm,0.7s
HHC pmax pmax
comp=Z,52nm,3.9s
**BJT Baijiatuau 47.02 14** P **P** **15 33 58.0 -0.4**
BJT IAmb IAmb 15 33 59.5
comp=Z,18nm,0.7s
**BJT Baijiatuau 47.02 14** P **P** **15 33 58.0 -0.4**
BJT pmax pmax
comp=Z,18nm,0.7s
**BJI Beijing 47.04 14** P **P** **15 33 58.2 -0.4**
BJI pmax pmax
comp=Z,12nm,0.7s
BJI LR LR
comp=Z,290nm,12.7s
BJI LR LR
comp=Z,900nm,13.9s
BJI LR LR
comp=Z,800nm,14.0s
**ARPS Mount Arapiles 47.45 136** P **P** **15 34 03.7 +1.8**
**NIL Nilore 47.87 327** P **P** **15 34 05.0 -0.2**
**NIL Nilore 47.87 327** P **P** **15 34 05.0 -0.2**
NIL pmax pmax
comp=Z,34nm,0.7s
**CMSA Cobar Meteorol 47.88 128** P **P** **15 34 07.1 +1.7**
**CMSA Cobar Meteorol 47.88 128** P **P** **15 34 06.0 +0.6**
comp=Z,31nm,0.8s,SNR=4.3
**KSAR Wonju Array Be 48.82 27** P **P** **15 34 11.3 -1.1**
**KSAR Wonju Array Be 48.82 27** P **P** **15 34 11.3 -1.1**
**KSRS Korea Array 48.84 27** P **P** **15 34 12.3 -0.3**
comp=Z,3.7nm,0.6s,baz=227,slow=7.1,SNR=39
comp=Z,3.7nm,0.6s
**KS19 Wonju Array Si 48.86 27** P **P** **15 34 12.4 -0.3**
**JMN Monobe 48.99 35** P **P** **15 34 14.2 +0.3**
**JMN Monobe 48.99 35** P **P** **15 34 13.0 -0.9**
JMN IAmb IAmb 15 34 27.0
comp=Z,22nm,1.0s
**JCJ Chichijima 50.16 48** P **P** **15 34 19.5 -3.4**
**EIDS Eidsvold 50.37 118** P **P** **15 34 25.7 +1.2**
comp=Z,7.8nm,0.6s,SNR=2.1
**XLT XiLinHaoTe 50.69 13** *e*P **P** **15 34 26.9 +0.3**
XLT pP sP 15 34 39.1 -1.6
XLT sP pP 15 34 46.5 +10
XLT pmax pmax
comp=Z,28nm,1.0s
**WMQ Urumqi 50.94 346** *e*P **P** **15 34 29.3 +0.8**
WMQ pmax pmax
comp=Z,60nm,0.9s
WMQ pmax pmax
comp=Z,150nm,3.8s
WMQ LR LR
comp=Z,1μm,12.7s
**YNG Young 51.07 130** P **P** **15 34 31.6 +1.9**
**YNG Young 51.07 130** P **P** **15 34 29.9 +0.2**
comp=Z,58nm,1.0s,SNR=1.5
**KSH Kashi 51.13 334** P **P** **15 34 29.6 -0.5**
KSH pmax pmax
comp=Z,24nm,0.8s
**CAN Canberra 51.93 131** P **P** **15 34 36.3 +0.1**
**CAN Canberra 51.93 131** P **P** **15 34 37.4 +1.2**
comp=Z,22nm,1.3s,SNR=2.0
**ARMA Armidale 52.25 124** P **P** **15 34 40.2 +1.5**
**ARMA Armidale 52.25 124** P **P** **15 34 39.5 +0.8**
comp=Z,16nm,0.9s,SNR=2.2
**PRZ Przheval'sk 52.62 338** IAmb IAmb 15 35 07.9
comp=Z,20nm,0.9s
**NRN Naryn 52.70 335** P **P** **15 34 42.0 0.0**
NRN IAmb IAmb 15 34 43.5
comp=Z,21nm,1.0s
**NRN Naryn 52.70 335** P **P** **15 34 42.0 0.0**
NRN pmax pmax
comp=Z,21nm,1.0s
**SHLS Shalkode 52.81 339** *e*P **P** **15 34 41.6 -1.0**
comp=Z,16nm,0.7s,baz=339
**SHLS Shalkode 52.81 339** *e*P **P** **15 34 41.5 -1.0**
SHLS pmax pmax
comp=Z,16nm,0.7s
**UZB Uzynbulak 52.96 338** *e*P **P** **15 34 43.7 0.0**
comp=Z,6.9nm,0.5s,baz=338
UZB *e*S **S** **15 42 12.0 +1.0**
baz=338
**UZB Uzynbulak 52.96 338** *e*P **P** **15 34 43.7 0.0**
UZB *e*S **S** **15 42 12.0 +1.0**
UZB pmax pmax
comp=Z,7.0nm,0.5s
**DRK Karamyk 53.06 330** IAmb IAmb 15 35 03.1
comp=Z,22nm,0.8s
**SATY Saty 53.11 338** *e*P **P** **15 34 44.9 +0.1**
comp=Z,6.0nm,0.5s,baz=338
**SATY Saty 53.11 338** *e*P **P** **15 34 44.8 +0.1**
SATY pmax pmax
comp=Z,6.0nm,0.5s
**ZHN Zhinishke 53.19 338** *e*P **P** **15 34 45.2 -0.2**
baz=338
**ZHN Zhinishke 53.19 338** *e*P **P** **15 34 45.2 -0.2**
**SONM Songino Array 53.24 3** P **P** **15 34 46.2 +0.6**
**SONM Songino Array 53.24 3** P **P** **15 34 46.3 +0.6**
comp=Z,52nm,0.7s,baz=184,slow=8.9,SNR=160
comp=Z,52nm,0.7s
**CN2 Changchun 53.26 21** P **P** **15 34 43.0 -2.7**
CN2 pmax pmax
comp=Z,20nm,1.0s
**ULN Ulaanbaatar 53.31 4***c i*P **P** **15 34 46.8 +0.6**
ULN pmax pmax
comp=Z,47nm,1.3s
**KPKS Kokpek 53.36 338** *e*P **P** **15 34 46.5 -0.1**
comp=Z,10.0nm,0.8s,baz=338
**KPKS Kokpek 53.36 338** *e*P **P** **15 34 46.4 -0.1**
KPKS pmax pmax
comp=Z,10.0nm,0.8s
**GAR Garm 53.44 329** IAmb IAmb 15 35 01.9
comp=Z,21nm,0.9s
**MAJO Matsushiro 53.48 36** P **P** **15 34 46.7 -0.8**
**MAJO Matsushiro 53.48 36**⇓*e*P **P** **15 34 45.3 -2.2**
MAJO pmax pmax
comp=Z,6.0nm,0.9s
**MJAR Matsushiro Arr 53.48 36** P **P** **15 34 45.2 -2.3**
comp=Z,5.5nm,0.8s,baz=218,slow=6.9,SNR=14
comp=Z,5.5nm,0.8s
**BOOM Boonskoye usch 53.60 336** IAmb IAmb 15 34 50.0
comp=Z,16nm,0.9s
**TNSS Tian-Shan 53.65 337** *e*P **P** **15 34 48.8 -0.3**
baz=337
**TNSS Tian-Shan 53.65 337** *e*P **P** **15 34 48.8 -0.3**
**MDOK Medeo 53.72 337** *e*P P 15 34 59.4 +10
**AAA Alma-Ata 53.81 337** *e*P **P** **15 34 49.9 +0.1**
comp=Z,8.4nm,0.5s,baz=337
**AAA Alma-Ata 53.81 337** *e*P **P** **15 34 49.9 +0.1**
AAA pmax pmax
comp=Z,8.0nm,0.5s
**SIMJ Simiganj 53.88 328** P **P** **15 34 48.7 -1.8**
SIMJ IAmb IAmb 15 34 50.5
comp=Z,21nm,1.3s
**ARSB Arslanbob 53.94 333** P **P** **15 34 51.2 +0.3**
ARSB IAmb IAmb 15 34 52.7
comp=Z,11nm,1.0s
**ARSB Arslanbob 53.94 333** P **P** **15 34 51.2 +0.3**
ARSB pmax pmax
comp=Z,11nm,1.0s
**UCH Uchtor 53.98 334** P **P** **15 34 52.3 +0.7**
SNR=11
**BTK Batken 53.99 330** P **P** **15 34 51.5 +0.3**
BTK IAmb IAmb 15 34 53.2
comp=Z,34nm,1.4s
**BTK Batken 53.99 330** P **P** **15 34 51.6 +0.3**
BTK pmax pmax
comp=Z,34nm,1.4s
**TKM2 Tokmak 2 54.10 336** P **P** **15 34 53.0 +0.8**
SNR=7.1
**KBK Karagaybulak 54.15 335** P **P** **15 34 53.8 +1.3**
SNR=5.2
**AML Almayashu 54.26 334** P **P** **15 34 54.3 +0.7**
SNR=18
**ARXS Arharly 54.32 338** *e*P **P** **15 34 52.0 -1.5**
**AAK Ala-Archa 54.32 335***ce*P **P** **15 34 54.5 +0.8**
AAK pmax pmax
comp=Z,22nm,2.5s
**CHKK Chushkaly 54.33 337** *e*P **P** **15 34 53.3 -0.3**
baz=337
**CHKK Chushkaly 54.33 337** *e*P **P** **15 34 53.2 -0.3**
**CHMS Chumysh 54.51 335** P **P** **15 34 55.5 +0.6**
SNR=5.1
**EKS2 Erkin-Say 54.65 334** P **P** **15 34 57.1 +1.1**
SNR=28
**TDK Taldyqorghan 54.79 339** *e*P **P** **15 34 56.8 -0.1**
comp=Z,9.0nm,0.5s,baz=339
**TDK Taldyqorghan 54.79 339** *e*P **P** **15 34 56.7 -0.1**
TDK pmax pmax
comp=Z,9.0nm,0.5s
**USP Ospenovka 54.84 335** P **P** **15 34 57.5 +0.3**
SNR=6.0
**SGDS Sogindy 54.93 335** *e*P **P** **15 34 57.9 -0.2**
baz=335
**SGDS Sogindy 54.93 335** *e*P **P** **15 34 57.8 -0.2**
**HRA Herat 55.02 319** P **P** **15 34 58.5 -0.5**
**ZSN Zaisan 55.03 345** *e*P **P** **15 34 58.6 -0.1**
comp=Z,13nm,0.7s,baz=345
**ZSN Zaisan 55.03 345** *e*P **P** **15 34 58.5 -0.1**
ZSN pmax pmax
comp=Z,13nm,0.7s
**MK31 Makanchi Array 55.13 343** IAmb IAmb 15 35 13.3
comp=Z,22nm,0.8s
**MK31 Makanchi Array 55.13 343** *i*P **P** **15 34 59.4 +0.1**
MK31 pmax pmax
comp=Z,21nm,0.7s
**MKAR Makanchi Array 55.13 343** P **P** **15 34 59.2 -0.1**
**MKAR Makanchi Array 55.13 343** P **P** **15 34 59.6 +0.3**
comp=Z,21nm,0.8s,baz=149,slow=8.9,SNR=146
comp=Z,21nm,0.8s
**MAKZ Makanchi 55.23 343** P **P** **15 34 59.6 -0.4**
**MAKZ Makanchi 55.23 343** P **P** **15 34 59.6 -0.4**
MAKZ pmax pmax
comp=Z,8.0nm,0.8s
**MDJ Mudanjiang 55.49 23** P **P** **15 35 00.8 -1.1**
MDJ pmax pmax
comp=Z,7.0nm,1.0s
**BNX BinXian 55.63 21** ⇑P **P** **15 35 02.6 -0.3**
BNX pmax pmax
comp=Z,40nm,0.9s
**ZAK Zakamensk 55.69 1** *e*P **P** **15 35 03.2 -0.2**
ZAK pmax pmax
comp=Z,17nm,1.0s
**JMM Marumori 55.90 36** P **P** **15 35 04.3 -0.6**
comp=Z,15nm,1.0s
**USA0B Ussuriysk Arra 56.13 25** P **P** **15 35 05.6 -0.9**
USA0B IAmb IAmb 15 35 07.9
comp=Z,16nm,0.8s
**USA0B Ussuriysk Arra 56.13 25***c i*P **P** **15 35 05.2 -1.3**
**USRK Ussuriysk Ar. 56.13 25** P **P** **15 35 05.3 -1.1**
**USRK Ussuriysk Ar. 56.13 25** P **P** **15 35 06.0 -0.5**
comp=Z,12nm,0.6s,baz=213,slow=4.5,SNR=31
comp=Z,12nm,0.6s
**CHM Chimkent 56.30 331** *e*P **P** **15 35 07.7 -0.1**
baz=331
**CHM Chimkent 56.30 331** *e*P **P** **15 35 07.7 -0.1**
**KK31 Karatay Array 56.47 332** *i*P **P** **15 35 08.7 -0.3**
**KKAR Karatay Array 56.47 332** P **P** **15 35 08.1 -0.9**
**KKAR Karatay Array 56.47 332** P **P** **15 35 08.1 -0.9**
**BTLS Baital 56.48 336** *e*P **P** **15 35 08.5 -0.5**
baz=336
**BTLS Baital 56.48 336** *e*P **P** **15 35 08.5 -0.5**
**HIA Hailar 56.58 13** P **P** **15 35 08.0 -1.7**
HIA IAmb IAmb 15 35 09.8
comp=Z,11nm,0.8s
**HIA Hailar 56.58 13** P **P** **15 35 08.0 -1.7**
HIA pmax pmax
comp=Z,11nm,0.8s
**BRLS Borolday 56.73 332** *e*P **P** **15 35 09.8 -1.1**
baz=331
**BRLS Borolday 56.73 332** *e*P **P** **15 35 09.7 -1.1**
**MOY Mondy 56.99 359** *e*P **P** **15 35 12.7 +0.1**
MOY pmax pmax
comp=Z,28nm,1.9s
**IRK Irkutsk 57.57 1** *e*P **P** **15 35 14.9 -1.7**
IRK pmax pmax
comp=Z,42nm,1.5s
**JTM Tenmabayashi 58.03 34** P **P** **15 35 19.2 -0.8**
**CIT Chita 58.09 8** *e*P **P** **15 35 20.9 +0.6**
CIT *e* 15 35 33.4
CIT pmax pmax
comp=Z,41nm,2.5s
**HEH HeiHe 59.56 18** *e*P **P** **15 35 30.0 -0.5**
HEH pmax pmax
comp=Z,39nm,0.9s
**KURBB Kurchatov Arra 59.67 342** P **P** **15 35 31.0 -0.2**
comp=Z,11nm,0.8s,baz=157,slow=6.7,SNR=57
comp=Z,11nm,0.8s
**KURK Kurchatov 59.72 343** P **P** **15 35 31.4 -0.2**
KURK IAmb IAmb 15 35 46.2
comp=Z,25nm,0.9s
**KURK Kurchatov 59.72 343***c i*P **P** **15 35 31.5 0.0**
KURK pmax pmax
comp=Z,19nm,1.1s
**OTUK Ortayu 59.77 337** P **P** **15 35 31.7 -0.3**
**H04S1 CROZET ISLANDS 59.84 218** T T 16 40 15.3
baz=62,slow=75,SNR=1074
**H04S3 CROZET ISLANDS 59.85 218** T T 16 40 14.9
baz=62,slow=75,SNR=3445
**H04S2 CROZET ISLANDS 59.85 218** T T 16 40 16.2
baz=62,slow=75,SNR=3529
**ERM Erimo 60.01 34** P **P** **15 35 33.1 -0.6**
**JEM Erimo 60.02 34** P **P** **15 35 34.6 +0.9**
**KLR Kul'dur 60.16 22***c i*P **P** **15 35 33.6 -1.0**
KLR pmax pmax
comp=Z,11nm,0.6s
**ZALV Zalesovo Beam 61.12 348** P **P** **15 35 40.5 -0.6**
**ZALV Zalesovo Beam 61.12 348** P **P** **15 35 40.9 -0.2**
comp=Z,21nm,0.5s,baz=168,slow=5.1,SNR=74
comp=Z,21nm,0.5s
**ASAJ Asahikawa 61.13 32** P **P** **15 35 40.1 -1.2**
ASAJ pmax pmax
comp=Z,14nm,1.0s
**JKA Kamikawa-asahi 61.13 32** P **P** **15 35 40.1 -1.2**
JKA IAmb IAmb 15 35 41.5
comp=Z,14nm,1.0s
**ZEA Zeya 62.58 16** *e*P **P** **15 35 50.9 0.0**
ZEA pmax pmax
comp=E,10.0nm,0.6s
ZEA pmax pmax
comp=N,10.0nm,0.8s
ZEA pmax pmax
comp=Z,20nm,0.9s
**RAYN Ar Rayn 62.73 300** P **P** **15 35 53.4 +0.8**
**RAYN Ar Rayn 62.73 300** P **P** **15 35 53.4 +0.8**
RAYN pmax pmax
comp=Z,10.0nm,1.4s
**YSS Yuzh-Sakhalins 63.16 30** P **P** **15 35 55.1 +0.2**
**YSS Yuzh-Sakhalins 63.16 30** P **P** **15 35 53.6 -1.3**
**YSS Yuzh-Sakhalins 63.16 30** *e*P **P** **15 35 54.0 -0.9**
YSS *e* 15 36 14.0
YSS pmax pmax
comp=Z,30nm,1.1s
YSS pmax pmax
comp=Z,100nm,3.5s
**GRNR Gornyy 63.18 23**⇑*i*P **P** **15 35 54.5 -0.5**
GRNR pmax pmax
comp=Z,10.0nm,1.1s
**DZM Mont Dzumac 63.71 112** *e*LR LR 15 54 51.0
comp=Z,196nm,22.6s
**DZM Mont Dzumac 63.71 112** LR LR 16 04 26.5
comp=Z,163nm,20.1s,baz=248,slow=37
**BOD Bodaibo 63.81 7** *e*P **P** **15 35 58.2 -0.8**
BOD pmax pmax
comp=Z,34nm,1.0s
**LIFNC LIFOU 64.35 110** P **P** **15 36 04.3 +1.0**
**BVA0 Borovoye Array 64.39 339** *i*P **P** **15 36 02.6 -0.2**
**BRVK Borovoye 64.45 339** P **P** **15 36 02.8 -0.5**
BRVK IAmb IAmb 15 36 03.6
comp=Z,14nm,0.6s
**BRVK Borovoye 64.45 339***c i*P **P** **15 36 03.0 -0.2**
BRVK pmax pmax
comp=Z,26nm,1.3s
**AB31 Akbulak array 65.97 331** P **P** **15 36 13.3 +0.1**
**ABKAR Akbulak array 65.97 331** P **P** **15 36 12.7 -0.5**
**MAW Mawson 67.56 195** P **P** **15 36 24.4 +1.4**
comp=Z,5.9nm,0.8s,baz=44,slow=6.6,SNR=15
MAW LR LR 15 59 40.3
comp=Z,369nm,21.8s,baz=18,slow=30
comp=Z,5.9nm,0.8s
**AKTO Aktyubinsk 67.69 331** P **P** **15 36 23.9 -0.2**
comp=Z,2.4nm,0.3s,baz=150,slow=5.7,SNR=16
comp=Z,2.4nm,0.3s
**AKTO Aktyubinsk 67.69 331** P **P** **15 36 24.0 -0.2**
**YAK Yakutsk 70.53 13** P **P** **15 36 39.2 -2.2**
**YAK Yakutsk 70.53 13** *e*P **P** **15 36 39.4 -2.0**
YAK *e**PP **pP** **15 36 52.0 +0.2**
YAK *e* 15 37 10.1
YAK *e*S **S** **15 45 51.6 -0.6**
YAK *e*SS **SS** **15 50 21.6 -2.5**
YAK pmax pmax
comp=Z,25nm,0.9s
YAK pmax pmax
comp=E,10.0nm,1.1s
YAK pmax pmax
comp=N,17nm,1.3s
YAK smax smax
comp=N,17nm,1.8s

YAK smax smax
comp=E,8.0nm,1.5s
**SVE Sverdlovsk 70.92 337** *de*P **P 15 36 44.9 +0.9**
SVE pmax pmax
comp=Z,46nm,1.1s
**GURO Guroymak-BITLI 71.10 314** P **P 15 36 46.4 +0.7**
GURO IAmb IAmb 15 36 48.1
comp=Z,13nm,0.9s
**ARU Arti 71.47 336** P **P 15 36 47.2 -0.1**
**ARU Arti 71.47 336** P **P 15 36 47.7 +0.4**
comp=Z,11nm,0.5s,baz=138,slow=4.9,SNR=29
comp=Z,11nm,0.5s
**ARU Arti 71.47 336** *d* iP **P 15 36 47.5 +0.2**
ARU 15 37 07.8
ARU 15 39 26.3
ARU S **S 15 46 03.5 +0.1**
ARU SS **SS 15 50 36.6 -2.3**
ARU pmax pmax
comp=Z,43nm,1.3s
**ARU Arti 71.47 336** P **P 15 36 47.7 +0.4**
comp=Z,30nm,1.1s,comp=Z,382nm
**KBZ Khabaz 72.67 319** P **P 15 36 55.5 +0.8**
comp=Z,14nm,0.9s,baz=110,slow=5.2,SNR=22
comp=Z,14nm,0.9s
**KBZ Khabaz 72.67 319** *i* P **P 15 36 55.6 +0.8**
KBZ pmax pmax
comp=Z,12nm,0.9s
**SHA1 Shidzhatmaz 72.83 319** *c* iP **P 15 36 56.8 +0.8**
**KIV Kislovodsk 72.90 319** P **P 15 36 56.2 -0.1**
KIV IAmb IAmb 15 36 58.8
comp=Z,17nm,0.9s
**KIV Kislovodsk 72.90 319** *e*P **P 15 36 56.8 +0.5**
KIV pmax pmax
comp=Z,17nm,1.1s
KIV MLR MLR
comp=Z,798nm,18.0s
**ARPR Arapgir-MALATY 73.97 313** IAmb IAmb 15 37 05.5
comp=Z,25nm,0.9s
**BKZ Black Stump Fm 74.03 129** P **P 15 37 04.2 +1.1**
**BKZ Black Stump Fm 74.03 129** P **P 15 37 03.1 0.0**
BKZ IAmb IAmb 15 37 04.5
comp=Z,17nm,0.7s
**BELG Belogornoye 74.08 329** P **P 15 37 02.9 +0.1**
comp=Z,24nm,0.8s,baz=115,slow=1.9,SNR=7.2
comp=Z,24nm,0.8s
**BELG Belogornoye 74.08 329** *ce*P **P 15 37 02.7 -0.2**
BELG pmax pmax
comp=Z,6.0nm,1.1s
**GAZ Gaziantep 74.14 311** IAmb IAmb 15 37 06.8
comp=Z,20nm,1.0s
**MMAI Mount Meron Ar 74.21 306** P **P 15 37 05.1 +0.9**
comp=Z,7.2nm,0.8s,baz=102,slow=7.8,SNR=7.3
comp=Z,7.2nm,0.8s
**RTZ Ruatahuna 74.36 128** P **P 15 37 04.7 -0.3**
RTZ IAmb IAmb 15 37 06.6
comp=Z,33nm,1.1s
**URZ Urewera 74.43 128** LR LR 16 10 17.3
comp=Z,191nm,20.1s,baz=30,slow=36
**LABN Labinsk 74.47 319** *e*P P 15 37 00.2 -5.2
LABN pmax pmax
comp=Z,38nm,0.4s
LABN MLR MLR
comp=E,2μm,11.0s
LABN MLR MLR
comp=N,3μm,13.0s
**SOC Sochi 74.71 318** *e*P **P 15 37 05.4 -1.3**
SOC *e* 15 39 49.0
SOC *e*PPP PPP 15 41 36.6
SOC *e*S **S 15 46 41.6 +0.9**
SOC *e*SS **SS 15 51 26.5 -2.4**
SOC *e*SSS SSS 15 54 46.5
SOC pmax pmax
comp=Z,13nm,0.6s
SOC MLR MLR
comp=Z,893nm,18.0s
**PET Petropavlovsk 74.96 31** P **P 15 37 07.2 -0.8**
**PET Petropavlovsk 74.96 31** P **P 15 37 06.9 -1.0**
**PET Petropavlovsk 74.96 31** *e*P **P 15 37 07.1 -0.9**
PET pmax pmax
comp=Z,40nm,0.7s
**ERBR Yeremizino-Bor 75.07 320** *e*P **P 15 37 08.3 -0.5**
ERBR *e*S **S 15 46 42.1 -2.6**
ERBR pmax pmax
comp=Z,8.0nm,0.4s
ERBR MLR MLR
comp=Z,1μm,14.0s
**MA2 Magadan 75.20 23** P **P 15 37 09.4 +0.2**
**MA2 Magadan 75.20 23** P **P 15 37 09.0 -0.3**
MA2 IAmb IAmb 15 37 10.2
comp=Z,29nm,0.9s
**MA2 Magadan 75.20 23** *de*P **P 15 37 09.3 +0.1**
MA2 pmax pmax
comp=Z,39nm,1.7s
**BNN Bunyan 75.71 312** P **P 15 37 11.4 -1.5**
BNN IAmb IAmb 15 37 15.3
comp=Z,24nm,0.8s
**BOSA Boshof 76.28 242** P **P 15 37 17.6 +1.2**
comp=Z,1.1nm,0.4s,baz=170,slow=18,SNR=1.7
comp=Z,1.1nm,0.4s
**KIRV Kirov 76.66 334** P **P 15 37 17.6 +0.1**
comp=Z,19nm,0.6s,baz=80,slow=3.8,SNR=12
comp=Z,19nm,0.6s
**KIRV Kirov 76.66 334** *c* iP **P 15 37 18.2 +0.7**
**ANN Anapa 76.69 318** *e*P **P 15 37 16.1 -1.9**
ANN *e*S **S 15 47 00.3 -2.2**
ANN pmax pmax
comp=Z,32nm,1.1s
ANN MLR MLR
comp=Z,820nm,16.0s
**VRH Novokhopyorsk 76.69 326** *e*P **P 15 37 17.7 -0.2**
VRH pmax pmax
comp=Z,29nm,0.8s
**BR131 Keskin Array S 77.61 313** *c* iP **P 15 37 23.5 -0.1**
**BRTR Keskin Array B 77.61 313** P **P 15 37 23.3 -0.3**
**BRTR Keskin Array B 77.61 313** P **P 15 37 23.9 +0.4**
comp=Z,7.6nm,0.9s,baz=125,slow=6.5,SNR=24
comp=Z,7.6nm,0.9s
**BRTR Keskin Array B 77.61 313** P **P 15 37 24.0 +0.4**
**SEY Seymchan 77.94 21** *ce*P **P 15 37 24.6 -0.1**
SEY pmax pmax
comp=Z,14nm,1.3s
**VORD Divnogorie 77.97 325** *e*P **P 15 37 23.1 -2.0**
VORD pmax pmax
comp=Z,10.0nm,1.2s
**VSR Storozhevoye 78.15 325** *e*P **P 15 37 24.4 -1.7**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**VNDA Vanda 78.22 169** P **P 15 37 27.1 +1.1**
comp=Z,0.8nm,0.7s,baz=277,slow=4.7,SNR=5.0
VNDA LR LR 16 08 31.0
comp=Z,163nm,18.2s,baz=317,slow=33
comp=Z,0.8nm,0.7s
**VORR Voronezh 78.31 325** *e*P **P 15 37 26.9 -0.1**
VORR pmax pmax
comp=Z,12nm,0.7s
**LPSR Galich'ya Gora 78.86 326** *e*P **P 15 37 29.3 -0.6**
LPSR pmax pmax
comp=Z,20nm,0.8s
**SIM Simferopol' 78.95 318** *e*P **P 15 37 31.4 +0.7**
SIM pmax pmax
comp=Z,33nm,1.0s
**MOS Moscow 80.85 329** *e*P **P 15 37 38.7 -2.0**
**OBN Obninsk 81.15 328** *de*P **P 15 37 43.5 +1.2**
OBN *i* 15 37 58.2
OBN *e* 15 40 47.1
OBN *e*S **S 15 47 47.2 -2.5**
OBN *e*SS **SS 15 53 07.9 +2.5**
OBN pmax pmax
comp=Z,20nm,1.4s
OBN MLR MLR
comp=Z,557nm,16.0s
**MILM Milestii Mici 83.07 318** ⇓P **P 15 37 53.6 +1.1**
**MILM Milestii Mici 83.07 318** ⇓P **P 15 37 53.6 +1.1**
**IDI Anoyia 83.22 306** P **P 15 37 54.2 +0.6**
comp=Z,8.8nm,1.1s,baz=246,slow=18,SNR=1.6
comp=Z,8.8nm,1.1s
**SORM Soroca 83.70 320** ⇑P **P 15 37 56.7 +0.9**
**SORM Soroca 83.70 320** ⇑P **P 15 37 56.7 +0.9**
**AK09 Malin Array Si 83.79 322** P **P 15 37 56.8 +0.6**
**AK10 Malin Array Si 83.81 322** P **P 15 37 56.8 +0.5**
**AK08 Malin Array Si 83.82 322** P **P 15 37 56.7 +0.4**
**AK07 Malin Array Si 83.82 322** P **P 15 37 56.9 +0.6**
**AK05 Malin Array Si 83.84 322** P **P 15 37 56.3 -0.1**
**AKASG Malin Array Be 83.85 322** P **P 15 37 56.2 -0.2**
**AKASG Malin Array Be 83.85 322** P **P 15 37 56.3 -0.2**
comp=Z,4.2nm,0.9s,baz=87,slow=4.8,SNR=15
comp=Z,4.2nm,0.9s
**AKBB Malin Array Si 83.85 322** IAmb IAmb 15 37 57.8
comp=Z,12nm,1.1s
**AKBB Malin Array Si 83.85 322** ⇓*e*P **P 15 37 57.1 +0.6**
**AK01 Malin Array Si 83.86 322** P **P 15 37 56.5 0.0**
**KIEV Kiev 83.86 322** P **P 15 37 55.9 -0.6**
KIEV IAmb IAmb 15 37 57.8
comp=Z,11nm,1.1s
**KIEV Kiev 83.86 322** ⇓P **P 15 37 57.1 +0.6**
**KIEV Kiev 83.86 322** ⇓P **P 15 37 57.1 +0.6**
**KIEV Kiev 83.86 322** P **P 15 37 56.9 +0.4**
**AK03 Malin Array Si 83.86 322** P **P 15 37 56.8 +0.3**
**AK14 Malin Array Si 83.91 322** P **P 15 37 56.4 -0.4**
**AK22 Malin Array Si 83.96 322** P **P 15 37 57.7 +0.7**
**VRI Vrincioaia 84.20 317** ⇑P **P 15 37 59.8 +1.4**
**VRI Vrincioaia 84.20 317** ⇑P **P 15 37 59.8 +1.4**
**PLOR Plostina 84.25 317** ⇓P **P 15 38 01.7 +3.0**
**PLOR Plostina 84.25 317** ⇓P **P 15 38 01.7 +3.0**
**QSPA South Pole Qui 84.45 180** P **P 15 37 59.9 +0.5**
**QSPA South Pole Qui 84.45 180** P **P 15 38 00.1 +0.6**
comp=Z,1.4nm,0.6s,baz=221,slow=1.1,SNR=13
QSPA LR LR 16 12 48.0
comp=Z,173nm,18.6s,baz=314,slow=34
comp=Z,1.4nm,0.6s
**LUBAR Lubar, Ukraine 84.55 321** P **P 15 38 00.2 +0.2**
**MLR Muntele Rosu 84.64 317** P **P 15 38 00.7 -0.1**
MLR IAmb IAmb 15 38 03.5
comp=Z,23nm,1.1s
**MLR Muntele Rosu 84.64 317** P **P 15 38 00.6 -0.2**
comp=Z,17nm,1.1s,baz=107,slow=4.4,SNR=10
comp=Z,17nm,1.1s
**MLR Muntele Rosu 84.64 317** ⇓P **P 15 38 02.8 +2.0**
**MLR Muntele Rosu 84.64 317** P **P 15 38 00.7 -0.1**
MLR pmax pmax
comp=Z,23nm,1.1s
**TURR Turia 84.72 317** ⇑P **P 15 38 02.2 +1.1**
**KMPD K-Podol'skiy 85.03 320** P **P 15 38 03.5 +1.0**
**NVL N'lazarevskaya 85.07 199** *e*P P 15 37 48.4 -14
NVL pmax pmax
comp=Z,8.0nm,0.7s
NVL MLR MLR
comp=Z,86nm,17.0s
**DOPR Dopca 85.13 317** ⇓P **P 15 38 05.0 +1.9**
**BILL Bilibino 85.56 20** P **P 15 38 04.0 -0.8**
BILL IAmb IAmb 15 38 37.2
comp=Z,8.3nm,0.4s
**BILL Bilibino 85.56 20** *i* P **P 15 38 04.2 -0.6**
BILL *i* 15 38 13.2
BILL *i* 15 41 21.1
BILL pmax pmax
comp=Z,6.0nm,1.3s
**BURAR Bucovina Array 85.62 319** P **P 15 38 06.4 +0.8**
BURAR IAmb IAmb 15 38 08.6
comp=Z,8.0nm,0.8s
**BURAR Bucovina Array 85.62 319** ⇑P **P 15 38 07.8 +2.2**
**BURAR Bucovina Array 85.62 319** P **P 15 38 06.4 +0.8**
**BUR08 Bucovina Ar. S 85.63 319** IAmb IAmb 15 38 08.9
comp=Z,13nm,1.1s
**MNK Minsk 85.69 326** *i* P **P 15 38 05.2 -0.5**
MNK *i* 15 41 23.9
MNK *i* PPP PPP 15 43 17.6
MNK *i* S **SKSac 15 48 27.0 -1.5**
MNK pmax pmax
comp=N,8.0nm,0.8s
MNK pmax pmax
comp=Z,12nm,0.8s
MNK pmax pmax
comp=E,7.0nm,0.9s
MNK MLR MLR
comp=N,483nm,17.0s
MNK MLR MLR
comp=Z,481nm,17.0s
MNK MLR MLR
comp=E,165nm,17.0s
**JOF Joensuu 86.51 334** *e*P **P 15 38 10.6 +1.1**
**GZR Gura Zlata 86.80 316** ⇑P **P 15 38 13.5 +2.0**
**GZR Gura Zlata 86.80 316** ⇑P **P 15 38 13.5 +2.0**
**LVZ Lovozero 86.98 339** ⇓P **P 15 38 11.2 -0.6**
**APA Apatity 87.30 339** ⇓*i* P **P 15 38 17.0 +3.7**
APA pmax pmax
comp=Z,5.0nm,1.2s
APA MLR MLR
comp=Z,1μm,15.0s
**SURR Surduc 87.32 316** ⇑P **P 15 38 15.1 +1.3**
**VSU Vasula 87.35 329** *ce*P **P 15 38 14.4 +0.7**
VSU pmax pmax
comp=Z,14nm,1.0s
**BZS Buzias 87.64 316** ⇑P **P 15 38 17.1 +1.7**
**BZS Buzias 87.64 316** ⇑P **P 15 38 17.1 +1.7**
**KOLS Kolonicke sedl 87.81 319** *e*P **P 15 38 18.5 +2.3**
KOLS pmax pmax
comp=Z,35nm,1.0s
**KOLS Kolonicke sedl 87.81 319** *e*P **P 15 38 18.5 +2.3**
**ARBE Arbavere 87.98 330** *e*P **P 15 38 17.8 +1.1**
**PABE Paberze 88.12 326** *e*P **P 15 38 18.9 +1.5**
**SUW Suwalki 88.26 325** *e*P **P 15 38 19.0 +0.9**
**SUW Suwalki 88.26 325** *e*P **P 15 38 19.3 +1.2**
**FINES FINESS Array B 88.43 332** P **P 15 38 19.5 +0.7**
comp=Z,5.7nm,0.9s,baz=102,slow=8.6,SNR=12
comp=Z,5.7nm,0.9s
**MEF Metsahovi 88.94 331** *e*P **P 15 38 22.2 +1.1**
**KEF Keurusu 89.16 333** *e*P **P 15 38 23.1 +0.9**
**NIE Niedzica 89.17 320** *e*P **P 15 38 24.9 +2.3**
**PSZ Piszkesteto 89.20 318** ⇓P **P 15 38 24.6 +1.8**
**PSZ Piszkesteto 89.20 318** ⇓P **P 15 38 24.6 +1.8**
**OJC Ojcow 89.62 320** *e*P **P 15 38 25.9 +1.2**
**LANS Líptovska Anna 89.67 319** *e*P **P 15 38 28.8 +3.8**
LANS pmax pmax
comp=Z,3.0nm,1.0s
**LANS Liptovska Anna 89.67 319** *e*P **P 15 38 28.8 +3.8**
**MORH Mrgy, Hungar 89.79 316** ⇓P **P 15 38 26.6 +1.1**
**VYHS Vyhne 89.98 319** *e*P **P 15 38 28.3 +1.9**
VYHS pmax pmax
comp=Z,9.0nm,1.2s
**VYHS Vyhne 89.98 319** *e*P **P 15 38 28.3 +1.9**
**TIP Tinagrande 90.25 309** ⇓P **P 15 38 25.9 -2.0**
**VAF Ylistaro 90.34 333** *e*P **P 15 38 29.2 +1.5**
**ARCES ARCESS Array B 90.66 340** P **P 15 38 28.8 -0.3**
ARCES IAmb IAmb 15 38 58.7
comp=Z,12nm,1.4s
**ARCES ARCESS Array B 90.66 340** P **P 15 38 29.2 +0.1**
comp=Z,2.6nm,0.8s,baz=71,slow=8.1,SNR=11
comp=Z,2.6nm,0.8s
**JAVC Velka Javorina 90.80 319** *e*P **P 15 38 32.3 +2.0**
**SMOL Smolenice 90.91 318** *e*P **P 15 38 32.9 +2.2**
**MORC Moravsky Berou 91.00 320** *e*P **P 15 38 32.6 +1.4**
**MORC Moravsky Berou 91.00 320** ⇑P **P 15 38 32.0 +0.8**
**MORC Moravsky Berou 91.00 320** ⇑P **P 15 38 32.0 +0.8**
**KSP Ksiaz 91.92 321** *e*P **P 15 38 37.2 +1.9**
**CLL Collm 94.03 321** *e*P **P 15 38 46.0 +0.9**
**CLL Collm 94.03 321** *e*P **P 15 38 46.0 +0.9**
**HFS Hagfors 94.22 330** P **P 15 38 45.7 0.0**
comp=Z,1.9nm,0.7s,baz=35,slow=5.6,SNR=4.6
comp=Z,1.9nm,0.7s
**SPITS Spitsbergen Ar 94.60 348** P **P 15 38 46.8 -0.4**
comp=Z,0.5nm,0.3s,baz=149,slow=9.8,SNR=2.5
comp=Z,0.5nm,0.3s
**TBI Tubuai 104.11 116** *e*LR LR 16 13 47.1
comp=Z,496nm,25.0s
**PPT2 Papeete2 105.17 110** *e*LR LR 16 14 13.3
comp=Z,142nm,23.0s
PPT2 *e*LR LR 16 14 14.6
comp=Z,120nm,28.2s
**H09N1 TRISTAN DA CUN 106.14 229** T T 17 38 22.9
SNR=60
**SCHQ Schefferville 130.11 352** PKP **PKiKP 15 44 36.9 -0.7**
comp=Z,1.6nm,0.5s,baz=326,slow=3.6,SNR=3.5
**NVAR Mina Array Bea 130.55 43** PKP **PKiKP 15 44 39.5 +0.3**
comp=Z,0.6nm,0.5s,baz=357,slow=3.0,SNR=5.2
**ULM Lac du Bonnet 132.80 16** PKP **PKiKP 15 44 42.4 -0.7**
comp=Z,2.1nm,0.7s,baz=322,slow=12,SNR=2.1
**PDAR Pinedale Array 133.26 33** PKP **PKPdf 15 44 43.5 +0.1**
comp=Z,0.2nm,0.4s,baz=45,slow=2.3,SNR=2.9
**TXAR Lajitas Array 145.69 43** PKPbc **PKPab 15 45 07.5 +0.6**
comp=Z,19nm,0.9s,baz=298,slow=2.7,SNR=97

**IDC 01 15:28:40.6±350.0, 55°.77N×38°.71E, h0km, Error ellipse: s-maj=130.6km s-min=31.7km az=140.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **1.27** | **319** | I | I | 15 36 40.0 | |
| | baz=137,slow=318,SNR=0.7 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **12.78** | **107** | I | I | 16 46 40.0 | |
| | baz=297,slow=314,SNR=0.5 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **16.72** | **256** | I | I | 17 03 30.0 | |
| | baz=54,slow=344,SNR=0.5 | | | | | | |

**IDC 01 15:39:49.6±352.0, 55°.70N×38°.76E, h0km, Error ellipse: s-maj=131.1km s-min=29.8km az=141.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **1.34** | **321** | I | I | 15 48 20.0 | |
| | baz=139,slow=318,SNR=1.2 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **12.73** | **107** | I | I | 16 57 30.0 | |
| | baz=299,slow=310,SNR=0.4 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **16.73** | **256** | I | I | 17 14 40.0 | |
| | baz=55,slow=344,SNR=0.3 | | | | | | |

*IDC **01** 15:45:28.3±0.7, 30°.17N×87°.68E, h0km, mb4.0/22, mbtmp4.0/25, ML4.0/3, Error ellipse: s-maj=22.8km s-min=13.0km az=42.0*
*NEIC **01** 15:45:31.7±2.7, 30°.41N±0°.03×87°.49E±0°.08, h10km±1km, mb4.3/48, Error ellipse: s-maj=11.2km s-min=4.5km az=89.0*
*NDI **01** 15:45:32.9±4.9, 30°.03N×87°.38E, h15km±999km, ML4.1, mb4.3(NEIC)*
**ISC 01 15:45:30.6±0.5, 30°.23N±0°.06×87°.44E±0°.06, h10km, n108, σ1°38/102, mb4.2/36, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTK** | **Tadong** | **3.08** | **160** | *e*P | **Pn** | **15 46 22.8** | **+3.4** |
| GTK | | | | IAML | | 15 47 28.3 | |
| | comp=E,352nm,0.6s | | | | | | |
| GTK | | | | IAML | | 15 47 34.2 | |
| | comp=N,381nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **3.26** | **98** | Pn | **Pn** | **15 46 24.4** | **+2.1** |
| LSA | | | | smax | smax | | |
| | comp=N,830nm,1.0s | | | | | | |
| LSA | | | | smax | smax | | |
| | comp=E,1μm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **3.26** | **98** | Pn | **Pn** | **15 46 22.9** | **+0.6** |
| **TAWA** | **Tawang** | **4.69** | **123** | IAML | | 15 48 55.0 | |
| | comp=E,728nm,0.6s | | | | | | |
| TAWA | | | | IAML | | 15 49 00.0 | |
| | comp=N,698nm,0.8s | | | | | | |
| **GUWA** | **GUWAHATI** | **5.50** | **136** | *e*P | **Pn** | **15 46 53.5** | **+0.9** |
| GUWA | | | | IAML | | 15 47 51.3 | |
| | comp=N,286nm,0.9s | | | | | | |
| GUWA | | | | IAML | | 15 47 51.7 | |
| | comp=E,285nm,0.8s | | | | | | |
| **SHL** | **Shillong** | **6.09** | **139** | Pn | **Pn** | **15 47 03.7** | **+2.9** |
| **ZIRO** | **ZIRO** | **6.23** | **114** | *e*P | **Pn** | **15 47 03.1** | **+0.2** |
| ZIRO | | | | IAML | | 15 48 07.5 | |
| | comp=E,722nm,0.4s | | | | | | |
| ZIRO | | | | IAML | | 15 48 08.7 | |
| | comp=N,680nm,0.7s | | | | | | |
| **LGTI** | **Lohaghat** | **6.30** | **265** | IAML | | 15 48 13.5 | |
| | comp=E,142nm,0.7s | | | | | | |
| LGTI | | | | IAML | | 15 48 16.0 | |
| | comp=N,196nm,0.7s | | | | | | |
| **PTH** | **Pithoragarh** | **6.31** | **266** | IAML | | 15 48 11.4 | |
| | comp=N,154nm,0.4s | | | | | | |
| PTH | | | | IAML | | 15 48 13.7 | |
| | comp=E,168nm,0.7s | | | | | | |
| **BOK** | **Bokaro** | **6.56** | **193** | *e*P | **Pn** | **15 47 04.7** | **-2.5** |
| BOK | | | | IAML | | 15 48 12.0 | |
| | comp=N,127nm,0.8s | | | | | | |
| **KOHI** | **KOHIMA** | **7.41** | **126** | *e*P | **Pn** | **15 47 17.3** | **-1.7** |
| KOHI | | | | IAML | | 15 48 23.9 | |
| | comp=N,332nm,0.6s | | | | | | |
| KOHI | | | | IAML | | 15 48 26.1 | |
| | comp=E,325nm,1.1s | | | | | | |
| **IMP** | **Imphal** | **7.89** | **131** | *e*P | **Pn** | **15 47 25.6** | **+0.1** |
| IMP | | | | IAML | | 15 48 24.5 | |
| | comp=N,70nm,1.1s | | | | | | |
| IMP | | | | IAML | | 15 48 24.6 | |
| | comp=E,34nm,0.8s | | | | | | |
| **LKP** | **Lekhapani** | **7.92** | **109** | IAML | | 15 48 26.8 | |
| | comp=N,221nm,0.7s | | | | | | |
| LKP | | | | IAML | | 15 48 27.8 | |
| | comp=E,215nm,0.7s | | | | | | |
| **DDI** | **Dehra Dun** | **8.12** | **273** | IAML | | 15 48 36.6 | |
| | comp=E,733nm,0.5s | | | | | | |
| DDI | | | | IAML | | 15 48 36.6 | |
| | comp=N,549nm,0.5s | | | | | | |
| **SMLA** | **Simla** | **8.89** | **278** | *e*P | **Pn** | **15 47 41.2** | **+2.1** |
| SMLA | | | | IAML | | 15 48 42.9 | |
| | comp=Z,84nm,0.6s | | | | | | |
| SMLA | | | | IAML | | 15 48 44.4 | |
| | comp=E,67nm,0.4s | | | | | | |
| SMLA | | | | IAML | | 15 48 46.1 | |
| | comp=N,74nm,0.5s | | | | | | |
| **BLSP** | **Bilaspur** | **9.37** | **212** | *e*P | Pn | 15 47 40.5 | -5.3 |
| **DHRM** | **DHARAMSHALA** | **9.75** | **285** | *e*P | **Pn** | **15 47 52.0** | **+0.9** |
| DHRM | | | | IAML | | 15 48 58.1 | |
| | comp=N,93nm,0.6s | | | | | | |
| DHRM | | | | IAML | | 15 48 59.3 | |
| | comp=E,99nm,0.6s | | | | | | |
| **THN** | **Thein Dam** | **10.26** | **285** | *e*P | **Pn** | **15 47 57.6** | **-0.4** |
| THN | | | | IAML | | 15 49 00.6 | |
| | comp=E,59nm,0.7s | | | | | | |
| THN | | | | IAML | | 15 49 03.6 | |
| | comp=N,33nm,0.7s | | | | | | |
| **BHPL** | **Bhopal** | **11.34** | **234** | *e*P | **Pn** | **15 48 13.0** | **+0.2** |
| **NIL** | **Nilore** | **12.52** | **289** | Pn | **Pn** | **15 48 28.1** | **-0.8** |
| **KSH** | **Kashi** | **13.20** | **318** | Pn | **Pn** | **15 48 40.5** | **+2.4** |
| KSH | | | | smax | smax | | |
| | comp=N,52nm,1.1s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,57nm,1.1s | | | | | | |
| **WMQ** | **Urumqi** | **13.56** | **1** | *e*P | **P** | **15 48 53.9** | **+1.6** |
| WMQ | | | | smax | smax | | |
| | comp=N,17nm,1.9s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,18nm,0.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=N,4μm,13.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,2μm,11.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,1μm,12.1s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **13.86** | **328** | Pn | **Pn** | **15 48 46.9** | **-0.5** |
| **PRZ** | **Przheval'sk** | **14.22** | **332** | Pn | **Pn** | **15 48 50.1** | **-2.1** |
| **NRN** | **Naryn** | **14.51** | **323** | Pn | **Pn** | **15 48 55.1** | **-1.2** |
| **BOOM** | **Boomskoye usch** | **15.32** | **326** | Pn | **Pn** | **15 49 04.6** | **-2.5** |
| BOOM | | | | IAmb | IAmb | 15 49 18.1 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **15.44** | **135** | Pn | **Pn** | **15 49 09.4** | **+0.8** |
| **CM31** | **Chiang Mai Arr** | **15.71** | **136** | Pn | **Pn** | **15 49 13.0** | **+0.8** |
| CM31 | | | | IAmb | IAmb | 15 49 15.7 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **15.71** | **136** | Pn | **Pn** | **15 49 12.1** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **15.71** | **136** | Pn | **Pn** | **15 49 08.7** | **-3.4** |
| | comp=Z,0.4nm,0.3s,baz=317,slow=13,SNR=1.7 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **DRK** | **Karamyk** | **15.79** | **310** | Pn | **Pn** | **15 49 10.6** | **-2.7** |
| **ARSB** | **Arslanbob** | **16.10** | **317** | Pn | **Pn** | **15 49 15.1** | **-2.1** |
| **KBL** | **Kabul** | **16.12** | **290** | Pn | **Pn** | **15 49 14.8** | **-2.7** |
| KBL | | | | IAmb | IAmb | 15 49 28.5 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **16.16** | **324** | Pn | **Pn** | **15 49 17.4** | **-0.5** |
| **AAK** | **Ala-Archa** | **16.16** | **324** | Pn | **Pn** | **15 49 19.1** | **+1.2** |
| | comp=Z,0.3nm,0.3s,baz=202,slow=5.4,SNR=1.5 | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **GAR** | **Garm** | **16.57** | **306** | Pn | **Pn** | **15 49 19.7** | **-3.5** |
| GAR | | | | IAmb | IAmb | 15 49 33.8 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **BTK** | **Batken** | **16.74** | **310** | Pn | **Pn** | **15 49 22.1** | **-3.2** |
| **MK31** | **Makanchi Array** | **17.01** | **348** | | **Pn** | **15 49 28.4** | **-0.2** |
| **MKAR** | **Makanchi Array** | **17.01** | **348** | Pn | **Pn** | **15 49 27.9** | **-0.8** |
| **MKAR** | **Makanchi Array** | **17.01** | **348** | P | **Pn** | **15 49 28.1** | **-0.5** |
| | comp=Z,0.3nm,0.3s,baz=159,slow=14,SNR=16 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **17.09** | **347** | | **Pn** | **15 49 29.5** | **0.0** |
| **SLVN** | **Son La** | **17.26** | **117** | Pn | **Pn** | **15 49 31.2** | **-0.6** |
| **SIMJ** | **Simiganj** | **17.35** | **304** | Pn | **Pn** | **15 49 32.0** | **-1.0** |
| SIMJ | | | | IAmb | IAmb | 15 49 34.4 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **18.65** | **318** | P | **P** | **15 49 48.6** | **+0.1** |
| **KKAR** | **Karatay Array** | **18.65** | **318** | P | **P** | **15 49 48.1** | **-0.4** |
| **ENH** | **Enshi** | **19.05** | **84** | P | **Pn** | **15 49 53.9** | **+0.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURBB | Kurchatov Arra | 21.44 | 344 | P | P | 15 50 18.4 | -0.4 |
| | comp=Z,2.2nm,0.2s,baz=157,slow=10,SNR=20 | | | | | | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| KURK | Kurchatov | 21.50 | 345 | P | P | 15 50 18.7 | -0.7 |
| KURK | | | | IAmb | IAmb | 15 50 27.4 | |
| | comp=Z,20nm,1.3s | | | | | | |
| HRA | Herat | 21.68 | 288 | P | P | 15 50 19.6 | -2.2 |
| HRA | | | | IAmb | IAmb | 15 50 29.1 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| SONM | Songino Array | 22.82 | 34 | P | P | 15 50 34.2 | +0.4 |
| SONM | Songino Array | 22.82 | 34 | P | P | 15 50 31.5 | -2.3 |
| | comp=Z,0.4nm,0.3s,baz=191,slow=13,SNR=1.8 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| ULN | Ulaanbaatar | 23.17 | 35 | P | P | 15 50 37.6 | +0.2 |
| ZAA0 | Zalesovo Array | 23.77 | 356 | P | P | 15 50 43.7 | +0.5 |
| ZAA0 | | | | IAmb | IAmb | 15 50 45.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| ZALV | Zalesovo Beam | 23.77 | 356 | P | P | 15 50 43.4 | +0.3 |
| ZALV | Zalesovo Beam | 23.77 | 356 | P | P | 15 50 43.0 | -0.1 |
| | comp=Z,4.4nm,0.9s,baz=177,slow=9.8,SNR=12 | | | | | | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| BRVK | Borovoye | 26.03 | 336 | P | P | 15 51 02.2 | -1.5 |
| BRVK | | | | IAmb | IAmb | 15 51 07.1 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| ABKAR | Akbulak array | 28.18 | 320 | P | P | 15 51 21.7 | -1.5 |
| ABKAR | Akbulak array | 28.18 | 320 | P | P | 15 51 22.5 | -0.6 |
| ABKAR | | | | IAmb | IAmb | 15 51 26.1 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 29.86 | 321 | P | P | 15 51 39.2 | +1.1 |
| | comp=Z,2.7nm,0.8s,baz=130,slow=7.0,SNR=9.5 | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| GSI | Gunungsitoli | 30.34 | 160 | P | P | 15 51 43.9 | +1.3 |
| ARU | Arti | 33.12 | 331 | P | P | 15 52 06.7 | +0.1 |
| ARU | | | | IAmb | IAmb | 15 52 14.6 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| ARU | Arti | 33.12 | 331 | P | P | 15 52 07.6 | +1.0 |
| | comp=Z,2.6nm,0.5s,baz=168,slow=7.1,SNR=4.7 | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| KSAR | Wonju Array Be | 34.15 | 67 | P | P | 15 52 16.7 | +0.8 |
| KSRS | Korea Array | 34.19 | 67 | P | P | 15 52 14.1 | -2.0 |
| KSRS | Korea Array | 34.19 | 67 | P | P | 15 52 14.1 | -2.0 |
| | comp=Z,0.3nm,0.6s,baz=266,slow=8.8,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| JNU | Nakatsue | 36.89 | 74 | P | P | 15 52 38.2 | -1.3 |
| | comp=Z,5.1nm,0.9s,baz=340,slow=16,SNR=2.1 | | | | | | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| KBZ | Khabaz | 37.60 | 304 | P | P | 15 52 47.2 | +1.8 |
| | comp=Z,1.9nm,0.8s,baz=135,slow=5.0,SNR=4.0 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| KIRV | Kirov | 38.38 | 329 | P | P | 15 52 54.0 | +2.3 |
| | comp=Z,6.5nm,0.5s,baz=146,slow=3.6,SNR=4.4 | | | | | | |
| | comp=Z,6.5nm,0.5s | | | | | | |
| YAK | Yakutsk | 41.94 | 28 | P | P | 15 53 21.7 | +0.5 |
| YAK | | | | IAmb | IAmb | 15 53 26.5 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| GAZ | Gaziantep | 41.96 | 293 | P | P | 15 53 21.5 | -0.4 |
| GAZ | | | | IAmb | IAmb | 15 53 29.5 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| BR131 | Keskin Array S | 44.51 | 297 | P | P | 15 53 42.5 | 0.0 |
| BR131 | | | | IAmb | IAmb | 15 53 53.7 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| BRTR | Keskin Array B | 44.51 | 297 | P | P | 15 53 43.0 | +0.4 |
| BRTR | Keskin Array B | 44.51 | 297 | P | P | 15 53 43.6 | +1.1 |
| | comp=Z,0.9nm,0.6s,baz=156,slow=9.5,SNR=5.3 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| ANTO | Ankara | 45.15 | 298 | P | P | 15 53 47.9 | +0.4 |
| AKASG | Malin Array Be | 47.43 | 313 | P | P | 15 54 05.3 | +0.2 |
| AKASG | | | | IAmb | IAmb | 15 54 09.4 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| AKASG | Malin Array Be | 47.43 | 313 | P | P | 15 54 06.2 | +1.0 |
| | comp=Z,1.0nm,0.5s,baz=80,slow=7.6,SNR=5.7 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| AKBB | Malin Array Si | 47.43 | 313 | P | P | 15 54 05.5 | +0.3 |
| AKBB | | | | IAmb | IAmb | 15 54 07.9 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| KIEV | Kiev | 47.44 | 313 | P | P | 15 54 06.0 | +0.8 |
| KIEV | | | | IAmb | IAmb | 15 54 07.9 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| ELL | Elmali | 47.81 | 294 | P | P | 15 54 08.0 | -0.5 |
| MLR | Muntele Rosu | 49.71 | 306 | P | P | 15 54 22.8 | -0.2 |
| BURAR | Bucovina Array | 50.07 | 309 | P | P | 15 54 25.7 | 0.0 |
| FIA1 | FINESS Array S | 50.31 | 327 | P | P | 15 54 27.7 | +0.6 |
| FINES | FINESS Array B | 50.31 | 327 | P | P | 15 54 27.4 | +0.3 |
| FINES | FINESS Array B | 50.31 | 327 | P | P | 15 54 28.0 | +0.9 |
| | comp=Z,2.0nm,0.7s,baz=106,slow=12,SNR=9.1 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ARCES | ARCESS Array B | 52.25 | 337 | P | P | 15 54 41.6 | 0.0 |
| ARCES | | | | IAmb | IAmb | 15 54 43.8 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| ARCES | ARCESS Array B | 52.25 | 337 | P | P | 15 54 41.7 | +0.1 |
| | comp=Z,2.9nm,0.9s,baz=110,slow=9.2,SNR=9.4 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| ITM | Ithomi | 53.99 | 296 | P | P | 15 54 54.1 | -0.8 |
| ITM | | | | IAmb | IAmb | 15 55 03.4 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| HFS | Hagfors | 56.29 | 325 | P | P | 15 55 11.2 | 0.0 |
| HFS | Hagfors | 56.29 | 325 | P | P | 15 55 11.2 | 0.0 |
| | comp=Z,5.8nm,0.8s,baz=79,slow=7.7,SNR=12 | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| SPITS | Spitsbergen Ar | 56.76 | 347 | P | P | 15 55 13.1 | -1.2 |
| | comp=Z,1.0nm,0.7s,baz=92,slow=13,SNR=1.5 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| KMBO | Kilima Mbogo | 57.03 | 246 | P | P | 15 55 18.3 | +1.0 |
| KMBO | | | | IAmb | IAmb | 15 55 32.6 | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| NB201 | NORSAR Array S | 57.42 | 326 | P | P | 15 55 19.9 | +0.7 |
| NB2 | NORSAR Subarra | 57.46 | 326 | P | P | 15 55 19.0 | -0.5 |
| | comp=Z,3.6nm,1.0s,baz=86,slow=7.4 | | | | | | |
| NOA | NORSAR Array B | 57.46 | 326 | P | P | 15 55 18.9 | -0.5 |
| | comp=Z,2.1nm,0.8s,baz=86,slow=7.0,SNR=8.7 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| GERES | GERESS Array B | 57.57 | 311 | P | P | 15 55 20.8 | +0.2 |
| | comp=Z,0.4nm,0.5s,baz=110,slow=8.5,SNR=2.7 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| NC204 | NORSAR Array S | 57.66 | 326 | P | P | 15 55 20.5 | -0.4 |
| NC204 | | | | IAmb | IAmb | 15 55 22.8 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| NBO00 | NORSAR Array S | 57.67 | 326 | P | P | 15 55 21.5 | +0.6 |
| NBO00 | | | | IAmb | IAmb | 15 55 22.9 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| EKA | Eskdalemuir Ar | 66.05 | 321 | P | P | 15 56 17.9 | +0.5 |
| | comp=Z,1.1nm,0.7s,baz=96,slow=6.8,SNR=1.9 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 67.27 | 132 | P | P | 15 56 23.7 | -1.9 |
| | comp=Z,1.1nm,0.6s,baz=322,slow=6.4,SNR=17 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| ASAR | Alice Springs | 69.72 | 135 | P | P | 15 56 39.0 | -1.9 |
| | comp=Z,1.4nm,0.7s,baz=318,slow=6.4,SNR=14 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| BMAR | Burnt Mountain | 75.13 | 18 | P | P | 15 57 13.9 | +1.2 |
| ILAR | Eielson Array | 76.33 | 21 | P | P | 15 57 18.4 | -1.1 |
| | comp=Z,0.4nm,0.8s,baz=282,slow=3.5,SNR=4.3 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| SML | Sawmill | 77.89 | 24 | P | P | 15 57 30.4 | +2.0 |
| BCAR | Beaver Creek A | 79.13 | 21 | P | P | 15 57 36.2 | +1.0 |
| TOA0 | Torodi Ar. Sit | 79.88 | 279 | P | P | 15 57 39.8 | -0.2 |
| TOA0 | | | | IAmb | IAmb | 15 57 42.0 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 79.88 | 279 | P | P | 15 57 40.0 | 0.0 |
| | comp=Z,1.5nm,0.8s,baz=59,slow=7.6,SNR=9.1 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| N32M | Quiet Lake | 83.16 | 19 | P | P | 15 57 58.2 | +1.5 |
| N32M | | | | IAmb | IAmb | 15 58 10.3 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| CPUP | Villa Florida | 148.81 | 268 | PKPbc | PKPbc | 16 05 17.6 | -1.2 |
| | comp=Z,2.9nm,0.8s,baz=156,slow=6.0,SNR=5.0 | | | | | | |

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*IDC* ***01*** *15:45:53.1±1.2, 33°.81N×141°.69E, h0km, mb3.5/4, mbtmp3.5/6, ML2.9/2, Error ellipse: s-maj=24.2km s-min=19.4km az=105.0*

*JMA* ***01*** *15:45:56.5±0.6, 34°N±1°×14°2E±°, h41km, MV3.2/20, FAR SE OFF BOSO PEN*

**ISC 01 15:45:56.3**±1.1**, 33°.81N**±0°.05×**141°.62E**±0°.08**, h24km, n15,** σ**1s.10**/20**, mb3.6**/4**, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BSO1 | Boso 1 | 1.00 | 328 | P | Pb | 15 46 14.0 | -0.6 |
| BSO3 | Boso 3 | 1.35 | 318 | P | Pb | 15 46 19.6 | -1.2 |
| BSO3 | | | | eS | Sb | 15 46 37.3 | -0.3 |
| BSO4 | Boso 4 | 1.59 | 318 | eP | Pb | 15 46 23.3 | -1.5 |
| JHJ2 | Mitsune | 1.66 | 246 | eP | Pb | 15 46 25.1 | -1.0 |
| JHJ | Hachijo jima 2 | 1.68 | 246 | Pn | Pb | 15 46 25.0 | -1.5 |
| | 41nm,0.3s,baz=49,slow=20,SNR=21 | | | | | | |
| JHJ | | | | Sn | Sb | 15 46 46.5 | -0.7 |
| | 95nm,0.3s,baz=62,slow=22,SNR=11 | | | | | | |
| JMKN | Mikurajimanish | 1.69 | 273 | eP | Pn | 15 46 24.5 | +0.2 |
| JMKN | | | | eS | Sn | 15 46 45.6 | +0.3 |
| JMYK | Miyake Tsubota | 1.74 | 279 | P | Pn | 15 46 25.5 | +0.5 |
| JIZS | Izushimoda | 2.45 | 293 | eP | Pn | 15 46 35.3 | +0.6 |
| JOD2 | Odawara 2 | 2.55 | 306 | P | Pn | 15 46 36.0 | -0.1 |
| MJAR | Matsushiro Arr | 3.91 | 315 | Pn | Pn | 15 46 55.6 | +0.8 |
| | 0.2nm,0.3s,baz=146,slow=12,SNR=14 | | | | | | |
| MJAR | | | | Sn | Sn | 15 47 42.4 | +2.5 |
| | 0.2nm,0.3s,baz=149,slow=13,SNR=4.1 | | | | | | |
| | 4.1nm,0.6s | | | | | | |
| ASAJ | Asahikawa | 10.32 | 4 | Pn | Pn | 15 48 21.4 | -1.5 |
| | 0.2nm,0.3s,baz=176,slow=16,SNR=2.2 | | | | | | |
| ASAJ | | | | Sn | Sn | 15 50 16.9 | -0.8 |
| | 0.1nm,0.3s,baz=217,slow=20,SNR=1.6 | | | | | | |
| | 2.2nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 46.04 | 305 | P | P | 15 54 18.7 | +0.8 |
| | 1.1nm,0.9s,baz=101,slow=7.8,SNR=0.9 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| ILAR | Eielson Array | 52.15 | 31 | P | P | 15 55 04.6 | +0.2 |
| | 0.6nm,0.9s,baz=265,slow=6.6,SNR=7.6 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 53.90 | 188 | P | P | 15 55 17.8 | 0.0 |
| | 0.3nm,0.5s,baz=2.9,slow=7.4,SNR=11 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| ASAR | Alice Springs | 57.62 | 188 | P | P | 15 55 45.6 | +1.1 |
| | 0.2nm,0.7s,baz=11,slow=7.6,SNR=4.4 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

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*BGR* ***01*** *15:45:55.2, 26°.39N×91°.03E, h33km, mb4.7*

*IDC* ***01*** *15:46:20.9±0.5, 30°.15N×87°.57E, h0km, mb4.6/40, mbtmp4.6/43, ML4.1/3, MS4.3/1, Error ellipse: s-maj=12.9km s-min=9.9km az=21.0*

*MOS* ***01*** *15:46:21.4±1.2, 30°.19N×87°.65E, h10km, mb5.2/75, MS4.6/20, Error ellipse: s-maj=6.2km s-min=2.9km az=122.8*

*NEIC* ***01*** *15:46:23.8±1.9, 30°.35N±0°.07×87°.60E±0°.07, h10km±1km, mb5.1/199, Mww5.2/13, Error ellipse: s-maj=11.5km s-min=10.3km az=177.0*

*NEIC* ***01*** *15:46:23.5, 30°.41N×87°.64E, h26km*

*NEIC* ***01*** *15:46:23.5, 30°.51N×87°.41E, h26km, Moment Tensor Solution. Duration: 1s.9 Moment tensor: Scale 10^16Nm; Mrr-4.18; Mθθ-3.74; Mφφ7.92; Mrθ5.07; Mθφ-1.43; Mφr2.66; Fault plane solution: M0 9.00000×10^16 NP1: φs209.09000°, δ68.00000°, λ-44.11000°. NP2: φs319.05000°, δ49.81000°, λ-150.63000°. Principal axes: T 8.4899, Plg11.0000°, Azm268.0000°; N 1.0274, Plg42.0000°, Azm8.0000°; P -9.5173, Plg46.0000°, Azm166.0000°;*

*BJI* ***01*** *15:46:23.3±0.0, 30°.30N×87°.64E, h9km, mb4.8/72, mB5.3/54, Ms4.9/76, Ms7 4.9/76*

*NDI* ***01*** *15:46:25.5±4.3, 30°.25N×87°.87E, h10km, ML4.5, MW4.7, mb5.1(NEIC)*

*GCMT* ***01*** *15:46:26.8±0.1, 30°.23N±0°.01×87°.80E±0°.01, h15km, MW5.3/113, Moment Tensor Solution. s67,c89; s113,c219; Duration: 1s.1 Moment tensor: Scale 10^17 Nm; Mrr-0.51±.02; Mθθ-0.29±.01; Mφφ0.79±.01; Mrθ1.20±.06; Mθφ-0.01±.01; Mφr-0.17±.04; Best double couple: M0 1.26700×10^17 NP1:φs303.00000°, δ80.00000°, λ-117.00000°. NP2:φs194.00000°, δ28.00000°, λ-21.00000°. Principal axes: T 0.9240, Plg30.0000°, Azm54.0000°; N 0.6870, Plg27.0000°, Azm308.0000°; P -1.6100, Plg48.0000°, Azm184.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 01 15:46:23.5**±0.4**, 30°.24N**±0°.03×**87°.57E**±0°.03**, h10km**±2km**, h10km:pP-P, n977,** σ**1s.88**/1016**, mb5.0**/256**, MS4.8**/48**, 50C-24D, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GTK | Tadong | 3.05 | 162 | eP | Pn | 15 47 11.6 | -0.4 |
| LSA | Lhasa | 3.15 | 99 | Pn | Pn | 15 47 16.8 | +3.1 |
| LSA | Lhasa | 3.15 | 99 | P | Pn | 15 47 16.8 | +3.1 |
| LSA | Lhasa | 3.15 | 99 | Sn | Pn | 15 47 18.2 | +4.5 |
| VLK | Valmikinagar | 4.37 | 229 | eP | Pn | 15 47 34.5 | +4.6 |
| TAWA | Tawang | 4.60 | 124 | ex | Pb | 15 47 43.0 | -1.6 |
| GUWA | GUWAHATI | 5.43 | 137 | eP | Pn | 15 47 43.5 | -1.0 |
| GUWA | GUWAHATI | 5.43 | 137 | ex | Pn | 15 47 46.4 | +1.8 |
| SHL | Shillong | 6.02 | 140 | Pn | Pn | 15 47 52.6 | -0.3 |
| SHL | Shillong | 6.02 | 140 | ex | Pn | 15 47 53.8 | +0.9 |
| SHL | Shillong | 6.02 | 140 | eP | Pn | 15 47 53.1 | +0.2 |
| SHL | Shillong | 6.02 | 140 | P | Pn | 15 47 52.6 | -0.3 |
| ZIRO | ZIRO | 6.14 | 115 | ex | Pn | 15 47 57.0 | +2.5 |
| LGTI | Lohaghat | 6.41 | 265 | eP | Pn | 15 48 04.7 | +6.7 |
| LGTI | | | | eS | Sn | 15 49 20.6 | +9.4 |
| LGTI | | | | IAML | | 15 49 31.7 | |
| | comp=E,117nm,0.8s | | | | | | |
| LGTI | | | | IAML | | 15 49 32.7 | |
| | comp=N,107nm,0.9s | | | | | | |
| LGTI | Lohaghat | 6.41 | 265 | ex | Pn | 15 48 04.4 | +6.4 |
| PTH | Pithoragarh | 6.42 | 266 | eP | Pn | 15 48 02.0 | +3.6 |
| PTH | | | | eS | Sn | 15 49 17.8 | +6.0 |
| PTH | Pithoragarh | 6.42 | 266 | ex | Pn | 15 48 07.5 | +9.1 |
| BOK | Bokaro | 6.59 | 194 | eP | Pn | 15 48 02.9 | +2.3 |
| BOK | Bokaro | 6.59 | 194 | ex | Pn | 15 48 08.9 | +8.4 |
| ALBI | Allahabad | 7.08 | 227 | eP | Pn | 15 48 09.2 | +1.9 |
| ALBI | | | | eS | Sn | 15 49 32.3 | +4.4 |
| ALBI | | | | IAML | | 15 49 36.8 | |
| | comp=N,2μm,1.4s | | | | | | |
| ALBI | | | | IAML | | 15 49 40.4 | |
| | comp=E,2μm,1.1s | | | | | | |
| KOHI | KOHIMA | 7.33 | 126 | eP | Pn | 15 48 11.2 | +0.4 |
| IMP | Imphal | 7.81 | 132 | eP | Pn | 15 48 18.9 | +1.4 |
| LKP | Lekhapani | 7.82 | 110 | eP | Pn | 15 48 17.5 | +0.2 |
| DDI | Dehra Dun | 8.23 | 273 | eP | Pn | 15 48 26.8 | +3.8 |
| DDI | | | | eS | Sn | 15 49 58.1 | +2.0 |
| DDI | | | | IAML | | 15 50 04.5 | |
| | comp=N,733nm,1.4s | | | | | | |
| DDI | | | | IAML | | 15 50 07.3 | |
| | comp=E,599nm,0.5s | | | | | | |
| GOMU | GeErMu | 8.49 | 44 | P | Pn | 15 48 30.6 | +3.7 |
| GOMU | | | | S | Sn | 15 50 05.6 | +2.6 |
| GOMU | | | | pmax | pmax | | |
| | comp=E,75nm,1.4s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=E,790nm,4.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,8μm,5.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,10μm,6.1s | | | | | | |
| SMLA | Simla | 9.00 | 278 | eP | Pn | 15 48 37.3 | +3.8 |
| SMLA | | | | eS | Sn | 15 50 16.2 | +1.2 |
| SMLA | | | | IAML | | 15 50 23.2 | |
| | comp=N,318nm,1.2s | | | | | | |
| SMLA | | | | IAML | | 15 50 23.7 | |
| | comp=E,466nm,1.1s | | | | | | |
| NDI | New Delhi | 9.16 | 263 | eP | Pn | 15 48 39.0 | +3.2 |
| NDI | | | | eS | Sn | 15 50 20.7 | +1.8 |
| NDI | | | | IAML | | 15 50 27.5 | |
| | comp=E,107nm,1.0s | | | | | | |
| BHK | Bhakra | 9.66 | 280 | eP | Pn | 15 48 46.4 | +3.8 |
| BHK | | | | eS | Sn | 15 50 30.5 | -0.8 |
| BHK | | | | IAML | | 15 50 44.4 | |
| | comp=E,183nm,0.9s | | | | | | |
| BHK | | | | IAML | | 15 50 50.4 | |
| | comp=E,213nm,0.9s | | | | | | |
| DHRM | DHARAMSHALA | 9.85 | 285 | eP | Pn | 15 48 48.7 | +3.2 |
| DHRM | | | | eS | Sn | 15 50 38.9 | +2.6 |
| DHRM | | | | IAML | | 15 50 42.2 | |
| | comp=N,225nm,0.9s | | | | | | |
| DHRM | | | | IAML | | 15 50 47.5 | |
| | comp=E,252nm,0.4s | | | | | | |
| KUDL | Kundal | 9.91 | 261 | eP | Pn | 15 48 50.5 | +4.5 |
| THN | Thein Dam | 10.37 | 285 | eP | Pn | 15 48 55.9 | +3.6 |
| THN | | | | eS | Sn | 15 50 47.8 | -0.8 |
| TNCH | TengChong | 11.01 | 116 | ⇑P | Pn | 15 49 01.6 | +0.3 |
| TNCH | | | | S | Sn | 15 51 04.6 | 0.0 |
| TNCH | | | | SS | SnSn | 15 51 19.5 | +3.0 |
| TNCH | | | | pmax | pmax | | |
| | comp=E,130nm,0.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,5μm,14.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,12μm,14.0s | | | | | | |
| JMU | Jammu | 11.09 | 286 | eP | Pn | 15 49 05.3 | +3.1 |
| JMU | | | | eS | Sn | 15 51 07.2 | +0.8 |
| BHPL | Bhopal | 11.43 | 235 | eP | Pn | 15 49 09.1 | +2.1 |
| BHPL | | | | eS | Sn | 15 51 09.7 | -5.1 |
| BHPL | | | | IAML | | 15 51 19.2 | |
| | comp=E,70nm,1.0s | | | | | | |
| BHPL | | | | IAML | | 15 51 30.1 | |
| | comp=N,58nm,1.0s | | | | | | |
| AJM | Ajmer | 11.98 | 255 | eP | Pn | 15 49 17.7 | +3.2 |
| NIL | Nilore | 12.62 | 289 | Pn | Pn | 15 49 21.0 | -2.2 |
| NIL | Nilore | 12.62 | 289 | P | Pn | 15 49 22.6 | -0.6 |
| PZH | PanZhiHua | 13.02 | 103 | P | Pn | 15 49 30.4 | +1.6 |
| PZH | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=N,100nm,5.1s | | | | | | |
| KSH | Kashi | 13.26 | 317 | Sn | Sn | 15 51 59.9 | +0.3 |
| AKL | Akola | 13.45 | 228 | eP | Pn | 15 49 35.0 | +0.5 |
| WMQ | Urumqi | 13.55 | 0 | eP | Pn | 15 49 37.4 | +1.5 |
| WMQ | | | | pmax | pmax | | |
| | comp=N,33nm,1.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=N,1μm,13.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=N,1μm,13.3s | | | | | | |
| GTA | Gaotai | 13.58 | 44 | eP | Pn | 15 49 37.1 | +0.7 |
| GTA | | | | pP | P | 15 49 41.0 | -4.5 |
| GTA | | | | S | Sn | 15 52 08.1 | +0.7 |
| GTA | | | | sS | S | 15 52 13.6 | -17 |
| GTA | | | | SS | SnSn | 15 52 28.1 | +8.3 |
| GTA | | | | pmax | pmax | | |
| | comp=N,8.0nm,2.0s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=N,270nm,5.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,6μm,14.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,2μm,12.4s | | | | | | |
| TARG | Taragay, Kyrgy | 13.91 | 328 | Pn | Pn | 15 49 44.8 | +3.7 |
| TARG | Taragay, Kyrgy | 13.91 | 328 | P | Pn | 15 49 44.8 | +3.7 |
| CD2 | Chengdu | 13.97 | 83 | P | Pn | 15 49 40.9 | -0.7 |
| CD2 | | | | PP | P | 15 49 55.3 | +5.6 |
| CD2 | | | | S | Sn | 15 52 14.3 | -2.4 |
| CD2 | | | | SS | SnSn | 15 52 31.2 | +2.1 |
| CD2 | | | | pmax | pmax | | |
| | comp=N,50nm,0.8s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=N,7μm,9.3s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=N,8μm,10.3s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=N,10μm,9.5s | | | | | | |
| PRZ | Przheval'sk | 14.26 | 331 | P | Pn | 15 49 45.7 | 0.0 |
| KMI | Kunming | 14.37 | 107 | ⇑P | Pn | 15 49 47.5 | +0.2 |
| KMI | | | | S | Sn | 15 52 30.5 | +3.6 |
| KMI | | | | pmax | pmax | | |
| | comp=N,110nm,0.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,3μm,16.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,5μm,9.7s | | | | | | |
| SHLS | Shalkode | 14.43 | 336 | eP | Pn | 15 49 46.4 | -1.5 |
| | comp=N,19nm,1.0s,baz=336 | | | | | | |
| SHLS | Shalkode | 14.43 | 336 | eP | Pn | 15 49 46.4 | -1.5 |
| SHLS | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| NRN | Naryn | 14.57 | 323 | Pn | Pn | 15 49 52.6 | +2.6 |
| NRN | Naryn | 14.57 | 323 | P | Pn | 15 49 52.6 | +2.6 |
| UZB | Uzynbulak | 14.58 | 334 | eP | Pn | 15 49 50.7 | +0.6 |
| | baz=334 | | | | | | |
| UZB | | | | eS | Sn | 15 52 32.4 | +0.7 |
| | baz=334 | | | | | | |
| UZB | Uzynbulak | 14.58 | 334 | eP | Pn | 15 49 50.6 | +0.6 |
| UZB | | | | eS | Sn | 15 52 32.4 | +0.7 |
| SATY | Saty | 14.74 | 333 | eP | Pn | 15 49 53.1 | +0.9 |
| | comp=Z,19nm,1.0s,baz=332 | | | | | | |
| SATY | | | | eS | Sn | 15 52 36.5 | +0.9 |
| | baz=332 | | | | | | |
| SATY | Saty | 14.74 | 333 | eP | Pn | 15 49 53.0 | +0.9 |
| SATY | | | | eS | Sn | 15 52 36.5 | +0.9 |
| SATY | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| LZH | Lanzhou | 14.82 | 63 | P | Pn | 15 49 52.5 | -0.8 |
| LZH | | | | sP | P | 15 50 01.8 | +2.5 |
| LZH | | | | S | Sn | 15 52 41.3 | +3.7 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,120nm,1.4s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,210nm,4.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,5μm,8.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,4μm,8.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,2μm,9.6s | | | | | | |
| ZHN | Zhinishke | 14.82 | 333 | eP | Pn | 15 49 54.0 | +0.7 |
| | comp=Z,30nm,1.1s,baz=332 | | | | | | |
| ZHN | Zhinishke | 14.82 | 333 | eP | Pn | 15 49 54.0 | +0.7 |
| ZHN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| KPKS | Kokpek | 14.98 | 334 | eP | Pn | 15 49 55.9 | +0.5 |
| | baz=333 | | | | | | |
| KPKS | | | | eS | Sn | 15 52 41.7 | +0.3 |
| | baz=333 | | | | | | |
| KPKS | Kokpek | 14.98 | 334 | eP | Pn | 15 49 55.8 | +0.5 |
| KPKS | | | | eS | Sn | 15 52 41.6 | +0.3 |
| ULHL | Ulahol | 15.05 | 326 | P | P | 15 50 00.9 | -0.9 |
| | SNR=6.8 | | | | | | |
| HYB | Hyderabad | 15.19 | 215 | eP | Pn | 15 49 59.6 | +1.3 |
| HYB | | | | eS | Sn | 15 52 50.4 | +3.7 |
| HYB | | | | IVMs_BB | IVMs_BB | 15 56 57.1 | |
| | comp=Z,4μm,6.3s | | | | | | |
| CHTO | Chiang Mai | 15.37 | 135 | Pn | Pn | 15 49 58.7 | -1.9 |
| CHTO | | | | IAmb | IAmb | 15 50 08.7 | |
| | comp=Z,56nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 15.37 | 135 | P | Pn | 15 49 58.7 | -1.9 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,56nm,0.8s | | | | | | |
| BOOM | Boomskoye usch | 15.38 | 326 | Pn | Pn | 15 50 01.6 | +0.8 |
| BOOM | Boomskoye usch | 15.38 | 326 | P | Pn | 15 50 01.6 | +0.8 |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,67nm,1.3s | | | | | | |
| KNDC | Almaty | 15.47 | 330 | P | P | 15 50 08.9 | +2.5 |
| CM31 | Chiang Mai Arr | 15.64 | 136 | Pn | Pn | 15 50 03.5 | -0.6 |
| CM31 | | | | IAmb | IAmb | 15 50 11.6 | |
| | comp=Z,408nm,1.9s | | | | | | |
| CMAR | Chiang Mai Arr | 15.64 | 136 | Pn | Pn | 15 50 04.2 | +0.1 |
| CMAR | Chiang Mai Arr | 15.64 | 136 | Pn | Pn | 15 50 01.9 | -2.2 |
| | comp=Z,0.5nm,0.3s,baz=324,slow=12,SNR=18 | | | | | | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 15.64 | 136 | P | Pn | 15 50 04.2 | +0.1 |
| OHH | Osh | 15.81 | 314 | P | Pn | 15 50 07.8 | +1.5 |
| OHH | | | | pmax | pmax | | |
| | comp=Z,34nm,0.7s | | | | | | |
| DRK | Karamyk | 15.87 | 310 | | P | 15 50 13.8 | +2.7 |
| DRK | Karamyk | 15.87 | 310 | P | P | 15 50 13.8 | +2.7 |
| DRK | | | | pmax | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 15.87 | 326 | P | P | 15 50 10.8 | -0.1 |
| | SNR=16 | | | | | | |
| UCH | Uchtor | 15.91 | 322 | P | P | 15 50 11.5 | -0.2 |
| | SNR=22 | | | | | | |
| ARXS | Arharly | 15.94 | 334 | eP | P | 15 50 09.8 | -1.8 |
| CHKK | Chushkaly | 15.98 | 331 | eP | Pn | 15 50 09.6 | +1.2 |
| | baz=330 | | | | | | |
| CHKK | Chushkaly | 15.98 | 331 | eP | Pn | 15 50 09.5 | +1.2 |
| KBK | Karagaybulak | 15.99 | 324 | P | P | 15 50 13.1 | +0.7 |
| | SNR=9.3 | | | | | | |
| AAK | Ala-Archa | 16.21 | 323 | P | P | 15 50 21.4 | +6.7 |
| | SNR=6.1 | | | | | | |
| AAK | Ala-Archa | 16.21 | 323 | | P | 15 50 15.7 | +1.0 |
| AAK | Ala-Archa | 16.21 | 323 | Pn | Pn | 15 50 11.8 | +0.2 |
| | comp=Z,0.3nm,0.3s,baz=170,slow=11,SNR=1.9 | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| AAK | Ala-Archa | 16.21 | 323 | ceP | Pn | 15 50 12.1 | +0.5 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| KBL | Kabul | 16.22 | 290 | | P | 15 50 18.1 | +3.2 |
| KBL | Kabul | 16.22 | 290 | P | P | 15 50 18.1 | +3.2 |
| KBL | | | | pmax | pmax | | |
| | comp=Z,135nm,1.7s | | | | | | |
| FRU1 | Bishkek | 16.27 | 324 | | P | 15 50 14.8 | -0.4 |
| FRU1 | Bishkek | 16.27 | 324 | P | P | 15 50 14.8 | -0.4 |
| FRU1 | | | | pmax | pmax | | |
| | comp=Z,95nm,1.1s | | | | | | |
| AML | Almayashu | 16.29 | 321 | P | P | 15 50 19.5 | +3.7 |
| | SNR=27 | | | | | | |
| CHMS | Chumysh | 16.34 | 325 | P | P | 15 50 17.2 | +1.2 |
| | SNR=8.1 | | | | | | |

PHRA **Phrae** 16.41 133 Pn **Pn** 15 50 14.0 0.0
TDK **Taldyqorghan** 16.41 336 *e*P **Pn** 15 50 14.9 +1.0
baz=336
TDK LR LR 15 57 00.4
comp=Z,1μm,9.3s,baz=336
TDK **Taldyqorghan** 16.41 336 *e*P **Pn** 15 50 14.9 +1.0
TDK MLR MLR
comp=Z,1μm,9.0s
EKS2 **Erkin-Say** 16.61 322 P **P** 15 50 22.3 +3.3
SNR=21
GAR **Garm** 16.65 306 Pn **Pn** 15 50 15.5 -1.7
GAR IAmb IAmb 15 50 24.3
comp=Z,281nm,1.2s
SGDS **Sogindy** 16.74 326 *e*P **P** 15 50 19.5 -0.9
baz=325
SGDS **Sogindy** 16.74 326 *e*P **P** 15 50 19.5 -0.9
BTK **Batken** 16.82 310 Pn **Pn** 15 50 17.8 -1.3
BTK **Batken** 16.82 310 P **Pn** 15 50 17.8 -1.3
BTK pmax pmax
comp=Z,204nm,0.6s
MK31 **Makanchi Array** 17.03 348 **Pn** 15 50 22.4 +0.7
MK31 **Makanchi Array** 17.03 348 *ce*P **Pn** 15 50 21.2 -0.5
MKAR **Makanchi Array** 17.03 348 **Pn** 15 50 22.2 +0.5
MKAR **Makanchi Array** 17.03 348 P **Pn** 15 50 22.4 +0.6
comp=Z,1.0nm,0.3s,baz=155,slow=13,SNR=26
MKAR PcP **PcP** 15 55 07.1 -0.1
comp=Z,0.2nm,0.4s,baz=189,slow=2.9,SNR=2.6
comp=Z,15nm,0.7s
MAKZ **Makanchi** 17.10 347 **Pn** 15 50 22.6 0.0
MAKZ **Makanchi** 17.10 347 P **Pn** 15 50 22.7 0.0
MAKZ pmax pmax
comp=Z,136nm,1.8s
SLVN **Son La** 17.16 117 **P** 15 50 24.7 -0.6
SLVN IAmb IAmb 15 50 31.6
comp=Z,223nm,1.7s
GYA **Guiyang** 17.23 98 ⇑P **Pn** 15 50 23.2 -1.2
GYA S **Sn** 15 53 30.4 -5.8
GYA pmax pmax
comp=Z,160nm,1.9s
GYA pmax pmax
comp=Z,1μm,3.3s
GYA LR LR
comp=Z,2μm,11.4s
GYA LR LR
comp=Z,2μm,13.8s
GYA LR LR
comp=Z,3μm,15.2s
ZSN **Zaisan** 17.31 354 *e*P **Pn** 15 50 25.3 0.0
baz=353
ZSN *e*S **Sn** 15 53 36.9 -0.9
baz=353
ZSN **Zaisan** 17.31 354 *e*P **Pn** 15 50 25.2 0.0
ZSN *e*S **Sn** 15 53 36.9 -0.9
CHGR **Chuyangaron** 17.33 304 Pn **Pn** 15 50 23.5 -2.1
CHGR **Chuyangaron** 17.33 304 P **Pn** 15 50 23.5 -2.1
CHGR pmax pmax
comp=Z,686nm,1.8s
SIMJ **Simiganj** 17.44 304 **Pn** 15 50 26.6 -0.4
SIMJ IAmb IAmb 15 50 35.0
comp=Z,88nm,0.7s
BTLS **Baital** 18.21 328 *e*P **P** 15 50 37.7 +1.2
baz=327
BTLS *e*S **Sn** 15 54 01.1 +1.6
baz=327
BTLS **Baital** 18.21 328 *e*P **P** 15 50 37.7 +1.2
BTLS *e*S **Sn** 15 54 01.1 +1.6
XAN **Xi'an** 18.47 73 ⇑⇑P **P** 15 50 39.0 -0.6
XAN S **Sn** 15 54 03.2 -2.9
XAN sS S 15 54 09.0 -1.5
XAN pmax pmax
comp=Z,40nm,1.3s
XAN pmax pmax
comp=Z,2μm,5.1s
XAN LR LR
comp=Z,3μm,11.4s
XAN LR LR
comp=Z,7μm,11.4s
XAN LR LR
comp=Z,8μm,11.1s
KK31 **Karatay Array** 18.71 318 P **Pn** 15 50 42.5 0.0
KK31 **Karatay Array** 18.71 318 P **Pn** 15 50 42.5 0.0
KK31 pmax pmax
comp=Z,26nm,1.1s
KKAR **Karatay Array** 18.71 318 P **P** 15 50 42.2 0.0
KKAR **Karatay Array** 18.71 318 P **P** 15 50 42.2 0.0
KKAR pmax pmax
comp=Z,26nm,1.1s
CHM **Chimkent** 18.80 315 *e*P **Pn** 15 50 45.3 +1.7
comp=Z,39nm,1.0s,baz=314
CHM LR LR 15 58 05.9
comp=Z,761nm,14.8s,baz=314
CHM **Chimkent** 18.80 315 *e*P **Pn** 15 50 45.2 +1.7
CHM pmax pmax
comp=Z,39nm,1.0s
CHM MLR MLR
comp=Z,761nm,15.0s
ENH **Enshi** 18.93 84 P **Pn** 15 50 47.4 +2.1
ENH **Enshi** 18.93 84 P **Pn** 15 50 45.3 -0.1
BRLS **Borolday** 19.07 317 *e*P **Pn** 15 50 47.5 +0.6
baz=315
BRLS **Borolday** 19.07 317 *e*P **Pn** 15 50 47.4 +0.6
SRDT **SRDT** 19.07 144 P **Pn** 15 50 49.9 +3.0
BTO **Baotou** 20.96 54 *e*P **P** 15 51 05.4 -1.4
BTO pP Pn 15 51 09.4 0.0
BTO sP **sP** 15 51 12.9 -0.4
BTO PP **PnPn** 15 51 26.9 +1.5
BTO S **S** 15 54 57.2 -3.2
BTO sS Sn 15 55 01.7 -4.5
BTO pmax pmax
comp=Z,19nm,1.1s
BTO pmax pmax
comp=Z,2μm,8.0s
BTO LR LR
comp=Z,5μm,18.4s
BTO LR LR
comp=Z,3μm,15.2s
LYN **LuoYang** 21.44 72 *e*P **P** 15 51 12.4 +0.5
LYN pP pP 15 51 17.1 +0.8
LYN sP sP 15 51 20.7 +2.3
LYN S **S** 15 55 07.6 -2.2
LYN sS sS 15 55 12.7 -4.1
LYN pmax pmax
comp=Z,53nm,0.6s
LYN pmax pmax
comp=Z,2μm,5.8s
LYN LR LR
comp=Z,2μm,9.3s
LYN LR LR
comp=Z,1μm,8.6s
KURBB **Kurchatov Arra** 21.46 344 P **P** 15 51 11.7 -0.2
comp=Z,56nm,1.1s,baz=159,slow=10,SNR=33
KURBB PcP **PcP** 15 55 13.9 -0.9
comp=Z,0.5nm,0.4s,baz=171,slow=2.1,SNR=3.0
comp=Z,56nm,1.1s
KURK **Kurchatov** 21.52 344 P **P** 15 51 12.2 -0.3
KURK IAmb IAmb 15 51 20.9
comp=Z,172nm,1.2s
KURK **Kurchatov** 21.52 344 *ce*P **P** 15 51 11.4 -1.2
KURK pmax pmax
comp=Z,145nm,1.4s
HRA **Herat** 21.78 288 P **P** 15 51 15.5 -0.2
HRA IAmb IAmb 15 51 22.0
comp=Z,112nm,1.7s
TIY **Taiyuan** 21.89 63 *e*P **P** 15 51 21.4 +4.7
TIY S **S** 15 55 16.3 -2.3
TIY pmax pmax
comp=Z,160nm,1.4s
TIY LR LR
comp=Z,1μm,7.9s
TIY LR LR
comp=Z,1μm,7.3s
HHC **Hu-ho-hao-te** 22.14 55 *e*P **P** 15 51 25.0 +5.5
HHC S **S** 15 55 20.7 -2.8
HHC sS pS 15 55 28.3 -1.6
HHC pmax pmax
comp=Z,32nm,0.6s
HHC pmax pmax
comp=Z,130nm,4.5s
HHC LR LR
comp=Z,3μm,12.0s
HHC LR LR
comp=Z,2μm,11.3s
HHC LR LR
comp=Z,4μm,11.2s
SONM **Songino Array** 22.75 34 P **P** 15 51 26.1 +0.1
SONM IAmb IAmb 15 51 31.1
comp=Z,126nm,1.6s
SONM **Songino Array** 22.75 34 P **P** 15 51 26.3 +0.3
comp=Z,13nm,0.8s,baz=226,slow=8.3,SNR=30
SONM LR LR 16 01 31.6
comp=Z,800nm,21.2s,baz=222,slow=40
comp=Z,13nm,0.8s
QIZ **Qiongzhong** 23.08 114 P **P** 15 51 33.6 +4.2
QIZ **Qiongzhong** 23.08 114 P **P** 15 51 29.6 +0.1
QIZ PP **PnPn** 15 51 58.6 +4.2
QIZ S **S** 15 55 39.9 -0.7
QIZ pmax pmax
comp=Z,64nm,2.4s
QIZ pmax pmax
comp=Z,1μm,4.8s
QIZ LR LR
comp=Z,2μm,18.8s
QIZ LR LR
comp=Z,2μm,19.8s
QIZ LR LR
comp=Z,1μm,12.4s
QIZ **Qiongzhong** 23.08 114 P **P** 15 51 29.5 +0.1
WHN **Wuhan** 23.09 82 P **P** 15 51 29.8 +0.3
WHN pP **pP** 15 51 33.6 -0.4
WHN S **S** 15 55 38.0 -2.6
WHN sS **pS** 15 55 43.8 -2.0
WHN pmax pmax
comp=Z,320nm,1.4s
WHN pmax pmax
comp=Z,3μm,3.9s
WHN LR LR
comp=Z,20μm,15.5s
ULN **Ulaanbaatar** 23.10 35 P **P** 15 51 28.6 -1.0
ULN IAmb IAmb 15 51 37.3
comp=Z,60nm,1.6s
ULN **Ulaanbaatar** 23.10 35 *de*P **P** 15 51 28.6 -1.0
ULN pmax pmax
comp=Z,14nm,0.9s
ZAK **Zakamensk** 23.32 26 *e*P **P** 15 51 31.6 -0.2
ZAK pmax pmax
comp=Z,33nm,1.4s
HNS **HongShan** 23.60 65 ⇑P **P** 15 51 34.7 +0.2
HNS *e*S **S** 15 55 50.9 +2.0
HNS pmax pmax
comp=Z,66nm,1.8s
HNS pmax pmax
comp=Z,820nm,7.6s
HNS LR LR
comp=Z,1μm,16.7s
HNS LR LR
comp=Z,3μm,16.7s
MOY **Mondy** 23.61 21 *e*P **P** 15 51 36.0 +1.4
MOY pmax pmax
comp=Z,128nm,2.3s
PALK **Pallekele** 23.74 197 P **P** 15 51 34.3 -1.8
comp=Z,8.3nm,0.8s,baz=76,slow=17,SNR=1.2
comp=Z,8.3nm,0.8s
ZAA0 **Zalesovo Array** 23.77 356 P **P** 15 51 34.5 -1.5
ZAA0 IAmb IAmb 15 51 46.5
comp=Z,50nm,1.2s
ZALV **Zalesovo Beam** 23.77 356 P **P** 15 51 35.7 -0.3
ZALV **Zalesovo Beam** 23.77 356 P **P** 15 51 36.2 +0.1
comp=Z,17nm,0.7s,baz=183,slow=9.0,SNR=25
ZALV PcP **PcP** 15 55 19.1 -0.4
comp=Z,0.4nm,0.5s,baz=222,slow=1.9,SNR=2.8
comp=Z,17nm,0.7s
SURA **Surathani** 23.81 149 P **P** 15 51 37.6 +0.9
SRIT **Nakonsritamara** 24.30 150 P **P** 15 51 44.0 +2.7
SRIT **Nakonsritamara** 24.30 150 P **P** 15 51 41.1 -0.2
BJI **Beijing** 25.26 59 P **P** 15 51 49.9 +0.1
BJI sP **pP** 15 51 55.4 +0.9
BJI PcP **PcP** 15 55 24.2 +1.2
BJI pmax pmax
comp=Z,3.0nm,0.8s
BJI pmax pmax
comp=Z,190nm,6.0s
BJI LR LR
comp=Z,560nm,12.7s
BJI LR LR
comp=Z,920nm,15.9s
BJI LR LR
comp=Z,1μm,18.8s
TIA **Tai'an** 25.37 69 P **P** 15 51 52.5 +1.6
TIA pmax pmax
comp=Z,10.0nm,0.7s
TIA pmax pmax
comp=Z,470nm,4.5s
TIA LR LR
comp=Z,1μm,9.3s
TIA LR LR
comp=Z,4μm,16.7s
BRVK **Borovoye** 26.07 336 P **P** 15 51 57.0 0.0
BRVK IAmb IAmb 15 52 03.8
comp=Z,35nm,1.1s
BRVK **Borovoye** 26.07 336 ⇑*e*P **P** 15 51 55.5 -1.5
BRVK pmax pmax
comp=Z,7.0nm,0.9s
XLT **XiLinHaoTe** 26.37 51 *e*P **P** 15 52 01.5 +1.5
XLT sP sP 15 52 09.6 +2.9
XLT PP **PnPn** 15 52 44.5 +5.2
XLT S **S** 15 56 35.3 +2.1
XLT sS sS 15 56 43.8 +2.9
XLT SS **SnSn** 15 57 38.8 +5.5
XLT pmax pmax
comp=Z,13nm,1.0s
XLT pmax pmax
comp=Z,350nm,5.3s
XLT LR LR
comp=Z,270nm,18.3s
XLT LR LR
comp=Z,1μm,19.6s
XLT LR LR
comp=Z,1μm,14.0s
DLV **T Lat** 26.61 129 P **P** 15 52 04.6 +2.2
DLV **T Lat** 26.61 129 P **P** 15 52 02.6 +0.2
NJ2 **Nanjing** 26.79 78 *e*P **P** 15 52 02.2 -1.6
NJ2 pmax pmax
comp=Z,14nm,1.0s
NJ2 LR LR
comp=Z,2μm,9.0s
NJ2 LR LR
comp=Z,1μm,7.1s
NJ2 LR LR
comp=Z,1μm,8.5s
KULM **Kulim** 27.72 151 P **P** 15 52 13.0 +0.8
KULM IAmb IAmb 15 52 18.5
comp=Z,47nm,1.2s
QZH **Quanzhou** 27.95 93 *e*P **P** 15 52 14.2 0.0
QZH pmax pmax
comp=Z,340nm,7.6s
QZH LR LR
comp=Z,1μm,10.0s
QZH LR LR
comp=Z,4μm,15.1s
QZH LR LR
comp=Z,5μm,16.1s
ABKAR **Akbulak array** 28.25 320 P **P** 15 52 16.8 +0.2
ABKAR **Akbulak array** 28.25 320 P **P** 15 52 17.0 +0.4
ABKAR IAmb IAmb 15 52 21.2
comp=Z,14nm,0.7s
SSE **Sheshan** 28.87 80 P P 15 52 16.0 -6.4
SSE S **S** 15 57 07.9 -4.7
SSE sS sS 15 57 38.2 +18
SSE pmax pmax
comp=Z,15nm,2.9s
SSE pmax pmax
comp=Z,170nm,3.7s
SSE LR LR
comp=N,1μm,15.7s
DL2 **Dalian** 29.21 64 P **P** 15 52 29.5 +4.2
DL2 S S 15 57 27.3 +9.4
DL2 pmax pmax
comp=N,30nm,0.8s
DL2 pmax pmax
comp=N,240nm,3.9s
DL2 LR LR
comp=N,1μm,17.9s
DL2 LR LR
comp=N,1μm,13.0s
DL2 LR LR
comp=N,2μm,15.1s
AKTO **Aktyubinsk** 29.93 321 P **P** 15 52 32.2 +0.6
comp=N,14nm,0.9s,baz=125,slow=7.8,SNR=21
AKTO ScP **ScP** 15 59 16.4 +0.1
comp=N,0.8nm,0.6s,baz=153,slow=4.5,SNR=1.9
comp=N,14nm,0.9s
NACB **Ninganchiao** 30.78 93 P **P** 15 52 41.3 +1.9
NACB **Ninganchiao** 30.78 93 P **P** 15 52 39.1 -0.3
YULB **Yu-li** 30.79 95 P **P** 15 52 41.7 +2.2
YULB **Yu-li** 30.79 95 P **P** 15 52 39.6 +0.1
TWG **Pinlang** 30.79 96 P **P** 15 52 39.0 -0.5
TWG IAmb IAmb 15 52 45.4
comp=Z,47nm,1.3s
TWGBT **Beinan** 30.80 96 P **P** 15 52 41.5 +1.9
HIA **Hailar** 30.86 43 P **P** 15 52 39.8 -0.1
HIA IAmb IAmb 15 52 48.6
comp=Z,23nm,0.8s
HIA **Hailar** 30.86 43 ⇓*e*P **P** 15 52 39.6 -0.2
HIA pmax pmax
comp=Z,10.0nm,0.6s
SVE **Sverdlovsk** 32.57 332 *e*P **P** 15 52 56.0 +1.3
SVE pmax pmax
comp=Z,118nm,1.5s
CN2 **Changchun** 32.84 55 P **P** 15 52 56.1 -1.2
CN2 pmax pmax
comp=Z,10.0nm,0.5s
CN2 pmax pmax
comp=Z,200nm,5.0s
CN2 LR LR
comp=Z,1μm,15.0s
CN2 LR LR
comp=Z,2μm,16.0s
INCN **Inchon** 33.05 67 P **P** 15 53 01.3 +2.0
BOD **Bodaibo** 33.07 26 *e*P **P** 15 52 58.3 -0.8
BOD pmax pmax
comp=Z,27nm,1.9s
ARU **Arti** 33.16 330 P **P** 15 53 00.3 +0.4
ARU **Arti** 33.16 330 P **P** 15 53 00.2 +0.2
comp=Z,28nm,0.6s,baz=127,slow=6.4,SNR=25
comp=Z,28nm,0.6s
ARU **Arti** 33.16 330 *c i*P **P** 15 53 00.1 +0.2
ARU 15 54 07.1
ARU PPP PPP 15 54 21.4
ARU 15 55 43.6
ARU S **S** 15 58 20.6 +1.4
ARU SS **SnSn** 16 00 15.2 -3.1
ARU SSS SSS 16 00 39.3
ARU pmax pmax
comp=Z,78nm,1.3s
ARU MLR MLR
comp=Z,999nm,13.0s
ARU **Arti** 33.16 330 P **P** 15 52 59.9 0.0
comp=Z,52nm,0.9s,comp=Z,764nm
TJN **Taejon** 33.64 69 ⇑*e*P **P** 15 53 03.2 -1.2
KSAR **Wonju Array Be** 34.05 67 P **P** 15 53 06.1 -1.8
KSAR **Wonju Array Be** 34.05 67 P **P** 15 53 06.1 -1.8
KSRS **Korea Array** 34.08 67 P **P** 15 53 07.8 -0.3
comp=Z,2.7nm,0.6s,baz=263,slow=8.4,SNR=13
KSRS ScP **ScP** 15 59 31.9 +1.3
comp=Z,0.9nm,0.9s,baz=260,slow=3.6,SNR=4.4
comp=Z,2.7nm,0.6s
MAK **Makhachkala** 34.26 303 *e*P **P** 15 53 06.1 -3.6
MAK *e* 15 54 26.7
MAK *e*S **S** 15 58 32.4 -4.2
MAK *e*SS **SnSn** 16 00 47.3 +2.0
MAK pmax pmax
comp=Z,130nm,1.2s
MAK MLR MLR
comp=Z,4μm,14.0s
BNX **BinXian** 34.60 52 ⇓P **P** 15 53 13.2 +0.6
BNX pmax pmax
comp=Z,12nm,0.8s
JOW **Kunigami** 35.79 85 P **P** 15 53 21.4 -1.6
comp=Z,12nm,0.6s,baz=292,slow=11,SNR=2.0
comp=Z,12nm,0.6s
HEH **HeiHe** 35.83 45 *e*P **P** 15 53 22.4 -0.7
HEH sP **sP** 15 53 33.8 +3.9
HEH PP **PP** 15 54 49.5 +5.1
HEH S **S** 15 58 58.1 -2.5
HEH pmax pmax
comp=Z,20nm,0.8s
HEH pmax pmax
comp=Z,170nm,5.9s
HEH LR LR
comp=Z,3μm,13.4s
HEH LR LR
comp=Z,1μm,14.2s
HEH LR LR
comp=Z,2μm,10.9s
MDJ **Mudanjiang** 35.91 55 P **P** 15 53 21.1 -2.8
MDJ S **S** 15 59 06.8 +4.8
MDJ pmax pmax
comp=Z,4.0nm,0.8s
MDJ pmax pmax
comp=Z,170nm,6.3s
MDJ LR LR
comp=Z,5μm,17.6s
MDJ LR LR
comp=Z,1μm,16.9s
MDJ LR LR
comp=Z,2μm,16.2s
TRLG **Trialeti** 36.62 300 P **P** 15 53 33.2 +3.0
JNU **Nakatsue** 36.78 74 P **P** 15 53 30.7 -0.8
comp=Z,7.2nm,0.9s,baz=242,slow=4.1,SNR=3.1
comp=Z,7.2nm,0.9s
ZEA **Zeya** 36.99 39 *e*P **P** 15 53 33.5 +0.5
ZEA pmax pmax
comp=Z,10.0nm,0.9s
ZEA MLR MLR
comp=E,800nm,12.0s
ZEA MLR MLR
comp=Z,800nm,11.0s
USA0B **Ussuriysk Arra** 37.56 56 ⇑*e*P **P** 15 53 36.1 -1.8
USRK **Ussuriysk Ar.** 37.56 56 P **P** 15 53 38.0 +0.1
comp=Z,7.5nm,0.8s,baz=248,slow=9.4,SNR=5.6
comp=Z,7.5nm,0.8s
KBZ **Khabaz** 37.69 304 P **P** 15 53 38.9 -0.1
comp=Z,2.6nm,0.7s,baz=77,slow=10,SNR=6.8
comp=Z,2.6nm,0.7s
KBZ **Khabaz** 37.69 304 ⇓*e*P **P** 15 53 39.5 +0.5
KBZ pmax pmax
comp=Z,13nm,1.7s
KIV **Kislovodsk** 37.87 304 *e*P **P** 15 53 42.2 +1.5
KIV pmax pmax
comp=Z,11nm,1.0s
SHA1 **Shidzhatmaz** 37.87 304 ⇓*e*P **P** 15 53 41.7 +0.9
RAYN **Ar Rayn** 37.95 270 P **P** 15 53 40.8 -0.7
RAYN **Ar Rayn** 37.95 270 P **P** 15 53 40.8 -0.7
RAYN pmax pmax
comp=Z,10.0nm,1.1s
GURO **Guroymak-BITLI** 38.16 295 P **P** 15 53 42.7 -0.5
KLR **Kul'dur** 38.26 48 P **P** 15 53 43.2 -0.5
comp=Z,8.9nm,0.6s,baz=267,slow=8.2,SNR=18
comp=Z,8.9nm,0.6s
KLR **Kul'dur** 38.26 48 *ce*P **P** 15 53 43.8 0.0
KLR pmax pmax
comp=Z,28nm,1.7s
KIRV **Kirov** 38.43 329 P **P** 15 53 45.2 +0.1
comp=Z,26nm,0.6s,baz=137,slow=3.5,SNR=19
comp=Z,26nm,0.6s
KIRV **Kirov** 38.43 329 *ce*P **P** 15 53 45.4 +0.3
JMN **Monobe** 39.18 73 P **P** 15 53 53.9 +2.1
JMN **Monobe** 39.18 73 P **P** 15 53 51.5 -0.3
JMN IAmb IAmb 15 53 59.2
comp=Z,23nm,0.8s
LABN **Labinsk** 39.33 305 *e*P **P** 15 53 56.9 +4.0
LABN *e*S **S** 15 59 55.4 +1.5
LABN pmax pmax
comp=Z,45nm,0.7s
LABN MLR MLR
comp=N,2μm,16.0s
LABN MLR MLR
comp=E,2μm,15.0s
ERBR **Yeremizino-Bor** 39.61 306 *e*P **P** 15 53 56.5 +1.4
ERBR *e*S **S** 15 59 59.5 +1.5
ERBR MLR MLR
comp=Z,1μm,14.0s
VRH **Novokhopyorsk** 39.76 315 *e*P **P** 15 53 55.5 -0.8
VRH pmax pmax
comp=Z,30nm,0.6s
SOC **Sochi** 39.98 303 *e*P **P** 15 53 57.6 -0.7
SOC *e* 15 55 28.0
SOC *e*S **S** 16 00 03.8 +0.2
SOC *e*SS **SS** 16 03 00.3 0.0
SOC pmax pmax
comp=Z,18nm,0.9s
SOC MLR MLR
comp=Z,803nm,16.0s
TEY **Ternei** 40.92 55 *ce*P **P** 15 54 02.3 -3.7
TEY *e* 16 00 14.0
TEY *e* 16 03 19.0

TEY pmax pmax
comp=Z,20nm,4.8s
**ARPR Arapgir-MALATY 41.02 296 P P 15 54 06.9 -0.3**
ARPR lAmb lAmb 15 54 13.6
comp=Z,69nm,1.2s
**VORD Divnogorie 41.20 314** *eP* **P 15 54 08.6 +0.4**
VORD pmax pmax
comp=Z,40nm,1.1s
**VSR Storozhevoye 41.33 315** *eP* **P 15 54 07.4 -1.9**
VSR pmax pmax
comp=Z,30nm,1.3s
**VORR Voronezh 41.40 315** *eP* **P 15 54 10.8 +1.0**
VORR pmax pmax
comp=Z,25nm,0.7s
**GRNR Gornyy 41.52 46**⇑ *iP* **P 15 54 10.4 -0.5**
GRNR *e* 15 54 14.7
GRNR pmax pmax
comp=E,4.0nm,1.1s
GRNR pmax pmax
comp=Z,4.0nm,1.1s
GRNR MLR MLR
comp=E,510nm,13.0s
GRNR MLR MLR
comp=N,860nm,10.0s
GRNR MLR MLR
comp=Z,560nm,11.0s
**INU Inuyama 41.53 70** P **P 15 54 09.9 -1.3**
**INU Inuyama 41.53 70** P **P 15 54 09.3 -1.9**
**ANN Anapa 41.69 305** *eP* **P 15 54 12.4 +0.1**
ANN *eS* **S 16 00 28.7 -0.2**
ANN pmax pmax
comp=Z,46nm,0.9s
ANN MLR MLR
comp=N,936nm,14.0s
ANN MLR MLR
comp=Z,692nm,15.0s
ANN MLR MLR
comp=E,714nm,13.0s
**LPSR Galich'ya Gora 41.76 317** *eP* **P 15 54 12.2 -0.6**
LPSR pmax pmax
comp=Z,30nm,0.8s
**JGF Kuroka 41.78 69** P **P 15 54 14.0 +0.7**
**JGF Kuroka 41.78 69** P **P 15 54 13.3 0.0**
**YAK Yakutsk 41.88 28** P **P 15 54 14.5 +0.9**
**YAK Yakutsk 41.88 28** P **P 15 54 13.0 -0.5**
comp=Z,16nm,0.7s,baz=191,slow=1.7,SNR=14
comp=Z,16nm,0.7s
**YAK Yakutsk 41.88 28** *eP* **P 15 54 14.6 +1.0**
YAK *e**PP **pP 15 54 16.9 -1.6**
YAK *e* 15 55 58.4
YAK *e* 15 56 10.5
YAK *e*PPP PPP 15 56 23.0
YAK *eS* **S 16 00 34.3 +3.0**
YAK *e**SS **sS 16 00 38.3 -1.0**
YAK *e*SSS SSS 16 04 15.4
YAK *e* 16 04 20.1
YAK pmax pmax
comp=Z,8.0nm,0.8s
YAK pmax pmax
comp=N,8.0nm,1.4s
YAK pmax pmax
comp=E,13nm,1.5s
YAK pmax pmax
comp=Z,12nm,1.4s
YAK smax smax
comp=E,57nm,3.0s
YAK smax smax
comp=N,64nm,2.9s
YAK MLR MLR
comp=Z,613nm,13.0s
YAK MLR MLR
comp=N,411nm,13.0s
YAK MLR MLR
comp=E,280nm,12.0s
**MJB9 Matsu-Tunnel 42.34 68** P **P 15 54 16.6 -1.3**
**MAJO Matsushiro 42.35 68** P **P 15 54 17.4 -0.5**
**MAJO Matsushiro 42.35 68** P **P 15 54 16.6 -1.2**
**MAJO Matsushiro 42.35 68**⇑ *eP* **P 15 54 16.6 -1.2**
MAJO pmax pmax
comp=Z,6.0nm,0.9s
**MJAR Matsushiro Arr 42.35 68** P **P 15 54 16.6 -1.2**
comp=Z,6.2nm,0.9s,baz=277,slow=9.3,SNR=7.0
comp=Z,6.2nm,0.9s
**TOLI2 Tolitoli 42.82 126** P **P 15 54 24.6 +2.8**
**TOLI2 Tolitoli 42.82 126** P **P 15 54 21.2 -0.6**
**BNN Bunyan 42.97 296** P **P 15 54 22.4 -0.7**
**MOS Moscow 43.26 321** *eP* **P 15 54 24.5 -0.4**
MOS *e* 15 56 05.5
MOS *eS* **S 16 00 49.7 -2.2**
MOS pmax pmax
comp=Z,400nm,2.0s
MOS pmax pmax
comp=Z,171nm,1.6s
MOS MLR MLR
comp=Z,700nm,10.0s
**OBN Obninsk 43.69 320** P **P 15 54 27.8 -0.6**
OBN lAmb lAmb 15 54 35.2
comp=Z,25nm,0.6s
**OBN Obninsk 43.69 320**⇑ *eP* **P 15 54 29.7 +1.3**
OBN *e* 15 56 13.6
OBN *eS* **S 16 01 01.0 +2.8**
OBN pmax pmax
comp=Z,19nm,1.0s
OBN MLR MLR
comp=Z,583nm,18.0s
**SIM Simferopol' 44.05 305** *eP* **P 15 54 33.6 +2.1**
SIM pmax pmax
comp=Z,43nm,1.2s
**BALJ Balqa 44.12 286** P **P 15 54 31.9 -0.3**
BALJ lAmb lAmb 15 54 38.1
comp=Z,19nm,0.9s
**MMAI Mount Meron Ar 44.13 288** P **P 15 54 31.9 -0.5**
comp=Z,0.9nm,0.2s,baz=88,slow=10,SNR=2.6
comp=Z,0.9nm,0.2s
**JMM Marumori 44.25 65** P **P 15 54 31.7 -1.4**
**JMM Marumori 44.25 65** P **P 15 54 30.6 -2.5**
JMM lAmb lAmb 15 54 37.5
comp=Z,28nm,0.8s
**BR104 Keskin Array S 44.61 297** P **P 15 54 37.3 +1.1**
comp=Z,9.2nm,0.6s,comp=Z,129nm
**BR131 Keskin Array S 44.61 297** P **P 15 54 35.5 -0.7**
BR131 lAmb lAmb 15 54 41.0
comp=Z,55nm,1.7s
**BR131 Keskin Array S 44.61 297**⇑ *eP* **P 15 54 36.0 -0.2**
**BRTR Keskin Array B 44.61 297** P **P 15 54 35.5 -0.7**
**BRTR Keskin Array B 44.61 297** P **P 15 54 36.2 0.0**
comp=Z,3.3nm,0.5s,baz=102,slow=7.9,SNR=16
comp=Z,3.3nm,0.5s
**BR106 Keskin Array S 44.62 297** P **P 15 54 37.5 +1.2**
comp=Z,9.1nm,0.7s,comp=Z,108nm
**BR105 Keskin Array S 44.62 297** P **P 15 54 37.6 +1.3**
comp=Z,15nm,0.8s,comp=Z,151nm
**ASAJ Asahikawa 45.18 56** P **P 15 54 38.0 -2.5**
comp=Z,2.5nm,0.7s,baz=289,slow=30,SNR=1.7
comp=Z,2.5nm,0.7s
**ANTO Ankara 45.24 298** P **P 15 54 41.4 +0.2**
**ANTO Ankara 45.24 298** P **P 15 54 41.4 +0.2**
ANTO pmax pmax
comp=Z,129nm,1.7s
**ANTO Ankara 45.24 298** P **P 15 54 43.2 +2.0**
comp=Z,26nm,1.2s,comp=Z,357nm
**YSS Yuzh-Sakhalins 45.29 52** *eP* **P 15 54 38.3 -3.0**
YSS *eS*S SS 16 04 34.9 -9.4
YSS pmax pmax
comp=Z,200nm,5.1s
YSS pmax pmax
comp=Z,10.0nm,1.1s
YSS MLR MLR
comp=Z,1μm,16.0s
YSS MLR MLR
comp=N,1μm,14.0s
YSS MLR MLR
comp=E,1μm,16.0s
**TYV Tymovskoe 45.45 47** *eP* **P 15 54 43.1 +0.6**
TYV *eS* **S 16 01 27.0 +3.1**
TYV pmax pmax
comp=Z,100nm,4.8s
TYV pmax pmax
comp=Z,7.0nm,1.1s
TYV smax smax
comp=N,100nm,5.8s
TYV smax smax
comp=E,100nm,5.8s
**MDUB Mudurnu 46.40 299** P **P 15 54 49.9 -0.5**
**PURM Purcari 47.01 307** P **P 15 54 54.9 0.0**
comp=E,77nm,0.6s,comp=E,5μm

**TIXI Tiksi 47.06 17** P **P 15 54 55.0 +0.1**
**TIXI Tiksi 47.06 17** P **P 15 54 54.1 -0.8**
comp=E,8.3nm,0.5s,baz=217,slow=6.5,SNR=4.3
comp=E,8.3nm,0.5s
**TIXI Tiksi 47.06 17** P **P 15 54 55.0 +0.1**
TIXI pmax pmax
comp=Z,113nm,1.9s
**AK09 Malin Array Si 47.46 313** P **P 15 54 57.7 -0.6**
**AK08 Malin Array Si 47.48 313** P **P 15 54 58.9 +0.4**
**AK10 Malin Array Si 47.48 313** P **P 15 54 57.9 -0.6**
**AKASG Malin Array Be 47.50 313** P **P 15 54 58.0 -0.6**
AKASG lAmb lAmb 15 55 02.0
comp=Z,33nm,1.5s
**AKASG Malin Array Be 47.50 313** P **P 15 54 57.6 -1.1**
comp=Z,3.3nm,0.5s,baz=80,slow=7.8,SNR=19
AKASG PP **PP 15 56 51.4 +1.5**
comp=Z,0.5nm,0.4s,baz=82,slow=9.3,SNR=5.2
comp=Z,3.3nm,0.5s
**AKASG Malin Array Be 47.50 313** P **P 15 54 58.0 -0.6**
AKASG pmax pmax
comp=Z,33nm,1.5s
**AKBB Malin Array Si 47.50 313** P **P 15 54 58.2 -0.4**
AKBB lAmb lAmb 15 55 03.2
comp=Z,15nm,0.7s
**AKBB Malin Array Si 47.50 313** *ce*P **P 15 54 59.9 +1.2**
**AKBB Malin Array Si 47.50 313** P **P 15 55 00.3 +1.6**
**AK03 Malin Array Si 47.51 313** P **P 15 54 58.3 -0.4**
**AK01 Malin Array Si 47.51 313** P **P 15 54 59.9 +1.2**
**AK07 Malin Array Si 47.51 313** P **P 15 54 58.7 0.0**
**AK02 Malin Array Si 47.51 313** P **P 15 54 57.9 -0.8**
**AK05 Malin Array Si 47.51 313** P **P 15 54 59.5 +0.8**
**KIEV Kiev 47.51 313** P **P 15 54 57.6 -1.1**
KIEV lAmb lAmb 15 55 03.2
comp=Z,14nm,0.7s
**KIEV Kiev 47.51 313**⇑ P **P 15 55 00.1 +1.3**
**KIEV Kiev 47.51 313** P **P 15 55 00.0 +1.3**
**KIEV Kiev 47.51 313** P **P 15 55 00.3 +1.6**
comp=Z,91nm,2.2s,comp=Z,2μm
**AK12 Malin Array Si 47.54 313** P **P 15 54 58.4 -0.6**
**AK14 Malin Array Si 47.57 313** P **P 15 54 58.4 -0.8**
**AK22 Malin Array Si 47.60 313** P **P 15 54 58.2 -1.2**
**AK18 Malin Array Si 47.60 313** P **P 15 54 59.0 -0.4**
**AK19 Malin Array Si 47.64 313** P **P 15 54 58.8 -0.9**
**AK20 Malin Array Si 47.64 313** P **P 15 54 58.7 -1.0**
**KIS Kishinev 47.73 308** *eP* **P 15 55 02.0 +1.5**
comp=Z,50nm,2.3s
KIS *eL* L 16 14 59.0
KIS LRM MLR 16 19 57.0
comp=Z,200nm,13.0s
**KIS Kishinev 47.73 308** *eP* **P 15 55 02.0 +1.5**
KIS pmax pmax
comp=Z,50nm,2.3s
KIS MLR MLR
comp=Z,200nm,13.0s
**MILM Milestii Mici 47.74 308**⇑ *iP* **P 15 55 02.0 +1.5**
comp=Z,100nm,1.8s
MILM *eL* L 16 11 59.0
MILM LQM 16 13 36.0
comp=Z,600nm,27.0s
MILM LRM MLR 16 19 54.0
comp=Z,500nm,14.0s
**MILM Milestii Mici 47.74 308**⇑ P **P 15 55 02.1 +1.5**
**MILM Milestii Mici 47.74 308** P **P 15 55 02.0 +1.5**
**TLCR 47.80 305**⇑ P **P 15 55 02.8 +1.7**
**TLCR 47.80 305** P **P 15 55 02.7 +1.7**
**ELL Elmali 47.91 294** P **P 15 55 01.0 -1.2**
**ELL Elmali 47.91 294** P **P 15 55 01.0 -1.2**
ELL pmax pmax
comp=Z,227nm,0.7s
**SORM Soroca 48.03 309**⇑ P **P 15 55 04.5 +1.7**
**SORM Soroca 48.03 309** P **P 15 55 04.4 +1.7**
**TPGR Topolog 48.09 305**⇑ P **P 15 55 05.5 +2.2**
**MI30 MI30,Zelenitsa 48.16 313** P **P 15 55 02.1 -1.7**
**JOF Joensuu 48.27 329** *eP* **P 15 55 04.2 -0.2**
**CFR Carcaliu 48.28 305**⇑ P **P 15 55 06.6 +1.9**
**CFR Carcaliu 48.28 305** P **P 15 55 06.6 +1.9**
**VLDR Vladesti 48.28 306**⇑ P **P 15 55 06.4 +1.6**
**LUBAR Lubar, Ukraine 48.42 312** P **P 15 55 05.0 -0.8**
**SCHLR Schela 48.48 306**⇑ P **P 15 55 07.4 +1.2**
**MI28 Mi28,Pidlybu 48.50 313** P **P 15 55 05.7 -0.7**
**MNK Minsk 48.56 318** *i* P **P 15 55 07.0 +0.2**
comp=E,8.0nm,0.9s
MNK *i* P **P 15 55 07.0 +0.2**
comp=N,13nm,0.9s
MNK *i* P **P 15 55 07.0 +0.2**
comp=Z,28nm,0.9s,baz=94
MNK *i* PcP **PcP 15 56 32.2 -0.3**
MNK *i* PP **PP 15 57 00.1 +0.7**
MNK *i* PPP PPP 15 57 49.4
MNK *i* S **S 16 02 09.9 +1.7**
MNK *i* SS **SS 16 05 41.8 +4.0**
MNK *i* SSS SSS 16 06 59.1
MNK *i* LQ LQ 16 12 07.2
MNK *i* LR LR 16 15 42.2
MNK *i* LRM MLR 16 17 45.8
comp=N,483nm,17.1s
MNK *i* LRM MLR 16 18 11.4
comp=Z,471nm,17.1s
MNK *i* LRM MLR 16 18 20.6
comp=E,153nm,16.7s
**MNK Minsk 48.56 318** *i* P **P 15 55 07.0 +0.2**
MNK *i* 15 56 32.1
MNK *i* 15 57 00.1
MNK *i* PPP PPP 15 57 49.3
MNK *i* S **S 16 02 09.9 +1.7**
MNK *i* SSS SSS 16 06 59.1
MNK pmax pmax
comp=N,13nm,0.9s
MNK pmax pmax
comp=Z,28nm,0.9s
MNK pmax pmax
comp=E,8.0nm,0.9s
MNK MLR MLR
comp=N,483nm,17.0s
MNK MLR MLR
comp=Z,471nm,17.0s
MNK MLR MLR
comp=E,153nm,17.0s
**LVZ Lovozero 48.60 336** P **P 15 55 07.0 0.0**
LVZ lAmb lAmb 15 55 10.0
comp=Z,22nm,0.9s
**LVZ Lovozero 48.60 336** P **P 15 55 07.0 0.0**
LVZ pmax pmax
comp=Z,23nm,0.9s
**APA Apatity 48.91 336**⇓ *iP* **P 15 55 09.8 +0.5**
APA pmax pmax
comp=Z,7.0nm,0.7s
APA MLR MLR
comp=Z,700nm,11.0s
**VRI Vrincioaia 49.22 306**⇑ P **P 15 55 13.8 +1.7**
**VRI Vrincioaia 49.22 306** P **P 15 55 13.8 +1.7**
**VRI Vrincioaia 49.22 306** P **P 15 55 14.0 +1.9**
comp=Z,19nm,0.7s,comp=Z,194nm
**TESR Tescani 49.24 307**⇑ P **P 15 55 12.6 +0.4**
**TESR Tescani 49.24 307** P **P 15 55 12.0 -0.2**
comp=Z,16nm,1.4s,comp=Z,389nm
**PLOR5 Plostina Array 49.27 306** P **P 15 55 14.1 +1.7**
comp=Z,51nm,0.6s
**PLOR Plostina 49.28 306**⇑ P **P 15 55 13.2 +0.6**
**PLOR Plostina 49.28 306** P **P 15 55 13.1 +0.6**
**KMPD K-Podol'skiy 49.28 310** P **P 15 55 12.5 +0.1**
**ISR Istrita 49.41 305**⇑ P **P 15 55 14.7 +1.1**
**ISR Istrita 49.41 305** P **P 15 55 14.6 +1.1**
**COVR Voineasa-Covas 49.59 306**⇑ P **P 15 55 16.8 +1.9**
**VSU Vasula 49.61 323**⇓ *eP* **P 15 55 15.6 +0.9**
VSU pmax pmax
comp=Z,38nm,1.4s
**RNPP9 Sopachiv 49.62 314** P **P 15 55 15.2 +0.2**
**RNPP5 Staryi Chortor 49.63 313** P **P 15 55 15.2 +0.2**
**RNPP8 Varash 49.65 314** P **P 15 55 15.3 +0.1**
**ISAL Salakas 49.65 319** *eP* **P 15 55 15.5 +0.4**
**TURR Turia 49.71 307**⇑ P **P 15 55 16.2 +0.4**
**MLR Muntele Rosu 49.80 306** P **P 15 55 16.6 0.0**
**MLR Muntele Rosu 49.80 306**⇓ P **P 15 55 17.9 +1.3**
**MLR Muntele Rosu 49.80 306** P **P 15 55 17.9 +1.3**
**MLR Muntele Rosu 49.80 306** P **P 15 55 18.0 +1.3**
comp=Z,59nm,1.2s,comp=Z,709nm
**OZUR 49.86 307**⇓ P **P 15 55 18.6 +1.7**
**MSF Maaselka 50.03 333** P **P 15 55 19.7 +1.8**
**ELND Elena 50.10 303**⇑ P **P 15 55 20.7 +1.9**
**ARBE Arbavere 50.12 324** *eP* **P 15 55 19.0 +0.4**
**DOPR Dopca 50.15 307**⇑ P **P 15 55 20.9 +1.8**
**BURAR Bucovina Array 50.16 309** P **P 15 55 18.5 -0.7**
**BURAR Bucovina Array 50.16 309**⇑ P **P 15 55 21.0 +1.8**

**BURAR Bucovina Array 50.16 309** P **P 15 55 18.5 -0.7**
BURAR pmax pmax
comp=Z,5.0nm,0.8s
**BUR08 Bucovina Ar. S 50.16 309** P **P 15 55 19.2 -0.1**
**EZN Ezine 50.19 298** P **P 15 55 20.5 +1.1**
**ALN Alexandroupoli 50.24 300** P **P 15 55 20.2 +0.4**
**FIA1 FINESS Array S 50.36 327** P **P 15 55 19.8 -0.6**
**FINES FINESS Array B 50.36 327** P **P 15 55 19.9 -0.5**
**FINES FINESS Array B 50.36 327** P **P 15 55 19.2 -1.2**
comp=Z,8.1nm,0.5s,baz=104,slow=7.5,SNR=31
comp=Z,8.1nm,0.5s
**FINES FINESS Array B 50.36 327** P **P 15 55 19.9 -0.5**
**VOIR 50.43 306**⇑ P **P 15 55 22.4 +1.0**
**VOIR 50.43 306** P **P 15 55 22.3 +1.0**
**ARCR ARCALIA 50.77 308**⇓ P **P 15 55 25.6 +1.8**
**LVV L'vov 50.83 312** *eP* **P 15 55 23.7 -0.5**
LVV *eS* **S 16 02 36.5 -3.6**
LVV *e*PS PKiKP 16 02 52.5 -32
LVV *e*SS **ScS 16 05 06.6 -8.4**
LVV MLR MLR
comp=E,700nm,14.0s
LVV MLR MLR
comp=Z,800nm,14.0s
LVV MLR MLR
comp=N,200nm,16.0s
**PABE Paberze 50.87 319** P **P 15 55 23.1 -1.3**
**PABE Paberze 50.87 319** *eP* **P 15 55 25.9 +1.5**
**VSVD Vaisvydziai 50.92 320** *eP* **P 15 55 28.4 +3.7**
**MA2 Magadan 50.95 36** P **P 15 55 23.3 -1.6**
**MA2 Magadan 50.95 36** P **P 15 55 22.8 -2.1**
MA2 lAmb lAmb 15 55 29.3
comp=Z,27nm,0.9s
**MA2 Magadan 50.95 36** P **P 15 55 23.8 -1.1**
comp=Z,6.8nm,0.7s,baz=313,slow=7.8,SNR=7.2
comp=Z,6.8nm,0.7s
**MA2 Magadan 50.95 36** *de*P **P 15 55 23.7 -1.2**
MA2 pmax pmax
comp=Z,17nm,1.8s
**MEF Metsahovi 51.01 325** *eP* **P 15 55 26.5 +1.2**
**KEF Keuruu 51.04 328** *eP* **P 15 55 25.2 -0.3**
**MTSE Matsula 51.16 323** *eP* **P 15 55 28.2 +1.7**
**VADS Vadso 51.18 338** *eP* **P 15 55 27.1 +0.7**
VADS lAmb lAmb 15 55 30.1
comp=Z,39nm,1.1s
**APE Apeiranthos 51.29 295**⇓ P **P 15 55 28.7 +0.8**
**APE Apeiranthos 51.29 295** P **P 15 55 28.7 +0.8**
**SUW Suwalki 51.29 317** P **P 15 55 24.9 -2.7**
SUW lAmb lAmb 15 55 29.8
comp=Z,32nm,0.9s
**SUW Suwalki 51.29 317** *eP* **P 15 55 29.4 +1.8**
**SUW Suwalki 51.29 317** P **P 15 55 24.9 -2.7**
SUW pmax pmax
comp=Z,32nm,0.9s
**SGF Sodankyl 51.39 334** P **P 15 55 29.8 +1.7**
**KWP Kalwaria Pacla 51.70 311** P **P 15 55 29.0 -1.7**
**KWP Kalwaria Pacla 51.70 311** P **P 15 55 29.0 -1.7**
KWP pmax pmax
comp=Z,59nm,0.4s
**KEV Kevo 51.84 337** P **P 15 55 30.7 -0.7**
KEV lAmb lAmb 15 55 35.1
comp=Z,33nm,1.2s
**KEV Kevo 51.84 337** P **P 15 55 30.7 -0.7**
KEV pmax pmax
comp=Z,33nm,1.2s
**OUR Ouranopolis 51.88 300** P **P 15 55 32.4 +0.3**
**DRGR 51.92 308** P **P 15 55 36.9 +4.4**
**PBUR Paburge 52.04 320** *eP* **P 15 55 34.8 +1.7**
**SEY Seymchan 52.11 32** P **P 15 55 32.8 -0.7**
comp=Z,6.3nm,0.7s,baz=278,slow=9.9,SNR=9.1
comp=Z,6.3nm,0.7s
**SEY Seymchan 52.11 32** *eP* **P 15 55 34.5 +0.9**
SEY pmax pmax
comp=Z,22nm,1.4s
**VAF Ylistaro 52.17 328** *eP* **P 15 55 33.8 -0.1**
**ARCES ARCESS Array B 52.29 337** P **P 15 55 34.8 0.0**
ARCES lAmb lAmb 15 55 38.6
comp=Z,24nm,0.9s
**ARCES ARCESS Array B 52.29 337** P **P 15 55 34.2 -0.6**
comp=Z,13nm,0.7s,baz=99,slow=7.6,SNR=27
comp=Z,13nm,0.7s
**ARCES ARCESS Array B 52.29 337** P **P 15 55 34.8 0.0**
ARCES pmax pmax
comp=Z,24nm,0.9s
**SURR Surduc 52.44 307**⇑ P **P 15 55 36.6 +0.3**
**SIRR Siria 52.70 307**⇓ P **P 15 55 39.1 +0.9**
**BZS Buzias 52.81 306**⇑ P **P 15 55 39.1 +0.1**
**BZS Buzias 52.81 306** P **P 15 55 39.1 +0.1**
**MDVR Moldovita 52.85 305**⇑ P **P 15 55 40.4 +1.0**
**KTK1 Kautokeino 52.95 336** *eP* **P 15 55 41.2 +1.5**
KTK1 lAmb lAmb 15 55 42.9
comp=Z,29nm,1.1s
**BOVS Bovan 53.02 304**⇑ P **P 15 55 41.7 +1.1**
**LIT Litokhoron 53.04 299** P **P 15 55 39.5 -1.4**
LIT lAmb lAmb 15 55 44.5
comp=Z,47nm,1.4s
**LIT Litokhoron 53.04 299** P **P 15 55 39.5 -1.4**
LIT pmax pmax
comp=Z,47nm,1.4s
**SOEI Soe 53.16 133** P **P 15 55 43.4 +1.4**
**HAMF Hammerfest 53.17 338** *eP* **P 15 55 41.1 -0.1**
HAMF lAmb lAmb 15 55 45.0
comp=Z,66nm,0.7s
**NIE Niedzica 53.28 311** P **P 15 55 45.5 +3.0**
**AGG Agios Georgios 53.37 298** P **P 15 55 44.2 +0.9**
**AGG Agios Georgios 53.37 298** P **P 15 55 44.2 +0.9**
AGG pmax pmax
comp=Z,187nm,1.7s
**OJC Ojcow 53.53 312** P **P 15 55 43.7 -0.6**
OJC lAmb lAmb 15 55 48.6
comp=Z,73nm,1.9s
**OJC Ojcow 53.53 312** P **P 15 55 43.7 -0.6**
OJC pmax pmax
comp=Z,73nm,1.9s
**PSZ Piszkesteto 53.70 309** P **P 15 55 44.4 -1.2**
PSZ lAmb lAmb 15 55 50.1
comp=Z,27nm,1.5s
**PSZ Piszkesteto 53.70 309**⇑ P **P 15 55 47.3 +1.6**
**PSZ Piszkesteto 53.70 309** P **P 15 55 47.2 +1.6**
**FNA Florina 53.75 301** P **P 15 55 45.4 -0.7**
**FNA Florina 53.75 301** P **P 15 55 45.4 -0.7**
FNA pmax pmax
comp=Z,7.0nm,0.8s
**ITM Ithomi 54.08 296** P **P 15 55 46.6 -1.9**
ITM lAmb lAmb 15 55 50.4
comp=Z,24nm,0.9s
**FRGS Fruska Gora 54.13 306**⇑ P **P 15 55 50.4 +1.6**
**VYHS Vyhne 54.34 310** *eP* **P 15 55 53.0 +2.8**
**VYHS Vyhne 54.34 310** *eP* **P 15 55 53.0 +2.8**
**HOPEN Hopen 54.50 345** *eP* **P 15 55 51.3 +0.4**
HOPEN lAmb lAmb 15 55 55.4
comp=Z,83nm,1.3s
**TRO Tromso 54.57 336** *eP* **P 15 55 51.7 +0.3**
TRO lAmb lAmb 15 55 54.6
comp=Z,29nm,1.0s
**PUK Puka 54.60 302** P **P 15 55 53.3 +1.0**
PUK lAmb lAmb 15 55 55.6
comp=Z,35nm,1.3s
**OKC Ostrava-Krasne 54.63 312** AMS AMS 16 21 30.0
comp=Z,500nm,20.6s
**OKC Ostrava-Krasne 54.63 312** P **P 15 55 56.0 +3.7**
**MORH Mrgy. Hungar 54.78 308**⇑ P **P 15 55 54.8 +1.4**
**PDG Podgorica 55.00 303** P **P 15 55 54.7 -0.3**
PDG lAmb lAmb 15 55 58.5
comp=Z,21nm,1.3s
**PDG Podgorica 55.00 303**⇑ P **P 15 55 56.9 +1.9**
**MORC Moravsky Berou 55.03 312** P **P 15 55 55.5 +0.3**
MORC lAmb lAmb 15 55 59.8
comp=Z,18nm,1.2s
**MORC Moravsky Berou 55.03 312** *eP* **P 15 55 55.8 +0.6**
**MORC Moravsky Berou 55.03 312**⇓ P **P 15 55 55.5 +0.3**
**MORC Moravsky Berou 55.03 312** P **P 15 55 55.5 +0.3**
MORC pmax pmax
comp=Z,18nm,1.2s
**JAVC Velka Javorina 55.06 311** *eP* **P 15 55 57.6 +2.1**
**BJO1 Bjornoya 55.41 342** *eP* **P 15 55 56.4 -1.1**
**KRLC Kraliky 55.48 312** *eP* **P 15 55 59.3 +0.8**
KRLC AMS AMS 16 21 40.0
comp=Z,600nm,22.7s
**KRLC Kraliky 55.48 312** *eP* **P 15 55 59.3 +0.8**
KRLC MLR MLR
comp=Z,600nm,22.7s
**FAUS Fauske 55.67 334** *eP* **P 15 55 58.5 -1.0**
FAUS lAmb lAmb 15 56 04.9
comp=Z,13nm,0.8s

**KSP Ksiaz 55.69 313** P **P** **15 56 00.4 +0.5**
**KSP Ksiaz 55.69 313** P **P** **15 56 00.4 +0.5**
comp=Z,20nm,1.5s,comp=Z,361nm
**VRAC Vranov 55.70 311** *e*P **P** **15 55 59.2 -0.8**
**VRAC Vranov 55.70 311** ⇑P **P** **15 55 59.6 -0.4**
**VRAC Vranov 55.70 311** P **P** **15 55 59.6 -0.4**
**STEI Steigen 55.72 334** *e*P **P** **15 56 01.4 +1.6**
STEI IAmb IAmb 15 56 03.3
comp=Z,201nm,2.4s
**DPC Dobruska-Polom 55.73 313** *e*P **P** **15 56 01.8 +1.5**
DPC AMS AMS 16 22 00.0
comp=Z,700nm,18.3s
**DPC Dobruska-Polom 55.73 313** *e*P **P** **15 56 01.8 +1.5**
DPC MLR MLR
comp=Z,700nm,18.3s
**KRUC Moravsky 55.86 311** *e*P **P** **15 56 01.9 +0.7**
**UPC Upice 55.91 313** AMS AMS 16 22 00.0
comp=Z,800nm,17.3s
**LODK Lodwar 56.01 252** P **P** **15 56 02.1 -0.7**
**RONA Rosalia, Austr 56.14 310** *i* pP pP 15 56 06.3 -1.9
comp=Z,0.8nm,0.7s,SNR=5.7
**HFS Hagfors 56.35 325** P **P** **15 56 03.7 -0.7**
comp=Z,25nm,0.6s,baz=87,slow=7.9,SNR=31
comp=Z,25nm,0.6s
**LOF Lofoten 56.37 334** *e*P **P** **15 56 04.0 -0.5**
**CONA Conrad Observa 56.39 310** *e*P **P** **15 56 04.7 -0.4**
comp=Z,3.0nm,1.1s
CONA *i* pP **pP** **15 56 08.3 -1.8**
comp=Z,30nm,1.5s,SNR=10.0
**TREC Trest 56.42 312** AMS AMS 16 22 20.0
comp=Z,900nm,25.8s
**KONS Konsvik 56.49 332** *e*P **P** **15 56 05.5 +0.2**
**STOK Stokkvaagen 56.53 332** *e*P **P** **15 56 06.3 +0.7**
**ARSA Arzberg 56.73 309** *e*P **P** **15 56 06.7 -0.7**
comp=Z,1.3nm,0.5s
ARSA *e*pP **pP** **15 56 10.2 -2.2**
comp=Z,13nm,1.7s
**GOPC GO Pecny, Ondr 56.77 312** AMS AMS 16 21 00.0
comp=Z,600nm,20.5s
**SPB2 Spitsbergen Ar 56.77 347** P **P** **15 56 06.0 -1.2**
**SPA0 Spitsbergen Ar 56.78 347** *e*P **P** **15 56 08.9 +1.6**
**SPITS Spitsbergen Ar 56.78 347** P **P** **15 56 06.9 -0.5**
comp=Z,3.9nm,0.7s,baz=81,slow=12,SNR=7.7
comp=Z,3.9nm,0.7s
**SPITS Spitsbergen Ar 56.78 347** P **P** **15 56 07.4 +0.1**
**PVCC Panska Ves 56.82 313** AMS AMS 16 24 10.0
comp=Z,800nm,15.6s
**PVCC Panska Ves 56.82 313** P **P** **15 56 10.3 +2.3**
**PRU Pruhonice 56.92 313** AMS AMS 16 22 40.0
comp=Z,600nm,17.3s
**PRA Prague 56.98 313** AMS AMS 16 22 40.0
comp=Z,700nm,19.0s
**NSS Namsos 56.98 330** *e*P **P** **15 56 09.2 +0.3**
**RICC Richard 57.11 313** AMS AMS 16 23 00.0
comp=Z,900nm,19.1s
**KMBO Kilima Mbogo 57.13 246** P **P** **15 56 10.8 -0.2**
**KMBO Kilima Mbogo 57.13 246** P **P** **15 56 10.8 -0.2**
KMBO pmax pmax
comp=Z,10.0nm,1.1s
**BRG Berggiesshubel 57.16 314** *e*P **P** **15 56 11.7 +1.3**
BRG Amp 15 56 14.8
comp=Z,11nm,1.0s
**BRG Berggiesshubel 57.16 314** *e*P **P** **15 56 11.7 +1.3**
BRG pmax pmax
comp=Z,11nm,1.0s
**BRG Berggiesshubel 57.16 314** *e*P **P** **15 56 11.5 +1.1**
comp=Z,6.5nm,0.9s,baz=79,slow=6.6
**SOKA Soboth 57.16 309** *i* pP pP 15 56 13.7 -1.8
comp=Z,28nm,1.6s,SNR=9.1
**ZVC Zvikov 57.23 312** AMS AMS 16 22 40.0
comp=Z,900nm,25.5s
**CKRC Cesky Krumlov 57.26 311** *e*S **S** **16 04 08.1 +1.0**
CKRC AMS AMS 16 23 00.0
comp=Z,800nm,18.3s
**NC405 NORSAR Array S 57.26 326** P **P** **15 56 10.1 -0.9**
**NC602 NORSAR Array S 57.38 326** P **P** **15 56 09.8 -2.0**
NC602 IAmb IAmb 15 56 13.7
comp=Z,14nm,0.9s
**NC602 NORSAR Array S 57.38 326** *e*P **P** **15 56 12.4 +0.6**
NC602 IAmb IAmb 15 56 13.9
comp=Z,144nm,2.2s
**NORES NORESS Array B 57.38 326** P **P** **15 56 14.3 +2.6**
**NC303 NORSAR Array S 57.42 326** P **P** **15 56 10.1 -2.0**
NC303 IAmb IAmb 15 56 16.0
comp=Z,16nm,0.8s
**MOA Molln 57.46 310** *e*pP pP 15 56 15.5 -2.1
comp=Z,15nm,1.4s
**NB201 NORSAR Array S 57.47 326** P **P** **15 56 10.4 -2.0**
NB201 IAmb IAmb 15 56 17.2
comp=Z,15nm,0.7s
**NB2 NORSAR Subarra 57.51 326** P **P** **15 56 11.1 -1.7**
comp=Z,18nm,0.8s,baz=84,slow=6.9
**NB2 NORSAR Subarra 57.51 326** P **P** **15 56 11.1 -1.7**
baz=84,slow=6.9
**NB2 NORSAR Subarra 57.51 326** P **P** **15 56 11.1 -1.7**
NB2 pmax pmax
comp=Z,102nm,2.0s
**NOA NORSAR Array B 57.51 326** P **P** **15 56 11.6 -1.2**
comp=Z,12nm,0.8s,baz=86,slow=7.1,SNR=29
comp=Z,12nm,0.8s
**OBKA Obir 57.52 308** *e*pP pP 15 56 16.4 -1.8
comp=Z,13nm,1.3s
**HSKC Hora Svate Kat 57.52 313** AMS AMS 16 22 50.0
comp=Z,1μm,18.7s
**TIP Timpagrande 57.56 300** P **P** **15 56 12.6 -0.9**
**TIP Timpagrande 57.56 300** ⇑P **P** **15 56 14.1 +0.5**
**GEC2 GERESS Array S 57.65 311** P **P** **15 56 12.5 -1.6**
GEC2 IAmb IAmb 15 56 18.3
comp=Z,36nm,1.6s
**GEC2 GERESS Array S 57.65 311** *e*P **P** **15 56 14.6 +0.6**
baz=79,slow=6.6
**GERES GERESS Array B 57.65 311** P **P** **15 56 13.1 -1.0**
**GERES GERESS Array B 57.65 311** P **P** **15 56 13.3 -0.7**
comp=Z,2.2nm,0.8s,baz=102,slow=5.7,SNR=8.9
comp=Z,2.2nm,0.8s
**CLL Collm 57.68 314** P **P** **15 56 12.3 -1.7**
CLL IAmb IAmb 15 56 17.2
comp=Z,18nm,1.4s
**CLL Collm 57.68 314** *e*P **P** **15 56 12.0 -2.0**
comp=Z,8.0nm,1.8s
CLL *i* Pmax 15 56 15.6
comp=Z,21nm,1.5s
CLL *e*PP **PP** **15 58 24.0 +2.3**
CLL *e*SS SS 16 08 12.0 +10
CLL *e*SSS SSS 16 10 30.0
CLL AMS AMS 16 24 00.0
comp=Z,1μm,19.5s
**CLL Collm 57.68 314** *e*P **P** **15 56 12.0 -2.0**
CLL pmax pmax
comp=Z,21nm,1.5s
CLL MLR MLR
comp=Z,1μm,19.5s
**CLL Collm 57.68 314** *e*P **P** **15 56 14.6 +0.6**
comp=Z,9.6nm,1.3s,baz=79,slow=6.6
**KHC Kasperske Hory 57.68 312** IAmb IAmb 15 56 18.6
comp=Z,35nm,1.7s
**KHC Kasperske Hory 57.68 312** *e*P **P** **15 56 15.7 +1.5**
KHC *e*S **S** **16 04 11.9 -0.8**
KHC AMS AMS 16 23 00.0
comp=Z,800nm,20.6s
**KHC Kasperske Hory 57.68 312** *e*P **P** **15 56 15.7 +1.5**
KHC *e*S **S** **16 04 11.9 -0.8**
KHC MLR MLR
comp=Z,800nm,20.6s
**NAO01 NORSAR Array S 57.69 326** **P** **15 56 11.5 -2.4**
NAO01 IAmb IAmb 15 56 16.7
comp=Z,20nm,0.9s
**NC204 NORSAR Array S 57.71 326** IAmb IAmb 15 56 17.8
comp=Z,28nm,1.1s
**NBO00 NORSAR Array S 57.72 326** IAmb IAmb 15 56 17.8
comp=Z,16nm,1.0s
**KBS Kingsbay 57.78 347** *e*P **P** **15 56 14.8 +0.5**
KBS IAmb IAmb 15 56 35.0
comp=Z,16nm,1.1s
**TBLU Trondheim 57.80 329** *e*P **P** **15 56 14.5 -0.2**
**OSL Oslo 57.85 325** *e*P **P** **15 56 16.0 +0.9**
**BIOA Bad Ischl, Aus 57.91 310** *e*pP **P** **15 56 18.3 +2.6**
comp=Z,7.3nm,1.1s
**CUC Castrocucco 58.06 301** P **P** **15 56 15.4 -1.6**
CUC IAmb IAmb 15 56 21.2
comp=Z,38nm,1.8s
**BILL Bilibino 58.12 26** P **P** **15 56 16.3 -0.6**
**BILL Bilibino 58.12 26** *d i*P **P** **15 56 15.8 -1.1**
BILL *i* 15 57 05.5
BILL pmax pmax
comp=Z,9.0nm,1.0s
BILL MLR MLR
comp=Z,281nm,15.0s
**WET Wettzell 58.13 312** *e*P **P** **15 56 17.7 +0.4**
comp=Z,5.5nm,1.1s,baz=79,slow=6.6
**TANN Tannenbergstha 58.17 313** *e*P **P** **15 56 18.1 +0.6**
comp=Z,4.7nm,0.9s,baz=79,slow=6.6
**PRED Cave del Predi 58.20 309** P **P** **15 56 15.9 -2.0**
**KBA Koelnbreinsper 58.22 309** *e*pP **P** **15 56 19.7 +1.5**
comp=Z,3.4nm,1.0s
**SABO M.te Sabotino 58.27 308** P **P** **15 56 15.2 -3.2**
SABO IAmb IAmb 15 56 22.1
comp=Z,88nm,1.7s
**ROTZ Rotzenmuhle 58.45 313** *e*P **P** **15 56 20.2 +0.7**
comp=Z,2.3nm,1.0s,baz=79,slow=6.6
**KONO Kongsberg 58.45 324** P **P** **15 56 18.0 -1.3**
**KONO Kongsberg 58.45 324** *e*P **P** **15 56 20.1 +0.9**
**KONO Kongsberg 58.45 324** *ce*P **P** **15 56 20.3 +1.0**
KONO pmax pmax
comp=Z,15nm,1.1s
**DOMB Dombas 58.45 327** *e*P **P** **15 56 19.9 +0.6**
DOMB IAmb IAmb 15 56 22.2
comp=Z,22nm,0.9s
**CEL Celeste 58.45 299** **P** **15 56 18.4 -1.3**
**NEUB Neuenburg 58.45 314** *e*P **P** **15 56 20.4 +1.0**
comp=Z,5.5nm,0.7s,baz=79,slow=6.6
**RJOB Jochberg 58.45 310** *e*P **P** **15 56 19.6 0.0**
baz=79,slow=6.6
**MANZ Manzenberg 58.47 313** *e*P **P** **15 56 21.3 +1.6**
comp=Z,1.1nm,0.9s,baz=79,slow=6.6
**FLTG Flechtingen 58.59 316** *e*P **P** **15 56 21.4 +1.0**
comp=Z,6.8nm,0.9s,baz=79,slow=6.6
**LESA Schwarzleotal 58.60 310** *e*pP pP 15 56 23.3 -2.3
comp=Z,12nm,1.4s
**MOX Moxa 58.66 314** *e*P **P** **15 56 22.3 +1.4**
comp=Z,5.8nm,1.0s,baz=79,slow=6.6
**ABTA Abfaltersbach 58.85 309** *e*pP **P** **15 56 24.1 +1.6**
comp=Z,4.3nm,0.9s
**BSEG Bad Segeberg 58.87 318** *e*P **P** **15 56 22.9 +0.6**
comp=Z,8.2nm,0.8s,baz=79,slow=6.6
**INTR Introdacqua 58.97 303** P **P** **15 56 24.0 +0.7**
**GRA1 Grafenberg Arr 59.09 313** P **P** **15 56 23.3 -0.7**
**GRF Grafenberg Arr 59.09 313** P **P** **15 56 23.3 -0.7**
GRF pmax pmax
comp=Z,74nm,1.8s
**GRF Grafenberg Arr 59.09 313** *e*P **P** **15 56 24.5 +0.6**
comp=Z,8.1nm,1.1s,baz=79,slow=6.6
**GRFO Grafenberg 59.09 313** P **P** **15 56 23.3 -0.6**
**GRFO Grafenberg 59.09 313** P **P** **15 56 23.3 -0.6**
GRFO pmax pmax
comp=Z,73nm,1.8s
**MOL Molde 59.10 328** *e*P **P** **15 56 23.9 +0.2**
**HOMB Hombersund 59.19 323** *e*P **P** **15 56 25.0 +0.6**
**CLZ Clausthal 59.20 315** *e*P **P** **15 56 25.1 +0.4**
comp=Z,7.4nm,0.8s,baz=79,slow=6.6
**NRDL Niedersach Rie 59.24 316** *e*P **P** **15 56 25.3 +0.5**
comp=Z,9.9nm,0.9s,baz=79,slow=6.6
**FDMO Fiordimonte 59.30 305** P **P** **15 56 25.9 +0.3**
**WTTA Wattenberg 59.32 310** *e*P **P** **15 56 24.1 -1.8**
comp=Z,3.1nm,0.8s
WTTA *e*pP **pP** **15 56 27.9 -2.9**
comp=Z,15nm,1.3s
**NRCA Norcia 59.33 305** P **P** **15 56 24.1 -1.7**
NRCA IAmb IAmb 15 56 29.1
comp=Z,45nm,1.7s
**WATA Walderalm 59.35 310** *e*pP **P** **15 56 27.7 +1.7**
comp=Z,1.7nm,0.5s
**SQTA Sankt Quirin 59.62 310** *e*pP **P** **15 56 29.7 +1.9**
comp=Z,8.3nm,1.2s
**UBBA Unterbreizbach 59.63 314** *e*P **P** **15 56 28.0 +0.5**
baz=79,slow=6.6
**MOTA Mosalm 59.66 310** *e*pP **P** **15 56 29.6 +1.4**
comp=Z,7.5nm,0.9s
**MBWA Marble Bar 59.74 145** P **P** **15 56 30.6 +1.9**
**CESX Cesi 59.77 304** P **P** **15 56 27.0 -1.8**
**GENI Genyem 59.83 113** P **P** **15 56 31.4 +1.9**
**RETA Reutte 59.85 310** *e*pP **P** **15 56 31.3 +2.0**
comp=Z,9.2nm,1.2s
**SNART Snartemo 59.85 323** *e*P **P** **15 56 30.2 +1.2**
**ODD1 Odda 59.90 325** *e*P **P** **15 56 28.6 -0.8**
**HYA Hoyanger 59.92 326** *e*P **P** **15 56 29.2 -0.2**
HYA IAmb IAmb 15 56 32.4
comp=Z,84nm,1.7s
**FETA Feichten 59.98 310** *e*pP **P** **15 56 32.3 +1.9**
comp=Z,12nm,1.7s
**BLS5 Blasjo 60.06 324** *e*P **P** **15 56 31.7 +1.2**
BLS5 IAmb IAmb 15 56 35.0
comp=Z,18nm,1.1s
**FUORN Ofenpass-Fuorn 60.39 309** IAmb IAmb 15 57 22.7
comp=Z,21nm,1.9s
**FOO Floro 60.40 327** *e*P **P** **15 56 34.0 +1.3**
**FITZ Fitzroy Crossi 60.45 138** P **P** **15 56 35.6 +2.0**
**BER Bergen 60.46 326** *e*P **P** **15 56 33.6 +0.5**
BER IAmb IAmb 15 56 41.0
comp=Z,89nm,1.5s
**ASK Askoy 60.51 326** *e*P **P** **15 56 34.3 +0.8**
**KASTN Kahler Asten 60.53 315** *e*P **P** **15 56 33.9 +0.1**
comp=Z,2.6nm,0.9s,baz=79,slow=6.6
**STU Stuttgart 60.58 312** P **P** **15 56 34.6 +0.4**
STU IAmb IAmb 15 56 37.6
comp=Z,29nm,1.3s
**STU Stuttgart 60.58 312** P **P** **15 56 34.6 +0.4**
STU pmax pmax
comp=Z,29nm,1.3s
**IBBN Ibbenburen 60.69 316** *e*P **P** **15 56 35.1 +0.3**
comp=Z,9.4nm,1.0s,baz=79,slow=6.6
**TNS Taunus Mts 60.73 314** *e*P **P** **15 56 35.3 +0.1**
comp=Z,4.7nm,0.9s,baz=79,slow=6.6
**CDF Champ du Feu 61.91 312** *e*P **P** **15 56 43.8 +0.5**
CDF pmax pmax
comp=Z,39nm,1.8s
**BTNL Ternell 62.08 314** *d*P **P** **15 56 45.3 +1.0**
comp=Z,6.2nm,1.3s
**MEM Membach 62.15 315** *d*P **P** **15 56 46.3 +1.5**
**TABU Tabubil 62.29 115** P **P** **15 56 48.1 +1.8**
**WLF Walferdange 62.30 313** *dx* x 15 56 43.3
WLF *d*PcP **PcP** **15 57 24.4 -1.1**
**WLF Walferdange 62.30 313** *e*P **P** **15 56 45.5 -0.3**
comp=Z,9.8nm,1.0s,baz=79,slow=6.6
**PGF Pioggiola 62.33 305** *e*P **P** **15 56 49.6 +3.3**
PGF pmax pmax
comp=Z,34nm,1.6s
**HINF Hinteralfeld 62.33 311** *e*P **P** **15 56 47.7 +1.6**
HINF pmax pmax
comp=Z,52nm,1.9s
**SENIN Lac Senin/Sane 62.43 310** P **P** **15 56 45.7 -1.3**
**ABPO Ambohimpanom 62.50 224** P **P** **15 56 47.1 -0.6**
ABPO IAmb IAmb 15 56 52.5
comp=Z,9.5nm,0.9s
**ABPO Ambohimpanom 62.50 224** P **P** **15 56 47.1 -0.6**
ABPO pmax pmax
comp=Z,9.0nm,1.0s
**BCLA Clavier 62.63 314** *d*P **P** **15 56 47.8 -0.2**
**RCHB Rochefort 62.75 314** *d*P **P** **15 56 50.4 +1.6**
**BGES Gesves 62.78 314** *d*P **P** **15 56 50.7 +1.7**
**BMRD Maredsous 62.99 314** *dx* x 15 56 53.2
**LPG La Plagne 63.04 309** *e*P **P** **15 56 51.4 +0.2**
LPG pmax pmax
comp=Z,58nm,1.8s
**LPL La Plagne 63.05 309** *e*P **P** **15 56 54.3 +3.1**
LPL pmax pmax
comp=Z,58nm,1.7s
**DOU Dourbes 63.16 314** *d*PcP **PcP** **15 57 29.9 +0.9**
**MBDF Montbardon 63.25 308** *e*P **P** **15 56 51.3 -1.1**
MBDF pmax pmax
comp=Z,17nm,1.7s
**KEST Kesra 64.21 298** P **P** **15 56 58.4 -0.4**
**KEST Kesra 64.21 298** P **P** **15 56 57.3 -1.5**
comp=Z,1.7nm,0.6s,baz=80,slow=6.8,SNR=11
comp=Z,1.7nm,0.6s
**TATN Tataouine 64.38 294** P **P** **15 56 59.5 -0.4**
**DAG Danmarks Havn 64.41 346** *i* P **P** **15 56 59.0 -0.3**
**LOR Lormes 64.44 311** *e*P **P** **15 56 59.9 -0.1**
LOR pmax pmax
comp=Z,37nm,1.8s
**VIVF Saint-Julien-l 64.64 309** *e*P **P** **15 57 03.7 +2.3**
VIVF pmax pmax
comp=Z,34nm,1.8s
**SMF Signal de Mont 64.64 311** *e*P **P** **15 57 01.4 +0.1**
SMF pmax pmax
comp=Z,41nm,1.7s
**SSF Saint Saulge 64.73 311** *e*P **P** **15 57 02.0 +0.1**
SSF pmax pmax
comp=Z,19nm,1.2s
**AVF Avril sur Loir 64.91 311** *e*P **P** **15 57 02.3 -0.8**
AVF pmax pmax
comp=Z,50nm,1.8s
**VOI Vohitsoka 65.00 222** P **P** **15 57 04.4 +0.4**
VOI IAmb IAmb 15 57 44.3
comp=Z,24nm,1.3s
**TCF Toulx Ste Croi 65.82 311** *e*P **P** **15 57 09.6 +0.5**
TCF pmax pmax
comp=Z,46nm,1.7s
**EKA Eskdalemuir Ar 66.11 321** P **P** **15 57 09.6 -1.1**
comp=Z,6.2nm,0.8s,baz=79,slow=6.8,SNR=11
comp=Z,6.2nm,0.8s
**CAF Calviac 66.37 309** *e*P **P** **15 57 14.9 +2.3**
CAF pmax pmax
comp=Z,5.0nm,0.9s
**LDF La Druitiere 66.55 314** *e*P **P** **15 57 11.5 -2.2**
LDF pmax pmax
comp=Z,7.0nm,0.7s
**RJF Les Rejaudoux 66.60 310** *e*P **P** **15 57 15.0 +0.9**
RJF pmax pmax
comp=Z,62nm,1.9s
**MTLF Montolieu 66.80 308** *e*P **P** **15 57 18.0 +2.6**
MTLF pmax pmax
comp=Z,37nm,1.8s
**GRR Gorron 67.08 314** *e*P **P** **15 57 17.1 +0.1**
GRR pmax pmax
comp=Z,14nm,1.0s
**WB0 Warramunga Arr 67.10 132** P **P** **15 57 16.6 -0.8**
WB0 IAmb IAmb 15 57 22.8
comp=Z,12nm,0.8s
**WRA Warramunga Ar 67.19 132** P **P** **15 57 17.0 -1.1**
**WRA Warramunga Arr 67.19 132** P **P** **15 57 16.7 -1.3**
comp=Z,5.2nm,0.7s,baz=327,slow=6.7,SNR=23
comp=Z,5.2nm,0.7s
**WRA Warramunga Arr 67.19 132** P **P** **15 57 17.0 -1.1**
WRA pmax pmax
comp=Z,2.0nm,2.0s
**WRAB Tennant Creek 67.19 132** P **P** **15 57 17.4 -0.6**
WRAB IAmb IAmb 15 57 23.2
comp=Z,11nm,0.8s
**WRAB Tennant Creek 67.19 132** P **P** **15 57 17.5 -0.6**
WRAB pmax pmax
comp=Z,11nm,0.8s
**WB2 Warramunga Arr 67.20 132** P **P** **15 57 16.8 -1.3**
WB2 IAmb IAmb 15 57 23.3
comp=Z,14nm,0.8s
**LFF La Frestale 67.25 310** *e*P **P** **15 57 21.7 +3.6**
LFF pmax pmax
comp=Z,7.0nm,0.7s
**WR0 Warramunga Arr 67.33 132** IAmb IAmb 15 57 23.9
comp=Z,7.3nm,0.8s
**WRKA Warakurna 67.42 140** P **P** **15 57 20.2 +0.8**
**GAMB Gambell 67.83 28** P **P** **15 57 18.4 -3.0**
baz=293
**SGMF Saint Gilles 68.19 314** *e*P **P** **15 57 24.6 +0.6**
SGMF pmax pmax
comp=Z,42nm,1.6s
**C16K Lisburne Hills 68.26 23** P **P** **15 57 21.5 -2.6**
baz=297
**TNA Tin City 68.56 26** P **P** **15 57 23.6 -2.5**
baz=296
**ROSF Rostrenen 68.61 314** *e*P **P** **15 57 27.9 +1.3**
ROSF pmax pmax
comp=Z,31nm,1.2s
**QUIF Quistinic 68.69 314** *e*P **P** **15 57 26.9 -0.3**
QUIF pmax pmax
comp=Z,26nm,1.3s
**ETSF Etsaut 68.86 308** *e*P **P** **15 57 31.4 +3.0**
ETSF pmax pmax
comp=Z,3.0nm,0.7s
**B18K Kokolik River 68.87 21** P **P** **15 57 25.3 -2.6**
baz=300
**C17K DeLong Mountai 68.87 22** P **P** **15 57 25.7 -2.3**
baz=299
**RDOG Red Dog Mine 69.17 22** P **P** **15 57 28.5 -1.4**
baz=299
**F14K Arctic Creek 69.19 25** P **P** **15 57 27.9 -2.1**
baz=297
**D17K Noatak River 69.28 23** P **P** **15 57 28.7 -1.8**
baz=299
**C18K Utukok River 69.42 21** P **P** **15 57 29.1 -2.4**
baz=300
**ASAR Alice Springs 69.65 135** P **P** **15 57 31.7 -1.7**
**ASAR Alice Springs 69.65 135** P **P** **15 57 32.0 -1.4**
comp=Z,4.2nm,0.7s,baz=316,slow=5.6,SNR=22
comp=Z,4.2nm,0.7s
**AS01 Alice Springs 69.67 135** P **P** **15 57 33.1 -0.5**
**C19K Lookout Ridge 69.68 21** P **P** **15 57 31.1 -1.9**
baz=302,SNR=5.9
**F15K North Star Dit 69.70 25** P **P** **15 57 31.0 -2.2**
baz=299
**EUNU Eureka 69.89 359** P **P** **15 57 32.8 -1.4**
**B20K Meade River 69.91 19** P **P** **15 57 32.1 -2.2**
baz=304
**A22K Sinclair Lake 69.95 18** P **P** **15 57 32.6 -2.0**
baz=305
**ANM Nome 69.98 26** P **P** **15 57 32.2 -2.7**
baz=298
**E17K Hotham Inlet 70.01 23** P **P** **15 57 32.9 -2.1**
baz=300
**E18K Tukpahlearik C 70.25 22** P **P** **15 57 35.3 -1.2**
E18K IAmb IAmb 15 57 40.3
comp=Z,31nm,1.5s
**E18K Tukpahlearik C 70.25 22** P **P** **15 57 34.8 -1.7**
baz=301
**G15K Niukluk 70.27 25** P **P** **15 57 34.5 -2.2**
baz=299
**D19K Kuna River 70.46 21** P **P** **15 57 37.6 -0.2**
**D19K Kuna River 70.46 21** P **P** **15 57 36.3 -1.5**
baz=303
**F17K Baldwin Pennin 70.54 23** P **P** **15 57 36.7 -1.5**
baz=301
**G16K Koyuk River 70.69 25** P **P** **15 57 37.5 -1.7**
baz=301
**B22K Teshekpuk Lake 70.76 18** P **P** **15 57 38.1 -1.4**
baz=307
**D20K Etivluk River 70.80 20** P **P** **15 57 37.6 -2.3**
baz=304
**B21K Ikpikpuk River 70.86 19** P **P** **15 57 38.5 -1.6**
B21K IAmb IAmb 15 57 43.9
comp=Z,8.2nm,0.8s
**B21K Ikpikpuk River 70.86 19** P **P** **15 57 37.8 -2.3**
baz=306
**F18K Selawik 71.00 23** P **P** **15 57 39.1 -1.9**
baz=302
**SUMG Summit 71.06 345** P **P** **15 57 41.6 -0.2**
SUMG IAmb IAmb 15 57 44.4
comp=Z,42nm,1.6s
**SUMG Summit 71.06 345** P **P** **15 57 41.7 -0.2**
SUMG pmax pmax
comp=Z,42nm,1.6s
**C21K Knifeblade Rid 71.08 20** P **P** **15 57 39.7 -1.8**
baz=306
**QIS Mount Isa 71.10 129** P **P** **15 57 41.4 -0.9**
**H16K Elim 71.12 25** P **P** **15 57 38.8 -3.0**
baz=301
**E20K Nigu River 71.19 21** P **P** **15 57 39.1 -3.2**
baz=305
**G17K Kiwalik Mounta 71.24 24** P **P** **15 57 41.0 -1.6**
baz=302
**E19K Redstone River 71.32 22** P **P** **15 57 41.5 -1.4**
E19K IAmb IAmb 15 57 49.0
comp=Z,8.5nm,0.8s
**E19K Redstone River 71.32 22** P **P** **15 57 40.5 -2.5**
baz=304
**F19K Shaleruckik Mo 71.50 22** P **P** **15 57 41.4 -2.7**
baz=304,SNR=5.6
**J14K Nanvaranak Lak 71.58 27** P **P** **15 57 41.9 -2.7**
baz=300
**M11K Mekoryuk 71.65 30** P **P** **15 57 42.8 -2.2**
baz=299
**G18K Tagagawik 71.72 23** P **P** **15 57 43.9 -1.5**
baz=304
**E21K Killik River 71.75 20** IAmb IAmb 15 57 49.0
comp=Z,14nm,0.9s
**E21K Killik River 71.75 20** P **P** **15 57 43.5 -2.1**
baz=307,SNR=7.4
**H17K Granite Mounta 71.81 24** IAmb IAmb 15 57 52.4
comp=Z,9.1nm,0.8s
**H17K Granite Mounta 71.81 24** P **P** **15 57 44.0 -2.0**
baz=303
**C23K Itkillik River 71.83 18** P **P** **15 57 44.8 -1.2**
baz=309,SNR=6.2
**D22K Ayikyak River 71.86 19** P **P** **15 57 46.1 -0.1**
D22K IAmb IAmb 15 58 09.7
comp=Z,21nm,1.6s
**D22K Ayikyak River 71.86 19** P **P** **15 57 42.9 -3.3**
baz=308
**P08K Saint George I 71.89 35** P **P** **15 57 43.2 -3.3**

baz=298
F20K **Avaraart Lake** 72.03 22 P P 15 57 44.0 -3.2
baz=306
I17K **Unalakleet** 72.09 26 P P 15 57 44.6 -3.0
baz=302
G19K **Purcell Mounta** 72.11 23 P P 15 57 47.8 0.0
G19K **Purcell Mounta** 72.11 23 P P 15 57 45.4 -2.4
baz=305,SNR=6.5
H18K **Honhosa River** 72.24 24 P P 15 57 47.7 -0.8
H18K IAmb IAmb 15 57 53.4
comp=Z,12nm,0.8s
H18K **Honhosa River** 72.24 24 P P 15 57 45.5 -3.0
baz=304
TAM **Tamanrasset** 72.33 286 P P 15 57 50.5 +0.5
TAM IAmb IAmb 15 57 54.0
comp=Z,14nm,1.2s
TAM **Tamanrasset** 72.33 286 P P 15 57 50.5 +0.5
TAM pmax pmax
comp=Z,14nm,1.2s
D23K **Nanushuk River** 72.37 19 P P 15 57 47.2 -2.1
baz=310
C24K **Franklin Bluff** 72.41 18 P P 15 57 46.6 -2.9
baz=311
J16K **Anvik River** 72.45 26 P P 15 57 46.8 -3.0
baz=303
ESDC **Sonseca Array** 72.49 306 P P 15 57 50.0 -0.6
ESDC **Sonseca Array** 72.49 306 P P 15 57 49.2 -1.5
comp=Z,1.7nm,0.7s,baz=55,slow=7.0,SNR=9.6
comp=Z,1.7nm,0.7s
E22K **Anaktuvuk Pass** 72.57 20 P P 15 57 47.9 -2.6
baz=309
K15K **Wolf Creek Mou** 72.62 27 P P 15 57 48.3 -2.6
baz=302
F21K **Alatna River** 72.63 21 IAmb IAmb 15 57 54.5
comp=Z,38nm,1.6s
F21K **Alatna River** 72.63 21 P P 15 57 48.5 -2.4
baz=308,SNR=7.0
L14K **Kuka Creek** 72.66 28 P P 15 57 48.7 -2.3
baz=302
H19K **Roundabout Mou** 72.68 23 P P 15 57 50.8 -0.3
H19K IAmb IAmb 15 57 55.3
comp=Z,24nm,1.3s
H19K **Roundabout Mou** 72.68 23 P P 15 57 49.6 -1.5
baz=306,SNR=8.2
D24K **Happy Valley** 72.75 18 P P 15 57 49.5 -2.1
baz=311
F22K **John River** 72.85 20 P P 15 57 49.2 -3.0
baz=309,SNR=5.8
M13K **Dall Lake** 72.86 29 P P 15 57 50.0 -2.3
baz=301
TOLK **Toolik Lake Re** 72.89 19 P P 15 57 50.8 -1.6
baz=310,SNR=5.3
LSZ **Lusaka** 72.89 240 P P 15 57 53.0 -0.3
LSZ IAmb IAmb 15 57 59.1
comp=Z,8.3nm,0.7s
LSZ **Lusaka** 72.89 240 P P 15 57 53.0 -0.3
LSZ pmax pmax
comp=Z,8.0nm,0.7s
J17K **VABM Dome** 72.96 26 P P 15 57 50.1 -2.7
baz=304
L15K **Ungalak Mounta** 72.97 28 P P 15 57 50.5 -2.5
baz=302
GCSA **Galena City Sc** 72.99 24 P P 15 57 51.4 -1.5
baz=305
G21K **Allakaket** 73.06 22 P P 15 57 51.5 -2.0
baz=308
H20K **Anotleneega Mo** 73.23 23 P P 15 57 52.7 -1.8
baz=307
C26K **Camden Bay** 73.25 17 P P 15 57 52.4 -2.1
baz=314
E23K **Chandalar** 73.25 19 P P 15 57 53.0 -1.6
baz=311
M14K **Bethel** 73.27 29 P P 15 57 52.5 -2.1
baz=302
D25K **Kavik River** 73.29 17 IAmb IAmb 15 57 58.2
comp=Z,48nm,2.0s
D25K **Kavik River** 73.29 17 P P 15 57 52.1 -2.7
baz=313,SNR=5.5
G22K **Bettles** 73.43 21 P P 15 57 54.2 -1.4
baz=309
E24K **Your Creek** 73.56 19 P P 15 57 55.1 -1.3
baz=312,SNR=5.3
K17K **Iditarod** 73.64 26 P P 15 57 55.0 -1.9
baz=305
C27K **Jago River** 73.75 17 P P 15 57 56.2 -1.2
baz=315,SNR=8.5
L16K **Owhat River** 73.75 27 P P 15 57 55.3 -2.2
baz=304
OOD **Oodnadatta** 73.78 137 P P 15 57 57.6 -0.5
I20K **Naaghedeneel** 73.79 23 P P 15 57 54.9 -2.8
baz=307
J18K **Innoko River** 73.79 25 P P 15 57 55.7 -2.1
baz=306
H21K **Melozitna Rive** 73.81 22 IAmb IAmb 15 58 01.6
comp=Z,46nm,2.0s
H21K **Melozitna Rive** 73.81 22 P P 15 57 55.6 -2.3
baz=308,SNR=6.6
M15K **Kasigluk River** 73.82 28 P P 15 57 55.5 -2.5
baz=303
N14K **Kuskokwak Cree** 73.83 29 P P 15 57 55.6 -2.4
baz=303
J19K **Poorman** 73.88 24 IAmb IAmb 15 58 04.3
comp=Z,15nm,0.9s
J19K **Poorman** 73.88 24 P P 15 57 56.4 -1.9
baz=306,SNR=9.2
NIKH **Nikolski High** 73.96 38 P P 15 57 56.7 -2.2
baz=299
L17K **Donlin** 73.97 26 P P 15 57 55.5 -3.3
baz=305
G23K **Bananza Creek** 74.01 20 P P 15 57 58.1 -1.0
G23K IAmb IAmb 15 58 02.7
comp=Z,35nm,1.8s
G23K **Bananza Creek** 74.01 20 P P 15 57 57.2 -1.9
baz=311,SNR=6.1
F24K **Squaw Lake** 74.11 19 P P 15 57 56.0 -3.6
baz=312
H22K **Ishtalitna Cre** 74.12 21 P P 15 57 56.7 -3.0
baz=310
J20K **Nowinta River** 74.28 24 IAmb IAmb 15 58 07.7
comp=Z,14nm,0.8s
J20K **Nowinta River** 74.28 24 P P 15 57 57.0 -3.6
baz=308,SNR=15
M16K **Timber Creek** 74.34 28 P P 15 57 59.1 -1.9
baz=304
N15K **Kwethluk River** 74.36 29 P P 15 57 59.0 -2.2
baz=304
O14K **Tigyukauivet M** 74.37 30 P P 15 57 58.5 -2.7
baz=303
L18K **Granite Mounta** 74.54 26 P P 15 57 59.1 -3.0
baz=306
F25K **Christian Rive** 74.68 19 P P 15 58 00.8 -2.2
baz=314,SNR=9.9
D27M **Malcolm River** 74.70 16 P P 15 58 01.2 -1.9
baz=318,SNR=5.3
M17K **Holitna River** 74.73 27 P P 15 58 01.7 -1.6
baz=306
N16K **Nishlik Lake** 74.73 28 P P 15 58 01.7 -1.7
baz=305
H23K **Yukon River** 74.74 21 P P 15 58 01.7 -1.6
baz=311,SNR=5.9
UNV **Unalaska Valle** 74.75 36 P P 15 58 01.0 -2.5
baz=300
G24K **Hadweenzic Riv** 74.78 20 IAmb IAmb 15 58 07.4
comp=Z,38nm,1.9s
G24K **Hadweenzic Riv** 74.78 20 P P 15 58 02.8 -0.7
baz=313,SNR=6.7
K20K **Telida** 74.81 24 IAmb IAmb 15 58 09.2
comp=Z,25nm,1.1s
K20K **Telida** 74.81 24 P P 15 58 01.0 -2.8
baz=308,SNR=12
MLY **Manley** 74.88 22 P P 15 58 02.8 -1.4
MLY **Manley** 74.88 22 P P 15 58 03.1 -1.1
baz=310
F26K **Sheenjek River** 75.02 18 P P 15 58 03.3 -1.6
baz=315
O15K **Ungalikthiuk R** 75.03 29 P P 15 58 03.1 -1.9
baz=304
BMAR **Burnt Mountain** 75.09 18 P P 15 58 04.3 -1.0
G25K **Bearman Lake** 75.13 19 P P 15 58 03.4 -2.1
baz=314
D28M **Stokes Point** 75.16 15 P P 15 58 03.3 -2.3
baz=320
H24K **Noodor Dome** 75.25 21 P P 15 58 04.6 -1.6
baz=313
I23K **Minto, Yukon-K** 75.25 21 P P 15 58 05.2 -1.0
I23K **Minto, Yukon-K** 75.25 21 P P 15 58 05.0 -1.2
baz=312,SNR=6.7
L19K **White Mountain** 75.25 25 P P 15 58 04.4 -1.9
baz=308
M18K **Stony River** 75.30 26 P P 15 58 05.3 -1.3
baz=307
E27K **Coleen River** 75.33 17 P P 15 58 04.3 -2.4
baz=317,SNR=10
N17K **Nushagak Hills** 75.34 28 P P 15 58 06.4 -0.5
baz=306
BPAW **Bear Paw Mtn.** 75.41 23 P P 15 58 06.1 -1.0
baz=310
L20K **Farewell, AK** 75.42 25 P P 15 58 05.7 -1.6
baz=308
CTA **Charters Tower** 75.43 124 LR LR 16 33 18.4
comp=Z,6.2nm,21.4s,baz=300,slow=37
O16K **Kokwok River B** 75.52 29 P P 15 58 06.1 -1.8
O16K **Kokwok River B** 75.52 29 P P 15 58 05.7 -2.2
baz=306
E28M **Babbage River** 75.52 16 P P 15 58 06.7 -1.1
E28M **Babbage River** 75.52 16 P P 15 58 05.9 -1.8
baz=319,SNR=11
A36M **Sachs Harbour** 75.52 10 P P 15 58 06.0 -1.6
baz=331
H25L **Birch Creek** 75.56 20 P P 15 58 07.0 -0.9
baz=314
M19K **Big River Lodg** 75.59 26 P P 15 58 06.0 -2.3
baz=308
G26K **Porcupine Rive** 75.65 19 P P 15 58 06.1 -2.3
baz=316,SNR=5.9
NEA2 **Nenana** 75.71 22 P P 15 58 08.7 -0.2
NEA2 IAmb IAmb 15 58 14.6
comp=Z,12nm,0.8s
NEA2 **Nenana** 75.71 22 P P 15 58 06.8 -2.1
baz=312
MDM **Murphy Dome** 75.73 21 P P 15 58 07.3 -1.8
MDM IAmb IAmb 15 58 12.4
comp=Z,13nm,1.1s
N18K **Kilae Creek** 75.77 27 P P 15 58 07.1 -2.2
baz=307
O17K **Koliganek Bris** 75.83 28 P P 15 58 08.3 -1.3
baz=306
POKR **Poker Plat Res** 75.87 21 P P 15 58 08.5 -1.3
baz=313
P16K **Nushagak River** 75.89 29 P P 15 58 08.1 -1.9
baz=306
COLA **College** 75.91 21 P P 15 58 08.2 -1.8
baz=313
COLA **College** 75.91 21 P P 15 58 12.2 +2.2
M20K **Styx River** 76.07 25 P P 15 58 10.5 -0.6
M20K **Styx River** 76.07 25 P P 15 58 08.3 -2.9
baz=309,SNR=5.6
E29M **Blow River** 76.08 16 IAmb IAmb 15 58 14.6
comp=Z,26nm,1.2s
E29M **Blow River** 76.08 16 P P 15 58 08.0 -2.9
baz=321,SNR=14
CCB **Clear Creek Bu** 76.08 21 P P 15 58 09.8 -1.1
PRP **Porcupine Dome** 76.17 20 P P 15 58 08.5 -3.2
baz=315,SNR=6.2
F28M **Old Crow** 76.19 17 IAmb IAmb 15 58 15.2
comp=Z,14nm,1.2s
F28M **Old Crow** 76.19 17 P P 15 58 09.5 -2.1
baz=319,SNR=6.3
N19K **Bonanza Creek** 76.23 26 P P 15 58 09.9 -2.1
baz=308
IL31 76.28 21 IAmb IAmb 15 58 14.5
comp=Z,30nm,1.9s
ILAR **Eielson Array** 76.28 21 P P 15 58 11.2 -1.0
comp=Z,2.2nm,0.7s,baz=308,slow=4.4,SNR=17
ILAR PP PP 16 01 03.2 +0.4
comp=Z,1.1nm,0.8s,baz=309,slow=7.0,SNR=5.7
comp=Z,2.2nm,0.7s
G27K **Doyon Strip** 76.33 18 P P 15 58 10.3 -2.1
baz=318
MCK **McKinley** 76.33 22 P P 15 58 10.3 -2.2
baz=312
P17K **Kvichak River** 76.44 28 P P 15 58 11.2 -1.9
baz=307
O18K **Koktuh Hills** 76.54 27 P P 15 58 11.5 -2.2
baz=308
RND **Reindeer** 76.58 23 P P 15 58 13.9 0.0
RND **Reindeer** 76.58 23 P P 15 58 13.9 0.0
RND pmax pmax
comp=Z,60nm,2.0s
SKT **Skwentna** 76.59 25 P P 15 58 12.1 -1.9
baz=310,SNR=8.5
Q16K **King Salmon** 76.66 29 P P 15 58 11.6 -2.7
baz=307
O19K **Port Alsworth** 76.68 27 P P 15 58 12.6 -1.8
baz=308
CUT **Chulitna** 76.76 24 P P 15 58 12.5 -2.4
baz=311
H27K **Steamboat Moun** 76.80 18 P P 15 58 11.5 -3.6
baz=318,SNR=6.0
S14K **Fog Glacier** 76.80 32 P P 15 58 11.3 -4.0
baz=305
P18K **Big Mountain,** 76.81 28 P P 15 58 12.8 -2.5
baz=308
INKA **Innaminka** 76.84 133 P P 15 58 19.2 +3.5
N20K **Mount Spurr** 76.85 25 P P 15 58 13.8 -1.7
baz=310
J25K **Salcha River,** 76.86 21 IAmb IAmb 15 58 31.3
comp=Z,22nm,2.0s
J25K **Salcha River,** 76.86 21 P P 15 58 13.0 -2.5
baz=315
I26K **Coal Creek Min** 77.02 19 IAmb IAmb 15 58 24.8
comp=Z,9.6nm,0.8s
I26K **Coal Creek Min** 77.02 19 P P 15 58 15.2 -1.1
baz=317
WAT1 **Susitna Watana** 77.07 23 P P 15 58 14.7 -2.0
baz=313
INK **Inuvik** 77.13 15 IAmb IAmb 15 58 20.1
comp=Z,18nm,1.2s
INK **Inuvik** 77.13 15 P P 15 58 14.8 -2.0
baz=324
F30M **Barrier River** 77.18 16 P P 15 58 15.4 -1.8
baz=322
G29M **Pine Creek** 77.19 17 IAmb IAmb 15 58 21.9
comp=Z,16nm,0.9s
G29M **Pine Creek** 77.19 17 P P 15 58 15.2 -2.1
baz=321
SUA **Susitna One** 77.21 25 P P 15 58 15.9 -1.7
baz=311
Q17K **Contact Creek** 77.23 29 P P 15 58 14.6 -3.2
baz=308
I27K **Kandik River** 77.24 19 P P 15 58 15.1 -2.5
baz=318,SNR=7.8
M22K **Willow** 77.25 24 P P 15 58 15.2 -2.4
baz=312
DHY **Denali Highway** 77.30 22 P P 15 58 15.1 -3.0
baz=314,SNR=5.3
K24K **Donnelly Dome** 77.30 21 P P 15 58 16.1 -1.9
baz=315
CHGN **Chignik** 77.31 31 P P 15 58 15.9 -2.2
baz=306
Q18K **Katmai Hardscr** 77.36 28 P P 15 58 15.5 -3.0
baz=308
O20K **Slope Mountain** 77.41 26 P P 15 58 15.8 -2.8
baz=310
R17L **Mt. Peulik Vol** 77.42 30 P P 15 58 16.2 -2.5
baz=307
P19K **Oil Pt** 77.45 27 P P 15 58 16.6 -2.2
baz=309
J26L **Joseph Creek** 77.48 20 IAmb IAmb 15 58 23.1
comp=Z,13nm,0.9s
J26L **Joseph Creek** 77.48 20 P P 15 58 17.1 -2.0
baz=316,SNR=16
WAT6 **Susitna Watana** 77.52 23 P P 15 58 17.3 -2.1
baz=313
G30M **tAoh Zraii Nji** 77.58 16 IAmb IAmb 15 58 23.1
comp=Z,15nm,0.9s
G30M **tAoh Zraii Nji** 77.58 16 P P 15 58 16.9 -2.6
baz=322,SNR=6.7
CHNA **Chernabura Isl** 77.62 33 P P 15 58 17.6 -2.2
baz=305
H29M **Whitestone** 77.64 17 P P 15 58 19.4 -0.4
H29M IAmb IAmb 15 58 32.4
comp=Z,28nm,1.6s
H29M **Whitestone** 77.64 17 P P 15 58 16.7 -3.1
baz=320
PMR **Palmer** 77.71 24 P P 15 58 18.3 -1.8
baz=312
SCRK **Sand Creek** 77.74 21 IAmb IAmb 15 58 23.6
comp=Z,12nm,1.0s
SCRK **Sand Creek** 77.74 21 P P 15 58 18.2 -2.3
baz=316,SNR=11
Q19K **Cape Douglas,** 77.74 28 P P 15 58 18.3 -2.2
baz=309
F31M **Tsiigehtchic** 77.79 15 P P 15 58 19.1 -1.4
baz=324
I28M **Miner Creek** 77.82 18 P P 15 58 20.3 -0.6
I28M IAmb IAmb 15 58 25.0
comp=Z,8.1nm,0.8s
I28M **Miner Creek** 77.82 18 P P 15 58 18.1 -2.8
baz=319,SNR=5.8
RC01 **Rabbit Creek A** 77.83 25 P P 15 58 17.6 -3.3
baz=312
SML **Sawmill** 77.84 24 P P 15 58 18.2 -2.8
baz=313
EPYK **Eagle Plains** 77.94 17 IAmb IAmb 15 58 25.5
comp=Z,13nm,0.8s
EPYK **Eagle Plains** 77.94 17 P P 15 58 18.8 -2.7
baz=322
EGAK **Eagle** 77.98 19 P P 15 58 21.3 -0.4
EGAK **Eagle** 77.98 19 P P 15 58 19.3 -2.4
baz=318,SNR=5.5
PAX **Paxson** 77.99 22 P P 15 58 19.1 -2.8
baz=315
M23K **Glacier View** 78.06 24 P P 15 58 19.5 -2.8
baz=313
KNK **Knik Glacier** 78.07 24 P P 15 58 19.5 -2.8
baz=313
G31M **Satah River** 78.09 16 IAmb IAmb 15 58 25.7
comp=Z,17nm,0.8s
G31M **Satah River** 78.09 16 P P 15 58 19.6 -2.6
baz=324,SNR=5.2
SCM **Sheep Creek Mo** 78.17 23 P P 15 58 21.6 -1.3
SCM **Sheep Creek Mo** 78.17 23 P P 15 58 19.7 -3.2
baz=314
SCM **Sheep Creek Mo** 78.17 23 P P 15 58 21.6 -1.3
SCM pmax pmax
comp=Z,47nm,1.6s
O22K **Cooper Landing** 78.24 25 P P 15 58 20.7 -2.4
baz=312
K27K **Chicken** 78.28 20 IAmb IAmb 15 58 27.2
comp=Z,13nm,1.1s
K27K **Chicken** 78.28 20 P P 15 58 21.9 -1.4
baz=318
QLP **Quilpie** 78.30 130 P P 15 58 24.1 +0.2
I29M **Ogilvie Camp,** 78.32 18 P P 15 58 21.2 -2.4
baz=321
BRSE **Bradley Lake S** 78.35 26 P P 15 58 21.9 -1.9
baz=311
M24K **Tolsona, Glenn** 78.37 23 P P 15 58 21.5 -2.5
baz=315
Q20K **Shuyak Island** 78.45 28 P P 15 58 20.5 -3.8
baz=310
PWL **Port Wells** 78.49 24 P P 15 58 20.6 -3.9
baz=313
HARP **HAARP** 78.50 22 P P 15 58 21.7 -2.9
baz=315
MENT **Mentasta** 78.57 21 P P 15 58 26.4 +1.4
SEW **Seward** 78.59 25 P P 15 58 21.6 -3.5
baz=312
L26K **Log Cabin Wild** 78.63 21 P P 15 58 23.4 -1.9
baz=317
KLU **Klutina** 78.89 23 P P 15 58 23.7 -3.1
baz=315
KDAK **Kodiak Island** 78.91 28 P P 15 58 24.1 -2.8
baz=310
GLI **Glacier Island** 78.92 24 P P 15 58 24.7 -2.2
baz=314
I30M **Mount Dempster** 78.94 17 P P 15 58 25.6 -1.5
I30M IAmb IAmb 15 58 30.0
comp=Z,47nm,1.8s
I30M **Mount Dempster** 78.94 17 P P 15 58 24.0 -3.1
baz=322,SNR=6.1
OHAK **Old Harbor** 78.97 29 P P 15 58 24.4 -2.9
baz=310
SII **Sitkinak Islan** 79.01 30 P P 15 58 24.2 -3.4
baz=309
DAWY **Dawson** 79.03 19 P P 15 58 24.7 -2.8
baz=320
J29N **Klondike Camp** 79.05 18 P P 15 58 24.6 -3.1
baz=321
L27K **Beaver Creek,** 79.07 21 P P 15 58 25.6 -2.2
baz=318,SNR=6.7
BCAR **Beaver Creek A** 79.08 21 P P 15 58 27.8 -0.1
M26K **Nabesna, AK** 79.19 21 P P 15 58 26.0 -2.5
baz=317
N25K **Chitina, Valde** 79.25 23 P P 15 58 26.9 -2.0
baz=316
P23K **Montague Islan** 79.42 25 P P 15 58 28.1 -1.6
baz=314
J30M **Hart River** 79.46 18 P P 15 58 27.5 -2.6
baz=322,SNR=5.8
M27K **Edge Creek, AK** 79.58 21 P P 15 58 28.9 -1.8
baz=318
EYAK **Cordova Ski Ar** 79.62 24 P P 15 58 28.3 -2.4
baz=315
BMRM **Bremner River** 79.71 23 P P 15 58 29.9 -1.4
baz=316
K29M **Barlow Dome** 79.72 19 P P 15 58 30.7 -0.7
K29M **Barlow Dome** 79.72 19 P P 15 58 29.1 -2.3
baz=322,SNR=16
MCARA **McCarthy VSAT** 79.94 22 P P 15 58 30.0 -2.4
baz=317
TOA0 **Torodi Ar. Sit** 79.98 279 IAmb IAmb 15 58 37.8
comp=Z,32nm,1.4s
TORD **Torodi Ar. Bea** 79.98 279 P P 15 58 32.5 -1.0
TORD IAmb IAmb 15 58 36.9
comp=Z,17nm,1.2s
TORD **Torodi Ar. Bea** 79.98 279 P P 15 58 32.6 -0.9
comp=Z,4.9nm,0.6s,baz=43,slow=4.9,SNR=16
comp=Z,4.9nm,0.6s
L29M **L29M** 80.13 19 P P 15 58 32.8 -0.8
L29M **L29M** 80.13 19 P P 15 58 31.1 -2.5
baz=321
Q23K **Middleton Isla** 80.20 25 P P 15 58 31.8 -2.1
baz=315
STKA **Stephens Creek** 80.26 136 P P 15 58 37.0 +2.4
STKA **Stephens Creek** 80.26 136 P P 15 58 33.3 -1.2
comp=Z,1.7nm,0.8s,baz=260,slow=4.2,SNR=3.8
comp=Z,1.7nm,0.8s
CRQE **Cirque** 80.38 23 P P 15 58 32.0 -3.1
baz=317
YUK3 **Moose Creek** 80.46 21 P P 15 58 32.1 -3.5
baz=319
KAIM **Kayak Island** 80.53 24 P P 15 58 31.8 -3.9
baz=316
M29M **Somme Creek** 80.55 20 P P 15 58 36.5 +0.6
M29M **Somme Creek** 80.55 20 P P 15 58 32.2 -3.7
baz=321,SNR=9.3
CTG **Chitna Glacier** 80.79 22 P P 15 58 34.1 -3.2
baz=319
CTGM **Chitina Glacie** 80.80 22 P P 15 58 37.0 -0.3
CTGM IAmb IAmb 15 58 42.6
comp=Z,22nm,1.0s
LBTB **Lobatse** 80.90 234 P P 15 58 40.0 +1.7
LBTB IAmb IAmb 15 58 45.9
comp=Z,20nm,1.1s
LBTB **Lobatse** 80.90 234 P P 15 58 40.0 +1.7
LBTB pmax pmax
comp=Z,20nm,1.1s
M30M **Minto, Yukon** 80.92 19 P P 15 58 37.4 -0.4
M30M **Minto, Yukon** 80.92 19 P P 15 58 35.0 -2.8
baz=322
YUK8 **Steele Glacier** 81.05 21 P P 15 58 35.2 -3.6
baz=320
MESA **MESA** 81.19 23 P P 15 58 36.4 -3.0
baz=318
O28M **Mount Upton** 81.31 22 P P 15 58 37.7 -2.5
baz=320
YUK4 **Talbot Arm** 81.35 21 P P 15 58 38.3 -2.0
baz=321
N30M **Aishikik Lake** 81.72 20 P P 15 58 39.9 -2.2
baz=322,SNR=7.9
YUK6 **Outpost Mounta** 81.75 21 P P 15 58 39.7 -2.7
baz=321
PINM **Pinnacle** 81.81 22 P P 15 58 39.7 -2.9
baz=320
M31M **Drury Creek, Y** 81.90 18 P P 15 58 39.8 -3.2
baz=324,SNR=8.3
N31M **Braeburn, Yuko** 82.08 19 P P 15 58 43.6 -0.4
N31M **Braeburn, Yuko** 82.08 19 P P 15 58 41.2 -2.8
baz=323,SNR=7.7
FARO **Faro, Yukon** 82.16 18 P P 15 58 41.4 -2.9
baz=325
O29M **Mount Kennedy** 82.18 21 P P 15 58 41.2 -3.5
baz=321
EIDS **Eidsvold** 82.20 125 P P 15 58 44.3 -0.7
EIDS **Eidsvold** 82.20 125 P P 15 58 44.0 -1.0
EIDS IAmb IAmb 15 58 50.5
comp=Z,15nm,1.1s
MMPY **Sheldon Lake,** 82.38 17 P P 15 58 45.6 +0.1
MMPY IAmb IAmb 15 58 50.7
comp=Z,35nm,1.5s
MMPY **Sheldon Lake,** 82.38 17 P P 15 58 42.7 -2.8

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=327,SNR=6.3 | | | | | | |
| PNL | Peninsula | 82.41 | 22 | P | P | 15 58 43.2 | -2.5 |
| | baz=320 | | | | | | |
| CMSA | Cobar Meteorol | 82.57 | 133 | P | P | 15 58 49.2 | +2.4 |
| O30N | Mendenhall | 82.57 | 20 | P | P | 15 58 45.8 | -0.8 |
| | baz=323 | | | | | | |
| P30M | Million Dollar | 82.82 | 21 | P | P | 15 58 45.9 | -1.9 |
| | baz=322 | | | | | | |
| P29M | Windy Craggy | 82.97 | 21 | P | P | 15 58 46.7 | -1.9 |
| | baz=322 | | | | | | |
| WHY | Whitehorse | 83.01 | 20 | P | P | 15 58 46.7 | -2.2 |
| | baz=324 | | | | | | |
| N32M | Quiet Lake | 83.12 | 19 | P | P | 15 58 49.0 | -0.4 |
| N32M | Quiet Lake | 83.12 | 19 | P | P | 15 58 47.5 | -1.9 |
| | baz=325 | | | | | | |
| TSUM | Tsumeb | 83.33 | 243 | P | P | 15 58 51.1 | -0.1 |
| BOSA | Boshof | 83.41 | 232 | P | P | 15 58 50.9 | -0.5 |
| | comp=Z,5.8nm,0.8s,baz=50,slow=4.0,SNR=3.6 | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| WRGLY | Wrigley | 83.63 | 14 | P | P | 15 58 49.8 | -2.0 |
| | baz=333 | | | | | | |
| SKAG | Skagway | 83.85 | 20 | P | P | 15 58 55.2 | +2.1 |
| SKAG | Skagway | 83.85 | 20 | P | P | 15 58 51.8 | -1.2 |
| | baz=324 | | | | | | |
| P33M | Teslin, Yukon | 83.97 | 19 | P | P | 15 58 53.3 | -0.6 |
| P33M | Teslin, Yukon | 83.97 | 19 | P | P | 15 58 51.3 | -2.5 |
| | baz=326 | | | | | | |
| TGTN | Hyland Airport | 84.05 | 16 | P | P | 15 58 52.3 | -1.9 |
| | baz=329 | | | | | | |
| P32M | Atlin | 84.22 | 20 | P | P | 15 58 54.0 | -1.1 |
| | baz=325 | | | | | | |
| R31K | City Hall, Gus | 84.57 | 21 | P | P | 15 58 55.8 | -1.0 |
| | baz=324 | | | | | | |
| S31K | Pelican | 84.78 | 22 | P | P | 15 58 57.1 | -0.7 |
| | baz=323 | | | | | | |
| R32K | Eaglecrest | 85.06 | 21 | P | P | 15 58 58.6 | -0.6 |
| | baz=324 | | | | | | |
| WTLY | Watson Lake, Y | 85.14 | 17 | P | P | 15 58 58.6 | -1.0 |
| | baz=329 | | | | | | |
| Q32M | Nakina River | 85.17 | 19 | P | P | 15 58 57.6 | -2.4 |
| | baz=326 | | | | | | |
| R33M | Jennings River | 85.17 | 19 | P | P | 15 58 58.8 | -1.2 |
| | baz=327 | | | | | | |
| YKA | Yellowknife Ar | 85.88 | 10 | P | P | 15 59 03.1 | -0.1 |
| YKA | Yellowknife Ar | 85.88 | 10 | P | P | 15 59 03.3 | 0.0 |
| | comp=Z,3.4nm,0.8s,baz=344,slow=4.7,SNR=9.5 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| YKA | Yellowknife Ar | 85.88 | 10 | P | P | 15 59 03.1 | -0.1 |
| DLBC | Dease Lake | 86.24 | 19 | P | P | 15 59 05.5 | +0.2 |
| | comp=Z,1.9nm,0.3s,baz=23,slow=4.0,SNR=7.4 | | | | | | |
| | comp=Z,1.9nm,0.3s | | | | | | |
| DLBC | Dease Lake | 86.24 | 19 | P | P | 15 59 03.0 | -2.2 |
| | baz=328 | | | | | | |
| KOTAN | Kotaneelee Air | 86.27 | 15 | P | P | 15 59 04.3 | -1.0 |
| | baz=333 | | | | | | |
| S34M | Telegraph Cree | 86.37 | 20 | P | P | 15 59 03.9 | -1.9 |
| | baz=327 | | | | | | |
| T33K | Petersburg | 86.74 | 21 | P | P | 15 59 05.5 | -2.1 |
| | baz=326 | | | | | | |
| TOAD | Toad River Com | 87.14 | 16 | P | P | 15 59 08.5 | -1.0 |
| | baz=332 | | | | | | |
| T35M | Bob Quinn | 87.42 | 20 | P | P | 15 59 09.6 | -1.3 |
| | baz=328 | | | | | | |
| U35K | Hyder | 88.39 | 20 | P | P | 15 59 14.3 | -1.2 |
| | baz=328 | | | | | | |
| V35K | Ketchikan | 88.40 | 21 | P | P | 15 59 14.3 | -1.2 |
| | baz=327 | | | | | | |
| DBIC | Dimbokro | 88.77 | 277 | P | P | 15 59 17.5 | -0.6 |
| | comp=Z,7.8nm,1.0s,baz=54,slow=4.7,SNR=7.0 | | | | | | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| DZM | Mont Dzumac | 91.85 | 114 | eLR | LR | 16 28 51.7 | |
| | comp=Z,320nm,31.3s | | | | | | |
| NEW | Newport | 98.77 | 16 | P | P | 16 00 01.4 | -2.1 |
| | baz=339 | | | | | | |
| EGMT | Eagleton | 100.55 | 12 | P | Pdif | 16 00 09.4 | -2.1 |
| | baz=345 | | | | | | |
| MSO | Missoula | 100.86 | 15 | P | Pdif | 16 00 10.8 | -2.1 |
| | baz=341 | | | | | | |
| DGMT | Dagmar | 100.94 | 8 | P | Pdif | 16 00 12.4 | -0.7 |
| | baz=350 | | | | | | |
| AGMN | Agassiz Nation | 101.76 | 2 | P | Pdif | 16 00 13.4 | -3.3 |
| | baz=357 | | | | | | |
| PKME | Peaks-Kenny Pk | 101.96 | 344 | P | Pdif | 16 00 15.5 | -2.2 |
| | baz=20 | | | | | | |
| MDND | Maddock | 102.00 | 5 | P | Pdif | 16 00 15.3 | -2.5 |
| | baz=354 | | | | | | |
| LONY | Lake Ozonia | 103.74 | 347 | P | Pdif | 16 00 23.0 | -2.6 |
| | baz=16 | | | | | | |
| PDAR | Pinedale Array | 105.66 | 13 | PKiKP | PKiKP | 16 04 47.0 | -0.5 |
| | comp=Z,0.3nm,0.4s,baz=54,slow=4.7,SNR=2.8 | | | | | | |
| JFWS | Jewell Farm | 107.17 | 358 | P | PKiKP | 16 04 50.1 | +0.1 |
| | baz=1.9 | | | | | | |
| IRM | Iron Mountain | 112.45 | 20 | P | PKiKP | 16 04 59.0 | -1.3 |
| | baz=339 | | | | | | |
| PFO | Pinyon Flats O | 112.55 | 22 | P | PKiKP | 16 04 59.7 | -0.9 |
| | baz=338 | | | | | | |
| TPFO | Pinon Flats | 112.56 | 22 | P | PKiKP | 16 04 59.0 | -1.6 |
| | baz=338 | | | | | | |
| ANMO | Albuquerque | 113.83 | 13 | P | PKiKP | 16 05 01.8 | -1.2 |
| | baz=347 | | | | | | |
| WVT | Waverly | 113.84 | 356 | P | PKiKP | 16 05 01.1 | -1.7 |
| | baz=4.3 | | | | | | |
| WMOK | Wichita Mounta | 115.09 | 6 | P | PKiKP | 16 05 03.3 | -1.9 |
| | baz=354 | | | | | | |
| 214A | Organ Pipe Nat | 115.19 | 19 | P | PKiKP | 16 05 04.5 | -1.1 |
| | baz=341 | | | | | | |
| TUC | Tucson | 115.40 | 17 | P | PKiKP | 16 05 04.9 | -1.1 |
| | baz=342 | | | | | | |
| MIAR | Mount Ida | 115.55 | 1 | P | PKiKP | 16 05 05.7 | -0.4 |
| | baz=359 | | | | | | |
| 121A | Cookes Peak, D | 115.89 | 14 | P | PKiKP | 16 05 06.1 | -1.0 |
| | baz=345 | | | | | | |
| JCT | Junction City | 119.21 | 7 | P | PKPdf | 16 05 11.5 | -1.9 |
| | baz=353 | | | | | | |
| TXAR | Lajitas Array | 119.80 | 11 | PKP | PKPdf | 16 05 13.5 | -1.1 |
| | comp=Z,1.3nm,0.7s,baz=293,slow=0.2,SNR=7.7 | | | | | | |
| PPT2 | Papeete2 | 126.75 | 90 | eLR | LR | 16 44 59.6 | |
| | comp=Z,258nm,38.5s | | | | | | |
| PPT2 | | | | eLR | LR | 16 45 02.2 | |
| | comp=Z,539nm,35.5s | | | | | | |
| TAOE | Nuku Hiva Isla | 130.69 | 75 | eLR | LR | 16 46 52.3 | |
| | comp=Z,261nm,28.6s | | | | | | |
| ITAB | Concordia | 144.66 | 265 | PKPdf | PKPab | 16 05 59.1 | -0.4 |
| SAML | Samuel | 145.43 | 302 | | PKPbc | 16 06 00.6 | -1.8 |
| SAML | Samuel | 145.43 | 302 | PKIKP | PKPbc | 16 06 00.6 | -1.8 |
| PTLB | Pontes e Lacer | 146.12 | 288 | PKPdf | PKPdf | 16 06 02.9 | -0.7 |
| PLTB | Pedras Altas | 146.80 | 257 | | PKPbc | 16 06 05.4 | -0.8 |
| ETMB | Extrema | 148.21 | 304 | PKPbc | PKPbc | 16 06 09.0 | -1.5 |
| CPUP | Villa Florida | 148.92 | 268 | PKPbc | PKPbc | 16 06 10.0 | -2.0 |
| | comp=Z,12nm,0.6s,baz=90,slow=20,SNR=5.9 | | | | | | |
| LPAZ | La Paz | 153.78 | 297 | PKP | PKPdf | 16 06 13.7 | -2.8 |
| | comp=Z,0.5nm,0.4s,baz=52,slow=0.5,SNR=3.8 | | | | | | |
| LPAZ | | | | PKPbc | PKiKP | 16 06 24.4 | 0.0 |
| | comp=Z,3.2nm,0.8s,baz=354,slow=3.0,SNR=6.8 | | | | | | |
| MG05 | Puerto Natales | 153.99 | 209 | PKPdf | PKPdf | 16 06 13.6 | -1.3 |

*BGR **01** 16:05:14.9, 9°.76N×100°.35W, h33km, mb5.4*
*MOS **01** 16:05:54.4±1.0, 15°.06N×93°.49W, h54km, mb5.5/99, Error ellipse: s-maj=7.0km s-min=4.4km az=85.3*
*GCMT **01** 16:05:54.8±0.2, 15°.03N±0°.01×93°.78W±0°.01, h69km±3km, MW5.0/116, Moment Tensor Solution. s62,c83; s116,c174; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.76±.15; $M_{\theta\theta}$1.46±.13; $M_{\phi\phi}$-0.70±.13; $M_{r\theta}$3.50±.08; $M_{\theta\phi}$-0.74±.13; $M_{\phi r}$-2.72±.07; Best double couple: $M_0$4.63900×$10^{16}$ NP1:$\phi_s$309.00000°,δ83.00000°, λ-79.00000°. NP2:$\phi_s$69.00000°,δ13.00000°, λ-149.00000°. Principal axes: T 4.9430, Plg38.0000°, Azm29.0000°; N -0.6100, Plg11.0000°, Azm127.0000°; P -4.3340, Plg50.0000°, Azm231.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*MEX **01** 16:05:56.9±0.7, 14°.80N×93°.75W, h31km±8km, MD5.2*
*NEIC **01** 16:05:56.8±2.2, 14°.93N±0°.05×93°.66W±0°.05, h67km±4km, mb5.2/650, Mww5.0/34, Md5.2/141(MEX), Error ellipse: s-maj=8.3km s-min=6.2km az=210.0*
*IDC **01** 16:05:57.3±1.7, 15°.03N×93°.46W, h71km±13km, mb4.7/24, mbtmp5.0/29, MS4.0/44, Error ellipse: s-maj=18.2km s-min=9.1km az=40.0*
*CATAC **01** 16:05:57.2±0.7, 14°.63N×93°.70W, h47km±55km, MB5.6, mb5.7, ML5.6*
*BJI **01** 16:05:58.0±0.0, 15°.10N×93°.50W, h63km, mB5.1/1, Ms4.8/1, Ms7 4.6/7*

*NEIC **01** 16:05:59.1, 15°.17N×93°.40W, h60km, Moment Tensor Solution. Duration: 1.6s Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-2.11; $M_{\theta\theta}$1.72; $M_{\phi\phi}$0.39; $M_{r\theta}$3.09; $M_{\theta\phi}$-0.67; $M_{\phi r}$-2.65; Fault plane solution: $M_0$4.56000×$10^{16}$ NP1: $\phi_s$308.43000°,δ76.99000°,λ-83.45000°. NP2: $\phi_s$101.41000°,δ14.54000°,λ-116.28000°. Principal axes: T 4.4329, Plg32.0000°, Azm33.0000°; N 0.2498, Plg6.0000°, Azm127.0000°; P -4.6827, Plg58.0000°, Azm227.0000°;*
*SNET **01** 16:05:59.1±1.1, 15°.02N×93°.40W, h35km±999km, ML4.9*
*NEIC **01** 16:05:59.1, 15°.07N×93°.50W, h60km*
*GCG **01** 16:06:08.2±2.9, 14°.82N×92°.67W, h8km±577km, MD5.3*

**ISC 01 16:05:54.9**±0.4, **14°.82N**±0°.04×**93°.72W**±0°.03, **h61**km±2km, **h61km:pP-P, n1501, σ1.86s**/1345, **mb5.2**/447, **51C-33D,**
**Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.00 | 29 | | Pn | 16 06 12.9 | -0.2 |
| PCIG | | | | | Sn | 16 06 25.9 | -0.6 |
| PCIG | | 1.00 | 29 | ⇓eP | Pn | 16 06 12.9 | -0.2 |
| PCIG | | | | eS | Sn | 16 06 25.9 | -0.6 |
| THIG | | 1.41 | 86 | | Pn | 16 06 19.0 | +0.6 |
| THIG | | | | | Sn | 16 06 35.6 | -0.5 |
| THIG | | 1.41 | 86 | eP | Pn | 16 06 19.0 | +0.6 |
| THIG | | | | eS | Sn | 16 06 35.6 | -0.5 |
| CARR | Arriaga | 1.43 | 353 | iP | Pn | 16 06 18.2 | -0.5 |
| CARR | | | | iS | Sn | 16 06 35.8 | -0.8 |
| PAVE | Pavencul | 1.54 | 76 | ⇓eP | Pn | 16 06 20.9 | +0.6 |
| PAVE | | | | eS | Sn | 16 06 38.5 | -0.9 |
| CHUJ | Union Juarez | 1.58 | 80 | ⇑eP | Pn | 16 06 21.1 | +0.1 |
| CHUJ | | | | eS | Sn | 16 06 40.9 | +0.3 |
| NILT | Santiago Nilte | 1.94 | 334 | eP | Pn | 16 06 24.6 | -1.0 |
| NILT | | | | iS | Sn | 16 06 46.7 | -2.2 |
| RTAL | Retalhuleu | 1.98 | 98 | | Pn | 16 06 27.1 | +0.9 |
| RTAL | Retalhuleu | 1.98 | 98 | iP | Pn | 16 06 26.8 | +0.6 |
| RTAL | | | | eS | Sn | 16 06 50.2 | +0.3 |
| RTAL | Retalhuleu | 1.98 | 98 | iP | Pn | 16 06 27.5 | +1.3 |
| RTAL | | | | iS | Sn | 16 06 50.6 | +0.7 |
| TGIG | | 2.03 | 16 | | Pn | 16 06 27.4 | +0.5 |
| TGIG | | | | | Sn | 16 06 51.7 | +0.4 |
| TGIG | | 2.03 | 16 | ⇑iP | Pn | 16 06 27.4 | +0.5 |
| TGIG | | | | eS | Sn | 16 06 51.7 | +0.4 |
| TGBT | Tuxtla Gutierr | 2.04 | 17 | | Pn | 16 06 27.6 | +0.7 |
| TGBT | | | | | Sn | 16 06 51.9 | +0.6 |
| TGBT | Tuxtla Gutierr | 2.04 | 17 | ⇑iP | Pn | 16 06 27.6 | +0.7 |
| TGBT | | | | eS | Sn | 16 06 51.9 | +0.6 |
| STG3 | Santiaguito 3, | 2.08 | 93 | iP | Pn | 16 06 29.0 | +1.3 |
| CCIG | Comitan | 2.11 | 46 | | Pn | 16 06 28.8 | +0.8 |
| CCIG | Comitan | 2.11 | 46 | ⇑eP | Pn | 16 06 29.3 | +1.3 |
| CCIG | | | | eS | Sn | 16 06 55.6 | +2.3 |
| CCIG | Comitan | 2.11 | 46 | iP | Pn | 16 06 30.9 | +2.9 |
| CCIG | | | | IAML | | 16 07 04.8 | |
| | comp=Z,59µm,1.0s | | | | | | |
| QUEO | Labor Ovalle | 2.13 | 88 | iP | Pn | 16 06 30.1 | +1.6 |
| QUEO | | | | iS | Sn | 16 06 56.0 | +1.9 |
| QUEO | | | | IAML | | 16 07 02.6 | |
| | comp=Z,69µm,1.0s | | | | | | |
| SULM | Suchitepequez, | 2.15 | 103 | iP | Pn | 16 06 31.0 | +2.6 |
| SOKI | Kika Raxquin | 2.24 | 90 | iP | Pn | 16 06 31.4 | +1.4 |
| SOKI | | | | iS | Sn | 16 06 57.2 | +0.4 |
| SOKI | | | | IAML | | 16 07 29.5 | |
| | comp=Z,15µm,1.0s | | | | | | |
| HUIG | Huatulco | 2.49 | 293 | | Pn | 16 06 31.8 | -1.3 |
| HUIG | | | | | Sn | 16 06 56.8 | -5.5 |
| HUIG | Huatulco | 2.49 | 293 | ⇑eP | Pn | 16 06 31.8 | -1.3 |
| HUIG | | | | eS | Sn | 16 06 56.8 | -5.5 |
| UXUV | UXUV | 2.52 | 351 | ⇑eP | Pn | 16 06 34.3 | +0.9 |
| UXUV | | | | eS | Sn | 16 07 01.1 | -1.9 |
| CMIG | Matias Romero | 2.52 | 334 | | Pn | 16 06 33.3 | -0.3 |
| CMIG | | | | | Sn | 16 07 00.6 | -2.5 |
| CMIG | Matias Romero | 2.52 | 334 | P | Pn | 16 06 33.4 | -0.1 |
| | comp=Z,1µm,0.3s,baz=169,slow=11,SNR=653 | | | | | | |
| CMIG | | | | S | Sn | 16 07 01.3 | -1.8 |
| | comp=Z,3µm,0.4s,baz=143,slow=11,SNR=7.5 | | | | | | |
| CMIG | Matias Romero | 2.52 | 334 | ⇓eP | Pn | 16 06 33.3 | -0.3 |
| CMIG | | | | eS | Sn | 16 07 00.6 | -2.5 |
| QUIS | Sacapulas | 2.58 | 79 | iP | Pn | 16 06 36.6 | +2.1 |
| QUIS | | | | iS | Sn | 16 07 09.2 | +4.4 |
| QUIS | | | | IAML | | 16 07 13.2 | |
| | comp=Z,35µm,1.0s | | | | | | |
| PANG | Puerto Angel | 2.79 | 288 | | Pn | 16 06 36.0 | -1.1 |
| PANG | | | | | Sn | 16 07 03.5 | -6.1 |
| PANG | Puerto Angel | 2.79 | 288 | ⇑iP | Pn | 16 06 36.0 | -1.1 |
| PANG | | | | eS | Sn | 16 07 03.5 | -6.1 |
| FUG | Fuego 3 | 2.81 | 97 | iP | Pn | 16 06 39.8 | +2.2 |
| GUMI | Mixco | 3.01 | 93 | iP | Pn | 16 06 42.6 | +2.2 |
| GUMI | | | | IAML | | 16 07 38.8 | |
| | comp=Z,16µm,1.0s | | | | | | |
| PCG | Pacaya | 3.04 | 98 | iP | Pn | 16 06 43.6 | +2.7 |
| GCG4 | OSOP | 3.09 | 94 | iP | Pn | 16 06 44.1 | +2.6 |
| GCG4 | | | | IAML | | 16 07 34.3 | |
| | comp=Z,15µm,1.0s | | | | | | |
| APG | El Apazote | 3.15 | 86 | P | Pn | 16 06 42.5 | +0.2 |
| | comp=Z,89nm,0.8s,baz=312,slow=20,SNR=605 | | | | | | |
| APG | | | | S | Sn | 16 07 16.3 | -2.6 |
| | comp=Z,182nm,0.5s,baz=348,slow=19,SNR=7.2 | | | | | | |
| VHSA | Villahermosa | 3.23 | 13 | eP | Pn | 16 06 43.0 | -0.2 |
| VHSA | | | | eS | Sn | 16 07 23.9 | +3.4 |
| TUIG | Tuzandepetl | 3.27 | 348 | eP | Pn | 16 06 43.3 | -0.4 |
| TUIG | | | | eS | Sn | 16 07 21.3 | 0.0 |
| NBG | Las Nubes | 3.27 | 94 | iP | Pn | 16 06 47.0 | +3.0 |
| NEUV | Arroyo Zacate | 3.50 | 325 | ⇓eP | Pn | 16 06 46.1 | -0.8 |
| NEUV | | | | eS | Sn | 16 07 19.3 | -7.9 |
| PEIG | Puerto Escondi | 3.51 | 290 | | Pn | 16 06 46.2 | -0.8 |
| PEIG | | | | | Sn | 16 07 21.1 | -6.2 |
| PEIG | Puerto Escondi | 3.51 | 290 | ⇑eP | Pn | 16 06 46.2 | -0.8 |
| PEIG | | | | eS | Sn | 16 07 21.1 | -6.2 |
| OXBJ | Oaxaca | 3.65 | 308 | | Pn | 16 06 50.4 | +1.3 |
| OXBJ | | | | | Sn | 16 07 28.5 | -2.7 |
| OXBJ | Oaxaca | 3.65 | 308 | eP | Pn | 16 06 50.4 | +1.3 |
| OXBJ | | | | eS | Sn | 16 07 28.5 | -2.7 |
| OXIG | Oaxaca | 3.66 | 308 | | Pn | 16 06 50.3 | +1.0 |
| OXIG | | | | | Sn | 16 07 25.7 | -5.7 |
| VHO | Vista Hermosa | 3.66 | 308 | eP | Pn | 16 06 50.3 | +1.0 |
| VHO | | | | eS | Sn | 16 07 25.7 | -5.7 |
| SLOZ | Alcaldia de Sa | 3.89 | 101 | eP | Pn | 16 06 53.6 | +1.2 |
| LOAL | Lomas de Alarc | 3.90 | 102 | iP | Pn | 16 06 53.5 | +1.0 |
| LOAL | | | | IAML | | 16 07 51.4 | |
| | comp=Z,10µm,1.0s | | | | | | |
| MRL | Marmol | 3.91 | 86 | iP | Pn | 16 06 55.3 | +2.5 |
| NUBE | Las Nubes | 3.93 | 103 | eP | Pn | 16 06 53.9 | +1.0 |
| NUBE | Las Nubes | 3.93 | 103 | iP | Pn | 16 06 54.5 | +1.6 |
| NUBE | | | | iS | Sn | 16 07 37.9 | +0.1 |
| NUBE | | | | IAML | | 16 07 48.2 | |
| | comp=Z,4µm,1.0s | | | | | | |
| PMUV | Sontecomapan | 3.94 | 340 | eP | Pn | 16 06 51.0 | -2.0 |
| PMUV | | | | eS | Sn | 16 07 31.5 | -6.6 |
| RTR | El Retiro | 4.05 | 103 | eP | Pn | 16 06 56.2 | +1.6 |
| SBLS | San Blas | 4.09 | 103 | eP | Pn | 16 06 56.8 | +1.7 |
| SBLS | | | | eS | Sn | 16 07 42.1 | +0.1 |
| CEVE | Cerro Verde | 4.09 | 103 | eP | Pn | 16 06 57.0 | +1.8 |
| CEVE | Cerro Verde | 4.09 | 103 | iP | Pn | 16 06 56.8 | +1.6 |
| CEVE | | | | IAML | | 16 07 58.3 | |
| | comp=Z,7µm,1.0s | | | | | | |
| SNJE | San Jose | 4.10 | 103 | eP | Pn | 16 06 56.8 | +1.5 |
| UNIC | Universidad Ca | 4.13 | 101 | iP | Pn | 16 06 57.0 | +1.5 |
| UNIC | | | | IAML | | 16 07 47.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| YOIG | Yosondua | 4.20 | 299 | | Pn | 16 06 57.8 | +1.0 |
| YOIG | | | | | Sn | 16 07 38.2 | -6.6 |
| YOIG | Yosondua | 4.20 | 299 | ⇑eP | Pn | 16 06 57.8 | +1.0 |
| YOIG | | | | eS | Sn | 16 07 38.2 | -6.6 |
| MTO3 | Montecristo | 4.24 | 95 | Pn | Pn | 16 06 58.4 | +1.1 |
| MTO3 | Montecristo | 4.24 | 95 | eP | Pn | 16 06 58.2 | +1.0 |
| MTO3 | Montecristo | 4.24 | 95 | iP | Pn | 16 06 58.2 | +1.0 |
| MTO3 | | | | IAML | | 16 08 21.4 | |
| | comp=Z,2µm,1.0s | | | | | | |
| JAYA | Jayaque - finc | 4.30 | 105 | eP | Pn | 16 06 58.8 | +0.8 |
| JAYA | | | | IAML | | 16 07 52.2 | |
| | comp=Z,3µm,0.6s | | | | | | |
| JAYA | Jayaque - finc | 4.30 | 105 | iP | Pn | 16 06 59.3 | +1.3 |
| JAYA | | | | IAML | | 16 07 51.7 | |
| | comp=Z,7µm,1.0s | | | | | | |
| PMON | Piamonte | 4.41 | 104 | iP | Pn | 16 07 01.0 | +1.5 |
| PMON | | | | IAML | | 16 07 55.8 | |
| | comp=Z,4µm,1.0s | | | | | | |
| BOQS | Boqueron | 4.44 | 104 | eP | Pn | 16 07 01.5 | +1.5 |
| LALI | Alcalda de L | 4.47 | 107 | eP | Pn | 16 07 01.1 | +1.0 |
| LALI | | | | IAML | | 16 07 56.9 | |
| | comp=Z,1µm,0.8s | | | | | | |
| LALI | Alcalda de L | 4.47 | 107 | iP | Pn | 16 07 02.1 | +2.0 |
| LALI | | | | IAML | | 16 08 00.7 | |
| | comp=Z,1µm,1.0s | | | | | | |
| UEES | Universidad Ev | 4.48 | 104 | iP | Pn | 16 07 02.3 | +1.9 |
| UEES | | | | IAML | | 16 08 05.9 | |
| | comp=Z,1µm,1.0s | | | | | | |
| SNET | Serv Nac Est T | 4.50 | 104 | | Pn | 16 07 01.6 | +1.0 |
| PNIG | Pinotepa | 4.53 | 291 | | Pn | 16 07 01.0 | 0.0 |
| PNIG | | | | | Sn | 16 07 45.2 | -7.1 |
| PNIG | Pinotepa | 4.53 | 291 | ⇑eP | Pn | 16 07 01.0 | 0.0 |
| PNIG | | | | eS | Sn | 16 07 45.2 | -7.1 |
| UDBS | Universidad Do | 4.56 | 103 | iP | Pn | 16 07 02.5 | +1.0 |
| UDBS | | | | IAML | | 16 08 15.1 | |
| | comp=Z,2µm,1.0s | | | | | | |
| LOMA | Loma Larga | 4.56 | 104 | iP | Pn | 16 07 03.7 | +2.1 |
| LOMA | | | | IAML | | 16 08 23.0 | |
| | comp=Z,3µm,1.0s | | | | | | |
| PANCS | Alcalda de | 4.56 | 105 | iP | Pn | 16 07 02.5 | +1.0 |
| PANCS | | | | IAML | | 16 08 00.6 | |
| | comp=Z,6µm,1.0s | | | | | | |
| TOIG | Toxpalan | 4.57 | 316 | | Pn | 16 07 03.7 | +2.0 |
| TOIG | | | | | Sn | 16 07 43.9 | -10 |
| TOIG | Toxpalan | 4.57 | 316 | eP | Pn | 16 07 03.7 | +2.0 |
| TOIG | | | | eS | Sn | 16 07 43.9 | -10 |
| TXIG | Tlaxiaco | 4.58 | 302 | | Pn | 16 07 03.3 | +1.4 |
| TXIG | | | | | Sn | 16 07 51.8 | -2.3 |
| TXIG | Tlaxiaco | 4.58 | 302 | ⇑eP | Pn | 16 07 03.3 | +1.4 |
| TXIG | | | | eS | Sn | 16 07 51.8 | -2.3 |
| LFRS | El Faro | 4.67 | 104 | eP | Pn | 16 07 04.3 | +1.2 |
| SCIG | Sabancuy | 4.79 | 30 | ⇑eP | Pn | 16 07 04.3 | -0.2 |
| SCIG | | | | eS | Sn | 16 07 58.1 | -0.5 |
| COEG | Centro de Oper | 4.84 | 104 | eP | Pn | 16 07 06.7 | +1.4 |
| COEG | Centro de Oper | 4.84 | 104 | iP | Pn | 16 07 06.8 | +1.4 |
| COEG | | | | IAML | | 16 07 22.2 | |
| | comp=Z,2µm,1.0s | | | | | | |
| HLIG | Huajuapan de L | 4.93 | 308 | | Pn | 16 07 08.5 | +1.8 |
| HLIG | | | | | Sn | 16 07 56.2 | -6.4 |
| HLIG | Huajuapan de L | 4.93 | 308 | ⇑eP | Pn | 16 07 08.5 | +1.8 |
| HLIG | | | | iS | Sn | 16 07 56.2 | -6.4 |
| TECO | Alcaldia de Te | 4.96 | 104 | iP | Pn | 16 07 08.3 | +1.4 |
| TECO | | | | IAML | | 16 08 11.2 | |
| | comp=Z,760nm,1.0s | | | | | | |
| TPIG | Tehuac#an | 5.00 | 316 | | Pn | 16 07 10.0 | +2.4 |
| TPIG | | | | | Sn | 16 08 04.8 | +0.6 |
| TPIG | Tehuac#an | 5.00 | 316 | eP | Pn | 16 07 10.0 | +2.4 |
| TPIG | | | | eS | Sn | 16 08 04.8 | +0.6 |
| PQSS | Presa 15 de Se | 5.14 | 103 | iP | Pn | 16 07 11.2 | +1.8 |
| PQSS | | | | IVmB_BB | | 16 07 37.5 | |
| | comp=Z,3µm,1.0s | | | | | | |
| PQSS | | | | IAmb | IAmb | 16 07 37.9 | |
| | comp=Z,270nm,0.7s | | | | | | |
| PQSS | | | | IAML | | 16 08 22.8 | |
| | comp=Z,440nm,1.0s | | | | | | |
| OZST | Orizaba | 5.16 | 322 | eP | Pn | 16 07 07.6 | -2.1 |
| OZST | | | | eS | Sn | 16 08 08.0 | 0.0 |
| FTIG | Fresnillo de T | 5.23 | 307 | | Pn | 16 07 13.1 | +2.4 |
| FTIG | | | | | Sn | 16 08 03.7 | -6.1 |
| FTIG | Fresnillo de T | 5.23 | 307 | eP | Pn | 16 07 13.1 | +2.4 |
| FTIG | | | | iS | Sn | 16 08 03.7 | -6.1 |
| TLIG | Tlapa | 5.40 | 301 | Pn | Pn | 16 07 14.6 | +1.7 |
| TLIG | Tlapa | 5.40 | 301 | eP | Pn | 16 07 14.7 | +1.7 |
| TLIG | | | | eS | Sn | 16 08 09.5 | -4.4 |
| JAUV | Jalcomulco | 5.40 | 327 | ⇑eP | Pn | 16 07 11.3 | -1.6 |
| JAUV | | | | eS | Sn | 16 08 08.3 | -5.5 |
| PACA | Pacayal | 5.40 | 104 | eP | Pn | 16 07 16.6 | +3.5 |
| PACA | Pacayal | 5.40 | 104 | iP | Pn | 16 07 18.2 | +5.1 |
| PACA | | | | IAmb | IAmb | 16 07 47.2 | |
| | comp=Z,3µm,0.6s | | | | | | |
| PACA | | | | IVmB_BB | | 16 07 59.6 | |
| | comp=Z,37µm,1.0s | | | | | | |
| PACA | | | | IAML | | 16 08 25.2 | |
| | comp=Z,6µm,1.0s | | | | | | |
| LCY | Lacayo | 5.44 | 104 | eP | Pn | 16 07 15.3 | +1.7 |
| BLLM | Bellamira | 5.49 | 104 | eP | Pn | 16 07 16.1 | +1.8 |
| HMTT | Tlapaneco | 5.51 | 303 | | Pn | 16 07 17.1 | +2.6 |
| HMTT | | | | | Sn | 16 08 09.9 | -6.8 |
| HMTT | Tlapaneco | 5.51 | 303 | eP | Pn | 16 07 17.1 | +2.6 |
| HMTT | | | | eS | Sn | 16 08 09.9 | -6.8 |
| LVIG | Laguna Verde | 5.52 | 333 | eP | Pn | 16 07 12.6 | -1.9 |
| LVIG | | | | eS | Sn | 16 08 07.9 | -8.6 |
| JUCU | Jucuar¡n | 5.53 | 106 | eP | Pn | 16 07 17.0 | +2.2 |
| JUCU | | | | IAML | | 16 08 26.9 | |
| | comp=Z,472nm,0.5s | | | | | | |
| CRIG | Cruz Grande | 5.55 | 291 | | Pn | 16 07 15.4 | +0.4 |
| CRIG | | | | | Sn | 16 08 09.4 | -8.0 |
| CRIG | Cruz Grande | 5.55 | 291 | eP | Pn | 16 07 15.4 | +0.4 |
| CRIG | | | | eS | Sn | 16 08 09.4 | -8.0 |
| LCND | La Caada | 5.85 | 104 | eP | Pn | 16 07 20.7 | +1.5 |
| LCND | La Caada | 5.85 | 104 | iP | Pn | 16 07 20.9 | +1.8 |
| LCND | | | | IAML | | 16 07 32.2 | |
| | comp=Z,720nm,1.0s | | | | | | |
| LCND | | | | IVmB_BB | | 16 07 32.2 | |
| | comp=Z,6µm,1.0s | | | | | | |
| LCND | | | | IAmb | IAmb | 16 07 32.3 | |
| | comp=Z,500nm,0.5s | | | | | | |
| CNCH | Conchagua | 5.91 | 104 | iP | Pn | 16 07 22.6 | +2.5 |
| CNCH | | | | IVmB_BB | | 16 07 33.3 | |
| | comp=Z,19µm,1.0s | | | | | | |
| CNCH | | | | IAmb | IAmb | 16 07 33.8 | |
| | comp=Z,1µm,0.6s | | | | | | |
| CNCH | | | | IAML | | 16 08 37.0 | |
| | comp=Z,2µm,1.0s | | | | | | |
| DAIG | Los Arroyos | 6.11 | 292 | | Pn | 16 07 23.6 | +1.0 |
| DAIG | | | | | Sn | 16 08 22.4 | -8.9 |
| DAIG | Los Arroyos | 6.11 | 292 | ⇑eP | Pn | 16 07 23.6 | +1.0 |
| DAIG | | | | eS | Sn | 16 08 22.4 | -8.9 |
| ACP2 | Acapulco | 6.28 | 290 | | Pn | 16 07 26.0 | +1.0 |
| ACP2 | | | | | Sn | 16 08 28.8 | -6.5 |
| ACP2 | Acapulco | 6.28 | 290 | iP | Pn | 16 07 26.0 | +1.0 |
| ACP2 | | | | eS | Sn | 16 08 28.8 | -6.5 |
| TGUH | Tegucigalpa,Un | 6.29 | 96 | Pn | Pn | 16 07 25.9 | +0.6 |
| PPM | Popocatepetl | 6.32 | 313 | eP | Pn | 16 07 29.4 | +3.5 |
| PPM | | | | eS | Sn | 16 08 38.7 | +1.7 |
| PPIG | Popocatepetl | 6.32 | 313 | | Pn | 16 07 29.4 | +3.4 |
| PPIG | | | | | Sn | 16 08 38.7 | +1.7 |
| MEIG | Mezcala | 6.45 | 299 | | Pn | 16 07 29.7 | +2.3 |
| MEIG | | | | | Sn | 16 08 34.3 | -5.4 |
| MEIG | Mezcala | 6.45 | 299 | eP | Pn | 16 07 29.7 | +2.3 |
| MEIG | | | | eS | Sn | 16 08 34.3 | -5.4 |
| YAIG | Yautepec | 6.51 | 309 | | Pn | 16 07 30.8 | +2.6 |
| YAIG | | | | | Sn | 16 08 36.4 | -4.8 |
| YAIG | Yautepec | 6.51 | 309 | eP | Pn | 16 07 30.8 | +2.6 |
| YAIG | | | | eS | Sn | 16 08 36.4 | -4.8 |
| PLIG | Platanillo | 6.58 | 303 | | Pn | 16 07 30.6 | +1.4 |
| PLIG | | | | | Sn | 16 08 38.4 | -4.6 |
| PLIG | Platanillo | 6.58 | 303 | eP | Pn | 16 07 30.6 | +1.4 |
| PLIG | | | | eS | Sn | 16 08 38.4 | -4.6 |
| MPVM | San Francisco | 6.68 | 311 | eP | Pn | 16 07 29.5 | -1.2 |
| MPVM | | | | eS | Sn | 16 08 43.7 | -1.8 |
| TLVM | San Miguel Top | 6.79 | 311 | eP | Pn | 16 07 34.6 | +2.4 |
| TLVM | | | | eS | Sn | 16 08 49.6 | +1.2 |
| XCVM | Xochimilco | 6.79 | 311 | eP | Pn | 16 07 32.5 | +0.3 |
| XCVM | | | | eS | Sn | 16 08 51.2 | +2.9 |
| CRIN | San Cristobal | 6.81 | 107 | | Pn | 16 07 33.8 | +1.4 |
| CRIN | San Cristobal | 6.81 | 107 | iP | Pn | 16 07 34.3 | +1.9 |
| CRIN | | | | IVmB_BB | | 16 07 48.0 | |
| | comp=Z,11µm,1.0s | | | | | | |
| CRIN | | | | IAmb | IAmb | 16 07 54.5 | |
| | comp=Z,1µm,0.7s | | | | | | |
| CRIN | | | | IAML | | 16 08 59.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| CRIN | San Cristobal | 6.81 | 107 | eP | Pn | 16 07 34.4 | +1.9 |
| MAVM | Malinalco, Edo | 6.89 | 307 | eP | Pn | 16 07 21.7 | -12 |
| MAVM | | | | eS | Sn | 16 08 46.9 | -3.8 |
| PKGN | Cerro Pekin | 6.89 | 107 | iP | Pn | 16 07 34.3 | +0.9 |
| PKGN | | | | IAML | | 16 07 56.8 | |
| | comp=Z,1µm,1.0s | | | | | | |
| PKGN | | | | IAmb | IAmb | 16 08 03.6 | |
| | comp=Z,1µm,0.7s | | | | | | |
| PKGN | | | | IVmB_BB | | 16 08 24.5 | |
| | comp=Z,17µm,1.0s | | | | | | |
| VTVM | Tizayuca | 6.89 | 316 | | Pn | 16 07 33.4 | -0.3 |
| VTVM | | | | | Sn | 16 08 53.4 | +2.5 |
| VTVM | Tizayuca | 6.89 | 316 | iP | Pn | 16 07 33.4 | -0.3 |
| VTVM | | | | eS | Sn | 16 08 53.4 | +2.5 |
| AOVM | Tlapan | 6.95 | 310 | | Pn | 16 07 37.0 | +2.4 |
| AOVM | | | | | Sn | 16 08 55.4 | +3.0 |
| AOVM | Tlapan | 6.95 | 310 | eP | Pn | 16 07 37.0 | +2.4 |
| AOVM | | | | eS | Sn | 16 08 55.4 | +3.0 |
| MHVM | Bosque de Chap | 6.95 | 312 | eS | Sn | 16 08 47.6 | -4.7 |
| SOMN | Somoto | 7.03 | 101 | iP | Pn | 16 07 37.5 | +2.1 |
| SOMN | | | | IVmB_BB | | 16 08 06.0 | |

comp=Z,730nm,1.0s
SOMN IAmb IAmb 16 08 06.3
comp=Z,44nm,0.7s
SOMN IAML 16 10 04.2
comp=Z,79nm,1.0s
**TEL3 Telica 3 7.04 108** *i* P **Pn 16 07 36.1 +0.6**
TEL3 IAmb IAmb 16 07 46.2
comp=Z,740nm,0.4s
TEL3 IVmB_BB 16 07 46.3
comp=Z,10µm,1.0s
TEL3 IAML 16 07 46.4
comp=Z,1µm,1.0s
**MYIG Mrida 7.18 31** *e*P **Pn 16 07 36.9 -0.5**
MYIG *e*S **Sn 16 08 55.7 -1.8**
**CNGA Al SSO del Vol 7.20 108** *i* P **Pn 16 07 36.7 -1.0**
CNGA IAML 16 07 51.2
comp=Z,290nm,1.0s
CNGA IVmB_BB 16 07 51.2
comp=Z,4µm,1.0s
CNGA IAmb IAmb 16 07 58.2
comp=Z,160nm,0.5s
**CNGN Cerro Negro 7.20 108 Pn 16 07 38.0 +0.3**
**CNGN Cerro Negro 7.20 108** *i* P **Pn 16 07 38.7 +1.0**
CNGN IVmB_BB 16 07 49.0
comp=Z,5µm,1.0s
CNGN IAML 16 07 49.1
comp=Z,560nm,1.0s
CNGN IAmb IAmb 16 07 49.1
comp=Z,460nm,0.7s
**CNGN Cerro Negro 7.20 108** *e*P **Pn 16 07 38.2 +0.5**
**TOVM TOLUCA 7.22 309 Pn 16 07 38.7 +0.5**
TOVM *e*S **Sn 16 08 55.7 -3.3**
**TOVM TOLUCA 7.22 309** *e*P **Pn 16 07 38.7 +0.5**
TOVM *e*S **Sn 16 08 55.7 -3.3**
**ARIG Puente Sto Nin 7.23 299 Pn 16 07 40.8 +2.8**
ARIG *e*S **Sn 16 08 52.9 -5.8**
**ARIG Puente Sto Nin 7.23 299⇑** *e*P **Pn 16 07 40.8 +2.8**
ARIG *e*S **Sn 16 08 52.9 -5.8**
**MACN El Madrono 7.24 108** *i* P **Pn 16 07 39.1 +1.0**
MACN IVmB_BB 16 07 44.5
comp=Z,2µm,1.0s
MACN IAML 16 07 48.6
comp=Z,190nm,1.0s
**LIMN Finca el Limon 7.35 103** *i* P **Pn 16 07 40.7 +1.0**
LIMN IVmB_BB 16 07 54.8
comp=Z,3µm,1.0s
LIMN IAmb IAmb 16 07 55.2
comp=Z,410nm,0.9s
LIMN IAML 16 10 03.4
comp=Z,440nm,1.0s
**TEJU Tejupilco 7.38 304** *i* P **Pn 16 07 43.5 +3.3**
TEJU *i* S **Sn 16 09 00.0 -2.6**
**COPN Copaltepe 7.41 110** *i* P **Pn 16 07 41.1 +0.6**
COPN IAmb IAmb 16 07 52.7
comp=Z,210nm,0.5s
COPN IAML 16 07 55.9
comp=Z,330nm,1.0s
COPN IVmB_BB 16 08 11.2
comp=Z,2µm,1.0s
**MOM2 El Cardon 7.42 108** *i* P **Pn 16 07 40.5 -0.1**
MOM2 IAmb IAmb 16 07 53.3
comp=Z,200nm,0.7s
MOM2 IVmB_BB 16 07 53.4
comp=Z,2µm,1.0s
MOM2 IAML 16 07 55.9
comp=Z,340nm,1.0s
**DHIG Demacu 7.44 318 Pn 16 07 43.9 +2.8**
**DEIG Demacu 7.44 318** *e*P **Pn 16 07 43.9 +2.8**
**TEIG Tepich 7.47 43 Pn 16 07 39.6 -1.8**
**TEIG Tepich 7.47 43** P **Pn 16 07 39.1 -2.2**
comp=Z,627nm,0.5s,baz=230,slow=1.9,SNR=142
TEIG S **Sn 16 08 56.7 -8.0**
comp=Z,305nm,0.3s,baz=258,slow=20,SNR=0.9
**SAPS Ciudad Sandino 7.59 109** *i* P Pn 16 07 52.8 +10
**PET2 Petatlan 7.73 291** *i* P **Pn 16 07 46.9 +2.1**
PET2 *i* S **Sn 16 09 11.9 +0.9**
**RA5A7 El Crucero 7.74 110** *i* P Pn 16 07 56.9 +12
**CRUN El Crucero 7.75 110** *i* P Pn 16 07 56.4 +11
**ACIG Acambay 7.80 312 Pn 16 07 49.1 +3.1**
ACIG Sn 16 09 23.6 +10
**ACIG Acambay 7.80 312** *e*P **Pn 16 07 49.1 +3.1**
ACIG *e*S Sn 16 09 23.6 +10
**MAS3 Al N del Volca 7.85 110** *i* P Pn 16 07 53.4 +6.9
**ZIIG Zihuatanejo 7.94 291 Pn 16 07 49.8 +2.1**
**ZIIG Zihuatanejo 7.94 291⇑** *e*P **Pn 16 07 49.8 +2.1**
**CTUV Llano Grande 7.95 327** *e*P **Pn 16 07 47.3 -0.6**
CTUV *i* S **Sn 16 09 11.2 -5.1**
**BOAB BOACO BROADBAN 8.18 106** Pn Pn 16 07 51.0 +0.1
**BOAB BOACO BROADBAN 8.18 106** *i* P **Pn 16 07 52.0 +1.0**
**MOIG Morelia 8.62 305 Pn 16 07 59.4 +2.2**
**MOIG Morelia 8.62 305** *e*P **Pn 16 08 00.2 +3.0**
**JRQG Juriquilla Cam 8.68 313 Pn 16 07 59.3 +1.3**
**ACON Acoyapa 8.79 108 Pn 16 07 59.5 +0.2**
**ACON Acoyapa 8.79 108** *e*P **Pn 16 08 00.2 +1.0**
**ALIBA Liberia Airpor 9.01 117** *e*P **Pn 16 08 06.0 +3.6**
**VORI VORI 9.08 115** *e*P **Pn 16 08 07.7 +4.1**
**RPIG Rio Verde 9.20 321 Pn 16 08 07.7 +2.6**
RPIG S **Sn 16 09 53.9 +6.7**
**RPIG Rio Verde 9.20 321** *e*P **Pn 16 08 07.7 +2.6**
RPIG *e*S **Sn 16 09 53.9 +6.7**
**COLC Colonia 9.28 115** *e*P **Pn 16 08 08.8 +2.8**
**BAGA Bagaces 9.29 116** *e*P **Pn 16 08 10.6 +4.3**
**CUI Cuipilapa 9.31 115** *e*P **Pn 16 08 09.1 +2.5**
**NICO Nicoya 9.32 119** *e*P **Pn 16 08 10.3 +3.6**
**ESPN Las Esperanzas 9.53 105 Pn 16 08 10.6 +1.2**
**JTS Las Juntas de 9.67 117** Pn **Pn 16 08 12.5 +1.1**
**JTS Las Juntas de 9.67 117** P **Pn 16 08 12.3 +0.9**
comp=Z,12nm,0.3s,baz=310,slow=21,SNR=18
JTS S **Sn 16 09 56.9 -1.7**
comp=Z,7.3nm,0.4s,baz=320,slow=23,SNR=0.7
**JTS Las Juntas de 9.67 117** *e*P **Pn 16 08 13.6 +2.2**
**JTS Las Juntas de 9.67 117** *e*P **Pn 16 08 14.0 +2.5**
**GTIG Gomez Farias 9.69 329 Pn 16 08 13.4 +1.7**
**GTIG Gomez Farias 9.69 329** *e*P **Pn 16 08 13.4 +1.7**
**ARE1 Arenal 1 9.79 115** *e*P **Pn 16 08 15.9 +2.8**
**MMIG Aquila 9.85 292 Pn 16 08 16.1 +2.2**
MMIG **Sn 16 10 06.1 +3.1**
**MMIG Aquila 9.85 292** *e*P **Pn 16 08 16.1 +2.2**
MMIG *e*S **Sn 16 10 06.1 +3.1**
**SOCE Pocosol 9.92 115** Pn **Pn 16 08 15.9 +1.1**
**COIG Colima 10.48 296⇓** *e*P **Pn 16 08 26.1 +3.6**
COIG *e*S **Sn 16 10 19.3 +0.9**
**JUBC Volcan de Coli 10.51 298** *e*P **Pn 16 08 28.8 +3.7**
JUBC *e*S **Sn 16 10 20.0 +0.6**
**MNGA Volcan de Coli 10.53 297⇓** *e*P **Pn 16 08 27.7 +4.3**
MNGA *e*S **Sn 16 10 21.7 +1.7**
**HDC Heredia 10.53 116** Pn **Pn 16 08 24.0 +0.7**
**HDC Heredia 10.53 116** *e*P **Pn 16 08 24.3 +1.0**
**INCO Volcan de Coli 10.54 298⇓** *e*P **Pn 16 08 27.8 +4.1**
INCO *e*S **Sn 16 10 22.1 +1.6**
**SOMAC Volcano de Col 10.56 298** *e*P **Pn 16 08 25.9 +2.0**
SOMAC *e*S **Sn 16 10 22.8 +1.9**
**CEGR Campo Tres 10.70 297** *e*P **Pn 16 08 28.8 +3.1**
CEGR *e*S **Sn 16 10 24.2 +0.1**
**R15V 10.73 295 Pn 16 08 29.1 +3.2**
**R15V 10.73 295** *e*P **Pn 16 08 29.1 +3.2**
R15V *e*S **Sn 16 10 24.7 +0.2**
**LCR2 La Lucha 2 10.75 117** Pn **Pn 16 08 28.1 +1.7**
**LCR2 La Lucha 2 10.75 117** *e*P **Pn 16 08 28.6 +2.2**
**VICA Volcano Irazu 10.78 115** *e*P **Pn 16 08 29.5 +2.6**
**VTCV VTCV, Calle Va 10.88 115** *e*P **Pn 16 08 31.4 +3.3**
**LCOCO El Coco 10.98 114** *e*P **Pn 16 08 32.6 +3.2**
**LNIG Linares 11.39 333** *e*P **Pn 16 08 35.6 +0.7**
**ZAIG Zacatecas 11.52 315 Pn 16 08 37.8 +0.9**
**ZAIG Zacatecas 11.52 315** *e*P **Pn 16 08 38.8 +1.9**
**DRK0 Durika 11.64 117** *e*P **Pn 16 08 40.9 +2.5**
**BRU2 Volcan 12.34 118 Pn 16 08 49.7 +1.6**
**MNIG Monterrey 12.38 331 Pn 16 08 48.3 -0.1**
**MNIG Monterrey 12.38 331** *e*P **Pn 16 08 48.3 -0.1**
**HBVL Hebbronville 13.03 340** Pn **Pn 16 08 59.7 +2.5**
**CAMR Camarioca 14.26 53** Pn **Pn 16 09 09.8 -4.0**
**833A Chaparral WMA,** P **Pn 16 09 16.7 +0.7**
baz=156,SNR=33
**MCIG Muzquiz 14.86 332 Pn 16 09 21.4 -0.2**
**MCIG Muzquiz 14.86 332** *e*P **Pn 16 09 21.4 -0.2**
**HKT Hockley 15.19 353** Pn **Pn 16 09 24.6 -1.1**
**HKT Hockley 15.19 353⇑** *e*P **Pn 16 09 24.7 -1.0**
HKT pmax pmax
comp=Z,40nm,1.5s
**DRIO Del Rio 15.87 337 Pn 16 09 33.7 -0.8**
**MTDJ Mount Denham 15.88 75** P **Pn 16 09 35.8 +0.9**
**435B Jarrell 16.28 348** P **Pn 16 09 39.0 -0.7**
baz=166
**HPIG 16.41 319** Pn **Pn 16 09 41.8 +0.2**
**JCT Junction City 16.56 341** P **Pn 16 09 43.1 -0.1**
baz=158,SNR=75
**BCIG La Boquilla 16.69 321** P **P 16 09 48.1 +1.6**
**BCIG La Boquilla 16.69 321** *e*P **P 16 09 48.1 +1.6**
**NATX Nacogdoches 16.89 357** P **Pn 16 09 46.4 -0.8**
baz=176
**H06E1 SOCORRO T-PHAS 16.93 286** T T 16 27 21.9
**346A Big Creek Wild 16.95 13** Pn **Pn 16 09 46.6 -1.4**
**TXAR Lajitas Array 17.12 329 P 16 09 51.6 +0.5**
**TXAR Lajitas Array 17.12 329** P **P 16 09 51.7 +0.6**
comp=Z,28nm,0.9s,baz=151,slow=13,SNR=149
TXAR LR LR 16 17 04.4
comp=Z,147nm,18.7s,baz=134,slow=39
**BRAL Brewton 17.39 19** P **Pn 16 09 53.4 0.0**
baz=202,SNR=5.2
**060A Indiantown 17.40 44** Pn **Pn 16 09 51.6 -1.9**
**WHTX Lake Whitney, 17.43 349** P **Pn 16 09 53.3 -0.6**
baz=167,SNR=26
**DWPF Disney Wildern 17.46 39** Pn **Pn 16 09 52.6 -1.8**
**DWPF Disney Wildern 17.46 39** P **Pn 16 09 53.0 -1.3**
baz=223
**VBMS Vicksburg 17.57 9** Pn **Pn 16 09 53.7 -1.9**
**VBMS Vicksburg 17.57 9** P **Pn 16 09 54.5 -1.1**
baz=190,SNR=10
**SLBS Sierra La Lagu 17.66 302** P **P 16 09 59.8 +2.7**
**FW13 Cleburne 17.78 350 Pn 16 09 58.1 -0.2**
FW13 IAmb IAmb 16 10 05.3
comp=Z,90nm,0.8s
**FW14 Alvarado 17.79 350 Pn 16 09 57.6 -0.7**
FW14 IAmb IAmb 16 10 06.3
comp=Z,127nm,0.7s
**656A Willston 17.79 34 Pn 16 09 57.6 -0.7**
**FW16 Waxahatchie 17.82 351 P 16 09 58.8 +0.1**
**143A Socs Landing, 17.93 6** IAmb IAmb 16 10 07.1
comp=Z,201nm,1.2s
**TREL Terrell 17.96 354** P **Pn 16 10 00.5 +0.1**
TREL IAmb IAmb 16 10 02.6
comp=Z,464nm,1.9s
**ALPN Alpine 17.97 331** IAmb IAmb 16 10 04.7
comp=Z,106nm,0.8s
**LPIG La Paz 18.15 303** P **Pn 16 10 06.3 +3.5**
comp=Z,34nm,0.3s,baz=165,slow=5.2,SNR=4.0
LPIG LR LR 16 17 12.1
comp=Z,298nm,18.7s,baz=119,slow=37
**CSIG Choix 18.15 314** P **Pn 16 10 04.9 +2.1**
**CSIG Choix 18.15 314** *e*P **Pn 16 10 04.9 +2.1**
**FW07 Weatherford 18.18 349** P **P 16 10 02.4 -0.3**
FW07 IAmb IAmb 16 10 12.9
comp=Z,280nm,1.4s
**146A Union 18.24 13** IAmb IAmb 16 10 05.6
comp=Z,90nm,0.8s
**Z41A Richland Creek 18.38 2** P **P 16 10 04.6 -0.2**
Z41A IAmb IAmb 16 10 11.6
comp=Z,190nm,0.7s
**PLPT Palo Pinto 18.39 348** P **Pn 16 10 06.3 +0.6**
PLPT IAmb IAmb 16 10 07.6
comp=Z,123nm,0.8s
**Z38A Mt. Pleasant 18.39 357** IAmb IAmb 16 10 14.0
comp=Z,281nm,1.0s
**FW06 Azle 18.41 350** IAmb IAmb 16 10 08.6
comp=Z,90nm,0.8s
**MNHN Monahans 18.41 335** IAmb IAmb 16 10 11.9
comp=Z,112nm,0.8s
**352A Blakely 18.43 24** IAmb IAmb 16 10 07.8
comp=Z,233nm,0.9s
**GTBY Guantanamo Bay 18.47 71** P **P 16 10 04.3 -1.6**
GTBY IAmb IAmb 16 10 08.4
comp=Z,209nm,1.1s
**ABTX Abilene, Hawle 18.53 344** IAmb IAmb 16 10 10.0
comp=Z,175nm,0.8s
**ABTX Abilene, Hawle 18.53 344** P **Pn 16 10 07.6 +0.3**
baz=161,SNR=50
**FW03 Perrin-Whitt E 18.57 348** IAmb IAmb 16 10 09.9
comp=Z,164nm,0.8s
**Z35A Perchaven, San 18.71 351** P **P 16 10 08.2 -0.2**
Z35A IAmb IAmb 16 10 16.8
comp=Z,274nm,1.1s
**NMDO Nuevo Mundo 18.74 70** IAmb IAmb 16 10 16.5
comp=Z,45nm,1.0s
**WLAR White Oak Lake 18.79 2** P **P 16 10 09.4 0.0**
**PECS Pecos 18.91 332** P **Pn 16 10 11.9 -0.2**
**TIGA Tifton 18.96 28** IAmb IAmb 16 10 14.2
comp=Z,184nm,0.7s
**TIGA Tifton 18.96 28** P **P 16 10 10.2 -1.1**
baz=211,SNR=14
**Z47A Carrollton 19.00 15** IAmb IAmb 16 10 14.6
comp=Z,270nm,0.9s
**ODSA Odessa 19.02 336** IAmb IAmb 16 10 16.6
comp=Z,212nm,0.8s
**CCAR Cane Creek 19.10 5** IAmb IAmb 16 10 20.8
comp=Z,138nm,0.7s
**SN05 Snyder 5 19.12 341** IAmb IAmb 16 10 17.3
comp=Z,203nm,0.7s
**LRAL Lakeview Retre 19.14 17** P **P 16 10 12.6 -0.5**
baz=200
**APMT Aspermont 19.32 344** P **P 16 10 15.6 +0.4**
APMT IAmb IAmb 16 10 19.4
comp=Z,177nm,0.8s
**SN07 Snyder 07 19.32 342** IAmb IAmb 16 10 18.1
comp=Z,330nm,1.3s
**WTFS Witchita Falls 19.35 348** IAmb IAmb 16 10 19.9
comp=Z,139nm,0.8s
**152A Waverly Hall 19.57 23** P **P 16 10 15.9 -2.0**
152A IAmb IAmb 16 10 20.8
comp=Z,112nm,0.8s
**MIAR Mount Ida 19.64 0** P **P 16 10 18.1 -0.5**
**MIAR Mount Ida 19.64 0** P **P 16 10 18.1 -0.5**
baz=180,SNR=200
**MIAR Mount Ida 19.64 0** P **P 16 10 18.2 -0.5**
MIAR pmax pmax
comp=Z,384nm,1.0s
**X37A Clayton 19.74 356** IAmb IAmb 16 10 25.9
comp=Z,183nm,0.8s
**DKNS Dickens 19.87 342** IAmb IAmb 16 10 23.3
comp=Z,160nm,0.8s
**255A Hazlehurst 19.89 29** IAmb IAmb 16 10 24.6
comp=Z,181nm,0.8s
**MNTX Cornudas Mount 19.90 330** P **Pn 16 10 22.9 -0.7**
baz=144,SNR=100
**UALR University of 19.91 3** P **P 16 10 20.6 -0.9**
UALR IAmb IAmb 16 10 27.5
comp=Z,206nm,0.9s
**OXF Oxford 19.99 10** IAmb IAmb 16 10 26.6
comp=Z,223nm,1.0s
**OXF Oxford 19.99 10** P **P 16 10 20.6 -1.8**
baz=192,SNR=23
**Y49A Blount Mountai 20.08 18** P **P 16 10 21.3 -2.1**
Y49A IAmb IAmb 16 10 26.3
comp=Z,79nm,0.8s
**CGIG 20.28 322** Pn 16 10 29.1 +0.8
**CGIG 20.28 322** *e*P Pn 16 10 29.1 +0.8
**WMOK Wichita Mounta 20.35 348** IAmb IAmb 16 10 28.6
comp=Z,205nm,0.9s
**WMOK Wichita Mounta 20.35 348** P **P 16 10 26.4 0.0**
baz=165,SNR=202
**WMOK Wichita Mounta 20.35 348** P **P 16 10 26.5 +0.1**
WMOK pmax pmax
comp=Z,254nm,1.3s
**WHAR Wooly Hollow 20.43 3** IAmb IAmb 16 10 31.7
comp=Z,85nm,0.8s
**FNO Franklin 20.62 351** P **P 16 10 28.9 -0.4**
**PLAL Pickwick Lake 20.71 13** IAmb IAmb 16 10 33.6
comp=Z,66nm,0.8s
**GOGA Godfrey 20.72 25** IAmb IAmb 16 10 48.8
comp=Z,69nm,0.8s
**GOGA Godfrey 20.72 25** P **P 16 10 28.2 -2.1**
baz=209,SNR=22
**GOGA Godfrey 20.72 25** P **P 16 10 28.5 -1.8**
GOGA pmax pmax
comp=Z,104nm,1.0s
**MSTX Muleshoe 20.75 338** P **P 16 10 31.5 +0.7**
baz=154,SNR=89
**HBAR Harrisburg 20.83 7** P **P 16 10 30.0 -1.6**
**Y52A Lilburn 20.88 23** IAmb IAmb 16 10 50.7
comp=Z,172nm,1.1s
**OTAV Otavalo 20.92 132** *e*P **P 16 10 33.1 -0.1**
**FPAL Fort Paine 20.95 19** P **P 16 10 30.3 -2.7**
**IMBA Imbabura, San 21.08 132** P **P 16 10 36.1 +1.3**
IMBA IAmb IAmb 16 10 46.9
comp=Z,225nm,1.0s
**TUL3 Leonard 21.09 355** P **P 16 10 33.5 -0.8**
**TUL3 Leonard 21.09 355** P **P 16 10 34.0 -0.2**
baz=174,SNR=29
**AMTX Amarillo 21.23 342** P **P 16 10 36.8 +0.9**
baz=158
**OK031 S. Brethren Rd 21.23 353** P **P 16 10 34.1 -1.8**
**NZIG Nacozari, Sono 21.25 319** *e* **P 16 10 36.8 +0.5**
NZIG *e*P **P 16 10 38.8 +2.5**
**LCAR Lake Charles 21.29 6** P **P 16 10 33.8 -2.6**
LCAR IAmb IAmb 16 10 52.5
comp=Z,155nm,1.4s
**RLO Rose Lookout 21.29 357** IAmb IAmb 16 10 39.3
comp=Z,236nm,1.0s
**HALT Halls 21.37 10** P **P 16 10 34.3 -3.0**
**SWET Sewanee 21.48 18** IAmb IAmb 16 10 39.7
comp=Z,84nm,0.8s
**PEBM Pemiscott Bayo 21.48 9** P **P 16 10 37.5 -1.0**
**ROSC El Rosal 21.51 115** P **P 16 10 41.7 +2.2**
**ROSC El Rosal 21.51 115** P **P 16 10 40.8 +1.4**
comp=Z,82nm,0.9s,baz=341,slow=3.8,SNR=49
comp=Z,82nm,0.9s
**ROSC El Rosal 21.51 115** P **P 16 10 41.7 +2.2**
ROSC pmax pmax
comp=Z,281nm,1.2s
**LNXT Lenox 21.53 9** P **P 16 10 37.7 -1.3**
**ANTS Antisana-Sarah 21.64 133** P **P 16 10 42.4 +1.4**
**W50A Signal Mountai 21.66 19** IAmb IAmb 16 11 00.4
comp=Z,110nm,0.8s
**GLAT Glass 21.73 10** P **P 16 10 38.8 -2.3**
**V48A Smith Brothers 21.73 15** IAmb IAmb 16 11 01.2
comp=Z,125nm,1.1s
**ELIS Ellis County 21.76 347** P **P 16 10 41.6 0.0**
**121A Cookes Peak, D 21.80 326** IAmb IAmb 16 10 47.1
comp=Z,165nm,0.9s
**121A Cookes Peak, D 21.80 326** P **P 16 10 45.1 +3.0**
baz=140,SNR=104
**SDDR Presa de Saban 21.85 76** P **P 16 10 40.5 -2.2**
SDDR IAmb IAmb 16 10 45.1
comp=Z,138nm,1.0s
**WVT Waverly 21.87 13** P **P 16 10 39.9 -2.7**
WVT IAmb IAmb 16 10 47.3
comp=Z,75nm,0.8s
**WVT Waverly 21.87 13** P **P 16 10 39.9 -2.7**
baz=195
**WVT Waverly 21.87 13** P **P 16 10 39.9 -2.7**
WVT pmax pmax
comp=Z,75nm,0.8s
**HODGE Hodges 21.93 26** IAmb IAmb 16 10 59.5
comp=Z,220nm,1.5s
**NHSC New Hope 21.97 32** P **P 16 10 42.8 -1.0**
baz=217
**HICK Hickman 22.00 10** P **P 16 10 42.6 -1.4**
**W52A Murphy 22.03 22** IAmb IAmb 16 11 04.7
comp=Z,142nm,1.6s
**PARMO Parma 22.04 9** P **P 16 10 43.3 -1.1**
**T35A Sooner Cattle 22.15 354** IAmb IAmb 16 10 47.3
comp=Z,153nm,1.0s
**CLTN Cedars of Leba 22.19 16** IAmb IAmb 16 11 06.6
comp=Z,126nm,1.1s
**T42A Van Buren 22.24 6** IAmb IAmb 16 10 48.3
comp=Z,66nm,0.7s
**BG3 Lake Jocassee 22.31 24** IAmb IAmb 16 11 03.1
comp=Z,84nm,1.0s
**KAN14 Manchester OK 22.37 351** P **P 16 10 46.3 -1.8**
KAN14 IAmb IAmb 16 10 49.4
comp=Z,102nm,0.7s
**JSC Jenkinsville 22.41 28** IAmb IAmb 16 11 04.7
comp=Z,100nm,1.2s
**GRTK Grand Turk 22.45 69** P **P 16 10 47.2 -1.9**
**KAN05 Bluff City Nor 22.50 351** P **P 16 10 48.9 -0.6**
**DUN6 Lazy B Ranch 22.53 324** P **P 16 10 51.3 +1.3**
**Y22D IRIS PASSCAL I 22.58 330** P **P 16 10 52.6 +2.1**
baz=144
**TKL Tuckaleechee C 22.59 21** IAmb IAmb 16 11 11.2
comp=Z,81nm,1.1s
**TKL Tuckaleechee C 22.59 21** LR LR 16 22 01.8
comp=Z,570nm,18.0s,baz=220,slow=43
**PAULI Pauline 22.62 26** IAmb IAmb 16 11 11.3
comp=Z,62nm,0.9s
**CGM3 Cape Girardeau 22.68 8** IAmb IAmb 16 11 15.1
comp=Z,178nm,1.5s
**U49A Red Boiling Sp 22.74 17** IAmb IAmb 16 11 12.9
comp=Z,179nm,1.1s
**T47A Sharon Grove 22.85 14** IAmb IAmb 16 10 54.1
comp=Z,134nm,0.8s
**Y58A Scranton 22.86 31** P **P 16 10 51.1 -2.2**
Y58A IAmb IAmb 16 11 16.1
comp=Z,138nm,0.9s
**V53A Saluda 22.95 23** IAmb IAmb 16 11 15.3
comp=Z,87nm,0.8s
**BIRD Birdtown, Kers 23.08 29** IAmb IAmb 16 11 12.8
comp=Z,130nm,1.2s
**ANMO Albuquerque 23.09 332** P **P 16 10 56.1 +0.4**
**ANMO Albuquerque 23.09 332** LR LR 16 21 29.1
comp=Z,148nm,19.7s,baz=250,slow=40
**ANMO Albuquerque 23.09 332** P **P 16 10 57.0 +1.2**
baz=146
**ANMO Albuquerque 23.09 332** *c*P **P 16 10 57.0 +1.2**
ANMO pmax pmax
comp=Z,14nm,0.9s
**KMSC Kings Mountain 23.10 27** IAmb IAmb 16 10 57.2
comp=Z,118nm,1.1s
**KMSC Kings Mountain 23.10 27** P **P 16 10 53.4 -2.3**
baz=212,SNR=21
**CCM Cathedral Cave 23.25 5** P **P 16 10 55.0 -2.0**
CCM IAmb IAmb 16 10 57.5
comp=Z,104nm,0.7s
**CCM Cathedral Cave 23.25 5** P **P 16 10 54.9 -2.2**
baz=186
**CCM Cathedral Cave 23.25 5** P **P 16 10 55.0 -2.0**
CCM pmax pmax
comp=Z,104nm,0.7s
**SDV Santo Domingo 23.34 102** LR LR 16 21 14.3
comp=Z,228nm,19.3s,baz=286,slow=40
**SDV Santo Domingo 23.34 102** *e*P **P 16 10 57.0 -1.4**
**TUC Tucson 23.35 321** P **P 16 10 59.4 +1.2**
TUC IAmb IAmb 16 11 02.0
comp=Z,66nm,0.9s
**TUC Tucson 23.35 321** P **P 16 11 00.7 +2.5**
baz=134
**TUC Tucson 23.35 321** *i* **P 16 11 00.3 +2.1**
**TUC Tucson 23.35 321** P **P 16 10 59.4 +1.2**
TUC pmax pmax
comp=Z,66nm,0.9s
**TZTN Tazewell 23.46 21** IAmb IAmb 16 11 00.2
comp=Z,118nm,1.4s
**TZTN Tazewell 23.46 21** P **P 16 10 56.5 -2.6**
baz=205,SNR=15
**V55A Taylorsville 23.75 26** IAmb IAmb 16 11 28.1
comp=Z,107nm,1.3s
**U54A Nelsons Funny 24.08 24** IAmb IAmb 16 11 28.7
comp=Z,65nm,0.9s
**T25A Trinidad 24.18 339** P **P 16 11 08.3 +2.4**
baz=153,SNR=131
**WCI Wyandotte Cave 24.23 14** P **P 16 11 03.6 -2.4**
WCI IAmb IAmb 16 11 07.7
comp=Z,136nm,0.8s
**WCI Wyandotte Cave 24.23 14** P **P 16 11 03.6 -2.4**
baz=197
**WCI Wyandotte Cave 24.23 14** P **P 16 11 03.6 -2.4**
WCI pmax pmax
comp=Z,136nm,0.8s
**KSU1 Kansas State U 24.32 355** P **P 16 11 06.2 -0.7**
baz=173,SNR=32
**OLIL Olney 24.33 11** P **P 16 11 04.5 -2.4**
**Q44A Meyer Farm, Va 24.35 9** IAmb IAmb 16 11 08.4
comp=Z,104nm,0.8s
**214A Organ Pipe Nat 24.39 318** P **P 16 11 09.4 +1.8**
**214A Organ Pipe Nat 24.39 318** P **P 16 11 09.5 +1.9**
baz=129,SNR=14
**S51A Beattyville 24.44 20** IAmb IAmb 16 11 32.8
comp=Z,80nm,1.0s
**X18A Snowflake 24.48 326** IAmb IAmb 16 11 13.6
comp=Z,68nm,1.2s
**CBKS Cedar Bluff 24.48 349** P **P 16 11 08.9 +0.5**
baz=165,SNR=13
**U56A King 24.53 27** IAmb IAmb 16 11 10.1
comp=Z,82nm,0.9s
**PIX Pinacate 24.57 316** P **P 16 11 10.9 +1.7**
**R50A Paris 24.80 18** IAmb IAmb 16 11 37.7
comp=Z,90nm,1.1s
**CNNC Cliffs of the 24.82 32** P **P 16 11 10.5 -0.9**
baz=219
**W18A Petrified Fore 24.82 327** P **P 16 11 13.5 +1.8**
**W18A Petrified Fore 24.82 327** P **P 16 11 13.9 +2.2**
baz=140,SNR=7.8
**P43A Skaggs, Pawnee 25.00 8** IAmb IAmb 16 11 13.1
comp=Z,74nm,0.8s
**BLO Bloomington 25.07 13** IAmb IAmb 16 11 15.5
comp=Z,78nm,0.8s

SDCO Great Sand Dun 25.11 338 P P 16 11 16.0 +1.6
SDCO IAmb IAmb 16 11 17.8
comp=Z,82nm,1.1s
SDCO Great Sand Dun 25.11 338 P P 16 11 16.3 +1.8
baz=152,SNR=96
BLA Blacksburg 25.25 26 P P 16 11 13.3 -2.1
baz=211
KSCO Kaye Shedlock' 25.34 344 P P 16 11 16.8 +0.5
KSCO Kaye Shedlock' 25.34 344 P P 16 11 17.6 +1.3
baz=159,SNR=19
113A Mohawk Valley, 25.53 318 P P 16 11 19.4 +1.6
SSFO Shawnee State 25.53 19 IAmb IAmb 16 11 53.2
comp=Z,69nm,0.9s
P48A Milroy 25.61 15 IAmb IAmb 16 11 19.9
comp=Z,59nm,0.7s
S22A 4UR Ranch, Cre 25.62 335 P P 16 11 21.4 +2.3
baz=149,SNR=35
MLPR Magueyes Islan 25.77 79 IAmb IAmb 16 11 21.4
comp=Z,66nm,1.1s
BAUV El Baul 25.78 100 P P 16 11 17.5 -2.9
BAUV IAmb IAmb 16 11 22.7
comp=Z,74nm,0.9s
Q51A Peebles 25.79 19 IAmb IAmb 16 11 58.0
comp=Z,82nm,1.0s
Y14A Wickenburg 25.82 321 P P 16 11 22.2 +1.7
P49A Miami Univ. Ec 25.86 16 P P 16 11 17.5 -3.3
baz=200
MVCO Mesa Verde 25.89 332 IAmb IAmb 16 11 40.0
comp=Z,87nm,1.1s
MVCO Mesa Verde 25.89 332 P P 16 11 23.7 +2.3
baz=145,SNR=11
N41A Harden Midland 25.91 5 IAmb IAmb 16 11 21.4
comp=Z,104nm,0.7s
HDIL Hopedale 25.93 8 P P 16 11 19.7 -1.8
baz=189,SNR=13
Q24A Divide 26.07 339 P P 16 11 23.8 +0.7
Q24A Divide 26.07 339 P P 16 11 25.1 +1.9
baz=154,SNR=24
Q52A Bidwell 26.08 21 IAmb IAmb 16 11 23.6
comp=Z,52nm,0.9s
SFIN Lafayette 26.11 12 IAmb IAmb 16 11 22.9
comp=Z,53nm,0.8s
SFIN Lafayette 26.11 12 P P 16 11 20.7 -2.4
baz=194,SNR=14
P51A Williamsport 26.29 19 IAmb IAmb 16 12 02.5
comp=Z,50nm,0.8s
T59A Double "B" Far 26.34 30 P P 16 11 24.5 -0.7
GLA Glamis 26.40 317 P P 16 11 26.9 +1.1
GLA Glamis 26.40 317 P P 16 11 27.8 +2.0
baz=128
GLA Glamis 26.40 317 P P 16 11 26.9 +1.1
GLA pmax pmax
comp=Z,24nm,0.9s
O48B Farmland 26.43 15 IAmb IAmb 16 11 28.0
comp=Z,48nm,0.7s
O48B Farmland 26.43 15 P P 16 11 22.8 -3.2
baz=198,SNR=17
O49A Covington 26.57 16 IAmb IAmb 16 11 57.9
comp=Z,51nm,0.8s
ATAH Atahualpa 26.58 144 LR LR 16 20 49.5
comp=Z,157nm,21.6s,baz=327,slow=34
Q54A Coxs Mills 26.61 23 IAmb IAmb 16 11 28.1
comp=Z,66nm,1.2s
SJG San Juan 26.63 79 LR LR 16 22 59.8
comp=Z,154nm,19.3s,baz=220,slow=39
BLYC Blythe 26.64 319 P P 16 11 28.1 +0.1
P52A Corning 26.73 20 P P 16 11 27.2 -1.5
baz=205
PDMCI Parker Dam,Lak 26.76 320 P P 16 11 30.8 +1.8
baz=131,SNR=15
BGNE Belgrade 26.77 353 P P 16 11 29.1 0.0
baz=170,SNR=15
YUH Yuha Desert 26.89 315 P P 16 11 30.3 +0.1
N47A Urbana 26.89 14 IAmb IAmb 16 11 29.9
comp=Z,58nm,1.0s
M44A Midewin, Midew 26.93 9 IAmb IAmb 16 11 30.9
comp=Z,60nm,0.9s
SWSC Sam W. Stewart 26.98 316 P P 16 11 33.3 +2.3
baz=126
ISCO Idaho Springs 26.98 340 IAmb IAmb 16 11 34.3
comp=Z,62nm,0.9s
ISCO Idaho Springs 26.98 340 P P 16 11 33.0 +1.7
baz=153,SNR=38
ISCO Idaho Springs 26.98 340 P P 16 11 33.2 +1.9
ISCO pmax pmax
comp=Z,71nm,1.1s
R58B Mineral 26.99 28 P P 16 11 27.6 -3.4
SCIA State Center 27.00 1 P P 16 11 30.2 -0.9
baz=181,SNR=20
ACSO Alum Creek Sta 27.00 18 P P 16 11 28.4 -2.7
baz=203
IKP In-Ko-Pah, Jac 27.02 315 P P 16 11 33.4 +1.9
baz=125
OGNE Ogallala 27.02 346 P P 16 11 32.9 +1.5
baz=162,SNR=13
W13A Hualapai Mount 27.14 322 P P 16 11 33.7 +1.0
BC3 Big Chuckawall 27.18 317 P P 16 11 35.4 +2.4
baz=128,SNR=26
O52A Adamsville 27.26 20 IAmb IAmb 16 12 18.4
comp=Z,85nm,1.3s
BRIGG Briggsdale 27.28 342 P P 16 11 34.2 +0.4
BRIGG IAmb IAmb 16 11 41.7
comp=Z,71nm,1.0s
IRM Iron Mountain 27.30 319 P P 16 11 36.2 +2.2
baz=129,SNR=16
L42A Oliver, Polo 27.31 7 IAmb IAmb 16 11 34.6
comp=Z,111nm,0.9s
NEE2 Needles Airpor 27.36 320 P P 16 11 36.9 +2.4
baz=131
MONP2 Monument Peak 27.37 315 P P 16 11 36.6 +1.8
baz=125
HMU Henry Mountain 27.52 330 P P 16 11 36.9 +0.7
HMU IAmb IAmb 16 11 39.7
comp=Z,66nm,1.3s
MCWV Mont Chateau 27.58 24 P P 16 11 33.8 -2.4
baz=210
O53A New Philadelph 27.59 21 P P 16 11 33.6 -2.8
baz=206,SNR=9.1
L44A Lake County Fo 27.72 9 IAmb IAmb 16 11 40.0
comp=Z,60nm,0.8s
L44A Lake County Fo 27.72 9 P P 16 11 35.2 -2.3
baz=192
BELC Belle Mtn. Jos 27.75 317 P P 16 11 40.6 +2.5
baz=128,SNR=7.7
TPFO Pinon Flats 27.81 316 P P 16 11 40.3 +1.7
baz=126
PFO Pinyon Flats O 27.82 316 P P 16 11 40.1 +1.3
PFO Pinyon Flats O 27.82 316 LR LR 16 24 00.5
comp=Z,225nm,18.1s,baz=126,slow=39
PFO Pinyon Flats O 27.82 316 P P 16 11 41.4 +2.7
baz=126
PFO Pinyon Flats O 27.82 316⇑*e*P P 16 11 40.0 +1.3
PFO pmax pmax
comp=Z,10.0nm,0.9s
109C Camp Elliot, M 27.84 314 P P 16 11 39.9 +1.2
baz=124
L46A Eue Claire 27.85 12 IAmb IAmb 16 12 20.2
comp=Z,82nm,1.2s
GMRC Granite Mounta 28.02 319 P P 16 11 42.8 +2.3
baz=129,SNR=13
N23A Red Feather La 28.08 340 P P 16 11 42.7 +1.7
baz=154,SNR=10.0
JFWS Jewell Farm 28.16 5 P P 16 11 39.9 -1.5
baz=187,SNR=28
K43A Burlington 28.17 8 IAmb IAmb 16 11 41.8
comp=Z,46nm,0.9s
L48A N Adams 28.20 15 IAmb IAmb 16 12 45.3
comp=Z,49nm,0.9s
K30B Basset 28.22 351 P P 16 11 42.0 0.0
N53A Lisbon 28.22 21 IAmb IAmb 16 12 42.0
comp=Z,211nm,2.0s
O20A White River Ci 28.24 336 P P 16 11 44.5 +2.0
baz=149,SNR=24
MURC Murrieta 28.31 315 P P 16 11 44.7 +1.8
baz=125
SZCU Shurtz Canyon 28.46 326 P P 16 11 46.4 +2.0
HEC Hector,Ludlow 28.48 318 P P 16 11 47.1 +2.6
baz=128
BBRC Big Bear Solar 28.52 317 P P 16 11 47.4 +2.4
baz=126
CCUT Cedar City 28.57 326 P P 16 11 46.6 +1.1
TUQ Turquoise Moun 28.61 320 P P 16 11 47.8 +2.1
baz=130
MVU Marysvale 28.69 329 P P 16 11 48.3 +1.7
PCRV Puerto La Cruz 28.75 96 LR LR 16 23 51.2
comp=Z,249nm,21.9s,slow=38
M53A WI Miller and 28.84 21 P P 16 11 44.9 -2.6

baz=207
ECSD EROS Data Cent 28.92 356 P P 16 11 47.3 -0.9
baz=174,SNR=136
BFSC Mount Baldy Ra 28.99 316 P P 16 11 51.4 +2.3
baz=125
GSC Goldstone, Bar 29.08 319 P P 16 11 52.2 +2.3
baz=128
I40A Norwalk 29.10 5 IAmb IAmb 16 11 51.8
comp=Z,116nm,1.0s
I37A Lemond, Waseca 29.10 0 IAmb IAmb 16 11 50.6
comp=Z,102nm,0.9s
RDMU Red Mountain 29.14 335 P P 16 11 52.0 +1.5
SSPA Standing Stone 29.19 25 P P 16 11 47.7 -3.0
SSPA Standing Stone 29.19 25 P P 16 11 49.7 -1.0
baz=212
RWWY Rawlins 29.21 339 P P 16 11 52.7 +1.6
I42A Draeger Farm, 29.26 7 IAmb IAmb 16 11 51.6
comp=Z,44nm,0.9s
PRN Pahroc Range 29.41 324 P P 16 11 54.5 +1.7
GWY Greenwater Val 29.55 320 P P 16 11 55.9 +1.8
EDW2 Edwards Air Fo 29.59 317 P P 16 11 55.3 +0.9
baz=126
ERPA Erie 29.68 21 P P 16 11 55.5 +0.6
baz=207
LRMC Laurel Mtn Rad 29.75 318 P P 16 11 57.5 +1.6
baz=127
TPNV Topopah Spring 29.80 322 P P 16 11 58.7 +2.4
baz=131,SNR=8.3
K22A Casper 29.85 341 IAmb IAmb 16 11 59.4
comp=Z,56nm,1.1s
K22A Casper 29.85 341 P P 16 11 57.8 +1.2
baz=154,SNR=16
FURC Furnace Creek, 29.85 320 P P 16 11 59.2 +2.7
baz=130
SUSD Miller 29.86 352 P P 16 11 56.2 -0.3
baz=169,SNR=13
OSI Osito Audit: C 29.93 316 P P 16 11 59.3 +2.0
baz=124
S11A Rachel 29.97 323 P P 16 11 59.4 +1.6
MPMC Manual Prospec 29.98 319 P P 16 11 58.3 +0.3
baz=128,SNR=14
SPR3 Spring Creek 3 30.15 327 P P 16 12 00.7 +1.2
DUG Dugway, Tooele 30.29 330 P P 16 12 01.3 +0.7
DUG Dugway, Tooele 30.29 330 P P 16 12 02.2 +1.6
baz=141,SNR=7.4
DUG Dugway, Tooele 30.29 330 P P 16 12 01.3 +0.7
DUG pmax pmax
comp=Z,21nm,1.4s
ARVC Arvin 30.30 316 P P 16 12 02.7 +2.2
baz=125
SPMN Marine on St. 30.32 1 P P 16 11 59.1 -1.5
baz=181,SNR=50
ISA Isabella, Lake 30.38 318 P P 16 12 03.9 +2.6
baz=126
TCUT Toone Canyon 30.38 333 P P 16 12 03.1 +1.6
TCUT IAmb IAmb 16 12 21.1
comp=Z,87nm,1.1s
Q12A Willow Creek R 30.45 326 P P 16 12 03.6 +1.6
G40A Rib Lake 30.50 5 IAmb IAmb 16 12 01.6
comp=Z,36nm,1.0s
RSSD Black Hills 30.50 345 P P 16 12 02.8 +0.3
RSSD Black Hills 30.50 345 P P 16 12 03.6 +1.2
baz=160
RSSD Black Hills 30.50 345 P P 16 12 02.8 +0.3
RSSD pmax pmax
comp=Z,22nm,0.9s
RSSD Black Hills 30.50 345 P P 16 12 03.7 +1.2
GRAC Grapevine Rang 30.50 321 P P 16 12 05.2 +2.8
baz=130,SNR=10
CWC Cottonwood Cre 30.60 319 P P 16 12 05.4 +2.0
baz=128
CZSB Cruzeiro do Su 30.60 136 P P 16 12 04.6 +1.2
CZSB IAmb IAmb 16 12 29.1
comp=Z,100nm,1.7s
CZSB Cruzeiro do Su 30.60 136 *e*P P 16 12 04.0 +0.6
GMN Gold Mountain 30.64 321 P P 16 12 05.6 +1.8
VES Vestal, Richgr 30.88 317 P P 16 12 07.7 +2.0
baz=126
BGU Big Grassy Mou 30.96 331 P P 16 12 08.4 +1.9
F33A 5 Mile Ranch, 31.00 357 IAmb IAmb 16 12 06.2
comp=Z,76nm,0.9s
BW06 Boulder Array 31.00 337 P P 16 12 07.3 +0.4
baz=149,SNR=29
PDAR Pinedale Array 31.00 337 P P 16 12 07.6 +0.7
PDAR Pinedale Array 31.00 337 P P 16 12 07.4 +0.5
comp=Z,16nm,0.9s,baz=137,slow=9.9,SNR=89
PDAR PcP PcP 16 15 02.1 +0.4
comp=Z,0.6nm,0.5s,baz=169,slow=3.0,SNR=1.3
PDAR LR LR 16 25 55.7
comp=Z,139nm,21.1s,baz=130,slow=39
comp=Z,16nm,0.9s
DSP Deep Springs 31.11 321 P P 16 12 09.8 +2.2
TPH Tonopah 31.12 322 IAmb IAmb 16 12 28.6
comp=Z,44nm,1.1s
PAL Palisades 31.27 30 P P 16 12 07.9 -1.1
baz=219
BINY Binghamton 31.28 26 P P 16 12 06.4 -2.7
baz=214
COWI Conover 31.42 6 IAmb IAmb 16 12 10.3
comp=Z,30nm,0.7s
NNA Nana 31.45 147 LR LR 16 22 40.5
comp=Z,228nm,20.9s,baz=328,slow=32
NNA Nana 31.45 147⇑*e*P P 16 12 12.6 +1.7
NNA pmax pmax
comp=Z,30nm,1.3s
K57A Scipio Center 31.51 25 IAmb IAmb 16 12 11.4
comp=Z,28nm,0.8s
HVU Hansel Valley 31.52 332 IAmb IAmb 16 12 14.9
comp=Z,62nm,1.3s
AHID Auburn Hatcher 31.61 335 P P 16 12 13.0 +0.8
AHID IAmb IAmb 16 12 16.0
comp=Z,66nm,1.2s
BBSR BB Station 31.67 51 P P 16 12 10.1 -2.5
BBSR IAmb IAmb 16 12 11.8
comp=Z,69nm,0.9s
BBSR BB Station 31.67 51 P P 16 12 10.9 -1.7
BBSR pP pP 16 12 26.2 -1.4
NV11 Mina Array Sit 31.91 322 IAmb IAmb 16 12 36.1
comp=Z,31nm,1.1s
ELK Elko 31.91 328 P P 16 12 17.0 +2.0
ELK Elko 31.91 328 LR LR 16 27 06.0
comp=Z,365nm,18.6s,baz=168,slow=40
ELK Elko 31.91 328 P P 16 12 17.0 +2.0
ELK pmax pmax
comp=Z,24nm,1.1s
NVAR Mina Array Bea 32.00 322 P P 16 12 18.2 +2.4
NVAR Mina Array Bea 32.00 322 P P 16 12 18.4 +2.7
comp=Z,15nm,0.8s,baz=140,slow=8.9,SNR=92
NVAR PcP PcP 16 15 06.5 +2.0
comp=Z,1.8nm,0.8s,baz=126,slow=5.2,SNR=1.8
NVAR LR LR 16 26 58.7
comp=Z,436nm,19.5s,baz=136,slow=40
comp=Z,15nm,0.8s
E28A Huff 32.19 351 P P 16 12 17.2 +0.1
RYN Ryan 32.26 322 P P 16 12 18.6 +0.7
KVN Kaiserville 32.28 323 P P 16 12 19.5 +1.3
KVN Kaiserville 32.28 323 P P 16 12 19.5 +1.3
KVN pmax pmax
comp=Z,14nm,0.9s
FXWY Fox Creek 32.31 336 IAmb IAmb 16 12 21.6
comp=Z,42nm,1.1s
SADO Sadowa 32.31 20 IAmb IAmb 16 12 16.9
comp=Z,44nm,1.4s
SADO Sadowa 32.31 20 LR LR 16 27 36.1
comp=Z,658nm,18.7s,baz=164,slow=40
IMW Indian Meadow 32.49 337 IAmb IAmb 16 12 23.9
comp=Z,34nm,1.1s
FLWY Flagg Ranch 32.56 337 IAmb IAmb 16 12 39.4
comp=Z,32nm,0.8s
DELO Deloro Mine 32.61 22 IAmb IAmb 16 12 20.8
comp=Z,42nm,0.9s
BMN Battle Mountai 32.73 326 P P 16 12 23.9 +1.8
BMN Battle Mountai 32.73 326 P P 16 12 23.9 +1.8
BMN pmax pmax
comp=Z,20nm,0.9s
H17A Grant Village 32.78 337 IAmb IAmb 16 12 28.7
comp=Z,37nm,1.1s
H17A Grant Village 32.78 337 P P 16 12 23.8 +1.3
baz=148,SNR=11
YERR Yerington 32.91 322 P P 16 12 25.4 +1.7
YMP Mirror Lake Pl 32.92 338 IAmb IAmb 16 12 47.0
comp=Z,79nm,1.2s
RLMT Red Lodge 32.95 340 P P 16 12 25.5 +1.5
baz=151,SNR=33
EYMN Ely 33.08 3 IAmb IAmb 16 12 24.1
comp=Z,88nm,1.3s
EYMN Ely 33.08 3 P P 16 12 22.8 -2.0

baz=184,SNR=6.9
YNR Norris Junctio 33.09 338 IAmb IAmb 16 12 28.7
comp=Z,24nm,0.9s
YMR Madison River 33.16 337 P P 16 12 27.8 +2.0
PNTR Pine Nut 33.20 322 P P 16 12 28.1 +1.8
MDND Maddock 33.29 353 P P 16 12 26.5 -0.2
baz=169,SNR=123
YHL Hebgen Lake 33.40 337 IAmb IAmb 16 12 32.5
comp=Z,83nm,1.2s
EMB Emerald Bay 33.43 321 P P 16 12 29.3 +1.0
AGMN Agassiz Nation 33.43 357 P P 16 12 26.6 -1.3
baz=176,SNR=58
LAO LASA Array 33.45 344 P P 16 12 28.0 -0.1
baz=157,SNR=8.2
HRV Adam Dziewonsk 33.55 30 P P 16 12 27.8 -1.2
baz=221
HLID Hailey 33.67 332 IAmb IAmb 16 12 33.4
comp=Z,26nm,1.0s
HLID Hailey 33.67 332 P P 16 12 31.7 +1.5
baz=142,SNR=37
LONY Lake Ozonia 33.86 25 IAmb IAmb 16 12 32.1
comp=Z,22nm,1.0s
LONY Lake Ozonia 33.86 25 P P 16 12 29.1 -2.5
baz=214,SNR=9.6
TEFE Tefe 34.09 120 *e*P P 16 12 34.7 +0.8
BOZ Bozeman (W) 34.20 337 IAmb IAmb 16 12 40.9
comp=Z,35nm,1.1s
BOZ Bozeman (W) 34.20 337 P P 16 12 35.8 +1.0
baz=148,SNR=38
MFID Camas Ranch 34.21 331 P P 16 12 35.6 +0.8
MFID IAmb IAmb 16 12 40.2
comp=Z,44nm,1.6s
DGMT Dagmar 34.65 348 P P 16 12 38.9 +0.5
DGMT Dagmar 34.65 348 P P 16 12 39.4 +0.9
baz=162,SNR=14
WVOR Wild Horse Val 34.89 327 IAmb IAmb 16 13 01.2
comp=Z,45nm,1.2s
WVOR Wild Horse Val 34.89 327 P P 16 12 42.6 +1.8
WVOR pmax pmax
comp=Z,35nm,1.3s
MNTQ Montreal, Queb 34.97 25 IAmb IAmb 16 12 41.2
comp=Z,29nm,1.2s
BOAV Boa Vista 35.00 107 P P 16 12 41.4 -0.5
BOAV IAmb IAmb 16 12 43.0
comp=Z,24nm,0.9s
BOAV Boa Vista 35.00 107 *e*P P 16 12 41.3 -0.5
TRQ Mont Tremblant 35.20 23 IAmb IAmb 16 12 44.0
comp=Z,27nm,1.1s
ULM Lac du Bonnet 35.38 358 P P 16 12 43.2 -1.5
comp=Z,51nm,0.7s,baz=175,slow=9.5,SNR=58
ULM PcP PcP 16 15 13.7 +0.1
comp=Z,15nm,0.8s,baz=249,slow=4.5,SNR=4.0
ULM LR LR 16 30 01.3
comp=Z,192nm,21.6s,baz=188,slow=41
comp=Z,51nm,0.7s
ULM Lac du Bonnet 35.38 358 *c i*P P 16 12 42.8 -1.8
HATC Hat Creek Radi 35.40 322 P P 16 12 46.5 +1.5
HATC IAmb IAmb 16 13 09.8
comp=Z,32nm,1.0s
EGMT Eagleton 35.67 341 P P 16 12 48.0 +0.7
baz=152,SNR=18
OVMT Ovando 35.94 337 P P 16 12 50.5 +0.7
MSO Missoula 36.11 336 IAmb IAmb 16 12 53.6
comp=Z,43nm,1.0s
MSO Missoula 36.11 336 P P 16 12 52.1 +1.1
baz=145,SNR=19
ETMB Extrema 36.64 130 P P 16 12 56.1 +0.3
ETMB IAmb IAmb 16 13 02.0
comp=Z,32nm,1.1s
ETMB Extrema 36.64 130 *e*P P 16 12 56.7 +0.9
YBH Yreka Blue Hor 36.70 323 LR LR 16 28 52.2
comp=Z,532nm,20.4s,baz=150,slow=38
K04D Chiloquin, OR 36.72 325 P P 16 12 57.1 +0.7
K04D IAmb IAmb 16 13 15.7
comp=Z,26nm,0.8s
KHMM Horse Mountain 36.80 321 IAmb IAmb 16 13 18.2
comp=Z,16nm,0.8s
KRPM Rodgers 37.14 321 P P 16 13 01.3 +1.4
KRPM IAmb IAmb 16 13 21.4
comp=Z,40nm,1.0s
MACA Manacapuru-AM 37.28 116 IAmb IAmb 16 13 04.0
comp=Z,38nm,0.7s
MACA Manacapuru-AM 37.28 116 *e*P P 16 13 01.9 +0.6
E09A Wood Farm, Sta 37.63 332 P P 16 13 04.0 +0.1
E09A IAmb IAmb 16 13 05.7
comp=Z,19nm,0.9s
I05D Terrebonne, OR 37.63 327 P P 16 13 04.3 +0.3
KBO Bosley Butte 37.89 322 P P 16 13 06.2 0.0
KBO IAmb IAmb 16 13 27.6
comp=Z,59nm,1.0s
HAWA Hanford 38.18 331 P P 16 13 07.7 -0.8
G05A Wamic 38.24 328 IAmb IAmb 16 13 12.9
comp=Z,32nm,0.9s
J01E Myrtle Point 38.30 324 IAmb IAmb 16 13 29.4
comp=Z,41nm,0.9s
I03D Drain, OR 38.30 325 P P 16 13 10.6 +1.0
I03D IAmb IAmb 16 13 28.9
comp=Z,29nm,1.0s
H04A Detroit Lake 38.31 327 IAmb IAmb 16 13 12.3
comp=Z,49nm,1.1s
SAML Samuel 38.40 126 P P 16 13 09.5 -1.2
SAML IAmb IAmb 16 13 14.5
comp=Z,38nm,0.8s
SAML Samuel 38.40 126 P P 16 13 09.5 -1.2
SAML pmax pmax
comp=Z,38nm,0.8s
SAML Samuel 38.40 126 *e*P P 16 13 10.4 -0.3
BUCK Buck Mountain 38.42 326 P P 16 13 11.0 +0.3
BUCK IAmb IAmb 16 13 13.1
comp=Z,64nm,1.4s
H04D Lebanon 38.50 326 IAmb IAmb 16 13 29.5
comp=Z,25nm,0.9s
NEW Newport 38.54 335 IAmb IAmb 16 13 13.6
comp=Z,39nm,1.5s
NEW Newport 38.54 335 LR LR 16 28 54.1
comp=Z,251nm,20.7s,baz=207,slow=36
NEW Newport 38.54 335 P P 16 13 12.1 +0.5
baz=142,SNR=12
NEW Newport 38.54 335 P P 16 13 12.2 +0.6
NEW pmax pmax
comp=Z,18nm,1.0s
C09A Chrisman Ranch 38.67 333 IAmb IAmb 16 13 15.1
comp=Z,32nm,0.8s
COR Corvallis 38.85 326 P P 16 13 15.3 +1.2
COR IAmb IAmb 16 13 44.8
comp=Z,25nm,0.9s
COR Corvallis 38.85 326 P P 16 13 15.3 +1.2
COR pmax pmax
comp=Z,25nm,0.9s
G03D McMinnville, O 39.24 327 IAmb IAmb 16 13 20.4
comp=Z,58nm,1.2s
LTY Liberty 39.35 331 IAmb IAmb 16 13 21.1
comp=Z,31nm,1.1s
LON Longmire 39.53 329 P P 16 13 20.7 +0.8
LON IAmb IAmb 16 13 23.8
comp=Z,18nm,0.8s
LON Longmire 39.53 329 P P 16 13 20.7 +0.8
LON pmax pmax
comp=Z,18nm,0.8s
LPAZ La Paz 39.92 140 P P 16 13 24.2 +0.1
LPAZ La Paz 39.92 140 LR LR 16 29 12.2
comp=Z,120nm,21.7s,baz=308,slow=35
LPAZ La Paz 39.92 140 *e*P P 16 13 24.2 +0.1
LPAZ La Paz 39.92 140 *e*P P 16 13 23.7 -0.4
D05A Enumclaw 39.93 330 P P 16 13 23.6 +0.5
D05A IAmb IAmb 16 13 25.8
comp=Z,41nm,1.1s
E03A Lebam 40.28 328 P P 16 13 26.9 +1.0
E03A IAmb IAmb 16 13 29.5
comp=Z,35nm,1.0s
FFC Flin Flon 40.34 353 P P 16 13 26.4 0.0
FFC IAmb IAmb 16 13 27.8
comp=Z,68nm,1.2s
FFC Flin Flon 40.34 353 *e*P P 16 13 26.4 0.0
FFC Flin Flon 40.34 353 P P 16 13 26.6 +0.2
FFC pP pP 16 13 41.8 +0.1
GNW Green Mountain 40.60 330 P P 16 13 28.3 -0.3
WISH Wishkah 40.76 328 IAmb IAmb 16 13 33.3
comp=Z,43nm,1.2s
MDP Montagnes des 41.53 99 LR LR 16 32 05.0
comp=Z,340nm,21.8s,baz=292,slow=38
PGC Sidney 41.65 330 P P 16 13 37.2 0.0
PGC IAmb IAmb 16 13 39.9
comp=Z,30nm,1.1s
ITTB Itaituba 42.19 114 *e*P P 16 13 41.2 -0.9
VILB Vilhena 43.16 128 P P 16 13 50.7 +0.7

VILB IAmb IAmb 16 13 55.1
comp=Z,53nm,0.8s
**VILB Vilhena 43.16 128** *eP* **P 16 13 50.2 +0.3**
**BRLDA Berland Lookou 43.35 340** IAmb IAmb 16 13 53.0
comp=Z,52nm,0.7s
**CBB Campbell River 43.51 331** P **P 16 13 54.0 +1.6**
**FCC Fort Churchill 43.87 360** P **P 16 13 53.8 -1.2**
**FCC Fort Churchill 43.87 360** P **P 16 13 53.8 -1.2**
FCC pmax pmax
comp=Z,139nm,0.8s
**MCPB Macapa, AP 43.87 106** *eP* **P 16 13 55.2 -0.6**
**RPN Rapa Nui 44.37 200** LR LR 16 28 56.8
comp=Z,46nm,21.4s,baz=24,slow=31
**LVC Limon Verde 44.43 146** *eP* **P 16 14 00.4 0.0**
**SCHQ Schefferville 45.06 22** P **P 16 14 02.6 -2.1**
**SCHQ Schefferville 45.06 22** P **P 16 14 02.2 -2.4**
comp=Z,13nm,0.9s,baz=227,slow=6.4,SNR=11
SCHQ LR LR 16 34 00.4
comp=Z,662nm,21.8s,baz=240,slow=38
comp=Z,13nm,0.9s
**PDRB Porto dos Gac 45.08 124** *eP* **P 16 14 05.0 -0.4**
**CLDB Colider 45.43 122** *eP* **P 16 14 07.9 -0.2**
**PTLB Pontes e Lacer 45.53 130** P **P 16 14 09.3 +0.5**
PTLB IAmb IAmb 16 14 14.3
comp=Z,30nm,1.0s
**PTLB Pontes e Lacer 45.53 130** *eP* **P 16 14 09.0 +0.2**
**AC06 Mina Casimiro 47.66 151** IAmb IAmb 16 14 54.4
comp=Z,37nm,1.3s
**PRPB Parauapebas 48.26 112** *eP* **P 16 14 30.1 -0.2**
**TMAB Tom-Au,PA,Br 48.29 107** *eP* **P 16 14 30.0 -0.5**
**AC05 El Transito 48.96 152** IAmb IAmb 16 14 58.9
comp=Z,17nm,0.9s
**SNDB Serra Nova Dou 49.74 120** *eP* **P 16 14 41.4 -0.2**
**TOAD Toad River Com 49.78 339** P **P 16 14 41.4 +0.1**
baz=138,SNR=29
**V35K Ketchikan 49.85 333** P **P 16 14 43.3 +1.5**
baz=129
**YKA Yellowknife Ar 49.86 347** P **P 16 14 42.0 +0.3**
**YKA Yellowknife Ar 49.86 347** P **P 16 14 42.2 +0.5**
comp=Z,49nm,0.7s,baz=152,slow=7.7,SNR=136
YKA PP **PP 16 16 36.9 0.0**
comp=Z,4.8nm,0.7s,baz=153,slow=9.5,SNR=3.9
comp=Z,49nm,0.7s
**H03N2 Juan Fernandez 50.02 164** T T 17 09 01.7
baz=343
**H03N1 Juan Fernandez 50.03 164** T T 17 09 03.8
baz=343
**H03N3 Juan Fernandez 50.04 164** T T 17 09 02.3
baz=343
**T35M Bob Quinn 50.34 335** P **P 16 14 47.4 +1.9**
T35M IAmb IAmb 16 14 49.7
comp=Z,27nm,1.2s
**T35M Bob Quinn 50.34 335** P **P 16 14 47.8 +2.2**
baz=131,SNR=7.4
**KOTAN Kotaneelee Air 50.37 341** P **P 16 14 47.0 +1.4**
baz=140,SNR=23
**LIRD Liard River Hi 50.49 339** P **P 16 14 47.8 +1.2**
baz=138
**CO03 El Pedregal 50.51 154** IAmb IAmb 16 14 49.7
comp=Z,28nm,0.9s
**RVDE Rio Verde (Bra 50.88 130** *eP* **P 16 14 50.1 0.0**
**U33K Whale Pass 51.01 333** P **P 16 14 52.4 +1.9**
baz=128
**DLBC Dease Lake 51.24 336** P **P 16 14 54.5 +2.2**
DLBC IAmb IAmb 16 14 56.3
comp=Z,43nm,1.1s
**DLBC Dease Lake 51.24 336** P **P 16 14 54.2 +1.9**
baz=132,SNR=14
**AQDB Aquidauana 51.25 132** *eP* **P 16 14 52.8 0.0**
**S34M Telegraph Cree 51.32 335** P **P 16 14 54.6 +1.8**
baz=131
**ARAG Araguaiana, MT 51.33 125** *eP* **P 16 14 53.8 +0.3**
**SMTB Santa Maria do 51.43 114** *eP* **P 16 14 54.0 -0.3**
**TAOE Nuku Hiva Isla 51.69 246** *eLR* LR 16 29 51.3
comp=Z,527nm,25.7s
**FRB Frobisher Bay 51.91 14** P **P 16 14 56.2 -0.9**
FRB pmax pmax
comp=Z,123nm,0.9s
**PAPY Pozo Azul 51.94 138** *eP* **P 16 14 58.7 +0.8**
**WTLY Watson Lake, Y 51.95 339** P **P 16 14 59.0 +1.4**
**WTLY Watson Lake, Y 51.95 339** P **P 16 14 59.7 +2.2**
baz=135
**ZON Zonda 51.99 153** IAmb IAmb 16 15 01.2
comp=Z,23nm,1.1s
**R33M Jennings River 52.24 337** P **P 16 15 01.3 +1.4**
**R33M Jennings River 52.24 337** P **P 16 15 01.9 +2.1**
baz=132,SNR=22
**VA03 San Esteban 52.25 155** IAmb IAmb 16 15 02.8
comp=Z,41nm,1.0s
**Q32M Nakina River 52.46 336** IAmb IAmb 16 15 05.5
comp=Z,38nm,1.0s
**Q32M Nakina River 52.46 336** P **P 16 15 03.1 +1.5**
baz=130,SNR=21
**S32K Killisnoo 52.47 334** P **P 16 15 03.9 +2.5**
baz=127
**SIT Sitka 52.55 333** P **P 16 15 03.0 +1.0**
baz=126
**WRGLY Wrigley 52.63 344** P **P 16 15 02.8 +0.3**
**WRGLY Wrigley 52.63 344** P **P 16 15 03.5 +1.0**
baz=143,SNR=8.0
**TGTN Hyland Airport 52.78 340** P **P 16 15 05.3 +1.5**
baz=136,SNR=20
**R32K Eaglecrest 52.94 334** P **P 16 15 05.5 +0.6**
baz=127
**MT13 San Alfonso 53.21 156** IAmb IAmb 16 15 31.5
comp=Z,37nm,1.1s
**LMEL Las Melosas 53.33 156** IAmb IAmb 16 15 11.2
comp=Z,36nm,0.9s
**P32M Atlin 53.43 336** IAmb IAmb 16 15 11.8
comp=Z,24nm,1.1s
**P32M Atlin 53.43 336** P **P 16 15 10.3 +1.7**
baz=129,SNR=9.9
**BO01 Tunca 53.47 157** IAmb IAmb 16 15 11.5
comp=Z,23nm,1.1s
**S31K Pelican 53.48 333** P **P 16 15 10.2 +1.4**
baz=125
**P33M Teslin, Yukon 53.49 337** P **P 16 15 09.7 +0.7**
P33M IAmb IAmb 16 15 12.2
comp=Z,30nm,1.3s
**P33M Teslin, Yukon 53.49 337** P **P 16 15 10.9 +1.9**
baz=130,SNR=11
**BO02 Sierra Bellavi 53.94 157** IAmb IAmb 16 15 35.4
comp=Z,59nm,1.8s
**SKAG Skagway 54.00 335** P **P 16 15 13.3 +0.7**
SKAG IAmb IAmb 16 15 15.8
comp=Z,32nm,1.6s
**SKAG Skagway 54.00 335** P **P 16 15 14.4 +1.9**
baz=127
**CPUP Villa Florida 54.09 139** P **P 16 15 13.2 -0.5**
comp=Z,3.6nm,1.0s,baz=326,slow=7.3,SNR=6.0
CPUP LR LR 16 39 49.7
comp=Z,70nm,18.8s,baz=6.5,slow=38
comp=Z,3.6nm,1.0s
**CPUP Villa Florida 54.09 139** *eP* **P 16 15 13.6 -0.1**
**CPUP Villa Florida 54.09 139** P **P 16 15 13.0 -0.7**
**N32M Quiet Lake 54.20 338** P **P 16 15 15.2 +1.0**
N32M IAmb IAmb 16 15 17.2
comp=Z,46nm,1.0s
**N32M Quiet Lake 54.20 338** P **P 16 15 16.0 +1.9**
baz=130
**BDFB Brasilia 54.37 122** P **P 16 15 16.2 +0.2**
comp=Z,18nm,0.7s,baz=294,slow=10,SNR=12
comp=Z,18nm,0.7s
**PLBC Pleasant Camp 54.42 335** P **P 16 15 17.9 +2.2**
baz=126
**MMPY Sheldon Lake, 54.55 340** IAmb IAmb 16 15 20.1
comp=Z,51nm,1.1s
**MMPY Sheldon Lake, 54.55 340** P **P 16 15 18.8 +2.1**
baz=133,SNR=25
**WHY Whitehorse 54.56 337** P **P 16 15 17.5 +0.7**
**WHY Whitehorse 54.56 337** P **P 16 15 18.6 +1.8**
baz=128,SNR=6.4
**TRCB Terra Rica 54.91 132** *eP* **P 16 15 20.0 +0.1**
**FARO Faro, Yukon 55.01 339** IAmb IAmb 16 15 22.6
comp=Z,15nm,0.9s
**FARO Faro, Yukon 55.01 339** P **P 16 15 21.2 +1.3**
baz=131,SNR=12
**P30M Million Dollar 55.06 335** P **P 16 15 22.3 +2.0**
baz=126,SNR=6.2
**P29M Windy Craggy 55.09 334** IAmb IAmb 16 15 24.1
comp=Z,42nm,1.2s
**P29M Windy Craggy 55.09 334** P **P 16 15 22.6 +2.0**
baz=125,SNR=5.2
**O30N Mendenhall 55.10 336** IAmb IAmb 16 15 23.9
comp=Z,31nm,1.2s
**O30N Mendenhall 55.10 336** P **P 16 15 22.7 +2.0**
baz=127,SNR=14

**PCMB Pacaembu 55.18 130** *eP* **P 16 15 21.8 0.0**
**M31M Drury Creek, Y 55.36 338** IAmb IAmb 16 15 25.6
comp=Z,39nm,1.6s
**M31M Drury Creek, Y 55.36 338** P **P 16 15 24.1 +1.7**
baz=130,SNR=9.8
**SDBA SAO DESIDERIO 55.40 117** *eP* **P 16 15 23.0 -0.5**
**BI02 San Fabin de 55.41 158** IAmb IAmb 16 15 25.8
comp=Z,24nm,1.2s
**N31M Braeburn, Yuko 55.42 337** IAmb IAmb 16 15 25.9
comp=Z,35nm,1.0s
**N31M Braeburn, Yuko 55.42 337** P **P 16 15 24.6 +1.6**
baz=128,SNR=12
**IPMB Ipameri, GO 55.45 124** *eP* **P 16 15 23.5 -0.3**
**PNL Peninsula 55.81 334** P **P 16 15 27.5 +1.8**
baz=123
**O29M Mount Kennedy 55.82 335** IAmb IAmb 16 15 29.1
comp=Z,22nm,1.1s
**O29M Mount Kennedy 55.82 335** P **P 16 15 27.7 +1.8**
baz=124,SNR=5.9
**N30M Aishikik Lake 55.90 337** IAmb IAmb 16 15 29.9
comp=Z,26nm,1.1s
**N30M Aishikik Lake 55.90 337** P **P 16 15 28.3 +1.9**
baz=126,SNR=15
**BCPM Bancas Point 56.06 334** IAmb IAmb 16 15 31.0
comp=Z,28nm,1.0s
**YUK6 Outpost Mounta 56.10 336** P **P 16 15 30.3 +2.2**
baz=125,SNR=7.5
**LDASE Londrina, Braz 56.38 132** *eP* **P 16 15 29.8 -0.5**
**PINM Pinnacle 56.40 334** P **P 16 15 32.1 +2.1**
baz=122
**YUK4 Talbot Arm 56.44 336** P **P 16 15 32.3 +1.9**
baz=125,SNR=9.6
**M30M Minto, Yukon 56.47 338** IAmb IAmb 16 15 33.1
comp=Z,51nm,1.6s
**M30M Minto, Yukon 56.47 338** P **P 16 15 31.6 +1.2**
baz=127,SNR=17
**PTGB Pitanga 56.53 134** *eP* **P 16 15 31.5 +0.1**
**IVI Ivigtut 56.61 24** *i P* **P 16 15 29.2 -2.2**
IVI IAmb IAmb 16 15 32.9
comp=Z,16nm,1.0s
**O28M Mount Upton 56.74 335** P **P 16 15 34.7 +2.0**
baz=123
**YUK8 Steele Glacier 56.85 335** P **P 16 15 35.2 +1.8**
baz=123,SNR=10.0
**ITQB Itaqui 56.89 141** P **P 16 15 34.1 +0.3**
ITQB IAmb IAmb 16 16 00.7
comp=Z,26nm,1.0s
**ITQB Itaqui 56.89 141** *eP* **P 16 15 34.1 +0.3**
**BB19B Bebedouro 56.92 128** *eP* **P 16 15 34.5 +0.2**
**TABL Table Mountain 56.96 334** IAmb IAmb 16 15 37.5
comp=Z,35nm,1.1s
**CRSM Crissiumal (Br 57.01 137** *eP* **P 16 15 35.2 +0.5**
**M29M Somme Creek 57.01 337** P **P 16 15 36.2 +1.9**
baz=125,SNR=59
**NUUK Nuuk 57.09 20** *i P* **P 16 15 34.4 -0.2**
NUUK IAmb IAmb 16 15 35.5
comp=Z,143nm,2.0s
**LOGN Logan Glacier 57.11 335** IAmb IAmb 16 15 38.6
comp=Z,25nm,1.1s
**JANB Januaria 57.16 119** *eP* **P 16 15 35.9 -0.1**
**PMNB Patos De Minas 57.17 124** *eP* **P 16 15 36.5 +0.4**
**MESA MESA 57.17 334** P **P 16 15 37.7 +2.1**
baz=120
**L29M L29M 57.28 338** IAmb IAmb 16 15 38.8
comp=Z,32nm,1.0s
**L29M L29M 57.28 338** P **P 16 15 37.4 +1.2**
baz=126,SNR=22
**CTGM Chitina Glacie 57.32 335** P **P 16 15 38.6 +2.0**
CTGM IAmb IAmb 16 15 40.2
comp=Z,41nm,1.4s
**CTG Chitna Glacier 57.32 335** P **P 16 15 38.6 +2.0**
baz=122,SNR=6.0
**PSAL Palomas, Salto 57.33 143** *eP* **P 16 15 37.1 +0.3**
**NBPB Pedra_Branca-C 57.34 107** *eP* **P 16 15 36.9 -0.5**
**YUK3 Moose Creek 57.40 336** P **P 16 15 38.5 +1.3**
baz=123
**FRTB Fartura 57.48 131** *eP* **P 16 15 38.0 -0.1**
**K29M Barlow Dome 57.51 339** IAmb IAmb 16 15 40.1
comp=Z,54nm,1.9s
**K29M Barlow Dome 57.51 339** P **P 16 15 38.6 +0.8**
baz=127,SNR=10
**J30M Hart River 57.55 340** P **P 16 15 39.0 +0.8**
baz=129,SNR=6.8
**ISLE Juniper Island 57.55 334** IAmb IAmb 16 15 41.4
comp=Z,21nm,1.0s
**C36M Paulatuk 57.74 348** P **P 16 15 39.9 +0.7**
baz=144
**TGL Tana Glacier 57.84 334** IAmb IAmb 16 15 43.4
comp=Z,40nm,1.2s
**CRQE Cirque 57.95 334** P **P 16 15 42.8 +1.8**
baz=120
**CRQM Cirque 57.97 334** P **P 16 15 42.4 +1.2**
CRQM IAmb IAmb 16 15 44.2
comp=Z,22nm,1.0s
**I30M Mount Dempster 57.98 340** IAmb IAmb 16 15 43.3
comp=Z,48nm,1.6s
**I30M Mount Dempster 57.98 340** P **P 16 15 41.7 +0.6**
baz=129,SNR=12
**NBCL Cascavel-CE 58.08 105** *eP* **P 16 15 42.0 -0.5**
**ITAB Concordia 58.10 136** *eP* **P 16 15 42.1 -0.3**
**J29N Klondike Camp 58.12 339** P **P 16 15 42.9 +0.9**
baz=127
**KAIM Kayak Island 58.12 333** P **P 16 15 42.8 +0.8**
baz=118
**MCARA McCarthy VSAT 58.24 335** P **P 16 15 44.8 +1.9**
baz=120,SNR=7.9
**RODS Rosario do Sul 58.24 141** *eP* **P 16 15 43.3 0.0**
**HMT Hamilton 58.25 333** P **P 16 15 44.7 +1.7**
HMT IAmb IAmb 16 15 46.4
comp=Z,34nm,1.0s
**M27K Edge Creek, AK 58.28 336** IAmb IAmb 16 15 46.4
comp=Z,15nm,1.1s
**M27K Edge Creek, AK 58.28 336** P **P 16 15 44.9 +1.6**
baz=122,SNR=7.6
**DAWY Dawson 58.30 338** P **P 16 15 43.4 +0.1**
baz=125
**VRDI Verde Repeater 58.34 334** IAmb IAmb 16 15 46.8
comp=Z,18nm,0.9s
**G31M Satah River 58.45 342** P **P 16 15 44.7 +0.6**
baz=132,SNR=11
**RCLB Rio Claro- Sao 58.45 128** *eP* **P 16 15 45.3 +0.3**
**ALGR Alto Alegre (B 58.55 138** *eP* **P 16 15 45.5 0.0**
**GLB Gilahina Butte 58.60 334** IAmb IAmb 16 15 48.6
comp=Z,28nm,1.0s
**BCAR Beaver Creek A 58.63 337** P **P 16 15 46.0 +0.5**
**L27K Beaver Creek, 58.64 337** IAmb IAmb 16 15 48.4
comp=Z,25nm,1.1s
**L27K Beaver Creek, 58.64 337** P **P 16 15 47.1 +1.4**
baz=122,SNR=27
**F31M Tsiigehtchic 58.65 343** P **P 16 15 45.7 +0.2**
baz=125,SNR=10
**I29M Ogilvie Camp, 58.70 340** IAmb IAmb 16 15 47.7
comp=Z,19nm,1.1s
**I29M Ogilvie Camp, 58.70 340** P **P 16 15 46.4 +0.4**
baz=127,SNR=18
**BMRM Bremner River 58.70 334** P **P 16 15 48.1 +1.9**
baz=118
**TBOT Tacuaremb 58.75 142** *eP* **P 16 15 47.0 +0.3**
**M26K Nabesna, AK 58.75 336** IAmb IAmb 16 15 49.4
comp=Z,26nm,1.1s
**M26K Nabesna, AK 58.75 336** P **P 16 15 47.9 +1.5**
baz=121,SNR=14
**Q23K Middleton Isla 58.77 332** P **P 16 15 48.7 +2.2**
baz=116
**EPYK Eagle Plains 58.82 341** P **P 16 15 47.4 +0.5**
EPYK IAmb IAmb 16 16 42.5
comp=Z,20nm,0.9s
**EPYK Eagle Plains 58.82 341** P **P 16 15 47.4 +0.5**
baz=129,SNR=7.3
**EYAK Corcova Ski Ar 59.00 333** P **P 16 15 49.7 +1.6**
baz=117
**N25K Chitina, Valde 59.01 334** P **P 16 15 49.6 +1.4**
N25K IAmb IAmb 16 15 51.7
comp=Z,31nm,0.9s
**N25K Chitina, Valde 59.01 334** P **P 16 15 50.4 +2.1**
baz=119,SNR=14
**G30M tAoh Zraii Nji 59.06 342** P **P 16 15 49.1 +0.5**
baz=130
**INK Inuvik 59.19 344** P **P 16 15 50.0 +0.7**
comp=Z,19nm,0.7s,baz=132,slow=8.3,SNR=25
INK LR LR 16 44 04.3
comp=Z,163nm,18.4s,baz=184,slow=39
comp=Z,19nm,0.7s
**INK Inuvik 59.19 344** P **P 16 15 49.7 +0.4**
baz=134,SNR=20
**INK Inuvik 59.19 344** P **P 16 15 50.0 +0.7**
**SPB Sao Paulo 59.20 129** *eP* **P 16 15 50.1 0.0**

**L26K Log Cabin Wild 59.21 336** IAmb IAmb 16 15 52.4
comp=Z,20nm,1.1s
**L26K Log Cabin Wild 59.21 336** P **P 16 15 50.7 +1.1**
baz=121,SNR=6.5
**VAO Valinhos 59.22 129** *eP* **P 16 15 49.8 -0.5**
**H29M Whitestone 59.25 341** IAmb IAmb 16 15 51.9
comp=Z,24nm,1.1s
**H29M Whitestone 59.25 341** P **P 16 15 50.7 +0.9**
baz=127,SNR=9.9
**SFJD Kangerlussuaq 59.25 18** LR LR 16 43 26.0
comp=Z,343nm,18.7s,baz=296,slow=38
**SFJD Kangerlussuaq 59.25 18** *i P* **P 16 15 49.3 -0.4**
SFJD IAmb IAmb 16 15 50.0
comp=Z,28nm,0.9s
**K27K Chicken 59.26 337** P **P 16 15 51.6 +1.7**
baz=122
**DIAM Diamantina, MG 59.29 122** *eP* **P 16 15 50.7 -0.3**
**I28M Miner Creek 59.30 339** P **P 16 15 50.8 +0.6**
baz=125,SNR=6.4
**PLCA Paso Flores 59.30 160** P **P 16 15 52.1 +1.6**
comp=Z,16nm,1.0s,baz=351,slow=7.5,SNR=3.3
PLCA LR LR 16 37 06.1
comp=Z,161nm,22.0s,baz=204,slow=32
comp=Z,16nm,1.0s
**PLCA Paso Flores 59.30 160** *eP* **P 16 15 51.6 +1.1**
**PLCA Paso Flores 59.30 160** P **P 16 15 51.4 +0.9**
**MENT Mentasta 59.31 336** IAmb IAmb 16 15 53.0
comp=Z,45nm,1.6s
**EGAK Eagle 59.34 338** IAmb IAmb 16 15 52.0
comp=Z,18nm,1.0s
**EGAK Eagle 59.34 338** P **P 16 15 50.8 +0.4**
baz=124,SNR=16
**F30M Barrier River 59.35 343** P **P 16 15 51.0 +0.6**
baz=131,SNR=10
**CPSB Cacapava Do Su 59.37 140** *eP* **P 16 15 51.2 0.0**
**P23K Montague Islan 59.50 332** P **P 16 15 52.7 +1.2**
baz=115
**KLU Klutina 59.51 334** P **P 16 15 52.9 +1.1**
KLU IAmb IAmb 16 15 54.8
comp=Z,32nm,1.0s
**KLU Klutina 59.51 334** P **P 16 15 53.3 +1.5**
baz=117,SNR=14
**G29M Pine Creek 59.57 341** P **P 16 15 52.4 +0.4**
G29M IAmb IAmb 16 16 11.6
comp=Z,17nm,0.8s
**G29M Pine Creek 59.57 341** P **P 16 15 52.8 +0.8**
baz=128,SNR=12
**HARP HAARP 59.62 335** P **P 16 15 53.4 +0.9**
baz=118,SNR=7.4
**PET01 Itanhaem-SP 59.73 130** *eP* **P 16 15 53.9 +0.3**
**GLI Glacier Island 59.74 333** P **P 16 15 54.4 +1.1**
baz=116
**BSCB Bom Sucesso 59.80 125** *eP* **P 16 15 53.9 -0.4**
**RES Resolute Bay 59.87 360** P **P 16 15 53.9 0.0**
RES pmax pmax
comp=Z,31nm,0.6s
**M24K Tolsona, Glenn 59.90 334** P **P 16 15 56.0 +1.6**
baz=117
**SCRK Sand Creek 59.95 337** IAmb IAmb 16 15 57.5
comp=Z,24nm,1.1s
**SCRK Sand Creek 59.95 337** P **P 16 15 55.8 +1.1**
baz=120,SNR=21
**I27K Kandik River 59.96 339** P **P 16 15 55.6 +0.9**
baz=124,SNR=28
**PAX Paxson 60.02 336** P **P 16 15 56.2 +0.9**
baz=118,SNR=22
**J26L Joseph Creek 60.06 338** P **P 16 15 55.9 +0.4**
J26L IAmb IAmb 16 15 58.3
comp=Z,38nm,1.1s
**J26L Joseph Creek 60.06 338** P **P 16 15 56.9 +1.4**
baz=121,SNR=39
**A36M Sachs Harbour 60.13 349** P **P 16 15 55.9 +0.2**
baz=144
**LL01 San Ignacio de 60.20 162** P **P 16 15 57.5 +1.0**
LL01 IAmb IAmb 16 15 58.8
comp=Z,27nm,1.2s
**PLTB Pedras Altas 60.21 141** *eP* **P 16 15 56.0 -0.9**
**SCM Sheep Creek Mo 60.26 334** IAmb IAmb 16 15 59.4
comp=Z,23nm,1.1s
**SCM Sheep Creek Mo 60.26 334** P **P 16 15 57.9 +1.0**
baz=116
**PWL Port Wells 60.28 333** P **P 16 15 57.9 +0.9**
baz=114
**H27K Steamboat Moun 60.29 340** P **P 16 15 57.9 +0.9**
baz=124,SNR=28
**DY2G Dye2 60.31 20** *i P* **P 16 15 56.2 -1.1**
DY2G IAmb IAmb 16 15 57.6
comp=Z,27nm,1.0s
**I26K Coal Creek Min 60.34 338** IAmb IAmb 16 15 59.3
comp=Z,28nm,1.4s
**I26K Coal Creek Min 60.34 338** P **P 16 15 58.0 +0.7**
baz=122
**M23K Glacier View 60.41 334** P **P 16 15 58.8 +0.9**
baz=116,SNR=5.9
**TRQA Tornquist 60.44 151** P **P 16 15 58.9 +0.6**
TRQA IAmb IAmb 16 15 59.6
comp=Z,16nm,1.1s
**TRQA Tornquist 60.44 151** P **P 16 15 58.9 +0.6**
TRQA pmax pmax
comp=Z,17nm,1.2s
**TRQA Tornquist 60.44 151** *eP* **P 16 15 58.9 +0.6**
**E29M Blow River 60.46 343** IAmb IAmb 16 16 00.5
comp=Z,52nm,1.4s
**E29M Blow River 60.46 343** P **P 16 15 59.2 +1.1**
baz=129,SNR=28
**SEW Seward 60.48 332** P **P 16 15 59.3 +1.1**
baz=113
**K24K Donnelly Dome 60.55 336** P **P 16 15 59.9 +1.1**
baz=118,SNR=11
**F28M Old Crow 60.57 342** P **P 16 15 59.8 +1.0**
baz=126,SNR=21
**KNK Knik Glacier 60.57 333** P **P 16 16 00.1 +1.1**
KNK IAmb IAmb 16 16 01.4
comp=Z,27nm,1.0s
**KNK Knik Glacier 60.57 333** P **P 16 16 00.0 +1.1**
baz=115
**G27K Doyon Strip 60.66 340** IAmb IAmb 16 16 01.4
comp=Z,18nm,1.0s
**G27K Doyon Strip 60.66 340** P **P 16 16 00.2 +0.7**
baz=124,SNR=20
**SML Sawmill 60.68 334** P **P 16 16 00.8 +1.1**
baz=115,SNR=7.6
**O22K Cooper Landing 60.75 332** P **P 16 16 00.5 +0.4**
baz=113
**WAT6 Susitna Watana 60.77 335** P **P 16 16 01.6 +1.1**
baz=116,SNR=26
**J25K Salcha River, 60.79 337** IAmb IAmb 16 16 02.9
comp=Z,25nm,1.1s
**J25K Salcha River, 60.79 337** P **P 16 16 01.5 +1.0**
baz=119,SNR=25
**DHY Denali Highway 60.84 335** P **P 16 16 01.6 +0.7**
baz=116,SNR=7.4
**RCBR Riachuelo 60.87 105** P **P 16 16 01.6 -0.1**
RCBR IAmb IAmb 16 16 05.0
comp=Z,24nm,1.1s
**RCBR Riachuelo 60.87 105** P **P 16 16 01.7 -0.1**
RCBR pmax pmax
comp=Z,24nm,1.1s
**RCBR Riachuelo 60.87 105** *eP* **P 16 16 01.4 -0.3**
**RCBR Riachuelo 60.87 105** P **P 16 16 02.7 +1.0**
RCBR pP **pP 16 16 19.6 +1.7**
RCBR sP **sP 16 16 27.8 +3.1**
**PMR Palmer 60.94 333** P **P 16 16 02.4 +1.1**
baz=114
**BRSE Bradley Lake S 60.94 331** P **P 16 16 02.6 +1.2**
baz=112
**RC01 Rabbit Creek A 61.00 333** IAmb IAmb 16 16 04.2
comp=Z,35nm,0.9s
**RC01 Rabbit Creek A 61.00 333** P **P 16 16 02.9 +1.0**
baz=113,SNR=7.1
**NBLA Lagarto - SE 61.06 112** *eP* **P 16 16 02.6 -0.4**
**E28M Babbage River 61.07 343** IAmb IAmb 16 16 21.6
comp=Z,17nm,0.8s
**E28M Babbage River 61.07 343** P **P 16 16 02.7 +0.5**
baz=127,SNR=31
**KDAK Kodiak Island 61.15 328** P **P 16 16 03.5 +0.7**
comp=Z,13nm,0.9s,baz=188,slow=1.4,SNR=13
comp=Z,13nm,0.9s
**KDAK Kodiak Island 61.15 328** P **P 16 16 04.4 +1.6**
baz=109
**KDAK Kodiak Island 61.15 328** P **P 16 16 04.5 +1.6**
KDAK pP **pP 16 16 21.7 +2.7**
KDAK sP **sP 16 16 29.4 +3.4**
**WAT1 Susitna Watana 61.21 335** P **P 16 16 04.1 +0.8**
baz=115
**HDA Harding Lake 61.29 337** IAmb IAmb 16 16 05.5
comp=Z,22nm,0.8s

**HDA Harding Lake** 61.29 337 P P 16 16 04.7 +0.9
baz=118,SNR=17
**D28M Stokes Point** 61.29 343 P P 16 16 04.5 +0.9
baz=128,SNR=10
**PRP Porcupine Dome** 61.30 338 P P 16 16 04.3 +0.3
PRP IAmb IAmb 16 16 06.1
comp=Z,34nm,0.9s
**PRP Porcupine Dome** 61.30 338 P P 16 16 04.9 +0.9
baz=120,SNR=30
**Q20K Shuyak Island** 61.33 329 P P 16 16 05.3 +1.2
baz=109
**OHAK Old Harbor** 61.33 328 P P 16 16 05.4 +1.4
baz=108
**HOM Homer** 61.33 331 P P 16 16 05.5 +1.5
baz=111
**E27K Coleen River** 61.43 342 IAmb IAmb 16 16 07.1
comp=Z,30nm,1.0s
**E27K Coleen River** 61.43 342 P P 16 16 05.9 +1.3
baz=125,SNR=38
**M22K Willow** 61.43 333 P P 16 16 05.6 +0.9
baz=113
**IL31** 61.44 337 IAmb IAmb 16 16 06.8
comp=Z,32nm,0.8s
**ILAR Eielson Array** 61.44 337 P P 16 16 05.0 +0.3
**ILAR Eielson Array** 61.44 337 P P 16 16 05.4 +0.7
comp=Z,20nm,0.9s,baz=132,slow=4.7,SNR=126
ILAR PP PP 16 18 20.6 +0.1
comp=Z,3.1nm,0.9s,baz=114,slow=6.6,SNR=4.8
comp=Z,20nm,0.9s
**G26K Porcupine Rive** 61.44 340 P P 16 16 05.3 +0.6
baz=122,SNR=20
**CAPN Captain Cook N** 61.51 332 P P 16 16 06.0 +0.8
baz=112
**VAS01 Vassouras-RJ** 61.53 126 *e*P P 16 16 06.0 0.0
**SJMB Sao Joao De Ma** 61.54 121 *e*P P 16 16 06.6 +0.5
**RND Reindeer** 61.59 335 P P 16 16 06.7 +0.8
**RND Reindeer** 61.59 335 P P 16 16 06.7 +0.8
RND pmax pmax
comp=Z,74nm,0.9s
**SUA Susitna One** 61.59 333 P P 16 16 06.9 +0.9
baz=112
**SII Sitkinak Islan** 61.60 327 P P 16 16 07.2 +1.2
baz=107
**NBCA Caruaru-PE** 61.62 108 *e*P P 16 16 06.8 -0.1
**NUUG Nuugaatsiaq** 61.63 14 *i* P P 16 16 04.4 -1.5
NUUG IAmb IAmb 16 16 07.4
comp=Z,153nm,0.9s
**GUA01 Guaratinga, BA** 61.70 118 *e*P P 16 16 06.5 -0.7
**FYU Fort Yukon** 61.73 339 IAmb IAmb 16 16 08.9
comp=Z,46nm,1.5s
**WRH Wood River Hil** 61.76 336 P P 16 16 06.7 -0.2
WRH IAmb IAmb 16 16 08.3
comp=Z,12nm,0.9s
**CUT Chulitna** 61.76 334 P P 16 16 07.7 +0.9
baz=113,SNR=7.3
**MCK McKinley** 61.76 335 P P 16 16 07.9 +0.9
baz=115,SNR=13
**MCK McKinley** 61.76 335 P P 16 16 08.2 +1.2
**H25L Birch Creek** 61.78 339 P P 16 16 08.0 +1.1
baz=120,SNR=25
**POKR Poker Plat Res** 61.80 337 IAmb IAmb 16 16 09.2
comp=Z,24nm,1.1s
**POKR Poker Plat Res** 61.80 337 P P 16 16 07.9 +0.7
baz=118,SNR=6.2
**COLA College** 61.85 337 P P 16 16 07.7 +0.3
COLA IAmb IAmb 16 16 09.1
comp=Z,29nm,0.8s
**COLA College** 61.85 337 P P 16 16 08.2 +0.7
baz=117
**COLA College** 61.85 337 *c i* P P 16 16 07.7 +0.3
COLA pmax pmax
comp=Z,26nm,0.9s
**COLA College** 61.85 337 P P 16 16 08.1 +0.6
**D27M Malcolm River** 61.87 343 IAmb IAmb 16 16 27.5
comp=Z,18nm,0.8s
**D27M Malcolm River** 61.87 343 P P 16 16 08.6 +0.9
baz=126,SNR=23
**UPNV Upernavik** 61.91 12 *i* P P 16 16 07.0 -0.7
UPNV IAmb IAmb 16 16 08.8
comp=Z,87nm,1.0s
**O20K Slope Mountain** 61.95 331 P P 16 16 09.8 +1.5
baz=110
**BMAR Burnt Mountain** 61.96 340 P P 16 16 08.9 +0.7
**F26K Sheenjek River** 61.96 341 P P 16 16 09.4 +1.2
baz=122,SNR=25
**MDM Murphy Dome** 62.03 337 IAmb IAmb 16 16 10.3
comp=Z,38nm,1.6s
**R18K Karluk** 62.04 328 P P 16 16 10.4 +1.5
baz=107
**Q19K Cape Douglas,** 62.05 329 P P 16 16 10.1 +1.1
baz=108
**P19K Oil Pt** 62.09 330 P P 16 16 10.6 +1.4
baz=109
**G25K Bearman Lake** 62.13 339 P P 16 16 10.4 +1.2
baz=120,SNR=19
**SKT Skwentna** 62.14 333 IAmb IAmb 16 16 11.7
comp=Z,28nm,0.9s
**SKT Skwentna** 62.14 333 P P 16 16 10.4 +0.9
baz=112,SNR=14
**N20K Mount Spurr** 62.15 332 P P 16 16 10.9 +1.2
baz=111
**SPCR Spurr Chakacha** 62.15 332 P P 16 15 56.9 -13
baz=111
**NEA2 Nenana** 62.19 336 P P 16 16 10.0 +0.2
NEA2 IAmb IAmb 16 16 11.7
comp=Z,10nm,0.8s
**NEA2 Nenana** 62.19 336 P P 16 16 10.1 +0.2
baz=116,SNR=7.1
**DUB01 Friburgo-RJ** 62.27 125 *e*P P 16 16 10.1 -0.9
**H24K Noodor Dome** 62.31 338 IAmb IAmb 16 16 12.8
comp=Z,38nm,0.9s
**H24K Noodor Dome** 62.31 338 P P 16 16 11.6 +0.9
baz=117,SNR=52
**ISOG Isortoq, Green** 62.39 23 *i* P P 16 16 10.2 -0.8
ISOG IAmb IAmb 16 16 11.5
comp=Z,18nm,0.8s
**F25K Christian Rive** 62.39 340 P P 16 16 12.9 +1.7
baz=120,SNR=35
**RIB01 Linhares ES** 62.48 121 *e*P P 16 16 13.2 +0.8
**I23K Minto, Yukon-K** 62.55 337 P P 16 16 13.2 +1.1
baz=116,SNR=47
**G24K Hadweenzic Riv** 62.57 339 IAmb IAmb 16 16 14.8
comp=Z,37nm,1.1s
**G24K Hadweenzic Riv** 62.57 339 P P 16 16 13.3 +1.0
baz=118,SNR=38
**Q18K Katmai Hardscr** 62.64 329 P P 16 16 13.8 +0.8
baz=107,SNR=8.4
**BPAW Bear Paw Mtn.** 62.74 335 IAmb IAmb 16 16 15.2
comp=Z,34nm,0.9s
**BPAW Bear Paw Mtn.** 62.74 335 P P 16 16 14.0 +0.5
baz=114,SNR=25
**O19K Port Alsworth** 62.78 331 P P 16 16 14.4 +0.6
baz=108
**M20K Styx River** 62.81 333 P P 16 16 13.5 -0.5
M20K IAmb IAmb 16 16 16.0
comp=Z,21nm,0.8s
**M20K Styx River** 62.81 333 P P 16 16 14.8 +0.7
baz=110,SNR=13
**ALF01 Guarapari-ES** 62.85 123 *e*P P 16 16 15.4 +0.6
**C27K Jago River** 62.88 342 P P 16 16 15.6 +1.3
baz=123,SNR=25
**H23K Yukon River** 62.91 338 IAmb IAmb 16 16 16.8
comp=Z,32nm,1.6s
**H23K Yukon River** 62.91 338 P P 16 16 15.5 +0.9
baz=116,SNR=8.4
**P18K Big Mountain,** 62.97 330 P P 16 16 15.6 +0.5
baz=107
**Q17K Contact Creek** 62.97 328 P P 16 16 15.9 +0.7
baz=106,SNR=6.4
**MLY Manley** 63.02 336 P P 16 16 15.9 +0.5
MLY IAmb IAmb 16 16 17.4
comp=Z,37nm,0.9s
**MLY Manley** 63.02 336 P P 16 16 16.2 +0.8
baz=114,SNR=30
**R17L Mt. Peulik Vol** 63.04 328 P P 16 16 16.8 +1.2
baz=105
**N19K Bonanza Creek** 63.06 331 IAmb IAmb 16 16 17.6
comp=Z,30nm,0.9s
**N19K Bonanza Creek** 63.06 331 P P 16 16 16.4 +0.6
baz=108,SNR=12
**KULLO Kullorsuaq** 63.07 10 *i* P P 16 16 14.4 -1.0
KULLO IAmb IAmb 16 16 16.6
comp=Z,163nm,1.1s
**TULEG Thule** 63.09 6 P P 16 16 16.2 +0.7
**O18K Koktuh Hills** 63.10 330 P P 16 16 15.8 -0.1
**O18K Koktuh Hills** 63.10 330 P P 16 16 16.5 +0.6
baz=107,SNR=5.4

**F24K Squaw Lake** 63.10 340 IAmb IAmb 16 16 18.7
comp=Z,22nm,1.4s
**F24K Squaw Lake** 63.10 340 P P 16 16 17.1 +1.2
baz=118,SNR=9.4
**ABR01 Abrolhos, BA** 63.27 119 *e*P P 16 16 16.1 -1.6
**L20K Farewell, AK** 63.34 333 P P 16 16 18.4 +0.9
baz=110,SNR=30
**M19K Big River Lodg** 63.38 333 IAmb IAmb 16 16 19.9
comp=Z,20nm,0.8s
**M19K Big River Lodg** 63.38 333 P P 16 16 18.8 +1.1
baz=109
**C26K Camden Bay** 63.39 342 P P 16 16 19.0 +1.3
baz=122
**Q16K King Salmon** 63.47 329 P P 16 16 19.4 +1.0
baz=105
**G23K Bananza Creek** 63.48 338 IAmb IAmb 16 16 20.7
comp=Z,22nm,1.1s
**G23K Bananza Creek** 63.48 338 P P 16 16 19.2 +0.8
baz=116,SNR=22
**P17K Kvichak River** 63.51 329 P P 16 16 19.2 +0.7
baz=106
**D25K Kavik River** 63.51 342 P P 16 16 18.7 +0.1
D25K IAmb IAmb 16 16 21.1
comp=Z,41nm,1.0s
**D25K Kavik River** 63.51 342 P P 16 16 19.6 +1.0
baz=120,SNR=30
**E24K Your Creek** 63.57 340 P P 16 16 19.8 +0.8
baz=118,SNR=16
**H22K Ishtalitna Cre** 63.62 337 P P 16 16 19.6 +0.3
baz=114,SNR=24
**L19K White Mountain** 63.67 333 P P 16 16 20.1 +0.4
baz=109,SNR=7.4
**N18K Kilae Creek** 63.67 331 P P 16 16 20.5 +0.8
baz=107
**K20K Telida** 63.73 334 IAmb IAmb 16 16 21.7
comp=Z,37nm,0.8s
**K20K Telida** 63.73 334 P P 16 16 20.3 +0.2
baz=110,SNR=28
**CHGN Chignik** 63.80 326 P P 16 16 22.1 +1.5
baz=103
**PPT2 Papeete2** 63.80 242 *e*LR LR 16 35 17.7
comp=Z,354nm,30.0s
PPT2 *e*LR LR 16 35 30.3
comp=Z,133nm,20.2s
**M18K Stony River** 63.89 332 P P 16 16 21.7 +0.6
baz=108,SNR=7.7
**E23K Chandalar** 63.94 340 P P 16 16 22.9 +1.4
baz=117,SNR=30
**O17K Koliganek Bris** 63.99 330 P P 16 16 22.6 +0.8
baz=106,SNR=5.5
**J20K Nowinta River** 64.05 335 IAmb IAmb 16 16 23.7
comp=Z,29nm,0.9s
**J20K Nowinta River** 64.05 335 P P 16 16 22.4 +0.2
baz=110,SNR=24
**H21K Melozitna Rive** 64.07 337 P P 16 16 22.6 +0.4
baz=112,SNR=16
**G22K Bettles** 64.10 338 P P 16 16 23.3 +0.9
baz=114
**CHNA Chernabura Isl** 64.15 324 P P 16 16 24.2 +1.3
baz=101
**D24K Happy Valley** 64.19 341 P P 16 16 23.9 +0.9
D24K IAmb IAmb 16 16 25.3
comp=Z,44nm,1.4s
**D24K Happy Valley** 64.19 341 P P 16 16 24.1 +1.2
baz=118,SNR=7.6
**TOLK Toolik Lake Re** 64.19 340 IAmb IAmb 16 16 25.3
comp=Z,23nm,1.1s
**TOLK Toolik Lake Re** 64.19 340 P P 16 16 23.9 +0.9
baz=117,SNR=16
**P16K Nushagak River** 64.24 329 P P 16 16 24.1 +0.7
baz=104
**N17K Nushagak Hills** 64.24 331 IAmb IAmb 16 18 44.8
comp=Z,45nm,1.6s
**N17K Nushagak Hills** 64.24 331 P P 16 16 24.2 +0.8
baz=106
**I20K Naaghedeneel** 64.41 336 P P 16 16 24.9 +0.6
baz=110,SNR=8.2
**S14K Fog Glacier** 64.42 326 P P 16 16 25.9 +1.1
baz=102
**C24K Franklin Bluff** 64.42 342 P P 16 16 25.8 +1.4
baz=118,SNR=6.7
**O16K Kokwok River B** 64.43 329 IAmb IAmb 16 18 43.9
comp=Z,27nm,0.5s
**O16K Kokwok River B** 64.43 329 P P 16 16 25.5 +0.8
baz=104,SNR=5.5
**L18K Granite Mounta** 64.50 332 P P 16 16 25.0 -0.1
L18K IAmb IAmb 16 16 26.9
comp=Z,21nm,1.1s
**L18K Granite Mounta** 64.50 332 P P 16 16 25.7 +0.6
baz=107,SNR=7.4
**IMAR Indian Mountai** 64.56 337 P P 16 16 24.9 -0.5
**F22K John River** 64.58 339 P P 16 16 27.0 +1.4
baz=113,SNR=20
**J19K Poorman** 64.60 334 IAmb IAmb 16 16 27.1
comp=Z,40nm,0.8s
**J19K Poorman** 64.60 334 P P 16 16 26.1 +0.4
baz=109,SNR=28
**M17K Holitna River** 64.60 331 IAmb IAmb 16 16 27.6
comp=Z,29nm,1.1s
**M17K Holitna River** 64.60 331 P P 16 16 25.8 0.0
baz=106,SNR=5.7
**G21K Allakaket** 64.67 337 IAmb IAmb 16 16 28.1
comp=Z,23nm,0.9s
**G21K Allakaket** 64.67 337 P P 16 16 26.7 +0.6
baz=112
**D23K Nanushuk River** 64.70 340 P P 16 16 27.9 +1.7
baz=116
**E22K Anaktuvuk Pass** 64.71 339 P P 16 16 27.7 +1.3
baz=114
**H20K Anotleneega Mo** 64.81 336 P P 16 16 27.1 0.0
baz=110,SNR=15
**J18K Innoko River** 64.89 334 P P 16 16 27.6 0.0
J18K IAmb IAmb 16 16 29.2
comp=Z,26nm,1.4s
**J18K Innoko River** 64.89 334 P P 16 16 27.8 +0.2
baz=108,SNR=8.6
**F21K Alatna River** 64.93 338 P P 16 16 29.4 +1.6
baz=112,SNR=101
**N16K Nishlik Lake** 64.98 330 P P 16 16 29.0 +0.7
baz=104,SNR=5.4
**C23K Itkillik River** 65.07 341 P P 16 16 29.8 +1.2
baz=116,SNR=23
**O15K Ungalikthiuk R** 65.19 329 P P 16 16 29.8 +0.2
baz=103
**L17K Donlin** 65.20 332 P P 16 16 29.9 +0.3
baz=106,SNR=6.3
**M16K Timber Creek** 65.21 331 P P 16 16 30.6 +0.9
baz=104
**D22K Ayikyak River** 65.31 340 IAmb IAmb 16 16 33.0
comp=Z,29nm,0.9s
**D22K Ayikyak River** 65.31 340 P P 16 16 31.5 +1.2
baz=114,SNR=22
**EUNU Eureka** 65.35 1 P P 16 16 30.6 +0.1
**GCSA Galena City Sc** 65.36 335 P P 16 16 30.7 +0.2
baz=108
**K17K Iditarod** 65.36 333 IAmb IAmb 16 16 32.0
comp=Z,19nm,0.8s
**K17K Iditarod** 65.36 333 P P 16 16 30.7 0.0
baz=106,SNR=7.0
**H19K Roundabout Mou** 65.44 336 P P 16 16 31.1 +0.1
H19K IAmb IAmb 16 16 32.8
comp=Z,30nm,0.9s
**H19K Roundabout Mou** 65.44 336 P P 16 16 31.1 +0.1
baz=109,SNR=16
**N15K Kwethluk River** 65.55 330 P P 16 16 32.1 +0.2
baz=103
**E21K Killik River** 65.57 339 IAmb IAmb 16 16 34.2
comp=Z,27nm,1.0s
**E21K Killik River** 65.57 339 P P 16 16 32.7 +0.7
baz=112,SNR=21
**L16K Owhat River** 65.63 332 IAmb IAmb 16 16 34.6
comp=Z,23nm,1.1s
**L16K Owhat River** 65.63 332 P P 16 16 33.4 +1.0
baz=104,SNR=7.5
**F20K Avaraart Lake** 65.68 338 IAmb IAmb 16 16 35.0
comp=Z,34nm,0.9s
**F20K Avaraart Lake** 65.68 338 P P 16 16 33.7 +1.1
baz=110,SNR=36
**S12K Black Hills** 65.69 325 P P 16 16 34.3 +1.3
baz=99
**G19K Purcell Mounta** 65.89 337 P P 16 16 33.9 -0.1
G19K IAmb IAmb 16 16 35.9
comp=Z,35nm,1.1s
**G19K Purcell Mounta** 65.89 337 P P 16 16 34.7 +0.7
baz=108,SNR=18
**J17K VABM Dome** 65.89 333 P P 16 16 34.5 +0.4
baz=105
**SUMG Summit** 65.90 16 P P 16 16 34.5 0.0

SUMG pmax pmax
comp=Z,140nm,1.0s
**SUMG Summit** 65.90 16 *i* P P 16 16 34.0 -0.5
SUMG IAmb IAmb 16 16 35.9
comp=Z,98nm,0.9s
**O14K Tigyukauivet M** 65.93 329 P P 16 16 34.5 +0.1
baz=102
**M15K Kasigluk River** 65.96 330 P P 16 16 35.3 +0.8
baz=103
**H18K Honhosa River** 66.09 335 P P 16 16 36.3 +0.9
baz=107,SNR=6.6
**C21K Knifeblade Rid** 66.12 340 P P 16 16 36.6 +1.1
baz=112,SNR=10
**B22K Teshekpuk Lake** 66.15 341 P P 16 16 36.4 +0.8
baz=114
**NEEM North Greenlan** 66.19 9 *i* P P 16 16 35.2 -1.0
NEEM IAmb IAmb 16 16 37.7
comp=Z,256nm,1.1s
**B21K Ikpikpuk River** 66.24 340 IAmb IAmb 16 16 38.3
comp=Z,16nm,0.8s
**B21K Ikpikpuk River** 66.24 340 P P 16 16 37.1 +0.9
baz=112,SNR=7.7
**E20K Nigu River** 66.27 339 P P 16 16 37.7 +1.2
baz=110
**N14K Kuskokwak Cree** 66.28 329 P P 16 16 36.9 +0.3
baz=101
**FALS False Pass** 66.33 324 P P 16 16 37.9 +0.9
baz=98
**F19K Shaleruckik Mo** 66.37 337 IAmb IAmb 16 16 39.2
comp=Z,35nm,1.1s
**F19K Shaleruckik Mo** 66.37 337 P P 16 16 37.8 +0.8
baz=108,SNR=16
**E19K Redstone River** 66.37 338 P P 16 16 37.9 +0.8
baz=109
**TBI Tubuai** 66.41 236 *e*LR LR 16 36 42.6
comp=Z,2µm,30.2s
**G18K Tagagawik** 66.42 336 IAmb IAmb 16 16 39.9
comp=Z,22nm,1.1s
**G18K Tagagawik** 66.42 336 P P 16 16 38.3 +0.8
baz=107,SNR=9.5
**J16K Anvik River** 66.53 333 P P 16 16 38.9 +0.7
J16K IAmb IAmb 16 16 40.8
comp=Z,39nm,0.9s
**J16K Anvik River** 66.53 333 P P 16 16 39.7 +1.5
baz=104,SNR=11
**L15K Ungalak Mounta** 66.55 331 P P 16 16 39.4 +1.1
baz=102,SNR=12
**D20K Etivluk River** 66.58 339 P P 16 16 39.5 +1.1
baz=110,SNR=26
**M14K Bethel** 66.58 330 IAmb IAmb 16 16 40.8
comp=Z,44nm,0.9s
**M14K Bethel** 66.58 330 P P 16 16 39.5 +1.0
baz=102,SNR=5.5
**H17K Granite Mounta** 66.66 335 IAmb IAmb 16 16 41.5
comp=Z,49nm,1.5s
**H17K Granite Mounta** 66.66 335 P P 16 16 40.0 +1.0
baz=105
**K15K Wolf Creek Mou** 66.71 332 IAmb IAmb 16 16 42.1
comp=Z,38nm,0.9s
**K15K Wolf Creek Mou** 66.71 332 P P 16 16 40.7 +1.4
baz=102,SNR=10
**I17K Unalakleet** 66.71 334 P P 16 16 39.8 +0.5
baz=104
**A22K Sinclair Lake** 66.89 342 P P 16 16 41.5 +1.2
baz=112
**F18K Selawik** 67.01 337 P P 16 16 42.1 +1.0
baz=106
**D19K Kuna River** 67.02 339 IAmb IAmb 16 16 43.3
comp=Z,24nm,1.1s
**D19K Kuna River** 67.02 339 P P 16 16 42.2 +0.9
baz=108
**L14K Kuka Creek** 67.04 331 P P 16 16 42.6 +1.2
baz=101
**G17K Kiwalik Mounta** 67.11 335 P P 16 16 43.0 +1.2
baz=105,SNR=6.0
**M13K Dall Lake** 67.19 330 P P 16 16 43.5 +1.2
baz=100
**B20K Meade River** 67.21 341 P P 16 16 43.5 +1.1
**B20K Meade River** 67.21 341 P P 16 16 43.9 +1.5
baz=110,SNR=12
**H16K Elim** 67.55 334 P P 16 16 45.8 +1.2
baz=103
**F17K Baldwin Pennin** 67.58 336 P P 16 16 45.8 +1.1
baz=104
**E18K Tukpahlearik C** 67.60 337 IAmb IAmb 16 16 46.8
comp=Z,22nm,1.1s
**E18K Tukpahlearik C** 67.60 337 P P 16 16 45.7 +0.8
baz=106,SNR=5.5
**J14K Nanvaranak Lak** 67.72 332 IAmb IAmb 16 16 48.7
comp=Z,46nm,0.9s
**J14K Nanvaranak Lak** 67.72 332 P P 16 16 47.3 +1.6
baz=101,SNR=10.0
**C19K Lookout Ridge** 67.72 339 IAmb IAmb 16 16 48.5
comp=Z,37nm,1.2s
**C19K Lookout Ridge** 67.72 339 P P 16 16 46.7 +1.0
baz=107,SNR=8.3
**G16K Koyuk River** 67.77 335 P P 16 16 47.1 +1.1
baz=103
**E17K Hotham Inlet** 67.97 337 P P 16 16 48.0 +0.8
baz=104,SNR=6.8
**UNV Unalaska Valle** 68.02 322 P P 16 16 48.6 +0.8
baz=95
**C18K Utukok River** 68.15 339 P P 16 16 49.0 +0.6
baz=105
**G15K Niukluk** 68.38 334 P P 16 16 50.5 +0.7
baz=101
**A19K Wainwright** 68.54 340 P P 16 16 52.3 +1.6
baz=106
**B18K Kokolik River** 68.55 339 P P 16 16 51.9 +1.1
baz=105
**M11K Mekoryuk** 68.58 329 P P 16 16 51.6 +0.5
baz=98
**D17K Noatak River** 68.59 337 P P 16 16 51.8 +0.7
baz=103
**RDOG Red Dog Mine** 68.61 338 P P 16 16 51.8 +0.6
baz=104
**F15K North Star Dit** 68.77 335 IAmb IAmb 16 16 54.9
comp=Z,26nm,0.9s
**F15K North Star Dit** 68.77 335 P P 16 16 53.4 +1.2
baz=101,SNR=5.3
**C17K DeLong Mountai** 68.81 338 P P 16 16 53.0 +0.5
baz=104
**ANM Nome** 68.86 334 P P 16 16 53.4 +0.6
baz=100
**ALE Alert** 68.87 4 P P 16 16 52.6 -0.1
ALE PcP *sP* 16 17 16.1 +0.2
**BORG Borgarnes** 69.20 26 LR LR 16 47 00.2
comp=Z,182nm,20.4s,baz=260,slow=36
**NIKH Nikolski High** 69.36 321 P P 16 16 56.7 +0.6
baz=92
**F14K Arctic Creek** 69.41 335 P P 16 16 57.1 +0.9
baz=99
**C16K Lisburne Hills** 69.55 338 P P 16 16 57.9 +0.9
baz=101
**P08K Saint George I** 69.96 325 P P 16 17 01.1 +1.4
baz=93
**TNA Tin City** 70.08 335 P P 16 17 01.2 +0.9
baz=98
**SPIA Saint Paul Isl** 70.37 326 P P 16 17 03.6 +1.4
baz=93
**GAMB Gambell** 71.51 333 P P 16 17 10.2 +1.2
baz=94
**DAG Danmarks Havn** 72.26 14 P P 16 17 13.3 0.0
DAG pmax pmax
comp=Z,116nm,0.9s
**DAG Danmarks Havn** 72.26 14 *i* P P 16 17 13.0 -0.3
DAG IAmb IAmb 16 17 14.1
comp=Z,113nm,1.1s
**NOR Nord** 73.54 9 P P 16 17 21.7 +0.9
NOR pmax pmax
comp=Z,58nm,1.8s
**NOR Nord** 73.54 9 *i* P P 16 17 20.1 -0.8
NOR IAmb IAmb 16 17 23.5
comp=Z,94nm,1.4s
**RAR Rarotonga** 74.05 242 LR LR 16 41 13.1
comp=Z,89nm,21.4s,baz=286,slow=28
**PCAS Casmilo, Conde** 77.01 52 *e*P P 16 17 40.5 -1.0
comp=Z,51nm,1.6s
**COI Coimbra** 77.05 52 *e*PcP PcP 16 17 51.2 -1.3
**PCAB Cabril** 77.12 50 *e*P P 16 17 41.4 -0.8
comp=Z,21nm,1.5s
**PNCL Nicolau / Gran** 77.28 54 *e*P P 16 17 39.6 -3.5
**MORF Marmelete** 77.31 55 *i* LQ LQ 16 17 49.6
**POLO Lamas de Olo** 77.34 50 *e*P P 16 17 41.8 -1.7
comp=Z,20nm,1.3s
**PMTG Montargil** 77.37 53 *e*P P 16 17 42.0 -1.5
comp=Z,21nm,1.5s
**PVIS Viseu** 77.37 51 *e*P P 16 17 41.8 -1.8

**MESJ Messejana** 77.56 54 *e*P P 16 17 43.1 -1.6
comp=Z,53nm,1.8s
**MTE Manteigas** 77.68 51 *e*P P 16 17 43.8 -1.6
comp=Z,30nm,1.8s
**PCBR Castelo Branco** 77.82 52 *e*P P 16 17 45.3 -0.7
comp=Z,14nm,1.4s
**PMRV Marv??o** 77.95 52 *e*P P 16 17 45.0 -1.8
comp=Z,16nm,1.3s
**PBRG Braganca** 78.06 50 *e*P P 16 17 45.8 -1.6
comp=Z,23nm,1.6s
**ESK Eskdalemuir** 78.25 36 P P 16 17 46.7 -1.4
ESK IAmb IAmb 16 17 48.9
comp=Z,28nm,0.8s
**ESK Eskdalemuir** 78.25 36 P P 16 17 46.7 -1.4
ESK pmax pmax
comp=Z,28nm,0.9s
**EKA Eskdalemuir Ar** 78.28 36 P P 16 17 47.2 -1.0
comp=Z,16nm,0.8s,baz=281,slow=5.6,SNR=28
comp=Z,16nm,0.8s
**PBAR Barrancos** 78.43 53 *e*P P 16 17 48.5 -1.0
comp=Z,14nm,1.8s
**KBS Kingsbay** 78.53 11 P P 16 17 49.2 0.0
KBS IAmb IAmb 16 17 53.5
comp=Z,34nm,0.8s
**KBS Kingsbay** 78.53 11 *e*P P 16 17 51.0 +1.8
KBS IAmb IAmb 16 17 53.1
comp=Z,35nm,0.9s
**KBS Kingsbay** 78.53 11⇓ *e*P P 16 17 48.0 -1.2
KBS pmax pmax
comp=Z,21nm,0.9s
**KBS Kingsbay** 78.53 11 *i* P P 16 17 49.7 +0.5
**ROSF Rostrenen** 79.38 43 *e*P P 16 17 52.8 -1.6
ROSF pmax pmax
comp=Z,79nm,1.8s
**QUIF Quistinic** 79.53 43 *e*P P 16 17 53.7 -1.5
QUIF pmax pmax
comp=Z,66nm,1.7s
**SPA0 Spitsbergen Ar** 79.62 11 *e*P P 16 17 56.0 +0.8
SPA0 IAmb IAmb 16 17 57.1
comp=Z,264nm,2.3s
**SPITS Spitsbergen Ar** 79.62 11 P P 16 17 55.4 +0.2
comp=Z,3.2nm,0.4s,baz=90,slow=1.4,SNR=17
SPITS LR LR 16 55 21.5
comp=Z,345nm,20.6s,baz=254,slow=37
comp=Z,3.2nm,0.4s
**SPB2 Spitsbergen Ar** 79.62 11 IAmb IAmb 16 17 58.5
comp=Z,31nm,1.2s
**SHEM Shemya Is, Ala** 79.67 322 LR LR 16 51 05.6
comp=Z,37nm,18.6s,baz=297,slow=34
**SGMF Saint Gilles** 79.87 43 *e*P P 16 17 55.2 -1.9
SGMF pmax pmax
comp=Z,70nm,1.9s
**BILL Bilibino** 80.08 338 P P 16 17 58.1 +0.3
BILL IAmb IAmb 16 18 00.2
comp=Z,50nm,1.1s
**BILL Bilibino** 80.08 338 *c i*P P 16 17 58.8 +0.9
BILL *i* 16 18 03.6
BILL *i* 16 18 14.7
BILL *i* 16 18 22.3
BILL *i* 16 21 01.5
BILL pmax pmax
comp=Z,35nm,0.9s
**PAB San Pablo** 80.25 52 P P 16 17 57.9 -1.5
**PAB San Pablo** 80.25 52 P P 16 17 58.6 -0.9
**ESDC Sonseca Array** 80.52 51 P P 16 17 59.2 -1.6
**ESDC Sonseca Array** 80.52 51 P P 16 17 59.7 -1.2
comp=Z,8.9nm,1.0s,baz=290,slow=5.4,SNR=25
ESDC LR LR 16 47 46.3
comp=Z,147nm,21.3s,baz=298,slow=31
comp=Z,8.9nm,1.0s
**GRR Gorron** 80.95 42 *e*P P 16 18 01.6 -1.3
GRR pmax pmax
comp=Z,24nm,0.8s
**FLN La Foliniere** 81.12 42 *e*P P 16 18 02.6 -1.2
FLN pmax pmax
comp=Z,35nm,1.1s
**FOO Floro** 81.21 29 *e*P P 16 18 03.9 -0.1
FOO IAmb IAmb 16 18 05.6
comp=Z,24nm,0.9s
**LDF La Druitiere** 81.39 42 *e*P P 16 18 04.0 -1.2
LDF pmax pmax
comp=Z,32nm,1.2s
**MDT Midelt** 81.39 58 LR LR 16 47 08.2
comp=Z,78nm,20.7s,baz=332,slow=30
**BJO1 Bjornoya** 81.70 15 *e*P P 16 18 07.7 +1.4
BJO1 IAmb IAmb 16 18 08.7
comp=Z,239nm,1.9s
**MFF Saint Martin d** 81.81 44 *e*P P 16 18 06.0 -1.5
MFF pmax pmax
comp=Z,21nm,1.2s
**SJPF Ste Jean** 81.82 48 *e*P P 16 18 09.3 +1.6
SJPF pmax pmax
comp=Z,30nm,1.4s
**HYA Hoyanger** 81.86 29 *e*P P 16 18 08.8 +1.4
HYA IAmb IAmb 16 18 09.2
comp=Z,33nm,1.0s
**HOPEN Hopen** 82.07 12 *e*P P 16 18 09.3 +1.0
HOPEN IAmb IAmb 16 18 11.6
comp=Z,44nm,0.9s
**MOL Molde** 82.08 27 *e*P P 16 18 09.9 +1.4
MOL IAmb IAmb 16 18 10.3
comp=Z,25nm,1.1s
**ETSF Etsaut** 82.34 48 *e*P P 16 18 09.2 -1.3
ETSF pmax pmax
comp=Z,4.0nm,0.7s
**ODD1 Odda** 82.41 30 *e*P P 16 18 11.9 +1.4
ODD1 IAmb IAmb 16 18 12.5
comp=Z,19nm,0.8s
**BLS5 Blasjo** 82.47 31 *e*P P 16 18 12.3 +1.6
BLS5 IAmb IAmb 16 18 12.9
comp=Z,38nm,1.1s
**PMSA Palmer Station** 82.50 168 LR LR 16 47 00.2
comp=Z,72nm,21.8s,baz=186,slow=30
**LOF Lofoten** 82.64 21 *e*P P 16 18 13.4 +2.0
LOF IAmb IAmb 16 18 13.4
comp=Z,62nm,1.1s
**LFF La Frestale** 82.79 46 *e*P P 16 18 11.2 -1.4
LFF pmax pmax
comp=Z,35nm,1.2s
**DOMB Dombas** 82.92 28 *e*P P 16 18 14.5 +1.5
DOMB IAmb IAmb 16 18 15.2
comp=Z,59nm,0.8s
**TBLU Trondheim** 83.05 26 *e*P P 16 18 15.3 +1.7
TBLU IAmb IAmb 16 18 15.9
comp=Z,52nm,0.9s
**CLF Chambon-Foret** 83.06 42 P P 16 18 12.9 -1.1
CLF IAmb IAmb 16 18 16.5
comp=Z,74nm,1.3s
**KONS Konsvik** 83.08 23 *e*P P 16 18 15.6 +1.9
KONS IAmb IAmb 16 18 16.0
comp=Z,189nm,1.9s
**STOK Stokkvaagen** 83.10 23 *e*P P 16 18 15.8 +2.0
STOK IAmb IAmb 16 18 16.3
comp=Z,102nm,1.2s
**SNART Snartemo** 83.15 31 *e*P P 16 18 15.6 +1.4
SNART IAmb IAmb 16 18 16.1
comp=Z,871nm,3.0s
**RJF Les Rejaudoux** 83.24 45 *e*P P 16 18 13.4 -1.6
RJF pmax pmax
comp=Z,15nm,0.9s
**STEI Steigen** 83.31 21 *e*P P 16 18 15.8 +1.0
STEI IAmb IAmb 16 18 17.0
comp=Z,79nm,1.1s
**NSS Namsos** 83.33 25 *e*P P 16 18 16.0 +1.0
NSS IAmb IAmb 16 18 16.9
comp=Z,37nm,0.8s
**TCF Toulx Ste Croi** 83.46 44 *e*P P 16 18 14.5 -1.6
TCF pmax pmax
comp=Z,11nm,1.0s
**FAUS Fauske** 83.54 22 *e*P P 16 18 17.0 +1.0
FAUS IAmb IAmb 16 18 18.2
comp=Z,114nm,1.5s
**CAF Calviac** 83.70 45 *e*P P 16 18 15.8 -1.6
CAF pmax pmax
comp=Z,8.0nm,0.9s
**CEST Esterri de Car** 83.71 48 IAmb IAmb 16 18 19.8
comp=Z,15nm,1.0s
**BAIF Baives** 83.78 40 *e*P P 16 18 17.5 -0.1
BAIF pmax pmax
comp=Z,15nm,1.0s
**TRO Tromso** 83.82 19 *e*P P 16 18 18.6 +1.2
TRO IAmb IAmb 16 18 19.6
comp=Z,322nm,2.0s
**BGF Bois d'Agland** 83.82 44 *e*P P 16 18 16.4 -1.5
BGF pmax pmax
comp=Z,21nm,0.8s

**KONO Kongsberg** 83.93 30 P P 16 18 17.9 -0.3
**KONO Kongsberg** 83.93 30 *e*P P 16 18 19.1 +0.9
KONO IAmb IAmb 16 18 20.4
comp=Z,66nm,1.2s
**KONO Kongsberg** 83.93 30 *ce*P P 16 18 18.3 +0.1
KONO pmax pmax
comp=Z,69nm,1.3s
**NC204 NORSAR Array S** 83.93 28 IAmb IAmb 16 18 20.6
comp=Z,54nm,1.2s
**DOU Dourbes** 84.01 40 *d*P P 16 18 17.9 -0.9
comp=Z,8.8nm,1.0s
**BMRD Maredsous** 84.06 40 *d*P P 16 18 17.9 -1.1
**AVF Avril sur Loir** 84.10 43 *e*P P 16 18 17.5 -1.8
AVF pmax pmax
comp=Z,12nm,0.8s
**SSF Saint Saulge** 84.13 43 *e*P P 16 18 18.6 -0.9
SSF pmax pmax
comp=Z,16nm,0.8s
**GIVF Givet** 84.15 40 *e*P P 16 18 18.6 -0.9
GIVF pmax pmax
comp=Z,22nm,1.2s
**MTLF Montolieu** 84.21 47 *e*P P 16 18 18.6 -1.4
MTLF pmax pmax
comp=Z,26nm,1.1s
**NB2 NORSAR Subarra** 84.22 28 P P 16 18 20.7 +1.0
comp=Z,76nm,0.9s,baz=292,slow=5.3
**NB2 NORSAR Subarra** 84.22 28 P P 16 18 20.7 +1.0
baz=292,slow=5.3
**NB2 NORSAR Subarra** 84.22 28 P P 16 18 17.1 -2.6
NB2 pmax pmax
comp=Z,26nm,0.9s
**NOA NORSAR Array B** 84.22 28 P P 16 18 20.1 +0.4
comp=Z,43nm,0.8s,baz=291,slow=5.1,SNR=115
comp=Z,43nm,0.8s
**NC303 NORSAR Array S** 84.22 28 IAmb IAmb 16 18 22.1
comp=Z,42nm,0.9s
**BGES Gesves** 84.23 39 *d*P P 16 18 19.6 -0.4
comp=Z,15nm,0.7s
**BCLA Clavier** 84.36 39 *d*P P 16 18 19.9 -0.6
comp=Z,11nm,0.7s
**OSL Oslo** 84.37 29 *e*P P 16 18 22.1 +1.7
OSL IAmb IAmb 16 18 22.8
comp=Z,145nm,1.0s
**RCHB Rochefort** 84.39 40 *d*P P 16 18 20.0 -0.7
**SMF Signal de Mont** 84.46 43 *e*P P 16 18 19.4 -1.8
SMF pmax pmax
comp=Z,16nm,1.0s
**BSTI Sart Tilman** 84.47 39 *d*P P 16 18 20.4 -0.7
**NC602 NORSAR Array S** 84.47 28 P P 16 18 22.0 +1.0
**NC602 NORSAR Array S** 84.47 28 *e*P P 16 18 22.5 +1.6
**NORES NORESS Array B** 84.47 28 P P 16 18 22.6 +1.7
NORES pmax pmax
comp=Z,7.0nm,0.7s
**MEM Membach** 84.73 39 *d*P P 16 18 22.1 -0.3
comp=Z,20nm,1.0s
**MUD Monsted U'grnd** 84.75 33 P P 16 18 23.3 +1.0
MUD pmax pmax
comp=Z,32nm,1.1s
**MUD Monsted U'grnd** 84.75 33 *i* P P 16 18 22.2 -0.1
MUD IAmb IAmb 16 18 24.5
comp=Z,26nm,0.9s
**HLG Helgoland** 84.76 35 *e*P P 16 18 23.7 +1.2
comp=Z,70nm,0.9s,baz=293,slow=4.5
**HAMF Hammerfest** 84.77 17 *e*P P 16 18 24.0 +1.8
**BHOU Houvegnez** 84.81 39 *d*P P 16 18 22.6 -0.3
BHOU *d*PcP **PcP** 16 18 24.9 -1.3
BHOU *dx* x 16 18 31.5
BHOU *d*pP **sP** 16 18 44.6 -1.9
BHOU *d*sP pP 16 18 53.9 +14
**BTNL Ternell** 84.81 39 *d*P P 16 18 22.3 -0.6
comp=Z,8.8nm,1.3s
**WLF Walferdange** 85.10 40 *d*P P 16 18 23.9 -0.4
comp=Z,17nm,1.1s
WLF *dx* x 16 18 36.1
WLF *d*pP **sP** 16 18 45.7 -2.3
WLF *d*sP pP 16 18 55.0 +14
**BUG Bochum--Univer** 85.25 38 P P 16 18 26.5 +1.5
BUG pmax pmax
comp=Z,33nm,1.4s
**BUG Bochum--Univer** 85.25 38 *e*P P 16 18 26.2 +1.2
comp=Z,15nm,1.0s,baz=293,slow=4.5
**IBBN Ibbenburen** 85.27 37 *e*P P 16 18 26.3 +1.2
comp=Z,34nm,0.9s,baz=293,slow=4.5
**AHRW Bad Neuenahr-A** 85.41 39 *e*P P 16 18 27.4 +1.6
comp=Z,38nm,0.9s,baz=293,slow=4.5
**KTK1 Kautokeino** 85.46 19 *e*P P 16 18 26.1 +0.4
**HFS Hagfors** 85.69 29 P P 16 18 27.3 +0.2
comp=Z,21nm,0.8s,baz=241,slow=3.1,SNR=48
comp=Z,21nm,0.8s
**HAU Haudompre** 85.71 42 *e*P P 16 18 27.1 -0.3
HAU pmax pmax
comp=Z,28nm,0.9s
**ARCES ARCESS Array B** 85.88 18 P P 16 18 27.8 -0.1
ARCES IAmb IAmb 16 18 29.8
comp=Z,12nm,0.8s
**ARCES ARCESS Array B** 85.88 18 P P 16 18 28.1 +0.3
comp=Z,5.7nm,0.5s,baz=292,slow=3.8,SNR=77
ARCES LR LR 16 57 44.1
comp=Z,167nm,19.6s,baz=294,slow=36
comp=Z,5.7nm,0.5s
**CABF La Chapelle** 85.95 43 *e*P P 16 18 29.3 +0.5
CABF pmax pmax
comp=Z,34nm,1.2s
**KASTN Kahler Asten** 86.01 38 *e*P P 16 18 29.4 +0.5
comp=Z,21nm,1.0s,baz=293,slow=4.5
**HINF Hinteralfeld** 86.09 42 *e*P P 16 18 28.8 -0.6
HINF pmax pmax
comp=Z,18nm,1.0s
**ECH Echery** 86.17 41 IAmb IAmb 16 18 31.4
comp=Z,23nm,0.9s
**ECH Echery** 86.17 41 P P 16 18 30.0 +0.3
ECH pmax pmax
comp=Z,28nm,1.1s
**CDF Champ du Feu** 86.18 41 *e*P P 16 18 29.6 -0.2
CDF pmax pmax
comp=Z,29nm,1.0s
**BSEG Bad Segeberg** 86.20 35 P P 16 18 30.3 +0.7
BSEG pmax pmax
comp=Z,72nm,1.0s
**BSEG Bad Segeberg** 86.20 35 *e*P P 16 18 30.2 +0.5
comp=Z,48nm,0.9s,baz=293,slow=4.5
**KEV Kevo** 86.20 17 P P 16 18 29.0 -0.3
KEV IAmb IAmb 16 18 34.5
comp=Z,21nm,0.9s
**KEV Kevo** 86.20 17 P P 16 18 29.0 -0.3
KEV pmax pmax
comp=Z,21nm,0.9s
**ORIF Oris-en-Rattie** 86.31 45 *e*P P 16 18 30.7 +0.1
ORIF pmax pmax
comp=Z,16nm,0.8s
**TNS Taunus Mts** 86.34 39 P P 16 18 30.0 -0.5
TNS pmax pmax
comp=Z,66nm,1.2s
**TNS Taunus Mts** 86.34 39 *e*P P 16 18 31.3 +0.8
comp=Z,27nm,0.8s,baz=293,slow=4.5
**NRDL Niedersach Rie** 86.57 36 *e*P P 16 18 32.1 +0.7
comp=Z,11nm,0.9s,baz=293,slow=4.5
**VADS Vadso** 86.66 17 *e*P P 16 18 33.0 +1.4
**LPL La Plagne** 86.71 44 *e*P P 16 18 32.2 -0.5
LPL pmax pmax
comp=Z,31nm,1.4s
**LPG La Plagne** 86.73 44 *e*P P 16 18 33.0 +0.2
LPG pmax pmax
comp=Z,36nm,1.4s
**GTTG Gottingen** 86.81 37 *e*P P 16 18 33.2 +0.5
comp=Z,18nm,0.7s,baz=293,slow=4.5
**BNI Bardonecchia** 86.82 44 P P 16 18 32.9 -0.2
BNI IAmb IAmb 16 18 35.4
comp=Z,28nm,1.1s
**BNI Bardonecchia** 86.82 44 P P 16 18 32.9 -0.2
BNI pmax pmax
comp=Z,28nm,1.1s
**BFO Black Forest** 86.87 41 P P 16 18 31.6 -1.5
BFO IAmb IAmb 16 18 34.5
comp=Z,18nm,1.1s
**BFO Black Forest** 86.87 41 P P 16 18 31.6 -1.5
BFO pmax pmax
comp=Z,17nm,1.1s
**BFO Black Forest** 86.87 41 *e*P P 16 18 34.0 +0.9
comp=Z,8.3nm,0.9s,baz=293,slow=4.5
**CLZ Clausthal** 86.95 37 *e*P P 16 18 33.8 +0.3
comp=Z,9.8nm,0.7s,baz=293,slow=4.5
**MBDF Montbardon** 86.98 45 *e*P P 16 18 34.1 +0.2
MBDF pmax pmax
comp=Z,26nm,0.8s
**TIC Toumodi** 87.08 84⇑ *e*P P 16 18 34.7 -0.1
comp=Z,48nm,0.9s
**UBBA Unterbreizbach** 87.08 38 *e*P P 16 18 34.5 +0.6
baz=293,slow=4.5
**SLE Schleitheim** 87.16 41 P P 16 18 34.0 -0.6
SLE pmax pmax
comp=Z,32nm,1.0s
**LIC Lamto** 87.17 84⇑ *e*P P 16 18 35.4 +0.2
comp=Z,114nm,0.9s
**LMR La Mourre** 87.22 46 *e*P P 16 18 34.7 -0.2
LMR pmax pmax
comp=Z,41nm,1.0s
**DBIC Dimbokro** 87.23 84 P P 16 18 35.2 -0.2
DBIC IAmb IAmb 16 18 36.8
comp=Z,30nm,0.9s
**DBIC Dimbokro** 87.23 84 P P 16 18 35.7 +0.2
comp=Z,20nm,0.8s,baz=268,slow=4.8,SNR=21
comp=Z,20nm,0.8s
**FLTG Flechtingen** 87.28 36 *e*P P 16 18 34.9 -0.1
comp=Z,7.1nm,0.7s,baz=293,slow=4.5
**SEY Seymchan** 87.32 335⇑ *e*P P 16 18 35.7 +0.8
SEY pmax pmax
comp=Z,8.0nm,1.0s
**SGF Sodankyl** 87.33 19 P P 16 18 34.3 -0.6
SGF pmax pmax
comp=Z,16nm,1.0s
**ISO Isola** 87.33 45 P P 16 18 35.4 -0.1
ISO pmax pmax
comp=Z,11nm,1.2s
**KIC Kosan Boka** 87.42 84⇑ *e*P P 16 18 36.6 +0.2
comp=Z,64nm,0.7s
**MOX Moxa** 88.10 38 P P 16 18 39.1 +0.1
MOX pmax pmax
comp=Z,15nm,0.8s
**MOX Moxa** 88.10 38 *e*P P 16 18 38.8 -0.2
comp=Z,5.2nm,0.8s,baz=293,slow=4.5
**TUE Stuetta** 88.13 42 IAmb IAmb 16 18 41.6
comp=Z,13nm,0.9s
**DAVA Damuels** 88.20 41 *i* PcP P 16 18 39.7 -0.1
comp=Z,7nm,1.0s,SNR=9.9
**GRF Grafenberg Arr** 88.20 39 *e*P P 16 18 40.0 +0.5
comp=Z,10nm,1.0s,baz=293,slow=4.5
**UBR Ueberruh** 88.21 41 *e*P P 16 18 40.0 +0.3
comp=Z,16nm,1.1s,baz=293,slow=4.5
**VAF Ylistaro** 88.26 24 *e*P P 16 18 39.6 +0.2
**DAVOX Davos/Dischmat** 88.38 42 LR LR 16 52 37.3
comp=Z,135nm,21.4s,baz=267,slow=32
**MANZ Manzenberg** 88.63 38 *e*P P 16 18 41.4 -0.1
comp=Z,1.1nm,0.9s,baz=293,slow=4.5
**CLL Collm** 88.67 37 IAmb IAmb 16 18 43.3
comp=Z,10nm,1.0s
**CLL Collm** 88.67 37 *i* P P 16 18 42.2 +0.6
comp=Z,19nm,1.3s
CLL *i* pP **sP** 16 19 02.2 -3.1
**CLL Collm** 88.67 37 *i* P P 16 18 42.2 +0.6
CLL *i* *PP **sP** 16 19 02.2 -3.1
CLL pmax pmax
comp=Z,19nm,1.3s
**CLL Collm** 88.67 37 *e*P P 16 18 41.0 -0.6
comp=Z,5.9nm,0.9s,baz=293,slow=4.5
**FUORN Ofenpass-Fuorn** 88.68 42 IAmb IAmb 16 18 44.0
comp=Z,11nm,0.7s
**TANN Tannenbergstha** 88.69 38 *e*P P 16 18 41.6 -0.2
comp=Z,7.1nm,0.9s,baz=293,slow=4.5
**RETA Reutte** 88.70 41 *i* PcP P 16 18 41.8 -0.1
comp=Z,11nm,0.8s,SNR=8.5
**ROTZ Rotzenmuhle** 88.77 39 *e*P P 16 18 42.3 +0.1
comp=Z,0.6nm,0.8s,baz=293,slow=4.5
**FETA Feichten** 88.84 42 *i* PcP P 16 18 42.7 0.0
comp=Z,8.4nm,0.7s,SNR=8.3
**MOTA Moosalm** 88.96 41 *e*PcP P 16 18 43.1 -0.2
comp=Z,12nm,0.8s
**MSSA Maissana** 88.97 44 IAmb IAmb 16 18 44.7
comp=Z,27nm,1.2s
**MSF Maaselka** 89.03 20 P P 16 18 43.2 +0.2
MSF pmax pmax
comp=Z,13nm,0.9s
**SQTA Sankt Quirin** 89.08 41 *e*PcP P 16 18 43.7 -0.1
comp=Z,2.9nm,0.6s
**TIXI Tiksi** 89.11 348 LR LR 17 03 32.7
comp=Z,117nm,21.1s,baz=16,slow=39
**TIXI Tiksi** 89.11 348⇑ *e*P P 16 18 43.7 +0.5
TIXI pmax pmax
comp=Z,28nm,0.9s
**PGF Pioggiola** 89.20 46 P P 16 18 43.8 -0.7
PGF pmax pmax
comp=Z,19nm,0.8s
**WTTA Wattenberg** 89.33 41 *e*PcP **PcP** 16 18 46.0 -0.5
comp=Z,12nm,0.7s
**BRG Berggiesshubel** 89.39 37 *i* P P 16 18 45.8 +0.8
BRG Amp 16 18 47.0
comp=Z,20nm,1.0s
**BRG Berggiesshubel** 89.39 37 *i* P P 16 18 45.7 +0.8
BRG pmax pmax
comp=Z,20nm,1.0s
**BRG Berggiesshubel** 89.39 37 *e*P P 16 18 44.3 -0.7
comp=Z,13nm,0.9s,baz=293,slow=4.5
**WET Wettzell** 89.41 39 P P 16 18 45.7 +0.5
WET pmax pmax
comp=Z,15nm,2.0s
**WET Wettzell** 89.41 39 *e*P P 16 18 45.1 -0.1
comp=Z,10nm,1.0s,baz=293,slow=4.5
**LVZ Lovozero** 89.54 17 P P 16 18 45.0 -0.4
LVZ IAmb IAmb 16 18 49.1
comp=Z,18nm,1.0s
**LVZ Lovozero** 89.54 17 P P 16 18 45.0 -0.4
LVZ pmax pmax
comp=Z,18nm,1.0s
**KEF Keuruu** 89.59 24 *e*P P 16 18 45.6 -0.1
**MA2 Magadan** 89.61 333 LR LR 17 01 51.4
comp=Z,40nm,20.3s,baz=44,slow=38
**CTI Castel Tesino** 89.78 42 IAmb IAmb 16 18 48.2
comp=Z,11nm,0.9s
**KHC Kasperske Hory** 89.84 39 IAmb IAmb 16 18 49.3
comp=Z,17nm,1.1s
**KHC Kasperske Hory** 89.84 39 *e*P P 16 18 47.8 +0.6
KHC AMS AMS 16 56 40.0
comp=Z,300nm,20.7s
**KHC Kasperske Hory** 89.84 39 *ce*P P 16 18 47.6 +0.4
KHC pmax pmax
comp=Z,41nm,1.2s
**KHC Kasperske Hory** 89.84 39 P P 16 18 47.9 +0.7
comp=Z,15nm,1.1s
**PVCC Panska Ves** 89.89 37 P P 16 18 48.1 +0.8
PVCC pmax pmax
comp=Z,27nm,1.0s
**RJOB Jochberg** 89.89 40 *e*P P 16 18 47.5 0.0
comp=Z,6.6nm,1.0s,baz=293,slow=4.5
**LESA Schwarzleotal** 89.93 41 *e*PcP P 16 18 47.8 +0.1
comp=Z,5.1nm,1.1s
**ZCCA Zocca** 89.94 44 IAmb IAmb 16 18 49.8
comp=Z,20nm,0.7s
**GEC2 GERESS Array S** 90.03 39 IAmb IAmb 16 18 49.9
comp=Z,19nm,1.1s
**GEC2 GERESS Array S** 90.03 39 P P 16 18 48.3 +0.1
GEC2 pmax pmax
comp=Z,17nm,1.2s
**GEC2 GERESS Array S** 90.03 39 *e*P P 16 18 47.9 -0.2
comp=Z,12nm,1.0s,baz=293,slow=4.5
**GERES GERESS Array B** 90.03 39 P P 16 18 47.8 -0.3
comp=Z,7.7nm,0.9s,baz=270,slow=4.9,SNR=24
GERES LR LR 16 56 12.2
comp=Z,194nm,21.2s,baz=306,slow=34
comp=Z,7.7nm,0.9s
**ABTA Abfaltersbach** 90.08 41 *i* PcP P 16 18 48.4 -0.1
comp=Z,11nm,1.0s,SNR=8.9
**PRU Pruhonice** 90.09 38 *e*P P 16 18 49.2 +0.9
**PRU Pruhonice** 90.09 38 *e*P P 16 18 49.2 +0.9
**ZVC Zvikov** 90.09 38 *e*P P 16 18 48.9 +0.6
**GOPC GO Pecny, Ondr** 90.26 38 P P 16 18 49.2 +0.1
GOPC pmax pmax
comp=Z,20nm,1.0s
**STAL STALIGIAL** 90.39 42 IAmb IAmb 16 18 51.1
comp=Z,17nm,1.0s
**CKRC Cesky Krumlov** 90.41 39 *e*P P 16 18 50.1 +0.3
CKRC AMS AMS 16 55 50.0
comp=Z,300nm,22.5s
**CKRC Cesky Krumlov** 90.41 39 *e*P P 16 18 50.1 +0.3
CKRC MLR MLR
comp=Z,300nm,22.5s
**OSSC Osservatorio P** 90.42 45 IAmb IAmb 16 18 50.2
comp=Z,17nm,1.3s
**MEF Metsahovi** 90.42 26 *e*P P 16 18 49.7 +0.2
**BIOA Bad Ischl, Aus** 90.43 40 *e*PcP **PcP** 16 18 50.9 -0.2
comp=Z,9.1nm,1.1s
**FINES FINESS Array B** 90.46 25 P P 16 18 49.1 -0.6
**FINES FINESS Array B** 90.46 25 P P 16 18 49.6 -0.1
comp=Z,5.8nm,0.7s,baz=295,slow=2.9,SNR=32

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FINES | | | | LR | LR | 16 58 55.1 | |
| | comp=Z,163nm,21.5s,baz=300,slow=35 | | | | | | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| KBA | Koelnbreinsper | 90.48 | 41 | ePcP | P | 16 18 50.9 | +0.5 |
| | comp=Z,9.4nm,1.0s | | | | | | |
| VSL | Villasalto | 90.49 | 49 | IAmb | IAmb | 16 18 52.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| CHVC | Chvalec | 90.73 | 37 | AMS | AMS | 16 55 00.0 | |
| | comp=Z,200nm,23.8s | | | | | | |
| UPC | Upice | 90.74 | 37 | P | P | 16 18 52.1 | +0.8 |
| UPC | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| MOA | Molln | 90.76 | 40 | i PcP | P | 16 18 51.7 | +0.1 |
| | comp=Z,14nm,1.2s,SNR=7.4 | | | | | | |
| KSP | Ksiaz | 90.76 | 37 | P | P | 16 18 52.5 | +1.0 |
| KSP | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| KSP | Ksiaz | 90.76 | 37 | P | P | 16 18 52.4 | +1.0 |
| | comp=Z,16nm,0.9s | | | | | | |
| MYKA | Terra Mystica | 90.84 | 41 | i PcP | PcP | 16 18 52.9 | -0.1 |
| | comp=Z,6.7nm,0.8s,SNR=5.1 | | | | | | |
| PRED | Cave del Predi | 90.87 | 41 | IAmb | IAmb | 16 18 53.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| TREC | Trest | 90.93 | 38 | P | P | 16 18 53.2 | +0.9 |
| TREC | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| MTSE | Matsula | 90.95 | 28 | eP | P | 16 18 51.2 | -0.8 |
| DPC | Dobruska-Polom | 90.98 | 37 | eP | P | 16 18 53.2 | +0.7 |
| DPC | Dobruska-Polom | 90.98 | 37 | eP | P | 16 18 53.2 | +0.7 |
| DPC | Dobruska-Polom | 90.98 | 37 | P | P | 16 18 53.5 | +1.0 |
| | comp=Z,24nm,1.0s | | | | | | |
| KRLC | Kraliky | 91.37 | 37 | eP | P | 16 18 55.3 | +1.0 |
| KRLC | Kraliky | 91.37 | 37 | eP | P | 16 18 55.3 | +1.0 |
| OBKA | Obir | 91.47 | 41 | ePcP | PcP | 16 18 55.7 | -0.1 |
| | comp=Z,8.3nm,1.1s | | | | | | |
| ARBE | Arbavere | 91.52 | 26 | eP | P | 16 18 54.1 | -0.5 |
| KRUC | Moravsky | 91.57 | 38 | eP | P | 16 18 55.4 | +0.2 |
| KRUC | Moravsky | 91.57 | 38 | P | P | 16 18 55.6 | +0.4 |
| KRUC | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | |
| VRAC | Vranov | 91.58 | 38 | eP | P | 16 18 55.0 | -0.3 |
| VRAC | Vranov | 91.58 | 38 | LR | LR | 17 01 27.5 | |
| | comp=Z,92nm,18.5s,baz=298,slow=36 | | | | | | |
| VRAC | Vranov | 91.58 | 38 | ⇑P | P | 16 18 55.5 | +0.2 |
| VRAC | Vranov | 91.58 | 38 | P | P | 16 18 55.5 | +0.2 |
| JOF | Joensuu | 91.61 | 22 | eP | P | 16 18 54.8 | -0.3 |
| LJU | Ljubljana | 91.64 | 41 | eP | P | 16 18 56.1 | +0.5 |
| CESX | Cesi | 91.66 | 45 | IAmb | IAmb | 16 18 57.5 | |
| | comp=Z,17nm,1.1s | | | | | | |
| SOKA | Soboth | 91.70 | 41 | i PcP | PcP | 16 18 56.6 | -0.3 |
| | comp=Z,14nm,1.5s,SNR=6.3 | | | | | | |
| CONA | Conrad Observa | 91.71 | 39 | i PcP | PcP | 16 18 56.5 | -0.3 |
| | comp=Z,16nm,1.3s,SNR=11 | | | | | | |
| KEST | Kesra | 91.73 | 52 | IAmb | IAmb | 16 18 58.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| KEST | Kesra | 91.73 | 52 | P | P | 16 18 55.5 | -0.8 |
| | comp=Z,8.9nm,0.8s,baz=326,slow=2.0,SNR=8.9 | | | | | | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| ARSA | Arzberg | 91.78 | 40 | ePcP | P | 16 18 56.6 | +0.3 |
| | comp=Z,5.9nm,0.9s | | | | | | |
| TORD | Torodi Ar. Bea | 91.80 | 76 | P | P | 16 18 55.7 | -1.2 |
| TORD | Torodi Ar. Bea | 91.80 | 76 | P | P | 16 18 56.3 | -0.7 |
| | comp=Z,1.3nm,0.6s,baz=297,slow=6.2,SNR=14 | | | | | | |
| TORD | | | | LR | LR | 16 56 26.9 | |
| | comp=Z,82nm,21.8s,baz=314,slow=33 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| FDMO | Fiordimonte | 91.85 | 45 | IAmb | IAmb | 16 18 57.7 | |
| | comp=Z,20nm,1.0s | | | | | | |
| MORC | Moravsky Berou | 91.94 | 37 | eP | P | 16 18 57.5 | +0.5 |
| MORC | Moravsky Berou | 91.94 | 37 | ⇑P | P | 16 18 57.9 | +0.9 |
| MORC | Moravsky Berou | 91.94 | 37 | P | P | 16 18 57.9 | +0.9 |
| RONA | Rosalia, Austr | 92.08 | 39 | ePcP | P | 16 18 57.7 | +0.1 |
| | comp=Z,15nm,1.1s,SNR=7.4 | | | | | | |
| MAUC | Maruska | 92.29 | 37 | eP | P | 16 19 00.2 | +1.6 |
| CRES | Cresnjev | 92.32 | 41 | i P | P | 16 18 59.5 | +0.7 |
| ZST | Bratislava | 92.36 | 39 | eP | P | 16 19 00.3 | +1.5 |
| ZST | | | | pmax | pmax | | |
| | comp=Z,83nm,1.1s | | | | | | |
| ZST | Bratislava | 92.36 | 39 | eP | P | 16 19 00.3 | +1.5 |
| VSU | Vasula | 92.38 | 27 | ⇓eP | P | 16 18 58.7 | 0.0 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,21nm,1.5s | | | | | | |
| JAVC | Velka Javorina | 92.41 | 38 | eP | P | 16 19 00.3 | +1.1 |
| SMOL | Smolenice | 92.42 | 38 | eP | P | 16 19 01.0 | +1.9 |
| SMOL | | | | pmax | pmax | | |
| | comp=Z,20nm,1.4s | | | | | | |
| PABE | Paberze | 92.67 | 30 | eP | P | 16 19 00.4 | +0.3 |
| MSVF | Nonsavu | 92.78 | 253 | LR | LR | 16 51 12.9 | |
| | comp=Z,131nm,20.6s,baz=156,slow=29 | | | | | | |
| SUW | Suwalki | 93.04 | 32 | eP | P | 16 19 02.3 | +0.5 |
| SUW | Suwalki | 93.04 | 32 | P | P | 16 19 02.4 | +0.5 |
| SUW | | | | pmax | pmax | | |
| | comp=Z,51nm,1.2s | | | | | | |
| OJC | Ojcow | 93.05 | 36 | P | P | 16 19 03.0 | +1.0 |
| OJC | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| OJC | Ojcow | 93.05 | 36 | P | P | 16 19 03.0 | +1.0 |
| | comp=Z,29nm,1.0s | | | | | | |
| MPLH | Magyarpolny | 93.06 | 40 | P | P | 16 19 03.3 | +1.2 |
| | comp=Z,36nm,1.4s | | | | | | |
| VYHS | Vyhne | 93.27 | 38 | eP | P | 16 19 04.4 | +1.3 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,22nm,1.2s | | | | | | |
| VYHS | Vyhne | 93.27 | 38 | eP | P | 16 19 04.4 | +1.3 |
| LANS | Liptovska Anna | 93.34 | 37 | eP | P | 16 19 05.5 | +2.0 |
| LANS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| LANS | Liptovska Anna | 93.34 | 37 | eP | P | 16 19 05.5 | +2.0 |
| NIE | Niedzica | 93.70 | 37 | P | P | 16 19 07.4 | +2.3 |
| NIE | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| PSZ | Piszkesteto | 94.16 | 38 | ⇑P | P | 16 19 08.3 | +1.0 |
| PSZ | Piszkesteto | 94.16 | 38 | P | P | 16 19 08.2 | +1.0 |
| MORH | Mrgy, Hungar | 94.16 | 40 | ⇓P | P | 16 19 07.2 | 0.0 |
| KECS | Kecovo | 94.25 | 37 | eP | P | 16 19 09.0 | +1.4 |
| KECS | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| KECS | Kecovo | 94.25 | 37 | eP | P | 16 19 09.0 | +1.4 |
| CRVS | Cervenica-Dubn | 94.62 | 37 | eP | P | 16 19 10.8 | +1.5 |
| CRVS | | | | pmax | pmax | | |
| | comp=Z,36nm,1.1s | | | | | | |
| CRVS | Cervenica-Dubn | 94.62 | 37 | eP | P | 16 19 10.8 | +1.5 |
| VAE | Valguarnera | 94.90 | 49 | LR | LR | 16 56 11.7 | |
| | comp=Z,296nm,21.8s,baz=321,slow=32 | | | | | | |
| CUC | Castrocucco | 94.92 | 47 | IAmb | IAmb | 16 19 11.9 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| KWP | Kalwaria Pacla | 94.98 | 36 | P | P | 16 19 10.9 | 0.0 |
| KWP | Kalwaria Pacla | 94.98 | 36 | P | P | 16 19 10.9 | 0.0 |
| KWP | | | | pmax | pmax | | |
| | comp=Z,57nm,1.3s | | | | | | |
| KWP | Kalwaria Pacla | 94.98 | 36 | P | P | 16 19 12.5 | +1.6 |
| KOLS | Kolonicke sedl | 95.07 | 37 | eP | P | 16 19 13.0 | +1.6 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| KOLS | Kolonicke sedl | 95.07 | 37 | eP | P | 16 19 13.0 | +1.6 |
| MNK | Minsk | 95.11 | 30 | i P | P | 16 19 09.9 | -1.5 |
| MNK | | | | i *PP | pP | 16 19 27.8 | -0.7 |
| MNK | | | | i | | 16 22 58.8 | |
| MNK | | | | i PPP | PPP | 16 25 00.6 | |
| MNK | | | | i S | SKSac | 16 29 39.7 | -2.2 |
| MNK | | | | i *SS | SKKSac | 16 30 12.1 | +7.3 |
| MNK | | | | i PS | PS | 16 32 26.3 | +41 |
| MNK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,11nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.8s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,182nm,18.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,169nm,18.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,77nm,20.0s | | | | | | |
| MATE | Matera | 95.27 | 46 | ⇑P | P | 16 19 12.1 | -0.3 |
| FRGS | Fruska Gora | 95.37 | 41 | ⇑P | P | 16 19 13.4 | +0.6 |
| LVV | L'vov | 95.63 | 35 | eP | P | 16 19 14.2 | +0.4 |
| RNPP9 | Sopachiv | 95.80 | 33 | P | P | 16 19 15.4 | +0.8 |
| RNPP8 | Varash | 95.83 | 33 | P | P | 16 19 15.4 | +0.7 |
| RNPP5 | Staryi Chortor | 95.90 | 33 | P | P | 16 19 15.8 | +0.8 |
| MORS | Morshin | 95.90 | 36 | P | P | 16 19 16.4 | +1.3 |
| MORS | Morshin | 95.90 | 36 | P | P | 16 19 16.4 | +1.3 |
| MEZ | Mezhgor'ye | 96.00 | 36 | P | P | 16 19 17.4 | +1.8 |
| SIRR | Siria | 96.00 | 39 | ⇓P | P | 16 19 15.8 | +0.2 |
| YAK | Yakutsk | 96.15 | 341 | LR | LR | 17 09 19.4 | |
| | comp=E,54nm,18.6s,baz=30,slow=40 | | | | | | |
| YAK | Yakutsk | 96.15 | 341 | ⇑eP | P | 16 19 17.4 | +1.5 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| BZS | Buzias | 96.28 | 40 | ⇑P | P | 16 19 17.8 | +0.8 |
| BZS | Buzias | 96.28 | 40 | P | P | 16 19 17.7 | +0.8 |
| DRGR | | 96.38 | 38 | ⇓P | P | 16 19 17.7 | +0.3 |
| DRGR | | 96.38 | 38 | P | P | 16 19 17.7 | +0.3 |
| STNU | Starunia | 96.46 | 36 | P | P | 16 19 18.4 | +0.7 |
| SURR | Surduc | 96.53 | 39 | ⇑P | P | 16 19 18.8 | +0.7 |
| MDVR | Moldovita | 96.74 | 40 | ⇑P | P | 16 19 19.5 | +0.5 |
| KSV | Kosov | 96.99 | 36 | P | P | 16 19 19.7 | -0.4 |
| KSV | Kosov | 96.99 | 36 | P | P | 16 19 19.7 | -0.4 |
| GZR | Gura Zlata | 97.11 | 39 | ⇑P | P | 16 19 20.7 | -0.1 |
| GZR | Gura Zlata | 97.11 | 39 | P | P | 16 19 20.6 | -0.1 |
| HERR | Herculane | 97.13 | 40 | ⇑P | P | 16 19 20.6 | -0.2 |
| BURAR | Bucovina Array | 97.44 | 37 | P | P | 16 19 21.4 | -0.8 |
| BURAR | Bucovina Array | 97.44 | 37 | ⇓P | Pdif | 16 19 22.8 | +0.5 |
| BURAR | Bucovina Array | 97.44 | 37 | P | P | 16 19 21.5 | -0.8 |
| LUBAR | Lubar, Ukraine | 97.61 | 34 | P | P | 16 19 22.1 | -0.7 |
| KMPD | K-Podol'skiy | 97.64 | 35 | P | P | 16 19 22.6 | -0.4 |
| KIEV | Kiev | 97.95 | 33 | ⇑P | P | 16 19 24.1 | -0.2 |
| KIEV | Kiev | 97.95 | 33 | P | P | 16 19 24.1 | -0.2 |
| AKASG | Malin Array Be | 97.95 | 33 | P | P | 16 19 23.0 | -1.3 |
| | comp=Z,0.3nm,0.3s,baz=299,slow=3.4,SNR=4.7 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| AKBB | Malin Array Si | 97.95 | 33 | ⇑eP | P | 16 19 20.3 | -4.0 |
| ARR | Arges | 98.25 | 39 | ⇑P | Pdif | 16 19 26.5 | +0.6 |
| VOIR | | 98.47 | 39 | ⇑P | Pdif | 16 19 27.3 | +0.4 |
| VOIR | | 98.47 | 39 | P | Pdif | 16 19 27.3 | +0.4 |
| OBN | Obninsk | 98.70 | 26 | LR | LR | 17 02 53.5 | |
| | comp=Z,139nm,21.8s,baz=354,slow=35 | | | | | | |
| OBN | Obninsk | 98.70 | 26 | ⇑eP | P | 16 19 26.8 | -0.7 |
| OBN | | | | i | | 16 19 42.7 | |
| OBN | | | | eSS | SS | 16 37 48.0 | +10 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,100nm,18.0s | | | | | | |
| SORM | Soroca | 98.93 | 35 | ⇓P | P | 16 19 28.7 | -0.1 |
| SORM | Soroca | 98.93 | 35 | P | P | 16 19 28.6 | -0.1 |
| MLR | Muntele Rosu | 98.98 | 38 | ⇓P | Pdif | 16 19 29.5 | +0.3 |
| MLR | Muntele Rosu | 98.98 | 38 | P | Pdif | 16 19 29.5 | +0.3 |
| KIRV | Kirov | 100.88 | 19 | ⇑eP | Pdif | 16 19 36.5 | -0.7 |
| VORR | Voronezh | 102.20 | 28 | eP | Pdif | 16 19 43.6 | +0.4 |
| VORR | | | | pmax | pmax | | |
| | comp=Z,21nm,1.7s | | | | | | |
| VRH | Novokhopyorsk | 103.65 | 27 | eP | Pdif | 16 19 50.6 | +0.9 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,18nm,2.0s | | | | | | |
| DZM | Mont Dzumac | 104.37 | 251 | eLR | LR | 16 54 18.9 | |
| | comp=Z,237nm,23.9s | | | | | | |
| BRTR | Keskin Array B | 106.91 | 40 | PKiKP | PKiKP | 16 24 14.6 | +0.2 |
| | comp=Z,1.2nm,0.9s,baz=296,slow=0.7,SNR=3.7 | | | | | | |
| ZALV | Zalesovo Beam | 111.50 | 1 | PP | PP | 16 24 57.9 | -5.0 |
| | comp=Z,6.9nm,0.9s,baz=358,slow=5.7,SNR=13 | | | | | | |
| KURK | Kurchatov | 114.40 | 5 | ⇑iPKIKP | PKiKP | 16 24 26.0 | -1.9 |
| KURBB | Kurchatov Arra | 114.49 | 5 | PKP | PKPdf | 16 24 28.7 | +0.6 |
| | comp=Z,1.2nm,0.6s,baz=357,slow=2.1,SNR=4.8 | | | | | | |
| KURBB | | | | PP | PP | 16 25 19.7 | -4.4 |
| | comp=Z,3.3nm,1.0s,baz=354,slow=6.2,SNR=6.2 | | | | | | |
| KURBB | | | | PKKPbc | PKKPbc | 16 35 05.8 | -2.9 |
| | comp=Z,0.3nm,0.7s,baz=176,slow=3.7,SNR=4.2 | | | | | | |
| ULN | Ulaanbaatar | 114.90 | 345 | ⇑iPKIKP | PKPdf | 16 24 29.5 | +0.3 |
| KSRS | Korea Array | 114.92 | 324 | PKP | PKPdf | 16 24 30.4 | +1.2 |
| | comp=Z,0.3nm,0.4s,baz=332,slow=0.8,SNR=1.8 | | | | | | |
| SONM | Songino Array | 115.09 | 345 | PKP | PKPdf | 16 24 32.5 | +2.9 |
| | comp=Z,2.0nm,0.7s,baz=9.9,slow=2.2,SNR=4.9 | | | | | | |
| XLT | XiLinHaoTe | 115.53 | 337 | ePKP | PKiKP | 16 24 29.6 | -0.9 |
| MK31 | Makanchi Array | 118.57 | 3 | ⇑iPKIKP | PKPdf | 16 24 35.9 | -0.2 |
| MKAR | Makanchi Array | 118.57 | 3 | PKP | PKPdf | 16 24 35.6 | -0.5 |
| | comp=Z,1.6nm,0.8s,baz=8.5,slow=2.5,SNR=5.1 | | | | | | |
| MKAR | | | | PP | PP | 16 25 49.5 | -3.2 |
| | comp=Z,3.3nm,1.0s,baz=24,slow=4.4,SNR=6.9 | | | | | | |
| HHC | Hu-ho-hao-te | 119.85 | 338 | ePKP | PKPdf | 16 24 34.7 | -4.2 |
| HHC | | | | LR | LR | | |
| | comp=Z,160nm,22.8s | | | | | | |
| HNS | HongShan | 121.58 | 334 | ePKP | PKiKP | 16 24 49.1 | +6.8 |
| WMQ | Urumqi | 121.63 | 359 | ePKP | PKiKP | 16 24 42.5 | +0.2 |
| WMQ | | | | LR | LR | | |
| | comp=Z,180nm,24.0s | | | | | | |
| BOSA | Boshof | 122.21 | 115 | PKP | PKiKP | 16 24 46.2 | +2.4 |
| | comp=Z,20nm,0.8s,baz=281,slow=2.0,SNR=12 | | | | | | |
| TRKS | Terek-Say | 122.21 | 13 | PKIKP | PKiKP | 16 24 45.1 | +1.4 |
| MBAR | Mbarara | 123.36 | 81 | ⇓iPKIKP | PKPdf | 16 24 45.6 | -0.8 |
| BTK | Batken | 123.54 | 14 | PKIKP | PKPdf | 16 24 41.3 | -4.7 |
| NJ2 | Nanjing | 123.91 | 327 | ePKP | PKPdf | 16 24 46.4 | -0.3 |
| SIMJ | Simiganj | 124.40 | 16 | PKPdf | PKPdf | 16 24 47.7 | -0.1 |
| CHGR | Chuyangaron | 124.44 | 16 | PKIKP | PKiKP | 16 24 48.8 | +0.7 |
| GTA | Gaotai | 124.59 | 347 | ePKP | PKiKP | 16 24 53.4 | +5.0 |
| MAW | Mawson | 125.09 | 169 | PKP | PKiKP | 16 24 48.4 | +0.2 |
| | comp=Z,1.6nm,0.7s,baz=180,slow=2.0,SNR=2.9 | | | | | | |
| LZH | Lanzhou | 126.72 | 342 | ePKP | PKiKP | 16 24 54.1 | +1.4 |
| XAN | Xi'an | 126.84 | 336 | PKP | PKiKP | 16 24 58.5 | +5.6 |
| STKA | Stephens Creek | 127.00 | 241 | PKP | PKiKP | 16 24 53.5 | +0.4 |
| | comp=Z,3.2nm,0.7s,baz=39,slow=3.9,SNR=7.7 | | | | | | |
| WHN | Wuhan | 127.42 | 329 | PKP | PKiKP | 16 25 00.6 | +6.5 |
| GOMU | GeErMu | 128.62 | 351 | PKP | PKiKP | 16 25 00.3 | +3.5 |
| ENH | Enshi | 129.91 | 334 | PKPdf | PKPdf | 16 24 58.4 | 0.0 |
| CD2 | Chengdu | 131.53 | 340 | PKP | PKPdf | 16 24 59.5 | -1.9 |
| WRA | Warramunga Arr | 133.97 | 256 | PKP | PKiKP | 16 25 06.9 | -0.6 |
| | comp=Z,1.2nm,0.6s,baz=88,slow=2.3,SNR=19 | | | | | | |
| ASAR | Alice Springs | 134.36 | 251 | PKP | PKiKP | 16 25 07.9 | -0.3 |
| | comp=Z,0.8nm,0.7s,baz=92,slow=2.5,SNR=13 | | | | | | |
| PZH | PanZhiHua | 136.26 | 340 | PKP | PKPdf | 16 25 09.1 | -1.4 |
| CHTO | Chiang Mai | 144.33 | 339 | PKPdf | PKPab | 16 25 22.9 | -0.2 |
| CHTO | Chiang Mai | 144.33 | 339 | PKIKP | PKPab | 16 25 22.9 | -0.2 |
| CMAR | Chiang Mai Arr | 144.66 | 339 | PKP | PKPdf | 16 25 25.2 | -0.5 |
| | comp=Z,12nm,0.9s,baz=342,slow=3.8,SNR=49 | | | | | | |
| HYB | Hyderabad | 147.07 | 14 | ePKiKP | PKiKP | 16 25 34.3 | -0.1 |
| HYB | | | | esPKPdf | sPKPbc | 16 25 55.7 | -0.4 |
| HYB | | | | eSKSdf | SKSdf | 16 32 31.8 | -2.1 |
| KSM | Kuching | 151.23 | 302 | PKPab | PKPab | 16 25 48.8 | -1.8 |

IDC **01** 16:17:13.8±1.1, 56.°44N×148.°56W, h0km, mb3.7/10, mbtmp3.8/15, ML3.8/5, MS3.8/18, Error ellipse: s-maj=25.6km s-min=17.6km az=34.0

NEIC **01** 16:17:13.7±1.1, 56.°49N±0.°07×148.°63W±0.°09, h10km±1km, mb3.9/3, ML4.1/80, ML3.9(AEIC), Error ellipse: s-maj=13.0km s-min=7.9km az=156.0

AEIC **01** 16:17:18.9±1.0, 56.°51N±0.°08×148.°62W±0.°09, h7km±6km, Error ellipse: s-maj=11.4km s-min=6.8km az=163.0

**ISC 01 16:17:15.1**±0.7**, 56.°56N**±0.°07×**148.°65W**±0.°05**, h10**km**, n180, σ1.°25**/166**, mb3.9**/13**, MS4.0**/13**, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDAK | Kodiak Island | 2.47 | 301 | | Pn | 16 17 54.3 | -1.0 |
| KDAK | Kodiak Island | 2.47 | 301 | Pn | Pn | 16 17 54.6 | -0.7 |
| | 17nm,0.3s,baz=150,slow=4.8,SNR=200 | | | | | | |
| KDAK | | | | Sn | Sn | 16 18 22.2 | -3.2 |
| | 19nm,0.3s,baz=121,slow=15,SNR=14 | | | | | | |
| KDAK | | | | LR | LR | 16 19 10.2 | |
| | comp=Z,2µm,20.1s,baz=151,slow=45 | | | | | | |
| | 48nm,0.3s | | | | | | |
| OHAK | Old Harbor | 2.63 | 287 | P | Pn | 16 17 56.3 | -1.2 |
| OHAK | Old Harbor | 2.63 | 287 | | Pn | 16 17 55.9 | -1.6 |
| OHAK | | | | Sn | Sn | 16 18 25.7 | -3.7 |
| SYI | Shuyak Island | 2.88 | 317 | | Pn | 16 18 00.6 | -0.3 |
| SYI | | | | Sn | Sn | 16 18 33.5 | -2.0 |
| SII | Sitkinak Islan | 3.06 | 272 | P | Pn | 16 18 02.4 | -1.1 |
| SII | Sitkinak Islan | 3.06 | 272 | | Pn | 16 18 01.9 | -1.6 |
| SII | | | | Sn | Sn | 16 18 35.5 | -4.8 |
| SII | | | | IAML | | 16 18 38.7 | |
| | comp=N,435nm,0.8s | | | | | | |
| SII | | | | IAML | | 16 18 46.5 | |
| | comp=E,451nm,0.7s | | | | | | |
| MID | Middleton Isla | 3.13 | 22 | P | Pn | 16 18 03.6 | -0.7 |
| MID | Middleton Isla | 3.13 | 22 | | Pn | 16 18 03.4 | -0.9 |
| MID | | | | Sn | Sn | 16 18 38.2 | -3.5 |
| Q23K | Middleton Isla | 3.13 | 22 | | Pn | 16 18 03.4 | -0.9 |
| Q23K | | | | Sn | Sn | 16 18 39.2 | -2.5 |
| CNPM | China Poot | 3.28 | 336 | | Pn | 16 18 06.0 | -0.5 |
| CNPM | | | | Sn | Sn | 16 18 44.2 | -1.3 |
| R18K | Karluk | 3.33 | 290 | | Pn | 16 18 05.8 | -1.2 |
| R18K | | | | IAML | | 16 18 52.3 | |
| | comp=E,624nm,0.4s | | | | | | |
| R18K | | | | IAML | | 16 18 53.1 | |
| | comp=N,548nm,0.5s | | | | | | |
| BRSE | Bradley Lake S | 3.38 | 342 | | Pn | 16 18 07.7 | -0.2 |
| BRSE | | | | | Sn | 16 18 46.7 | -1.2 |
| BRLK | Bradley Lake | 3.43 | 341 | | Pn | 16 18 07.8 | -0.6 |
| BRLK | | | | Sn | Sn | 16 18 46.9 | -2.3 |
| BRLK | | | | IAML | | 16 18 54.7 | |
| | comp=E,231nm,0.8s | | | | | | |
| BRLK | | | | IAML | | 16 18 54.9 | |
| | comp=N,256nm,0.5s | | | | | | |
| HOM | Homer | 3.49 | 334 | Pn | Pn | 16 18 08.6 | -0.8 |
| P23K | Montague Islan | 3.51 | 10 | | Sn | 16 18 49.0 | -2.2 |
| Q19K | Cape Douglas, | 3.58 | 314 | | Pn | 16 18 10.8 | +0.2 |
| SEW | Seward | 3.58 | 354 | Pn | Pn | 16 18 09.0 | -1.5 |
| SEW | Seward | 3.58 | 354 | | Sn | 16 18 51.1 | -1.7 |
| AU22 | Augustine Moun | 3.77 | 320 | | Pn | 16 18 14.4 | +1.2 |
| AUCH | Augustine Cone | 3.80 | 320 | | Pn | 16 18 14.9 | +1.3 |
| KARR | Katmai Rainbow | 3.80 | 303 | | Pn | 16 18 15.4 | +1.8 |
| P19K | Oil Pt | 3.94 | 324 | | Pn | 16 18 15.9 | +0.3 |
| CHIR | Chirikof Islan | 3.97 | 262 | Pn | Pn | 16 18 14.8 | -1.1 |
| CHIR | | | | IAML | | 16 18 58.3 | |
| | comp=E,226nm,0.6s | | | | | | |
| CHIR | | | | IAML | | 16 19 01.2 | |
| | comp=N,206nm,0.6s | | | | | | |
| O22K | Cooper Landing | 3.97 | 352 | | Pn | 16 18 15.5 | -0.4 |
| ACHA | Angle Creek He | 3.98 | 297 | Pn | Pn | 16 18 15.7 | -0.4 |
| HIN | Hinchinbrook I | 4.01 | 15 | Pn | Pn | 16 18 15.2 | -1.4 |
| HIN | | | | IAML | | 16 19 11.0 | |
| | comp=E,353nm,0.7s | | | | | | |
| KAHC | Katmai Hardscr | 4.01 | 304 | | Pn | 16 18 17.1 | +0.5 |
| KAIM | Kayak Island | 4.05 | 32 | Pn | Pn | 16 18 16.1 | -0.9 |
| KAIM | | | | IAML | | 16 19 10.1 | |
| | comp=N,337nm,0.7s | | | | | | |
| ANCK | Angle Creek | 4.05 | 297 | | Pn | 16 18 18.2 | +1.0 |
| O20K | Slope Mountain | 4.11 | 331 | | Pn | 16 18 18.0 | +0.1 |
| IVE | Iliamna Volcan | 4.16 | 328 | | Pn | 16 18 18.4 | -0.3 |
| EYAK | Cordova Ski Ar | 4.28 | 20 | P | Pn | 16 18 20.1 | -0.1 |
| EYAK | Cordova Ski Ar | 4.28 | 20 | Pn | Pn | 16 18 19.6 | -0.6 |
| PWL | Port Wells | 4.32 | 2 | | Pn | 16 18 19.9 | -0.8 |
| PWL | | | | IAML | | 16 19 17.0 | |
| | comp=E,208nm,0.6s | | | | | | |
| PWL | | | | IAML | | 16 19 19.6 | |
| | comp=N,162nm,0.6s | | | | | | |
| PLK4 | Peulik 4 | 4.34 | 288 | Pn | Pn | 16 18 20.2 | -0.9 |
| PLK4 | | | | IAML | | 16 19 21.9 | |
| | comp=N,217nm,0.6s | | | | | | |
| PLK4 | | | | IAML | | 16 19 22.1 | |
| | comp=E,282nm,0.6s | | | | | | |
| PLK2 | Peulik 2 | 4.35 | 289 | | Pn | 16 18 21.2 | 0.0 |
| SUCK | Suckling Hills | 4.36 | 34 | | Pn | 16 18 20.8 | -0.5 |
| SUCK | | | | IAML | | 16 19 17.8 | |
| | comp=E,162nm,0.7s | | | | | | |
| SUCK | | | | IAML | | 16 19 18.2 | |
| | comp=N,199nm,0.6s | | | | | | |
| RAGM | Ragged Mountai | 4.37 | 27 | | Pn | 16 18 20.8 | -0.6 |
| GLI | Glacier Island | 4.41 | 10 | | Pn | 16 18 21.0 | -1.0 |
| GLI | | | | IAML | | 16 19 14.0 | |
| | comp=E,152nm,0.5s | | | | | | |
| GLI | | | | IAML | | 16 19 14.5 | |
| | comp=N,154nm,0.8s | | | | | | |
| HMT | Hamilton | 4.43 | 29 | | Pn | 16 18 21.9 | -0.4 |
| RED | Redoubt Volcan | 4.43 | 333 | | Pn | 16 18 22.0 | -0.4 |
| RSO | Redoubt South | 4.47 | 333 | Pn | Pn | 16 18 22.1 | -0.9 |
| PLK1 | Peulik 1 | 4.51 | 289 | | Pn | 16 18 23.3 | 0.0 |
| P18K | Big Mountain, | 4.51 | 312 | Pn | Pn | 16 18 22.6 | -0.8 |
| P18K | | | | IAML | | 16 19 21.9 | |
| | comp=N,48nm,0.5s | | | | | | |
| P18K | | | | IAML | | 16 19 32.6 | |
| | comp=E,35nm,0.8s | | | | | | |
| BGLC | Bering Glacier | 4.55 | 36 | | Pn | 16 18 23.3 | -0.6 |
| DFR | Drift River | 4.56 | 334 | | Pn | 16 18 23.6 | -0.5 |
| RC01 | Rabbit Creek A | 4.58 | 353 | | Pn | 16 18 24.3 | 0.0 |
| RC01 | | | | IAML | | 16 19 19.5 | |
| | comp=E,232nm,0.5s | | | | | | |
| RC01 | | | | IAML | | 16 19 25.9 | |
| | comp=N,166nm,0.6s | | | | | | |
| RDJH | Redoubt Jeurge | 4.59 | 333 | | Pn | 16 18 25.0 | +0.5 |
| PLBL | Peulik Blue Cr | 4.60 | 288 | | Pn | 16 18 24.9 | +0.4 |
| PLK5 | Peulik 5 | 4.69 | 291 | | Pn | 16 18 26.6 | +0.8 |
| O19K | Port Alsworth | 4.71 | 323 | Pn | Pn | 16 18 24.8 | -1.3 |
| O19K | | | | IAML | | 16 19 25.5 | |
| | comp=N,499nm,0.5s | | | | | | |
| O19K | | | | IAML | | 16 19 28.0 | |
| | comp=E,476nm,0.5s | | | | | | |
| SNH | Sunshine Point | 4.75 | 38 | Pn | Pn | 16 18 26.0 | -0.7 |
| SNH | | | | IAML | | 16 19 25.9 | |
| | comp=N,124nm,0.6s | | | | | | |
| SNH | | | | IAML | | 16 19 44.1 | |
| | comp=E,140nm,0.8s | | | | | | |
| O18K | Koktuh Hills | 4.79 | 316 | Pn | Pn | 16 18 26.2 | -1.0 |
| KNK | Knik Glacier | 4.87 | 1 | Pn | Pn | 16 18 27.8 | -0.6 |
| KNK | | | | IAML | | 16 19 32.6 | |
| | comp=N,114nm,0.7s | | | | | | |
| KNK | | | | IAML | | 16 19 41.5 | |
| | comp=E,125nm,0.8s | | | | | | |
| P17K | Kvichak River | 4.93 | 306 | | Pn | 16 18 29.5 | +0.5 |
| WAX | Waxell Ridge | 4.95 | 36 | Pn | Pn | 16 18 28.5 | -0.9 |
| SUA | Susitna One | 5.04 | 348 | IAML | | 16 19 32.0 | |
| | comp=N,86nm,0.7s | | | | | | |
| SUA | | | | IAML | | 16 19 33.2 | |
| | comp=E,84nm,0.7s | | | | | | |
| PMR | Palmer | 5.05 | 357 | P | Pn | 16 18 31.7 | +0.9 |
| PMR | Palmer | 5.05 | 357 | IAML | | 16 19 32.4 | |
| | comp=E,120nm,0.6s | | | | | | |
| PMR | | | | IAML | | 16 19 32.8 | |
| | comp=N,94nm,0.6s | | | | | | |
| SPCP | Crater Peak Br | 5.06 | 340 | | Pn | 16 18 31.8 | +0.8 |
| MESA | MESA | 5.06 | 41 | Pn | Pn | 16 18 30.3 | -0.8 |
| MESA | | | | IAML | | 16 19 31.9 | |
| | comp=N,108nm,0.6s | | | | | | |
| MESA | | | | IAML | | 16 19 44.4 | |
| | comp=E,96nm,0.5s | | | | | | |
| SPBG | Spurr Blockage | 5.09 | 339 | | Pn | 16 18 32.0 | +0.5 |
| CRQM | Cirque | 5.10 | 32 | IAML | | 16 19 33.9 | |
| | comp=E,120nm,0.7s | | | | | | |
| CRQM | | | | IAML | | 16 19 36.8 | |
| | comp=N,150nm,0.5s | | | | | | |
| KLU | Klutina | 5.14 | 15 | Pn | Pn | 16 18 31.7 | -0.5 |
| KLU | | | | IAML | | 16 19 31.6 | |
| | comp=N,88nm,0.4s | | | | | | |
| KLU | | | | IAML | | 16 19 35.8 | |
| | comp=E,100nm,0.5s | | | | | | |
| SPWE | Spurr West | 5.14 | 338 | | Pn | 16 18 32.8 | +0.6 |
| TGL | Tana Glacier | 5.19 | 33 | IAML | | 16 19 39.1 | |
| | comp=E,107nm,0.6s | | | | | | |
| TGL | | | | IAML | | 16 19 46.8 | |
| | comp=N,82nm,0.6s | | | | | | |
| STLK | Strandline Lak | 5.22 | 343 | | Pn | 16 18 33.5 | +0.4 |
| ISLE | Juniper Island | 5.23 | 37 | Pn | Pn | 16 18 32.4 | -1.0 |
| ISLE | | | | IAML | | 16 19 37.8 | |
| | comp=E,80nm,0.7s | | | | | | |
| ISLE | | | | IAML | | 16 19 53.1 | |
| | comp=N,89nm,1.1s | | | | | | |
| N19K | Bonanza Creek | 5.24 | 327 | Pn | Pn | 16 18 32.4 | -1.1 |
| SML | Sawmill | 5.27 | 2 | IAML | | 16 19 36.3 | |
| | comp=N,120nm,0.6s | | | | | | |
| SML | | | | IAML | | 16 19 45.2 | |
| | comp=E,92nm,0.8s | | | | | | |
| SCM | Sheep Creek Mo | 5.33 | 7 | Pn | Pn | 16 18 34.6 | -0.2 |
| CHGN | Chignik | 5.43 | 271 | Pn | Pn | 16 18 35.4 | -0.5 |
| N25K | Chitina, Valde | 5.47 | 21 | Pn | Pn | 16 18 36.1 | -0.5 |
| SAMH | Samovar Hills | 5.47 | 46 | | Pn | 16 18 36.4 | -0.3 |
| P16K | Nushagak River | 5.58 | 300 | | Pn | 16 18 38.6 | +0.7 |
| SKT | Skwentna | 5.63 | 346 | Pn | Pn | 16 18 38.2 | -0.6 |
| PNL | Peninsula | 5.81 | 54 | P | Pn | 16 18 41.1 | -0.1 |
| LOGN | Logan Glacier | 5.84 | 40 | Pn | Pn | 16 18 41.0 | -0.8 |
| WASW | Wrangell South | 5.85 | 21 | | Pn | 16 18 42.3 | +0.3 |
| O16K | Kokwok River B | 5.86 | 305 | Pn | Pn | 16 18 41.0 | -0.9 |
| WAZA | Wrangell Mount | 5.99 | 21 | | Pn | 16 18 44.3 | +0.3 |
| WAT1 | Susitna Watana | 6.29 | 0 | | Pn | 16 18 48.2 | +0.4 |
| CNBA | Chernabura Isl | 6.43 | 259 | Pn | Pn | 16 18 48.2 | -1.4 |
| L20K | Farewell, AK | 6.50 | 338 | | Pn | 16 18 51.5 | +0.8 |
| M26K | Nabesna, AK | 6.53 | 24 | Pn | Pn | 16 18 50.1 | -1.0 |
| P29M | Windy Craggy | 6.55 | 57 | | Pn | 16 18 50.4 | -1.0 |
| PAX | Paxson | 6.63 | 13 | | Pn | 16 18 53.0 | +0.5 |
| SDPT | Sand Point | 6.75 | 265 | P | Pn | 16 18 53.9 | -0.2 |
| RND | Reindeer | 6.87 | 359 | Pn | Pn | 16 18 55.0 | -0.8 |
| S31K | Pelican | 6.88 | 73 | Pn | Pn | 16 18 52.9 | -3.0 |
| L18K | Granite Mounta | 7.00 | 327 | Pn | Pn | 16 18 56.7 | -0.8 |
| P30M | Million Dollar | 7.11 | 55 | Pn | Pn | 16 18 58.1 | -1.0 |
| O14K | Tigyukauivet M | 7.24 | 297 | Pn | Pn | 16 19 01.0 | +0.2 |
| SIT | Sitka | 7.33 | 81 | P | Pn | 16 18 58.5 | -3.6 |
| L27K | Beaver Creek, | 7.37 | 25 | Pn | Pn | 16 19 01.8 | -0.9 |
| BCAR | Beaver Creek A | 7.38 | 25 | | Pn | 16 19 02.2 | -0.6 |
| K24K | Donnelly Dome | 7.41 | 10 | | Pn | 16 19 04.8 | +1.6 |
| L17K | Donlin | 7.45 | 323 | | Pn | 16 19 03.8 | +0.1 |
| DOT | Dot Lake | 7.47 | 16 | | Pn | 16 19 05.0 | +1.0 |
| S12K | Black Hills | 7.55 | 269 | Pn | Pn | 16 19 03.8 | -1.2 |
| PN7A | Pavlof North-7 | 7.57 | 267 | | Pn | 16 19 05.4 | -0.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SKAG | Skagway | 7.65 | 62 | P | Pn | 16 19 06.3 | -0.1 |
| BPAW | Bear Paw Mtn. | 7.65 | 352 | Pn | Pn | 16 19 06.2 | -0.3 |
| N14K | Kuskokwak Cree | 7.66 | 302 | | Pn | 16 19 07.0 | +0.5 |
| S32K | Killisnoo | 7.74 | 77 | Pn | Pn | 16 19 04.8 | -2.7 |
| SCRK | Sand Creek | 7.79 | 15 | Pn | Pn | 16 19 08.2 | -0.3 |
| R32K | Eaglecrest | 7.82 | 71 | Pn | Pn | 16 19 06.9 | -1.8 |
| J18K | Innoko River | 8.01 | 333 | Pn | Pn | 16 19 10.7 | -0.7 |
| J20K | Nowinta River | 8.11 | 343 | Pn | Pn | 16 19 12.6 | -0.1 |
| J19K | Poorman | 8.22 | 338 | Pn | Pn | 16 19 13.2 | -1.0 |
| J25K | Salcha River, | 8.24 | 10 | Pn | Pn | 16 19 13.6 | -0.9 |
| WHY | Whitehorse | 8.27 | 55 | Pn | Pn | 16 19 14.4 | -0.7 |
| IL31 | | 8.29 | 5 | Pn | Pn | 16 19 14.3 | -0.8 |
| ILAR | Eielson Array | 8.29 | 5 | Pn | Pn | 16 19 15.3 | +0.2 |
| | comp=E,1.0nm,0.3s,baz=188,slow=13,SNR=22 | | | | | | |
| ILAR | | | | Sn | Sn | 16 20 43.9 | -4.8 |
| | comp=E,0.5nm,0.3s,baz=186,slow=24,SNR=5.0 | | | | | | |
| ILAR | | | | LR | LR | 16 22 34.0 | |
| | comp=E,320nm,19.6s,baz=223,slow=38 | | | | | | |
| | comp=E,2.3nm,0.4s | | | | | | |
| J26L | Joseph Creek | 8.35 | 15 | Pn | Pn | 16 19 15.5 | -0.6 |
| L15K | Ungalak Mounta | 8.36 | 313 | | Pn | 16 19 16.3 | +0.3 |
| L29M | L29M | 8.43 | 34 | Pn | Pn | 16 19 17.0 | -0.2 |
| MDM | Murphy Dome | 8.43 | 1 | Pn | Pn | 16 19 17.4 | +0.2 |
| P32M | Atlin | 8.47 | 63 | | Pn | 16 19 16.9 | -0.9 |
| MLY | Manley | 8.56 | 354 | Pn | Pn | 16 19 18.5 | -0.4 |
| I23K | Minto, Yukon-K | 8.63 | 358 | Pn | Pn | 16 19 18.9 | -0.9 |
| L14K | Kuka Creek | 8.69 | 309 | Pn | Pn | 16 19 20.6 | 0.0 |
| CRAG | Craig | 8.77 | 91 | P | Pn | 16 19 17.6 | -4.1 |
| SSLS | Shishaldin Sou | 8.88 | 264 | | Pn | 16 19 23.1 | -0.3 |
| J16K | Anvik River | 9.02 | 323 | Pn | Pn | 16 19 24.2 | -0.9 |
| P33M | Teslin, Yukon | 9.08 | 60 | | Pn | 16 19 25.1 | -1.0 |
| PRP | Porcupine Dome | 9.12 | 8 | Pn | Pn | 16 19 25.4 | -1.2 |
| K29M | Barlow Dome | 9.15 | 33 | Pn | Pn | 16 19 26.2 | -0.9 |
| I26K | Coal Creek Min | 9.17 | 15 | Pn | Pn | 16 19 26.3 | -1.0 |
| N32M | Quiet Lake | 9.28 | 54 | Pn | Pn | 16 19 28.8 | 0.0 |
| H23K | Yukon River | 9.31 | 358 | Pn | Pn | 16 19 29.8 | +0.6 |
| H24K | Noodor Dome | 9.32 | 2 | Pn | Pn | 16 19 28.9 | -0.4 |
| H21K | Melozitna Rive | 9.35 | 349 | Pn | Pn | 16 19 28.7 | -0.9 |
| IMAR | Indian Mountai | 9.77 | 348 | | Pn | 16 19 35.4 | 0.0 |
| R33M | Jennings River | 9.81 | 66 | Pn | Pn | 16 19 34.8 | -1.3 |
| I28M | Miner Creek | 9.86 | 22 | Pn | Pn | 16 19 36.8 | +0.1 |
| G24K | Hadweenzic Riv | 10.19 | 3 | | Pn | 16 19 41.6 | +0.4 |
| DLBC | Dease Lake | 10.19 | 72 | Pn | Pn | 16 19 41.9 | +0.5 |
| | comp=E,1.1nm,0.3s,baz=234,slow=11,SNR=4.2 | | | | | | |
| DLBC | | | | LR | LR | 16 23 00.9 | |
| | comp=E,280nm,19.3s,baz=274,slow=34 | | | | | | |
| | comp=E,3.1nm,0.4s | | | | | | |
| G23K | Bananza Creek | 10.21 | 357 | | Pn | 16 19 41.9 | +0.4 |
| I30M | Mount Dempster | 10.52 | 29 | | Pn | 16 19 47.4 | +1.5 |
| MMPY | Sheldon Lake, | 10.68 | 48 | | Pn | 16 19 47.9 | -0.1 |
| F24K | Squaw Lake | 11.01 | 2 | | Pn | 16 19 52.1 | -0.3 |
| F20K | Avaraart Lake | 11.04 | 345 | | Pn | 16 19 53.8 | +1.1 |
| E21K | Killik River | 12.17 | 351 | | Pn | 16 20 09.7 | +1.4 |
| BBB | Bella Bella | 12.73 | 101 | LR | LR | 16 24 01.3 | |
| | comp=E,474nm,19.6s,baz=324,slow=32 | | | | | | |
| INK | Inuvik | 13.65 | 24 | Pn | Pn | 16 20 30.0 | +1.7 |
| | comp=E,0.2nm,0.3s,baz=199,slow=15,SNR=3.1 | | | | | | |
| INK | | | | LR | LR | 16 26 08.1 | |
| | comp=E,366nm,18.5s,baz=189,slow=39 | | | | | | |
| | comp=E,1.8nm,0.3s | | | | | | |
| YKA | Yellowknife Ar | 18.09 | 57 | P | P | 16 21 26.5 | 0.0 |
| YKA | Yellowknife Ar | 18.09 | 57 | P | P | 16 21 25.9 | -0.7 |
| | comp=E,0.1nm,0.3s,baz=263,slow=11,SNR=8.5 | | | | | | |
| | comp=E,4.5nm,1.0s | | | | | | |
| HUMO | Hull Mountain | 21.56 | 119 | P | P | 16 22 05.0 | +0.5 |
| HUMO | | | | IAmb | IAmb | 16 22 06.9 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| PINE | Pine Mountain | 21.68 | 114 | P | P | 16 22 05.8 | -0.2 |
| PINE | | | | IAmb | IAmb | 16 22 20.9 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| J05D | Fort Rock, OR | 21.90 | 116 | P | P | 16 22 08.0 | -0.3 |
| J05D | | | | IAmb | IAmb | 16 22 20.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| NVAR | Mina Array Bea | 27.04 | 119 | P | P | 16 22 57.3 | -0.2 |
| | comp=Z,0.8nm,0.8s,baz=319,slow=4.9,SNR=5.0 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| MA2 | Magadan | 31.21 | 301 | LR | LR | 16 36 55.6 | |
| | comp=Z,220nm,19.0s,baz=81,slow=38 | | | | | | |
| PFO | Pinyon Flats O | 31.80 | 122 | LR | LR | 16 34 10.1 | |
| | comp=Z,224nm,20.1s,baz=330,slow=32 | | | | | | |
| ANMO | Albuquerque | 35.73 | 109 | LR | LR | 16 37 46.8 | |
| | comp=Z,96nm,20.3s,baz=76,slow=35 | | | | | | |
| TXAR | Lajitas Array | 41.60 | 112 | P | P | 16 25 02.4 | -0.7 |
| | comp=Z,0.2nm,0.3s,baz=316,slow=8.8,SNR=2.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| USRK | Ussuriysk Ar. | 49.30 | 291 | LR | LR | 16 48 59.2 | |
| | comp=Z,69nm,18.3s,baz=58,slow=39 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 49.33 | 240 | T | T | 17 19 18.0 | |
| | baz=31,slow=76,SNR=22 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 49.33 | 240 | T | T | 17 19 15.2 | |
| | baz=31,slow=76,SNR=16 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 49.34 | 240 | T | T | 17 19 16.8 | |
| | baz=31,slow=76,SNR=16 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 50.47 | 240 | T | T | 17 21 03.8 | |
| | baz=29,slow=76,SNR=36 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 50.48 | 240 | T | T | 17 21 02.9 | |
| | baz=29,slow=76,SNR=18 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 50.49 | 240 | T | T | 17 21 00.6 | |
| | baz=29,slow=76,SNR=28 | | | | | | |
| SONM | Songino Array | 58.73 | 310 | P | P | 16 27 15.0 | +2.2 |
| | comp=Z,0.8nm,0.6s,baz=46,slow=6.2,SNR=2.7 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 61.52 | 327 | P | P | 16 27 32.9 | +1.3 |
| | comp=Z,1.0nm,0.5s,baz=23,slow=6.4,SNR=4.0 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| FINES | FINESS Array B | 62.26 | 3 | P | P | 16 27 37.5 | +1.0 |
| | comp=Z,1.1nm,0.6s,baz=2.9,slow=7.6,SNR=7.8 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| HFS | Hagfors | 62.81 | 10 | LR | LR | 16 56 01.2 | |
| | comp=Z,169nm,20.1s,baz=272,slow=37 | | | | | | |
| KURBB | Kurchatov Arra | 66.28 | 329 | P | P | 16 28 04.5 | +1.5 |
| | comp=Z,0.3nm,0.4s,baz=32,slow=6.2,SNR=1.6 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 68.57 | 325 | P | P | 16 28 18.3 | +0.7 |
| | comp=Z,0.3nm,0.4s,baz=36,slow=8.5,SNR=6.0 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| AKASG | Malin Array Be | 73.09 | 1 | P | P | 16 28 45.8 | +0.9 |
| | comp=Z,0.3nm,0.3s,baz=0.8,slow=6.5,SNR=1.6 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| PPT | Papeete | 73.84 | 181 | LR | LR | 16 53 30.5 | |
| | comp=Z,151nm,19.7s,baz=312,slow=30 | | | | | | |
| SDV | Santo Domingo | 76.03 | 95 | LR | LR | 17 03 23.8 | |
| | comp=Z,72nm,21.7s,baz=72,slow=36 | | | | | | |
| ESDC | Sonseca Array | 79.58 | 27 | P | P | 16 29 22.4 | +0.3 |
| | comp=Z,0.7nm,0.7s,baz=342,slow=6.7,SNR=4.6 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| KBZ | Khabaz | 79.61 | 352 | LR | LR | 17 08 53.8 | |
| | comp=Z,86nm,21.1s,baz=318,slow=39 | | | | | | |
| GNI | Garni | 82.99 | 350 | LR | LR | 17 10 59.1 | |
| | comp=Z,79nm,22.0s,baz=351,slow=39 | | | | | | |
| BRTR | Keskin Array B | 84.06 | 358 | P | P | 16 29 46.7 | +0.9 |
| | comp=Z,0.7nm,0.9s,baz=316,slow=4.0,SNR=2.5 | | | | | | |
| BRTR | | | | LR | LR | 17 08 50.3 | |
| | comp=Z,90nm,21.1s,baz=300,slow=37 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| IDI | Anoyia | 88.35 | 5 | LR | LR | 17 15 18.1 | |
| | comp=Z,55nm,18.1s,baz=300,slow=39 | | | | | | |
| CTA | Charters Tower | 93.74 | 239 | LR | LR | 17 06 33.5 | |
| | comp=Z,6.2nm,20.5s,baz=90,slow=32 | | | | | | |
| LPAZ | La Paz | 98.31 | 107 | LR | LR | 17 19 14.5 | |
| | comp=Z,109nm,20.9s,baz=56,slow=38 | | | | | | |

*IDC **01** 16:26:18.2±0.8, 2°.74S×139°.48E, h0km, mb3.9/9, mbtmp3.9/10, ML4.5/1, Error ellipse: s-maj=49.9km s-min=17.5km az=84.0*
*NEIC **01** 16:26:26.7±2.1, 2°.87S±0°.10×139°.21E±0°.08, h56km±8km, mb4.2/19, Error ellipse: s-maj=16.2km s-min=8.3km az=217.0*
*DJA **01** 16:26:27.5±1.3, 3°S±5°×13°9E±°, h25km±12km, M4.6/7, mb4.6/5, MLv4.5/7*
**ISC 01 16:26:25.9**±0.6, **2°.98S**±0°.07×**139°.17E**±0°.06, **h46**km, **n44**, σ**2s10**/48, **mb4.1**/15, **Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GENI | Genyem | 1.07 | 69 | P | Pn | 16 26 47.1 | +2.7 |
| GENI | | | | S | Sn | 16 27 02.0 | +3.8 |
| JAY | Jayapura | 1.60 | 73 | P | Pn | 16 26 53.2 | +1.4 |
| JAY | | | | S | Sn | 16 27 12.3 | +1.0 |
| KMPI | Kaimana, Papua | 5.50 | 263 | P | Pn | 16 27 48.9 | +3.6 |
| MMPI | Merauke | 5.58 | 168 | P | Pn | 16 27 49.2 | +2.8 |
| | 271nm,1.3s | | | | | | |
| FAKI | Fak Fak | 6.91 | 270 | Pn | Pn | 16 28 06.4 | +1.7 |
| FAKI | Fak Fak | 6.91 | 270 | P | Pn | 16 28 07.0 | +2.3 |
| | 45nm,2.0s,0.3nm | | | | | | |
| COEN | Coen | 11.60 | 160 | Pn | Pn | 16 29 11.9 | +2.9 |
| KNRA | Kununurra | 16.26 | 218 | Pn | P | 16 30 12.5 | -1.1 |
| KNRA | | | | IAmb | IAmb | 16 30 16.5 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| SOEI | Soe | 16.26 | 245 | | P | 16 30 16.1 | +2.3 |
| SOEI | | | | IAmb | IAmb | 16 30 27.9 | |
| | comp=Z,36nm,0.9s | | | | | | |
| SOEI | Soe | 16.26 | 245 | P | P | 16 30 17.8 | +4.0 |
| WB0 | Warramunga Arr | 17.33 | 195 | Pn | Pn | 16 30 24.6 | +0.1 |
| WB0 | | | | IAmb | IAmb | 16 30 41.8 | |
| | comp=Z,13nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 17.47 | 195 | Pn | Pn | 16 30 26.2 | -0.1 |
| WRAB | Tennant Creek | 17.50 | 195 | | Pn | 16 30 26.7 | +0.1 |
| WRAB | | | | IAmb | IAmb | 16 30 30.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| WB2 | Warramunga Arr | 17.50 | 195 | | P | 16 30 27.5 | +0.1 |
| WB2 | | | | IAmb | IAmb | 16 30 31.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 17.51 | 195 | Pn | Pn | 16 30 25.9 | -0.9 |
| WRA | Warramunga Arr | 17.51 | 195 | P | Pn | 16 30 27.1 | +0.3 |
| | comp=Z,1.7nm,0.3s,baz=17,slow=12,SNR=47 | | | | | | |
| WRA | | | | S | Sn | 16 33 34.1 | -6.8 |
| | comp=Z,0.4nm,0.4s,baz=2.2,slow=24,SNR=2.8 | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | |
| FITZ | Fitzroy Crossi | 20.04 | 220 | P | P | 16 30 55.8 | +0.5 |
| AS31 | Alice Springs | 21.19 | 193 | P | P | 16 31 09.1 | +1.5 |
| AS31 | | | | IAmb | IAmb | 16 31 41.1 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| ASAR | Alice Springs | 21.19 | 193 | P | P | 16 31 08.3 | +0.6 |
| ASAR | Alice Springs | 21.19 | 193 | P | P | 16 31 09.0 | +1.4 |
| | comp=Z,2.8nm,0.6s,baz=18,slow=10,SNR=128 | | | | | | |
| ASAR | | | | S | S | 16 34 58.1 | -2.8 |
| | comp=Z,0.9nm,0.9s,baz=20,slow=26,SNR=1.9 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| STKA | Stephens Creek | 28.84 | 176 | P | P | 16 32 18.4 | -1.5 |
| KSRS | Korea Array | 41.56 | 346 | P | P | 16 34 06.8 | -2.3 |
| | comp=Z,0.5nm,0.6s,baz=154,slow=8.7,SNR=5.1 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| USRK | Ussuriysk Ar. | 47.41 | 353 | P | P | 16 34 54.7 | -1.0 |
| USRK | Ussuriysk Ar. | 47.41 | 353 | P | P | 16 34 54.1 | -1.6 |
| | comp=Z,1.5nm,0.7s,baz=186,slow=7.1,SNR=5.8 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 70.28 | 322 | P | P | 16 37 33.8 | -0.8 |
| MKAR | Makanchi Array | 70.28 | 322 | P | P | 16 37 33.1 | -1.4 |
| | comp=Z,1.2nm,0.7s,baz=100,slow=8.3,SNR=8.2 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| MAKZ | Makanchi | 70.48 | 322 | P | P | 16 37 35.0 | -0.8 |
| MAKZ | | | | IAmb | IAmb | 16 37 35.2 | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 72.40 | 330 | P | P | 16 37 45.6 | -1.5 |
| ZALV | Zalesovo Beam | 72.40 | 330 | P | P | 16 37 44.6 | -2.5 |
| | comp=Z,0.7nm,0.5s,baz=110,slow=8.1,SNR=2.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 74.21 | 325 | P | P | 16 37 56.7 | -1.2 |
| | comp=Z,0.3nm,0.5s,baz=109,slow=5.9,SNR=3.9 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| VNDA | Vanda | 75.47 | 175 | P | P | 16 38 06.1 | +1.4 |
| VNDA | Vanda | 75.47 | 175 | P | P | 16 38 05.8 | +1.1 |
| | comp=Z,0.6nm,0.5s,baz=321,slow=6.3,SNR=10 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| M20K | Styx River | 82.29 | 26 | P | P | 16 38 42.5 | 0.0 |
| CNPM | China Poot | 82.35 | 29 | P | P | 16 38 39.6 | -3.1 |
| D19K | Kuna River | 83.06 | 19 | P | P | 16 38 45.0 | -1.3 |
| D19K | | | | IAmb | IAmb | 16 39 11.9 | |
| | comp=Z,8.7nm,1.5s | | | | | | |
| IMAR | Indian Mountai | 83.56 | 22 | P | P | 16 38 48.4 | -0.4 |
| H21K | Melozitna Rive | 83.80 | 23 | P | P | 16 38 49.4 | -0.7 |
| H21K | | | | IAmb | IAmb | 16 39 15.5 | |
| | comp=Z,3.6nm,1.3s | | | | | | |
| E22K | Anaktuvuk Pass | 85.06 | 21 | P | P | 16 38 55.6 | -0.8 |
| E22K | | | | IAmb | IAmb | 16 39 30.5 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| G23K | Bananza Creek | 85.23 | 22 | P | P | 16 38 55.8 | -1.5 |
| G23K | | | | IAmb | IAmb | 16 39 26.8 | |
| | comp=Z,2.1nm,1.4s | | | | | | |
| ILAR | Eielson Array | 85.89 | 24 | P | P | 16 38 58.0 | -2.5 |
| | comp=Z,0.8nm,0.7s,baz=263,slow=4.8,SNR=6.4 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 86.97 | 180 | P | P | 16 39 07.1 | +1.0 |
| | comp=Z,0.6nm,0.4s,baz=63,slow=2.3,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| AKASG | Malin Array Be | 104.86 | 322 | PKiKP | PKiKP | 16 44 41.6 | -1.2 |
| | comp=Z,0.4nm,0.3s,baz=69,slow=5.1,SNR=5.0 | | | | | | |
| TORD | Torodi Ar. Bea | 136.77 | 286 | PKP | PKPdf | 16 45 44.8 | +0.4 |
| | comp=Z,0.9nm,1.2s,baz=89,slow=2.2,SNR=2.6 | | | | | | |
| LPAZ | La Paz | 146.91 | 126 | PKPbc | PKPdf | 16 46 01.7 | -1.5 |
| | comp=Z,7.2nm,0.4s,baz=253,slow=6.7,SNR=36 | | | | | | |

*TEH **01** 16:34:17.0, 27°.81N×57°.57E, h18km±19km, ML2.8*
*OMAN **01** 16:34:23.7±0.8, 27°.36N×57°.86E, h21km±44km, ml2.2/6, Error ellipse: s-maj=61.7km s-min=4.7km az=24.0*
**ISC 01 16:34:17.4**±1.0, **27°.88N**±0°.07×**57°.60E**±0°.09, **h26**km±9km, **n16**, σ**2s19**/26, **Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KHNJ | Kahnooj | 0.12 | 52 | Pg | Pb | 16 34 21.9 | -0.4 |
| KHNJ | | | | Sg | Sb | 16 34 25.8 | +0.2 |
| IBND | Bandar-abas | 1.03 | 246 | Pg | Pn | 16 34 36.1 | -0.2 |
| GENO | Geno | 1.35 | 250 | Pg | Pn | 16 34 41.1 | +0.3 |
| KBAM | BAM | 1.46 | 31 | Pg | Pb | 16 34 44.5 | +0.6 |
| NGRK | Negar Kerman | 1.92 | 337 | Pn | Pb | 16 34 51.1 | -0.9 |
| CHMN | Cheshme madani | 1.98 | 358 | Pn | Pb | 16 34 52.7 | -0.2 |
| JASK | Jask - Hormozg | 2.02 | 173 | Pn | Pn | 16 34 50.8 | +1.0 |
| SHME | Shamm | 2.24 | 216 | P | Pn | 16 34 55.2 | +2.4 |
| | SNR=9.2 | | | | | | |
| SHME | | | | S | Sn | 16 35 18.5 | -1.1 |
| BANOM | Banah | 2.27 | 211 | P | Pn | 16 34 55.5 | +2.3 |
| BANOM | | | | S | Sn | 16 35 22.8 | +2.5 |
| MASF | Masafi | 2.81 | 208 | P | Pn | 16 35 02.6 | +1.9 |
| MASF | | | | S | Sn | 16 35 32.8 | -1.0 |
| MDH | Madha | 2.82 | 205 | P | Pn | 16 35 03.9 | +3.1 |
| MDH | | | | S | Sn | 16 35 30.0 | -4.0 |
| UOSS | Minazif | 3.18 | 204 | P | Pn | 16 35 07.9 | +2.1 |
| UOSS | | | | S | Sn | 16 35 38.9 | -3.9 |
| HATD | Hatta, Dubai | 3.31 | 204 | P | Pn | 16 35 10.3 | +2.7 |
| HATD | | | | S | Sn | 16 35 45.5 | -0.6 |
| ASHO | Ashiyiah | 3.47 | 204 | P | Pn | 16 35 11.6 | +1.8 |
| ASHO | | | | S | Sn | 16 35 51.5 | +1.5 |
| HOQ | Hoqain | 4.28 | 184 | P | Pn | 16 35 19.9 | -1.1 |
| HOQ | | | | S | Sn | 16 36 05.7 | -4.5 |
| ARQ | Araqi | 4.62 | 192 | P | Pn | 16 35 26.8 | +1.1 |
| ARQ | | | | S | Sn | 16 36 18.6 | +0.1 |

**AUST 01 16:47:17.9**±0.3, **32°.36S**×**150°.76E**, **h10**km, **Mjma2.6**/6, **ML2.1**/6, **MLv2.3**/6, **Error ellipse: s-maj=0.0km s-min=0.0km az=0.0, New South Wales**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CATI | Cattai, Sydney | 1.20 | 174 | P | Pn | 16 47 39.2 | -1.6 |
| | SNR=2.2 | | | | | | |
| CATI | | | | S | Sb | 16 47 56.2 | -0.3 |
| SYDH | Sydney Hard Ro | 1.40 | 181 | P | Pn | 16 47 42.9 | -0.7 |
| | SNR=1.8 | | | | | | |
| SYDH | | | | S | Sb | 16 48 02.4 | +0.3 |
| SYDH | Sydney Hard Ro | 1.40 | 181 | P | Pn | 16 47 42.9 | -0.7 |
| | SNR=1.8 | | | | | | |
| OKDL | Oakdale | 1.73 | 188 | P | Pn | 16 47 47.9 | -0.1 |
| | SNR=1.6 | | | | | | |
| OKDL | | | | S | Sb | 16 48 11.3 | -0.2 |
| ARMA | Armidale | 2.07 | 21 | P | Pn | 16 47 53.1 | +0.3 |
| | SNR=1.1 | | | | | | |
| ARMA | | | | S | Sn | 16 48 19.5 | +0.8 |
| YNG | Young | 2.77 | 225 | S | Sb | 16 48 39.9 | -1.6 |

**AUST 01 16:49:21.8**±0.4, **32°.34S**×**150°.77E**, **h10**km, **Mjma2.6**/4, **ML2.0**/4, **MLv2.2**/4, **Error ellipse: s-maj=0.0km s-min=0.0km az=0.0, New South Wales**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CATI | Cattai, Sydney | 1.22 | 174 | P | Pg | 16 49 46.0 | +0.9 |
| | SNR=2.0 | | | | | | |
| CATI | | | | S | Sb | 16 49 59.3 | -1.3 |
| SYDH | Sydney Hard Ro | 1.42 | 181 | S | Sb | 16 50 06.5 | +0.1 |
| OKDL | Oakdale | 1.74 | 188 | P | Pn | 16 49 51.4 | -0.7 |
| | SNR=1.8 | | | | | | |
| OKDL | | | | S | Sn | 16 50 15.0 | +0.6 |
| ARMA | Armidale | 2.06 | 21 | P | Pn | 16 49 57.1 | +0.6 |
| | 0.1nm,SNR=1.9 | | | | | | |
| ARMA | | | | S | Sn | 16 50 22.4 | +0.2 |

**KRSC 01 16:57:32.8**±1.7, **52°.61N**×**154°.75E**, **h511**km±16km, **Ml3.8**, **Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAK | Asacha | 1.94 | 96 | eP | P | 16 58 40.1 | +1.4 |
| MTVR | Mutnovka | 2.10 | 92 | eP | P | 16 58 41.2 | +1.7 |
| KDTR | Khodutka, Kamc | 2.20 | 110 | eP | P | 16 58 40.0 | +0.1 |
| KDTR | | | | eS | S | 16 59 33.5 | -1.0 |
| GNL | Ganaly | 2.21 | 59 | eP | P | 16 58 40.3 | +0.4 |
| GNL | | | | eS | S | 16 59 34.1 | -0.7 |
| KOK | Koryaka | 2.45 | 72 | eP | P | 16 58 42.8 | +1.6 |
| DALK | Dalny | 2.46 | 79 | eP | P | 16 58 41.9 | +0.7 |
| KRX | Arik | 2.47 | 71 | eP | P | 16 58 42.7 | +1.3 |
| AVH | Avacha | 2.50 | 73 | eP | P | 16 58 43.0 | +1.5 |
| SMAR | Somma | 2.54 | 73 | eP | P | 16 58 43.4 | +1.5 |
| UGLR | Uglovaya | 2.54 | 75 | eP | P | 16 58 43.6 | +1.8 |
| SPN | Mys Shipunski | 3.23 | 79 | eP | P | 16 58 46.9 | +0.8 |
| ESO | Esso | 4.05 | 33 | eP | P | 16 58 52.8 | +0.6 |
| TUMR | Tumrok | 4.16 | 48 | eP | P | 16 58 55.9 | +2.7 |
| KBTR | Krutoberegovo | 5.93 | 49 | eP | P | 16 59 09.7 | +1.0 |

**IDC 01 17:00:04.8**±3.6, **47°.47N**×**93°.28W**, **h0**km, **mbtmp3.0**/2, **ML0.9**/1, **Error ellipse: s-maj=43.0km s-min=17.0km az=89.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULM | Lac du Bonnet | 3.27 | 329 | Pn | Pn | 17 00 56.2 | -1.1 |
| | 0.2nm,0.3s,baz=146,slow=14,SNR=2.0 | | | | | | |
| ULM | | | | Pg | Pb | 17 01 03.2 | -0.6 |
| | 0.9nm,0.3s,baz=141,slow=13,SNR=7.6 | | | | | | |
| ULM | | | | Lg | Lg | 17 01 45.5 | |
| | 3.1nm,0.3s,baz=71,slow=21,SNR=17 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| I10CA | LAC DU BONNET | 3.29 | 327 | I | I | 17 20 20.0 | |
| | 0.2nm,1.0s,baz=146,slow=330,SNR=7.9 | | | | | | |
| PDAR | Pinedale Array | 12.42 | 254 | Pn | Pn | 17 03 00.3 | -2.6 |
| | 0.4nm,0.5s,baz=78,slow=13,SNR=4.0 | | | | | | |
| PDAR | | | | Lg | Lg | 17 06 25.3 | |
| | 0.1nm,0.3s,baz=66,slow=26,SNR=2.4 | | | | | | |
| I56US | NEWPORT INFRAS | 16.02 | 282 | I | I | 18 40 40.0 | |
| | baz=85,slow=315,SNR=6.2 | | | | | | |

*KRNET **01** 17:10:11.1±0.1, 40°.72N×77°.71E, h14km, mb2.4*
*NNC **01** 17:10:11.7±1.5, 40°.74N×77°.70E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=9.8km s-min=6.8km az=173.0*
*SOME **01** 17:10:11.1, 40°.75N×77°.77E, h5km*
**ISC 01 17:10:11.4**±2.5, **40°.76N**±0°.10×**77°.66E**±0°.03, **h2**km±19km, **n47**, σ**1s44**/72, **13C-7D**, **Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TARG | Taragay, Kyrgy | 0.98 | 6 | ⇑iP | Pb | 17 10 30.2 | -1.2 |
| | baz=4.0 | | | | | | |
| TARG | | | | ⇑iS | Sg | 17 10 44.4 | +1.5 |
| | baz=4.0 | | | | | | |
| KDJ | Kajisay | 1.42 | 345 | ⇑iP | Pb | 17 10 38.4 | -0.4 |
| | baz=45 | | | | | | |
| KDJ | | | | ⇑iS | Sg | 17 10 58.3 | +1.2 |
| | baz=45 | | | | | | |
| NRN | Naryn | 1.43 | 299 | ⇑eP | Pb | 17 10 39.0 | 0.0 |
| | baz=99 | | | | | | |
| NRN | | | | ⇑iS | Sg | 17 10 59.3 | +2.0 |
| | baz=99 | | | | | | |
| PRZ | Przheval'sk | 1.81 | 18 | ⇑eP | Pg | 17 10 45.8 | -0.4 |
| | baz=16 | | | | | | |
| PRZ | | | | ⇑eS | Sg | 17 11 10.2 | +0.5 |
| | baz=16 | | | | | | |
| ULHL | Ulahol | 1.83 | 325 | ⇓eP | Pb | 17 10 46.0 | +0.2 |
| | baz=25 | | | | | | |
| ULHL | | | | ⇓iS | Sg | 17 11 11.3 | +1.0 |
| | baz=25 | | | | | | |
| BOOM | Boomskoye usch | 2.16 | 324 | ⇑eP | Pb | 17 10 51.1 | -0.3 |
| | baz=24 | | | | | | |
| BOOM | | | | ⇑iS | Sb | 17 11 20.0 | +1.3 |
| | baz=24 | | | | | | |
| TNSS | Tian-Shan | 2.34 | 347 | eP | Pg | 17 10 56.2 | -0.2 |
| | 3.7nm,0.3s | | | | | | |
| TNSS | | | | eS | Sg | 17 11 28.2 | +1.6 |
| | 9.7nm,0.6s | | | | | | |
| TNSS | Tian-Shan | 2.34 | 347 | Pg | Pg | 17 10 56.2 | -0.2 |
| | 3.7nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 17 11 27.5 | |
| | 9.7nm,0.6s | | | | | | |
| SATY | Saty | 2.37 | 13 | eP | Pg | 17 10 56.5 | -0.3 |
| | 3.9nm,0.3s | | | | | | |
| SATY | | | | eS | Sg | 17 11 28.6 | +1.1 |
| | 11nm,0.1s | | | | | | |
| SATY | Saty | 2.37 | 13 | Pg | Pg | 17 10 56.6 | -0.3 |
| | 3.9nm,0.3s | | | | | | |
| SATY | | | | Lg | Lg | 17 11 28.2 | |
| | 17nm,0.4s | | | | | | |
| IZV | Izvestkoviy | 2.41 | 341 | eP | Pg | 17 10 56.8 | -0.8 |
| | 0.1nm,0.0s | | | | | | |
| IZV | | | | eS | Sg | 17 11 29.0 | +0.1 |
| | 40nm,0.4s | | | | | | |
| IZV | Izvestkoviy | 2.41 | 341 | Pg | Pg | 17 10 56.8 | -0.8 |
| | 0.1nm,0.0s | | | | | | |
| IZV | | | | Lg | Lg | 17 11 29.0 | |
| | 40nm,0.4s | | | | | | |
| ZHN | Zhinishke | 2.48 | 13 | eP | Pg | 17 10 58.6 | -0.3 |
| | 3.5nm,0.1s | | | | | | |
| ZHN | | | | eS | Sg | 17 11 32.1 | +1.0 |
| | 42nm,0.3s | | | | | | |
| ZHN | Zhinishke | 2.48 | 13 | Pg | Pg | 17 10 58.6 | -0.3 |
| | 3.5nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 17 11 31.2 | |
| | 42nm,0.3s | | | | | | |
| KOTS | Kotyrbulak | 2.51 | 351 | eP | Pg | 17 10 59.0 | -0.5 |
| | 4.4nm,0.3s | | | | | | |
| KOTS | | | | eS | Sg | 17 11 33.1 | +1.0 |
| | 26nm,0.2s | | | | | | |
| KOTS | Kotyrbulak | 2.51 | 351 | Pg | Pg | 17 10 59.0 | -0.5 |
| | 4.4nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 17 11 33.1 | |
| | 26nm,0.2s | | | | | | |
| KNDC | Almaty | 2.51 | 348 | ⇑Pg | Pb | 17 10 55.9 | -1.4 |
| | 9.9nm,0.4s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 17 11 32.8 | |
| | 35nm,0.6s | | | | | | |
| MTBS | Maitube | 2.54 | 339 | eP | Pg | 17 11 00.1 | -0.1 |
| | 4.8nm,0.2s | | | | | | |
| MTBS | | | | eS | Sg | 17 11 34.6 | +1.4 |
| | 17nm,0.6s | | | | | | |
| MTBS | Maitube | 2.54 | 339 | Pg | Pg | 17 11 00.1 | -0.1 |
| | 4.8nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 17 11 34.6 | |
| | 17nm,0.6s | | | | | | |
| UZB | Uzynbulak | 2.60 | 23 | eP | Pb | 17 10 59.3 | +0.5 |
| | 2.7nm,0.5s | | | | | | |
| UZB | | | | eS | Sg | 17 11 33.5 | -1.4 |
| | 10nm,0.4s | | | | | | |
| UZB | Uzynbulak | 2.60 | 23 | Pg | Pb | 17 10 59.3 | +0.5 |
| | 2.7nm,0.5s | | | | | | |
| UZB | | | | Lg | Lg | 17 11 33.5 | |
| | 10nm,0.4s | | | | | | |
| KST | Kastek | 2.61 | 332 | eP | Pg | 17 11 01.1 | -0.4 |
| | 3.5nm,0.2s | | | | | | |
| KST | | | | eS | Sg | 17 11 36.4 | +1.0 |
| | 14nm,0.4s | | | | | | |
| KST | Kastek | 2.61 | 332 | Pg | Pg | 17 11 00.5 | -1.0 |
| | 3.5nm,0.2s | | | | | | |
| KST | | | | Lg | Lg | 17 11 36.4 | |
| | 14nm,0.4s | | | | | | |
| TKM2 | Tokmak 2 | 2.66 | 325 | ⇓Pg | Pb | 17 11 00.9 | +1.0 |
| | 2.2nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 17 11 39.4 | |
| | 4.2nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 2.66 | 325 | ⇓iP | Pb | 17 10 58.0 | -1.9 |
| | baz=25 | | | | | | |
| TKM2 | | | | ⇓iS | Sb | 17 11 31.8 | -1.2 |
| | baz=25 | | | | | | |
| SHLS | Shalkode | 2.75 | 29 | eP | Pg | 17 11 05.5 | +1.4 |
| | 12nm,0.3s | | | | | | |
| SHLS | | | | eS | Sg | 17 11 44.1 | +4.3 |
| | 26nm,0.4s | | | | | | |
| SHLS | Shalkode | 2.75 | 29 | Pg | Pg | 17 11 05.5 | +1.4 |
| | 12nm,0.3s | | | | | | |
| SHLS | | | | Lg | Lg | 17 11 44.1 | |
| | 26nm,0.4s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURS | Kuram | 2.76 | 8 | eP | Pg | 17 11 02.7 | -1.6 |
| | 3.6nm,0.6s | | | | | | |
| KURS | | | | eS | Sg | 17 11 39.1 | -0.9 |
| | 8.3nm,0.5s | | | | | | |
| KURS | Kuram | 2.76 | 8 | Pg | Pg | 17 11 02.7 | -1.6 |
| | 3.6nm,0.6s | | | | | | |
| KURS | | | | Lg | Lg | 17 11 39.1 | |
| | 8.3nm,0.5s | | | | | | |
| KPKS | Kokpek | 2.81 | 15 | eP | Pb | 17 11 03.5 | +1.1 |
| | 8.2nm,0.3s | | | | | | |
| KPKS | | | | eS | Sg | 17 11 40.8 | -1.0 |
| | 25nm,0.4s | | | | | | |
| KPKS | Kokpek | 2.81 | 15 | Pg | Pg | 17 11 03.8 | -1.5 |
| | 8.2nm,0.3s | | | | | | |
| KPKS | | | | Lg | Lg | 17 11 39.3 | |
| | 25nm,0.4s | | | | | | |
| DGS | Degeres | 2.86 | 331 | eP | Pg | 17 11 05.5 | -0.6 |
| | 8.9nm,0.4s | | | | | | |
| DGS | | | | eS | Sg | 17 11 44.5 | +1.3 |
| | 7.0nm,0.4s | | | | | | |
| DGS | Degeres | 2.86 | 331 | Pg | Pg | 17 11 05.5 | -0.6 |
| | 8.9nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 17 11 44.5 | |
| | 8.2nm,1.0s | | | | | | |
| AAK | Ala-Archa | 3.03 | 309 | ⇑Pg | Pb | 17 11 03.9 | -2.2 |
| | 1.9nm,0.4s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 17 11 48.8 | |
| | 14nm,0.8s | | | | | | |
| KTBS | Karatobe | 3.04 | 346 | eP | Pg | 17 11 08.4 | -1.4 |
| | 7.0nm,0.2s | | | | | | |
| KTBS | | | | eS | Sg | 17 11 48.7 | -0.4 |
| | 34nm,0.7s | | | | | | |
| KTBS | Karatobe | 3.04 | 346 | Pg | Pg | 17 11 08.3 | -1.4 |
| | 7.0nm,0.2s | | | | | | |
| KTBS | | | | Lg | Lg | 17 11 48.7 | |
| | 34nm,0.7s | | | | | | |
| CHKK | Chushkaly | 3.14 | 351 | eP | Pb | 17 11 09.3 | +1.3 |
| | 2.5nm,0.4s | | | | | | |
| CHKK | | | | eS | Sg | 17 11 50.4 | -1.8 |
| | 14nm,0.2s | | | | | | |
| CHKK | Chushkaly | 3.14 | 351 | Pg | Pb | 17 11 09.3 | +1.3 |
| | 2.5nm,0.4s | | | | | | |
| CHKK | | | | Lg | Lg | 17 11 50.4 | |
| | 14nm,0.2s | | | | | | |
| KRBS | Karabastau | 3.29 | 334 | eP | Pb | 17 11 12.6 | +2.1 |
| | 4.1nm,0.4s | | | | | | |
| KRBS | | | | eS | Sg | 17 11 56.2 | -0.9 |
| | 2.9nm,0.7s | | | | | | |
| KRBS | Karabastau | 3.29 | 334 | Pg | Pb | 17 11 12.6 | +2.1 |
| | 4.1nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 17 11 56.2 | |
| | 2.9nm,0.7s | | | | | | |
| KTMS | Ketmen | 3.35 | 36 | eP | Pb | 17 11 12.1 | +0.4 |
| | 1.7nm,0.3s | | | | | | |
| KTMS | | | | eS | Sg | 17 11 55.5 | -3.6 |
| | 6.4nm,0.5s | | | | | | |
| KTMS | Ketmen | 3.35 | 36 | Pg | Pb | 17 11 12.1 | +0.4 |
| | 1.7nm,0.3s | | | | | | |
| KTMS | | | | Lg | Lg | 17 11 56.6 | |
| | 6.4nm,0.5s | | | | | | |
| BLB | Baldybastay | 3.39 | 10 | Pg | Pb | 17 11 13.6 | +1.3 |
| | 7.2nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 17 11 58.8 | |
| | 17nm,0.4s | | | | | | |
| ARXS | Arharly | 3.46 | 2 | eP | Pb | 17 11 15.2 | +1.8 |
| | 1.2nm,0.2s | | | | | | |
| ARXS | | | | eS | Sg | 17 12 00.9 | -1.6 |
| | 25nm,0.5s | | | | | | |
| ARXS | Arharly | 3.46 | 2 | Pg | Pb | 17 11 15.2 | +1.8 |
| | 1.2nm,0.2s | | | | | | |
| ARXS | | | | Lg | Lg | 17 12 00.5 | |
| | 25nm,0.5s | | | | | | |
| DJR | Jarkent | 3.91 | 23 | eP | Pb | 17 11 22.2 | +1.1 |
| | 1.1nm,0.4s | | | | | | |
| DJR | | | | eS | Sg | 17 12 12.5 | -4.3 |
| | 3.2nm,0.3s | | | | | | |
| DJR | Jarkent | 3.91 | 23 | Pg | Pb | 17 11 22.2 | +1.1 |
| | 1.1nm,0.4s | | | | | | |
| DJR | | | | Lg | Lg | 17 12 12.5 | |
| | 3.1nm,0.4s | | | | | | |

*STR **01** 17:24:17.9±0.5,43°N±4°×°±°,h2km,MLv2.9/12,Error ellipse: s-maj=0.0km s-min=0.0km az=7.3,preliminary*
*LDG **01** 17:24:18.4±0.1,43°.05N×0°.49W,h2km,Md3.2/2,Ml3.3/32, Error ellipse: s-maj=1.8km s-min=1.8km az=131.0*
*MDD **01** 17:24:19.3±0.2,43°.01N×0°.52W,h10km,mb_Lg3.0/37, Error ellipse: s-maj=2.1km s-min=1.1km az=8.0*
*INMG **01** 17:24:20.6±1.9,43°.00N×0°.52W,h20km±6km,ML2.7,Error ellipse: s-maj=3.9km s-min=3.8km az=60.0*
**ISC 01 17:24:16.3**±0.9,**43°.09N**±0°.02×**0°.54W**±0°.02,**h10**km±7km, **n85**,σ**1§82**/162,**Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ETSF | Etsaut | 0.19 | 184 | ePg | Pg | 17 24 19.4 | -1.0 |
| ETSF | | | | eSg | Sg | 17 24 23.4 | +0.1 |
| | 372nm,0.3s | | | | | | |
| CANF | Canfranc | 0.33 | 177 | Pg | Pg | 17 24 21.8 | -1.1 |
| PYLO | Lourdes | 0.36 | 88 | Pg | Pg | 17 24 23.8 | +0.3 |
| PYLO | | | | Sg | Sg | 17 24 30.0 | +1.7 |
| VIEF | Viey | 0.46 | 116 | Pg | Pg | 17 24 25.1 | -0.3 |
| VIEF | | | | Sg | Sg | 17 24 31.0 | -0.5 |
| SJPF | Ste Jean | 0.50 | 273 | ePg | Pg | 17 24 26.9 | +0.8 |
| SJPF | | | | eSg | Sb | 17 24 34.5 | -0.1 |
| | 312nm,0.4s | | | | | | |
| EORO | Oroz-Betelu | 0.60 | 251 | Pg | Pg | 17 24 28.3 | +0.4 |
| EORO | | | | Sg | Sb | 17 24 37.7 | +0.3 |
| EORO | | | | i Vmb_Lg | | 17 24 42.0 | |
| EPF | Esparros | 0.65 | 95 | ePg | Pg | 17 24 29.2 | +0.3 |
| EPF | | | | eSg | Sb | 17 24 39.2 | +0.4 |
| | 163nm,0.4s | | | | | | |
| ECHI | Chisagues Biel | 0.69 | 128 | Pg | Pg | 17 24 29.1 | -0.5 |
| ECHI | | | | Sg | Sg | 17 24 37.8 | -0.8 |
| ECHI | | | | i Vmb_Lg | | 17 24 40.3 | |
| ECHI | Chisagues Biel | 0.69 | 128 | Pg | Pg | 17 24 29.0 | -0.6 |
| TERF | Tercis-les-Bai | 0.72 | 325 | Pg | Pn | 17 24 33.1 | +0.6 |
| TERF | | | | Sg | Sn | 17 24 46.1 | +2.5 |
| EARA | Aranguren | 0.83 | 248 | Pg | Pb | 17 24 33.7 | +0.9 |
| EARA | | | | Sg | Sb | 17 24 46.3 | +2.4 |
| EARA | | | | i Vmb_Lg | | 17 24 49.0 | |
| EARA | Aranguren | 0.83 | 248 | Pg | Pb | 17 24 33.3 | +0.6 |
| EARA | Aranguren | 0.83 | 248 | Sg | Sb | 17 24 45.9 | +1.9 |
| MLS | Moulis | 1.21 | 96 | Pg | Pg | 17 24 38.7 | -0.7 |
| SALF | Salau | 1.31 | 104 | Pg | Pn | 17 24 41.0 | +0.3 |
| ESAC | San Caprasio | 1.37 | 178 | Pn | Pn | 17 24 38.5 | -3.0 |
| ESAC | | | | Sn | Sg | 17 24 58.1 | -2.2 |
| ESAC | | | | i Vmb_Lg | | 17 25 06.8 | |
| MONQ | Montcuq | 1.79 | 44 | Pg | Pg | 17 24 51.8 | +1.1 |
| MONQ | | | | Sg | Sg | 17 25 17.1 | +3.2 |
| EMIR | Miracle | 1.93 | 127 | Pn | Pn | 17 24 50.8 | +1.7 |
| EMIR | | | | Pg | Pg | 17 24 53.6 | +0.3 |
| EMIR | | | | Sg | Sg | 17 25 19.0 | +0.7 |
| EMIR | | | | i Vmb_Lg | | 17 25 27.8 | |
| CARF | Carcanieres | 1.98 | 100 | Pn | Pb | 17 24 54.1 | +1.6 |
| CARF | | | | Sg | Sg | 17 25 23.3 | +3.3 |
| VALC | Valcebollere | 2.03 | 110 | Pg | Pg | 17 24 55.9 | +0.6 |
| VALC | | | | Sg | Sg | 17 25 23.4 | +1.8 |
| MTLF | Montolieu | 2.03 | 82 | ePg | Pb | 17 24 54.6 | +1.3 |
| MTLF | | | | eSg | Sg | 17 25 21.0 | -0.6 |
| | 59nm,0.5s | | | | | | |
| LFF | La Frestale | 2.07 | 26 | ePg | Pg | 17 24 57.0 | +1.1 |
| LFF | | | | eSg | Sg | 17 25 24.3 | +1.6 |
| | 132nm,0.5s | | | | | | |
| EPOB | Poblet | 2.11 | 145 | Pn | Pn | 17 24 54.3 | +2.6 |
| EPOB | | | | Pg | Pb | 17 24 55.7 | +1.0 |
| EPOB | | | | Sn | Sn | 17 25 19.0 | +1.0 |
| EPOB | | | | Sg | Sg | 17 25 24.7 | +0.6 |
| EPOB | | | | i Vmb_Lg | | 17 25 32.9 | |
| ELAN | Lanestosa | 2.12 | 275 | Pn | Pb | 17 24 54.8 | -0.1 |
| ELAN | | | | Sn | Sb | 17 25 21.4 | +0.2 |
| ELAN | | | | Sg | Sg | 17 25 27.0 | +2.5 |
| ERTA | Horta de San J | 2.23 | 163 | Pg | Pb | 17 24 58.2 | +1.5 |
| ERTA | | | | Sg | Sg | 17 25 27.7 | -0.2 |
| ERTA | | | | i Vmb_Lg | | 17 25 40.0 | |
| FILF | Fillols | 2.34 | 102 | Pg | Pb | 17 24 59.3 | +0.7 |
| FILF | | | | Sg | Sg | 17 25 30.8 | -0.8 |
| ETOR | Torete | 2.54 | 207 | Pn | Pn | 17 24 59.2 | +1.7 |
| ETOR | | | | Sn | Sn | 17 25 28.8 | +0.3 |
| EJON | La Jonquera | 2.60 | 103 | Pn | Pb | 17 25 03.2 | +0.1 |
| EJON | | | | Sg | Sg | 17 25 38.7 | -1.3 |
| EJON | | | | i Vmb_Lg | | 17 25 43.0 | |
| CAF | Calviac | 2.63 | 45 | eP | Pb | 17 25 02.7 | -0.7 |
| CAF | Calviac | 2.63 | 45 | ePg | Pg | 17 25 06.8 | +0.2 |
| CAF | | | | eSg | Sg | 17 25 40.4 | -0.3 |
| | 118nm,0.8s | | | | | | |
| RJF | Les Rejaudoux | 2.66 | 33 | ePn | Pn | 17 25 01.1 | +1.9 |
| RJF | Les Rejaudoux | 2.66 | 33 | ePg | Pg | 17 25 07.6 | +0.3 |
| RJF | | | | eSg | Sg | 17 25 42.1 | +0.3 |
| | 67nm,0.4s | | | | | | |
| EMOS | Mosqueruela | 2.72 | 179 | Pn | Pn | 17 25 03.6 | +3.4 |
| EMOS | | | | Sn | Sn | 17 25 33.7 | +0.5 |
| EMOS | | | | i Vmb_Lg | | 17 25 58.5 | |
| FRNF | Fournols | 3.20 | 43 | Pn | Pn | 17 25 08.9 | +2.3 |
| FRNF | | | | Sg | Sg | 17 26 00.2 | +1.1 |
| LASF | Ste Croix | 3.34 | 71 | eP | Pn | 17 25 12.6 | +4.0 |
| LASF | Ste Croix | 3.34 | 71 | ePg | Pg | 17 25 19.9 | -0.5 |
| LASF | | | | eSn | Sn | 17 25 47.8 | -0.5 |
| LASF | | | | eSg | Sg | 17 26 02.7 | -1.0 |
| | 40nm,0.5s | | | | | | |
| EARI | Arriondas | 3.42 | 275 | Pn | Pn | 17 25 12.5 | +2.8 |
| EARI | | | | Sn | Sn | 17 25 51.0 | +0.7 |
| VERF | Verneugheol | 3.43 | 38 | Pn | Pb | 17 25 14.6 | -2.5 |
| VERF | | | | Pg | Pg | 17 25 24.1 | +2.1 |
| VERF | | | | Sg | Sg | 17 26 09.2 | +2.7 |
| MFF | Saint Martin d | 3.52 | 4 | ePn | Pn | 17 25 12.4 | +1.4 |
| MFF | Saint Martin d | 3.52 | 4 | ePg | Pg | 17 25 24.1 | +0.3 |
| MFF | | | | eSg | Sg | 17 26 09.0 | -0.4 |
| | 36nm,0.4s | | | | | | |
| TCF | Toulx Ste Croi | 3.75 | 31 | ePg | Pg | 17 25 28.9 | +0.7 |
| TCF | | | | eSg | Sg | 17 26 16.0 | -0.7 |
| | 104nm,0.8s | | | | | | |
| VIVF | Saint-Julien-l | 4.16 | 63 | eP | Pn | 17 25 23.9 | +4.1 |
| VIVF | Saint-Julien-l | 4.16 | 63 | ePg | Pg | 17 25 34.6 | -1.3 |
| VIVF | | | | eSn | Sn | 17 26 06.8 | -1.6 |
| VIVF | | | | eSg | Sg | 17 26 27.5 | -2.2 |
| | 20nm,0.4s | | | | | | |
| BGF | Bois d'Agland | 4.22 | 34 | eP | Pn | 17 25 24.8 | +4.2 |
| BGF | Bois d'Agland | 4.22 | 34 | ePg | Pg | 17 25 36.4 | -0.8 |
| BGF | | | | eSg | Sg | 17 26 31.9 | +0.1 |
| | 89nm,0.3s | | | | | | |
| SMRF | Simiane la Rot | 4.53 | 77 | eP | Pn | 17 25 29.1 | +4.1 |
| SMRF | | | | eSn | Sn | 17 26 16.1 | -1.6 |
| SMRF | | | | eSg | Sg | 17 26 42.6 | +0.8 |
| | 9.9nm,0.5s | | | | | | |
| PAB | San Pablo | 4.56 | 220 | Pn | Pn | 17 25 26.7 | +1.3 |
| PAB | | | | Sn | Sn | 17 26 14.2 | -4.1 |
| AVF | Avril sur Loir | 4.62 | 35 | ePn | Pn | 17 25 27.1 | +1.0 |
| AVF | Avril sur Loir | 4.62 | 35 | ePg | Pg | 17 25 43.5 | -1.2 |
| AVF | | | | eSn | Sn | 17 26 19.2 | -0.5 |
| AVF | | | | eSg | Sg | 17 26 43.6 | -0.9 |
| | 27nm,0.5s | | | | | | |
| ECAL | Calabor | 4.72 | 258 | Pn | Pn | 17 25 30.0 | +2.4 |
| ECAL | | | | Sn | Sn | 17 26 22.7 | +0.3 |
| SMF | Signal de Mont | 4.73 | 40 | ePn | Pn | 17 25 28.7 | +1.1 |
| SMF | Signal de Mont | 4.73 | 40 | ePg | Pg | 17 25 46.0 | -0.8 |
| SMF | | | | eSg | Sg | 17 26 46.6 | -1.4 |
| | 17nm,0.5s | | | | | | |
| HYF | Humbligny | 4.74 | 27 | eSg | Sg | 17 26 47.5 | -1.1 |
| PBRG | Braganca | 4.76 | 256 | eSn | Sn | 17 26 24.5 | +1.1 |
| PBRG | | | | A | A | 17 27 17.1 | |
| | 15nm,0.2s | | | | | | |
| SSF | Saint Saulge | 4.90 | 34 | ePg | Pg | 17 25 48.9 | -1.2 |
| SSF | | | | eSn | Sn | 17 26 24.7 | -1.9 |
| SSF | | | | eSg | Sg | 17 26 52.4 | -1.1 |
| | 12nm,0.5s | | | | | | |
| PSIM | Granatula de C | 4.91 | 211 | Pn | Pn | 17 25 31.3 | +1.2 |
| PSIM | | | | Sn | Sn | 17 26 24.7 | -2.3 |
| ORIF | Oris-en-Rattie | 4.98 | 66 | eP | Pn | 17 25 35.2 | +4.1 |
| ORIF | | | | eSn | Sn | 17 26 26.8 | -1.9 |
| ORIF | | | | eSg | Sg | 17 26 53.4 | -2.7 |
| | 5.7nm,0.6s | | | | | | |
| LMR | La Mourre | 5.16 | 85 | ePn | Pn | 17 25 34.5 | +1.0 |
| LMR | La Mourre | 5.16 | 85 | ePg | Pg | 17 25 53.7 | -1.4 |
| LMR | | | | eSn | Sn | 17 26 31.6 | -1.4 |
| LMR | | | | eSg | Sg | 17 26 57.8 | -4.0 |
| | 3.6nm,0.6s | | | | | | |
| QUIF | Quistinic | 5.17 | 340 | ePn | Pn | 17 25 35.4 | +1.8 |
| QUIF | Quistinic | 5.17 | 340 | ePg | Pg | 17 25 53.4 | -1.8 |
| QUIF | | | | eSn | Sn | 17 26 31.9 | -1.3 |
| QUIF | | | | eSg | Sg | 17 27 00.5 | -1.6 |
| | 15nm,0.5s | | | | | | |
| MVO | Moncorvo | 5.20 | 250 | ePn | Pn | 17 25 35.6 | +1.5 |
| MVO | | | | eSn | Sn | 17 26 35.6 | +1.5 |
| MVO | | | | eSg | Sg | 17 26 59.8 | -3.3 |
| MVO | | | | A | A | 17 27 10.8 | |
| | 8.6nm,0.6s | | | | | | |
| LOR | Lormes | 5.21 | 35 | eP | Pn | 17 25 38.6 | +4.4 |
| LOR | | | | eSn | Sn | 17 26 32.5 | -1.8 |
| LOR | | | | eSg | Sg | 17 27 01.4 | -2.0 |
| | 9.4nm,0.5s | | | | | | |
| GRR | Gorron | 5.30 | 358 | eP | Pn | 17 25 38.5 | +3.0 |
| GRR | | | | eSn | Sn | 17 26 35.1 | -1.5 |
| GRR | | | | eSg | Sg | 17 27 05.3 | -1.2 |
| | 57nm,0.9s | | | | | | |
| SGMF | Saint Gilles | 5.36 | 345 | ePg | Pg | 17 25 56.7 | -2.1 |
| SGMF | | | | eSn | Sn | 17 26 37.7 | -0.1 |
| SGMF | | | | eSg | Sg | 17 27 06.4 | -1.7 |
| | 21nm,0.6s | | | | | | |
| LDF | La Druitiere | 5.51 | 3 | ePn | Pn | 17 25 40.3 | +1.9 |
| LDF | La Druitiere | 5.51 | 3 | ePg | Pg | 17 26 01.6 | -0.2 |
| LDF | | | | eSg | Sg | 17 27 12.7 | -0.5 |
| | 47nm,0.9s | | | | | | |
| MBDF | Montbardon | 5.53 | 70 | eP | Pn | 17 25 42.7 | +3.9 |
| MBDF | | | | eSn | Sn | 17 26 39.3 | -3.1 |
| MBDF | | | | eSg | Sg | 17 27 14.0 | +0.2 |
| | 0.5nm,0.3s | | | | | | |
| ROSF | Rostrenen | 5.58 | 341 | ePn | Pn | 17 25 39.6 | +0.2 |
| ROSF | Rostrenen | 5.58 | 341 | ePg | Pg | 17 26 04.6 | +1.4 |
| ROSF | | | | eSn | Sn | 17 26 42.2 | -1.3 |
| ROSF | | | | eSg | Sg | 17 27 13.7 | -1.8 |
| | 12nm,0.6s | | | | | | |
| POLO | Lamas de Olo | 5.65 | 255 | ePn | Pn | 17 25 41.9 | +1.5 |
| FLN | La Foliniere | 5.67 | 0 | eSn | Sn | 17 26 44.2 | -1.5 |
| FLN | | | | eSg | Sg | 17 27 17.4 | -1.0 |
| | 13nm,0.4s | | | | | | |
| PCAB | Cabril | 5.71 | 259 | ePn | Pn | 17 25 41.8 | +0.6 |
| PCAB | | | | eSg | Sg | 17 27 16.4 | -3.3 |
| PCAB | | | | A | A | 17 27 28.7 | |
| | 6.9nm,0.7s | | | | | | |
| LPL | La Plagne | 5.75 | 63 | eP | Pn | 17 25 47.0 | +5.1 |
| LPL | | | | eSn | Sn | 17 26 45.0 | -3.0 |
| LPL | | | | eSg | Sg | 17 27 19.7 | -1.3 |
| | 0.6nm,0.3s | | | | | | |
| LPG | La Plagne | 5.76 | 63 | eP | Pn | 17 25 48.2 | +6.2 |
| LPG | | | | eSn | Sn | 17 26 45.3 | -3.0 |
| LPG | | | | eSg | Sg | 17 27 20.0 | -1.2 |
| | 1.9nm,0.4s | | | | | | |
| CABF | La Chapelle | 5.88 | 51 | ePn | Pn | 17 25 44.0 | +0.5 |
| CABF | | | | eSg | Sg | 17 27 23.7 | -1.3 |
| | 13nm,0.6s | | | | | | |
| MTE | Manteigas | 5.89 | 245 | eSn | Sn | 17 26 50.4 | -0.7 |
| PVIS | Viseu | 5.98 | 249 | eSn | Sn | 17 26 53.6 | +0.3 |
| PCBR | Castelo Branco | 6.14 | 240 | eSn | Sn | 17 26 57.2 | 0.0 |
| PCBR | | | | A | A | 17 27 50.4 | |
| | 5.0nm,0.7s | | | | | | |
| PMRV | Marv??o | 6.33 | 237 | ePn | Pn | 17 25 51.2 | +1.6 |
| PMRV | | | | A | A | 17 27 49.1 | |
| | 3.8nm,0.6s | | | | | | |
| MEZF | Maizieres J'vi | 6.67 | 34 | eSg | Sg | 17 27 50.3 | -0.1 |
| | 12nm,0.5s | | | | | | |
| PGF | Pioggiola | 7.04 | 91 | ePn | Pn | 17 25 59.8 | +0.4 |
| PGF | | | | eSn | Sn | 17 27 15.2 | -4.2 |
| | 0.3nm,0.3s | | | | | | |
| CDF | Champ du Feu | 7.63 | 43 | ePn | Pn | 17 26 09.0 | +1.5 |
| CDF | | | | eSn | Sn | 17 27 30.9 | -3.0 |
| CDF | | | | eSg | Sg | 17 28 18.2 | -2.8 |
| | 3.4nm,0.5s | | | | | | |
| BAIF | Baives | 7.70 | 23 | eSg | Sg | 17 28 21.9 | -1.3 |
| | 1.7nm,0.5s | | | | | | |
| GIVF | Givet | 7.92 | 26 | eSg | Sg | 17 28 29.5 | -1.0 |
| | 10nm,0.8s | | | | | | |

*IDC **01** 17:37:55.7±0.7,0°.01S×123°.00E,h160km±6km,mb3.9/15, mbtmp4.3/16,Error ellipse: s-maj=21.6km s-min=8.9km az=76.0*
*NEIC **01** 17:37:55.8±1.9,0°.08S±0°.07×122°.93E±0°.07,h154km±6km, mb4.5/46,Error ellipse: s-maj=10.4km s-min=8.9km az=219.0*
*DJA **01** 17:37:56.1±0.3,0°S±3°×12°3E±°,h149km±4km,M4.4/19, mB4.7/6,mb4.6/13,MLv4.6/19,Mw(mB)4.0/6*
**ISC 01 17:37:56.1**±0.3,**0°.09S**±0°.04×**122°.90E**±0°.05,**h162**km,**n146**, σ**1§17**/163,**mb4.4**/40,**Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GTOI | Gorontalo | 0.73 | 9 | P | Pn | 17 38 20.2 | +0.1 |
| GTOI | | | | S | Sn | 17 38 38.2 | -0.4 |
| LUWI | Luwuk | 0.95 | 188 | P | Pn | 17 38 21.0 | -0.6 |
| LUWI | Luwuk | 0.95 | 188 | Pn | Pn | 17 38 20.8 | -0.9 |
| LUWI | Luwuk | 0.95 | 188 | P | Pn | 17 38 21.1 | -0.6 |
| LUWI | | | | S | Sn | 17 38 39.4 | -2.0 |
| MRSI | Marisa | 1.11 | 300 | P | Pn | 17 38 21.5 | -1.5 |
| MRSI | | | | S | Sn | 17 38 40.0 | -3.6 |
| KMSI | Cibinong | 1.27 | 58 | P | Pn | 17 38 24.4 | +0.1 |
| KMSI | | | | S | Sn | 17 38 47.6 | +1.6 |
| TOLI2 | Tolitoli | 2.43 | 299 | P | Pn | 17 38 36.5 | -0.5 |
| TOLI2 | Tolitoli | 2.43 | 299 | Pn | Pn | 17 38 35.8 | -1.2 |
| SANI | Sanana | 3.65 | 122 | P | Pn | 17 38 50.7 | -1.5 |
| SANI | Sanana | 3.65 | 122 | P | Pn | 17 38 50.5 | -1.7 |
| TNTI | Ternate | 4.55 | 79 | P | Pn | 17 39 02.9 | -0.9 |
| TNTI | Ternate | 4.55 | 79 | | Pn | 17 39 02.5 | -1.3 |
| TNTI | | | | | Sn | 17 39 53.5 | -3.1 |
| TNTI | Ternate | 4.55 | 79 | P | Pn | 17 39 03.3 | -0.5 |
| LBMI | Labuha | 4.63 | 97 | P | Pn | 17 39 05.1 | +0.2 |
| BNSI | Bone | 5.11 | 213 | P | Pn | 17 39 11.0 | -0.2 |
| | 79nm,1.1s,1µm0.3nm | | | | | | |
| NLAI | Namlea | 5.23 | 127 | P | Pn | 17 39 13.3 | +0.5 |
| | 112nm,1.2s,1.9nm | | | | | | |
| SGKI | Sangatta, Kali | 5.32 | 265 | P | Pn | 17 39 13.1 | -0.8 |
| BBSI | Bau Bau | 5.37 | 184 | P | Pn | 17 39 14.4 | -0.3 |
| | 79nm,1.0s,936nm0.4nm | | | | | | |
| KAPI | Kappang | 5.81 | 213 | Pn | Pn | 17 39 21.1 | +0.6 |
| KAPI | Kappang | 5.81 | 213 | P | Pn | 17 39 21.8 | +1.3 |
| | 21nm,0.6s,baz=0.5,slow=5.6,SNR=8.4 | | | | | | |
| BKB | Balikpapan | 6.12 | 259 | Pn | Pn | 17 39 23.0 | -1.5 |
| BKB | Balikpapan | 6.12 | 259 | P | Pn | 17 39 23.2 | -1.3 |
| | 114nm,2.1s,0.5nm | | | | | | |
| BSSI | Bau Bau, Buton | 6.47 | 202 | P | Pn | 17 39 30.3 | +1.0 |
| | 51nm,1.1s,757nm0.2nm | | | | | | |
| MYLDM | Lahad Datu | 6.84 | 320 | Pn | Pn | 17 39 34.2 | +0.1 |
| MMRI | Maumere | 8.51 | 184 | Pn | Pn | 17 39 53.9 | -2.5 |
| KKM | Kota Kinabalu | 9.04 | 313 | Pn | Pn | 17 40 02.4 | -1.0 |
| FAKI | Fak Fak | 9.76 | 107 | P | Pn | 17 40 12.1 | -0.7 |
| MTN | Manton Dam | 15.07 | 148 | P | Pn | 17 41 21.5 | +0.5 |
| MTN | Manton Dam | 15.07 | 148 | | Pn | 17 41 19.9 | -1.1 |
| MTN | | | | IAmb | IAmb | 17 41 37.3 | |
| | comp=Z,32nm,1.5s | | | | | | |
| KDU | Kakadu | 15.71 | 143 | P | Pn | 17 41 29.1 | +0.3 |
| KNRA | Kununurra | 16.53 | 160 | | P | 17 41 36.9 | -1.7 |
| KNRA | | | | IAmb | IAmb | 17 41 44.1 | |
| | comp=Z,18nm,1.1s | | | | | | |
| BBJI | Bungbulang | 16.88 | 244 | P | Pn | 17 41 45.2 | +2.1 |
| FITZ | Fitzroy Crossi | 18.09 | 172 | P | P | 17 41 55.4 | -0.2 |
| DLV | T Lat | 18.65 | 310 | P | P | 17 42 03.3 | +1.3 |
| MBWA | Marble Bar | 21.17 | 188 | P | P | 17 42 30.0 | +1.2 |
| PSA00 | Pilbara Seismi | 21.56 | 188 | P | P | 17 42 33.5 | +0.6 |
| WB0 | Warramunga Arr | 22.56 | 151 | P | P | 17 42 42.2 | -0.7 |
| WB0 | | | | IAmb | IAmb | 17 42 43.8 | |
| | comp=Z,30nm,1.2s | | | | | | |
| WRAB | Tennant Creek | 22.68 | 151 | P | P | 17 42 42.5 | -1.5 |
| WRAB | | | | IAmb | IAmb | 17 42 45.8 | |
| | comp=Z,20nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 22.69 | 151 | P | P | 17 42 42.7 | -1.4 |
| WRA | Warramunga Arr | 22.69 | 151 | P | P | 17 42 44.1 | 0.0 |
| | comp=Z,12nm,0.8s,baz=339,slow=9.5,SNR=81 | | | | | | |
| WRA | | | | PcP | PcP | 17 46 30.7 | -0.4 |
| | comp=Z,0.4nm,0.7s,baz=333,slow=2.2,SNR=4.6 | | | | | | |
| WRA | | | | S | S | 17 46 38.7 | -1.5 |
| | comp=Z,2.5nm,0.9s,baz=330,slow=16,SNR=8.0 | | | | | | |
| WRA | | | | ScP | ScP | 17 49 53.1 | -0.6 |
| | comp=Z,2.7nm,0.6s,baz=324,slow=2.6,SNR=30 | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| WB2 | Warramunga Arr | 22.69 | 151 | P | P | 17 42 43.7 | -0.4 |
| WB2 | | | | IAmb | IAmb | 17 42 45.8 | |
| | comp=Z,23nm,1.1s | | | | | | |
| WR0 | Warramunga Arr | 22.80 | 151 | P | P | 17 42 44.5 | -0.6 |
| WR0 | | | | IAmb | IAmb | 17 42 46.8 | |
| | comp=Z,52nm,1.2s | | | | | | |
| UBPT | Khong Chiam | 23.02 | 312 | P | P | 17 42 48.7 | +1.5 |
| UBPT | Khong Chiam | 23.02 | 312 | P | P | 17 42 45.2 | -2.0 |
| TPUB | Ta-pu | 23.36 | 355 | P | P | 17 42 51.4 | +1.2 |
| TPUB | Ta-pu | 23.36 | 355 | P | P | 17 42 50.4 | +0.3 |
| TPUB | | | | IAmb | IAmb | 17 42 57.1 | |
| | comp=Z,27nm,0.9s | | | | | | |
| YULB | Yu-li | 23.40 | 356 | P | P | 17 42 49.4 | -1.1 |
| YULB | | | | IAmb | IAmb | 17 42 55.1 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| SSLB | Suanglung | 23.81 | 356 | P | P | 17 42 55.4 | +1.1 |
| SSLB | Suanglung | 23.81 | 356 | P | P | 17 42 54.2 | -0.1 |
| COEN | Coen | 24.34 | 125 | P | P | 17 43 00.5 | +1.3 |
| YOJ | Yonaguni jima | 24.41 | 0 | P | P | 17 42 59.8 | +0.2 |
| YOJ | | | | IAmb | IAmb | 17 43 03.7 | |
| | comp=Z,27nm,0.8s | | | | | | |
| YHNB | Yeheng | 24.66 | 357 | P | P | 17 43 03.4 | +1.3 |
| YHNB | Yeheng | 24.66 | 357 | P | P | 17 43 02.6 | +0.6 |
| YHNB | | | | IAmb | IAmb | 17 43 04.7 | |
| | comp=Z,13nm,0.7s | | | | | | |
| TATO | Taipei | 24.96 | 357 | P | P | 17 43 06.0 | +1.4 |
| WRKA | Warakurna | 25.34 | 169 | P | P | 17 43 09.2 | +1.0 |
| AS31 | Alice Springs | 25.75 | 156 | P | P | 17 43 11.7 | -0.2 |
| ASAR | Alice Springs | 25.75 | 156 | P | P | 17 43 11.6 | -0.4 |
| ASAR | Alice Springs | 25.75 | 156 | P | P | 17 43 12.2 | +0.3 |
| | comp=Z,2.1nm,0.7s,baz=340,slow=11,SNR=33 | | | | | | |
| ASAR | | | | pP | pP | 17 43 44.2 | -1.3 |
| | comp=Z,3.6nm,0.9s,baz=331,slow=8.3,SNR=5.1 | | | | | | |
| ASAR | | | | PcP | PcP | 17 46 37.8 | 0.0 |
| | comp=Z,2.1nm,0.5s,baz=346,slow=2.1,SNR=17 | | | | | | |
| ASAR | | | | ScP | ScP | 17 50 01.5 | -0.7 |
| | comp=Z,3.6nm,0.6s,baz=341,slow=2.8,SNR=51 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| AS01 | Alice Springs | 25.77 | 156 | P | P | 17 43 13.5 | +1.4 |
| PMG | Port Moresby | 25.86 | 112 | P | P | 17 43 13.0 | 0.0 |
| QIS | Mount Isa | 26.09 | 142 | P | P | 17 43 16.1 | +1.1 |
| MEEK | Meekatharra | 26.71 | 189 | P | P | 17 43 21.0 | +0.5 |
| MTSU | Mount Surprise | 27.65 | 132 | P | P | 17 43 28.9 | -0.1 |
| CMAR | Chiang Mai Arr | 29.90 | 309 | P | P | 17 43 49.0 | +0.1 |
| CMAR | Chiang Mai Arr | 29.90 | 309 | P | P | 17 43 49.9 | +1.0 |
| | comp=Z,2.2nm,0.7s,baz=138,slow=7.0,SNR=15 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| CHTO | Chiang Mai | 30.11 | 310 | P | P | 17 43 52.0 | +1.3 |
| CHTO | | | | IAmb | IAmb | 17 44 35.1 | |
| | comp=Z,11nm,1.5s | | | | | | |
| OOD | Oodnadatta | 30.15 | 157 | P | P | 17 43 51.8 | +0.8 |
| FORT | Forrest | 30.91 | 171 | P | P | 17 43 58.5 | +0.9 |
| BLDU | Ballidu | 30.92 | 190 | P | P | 17 44 00.2 | +2.5 |
| KMBL | Kambalda | 31.12 | 182 | P | P | 17 44 00.7 | +1.2 |
| KLBR | Kellerberrin | 31.71 | 188 | P | P | 17 44 06.8 | +2.2 |
| MULG | Mulgathing | 31.84 | 162 | P | P | 17 44 07.0 | +1.2 |
| NJ2 | Nanjing | 32.20 | 354 | eP | P | 17 44 10.8 | +2.0 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| ENH | Enshi | 32.78 | 338 | P | P | 17 44 14.4 | +0.3 |
| NWAO | Narrogin (SRO) | 33.09 | 189 | P | P | 17 44 16.7 | 0.0 |
| PZH | PanZhiHua | 33.39 | 324 | P | P | 17 44 21.7 | +2.2 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | |
| BBOO | Buckleboo | 34.83 | 160 | P | P | 17 44 32.2 | +0.6 |
| RK1H | Rockhampton Ha | 35.42 | 133 | P | P | 17 44 37.9 | +1.1 |
| STKA | Stephens Creek | 36.22 | 153 | P | P | 17 44 44.7 | +1.1 |
| STKA | Stephens Creek | 36.22 | 153 | P | P | 17 44 43.6 | +0.1 |
| STKA | Stephens Creek | 36.22 | 153 | P | P | 17 44 43.5 | -0.1 |
| | comp=Z,13nm,0.8s,baz=323,slow=11,SNR=18 | | | | | | |
| STKA | | | | PcP | PcP | 17 47 05.3 | -0.1 |
| | comp=Z,3.0nm,0.5s,baz=20,slow=2.3,SNR=6.1 | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | |
| HTT | Hallett | 36.42 | 157 | P | P | 17 44 46.8 | +1.5 |
| JSG | Sagara | 37.43 | 21 | P | P | 17 44 54.8 | +1.1 |
| KSRS | Korea Array | 37.65 | 7 | P | P | 17 44 54.1 | -1.3 |
| | comp=Z,0.9nm,0.6s,baz=181,slow=10,SNR=5.7 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| CMSA | Cobar Meteorol | 38.00 | 148 | P | P | 17 45 00.5 | +2.0 |
| MAJO | Matsushiro | 39.12 | 20 | P | P | 17 45 06.4 | -1.5 |
| MAJO | | | | IAmb | IAmb | 17 45 07.2 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 39.12 | 20 | P | P | 17 45 06.4 | -1.4 |
| | comp=Z,5.2nm,0.7s,baz=194,slow=8.7,SNR=11 | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| MJB9 | Matsu-Tunnel | 39.12 | 20 | P | P | 17 45 06.4 | -1.5 |
| GC1S | Gold Coast 1 S | 40.48 | 136 | P | P | 17 45 18.9 | -0.2 |
| ARPS | Mount Arapiles | 40.49 | 156 | P | P | 17 45 21.0 | +1.8 |
| ARMA | Armidale | 40.69 | 140 | P | P | 17 45 23.3 | +2.3 |
| YNG | Young | 41.57 | 148 | P | P | 17 45 30.1 | +2.1 |
| HHC | Hu-ho-hao-te | 42.03 | 347 | eP | P | 17 45 32.7 | +0.9 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,82nm,4.6s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CAN | Canberra | 42.67 | 148 | P | P | 17 45 39.1 | +2.2 |
| TOO | Toolangi | 42.73 | 153 | P | P | 17 45 39.6 | +2.2 |
| TOO | Toolangi | 42.73 | 153 | P | P | 17 45 38.1 | +0.7 |
| TOO | | | | IAmb | IAmb | 17 45 40.2 | |
| | comp=Z,10nm,0.9s | | | | | | |
| JTM | Tenmabayashi | 43.91 | 20 | P | P | 17 45 46.1 | -0.6 |
| XLT | XiLinHaoTe | 44.22 | 353 | eP | P | 17 45 51.3 | +2.0 |
| XLT | | | | pP | pP | 17 46 27.6 | +2.5 |
| XLT | | | | sP | sP | 17 46 46.6 | +3.3 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,84nm,5.4s | | | | | | |
| GTA | Gaotai | 44.63 | 334 | eP | P | 17 45 53.7 | +1.0 |
| GTA | | | | pP | pP | 17 46 29.9 | +1.3 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| USRK | Ussuriysk Ar. | 44.84 | 9 | P | P | 17 45 52.8 | -1.3 |
| USRK | Ussuriysk Ar. | 44.84 | 9 | P | P | 17 45 53.4 | -0.6 |
| | comp=Z,3.2nm,0.6s,baz=200,slow=8.1,SNR=12 | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| DZM | Mont Dzumac | 47.70 | 120 | P | P | 17 46 16.9 | 0.0 |
| DZM | | | | IAmb | IAmb | 17 46 57.1 | |
| | comp=Z,21nm,1.3s | | | | | | |
| SONM | Songino Array | 49.85 | 345 | P | P | 17 46 33.1 | +0.3 |
| SONM | Songino Array | 49.85 | 345 | P | P | 17 46 32.6 | -0.3 |
| | comp=Z,1.1nm,0.5s,baz=166,slow=9.4,SNR=6.6 | | | | | | |
| SONM | | | | pP | pP | 17 47 08.8 | -0.7 |
| | comp=Z,1.1nm,0.7s,baz=163,slow=7.9,SNR=3.2 | | | | | | |
| SONM | | | | ScP | ScP | 17 51 29.8 | -1.7 |
| | comp=Z,0.4nm,0.5s,baz=191,slow=3.0,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| MK31 | Makanchi Array | 58.64 | 328 | P | P | 17 47 35.3 | -1.0 |
| MKAR | Makanchi Array | 58.64 | 328 | P | P | 17 47 35.2 | -1.1 |
| MKAR | Makanchi Array | 58.64 | 328 | P | P | 17 47 35.6 | -0.7 |
| | comp=Z,2.1nm,0.5s,baz=125,slow=8.6,SNR=31 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| MAKZ | Makanchi | 58.81 | 328 | P | P | 17 47 37.0 | -0.5 |
| KBL | Kabul | 60.92 | 310 | P | P | 17 47 52.1 | -0.3 |
| KBL | | | | IAmb | IAmb | 17 47 53.1 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| RPZ | Rata Peaks | 61.00 | 142 | P | P | 17 47 53.7 | +1.2 |
| RPZ | Rata Peaks | 61.00 | 142 | P | P | 17 47 52.9 | +0.4 |
| TUWZ | Tuamarina | 61.72 | 138 | P | P | 17 47 58.4 | +1.1 |
| KHZ | Kahutara | 61.92 | 140 | P | P | 17 47 59.5 | +0.9 |
| KHZ | Kahutara | 61.92 | 140 | P | P | 17 47 59.3 | +0.7 |
| ZALV | Zalesovo Beam | 62.36 | 336 | P | P | 17 47 59.5 | -1.8 |
| | comp=Z,0.4nm,0.4s,baz=154,slow=4.6,SNR=1.9 | | | | | | |
| ZALV | | | | pP | PcP | 17 48 38.7 | -0.6 |
| | comp=Z,0.7nm,0.7s,baz=120,slow=8.5,SNR=2.1 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| BKZ | Black Stump Fm | 62.46 | 135 | P | P | 17 48 04.0 | +1.6 |
| BKZ | Black Stump Fm | 62.46 | 135 | P | P | 17 48 02.7 | +0.4 |
| URZ | Urewera | 62.52 | 134 | P | P | 17 48 04.4 | +1.7 |
| RTZ | Ruatahuna | 62.58 | 134 | P | P | 17 48 03.6 | +0.4 |
| KURBB | Kurchatov Arra | 62.99 | 330 | P | P | 17 48 04.8 | -0.8 |
| | comp=Z,2.1nm,0.2s,baz=134,slow=6.5,SNR=1.9 | | | | | | |
| KURBB | | | | pP | PcP | 17 48 42.5 | +0.4 |
| | comp=Z,0.8nm,0.2s,baz=123,slow=7.0,SNR=1.8 | | | | | | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| MA2 | Magadan | 63.35 | 15 | P | P | 17 48 08.9 | +1.1 |
| MA2 | Magadan | 63.35 | 15 | P | P | 17 48 08.3 | +0.6 |
| CASY | Casey | 66.63 | 185 | P | P | 17 48 28.5 | -0.3 |
| CASY | | | | IAmb | IAmb | 17 48 30.0 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| MAW | Mawson | 78.88 | 200 | P | P | 17 49 41.1 | +0.1 |
| | comp=Z,4.5nm,1.0s,baz=71,slow=10,SNR=6.1 | | | | | | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| VNDA | Vanda | 80.17 | 172 | P | P | 17 49 48.0 | +0.2 |
| VNDA | Vanda | 80.17 | 172 | P | P | 17 49 48.1 | +0.3 |
| | comp=Z,3.1nm,0.7s,baz=314,slow=6.1,SNR=24 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| SBA | Scott Base | 81.12 | 171 | P | P | 17 49 53.6 | +0.7 |
| NPOC | North of Pu‘u | 82.47 | 71 | P | P | 17 49 58.4 | -2.8 |
| PLK4 | Peulik 4 | 85.11 | 32 | P | P | 17 50 13.7 | -0.1 |
| PLK4 | | | | IAmb | IAmb | 17 50 14.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| C19K | Lookout Ridge | 85.64 | 21 | P | P | 17 50 17.2 | +1.0 |
| C19K | | | | IAmb | IAmb | 17 50 18.3 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| G19K | Purcell Mounta | 86.04 | 24 | P | P | 17 50 18.6 | +0.4 |
| G19K | | | | IAmb | IAmb | 17 50 19.4 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| H19K | Roundabout Mou | 86.20 | 24 | P | P | 17 50 19.7 | +0.8 |
| H19K | | | | IAmb | IAmb | 17 50 20.3 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| OHAK | Old Harbor | 86.71 | 33 | P | P | 17 50 21.7 | +0.2 |
| OHAK | | | | IAmb | IAmb | 17 50 32.6 | |
| | comp=Z,19nm,1.3s | | | | | | |
| IMAR | Indian Mountai | 87.37 | 24 | P | P | 17 50 24.7 | +0.1 |
| H23K | Yukon River | 89.08 | 24 | P | P | 17 50 33.0 | +0.3 |
| QSPA | South Pole Qui | 89.84 | 180 | P | P | 17 50 36.0 | -0.4 |
| QSPA | | | | IAmb | IAmb | 17 50 41.8 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| QSPA | South Pole Qui | 89.84 | 180 | P | P | 17 50 36.5 | +0.1 |
| | comp=Z,4.4nm,1.0s,baz=308,slow=2.9,SNR=17 | | | | | | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| ILAR | Eielson Array | 90.17 | 25 | P | P | 17 50 36.3 | -1.5 |
| | comp=Z,0.2nm,0.5s,baz=250,slow=4.6,SNR=4.4 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| BMAR | Burnt Mountain | 91.06 | 23 | P | P | 17 50 42.6 | +0.7 |
| BCAR | Beaver Creek A | 92.50 | 27 | P | P | 17 50 49.3 | +0.6 |
| I28M | Miner Creek | 93.07 | 25 | P | P | 17 50 51.5 | +0.2 |
| I28M | | | | IAmb | IAmb | 17 50 59.5 | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| NVAR | Mina Array Bea | 112.29 | 48 | PKiKP | PKiKP | 17 56 13.6 | +0.1 |
| | comp=Z,0.5nm,0.6s,baz=270,slow=3.0,SNR=4.6 | | | | | | |
| PDAR | Pinedale Array | 116.73 | 41 | PKP | PKPdf | 17 56 21.1 | -0.8 |
| | comp=Z,0.2nm,0.5s,baz=159,slow=0.8,SNR=2.5 | | | | | | |
| PDAR | | | | PKKPbc | PKKPbc | 18 06 52.0 | +1.6 |
| | comp=Z,0.6nm,0.7s,baz=116,slow=7.6,SNR=4.8 | | | | | | |
| TORD | Torodi Ar. Bea | 120.34 | 285 | PKP | PKPdf | 17 56 27.8 | -1.3 |
| | comp=Z,1.1nm,0.6s,baz=83,slow=5.4,SNR=7.3 | | | | | | |
| TXAR | Lajitas Array | 126.95 | 53 | PKP | PKPdf | 17 56 40.9 | -0.7 |
| | comp=Z,0.4nm,0.6s,baz=274,slow=0.8,SNR=5.0 | | | | | | |
| CPUP | Villa Florida | 153.73 | 180 | PKPbc | PKPbc | 17 57 36.0 | -0.7 |
| | comp=Z,1.9nm,0.7s,baz=216,slow=5.1,SNR=4.8 | | | | | | |

*MOS **01** 18:02:59.5±0.9, 48.̊91N×155.̊31E, h74km, mb4.4/5, Error ellipse: s-maj=17.1km s-min=4.6km az=74.2*
*SKHL **01** 18:02:59.4±0.4, 48.̊80N×155.̊50E, h80km±4km, mb5.1/7, msha5.7/8*
*IDC **01** 18:02:59.2±3.0, 48.̊87N×155.̊50E, h59km±27km, mb3.2/9, mbtmp3.7/12, ML4.7/3, MS2.2/1, Error ellipse: s-maj=22.8km s-min=19.3km az=147.0*
*NEIC **01** 18:02:59.8±1.4, 48.̊9N±0.̊1×155.̊2E±0.̊2, h47km±11km, mb4.2/15, Error ellipse: s-maj=30.2km s-min=5.3km az=129.0*
*KRSC **01** 18:03:00.0±1.2, 48.̊84N×156.̊78E, h32km±18km, Ml4.7*
**ISC 01 18:02:58.6**±0.6, **48.̊80N**±0.̊08×**155.̊45E**±0.̊08, **h51**km, **n115**, σ1.̊78/130, **mb3.9**/20, **3C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 1.94 | 13 | eP | Pn | 18 03 31.3 | +2.2 |
| SKR | | | | eS | Sn | 18 03 54.4 | +2.2 |
| SKR | Severo-Kuril's | 1.94 | 13 | eP | Pn | 18 03 31.0 | +1.9 |
| SKR | | | | AMB | AMB | 18 03 34.8 | |
| | 230nm,0.2s | | | | | | |
| SKR | | | | eS | Sn | 18 03 53.6 | +1.4 |
| SKR | | | | A | A | 18 03 55.8 | |
| | 790nm,0.2s | | | | | | |
| SKR | | | | A | A | 18 03 55.8 | |
| | 1μm,0.2s | | | | | | |
| SKR | Severo-Kuril's | 1.94 | 13⇑ | iPN | Pn | 18 03 30.8 | +1.7 |
| SKR | | | | i S | Sn | 18 03 53.3 | +1.1 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,231nm,0.2s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| KDTR | Khodutka, Kamc | 3.45 | 28 | eP | Pn | 18 03 50.3 | +0.5 |
| KDTR | | | | eS | Sn | 18 04 27.7 | -1.8 |
| KDTR | Khodutka, Kamc | 3.45 | 28 | eP | Pn | 18 03 50.3 | +0.5 |
| KDTR | | | | AMB | AMB | 18 03 51.0 | |
| | comp=N,170nm,0.3s | | | | | | |
| KDTR | | | | eS | Sn | 18 04 27.6 | -1.8 |
| KDTR | | | | A | A | 18 04 28.6 | |
| | comp=N,600nm,0.3s | | | | | | |
| KDTR | | | | A | A | 18 04 28.6 | |
| | comp=N,300nm,0.3s | | | | | | |
| KDTR | Khodutka, Kamc | 3.45 | 28 | PN | Pn | 18 03 50.3 | +0.5 |
| KDTR | | | | S | Sn | 18 04 27.6 | -1.8 |
| ASAK | Asacha | 3.91 | 23 | eP | Pn | 18 03 57.9 | +1.6 |
| ASAK | Asacha | 3.91 | 23 | PN | Pn | 18 03 57.8 | +1.6 |
| MTVR | Mutnovka | 4.08 | 24 | eP | Pn | 18 03 59.8 | +1.2 |
| MTVR | | | | eS | Sn | 18 04 44.2 | -0.9 |
| MTVR | Mutnovka | 4.08 | 24 | PN | Pn | 18 03 59.8 | +1.2 |
| MTVR | | | | S | Sn | 18 04 44.1 | -0.9 |
| GRL | Gorelyy | 4.11 | 23 | eP | Pn | 18 04 00.7 | +1.7 |
| GRL | | | | eS | Sn | 18 04 45.4 | -0.5 |
| GRL | Gorelyy | 4.11 | 23 | PN | Pn | 18 04 00.7 | +1.7 |
| GRL | | | | S | Sn | 18 04 45.3 | -0.5 |
| APC | Apacha | 4.27 | 14 | eP | Pn | 18 04 03.9 | +2.8 |
| APC | Apacha | 4.27 | 14 | PN | Pn | 18 04 03.8 | +2.8 |
| KRMR | Karymshinskiy | 4.38 | 22 | eP | Pn | 18 04 05.0 | +2.5 |
| KRMR | | | | eS | Sn | 18 04 53.0 | +0.7 |
| KRMR | Karymshinskiy | 4.38 | 22 | eP | Pn | 18 04 05.0 | +2.5 |
| KRMR | | | | AMB | AMB | 18 04 06.9 | |
| | comp=N,50nm,0.2s | | | | | | |
| KRMR | | | | eS | Sn | 18 04 52.9 | +0.7 |
| KRMR | | | | A | A | 18 04 57.8 | |
| | comp=N,130nm,0.2s | | | | | | |
| KRMR | | | | A | A | 18 04 57.8 | |
| | comp=N,110nm,0.2s | | | | | | |
| KRMR | Karymshinskiy | 4.38 | 22 | PN | Pn | 18 04 05.0 | +2.5 |
| KRMR | | | | S | Sn | 18 04 52.9 | +0.7 |
| PET | Petropavlovsk | 4.69 | 24 | | Pn | 18 04 07.2 | +0.4 |
| PET | | | | Sn | Sn | 18 04 58.7 | -1.2 |
| PET | Petropavlovsk | 4.69 | 24 | eP | Pn | 18 04 07.8 | +1.0 |
| PET | | | | eS | Sn | 18 04 58.2 | -1.6 |
| PET | Petropavlovsk | 4.69 | 24 | eP | Pn | 18 04 08.4 | +1.6 |
| PET | | | | eS | Sn | 18 04 58.7 | -1.2 |
| PET | Petropavlovsk | 4.69 | 24 | ePN | Pn | 18 04 08.1 | +1.3 |
| PET | | | | eS | Sn | 18 04 58.7 | -1.2 |
| PET | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,89nm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,76nm,0.5s | | | | | | |
| DALK | Dalny | 4.73 | 25 | eP | Pn | 18 04 08.2 | +0.9 |
| DALK | | | | eS | Sn | 18 04 59.4 | -1.4 |
| DALK | Dalny | 4.73 | 25 | eP | Pn | 18 04 08.1 | +0.9 |
| DALK | | | | AMB | AMB | 18 04 10.1 | |
| | comp=E,40nm,0.1s | | | | | | |
| DALK | | | | eS | Sn | 18 04 59.3 | -1.4 |
| DALK | | | | A | A | 18 05 02.0 | |
| | comp=E,150nm,0.3s | | | | | | |
| DALK | | | | A | A | 18 05 02.0 | |
| | comp=E,60nm,0.3s | | | | | | |
| DALK | Dalny | 4.73 | 25 | PN | Pn | 18 04 08.1 | +0.9 |
| DALK | | | | S | Sn | 18 04 59.3 | -1.4 |
| UGLR | Uglovaya | 4.90 | 24 | eP | Pn | 18 04 11.6 | +1.8 |
| UGLR | Uglovaya | 4.90 | 24 | PN | Pn | 18 04 11.6 | +1.8 |
| KOK | Koryaka | 4.93 | 23 | eP | Pn | 18 04 12.5 | +2.4 |
| KOK | Koryaka | 4.93 | 23 | eP | Pn | 18 04 12.5 | +2.4 |
| KOK | Koryaka | 4.93 | 23 | PN | Pn | 18 04 12.5 | +2.4 |
| AVH | Avacha | 4.93 | 24 | eP | Pn | 18 04 12.6 | +2.4 |
| AVH | Avacha | 4.93 | 24 | eP | Pn | 18 04 12.6 | +2.4 |
| AVH | Avacha | 4.93 | 24 | PN | Pn | 18 04 12.6 | +2.4 |
| SMAR | Somma | 4.95 | 24 | eP | Pn | 18 04 12.5 | +2.0 |
| SMAR | Somma | 4.95 | 24 | PN | Pn | 18 04 12.5 | +2.0 |
| KRER | Koryakskii | 4.97 | 23 | eP | Pn | 18 04 12.9 | +2.1 |
| KRER | Koryakskii | 4.97 | 23 | PN | Pn | 18 04 12.9 | +2.1 |
| KRX | Arik | 4.99 | 23 | eP | Pn | 18 04 13.2 | +2.1 |
| KRX | Arik | 4.99 | 23 | PN | Pn | 18 04 13.2 | +2.1 |
| NLC | Nalytchevo | 5.02 | 28 | eP | Pn | 18 04 11.0 | -0.3 |
| NLC | Nalytchevo | 5.02 | 28 | PN | Pn | 18 04 11.0 | -0.3 |
| GNL | Ganaly | 5.15 | 17 | eP | Pn | 18 04 16.3 | +3.1 |
| GNL | Ganaly | 5.15 | 17 | PN | Pn | 18 04 16.3 | +3.1 |
| SPN | Mys Shipunski | 5.18 | 32 | eP | Pn | 18 04 13.7 | +0.1 |
| SPN | | | | eS | Sn | 18 05 08.1 | -4.0 |
| SPN | Mys Shipunski | 5.18 | 32 | PN | Pn | 18 04 13.6 | +0.1 |
| KII | Karymskiy | 5.81 | 24 | eP | Pn | 18 04 25.0 | +2.7 |
| KII | Karymskiy | 5.81 | 24 | PN | Pn | 18 04 24.9 | +2.7 |
| KUR | Kuril'sk | 6.29 | 238 | eP | Pn | 18 04 30.8 | +2.0 |
| KUR | | | | AMB | AMB | 18 04 38.1 | |
| | comp=E,30nm,0.4s | | | | | | |
| KUR | | | | eS | Sn | 18 05 39.7 | +0.4 |
| KUR | | | | A | A | 18 05 53.6 | |
| | comp=E,40nm,0.5s | | | | | | |
| KUR | | | | A | A | 18 05 53.6 | |
| | comp=E,40nm,0.5s | | | | | | |
| KUR | Kuril'sk | 6.29 | 238 | PN | Pn | 18 04 29.7 | +0.9 |
| KUR | | | | eS | Sn | 18 05 45.0 | +5.7 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,28nm,0.5s | | | | | | |
| TUMD | Tumrok D | 7.10 | 24 | eP | Pn | 18 04 42.3 | +2.4 |
| TUMR | Tumrok | 7.11 | 22 | eP | Pn | 18 04 43.1 | +3.0 |
| TUMR | Tumrok | 7.11 | 22 | PN | Pn | 18 04 43.0 | +3.0 |
| SHO | Shikotan | 7.74 | 234 | eS | Sn | 18 06 12.6 | -2.1 |
| SHO | | | | A | A | 18 06 21.9 | |
| | comp=Z,20nm,0.4s | | | | | | |
| SHO | | | | A | A | 18 06 21.9 | |
| | comp=Z,20nm,0.4s | | | | | | |
| SHO | Shikotan | 7.74 | 234 | ePN | Pn | 18 04 56.5 | +7.9 |
| YUK | Yuzh-Kuril'sk | 8.16 | 238 | eP | Pn | 18 04 57.0 | +2.7 |
| YUK | | | | AMB | AMB | 18 05 00.5 | |
| | comp=Z,140nm,0.6s | | | | | | |
| YUK | | | | eS | Sn | 18 06 22.4 | -2.7 |
| YUK | | | | A | A | 18 06 38.4 | |
| | comp=Z,60nm,0.6s | | | | | | |
| YUK | | | | A | A | 18 06 38.4 | |
| | comp=Z,80nm,0.6s | | | | | | |
| YUK | Yuzh-Kuril'sk | 8.16 | 238 | ePN | Pn | 18 04 59.3 | +5.0 |
| NMR | Nemuro--Hokkai | 8.66 | 235 | eP | Pn | 18 05 02.9 | +1.6 |
| NMR | | | | eS | Sn | 18 06 33.9 | -3.6 |
| NMR | Nemuro--Hokkai | 8.66 | 235 | ePN | Pn | 18 05 08.1 | +6.8 |
| YSS | Yuzh-Sakhalins | 8.73 | 263 | Pn | Pn | 18 04 58.6 | -3.6 |
| JKA | Kamikawa-asahi | 10.03 | 247 | Pn | Pn | 18 05 20.0 | +0.1 |
| ASAJ | Asahikawa | 10.03 | 247 | P | Pn | 18 05 23.1 | +3.2 |
| | comp=Z,3.0nm,1.0s,baz=350,slow=30,SNR=1.4 | | | | | | |
| ERM | Erimo | 10.98 | 236 | Pn | Pn | 18 05 34.5 | +1.6 |
| ERM | Erimo | 10.98 | 236 | PN | Pn | 18 05 34.5 | +1.6 |
| MA2 | Magadan | 11.14 | 348 | Pn | Pn | 18 05 32.1 | -2.9 |
| MA2 | Magadan | 11.14 | 348 | P | Pn | 18 05 35.1 | +0.1 |
| | comp=Z,0.6nm,0.3s,baz=168,slow=11,SNR=6.8 | | | | | | |
| MA2 | | | | LR | LR | 18 09 47.6 | |
| | comp=Z,12nm,20.6s,baz=84,slow=37 | | | | | | |
| | comp=Z,2.5nm,0.4s | | | | | | |
| SHEM | Shemya Is, Ala | 12.44 | 65 | P | Pn | 18 05 50.8 | -1.9 |
| | comp=Z,3.4nm,0.3s,baz=279,slow=19,SNR=5.1 | | | | | | |
| MAJO | Matsushiro | 17.58 | 232⇑ | eP | Pn | 18 06 51.3 | -8.6 |
| YAK | Yakutsk | 19.56 | 322 | P | P | 18 07 22.0 | +0.2 |
| YAK | | | | IAmb | IAmb | 18 07 23.2 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| YAK | Yakutsk | 19.56 | 322 | P | P | 18 07 20.7 | -1.1 |
| | comp=Z,1.4nm,0.3s,baz=114,slow=4.8,SNR=6.6 | | | | | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| YAK | Yakutsk | 19.56 | 322⇑ | eP | P | 18 07 19.8 | -2.0 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| BILL | Bilibino | 20.05 | 12 | i P | P | 18 07 25.4 | -1.8 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| C19K | Lookout Ridge | 29.76 | 31 | P | P | 18 09 00.7 | +0.8 |
| D19K | Kuna River | 30.08 | 32 | P | P | 18 09 03.8 | +1.1 |
| D19K | | | | IAmb | IAmb | 18 09 21.8 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.43 | 158 | T | T | 18 41 41.3 | |
| | baz=342,slow=76,SNR=24 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.44 | 158 | T | T | 18 41 41.0 | |
| | baz=342,slow=76,SNR=27 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.44 | 158 | T | T | 18 41 40.9 | |
| | baz=342,slow=76,SNR=31 | | | | | | |
| B20K | Meade River | 30.86 | 30 | P | P | 18 09 10.2 | +0.6 |
| H21K | Melozitna Rive | 31.52 | 38 | P | P | 18 09 16.0 | +0.6 |
| H11S1 | WAKE ISLAND Hy | 31.56 | 159 | T | T | 18 42 39.7 | |
| | baz=345,slow=76,SNR=206 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 31.57 | 159 | T | T | 18 42 34.7 | |
| | baz=345,slow=76,SNR=262 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 31.58 | 159 | T | T | 18 42 46.9 | |
| | baz=345,slow=76,SNR=184 | | | | | | |
| C23K | Itkillik River | 33.01 | 31 | P | P | 18 09 30.0 | +1.7 |
| C23K | | | | IAmb | IAmb | 18 10 07.9 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| F24K | Squaw Lake | 33.67 | 35 | P | P | 18 09 36.3 | +2.1 |
| F24K | | | | IAmb | IAmb | 18 09 58.0 | |
| | comp=Z,4.8nm,1.5s | | | | | | |
| G24K | Hadweenzic Riv | 33.77 | 37 | P | P | 18 09 36.0 | +0.9 |
| G24K | | | | IAmb | IAmb | 18 10 03.2 | |
| | comp=Z,2.7nm,1.2s | | | | | | |
| ILAR | Eielson Array | 33.96 | 40 | P | P | 18 09 36.4 | -0.4 |
| | comp=Z,0.3nm,0.8s,baz=245,slow=6.9,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| D25K | Kavik River | 34.40 | 32 | P | P | 18 09 42.5 | +2.0 |
| D25K | | | | IAmb | IAmb | 18 09 46.0 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| BMAR | Burnt Mountain | 34.94 | 36 | P | P | 18 09 46.5 | +1.3 |
| F28M | Old Crow | 36.74 | 35 | P | P | 18 10 02.7 | +2.1 |
| F28M | | | | IAmb | IAmb | 18 10 38.0 | |
| | comp=Z,4.2nm,1.4s | | | | | | |
| INK | Inuvik | 39.07 | 34 | P | P | 18 10 20.3 | +0.2 |
| INK | Inuvik | 39.07 | 34 | P | P | 18 10 20.3 | +0.2 |
| INK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| ZALV | Zalesovo Beam | 42.72 | 305 | P | P | 18 10 48.9 | -1.4 |
| | comp=Z,0.3nm,0.4s,baz=89,slow=8.8,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| EUNU | Eureka | 46.80 | 12 | P | P | 18 11 23.5 | +1.0 |
| MK31 | Makanchi Array | 47.42 | 297 | P | P | 18 11 27.7 | 0.0 |
| MK31 | Makanchi Array | 47.42 | 297 | P | P | 18 11 27.7 | 0.0 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.5s | | | | | | |
| MKAR | Makanchi Array | 47.42 | 297 | P | P | 18 11 27.1 | -0.6 |
| MKAR | Makanchi Array | 47.42 | 297 | P | P | 18 11 27.5 | -0.2 |
| | comp=Z,0.2nm,0.3s,baz=61,slow=9.9,SNR=4.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 47.42 | 297 | eP | P | 18 11 26.9 | -0.8 |
| MKAR | Makanchi Array | 47.42 | 297 | eP | P | 18 11 26.9 | -0.8 |
| PDAR | Pinedale Array | 62.28 | 56 | P | P | 18 13 15.2 | -0.3 |
| | comp=Z,0.1nm,0.4s,baz=237,slow=3.1,SNR=3.7 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| FINES | FINESS Array B | 62.85 | 335 | P | P | 18 13 17.9 | -0.7 |
| | comp=Z,0.8nm,0.5s,baz=30,slow=7.5,SNR=11 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| OBN | Obninsk | 64.50 | 326 | eP | P | 18 13 28.8 | -0.8 |
| OBN | Obninsk | 64.50 | 326 | eP | P | 18 13 28.8 | -0.8 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| BORG | Borgarnes | 66.77 | 358 | i P | P | 18 13 46.8 | +2.8 |
| WRA | Warramunga Arr | 70.98 | 201 | P | P | 18 14 10.3 | -0.4 |
| | comp=Z,0.7nm,0.8s,baz=18,slow=6.6,SNR=4.8 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 70.98 | 201 | eP | P | 18 14 11.6 | +0.9 |
| ASAR | Alice Springs | 74.67 | 200 | P | P | 18 14 32.8 | +0.3 |
| | comp=Z,0.1nm,0.5s,baz=16,slow=5.6,SNR=1.2 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| EKA | Eskdalemuir Ar | 74.70 | 348 | P | P | 18 14 32.4 | -0.1 |
| | comp=Z,0.3nm,0.4s,baz=18,slow=5.1,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| BUR08 | Bucovina Ar. S | 74.71 | 328 | P | P | 18 14 31.5 | -1.3 |
| BUR08 | | | | IAmb | IAmb | 18 14 53.9 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| BURAR | Bucovina Array | 74.73 | 328 | P | P | 18 14 32.6 | -0.2 |
| BURAR | Bucovina Array | 74.73 | 328 | P | P | 18 14 32.6 | -0.2 |
| BURAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 75.13 | 63 | P | P | 18 14 34.8 | -0.7 |
| TXAR | Lajitas Array | 75.13 | 63 | P | P | 18 14 35.0 | -0.5 |
| | comp=Z,0.3nm,0.4s,baz=308,slow=4.6,SNR=3.7 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| TXAR | Lajitas Array | 75.13 | 63 | P | P | 18 14 35.0 | -0.5 |
| MORC | Moravsky Berou | 75.34 | 333 | P | P | 18 14 36.3 | 0.0 |
| MORC | | | | IAmb | IAmb | 18 14 38.2 | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| MORC | Moravsky Berou | 75.34 | 333 | P | P | 18 14 36.3 | 0.0 |
| MORC | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GO06 | Curarrehue | 145.60 | 92 | PKPdf | PKPdf | 18 22 30.4 | -0.3 |

*NOU **01** 18:36:02.3, 37.̊57S×177.̊13E, h221km, ML3.5/6, Off E. Coast of N. Island, N.Z.*
*WEL **01** 18:36:11.1±1.1, 38˚S±9˚×17˚7E±˚, h137km±8km, M2.6/12, ML2.7/8, MLv2.6/12, Error ellipse: s-maj=0.0km s-min=0.0km az=27.2, confirmed*
**ISC 01 18:36:11.1**±1.9, **37.̊70S**±0.̊05×**176.̊65E**±0.̊04, **h147**km±11km, **n49**, σ0.̊67/67, **North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OPRZ | Ohinepanea | 0.16 | 207 | P | Pn | 18 36 30.7 | -0.2 |
| OPRZ | | | | S | Sn | 18 36 45.6 | -0.5 |
| MARZ | Manawahe | 0.28 | 176 | P | Pn | 18 36 31.3 | +0.1 |
| TGRZ | Tauranga | 0.31 | 265 | P | Pn | 18 36 31.3 | 0.0 |
| TGRZ | | | | S | Sn | 18 36 46.7 | +0.1 |
| KARZ | Kaharoa | 0.45 | 225 | P | Pn | 18 36 32.0 | +0.1 |
| OMRZ | Omania | 0.46 | 208 | P | Pn | 18 36 32.1 | +0.1 |
| WIZ | White Island | 0.46 | 68 | P | Pn | 18 36 31.7 | -0.2 |
| TARZ | Mount Tarawera | 0.55 | 192 | P | Pn | 18 36 32.9 | +0.4 |
| KMRZ | Kaimai | 0.58 | 255 | P | Pn | 18 36 30.7 | -1.9 |
| URZ | Urewera | 0.67 | 147 | P | Pn | 18 36 32.8 | -0.2 |
| URZ | Urewera | 0.67 | 147 | P | Pn | 18 36 32.5 | -0.6 |
| URZ | | | | S | Sn | 18 36 49.6 | -0.2 |
| MUGZ | Murupara | 0.78 | 173 | P | Pn | 18 36 33.7 | -0.2 |
| MUGZ | | | | S | Sn | 18 36 51.7 | +0.4 |
| RUGZ | Raukumara Rang | 0.86 | 108 | P | Pn | 18 36 33.7 | -0.9 |
| RUGZ | | | | S | Sn | 18 36 51.5 | -0.9 |
| HAZ | Te Kaha | 0.90 | 94 | P | Pn | 18 36 34.2 | -0.5 |
| HAZ | | | | S | Sn | 18 36 52.7 | 0.0 |
| TOZ | Tahuroa Road | 0.91 | 268 | P | Pn | 18 36 35.1 | +0.3 |
| TOZ | | | | S | Sn | 18 36 53.2 | +0.4 |
| MWZ | Matawai | 0.94 | 133 | P | Pn | 18 36 34.8 | -0.3 |
| MWZ | | | | S | Sn | 18 36 53.0 | -0.5 |
| RTZ | Ruatahuna | 0.95 | 164 | P | Pn | 18 36 34.1 | -1.2 |
| RTZ | | | | S | Sn | 18 36 54.5 | +0.7 |
| RAGZ | Rawiri | 1.00 | 143 | P | Pn | 18 36 36.0 | +0.4 |
| RAGZ | | | | S | Sn | 18 36 54.9 | +0.5 |
| KUTZ | Kaahu Road | 1.02 | 219 | P | Pn | 18 36 36.3 | +0.5 |
| TLZ | Tolley Road | 1.08 | 234 | P | Pn | 18 36 36.8 | +0.4 |
| WHTZ | Whakaora | 1.11 | 209 | P | Pn | 18 36 37.7 | +1.1 |
| MRHZ | Matea Rd | 1.15 | 189 | P | Pn | 18 36 37.1 | +0.2 |
| TWGZ | Tauwhareparae | 1.16 | 115 | P | Pn | 18 36 37.6 | +0.6 |
| TWGZ | | | | S | Sn | 18 36 58.8 | +2.0 |
| MTHZ | Maungataniwha | 1.16 | 173 | P | Pn | 18 36 37.1 | 0.0 |
| MTHZ | | | | S | Sn | 18 36 57.1 | +0.1 |
| TKGZ | Te Karaka | 1.20 | 128 | P | Pn | 18 36 37.5 | +0.1 |
| TKGZ | | | | S | Sn | 18 36 57.2 | -0.3 |
| KUZ | Kuaotunu | 1.21 | 322 | P | Pn | 18 36 37.4 | -0.1 |
| KUZ | Kuaotunu | 1.21 | 322 | P | Pn | 18 36 37.4 | -0.1 |
| SNGZ | Shannon Statio | 1.21 | 153 | P | Pn | 18 36 37.7 | +0.2 |
| SNGZ | | | | S | Sn | 18 36 58.6 | +0.8 |
| WATZ | Wairara | 1.24 | 215 | P | Pn | 18 36 38.9 | +1.1 |
| RAHZ | Arahi | 1.26 | 164 | P | Pn | 18 36 38.4 | +0.4 |
| MKAZ | Moumakai | 1.32 | 296 | P | Pn | 18 36 39.0 | +0.4 |
| MXZ | Matakaoa Point | 1.32 | 85 | P | Pn | 18 36 39.4 | +0.8 |
| MXZ | | | | S | Sn | 18 36 59.7 | +0.1 |
| RIGZ | Rimuhau | 1.33 | 139 | P | Pn | 18 36 39.1 | +0.3 |
| RIGZ | | | | S | Sn | 18 36 59.4 | -0.5 |
| RATZ | Rangitukua | 1.35 | 210 | P | Pn | 18 36 39.4 | +0.5 |
| NMHZ | Naumai | 1.40 | 175 | P | Pn | 18 36 40.2 | +0.7 |
| BKZ | Black Stump Fm | 1.47 | 185 | P | Pn | 18 36 40.0 | -0.2 |
| BKZ | Black Stump Fm | 1.47 | 185 | P | Pn | 18 36 39.8 | -0.4 |
| BKZ | | | | S | Sn | 18 37 01.5 | -1.0 |
| KATZ | Kakaramea | 1.48 | 210 | P | Pn | 18 36 41.0 | +0.6 |
| WIAZ | Waiheke Island | 1.51 | 306 | P | Pn | 18 36 40.9 | +0.4 |
| PRGZ | Paritu Road | 1.56 | 142 | P | Pn | 18 36 41.5 | +0.4 |
| PRGZ | | | | S | Sn | 18 37 03.9 | -0.2 |
| ARHZ | Aropaoanui | 1.58 | 170 | P | Pn | 18 36 41.5 | +0.2 |
| ARHZ | | | | S | Sn | 18 37 04.8 | +0.3 |
| KRVZ | Karewarewa | 1.60 | 209 | P | Pn | 18 36 42.3 | +0.6 |
| HIZ | Hauiti | 1.63 | 240 | P | Pn | 18 36 42.4 | +0.6 |
| HIZ | Hauiti | 1.63 | 240 | P | Pn | 18 36 42.4 | +0.6 |
| WTVZ | West Tongariro | 1.64 | 210 | P | Pn | 18 36 42.7 | +0.6 |
| TWVZ | Taurewa | 1.67 | 214 | P | Pn | 18 36 43.0 | +0.7 |
| MBAZ | Motutapu North | 1.68 | 303 | P | Pn | 18 36 42.9 | +0.6 |
| GRZ | Great Barrier | 1.73 | 326 | P | Pn | 18 36 43.0 | 0.0 |
| QRZ | Quartz Range | 4.47 | 224 | P | Pn | 18 37 15.2 | -2.2 |
| KHZ | Kahutara | 5.28 | 206 | P | Pn | 18 37 24.1 | -4.0 |

**IDC 01 18:39:49.5**±4.2, **30.̊08S**×**178.̊43W**, **h0**km, **mb3.3**/2, **mbtmp3.3**/2, **Error ellipse: s-maj=118.9km s-min=20.1km az=136.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 0.93 | 28 | Pn | Pn | 18 40 10.1 | +0.3 |
| | 125nm,0.3s,baz=287,slow=21,SNR=1.6 | | | | | | |
| RAO | | | | Sn | Sn | 18 40 24.7 | +0.9 |
| | 146nm,0.3s,baz=287,slow=19,SNR=1.8 | | | | | | |
| ASAR | Alice Springs | 42.76 | 267 | P | P | 18 47 49.4 | +0.5 |
| | 0.3nm,0.7s,baz=106,slow=7.4,SNR=4.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 43.72 | 272 | P | P | 18 47 56.2 | -0.4 |
| | 0.3nm,0.6s,baz=111,slow=8.0,SNR=5.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **144.71** | **340** | PKP | PKPab | 18 59 25.9 | -0.3 |
| | 0.7nm,0.7s,baz=67,slow=5.0,SNR=4.2 | | | | | | |

**DJA 01 18:41:40.9**±0.8**,8˚S**±9˚×**12˚4E**±˚**,h177**$^{km}$±6$^{km}$**,M3.5**/7**, mb4.1**/3**,MLv3.2**/7**,Flores region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **1.67** | **170** | P | Pn | 18 42 15.8 | +1.3 |
| SOEI | | | | S | Sn | 18 42 38.7 | -1.8 |
| **MMRI** | **Maumere** | **1.79** | **253** | P | Pn | 18 42 15.6 | 0.0 |
| **BATI** | **Baumata** | **2.12** | **188** | P | Pn | 18 42 19.7 | +0.6 |
| BATI | | | | S | Sn | 18 42 46.5 | -2.3 |
| **PLAI** | **Plampang** | **6.17** | **263** | P | Pn | 18 43 10.2 | +0.1 |
| | 47nm,1.2s,0.2nm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **7.04** | **264** | P | Pn | 18 43 21.3 | -0.3 |
| | 32nm,1.3s | | | | | | |

*SOME **01** 18:43:49.0,39˚47N×73˚15E,h10$^{km}$*
*KRNET **01** 18:43:49.4±0.1,39˚30N×74˚17E,h11$^{km}$,mb3.0*
*NNC **01** 18:43:54.9±5.1,39˚50N×74˚03E,h0$^{km}$,mb3.8,mpv3.4, Error ellipse: s-maj=37.5km s-min=20.6km az=172.0*
**ISC 01 18:43:54.3**±1.9**,39˚45N**±0˚07×**73˚92E**±0˚04**,h4**$^{km}$±11$^{km}$**, n31,**σ**2**$^{s}$**15**/55**,21C-11D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.65** | **331** | ⇑iP | **Pg** | **18 44 06.2** | **-0.6** |
| | baz=25 | | | | | | |
| SFK | | | | ⇑iS | **Sb** | **18 44 19.0** | **+1.2** |
| | baz=25 | | | | | | |
| **OHH** | **Osh** | **1.38** | **321** | ⇓eP | **Pg** | **18 44 19.9** | **-0.9** |
| | baz=19 | | | | | | |
| OHH | | | | ⇓eS | **Sn** | **18 44 42.2** | **+3.0** |
| | baz=19 | | | | | | |
| **DRK** | **Karamyk** | **1.64** | **272** | ⇑iP | **Pn** | **18 44 24.2** | **+0.1** |
| | baz=76 | | | | | | |
| DRK | | | | ⇑iS | **Sg** | **18 44 48.7** | **+1.8** |
| | baz=76 | | | | | | |
| **ARSB** | **Arslanbob** | **2.01** | **339** | ⇓eP | **Pn** | **18 44 29.8** | **+0.7** |
| | baz=36 | | | | | | |
| ARSB | | | | ⇓eS | **Sg** | **18 44 59.0** | **+0.2** |
| | baz=36 | | | | | | |
| **ARLS** | **Aral** | **2.43** | **7** | ⇓eP | **Pn** | **18 44 34.6** | **-0.3** |
| | baz=3.0 | | | | | | |
| ARLS | | | | ⇓iS | **Sb** | **18 45 07.5** | **-1.6** |
| | baz=3.0 | | | | | | |
| **BTK** | **Batken** | **2.46** | **285** | ⇑eP | **Pn** | **18 44 36.1** | **+0.8** |
| | baz=87 | | | | | | |
| BTK | | | | ⇑eS | **Sg** | **18 45 09.9** | **-3.6** |
| | baz=87 | | | | | | |
| **NRN** | **Naryn** | **2.54** | **38** | ⇑eP | **Pn** | **18 44 34.5** | **-2.1** |
| | baz=32 | | | | | | |
| NRN | | | | ⇑eS | **Sn** | **18 45 06.8** | **-1.4** |
| | baz=32 | | | | | | |
| **AML** | **Almayashu** | **2.69** | **356** | ⇑iP | **Pn** | **18 44 38.9** | **+0.3** |
| | baz=53 | | | | | | |
| AML | | | | ⇑iS | **Sb** | **18 45 15.0** | **-1.6** |
| | baz=53 | | | | | | |
| **ARK** | **Arkit** | **2.78** | **328** | ⇑iP | **Pn** | **18 44 40.4** | **+0.7** |
| | baz=27 | | | | | | |
| ARK | | | | ⇑iS | **Sb** | **18 45 17.7** | **-1.3** |
| | baz=27 | | | | | | |
| **TRKS** | **Terek-Say** | **2.97** | **315** | ⇑eP | **Pn** | **18 44 42.4** | **+0.1** |
| | baz=14 | | | | | | |
| TRKS | | | | ⇑iS | **Sb** | **18 45 21.1** | **-3.4** |
| | baz=14 | | | | | | |
| **AAK** | **Ala-Archa** | **3.22** | **8** | ⇑Pg | **Pn** | **18 44 49.8** | **+4.1** |
| | 6.8nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 18 45 34.1 | |
| | 7.5nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **3.22** | **341** | ⇓eP | **Pn** | **18 44 46.8** | **+1.1** |
| | baz=39 | | | | | | |
| MNAS | | | | ⇓eS | **Sb** | **18 45 27.9** | **-3.8** |
| | baz=39 | | | | | | |
| **MRKS** | **Merke** | **3.34** | **351** | eP | **Pn** | **18 44 50.0** | **+2.8** |
| | 6.9nm,0.4s | | | | | | |
| MRKS | | | | eS | **Sb** | **18 45 34.3** | **-0.7** |
| | 9.2nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.34** | **351** | Pg | **Pn** | **18 44 50.1** | **+2.8** |
| | 6.9nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 18 45 34.3 | |
| | 9.2nm,0.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.41** | **26** | ⇑eP | **Pn** | **18 44 47.6** | **-0.7** |
| | baz=22 | | | | | | |
| BOOM | | | | ⇑eS | **Sn** | **18 45 29.4** | **+0.2** |
| | baz=22 | | | | | | |
| **KDJ** | **Kajisay** | **3.65** | **42** | ⇓eP | **Pn** | **18 44 50.3** | **-1.4** |
| | baz=38 | | | | | | |
| KDJ | | | | ⇓eS | **Sn** | **18 45 33.7** | **-1.6** |
| | baz=38 | | | | | | |
| **KST** | **Kastek** | **3.91** | **23** | eP | **Pb** | **18 45 05.0** | **+1.1** |
| | 2.9nm,0.5s | | | | | | |
| KST | | | | eS | **Sg** | **18 45 59.9** | **0.0** |
| | 4.5nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.04** | **20** | eP | **Pb** | **18 45 06.7** | **+0.6** |
| | 3.9nm,0.6s | | | | | | |
| DGS | | | | eS | **Sg** | **18 46 02.7** | **-1.4** |
| | 5.7nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.25** | **32** | eP | **Pb** | **18 45 12.9** | **+3.0** |
| | 5.6nm,0.4s | | | | | | |
| TNSS | | | | eS | **Sg** | **18 46 13.3** | **+2.4** |
| | 3.1nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.25** | **32** | Pg | **Pb** | **18 45 12.9** | **+3.0** |
| | 5.6nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 18 46 13.3 | |
| | 3.1nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **4.45** | **17** | eP | **Pb** | **18 45 14.6** | **+1.6** |
| | 3.5nm,0.5s | | | | | | |
| KRBS | | | | eS | **Sg** | **18 46 16.4** | **-0.7** |
| | 2.7nm,0.9s | | | | | | |
| **KRBS** | **Karabastau** | **4.45** | **17** | Pg | **Pb** | **18 45 14.5** | **+1.6** |
| | 3.5nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 18 46 14.9 | |
| | 1.8nm,0.3s | | | | | | |
| **KK31** | **Karatay Array** | **4.46** | **326** | ⇑Pn | **Pn** | **18 45 04.9** | **+2.2** |
| | 1.1nm,0.4s,baz=128,slow=12,SNR=19 | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **18 45 15.1** | **+1.9** |
| | 1.4nm,0.5s | | | | | | |
| KK31 | | | | ⇑Sn | **Sb** | **18 46 00.8** | **-6.6** |
| | 0.8nm,0.3s,baz=133,slow=23,SNR=4.0 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 18 46 17.9 | |
| | 2.7nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.48** | **31** | eP | **Pb** | **18 45 16.1** | **+2.4** |
| | 5.1nm,0.6s | | | | | | |
| KOTS | | | | eS | **Sg** | **18 46 18.7** | **+0.4** |
| | 8.8nm,0.9s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.48** | **31** | Pg | **Pb** | **18 45 16.0** | **+2.4** |
| | 5.1nm,0.6s | | | | | | |
| KOTS | | | | Lg | Lg | 18 46 18.7 | |
| | 8.8nm,0.9s | | | | | | |
| **BRLS** | **Borolday** | **4.72** | **321** | eP | **Pn** | **18 45 06.4** | **+0.2** |
| | 1.1nm,0.3s | | | | | | |
| BRLS | | | | eS | **Sn** | **18 46 01.7** | **+0.3** |
| | 3.3nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **4.72** | **321** | Pg | **Pn** | **18 45 05.9** | **-0.4** |
| | 1.1nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 18 45 59.8 | |
| | 4.2nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **4.74** | **25** | eP | **Pb** | **18 45 20.1** | **+2.2** |
| | 5.9nm,0.5s | | | | | | |
| KTBS | | | | eS | **Sg** | **18 46 25.0** | **-1.5** |
| | 9.1nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.74** | **25** | Pg | **Pb** | **18 45 20.1** | **+2.2** |
| | 5.9nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 18 46 25.0 | |
| | 9.1nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **5.59** | **30** | eP | **Pb** | **18 45 36.1** | **+3.7** |
| | 4.1nm,0.5s | | | | | | |
| ARXS | | | | eS | **Sg** | **18 46 53.0** | **-0.6** |
| | 5.1nm,0.8s | | | | | | |
| **ARXS** | **Arharly** | **5.59** | **30** | Pg | **Pb** | **18 45 34.7** | **+2.3** |
| | 4.1nm,0.5s | | | | | | |
| ARXS | | | | Lg | Lg | 18 46 50.7 | |
| | 5.1nm,0.8s | | | | | | |

*NEIC **01** 18:55:26.9±1.3,56˚1S±0˚1×27˚9W±0˚2,h115$^{km}$±7$^{km}$, mb4.1/8,Error ellipse: s-maj=23.1km s-min=15.2km az=211.0*
*IDC **01** 18:55:29.9±12.0,56˚11S×27˚63W,h144$^{km}$±110$^{km}$, mb3.7/4,mbtmp4.1/4,Error ellipse: s-maj=80.7km s-min=23.6km az=108.0*
**ISC 01 18:55:26.9**±0.6**,56˚1S**±0˚1×**28˚0W**±0˚1**,h121**$^{km}$**,n39,** σ**0**$^{s}$**74**/39**,mb4.0**/6**,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.21** | **287** | Pn | **Pn** | **18 56 43.5** | **+1.0** |
| HOPE | | | | Sn | **Sn** | **18 57 39.6** | **-1.8** |
| **BELA** | **Belgrano 2** | **21.99** | **184** | P | **P** | **19 00 09.4** | **-1.3** |
| BELA | | | | IAmb | IAmb | 19 00 11.7 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.15** | **180** | P | **P** | **19 02 00.0** | **+0.1** |
| QSPA | | | | IAmb | IAmb | 19 02 01.1 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.15** | **180** | P | **P** | **19 02 00.3** | **+0.3** |
| | comp=Z,1.4nm,0.4s,baz=118,slow=1.3,SNR=24 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **MT02** | **Curacav** | **37.39** | **289** | P | **P** | **19 02 27.6** | **-0.2** |
| **SBA** | **Scott Base** | **45.99** | **184** | P | **P** | **19 03 37.9** | **+0.7** |
| **VNDA** | **Vanda** | **46.50** | **183** | P | **P** | **19 03 42.2** | **+1.0** |
| **VNDA** | **Vanda** | **46.50** | **183** | P | **P** | **19 03 42.2** | **+1.0** |
| | comp=Z,0.8nm,0.6s,baz=178,slow=5.6,SNR=7.8 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **LPAZ** | **La Paz** | **50.05** | **306** | P | **P** | **19 04 11.4** | **+1.5** |
| LPAZ | | | | IAmb | IAmb | 19 04 20.5 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **DBIC** | **Dimbokro** | **65.40** | **25** | P | **P** | **19 05 55.5** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=154,slow=7.0,SNR=1.5 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **73.32** | **30** | P | **P** | **19 06 45.4** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **73.32** | **30** | P | **P** | **19 06 45.4** | **+0.4** |
| TORD | | | | IAmb | IAmb | 19 06 46.3 | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.32** | **30** | P | **P** | **19 06 45.5** | **+0.4** |
| | comp=Z,3.1nm,0.5s,baz=209,slow=6.0,SNR=26 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **124.64** | **28** | PKP | **PKPdf** | **19 14 09.6** | **-0.9** |
| | comp=Z,0.5nm,0.7s,baz=263,slow=2.4,SNR=4.3 | | | | | | |
| **STCH** | **Steam Cracks** | **126.35** | **249** | | **PKPdf** | **19 14 13.4** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **142.79** | **64** | PKhKP | PKPpre | 19 14 38.2 | |
| | comp=Z,0.6nm,0.5s,baz=226,slow=2.5,SNR=2.3 | | | | | | |
| **M30M** | **Minto, Yukon** | **144.87** | **310** | | **PKPdf** | **19 14 48.2** | **+0.1** |
| **F31M** | **Tsiigehtchic** | **145.38** | **319** | PKPdf | **PKPab** | **19 14 49.4** | **+0.1** |
| **G31M** | **Satah River** | **145.41** | **318** | PKPdf | **PKPbc** | **19 14 49.2** | **+0.2** |
| **J30M** | **Hart River** | **145.42** | **314** | PKPdf | **PKPbc** | **19 14 49.6** | **+0.3** |
| **M29M** | **Somme Creek** | **145.54** | **310** | PKPdf | **PKPbc** | **19 14 50.0** | **+0.3** |
| **L29M** | **L29M** | **145.64** | **311** | | **PKPab** | **19 14 50.8** | **+0.3** |
| **K29M** | **Barlow Dome** | **145.65** | **312** | PKPdf | **PKPab** | **19 14 51.0** | **+0.4** |
| **I30M** | **Mount Dempster** | **145.66** | **315** | PKPdf | **PKPab** | **19 14 50.6** | **0.0** |
| **G30M** | **tAoh Zraii Nji** | **146.16** | **318** | PKPdf | **PKPab** | **19 14 52.5** | **+0.2** |
| **EPYK** | **Eagle Plains** | **146.16** | **317** | PKPdf | **PKPbc** | **19 14 52.0** | **+0.6** |
| **H29M** | **Whitestone** | **146.75** | **316** | PKPdf | **PKPbc** | **19 14 53.5** | **+0.5** |
| **G29M** | **Pine Creek** | **146.82** | **317** | | **PKPbc** | **19 14 53.7** | **+0.5** |
| **I28M** | **Miner Creek** | **147.15** | **314** | PKPdf | **PKPbc** | **19 14 54.3** | **0.0** |
| **E29M** | **Blow River** | **147.15** | **320** | | **PKPbc** | **19 14 54.0** | **-0.1** |
| **F28M** | **Old Crow** | **147.69** | **318** | PKPbc | **PKPbc** | **19 14 56.2** | **+0.6** |
| **I26K** | **Coal Creek Min** | **148.41** | **313** | | **PKPbc** | **19 14 57.8** | **+0.3** |
| **D27M** | **Malcolm River** | **148.42** | **321** | | **PKiKP** | **19 14 58.9** | **-0.1** |
| **E27K** | **Coleen River** | **148.45** | **319** | PKPbc | **PKPbc** | **19 14 57.2** | **-0.4** |
| **BMAR** | **Burnt Mountain** | **149.43** | **317** | PKPbc | **PKiKP** | **19 15 01.0** | **-0.2** |
| **ILAR** | **Eielson Array** | **149.82** | **312** | | **PKPbc** | **19 15 00.2** | **-0.9** |
| **ILAR** | **Eielson Array** | **149.82** | **312** | PKPbc | **PKPbc** | **19 15 01.2** | **+0.2** |
| | comp=Z,1.5nm,0.8s,baz=126,slow=1.8,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **151.17** | **87** | PKPbc | **PKPbc** | **19 15 04.3** | **-0.7** |
| | comp=Z,0.8nm,0.5s,baz=232,slow=3.2,SNR=5.6 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **151.44** | **319** | | **PKiKP** | **19 15 05.3** | **+0.1** |

**IDC 01 19:29:32.1**±4.9**,7˚71S**×**146˚75E,h114**$^{km}$±53$^{km}$**,mb2.6**/1**, mbtmp3.1**/2**,Error ellipse: s-maj=75.1km s-min=36.8km az=128.0,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **1.73** | **167** | P | Pn | 19 30 02.7 | +0.7 |
| | 10nm,0.3s,baz=354,slow=12,SNR=28 | | | | | | |
| PMG | | | | S | Sn | 19 30 24.8 | 0.0 |
| | 18nm,0.3s,baz=324,slow=18,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.11** | **223** | P | P | 19 33 24.0 | -0.2 |
| | 0.2nm,0.4s,baz=49,slow=11,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **20.09** | **216** | P | P | 19 33 57.7 | +0.9 |
| | 0.4nm,0.6s,baz=42,slow=11,SNR=10 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.24** | **282** | PKPbc | PKPbc | 19 48 55.6 | -1.6 |
| | 0.2nm,0.5s,baz=62,slow=3.8,SNR=4.1 | | | | | | |

**IDC 01 19:39:43.2**±1.9**,7˚32S**×**129˚48E,h0**$^{km}$**,mb3.5**/2**, mbtmp3.4**/4**,ML3.3**/2**,Error ellipse: s-maj=138.0km s-min=30.4km az=68.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.40** | **160** | Pn | Pn | 19 42 53.4 | -1.5 |
| | 0.2nm,0.3s,baz=342,slow=14,SNR=17 | | | | | | |
| WRA | | | | Sn | Sn | 19 45 12.4 | -12 |
| | 0.4nm,0.3s,baz=329,slow=23,SNR=11 | | | | | | |
| | 0.2nm,0.2s | | | | | | |
| **ASAR** | **Alice Springs** | **16.80** | **166** | Pn | P | 19 43 41.5 | -0.8 |
| | 0.1nm,0.3s,baz=345,slow=12,SNR=8.1 | | | | | | |
| ASAR | | | | Sn | Sn | 19 46 35.4 | -12 |
| | 0.1nm,0.3s,baz=350,slow=27,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.21** | **327** | P | P | 19 50 46.0 | +0.3 |
| | 0.3nm,0.4s,baz=117,slow=8.2,SNR=7.5 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.51** | **329** | P | P | 19 51 11.4 | -0.5 |
| | 0.2nm,0.5s,baz=124,slow=5.9,SNR=2.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*SJA **01** 19:55:41.1±0.8,20˚40S×69˚00W,h120$^{km}$±5$^{km}$,ML4.4, MW4.2*
*NEIC **01** 19:55:41.7±1.0,20˚39S±0˚03×69˚06W±0˚07,h123$^{km}$±7$^{km}$, mb4.5/20,ML4.4(GUC),Error ellipse: s-maj=10.3km s-min=4.7km az=90.0*
*VAO **01** 19:55:42.7±0.4,20˚35S×68˚77W,h108$^{km}$±4$^{km}$,mb4.8*
*GUC **01** 19:55:42.3±0.8,20˚40S×69˚04W,h119$^{km}$±4$^{km}$,ML4.4*
*IDC **01** 19:55:43.5±1.4,20˚44S×68˚68W,h119$^{km}$±12$^{km}$,mb3.9/6, mbtmp4.3/10,Error ellipse: s-maj=25.7km s-min=12.7km az=111.0*
**ISC 01 19:55:41.2**±0.6**,20˚39S**±0˚03×**69˚00W**±0˚05**,h118**$^{km}$±5$^{km}$**, n118,**σ**1**$^{s}$**51**/150**,mb4.6**/8**,6C-1D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PX03** | **IPOC Station P** | **0.59** | **269** | ⇓eP | **Pn** | **19 55 59.7** | **+0.1** |
| PX03 | | | | eS | **Sn** | **19 56 13.6** | **+0.1** |
| **GO01** | **Chusmiza** | **0.74** | **346** | Pn | **Pn** | **19 56 02.4** | **+1.2** |
| GO01 | | | | Sn | **Sn** | **19 56 17.0** | **+0.7** |
| **GO01** | **Chusmiza** | **0.74** | **346** | eP | **Pn** | **19 56 02.5** | **+1.2** |
| GO01 | | | | eS | **Sn** | **19 56 17.4** | **+1.2** |
| GO01 | | | | IAML | | 19 56 20.3 | |
| | comp=Z,26µm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **0.74** | **346** | ⇑eP | **Pn** | **19 56 02.5** | **+1.2** |
| GO01 | | | | eS | **Sn** | **19 56 17.2** | **+0.9** |
| **PB01** | **IPOC Station P** | **0.79** | **215** | | **Pn** | **19 56 01.7** | **+0.5** |
| **PB01** | **IPOC Station P** | **0.79** | **215** | eP | **Pn** | **19 56 01.9** | **+0.6** |
| PB01 | | | | eS | **Sn** | **19 56 17.2** | **+0.9** |
| PB01 | | | | IAML | | 19 56 18.2 | |
| | comp=Z,8µm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **0.79** | **215** | ⇑eP | **Pn** | **19 56 01.8** | **+0.6** |
| PB01 | | | | eS | **Sn** | **19 56 16.6** | **+0.3** |
| PB01 | | | | IAML | | 19 56 17.4 | |
| | comp=N,15µm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **0.84** | **277** | | **Pn** | **19 56 02.1** | **+0.4** |
| HMBC | | | | Sn | **Sn** | **19 56 17.3** | **+0.2** |
| **TA02** | **Huaiquique** | **1.07** | **276** | | **Pn** | **19 56 04.1** | **+0.4** |
| **TA02** | **Huaiquique** | **1.07** | **276** | eP | **Pn** | **19 56 04.6** | **+0.9** |
| TA02 | | | | eS | **Sn** | **19 56 22.1** | **+1.4** |
| TA02 | | | | IAML | | 19 56 23.3 | |
| | comp=Z,9µm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **1.07** | **276** | ⇑eP | **Pn** | **19 56 04.0** | **+0.3** |
| TA02 | | | | eS | **Sn** | **19 56 20.7** | **0.0** |
| TA02 | | | | IAML | | 19 56 24.4 | |
| | comp=N,9µm,0.1s | | | | | | |
| **TA01** | **Diego Aracena** | **1.12** | **261** | Pn | **Pn** | **19 56 04.5** | **+0.3** |
| **TA01** | **Diego Aracena** | **1.12** | **261** | eP | **Pn** | **19 56 04.8** | **+0.6** |
| TA01 | | | | eS | **Sn** | **19 56 23.4** | **+1.7** |
| TA01 | | | | IAML | | 19 56 28.1 | |
| | comp=Z,3µm,0.5s | | | | | | |
| **TA01** | **Diego Aracena** | **1.12** | **261** | ⇑eP | **Pn** | **19 56 04.7** | **+0.4** |
| TA01 | | | | eS | **Sn** | **19 56 21.3** | **-0.4** |
| TA01 | | | | IAML | | 19 56 23.1 | |
| | comp=E,10µm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **1.42** | **189** | | **Pn** | **19 56 08.7** | **+0.9** |
| PB09 | | | | Sn | **Sn** | **19 56 28.3** | **+0.4** |
| **PB09** | **IPOC Station P** | **1.42** | **189** | eP | **Pn** | **19 56 08.8** | **+1.1** |
| PB09 | | | | eS | **Sn** | **19 56 29.0** | **+1.2** |
| PB09 | | | | IAML | | 19 56 29.6 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **PB09** | **IPOC Station P** | **1.42** | **189** | ⇑eP | **Pn** | **19 56 08.7** | **+0.9** |
| PB09 | | | | eS | **Sn** | **19 56 28.8** | **+0.9** |
| PB09 | | | | IAML | | 19 56 29.9 | |
| | comp=N,5µm,0.6s | | | | | | |
| **PX02** | **IPOC Station P** | **1.81** | **321** | ⇑eP | **Pn** | **19 56 12.4** | **0.0** |
| PX02 | | | | eS | **Sn** | **19 56 35.7** | **-0.4** |
| PX02 | | | | IAML | | 19 56 42.6 | |
| | comp=N,2µm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **2.21** | **209** | | **Pn** | **19 56 17.3** | **-0.1** |
| **PB04** | **IPOC Station P** | **2.21** | **209** | eP | **Pn** | **19 56 17.9** | **+0.5** |
| PB04 | | | | eS | **Sn** | **19 56 45.0** | **-0.1** |
| PB04 | | | | IAML | | 19 56 49.2 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **2.21** | **209** | eP | **Pn** | **19 56 17.6** | **+0.2** |
| PB04 | | | | eS | **Sn** | **19 56 43.9** | **-1.2** |
| PB04 | | | | IAML | | 19 56 51.0 | |
| | comp=N,2µm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **2.21** | **178** | | **Pn** | **19 56 18.4** | **+0.9** |
| **LVC** | **Limon Verde** | **2.21** | **178** | eP | **Pn** | **19 56 19.1** | **+1.5** |
| LVC | | | | eS | **Sn** | **19 56 48.7** | **+3.3** |
| **LVC** | **Limon Verde** | **2.21** | **178** | P | **Pn** | **19 56 19.2** | **+1.6** |
| | comp=N,82nm,0.4s,baz=20,slow=12,SNR=138 | | | | | | |
| LVC | | | | S | **Sn** | **19 56 47.4** | **+2.0** |
| | comp=N,447nm,0.3s,baz=275,slow=23,SNR=25 | | | | | | |
| **LVC** | **Limon Verde** | **2.21** | **178** | i P | **Pn** | **19 56 19.0** | **+1.4** |
| LVC | | | | i S | **Sn** | **19 56 46.5** | **+1.1** |
| LVC | | | | IAML | | 19 56 53.8 | |
| | comp=N,3µm,0.3s | | | | | | |
| **LVC** | **Limon Verde** | **2.21** | **178** | eP | **Pn** | **19 56 18.9** | **+1.4** |
| LVC | | | | eS | **Sn** | **19 56 46.7** | **+1.3** |
| **PB06** | **IPOC Station P** | **2.37** | **193** | | **Pn** | **19 56 19.8** | **+0.4** |
| **PB06** | **IPOC Station P** | **2.37** | **193** | eP | **Pn** | **19 56 19.9** | **+0.6** |
| PB06 | | | | eS | **Sn** | **19 56 46.8** | **-1.8** |
| PB06 | | | | IAML | | 19 56 58.7 | |
| | comp=Z,895nm,0.5s | | | | | | |
| **PB06** | **IPOC Station P** | **2.37** | **193** | eP | **Pn** | **19 56 19.6** | **+0.3** |
| PB06 | | | | eS | **Sn** | **19 56 47.9** | **-0.7** |
| PB06 | | | | IAML | | 19 56 53.6 | |
| | comp=E,2µm,0.4s | | | | | | |
| **AP01** | **Chacalluta** | **2.37** | **328** | eP | **Pn** | **19 56 20.3** | **+1.0** |
| AP01 | | | | eS | **Sn** | **19 56 51.5** | **+3.0** |
| AP01 | | | | IAML | | 19 56 54.8 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **AF01** | **San Pedro de A** | **2.66** | **163** | | **Pn** | **19 56 25.2** | **+1.9** |
| **PB05** | **IPOC Station P** | **2.69** | **204** | | **Pn** | **19 56 23.4** | **-0.1** |
| **PB05** | **IPOC Station P** | **2.69** | **204** | eP | **Pn** | **19 56 23.8** | **+0.3** |
| PB05 | | | | eS | **Sn** | **19 56 54.9** | **-1.2** |
| PB05 | | | | IAML | | 19 56 57.4 | |
| | comp=Z,664nm,0.3s | | | | | | |
| **PB05** | **IPOC Station P** | **2.69** | **204** | eP | **Pn** | **19 56 23.4** | **-0.1** |
| PB05 | | | | eS | **Sn** | **19 56 54.5** | **-1.7** |
| PB05 | | | | IAML | | 19 57 04.2 | |
| | comp=N,1µm,0.5s | | | | | | |
| **PB18** | **Visviri** | **2.82** | **351** | | **Pn** | **19 56 25.5** | **-0.1** |
| **PB15** | **IPOC Station P** | **2.84** | **189** | | **Pn** | **19 56 25.6** | **+0.1** |
| **PB15** | **IPOC Station P** | **2.84** | **189** | eP | **Pn** | **19 56 26.7** | **+1.1** |
| PB15 | | | | eS | **Sn** | **19 57 00.5** | **+0.9** |
| PB15 | | | | IAML | | 19 57 06.2 | |
| | comp=Z,3µm,0.4s | | | | | | |
| **YJA** | **Yavi** | **3.71** | **119** | eP | **Pn** | **19 56 40.0** | **+2.8** |
| **LPAZ** | **La Paz** | **4.16** | **12** | Pn | **Pn** | **19 56 47.1** | **+3.5** |
| **LPAZ** | **La Paz** | **4.16** | **12** | eP | **Pn** | **19 56 47.0** | **+3.5** |
| **LPAZ** | **La Paz** | **4.16** | **12** | P | **Pn** | **19 56 46.8** | **+3.3** |
| | comp=Z,19nm,0.5s,baz=185,slow=4.8,SNR=81 | | | | | | |
| LPAZ | | | | S | **Sn** | **19 57 30.8** | **-0.9** |
| | comp=Z,18nm,0.4s,baz=184,slow=17,SNR=1.9 | | | | | | |
| **LPAZ** | **La Paz** | **4.16** | **12** | eP | **Pn** | **19 56 44.1** | **+0.6** |
| LPAZ | | | | eS | **Sn** | **19 57 29.9** | **-1.8** |
| **PB14** | **IPOC Station P** | **4.41** | **197** | | **Pn** | **19 56 44.6** | **-1.9** |
| **PB14** | **IPOC Station P** | **4.41** | **197** | eP | **Pn** | **19 56 46.2** | **-0.3** |
| PB14 | | | | eS | **Sn** | **19 57 34.6** | **-2.5** |
| PB14 | | | | IAML | | 19 57 37.1 | |
| | comp=Z,227nm,0.6s | | | | | | |
| **GO02** | **Mina Guanaco** | **4.78** | **186** | | **Pn** | **19 56 50.7** | **-0.8** |
| **GO02** | **Mina Guanaco** | **4.78** | **186** | eP | **Pn** | **19 56 51.6** | **+0.1** |
| GO02 | | | | eS | **Sn** | **19 57 45.8** | **-0.3** |
| GO02 | | | | IAML | | 19 57 51.1 | |
| | comp=Z,287nm,0.3s | | | | | | |
| **AC01** | **Pan de Azucar** | **5.92** | **194** | | **Pn** | **19 57 04.4** | **-2.1** |
| **AC06** | **Mina Casimiro** | **7.04** | **190** | | **Pn** | **19 57 18.5** | **-3.3** |
| **BBSD** | **Serra de San D** | **8.56** | **70** | eP | **Pn** | **19 57 40.2** | **-2.2** |
| BBSD | | | | eS | **Sn** | **19 59 12.9** | **-4.5** |
| **SIV** | **San Ignacio** | **8.71** | **61** | P | **Pn** | **19 57 43.0** | **-1.5** |
| | comp=Z,14nm,0.4s,baz=246,slow=12,SNR=96 | | | | | | |
| SIV | | | | S | **Sn** | **19 59 15.0** | **-6.0** |
| | comp=Z,5.3nm,0.8s,baz=305,slow=14,SNR=4.7 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.60** | **64** | Pn | **Pn** | **19 58 08.6** | **-1.2** |
| **PTLB** | **Pontes e Lacer** | **10.60** | **64** | eP | **Pn** | **19 58 09.2** | **-0.7** |
| **MURT** | **Porto Murtinho** | **10.71** | **99** | eP | **Pn** | **19 58 09.3** | **-2.1** |
| **VILB** | **Vilhena** | **11.21** | **50** | | **Pn** | **19 58 16.0** | **-2.1** |
| **VILB** | **Vilhena** | **11.21** | **50** | eP | **Pn** | **19 58 19.2** | **+1.1** |
| **CPUP** | **Villa Florida** | **12.24** | **121** | Pn | **Pn** | **19 58 30.9** | **-0.6** |
| **CPUP** | **Villa Florida** | **12.24** | **121** | P | **Pn** | **19 58 31.0** | **-0.6** |
| | comp=Z,8.8nm,0.7s,baz=303,slow=12,SNR=25 | | | | | | |
| **AQDB** | **Aquidauana** | **12.47** | **93** | Pn | **Pn** | **19 58 33.4** | **-1.3** |
| **AQDB** | **Aquidauana** | **12.47** | **93** | eP | **Pn** | **19 58 33.8** | **-0.9** |
| **MT08** | **Bocatoma Ro** | **13.04** | **184** | P | **Pn** | **19 58 44.8** | **+2.6** |
| **RVDE** | **Rio Verde (Bra** | **13.31** | **87** | eP | **Pn** | **19 58 43.1** | **-2.6** |
| **SALV** | **Santo Antonio** | **13.41** | **73** | eP | **Pn** | **19 58 45.8** | **-1.2** |
| **BO01** | **Tunca** | **14.07** | **187** | | **Pn** | **19 58 55.3** | **0.0** |
| **BO02** | **Sierra Bellavi** | **14.43** | **186** | | **Pn** | **19 58 55.6** | **-4.5** |
| **PDRB** | **Porto dos Gac** | **14.67** | **55** | eP | **Pn** | **19 59 02.7** | **-0.4** |
| **CRSM** | **Crissiumal (Br** | **15.39** | **120** | eP | **Pn** | **19 59 11.6** | **-0.4** |
| **TRCB** | **Terra Rica** | **15.41** | **102** | P | **Pn** | **19 59 12.0** | **-0.4** |
| **TRCB** | **Terra Rica** | **15.41** | **102** | eP | **Pn** | **19 59 11.5** | **-0.9** |
| **ML02** | **Panimavida** | **15.46** | **187** | Pn | **Pn** | **19 59 10.4** | **-2.5** |
| ML02 | | | | IAmb | IAmb | 19 59 18.1 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **CLDB** | **Colider** | **15.84** | **55** | eP | **P** | **19 59 18.2** | **-0.9** |
| **BI02** | **San Fabin de** | **16.34** | **187** | | **Pn** | **19 59 23.8** | **0.0** |
| **ALGR** | **Alto Alegre (B** | **16.75** | **123** | eP | **P** | **19 59 30.1** | **+0.9** |
| **LDASE** | **Londrina, Braz** | **16.86** | **103** | eP | **P** | **19 59 30.6** | **+0.1** |
| **ITAB** | **Concordia** | **16.87** | **117** | P | **P** | **19 59 30.8** | **+0.5** |
| ITAB | | | | IAmb | IAmb | 19 59 31.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **ITAB** | **Concordia** | **16.87** | **117** | eP | **P** | **19 59 30.9** | **+0.5** |
| **ARAG** | **Araguaiana, MT** | **16.99** | **77** | eP | **P** | **19 59 32.3** | **+0.5** |
| **ITRB** | **Iturama** | **17.53** | **91** | eP | **Pn** | **19 59 38.3** | **-0.1** |
| **TRQA** | **Tornquist** | **18.63** | **162** | P | **Pn** | **19 59 51.0** | **-0.4** |
| **NPGB** | **Novo Progresso** | **18.73** | **47** | eP | **P** | **19 59 50.2** | **-0.8** |
| **SNDB** | **Serra Nova Dou** | **18.94** | **66** | eP | **P** | **19 59 53.0** | **-0.2** |
| **MACA** | **Manacapuru-AM** | **18.95** | **26** | P | **P** | **19 59 53.1** | **-0.2** |
| **MACA** | **Manacapuru-AM** | **18.95** | **26** | eP | **P** | **19 59 54.0** | **+0.7** |
| **BB19B** | **Bebedouro** | **19.16** | **96** | eP | **P** | **19 59 55.3** | **-0.4** |
| **GO06** | **Curarrehue** | **19.25** | **186** | | **Pn** | **19 59 58.2** | **-0.5** |
| **IPMB** | **Ipameri, GO** | **19.78** | **87** | eP | **P** | **20 00 02.3** | **-0.2** |
| **LR05** | **Currie** | **19.94** | **187** | P | **P** | **20 00 03.8** | **0.0** |
| LR05 | | | | IAmb | IAmb | 20 00 06.9 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **RCLB** | **Rio Claro- Sao** | **20.09** | **100** | eP | **P** | **20 00 04.9** | **-0.8** |
| **SPB** | **Sao Paulo** | **20.25** | **103** | P | **P** | **20 00 06.6** | **-0.8** |
| SPB | | | | IAmb | IAmb | 20 00 49.3 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **PLCA** | **Paso Flores** | **20.32** | **183** | P | **P** | **20 00 08.9** | **+0.8** |
| **PLCA** | **Paso Flores** | **20.32** | **183** | P | **P** | **20 00 09.3** | **+1.3** |
| | comp=Z,5.5nm,0.8s,baz=14,slow=13,SNR=14 | | | | | | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **20.32** | **183** | eP | Pn | 20 00 09.8 | -1.4 |
| **ITTB** | **Itaituba** | **20.50** | **41** | eP | **P** | **20 00 09.7** | **-0.4** |
| **BDFB** | **Brasilia** | **20.50** | **80** | P | **P** | **20 00 09.1** | **-1.1** |
| BDFB | | | | IAmb | IAmb | 20 00 14.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **BDFB** | **Brasilia** | **20.50** | **80** | P | **P** | **20 00 09.2** | **-1.1** |
| | comp=Z,7.0nm,0.4s,baz=247,slow=11,SNR=8.7 | | | | | | |
| | comp=Z,7.0nm,0.4s | | | | | | |
| **VAO** | **Valinhos** | **20.64** | **101** | P | **P** | **20 00 11.4** | **-0.2** |
| VAO | | | | IAmb | IAmb | 20 00 12.6 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **VAO** | **Valinhos** | **20.64** | **101** | eP | **P** | **20 00 11.5** | **-0.2** |
| **LL03** | **Petrohue** | **20.89** | **187** | P | **P** | **20 00 13.3** | **-0.7** |
| **LL05** | **Los Muermos** | **21.29** | **189** | P | **P** | **20 00 16.9** | **-1.5** |
| **MAL2** | **Monte Alegre,** | **23.30** | **40** | P | **P** | **20 00 38.4** | **-0.5** |
| MAL2 | | | | IAmb | IAmb | 20 00 40.2 | |
| | comp=Z,34nm,1.1s | | | | | | |
| **DIAM** | **Diamantina, MG** | **23.98** | **89** | eP | **P** | **20 00 45.4** | **+0.2** |
| **JANB** | **Januaria** | **24.10** | **81** | eP | **P** | **20 00 44.8** | **-1.4** |
| **BOAV** | **Boa Vista** | **24.12** | **21** | P | **P** | **20 00 47.3** | **+1.0** |
| BOAV | | | | IAmb | IAmb | 20 00 49.4 | |

comp=Z,11nm,0.7s
BOAV Boa Vista 24.12 21 eP P 20 00 47.2 +0.9
SDBA SAO DESIDERIO 24.42 75 eP P 20 00 49.8 +0.7
MCPB Macapa, AP 25.91 42 eP P 20 01 03.2 +0.7
NAN01 Guarapari, ES 27.39 90 eP P 20 01 15.8 0.0
NBLA Lagarto - SE 31.42 77 eP P 20 01 50.5 -1.0
NBAN Anadia - AL 33.29 76 eP P 20 02 08.4 +0.5
RCBR Riachuelo 35.24 70 P P 20 02 25.7 +1.0
RCBR IAmb IAmb 20 02 27.7
comp=Z,16nm,1.1s
RCBR Riachuelo 35.24 70 eP P 20 02 25.9 +1.2
MCWV Mont Chateau 60.59 350 P P 20 05 35.5 -3.9
DBIC Dimbokro 68.51 74 P P 20 06 32.0 +0.5
comp=Z,6.1nm,0.5s,baz=227,slow=5.7,SNR=9.6
comp=Z,6.1nm,0.5s
QSPA South Pole Qui 69.80 180 P P 20 06 41.5 +2.8
comp=Z,1.0nm,0.5s,baz=233,slow=2.3,SNR=6.7
comp=Z,1.0nm,0.5s
NVAR Mina Array Bea 74.57 322 P P 20 07 10.6 +3.0
comp=Z,0.3nm,0.5s,baz=153,slow=6.1,SNR=2.5
comp=Z,0.3nm,0.5s
TOA0 Torodi Ar. Sit 77.07 71 P P 20 07 19.4 -2.6
TOA0 IAmb IAmb 20 07 24.6
comp=Z,6.8nm,0.5s
TORD Torodi Ar. Bea 77.07 71 P P 20 07 21.7 -0.3
TORD Torodi Ar. Bea 77.07 71 P P 20 07 22.3 +0.3
comp=Z,4.5nm,0.4s,baz=263,slow=6.1,SNR=121
comp=Z,4.5nm,0.4s
MKAR Makanchi Array 144.78 35 PKP PKPdf 20 15 05.2 +0.9
comp=Z,0.7nm,0.7s,baz=316,slow=3.3,SNR=7.2

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*JMA **01** 19:58:15.5±0.2, 40˚4N±0˚7×14˚4E±˚, h42km, MV2.9/28, FAR E OFF SANRIKU*
*IDC **01** 19:58:17.7±10.0, 40˚51N×143˚47E, h0km, mb3.5/3, mbtmp3.3/5, ML2.6/2, Error ellipse: s-maj=186.2km s-min=31.6km az=105.0*
**ISC 01 19:58:14.1**±1.3, **40˚39N**±0˚05×**144˚05E**±0˚08, **h16**km, **n24**, σ**2s01**/33, **mb3.3**/3, **Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JTH | Tanohata | 1.73 | 256 | P | Pb | 19 58 44.7 | -0.9 |
| JEM | Erimo | 1.76 | 338 | eP | Pb | 19 58 45.2 | -0.8 |
| JEM | | | | eS | Sb | 19 59 06.5 | -1.4 |
| JKEN | Kujiedanarisaw | 1.80 | 265 | P | Pb | 19 58 45.6 | -1.1 |
| JKEN | | | | eS | Sg | 19 59 07.9 | -4.1 |
| MIYJ | Miyakonagasawa | 1.89 | 245 | P | Pb | 19 58 47.3 | -1.0 |
| MIYJ | | | | eS | Sb | 19 59 10.5 | -1.2 |
| JANG | Nango | 1.94 | 270 | P | Pb | 19 58 47.7 | -1.3 |
| JNBK | Urakawa-nobuka | 2.13 | 333 | eP | Pn | 19 58 50.6 | +1.6 |
| JNBK | | | | eS | Sb | 19 59 17.5 | -1.0 |
| JCH | Churui | 2.29 | 347 | P | Pn | 19 58 52.0 | +0.9 |
| JCH | | | | S | Sn | 19 59 19.6 | +0.6 |
| JOM | Ohasama | 2.31 | 248 | P | Pb | 19 58 53.6 | -1.8 |
| JOT | Ohata | 2.48 | 295 | P | Pb | 19 58 55.9 | -2.5 |
| JMK | Ichinoseki | 2.61 | 238 | P | Pn | 19 58 57.4 | +1.8 |
| JMK | | | | eS | Sb | 19 59 28.2 | -4.1 |
| JAK | Akkeshi | 2.65 | 10 | eP | Pn | 19 58 56.6 | +0.5 |
| JAK | | | | eS | Sn | 19 59 26.4 | -1.6 |
| JAR | Ashorobuto | 2.92 | 356 | P | Pn | 19 58 59.8 | 0.0 |
| JAR | | | | eS | Sn | 19 59 32.9 | -1.6 |
| JYK | Kaneyama | 3.20 | 244 | P | Pn | 19 59 06.1 | +2.3 |
| NEM2 | Nemuro 2 | 3.23 | 22 | eP | Pn | 19 59 03.2 | -0.9 |
| NEM2 | | | | eS | Sn | 19 59 38.5 | -3.8 |
| JTKR | Abashiri--Toko | 3.58 | 358 | eP | Pn | 19 59 09.7 | +0.7 |
| JTKR | | | | eS | Sn | 19 59 51.1 | +0.1 |
| JKK2 | Kamakawa 2 | 3.62 | 345 | eP | Pn | 19 59 11.5 | +2.0 |
| JKK2 | | | | eS | Sn | 19 59 53.3 | +1.4 |
| ASAJ | Asahikawa | 3.88 | 344 | Pn | Pn | 19 59 15.0 | +1.9 |
| | 0.6nm,0.3s,baz=190,slow=12,SNR=7.6 | | | | | | |
| ASAJ | | | | Sn | Sn | 19 59 59.5 | +1.1 |
| | 0.9nm,0.3s,baz=220,slow=25,SNR=6.3 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| MJAR | Matsushiro Arr | 5.98 | 232 | Pn | Pn | 19 59 43.0 | +1.1 |
| | 0.1nm,0.3s,baz=43,slow=12,SNR=6.1 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| SONM | Songino Array | 27.83 | 298 | P | P | 20 04 04.7 | +2.1 |
| | 0.4nm,0.7s,baz=89,slow=10,SNR=2.4 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.39 | 130 | T | T | 20 33 50.7 | |
| | baz=322 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.41 | 130 | T | T | 20 33 46.0 | |
| | baz=322 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.41 | 130 | T | T | 20 33 45.7 | |
| | baz=322 | | | | | | |
| ZALV | Zalesovo Beam | 41.27 | 310 | P | P | 20 06 02.0 | +3.7 |
| | 0.3nm,0.3s,baz=86,slow=9.5,SNR=1.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 45.64 | 306 | P | P | 20 06 35.7 | +2.1 |
| | 0.1nm,0.3s,baz=78,slow=9.3,SNR=2.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

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*IDC **01** 19:59:36.1±0.8, 30˚10N×87˚34E, h0km, mb3.7/12, mbtmp3.6/14, ML3.5/2, Error ellipse: s-maj=28.5km s-min=17.0km az=51.0*
**ISC 01 19:59:41.3**±0.8, **30˚1N**±0˚1×**87˚4E**±0˚2, **h35**km, **n16**, σ**0s51**/16, **mb3.7**/12, **Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 15.68 | 135 | Pn | Pn | 20 03 18.8 | -0.9 |
| | 0.1nm,0.3s,baz=320,slow=11,SNR=2.8 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 17.10 | 348 | P | Pn | 20 03 36.7 | -0.9 |
| | 0.1nm,0.3s,baz=260,slow=36,SNR=3.0 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 21.52 | 345 | P | P | 20 04 26.6 | -0.5 |
| | 1.7nm,0.9s,baz=154,slow=11,SNR=7.7 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| SONM | Songino Array | 22.94 | 34 | P | P | 20 04 42.6 | +0.1 |
| | 0.9nm,1.0s,baz=219,slow=9.2,SNR=3.9 | | | | | | |
| | 0.9nm,1.0s | | | | | | |
| ZALV | Zalesovo Beam | 23.87 | 356 | P | P | 20 04 51.6 | +0.2 |
| | 1.0nm,0.5s,baz=172,slow=9.2,SNR=6.1 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| MJAR | Matsushiro Arr | 42.54 | 67 | P | P | 20 07 34.3 | +0.6 |
| | 1.0nm,0.7s,baz=275,slow=7.2,SNR=2.0 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| AKASG | Malin Array Be | 47.45 | 313 | P | P | 20 08 12.7 | +0.2 |
| | 0.2nm,0.2s,baz=92,slow=7.1,SNR=1.8 | | | | | | |
| | 0.2nm,0.2s | | | | | | |
| FINES | FINESS Array B | 50.36 | 327 | P | P | 20 08 34.7 | +0.2 |
| | 0.8nm,0.7s,baz=101,slow=8.0,SNR=5.2 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| ARCES | ARCESS Array B | 52.32 | 337 | P | P | 20 08 49.4 | +0.2 |
| | 0.6nm,0.6s,baz=103,slow=8.8,SNR=4.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| HFS | Hagfors | 56.34 | 325 | P | P | 20 09 18.8 | +0.2 |
| | 1.4nm,0.7s,baz=73,slow=7.0,SNR=5.6 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| NB2 | NORSAR Subarra | 57.51 | 326 | P | P | 20 09 26.5 | -0.3 |
| | comp=Z,0.5nm,0.6s,baz=84,slow=6.9 | | | | | | |
| NOA | NORSAR Array B | 57.51 | 326 | P | P | 20 09 26.0 | -0.8 |
| | comp=Z,0.6nm,0.8s,baz=86,slow=7.4,SNR=4.2 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 67.24 | 132 | P | P | 20 10 32.5 | +0.1 |
| | comp=Z,0.8nm,0.9s,baz=322,slow=6.4,SNR=6.6 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| ASAR | Alice Springs | 69.69 | 135 | P | P | 20 10 47.8 | +0.1 |
| | comp=Z,0.6nm,0.8s,baz=317,slow=6.6,SNR=4.6 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 79.84 | 279 | P | P | 20 11 47.1 | +0.4 |
| | comp=Z,0.7nm,0.7s,baz=38,slow=5.0,SNR=8.2 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| CPUP | Villa Florida | 148.75 | 268 | PKPbc | PKPbc | 20 19 25.5 | +0.1 |
| | comp=Z,1.2nm,0.4s,baz=122,slow=5.2,SNR=3.1 | | | | | | |

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*IDC **01** 20:02:15.5±1.8, 30˚03N×86˚96E, h0km, mb3.5/6, mbtmp3.5/8, ML3.5/2, Error ellipse: s-maj=49.1km s-min=35.3km az=72.0*
**ISC 01 20:02:20.5**±1.2, **30˚0N**±0˚2×**87˚0E**±0˚3, **h35**km, **n8**, σ**1s22**/8, **mb3.5**/6, **Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 15.81 | 134 | Pn | Pn | 20 06 00.1 | -0.5 |
| | 0.1nm,0.3s,baz=321,slow=13,SNR=2.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 17.14 | 349 | P | Pn | 20 06 16.9 | -0.2 |
| | 0.1nm,0.3s,baz=172,slow=12,SNR=4.5 | | | | | | |
| | 2.4nm,1.3s | | | | | | |
| KURBB | Kurchatov Arra | 21.54 | 345 | P | P | 20 07 04.4 | -2.1 |
| | 0.6nm,0.7s,baz=160,slow=10,SNR=3.7 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 23.95 | 357 | P | P | 20 07 31.3 | 0.0 |
| | 0.3nm,0.3s,baz=177,slow=8.5,SNR=2.3 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| ARCES | ARCESS Array B | 52.30 | 337 | P | P | 20 11 29.7 | +1.5 |
| | 0.8nm,0.7s,baz=106,slow=7.7,SNR=5.4 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| HFS | Hagfors | 56.25 | 325 | P | P | 20 11 56.7 | -0.4 |
| | 1.1nm,0.6s,baz=54,slow=7.5,SNR=2.8 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| ILAR | Eielson Array | 76.64 | 21 | P | P | 20 14 07.9 | +0.6 |
| | 0.2nm,0.6s,baz=312,slow=5.8,SNR=1.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| TORD | Torodi Ar. Bea | 79.57 | 279 | P | P | 20 14 24.4 | 0.0 |
| | 0.4nm,0.6s,baz=25,slow=3.9,SNR=4.0 | | | | | | |
| | 0.4nm,0.6s | | | | | | |

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*IDC **01** 20:07:00.9±0.8, 3˚39S×146˚22E, h0km, mb4.5/14, mbtmp4.5/15, ML2.8/2, MS4.5/49, Error ellipse: s-maj=36.6km s-min=13.6km az=85.0*
*BJI **01** 20:07:01.5±0.0, 3˚31S×146˚32E, h13km, mb4.7/78, mB5.3/56, Ms4.9/81, Ms7 4.8/77*
*MOS **01** 20:07:01.5±0.9, 3˚38S×146˚15E, h15km, mb5.2/19, Error ellipse: s-maj=10.8km s-min=6.4km az=106.4*
*NEIC **01** 20:07:02.9±1.9, 3˚35S±0˚06×146˚08E±0˚07, h10km±1km, mb5.1/89, Mww5.2/26, Error ellipse: s-maj=12.2km s-min=9.6km az=91.0*
*NEIC **01** 20:07:03.5, 3˚08S×146˚25E, h12km, Moment Tensor Solution. Duration: 2s0 Moment tensor: Scale 10$^{16}$Nm; Mrr-2.75; Mθθ1.96; Mϕϕ0.79; Mrθ2.76; Mθϕ8.18; Mϕr-1.50; Fault plane solution: M0 9.04000×10$^{16}$ NP1: ϕs268.32000°, δ74.18000°, λ-24.02000°. NP2:ϕs5.24000°, δ66.95000°, λ-162.77000°. Principal axes: T 9.6620, Plg5.0000°, Azm318.0000°; N -1.2529, Plg62.0000°, Azm57.0000°; P -8.4091, Plg28.0000°, Azm225.0000°;*
*NEIC **01** 20:07:03.5, 3˚38S×146˚05E, h12km*
*GCMT **01** 20:07:06.9±0.1, 3˚30S±0˚01×146˚04E±0˚01, h12km, MW5.3/142, Moment Tensor Solution. s114,c190; s142,c293; Duration: 1s1 Moment tensor: Scale 10$^{17}$ Nm; Mrr-0.10±.01; Mθθ0.03±.01; Mϕϕ0.07±.01; Mrθ0.14±.03; Mθϕ1.08±.01; Mϕr-0.01±.03; Best double couple: M0 1.08900×10$^{17}$ NP1:ϕs269.00000°, δ88.00000°, λ-7.00000°. NP2:ϕs359.00000°, δ83.00000°, λ-178.00000°. Principal axes: T 1.1350, Plg4.0000°, Azm315.0000°; N -0.0920, Plg82.0000°, Azm76.0000°; P -1.0430, Plg6.0000°, Azm224.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA **01** 20:07:10.6±0.7, 4˚S±5˚×14˚6E±˚, h43km±6km, M5.0/33, mb5.2/33, mB5.5/22, MLv5.0/2, Mw(mB)5.0/22, MwMwp4.9/6, Mwp5.2/6*
**ISC 01 20:07:03.7**±0.6, **3˚48S**±0˚04×**146˚11E**±0˚05, **h14**km±2km, **n263**, σ**2s18**/284, **mb5.0**/103, **MS4.6**/78, **9C-10D, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MANU | Manus Island | 1.90 | 41 | Pn | Pn | 20 07 32.5 | -3.2 |
| JAY | Jayapura | 5.48 | 280 | P | Pn | 20 08 22.6 | -2.4 |
| JAY | Jayapura | 5.48 | 280 | P | Pn | 20 08 25.7 | +0.7 |
| JAY | | | | pmax | pmax | | |
| | comp=Z,68nm,1.0s | | | | | | |
| PMG | Port Moresby | 5.98 | 170 | Pn | Pn | 20 08 33.0 | +1.3 |
| PMG | Port Moresby | 5.98 | 170 | Pn | Pn | 20 08 32.4 | +0.6 |
| | comp=Z,8.8nm,0.3s,baz=44,slow=6.9,SNR=27 | | | | | | |
| PMG | | | | Sn | Sn | 20 09 38.9 | -1.1 |
| | comp=Z,1.3nm,0.3s,baz=350,slow=14,SNR=4.0 | | | | | | |
| PMG | | | | LR | LR | 20 10 43.2 | |
| | comp=Z,2μm,20.8s,baz=352,slow=37 | | | | | | |
| | comp=Z,78nm,0.7s | | | | | | |
| PMG | Port Moresby | 5.98 | 170 | ceP | Pn | 20 08 32.7 | +0.9 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,63nm,0.6s | | | | | | |
| GENI | Genyem | 6.00 | 278 | P | Pn | 20 08 32.3 | +0.2 |
| | comp=Z,298nm,1.4s,comp=Z,4μmcomp=Z,5μmcomp=Z,1.1nm | | | | | | |
| RABL | Rabaul | 6.08 | 97 | Pn | Pn | 20 08 33.7 | +0.5 |
| COEN | Coen | 10.80 | 195 | Pn | Pn | 20 09 40.4 | +2.4 |
| COEN | Coen | 10.80 | 195 | P | Pn | 20 09 40.4 | +2.4 |
| | comp=Z,83nm,0.8s,SNR=10 | | | | | | |
| FAKI | Fak Fak | 13.85 | 272 | Pn | Pn | 20 10 17.6 | -2.2 |
| HNR | Honiara | 14.96 | 114 | P | P | 20 10 39.4 | -1.0 |
| HNR | Honiara | 14.96 | 114 | LR | LR | 20 16 29.6 | |
| | comp=Z,26μm,18.3s,baz=279,slow=38 | | | | | | |
| HNR | Honiara | 14.96 | 114 | P | P | 20 10 39.4 | -1.0 |
| HNR | | | | pmax | pmax | | |
| | comp=Z,199nm,0.9s | | | | | | |
| SWI | Sorong | 15.06 | 280 | P | Pn | 20 10 37.5 | +1.2 |
| | comp=Z,81nm,1.1s,comp=Z,999nm | | | | | | |
| SWI | Sorong | 15.06 | 280 | P | Pn | 20 10 37.8 | +1.5 |
| SWI | | | | pmax | pmax | | |
| | comp=Z,81nm,1.2s | | | | | | |
| BNDI | Bandanaira | 16.20 | 266 | P | P | 20 10 58.1 | +3.9 |
| KDU | Kakadu | 16.30 | 235 | P | Pn | 20 10 52.2 | -0.1 |
| | comp=Z,163nm,0.9s,SNR=16 | | | | | | |
| CTA | Charters Tower | 16.51 | 180 | Pn | Pn | 20 10 56.6 | +1.7 |
| | baz=356,slow=12,SNR=12 | | | | | | |
| CTA | | | | LR | LR | 20 17 36.4 | |
| | comp=Z,194nm,18.5s,baz=3.5,slow=38 | | | | | | |
| CTAO | Charters Tower | 16.51 | 180 | Pn | Pn | 20 10 55.2 | +0.2 |
| CTAO | Charters Tower | 16.51 | 180 | P | Pn | 20 10 55.2 | +0.2 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| GUMO | Guam | 17.01 | 356 | LR | LR | 20 17 20.1 | |
| | comp=Z,1μm,18.1s,baz=180,slow=37 | | | | | | |
| MSAI | Masohi | 17.15 | 270 | P | P | 20 11 07.3 | +2.6 |
| | comp=Z,63nm,2.1s | | | | | | |
| MTN | Manton Dam | 17.49 | 237 | | Pn | 20 11 05.4 | -1.9 |
| MTN | | | | IAmb | IAmb | 20 11 15.5 | |
| | comp=Z,124nm,0.8s | | | | | | |
| MTN | Manton Dam | 17.49 | 237 | P | Pn | 20 11 07.3 | 0.0 |
| | comp=Z,159nm,1.0s,SNR=21 | | | | | | |
| QIS | Mount Isa | 18.12 | 200 | P | Pn | 20 11 14.9 | -0.1 |
| | comp=Z,31nm,1.1s,SNR=5.3 | | | | | | |
| NLAI | Namlea | 18.98 | 270 | P | P | 20 11 25.7 | +0.8 |
| | comp=Z,104nm,1.7s,comp=Z,1μmcomp=Z,1μm | | | | | | |
| TNTI | Ternate | 19.20 | 282 | P | P | 20 11 24.2 | -3.2 |
| TNTI | | | | IAmb | IAmb | 20 11 33.4 | |
| | comp=Z,124nm,1.3s | | | | | | |
| TNTI | Ternate | 19.20 | 282 | P | Pn | 20 11 29.1 | +0.8 |
| | comp=Z,87nm,1.3s,comp=Z,2μmcomp=Z,2μm | | | | | | |
| WB0 | Warramunga Arr | 19.82 | 214 | | P | 20 11 34.3 | +0.2 |
| WR0 | Warramunga Arr | 19.89 | 214 | P | P | 20 11 34.6 | -0.2 |
| WRAB | Tennant Creek | 19.98 | 214 | P | P | 20 11 35.5 | -0.3 |
| WRAB | Tennant Creek | 19.98 | 214 | c iP | P | 20 11 36.5 | +0.7 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,155nm,0.9s | | | | | | |
| WB2 | Warramunga Arr | 19.98 | 214 | | P | 20 11 35.8 | 0.0 |
| WRA | Warramunga Arr | 19.99 | 214 | P | P | 20 11 35.6 | -0.4 |
| WRA | Warramunga Arr | 19.99 | 214 | P | P | 20 11 36.0 | +0.1 |
| | comp=Z,164nm,0.8s,baz=38,slow=12,SNR=213 | | | | | | |
| WRA | | | | S | S | 20 15 17.5 | -3.0 |
| | comp=Z,3.3nm,0.9s,baz=33,slow=19,SNR=5.9 | | | | | | |
| WRA | | | | PcP | PcP | 20 15 51.8 | -0.5 |
| | comp=Z,0.9nm,0.6s,baz=23,slow=1.3,SNR=1.3 | | | | | | |
| WRA | | | | LR | LR | 20 19 29.8 | |
| | comp=Z,2μm,19.2s,baz=3.0,slow=37 | | | | | | |
| SANI | Sanana | 20.15 | 274 | P | P | 20 11 38.7 | +1.0 |
| | comp=Z,50nm,1.2s,comp=Z,1μm | | | | | | |
| KNRA | Kununurra | 20.94 | 233 | P | P | 20 11 44.8 | -1.4 |
| KNRA | Kununurra | 20.94 | 233 | P | P | 20 11 45.2 | -1.0 |
| | comp=Z,601nm,0.9s,SNR=79 | | | | | | |
| EIDS | Eidsvold | 22.28 | 168 | P | P | 20 12 01.6 | +1.0 |
| EIDS | Eidsvold | 22.28 | 168 | P | P | 20 12 01.6 | +1.0 |
| | comp=Z,42nm,0.9s,SNR=8.3 | | | | | | |
| KMSI | Cibinong | 22.48 | 280 | P | P | 20 12 05.3 | +2.4 |
| SOEI | Soe | 22.56 | 253 | P | P | 20 12 02.6 | -1.3 |
| SOEI | Soe | 22.56 | 253 | P | P | 20 12 04.8 | +0.9 |
| DAV | Davao City (W) | 23.02 | 297 | LR | LR | 20 21 24.8 | |
| | comp=Z,252nm,18.3s,baz=95,slow=37 | | | | | | |
| QLP | Quilpie | 23.04 | 184 | P | P | 20 12 10.8 | +2.2 |
| | comp=Z,119nm,1.2s,SNR=13 | | | | | | |
| BATI | Baumata | 23.25 | 252 | P | P | 20 12 11.5 | +0.5 |
| AS31 | Alice Springs | 23.27 | 209 | P | P | 20 12 10.4 | -0.7 |
| ASAR | Alice Springs | 23.28 | 209 | P | P | 20 12 11.0 | -0.1 |
| ASAR | Alice Springs | 23.28 | 209 | P | P | 20 12 11.2 | +0.1 |
| | comp=Z,48nm,0.8s,baz=41,slow=8.6,SNR=252 | | | | | | |
| ASAR | | | | PcP | PcP | 20 15 58.2 | -0.5 |
| | comp=Z,1.6nm,0.8s,baz=46,slow=2.7,SNR=2.7 | | | | | | |
| ASAR | | | | S | S | 20 16 23.9 | +0.6 |
| | comp=Z,3.4nm,0.9s,baz=25,slow=20,SNR=4.8 | | | | | | |
| ASAR | | | | LR | LR | 20 22 59.2 | |
| | comp=Z,2μm,18.8s,baz=38,slow=41 | | | | | | |
| | comp=Z,48nm,0.8s | | | | | | |
| ASPA | Alice Springs | 23.28 | 209 | P | P | 20 12 11.2 | +0.1 |
| | comp=Z,34nm,0.8s,SNR=31 | | | | | | |
| LUWI | Luwuk | 23.45 | 275 | P | P | 20 12 13.1 | +0.2 |
| LUWI | Luwuk | 23.45 | 275 | P | P | 20 12 14.3 | +1.4 |
| | comp=Z,170nm,1.4s,comp=Z,3μm | | | | | | |
| GTOI | Gorontalo | 23.45 | 280 | P | P | 20 12 15.8 | +2.9 |
| | comp=Z,80nm,2.0s,comp=Z,1μm | | | | | | |
| BBSI | Bau Bau | 23.55 | 264 | P | P | 20 12 14.8 | +0.9 |
| | comp=Z,172nm,1.2s,comp=Z,2μm | | | | | | |
| MMRI | Maumere | 24.28 | 257 | P | P | 20 12 19.1 | -1.7 |
| MMRI | Maumere | 24.28 | 257 | P | P | 20 12 27.2 | +6.4 |
| MRSI | Marisa | 24.48 | 279 | P | P | 20 12 24.5 | +1.9 |
| | comp=Z,63nm,0.9s,comp=Z,1μm | | | | | | |
| KOUNC | Koumac, New Ca | 24.52 | 135 | P | P | 20 12 21.6 | -1.3 |
| FITZ | Fitzroy Crossi | 24.76 | 233 | P | P | 20 12 24.1 | -1.0 |
| TOLI2 | Tolitoli | 25.73 | 280 | P | P | 20 12 33.3 | -0.7 |
| BNSI | Bone | 25.96 | 267 | P | P | 20 12 38.6 | +2.6 |
| | comp=Z,134nm,1.2s,comp=Z,2μm | | | | | | |
| BASI | Baing, Sumba | 26.20 | 254 | P | P | 20 12 38.2 | -0.1 |
| KAPI | Kappang | 26.33 | 266 | P | P | 20 12 38.2 | -1.2 |
| KAPI | | | | IAmb | IAmb | 20 12 49.1 | |
| | comp=Z,59nm,1.1s | | | | | | |
| KAPI | Kappang | 26.33 | 266 | LR | LR | 20 25 39.9 | |
| | comp=Z,409nm,19.3s,baz=89,slow=42 | | | | | | |
| KAPI | Kappang | 26.33 | 266 | d iP | P | 20 12 40.8 | +1.4 |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,33nm,1.2s | | | | | | |
| DZM | Mont Dzumac | 27.03 | 135 | eP | P | 20 12 47.5 | +1.7 |
| | comp=Z,46nm,1.1s | | | | | | |
| DZM | | | | eS | S | 20 17 22.2 | -1.1 |
| | comp=Z,1μm,25.8s | | | | | | |
| DZM | | | | eLR | LR | 20 19 35.0 | |
| | comp=Z,5μm,27.9s | | | | | | |
| DZM | Mont Dzumac | 27.03 | 135 | P | P | 20 12 47.0 | +1.3 |
| DZM | Mont Dzumac | 27.03 | 135 | LR | LR | 20 22 15.5 | |
| | comp=Z,2μm,18.8s,baz=316,slow=34 | | | | | | |
| ARMA | Armidale | 27.30 | 170 | P | P | 20 12 48.3 | +0.3 |
| ARMA | Armidale | 27.30 | 170 | P | P | 20 12 49.1 | +1.1 |
| | comp=Z,28nm,0.9s,SNR=3.9 | | | | | | |
| WRKA | Warakurna | 27.45 | 217 | P | P | 20 12 49.6 | +0.2 |
| | comp=Z,89nm,1.0s,SNR=4.0 | | | | | | |
| CMSA | Cobar Meteorol | 27.91 | 181 | P | P | 20 12 58.3 | +4.9 |
| STKA | Stephens Creek | 28.56 | 188 | P | P | 20 13 00.4 | +1.1 |
| STKA | Stephens Creek | 28.56 | 188 | P | P | 20 13 03.4 | +4.2 |
| STKA | Stephens Creek | 28.56 | 188 | P | P | 20 13 03.7 | +4.4 |
| | comp=Z,18nm,0.8s,baz=351,slow=9.0,SNR=25 | | | | | | |
| STKA | | | | LR | LR | 20 25 45.4 | |
| | comp=Z,1μm,18.6s,baz=5.7,slow=39 | | | | | | |
| STKA | Stephens Creek | 28.56 | 188 | ⇑eP | P | 20 13 00.1 | +0.9 |
| MYLDM | Lahad Datu | 28.89 | 287 | P | P | 20 13 00.1 | -2.2 |
| JCJ | Chichijima | 30.64 | 353 | LR | LR | 20 22 08.8 | |
| | comp=Z,436nm,21.2s,baz=164,slow=30 | | | | | | |
| BBOO | Buckleboo | 30.66 | 197 | P | P | 20 13 16.4 | -1.4 |
| BBOO | | | | IAmb | IAmb | 20 13 19.8 | |
| | comp=Z,36nm,1.1s | | | | | | |
| BBOO | Buckleboo | 30.66 | 197 | P | P | 20 13 17.2 | -0.6 |
| | comp=Z,46nm,1.9s,SNR=2.0 | | | | | | |
| YNG | Young | 30.73 | 176 | P | P | 20 13 19.7 | +1.2 |
| | comp=Z,82nm,0.9s,SNR=2.0 | | | | | | |
| MBWA | Marble Bar | 31.09 | 233 | P | P | 20 13 20.1 | -1.7 |
| PSA00 | Pilbara Seismi | 31.21 | 233 | P | P | 20 13 21.8 | -1.1 |
| PSA00 | | | | IAmb | IAmb | 20 13 28.8 | |
| | comp=Z,46nm,1.6s | | | | | | |
| PSA00 | Pilbara Seismi | 31.21 | 233 | P | P | 20 13 22.3 | -0.5 |
| | comp=Z,50nm,1.3s,SNR=2.0 | | | | | | |
| FORT | Forrest | 32.06 | 210 | P | P | 20 13 29.7 | -0.5 |
| FORT | Forrest | 32.06 | 210 | P | P | 20 13 30.0 | -0.1 |
| | comp=Z,99nm,0.6s,SNR=2.2 | | | | | | |
| MSVF | Nonsavu | 34.35 | 117 | LR | LR | 20 28 15.0 | |
| | comp=Z,419nm,18.1s,baz=341,slow=37 | | | | | | |
| JOW | Kunigami | 34.72 | 331 | P | P | 20 13 52.6 | -0.8 |
| | comp=Z,30nm,0.9s,baz=165,slow=15,SNR=2.3 | | | | | | |
| JOW | | | | LR | LR | 20 24 55.1 | |
| | comp=Z,2μm,21.8s,baz=230,slow=31 | | | | | | |
| | comp=Z,30nm,0.9s | | | | | | |
| YULB | Yu-li | 36.04 | 319 | P | P | 20 14 03.6 | -1.3 |
| YULB | | | | IAmb | IAmb | 20 14 15.1 | |
| | comp=Z,20nm,0.8s | | | | | | |
| KSM | Kuching | 36.12 | 277 | P | P | 20 14 06.6 | +0.9 |
| KSM | | | | IAmb | IAmb | 20 14 15.3 | |
| | comp=Z,23nm,0.9s | | | | | | |
| NACB | Ninganchiao | 36.40 | 320 | P | P | 20 14 06.5 | -1.4 |
| TPUB | Ta-pu | 36.42 | 318 | P | P | 20 14 06.8 | -1.3 |
| TPUB | | | | IAmb | IAmb | 20 14 11.9 | |
| | comp=Z,37nm,1.1s | | | | | | |
| SSLB | Suanglung | 36.54 | 319 | P | P | 20 14 07.1 | -2.1 |
| SSLB | | | | IAmb | IAmb | 20 14 22.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| YHNB | Yeheng | 36.89 | 321 | P | P | 20 14 12.0 | -0.2 |
| JHJ | Hachijo jima 2 | 36.89 | 351 | LR | LR | 20 27 57.8 | |
| | comp=Z,958nm,18.1s,baz=109,slow=34 | | | | | | |
| KNMB | Chin-men Tao | 38.71 | 317 | P | P | 20 14 26.0 | -1.5 |
| KNMB | | | | IAmb | IAmb | 20 14 34.7 | |
| | comp=Z,74nm,1.1s | | | | | | |
| JMN | Monobe | 38.77 | 344 | P | P | 20 14 27.1 | -0.8 |
| JMN | | | | IAmb | IAmb | 20 14 31.8 | |
| | comp=Z,63nm,1.5s | | | | | | |
| QZH | Quanzhou | 38.89 | 318 | P | P | 20 14 30.2 | +1.2 |
| QZH | | | | PP | PnPn | 20 16 01.9 | +1.3 |
| QZH | | | | S | S | 20 20 31.2 | +4.3 |
| QZH | | | | pmax | pmax | | |
| | comp=Z,310nm,5.2s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,560nm,19.2s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,1μm,17.2s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,1μm,20.3s | | | | | | |
| JNU | Nakatsue | 39.16 | 340 | IAmb | IAmb | 20 14 34.7 | |
| | comp=Z,72nm,1.6s | | | | | | |
| JNU | Nakatsue | 39.16 | 340 | LR | LR | 20 27 38.8 | |
| | comp=Z,753nm,21.9s,baz=158,slow=32 | | | | | | |
| INU | Inuyama | 39.56 | 348 | P | P | 20 14 34.8 | +0.4 |
| JGF | Kuroka | 39.73 | 349 | P | P | 20 14 36.5 | +0.6 |
| NWAO | Narrogin (SRO) | 39.85 | 219 | LR | LR | 20 32 13.5 | |
| | comp=Z,2μm,19.2s,baz=48,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 40.49 | 350 | P | P | 20 14 40.9 | -1.3 |
| | comp=Z,5.3nm,1.1s,baz=176,slow=8.6,SNR=7.7 | | | | | | |
| MJAR | | | | LR | LR | 20 30 23.4 | |
| | comp=Z,250nm,18.9s,baz=140,slow=35 | | | | | | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| MAJO | Matsushiro | 40.50 | 350 | P | P | 20 14 39.5 | -2.7 |
| MAJO | Matsushiro | 40.50 | 350 | i P | P | 20 14 39.3 | -2.9 |
| MJB9 | Matsu-Tunnel | 40.50 | 350 | P | P | 20 14 38.8 | -3.5 |
| SSE | Sheshan | 41.80 | 327 | P | P | 20 14 52.6 | -0.4 |
| SSE | | | | S | S | 20 21 15.7 | +5.5 |
| SSE | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,100nm,3.7s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,440nm,21.3s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,470nm,18.6s | | | | | | |
| QIZ | Qiongzhong | 42.12 | 303 | P | P | 20 14 56.4 | +0.6 |
| QIZ | | | | S | S | 20 21 15.3 | 0.0 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,34nm,1.6s | | | | | | |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,320nm,3.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,530nm,21.0s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,350nm,19.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,860nm,28.4s | | | | | | |
| QIZ | Qiongzhong | 42.12 | 303 | IAmb | IAmb | 20 15 01.0 | |
| | comp=Z,57nm,1.3s | | | | | | |
| TJN | Taejon | 43.35 | 338 | deP | P | 20 15 05.6 | +0.1 |
| NJ2 | Nanjing | 43.81 | 326 | eP | P | 20 15 09.6 | +0.3 |
| NJ2 | | | | SS | SS | 20 24 50.8 | -5.3 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,900nm,19.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,470nm,18.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,1μm,20.4s | | | | | | |
| KSRS | Korea Array | 44.10 | 339 | P | P | 20 15 10.7 | -0.9 |
| | comp=Z,9.7nm,1.1s,baz=156,slow=9.5,SNR=32 | | | | | | |
| KSRS | | | | LR | LR | 20 30 31.0 | |
| | comp=Z,754nm,21.7s,baz=155,slow=32 | | | | | | |

comp=Z,9.7nm,1.1s
**KSAR Wonju Array Be 44.10 339** P **P** **20 15 10.2 -1.4**
**KSAR Wonju Array Be 44.10 339** P **P** **20 15 10.2 -1.4**
**KS19 Wonju Array Si 44.16 339** P **P** **20 15 10.1 -2.0**
**JTM Tenmabayashi 44.30 355** P **P** **20 15 12.6 -0.5**
JTM IAmb IAmb 20 15 37.4
comp=Z,57nm,1.2s
**UBPT Khong Chiam 44.34 296** P **P** **20 15 12.8 -1.0**
UBPT IAmb IAmb 20 15 21.4
comp=Z,72nm,1.7s
**INCN Inchon 44.60 338** P **P** **20 15 14.3 -1.3**
INCN IAmb IAmb 20 15 21.9
comp=Z,38nm,1.0s
**INCN Inchon 44.60 338** P **P** **20 15 14.3 -1.3**
INCN pmax pmax
comp=Z,38nm,1.0s
**URZ Urewera 44.70 145** LR LR 20 33 44.1
comp=Z,489nm,18.6s,baz=36,slow=36
**WHN Wuhan 45.44 320** P **P** **20 15 25.6 +3.3**
WHN pP **pwP** **20 15 30.4 +1.4**
WHN S **S** **20 22 04.6 +1.1**
WHN sS **sS** **20 22 12.6 +2.9**
WHN pmax pmax
comp=Z,820nm,3.5s
WHN LR LR
comp=Z,1μm,12.1s
WHN LR LR
comp=Z,720nm,14.0s
WHN LR LR
comp=Z,2μm,20.0s
**RPZ Rata Peaks 45.75 155** LR LR 20 31 57.9
comp=Z,612nm,21.6s,baz=319,slow=33
**JKA Kamikawa-asahi 47.49 357** P **P** **20 15 36.1 -2.1**
**ASAJ Asahikawa 47.49 357** LR LR 20 35 02.8
comp=Z,172nm,19.7s,baz=180,slow=36
**ASAJ Asahikawa 47.49 357** P **P** **20 15 36.1 -2.1**
ASAJ pmax pmax
comp=Z,34nm,1.2s
**DL2 Dalian 47.85 334** P **P** **20 15 40.1 -1.0**
DL2 S **S** **20 22 35.2 -2.6**
DL2 SS SS 20 25 54.8 -12
DL2 pmax pmax
comp=Z,39nm,1.4s
DL2 pmax pmax
comp=Z,190nm,4.1s
DL2 LR LR
comp=Z,790nm,18.9s
DL2 LR LR
comp=Z,630nm,18.8s
DL2 LR LR
comp=Z,1μm,19.4s
**TIA Tai'an 47.88 328** P **P** **20 15 40.1 -1.3**
TIA S **S** **20 22 37.9 -0.5**
TIA pmax pmax
comp=Z,10.0nm,1.1s
TIA pmax pmax
comp=Z,120nm,3.5s
TIA LR LR
comp=Z,920nm,16.9s
TIA LR LR
comp=Z,680nm,17.1s
TIA LR LR
comp=Z,2μm,18.7s
**PSTR Posyet 47.97 345**⇑ *e*P **P** **20 15 41.4 -0.5**
**SLVN Son La 48.12 303** P **P** **20 15 44.1 +0.5**
SLVN IAmb IAmb 20 15 54.2
comp=Z,17nm,1.0s
**GYA Guiyang 48.38 310**⇓P **P** **20 15 46.0 +0.4**
GYA S **S** **20 22 41.5 -4.4**
GYA pmax pmax
comp=Z,5.0nm,0.8s
GYA pmax pmax
comp=Z,220nm,5.2s
GYA LR LR
comp=Z,340nm,20.6s
GYA LR LR
comp=Z,250nm,22.0s
GYA LR LR
comp=Z,380nm,18.8s
**USA0B Ussuriysk Arra 49.13 347** *de*P **P** **20 15 50.1 -0.8**
**USRK Ussuriysk Ar. 49.13 347** P **P** **20 15 50.1 -0.8**
comp=Z,4.4nm,0.8s,baz=162,slow=7.9,SNR=7.4
USRK LR LR 20 33 29.4
comp=Z,300nm,20.9s,baz=156,slow=32
comp=Z,4.4nm,0.8s
**LYN LuoYang 49.32 323** *e*P **P** **20 15 55.3 +2.8**
LYN PP **PP** **20 17 50.2 +3.6**
LYN S **S** **20 22 59.7 +1.0**
LYN sS sS 20 23 11.4 +6.4
LYN pmax pmax
comp=Z,17nm,0.6s
LYN pmax pmax
comp=Z,140nm,3.5s
LYN LR LR
comp=Z,2μm,18.2s
LYN LR LR
comp=Z,1μm,18.9s
LYN LR LR
comp=Z,3μm,20.3s
**SNY Shenyang 49.54 338**⇓P **P** **20 15 57.1 +3.1**
SNY S **S** **20 23 04.4 +3.0**
SNY pmax pmax
comp=Z,16nm,1.8s
SNY pmax pmax
comp=Z,190nm,3.2s
SNY LR LR
comp=Z,210nm,21.1s
SNY LR LR
comp=Z,540nm,20.1s
SNY LR LR
comp=Z,730nm,24.1s
**HNS HongShan 50.06 327**⇑P **P** **20 15 59.8 +1.7**
HNS PP **PP** **20 17 50.7 -2.6**
HNS S **S** **20 23 14.0 +5.1**
HNS pmax pmax
comp=Z,200nm,4.0s
HNS LR LR
comp=Z,730nm,19.9s
HNS LR LR
comp=Z,450nm,19.9s
HNS LR LR
comp=Z,1μm,19.9s
**MDJ Mudanjiang 50.12 345** P **P** **20 15 57.1 -1.3**
MDJ S **S** **20 23 12.8 +3.3**
MDJ pmax pmax
comp=Z,6.0nm,1.0s
MDJ pmax pmax
comp=Z,150nm,7.8s
MDJ LR LR
comp=Z,310nm,20.6s
MDJ LR LR
comp=Z,330nm,20.6s
MDJ LR LR
comp=Z,650nm,17.9s
**PHRA Phrae 50.18 298** P **P** **20 15 59.7 +0.4**
**YSS Yuzh-Sakhalins 50.31 357** *e*P **P** **20 15 58.6 -1.2**
YSS *e*S **S** **20 23 09.1 -2.9**
YSS pmax pmax
comp=Z,10.0nm,0.7s
YSS pmax pmax
comp=Z,100nm,5.9s
YSS smax smax
comp=E,200nm,6.2s
**CN2 Changchun 50.61 341** P **P** **20 16 02.2 +0.1**
CN2 S **S** **20 23 17.8 +1.5**
CN2 pmax pmax
comp=E,10.0nm,0.6s
CN2 pmax pmax
comp=E,100nm,3.0s
CN2 LR LR
comp=E,600nm,17.0s
CN2 LR LR
comp=E,400nm,17.0s
CN2 LR LR
comp=E,800nm,17.0s
**KMI Kunming 50.78 307**⇑P **P** **20 16 04.7 +0.6**
KMI S **S** **20 23 20.0 +0.1**
KMI pmax pmax
comp=E,16nm,0.8s
KMI pmax pmax
comp=E,220nm,3.9s
KMI LR LR
comp=E,360nm,20.9s
KMI LR LR
comp=E,260nm,27.1s
KMI LR LR
comp=E,640nm,22.8s
**XAN Xi'an 51.19 320**⇓P **P** **20 16 09.5 +2.7**
XAN pP pwP 20 16 13.8 +0.3
XAN S **S** **20 23 28.1 +3.2**
XAN SS **SS** **20 26 56.6 -4.0**
XAN pmax pmax
comp=E,24nm,1.8s
XAN LR LR
comp=E,800nm,18.4s
XAN LR LR
comp=E,410nm,17.5s
XAN LR LR
comp=E,930nm,18.1s
**BJI Beijing 51.29 331** P **P** **20 16 05.4 -1.9**
BJI pP **pP** **20 16 10.0 -1.1**
BJI S **S** **20 23 28.6 +2.7**
BJI pmax pmax
comp=E,3.0nm,0.8s
BJI pmax pmax
comp=E,85nm,3.8s
BJI LR LR
comp=E,360nm,18.8s
BJI LR LR
comp=E,230nm,17.5s
BJI LR LR
comp=E,470nm,21.4s
**CM31 Chiang Mai Arr 51.31 297** P **P** **20 16 05.5 -2.3**
CM31 IAmb IAmb 20 16 19.8
comp=Z,36nm,1.0s
**CMAR Chiang Mai Arr 51.31 297** P **P** **20 16 07.8 0.0**
**CMAR Chiang Mai Arr 51.31 297** P **P** **20 16 08.6 +0.7**
comp=Z,5.3nm,0.8s,baz=117,slow=5.9,SNR=18
CMAR LR LR 20 36 09.4
comp=Z,159nm,21.9s,baz=125,slow=34
comp=Z,5.3nm,0.8s
**CHTO Chiang Mai 51.43 297** P **P** **20 16 07.6 -1.2**
CHTO IAmb IAmb 20 16 21.0
comp=Z,21nm,1.2s
**CHTO Chiang Mai 51.43 297** P **P** **20 16 07.6 -1.2**
CHTO pmax pmax
comp=Z,21nm,1.2s
**BNX BinXian 51.75 343**⇓P **P** **20 16 11.5 +0.8**
BNX pP **pP** **20 16 14.1 -0.4**
BNX S **S** **20 23 31.4 -0.7**
BNX sS **sS** **20 23 36.6 -1.8**
BNX pmax pmax
comp=Z,20nm,1.0s
BNX pmax pmax
comp=Z,190nm,4.0s
BNX LR LR
comp=Z,290nm,14.6s
BNX LR LR
comp=Z,250nm,15.2s
BNX LR LR
comp=Z,550nm,18.4s
**PZH PanZhiHua 52.22 308** P **P** **20 16 16.7 +2.0**
PZH S **S** **20 23 40.5 +1.0**
PZH SS **SS** **20 27 10.0 -7.3**
PZH pmax pmax
comp=Z,10.0nm,1.0s
PZH pmax pmax
comp=Z,140nm,4.0s
PZH LR LR
comp=Z,240nm,22.1s
PZH LR LR
comp=Z,180nm,19.1s
PZH LR LR
comp=Z,240nm,18.8s
**CD2 Chengdu 52.90 313** P **P** **20 16 19.1 -0.5**
CD2 pP pP 20 16 22.7 -0.7
CD2 S **S** **20 23 49.2 +0.7**
CD2 sS sS 20 23 56.2 +1.3
CD2 pmax pmax
comp=Z,10.0nm,0.7s
CD2 pmax pmax
comp=Z,150nm,3.7s
CD2 LR LR
comp=Z,440nm,17.5s
CD2 LR LR
comp=Z,460nm,18.4s
CD2 LR LR
comp=Z,560nm,16.5s
**KLR Kul'dur 53.96 348** LR LR 20 38 08.3
comp=Z,297nm,19.2s,baz=159,slow=35
**KLR Kul'dur 53.96 348**⇑ *e*P **P** **20 16 26.4 -0.6**
KLR pmax pmax
comp=Z,3.0nm,0.9s
**TNCH TengChong 54.17 304**⇓ *e*P **P** **20 16 29.5 +0.3**
TNCH sP pwP 20 16 35.5 -0.4
TNCH PP **PP** **20 18 27.9 -3.2**
TNCH S **S** **20 24 03.3 -3.0**
TNCH sS sS 20 24 16.4 +3.8
TNCH pmax pmax
comp=Z,19nm,2.1s
TNCH pmax pmax
comp=Z,190nm,4.3s
TNCH LR LR
comp=Z,230nm,21.3s
TNCH LR LR
comp=Z,190nm,14.8s
TNCH LR LR
comp=Z,500nm,28.4s
**HHC Hu-ho-hao-te 54.24 328** *e*P **P** **20 16 30.7 +1.4**
HHC pP pwP 20 16 35.1 -0.9
HHC S **S** **20 24 05.3 -1.2**
HHC SS **SS** **20 27 48.4 -0.3**
HHC pmax pmax
comp=Z,22nm,0.5s
HHC pmax pmax
comp=Z,180nm,3.8s
HHC LR LR
comp=Z,530nm,17.1s
HHC LR LR
comp=Z,680nm,17.1s
HHC LR LR
comp=Z,930nm,17.5s
**XLT XiLinHaoTe 54.34 334** *e*P **P** **20 16 32.2 +2.3**
XLT pP pwP 20 16 42.5 +5.8
XLT PcP **PcP** **20 17 32.6 -1.2**
XLT S **S** **20 24 04.5 -3.1**
XLT SS **SS** **20 27 48.0 -2.1**
XLT pmax pmax
comp=Z,10.0nm,0.8s
XLT pmax pmax
comp=Z,80nm,3.6s
XLT LR LR
comp=Z,56nm,19.6s
XLT LR LR
comp=Z,290nm,19.6s
XLT LR LR
comp=Z,810nm,21.7s
**BTO Baotou 54.90 327** *e*P **P** **20 16 37.0 +2.9**
BTO S **S** **20 24 22.9 +7.5**
BTO SS **SS** **20 27 58.3 -0.8**
BTO pmax pmax
comp=Z,24nm,2.3s
BTO pmax pmax
comp=Z,360nm,7.4s
BTO LR LR
comp=Z,2μm,21.6s
BTO LR LR
comp=Z,1μm,22.9s
BTO LR LR
comp=Z,2μm,22.6s
**RAR Rarotonga 55.42 113** LR LR 20 40 37.8
comp=Z,110nm,18.0s,baz=286,slow=36
**LZH Lanzhou 55.74 319** *e*P **P** **20 16 44.4 +4.1**
LZH pP pwP 20 16 50.2 +3.1
LZH S **S** **20 24 20.8 -6.1**
LZH pmax pmax
comp=Z,22nm,1.5s
LZH pmax pmax
comp=Z,190nm,5.2s
LZH LR LR
comp=Z,380nm,16.1s
LZH LR LR
comp=Z,460nm,15.5s
LZH LR LR
comp=Z,860nm,16.1s
**HEH HeiHe 55.90 346** *e*P **P** **20 16 39.3 -1.6**
HEH pP **pP** **20 16 43.7 -1.1**
HEH S **S** **20 24 28.2 +0.1**
HEH SS **SS** **20 28 11.5 -2.7**
HEH pmax pmax
comp=Z,12nm,1.0s
HEH pmax pmax
comp=Z,100nm,4.8s
HEH LR LR
comp=Z,190nm,17.0s
HEH LR LR
comp=Z,480nm,17.3s
HEH LR LR
comp=Z,400nm,15.6s
**PET Petropavlovsk 57.28 9** *e*P **P** **20 16 51.6 +0.9**
PET *e*S **S** **20 24 46.7 +0.4**
PET MLR MLR
comp=Z,200nm,19.0s
**ZEA Zeya 59.16 347** *e*P **P** **20 17 04.3 +0.4**
ZEA *e*S **S** **20 25 14.7 +3.8**
ZEA pmax pmax
comp=Z,10.0nm,0.7s
ZEA smax smax
comp=N,100nm,9.4s
**SHL Shillong 59.93 302** P **P** **20 17 08.5 -1.4**
SHL IAmb IAmb 20 17 22.6
comp=Z,17nm,0.9s
**SHL Shillong 59.93 302** P **P** **20 17 08.5 -1.4**
SHL pmax pmax
comp=Z,17nm,0.9s
**GTA Gaotai 60.26 320**⇓P **P** **20 17 11.9 0.0**
GTA pP sP 20 17 16.9 -0.4
GTA sP pwP 20 17 21.0 +2.3
GTA S **S** **20 25 26.7 +0.9**
GTA SS **SS** **20 29 23.8 +0.3**
GTA pmax pmax
comp=Z,5.0nm,0.9s
GTA LR LR
comp=Z,290nm,20.0s
GTA LR LR
comp=Z,200nm,17.8s
GTA LR LR
comp=Z,330nm,16.7s
**ULN Ulaanbaatar 61.49 331** P **P** **20 17 19.5 -0.6**
ULN IAmb IAmb 20 17 28.2
comp=Z,33nm,1.5s
**ULN Ulaanbaatar 61.49 331** *ce*P **P** **20 17 19.6 -0.6**
ULN pmax pmax
comp=Z,14nm,1.3s
**SONM Songino Array 61.79 331** P **P** **20 17 21.1 -1.1**
SONM IAmb IAmb 20 17 31.0
comp=Z,7.2nm,0.9s
**SONM Songino Array 61.79 331** P **P** **20 17 21.4 -0.8**
comp=Z,2.3nm,0.8s,baz=150,slow=6.7,SNR=9.1
SONM LR LR 20 43 23.9
comp=Z,914nm,19.6s,baz=131,slow=35
comp=Z,2.3nm,0.8s
**CIT Chita 61.81 338** *e*P **P** **20 17 22.2 +0.1**
**GOMU GeErMu 62.01 314** P **P** **20 17 24.2 +0.1**
GOMU sP sP 20 17 29.3 -0.2
GOMU PcP **PcP** **20 18 04.0 -0.7**
GOMU S **S** **20 25 47.3 -1.4**
GOMU ScS **SKSac** **20 27 16.2 -0.1**
GOMU SS **SS** **20 29 54.1 +2.6**
GOMU pmax pmax
comp=Z,7.0nm,1.4s
GOMU pmax pmax
comp=Z,220nm,5.2s
GOMU LR LR
comp=Z,540nm,18.1s
GOMU LR LR
comp=Z,1μm,20.2s
GOMU LR LR
comp=Z,2μm,22.6s
**MA2 Magadan 62.97 3** LR LR 20 46 26.0
comp=Z,82nm,18.5s,baz=182,slow=38
**PPT Papeete 64.48 108** LR LR 20 42 02.3
comp=Z,193nm,19.6s,baz=304,slow=33
**PPT2 Papeete2 64.48 108** *e*S **S** **20 26 20.1 +0.4**
comp=Z,219nm,34.5s
PPT2 *e*SS **SS** **20 30 25.3 -4.8**
comp=Z,117nm,26.8s
PPT2 *e*LQ LQ 20 34 09.2
comp=Z,565nm,24.8s
PPT2 *e*LR LR 20 36 54.6
comp=Z,540nm,33.0s
PPT2 *e*LR LR 20 36 56.5
comp=Z,322nm,35.0s
**ZAK Zakamensk 65.02 331** *e*P **P** **20 17 42.4 -1.1**
ZAK pmax pmax
comp=Z,20nm,1.1s
**TBI Tubuai 65.18 114** *e*S **S** **20 26 25.4 -2.6**
comp=Z,822nm,36.2s
TBI *e*SS **SS** **20 30 44.4 +3.7**
comp=Z,782nm,29.0s
TBI *e*LQ LQ 20 34 36.5
comp=Z,5μm,34.5s
TBI *e*LR LR 20 37 16.4
comp=Z,6μm,39.5s
TBI *e*LR LR 20 37 19.8
comp=Z,2μm,33.2s
**IRK Irkutsk 65.82 333** *e*P **P** **20 17 49.4 +0.9**
IRK *e* 20 18 17.3
IRK pmax pmax
comp=Z,45nm,2.9s
**SEY Seymchan 66.41 3** *e*P **P** **20 17 54.5 +2.5**
SEY pmax pmax
comp=Z,8.0nm,1.1s
**YAK Yakutsk 66.54 352** LR LR 20 45 50.2
comp=Z,216nm,21.5s,baz=153,slow=35
**YAK Yakutsk 66.54 352** *e*P **P** **20 17 56.8 +4.0**
YAK *e* 20 18 25.6
YAK *e* 20 20 15.6
YAK *e*S **S** **20 26 48.2 +5.2**
YAK *e**SS sS 20 27 12.2 +23
YAK *e*SS **SS** **20 31 04.4 +4.0**
YAK pmax pmax
comp=Z,8.0nm,1.3s
YAK pmax pmax
comp=E,2.0nm,1.1s
YAK pmax pmax
comp=N,3.0nm,1.1s
YAK pmax pmax
comp=N,24nm,2.8s
YAK pmax pmax
comp=Z,37nm,3.1s
YAK smax smax
comp=N,74nm,4.0s
YAK smax smax
comp=E,65nm,4.3s
**MOY Mondy 66.95 331** *e*P **P** **20 17 55.8 -0.1**
MOY pmax pmax
comp=Z,47nm,2.7s
**HYB Hyderabad 69.77 290** *e*P **P** **20 18 13.3 -0.8**
**WMQ Urumqi 70.32 319** *e*P **P** **20 18 20.6 +3.6**
WMQ PcP **PcP** **20 18 39.6 +1.0**
WMQ S **S** **20 27 34.5 +5.5**
WMQ SS **SS** **20 32 04.5 +4.7**
WMQ pmax pmax
comp=Z,12nm,2.1s
WMQ LR LR
comp=Z,280nm,23.5s
WMQ LR LR
comp=Z,270nm,15.7s
WMQ LR LR
comp=Z,280nm,24.0s
**BILL Bilibino 72.75 8** *i*P **P** **20 18 33.3 +2.2**
BILL *i* 20 18 43.8
BILL pmax pmax
comp=Z,4.0nm,1.1s
BILL MLR MLR
comp=Z,142nm,18.0s
**TAOE Nuku Hiva Isla 73.42 98** *e*LR LR 20 41 06.8
comp=Z,467nm,26.2s
**VNDA Vanda 74.46 176** P **P** **20 18 40.9 -0.2**
**VNDA Vanda 74.46 176** P **P** **20 18 41.2 +0.2**
comp=Z,0.7nm,0.7s,baz=318,slow=15,SNR=2.5
VNDA LR LR 20 49 20.3
comp=Z,340nm,19.3s,baz=346,slow=34
comp=Z,0.7nm,0.7s
**MK31 Makanchi Array 75.00 320** P **P** **20 18 42.6 -2.1**
MK31 IAmb IAmb 20 18 55.4
comp=Z,28nm,1.7s
**MK31 Makanchi Array 75.00 320** *i* P **P** **20 18 43.6 -1.2**
MK31 pmax pmax
comp=Z,10.0nm,1.0s
**MKAR Makanchi Array 75.00 320** P **P** **20 18 43.8 -1.0**
**MKAR Makanchi Array 75.00 320** P **P** **20 18 44.4 -0.4**
comp=Z,7.3nm,1.0s,baz=106,slow=7.7,SNR=22
MKAR LR LR 20 49 53.6
comp=Z,286nm,21.4s,baz=104,slow=34
comp=Z,7.3nm,1.0s
**MAKZ Makanchi 75.21 320** P **P** **20 18 45.0 -1.0**

MAKZ IAmb IAmb 20 18 59.3
comp=Z,17nm,1.3s
**MAKZ Makanchi 75.21 320** P **P** **20 18 45.0 -1.0**
MAKZ pmax pmax
comp=Z,17nm,1.3s
**ZALV Zalesovo Beam 76.42 328** P **P** **20 18 50.4 -2.3**
**ZALV Zalesovo Beam 76.42 328** P **P** **20 18 51.0 -1.7**
comp=Z,7.4nm,1.0s,baz=98,slow=6.1,SNR=5.5
ZALV LR LR 20 50 58.0
comp=Z,643nm,21.7s,baz=116,slow=34
comp=Z,7.4nm,1.0s
**KSH Kashi 77.05 312** P **P** **20 18 58.1 +1.4**
KSH S **S** **20 28 45.2 -0.2**
KSH pmax pmax
comp=Z,5.0nm,1.1s
KSH LR LR
comp=Z,250nm,21.0s
KSH LR LR
comp=Z,280nm,18.2s
KSH LR LR
comp=Z,390nm,17.9s
**NIL Nilore 77.75 305** P **P** **20 18 58.9 -1.8**
NIL IAmb IAmb 20 19 12.0
comp=Z,20nm,0.7s
**NIL Nilore 77.75 305** P **P** **20 18 58.9 -1.8**
NIL pmax pmax
comp=Z,20nm,0.7s
**KURK Kurchatov 78.68 323** P **P** **20 19 03.8 -1.6**
KURK IAmb IAmb 20 19 25.7
comp=Z,17nm,1.1s
**KURK Kurchatov 78.68 323** *ce*P **P** **20 19 03.8 -1.6**
KURK pmax pmax
comp=Z,19nm,1.3s
**KURBB Kurchatov Arra 78.70 323** P **P** **20 19 04.8 -0.6**
comp=Z,5.3nm,1.0s,baz=107,slow=5.5,SNR=13
KURBB LR LR 20 52 34.2
comp=Z,343nm,21.8s,baz=149,slow=35
comp=Z,5.3nm,1.0s
**AAK Ala-Archa 78.95 314** LR LR 20 53 27.6
comp=Z,441nm,21.9s,baz=96,slow=35
**E19K Redstone River 81.03 19** IAmb IAmb 20 19 37.0
comp=Z,15nm,0.9s
**C19K Lookout Ridge 81.22 17** P **P** **20 19 17.6 -1.3**
C19K IAmb IAmb 20 19 27.4
comp=Z,30nm,1.1s
**F20K Avaraart Lake 81.32 20** P **P** **20 19 18.9 -0.4**
**D19K Kuna River 81.32 18** P **P** **20 19 19.0 -0.4**
D19K IAmb IAmb 20 19 31.0
comp=Z,14nm,1.1s
**IMAR Indian Mountai 81.47 21** P **P** **20 19 18.3 -1.9**
**KKAR Karatay Array 81.91 314** P **P** **20 19 21.4 -1.6**
**KKAR Karatay Array 81.91 314** P **P** **20 19 21.4 -1.6**
**RND Reindeer 82.20 24** P P 20 19 29.7 +5.5
**E21K Killik River 82.60 19** P **P** **20 19 25.1 -1.0**
E21K IAmb IAmb 20 19 43.6
comp=Z,18nm,1.0s
**DHY Denali Highway 82.68 25** P **P** **20 19 25.6 -1.2**
**B21K Ikpikpuk River 82.99 18** IAmb IAmb 20 19 45.5
comp=Z,13nm,0.9s
**CCB Clear Creek Bu 83.12 23** P **P** **20 19 29.4 +0.6**
CCB IAmb IAmb 20 19 41.1
comp=Z,16nm,1.2s
**D22K Ayikyak River 83.22 19** P **P** **20 19 30.8 +1.5**
D22K IAmb IAmb 20 19 43.0
comp=Z,12nm,1.1s
**HDA Harding Lake 83.37 24** P **P** **20 19 30.5 +0.3**
**IL31 83.53 23** P **P** **20 19 30.5 -0.4**
IL31 IAmb IAmb 20 19 47.6
comp=Z,7.6nm,0.8s
**ILAR Eielson Array 83.53 23** P **P** **20 19 30.1 -0.8**
**ILAR Eielson Array 83.53 23** P **P** **20 19 30.0 -0.9**
comp=Z,1.0nm,0.7s,baz=260,slow=5.2,SNR=5.3
ILAR LR LR 20 51 22.2
comp=Z,250nm,21.9s,baz=259,slow=32
comp=Z,1.0nm,0.7s
**H24K Noodor Dome 83.57 22** P **P** **20 19 32.8 +1.6**
H24K IAmb IAmb 20 19 48.6
comp=Z,7.9nm,1.1s
**J25K Salcha River, 84.08 24** IAmb IAmb 20 19 46.7
comp=Z,18nm,1.1s
**MAW Mawson 84.22 202** P **P** **20 19 34.6 +0.2**
comp=Z,1.5nm,0.6s,baz=62,slow=13,SNR=2.2
MAW LR LR 20 53 29.1
comp=Z,206nm,21.3s,baz=80,slow=33
comp=Z,1.5nm,0.6s
**F24K Squaw Lake 84.24 21** P **P** **20 19 34.5 0.0**
F24K IAmb IAmb 20 19 52.0
comp=Z,14nm,1.1s
**BRVK Borovoye 84.30 324** P **P** **20 19 34.6 -0.5**
BRVK IAmb IAmb 20 19 46.7
comp=Z,18nm,0.9s
**BRVK Borovoye 84.30 324** P **P** **20 19 34.6 -0.5**
BRVK pmax pmax
comp=Z,18nm,1.0s
**M27K Edge Creek, AK 84.81 26** IAmb IAmb 20 19 51.8
comp=Z,12nm,1.1s
**M29M Somme Creek 86.37 27** P **P** **20 19 46.2 +0.8**
**QSPA South Pole Qui 86.47 180** P **P** **20 19 45.5 -0.3**
QSPA IAmb IAmb 20 19 58.8
comp=Z,7.9nm,1.0s
**QSPA South Pole Qui 86.47 180** P **P** **20 19 45.7 -0.1**
comp=Z,1.0nm,0.8s,baz=285,slow=1.4,SNR=22
QSPA LR LR 20 56 49.6
comp=Z,390nm,20.9s,baz=12,slow=34
comp=Z,1.0nm,0.8s
**L29M L29M 86.68 26** P **P** **20 19 46.5 -0.4**
L29M IAmb IAmb 20 20 05.5
comp=Z,11nm,1.0s
**E27K Coleen River 86.70 21** P **P** **20 19 46.2 -0.7**
E27K IAmb IAmb 20 20 04.5
comp=Z,8.7nm,1.1s
**HRA Herat 86.89 305** P **P** **20 19 46.8 -1.9**
HRA IAmb IAmb 20 19 56.2
comp=Z,13nm,1.2s
**K29M Barlow Dome 87.12 26** IAmb IAmb 20 20 03.2
comp=Z,16nm,1.1s
**WSAR Wadi Sarin 89.04 293** LR LR 21 03 49.4
comp=Z,55nm,18.5s,baz=104,slow=38
**INK Inuvik 89.65 22** LR LR 20 55 25.4
comp=Z,362nm,21.9s,baz=244,slow=32
**AB31 Akbulak array 90.11 319** *i* P **P** **20 20 05.6 +2.3**
AB31 pmax pmax
comp=Z,1.0nm,0.6s
**ABKAR Akbulak array 90.11 319** P **P** **20 20 01.9 -1.5**
**ABKAR Akbulak array 90.11 319** P **P** **20 20 01.9 -1.5**
ABKAR IAmb IAmb 20 20 13.6
comp=Z,4.5nm,0.9s
**BBB Bella Bella 90.13 38** LR LR 20 52 15.4
comp=Z,347nm,21.6s,baz=246,slow=30
**AKTO Aktyubinsk 91.44 320** LR LR 21 00 17.5
comp=Z,453nm,21.9s,baz=78,slow=35
**ARU Arti 91.52 326** LR LR 21 00 41.2
comp=Z,373nm,21.7s,baz=91,slow=35
**YBH Yreka Blue Hor 93.17 49** LR LR 20 53 48.5
comp=Z,544nm,21.7s,baz=311,slow=30
**ELIB Princess Elisa 96.38 195** *d*P **P** **20 20 36.4 +4.4**
**KIRV Kirov 96.45 328** LR LR 21 04 21.8
comp=Z,1μm,20.6s,baz=82,slow=36
**NVAR Mina Array Bea 96.53 52** LR LR 20 55 39.2
comp=Z,411nm,21.9s,baz=266,slow=30
**NEW Newport 97.09 42** LR LR 20 57 52.9
comp=Z,145nm,19.7s,baz=265,slow=32
**YKA Yellowknife Ar 97.37 28** LR LR 20 59 29.4
comp=Z,222nm,21.7s,baz=304,slow=32
**BELG Belogornoye 97.93 322** LR LR 21 05 18.1
comp=Z,243nm,20.7s,baz=77,slow=36
**PFO Pinyon Flats O 98.10 57** LR LR 20 57 00.5
comp=Z,352nm,20.8s,baz=256,slow=31
**MAK Makhachkala 98.66 313** *e*P P 20 20 37.5 -5.2
MAK *e* 20 31 12.6
MAK *e*SS SS 20 38 50.4 -7.1
MAK *e*SSS SSS 20 42 41.8
**ELK Elko 98.82 49** LR LR 20 57 28.7
comp=Z,212nm,21.1s,baz=263,slow=31
**NVL N'lazarevskaya 100.02 194** *e*P **Pdif** **20 20 59.0 +11**
NVL pmax pmax
comp=Z,5.0nm,0.6s
**MNK Minsk 108.93 327** *i* P **Pdif** **20 21 25.1 -3.0**
MNK *i* 20 25 56.6
MNK *i* PPP PPP 20 28 14.0
MNK *i* 20 32 42.3
MNK *i* SP SP 20 35 21.5 -1.9
MNK *i* SS SS 20 41 16.0 -1.7
MNK pmax pmax
comp=N,7.0nm,0.9s
MNK pmax pmax
comp=E,7.0nm,0.8s
MNK pmax pmax
comp=Z,6.0nm,0.8s
MNK MLR MLR
comp=E,130nm,19.0s
MNK MLR MLR
comp=Z,351nm,19.0s
**CLL Collm 118.37 329** *e*SKSac **SKSac** **20 32 38.0 -6.7**
CLL *e*PS PS 20 36 52.0 -1.5
CLL *e*PPS PPS 20 38 06.0
CLL *e*SS **SS** **20 43 18.0 -4.3**
CLL *ex* x 20 44 16.0
CLL *e*SSS SSS 20 47 46.0
CLL *e*SSSS 20 51 24.0
CLL *ex* x 20 52 30.0
CLL AMS AMS 21 18 00.0
comp=N,200nm,20.3s
CLL AMS AMS 21 18 00.0
comp=E,300nm,20.9s
CLL AMS AMS 21 18 00.0
comp=Z,400nm,21.1s
**LPAZ La Paz 140.86 121** PKP **PKPdf** **20 26 34.1 -1.0**
comp=Z,0.6nm,0.5s,baz=164,slow=6.4,SNR=2.0
**TORD Torodi Ar. Bea 143.55 287** PKPdf PKPab 20 26 35.8 +0.2
**TORD Torodi Ar. Bea 143.55 287** PKhKP PKPpre 20 26 35.7
comp=Z,2.1nm,0.7s,baz=52,slow=2.6,SNR=10
**SAML Samuel 148.29 113** **PKiKP** **20 26 52.3 0.0**
**SAML Samuel 148.29 113** PKP2 **PKiKP** **20 26 52.3 0.0**
**PTLB Pontes e Lacer 148.72 128** **PKPdf** **20 26 49.3 +1.5**
**DBIC Dimbokro 150.91 277** PKPab **PKiKP** **20 26 59.6 +1.9**
**DBIC Dimbokro 150.91 277** PKPbc **PKiKP** **20 26 57.5 -0.2**
comp=Z,6.8nm,0.6s,baz=86,slow=1.6,SNR=13

**IDC 01 20:15:33.3±2.6, 2°.93S×136°.37E, h0km, mb3.7/3, mbtmp3.8/4, ML3.7/1, Error ellipse: s-maj=109.7km s-min=27.2km az=81.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.03** | **187** | P | Pn | 20 19 32.5 | -0.5 |
| | 0.3nm,0.3s,baz=8.4,slow=13,SNR=13 | | | | | | |
| | 2.1nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **20.76** | **186** | P | P | 20 20 16.1 | +0.2 |
| | 4.5nm,0.6s,baz=6.3,slow=11,SNR=29 | | | | | | |
| | 4.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.55** | **323** | P | P | 20 26 37.8 | -0.1 |
| | 0.3nm,0.5s,baz=113,slow=6.6,SNR=6.6 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.57** | **326** | P | P | 20 27 02.6 | +0.3 |
| | 0.4nm,0.9s,baz=121,slow=5.1,SNR=3.1 | | | | | | |
| | 0.4nm,0.9s | | | | | | |

*ROM **01** 20:36:59.6±0.2, 39°.888N±0°.008×17°.19E±0°.02, h24km±2km, ML2.3/42, Error ellipse: s-maj=1.6km s-min=0.0km az=104.0*
*TIR **01** 20:37:01.5, 40°.14N×17°.58E, h20km±5km, Ml2.9*
**ISC 01 20:36:56.1±1.2, 39°.94N±0°.03×17°.41E±0°.03, h6km±11km, n33, σ1°15/41, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAR1** | **Taranto** | **0.60** | **351** | P | **Pn** | **20 37 11.9** | **+0.7** |
| TAR1 | | | | S | **Sn** | **20 37 21.6** | **+0.5** |
| TAR1 | | | | AML | AML | | |
| | comp=N,1825μm,0.2s | | | | | | |
| TAR1 | | | | AML | AML | | |
| | comp=E,1510μm,0.6s | | | | | | |
| TAR1 | | | | AML | AML | | |
| | comp=N,1825μm,1.8s | | | | | | |
| TAR1 | | | | AML | AML | | |
| | comp=E,1246μm,0.3s | | | | | | |
| TAR1 | | | | AML | AML | | |
| | comp=N,1823μm,0.2s | | | | | | |
| TAR1 | | | | AML | AML | | |
| | comp=E,1510μm,1.4s | | | | | | |
| **PIPA** | **Pietrapaola** | **0.64** | **226** | P | **Pb** | **20 37 09.7** | **-0.1** |
| PIPA | | | | S | **Sg** | **20 37 18.4** | **+1.5** |
| PIPA | | | | AML | AML | | |
| | comp=E,326μm,1.4s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=N,340μm,0.9s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=E,312μm,1.5s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=E,325μm,1.4s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=N,340μm,0.9s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=E,311μm,1.5s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=N,288μm,0.2s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=E,325μm,0.6s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=E,124μm,0.2s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=N,258μm,0.2s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=N,340μm,1.1s | | | | | | |
| PIPA | | | | AML | AML | | |
| | comp=E,139μm,0.3s | | | | | | |
| **LADO** | **San Nicola del** | **0.73** | **207** | P | **Pb** | **20 37 11.4** | **+0.1** |
| LADO | | | | S | **Sb** | **20 37 21.5** | **-0.1** |
| LADO | | | | AML | AML | | |
| | comp=N,10μm,0.2s | | | | | | |
| LADO | | | | AML | AML | | |
| | comp=N,10μm,0.2s | | | | | | |
| LADO | | | | AML | AML | | |
| | comp=E,14μm,0.3s | | | | | | |
| LADO | | | | AML | AML | | |
| | comp=N,5μm,0.2s | | | | | | |
| LADO | | | | AML | AML | | |
| | comp=E,8μm,0.3s | | | | | | |
| **MESG** | **Mesagne** | **0.73** | **27** | P | Pn | 20 37 16.6 | +3.5 |
| MESG | | | | S | **Sn** | **20 37 29.2** | **+4.7** |
| **ORI** | **Oriolo Calabro** | **0.75** | **280** | P | **Pg** | **20 37 11.3** | **+0.8** |
| ORI | | | | AML | AML | | |
| | comp=E,568μm,0.4s | | | | | | |
| ORI | | | | AML | AML | | |
| | comp=N,436μm,1.3s | | | | | | |
| ORI | | | | AML | AML | | |
| | comp=N,436μm,0.7s | | | | | | |
| ORI | | | | AML | AML | | |
| | comp=E,399μm,0.3s | | | | | | |
| **LTRZ** | **Laterza** | **0.80** | **326** | P | **Pn** | **20 37 13.6** | **-0.4** |
| LTRZ | | | | S | **Sn** | **20 37 25.8** | **-0.6** |
| LTRZ | | | | AML | AML | | |
| | comp=E,408μm,0.2s | | | | | | |
| LTRZ | | | | AML | AML | | |
| | comp=N,455μm,0.3s | | | | | | |
| LTRZ | | | | AML | AML | | |
| | comp=E,357μm,0.1s | | | | | | |
| **SALB** | **San Lorenzo Be** | **0.82** | **266** | P | **Pg** | **20 37 11.3** | **-0.6** |
| SALB | | | | S | **Sg** | **20 37 21.2** | **-1.3** |
| SALB | | | | AML | AML | | |
| | comp=E,297μm,1.0s | | | | | | |
| SALB | | | | AML | AML | | |
| | comp=N,242μm,0.3s | | | | | | |
| SALB | | | | AML | AML | | |
| | comp=E,297μm,1.0s | | | | | | |
| **NOCI** | **Noci** | **0.89** | **343** | P | **Pn** | **20 37 15.9** | **+0.7** |
| | baz=329 | | | | | | |
| NOCI | | | | S | **Sn** | **20 37 28.5** | **0.0** |
| | baz=329 | | | | | | |
| NOCI | | | | AMP | | | |
| | comp=N,2.6nm,0.2s,baz=329 | | | | | | |
| **NOCI** | **Noci** | **0.89** | **343** | P | **Pn** | **20 37 16.5** | **+1.2** |
| NOCI | | | | AML | AML | | |
| | comp=N,838μm,0.3s | | | | | | |
| NOCI | | | | AML | AML | | |
| | comp=E,520μm,0.3s | | | | | | |
| **MATE** | **Matera** | **0.89** | **323** | P | **Pn** | **20 37 14.8** | **-0.4** |
| MATE | | | | S | **Sn** | **20 37 28.5** | **0.0** |
| MATE | | | | AML | AML | | |
| | comp=N,460μm,0.3s | | | | | | |
| MATE | | | | AML | AML | | |
| | comp=E,400μm,0.1s | | | | | | |
| **TIP** | **Timpagrande** | **0.91** | **214** | P | **Pb** | **20 37 14.7** | **+0.4** |
| TIP | | | | AML | AML | | |
| | comp=E,72μm,1.3s | | | | | | |
| TIP | | | | AML | AML | | |
| | comp=N,52μm,1.0s | | | | | | |
| TIP | | | | AML | AML | | |
| | comp=E,72μm,0.7s | | | | | | |
| TIP | | | | AML | AML | | |
| | comp=N,43μm,0.6s | | | | | | |
| **MIGL** | **Miglionico** | **1.00** | **312** | P | **Pb** | **20 37 15.8** | **0.0** |
| MIGL | | | | S | **Sn** | **20 37 30.8** | **-0.3** |
| MIGL | | | | AML | AML | | |
| | comp=E,798μm,0.7s | | | | | | |
| MIGL | | | | AML | AML | | |
| | comp=N,650μm,1.4s | | | | | | |
| MIGL | | | | AML | AML | | |
| | comp=E,798μm,1.3s | | | | | | |
| MIGL | | | | AML | AML | | |
| | comp=N,650μm,0.6s | | | | | | |
| MIGL | | | | AML | AML | | |
| | comp=N,587μm,0.2s | | | | | | |
| MIGL | | | | AML | AML | | |
| | comp=E,700μm,0.2s | | | | | | |
| **SERS** | **Sersale** | **1.06** | **212** | P | **Pb** | **20 37 16.8** | **-0.1** |
| SERS | | | | AML | AML | | |
| | comp=E,58μm,0.3s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=E,58μm,1.7s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=N,64μm,0.7s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=N,56μm,0.3s | | | | | | |
| **AMUR** | **Altamura** | **1.15** | **328** | P | **Pn** | **20 37 19.1** | **+0.4** |
| AMUR | | | | S | **Sn** | **20 37 36.6** | **+1.8** |
| AMUR | | | | AML | AML | | |
| | comp=E,359μm,0.8s | | | | | | |
| AMUR | | | | AML | AML | | |
| | comp=N,346μm,0.3s | | | | | | |
| AMUR | | | | AML | AML | | |
| | comp=E,359μm,1.2s | | | | | | |
| AMUR | | | | AML | AML | | |
| | comp=E,306μm,0.2s | | | | | | |
| **CAR1** | **CAROLEI** | **1.15** | **234** | P | **Pg** | **20 37 18.4** | **+0.2** |
| CAR1 | | | | AML | AML | | |
| | comp=N,70μm,1.6s | | | | | | |
| CAR1 | | | | AML | AML | | |
| | comp=E,166μm,1.0s | | | | | | |
| CAR1 | | | | AML | AML | | |
| | comp=N,70μm,1.6s | | | | | | |
| CAR1 | | | | AML | AML | | |
| | comp=E,166μm,1.0s | | | | | | |
| CAR1 | | | | AML | AML | | |
| | comp=N,37μm,0.3s | | | | | | |
| CAR1 | | | | AML | AML | | |
| | comp=N,70μm,0.4s | | | | | | |
| **CET2** | **Cetraro** | **1.19** | **250** | P | **Pg** | **20 37 19.6** | **+0.6** |
| CET2 | | | | AML | AML | | |
| | comp=E,136μm,1.1s | | | | | | |
| CET2 | | | | AML | AML | | |
| | comp=N,235μm,0.4s | | | | | | |
| CET2 | | | | AML | AML | | |
| | comp=N,235μm,1.6s | | | | | | |
| CET2 | | | | AML | AML | | |
| | comp=E,136μm,0.9s | | | | | | |
| **CUC** | **Castrocucco** | **1.23** | **273** | P | **Pn** | **20 37 19.6** | **-0.2** |
| CUC | | | | AML | AML | | |
| | comp=E,93μm,0.8s | | | | | | |
| CUC | | | | AML | AML | | |
| | comp=N,54μm,0.6s | | | | | | |
| CUC | | | | AML | AML | | |
| | comp=E,93μm,1.2s | | | | | | |
| **MTSN** | **Montesano sull** | **1.31** | **285** | P | **Pn** | **20 37 20.2** | **-0.9** |
| MTSN | | | | AML | AML | | |
| | comp=E,62μm,0.9s | | | | | | |
| MTSN | | | | AML | AML | | |
| | comp=N,75μm,1.1s | | | | | | |
| MTSN | | | | AML | AML | | |
| | comp=N,75μm,0.9s | | | | | | |
| MTSN | | | | AML | AML | | |
| | comp=E,47μm,0.4s | | | | | | |
| MTSN | | | | AML | AML | | |
| | comp=N,75μm,0.3s | | | | | | |
| **ACER** | **Acerenza** | **1.41** | **308** | P | **Pg** | **20 37 23.4** | **+0.3** |
| ACER | | | | AML | AML | | |
| | comp=E,177μm,0.3s | | | | | | |
| ACER | | | | AML | AML | | |
| | comp=N,182μm,0.3s | | | | | | |
| ACER | | | | AML | AML | | |
| | comp=N,133μm,0.3s | | | | | | |
| ACER | | | | AML | AML | | |
| | comp=E,173μm,0.3s | | | | | | |
| **PALZ** | **Palazzo San Ge** | **1.50** | **313** | P | **Pb** | **20 37 24.3** | **0.0** |
| **CMPR** | **Campora** | **1.66** | **284** | P | **Pn** | **20 37 26.5** | **+0.7** |
| CMPR | | | | AML | AML | | |
| | comp=N,35μm,0.4s | | | | | | |
| CMPR | | | | AML | AML | | |
| | comp=E,38μm,0.3s | | | | | | |
| **JOPP** | **Joppolo** | **1.78** | **222** | P | **Pb** | **20 37 28.5** | **-0.6** |
| JOPP | | | | AML | AML | | |
| | comp=E,18μm,0.2s | | | | | | |
| JOPP | | | | AML | AML | | |
| | comp=N,22μm,1.3s | | | | | | |
| **KEK** | **Kerkira** | **1.85** | **96** | P | **Pg** | **20 37 31.7** | **0.0** |
| **SRN** | **Sarande** | **1.99** | **91** | P | Pg | 20 37 42.6 | +8.3 |
| | baz=97 | | | | | | |
| SRN | | | | S | Sg | 20 38 11.1 | +11 |
| | baz=97 | | | | | | |
| **CEL** | **Celeste** | **2.05** | **216** | P | **Pb** | **20 37 32.4** | **-1.3** |
| CEL | | | | AML | AML | | |
| | comp=N,16μm,0.9s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=E,14μm,1.4s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,16μm,1.1s | | | | | | |
| **MSAG** | **Monte S. Angel** | **2.11** | **328** | P | **Pb** | **20 37 33.3** | **-1.4** |
| MSAG | | | | AML | AML | | |
| | comp=E,34μm,0.8s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,75μm,0.7s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,75μm,1.3s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,72μm,0.1s | | | | | | |
| **SGRT** | **San Giovanni R** | **2.21** | **326** | P | **Pg** | **20 37 39.0** | **+0.5** |
| | baz=320 | | | | | | |
| SGRT | | | | S | **Sg** | **20 38 08.1** | **+0.9** |
| | baz=320 | | | | | | |
| SGRT | | | | AMP | | | |
| | comp=E,0.2nm,0.1s,baz=320 | | | | | | |
| **SGRT** | **San Giovanni R** | **2.21** | **326** | P | **Pb** | **20 37 35.4** | **-1.2** |
| **MELA** | **Melanico ??? S** | **2.47** | **316** | AML | AML | | |
| | comp=E,72μm,1.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,72μm,0.9s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,104μm,0.4s | | | | | | |
| **LKD2** | **Lefkada island** | **2.77** | **113** | P | **Pg** | **20 37 49.1** | **0.0** |
| | baz=118 | | | | | | |
| **PUK** | **Puka** | **2.82** | **41** | S | **Sb** | **20 38 20.0** | **-1.8** |
| | baz=41 | | | | | | |
| **STON** | **Ston** | **2.94** | **4** | AML | AML | | |
| STON | | | | AML | AML | | |
| | comp=N,26μm,0.2s | | | | | | |
| STON | | | | AML | AML | | |
| | comp=E,34μm,1.0s | | | | | | |
| **FNA** | **Florina** | **3.15** | **73** | P | **Pn** | **20 37 45.7** | **-0.6** |
| | baz=76 | | | | | | |
| FNA | | | | S | **Sb** | **20 38 29.5** | **-1.7** |
| | baz=76 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.0nm,0.2s,baz=76 | | | | | | |

*IDC **01** 20:39:09.1±2.6, 9°.42S×112°.67E, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=133.2km s-min=27.0km az=47.0*
*DJA **01** 20:39:15.3±1.3, 9°.S±9°×11°.3E±°, h19km±15km, M4.1/10, mb4.2/4, MLv4.1/10*
**ISC 01 20:39:16.2±1.1, 9°.4S±0°.1×112°.78E±0°.06, h35km, n14, σ1°53/17, mb3.4/3, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** | **1.65** | **55** | P | **Pn** | **20 39 42.6** | **0.0** |
| JAGI | | | | S | **Sn** | **20 40 03.0** | **+0.4** |
| **PWJI** | **Pagerwojo** | **1.69** | **325** | P | **Pn** | **20 39 44.5** | **+1.3** |
| PWJI | | | | S | **Sn** | **20 40 01.5** | **-2.1** |
| **DNP** | **Denpasar** | **2.51** | **73** | P | **Pn** | **20 39 55.8** | **+1.4** |
| **UGM** | **Wanagama** | **2.69** | **304** | P | **Pn** | **20 39 58.1** | **+1.1** |
| UGM | | | | S | **Sn** | **20 40 30.8** | **+2.5** |
| **SRBI** | **Singaraja** | **2.74** | **61** | P | **Pn** | **20 39 59.3** | **+1.6** |
| **TWSI** | **Taliwang, Sumb** | **4.10** | **81** | P | **Pn** | **20 40 16.9** | **+0.5** |
| **CMJI** | **Cimerak** | **4.58** | **290** | P | **Pn** | **20 40 23.5** | **+0.5** |
| **PLAI** | **Plampang** | **4.96** | **84** | P | **Pn** | **20 40 29.6** | **+1.3** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNJI** | **Cibinong** | **5.97** | **290** | P | **Pn** | **20 40 43.1** | **+1.0** |
| | 26nm,1.4s,0.1nm | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **8.30** | **68** | P | **Pn** | **20 41 15.8** | **+1.7** |
| | 26nm,1.3s | | | | | | |
| **KASI** | **Kota Agung** | **9.08** | **295** | P | **Pn** | **20 41 25.6** | **+0.8** |
| **WRA** | **Warramunga Arr** | **23.30** | **119** | P | **P** | **20 44 19.3** | **-1.9** |
| | 0.3nm,0.5s,baz=292,slow=11,SNR=6.3 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.66** | **128** | P | **P** | **20 44 33.0** | **-0.9** |
| | 0.7nm,0.7s,baz=306,slow=9.3,SNR=11 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.22** | **337** | P | **P** | **20 49 32.5** | **-1.8** |
| | 0.4nm,0.5s,baz=146,slow=7.1,SNR=5.0 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

*NEIC **01** 20:57:03.4±2.0, 13°.87N±0°.06×51°.6E±0°.1, h10km±1km, mb4.2/22, Error ellipse: s-maj=21.0km s-min=8.3km az=113.0*
*IDC **01** 20:57:05.5±1.9, 14°.04N×51°.83E, h0km, mb3.8/10, mbtmp3.8/11, ML3.6/1, MS3.5/3, Error ellipse: s-maj=45.5km s-min=23.1km az=176.0*
*OMAN **01** 20:57:13.7±0.6, 14°.52N×51°.63E, h71km±14km, mb4.6/5, ml3.9/4, Error ellipse: s-maj=17.6km s-min=8.5km az=288.0*
**ISC 01 20:57:07.2**±0.8**, 14°.12N**±0°.08×**51°.62E**±0°.08**, h21km, n59, σ2s.48**/71**, mb4.1**/19**, MS3.5**/3**, Eastern Gulf of Aden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABTO** | **Aybut** | **3.60** | **26** | P | **Pn** | **20 58 02.1** | **+0.2** |
| | SNR=9.8 | | | | | | |
| ABTO | | | | S | **Sn** | **20 58 40.5** | **-3.4** |
| **RBK** | **Rabkut** | **4.18** | **36** | P | **Pn** | **20 58 10.8** | **+0.9** |
| | SNR=28 | | | | | | |
| **WHFO** | **Wadi Hawf** | **4.31** | **28** | P | **Pn** | **20 58 12.1** | **+0.4** |
| | SNR=26 | | | | | | |
| WHFO | | | | S | **Sn** | **20 59 01.4** | **+0.1** |
| **DMTO** | **DMTO** | **4.80** | **41** | P | **Pn** | **20 58 19.0** | **+0.6** |
| | SNR=24 | | | | | | |
| DMTO | | | | S | **Sn** | **20 59 13.3** | **-0.1** |
| **DOK** | **Doka** | **5.08** | **28** | P | **Pn** | **20 58 22.9** | **+0.7** |
| **ATD** | **Arta Tunnel** | **8.93** | **254** | LR | LR | 21 01 40.4 | |
| | comp=Z,12nm,19.2s,slow=30 | | | | | | |
| **MZR** | **Muzera** | **9.01** | **11** | P | **Pn** | **20 59 15.7** | **-0.5** |
| MZR | | | | S | **Sn** | **21 00 54.6** | **-2.5** |
| **MHTO** | **MHTO** | **9.12** | **41** | P | **Pn** | **20 59 18.1** | **+0.4** |
| **MZWR** | **Madinat Zayed** | **9.83** | **12** | P | **Pn** | **20 59 26.9** | **-0.5** |
| MZWR | | | | S | **Sn** | **21 01 13.4** | **-3.7** |
| **JMDO** | **Jabal Madar** | **10.26** | **36** | P | **Pn** | **20 59 33.5** | **+0.2** |
| JMDO | | | | S | **Sn** | **21 01 28.1** | **+0.3** |
| **ARQ** | **Araqi** | **10.28** | **26** | P | **Pn** | **20 59 34.9** | **+1.4** |
| ARQ | | | | S | **Sn** | **21 01 23.6** | **-4.6** |
| **ALNE** | **Al Ain** | **10.63** | **21** | P | **Pn** | **20 59 40.7** | **+2.4** |
| ALNE | | | | S | **Sn** | **21 01 32.2** | **-4.6** |
| **SMDO** | **Samad** | **10.78** | **33** | P | **Pn** | **20 59 39.7** | **-0.8** |
| **JLN** | **Jalan Bani Buh** | **10.89** | **42** | P | **Pn** | **20 59 42.7** | **+0.7** |
| JLN | | | | S | **Sn** | **21 01 44.4** | **+1.2** |
| **WBK** | **Wadi Bani Khal** | **10.95** | **38** | P | **Pn** | **20 59 43.9** | **+1.1** |
| WBK | | | | S | **Sn** | **21 01 42.3** | **-2.5** |
| **RAYN** | **Ar Rayn** | **11.00** | **329** | Pn | **Pn** | **20 59 42.4** | **-1.1** |
| **ASUD** | **Al Ashush, Dub** | **11.02** | **18** | P | **Pn** | **20 59 44.6** | **+0.9** |
| ASUD | | | | S | **Sn** | **21 01 40.5** | **-5.9** |
| **BIDO** | **Bidbid** | **11.20** | **32** | P | **Pn** | **20 59 47.8** | **+1.6** |
| **WSAR** | **Wadi Sarin** | **11.24** | **35** | Pn | **Pn** | **20 59 46.2** | **-0.6** |
| | 0.4nm,0.3s,baz=245,slow=13,SNR=5.2 | | | | | | |
| WSAR | | | | Sn | **Sn** | **21 01 47.2** | **-4.6** |
| | 0.3nm,0.3s,baz=237,slow=9.1,SNR=1.3 | | | | | | |
| | 8.4nm,1.0s | | | | | | |
| **WSAR** | **Wadi Sarin** | **11.24** | **35** | P | **Pn** | **20 59 45.5** | **-1.3** |
| **ASHO** | **Ashiyiah** | **11.31** | **21** | P | **Pn** | **20 59 50.2** | **+2.4** |
| ASHO | | | | S | **Sn** | **21 01 50.2** | **-3.4** |
| **UOSS** | **Minazif** | **11.60** | **21** | Pn | **Pn** | **20 59 47.9** | **-3.8** |
| **UOSS** | **Minazif** | **11.60** | **21** | P | **Pn** | **20 59 52.6** | **+0.9** |
| UOSS | | | | S | **Sn** | **21 01 58.1** | **-2.6** |
| **SHME** | **Shamm** | **12.61** | **19** | P | **Pn** | **21 00 05.9** | **+0.5** |
| SHME | | | | S | **Sn** | **21 02 19.5** | **-5.7** |
| **LODK** | **Lodwar** | **19.25** | **238** | P | **P** | **21 01 24.3** | **-6.2** |
| **KMBO** | **Kilima Mbogo** | **20.79** | **224** | P | **P** | **21 01 40.5** | **-7.0** |
| **KIBK** | **Kibwezi** | **21.18** | **220** | P | **P** | **21 01 47.5** | **-4.0** |
| KIBK | | | | IAmb | IAmb | 21 01 56.8 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **HRA** | **Herat** | **22.35** | **24** | P | **P** | **21 02 03.0** | **-1.1** |
| HRA | | | | IAmb | IAmb | 21 02 16.9 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **KBL** | **Kabul** | **25.72** | **35** | P | **P** | **21 02 35.4** | **-1.0** |
| KBL | | | | IAmb | IAmb | 21 02 40.9 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **SIMJ** | **Simiganj** | **28.88** | **29** | P | **P** | **21 03 04.8** | **+0.1** |
| SIMJ | | | | IAmb | IAmb | 21 03 24.6 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **CHGR** | **Chuyangaron** | **28.95** | **29** | P | **P** | **21 03 03.8** | **-1.4** |
| **KBZ** | **Khabaz** | **30.44** | **347** | LR | LR | 21 18 13.0 | |
| | comp=Z,229nm,18.7s,baz=104,slow=42 | | | | | | |
| **DRK** | **Karamyk** | **30.88** | **31** | P | **P** | **21 03 21.1** | **-1.4** |
| **OPO** | **Ambohidratompo** | **32.77** | **188** | LR | LR | 21 15 21.0 | |
| | comp=Z,102nm,20.2s,baz=166,slow=34 | | | | | | |
| **KK31** | **Karatay Array** | **33.14** | **26** | P | **P** | **21 03 41.8** | **-0.3** |
| **KKAR** | **Karatay Array** | **33.14** | **26** | P | **P** | **21 03 41.7** | **-0.3** |
| **KKAR** | **Karatay Array** | **33.14** | **26** | P | **P** | **21 03 45.4** | **+3.3** |
| KKAR | | | | IAmb | IAmb | 21 03 53.7 | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **NRN** | **Naryn** | **34.49** | **33** | P | **P** | **21 03 53.2** | **-0.9** |
| NRN | | | | IAmb | IAmb | 21 04 10.0 | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **34.59** | **30** | P | **P** | **21 03 54.2** | **-0.7** |
| AAK | | | | IAmb | IAmb | 21 04 15.4 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **35.67** | **35** | P | **P** | **21 04 03.2** | **-1.3** |
| TARG | | | | IAmb | IAmb | 21 04 14.5 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **35.70** | **9** | P | **P** | **21 04 06.0** | **+1.9** |
| **AKASG** | **Malin Array Be** | **40.76** | **338** | P | **P** | **21 04 49.6** | **+2.9** |
| | comp=Z,0.2nm,0.4s,baz=148,slow=7.2,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **41.46** | **32** | P | **P** | **21 04 51.4** | **-1.2** |
| **MKAR** | **Makanchi Array** | **41.46** | **32** | P | **P** | **21 04 54.2** | **+1.6** |
| | comp=Z,0.6nm,0.5s,baz=217,slow=7.3,SNR=8.9 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **41.58** | **17** | P | **P** | **21 04 52.8** | **-0.6** |
| BRVK | | | | IAmb | IAmb | 21 05 25.7 | |
| | comp=Z,3.4nm,1.1s | | | | | | |
| **TATN** | **Tataouine** | **41.65** | **303** | P | **P** | **21 04 53.5** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **42.45** | **25** | P | **P** | **21 05 02.1** | **+1.6** |
| | comp=Z,1.6nm,0.2s,baz=360,slow=17,SNR=2.0 | | | | | | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **45.53** | **78** | P | **P** | **21 05 24.1** | **-1.7** |
| **CMAR** | **Chiang Mai Arr** | **45.53** | **78** | P | **P** | **21 05 23.2** | **-2.6** |
| **CMAR** | **Chiang Mai Arr** | **45.53** | **78** | P | **P** | **21 05 25.6** | **-0.1** |
| | comp=Z,4.2nm,0.7s,baz=274,slow=8.9,SNR=22 | | | | | | |
| CMAR | | | | LR | LR | 21 23 58.3 | |
| | comp=Z,16nm,19.0s,baz=285,slow=36 | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **47.52** | **26** | P | **P** | **21 05 39.9** | **-0.9** |
| ZAA0 | | | | IAmb | IAmb | 21 06 08.1 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **47.52** | **26** | P | **P** | **21 05 41.0** | **+0.2** |
| **ZALV** | **Zalesovo Beam** | **47.52** | **26** | P | **P** | **21 05 41.7** | **+0.9** |
| | comp=Z,1.6nm,0.5s,baz=233,slow=8.1,SNR=11 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.45** | **275** | P | **P** | **21 05 51.8** | **+3.1** |
| | comp=Z,0.3nm,0.9s,baz=64,slow=6.6,SNR=1.6 | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **50.72** | **344** | P | **P** | **21 06 05.9** | **+0.7** |
| **FINES** | **FINESS Array B** | **50.72** | **344** | P | **P** | **21 06 07.6** | **+2.5** |
| | comp=Z,0.9nm,0.7s,baz=188,slow=6.9,SNR=3.1 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **53.64** | **338** | P | **P** | **21 06 29.4** | **+2.4** |
| | comp=Z,1.2nm,0.9s,baz=98,slow=8.9,SNR=1.7 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **ESDC** | **Sonseca Array** | **54.74** | **309** | P | **P** | **21 06 38.5** | **+3.1** |
| | comp=Z,0.4nm,0.7s,baz=98,slow=5.3,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.21** | **41** | P | **P** | **21 06 47.4** | **+1.4** |
| | comp=Z,0.4nm,0.5s,baz=243,slow=7.2,SNR=2.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |

**IDC 01 20:58:58.0**±9.2**, 6°.28S**×**150°.77E, h83km**±65km**, mb3.3**/2**, mbtmp3.7**/3**, ML1.8**/1**, MS3.7**/1**, Error ellipse: s-maj=103.7km s-min=58.8km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.74** | **229** | P | Pn | 21 00 07.5 | +0.5 |
| | 2.6nm,0.3s,baz=51,slow=6.5,SNR=2.4 | | | | | | |
| PMG | | | | S | Sn | 21 01 00.8 | +0.1 |
| | 6.8nm,0.5s,baz=18,slow=20,SNR=1.6 | | | | | | |
| | 6.0nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.96** | **228** | P | P | 21 03 34.5 | +0.1 |
| | 1.0nm,0.3s,baz=54,slow=11,SNR=21 | | | | | | |
| | 1.0nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **23.70** | **221** | P | P | 21 04 03.3 | +0.8 |
| | 1.0nm,0.5s,baz=57,slow=8.8,SNR=20 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **RAR** | **Rarotonga** | **50.05** | **112** | LR | LR | 21 25 44.1 | |
| | comp=Z,92nm,21.8s,baz=76,slow=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.79** | **285** | PKPbc | PKPbc | 21 18 35.8 | -1.2 |
| | 0.3nm,0.5s,baz=75,slow=2.5,SNR=7.4 | | | | | | |

**NOU 01 21:05:40.2, 46°.49S×167°.08E, h0km, MLv3.7**/6**, Off W. Coast of S. Island, N.Z., Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.43** | **319** | P | Pg | 21 05 48.5 | +0.2 |
| **SYZ** | **Scrubby Hill** | **1.42** | **93** | P | Pn | 21 06 06.6 | -0.7 |
| **JCZ** | **Jackson Bay** | **2.70** | **27** | P | Pn | 21 06 26.0 | +1.1 |
| **ODZ** | **Otahua Downs** | **2.88** | **61** | P | Pn | 21 06 26.7 | -0.7 |
| **RPZ** | **Rata Peaks** | **3.95** | **47** | P | Pn | 21 06 42.2 | +0.1 |
| **QRZ** | **Quartz Range** | **6.90** | **37** | P | Pn | 21 07 21.6 | -1.0 |

*SOME **01** 21:09:06.1, 39°.43N×73°.10E, h10km*
*KRNET **01** 21:09:07.2±0.1, 39°.41N×73°.02E, h15km, mb3.1*
*NNC **01** 21:09:14.9±5.6, 39°.88N×73°.60E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=43.3km s-min=27.7km az=173.0*
**ISC 01 21:09:03.5**±1.1**, 39°.35N**±0°.05×**73°.25E**±0°.03**, h10km, n44, σ1s.80**/73**, 39C-7D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.70** | **16** | ⇓iP | **Pn** | **21 09 20.7** | **+1.0** |
| | baz=31 | | | | | | |
| SFK | | | | ⇓iS | **Sn** | **21 09 30.4** | **-0.3** |
| | baz=31 | | | | | | |
| **DRK** | **Karamyk** | **1.13** | **277** | ⇑eP | **Pn** | **21 09 25.4** | **-0.3** |
| | baz=75 | | | | | | |
| DRK | | | | ⇑eS | **Sg** | **21 09 38.2** | **-1.7** |
| | baz=75 | | | | | | |
| **OHH** | **Osh** | **1.23** | **343** | ⇑iP | **Pg** | **21 09 28.5** | **+1.3** |
| | baz=51 | | | | | | |
| OHH | | | | ⇑iS | **Sn** | **21 09 44.2** | **+0.6** |
| | baz=51 | | | | | | |
| **ARSB** | **Arslanbob** | **1.99** | **354** | ⇑iP | **Pg** | **21 09 42.3** | **+0.7** |
| | baz=59 | | | | | | |
| ARSB | | | | ⇑iS | **Sg** | **21 10 08.1** | **+0.7** |
| | baz=59 | | | | | | |
| **BTK** | **Batken** | **2.00** | **292** | ⇑iP | **Pg** | **21 09 40.7** | **-1.3** |
| | baz=91 | | | | | | |
| BTK | | | | ⇑iS | **Sb** | **21 10 05.3** | **+0.1** |
| | baz=91 | | | | | | |
| **GAR** | **Garm** | **2.30** | **262** | ⇑iP | **Pb** | **21 09 45.9** | **+0.7** |
| | baz=60 | | | | | | |
| GAR | | | | ⇑iS | **Sb** | **21 10 14.0** | **+0.2** |
| | baz=60 | | | | | | |
| **ARK** | **Arkit** | **2.64** | **339** | ⇑iP | **Pb** | **21 09 51.0** | **+0.1** |
| | baz=42 | | | | | | |
| ARK | | | | ⇑iS | **Sb** | **21 10 22.8** | **-0.6** |
| | baz=42 | | | | | | |
| **ARLS** | **Aral** | **2.64** | **18** | ⇑iP | **Pg** | **21 09 52.6** | **-1.6** |
| | baz=22 | | | | | | |
| ARLS | | | | ⇑iS | **Sg** | **21 10 25.8** | **-2.7** |
| | baz=22 | | | | | | |
| **TRKS** | **Terek-Say** | **2.71** | **324** | ⇑iP | **Pb** | **21 09 50.7** | **-1.5** |
| | baz=26 | | | | | | |
| TRKS | | | | ⇑iS | **Sn** | **21 10 22.1** | **+1.9** |
| | baz=26 | | | | | | |
| **AML** | **Almayashu** | **2.80** | **7** | P | **Pg** | **21 09 57.2** | **-0.1** |
| | SNR=14 | | | | | | |
| **AML** | **Almayashu** | **2.80** | **7** | ⇑iP | **Pb** | **21 09 54.6** | **+0.7** |
| | baz=10.0 | | | | | | |
| AML | | | | ⇑iS | **Sb** | **21 10 29.1** | **+0.6** |
| | baz=10.0 | | | | | | |
| **NRN** | **Naryn** | **2.96** | **44** | ⇑iP | **Pb** | **21 09 57.8** | **+1.2** |
| | baz=47 | | | | | | |
| NRN | | | | ⇑iS | **Sb** | **21 10 34.7** | **+1.7** |
| | baz=47 | | | | | | |
| **UCH** | **Uchtor** | **3.04** | **18** | P | **Pg** | **21 10 00.9** | **-0.9** |
| | SNR=19 | | | | | | |
| **UCH** | **Uchtor** | **3.04** | **18** | ⇑iP | **Pb** | **21 09 58.5** | **+0.6** |
| | baz=21 | | | | | | |
| UCH | | | | ⇑iS | **Sb** | **21 10 35.8** | **+0.6** |
| | baz=21 | | | | | | |
| **MNAS** | **Manas** | **3.19** | **350** | ⇑iP | **Pb** | **21 09 59.0** | **-1.4** |
| | baz=53 | | | | | | |
| MNAS | | | | ⇑iS | **Sb** | **21 10 37.1** | **-2.2** |
| | baz=53 | | | | | | |
| **CHGR** | **Chuyangaron** | **3.26** | **259** | ⇑iP | **Pb** | **21 09 59.0** | **-2.5** |
| | baz=57 | | | | | | |
| CHGR | | | | ⇑iS | **Sn** | **21 10 36.6** | **+2.9** |
| | baz=57 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.34** | **7** | P | **Pb** | **21 10 04.4** | **+1.5** |
| | SNR=5.6 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.34** | **7** | ⇑iP | **Pb** | **21 10 01.8** | **-1.1** |
| | baz=10.0 | | | | | | |
| EKS2 | | | | ⇑iS | **Sb** | **21 10 41.6** | **-2.0** |
| | baz=10.0 | | | | | | |
| **MRKS** | **Merke** | **3.40** | **360** | eP | **Pg** | **21 10 06.9** | **-1.7** |
| | 2.5nm,0.2s | | | | | | |
| MRKS | | | | eS | **Sg** | **21 10 50.7** | **-1.9** |
| | 55nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.40** | **360** | Pg | **Pb** | **21 10 04.8** | **+0.9** |
| | 4.6nm,0.3s | | | | | | |
| MRKS | | | | Lg | Lg | 21 10 50.7 | |
| | 55nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.42** | **16** | P | **Pg** | **21 10 06.4** | **-2.7** |
| | SNR=8.9 | | | | | | |
| **AAK** | **Ala-Archa** | **3.42** | **16** | ⇓Pn | **Pb** | **21 10 05.9** | **+1.6** |
| | 9.4nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 21 10 48.4 | |
| | 24nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **3.42** | **16** | ⇑iP | **Pb** | **21 10 03.3** | **-1.0** |
| | baz=19 | | | | | | |
| AAK | | | | ⇑iS | **Sb** | **21 10 44.4** | **-1.6** |
| | baz=19 | | | | | | |
| **ULHL** | **Ulahol** | **3.68** | **37** | P | **Pb** | **21 10 10.9** | **+2.1** |
| | SNR=6.3 | | | | | | |
| **ULHL** | **Ulahol** | **3.68** | **37** | ⇓iP | **Pb** | **21 10 08.1** | **-0.7** |
| | baz=40 | | | | | | |
| ULHL | | | | ⇓iS | **Sb** | **21 10 52.1** | **-1.5** |
| | baz=40 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.75** | **32** | ⇑iP | **Pb** | **21 10 08.8** | **-1.1** |
| | baz=35 | | | | | | |
| BOOM | | | | ⇑iS | **Sb** | **21 10 53.3** | **-2.1** |
| | baz=35 | | | | | | |
| **CHMS** | **Chumysh** | **3.82** | **17** | P | **Pb** | **21 10 11.7** | **+0.6** |
| | SNR=29 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.99** | **26** | P | **Pb** | **21 10 14.3** | **+0.3** |
| | SNR=6.4 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.99** | **26** | ⇑Pn | **Pb** | **21 10 13.5** | **-0.5** |
| | 1.7nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 21 11 08.7 | |
| | 5.4nm,0.5s | | | | | | |
| **KST** | **Kastek** | **4.22** | **28** | eP | **Pg** | **21 10 24.9** | **+0.5** |
| | 1.7nm,0.3s | | | | | | |
| KST | | | | eS | **Sg** | **21 11 21.3** | **+2.2** |
| | 9.6nm,0.7s | | | | | | |
| **KST** | **Kastek** | **4.22** | **28** | Pg | **Pb** | **21 10 15.1** | **-2.9** |
| | 3.1nm,0.3s | | | | | | |
| KST | | | | Lg | Lg | 21 11 08.9 | |
| | 6.6nm,0.5s | | | | | | |
| **SGDS** | **Sogindy** | **4.23** | **14** | Pg | **Pb** | **21 10 16.6** | **-1.5** |
| | 2.8nm,0.3s | | | | | | |
| SGDS | | | | Lg | Lg | 21 11 11.7 | |
| | 2.4nm,0.4s | | | | | | |
| **KK31** | **Karatay Array** | **4.28** | **332** | ⇑Pn | **Pb** | **21 10 15.9** | **-3.0** |
| | 1.4nm,0.5s,baz=136,slow=12,SNR=12 | | | | | | |
| KK31 | | | | ⇑Pg | **Pg** | **21 10 28.3** | **+2.7** |
| | 1.7nm,0.4s,baz=158,slow=13,SNR=5.5 | | | | | | |
| KK31 | | | | ⇑Sn | **Sb** | **21 11 05.4** | **-5.3** |
| | 4.8nm,0.3s,baz=157,slow=17,SNR=7.9 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 21 11 18.2 | |
| | 9.0nm,0.5s,baz=145,slow=30,SNR=3.8 | | | | | | |
| **KKAR** | **Karatay Array** | **4.28** | **332** | ⇑iP | Pb | 21 10 13.6 | -5.3 |
| | baz=34 | | | | | | |
| KKAR | | | | ⇑iS | **Sn** | **21 11 01.8** | **+3.0** |
| | baz=34 | | | | | | |
| **DGS** | **Degeres** | **4.33** | **25** | eP | **Pg** | **21 10 25.7** | **-0.8** |
| | 3.4nm,0.3s | | | | | | |
| DGS | | | | eS | **Sg** | **21 11 23.6** | **+0.9** |
| | 4.9nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.33** | **25** | Pg | **Pb** | **21 10 18.9** | **-0.9** |
| | 1.8nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 21 11 15.7 | |
| | 4.9nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **4.48** | **31** | eP | **Pg** | **21 10 27.8** | **-1.5** |
| | 3.1nm,0.4s | | | | | | |
| MTBS | | | | eS | **Sg** | **21 11 27.1** | **-0.1** |
| | 3.0nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **4.48** | **31** | Pg | **Pb** | **21 10 21.3** | **-1.0** |
| | 3.1nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 21 11 19.8 | |
| | 3.0nm,0.2s | | | | | | |
| **BRLS** | **Borolday** | **4.49** | **326** | eP | **Pb** | **21 10 24.6** | **+2.2** |
| | 1.5nm,0.2s | | | | | | |
| BRLS | | | | eS | **Sb** | **21 11 20.8** | **+4.2** |
| | 11nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.63** | **36** | eP | **Pg** | **21 10 32.0** | **-0.1** |
| | 2.3nm,0.4s | | | | | | |
| TNSS | | | | eS | **Sg** | **21 11 34.3** | **+2.3** |
| | 3.2nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **4.71** | **22** | eP | **Pg** | **21 10 32.1** | **-1.7** |
| | 1.6nm,0.3s | | | | | | |
| KRBS | | | | eS | **Sg** | **21 11 34.9** | **+0.1** |
| | 5.5nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **4.71** | **22** | Pg | **Pb** | **21 10 24.1** | **-2.2** |
| | 0.8nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 21 11 25.1 | |
| | 1.3nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **5.07** | **29** | eP | **Pg** | **21 10 37.7** | **-2.9** |
| | 2.9nm,0.4s | | | | | | |
| KTBS | | | | eS | **Sg** | **21 11 43.9** | **-2.3** |
| | 6.4nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **5.95** | **34** | eP | **Pg** | **21 10 57.6** | **+0.2** |
| ARXS | | | | eS | **Sg** | **21 12 17.4** | **+3.0** |

*IDC **01** 21:23:52.7±8.8, 18°.25S×170°.10E, h215km±52km, mb3.7/3, mbtmp4.2/4, MS3.6/4, Error ellipse: s-maj=111.9km s-min=76.6km az=115.0*
*NOU **01** 21:24:07.2, 18°.96S×169°.24E, h170km, MLv3.7/10, Vanuatu Islands*
**ISC 01 21:23:56.6**±3.5**, 18°.8S**±0°.1×**170°.1E**±0°.4**, h250km, n15, σ1s.30**/13**, mb3.8**/3**, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.87** | **300** | P | **Pn** | **21 24 37.8** | **-0.2** |
| **DVP** | **Devils Point** | **2.10** | **299** | P | **Pn** | **21 24 39.2** | **-0.9** |
| **MARNC** | **Mare, Loyalty** | **3.36** | **216** | P | **Pn** | **21 24 52.7** | **-0.3** |
| **LIFNC** | **LIFOU** | **3.38** | **233** | P | **Pn** | **21 24 50.7** | **-2.6** |
| **YATNC** | **Mamie plateau,** | **4.48** | **222** | P | **Pn** | **21 25 04.5** | **-1.6** |
| **DZM** | **Mont Dzumac** | **4.78** | **226** | P | **Pn** | **21 25 08.9** | **-1.0** |
| **DZM** | **Mont Dzumac** | **4.78** | **226** | P | **Pn** | **21 25 09.2** | **-0.7** |
| | 7.6nm,0.3s,baz=49,slow=16,SNR=27 | | | | | | |
| DZM | | | | S | **S** | **21 26 09.7** | **+1.6** |
| | 6.8nm,0.5s,baz=133,slow=18,SNR=1.5 | | | | | | |
| DZM | | | | LR | LR | 21 26 52.4 | |
| | comp=Z,136nm,19.0s,baz=128,slow=35 | | | | | | |
| **NOUC** | **Port Laguerre** | **4.90** | **226** | P | **Pn** | **21 25 10.5** | **-0.7** |
| **ONTNC** | **Ouen Toro** | **4.94** | **224** | P | **Pn** | **21 25 11.2** | **-0.5** |
| **URZ** | **Urewera** | **20.38** | **164** | LR | LR | 21 35 41.5 | |
| | comp=Z,69nm,18.1s,baz=220,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **28.82** | **237** | P | **P** | **21 29 33.0** | **+1.1** |
| | 2.0nm,0.8s,baz=72,slow=8.8,SNR=4.2 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.75** | **262** | P | **P** | **21 30 14.3** | **-0.8** |
| | 0.8nm,0.5s,baz=91,slow=8.9,SNR=31 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **34.06** | **255** | P | **P** | **21 30 18.0** | **+0.2** |
| | 6.8nm,0.5s,baz=83,slow=8.8,SNR=107 | | | | | | |
| | 6.8nm,0.5s | | | | | | |
| **YAK** | **Yakutsk** | **86.66** | **342** | LR | LR | 22 10 21.3 | |
| | comp=Z,36nm,20.1s,baz=43,slow=32 | | | | | | |
| **PMSA** | **Palmer Station** | **87.08** | **160** | LR | LR | 22 07 36.1 | |
| | comp=Z,219nm,20.7s,baz=282,slow=30 | | | | | | |

*ISN **01** 21:41:41.5±0.6, 34°.69N×43°.93E, h18km±9km, ML3.2*
*TEH **01** 21:41:41.6, 34°.92N×43°.99E, h12km±123km, ML3.0*
**ISC 01 21:41:39.2**±2.0**, 34°.78N**±0°.05×**43°.8E**±0°.1**, h10km, n12, σ1s.41**/15**, Iraq**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KGS1** | **Ghasr-e-Shirin** | **1.52** | **100** | Pg | **Pg** | **21 42 08.3** | **-0.1** |
| **BHD** | **Baghdad** | **1.59** | **161** | ePg | **Pn** | **21 42 08.0** | **+0.6** |
| BHD | | | | eSg | **Sn** | **21 42 27.0** | **-1.0** |
| **GLG1** | **Gilan-e-Gharb** | **1.88** | **110** | Pg | **Pb** | **21 42 14.0** | **+0.2** |
| **SDS1** | **Sardasht. Az.** | **1.95** | **45** | Pg | **Pb** | **21 42 13.2** | **-1.8** |
| **IDHR** | **Dehrash** | **2.15** | **91** | Pn | **Pb** | **21 42 16.7** | **-1.6** |
| **ILBA** | **Ilam Banvizeh** | **2.32** | **119** | Pn | **Pn** | **21 42 19.4** | **+1.9** |
| **IGHG** | **Ghaleghazi** | **2.35** | **100** | Pn | **Pb** | **21 42 20.9** | **-0.9** |
| **IBDR** | **Badra** | **2.45** | **132** | ePn | **Pn** | **21 42 20.0** | **+0.8** |
| IBDR | | | | eSn | **Sn** | **21 42 49.0** | **-0.1** |
| **MAHB** | **Mahabad** | **2.53** | **38** | Pn | **Pn** | **21 42 21.5** | **+1.1** |
| **SNQR** | **Sonqor, Kerman** | **3.17** | **88** | Pn | **Pn** | **21 42 31.0** | **+1.6** |
| **RAFI** | **Al-Rafai** | **3.62** | **147** | ePn | **Pn** | **21 42 37.0** | **+1.6** |
| RAFI | | | | eSn | **Sn** | **21 43 17.0** | **-1.2** |
| **ISHB** | **Shabestar** | **3.79** | **22** | Pn | **Pn** | **21 42 39.9** | **+1.9** |

*GUC **01** 21:42:57.6±0.9, 32°.18S×71°.80W, h19km±5km, ML3.1*
*SJA **01** 21:43:02.5±0.6, 32°.04S×71°.62W, h41km±999km, ML3.1, MW3.5*
**ISC 01 21:42:55.7**±1.6**, 32°.15S**±0°.03×**71°.88W**±0°.06**, h12km**±11km**, n30, σ0s.85**/56**, 5C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VA06** | **Catapilco** | **0.65** | **130** | ⇑eP | **Pg** | **21 43 08.8** | **+0.6** |
| VA06 | | | | eS | **Sg** | **21 43 16.7** | **0.0** |
| VA06 | | | | IAML | | 21 43 19.6 | |
| | comp=N,1μm,0.4s | | | | | | |
| **VA01** | **Torpederas** | **0.90** | **167** | ⇑eP | **Pb** | **21 43 13.1** | **-0.1** |
| VA01 | | | | eS | **Sb** | **21 43 25.4** | **+0.3** |
| VA01 | | | | IAML | | 21 43 26.4 | |
| | comp=E,427nm,0.1s | | | | | | |
| **ROCH** | **El Roble** | **1.10** | **138** | i P | **Pb** | **21 43 16.4** | **-0.5** |
| ROCH | | | | i S | **Sb** | **21 43 30.5** | **-0.8** |
| ROCH | | | | IAML | | 21 43 34.3 | |
| | comp=N,999nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **1.20** | **39** | eP | **Pn** | **21 43 18.1** | **-0.4** |
| CO02 | | | | eS | **Sb** | **21 43 34.2** | **+0.2** |
| CO02 | | | | IAML | | 21 43 39.4 | |
| | comp=N,1μm,0.3s | | | | | | |
| **MT02** | **Curacav** | **1.27** | **151** | ⇑iP | **Pn** | **21 43 18.9** | **-0.4** |
| MT02 | | | | i S | **Sb** | **21 43 35.1** | **-0.9** |
| **VA03** | **San Esteban** | **1.28** | **119** | ⇑eP | **Pn** | **21 43 19.0** | **-0.6** |
| VA03 | | | | eS | **Sb** | **21 43 35.6** | **-0.7** |
| VA03 | | | | IAML | | 21 43 36.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **1.42** | **135** | eP | **Pn** | **21 43 21.3** | **-0.1** |
| PEL | | | | eS | **Sn** | **21 43 38.5** | **-1.5** |
| PEL | | | | IAML | | 21 43 42.1 | |
| | comp=N,639nm,0.7s | | | | | | |
| **CO06** | **Fray Jorge** | **1.48** | **8** | eP | **Pn** | **21 43 21.5** | **-0.6** |
| CO06 | | | | eS | **Sb** | **21 43 43.0** | **+1.1** |
| CO06 | | | | IAML | | 21 43 46.8 | |
| | comp=N,189nm,0.3s | | | | | | |
| **VA05** | **Santo Domingo** | **1.52** | **172** | ⇑iP | **Pn** | **21 43 22.6** | **-0.2** |
| VA05 | | | | i S | **Sn** | **21 43 42.9** | **+0.4** |
| VA05 | | | | IAML | | 21 43 48.3 | |
| | comp=N,974nm,0.4s | | | | | | |
| **MT05** | **Renca** | **1.57** | **143** | eP | **Pn** | **21 43 23.6** | **+0.1** |
| MT05 | | | | e | | 21 43 23.6 | |
| MT05 | | | | eS | **Sn** | **21 43 43.3** | **-0.5** |
| MT05 | | | | IAML | | 21 43 48.8 | |
| | comp=E,652nm,0.3s | | | | | | |
| **MT10** | **Hacienda Santa** | **1.60** | **135** | i P | **Pn** | **21 43 24.2** | **+0.3** |
| MT10 | | | | i S | **Sn** | **21 43 44.8** | **+0.3** |
| MT10 | | | | IAML | | 21 43 48.2 | |
| | comp=E,1μm,0.3s | | | | | | |
| **MT14** | **Cerro Cal¡n** | **1.69** | **138** | eP | **Pn** | **21 43 25.6** | **+0.5** |
| MT14 | | | | eS | **Sn** | **21 43 46.3** | **-0.3** |
| MT14 | | | | IAML | | 21 43 56.1 | |
| | comp=E,502nm,0.5s | | | | | | |
| **MT16** | **CCHEN** | **1.72** | **139** | eP | **Pn** | **21 43 26.1** | **+0.6** |
| MT16 | | | | eS | **Sn** | **21 43 47.8** | **+0.4** |
| MT16 | | | | IAML | | 21 43 58.0 | |
| | comp=N,174nm,0.8s | | | | | | |
| **MT03** | **Universidad Ad** | **1.77** | **140** | eP | **Pn** | **21 43 26.7** | **+0.5** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MT03 | | | | eS | Sn | 21 43 48.9 | +0.1 |
| MT03 | | | | IAML | | 21 43 51.5 | |
| | comp=E,412nm,0.4s | | | | | | |
| FCH | Farellones | 1.79 | 132 | eP | Pn | 21 43 27.2 | +0.6 |
| FCH | | | | eS | Sb | 21 43 50.3 | -0.7 |
| FCH | | | | IAML | | 21 43 53.0 | |
| | comp=N,147nm,0.4s | | | | | | |
| MT09 | Talagante | 1.79 | 155 | iP | Pn | 21 43 27.4 | +0.8 |
| MT09 | | | | eS | Sn | 21 43 49.8 | +0.4 |
| MT09 | | | | IAML | | 21 43 55.6 | |
| | comp=N,318nm,0.3s | | | | | | |
| MT01 | Popeta | 1.79 | 163 | ⇓iP | Pn | 21 43 26.5 | 0.0 |
| MT01 | | | | iS | Sn | 21 43 48.2 | -1.0 |
| MT01 | | | | IAML | | 21 43 58.9 | |
| | comp=E,183nm,0.3s | | | | | | |
| MT15 | Las Vizcachas | 1.85 | 142 | eS | Sn | 21 43 51.7 | +1.0 |
| MT15 | | | | IAML | | 21 43 59.3 | |
| | comp=E,315nm,0.4s | | | | | | |
| MT04 | Ro Olivares | 1.93 | 131 | eP | Pn | 21 43 29.5 | +0.9 |
| MT04 | | | | eS | Sn | 21 43 53.4 | +0.4 |
| MT04 | | | | IAML | | 21 43 55.6 | |
| | comp=E,224nm,0.4s | | | | | | |
| MT12 | Pirque | 1.94 | 145 | eP | Pn | 21 43 29.7 | +1.2 |
| MT12 | | | | eS | Sb | 21 43 54.2 | -1.0 |
| MT12 | | | | IAML | | 21 43 59.1 | |
| | comp=N,590nm,0.3s | | | | | | |
| MT08 | Bocatoma Ro | 2.04 | 130 | eP | Pn | 21 43 31.3 | +1.3 |
| MT08 | | | | eS | Sn | 21 43 56.8 | +1.3 |
| MT08 | | | | IAML | | 21 43 59.6 | |
| | comp=E,141nm,0.4s | | | | | | |
| MT13 | San Alfonso | 2.08 | 140 | eP | Pn | 21 43 31.6 | +1.1 |
| MT13 | | | | eS | Sn | 21 43 57.8 | +1.3 |
| MT13 | | | | IAML | | 21 44 05.3 | |
| | comp=E,201nm,0.4s | | | | | | |
| AUSP | Uspallata | 2.12 | 93 | iP | Pb | 21 43 34.5 | +0.4 |
| AUSP | | | | iS | Sn | 21 43 58.9 | +1.4 |
| GO04 | Tololo Observa | 2.17 | 26 | eP | Pb | 21 43 34.5 | -0.6 |
| GO04 | | | | eS | Sb | 21 44 03.5 | +1.4 |
| GO04 | | | | IAML | | 21 44 13.0 | |
| | comp=E,496nm,0.4s | | | | | | |
| RTLS | Leoncito | 2.22 | 82 | iP | Pb | 21 43 35.9 | -0.1 |
| RTLS | | | | iS | Sn | 21 44 01.1 | +0.8 |
| RTLS | | | | IAML | | 21 44 11.3 | |
| | comp=Z,234nm,0.3s | | | | | | |
| ARCO | CERRO ARCO | 2.59 | 106 | iP | Pb | 21 43 41.7 | -0.4 |
| ARCO | | | | iS | Sn | 21 44 10.1 | +1.1 |
| ARCO | | | | IAML | | 21 44 22.7 | |
| | comp=Z,53nm,0.5s | | | | | | |
| ASAL | Salagasta | 2.62 | 101 | iP | Pb | 21 43 41.7 | -0.9 |
| ASAL | | | | iS | Sb | 21 44 13.1 | -1.6 |
| AAGR | Agrelo | 2.74 | 111 | iP | Pb | 21 43 44.2 | -0.5 |
| AAGR | | | | IAML | | 21 44 27.6 | |
| | comp=Z,41nm,0.7s | | | | | | |
| AROD | Rodeo | 2.85 | 47 | iP | Pb | 21 43 45.0 | -1.7 |
| ACCO | Cerro Coronel | 2.87 | 58 | iP | Pb | 21 43 45.3 | -1.7 |
| ACCO | | | | IAML | | 21 44 27.6 | |
| | comp=Z,119nm,0.4s | | | | | | |

*NOU **01** 21:43:51.6, 33.°73S×177.°32W, h293km, MLv4.7/7, South of Kermadec Islands*
*WEL **01** 21:44:03.7±0.6, 34°S±6°×18°0W±1°4, h33km, M4.2/17, mB4.8/11, ML4.6/19, MLv4.5/17, Mw(mB)4.1/11, Error ellipse: s-maj=0.0km s-min=0.0km az=111.5, confirmed*
**ISC 01 21:44:02.3**±1.3**, 33.°58S**±0.°08×**179.°4W**±0.°2**, h35**km**, n33, σ2.§06**/51**, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 4.39 | 205 | P | Pn | 21 45 11.5 | +5.1 |
| MXZ | Matakaoa Point | 4.39 | 205 | P | Pn | 21 45 07.8 | +1.4 |
| MXZ | | | | S | Sn | 21 45 57.6 | +1.2 |
| GLKZ | Green Lake | 4.49 | 17 | P | Pn | 21 45 08.1 | +0.3 |
| GLKZ | | | | S | Sn | 21 45 58.8 | +0.1 |
| HAZ | Te Kaha | 4.76 | 208 | P | Pn | 21 45 14.4 | +3.0 |
| HAZ | | | | S | Sn | 21 46 08.8 | +3.5 |
| PUZ | Puketiti | 4.87 | 202 | P | Pn | 21 45 14.7 | +1.7 |
| PUZ | | | | S | Sn | 21 46 09.1 | +1.0 |
| RUGZ | Raukumara Rang | 4.98 | 208 | P | Pn | 21 45 16.6 | +2.0 |
| RUGZ | | | | S | Sn | 21 46 13.8 | +2.8 |
| TWGZ | Tauwhareparae | 5.06 | 204 | P | Pn | 21 45 17.7 | +2.1 |
| TWGZ | | | | S | Sn | 21 46 14.9 | +2.1 |
| CNGZ | Carnagh Statio | 5.26 | 201 | P | Pn | 21 45 20.5 | +2.1 |
| TKGZ | Te Karaka | 5.34 | 204 | P | Pn | 21 45 21.5 | +2.1 |
| TKGZ | | | | S | Sn | 21 46 20.1 | +0.4 |
| MWZ | Matawai | 5.36 | 207 | P | Pn | 21 45 20.9 | +1.2 |
| MWZ | | | | S | Sn | 21 46 19.5 | -0.8 |
| URZ | Urewera | 5.46 | 210 | P | Pn | 21 45 24.9 | +3.8 |
| URZ | Urewera | 5.46 | 210 | P | Pn | 21 45 22.7 | +1.6 |
| URZ | | | | S | Sn | 21 46 21.6 | -1.1 |
| RAGZ | Rawiri | 5.54 | 207 | P | Pn | 21 45 23.9 | +1.6 |
| RAGZ | | | | S | Sn | 21 46 24.4 | -0.5 |
| RIGZ | Rimuhau | 5.61 | 203 | P | Pn | 21 45 26.7 | +3.6 |
| RIGZ | | | | S | Sn | 21 46 26.2 | -0.1 |
| PRGZ | Paritu Road | 5.77 | 202 | P | Pn | 21 45 26.4 | +1.1 |
| PRGZ | | | | S | Sn | 21 46 31.2 | +1.0 |
| MUGZ | Murupara | 5.79 | 211 | P | Pn | 21 45 26.5 | +0.8 |
| MUGZ | | | | S | Sn | 21 46 30.9 | 0.0 |
| RTZ | Ruatahuna | 5.82 | 209 | P | Pn | 21 45 26.2 | +0.1 |
| RTZ | | | | S | Sn | 21 46 30.1 | -1.5 |
| SNGZ | Shannon Statio | 5.82 | 206 | P | Pn | 21 45 28.1 | +2.0 |
| SNGZ | | | | S | Sn | 21 46 30.2 | -1.4 |
| KNZ | Kokohu | 5.92 | 203 | P | Pn | 21 45 26.7 | -0.7 |
| MHGZ | Mahia Peninsul | 5.97 | 201 | P | Pn | 21 45 28.7 | +0.5 |
| MHGZ | | | | S | Sn | 21 46 31.1 | -4.2 |
| OUZ | Omahuta | 6.03 | 252 | P | Pn | 21 45 40.8 | +12 |
| | 8.8nm,1.3s | | | | | | |
| OUZ | Omahuta | 6.03 | 252 | P | Pn | 21 45 29.5 | +0.6 |
| RAHZ | Arahi | 6.04 | 207 | P | Pn | 21 45 28.9 | -0.1 |
| RAHZ | | | | S | Sn | 21 46 35.9 | -1.0 |
| MTHZ | Maungataniwha | 6.08 | 209 | P | Pn | 21 45 30.8 | +1.2 |
| MTHZ | | | | S | Sn | 21 46 39.2 | +1.3 |
| NMHZ | Naumai | 6.30 | 208 | P | Pn | 21 45 32.9 | +0.2 |
| NMHZ | | | | S | Sn | 21 46 43.7 | +0.2 |
| BKZ | Black Stump Fm | 6.49 | 210 | P | Pn | 21 45 37.8 | +2.6 |
| BKZ | Black Stump Fm | 6.49 | 210 | P | Pn | 21 45 35.1 | -0.2 |
| BKZ | | | | S | Sn | 21 46 46.4 | -1.6 |
| KWHZ | Kaweka Forest | 6.73 | 209 | P | Pn | 21 45 38.2 | -0.4 |
| KWHZ | | | | S | Sn | 21 46 47.6 | -6.5 |
| HIZ | Hauiti | 6.78 | 222 | P | Pn | 21 45 44.2 | +5.0 |
| SNVZ | South Ngauruho | 6.88 | 214 | P | Pn | 21 45 42.6 | +1.8 |
| KAHZ | Kahuranaki | 6.89 | 205 | P | Pn | 21 45 39.9 | -0.8 |
| BFZ | Birch Farm | 7.89 | 205 | P | Pn | 21 45 52.9 | -1.6 |
| KHZ | Kahutara | 10.43 | 210 | P | Pn | 21 46 25.1 | -4.1 |

*IDC **01** 22:19:07.4±4.2, 23.°53S×176.°41W, h116km±34km, mb3.6/9, mbtmp4.0/11, MS3.2/1, Error ellipse: s-maj=31.6km s-min=20.3km az=80.0*
**ISC 01 22:19:05.4**±0.9**, 23.°6S**±0.°1×**176.°3W**±0.°2**, h100**km**, n22, σ1.§22**/16**, mb3.9**/9**, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 7.90 | 317 | P | Pn | 22 20 57.8 | +0.2 |
| | 9.2nm,0.6s,baz=129,slow=17,SNR=7.1 | | | | | | |
| URZ | Urewera | 15.67 | 200 | P | P | 22 22 40.5 | -1.9 |
| | 2.7nm,0.3s,baz=342,slow=3.2,SNR=1.3 | | | | | | |
| URZ | | | | S | Sn | 22 25 21.8 | -12 |
| | 3.8nm,0.3s,baz=191,slow=20,SNR=5.8 | | | | | | |
| DZM | Mont Dzumac | 16.02 | 272 | P | P | 22 22 48.3 | +1.7 |
| | 7.9nm,0.7s,baz=90,slow=16,SNR=5.3 | | | | | | |
| DZM | | | | LR | LR | 22 26 38.6 | |
| | comp=Z,83nm,20.7s,baz=288,slow=28 | | | | | | |
| STKA | Stephens Creek | 38.01 | 248 | P | P | 22 26 14.1 | +0.2 |
| | 1.6nm,0.7s,baz=112,slow=11,SNR=3.4 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| ASAR | Alice Springs | 45.46 | 259 | P | P | 22 27 14.8 | 0.0 |
| | 1.1nm,0.6s,baz=103,slow=8.3,SNR=11 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 45.84 | 265 | P | P | 22 27 16.0 | -1.8 |
| | 2.2nm,0.7s,baz=95,slow=8.3,SNR=46 | | | | | | |
| | 2.2nm,0.7s | | | | | | |
| VNDA | Vanda | 54.98 | 186 | P | P | 22 28 26.4 | +0.6 |
| | 0.5nm,0.8s,baz=9.5,slow=6.1,SNR=3.7 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 66.48 | 180 | P | P | 22 29 44.7 | +0.6 |
| | 0.8nm,0.9s,baz=90,slow=4.0,SNR=2.2 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| MJAR | Matsushiro Arr | 73.65 | 323 | P | P | 22 30 27.5 | -0.6 |
| | 0.8nm,0.3s,baz=110,slow=7.2,SNR=2.5 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| MAW | Mawson | 79.20 | 200 | P | P | 22 30 59.9 | +1.0 |
| | 1.3nm,0.7s,baz=138,slow=7.0,SNR=3.9 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| H03S2 | Juan Fernandez | 82.92 | 124 | T | T | 00 02 51.6 | |
| | baz=245,slow=74 | | | | | | |
| H03S1 | Juan Fernandez | 82.94 | 124 | T | T | 00 03 05.0 | |
| | baz=245,slow=74 | | | | | | |
| H03S3 | Juan Fernandez | 82.94 | 124 | T | T | 00 02 51.7 | |
| | baz=245,slow=74 | | | | | | |
| H03N2 | Juan Fernandez | 83.08 | 123 | T | T | 00 02 55.8 | |
| | baz=250,slow=73 | | | | | | |
| H03N3 | Juan Fernandez | 83.08 | 123 | T | T | 00 02 59.2 | |
| | baz=250,slow=73 | | | | | | |
| H03N1 | Juan Fernandez | 83.09 | 123 | T | T | 00 02 57.9 | |
| | baz=250,slow=73 | | | | | | |
| ILAR | Eielson Array | 90.98 | 12 | P | P | 22 31 58.5 | +0.9 |
| | 0.3nm,0.8s,baz=180,slow=3.2,SNR=4.1 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 92.65 | 289 | P | P | 22 32 07.0 | +0.6 |
| | 0.8nm,0.3s,baz=115,slow=2.9,SNR=7.1 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| AKASG | Malin Array Be | 146.50 | 330 | PKPbc | PKPdf | 22 38 32.4 | -0.8 |
| | 0.5nm,0.3s,baz=43,slow=4.1,SNR=5.1 | | | | | | |
| BRTR | Keskin Array B | 150.08 | 310 | PKPbc | PKPbc | 22 38 42.8 | -1.9 |
| | 0.9nm,0.9s,baz=107,slow=5.0,SNR=4.5 | | | | | | |
| MMAI | Mount Meron Ar | 150.68 | 296 | PKPbc | PKiKP | 22 38 45.7 | -1.2 |
| | 2.0nm,0.7s,baz=0.0,slow=1.4,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 169.42 | 169 | PKPab | PKPab | 22 40 15.2 | +0.4 |
| | 0.3nm,1.0s,baz=150,slow=3.8,SNR=4.3 | | | | | | |

*NSSP **01** 22:33:33.5, 38.°43N×45.°32E, h10km, Ms3.0*
*AFAD **01** 22:33:33.3±0.0, 38.°40N×45.°14E, h7km±2km, ML2.1*
*TEH **01** 22:33:37.0, 38.°40N×45.°22E, h9km±26km, ML2.6*
**ISC 01 22:33:34.2**±1.2**, 38.°39N**±0.°03×**45.°12E**±0.°03**, h12**km±11km**, n24, σ1.§19**/35**, 5C-5D, Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ISHB | Shabestar | 0.40 | 106 | Pg | Pn | 22 33 44.1 | -2.0 |
| IMRD | Marand | 0.56 | 55 | Pg | Pn | 22 33 46.7 | -1.5 |
| ITBZ | Tabriz | 0.82 | 101 | Pg | Pn | 22 33 51.0 | -0.7 |
| OZAP | Van, Ozalp-Mer | 0.93 | 287 | P | Pg | 22 33 50.6 | -1.6 |
| OZAP | | | | S | Sg | 22 34 04.8 | +0.6 |
| OZAP | | | | i AML | AML | 22 34 10.0 | |
| | comp=E,47nm,0.7s | | | | | | |
| OZAP | | | | i AML | AML | 22 34 15.0 | |
| | comp=N,47nm,0.6s | | | | | | |
| IAZR | Azarshahr | 0.98 | 136 | Pg | Pn | 22 33 54.8 | +0.7 |
| YOVA | Hakkari_Yksek | 1.04 | 220 | P | Pg | 22 33 53.7 | -0.6 |
| YOVA | | | | i AML | AML | 22 34 15.0 | |
| | comp=N,67nm,0.7s | | | | | | |
| YOVA | | | | i AML | AML | 22 34 15.0 | |
| | comp=E,53nm,0.5s | | | | | | |
| CLDR | Caldiran | 1.20 | 309 | P | Pn | 22 33 52.3 | -4.8 |
| CLDR | | | | S | Sb | 22 34 09.4 | -3.4 |
| VMUR | Van-Muradiye | 1.35 | 297 | P | Pb | 22 34 00.1 | +0.5 |
| VMUR | | | | S | Sn | 22 34 18.6 | +1.4 |
| VMUR | | | | i AML | AML | 22 34 20.0 | |
| | comp=N,35nm,0.9s | | | | | | |
| VMUR | | | | i AML | AML | 22 34 25.0 | |
| | comp=E,40nm,0.4s | | | | | | |
| TVAN | Van | 1.35 | 276 | P | Pn | 22 33 59.5 | +0.3 |
| TVAN | | | | i AML | AML | 22 34 22.0 | |
| | comp=N,36nm,0.9s | | | | | | |
| TVAN | | | | i AML | AML | 22 34 26.0 | |
| | comp=E,34nm,0.6s | | | | | | |
| HAKT | HAKKARI | 1.40 | 234 | P | Pn | 22 33 59.8 | 0.0 |
| HAKT | | | | i AML | AML | 22 34 22.0 | |
| | comp=N,35nm,0.5s | | | | | | |
| HAKT | | | | i AML | AML | 22 34 27.0 | |
| | comp=E,41nm,0.7s | | | | | | |
| IHRS | Heris | 1.51 | 92 | Pg | Pg | 22 34 04.2 | +1.0 |
| GEVA | Gevas | 1.63 | 268 | P | Pn | 22 34 02.9 | 0.0 |
| GEVA | | | | S | Sg | 22 34 27.8 | +1.3 |
| GEVA | | | | i AML | AML | 22 34 30.0 | |
| | comp=N,28nm,0.8s | | | | | | |
| GEVA | | | | i AML | AML | 22 34 33.0 | |
| | comp=E,26nm,0.4s | | | | | | |
| NRKZ | NAREK | 1.65 | 347 | eP | Pg | 22 34 05.1 | -0.7 |
| NRKZ | | | | eS | Sg | 22 34 26.8 | -0.4 |
| IGDI | IGDIR | 1.68 | 331 | P | Pb | 22 34 05.2 | 0.0 |
| IGDI | | | | S | Sg | 22 34 28.7 | +0.3 |
| IGDI | | | | i AML | AML | 22 34 31.0 | |
| | comp=N,28nm,0.9s | | | | | | |
| IGDI | | | | i AML | AML | 22 34 31.0 | |
| | comp=E,28nm,0.7s | | | | | | |
| GNI | Garni | 1.78 | 351 | ⇑iP | Pg | 22 34 07.4 | -0.9 |
| GNI | | | | ⇑iS | Sg | 22 34 31.2 | -0.3 |
| METS | Metsamor | 1.93 | 336 | eP | Pn | 22 34 06.6 | -0.4 |
| METS | | | | eS | Sb | 22 34 34.5 | +1.0 |
| KAPZ | Kaputan | 1.95 | 350 | ⇓iP | Pg | 22 34 11.7 | -0.1 |
| KAPZ | | | | ⇓iS | Sg | 22 34 39.7 | +2.6 |
| VNNZ | Vanand | 1.98 | 330 | ⇓iP | Pb | 22 34 11.1 | +0.8 |
| VNNZ | | | | ⇓iS | Sg | 22 34 38.9 | +0.9 |
| IHSH | Hashtrud | 2.01 | 122 | Pn | Pg | 22 34 12.7 | -0.1 |
| ARUZ | Aruch | 2.05 | 337 | ⇑iP | Pb | 22 34 12.2 | +0.7 |
| ARUZ | | | | ⇑iS | Sg | 22 34 41.3 | +1.2 |
| KOTA | Agri, Merkez-K | 2.05 | 314 | P | Pb | 22 34 11.7 | +0.1 |
| KOTA | | | | i AML | AML | 22 34 49.0 | |
| | comp=N,8.3nm,0.6s | | | | | | |
| KOTA | | | | i AML | AML | 22 34 59.0 | |
| | comp=E,8.5nm,0.9s | | | | | | |
| PERV | Siirt/Pervari- | 2.08 | 258 | P | Pb | 22 34 11.9 | -0.2 |
| PERV | | | | i AML | AML | 22 34 54.0 | |
| | comp=N,28nm,0.6s | | | | | | |
| PERV | | | | i AML | AML | 22 34 55.0 | |
| | comp=E,42nm,0.7s | | | | | | |
| ISRB | Sarab | 2.08 | 105 | Pn | Pg | 22 34 13.1 | -1.1 |
| AMBZ | Amberd | 2.10 | 342 | ⇓iP | Pb | 22 34 13.2 | +0.7 |
| AMBZ | | | | ⇑iS | Sg | 22 34 43.4 | +1.6 |

*NEIC **01** 22:57:52.0±0.9, 11.°24N±0.°06×86.°09W±0.°05, h65km±8km, mb4.0/9, Error ellipse: s-maj=9.6km s-min=5.7km az=218.0*
*UCR **01** 22:57:52.3±0.8, 11.°31N×86.°02W, h56km±6km, MW4.5*
*IDC **01** 22:57:52.0±1.5, 11.°57N×85.°65W, h80km±19km, mb3.7/3, mbtmp3.9/4, MS2.9/1, Error ellipse: s-maj=67.3km s-min=15.9km az=58.0*
*CATAC **01** 22:57:52.5±0.2, 11.°23N×86.°10W, h47km±5km, ML4.6*
*SNET **01** 22:57:55.2±1.5, 11.°39N×86.°27W, h34km±999km, ML4.1*
**ISC 01 22:57:51.8**±0.7**, 11.°26N**±0.°03×**86.°09W**±0.°03**, h75**km±6km**, n155, σ0.§86**/194**, mb4.0**/7**, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARIN | Rivas | 0.32 | 52 | iP | Pn | 22 58 03.1 | -0.6 |
| ARIN | | | | iS | Sn | 22 58 11.4 | -1.0 |
| ARIN | | | | IAML | | 22 58 11.9 | |
| | comp=Z,16µm,1.0s | | | | | | |
| LCRUZ | La Cruz | 0.49 | 111 | eP | Pn | 22 58 04.8 | -0.2 |
| LCRUZ | | | | eS | Sn | 22 58 13.7 | -1.0 |
| NADN | Granada | 0.49 | 7 | iP | Pn | 22 58 04.8 | -0.2 |
| NADN | | | | iS | Sn | 22 58 14.6 | -0.2 |
| NADN | | | | IAML | | 22 58 15.4 | |
| | comp=Z,41µm,1.0s | | | | | | |
| RB213 | Mirador 2 Volc | 0.72 | 354 | iP | Pn | 22 58 09.3 | +1.9 |
| RB213 | | | | IAML | | 22 58 29.8 | |
| | comp=Z,11µm,1.0s | | | | | | |
| MASN | Masaya | 0.73 | 356 | iP | Pn | 22 58 07.0 | -0.5 |
| MASN | | | | iS | Sn | 22 58 19.0 | 0.0 |
| MASN | | | | IAML | | 22 58 20.6 | |
| | comp=Z,7µm,1.0s | | | | | | |
| CRUN | El Crucero | 0.75 | 344 | iP | Pn | 22 58 07.3 | -0.5 |
| CRUN | | | | IAML | | 22 58 29.9 | |
| | comp=Z,76nm,1.0s | | | | | | |
| RA5A7 | El Crucero | 0.76 | 344 | iP | Pn | 22 58 08.0 | +0.1 |
| RA5A7 | | | | IAML | | 22 58 20.8 | |
| | comp=Z,110µm,1.0s | | | | | | |
| MAS3 | Al N del Volca | 0.77 | 354 | iP | Pn | 22 58 07.6 | -0.3 |
| MAS3 | | | | iS | Sn | 22 58 18.8 | -1.0 |
| MAS3 | | | | IAML | | 22 58 20.7 | |
| | comp=Z,31µm,1.0s | | | | | | |
| ELI1 | Hacienda Flor | 0.81 | 139 | eP | Pn | 22 58 08.9 | +0.6 |
| ELI1 | | | | eS | Sn | 22 58 21.9 | +1.4 |
| MAFN | Magfor | 0.84 | 350 | iP | Pn | 22 58 08.8 | +0.1 |
| MAFN | | | | iS | Sn | 22 58 21.5 | +0.2 |
| MAFN | | | | IAML | | 22 58 26.2 | |
| | comp=Z,18µm,1.0s | | | | | | |
| ALIBA | Liberia Airpor | 0.85 | 141 | eP | Pn | 22 58 09.4 | +0.6 |
| VORI | VORI | 0.85 | 121 | eP | Pn | 22 58 08.6 | -0.4 |
| VRLE | La Escondida, | 0.85 | 123 | eP | Pn | 22 58 08.7 | -0.3 |
| ENAN | Enatrel Managu | 0.87 | 349 | iP | Pn | 22 58 09.1 | +0.1 |
| ENAN | | | | iS | Sn | 22 58 22.0 | +0.2 |
| ENAN | | | | IAML | | 22 58 23.4 | |
| | comp=Z,29µm,1.0s | | | | | | |
| USIM | UNAN | 0.87 | 348 | iP | Pn | 22 58 09.0 | -0.1 |
| USIM | | | | iS | Sn | 22 58 22.3 | +0.4 |
| USIM | | | | IAML | | 22 58 25.1 | |
| | comp=Z,24µm,1.0s | | | | | | |
| GPS3 | Bodega del ICE | 0.87 | 125 | eP | Pn | 22 58 11.4 | +2.3 |
| R0529 | La Mascota | 0.87 | 351 | iP | Pn | 22 58 08.9 | -0.2 |
| R0529 | | | | IAML | | 22 58 26.5 | |
| | comp=Z,21µm,1.0s | | | | | | |
| RB28C | Hialeah | 0.88 | 348 | iP | Pn | 22 58 09.1 | 0.0 |
| RB28C | | | | IAML | | 22 58 24.2 | |
| | comp=Z,15µm,1.0s | | | | | | |
| ABCN | Banco Central | 0.89 | 346 | iP | Pn | 22 58 09.6 | +0.4 |
| ABCN | | | | iS | Sn | 22 58 22.7 | +0.6 |
| ABCN | | | | IAML | | 22 58 24.1 | |
| | comp=Z,51µm,1.0s | | | | | | |
| AERN | Aeropuerto Man | 0.89 | 355 | iS | Sn | 22 58 22.2 | +0.1 |
| GPS2 | Hotel Rincn d | 0.89 | 124 | eP | Pn | 22 58 08.9 | -0.4 |
| RE6B4 | Centro civico | 0.89 | 347 | iP | Pn | 22 58 09.4 | +0.2 |
| RE6B4 | | | | IAML | | 22 58 24.1 | |
| | comp=Z,24µm,1.0s | | | | | | |
| ERIA | Liberia | 0.89 | 134 | eP | Pn | 22 58 09.7 | +0.4 |
| MGA1 | Managua | 0.90 | 350 | iP | Pn | 22 58 09.2 | -0.2 |
| MGA1 | | | | iS | Sn | 22 58 21.7 | -0.7 |
| MGA1 | | | | IAML | | 22 58 25.2 | |
| | comp=Z,16µm,1.0s | | | | | | |
| R4DEC | Barrio San Lui | 0.90 | 350 | iP | Pn | 22 58 09.1 | -0.3 |
| R4DEC | | | | iP | Pn | 22 58 09.1 | -0.3 |
| R4DEC | | | | IAML | | 22 58 25.2 | |
| | comp=Z,11µm,1.0s | | | | | | |
| R4DEC | | | | IAML | | 22 58 25.2 | |
| | comp=Z,12µm,1.0s | | | | | | |
| WILN | Americas 2 | 0.90 | 354 | iS | Sn | 22 58 22.8 | +0.3 |
| ALLN | Telcor Managua | 0.91 | 349 | iP | Pn | 22 58 09.5 | 0.0 |
| ALLN | | | | iS | Sn | 22 58 22.7 | +0.1 |
| ALLN | | | | IAML | | 22 58 23.2 | |
| | comp=Z,14µm,1.0s | | | | | | |
| SAPS | Ciudad Sandino | 0.96 | 342 | iP | Pn | 22 58 10.1 | 0.0 |
| SAPS | | | | iS | Sn | 22 58 23.9 | +0.3 |
| SAPS | | | | IAML | | 22 58 25.2 | |
| | comp=Z,40µm,1.0s | | | | | | |
| APQ2 | Apoyeque | 0.96 | 346 | iP | Pn | 22 58 10.2 | +0.1 |
| APQ2 | | | | iS | Sn | 22 58 24.1 | +0.4 |
| APQ2 | | | | IAML | | 22 58 27.0 | |
| | comp=Z,31µm,1.0s | | | | | | |
| DELF | Filadelfia | 0.96 | 146 | eP | Pn | 22 58 11.5 | +1.4 |
| APYN | Apoyeque | 1.00 | 346 | iP | Pn | 22 58 10.7 | +0.1 |
| APYN | | | | iS | Sn | 22 58 24.9 | +0.2 |
| APYN | | | | IAML | | 22 58 28.0 | |
| | comp=Z,430nm,1.0s | | | | | | |
| COPN | Copaltepe | 1.04 | 332 | iP | Pn | 22 58 10.8 | -0.2 |
| COPN | | | | IAML | | 22 58 29.1 | |
| | comp=Z,5µm,1.0s | | | | | | |
| CAMAV | Centro de Prod | 1.04 | 122 | eP | Pn | 22 58 11.2 | +0.1 |
| SBEN | San Benito | 1.04 | 2 | iP | Pn | 22 58 11.1 | 0.0 |
| SBEN | | | | iS | Sn | 22 58 26.3 | +0.8 |
| SBEN | | | | IAML | | 22 58 27.0 | |
| | comp=Z,9µm,1.0s | | | | | | |
| COLC | Colonia | 1.05 | 124 | eP | Pn | 22 58 11.3 | +0.1 |
| HUEN | | 1.08 | 356 | iP | Pn | 22 58 11.5 | 0.0 |
| HUEN | | | | IAML | | 22 58 26.5 | |
| | comp=Z,3µm,1.0s | | | | | | |
| HUEN | | | | iS | Sn | 22 58 26.9 | +0.7 |
| CUI | Cuipilapa | 1.09 | 123 | eP | Pn | 22 58 11.9 | +0.2 |
| BAGA | Bagaces | 1.09 | 131 | eP | Pn | 22 58 11.9 | +0.2 |
| BC86 | Nagarote | 1.10 | 335 | iP | Pn | 22 58 11.5 | -0.3 |
| BC86 | | | | iS | Sn | 22 58 26.2 | -0.6 |
| BC86 | | | | IAML | | 22 58 31.2 | |
| | comp=Z,13µm,1.0s | | | | | | |
| ACON | Acoyapa | 1.15 | 52 | | Pn | 22 58 12.2 | -0.2 |
| ACON | | | | Sn | Sn | 22 58 26.8 | -1.0 |
| ACON | Acoyapa | 1.15 | 52 | iP | Pn | 22 58 12.2 | -0.2 |
| ACON | | | | iS | Sn | 22 58 27.5 | -0.3 |
| ACON | | | | IAML | | 22 58 30.8 | |
| | comp=Z,4µm,1.0s | | | | | | |
| ACON | Acoyapa | 1.15 | 52 | eP | Pn | 22 58 11.9 | -0.5 |
| BC84 | Volcan Momotom | 1.21 | 339 | iP | Pn | 22 58 13.2 | 0.0 |
| BC84 | | | | IAML | | 22 58 30.7 | |
| | comp=Z,11µm,1.0s | | | | | | |
| MOM2 | El Cardon | 1.23 | 342 | iP | Pn | 22 58 13.4 | -0.1 |
| MOM2 | | | | iS | Sn | 22 58 30.5 | +0.7 |
| MOM2 | | | | IAML | | 22 58 34.8 | |
| | comp=Z,5µm,1.0s | | | | | | |
| LEVN | Ruinas Leon Vi | 1.25 | 336 | iP | Pn | 22 58 13.9 | +0.2 |
| LEVN | | | | iS | Sn | 22 58 30.6 | +0.5 |
| LEVN | | | | IAML | | 22 58 31.5 | |
| | comp=Z,12µm,1.0s | | | | | | |
| BOAB | BOACO BROADBAN | 1.26 | 19 | Pn | Pn | 22 58 13.7 | -0.1 |
| BOAB | | | | Sn | Sn | 22 58 29.6 | -0.7 |
| BOAB | BOACO BROADBAN | 1.26 | 19 | iP | Pn | 22 58 13.7 | -0.1 |
| BOAB | | | | IAML | | 22 58 13.9 | |
| | comp=Z,3µm,1.0s | | | | | | |
| BOAB | | | | iS | Sn | 22 58 29.9 | -0.4 |
| VERA | Finca Concepci | 1.27 | 108 | eP | Pn | 22 58 13.7 | -0.2 |
| CNAS | Canas | 1.28 | 130 | eP | Pn | 22 58 14.2 | +0.1 |
| NICO | Nicoya | 1.28 | 150 | eP | Pn | 22 58 14.1 | -0.1 |
| MACN | El Madrono | 1.33 | 335 | iP | Pn | 22 58 15.0 | +0.2 |
| MACN | | | | IAML | | 22 58 15.4 | |
| | comp=Z,10µm,1.0s | | | | | | |
| MACN | | | | iS | Sn | 22 58 32.0 | 0.0 |
| CNGN | Cerro Negro | 1.37 | 334 | | Pn | 22 58 15.4 | +0.1 |
| CNGN | | | | Sn | Sn | 22 58 32.5 | -0.5 |
| CNGN | Cerro Negro | 1.37 | 334 | iP | Pn | 22 58 15.3 | 0.0 |
| CNGN | | | | iS | Sn | 22 58 32.8 | -0.2 |
| CNGN | | | | IAML | | 22 58 38.3 | |
| | comp=Z,11µm,1.0s | | | | | | |
| CNGN | Cerro Negro | 1.37 | 334 | eP | Pn | 22 58 15.4 | +0.1 |
| LCHIL | Los Chiles | 1.37 | 99 | eP | Pn | 22 58 14.8 | -0.5 |
| BRAN | Las Pilas | 1.48 | 350 | iP | Pn | 22 58 09.5 | -7.1 |
| BRAN | | | | iS | Sn | 22 58 23.0 | -12 |
| BRAN | | | | IAML | | 22 58 24.9 | |
| | comp=Z,31µm,1.0s | | | | | | |
| JTS | Las Juntas de | 1.48 | 130 | P | Pn | 22 58 16.3 | -0.3 |
| | comp=Z,496nm,0.3s,baz=323,slow=2.8,SNR=659 | | | | | | |
| JTS | | | | S | Sn | 22 58 35.3 | -0.1 |
| | comp=Z,359nm,0.3s,baz=204,slow=18,SNR=12 | | | | | | |
| JTS | Las Juntas de | 1.48 | 130 | eP | Pn | 22 58 16.4 | -0.3 |
| JUNT | Juntas | 1.48 | 131 | eP | Pn | 22 58 16.4 | -0.3 |
| INDI | Punta indio, G | 1.50 | 157 | iP | Pn | 22 58 16.5 | -0.4 |
| INDI | | | | iS | Sn | 22 58 35.3 | -0.6 |
| INDI | | | | IAML | | 22 58 48.5 | |
| | comp=Z,4µm,1.0s | | | | | | |
| NYURE | Nandayure | 1.50 | 146 | eP | Pn | 22 58 16.8 | -0.1 |
| MTEVE | Monteverde | 1.56 | 127 | eP | Pn | 22 58 18.9 | +1.1 |
| ARE1 | Arenal 1 | 1.57 | 120 | eP | Pn | 22 58 18.1 | +0.3 |
| CEDE | Laguna Cedeo | 1.57 | 119 | eP | Pn | 22 58 18.1 | +0.3 |
| VACR | Volcan Arenal | 1.59 | 119 | eP | Pn | 22 58 18.4 | +0.2 |
| PKGN | Cerro Pekin | 1.65 | 328 | iP | Pn | 22 58 19.3 | +0.4 |
| PKGN | | | | iS | Sn | 22 58 39.5 | +0.1 |
| PKGN | | | | IAML | | 22 58 44.2 | |
| | comp=Z,17µm,1.0s | | | | | | |
| SOCE | Pocosol | 1.69 | 121 | | Pn | 22 58 19.2 | -0.2 |
| SOCE | Pocosol | 1.69 | 121 | iP | Pn | 22 58 19.7 | +0.2 |
| SOCE | | | | IAML | | 22 58 26.9 | |
| | comp=Z,2µm,1.0s | | | | | | |
| SOCE | Pocosol | 1.69 | 121 | eP | Pn | 22 58 18.9 | -0.6 |
| CRIN | San Cristobal | 1.71 | 327 | | Pn | 22 58 20.0 | +0.2 |
| CRIN | | | | Sn | Sn | 22 58 41.0 | 0.0 |
| CRIN | San Cristobal | 1.71 | 327 | iP | Pn | 22 58 20.4 | +0.6 |
| CRIN | | | | iS | Sn | 22 58 41.0 | 0.0 |
| CRIN | | | | IAML | | 22 58 47.9 | |
| | comp=Z,14µm,1.0s | | | | | | |
| CRIN | San Cristobal | 1.71 | 327 | eP | Pn | 22 58 19.9 | +0.2 |
| COVE | Coope Vega, Sa | 1.75 | 108 | iP | Pn | 22 58 19.4 | -0.8 |
| COVE | | | | IAML | | 22 58 41.7 | |
| | comp=Z,1µm,1.0s | | | | | | |
| LIMN | Finca el Limon | 1.81 | 352 | iP | Pn | 22 58 21.4 | +0.2 |
| LIMN | | | | IAML | | 22 58 47.9 | |
| | comp=Z,2µm,1.0s | | | | | | |
| CBL1 | Cabuya | 1.93 | 149 | eP | Pn | 22 58 22.7 | +0.1 |
| RAMO | San Ramon | 1.98 | 126 | eP | Pn | 22 58 24.8 | +1.4 |
| ESPN | Las Esperanzas | 1.99 | 62 | | Pn | 22 58 23.9 | +0.5 |
| ESPN | | | | Sn | Sn | 22 58 46.9 | -0.6 |
| ESPN | Las Esperanzas | 1.99 | 62 | iP | Pn | 22 58 24.0 | +0.6 |
| ESPN | | | | IAML | | 22 58 24.3 | |
| | comp=Z,2µm,1.0s | | | | | | |
| ESPN | | | | iS | Sn | 22 58 47.9 | +0.4 |
| ESPN | Las Esperanzas | 1.99 | 62 | eP | Pn | 22 58 24.1 | +0.6 |
| TCS1 | Tacares | 2.14 | 124 | iP | Pn | 22 58 26.4 | +0.9 |
| TCS1 | | | | IAML | | 22 58 26.7 | |

comp=Z,10μm,1.0s
TCS1 Tacares 2.14 124 eP Pn 22 58 24.2 -1.3
SOMN Somoto 2.21 347 iP Pn 22 58 28.6 +2.1
SOMN IAML 22 58 28.8
comp=Z,830nm,1.0s
BELE Belen 2.27 124 eP Pn 22 58 27.7 +0.5
SANTA Santa Ana 2.29 125 eP Pn 22 58 27.9 +0.3
HDC Heredia 2.31 122 Pn 22 58 28.2 +0.3
HDC Heredia 2.31 122 eP Pn 22 58 28.3 +0.4
HDC3 Heredia 3 2.31 122 iP Pn 22 58 28.6 +0.7
HDC3 IAML 22 58 29.0
comp=Z,3μm,1.0s
LUJA Lujan 2.39 123 eP Pn 22 58 30.7 +1.8
ACOS Acosta 2.39 127 eP Pn 22 58 28.6 -0.3
BLUN Bluefields 2.39 72 iP Pn 22 58 28.4 -0.4
BLUN IAML 22 59 11.2
comp=Z,2μm,1.0s
SJS Escuela Geolog 2.40 123 eP Pn 22 58 30.0 +1.0
SJS3 Mercedes San J 2.40 123 eP Pn 22 58 30.0 +0.9
AMPA Desamparados 2.41 124 eP Pn 22 58 29.9 +0.7
CVIMO Finca Echandi 2.44 120 eP Pn 22 58 30.2 +0.5
ABE2 San Pablo 2.53 127 eP Pn 22 58 26.6 -4.3
LCR2 La Lucha 2 2.55 126 Pn 22 58 31.0 -0.1
LCR2 La Lucha 2 2.55 126 iP Pn 22 58 31.6 +0.5
LCR2 IAML 22 58 38.2
comp=Z,540nm,1.0s
LCR2 La Lucha 2 2.55 126 eP Pn 22 58 31.4 +0.3
VICA Volcano Irazu 2.55 120 eP Pn 22 58 31.6 +0.3
RAFA San Farael, Vo 2.59 120 iP Pn 22 58 32.4 +0.6
RAFA IAML 22 58 33.7
comp=Z,2μm,1.0s
RAFA San Farael, Vo 2.59 120 eP Pn 22 58 32.9 +1.1
VTLA Turrialba Volc 2.60 118 eP Pn 22 58 32.1 +0.2
CVTQ Turrialba Volc 2.60 118 eP Pn 22 58 32.4 +0.4
CVTR Volcan Turrial 2.60 118 eP Pn 22 58 31.1 -1.0
REPA Paraso 2.61 123 eP Pn 22 58 34.2 +2.3
PCAYA Pacayas 2.61 120 eP Pn 22 58 33.0 +1.0
CNCH Conchagua 2.63 320 iP Pn 22 58 32.4 +0.2
CNCH IAML 22 58 35.7
comp=Z,2μm,1.0s
VTCV VTCV, Calle Va 2.65 118 eP Pn 22 58 31.5 -1.0
LCND La Caada 2.69 319 eP Pn 22 58 33.1 +0.2
LCND IAML 22 58 37.1
comp=Z,1μm,0.1s
LCND eS Sn 22 59 02.5 -1.9
LCND La Caada 2.69 319 iP Pn 22 58 33.1 +0.2
LCND iP 22 58 33.4
LCND IAML 22 59 09.7
comp=Z,1μm,1.0s
LCND IAML 22 59 53.2
comp=Z,12μm,1.0s
VERB Verbena 2.69 119 eP Pn 22 58 34.0 +1.0
IRES Siquirres 2.79 114 eP Pn 22 58 35.5 +1.2
JUCU Jucuarın 2.89 314 eP Pn 22 58 35.6 0.0
JUCU Jucuarın 2.89 314 iP Pn 22 58 35.4 -0.3
JUCU IAML 22 59 13.4
comp=Z,1μm,1.0s
CNRM Centro Naciona 3.00 318 iP Pn 22 58 38.3 +1.3
CNRM IAML 22 59 24.7
comp=Z,4μm,1.0s
TGUH Tegucigalpa,Un 3.01 338 Pn 22 58 38.1 +0.7
TGUH Tegucigalpa,Un 3.01 338 iP Pn 22 58 38.3 +0.9
TGUH IAML 22 59 03.1
comp=Z,440nm,1.0s
RANC El Ranchito 3.05 315 iP Pn 22 58 38.8 +1.0
RANC IAML 22 59 19.9
comp=Z,680nm,1.0s
PACA Pacayal 3.10 316 iP Pn 22 58 39.3 +0.8
PACA IAML 22 59 22.7
comp=Z,6μm,1.0s
PQSS Presa 15 de Se 3.37 315 iP Pn 22 58 43.0 +0.9
PQSS IAML 22 59 58.3
comp=Z,310nm,1.0s
DRK0 Durika 3.43 125 iP Pn 22 58 43.9 +0.8
DRK0 IAML 22 59 28.6
comp=Z,1μm,1.0s
DRK0 Durika 3.43 125 eP Pn 22 58 44.5 +1.4
TECO Alcaldia de Te 3.47 311 eP Pn 22 58 44.0 +0.5
TECO eS Sn 22 59 22.6 -0.8
TECO Alcaldia de Te 3.47 311 iP Pn 22 58 43.8 +0.3
TECO IAML 22 58 45.7
comp=Z,500nm,1.0s
SCLA Alcaldia de Sa 3.54 314 eP Pn 22 58 45.5 +1.0
SCLA IAML 22 58 48.0
comp=Z,121nm,0.3s
SCLA eS Sn 22 59 26.6 +1.4
COEG Centro de Oper 3.59 311 eP Pn 22 58 46.1 +0.9
COEG IAML 22 58 48.0
comp=Z,597nm,0.3s
EDP2 Potrero Grande 3.63 128 eP Pn 22 58 48.4 +2.6
LOMA Loma Larga 3.83 309 eP Pn 22 58 49.2 +0.7
LOMA IAML 22 58 50.7
comp=Z,398nm,0.2s
LOMA eS Sn 22 59 31.0 -1.4
SNET Serv Nac Est T 3.90 309 Pn 22 58 49.4 0.0
JAYA Jayaque - finc 4.05 306 eP Pn 22 58 51.9 +0.3
JAYA IAML 22 58 55.5
comp=Z,376nm,0.2s
JAYA eS Sn 22 59 36.5 -1.4
BRU2 Volcan 4.15 126 Pn 22 58 53.0 +0.1
CEVE Cerro Verde 4.29 307 eP Pn 22 58 57.0 +2.1
NUBE Las Nubes 4.46 307 eP Pn 22 58 58.5 +1.4
NUBE eS Sn 22 59 45.7 -2.1
MTO3 Montecristo 4.46 315 Pn Pn 22 58 57.5 +0.3
APG El Apazote 5.66 312 P Pn 22 59 15.5 +2.0
comp=Z,2.7nm,0.8s,baz=134,slow=10,SNR=17
RTAL Retalhuleu 6.35 301 Pn 22 59 22.3 -0.6
BCIP Isla Barro Col 6.50 108 Pn 22 59 25.0 +0.2
CHIV Chivirico 12.72 46 Pn Pn 23 00 52.0 +2.2
TLIG Tlapa 13.61 299 Pn Pn 23 01 02.4 +0.7
ANTS Antisana-Sarah 14.09 145 Pn Pn 23 01 07.6 -0.8
BAUV El Baul 17.92 96 P Pn 23 01 56.2 +0.1
BAUV IAmb IAmb 23 02 21.8
comp=Z,8.6nm,0.7s
HBVL Hebbronville 19.68 325 P P 23 02 15.5 +0.5
833A Chaparral WMA, 21.06 326 P P 23 02 28.8 -1.1
833A IAmb IAmb 23 02 57.6
comp=Z,6.0nm,0.6s
Y49A Blount Mountai 22.50 359 P P 23 02 44.7 -0.5
Y49A IAmb IAmb 23 02 50.6
comp=Z,4.1nm,0.8s
DRIO Del Rio 22.59 325 P P 23 02 45.3 -0.9
BRDY Brady 23.24 331 P P 23 02 51.4 -1.3
BRDY IAmb IAmb 23 02 52.7
comp=Z,5.0nm,0.9s
TXAR Lajitas Array 24.33 320 P P 23 03 03.3 +0.5
comp=Z,3.8nm,0.7s,baz=138,slow=10,SNR=60
comp=Z,3.8nm,0.7s
TX31 Lajitas Ar. Si 24.34 320 P P 23 03 03.2 +0.5
TX31 IAmb IAmb 23 03 04.4
comp=Z,4.8nm,0.7s
TKL Tuckaleechee C 24.38 5 LR LR 23 11 53.7
comp=Z,31nm,19.8s,baz=187,slow=35
WMOK Wichita Mounta 26.08 336 P P 23 03 19.5 +1.1
MDPB Devils Postpil 39.53 317 P P 23 05 15.0 -0.8
ULM Lac du Bonnet 39.70 350 P P 23 05 14.1 -2.6
comp=Z,0.8nm,0.3s,baz=142,slow=8.4,SNR=4.9
comp=Z,0.8nm,0.3s
PLCA Paso Flores 53.69 165 P P 23 07 07.0 +1.0
comp=Z,1.4nm,0.9s,baz=316,slow=4.0,SNR=3.7
comp=Z,1.4nm,0.9s
ASAR Alice Springs 140.04 247 PKP PKPdf 23 17 12.4 0.0
comp=Z,0.3nm,0.4s,baz=97,slow=2.0,SNR=5.4
WRA Warramunga Arr 140.20 252 PKP PKPdf 23 17 12.7 -0.2
comp=Z,0.6nm,0.6s,baz=90,slow=2.2,SNR=13

*IDC **01** 23:02:23.7±1.3,21.58N×121.05E,h0km,mb3.7/10, mbtmp3.7/11,MS2.6/3,Error ellipse: s-maj=36.9km s-min=26.8km az=62.0*

*ASIES **01** 23:02:32.4,21.87N×121.23E,h59km,ML3.9,Mw3.7, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; Mrr-1.32; Mθθ1.67; Mφφ-0.35; Mrθ2.10; Mθφ-0.56; Mφr-2.70; Fault plane solution: M0 3.79313×$10^{21}$ NP1: φs317.49000°,δ80.00000°,λ-73.29000°. NP2:φs77.53000°, δ19.40000°,λ-148.49000°. Principal axes: T Plg32.9700°, Azm33.4660°; N Plg16.4500°, Azm134.5080°; P Plg52.1590°, Azm246.8480°;*

*TAP **01** 23:02:32.4,21.87N×121.23E,h59km,ML3.9,D*

*JMA **01** 23:02:35.5±0.3,22.1N×121.6E±0.5,h0km,MV4.1/13, TAIWAN REGION*

**ISC 01 23:02:32.4±0.8,21.80N±0.05×121.24E±0.03,h64km±5km, n163,σ1832/291,mb3.6/9,1D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAY** | **Lan-yu** baz=60 | 0.37 | 50 | ⇓iP | Pn | 23 02 42.9 | -0.6 |
| LAY | | | | S | Sn | 23 02 52.4 | +0.7 |
| **LYUB** | **Lan-yu** baz=60 | 0.38 | 58 | iP | Pn | 23 02 42.6 | -0.9 |
| LYUB | | | | S | Sn | 23 02 50.1 | -1.5 |
| **TWKBT** | **Hengchun** baz=281 | 0.42 | 290 | iP | Pn | 23 02 44.1 | +0.2 |
| TWKBT | | | | iS | Sn | 23 02 52.4 | 0.0 |
| **TWK1** | **Hengchun** baz=285 | 0.43 | 290 | iP | Pn | 23 02 44.1 | +0.1 |
| TWK1 | | | | iS | Sn | 23 02 52.2 | -0.2 |
| **SMST** | **Manzhou Townsh** baz=293 | 0.43 | 301 | iP | Pn | 23 02 44.0 | -0.1 |
| SMST | | | | iS | Sn | 23 02 52.1 | -0.4 |
| **SNW** | **Nanwan** baz=282 | 0.48 | 289 | P | Pn | 23 02 44.6 | +0.1 |
| SNW | | | | S | Sn | 23 02 54.6 | +1.3 |
| **HEN** | **Hengchun** baz=297 | 0.51 | 294 | P | Pn | 23 02 45.5 | +0.8 |
| HEN | | | | eS | Sn | 23 02 54.0 | +0.2 |
| **SLIU** | **Shizi** baz=320 | 0.58 | 315 | eP | Pn | 23 02 45.6 | +0.1 |
| SLIU | | | | S | Sn | 23 02 55.3 | +0.1 |
| **TAWH** | **Dawu Township** baz=335 | 0.63 | 329 | eP | Pn | 23 02 45.5 | -0.6 |
| TAWH | | | | eS | Sn | 23 02 54.5 | -1.6 |
| **TAW** | **Tawu** baz=335 | 0.64 | 330 | P | Pn | 23 02 45.6 | -0.6 |
| TAW | | | | iS | Sn | 23 02 54.4 | -1.9 |
| **EAST** | **Anshuo** baz=333 | 0.69 | 328 | iP | Pn | 23 02 46.2 | -0.6 |
| EAST | | | | S | Sn | 23 02 55.7 | -1.6 |
| **SCZT** | **Fangliau** baz=321 | 0.81 | 315 | iP | Pn | 23 02 48.1 | -0.1 |
| SCZT | | | | eS | Sn | 23 02 59.7 | -0.1 |
| **ECL** | **Taimali** baz=347 | 0.84 | 342 | P | Pn | 23 02 47.5 | -1.1 |
| ECL | | | | iS | Sn | 23 02 57.9 | -2.5 |
| **LDUT** | **Ludao** baz=22 | 0.90 | 14 | eP | Pn | 23 02 48.5 | -0.8 |
| LDUT | | | | S | Sn | 23 03 00.8 | -1.0 |
| **TTN** | **Taitung** baz=356 | 0.95 | 355 | eP | Pn | 23 02 50.3 | +0.3 |
| TTN | | | | S | Sn | 23 03 04.2 | +1.2 |
| **TWP** | **Hsiaoliuchiu** baz=301 | 0.98 | 304 | eP | Pn | 23 02 51.5 | +1.2 |
| TWP | | | | eS | Sn | 23 03 06.3 | +2.7 |
| **MASBT** | **Mashibuluo** baz=328 | 0.98 | 325 | P | Pn | 23 02 50.7 | +0.3 |
| MASBT | | | | S | Sn | 23 03 02.8 | -1.0 |
| **TWGBT** | **Beinan** | 1.02 | 352 | P | Pn | 23 02 49.9 | -1.1 |
| **TWGBT** | **Beinan** baz=352 | 1.02 | 352 | eP | Pn | 23 02 49.8 | -1.1 |
| TWGBT | | | | iS | Sn | 23 03 03.0 | -1.7 |
| **TWG** | **Pinlang** baz=352 | 1.03 | 351 | eP | Pn | 23 02 49.7 | -1.3 |
| TWG | | | | iS | Sn | 23 03 02.8 | -2.0 |
| **TSMG** | **Majia** baz=327 | 1.06 | 329 | P | Pn | 23 02 51.2 | -0.1 |
| TSMG | | | | S | Sn | 23 03 04.7 | -0.8 |
| **SSD** | **Sandimen** baz=328 | 1.10 | 329 | iP | Pn | 23 02 51.7 | -0.2 |
| SSD | | | | iS | Sn | 23 03 05.9 | -0.5 |
| **LONT** | **Longtian** baz=355 | 1.11 | 355 | P | Pn | 23 02 51.0 | -1.0 |
| LONT | | | | eS | Sn | 23 03 04.8 | -1.7 |
| **SGLT** | **Jiouru** baz=322 | 1.15 | 323 | eP | Pn | 23 02 52.8 | +0.2 |
| SGLT | | | | eS | Sn | 23 03 08.8 | +1.2 |
| **EDH** | **Donghe** baz=355 | 1.17 | 3 | P | Pn | 23 02 52.0 | -0.8 |
| EDH | | | | iS | Sn | 23 03 06.7 | -1.3 |
| **SNJT** | **Kaohsiung City** baz=317 | 1.27 | 319 | eP | Pn | 23 02 55.5 | +1.5 |
| SNJT | | | | iS | Sn | 23 03 11.2 | +1.0 |
| **TWM1** | **Shoushan** baz=322 | 1.27 | 324 | iP | Pn | 23 02 55.6 | +1.5 |
| TWM1 | | | | eS | Sn | 23 03 12.1 | +1.7 |
| **SCST** | **Cishan** baz=334 | 1.28 | 328 | iP | Pn | 23 02 55.2 | +0.9 |
| SCST | | | | eS | Sn | 23 03 10.8 | +0.1 |
| **ECS** | **Chishang** baz=352 | 1.29 | 359 | eP | Pn | 23 02 54.1 | -0.3 |
| ECS | | | | S | Sn | 23 03 09.9 | -0.9 |
| **CHKT** | **Chengkung** baz=357 | 1.30 | 5 | eP | Pn | 23 02 54.2 | -0.3 |
| CHKT | | | | S | Sn | 23 03 09.2 | -1.8 |
| **SLGT** | **Liugui** baz=327 | 1.31 | 335 | eP | Pn | 23 02 55.6 | +0.9 |
| SLGT | | | | iS | Sn | 23 03 11.0 | -0.3 |
| **EHD** | **Haiduan** baz=352 | 1.34 | 359 | eP | Pn | 23 02 54.3 | -0.8 |
| EHD | | | | iS | Sn | 23 03 09.1 | -3.1 |
| **CHKH** | **Chenggong** baz=359 | 1.39 | 6 | iP | Pn | 23 02 55.3 | -0.4 |
| CHKH | | | | iS | Sn | 23 03 12.1 | -1.2 |
| **FULB** | **Fuli** baz=354 | 1.39 | 2 | iP | Pn | 23 02 55.6 | -0.2 |
| FULB | | | | iS | Sn | 23 03 12.4 | -0.9 |
| **ELDTW** | **Lidau** baz=357 | 1.40 | 352 | eP | Pn | 23 02 55.5 | -0.5 |
| ELDTW | | | | S | Sn | 23 03 11.2 | -2.4 |
| **SGST** | **Jiashian** baz=334 | 1.41 | 335 | iP | Pn | 23 02 56.4 | +0.4 |
| SGST | | | | iS | Sn | 23 03 13.3 | -0.5 |
| **STYT** | **Tauyuan** baz=342 | 1.43 | 342 | iP | Pn | 23 02 56.3 | 0.0 |
| STYT | | | | iS | Sn | 23 03 14.2 | 0.0 |
| **STYH** | **Taoyuan** baz=342 | 1.43 | 343 | eP | Pn | 23 02 56.8 | +0.5 |
| STYH | | | | S | Sn | 23 03 14.3 | +0.1 |
| **CHN3** | **Shinhua** baz=327 | 1.51 | 328 | eP | Pn | 23 02 59.4 | +2.2 |
| CHN3 | | | | iS | Sn | 23 03 17.9 | +1.9 |
| **ECBN** | **Changbin** | 1.52 | 7 | iP | Pn | 23 02 57.3 | -0.1 |
| ECBN | | | | S | Sn | 23 03 15.6 | -0.8 |
| **CHN1** | **Nanshi** baz=334 | 1.53 | 335 | iP | Pn | 23 02 57.8 | +0.2 |
| CHN1 | | | | iS | Sn | 23 03 15.9 | -0.6 |
| **TAI** | **Tainan** baz=320 | 1.53 | 321 | eP | Pn | 23 02 57.6 | 0.0 |
| TAI | | | | eS | Sn | 23 03 16.9 | +0.3 |
| **EYUL** | **Yuli** baz=356 | 1.54 | 3 | P | Pn | 23 02 57.2 | -0.6 |
| EYUL | | | | eS | Sn | 23 03 15.9 | -1.0 |
| **TWF1** | **Yuli** baz=356 | 1.55 | 2 | iP | Pn | 23 02 56.1 | -1.7 |
| TWF1 | | | | eS | Sn | 23 03 15.7 | -1.3 |
| **TAI1** | **Yung-k'ang** baz=309 | 1.55 | 323 | eP | Pn | 23 02 58.2 | +0.4 |
| TAI1 | | | | S | Sn | 23 03 17.4 | +0.4 |
| **WTP** | **Ta-pu** baz=338 | 1.55 | 338 | eP | Pn | 23 02 58.7 | +0.8 |
| WTP | | | | eS | Sn | 23 03 17.7 | +0.5 |
| **SNST** | **Tainan City** baz=334 | 1.57 | 334 | eP | Pn | 23 02 59.9 | +1.8 |
| SNST | | | | iS | Sn | 23 03 17.2 | -0.4 |
| **YULB** | **Yu-li** | 1.59 | 2 | P | Pn | 23 02 57.3 | -1.1 |
| **YULB** | **Yu-li** baz=357 | 1.59 | 2 | P | Pn | 23 02 57.2 | -1.1 |
| YULB | | | | eS | Sn | 23 03 15.0 | -2.9 |
| **SSHA** | **Shanhua** baz=338 | 1.59 | 327 | eP | Pn | 23 02 58.4 | -0.1 |
| SSHA | | | | S | Sn | 23 03 18.1 | 0.0 |
| **TPUB** | **Ta-pu** | 1.60 | 339 | P | Pn | 23 03 00.9 | +2.4 |
| **TPUB** | **Ta-pu** baz=339 | 1.60 | 339 | eP | Pn | 23 02 58.6 | +0.1 |
| TPUB | | | | iS | Sn | 23 03 17.7 | -0.5 |
| **TWK** | **Hsinying** baz=334 | 1.62 | 335 | iP | Pn | 23 02 58.8 | 0.0 |
| TWK | | | | iS | Sn | 23 03 17.7 | -1.1 |
| **SCLT** | **Jiali** baz=315 | 1.68 | 325 | iP | Pn | 23 02 59.5 | 0.0 |
| SCLT | | | | S | Sn | 23 03 19.7 | -0.4 |
| **EHYH** | **Wanrong** baz=356 | 1.69 | 3 | iP | Pn | 23 02 58.4 | -1.4 |
| EHYH | | | | eS | Sn | 23 03 19.2 | -1.2 |
| **HGSD** | **Ruisui** baz=6.0 | 1.69 | 6 | P | Pn | 23 02 59.9 | +0.1 |
| HGSD | | | | eS | Sn | 23 03 22.7 | +2.2 |
| **EHY** | **Hungye** baz=356 | 1.70 | 3 | iP | Pn | 23 02 58.8 | -1.1 |
| EHY | | | | eS | Sn | 23 03 18.8 | -1.9 |
| **YUS** | **Yu-Shan** | 1.70 | 351 | P | Pn | 23 03 00.3 | -0.1 |
| YUS | | | | eS | Sn | 23 03 23.6 | +2.2 |
| **TSCK** | **Chigu Township** baz=309 | 1.71 | 322 | iP | Pn | 23 02 59.9 | -0.1 |
| TSCK | | | | iS | Sn | 23 03 19.3 | -1.7 |
| **WCKO** | **Fanlu** baz=340 | 1.73 | 340 | P | Pn | 23 03 01.1 | +0.8 |
| WCKO | | | | iS | Sn | 23 03 21.3 | -0.2 |
| **ICHU** | **Yijhu** baz=342 | 1.79 | 330 | P | Pn | 23 03 01.5 | +0.4 |
| ICHU | | | | S | Sn | 23 03 22.1 | -0.7 |
| **CHN8** | **Yiju** baz=340 | 1.81 | 328 | eP | Pn | 23 03 01.4 | +0.1 |
| CHN8 | | | | S | Sn | 23 03 21.7 | -1.5 |
| **CHN5** | **Tsauling** baz=344 | 1.86 | 344 | iP | Pn | 23 03 02.3 | +0.2 |
| CHN5 | | | | iS | Sn | 23 03 24.4 | -0.3 |
| **EGFH** | **Guangfu** baz=357 | 1.87 | 5 | iP | Pn | 23 03 03.3 | +1.2 |
| EGFH | | | | eS | Sn | 23 03 23.8 | -1.0 |
| **WARBT** | **Fenglin Townsh** baz=5.0 | 1.91 | 4 | P | Pn | 23 03 01.7 | -1.1 |
| WARBT | | | | eS | Sn | 23 03 23.3 | -2.6 |
| **WHYT** | **Xinyi Township** baz=338 | 1.92 | 349 | P | Pn | 23 03 04.4 | +1.5 |
| WHYT | | | | S | Sn | 23 03 26.6 | +0.5 |
| **VWDT** | **VWDT** baz=350 | 1.95 | 357 | P | Pn | 23 03 03.4 | +0.3 |
| VWDT | | | | eS | Sn | 23 03 25.9 | -0.7 |
| **WSL** | **Shuilin Townsh** baz=331 | 1.95 | 332 | eP | Pn | 23 03 03.1 | -0.2 |
| WSL | | | | iS | Sn | 23 03 25.4 | -1.3 |
| **WDLH** | **Douliu** baz=341 | 1.99 | 341 | P | Pn | 23 03 04.6 | +0.8 |
| WDLH | | | | S | Sn | 23 03 27.1 | -0.5 |
| **SSLB** | **Suanglung** | 2.00 | 352 | P | Pn | 23 03 04.7 | +0.8 |
| **SSLB** | **Suanglung** baz=340 | 2.00 | 352 | P | Pn | 23 03 04.0 | +0.1 |
| SSLB | | | | eS | Sn | 23 03 28.0 | +0.1 |
| **SHUL** | **Shoufeng** baz=360 | 2.00 | 8 | eP | Pn | 23 03 04.2 | +0.3 |
| SHUL | | | | S | Sn | 23 03 28.3 | +0.4 |
| **ESL** | **Shilin** baz=6.0 | 2.01 | 5 | iP | Pn | 23 03 03.7 | -0.4 |
| ESL | | | | eS | Sn | 23 03 26.1 | -2.1 |
| **WTK** | **Tuku** baz=337 | 2.04 | 337 | eP | Pn | 23 03 04.8 | +0.4 |
| WTK | | | | S | Sn | 23 03 27.2 | -1.6 |
| **WSF** | **Szhu** baz=333 | 2.06 | 333 | eP | Pn | 23 03 05.0 | +0.4 |
| WSF | | | | iS | Sn | 23 03 27.6 | -1.7 |
| **WDGT** | **Dungji** baz=314 | 2.06 | 315 | iP | Pn | 23 03 03.7 | -1.0 |
| WDGT | | | | iS | Sn | 23 03 25.6 | -3.7 |
| **WJS** | **Zhushan** baz=347 | 2.07 | 347 | eP | Pn | 23 03 05.7 | +0.9 |
| WJS | | | | S | Sn | 23 03 29.6 | 0.0 |
| **TEYL** | **Yanliau Villag** baz=2.0 | 2.08 | 9 | P | Pn | 23 03 06.5 | +1.4 |
| TEYL | | | | S | Sn | 23 03 32.4 | +2.4 |
| **SMLT** | **Sun Moon Lake** baz=352 | 2.10 | 351 | iP | Pn | 23 03 05.8 | +0.5 |
| SMLT | | | | S | Sn | 23 03 30.5 | +0.1 |
| **TYC** | **Yuchr** baz=351 | 2.12 | 350 | iP | Pn | 23 03 05.7 | +0.1 |
| TYC | | | | S | Sn | 23 03 30.6 | -0.3 |
| **WNT** | **Mingjian** baz=346 | 2.13 | 346 | P | Pn | 23 03 07.5 | +1.8 |
| WNT | | | | iS | Sn | 23 03 30.5 | -0.7 |
| **OWD** | **Renai** baz=346 | 2.15 | 358 | P | Pn | 23 03 06.7 | +0.6 |
| OWD | | | | S | Sn | 23 03 31.6 | -0.1 |
| **ETM** | **Tongmen** baz=7.0 | 2.17 | 6 | P | Pn | 23 03 05.6 | -0.6 |
| ETM | | | | eS | Sn | 23 03 29.1 | -2.9 |
| **VCHM** | **Qimei** baz=317 | 2.18 | 310 | iP | Pn | 23 03 05.5 | -0.9 |
| VCHM | | | | S | Sn | 23 03 29.2 | -3.2 |
| **WUSB** | **Renai** baz=344 | 2.19 | 357 | iP | Pn | 23 03 07.3 | +0.8 |
| WUSB | | | | S | Sn | 23 03 32.0 | -0.6 |
| **LXIB** | **Xiulin Townshi** baz=11 | 2.22 | 4 | P | Pn | 23 03 06.2 | -0.8 |
| LXIB | | | | eS | Sn | 23 03 33.4 | 0.0 |
| **WPL** | **Puli Township** baz=353 | 2.22 | 353 | eP | Pn | 23 03 08.7 | +1.8 |
| WPL | | | | eS | Sn | 23 03 32.7 | -0.5 |
| | baz=353 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRL** | **Guolierlin Hig** | **2.24** | **339** | *e*P | **Pn** | **23 03 08.2** | **+1.1** |
| | baz=339 | | | | | | |
| WRL | | | | S | **Sn** | **23 03 32.4** | **-1.3** |
| | baz=339 | | | | | | |
| **CHGB** | **Renai** | **2.25** | **358** | *e*P | **Pn** | **23 03 08.5** | **+0.9** |
| | baz=347 | | | | | | |
| CHGB | | | | S | **Sn** | **23 03 33.3** | **-1.1** |
| | baz=347 | | | | | | |
| **WCS** | **Beigang Elemen** | **2.27** | **352** | *i* P | **Pn** | **23 03 07.8** | **+0.2** |
| | baz=352 | | | | | | |
| WCS | | | | *e*S | **Sn** | **23 03 33.5** | **-0.9** |
| | baz=352 | | | | | | |
| **TWD** | **Chiawan** | **2.29** | **8** | *i* P | **Pn** | **23 03 07.4** | **-0.5** |
| | baz=2.0 | | | | | | |
| TWD | | | | S | **Sn** | **23 03 35.9** | **+0.9** |
| | baz=2.0 | | | | | | |
| **PHUB** | **P'eng-hu** | **2.30** | **318** | P | **Pn** | **23 03 06.4** | **-1.5** |
| | baz=317 | | | | | | |
| PHUB | | | | S | **Sn** | **23 03 31.5** | **-3.6** |
| | baz=317 | | | | | | |
| **WHF** | **Hehuan Shan** | **2.33** | **1** | *i* P | **Pn** | **23 03 09.7** | **+0.9** |
| | baz=348 | | | | | | |
| WHF | | | | *i* S | **Sn** | **23 03 35.9** | **-0.8** |
| | baz=348 | | | | | | |
| **PNG** | **Penghu** | **2.35** | **319** | *i* P | **Pn** | **23 03 07.6** | **-1.0** |
| | baz=318 | | | | | | |
| PNG | | | | *i* S | **Sn** | **23 03 33.3** | **-3.1** |
| | baz=318 | | | | | | |
| **NACB** | **Ninganchiao** | **2.39** | **8** | P | **Pn** | **23 03 08.7** | **-0.5** |
| **NACB** | **Ninganchiao** | **2.39** | **8** | P | **Pn** | **23 03 09.0** | **-0.1** |
| | baz=3.0 | | | | | | |
| NACB | | | | S | **Sn** | **23 03 34.8** | **-2.5** |
| | baz=3.0 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **2.41** | **5** | P | **Pn** | **23 03 09.2** | **-0.3** |
| | baz=6.0 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **23 03 37.4** | **-0.6** |
| | baz=6.0 | | | | | | |
| **FUSS** | **Fushou** | **2.44** | **0** | *i* P | **Pn** | **23 03 11.1** | **+1.0** |
| | baz=348 | | | | | | |
| FUSS | | | | S | **Sn** | **23 03 38.2** | **-0.7** |
| | baz=348 | | | | | | |
| **TDCB** | **Techi** | **2.44** | **358** | *i* P | **Pn** | **23 03 10.6** | **+0.5** |
| | baz=347 | | | | | | |
| TDCB | | | | *e*S | **Sn** | **23 03 37.7** | **-1.2** |
| | baz=347 | | | | | | |
| **TWT** | **Tachien** | **2.44** | **359** | *i* P | **Pn** | **23 03 11.3** | **+1.2** |
| | baz=347 | | | | | | |
| TWT | | | | *e*S | **Sn** | **23 03 38.4** | **-0.6** |
| | baz=347 | | | | | | |
| **WHP** | **Taichung City** | **2.48** | **354** | P | **Pn** | **23 03 11.2** | **+0.6** |
| | baz=354 | | | | | | |
| WHP | | | | *i* S | **Sn** | **23 03 40.2** | **+0.4** |
| | baz=354 | | | | | | |
| **EOS4** | **EOS4** | **2.52** | **23** | *i* P | **Pn** | **23 03 11.3** | **+0.8** |
| | baz=30 | | | | | | |
| EOS4 | | | | *i* S | **Sn** | **23 03 39.6** | **-0.3** |
| | baz=30 | | | | | | |
| **TWQ1** | **Liyutan** | **2.57** | **350** | *i* P | **Pn** | **23 03 12.9** | **+1.2** |
| | baz=340 | | | | | | |
| TWQ1 | | | | *i* S | **Sn** | **23 03 41.9** | **0.0** |
| | baz=340 | | | | | | |
| **NNSB** | **Datong** | **2.62** | **3** | *e*P | **Pn** | **23 03 13.2** | **+0.8** |
| | baz=9.0 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **23 03 42.7** | **-0.5** |
| | baz=9.0 | | | | | | |
| **NNS** | **Nan Shan** | **2.63** | **3** | *i* P | **Pn** | **23 03 14.9** | **+2.3** |
| | baz=9.0 | | | | | | |
| NNS | | | | S | **Sn** | **23 03 44.6** | **+1.2** |
| | baz=9.0 | | | | | | |
| **NSY** | **Sanyi** | **2.64** | **350** | *e*P | **Pn** | **23 03 14.3** | **+1.7** |
| | baz=351 | | | | | | |
| NSY | | | | S | **Sn** | **23 03 43.1** | **-0.5** |
| | baz=351 | | | | | | |
| **ENA** | **Nanau** | **2.66** | **10** | *i* P | **Pn** | **23 03 13.0** | **+0.1** |
| | baz=358 | | | | | | |
| ENA | | | | S | **Sn** | **23 03 45.3** | **+1.4** |
| | baz=358 | | | | | | |
| **EOS3** | **EOS3** | **2.67** | **22** | P | **Pn** | **23 03 13.8** | **+1.0** |
| | baz=21 | | | | | | |
| EOS3 | | | | *i* S | **Sn** | **23 03 43.9** | **-0.1** |
| | baz=21 | | | | | | |
| **EWUT** | **Wuta** | **2.68** | **11** | P | **Pn** | **23 03 14.0** | **+0.9** |
| | baz=358 | | | | | | |
| EWUT | | | | *e*S | **Sn** | **23 03 45.9** | **+1.4** |
| | baz=358 | | | | | | |
| **LATG** | **Datong** | **2.74** | **5** | P | **Pn** | **23 03 14.2** | **+0.2** |
| | baz=13 | | | | | | |
| LATG | | | | *e*S | **Sn** | **23 03 45.6** | **-0.5** |
| | baz=13 | | | | | | |
| **EOS2** | **EOS2** | **2.76** | **19** | P | **Pn** | **23 03 15.4** | **+1.2** |
| | baz=18 | | | | | | |
| EOS2 | | | | *e*S | **Sn** | **23 03 45.5** | **-0.8** |
| | baz=18 | | | | | | |
| **NDT** | **Datong Townshi** | **2.80** | **5** | P | **Pn** | **23 03 16.3** | **+1.4** |
| | baz=12 | | | | | | |
| NDT | | | | S | **Sn** | **23 03 47.1** | **-0.3** |
| | baz=12 | | | | | | |
| **ESAO** | **Su ao** | **2.82** | **11** | P | **Pn** | **23 03 16.7** | **+1.7** |
| | baz=359 | | | | | | |
| ESAO | | | | *e*S | **Sn** | **23 03 48.4** | **+0.5** |
| | baz=359 | | | | | | |
| **NFF** | **Wufeng Townshi** | **2.82** | **358** | P | **Pn** | **23 03 17.4** | **+2.3** |
| | baz=347 | | | | | | |
| NFF | | | | *i* S | **Sn** | **23 03 47.9** | **-0.1** |
| | baz=347 | | | | | | |
| **NSTT** | **Nanjuang** | **2.83** | **356** | *i* P | **Pn** | **23 03 15.9** | **+0.8** |
| | baz=345 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **23 03 46.6** | **-1.5** |
| | baz=345 | | | | | | |
| **LIOB** | **Emei** | **2.84** | **356** | P | **Pn** | **23 03 16.2** | **+0.8** |
| | baz=345 | | | | | | |
| LIOB | | | | *e*S | **Sn** | **23 03 47.7** | **-0.7** |
| | baz=345 | | | | | | |
| **ENTT** | **Nioudou** | **2.84** | **6** | *i* P | **Pn** | **23 03 16.1** | **+0.6** |
| | baz=7.0 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **23 03 48.5** | **0.0** |
| | baz=7.0 | | | | | | |
| **TWC** | **Suao** | **2.85** | **11** | *i* P | **Pn** | **23 03 17.0** | **+1.5** |
| | baz=359 | | | | | | |
| TWC | | | | *i* S | **Sn** | **23 03 49.4** | **+0.7** |
| | baz=359 | | | | | | |
| **YHNB** | **Yeheng** | **2.86** | **2** | P | **Pn** | **23 03 17.1** | **+1.4** |
| **YHNB** | **Yeheng** | **2.86** | **2** | *i* P | **Pn** | **23 03 17.3** | **+1.6** |
| | baz=351 | | | | | | |
| YHNB | | | | S | **Sn** | **23 03 49.1** | **+0.1** |
| | baz=351 | | | | | | |
| **NSK** | **Sanguang** | **2.87** | **2** | *i* P | **Pn** | **23 03 17.3** | **+1.5** |
| | baz=351 | | | | | | |
| NSK | | | | *i* S | **Sn** | **23 03 50.5** | **+1.4** |
| | baz=351 | | | | | | |
| **TWE** | **Neicheng** | **2.94** | **8** | P | **Pn** | **23 03 19.1** | **+2.5** |
| | baz=8.0 | | | | | | |
| TWE | | | | *e*S | **Sn** | **23 03 51.7** | **+1.0** |
| | baz=8.0 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.96** | **6** | P | **Pn** | **23 03 18.2** | **+1.1** |
| | baz=7.0 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **23 03 51.1** | **-0.4** |
| | baz=7.0 | | | | | | |
| **NWLT** | **Wulai** | **2.97** | **5** | *e*P | **Pn** | **23 03 18.6** | **+1.4** |
| | baz=11 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **23 03 51.6** | **-0.1** |
| | baz=11 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **3.07** | **30** | *e*S | **Sn** | **23 03 49.8** | **-4.2** |
| **EGS** | | **3.10** | **12** | *i* P | **Pn** | **23 03 21.4** | **+2.5** |
| | baz=359 | | | | | | |
| EGS | | | | *i* S | **Sn** | **23 03 56.9** | **+2.2** |
| | baz=359 | | | | | | |
| **YOJ** | **Yonaguni jima** | **3.11** | **31** | P | **Pn** | **23 03 19.8** | **+0.8** |
| | baz=40 | | | | | | |
| YOJ | | | | *e*S | **Sn** | **23 03 54.3** | **-0.7** |
| | baz=40 | | | | | | |
| **TIPB** | **Shuangxi** | **3.20** | **10** | P | **Pn** | **23 03 22.1** | **+1.7** |
| | baz=2.0 | | | | | | |
| TIPB | | | | S | **Sn** | **23 03 57.9** | **+0.6** |
| | baz=2.0 | | | | | | |
| **HATJ** | **Hateruma jima** | **3.26** | **46** | *e*P | **Pn** | **23 03 21.6** | **+0.5** |
| HATJ | | | | *e*S | **Sn** | **23 03 56.0** | **-2.7** |
| **SXI1** | **Grass Mountain** | **3.33** | **10** | P | **Pn** | **23 03 24.4** | **+2.3** |
| | baz=356 | | | | | | |
| SXI1 | | | | *e*S | **Sn** | **23 04 01.6** | **+1.0** |
| | baz=356 | | | | | | |
| **YM01** | **YM01** | **3.34** | **5** | *e*P | **Pn** | **23 03 22.7** | **+0.5** |
| | baz=5.0 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **23 04 01.8** | **+0.9** |
| | baz=5.0 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **3.41** | **42** | *e*P | **Pn** | **23 03 23.9** | **+0.7** |
| IRIF | | | | *e*S | **Sn** | **23 04 00.1** | **-2.2** |
| **JKRS** | **Kuro-shima** | **3.52** | **46** | *e*P | **Pn** | **23 03 25.4** | **+0.8** |
| JKRS | | | | *e*S | **Sn** | **23 04 03.4** | **-1.7** |
| **VWUC** | **VWUC** | **3.58** | **333** | *i* P | **Pn** | **23 03 24.5** | **-0.9** |
| | baz=341 | | | | | | |
| VWUC | | | | S | **Sn** | **23 04 03.4** | **-3.1** |
| | baz=341 | | | | | | |
| **KNM** | **Kinmen** | **3.67** | **316** | *e*P | **Pn** | **23 03 27.7** | **+1.0** |
| | baz=314 | | | | | | |
| KNM | | | | S | **Sn** | **23 04 08.2** | **-0.5** |
| | baz=314 | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.70** | **46** | *e*P | **Pn** | **23 03 27.4** | **+0.4** |
| JIJ | | | | *e*S | **Sn** | **23 04 06.7** | **-2.6** |
| **KNMB** | **Chin-men Tao** | **3.73** | **316** | P | **Pn** | **23 03 26.9** | **-0.6** |
| | baz=315 | | | | | | |
| KNMB | | | | S | **Sn** | **23 04 06.8** | **-3.4** |
| | baz=315 | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.77** | **329** | P | **Pn** | **23 03 27.1** | **-0.9** |
| | baz=337 | | | | | | |
| PTMZ | | | | S | **Sn** | **23 04 06.6** | **-4.5** |
| | baz=337 | | | | | | |
| **ZPLA** | **Ao Xicun** | **3.85** | **304** | *i* P | **Pn** | **23 03 29.9** | **+0.7** |
| | baz=303 | | | | | | |
| ZPLA | | | | S | **Sn** | **23 04 12.3** | **-0.9** |
| | baz=303 | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.96** | **45** | P | **Pn** | **23 03 30.6** | **0.0** |
| **DSXP** | **Dongshan** | **4.00** | **299** | P | **Pn** | **23 03 30.8** | **-0.4** |
| | baz=298 | | | | | | |
| DSXP | | | | S | **Sn** | **23 04 14.4** | **-2.4** |
| | baz=298 | | | | | | |
| **JTJ** | **Tarama** | **4.26** | **48** | *e*P | **Pn** | **23 03 35.4** | **+0.7** |
| JTJ | | | | *e*S | **Sn** | **23 04 21.7** | **-1.5** |
| **MATB** | **Ma-tsu** | **4.49** | **345** | P | **Pn** | **23 03 37.2** | **-0.7** |
| | baz=344 | | | | | | |
| MATB | | | | *i* S | **Sn** | **23 04 24.4** | **-4.4** |
| | baz=344 | | | | | | |
| **MHZQ** | **Yeshan** | **4.73** | **335** | P | **Pn** | **23 03 40.3** | **-0.9** |
| | baz=334 | | | | | | |
| MHZQ | | | | S | **Sn** | **23 04 30.9** | **-3.9** |
| | baz=334 | | | | | | |
| **KSRS** | **Korea Array** | **16.64** | **19** | Pn | **P** | **23 06 23.0** | **+0.2** |
| | 0.8nm,0.5s,baz=197,slow=13,SNR=6.1 | | | | | | |
| **JCJ** | **Chichijima** | **19.77** | **70** | LR | LR | 23 12 52.2 | |
| | comp=Z,11nm,21.1s,baz=101,slow=31 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.82** | **41** | P | **P** | **23 07 10.4** | **+1.8** |
| | 1.6nm,0.6s,baz=233,slow=10,SNR=6.7 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.19** | **265** | LR | LR | 23 15 25.1 | |
| | comp=Z,15nm,18.4s,baz=290,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **28.59** | **339** | P | **P** | **23 08 23.2** | **+0.7** |
| | 1.1nm,0.7s,baz=153,slow=9.1,SNR=4.9 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **40.11** | **318** | P | **P** | **23 10 01.1** | **-0.6** |
| | 0.2nm,0.5s,baz=123,slow=8.4,SNR=4.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.28** | **329** | P | **P** | **23 10 20.2** | **+0.8** |
| | 0.6nm,0.4s,baz=106,slow=7.9,SNR=3.6 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.62** | **84** | T | T | 23 55 38.9 | |
| | baz=282 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.62** | **84** | T | T | 23 55 46.1 | |
| | baz=282,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.64** | **84** | T | T | 23 55 46.4 | |
| | baz=282,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.68** | **86** | T | T | 23 55 42.0 | |
| | baz=283,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.69** | **86** | T | T | 23 55 51.6 | |
| | baz=283,slow=75 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.70** | **86** | T | T | 23 55 44.8 | |
| | baz=283,slow=75 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.42** | **162** | P | **P** | **23 10 27.8** | **-1.2** |
| | 0.3nm,0.8s,baz=343,slow=9.1,SNR=1.7 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.98** | **322** | P | **P** | **23 10 33.8** | **+0.6** |
| | 0.3nm,0.5s,baz=111,slow=10,SNR=2.2 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **73.52** | **330** | P | **P** | **23 13 58.7** | **+0.7** |
| | 0.7nm,0.7s,baz=57,slow=5.1,SNR=6.1 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **79.66** | **331** | P | **P** | **23 14 33.2** | **+0.5** |
| | 1.4nm,0.9s,baz=105,slow=4.9,SNR=2.8 | | | | | | |
| | 1.4nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **80.35** | **332** | P | **P** | **23 14 36.4** | **-0.1** |
| | 0.6nm,0.8s,baz=59,slow=6.7,SNR=1.4 | | | | | | |
| NOA | | | | LR | LR | 23 54 33.1 | |
| | comp=Z,6.0nm,18.2s,baz=290,slow=39 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.14** | **23** | P | **P** | **23 15 01.5** | **+0.2** |
| | 0.7nm,0.7s,baz=305,slow=6.7,SNR=3.0 | | | | | | |
| | 0.7nm,0.7s | | | | | | |

**IDC 01 23:03:54.1**±2.2**, 4°.79S**×**146°.49E, h0**km**, mb3.4**/2**,**
**mbtmp3.4**/3**, ML3.7**/1**, Error ellipse: s-maj=284.8km**
**s-min=30.3km az=121.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **19.16** | **217** | P | P | 23 08 19.2 | 0.0 |
| | 0.3nm,0.3s,baz=36,slow=9.7,SNR=16 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.36** | **212** | P | P | 23 08 53.8 | -0.1 |
| | 0.8nm,0.8s,baz=45,slow=7.6,SNR=7.0 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **84.57** | **23** | P | P | 23 16 29.1 | +0.1 |
| | 0.4nm,0.7s,baz=232,slow=5.6,SNR=4.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*IDC **01** 23:08:04.6±6.7, 34°.71N×72°.67E, h120km±59km, mb3.1/7,*
*mbtmp3.5/11, Error ellipse: s-maj=46.4km s-min=25.1km*
*az=31.0*
**ISC 01 23:08:02.1**±1.3**, 34°.6N**±0°.2×**72°.6E**±0°.2**, h100**km**, n11,**
σ**1s.24**/11**, mb3.4**/7**, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **8.18** | **10** | P | **Pn** | **23 10 00.0** | **+1.9** |
| | 2.2nm,0.3s,baz=201,slow=8.6,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **14.23** | **28** | P | **Pn** | **23 11 19.5** | **+0.6** |
| | 0.3nm,0.6s,baz=216,slow=12,SNR=2.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **16.61** | **13** | P | **Pn** | **23 11 47.5** | **-1.2** |
| | 0.2nm,0.4s,baz=203,slow=10,SNR=4.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **19.08** | **331** | P | **P** | **23 12 16.1** | **-0.5** |
| | 1.7nm,0.3s,baz=140,slow=9.8,SNR=10.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.20** | **20** | P | **P** | **23 12 37.1** | **-2.3** |
| | 0.7nm,0.3s,baz=211,slow=8.4,SNR=7.1 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **39.79** | **327** | P | **P** | **23 15 25.6** | **+0.7** |
| | 0.3nm,0.6s,baz=119,slow=8.7,SNR=1.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **43.40** | **338** | P | **P** | **23 15 55.2** | **+0.9** |
| | 1.1nm,0.8s,baz=115,slow=5.8,SNR=3.8 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **45.37** | **323** | P | **P** | **23 16 09.7** | **-0.4** |
| | 0.8nm,0.8s,baz=98,slow=11,SNR=8.5 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **46.68** | **324** | P | **P** | **23 16 20.5** | **0.0** |
| | 0.2nm,0.7s,baz=98,slow=7.6,SNR=2.4 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.99** | **270** | P | **P** | **23 18 44.4** | **-0.2** |
| | 0.4nm,0.6s,baz=34,slow=6.8,SNR=2.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.88** | **123** | P | **P** | **23 20 00.5** | **+0.5** |
| | 0.1nm,0.5s,baz=323,slow=4.9,SNR=4.7 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

*IDC **02** 00:14:15.7±1.1, 9°.83S×160°.16E, h0km, mb3.9/9,*
*mbtmp3.9/10, ML3.4/1, MS2.7/2, Error ellipse:*
*s-maj=35.0km s-min=23.9km az=101.0*
**ISC 02 00:14:20.6**±0.9**, 9°.9S**±0°.1×**160°.1E**±0°.2**, h32**km**, n19,**
σ**0s.86**/11**, mb3.8**/9**, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **0.49** | **338** | LR | LR | 00 14 52.3 | |
| | comp=Z,2μm,18.8s,baz=224,slow=82 | | | | | | |
| **PMG** | **Port Moresby** | **12.81** | **271** | LR | LR | 00 21 31.2 | |
| | comp=Z,110nm,18.3s,baz=92,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **13.54** | **154** | Pn | **Pn** | **00 17 30.3** | **-0.4** |
| | 0.2nm,0.3s,baz=30,slow=20,SNR=1.1 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **CTA** | **Charters Tower** | **16.80** | **231** | LR | LR | 00 24 17.6 | |
| | comp=Z,6.6nm,19.9s,baz=93,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.82** | **245** | P | **P** | **00 19 59.3** | **+1.0** |
| | 2.6nm,0.9s,baz=74,slow=9.4,SNR=14 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 23 21.1** | **+0.4** |
| | 0.5nm,1.0s,baz=68,slow=2.0,SNR=2.1 | | | | | | |
| | 2.6nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **27.82** | **215** | P | **P** | **00 20 06.7** | **-0.4** |
| | 1.5nm,0.7s,baz=18,slow=13,SNR=3.1 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **28.54** | **238** | P | **P** | **00 20 13.3** | **-0.4** |
| | 0.5nm,0.6s,baz=60,slow=9.9,SNR=5.7 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.93** | **13** | T | T | 00 49 01.6 | |
| | baz=194,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.93** | **13** | T | T | 00 49 02.1 | |
| | baz=194,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.95** | **13** | T | T | 00 49 05.4 | |
| | baz=194 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.16** | **13** | T | T | 00 50 50.9 | |
| | baz=193,slow=76,SNR=6.8 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.17** | **13** | T | T | 00 50 48.8 | |
| | baz=193,slow=76,SNR=5.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.18** | **13** | T | T | 00 50 51.9 | |
| | baz=193,slow=76,SNR=8.1 | | | | | | |
| **VNDA** | **Vanda** | **67.62** | **180** | P | **P** | **00 25 13.8** | **0.0** |
| | 0.2nm,0.6s,baz=331,slow=5.3,SNR=2.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **74.54** | **326** | P | **P** | **00 25 55.3** | **-1.1** |
| | 0.2nm,0.5s,baz=131,slow=7.3,SNR=1.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **80.11** | **180** | P | **P** | **00 26 28.1** | **+0.8** |
| | 1.7nm,1.1s,baz=320,slow=3.9,SNR=2.6 | | | | | | |
| | 1.7nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **84.25** | **20** | P | **P** | **00 26 49.0** | **+0.2** |
| | 0.4nm,0.5s,baz=257,slow=5.5,SNR=5.3 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **88.94** | **318** | P | **P** | **00 27 11.4** | **-0.7** |
| | 0.2nm,0.6s,baz=113,slow=3.7,SNR=1.8 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **92.29** | **321** | P | **P** | **00 27 28.9** | **+1.4** |
| | 1.0nm,0.2s,baz=104,slow=3.9,SNR=1.3 | | | | | | |
| | 1.0nm,0.2s | | | | | | |

**IDC 02 00:23:22.9**±3.1**, 20°.48S**×**177°.92W, h500**km±58km**,**
**mb2.8**/4**, mbtmp3.7**/5**, Error ellipse: s-maj=145.9km**
**s-min=33.5km az=26.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.69** | **305** | P | P | 00 24 47.2 | -0.1 |
| | 6.3nm,0.6s,baz=239,slow=19,SNR=7.6 | | | | | | |
| **STKA** | **Stephens Creek** | **37.87** | **244** | P | P | 00 29 56.3 | -0.2 |
| | 2.7nm,0.9s,baz=41,slow=9.3,SNR=1.5 | | | | | | |
| | 2.7nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **44.60** | **257** | P | P | 00 30 50.0 | -0.3 |
| | 0.8nm,0.6s,baz=98,slow=7.7,SNR=8.0 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.68** | **262** | P | P | 00 30 51.0 | +0.1 |
| | 0.2nm,0.3s,baz=97,slow=7.6,SNR=9.4 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.59** | **180** | P | P | 00 33 41.1 | 0.0 |
| | 0.6nm,0.6s,baz=323,slow=1.8,SNR=6.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

*UCR **02** 00:24:28.5±1.2, 10°.51N×86°.29W, h18km±12km, MW3.6*
*CATAC **02** 00:24:28.5±0.6, 10°.53N×86°.20W, h10km, ML3.0*
**ISC 02 00:24:27.6**±1.8**, 10°.49N**±0°.05×**86°.30W**±0°.07**, h14**km±11km**,**
**n25,** σ**0s.90**/34**, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ELI1** | **Hacienda Flor** | **0.75** | **78** | *e*P | **Pn** | **00 24 43.9** | **+0.1** |
| ELI1 | | | | *e*S | **Sn** | **00 24 55.6** | **+0.6** |
| **LCRUZ** | **La Cruz** | **0.88** | **48** | *e*P | **Pn** | **00 24 45.3** | **-0.3** |
| LCRUZ | | | | *e*S | **Sn** | **00 24 57.6** | **-0.6** |
| **NICO** | **Nicoya** | **0.91** | **113** | *e*P | **Pg** | **00 24 44.9** | **-0.3** |
| **GPS3** | **Bodega del ICE** | **0.96** | **74** | *e*P | **Pn** | **00 24 50.2** | **+3.5** |
| **VRLE** | **La Escondida,** | **0.97** | **72** | *e*P | **Pg** | **00 24 46.4** | **+0.1** |
| **GPS2** | **Hotel Rincn d** | **0.97** | **74** | *e*P | **Pg** | **00 24 46.5** | **+0.2** |
| **VORI** | **VORI** | **0.99** | **71** | *e*P | **Pg** | **00 24 46.9** | **+0.1** |
| **INDI** | **Punta indio, G** | **1.00** | **128** | *i* P | **Pb** | **00 24 46.3** | **-0.4** |
| INDI | | | | *i* S | **Sb** | **00 24 58.8** | **-1.0** |
| INDI | | | | IAML | | 00 25 10.6 | |
| | comp=Z,310nm,1.0s | | | | | | |
| **BAGA** | **Bagaces** | **1.02** | **88** | *e*P | **Pg** | **00 24 47.4** | **0.0** |
| BAGA | | | | *e*S | **Sg** | **00 25 00.8** | **+0.1** |
| **COLC** | **Colonia** | **1.09** | **81** | *e*P | **Pb** | **00 24 48.4** | **0.0** |
| COLC | | | | *e*S | **Sn** | **00 25 03.6** | **0.0** |
| **CUI** | **Cuipilapa** | **1.13** | **81** | *e*P | **Pb** | **00 24 48.8** | **-0.2** |
| CUI | | | | *e*S | **Sb** | **00 25 03.4** | **-0.2** |
| **JTS** | **Las Juntas de** | **1.34** | **98** | *e*P | **Pn** | **00 24 51.5** | **-0.5** |
| **ARE1** | **Arenal 1** | **1.56** | **91** | *e*P | **Pb** | **00 24 55.5** | **-0.7** |
| **CEDE** | **Laguna Cedeo** | **1.57** | **90** | *e*P | **Pb** | **00 24 56.0** | **-0.5** |
| **SOCE** | **Pocosol** | **1.66** | **94** | *i* P | **Pn** | **00 24 56.7** | **+0.3** |
| SOCE | | | | IAML | | 00 25 04.4 | |
| | comp=Z,150nm,1.0s | | | | | | |
| **SAPS** | **Ciudad Sandino** | **1.67** | **357** | *i* P | **Pb** | **00 24 57.7** | **-0.5** |
| SAPS | | | | IAML | | 00 24 59.3 | |
| | comp=Z,230nm,1.0s | | | | | | |
| SAPS | | | | *i* S | **Sn** | **00 25 17.3** | **-0.5** |
| **COPN** | **Copaltepe** | **1.70** | **350** | *i* P | **Pn** | **00 24 57.7** | **+0.8** |
| COPN | | | | IAML | | 00 25 30.5 | |
| | comp=Z,98nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **1.84** | **37** | *i* P | **Pn** | **00 24 58.8** | **0.0** |
| ACON | | | | IAML | | 00 25 00.2 | |
| | comp=Z,130nm,1.0s | | | | | | |
| ACON | | | | *i* S | **Sn** | **00 25 21.0** | **-0.9** |
| **ACON** | **Acoyapa** | **1.84** | **37** | *e*P | **Pn** | **00 24 59.0** | **+0.3** |
| **HUEN** | | **1.84** | **4** | *i* P | **Pn** | **00 24 59.4** | **+0.6** |
| HUEN | | | | IAML | | 00 25 01.2 | |
| | comp=Z,140nm,1.0s | | | | | | |
| HUEN | | | | *i* S | **Sb** | **00 25 24.2** | **+0.3** |
| **MACN** | **El Madrono** | **2.00** | **349** | *i* P | **Pn** | **00 25 01.9** | **+0.9** |
| MACN | | | | IAML | | 00 25 12.5 | |
| | comp=Z,76nm,1.0s | | | | | | |
| **CNGA** | **Al SSO del Vol** | **2.03** | **349** | *i* P | **Pn** | **00 25 02.3** | **+0.9** |
| CNGA | | | | IAML | | 00 25 11.1 | |
| | comp=Z,180nm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.04** | **18** | *i* P | **Pn** | **00 25 02.0** | **+0.4** |
| BOAB | | | | IAML | | 00 25 49.2 | |
| | comp=Z,74nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **2.38** | **108** | *i* P | **Pn** | **00 25 08.1** | **+1.7** |
| LCR2 | | | | IAML | | 00 25 56.0 | |
| | comp=Z,49nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **2.38** | **108** | *e*P | **Pn** | **00 25 07.7** | **+1.3** |

*MEX **02** 00:27:51.6±0.7, 14°.68N×94°.35W, h17km±999km, MD4.2*
*IDC **02** 00:27:53.4±28.0, 15°.53N×93°.45W, h0km, mb3.4/2,*
*mbtmp3.3/3, ML3.3/1, MS2.9/2, Error ellipse:*
*s-maj=795.2km s-min=65.3km az=32.0*
**ISC 02 00:27:50.4**±1.1**, 14°.63N**±0°.07×**94°.33W**±0°.03**, h23**km**, n27,**
σ**2s.29**/41**, Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.51** | **45** | *i* P | **Pn** | **00 28 14.4** | **-1.7** |
| PCIG | | | | *e*S | **Sn** | **00 28 32.3** | **-2.8** |
| **CARR** | **Arriaga** | **1.66** | **14** | *i* P | **Pn** | **00 28 16.4** | **-1.7** |
| CARR | | | | *i* S | **Sn** | **00 28 33.5** | **-5.1** |
| **NILT** | **Santiago Nilte** | **1.94** | **352** | *e*P | **Pn** | **00 28 19.8** | **-2.2** |
| NILT | | | | *i* S | **Sn** | **00 28 43.2** | **-2.5** |
| **THIG** | | **2.02** | **82** | *e*P | Pn | 00 28 19.1 | -3.9 |
| THIG | | | | *e*S | **Sn** | **00 28 45.7** | **-1.8** |
| **HUIG** | **Huatulco** | **2.06** | **304** | *e*P | **Pn** | **00 28 22.4** | **-1.2** |
| HUIG | | | | *e*S | **Sn** | **00 28 44.7** | **-3.9** |
| **PAVE** | **Pavencul** | **2.15** | **75** | *e*P | **Pn** | **00 28 23.7** | **-1.4** |
| PAVE | | | | *e*S | **Sn** | **00 28 49.3** | **-2.0** |
| **CHUJ** | **Union Juarez** | **2.20** | **78** | *e*P | **Pn** | **00 28 24.5** | **-1.2** |
| CHUJ | | | | *e*S | **Sn** | **00 28 49.7** | **-2.6** |
| **TGIG** | | **2.43** | **28** | *e*P | **Pn** | **00 28 27.8** | **-1.0** |
| TGIG | | | | *e*S | **Sn** | **00 28 53.7** | **-4.1** |
| **TGBT** | **Tuxtla Gutierr** | **2.44** | **29** | *i* P | **Pn** | **00 28 29.8** | **+0.9** |
| TGBT | | | | *i* S | **Sn** | **00 28 59.9** | **+1.8** |
| **RTAL** | **Retalhuleu** | **2.55** | **92** | *e*P | Pn | 00 28 27.2 | -3.2 |
| RTAL | | | | *e*S | **Sn** | **00 28 59.2** | **-1.6** |
| **CCIG** | **Comitan** | **2.68** | **52** | *e*P | **Pn** | **00 28 33.1** | **+0.9** |
| CCIG | | | | *e*S | **Sn** | **00 29 05.8** | **+1.7** |
| **UXUV** | **UXUV** | **2.68** | **4** | *e*P | **Pn** | **00 28 32.6** | **+0.5** |
| UXUV | | | | *e*S | **Sn** | **00 29 03.3** | **-0.6** |
| **HUEH** | **Huehuetenango** | **2.82** | **76** | *e*P | Pn | 00 28 29.7 | -4.5 |
| HUEH | | | | *e*S | **Sn** | **00 29 04.5** | **-3.1** |
| **PEIG** | **Puerto Escondi** | **3.04** | **297** | *e*S | **Sn** | **00 29 08.8** | **-4.1** |
| **VHO** | **Vista Hermosa** | **3.35** | **317** | *e*P | **Pn** | **00 28 41.5** | **-0.1** |
| VHO | | | | *e*S | **Sn** | **00 29 16.8** | **-4.1** |
| **YOIG** | **Yosondua** | **3.81** | **306** | *e*P | **Pn** | **00 28 48.3** | **+0.4** |
| YOIG | | | | *e*S | **Sn** | **00 29 30.5** | **-1.7** |
| **PMUV** | **Sontecomapan** | **3.97** | **349** | *e*P | **Pn** | **00 28 50.4** | **+0.5** |
| PMUV | | | | *e*S | **Sn** | **00 29 36.2** | **+0.4** |
| **TOIG** | **Toxpalan** | **4.33** | **323** | *e*P | **Pn** | **00 28 55.9** | **+0.9** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| TOIG | | | | eS | Sn | 00 29 45.4 | +0.5 |
| HLIG | Huajuapan de L | 4.61 | 314 | eP | Pn | 00 28 58.2 | -0.7 |
| HLIG | | | | eS | Sn | 00 29 50.7 | -1.2 |
| TPIG | Tehuac#an | 4.76 | 323 | eP | Pn | 00 29 07.7 | +6.7 |
| FTIG | Fresnillo de T | 4.89 | 312 | eP | Pn | 00 29 05.1 | +2.4 |
| FTIG | | | | eS | Sn | 00 29 57.8 | -0.9 |
| SCIG | Sabancuy | 5.26 | 34 | eP | Pn | 00 29 08.5 | +0.8 |
| JAUV | Jalcomulco | 5.27 | 334 | eP | Pn | 00 29 01.2 | -6.7 |
| JAUV | | | | eS | Sn | 00 30 03.3 | -4.6 |
| TEIG | Tepich | 8.02 | 45 | LR | LR | 00 33 06.8 | |
| | comp=Z,114nm,19.4s,baz=232,slow=46 | | | | | | |
| TXAR | Lajitas Array | 16.99 | 331 | Pn | P | 00 31 50.0 | +1.5 |
| | baz=148,slow=13,SNR=4.9 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| PDAR | Pinedale Array | 30.95 | 338 | P | P | 00 34 08.0 | +2.0 |
| | 0.1nm,0.3s,baz=138,slow=9.6,SNR=1.7 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| NOA | NORSAR Array B | 84.66 | 28 | P | P | 00 40 22.9 | +0.8 |
| | 0.2nm,0.5s,baz=291,slow=5.2,SNR=2.0 | | | | | | |
| NOA | | | | LR | LR | 01 15 31.4 | |
| | comp=Z,4.3nm,19.8s,baz=10.0,slow=34 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **02** 00:34:51.5±1.2, 56°.50N×148°.82W, h0km, mb3.5/5, mbtmp3.5/9, ML3.1/4, MS2.8/9, Error ellipse: s-maj=26.0km s-min=18.7km az=43.0*

*NEIC **02** 00:34:51.8±1.1, 56°.47N±0°.08×148°.6W±0°.1, h23km±9km, ML3.6/70, ML3.4(AEIC), Error ellipse: s-maj=12.8km s-min=7.5km az=160.0*

*AEIC **02** 00:34:56.5±1.0, 56°.58N±0°.08×148°.64W±0°.10, h12km±7km, Error ellipse: s-maj=11.5km s-min=7.4km az=162.0*

**ISC 02 00:34:52.1**±0.8**, 56°.64N**±0°.07×**148°.67W**±0°.05**, h10**km**, n162, σ1s06**/159**, mb3.7**/4**, MS2.8**/4**, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDAK | Kodiak Island | 2.42 | 300 | | Pn | 00 35 31.1 | -0.5 |
| KDAK | | | | | Sn | 00 35 58.9 | -2.4 |
| KDAK | Kodiak Island | 2.42 | 300 | Pn | Pn | 00 35 31.2 | -0.5 |
| | 5.8nm,0.3s,baz=144,slow=4.9,SNR=50 | | | | | | |
| KDAK | | | | Sn | Sn | 00 35 58.8 | -2.4 |
| | 14nm,0.3s,baz=258,slow=21,SNR=14 | | | | | | |
| KDAK | | | | LR | LR | 00 36 24.3 | |
| | comp=Z,102nm,21.8s,baz=135,slow=38 | | | | | | |
| | 14nm,0.3s | | | | | | |
| OHAK | Old Harbor | 2.60 | 285 | | Pn | 00 35 32.8 | -1.3 |
| OHAK | | | | | Sn | 00 36 02.3 | -3.4 |
| SYI | Shuyak Island | 2.81 | 316 | | Pn | 00 35 37.4 | +0.3 |
| SYI | | | | | Sn | 00 36 10.3 | -0.7 |
| SII | Sitkinak Islan | 3.05 | 271 | Pn | Pn | 00 35 39.2 | -1.2 |
| SII | | | | | Sn | 00 36 13.1 | -3.9 |
| SII | | | | IAML | | 00 36 21.3 | |
| | comp=N,137nm,0.8s | | | | | | |
| SII | | | | IAML | | 00 36 26.9 | |
| | comp=E,144nm,0.7s | | | | | | |
| Q23K | Middleton Isla | 3.06 | 23 | Pn | Pn | 00 35 39.9 | -0.5 |
| Q23K | | | | IAML | | 00 36 19.6 | |
| | comp=E,130nm,0.7s | | | | | | |
| Q23K | | | | IAML | | 00 36 21.4 | |
| | comp=N,104nm,0.9s | | | | | | |
| MID | Middleton Isla | 3.06 | 23 | Pn | Pn | 00 35 39.9 | -0.5 |
| MID | | | | | Sn | 00 36 14.9 | -2.1 |
| MID | | | | IAML | | 00 36 17.5 | |
| | comp=E,131nm,1.0s | | | | | | |
| MID | | | | IAML | | 00 36 21.4 | |
| | comp=N,103nm,0.7s | | | | | | |
| CNPM | China Poot | 3.20 | 336 | | Pn | 00 35 42.6 | +0.2 |
| CNPM | | | | IAML | | 00 36 26.1 | |
| | comp=E,88nm,1.1s | | | | | | |
| R18K | Karluk | 3.29 | 289 | | Pn | 00 35 43.0 | -0.5 |
| R18K | | | | | Sn | 00 36 20.6 | -2.1 |
| R18K | | | | IAML | | 00 36 31.4 | |
| | comp=E,178nm,0.5s | | | | | | |
| BRSE | Bradley Lake S | 3.30 | 341 | | Pn | 00 35 43.8 | 0.0 |
| BRSE | | | | | Sn | 00 36 21.1 | -1.9 |
| BRLK | Bradley Lake | 3.34 | 340 | | Pn | 00 35 44.5 | 0.0 |
| BRLK | | | | IAML | | 00 36 29.6 | |
| | comp=N,80nm,1.0s | | | | | | |
| SEW | Seward | 3.50 | 354 | | Pn | 00 35 46.1 | -0.3 |
| Q19K | Cape Douglas, | 3.52 | 313 | | Pn | 00 35 47.7 | +0.9 |
| Q19K | | | | IAML | | 00 36 42.7 | |
| | comp=N,163nm,0.9s | | | | | | |
| KAHG | Katmai Hook Gl | 3.67 | 303 | | Pn | 00 35 49.9 | +0.9 |
| P19K | Oil Pt | 3.87 | 323 | Pn | Pn | 00 35 52.2 | +0.6 |
| P19K | | | | IAML | | 00 36 43.8 | |
| | comp=E,126nm,0.7s | | | | | | |
| ACHA | Angle Creek He | 3.93 | 296 | | Pn | 00 35 52.4 | -0.1 |
| HIN | Hinchinbrook I | 3.94 | 16 | | Pn | 00 35 52.7 | +0.2 |
| KAHC | Katmai Hardscr | 3.96 | 303 | | Pn | 00 35 53.2 | +0.3 |
| KAIM | Kayak Island | 3.99 | 32 | | Pn | 00 35 53.0 | -0.2 |
| ANCK | Angle Creek | 4.01 | 296 | | Pn | 00 35 54.6 | +1.1 |
| O20K | Slope Mountain | 4.03 | 331 | | Pn | 00 35 54.6 | +0.7 |
| EYAK | Cordova Ski Ar | 4.21 | 20 | | Pn | 00 35 56.5 | +0.3 |
| CNTC | Contact Creek | 4.22 | 296 | | Pn | 00 35 57.1 | +0.6 |
| PWL | Port Wells | 4.24 | 2 | | Pn | 00 35 56.8 | +0.2 |
| PWL | | | | IAML | | 00 36 49.2 | |
| | comp=E,78nm,0.6s | | | | | | |
| PWL | | | | IAML | | 00 36 50.8 | |
| | comp=N,59nm,0.6s | | | | | | |
| PLK3 | Peulik 3 | 4.27 | 287 | | Pn | 00 35 57.3 | +0.2 |
| SUCK | Suckling Hills | 4.30 | 35 | | Pn | 00 35 57.5 | 0.0 |
| SUCK | | | | IAML | | 00 36 51.0 | |
| | comp=N,81nm,0.6s | | | | | | |
| SUCK | | | | IAML | | 00 36 52.8 | |
| | comp=E,63nm,0.5s | | | | | | |
| RAGM | Ragged Mountai | 4.30 | 27 | | Pn | 00 35 57.8 | +0.2 |
| PLK4 | Peulik 4 | 4.31 | 287 | | Pn | 00 35 57.6 | -0.1 |
| PLK4 | | | | IAML | | 00 36 57.3 | |
| | comp=E,64nm,0.8s | | | | | | |
| PLK4 | | | | IAML | | 00 37 03.1 | |
| | comp=N,54nm,1.2s | | | | | | |
| GLI | Glacier Island | 4.33 | 10 | | Pn | 00 35 58.1 | +0.2 |
| GLI | | | | IAML | | 00 36 49.0 | |
| | comp=N,61nm,0.7s | | | | | | |
| GLI | | | | IAML | | 00 36 52.3 | |
| | comp=E,58nm,0.8s | | | | | | |
| RED | Redoubt Volcan | 4.36 | 332 | | Pn | 00 35 58.6 | +0.2 |
| HMT | Hamilton | 4.37 | 30 | | Pn | 00 35 58.8 | +0.3 |
| RSO | Redoubt South | 4.39 | 333 | | Pn | 00 35 59.4 | +0.5 |
| RDT | Redoubt | 4.40 | 335 | | Pn | 00 35 58.9 | 0.0 |
| RDWB | Redoubt West | 4.43 | 332 | | Pn | 00 35 59.2 | -0.3 |
| P18K | Big Mountain, | 4.45 | 311 | | Pn | 00 35 59.6 | 0.0 |
| GOAT | Goat Mountain | 4.46 | 26 | | Pn | 00 35 59.8 | +0.1 |
| BGLC | Bering Glacier | 4.50 | 37 | | Pn | 00 36 00.2 | +0.1 |
| RC01 | Rabbit Creek A | 4.50 | 353 | | Pn | 00 36 00.7 | +0.4 |
| RC01 | | | | IAML | | 00 36 54.2 | |
| | comp=N,67nm,0.4s | | | | | | |
| SNH | Sunshine Point | 4.69 | 38 | | Pn | 00 36 02.5 | -0.4 |
| SNH | | | | IAML | | 00 37 08.0 | |
| | comp=E,43nm,0.6s | | | | | | |
| SNH | | | | IAML | | 00 37 18.5 | |
| | comp=N,35nm,0.9s | | | | | | |
| O18K | Koktuh Hills | 4.72 | 316 | | Pn | 00 36 03.3 | -0.1 |
| DIV | Divide | 4.75 | 17 | | Pn | 00 36 03.9 | +0.2 |
| KHIT | Khitrov Hills | 4.75 | 34 | | Pn | 00 36 03.4 | -0.4 |
| KNK | Knik Glacier | 4.79 | 1 | | Pn | 00 36 04.7 | +0.5 |
| KNK | | | | IAML | | 00 37 03.4 | |
| | comp=E,44nm,0.7s | | | | | | |
| KNK | | | | IAML | | 00 37 03.5 | |
| | comp=N,33nm,0.9s | | | | | | |
| BMRM | Bremner River | 4.83 | 24 | | Pn | 00 36 04.6 | -0.2 |
| P17K | Kvichak River | 4.87 | 305 | | Pn | 00 36 05.7 | +0.4 |
| SPU | Mount Spurr | 4.88 | 340 | | Pn | 00 36 06.1 | +0.6 |
| SPU | | | | IAML | | 00 37 04.6 | |
| | comp=E,27nm,0.6s | | | | | | |
| WAX | Waxell Ridge | 4.88 | 36 | | Pn | 00 36 05.5 | -0.1 |
| MESA | MESA | 5.00 | 42 | Pn | Pn | 00 36 07.1 | -0.2 |
| MESA | | | | IAML | | 00 37 18.7 | |
| | comp=N,39nm,0.4s | | | | | | |
| MESA | | | | IAML | | 00 38 07.9 | |
| | comp=E,44nm,0.2s | | | | | | |
| CRQM | Cirque | 5.03 | 33 | | Pn | 00 36 07.7 | 0.0 |
| CRQM | | | | IAML | | 00 37 14.4 | |
| | comp=E,48nm,0.8s | | | | | | |
| KLU | Klutina | 5.07 | 15 | | Pn | 00 36 08.6 | +0.5 |
| KLU | | | | IAML | | 00 37 08.4 | |
| | comp=E,39nm,0.8s | | | | | | |
| KLU | | | | IAML | | 00 37 14.1 | |
| | comp=N,34nm,0.7s | | | | | | |
| TGL | Tana Glacier | 5.13 | 34 | | Pn | 00 36 08.8 | -0.1 |
| TGL | | | | IAML | | 00 37 09.5 | |
| | comp=N,28nm,0.4s | | | | | | |
| TGL | | | | IAML | | 00 37 11.1 | |
| | comp=E,38nm,0.5s | | | | | | |
| STLK | Strandline Lak | 5.14 | 343 | | Pn | 00 36 09.6 | +0.5 |
| GHO | Glory Hole Cre | 5.15 | 359 | | Pn | 00 36 10.6 | +1.4 |
| N19K | Bonanza Creek | 5.17 | 327 | | Pn | 00 36 09.2 | -0.3 |
| ISLE | Juniper Island | 5.17 | 37 | | Pn | 00 36 09.2 | -0.3 |
| ISLE | | | | IAML | | 00 37 29.6 | |
| | comp=E,31nm,1.2s | | | | | | |
| ISLE | | | | IAML | | 00 37 45.8 | |
| | comp=N,32nm,1.3s | | | | | | |
| BAGL | Bagley Icefiel | 5.17 | 39 | | Pn | 00 36 09.2 | -0.2 |
| SML | Sawmill | 5.19 | 2 | | Pn | 00 36 10.2 | +0.5 |
| SML | | | | IAML | | 00 37 12.4 | |
| | comp=N,47nm,0.9s | | | | | | |
| SML | | | | IAML | | 00 37 13.5 | |
| | comp=E,34nm,0.7s | | | | | | |
| SCM | Sheep Creek Mo | 5.25 | 7 | | Pn | 00 36 11.4 | +0.7 |
| RKAV | Rock Avalanche | 5.31 | 43 | | Pn | 00 36 10.8 | -0.7 |
| N25K | Chitina, Valde | 5.40 | 21 | | Pn | 00 36 13.2 | +0.4 |
| CHGN | Chignik | 5.42 | 270 | Pn | Pn | 00 36 12.3 | -0.4 |
| SAMH | Samovar Hills | 5.43 | 47 | | Pn | 00 36 13.0 | 0.0 |
| GLB | Gilahina Butte | 5.43 | 25 | | Pn | 00 36 13.2 | +0.1 |
| O17K | Koliganek Bris | 5.45 | 309 | | Pn | 00 36 13.5 | +0.2 |
| GRNC | Granite Creek | 5.46 | 38 | | Pn | 00 36 13.3 | -0.4 |
| TABL | Table Mountain | 5.48 | 43 | | Pn | 00 36 13.7 | -0.2 |
| BALM | Baldy | 5.50 | 34 | | Pn | 00 36 13.9 | -0.1 |
| P16K | Nushagak River | 5.53 | 300 | | Pn | 00 36 14.9 | +0.6 |
| N18K | Kilae Creek | 5.53 | 320 | | Pn | 00 36 14.2 | -0.2 |
| SKT | Skwentna | 5.55 | 346 | | Pn | 00 36 15.1 | +0.4 |
| PTPK | Patty Peak | 5.58 | 33 | | Pn | 00 36 15.2 | 0.0 |
| MCARA | McCarthy VSAT | 5.58 | 29 | | Pn | 00 36 14.9 | -0.1 |
| PCA | Pinnacle | 5.62 | 48 | | Pn | 00 36 15.5 | -0.2 |
| M24K | Tolsona, Glenn | 5.63 | 12 | | Pn | 00 36 16.8 | +1.0 |
| M20K | Styx River | 5.73 | 338 | | Pn | 00 36 17.1 | -0.2 |
| PNL | Peninsula | 5.77 | 54 | | Pn | 00 36 17.3 | -0.4 |
| CTGM | Chitina Glacie | 5.77 | 38 | | Pn | 00 36 17.4 | -0.5 |
| LOGN | Logan Glacier | 5.79 | 40 | | Pn | 00 36 17.7 | -0.4 |
| WACK | Wrangell Chich | 5.80 | 21 | | Pn | 00 36 18.8 | +0.5 |
| BCPM | Bancas Point | 5.80 | 51 | | Pn | 00 36 18.0 | -0.2 |
| O16K | Kokwok River B | 5.81 | 305 | | Pn | 00 36 18.6 | +0.5 |
| N17K | Nushagak Hills | 5.92 | 315 | Pn | Pn | 00 36 19.7 | 0.0 |
| WAZA | Wrangell Mount | 5.92 | 21 | | Pn | 00 36 20.1 | +0.1 |
| M19K | Big River Lodg | 6.04 | 333 | | Pn | 00 36 21.1 | -0.2 |
| O28M | Mount Upton | 6.05 | 43 | | Pn | 00 36 21.4 | -0.5 |
| L19K | White Mountain | 6.39 | 333 | | Pn | 00 36 25.8 | -0.4 |
| O29M | Mount Kennedy | 6.44 | 51 | | Pn | 00 36 27.1 | +0.1 |
| M26K | Nabesna, AK | 6.46 | 24 | | Pn | 00 36 27.1 | -0.1 |
| O15K | Ungalikthiuk R | 6.47 | 298 | | Pn | 00 36 27.6 | +0.4 |
| DHY | Denali Highway | 6.49 | 5 | | Pn | 00 36 29.9 | +2.2 |
| P29M | Windy Craggy | 6.52 | 58 | | Pn | 00 36 27.4 | -0.6 |
| N16K | Nishlik Lake | 6.53 | 310 | | Pn | 00 36 28.0 | -0.2 |
| YUK2 | White River | 6.54 | 35 | | Pn | 00 36 29.0 | +0.7 |
| PAX | Paxson | 6.55 | 13 | | Pn | 00 36 29.4 | +0.9 |
| M17K | Holitna River | 6.58 | 320 | Pn | Pn | 00 36 29.1 | +0.3 |
| M27K | Edge Creek, AK | 6.69 | 28 | | Pn | 00 36 30.9 | +0.5 |
| RND | Reindeer | 6.79 | 359 | Pn | Pn | 00 36 33.0 | +1.3 |
| S31K | Pelican | 6.87 | 74 | | Pn | 00 36 30.5 | -2.2 |
| YUK6 | Outpost Mounta | 6.87 | 47 | | Pn | 00 36 33.0 | 0.0 |
| M16K | Timber Creek | 6.91 | 314 | | Pn | 00 36 33.8 | +0.4 |
| L18K | Granite Mounta | 6.93 | 327 | Pn | Pn | 00 36 33.0 | -0.6 |
| L26K | Log Cabin Wild | 6.94 | 20 | | Pn | 00 36 33.2 | -0.6 |
| N15K | Kwethluk River | 6.96 | 305 | | Pn | 00 36 34.8 | +0.7 |
| CAST | Castle Rocks | 7.01 | 347 | | Pn | 00 36 35.8 | +1.1 |
| P30M | Million Dollar | 7.07 | 56 | | Pn | 00 36 35.7 | +0.1 |
| O14K | Tigyukauivet M | 7.20 | 297 | Pn | Pn | 00 36 37.4 | +0.2 |
| K20K | Telida | 7.26 | 340 | | Pn | 00 36 39.3 | +1.1 |
| L27K | Beaver Creek, | 7.30 | 25 | Pn | Pn | 00 36 38.7 | 0.0 |
| BCAR | Beaver Creek A | 7.31 | 25 | Pn | Pn | 00 36 39.4 | +0.5 |
| SIT | Sitka | 7.33 | 81 | Pn | Pn | 00 36 37.0 | -2.0 |
| S12K | Black Hills | 7.54 | 268 | Pn | Pn | 00 36 40.5 | -1.4 |
| BPAW | Bear Paw Mtn. | 7.57 | 352 | Pn | Pn | 00 36 43.0 | +0.6 |
| SKAG | Skagway | 7.62 | 63 | Pn | Pn | 00 36 42.8 | -0.3 |
| BESE | Bessie Mountai | 7.67 | 70 | Pn | Pn | 00 36 42.4 | -1.4 |
| N30M | Aishikik Lake | 7.67 | 46 | | Pn | 00 36 43.9 | 0.0 |
| S32K | Killisnoo | 7.73 | 78 | Pn | Pn | 00 36 41.6 | -2.9 |
| O30N | Mendenhall | 7.74 | 52 | | Pn | 00 36 44.3 | -0.5 |
| M29M | Somme Creek | 7.79 | 37 | | Pn | 00 36 45.7 | +0.2 |
| K17K | Iditarod | 7.80 | 325 | Pn | Pn | 00 36 45.3 | -0.1 |
| R32K | Eaglecrest | 7.81 | 72 | Pn | Pn | 00 36 43.7 | -1.9 |
| CCB | Clear Creek Bu | 8.04 | 3 | Pn | Pn | 00 36 50.6 | +1.8 |
| J25K | Salcha River, | 8.16 | 10 | Pn | Pn | 00 36 50.5 | 0.0 |
| ILAR | Eielson Array | 8.21 | 5 | Pn | Pn | 00 36 51.7 | +0.7 |
| ILAR | Eielson Array | 8.21 | 5 | Pn | Pn | 00 36 52.1 | +1.0 |
| | comp=E,0.2nm,0.3s,baz=189,slow=13,SNR=8.7 | | | | | | |
| ILAR | | | | Sn | Sn | 00 38 20.5 | -3.2 |
| | comp=E,0.4nm,0.3s,baz=190,slow=22,SNR=6.6 | | | | | | |
| ILAR | | | | LR | LR | 00 40 28.9 | |
| | comp=E,27nm,19.5s,baz=250,slow=40 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| N31M | Braeburn, Yuko | 8.22 | 48 | | Pn | 00 36 51.7 | +0.4 |
| WHY | Whitehorse | 8.24 | 55 | Pn | Pn | 00 36 51.5 | -0.1 |
| J26L | Joseph Creek | 8.27 | 16 | | Pn | 00 36 52.4 | +0.3 |
| MDM | Murphy Dome | 8.35 | 1 | Pn | Pn | 00 36 53.2 | +0.2 |
| L29M | L29M | 8.37 | 35 | | Pn | 00 36 54.1 | +0.7 |
| P32M | Atlin | 8.45 | 63 | | Pn | 00 36 53.7 | -0.8 |
| M30M | Minto, Yukon | 8.46 | 40 | | Pn | 00 36 54.7 | +0.1 |
| I23K | Minto, Yukon-K | 8.54 | 358 | | Pn | 00 36 56.5 | +0.8 |
| P33M | Teslin, Yukon | 9.05 | 60 | Pn | Pn | 00 37 02.1 | -0.6 |
| Q32M | Nakina River | 9.06 | 68 | Pn | Pn | 00 37 01.6 | -1.3 |
| K29M | Barlow Dome | 9.09 | 33 | Pn | Pn | 00 37 03.8 | +0.4 |
| M31M | Drury Creek, Y | 9.15 | 47 | Pn | Pn | 00 37 04.5 | +0.4 |
| N32M | Quiet Lake | 9.24 | 54 | Pn | Pn | 00 37 04.6 | -0.7 |
| H21K | Melozitna Rive | 9.26 | 349 | Pn | Pn | 00 37 05.7 | +0.1 |
| IMAR | Indian Mountai | 9.68 | 348 | Pn | Pn | 00 37 11.8 | +0.5 |
| H02S1 | DAWSON INLET T | 9.93 | 103 | T | T | 00 47 01.1 | |
| | SNR=4.0 | | | | | | |
| J30M | Hart River | 9.98 | 32 | | Pn | 00 37 17.0 | +1.5 |
| G23K | Bananza Creek | 10.13 | 357 | | Pn | 00 37 17.3 | -0.1 |
| DLBC | Dease Lake | 10.18 | 72 | Pn | Pn | 00 37 16.2 | -2.0 |
| | comp=E,0.4nm,0.3s,baz=241,slow=19,SNR=4.5 | | | | | | |
| DLBC | | | | Sn | Sn | 00 39 07.1 | -5.2 |
| | comp=E,0.2nm,0.3s,baz=145,slow=20,SNR=2.7 | | | | | | |
| MMPY | Sheldon Lake, | 10.63 | 49 | | Pn | 00 37 24.9 | +0.6 |
| BBB | Bella Bella | 12.76 | 102 | LR | LR | 00 41 37.4 | |
| | comp=E,62nm,19.0s,baz=314,slow=32 | | | | | | |
| INK | Inuvik | 13.58 | 24 | Pn | Pn | 00 38 07.5 | +3.1 |
| | comp=E,0.1nm,0.3s,baz=207,slow=7.3,SNR=1.5 | | | | | | |
| INK | | | | LR | LR | 00 43 33.7 | |
| | comp=E,33nm,18.8s,baz=214,slow=38 | | | | | | |
| | comp=E,1.3nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 18.06 | 57 | P | Pn | 00 39 04.9 | +2.1 |
| | comp=E,0.1nm,0.3s,baz=252,slow=9.7,SNR=2.4 | | | | | | |
| YKA | | | | LR | LR | 00 45 50.3 | |
| | comp=E,43nm,18.4s,baz=51,slow=36 | | | | | | |
| | comp=E,0.8nm,0.8s | | | | | | |
| NEW | Newport | 20.81 | 100 | P | P | 00 39 35.7 | +2.3 |
| | comp=E,0.6nm,0.3s,baz=266,slow=19,SNR=1.6 | | | | | | |
| NEW | | | | LR | LR | 00 46 21.5 | |
| | comp=E,29nm,18.6s,baz=26,slow=33 | | | | | | |
| | comp=E,0.6nm,0.3s | | | | | | |
| YBH | Yreka Blue Hor | 22.40 | 121 | LR | LR | 00 46 19.5 | |
| | comp=E,30nm,20.2s,baz=206,slow=31 | | | | | | |
| NVAR | Mina Array Bea | 27.08 | 119 | P | P | 00 40 34.1 | -0.9 |
| | comp=E,0.2nm,0.3s,baz=286,slow=7.4,SNR=1.9 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| MA2 | Magadan | 31.16 | 301 | LR | LR | 00 54 33.0 | |
| | comp=E,28nm,19.8s,baz=94,slow=38 | | | | | | |
| TIXI | Tiksi | 35.55 | 327 | LR | LR | 00 56 46.5 | |
| | comp=E,15nm,18.2s,baz=68,slow=37 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 49.36 | 240 | T | T | 01 37 20.8 | |
| | baz=30 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 49.36 | 240 | T | T | 01 37 24.2 | |
| | baz=30 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 49.38 | 240 | T | T | 01 37 32.4 | |
| | baz=30 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 50.50 | 240 | T | T | 01 38 59.7 | |
| | baz=32 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 50.51 | 240 | T | T | 01 39 04.2 | |
| | baz=32 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 50.52 | 240 | T | T | 01 39 00.2 | |
| | baz=32 | | | | | | |
| SONM | Songino Array | 58.67 | 310 | P | P | 00 44 49.5 | +0.2 |
| | comp=E,0.2nm,0.4s,baz=46,slow=8.3,SNR=1.6 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| ZALV | Zalesovo Beam | 61.44 | 327 | P | P | 00 45 09.1 | +1.0 |
| | comp=E,0.3nm,0.3s,baz=32,slow=8.5,SNR=1.6 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| FINES | FINESS Array B | 62.18 | 3 | P | P | 00 45 14.5 | +1.5 |
| | comp=E,0.4nm,0.5s,baz=5.2,slow=6.3,SNR=4.8 | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | |
| QSPA | South Pole Qui | 146.43 | 180 | PKPbc | PKPbc | 00 54 34.0 | +2.2 |
| | comp=E,0.6nm,0.9s,baz=16,slow=7.4,SNR=1.4 | | | | | | |

*IDC **02** 00:40:35.4±1.3, 2°.93S×147°.82E, h0km, mb3.8/8, mbtmp3.8/8, MS3.6/18, Error ellipse: s-maj=46.7km s-min=23.8km az=110.0*

**ISC 02 00:40:38.8**±1.2**, 3°.0S**±0°.2×**147°.8E**±0°.3**, h22**km**, n31, σ0s70**/9**, mb3.9**/8**, MS3.7**/17**, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.44 | 186 | LR | LR | 00 44 41.6 | |
| | comp=Z,310nm,21.4s,baz=315,slow=38 | | | | | | |
| CTA | Charters Tower | 17.09 | 185 | LR | LR | 00 50 33.9 | |
| | comp=Z,9.5nm,20.1s,baz=5.5,slow=35 | | | | | | |
| WRA | Warramunga Arr | 21.39 | 217 | P | P | 00 45 24.9 | -0.3 |
| | 4.3nm,0.8s,baz=41,slow=11,SNR=18 | | | | | | |
| WRA | | | | LR | LR | 00 54 59.2 | |
| | comp=Z,161nm,20.6s,baz=8.5,slow=40 | | | | | | |
| | 4.3nm,0.8s | | | | | | |
| DAV | Davao City (W) | 24.30 | 294 | LR | LR | 00 55 20.1 | |
| | comp=Z,48nm,19.1s,baz=140,slow=36 | | | | | | |
| ASAR | Alice Springs | 24.58 | 212 | P | P | 00 45 58.0 | +0.4 |
| | 2.3nm,0.6s,baz=38,slow=7.2,SNR=29 | | | | | | |
| ASAR | | | | LR | LR | 00 56 27.6 | |
| | comp=Z,237nm,18.7s,baz=63,slow=39 | | | | | | |
| | 2.3nm,0.6s | | | | | | |
| DZM | Mont Dzumac | 26.25 | 138 | LR | LR | 00 54 52.6 | |
| | comp=Z,145nm,20.0s,baz=111,slow=33 | | | | | | |
| KAPI | Kappang | 28.05 | 265 | LR | LR | 00 58 20.8 | |
| | comp=Z,48nm,20.5s,baz=107,slow=38 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 28.29 | 40 | T | T | 01 16 09.7 | |
| | baz=222,slow=75,SNR=162 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 28.30 | 40 | T | T | 01 16 11.5 | |
| | baz=222,slow=75,SNR=100 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 28.31 | 40 | T | T | 01 16 12.2 | |
| | baz=222,slow=75,SNR=134 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.32 | 39 | T | T | 01 17 24.4 | |
| | baz=221,slow=76,SNR=86 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.33 | 39 | T | T | 01 17 25.2 | |
| | baz=221,slow=76,SNR=192 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.34 | 39 | T | T | 01 17 25.7 | |
| | baz=221,slow=76,SNR=187 | | | | | | |
| STKA | Stephens Creek | 29.36 | 191 | LR | LR | 00 58 32.5 | |
| | comp=Z,98nm,19.0s,baz=23,slow=37 | | | | | | |
| NWAO | Narrogin (SRO) | 41.33 | 220 | LR | LR | 01 06 52.0 | |
| | comp=Z,244nm,20.0s,baz=6.5,slow=38 | | | | | | |
| CMAR | Chiang Mai Arr | 52.58 | 296 | P | P | 00 49 51.6 | +0.3 |
| | 2.0nm,0.3s,baz=116,slow=6.1,SNR=2.1 | | | | | | |
| | 2.0nm,0.3s | | | | | | |
| SONM | Songino Array | 62.17 | 330 | P | P | 00 50 58.4 | -0.2 |
| | 0.3nm,0.3s,baz=134,slow=6.2,SNR=3.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| MA2 | Magadan | 62.39 | 2 | LR | LR | 01 13 56.7 | |
| | comp=Z,24nm,21.9s,baz=150,slow=32 | | | | | | |
| MKAR | Makanchi Array | 75.68 | 320 | P | P | 00 52 23.6 | +1.1 |
| | 0.4nm,0.8s,baz=100,slow=7.5,SNR=2.5 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| KDAK | Kodiak Island | 76.86 | 28 | LR | LR | 01 22 54.4 | |
| | comp=Z,29nm,19.7s,baz=247,slow=33 | | | | | | |
| KURBB | Kurchatov Arra | 79.29 | 323 | P | P | 00 52 42.0 | -0.7 |
| | 0.3nm,0.7s,baz=111,slow=5.1,SNR=2.8 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| ILAR | Eielson Array | 82.39 | 23 | P | P | 00 52 58.7 | -0.2 |
| | 0.3nm,0.7s,baz=240,slow=7.2,SNR=3.2 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| DLBC | Dease Lake | 88.40 | 31 | LR | LR | 01 27 37.4 | |
| | comp=Z,39nm,19.1s,baz=324,slow=32 | | | | | | |
| INK | Inuvik | 88.55 | 21 | LR | LR | 01 30 22.3 | |
| | comp=Z,39nm,18.9s,baz=259,slow=34 | | | | | | |
| BBB | Bella Bella | 88.69 | 38 | LR | LR | 01 25 41.3 | |
| | comp=Z,48nm,20.6s,baz=218,slow=30 | | | | | | |
| YBH | Yreka Blue Hor | 91.57 | 48 | LR | LR | 01 27 30.1 | |
| | comp=Z,38nm,19.7s,baz=284,slow=31 | | | | | | |
| ARU | Arti | 92.01 | 326 | LR | LR | 01 34 57.2 | |
| | comp=Z,11nm,21.6s,baz=74,slow=36 | | | | | | |
| NVAR | Mina Array Bea | 94.88 | 52 | P | P | 00 54 00.2 | +0.3 |
| | 0.2nm,0.4s,baz=269,slow=3.6,SNR=1.6 | | | | | | |
| NVAR | | | | LR | LR | 01 28 48.7 | |
| | comp=Z,46nm,20.9s,baz=269,slow=30 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| NEW | Newport | 95.58 | 42 | LR | LR | 01 30 56.7 | |
| | comp=Z,24nm,18.9s,baz=254,slow=32 | | | | | | |
| PFO | Pinyon Flats O | 96.41 | 57 | LR | LR | 01 28 01.6 | |
| | comp=Z,38nm,21.9s,baz=221,slow=30 | | | | | | |
| TORD | Torodi Ar. Bea | 144.99 | 289 | PKPbc | PKPab | 01 00 13.9 | -0.9 |
| | 1.3nm,1.1s,baz=74,slow=6.2,SNR=4.6 | | | | | | |

**IDC 02 00:44:26.2**±8.3**, 2°.31S**×**138°.02E, h0**km**, mb3.3**/3**, mbtmp3.3**/4**, ML3.1**/1**, Error ellipse: s-maj=378.1km s-min=28.8km az=85.0, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 17.89 | 191 | P | Pn | 00 48 36.8 | +0.1 |
| | 0.1nm,0.3s,baz=13,slow=12,SNR=4.9 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| ASAR | Alice Springs | 21.61 | 190 | P | P | 00 49 18.0 | 0.0 |
| | 0.2nm,0.3s,baz=12,slow=10,SNR=4.0 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 69.05 | 323 | P | P | 00 55 33.7 | -0.2 |
| | 0.3nm,0.6s,baz=116,slow=6.7,SNR=3.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 73.00 | 325 | P | P | 00 55 58.1 | +0.3 |
| | 0.4nm,0.7s,baz=117,slow=3.2,SNR=1.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

**NEIC 02 01:24:12.8**±2.2**, 31°.67N**±0°.05×**104°.43W**±0°.02**, h5**km±1km**, mb_Lg2.4**/29**, ML2.6**/32**, Error ellipse: s-maj=8.4km s-min=3.6km az=353.0, Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PECS | Pecos | 0.57 | 121 | Pg | Pb | 01 24 24.9 | -0.4 |
| PECS | | | | Sg | Sg | 01 24 31.5 | +0.4 |
| VHRN | Van Horn | 1.00 | 209 | Pn | Pn | 01 24 34.0 | +0.4 |
| ALPN | Alpine | 1.46 | 152 | | Pb | 01 24 40.6 | 0.0 |
| MNHN | Monahans | 1.46 | 102 | | Pb | 01 24 40.4 | -0.2 |
| ODSA | Odessa | 1.66 | 74 | Pg | Pb | 01 24 44.4 | +0.3 |
| TX31 | Lajitas Ar. Si | 2.42 | 164 | | Pn | 01 24 54.5 | +1.4 |
| TXAR | Lajitas Array | 2.42 | 164 | | Pn | 01 24 54.9 | +1.8 |
| SAND | Sanderson | 2.62 | 130 | | Pn | 01 24 55.9 | 0.0 |
| SAND | | | | IAmb_Lg | | 01 25 43.0 | |
| | comp=Z,19nm,0.7s | | | | | | |
| SGCY | Sterling City | 2.83 | 84 | Pn | Pn | 01 24 58.7 | 0.0 |
| SGCY | | | | IAmb_Lg | | 01 25 45.3 | |
| | comp=Z,19nm,1.1s | | | | | | |
| POST | Post | 2.84 | 60 | | Pn | 01 24 59.4 | +0.4 |
| POST | | | | IAmb_Lg | | 01 25 41.5 | |
| | comp=Z,13nm,1.1s | | | | | | |
| OZNA | Ozona | 2.92 | 104 | Pn | Pn | 01 25 01.7 | +1.6 |
| OZNA | | | | IAmb_Lg | | 01 25 49.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| 121A | Cookes Peak, D | 2.97 | 288 | Pn | Pn | 01 25 01.2 | +0.3 |
| 121A | | | | IAML | | 01 25 54.3 | |
| | comp=E,17nm,0.6s | | | | | | |
| 121A | | | | IAML | | 01 25 55.6 | |
| | comp=N,19nm,0.4s | | | | | | |
| Y22D | IRIS PASSCAL I | 3.19 | 320 | Pn | Pn | 01 25 05.1 | +1.4 |
| SN05 | Snyder 5 | 3.24 | 67 | IAmb_Lg | | 01 25 57.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| SN07 | Snyder 07 | 3.31 | 64 | IAmb_Lg | | 01 26 05.9 | |
| | comp=Z,15nm,0.9s | | | | | | |
| DKNS | Dickens | 3.57 | 55 | Pn | Pn | 01 25 11.0 | +2.1 |
| DKNS | | | | IAmb_Lg | | 01 26 07.6 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| ANMO | Albuquerque | 3.68 | 333 | Pn | Pn | 01 25 11.9 | +1.3 |
| ANMO | | | | IAML | | 01 26 10.2 | |
| | comp=Z,13nm,0.7s | | | | | | |
| ANMO | | | | IAML | | 01 26 10.6 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| AMTX | Amarillo | 3.95 | 35 | Pn | Pn | 01 25 15.3 | +1.1 |
| DRIO | Del Rio | 3.98 | 123 | Pn | Pn | 01 25 15.9 | +1.4 |
| DRIO | | | | IAmb_Lg | | 01 26 27.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| APMT | Aspermont | 4.00 | 64 | Pn | Pn | 01 25 13.9 | -0.9 |
| BRDY | Brady | 4.66 | 93 | IAmb_Lg | | 01 26 43.4 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| RTBA | Rita Blanca | 4.96 | 16 | Pn | Pn | 01 25 28.1 | -0.1 |
| WMOK | Wichita Mounta | 5.64 | 56 | IAmb_Lg | | 01 27 23.4 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| 435B | Jarrell | 5.93 | 97 | IAmb_Lg | | 01 27 25.6 | |
| | comp=Z,7.0nm,0.8s | | | | | | |

*ATH **02** 01:24:55.9, 38°.95N×26°.08E, h13km±1km, ML3.0/4, Error ellipse: s-maj=2.0km s-min=0.8km az=87.0*

*THE **02** 01:24:55.8, 38°.96N×26°.06E, h11km, ML3.0/5, Error*

*ellipse: s-maj=1.3km s-min=0.6km az=92.0*
*AFAD **02** 01:24:55.2±0.0, 38°.95N×26°.03E, h7km±4km, ML2.7*
*ISK **02** 01:24:55.1, 38°.95N×26°.04E, h13km, ML3.1/16*
**ISC 02 01:24:55.3**±0.9**, 38°.94N**±0°.02×**26°.09E**±0°.02**, h16**km±7km**,**
**n65,** σ**0s.59**/89**, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIGR | SIGRI | 0.32 | 326 | Pg | Pg | 01 25 01.7 | -0.4 |
| SIGR | | | | Sg | Sg | 01 25 06.5 | -0.2 |
| SIGR | SIGRI | 0.32 | 326 | P | Pg | 01 25 02.0 | -0.1 |
| SIGR | | | | S | Sg | 01 25 06.5 | -0.2 |
| | 4µm,0.3s | | | | | | |
| SIGR | SIGRI | 0.32 | 326 | P | Pg | 01 25 02.0 | -0.1 |
| SIGR | | | | AML | AML | 01 25 06.8 | |
| | comp=E,8818µm,0.3s | | | | | | |
| SIGR | | | | S | Sg | 01 25 07.0 | +0.3 |
| SIGR | | | | AML | AML | 01 25 07.2 | |
| | comp=N,7658µm,0.2s | | | | | | |
| PRK | Paraskevi | 0.34 | 26 | P | Pb | 01 25 02.5 | -0.5 |
| PRK | | | | S | Sb | 01 25 07.5 | -0.6 |
| | comp=N,3µm,0.4s | | | | | | |
| PRK | Paraskevi | 0.34 | 26 | P | Pb | 01 25 02.4 | -0.5 |
| PRK | | | | S | Sb | 01 25 07.8 | -0.4 |
| PRK | | | | AML | AML | 01 25 09.0 | |
| | comp=N,6824µm,0.4s | | | | | | |
| PRK | | | | AML | AML | 01 25 12.1 | |
| | comp=E,3222µm,0.4s | | | | | | |
| KARB | zmir-Karabur | 0.38 | 137 | P | Pb | 01 25 03.5 | -0.2 |
| KARB | | | | S | Sb | 01 25 08.9 | -0.5 |
| KARB | | | | i AML | AML | 01 25 10.0 | |
| | comp=E,570nm,0.3s | | | | | | |
| KARB | | | | i AML | AML | 01 25 11.0 | |
| | comp=E,499nm,0.3s | | | | | | |
| EAG2 | Marmaro, Chios | 0.40 | 177 | P | Pb | 01 25 03.7 | -0.3 |
| GPNR | Gulpinar-Canak | 0.51 | 4 | Pg | Pg | 01 25 05.4 | -0.2 |
| GPNR | | | | Sg | Sb | 01 25 13.3 | +0.1 |
| FOCM | Foa | 0.56 | 114 | Pg | Pb | 01 25 07.1 | +0.4 |
| FOCM | | | | Sg | Sn | 01 25 15.9 | -1.6 |
| CHOS | Chios island | 0.56 | 182 | Pg | Pb | 01 25 06.5 | -0.4 |
| CHOS | Chios island | 0.56 | 182 | P | Pb | 01 25 06.4 | -0.4 |
| CHOS | | | | S | Sb | 01 25 15.3 | +0.7 |
| | comp=E,2µm,0.3s | | | | | | |
| CHOS | Chios island | 0.56 | 182 | P | Pb | 01 25 06.4 | -0.4 |
| CHOS | | | | S | Sb | 01 25 14.5 | 0.0 |
| CHOS | | | | AML | AML | 01 25 17.6 | |
| | comp=N,1932µm,0.4s | | | | | | |
| CHOS | | | | AML | AML | 01 25 18.1 | |
| | comp=E,4739µm,0.2s | | | | | | |
| KOCA | Canakkale, Ayv | 0.56 | 4 | P | Pb | 01 25 06.4 | -0.4 |
| KOCA | | | | i AML | AML | 01 25 18.0 | |
| | comp=E,674nm,0.5s | | | | | | |
| KOCA | | | | i AML | AML | 01 25 18.0 | |
| | comp=E,387nm,0.2s | | | | | | |
| CAND | Candarli | 0.56 | 89 | Pg | Pb | 01 25 07.3 | +0.5 |
| AYVA | Ayvalik | 0.59 | 52 | P | Pb | 01 25 07.4 | 0.0 |
| AYVA | | | | S | Sb | 01 25 15.8 | +0.2 |
| AYVA | | | | i AML | AML | 01 25 18.0 | |
| | comp=E,1µm,0.3s | | | | | | |
| AYVA | | | | i AML | AML | 01 25 19.0 | |
| | comp=E,788nm,0.6s | | | | | | |
| CESE | eme | 0.64 | 165 | Pg | Pg | 01 25 07.2 | -0.6 |
| DKL | Dikili | 0.65 | 78 | Pg | Pn | 01 25 08.9 | -1.1 |
| IZMD | zmir-Dikili- | 0.66 | 86 | P | Pn | 01 25 10.0 | -0.1 |
| IZMD | | | | S | Sn | 01 25 20.8 | +0.5 |
| IZMD | | | | i AML | AML | 01 25 21.0 | |
| | comp=E,199nm,0.6s | | | | | | |
| IZMD | | | | i AML | AML | 01 25 22.0 | |
| | comp=E,104nm,0.4s | | | | | | |
| URLA | Izmir | 0.71 | 145 | Pg | Pn | 01 25 09.7 | -1.1 |
| URLA | Izmir | 0.71 | 145 | P | Pb | 01 25 09.2 | -0.2 |
| URLA | | | | S | Sn | 01 25 21.1 | -0.3 |
| URLA | | | | i AML | AML | 01 25 22.0 | |
| | comp=E,461nm,0.5s | | | | | | |
| URLA | | | | i AML | AML | 01 25 22.0 | |
| | comp=E,463nm,0.3s | | | | | | |
| ZEDA | zmir-Bergama | 0.77 | 88 | P | Pn | 01 25 11.4 | -0.3 |
| ZEDA | | | | i AML | AML | 01 25 23.0 | |
| | comp=E,324nm,0.4s | | | | | | |
| ZEDA | | | | S | Sn | 01 25 23.4 | +0.4 |
| ZEDA | | | | i AML | AML | 01 25 24.0 | |
| | comp=E,283nm,0.3s | | | | | | |
| ZEYE | Izmir, Urla-Ze | 0.78 | 155 | P | Pb | 01 25 10.3 | -0.2 |
| ZEYE | | | | S | Sn | 01 25 22.8 | -0.2 |
| ZEYE | | | | i AML | AML | 01 25 24.0 | |
| | comp=E,283nm,0.2s | | | | | | |
| ZEYE | | | | i AML | AML | 01 25 24.0 | |
| | comp=E,637nm,0.3s | | | | | | |
| EZNE | Ezine-Canakkal | 0.84 | 15 | Pg | Pb | 01 25 11.5 | -0.1 |
| BAYC | CANAKKALE_Bayr | 0.87 | 24 | P | Pb | 01 25 12.2 | 0.0 |
| BAYC | | | | i AML | AML | 01 25 26.0 | |
| | comp=E,401nm,0.5s | | | | | | |
| BAYC | | | | S | Sn | 01 25 26.3 | +0.8 |
| BAYC | | | | i AML | AML | 01 25 27.0 | |
| | comp=E,286nm,0.4s | | | | | | |
| EZN | Ezine | 0.90 | 12 | Pg | Pb | 01 25 12.5 | -0.1 |
| EZN | Ezine | 0.90 | 12 | P | Pg | 01 25 12.3 | -0.5 |
| EZN | | | | S | Sn | 01 25 25.5 | -0.6 |
| | comp=E,820nm,0.5s | | | | | | |
| BUHA | Balikesir, Bur | 0.95 | 54 | P | Pn | 01 25 14.0 | -0.1 |
| BUHA | | | | S | Sn | 01 25 27.4 | +0.1 |
| BUHA | | | | i AML | AML | 01 25 29.0 | |
| | comp=E,448nm,0.4s | | | | | | |
| BUHA | | | | i AML | AML | 01 25 29.0 | |
| | comp=E,536nm,0.3s | | | | | | |
| EFSA | Agios Efstrati | 1.04 | 305 | P | Pn | 01 25 15.4 | +0.1 |
| EFSA | | | | S | Sg | 01 25 29.2 | +0.2 |
| DGB | zmir | 1.09 | 145 | P | Pn | 01 25 15.8 | -0.2 |
| DGB | | | | i AML | AML | 01 25 33.0 | |
| | comp=E,113nm,0.2s | | | | | | |
| DGB | | | | i AML | AML | 01 25 35.0 | |
| | comp=E,119nm,0.3s | | | | | | |
| SOMA | Soma-Manisa | 1.15 | 79 | Pn | Pg | 01 25 17.4 | -0.1 |
| LIA | Limnos Island | 1.18 | 324 | P | Pn | 01 25 17.4 | +0.1 |
| LIA | | | | S | Sb | 01 25 32.5 | 0.0 |
| | comp=E,770nm,0.5s | | | | | | |
| LIA | Limnos Island | 1.18 | 324 | P | Pn | 01 25 17.3 | +0.1 |
| LIA | | | | S | Sb | 01 25 32.5 | 0.0 |
| LIA | | | | AML | AML | 01 25 34.7 | |
| | comp=E,1771µm,0.5s | | | | | | |
| LIA | | | | AML | AML | 01 25 35.5 | |
| | comp=N,1290µm,0.5s | | | | | | |
| COMU | Canakkale | 1.19 | 14 | Pn | Pg | 01 25 17.9 | -0.5 |
| SKY | Skiros Island | 1.20 | 267 | P | Pg | 01 25 19.0 | +0.5 |
| GADA | Gvkgeada | 1.25 | 353 | Pn | Pn | 01 25 18.4 | +0.1 |
| YENI | Yenice-Canakka | 1.34 | 42 | Pn | Pg | 01 25 20.1 | -1.0 |
| STEP | BALIKESIR_Sava | 1.34 | 71 | P | Pb | 01 25 20.0 | -0.2 |
| STEP | | | | S | Sg | 01 25 40.5 | +1.8 |
| STEP | | | | i AML | AML | 01 25 43.0 | |
| | comp=N,192nm,0.3s | | | | | | |
| STEP | | | | i AML | AML | 01 25 45.0 | |
| | comp=N,188nm,0.6s | | | | | | |
| AKHS | Akhisar | 1.35 | 92 | P | Pg | 01 25 22.0 | +0.6 |
| AKHS | | | | S | Sg | 01 25 41.4 | +2.4 |
| AKHS | | | | i AML | AML | 01 25 45.0 | |
| | comp=N,61nm,0.6s | | | | | | |
| BALY | Balya | 1.43 | 56 | P | Pg | 01 25 22.0 | -0.9 |
| BALY | | | | i AML | AML | 01 25 44.0 | |
| | comp=N,98nm,0.6s | | | | | | |
| BALY | | | | i AML | AML | 01 25 46.0 | |
| | comp=N,153nm,0.5s | | | | | | |
| GELI | Tayfur-Gelibol | 1.48 | 12 | Pn | Pb | 01 25 21.9 | -0.7 |
| LPK | Lapseki | 1.52 | 20 | Pn | Pb | 01 25 22.5 | -0.7 |
| KYMI | Kymi, Euboea I | 1.58 | 259 | P | Pn | 01 25 22.7 | -0.1 |
| SMTH | Samothraki Isl | 1.58 | 345 | P | Pn | 01 25 22.8 | -0.1 |
| SMTH | Samothraki Isl | 1.58 | 345 | P | Pn | 01 25 22.7 | -0.1 |
| BKES | Balkesir-Mer | 1.63 | 61 | P | Pb | 01 25 24.2 | -0.9 |
| BKES | | | | S | Sb | 01 25 45.2 | -0.3 |
| BKES | | | | i AML | AML | 01 25 50.0 | |
| | comp=N,70nm,0.6s | | | | | | |
| BKES | | | | i AML | AML | 01 25 52.0 | |
| | comp=N,90nm,0.5s | | | | | | |
| ERIK | Erikli-Kesan | 1.76 | 11 | Pn | Pn | 01 25 25.9 | +0.8 |
| ENEZ | Enez | 1.79 | 2 | Pn | Pn | 01 25 26.2 | +0.6 |
| ENEZ | Enez | 1.79 | 2 | P | Pn | 01 25 26.0 | +0.4 |
| DION | Dionisos Attik | 1.90 | 244 | P | Pn | 01 25 27.6 | +0.5 |
| APE | Apeiranthos | 1.92 | 193 | P | Pn | 01 25 27.3 | -0.2 |
| ALN | Alexandroupoli | 1.95 | 359 | P | Pn | 01 25 28.2 | +0.4 |
| ALN | Alexandroupoli | 1.95 | 359 | P | Pn | 01 25 28.1 | +0.2 |
| THAS | Thassos island | 1.97 | 328 | P | Pn | 01 25 27.8 | -0.2 |
| THAS | Thassos island | 1.97 | 328 | P | Pn | 01 25 27.9 | -0.1 |
| BODT | Bodrum | 2.11 | 152 | P | Pn | 01 25 29.7 | -0.4 |
| OUR | Ouranopolis | 2.14 | 311 | P | Pn | 01 25 30.4 | 0.0 |
| OUR | Ouranopolis | 2.14 | 311 | P | Pn | 01 25 31.0 | +0.6 |
| RDO | Rodhopi | 2.24 | 349 | P | Pn | 01 25 32.3 | +0.5 |
| RDO | Rodhopi | 2.24 | 349 | P | Pn | 01 25 32.4 | +0.6 |
| KAVA | Kavala | 2.38 | 330 | P | Pn | 01 25 34.0 | +0.3 |
| KOKK | Kokkinochori, | 2.46 | 320 | P | Pn | 01 25 35.0 | +0.1 |
| KOKK | Kokkinochori, | 2.46 | 320 | P | Pn | 01 25 35.0 | +0.1 |
| SOH | Sokhos | 2.82 | 313 | P | Pn | 01 25 40.6 | +0.8 |
| SRS | Serrai | 2.89 | 319 | P | Pn | 01 25 41.3 | +0.4 |
| NVR | Nevrokopi | 2.95 | 325 | P | Pn | 01 25 43.0 | +1.4 |

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*UPA **02** 01:53:09.8±0.8, 9°.06N×83°.89W, h8km±5km, MW3.2*
*UCR **02** 01:53:11.8±0.9, 9°.14N×83°.83W, h37km±11km, MW3.5*
*CATAC **02** 01:53:11.6±0.4, 9°.18N×83°.83W, h25km±5km, ML3.6*
**ISC 02 01:53:12.0**±1.1**, 9°.16N**±0°.04×**83°.84W**±0°.04**, h29**km±10km**,**
**n50,** σ**0s.92**/61**, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OCHAL | Ojochal | 0.20 | 108 | i P | Pn | 01 53 18.7 | -0.4 |
| OCHAL | | | | i S | Sn | 01 53 24.3 | +2.1 |
| OCHAL | | | | IAML | | 01 53 26.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| LLNJ | Naranjito | 0.41 | 320 | eP | Pb | 01 53 20.9 | 0.0 |
| EDPN | Palmar Norte | 0.42 | 118 | eP | Pb | 01 53 21.2 | 0.0 |
| RAZU | San Marcos de | 0.53 | 340 | eP | Pb | 01 53 23.1 | +0.1 |
| EDBA | Buenos Aires | 0.55 | 90 | eP | Pn | 01 53 22.2 | -1.8 |
| ABE2 | San Pablo | 0.58 | 338 | eP | Pn | 01 53 23.9 | -0.7 |
| DRK0 | Durika | 0.59 | 80 | i P | Pn | 01 53 23.1 | -1.6 |
| DRK0 | | | | i S | Sb | 01 53 32.4 | +0.1 |
| DRK0 | | | | IAML | | 01 53 32.9 | |
| | comp=Z,32µm,1.0s | | | | | | |
| DRK0 | Durika | 0.59 | 80 | eP | Pn | 01 53 23.3 | -1.4 |
| DRK0 | Durika | 0.59 | 80 | eP | Pn | 01 53 23.2 | -1.4 |
| DRK0 | | | | eS | Sb | 01 53 32.3 | +0.1 |
| LCR2 | La Lucha 2 | 0.60 | 344 | i P | Pn | 01 53 23.7 | -1.1 |
| LCR2 | | | | i S | Sb | 01 53 32.9 | +0.4 |
| LCR2 | | | | IAML | | 01 53 33.2 | |
| | comp=Z,830nm,1.0s | | | | | | |
| LCR2 | La Lucha 2 | 0.60 | 344 | eP | Pn | 01 53 23.8 | -1.1 |
| REPA | Paraso | 0.66 | 357 | eP | Pn | 01 53 25.8 | +0.1 |
| EDP2 | Potrero Grande | 0.67 | 102 | eP | Pn | 01 53 24.7 | -0.9 |
| ACOS | Acosta | 0.71 | 333 | eP | Pn | 01 53 25.3 | -1.0 |
| VINA | Juan Vinas | 0.73 | 7 | eP | Pn | 01 53 25.8 | -0.9 |
| PCAYA | Pacayas | 0.75 | 2 | eP | Pn | 01 53 26.3 | -0.7 |
| TRIO | Tres Rios | 0.76 | 348 | eP | Pn | 01 53 25.9 | -1.0 |
| VERB | Verbena | 0.79 | 10 | eP | Pn | 01 53 26.7 | -0.7 |
| RAFA | San Farael, Vo | 0.79 | 2 | i P | Pn | 01 53 27.0 | -0.6 |
| RAFA | | | | i S | Sn | 01 53 38.6 | -0.1 |
| RAFA | | | | IAML | | 01 53 40.0 | |
| | comp=Z,13µm,1.0s | | | | | | |
| RAFA | San Farael, Vo | 0.79 | 2 | eP | Pn | 01 53 26.9 | -0.7 |
| RAFA | | | | eS | Sn | 01 53 38.8 | +0.2 |
| PTJ1 | Puerto Jimnez | 0.81 | 140 | i P | Pn | 01 53 27.2 | -0.4 |
| PTJ1 | | | | i S | Sn | 01 53 40.3 | +1.6 |
| PTJ1 | | | | IAML | | 01 53 52.5 | |
| | comp=Z,2µm,1.0s | | | | | | |
| PTJ1 | Puerto Jimnez | 0.81 | 140 | eP | Pn | 01 53 25.1 | -2.5 |
| PTJ1 | Puerto Jimnez | 0.81 | 140 | eP | Pn | 01 53 27.4 | -0.2 |
| VICA | Volcano Irazu | 0.82 | 359 | eP | Pn | 01 53 27.3 | -0.8 |
| CORON | Coronado | 0.82 | 348 | eP | Pn | 01 53 27.6 | -0.3 |
| VTCV | VTCV, Calle Va | 0.82 | 8 | eP | Pn | 01 53 27.0 | -0.9 |
| EDAD | Golfito | 0.83 | 127 | eP | Pn | 01 53 26.2 | -1.7 |
| VTLA | Turrialba Volc | 0.84 | 4 | eP | Pn | 01 53 27.6 | -0.7 |
| CVTQ | Turrialba Volc | 0.84 | 5 | eP | Pn | 01 53 27.7 | -0.6 |
| CVTR | Volcan Turrial | 0.86 | 5 | eP | Pn | 01 53 28.0 | -0.6 |
| HDC | Heredia | 0.88 | 342 | eP | Pn | 01 53 28.0 | -0.7 |
| HDC | | | | eS | Sn | 01 53 40.9 | +0.4 |
| HDC3 | Heredia 3 | 0.88 | 342 | i P | Pn | 01 53 28.2 | -0.4 |
| HDC3 | | | | i S | Sn | 01 53 40.6 | +0.1 |
| HDC3 | | | | IAML | | 01 53 45.8 | |
| | comp=Z,970nm,1.0s | | | | | | |
| BELE | Belen | 0.88 | 337 | eP | Pn | 01 53 27.9 | -0.8 |
| TRB2 | Turrubares | 0.96 | 321 | eP | Pn | 01 53 29.1 | -0.6 |
| TCS1 | Tacares | 0.99 | 332 | i P | Pn | 01 53 29.5 | -0.6 |
| TCS1 | | | | IAML | | 01 53 45.3 | |
| | comp=Z,5µm,1.0s | | | | | | |
| BRU2 | Volcan | 1.19 | 108 | eP | Pn | 01 53 32.0 | -0.9 |
| BRU2 | | | | eS | Sn | 01 53 48.7 | +0.5 |
| BRU2 | Volcan | 1.19 | 108 | eP | Pn | 01 53 32.0 | -0.9 |
| CBL1 | Cabuya | 1.31 | 289 | eP | Pn | 01 53 32.7 | -1.7 |
| PTPM | Petroterminale | 1.34 | 135 | eP | Pn | 01 53 33.9 | -0.9 |
| BCO2 | Palmira | 1.36 | 109 | eP | Pn | 01 53 34.4 | -0.9 |
| BCO2 | | | | eS | Sn | 01 53 54.0 | +1.4 |
| CNI2 | El Empalme, Bo | 1.37 | 79 | eP | Pn | 01 53 34.6 | -0.7 |
| CNI2 | | | | eS | Sn | 01 53 53.2 | +0.7 |
| SOCE | Pocosol | 1.44 | 328 | i P | Pn | 01 53 36.6 | +0.4 |
| SOCE | | | | IAML | | 01 53 59.6 | |
| | comp=Z,480nm,1.0s | | | | | | |
| SOCE | Pocosol | 1.44 | 328 | eP | Pn | 01 53 36.9 | +0.6 |
| VACR | Volcan Arenal | 1.55 | 328 | eP | Pn | 01 53 38.2 | +0.5 |
| ARE1 | Arenal 1 | 1.56 | 326 | eP | Pn | 01 53 38.7 | +0.8 |
| CEDE | Laguna Cedeo | 1.57 | 327 | eP | Pn | 01 53 39.0 | +0.9 |
| JTS | Las Juntas de | 1.57 | 316 | eP | Pn | 01 53 37.6 | -0.5 |
| JTS | Las Juntas de | 1.57 | 316 | eP | Pn | 01 53 37.5 | -0.5 |
| CHGR2 | Aguacate | 1.69 | 97 | eP | Pn | 01 53 39.4 | -0.2 |
| INDI | Punta indio, G | 1.79 | 293 | i P | Pn | 01 53 39.4 | -1.6 |
| INDI | | | | IAML | | 01 54 01.2 | |
| | comp=Z,71nm,1.0s | | | | | | |

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*IDC **02** 02:00:22.9±1.4, 21°.28S×178°.96W, h542km±15km, mb3.0/8, mbtmp3.9/9, Error ellipse: s-maj=21.0km s-min=15.2km az=111.0*
**ISC 02 02:00:22.9**±0.6**, 21°.4S**±0°.1×**179°.0W**±0°.2**, h550**km**, n63,**
σ**2s.02**/62**, mb3.5**/8**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 4.53 | 322 | P | P | 02 01 48.3 | -0.8 |
| | 28nm,0.4s,baz=163,slow=8.4,SNR=33 | | | | | | |
| MSVF | | | | S | S | 02 02 58.5 | -0.8 |
| | 44nm,1.2s,baz=323,slow=22,SNR=3.8 | | | | | | |
| WCZ | Waipu Caves | 15.65 | 200 | P | P | 02 03 39.5 | +0.6 |
| KUZ | Kuaotunu | 16.01 | 195 | P | P | 02 03 40.9 | -1.4 |
| WIAZ | Waiheke Island | 16.21 | 197 | P | P | 02 03 44.5 | +0.2 |
| MXZ | Matakaoa Point | 16.32 | 188 | P | P | 02 03 42.7 | -2.6 |
| MKAZ | Moumakai | 16.49 | 197 | P | P | 02 03 45.0 | -1.9 |
| RUGZ | Raukumara Rang | 16.80 | 189 | P | P | 02 03 48.9 | -0.9 |
| PUZ | Puketiti | 16.83 | 187 | P | P | 02 03 49.4 | -0.5 |
| TWGZ | Tauwhareparae | 16.97 | 188 | P | P | 02 03 51.1 | -0.1 |
| TOZ | Tahuroa Road | 17.00 | 195 | P | P | 02 03 52.8 | +1.3 |
| URZ | Urewera | 17.18 | 190 | P | P | 02 03 49.4 | -3.7 |
| | 6.2nm,0.3s,baz=23,slow=4.8,SNR=12 | | | | | | |
| URZ | Urewera | 17.18 | 190 | P | P | 02 03 49.4 | -3.7 |
| MWZ | Matawai | 17.19 | 189 | P | P | 02 03 51.7 | -1.6 |
| TMVZ | Te Maari | 18.28 | 193 | P | P | 02 04 01.9 | -1.4 |
| ETVZ | East Tongariro | 18.30 | 193 | P | P | 02 04 02.0 | -1.5 |
| OTVZ | Oturere | 18.33 | 193 | P | P | 02 04 02.0 | -1.9 |
| SNVZ | South Ngauruho | 18.36 | 193 | P | P | 02 04 01.7 | -2.4 |
| KWHZ | Kaweka Forest | 18.43 | 191 | P | P | 02 04 03.5 | -1.1 |
| WNVZ | Wahianoa | 18.50 | 193 | P | P | 02 04 03.1 | -2.3 |
| KRHZ | Kereru | 18.66 | 191 | P | P | 02 04 04.2 | -2.4 |
| TSZ | Takapari Road | 19.14 | 192 | P | P | 02 04 09.5 | -1.5 |
| DVHZ | Dannevirke | 19.33 | 191 | P | P | 02 04 10.6 | -2.1 |
| BFZ | Birch Farm | 19.69 | 191 | P | P | 02 04 12.4 | -3.6 |
| MRZ | Mangatainoka R | 19.79 | 192 | P | P | 02 04 14.3 | -2.6 |
| OGWZ | Otaki Gorge | 20.02 | 193 | P | P | 02 04 17.5 | -1.5 |
| HOWZ | Holdsworth Sta | 20.03 | 192 | P | P | 02 04 15.0 | -4.2 |
| KIW | Kapiti Island | 20.12 | 193 | P | P | 02 04 17.2 | -2.7 |
| MTW | Mount Morrison | 20.29 | 192 | P | P | 02 04 19.3 | -2.1 |
| DUWZ | D'Urville Isla | 20.30 | 196 | P | P | 02 04 19.6 | -1.9 |
| CAW | Cannon Point | 20.32 | 193 | P | P | 02 04 17.8 | -3.9 |
| TRWZ | Traveller | 20.48 | 191 | P | P | 02 04 21.5 | -1.7 |
| PAWZ | Paruwai Farm | 20.52 | 192 | P | P | 02 04 23.1 | -0.4 |
| MSWZ | Moikau Station | 20.58 | 192 | P | P | 02 04 21.3 | -2.9 |
| TCW | Tory Channel | 20.60 | 194 | P | P | 02 04 23.7 | -0.5 |
| BHW | Baring Head | 20.66 | 193 | P | P | 02 04 24.6 | -0.1 |
| PLWZ | Palliser | 20.73 | 192 | P | P | 02 04 24.0 | -1.5 |
| NNZ | Nelson | 20.83 | 196 | P | P | 02 04 22.9 | -3.3 |
| TUWZ | Tuamarina | 20.89 | 195 | P | P | 02 04 22.0 | -4.7 |
| MRNZ | Matariki Terra | 21.16 | 197 | P | P | 02 04 28.9 | -0.4 |
| THZ | Tophouse | 21.46 | 197 | P | P | 02 04 31.4 | -0.7 |
| KHZ | Kahutara | 21.91 | 195 | P | P | 02 04 40.7 | +4.7 |
| GVZ | Greta Valley S | 22.56 | 195 | P | P | 02 04 39.9 | -1.9 |
| LTZ | Lake Taylor | 22.58 | 197 | P | P | 02 04 40.4 | -1.7 |
| OXZ | Oxford | 23.15 | 197 | P | P | 02 04 44.6 | -2.5 |
| ASAR | Alice Springs | 43.40 | 258 | P | P | 02 07 38.6 | +1.0 |
| | 0.7nm,0.4s,baz=94,slow=8.3,SNR=16 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 43.54 | 263 | P | P | 02 07 39.0 | +0.3 |
| | 0.4nm,0.3s,baz=94,slow=7.8,SNR=38 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| VNDA | Vanda | 56.98 | 185 | P | P | 02 09 17.2 | +1.4 |
| | 0.5nm,0.4s,baz=7.5,slow=6.4,SNR=14 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| QSPA | South Pole Qui | 68.72 | 180 | P | P | 02 10 32.4 | +0.8 |
| | 2.4nm,0.8s,baz=351,slow=3.7,SNR=18 | | | | | | |
| | 2.4nm,0.8s | | | | | | |
| NVAR | Mina Array Bea | 82.30 | 44 | P | P | 02 11 48.4 | +0.9 |
| | 0.3nm,0.5s,baz=234,slow=6.5,SNR=1.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| TXAR | Lajitas Array | 88.32 | 58 | P | P | 02 12 16.4 | -0.3 |
| | 0.3nm,0.8s,baz=232,slow=5.6,SNR=4.4 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| ILAR | Eielson Array | 89.35 | 13 | P | P | 02 12 19.9 | -0.6 |
| | 0.4nm,0.4s,baz=216,slow=5.5,SNR=12 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| PDAR | Pinedale Array | 90.23 | 44 | P | P | 02 12 25.6 | +0.3 |
| | 0.7nm,0.8s,baz=222,slow=2.4,SNR=4.5 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| ARCES | ARCESS Array B | 129.57 | 349 | PKP | PKPdf | 02 18 28.8 | 0.0 |
| | 4.0nm,1.0s,baz=73,slow=3.1,SNR=7.3 | | | | | | |
| FINES | FINESS Array B | 136.31 | 343 | PKP | PKiKP | 02 18 43.4 | -0.1 |
| | 0.3nm,0.4s,baz=12,slow=3.3,SNR=5.0 | | | | | | |
| HFS | Hagfors | 140.22 | 350 | PKhKP | PKPpre | 02 18 42.9 | |
| | 0.7nm,0.4s,baz=72,slow=4.7,SNR=22 | | | | | | |
| AKASG | Malin Array Be | 143.28 | 330 | PKP | PKPbc | 02 18 53.0 | 0.0 |
| | 1.0nm,0.4s,baz=44,slow=3.9,SNR=6.2 | | | | | | |
| EKA | Eskdalemuir Ar | 145.92 | 4 | PKPbc | PKPbc | 02 19 00.4 | -0.5 |
| | 2.8nm,0.8s,baz=350,slow=3.0,SNR=3.7 | | | | | | |
| BRTR | Keskin Array B | 146.68 | 311 | PKPbc | PKPbc | 02 19 04.2 | +0.5 |
| | 0.3nm,0.5s,baz=108,slow=0.5,SNR=1.1 | | | | | | |
| MMAI | Mount Meron Ar | 147.39 | 298 | PKPbc | PKiKP | 02 19 07.6 | +0.3 |
| | 0.5nm,0.3s,baz=72,slow=4.7,SNR=1.2 | | | | | | |
| GERES | GERESS Array B | 150.74 | 343 | PKPbc | PKiKP | 02 19 14.3 | +0.6 |
| | 0.3nm,0.3s,baz=72,slow=3.2,SNR=2.8 | | | | | | |
| CONA | Conrad Observa | 150.90 | 339 | i PKiKP | PKiKP | 02 19 15.0 | +1.0 |
| | 0.8nm,0.5s | | | | | | |
| RONA | Rosalia, Austr | 150.95 | 338 | i PKiKP | PKiKP | 02 19 15.1 | +1.0 |
| | 1.0nm,0.4s | | | | | | |
| SOKA | Soboth | 152.26 | 339 | i PKP | PKiKP | 02 19 17.2 | +0.3 |
| | 3.2nm,1.4s | | | | | | |

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*DJA **02** 02:07:34.8±0.5, 5°S±4°×13°0E±°, h200km±5km, M3.8/4, mb4.5/1, MLv3.5/4*
*IDC **02** 02:07:41.2±11.0, 4°.95S×130°.06E, h336km±132km, mb3.2/3, mbtmp3.8/5, Error ellipse: s-maj=94.9km s-min=48.8km az=70.0*
**ISC 02 02:07:32.8**±1.1**, 4°.63S**±0°.08×**129°.53E**±0°.09**, h200**km**, n11,**
σ**2s.52**/12**, mb3.7**/3**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNDI | Bandanaira | 0.39 | 74 | P | Pn | 02 08 00.9 | +1.4 |
| BNDI | | | | S | Sn | 02 08 24.3 | +4.2 |
| MSAI | Masohi | 1.41 | 335 | P | Pn | 02 08 07.4 | +1.7 |
| MSAI | | | | S | Sn | 02 08 33.4 | +2.0 |
| FAKI | Fak Fak | 3.20 | 58 | P | Pn | 02 08 25.9 | +1.1 |
| FAKI | | | | S | Sn | 02 09 06.2 | +0.6 |
| SAUI | Saumlaki | 3.77 | 152 | P | Pn | 02 08 34.2 | +2.5 |
| SWI | Sorong | 4.12 | 25 | P | Pn | 02 08 37.4 | +1.3 |
| KMPI | Kaimana, Papua | 4.27 | 77 | P | Pn | 02 08 38.7 | +0.7 |
| WRA | Warramunga Arr | 15.93 | 163 | P | P | 02 11 00.7 | -5.2 |
| | 0.5nm,0.3s,baz=344,slow=12,SNR=22 | | | | | | |
| WRA | | | | S | S | 02 13 47.5 | -15 |
| | 0.7nm,0.5s,baz=344,slow=22,SNR=7.4 | | | | | | |
| ASAR | Alice Springs | 19.39 | 168 | P | P | 02 11 40.0 | -3.7 |
| | 2.6nm,0.7s,baz=350,slow=12,SNR=22 | | | | | | |
| MKAR | Makanchi Array | 66.00 | 326 | P | P | 02 17 56.4 | -1.4 |
| | 0.6nm,0.4s,baz=125,slow=8.2,SNR=6.2 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| ZALV | Zalesovo Beam | 69.27 | 334 | P | P | 02 18 14.4 | -3.6 |
| | 0.3nm,0.3s,baz=124,slow=7.2,SNR=1.5 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 70.26 | 328 | P | P | 02 18 22.1 | -2.0 |
| | 0.8nm,0.5s,baz=126,slow=5.5,SNR=10.0 | | | | | | |
| | 0.8nm,0.5s | | | | | | |

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*IDC **02** 02:13:02.7±16.0, 36°.42N×70°.20E, h181km±176km, mb3.0/2, mbtmp3.5/4, ML3.0/2, Error ellipse: s-maj=249.9km s-min=79.5km az=134.0*
*NNC **02** 02:13:08.9±2.8, 36°.84N×70°.36E, h180km±55km, mb2.7, mpv3.8, Error ellipse: s-maj=30.5km s-min=15.0km az=25.0*
**ISC 02 02:13:05.1**±1.8**, 36°.6N**±0°.2×**70°.4E**±0°.2**, h200**km**, n8,**
σ**1s.41**/10**, 2C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KK31 | Karatay Array | 6.48 | 1 | P | Pn | 02 14 39.5 | +0.9 |
| | 1.9nm,0.3s,baz=168,slow=9.9,SNR=29 | | | | | | |
| KK31 | | | | S | Sn | 02 15 50.8 | -1.9 |
| | 2.6nm,0.4s,baz=198,slow=16,SNR=9.9 | | | | | | |
| AAK | Ala-Archa | 6.81 | 27 | ⇑P | Pn | 02 14 44.1 | +1.1 |
| | 1.5nm,0.3s | | | | | | |
| AAK | | | | ⇓S | Sn | 02 15 59.6 | -1.0 |
| | 17nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 7.48 | 31 | ⇑P | Pn | 02 14 52.5 | +0.8 |
| | 5.6nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 13.51 | 37 | P | P | 02 16 10.5 | -0.9 |
| | 0.2nm,0.3s,baz=208,slow=10,SNR=9.0 | | | | | | |
| | 1.6nm,0.8s | | | | | | |
| AB31 | Akbulak array | 14.74 | 332 | ⇓P | P | 02 16 26.3 | +1.4 |
| | 0.2nm,0.4s,baz=147,slow=12,SNR=7.2 | | | | | | |
| KURBB | Kurchatov Arra | 15.19 | 20 | P | Pn | 02 16 29.5 | +0.1 |
| | baz=208,slow=11,SNR=3.0 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 20.03 | 26 | P | P | 02 17 24.1 | +1.5 |
| | 1.2nm,0.4s,baz=211,slow=11,SNR=5.7 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| TORD | Torodi Ar. Bea | 65.20 | 268 | P | P | 02 23 24.1 | -1.3 |
| | 0.4nm,1.1s,baz=43,slow=6.4,SNR=4.1 | | | | | | |
| | 0.4nm,1.1s | | | | | | |

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*SOME **02** 02:20:17.0, 42°.25N×83°.95E, h10km*
*NNC **02** 02:20:20.0±2.1, 42°.01N×83°.63E, h17km±11km, mb3.5, mpv3.2, Error ellipse: s-maj=15.9km s-min=10.3km az=155.0*
**ISC 02 02:20:18.7**±2.6**, 42°.0N**±0°.1×**83°.73E**±0°.08**, h10**km**, n21,**
σ**2s.37**/31**, 8C, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KTMS | Ketmen | 2.85 | 301 | eP | Pb | 02 21 11.0 | +1.2 |
| | 3.4nm,0.2s | | | | | | |
| KTMS | | | | eS | Sg | 02 21 50.4 | 0.0 |
| | 12nm,0.4s | | | | | | |
| KTMS | Ketmen | 2.85 | 301 | Pg | Pb | 02 21 11.0 | +1.2 |
| | 3.4nm,0.2s | | | | | | |
| KTMS | | | | Lg | Lg | 02 21 50.4 | |
| | 12nm,0.4s | | | | | | |
| PDGK | Podgornoye | 3.38 | 294 | Pg | Pb | 02 21 20.3 | +1.6 |
| | 0.8nm,0.4s | | | | | | |
| PDGK | | | | Lg | Lg | 02 22 06.4 | |
| | 6.0nm,0.6s | | | | | | |
| PDGK | Podgornoye | 3.38 | 294 | ⇑Pn | Pn | 02 21 10.7 | -0.9 |
| | 1.5nm,0.5s | | | | | | |
| PDGK | | | | ⇑Pg | Pg | 02 21 22.0 | -1.4 |
| | 3.1nm,0.7s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 02 22 07.1 | |
| | 20nm,0.7s | | | | | | |
| DJR | Jarkent | 3.68 | 310 | eP | Pb | 02 21 24.4 | +0.6 |
| | 1.9nm,0.2s | | | | | | |
| DJR | | | | eS | Sg | 02 22 13.2 | -3.6 |
| | 5.5nm,0.4s | | | | | | |
| DJR | Jarkent | 3.68 | 310 | Pg | Pb | 02 21 24.4 | +0.6 |
| | 1.9nm,0.2s | | | | | | |
| DJR | | | | Lg | Lg | 02 22 13.2 | |
| | 5.5nm,0.4s | | | | | | |
| KPKS | Kokpek | 3.98 | 293 | eP | Pb | 02 21 31.5 | +2.5 |
| | 2.8nm,0.3s | | | | | | |
| KPKS | | | | eS | Sg | 02 22 25.2 | -1.2 |
| | 5.9nm,0.2s | | | | | | |
| KPKS | Kokpek | 3.98 | 293 | Pg | Pb | 02 21 31.5 | +2.5 |
| | 2.8nm,0.3s | | | | | | |
| KPKS | | | | Lg | Lg | 02 22 25.2 | |
| | 5.9nm,0.2s | | | | | | |
| SATY | Saty | 4.06 | 286 | eP | Pg | 02 21 33.8 | -2.7 |
| | 3.2nm,0.3s | | | | | | |
| SATY | | | | eS | Sg | 02 22 29.2 | +0.1 |
| | 6.3nm,0.4s | | | | | | |
| SATY | Saty | 4.06 | 286 | Pg | Pg | 02 21 33.8 | -2.7 |
| | 3.2nm,0.3s | | | | | | |
| SATY | | | | Lg | Lg | 02 22 29.2 | |
| | 6.3nm,0.4s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **KURS** | **Kuram** | **4.34** | **291** | *e*P | **Pb** | **02 21 38.2** | **+3.1** |
| | 3.1nm,0.5s | | | | | | |
| KURS | | | | *e*S | **Sg** | **02 22 36.7** | **-1.3** |
| | 6.7nm,0.9s | | | | | | |
| **KURS** | **Kuram** | **4.34** | **291** | Pg | **Pb** | **02 21 38.2** | **+3.1** |
| | 3.1nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 02 22 36.7 | |
| | 6.7nm,0.9s | | | | | | |
| **BLB** | **Baldybastay** | **4.36** | **300** | Pg | **Pb** | **02 21 38.0** | **+2.5** |
| | 8.2nm,0.5s | | | | | | |
| BLB | | | | Lg | Lg | 02 22 36.4 | |
| | 6.4nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **4.83** | **299** | *e*P | **Pb** | **02 21 46.8** | **+3.3** |
| | 1.2nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **02 22 51.6** | **-2.2** |
| | 4.9nm,0.8s | | | | | | |
| **ARXS** | **Arharly** | **4.83** | **299** | Pg | **Pb** | **02 21 46.8** | **+3.3** |
| | 1.2nm,0.3s | | | | | | |
| ARXS | | | | Lg | Lg | 02 22 51.6 | |
| | 4.9nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **4.86** | **348** | ⇑Pn | **Pn** | **02 21 33.6** | **+1.7** |
| | 0.1nm,0.3s | | | | | | |
| MK31 | | | | ⇑Pg | **Pg** | **02 21 50.2** | **-1.5** |
| | 2.7nm,0.6s,baz=163,slow=16,SNR=13 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 02 22 55.1 | |
| | 4.2nm,0.7s,baz=164,slow=24,SNR=3.6 | | | | | | |
| **MAKZ** | **Makanchi** | **4.92** | **346** | ⇑Pg | **Pb** | **02 21 49.6** | **+4.6** |
| | 1.5nm,0.7s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 02 22 58.2 | |
| | 3.1nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **5.44** | **290** | *e*P | **Pg** | **02 22 00.2** | **-2.7** |
| | 1.5nm,0.5s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **02 23 14.7** | **+1.5** |
| | 5.7nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **5.44** | **290** | Pg | **Pg** | **02 22 00.2** | **-2.7** |
| | 1.5nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 02 23 14.7 | |
| | 5.7nm,0.8s | | | | | | |
| **ZSN** | **Zaisan** | **5.46** | **8** | *e*P | **Pb** | **02 21 53.1** | **-1.2** |
| | 6.2nm,0.5s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **02 23 02.4** | **+2.5** |
| | 4.8nm,0.3s | | | | | | |
| **ZSN** | **Zaisan** | **5.46** | **8** | Pg | **Pb** | **02 21 53.1** | **-1.2** |
| | 6.2nm,0.5s | | | | | | |
| ZSN | | | | Lg | Lg | 02 23 02.4 | |
| | 4.8nm,0.3s | | | | | | |

**RSNC 02 02:45:14.1**±0.0**,4°N**±1°×**7°4W**±°**,h2**km±2km**,M3.0,mb4.1, ML2.7,Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VILC** | **Villavicencio,** | **0.39** | **72** | P | Pg | 02 45 21.7 | +0.2 |
| VILC | | | | S | Sg | 02 45 27.5 | +0.9 |
| **CHIC** | **Chingaza** | **0.71** | **27** | P | Pg | 02 45 26.5 | -1.4 |
| CHIC | | | | S | Sg | 02 45 35.2 | -1.9 |
| **URMC** | **La Uribe, Meta** | **0.80** | **203** | P | Pg | 02 45 28.2 | -1.3 |
| URMC | | | | S | Sg | 02 45 39.5 | -0.5 |
| **PRAC** | **Prado** | **0.87** | **252** | P | Pg | 02 45 29.0 | -1.8 |
| PRAC | | | | S | Sg | 02 45 40.6 | -1.5 |
| **ROSC** | **El Rosal** | **0.88** | **343** | P | Pg | 02 45 30.5 | -0.6 |
| ROSC | | | | S | Sg | 02 45 43.0 | +0.4 |
| **ORTC** | **Ortega, Tolima** | **1.19** | **266** | P | Pg | 02 45 34.7 | -2.2 |
| ORTC | | | | S | Sg | 02 45 50.6 | -1.7 |
| **ANIL** | **Santa Ana** | **1.43** | **290** | P | Pn | 02 45 38.5 | -2.8 |
| ANIL | | | | S | Sg | 02 45 57.6 | -2.5 |
| **RECRC** | **Villamaria, Ca** | **1.61** | **307** | P | Pn | 02 45 41.7 | -2.3 |
| RECRC | | | | S | Sn | 02 46 02.3 | -3.4 |
| **SPBC** | **San Pablo de B** | **1.65** | **360** | P | Pn | 02 45 43.6 | -0.6 |
| SPBC | | | | S | Sn | 02 46 06.3 | +0.2 |
| **NORC** | **Norcasia** | **1.76** | **333** | P | Pn | 02 45 43.8 | -1.9 |
| NORC | | | | S | Sn | 02 46 06.2 | -2.5 |
| **BETC** | **Betania** | **1.90** | **227** | P | Pn | 02 45 47.1 | -0.5 |
| BETC | | | | S | Sn | 02 46 10.8 | -1.3 |
| **PTGC** | **Puerto Gaitan,** | **1.93** | **84** | P | Pn | 02 45 47.6 | -0.4 |
| PTGC | | | | S | Sn | 02 46 13.7 | +0.8 |
| **GUVC** | **San Jose del G** | **2.03** | **135** | P | Pn | 02 45 48.5 | -0.8 |
| GUVC | | | | S | Sn | 02 46 15.8 | +0.5 |
| **RUSC** | **La Rusia** | **2.13** | **27** | P | Pn | 02 45 51.6 | +0.5 |
| RUSC | | | | S | Sb | 02 46 20.3 | -0.4 |
| **YOTC** | **Yotoco, Valle** | **2.28** | **270** | P | Pn | 02 45 51.1 | -1.8 |
| YOTC | | | | S | Sn | 02 46 19.6 | -2.1 |
| **GARC** | **Garzon, Huila** | **2.29** | **219** | P | Pn | 02 45 53.5 | +0.3 |
| GARC | | | | S | Sn | 02 46 22.4 | +0.2 |
| **PLMC** | **San Jos del P** | **2.40** | **292** | P | Pn | 02 45 55.2 | +0.7 |
| PLMC | | | | S | Sn | 02 46 25.8 | +1.4 |
| **PTBC** | **PUERTO BERRIO,** | **2.56** | **351** | P | Pn | 02 45 55.4 | -1.3 |
| PTBC | | | | S | Sn | 02 46 27.7 | -0.8 |
| **JAMC** | **Jamundi, Valle** | **2.72** | **254** | P | Pn | 02 45 58.1 | -0.9 |
| JAMC | | | | S | Sn | 02 46 33.1 | +0.4 |
| **BARC** | **Barichara** | **2.73** | **19** | P | Pn | 02 46 01.0 | +1.8 |
| BARC | | | | S | Sb | 02 46 37.9 | +0.1 |
| **FLOC** | **Florencia** | **2.87** | **214** | P | Pb | 02 46 04.0 | -2.1 |
| FLOC | | | | S | Sb | 02 46 40.3 | -1.5 |
| **POPC** | **Popayan, Colom** | **2.98** | **241** | P | Pn | 02 46 03.7 | +1.0 |
| POPC | | | | S | Sb | 02 46 44.8 | -0.3 |
| **MALC** | **Bahia Malaga** | **3.27** | **271** | P | Pn | 02 46 06.5 | +0.1 |
| MALC | | | | S | Sg | 02 46 56.7 | -2.5 |
| **ZARC** | **Zaragoza, Cauc** | **3.57** | **347** | P | Pn | 02 46 10.3 | -0.3 |
| ZARC | | | | S | Sb | 02 46 57.8 | -4.0 |
| **BBAC** | **Balboa, Cauca** | **3.73** | **239** | P | Pn | 02 46 13.2 | +0.2 |
| **PTLC** | **Puerto Leguiza** | **3.86** | **191** | P | Pn | 02 46 06.7 | -7.9 |
| **GR1C** | **Gorgona, Isla** | **4.21** | **257** | P | Pn | 02 46 19.4 | 0.0 |
| **OCAC** | **Ocana** | **4.29** | **10** | P | Pn | 02 46 21.7 | +1.2 |
| OCAC | | | | S | Sn | 02 47 13.4 | +2.2 |

*BGR **02** 02:52:07.6, 29°.12N×70°.56E, h33km, mb4.6*
*NNC **02** 02:52:22.4±3.1, 31°.84N×69°.23E, h0km, mb4.8, Error ellipse: s-maj=36.1km s-min=31.4km az=153.0*
*IDC **02** 02:52:24.6±0.5, 32°.11N×69°.00E, h0km, mb4.3/24, mbtmp4.3/28, ML4.0/4, MS3.6/34, Error ellipse: s-maj=12.9km s-min=11.3km az=160.0*
*MOS **02** 02:52:29.3±1.2, 32°.16N×69°.12E, h42km, mb4.7/27, Error ellipse: s-maj=6.5km s-min=4.0km az=89.1*
*NEIC **02** 02:52:31.9±1.3, 32°.13N±0°.09×69°.09E±0°.09, h47km±6km, mb4.5/89, Error ellipse: s-maj=13.4km s-min=10.3km az=212.0*
*BJI **02** 02:52:36.0±0.0, 32°.39N×69°.60E, h60km, mb4.3/23, mB4.7/5, Ms4.0/10, Ms7 3.8/8*
**ISC 02 02:52:30.2**±0.4**, 31°.96N**±0°.04×**68°.98E**±0°.04**, h41**km±3km**, h41**km**:pP-P, n380,** σ1**§51**/394**, mb4.5**/113**, MS3.6**/37**, 26C-20D, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBL** | **Kabul** | **2.58** | **1** | | **Pn** | **02 53 09.1** | **-0.6** |
| **KBL** | **Kabul** | **2.58** | **1** | P | **Pn** | **02 53 10.7** | **+1.0** |
| **KBL** | **Kabul** | **2.58** | **1** | P | **Pn** | **02 53 09.1** | **-0.6** |
| **NIL** | **Nilore** | **3.98** | **64** | Pn | **Pn** | **02 53 28.3** | **-0.4** |
| **NIL** | **Nilore** | **3.98** | **64** | P | **Pn** | **02 53 28.8** | **+0.1** |
| **NIL** | **Nilore** | **3.98** | **64** | P | **Pn** | **02 53 28.3** | **-0.4** |
| **JMU** | **Jammu** | **5.07** | **80** | *e*P | **Pn** | **02 53 43.5** | **-0.2** |
| JMU | | | | *e*x | x | 02 54 42.9 | |
| **THN** | **Thein Dam** | **5.73** | **83** | *e*P | **Pn** | **02 53 52.3** | **-0.5** |
| THN | | | | *e*S | **Sn** | **02 55 02.8** | **+5.4** |
| THN | | | | IAML | | 02 55 42.5 | |
| | comp=N,393nm,1.2s | | | | | | |
| THN | | | | IAML | | 02 55 43.6 | |
| | comp=E,489nm,0.9s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.22** | **85** | *e*P | **Pn** | **02 53 59.0** | **-0.7** |
| DHRM | | | | *e*S | **Sn** | **02 55 16.0** | **+6.3** |
| DHRM | | | | IAML | | 02 55 56.2 | |
| | comp=N,744nm,0.5s | | | | | | |
| **BHK** | **Bhakra** | **6.37** | **93** | *e*x | **Pn** | **02 54 01.4** | **-0.2** |
| BHK | | | | *e*x | x | 02 55 10.8 | |
| BHK | | | | IAML | | 02 55 21.1 | |
| | comp=E,247nm,0.9s | | | | | | |
| **CHGR** | **Chuyangaron** | **6.69** | **1** | Pn | **Pn** | **02 54 05.5** | **-0.4** |
| **CHGR** | **Chuyangaron** | **6.69** | **1** | P | **Pn** | **02 54 05.6** | **-0.4** |
| **SIMJ** | **Simiganj** | **6.69** | **0** | Pn | **Pn** | **02 54 05.2** | **-0.8** |
| **SMLA** | **Simla** | **7.04** | **95** | *e*P | **Pn** | **02 54 10.4** | **-0.4** |
| SMLA | | | | *e*S | **Sn** | **02 55 33.5** | **+4.0** |
| SMLA | | | | IAML | | 02 55 53.1 | |
| | comp=E,241nm,0.4s | | | | | | |
| SMLA | | | | IAML | | 02 55 53.5 | |
| | comp=E,231nm,1.6s | | | | | | |
| **GAR** | **Garm** | **7.11** | **8** | | **Pn** | **02 54 10.5** | **-1.3** |
| **AJM** | **Ajmer** | **7.37** | **136** | *e*P | **Pn** | **02 54 14.1** | **-1.2** |
| **KUDL** | **Kundal** | **7.54** | **118** | *e*P | **Pn** | **02 54 14.8** | **-2.8** |
| KUDL | | | | *e*S | **Sn** | **02 55 41.6** | **-0.2** |
| KUDL | | | | IAML | | 02 55 58.5 | |
| | comp=N,43nm,0.7s | | | | | | |
| KUDL | | | | IAML | | 02 55 58.6 | |
| | comp=E,56nm,0.9s | | | | | | |
| **NDI** | **New Delhi** | **7.83** | **112** | *e*P | **Pn** | **02 54 20.6** | **-1.0** |
| **DRK** | **Karamyk** | **7.85** | **16** | | **Pn** | **02 54 20.9** | **-1.2** |
| **DRK** | **Karamyk** | **7.85** | **16** | P | **Pn** | **02 54 20.9** | **-1.2** |
| **BTK** | **Batken** | **8.22** | **10** | Pn | **Pn** | **02 54 26.9** | **-0.1** |
| **BTK** | **Batken** | **8.22** | **10** | P | **Pn** | **02 54 26.9** | **-0.1** |
| **OHH** | **Osh** | **9.08** | **19** | P | **Pn** | **02 54 39.3** | **+0.5** |
| OHH | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **9.44** | **35** | P | Pn | 02 54 37.7 | -6.1 |
| KSH | | | | sP | | 02 54 54.2 | |
| KSH | | | | LR | LR | | |
| | comp=Z,1μm,7.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,790nm,6.5s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,760nm,7.2s | | | | | | |
| **PTH** | **Pithoragarh** | **9.96** | **101** | *e*P | **Pn** | **02 54 51.0** | **-0.1** |
| PTH | | | | *e*S | **Sn** | **02 56 38.4** | **-3.2** |
| **ARK** | **Arkit** | **10.11** | **13** | P | **Pn** | **02 54 52.1** | **-0.8** |
| ARK | | | | pmax | pmax | | |
| | comp=Z,33nm,0.8s | | | | | | |
| **JHNI** | **Jhansi** | **10.60** | **125** | *e*P | **Pn** | **02 54 56.6** | **-2.9** |
| JHNI | | | | *e*S | **Sn** | **02 56 53.4** | **-3.5** |
| JHNI | | | | IAML | | 02 56 58.3 | |
| | comp=E,16nm,0.8s | | | | | | |
| JHNI | | | | IAML | | 02 56 58.3 | |
| | comp=N,22nm,0.5s | | | | | | |
| **AML** | **Almayashu** | **10.83** | **19** | P | **Pn** | **02 55 02.5** | **-0.5** |
| | SNR=17 | | | | | | |
| **NRN** | **Naryn** | **11.01** | **29** | Pn | **Pn** | **02 55 01.8** | **-3.5** |
| **NRN** | **Naryn** | **11.01** | **29** | P | **Pn** | **02 55 01.8** | **-3.5** |
| **UCH** | **Uchtor** | **11.16** | **22** | P | **Pn** | **02 55 05.5** | **-2.1** |
| | SNR=64 | | | | | | |
| **KK31** | **Karatay Array** | **11.19** | **6** | Pn | **Pn** | **02 55 05.3** | **-2.3** |
| **KK31** | **Karatay Array** | **11.19** | **6** | P | **Pn** | **02 55 05.6** | **-2.0** |
| | comp=N,41nm,0.9s,baz=191,slow=12,SNR=181 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **02 57 13.4** | **+2.0** |
| | comp=N,11nm,0.7s,baz=212,slow=24,SNR=5.3 | | | | | | |
| **KK31** | **Karatay Array** | **11.19** | **6** | P | **Pn** | **02 55 05.3** | **-2.3** |
| **KKAR** | **Karatay Array** | **11.19** | **6** | | **Pn** | **02 55 05.5** | **-2.1** |
| **KKAR** | **Karatay Array** | **11.19** | **6** | Pn | **Pn** | **02 55 05.8** | **-1.8** |
| **KKAR** | **Karatay Array** | **11.19** | **6** | P | **Pn** | **02 55 05.8** | **-1.8** |
| **EKS2** | **Erkin-Say** | **11.34** | **18** | P | **Pn** | **02 55 08.4** | **-1.4** |
| | SNR=17 | | | | | | |
| **BHPL** | **Bhopal** | **11.46** | **137** | *e*P | **Pn** | **02 55 08.7** | **-2.8** |
| BHPL | | | | *e*S | **Sn** | **02 57 12.7** | **-5.5** |
| BHPL | | | | IAML | | 02 57 47.0 | |
| | comp=N,26nm,0.5s | | | | | | |
| BHPL | | | | IAML | | 02 57 54.7 | |
| | comp=E,39nm,1.1s | | | | | | |
| **JASK** | **Jask - Hormozg** | **11.46** | **241** | P | **Pn** | **02 55 13.2** | **+1.8** |
| **AAK** | **Ala-Archa** | **11.53** | **21** | P | **Pn** | **02 55 10.7** | **-1.6** |
| | SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **11.53** | **21** | Pn | **Pn** | **02 55 10.3** | **-2.0** |
| | comp=E,2.7nm,0.3s,baz=52,slow=18,SNR=23 | | | | | | |
| AAK | | | | Sn | **Sn** | **02 57 14.5** | **-5.2** |
| | comp=E,0.4nm,0.3s,baz=207,slow=22,SNR=1.8 | | | | | | |
| AAK | | | | LR | LR | 03 00 01.2 | |
| | comp=E,246nm,19.4s,baz=218,slow=40 | | | | | | |
| | comp=E,27nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **11.53** | **21** | P | **Pn** | **02 55 10.7** | **-1.6** |
| **AAK** | **Ala-Archa** | **11.53** | **21** | ⇑P | **Pn** | **02 55 10.2** | **-2.2** |
| | comp=E,26nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **11.53** | **21** | *d i*P | **Pn** | **02 55 10.5** | **-1.8** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,29nm,0.7s | | | | | | |
| **BOOM** | **Boomskoye usch** | **11.88** | **26** | Pn | **Pn** | **02 55 14.4** | **-2.8** |
| **BOOM** | **Boomskoye usch** | **11.88** | **26** | P | **Pn** | **02 55 14.4** | **-2.8** |
| **CHMS** | **Chumysh** | **11.93** | **21** | P | **Pn** | **02 55 15.6** | **-2.2** |
| | SNR=14 | | | | | | |
| **CHMS** | **Chumysh** | **11.93** | **21** | ⇓P | **Pn** | **02 55 14.9** | **-2.9** |
| | comp=Z,26nm,0.7s | | | | | | |
| **CHMS** | **Chumysh** | **11.93** | **21** | P | **Pn** | **02 55 14.8** | **-3.0** |
| **TARG** | **Taragay, Kyrgy** | **12.04** | **33** | | **Pn** | **02 55 16.6** | **-2.9** |
| **TARG** | **Taragay, Kyrgy** | **12.04** | **33** | P | **Pn** | **02 55 16.6** | **-2.9** |
| **TKM2** | **Tokmak 2** | **12.14** | **24** | P | **Pn** | **02 55 17.7** | **-3.0** |
| | SNR=32 | | | | | | |
| **TKM2** | **Tokmak 2** | **12.14** | **24** | ⇓P | **Pn** | **02 55 17.3** | **-3.4** |
| | comp=Z,20nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **12.14** | **24** | P | **Pn** | **02 55 17.3** | **-3.4** |
| **WSAR** | **Wadi Sarin** | **12.62** | **229** | Pn | **Pn** | **02 55 27.8** | **+0.5** |
| | comp=Z,0.5nm,0.3s,baz=54,slow=8.7,SNR=5.5 | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **WSAR** | **Wadi Sarin** | **12.62** | **229** | P | **Pn** | **02 55 26.6** | **-0.6** |
| **BIDO** | **Bidbid** | **12.76** | **231** | P | **Pn** | **02 55 28.9** | **-0.2** |
| **WBK** | **Wadi Bani Khal** | **12.87** | **226** | P | **Pn** | **02 55 30.4** | **-0.3** |
| **MDOK** | **Medeo** | **12.88** | **27** | ⇓P | Pn | 02 55 24.0 | -6.8 |
| | comp=Z,11nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **12.88** | **27** | P | Pn | 02 55 24.0 | -6.8 |
| **JLN** | **Jalan Bani Buh** | **12.96** | **223** | P | **Pn** | **02 55 31.2** | **-0.6** |
| **MDH** | **Madha** | **12.96** | **242** | P | **Pn** | **02 55 31.1** | **-0.7** |
| **MASF** | **Masafi** | **13.02** | **243** | P | **Pn** | **02 55 35.2** | **+2.5** |
| **SMDO** | **Samad** | **13.13** | **230** | P | **Pn** | **02 55 34.0** | **-0.3** |
| **UOSS** | **Minazif** | **13.22** | **241** | P | **Pn** | **02 55 34.2** | **-1.3** |
| **HOQ** | **Hoqain** | **13.27** | **234** | P | **Pn** | **02 55 35.2** | **-0.9** |
| **AKL** | **Akola** | **13.32** | **145** | *e*P | **Pn** | **02 55 34.2** | **-2.6** |
| AKL | | | | *e*x | x | 02 57 58.7 | |
| **HATD** | **Hatta, Dubai** | **13.35** | **241** | P | **Pn** | **02 55 38.1** | **+0.9** |
| **SOHO** | **SOHO** | **13.46** | **238** | P | **Pn** | **02 55 37.5** | **-1.2** |
| **ASHO** | **Ashiyiah** | **13.48** | **241** | P | **Pn** | **02 55 40.8** | **+1.8** |
| | SNR=7.0 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **13.79** | **242** | P | **Pn** | **02 55 43.8** | **+0.5** |
| **ARQ** | **Araqi** | **13.97** | **235** | P | **Pn** | **02 55 46.3** | **+0.5** |
| | SNR=13 | | | | | | |
| **PDGK** | **Podgornoye** | **14.06** | **33** | ⇑P | **Pn** | **02 55 43.5** | **-3.4** |
| **PDGK** | **Podgornoye** | **14.06** | **33** | P | **Pn** | **02 55 43.5** | **-3.4** |
| **MZR** | **Muzera** | **16.38** | **241** | P | **P** | **02 56 20.0** | **+0.5** |
| **OTUK** | **Ortayu** | **16.47** | **8** | ⇑P | **Pn** | **02 56 14.4** | **-3.8** |
| | comp=Z,14nm,0.8s | | | | | | |
| **OTUK** | **Ortayu** | **16.47** | **8** | P | **Pn** | **02 56 14.4** | **-3.8** |
| **HYB** | **Hyderabad** | **16.88** | **147** | *e*P | **P** | **02 56 28.1** | **+2.9** |
| HYB | | | | *e*S | **S** | **02 59 38.4** | **-0.7** |
| **SLWR** | **Sila** | **17.15** | **247** | P | **P** | **02 56 28.8** | **+0.7** |
| **MAKZ** | **Makanchi** | **17.88** | **30** | P | **Pn** | **02 56 31.2** | **-4.5** |
| **MAKZ** | **Makanchi** | **17.88** | **30** | P | **Pn** | **02 56 31.2** | **-4.5** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **18.00** | **31** | | **Pn** | **02 56 35.2** | **-2.0** |
| **MK31** | **Makanchi Array** | **18.00** | **31** | ⇑P | **Pn** | **02 56 34.5** | **-2.8** |
| | comp=Z,4.5nm,0.6s,baz=224,slow=14,SNR=40 | | | | | | |
| **MK31** | **Makanchi Array** | **18.00** | **31** | *d i*P | **Pn** | **02 56 35.4** | **-1.8** |
| **MKAR** | **Makanchi Array** | **18.00** | **31** | | **Pn** | **02 56 32.8** | **-4.5** |
| **MKAR** | **Makanchi Array** | **18.00** | **31** | P | **Pn** | **02 56 33.3** | **-3.9** |
| | comp=Z,0.8nm,0.3s,baz=227,slow=13,SNR=26 | | | | | | |
| MKAR | | | | S | **Sn** | **02 59 53.9** | **-3.1** |
| | comp=Z,0.6nm,0.7s,baz=211,slow=16,SNR=1.9 | | | | | | |
| MKAR | | | | LR | LR | 03 03 11.0 | |
| | comp=Z,75nm,18.9s,baz=230,slow=36 | | | | | | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **18.00** | **31** | *e*P | **Pn** | **02 56 35.4** | **-1.8** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **18.57** | **341** | ⇓P | **P** | **02 56 42.5** | **-1.0** |
| | comp=Z,30nm,0.9s,baz=150,slow=12,SNR=128 | | | | | | |
| **AB31** | **Akbulak array** | **18.57** | **341** | P | **P** | **02 56 42.5** | **-1.0** |
| **ABKAR** | **Akbulak array** | **18.57** | **341** | P | **P** | **02 56 42.3** | **-1.2** |
| **ABKAR** | **Akbulak array** | **18.57** | **341** | P | **P** | **02 56 42.5** | **-1.0** |
| ABKAR | | | | IAmb | IAmb | 02 56 45.8 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **18.89** | **46** | *e*P | **Pn** | **02 56 49.1** | **+1.1** |
| WMQ | | | | PcP | **PcP** | **03 01 12.5** | **+0.3** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **19.95** | **18** | P | **P** | **02 56 56.5** | **-2.1** |
| | comp=Z,0.2nm,0.3s,baz=208,slow=11,SNR=18 | | | | | | |
| KURBB | | | | LR | LR | 03 05 12.6 | |
| | comp=Z,94nm,21.7s,baz=160,slow=39 | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **20.06** | **18** | | **P** | **02 56 58.1** | **-1.6** |
| **KURK** | **Kurchatov** | **20.06** | **18** | P | **P** | **02 56 58.2** | **-1.6** |
| **KURK** | **Kurchatov** | **20.06** | **18** | *de*P | **P** | **02 56 58.2** | **-1.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **20.18** | **339** | P | **P** | **02 57 00.4** | **-0.7** |
| | comp=Z,16nm,0.9s,baz=173,slow=8.4,SNR=58 | | | | | | |
| AKTO | | | | LR | LR | 03 05 50.4 | |
| | comp=Z,276nm,19.4s,baz=94,slow=40 | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **MAK** | **Makhachkala** | **20.22** | **309** | *e*P | **P** | **02 56 59.5** | **-2.1** |
| MAK | | | | *e**PP | **pP** | **02 57 12.6** | **+0.2** |
| MAK | | | | *e**SP | **sP** | **02 57 20.5** | **+2.6** |
| MAK | | | | *e*S | **S** | **03 00 43.6** | **-2.5** |
| MAK | | | | pmax | pmax | | |
| | comp=Z,193nm,1.3s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,312nm,11.0s | | | | | | |
| **SHL** | **Shillong** | **21.05** | **102** | P | **P** | **02 57 09.3** | **-1.7** |
| **SHL** | **Shillong** | **21.05** | **102** | *e*x | x | 02 57 10.5 | |
| **SHL** | **Shillong** | **21.05** | **102** | P | **P** | **02 57 11.8** | **+0.9** |
| | SNR=12 | | | | | | |
| **SHL** | **Shillong** | **21.05** | **102** | P | **P** | **02 57 09.3** | **-1.7** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,55nm,1.2s | | | | | | |
| **BVA0** | **Borovoye Array** | **21.08** | **2** | ⇓P | **P** | **02 57 09.6** | **-1.2** |
| | comp=Z,16nm,1.1s,baz=174,slow=10,SNR=35 | | | | | | |
| **BVA0** | **Borovoye Array** | **21.08** | **2** | P | **P** | **02 57 09.6** | **-1.2** |
| **BRVK** | **Borovoye** | **21.11** | **2** | P | **P** | **02 57 09.6** | **-1.5** |
| BRVK | | | | IAmb | IAmb | 02 57 11.4 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **21.11** | **2** | P | **P** | **02 57 10.4** | **-0.8** |
| **BRVK** | **Borovoye** | **21.11** | **2** | *ce*P | **P** | **02 57 10.3** | **-0.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,60nm,2.5s | | | | | | |
| **GNI** | **Garni** | **21.18** | **299** | P | **P** | **02 57 13.3** | **+1.0** |
| **GNI** | **Garni** | **21.18** | **299** | P | **P** | **02 57 12.3** | **0.0** |
| | comp=Z,34nm,1.0s,baz=155,slow=4.3,SNR=16 | | | | | | |
| GNI | | | | LR | LR | 03 07 47.3 | |
| | comp=Z,60nm,18.8s,baz=114,slow=44 | | | | | | |
| | comp=Z,34nm,1.0s | | | | | | |
| **GNI** | **Garni** | **21.18** | **299** | P | **P** | **02 57 13.3** | **+1.0** |
| **GNI** | **Garni** | **21.18** | **299** | *de*P | **P** | **02 57 15.3** | **+3.0** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,75nm,1.3s | | | | | | |
| **GOMU** | **GeErMu** | **21.79** | **72** | P | **P** | **02 57 19.9** | **+0.9** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,21nm,1.4s | | | | | | |
| **RAYN** | **Ar Rayn** | **22.38** | **254** | P | **P** | **02 57 26.1** | **+1.0** |
| RAYN | | | | IAmb | IAmb | 02 57 31.6 | |
| | comp=Z,30nm,1.3s | | | | | | |
| **RAYN** | **Ar Rayn** | **22.38** | **254** | P | **P** | **02 57 24.1** | **-1.0** |
| **RAYN** | **Ar Rayn** | **22.38** | **254** | P | **P** | **02 57 26.1** | **+1.0** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| **KBZ** | **Khabaz** | **23.61** | **307** | P | **P** | **02 57 36.2** | **-1.0** |
| | comp=Z,2.1nm,0.7s,baz=117,slow=10,SNR=3.9 | | | | | | |
| KBZ | | | | LR | LR | 03 09 46.7 | |
| | comp=Z,132nm,18.5s,baz=95,slow=44 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **23.61** | **307** | ⇓*e*P | **P** | **02 57 38.3** | **+1.0** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,11nm,1.9s | | | | | | |
| **LKP** | **Lekhapani** | **23.78** | **94** | *e*x | x | 02 57 33.1 | |
| **KIV** | **Kislovodsk** | **23.83** | **308** | P | **P** | **02 57 39.8** | **+0.3** |
| **KIV** | **Kislovodsk** | **23.83** | **308** | *e*P | **P** | **02 57 40.2** | **+0.7** |
| KIV | | | | *e*S | **S** | **03 01 53.2** | **+0.6** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,61nm,14.0s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **24.74** | **23** | P | **P** | **02 57 46.4** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **24.74** | **23** | P | **P** | **02 57 46.2** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **24.74** | **23** | P | **P** | **02 57 46.0** | **-1.6** |
| | comp=Z,4.9nm,0.5s,baz=230,slow=11,SNR=20 | | | | | | |
| ZALV | | | | LR | LR | 03 08 05.1 | |
| | comp=Z,108nm,19.5s,baz=212,slow=38 | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **24.74** | **23** | *e*P | **P** | **02 57 45.9** | **-1.6** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **ARU** | **Arti** | **25.52** | **347** | P | **P** | **02 57 55.1** | **+0.4** |
| ARU | | | | IAmb | IAmb | 02 57 58.7 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **ARU** | **Arti** | **25.52** | **347** | LR | LR | 03 08 47.8 | |
| | comp=Z,214nm,18.8s,baz=162,slow=39 | | | | | | |
| **ARU** | **Arti** | **25.52** | **347** | *c i*P | **P** | **02 57 55.4** | **+0.8** |
| ARU | | | | | | 02 58 31.5 | |
| ARU | | | | S | **S** | **03 02 20.9** | **+1.7** |
| ARU | | | | SS | **SnSn** | **03 03 15.5** | **+0.7** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,33nm,1.1s | | | | | | |
| ARU | | | | MLR | MLR | | |
| | comp=Z,215nm,21.0s | | | | | | |
| **ARU** | **Arti** | **25.52** | **347** | P | **P** | **02 57 55.5** | **+0.8** |
| | comp=Z,29nm,1.2s,comp=Z,333nm | | | | | | |
| **BELG** | **Belogornoye** | **25.66** | **329** | LR | LR | 03 10 17.0 | |
| | comp=Z,236nm,21.0s,baz=124,slow=42 | | | | | | |
| **BELG** | **Belogornoye** | **25.66** | **329** | *c i*P | **P** | **02 57 56.2** | **+0.3** |
| BELG | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **SOC** | **Sochi** | **25.74** | **305** | *e*P | **P** | **02 57 54.8** | **-2.0** |
| SOC | | | | *e* | | 02 58 33.2 | |
| SOC | | | | *e*S | **S** | **03 02 20.3** | **-2.6** |
| SOC | | | | *e*SS | **SnSn** | **03 03 21.4** | **+1.0** |
| SOC | | | | MLR | MLR | | |
| | comp=Z,92nm,18.0s | | | | | | |
| **GTA** | **Gaotai** | **26.04** | **65** | *e*P | **P** | **02 58 01.4** | **+1.6** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **28.27** | **281** | LR | LR | 03 11 00.5 | |
| | comp=Z,138nm,21.6s,baz=34,slow=40 | | | | | | |
| **EIL** | **Elat** | **29.24** | **275** | LR | LR | 03 12 01.4 | |
| | comp=Z,91nm,19.2s,baz=74,slow=40 | | | | | | |
| **BR104** | **Keskin Array S** | **29.53** | **295** | P | **P** | **02 58 31.6** | **+0.7** |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **BR131** | **Keskin Array S** | **29.53** | **295** | P | **P** | **02 58 31.5** | **+0.6** |
| **BR131** | **Keskin Array S** | **29.53** | **295** | ⇑*e*P | **P** | **02 58 31.1** | **+0.1** |
| **BRTR** | **Keskin Array B** | **29.53** | **295** | P | **P** | **02 58 30.1** | **-0.9** |
| | comp=Z,1.6nm,0.7s,baz=109,slow=9.4,SNR=10 | | | | | | |
| BRTR | | | | LR | LR | 03 13 04.9 | |
| | comp=Z,66nm,20.1s,baz=98,slow=42 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **29.53** | **295** | *e*P | **P** | **02 58 31.6** | **+0.6** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **BR105** | **Keskin Array S** | **29.55** | **295** | P | **P** | **02 58 31.6** | **+0.5** |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **BR106** | **Keskin Array S** | **29.55** | **295** | P | **P** | **02 58 31.8** | **+0.7** |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **KIRV** | **Kirov** | **29.75** | **339** | LR | LR | 03 13 30.9 | |
| | comp=Z,26nm,18.5s,baz=152,slow=43 | | | | | | |
| **KIRV** | **Kirov** | **29.75** | **339** | ⇑*e*P | **P** | **02 58 33.5** | **+1.1** |
| **CHTO** | **Chiang Mai** | **29.96** | **109** | P | **P** | **02 58 35.1** | **+0.3** |
| CHTO | | | | IAmb | IAmb | 02 58 37.9 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **29.96** | **109** | P | **P** | **02 58 35.1** | **+0.3** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.15** | **109** | P | **P** | **02 58 37.8** | **+1.4** |
| | comp=Z,0.9nm,0.3s,baz=312,slow=7.2,SNR=7.6 | | | | | | |
| CMAR | | | | PcP | **PcP** | **03 01 38.6** | **+1.5** |
| | comp=Z,1.7nm,0.3s,baz=291,slow=4.3,SNR=6.9 | | | | | | |
| CMAR | | | | LR | LR | 03 12 18.1 | |
| | comp=Z,64nm,18.1s,baz=290,slow=40 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.15** | **109** | *e*P | **P** | **02 58 38.1** | **+1.7** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **PHRA** | **Phrae** | **31.16** | **108** | P | **P** | **02 58 45.0** | **-0.4** |
| **MOS** | **Moscow** | **32.33** | **327** | *e*P | **P** | **02 58 53.2** | **-2.0** |
| MOS | | | | *e* | | 02 59 57.5 | |
| **SONM** | **Songino Array** | **32.43** | **50** | P | **P** | **02 58 57.1** | **+0.7** |
| | comp=Z,2.1nm,0.6s,baz=252,slow=9.2,SNR=15 | | | | | | |
| SONM | | | | PcP | **PcP** | **03 01 43.8** | **+0.9** |
| | comp=Z,0.3nm,0.5s,baz=250,slow=4.3,SNR=2.7 | | | | | | |
| SONM | | | | LR | LR | 03 13 05.8 | |
| | comp=Z,40nm,20.8s,baz=288,slow=38 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **32.43** | **50** | *e*P | **P** | **02 58 57.6** | **+1.2** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **OBN** | **Obninsk** | **32.49** | **325** | LR | LR | 03 15 18.7 | |
| | comp=Z,388nm,18.5s,baz=168,slow=42 | | | | | | |
| **OBN** | **Obninsk** | **32.49** | **325** | ⇓*e*P | **P** | **02 58 57.4** | **+0.7** |
| OBN | | | | *e**PP | **pP** | **02 59 04.4** | **-4.2** |
| OBN | | | | *e**SP | **sP** | **02 59 14.5** | **+0.7** |
| OBN | | | | | | 03 00 02.0 | |
| OBN | | | | | | 03 01 44.0 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,44nm,2.5s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,332nm,16.0s | | | | | | |
| **SLVN** | **Son La** | **32.84** | **100** | P | **P** | **02 59 00.9** | **+0.8** |
| SLVN | | | | IAmb | IAmb | 02 59 03.8 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **32.86** | **50** | ⇓*e*P | **P** | **02 59 00.9** | **+0.7** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |

**AK09 Malin Array Si 34.64 314** P **P** **02 59 15.6 +0.2**
**AK10 Malin Array Si 34.66 314** P **P** **02 59 15.8 +0.2**
**AK08 Malin Array Si 34.66 314** P **P** **02 59 15.8 +0.2**
**AK07 Malin Array Si 34.67 314** P **P** **02 59 15.7 0.0**
**AK05 Malin Array Si 34.69 314** P **P** **02 59 15.8 -0.1**
**AKASG Malin Array Be 34.70 314** P **P** **02 59 15.6 -0.3**
comp=Z,4.6nm,0.8s,baz=97,slow=7.1,SNR=15
AKASG LR LR 03 16 30.1
comp=Z,158nm,19.8s,baz=112,slow=42
comp=Z,4.6nm,0.8s
**AKASG Malin Array Be 34.70 314** *eP* **P** **02 59 16.0 0.0**
AKASG pmax pmax
comp=Z,6.0nm,0.8s
**AKBB Malin Array Si 34.70 314** P **P** **02 59 15.7 -0.2**
**AKBB Malin Array Si 34.70 314** *ceP* **P** **02 59 15.8 -0.2**
**AKBB Malin Array Si 34.70 314** P **P** **02 59 16.0 0.0**
**AK01 Malin Array Si 34.71 314** P **P** **02 59 16.3 +0.3**
**KIEV Kiev 34.71 314** P **P** **02 59 15.7 -0.3**
KIEV IAmb IAmb 02 59 16.9
comp=Z,8.9nm,0.8s
**KIEV Kiev 34.71 314** ⇑P **P** **02 59 15.8 -0.2**
**KIEV Kiev 34.71 314** ⇑P **P** **02 59 15.8 -0.2**
**KIEV Kiev 34.71 314** P **P** **02 59 16.0 0.0**
comp=Z,56nm,1.0s
**AK12 Malin Array Si 34.73 314** P **P** **02 59 16.3 +0.1**
**AK11 Malin Array Si 34.73 314** P **P** **02 59 16.5 +0.3**
**AK14 Malin Array Si 34.75 314** P **P** **02 59 16.7 +0.3**
**AK22 Malin Array Si 34.81 314** P **P** **02 59 17.0 +0.1**
**AK19 Malin Array Si 34.84 314** P **P** **02 59 17.1 0.0**
**AK20 Malin Array Si 34.85 314** P **P** **02 59 17.1 -0.1**
**LUBAR Lubar, Ukraine 35.39 313** P **P** **02 59 21.8 -0.1**
**MLR Muntele Rosu 35.76 305** P **P** **02 59 26.1 +0.8**
**MLR Muntele Rosu 35.76 305** LR LR 03 18 11.7
comp=Z,58nm,18.2s,baz=90,slow=43
**MLR Muntele Rosu 35.76 305** ⇑P **P** **02 59 27.5 +2.2**
**MLR Muntele Rosu 35.76 305** ⇑P **P** **02 59 27.5 +2.2**
**MLR Muntele Rosu 35.76 305** P **P** **02 59 26.7 +1.4**
comp=Z,13nm,1.3s
**LYN LuoYang 36.26 74** *eP* **P** **02 59 31.1 +1.6**
LYN pmax pmax
comp=Z,16nm,0.4s
**FURI Furi 36.28 237** LR LR 03 15 33.5
comp=Z,31nm,19.6s,baz=162,slow=38
**VOIR 36.38 305** ⇑P P 02 59 50.2 +20
**BURAR Bucovina Array 36.56 308** ⇓P **P** **02 59 33.5 +1.5**
**MNK Minsk 36.73 320** *i* P **P** **02 59 30.7 -2.5**
comp=E,4.0nm,0.9s
MNK *i* P **P** **02 59 30.7 -2.5**
comp=N,6.0nm,0.7s
MNK *i* P **P** **02 59 30.7 -2.5**
comp=Z,14nm,0.9s,baz=111
MNK *i* pP **pP** **02 59 44.5 -0.8**
MNK *i* PP **PP** **03 00 54.9 -2.3**
MNK *i* S **S** **03 05 11.0 -2.9**
MNK *i* sS **sS** **03 05 34.1 +0.1**
MNK *i* SS **SnSn** **03 07 50.2 +3.2**
MNK *i* LQ LQ 03 11 37.9
MNK *i* LR LR 03 14 23.8
MNK *i* LRM MLR 03 16 06.8
comp=N,110nm,16.8s
MNK *i* LRM MLR 03 17 05.8
comp=E,40nm,14.5s
MNK *i* LRM MLR 03 17 14.3
comp=Z,156nm,18.9s
**MNK Minsk 36.73 320** *i* P **P** **02 59 30.7 -2.5**
MNK *i* *PP **pP** **02 59 44.5 -0.8**
MNK *i* 03 00 54.9
MNK *i* S **S** **03 05 10.9 -2.9**
MNK *i* *SS **sS** **03 05 34.0 +0.1**
MNK pmax pmax
comp=E,4.0nm,0.9s
MNK pmax pmax
comp=Z,14nm,0.9s
MNK pmax pmax
comp=N,6.0nm,0.7s
MNK MLR MLR
comp=N,110nm,17.0s
MNK MLR MLR
comp=E,40nm,15.0s
MNK MLR MLR
comp=Z,156nm,19.0s
**RNPP5 Staryi Chortor 36.88 314** P **P** **02 59 35.1 +0.5**
**RNPP9 Sopachiv 36.92 315** P **P** **02 59 35.3 +0.3**
**RNPP8 Varash 36.92 314** P **P** **02 59 35.4 +0.4**
**UBPT Khong Chiam 37.11 108** P **P** **02 59 37.2 +0.3**
**NACGM Naroch 37.46 320** *eP* **P** **02 59 40.4 +0.9**
comp=E,724nm,1.1s,baz=110
**DRGR 38.14 307** ⇓P **P** **02 59 46.3 +0.8**
**DRGR 38.14 307** ⇓P **P** **02 59 46.3 +0.8**
**SURR Surduc 38.45 305** ⇓P **P** **02 59 49.3 +1.3**
**KWP Kalwaria Pacla 38.53 311** P **P** **02 59 49.2 +0.6**
KWP IAmb IAmb 02 59 50.4
comp=Z,12nm,1.1s
**KWP Kalwaria Pacla 38.53 311** P **P** **02 59 49.2 +0.6**
KWP pmax pmax
comp=Z,12nm,1.1s
**KWP Kalwaria Pacla 38.53 311** P **P** **02 59 49.8 +1.2**
comp=Z,11nm,1.4s
**KOLS Kolonicke sedl 38.70 310** *eP* **P** **02 59 51.5 +1.4**
KOLS pmax pmax
comp=Z,5.0nm,0.9s
**KOLS Kolonicke sedl 38.70 310** *eP* **P** **02 59 51.5 +1.4**
**ITM Ithomi 38.78 291** P **P** **02 59 51.0 +0.1**
ITM IAmb IAmb 02 59 53.0
comp=Z,4.1nm,0.7s
**BZS Buzias 38.80 305** ⇑P **P** **02 59 52.1 +1.2**
**BZS Buzias 38.80 305** ⇑P **P** **02 59 52.1 +1.2**
**SIRR Siria 38.82 306** ⇓P **P** **02 59 53.6 +2.5**
**VSU Vasula 38.84 326** *ceP* **P** **02 59 50.8 -0.2**
VSU pmax pmax
comp=Z,20nm,1.7s
**JOF Joensuu 39.08 334** *eP* **P** **02 59 53.4 +0.4**
**PABE Paberze 39.19 320** *eP* **P** **02 59 54.4 +0.5**
**CRVS Cervenica-Dubn 39.23 310** *eP* **P** **02 59 55.5 +1.0**
CRVS pmax pmax
comp=Z,17nm,1.3s
**CRVS Cervenica-Dubn 39.23 310** *eP* **P** **02 59 55.5 +1.0**
**ARBE Arbavere 39.60 327** *eP* **P** **02 59 57.7 +0.3**
**NIE Niedzica 40.05 310** P **P** **03 00 03.0 +1.7**
**NIE Niedzica 40.05 310** P **P** **03 00 03.0 +1.7**
comp=Z,4.4nm,1.2s
**PSZ Piszkesteto 40.16 308** ⇑P **P** **03 00 03.9 +1.6**
**PSZ Piszkesteto 40.16 308** ⇑P **P** **03 00 03.9 +1.6**
**MTSE Matsula 40.35 325** *eP* **P** **03 00 04.2 +0.6**
**FIA1 FINESS Array S 40.43 330** P **P** **03 00 04.7 +0.4**
FIA1 IAmb IAmb 03 00 04.8
comp=Z,14nm,0.9s
**FINES FINESS Array B 40.43 330** P **P** **03 00 04.5 +0.3**
**FINES FINESS Array B 40.43 330** P **P** **03 00 03.8 -0.4**
comp=Z,3.4nm,0.7s,baz=114,slow=13,SNR=19
FINES LR LR 03 18 31.5
comp=Z,147nm,20.2s,baz=116,slow=39
comp=Z,3.4nm,0.7s
**FINES FINESS Array B 40.43 330** *eP* **P** **03 00 04.5 +0.3**
FINES pmax pmax
comp=Z,3.0nm,0.7s
**PBUR Paburge 40.44 321** *eP* **P** **03 00 04.4 0.0**
**MEF Metsahovi 40.65 327** *eP* **P** **03 00 05.9 -0.1**
**VYHS Vyhne 40.91 309** *eP* **P** **03 00 09.6 +1.2**
VYHS pmax pmax
comp=Z,4.0nm,1.4s
**VYHS Vyhne 40.91 309** *eP* **P** **03 00 09.6 +1.2**
VYHS *e* 03 18 39.7
VYHS *e* 03 18 58.6
**KEF Keuruu 41.27 330** *eP* **P** **03 00 11.8 +0.6**
**MPLH Magyarpolny 41.70 307** P **P** **03 00 16.2 +1.3**
comp=Z,13nm,1.3s
**JAVC Velka Javorina 41.71 309** *eP* **P** **03 00 16.5 +1.4**
**MORC Moravsky Berou 41.88 311** P **P** **03 00 16.9 +0.5**
**MORC Moravsky Berou 41.88 311** *eP* **P** **03 00 16.7 +0.4**
**MORC Moravsky Berou 41.88 311** ⇑P **P** **03 00 16.7 +0.4**
**MORC Moravsky Berou 41.88 311** P **P** **03 00 16.9 +0.5**
MORC pmax pmax
comp=Z,4.0nm,0.9s
**VRAC Vranov 42.45 310** *eP* **P** **03 00 21.5 +0.5**
**VRAC Vranov 42.45 310** LR LR 03 21 27.6
comp=Z,24nm,20.2s,baz=76,slow=41
**RONA Rosalia, Austr 42.56 307** *eP* **P** **03 00 21.6 -0.4**
comp=Z,2.4nm,1.1s
**KRUC Moravsky 42.57 309** *eP* **P** **03 00 22.3 +0.4**
**VAF Ylistaro 42.57 331** *eP* **P** **03 00 21.7 +0.1**
**DPC Dobruska-Polom 42.71 311** P **P** **03 00 24.6 +1.5**
**DPC Dobruska-Polom 42.71 311** P **P** **03 00 24.6 +1.5**
comp=Z,6.4nm,1.4s

**KSP Ksiaz 42.77 312** P **P** **03 00 24.8 +1.2**
**KSP Ksiaz 42.77 312** P **P** **03 00 24.8 +1.2**
**CONA Conrad Observa 42.87 308** *eP* **P** **03 00 24.7 +0.3**
comp=Z,3.9nm,1.9s
**ARSA Arzberg 43.08 307** *eP* **P** **03 00 26.5 +0.4**
comp=Z,3.5nm,1.1s
**CUC Castrocucco 43.22 296** P **P** **03 00 28.3 +0.9**
CUC IAmb IAmb 03 00 29.1
comp=Z,10nm,0.9s
**SOKA Soboth 43.41 306** *i* P **P** **03 00 28.7 -0.1**
comp=Z,0.3nm,0.3s
**BKNI Bangkinang 43.67 130** P **P** **03 00 32.5 +1.3**
**OBKA Obir 43.74 306** *eP* **P** **03 00 31.8 +0.2**
comp=Z,5.4nm,1.3s
**MOA Molln 43.94 308** *eP* **P** **03 00 33.2 +0.2**
comp=Z,3.6nm,1.2s
**BRG Berggiesshubel 44.26 312** *eP* **P** **03 00 36.7 +1.1**
BRG Amp 03 00 38.4
comp=Z,3.4nm,0.8s
**BRG Berggiesshubel 44.26 312** *eP* **P** **03 00 36.6 +1.1**
baz=92,slow=7.7
**GEC2 GERESS Array S 44.33 309** P **P** **03 00 36.0 -0.2**
**GEC2 GERESS Array S 44.33 309** *eP* **P** **03 00 36.4 +0.2**
comp=Z,8.8nm,1.5s,baz=92,slow=7.7
**GERES GERESS Array B 44.33 309** P **P** **03 00 36.6 +0.4**
**GERES GERESS Array B 44.33 309** P **P** **03 00 35.8 -0.5**
comp=Z,1.0nm,0.9s,baz=111,slow=5.5,SNR=7.3
GERES PcP **PP** **03 02 20.6 +0.7**
comp=Z,0.6nm,0.6s,baz=150,slow=2.2,SNR=3.6
comp=Z,1.0nm,0.9s
**GERES GERESS Array B 44.33 309** *eP* **P** **03 00 36.5 +0.2**
GERES pmax pmax
comp=Z,1.0nm,0.6s
**BIOA Bad Ischl, Aus 44.36 307** *eP* **P** **03 00 36.8 +0.4**
comp=Z,3.9nm,1.2s
**MYKA Terra Mystica 44.37 306** *eP* **P** **03 00 35.9 -0.7**
comp=Z,1.5nm,0.5s
**KHC Kasperske Hory 44.42 309**⇓ *eP* **P** **03 00 37.2 +0.3**
KHC pmax pmax
comp=Z,10.0nm,2.5s
**KMBO Kilima Mbogo 44.55 229** P **P** **03 00 40.5 +1.9**
**KMBO Kilima Mbogo 44.55 229** P **P** **03 00 40.5 +1.9**
KMBO pmax pmax
comp=Z,4.0nm,1.1s
**ARCES ARCESS Array B 44.76 340** P **P** **03 00 39.5 +0.2**
comp=Z,2.7nm,0.6s,baz=110,slow=7.8,SNR=12
ARCES LR LR 03 20 38.0
comp=Z,127nm,18.6s,baz=116,slow=38
comp=Z,2.7nm,0.6s
**CLL Collm 44.88 312** *ePP* PP 03 02 26.0 +0.4
CLL AMS AMS 03 22 00.0
comp=Z,100nm,20.3s
**LESA Schwarzleotal 45.01 307** *eP* **P** **03 00 42.0 +0.3**
comp=Z,2.5nm,1.0s
**ROTZ Rotzenmuhle 45.33 310** *eP* **P** **03 00 44.7 +0.6**
comp=Z,1.1nm,1.0s,baz=92,slow=7.7
**MANZ Manzenberg 45.40 311** *eP* **P** **03 00 45.5 +0.9**
comp=Z,3.7nm,1.4s,baz=92,slow=7.7
**NEUB Neuenburg 45.64 312** *eP* **P** **03 00 47.5 +1.0**
baz=92,slow=7.7
**HFS Hagfors 45.71 325** P **P** **03 00 46.3 -0.6**
comp=Z,6.8nm,0.8s,baz=120,slow=7.2,SNR=28
HFS LR LR 03 22 56.2
comp=Z,318nm,19.8s,baz=100,slow=40
comp=Z,6.8nm,0.8s
**MOX Moxa 45.73 312** *eP* **P** **03 00 48.2 +0.9**
baz=92,slow=7.7
**WATA Walderalm 45.76 307** *eP* **P** **03 00 47.5 -0.2**
comp=Z,2.5nm,0.8s
**GRF Grafenberg Arr 45.97 310** *eP* **P** **03 00 49.5 +0.4**
comp=Z,12nm,1.3s,baz=92,slow=7.7
**GORT1 Trebel 46.02 315** *eP* **P** **03 00 50.1 +0.8**
comp=Z,10nm,1.0s,baz=92,slow=7.7
**FLTG Flechtingen 46.02 314** *eP* **P** **03 00 49.8 +0.3**
comp=Z,9.7nm,0.9s,baz=92,slow=7.7
**MOTA Moosalm 46.08 307** *eP* **P** **03 00 49.3 -1.0**
comp=Z,2.8nm,0.8s
**HEH HeiHe 46.41 49** *eP* **P** **03 00 53.6 +1.0**
HEH pmax pmax
comp=Z,7.0nm,0.9s
**CLZ Clausthal 46.54 313** *eP* **P** **03 00 54.0 +0.3**
comp=Z,14nm,1.3s,baz=92,slow=7.7
**BSEG Bad Segeberg 46.67 316** *eP* **P** **03 00 54.8 +0.3**
comp=Z,13nm,1.0s,baz=92,slow=7.7
**NRDL Niedersach Rie 46.72 314** *eP* **P** **03 00 55.4 +0.5**
baz=92,slow=7.7
**NC405 NORSAR Array S 46.87 326** P **P** **03 00 55.6 -0.4**
NC405 IAmb IAmb 03 00 56.1
comp=Z,4.9nm,0.7s
**NORES NORESS Array B 46.88 325** P **P** **03 00 56.5 +0.4**
**DAVA Damuels 46.92 307** P **P** **03 00 56.4 -0.4**
comp=Z,2.2nm,0.6s
**NC303 NORSAR Array S 47.05 326** P **P** **03 00 57.2 -0.2**
**NB2 NORSAR Subarra 47.09 326** P **P** **03 00 56.7 -1.1**
comp=Z,6.8nm,0.8s,baz=103,slow=7.9
**NB2 NORSAR Subarra 47.09 326** P **P** **03 00 54.5 -3.3**
**NOA NORSAR Array B 47.09 326** P **P** **03 00 57.0 -0.8**
comp=Z,3.2nm,0.7s,baz=104,slow=7.8,SNR=23
NOA LR LR 03 23 59.4
comp=Z,320nm,18.6s,baz=105,slow=40
comp=Z,3.2nm,0.7s
**NOA NORSAR Array B 47.09 326** P **P** **03 00 57.0 -0.8**
**RETH Rethem/Aller, 47.19 314** *eP* **P** **03 00 59.0 +0.5**
comp=Z,12nm,1.6s,baz=92,slow=7.7
**NC204 NORSAR Array S 47.35 326** P **P** **03 00 58.6 -1.2**
NC204 IAmb IAmb 03 01 00.1
comp=Z,4.8nm,0.8s
**KSAR Wonju Array Be 48.07 66** P **P** **03 01 05.2 -0.5**
**KSAR Wonju Array Be 48.07 66** P **P** **03 01 05.2 -0.5**
**KSRS Korea Array 48.09 66** P **P** **03 01 05.3 -0.6**
comp=Z,2.2nm,0.8s,baz=271,slow=7.2,SNR=7.9
KSRS LR LR 03 24 11.1
comp=Z,30nm,18.4s,baz=150,slow=40
comp=Z,2.2nm,0.8s
**KSRS Korea Array 48.09 66** *eP* **P** **03 01 06.3 +0.4**
KSRS pmax pmax
comp=Z,2.0nm,0.8s
**YAK Yakutsk 48.65 33**⇑ *eP* **P** **03 01 09.0 -0.8**
YAK pmax pmax
comp=Z,15nm,0.5s
**SENIN Lac Senin/Sane 48.76 306** P **P** **03 01 10.2 -0.9**
**TATN Tataouine 48.87 287** P **P** **03 01 12.1 +0.2**
**KEST Kesra 49.01 292** P **P** **03 01 13.7 +0.7**
**KEST Kesra 49.01 292** P **P** **03 01 13.7 +0.7**
comp=Z,8.2nm,0.7s,baz=62,slow=10,SNR=4.2
comp=Z,8.2nm,0.7s
**KEST Kesra 49.01 292** P **P** **03 01 14.3 +1.3**
**KLR Kul'dur 49.25 50**⇓ *eP* **P** **03 01 14.7 +0.1**
KLR pmax pmax
comp=Z,5.0nm,1.7s
**PSTR Posyet 49.33 59**⇑ *eP* **P** **03 01 14.4 -0.9**
**SPITS Spitsbergen Ar 51.55 348** LR LR 03 26 03.6
comp=Z,51nm,18.4s,baz=86,slow=39
**EKA Eskdalemuir Ar 54.46 318** P **P** **03 01 51.8 -1.5**
comp=Z,0.9nm,0.5s,baz=96,slow=7.0,SNR=4.5
comp=Z,0.9nm,0.5s
**MJAR Matsushiro Arr 56.29 65** *eP* **P** **03 02 07.1 +0.3**
MJAR pmax pmax
comp=Z,2.0nm,1.0s
**MJA0 Matsu Arr-Jizo 56.32 65** *eP* **P** **03 02 07.1 0.0**
MJA0 pmax pmax
comp=Z,2.0nm,1.0s
**ESDC Sonseca Array 58.17 300** P **P** **03 02 19.3 -0.8**
ESDC IAmb IAmb 03 02 21.0
comp=Z,5.0nm,1.5s
**ESDC Sonseca Array 58.17 300** P **P** **03 02 19.1 -0.9**
comp=Z,1.9nm,0.8s,baz=68,slow=5.9,SNR=13
ESDC PcP **PcP** **03 03 11.1 -0.1**
comp=Z,1.0nm,0.9s,baz=42,slow=4.0,SNR=4.6
ESDC LR LR 03 33 29.0
comp=Z,16nm,18.1s,baz=126,slow=42
comp=Z,1.9nm,0.8s
**SEY Seymchan 59.13 32***ceP* **P** **03 02 28.8 +2.5**
SEY pmax pmax
comp=Z,7.0nm,1.7s
**KAPI Kappang 60.68 118** LR LR 03 31 02.1
comp=Z,15nm,20.9s,baz=280,slow=38
**BORG Borgarnes 61.71 331** LR LR 03 30 11.6
comp=Z,71nm,21.6s,baz=77,slow=37
**BILL Bilibino 63.42 25**⇓ *eP* **P** **03 02 55.8 +0.6**
BILL *SP **sP** **03 03 13.0 +0.1**
BILL pmax pmax
comp=Z,6.0nm,1.0s
BILL MLR MLR
comp=Z,62nm,17.0s
**TOA0 Torodi Ar. Sit 63.97 270** P **P** **03 02 59.3 -0.3**
TOA0 IAmb IAmb 03 03 01.2
comp=Z,4.9nm,0.9s
**TORD Torodi Ar. Bea 63.97 270** P **P** **03 02 59.1 -0.6**
**TORD Torodi Ar. Bea 63.97 270** P **P** **03 02 58.9 -0.8**
comp=Z,3.4nm,0.9s,baz=66,slow=9.0,SNR=19
comp=Z,3.4nm,0.9s
**TSUM Tsumeb 70.79 231** LR LR 03 39 09.2
comp=Z,42nm,20.1s,baz=336,slow=40
**SFJD Kangerlussuaq 71.38 339** LR LR 03 33 57.6
comp=Z,48nm,21.1s,baz=32,slow=35
**DBIC Dimbokro 72.79 267** P **P** **03 03 54.9 +0.1**
comp=Z,6.5nm,1.2s,baz=37,slow=7.2,SNR=3.1
comp=Z,6.5nm,1.2s
**C19K Lookout Ridge 73.15 16** P **P** **03 03 56.7 +0.5**
**BOSA Boshof 73.19 219** P **P** **03 03 57.8 +0.8**
comp=Z,6.2nm,1.0s,baz=57,slow=9.9,SNR=4.1
comp=Z,6.2nm,1.0s
**D19K Kuna River 73.96 16** P **P** **03 04 01.5 +0.5**
**E18K Tukpahlearik C 74.15 18** P **P** **03 04 02.5 +0.5**
**C23K Itkillik River 74.52 13** P **P** **03 04 04.4 +0.3**
**D22K Ayikyak River 74.89 14** P **P** **03 04 06.8 +0.5**
D22K IAmb IAmb 03 04 08.7
comp=Z,6.6nm,1.0s
**E21K Killik River 74.96 15** P **P** **03 04 06.4 -0.3**
E21K IAmb IAmb 03 04 07.8
comp=Z,5.4nm,0.8s
**E19K Redstone River 74.98 17** P **P** **03 04 06.7 -0.1**
E19K IAmb IAmb 03 04 08.8
comp=Z,5.4nm,0.7s
**F20K Avaraart Lake 75.67 17** P **P** **03 04 10.6 -0.1**
**E22K Anaktuvuk Pass 75.68 15** P **P** **03 04 11.3 +0.4**
**TOLK Toolik Lake Re 75.72 14** P **P** **03 04 11.5 +0.4**
TOLK IAmb IAmb 03 04 12.3
comp=Z,6.4nm,0.8s
**D25K Kavik River 75.75 12** P **P** **03 04 11.8 +0.5**
D25K IAmb IAmb 03 04 13.3
comp=Z,9.1nm,0.9s
**G19K Purcell Mounta 76.04 18** P **P** **03 04 13.2 +0.3**
G19K IAmb IAmb 03 04 14.0
comp=Z,6.6nm,0.9s
**F21K Alatna River 76.06 16** P **P** **03 04 13.2 +0.3**
**E24K Your Creek 76.42 14** P **P** **03 04 15.3 +0.2**
E24K IAmb IAmb 03 04 16.4
comp=Z,3.6nm,0.8s
**G21K Allakaket 76.62 16** P **P** **03 04 16.2 0.0**
**IMAR Indian Mountai 77.00 17** P **P** **03 04 18.0 -0.3**
**G23K Bananza Creek 77.25 15** P **P** **03 04 19.6 -0.2**
G23K IAmb IAmb 03 04 21.4
comp=Z,5.4nm,1.0s
**H21K Melozitna Rive 77.49 16** P **P** **03 04 21.0 -0.1**
H21K IAmb IAmb 03 04 22.5
comp=Z,5.3nm,1.0s
**BMAR Burnt Mountain 77.73 13** P **P** **03 04 23.0 +0.6**
**H23K Yukon River 78.11 15** P **P** **03 04 24.8 +0.3**
H23K IAmb IAmb 03 04 26.0
comp=Z,3.4nm,0.8s
**J19K Poorman 78.11 18** P **P** **03 04 25.0 +0.4**
J19K IAmb IAmb 03 04 25.8
comp=Z,5.3nm,0.9s
**J20K Nowinta River 78.36 18** P **P** **03 04 26.4 +0.4**
J20K IAmb IAmb 03 04 28.5
comp=Z,4.2nm,0.8s
**K17K Iditarod 78.36 20** P **P** **03 04 26.0 +0.1**
**H24K Noodor Dome 78.46 15** P **P** **03 04 26.6 +0.1**
**MLY Manley 78.50 16** P **P** **03 04 26.6 -0.2**
MLY IAmb IAmb 03 04 29.0
comp=Z,3.7nm,1.0s
**INK Inuvik 78.64 8** P **P** **03 04 28.0 +0.7**
INK IAmb IAmb 03 04 28.7
comp=Z,10nm,1.2s
**INK Inuvik 78.64 8** P **P** **03 04 28.0 +0.7**
INK pmax pmax
comp=Z,10.0nm,1.3s
**I23K Minto, Yukon-K 78.72 16** P **P** **03 04 28.3 +0.4**
**L16K Owhat River 78.78 21** P **P** **03 04 28.2 0.0**
L16K IAmb IAmb 03 04 30.4
comp=Z,6.0nm,0.8s
**G27K Doyon Strip 78.81 12** P **P** **03 04 28.8 +0.4**
G27K IAmb IAmb 03 04 30.6
comp=Z,4.8nm,1.1s
**NWAO Narrogin (SRO) 78.99 140** LR LR 03 39 51.8
comp=Z,58nm,18.2s,baz=197,slow=36
**MDM Murphy Dome 79.13 15** P **P** **03 04 30.2 0.0**
MDM IAmb IAmb 03 04 31.1
comp=Z,5.1nm,0.9s
**POKR Poker Plat Res 79.17 15** P **P** **03 04 30.9 +0.5**
POKR IAmb IAmb 03 04 32.1
comp=Z,7.1nm,1.1s
**NEA2 Nenana 79.26 16** P **P** **03 04 30.5 -0.3**
NEA2 IAmb IAmb 03 04 31.9
comp=Z,5.6nm,0.8s
**CAST Castle Rocks 79.51 17** P **P** **03 04 30.5 -1.8**
CAST IAmb IAmb 03 04 34.5
comp=Z,6.7nm,0.8s
**G30M tAoh Zrail Nji 79.52 10** P **P** **03 04 32.0 -0.3**
G30M IAmb IAmb 03 04 33.8
comp=Z,7.8nm,1.1s
**ILAR Eielson Array 79.59 15** P **P** **03 04 32.2 -0.5**
**ILAR Eielson Array 79.59 15** P **P** **03 04 31.6 -1.1**
comp=Z,1.0nm,0.9s,baz=314,slow=4.5,SNR=10
ILAR PP **PP** **03 07 33.8 +0.8**
comp=Z,1.1nm,1.1s,baz=324,slow=5.6,SNR=6.5
comp=Z,1.0nm,0.9s
**ILAR Eielson Array 79.59 15** *eP* **P** **03 04 31.9 -0.8**
ILAR pmax pmax
comp=Z,1.0nm,0.8s
**M17K Holitna River 79.64 21** P **P** **03 04 32.5 -0.5**
**G31M Satah River 79.85 9** P **P** **03 04 33.8 -0.2**
G31M IAmb IAmb 03 04 35.6
comp=Z,13nm,1.4s
**H29M Whitestone 79.90 11** P **P** **03 04 34.8 +0.5**
H29M IAmb IAmb 03 04 36.1
comp=Z,6.1nm,1.1s
**I28M Miner Creek 80.35 12** P **P** **03 04 35.5 -1.4**
**I29M Ogilvie Camp, 80.70 11** P **P** **03 04 38.0 -0.7**
I29M IAmb IAmb 03 04 39.9
comp=Z,7.3nm,1.2s
**DHY Denali Highway 80.95 16** P **P** **03 04 38.8 -1.4**
DHY IAmb IAmb 03 04 41.1
comp=Z,3.6nm,0.8s
**WB0 Warramunga Arr 81.03 120** P **P** **03 04 40.7 -0.3**
**WRA Warramunga Arr 81.10 120** P **P** **03 04 41.4 -0.1**
comp=Z,8.9nm,0.8s,baz=319,slow=5.0,SNR=47
comp=Z,8.9nm,0.8s
**WRAB Tennant Creek 81.10 120**⇑ *eP* **P** **03 04 41.8 +0.4**
WRAB pmax pmax
comp=Z,16nm,0.9s
**WB2 Warramunga Arr 81.11 120** P **P** **03 04 41.8 +0.3**
**I30M Mount Dempster 81.14 11** P **P** **03 04 41.1 0.0**
**WR0 Warramunga Arr 81.26 120** P **P** **03 04 43.5 +1.2**
**DAWY Dawson 81.71 12** P **P** **03 04 43.2 -0.9**
**J30M Hart River 81.75 11** P **P** **03 04 44.4 0.0**
**K29M Barlow Dome 82.24 12** P **P** **03 04 46.7 -0.2**
K29M IAmb IAmb 03 04 48.1
comp=Z,4.1nm,1.1s
**M27K Edge Creek, AK 82.78 14** P **P** **03 04 49.6 -0.2**
M27K IAmb IAmb 03 04 52.0
comp=Z,12nm,1.4s
**L29M L29M 82.81 12** P **P** **03 04 49.8 -0.1**
L29M IAmb IAmb 03 04 51.8
comp=Z,4.8nm,1.1s
**AS31 Alice Springs 83.11 123** P **P** **03 04 52.6 +0.7**
**ASAR Alice Springs 83.11 123** P **P** **03 04 52.2 +0.3**
comp=Z,5.2nm,0.8s,baz=312,slow=5.6,SNR=32
comp=Z,5.2nm,0.8s
**SCHQ Schefferville 85.58 336** LR LR 03 45 55.5
comp=Z,45nm,18.9s,baz=120,slow=38
**YKA Yellowknife Ar 85.83 2** P **P** **03 05 05.2 +0.1**
**YKA Yellowknife Ar 85.83 2** P **P** **03 05 05.4 +0.3**
comp=Z,1.8nm,0.8s,baz=354,slow=5.4,SNR=12
comp=Z,1.8nm,0.8s
**YKA Yellowknife Ar 85.83 2** *eP* **P** **03 05 05.7 +0.6**
YKA pmax pmax
comp=Z,1.0nm,0.7s
**STKA Stephens Creek 93.49 126** LR LR 03 49 19.4
comp=Z,29nm,22.0s,baz=219,slow=36
**PLCA Paso Flores 146.49 243** PKPbc **PKiKP** **03 12 09.2 -0.7**
comp=Z,2.8nm,0.9s,baz=92,slow=6.7,SNR=8.8

**ROM 02 02:57:46.8**±0.1,**42°.756N**±0°.006×**12°.833E**±0°.005,
**h9km, ML0.8**/14,**1C-1D, Error ellipse: s-maj=0.7km**
**s-min=0.4km az=173.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GAVE** | **Gavelli** | **0.08** | **145** | P | | Pg | 02 57 49.5 | +0.4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GAVE | | | | S | Sg | 02 57 51.4 | +0.6 |
| GAVE | | | | AML | AML | | |
| | comp=E,314µm,0.1s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=N,390µm,0.3s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=N,390µm,0.3s | | | | | | |
| ARRO | Arrone | 0.18 | 196 | ⇑P | Pg | 02 57 51.0 | +0.3 |
| ARRO | | | | AML | AML | | |
| | comp=E,31µm,0.2s | | | | | | |
| ARRO | | | | AML | AML | | |
| | comp=N,35µm,0.2s | | | | | | |
| ARRO | | | | AML | AML | | |
| | comp=E,31µm,0.2s | | | | | | |
| ARRO | | | | AML | AML | | |
| | comp=N,35µm,0.2s | | | | | | |
| MOMA | Monte Martano | 0.20 | 284 | ⇓P | Pg | 02 57 51.5 | +0.5 |
| MOMA | | | | S | Sg | 02 57 55.1 | +1.3 |
| MOMA | | | | AML | AML | | |
| | comp=E,48µm,0.2s | | | | | | |
| MOMA | | | | AML | AML | | |
| | comp=N,35µm,1.5s | | | | | | |
| MOMA | | | | AML | AML | | |
| | comp=N,35µm,0.5s | | | | | | |
| NRCA | Norcia | 0.22 | 69 | P | Pg | 02 57 52.0 | +0.6 |
| NRCA | | | | S | Sg | 02 57 55.8 | +1.3 |
| NRCA | | | | AML | AML | | |
| | comp=E,40µm,1.0s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,48µm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,40µm,1.0s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,48µm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,40µm,1.0s | | | | | | |
| CESI | CESI - Serrava | 0.26 | 12 | P | Pg | 02 57 52.8 | +0.8 |
| CESI | | | | S | Sb | 02 57 57.4 | -0.8 |
| CESI | | | | AML | AML | | |
| | comp=E,15µm,1.1s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=N,26µm,1.3s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=E,15µm,0.9s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=N,26µm,0.7s | | | | | | |
| ASSB | Assisi San Ben | 0.31 | 336 | P | Pb | 02 57 53.9 | -0.7 |
| ASSB | | | | AML | AML | | |
| | comp=E,25µm,0.5s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=N,22µm,1.4s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=N,22µm,0.6s | | | | | | |
| FDMO | Fiordimonte | 0.34 | 34 | P | Pg | 02 57 54.2 | +0.7 |
| FDMO | | | | S | Sb | 02 57 59.6 | -0.9 |
| FDMO | | | | AML | AML | | |
| | comp=E,18µm,1.1s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=N,16µm,1.2s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=E,18µm,0.9s | | | | | | |

*IDC **02** 02:58:57.9±0.9, 15.°50S×173.°18W, h0km, mb4.1/7, mbtmp4.1/8, ML3.4/1, MS3.3/13, Error ellipse: s-maj=38.7km s-min=25.2km az=142.0*

*NEIC **02** 02:59:03.0±1.6, 15.°45S±0.°09×173.°1W±0.°2, h35km±2km, mb4.6/63, Error ellipse: s-maj=31.2km s-min=12.9km az=283.0*

**ISC 02 02:59:01.7**±0.6**, 15.°48S**±0.°08×**173.°1W**±0.°1**, h29km, n95, σ0.s74**/75**, mb4.6**/36**, MS3.5**/12**, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 2.01 | 39 | Pn | Pn | 02 59 33.4 | -0.3 |
| NIUE | Niue | 4.68 | 140 | | Pn | 03 00 10.7 | +0.3 |
| MSVF | Nonsavu | 8.79 | 254 | LR | LR | 03 04 08.4 | |
| | comp=Z,226nm,20.9s,baz=355,slow=36 | | | | | | |
| RAR | Rarotonga | 13.86 | 116 | Pn | Pn | 03 02 15.2 | -1.1 |
| | 1.9nm,0.3s,baz=243,slow=9.0,SNR=2.3 | | | | | | |
| RAR | | | | LR | LR | 03 06 34.3 | |
| | comp=Z,71nm,20.1s,baz=278,slow=33 | | | | | | |
| | 10nm,0.6s | | | | | | |
| DZM | Mont Dzumac | 20.45 | 248 | LR | LR | 03 10 32.9 | |
| | comp=Z,124nm,20.1s,baz=58,slow=34 | | | | | | |
| PPT | Papeete | 22.63 | 99 | LR | LR | 03 11 14.2 | |
| | comp=Z,28nm,19.8s,baz=322,slow=32 | | | | | | |
| URZ | Urewera | 24.29 | 199 | LR | LR | 03 13 04.6 | |
| | comp=Z,37nm,18.6s,baz=44,slow=35 | | | | | | |
| RTZ | Ruatahuna | 24.65 | 199 | P | P | 03 04 20.3 | +0.3 |
| MRZ | Mangatainoka R | 26.96 | 199 | P | P | 03 04 39.6 | -1.1 |
| HNR | Honiara | 26.99 | 280 | LR | LR | 03 13 04.3 | |
| | comp=Z,911nm,19.5s,baz=127,slow=32 | | | | | | |
| KHZ | Kahutara | 29.21 | 201 | P | P | 03 05 01.1 | +0.4 |
| H11S2 | WAKE ISLAND Hy | 39.19 | 329 | T | T | 03 48 10.0 | |
| | baz=146,slow=76,SNR=6.8 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.20 | 329 | T | T | 03 48 10.0 | |
| | baz=146,slow=76,SNR=6.8 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.20 | 329 | T | T | 03 48 09.4 | |
| | baz=146,slow=76 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 40.13 | 330 | T | T | 03 49 20.9 | |
| | baz=150,slow=76,SNR=6.4 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.13 | 330 | T | T | 03 49 21.3 | |
| | baz=150,slow=76,SNR=8.3 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 40.15 | 330 | T | T | 03 49 22.5 | |
| | baz=150,slow=76,SNR=6.0 | | | | | | |
| ASAR | Alice Springs | 50.38 | 252 | P | P | 03 07 55.5 | -1.2 |
| | 1.6nm,0.7s,baz=90,slow=7.9,SNR=8.1 | | | | | | |
| ASAR | | | | LR | LR | 03 28 09.5 | |
| | comp=Z,65nm,19.1s,baz=98,slow=35 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| GUMO | Guam | 50.63 | 303 | LR | LR | 03 26 02.8 | |
| | comp=Z,20nm,19.8s,baz=228,slow=32 | | | | | | |
| MJAR | Matsushiro Arr | 69.19 | 320 | LR | LR | 03 34 03.7 | |
| | comp=Z,22nm,20.4s,baz=162,slow=30 | | | | | | |
| JNU | Nakatsue | 72.07 | 313 | LR | LR | 03 35 01.5 | |
| | comp=Z,22nm,20.2s,baz=342,slow=30 | | | | | | |
| PFO | Pinyon Flats O | 72.75 | 47 | LR | LR | 03 34 56.3 | |
| | comp=Z,24nm,18.2s,baz=282,slow=30 | | | | | | |
| YBH | Yreka Blue Hor | 73.48 | 37 | LR | LR | 03 34 43.1 | |
| | comp=Z,39nm,20.1s,baz=290,slow=29 | | | | | | |
| NVAR | Mina Array Bea | 74.18 | 42 | P | P | 03 10 37.7 | +1.7 |
| | 3.2nm,0.9s,baz=227,slow=10.0,SNR=16 | | | | | | |
| NVAR | | | | LR | LR | 03 36 13.9 | |
| | comp=Z,42nm,21.1s,baz=274,slow=30 | | | | | | |
| | 3.2nm,0.9s | | | | | | |
| QSPA | South Pole Qui | 74.57 | 180 | P | P | 03 10 37.8 | 0.0 |
| QSPA | South Pole Qui | 74.57 | 180 | P | P | 03 10 39.1 | +1.3 |
| | 0.7nm,0.8s,baz=107,slow=14,SNR=1.6 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| SHPR | Sheep Range | 75.20 | 45 | P | P | 03 10 42.7 | +0.8 |
| J05D | Fort Rock, OR | 75.30 | 36 | P | P | 03 10 42.8 | +0.5 |
| J05D | | | | IAmb | IAmb | 03 10 45.3 | |
| | comp=Z,9.8nm,0.9s | | | | | | |
| W13A | Hualapai Mount | 75.34 | 47 | P | P | 03 10 42.1 | -0.8 |
| Y14A | Wickenburg | 75.38 | 48 | P | P | 03 10 43.3 | +0.4 |
| H04A | Detroit Lake | 75.64 | 35 | P | P | 03 10 43.3 | -0.8 |
| H04A | | | | IAmb | IAmb | 03 10 46.3 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| F03A | Seaside | 75.71 | 33 | P | P | 03 10 44.5 | +0.2 |
| PINE | Pine Mountain | 75.78 | 36 | P | P | 03 10 46.6 | +1.4 |
| WVOR | Wild Horse Val | 76.31 | 38 | P | P | 03 10 48.2 | +0.2 |
| WVOR | | | | IAmb | IAmb | 03 10 50.6 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| HOOD | Mount Hood Mea | 76.34 | 35 | P | P | 03 10 49.3 | +1.1 |
| LCMT | Little Creek M | 76.78 | 45 | P | P | 03 10 51.1 | +0.3 |
| Q12A | Willow Creek R | 76.78 | 43 | P | P | 03 10 50.8 | -0.1 |
| Q12A | | | | IAmb | IAmb | 03 10 53.2 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| CCUT | Cedar City | 76.97 | 45 | P | P | 03 10 53.4 | +1.3 |
| CCUT | | | | IAmb | IAmb | 03 10 55.0 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| KNB | Kanab | 77.07 | 45 | P | P | 03 10 53.4 | +0.9 |
| SPR3 | Spring Creek 3 | 77.08 | 43 | P | P | 03 10 53.1 | +0.3 |
| U15A | North Rim | 77.14 | 46 | P | P | 03 10 53.4 | +0.3 |
| U15A | | | | IAmb | IAmb | 03 10 56.0 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| PSUT | Pine Spring | 77.15 | 44 | P | P | 03 10 52.6 | -0.5 |
| PSUT | | | | IAmb | IAmb | 03 10 55.4 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| D05A | Enumclaw | 77.35 | 33 | P | P | 03 10 53.4 | -0.2 |
| ELK | Elko | 77.44 | 41 | P | P | 03 10 53.5 | -1.1 |
| PKCU | Pink Cliffs | 77.64 | 45 | P | P | 03 10 55.5 | -0.4 |
| G08A | Pilot Rock | 77.82 | 36 | P | P | 03 10 57.6 | +1.2 |
| G08A | | | | IAmb | IAmb | 03 10 59.0 | |
| | comp=Z,8.2nm,1.0s | | | | | | |
| X18A | Snowflake | 77.87 | 49 | P | P | 03 10 56.9 | -0.2 |
| HAWA | Hanford | 78.17 | 35 | P | P | 03 10 59.1 | +0.8 |
| HAWA | | | | IAmb | IAmb | 03 11 00.8 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| MVU | Marysvale | 78.24 | 44 | P | P | 03 10 59.6 | +0.5 |
| MSU | Marysvale | 78.27 | 44 | P | P | 03 11 00.3 | +1.0 |
| BMO | Blue Mountains | 78.50 | 37 | P | P | 03 11 01.2 | +0.9 |
| BMO | | | | IAmb | IAmb | 03 11 02.4 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| MFID | Camas Ranch | 78.56 | 39 | P | P | 03 11 00.7 | +0.1 |
| MFID | | | | IAmb | IAmb | 03 11 02.9 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| DUG | Dugway, Tooele | 78.71 | 43 | P | P | 03 11 01.1 | -0.4 |
| D08A | Wollman Farm, | 78.91 | 34 | P | P | 03 11 02.7 | +0.4 |
| D08A | | | | IAmb | IAmb | 03 11 04.8 | |
| | comp=Z,10nm,1.0s | | | | | | |
| F10A | Beach Ranch, E | 79.20 | 36 | P | P | 03 11 03.6 | -0.4 |
| F10A | | | | IAmb | IAmb | 03 11 05.9 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| TMUT | Trail Mountain | 79.32 | 44 | P | P | 03 11 05.9 | +0.8 |
| B08A | Colville Reser | 79.48 | 33 | P | P | 03 11 05.7 | +0.2 |
| B08A | | | | IAmb | IAmb | 03 11 07.1 | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| HLID | Hailey | 79.50 | 39 | P | P | 03 11 07.0 | +1.2 |
| HLID | | | | IAmb | IAmb | 03 11 08.6 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| C09A | Chrisman Ranch | 79.70 | 34 | P | P | 03 11 06.4 | -0.3 |
| C09A | | | | IAmb | IAmb | 03 11 08.8 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| P17A | Butcher Ranch, | 79.72 | 44 | P | P | 03 11 06.9 | -0.2 |
| P17A | | | | IAmb | IAmb | 03 11 10.6 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| VHRN | Van Horn | 79.95 | 54 | P | P | 03 11 09.6 | +1.0 |
| VHRN | | | | IAmb | IAmb | 03 11 11.1 | |
| | comp=Z,8.3nm,1.3s | | | | | | |
| P18A | Preston Nutter | 80.13 | 44 | P | P | 03 11 09.5 | 0.0 |
| TX31 | Lajitas Ar. Si | 80.40 | 56 | P | P | 03 11 12.0 | +1.0 |
| TX31 | | | | IAmb | IAmb | 03 11 13.8 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| TXAR | Lajitas Array | 80.40 | 56 | P | P | 03 11 12.4 | +1.4 |
| | comp=Z,1.9nm,1.0s,baz=229,slow=6.8,SNR=16 | | | | | | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| ALPN | Alpine | 80.84 | 55 | P | P | 03 11 13.9 | +0.6 |
| ALPN | | | | IAmb | IAmb | 03 11 15.7 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| DLMT | Dillon | 81.56 | 38 | P | P | 03 11 16.6 | -0.2 |
| DLMT | | | | IAmb | IAmb | 03 11 19.4 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| MSO | Missoula | 81.56 | 37 | P | P | 03 11 16.6 | -0.1 |
| MSO | | | | IAmb | IAmb | 03 11 19.1 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| TPAW | Teton Pass | 81.60 | 41 | P | P | 03 11 17.3 | +0.1 |
| TPAW | | | | IAmb | IAmb | 03 11 19.7 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| FXWY | Fox Creek | 81.63 | 40 | P | P | 03 11 18.2 | +0.8 |
| WRH | Wood River Hil | 81.97 | 11 | P | P | 03 11 18.6 | +0.3 |
| WRH | | | | IAmb | IAmb | 03 11 22.4 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| FLWY | Flagg Ranch | 82.06 | 40 | P | P | 03 11 19.5 | -0.1 |
| FLWY | | | | IAmb | IAmb | 03 11 22.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| PD31 | Pinedale Array | 82.12 | 42 | P | P | 03 11 20.5 | +0.6 |
| PD31 | | | | IAmb | IAmb | 03 11 21.9 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| PDAR | Pinedale Array | 82.12 | 42 | P | P | 03 11 20.6 | +0.7 |
| | comp=Z,1.7nm,0.8s,baz=222,slow=4.0,SNR=14 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| YHL | Hebgen Lake | 82.15 | 39 | P | P | 03 11 19.2 | -0.9 |
| CCB | Clear Creek Bu | 82.18 | 11 | P | P | 03 11 19.8 | +0.4 |
| BOZ | Bozeman (W) | 82.26 | 38 | P | P | 03 11 20.0 | -0.5 |
| BOZ | | | | IAmb | IAmb | 03 11 23.1 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| YHH | Holmes Hill | 82.32 | 39 | P | P | 03 11 20.6 | -0.4 |
| ILAR | Eielson Array | 82.46 | 11 | P | P | 03 11 21.4 | +0.5 |
| | comp=Z,0.8nm,0.8s,baz=228,slow=6.4,SNR=19 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| SDCO | Great Sand Dun | 82.54 | 48 | P | P | 03 11 21.1 | -1.2 |
| POKR | Poker Plat Res | 82.68 | 11 | P | P | 03 11 21.4 | -0.7 |
| POKR | | | | IAmb | IAmb | 03 11 23.9 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| DRIO | Del Rio | 82.89 | 57 | P | P | 03 11 23.5 | -0.5 |
| DRIO | | | | IAmb | IAmb | 03 11 25.8 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| RWWY | Rawlins | 83.14 | 44 | P | P | 03 11 25.0 | -0.3 |
| APMT | Aspermont | 84.75 | 54 | P | P | 03 11 32.2 | -1.2 |
| E22K | Anaktuvuk Pass | 84.80 | 8 | P | P | 03 11 32.6 | -0.3 |
| E22K | | | | IAmb | IAmb | 03 11 35.4 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| ABTX | Abilene, Hawle | 84.86 | 54 | P | P | 03 11 34.1 | +0.1 |
| H03S2 | Juan Fernandez | 84.91 | 124 | T | T | 04 45 24.9 | |
| | baz=251,slow=74,SNR=4.0 | | | | | | |
| H03S1 | Juan Fernandez | 84.92 | 124 | T | T | 04 45 28.5 | |
| | baz=251,slow=74,SNR=3.5 | | | | | | |
| H03S3 | Juan Fernandez | 84.92 | 124 | T | T | 04 45 35.3 | |
| | baz=251,slow=74,SNR=1.2 | | | | | | |
| PLCA | Paso Flores | 89.23 | 132 | LR | LR | 03 42 07.7 | |
| | comp=Z,34nm,20.6s,baz=182,slow=29 | | | | | | |
| YKA | Yellowknife Ar | 90.05 | 23 | P | P | 03 11 59.1 | +0.8 |
| | comp=Z,0.7nm,0.7s,baz=256,slow=5.0,SNR=2.9 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| GERES | GERESS Array B | 146.26 | 352 | PKPbc | PKPab | 03 18 40.4 | +0.1 |
| | comp=Z,0.7nm,0.8s,baz=66,slow=5.5,SNR=5.0 | | | | | | |
| BRTR | Keskin Array B | 146.41 | 321 | PKPbc | PKPab | 03 18 41.9 | +0.6 |
| | comp=Z,1.9nm,0.6s,baz=98,slow=2.9,SNR=10.0 | | | | | | |
| RONA | Rosalia, Austr | 146.94 | 348 | *e*PKP | PKiKP | 03 18 43.9 | -0.2 |
| | comp=Z,2.5nm,0.9s | | | | | | |
| RETA | Reutte | 147.92 | 355 | *e*PKP | PKiKP | 03 18 45.9 | -0.2 |
| | comp=Z,2.5nm,1.0s | | | | | | |
| ABTA | Abfaltersbach | 148.47 | 353 | *e*PKP | PKiKP | 03 18 46.6 | -0.8 |
| | comp=Z,3.1nm,0.8s | | | | | | |

*IDC **02** 03:00:54.2±2.5, 3.°10S×135.°59E, h0km, mb4.0/2, mbtmp4.2/3, ML4.0/1, MS2.4/1, Error ellipse: s-maj=98.9km s-min=29.6km az=79.0*

*DJA **02** 03:00:58.4±0.5, 3˚S±5˚×13˚5E±˚, h10km, M4.1/6, mb4.3/1, MLv4.1/6*

**ISC 02 03:00:56.7**±1.6**, 3.°1S**±0.°1×**135.°4E**±0.°1**, h10km, n7, σ1.s46**/8**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMPI | Kaimana, Papua | 1.73 | 251 | P | Pn | 03 01 27.3 | +0.5 |
| KMPI | | | | S | Sn | 03 01 50.4 | +1.4 |
| FAKI | Fak Fak | 3.10 | 273 | P | Pn | 03 01 46.4 | +0.7 |
| FAKI | | | | S | Sn | 03 02 20.5 | -2.4 |
| SWI | Sorong | 4.66 | 299 | P | Pn | 03 02 07.9 | +0.8 |
| DAV | Davao City (W) | 14.05 | 316 | LR | LR | 03 09 30.3 | |
| | comp=Z,16nm,18.5s,baz=182,slow=36 | | | | | | |
| WRA | Warramunga Arr | 16.76 | 183 | Pn | Pn | 03 04 52.1 | +0.4 |
| | 0.6nm,0.3s,baz=6.0,slow=12,SNR=32 | | | | | | |
| WRA | | | | Sn | Sn | 03 07 40.7 | -17 |
| | 0.5nm,0.3s,baz=10,slow=23,SNR=9.0 | | | | | | |
| | 10nm,0.9s | | | | | | |
| ASAR | Alice Springs | 20.49 | 184 | P | P | 03 05 33.6 | -1.3 |
| | 6.7nm,0.6s,baz=9.3,slow=11,SNR=82 | | | | | | |
| ASAR | | | | S | S | 03 09 07.7 | -17 |
| | 0.5nm,0.6s,baz=3.9,slow=28,SNR=1.7 | | | | | | |
| | 6.7nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 68.09 | 324 | P | P | 03 11 56.9 | +0.1 |
| | 0.7nm,0.5s,baz=122,slow=7.3,SNR=6.5 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

*IDC **02** 03:05:59.1±0.8, 31.°95N×69.°02E, h0km, mb3.8/20, mbtmp3.9/24, ML3.5/4, MS2.8/4, Error ellipse: s-maj=19.9km s-min=15.1km az=11.0*

*NNC **02** 03:06:03.6±3.4, 32.°11N×69.°27E, h11km±28km, mb3.8, Error ellipse: s-maj=22.5km s-min=16.5km az=165.0*

*NEIC **02** 03:06:04±1.9, 31.°97N±0.°10×69.°01E±0.°09, h29km±5km, mb4.4/24, Error ellipse: s-maj=14.5km s-min=10.5km az=194.0*

**ISC 02 03:06:01.3**±0.5**, 31.°97N**±0.°06×**68.°89E**±0.°05**, h10km, n78, σ1.s46**/78**, mb4.1**/28**, MS2.9**/3**, 2C-1D, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBL | Kabul | 2.57 | 3 | Pn | Pn | 03 06 44.5 | +1.3 |
| NIL | Nilore | 4.04 | 64 | Pn | Pn | 03 07 03.9 | +0.7 |
| JMU | Jammu | 5.14 | 80 | *e*S | Sn | 03 08 18.7 | +1.0 |
| THN | Thein Dam | 5.80 | 84 | *e*P | Pn | 03 07 28.9 | +1.5 |
| THN | | | | *e*S | Sn | 03 08 40.2 | +6.1 |
| THN | | | | IAML | | 03 09 14.5 | |
| | comp=E,43nm,0.7s | | | | | | |
| THN | | | | IAML | | 03 09 19.6 | |
| | comp=E,78nm,0.7s | | | | | | |
| HRA | Herat | 6.07 | 295 | Pn | Pn | 03 07 33.4 | +2.1 |
| DHRM | DHARAMSHALA | 6.29 | 86 | *e*P | Pn | 03 07 37.1 | +2.7 |
| DHRM | | | | *e*S | Sn | 03 08 51.8 | +5.3 |
| DHRM | | | | IAML | | 03 09 30.7 | |
| | comp=E,113nm,0.7s | | | | | | |
| DHRM | | | | IAML | | 03 09 36.1 | |
| | comp=E,87nm,0.7s | | | | | | |
| BHK | Bhakra | 6.44 | 93 | *e*S | Sn | 03 08 50.2 | +0.4 |
| SIMJ | Simiganj | 6.67 | 1 | Pn | Pn | 03 07 41.3 | +1.8 |
| CHGR | Chuyangaron | 6.67 | 2 | Pn | Pn | 03 07 41.4 | +1.9 |
| GAR | Garm | 7.11 | 9 | Pn | Pn | 03 07 45.7 | +0.2 |
| SMLA | Simla | 7.11 | 95 | *e*P | Pn | 03 07 47.2 | +1.8 |
| SMLA | | | | *e*S | Sn | 03 09 08.0 | +1.7 |
| SMLA | | | | IAML | | 03 09 12.8 | |
| | comp=E,30nm,0.5s | | | | | | |
| KUDL | Kundal | 7.61 | 118 | *e*P | Pn | 03 07 52.2 | -0.1 |
| DRK | Karamyk | 7.86 | 17 | Pn | Pn | 03 07 55.4 | -0.5 |
| BTK | Batken | 8.22 | 10 | Pn | Pn | 03 08 00.3 | -0.4 |
| NRN | Naryn | 11.03 | 29 | Pn | Pn | 03 08 38.6 | -0.8 |
| KK31 | Karatay Array | 11.19 | 6 | Pn | Pn | 03 08 42.4 | +1.2 |
| KK31 | Karatay Array | 11.19 | 6 | P | Pn | 03 08 41.4 | +0.2 |
| | comp=E,2.6nm,0.5s,baz=226,slow=10,SNR=25 | | | | | | |
| KK31 | | | | S | Sn | 03 10 45.5 | -0.9 |
| | comp=E,1.1nm,0.5s,baz=191,slow=21,SNR=3.9 | | | | | | |
| KKAR | Karatay Array | 11.19 | 6 | Pn | Pn | 03 08 42.4 | +1.2 |
| KKAR | Karatay Array | 11.19 | 6 | Pn | Pn | 03 08 41.1 | -0.2 |
| AAK | Ala-Archa | 11.54 | 21 | Pn | Pn | 03 08 45.2 | -1.0 |
| | comp=E,0.5nm,0.3s,baz=176,slow=16,SNR=2.4 | | | | | | |
| AAK | | | | LR | LR | 03 12 43.1 | |
| | comp=E,22nm,21.2s,baz=228,slow=35 | | | | | | |
| | comp=E,3.9nm,0.6s | | | | | | |
| BOOM | Boomskoye usch | 11.90 | 26 | Pn | Pn | 03 08 50.3 | -0.9 |
| TKM2 | Tokmak 2 | 12.15 | 24 | ⇑P | Pn | 03 08 53.4 | -1.2 |
| | comp=E,3.7nm,0.9s | | | | | | |
| WSAR | Wadi Sarin | 12.58 | 229 | Pn | Pn | 03 09 01.6 | +1.2 |
| | comp=E,0.2nm,0.3s,baz=0.0,slow=9.1,SNR=1.6 | | | | | | |
| | comp=E,2.7nm,0.7s | | | | | | |
| HYB | Hyderabad | 16.93 | 147 | *e*P | Pn | 03 09 59.4 | +1.0 |
| MAKZ | Makanchi | 17.90 | 30 | | Pn | 03 10 09.4 | -0.9 |
| MK31 | Makanchi Array | 18.03 | 31 | | Pn | 03 10 11.0 | -0.9 |
| MK31 | Makanchi Array | 18.03 | 31 | P | Pn | 03 10 10.2 | -1.7 |
| | comp=E,1.8nm,0.8s,baz=210,slow=11,SNR=9.1 | | | | | | |
| MKAR | Makanchi Array | 18.03 | 31 | P | Pn | 03 10 10.3 | -1.6 |
| | comp=E,0.2nm,0.3s,baz=218,slow=11,SNR=7.5 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| AB31 | Akbulak array | 18.53 | 341 | P | P | 03 10 19.3 | +1.5 |
| | comp=E,3.9nm,0.8s,baz=157,slow=12,SNR=38 | | | | | | |
| ABKAR | Akbulak array | 18.53 | 341 | P | P | 03 10 19.2 | +1.4 |
| ABKAR | Akbulak array | 18.53 | 341 | P | P | 03 10 18.3 | +0.5 |
| ABKAR | | | | IAmb | IAmb | 03 10 20.9 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| LSA | Lhasa | 19.25 | 91 | P | P | 03 10 24.6 | -1.8 |
| LSA | | | | IAmb | IAmb | 03 10 26.2 | |
| | comp=Z,6.2nm,0.4s | | | | | | |
| KURBB | Kurchatov Arra | 19.96 | 18 | P | P | 03 10 32.1 | -1.3 |
| | comp=Z,0.1nm,0.3s,baz=205,slow=10,SNR=8.7 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 19.96 | 18 | ⇓P | P | 03 10 33.2 | -0.2 |
| | comp=Z,2.3nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 20.14 | 339 | P | P | 03 10 36.2 | +0.8 |
| | comp=Z,2.3nm,0.6s,baz=169,slow=12,SNR=9.6 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| BVA0 | Borovoye Array | 21.07 | 3 | ⇑P | P | 03 10 46.3 | +0.8 |
| | comp=Z,2.2nm,0.6s,baz=184,slow=11,SNR=11 | | | | | | |
| BRVK | Borovoye | 21.10 | 2 | P | P | 03 10 46.0 | +0.2 |
| GNI | Garni | 21.11 | 299 | P | P | 03 10 47.5 | +1.2 |
| | comp=Z,6.8nm,0.9s,baz=63,slow=9.5,SNR=1.9 | | | | | | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| SHL | Shillong | 21.12 | 102 | P | P | 03 10 43.1 | -3.4 |
| KARS | Kars | 22.46 | 300 | P | P | 03 11 00.6 | -0.1 |
| KBZ | Khabaz | 23.54 | 307 | P | P | 03 11 12.6 | +0.9 |
| | comp=Z,2.2nm,0.8s,baz=169,slow=5.8,SNR=4.0 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| ZAA0 | Zalesovo Array | 24.75 | 23 | P | P | 03 11 21.6 | -1.2 |
| ZALV | Zalesovo Beam | 24.75 | 23 | P | P | 03 11 22.2 | -0.6 |
| ZALV | Zalesovo Beam | 24.75 | 23 | P | P | 03 11 21.5 | -1.4 |
| | comp=Z,0.6nm,0.3s,baz=206,slow=11,SNR=3.4 | | | | | | |
| ZALV | | | | LR | LR | 03 22 35.3 | |
| | comp=Z,35nm,18.8s,baz=252,slow=40 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| ARU | Arti | 25.49 | 347 | LR | LR | 03 21 42.2 | |
| | comp=Z,19nm,21.2s,baz=184,slow=37 | | | | | | |
| BELG | Belogornoye | 25.61 | 329 | LR | LR | 03 24 46.9 | |
| | comp=Z,30nm,18.3s,baz=143,slow=44 | | | | | | |
| BRTR | Keskin Array B | 29.46 | 295 | P | P | 03 12 06.3 | +0.8 |
| | comp=Z,0.7nm,0.8s,baz=116,slow=5.9,SNR=5.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| SONM | Songino Array | 32.47 | 50 | P | P | 03 12 32.5 | +0.5 |
| | comp=Z,0.4nm,0.5s,baz=249,slow=8.2,SNR=3.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| AKASG | Malin Array Be | 34.64 | 314 | P | P | 03 12 50.7 | 0.0 |
| | comp=Z,1.6nm,0.6s,baz=99,slow=7.5,SNR=5.9 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| AKBB | Malin Array Si | 34.64 | 314 | P | P | 03 12 51.6 | +1.0 |
| AKBB | | | | IAmb | IAmb | 03 12 53.2 | |
| | comp=Z,3.1nm,0.6s | | | | | | |
| KIEV | Kiev | 34.65 | 314 | P | P | 03 12 51.7 | +1.0 |
| KIEV | | | | IAmb | IAmb | 03 12 53.2 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| FIA1 | FINESS Array S | 40.38 | 330 | P | P | 03 13 39.6 | +0.5 |
| FIA1 | | | | IAmb | IAmb | 03 13 45.8 | |
| | comp=Z,7.3nm,1.0s | | | | | | |
| FINES | FINESS Array B | 40.39 | 330 | P | P | 03 13 39.1 | 0.0 |
| | comp=Z,1.3nm,0.5s,baz=111,slow=10,SNR=10 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| CUC | Castrocucco | 43.15 | 296 | P | P | 03 14 03.5 | +1.4 |
| CUC | | | | IAmb | IAmb | 03 14 04.5 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| ARCES | ARCESS Array B | 44.72 | 340 | P | P | 03 14 14.5 | +0.2 |
| ARCES | | | | IAmb | IAmb | 03 14 19.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| ARCES | ARCESS Array B | 44.72 | 340 | P | P | 03 14 14.4 | +0.1 |
| | comp=Z,2.4nm,0.9s,baz=129,slow=9.6,SNR=5.7 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| HFS | Hagfors | 45.65 | 325 | P | P | 03 14 21.2 | -0.6 |
| | comp=Z,1.2nm,0.5s,baz=141,slow=9.6,SNR=14 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| NB2 | NORSAR Subarra | 47.04 | 326 | P | P | 03 14 32.1 | -0.6 |
| | comp=Z,0.7nm,0.5s,baz=102,slow=7.9 | | | | | | |
| NOA | NORSAR Array B | 47.04 | 326 | P | P | 03 14 32.1 | -0.6 |
| | comp=Z,0.7nm,0.6s,baz=103,slow=7.8,SNR=12 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| NBO00 | NORSAR Array S | 47.25 | 326 | P | P | 03 14 34.1 | -0.2 |
| NC204 | NORSAR Array S | 47.30 | 326 | P | P | 03 14 34.1 | -0.7 |
| NC204 | | | | IAmb | IAmb | 03 14 47.6 | |
| | comp=Z,13nm,1.5s | | | | | | |
| KSRS | Korea Array | 48.16 | 66 | P | P | 03 14 40.7 | -1.0 |
| | comp=Z,0.6nm,0.6s,baz=281,slow=6.4,SNR=2.1 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| SENIN | Lac Senin/Sane | 48.69 | 306 | P | P | 03 14 45.6 | -0.3 |
| KEST | Kesra | 48.94 | 292 | P | P | 03 14 49.0 | +1.2 |
| KEST | | | | IAmb | IAmb | 03 14 51.2 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| KEST | Kesra | 48.94 | 292 | P | P | 03 14 48.5 | +0.6 |
| | comp=Z,3.5nm,0.7s,baz=146,slow=8.4,SNR=8.8 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| SSB | Saint Sauveur | 50.73 | 305 | P | P | 03 15 01.4 | +0.1 |
| SSB | | | | IAmb | IAmb | 03 15 09.8 | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| CEST | Esterri de Car | 53.55 | 302 | P | P | 03 15 21.6 | -0.9 |
| CEST | | | | IAmb | IAmb | 03 15 26.7 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| EKA | Eskdalemuir Ar | 54.40 | 318 | P | P | 03 15 28.0 | -0.3 |
| | comp=Z,0.5nm,0.5s,baz=93,slow=8.6,SNR=2.4 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| XMIS | Christmas Isla | 54.94 | 134 | P | P | 03 15 31.4 | -1.2 |
| MJB9 | Matsu-Tunnel | 56.35 | 65 | P | P | 03 15 40.6 | -2.0 |
| MAJO | Matsushiro | 56.35 | 65 | P | P | 03 15 40.8 | -1.9 |
| ESDC | Sonseca Array | 58.10 | 300 | P | P | 03 15 54.0 | -1.0 |
| | comp=Z,0.6nm,0.6s,baz=64,slow=7.0,SNR=6.9 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| PAB | San Pablo | 58.42 | 300 | P | P | 03 15 56.9 | -0.4 |
| PAB | | | | IAmb | IAmb | 03 16 05.9 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| TORD | Torodi Ar. Bea | 63.90 | 270 | P | P | 03 16 34.2 | -0.5 |
| | comp=Z,0.6nm,0.8s,baz=70,slow=11,SNR=4.6 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| ILAR | Eielson Array | 79.60 | 15 | P | P | 03 18 06.9 | -1.4 |
| | comp=Z,0.1nm,0.5s,baz=306,slow=5.1,SNR=2.5 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 81.17 | 120 | P | P | 03 18 16.0 | -1.4 |
| | comp=Z,1.9nm,0.8s,baz=319,slow=5.0,SNR=14 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| ASAR | Alice Springs | 83.18 | 123 | P | P | 03 18 27.0 | -0.9 |
| | comp=Z,1.1nm,0.8s,baz=318,slow=5.6,SNR=7.1 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,1.1nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.82** | **2** | P | **P** | **03 18 40.2** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=352,slow=5.4,SNR=5.6 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |

*IDC **02** 03:26:45.7±9.0, 19°03N×155°75W, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=180.4km s-min=22.2km az=53.0*

*HVO **02** 03:26:48.5±1.4, 19°410N±0°009×155°264W±0°006, h-0km±4km, ML3.7/17, ML3.0/18(NEIC), Error ellipse: s-maj=1.4km s-min=0.7km az=170.0*

*NEIC **02** 03:26:49.4±1.3, 19°421N±0°005×155°272W±0°009, h5km±1km, Error ellipse: s-maj=2.5km s-min=1.4km az=129.0*

**ISC 02 03:26:49.6**±0.9**, 19°43N**±0°03×**155°30W**±0°03**, h4**km±5km**, n31, σ1s22**/34**, mb3.4**/3**, Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UWE** | **Uwekahuna** | **0.01** | **140** | | **Pg** | **03 26 50.2** | **-0.3** |
| **OBL** | **Observatory Le** | **0.02** | **128** | | **Pg** | **03 26 50.5** | **-0.1** |
| **UWB** | **Uwekahuna B** | **0.02** | **105** | | **Pg** | **03 26 50.1** | **-0.5** |
| **WRMHI** | **West Rim** | **0.02** | **177** | | **Pg** | **03 26 51.0** | **+0.4** |
| **SBLHI** | **Steaming Bluff** | **0.03** | **97** | | **Pg** | **03 26 50.0** | **-0.7** |
| **HATHI** | **Halema'uma'u T** | **0.04** | **101** | | **Pg** | **03 26 49.5** | **-1.3** |
| **RSD** | **Rainshed** | **0.04** | **35** | | **Pg** | **03 26 51.9** | **+1.1** |
| **SDHHI** | **Sand Hill** | **0.04** | **170** | | **Pg** | **03 26 51.1** | **+0.3** |
| **BYL** | **Byron's Ledge** | **0.04** | **115** | | **Pg** | **03 26 49.3** | **-1.5** |
| **RIM** | **Rim** | **0.04** | **144** | | **Pg** | **03 26 50.0** | **-0.8** |
| **KKO** | **Keanakako`i** | **0.05** | **134** | | **Pg** | **03 26 49.8** | **-1.1** |
| **PUH** | **Pauahi** | **0.10** | **125** | | **Pg** | **03 26 50.9** | **-0.8** |
| PUH | | | | IAML | | 03 26 51.4 | |
| | comp=E,7µm,0.6s | | | | | | |
| PUH | | | | IAML | | 03 26 51.5 | |
| | comp=N,8µm,0.4s | | | | | | |
| **MLH** | **Mauna Loa** | **0.10** | **308** | | **Pg** | **03 26 52.8** | **+1.0** |
| MLH | | | | IAML | | 03 26 55.1 | |
| | comp=N,5µm,0.8s | | | | | | |
| MLH | | | | IAML | | 03 26 55.8 | |
| | comp=E,8µm,0.7s | | | | | | |
| **HLP** | **Hilina Pali** | **0.13** | **183** | | **Pg** | **03 26 52.0** | **-0.3** |
| HLP | | | | IAML | | 03 26 54.5 | |
| | comp=N,6µm,1.0s | | | | | | |
| HLP | | | | IAML | | 03 26 54.7 | |
| | comp=E,11µm,1.0s | | | | | | |
| **HLP** | **Hilina Pali** | **0.13** | **183** | | **Sg** | **03 26 54.8** | **+0.7** |
| **KNHH** | **Kane Nui o Ham** | **0.14** | **112** | | **Pg** | **03 26 51.5** | **-0.9** |
| **NPOC** | **North of Pu'u** | **0.18** | **102** | | **Pg** | **03 26 56.3** | **+3.0** |
| **JCUZ** | **Jacuzzi** | **0.19** | **104** | | **Pg** | **03 26 52.6** | **-0.9** |
| JCUZ | | | | | **Sg** | **03 26 55.4** | **-0.6** |
| **HTC** | **Hot Caves** | **0.21** | **205** | | **Pg** | **03 26 54.2** | **+0.4** |
| **JOKA** | **Jonika Flow** | **0.28** | **89** | | **Pg** | **03 26 53.5** | **-1.6** |
| JOKA | | | | IAML | | 03 27 00.1 | |
| | comp=E,4µm,0.8s | | | | | | |
| **ALEP** | **Alea Permanent** | **0.34** | **289** | | **Pb** | **03 26 58.5** | **0.0** |
| ALEP | | | | | **Sb** | **03 27 04.5** | **+0.1** |
| **PAH** | **Pahoa** | **0.34** | **79** | Pg | **Pg** | **03 26 55.2** | **-1.0** |
| **KHU** | **Kahuku** | **0.35** | **238** | Pg | **Pg** | **03 26 56.6** | **+0.2** |
| KHU | | | | | **Sb** | **03 27 03.9** | **-0.6** |
| **HPO** | **Honuapo** | **0.41** | **215** | | **Pg** | **03 26 57.3** | **-0.3** |
| **HPO** | **Honuapo** | **0.41** | **215** | | **Sb** | **03 27 05.4** | **-0.8** |
| **HUH** | **Hualalai** | **0.56** | **297** | | **Pb** | **03 27 01.7** | **-0.6** |
| **I59US** | **HAWAII INFRASO** | **0.58** | **286** | Pg | **Pg** | **03 26 56.8** | **-4.0** |
| | baz=118,slow=66 | | | | | | |
| **HPAH** | **Hawaii Prepara** | **0.70** | **328** | Pg | **Pg** | **03 27 02.6** | **-0.6** |
| **PDAR** | **Pinedale Array** | **44.87** | **48** | P | **P** | **03 35 06.4** | **+0.9** |
| | comp=E,0.1nm,0.3s,baz=221,slow=6.7,SNR=1.2 | | | | | | |
| | comp=E,0.1nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **45.66** | **5** | P | **P** | **03 35 11.2** | **0.0** |
| | comp=E,0.4nm,0.8s,baz=201,slow=6.5,SNR=4.0 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **47.73** | **68** | P | **P** | **03 35 29.0** | **+1.0** |
| | comp=E,0.7nm,0.8s,baz=256,slow=7.8,SNR=7.9 | | | | | | |
| | comp=E,0.7nm,0.8s | | | | | | |

*DNK **02** 03:38:17.1±3.2, 70°69N×21°68W, h6km±25km, ML3.0*

*IDC **02** 03:38:20.4±1.2, 70°79N×22°33W, h0km, mb3.4/5, mbtmp3.5/7, ML2.4/2, MS2.7/4, Error ellipse: s-maj=78.9km s-min=19.7km az=6.0*

**ISC 02 03:38:20.3**±0.8**, 70°57N**±0°09×**22°34W**±0°06**, h10**km**, n14, σ2s05**/15**, mb3.4**/5**, Eastern Kalaallit Nunaat**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCO** | **Scoresbysund** | **0.15** | **122** | *i* P | **Pg** | **03 38 22.1** | **-1.5** |
| SCO | | | | *i* S | **Sg** | **03 38 23.8** | **-2.2** |
| **DBG** | **Daneborg** | **3.82** | **9** | *i* S | Sn | 03 39 55.2 | -8.6 |
| DBG | | | | IAML | | 03 40 37.7 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **SOEG** | **Soedalen** | **3.98** | **238** | *i* P | **Pn** | **03 39 20.8** | **-0.4** |
| SOEG | | | | *e*S | **Sn** | **03 40 10.7** | **+2.8** |
| SOEG | | | | IAML | | 03 40 30.0 | |
| | comp=Z,153nm,0.8s | | | | | | |
| **SUMG** | **Summit** | **5.49** | **299** | *i* P | **Pn** | **03 39 42.5** | **+0.2** |
| SUMG | | | | *i* S | **Sn** | **03 40 42.7** | **-2.9** |
| SUMG | | | | IAML | | 03 41 18.8 | |
| | comp=Z,54nm,0.7s | | | | | | |
| **ICESG** | **Greenland Ices** | **6.16** | **264** | *i* P | **Pn** | **03 39 49.1** | **-2.4** |
| ICESG | | | | *i* S | **Sn** | **03 40 59.0** | **-3.2** |
| ICESG | | | | IAML | | 03 41 34.5 | |
| | comp=Z,49nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **16.03** | **71** | LR | LR | 03 46 59.7 | |
| | comp=Z,35nm,19.6s,baz=300,slow=33 | | | | | | |
| **NOA** | **NORSAR Array B** | **16.47** | **108** | Pn | **P** | **03 42 13.4** | **-0.5** |
| | baz=310,slow=10,SNR=2.8 | | | | | | |
| NOA | | | | LR | LR | 03 47 38.9 | |
| | comp=Z,13nm,20.0s,baz=305,slow=34 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **17.96** | **107** | P | **P** | **03 42 32.0** | **+1.8** |
| | comp=Z,0.1nm,0.3s,baz=327,slow=7.3,SNR=6.4 | | | | | | |
| HFS | | | | LR | LR | 03 47 47.9 | |
| | comp=Z,27nm,21.9s,baz=278,slow=32 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **21.07** | **91** | P | **P** | **03 43 05.0** | **+0.9** |
| | comp=Z,2.7nm,0.6s,baz=327,slow=10,SNR=16 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **28.01** | **119** | LR | LR | 03 54 41.9 | |
| | comp=Z,16nm,18.5s,baz=312,slow=35 | | | | | | |
| **PDAR** | **Pinedale Array** | **49.50** | **285** | P | **P** | **03 47 12.2** | **+1.5** |
| | comp=Z,0.3nm,0.7s,baz=34,slow=6.6,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.20** | **59** | P | **P** | **03 47 24.4** | **+1.1** |
| | comp=Z,0.5nm,0.9s,baz=323,slow=6.3,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.22** | **290** | P | **P** | **03 48 01.0** | **+0.6** |
| | comp=Z,0.1nm,0.4s,baz=11,slow=5.7,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **59.78** | **273** | P | **P** | **03 48 26.9** | **+1.7** |
| | comp=Z,0.6nm,0.7s,baz=42,slow=5.7,SNR=9.5 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |

*BJI **02** 03:49:39.5±0.0, 51°15N×178°34E, h14km, mb4.7/34, mB4.9/13, Ms4.5/12, Ms7 4.1/12*

*AEIC **02** 03:49:42.9±1.6, 51°17N±0°06×178°08E±0°06, h5km±4km, Error ellipse: s-maj=9.7km s-min=5.0km az=160.0*

*MOS **02** 03:49:45.8±1.0, 51°33N×178°17E, h37km, mb5.0/49, Error ellipse: s-maj=7.7km s-min=5.6km az=104.1*

*IDC **02** 03:49:46.2±2.2, 51°40N×178°21E, h29km±13km, mb4.1/28, mbtmp4.3/31, ML5.0/3, MS3.8/65, Error ellipse: s-maj=16.4km s-min=10.8km az=170.0*

*NEIC **02** 03:49:49.4±2.0, 51°44N±0°09×178°22E±0°07, h47km±6km, mb4.5/227, ML4.5(AEIC), Error ellipse: s-maj=13.1km s-min=6.3km az=173.0*

**ISC 02 03:49:45.6**±0.5**, 51°25N**±0°05×**178°22E**±0°03**, h30**km±3km**, h29**km**:pP-P, n520, σ1s38**/492**, mb4.5**/184**, MS3.8**/71**, 32C-16D, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.69** | **79** | | **Pb** | **03 49 58.0** | **-1.2** |
| AMKA | | | | | **Sn** | **03 50 09.6** | **+0.5** |
| **LSSE** | **Little Sitkin** | **0.72** | **18** | | **Pb** | **03 49 59.5** | **-0.3** |
| **LSPA** | **Little Sitkin** | **0.75** | **17** | | **Pb** | **03 49 59.8** | **-0.3** |
| LSPA | | | | | **Sb** | **03 50 10.9** | **+0.9** |
| **LSNW** | **Little Sitkin** | **0.75** | **14** | | **Pb** | **03 49 59.6** | **-0.6** |
| **CESW** | **Semis' Southwe** | **1.07** | **52** | | **Pb** | **03 50 04.8** | **-0.7** |
| **CETU** | **Semis' Tuman** | **1.07** | **47** | | **Pb** | **03 50 05.3** | **-0.3** |
| **CERB** | **Semis' Cerberu** | **1.12** | **52** | | **Pb** | **03 50 06.0** | **-0.3** |
| **CEAP** | **Semis' Anvil P** | **1.14** | **48** | | **Pb** | **03 50 06.0** | **-0.7** |
| **CEPE** | **Semis' Perret** | **1.15** | **51** | | **Pb** | **03 50 06.3** | **-0.5** |
| **GAEA** | **Gareloi East** | **1.97** | **73** | | **Pb** | **03 50 18.6** | **-2.2** |
| **TANO** | **Tanaga North** | **2.38** | **72** | | **Pb** | **03 50 24.6** | **-3.2** |
| **TASE** | **Tanaga Southea** | **2.41** | **74** | | **Pn** | **03 50 25.0** | **+1.9** |
| **TAFP** | **Tanaga Falls P** | **2.46** | **73** | | **Pn** | **03 50 25.3** | **+1.6** |
| TAFP | | | | | **Sn** | **03 50 55.0** | **+2.3** |
| TAFP | | | | | LR | 03 50 57.9 | |
| **KICM** | **Kanaga Island** | **2.94** | **75** | | **Pn** | **03 50 32.3** | **+2.1** |
| **SHEM** | **Shemya Is, Ala** | **2.95** | **302** | Pn | **Pn** | **03 50 30.7** | **+0.4** |
| | 186nm,0.3s,baz=88,slow=2.5,SNR=73 | | | | | | |
| SHEM | | | | Sn | **Sn** | **03 51 05.2** | **+0.6** |
| | 100nm,0.3s,baz=172,slow=7.1,SNR=1.9 | | | | | | |
| SHEM | | | | LR | LR | 03 51 44.0 | |
| | comp=Z,3µm,18.3s,baz=133,slow=41 | | | | | | |
| **KIWB** | **Kanaga Island** | **2.96** | **76** | | **Pn** | **03 50 32.4** | **+1.9** |
| KIWB | | | | | **Sb** | **03 51 09.1** | **-4.1** |
| **ADK** | **Adak** | **3.25** | **77** | | **Pn** | **03 50 36.1** | **+1.6** |
| ADK | | | | | **Sn** | **03 51 13.8** | **+1.8** |
| **ADK** | **Adak** | **3.25** | **77** | P | **Pn** | **03 50 36.1** | **+1.6** |
| ADK | | | | | | 03 51 13.9 | |
| **GSMY** | **Great Sitkin M** | **3.66** | **75** | | **Pn** | **03 50 41.5** | **+1.4** |
| **GSTR** | **Great Sitkin T** | **3.67** | **74** | | **Pn** | **03 50 40.8** | **+0.6** |
| **ATKA** | **Atka Island** | **4.81** | **76** | | **Pn** | **03 50 57.2** | **+1.2** |
| **CLCO** | **Concord Point,** | **7.60** | **74** | | **Pn** | **03 51 36.9** | **+2.6** |
| **NIKH** | **Nikolski High** | **8.15** | **73** | | **Pn** | **03 51 44.1** | **+2.4** |
| **OKSP** | **Okmok Steeple** | **8.52** | **71** | | **Pn** | **03 51 49.5** | **+2.6** |
| **OKFG** | **Magazine Ridge** | **8.77** | **70** | | **Pn** | **03 51 53.5** | **+3.3** |
| **P08K** | **Saint George I** | **8.99** | **49** | | **Pn** | **03 51 56.3** | **+3.1** |
| **MAPS** | **Pakushin South** | **9.41** | **68** | | **Pn** | **03 52 01.9** | **+3.0** |
| **MSW** | **Makushin Switc** | **9.52** | **68** | | **Pn** | **03 52 03.6** | **+3.1** |
| **UNV** | **Unalaska Valle** | **9.67** | **68** | | **Pn** | **03 52 05.2** | **+2.7** |
| **ZRO** | **Akutan Zero** | **10.02** | **67** | | **Pn** | **03 52 10.9** | **+3.5** |
| **AKGG** | **Akutan Green G** | **10.03** | **67** | | **Pn** | **03 52 11.0** | **+3.5** |
| **AKSA** | **Akutan Strait** | **10.19** | **67** | | **Pn** | **03 52 12.8** | **+3.2** |
| **PET** | **Petropavlovsk** | **12.15** | **286** | ⇑*e*P | **Pn** | **03 52 38.6** | **+2.1** |
| **L14K** | **Kuka Creek** | **14.59** | **39** | Pn | **P** | **03 53 13.2** | **-2.5** |
| **N15K** | **Kwethluk River** | **15.07** | **45** | P | **P** | **03 53 19.3** | **-1.9** |
| **J14K** | **Nanvaranak Lak** | **15.14** | **33** | Pn | **Pn** | **03 53 18.6** | **+1.6** |
| **K15K** | **Wolf Creek Mou** | **15.59** | **37** | Pn | **Pn** | **03 53 23.4** | **+0.4** |
| K15K | | | | IAmb | IAmb | 03 53 30.4 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **O16K** | **Kokwok River B** | **15.76** | **49** | Pn | **Pn** | **03 53 26.5** | **+1.4** |
| **M16K** | **Timber Creek** | **15.96** | **43** | Pn | **Pn** | **03 53 29.5** | **+1.7** |
| M16K | | | | IAmb | IAmb | 03 54 01.6 | |
| | comp=Z,34nm,1.3s | | | | | | |
| **L16K** | **Owhat River** | **16.08** | **41** | | **P** | **03 53 31.3** | **-1.1** |
| **J16K** | **Anvik River** | **16.52** | **35** | Pn | **Pn** | **03 53 35.3** | **+0.4** |
| **N17K** | **Nushagak Hills** | **16.54** | **46** | Pn | **Pn** | **03 53 36.1** | **+1.0** |
| **M17K** | **Holitna River** | **16.79** | **43** | | **P** | **03 53 39.6** | **-0.6** |
| **K17K** | **Iditarod** | **17.07** | **39** | | **P** | **03 53 43.0** | **-0.3** |
| K17K | | | | IAmb | IAmb | 03 53 47.6 | |
| | comp=Z,45nm,1.4s | | | | | | |
| **J17K** | **VABM Dome** | **17.15** | **36** | | **P** | **03 53 43.8** | **-0.4** |
| J17K | | | | IAmb | IAmb | 03 53 48.5 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **N18K** | **Kilae Creek** | **17.19** | **47** | | **P** | **03 53 44.6** | **-0.1** |
| **O18K** | **Koktuh Hills** | **17.22** | **50** | | **P** | **03 53 45.0** | **0.0** |
| O18K | | | | IAmb | IAmb | 03 54 02.2 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **L18K** | **Granite Mounta** | **17.48** | **41** | | **P** | **03 53 48.2** | **+0.3** |
| **MA2** | **Magadan** | **17.56** | **309** | P | **Pn** | **03 53 47.9** | **+0.1** |
| | comp=Z,0.9nm,0.3s,baz=201,slow=17,SNR=1.7 | | | | | | |
| MA2 | | | | LR | LR | 04 00 21.0 | |
| | comp=Z,525nm,19.0s,baz=112,slow=36 | | | | | | |
| | comp=Z,3.6nm,0.4s | | | | | | |
| **MA2** | **Magadan** | **17.56** | **309** | ⇑*e*P | **P** | **03 53 48.7** | **0.0** |
| **OHAK** | **Old Harbor** | **17.61** | **59** | Pn | **Pn** | **03 53 47.6** | **-0.9** |
| **H17K** | **Granite Mounta** | **17.80** | **31** | | **P** | **03 53 53.1** | **+1.8** |
| **BILL** | **Bilibino** | **17.83** | **345** | ⇓*i*P | **P** | **03 53 52.9** | **+1.3** |
| BILL | | | | *i* S | **Sn** | **03 57 05.1** | **-3.6** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,453nm,17.0s | | | | | | |
| **N19K** | **Bonanza Creek** | **17.88** | **47** | | **P** | **03 53 53.5** | **+1.1** |
| **KDAK** | **Kodiak Island** | **18.07** | **57** | P | **Pn** | **03 53 53.4** | **-0.7** |
| **KDAK** | **Kodiak Island** | **18.07** | **57** | P | **Pn** | **03 53 51.8** | **-2.3** |
| | comp=Z,1.4nm,0.3s,baz=292,slow=9.5,SNR=19 | | | | | | |
| KDAK | | | | S | **Sn** | **03 57 07.8** | **-6.8** |
| | comp=Z,2.7nm,0.8s,baz=186,slow=16,SNR=1.3 | | | | | | |
| | comp=Z,7.1nm,0.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **18.07** | **57** | ⇑*e*P | **Pn** | **03 53 53.7** | **-0.4** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| **J18K** | **Innoko River** | **18.08** | **38** | | **P** | **03 53 55.6** | **+1.1** |
| **SEY** | **Seymchan** | **18.12** | **320** | P | **Pn** | **03 53 52.2** | **-2.4** |
| | comp=Z,1.1nm,0.4s,baz=198,slow=20,SNR=1.9 | | | | | | |
| **SEY** | **Seymchan** | **18.12** | **320** | ⇑*e*P | **P** | **03 53 56.7** | **+1.9** |
| **L19K** | **White Mountain** | **18.24** | **43** | | **P** | **03 53 57.2** | **+1.0** |
| **ILSW** | **Iliamna Southw** | **18.25** | **50** | P | **P** | **03 53 58.5** | **+2.0** |
| ILSW | | | | IAmb | IAmb | 03 54 05.3 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **M19K** | **Big River Lodg** | **18.32** | **44** | P | **Pn** | **03 53 58.4** | **+1.2** |
| **H18K** | **Honhosa River** | **18.44** | **32** | P | **Pn** | **03 53 59.6** | **+0.9** |
| H18K | | | | IAmb | IAmb | 03 54 05.0 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **RSO** | **Redoubt South** | **18.58** | **49** | P | **Pn** | **03 54 01.5** | **+1.0** |
| **J19K** | **Poorman** | **18.77** | **37** | | **Pn** | **03 54 03.4** | **+0.8** |
| J19K | | | | IAmb | IAmb | 03 54 08.7 | |
| | comp=Z,33nm,1.5s | | | | | | |
| **G18K** | **Tagagawik** | **18.82** | **30** | | **Pn** | **03 54 04.2** | **+1.0** |
| **M20K** | **Styx River** | **18.87** | **45** | P | **Pn** | **03 54 04.6** | **+0.7** |
| **K20K** | **Telida** | **19.07** | **40** | P | **Pn** | **03 54 07.3** | **+1.1** |
| **SPU** | **Mount Spurr** | **19.12** | **47** | P | **Pn** | **03 54 07.4** | **+0.5** |
| SPU | | | | IAmb | IAmb | 03 54 14.0 | |
| | comp=Z,21nm,1.0s | | | | | | |
| **E18K** | **Tukpahlearik C** | **19.31** | **25** | | **Pn** | **03 54 09.1** | **+0.1** |
| E18K | | | | IAmb | IAmb | 03 54 15.7 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **H19K** | **Roundabout Mou** | **19.31** | **33** | P | **Pn** | **03 54 09.1** | **+0.1** |
| H19K | | | | IAmb | IAmb | 03 54 15.8 | |
| | comp=Z,39nm,1.2s | | | | | | |
| **J20K** | **Nowinta River** | **19.42** | **38** | P | **Pn** | **03 54 10.3** | **-0.2** |
| **G19K** | **Purcell Mounta** | **19.47** | **31** | P | **Pn** | **03 54 11.2** | **+0.1** |
| G19K | | | | IAmb | IAmb | 03 54 16.8 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **I20K** | **Naaghedeneel** | **19.61** | **36** | P | **Pn** | **03 54 13.0** | **+0.4** |
| I20K | | | | IAmb | IAmb | 03 54 13.9 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **SKT** | **Skwentna** | **19.61** | **45** | Pn | **Pn** | **03 54 13.2** | **+0.5** |
| **F19K** | **Shaleruckik Mo** | **19.70** | **29** | P | **Pn** | **03 54 13.3** | **-0.3** |
| F19K | | | | IAmb | IAmb | 03 54 14.7 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **CAST** | **Castle Rocks** | **19.91** | **41** | P | **Pn** | **03 54 16.1** | **-0.1** |
| CAST | | | | IAmb | IAmb | 03 54 21.2 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **C18K** | **Utukok River** | **20.08** | **22** | | **P** | **03 54 17.4** | **+1.1** |
| C18K | | | | IAmb | IAmb | 03 54 22.7 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **M22K** | **Willow** | **20.18** | **46** | P | Pn | 03 54 18.6 | -0.7 |
| **E19K** | **Redstone River** | **20.27** | **28** | P | Pn | 03 54 19.9 | -0.6 |
| E19K | | | | IAmb | IAmb | 03 54 26.1 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **F20K** | **Avaraart Lake** | **20.46** | **30** | P | Pn | 03 54 21.9 | -0.7 |
| **IMAR** | **Indian Mountai** | **20.49** | **33** | P | **P** | **03 54 22.1** | **+1.3** |
| **PMR** | **Palmer** | **20.59** | **47** | P | Pn | 03 54 23.2 | -0.9 |
| PMR | | | | IAmb | IAmb | 03 54 35.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **PMR** | **Palmer** | **20.59** | **47** | P | Pn | 03 54 23.2 | -0.9 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **20.63** | **40** | | **P** | **03 54 23.7** | **+1.4** |
| BPAW | | | | IAmb | IAmb | 03 54 44.0 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **20.65** | **35** | P | **P** | **03 54 24.0** | **+1.4** |
| H21K | | | | IAmb | IAmb | 03 54 27.9 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **GHO** | **Glory Hole Cre** | **20.73** | **47** | P | **P** | **03 54 24.6** | **+1.1** |
| GHO | | | | IAmb | IAmb | 03 54 42.7 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **20.73** | **25** | | **P** | **03 54 24.8** | **+1.4** |
| D19K | | | | IAmb | IAmb | 03 54 28.5 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **PWL** | **Port Wells** | **20.78** | **49** | P | **P** | **03 54 24.3** | **+0.3** |
| PWL | | | | IAmb | IAmb | 03 54 36.4 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **C19K** | **Lookout Ridge** | **20.81** | **22** | | **P** | **03 54 25.4** | **+1.2** |
| C19K | | | | IAmb | IAmb | 03 54 29.3 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **KNK** | **Knik Glacier** | **20.85** | **48** | P | Pn | 03 54 26.2 | -1.1 |
| KNK | | | | IAmb | IAmb | 03 54 34.8 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **G21K** | **Allakaket** | **20.87** | **32** | P | **P** | **03 54 26.1** | **+1.3** |
| G21K | | | | IAmb | IAmb | 03 54 27.3 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **21.01** | **47** | P | **P** | **03 54 26.5** | **0.0** |
| SML | | | | IAmb | IAmb | 03 54 42.6 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MLY** | **Manley** | **21.12** | **37** | | **P** | **03 54 29.6** | **+2.0** |
| **RND** | **Reindeer** | **21.25** | **42** | | **P** | **03 54 30.0** | **+0.9** |
| **RND** | **Reindeer** | **21.25** | **42** | P | **P** | **03 54 30.0** | **+0.9** |
| RND | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **21.27** | **31** | P | **P** | **03 54 30.3** | **+1.2** |
| F21K | | | | IAmb | IAmb | 03 54 31.7 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **BWN** | **Browne** | **21.27** | **40** | P | **P** | **03 54 31.0** | **+1.8** |
| **GLI** | **Glacier Island** | **21.38** | **50** | P | **P** | **03 54 30.8** | **+0.4** |
| GLI | | | | IAmb | IAmb | 03 54 31.7 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.48** | **47** | P | **P** | **03 54 31.8** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **21.48** | **47** | P | **P** | **03 54 31.8** | **+0.3** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,60nm,1.1s | | | | | | |
| **NEA2** | **Nenana** | **21.59** | **39** | P | **P** | **03 54 33.2** | **+0.6** |
| NEA2 | | | | IAmb | IAmb | 03 54 37.5 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **21.70** | **38** | P | **P** | **03 54 35.1** | **+1.4** |
| **DHY** | **Denali Highway** | **21.79** | **44** | P | **P** | **03 54 35.2** | **+0.3** |
| DHY | | | | IAmb | IAmb | 03 54 38.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **E21K** | **Killik River** | **21.85** | **28** | P | **P** | **03 54 36.4** | **+1.0** |
| E21K | | | | IAmb | IAmb | 03 54 38.6 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **21.92** | **36** | P | **P** | **03 54 38.1** | **+2.0** |
| **WRH** | **Wood River Hil** | **21.94** | **40** | P | **P** | **03 54 37.4** | **+1.1** |
| **KLU** | **Klutina** | **22.06** | **48** | P | **P** | **03 54 38.9** | **+1.2** |
| KLU | | | | IAmb | IAmb | 03 55 03.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **22.07** | **39** | P | **P** | **03 54 38.0** | **+0.3** |
| MDM | | | | IAmb | IAmb | 03 54 40.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **22.07** | **47** | P | **P** | **03 54 39.4** | **+1.6** |
| **CCB** | **Clear Creek Bu** | **22.12** | **40** | P | **P** | **03 54 38.7** | **+0.4** |
| **G23K** | **Bananza Creek** | **22.16** | **34** | P | **P** | **03 54 39.5** | **+0.8** |
| G23K | | | | IAmb | IAmb | 03 54 44.3 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **COLA** | **College** | **22.18** | **39** | P | **P** | **03 54 40.3** | **+1.4** |
| COLA | | | | IAmb | IAmb | 03 55 24.6 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **COLA** | **College** | **22.18** | **39** | *de*P | **P** | **03 54 39.9** | **+1.0** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **22.32** | **30** | P | **P** | **03 54 41.2** | **+0.8** |
| E22K | | | | IAmb | IAmb | 03 54 43.4 | |
| | comp=Z,34nm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **22.38** | **41** | P | **P** | **03 54 41.3** | **+0.2** |
| HDA | | | | IAmb | IAmb | 03 54 43.6 | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **B21K** | **Ikpikpuk River** | **22.43** | **25** | P | **P** | **03 54 42.1** | **+0.6** |
| **POKR** | **Poker Plat Res** | **22.44** | **39** | P | **P** | **03 54 42.3** | **+0.6** |
| **RAGM** | **Ragged Mountai** | **22.48** | **52** | P | **P** | **03 54 43.3** | **+1.1** |
| **D22K** | **Ayikyak River** | **22.49** | **27** | P | **P** | **03 54 43.1** | **+0.9** |
| **IL31** | | **22.53** | **40** | P | **P** | **03 54 43.5** | **+0.9** |
| **ILAR** | **Eielson Array** | **22.53** | **40** | P | **P** | **03 54 40.9** | **-1.8** |
| | comp=Z,2.2nm,0.7s,baz=231,slow=8.3,SNR=39 | | | | | | |
| ILAR | | | | PcP | **PcP** | **03 58 35.2** | **0.0** |
| | comp=Z,0.4nm,0.6s,baz=292,slow=3.6,SNR=1.9 | | | | | | |
| ILAR | | | | ScP | **ScP** | **04 02 10.5** | **+0.1** |
| | comp=Z,0.9nm,0.8s,baz=295,slow=3.1,SNR=7.3 | | | | | | |
| ILAR | | | | LR | LR | 04 04 16.8 | |
| | comp=Z,191nm,19.2s,baz=222,slow=39 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **22.53** | **40** | *e*P | **P** | **03 54 43.6** | **+0.9** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **22.55** | **37** | P | **P** | **03 54 44.7** | **+1.8** |
| H24K | | | | IAmb | IAmb | 03 54 47.0 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **HMT** | **Hamilton** | **22.68** | **52** | P | **P** | **03 54 45.6** | **+1.3** |
| HMT | | | | IAmb | IAmb | 03 55 01.7 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **N25K** | **Chitina, Valde** | **22.70** | **48** | P | **P** | **03 54 45.0** | **+0.4** |
| N25K | | | | IAmb | IAmb | 03 54 56.8 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **GLB** | **Gilahina Butte** | **23.05** | **49** | P | **P** | **03 54 48.6** | **+0.5** |
| GLB | | | | IAmb | IAmb | 03 54 52.9 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **23.06** | **35** | P | **P** | **03 54 49.5** | **+1.4** |
| **J25K** | **Salcha River,** | **23.10** | **41** | P | **P** | **03 54 47.9** | **-0.8** |
| **CRQM** | **Cirque** | **23.28** | **51** | P | **P** | **03 54 51.9** | **+1.2** |
| **F24K** | **Squaw Lake** | **23.28** | **33** | P | **P** | **03 54 51.6** | **+1.2** |
| **TOLK** | **Toolik Lake Re** | **23.29** | **30** | P | **P** | **03 54 51.6** | **+1.1** |
| TOLK | | | | IAmb | IAmb | 03 54 59.2 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **23.34** | **31** | P | **P** | **03 54 52.0** | **+1.0** |
| **MCARA** | **McCarthy VSAT** | **23.41** | **49** | P | **P** | **03 54 53.2** | **+1.5** |
| MCARA | | | | IAmb | IAmb | 03 55 11.1 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **23.46** | **273** | *e*P | **P** | **03 54 54.7** | **+2.4** |
| YSS | | | | *e**SP | **pwP** | **03 55 03.0** | **+0.1** |
| YSS | | | | *e*S | **S** | **03 59 04.1** | **+0.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,100nm,3.8s | | | | | | |
| **SCRK** | **Sand Creek** | **23.49** | **43** | P | **P** | **03 54 51.6** | **-1.0** |
| SCRK | | | | IAmb | IAmb | 03 55 06.6 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **L26K** | **Log Cabin Wild** | **23.55** | **45** | P | **P** | **03 54 53.9** | **+0.8** |
| L26K | | | | IAmb | IAmb | 03 54 58.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **M26K** | **Nabesna, AK** | **23.59** | **47** | P | **P** | **03 54 54.0** | **+0.5** |
| **C23K** | **Itkillik River** | **23.65** | **27** | P | **P** | **03 54 54.6** | **+0.7** |
| C23K | | | | IAmb | IAmb | 03 55 11.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **23.79** | **29** | P | **P** | **03 54 56.0** | **+0.7** |
| **J26L** | **Joseph Creek** | **23.81** | **42** | P | **P** | **03 54 55.2** | **-0.4** |
| **GRNC** | **Granite Creek** | **23.95** | **51** | P | **P** | **03 54 57.6** | **+0.4** |
| GRNC | | | | IAmb | IAmb | 03 55 13.0 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **M27K** | **Edge Creek, AK** | **24.09** | **47** | P | **P** | **03 54 59.5** | **+1.1** |
| M27K | | | | IAmb | IAmb | 03 55 23.5 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **CTGM** | **Chitina Glacie** | **24.18** | **51** | P | **P** | **03 55 00.2** | **+1.1** |
| CTGM | | | | IAmb | IAmb | 03 55 14.7 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **I26K** | **Coal Creek Min** | **24.20** | **40** | P | **P** | **03 54 58.5** | **-0.7** |
| **TABL** | **Table Mountain** | **24.23** | **52** | P | **P** | **03 54 59.9** | **+0.2** |
| **L27K** | **Beaver Creek,** | **24.24** | **45** | P | **P** | **03 55 00.6** | **+1.1** |
| **BCAR** | **Beaver Creek A** | **24.26** | **45** | P | **P** | **03 55 01.0** | **+1.2** |
| **K27K** | **Chicken** | **24.32** | **43** | P | **P** | **03 55 00.5** | **+0.2** |
| K27K | | | | IAmb | IAmb | 03 55 19.7 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **LOGN** | **Logan Glacier** | **24.33** | **51** | P | **P** | **03 55 01.1** | **+0.6** |
| **BMAR** | **Burnt Mountain** | **24.39** | **34** | P | **P** | **03 55 01.3** | **+0.4** |
| **D25K** | **Kavik River** | **24.63** | **30** | P | **P** | **03 55 03.8** | **+0.7** |
| **JKA** | **Kamikawa-asahi** | **24.83** | **267** | P | **P** | **03 55 06.3** | **+1.3** |
| **ASAJ** | **Asahikawa** | **24.83** | **267** | LR | LR | 04 05 02.9 | |
| | comp=Z,88nm,20.4s,baz=116,slow=37 | | | | | | |
| **ASAJ** | **Asahikawa** | **24.83** | **267** | P | **P** | **03 55 06.4** | **+1.4** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **24.88** | **42** | P | **P** | **03 55 05.5** | **+0.2** |
| **G27K** | **Doyon Strip** | **25.24** | **37** | P | **P** | **03 55 09.2** | **+0.5** |
| **DAWY** | **Dawson** | **25.49** | **44** | P | **P** | **03 55 11.9** | **+1.0** |
| **I28M** | **Miner Creek** | **25.54** | **40** | P | **P** | **03 55 11.2** | **-0.2** |
| I28M | | | | IAmb | IAmb | 03 55 15.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **M29M** | **Somme Creek** | **25.68** | **47** | P | **P** | **03 55 13.2** | **+0.4** |
| M29M | | | | IAmb | IAmb | 03 55 31.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **25.73** | **34** | P | **P** | **03 55 13.8** | **+0.8** |
| E27K | | | | IAmb | IAmb | 03 55 17.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **L29M** | **L29M** | **25.91** | **46** | P | **P** | **03 55 14.8** | **+0.1** |
| L29M | | | | IAmb | IAmb | 03 55 51.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **GRNR** | **Gornyy** | **26.05** | **285** | ⇑*i*P | **P** | **03 55 16.9** | **+0.9** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **F28M** | **Old Crow** | **26.15** | **35** | P | **P** | **03 55 17.6** | **+0.8** |
| F28M | | | | IAmb | IAmb | 03 55 38.3 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **26.19** | **41** | P | **P** | **03 55 16.8** | **-0.4** |
| I29M | | | | IAmb | IAmb | 03 55 35.7 | |
| | comp=Z,13nm,0.8s | | | | | | |

**N30M Aishikik Lake 26.26 50** P **P** **03 55 19.8 +1.9**
**K29M Barlow Dome 26.27 44** P **P** **03 55 18.5 +0.5**
**D27M Malcolm River 26.33 32** P **P** **03 55 19.6 +1.1**
D27M IAmb IAmb 03 55 41.9
comp=Z,13nm,1.1s
**H29M Whitestone 26.35 39** P **P** **03 55 18.1 -0.6**
**M30M Minto, Yukon 26.47 47** P **P** **03 55 21.7 +1.9**
**E28M Babbage River 26.59 33** P **P** **03 55 22.1 +1.4**
**G29M Pine Creek 26.65 37** P **P** **03 55 22.1 +0.8**
G29M IAmb IAmb 03 55 22.9
comp=Z,10nm,1.0s
**J30M Hart River 26.89 43** P **P** **03 55 24.0 +0.4**
J30M IAmb IAmb 03 55 57.9
comp=Z,6.5nm,0.8s
**I30M Mount Dempster 26.96 41** P **P** **03 55 23.6 -0.7**
**EPYK Eagle Plains 27.03 39** P **P** **03 55 24.2 -0.6**
EPYK IAmb IAmb 03 55 26.5
comp=Z,11nm,1.0s
**G31M Satah River 28.10 38** P **P** **03 55 34.2 0.0**
**YAK Yakutsk 28.10 311** LR LR 04 06 51.1
comp=Z,267nm,18.2s,baz=106,slow=37
**YAK Yakutsk 28.10 311** *eP* **P** **03 55 31.5 -2.8**
YAK *e*'PP **pP** **03 55 41.2 -1.3**
YAK *e*'SS **S** **04 00 15.1 -1.9**
YAK *e*'SS **sS** **04 00 31.7 +1.2**
YAK pmax pmax
comp=Z,59nm,1.6s
YAK pmax pmax
comp=N,5.0nm,0.9s
YAK pmax pmax
comp=E,13nm,1.3s
YAK smax smax
comp=E,105nm,8.4s
YAK smax smax
comp=N,63nm,3.8s
**F31M Tsiigehtchic 28.39 37** P **P** **03 55 36.8 -0.1**
**INK Inuvik 28.64 35** P **P** **03 55 40.4 +1.3**
**INK Inuvik 28.64 35** LR LR 04 07 31.3
comp=N,157nm,20.2s,baz=241,slow=37
**INK Inuvik 28.64 35** P **P** **03 55 40.4 +1.3**
INK pmax pmax
comp=Z,5.0nm,1.0s
**MMPY Sheldon Lake, 29.02 47** P **P** **03 55 44.2 +1.6**
**KLR Kul'dur 29.41 285** LR LR 04 08 35.2
comp=Z,58nm,19.6s,baz=58,slow=38
**KLR Kul'dur 29.41 285** *ceP* **P** **03 55 46.8 +0.7**
KLR pmax pmax
comp=Z,19nm,1.0s
**TIXI Tiksi 29.84 331** LR LR 04 08 21.7
comp=Z,291nm,18.6s,baz=162,slow=38
**ZEA Zeya 30.59 295** *eP* **P** **03 55 55.8 -0.7**
ZEA pmax pmax
comp=Z,10.0nm,1.1s
**USRK Ussuriysk Ar. 31.45 275** P **P** **03 56 04.3 +0.2**
comp=Z,1.7nm,0.6s,baz=71,slow=7.8,SNR=4.1
USRK PcP **PcP** **03 58 57.9 +1.2**
comp=Z,1.5nm,0.8s,baz=95,slow=1.6,SNR=1.8
USRK LR LR 04 07 48.2
comp=Z,84nm,21.4s,baz=37,slow=34
comp=Z,1.7nm,0.6s
**HEH HeiHe 31.64 288** *eP* **P** **03 56 04.1 -1.6**
HEH pmax pmax
comp=Z,5.0nm,0.6s
HEH LR LR
comp=Z,130nm,14.2s
HEH LR LR
comp=Z,120nm,13.8s
HEH LR LR
comp=Z,170nm,15.8s
**MJAR Matsushiro Arr 31.92 258** P **P** **03 56 09.6 +1.3**
comp=Z,0.7nm,0.5s,baz=80,slow=8.4,SNR=2.0
MJAR LR LR 04 06 49.0
comp=Z,63nm,21.8s,baz=38,slow=32
comp=Z,0.7nm,0.5s
**A36M Sachs Harbour 32.11 29** P **P** **03 56 10.9 +1.2**
**BBB Bella Bella 32.63 67** LR LR 04 10 08.2
comp=Z,88nm,18.4s,baz=296,slow=38
**H11N2 WAKE ISLAND Hy 32.69 200** T T 04 31 43.8
baz=11,slow=76,SNR=41
**H11N3 WAKE ISLAND Hy 32.70 200** T T 04 31 46.0
baz=11,slow=76,SNR=57
**H11N1 WAKE ISLAND Hy 32.71 200** T T 04 31 34.4
baz=11,slow=76,SNR=19
**MSHR Mys Shultsa 32.80 273** ⇓ *eP* **P** **03 56 17.6 +1.7**
MSHR pmax pmax
comp=Z,4.0nm,0.8s
**PSTR Posyet 32.98 274** ⇓ *eP* **P** **03 56 19.4 +1.9**
**BNX BinXian 33.56 281** ⇓ P **P** **03 56 22.5 -0.1**
BNX pmax pmax
comp=Z,10.0nm,0.8s
**H11S1 WAKE ISLAND Hy 33.92 200** T T 04 33 12.9
baz=19,slow=74
**H11S3 WAKE ISLAND Hy 33.93 200** T T 04 33 37.9
baz=19,slow=74
**H11S2 WAKE ISLAND Hy 33.94 200** T T 04 33 01.9
baz=19
**CN2 Changchun 35.73 279** *eP* **P** **03 56 41.8 +0.5**
CN2 pmax pmax
comp=Z,10.0nm,0.5s
CN2 LR LR
comp=Z,200nm,19.0s
CN2 LR LR
comp=Z,200nm,19.0s
CN2 LR LR
comp=Z,200nm,20.0s
**BOD Bodaibo 36.55 306** *eP* **P** **03 56 47.5 -0.7**
BOD pmax pmax
comp=Z,30nm,0.8s
**HILA High Level 36.60 53** P **P** **03 56 50.3 +1.7**
**YKA Yellowknife Ar 36.67 46** P **P** **03 56 49.2 0.0**
comp=Z,0.9nm,0.5s,baz=305,slow=8.6,SNR=12
YKA PcP **PcP** **03 59 11.9 +0.6**
comp=Z,0.2nm,0.3s,baz=298,slow=2.5,SNR=2.0
YKA ScP **ScP** **04 02 54.9 -0.6**
comp=Z,2.4nm,1.0s,baz=279,slow=3.3,SNR=8.1
YKA LR LR 04 14 07.8
comp=Z,175nm,18.1s,baz=290,slow=40
comp=Z,0.9nm,0.5s
**KSRS Korea Array 37.76 269** P **P** **03 57 00.0 +1.3**
comp=Z,3.2nm,0.9s,baz=60,slow=8.3,SNR=13
KSRS ScP **ScP** **04 03 00.2 +0.1**
comp=Z,0.4nm,0.3s,baz=27,slow=3.0,SNR=2.2
KSRS LR LR 04 13 04.4
comp=Z,44nm,19.7s,baz=65,slow=37
comp=Z,3.2nm,0.9s
**KSRS Korea Array 37.76 269** *eP* **P** **03 57 00.8 +2.1**
KSRS pmax pmax
comp=Z,3.0nm,0.9s
**BRLDA Berland Lookou 37.95 60** P **P** **03 57 02.0 +1.7**
BRLDA IAmb IAmb 03 57 04.3
comp=Z,6.1nm,0.9s
**LON Longmire 38.65 72** P **P** **03 57 07.7 +1.5**
**LON Longmire 38.65 72** P **P** **03 57 07.7 +1.5**
LON pmax pmax
comp=Z,3.0nm,0.8s
**JNU Nakatsue 38.70 261** LR LR 04 15 22.5
comp=Z,29nm,18.9s,baz=42,slow=40
**B08A Colville Reser 39.34 69** P **P** **03 57 12.7 +0.8**
B08A IAmb IAmb 03 57 15.6
comp=Z,6.1nm,1.1s
**H04A Detroit Lake 39.47 75** P **P** **03 57 14.9 +1.9**
H04A IAmb IAmb 03 57 33.7
comp=Z,4.7nm,0.7s
**DBO Dodson Butte 39.66 78** P **P** **03 57 18.4 +3.7**
DBO IAmb IAmb 03 57 31.8
comp=Z,10.0nm,1.3s
**I04A Tendick Farm, 39.80 77** P **P** **03 57 17.6 +1.7**
I04A IAmb IAmb 03 57 21.8
comp=Z,8.1nm,1.1s
**L02F Cave Junction 40.00 80** P **P** **03 57 18.5 +1.0**
L02F IAmb IAmb 03 57 27.4
comp=Z,5.7nm,1.0s
**HUMO Hull Mountain 40.11 79** P **P** **03 57 19.4 +1.0**
HUMO IAmb IAmb 03 57 30.1
comp=Z,8.4nm,1.4s
**HAWA Hanford 40.19 72** P **P** **03 57 20.8 +1.8**
HAWA IAmb IAmb 03 57 23.6
comp=Z,6.7nm,0.9s
**RES Resolute Bay 40.63 24** LR LR 04 15 24.6
comp=Z,119nm,22.0s,baz=329,slow=38
**NEW Newport 40.68 68** P **P** **03 57 24.2 +1.2**
NEW IAmb IAmb 03 57 26.8
comp=Z,6.2nm,0.9s
**NEW Newport 40.68 68** LR LR 04 11 34.6
comp=Z,69nm,21.9s,baz=296,slow=32
**NEW Newport 40.68 68** P **P** **03 57 24.2 +1.2**

NEW pmax pmax
comp=Z,6.0nm,0.9s
**YBH Yreka Blue Hor 40.75 80** P **P** **03 57 26.0 +2.2**
YBH IAmb IAmb 03 57 40.8
comp=Z,6.5nm,0.9s
**YBH Yreka Blue Hor 40.75 80** LR LR 04 11 12.6
comp=Z,76nm,21.5s,baz=300,slow=32
**YBH Yreka Blue Hor 40.75 80** P **P** **03 57 26.0 +2.2**
YBH pmax pmax
comp=Z,7.0nm,0.9s
**J05D Fort Rock, OR 40.80 77** P **P** **03 57 26.4 +2.2**
J05D IAmb IAmb 03 57 30.6
comp=Z,7.9nm,1.1s
**XLT XiLinHaoTe 41.43 285** *eP* **P** **03 57 30.3 +1.0**
XLT pmax pmax
comp=Z,17nm,0.8s
**BMO Blue Mountains 42.33 72** P **P** **03 57 37.2 +0.5**
**BMO Blue Mountains 42.33 72** P **P** **03 57 37.2 +0.5**
BMO pmax pmax
comp=Z,3.0nm,1.0s
**WVOR Wild Horse Val 42.86 76** P **P** **03 57 42.3 +1.3**
WVOR IAmb IAmb 03 57 50.3
comp=Z,5.9nm,0.9s
**WVOR Wild Horse Val 42.86 76** P **P** **03 57 42.3 +1.3**
WVOR pmax pmax
comp=Z,6.0nm,0.9s
**BPMT Black Pine Rid 43.76 68** P **P** **03 57 48.3 -0.1**
**LYMT Lyon Mountain 44.15 67** P **P** **03 57 51.7 +0.3**
**PNTR Pine Nut 44.22 81** P **P** **03 57 54.2 +2.0**
**CMB Columbia Colle 44.37 82** P **P** **03 57 53.4 +0.2**
CMB IAmb IAmb 03 58 01.5
comp=Z,6.8nm,1.1s
**CMB Columbia Colle 44.37 82** P **P** **03 57 53.4 +0.2**
CMB pmax pmax
comp=Z,7.0nm,1.2s
**WAKR Walker 44.67 81** P **P** **03 57 57.2 +1.4**
WAKR IAmb IAmb 03 58 16.9
comp=Z,12nm,1.3s
**HLID Hailey 44.77 72** P **P** **03 57 57.0 +0.6**
**BMN Battle Mountai 44.88 78** P **P** **03 57 58.1 +0.7**
BMN IAmb IAmb 03 58 13.3
comp=Z,4.7nm,0.7s
**BMN Battle Mountai 44.88 78** P **P** **03 57 58.1 +0.7**
BMN pmax pmax
comp=Z,5.0nm,0.7s
**SONM Songino Array 45.02 295** P **P** **03 57 58.7 +0.4**
SONM IAmb IAmb 03 57 59.8
comp=Z,5.6nm,0.6s
**SONM Songino Array 45.02 295** P **P** **03 57 59.4 +1.2**
comp=Z,6.9nm,0.6s,baz=62,slow=7.8,SNR=39
SONM PcP **PcP** **03 59 38.9 0.0**
comp=Z,0.6nm,0.5s,baz=100,slow=1.8,SNR=2.7
SONM ScP **ScP** **04 03 29.6 +0.7**
comp=Z,0.5nm,0.7s,baz=90,slow=5.9,SNR=3.8
SONM LR LR 04 17 28.0
comp=Z,122nm,19.6s,baz=58,slow=37
comp=Z,6.9nm,0.6s
**RYN Ryan 45.17 81** P **P** **03 58 00.3 +0.7**
RYN IAmb IAmb 03 58 17.9
comp=Z,4.3nm,0.7s
**KVN Kaiserville 45.17 80** P **P** **03 58 00.5 +0.8**
KVN IAmb IAmb 03 58 10.7
comp=Z,6.1nm,1.1s
**KVN Kaiserville 45.17 80** P **P** **03 58 00.5 +0.8**
KVN pmax pmax
comp=Z,6.0nm,1.1s
**BOZ Bozeman (W) 45.28 68** P **P** **03 58 00.8 +0.4**
BOZ IAmb IAmb 03 58 30.2
comp=Z,4.7nm,0.9s
**BOZ Bozeman (W) 45.28 68** P **P** **03 58 00.8 +0.4**
BOZ pmax pmax
comp=Z,5.0nm,0.9s
**ZAK Zakamensk 45.41 300** *eP* **P** **03 58 01.7 +0.4**
ZAK pmax pmax
comp=Z,8.0nm,1.4s
**LHV Little Huntoon 45.41 81** P **P** **03 58 02.5 +1.2**
LHV IAmb IAmb 03 58 33.3
comp=Z,13nm,1.4s
**NVAR Mina Array Bea 45.42 81** P **P** **03 58 03.4 +1.7**
comp=Z,2.6nm,0.8s,baz=295,slow=7.1,SNR=18
NVAR LR LR 04 15 10.2
comp=Z,62nm,19.3s,baz=296,slow=34
comp=Z,2.6nm,0.8s
**MDPB Devils Postpil 45.43 82** P **P** **03 58 02.0 +0.2**
MDPB IAmb IAmb 03 58 09.4
comp=Z,6.2nm,1.0s
**OMMB Old Mammoth Mi 45.49 82** P **P** **03 58 03.7 +1.3**
**NV11 Mina Array Sit 45.52 80** P **P** **03 58 03.8 +1.4**
NV11 IAmb IAmb 03 58 13.3
comp=Z,3.8nm,0.8s
**ELK Elko 45.91 76** P **P** **03 58 07.3 +1.7**
**ELK Elko 45.91 76** P **P** **03 58 07.3 +1.7**
ELK pmax pmax
comp=Z,3.0nm,0.8s
**HHC Hu-ho-hao-te 45.91 284** *eP* **P** **03 58 01.9 -3.5**
HHC pmax pmax
comp=Z,7.0nm,0.5s
HHC pmax pmax
comp=Z,62nm,4.8s
**YHL Hebgen Lake 45.96 69** P **P** **03 58 06.3 +0.3**
YHL IAmb IAmb 03 58 27.9
comp=Z,5.3nm,0.9s
**MOY Mondy 45.96 302** *eP* **P** **03 58 06.5 +0.8**
MOY pmax pmax
comp=Z,15nm,1.3s
**YHB Horse Butte 46.01 69** P **P** **03 58 06.9 +0.6**
YHB IAmb IAmb 03 58 42.1
comp=Z,7.9nm,0.8s
**YHH Holmes Hill 46.19 69** P **P** **03 58 08.6 +0.8**
**GUMO Guam 46.20 228** LR LR 04 15 21.2
comp=Z,56nm,18.9s,baz=88,slow=33
**DSP Deep Springs 46.29 82** P **P** **03 58 10.4 +2.2**
**TPH Tonopah 46.31 80** P **P** **03 58 09.9 +1.3**
**TPH Tonopah 46.31 80** P **P** **03 58 10.0 +1.3**
TPH pmax pmax
comp=Z,28nm,1.0s
**MZP Montezuma Peak 46.45 81** P **P** **03 58 09.3 -0.6**
**IMW Indian Meadow 46.65 70** P **P** **03 58 13.5 +2.2**
**GMN Gold Mountain 46.77 81** P **P** **03 58 13.2 +0.9**
**NJ2 Nanjing 46.94 270** *eP* **P** **03 58 10.2 -3.2**
NJ2 pmax pmax
comp=Z,9.0nm,0.7s
NJ2 pmax pmax
comp=Z,130nm,4.1s
**BTO Baotou 47.00 285** *eP* **P** **03 58 15.9 +2.0**
BTO pP **pP** **03 58 20.5 -1.7**
BTO sP **sP** **03 58 22.8 -2.6**
BTO pmax pmax
comp=Z,39nm,1.0s
BTO pmax pmax
comp=Z,190nm,3.9s
**SPR3 Spring Creek 3 47.52 77** P **P** **03 58 19.4 +1.1**
SPR3 IAmb IAmb 03 58 27.1
comp=Z,2.7nm,0.6s
**DUG Dugway, Tooele 47.72 75** P **P** **03 58 19.9 +0.3**
**DUG Dugway, Tooele 47.72 75** P **P** **03 58 19.9 +0.3**
DUG pmax pmax
comp=Z,11nm,1.2s
**GWY Greenwater Val 47.84 82** P **P** **03 58 21.2 +0.6**
GWY IAmb IAmb 03 58 27.4
comp=Z,3.8nm,1.0s
**PRN Pahroc Range 48.07 80** P **P** **03 58 23.9 +1.5**
**PD31 Pinedale Array 48.13 70** P **P** **03 58 23.3 +0.5**
PD31 IAmb IAmb 03 58 52.0
comp=Z,4.9nm,0.9s
**PDAR Pinedale Array 48.13 70** P **P** **03 58 23.7 +0.8**
**PDAR Pinedale Array 48.13 70** P **P** **03 58 23.3 +0.5**
comp=Z,2.0nm,0.7s,baz=324,slow=3.3,SNR=17
PDAR ScP **ScP** **04 03 42.3 +0.2**
comp=Z,0.5nm,0.9s,baz=29,slow=3.4,SNR=4.5
PDAR LR LR 04 16 11.6
comp=Z,48nm,20.9s,baz=300,slow=33
comp=Z,2.0nm,0.7s
**NLU North Lily Min 48.31 75** P **P** **03 58 25.2 +0.9**
NLU IAmb IAmb 03 58 41.5
comp=Z,3.3nm,0.8s
**GSC Goldstone, Bar 48.33 83** P **P** **03 58 25.6 +1.3**
GSC IAmb IAmb 03 58 51.9
comp=Z,5.8nm,1.0s
**GSC Goldstone, Bar 48.33 83** P **P** **03 58 25.6 +1.3**
GSC pmax pmax
comp=Z,6.0nm,1.0s
**MVU Marysvale 49.13 76** P **P** **03 58 33.0 +2.4**
**MSU Marysvale 49.15 76** P **P** **03 58 32.0 +1.3**
**MSU Marysvale 49.15 76** P **P** **03 58 32.0 +1.3**

**TMUT Trail Mountain 49.25 75** P **P** **03 58 32.7 +1.1**
TMUT IAmb IAmb 03 58 56.8
comp=Z,6.4nm,0.9s
**MTPU Mount Pierson 49.44 77** P **P** **03 58 35.5 +2.4**
MTPU IAmb IAmb 03 59 03.7
comp=Z,5.7nm,1.3s
**LCMT Little Creek M 49.44 79** P **P** **03 58 32.5 -0.4**
LCMT IAmb IAmb 03 58 44.4
comp=Z,4.8nm,0.9s
**RDMU Red Mountain 49.45 73** P **P** **03 58 33.9 +0.9**
**Q16A Castle Valley 49.51 75** P **P** **03 58 34.3 +0.9**
Q16A IAmb IAmb 03 58 49.4
comp=Z,4.1nm,0.9s
**P18A Preston Nutter 49.62 74** P **P** **03 58 35.7 +1.3**
P18A IAmb IAmb 03 59 04.5
comp=Z,4.6nm,0.9s
**PFO Pinyon Flats O 49.65 84** LR LR 04 15 16.8
comp=Z,84nm,22.0s,baz=290,slow=31
**KNB Kanab 49.70 78** P **P** **03 58 36.5 +1.6**
KNB IAmb IAmb 03 59 05.5
comp=Z,9.9nm,1.3s
**KNB Kanab 49.70 78** P **P** **03 58 36.5 +1.6**
KNB pmax pmax
comp=Z,10.0nm,1.3s
**SRU San Rafael Swe 49.78 75** P **P** **03 58 37.0 +1.5**
SRU IAmb IAmb 03 59 06.2
comp=Z,4.2nm,0.8s
**SRU San Rafael Swe 49.78 75** P **P** **03 58 37.0 +1.5**
SRU pmax pmax
comp=Z,4.0nm,0.8s
**W13A Hualapai Mount 50.27 81** P **P** **03 58 40.0 +0.7**
**SPITS Spitsbergen Ar 50.36 355** P **P** **03 58 38.0 -1.2**
**SPITS Spitsbergen Ar 50.36 355** P **P** **03 58 38.0 -1.2**
comp=Z,5.0nm,0.5s,baz=46,slow=6.0,SNR=16
SPITS LR LR 04 19 11.0
comp=Z,65nm,21.9s,baz=350,slow=35
comp=Z,5.0nm,0.5s
**SPITS Spitsbergen Ar 50.36 355** P **P** **03 58 38.0 -1.2**
**HMU Henry Mountain 50.38 76** P **P** **03 58 41.3 +1.1**
**U15A North Rim 50.40 79** P **P** **03 58 41.0 +0.7**
U15A IAmb IAmb 03 59 06.4
comp=Z,5.0nm,0.8s
**ULM Lac du Bonnet 51.31 55** LR LR 04 20 28.4
comp=Z,95nm,21.2s,baz=306,slow=36
**Y14A Wickenburg 51.58 82** P **P** **03 58 48.9 -0.1**
**MVCO Mesa Verde 52.22 75** P **P** **03 58 54.5 +0.6**
MVCO IAmb IAmb 03 59 03.0
comp=Z,7.7nm,1.4s
**ZAA0 Zalesovo Array 52.75 312** P **P** **03 58 56.7 -0.6**
ZAA0 IAmb IAmb 03 59 21.5
comp=Z,4.7nm,1.0s
**ZALV Zalesovo Beam 52.75 312** P **P** **03 58 57.1 -0.1**
**ZALV Zalesovo Beam 52.75 312** P **P** **03 58 56.9 -0.4**
comp=Z,2.4nm,0.5s,baz=43,slow=7.2,SNR=9.5
ZALV LR LR 04 23 07.3
comp=Z,139nm,18.5s,baz=55,slow=38
comp=Z,2.4nm,0.5s
**S22A 4UR Ranch, Cre 52.88 74** P **P** **03 59 01.4 +2.6**
**LZH Lanzhou 53.61 284** P **P** **03 59 05.7 +1.6**
LZH pP pwP 03 59 16.5 +0.8
LZH pmax pmax
comp=Z,21nm,1.0s
LZH LR LR
comp=Z,120nm,12.7s
LZH LR LR
comp=Z,150nm,14.8s
LZH LR LR
comp=Z,130nm,13.7s
**GTA Gaotai 53.86 290** *eP* **P** **03 59 06.8 +0.9**
GTA pP pwP 03 59 17.2 -0.4
GTA PcP **PcP** **04 00 12.3 +1.1**
GTA pmax pmax
comp=Z,6.0nm,1.2s
GTA LR LR
comp=Z,120nm,16.7s
GTA LR LR
comp=Z,160nm,16.7s
GTA LR LR
comp=Z,170nm,16.4s
**TUC Tucson 54.05 81** P **P** **03 59 08.5 +1.2**
TUC pmax pmax
comp=Z,4.0nm,1.0s
**FRB Frobisher Bay 54.10 30** LR LR 04 25 20.2
comp=Z,166nm,18.3s,baz=4.0,slow=40
**T25A Trinidad 54.73 73** P **P** **03 59 13.0 +0.7**
T25A IAmb IAmb 03 59 30.0
comp=Z,5.7nm,1.0s
**ANMO Albuquerque 54.95 76** LR LR 04 21 59.5
comp=Z,48nm,19.6s,baz=47,slow=35
**SFJD Kangerlussuaq 56.45 21** LR LR 04 26 44.8
comp=Z,44nm,18.9s,baz=324,slow=39
**N35A Tabor 57.39 64** P **P** **03 59 32.9 +2.0**
**KURK Kurchatov 57.74 312** P **P** **03 59 33.2 0.0**
**KURK Kurchatov 57.74 312** *c iP* **P** **03 59 33.5 +0.2**
KURK pmax pmax
comp=Z,38nm,1.3s
**WMQ Urumqi 57.82 301** *eP* **P** **03 59 33.6 -0.5**
WMQ LR LR
comp=Z,210nm,19.3s
WMQ LR LR
comp=Z,220nm,18.3s
WMQ LR LR
comp=Z,280nm,20.3s
**KURBB Kurchatov Arra 57.84 312** P **P** **03 59 33.9 -0.1**
comp=Z,9.2nm,0.7s,baz=49,slow=7.2,SNR=53
KURBB LR LR 04 26 18.3
comp=Z,263nm,18.3s,baz=177,slow=38
comp=Z,9.2nm,0.7s
**ARCES ARCESS Array B 57.88 349** P **P** **03 59 33.7 -0.4**
comp=Z,2.4nm,0.8s,baz=51,slow=7.9,SNR=6.6
ARCES LR LR 04 24 45.1
comp=Z,93nm,21.9s,baz=0.5,slow=36
comp=Z,2.4nm,0.8s
**ARCES ARCESS Array B 57.88 349** *eP* **P** **03 59 37.0 +3.0**
ARCES pmax pmax
comp=Z,1.0nm,0.5s
**JMIC Jan Mayen 57.98 3** LR LR 04 26 49.3
comp=Z,37nm,18.2s,baz=17,slow=38
**MK31 Makanchi Array 58.63 307** P **P** **03 59 39.1 -0.5**
MK31 IAmb IAmb 03 59 39.8
comp=Z,3.0nm,0.6s
**MK31 Makanchi Array 58.63 307** *ceP* **P** **03 59 39.1 -0.5**
**MKAR Makanchi Array 58.63 307** P **P** **03 59 39.1 -0.5**
**MKAR Makanchi Array 58.63 307** P **P** **03 59 39.2 -0.4**
comp=Z,3.1nm,0.6s,baz=54,slow=7.1,SNR=21
MKAR PP **PP** **04 01 46.9 -2.1**
comp=Z,3.0nm,1.1s,baz=50,slow=9.6,SNR=2.8
MKAR LR LR 04 26 24.1
comp=Z,162nm,19.1s,baz=62,slow=38
comp=Z,3.1nm,0.6s
**VHRN Van Horn 58.69 79** P **P** **03 59 41.4 +1.0**
VHRN IAmb IAmb 03 59 51.7
comp=Z,3.2nm,0.9s
**MAKZ Makanchi 58.78 307** P **P** **03 59 40.3 -0.4**
MAKZ IAmb IAmb 03 59 40.8
comp=Z,4.7nm,0.8s
**MAKZ Makanchi 58.78 307** P **P** **03 59 40.3 -0.4**
MAKZ pmax pmax
comp=Z,5.0nm,0.9s
**GOMU GeErMu 58.95 290** P **P** **03 59 39.8 -2.6**
GOMU pP sP 03 59 49.5 -4.5
GOMU PcP **PcP** **04 00 27.6 -3.8**
GOMU pmax pmax
comp=Z,14nm,0.9s
GOMU pmax pmax
comp=Z,160nm,4.5s
GOMU LR LR
comp=Z,160nm,14.6s
GOMU LR LR
comp=Z,200nm,15.9s
GOMU LR LR
comp=Z,310nm,15.4s
**MNHN Monahans 59.67 77** P **P** **03 59 48.0 +0.9**
**WMOK Wichita Mounta 59.72 71** P **P** **03 59 50.1 +2.8**
WMOK pmax pmax
comp=Z,2.0nm,1.2s
**BRVK Borovoye 59.78 318** P **P** **03 59 47.9 +0.5**
**BRVK Borovoye 59.78 318** *c iP* **P** **03 59 47.9 +0.5**
BRVK pmax pmax
comp=Z,23nm,1.0s
**LPIG La Paz 60.11 88** LR LR 04 20 16.3
comp=Z,36nm,20.9s,baz=234,slow=30
**P40A Paris 60.31 63** P **P** **03 59 52.1 +0.8**
**TX31 Lajitas Ar. Si 60.52 79** P **P** **03 59 53.6 +0.6**
TX31 IAmb IAmb 04 00 30.6
comp=Z,4.8nm,1.1s

**TXAR Lajitas Array 60.52 79** P **P** **03 59 53.5 +0.5**
**TXAR Lajitas Array 60.52 79** P **P** **03 59 53.8 +0.8**
comp=Z,1.0nm,0.5s,baz=300,slow=5.3,SNR=18
comp=Z,1.0nm,0.5s
**SVE Sverdlovsk 60.68 326** *e*P **P** **03 59 55.0 +1.5**
SVE pmax pmax
comp=Z,19nm,1.0s
**SCHQ Schefferville 61.25 37** P **P** **03 59 58.2 +0.8**
comp=Z,3.8nm,0.8s,baz=329,slow=6.2,SNR=5.6
SCHQ LR LR 04 28 19.8
comp=Z,125nm,19.5s,baz=316,slow=38
comp=Z,3.8nm,0.8s
**ARU Arti 61.71 327** P **P** **04 00 01.0 +0.5**
**ARU Arti 61.71 327** LR LR 04 29 21.3
comp=Z,145nm,19.7s,baz=40,slow=39
**ARU Arti 61.71 327***d i*P **P** **04 00 01.2 +0.7**
ARU 04 00 42.3
ARU 04 02 14.9
ARU S **S** **04 08 23.2 +2.4**
ARU SS **SS** **04 12 19.0 -2.7**
ARU pmax pmax
comp=Z,26nm,0.9s
**HNR Honiara 62.47 200** LR LR 04 21 42.1
comp=Z,1μm,21.3s,baz=0.5,slow=31
**FCAR Ozark Folk Cen 62.81 66** P **P** **04 00 07.4 -0.8**
**KIRV Kirov 62.85 333** LR LR 04 30 57.8
comp=Z,65nm,18.4s,baz=14,slow=39
**KIRV Kirov 62.85 333***c i*P **P** **04 00 08.8 +0.7**
**MIAR Mount Ida 62.92 68** P **P** **04 00 10.2 +1.3**
**MIAR Mount Ida 62.92 68** P **P** **04 00 10.2 +1.3**
MIAR pmax pmax
comp=Z,8.0nm,1.1s
**JOF Joensuu 63.22 344** *e*P **P** **04 00 11.2 +0.7**
**BORG Borgarnes 63.35 9** LR LR 04 28 57.6
comp=Z,48nm,18.8s,baz=341,slow=37
**SADO Sadowa 63.39 51** LR LR 04 29 00.4
comp=Z,66nm,18.3s,baz=347,slow=37
**VAF Ylistaro 64.43 348** *e*P **P** **04 00 18.6 +0.1**
**BOOM Boomskoye usch 64.87 307** P **P** **04 00 22.7 +0.8**
BOOM IAmb IAmb 04 00 23.4
comp=Z,5.2nm,0.8s
**BOOM Boomskoye usch 64.87 307** P **P** **04 00 22.7 +0.8**
BOOM pmax pmax
comp=Z,5.0nm,0.8s
**KEF Keuruu 64.97 347** *e*P **P** **04 00 22.2 +0.2**
**FINES FINESS Array B 65.47 346** P **P** **04 00 24.3 -0.9**
comp=Z,2.4nm,0.6s,baz=31,slow=8.1,SNR=16
FINES LR LR 04 29 44.4
comp=Z,48nm,22.0s,baz=32,slow=37
comp=Z,2.4nm,0.6s
**FINES FINESS Array B 65.47 346** *e*P **P** **04 00 24.9 -0.3**
FINES pmax pmax
comp=Z,2.0nm,0.6s
**AAK Ala-Archa 65.49 308** P **P** **04 00 25.6 -0.3**
**AAK Ala-Archa 65.49 308** LR LR 04 29 40.3
comp=Z,138nm,21.9s,baz=44,slow=37
**AAK Ala-Archa 65.49 308***ce*P **P** **04 00 26.6 +0.7**
AAK pmax pmax
comp=Z,6.0nm,1.0s
**PMG Port Moresby 66.11 214** LR LR 04 23 30.3
comp=Z,49nm,21.1s,baz=3.0,slow=31
**ARLS Aral 66.15 308** P **P** **04 00 31.5 +1.4**
ARLS pmax pmax
comp=Z,11nm,1.0s
**AKTO Aktyubinsk 66.69 323** LR LR 04 32 21.1
comp=Z,242nm,19.4s,baz=162,slow=38
**ABKAR Akbulak array 66.89 321** P **P** **04 00 34.9 +0.4**
**ABKAR Akbulak array 66.89 321** P **P** **04 00 35.0 +0.5**
ABKAR IAmb IAmb 04 00 37.0
comp=Z,13nm,1.1s
**MEF Metsahovi 66.90 346** *e*P **P** **04 00 34.9 +0.5**
**KSH Kashi 67.06 305** P **P** **04 00 40.4 +4.5**
KSH pP pwP 04 00 48.5 +0.8
KSH pmax pmax
comp=Z,11nm,1.0s
**KK31 Karatay Array 67.07 311** P **P** **04 00 36.1 +0.3**
**KK31 Karatay Array 67.07 311** P **P** **04 00 36.1 +0.3**
KK31 pmax pmax
comp=Z,6.0nm,0.7s
**KKAR Karatay Array 67.07 311** P **P** **04 00 35.7 -0.1**
**KKAR Karatay Array 67.07 311** P **P** **04 00 36.4 +0.5**
KKAR IAmb IAmb 04 00 47.1
comp=Z,6.4nm,0.7s
**KKAR Karatay Array 67.07 311** P **P** **04 00 36.4 +0.5**
KKAR pmax pmax
comp=Z,6.0nm,0.7s
**NC204 NORSAR Array S 67.38 353** P **P** **04 00 38.0 +0.5**
**NC303 NORSAR Array S 67.39 353** P **P** **04 00 38.0 +0.5**
**NB201 NORSAR Array S 67.56 353** P **P** **04 00 38.5 -0.2**
**NB2 NORSAR Subarra 67.58 353** P **P** **04 00 38.1 -0.7**
comp=Z,8.9nm,1.2s,baz=8.8,slow=6.5
**NB2 NORSAR Subarra 67.58 353** P **P** **04 00 40.2 +1.4**
**NOA NORSAR Array B 67.58 353** P **P** **04 00 38.1 -0.7**
comp=Z,1.8nm,0.6s,baz=8.9,slow=6.3,SNR=16
NOA LR LR 04 28 24.8
comp=Z,39nm,21.9s,baz=10.0,slow=34
comp=Z,1.8nm,0.6s
**NOA NORSAR Array B 67.58 353** *e*P **P** **04 00 39.2 +0.4**
NOA pmax pmax
comp=Z,2.0nm,0.6s
**TKL Tuckaleechee C 67.66 61** LR LR 04 31 06.9
comp=Z,49nm,19.3s,baz=340,slow=37
**NORES NORESS Array B 67.86 353** P **P** **04 00 41.1 +0.6**
**TRKS Terek-Say 67.97 309** P **P** **04 00 42.8 +1.1**
TRKS pmax pmax
comp=Z,7.0nm,1.1s
**HFS Hagfors 68.27 352** P **P** **04 00 42.6 -0.5**
comp=Z,1.8nm,0.5s,baz=29,slow=3.4,SNR=22
HFS LR LR 04 29 59.3
comp=Z,65nm,21.3s,baz=356,slow=35
comp=Z,1.8nm,0.5s
**SHL Shillong 68.28 284** P **P** **04 00 42.9 -1.0**
**SHL Shillong 68.28 284** P **P** **04 00 42.9 -1.0**
SHL pmax pmax
comp=Z,16nm,1.0s
**MTSE Matsula 68.43 346** *e*P **P** **04 00 44.3 +0.3**
**MOS Moscow 68.48 337** *e*P **P** **04 00 43.9 -0.5**
MOS pmax pmax
comp=Z,32nm,0.9s
**BELG Belogornoye 68.65 330** LR LR 04 33 58.5
comp=Z,138nm,19.1s,baz=52,slow=39
**BELG Belogornoye 68.65 330***c i*P **P** **04 00 46.2 +0.7**
BELG pmax pmax
comp=Z,11nm,1.0s
**CMAR Chiang Mai Arr 69.16 274** P **P** **04 00 49.7 +0.5**
comp=Z,1.1nm,0.3s,baz=28,slow=7.4,SNR=7.9
comp=Z,1.1nm,0.3s
**CMAR Chiang Mai Arr 69.16 274** *e*P **P** **04 00 50.2 +1.0**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**BTK Batken 69.25 308** P **P** **04 00 49.8 +0.2**
**BTK Batken 69.25 308** P **P** **04 00 49.8 +0.2**
BTK pmax pmax
comp=Z,10.0nm,0.8s
**OBN Obninsk 69.30 338** LR LR 04 34 53.7
comp=Z,141nm,18.0s,baz=354,slow=39
**OBN Obninsk 69.30 338***c i*P **P** **04 00 49.8 +0.3**
OBN *i* *PP **pwP** **04 00 59.7 -0.9**
OBN *i* *SP **sP** **04 01 05.4 +3.7**
OBN 04 01 11.0
OBN *e*S S 04 10 15.6 +22
OBN pmax pmax
comp=Z,35nm,1.3s
OBN MLR MLR
comp=Z,152nm,17.0s
**TAOE Nuku Hiva Isla 69.80 136** *e*LR LR 04 22 03.8
comp=Z,273nm,24.8s
**GAR Garm 70.31 308** P **P** **04 00 56.6 +0.4**
**LPSR Galich'ya Gora 70.99 335** *e*P **P** **04 00 58.5 -1.4**
LPSR pmax pmax
comp=Z,20nm,1.1s
**CHGR Chuyangaron 71.14 309** P **P** **04 01 00.9 -0.4**
**CHGR Chuyangaron 71.14 309** P **P** **04 01 00.9 -0.4**
CHGR pmax pmax
comp=Z,38nm,1.1s
**SIMJ Simiganj 71.22 309** P **P** **04 01 01.6 -0.1**
**VRH Novokhopyorsk 71.47 333** *e*P **P** **04 01 01.8 -1.1**
VRH pmax pmax
comp=Z,36nm,0.8s
**VORR Voronezh 71.75 335** *e*P **P** **04 01 05.0 +0.5**
VORR pmax pmax
comp=Z,77nm,0.5s
**VSR Storozhevoye 72.17 334** *e*P **P** **04 01 06.1 -1.0**
VSR pmax pmax
comp=Z,20nm,1.3s
**VORD Divnogorie 72.36 334** *e*P **P** **04 01 06.1 -2.1**
VORD pmax pmax
comp=Z,20nm,1.2s
**NIL Nilore 72.93 303** P **P** **04 01 12.1 +0.2**
**NIL Nilore 72.93 303** P **P** **04 01 12.1 +0.2**
NIL pmax pmax
comp=Z,28nm,1.2s
**DZM Mont Dzumac 73.73 191** *e*LR LR 04 24 03.5
comp=Z,231nm,24.4s
**DZM Mont Dzumac 73.73 191** LR LR 04 25 55.0
comp=Z,125nm,21.7s,baz=8.5,slow=29
**EKA Eskdalemuir Ar 73.78 1** P **P** **04 01 15.4 -1.1**
comp=Z,0.6nm,0.6s,baz=19,slow=4.5,SNR=1.5
comp=Z,0.6nm,0.6s
**PPT Papeete 74.10 148** LR LR 04 27 51.7
comp=Z,131nm,20.1s,baz=314,slow=31
**PPT2 Papeete2 74.12 148** *e*LR LR 04 23 55.3
comp=Z,219nm,24.2s
PPT2 *e*LR LR 04 23 56.9
comp=Z,189nm,26.2s
**KBL Kabul 74.42 306** P **P** **04 01 20.2 -0.7**
**KBL Kabul 74.42 306** P **P** **04 01 20.2 -0.7**
KBL pmax pmax
comp=Z,14nm,1.0s
**RAR Rarotonga 74.70 159** LR LR 04 28 23.6
comp=Z,189nm,18.8s,baz=304,slow=31
**CMIG Matias Romero 74.95 81** LR LR 04 29 44.3
comp=Z,42nm,21.9s,baz=354,slow=32
**AKASG Malin Array Be 75.07 340** P **P** **04 01 24.0 -0.1**
comp=Z,2.8nm,0.4s,baz=25,slow=5.9,SNR=14
AKASG LR LR 04 39 10.1
comp=Z,79nm,18.1s,baz=14,slow=40
comp=Z,2.8nm,0.4s
**AKASG Malin Array Be 75.07 340** *e*P **P** **04 01 24.4 +0.3**
AKASG pmax pmax
comp=Z,3.0nm,0.4s
**AKBB Malin Array Si 75.07 340** P **P** **04 01 23.9 -0.1**
**AKBB Malin Array Si 75.07 340***o i*P **P** **04 01 24.0 -0.1**
**KIEV Kiev 75.08 340** P **P** **04 01 24.2 +0.1**
**KIEV Kiev 75.08 340** P **P** **04 01 24.2 +0.1**
KIEV pmax pmax
comp=Z,17nm,1.3s
**GOF Gofitskoye 76.54 329***ce*P **P** **04 01 33.8 +1.2**
**TEIG Tepich 76.63 74** LR LR 04 37 10.0
comp=Z,21nm,18.1s,baz=351,slow=37
**CLL Collm 77.06 351** *e*P **P** **04 01 36.0 +0.6**
**CLL Collm 77.06 351** *e*P **P** **04 01 36.0 +0.6**
**KSP Ksiaz 77.13 348** *e*P **P** **04 01 35.9 +0.1**
**OJC Ojcow 77.25 346** *e*P **P** **04 01 37.1 +0.5**
**OJC Ojcow 77.25 346** P **P** **04 01 37.7 +1.2**
OJC pmax pmax
comp=Z,10.0nm,0.9s
**KWP Kalwaria Pacla 77.35 344** *e*P **P** **04 01 38.1 +1.0**
**KWP Kalwaria Pacla 77.35 344** P **P** **04 01 38.1 +1.0**
KWP pmax pmax
comp=Z,26nm,0.9s
**KIV Kislovodsk 77.64 329** P **P** **04 01 38.9 0.0**
**KIV Kislovodsk 77.64 329** ⇑P **P** **04 01 40.2 +1.3**
**KIV Kislovodsk 77.64 329** *e*P **P** **04 01 39.9 +1.0**
KIV pmax pmax
comp=Z,19nm,1.0s
**SORM Soroca 77.68 340** ⇑P **P** **04 01 39.3 +0.4**
**SORM Soroca 77.68 340** ⇑P **P** **04 01 39.3 +0.4**
**KBZ Khabaz 77.77 329** P **P** **04 01 40.6 +1.1**
comp=Z,10nm,0.8s,baz=111,slow=2.6,SNR=20
KBZ LR LR 04 41 15.6
comp=Z,98nm,19.9s,baz=22,slow=40
comp=Z,10nm,0.8s
**KBZ Khabaz 77.77 329***de*P **P** **04 01 40.9 +1.4**
KBZ pmax pmax
comp=Z,10.0nm,0.8s
**KRLC Kraliky 77.82 348** P **P** **04 01 40.9 +1.1**
KRLC pmax pmax
comp=Z,3.0nm,1.1s
**SHA1 Shidzhatmaz 77.84 329***c i*P **P** **04 01 41.4 +1.2**
**MORC Moravsky Berou 78.01 347** *e*P **P** **04 01 42.2 +1.4**
**KOLS Kolonicke sedl 78.10 344** *e*P **P** **04 01 42.4 +1.1**
KOLS pmax pmax
comp=Z,9.0nm,0.8s
**KOLS Kolonicke sedl 78.10 344** *e*P **P** **04 01 42.4 +1.1**
**CRVS Cervenica-Dubn 78.27 345** *e*P **P** **04 01 43.6 +1.4**
CRVS pmax pmax
comp=Z,8.0nm,0.9s
**CRVS Cervenica-Dubn 78.27 345** *e*P **P** **04 01 43.6 +1.4**
**LANS Liptovska Anna 78.34 346** *e*P **P** **04 01 44.3 +1.6**
LANS pmax pmax
comp=Z,4.0nm,0.9s
**LANS Liptovska Anna 78.34 346** *e*P **P** **04 01 44.3 +1.6**
**VRAC Vranov 78.60 348** *e*P **P** **04 01 45.6 +1.5**
**VRAC Vranov 78.60 348** LR LR 04 40 54.3
comp=Z,43nm,19.8s,baz=21,slow=39
**BMRD Maredsous 78.67 356** *d*P **P** **04 01 45.1 +0.7**
**BURAR Bucovina Array 78.82 342** ⇓P **P** **04 01 46.4 +1.0**
**KRUC Moravsky 78.87 348** *e*P **P** **04 01 46.1 +0.6**
**JAVC Velka Javorina 78.89 347** *e*P **P** **04 01 46.9 +1.2**
**SOC Sochi 78.92 331** *e*P **P** **04 01 44.7 -1.2**
SOC *e* 04 04 43.1
SOC *e*PPP PPP 04 06 30.1
SOC *e*S S **04 11 40.5 -1.5**
SOC *e*SS **SS** **04 16 47.6 +1.6**
SOC *e*SSS SSS 04 20 07.6
SOC MLR MLR
comp=Z,77nm,18.0s
**VYHS Vyhne 79.08 346** *e*P **P** **04 01 47.9 +1.2**
VYHS pmax pmax
comp=Z,5.0nm,1.1s
**VYHS Vyhne 79.08 346** *e*P **P** **04 01 47.9 +1.2**
**KHC Kasperske Hory 79.14 350** *e*P **P** **04 01 47.0 -0.1**
**KHC Kasperske Hory 79.14 350**‖ *e*P **P** **04 01 47.7 +0.6**
KHC pmax pmax
comp=Z,7.0nm,1.0s
**GERES GERESS Array B 79.41 350** P **P** **04 01 47.4 -1.2**
comp=Z,0.3nm,0.4s,baz=15,slow=4.1,SNR=2.3
comp=Z,0.3nm,0.4s
**MODS Modra-Piesok 79.42 347** *e*P **P** **04 01 50.7 +2.1**
MODS pmax pmax
comp=Z,10.0nm,1.0s
**MODS Modra-Piesok 79.42 347** *e*P **P** **04 01 50.7 +2.1**
**PSZ Piszkesteto 79.48 345** ⇓P **P** **04 01 51.6 +2.7**
**PSZ Piszkesteto 79.48 345** ⇓P **P** **04 01 51.6 +2.7**
**TBI Tubuai 79.53 150** *e*LR LR 04 26 24.4
comp=Z,764nm,23.8s
TBI *e*LR LR 04 26 28.8
comp=Z,903nm,26.2s
**CONA Conrad Observa 80.05 348** *e*P **P** **04 01 54.2 +2.1**
comp=Z,4.6nm,1.0s
**DRGR 80.09 343** ⇑P **P** **04 01 53.2 +0.9**
**DRGR 80.09 343** ⇑P **P** **04 01 53.2 +0.9**
**TURR Turia 80.15 341** ⇑P **P** **04 01 56.3 +3.7**
**RONA Rosalia, Austr 80.22 348** *e*P **P** **04 01 52.2 -0.8**
comp=Z,3.1nm,0.9s
**COVR Voineasa-Covas 80.31 341** ⇓P **P** **04 01 55.0 +1.5**
**GNI Garni 80.32 326** LR LR 04 43 01.2
comp=Z,130nm,18.1s,baz=34,slow=40
**MOA Molln 80.33 349** *e*P **P** **04 01 53.4 -0.1**
comp=Z,3.3nm,1.2s
**DOPR Dopca 80.36 341** ⇑P **P** **04 01 56.7 +3.0**
**BIOA Bad Ischl, Aus 80.56 350** *i* P **P** **04 01 54.1 -0.6**
comp=Z,3.1nm,0.6s
**WRA Warramunga Arr 80.65 221** P **P** **04 01 55.3 -0.1**
comp=Z,0.8nm,0.7s,baz=33,slow=6.1,SNR=13
comp=Z,0.8nm,0.7s
**WRA Warramunga Arr 80.65 221** *e*P **P** **04 01 56.7 +1.3**
WRA pmax pmax
comp=Z,1.0nm,0.7s
**MLR Muntele Rosu 80.71 341** LR LR 04 42 08.3
comp=Z,56nm,18.5s,baz=26,slow=39
**MLR Muntele Rosu 80.71 341** ⇑P **P** **04 01 57.9 +2.2**
**MLR Muntele Rosu 80.71 341** ⇑P **P** **04 01 57.9 +2.2**
**ARSA Arzberg 80.76 348** *e*P **P** **04 01 57.2 +1.3**
comp=Z,1.4nm,0.5s
**SIRR Siria 80.78 344** ⇑P **P** **04 01 57.9 +1.9**
**LESA Schwarzleotal 80.92 350** *e*P **P** **04 01 55.3 -1.5**
comp=Z,1.7nm,0.8s
**VOIR 80.94 341** ⇑P **P** **04 01 58.9 +2.0**
**VOIR 80.94 341** ⇑P **P** **04 01 58.9 +2.0**
**RETA Reutte 81.06 351** *e*PcP **P** **04 02 00.1 +2.7**
comp=Z,3.8nm,1.3s
**WATA Walderalm 81.13 351** *e*P **P** **04 02 00.0 +2.1**
comp=Z,3.7nm,0.8s
**MOTA Moosalm 81.17 351** *e*P **P** **04 01 58.8 +0.7**
comp=Z,5.9nm,1.0s
**KBA Koelnbreinsper 81.19 350** *e*P **P** **04 01 59.9 +1.6**
comp=Z,8.4nm,0.7s
**WTTA Wattenberg 81.19 351** *e*P **P** **04 01 59.3 +1.0**
comp=Z,3.4nm,0.7s
**SURR Surduc 81.20 343** ⇑P **P** **04 01 59.2 +1.0**
**SQTA Sankt Quirin 81.28 351** *e*P **P** **04 01 59.8 +1.1**
comp=Z,2.1nm,0.5s
**DAVA Damuels 81.33 352** *e*P **P** **04 01 59.6 +0.5**
comp=Z,4.2nm,1.3s
**BZS Buzias 81.42 344** ⇓P **P** **04 01 59.9 +0.6**
**BZS Buzias 81.42 344** ⇓P **P** **04 01 59.9 +0.6**
**GZR Gura Zlata 81.42 343** ⇑P **P** **04 02 01.0 +1.5**
**GZR Gura Zlata 81.42 343** ⇑P **P** **04 02 01.0 +1.5**
**FETA Feichten 81.52 351** *e*P **P** **04 02 00.6 +0.5**
comp=Z,3.3nm,1.2s
**OBKA Obir 81.61 349** *e*P **P** **04 02 01.4 +1.0**
comp=Z,1.8nm,0.5s
**ABTA Abfaltersbach 81.61 350** *e*P **P** **04 02 02.0 +1.5**
comp=Z,8.1nm,1.3s
**HERR Herculane 81.99 343** ⇓P **P** **04 02 02.2 -0.1**
**FRGS Fruska Gora 82.17 345** ⇓P **P** **04 02 04.7 +1.3**
**ASAR Alice Springs 84.15 220** P **P** **04 02 14.3 +0.7**
comp=Z,0.3nm,0.4s,baz=23,slow=4.8,SNR=4.1
ASAR LR LR 04 39 15.7
comp=Z,25nm,19.3s,baz=11,slow=35
comp=Z,0.3nm,0.4s
**BRTR Keskin Array B 84.25 333** P **P** **04 02 15.2 +0.9**
comp=Z,7.3nm,0.8s,baz=48,slow=2.8,SNR=36
BRTR LR LR 04 46 25.4
comp=Z,26nm,18.9s,baz=354,slow=40
comp=Z,7.3nm,0.8s
**STKA Stephens Creek 88.83 211** P **P** **04 02 36.9 +0.6**
comp=Z,3.5nm,0.9s,baz=313,slow=18,SNR=3.1
STKA LR LR 04 43 01.9
comp=Z,49nm,18.1s,baz=26,slow=36
comp=Z,3.5nm,0.9s
**URZ Urewera 89.14 181** LR LR 04 36 28.7
comp=Z,91nm,20.9s,baz=40,slow=31
**ESDC Sonseca Array 89.44 2** P **P** **04 02 37.8 -1.7**
comp=Z,0.9nm,0.9s,baz=356,slow=3.4,SNR=5.7
comp=Z,0.9nm,0.9s
**MMAI Mount Meron Ar 89.94 329** LR LR 04 48 05.5
comp=Z,68nm,19.5s,baz=335,slow=39
**VAE Valguarnera 90.51 347** LR LR 04 46 16.5
comp=Z,45nm,19.9s,baz=310,slow=38
**EIL Elat 93.17 329** LR LR 04 50 54.5
comp=Z,69nm,18.6s,baz=67,slow=39
**MDT Midelt 96.27 2** LR LR 04 44 22.7
comp=Z,23nm,19.3s,baz=358,slow=34
**TORD Torodi Ar. Bea 115.81 356** PKP **PKiKP** **04 08 24.5 -0.8**
comp=Z,0.3nm,0.4s,baz=335,slow=3.3,SNR=9.8
**H03N2 Juan Fernandez 122.92 104** T T 06 23 37.5
baz=308
**H03N1 Juan Fernandez 122.94 104** T T 06 23 37.8
baz=308
**H03N3 Juan Fernandez 122.94 104** T T 06 23 39.0
baz=308
**QSPA South Pole Qui 141.00 180** PKP **PKPdf** **04 09 10.5 -0.9**
comp=Z,1.2nm,0.8s,baz=314,slow=2.1,SNR=3.0
**MAW Mawson 145.24 217** PKPbc **PKPab** **04 09 18.6 0.0**
comp=Z,1.2nm,0.6s,baz=92,slow=3.4,SNR=2.9
**BOSA Boshof 149.63 308** PKPbc **PKPbc** **04 09 32.6 +0.5**
comp=Z,1.8nm,0.5s,baz=25,slow=3.9,SNR=6.9

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**IDC 02 04:01:57.8±3.8, 53°.59N×88°.05E, h0km, mbtmp2.5/2, ML2.5/2, Error ellipse: s-maj=36.7km s-min=19.1km az=51.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.95** | **282** | I | I | | 04 14 00.0 | |
| | baz=98,slow=319,SNR=3.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.95** | **282** | Pg | Pn | | 04 02 32.8 | +0.7 |
| | 0.5nm,0.3s,baz=99,slow=14,SNR=4.2 | | | | | | | |
| ZALV | | | | Lg | Lg | | 04 02 59.0 | |
| | 1.1nm,0.3s,baz=101,slow=26,SNR=8.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.57** | **247** | Pn | Pn | | 04 03 37.1 | +1.5 |
| | baz=64,slow=14,SNR=1.7 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.74** | **211** | Pn | Pn | | 04 03 52.2 | +0.5 |
| | 0.2nm,0.3s,baz=29,slow=36,SNR=1.5 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |

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**IDC 02 04:05:18.3±2.0, 3°.07S×148°.02E, h0km, mb3.6/3, mbtmp3.7/3, MS3.2/3, Error ellipse: s-maj=166.4km s-min=31.4km az=121.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.44** | **218** | P | P | | 04 10 07.7 | -0.5 |
| | 2.5nm,0.8s,baz=42,slow=11,SNR=16 | | | | | | | |
| WRA | | | | LR | LR | | 04 17 33.7 | |
| | comp=Z,89nm,21.0s,baz=67,slow=34 | | | | | | | |
| | 2.5nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **24.61** | **212** | P | P | | 04 10 40.9 | +0.4 |
| | 2.0nm,0.9s,baz=47,slow=6.7,SNR=12 | | | | | | | |
| | 2.0nm,0.9s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.23** | **40** | T | T | | 04 41 01.4 | |
| | baz=223,slow=75,SNR=38 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.24** | **40** | T | T | | 04 40 58.2 | |
| | baz=223,slow=75,SNR=44 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.25** | **40** | T | T | | 04 40 57.6 | |
| | baz=223,slow=75,SNR=48 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.26** | **39** | T | T | | 04 42 11.9 | |
| | baz=221,slow=76,SNR=14 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.28** | **39** | T | T | | 04 42 14.8 | |
| | baz=221,slow=76,SNR=19 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.28** | **39** | T | T | | 04 42 13.7 | |
| | baz=221,slow=76,SNR=24 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **40.46** | **348** | LR | LR | | 04 28 13.3 | |
| | comp=Z,18nm,19.0s,baz=134,slow=34 | | | | | | | |
| **MKAR** | **Makanchi Array** | **75.92** | **320** | LR | LR | | 04 51 56.1 | |
| | comp=Z,14nm,18.5s,baz=352,slow=37 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.40** | **23** | P | P | | 04 17 42.0 | 0.0 |
| | 0.4nm,0.9s,baz=229,slow=3.5,SNR=2.4 | | | | | | | |
| | 0.4nm,0.9s | | | | | | | |

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*IDC **02** 04:16:22.9±1.8, 30°.44S×177°.99W, h0km, mb3.5/3, mbtmp3.6/4, ML2.9/1, Error ellipse: s-maj=48.0km s-min=24.4km az=102.0*

**ISC 02 04:16:27.6±1.4, 30°.4S±0°.1×178°.0W±0°.3, h46km, n9, σ2s30/8, mb3.6/3, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.16** | **5** | Pn | **Pn** | | **04 16 47.0** | **-0.4** |
| | 124nm,0.3s,baz=217,slow=20,SNR=1.6 | | | | | | | |
| RAO | | | | Sn | **Sn** | | **04 16 59.9** | **-2.3** |
| | 252nm,0.3s,baz=132,slow=22,SNR=3.4 | | | | | | | |
| **URZ** | **Urewera** | **8.79** | **206** | Pn | **Pn** | | **04 18 30.0** | **-2.0** |
| | 0.1nm,0.3s,baz=338,slow=5.4,SNR=1.5 | | | | | | | |
| URZ | | | | Sn | **Sn** | | **04 20 07.5** | **-2.2** |
| | 0.9nm,0.3s,baz=342,slow=20,SNR=8.8 | | | | | | | |
| | 4.1nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **43.08** | **267** | P | **P** | | **04 24 25.2** | **+1.8** |
| | 0.3nm,0.6s,baz=105,slow=7.1,SNR=2.4 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.07** | **272** | P | **P** | | **04 24 33.3** | **+2.0** |
| | 0.5nm,0.5s,baz=111,slow=8.1,SNR=14 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **VNDA** | **Vanda** | **48.08** | **186** | P | **P** | | **04 25 04.2** | **+2.1** |
| | 0.5nm,0.7s,baz=53,slow=5.1,SNR=2.4 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **H03S2** | **Juan Fernandez** | **80.47** | **124** | T | T | | 05 57 47.9 | |
| | baz=238,slow=74,SNR=13 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.49** | **124** | T | T | | 05 57 49.1 | |
| | baz=238,slow=74,SNR=12 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.49** | **124** | T | T | | 05 57 47.9 | |
| | baz=238,slow=74,SNR=11 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.15** | **340** | PKPbc | **PKPdf** | | **04 35 59.6** | **+0.4** |
| | 0.4nm,0.3s,baz=26,slow=3.5,SNR=2.3 | | | | | | | |

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*IDC **02** 04:26:22.7±9.6, 21°.98S×178°.62W, h322km±63km, mb3.1/3, mbtmp3.9/4, Error ellipse: s-maj=139.7km s-min=36.2km az=136.0*

**ISC 02 04:26:21.5±2.6, 22°.2S±0°.2×178°.7W±0°.4, h300km, n7, σ0s69/6, mb3.1/3, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.41** | **325** | P | **Pn** | | **04 27 44.1** | **+0.1** |
| | 20nm,0.5s,baz=130,slow=9.4,SNR=24 | | | | | | | |
| **STKA** | **Stephens Creek** | **36.49** | **246** | P | **P** | | **04 32 58.8** | **0.0** |
| | 1.4nm,0.6s,baz=106,slow=16,SNR=4.0 | | | | | | | |
| | 1.4nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **43.52** | **259** | P | **P** | | **04 33 56.1** | **-0.4** |
| | 0.7nm,0.6s,baz=94,slow=8.1,SNR=6.3 | | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 0.7nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 43.75 | 264 | P | P | 04 33 58.7 | +0.4 |
| | 0.7nm,0.6s,baz=98,slow=8.4,SNR=13 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| HFS | Hagfors | 141.12 | 350 | PKhKP | PKPpre | 04 45 07.2 | |
| | 0.6nm,0.6s,baz=79,slow=7.7,SNR=5.2 | | | | | | |
| AKASG | Malin Array Be | 144.18 | 329 | PKP | PKPab | 04 45 19.3 | -0.8 |
| | 1.2nm,0.5s,baz=44,slow=3.7,SNR=4.8 | | | | | | |
| BRTR | Keskin Array B | 147.48 | 310 | PKPbc | PKPdf | 04 45 28.4 | +0.7 |
| | 0.2nm,0.4s,baz=57,slow=5.3,SNR=2.9 | | | | | | |

*NEIC **02** 04:39:56.0±0.4, 37°.11N±0°.01×97°.59W±0°.01, h6km±1km, Error ellipse: s-maj=1.9km s-min=1.0km az=205.0*

**NEIC 02 04:39:56.2**±0.4**, 37°.11N**±0°.01×**97°.59W**±0°.01**, h5**km±1km**, mb_Lg2.6**/80**, ML3.2**/50**, ML2.9**/17**, Error ellipse: s-maj=2.0km s-min=1.1km az=217.0, Kansas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KAN09 | Caldwell North | 0.04 | 318 | | Pg | 04 39 57.5 | +0.1 |
| KAN09 | | | | Sg | Sg | 04 39 58.4 | +0.1 |
| KAN13 | South Haven SW | 0.13 | 137 | Pg | Pg | 04 39 59.1 | +0.2 |
| KAN13 | | | | Sg | Sg | 04 40 01.3 | +0.6 |
| KAN13 | | | | IAML | | 04 40 01.5 | |
| | comp=N,12µm,0.3s | | | | | | |
| KAN01 | Argonia South | 0.14 | 288 | Pg | Pg | 04 39 59.5 | +0.3 |
| KAN01 | | | | Sg | Sg | 04 40 01.7 | +0.6 |
| KAN17 | Caldwell West | 0.16 | 245 | | Pg | 04 39 59.7 | +0.3 |
| KAN17 | | | | Sg | Sg | 04 40 02.0 | +0.6 |
| KAN17 | | | | IAML | | 04 40 02.2 | |
| | comp=E,9µm,0.2s | | | | | | |
| KS21 | Milan North St | 0.19 | 341 | IAML | | 04 40 03.2 | |
| | comp=E,5µm,0.3s | | | | | | |
| KS21 | Milan North St | 0.19 | 341 | | Pg | 04 40 00.2 | +0.2 |
| KS21 | | | | | Sg | 04 40 03.1 | +0.6 |
| KAN08 | Anthony NE Sta | 0.33 | 291 | | Pg | 04 40 02.9 | +0.3 |
| KAN08 | | | | | Sg | 04 40 07.6 | +0.7 |
| KAN08 | | | | IAML | | 04 40 07.8 | |
| | comp=N,2µm,0.2s | | | | | | |
| KAN14 | Manchester OK | 0.34 | 243 | | Pg | 04 40 03.0 | +0.2 |
| KAN14 | | | | IAML | | 04 40 07.8 | |
| | comp=E,2µm,0.1s | | | | | | |
| KAN14 | | | | IAML | | 04 40 09.5 | |
| | comp=N,3µm,0.2s | | | | | | |
| GC02 | Grant County # | 0.34 | 220 | Pg | Pg | 04 40 03.0 | +0.2 |
| GC02 | | | | Sg | Sg | 04 40 07.8 | +0.6 |
| KAN12 | Harper NE Stat | 0.38 | 300 | | Pg | 04 40 03.8 | +0.2 |
| KAN12 | | | | | Sg | 04 40 09.2 | +0.6 |
| KAN12 | | | | IAML | | 04 40 12.4 | |
| | comp=N,2µm,0.3s | | | | | | |
| KAN12 | | | | IAML | | 04 40 12.9 | |
| | comp=E,3µm,0.3s | | | | | | |
| BLOK | Blackwell | 0.46 | 139 | | Pg | 04 40 05.2 | +0.2 |
| BLOK | | | | | Sg | 04 40 11.7 | +0.7 |
| OK032 | Salt Plains WL | 0.58 | 239 | Pg | Pg | 04 40 07.6 | +0.2 |
| OK032 | | | | | Sg | 04 40 15.6 | +0.6 |
| OK032 | | | | IAML | | 04 40 15.8 | |
| | comp=E,1µm,0.2s | | | | | | |
| OK032 | | | | IAML | | 04 40 19.0 | |
| | comp=E,1µm,0.2s | | | | | | |
| CROK | Carrier | 0.68 | 208 | Pg | Pg | 04 40 09.4 | +0.1 |
| CROK | | | | IAML | | 04 40 21.8 | |
| | comp=N,749nm,0.2s | | | | | | |
| CROK | | | | IAML | | 04 40 22.6 | |
| | comp=E,982nm,0.5s | | | | | | |
| OK051 | E0350 and S346 | 0.85 | 135 | Pg | Pg | 04 40 12.4 | -0.2 |
| OK051 | | | | IAML | | 04 40 26.2 | |
| | comp=E,809nm,0.2s | | | | | | |
| OK051 | | | | IAML | | 04 40 26.2 | |
| | comp=E,902nm,0.2s | | | | | | |
| OK048 | Pawnee Station | 0.86 | 143 | Pg | Pg | 04 40 12.7 | -0.1 |
| OK048 | | | | IAML | | 04 40 26.1 | |
| | comp=E,630nm,0.5s | | | | | | |
| OK048 | | | | IAML | | 04 40 26.1 | |
| | comp=E,437nm,0.5s | | | | | | |
| T35A | Sooner Cattle | 0.88 | 102 | | Pg | 04 40 13.0 | -0.2 |
| OK038 | West end E0370 | 1.12 | 236 | Pg | Pg | 04 40 17.4 | -0.3 |
| QUOK | Quay | 1.17 | 143 | Pg | Pg | 04 40 18.5 | -0.3 |
| NOKA | Waynoka | 1.18 | 247 | Pg | Pg | 04 40 18.3 | -0.5 |
| NOKA | | | | IAML | | 04 40 38.9 | |
| | comp=N,685nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 04 40 40.4 | |
| | comp=E,508nm,0.3s | | | | | | |
| OK052 | Battle Ridge R | 1.28 | 150 | Pg | Pn | 04 40 20.3 | -0.4 |
| OK052 | | | | IAML | | 04 40 43.8 | |
| | comp=E,519nm,0.3s | | | | | | |
| OK031 | S. Brethren Rd | 1.30 | 152 | Pg | Pn | 04 40 20.5 | -0.5 |
| OK031 | | | | IAML | | 04 40 38.8 | |
| | comp=E,585nm,0.3s | | | | | | |
| OK029 | Liberty Lake | 1.31 | 175 | | Pn | 04 40 20.9 | -0.3 |
| U32A | Winter Ranch, | 1.35 | 238 | | Pn | 04 40 21.3 | -0.4 |
| U32A | | | | IAML | | 04 40 40.6 | |
| | comp=E,477nm,0.3s | | | | | | |
| U32A | | | | IAML | | 04 40 40.9 | |
| | comp=N,517nm,0.1s | | | | | | |
| ADOK | Arcadia Dam | 1.46 | 173 | Pg | Pn | 04 40 22.7 | -0.6 |
| DEOK | Depew | 1.54 | 145 | Pg | Pn | 04 40 24.5 | +0.2 |
| R32A | Long Quarter, | 1.58 | 326 | | Pn | 04 40 25.4 | +0.4 |
| OKCSW | OKLAHOMA CITY | 1.70 | 176 | | Pn | 04 40 27.2 | +0.7 |
| CSTR | Hydro, Custer | 1.71 | 212 | | Pn | 04 40 27.2 | +0.5 |
| FNO | Franklin | 1.85 | 175 | | Pn | 04 40 29.2 | +0.5 |
| TUL3 | Leonard | 1.88 | 129 | | Pn | 04 40 29.5 | +0.5 |
| TUL3 | | | | IAmb_Lg | | 04 40 57.1 | |
| | comp=Z,38nm,0.9s | | | | | | |
| KSU1 | Kansas State U | 2.13 | 21 | Pn | Pn | 04 40 33.0 | +0.5 |
| KSU1 | | | | IAmb_Lg | | 04 41 04.5 | |
| | comp=Z,36nm,1.0s | | | | | | |
| RLO | Rose Lookout | 2.27 | 114 | | Pn | 04 40 35.1 | +0.7 |
| X37A | Clayton | 3.09 | 144 | IAmb_Lg | | 04 41 39.3 | |
| | comp=Z,25nm,0.8s | | | | | | |
| S39A | Bolivar | 3.45 | 79 | IAmb_Lg | | 04 41 53.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| Z35A | Perchaven, San | 3.78 | 176 | IAmb_Lg | | 04 42 05.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| AMTX | Amarillo | 3.99 | 237 | IAmb_Lg | | 04 42 04.8 | |
| | comp=Z,12nm,0.7s | | | | | | |
| P38A | Dawn | 4.06 | 51 | IAmb_Lg | | 04 42 12.6 | |
| | comp=Z,16nm,0.7s | | | | | | |
| MIAR | Mount Ida | 4.14 | 127 | IAmb_Lg | | 04 42 13.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| RTBA | Rita Blanca | 4.19 | 262 | IAmb_Lg | | 04 42 18.8 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| MGMO | Mountain Grove | 4.25 | 88 | IAmb_Lg | | 04 42 18.9 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| BGNE | Belgrade | 4.32 | 354 | IAmb_Lg | | 04 42 14.0 | |
| | comp=Z,20nm,0.7s | | | | | | |
| R40A | Maddies Statio | 4.38 | 73 | IAmb_Lg | | 04 42 16.8 | |
| | comp=Z,19nm,0.7s | | | | | | |
| DKNS | Dickens | 4.38 | 219 | IAmb_Lg | | 04 42 26.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| Z38A | Mt. Pleasant | 4.39 | 150 | IAmb_Lg | | 04 42 15.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| KSCO | Kaye Shedlock' | 4.41 | 297 | IAmb_Lg | | 04 42 25.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| FCAR | Ozark Folk Cen | 4.57 | 104 | IAmb_Lg | | 04 42 19.1 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| WHAR | Wooly Hollow | 4.65 | 111 | IAmb_Lg | | 04 42 32.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| X40A | Basin Creek Fa | 4.67 | 123 | IAmb_Lg | | 04 42 23.5 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| SN07 | Snyder 07 | 4.84 | 215 | IAmb_Lg | | 04 42 41.3 | |
| | comp=Z,10nm,0.7s | | | | | | |
| UALR | University of | 4.85 | 117 | IAmb_Lg | | 04 42 40.7 | |
| | comp=Z,12nm,0.9s | | | | | | |
| L34A | Svendsen Farm, | 4.94 | 11 | IAmb_Lg | | 04 42 40.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| CCM | Cathedral Cave | 5.13 | 77 | IAmb_Lg | | 04 42 43.9 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| POST | Post | 5.15 | 220 | IAmb_Lg | | 04 42 51.9 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| T25A | Trinidad | 5.45 | 272 | IAmb_Lg | | 04 42 49.6 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| Z41A | Richland Creek | 5.49 | 133 | IAmb_Lg | | 04 43 05.2 | |
| | comp=Z,10nm,0.8s | | | | | | |
| PBMO | Poplar Bluff | 5.74 | 91 | IAmb_Lg | | 04 42 58.1 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| Q24A | Divide | 6.25 | 290 | IAmb_Lg | | 04 43 26.0 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| BRIGG | Briggsdale | 6.29 | 305 | IAmb_Lg | | 04 43 27.6 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| CGM3 | Cape Girardeau | 6.33 | 86 | IAmb_Lg | | 04 43 17.2 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| JCT | Junction City | 6.86 | 196 | IAmb_Lg | | 04 43 46.7 | |
| | comp=Z,8.3nm,1.0s | | | | | | |
| L40A | Anamosa | 6.97 | 43 | IAmb_Lg | | 04 43 37.6 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| PHWY | Pilot Hill | 7.41 | 307 | IAmb_Lg | | 04 43 59.9 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| N23A | Red Feather La | 7.52 | 303 | IAmb_Lg | | 04 44 09.0 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| 735A | Kenedy | 8.23 | 181 | IAmb_Lg | | 04 44 21.3 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| ALPN | Alpine | 8.39 | 219 | IAmb_Lg | | 04 44 27.5 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| RSSD | Black Hills | 8.55 | 327 | IAmb_Lg | | 04 44 37.4 | |
| | comp=Z,5.8nm,1.1s | | | | | | |

*NNC **02** 04:59:31.2±2.1, 53°.50N×87°.96E, h0km, mb3.2, mpv2.8, Error ellipse: s-maj=17.8km s-min=9.2km az=57.0, Suspected Mining explosion.*

*IDC **02** 04:59:34.0±3.0, 53°.54N×87°.63E, h0km, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=24.9km s-min=14.8km az=61.0*

**ISC 02 04:59:32.3**±3.3**, 53°.6N**±0°.1×**87°.8E**±0°.2**, h0**km**, n7,** σ1s**44**/11**, 5C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.79 | 282 | I | I | 05 11 20.0 | |
| | 0.1nm,1.0s,baz=98,slow=312,SNR=8.1 | | | | | | |
| ZAA0 | Zalesovo Array | 1.79 | 282 | ⇑P | Pn | 05 00 04.6 | +0.2 |
| | 0.6nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | Sg | 05 00 31.1 | +1.4 |
| | 8.1nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 1.79 | 282 | Pg | Pb | 05 00 05.0 | -0.9 |
| | 4.3nm,0.3s,baz=102,slow=14,SNR=36 | | | | | | |
| ZALV | | | | Lg | Lg | 05 00 29.1 | |
| | 4.2nm,0.3s,baz=104,slow=24,SNR=22 | | | | | | |
| KURK | Kurchatov | 6.33 | 247 | ⇑Pn | Pn | 05 01 07.5 | +0.8 |
| | 2.0nm,0.9s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 05 02 19.6 | 0.0 |
| | 1.8nm,0.9s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 05 02 52.6 | |
| | 12nm,1.0s | | | | | | |
| KURBB | Kurchatov Arra | 6.43 | 246 | Pn | Pn | 05 01 09.1 | +1.1 |
| | 0.1nm,0.3s,baz=64,slow=14,SNR=5.1 | | | | | | |
| KURBB | | | | Sn | Sn | 05 02 19.6 | -2.4 |
| | 0.1nm,0.3s,baz=64,slow=28,SNR=1.6 | | | | | | |
| KURBB | | | | Lg | Lg | 05 02 53.4 | |
| | baz=64,slow=30,SNR=1.2 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| MK31 | Makanchi Array | 7.67 | 209 | ⇓Pn | Pn | 05 01 24.1 | -1.0 |
| | 0.8nm,0.6s,baz=21,slow=10,SNR=5.3 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 05 02 52.8 | +0.2 |
| | 1.6nm,0.8s,baz=130,slow=48,SNR=2.9 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 05 03 34.3 | |
| | 5.7nm,1.1s,baz=25,slow=31,SNR=5.4 | | | | | | |
| MKAR | Makanchi Array | 7.67 | 209 | Pn | Pn | 05 01 27.1 | +2.0 |
| | 0.1nm,0.3s,baz=26,slow=8.7,SNR=4.1 | | | | | | |
| MKAR | | | | Sn | Sn | 05 02 51.8 | -0.8 |
| | 0.1nm,0.3s,baz=28,slow=28,SNR=5.4 | | | | | | |
| MKAR | | | | Lg | Lg | 05 03 30.7 | |
| | 0.1nm,0.3s,baz=16,slow=31,SNR=1.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*IDC **02** 05:00:37.4±1.5, 17°.85S×167°.46E, h0km, mb4.0/7, mbtmp4.0/8, ML3.7/1, MS3.2/10, Error ellipse: s-maj=35.5km s-min=27.8km az=47.0*

*NOU **02** 05:00:41.7, 18°.00S×167°.49E, h32km, MLv4.3/12, Vanuatu Islands*

**ISC 02 05:00:41.6**±0.9**, 18°.07S**±0°.10×**167°.48E**±0°.09**, h23**km**, n26,** σ1s**25**/18**, mb4.0**/7**, MS3.1**/10**, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DVP | Devils Point | 0.76 | 63 | P | Pb | 05 00 55.9 | -0.2 |
| RTV | Rentapao | 0.94 | 73 | P | Pb | 05 00 59.2 | 0.0 |
| LIFNC | LIFOU | 2.70 | 185 | P | Pn | 05 01 22.7 | -0.9 |
| MARNC | Mare, Loyalty | 3.43 | 171 | P | Pn | 05 01 34.1 | +0.4 |
| KOUNC | Koumac, New Ca | 3.90 | 230 | P | Pn | 05 01 40.5 | +0.4 |
| YATNC | Mamie plateau, | 4.01 | 188 | P | Pn | 05 01 40.9 | -0.7 |
| DZM | Mont Dzumac | 4.10 | 194 | P | Pn | 05 01 43.5 | +0.6 |
| DZM | Mont Dzumac | 4.10 | 194 | Pn | Pn | 05 01 42.6 | -0.3 |
| | 4.4nm,0.3s,baz=45,slow=17,SNR=119 | | | | | | |
| DZM | | | | Sn | Sn | 05 02 27.6 | -2.6 |
| | 12nm,0.3s,baz=116,slow=20,SNR=9.6 | | | | | | |
| | 11nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 4.16 | 195 | P | Pn | 05 01 45.0 | +1.3 |
| ONTNC | Ouen Toro | 4.32 | 193 | P | Pn | 05 01 47.5 | +1.5 |
| HNR | Honiara | 11.28 | 319 | LR | LR | 05 06 30.9 | |
| | comp=Z,2µm,20.1s,baz=171,slow=32 | | | | | | |
| CTA | Charters Tower | 20.16 | 261 | LR | LR | 05 12 23.3 | |
| | comp=Z,6.9nm,19.5s,baz=100,slow=35 | | | | | | |
| PMG | Port Moresby | 21.52 | 291 | LR | LR | 05 12 50.7 | |
| | comp=Z,74nm,19.2s,baz=138,slow=34 | | | | | | |
| URZ | Urewera | 21.80 | 159 | P | P | 05 05 31.7 | -0.4 |
| | 3.5nm,0.8s,baz=192,slow=6.3,SNR=2.5 | | | | | | |
| URZ | | | | LR | LR | 05 12 31.7 | |
| | comp=Z,70nm,18.7s,baz=39,slow=32 | | | | | | |
| | 3.5nm,0.8s | | | | | | |
| STKA | Stephens Creek | 27.11 | 235 | LR | LR | 05 16 03.4 | |
| | comp=Z,43nm,19.8s,baz=37,slow=34 | | | | | | |
| WRA | Warramunga Arr | 31.36 | 261 | P | P | 05 07 00.1 | -0.8 |
| | 1.6nm,0.7s,baz=90,slow=8.9,SNR=9.3 | | | | | | |
| WRA | | | | LR | LR | 05 19 13.4 | |
| | comp=Z,75nm,21.6s,baz=27,slow=36 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| ASAR | Alice Springs | 31.82 | 254 | P | P | 05 07 04.3 | -0.5 |
| | 1.9nm,0.6s,baz=79,slow=9.0,SNR=14 | | | | | | |
| | 1.9nm,0.6s | | | | | | |
| GUMO | Guam | 38.56 | 323 | LR | LR | 05 22 33.6 | |
| | comp=Z,22nm,20.7s,baz=180,slow=34 | | | | | | |
| JOW | Kunigami | 58.65 | 319 | LR | LR | 05 33 27.2 | |
| | comp=Z,120nm,20.6s,baz=323,slow=34 | | | | | | |
| VNDA | Vanda | 59.54 | 181 | P | P | 05 10 44.4 | +1.6 |
| | 1.1nm,1.0s,baz=352,slow=5.9,SNR=4.9 | | | | | | |
| | 1.1nm,1.0s | | | | | | |
| JNU | Nakatsue | 61.76 | 325 | LR | LR | 05 33 04.3 | |
| | comp=Z,12nm,21.1s,baz=112,slow=32 | | | | | | |
| QSPA | South Pole Qui | 71.97 | 180 | P | P | 05 12 04.7 | +1.4 |
| | 1.5nm,0.8s,baz=23,slow=6.6,SNR=5.1 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| KLR | Kul'dur | 74.13 | 337 | LR | LR | 05 42 56.6 | |
| | comp=Z,13nm,19.3s,baz=149,slow=34 | | | | | | |
| ILAR | Eielson Array | 89.63 | 18 | P | P | 05 13 35.1 | -1.9 |
| | 0.3nm,0.6s,baz=233,slow=5.5,SNR=3.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| SNAA | Sanae | 90.24 | 183 | P | P | 05 13 41.2 | +1.0 |
| | 2.1nm,0.9s,baz=264,slow=2.5,SNR=4.4 | | | | | | |
| | 2.1nm,0.9s | | | | | | |
| ZALV | Zalesovo Beam | 100.19 | 323 | LR | LR | 06 01 01.2 | |
| | comp=Z,7.3nm,18.5s,baz=52,slow=36 | | | | | | |

**IDC 02 05:02:33.8**±2.6**, 21°.33S**×**147°.72E, h0**km**, mbtmp3.4**/3**, ML3.0**/3**, Error ellipse: s-maj=32.2km s-min=18.1km az=60.0, Queensland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CTA | Charters Tower | 1.84 | 312 | Pn | Pn | 05 03 06.5 | -0.2 |
| | 3.0nm,0.3s,baz=126,slow=17,SNR=115 | | | | | | |
| CTA | | | | Lg | Lg | 05 03 32.6 | |
| | 2.4nm,0.3s,baz=219,slow=20,SNR=43 | | | | | | |
| STKA | Stephens Creek | 11.84 | 206 | Pn | Pn | 05 05 24.1 | +0.2 |
| | 0.2nm,0.3s,baz=35,slow=12,SNR=2.6 | | | | | | |
| STKA | | | | Lg | Lg | 05 08 50.0 | |
| | 0.1nm,0.3s,baz=91,slow=23,SNR=1.8 | | | | | | |
| | 3.8nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 12.60 | 274 | Pn | Pn | 05 05 33.7 | -0.7 |
| | baz=92,slow=12,SNR=2.1 | | | | | | |
| WRA | | | | Lg | Lg | 05 09 11.3 | |
| | 0.1nm,0.3s,baz=101,slow=28,SNR=6.0 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| ASAR | Alice Springs | 12.98 | 257 | Pn | Pn | 05 05 39.6 | +0.1 |
| | 0.1nm,0.3s,baz=82,slow=14,SNR=2.1 | | | | | | |
| ASAR | | | | Lg | Lg | 05 09 28.5 | |
| | 0.1nm,0.3s,baz=85,slow=31,SNR=4.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| I22FR | PORTLAGUERRE I | 17.79 | 96 | I | I | 06 49 50.0 | |
| | 0.1nm,0.8s,baz=266,slow=296,SNR=3.5 | | | | | | |
| TORD | Torodi Ar. Bea | 146.60 | 261 | PKPbc | PKPbc | 05 22 17.5 | -0.7 |
| | 0.3nm,0.5s,baz=103,slow=1.3,SNR=4.0 | | | | | | |

*NEIC **02** 05:14:37.4±1.1, 19°.9N±0°.2×64°.3W±0°.2, h10km±2km, ML2.7/16, Md3.3/4(RSPR), Error ellipse: s-maj=35.9km s-min=16.3km az=135.0*

*RSPR **02** 05:14:40.2, 19°.85N×64°.18W, h97km±22km, MD3.3/4*

**ISC 02 05:14:38.7**±3.5**, 19°.9N**±0°.2×**64°.27W**±0°.08**, h10**km**, n18,** σ1s**47**/22**, 4C, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HUMP | Col San Antoni | 2.31 | 221 | ⇑eP | Pn | 05 15 16.8 | -0.1 |
| HUMP | Col San Antoni | 2.31 | 221 | eS | Sn | 05 15 44.7 | -0.7 |
| HUMP | Col San Antoni | 2.31 | 221 | | Pn | 05 15 15.7 | -1.1 |
| HUMP | | | | | Sn | 05 15 43.7 | -1.6 |
| EMPR | Esperanza - Ma | 2.57 | 237 | Pn | Pn | 05 15 19.4 | -0.9 |
| IGPR | InterUniversit | 2.60 | 222 | ⇑eP | Pn | 05 15 20.4 | -0.5 |
| IGPR | InterUniversit | 2.60 | 222 | eS | Sn | 05 15 51.4 | -1.1 |
| IGPR | InterUniversit | 2.60 | 222 | | Pn | 05 15 19.8 | -1.1 |
| IGPR | | | | | Sn | 05 15 51.3 | -1.3 |
| AOPR | Arecibo Observ | 2.82 | 237 | eP | Pg | 05 15 35.9 | +3.2 |
| AOPR | | | | eS | Sn | 05 15 55.8 | -2.2 |
| UUPR | Utuado, UPR, P | 2.85 | 235 | ⇑eP | Pn | 05 15 23.6 | -0.6 |
| UUPR | Utuado, UPR, P | 2.85 | 235 | eS | Sn | 05 15 58.2 | -0.4 |
| UUPR | Utuado, UPR, P | 2.85 | 235 | | Pn | 05 15 23.2 | -1.0 |
| UUPR | | | | | Sn | 05 15 57.8 | -0.8 |
| UUPR | | | | IAML | | 05 16 09.1 | |
| | comp=E,36nm,0.3s | | | | | | |
| CELP | Cerrillos | 2.85 | 230 | Pn | Pn | 05 15 22.4 | -1.8 |
| CELP | | | | IAML | | 05 16 53.6 | |
| | comp=N,20nm,2.7s | | | | | | |
| CELP | | | | IAML | | 05 16 59.4 | |
| | comp=E,18nm,2.4s | | | | | | |
| OBIP | Obispado Ponce | 2.89 | 230 | ⇑eP | Pn | 05 15 24.5 | -0.3 |
| OBIP | Obispado Ponce | 2.89 | 230 | eS | Sn | 05 15 59.6 | -0.1 |
| OBIP | Obispado Ponce | 2.89 | 230 | | Pn | 05 15 23.0 | -1.8 |
| OBIP | | | | IAML | | 05 16 01.5 | |
| | comp=N,18nm,2.0s | | | | | | |
| OBIP | | | | IAML | | 05 16 48.1 | |
| | comp=E,17nm,2.5s | | | | | | |
| MLPR | Magueyes Islan | 3.26 | 234 | Pn | Pn | 05 15 27.7 | -2.2 |
| MLPR | | | | IAML | | 05 16 16.7 | |
| | comp=E,18nm,2.4s | | | | | | |
| CRPR | Cabo Rojo, PR | 3.29 | 235 | Pn | Pn | 05 15 28.5 | -1.8 |
| CRPR | | | | IAML | | 05 16 47.0 | |
| | comp=E,22nm,1.8s | | | | | | |
| CRPR | | | | IAML | | 05 17 21.1 | |
| | comp=N,25nm,2.2s | | | | | | |
| ANBD | Bethesda, Anti | 3.71 | 140 | eS | Sn | 05 16 19.3 | -0.5 |

*IDC **02** 05:29:12.4±1.9, 56°.17N×149°.25W, h0km, mb3.5/3, mbtmp3.6/8, ML3.5/5, MS3.0/5, Error ellipse: s-maj=34.9km s-min=22.9km az=25.0*

*NEIC **02** 05:29:15.2±1.4, 56°.35N±0°.07×149°.2W±0°.1, h10km±2km, ML3.7/68, ML3.5(AEIC), Error ellipse: s-maj=12.6km s-min=10.2km az=172.0*

*AEIC **02** 05:29:20.9±1.1, 56°.44N±0°.08×149°.2W±0°.1, h12km±7km, Error ellipse: s-maj=12.1km s-min=8.9km az=169.0*

**ISC 02 05:29:15.0**±1.1**, 56°.47N**±0°.09×**149°.17W**±0°.06**, h10**km**, n219,** σ1s**66**/213**, mb3.6**/3**, MS3.0**/3**, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDAK | Kodiak Island | 2.28 | 307 | | Pn | 05 29 53.5 | +0.9 |
| KDAK | Kodiak Island | 2.28 | 307 | Pn | Pn | 05 29 53.4 | +0.8 |
| | 12nm,0.3s,baz=146,slow=5.2,SNR=487 | | | | | | |
| KDAK | | | | Sn | Sn | 05 30 18.8 | -1.9 |
| | 13nm,0.3s,baz=259,slow=20,SNR=16 | | | | | | |
| KDAK | | | | LR | LR | 05 31 04.0 | |
| | comp=Z,220nm,19.9s,baz=221,slow=46 | | | | | | |
| | 24nm,0.3s | | | | | | |
| OHAK | Old Harbor | 2.38 | 290 | P | Pn | 05 29 54.2 | +0.2 |
| OHAK | Old Harbor | 2.38 | 290 | | Pn | 05 29 54.4 | +0.3 |
| SYI | Shuyak Island | 2.76 | 322 | Pn | Pn | 05 30 00.4 | +1.2 |
| SYI | | | | | Sn | 05 30 32.6 | +0.1 |
| SII | Sitkinak Islan | 2.78 | 274 | P | Pn | 05 29 59.8 | +0.3 |
| SII | Sitkinak Islan | 2.78 | 274 | Pn | Pn | 05 29 59.8 | +0.3 |
| SII | | | | IAML | | 05 30 31.5 | |
| | comp=N,174nm,0.7s | | | | | | |
| SII | | | | IAML | | 05 30 39.6 | |
| | comp=E,183nm,0.3s | | | | | | |
| R18K | Karluk | 3.09 | 293 | | Pn | 05 30 04.9 | +1.1 |
| R18K | | | | IAML | | 05 30 42.4 | |
| | comp=E,241nm,0.5s | | | | | | |
| CNPM | China Poot | 3.25 | 341 | | Pn | 05 30 07.2 | +1.2 |
| Q23K | Middleton Isla | 3.33 | 26 | Pn | Pn | 05 30 07.9 | +1.0 |
| Q23K | | | | IAML | | 05 30 52.9 | |
| | comp=N,136nm,1.1s | | | | | | |
| Q23K | | | | IAML | | 05 31 00.8 | |
| | comp=E,90nm,0.9s | | | | | | |
| MID | Middleton Isla | 3.33 | 26 | P | Pn | 05 30 07.8 | +0.9 |
| MID | Middleton Isla | 3.33 | 26 | Pn | Pn | 05 30 07.6 | +0.7 |
| MID | | | | IAML | | 05 30 52.9 | |
| | comp=N,137nm,1.1s | | | | | | |
| MID | | | | IAML | | 05 31 00.8 | |
| | comp=E,95nm,0.9s | | | | | | |
| BRSE | Bradley Lake S | 3.38 | 346 | | Pn | 05 30 08.8 | +0.9 |
| BRSE | | | | | Sn | 05 30 46.4 | -1.6 |
| BRLK | Bradley Lake | 3.43 | 345 | | Pn | 05 30 09.3 | +0.9 |
| BRLK | | | | IAML | | 05 30 50.9 | |
| | comp=N,97nm,0.6s | | | | | | |
| BRLK | | | | IAML | | 05 30 56.6 | |
| | comp=E,95nm,0.4s | | | | | | |
| Q19K | Cape Douglas, | 3.44 | 318 | | Pn | 05 30 10.5 | +1.9 |
| Q19K | | | | IAML | | 05 30 57.6 | |
| | comp=N,243nm,0.8s | | | | | | |
| HOM | Homer | 3.46 | 339 | Pn | Pn | 05 30 10.7 | +1.9 |
| KAHG | Katmai Hook Gl | 3.54 | 307 | | Pn | 05 30 11.9 | +1.9 |
| SEW | Seward | 3.65 | 358 | | Pn | 05 30 12.3 | +0.9 |
| CHIR | Chirikof Islan | 3.67 | 262 | Pn | Pn | 05 30 11.0 | -0.6 |
| CHIR | | | | IAML | | 05 30 52.1 | |
| | comp=E,112nm,0.6s | | | | | | |
| CHIR | | | | IAML | | 05 31 01.2 | |
| | comp=N,98nm,1.0s | | | | | | |
| AUCH | Augustine Cone | 3.69 | 324 | | Pn | 05 30 14.0 | +2.0 |
| ACHA | Angle Creek He | 3.77 | 300 | | Pn | 05 30 14.5 | +1.4 |
| KAHC | Katmai Hardscr | 3.83 | 307 | | Pn | 05 30 16.0 | +2.0 |
| KAHC | Katmai Hardscr | 3.83 | 307 | | Pn | 05 30 15.7 | +1.7 |
| ANCK | Angle Creek | 3.84 | 299 | | Pn | 05 30 16.1 | +2.0 |
| P19K | Oil Pt | 3.85 | 328 | Pn | Pn | 05 30 16.0 | +1.8 |
| P19K | | | | IAML | | 05 31 06.5 | |
| | comp=E,177nm,0.6s | | | | | | |
| O22K | Cooper Landing | 4.03 | 356 | | Pn | 05 30 17.8 | +1.2 |
| O20K | Slope Mountain | 4.05 | 335 | | Pn | 05 30 17.8 | +0.8 |
| CNTC | Contact Creek | 4.06 | 299 | | Pn | 05 30 19.0 | +1.9 |
| SLKM | Skilak Lake | 4.09 | 353 | | Pn | 05 30 18.2 | +0.7 |
| PLK4 | Peulik 4 | 4.09 | 289 | Pn | Pn | 05 30 18.8 | +1.2 |
| PLK4 | | | | IAML | | 05 31 11.4 | |
| | comp=E,112nm,0.8s | | | | | | |
| PLK4 | | | | IAML | | 05 31 12.0 | |
| | comp=N,75nm,0.9s | | | | | | |
| IVE | Iliamna Volcan | 4.10 | 332 | | Pn | 05 30 18.4 | +0.7 |
| PLK2 | Peulik 2 | 4.11 | 291 | | Pn | 05 30 19.1 | +1.3 |
| HIN | Hinchinbrook I | 4.18 | 18 | Pn | Pn | 05 30 20.2 | +1.5 |
| HIN | | | | IAML | | 05 31 14.8 | |
| | comp=E,136nm,0.7s | | | | | | |
| PLK1 | Peulik 1 | 4.27 | 291 | | Pn | 05 30 21.2 | +1.3 |
| KAIM | Kayak Island | 4.28 | 34 | | Pn | 05 30 21.6 | +1.5 |
| PLBL | Peulik Blue Cr | 4.35 | 290 | | Pn | 05 30 22.5 | +1.4 |
| P18K | Big Mountain, | 4.36 | 315 | | Pn | 05 30 22.3 | +1.1 |
| RED | Redoubt Volcan | 4.39 | 336 | | Pn | 05 30 22.3 | +0.7 |
| PWL | Port Wells | 4.42 | 5 | | Pn | 05 30 23.4 | +1.4 |
| PWL | | | | IAML | | 05 31 12.9 | |
| | comp=N,69nm,0.5s | | | | | | |
| PWL | | | | IAML | | 05 31 13.0 | |
| | comp=E,82nm,0.5s | | | | | | |
| RSO | Redoubt South | 4.42 | 336 | | Pn | 05 30 23.4 | +1.2 |
| RDT | Redoubt | 4.45 | 339 | | Pn | 05 30 22.9 | +0.5 |
| EYAK | Cordova Ski Ar | 4.46 | 22 | P | Pn | 05 30 24.1 | +1.5 |
| EYAK | Cordova Ski Ar | 4.46 | 22 | | Pn | 05 30 24.2 | +1.6 |
| RDWB | Redoubt West | 4.46 | 336 | | Pn | 05 30 23.1 | +0.3 |
| GLI | Glacier Island | 4.55 | 13 | | Pn | 05 30 25.1 | +1.3 |
| GLI | | | | IAML | | 05 31 22.0 | |
| | comp=N,65nm,0.5s | | | | | | |
| GLI | | | | IAML | | 05 31 28.9 | |
| | comp=E,78nm,0.7s | | | | | | |
| RAGM | Ragged Mountai | 4.58 | 29 | | Pn | 05 30 25.9 | +1.6 |
| SUCK | Suckling Hills | 4.60 | 36 | Pn | Pn | 05 30 26.2 | +1.8 |
| SUCK | | | | IAML | | 05 31 19.0 | |
| | comp=E,79nm,0.4s | | | | | | |
| RC01 | Rabbit Creek A | 4.64 | 357 | | Pn | 05 30 26.2 | +1.1 |
| RC01 | | | | IAML | | 05 31 22.4 | |
| | comp=E,72nm,0.4s | | | | | | |
| RC01 | | | | IAML | | 05 31 27.6 | |
| | comp=N,48nm,0.8s | | | | | | |
| HMT | Hamilton | 4.66 | 32 | Pn | Pn | 05 30 26.6 | +1.3 |
| O18K | Koktuh Hills | 4.66 | 319 | Pn | Pn | 05 30 26.3 | +1.0 |
| O18K | | | | IAML | | 05 31 26.6 | |
| | comp=N,40nm,0.8s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| NICHA | Nichawak Mount | 4.66 | 34 | | Pn | 05 30 27.0 | +1.6 |
| GOAT | Goat Mountain | 4.73 | 28 | | Pn | 05 30 27.9 | +1.5 |
| BGLC | Bering Glacier | 4.80 | 38 | | Pn | 05 30 28.4 | +1.2 |
| GRIN | Grindle Hills | 4.91 | 36 | | Pn | 05 30 30.2 | +1.5 |
| SPU | Mount Spurr | 4.96 | 344 | | Pn | 05 30 30.5 | +1.0 |
| SPU | | | | IAML | | 05 31 29.5 | |
| | comp=E,39nm,0.5s | | | | | | |
| SPU | | | | IAML | | 05 31 29.6 | |
| | comp=N,36nm,0.6s | | | | | | |
| KNK | Knik Glacier | 4.97 | 4 | Pn | Pn | 05 30 30.8 | +1.2 |
| KNK | | | | IAML | | 05 31 28.9 | |
| | comp=N,30nm,0.6s | | | | | | |
| KNK | | | | IAML | | 05 31 39.2 | |
| | comp=E,35nm,0.9s | | | | | | |
| DIV | Divide | 4.99 | 19 | | Pn | 05 30 31.4 | +1.4 |
| SNH | Sunshine Point | 5.00 | 39 | | Pn | 05 30 31.7 | +1.7 |
| SNH | | | | IAML | | 05 31 27.8 | |
| | comp=E,50nm,0.7s | | | | | | |
| SNH | | | | IAML | | 05 31 32.3 | |
| | comp=N,48nm,1.1s | | | | | | |
| SPCP | Crater Peak Br | 5.05 | 343 | | Pn | 05 30 32.4 | +1.5 |
| SPCG | Spurr Capps Gl | 5.06 | 344 | | Pn | 05 30 31.9 | +1.0 |
| SUA | Susitna One | 5.07 | 351 | Pn | Pn | 05 30 32.7 | +1.6 |
| SUA | | | | IAML | | 05 31 32.2 | |
| | comp=N,28nm,0.9s | | | | | | |
| BMRM | Bremner River | 5.10 | 26 | | Pn | 05 30 33.0 | +1.6 |
| PMR | Palmer | 5.14 | 0 | P | Pn | 05 30 34.2 | +2.4 |
| PMR | Palmer | 5.14 | 0 | Pn | Pn | 05 30 33.0 | +1.2 |
| PMR | | | | IAML | | 05 31 38.2 | |
| | comp=E,25nm,0.4s | | | | | | |
| CHGN | Chignik | 5.14 | 272 | Pn | Pn | 05 30 33.0 | +1.1 |
| CHGN | | | | IAML | | 05 31 33.9 | |
| | comp=N,52nm,0.4s | | | | | | |
| CHGN | | | | IAML | | 05 31 35.5 | |
| | comp=E,57nm,0.2s | | | | | | |
| N19K | Bonanza Creek | 5.16 | 330 | Pn | Pn | 05 30 33.2 | +0.9 |
| WAX | Waxell Ridge | 5.19 | 37 | | Pn | 05 30 33.9 | +1.3 |
| STLK | Strandline Lak | 5.23 | 346 | | Pn | 05 30 34.3 | +1.2 |
| BARK | Barkley Ridge | 5.28 | 39 | | Pn | 05 30 35.2 | +1.4 |
| KLU | Klutina | 5.31 | 17 | | Pn | 05 30 36.0 | +1.8 |
| MESA | MESA | 5.32 | 43 | | Pn | 05 30 35.9 | +1.4 |
| GHO | Glory Hole Cre | 5.32 | 1 | | Pn | 05 30 36.4 | +2.0 |
| CRQM | Cirque | 5.33 | 34 | | Pn | 05 30 36.0 | +1.3 |
| O17K | Koliganek Bris | 5.35 | 312 | | Pn | 05 30 35.9 | +1.2 |
| SML | Sawmill | 5.37 | 4 | | Pn | 05 30 37.0 | +1.9 |
| P16K | Nushagak River | 5.38 | 302 | | Pn | 05 30 37.1 | +2.0 |
| M23K | Glacier View | 5.39 | 7 | | Pn | 05 30 37.1 | +1.8 |
| TGL | Tana Glacier | 5.42 | 35 | | Pn | 05 30 37.4 | +1.5 |
| SCM | Sheep Creek Mo | 5.46 | 9 | | Pn | 05 30 38.1 | +1.7 |
| ISLE | Juniper Island | 5.47 | 38 | | Pn | 05 30 38.0 | +1.4 |
| BAGL | Bagley Icefiel | 5.48 | 40 | | Pn | 05 30 38.1 | +1.6 |
| N18K | Kilae Creek | 5.49 | 323 | Pn | Pn | 05 30 37.5 | +0.8 |
| VRDI | Verde Repeater | 5.62 | 29 | Pn | Pn | 05 30 40.1 | +1.5 |
| RKAV | Rock Avalanche | 5.63 | 44 | | Pn | 05 30 40.3 | +1.6 |
| SKT | Skwentna | 5.66 | 349 | Pn | Pn | 05 30 41.1 | +2.1 |
| N25K | Chitina, Valde | 5.66 | 23 | Pn | Pn | 05 30 41.1 | +2.0 |
| O16K | Kokwok River B | 5.68 | 307 | Pn | Pn | 05 30 41.0 | +1.7 |
| KIAG | Kiagna River | 5.70 | 36 | | Pn | 05 30 41.1 | +1.4 |
| GLB | Gilahina Butte | 5.70 | 27 | Pn | Pn | 05 30 41.3 | +1.7 |
| SAMH | Samovar Hills | 5.74 | 47 | | Pn | 05 30 42.3 | +2.0 |
| GRNC | Granite Creek | 5.77 | 39 | | Pn | 05 30 42.4 | +1.7 |
| TABL | Table Mountain | 5.79 | 43 | | Pn | 05 30 42.8 | +1.8 |
| N17K | Nushagak Hills | 5.85 | 317 | | Pn | 05 30 42.7 | +1.2 |
| M24K | Tolsona, Glenn | 5.86 | 14 | Pn | Pn | 05 30 44.0 | +2.2 |
| MCARA | McCarthy VSAT | 5.86 | 30 | | Pn | 05 30 43.5 | +1.7 |
| PCA | Pinnacle | 5.94 | 49 | | Pn | 05 30 44.9 | +1.9 |
| WASW | Wrangell South | 6.04 | 23 | | Pn | 05 30 46.4 | +1.9 |
| M19K | Big River Lodg | 6.07 | 336 | | Pn | 05 30 45.8 | +1.1 |
| CTGM | Chitina Glacie | 6.08 | 39 | | Pn | 05 30 46.5 | +1.6 |
| M18K | Stony River | 6.09 | 328 | | Pn | 05 30 45.5 | +0.5 |
| PNL | Peninsula | 6.09 | 54 | P | Pn | 05 30 47.1 | +2.1 |
| PNL | Peninsula | 6.09 | 54 | | Pn | 05 30 46.4 | +1.4 |
| LOGN | Logan Glacier | 6.10 | 41 | | Pn | 05 30 46.6 | +1.4 |
| BCPM | Bancas Point | 6.13 | 51 | | Pn | 05 30 47.0 | +1.5 |
| CNBA | Chernabura Isl | 6.13 | 259 | Pn | Pn | 05 30 45.6 | +0.2 |
| WAT6 | Susitna Watana | 6.17 | 6 | | Pn | 05 30 47.5 | +1.4 |
| HARP | HAARP | 6.29 | 17 | | Pn | 05 30 49.9 | +2.2 |
| O15K | Ungalikthiuk R | 6.30 | 300 | | Pn | 05 30 49.8 | +1.9 |
| O28M | Mount Upton | 6.37 | 44 | | Pn | 05 30 50.5 | +1.5 |
| WAT7 | Susitna Watana | 6.38 | 1 | | Pn | 05 30 50.9 | +1.9 |
| WAT1 | Susitna Watana | 6.39 | 3 | | Pn | 05 30 50.9 | +1.9 |
| L19K | White Mountain | 6.42 | 335 | Pn | Pn | 05 30 50.0 | +0.5 |
| N16K | Nishlik Lake | 6.44 | 313 | | Pn | 05 30 51.2 | +1.5 |
| SDPT | Sand Point | 6.46 | 265 | P | Pn | 05 30 49.8 | -0.1 |
| M17K | Holitna River | 6.54 | 323 | Pn | Pn | 05 30 51.9 | +0.8 |
| DHY | Denali Highway | 6.69 | 7 | Pn | Pn | 05 30 55.6 | +2.4 |
| M26K | Nabesna, AK | 6.73 | 25 | | Pn | 05 30 56.4 | +2.7 |
| O29M | Mount Kennedy | 6.76 | 51 | | Pn | 05 30 56.1 | +1.9 |
| PAX | Paxson | 6.78 | 14 | | Pn | 05 30 56.2 | +1.8 |
| YUK2 | White River | 6.83 | 35 | | Pn | 05 30 57.4 | +2.1 |
| M16K | Timber Creek | 6.84 | 316 | Pn | Pn | 05 30 56.8 | +1.7 |
| N15K | Kwethluk River | 6.84 | 307 | | Pn | 05 30 57.6 | +2.4 |
| P29M | Windy Craggy | 6.84 | 58 | Pn | Pn | 05 30 56.7 | +1.4 |
| YUK8 | Steele Glacier | 6.86 | 41 | | Pn | 05 30 58.3 | +2.6 |
| L18K | Granite Mounta | 6.93 | 329 | Pn | Pn | 05 30 57.4 | +1.1 |
| RND | Reindeer | 6.96 | 1 | Pn | Pn | 05 30 59.2 | +2.3 |
| M27K | Edge Creek, AK | 6.97 | 29 | | Pn | 05 30 59.5 | +2.3 |
| O14K | Tigyukauivet M | 7.03 | 298 | Pn | Pn | 05 30 59.8 | +2.1 |
| CAST | Castle Rocks | 7.12 | 349 | Pn | Pn | 05 31 00.7 | +1.6 |
| KTH | Kantishna Hill | 7.16 | 354 | Pn | Pn | 05 31 01.7 | +2.1 |
| S31K | Pelican | 7.18 | 73 | | Pn | 05 30 59.1 | -0.8 |
| YUK6 | Outpost Mounta | 7.19 | 47 | | Pn | 05 31 02.6 | +2.3 |
| K20K | Telida | 7.33 | 342 | Pn | Pn | 05 31 03.5 | +1.5 |
| PLBC | Pleasant Camp | 7.44 | 61 | | Pn | 05 31 05.3 | +1.9 |
| L16K | Owhat River | 7.46 | 319 | Pn | Pn | 05 31 05.0 | +1.3 |
| YUK5 | Granite Creek | 7.50 | 47 | | Pn | 05 31 06.8 | +2.4 |
| R31K | City Hall, Gus | 7.50 | 69 | | Pn | 05 31 06.2 | +2.0 |
| L27K | Beaver Creek, | 7.57 | 26 | Pn | Pn | 05 31 07.0 | +1.7 |
| BCAR | Beaver Creek A | 7.59 | 26 | Pn | Pn | 05 31 07.2 | +1.7 |
| SIT | Sitka | 7.63 | 80 | P | Pn | 05 31 04.3 | -1.7 |
| SIT | Sitka | 7.63 | 80 | Pn | Pn | 05 31 04.2 | -1.8 |
| BPAW | Bear Paw Mtn. | 7.71 | 354 | | Pn | 05 31 08.2 | +1.0 |
| K17K | Iditarod | 7.78 | 327 | Pn | Pn | 05 31 08.9 | +0.8 |
| SKAG | Skagway | 7.94 | 62 | P | Pn | 05 31 13.4 | +3.1 |
| SKAG | Skagway | 7.94 | 62 | Pn | Pn | 05 31 12.0 | +1.7 |
| J18K | Innoko River | 7.97 | 335 | Pn | Pn | 05 31 12.7 | +2.1 |
| N30M | Aishikik Lake | 7.99 | 46 | | Pn | 05 31 13.1 | +2.0 |
| S32K | Killisnoo | 8.04 | 77 | Pn | Pn | 05 31 11.2 | -0.4 |
| HDA | Harding Lake | 8.04 | 7 | | Pn | 05 31 14.0 | +2.4 |
| O30N | Mendenhall | 8.07 | 52 | Pn | Pn | 05 31 14.1 | +2.1 |
| M29M | Somme Creek | 8.09 | 38 | | Pn | 05 31 14.9 | +2.4 |
| J20K | Nowinta River | 8.11 | 344 | | Pn | 05 31 14.1 | +1.5 |
| R32K | Eaglecrest | 8.12 | 71 | Pn | Pn | 05 31 13.9 | +1.1 |
| NEA2 | Nenana | 8.15 | 0 | Pn | Pn | 05 31 15.1 | +1.9 |
| JIS | Juneau Island | 8.19 | 71 | P | Pn | 05 31 16.7 | +3.0 |
| J19K | Poorman | 8.20 | 340 | Pn | Pn | 05 31 14.4 | +0.6 |
| CCB | Clear Creek Bu | 8.23 | 4 | | Pn | 05 31 16.1 | +1.9 |
| K27K | Chicken | 8.36 | 22 | Pn | Pn | 05 31 17.2 | +1.3 |
| J25K | Salcha River, | 8.38 | 11 | Pn | Pn | 05 31 17.8 | +1.5 |
| IL31 | | 8.40 | 7 | | Pn | 05 31 18.6 | +2.0 |
| ILAR | Eielson Array | 8.40 | 7 | Pn | Pn | 05 31 19.0 | +2.4 |
| ILAR | Eielson Array | 8.40 | 7 | Pn | Pn | 05 31 18.0 | +1.4 |
| | comp=E,0.4nm,0.3s,baz=188,slow=14,SNR=17 | | | | | | |
| ILAR | | | | Sn | Sn | 05 32 48.3 | -3.1 |
| | comp=E,0.5nm,0.3s,baz=246,slow=18,SNR=5.0 | | | | | | |
| | comp=E,0.9nm,0.3s | | | | | | |
| COLA | College | 8.46 | 4 | P | Pn | 05 31 20.4 | +3.1 |
| COLA | College | 8.46 | 4 | Pn | Pn | 05 31 19.8 | +2.4 |
| J26L | Joseph Creek | 8.51 | 17 | | Pn | 05 31 20.3 | +2.1 |
| MDM | Murphy Dome | 8.53 | 3 | | Pn | 05 31 20.6 | +2.3 |
| N31M | Braeburn, Yuko | 8.54 | 48 | | Pn | 05 31 20.7 | +2.2 |
| WHY | Whitehorse | 8.56 | 55 | Pn | Pn | 05 31 21.5 | +2.6 |
| K15K | Wolf Creek Mou | 8.59 | 318 | Pn | Pn | 05 31 20.1 | +0.9 |
| MLY | Manley | 8.62 | 356 | | Pn | 05 31 21.4 | +1.7 |
| L29M | L29M | 8.67 | 35 | | Pn | 05 31 22.6 | +2.3 |
| I23K | Minto, Yukon-K | 8.71 | 359 | Pn | Pn | 05 31 22.3 | +1.5 |
| POKR | Poker Plat Res | 8.72 | 5 | Pn | Pn | 05 31 22.2 | +1.3 |
| M30M | Minto, Yukon | 8.77 | 41 | Pn | Pn | 05 31 22.8 | +1.2 |
| P32M | Atlin | 8.77 | 63 | Pn | Pn | 05 31 23.3 | +1.5 |
| J16K | Anvik River | 8.92 | 325 | Pn | Pn | 05 31 24.0 | +0.4 |
| U33K | Whale Pass | 8.93 | 86 | Pn | Pn | 05 31 22.1 | -1.7 |
| DAWY | Dawson | 9.02 | 28 | | Pn | 05 31 26.3 | +1.1 |
| CRAG | Craig | 9.06 | 90 | P | Pn | 05 31 24.7 | -0.9 |
| CRAG | Craig | 9.06 | 90 | Pn | Pn | 05 31 23.9 | -1.7 |
| EGAK | Eagle | 9.21 | 22 | | Pn | 05 31 29.2 | +1.6 |
| I26K | Coal Creek Min | 9.33 | 16 | Pn | Pn | 05 31 31.7 | +2.4 |
| P33M | Teslin, Yukon | 9.37 | 60 | Pn | Pn | 05 31 31.4 | +1.5 |
| H21K | Melozitna Rive | 9.38 | 351 | Pn | Pn | 05 31 31.0 | +0.9 |
| K29M | Barlow Dome | 9.39 | 33 | Pn | Pn | 05 31 32.5 | +2.3 |
| H23K | Yukon River | 9.39 | 359 | Pn | Pn | 05 31 31.4 | +1.2 |
| H24K | Noodor Dome | 9.42 | 3 | | Pn | 05 31 32.3 | +1.7 |
| N32M | Quiet Lake | 9.56 | 54 | Pn | Pn | 05 31 32.3 | -0.2 |
| H19K | Roundabout Mou | 9.74 | 342 | Pn | Pn | 05 31 36.5 | +1.6 |
| H18K | Honhosa River | 9.79 | 337 | Pn | Pn | 05 31 36.4 | +0.9 |
| IMAR | Indian Mountai | 9.79 | 349 | Pn | Pn | 05 31 37.4 | +1.8 |
| V35K | Ketchikan | 9.93 | 89 | Pn | Pn | 05 31 37.0 | -0.4 |
| H17K | Granite Mounta | 9.97 | 333 | Pn | Pn | 05 31 39.3 | +1.1 |
| I28M | Miner Creek | 10.05 | 23 | Pn | Pn | 05 31 40.9 | +1.6 |
| R33M | Jennings River | 10.11 | 66 | Pn | Pn | 05 31 42.2 | +2.1 |
| J30M | Hart River | 10.28 | 33 | Pn | Pn | 05 31 44.8 | +2.4 |
| G23K | Bananza Creek | 10.29 | 358 | | Pn | 05 31 44.6 | +2.2 |
| G21K | Allakaket | 10.29 | 350 | Pn | Pn | 05 31 43.5 | +1.1 |
| DLBC | Dease Lake | 10.49 | 71 | Pn | Pn | 05 31 46.9 | +1.6 |
| DLBC | Dease Lake | 10.49 | 71 | Pn | Pn | 05 31 45.2 | -0.2 |
| | comp=E,1.0nm,0.3s,baz=270,slow=18,SNR=15 | | | | | | |
| DLBC | | | | Sn | Sn | 05 33 41.0 | -1.9 |
| | comp=E,0.2nm,0.3s,baz=155,slow=26,SNR=1.4 | | | | | | |
| | comp=E,2.5nm,0.3s | | | | | | |
| F21K | Alatna River | 10.98 | 351 | Pn | Pn | 05 31 53.8 | +1.9 |
| F24K | Squaw Lake | 11.10 | 3 | Pn | Pn | 05 31 54.5 | +0.9 |
| BMAR | Burnt Mountain | 11.20 | 9 | Pn | Pn | 05 31 57.9 | +2.9 |
| E19K | Redstone River | 11.64 | 344 | Pn | Pn | 05 32 03.5 | +2.6 |
| BBB | Bella Bella | 13.00 | 100 | LR | LR | 05 36 01.2 | |
| | comp=E,48nm,19.9s,baz=262,slow=32 | | | | | | |
| INK | Inuvik | 13.85 | 25 | Pn | Pn | 05 32 33.5 | +2.5 |
| INK | Inuvik | 13.85 | 25 | Pn | Pn | 05 32 33.6 | +2.6 |
| | baz=228,slow=8.1,SNR=2.2 | | | | | | |
| | comp=E,1.1nm,0.7s | | | | | | |
| YKA | Yellowknife Ar | 18.38 | 57 | P | Pn | 05 33 31.4 | +1.8 |
| | comp=E,0.1nm,0.3s,baz=264,slow=11,SNR=1.6 | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | |
| YBH | Yreka Blue Hor | 22.55 | 120 | LR | LR | 05 40 51.9 | |
| | comp=E,48nm,20.1s,baz=296,slow=31 | | | | | | |
| NVAR | Mina Array Bea | 27.25 | 118 | P | P | 05 34 58.7 | -0.5 |
| | comp=E,0.4nm,0.7s,baz=320,slow=8.3,SNR=2.5 | | | | | | |
| NVAR | | | | LR | LR | 05 43 38.6 | |
| | comp=E,43nm,21.1s,baz=262,slow=32 | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 41.83 | 111 | LR | LR | 05 53 11.4 | |
| | comp=E,26nm,20.5s,baz=150,slow=34 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 49.03 | 240 | T | T | 06 31 21.5 | |
| | baz=30,slow=76,SNR=4.2 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 49.04 | 240 | T | T | 06 31 21.5 | |
| | baz=30,slow=76,SNR=4.4 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 49.05 | 240 | T | T | 06 31 21.5 | |
| | baz=30,slow=76,SNR=3.9 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 50.17 | 239 | T | T | 06 32 58.6 | |
| | baz=29,slow=76,SNR=8.7 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 50.19 | 239 | T | T | 06 32 48.1 | |
| | baz=29,slow=76,SNR=5.0 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 50.19 | 239 | T | T | 06 32 56.2 | |
| | baz=29,slow=76,SNR=5.2 | | | | | | |
| SONM | Songino Array | 58.56 | 310 | P | P | 05 39 10.9 | -0.6 |
| | comp=E,0.3nm,0.5s,baz=39,slow=7.4,SNR=1.6 | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | |
| FINES | FINESS Array B | 62.37 | 3 | P | P | 05 39 36.4 | -0.7 |
| | comp=E,0.9nm,0.9s,baz=357,slow=9.7,SNR=1.7 | | | | | | |
| | comp=E,0.9nm,0.9s | | | | | | |

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*SJA **02** 05:29:37.3±0.7, 24.°21S×66.°98W, h211km±5km, ML4.2, MW4.1*

*NEIC **02** 05:29:37.3±1.3, 24.°21S±0.°06×67.°0W±0.°1, h215km±11km, mb4.1/6, Mwr4.5(GUC), Error ellipse: s-maj=14.7km s-min=7.4km az=106.0*

*VAO **02** 05:29:38.6±0.6, 24.°23S×66.°89W, h178km, mb4.1*

*IDC **02** 05:29:38.5±1.0, 24.°07S×66.°85W, h186km±9km, mb3.4/10, mbtmp3.9/15, Error ellipse: s-maj=13.6km s-min=12.8km az=60.0*

*GUC **02** 05:29:39.3±0.7, 24.°16S×67.°30W, h228km±7km, ML4.4*

**ISC 02 05:29:37.7**±0.6**, 24.°20S**±0.°04×**66.°98W**±0.°04**, h194**km±6km**, n104, σ1§58**/136**, mb3.9**/12**, 7C, Salta Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLA | San Lorenzo | 1.44 | 111 | eP | Pn | 05 30 12.6 | +2.1 |
| SLA | | | | eS | S | 05 30 32.8 | -3.1 |
| SLA | San Lorenzo | 1.44 | 111 | eP | Pn | 05 30 12.4 | +1.9 |
| SLA | | | | eS | S | 05 30 37.0 | +1.1 |
| AF01 | San Pedro de A | 1.66 | 318 | | Pn | 05 30 14.5 | +1.8 |
| AF01 | San Pedro de A | 1.66 | 318 | eP | Pn | 05 30 14.2 | +1.5 |
| AF01 | | | | IAML | | 05 30 49.6 | |
| | comp=Z,439nm,0.2s | | | | | | |
| AF01 | San Pedro de A | 1.66 | 318 | ⇑eP | Pn | 05 30 14.6 | +1.8 |
| AF01 | | | | eS | S | 05 30 42.2 | +2.5 |
| AF01 | | | | IAML | | 05 30 45.0 | |
| | comp=N,643nm,0.2s | | | | | | |
| AZAP | Zapla | 1.75 | 91 | eP | Pn | 05 30 14.8 | +1.3 |
| AZAP | | | | eS | S | 05 30 42.9 | +1.7 |
| LVC | Limon Verde | 2.38 | 311 | eP | Pn | 05 30 21.7 | +1.4 |
| LVC | | | | eS | S | 05 30 54.5 | +1.3 |
| LVC | Limon Verde | 2.38 | 311 | P | Pn | 05 30 21.6 | +1.4 |
| | comp=N,115nm,0.2s,baz=121,slow=8.4,SNR=970 | | | | | | |
| LVC | | | | S | S | 05 30 53.2 | 0.0 |
| | comp=N,256nm,0.4s,baz=272,slow=21,SNR=52 | | | | | | |
| LVC | Limon Verde | 2.38 | 311 | ⇑eP | Pn | 05 30 21.5 | +1.3 |
| LVC | | | | eS | S | 05 30 53.5 | +0.2 |
| LVC | Limon Verde | 2.38 | 311 | eP | Pn | 05 30 21.5 | +1.3 |
| LVC | | | | eS | S | 05 30 53.5 | +0.2 |
| YJA | Yavi | 2.43 | 34 | eP | Pn | 05 30 22.7 | +1.8 |
| YJA | | | | eS | S | 05 30 56.0 | +1.6 |
| PB15 | IPOC Station P | 2.49 | 293 | | Pn | 05 30 22.6 | +1.3 |
| PB15 | IPOC Station P | 2.49 | 293 | eP | Pn | 05 30 22.7 | +1.3 |
| PB15 | | | | eS | S | 05 30 56.0 | +0.9 |
| PB15 | IPOC Station P | 2.49 | 293 | ⇑eP | Pn | 05 30 22.8 | +1.4 |
| PB15 | | | | i S | S | 05 30 55.1 | 0.0 |
| GO02 | Mina Guanaco | 2.56 | 248 | | Pn | 05 30 23.5 | +1.3 |
| GO02 | | | | Sn | S | 05 30 57.2 | +0.4 |
| GO02 | Mina Guanaco | 2.56 | 248 | eP | Pn | 05 30 23.4 | +1.1 |
| GO02 | | | | eS | S | 05 30 57.6 | +0.8 |
| GO02 | Mina Guanaco | 2.56 | 248 | eP | Pn | 05 30 23.5 | +1.3 |
| GO02 | | | | eS | S | 05 30 57.5 | +0.8 |
| GO02 | | | | IAML | | 05 30 59.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| ALOL | LOMAS DE OLMED | 2.77 | 83 | eP | Pn | 05 30 25.7 | +1.3 |
| PB06 | IPOC Station P | 2.81 | 302 | | Pn | 05 30 25.8 | +0.9 |
| PB06 | IPOC Station P | 2.81 | 302 | eP | Pn | 05 30 26.1 | +1.1 |
| PB06 | | | | eS | S | 05 31 01.4 | -0.2 |
| PB06 | | | | IAML | | 05 31 04.9 | |
| | comp=Z,1μm,0.4s | | | | | | |
| PB06 | IPOC Station P | 2.81 | 302 | i P | Pn | 05 30 26.1 | +1.2 |
| PB06 | | | | eS | S | 05 31 00.7 | -1.0 |
| PB06 | | | | IAML | | 05 31 03.4 | |
| | comp=E,1μm,0.3s | | | | | | |
| PB14 | IPOC Station P | 3.15 | 262 | Pn | Pn | 05 30 29.6 | +0.5 |
| PB14 | IPOC Station P | 3.15 | 262 | eP | Pn | 05 30 29.8 | +0.6 |
| PB14 | | | | eS | S | 05 31 08.8 | -0.4 |
| PB14 | | | | IAML | | 05 31 15.2 | |
| | comp=Z,340nm,0.6s | | | | | | |
| PB14 | IPOC Station P | 3.15 | 262 | ⇑iP | Pn | 05 30 29.7 | +0.6 |
| PB14 | | | | i S | S | 05 31 07.7 | -1.5 |
| PB14 | | | | IAML | | 05 31 09.8 | |
| | comp=E,488nm,0.4s | | | | | | |
| PB09 | IPOC Station P | 3.17 | 319 | | Pn | 05 30 30.7 | +1.4 |
| PB09 | IPOC Station P | 3.17 | 319 | eP | Pn | 05 30 30.7 | +1.4 |
| PB09 | | | | eS | S | 05 31 10.7 | +1.1 |
| PB09 | | | | IAML | | 05 31 16.4 | |
| | comp=Z,337nm,0.6s | | | | | | |
| PB09 | IPOC Station P | 3.17 | 319 | eP | Pn | 05 30 30.5 | +1.1 |
| PB09 | | | | i S | S | 05 31 09.2 | -0.4 |
| PB09 | | | | IAML | | 05 31 12.1 | |
| | comp=N,286nm,0.3s | | | | | | |
| PB05 | IPOC Station P | 3.25 | 294 | | Pn | 05 30 30.8 | +0.7 |
| PB04 | IPOC Station P | 3.46 | 302 | Pn | Pn | 05 30 33.2 | +0.5 |
| PB04 | IPOC Station P | 3.46 | 302 | eP | Pn | 05 30 33.4 | +0.6 |
| PB04 | | | | eS | S | 05 31 15.4 | -0.3 |
| PB04 | | | | IAML | | 05 31 17.6 | |
| | comp=Z,610nm,0.3s | | | | | | |
| PB04 | IPOC Station P | 3.46 | 302 | eP | Pn | 05 30 33.0 | +0.2 |
| PB04 | | | | i S | S | 05 31 13.5 | -2.2 |
| AC01 | Pan de Azucar | 3.81 | 239 | | Pn | 05 30 36.7 | -0.1 |
| AC01 | Pan de Azucar | 3.81 | 239 | eP | Pn | 05 30 36.8 | -0.1 |
| AC01 | | | | eS | S | 05 31 21.8 | -1.5 |
| AC01 | | | | IAML | | 05 31 25.8 | |
| | comp=Z,191nm,0.3s | | | | | | |
| AC01 | Pan de Azucar | 3.81 | 239 | ⇑eP | Pn | 05 30 36.7 | -0.1 |
| AC01 | | | | eS | S | 05 31 21.8 | -1.5 |
| CYA | Choya | 4.35 | 166 | eP | Pn | 05 30 40.0 | -3.7 |
| CYA | | | | eS | | 05 31 22.2 | |
| AC06 | Mina Casimiro | 4.37 | 223 | | Pn | 05 30 44.0 | 0.0 |
| PATCX | Punta Patache | 4.46 | 318 | | Pn | 05 30 45.1 | -0.2 |
| PATCX | Punta Patache | 4.46 | 318 | eP | Pn | 05 30 45.1 | -0.2 |
| PATCX | | | | eS | S | 05 31 36.9 | -1.4 |
| PATCX | | | | IAML | | 05 31 42.2 | |
| | comp=Z,144nm,0.5s | | | | | | |
| PATCX | Punta Patache | 4.46 | 318 | eP | Pn | 05 30 45.0 | -0.2 |
| GO03 | Copiap | 4.47 | 220 | | Pn | 05 30 45.3 | 0.0 |
| GO03 | Copiap | 4.47 | 220 | eP | Pn | 05 30 45.3 | 0.0 |
| GO03 | | | | eS | S | 05 31 37.1 | -1.3 |
| GO03 | Copiap | 4.47 | 220 | ⇑eP | Pn | 05 30 45.3 | 0.0 |
| TA01 | Diego Aracena | 4.67 | 320 | | Pn | 05 30 47.5 | -0.4 |
| TA01 | Diego Aracena | 4.67 | 320 | eP | Pn | 05 30 48.0 | +0.2 |
| TA01 | | | | eS | S | 05 31 42.2 | -0.8 |
| TA01 | | | | IAML | | 05 31 49.6 | |
| | comp=Z,80nm,0.4s | | | | | | |
| HMBC | Humberstone | 4.74 | 325 | | Pn | 05 30 47.8 | -1.1 |
| HMBC | Humberstone | 4.74 | 325 | eP | Pn | 05 30 47.8 | -1.1 |
| HMBC | | | | eS | S | 05 31 43.0 | -1.8 |
| HMBC | | | | IAML | | 05 31 47.9 | |
| | comp=Z,307nm,0.4s | | | | | | |
| HMBC | Humberstone | 4.74 | 325 | ⇑iP | Pn | 05 30 47.7 | -1.1 |
| HMBC | | | | i S | S | 05 31 40.5 | -4.3 |
| TA02 | Huaiquique | 4.88 | 323 | Pn | Pn | 05 30 50.0 | -0.5 |
| GO01 | Chusmiza | 4.96 | 335 | | Pn | 05 30 52.4 | +0.4 |
| GO01 | Chusmiza | 4.96 | 335 | eP | Pn | 05 30 52.6 | +0.6 |
| GO01 | | | | eS | S | 05 31 50.2 | -0.1 |
| ACLC | CERRO LA CRUZ | 5.20 | 180 | eP | Pn | 05 30 55.5 | +0.8 |
| ACLC | | | | eS | S | 05 31 56.1 | +0.6 |
| AC04 | Llanos de Chal | 5.42 | 222 | Pn | Pn | 05 30 56.6 | -0.8 |
| AC04 | Llanos de Chal | 5.42 | 222 | eP | Pn | 05 30 56.6 | -0.8 |
| AC04 | | | | eS | S | 05 31 53.8 | -6.4 |
| AC04 | | | | IAML | | 05 32 05.3 | |
| | comp=Z,56nm,0.7s | | | | | | |
| AC05 | El Transito | 5.48 | 212 | Pn | Pn | 05 30 58.3 | +0.1 |
| LCO | Las Campanas | 5.83 | 214 | Pn | Pn | 05 31 02.0 | -1.0 |
| CO01 | Juntas del Tor | 6.39 | 205 | Pn | Pn | 05 31 08.9 | -1.2 |
| CO03 | El Pedregal | 7.38 | 206 | Pn | Pn | 05 31 21.9 | -1.1 |
| CO06 | Fray Jorge | 7.66 | 212 | Pn | Pn | 05 31 25.6 | -0.9 |
| CO02 | Combarbal | 7.83 | 206 | Pn | Pn | 05 31 28.1 | -0.8 |
| LPAZ | La Paz | 7.95 | 352 | | Pn | 05 31 30.8 | -0.2 |
| LPAZ | La Paz | 7.95 | 352 | P | Pn | 05 31 31.2 | +0.2 |
| | comp=Z,3.5nm,0.3s,baz=158,slow=8.0,SNR=46 | | | | | | |
| LPAZ | | | | S | S | 05 32 58.5 | -2.3 |
| | comp=Z,2.0nm,0.5s,baz=312,slow=15,SNR=4.5 | | | | | | |
| LPAZ | La Paz | 7.95 | 352 | eP | Pn | 05 31 31.1 | +0.1 |
| CPUP | Villa Florida | 8.99 | 106 | Pn | Pn | 05 31 43.6 | -0.3 |
| CPUP | Villa Florida | 8.99 | 106 | P | Pn | 05 31 43.8 | -0.1 |
| | comp=Z,1.5nm,0.5s,baz=284,slow=14,SNR=6.4 | | | | | | |
| MURT | Porto Murtinho | 9.00 | 76 | eP | Pn | 05 31 44.7 | +0.6 |
| VA03 | San Esteban | 9.09 | 199 | Pn | Pn | 05 31 43.5 | -1.7 |
| BBSD | Serra de San D | 9.18 | 42 | eP | Pn | 05 31 46.9 | +0.4 |
| MT02 | Curacav | 9.73 | 201 | Pn | Pn | 05 31 52.6 | -1.0 |
| SIV | San Ignacio | 9.87 | 35 | P | Pn | 05 31 54.7 | -0.8 |
| | comp=Z,1.0nm,0.3s,baz=212,slow=11,SNR=13 | | | | | | |
| SIV | | | | S | S | 05 33 39.7 | -6.2 |
| | comp=Z,0.6nm,0.6s,baz=217,slow=9.2,SNR=1.3 | | | | | | |
| MT09 | Talagante | 10.16 | 199 | Pn | Pn | 05 31 58.1 | -1.2 |
| MT01 | Popeta | 10.33 | 200 | Pn | Pn | 05 31 59.7 | -1.5 |
| ITQB | Itaqui | 10.72 | 123 | Pn | Pn | 05 32 05.5 | -0.9 |
| BO01 | Tunca | 10.77 | 198 | Pn | Pn | 05 32 03.2 | -3.7 |
| PSAL | Palomas, Salto | 10.77 | 132 | eP | Pn | 05 32 07.5 | +0.5 |
| AQDB | Aquidauana | 11.08 | 73 | Pn | Pn | 05 32 10.2 | -0.8 |
| PTLB | Pontes e Lacer | 11.41 | 42 | Pn | Pn | 05 32 14.2 | -1.1 |
| ITAB | Concordia | 13.72 | 106 | | Pn | 05 32 44.1 | -0.4 |
| PLTB | Pedras Altas | 14.01 | 125 | P | Pn | 05 32 47.0 | -1.0 |
| TRQA | Tornquist | 14.46 | 164 | P | Pn | 05 32 51.9 | -1.6 |
| SAML | Samuel | 15.60 | 14 | P | P | 05 33 04.5 | -3.2 |
| SAML | | | | IAmb | IAmb | 05 33 08.8 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| VAO | Valinhos | 18.38 | 90 | P | P | 05 33 36.6 | -1.7 |
| IPMB | Ipameri, GO | 18.57 | 74 | eP | P | 05 33 41.1 | +0.8 |
| SNDB | Serra Nova Dou | 19.22 | 53 | eP | P | 05 33 46.7 | -0.6 |
| BDFB | Brasilia | 19.74 | 68 | P | P | 05 33 54.5 | +1.4 |
| | comp=Z,3.4nm,0.5s,baz=242,slow=8.9,SNR=11 | | | | | | |
| TBTG | Tabatinga, AM | 20.10 | 351 | eP | Pn | 05 34 00.1 | -1.0 |
| TEFE | Tefe | 20.70 | 7 | eP | Pn | 05 34 06.3 | -2.4 |
| PMSA | Palmer Station | 40.61 | 178 | P | P | 05 36 55.4 | -2.8 |
| PMSA | | | | IAmb | IAmb | 05 37 00.5 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| CELP | Cerrillos | 42.02 | 1 | P | P | 05 37 10.8 | +0.5 |
| CELP | | | | IAmb | IAmb | 05 37 11.2 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| SNAA | Sanae | 59.16 | 161 | P | P | 05 39 16.1 | -1.7 |
| SNAA | | | | IAmb | IAmb | 05 39 20.8 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| SNAA | Sanae | 59.16 | 161 | P | P | 05 39 19.7 | +1.9 |
| | comp=Z,1.2nm,0.7s,baz=233,slow=15,SNR=5.5 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 63.85 | 324 | P | P | 05 39 52.0 | +2.3 |
| | comp=Z,0.3nm,0.7s,baz=153,slow=8.1,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 66.00 | 180 | P | P | 05 40 05.5 | +2.2 |
| | comp=Z,2.2nm,0.5s,baz=232,slow=0.4,SNR=27 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| SBA | Scott Base | 73.50 | 190 | P | P | 05 40 46.8 | -1.8 |
| VNDA | Vanda | 74.51 | 190 | P | P | 05 40 57.4 | +3.0 |
| | comp=Z,0.5nm,0.9s,baz=115,slow=4.9,SNR=3.8 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| TORD | Torodi Ar. Bea | 76.62 | 69 | P | P | 05 41 07.4 | -0.1 |
| | comp=Z,0.6nm,0.4s,baz=262,slow=6.0,SNR=11 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| PDAR | Pinedale Array | 77.33 | 329 | P | P | 05 41 12.9 | +1.8 |
| | comp=Z,0.3nm,0.5s,baz=128,slow=10,SNR=4.1 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| ULM | Lac du Bonnet | 78.42 | 342 | P | P | 05 41 17.5 | +0.8 |
| | comp=Z,1.6nm,0.4s,baz=123,slow=5.1,SNR=4.9 | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | |
| NVAR | Mina Array Bea | 78.70 | 321 | P | P | 05 41 20.6 | +1.8 |
| | comp=Z,0.2nm,0.6s,baz=126,slow=7.0,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| MAW | Mawson | 81.24 | 163 | P | P | 05 41 34.2 | +2.6 |
| | comp=Z,1.6nm,0.6s,baz=202,slow=7.1,SNR=7.2 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| YKA | Yellowknife Ar | 94.32 | 340 | P | P | 05 42 36.0 | +1.4 |
| | comp=Z,0.6nm,0.7s,baz=133,slow=4.6,SNR=4.4 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| ASAR | Alice Springs | 128.28 | 205 | PKP | PKiKP | 05 48 23.1 | +0.6 |
| | comp=Z,0.3nm,0.5s,baz=160,slow=1.9,SNR=4.3 | | | | | | |
| WRA | Warramunga Arr | 131.46 | 207 | PKP | PKiKP | 05 48 29.1 | +0.2 |
| | comp=Z,0.3nm,0.4s,baz=159,slow=1.7,SNR=12 | | | | | | |
| ZALV | Zalesovo Beam | 143.56 | 28 | PKP | PKPdf | 05 48 48.6 | -0.4 |
| | comp=Z,1.6nm,0.5s,baz=298,slow=3.5,SNR=7.4 | | | | | | |
| MKAR | Makanchi Array | 146.67 | 40 | PKPbc | PKPab | 05 48 56.9 | -1.2 |
| | comp=Z,3.4nm,0.7s,baz=298,slow=3.7,SNR=25 | | | | | | |

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**IDC 02 05:35:22.7**±12.0**, 7.°34S×148.°13E, h343**km±125km**, mb2.9**/4**, mbtmp3.6**/5**, Error ellipse: s-maj=69.9km s-min=32.4km az=71.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 18.33 | 225 | P | P | 05 39 13.4 | -0.2 |
| | 0.2nm,0.3s,baz=50,slow=10,SNR=8.4 | | | | | | |
| ASAR | Alice Springs | 21.21 | 218 | P | P | 05 39 43.0 | +0.5 |
| | 0.3nm,0.4s,baz=58,slow=9.2,SNR=6.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| CMAR | Chiang Mai Arr | 54.87 | 299 | P | P | 05 44 18.7 | -0.4 |
| | 1.6nm,0.3s,baz=122,slow=8.6,SNR=2.6 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| VNDA | Vanda | 70.53 | 177 | P | P | 05 46 00.1 | -0.4 |
| | 0.2nm,0.4s,baz=346,slow=4.3,SNR=1.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| ILAR | Eielson Array | 86.26 | 23 | P | P | 05 47 26.3 | +0.3 |
| | 0.2nm,0.8s,baz=231,slow=5.5,SNR=1.5 | | | | | | |
| | 0.2nm,0.8s | | | | | | |

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*IDC **02** 05:35:28.9±3.1, 53.°56N×87.°90E, h0km, mbtmp3.2/2, ML2.7/2, Error ellipse: s-maj=28.2km s-min=18.8km az=86.0*

*NNC **02** 05:35:28.9±4.6, 55.°93N×84.°63E, h0km, mb3.3, mpv2.9, Error ellipse: s-maj=34.8km s-min=24.6km az=44.0, Suspected Mining explosion.*

**ISC 02 05:35:31.8**±3.2**, 53.°49N**±0.°09×**87.°7E**±0.°2**, h10**km**, n8, σ1§67**/13**, 6C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZAA0 | Zalesovo Array | 1.80 | 286 | ⇓P | Pb | 05 36 02.7 | -2.1 |
| | 0.6nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | Sg | 05 36 30.5 | +0.9 |
| | 4.1nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 1.80 | 286 | Pn | Pb | 05 36 03.3 | -1.5 |
| | 5.2nm,0.3s,baz=99,slow=16,SNR=57 | | | | | | |
| ZALV | | | | Sn | Sg | 05 36 28.9 | -0.6 |
| | 5.4nm,0.3s,baz=100,slow=25,SNR=14 | | | | | | |
| I46RU | ZALESOVO INFRA | 1.80 | 286 | I | I | 05 47 32.5 | |
| | 0.1nm,1.0s,baz=98,slow=313,SNR=6.5 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KURK | Kurchatov | 6.27 | 247 | ⇓Pn | Pn | 05 37 06.7 | +2.5 |
| | 1.0nm,0.5s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 05 38 16.3 | +0.5 |
| | 1.7nm,0.7s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 05 38 50.6 | |
| | 10nm,1.2s | | | | | | |
| KURBB | Kurchatov Arra | 6.36 | 247 | Pn | Pn | 05 37 04.8 | -0.8 |
| | 0.2nm,0.3s,baz=64,slow=15,SNR=3.0 | | | | | | |
| KURBB | | | | Sn | Sn | 05 38 19.6 | +1.3 |
| | baz=53,slow=26 | | | | | | |
| KURBB | | | | Lg | Lg | 05 38 54.3 | |
| | 0.5nm,0.3s,baz=55,slow=30,SNR=5.3 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 6.36 | 247 | ⇑Pn | Pn | 05 37 06.9 | +1.4 |
| | 1.5nm,0.5s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 05 38 19.2 | +1.0 |
| | 7.5nm,0.8s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 05 38 52.6 | |
| | 8.4nm,0.8s | | | | | | |
| MK31 | Makanchi Array | 7.56 | 210 | ⇑Sn | Sg | 05 39 32.0 | -2.2 |
| | 2.1nm,0.7s,baz=42,slow=33,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 7.56 | 210 | Pn | Pn | 05 37 23.3 | +1.3 |
| | 0.1nm,0.3s,baz=32,slow=11,SNR=4.5 | | | | | | |
| MKAR | | | | Sn | Sn | 05 38 48.9 | +1.2 |
| | 0.1nm,0.3s,baz=14,slow=29,SNR=2.6 | | | | | | |
| MKAR | | | | Lg | Lg | 05 39 30.0 | |
| | 0.1nm,0.3s,baz=23,slow=30,SNR=5.2 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

**IDC 02 05:35:44.3±5.2, 18°.64S×178°.53W, h542km±41km, mb2.9/3, mbtmp3.7/4, Error ellipse: s-maj=241.7km s-min=30.2km az=158.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.37 | 285 | P | P | 05 37 01.2 | 0.0 |
| | 9.5nm,0.7s,baz=141,slow=17,SNR=5.7 | | | | | | |
| WRA | Warramunga Arr | 44.39 | 260 | P | P | 05 43 06.8 | -0.5 |
| | 0.3nm,0.3s,baz=98,slow=7.4,SNR=12 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| ASAR | Alice Springs | 44.49 | 255 | P | P | 05 43 08.1 | +0.1 |
| | 3.2nm,0.7s,baz=86,slow=8.4,SNR=24 | | | | | | |
| | 3.2nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 86.48 | 58 | P | P | 05 47 30.1 | -0.1 |
| | 0.2nm,0.8s,baz=215,slow=7.6,SNR=2.8 | | | | | | |
| | 0.2nm,0.8s | | | | | | |

**NNC 02 05:52:46.0±3.9, 37°.73N×71°.65E, h155km±73km, mb2.9, mpv3.8, 1C-4D, Error ellipse: s-maj=39.9km s-min=22.5km az=13.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAK | Ala-Archa | 5.37 | 23 | ⇓P | Pn | 05 54 04.2 | -0.2 |
| | 3.8nm,0.5s | | | | | | |
| AAK | | | | ⇓S | Sn | 05 55 05.8 | 0.0 |
| | 19nm,0.6s | | | | | | |
| KK31 | Karatay Array | 5.44 | 351 | ⇓P | Pn | 05 54 05.4 | +0.2 |
| | 6.4nm,0.3s,baz=175,slow=12,SNR=136 | | | | | | |
| KK31 | | | | ⇑S | Sn | 05 55 08.1 | +0.8 |
| | 5.6nm,0.4s,baz=169,slow=12,SNR=4.9 | | | | | | |
| MK31 | Makanchi Array | 12.00 | 38 | P | Pn | 05 55 35.2 | +3.2 |
| | 0.4nm,0.4s,baz=208,slow=6.7,SNR=3.7 | | | | | | |
| AB31 | Akbulak array | 14.29 | 327 | ⇓P | Pn | 05 55 59.9 | -1.3 |
| | 0.7nm,0.6s,baz=138,slow=14,SNR=14 | | | | | | |

*NEIC 02 06:02:10.1±1.2, 34°.98N±0°.01×97°.55W±0°.02, h5km±1km, Error ellipse: s-maj=2.8km s-min=2.2km az=100.0*

**TUL 02 06:02:10.4±1.6, 34°.99N±0°.01×97°.54W±0°.02, h6km±4km, ML2.6, mb_Lg2.4/73(NEIC), ML2.4/30(NEIC), Error ellipse: s-maj=2.2km s-min=1.4km az=121.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNO | Franklin | 0.29 | 23 | Pg | Pg | 06 02 16.6 | +0.5 |
| FNO | | | | Sg | Sg | 06 02 21.2 | +1.2 |
| FNO | | | | IAML | | 06 02 24.6 | |
| | comp=E,639nm,0.6s | | | | | | |
| OKCSW | OKLAHOMA CITY | 0.43 | 12 | Pg | Pg | 06 02 18.4 | -0.3 |
| OKCSW | | | | IAML | | 06 02 33.2 | |
| | comp=N,289nm,0.5s | | | | | | |
| X34A | Smith Ranch, M | 0.45 | 212 | Pg | Pg | 06 02 19.7 | +0.6 |
| X34A | | | | Sg | Sg | 06 02 25.0 | -0.1 |
| X34A | | | | IAML | | 06 02 30.8 | |
| | comp=E,245nm,0.6s | | | | | | |
| X34A | | | | IAML | | 06 02 34.7 | |
| | comp=N,256nm,0.8s | | | | | | |
| ADOK | Arcadia Dam | 0.68 | 12 | Pg | Pg | 06 02 23.8 | +0.3 |
| ADOK | | | | Sg | Sg | 06 02 33.3 | +1.0 |
| OK029 | Liberty Lake | 0.81 | 5 | Pg | Pg | 06 02 25.6 | -0.4 |
| OK029 | | | | Sg | Sg | 06 02 37.3 | +0.7 |
| OK029 | | | | IAML | | 06 02 50.2 | |
| | comp=N,177nm,0.8s | | | | | | |
| OK029 | | | | IAML | | 06 02 52.3 | |
| | comp=N,108nm,0.5s | | | | | | |
| LOOK | Love County | 1.04 | 163 | Pg | Pg | 06 02 30.3 | 0.0 |
| LOOK | | | | IAML | | 06 02 55.5 | |
| | comp=N,136nm,0.2s | | | | | | |
| WMOK | Wichita Mounta | 1.05 | 257 | Pg | Pg | 06 02 29.4 | -1.1 |
| WMOK | | | | Sg | Sg | 06 02 44.0 | 0.0 |
| OK031 | S. Brethren Rd | 1.12 | 31 | Pg | Pg | 06 02 31.2 | -0.7 |
| OK031 | | | | Sg | Sg | 06 02 46.8 | +0.2 |
| OK031 | | | | IAML | | 06 02 48.8 | |
| | comp=N,123nm,0.1s | | | | | | |
| CSTR | Hydro, Custer | 1.14 | 305 | Pg | Pg | 06 02 32.4 | +0.1 |
| CSTR | | | | Sg | Sg | 06 02 47.3 | 0.0 |
| OK052 | Battle Ridge R | 1.17 | 31 | Pg | Pg | 06 02 32.0 | -0.9 |
| OK052 | | | | Sg | Sg | 06 02 48.0 | -0.1 |
| DEOK | Depew | 1.21 | 45 | Pg | Pg | 06 02 32.6 | -0.9 |
| DEOK | | | | Sg | Sb | 06 02 49.6 | 0.0 |
| QUOK | Quay | 1.36 | 30 | | Pn | 06 02 35.3 | -0.7 |
| WTFS | Witchita Falls | 1.44 | 212 | | Pn | 06 02 36.5 | -0.5 |
| OK048 | Pawnee Station | 1.51 | 19 | | Pn | 06 02 37.5 | -0.6 |
| CROK | Carrier | 1.56 | 347 | | Pn | 06 02 38.0 | -0.7 |
| OK051 | E0350 and S346 | 1.62 | 21 | | Pn | 06 02 39.5 | -0.1 |
| Z35A | Perchaven, San | 1.67 | 172 | | Pn | 06 02 40.2 | 0.0 |
| TUL3 | Leonard | 1.70 | 57 | | Pn | 06 02 40.9 | +0.2 |
| OK038 | West end E0370 | 1.78 | 327 | Pn | Pn | 06 02 42.4 | +0.6 |
| BLOK | Blackwell | 1.79 | 8 | Pn | Pn | 06 02 42.6 | +0.7 |
| U32A | Winter Ranch, | 1.83 | 320 | Pn | Pn | 06 02 43.0 | +0.5 |
| X37A | Clayton | 1.83 | 102 | Pn | Pn | 06 02 43.0 | +0.5 |
| OK032 | Salt Plains WL | 1.89 | 344 | Pn | Pn | 06 02 43.3 | -0.1 |
| OK032 | | | | IAmb_Lg | | 06 03 10.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| FW03 | Perrin-Whitt E | 1.99 | 193 | Pn | Pn | 06 02 45.5 | +0.8 |
| KAN14 | Manchester OK | 2.00 | 350 | Pn | Pn | 06 02 44.7 | 0.0 |
| FW06 | Azle | 2.01 | 180 | Pn | Pb | 06 02 46.2 | -1.2 |
| KAN17 | Caldwell West | 2.06 | 355 | Pn | Pn | 06 02 45.0 | -0.7 |
| T35A | Sooner Cattle | 2.10 | 23 | Pn | Pn | 06 02 47.0 | +0.8 |
| KAN09 | Caldwell North | 2.15 | 358 | Pn | Pn | 06 02 47.3 | +0.5 |
| KAN01 | Argonia South | 2.17 | 355 | IAmb_Lg | | 06 03 20.3 | |
| | comp=Z,15nm,0.7s | | | | | | |
| SMWD | Samnorwood | 2.22 | 274 | Pn | Pn | 06 02 48.0 | +0.1 |
| SMWD | | | | IAmb_Lg | | 06 03 24.9 | |
| | comp=Z,21nm,0.8s | | | | | | |
| PLPT | Palo Pinto | 2.26 | 197 | Pn | Pn | 06 02 48.9 | +0.5 |
| FW07 | Weatherford | 2.29 | 185 | IAmb_Lg | | 06 03 23.0 | |
| | comp=Z,21nm,0.9s | | | | | | |
| RLO | Rose Lookout | 2.37 | 59 | Pn | Pn | 06 02 50.2 | +0.4 |
| TREL | Terrell | 2.56 | 151 | IAmb_Lg | | 06 03 32.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| FW16 | Waxahatchie | 2.56 | 168 | IAmb_Lg | | 06 03 37.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| FW14 | Alvarado | 2.60 | 173 | IAmb_Lg | | 06 03 37.2 | |
| | comp=Z,16nm,0.7s | | | | | | |
| Z38A | Mt. Pleasant | 2.73 | 128 | Pn | Pn | 06 02 55.1 | +0.3 |
| Z38A | | | | IAmb_Lg | | 06 03 40.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| U38A | Gravette | 2.95 | 60 | Pn | Pn | 06 02 57.4 | -0.5 |
| WHTX | Lake Whitney, | 2.99 | 179 | Pn | Pn | 06 02 57.0 | -1.4 |
| WHTX | | | | IAmb_Lg | | 06 03 48.8 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| DKNS | Dickens | 3.09 | 246 | Pn | Pn | 06 02 58.5 | -1.3 |
| HHAR | Hobbs | 3.21 | 65 | Pn | Pn | 06 03 01.9 | +0.5 |
| MIAR | Mount Ida | 3.29 | 97 | Pn | Pn | 06 03 04.2 | +1.6 |
| MIAR | | | | IAmb_Lg | | 06 03 59.7 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| AMTX | Amarillo | 3.40 | 269 | Pn | Pn | 06 03 04.9 | +0.7 |
| AMTX | | | | IAmb_Lg | | 06 04 02.1 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| R32A | Long Quarter, | 3.56 | 345 | Pn | Pn | 06 03 05.0 | -1.2 |
| R32A | | | | IAmb_Lg | | 06 04 12.7 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| POST | Post | 3.80 | 241 | Pn | Pn | 06 03 10.5 | +0.9 |
| BRDY | Brady | 3.89 | 199 | Pn | Pn | 06 03 10.0 | -0.8 |
| BRDY | | | | IAmb_Lg | | 06 04 18.3 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| WLAR | White Oak Lake | 3.89 | 108 | Pn | Pn | 06 03 10.0 | -0.7 |
| WLAR | | | | IAmb_Lg | | 06 04 20.0 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| KSU1 | Kansas State U | 4.17 | 10 | IAmb_Lg | | 06 04 31.5 | |
| | comp=Z,12nm,0.7s | | | | | | |
| CBKS | Cedar Bluff | 4.21 | 336 | IAmb_Lg | | 06 04 30.5 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| SGCY | Sterling City | 4.29 | 225 | IAmb_Lg | | 06 04 33.0 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| WHAR | Wooly Hollow | 4.32 | 84 | Pn | Pn | 06 03 16.8 | +0.1 |
| WHAR | | | | IAmb_Lg | | 06 04 35.0 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| S39A | Bolivar | 4.35 | 50 | Pn | Pn | 06 03 14.8 | -2.2 |
| S39A | | | | IAmb_Lg | | 06 04 33.1 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| MSTX | Muleshoe | 4.44 | 258 | Pn | Pn | 06 03 19.2 | +0.8 |
| RTBA | Rita Blanca | 4.47 | 290 | Pn | Pn | 06 03 19.7 | +0.8 |
| RTBA | | | | IAmb_Lg | | 06 04 41.8 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| FCAR | Ozark Folk Cen | 4.51 | 77 | IAmb_Lg | | 06 04 40.7 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| MGMO | Mountain Grove | 4.79 | 62 | IAmb_Lg | | 06 04 52.6 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| JCT | Junction City | 4.88 | 204 | Pn | Pn | 06 03 24.1 | -0.4 |
| OZNA | Ozona | 5.05 | 218 | Pn | Pn | 06 03 26.4 | -0.4 |
| OZNA | | | | IAmb_Lg | | 06 04 54.6 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| R40A | Maddies Statio | 5.37 | 51 | IAmb_Lg | | 06 05 14.9 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| T42A | Van Buren | 5.61 | 67 | IAmb_Lg | | 06 05 15.0 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| P38A | Dawn | 5.62 | 33 | IAmb_Lg | | 06 05 16.3 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| KSCO | Kaye Shedlock' | 5.72 | 316 | IAmb_Lg | | 06 05 24.1 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| CCM | Cathedral Cave | 5.92 | 57 | IAmb_Lg | | 06 05 23.0 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| T25A | Trinidad | 5.96 | 293 | IAmb_Lg | | 06 05 23.3 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| DRIO | Del Rio | 6.13 | 206 | IAmb_Lg | | 06 05 31.4 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| P40A | Paris | 6.30 | 42 | IAmb_Lg | | 06 05 34.1 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| SAND | Sanderson | 6.34 | 219 | Pn | Pn | 06 03 43.8 | -0.7 |
| SAND | | | | IAmb_Lg | | 06 05 44.9 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| FVM | French Village | 6.47 | 60 | IAmb_Lg | | 06 05 53.5 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| CGM3 | Cape Girardeau | 6.78 | 68 | IAmb_Lg | | 06 05 52.6 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| VHRN | Van Horn | 7.53 | 238 | IAmb_Lg | | 06 06 20.1 | |
| | comp=Z,4.3nm,1.3s | | | | | | |

*NEIC 02 06:10:00.2±1.2, 39°.14N±0°.04×115°.67W±0°.05, h11km±2km, Error ellipse: s-maj=5.6km s-min=5.1km az=183.0*

**REN 02 06:10:00.7±1.6, 39°.17N±0°.06×115°.66W±0°.05, h0km±3km, ML2.8/3, ML2.5/72(NEIC), Error ellipse: s-maj=8.3km s-min=5.9km az=163.0, Nevada**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| Q12A | Willow Creek R | 0.66 | 101 | | Pg | 06 10 13.1 | -0.2 |
| Q12A | | | | IAML | | 06 10 30.2 | |
| | comp=E,177nm,0.2s | | | | | | |
| Q12A | | | | IAML | | 06 10 31.1 | |
| | comp=N,186nm,0.3s | | | | | | |
| SPR3 | Spring Creek 3 | 1.05 | 99 | | Pg | 06 10 21.0 | +0.2 |
| SPR3 | | | | IAML | | 06 10 36.4 | |
| | comp=E,95nm,0.2s | | | | | | |
| SPR3 | | | | IAML | | 06 10 37.7 | |
| | comp=N,132nm,0.5s | | | | | | |
| Q09A | Carvers | 1.23 | 255 | | Pg | 06 10 23.7 | -0.6 |
| S11A | Rachel | 1.53 | 183 | | Pn | 06 10 27.9 | -1.5 |
| PSUT | Pine Spring | 1.55 | 114 | | Pn | 06 10 28.5 | -1.3 |
| PSUT | | | | IAML | | 06 10 51.8 | |
| | comp=N,85nm,0.2s | | | | | | |
| ELK | Elko | 1.60 | 12 | | Pn | 06 10 30.2 | -0.3 |
| TPH | Tonopah | 1.64 | 229 | | Pn | 06 10 30.2 | -0.8 |
| BMN | Battle Mountai | 1.74 | 317 | | Pn | 06 10 31.8 | -0.6 |
| BMN | | | | IAML | | 06 10 59.4 | |
| | comp=E,51nm,0.5s | | | | | | |
| PRN | Pahroc Range | 1.83 | 165 | | Pn | 06 10 31.8 | -1.7 |
| PRN | | | | IAML | | 06 11 00.9 | |
| | comp=N,57nm,0.7s | | | | | | |
| KVN | Kaiserville | 1.90 | 267 | | Pn | 06 10 33.3 | -1.2 |
| MZP | Montezuma Peak | 2.00 | 223 | | Pn | 06 10 35.7 | -0.2 |
| NV11 | Mina Array Sit | 2.08 | 250 | | Pn | 06 10 36.2 | -0.8 |
| NVAR | Mina Array Bea | 2.19 | 251 | | Pn | 06 10 37.8 | -0.9 |
| NV08 | Mina Array Sit | 2.21 | 251 | | Pn | 06 10 37.7 | -1.1 |
| NV09 | Mina Array Sit | 2.21 | 251 | | Pn | 06 10 38.1 | -0.8 |
| GMN | Gold Mountain | 2.25 | 214 | Pn | Pn | 06 10 38.2 | -1.3 |
| GMN | | | | IAML | | 06 11 21.3 | |
| | comp=N,20nm,0.6s | | | | | | |
| TPNV | Topopah Spring | 2.27 | 192 | Pn | Pn | 06 10 37.8 | -1.8 |
| TPNV | | | | IAML | | 06 11 11.5 | |
| | comp=N,25nm,0.4s | | | | | | |
| TPNV | | | | IAML | | 06 11 13.9 | |
| | comp=N,19nm,0.5s | | | | | | |
| RYN | Ryan | 2.30 | 257 | | Pn | 06 10 39.0 | -1.0 |
| LHV | Little Huntoon | 2.41 | 248 | Pn | Pn | 06 10 41.2 | -0.1 |
| LHV | | | | IAML | | 06 11 16.7 | |
| | comp=E,36nm,0.8s | | | | | | |
| DUG | Dugway, Tooele | 2.42 | 64 | Pn | Pn | 06 10 42.0 | +0.3 |
| DUG | | | | IAML | | 06 11 19.6 | |
| | comp=E,24nm,0.7s | | | | | | |
| DUG | | | | IAML | | 06 11 24.3 | |
| | comp=E,20nm,0.7s | | | | | | |
| CCUT | Cedar City | 2.43 | 131 | Pn | Pn | 06 10 40.3 | -1.6 |
| CCUT | | | | IAML | | 06 11 16.3 | |
| | comp=N,25nm,0.4s | | | | | | |
| CCUT | | | | IAML | | 06 11 20.7 | |
| | comp=E,17nm,0.4s | | | | | | |
| SGV | South Grapevin | 2.44 | 207 | | Pn | 06 10 41.0 | -0.9 |
| NSP | Numbskull Pass | 2.48 | 190 | | Pn | 06 10 41.5 | -0.9 |
| DSP | Deep Springs | 2.56 | 226 | Pn | Pn | 06 10 42.5 | -0.9 |
| SZCU | Shurtz Canyon | 2.56 | 127 | Pn | Pn | 06 10 43.1 | -0.6 |
| SZCU | | | | IAML | | 06 11 26.1 | |
| | comp=N,28nm,0.4s | | | | | | |
| BGU | Big Grassy Mou | 2.67 | 48 | Pn | Pn | 06 10 45.0 | -0.2 |
| BGU | | | | IAML | | 06 11 28.2 | |
| | comp=E,18nm,0.5s | | | | | | |
| BGU | | | | IAML | | 06 11 28.5 | |
| | comp=N,14nm,0.5s | | | | | | |
| SHPR | Sheep Range | 2.69 | 171 | Pn | Pn | 06 10 43.5 | -1.9 |
| BENR | Benton | 2.71 | 238 | | Pb | 06 10 50.0 | -0.2 |
| MVU | Marysvale | 2.77 | 103 | Pn | Pn | 06 10 46.7 | +0.1 |
| YERR | Yerington | 2.79 | 267 | Pn | Pn | 06 10 46.8 | 0.0 |
| YERR | | | | IAML | | 06 11 23.8 | |
| | comp=E,23nm,0.4s | | | | | | |
| YERR | | | | IAML | | 06 11 34.6 | |
| | comp=N,10nm,0.8s | | | | | | |
| MSU | Marysvale | 2.80 | 103 | Pn | Pn | 06 10 46.0 | -1.0 |
| LCMT | Little Creek M | 2.88 | 138 | Pn | Pn | 06 10 47.0 | -0.9 |
| LCMT | | | | IAML | | 06 11 32.0 | |
| | comp=E,12nm,0.2s | | | | | | |
| LCMT | | | | IAML | | 06 11 32.5 | |
| | comp=N,8.4nm,0.2s | | | | | | |
| MTPU | Mount Pierson | 2.95 | 111 | Pn | Pn | 06 10 48.1 | -1.0 |
| PKCU | Pink Cliffs | 3.15 | 122 | Pn | Pn | 06 10 51.3 | -0.6 |
| PKCU | | | | IAML | | 06 11 40.7 | |
| | comp=N,14nm,0.5s | | | | | | |
| HVU | Hansel Valley | 3.41 | 39 | Pn | Pn | 06 10 56.2 | +1.0 |
| HVU | | | | IAML | | 06 11 55.2 | |
| | comp=E,8.9nm,0.6s | | | | | | |
| HVU | | | | IAML | | 06 11 56.7 | |
| | comp=N,14nm,0.4s | | | | | | |
| EMB | Emerald Bay | 3.46 | 268 | Pn | Pn | 06 10 55.2 | -0.9 |
| EMB | | | | IAML | | 06 11 58.1 | |
| | comp=E,9.5nm,2.5s | | | | | | |
| EMB | | | | IAML | | 06 11 58.5 | |
| | comp=N,8.6nm,1.1s | | | | | | |
| V12A | Nelson | 3.50 | 169 | Pn | Pn | 06 10 54.8 | -1.7 |
| AFDM | Forest Hills D | 4.14 | 269 | Pn | Pn | 06 11 04.9 | -0.3 |
| AFDM | | | | IAML | | 06 12 35.1 | |
| | comp=N,4.5nm,3.1s | | | | | | |
| AFDM | | | | IAML | | 06 13 28.3 | |
| | comp=E,4.9nm,3.5s | | | | | | |

**IDC 02 06:21:49.2±888.0, 51°.73N×42°.33E, h0km, Error ellipse: s-maj=431.5km s-min=124.6km az=146.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I43RU | DUBNA INFRASON | 5.83 | 331 | I | I | 06 56 40.0 | |
| | baz=146,slow=318,SNR=0.7 | | | | | | |
| I26DE | FREYUNG INFRAS | 18.46 | 272 | I | I | 08 08 30.0 | |
| | baz=68,slow=338,SNR=0.5 | | | | | | |
| I37NO | I37NO | 20.72 | 336 | I | I | 08 30 20.0 | |
| | baz=136,slow=320,SNR=0.8 | | | | | | |

*BJI 02 06:22:49.7±0.0, 5°.94S×149°.58E, h161km, mb4.8/36, mB4.8/13*

*NEIC 02 06:22:55.9±1.2, 5°.63S±0°.07×149°.11E±0°.08, h161km±7km, mb4.7/104, Error ellipse: s-maj=11.8km s-min=9.4km az=98.0*

*IDC 02 06:22:57.3±1.8, 5°.67S×149°.03E, h181km±16km, mb4.1/19, mbtmp4.5/22, MS3.0/5, Error ellipse: s-maj=13.4km s-min=7.9km az=98.0*

*DJA 02 06:23:19.9±0.9, 7°S±6°×14°8E±°, h261km±12km, M4.6/8, mb4.6/8*

**ISC 02 06:22:55.6±0.3, 5°.65S±0°.05×149°.09E±0°.06, h163km, n357, σ0s.76/325, mb4.6/77, 2C-2D, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | Rabaul | 3.39 | 65 | | Pn | 06 23 47.5 | -0.9 |
| MANU | Manus Island | 3.98 | 334 | | Pn | 06 23 56.4 | +0.5 |
| PMG | Port Moresby | 4.19 | 207 | P | Pn | 06 23 59.6 | +0.9 |
| PMG | Port Moresby | 4.19 | 207 | P | Pn | 06 23 58.8 | +0.1 |
| | 334nm,0.7s,baz=16,slow=6.0,SNR=33 | | | | | | |
| PMG | | | | S | Sn | 06 24 44.9 | -3.1 |
| | 354nm,0.4s,baz=70,slow=14,SNR=5.6 | | | | | | |
| COEN | Coen | 10.10 | 215 | P | Pn | 06 25 18.8 | +2.0 |
| COEN | Coen | 10.10 | 215 | | Pn | 06 25 17.1 | +0.3 |
| MTSU | Mount Surprise | 13.25 | 200 | P | P | 06 26 03.4 | +1.8 |
| TV1H | Townsville Har | 13.71 | 189 | P | P | 06 26 09.1 | +2.5 |
| CTA | Charters Tower | 14.61 | 191 | P | P | 06 26 15.5 | -1.2 |
| | 3.1nm,1.1s,baz=12,slow=13,SNR=17 | | | | | | |
| CTA | | | | LR | LR | 06 32 20.8 | |
| | comp=Z,7.7nm,18.8s,baz=48,slow=39 | | | | | | |
| CTAO | Charters Tower | 14.61 | 191 | P | P | 06 26 19.8 | +3.1 |
| CTAO | Charters Tower | 14.61 | 191 | | Pn | 06 26 15.2 | +0.5 |
| KMPI | Kaimana, Papua | 15.46 | 277 | P | P | 06 26 37.5 | +11 |
| RK1H | Rockhampton Ha | 17.68 | 176 | P | Pn | 06 26 52.7 | +0.8 |
| KDU | Kakadu | 17.82 | 246 | P | P | 06 26 51.7 | -0.4 |
| MTN | Manton Dam | 19.10 | 247 | P | P | 06 27 05.5 | -0.5 |
| MTN | Manton Dam | 19.10 | 247 | | P | 06 27 05.1 | -1.0 |
| MTN | | | | IAmb | IAmb | 06 27 06.1 | |
| | comp=Z,32nm,0.7s | | | | | | |
| DRS | Darwin Rock St | 19.18 | 248 | P | P | 06 27 06.3 | -0.6 |
| GUMO | Guam | 19.57 | 348 | P | P | 06 27 11.5 | +0.4 |
| GUMO | Guam | 19.57 | 348 | P | P | 06 27 10.7 | -0.4 |
| | comp=Z,47nm,0.8s,baz=164,slow=14,SNR=4.5 | | | | | | |
| EIDS | Eidsvold | 19.70 | 175 | P | Pn | 06 27 15.1 | -0.5 |
| EIDS | Eidsvold | 19.70 | 175 | | Pn | 06 27 14.0 | -1.7 |
| EIDS | | | | IAmb | IAmb | 06 27 19.2 | |
| | comp=Z,32nm,0.9s | | | | | | |
| WB0 | Warramunga Arr | 20.03 | 224 | | P | 06 27 15.9 | -0.1 |
| WR0 | Warramunga Arr | 20.06 | 224 | P | P | 06 27 16.3 | -0.1 |
| WRAB | Tennant Creek | 20.18 | 224 | P | P | 06 27 17.3 | -0.3 |
| WB2 | Warramunga Arr | 20.18 | 224 | | P | 06 27 17.1 | -0.5 |
| WRA | Warramunga Arr | 20.19 | 224 | P | P | 06 27 16.4 | -1.4 |
| WRA | Warramunga Arr | 20.19 | 224 | P | P | 06 27 17.7 | 0.0 |
| | comp=Z,39nm,0.5s,baz=48,slow=11,SNR=432 | | | | | | |
| WRA | | | | S | S | 06 30 53.5 | -2.1 |
| | comp=Z,7.2nm,1.1s,baz=46,slow=20,SNR=12 | | | | | | |
| WRA | | | | LR | LR | 06 35 59.6 | |
| | comp=Z,75nm,18.9s,baz=351,slow=39 | | | | | | |
| | comp=Z,39nm,0.5s | | | | | | |
| QLP | Quilpie | 21.32 | 192 | P | P | 06 27 34.1 | +4.3 |
| AUWSH | Wavell State H | 21.95 | 171 | P | P | 06 27 37.5 | +1.2 |
| KNRA | Kununurra | 22.30 | 242 | P | P | 06 27 38.6 | -1.3 |
| KNRA | | | | IAmb | IAmb | 06 27 40.7 | |
| | comp=Z,17nm,0.7s | | | | | | |
| AS01 | Alice Springs | 23.09 | 218 | P | P | 06 27 48.3 | +1.1 |
| AS31 | Alice Springs | 23.12 | 218 | P | P | 06 27 47.8 | +0.3 |
| AS31 | | | | IAmb | IAmb | 06 27 59.0 | |
| | comp=Z,11nm,0.5s | | | | | | |
| ASAR | Alice Springs | 23.12 | 218 | P | P | 06 27 47.6 | +0.2 |
| ASAR | Alice Springs | 23.12 | 218 | P | P | 06 27 47.9 | +0.4 |
| | comp=Z,8.5nm,0.3s,baz=53,slow=8.7,SNR=240 | | | | | | |
| ASAR | | | | S | S | 06 31 45.5 | -1.1 |
| | comp=Z,1.3nm,0.8s,baz=35,slow=18,SNR=2.6 | | | | | | |
| ASAR | | | | LR | LR | 06 38 06.9 | |
| | comp=Z,65nm,21.2s,baz=88,slow=39 | | | | | | |
| | comp=Z,8.5nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 23.33 | 136 | P | P | 06 27 40.9 | -8.4 |
| INKA | Innaminka | 23.36 | 199 | P | P | 06 27 51.8 | +2.4 |
| DZM | Mont Dzumac | 23.41 | 136 | P | P | 06 27 40.3 | -10 |
| DZM | Mont Dzumac | 23.41 | 136 | P | P | 06 27 50.5 | +0.4 |
| DZM | Mont Dzumac | 23.41 | 136 | P | P | 06 27 50.9 | +0.8 |
| | comp=Z,25nm,0.6s,baz=282,slow=8.1,SNR=40 | | | | | | |
| | comp=Z,25nm,0.6s | | | | | | |
| ONTNC | Ouen Toro | 23.57 | 136 | P | P | 06 27 52.0 | +0.5 |
| AULRC | Lightning Ridg | 23.67 | 182 | P | P | 06 27 53.1 | +0.8 |
| YATNC | Mamie plateau, | 23.71 | 135 | P | P | 06 27 44.3 | -8.5 |
| ARMA | Armidale | 24.75 | 175 | P | P | 06 28 03.9 | +1.6 |
| OOD | Oodnadatta | 25.44 | 209 | P | P | 06 28 10.1 | +1.7 |
| CMSA | Cobar Meteorol | 25.95 | 187 | P | P | 06 28 14.3 | +1.4 |
| FITZ | Fitzroy Crossi | 26.03 | 240 | P | P | 06 28 13.3 | -0.5 |
| STKA | Stephens Creek | 27.02 | 194 | P | P | 06 28 23.2 | +0.7 |
| STKA | Stephens Creek | 27.02 | 194 | P | P | 06 28 22.9 | +0.4 |
| | comp=Z,1.8nm,0.3s,baz=47,slow=14,SNR=6.4 | | | | | | |
| STKA | | | | LR | LR | 06 39 51.9 | |
| | comp=Z,85nm,18.2s,baz=33,slow=38 | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | |
| LHI | Lord Howe Isla | 27.38 | 161 | P | P | 06 28 26.2 | +0.5 |
| CAN | Canberra | 29.52 | 180 | P | P | 06 28 46.3 | +1.6 |
| CAN | | | | IAmb | IAmb | 06 28 48.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| BBOO | Buckleboo | 29.63 | 203 | P | P | 06 28 45.6 | 0.0 |
| BBOO | | | | IAmb | IAmb | 06 28 46.6 | |
| | comp=Z,16nm,0.9s | | | | | | |
| FUNA | Funafuti | 30.00 | 97 | P | P | 06 28 48.5 | -0.7 |
| MSVF | Nonsavu | 30.74 | 115 | P | P | 06 28 56.9 | +1.2 |
| MSVF | | | | IAmb | IAmb | 06 29 04.8 | |
| | comp=Z,15nm,0.8s | | | | | | |
| MSVF | Nonsavu | 30.74 | 115 | P | P | 06 28 56.0 | +0.3 |
| | comp=Z,3.4nm,0.5s,baz=307,slow=10,SNR=2.2 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| FORT | Forrest | 31.87 | 216 | P | P | 06 29 05.4 | 0.0 |
| TOO | Toolangi | 31.94 | 185 | P | P | 06 29 07.2 | +1.2 |
| TOO | | | | IAmb | IAmb | 06 29 07.7 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| MBWA | Marble Bar | 32.36 | 239 | P | P | 06 29 09.0 | -0.8 |
| PSA00 | Pilbara Seismi | 32.43 | 238 | P | P | 06 29 09.3 | -1.2 |
| GIRL | Giralia | 37.64 | 240 | P | P | 06 29 55.1 | +0.1 |
| MORW | Morawa | 38.96 | 229 | P | P | 06 30 05.8 | -0.2 |
| YULB | Yu-li | 39.62 | 318 | P | P | 06 30 11.3 | -0.2 |
| YULB | | | | IAmb | IAmb | 06 30 11.7 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| TPUB | Ta-pu | 40.01 | 317 | P | P | 06 30 14.0 | -0.8 |
| TPUB | | | | IAmb | IAmb | 06 30 14.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| RTZ | Ruatahuna | 41.42 | 146 | P | P | 06 30 27.2 | +1.1 |
| RTZ | | | | IAmb | IAmb | 06 30 30.0 | |
| | comp=Z,20nm,1.2s | | | | | | |
| MJAR | Matsushiro Arr | 43.19 | 347 | P | P | 06 30 40.6 | +0.1 |
| | comp=Z,8.1nm,0.9s,baz=162,slow=8.3,SNR=14 | | | | | | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| MAJO | Matsushiro | 43.20 | 347 | P | P | 06 30 40.2 | -0.2 |
| MAJO | | | | IAmb | IAmb | 06 30 42.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| MJB9 | Matsu-Tunnel | 43.20 | 347 | P | P | 06 30 40.2 | -0.3 |
| MJB9 | | | | IAmb | IAmb | 06 30 42.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| KSRS | Korea Array | 47.21 | 337 | P | P | 06 31 12.6 | +0.6 |
| | comp=Z,5.5nm,0.7s,baz=156,slow=8.2,SNR=23 | | | | | | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| KSAR | Wonju Array Be | 47.22 | 337 | P | P | 06 31 11.2 | -0.8 |
| KS19 | Wonju Array Si | 47.27 | 337 | P | P | 06 31 11.7 | -0.8 |
| NJ2 | Nanjing | 47.28 | 324 | eP | P | 06 31 14.8 | +2.2 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,85nm,4.3s | | | | | | |
| JKA | Kamikawa-asahi | 49.88 | 354 | P | P | 06 31 32.3 | -0.1 |
| JKA | | | | IAmb | IAmb | 06 31 38.0 | |
| | comp=Z,9.7nm,0.8s | | | | | | |

**TIA** **Tai'an** 51.30 327 P P 06 31 42.9 -0.2
TIA pmax pmax
comp=Z,23nm,0.8s
**USRK** **Ussuriysk Ar.** 51.96 344 P P 06 31 48.6 +0.7
comp=Z,13nm,0.7s,baz=180,slow=6.8,SNR=32
comp=Z,13nm,0.7s
**USA0B** **Ussuriysk Arra** 51.96 344 P P 06 31 48.5 +0.6
USA0B IAmb IAmb 06 31 50.3
comp=Z,12nm,0.7s
**LYN** **LuoYang** 52.84 322 ⇓P P 06 31 55.0 +0.5
LYN sP sP 06 32 50.1 +0.9
LYN pmax pmax
comp=Z,12nm,0.3s
**MDJ** **Mudanjiang** 53.02 343 P P 06 31 54.0 -1.6
MDJ pmax pmax
comp=Z,6.0nm,0.7s
**HNS** **HongShan** 53.49 326 ⇑P P 06 31 59.5 +0.3
HNS pmax pmax
comp=Z,25nm,0.9s
**BJI** **Beijing** 54.64 329 P P 06 32 07.3 -0.2
BJI pmax pmax
comp=Z,5.0nm,0.7s
**BNX** **BinXian** 54.70 342 ⇑P P 06 32 08.1 +0.3
BNX pmax pmax
comp=Z,18nm,1.1s
**XAN** **Xi'an** 54.76 319 P P 06 32 08.4 -0.1
XAN pP pP 06 32 42.0 -3.6
XAN pmax pmax
comp=Z,10.0nm,0.8s
**CMAR** **Chiang Mai Arr** 54.93 297 P P 06 32 10.5 +0.5
comp=Z,2.4nm,0.3s,baz=82,slow=6.4,SNR=1.4
CMAR LR LR 06 57 02.2
comp=Z,7.9nm,18.4s,baz=270,slow=37
comp=Z,2.4nm,0.3s
**PZH** **PanZhiHua** 55.89 307 P P 06 32 18.6 +1.8
PZH pmax pmax
comp=Z,7.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,4.7s
**HHC** **Hu-ho-hao-te** 57.66 327 eP P 06 32 30.4 +1.4
HHC pmax pmax
comp=Z,11nm,0.6s
HHC pmax pmax
comp=Z,82nm,4.4s
**HEH** **HeiHe** 58.76 344 eP P 06 32 36.4 +0.1
HEH pmax pmax
comp=Z,22nm,0.7s
**HIA** **Hailar** 60.38 338 P P 06 32 47.7 +0.3
**MA2** **Magadan** 65.04 1 P P 06 33 17.8 -0.2
**SONM** **Songino Array** 65.13 330 P P 06 33 18.8 -0.3
SONM IAmb IAmb 06 33 21.0
comp=Z,4.0nm,0.6s
**SONM** **Songino Array** 65.13 330 P P 06 33 19.7 +0.6
comp=Z,3.1nm,0.5s,baz=154,slow=4.2,SNR=16
comp=Z,3.1nm,0.5s
**CASY** **Casey** 66.15 196 P P 06 33 24.6 -0.5
**NIKH** **Nikolski High** 68.35 26 P P 06 33 40.0 +0.9
baz=226
**VNDA** **Vanda** 72.14 177 P P 06 34 02.8 +0.9
**VNDA** **Vanda** 72.14 177 P P 06 34 02.2 +0.4
comp=Z,1.3nm,0.6s,baz=332,slow=6.9,SNR=14
comp=Z,1.3nm,0.6s
**GAMB** **Gambell** 75.23 17 P P 06 34 21.2 +1.2
baz=221
**M13K** **Dall Lake** 75.62 22 P P 06 34 23.1 +0.9
baz=229
**O14K** **Tigyukauivet M** 75.69 24 P P 06 34 23.3 +0.6
baz=232
**N14K** **Kuskokwak Cree** 75.94 23 P P 06 34 24.6 +0.5
baz=231
**O15K** **Ungalikthiuk R** 76.23 24 P P 06 34 26.3 +0.5
baz=233
**M14K** **Bethel** 76.36 22 P P 06 34 27.0 +0.6
baz=230
**L14K** **Kuka Creek** 76.47 22 P P 06 34 27.8 +0.8
baz=230
**N15K** **Kwethluk River** 76.72 23 P P 06 34 29.1 +0.5
baz=232
**M15K** **Kasigluk River** 76.82 23 P P 06 34 29.4 +0.4
baz=232
**R17L** **Mt. Peulik Vol** 76.82 27 P P 06 34 29.2 +0.1
baz=236
**J14K** **Nanvaranak Lak** 77.09 20 P P 06 34 31.4 +0.9
baz=229
**L15K** **Ungalak Mounta** 77.13 22 P P 06 34 31.0 +0.3
baz=231
**O16K** **Kokwok River B** 77.19 25 P P 06 34 31.0 -0.2
baz=234
**Q17K** **Contact Creek** 77.38 26 P P 06 34 31.7 -0.7
baz=237
**N16K** **Nishlik Lake** 77.44 24 P P 06 34 33.4 +0.9
baz=234
**K15K** **Wolf Creek Mou** 77.51 21 P P 06 34 33.6 +0.7
baz=231
**ACHA** **Angle Creek He** 77.60 27 P P 06 34 33.0 -0.6
ACHA IAmb IAmb 06 34 34.5
comp=Z,12nm,1.0s
**R18K** **Karluk** 77.65 27 P P 06 34 34.4 +0.7
baz=238
**TNA** **Tin City** 77.65 17 P P 06 34 34.4 +0.9
baz=224
**M16K** **Timber Creek** 77.69 23 P P 06 34 34.4 +0.5
baz=233
**O17K** **Koliganek Bris** 77.71 25 P P 06 34 34.1 +0.1
baz=235
**ANM** **Nome** 77.71 18 P P 06 34 34.7 +0.7
baz=227
**L16K** **Owhat River** 77.90 22 P P 06 34 35.4 +0.3
baz=233
**Q18K** **Katmai Hardscr** 77.98 26 P P 06 34 34.9 -0.8
baz=237
**OHAK** **Old Harbor** 78.01 28 P P 06 34 35.7 0.0
baz=239
**F14K** **Arctic Creek** 78.06 17 P P 06 34 36.6 +0.8
baz=226
**N17K** **Nushagak Hills** 78.10 24 IAmb IAmb 06 34 38.0
comp=Z,8.7nm,0.9s
**N17K** **Nushagak Hills** 78.10 24 P P 06 34 36.9 +0.8
baz=235
**P18K** **Big Mountain,** 78.28 26 P P 06 34 37.7 +0.5
baz=237
**G15K** **Niukluk** 78.43 18 P P 06 34 38.3 +0.5
baz=228
**J16K** **Anvik River** 78.46 21 P P 06 34 38.9 +0.8
baz=231
**M17K** **Holitna River** 78.51 23 P P 06 34 39.2 +0.8
baz=235
**O18K** **Koktuh Hills** 78.55 25 P P 06 34 39.1 +0.4
baz=237
**MK31** **Makanchi Array** 78.56 320 P P 06 34 38.6 -0.5
**MKAR** **Makanchi Array** 78.56 320 P P 06 34 38.5 -0.6
comp=Z,1.5nm,0.5s,baz=100,slow=7.2,SNR=14
comp=Z,1.5nm,0.5s
**L17K** **Donlin** 78.61 22 P P 06 34 40.0 +1.0
baz=234
**KDAK** **Kodiak Island** 78.62 28 P P 06 34 39.7 +0.6
baz=240
**N18K** **Kilae Creek** 78.72 24 P P 06 34 40.1 +0.5
baz=236
**Q19K** **Cape Douglas,** 78.73 26 P P 06 34 39.8 +0.1
baz=239
**K17K** **Iditarod** 78.95 22 P P 06 34 41.6 +0.9
baz=234,SNR=7.4
**J17K** **VABM Dome** 79.08 21 P P 06 34 42.4 +1.0
baz=233
**M18K** **Stony River** 79.20 24 P P 06 34 42.8 +0.6
baz=236
**G16K** **Koyuk River** 79.22 19 P P 06 34 43.4 +1.2
baz=229
**L18K** **Granite Mounta** 79.27 23 IAmb IAmb 06 34 44.4
comp=Z,12nm,0.8s
**L18K** **Granite Mounta** 79.27 23 P P 06 34 43.4 +0.8
baz=235,SNR=9.0
**P19K** **Oil Pt** 79.29 26 P P 06 34 42.6 -0.2
**P19K** **Oil Pt** 79.29 26 P P 06 34 43.1 +0.4
baz=239
**N19K** **Bonanza Creek** 79.37 25 P P 06 34 43.4 +0.2
baz=238
**H17K** **Granite Mounta** 79.73 20 P P 06 34 45.7 +0.8
baz=232
**O20K** **Slope Mountain** 79.77 26 P P 06 34 46.1 +0.7
baz=239
**ZALV** **Zalesovo Beam** 79.84 327 P P 06 34 44.2 -1.5
comp=Z,3.4nm,0.6s,baz=111,slow=5.4,SNR=14
comp=Z,3.4nm,0.6s
**G17K** **Kiwalik Mounta** 79.84 19 P P 06 34 46.2 +0.6
baz=231
**L19K** **White Mountain** 79.96 23 P P 06 34 47.0 +0.7
L19K IAmb IAmb 06 34 47.7
comp=Z,13nm,0.8s
**L19K** **White Mountain** 79.96 23 P P 06 34 46.8 +0.5
baz=237,SNR=13
**J18K** **Innoko River** 79.97 22 P P 06 34 46.5 +0.2
**J18K** **Innoko River** 79.97 22 P P 06 34 46.8 +0.5
baz=235,SNR=6.0
**M19K** **Big River Lodg** 79.99 24 P P 06 34 47.1 +0.6
baz=237
**H18K** **Honhosa River** 80.38 20 P P 06 34 49.3 +0.8
baz=233
**BRSE** **Bradley Lake S** 80.42 26 P P 06 34 49.1 +0.3
baz=241
**E17K** **Hotham Inlet** 80.49 17 P P 06 34 49.5 +0.6
baz=230
**M20K** **Styx River** 80.49 24 IAmb IAmb 06 34 50.2
comp=Z,8.2nm,0.7s
**M20K** **Styx River** 80.49 24 P P 06 34 49.4 +0.2
baz=239
**L20K** **Farewell, AK** 80.51 23 P P 06 34 49.4 +0.1
baz=238,SNR=6.9
**J19K** **Poorman** 80.68 22 P P 06 34 50.5 +0.5
baz=236
**G18K** **Tagagawik** 80.73 19 P P 06 34 50.6 +0.2
baz=233
**K20K** **Telida** 80.90 22 P P 06 34 51.5 +0.2
baz=238,SNR=12
**C17K** **DeLong Mountai** 81.02 16 P P 06 34 52.2 +0.4
baz=228
**E18K** **Tukpahlearik C** 81.07 18 P P 06 34 52.2 +0.1
baz=231
**SEW** **Seward** 81.17 26 P P 06 34 52.3 -0.4
baz=242
**O22K** **Cooper Landing** 81.23 26 P P 06 34 52.6 -0.4
baz=242
**H19K** **Roundabout Mou** 81.25 20 P P 06 34 53.3 +0.3
baz=235,SNR=6.5
**SUA** **Susitna One** 81.26 25 P P 06 34 53.3 0.0
baz=241
**J20K** **Nowinta River** 81.32 22 P P 06 34 53.7 +0.3
baz=237,SNR=7.7
**PPLA** **Purkeypile** 81.39 23 P P 06 34 53.7 -0.3
baz=239
**G19K** **Purcell Mounta** 81.40 19 P P 06 34 54.2 +0.4
baz=234,SNR=5.4
**RC01** **Rabbit Creek A** 81.51 25 P P 06 34 54.4 -0.1
RC01 IAmb IAmb 06 34 54.8
comp=Z,22nm,1.1s
**RC01** **Rabbit Creek A** 81.51 25 P P 06 34 53.7 -0.8
baz=242
**BOOM** **Boomskoye usch** 81.52 314 P P 06 34 55.1 -0.1
BOOM IAmb IAmb 06 34 55.6
comp=Z,4.9nm,0.6s
**I20K** **Naaghedeneel** 81.53 21 P P 06 34 54.6 0.0
baz=237
**F19K** **Shaleruckik Mo** 81.58 19 P P 06 34 54.6 -0.1
baz=234
**M22K** **Willow** 81.66 25 IAmb IAmb 06 34 55.6
comp=Z,22nm,1.0s
**M22K** **Willow** 81.66 25 P P 06 34 54.0 -1.2
baz=241
**CAST** **Castle Rocks** 81.70 23 IAmb IAmb 06 34 55.7
comp=Z,13nm,0.8s
**H20K** **Anotleneega Mo** 81.78 20 P P 06 34 55.9 +0.1
baz=236
**CHUM** **Lake Minchumin** 81.85 22 P P 06 34 56.0 -0.2
baz=239
**PMR** **Palmer** 82.00 25 IAmb IAmb 06 34 57.1
comp=Z,9.3nm,0.9s
**PMR** **Palmer** 82.00 25 P P 06 34 56.1 -0.9
baz=242,SNR=6.2
**PWL** **Port Wells** 82.01 26 P P 06 34 56.6 -0.6
baz=243,SNR=5.2
**P23K** **Montague Islan** 82.04 27 P P 06 34 57.3 0.0
baz=244
**E19K** **Redstone River** 82.12 18 IAmb IAmb 06 34 59.9
comp=Z,6.5nm,0.7s
**E19K** **Redstone River** 82.12 18 P P 06 34 58.2 +0.6
baz=234,SNR=8.1
**GHO** **Glory Hole Cre** 82.17 25 IAmb IAmb 06 34 58.3
comp=Z,13nm,0.9s
**KNK** **Knik Glacier** 82.21 25 P P 06 34 58.5 +0.3
baz=243
**KURBB** **Kurchatov Arra** 82.21 323 P P 06 34 56.7 -1.7
comp=Z,1.0nm,0.7s,baz=112,slow=4.5,SNR=7.5
comp=Z,1.0nm,0.7s
**KTH** **Kantishna Hill** 82.22 23 IAmb IAmb 06 34 57.9
comp=Z,13nm,0.8s
**F20K** **Avaraart Lake** 82.37 19 P P 06 34 59.4 +0.6
baz=236
**C19K** **Lookout Ridge** 82.43 16 P P 06 34 59.7 +0.5
baz=232
**SML** **Sawmill** 82.44 25 P P 06 34 58.8 -0.6
baz=243,SNR=11
**BPAW** **Bear Paw Mtn.** 82.46 23 P P 06 34 58.5 -1.0
baz=240,SNR=5.5
**D19K** **Kuna River** 82.48 17 P P 06 34 59.5 +0.1
baz=233
**GLI** **Glacier Island** 82.56 26 P P 06 34 59.4 -0.6
baz=244
**H21K** **Melozitna Rive** 82.59 21 P P 06 35 00.1 0.0
baz=238
**M23K** **Glacier View** 82.69 25 P P 06 35 00.5 -0.2
baz=244
**G21K** **Allakaket** 82.81 20 P P 06 35 01.3 +0.1
baz=238
**WAT1** **Susitna Watana** 82.82 24 P P 06 35 00.3 -1.0
baz=243
**SCM** **Sheep Creek Mo** 82.88 25 P P 06 35 01.2 -0.6
baz=244,SNR=7.4
**E20K** **Nigu River** 82.91 18 P P 06 35 01.9 +0.2
baz=235,SNR=5.7
**EYAK** **Cordova Ski Ar** 83.02 27 P P 06 35 01.9 -0.4
baz=246
**MLY** **Manley** 83.02 22 IAmb IAmb 06 35 02.9
comp=Z,11nm,0.8s
**MLY** **Manley** 83.02 22 P P 06 35 02.1 -0.2
baz=240,SNR=17
**WAT6** **Susitna Watana** 83.04 25 P P 06 35 01.8 -0.8
baz=243,SNR=10.0
**D20K** **Etivluk River** 83.05 17 P P 06 35 02.4 0.0
baz=234
**MCK** **McKinley** 83.08 23 P P 06 35 01.5 -1.2
baz=242,SNR=17
**F21K** **Alatna River** 83.19 19 P P 06 35 03.4 +0.2
baz=238
**H22K** **Ishtalitna Cre** 83.22 21 P P 06 35 03.4 +0.1
baz=240,SNR=5.2
**KLU** **Klutina** 83.34 26 P P 06 35 03.9 -0.2
baz=245,SNR=12
**MAW** **Mawson** 83.37 203 P P 06 35 03.7 -0.3
comp=Z,1.3nm,0.7s,baz=89,slow=6.6,SNR=6.8
comp=Z,1.3nm,0.7s
**DHY** **Denali Highway** 83.41 24 P P 06 35 03.7 -0.8
baz=244,SNR=9.4
**NEA2** **Nenana** 83.43 23 IAmb IAmb 06 35 04.1
comp=Z,11nm,0.8s
**NEA2** **Nenana** 83.43 23 P P 06 35 03.2 -1.2
baz=242,SNR=5.5
**M24K** **Tolsona, Glenn** 83.49 25 P P 06 35 04.8 0.0
baz=245
**I23K** **Minto, Yukon-K** 83.59 22 P P 06 35 04.6 -0.6
baz=242
**B20K** **Meade River** 83.66 16 P P 06 35 04.6 -0.8
baz=234
**G22K** **Bettles** 83.70 20 P P 06 35 05.4 -0.3
baz=240
**E21K** **Killik River** 83.70 18 P P 06 35 05.6 -0.2
baz=237
**BMRM** **Bremner River** 83.70 27 P P 06 35 05.5 -0.5
baz=246
**WRH** **Wood River Hil** 83.75 23 IAmb IAmb 06 35 05.7
comp=Z,15nm,1.0s
**F22K** **John River** 83.77 19 P P 06 35 06.5 +0.4
baz=239
**H23K** **Yukon River** 83.84 21 P P 06 35 06.4 -0.1
baz=242
**C21K** **Knifeblade Rid** 83.85 17 P P 06 35 06.6 +0.1
baz=236
**CCB** **Clear Creek Bu** 83.94 23 IAmb IAmb 06 35 06.4
comp=Z,11nm,0.8s
**N25K** **Chitina, Valde** 83.96 26 P P 06 35 07.1 -0.2
baz=246
**COLA** **College** 84.03 22 P P 06 35 05.9 -1.5
**COLA** **College** 84.03 22 P P 06 35 06.8 -0.6
baz=243
**HARP** **HAARP** 84.04 25 P P 06 35 07.1 -0.4
baz=246
**G23K** **Bananza Creek** 84.10 20 P P 06 35 07.8 -0.1
baz=241,SNR=7.8
**PAX** **Paxson** 84.15 25 P P 06 35 07.5 -0.7
baz=246
**B21K** **Ikpikpuk River** 84.16 17 P P 06 35 07.2 -0.7
baz=236
**HDA** **Harding Lake** 84.17 23 P P 06 35 07.2 -1.0
baz=244,SNR=6.7
**E22K** **Anaktuvuk Pass** 84.22 19 P P 06 35 08.4 0.0
baz=239
**GLB** **Gilahina Butte** 84.24 26 IAmb IAmb 06 35 08.9
comp=Z,7.4nm,0.8s
**CRQM** **Cirque** 84.28 27 IAmb IAmb 06 35 10.4
comp=Z,14nm,0.9s
**CRQE** **Cirque** 84.30 27 P P 06 35 08.7 -0.4
baz=248
**QSPA** **South Pole Qui** 84.31 180 P P 06 35 08.9 -0.2
QSPA IAmb IAmb 06 35 09.8
comp=Z,5.8nm,0.8s
**QSPA** **South Pole Qui** 84.31 180 P P 06 35 09.0 0.0
comp=Z,4.6nm,0.7s,baz=310,slow=1.0,SNR=39
comp=Z,4.6nm,0.7s
**D22K** **Ayikyak River** 84.33 18 IAmb IAmb 06 35 10.5
comp=Z,9.9nm,0.9s
**D22K** **Ayikyak River** 84.33 18 P P 06 35 09.4 +0.4
baz=238
**ILAR** **Eielson Array** 84.35 23 P P 06 35 07.5 -1.6
comp=Z,8.8nm,0.7s,baz=250,slow=5.1,SNR=113
comp=Z,8.8nm,0.7s
**K24K** **Donnelly Dome** 84.37 24 P P 06 35 09.2 0.0
baz=245
**H24K** **Noodor Dome** 84.46 22 P P 06 35 09.5 -0.1
baz=243
**J25K** **Salcha River,** 84.87 23 P P 06 35 11.0 -0.8
baz=245,SNR=37
**E23K** **Chandalar** 84.89 19 P P 06 35 12.2 +0.4
baz=241
**B22K** **Teshekpuk Lake** 84.90 17 P P 06 35 12.0 +0.4
baz=237
**M26K** **Nabesna, AK** 84.97 26 P P 06 35 12.2 -0.1
baz=248
**G24K** **Hadweenzic Riv** 84.99 21 P P 06 35 12.0 -0.2
baz=243
**D23K** **Nanushuk River** 85.00 18 P P 06 35 12.8 +0.6
baz=240
**L26K** **Log Cabin Wild** 85.06 25 P P 06 35 12.4 -0.3
baz=247,SNR=9.9
**SCRK** **Sand Creek** 85.17 24 P P 06 35 12.8 -0.5
baz=247,SNR=7.4
**CTG** **Chitna Glacier** 85.18 27 P P 06 35 13.2 -0.3
baz=249
**TOLK** **Toolik Lake Re** 85.19 19 P P 06 35 13.5 +0.3
baz=241
**F24K** **Squaw Lake** 85.22 20 IAmb IAmb 06 35 14.9
comp=Z,7.1nm,0.8s
**F24K** **Squaw Lake** 85.22 20 P P 06 35 13.4 0.0
baz=243
**E24K** **Your Creek** 85.28 20 P P 06 35 13.7 0.0
baz=242
**PINM** **Pinnacle** 85.38 28 P P 06 35 14.3 -0.1
baz=250
**M27K** **Edge Creek, AK** 85.44 26 P P 06 35 14.8 +0.1
baz=249,SNR=21
**C23K** **Itkillik River** 85.46 18 IAmb IAmb 06 35 15.9
comp=Z,11nm,0.8s
**C23K** **Itkillik River** 85.46 18 P P 06 35 14.5 0.0
baz=240
**G25K** **Bearman Lake** 85.51 21 P P 06 35 15.0 +0.2
baz=245
**J26L** **Joseph Creek** 85.54 24 P P 06 35 14.8 -0.3
baz=247,SNR=11
**O28M** **Mount Upton** 85.64 28 P P 06 35 15.4 -0.5
baz=250
**PNL** **Peninsula** 85.65 29 P P 06 35 15.6 -0.1
baz=251
**D24K** **Happy Valley** 85.67 18 IAmb IAmb 06 35 17.0
comp=Z,6.7nm,0.7s
**D24K** **Happy Valley** 85.67 18 P P 06 35 15.8 +0.3
baz=242
**L27K** **Beaver Creek,** 85.71 25 P P 06 35 16.0 +0.1
baz=240,SNR=13
**YUK3** **Moose Creek** 85.86 27 P P 06 35 16.7 -0.2
baz=250,SNR=9.0
**K27K** **Chicken** 85.96 24 IAmb IAmb 06 35 18.7
comp=Z,12nm,1.0s
**K27K** **Chicken** 85.96 24 P P 06 35 17.3 +0.2
baz=248
**C24K** **Franklin Bluff** 85.98 18 P P 06 35 16.7 -0.3
baz=242
**YUK8** **Steele Glacier** 86.01 27 P P 06 35 17.4 -0.2
baz=251,SNR=5.3
**I26K** **Coal Creek Min** 86.02 23 P P 06 35 17.2 -0.1
baz=247
**F25K** **Christian Rive** 86.03 20 P P 06 35 17.0 -0.4
baz=245
**O29M** **Mount Kennedy** 86.24 28 IAmb IAmb 06 35 19.6
comp=Z,9.5nm,1.0s
**O29M** **Mount Kennedy** 86.24 28 P P 06 35 18.4 -0.3
baz=252
**G26K** **Porcupine Rive** 86.42 21 P P 06 35 19.1 -0.1
baz=247,SNR=6.8
**P29M** **Windy Craggy** 86.44 29 P P 06 35 19.7 +0.1
baz=253
**D25K** **Kavik River** 86.53 19 IAmb IAmb 06 35 20.7
comp=Z,5.1nm,0.8s
**D25K** **Kavik River** 86.53 19 P P 06 35 19.6 -0.2
baz=244
**YUK4** **Talbot Arm** 86.54 27 P P 06 35 20.7 +0.5
baz=252,SNR=12
**YUK6** **Outpost Mounta** 86.54 28 P P 06 35 20.2 -0.1
baz=252
**F26K** **Sheenjek River** 86.59 21 P P 06 35 20.7 +0.5
baz=246
**EGAK** **Eagle** 86.61 24 IAmb IAmb 06 35 21.1
comp=Z,11nm,0.9s
**EGAK** **Eagle** 86.61 24 P P 06 35 19.8 -0.4
baz=249
**S31K** **Pelican** 86.71 31 P P 06 35 21.0 +0.2
baz=254
**I27K** **Kandik River** 86.72 23 P P 06 35 20.9 +0.1
baz=249,SNR=13
**P30M** **Million Dollar** 86.96 29 P P 06 35 22.4 +0.3
baz=253
**M29M** **Somme Creek** 86.96 26 P P 06 35 22.3 +0.2
baz=252,SNR=13
**H27K** **Steamboat Moun** 86.98 22 P P 06 35 22.4 +0.3
baz=245,SNR=11
**PLBC** **Pleasant Camp** 87.06 30 P P 06 35 22.3 -0.1
baz=254
**DAWY** **Dawson** 87.08 25 IAmb IAmb 06 35 23.8
comp=Z,12nm,1.0s
**DAWY** **Dawson** 87.08 25 P P 06 35 22.7 +0.1
baz=251,SNR=19
**G27K** **Doyon Strip** 87.15 22 P P 06 35 23.2 +0.4
baz=249
**N30M** **Aishikik Lake** 87.28 28 IAmb IAmb 06 35 24.9
comp=Z,11nm,1.1s
**N30M** **Aishikik Lake** 87.28 28 P P 06 35 23.9 +0.3
baz=253,SNR=5.5
**L29M** **L29M** 87.32 26 P P 06 35 24.2 +0.5
baz=252,SNR=14
**I28M** **Miner Creek** 87.33 23 P P 06 35 23.7 -0.1
baz=250,SNR=8.0
**C27K** **Jago River** 87.51 19 P P 06 35 25.1 +0.6
baz=247,SNR=8.8
**O30N** **Mendenhall** 87.55 28 IAmb IAmb 06 35 25.6
comp=Z,9.8nm,0.8s
**O30N** **Mendenhall** 87.55 28 P P 06 35 24.9 -0.1
baz=254,SNR=9.2
**E27K** **Coleen River** 87.67 20 IAmb IAmb 06 35 26.8
comp=Z,8.1nm,1.0s
**E27K** **Coleen River** 87.67 20 P P 06 35 25.6 +0.3
baz=249
**J29N** **Klondike Camp** 87.69 24 IAmb IAmb 06 35 27.1
comp=Z,9.5nm,0.8s
**J29N** **Klondike Camp** 87.69 24 P P 06 35 26.0 +0.4
baz=252
**CRAG** **Craig** 87.74 34 P P 06 35 25.9 +0.1
baz=257
**M30M** **Minto, Yukon** 87.74 26 P P 06 35 25.7 0.0
baz=253
**K29M** **Barlow Dome** 87.80 25 P P 06 35 26.2 +0.1
baz=253,SNR=20
**U33K** **Whale Pass** 87.89 33 P P 06 35 26.5 0.0
baz=257
**N31M** **Braeburn, Yuko** 87.90 28 P P 06 35 26.5 0.0
baz=254,SNR=6.5
**I29M** **Ogilvie Camp,** 87.94 24 IAmb IAmb 06 35 37.7
comp=Z,5.8nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I29M | Ogilvie Camp, | 87.94 | 24 | P | P | 06 35 26.2 | -0.5 |
| | baz=252,SNR=9.4 | | | | | | |
| F28M | Old Crow | 88.08 | 21 | P | P | 06 35 27.1 | -0.1 |
| | baz=250 | | | | | | |
| WHY | Whitehorse | 88.10 | 29 | IAmb | IAmb | 06 35 28.1 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| WHY | Whitehorse | 88.10 | 29 | P | P | 06 35 27.3 | -0.3 |
| | baz=255 | | | | | | |
| H29M | Whitestone | 88.19 | 23 | P | P | 06 35 27.4 | -0.3 |
| | baz=252 | | | | | | |
| D27M | Malcolm River | 88.27 | 20 | P | P | 06 35 28.2 | +0.1 |
| | baz=249 | | | | | | |
| P32M | Atlin | 88.40 | 30 | P | P | 06 35 28.9 | -0.1 |
| | baz=256 | | | | | | |
| J30M | Hart River | 88.51 | 25 | P | P | 06 35 29.4 | 0.0 |
| | baz=254,SNR=9.8 | | | | | | |
| E28M | Babbage River | 88.53 | 20 | P | P | 06 35 29.3 | 0.0 |
| | baz=251 | | | | | | |
| G29M | Pine Creek | 88.53 | 22 | P | P | 06 35 29.2 | -0.2 |
| | baz=252 | | | | | | |
| V35K | Ketchikan | 88.55 | 34 | P | P | 06 35 29.2 | -0.4 |
| | baz=258 | | | | | | |
| I30M | Mount Dempster | 88.67 | 24 | P | P | 06 35 29.7 | -0.5 |
| | baz=254 | | | | | | |
| M31M | Drury Creek, Y | 88.72 | 27 | P | P | 06 35 30.1 | -0.3 |
| | baz=256 | | | | | | |
| EPYK | Eagle Plains | 88.87 | 23 | P | P | 06 35 30.5 | -0.5 |
| | baz=253,SNR=6.5 | | | | | | |
| Q32M | Nakina River | 88.97 | 31 | P | P | 06 35 31.3 | -0.5 |
| | baz=257 | | | | | | |
| P33M | Teslin, Yukon | 88.98 | 29 | P | P | 06 35 31.7 | 0.0 |
| | baz=257 | | | | | | |
| E29M | Blow River | 89.03 | 21 | P | P | 06 35 31.1 | -0.5 |
| | baz=252 | | | | | | |
| D28M | Stokes Point | 89.04 | 20 | P | P | 06 35 31.6 | 0.0 |
| | baz=251 | | | | | | |
| N32M | Quiet Lake | 89.07 | 28 | IAmb | IAmb | 06 35 33.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| N32M | Quiet Lake | 89.07 | 28 | P | P | 06 35 31.7 | -0.3 |
| | baz=257 | | | | | | |
| G30M | tAoh Zraii Nji | 89.23 | 22 | P | P | 06 35 32.4 | -0.3 |
| | baz=254 | | | | | | |
| S34M | Telegraph Cree | 89.34 | 32 | P | P | 06 35 32.7 | -0.6 |
| | baz=258 | | | | | | |
| F30M | Barrier River | 89.57 | 22 | P | P | 06 35 33.7 | -0.5 |
| | baz=254 | | | | | | |
| R33M | Jennings River | 89.72 | 30 | P | P | 06 35 35.3 | 0.0 |
| | baz=258 | | | | | | |
| G31M | Satah River | 89.96 | 23 | P | P | 06 35 35.2 | -0.8 |
| | baz=256 | | | | | | |
| DLBC | Dease Lake | 90.02 | 31 | P | P | 06 35 36.1 | -0.4 |
| | baz=259 | | | | | | |
| F31M | Tsiigehtchic | 90.28 | 22 | P | P | 06 35 37.3 | -0.2 |
| | baz=256 | | | | | | |
| INK | Inuvik | 90.57 | 21 | P | P | 06 35 38.8 | 0.0 |
| | baz=256 | | | | | | |
| WTLY | Watson Lake, Y | 90.93 | 30 | P | P | 06 35 40.5 | -0.2 |
| | baz=260 | | | | | | |
| TGTN | Hyland Airport | 91.42 | 28 | P | P | 06 35 42.7 | -0.3 |
| | baz=261 | | | | | | |
| LIRD | Liard River Hi | 92.18 | 31 | P | P | 06 35 46.2 | -0.3 |
| | baz=263 | | | | | | |
| TOAD | Toad River Com | 92.56 | 31 | P | P | 06 35 48.2 | 0.0 |
| | baz=263 | | | | | | |
| KOTAN | Kotaneelee Air | 93.29 | 30 | P | P | 06 35 51.3 | -0.3 |
| | baz=264 | | | | | | |
| WRGLY | Wrigley | 93.85 | 27 | P | P | 06 35 53.7 | -0.3 |
| | baz=265 | | | | | | |
| A36M | Sachs Harbour | 93.99 | 18 | P | P | 06 35 54.1 | -0.4 |
| | baz=264 | | | | | | |
| ELIB | Princess Elisa | 95.06 | 195 | dP | P | 06 35 59.5 | -0.2 |
| | comp=Z,2.0nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 95.51 | 52 | P | P | 06 36 01.9 | -0.6 |
| | comp=Z,0.3nm,0.6s,baz=277,slow=4.9,SNR=4.3 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| LRMC | Laurel Mtn Rad | 95.87 | 55 | P | P | 06 36 03.8 | -0.3 |
| | baz=267 | | | | | | |
| MPMC | Manual Prospec | 96.05 | 54 | P | P | 06 36 04.5 | -0.5 |
| | baz=268 | | | | | | |
| FURC | Furnace Creek, | 96.57 | 54 | P | P | 06 36 06.8 | -0.2 |
| | baz=268 | | | | | | |
| YKA | Yellowknife Ar | 97.90 | 28 | P | P | 06 36 11.9 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=269,slow=3.7,SNR=2.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| PDAR | Pinedale Array | 102.15 | 48 | P | Pdif | 06 36 30.4 | -1.7 |
| | comp=Z,0.4nm,0.7s,baz=195,slow=4.6,SNR=4.2 | | | | | | |
| ROSC | El Rosal | 136.77 | 89 | PKP | PKPdf | 06 41 59.4 | -0.8 |
| | comp=Z,5.5nm,0.7s,baz=239,slow=23,SNR=4.2 | | | | | | |
| LPAZ | La Paz | 137.21 | 121 | PKP | PKPdf | 06 42 00.3 | -0.9 |
| | comp=Z,1.7nm,0.9s,baz=216,slow=6.5,SNR=4.9 | | | | | | |
| CPUP | Villa Florida | 139.17 | 142 | PKP | PKPdf | 06 42 02.5 | -1.3 |
| | comp=Z,1.3nm,0.7s,baz=263,slow=1.4,SNR=4.2 | | | | | | |
| TORD | Torodi Ar. Bea | 147.01 | 285 | PKPbc | PKPbc | 06 42 19.4 | -0.7 |
| | comp=Z,4.5nm,0.5s,baz=69,slow=2.7,SNR=43 | | | | | | |
| BDFB | Brasilia | 152.90 | 142 | PKPbc | PKPbc | 06 42 34.0 | -0.6 |
| | comp=Z,5.8nm,0.5s,baz=231,slow=0.6,SNR=18 | | | | | | |

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*IDC **02** 06:30:34.1±1.0, 17°.57S×168°.38E, h0km, mb4.0/7, mbtmp4.0/8, ML4.1/1, MS3.4/7, Error ellipse: s-maj=35.8km s-min=23.4km az=137.0*

*NOU **02** 06:30:40.3, 17°.83S×168°.42E, h26km, MLv4.2/11, Vanuatu Islands*

*NEIC **02** 06:30:43.0±1.1, 17°.90S±0°.05×168°.1E±0°.1, h35km±2km, mb4.4/13, Error ellipse: s-maj=21.2km s-min=3.5km az=111.0*

**ISC 02 06:30:42.0**±0.8**, 17°.93S**±0°.08×**168°.2E**±0°.1**, h32km, n44, σ1°.35**/38**, mb4.3**/14**, MS3.4**/5**, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DVP | Devils Point | 0.21 | 2 | P | Pb | 06 30 49.1 | +0.6 |
| LIFNC | LIFOU | 2.96 | 197 | P | Pn | 06 31 27.8 | +1.0 |
| LIFNC | LIFOU | 2.96 | 197 | Pn | Pn | 06 31 25.7 | -1.2 |
| LIFNC | | | | Sn | Sn | 06 32 00.2 | -1.1 |
| MARNC | Mare, Loyalty | 3.53 | 182 | P | Pn | 06 31 35.1 | +0.5 |
| YATNC | Mamie plateau, | 4.28 | 196 | P | Pn | 06 31 46.1 | +1.2 |
| DZM | Mont Dzumac | 4.43 | 201 | P | Pn | 06 31 48.6 | +1.5 |
| DZM | Mont Dzumac | 4.43 | 201 | Pn | Pn | 06 31 48.0 | +1.0 |
| DZM | Mont Dzumac | 4.43 | 201 | Pn | Pn | 06 31 48.6 | +1.5 |
| | 8.6nm,0.3s,baz=72,slow=8.7,SNR=183 | | | | | | |
| DZM | | | | Sn | Sn | 06 32 38.2 | +0.6 |
| | 18nm,0.3s,baz=137,slow=20,SNR=12 | | | | | | |
| DZM | | | | LR | LR | 06 33 33.8 | |
| | comp=Z,228nm,20.4s,baz=25,slow=37 | | | | | | |
| | 18nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 4.50 | 203 | P | Pn | 06 31 49.9 | +1.9 |
| KOUNC | Koumac, New Ca | 4.51 | 234 | P | Pn | 06 31 49.5 | +1.5 |
| KOUNC | Koumac, New Ca | 4.51 | 234 | Pn | Pn | 06 31 48.0 | 0.0 |
| ONTNC | Ouen Toro | 4.64 | 200 | P | Pn | 06 31 51.9 | +2.0 |
| ONTNC | Ouen Toro | 4.64 | 200 | Pn | Pn | 06 31 50.5 | +0.6 |
| PINNC | Pines Island, | 4.71 | 188 | Pn | Pn | 06 31 52.7 | +1.9 |
| MSVF | Nonsavu | 9.40 | 90 | LR | LR | 06 35 49.2 | |
| | comp=Z,137nm,20.4s,baz=203,slow=34 | | | | | | |
| HNR | Honiara | 11.63 | 316 | LR | LR | 06 36 50.1 | |
| | comp=Z,862nm,19.8s,baz=180,slow=33 | | | | | | |
| CTA | Charters Tower | 20.84 | 261 | LR | LR | 06 42 21.8 | |
| | comp=Z,4.6nm,19.7s,baz=92,slow=34 | | | | | | |
| RTZ | Ruatahuna | 21.99 | 161 | P | P | 06 35 34.9 | +1.4 |
| RTZ | | | | IAmb | IAmb | 06 36 01.6 | |
| | comp=Z,21nm,1.2s | | | | | | |
| BKZ | Black Stump Fm | 22.36 | 163 | P | P | 06 35 38.8 | +1.4 |
| BKZ | | | | IAmb | IAmb | 06 35 41.9 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| MRZ | Mangatainoka R | 23.53 | 166 | P | P | 06 35 50.3 | +1.0 |
| BFZ | Birch Farm | 23.71 | 165 | P | P | 06 35 51.3 | +0.2 |
| PLWZ | Palliser | 24.32 | 167 | P | P | 06 35 57.0 | +0.1 |
| STKA | Stephens Creek | 27.73 | 235 | P | P | 06 36 27.6 | -0.1 |
| STKA | Stephens Creek | 27.73 | 235 | P | P | 06 36 28.1 | +0.4 |
| | comp=Z,3.2nm,1.0s,baz=10,slow=12,SNR=2.8 | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| WR0 | Warramunga Arr | 31.85 | 261 | P | P | 06 37 03.4 | -0.9 |
| WR0 | | | | IAmb | IAmb | 06 37 04.2 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| WB0 | Warramunga Arr | 32.00 | 261 | P | P | 06 37 04.8 | -0.8 |
| WB0 | | | | IAmb | IAmb | 06 37 10.5 | |
| | comp=Z,5.8nm,1.3s | | | | | | |
| WB2 | Warramunga Arr | 32.03 | 261 | P | P | 06 37 05.0 | -1.0 |
| WB2 | | | | IAmb | IAmb | 06 37 05.3 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 32.04 | 261 | P | P | 06 37 04.6 | -1.4 |
| | comp=Z,0.4nm,0.4s,baz=80,slow=6.1,SNR=15 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| AS31 | Alice Springs | 32.49 | 254 | P | P | 06 37 08.8 | -1.2 |
| ASAR | Alice Springs | 32.49 | 254 | P | P | 06 37 09.3 | -0.7 |
| | comp=Z,1.3nm,0.4s,baz=82,slow=8.7,SNR=22 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| GUMO | Guam | 38.86 | 322 | LR | LR | 06 52 23.2 | |
| | comp=Z,27nm,20.5s,baz=212,slow=34 | | | | | | |
| FITZ | Fitzroy Crossi | 40.39 | 263 | P | P | 06 38 17.3 | -0.1 |
| SBA | Scott Base | 59.95 | 180 | P | P | 06 40 45.7 | +1.0 |
| QSPA | South Pole Qui | 72.11 | 180 | P | P | 06 42 02.7 | -0.5 |
| QSPA | | | | IAmb | IAmb | 06 42 05.0 | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| QSPA | South Pole Qui | 72.11 | 180 | P | P | 06 42 02.7 | -0.5 |
| | comp=Z,1.7nm,0.9s,baz=87,slow=8.2,SNR=8.1 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| HHC | Hu-ho-hao-te | 78.58 | 320 | eP | P | 06 42 43.8 | +3.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,39nm,4.2s | | | | | | |
| BELA | Belgrano 2 | 83.48 | 175 | P | P | 06 43 04.3 | -1.7 |
| BELA | | | | IAmb | IAmb | 06 43 05.5 | |
| | comp=Z,3.2nm,1.3s | | | | | | |
| PMSA | Palmer Station | 88.47 | 160 | LR | LR | 07 19 41.2 | |
| | comp=Z,28nm,20.2s,baz=58,slow=33 | | | | | | |
| NVAR | Mina Array Bea | 88.70 | 49 | P | P | 06 43 27.9 | -4.7 |
| | comp=Z,0.5nm,0.7s,baz=224,slow=6.5,SNR=4.4 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| ILAR | Eielson Array | 89.29 | 18 | P | P | 06 43 30.1 | -4.5 |
| | comp=Z,0.3nm,0.6s,baz=238,slow=4.3,SNR=9.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| SNAA | Sanae | 90.41 | 183 | P | P | 06 43 38.4 | -1.6 |
| | comp=Z,1.1nm,0.7s,baz=144,slow=8.7,SNR=2.5 | | | | | | |
| SNAA | | | | LR | LR | 07 23 08.6 | |
| | comp=Z,38nm,18.1s,baz=230,slow=35 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 100.11 | 316 | LR | LR | 07 30 32.0 | |
| | comp=Z,12nm,19.6s,baz=302,slow=36 | | | | | | |
| KSH | Kashi | 102.84 | 308 | P | Pdif | 06 44 36.3 | -0.7 |
| ARCES | ARCESS Array B | 123.56 | 345 | PKP | PKPdf | 06 49 32.5 | -3.1 |
| | comp=Z,4.0nm,1.0s,baz=64,slow=8.5,SNR=3.7 | | | | | | |

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*AEIC **02** 06:51:14.6±1.3, 56°.1N±0°.1×149°.8W±0°.1, h8km±8km, Error ellipse: s-maj=18.8km s-min=9.6km az=173.0*

**NEIC 02 06:51:13.3**±1.3**, 56°.3N**±0°.1×**149°.9W**±0°.1**, h21**km±11km**, ML3.4**/46**, ML2.8**(AEIC)**, Error ellipse: s-maj=18.9km s-min=9.3km az=172.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OHAK | Old Harbor | 2.12 | 298 | | Pn | 06 51 46.5 | -0.8 |
| OHAK | | | | | Sn | 06 52 11.8 | -1.2 |
| KDAK | Kodiak Island | 2.12 | 316 | | Pn | 06 51 47.0 | -0.4 |
| SII | Sitkinak Islan | 2.42 | 278 | Pn | Pn | 06 51 51.0 | -0.6 |
| SYI | Shuyak Island | 2.71 | 331 | | Pn | 06 51 55.6 | +0.1 |
| R18K | Karluk | 2.83 | 299 | | Pn | 06 51 57.0 | -0.1 |
| CNPM | China Poot | 3.34 | 348 | Pn | Pn | 06 52 04.1 | -0.1 |
| Q19K | Cape Douglas, | 3.35 | 324 | | Pn | 06 52 05.5 | +1.1 |
| KAHG | Katmai Hook Gl | 3.38 | 313 | | Pn | 06 52 05.5 | +0.7 |
| BRSE | Bradley Lake S | 3.51 | 353 | | Pn | 06 52 05.9 | -0.5 |
| ANCK | Angle Creek | 3.62 | 304 | | Pn | 06 52 08.7 | +0.6 |
| KAHC | Katmai Hardscr | 3.66 | 313 | | Pn | 06 52 09.4 | +0.7 |
| Q23K | Middleton Isla | 3.67 | 29 | Pn | Pn | 06 52 08.1 | -0.6 |
| PLK4 | Peulik 4 | 3.81 | 294 | | Pn | 06 52 11.1 | +0.3 |
| P19K | Oil Pt | 3.83 | 333 | Pn | Pn | 06 52 11.7 | +0.7 |
| CNTC | Contact Creek | 3.83 | 304 | | Pn | 06 52 11.2 | +0.2 |
| PLK2 | Peulik 2 | 3.84 | 296 | | Pn | 06 52 11.1 | 0.0 |
| SEW | Seward | 3.84 | 3 | Pn | Pn | 06 52 11.6 | +0.5 |
| P23K | Montague Islan | 3.95 | 18 | | Pn | 06 52 12.2 | -0.3 |
| PLK1 | Peulik 1 | 4.00 | 295 | | Pn | 06 52 13.0 | -0.1 |
| P18K | Big Mountain, | 4.24 | 320 | | Pn | 06 52 16.6 | -0.1 |
| HIN | Hinchinbrook I | 4.49 | 22 | | Pn | 06 52 19.7 | -0.3 |
| O18K | Koktuh Hills | 4.58 | 324 | | Pn | 06 52 20.8 | -0.3 |
| KAIM | Kayak Island | 4.66 | 36 | Pn | Pn | 06 52 21.7 | -0.5 |
| PWL | Port Wells | 4.66 | 9 | Pn | Pn | 06 52 21.9 | -0.5 |
| EYAK | Cordova Ski Ar | 4.79 | 25 | Pn | Pn | 06 52 23.1 | -1.0 |
| RC01 | Rabbit Creek A | 4.83 | 1 | Pn | Pn | 06 52 24.3 | -0.3 |
| GLI | Glacier Island | 4.83 | 16 | Pn | Pn | 06 52 24.6 | -0.1 |
| RAGM | Ragged Mountai | 4.94 | 31 | Pn | Pn | 06 52 25.8 | -0.4 |
| SUCK | Suckling Hills | 4.98 | 38 | Pn | Pn | 06 52 26.3 | -0.4 |
| HMT | Hamilton | 5.02 | 34 | Pn | Pn | 06 52 27.3 | 0.0 |
| N19K | Bonanza Creek | 5.16 | 334 | Pn | Pn | 06 52 28.9 | -0.3 |
| PMR | Palmer | 5.34 | 4 | Pn | Pn | 06 52 32.5 | +0.9 |
| SNH | Sunshine Point | 5.39 | 41 | Pn | Pn | 06 52 33.2 | +0.9 |
| O16K | Kokwok River B | 5.51 | 311 | Pn | Pn | 06 52 34.4 | +0.5 |
| WAX | Waxell Ridge | 5.57 | 38 | Pn | Pn | 06 52 34.9 | +0.1 |
| SML | Sawmill | 5.60 | 7 | Pn | Pn | 06 52 35.6 | +0.3 |
| KLU | Klutina | 5.61 | 20 | Pn | Pn | 06 52 35.9 | +0.5 |
| N17K | Nushagak Hills | 5.75 | 321 | Pn | Pn | 06 52 36.5 | -0.6 |
| ISLE | Juniper Island | 5.86 | 39 | Pn | Pn | 06 52 39.0 | +0.1 |
| N25K | Chitina, Valde | 5.99 | 25 | Pn | Pn | 06 52 41.0 | +0.4 |
| GLB | Gilahina Butte | 6.05 | 29 | Pn | Pn | 06 52 42.0 | +0.5 |
| CTGM | Chitina Glacie | 6.47 | 40 | Pn | Pn | 06 52 46.8 | -0.4 |
| M17K | Holitna River | 6.47 | 326 | Pn | Pn | 06 52 47.7 | +0.6 |
| BCPM | Bancas Point | 6.54 | 52 | Pn | Pn | 06 52 48.0 | -0.2 |
| N15K | Kwethluk River | 6.67 | 310 | Pn | Pn | 06 52 50.8 | +1.0 |
| M16K | Timber Creek | 6.72 | 319 | Pn | Pn | 06 52 51.2 | +0.7 |
| O14K | Tigyukauivet M | 6.79 | 301 | Pn | Pn | 06 52 51.5 | -0.1 |
| BPAW | Bear Paw Mtn. | 7.87 | 356 | Pn | Pn | 06 53 06.0 | -0.3 |
| N30M | Aishikik Lake | 8.40 | 47 | Pn | Pn | 06 53 13.2 | -0.5 |
| M29M | Somme Creek | 8.48 | 39 | Pn | Pn | 06 53 15.5 | +0.8 |
| O30N | Mendenhall | 8.49 | 52 | Pn | Pn | 06 53 14.7 | -0.1 |

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*IDC **02** 06:52:34.5±1.5, 56°.20N×149°.79W, h0km, mb3.2/4, mbtmp3.3/8, ML2.9/4, MS3.0/7, Error ellipse: s-maj=31.3km s-min=17.3km az=56.0*

*NEIC **02** 06:52:35.2±1.1, 56°.08N±0°.08×149°.8W±0°.1, h20km±9km, ML3.4/48, ML3.3(AEIC), Error ellipse: s-maj=11.9km s-min=8.5km az=164.0*

*AEIC **02** 06:52:37.9±1.2, 56°.0N±0°.1×149°.8W±0°.1, h10km±7km, Error ellipse: s-maj=15.5km s-min=8.2km az=184.0*

**ISC 02 06:52:35.9**±1.0**, 56°.33N**±0°.09×**149°.74W**±0°.07**, h10km, n169, σ1°.03**/120**, mb3.1**/4**, MS2.9**/3**, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDAK | Kodiak Island | 2.13 | 314 | Pn | Pn | 06 53 11.4 | -0.2 |
| KDAK | Kodiak Island | 2.13 | 314 | Sn | Sn | 06 53 37.7 | -0.4 |
| KDAK | Kodiak Island | 2.13 | 314 | Pn | Pn | 06 53 11.3 | -0.2 |
| | 3.4nm,0.3s,baz=127,slow=5.0,SNR=13 | | | | | | |
| KDAK | | | | Sn | Sn | 06 53 37.2 | -0.8 |
| | 7.3nm,0.3s,baz=39,slow=20,SNR=13 | | | | | | |
| KDAK | | | | LR | LR | 06 54 22.5 | |
| | comp=Z,393nm,19.1s,baz=196,slow=49 | | | | | | |
| | 8.4nm,0.3s | | | | | | |
| OHAK | Old Harbor | 2.15 | 296 | Pn | Pn | 06 53 10.5 | -1.2 |
| SII | Sitkinak Islan | 2.48 | 277 | Pn | Pn | 06 53 13.2 | -3.1 |
| SII | | | | IAML | | 06 53 51.4 | |
| | comp=N,269nm,0.8s | | | | | | |
| SII | | | | IAML | | 06 53 51.8 | |
| | comp=E,292nm,0.8s | | | | | | |
| SII | Sitkinak Islan | 2.48 | 277 | IAML | | 06 52 51.9 | |
| | comp=E,45nm,1.1s | | | | | | |
| SYI | Shuyak Island | 2.70 | 329 | Pn | Pn | 06 53 19.8 | +0.4 |
| SYI | Shuyak Island | 2.70 | 329 | IAML | | 06 53 46.0 | |
| | comp=N,17nm,0.9s | | | | | | |
| SYI | Shuyak Island | 2.70 | 329 | IAML | | 06 53 45.9 | |
| | comp=E,16nm,0.5s | | | | | | |
| R18K | Karluk | 2.87 | 298 | | Pn | 06 53 21.1 | -0.4 |
| R18K | | | | IAML | | 06 54 02.2 | |
| | comp=E,93nm,0.5s | | | | | | |
| R18K | | | | IAML | | 06 54 04.4 | |
| | comp=N,105nm,0.6s | | | | | | |
| R18K | Karluk | 2.87 | 298 | IAML | | 06 53 32.0 | |
| | comp=N,62nm,0.5s | | | | | | |
| R18K | Karluk | 2.87 | 298 | IAML | | 06 53 21.8 | |
| | comp=E,99nm,0.5s | | | | | | |
| CNPM | China Poot | 3.31 | 347 | Pn | Pn | 06 53 28.4 | +0.7 |
| CNPM | | | | IAML | | 06 54 11.4 | |
| | comp=E,40nm,0.7s | | | | | | |
| CNPM | China Poot | 3.31 | 347 | IAML | | 06 54 11.4 | |
| | comp=E,40nm,0.7s | | | | | | |
| CNPM | China Poot | 3.31 | 347 | IAML | | 06 54 11.1 | |
| | comp=N,37nm,0.4s | | | | | | |
| Q19K | Cape Douglas, | 3.35 | 323 | | Pn | 06 53 29.4 | +1.1 |
| Q19K | Cape Douglas, | 3.35 | 323 | IAML | | 06 54 15.8 | |
| | comp=E,246nm,1.1s | | | | | | |
| Q19K | Cape Douglas, | 3.35 | 323 | IAML | | 06 54 16.0 | |
| | comp=N,164nm,0.9s | | | | | | |
| KAHG | Katmai Hook Gl | 3.39 | 312 | | Pn | 06 53 29.7 | +0.8 |
| BRSE | Bradley Lake S | 3.47 | 352 | | Pn | 06 53 30.3 | +0.3 |
| BRSE | | | | | Sn | 06 54 11.8 | +0.8 |
| BRLK | Bradley Lake | 3.50 | 350 | | Pn | 06 53 30.8 | +0.4 |
| BRLK | | | | IAML | | 06 54 17.0 | |
| | comp=N,52nm,0.5s | | | | | | |
| BRLK | | | | IAML | | 06 54 19.8 | |
| | comp=E,92nm,0.3s | | | | | | |
| ACHA | Angle Creek He | 3.57 | 304 | | Pn | 06 53 31.4 | 0.0 |
| Q23K | Middleton Isla | 3.60 | 29 | Pn | Pn | 06 53 31.9 | +0.2 |
| Q23K | | | | IAML | | 06 54 16.3 | |
| | comp=N,68nm,1.1s | | | | | | |
| Q23K | | | | IAML | | 06 54 44.5 | |
| | comp=E,78nm,0.9s | | | | | | |
| Q23K | Middleton Isla | 3.60 | 29 | IAML | | 06 54 23.1 | |
| | comp=E,69nm,1.1s | | | | | | |
| Q23K | Middleton Isla | 3.60 | 29 | IAML | | 06 54 16.3 | |
| | comp=N,68nm,1.1s | | | | | | |
| MID | Middleton Isla | 3.60 | 29 | Pn | Pn | 06 53 32.2 | +0.4 |
| MID | | | | IAML | | 06 54 16.3 | |
| | comp=N,66nm,1.1s | | | | | | |
| MID | | | | IAML | | 06 54 44.5 | |
| | comp=E,79nm,0.9s | | | | | | |
| ANCK | Angle Creek | 3.65 | 303 | | Pn | 06 53 33.0 | +0.6 |
| KAHC | Katmai Hardscr | 3.67 | 312 | | Pn | 06 53 33.6 | +0.8 |
| KAHC | Katmai Hardscr | 3.67 | 312 | | Pn | 06 53 33.5 | +0.6 |
| P19K | Oil Pt | 3.82 | 332 | Pn | Pn | 06 53 35.6 | +0.9 |
| P19K | | | | IAML | | 06 54 27.0 | |
| | comp=E,83nm,1.1s | | | | | | |
| P19K | | | | IAML | | 06 54 27.2 | |
| | comp=N,83nm,0.6s | | | | | | |
| P19K | Oil Pt | 3.82 | 332 | IAML | | 06 54 27.2 | |
| | comp=N,83nm,0.6s | | | | | | |
| P19K | Oil Pt | 3.82 | 332 | IAML | | 06 54 27.0 | |
| | comp=E,83nm,1.1s | | | | | | |
| PLK3 | Peulik 3 | 3.82 | 294 | | Pn | 06 53 34.4 | -0.3 |
| PLK4 | Peulik 4 | 3.85 | 293 | Pn | Pn | 06 53 34.7 | -0.6 |
| PLK4 | | | | IAML | | 06 54 29.0 | |
| | comp=E,64nm,0.7s | | | | | | |
| PLK4 | | | | IAML | | 06 54 32.5 | |
| | comp=N,79nm,0.8s | | | | | | |
| PLK4 | Peulik 4 | 3.85 | 293 | IAML | | 06 54 29.0 | |
| | comp=E,64nm,0.7s | | | | | | |
| PLK4 | Peulik 4 | 3.85 | 293 | IAML | | 06 54 32.5 | |
| | comp=N,79nm,0.8s | | | | | | |
| CNTC | Contact Creek | 3.86 | 303 | | Pn | 06 53 35.4 | 0.0 |
| PLK2 | Peulik 2 | 3.87 | 295 | | Pn | 06 53 35.3 | -0.2 |
| P23K | Montague Islan | 3.89 | 18 | | Pn | 06 53 36.3 | +0.6 |
| O20K | Slope Mountain | 4.06 | 339 | | Pn | 06 53 38.9 | +0.7 |
| P18K | Big Mountain, | 4.25 | 319 | | Pn | 06 53 41.0 | +0.3 |
| P18K | Big Mountain, | 4.25 | 319 | IAML | | 06 54 44.8 | |
| | comp=N,17nm,0.8s | | | | | | |
| P18K | Big Mountain, | 4.25 | 319 | IAML | | 06 54 32.1 | |
| | comp=E,14nm,0.9s | | | | | | |
| HIN | Hinchinbrook I | 4.42 | 21 | Pn | Pn | 06 53 43.9 | +0.8 |
| HIN | Hinchinbrook I | 4.42 | 21 | IAML | | 06 54 49.8 | |
| | comp=N,54nm,0.7s | | | | | | |
| HIN | Hinchinbrook I | 4.42 | 21 | IAML | | 06 54 46.7 | |
| | comp=E,72nm,0.9s | | | | | | |
| O18K | Koktuh Hills | 4.58 | 323 | | Pn | 06 53 45.4 | +0.3 |
| O18K | | | | IAML | | 06 54 46.7 | |
| | comp=N,37nm,1.0s | | | | | | |
| O18K | | | | IAML | | 06 54 54.2 | |
| | comp=E,17nm,1.0s | | | | | | |
| O18K | Koktuh Hills | 4.58 | 323 | IAML | | 06 54 46.8 | |
| | comp=N,37nm,1.0s | | | | | | |
| O18K | Koktuh Hills | 4.58 | 323 | IAML | | 06 54 54.2 | |
| | comp=E,17nm,1.0s | | | | | | |
| KAIM | Kayak Island | 4.58 | 36 | Pn | Pn | 06 53 45.8 | +0.6 |
| KAIM | Kayak Island | 4.58 | 36 | IAML | | 06 54 55.5 | |
| | comp=E,87nm,1.2s | | | | | | |
| KAIM | Kayak Island | 4.58 | 36 | IAML | | 06 54 48.4 | |
| | comp=N,99nm,0.8s | | | | | | |
| P17K | Kvichak River | 4.60 | 312 | | Pn | 06 53 45.8 | +0.5 |
| PWL | Port Wells | 4.61 | 9 | Pn | Pn | 06 53 46.5 | +0.9 |
| PWL | | | | IAML | | 06 54 52.4 | |
| | comp=E,32nm,0.9s | | | | | | |
| PWL | | | | IAML | | 06 54 53.4 | |
| | comp=N,27nm,0.6s | | | | | | |
| PWL | Port Wells | 4.61 | 9 | IAML | | 06 54 52.4 | |
| | comp=E,32nm,0.9s | | | | | | |
| PWL | Port Wells | 4.61 | 9 | IAML | | 06 54 53.4 | |
| | comp=N,27nm,0.6s | | | | | | |
| EYAK | Cordova Ski Ar | 4.73 | 25 | Pn | Pn | 06 53 48.4 | +1.2 |
| GLI | Glacier Island | 4.77 | 16 | Pn | Pn | 06 53 49.1 | +1.3 |
| GLI | | | | IAML | | 06 54 59.0 | |
| | comp=N,26nm,1.0s | | | | | | |
| GLI | | | | IAML | | 06 55 01.1 | |
| | comp=E,29nm,0.9s | | | | | | |
| GLI | Glacier Island | 4.77 | 16 | IAML | | 06 54 59.0 | |
| | comp=N,26nm,1.0s | | | | | | |
| GLI | Glacier Island | 4.77 | 16 | IAML | | 06 55 01.1 | |
| | comp=E,29nm,0.9s | | | | | | |
| RC01 | Rabbit Creek A | 4.78 | 0 | Pn | Pn | 06 53 49.2 | +1.3 |
| RC01 | | | | IAML | | 06 54 50.3 | |
| | comp=E,24nm,0.5s | | | | | | |
| RC01 | | | | IAML | | 06 54 59.0 | |
| | comp=N,18nm,0.9s | | | | | | |
| RC01 | Rabbit Creek A | 4.78 | 0 | IAML | | 06 54 59.0 | |
| | comp=N,18nm,0.9s | | | | | | |
| RC01 | Rabbit Creek A | 4.78 | 0 | IAML | | 06 54 50.3 | |
| | comp=E,24nm,0.5s | | | | | | |
| RAGM | Ragged Mountai | 4.87 | 31 | | Pn | 06 53 49.9 | +0.7 |
| RAGM | Ragged Mountai | 4.87 | 31 | IAML | | 06 54 19.4 | |
| | comp=E,78nm,0.8s | | | | | | |
| RAGM | Ragged Mountai | 4.87 | 31 | IAML | | 06 55 03.5 | |
| | comp=N,175nm,0.8s | | | | | | |
| SUCK | Suckling Hills | 4.91 | 38 | | Pn | 06 53 50.8 | +1.1 |
| SUCK | Suckling Hills | 4.91 | 38 | IAML | | 06 54 58.6 | |
| | comp=N,53nm,1.1s | | | | | | |
| SUCK | Suckling Hills | 4.91 | 38 | IAML | | 06 55 01.1 | |
| | comp=E,42nm,1.2s | | | | | | |
| HMT | Hamilton | 4.95 | 33 | Pn | Pn | 06 53 50.9 | +0.6 |
| HMT | Hamilton | 4.95 | 33 | IAML | | 06 55 02.1 | |
| | comp=N,108nm,0.7s | | | | | | |
| HMT | Hamilton | 4.95 | 33 | IAML | | 06 54 57.9 | |
| | comp=E,135nm,0.7s | | | | | | |
| NICHA | Nichawak Mount | 4.97 | 35 | | Pn | 06 53 51.2 | +0.7 |
| N19K | Bonanza Creek | 5.14 | 333 | Pn | Pn | 06 53 52.7 | -0.3 |
| N19K | | | | IAML | | 06 55 26.3 | |
| | comp=E,13nm,0.9s | | | | | | |
| N19K | Bonanza Creek | 5.14 | 333 | IAML | | 06 55 29.2 | |
| | comp=N,10nm,0.9s | | | | | | |
| N19K | Bonanza Creek | 5.14 | 333 | IAML | | 06 55 26.3 | |
| | comp=E,13nm,0.9s | | | | | | |
| PMR | Palmer | 5.29 | 3 | Pn | Pn | 06 53 56.7 | +1.8 |
| PMR | Palmer | 5.29 | 3 | IAML | | 06 55 04.6 | |
| | comp=E,12nm,0.6s | | | | | | |
| PMR | Palmer | 5.29 | 3 | IAML | | 06 55 13.3 | |
| | comp=N,14nm,0.7s | | | | | | |
| SNH | Sunshine Point | 5.31 | 40 | Pn | Pn | 06 53 56.0 | +0.8 |
| SNH | Sunshine Point | 5.31 | 40 | IAML | | 06 55 18.4 | |
| | comp=E,29nm,1.1s | | | | | | |
| SNH | Sunshine Point | 5.31 | 40 | IAML | | 06 55 02.5 | |
| | comp=N,31nm,1.1s | | | | | | |
| N18K | Kilae Creek | 5.43 | 326 | Pn | Pn | 06 53 57.1 | +0.3 |
| M22K | Willow | 5.45 | 358 | Pn | Pn | 06 53 58.0 | +0.9 |
| WAX | Waxell Ridge | 5.50 | 38 | | Pn | 06 53 58.8 | +1.0 |
| O16K | Kokwok River B | 5.52 | 310 | Pn | Pn | 06 53 58.5 | +0.4 |
| KLU | Klutina | 5.55 | 19 | | Pn | 06 53 60.0 | +1.4 |
| SML | Sawmill | 5.55 | 7 | | Pn | 06 54 00.3 | +1.9 |
| CRQM | Cirque | 5.63 | 35 | | Pn | 06 54 00.3 | +0.6 |
| TGL | Tana Glacier | 5.73 | 36 | | Pn | 06 54 02.5 | +1.4 |
| N17K | Nushagak Hills | 5.75 | 320 | Pn | Pn | 06 54 01.2 | +0.1 |
| ISLE | Juniper Island | 5.79 | 39 | | Pn | 06 54 02.9 | +1.1 |
| VRDI | Verde Repeater | 5.90 | 31 | | Pn | 06 54 04.3 | +0.8 |
| N25K | Chitina, Valde | 5.93 | 25 | Pn | Pn | 06 54 04.8 | +1.1 |
| GLB | Gilahina Butte | 5.98 | 28 | Pn | Pn | 06 54 06.1 | +1.6 |
| M24K | Tolsona, Glenn | 6.08 | 16 | Pn | Pn | 06 54 07.0 | +1.2 |
| GRNC | Granite Creek | 6.08 | 40 | | Pn | 06 54 07.0 | +1.0 |
| TABL | Table Mountain | 6.12 | 44 | | Pn | 06 54 07.1 | +0.6 |
| MCARA | McCarthy VSAT | 6.15 | 32 | Pn | Pn | 06 54 07.2 | +0.4 |
| CTGM | Chitina Glacie | 6.39 | 40 | Pn | Pn | 06 54 10.2 | 0.0 |
| LOGN | Logan Glacier | 6.42 | 42 | Pn | Pn | 06 54 11.5 | +1.0 |
| L19K | White Mountain | 6.43 | 338 | Pn | Pn | 06 54 10.4 | -0.2 |
| M17K | Holitna River | 6.46 | 325 | Pn | Pn | 06 54 11.3 | +0.3 |
| BCPM | Bancas Point | 6.47 | 52 | Pn | Pn | 06 54 11.5 | +0.4 |
| N15K | Kwethluk River | 6.68 | 309 | Pn | Pn | 06 54 14.9 | +0.9 |
| M16K | Timber Creek | 6.73 | 318 | Pn | Pn | 06 54 15.1 | +0.5 |
| O14K | Tigyukauivet M | 6.82 | 300 | Pn | Pn | 06 54 15.8 | -0.1 |
| O29M | Mount Kennedy | 7.10 | 51 | | Pn | 06 54 20.2 | +0.3 |
| RND | Reindeer | 7.12 | 3 | Pn | Pn | 06 54 20.4 | +0.3 |
| P29M | Windy Craggy | 7.19 | 58 | Pn | Pn | 06 54 21.3 | +0.3 |
| M27K | Edge Creek, AK | 7.26 | 30 | | Pn | 06 54 23.2 | +1.1 |
| KTH | Kantishna Hill | 7.28 | 356 | Pn | Pn | 06 54 23.4 | +1.2 |
| L16K | Owhat River | 7.37 | 321 | Pn | Pn | 06 54 23.8 | +0.4 |
| K20K | Telida | 7.38 | 345 | Pn | Pn | 06 54 24.3 | +0.7 |
| S31K | Pelican | 7.53 | 72 | Pn | Pn | 06 54 23.4 | -2.2 |
| K17K | Iditarod | 7.74 | 329 | Pn | Pn | 06 54 29.6 | +1.0 |
| BPAW | Bear Paw Mtn. | 7.83 | 356 | Pn | Pn | 06 54 30.9 | +1.2 |
| L27K | Beaver Creek, | 7.85 | 27 | Pn | Pn | 06 54 31.0 | +1.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| J18K | Innoko River | 7.97 | 337 | Pn | Pn | 06 54 31.3 | -0.3 |
| J20K | Nowinta River | 8.17 | 346 | Pn | Pn | 06 54 35.1 | +0.7 |
| WRH | Wood River Hil | 8.21 | 5 | Pn | Pn | 06 54 35.3 | +0.3 |
| HDA | Harding Lake | 8.23 | 9 | Pn | Pn | 06 54 38.5 | +3.3 |
| J19K | Poorman | 8.23 | 342 | Pn | Pn | 06 54 35.6 | +0.4 |
| M13K | Dall Lake | 8.24 | 305 | Pn | Pn | 06 54 36.4 | +1.1 |
| SKAG | Skagway | 8.29 | 62 | Pn | Pn | 06 54 35.5 | -0.6 |
| N30M | Aishikik Lake | 8.32 | 47 | Pn | Pn | 06 54 36.9 | +0.3 |
| L14K | Kuka Creek | 8.38 | 312 | Pn | Pn | 06 54 36.7 | -0.6 |
| S32K | Killisnoo | 8.38 | 76 | Pn | Pn | 06 54 36.1 | -1.2 |
| CCB | Clear Creek Bu | 8.40 | 6 | Pn | Pn | 06 54 40.5 | +2.9 |
| M29M | Somme Creek | 8.40 | 38 | | Pn | 06 54 39.5 | +1.8 |
| O30N | Mendenhall | 8.41 | 52 | Pn | Pn | 06 54 38.2 | +0.5 |
| R32K | Eaglecrest | 8.47 | 70 | Pn | Pn | 06 54 38.0 | -0.5 |
| K15K | Wolf Creek Mou | 8.49 | 320 | Pn | Pn | 06 54 38.9 | +0.2 |
| J17K | VABM Dome | 8.50 | 330 | Pn | Pn | 06 54 39.5 | +0.7 |
| IL31 | | 8.59 | 8 | Pn | Pn | 06 54 41.7 | +1.6 |
| ILAR | Eielson Array | 8.59 | 8 | Pn | Pn | 06 54 39.4 | -0.8 |
| | comp=N,0.1nm,0.3s,baz=197,slow=11,SNR=4.7 | | | | | | |
| ILAR | | | | Sn | Sn | 06 56 13.0 | -4.0 |
| | baz=190,slow=17,SNR=1.1 | | | | | | |
| ILAR | | | | LR | LR | 06 58 16.7 | |
| | comp=N,28nm,20.5s,baz=245,slow=39 | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | |
| J26L | Joseph Creek | 8.75 | 18 | | Pn | 06 54 43.7 | +1.3 |
| I23K | Minto, Yukon-K | 8.86 | 1 | Pn | Pn | 06 54 45.8 | +2.1 |
| N31M | Braeburn, Yuko | 8.88 | 49 | Pn | Pn | 06 54 44.7 | +0.6 |
| WHY | Whitehorse | 8.91 | 55 | Pn | Pn | 06 54 45.8 | +1.2 |
| L29M | L29M | 8.97 | 36 | | Pn | 06 54 47.2 | +1.8 |
| M30M | Minto, Yukon | 9.08 | 41 | Pn | Pn | 06 54 48.2 | +1.3 |
| P32M | Atlin | 9.12 | 62 | Pn | Pn | 06 54 47.1 | -0.4 |
| U33K | Whale Pass | 9.26 | 84 | Pn | Pn | 06 54 46.5 | -2.9 |
| H21K | Melozitna Rive | 9.48 | 352 | Pn | Pn | 06 54 53.0 | +0.7 |
| I26K | Coal Creek Min | 9.56 | 17 | Pn | Pn | 06 54 54.8 | +1.4 |
| K29M | Barlow Dome | 9.68 | 34 | Pn | Pn | 06 54 56.9 | +1.7 |
| P33M | Teslin, Yukon | 9.72 | 59 | Pn | Pn | 06 54 55.7 | -0.1 |
| IMAR | Indian Mountai | 9.88 | 350 | Pn | Pn | 06 54 59.3 | +1.5 |
| G21K | Allakaket | 10.38 | 352 | Pn | Pn | 06 55 05.1 | +0.4 |
| G23K | Bananza Creek | 10.42 | 359 | Pn | Pn | 06 55 07.2 | +1.9 |
| R33M | Jennings River | 10.46 | 65 | Pn | Pn | 06 55 06.8 | +1.0 |
| J30M | Hart River | 10.57 | 33 | Pn | Pn | 06 55 08.3 | +0.9 |
| DLBC | Dease Lake | 10.85 | 71 | LR | LR | 06 58 40.2 | |
| | comp=N,80nm,18.2s,baz=257,slow=34 | | | | | | |
| BMAR | Burnt Mountain | 11.40 | 10 | Pn | Pn | 06 55 19.5 | +0.9 |
| BBB | Bella Bella | 13.29 | 99 | LR | LR | 06 59 35.5 | |
| | comp=N,60nm,19.2s,baz=320,slow=32 | | | | | | |
| INK | Inuvik | 14.11 | 25 | Pn | Pn | 06 55 56.3 | +0.7 |
| | comp=N,0.1nm,0.3s,baz=225,slow=16,SNR=2.3 | | | | | | |
| | comp=N,1.7nm,1.0s | | | | | | |
| YKA | Yellowknife Ar | 18.73 | 56 | P | P | 06 56 54.5 | +0.1 |
| | baz=268,slow=11,SNR=5.9 | | | | | | |
| | comp=N,1.2nm,0.9s | | | | | | |
| NEW | Newport | 21.35 | 98 | P | P | 06 57 23.1 | +0.1 |
| | comp=N,0.7nm,0.5s,baz=300,slow=8.1,SNR=2.6 | | | | | | |
| NEW | | | | LR | LR | 07 04 20.8 | |
| | comp=N,45nm,18.9s,baz=284,slow=33 | | | | | | |
| | comp=N,0.7nm,0.5s | | | | | | |
| YBH | Yreka Blue Hor | 22.76 | 118 | P | P | 06 57 38.5 | +0.3 |
| | comp=N,0.5nm,0.7s,baz=330,slow=9.8,SNR=1.8 | | | | | | |
| YBH | | | | LR | LR | 07 04 12.2 | |
| | comp=N,44nm,20.4s,baz=298,slow=31 | | | | | | |
| | comp=N,0.5nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 27.46 | 117 | P | P | 06 58 22.4 | +0.2 |
| | comp=N,0.1nm,0.6s,baz=317,slow=6.1,SNR=1.3 | | | | | | |
| NVAR | | | | LR | LR | 07 07 20.4 | |
| | comp=N,48nm,18.4s,baz=288,slow=32 | | | | | | |
| | comp=N,0.1nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 42.08 | 110 | P | P | 07 00 28.1 | +0.2 |
| | comp=N,0.4nm,1.0s,baz=316,slow=6.2,SNR=3.2 | | | | | | |
| | comp=N,0.4nm,1.0s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 48.68 | 239 | T | T | 07 54 03.8 | |
| | baz=31,slow=74 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 48.69 | 239 | T | T | 07 54 02.9 | |
| | baz=31,slow=74 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 48.70 | 239 | T | T | 07 54 06.1 | |
| | baz=31 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 49.83 | 239 | T | T | 07 55 31.3 | |
| | baz=28,slow=76,SNR=5.5 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 49.84 | 239 | T | T | 07 55 31.5 | |
| | baz=28,slow=76,SNR=3.7 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 49.84 | 239 | T | T | 07 55 32.8 | |
| | baz=28,slow=76,SNR=4.7 | | | | | | |
| QSPA | South Pole Qui | 146.12 | 180 | PKPbc | PKPdf | 07 12 12.7 | -1.0 |
| | comp=N,1.3nm,1.0s,baz=38,slow=2.9,SNR=3.0 | | | | | | |

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*NAO **02** 06:56:29.1, 34°.28N×23°.79E, h33km, mb4.4*
*TIR **02** 06:56:39.1, 36°.10N×21°.19E, h7km±62km, Ml4.8*
*MCSM **02** 06:56:50.5±0.8, 37°N±6°×2°1E±°, h10km, mb4.5, mB4.7, MLv4.2, Mw(mB)4.0*
*IDC **02** 06:56:50.6±0.6, 36°.86N×21°.53E, h0km, mb4.4/24, mbtmp4.3/33, ML3.9/7, MS3.4/21, Error ellipse: s-maj=13.9km s-min=11.7km az=166.0*
*MOS **02** 06:56:51.0±1.3, 36°.76N×21°.31E, h13km, mb4.7/15, Error ellipse: s-maj=6.9km s-min=3.6km az=76.0*
*MED_RC **02** 06:56:53.0±0.4, 36°.78N×21°.34E, h27km±1km, MW4.3/17, Moment Tensor Solution.Mantle waves: s17,c25; Duration: 1s0 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-1.81±.51; $M_{\theta\theta}$0.50±.31; $M_{\phi\phi}$1.31±.29; $M_{r\theta}$-1.52±.35; $M_{\theta\phi}$3.10±.21; $M_{\phi r}$1.27±.26; Best double couple: $M_0$4.02000×$10^{15}$ NP1:$\phi_s$78.00000°,δ62.00000°, λ-33.00000°. NP2:$\phi_s$185.00000°,δ61.00000°, λ-148.00000°. Principal axes: T 4.0300, Plg1.0000°, Azm131.0000°; N -0.0300, Plg48.0000°, Azm222.0000°; P -4.0100, Plg42.0000°, Azm41.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*
*NEIC **02** 06:56:53.5±1.9, 36°.86N±0°.06×21°.40E±0°.07, h10km±1km, mb4.5/52 Error ellipse: s-maj=10.0km s-min=8.2km az=149.0*
*THE **02** 06:56:54.1, 36°.76N×21°.29E, h5km±1km, ML4.2/16, Error ellipse: s-maj=1.4km s-min=0.8km az=204.0*
*ATH **02** 06:56:55.6, 36°.78N×21°.34E, h10km, Mw4.2, Moment Tensor Solution. s7 Moment tensor: $M_{rr}$-0.51; $M_{\theta\theta}$-0.76; $M_{\phi\phi}$1.27; $M_{r\theta}$-0.02; $M_{\theta\phi}$2.08; $M_{\phi r}$0.53; Fault plane solution: NP1:$\phi_s$77.00000°,δ77.00000°,λ-2.00000°. NP2:$\phi_s$167.00000°,δ88.00000°,λ-167.00000°.*
*PDG **02** 06:56:55.5±0.6, 36°.83N×21°.31E, h23km±1km, ML4.5/9 Error ellipse: s-maj=1.0km s-min=0.9km az=90.0*

**ISC 02 06:56:53.5**±0.6**, 36°.81N**±0°.03×**21°.35E**±0°.02**, h19**km±2km**, n482,** σ1s72/511**, mb4.5**/67**, MS3.4**/18**, 41C-11D, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PYL | PYLOS | 0.33 | 75 | P | Pb | 06 57 01.9 | +1.0 |
| PYL | | | | S | Sb | 06 57 07.3 | +1.5 |
| | 27µm,0.4s | | | | | | |
| PYL | PYLOS | 0.33 | 75 | P | Pb | 06 57 01.9 | +1.0 |
| PYL | | | | S | Sg | 06 57 06.2 | +0.8 |
| ITM | Ithomi | 0.59 | 51 | | Pb | 06 57 06.1 | +0.7 |
| ITM | Ithomi | 0.59 | 51 | P | Pb | 06 57 06.0 | +0.7 |
| ITM | | | | S | Sb | 06 57 16.6 | +3.3 |
| | 27µm,0.5s | | | | | | |
| ITM | Ithomi | 0.59 | 51 | P | Pb | 06 57 06.2 | +1.0 |
| ITM | | | | S | Sb | 06 57 14.7 | +1.4 |
| LTHK | Lithakia | 0.99 | 336 | P | Pb | 06 57 12.4 | +0.4 |
| LTHK | | | | S | Sn | 06 57 28.6 | +2.8 |
| | 16µm,0.4s | | | | | | |
| LTHK | Lithakia | 0.99 | 336 | P | Pn | 06 57 13.2 | +0.8 |
| LTHK | | | | S | Sn | 06 57 27.4 | +1.6 |
| DRO | Drossia | 1.18 | 14 | P | Pg | 06 57 16.5 | +0.2 |
| DRO | | | | S | Sn | 06 57 34.8 | +4.2 |
| | 17µm,0.7s | | | | | | |
| DRO | Drossia | 1.18 | 14 | P | Pg | 06 57 16.8 | +0.5 |
| DRO | | | | S | Sn | 06 57 34.3 | +3.7 |
| RLS | Riolos of Patr | 1.25 | 4 | P | Pg | 06 57 17.6 | -0.1 |
| RLS | | | | S | Sg | 06 57 37.1 | +3.0 |
| | 8µm,1.0s | | | | | | |
| RLS | Riolos of Patr | 1.25 | 4 | P | Pg | 06 57 18.5 | +0.8 |
| RLS | | | | S | Sg | 06 57 36.7 | +2.6 |
| VLI | Veliai | 1.28 | 94 | P | Pg | 06 57 18.1 | -0.2 |
| VLI | | | | S | Sg | 06 57 38.2 | +3.1 |
| | 7µm,0.7s | | | | | | |
| VLI | Veliai | 1.28 | 94 | P | Pg | 06 57 18.6 | +0.3 |
| VLI | | | | S | Sg | 06 57 35.9 | +0.8 |
| RTZL | Ratzakli, Kefa | 1.34 | 340 | P | Pb | 06 57 18.5 | +0.4 |
| RTZL | | | | S | Sg | 06 57 38.0 | +0.9 |
| | 6µm,0.7s | | | | | | |
| MNVA | Monemvasia | 1.36 | 95 | P | Pg | 06 57 21.2 | +1.4 |
| GUR | Goura | 1.38 | 35 | P | Pb | 06 57 19.5 | +0.7 |
| GUR | | | | S | Sg | 06 57 40.2 | +2.0 |
| | 10µm,0.5s | | | | | | |
| GUR | Goura | 1.38 | 35 | P | Pb | 06 57 19.9 | +1.2 |
| GUR | | | | S | Sg | 06 57 39.8 | +1.7 |
| KLV | Kalavryta, Ach | 1.39 | 27 | P | Pb | 06 57 19.8 | +0.9 |
| KLV | | | | S | Sg | 06 57 41.3 | +2.8 |
| | 4µm,0.6s | | | | | | |
| KLV | Kalavryta, Ach | 1.39 | 27 | P | Pg | 06 57 20.3 | -0.1 |
| KLV | | | | S | Sg | 06 57 39.5 | +1.0 |
| PSDA | Pessada-Kefalo | 1.44 | 335 | P | Pb | 06 57 20.0 | +0.3 |
| PSDA | | | | S | Sg | 06 57 40.2 | +0.2 |
| | 6µm,0.5s | | | | | | |
| PSDA | Pessada-Kefalo | 1.44 | 335 | P | Pb | 06 57 20.4 | +0.7 |
| PSDA | | | | S | Sg | 06 57 40.9 | +0.9 |
| VLS | Valsamata | 1.49 | 336 | P | Pb | 06 57 20.7 | 0.0 |
| VLS | | | | S | Sg | 06 57 42.8 | +1.0 |
| | 5µm,0.8s | | | | | | |
| VLS | Valsamata | 1.49 | 336 | P | Pb | 06 57 20.9 | +0.2 |
| VLS | | | | S | Sg | 06 57 41.7 | -0.1 |
| VLS | Valsamata | 1.49 | 336 | P | Pb | 06 57 21.2 | +0.6 |
| VLS | | | | S | Sg | 06 57 42.2 | +0.5 |
| UPR | University Cam | 1.51 | 13 | P | Pg | 06 57 23.4 | +0.7 |
| UPR | | | | S | Sg | 06 57 43.7 | +1.3 |
| KRND | KRANIDI | 1.55 | 68 | P | Pb | 06 57 22.6 | +0.9 |
| KRND | | | | S | Sg | 06 57 44.6 | +0.9 |
| | 4µm,0.5s | | | | | | |
| KRND | KRANIDI | 1.55 | 68 | P | Pb | 06 57 22.6 | +0.9 |
| ALIK | Aliki, Aigiali | 1.57 | 23 | P | Pg | 06 57 23.7 | -0.1 |
| DMLN | Damoulianata-K | 1.62 | 332 | P | Pn | 06 57 22.4 | +1.2 |
| DMLN | | | | S | Sg | 06 57 45.8 | -0.1 |
| | 8µm,0.9s | | | | | | |
| DMLN | Damoulianata-K | 1.62 | 332 | P | Pb | 06 57 22.9 | 0.0 |
| EPID | Epidavros | 1.63 | 60 | P | Pb | 06 57 23.4 | +0.4 |
| EPID | | | | S | Sg | 06 57 46.6 | +0.5 |
| | 5µm,0.7s | | | | | | |
| EPID | Epidavros | 1.63 | 60 | P | Pb | 06 57 23.6 | +0.6 |
| EFP | Efpalio | 1.68 | 15 | P | Pg | 06 57 25.4 | -0.4 |
| EFP | Efpalio | 1.68 | 15 | P | Pg | 06 57 25.4 | -0.4 |
| KALE | Kalithea | 1.70 | 22 | P | Pb | 06 57 24.9 | +0.6 |
| KALE | | | | S | Sg | 06 57 48.4 | 0.0 |
| | 5µm,0.6s | | | | | | |
| KALE | Kalithea | 1.70 | 22 | P | Pg | 06 57 25.9 | -0.4 |
| LOUT | Loutraki | 1.75 | 47 | P | Pb | 06 57 25.1 | 0.0 |
| FSK | Fiskardo | 1.76 | 340 | P | Pb | 06 57 24.8 | -0.4 |
| FSK | | | | S | Sg | 06 57 49.4 | -0.9 |
| | 3µm,0.9s | | | | | | |
| FSK | Fiskardo | 1.76 | 340 | P | Pb | 06 57 25.6 | +0.3 |
| FSK | | | | S | Sb | 06 57 49.0 | +2.0 |
| PVO | Paravola | 1.81 | 4 | P | Pb | 06 57 26.7 | +0.6 |
| PVO | Paravola | 1.81 | 4 | P | Pg | 06 57 27.6 | -0.7 |
| ANKY | Antikythira Is | 1.84 | 120 | P | Pb | 06 57 26.9 | +0.4 |
| ANKY | Antikythira Is | 1.84 | 120 | P | Pb | 06 57 27.0 | +0.4 |
| ANX | Ano Chora | 1.84 | 14 | P | Pb | 06 57 28.0 | +1.4 |
| EVGI | Lefkada island | 1.89 | 343 | P | Pb | 06 57 27.2 | -0.2 |
| EVGI | Lefkada island | 1.89 | 343 | P | Pb | 06 57 28.0 | +0.6 |
| NYDR | Nydri-Lefkada | 1.97 | 345 | P | Pb | 06 57 28.9 | +0.1 |
| NYDR | Nydri-Lefkada | 1.97 | 345 | P | Pb | 06 57 28.7 | 0.0 |
| NYDR | | | | S | Sb | 06 57 53.1 | +0.2 |
| LKD2 | Lefkada island | 2.05 | 345 | P | Pb | 06 57 29.9 | -0.3 |
| | baz=352 | | | | | | |
| LKD2 | | | | S | Sg | 06 58 04.0 | +4.4 |
| | baz=352 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=N,16nm,0.8s,baz=352 | | | | | | |
| LKD2 | Lefkada island | 2.05 | 345 | P | Pb | 06 57 30.2 | 0.0 |
| VILL | Villia | 2.07 | 49 | P | Pn | 06 57 28.9 | +1.6 |
| TSLK | Tsoukalades, L | 2.08 | 345 | P | Pb | 06 57 30.6 | -0.2 |
| TSLK | Tsoukalades, L | 2.08 | 345 | P | Pb | 06 57 30.1 | -0.7 |
| TSLK | | | | S | Sb | 06 57 57.2 | +0.9 |
| EVR | Evrytania | 2.14 | 10 | P | Pb | 06 57 31.2 | -0.5 |
| EVR | Evrytania | 2.14 | 10 | P | Pb | 06 57 31.9 | +0.2 |
| VLY | Voula,Athens | 2.21 | 61 | P | Pn | 06 57 30.7 | +1.4 |
| AXAR | Agios Charalam | 2.21 | 28 | P | Pn | 06 57 32.0 | +2.7 |
| AXAR | Agios Charalam | 2.21 | 28 | P | Pb | 06 57 32.3 | -0.7 |
| ATH | Athens Observa | 2.22 | 58 | P | Pn | 06 57 30.9 | +1.6 |
| ATH | Athens Observa | 2.22 | 58 | P | Pn | 06 57 31.9 | +2.6 |
| ATHU | Athens Univers | 2.26 | 59 | P | Pn | 06 57 31.2 | +1.3 |
| RODP | Rodopos | 2.32 | 122 | P | Pb | 06 57 33.4 | -1.3 |
| AGG | Agios Georgios | 2.34 | 19 | | Pb | 06 57 34.3 | -0.9 |
| AGG | Agios Georgios | 2.34 | 19 | P | Pb | 06 57 34.4 | -0.8 |
| AGG | Agios Georgios | 2.34 | 19 | P | Pb | 06 57 34.3 | -0.9 |
| AGG | Agios Georgios | 2.34 | 19 | P | Pb | 06 57 34.3 | -0.9 |
| PTL | Penteli | 2.36 | 58 | P | Pn | 06 57 32.6 | +1.3 |
| DION | Dionisos Attik | 2.42 | 58 | P | Pn | 06 57 34.6 | +2.5 |
| MHLO | Agia Marina, M | 2.46 | 92 | P | Pn | 06 57 33.9 | +1.3 |
| IMMV | Iera Moni Meta | 2.52 | 121 | P | Pn | 06 57 35.6 | +2.1 |
| THL | Klokotos Trika | 2.80 | 11 | P | Pn | 06 57 40.0 | +2.7 |
| THL | Klokotos Trika | 2.80 | 11 | P | Pn | 06 57 40.6 | +3.3 |
| KYMI | Kymi, Euboea I | 2.84 | 49 | P | Pn | 06 57 39.5 | +1.6 |
| JAN | Janina | 2.87 | 352 | P | Pn | 06 57 41.0 | +2.7 |
| JAN | Janina | 2.87 | 352 | P | Pn | 06 57 41.5 | +3.2 |
| NEO | Neokhori | 2.90 | 30 | P | Pn | 06 57 40.9 | +2.1 |
| PRNS | Prines Rethymn | 2.94 | 118 | P | Pn | 06 57 40.7 | +1.5 |
| TYRN | Tyrnavos | 2.98 | 13 | P | Pn | 06 57 41.4 | +1.6 |
| TYRN | Tyrnavos | 2.98 | 13 | P | Pn | 06 57 42.1 | +2.3 |
| KPRO | Kipourio | 3.14 | 0 | P | Pn | 06 57 45.2 | +3.1 |
| KEK | Kerkira | 3.14 | 338 | Pn | Pn | 06 57 43.7 | +1.6 |
| KEK | Kerkira | 3.14 | 338 | P | Pn | 06 57 43.9 | +1.8 |
| SRN | Sarande | 3.24 | 341 | P | Pn | 06 57 44.5 | +1.1 |
| | baz=347 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,1.9nm,1.2s,baz=347 | | | | | | |
| SRN | Sarande | 3.24 | 341 | P | Pn | 06 57 45.4 | +2.0 |
| IDI | Anoyia | 3.25 | 117 | Pn | Pn | 06 57 46.5 | +2.9 |
| IDI | Anoyia | 3.25 | 117 | P | Pn | 06 57 45.9 | +2.3 |
| IDI | Anoyia | 3.25 | 117 | Pn | Pn | 06 57 43.3 | -0.3 |
| | comp=E,9.1nm,0.4s,baz=290,slow=11,SNR=15 | | | | | | |
| IDI | | | | Sn | Sn | 06 58 16.7 | -5.1 |
| | comp=E,17nm,0.3s,baz=319,slow=17,SNR=7.4 | | | | | | |
| SANT | Santorini | 3.34 | 96 | *e*P | Pn | 06 57 47.7 | +2.9 |
| SANT | Santorini | 3.34 | 96 | Pn | Pn | 06 57 46.9 | +2.1 |
| SANT | Santorini | 3.34 | 96 | ⇑P | Pn | 06 57 48.1 | +3.3 |
| APE | Apeiranthos | 3.36 | 84 | *e*P | Pn | 06 57 44.9 | -0.2 |
| APE | Apeiranthos | 3.36 | 84 | ⇓P | Pb | 06 57 52.4 | -0.2 |
| APE | Apeiranthos | 3.36 | 84 | ⇑*i*P | Pn | 06 57 46.1 | +1.0 |
| PENT | Pentalofos | 3.38 | 357 | P | Pn | 06 57 49.1 | +3.6 |
| LIT | Litokhoron | 3.41 | 15 | Pn | Pn | 06 57 47.1 | +1.4 |
| LIT | Litokhoron | 3.41 | 15 | P | Pn | 06 57 47.9 | +2.2 |
| LIT | Litokhoron | 3.41 | 15 | P | Pn | 06 57 47.1 | +1.4 |
| KZN | Kozani | 3.51 | 5 | P | Pn | 06 57 50.0 | +2.8 |
| KZN | Kozani | 3.51 | 5 | P | Pn | 06 57 49.9 | +2.8 |
| NEST | Nestorio | 3.61 | 356 | P | Pn | 06 57 52.2 | +3.7 |
| KBN | Korca | 3.83 | 354 | Pn | Pn | 06 57 53.0 | +1.5 |
| KBN | Korca | 3.83 | 354 | P | Pn | 06 57 55.9 | +4.2 |
| | baz=357 | | | | | | |
| KBN | Korca | 3.83 | 354 | P | Pn | 06 57 53.1 | +1.5 |
| VLO | Vlora | 3.93 | 339 | | Pn | 06 57 55.0 | +2.1 |
| VLO | Vlora | 3.93 | 339 | P | Pn | 06 57 54.6 | +1.8 |
| | baz=344 | | | | | | |
| VLO | Vlora | 3.93 | 339 | P | Pn | 06 57 55.0 | +2.1 |
| SCTE | Santa Cesarea | 3.96 | 326 | | Pn | 06 57 54.3 | +1.0 |
| SCTE | Santa Cesarea | 3.96 | 326 | P | Pn | 06 57 54.7 | +1.4 |
| | baz=333 | | | | | | |
| FNA | Florina | 3.97 | 0 | | Pn | 06 57 55.8 | +2.3 |
| FNA | Florina | 3.97 | 0 | P | Pn | 06 57 55.6 | +2.1 |
| | baz=1.0 | | | | | | |
| FNA | | | | S | Sb | 06 58 53.2 | +2.6 |
| | baz=1.0 | | | | | | |
| FNA | Florina | 3.97 | 0 | P | Pn | 06 57 55.5 | +2.1 |
| FNA | Florina | 3.97 | 0 | P | Pn | 06 57 55.8 | +2.3 |
| HORT | Hortiatis | 4.02 | 19 | P | Pn | 06 57 55.8 | +1.6 |
| CHOS | Chios island | 4.06 | 66 | *e*P | Pn | 06 57 56.0 | +1.3 |
| OUR | Ouranopolis | 4.08 | 30 | P | Pn | 06 57 56.7 | +1.8 |
| ZKR | Zakros | 4.30 | 112 | *e*P | Pb | 06 58 06.5 | -2.0 |
| SOH | Sokhos | 4.30 | 21 | P | Pn | 06 58 00.3 | +2.3 |
| LIA | Limnos Island | 4.31 | 43 | P | Pn | 06 57 59.4 | +1.3 |
| OHR | Ohrid | 4.32 | 355 | *i* Pn | Pn | 06 58 01.3 | +3.0 |
| TIP | Timpagrande | 4.33 | 305 | Pn | Pn | 06 57 59.1 | +0.7 |
| TIP | Timpagrande | 4.33 | 305 | ⇓P | Pn | 06 57 59.6 | +1.2 |
| URLA | Izmir | 4.45 | 68 | *e*P | Pn | 06 58 01.1 | +1.1 |
| KOKK | Kokkinochori, | 4.51 | 27 | P | Pn | 06 58 02.6 | +1.8 |
| KNT | Kendrikon | 4.51 | 15 | P | Pn | 06 58 03.3 | +2.4 |
| CEL | Celeste | 4.57 | 290 | | Pn | 06 58 03.1 | +1.4 |
| VAY | Valandovo | 4.61 | 12 | *i* Pn | Pn | 06 58 04.6 | +2.5 |
| SRS | Serrai | 4.64 | 21 | P | Pn | 06 58 04.5 | +1.8 |
| SRS | Serrai | 4.64 | 21 | P | Pn | 06 58 04.2 | +1.5 |
| TIR | Tirane | 4.68 | 346 | | Pn | 06 58 03.5 | +0.4 |
| TIR | Tirane | 4.68 | 346 | P | Pn | 06 58 03.5 | +0.4 |
| | baz=350 | | | | | | |
| TIR | Tirane | 4.68 | 346 | ⇑P | Pn | 06 58 05.6 | +2.5 |
| TIR | Tirane | 4.68 | 346 | ⇑P | Pn | 06 58 05.6 | +2.5 |
| GCAM | G?zelcaml? | 4.78 | 78 | *e*P | Pn | 06 58 04.9 | +0.4 |
| BODT | Bodrum | 4.79 | 85 | *e*P | Pn | 06 58 05.4 | +0.7 |
| KAVA | Kavala | 4.86 | 30 | P | Pn | 06 58 07.1 | +1.5 |
| KARP | Karpathos | 4.87 | 103 | *e*P | Pn | 06 58 10.5 | +4.7 |
| KARP | Karpathos | 4.87 | 103 | Pn | Pn | 06 58 08.2 | +2.4 |
| KARP | Karpathos | 4.87 | 103 | P | Pb | 06 58 16.5 | -1.8 |
| NVR | Nevrokopi | 4.94 | 23 | P | Pn | 06 58 09.6 | +2.8 |
| EZN | Ezine | 4.94 | 51 | P | Pn | 06 58 07.6 | +0.9 |
| EZN | Ezine | 4.94 | 51 | P | Pn | 06 58 07.6 | +0.9 |
| | comp=E,62nm,0.7s,comp=E,878nmcomp=E,0.2nm | | | | | | |
| DAT | Datca | 5.00 | 89 | *e*P | Pn | 06 58 09.1 | +1.4 |
| MLSB | Milas | 5.17 | 83 | *e*P | Pn | 06 58 10.5 | +0.6 |
| NOCI | Noci | 5.19 | 321 | P | Pn | 06 58 10.9 | +0.7 |
| | baz=327 | | | | | | |
| MATE | Matera | 5.28 | 318 | ⇑P | Pn | 06 58 12.6 | +1.2 |
| PUK | Puka | 5.35 | 348 | | Pn | 06 58 13.8 | +1.4 |
| PUK | Puka | 5.35 | 348 | P | Pn | 06 58 14.0 | +1.6 |
| | baz=351 | | | | | | |
| CUC | Castrocucco | 5.38 | 308 | | Pn | 06 58 14.2 | +1.3 |
| RDO | Rodhopi | 5.42 | 36 | | Pn | 06 58 14.9 | +1.5 |
| ALN | Alexandroupoli | 5.49 | 41 | | Pn | 06 58 15.4 | +1.1 |
| ALN | Alexandroupoli | 5.49 | 41 | P | Pn | 06 58 15.4 | +1.1 |
| ARG | Arkhangelos | 5.49 | 94 | *e*P | Pn | 06 58 16.8 | +2.4 |
| ARG | Arkhangelos | 5.49 | 94 | | Pn | 06 58 17.1 | +2.8 |
| ARG | Arkhangelos | 5.49 | 94 | P | Pn | 06 58 17.1 | +2.8 |
| TURN | Turunc | 5.54 | 88 | *e*P | Pn | 06 58 16.0 | +1.1 |
| VAE | Valguarnera | 5.58 | 279 | Pn | Pn | 06 58 18.3 | +2.7 |
| | comp=E,29nm,0.6s,baz=360,slow=9.6,SNR=6.6 | | | | | | |
| VAE | | | | Sn | Sn | 06 59 22.0 | +2.8 |
| | comp=E,13nm,0.3s,baz=242,slow=9.5,SNR=4.2 | | | | | | |
| WDD | Wied Dalam | 5.59 | 262 | Pn | Pn | 06 58 17.1 | +1.4 |
| RAFF | Raffo Rosso | 5.60 | 276 | Pn | Pn | 06 58 16.9 | +1.0 |
| DRME | Dracevica, Mon | 5.62 | 343 | *e*Pn | Pn | 06 58 17.1 | +1.0 |
| DRME | Dracevica, Mon | 5.62 | 343 | ⇑*i*Pn | Pn | 06 58 16.8 | +0.7 |
| DRME | | | | *i* Sn | Sn | 06 59 18.9 | -1.3 |
| BUM | Brajici-Budva | 5.80 | 342 | ⇓*i*Pn | Pn | 06 58 18.9 | +0.3 |
| BUM | | | | *e*Sn | Sn | 06 59 22.7 | -2.0 |
| PDG | Podgorica | 5.84 | 345 | | Pn | 06 58 19.6 | +0.5 |
| PDG | Podgorica | 5.84 | 345 | ⇑P | Pn | 06 58 20.1 | +1.1 |
| PDG | Podgorica | 5.84 | 345 | ⇓*i*Pn | Pn | 06 58 20.0 | +0.9 |
| PDG | | | | *i* Sn | Sn | 06 59 23.9 | -1.6 |
| PVY | Plav | 5.88 | 350 | *e*Pn | Pn | 06 58 21.2 | +1.5 |
| PLD | Plovdiv | 5.94 | 25 | P | Pn | 06 58 26.4 | +5.9 |
| PLD | | | | pmax | pmax | | |
| | comp=Z,89nm,0.9s | | | | | | |
| CEME | Cevo | 6.03 | 343 | ⇓*i*Pn | Pn | 06 58 22.1 | +0.4 |
| CEME | | | | *i* Sn | Sn | 06 59 27.9 | -2.4 |
| KULA | Kula-Manisa | 6.05 | 71 | *e*P | Pn | 06 58 22.9 | +0.8 |
| IVA | Berane | 6.16 | 350 | ⇓*i*Pn | Pn | 06 58 25.5 | +2.0 |
| IVA | | | | *i* Sn | Sn | 06 59 31.3 | -2.2 |
| KOME | Kolasin | 6.20 | 347 | ⇓*i*Pn | Pn | 06 58 25.4 | +1.3 |
| KOME | | | | *i* Sn | Sn | 06 59 32.2 | -2.2 |
| FETY | Fethiye | 6.22 | 89 | *e*P | Pn | 06 58 25.9 | +1.6 |
| NKME | Niksic | 6.23 | 344 | ⇓*i*Pn | Pn | 06 58 25.3 | +0.8 |
| NKME | | | | *i* Sn | Sn | 06 59 32.9 | -2.3 |
| TREB | Trebinje | 6.33 | 340 | *e*Pn | Pn | 06 58 25.2 | -0.7 |
| CAME | Cameli-Denizli | 6.38 | 86 | *e*P | Pn | 06 58 27.9 | +1.2 |
| APMY | Acipayam-Deniz | 6.39 | 82 | *e*P | Pn | 06 58 27.7 | +0.9 |
| BRY | Bratogost | 6.46 | 341 | *e*Pn | Pn | 06 58 27.4 | -0.2 |
| BRY | Bratogost | 6.46 | 341 | ⇓*i*Pn | Pn | 06 58 27.5 | -0.2 |
| BRY | | | | *i* Sn | Sn | 06 59 38.7 | -2.2 |
| SJES | Sjenica | 6.53 | 351 | *e*Pn | Pn | 06 58 30.2 | +1.5 |
| CLTB | Caltabellotta | 6.54 | 279 | Pn | Pn | 06 58 30.4 | +1.6 |
| SGRT | San Giovanni R | 6.58 | 320 | Pn | Pn | 06 58 30.3 | +1.0 |
| SGRT | San Giovanni R | 6.58 | 320 | P | Pn | 06 58 30.3 | +1.0 |
| | baz=325 | | | | | | |
| UPM | Unac-Piva | 6.66 | 344 | *e*Pn | Pn | 06 58 33.2 | +2.7 |
| UPM | Unac-Piva | 6.66 | 344 | ⇓*i*Pn | Pn | 06 58 32.0 | +1.5 |
| UPM | | | | *i* Sn | Sn | 06 59 43.5 | -2.4 |
| STON | Ston | 6.67 | 336 | *e*Pn | Pn | 06 58 29.8 | -0.7 |
| AKAS | Kas | 6.68 | 92 | *e*P | Pn | 06 58 32.9 | +2.2 |
| PLE | Pljevlja | 6.68 | 348 | ⇑*i*Pn | Pn | 06 58 33.4 | +2.6 |
| PLE | | | | *i* Sn | Sn | 06 59 43.8 | -2.7 |
| PAOL | Paolisi | 6.76 | 311 | | Pn | 06 58 32.6 | +0.9 |
| BOVS | Bovan | 6.82 | 2 | ⇑P | Pn | 06 58 30.7 | -1.9 |
| ELL | Elmali | 6.87 | 88 | *e*P | Pn | 06 58 35.3 | +1.9 |
| ELL | Elmali | 6.87 | 88 | Pn | Pn | 06 58 34.2 | +0.8 |
| ELL | Elmali | 6.87 | 88 | P | Pn | 06 58 34.2 | +0.8 |
| RUDO | Rudo | 6.97 | 348 | *e*Pn | Pn | 06 58 34.5 | -0.1 |
| ELND | Elena | 7.03 | 28 | ⇑P | Pn | 06 58 38.6 | +3.1 |
| BBLS | Lazi&#263i | 7.20 | 349 | *e*Pn | Pn | 06 58 38.2 | +0.3 |
| HAPS | Han Pijesak,Bl | 7.49 | 347 | *e*Pn | Pn | 06 58 42.4 | +0.5 |
| INTR | Introdacqua | 7.75 | 314 | | Pn | 06 58 46.5 | +1.1 |
| TEKS | Tekeris | 7.85 | 350 | *e*Pn | Pn | 06 58 45.8 | -1.0 |
| MDVR | Moldovita | 7.97 | 2 | ⇑P | Pn | 06 58 49.5 | +1.2 |
| HERR | Herculane | 8.10 | 5 | ⇑P | Pn | 06 58 51.0 | +0.8 |
| MGRS | Mrkonjic Grad | 8.26 | 338 | *e*Pn | Pn | 06 58 53.9 | +1.6 |
| CAMP | Campotosto | 8.37 | 316 | | Pn | 06 58 55.6 | +1.6 |
| FRGS | Fruska Gora | 8.42 | 353 | *e*Pn | Pn | 06 58 53.2 | -1.3 |
| FRGS | Fruska Gora | 8.42 | 353 | ⇑P | Pn | 06 58 54.7 | +0.2 |
| A050A | Klekovaca | 8.49 | 336 | *e*Pn | Pn | 06 58 56.7 | +1.2 |
| BLY | Banja Luka | 8.54 | 340 | *e*Pn | Pn | 06 58 54.8 | -1.3 |
| GZR | Gura Zlata | 8.64 | 7 | ⇑P | Pn | 06 58 58.5 | +0.9 |
| GZR | Gura Zlata | 8.64 | 7 | ⇑P | Pn | 06 58 58.5 | +0.9 |
| NRCA | Norcia | 8.73 | 316 | | Pn | 06 59 01.0 | +2.2 |
| GUMA | Gualdo di Mace | 8.76 | 318 | | Pn | 06 59 00.2 | +1.0 |
| A051A | Mrakovica | 8.86 | 339 | *e*Pn | Pn | 06 58 59.8 | -0.7 |
| FDMO | Fiordimonte | 8.88 | 317 | | Pn | 06 59 02.6 | +1.8 |
| VOIR | | 9.06 | 17 | ⇑P | Pn | 06 59 06.0 | +2.6 |
| VOIR | | 9.06 | 17 | ⇑P | Pn | 06 59 06.0 | +2.6 |
| MLR | Muntele Rosu | 9.34 | 20 | | Pn | 06 59 09.3 | +2.0 |
| MLR | Muntele Rosu | 9.34 | 20 | Pn | Pn | 06 59 04.6 | -2.6 |
| | comp=Z,0.2nm,0.3s,baz=212,slow=13,SNR=1.7 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| MLR | Muntele Rosu | 9.34 | 20 | ⇑P | Pn | 06 59 09.4 | +2.2 |
| MLR | Muntele Rosu | 9.34 | 20 | ⇑P | Pn | 06 59 09.4 | +2.2 |
| MORH | Mrgy, Hungar | 9.61 | 349 | ⇑P | Pn | 06 59 12.5 | +1.7 |
| KEST | Kesra | 9.75 | 267 | | Pn | 06 59 15.0 | +2.1 |
| KEST | Kesra | 9.75 | 267 | Pn | Pn | 06 59 13.3 | +0.5 |
| | comp=Z,0.3nm,0.3s,baz=149,slow=2.6,SNR=12 | | | | | | |
| KEST | | | | Sn | Sn | 07 01 01.9 | 0.0 |
| | comp=Z,0.4nm,0.3s,baz=47,slow=19,SNR=1.9 | | | | | | |
| KEST | | | | LR | LR | 07 03 31.9 | |
| | comp=Z,190nm,19.7s,baz=334,slow=40 | | | | | | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| VSL | Villasalto | 9.80 | 290 | | Pn | 06 59 13.8 | +0.3 |
| BOJS | Bojanci | 9.82 | 334 | *i* Pn | Pn | 06 59 14.2 | +0.5 |
| BOJS | Bojanci | 9.82 | 334 | *e*Pn | Pn | 06 59 13.9 | +0.2 |
| TATN | Tataouine | 9.85 | 248 | Pn | Pn | 06 59 17.3 | +3.1 |
| PLOR5 | Plostina Array | 9.87 | 22 | P | Pn | 06 59 15.4 | +1.0 |
| | comp=Z,20nm,1.0s | | | | | | |
| PLOR | Plostina | 9.87 | 22 | ⇑P | Pn | 06 59 17.0 | +2.6 |
| PLOR | Plostina | 9.87 | 22 | ⇑P | Pn | 06 59 17.0 | +2.6 |
| PLOR3 | Plostina Array | 9.87 | 22 | P | Pn | 06 59 16.1 | +1.6 |
| | comp=Z,28nm,1.1s | | | | | | |
| VRI | Vrincioaia | 9.91 | 22 | ⇑P | Pn | 06 59 18.1 | +3.2 |
| VRI | Vrincioaia | 9.91 | 22 | ⇑P | Pn | 06 59 18.1 | +3.2 |
| VRI | Vrincioaia | 9.91 | 22 | P | Pn | 06 59 17.4 | +2.5 |
| | comp=Z,14nm,0.9s,comp=Z,292nm | | | | | | |
| CASP | Castiglione de | 10.03 | 310 | Pn | Pn | 06 59 18.6 | +2.0 |
| BR105 | Keskin Array S | 10.08 | 70 | P | Pn | 06 59 20.2 | +2.8 |
| | comp=Z,7.1nm,0.8s,comp=Z,68nm | | | | | | |
| BR131 | Keskin Array S | 10.10 | 70 | *i* P | Pn | 06 59 21.0 | +3.4 |
| BRTR | Keskin Array B | 10.10 | 70 | Pn | Pn | 06 59 14.6 | -3.0 |
| | baz=246,slow=13 | | | | | | |
| OSSC | Osservatorio P | 10.23 | 314 | Pn | Pn | 06 59 19.3 | 0.0 |
| CEY | Cerknica | 10.32 | 332 | *i* Pn | Pn | 06 59 21.7 | +1.1 |
| CEY | Cerknica | 10.32 | 332 | *e*Pn | Pn | 06 59 21.3 | +0.7 |
| SKDS | Skadanscina | 10.32 | 330 | *e*Pn | Pn | 06 59 20.0 | -0.6 |
| CRNS | Crni Vrh | 10.68 | 332 | *i* Pn | Pn | 06 59 26.0 | +0.6 |
| SABO | M.te Sabotino | 10.85 | 330 | | Pn | 06 59 27.6 | -0.1 |
| ZCCA | Zocca | 10.90 | 317 | | Pn | 06 59 30.7 | +2.2 |
| SOKA | Soboth | 10.93 | 336 | *i* Pn | Pn | 06 59 28.4 | -0.5 |
| | comp=Z,4.3nm,0.4s,SNR=11 | | | | | | |
| OBKA | Obir | 10.94 | 334 | *e*Pn | Pn | 06 59 30.8 | +1.7 |
| | comp=Z,3.2nm,0.4s | | | | | | |
| OBKA | | | | *e*Sn | Sn | 07 01 26.2 | -4.7 |
| | comp=Z,18nm,0.7s | | | | | | |
| PSZ | Piszkesteto | 11.15 | 355 | Pn | Pn | 06 59 32.6 | +0.6 |
| PSZ | Piszkesteto | 11.15 | 355 | P | Pn | 06 59 32.6 | +0.6 |
| BUR08 | Bucovina Ar. S | 11.20 | 14 | Pn | Pn | 06 59 31.6 | -1.0 |
| TEOL | Teolo | 11.23 | 323 | Pn | Pn | 06 59 32.3 | -0.7 |
| PRED | Cave del Predi | 11.24 | 331 | | Pn | 06 59 33.7 | +0.5 |
| ARSA | Arzberg | 11.29 | 339 | *e*Pn | Pn | 06 59 34.3 | +0.5 |
| | comp=Z,1.3nm,0.4s | | | | | | |
| ARSA | | | | *e*Sn | Sn | 07 01 35.9 | -3.5 |
| | comp=Z,4.4nm,0.8s | | | | | | |
| MYKA | Terra Mystica | 11.37 | 332 | Pn | Pn | 06 59 37.4 | +2.5 |
| | comp=Z,5.7nm,0.9s | | | | | | |
| MYKA | | | | *e*Sn | Sn | 07 01 40.4 | -1.0 |
| | comp=Z,5.8nm,0.6s | | | | | | |
| RONA | Rosalia, Austr | 11.50 | 343 | *i* Pn | Pn | 06 59 39.6 | +2.8 |
| | comp=Z,1.7nm,0.5s | | | | | | |

KECS **Kecovo** 11.68 357 *e*P Pn 06 59 40.4 +1.2
KECS **Kecovo** 11.68 357 *e*PN Pn 06 59 40.4 +1.2
CTI **Castel Tesino** 11.74 325 Pn Pn 06 59 40.4 +0.3
CTI **Castel Tesino** 11.74 325 P Pn 06 59 40.4 +0.3
KSV **Kosov** 11.82 12 P Pn 06 59 40.4 -0.6
KSV **Kosov** 11.82 12 P Pn 06 59 40.9 -0.1
CONA **Conrad Observa** 11.82 342 *i* Pn Pn 06 59 40.5 -0.7
comp=Z,0.7nm,0.4s
KBA **Koelnbreinsper** 11.86 332 *i* Pn Pn 06 59 42.9 +1.2
comp=Z,4.8nm,0.9s
ABTA **Abfaltersbach** 11.91 329 *e*Pn Pn 06 59 44.5 +2.2
comp=Z,4.3nm,0.6s
ABTA *e*Sn **Sn** 07 01 51.4 -3.3
comp=Z,22nm,0.6s
MMAI **Mount Meron Ar** 12.14 104 Pn Pn 06 59 41.5 -4.2
comp=Z,1.6nm,0.3s,baz=281,slow=10,SNR=2.0
MMAI Sn **Sn** 07 01 54.5 -6.0
comp=Z,3.2nm,0.3s,baz=295,slow=22,SNR=2.5
MMAI LR LR 07 04 59.5
comp=Z,72nm,20.5s,baz=271,slow=41
comp=Z,0.9nm,0.3s
MOA **Mollη** 12.21 337 *e*Pn Pn 06 59 47.4 +1.0
comp=Z,8.4nm,0.6s,SNR=7.0
MOA *e*Sn **Sn** 07 01 59.6 -2.3
comp=Z,5.2nm,0.5s
LESA **Schwarzleotal** 12.40 332 *i* Pn Pn 06 59 50.4 +1.4
comp=Z,6.3nm,0.6s
LESA *i* Sn **Sn** 07 02 00.9 -5.7
comp=Z,11nm,0.5s
WTTA **Wattenberg** 12.68 328 *e*Pn Pn 06 59 53.8 +0.7
comp=Z,2.7nm,0.7s
WTTA *e*Sn **Sn** 07 02 08.4 -5.4
comp=Z,20nm,0.9s
WATA **Walderalm** 12.77 329 *e*Pn Pn 06 59 56.4 +2.3
comp=Z,8.2nm,0.8s
WATA *e*Sn **Sn** 07 02 13.5 -2.3
comp=Z,24nm,0.8s
FUORN **Ofenpass-Fuorn** 12.82 323 Pn 06 59 55.5 +0.5
SQTA **Sankt Quirin** 12.83 327 *e*Sn **Sn** 07 02 16.6 -0.7
comp=Z,8.5nm,0.4s
FETA **Feichten** 12.89 326 Pn Pn 07 00 04.3 +8.4
comp=Z,7.2nm,1.6s
FETA *e*Sn **Sn** 07 02 16.0 -2.9
comp=Z,8.0nm,0.9s
VRAC **Vranov** 12.96 346 LR LR 07 05 28.0
comp=Z,112nm,18.5s,baz=168,slow=40
LISJ **El Lisan** 12.97 111 P Pn 06 59 58.0 +1.2
MOTA **Moosalm** 12.97 327 *e*Pn Pn 06 59 59.9 +3.0
comp=Z,7.1nm,1.1s
MOTA *e*Sn **Sn** 07 02 19.9 -0.9
comp=Z,19nm,0.9s
CKRC **Cesky Krumlov** 13.06 339 AMS AMS 07 06 00.0
comp=Z,400nm,16.1s
HSUJ **Al Zarqa** 13.12 107 P Pn 06 59 59.9 +1.0
TUE **Stuetta** 13.16 321 Pn 06 59 59.5 -0.2
OKC **Ostrava-Krasne** 13.23 351 AMS AMS 07 06 10.0
comp=Z,300nm,17.1s
RETA **Reutte** 13.23 327 *e*Pn Pn 07 00 03.1 +2.7
comp=Z,4.9nm,0.9s
RETA *i* Sn **Sn** 07 02 24.0 -3.1
comp=Z,12nm,0.7s
GERES **GERESS Array B** 13.26 337 Pn Pn 07 00 00.1 -0.7
GERES **GERESS Array B** 13.26 337 Pn Pn 07 00 00.7 -0.2
comp=Z,0.3nm,0.3s,baz=158,slow=11,SNR=2.6
GERES Sn Sn 07 02 17.6 -10
comp=Z,0.2nm,0.3s,baz=152,slow=28,SNR=1.5
comp=Z,1.7nm,0.6s
MBRI **Mt Berech** 13.32 118 P Pn 06 59 59.9 -1.9
SWQJ **Swaqa** 13.40 110 P Pn 07 00 02.8 0.0
EIL **Elat** 13.42 118 Pn Pn 07 00 00.2 -2.8
comp=Z,1.0nm,0.3s,baz=327,slow=17,SNR=2.7
EIL Sn Sn 07 02 17.8 -14
comp=Z,1.0nm,0.3s,baz=307,slow=16,SNR=1.8
comp=Z,2.0nm,0.4s
AQBJ **Aqaba** 13.46 118 P Pn 07 00 04.9 +1.4
DAVA **Damuels** 13.48 325 *e*Pn Pn 07 00 06.7 +2.8
comp=Z,2.9nm,0.5s
KHC **Kasperske Hory** 13.55 338 Pn Pn 07 00 04.4 -0.4
KHC **Kasperske Hory** 13.55 338 *e*P Pn 07 00 05.4 +0.7
KHC AMS AMS 07 06 20.0
comp=Z,400nm,13.1s
KHC **Kasperske Hory** 13.55 338 *ce*P Pn 07 00 03.9 -0.8
KHC pmax pmax
comp=Z,16nm,2.5s
KHC **Kasperske Hory** 13.55 338 P Pn 07 00 05.3 +0.6
comp=Z,6.5nm,0.8s
ZVC **Zvikov** 13.65 340 AMS AMS 07 06 30.0
comp=Z,300nm,11.1s
KRLC **Kraliky** 13.66 347 AMS AMS 07 06 40.0
comp=Z,300nm,12.6s
WET **Wettzell** 13.79 336 P P 07 00 17.2 +0.9
LUBAR **Lubar, Ukraine** 13.90 17 P Pn 07 00 09.6 +0.1
DPC **Dobruska-Polom** 14.01 347 AMS AMS 07 06 40.0
comp=Z,300nm,14.4s
PRU **Pruhonice** 14.06 342 AMS AMS 07 06 40.0
comp=Z,300nm,10.2s
PRA **Prague** 14.16 342 AMS AMS 07 06 40.0
comp=Z,300nm,10.2s
SENIN **Lac Senin/Sane** 14.18 317 Pn Pn 07 00 14.4 +1.0
ORIF **Oris-en-Rattie** 14.22 310 P P 07 00 19.3 -1.9
ORIF pmax pmax
comp=Z,9.0nm,1.0s
UPC **Upice** 14.22 346 AMS AMS 07 06 50.0
comp=Z,300nm,12.0s
SLE **Schleitheim** 14.48 323 P P 07 00 25.5 +1.5
ANN **Anapa** 14.55 52 *e*P Pn 07 00 19.6 +1.3
ANN pmax pmax
comp=Z,31nm,0.9s
PVCC **Panska Ves** 14.55 343 AMS AMS 07 06 50.0
comp=Z,200nm,11.0s
MI30 **MI30,Zelenitsa** 14.77 17 P Pn 07 00 22.7 +1.4
RNPP5 **Staryi Chortor** 14.78 11 P Pn 07 00 22.8 +1.4
AK07 **Malin Array Si** 14.85 20 P Pn 07 00 22.3 -0.1
AK13 **Malin Array Si** 14.87 19 P Pn 07 00 22.2 -0.4
STU **Stuttgart** 14.89 327 Pn Pn 07 00 23.2 +0.2
STU **Stuttgart** 14.89 327 P Pn 07 00 23.2 +0.2
AK14 **Malin Array Si** 14.90 20 P Pn 07 00 22.0 -1.0
AK10 **Malin Array Si** 14.91 20 P Pn 07 00 23.1 -0.1
HSKC **Hora Svate Kat** 14.92 340 AMS AMS 07 07 00.0
comp=Z,200nm,15.4s
AK12 **Malin Array Si** 14.92 20 P Pn 07 00 22.4 -1.0
AK02 **Malin Array Si** 14.95 20 P Pn 07 00 23.0 -0.7
AK19 **Malin Array Si** 14.96 19 P Pn 07 00 23.0 -0.8
AK11 **Malin Array Si** 14.96 20 P Pn 07 00 23.0 -0.8
KIEV **Kiev** 14.98 20 Pn 07 00 22.9 -1.3
KIEV **Kiev** 14.98 20 P Pn 07 00 22.9 -1.3
KIEV **Kiev** 14.98 20 P Pn 07 00 23.2 -1.0
comp=Z,71nm,0.7s
AKASG **Malin Array Be** 14.99 20 Pn Pn 07 00 23.4 -0.9
comp=Z,0.9nm,0.3s,baz=210,slow=12,SNR=9.9
comp=Z,1.3nm,0.5s
AKBB **Malin Array Si** 14.99 20 Pn 07 00 22.9 -1.4
AKBB **Malin Array Si** 14.99 20 *i* P Pn 07 00 23.2 -1.1
AKBB pmax pmax
comp=Z,7.0nm,0.7s
AKBB **Malin Array Si** 14.99 20 P Pn 07 00 23.2 -1.1
ECH **Echery** 15.44 322 P P 07 00 35.0 +0.3
ECH pmax pmax
comp=Z,9.0nm,1.4s
MOX **Moxa** 15.49 336 P Pn 07 00 31.4 +0.5
MOX pmax pmax
comp=Z,9.0nm,0.8s
SOC **Sochi** 15.57 59 *e*P Pn 07 00 30.7 -1.2
SOC *e* 07 03 24.3
SOC MLR MLR
comp=Z,76nm,18.0s
CLL **Collm** 15.67 340 *es*P P 07 00 38.0 +0.9
comp=Z,4.0nm,0.8s
CLL *i* PP **pwP** 07 00 43.9 -0.5
CLL *ex* x 07 00 48.0
CLL *ex* x 07 04 06.0
CLL **Collm** 15.67 340 *e*P P 07 00 38.0 +0.9
CLL pmax pmax
comp=Z,4.0nm,0.8s
GURO **Guroymak-BITLI** 16.47 78 P Pn 07 00 45.0 +1.3
ERBR **Yeremizino-Bor** 16.89 52 *e*P P 07 00 51.0 +0.3
ERBR pmax pmax
comp=Z,38nm,0.6s
WLF **Walferdange** 16.92 324 P P 07 00 54.0 +3.0
WLF pmax pmax
comp=Z,21nm,1.2s
SUW **Suwalki** 17.25 4 P Pn 07 00 52.4 -0.8
SUW **Suwalki** 17.25 4 P Pn 07 00 52.4 -0.8
SUW pmax pmax
comp=Z,64nm,0.8s
SHA1 **Shidzhatmaz** 17.65 60 *ce*P P 07 01 00.8 +1.4

KIV **Kislovodsk** 17.73 60 P Pn 07 01 00.2 +0.8
KIV **Kislovodsk** 17.73 60 *e*P Pn 07 01 00.8 +1.4
KIV pmax pmax
comp=Z,17nm,1.0s
KIV MLR MLR
comp=Z,12nm,14.0s
KIV **Kislovodsk** 17.73 60 P Pn 07 01 00.9 +1.5
comp=Z,17nm,0.9s
KBZ **Khabaz** 17.81 61 P Pn 07 00 57.7 -2.6
comp=Z,0.1nm,0.3s,baz=199,slow=22,SNR=1.7
comp=Z,6.2nm,0.9s
KBZ **Khabaz** 17.81 61 *ce*P P 07 01 02.5 +1.6
DOU **Dourbes** 17.95 323 *d*P P 07 01 04.6 +2.2
comp=Z,8.3nm,0.9s
MNK **Minsk** 18.26 12 *i* P Pn 07 01 00.7 -5.0
comp=E,5.0nm,0.5s
MNK *i* P Pn 07 01 00.7 -5.0
comp=N,35nm,0.8s
MNK *i* P Pn 07 01 00.7 -5.0
comp=Z,32nm,0.7s,baz=197
MNK *i* PP **pwP** 07 01 12.3 -0.4
MNK *i* S **Sn** 07 04 24.3 -4.7
MNK *i* SS **S** 07 04 39.2 +5.4
MNK *i* LR LR 07 06 53.4
MNK *i* LRM MLR 07 08 49.5
comp=Z,136nm,14.2s
MNK *i* LRM MLR 07 08 51.9
comp=E,39nm,12.8s
MNK *i* LRM MLR 07 08 57.7
comp=N,110nm,14.7s
MNK **Minsk** 18.26 12 *i* P Pn 07 01 00.6 -5.0
MNK *i* S **Sn** 07 04 24.2 -4.7
MNK pmax pmax
comp=N,35nm,0.9s
MNK pmax pmax
comp=E,5.0nm,0.5s
MNK pmax pmax
comp=Z,32nm,0.7s
MNK MLR MLR
comp=Z,136nm,14.0s
MNK MLR MLR
comp=E,39nm,13.0s
MNK MLR MLR
comp=N,110nm,15.0s
NACGM **Naroch** 18.48 10 *e*P P 07 01 07.4 -0.8
comp=N,1μm,0.8s,baz=194
GNI **Garni** 18.61 73 P P 07 01 09.6 -0.4
GNI **Garni** 18.61 73 LR LR 07 09 38.0
comp=N,67nm,22.0s,baz=290,slow=42
GNI **Garni** 18.61 73 *ce*P P 07 01 10.1 +0.2
GNI pmax pmax
comp=Z,19nm,1.7s
PABE **Paberze** 18.79 5 P P 07 01 11.2 -0.3
PABE **Paberze** 18.79 5 *e*P P 07 01 11.6 +0.1
VORD **Divnogorie** 19.10 37 *e*P P 07 01 12.8 -2.2
VORD pmax pmax
comp=Z,8.0nm,0.8s
VSR **Storozhevoye** 19.20 36 *e*P P 07 01 14.0 -2.2
VSR pmax pmax
comp=Z,5.0nm,0.8s
VORR **Voronezh** 19.53 35 *e*P P 07 01 13.9 -5.8
VORR pmax pmax
comp=Z,37nm,0.3s
LPSR **Galich'ya Gora** 20.05 33 *e*P P 07 01 23.2 -2.2
LPSR pmax pmax
comp=Z,30nm,0.8s
ESDC **Sonseca Array** 20.07 286 P P 07 01 26.0 +0.3
comp=Z,1.5nm,1.0s,baz=83,slow=12,SNR=5.8
DEL **Delary** 20.30 348 *i* P P 07 01 28.0 -0.1
VRH **Novokhopyorsk** 20.44 39 *e*P P 07 01 28.4 -1.2
VRH pmax pmax
comp=Z,59nm,0.6s
SLIT **Slitere, Latvi** 20.84 1 *e*P P 07 01 33.3 -0.6
OBN **Obninsk** 21.06 25 P P 07 01 36.0 -0.3
OBN **Obninsk** 21.06 25 P P 07 01 34.6 -1.7
comp=Z,17nm,0.4s,baz=333,slow=4.5,SNR=8.0
comp=Z,17nm,0.4s
OBN **Obninsk** 21.06 25 *c i*P P 07 01 36.0 -0.3
OBN *i* *SP **pwP** 07 01 41.9 -1.4
OBN PPP PPP 07 02 06.0
OBN 07 05 42.0
OBN SS Sn 07 06 15.0 +39
OBN pmax pmax
comp=Z,24nm,0.6s
OBN MLR MLR
comp=Z,52nm,16.0s
OBN **Obninsk** 21.06 25 P P 07 01 36.2 -0.1
comp=Z,50nm,0.8s
MDT **Midelt** 21.65 267 LR LR 07 11 26.0
comp=Z,57nm,20.8s,baz=87,slow=40
MOS **Moscow** 21.92 25 *e*P P 07 01 43.9 -1.6
MOS *e* 07 02 09.3
MOS pmax pmax
comp=Z,63nm,0.8s
VSU **Vasula** 21.95 8 *ce*P P 07 01 45.3 -0.5
VSU pmax pmax
comp=Z,66nm,0.7s
MTSE **Matsula** 21.98 3 *e*P P 07 01 46.2 +0.1
ARBE **Arbavere** 22.84 6 *e*P P 07 01 56.2 +0.9
MEF **Metsahovi** 23.51 4 *e*P P 07 02 01.3 -0.8
HFS **Hagfors** 23.85 351 P P 07 02 04.3 -1.1
comp=Z,12nm,0.6s,baz=156,slow=11,SNR=91
comp=Z,12nm,0.6s
BELG **Belogornoye** 24.16 42 P P 07 02 07.3 -1.0
comp=Z,73nm,0.7s,baz=252,slow=2.3,SNR=10
BELG LR LR 07 13 40.8
comp=Z,40nm,18.5s,baz=244,slow=42
BELG **Belogornoye** 24.16 42 *i* P P 07 02 08.6 +0.3
BELG pmax pmax
comp=Z,11nm,0.7s
NC602 **NORSAR Array S** 24.75 348 P P 07 02 13.8 +0.2
NC602 IAmb IAmb 07 02 26.9
comp=Z,6.4nm,0.7s
FINES **FINESS Array B** 24.84 5 P P 07 02 14.6 +0.2
FINES **FINESS Array B** 24.84 5 P P 07 02 14.1 -0.3
comp=Z,5.6nm,0.4s,baz=175,slow=11,SNR=81
FINES LR LR 07 13 20.5
comp=Z,84nm,18.6s,baz=200,slow=40
comp=Z,5.6nm,0.4s
FINES **FINESS Array B** 24.84 5 P P 07 02 14.6 +0.2
FIA1 **FINESS Array S** 24.84 5 P P 07 02 14.3 -0.1
EKA **Eskdalemuir Ar** 24.92 326 P P 07 02 15.6 +0.3
comp=Z,1.9nm,0.6s,baz=127,slow=8.7,SNR=9.2
comp=Z,1.9nm,0.6s
NAO01 **NORSAR Array S** 24.96 348 P P 07 02 15.8 +0.3
NAO01 IAmb IAmb 07 02 16.4
comp=Z,7.8nm,0.7s
NC405 **NORSAR Array S** 25.08 349 P P 07 02 16.3 -0.4
NC405 IAmb IAmb 07 02 29.1
comp=Z,6.5nm,0.8s
NB201 **NORSAR Array S** 25.08 348 P P 07 02 16.8 +0.1
NB201 IAmb IAmb 07 02 30.4
comp=Z,7.5nm,0.9s
NB2 **NORSAR Subarra** 25.09 348 P P 07 02 16.2 -0.5
comp=Z,3.6nm,0.6s,baz=157,slow=9.3
NOA **NORSAR Array B** 25.09 348 P P 07 02 16.6 -0.2
comp=Z,2.8nm,0.7s,baz=157,slow=9.0,SNR=25
comp=Z,2.8nm,0.7s
NBO00 **NORSAR Array S** 25.15 348 IAmb IAmb 07 02 32.1
comp=Z,7.4nm,0.8s
NC204 **NORSAR Array S** 25.39 348 IAmb IAmb 07 02 20.5
comp=Z,7.9nm,0.9s
KEF **Keuruu** 25.48 4 *e*P P 07 02 20.8 +0.6
VAF **Ylistaro** 26.27 1 *e*P P 07 02 28.3 +0.9
JOF **Joensuu** 26.85 10 *e*P P 07 02 32.1 -0.5
TOA0 **Torodi Ar. Sit** 29.41 222 P P 07 02 57.9 +2.0
TORD **Torodi Ar. Bea** 29.41 222 P P 07 02 56.8 +0.9
comp=Z,1.7nm,0.6s,baz=36,slow=9.9,SNR=7.8
TORD LR LR 07 15 12.0
comp=Z,45nm,18.5s,baz=352,slow=37
comp=Z,1.7nm,0.6s
AKTO **Aktyubinsk** 29.51 51 P P 07 02 54.2 -2.3
comp=Z,3.5nm,0.5s,baz=254,slow=9.5,SNR=9.8
comp=Z,3.5nm,0.5s
ABKAR **Akbulak array** 30.50 54 P P 07 03 04.8 -0.5
ARU **Arti** 31.67 40 P P 07 03 14.6 -0.8
ARU IAmb IAmb 07 03 26.6
comp=Z,4.0nm,0.8s
ARU **Arti** 31.67 40 P P 07 03 13.8 -1.6
comp=Z,2.2nm,0.4s,baz=256,slow=11,SNR=3.2
ARU LR LR 07 17 09.0
comp=Z,31nm,18.7s,baz=236,slow=39
comp=Z,2.2nm,0.4s
ARU **Arti** 31.67 40 *c i*P P 07 03 13.3 -2.2
ARU 07 04 16.0
ARU S **S** 07 08 23.3 -0.4

ARU pmax pmax
comp=Z,3.0nm,0.8s
FURI **Furi** 31.93 146 LR LR 07 18 31.1
comp=Z,52nm,18.3s,baz=312,slow=41
UOSS **Minazif** 32.00 102 P P 07 03 19.3 +0.5
ARCES **ARCESS Array B** 32.86 3 P P 07 03 25.1 -0.7
comp=Z,2.5nm,0.9s,baz=193,slow=9.9,SNR=6.9
ARCES LR LR 07 18 01.8
comp=Z,80nm,20.2s,baz=170,slow=39
comp=Z,2.5nm,0.9s
SIMJ **Simiganj** 37.41 72 P P 07 04 05.6 +0.1
SIMJ IAmb IAmb 07 04 06.2
comp=Z,7.0nm,0.8s
BRVK **Borovoye** 37.45 48 P P 07 04 05.3 -0.2
BRVK IAmb IAmb 07 04 06.0
comp=Z,4.3nm,0.6s
BRVK **Borovoye** 37.45 48 *ce*P P 07 04 05.0 -0.5
BRVK pmax pmax
comp=Z,5.0nm,0.7s
CHGR **Chuyangaron** 37.52 72 P P 07 04 06.6 +0.1
CHGR **Chuyangaron** 37.52 72 P P 07 04 06.6 +0.1
CHGR pmax pmax
comp=Z,22nm,0.7s
KK31 **Karatay Array** 37.77 65 P P 07 04 07.8 -0.5
KK31 IAmb IAmb 07 04 09.2
comp=Z,9.1nm,0.9s
KK31 **Karatay Array** 37.77 65 P P 07 04 07.8 -0.5
KK31 pmax pmax
comp=Z,9.0nm,0.9s
KKAR **Karatay Array** 37.77 65 P P 07 04 08.1 -0.2
KKAR IAmb IAmb 07 04 09.2
comp=Z,9.1nm,0.9s
KKAR **Karatay Array** 37.77 65 P P 07 04 08.0 -0.4
KKAR **Karatay Array** 37.77 65 P P 07 04 08.1 -0.2
KKAR pmax pmax
comp=Z,9.0nm,0.9s
MBAR **Mbarara** 38.23 165 P P 07 04 13.5 +0.9
MBAR **Mbarara** 38.23 165 LR LR 07 21 41.3
comp=Z,62nm,18.4s,baz=16,slow=39
MBAR **Mbarara** 38.23 165 P P 07 04 13.5 +0.9
MBAR pmax pmax
comp=Z,3.0nm,0.7s
GAR **Garm** 38.33 71 P P 07 04 13.9 +0.6
DBIC **Dimbokro** 38.36 225 P P 07 04 15.1 +1.6
DBIC IAmb IAmb 07 04 18.8
comp=Z,8.2nm,1.0s
DBIC **Dimbokro** 38.36 225 P P 07 04 14.7 +1.1
comp=Z,4.4nm,0.8s,baz=21,slow=8.2,SNR=7.4
comp=Z,4.4nm,0.8s
DBIC **Dimbokro** 38.36 225 P P 07 04 15.1 +1.6
DBIC pmax pmax
comp=Z,8.0nm,1.0s
TIC **Toumodi** 38.47 225⇑ *e*P P 07 04 15.5 +1.0
comp=Z,6.9nm,0.7s
KIC **Kosan Boka** 38.55 225⇑ *e*P P 07 04 16.2 +1.1
comp=Z,5.0nm,0.8s
LIC **Lamto** 38.82 225⇑ *e*P P 07 04 18.7 +1.3
comp=Z,14nm,0.8s
BBTS **Babate** 40.26 247 LR LR 07 23 30.6
comp=Z,138nm,18.3s,baz=298,slow=40
AAK **Ala-Archa** 40.73 65 P P 07 04 33.4 0.0
AAK **Ala-Archa** 40.73 65 *ce*P P 07 04 33.3 0.0
AAK pmax pmax
comp=Z,6.0nm,1.0s
SPITS **Spitsbergen Ar** 41.53 358 P P 07 04 38.4 -0.8
comp=Z,4.2nm,0.8s,baz=140,slow=9.1,SNR=1.6
comp=Z,4.2nm,0.8s
BOOM **Boomskoye usch** 41.81 65 P P 07 04 42.2 +0.1
NRN **Naryn** 42.06 66 IAmb IAmb 07 04 46.1
comp=Z,5.5nm,0.8s
KSH **Kashi** 42.48 69 P P 07 04 46.5 -1.2
KSH pmax pmax
comp=Z,5.0nm,0.8s
KURBB **Kurchatov Arra** 42.53 52 P P 07 04 46.7 -1.0
comp=Z,4.2nm,0.4s,baz=277,slow=8.5,SNR=42
comp=Z,4.2nm,0.4s
KURK **Kurchatov** 42.58 52 P P 07 04 47.4 -0.7
KURK **Kurchatov** 42.58 52 *ce*P P 07 04 47.1 -1.0
KURK pmax pmax
comp=Z,8.0nm,1.8s
MAKZ **Makanchi** 45.26 57 P P 07 05 09.1 -0.6
MAKZ **Makanchi** 45.26 57 P P 07 05 09.1 -0.6
MAKZ pmax pmax
comp=Z,1.0nm,0.6s
MK31 **Makanchi Array** 45.47 57 P P 07 05 10.7 -0.7
MK31 IAmb IAmb 07 05 11.0
comp=Z,4.3nm,0.6s
MK31 **Makanchi Array** 45.47 57 *ce*P P 07 05 10.3 -1.1
MKAR **Makanchi Array** 45.47 57 P P 07 05 10.7 -0.7
MKAR **Makanchi Array** 45.47 57 P P 07 05 10.4 -1.0
comp=Z,4.6nm,0.4s,baz=273,slow=7.1,SNR=38
comp=Z,4.6nm,0.4s
MKAR **Makanchi Array** 45.47 57 P P 07 05 10.7 -0.7
ZAA0 **Zalesovo Array** 46.13 47 P P 07 05 15.8 -0.6
ZALV **Zalesovo Beam** 46.13 47 P P 07 05 15.6 -0.8
ZALV **Zalesovo Beam** 46.13 47 P P 07 05 15.3 -1.1
comp=Z,8.0nm,0.6s,baz=275,slow=8.4,SNR=32
comp=Z,8.0nm,0.6s
ZALV **Zalesovo Beam** 46.13 47 P P 07 05 15.6 -0.8
SCHQ **Schefferville** 59.91 318 P P 07 06 58.1 0.0
comp=Z,2.8nm,0.7s,baz=54,slow=2.9,SNR=4.3
comp=Z,2.8nm,0.7s
TIXI **Tiksi** 60.70 20 LR LR 07 37 02.3
comp=Z,39nm,19.0s,baz=1.5,slow=40
SONM **Songino Array** 60.82 50 P P 07 07 04.3 -0.3
SONM **Songino Array** 60.82 50 P P 07 07 03.5 -1.1
comp=Z,2.1nm,0.6s,baz=281,slow=9.0,SNR=12
comp=Z,2.1nm,0.6s
SONM **Songino Array** 60.82 50 P P 07 07 04.3 -0.3
SONM pmax pmax
comp=Z,2.0nm,0.8s
ULN **Ulaanbaatar** 61.22 50 *ce*P P 07 07 06.6 -0.7
ULN pmax pmax
comp=Z,4.0nm,0.8s
LBTB **Lobatse** 61.62 176 LR LR 07 35 49.7
comp=Z,53nm,18.2s,baz=354,slow=38
BOSA **Boshof** 65.18 176 LR LR 07 38 07.9
comp=Z,54nm,18.1s,baz=12,slow=38
YAK **Yakutsk** 65.98 29 *ce*P P 07 07 37.0 -1.2
YAK pmax pmax
comp=Z,16nm,0.7s
HHC **Hu-ho-hao-te** 67.27 55 *e*P P 07 07 47.2 +0.2
HHC pmax pmax
comp=Z,18nm,0.6s
HHC pmax pmax
comp=Z,45nm,5.5s
PZH **PanZhiHua** 67.37 73 P P 07 07 48.7 +0.8
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,5.1s
SUR **Sutherland** 68.83 180 LR LR 07 43 33.0
comp=Z,39nm,20.6s,baz=354,slow=41
CMAR **Chiang Mai Arr** 69.43 82 P P 07 08 00.2 -0.5
comp=Z,2.0nm,0.5s,baz=300,slow=7.6,SNR=7.0
comp=Z,2.0nm,0.5s
GYA **Guiyang** 71.15 71 P P 07 08 11.5 +0.2
GYA pmax pmax
comp=Z,10.0nm,0.9s
HEH **HeiHe** 71.65 41 *e*P P 07 08 13.6 -0.1
HEH pmax pmax
comp=Z,16nm,0.8s
KLR **Kul'dur** 74.51 40 P P 07 08 30.5 -0.3
comp=Z,3.4nm,0.7s,baz=308,slow=6.6,SNR=10
KLR LR LR 07 43 05.5
comp=Z,18nm,20.3s,baz=290,slow=37
comp=Z,3.4nm,0.7s
KLR **Kul'dur** 74.51 40 *ce*P P 07 08 30.4 -0.3
KLR pmax pmax
comp=Z,5.0nm,0.9s
YKA **Yellowknife Ar** 74.90 340 P P 07 08 33.3 +0.6
comp=Z,0.6nm,0.7s,baz=39,slow=5.9,SNR=4.4
comp=Z,0.6nm,0.7s
MA2 **Magadan** 75.28 24 LR LR 07 45 15.9
comp=Z,16nm,19.6s,baz=276,slow=39
H29M **Whitestone** 76.11 352 P P 07 08 40.8 +1.2
H29M IAmb IAmb 07 08 41.9
comp=Z,3.7nm,0.7s
F21K **Alatna River** 76.22 358 P P 07 08 42.0 +1.7
F21K IAmb IAmb 07 08 42.8
comp=Z,3.5nm,0.8s
F19K **Shaleruckik Mo** 76.68 360 IAmb IAmb 07 08 44.4
comp=Z,3.3nm,0.9s
I30M **Mount Dempster** 76.82 351 IAmb IAmb 07 08 45.6
comp=Z,3.1nm,0.7s
NJ2 **Nanjing** 76.94 60 *e*P P 07 08 44.7 -0.2
NJ2 pmax pmax

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,11nm,0.7s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,220nm,4.0s | | | | | | |
| ULM | Lac du Bonnet | 77.19 | 324 | P | P | 07 08 47.0 | +1.0 |
| | comp=Z,2.1nm,0.7s,baz=94,slow=6.9,SNR=3.1 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| ULM | Lac du Bonnet | 77.19 | 324 | P | P | 07 08 47.0 | +1.0 |
| J30M | Hart River | 77.43 | 350 | P | P | 07 08 48.9 | +1.7 |
| J30M | | | | IAmb | IAmb | 07 08 49.6 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| IMAR | Indian Mountai | 77.46 | 358 | P | P | 07 08 48.9 | +1.6 |
| H21K | Melozitna Rive | 77.76 | 358 | IAmb | IAmb | 07 08 51.9 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 77.82 | 44 | P | P | 07 08 48.8 | -0.9 |
| | comp=Z,4.3nm,0.8s,baz=273,slow=4.8,SNR=9.1 | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| MDM | Murphy Dome | 78.23 | 355 | IAmb | IAmb | 07 08 53.6 | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| DAWY | Dawson | 78.31 | 351 | IAmb | IAmb | 07 08 53.8 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| J26L | Joseph Creek | 78.32 | 353 | IAmb | IAmb | 07 08 54.0 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| ILAR | Eielson Array | 78.33 | 355 | P | P | 07 08 53.4 | +1.3 |
| | comp=Z,0.7nm,0.7s,baz=342,slow=2.7,SNR=14 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| HDA | Harding Lake | 78.69 | 355 | IAmb | IAmb | 07 08 55.6 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| WRH | Wood River Hil | 78.71 | 355 | IAmb | IAmb | 07 08 55.8 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| KSAR | Wonju Array Be | 79.67 | 51 | P | P | 07 09 00.1 | +0.2 |
| KSAR | Wonju Array Be | 79.67 | 51 | P | P | 07 09 00.1 | +0.2 |
| KSRS | Korea Array | 79.69 | 51 | P | P | 07 08 60.0 | 0.0 |
| | comp=Z,3.5nm,0.7s,baz=310,slow=4.9,SNR=16 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| KSRS | Korea Array | 79.69 | 51 | P | P | 07 09 00.0 | 0.0 |
| M29M | Somme Creek | 79.76 | 351 | P | P | 07 09 02.2 | +2.1 |
| DHY | Denali Highway | 80.05 | 355 | IAmb | IAmb | 07 09 03.5 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| ASAJ | Asahikawa | 83.46 | 38 | LR | LR | 07 51 45.5 | |
| | comp=Z,19nm,18.4s,baz=62,slow=40 | | | | | | |
| BDFB | Brasilia | 83.53 | 245 | LR | LR | 07 47 02.8 | |
| | comp=Z,69nm,18.7s,baz=306,slow=36 | | | | | | |
| MJAR | Matsushiro Arr | 86.47 | 46 | P | P | 07 09 34.8 | -0.3 |
| | comp=Z,2.7nm,0.7s,baz=323,slow=3.9,SNR=5.3 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 119.82 | 93 | PKP | PKPdf | 07 15 42.4 | -0.6 |
| | comp=Z,0.3nm,0.6s,baz=315,slow=2.2,SNR=6.4 | | | | | | |
| ASAR | Alice Springs | 121.36 | 97 | PKP | PKPdf | 07 15 45.5 | -0.3 |
| | comp=Z,0.5nm,0.6s,baz=323,slow=2.0,SNR=8.4 | | | | | | |
| QSPA | South Pole Qui | 126.67 | 180 | PKP | PKPdf | 07 15 54.2 | -0.5 |
| | comp=Z,0.9nm,0.9s,baz=317,slow=1.7,SNR=2.1 | | | | | | |

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**IDC 02 07:08:26.1**±55.0**, 23°.71S×178°.96E, h0km, mb4.2**/3, **mbtmp4.2**/3**, Error ellipse: s-maj=984.3km s-min=143.8km az=86.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| STKA | Stephens Creek | 33.91 | 248 | P | P | 07 15 09.8 | -1.2 |
| | 2.0nm,0.4s,baz=97,slow=8.1,SNR=9.2 | | | | | | |
| | 2.0nm,0.4s | | | | | | |
| ASAR | Alice Springs | 41.12 | 261 | P | P | 07 16 12.0 | -0.2 |
| | 2.1nm,0.7s,baz=103,slow=7.9,SNR=19 | | | | | | |
| | 2.1nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 41.47 | 266 | P | P | 07 16 16.0 | +0.9 |
| | 1.5nm,0.3s,baz=97,slow=7.6,SNR=30 | | | | | | |
| | 1.5nm,0.3s | | | | | | |

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*SOME* ***02*** *07:50:39.2, 42°.02N×83°.68E, h5km*
*NNC* ***02*** *07:50:41.7±0.9, 42°.04N×83°.61E, h0km, mb3.8, mpv3.5, Error ellipse: s-maj=7.0km s-min=4.6km az=160.0*
**ISC 02 07:50:42.4**±2.7**, 42°.1N**±0°.1×**83°.53E**±0°.08**, h15km, n36,** σ**2s.87**/49**, 5C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KTMS | Ketmen | 2.72 | 302 | eP | Pb | 07 51 31.9 | +1.1 |
| | 4.4nm,0.8s | | | | | | |
| KTMS | | | | eS | Sg | 07 52 10.0 | +0.2 |
| | 22nm,0.7s | | | | | | |
| KTMS | Ketmen | 2.72 | 302 | Pg | Pb | 07 51 31.9 | +1.1 |
| | 4.4nm,0.8s | | | | | | |
| KTMS | | | | Lg | Lg | 07 52 10.0 | |
| | 22nm,0.7s | | | | | | |
| SHLS | Shalkode | 3.20 | 291 | eP | Pb | 07 51 36.3 | -2.6 |
| | 23nm,0.5s | | | | | | |
| SHLS | | | | eS | Sb | 07 52 17.5 | -0.2 |
| | 110nm,0.9s | | | | | | |
| SHLS | Shalkode | 3.20 | 291 | Pg | Pb | 07 51 36.3 | -2.6 |
| | 23nm,0.5s | | | | | | |
| SHLS | | | | Lg | Lg | 07 52 17.5 | |
| | 110nm,0.9s | | | | | | |
| PDGK | Podgornoye | 3.24 | 294 | Pg | Pb | 07 51 41.8 | +2.2 |
| | 2.4nm,0.6s | | | | | | |
| PDGK | | | | Lg | Lg | 07 52 26.9 | |
| | 13nm,0.7s | | | | | | |
| PDGK | Podgornoye | 3.24 | 294 | ⇑Pg | Pb | 07 51 42.8 | +3.2 |
| | 3.5nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 07 52 27.1 | |
| | 57nm,0.8s | | | | | | |
| UZB | Uzynbulak | 3.50 | 290 | eP | Pb | 07 51 46.2 | +2.1 |
| | 4.8nm,0.3s | | | | | | |
| UZB | | | | eS | Sg | 07 52 34.4 | -0.4 |
| | 17nm,1.0s | | | | | | |
| UZB | Uzynbulak | 3.50 | 290 | Pg | Pb | 07 51 46.2 | +2.1 |
| | 4.8nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 07 52 34.4 | |
| | 17nm,1.0s | | | | | | |
| DJR | Jarkent | 3.55 | 311 | eP | Pb | 07 51 47.1 | +2.1 |
| | 7.2nm,0.8s | | | | | | |
| DJR | | | | eS | Sg | 07 52 35.9 | -0.6 |
| | 12nm,0.7s | | | | | | |
| DJR | Jarkent | 3.55 | 311 | Pg | Pb | 07 51 47.1 | +2.1 |
| | 7.2nm,0.8s | | | | | | |
| DJR | | | | Lg | Lg | 07 52 35.9 | |
| | 12nm,0.7s | | | | | | |
| KPKS | Kokpek | 3.83 | 293 | eP | Pb | 07 51 52.9 | +3.2 |
| | 7.7nm,0.6s | | | | | | |
| KPKS | | | | eS | Sg | 07 52 45.8 | +0.3 |
| | 22nm,0.8s | | | | | | |
| KPKS | Kokpek | 3.83 | 293 | Pg | Pb | 07 51 52.9 | +3.2 |
| | 7.7nm,0.6s | | | | | | |
| KPKS | | | | Lg | Lg | 07 52 45.8 | |
| | 22nm,0.8s | | | | | | |
| SATY | Saty | 3.91 | 287 | eP | Pb | 07 51 54.0 | +2.8 |
| | 7.0nm,0.6s | | | | | | |
| SATY | | | | eS | Sg | 07 52 47.8 | -0.2 |
| | 34nm,0.6s | | | | | | |
| SATY | Saty | 3.91 | 287 | Pg | Pb | 07 51 54.0 | +2.8 |
| | 7.0nm,0.6s | | | | | | |
| SATY | | | | Lg | Lg | 07 52 47.8 | |
| | 34nm,0.6s | | | | | | |
| KNOS | Konyrlen | 3.92 | 307 | Pg | Pb | 07 51 54.2 | +2.9 |
| KNOS | | | | Lg | Lg | 07 52 48.2 | |
| KURS | Kuram | 4.20 | 292 | eP | Pb | 07 51 59.1 | +3.3 |
| | 5.9nm,0.9s | | | | | | |
| KURS | | | | eS | Sg | 07 52 56.8 | -0.3 |
| | 18nm,1.1s | | | | | | |
| KURS | Kuram | 4.20 | 292 | Pg | Pb | 07 51 59.1 | +3.3 |
| | 5.9nm,0.9s | | | | | | |
| KURS | | | | Lg | Lg | 07 52 56.7 | |
| | 18nm,1.1s | | | | | | |
| BLB | Baldybastay | 4.22 | 301 | Pg | Pb | 07 52 00.4 | +4.0 |
| | 28nm,0.7s | | | | | | |
| BLB | | | | Lg | Lg | 07 52 58.7 | |
| | 18nm,1.1s | | | | | | |
| ARXS | Arharly | 4.69 | 299 | eP | Pb | 07 52 08.6 | +4.1 |
| | 3.3nm,0.7s | | | | | | |
| ARXS | | | | eS | Sg | 07 53 12.7 | -0.4 |
| | 12nm,0.8s | | | | | | |
| ARXS | Arharly | 4.69 | 299 | Pg | Pb | 07 52 08.5 | +4.1 |
| | 3.3nm,0.7s | | | | | | |
| ARXS | | | | Lg | Lg | 07 53 12.7 | |
| | 12nm,0.8s | | | | | | |
| MK31 | Makanchi Array | 4.82 | 350 | ⇑Pg | Pb | 07 52 10.5 | +4.1 |
| | 8.8nm,0.7s,baz=161,slow=16,SNR=23 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 53 16.4 | |
| | 14nm,0.8s,baz=164,slow=25,SNR=4.5 | | | | | | |
| MAKZ | Makanchi | 4.88 | 347 | ⇓Pg | Pb | 07 52 11.3 | +3.9 |
| | 5.9nm,1.0s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 07 53 18.6 | |
| | 10nm,1.0s | | | | | | |
| MDOK | Medeo | 4.91 | 285 | eP | Pb | 07 52 11.8 | +3.6 |
| | 4.5nm,0.5s | | | | | | |
| MDOK | | | | eS | Sg | 07 53 18.4 | -1.5 |
| | 9.5nm,0.8s | | | | | | |
| MDOK | Medeo | 4.91 | 285 | Pg | Pb | 07 52 11.7 | +3.6 |
| | 4.5nm,0.5s | | | | | | |
| MDOK | | | | Lg | Lg | 07 53 18.4 | |
| | 9.5nm,0.8s | | | | | | |
| TNSS | Tian-Shan | 4.96 | 284 | eP | Pb | 07 52 12.5 | +3.4 |
| | 2.7nm,0.4s | | | | | | |
| TNSS | | | | eS | Sg | 07 53 19.6 | -2.0 |
| | 4.9nm,0.8s | | | | | | |
| TNSS | Tian-Shan | 4.96 | 284 | Pg | Pb | 07 52 12.5 | +3.4 |
| | 2.7nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 07 53 19.6 | |
| | 4.9nm,0.8s | | | | | | |
| CHKK | Chushkaly | 5.12 | 293 | eP | Pb | 07 52 16.2 | +4.5 |
| | 0.7nm,0.1s | | | | | | |
| CHKK | | | | eS | Sg | 07 53 26.1 | -0.7 |
| | 6.3nm,0.5s | | | | | | |
| CHKK | Chushkaly | 5.12 | 293 | Pg | Pb | 07 52 16.2 | +4.5 |
| | 0.7nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 07 53 26.1 | |
| | 6.3nm,0.5s | | | | | | |
| KTBS | Karatobe | 5.29 | 290 | eP | Pg | 07 52 21.2 | -2.5 |
| | 2.5nm,0.8s | | | | | | |
| KTBS | | | | eS | Sg | 07 53 34.6 | +2.3 |
| | 11nm,1.0s | | | | | | |
| KTBS | Karatobe | 5.29 | 290 | Pg | Pg | 07 52 21.2 | -2.5 |
| | 2.5nm,0.8s | | | | | | |
| KTBS | | | | Lg | Lg | 07 53 34.6 | |
| | 11nm,1.0s | | | | | | |
| ZSN | Zaisan | 5.47 | 10 | eP | Pb | 07 52 20.7 | +3.1 |
| | 3.9nm,0.2s | | | | | | |
| ZSN | | | | eS | Sg | 07 53 33.5 | -4.5 |
| | 15nm,1.2s | | | | | | |
| ZSN | Zaisan | 5.47 | 10 | Pg | Pb | 07 52 20.7 | +3.1 |
| | 3.9nm,0.2s | | | | | | |
| ZSN | | | | Lg | Lg | 07 53 33.5 | |
| | 15nm,1.2s | | | | | | |
| KST | Kastek | 5.67 | 283 | eP | Pg | 07 52 27.1 | -3.9 |
| | 3.5nm,0.7s | | | | | | |
| KST | | | | eS | Sg | 07 53 44.6 | +0.2 |
| | 6.5nm,1.1s | | | | | | |
| KST | Kastek | 5.67 | 283 | Pg | Pg | 07 52 27.1 | -3.9 |
| | 3.5nm,0.7s | | | | | | |
| KST | | | | Lg | Lg | 07 53 44.6 | |
| | 6.5nm,1.1s | | | | | | |
| DGS | Degeres | 5.84 | 284 | eP | Pg | 07 52 30.6 | -3.6 |
| | 2.3nm,0.6s | | | | | | |
| DGS | | | | eS | Sg | 07 53 51.0 | +1.2 |
| | 5.6nm,1.0s | | | | | | |
| DGS | Degeres | 5.84 | 284 | Pg | Pg | 07 52 30.6 | -3.6 |
| | 2.3nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 07 53 51.0 | |
| | 5.6nm,1.0s | | | | | | |

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**IDC 02 08:05:54.7**±3.1**, 54°.75N×86°.76E, h0km, mbtmp3.2**/2**, ML3.0**/2**, Error ellipse: s-maj=26.0km s-min=19.3km az=41.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.39 | 236 | I | I | 08 14 10.0 | |
| | baz=57,slow=318,SNR=2.6 | | | | | | |
| ZALV | Zalesovo Beam | 1.39 | 236 | Pg | Pg | 08 06 19.8 | -1.6 |
| | 1.9nm,0.3s,baz=55,slow=17,SNR=15 | | | | | | |
| ZALV | | | | Lg | Lg | 08 06 37.5 | |
| | 1.9nm,0.3s,baz=52,slow=28,SNR=4.5 | | | | | | |
| KURBB | Kurchatov Arra | 6.49 | 234 | Pn | Pn | 08 07 31.6 | +0.2 |
| | 0.2nm,0.3s,baz=53,slow=14,SNR=8.5 | | | | | | |
| KURBB | | | | Sn | Sn | 08 08 46.9 | +0.9 |
| | baz=41,slow=28,SNR=1.2 | | | | | | |
| KURBB | | | | Lg | Lg | 08 09 23.1 | |
| | 0.1nm,0.3s,baz=50,slow=30,SNR=2.3 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 8.45 | 201 | Pn | Pn | 08 07 59.7 | +1.3 |
| | 0.3nm,0.3s,baz=19,slow=14,SNR=3.3 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

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*IDC* ***02*** *08:13:30.4±0.7, 3°.49S×145°.07E, h0km, mb4.3/15, mbtmp4.4/17, ML2.6/2, MS4.6/46, Error ellipse: s-maj=26.8km s-min=11.1km az=90.0*
*BJI* ***02*** *08:13:30.8±0.0, 3°.54S×145°.49E, h23km, mb4.8/66, mB5.1/34, Ms4.9/67, Ms7 4.7/66*
*MOS* ***02*** *08:13:31.4±1.1, 3°.53S×144°.86E, h10km, mb5.0/36, Error ellipse: s-maj=9.6km s-min=5.6km az=117.3*
*DJA* ***02*** *08:13:32.3±2.1, 3°S±4°×14°5E±°, h11km±16km, M4.8/15, mb4.9/15, mB5.3/8, MLv4.9/3, Mw(mB)4.7/8, MwMwp4.5/3, Mwp4.9/3*
*NEIC* ***02*** *08:13:33.2±1.6, 3°.45S±0°.04×144°.95E±0°.06, h10km±1km, mb5.0/74, Error ellipse: s-maj=12.3km s-min=3.7km az=241.0*
*GCMT* ***02*** *08:13:35.2±0.1, 3°.35S±0°.01×144°.87E±0°.01, h12km, MW5.2/141, Moment Tensor Solution. s99,c148; s141,c258; Duration: 1s.0 Moment tensor: Scale 10^16 Nm; Mrr0.60±.12; Mθθ-0.79±.13; Mϕϕ0.19±.14; Mrθ0.28±.31; Mθϕ9.22±.09; Mϕr1.38±.31; Best double couple: Mo9.34500×10^16 NP1:ϕs358.00000°, δ87.00000°, λ171.00000°. NP2:ϕs89.00000°, δ81.00000°, λ3.00000°. Principal axes: T 9.1010, Plg8.0000°, Azm313.0000°; N 0.4870, Plg81.0000°, Azm161.0000°; P -9.5880, Plg4.0000°, Azm44.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 02 08:13:34.7**±0.3**, 3°.56S**±0°.04×**144°.97E**±0°.05**, h22km, h22km:pP-P, n278,** σ**1s.94**/285**, mb4.9**/105**, MS4.7**/71**, 12C-3D, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MANU | Manus Island | 2.83 | 58 | | Pn | 08 14 16.1 | -2.6 |
| TABU | Tabubil | 4.10 | 245 | P | Pn | 08 14 38.1 | +1.9 |
| JAY | Jayapura | 4.38 | 284 | P | Pn | 08 14 37.3 | -2.8 |
| JAY | Jayapura | 4.38 | 284 | P | Pn | 08 14 35.9 | -4.2 |
| GENI | Genyem | 4.89 | 281 | P | Pn | 08 14 49.2 | +2.2 |
| GENI | Genyem | 4.89 | 281 | P | Pn | 08 14 46.4 | -0.6 |
| KAVG | Kavieng | 5.91 | 81 | P | Pn | 08 15 05.1 | +4.1 |
| PMG | Port Moresby | 6.20 | 160 | P | Pn | 08 15 07.2 | +2.2 |
| PMG | Port Moresby | 6.20 | 160 | P | Pn | 08 15 06.4 | +1.4 |
| PMG | Port Moresby | 6.20 | 160 | Pn | Pn | 08 15 06.0 | +1.0 |
| PMG | Port Moresby | 6.20 | 160 | Pn | Pn | 08 15 05.4 | +0.3 |
| | 7.7nm,0.3s,baz=6.4,slow=6.2,SNR=10 | | | | | | |
| PMG | | | | Sn | Sn | 08 16 16.7 | +1.4 |
| | 2.4nm,0.3s,baz=43,slow=12,SNR=4.5 | | | | | | |
| PMG | | | | LR | LR | 08 17 57.9 | |
| | comp=Z,17µm,19.0s,baz=326,slow=43 | | | | | | |
| | 25nm,0.4s | | | | | | |
| PMG | Port Moresby | 6.20 | 160 | ceP | Pn | 08 15 05.8 | +0.8 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,43nm,1.7s | | | | | | |
| RABL | Rabaul | 7.21 | 95 | Pn | Pn | 08 15 18.7 | -0.2 |
| COEN | Coen | 10.48 | 190 | P | Pn | 08 16 06.7 | +2.9 |
| COEN | Coen | 10.48 | 190 | Pn | Pn | 08 16 06.2 | +2.4 |
| SWI | Sorong | 13.96 | 281 | P | Pn | 08 16 47.8 | -3.6 |
| SWI | | | | pmax | pmax | | |
| | comp=Z,56nm,1.2s | | | | | | |
| MTSU | Mount Surprise | 14.50 | 182 | P | Pn | 08 17 01.5 | +2.7 |
| HNR | Honiara | 15.98 | 112 | P | P | 08 17 23.6 | +1.9 |
| | comp=Z,281nm,0.9s | | | | | | |
| HNR | Honiara | 15.98 | 112 | Pn | Pn | 08 17 17.4 | -0.9 |
| HNR | Honiara | 15.98 | 112 | LR | LR | 08 22 36.0 | |
| | comp=Z,19µm,20.0s,baz=277,slow=34 | | | | | | |
| HNR | Honiara | 15.98 | 112 | P | Pn | 08 17 17.4 | -0.9 |
| HNR | | | | pmax | pmax | | |
| | comp=Z,401nm,1.1s | | | | | | |
| DRS | Darwin Rock St | 16.48 | 237 | P | Pn | 08 17 25.0 | +0.3 |
| | comp=Z,40nm,1.2s | | | | | | |
| CTA | Charters Tower | 16.48 | 176 | Pn | Pn | 08 17 25.1 | +0.5 |
| | baz=345,slow=12,SNR=4.2 | | | | | | |
| CTA | | | | LR | LR | 08 23 56.5 | |
| | comp=Z,173nm,21.3s,baz=358,slow=38 | | | | | | |
| CTAO | Charters Tower | 16.48 | 176 | P | P | 08 17 26.9 | -0.3 |
| CTAO | Charters Tower | 16.48 | 176 | P | P | 08 17 28.1 | +0.9 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,19nm,1.5s | | | | | | |
| MTN | Manton Dam | 16.50 | 235 | P | P | 08 17 27.2 | -0.3 |
| MTN | Manton Dam | 16.50 | 235 | | Pn | 08 17 23.2 | -1.8 |
| QIS | Mount Isa | 17.69 | 197 | P | P | 08 17 41.8 | +1.2 |
| TNTI | Ternate | 18.11 | 283 | P | Pn | 08 17 44.7 | -0.4 |
| WRAB | Tennant Creek | 19.29 | 212 | i P | P | 08 17 56.6 | -1.7 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,111nm,1.5s | | | | | | |
| WB2 | Warramunga Arr | 19.30 | 212 | P | P | 08 17 57.1 | -1.2 |
| WB2 | | | | IAmb | IAmb | 08 17 59.8 | |
| | comp=Z,62nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 19.30 | 212 | P | P | 08 17 57.6 | -0.9 |
| WRA | Warramunga Arr | 19.30 | 212 | P | P | 08 17 57.5 | -1.0 |
| | comp=Z,12nm,0.5s,baz=33,slow=11,SNR=103 | | | | | | |
| WRA | | | | S | Sn | 08 21 32.4 | -3.2 |
| | comp=Z,3.9nm,1.1s,baz=28,slow=22,SNR=4.8 | | | | | | |
| WRA | | | | LR | LR | 08 26 17.1 | |
| | comp=Z,11µm,18.8s,baz=33,slow=40 | | | | | | |
| WRA | Warramunga Arr | 19.30 | 212 | P | P | 08 17 57.6 | -0.9 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.6s | | | | | | |
| KNRA | Kununurra | 19.98 | 232 | P | P | 08 18 03.8 | -2.1 |
| KNRA | | | | IAmb | IAmb | 08 18 14.0 | |
| | comp=Z,134nm,1.3s | | | | | | |
| RK1H | Rockhampton Ha | 20.42 | 165 | P | Pn | 08 18 13.1 | +0.4 |
| | comp=Z,36nm,1.3s | | | | | | |
| KMSI | Cibinong | 21.38 | 281 | P | P | 08 18 20.0 | -1.0 |
| SOEI | Soe | 21.45 | 252 | P | P | 08 18 23.6 | +1.6 |
| SOEI | Soe | 21.45 | 252 | | P | 08 18 19.1 | -2.8 |
| SOEI | Soe | 21.45 | 252 | P | P | 08 18 21.3 | -0.7 |
| | comp=Z,199nm,1.5s | | | | | | |
| DAV | Davao City (W) | 22.05 | 299 | LR | LR | 08 26 47.1 | |
| | comp=Z,811nm,18.9s,baz=110,slow=36 | | | | | | |
| DAV | Davao City (W) | 22.05 | 299 | P | P | 08 18 25.0 | -3.2 |
| BATI | Baumata | 22.15 | 252 | P | P | 08 18 30.9 | +1.6 |
| | comp=Z,137nm,1.3s,comp=Z,2µm | | | | | | |
| LUWI | Luwuk | 22.32 | 276 | P | P | 08 18 34.6 | +3.5 |
| | comp=Z,141nm,1.5s | | | | | | |
| LUWI | Luwuk | 22.32 | 276 | P | P | 08 18 30.9 | -0.2 |
| EIDS | Eidsvold | 22.47 | 165 | P | P | 08 18 35.6 | +3.0 |
| EIDS | Eidsvold | 22.47 | 165 | P | P | 08 18 32.9 | +0.3 |
| EIDS | | | | IAmb | IAmb | 08 18 40.7 | |
| | comp=Z,46nm,1.2s | | | | | | |
| AS01 | Alice Springs | 22.65 | 207 | P | P | 08 18 34.6 | 0.0 |
| AS31 | Alice Springs | 22.67 | 207 | P | P | 08 18 33.5 | -1.3 |
| ASAR | Alice Springs | 22.67 | 207 | P | P | 08 18 34.0 | -0.8 |
| ASAR | Alice Springs | 22.67 | 207 | P | P | 08 18 34.1 | -0.7 |
| | comp=Z,17nm,0.8s,baz=30,slow=11,SNR=132 | | | | | | |
| ASAR | | | | S | S | 08 22 45.6 | +3.6 |
| | comp=Z,0.9nm,0.9s,baz=104,slow=40,SNR=2.2 | | | | | | |
| ASAR | | | | LR | LR | 08 28 23.5 | |
| | comp=Z,7µm,19.6s,baz=38,slow=39 | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | |
| QLP | Quilpie | 22.90 | 182 | P | P | 08 18 39.6 | +2.4 |
| FITZ | Fitzroy Crossi | 23.81 | 231 | P | P | 08 18 43.6 | -2.7 |
| INKA | Innaminka | 24.38 | 189 | P | P | 08 18 53.2 | +1.7 |
| TOLI2 | Tolitoli | 24.62 | 280 | P | P | 08 18 57.4 | +3.6 |
| TOLI2 | Tolitoli | 24.62 | 280 | P | P | 08 18 52.1 | -1.7 |
| TOLI2 | | | | IAmb | IAmb | 08 18 59.9 | |
| | comp=Z,42nm,0.8s | | | | | | |
| KAPI | Kappang | 25.19 | 266 | LR | LR | 08 30 37.2 | |
| | comp=Z,809nm,22.0s,baz=89,slow=41 | | | | | | |
| KAPI | Kappang | 25.19 | 266 | i P | P | 08 18 58.5 | -0.5 |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,52nm,1.6s | | | | | | |
| OOD | Oodnadatta | 25.68 | 199 | P | P | 08 19 04.0 | +0.8 |
| ARMA | Armidale | 27.45 | 167 | P | P | 08 19 19.9 | +0.6 |
| ARMA | | | | IAmb | IAmb | 08 19 31.8 | |
| | comp=Z,54nm,1.6s | | | | | | |
| LCRK | Leigh Creek | 27.50 | 193 | P | P | 08 19 23.3 | +3.7 |
| LIFNC | LIFOU | 27.62 | 130 | P | P | 08 19 21.5 | +0.6 |
| DZM | Mont Dzumac | 27.80 | 133 | eP | P | 08 19 19.6 | -3.0 |
| | comp=Z,57nm,1.4s | | | | | | |
| DZM | | | | eS | S | 08 24 03.9 | -0.6 |
| | comp=Z,712nm,28.1s | | | | | | |
| DZM | | | | eLR | LR | 08 26 28.3 | |
| | comp=Z,3µm,25.9s | | | | | | |
| DZM | Mont Dzumac | 27.80 | 133 | LR | LR | 08 29 37.7 | |
| | comp=Z,984nm,18.9s,baz=311,slow=35 | | | | | | |
| STKA | Stephens Creek | 28.35 | 186 | P | P | 08 19 26.8 | -0.4 |
| STKA | Stephens Creek | 28.35 | 186 | P | P | 08 19 26.3 | -0.9 |
| | comp=Z,8.2nm,1.1s,baz=13,slow=14,SNR=3.4 | | | | | | |
| STKA | | | | LR | LR | 08 30 54.9 | |
| | comp=Z,2µm,19.1s,baz=5.2,slow=37 | | | | | | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| STKA | Stephens Creek | 28.35 | 186 | i P | P | 08 19 29.3 | +2.1 |
| MBWA | Marble Bar | 30.14 | 232 | P | P | 08 19 41.4 | -1.9 |
| PSA00 | Pilbara Seismi | 30.27 | 232 | P | P | 08 19 43.5 | -0.9 |
| BBOO | Buckleboo | 30.27 | 195 | P | P | 08 19 45.1 | +0.8 |
| JCJ | Chichijima | 30.59 | 355 | LR | LR | 08 31 42.1 | |
| | comp=Z,656nm,18.1s,baz=164,slow=36 | | | | | | |
| FORT | Forrest | 31.43 | 209 | P | P | 08 19 53.5 | -1.0 |
| H11N1 | WAKE ISLAND Hy | 31.61 | 42 | T | T | 08 53 07.2 | |
| | baz=225,slow=76,SNR=13 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 31.62 | 42 | T | T | 08 53 06.2 | |
| | baz=225,slow=76,SNR=16 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 31.62 | 42 | T | T | 08 53 08.5 | |
| | baz=225,slow=76,SNR=12 | | | | | | |
| JOW | Kunigami | 34.25 | 333 | LR | LR | 08 31 05.8 | |
| | comp=Z,2µm,21.4s,baz=128,slow=31 | | | | | | |
| GIRL | Giralia | 35.30 | 235 | P | P | 08 20 27.9 | -0.5 |
| MSVF | Nonsavu | 35.34 | 116 | LR | LR | 08 33 06.0 | |
| | comp=Z,416nm,21.4s,baz=303,slow=33 | | | | | | |
| JNU | Nakatsue | 38.84 | 341 | LR | LR | 08 34 18.7 | |
| | comp=Z,1µm,20.8s,baz=156,slow=32 | | | | | | |
| NWAO | Narrogin (SRO) | 39.07 | 218 | LR | LR | 08 38 37.7 | |
| | comp=Z,3µm,18.1s,baz=36,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 40.39 | 352 | P | P | 08 21 08.7 | -2.5 |
| | comp=Z,3.3nm,0.8s,baz=180,slow=8.2,SNR=10 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| MAJO | Matsushiro | 40.39 | 352 | P | P | 08 21 08.8 | -2.4 |
| MAJO | Matsushiro | 40.39 | 352 | i P | P | 08 21 09.8 | -1.4 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,21nm,1.4s | | | | | | |
| MJB9 | Matsu-Tunnel | 40.40 | 352 | P | P | 08 21 09.1 | -2.1 |
| QIZ | Qiongzhong | 41.21 | 304 | P | P | 08 21 17.6 | -0.6 |
| QIZ | | | | PP | PP | 08 22 54.2 | +0.6 |
| QIZ | | | | S | S | 08 27 32.1 | +1.1 |
| QIZ | | | | SS | SS | 08 30 37.7 | +3.1 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,170nm,3.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,420nm,22.4s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,450nm,22.0s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,920nm,23.6s | | | | | | |
| SSE | Sheshan | 41.25 | 328 | P | P | 08 21 18.3 | -0.1 |
| SSE | | | | S | S | 08 27 32.1 | +0.9 |
| SSE | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,110nm,3.7s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,580nm,19.2s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,420nm,18.9s | | | | | | |
| JMM | Marumori | 41.40 | 355 | P | P | 08 21 17.0 | -2.4 |
| JMM | | | | IAmb | IAmb | 08 21 25.8 | |
| | comp=Z,39nm,1.4s | | | | | | |
| NJ2 | Nanjing | 43.24 | 327 | eP | P | 08 21 34.8 | +0.2 |
| NJ2 | | | | S | S | 08 28 05.5 | +4.9 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,61nm,3.5s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,790nm,23.7s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,550nm,23.7s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,1µm,22.6s | | | | | | |
| KSRS | Korea Array | 43.78 | 340 | P | P | 08 21 37.1 | -1.7 |
| | comp=Z,1.8nm,0.9s,baz=164,slow=8.8,SNR=7.9 | | | | | | |
| KSRS | | | | LR | LR | 08 36 48.7 | |
| | comp=Z,1µm,21.7s,baz=150,slow=32 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| KSAR | Wonju Array Be | 43.78 | 340 | P | P | 08 21 37.4 | -1.4 |
| KSAR | Wonju Array Be | 43.78 | 340 | P | P | 08 21 37.4 | -1.4 |
| BKNI | Bangkinang | 44.07 | 274 | P | P | 08 21 39.1 | -2.5 |
| WHN | Wuhan | 44.78 | 321 | P | P | 08 21 49.2 | +2.3 |
| WHN | | | | S | S | 08 28 24.7 | +1.7 |
| WHN | | | | LR | LR | | |
| | comp=Z,2µm,18.4s | | | | | | |
| URZ | Urewera | 45.30 | 144 | LR | LR | 08 39 05.8 | |
| | comp=Z,673nm,21.4s,baz=36,slow=34 | | | | | | |
| RTZ | Ruatahuna | 45.47 | 144 | P | P | 08 21 52.3 | -0.1 |
| RTZ | | | | IAmb | IAmb | 08 22 08.0 | |
| | comp=Z,22nm,1.0s | | | | | | |
| BKZ | Black Stump Fm | 45.56 | 145 | P | P | 08 21 52.9 | -0.2 |
| BKZ | | | | IAmb | IAmb | 08 21 54.0 | |
| | comp=Z,21nm,1.1s | | | | | | |
| TUWZ | Tuamarina | 45.79 | 149 | P | P | 08 21 55.0 | +0.1 |
| RPZ | Rata Peaks | 46.17 | 154 | LR | LR | 08 39 40.8 | |
| | comp=Z,796nm,20.4s,baz=314,slow=34 | | | | | | |
| BFZ | Birch Farm | 46.47 | 147 | P | P | 08 21 59.8 | -0.4 |

**TIA Tai'an 47.35 329** P **P** **08 22 06.6 -0.6**
TIA S **S** **08 29 02.0 +2.0**
TIA SS **SS** **08 32 21.2 -6.7**
TIA pmax pmax
comp=Z,6.0nm,0.9s
TIA pmax pmax
comp=Z,100nm,3.6s
TIA LR LR
comp=Z,790nm,16.9s
TIA LR LR
comp=Z,1μm,17.7s
TIA LR LR
comp=Z,2μm,17.6s
**DL2 Dalian 47.43 335** P **P** **08 22 06.9 -0.8**
DL2 S **S** **08 29 02.1 +1.2**
DL2 pmax pmax
comp=Z,16nm,1.1s
DL2 pmax pmax
comp=Z,94nm,7.4s
DL2 LR LR
comp=Z,790nm,27.0s
DL2 LR LR
comp=Z,460nm,16.4s
DL2 LR LR
comp=Z,1μm,22.1s
**JKA Kamikawa-asahi 47.51 358** P **P** **08 22 07.2 -1.0**
**ASAJ Asahikawa 47.51 358** P **P** **08 22 07.3 -0.9**
ASAJ pmax pmax
comp=Z,31nm,1.4s
**GYA Guiyang 47.56 311** P **P** **08 22 11.2 +2.1**
GYA S **S** **08 29 05.7 +2.2**
GYA pmax pmax
comp=Z,21nm,1.0s
GYA pmax pmax
comp=Z,270nm,5.8s
GYA LR LR
comp=Z,210nm,13.5s
GYA LR LR
comp=Z,540nm,18.4s
GYA LR LR
comp=Z,510nm,18.9s
**GSI Gunungsitoli 47.62 275** P **P** **08 22 07.5 -2.1**
**VLA Vladivostok 47.95 347** *i* P **P** **08 22 12.8 +1.2**
VLA pmax pmax
comp=Z,22nm,1.2s
**LYN LuoYang 48.70 324** *e*P **P** **08 22 21.5 +3.9**
LYN S **S** **08 29 24.0 +4.9**
LYN LR LR
comp=Z,2μm,19.2s
LYN LR LR
comp=Z,660nm,20.3s
LYN LR LR
comp=Z,2μm,19.6s
**USA0B Ussuriysk Arra 48.95 348** P **P** **08 22 18.7 -0.7**
USA0B IAmb IAmb 08 22 35.4
comp=Z,19nm,1.4s
**USA0B Ussuriysk Arra 48.95 348**⇑ *i* P **P** **08 22 19.3 -0.1**
**USRK Ussuriysk Ar. 48.95 348** P **P** **08 22 19.1 -0.3**
**USRK Ussuriysk Ar. 48.95 348** P **P** **08 22 18.4 -1.0**
comp=Z,4.2nm,0.7s,baz=190,slow=9.7,SNR=11
USRK LR LR 08 41 15.2
comp=Z,313nm,19.1s,baz=164,slow=34
comp=Z,4.2nm,0.7s
**USRK Ussuriysk Ar. 48.95 348** P **P** **08 22 19.1 -0.3**
**HNS HongShan 49.51 328**⇑ P **P** **08 22 23.9 +0.1**
HNS S **S** **08 29 34.5 +4.1**
HNS pmax pmax
comp=Z,17nm,1.2s
HNS LR LR
comp=Z,870nm,20.7s
HNS LR LR
comp=Z,420nm,19.1s
HNS LR LR
comp=Z,1μm,19.9s
**MDJ Mudanjiang 49.90 346** P **P** **08 22 22.2 -4.4**
MDJ S **S** **08 29 37.2 +1.7**
MDJ ScS **ScS** **08 32 10.6 -6.3**
MDJ pmax pmax
comp=Z,7.0nm,0.8s
MDJ LR LR
comp=Z,310nm,23.4s
MDJ LR LR
comp=Z,460nm,20.3s
MDJ LR LR
comp=Z,770nm,24.1s
**KMI Kunming 49.92 307**⇑ P **P** **08 22 29.2 +1.8**
KMI S **S** **08 29 40.2 +3.3**
KMI pmax pmax
comp=Z,24nm,1.4s
KMI LR LR
comp=Z,390nm,23.1s
KMI LR LR
comp=Z,240nm,23.2s
KMI LR LR
comp=Z,710nm,24.5s
**CN2 Changchun 50.31 342** *e*P **P** **08 22 31.0 +1.2**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 LR LR
comp=Z,500nm,16.0s
CN2 LR LR
comp=Z,400nm,16.0s
CN2 LR LR
comp=Z,700nm,16.0s
**CM31 Chiang Mai Arr 50.33 297** P **P** **08 22 28.5 -1.8**
CM31 IAmb IAmb 08 22 41.7
comp=Z,15nm,1.0s
**CMAR Chiang Mai Arr 50.33 297** P **P** **08 22 30.0 -0.3**
**CMAR Chiang Mai Arr 50.33 297** P **P** **08 22 30.6 +0.2**
comp=Z,2.7nm,0.7s,baz=115,slow=5.9,SNR=14
CMAR LR LR 08 41 26.1
comp=Z,235nm,21.6s,baz=105,slow=33
comp=Z,2.7nm,0.7s
**YSS Yuzh-Sakhalins 50.34 358** *e*P **P** **08 22 30.8 +1.0**
YSS *e*S **S** **08 29 43.8 +2.3**
YSS smax smax
comp=E,400nm,6.2s
YSS MLR MLR
comp=Z,500nm,14.0s
**CHTO Chiang Mai 50.45 298** P **P** **08 22 31.1 -0.2**
CHTO IAmb IAmb 08 22 42.6
comp=Z,20nm,1.4s
**CHTO Chiang Mai 50.45 298** P **P** **08 22 31.1 -0.2**
CHTO pmax pmax
comp=Z,20nm,1.5s
**XAN Xi'an 50.52 321**⇑ P **P** **08 22 31.5 -0.1**
XAN S **S** **08 29 44.4 -0.3**
XAN sS sS 08 29 58.7 +3.7
XAN SS **SS** **08 33 14.2 -5.0**
XAN pmax pmax
comp=Z,25nm,1.4s
XAN LR LR
comp=Z,670nm,18.4s
XAN LR LR
comp=Z,480nm,17.5s
XAN LR LR
comp=Z,980nm,17.5s
**PZH PanZhiHua 51.37 308** P **P** **08 22 39.7 +1.5**
PZH pmax pmax
comp=Z,7.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,4.8s
**BNX BinXian 51.51 344**⇓ P **P** **08 22 38.9 +0.2**
BNX S **S** **08 29 56.9 -1.0**
BNX pmax pmax
comp=Z,7.0nm,0.9s
BNX LR LR
comp=Z,320nm,18.4s
BNX LR LR
comp=Z,310nm,17.3s
BNX LR LR
comp=Z,550nm,19.5s
**CD2 Chengdu 52.13 314** P **P** **08 22 44.6 +0.9**
CD2 S **S** **08 30 09.8 +2.7**
CD2 pmax pmax
comp=Z,40nm,1.1s
CD2 pmax pmax
comp=Z,120nm,4.9s
CD2 LR LR
comp=Z,390nm,12.2s
CD2 LR LR
comp=Z,520nm,17.8s
CD2 LR LR
comp=Z,540nm,18.8s
**HHC Hu-ho-hao-te 53.71 329** *e*P **P** **08 22 56.7 +1.4**
HHC sP sP 08 23 03.3 -0.8
HHC S **S** **08 30 28.4 0.0**
HHC SS **SKiKP** **08 34 09.9 +0.9**
HHC pmax pmax
comp=Z,15nm,0.7s
HHC pmax pmax
comp=Z,100nm,4.7s
HHC LR LR
comp=Z,560nm,21.4s
HHC LR LR
comp=Z,540nm,20.6s
HHC LR LR
comp=Z,970nm,19.9s
**KLR Kul'dur 53.82 349** LR LR 08 44 20.7
comp=Z,342nm,19.1s,baz=168,slow=34
**KLR Kul'dur 53.82 349** *ce*P **P** **08 22 56.1 +0.4**
KLR pmax pmax
comp=Z,11nm,1.3s
**XLT XiLinHaoTe 53.91 334** *e*P **P** **08 22 56.8 +0.2**
XLT S **S** **08 30 32.2 +1.3**
XLT pmax pmax
comp=Z,6.0nm,1.0s
XLT pmax pmax
comp=Z,97nm,8.7s
XLT LR LR
comp=Z,47nm,21.8s
XLT LR LR
comp=Z,390nm,18.2s
XLT LR LR
comp=Z,710nm,19.2s
**TYV Tymovskoe 54.25 358** *e*P **P** **08 22 59.4 +0.6**
TYV *e*S **S** **08 30 39.9 +4.9**
TYV pmax pmax
comp=Z,4.0nm,0.9s
TYV pmax pmax
comp=Z,100nm,3.3s
TYV smax smax
comp=N,100nm,6.3s
TYV smax smax
comp=E,200nm,6.3s
**BTO Baotou 54.34 328** *e*P **P** **08 23 01.8 +1.9**
BTO pP **pP** **08 23 05.8 -0.5**
BTO sP **sP** **08 23 08.4 -0.6**
BTO S **S** **08 30 45.3 +8.3**
BTO sS **sS** **08 30 48.7 +1.4**
BTO SS **SS** **08 34 21.9 +2.4**
BTO pmax pmax
comp=E,16nm,0.8s
BTO pmax pmax
comp=E,200nm,5.1s
BTO LR LR
comp=E,2μm,20.6s
BTO LR LR
comp=E,1μm,20.6s
BTO LR LR
comp=E,2μm,20.8s
**LZH Lanzhou 55.05 319** P **P** **08 23 06.5 +1.3**
LZH sP pP 08 23 13.0 +1.4
LZH S **S** **08 30 47.4 +0.6**
LZH sS sS 08 31 02.7 +5.3
LZH SS **SS** **08 34 30.1 -0.8**
LZH pmax pmax
comp=E,33nm,1.1s
LZH pmax pmax
comp=E,190nm,4.8s
LZH LR LR
comp=E,580nm,15.8s
LZH LR LR
comp=E,250nm,16.3s
LZH LR LR
comp=E,860nm,17.0s
**HEH HeiHe 55.70 346** *e*P **P** **08 23 09.2 -0.1**
HEH pP **sP** **08 23 18.6 +0.4**
HEH S **S** **08 30 55.1 +0.6**
HEH SS **SS** **08 34 41.4 +1.2**
HEH pmax pmax
comp=E,9.0nm,0.9s
HEH LR LR
comp=E,200nm,15.1s
HEH LR LR
comp=E,430nm,16.0s
HEH LR LR
comp=E,560nm,17.8s
**ZEA Zeya 58.99 348** *e*P **P** **08 23 33.5 +1.0**
ZEA pmax pmax
comp=Z,10.0nm,1.5s
**GTA Gaotai 59.58 320** P **P** **08 23 38.3 +1.2**
GTA pP pP 08 23 43.4 -0.1
GTA S **S** **08 31 47.1 +0.9**
GTA pmax pmax
comp=Z,12nm,1.5s
GTA LR LR
comp=Z,210nm,20.0s
GTA LR LR
comp=Z,270nm,21.1s
GTA LR LR
comp=Z,330nm,21.5s
**ULN Ulaanbaatar 61.01 332** P **P** **08 23 46.3 -0.5**
ULN IAmb IAmb 08 23 49.1
comp=Z,34nm,1.9s
**ULN Ulaanbaatar 61.01 332** *ce*P **P** **08 23 47.5 +0.7**
ULN pmax pmax
comp=Z,16nm,1.7s
**SHEM Shemya Is, Ala 61.23 20** LR LR 08 46 17.3
comp=Z,617nm,20.5s,baz=259,slow=32
**GOMU GeErMu 61.25 315** P **P** **08 23 50.1 +1.2**
GOMU S **S** **08 32 10.4 +2.2**
GOMU SS **SS** **08 36 10.7 +1.9**
GOMU pmax pmax
comp=Z,20nm,0.8s
GOMU pmax pmax
comp=Z,250nm,5.3s
GOMU LR LR
comp=Z,640nm,19.5s
GOMU LR LR
comp=Z,900nm,21.0s
GOMU LR LR
comp=Z,2μm,21.5s
**SONM Songino Array 61.30 331** P **P** **08 23 48.2 -0.5**
**SONM Songino Array 61.30 331** P **P** **08 23 47.5 -1.2**
comp=Z,3.3nm,1.1s,baz=155,slow=4.9,SNR=11
SONM LR LR 08 48 42.3
comp=Z,791nm,21.1s,baz=136,slow=34
comp=Z,3.3nm,1.1s
**SONM Songino Array 61.30 331** P **P** **08 23 48.2 -0.5**
SONM pmax pmax
comp=Z,10.0nm,1.5s
**MA2 Magadan 63.11 3** LR LR 08 48 42.7
comp=Z,153nm,21.7s,baz=192,slow=34
**MA2 Magadan 63.11 3** *i* P **P** **08 23 59.9 -0.5**
MA2 pmax pmax
comp=Z,10.0nm,0.8s
**ZAK Zakamensk 64.55 332** *e*P **P** **08 24 10.1 -0.1**
ZAK pmax pmax
comp=Z,10.0nm,1.5s
**PALK Pallekele 65.03 280** LR LR 08 53 50.2
comp=Z,92nm,19.8s,baz=208,slow=37
**PPT2 Papeete2 65.54 108** *e*S **S** **08 32 58.3 -3.5**
comp=Z,85nm,27.5s
PPT2 *e*LQ LQ 08 41 06.3
comp=Z,480nm,27.8s
PPT2 *e*LR LR 08 43 48.7
comp=Z,448nm,27.2s
PPT2 *e*LR LR 08 43 59.8
comp=Z,580nm,24.0s
**TBI Tubuai 66.19 114** *e*S **S** **08 33 10.0 +0.7**
comp=Z,304nm,24.0s
TBI *e*SS **SS** **08 37 26.4 +0.8**
comp=Z,937nm,32.0s
TBI *e*LQ LQ 08 41 22.1
comp=Z,4μm,32.0s
TBI *e*LR LR 08 44 10.9
comp=Z,3μm,27.0s
TBI *e*LR LR 08 44 14.1
comp=Z,1μm,27.2s
**YAK Yakutsk 66.45 352** LR LR 08 52 21.7
comp=Z,298nm,19.8s,baz=156,slow=35
**YAK Yakutsk 66.45 352** *i* P **P** **08 24 21.8 -0.3**
YAK pmax pmax
comp=Z,18nm,0.9s
**SEY Seymchan 66.55 4** *ce*P **P** **08 24 22.9 +0.2**
SEY pmax pmax
comp=Z,6.0nm,0.9s
**CASY Casey 67.08 194** P **P** **08 24 26.2 +0.1**
CASY IAmb IAmb 08 24 33.1
comp=Z,15nm,1.2s
**WMQ Urumqi 69.63 319** *e*P **P** **08 24 43.4 +0.8**
WMQ pmax pmax
comp=Z,23nm,1.3s
WMQ LR LR
comp=Z,190nm,24.2s
**BILL Bilibino 72.98 8**⇓ *e*P **P** **08 25 02.7 +0.4**
BILL *PP **pP** **08 25 05.0 -3.9**
BILL *SP **pwP** **08 25 07.0 -4.0**
BILL 08 25 20.0
BILL pmax pmax
comp=Z,9.0nm,1.1s
BILL MLR MLR
comp=Z,169nm,19.0s
**ZSN Zaisan 73.00 322** *e*P **P** **08 25 03.2 +0.3**
baz=322
**ZSN Zaisan 73.00 322** *e*P **P** **08 25 03.1 +0.3**
**MK31 Makanchi Array 74.34 321** P **P** **08 25 10.3 -0.4**
MK31 IAmb IAmb 08 25 13.0
comp=Z,19nm,1.4s
**MK31 Makanchi Array 74.34 321** *ce*P **P** **08 25 11.5 +0.8**
**MKAR Makanchi Array 74.34 321** P **P** **08 25 10.3 -0.5**
comp=Z,4.2nm,0.9s,baz=101,slow=6.3,SNR=26
MKAR LR LR 08 56 21.3
comp=Z,245nm,22.0s,baz=114,slow=35
comp=Z,4.2nm,0.9s
**VNDA Vanda 74.46 176** P **P** **08 25 11.6 +0.8**
**VNDA Vanda 74.46 176** P **P** **08 25 11.1 +0.2**
comp=Z,2.2nm,0.7s,baz=316,slow=6.8,SNR=15
comp=Z,2.2nm,0.7s
**VNDA Vanda 74.46 176** P **P** **08 25 11.6 +0.8**
VNDA pmax pmax
comp=Z,4.0nm,1.0s
**TAOE Nuku Hiva Isla 74.53 98** *e*LR LR 08 48 06.0
comp=Z,626nm,40.1s
**MAKZ Makanchi 74.54 321** P **P** **08 25 11.7 -0.2**
MAKZ IAmb IAmb 08 25 14.1
comp=Z,19nm,1.3s
**MAKZ Makanchi 74.54 321** P **P** **08 25 11.7 -0.2**
MAKZ pmax pmax
comp=Z,19nm,1.3s
**SHLS Shalkode 74.88 316** *e*P **P** **08 25 12.7 -1.4**
comp=Z,9.1nm,1.2s,baz=316
**SHLS Shalkode 74.88 316** *e*P **P** **08 25 12.7 -1.4**
SHLS pmax pmax
comp=Z,9.0nm,1.2s
**SBA Scott Base 75.13 175** P **P** **08 25 16.9 +2.2**
SBA IAmb IAmb 08 25 55.2
comp=Z,28nm,1.8s
**SBA Scott Base 75.13 175** P **P** **08 25 16.9 +2.2**
SBA pmax pmax
comp=Z,28nm,1.8s
**UZB Uzynbulak 75.18 316** *e*P **P** **08 25 16.2 +0.2**
comp=Z,11nm,1.1s,baz=316
**UZB Uzynbulak 75.18 316** *e*P **P** **08 25 16.1 +0.2**
UZB pmax pmax
comp=Z,11nm,1.1s
**PRZ Przheval'sk 75.40 315** P **P** **08 25 18.8 +1.6**
PRZ pmax pmax
comp=Z,22nm,1.3s
**KPKS Kokpek 75.52 316** *e*P **P** **08 25 18.1 +0.3**
comp=Z,7.1nm,1.1s,baz=316
**KPKS Kokpek 75.52 316** *e*P **P** **08 25 18.0 +0.3**
KPKS pmax pmax
comp=Z,7.0nm,1.1s
**TARG Taragay, Kyrgy 75.58 315** P **P** **08 25 18.2 -0.3**
**TARG Taragay, Kyrgy 75.58 315** P **P** **08 25 18.2 -0.3**
TARG pmax pmax
comp=Z,8.0nm,1.1s
**SATY Saty 75.58 316** *e*P **P** **08 25 18.5 +0.4**
baz=316
**SATY Saty 75.58 316** *e*P **P** **08 25 18.5 +0.4**
**ZHN Zhinishke 75.60 316** *e*P **P** **08 25 18.6 +0.3**
baz=316
**ZHN Zhinishke 75.60 316** *e*P **P** **08 25 18.5 +0.3**
**TIXI Tiksi 75.80 355** LR LR 08 58 39.4
comp=Z,231nm,20.1s,baz=174,slow=36
**ZAA0 Zalesovo Array 75.88 328** P **P** **08 25 18.7 -0.7**
**ZALV Zalesovo Beam 75.88 328** P **P** **08 25 18.4 -1.1**
**ZALV Zalesovo Beam 75.88 328** P **P** **08 25 18.9 -0.5**
comp=Z,1.2nm,0.6s,baz=120,slow=5.8,SNR=4.8
ZALV LR LR 08 57 17.1
comp=Z,964nm,22.0s,baz=114,slow=35
comp=Z,1.2nm,0.6s
**M14K Bethel 76.07 24** P **P** **08 25 19.9 -0.4**
**TDK Taldyqorghan 76.22 318** *e*P **P** **08 25 22.2 +0.6**
comp=Z,7.8nm,0.5s,baz=318
**TDK Taldyqorghan 76.22 318** *e*P **P** **08 25 22.2 +0.6**
TDK pmax pmax
comp=Z,8.0nm,0.5s
**KSH Kashi 76.25 312** P **P** **08 25 24.4 +2.4**
KSH pP pP 08 25 28.8 +0.2
KSH pmax pmax
comp=Z,7.0nm,1.5s
KSH LR LR
comp=Z,440nm,19.7s
KSH LR LR
comp=Z,350nm,15.5s
KSH LR LR
comp=Z,320nm,20.8s
**MDOK Medeo 76.56 316** *e*P **P** **08 25 23.9 +0.1**
baz=316
**MDOK Medeo 76.56 316** *e*P **P** **08 25 23.8 +0.1**
**TNSS Tian-Shan 76.59 316** *e*P **P** **08 25 24.2 -0.1**
baz=316
**TNSS Tian-Shan 76.59 316** *e*P **P** **08 25 24.1 -0.1**
**AAA Alma-Ata 76.66 316** *e*P **P** **08 25 24.4 +0.1**
baz=316
**AAA Alma-Ata 76.66 316** *e*P **P** **08 25 24.3 +0.1**
**NRN Naryn 76.78 314** P **P** **08 25 25.4 +0.1**
**NRN Naryn 76.78 314** P **P** **08 25 25.4 +0.1**
NRN pmax pmax
comp=Z,6.0nm,1.0s
**CHKK Chushkaly 76.81 316** *e*P **P** **08 25 25.3 +0.3**
baz=316
**CHKK Chushkaly 76.81 316** *e*P **P** **08 25 25.3 +0.3**
**NIL Nilore 76.87 306** P **P** **08 25 26.7 +1.2**
NIL pmax pmax
comp=Z,16nm,0.8s
**O16K Kokwok River B 77.06 26** P **P** **08 25 26.0 0.0**
O16K IAmb IAmb 08 25 50.3
comp=Z,16nm,1.2s
**BOOM Boomskoye usch 77.13 315** P **P** **08 25 28.2 +1.2**
BOOM pmax pmax
comp=Z,9.0nm,1.3s
**M16K Timber Creek 77.44 24** P **P** **08 25 28.9 +0.8**
M16K IAmb IAmb 08 25 49.8
comp=Z,21nm,1.4s
**L16K Owhat River 77.60 24** P **P** **08 25 28.8 -0.1**
L16K IAmb IAmb 08 25 52.7
comp=Z,19nm,1.4s
**KURK Kurchatov 78.06 323** P **P** **08 25 30.9 -0.9**
KURK IAmb IAmb 08 25 33.6
comp=Z,29nm,1.6s
**KURK Kurchatov 78.06 323** *ce*P **P** **08 25 31.7 0.0**
KURK pmax pmax
comp=Z,19nm,1.4s
**KURBB Kurchatov Arra 78.08 323** P **P** **08 25 31.6 -0.3**
comp=Z,3.2nm,1.1s,baz=115,slow=4.8,SNR=15
KURBB LR LR 09 00 36.9
comp=Z,325nm,19.1s,baz=180,slow=36
comp=Z,3.2nm,1.1s
**ARLS Aral 78.11 314** P **P** **08 25 33.9 +1.4**
ARLS pmax pmax
comp=Z,7.0nm,1.1s
**AAK Ala-Archa 78.20 315** P **P** **08 25 32.7 -0.2**
**AAK Ala-Archa 78.20 315** LR LR 09 00 11.8
comp=Z,347nm,20.6s,baz=100,slow=36
**AAK Ala-Archa 78.20 315** *ce*P **P** **08 25 34.4 +1.5**
AAK pmax pmax
comp=Z,9.0nm,1.3s
**M17K Holitna River 78.27 25** P **P** **08 25 33.6 +0.9**
**SGDS Sogindy 78.33 316** *e*P **P** **08 25 33.9 +0.3**
baz=316
**SGDS Sogindy 78.33 316** *e*P **P** **08 25 33.8 +0.3**
**K17K Iditarod 78.60 23** P **P** **08 25 34.0 -0.5**
**KDAK Kodiak Island 78.74 29** LR LR 08 55 08.8
comp=Z,283nm,20.8s,baz=261,slow=32
**BTLS Baital 79.18 317** *e*P **P** **08 25 38.7 +0.6**
baz=317
**BTLS Baital 79.18 317** *e*P **P** **08 25 38.6 +0.6**
**N19K Bonanza Creek 79.23 26** P **P** **08 25 39.1 +0.9**
N19K IAmb IAmb 08 26 02.1
comp=Z,28nm,1.4s
**L19K White Mountain 79.72 24** P **P** **08 25 40.9 +0.2**
L19K IAmb IAmb 08 25 47.9
comp=Z,11nm,0.9s
**ARK Arkit 79.80 313** P **P** **08 25 42.9 +1.2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ARK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **CNPM** | **China Poot** | **80.12** | **28** | P | **P** | **08 25 42.1** | **-0.8** |
| **G18K** | **Tagagawik** | **80.17** | **20** | P | **P** | **08 25 43.1** | **0.0** |
| **BTK** | **Batken** | **80.23** | **311** | P | **P** | **08 25 44.8** | **+0.8** |
| BTK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **E18K** | **Tukpahlearik C** | **80.37** | **19** | P | **P** | **08 25 44.6** | **+0.6** |
| E18K | | | | IAmb | IAmb | 08 26 00.4 | |
| | comp=Z,36nm,1.8s | | | | | | |
| **H19K** | **Roundabout Mou** | **80.75** | **21** | P | **P** | **08 25 45.9** | **-0.2** |
| H19K | | | | IAmb | IAmb | 08 26 05.6 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **G19K** | **Purcell Mounta** | **80.84** | **20** | P | **P** | **08 25 46.7** | **+0.1** |
| G19K | | | | IAmb | IAmb | 08 26 13.5 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **80.95** | **23** | P | **P** | **08 25 47.2** | **0.0** |
| J20K | | | | IAmb | IAmb | 08 26 11.5 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **KK31** | **Karatay Array** | **81.15** | **314** | P | **P** | **08 25 48.2** | **-0.6** |
| KK31 | | | | IAmb | IAmb | 08 25 50.9 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **KK31** | **Karatay Array** | **81.15** | **314** | P | **P** | **08 25 48.2** | **-0.6** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,15nm,1.4s | | | | | | |
| **KKAR** | **Karatay Array** | **81.15** | **314** | P | **P** | **08 25 48.2** | **-0.6** |
| **KKAR** | **Karatay Array** | **81.15** | **314** | P | **P** | **08 25 48.0** | **-0.8** |
| KKAR | | | | IAmb | IAmb | 08 25 50.9 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **KKAR** | **Karatay Array** | **81.15** | **314** | P | **P** | **08 25 48.2** | **-0.6** |
| **CHGR** | **Chuyangaron** | **81.19** | **310** | P | **P** | **08 25 49.8** | **+0.6** |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,15nm,1.8s | | | | | | |
| **SIMJ** | **Simiganj** | **81.30** | **310** | P | **P** | **08 25 49.2** | **-0.7** |
| SIMJ | | | | IAmb | IAmb | 08 26 07.4 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **81.48** | **19** | P | **P** | **08 25 49.9** | **-0.1** |
| E19K | | | | IAmb | IAmb | 08 25 57.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **BRLS** | **Borolday** | **81.61** | **314** | *e*P | **P** | **08 25 52.1** | **+0.8** |
| | baz=314 | | | | | | |
| **BRLS** | **Borolday** | **81.61** | **314** | *e*P | **P** | **08 25 52.0** | **+0.8** |
| **F20K** | **Avaraart Lake** | **81.77** | **20** | P | **P** | **08 25 52.3** | **+0.8** |
| **BPAW** | **Bear Paw Mtn.** | **82.16** | **23** | P | **P** | **08 25 53.9** | **+0.2** |
| **MLY** | **Manley** | **82.65** | **23** | P | **P** | **08 25 56.5** | **+0.3** |
| MLY | | | | IAmb | IAmb | 08 26 19.7 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **RND** | **Reindeer** | **82.74** | **25** | P | **P** | **08 25 57.2** | **+0.5** |
| RND | | | | IAmb | IAmb | 08 26 01.8 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **RND** | **Reindeer** | **82.74** | **25** | P | **P** | **08 25 57.3** | **+0.5** |
| RND | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **83.44** | **22** | P | **P** | **08 26 01.0** | **+0.7** |
| **CCB** | **Clear Creek Bu** | **83.64** | **24** | P | **P** | **08 26 02.1** | **+0.8** |
| CCB | | | | IAmb | IAmb | 08 26 06.6 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **83.69** | **324** | *ce*P | **P** | **08 26 02.2** | **+0.4** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,20nm,1.7s | | | | | | |
| **MAW** | **Mawson** | **83.71** | **202** | P | **P** | **08 26 01.3** | **-0.3** |
| | comp=Z,2.6nm,0.8s,baz=71,slow=11,SNR=2.9 | | | | | | |
| MAW | | | | LR | LR | 08 59 39.6 | |
| | comp=Z,386nm,21.7s,baz=102,slow=33 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **COLA** | **College** | **83.71** | **23** | *i* P | **P** | **08 26 02.6** | **+1.0** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **84.06** | **24** | P | **P** | **08 26 03.1** | **-0.3** |
| **ILAR** | **Eielson Array** | **84.06** | **24** | P | **P** | **08 26 01.2** | **-2.2** |
| | comp=Z,2.6nm,0.8s,baz=252,slow=5.1,SNR=27 | | | | | | |
| ILAR | | | | LR | LR | 09 01 36.3 | |
| | comp=Z,284nm,19.5s,baz=260,slow=34 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **84.06** | **24** | P | **P** | **08 26 03.1** | **-0.3** |
| **H24K** | **Noodor Dome** | **84.07** | **22** | P | **P** | **08 26 04.0** | **+0.4** |
| H24K | | | | IAmb | IAmb | 08 26 23.1 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **L26K** | **Log Cabin Wild** | **84.94** | **26** | P | **P** | **08 26 07.6** | **-0.4** |
| **QSPA** | **South Pole Qui** | **86.39** | **180** | P | **P** | **08 26 14.2** | **-1.1** |
| QSPA | | | | IAmb | IAmb | 08 26 19.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.39** | **180** | P | **P** | **08 26 14.3** | **-1.0** |
| | comp=Z,16nm,1.1s,baz=289,slow=1.7,SNR=32 | | | | | | |
| QSPA | | | | LR | LR | 09 05 13.5 | |
| | comp=Z,437nm,18.6s,baz=17,slow=36 | | | | | | |
| | comp=Z,16nm,1.1s | | | | | | |
| **DAWY** | **Dawson** | **86.94** | **25** | P | **P** | **08 26 17.7** | **-0.1** |
| DAWY | | | | IAmb | IAmb | 08 27 01.1 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **L29M** | **L29M** | **87.25** | **26** | P | **P** | **08 26 18.5** | **-0.9** |
| L29M | | | | IAmb | IAmb | 08 26 33.0 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **K29M** | **Barlow Dome** | **87.69** | **26** | P | **P** | **08 26 20.8** | **-0.7** |
| K29M | | | | IAmb | IAmb | 08 26 35.0 | |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **WSAR** | **Wadi Sarin** | **88.03** | **293** | LR | LR | 09 10 25.1 | |
| | comp=Z,37nm,18.1s,baz=119,slow=39 | | | | | | |
| **INK** | **Inuvik** | **90.14** | **22** | LR | LR | 09 04 54.4 | |
| | comp=Z,359nm,19.7s,baz=250,slow=34 | | | | | | |
| **DLBC** | **Dease Lake** | **90.39** | **32** | LR | LR | 09 01 24.2 | |
| | comp=Z,265nm,19.7s,baz=288,slow=32 | | | | | | |
| **AKTO** | **Aktyubinsk** | **90.77** | **320** | LR | LR | 09 08 58.7 | |
| | comp=Z,336nm,19.1s,baz=90,slow=37 | | | | | | |
| **BBB** | **Bella Bella** | **90.89** | **38** | LR | LR | 09 01 50.2 | |
| | comp=Z,241nm,19.5s,baz=271,slow=32 | | | | | | |
| **ARU** | **Arti** | **90.95** | **326** | LR | LR | 09 09 14.8 | |
| | comp=Z,326nm,18.9s,baz=85,slow=37 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **94.08** | **49** | LR | LR | 09 02 02.0 | |
| | comp=Z,461nm,20.4s,baz=302,slow=31 | | | | | | |
| **KIRV** | **Kirov** | **95.92** | **328** | LR | LR | 09 10 19.5 | |
| | comp=Z,656nm,20.6s,baz=87,slow=36 | | | | | | |
| **ELIB** | **Princess Elisa** | **96.00** | **195** | *d*P | **P** | **08 27 00.7** | **+0.6** |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **BELG** | **Belogornoye** | **97.29** | **322** | LR | LR | 09 11 49.1 | |
| | comp=Z,371nm,21.4s,baz=127,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **97.47** | **52** | P | **P** | **08 27 06.9** | **-0.6** |
| | comp=Z,0.1nm,0.5s,baz=264,slow=5.3,SNR=2.4 | | | | | | |
| NVAR | | | | LR | LR | 09 02 10.2 | |
| | comp=Z,438nm,21.5s,baz=254,slow=30 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **NEW** | **Newport** | **97.91** | **42** | LR | LR | 09 04 23.7 | |
| | comp=Z,229nm,20.5s,baz=276,slow=31 | | | | | | |
| **YKA** | **Yellowknife Ar** | **97.96** | **27** | LR | LR | 09 07 12.2 | |
| | comp=Z,196nm,21.7s,baz=306,slow=33 | | | | | | |
| **PFO** | **Pinyon Flats O** | **99.10** | **57** | LR | LR | 09 06 57.1 | |
| | comp=Z,151nm,18.5s,baz=263,slow=32 | | | | | | |
| **NVL** | **N'lazarevskaya** | **99.67** | **194** | *e*P | **Pdif** | **08 27 31.1** | **+15** |
| NVL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,238nm,17.0s | | | | | | |
| **KIV** | **Kislovodsk** | **101.30** | **314** | *e*P | **Pdif** | **08 27 22.3** | **-2.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,96nm,20.0s | | | | | | |
| **LPAZ** | **La Paz** | **141.79** | **122** | PKP | **PKPdf** | **08 33 03.5** | **-3.1** |
| | comp=Z,1.6nm,1.0s,baz=161,slow=2.0,SNR=5.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **142.49** | **287** | PKhKP | PKPpre | 08 33 02.8 | |
| | comp=Z,1.4nm,1.1s,baz=61,slow=7.0,SNR=4.6 | | | | | | |
| **CPUP** | **Villa Florida** | **143.28** | **145** | PKP | **PKPdf** | **08 33 08.8** | **+0.7** |
| | comp=Z,1.5nm,0.8s,baz=282,slow=4.0,SNR=3.9 | | | | | | |
| **DBIC** | **Dimbokro** | **149.79** | **277** | PKPbc | **PKPbc** | **08 33 24.6** | **+0.4** |
| | comp=Z,9.7nm,1.1s,baz=101,slow=3.8,SNR=4.6 | | | | | | |

*IDC **02** 08:31:25.0±0.8, 50°.57S×117°.76W, h0km, mb3.9/8, mbtmp3.9/8, MS4.2/8, Error ellipse: s-maj=34.5km s-min=23.2km az=123.0*

**ISC 02 08:31:26.5**±0.8**, 50°.6S**±0°.2×**117°.7W**±0°.2**, h10km, n30, σ0s.44**/11**, mb4.0**/8**, MS4.2**/8**, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **USHA** | **Ushuaia** | **29.67** | **118** | LR | LR | 08 44 49.0 | |
| | comp=Z,782nm,21.9s,baz=232,slow=27 | | | | | | |
| **PMSA** | **Palmer Station** | **30.92** | **138** | LR | LR | 08 46 03.9 | |
| | comp=Z,392nm,21.8s,baz=268,slow=28 | | | | | | |
| **H03S2** | **Juan Fernandez** | **32.80** | **74** | T | T | 09 12 17.0 | |
| | baz=225,slow=74,SNR=5.3 | | | | | | |
| **H03S1** | **Juan Fernandez** | **32.80** | **74** | T | T | 09 12 17.9 | |
| | baz=225,slow=74,SNR=5.8 | | | | | | |
| **H03S3** | **Juan Fernandez** | **32.81** | **74** | T | T | 09 12 15.5 | |
| | baz=225,slow=74,SNR=6.6 | | | | | | |
| **H03N3** | **Juan Fernandez** | **33.05** | **74** | T | T | 09 12 32.8 | |
| | baz=228,slow=72,SNR=9.2 | | | | | | |
| **H03N2** | **Juan Fernandez** | **33.06** | **74** | T | T | 09 12 28.5 | |
| | baz=228,slow=72,SNR=9.5 | | | | | | |
| **H03N1** | **Juan Fernandez** | **33.07** | **74** | T | T | 09 12 31.2 | |
| | baz=228,slow=72,SNR=8.7 | | | | | | |
| **QSPA** | **South Pole Qui** | **39.63** | **180** | P | **P** | **08 38 58.6** | **+0.6** |
| | 4.3nm,1.0s,baz=102,slow=4.2,SNR=7.0 | | | | | | |
| | 4.3nm,1.0s | | | | | | |
| **URZ** | **Urewera** | **46.70** | **259** | LR | LR | 08 56 47.1 | |
| | comp=Z,396nm,18.3s,baz=218,slow=33 | | | | | | |
| **RAO** | **Raoul Island** | **49.35** | **272** | LR | LR | 08 57 59.7 | |
| | comp=Z,76nm,18.5s,baz=126,slow=32 | | | | | | |
| **NNA** | **Nana** | **50.90** | **56** | LR | LR | 08 57 40.2 | |
| | comp=Z,238nm,18.3s,baz=205,slow=31 | | | | | | |
| **CPUP** | **Villa Florida** | **51.50** | **86** | P | **P** | **08 40 32.1** | **-0.1** |
| | 0.4nm,0.3s,baz=207,slow=9.3,SNR=3.1 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **LPAZ** | **La Paz** | **52.29** | **68** | P | **P** | **08 40 38.8** | **-0.1** |
| | 2.5nm,1.1s,baz=181,slow=5.6,SNR=5.3 | | | | | | |
| LPAZ | | | | LR | LR | 08 57 20.1 | |
| | comp=Z,148nm,20.2s,baz=211,slow=30 | | | | | | |
| | 2.5nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **62.15** | **180** | P | **P** | **08 41 46.9** | **-0.3** |
| | 2.2nm,1.0s,baz=214,slow=11,SNR=4.0 | | | | | | |
| | 2.2nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **72.29** | **241** | LR | LR | 09 10 45.9 | |
| | comp=Z,120nm,18.2s,baz=177,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.52** | **12** | P | **P** | **08 43 39.5** | **+0.9** |
| | 1.1nm,1.0s,baz=187,slow=8.8,SNR=6.6 | | | | | | |
| | 1.1nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **82.92** | **241** | P | **P** | **08 43 51.6** | **0.0** |
| | 1.3nm,1.0s,baz=150,slow=4.0,SNR=5.0 | | | | | | |
| | 1.3nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **85.62** | **244** | P | **P** | **08 44 05.2** | **-0.2** |
| | 0.5nm,0.9s,baz=199,slow=4.5,SNR=3.9 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.63** | **360** | P | **P** | **08 44 19.2** | **-0.3** |
| | 0.1nm,0.4s,baz=187,slow=6.4,SNR=1.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **TKL** | **Tuckaleechee C** | **90.93** | **27** | LR | LR | 09 19 45.7 | |
| | comp=Z,458nm,20.6s,baz=302,slow=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **95.28** | **293** | T | T | 10 31 03.3 | |
| | baz=143,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **95.30** | **293** | T | T | 10 31 04.1 | |
| | baz=143 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **95.30** | **293** | T | T | 10 31 04.4 | |
| | baz=143,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **96.12** | **294** | T | T | 10 32 07.2 | |
| | baz=143,slow=76,SNR=8.2 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **96.13** | **294** | T | T | 10 32 09.2 | |
| | baz=143,slow=76,SNR=4.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **96.14** | **294** | T | T | 10 32 09.1 | |
| | baz=143,slow=76,SNR=4.9 | | | | | | |
| **GERES** | **GERESS Array B** | **148.98** | **74** | PKPbc | **PKPbc** | **08 51 13.6** | **-0.4** |
| | 1.4nm,0.7s,baz=224,slow=3.7,SNR=5.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **150.22** | **50** | PKPbc | **PKPbc** | **08 51 16.4** | **-0.2** |
| | 1.7nm,0.9s,baz=264,slow=2.3,SNR=3.5 | | | | | | |
| **SONM** | **Songino Array** | **151.36** | **282** | PKPbc | **PKPbc** | **08 51 19.4** | **-0.4** |
| | 0.4nm,0.4s,baz=129,slow=3.9,SNR=2.9 | | | | | | |

*IDC **02** 08:33:56.8±0.8, 50°.54S×117°.75W, h0km, mb4.0/6, mbtmp4.0/6, Error ellipse: s-maj=41.7km s-min=23.3km az=124.0*

**ISC 02 08:33:58.5**±0.8**, 50°.6S**±0°.2×**117°.7W**±0°.3**, h10km, n25, σ0s.97**/13**, mb3.9**/6**, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H03S2** | **Juan Fernandez** | **32.78** | **74** | T | T | 09 14 56.6 | |
| | baz=225,slow=74,SNR=7.0 | | | | | | |
| **H03S1** | **Juan Fernandez** | **32.78** | **74** | T | T | 09 15 00.2 | |
| | baz=225,slow=74,SNR=7.3 | | | | | | |
| **H03S3** | **Juan Fernandez** | **32.80** | **74** | T | T | 09 15 05.5 | |
| | baz=225,slow=74,SNR=7.5 | | | | | | |
| **H03N3** | **Juan Fernandez** | **33.04** | **74** | T | T | 09 15 03.9 | |
| | baz=228 | | | | | | |
| **H03N2** | **Juan Fernandez** | **33.04** | **74** | T | T | 09 15 02.8 | |
| | baz=228 | | | | | | |
| **H03N1** | **Juan Fernandez** | **33.05** | **74** | T | T | 09 15 03.0 | |
| | baz=228 | | | | | | |
| **VNDA** | **Vanda** | **39.22** | **200** | P | **P** | **08 41 26.7** | **+0.5** |
| | 1.8nm,1.1s,baz=86,slow=9.1,SNR=3.8 | | | | | | |
| | 1.8nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **39.64** | **180** | P | **P** | **08 41 30.5** | **+0.4** |
| | 3.8nm,0.9s,baz=92,slow=5.6,SNR=6.3 | | | | | | |
| | 3.8nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **52.27** | **68** | P | **P** | **08 43 10.6** | **-0.1** |
| | 2.5nm,1.0s,baz=184,slow=5.4,SNR=5.4 | | | | | | |
| | 2.5nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.51** | **12** | P | **P** | **08 46 12.3** | **+1.8** |
| | 0.9nm,1.0s,baz=181,slow=4.5,SNR=5.6 | | | | | | |
| | 0.9nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **82.94** | **241** | P | **P** | **08 46 23.7** | **0.0** |
| | 2.2nm,1.0s,baz=143,slow=4.6,SNR=6.6 | | | | | | |
| | 2.2nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **85.64** | **244** | P | **P** | **08 46 36.5** | **-0.8** |
| | 0.7nm,0.9s,baz=152,slow=3.8,SNR=2.4 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **95.29** | **293** | T | T | 10 31 50.9 | |
| | baz=142,slow=76,SNR=3.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **95.31** | **293** | T | T | 10 31 50.8 | |
| | baz=142,slow=76,SNR=3.1 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **95.31** | **293** | T | T | 10 31 55.3 | |
| | baz=142,slow=76,SNR=3.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **96.13** | **294** | T | T | 10 32 57.7 | |
| | baz=142 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **96.14** | **294** | T | T | 10 32 59.1 | |
| | baz=142 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **96.15** | **294** | T | T | 10 32 58.5 | |
| | baz=142 | | | | | | |
| **ILAR** | **Eielson Array** | **117.21** | **346** | PKP | **PKPdf** | **08 52 41.1** | **-1.3** |
| | 0.4nm,0.9s,baz=146,slow=2.8,SNR=4.1 | | | | | | |
| **GERES** | **GERESS Array B** | **148.96** | **74** | PKPbc | **PKPbc** | **08 53 45.5** | **-0.3** |
| | 1.0nm,0.7s,baz=246,slow=5.7,SNR=4.2 | | | | | | |
| **NB2** | **NORSAR Subarra** | **150.20** | **50** | PKPdf | **PKPbc** | **08 53 48.0** | **-0.4** |
| | comp=Z,11nm,1.4s,baz=267,slow=1.6 | | | | | | |
| **NB2** | **NORSAR Subarra** | **150.20** | **50** | PKPdf | **PKPbc** | **08 53 48.0** | **-0.4** |
| | baz=267,slow=1.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **150.20** | **50** | PKPbc | **PKPbc** | **08 53 47.4** | **-1.0** |
| | comp=Z,2.5nm,1.0s,baz=268,slow=2.0,SNR=3.7 | | | | | | |
| **HFS** | **Hagfors** | **151.38** | **52** | PKPbc | **PKPbc** | **08 53 49.8** | **-1.4** |
| | comp=Z,2.8nm,0.9s,baz=215,slow=1.8,SNR=4.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **157.21** | **107** | PKPab | **PKPab** | **08 54 24.8** | **-0.2** |
| | comp=Z,1.8nm,1.0s,baz=315,slow=0.8,SNR=5.2 | | | | | | |

*IDC **02** 08:35:56.2±1.0, 50°.65S×117°.57W, h0km, mb4.1/5, mbtmp4.1/5, Error ellipse: s-maj=42.3km s-min=28.0km az=131.0*

*NEIC **02** 08:35:59.7±1.4, 50°.7S±0°.2×117°.1W±0°.3, h10km±1km, mb4.6/13, Error ellipse: s-maj=34.5km s-min=24.7km az=291.0*

**ISC 02 08:35:58.4**±0.8**, 50°.6S**±0°.1×**117°.3W**±0°.2**, h10km, n33, σ1s.25**/25**, mb4.5**/11**, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMAI** | **San Martin Ant** | **29.83** | **145** | P | **P** | **08 42 06.0** | **+0.9** |
| **H03S2** | **Juan Fernandez** | **32.56** | **74** | T | T | 09 16 45.0 | |
| | baz=226 | | | | | | |
| **H03S1** | **Juan Fernandez** | **32.57** | **74** | T | T | 09 16 46.4 | |
| | baz=226 | | | | | | |
| **H03S3** | **Juan Fernandez** | **32.58** | **74** | T | T | 09 16 45.4 | |
| | baz=226 | | | | | | |
| **H03N3** | **Juan Fernandez** | **32.82** | **73** | T | T | 09 17 04.4 | |
| | baz=228,slow=72,SNR=5.5 | | | | | | |
| **H03N2** | **Juan Fernandez** | **32.83** | **73** | T | T | 09 17 01.3 | |
| | baz=228,slow=72,SNR=6.2 | | | | | | |
| **H03N1** | **Juan Fernandez** | **32.84** | **73** | T | T | 09 17 00.6 | |
| | baz=228,slow=72,SNR=11 | | | | | | |
| **MT01** | **Popeta** | **37.32** | **81** | P | **P** | **08 43 09.2** | **-1.5** |
| MT01 | | | | IAmb | IAmb | 08 43 44.4 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **39.23** | **200** | P | **P** | **08 43 27.3** | **+1.0** |
| **QSPA** | **South Pole Qui** | **39.57** | **180** | P | **P** | **08 43 30.1** | **+0.7** |
| **QSPA** | **South Pole Qui** | **39.57** | **180** | P | **P** | **08 43 29.3** | **-0.1** |
| | comp=Z,3.8nm,1.0s,baz=115,slow=7.0,SNR=5.1 | | | | | | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **51.24** | **85** | P | **P** | **08 45 02.4** | **+0.2** |
| | comp=Z,2.6nm,1.0s,baz=234,slow=5.9,SNR=3.9 | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **52.07** | **67** | P | **P** | **08 45 09.4** | **+0.3** |
| LPAZ | | | | IAmb | IAmb | 08 45 18.5 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **52.07** | **67** | P | **P** | **08 45 09.5** | **+0.3** |
| | comp=Z,3.0nm,1.1s,baz=212,slow=6.2,SNR=5.3 | | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.53** | **12** | P | **P** | **08 48 11.8** | **+1.3** |
| **TXAR** | **Lajitas Array** | **80.53** | **12** | P | **P** | **08 48 10.9** | **+0.4** |
| | comp=Z,1.0nm,1.0s,baz=182,slow=7.5,SNR=6.3 | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **80.53** | **12** | P | **P** | **08 48 12.6** | **+2.1** |
| TX31 | | | | IAmb | IAmb | 08 48 13.3 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **HNDO** | **Hondo** | **81.39** | **16** | P | **P** | **08 48 16.8** | **+1.8** |
| HNDO | | | | IAmb | IAmb | 08 48 17.8 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **JCT** | **Junction City** | **82.23** | **15** | P | **P** | **08 48 21.0** | **+1.5** |
| **214A** | **Organ Pipe Nat** | **82.32** | **4** | P | **P** | **08 48 21.2** | **+1.3** |
| 214A | | | | IAmb | IAmb | 08 48 22.9 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| **ASAR** | **Alice Springs** | **83.12** | **241** | P | **P** | **08 48 22.5** | **-2.1** |
| | comp=Z,2.6nm,1.1s,baz=155,slow=4.5,SNR=5.9 | | | | | | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **SGCY** | **Sterling City** | **83.42** | **14** | P | **P** | **08 48 26.6** | **+0.9** |
| **X16A** | **Lo Mia Camp, P** | **84.84** | **5** | P | **P** | **08 48 35.0** | **+2.0** |
| X16A | | | | IAmb | IAmb | 08 48 35.5 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **X18A** | **Snowflake** | **85.04** | **6** | P | **P** | **08 48 35.7** | **+1.7** |
| **ANMO** | **Albuquerque** | **85.75** | **9** | P | **P** | **08 48 38.1** | **+0.6** |
| ANMO | | | | IAmb | IAmb | 08 48 39.7 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **95.54** | **292** | T | T | 10 35 35.1 | |
| | baz=142,slow=76,SNR=12 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **95.56** | **292** | T | T | 10 35 34.2 | |
| | baz=142,slow=76,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **95.56** | **292** | T | T | 10 35 34.4 | |
| | baz=142,slow=76,SNR=13 | | | | | | |
| **GERES** | **GERESS Array B** | **148.75** | **74** | PKPbc | **PKPbc** | **08 55 44.0** | **-1.2** |
| | comp=Z,1.2nm,0.6s,baz=232,slow=4.5,SNR=4.8 | | | | | | |
| **NB2** | **NORSAR Subarra** | **150.06** | **50** | PKPdf | **PKPbc** | **08 55 47.4** | **-0.6** |
| | comp=Z,8.2nm,1.4s,baz=267,slow=1.6 | | | | | | |
| **NB2** | **NORSAR Subarra** | **150.06** | **50** | PKPdf | **PKPbc** | **08 55 47.4** | **-0.6** |
| | baz=267,slow=1.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **150.06** | **50** | PKPbc | **PKPbc** | **08 55 47.4** | **-0.6** |
| | comp=Z,3.1nm,1.0s,baz=265,slow=2.1,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **156.95** | **107** | PKP | **PKPdf** | **08 55 53.5** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=266,slow=1.3,SNR=1.9 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **08 56 23.0** | **-0.9** |
| | comp=Z,1.4nm,1.0s,baz=270,slow=1.2,SNR=4.3 | | | | | | |

*NOU **02** 08:41:12.2, 17°.00S×168°.72E, h102km, MLv4.2/13, Vanuatu Islands*

*NEIC **02** 08:41:25.8±1.6, 18°.0S±0°.1×168°.3E±0°.1, h47km±12km, mb4.4/8, Error ellipse: s-maj=20.0km s-min=17.5km az=102.0*

**ISC 02 08:41:26.1**±0.9**, 17°.93S**±0°.07×**168°.3E**±0°.1**, h50km, n24, σ1s.32**/25**, mb4.4**/6**, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **0.20** | **48** | P | **Pn** | **08 41 33.0** | **-1.4** |
| **DVP** | **Devils Point** | **0.21** | **338** | P | **Pn** | **08 41 32.4** | **-2.1** |
| **LIFNC** | **LIFOU** | **3.00** | **199** | P | **Pn** | **08 42 10.2** | **-0.9** |
| **LIFNC** | **LIFOU** | **3.00** | **199** | Pn | **Pn** | **08 42 09.5** | **-1.6** |
| LIFNC | | | | Sn | **Sn** | **08 42 42.8** | **-3.0** |
| **MARNC** | **Mare, Loyalty** | **3.54** | **184** | P | **Pn** | **08 42 19.6** | **+1.0** |
| **YATNC** | **Mamie plateau,** | **4.31** | **197** | P | **Pn** | **08 42 29.0** | **-0.2** |
| **DZM** | **Mont Dzumac** | **4.47** | **202** | P | **Pn** | **08 42 32.0** | **+0.6** |
| **DZM** | **Mont Dzumac** | **4.47** | **202** | Pn | **Pn** | **08 42 31.7** | **+0.4** |
| **NOUC** | **Port Laguerre** | **4.55** | **204** | P | **Pn** | **08 42 32.5** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **4.58** | **235** | P | **Pn** | **08 42 32.3** | **-0.6** |
| **KOUNC** | **Koumac, New Ca** | **4.58** | **235** | Pn | **Pn** | **08 42 32.2** | **-0.6** |
| **ONTNC** | **Ouen Toro** | **4.68** | **201** | P | **Pn** | **08 42 34.5** | **+0.3** |
| **ONTNC** | **Ouen Toro** | **4.68** | **201** | Pn | **Pn** | **08 42 34.7** | **+0.5** |
| **PINNC** | **Pines Island,** | **4.73** | **189** | Pn | **Pn** | **08 42 33.3** | **-1.5** |
| **WR0** | **Warramunga Arr** | **31.94** | **261** | P | **P** | **08 47 46.8** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 08 48 30.1 | |
| | comp=Z,6.8nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.08** | **261** | P | **P** | **08 47 47.9** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 08 47 57.7 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.12** | **261** | | **P** | **08 47 48.1** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 08 48 12.1 | |
| | comp=Z,6.8nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **32.58** | **254** | P | **P** | **08 47 52.8** | **-0.1** |
| **MTN** | **Manton Dam** | **36.12** | **273** | P | **P** | **08 48 22.6** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **40.47** | **263** | P | **P** | **08 49 00.5** | **+0.2** |
| **QSPA** | **South Pole Qui** | **72.12** | **180** | | **P** | **08 52 45.7** | **+0.6** |
| **HHC** | **Hu-ho-hao-te** | **78.63** | **320** | *e*P | **P** | **08 53 25.6** | **+2.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,51nm,4.4s | | | | | | |
| **BELA** | **Belgrano 2** | **83.48** | **175** | P | **P** | **08 53 46.6** | **-1.3** |
| BELA | | | | IAmb | IAmb | 08 53 49.5 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **95.64** | **314** | *e*P | **P** | **08 54 48.0** | **+1.7** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |

**IDC 02 08:46:38.1**±3.7**, 53°.86N×88°.15E, h0km, mbtmp2.7**/2**, ML2.5**/2**, Error ellipse: s-maj=35.6km s-min=20.9km az=45.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.97** | **274** | I | I | 08 59 25.0 | |
| | 0.2nm,1.2s,baz=91,slow=318,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.97** | **274** | Pn | Pn | 08 47 12.8 | +0.1 |
| | 0.6nm,0.3s,baz=89,slow=14,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 08 47 40.4 | |
| | 1.9nm,0.3s,baz=92,slow=22,SNR=18 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.74** | **245** | Pn | Pn | 08 48 18.9 | +0.7 |
| | 0.1nm,0.3s,baz=62,slow=14,SNR=4.3 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.00** | **210** | Pn | Pn | 08 48 36.5 | +0.9 |
| | 0.1nm,0.3s,baz=26,slow=3.7,SNR=1.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*NNC **02** 08:47:56.5±1.2, 53°.16N×91°.23E, h0km, mb3.7, mpv3.4, Error ellipse: s-maj=9.8km s-min=8.6km az=60.0, Suspected Mining explosion.*

*IDC **02** 08:48:00.1±3.1, 53°.47N×90°.63E, h0km, mbtmp3.5/3, ML3.0/3, Error ellipse: s-maj=26.7km s-min=21.9km az=53.0*

**ISC 02 08:47:59.8**±4.0**, 53°.4N**±0°.1×**90°.7E**±0°.2**, h0km, n9, σ2s.11**/10**, 5C-4D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.56** | **282** | I | I | 09 09 50.0 | |
| | 0.1nm,1.1s,baz=91,slow=313,SNR=6.6 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.56** | **282** | ⇓Pn | **Pn** | **08 48 57.6** | **+1.4** |
| | 2.2nm,0.6s | | | | | | |
| ZAA0 | | | | ⇑Sn | **Sb** | **08 49 45.4** | **-1.8** |
| | 18nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.56** | **282** | Pn | **Pn** | **08 48 55.2** | **-1.0** |
| | 2.4nm,0.3s,baz=94,slow=14,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 08 49 49.8 | |
| | 3.5nm,0.3s,baz=96,slow=31,SNR=8.2 | | | | | | |
| | 6.0nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **7.91** | **255** | ⇓Pn | **Pn** | **08 49 55.4** | **-0.5** |
| | 3.0nm,0.6s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **08 51 30.2** | **+4.1** |
| | 14nm,1.0s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 08 52 17.0 | |
| | 62nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.00** | **255** | Pn | **Pn** | **08 49 57.2** | **0.0** |
| | 0.2nm,0.3s,baz=66,slow=15,SNR=12 | | | | | | |
| KURBB | | | | Sn | **Sn** | **08 51 27.7** | **-0.7** |
| | 0.1nm,0.3s,baz=68,slow=24,SNR=7.8 | | | | | | |
| KURBB | | | | Lg | Lg | 08 52 14.4 | |
| | 0.1nm,0.3s,baz=60,slow=33,SNR=6.0 | | | | | | |
| | 2.0nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.00** | **255** | ⇓Lg | Lg | 08 52 18.1 | |
| | 81nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **8.51** | **223** | ⇑Pn | **Pn** | **08 50 02.5** | **-1.7** |
| | 0.6nm,0.5s,baz=36,slow=11,SNR=14 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 52 29.4 | |
| | 38nm,1.2s,baz=36,slow=28,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.51** | **223** | Pn | **Pn** | **08 50 06.1** | **+1.9** |
| | 0.4nm,0.3s,baz=38,slow=12,SNR=14 | | | | | | |
| MKAR | | | | Sn | **Sn** | **08 51 40.1** | **-0.7** |
| | 0.3nm,0.3s,baz=34,slow=25,SNR=2.4 | | | | | | |
| MKAR | | | | Lg | Lg | 08 52 30.4 | |
| | 0.1nm,0.3s,baz=35,slow=26,SNR=1.9 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **8.62** | **224** | ⇑Lg | Lg | 08 52 31.6 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 26nm,1.1s | | | | | | |

*SKHL* ***02*** *08:52:01.7±0.6, 46.°30N×146.°40E, h328km±4km, mb5.0/13, mbv5.0/2, msh4.3/2, msha5.4/13*
*MOS* ***02*** *08:52:01.3±1.0, 46.°44N×146.°25E, h318km, mb4.4/45, Error ellipse: s-maj=7.6km s-min=5.2km az=85.6*
*IDC* ***02*** *08:52:02.9±0.8, 46.°54N×146.°12E, h319km±8km, mb3.7/30, mbtmp4.5/40, Error ellipse: s-maj=10.0km s-min=7.4km az=143.0*
*JMA* ***02*** *08:52:02.3±0.4, 46°N±2°×14°6E±°, h341km, MV4.4/35, SOUTHERN SEA OF OKHOTSK*
*JMA Felt I J1 at SOUTHERN SEA OF OKHOTSK .*
*NIED* ***02*** *08:52:02.3, 45.°98N×146.°47E, h341km, MW4.5, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$6.00; $M_{\theta\theta}$-0.49; $M_{\phi\phi}$-5.51; $M_{r\theta}$1.50; $M_{\theta\phi}$-2.73; $M_{\phi r}$-1.77; Fault plane solution: $M_0$6.79000×$10^{15}$ NP1: $\phi_s$186.00000°, δ53.00000°, λ66.00000°. NP2: $\phi_s$42.00000°, δ43.00000°, λ118.00000°.*
*NEIC* ***02*** *08:52:03.4±1.8, 46.°44N±0.°10×146.°1E±0.°2, h328km±9km, mb4.5/66 Error ellipse: s-maj=17.4km s-min=13.2km az=113.0*
**ISC 02 08:52:01.9**±0.4**, 46.°30N**±0.°04×**146.°35E**±0.°04**, h319**km±4km**, h319**km**:pP-P, n597, σ1.°23**/645**, mb4.4**/116**, 31C-11D, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.50** | **135** | *i* P | **Pn** | **08 52 47.7** | **+0.8** |
| KUR | | | | AMB | AMB | 08 52 48.4 | |
| | 330nm,0.5s | | | | | | |
| KUR | | | | *i* S | **S** | **08 53 23.5** | **+0.6** |
| KUR | | | | A | A | 08 53 38.9 | |
| | 240nm,0.4s | | | | | | |
| KUR | | | | A | A | 08 53 38.9 | |
| | 330nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.50** | **135** | *c i*PN | **Pn** | **08 52 47.8** | **+0.8** |
| KUR | | | | *e*S | **S** | **08 53 23.5** | **+0.6** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,333nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,328nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,237nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.29** | **189** | *i* P | **Pn** | **08 52 53.0** | **+0.2** |
| YUK | | | | AMB | AMB | 08 52 54.2 | |
| | comp=N,2μm,1.1s | | | | | | |
| YUK | | | | AMB | AMB | 08 52 58.6 | |
| | comp=N,960nm,0.3s | | | | | | |
| YUK | | | | *e*S | **S** | **08 53 33.0** | **-0.3** |
| YUK | | | | A | A | 08 53 43.1 | |
| | comp=N,1μm,0.5s | | | | | | |
| YUK | | | | A | A | 08 53 43.1 | |
| | comp=N,320nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.29** | **189** | *c i*PN | **Pn** | **08 52 52.9** | **+0.2** |
| YUK | | | | *e*S | **S** | **08 53 33.8** | **+0.5** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,2μm,1.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,120nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,1μm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,127nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,2μm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,653nm,0.4s | | | | | | |
| **RUSJ** | **Misakicho** | **2.33** | **200** | ⇑*i*PN | **Pn** | **08 52 53.8** | **+0.8** |
| **SHO** | **Shikotan** | **2.45** | **172** | *i* P | **Pn** | **08 52 52.7** | **-1.4** |
| SHO | | | | AMB | AMB | 08 52 53.1 | |
| | comp=E,390nm,0.2s | | | | | | |
| SHO | | | | *e*S | **S** | **08 53 32.2** | **-3.6** |
| SHO | | | | A | A | 08 53 33.7 | |
| | comp=E,3μm,0.4s | | | | | | |
| SHO | | | | A | A | 08 53 33.7 | |
| | comp=E,2μm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.45** | **172** | ⇓*i*PN | **Pn** | **08 52 52.9** | **-1.2** |
| SHO | | | | *e*S | **S** | **08 53 31.7** | **-4.1** |
| SHO | | | | pmax | pmax | | |
| | comp=N,159nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,69nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,429nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,714nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,3μm,0.5s | | | | | | |
| **JRA** | **Rausu** | **2.52** | **201** | P | **Pn** | **08 52 55.0** | **+0.4** |
| **YSS** | **Yuzh-Sakhalins** | **2.56** | **286** | Pn | **Pn** | **08 52 55.6** | **+0.7** |
| **YSS** | **Yuzh-Sakhalins** | **2.56** | **286** | *i* P | **Pn** | **08 52 55.9** | **+1.1** |
| YSS | | | | AMB | AMB | 08 52 58.4 | |
| | comp=E,60nm,0.3s | | | | | | |
| YSS | | | | *e*S | **S** | **08 53 37.6** | **+0.3** |
| YSS | | | | A | A | 08 53 38.5 | |
| | comp=E,300nm,1.0s | | | | | | |
| YSS | | | | A | A | 08 53 38.5 | |
| | comp=E,300nm,1.0s | | | | | | |
| YSS | | | | A | A | 08 53 39.9 | |
| | comp=E,200nm,0.9s | | | | | | |
| YSS | | | | A | A | 08 53 39.9 | |
| | comp=E,110nm,0.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **2.56** | **286** | α *i*PN | **Pn** | **08 52 56.0** | **+1.1** |
| YSS | | | | *i* S | **S** | **08 53 36.7** | **-0.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,70nm,0.8s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=N,30nm,0.9s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=E,40nm,0.9s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,1μm,2.1s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,1μm,3.3s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,200nm,0.9s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,280μm,0.9s | | | | | | |
| **JTKR** | **Abashiri--Toko** | **2.90** | **217** | *i* P | **Pn** | **08 52 59.0** | **+0.9** |
| JTKR | | | | *e*S | **S** | **08 53 43.5** | **+0.5** |
| **JNK** | **Nakash** | **2.95** | **204** | P | **Pn** | **08 52 58.9** | **+0.3** |
| **NMR** | **Nemuro--Hokkai** | **2.96** | **189** | *i* P | **Pn** | **08 52 57.4** | **-1.3** |
| NMR | | | | *e*S | **S** | **08 53 41.0** | **-3.1** |
| **NMR** | **Nemuro--Hokkai** | **2.96** | **189** | ⇑*i*PN | **Pn** | **08 52 57.3** | **-1.4** |
| NMR | | | | *e*S | **S** | **08 53 40.6** | **-3.5** |
| **JSE** | **Soyaes** | **2.96** | **244** | *i* P | **Pn** | **08 52 59.7** | **+1.1** |
| JSE | | | | *e*S | **S** | **08 53 44.1** | **+0.1** |
| **NEM2** | **Nemuro 2** | **2.96** | **189** | *i* P | **Pn** | **08 52 57.3** | **-1.4** |
| NEM2 | | | | S | **S** | **08 53 40.9** | **-3.2** |
| **JMP** | **Maruseppu** | **3.12** | **224** | P | **Pn** | **08 53 01.0** | **+0.8** |
| **JWK2** | **Keihoku** | **3.27** | **254** | P | **Pn** | **08 53 03.4** | **+1.8** |
| JWK2 | | | | S | **S** | **08 53 51.0** | **+1.7** |
| **JKA** | **Kamikawa-asahi** | **3.43** | **232** | Pn | **Pn** | **08 53 04.2** | **+0.9** |
| **JKA** | **Kamikawa-asahi** | **3.43** | **232** | *e*P | **Pn** | **08 53 04.2** | **+0.9** |
| **ASAJ** | **Asahikawa** | **3.44** | **232** | P | **Pn** | **08 53 04.5** | **+1.2** |
| | comp=E,643nm,0.6s,baz=63,slow=6.7,SNR=728 | | | | | | |
| ASAJ | | | | S | **S** | **08 53 53.8** | **+1.3** |
| | comp=E,107nm,0.7s,baz=358,slow=18,SNR=8.7 | | | | | | |
| **ASAJ** | **Asahikawa** | **3.44** | **232** | PN | **Pn** | **08 53 04.2** | **+0.9** |
| **AKK** | **Akkeshi** | **3.45** | **199** | *e*P | **Pn** | **08 53 02.3** | **-1.2** |
| **JAK** | **Akkeshi** | **3.51** | **200** | *i* P | **Pn** | **08 53 03.1** | **-0.9** |
| JAK | | | | *e*S | **S** | **08 53 50.2** | **-3.6** |
| **JAR** | **Ashorobuto** | **3.52** | **212** | *i* P | **Pn** | **08 53 04.8** | **+0.6** |
| **JKK2** | **Kamakawa 2** | **3.52** | **228** | *i* P | **Pn** | **08 53 05.1** | **+0.9** |
| **JSS** | **Shosan** | **3.70** | **241** | P | **Pn** | **08 53 07.9** | **+2.0** |
| JSS | | | | S | **S** | **08 53 59.7** | **+2.4** |
| **JRBN** | **Rebuntou** | **3.80** | **259** | P | **Pn** | **08 53 07.4** | **+0.5** |
| JRBN | | | | *e*S | **S** | **08 53 58.1** | **-1.0** |
| **UGL** | **Uglegorsk** | **4.01** | **315** | *e*P | **Pn** | **08 53 08.8** | **-0.3** |
| UGL | | | | AMB | AMB | 08 53 09.4 | |
| | comp=E,50nm,0.6s | | | | | | |
| UGL | | | | *e*S | **S** | **08 54 02.5** | **-0.7** |
| UGL | | | | A | A | 08 54 07.5 | |
| | comp=E,40nm,0.4s | | | | | | |
| UGL | | | | A | A | 08 54 07.5 | |
| | comp=E,150nm,0.4s | | | | | | |
| **JFR** | **Furan** | **4.12** | **222** | P | **Pn** | **08 53 11.5** | **+1.0** |
| **JHR** | **Hokuryu** | **4.16** | **234** | *e*P | **Pn** | **08 53 12.3** | **+1.4** |
| **JCH** | **Churui** | **4.26** | **211** | *i* P | **Pn** | **08 53 10.9** | **-1.0** |
| JCH | | | | S | **S** | **08 54 03.5** | **-4.8** |
| **JBT2** | **Biratori 2** | **4.53** | **220** | P | **Pn** | **08 53 14.9** | **0.0** |
| **JNBK** | **Urakawa-nobuka** | **4.78** | **214** | *i* P | **Pn** | **08 53 16.3** | **-1.4** |
| JNBK | | | | *e*S | **S** | **08 54 13.2** | **-5.5** |
| **ERM** | **Erimo** | **4.86** | **209** | | **Pn** | **08 53 18.7** | **+0.1** |
| **ERM** | **Erimo** | **4.86** | **209** | *ce*PN | **Pn** | **08 53 18.4** | **-0.2** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,2μm,1.0s | | | | | | |
| **JEW** | **Eniwo** | **4.92** | **227** | P | **Pn** | **08 53 20.2** | **+0.9** |
| JEW | | | | *e*S | **S** | **08 54 20.2** | **-1.4** |
| **TYV** | **Tymovskoe** | **5.18** | **333** | *e*P | **Pn** | **08 53 22.0** | **-0.1** |
| TYV | | | | AMB | AMB | 08 53 23.0 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| TYV | | | | AMB | AMB | 08 53 26.4 | |
| | comp=Z,100nm,3.8s | | | | | | |
| TYV | | | | *e*S | **S** | **08 54 24.9** | **-1.9** |
| TYV | | | | A | A | 08 54 26.6 | |
| | comp=Z,100nm,5.0s | | | | | | |
| TYV | | | | A | A | 08 54 26.6 | |
| | comp=Z,200nm,5.0s | | | | | | |
| TYV | | | | A | A | 08 54 27.1 | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| **TYV** | **Tymovskoe** | **5.18** | **333** | *e*PN | **Pn** | **08 53 22.0** | **-0.1** |
| TYV | | | | *e*S | **S** | **08 54 21.7** | **-5.1** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,3.8s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,14nm,1.2s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,11nm,1.2s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,100nm,5.2s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,200nm,5.2s | | | | | | |
| **JOT** | **Ohata** | **6.23** | **220** | *i* P | **Pn** | **08 53 32.5** | **-2.0** |
| JOT | | | | *e*S | **S** | **08 54 42.3** | **-7.1** |
| **JOSM** | **Okushiri--Mats** | **6.50** | **232** | P | **Pn** | **08 53 37.2** | **-0.4** |
| **JTM** | **Tenmabayashi** | **6.71** | **217** | Pn | **Pn** | **08 53 38.2** | **-2.0** |
| **JSI2** | **Shiura 2** | **6.78** | **222** | *e*P | **Pn** | **08 53 39.7** | **-1.3** |
| JSI2 | | | | *e*S | **S** | **08 54 53.9** | **-7.3** |
| **JANG** | **Nango** | **6.89** | **212** | *i* P | **Pn** | **08 53 40.2** | **-2.2** |
| JANG | | | | S | S | 08 54 55.5 | -8.2 |
| **TEY** | **Ternei** | **6.95** | **263** | *e*P | **Pn** | **08 53 43.1** | **+0.2** |
| **TEY** | **Ternei** | **6.95** | **263** | ⇑*e*PN | **Pn** | **08 53 43.1** | **+0.2** |
| TEY | | | | *e* | | 08 55 01.7 | |
| TEY | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **JIW** | **Iwasaki** | **7.34** | **221** | *e*P | **Pn** | **08 53 46.3** | **-1.4** |
| JIW | | | | *e*S | **S** | **08 55 06.2** | **-7.3** |
| **SKR** | **Severo-Kuril's** | **7.83** | **52** | *e*P | **Pn** | **08 53 54.2** | **+0.8** |
| SKR | | | | AMB | AMB | 08 53 55.5 | |
| | comp=Z,120nm,0.5s | | | | | | |
| SKR | | | | *e*S | **S** | **08 55 20.8** | **-3.2** |
| SKR | | | | A | A | 08 55 21.0 | |
| | comp=Z,420nm,0.2s | | | | | | |
| SKR | | | | A | A | 08 55 21.0 | |
| | comp=Z,310nm,0.2s | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.83** | **52** | *ce*PN | **Pn** | **08 53 54.5** | **+1.1** |
| **JMM** | **Marumori** | **9.38** | **208** | | **Pn** | **08 54 12.0** | **-0.4** |
| **KLR** | **Kul'dur** | **10.26** | **292** | P | **Pn** | **08 54 22.9** | **-0.1** |
| | comp=Z,8.3nm,0.6s,baz=103,slow=11,SNR=22 | | | | | | |
| **KLR** | **Kul'dur** | **10.26** | **292** | *e*P | **Pn** | **08 54 22.5** | **-0.5** |
| **KLR** | **Kul'dur** | **10.26** | **292** | *e*PN | **Pn** | **08 54 22.5** | **-0.5** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,31nm,1.6s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **10.35** | **263** | P | **Pn** | **08 54 24.5** | **+0.4** |
| **USA0B** | **Ussuriysk Arra** | **10.35** | **263** | *i* PN | **Pn** | **08 54 24.5** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **10.35** | **263** | P | **Pn** | **08 54 24.7** | **+0.6** |
| | comp=Z,73nm,0.5s,baz=70,slow=12,SNR=162 | | | | | | |
| USRK | | | | S | **S** | **08 56 19.0** | **-1.5** |
| | comp=Z,1.4nm,0.6s,baz=82,slow=12,SNR=1.6 | | | | | | |
| **PET** | **Petropavlovsk** | **10.43** | **45** | *e*S | **S** | **08 56 19.2** | **-2.8** |
| **VLA** | **Vladivostok** | **10.78** | **258** | *i* PN | **Pn** | **08 54 29.4** | **+0.1** |
| **MSHR** | **Mys Shultsa** | **11.48** | **257** | *ce*PN | **Pn** | **08 54 37.5** | **-0.3** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **11.50** | **215** | | **Pn** | **08 54 38.7** | **+0.6** |
| **MAJO** | **Matsushiro** | **11.50** | **215** | | **Pn** | **08 54 38.8** | **+0.7** |
| **MAJO** | **Matsushiro** | **11.50** | **215** | *i* PN | **Pn** | **08 54 38.1** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **11.50** | **215** | P | **P** | **08 54 39.7** | **+0.3** |
| | comp=Z,11nm,0.5s,baz=11,slow=13,SNR=33 | | | | | | |
| MJAR | | | | S | **S** | **08 56 47.7** | **+1.1** |
| | comp=Z,3.8nm,0.8s,baz=21,slow=21,SNR=5.2 | | | | | | |
| **PSTR** | **Posyet** | **11.69** | **257** | *e*P | **Pn** | **08 54 40.5** | **+0.2** |
| **PSTR** | **Posyet** | **11.69** | **257** | *i* PN | **Pn** | **08 54 40.5** | **+0.2** |
| **MDJ** | **Mudanjiang** | **11.89** | **268** | P | **Pn** | **08 54 43.0** | **+0.3** |
| MDJ | | | | S | S | 08 57 41.0 | +46 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,200nm,0.8s | | | | | | |
| **MDJ** | **Mudanjiang** | **11.89** | **268** | | **Pn** | **08 54 42.6** | **-0.1** |
| **JGF** | **Kuroka** | **12.65** | **216** | P | **Pn** | **08 54 52.5** | **+0.4** |
| **INU** | **Inuyama** | **13.01** | **216** | | **Pn** | **08 54 57.3** | **+1.1** |
| **BNX** | **BinXian** | **13.18** | **274** | ⇑P | **P** | **08 54 56.6** | **-1.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,21nm,0.7s | | | | | | |
| **HEH** | **HeiHe** | **13.21** | **294** | *e*P | **P** | **08 54 58.3** | **+0.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,170nm,0.7s | | | | | | |
| **MA2** | **Magadan** | **13.56** | **10** | | **Pn** | **08 55 02.6** | **+0.2** |
| **MA2** | **Magadan** | **13.56** | **10** | P | **P** | **08 55 01.9** | **0.0** |
| | comp=Z,34nm,0.7s,baz=194,slow=11,SNR=23 | | | | | | |
| **MA2** | **Magadan** | **13.56** | **10** | *e*P | **Pn** | **08 55 03.1** | **+0.7** |
| **MA2** | **Magadan** | **13.56** | **10** | *ce*PN | **Pn** | **08 55 03.1** | **+0.7** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,28nm,0.6s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **14.09** | **203** | P | **Pn** | **08 55 11.8** | **+2.8** |
| | comp=Z,46nm,0.6s,baz=77,slow=16,SNR=1.8 | | | | | | |
| **KBG** | **Krutoberegovo** | **14.25** | **40** | *e*P | **Pn** | **08 55 10.8** | **+0.2** |
| KBG | | | | AMB | AMB | 08 55 12.2 | |
| | comp=Z,260nm,0.6s | | | | | | |
| KBG | | | | *e*S | **S** | **08 57 42.9** | **-2.3** |
| KBG | | | | A | A | 08 57 45.4 | |
| | comp=Z,230nm,0.7s | | | | | | |
| KBG | | | | A | A | 08 57 45.4 | |
| | comp=Z,190nm,0.7s | | | | | | |
| **ZEA** | **Zeya** | **14.33** | **308** | *e*P | **Pn** | **08 55 12.0** | **+0.4** |
| **ZEA** | **Zeya** | **14.33** | **308** | *e*P | **Pn** | **08 55 11.8** | **+0.2** |
| ZEA | | | | pmax | pmax | | |
| | comp=E,20nm,0.9s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=N,20nm,1.0s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **CN2** | **Changchun** | **14.98** | **268** | *e*P | **P** | **08 55 16.3** | **-1.4** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,40nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **16.30** | **244** | P | **Pn** | **08 55 34.1** | **-0.6** |
| | comp=Z,18nm,0.7s,baz=54,slow=10,SNR=99 | | | | | | |
| KSRS | | | | PcP | **PcP** | **09 00 07.0** | **+0.9** |
| | comp=Z,0.3nm,0.3s,baz=26,slow=1.3,SNR=4.5 | | | | | | |
| **KS19** | **Wonju Array Si** | **16.30** | **244** | P | **Pn** | **08 55 33.8** | **-1.0** |
| KS19 | | | | IAmb | IAmb | 08 55 35.1 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **16.33** | **244** | | **P** | **08 55 33.3** | **+0.9** |
| **KSAR** | **Wonju Array Be** | **16.33** | **244** | P | **P** | **08 55 33.3** | **+0.9** |
| **SNY** | **Shenyang** | **16.95** | **263** | ⇑P | **P** | **08 55 40.0** | **+0.9** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,29nm,0.8s | | | | | | |
| **SEY** | **Seymchan** | **17.02** | **9** | P | **P** | **08 55 39.4** | **-0.1** |
| | comp=Z,22nm,0.8s,baz=189,slow=9.0,SNR=29 | | | | | | |
| **SEY** | **Seymchan** | **17.02** | **9** | *e*P | **P** | **08 55 38.8** | **-0.8** |
| **SEY** | **Seymchan** | **17.02** | **9** | *e*P | **P** | **08 55 38.8** | **-0.8** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | |
| **INCN** | **Inchon** | **17.09** | **246** | P | **Pn** | **08 55 42.7** | **-1.2** |
| **INCN** | **Inchon** | **17.09** | **246** | P | **Pn** | **08 55 42.7** | **-1.2** |
| INCN | | | | pmax | pmax | | |
| | comp=Z,75nm,0.7s | | | | | | |
| **TJN** | **Taejon** | **17.33** | **242** | *ce*P | **P** | **08 55 44.9** | **+1.7** |
| **JNU** | **Nakatsue** | **17.70** | **227** | P | **P** | **08 55 48.9** | **+1.6** |
| JNU | | | | IAmb | IAmb | 08 55 57.5 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **17.70** | **227** | P | **P** | **08 55 49.3** | **+2.0** |
| | comp=Z,20nm,0.8s,baz=46,slow=9.9,SNR=12 | | | | | | |
| **HIA** | **Hailar** | **18.09** | **289** | P | **P** | **08 55 49.4** | **-2.0** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| **YAK** | **Yakutsk** | **18.44** | **335** | P | **P** | **08 55 53.1** | **-1.7** |
| | comp=Z,81nm,0.8s,baz=120,slow=4.4,SNR=14 | | | | | | |
| **YAK** | **Yakutsk** | **18.44** | **335** | *e*P | **P** | **08 55 52.6** | **-2.2** |
| YAK | | | | *e*S | **S** | **08 59 04.2** | **-4.0** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,54nm,0.6s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.3s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,112nm,3.0s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,64nm,1.2s | | | | | | |
| **DL2** | **Dalian** | **19.59** | **257** | P | **P** | **08 56 09.0** | **+1.6** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,34nm,0.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **21.44** | **275** | *e*P | **P** | **08 56 25.5** | **+0.1** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,23nm,0.7s | | | | | | |
| **BJI** | **Beijing** | **22.79** | **265** | P | **P** | **08 56 39.3** | **+1.8** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,57nm,3.5s | | | | | | |
| **BJT** | **Baijiatuau** | **22.81** | **265** | P | **P** | **08 56 39.7** | **+2.0** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **24.09** | **18** | *de*P | **P** | **08 56 47.5** | **-1.4** |
| BILL | | | | *PP | **pP** | **08 57 44.0** | **+0.7** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **HNS** | **HongShan** | **25.06** | **261** | ⇑P | **P** | **08 56 59.0** | **+1.0** |
| **NJ2** | **Nanjing** | **25.47** | **246** | *e*P | **P** | **08 57 01.8** | **+0.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,180nm,4.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **25.65** | **270** | *e*P | **P** | **08 57 03.0** | **-0.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,79nm,4.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.61** | **288** | *ce*P | **P** | **08 57 14.5** | **+2.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **TIXI** | **Tiksi** | **26.75** | **348** | *i* P | **P** | **08 57 14.4** | **+1.8** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **27.05** | **288** | P | **P** | **08 57 16.2** | **+0.4** |
| **SONM** | **Songino Array** | **27.05** | **288** | P | **P** | **08 57 15.2** | **-0.6** |
| | comp=Z,9.4nm,0.7s,baz=77,slow=8.9,SNR=23 | | | | | | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **27.05** | **288** | P | **P** | **08 57 16.2** | **+0.4** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **LYN** | **LuoYang** | **28.13** | **257** | P | **P** | **08 57 27.8** | **+2.5** |
| LYN | | | | pP | PP | 08 58 34.7 | -1.5 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.3s | | | | | | |
| **KNMB** | **Chin-men Tao** | **31.26** | **235** | P | **P** | **08 57 52.4** | **-0.4** |
| **M13K** | **Dall Lake** | **32.28** | **46** | P | **P** | **08 58 01.3** | **0.0** |
| M13K | | | | IAmb | IAmb | 08 58 04.2 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **M13K** | **Dall Lake** | **32.28** | **46** | P | **P** | **08 58 01.6** | **+0.3** |
| | baz=268 | | | | | | |
| **F15K** | **North Star Dit** | **32.41** | **36** | P | **P** | **08 58 02.2** | **-0.1** |
| **F15K** | **North Star Dit** | **32.41** | **36** | P | **P** | **08 58 02.3** | **-0.1** |
| | baz=258 | | | | | | |
| **G15K** | **Niukluk** | **32.52** | **37** | P | **P** | **08 58 03.0** | **-0.2** |
| | baz=260 | | | | | | |
| **L14K** | **Kuka Creek** | **32.66** | **44** | P | **P** | **08 58 05.1** | **+0.6** |
| L14K | | | | IAmb | IAmb | 08 58 07.0 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **L14K** | **Kuka Creek** | **32.66** | **44** | P | **P** | **08 58 05.6** | **+1.1** |
| | baz=267 | | | | | | |
| **C16K** | **Lisburne Hills** | **32.80** | **31** | P | **P** | **08 58 04.5** | **-1.1** |
| C16K | | | | IAmb | IAmb | 08 58 44.3 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **M14K** | **Bethel** | **32.98** | **45** | P | **P** | **08 58 07.9** | **+0.7** |
| M14K | | | | IAmb | IAmb | 08 58 09.6 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **M14K** | **Bethel** | **32.98** | **45** | P | **P** | **08 58 07.7** | **+0.5** |
| | baz=268,SNR=7.7 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **33.10** | **47** | P | **P** | **08 58 08.1** | **-0.2** |
| | baz=270 | | | | | | |
| **LZH** | **Lanzhou** | **33.22** | **268** | *e*P | **P** | **08 58 10.7** | **+0.8** |
| LZH | | | | sP | sP | 09 00 02.9 | +15 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| **L15K** | **Ungalak Mounta** | **33.26** | **43** | P | **P** | **08 58 10.5** | **+0.8** |
| | baz=267 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **33.27** | **42** | P | **P** | **08 58 10.4** | **+0.6** |
| K15K | | | | IAmb | IAmb | 08 58 48.2 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **33.27** | **42** | P | **P** | **08 58 11.0** | **+1.2** |
| | baz=266 | | | | | | |
| **G16K** | **Koyuk River** | **33.28** | **37** | P | **P** | **08 58 09.0** | **-0.8** |
| G16K | | | | IAmb | IAmb | 08 58 11.0 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **G16K** | **Koyuk River** | **33.28** | **37** | P | **P** | **08 58 10.1** | **+0.2** |
| | baz=261 | | | | | | |
| **O14K** | **Tigyukauivet M** | **33.31** | **48** | P | **P** | **08 58 10.8** | **+0.7** |
| O14K | | | | IAmb | IAmb | 08 58 12.8 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **O14K** | **Tigyukauivet M** | **33.31** | **48** | P | **P** | **08 58 11.5** | **+1.3** |
| | baz=271 | | | | | | |
| **D17K** | **Noatak River** | **33.47** | **32** | P | **P** | **08 58 11.5** | **+0.1** |
| | baz=256 | | | | | | |
| **M15K** | **Kasigluk River** | **33.61** | **45** | P | **P** | **08 58 13.7** | **+1.0** |
| | baz=269,SNR=8.6 | | | | | | |
| **C17K** | **DeLong Mountai** | **33.63** | **31** | P | **P** | **08 58 12.3** | **-0.6** |
| | baz=255 | | | | | | |
| **J16K** | **Anvik River** | **33.78** | **41** | P | **P** | **08 58 13.4** | **-0.7** |
| **J16K** | **Anvik River** | **33.78** | **41** | P | **P** | **08 58 14.4** | **+0.4** |
| | baz=266 | | | | | | |
| **I17K** | **Unalakleet** | **33.79** | **39** | P | **P** | **08 58 14.5** | **+0.3** |
| | baz=265 | | | | | | |
| **E17K** | **Hotham Inlet** | **33.81** | **34** | P | **P** | **08 58 13.9** | **-0.4** |
| | baz=259 | | | | | | |
| **N15K** | **Kwethluk River** | **33.90** | **46** | P | **P** | **08 58 16.5** | **+1.3** |
| **N15K** | **Kwethluk River** | **33.90** | **46** | P | **P** | **08 58 16.1** | **+0.9** |
| | baz=271,SNR=13 | | | | | | |
| **G17K** | **Kiwalik Mounta** | **34.01** | **37** | P | **P** | **08 58 16.2** | **+0.2** |
| | baz=262,SNR=5.8 | | | | | | |
| **SDPT** | **Sand Point** | **34.02** | **55** | P | **P** | **08 58 16.2** | **0.0** |
| | baz=278 | | | | | | |
| **O15K** | **Ungalikthiuk R** | **34.06** | **48** | P | **P** | **08 58 16.5** | **0.0** |
| | baz=272 | | | | | | |
| **L16K** | **Owhat River** | **34.22** | **43** | P | **P** | **08 58 18.3** | **+0.4** |
| L16K | | | | IAmb | IAmb | 08 58 19.5 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **L16K** | **Owhat River** | **34.22** | **43** | P | **P** | **08 58 18.4** | **+0.6** |
| | baz=269,SNR=8.8 | | | | | | |
| **H17K** | **Granite Mounta** | **34.24** | **38** | P | **P** | **08 58 18.2** | **+0.2** |
| | baz=264 | | | | | | |
| **E18K** | **Tukpahlearik C** | **34.34** | **33** | P | **P** | **08 58 18.8** | **0.0** |
| | baz=260 | | | | | | |
| **C18K** | **Utukok River** | **34.38** | **31** | P | **P** | **08 58 17.9** | **-1.4** |
| **C18K** | **Utukok River** | **34.38** | **31** | P | **P** | **08 58 18.3** | **-0.9** |
| | baz=257 | | | | | | |
| **GTA** | **Gaotai** | **34.40** | **276** | ⇓P | **P** | **08 58 21.0** | **+1.1** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| **S14K** | **Fog Glacier** | **34.42** | **53** | P | **P** | **08 58 19.4** | **-0.4** |
| | baz=277 | | | | | | |
| **M16K** | **Timber Creek** | **34.46** | **45** | P | **P** | **08 58 20.8** | **+0.9** |
| M16K | | | | IAmb | IAmb | 08 58 22.1 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **M16K** | **Timber Creek** | **34.46** | **45** | P | **P** | **08 58 20.9** | **+1.0** |
| | baz=270,SNR=7.1 | | | | | | |
| **J17K** | **VABM Dome** | **34.47** | **40** | P | **P** | **08 58 20.8** | **+0.8** |
| **J17K** | **VABM Dome** | **34.47** | **40** | P | **P** | **08 58 21.0** | **+1.0** |
| | baz=267 | | | | | | |
| **N16K** | **Nishlik Lake** | **34.55** | **46** | P | **P** | **08 58 22.2** | **+1.4** |
| | baz=271,SNR=16 | | | | | | |
| **F18K** | **Selawik** | **34.57** | **35** | P | **P** | **08 58 20.8** | **0.0** |
| | baz=262 | | | | | | |
| **L17K** | **Donlin** | **34.78** | **43** | P | **P** | **08 58 24.0** | **+1.3** |
| | baz=269,SNR=8.2 | | | | | | |
| **K17K** | **Iditarod** | **34.79** | **42** | P | **P** | **08 58 23.9** | **+1.1** |
| | baz=269,SNR=5.1 | | | | | | |
| **G18K** | **Tagagawik** | **34.88** | **36** | P | **P** | **08 58 23.0** | **-0.4** |
| G18K | | | | IAmb | IAmb | 08 58 24.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **G18K** | **Tagagawik** | **34.88** | **36** | P | **P** | **08 58 23.1** | **-0.4** |
| | baz=264,SNR=8.7 | | | | | | |
| **H18K** | **Honhosa River** | **34.92** | **37** | P | **P** | **08 58 23.5** | **-0.3** |
| H18K | | | | IAmb | IAmb | 08 58 24.9 | |
| | comp=Z,7.7nm,0.7s | | | | | | |
| **H18K** | **Honhosa River** | **34.92** | **37** | P | **P** | **08 58 23.9** | **+0.1** |
| | baz=265 | | | | | | |
| **O16K** | **Kokwok River B** | **34.92** | **47** | P | **P** | **08 58 24.7** | **+0.9** |
| O16K | | | | IAmb | IAmb | 08 58 26.1 | |

comp=Z,9.1nm,0.8s
O16K **Kokwok River B** 34.92 47 P P 08 58 25.0 +1.2
baz=273
P16K **Nushagak River** 35.01 48 P P 08 58 25.5 +0.9
baz=274
C19K **Lookout Ridge** 35.05 30 P P 08 58 24.5 -0.4
baz=258
M17K **Holitna River** 35.19 44 P P 08 58 26.9 +0.8
M17K **Holitna River** 35.19 44 P P 08 58 27.7 +1.5
baz=271,SNR=18
N17K **Nushagak Hills** 35.34 45 P P 08 58 28.3 +0.9
N17K IAmb IAmb 08 58 29.8
comp=Z,14nm,0.8s
N17K **Nushagak Hills** 35.34 45 P P 08 58 28.3 +0.9
baz=273,SNR=6.3
F19K **Shaleruckik Mo** 35.34 34 P P 08 58 26.7 -0.7
baz=263,SNR=11
O17K **Koliganek Bris** 35.42 47 P P 08 58 29.2 +1.2
baz=274
J18K **Innoko River** 35.53 40 P P 08 58 29.0 -0.1
J18K **Innoko River** 35.53 40 P P 08 58 29.3 +0.2
baz=269
L18K **Granite Mounta** 35.54 43 P P 08 58 29.6 +0.6
L18K IAmb IAmb 08 58 30.9
comp=Z,11nm,0.7s
L18K **Granite Mounta** 35.54 43 P P 08 58 30.4 +1.3
baz=271,SNR=8.1
G19K **Purcell Mounta** 35.54 36 P P 08 58 28.2 -0.8
baz=265,SNR=7.7
E19K **Redstone River** 35.63 33 P P 08 58 29.8 0.0
E19K IAmb IAmb 08 58 30.4
comp=Z,13nm,0.7s
E19K **Redstone River** 35.63 33 P P 08 58 29.3 -0.5
baz=263,SNR=15
H19K **Roundabout Mou** 35.75 37 P P 08 58 30.3 -0.5
H19K IAmb IAmb 08 58 31.8
comp=Z,19nm,0.9s
H19K **Roundabout Mou** 35.75 37 P P 08 58 30.8 0.0
baz=266,SNR=13
M18K **Stony River** 35.96 44 P P 08 58 33.7 +1.0
baz=272,SNR=7.5
N18K **Kilae Creek** 35.97 45 P P 08 58 33.8 +1.0
N18K IAmb IAmb 08 58 35.4
comp=Z,20nm,0.8s
N18K **Kilae Creek** 35.97 45 P P 08 58 34.2 +1.4
baz=274,SNR=16
J19K **Poorman** 36.03 39 P P 08 58 32.8 -0.5
J19K **Poorman** 36.03 39 P P 08 58 33.0 -0.2
baz=269,SNR=5.7
D20K **Etivluk River** 36.04 31 P P 08 58 32.2 -1.1
baz=262,SNR=8.7
B20K **Meade River** 36.07 29 P P 08 58 32.4 -1.0
baz=259
E20K **Nigu River** 36.13 32 P P 08 58 33.3 -0.8
baz=263,SNR=10
F20K **Avaraart Lake** 36.17 34 P P 08 58 34.0 -0.3
baz=265
Q17K **Contact Creek** 36.17 49 P P 08 58 34.8 +0.2
baz=277
O18K **Koktuh Hills** 36.37 46 P P 08 58 37.4 +1.3
O18K **Koktuh Hills** 36.37 46 P P 08 58 36.1 0.0
baz=275,SNR=6.5
L19K **White Mountain** 36.40 43 P P 08 58 36.3 0.0
baz=272
P18K **Big Mountain,** 36.40 47 P P 08 58 37.8 +1.4
P18K IAmb IAmb 08 58 38.6
comp=Z,14nm,0.9s
P18K **Big Mountain,** 36.40 47 P P 08 58 36.5 +0.2
baz=276
H20K **Anotleneega Mo** 36.40 37 P P 08 58 35.8 -0.5
baz=268,SNR=9.3
A21K **Barrow** 36.51 27 P P 08 58 36.0 -1.1
baz=258
I20K **Naaghedeneel** 36.55 38 P P 08 58 37.8 +0.3
baz=269
Q18K **Katmai Hardscr** 36.59 49 P P 08 58 38.2 +0.1
baz=277,SNR=6.6
M19K **Big River Lodg** 36.63 43 P P 08 58 39.3 +1.1
M19K **Big River Lodg** 36.63 43 P P 08 58 39.1 +0.8
baz=273
N19K **Bonanza Creek** 36.65 45 P P 08 58 39.7 +1.1
baz=274
J20K **Nowinta River** 36.68 39 P P 08 58 38.8 +0.1
J20K **Nowinta River** 36.68 39 P P 08 58 38.6 -0.1
baz=270,SNR=12
K20K **Telida** 36.73 41 P P 08 58 39.2 +0.1
baz=272,SNR=5.5
C21K **Knifeblade Rid** 36.76 31 P P 08 58 38.6 -0.6
baz=263,SNR=6.6
L20K **Farewell, AK** 36.84 42 P P 08 58 40.3 +0.3
baz=273
B21K **Ikpikpuk River** 36.88 30 P P 08 58 39.7 -0.5
baz=262
IMAR **Indian Mountai** 36.89 36 P P 08 58 39.3 -1.1
E21K **Killik River** 36.97 32 P P 08 58 40.3 -0.7
baz=265
G21K **Allakaket** 37.01 35 P P 08 58 41.4 +0.1
baz=268,SNR=18
R18K **Karluk** 37.02 50 P P 08 58 41.6 +0.1
baz=279
F21K **Alatna River** 37.05 34 P P 08 58 41.5 -0.3
baz=267,SNR=9.5
M20K **Styx River** 37.22 43 P P 08 58 43.3 0.0
baz=274
Q19K **Cape Douglas,** 37.26 48 P P 08 58 44.1 +0.5
baz=278
H21K **Melozitna Rive** 37.27 37 P P 08 58 43.2 -0.3
baz=270,SNR=11
P19K **Oil Pt** 37.38 47 P P 08 58 41.8 -2.8
baz=277
D22K **Ayikyak River** 37.48 31 P P 08 58 44.6 -0.6
baz=265
CHUM **Lake Minchumin** 37.49 40 P P 08 58 45.8 +0.4
baz=272
F22K **John River** 37.57 34 P P 08 58 46.0 -0.1
baz=268
PPLA **Purkeypile** 37.60 41 P P 08 58 47.0 +0.5
baz=274
CAST **Castle Rocks** 37.62 40 P P 08 58 47.3 +0.8
baz=273
OHAK **Old Harbor** 37.70 51 P P 08 58 47.5 +0.3
baz=280
E22K **Anaktuvuk Pass** 37.74 33 P P 08 58 47.2 -0.3
baz=267
G22K **Bettles** 37.81 35 P P 08 58 47.0 -1.1
baz=269,SNR=17
H22K **Ishtalitna Cre** 37.86 36 P P 08 58 48.0 -0.5
baz=270,SNR=12
Q20K **Shuyak Island** 37.95 48 P P 08 58 49.3 0.0
baz=279
KDAK **Kodiak Island** 37.98 50 P P 08 58 50.1 +0.5
comp=Z,7.7nm,0.6s,baz=270,slow=2.3,SNR=43
comp=Z,7.7nm,0.6s
KDAK **Kodiak Island** 37.98 50 P P 08 58 49.4 -0.1
baz=280
KDAK **Kodiak Island** 37.98 50 *i* P P 08 58 50.0 +0.5
KDAK pmax pmax
comp=Z,16nm,0.9s
BPAW **Bear Paw Mtn.** 38.07 39 P P 08 58 50.2 -0.1
baz=273
MLY **Manley** 38.14 38 P P 08 58 50.7 -0.2
baz=272,SNR=8.2
HOM **Homer** 38.18 46 P P 08 58 50.9 -0.3
baz=278
D23K **Nanushuk River** 38.21 31 P P 08 58 50.6 -0.7
baz=267,SNR=6.1
C23K **Itkillik River** 38.29 30 P P 08 58 51.0 -0.9
baz=266,SNR=7.2
G23K **Bananza Creek** 38.40 35 P P 08 58 52.2 -0.7
baz=271,SNR=14
E23K **Chandalar** 38.57 33 P P 08 58 53.7 -0.6
baz=269,SNR=18
TOLK **Toolik Lake Re** 38.59 32 P P 08 58 53.6 -1.0
baz=269,SNR=9.2
H23K **Yukon River** 38.61 36 P P 08 58 54.6 -0.2
baz=272,SNR=12
M22K **Willow** 38.66 43 P P 08 58 54.1 -1.0
baz=277
I23K **Minto, Yukon-K** 38.72 37 P P 08 58 55.5 0.0
baz=273,SNR=7.0
NEA2 **Nenana** 38.88 38 P P 08 58 56.6 -0.2
baz=274,SNR=7.4
D24K **Happy Valley** 38.88 31 P P 08 58 56.2 -0.6
baz=269,SNR=27
C24K **Franklin Bluff** 38.94 30 P P 08 58 56.4 -0.9
baz=268
E24K **Your Creek** 38.99 33 P P 08 58 57.6 -0.2
baz=270,SNR=18

MCK **McKinley** 39.00 40 P P 08 58 57.7 -0.2
baz=275,SNR=5.7
ZALV **Zalesovo Beam** 39.05 304 P P 08 58 56.9 -1.5
comp=Z,0.5nm,0.4s,baz=53,slow=5.6,SNR=2.0
ZALV PcP PcP 09 01 01.6 +0.5
comp=Z,0.7nm,0.3s,baz=48,slow=2.1,SNR=3.4
comp=Z,0.5nm,0.4s
F24K **Squaw Lake** 39.23 34 P P 08 58 59.0 -0.8
baz=272,SNR=16
H24K **Noodor Dome** 39.30 36 P P 08 59 00.5 +0.1
baz=274,SNR=9.6
COLA **College** 39.38 38 P P 08 59 01.0 +0.2
baz=275
COLA **College** 39.38 38 *i* P P 08 59 01.1 +0.2
COLA pmax pmax
comp=Z,13nm,0.8s
G24K **Hadweenzie Riv** 39.41 35 P P 08 59 01.2 -0.1
baz=273,SNR=9.1
POKR **Poker Plat Res** 39.53 37 P P 08 59 02.4 +0.1
baz=275,SNR=5.1
D25K **Kavik River** 39.76 31 P P 08 59 03.2 -0.9
baz=271,SNR=37
DHY **Denali Highway** 39.77 41 P P 08 59 04.2 -0.2
baz=278
ILAR **Eielson Array** 39.80 38 P P 08 59 03.9 -0.6
comp=Z,5.1nm,0.6s,baz=253,slow=5.5,SNR=101
ILAR ScP ScP 09 04 22.1 +1.1
comp=Z,0.3nm,0.6s,baz=265,slow=3.9,SNR=4.2
comp=Z,5.1nm,0.6s
HDA **Harding Lake** 39.81 39 P P 08 59 03.8 -0.7
baz=276,SNR=9.7
G25K **Bearman Lake** 39.96 35 P P 08 59 05.5 -0.1
baz=274
F25K **Christian Rive** 40.08 34 P P 08 59 06.6 -0.2
baz=274,SNR=13
H25L **Birch Creek** 40.11 36 P P 08 59 06.9 0.0
baz=275
PRP **Porcupine Dome** 40.30 37 P P 08 59 08.5 -0.2
baz=276,SNR=6.1
PZH **PanZhiHua** 40.35 256 P P 08 59 08.7 -0.8
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,5.1s
K24K **Donnelly Dome** 40.39 39 P P 08 59 08.6 -0.7
baz=278
J25K **Salcha River,** 40.46 38 P P 08 59 09.0 -0.9
baz=277
PAX **Paxson** 40.64 41 P P 08 59 11.0 -0.4
baz=279
F26K **Sheenjek River** 40.65 33 P P 08 59 11.3 -0.1
baz=275,SNR=16
C27K **Jago River** 40.69 30 P P 08 59 11.2 -0.4
baz=273,SNR=32
G26K **Porcupine Rive** 40.85 34 P P 08 59 12.9 -0.1
baz=276,SNR=21
HARP **HAARP** 40.88 41 P P 08 59 12.6 -0.7
baz=280
SCRK **Sand Creek** 41.15 39 P P 08 59 14.8 -0.7
baz=279,SNR=15
J26L **Joseph Creek** 41.25 38 P P 08 59 15.6 -0.7
baz=279
E27K **Coleen River** 41.56 32 P P 08 59 18.0 -0.7
baz=276
L26K **Log Cabin Wild** 41.59 40 P P 08 59 18.7 -0.3
baz=281
D27M **Malcolm River** 41.68 31 P P 08 59 19.3 -0.4
baz=276
G27K **Doyon Strip** 41.70 34 P P 08 59 20.1 +0.2
baz=278,SNR=8.9
H27K **Steamboat Moun** 41.84 35 P P 08 59 21.5 +0.5
baz=279
M26K **Nabesna, AK** 41.87 41 P P 08 59 21.8 +0.5
baz=282
I27K **Kandik River** 41.90 36 P P 08 59 22.0 +0.5
baz=279,SNR=8.1
K27K **Chicken** 41.97 39 P P 08 59 21.7 -0.3
K27K **Chicken** 41.97 39 P P 08 59 22.5 +0.5
baz=281,SNR=21
MCARA **McCarthy VSAT** 42.07 43 P P 08 59 23.6 +0.8
baz=283
CRQE **Cirque** 42.17 44 P P 08 59 24.9 +1.1
baz=284
EGAK **Eagle** 42.23 37 P P 08 59 24.5 +0.5
baz=281
BGLC **Bering Glacier** 42.23 45 P P 08 59 25.0 +0.9
baz=284
L27K **Beaver Creek,** 42.26 40 P P 08 59 25.1 +0.7
baz=282,SNR=19
E28M **Babbage River** 42.27 32 P P 08 59 23.8 -0.6
baz=278,SNR=5.4
F28M **Old Crow** 42.28 33 P P 08 59 24.6 +0.2
baz=279
M27K **Edge Creek, AK** 42.39 41 P P 08 59 26.5 +1.0
baz=283,SNR=18
I28M **Miner Creek** 42.61 36 P P 08 59 27.8 +0.6
baz=281,SNR=22
MESA **MESA** 42.86 44 P P 08 59 30.1 +0.7
baz=285
E29M **Blow River** 42.90 32 P P 08 59 29.4 +0.1
baz=280,SNR=5.3
MK31 **Makanchi Array** 42.95 295 P P 08 59 29.4 -0.7
MK31 **Makanchi Array** 42.95 295 *i* P P 08 59 29.7 -0.4
MKAR **Makanchi Array** 42.95 295 P P 08 59 30.1 0.0
MKAR **Makanchi Array** 42.95 295 P P 08 59 28.6 -1.5
comp=Z,0.5nm,0.4s,baz=54,slow=6.3,SNR=5.9
MKAR PcP PcP 09 01 14.6 +0.5
comp=Z,1.0nm,0.6s,baz=67,slow=3.2,SNR=5.3
MKAR ScP ScP 09 04 34.3 +0.3
comp=Z,0.3nm,0.5s,baz=67,slow=4.2,SNR=2.3
comp=Z,0.5nm,0.4s
MKAR **Makanchi Array** 42.95 295 P P 08 59 30.1 0.0
CTG **Chitna Glacier** 42.96 43 P P 08 59 30.7 +0.6
baz=285
H29M **Whitestone** 43.10 35 P P 08 59 31.0 0.0
baz=281,SNR=7.7
G29M **Pine Creek** 43.10 34 P P 08 59 31.2 +0.2
baz=281
DAWY **Dawson** 43.12 38 P P 08 59 31.5 +0.3
baz=283
YUK3 **Moose Creek** 43.17 42 P P 08 59 32.3 +0.4
baz=284
I29M **Ogilvie Camp,** 43.30 36 P P 08 59 32.5 -0.1
I29M **Ogilvie Camp,** 43.30 36 P P 08 59 32.9 +0.3
baz=282,SNR=9.6
O28M **Mount Upton** 43.55 43 P P 08 59 35.4 +0.4
baz=286
KURK **Kurchatov** 43.67 302 *e* P P 08 59 35.1 -0.6
KURK **Kurchatov** 43.67 302 P P 08 59 35.1 -0.6
KURK 09 01 17.3
PINM **Pinnacle** 43.70 44 P P 08 59 36.4 +0.4
baz=286
EPYK **Eagle Plains** 43.72 35 P P 08 59 35.8 -0.2
EPYK IAmb IAmb 08 59 37.4
comp=Z,10.0nm,0.5s
EPYK **Eagle Plains** 43.72 35 P P 08 59 36.2 +0.2
baz=283,SNR=12
KURBB **Kurchatov Arra** 43.76 301 P P 08 59 35.1 -1.4
comp=Z,0.9nm,0.4s,baz=75,slow=8.4,SNR=4.3
KURBB PcP sP 09 01 17.3 +0.5
comp=Z,2.4nm,0.6s,baz=75,slow=3.6,SNR=9.7
comp=Z,0.9nm,0.4s
G30M **tAoh Zraii Nji** 43.79 34 P P 08 59 36.0 -0.5
baz=282
F30M **Barrier River** 43.82 33 P P 08 59 37.1 +0.4
baz=282,SNR=14
L29M **L29M** 43.89 39 P P 08 59 38.6 +1.2
baz=285,SNR=17
M29M **Somme Creek** 43.91 40 P P 08 59 38.6 +1.0
M29M **Somme Creek** 43.91 40 P P 08 59 38.2 +0.6
baz=286
K29M **Barlow Dome** 43.97 38 P P 08 59 38.8 +0.7
baz=284
I30M **Mount Dempster** 44.12 36 P P 08 59 38.9 -0.3
baz=284,SNR=19
YUK4 **Talbot Arm** 44.12 42 P P 08 59 39.8 +0.5
baz=286
PNL **Peninsula** 44.24 44 P P 08 59 40.6 +0.5
baz=287
J30M **Hart River** 44.30 37 P P 08 59 41.1 +0.5
baz=285,SNR=5.4
YUK6 **Outpost Mounta** 44.37 42 P P 08 59 41.6 +0.3
baz=287
O29M **Mount Kennedy** 44.45 43 P P 08 59 42.6 +0.7
baz=287
INK **Inuvik** 44.51 32 P P 08 59 41.3 -0.7
INK **Inuvik** 44.51 32 P P 08 59 41.4 -0.6
comp=Z,6.1nm,0.4s,baz=305,slow=9.2,SNR=58

comp=Z,6.1nm,0.4s
INK **Inuvik** 44.51 32 P P 08 59 41.5 -0.5
baz=283,SNR=8.7
G31M **Satah River** 44.55 34 P P 08 59 41.8 -0.6
baz=284,SNR=6.6
M30M **Minto, Yukon** 44.62 40 P P 08 59 44.3 +1.2
baz=286
F31M **Tsiigehtchic** 44.63 33 P P 08 59 42.7 -0.2
baz=284
N30M **Aishikik Lake** 44.81 42 P P 08 59 45.2 +0.6
baz=287
P29M **Windy Craggy** 45.05 44 P P 08 59 48.5 +2.0
P29M **Windy Craggy** 45.05 44 P P 08 59 49.0 +2.5
baz=288,SNR=23
P30M **Million Dollar** 45.27 43 P P 08 59 50.1 +1.9
baz=289
N31M **Braeburn, Yuko** 45.40 41 P P 08 59 50.6 +1.5
N31M IAmb IAmb 08 59 52.7
comp=Z,33nm,1.4s
N31M **Braeburn, Yuko** 45.40 41 P P 08 59 51.0 +1.8
baz=288,SNR=7.8
O30N **Mendenhall** 45.48 42 P P 08 59 50.7 +0.9
O30N **Mendenhall** 45.48 42 P P 08 59 51.2 +1.4
baz=289,SNR=7.6
PLBC **Pleasant Camp** 45.77 44 P P 08 59 53.9 +1.9
baz=290
M31M **Drury Creek, Y** 45.80 40 P P 08 59 53.3 +1.0
baz=288,SNR=5.4
WHY **Whitehorse** 46.08 42 P P 08 59 55.9 +1.4
baz=290,SNR=6.0
FARO **Faro, Yukon** 46.26 40 P P 08 59 56.0 +0.2
baz=289
A36M **Sachs Harbour** 46.30 25 P P 08 59 55.3 -0.6
baz=287
N32M **Quiet Lake** 46.74 41 P P 09 00 00.6 +1.1
baz=290
P32M **Atlin** 46.99 43 P P 09 00 03.1 +1.5
baz=291
R32K **Eaglecrest** 47.09 45 P P 09 00 04.1 +1.9
baz=292,SNR=6.4
SIT **Sitka** 47.14 47 P P 09 00 04.7 +2.2
SIT IAmb IAmb 09 00 06.0
comp=Z,16nm,0.9s
SIT **Sitka** 47.14 47 P P 09 00 04.1 +1.5
baz=292
SIT **Sitka** 47.14 47 P P 09 00 04.7 +2.2
SIT pmax pmax
comp=Z,16nm,0.9s
P33M **Teslin, Yukon** 47.19 42 P P 09 00 04.3 +1.2
baz=291,SNR=14
S32K **Killisnoo** 47.36 46 P P 09 00 05.8 +1.6
baz=293
CMAR **Chiang Mai Arr** 47.77 251 P P 09 00 09.4 +1.5
comp=Z,2.7nm,0.9s,baz=34,slow=6.5,SNR=6.6
comp=Z,2.7nm,0.9s
Q32M **Nakina River** 47.92 44 P P 09 00 10.6 +1.8
baz=293,SNR=5.3
R33M **Jennings River** 48.37 43 P P 09 00 14.1 +2.0
baz=293
TGTN **Hyland Airport** 48.76 39 P P 09 00 16.4 +1.5
baz=294
S34M **Telegraph Cree** 48.88 45 P P 09 00 17.8 +2.0
baz=294,SNR=5.9
WTLY **Watson Lake, Y** 49.09 41 P P 09 00 19.1 +1.8
baz=294
DLBC **Dease Lake** 49.20 44 P P 09 00 20.3 +2.0
comp=Z,9.8nm,0.8s,baz=268,slow=4.6,SNR=22
comp=Z,9.8nm,0.8s
DLBC **Dease Lake** 49.20 44 P P 09 00 20.6 +2.3
baz=295,SNR=9.3
T35M **Bob Quinn** 49.71 45 P P 09 00 24.7 +2.6
baz=296,SNR=7.5
V35K **Ketchikan** 49.74 48 P P 09 00 24.1 +1.9
baz=296
LIRD **Liard River Hi** 50.62 41 P P 09 00 30.7 +1.9
baz=297
KOTAN **Kotaneelee Air** 51.22 40 P P 09 00 34.8 +1.6
baz=298
TOAD **Toad River Com** 51.27 42 P P 09 00 35.3 +1.6
baz=298,SNR=17
ARU **Arti** 52.12 315 P P 09 00 38.2 -1.6
comp=Z,6.0nm,0.2s,baz=347,slow=1.4,SNR=6.9
comp=Z,6.0nm,0.2s
ARU **Arti** 52.12 315 *c i* P P 09 00 38.4 -1.4
ARU 09 01 44.8
ARU 09 02 38.2
ARU SS SS 09 11 16.4 -3.3
ARU pmax pmax
comp=Z,9.0nm,0.9s
SPA0 **Spitsbergen Ar** 52.17 348 *e* P P 09 00 39.2 -0.7
SPITS **Spitsbergen Ar** 52.17 348 P P 09 00 38.2 -1.8
comp=Z,1.2nm,0.3s,baz=65,slow=8.5,SNR=5.6
comp=Z,1.2nm,0.3s
RES **Resolute Bay** 52.69 17 P P 09 00 42.9 -0.8
RES pmax pmax
comp=Z,43nm,0.8s
BBB **Bella Bella** 53.05 50 P P 09 00 47.3 +0.7
comp=Z,4.0nm,0.9s,baz=54,slow=8.3,SNR=2.6
comp=Z,4.0nm,0.9s
YKA **Yellowknife Ar** 54.01 35 P P 09 00 53.1 -0.3
comp=Z,2.9nm,0.7s,baz=304,slow=7.1,SNR=17
YKA PcP PcP 09 01 54.2 +0.4
comp=Z,0.6nm,0.7s,baz=306,slow=3.7,SNR=4.1
comp=Z,2.9nm,0.7s
AKTO **Aktyubinsk** 55.47 309 P P 09 01 02.7 -1.3
comp=Z,1.0nm,0.7s,baz=65,slow=12,SNR=2.3
comp=Z,1.0nm,0.7s
ARCES **ARCESS Array B** 56.66 339 P P 09 01 10.4 -1.7
comp=Z,0.9nm,0.4s,baz=39,slow=9.9,SNR=5.4
ARCES PcP PcP 09 02 02.8 -1.4
comp=Z,1.4nm,0.6s,baz=24,slow=6.9,SNR=1.6
comp=Z,0.9nm,0.4s
KTK1 **Kautokeino** 57.60 339 *e* P P 09 01 17.4 -1.2
KTK1 IAmb IAmb 09 01 19.4
comp=Z,6.6nm,0.9s
SGF **Sodankyl** 57.87 337 P P 09 01 19.4 -1.1
SGF pmax pmax
comp=Z,16nm,2.4s
TRO **Tromso** 58.16 341 *e* P P 09 01 21.0 -1.4
TRO IAmb IAmb 09 01 21.6
comp=Z,12nm,1.0s
MSF **Maaselka** 58.23 335 P P 09 01 21.4 -1.6
MSF pmax pmax
comp=Z,7.0nm,2.3s
B08A **Colville Reser** 59.86 50 P P 09 01 35.3 +0.9
COR **Corvallis** 59.92 56 P P 09 01 37.5 +2.7
COR pmax pmax
comp=Z,28nm,1.3s
STEI **Steigen** 60.34 341 *e* P P 09 01 35.7 -1.5
STEI IAmb IAmb 09 01 39.1
comp=Z,22nm,1.5s
H04A **Detroit Lake** 60.50 55 P P 09 01 40.0 +1.2
H04A IAmb IAmb 09 01 41.6
comp=Z,9.9nm,0.9s
LOF **Lofoten** 60.55 342 *e* P P 09 01 37.9 -0.8
FAUS **Fauske** 60.77 340 *e* P P 09 01 38.9 -1.2
FAUS IAmb IAmb 09 01 39.1
comp=Z,16nm,0.5s
NEW **Newport** 61.09 49 P P 09 01 43.4 +0.7
NEW **Newport** 61.09 49 P P 09 01 44.0 +1.4
baz=308,SNR=7.9
NEW **Newport** 61.09 49 P P 09 01 43.4 +0.7
NEW pmax pmax
comp=Z,7.0nm,0.8s
SUMG **Summit** 61.38 2 P P 09 01 43.9 -0.8
SUMG IAmb IAmb 09 01 44.6
comp=Z,11nm,0.5s
SUMG **Summit** 61.38 2 P P 09 01 43.9 -0.8
SUMG pmax pmax
comp=Z,11nm,0.5s
PINE **Pine Mountain** 61.76 55 P P 09 01 49.2 +1.8
PINE IAmb IAmb 09 01 50.7
comp=Z,13nm,0.8s
FIA1 **FINESS Array S** 62.35 332 P P 09 01 49.0 -1.7
FINES **FINESS Array B** 62.35 332 P P 09 01 49.4 -1.3
comp=Z,8.9nm,0.5s,baz=41,slow=7.6,SNR=68
FINES PcP PcP 09 02 26.3 -0.8
comp=Z,0.9nm,0.7s,baz=90,slow=3.5,SNR=1.6
comp=Z,8.9nm,0.5s
MSO **Missoula** 63.66 49 P P 09 02 01.0 +1.3
baz=311,SNR=8.8
NSS **Namsos** 63.89 340 *e* P P 09 01 59.5 -1.2
WVOR **Wild Horse Val** 63.92 55 P P 09 02 03.7 +2.2
WVOR pmax pmax
comp=Z,9.0nm,1.0s
VSU **Vasula** 64.34 330 *c e* P P 09 02 03.7 0.0
VSU pmax pmax

comp=Z,25nm,2.5s
**EGMT Eagleton** 65.02 46 P P 09 02 09.6 +1.2
baz=312,SNR=7.5
**MPK Martis Peak** 65.13 59 P P 09 02 11.6 +2.2
**EMB Emerald Bay** 65.29 59 P P 09 02 11.6 +1.1
EMB IAmb IAmb 09 02 13.0
comp=Z,8.1nm,0.7s
**TBLU Trondheim** 65.38 340 *eP* P 09 02 08.4 -1.9
**HLID Hailey** 65.54 52 P P 09 02 13.4 +1.4
baz=312,SNR=6.2
**BOZ Bozeman (W)** 65.68 49 P P 09 02 13.7 +0.9
**BOZ Bozeman (W)** 65.68 49 P P 09 02 14.4 +1.6
baz=312,SNR=33
**BOZ Bozeman (W)** 65.68 49 P P 09 02 13.7 +0.9
BOZ pmax pmax
comp=Z,12nm,0.6s
**DOMB Dombas** 66.70 340 *eP* P 09 02 17.8 -0.9
DOMB IAmb IAmb 09 02 18.1
comp=Z,5.7nm,0.7s
**NVAR Mina Array Bea** 66.71 58 P P 09 02 21.2 +1.8
comp=Z,5.8nm,0.8s,baz=294,slow=6.5,SNR=47
NVAR PcP PcP 09 02 47.9 +2.1
comp=Z,0.6nm,0.6s,baz=297,slow=4.0,SNR=2.1
comp=Z,5.8nm,0.8s
**WRA Warramunga Arr** 66.82 192 P P 09 02 21.2 +1.4
comp=Z,0.4nm,0.7s,baz=8.4,slow=6.6,SNR=5.6
comp=Z,0.4nm,0.7s
**MLAC Mammoth, Mammo** 66.92 59 P P 09 02 22.7 +1.9
baz=312
**NB201 NORSAR Array S** 67.00 338 P P 09 02 19.3 -1.3
**NB2 NORSAR Subarra** 67.03 338 P P 09 02 19.3 -1.5
comp=Z,4.3nm,0.5s,baz=31,slow=6.5
**NB2 NORSAR Subarra** 67.03 338 P P 09 02 19.3 -1.5
baz=31,slow=6.5
**NOA NORSAR Array B** 67.03 338 P P 09 02 19.6 -1.1
comp=Z,6.1nm,0.6s,baz=32,slow=6.4,SNR=36
comp=Z,6.1nm,0.6s
**H17A Grant Village** 67.05 49 P P 09 02 24.3 +2.8
baz=313,SNR=6.7
**HFS Hagfors** 67.12 336 P P 09 02 20.0 -1.3
comp=Z,6.6nm,0.3s,baz=33,slow=4.4,SNR=78
comp=Z,6.6nm,0.3s
**NC602 NORSAR Array S** 67.20 338 *eP* P 09 02 20.4 -1.4
**NORES NORESS Array B** 67.20 338 P P 09 02 20.8 -1.0
**RLMT Red Lodge** 67.23 48 P P 09 02 24.3 +1.7
baz=314,SNR=9.0
**DGMT Dagmar** 67.41 43 P P 09 02 24.2 +0.8
baz=315
**DSP Deep Springs** 67.61 59 P P 09 02 26.3 +1.6
DSP IAmb IAmb 09 02 27.9
comp=Z,7.6nm,1.1s
**KIV Kislovodsk** 67.66 311 *eP* P 09 02 24.9 -0.2
**KIV Kislovodsk** 67.66 311 *eP* P 09 02 24.9 -0.2
KIV pmax pmax
comp=Z,9.0nm,1.0s
**LAO LASA Array** 67.68 45 P P 09 02 26.6 +1.4
baz=315
**KBZ Khabaz** 67.70 310 P P 09 02 25.2 0.0
comp=Z,2.8nm,0.7s,baz=62,slow=5.1,SNR=6.8
comp=Z,2.8nm,0.7s
**KBZ Khabaz** 67.70 310 *eP* P 09 02 25.7 +0.5
**KBZ Khabaz** 67.70 310 *ceP* P 09 02 25.7 +0.5
KBZ pmax pmax
comp=Z,4.0nm,0.8s
**VES Vestal, Richgr** 67.96 61 P P 09 02 28.1 +1.1
baz=312
**PKM Mcpherson Peak** 68.15 62 P P 09 02 29.7 +1.3
baz=312
**CWC Cottonwood Cre** 68.17 60 P P 09 02 29.7 +1.2
baz=312
**GRAC Grapevine Rang** 68.22 59 P P 09 02 30.7 +2.1
baz=312,SNR=9.8
**ISA Isabella, Lake** 68.45 61 P P 09 02 30.8 +0.7
baz=312
**SPR3 Spring Creek 3** 68.64 56 P P 09 02 32.9 +1.4
SPR3 IAmb IAmb 09 02 34.2
comp=Z,4.4nm,0.7s
**DUG Dugway, Tooele** 68.69 54 P P 09 02 33.4 +1.8
baz=313,SNR=8.9
**DUG Dugway, Tooele** 68.69 54 P P 09 02 33.5 +1.9
DUG pmax pmax
comp=Z,12nm,0.9s
**BW06 Boulder Array** 68.70 50 P P 09 02 32.9 +1.2
baz=314,SNR=14
**PDAR Pinedale Array** 68.70 50 P P 09 02 32.6 +0.9
**PDAR Pinedale Array** 68.70 50 P P 09 02 32.7 +1.0
comp=Z,5.6nm,0.5s,baz=314,slow=0.9,SNR=86
comp=Z,5.6nm,0.5s
**MPMC Manual Prospec** 68.78 60 P P 09 02 33.4 +1.2
baz=313,SNR=6.6
**FURC Furnace Creek,** 68.87 59 P P 09 02 34.3 +1.7
baz=313,SNR=5.9
**TPNV Topopah Spring** 68.91 58 P P 09 02 34.3 +1.3
baz=313,SNR=8.4
**LRMC Laurel Mtn Rad** 69.05 60 P P 09 02 34.9 +1.0
baz=313
**AKASG Malin Array Be** 69.20 323 P P 09 02 33.1 -1.2
comp=Z,2.6nm,0.6s,baz=38,slow=6.6,SNR=8.8
comp=Z,2.6nm,0.6s
**AKBB Malin Array Si** 69.20 323 *ceP* P 09 02 33.4 -0.9
AKBB pmax pmax
comp=Z,5.0nm,0.7s
**KIEV Kiev** 69.21 323 P P 09 02 33.2 -1.2
KIEV pmax pmax
comp=Z,7.0nm,0.8s
**EDW2 Edwards Air Fo** 69.26 61 P P 09 02 36.7 +1.6
baz=313
**GSC Goldstone, Bar** 69.69 60 P P 09 02 39.3 +1.6
baz=313
**ULM Lac du Bonnet** 69.81 37 P P 09 02 37.8 -0.3
comp=Z,6.7nm,0.7s,baz=304,slow=6.3,SNR=12
comp=Z,6.7nm,0.7s
**RRX Edison Barstow** 69.87 60 P P 09 02 40.3 +1.6
baz=313
**BFSC Mount Baldy Ra** 69.90 61 P P 09 02 40.2 +1.1
baz=313
**MDND Maddock** 69.98 41 P P 09 02 39.6 +0.5
baz=318
**TUQ Turquoise Moun** 70.13 59 P P 09 02 41.8 +1.4
baz=313
**HEC Hector,Ludlow** 70.30 60 P P 09 02 42.8 +1.5
baz=313
**BBRC Big Bear Solar** 70.33 61 P P 09 02 42.8 +1.1
baz=313
**K22A Casper** 70.38 48 P P 09 02 42.3 +0.5
baz=316
**ASAR Alice Springs** 70.54 192 P P 09 02 45.0 +2.3
comp=Z,0.5nm,0.6s,baz=4.5,slow=5.6,SNR=9.2
comp=Z,0.5nm,0.6s
**RSSD Black Hills** 70.59 46 P P 09 02 43.8 +0.7
baz=316
**RSSD Black Hills** 70.59 46 P P 09 02 44.0 +0.9
RSSD pmax pmax
comp=Z,13nm,0.9s
**SRU San Rafael Swe** 70.72 53 P P 09 02 44.6 +0.8
SRU IAmb IAmb 09 02 46.6
comp=Z,11nm,0.9s
**SRU San Rafael Swe** 70.72 53 P P 09 02 44.7 +0.8
SRU pmax pmax
comp=Z,11nm,0.9s
**GMRC Granite Mounta** 70.73 60 P P 09 02 45.2 +1.2
baz=314
**BSD Bornholm Skovb** 70.96 333 P P 09 02 43.9 -0.9
BSD pmax pmax
comp=Z,25nm,1.4s
**PFO Pinyon Flats O** 71.06 61 P P 09 02 47.0 +1.0
baz=314
**TPFO Pinon Flats** 71.06 61 P P 09 02 47.0 +0.9
baz=314
**BELC Belle Mtn. Jos** 71.07 61 P P 09 02 47.2 +1.2
baz=314
**O20A White River Ci** 71.25 51 P P 09 02 47.6 +0.5
baz=315
**AGMN Agassiz Nation** 71.30 39 P P 09 02 47.5 +0.5
baz=320
**HMU Henry Mountain** 71.41 54 P P 09 02 49.2 +1.0
HMU IAmb IAmb 09 02 50.6
comp=Z,11nm,0.7s
**IRM Iron Mountain** 71.47 60 P P 09 02 49.7 +1.4
baz=314,SNR=5.2
**MONP2 Monument Peak** 71.57 62 P P 09 02 50.1 +0.9
baz=314
**BC3 Big Chuckawall** 71.63 60 P P 09 02 50.4 +1.0
baz=314
**IKP In-Ko-Pah, Jac** 71.93 62 P P 09 02 52.2 +1.1
baz=314
**N23A Red Feather La** 71.93 49 P P 09 02 52.3 +1.0
baz=316

**PDMCI Parker Dam,Lak** 71.97 59 P P 09 02 52.9 +1.7
baz=314,SNR=6.6
**GLA Glamis** 72.43 61 P P 09 02 55.0 +1.0
baz=314
**KWP Kalwaria Pacla** 72.68 325 P P 09 02 55.4 +0.3
KWP pmax pmax
comp=Z,11nm,1.1s
**SUSD Miller** 72.82 43 P P 09 02 56.8 +0.7
baz=319
**ISCO Idaho Springs** 72.90 50 P P 09 02 58.4 +1.4
baz=317
**MVCO Mesa Verde** 73.19 54 P P 09 02 60.0 +1.4
baz=316,SNR=5.0
**OJC Ojcow** 73.32 327 P P 09 02 58.8 0.0
OJC pmax pmax
comp=Z,5.0nm,0.7s
**EYMN Ely** 73.42 36 P P 09 02 59.6 +0.1
baz=322
**S22A 4UR Ranch, Cre** 73.72 52 P P 09 03 02.5 +0.7
baz=317,SNR=6.9
**OGNE Ogallala** 73.92 47 P P 09 03 02.8 +0.2
**OGNE Ogallala** 73.92 47 P P 09 03 03.2 +0.7
baz=318,SNR=6.9
**W18A Petrified Fore** 73.98 56 P P 09 03 03.5 +0.4
baz=316
**LANS Liptovska Anna** 74.32 327 *eP* P 09 03 05.1 +0.5
**LANS Liptovska Anna** 74.32 327 *eP* P 09 03 05.1 +0.5
**214A Organ Pipe Nat** 74.41 60 P P 09 03 06.7 +1.2
baz=315
**SDCO Great Sand Dun** 74.45 51 P P 09 03 06.5 +0.6
baz=317,SNR=5.6
**UPC Upice** 74.45 330 P P 09 03 05.4 +0.1
UPC pmax pmax
comp=Z,6.0nm,1.0s
**ECSD EROS Data Cent** 74.45 42 P P 09 03 05.7 +0.2
baz=320,SNR=7.5
**DPC Dobruska-Polom** 74.48 329 P P 09 03 05.6 +0.1
DPC pmax pmax
comp=Z,4.0nm,1.2s
**MORC Moravsky Berou** 74.52 328 *eP* P 09 03 05.6 -0.2
**MORC Moravsky Berou** 74.52 328 P P 09 03 05.9 +0.1
MORC pmax pmax
comp=Z,7.0nm,1.0s
**KRLC Kraliky** 74.54 329 P P 09 03 05.8 -0.1
KRLC pmax pmax
comp=Z,6.0nm,1.1s
**CLL Collm** 74.80 332 *i* P P 09 03 06.6 -0.7
comp=Z,10.0nm,1.1s
**CLL Collm** 74.80 332 *i* P P 09 03 06.6 -0.7
CLL pmax pmax
comp=Z,10.0nm,1.1s
**BRG Berggiesshubel** 74.86 331 P P 09 03 07.4 -0.2
BRG pmax pmax
comp=Z,4.0nm,0.8s
**KSCO Kaye Shedlock'** 75.05 49 P P 09 03 10.8 +1.7
baz=318
**VYHS Vyhne** 75.10 327 *eP* P 09 03 09.1 0.0
**VYHS Vyhne** 75.10 327 *eP* P 09 03 09.1 0.0
**JAVC Velka Javorina** 75.23 328 *eP* P 09 03 10.6 +0.7
**VRAC Vranov** 75.25 329 *eP* P 09 03 09.5 -0.4
**TUC Tucson** 75.37 59 P P 09 03 12.5 +1.6
baz=316
**TUC Tucson** 75.37 59 P P 09 03 12.2 +1.2
TUC pmax pmax
comp=Z,3.0nm,1.4s
**BRTR Keskin Array B** 75.39 313 P P 09 03 11.2 +0.2
comp=Z,1.4nm,0.8s,baz=50,slow=2.3,SNR=5.5
comp=Z,1.4nm,0.8s
**SCHQ Schefferville** 75.40 19 P P 09 03 10.6 -0.1
comp=Z,2.8nm,0.7s,baz=322,slow=9.4,SNR=2.6
comp=Z,2.8nm,0.7s
**PRU Pruhonice** 75.40 330 P P 09 03 10.6 -0.1
PRU pmax pmax
comp=Z,3.0nm,0.8s
**T25A Trinidad** 75.48 51 P P 09 03 12.6 +0.9
baz=318
**BGNE Belgrade** 75.50 45 P P 09 03 11.7 +0.2
baz=320
**EKA Eskdalemuir Ar** 75.52 343 P P 09 03 10.8 -0.5
comp=Z,3.2nm,0.6s,baz=24,slow=4.9,SNR=14
comp=Z,3.2nm,0.6s
**KRUC Moravsky** 75.53 329 *eP* P 09 03 11.3 -0.2
**KRUC Moravsky** 75.53 329 P P 09 03 11.5 0.0
KRUC pmax pmax
comp=Z,6.0nm,1.2s
**MOX Moxa** 75.82 332 P P 09 03 12.9 -0.2
MOX pmax pmax
comp=Z,6.0nm,0.7s
**ANMO Albuquerque** 75.96 54 P P 09 03 15.6 +1.2
baz=317
**KHC Kasperske Hory** 76.46 330 *ceP* P 09 03 17.1 +0.3
KHC pmax pmax
comp=Z,15nm,1.3s
**WET Wettzell** 76.69 331 P P 09 03 18.1 +0.1
WET pmax pmax
comp=Z,7.0nm,1.2s
**121A Cookes Peak, D** 76.96 57 P P 09 03 21.3 +1.3
baz=317
**TNS Taunus Mts** 77.18 334 P P 09 03 20.5 -0.3
TNS pmax pmax
comp=Z,7.0nm,0.7s
**SCIA State Center** 77.44 41 P P 09 03 23.4 +1.2
baz=323
**BTNL Ternell** 77.55 335 *dP* P 09 03 22.1 -0.7
comp=Z,5.8nm,0.8s
**MEM Membach** 77.57 335 *dP* P 09 03 21.4 -1.4
**BHOU Houvegnez** 77.80 335 *dP* P 09 03 23.8 -0.2
**BCLA Clavier** 77.94 336 *dP* P 09 03 24.4 -0.4
**JFWS Jewell Farm** 77.96 39 P P 09 03 24.5 -0.6
baz=324
**KSU1 Kansas State U** 78.03 45 P P 09 03 25.4 -0.2
baz=321
**BGES Gesves** 78.03 336 *dP* P 09 03 25.0 -0.3
**BMRD Maredsous** 78.19 336 *dP* P 09 03 25.9 -0.3
comp=Z,8.2nm,0.9s
**DOU Dourbes** 78.43 336 *dP* P 09 03 26.5 -0.9
**VLDQ Val d'Or** 78.49 28 P P 09 03 27.2 -0.7
**AMTX Amarillo** 78.64 51 P P 09 03 29.4 +0.4
baz=319
**GLMI Grayling** 78.72 34 P P 09 03 29.5 +0.3
baz=327
**MSTX Mustehoe** 78.73 52 P P 09 03 30.1 +0.6
baz=319
**MNTX Cornudas Mount** 78.95 56 P P 09 03 32.3 +1.6
baz=318,SNR=6.1
**ECH Echery** 79.35 334 P P 09 03 32.0 -0.6
ECH pmax pmax
comp=Z,9.0nm,1.8s
**WMOK Wichita Mounta** 80.29 49 P P 09 03 38.4 +0.6
baz=321,SNR=5.3
**WMOK Wichita Mounta** 80.29 49 P P 09 03 37.7 -0.1
WMOK pmax pmax
comp=Z,5.0nm,1.2s
**HDIL Hopedale** 80.29 40 P P 09 03 37.5 -0.1
baz=325
**S39A Bolivar** 80.73 44 P P 09 03 39.9 -0.2
S39A IAmb IAmb 09 03 40.7
comp=Z,6.6nm,0.8s
**TUL3 Leonard** 80.92 47 P P 09 03 42.1 +1.0
baz=322
**LOR Lormes** 81.19 335 P P 09 03 41.6 -0.7
LOR pmax pmax
comp=Z,6.0nm,1.3s
**AAM Ann Arbor** 81.22 35 P P 09 03 42.8 +0.3
baz=328
**SFIN Lafayette** 81.40 38 P P 09 03 43.7 +0.3
baz=326
**CCM Cathedral Cave** 81.43 42 P P 09 03 44.0 +0.4
baz=324
**ABTX Abilene, Hawle** 81.45 51 P P 09 03 45.0 +1.1
baz=320
**TX31 Lajitas Ar. Si** 81.70 56 P P 09 03 46.2 +0.9
TX31 IAmb IAmb 09 03 47.8
comp=Z,5.4nm,0.9s
**TXAR Lajitas Array** 81.70 56 P P 09 03 46.1 +0.7
**TXAR Lajitas Array** 81.70 56 P P 09 03 46.8 +1.4
comp=Z,4.2nm,0.7s,baz=295,slow=4.0,SNR=59
comp=Z,4.2nm,0.7s
**O48B Farmland** 82.32 37 P P 09 03 48.0 -0.3
baz=327
**BATG Bathurst New B** 82.58 22 P P 09 03 49.4 0.0
**ORIF Oris-en-Rattie** 82.69 333 P P 09 03 50.4 +0.2
ORIF pmax pmax
comp=Z,6.0nm,1.5s
**ERPA Erie** 82.80 33 P P 09 03 50.1 -0.6
baz=330

**MFF Saint Martin d** 82.92 337 P P 09 03 51.2 0.0
MFF pmax pmax
comp=Z,10.0nm,2.1s
**JCT Junction City** 83.01 53 P P 09 03 52.6 +0.6
baz=321
**MIAR Mount Ida** 83.11 46 P P 09 03 53.2 +0.9
baz=323
**MIAR Mount Ida** 83.11 46 P P 09 03 53.1 +0.7
MIAR pmax pmax
comp=Z,10.0nm,1.3s
**P49A Miami Univ. Ec** 83.11 37 P P 09 03 52.6 +0.3
baz=327
**WHTX Lake Whitney,** 83.11 50 P P 09 03 53.1 +0.6
baz=322
**M53A WI Miller and** 83.12 34 P P 09 03 52.6 +0.2
baz=330
**ACSO Alum Creek Sta** 83.24 36 P P 09 03 53.0 0.0
baz=328
**WCI Wyandotte Cave** 83.52 39 P P 09 03 54.8 +0.5
baz=327
**WCI Wyandotte Cave** 83.52 39 P P 09 03 54.9 +0.5
WCI pmax pmax
comp=Z,13nm,0.7s
**PKME Peaks-Kenny Pk** 83.55 24 P P 09 03 54.6 +0.2
baz=336
**H62A Milan** 83.63 26 P P 09 03 55.0 +0.2
**LBNH Lisbon** 83.69 27 P P 09 03 55.4 +0.2
baz=335
**O53A New Philadelph** 83.93 35 P P 09 03 56.8 +0.3
baz=329
**P52A Corning** 84.09 36 P P 09 03 56.1 -1.1
baz=329
**BINY Binghamton** 84.18 30 P P 09 03 56.4 -1.2
baz=332
**LMN Caledonia Moun** 84.22 21 P P 09 03 57.8 +0.1
**WVT Waverly** 84.57 41 P P 09 04 00.1 +0.5
WVT IAmb IAmb 09 04 01.2
comp=Z,5.8nm,0.7s
**WVT Waverly** 84.57 41 P P 09 04 00.2 +0.5
baz=326
**WVT Waverly** 84.57 41 P P 09 04 00.2 +0.5
WVT pmax pmax
comp=Z,6.0nm,0.7s
**NATX Nacogdoches** 84.76 48 P P 09 04 02.0 +1.2
baz=323
**SSPA Standing Stone** 84.87 32 P P 09 04 00.9 -0.2
baz=331
**833A Chaparral WMA,** 84.89 54 P P 09 04 01.8 +0.3
baz=321
**L61B Northampton** 85.07 28 P P 09 04 01.7 -0.4
baz=334
**OXF Oxford** 85.16 43 P P 09 04 02.8 +0.2
baz=325
**HRV Adam Dziewonsk** 85.38 27 P P 09 04 03.1 -0.4
baz=335
**PAL Palisades** 85.95 29 P P 09 04 06.1 -0.3
baz=334
**TZTN Tazewell** 86.12 38 P P 09 04 07.2 -0.2
baz=328
**LRAL Lakeview Retre** 87.52 42 P P 09 04 13.9 -0.1
baz=326
**KMSC Kings Mountain** 88.26 37 P P 09 04 16.7 -0.7
baz=330
**ESDC Sonseca Array** 90.38 338 P P 09 04 27.5 +0.1
comp=Z,0.8nm,0.6s,baz=12,slow=4.2,SNR=5.3
comp=Z,0.8nm,0.6s
**TIGA Tifton** 90.42 41 P P 09 04 27.5 -0.1
baz=328
**TORD Torodi Ar. Bea** 112.83 322 PKiKP **PKiKP** 09 10 00.7 -0.6
comp=Z,0.4nm,0.3s,baz=1.7,slow=2.7,SNR=8.5
**DBIC Dimbokro** 121.36 326 PKP **PKPdf** 09 10 17.3 -0.4
comp=Z,1.7nm,0.5s,baz=0.0,slow=2.0,SNR=4.3
**VNDA Vanda** 123.92 176 PKP **PKiKP** 09 10 22.0 +1.1
comp=Z,0.6nm,0.7s,baz=290,slow=3.6,SNR=4.5
**MAW Mawson** 129.45 210 PKP **PKiKP** 09 10 32.9 +0.7
comp=Z,0.9nm,0.8s,baz=58,slow=7.0,SNR=2.2
**QSPA South Pole Qui** 136.03 180 PKP **PKiKP** 09 10 45.8 +0.2
comp=Z,0.9nm,0.8s,baz=299,slow=1.2,SNR=7.1
**LPAZ La Paz** 138.57 55 PKP **PKiKP** 09 10 52.1 -0.9
comp=Z,1.1nm,0.7s,baz=333,slow=5.3,SNR=7.3
**ELIB Princess Elisa** 143.37 206 *d*PKP PKPbc 09 10 56.2 +0.8
**BDFB Brasilia** 147.16 26 PKPbc **PKPbc** 09 11 08.4 +0.4
comp=Z,5.1nm,0.7s,baz=264,slow=2.2,SNR=6.8
**TROLL Troll, Antarti** 149.19 201 ⇑PKiKP **PKiKP** 09 11 13.1 +0.5
comp=Z,358nm,0.7s
TROLL ⇑pPKiKP **pPKPab** 09 12 34.0 +1.1
comp=Z,323nm,0.7s
**SNAA Sanae** 150.69 199 ⇑PKiKP **PKiKP** 09 11 15.8 +0.2
comp=Z,61nm,0.7s
SNAA ⇑pPKiKP **pPKiKP** 09 12 34.5 +0.6
comp=Z,47nm,0.9s
**SNAA Sanae** 150.69 199 PKPbc **PKPbc** 09 11 15.0 -0.1
comp=Z,2.6nm,0.7s,baz=160,slow=9.0,SNR=12
**SNAA Sanae** 150.69 199 PKiKP **PKPbc** 09 11 15.0 -0.1
**VNA2 Neumayer--Watz** 152.25 198 ⇑PKiKP **PKiKP** 09 11 19.8 +1.0
comp=Z,9.3nm,0.6s,baz=143,slow=1.8
VNA2 ⇑pPKiKP **pPKiKP** 09 12 38.0 +1.0
comp=Z,11nm,1.0s,baz=172,slow=1.3
**VNA3 Neumayer Olymp** 152.47 197 ⇑PKiKP **PKiKP** 09 11 20.0 +0.8
comp=Z,3.0nm,0.5s
VNA3 ⇑pPKiKP **pPKiKP** 09 12 38.7 +1.2
comp=Z,4.6nm,0.8s
**CPUP Villa Florida** 152.59 52 PKPbc **PKPbc** 09 11 19.7 -1.0
comp=Z,1.6nm,0.6s,baz=321,slow=1.9,SNR=5.3
**VNA1 Neumayer--Stat** 152.65 198 ⇑PKiKP **PKiKP** 09 11 20.6 +1.1
comp=Z,4.4nm,1.1s
VNA1 ⇑pPKiKP **pPKiKP** 09 12 39.4 +1.6
comp=Z,5.4nm,0.8s

**IDC 02 09:01:40.5±2.9, 42°.37N×128°.99E, h0km, mbtmp2.6/2, ML2.3/2, Error ellipse: s-maj=40.2km s-min=16.0km az=119.0, Northeastern China**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I45RU** | **USSURIYSK INFR** | **2.85** | **49** | I | I | 09 21 20.0 | |
| | baz=226,slow=305,SNR=2.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **2.86** | **49** | Pn | Pn | 09 02 27.8 | +0.5 |
| | 0.2nm,0.3s,baz=235,slow=16,SNR=1.4 | | | | | | |
| USRK | | | | Pg | Pb | 09 02 32.8 | +0.4 |
| | 1.0nm,0.3s,baz=232,slow=14,SNR=11 | | | | | | |
| USRK | | | | Lg | Lg | 09 03 10.1 | |
| | 1.3nm,0.3s,baz=234,slow=26,SNR=7.5 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **KSRS** | **Korea Array** | **4.98** | **190** | Pn | Pn | 09 02 57.6 | +1.2 |
| | 0.2nm,0.3s,baz=12,slow=13,SNR=4.2 | | | | | | |
| KSRS | | | | Lg | Lg | 09 04 17.7 | |
| | 0.4nm,0.3s,baz=4.4,slow=29,SNR=2.9 | | | | | | |
| | 0.9nm,0.5s | | | | | | |

*IDC **02** 09:12:37.7±1.8, 35°.95N×139°.23E, h122km±21km, mb3.2/4, mbtmp3.6/6, Error ellipse: s-maj=48.5km s-min=21.5km az=117.0*

*JMA **02** 09:12:39.0±0.2, 36°.2N±0°.7×139°.0E±0°.8, h138km±1km, MV3.5/39, SE GUNMA PREF*

**ISC 02 09:12:39.2±0.9, 36°.12N±0°.05×138°.96E±0°.06, h137km±6km, n18, σ0°93/28, mb3.4/4, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JRY** | **Ryogami san** | **0.11** | **204** | *i* P | **Pn** | **09 12 58.1** | **+0.2** |
| JRY | | | | S | **Sn** | **09 13 12.3** | **+0.4** |
| **JAG** | **Ashikaga** | **0.50** | **53** | *i* P | **Pn** | **09 12 59.0** | **-0.1** |
| JAG | | | | S | **Sn** | **09 13 13.6** | **-0.7** |
| **JYN** | **Shimob** | **0.71** | **209** | *i* P | **Pn** | **09 13 00.4** | **-0.1** |
| JYN | | | | S | **Sn** | **09 13 17.1** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **0.74** | **305** | P | **Pn** | **09 13 00.1** | **-0.6** |
| | 235nm,0.3s,baz=132,slow=5.6,SNR=1060 | | | | | | |
| MJAR | | | | S | **Sn** | **09 13 16.7** | **-0.2** |
| | 22nm,0.3s,baz=135,slow=20,SNR=5.8 | | | | | | |
| **MAT** | **Matsushiro** | **0.74** | **305** | *i* P | **Pn** | **09 13 00.5** | **-0.2** |
| MAT | | | | S | **Sn** | **09 13 16.8** | **-0.2** |
| **JOD2** | **Odawara 2** | **0.86** | **173** | *i* P | **Pn** | **09 13 01.5** | **-0.2** |
| JOD2 | | | | S | **Sn** | **09 13 18.4** | **-0.3** |
| **JFNN** | **Fujinakano** | **0.95** | **194** | S | **Sn** | **09 13 22.1** | **+2.2** |
| **JNS** | **Sasagawa** | **1.72** | **9** | P | **Pn** | **09 13 10.8** | **+0.6** |
| **JOTO** | **OTAMA OYAMA** | **1.81** | **37** | *i* P | **Pn** | **09 13 12.1** | **+0.8** |
| JOTO | | | | S | **Sn** | **09 13 37.8** | **+1.8** |
| **JSZ** | **Suzu** | **1.84** | **316** | P | **Pn** | **09 13 11.4** | **-0.2** |
| JSZ | | | | *e*S | **Sn** | **09 13 36.7** | **+0.1** |
| **JYTA** | **Yamagatataniai** | **1.88** | **254** | P | **Pn** | **09 13 12.5** | **+0.3** |
| JYTA | | | | S | **Sn** | **09 13 37.2** | **-0.2** |
| **JSD** | **Sado** | **1.99** | **344** | P | **Pn** | **09 13 13.3** | **-0.2** |
| JSD | | | | S | **Sn** | **09 13 39.3** | **-0.5** |

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JNU | Nakatsue | 7.30 | 248 | P | Pn | 09 14 23.5 | +0.2 |
| | 8.3nm,0.7s,baz=56,slow=4.1,SNR=6.5 | | | | | | |
| KSRS | Korea Array | 8.95 | 282 | P | Pn | 09 14 48.0 | +2.7 |
| | 3.0nm,0.9s,baz=99,slow=14,SNR=13 | | | | | | |
| ILAR | Eielson Array | 51.32 | 32 | P | P | 09 21 28.6 | -0.3 |
| | 0.4nm,0.9s,baz=269,slow=7.0,SNR=4.1 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 55.93 | 185 | P | P | 09 22 01.4 | -1.5 |
| | 0.9nm,0.5s,baz=0.9,slow=7.5,SNR=32 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| ASAR | Alice Springs | 59.66 | 185 | P | P | 09 22 28.5 | -0.4 |
| | 0.2nm,0.5s,baz=20,slow=11,SNR=5.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| TXAR | Lajitas Array | 92.23 | 51 | P | P | 09 25 34.3 | +0.4 |
| | 0.2nm,0.7s,baz=323,slow=1.4,SNR=4.0 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

*KRNET **02** 09:14:11.6±0.1, 41.°61N×72.°79E, h19km, mb3.7*
*SOME **02** 09:14:11.8, 41.°63N×72.°85E, h10km*
*ISU **02** 09:14:12.7, 41.°57N×72.°87E, h29km*
*KNET **02** 09:14:13.8±0.6, 41.°73N×72.°90E, h7km±3km, ml3.5, Error ellipse: s-maj=6.9km s-min=4.1km az=134.0*
*NNC **02** 09:14:13.6±0.8, 41.°67N×72.°87E, h0km, mb4.6, mpv4.3, Error ellipse: s-maj=7.2km s-min=3.1km az=179.0*
**ISC 02 09:14:10.9**±1.1, **41.°62N**±0.°02×**72.°82E**±0.°01, **h2**km±9km, **n103**, σ**2.s07**/171, **38C-45D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARSB | Arslanbob | 0.32 | 157 | ⇓eP | Pg | 09 14 17.9 | +0.9 |
| | baz=53 | | | | | | |
| ARSB | | | | ⇓eS | Sg | 09 14 22.7 | +1.6 |
| | baz=53 | | | | | | |
| ARK | Arkit | 0.67 | 286 | ⇑eP | Pb | 09 14 24.0 | -1.4 |
| | baz=88 | | | | | | |
| ARK | | | | ⇑eS | Sb | 09 14 33.1 | -2.0 |
| | baz=88 | | | | | | |
| AML | Almayashu | 0.83 | 52 | P | Pb | 09 14 27.9 | -0.4 |
| | 636nm,0.2s,SNR=1153 | | | | | | |
| AML | | | | ⇑S | Sb | 09 14 39.5 | -0.6 |
| | 515nm,0.2s | | | | | | |
| AML | Almayashu | 0.83 | 52 | ⇓eP | Pb | 09 14 27.9 | -0.4 |
| | baz=52 | | | | | | |
| AML | | | | ⇓eS | Sb | 09 14 39.5 | -0.6 |
| | baz=52 | | | | | | |
| MNAS | Manas | 0.90 | 345 | ⇑eP | Pb | 09 14 28.6 | -0.8 |
| | baz=47 | | | | | | |
| MNAS | | | | ⇑eS | Sg | 09 14 41.1 | +1.2 |
| | baz=47 | | | | | | |
| NAM | Namangan | 1.07 | 235 | P | Pg | 09 14 33.4 | +1.9 |
| NAM | | | | S | Sg | 09 14 49.3 | +3.9 |
| KSNS | Kasansay | 1.08 | 245 | P | Pg | 09 14 33.7 | +2.1 |
| KSNS | | | | S | Sg | 09 14 49.8 | +4.2 |
| OHH | Osh | 1.09 | 181 | ⇑eP | Pb | 09 14 31.7 | -0.9 |
| | baz=80 | | | | | | |
| OHH | | | | ⇑iS | Sn | 09 14 46.3 | -2.7 |
| | baz=80 | | | | | | |
| ARLS | Aral | 1.15 | 77 | ⇓eP | Pb | 09 14 33.4 | -0.2 |
| | baz=77 | | | | | | |
| ARLS | | | | ⇓eS | Sn | 09 14 49.2 | -1.4 |
| | baz=77 | | | | | | |
| MRKS | Merke | 1.17 | 15 | eP | Pb | 09 14 33.9 | +0.1 |
| | 127nm,0.4s | | | | | | |
| MRKS | | | | eS | Sn | 09 14 49.0 | -1.9 |
| | 1µm,0.2s | | | | | | |
| MRKS | Merke | 1.17 | 15 | P | Pb | 09 14 33.9 | +0.1 |
| | 127nm,0.4s | | | | | | |
| MRKS | | | | S | Sn | 09 14 49.4 | -1.5 |
| | 1µm,0.2s | | | | | | |
| EKS2 | Erkin-Say | 1.26 | 34 | ⇑P | Pb | 09 14 35.6 | +0.1 |
| | 94nm,0.4s,SNR=110 | | | | | | |
| EKS2 | | | | ⇓S | Sb | 09 14 51.6 | -0.7 |
| | 103nm,0.2s | | | | | | |
| EKS2 | Erkin-Say | 1.26 | 34 | ⇓eP | Pb | 09 14 35.3 | -0.2 |
| | baz=34 | | | | | | |
| EKS2 | | | | ⇓eS | Sg | 09 14 52.6 | +1.1 |
| | baz=34 | | | | | | |
| TRKS | Terek-Say | 1.26 | 267 | ⇑eP | Pn | 09 14 34.2 | -1.6 |
| | baz=64 | | | | | | |
| TRKS | | | | ⇑eS | Sn | 09 14 50.7 | -2.7 |
| | baz=64 | | | | | | |
| UCH | Uchtor | 1.40 | 64 | ⇑P | Pb | 09 14 38.2 | +0.1 |
| | 100nm,0.2s,SNR=209 | | | | | | |
| UCH | | | | ⇑S | Sg | 09 14 57.5 | +1.4 |
| | 346nm,0.2s | | | | | | |
| UCH | Uchtor | 1.40 | 64 | ⇑iP | Pb | 09 14 38.0 | -0.1 |
| | baz=64 | | | | | | |
| UCH | | | | ⇑iS | Sg | 09 14 57.1 | +1.1 |
| | baz=64 | | | | | | |
| FRG | Fergana | 1.47 | 213 | P | Pg | 09 14 39.9 | +0.9 |
| FRG | | | | S | Sg | 09 15 00.7 | +2.6 |
| AAK | Ala-Archa | 1.61 | 50 | ⇑P | Pb | 09 14 41.9 | +0.4 |
| | 135nm,0.2s,SNR=62 | | | | | | |
| AAK | | | | ⇓S | Sg | 09 15 03.3 | +0.7 |
| | 204nm,0.2s | | | | | | |
| AAK | Ala-Archa | 1.61 | 50 | ⇓P | Pb | 09 14 41.6 | +0.1 |
| | 58nm,0.3s | | | | | | |
| AAK | | | | S | Sg | 09 15 03.4 | +0.7 |
| | 72nm,0.3s | | | | | | |
| AAK | Ala-Archa | 1.61 | 50 | ⇓iP | Pb | 09 14 41.6 | +0.1 |
| | baz=50 | | | | | | |
| AAK | | | | ⇓iS | Sg | 09 15 03.3 | +0.7 |
| | baz=50 | | | | | | |
| SFK | Sufi-Kurgan | 1.68 | 162 | ⇑iP | Pb | 09 14 42.2 | -0.6 |
| | baz=61 | | | | | | |
| SFK | | | | ⇑iS | Sg | 09 15 04.7 | -0.3 |
| | baz=61 | | | | | | |
| CHDK | Chadak | 1.69 | 248 | P | Pg | 09 14 43.9 | +0.7 |
| CHDK | | | | S | Sg | 09 15 07.7 | +2.6 |
| FRU1 | Bishkek | 1.80 | 48 | ⇓iP | Pb | 09 14 44.8 | +0.2 |
| | baz=48 | | | | | | |
| FRU1 | | | | ⇓iS | Sg | 09 15 09.0 | +0.4 |
| | baz=48 | | | | | | |
| MINT | Mingtut | 1.81 | 231 | P | Pg | 09 14 45.5 | -0.1 |
| MINT | | | | S | Sg | 09 15 10.8 | +1.8 |
| KBK | Karagaybulak | 1.89 | 56 | ⇑P | Pb | 09 14 47.2 | +0.9 |
| | 308nm,0.4s,SNR=57 | | | | | | |
| KBK | | | | ⇓S | Sg | 09 15 13.5 | +1.7 |
| | 635nm,0.3s | | | | | | |
| KBK | Karagaybulak | 1.89 | 56 | ⇓iP | Pb | 09 14 46.0 | -0.3 |
| | baz=56 | | | | | | |
| KBK | | | | ⇓iS | Sb | 09 15 11.3 | +0.8 |
| | baz=56 | | | | | | |
| CHMS | Chumysh | 1.99 | 45 | ⇑P | Pb | 09 14 48.8 | +0.9 |
| | 261nm,0.2s,SNR=151 | | | | | | |
| CHMS | | | | ⇓S | Sg | 09 15 15.8 | +1.0 |
| | 343nm,0.6s | | | | | | |
| CHMS | Chumysh | 1.99 | 45 | ⇑Pn | Pb | 09 14 48.8 | +0.9 |
| | 198nm,0.4s | | | | | | |
| CHMS | | | | Pg | Pg | 09 14 58.7 | +10 |
| | 164nm,0.2s | | | | | | |
| CHMS | | | | ⇓Sn | Sg | 09 15 14.7 | -0.2 |
| | 216nm,0.7s | | | | | | |
| CHMS | | | | Lg | Lg | 09 15 31.9 | |
| | 723nm,0.4s | | | | | | |
| CHMS | Chumysh | 1.99 | 45 | ⇑iP | Pb | 09 14 47.3 | -0.6 |
| | baz=46 | | | | | | |
| CHMS | | | | ⇑iS | Sb | 09 15 13.2 | +0.1 |
| | baz=46 | | | | | | |
| USP | Ospenovka | 2.06 | 36 | ⇑P | Pb | 09 14 49.4 | +0.3 |
| | 196nm,0.2s,SNR=289 | | | | | | |
| USP | | | | ⇓S | Sg | 09 15 17.4 | +0.1 |
| | 293nm,0.2s | | | | | | |
| USP | Ospenovka | 2.06 | 36 | ⇓iP | Pb | 09 14 48.4 | -0.8 |
| | baz=37 | | | | | | |
| USP | | | | ⇓iS | Sb | 09 15 15.0 | -0.3 |
| | baz=37 | | | | | | |
| CHMG | Chimgan | 2.11 | 269 | P | Pb | 09 14 50.2 | +0.2 |
| CHMG | | | | S | Sg | 09 15 19.7 | +1.0 |
| BTK | Batken | 2.17 | 225 | ⇑iP | Pb | 09 14 49.2 | -1.8 |
| | baz=25 | | | | | | |
| BTK | | | | ⇑iS | Sb | 09 15 16.8 | -1.7 |
| | baz=25 | | | | | | |
| KK31 | Karatay Array | 2.27 | 312 | ⇓Pn | Pb | 09 14 51.7 | -0.9 |
| | 48nm,0.4s,baz=119,slow=13,SNR=518 | | | | | | |
| KK31 | | | | ⇓Sn | Sg | 09 15 22.8 | -0.9 |
| | 77nm,0.3s,baz=131,slow=29,SNR=14 | | | | | | |
| DRK | Karamyk | 2.27 | 200 | ⇓iP | Pb | 09 14 50.7 | -2.1 |
| | baz=0.0 | | | | | | |
| DRK | | | | ⇓iS | Sb | 09 15 19.5 | -2.0 |
| | baz=0.0 | | | | | | |
| NRN | Naryn | 2.40 | 93 | ⇓iP | Pb | 09 14 52.8 | -2.1 |
| | baz=93 | | | | | | |
| NRN | | | | ⇓iS | Sb | 09 15 22.7 | -2.3 |
| | baz=93 | | | | | | |
| TKM2 | Tokmak 2 | 2.44 | 57 | ⇑P | Pb | 09 14 55.8 | +0.1 |
| | 163nm,0.4s,SNR=241 | | | | | | |
| TKM2 | Tokmak 2 | 2.44 | 57 | ⇓Pn | Pb | 09 14 55.6 | 0.0 |
| | 72nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Sn | Sb | 09 15 26.5 | +0.3 |
| | 112nm,0.5s | | | | | | |
| TKM2 | Tokmak 2 | 2.44 | 57 | ⇑iP | Pb | 09 14 53.8 | -1.8 |
| | baz=57 | | | | | | |
| TKM2 | | | | ⇑iS | Sb | 09 15 24.3 | -1.9 |
| | baz=57 | | | | | | |
| BOOM | Boomskoye usch | 2.48 | 68 | ⇓iP | Pb | 09 14 54.4 | -1.9 |
| | baz=68 | | | | | | |
| BOOM | | | | ⇓iS | Sb | 09 15 25.3 | -2.1 |
| | baz=68 | | | | | | |
| TGS | TashGRES | 2.48 | 267 | P | Pg | 09 14 57.5 | -1.0 |
| TGS | | | | S | Sg | 09 15 32.8 | +2.1 |
| CHM | Chimkent | 2.50 | 287 | eP | Pg | 09 14 58.7 | -0.1 |
| | 164nm,0.2s | | | | | | |
| CHM | | | | eS | Sg | 09 15 31.9 | +0.7 |
| | 723nm,0.4s | | | | | | |
| BRLS | Borolday | 2.62 | 304 | eP | Pg | 09 14 59.8 | -1.4 |
| | 74nm,0.4s | | | | | | |
| BRLS | | | | eS | Sg | 09 15 33.9 | -1.4 |
| | 203nm,0.2s | | | | | | |
| BRLS | Borolday | 2.62 | 304 | Pg | Pg | 09 14 59.8 | -1.4 |
| | 74nm,0.4s | | | | | | |
| BRLS | | | | Lg | Lg | 09 15 33.9 | |
| | 203nm,0.2s | | | | | | |
| ULHL | Ulahol | 2.63 | 75 | ⇓P | Pb | 09 14 58.4 | -0.5 |
| | 31nm,0.2s,SNR=30 | | | | | | |
| ULHL | Ulahol | 2.63 | 75 | ⇑iP | Pb | 09 14 56.3 | -2.6 |
| | baz=75 | | | | | | |
| ULHL | | | | ⇑iS | Sb | 09 15 28.8 | -2.9 |
| | baz=75 | | | | | | |
| TAS | Tashkent | 2.67 | 265 | P | Pb | 09 14 58.2 | -1.1 |
| TAS | | | | S | Sg | 09 15 34.0 | -2.5 |
| DGS | Degeres | 2.72 | 52 | eP | Pb | 09 15 01.4 | +1.0 |
| | 181nm,0.3s | | | | | | |
| DGS | | | | eS | Sb | 09 15 36.7 | +2.4 |
| | 154nm,0.5s | | | | | | |
| DGS | Degeres | 2.72 | 52 | Pg | Pb | 09 15 01.4 | +1.0 |
| | 181nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 09 15 36.7 | |
| | 154nm,0.5s | | | | | | |
| KST | Kastek | 2.73 | 58 | eP | Pb | 09 15 01.6 | +1.0 |
| | 134nm,0.7s | | | | | | |
| KST | | | | eS | Sg | 09 15 37.1 | -1.5 |
| | 425nm,0.5s | | | | | | |
| KST | Kastek | 2.73 | 58 | Pg | Pb | 09 15 01.6 | +1.0 |
| | 134nm,0.7s | | | | | | |
| KST | | | | Lg | Lg | 09 15 37.1 | |
| | 425nm,0.5s | | | | | | |
| YNGY | Yangiyul | 2.90 | 261 | P | Pb | 09 15 01.3 | -2.0 |
| YNGY | | | | S | Sb | 09 15 40.1 | +1.0 |
| KRBS | Karabastau | 2.96 | 44 | eP | Pb | 09 15 05.6 | +1.2 |
| | 70nm,0.3s | | | | | | |
| KRBS | | | | eS | Sg | 09 15 43.8 | -2.1 |
| | 3.7nm,0.7s | | | | | | |
| KRBS | Karabastau | 2.96 | 44 | Pg | Pb | 09 15 05.6 | +1.2 |
| | 70nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 09 15 43.8 | |
| | 3.7nm,0.7s | | | | | | |
| MTBS | Maitube | 3.07 | 59 | eP | Pb | 09 15 07.7 | +1.4 |
| | 98nm,0.5s | | | | | | |
| MTBS | | | | eS | Sg | 09 15 47.6 | -1.9 |
| | 235nm,0.7s | | | | | | |
| MTBS | Maitube | 3.07 | 59 | Pg | Pb | 09 15 07.7 | +1.4 |
| | 98nm,0.5s | | | | | | |
| MTBS | | | | Lg | Lg | 09 15 47.6 | |
| | 235nm,0.7s | | | | | | |
| IZV | Izvestkoviy | 3.15 | 62 | eP | Pb | 09 15 09.2 | +1.5 |
| IZV | | | | eS | Sg | 09 15 50.0 | -2.1 |
| IZV | Izvestkoviy | 3.15 | 62 | Pg | Pb | 09 15 09.2 | +1.5 |
| IZV | | | | Lg | Lg | 09 15 50.0 | |
| KSH | Kashi | 3.19 | 130 | Pn | Pb | 09 15 05.5 | -2.9 |
| KSH | | | | Sn | Sb | 09 15 45.9 | -1.8 |
| KSH | | | | smax | smax | | |
| | comp=N,120nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,78nm,0.6s | | | | | | |
| KASK | Kaskelen | 3.25 | 59 | ⇑Pg | Pg | 09 15 12.9 | -0.2 |
| KASK | | | | ⇓Lg | Lg | 09 15 55.4 | |
| KDJ | Kajisay | 3.30 | 80 | ⇓iP | Pn | 09 15 05.6 | +1.9 |
| | baz=80 | | | | | | |
| KDJ | | | | ⇓iS | Sn | 09 15 45.2 | +1.6 |
| | baz=80 | | | | | | |
| TNSS | Tian-Shan | 3.37 | 64 | eP | Pb | 09 15 13.1 | +1.5 |
| | comp=E,76nm,0.6s | | | | | | |
| TNSS | | | | eS | Sg | 09 15 56.8 | -2.5 |
| | comp=E,81nm,0.7s | | | | | | |
| TNSS | Tian-Shan | 3.37 | 64 | Pg | Pb | 09 15 13.1 | +1.5 |
| | comp=E,76nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 09 15 56.8 | |
| | comp=E,81nm,0.7s | | | | | | |
| KNDC | Almaty | 3.46 | 61 | ⇑Pg | Pg | 09 15 16.0 | -1.3 |
| | comp=E,120nm,0.6s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 09 16 03.0 | |
| | comp=E,267nm,0.7s | | | | | | |
| MDOK | Medeo | 3.49 | 62 | eP | Pb | 09 15 15.0 | +1.5 |
| | comp=E,75nm,0.5s | | | | | | |
| MDOK | | | | eS | Sg | 09 16 00.5 | -2.6 |
| | comp=E,87nm,0.8s | | | | | | |
| MDOK | Medeo | 3.49 | 62 | Pg | Pb | 09 15 15.0 | +1.5 |
| | comp=E,75nm,0.5s | | | | | | |
| MDOK | | | | ⇑Pg | Pg | 09 15 16.4 | -1.4 |
| | comp=E,70nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 09 16 00.4 | |
| | comp=E,87nm,0.8s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 09 16 03.9 | |
| | comp=E,132nm,0.7s | | | | | | |
| KTBS | Karatobe | 3.54 | 52 | eP | Pb | 09 15 15.6 | +1.4 |
| | comp=E,59nm,0.4s | | | | | | |
| KTBS | | | | eS | Sb | 09 16 01.3 | +3.7 |
| | comp=E,172nm,0.5s | | | | | | |
| KTBS | Karatobe | 3.54 | 52 | Pg | Pb | 09 15 15.6 | +1.4 |
| | comp=E,59nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 09 16 01.3 | |
| | comp=E,172nm,0.5s | | | | | | |
| BTLS | Baital | 3.54 | 14 | eP | Pb | 09 15 16.5 | +2.3 |
| | comp=E,16nm,0.5s | | | | | | |
| BTLS | | | | eS | Sg | 09 16 02.6 | -1.9 |
| | comp=E,99nm,0.3s | | | | | | |
| BTLS | Baital | 3.54 | 14 | Pg | Pb | 09 15 16.5 | +2.3 |
| | comp=E,16nm,0.5s | | | | | | |
| BTLS | | | | Lg | Lg | 09 16 02.6 | |
| | comp=E,99nm,0.3s | | | | | | |
| KOTS | Kotyrbulak | 3.56 | 62 | eP | Pb | 09 15 16.1 | +1.4 |
| | comp=E,69nm,0.3s | | | | | | |
| KOTS | | | | eS | Sg | 09 16 02.3 | -3.1 |
| | comp=E,235nm,0.7s | | | | | | |
| KOTS | Kotyrbulak | 3.56 | 62 | Pg | Pb | 09 15 16.1 | +1.4 |
| | comp=E,69nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 09 16 02.3 | |
| | comp=E,235nm,0.7s | | | | | | |
| CHKK | Chushkaly | 3.80 | 53 | eP | Pb | 09 15 20.9 | +2.2 |
| | comp=E,24nm,0.4s | | | | | | |
| CHKK | | | | eS | Sg | 09 16 10.3 | -2.6 |
| | comp=E,109nm,0.4s | | | | | | |
| CHKK | Chushkaly | 3.80 | 53 | Pg | Pb | 09 15 20.9 | +2.2 |
| | comp=E,24nm,0.4s | | | | | | |
| CHKK | | | | Lg | Lg | 09 16 10.3 | |
| | comp=E,109nm,0.4s | | | | | | |
| BXML | Bakhmal | 4.12 | 244 | P | Pb | 09 15 21.1 | -3.2 |
| BXML | | | | S | Sb | 09 16 17.7 | +3.1 |
| PRZ | Przheval'sk | 4.24 | 76 | ⇓iP | Pn | 09 15 18.8 | +2.0 |
| | baz=76 | | | | | | |
| PRZ | | | | ⇓iS | Sn | 09 16 07.7 | +0.7 |
| | baz=76 | | | | | | |
| KURS | Kuram | 4.37 | 63 | eP | Pb | 09 15 31.3 | +2.8 |
| | comp=E,19nm,0.7s | | | | | | |
| KURS | | | | eS | Sg | 09 16 28.0 | -3.4 |
| | comp=E,44nm,1.0s | | | | | | |
| KURS | Kuram | 4.37 | 63 | Pg | Pb | 09 15 31.3 | +2.8 |
| | comp=E,19nm,0.7s | | | | | | |
| KURS | | | | Lg | Lg | 09 16 28.0 | |
| | comp=E,44nm,1.0s | | | | | | |
| SATY | Saty | 4.38 | 69 | eP | Pb | 09 15 31.8 | +3.1 |
| | comp=E,40nm,0.5s | | | | | | |
| SATY | | | | eS | Sg | 09 16 29.1 | -2.7 |
| | comp=E,99nm,0.6s | | | | | | |
| SATY | Saty | 4.38 | 69 | Pg | Pb | 09 15 31.8 | +3.1 |
| | comp=E,40nm,0.5s | | | | | | |
| SATY | | | | Lg | Lg | 09 16 29.1 | |
| | comp=E,99nm,0.6s | | | | | | |
| ZHN | Zhinishke | 4.44 | 68 | eP | Pb | 09 15 32.7 | +3.1 |
| | comp=E,20nm,0.7s | | | | | | |
| ZHN | | | | eS | Sg | 09 16 30.5 | -3.0 |
| | comp=E,76nm,0.3s | | | | | | |
| ZHN | Zhinishke | 4.44 | 68 | Pg | Pb | 09 15 32.7 | +3.1 |
| | comp=E,20nm,0.7s | | | | | | |
| ZHN | | | | Lg | Lg | 09 16 30.5 | |
| | comp=E,76nm,0.3s | | | | | | |
| ARXS | Arharly | 4.50 | 53 | eP | Pb | 09 15 33.8 | +3.2 |
| | comp=E,68nm,0.7s | | | | | | |
| ARXS | | | | eS | Sg | 09 16 32.5 | -3.0 |
| | comp=E,106nm,1.1s | | | | | | |
| ARXS | Arharly | 4.50 | 53 | Pg | Pb | 09 15 33.8 | +3.2 |
| | comp=E,68nm,0.7s | | | | | | |
| ARXS | | | | Lg | Lg | 09 16 32.4 | |
| | comp=E,106nm,1.1s | | | | | | |
| KPKS | Kokpek | 4.71 | 65 | eP | Pb | 09 15 37.1 | +2.8 |
| | comp=E,44nm,0.5s | | | | | | |
| KPKS | | | | eS | Sg | 09 16 38.1 | -4.1 |
| | comp=E,103nm,0.8s | | | | | | |
| KPKS | Kokpek | 4.71 | 65 | Pg | Pb | 09 15 37.1 | +2.8 |
| | comp=E,44nm,0.5s | | | | | | |
| KPKS | | | | Lg | Lg | 09 16 38.1 | |
| | comp=E,103nm,0.8s | | | | | | |
| BLB | Baldybastay | 4.84 | 57 | Pg | Pb | 09 15 39.2 | +2.7 |
| | comp=E,138nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 09 16 41.8 | |
| | comp=E,88nm,0.9s | | | | | | |
| UZB | Uzynbulak | 4.84 | 70 | eP | Pb | 09 15 40.0 | +3.5 |
| | comp=E,18nm,0.7s | | | | | | |
| UZB | | | | eS | Sg | 09 16 43.1 | -3.3 |
| | comp=E,49nm,0.8s | | | | | | |
| UZB | Uzynbulak | 4.84 | 70 | Pg | Pb | 09 15 40.0 | +3.5 |
| | comp=E,18nm,0.7s | | | | | | |
| UZB | | | | Lg | Lg | 09 16 43.1 | |
| | comp=E,49nm,0.8s | | | | | | |
| SAM | Samarkand | 4.87 | 248 | P | Pn | 09 15 29.5 | +4.2 |
| SAM | | | | S | Sb | 09 16 33.8 | -2.3 |
| SHLS | Shalkode | 5.15 | 70 | eP | Pg | 09 15 52.6 | +3.0 |
| | comp=E,21nm,0.4s | | | | | | |
| SHLS | | | | eS | Sg | 09 17 04.1 | +7.7 |
| | comp=E,104nm,0.7s | | | | | | |
| PDGK | Podgornoye | 5.22 | 69 | Pg | Pb | 09 15 47.3 | +4.3 |
| | comp=E,8.2nm,0.7s | | | | | | |
| PDGK | | | | Lg | Lg | 09 16 55.2 | |
| | comp=E,24nm,0.6s | | | | | | |
| PDGK | Podgornoye | 5.22 | 69 | ⇓Pg | Pg | 09 15 48.8 | -2.1 |
| | comp=E,17nm,0.8s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 09 16 56.1 | |
| | comp=E,64nm,0.7s | | | | | | |
| NUT | Nurota | 5.50 | 261 | P | Pn | 09 15 38.6 | +4.8 |
| NUT | | | | S | Sb | 09 16 51.2 | -2.9 |
| DJR | Jarkent | 5.79 | 60 | eP | Pg | 09 15 59.1 | -2.7 |
| | comp=E,8.8nm,0.3s | | | | | | |
| DJR | | | | eS | Sg | 09 17 15.4 | -1.3 |
| | comp=E,30nm,0.5s | | | | | | |
| KTMS | Ketmen | 5.86 | 69 | eP | Pg | 09 16 00.1 | -3.0 |
| | comp=E,6.2nm,0.7s | | | | | | |
| KTMS | | | | eS | Sg | 09 17 17.4 | -1.6 |
| | comp=E,17nm,0.7s | | | | | | |
| KTMS | Ketmen | 5.86 | 69 | Pg | Pg | 09 16 00.1 | -3.0 |
| | comp=E,6.2nm,0.7s | | | | | | |
| KTMS | | | | Lg | Lg | 09 17 17.4 | |
| | comp=E,17nm,0.7s | | | | | | |
| OTUK | Ortayu | 6.64 | 357 | Pg | Pg | 09 16 15.7 | -2.3 |
| | comp=E,1.3nm,0.4s | | | | | | |
| OTUK | | | | Lg | Lg | 09 17 43.4 | |
| | comp=E,39nm,0.7s | | | | | | |
| OTUK | Ortayu | 6.64 | 357 | ⇓Lg | Lg | 09 17 42.5 | |
| | comp=E,20nm,0.6s | | | | | | |
| MK31 | Makanchi Array | 8.54 | 50 | ⇑Pn | Pn | 09 16 21.7 | +6.1 |
| | comp=E,3.2nm,0.5s,baz=231,slow=14,SNR=20 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 09 18 41.9 | |
| | comp=E,5.9nm,0.7s | | | | | | |
| KURK | Kurchatov | 9.95 | 22 | ⇓Sn | Sn | 09 18 31.0 | +4.1 |
| | comp=E,2.8nm,0.7s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 19 28.3 | |
| | comp=E,16nm,0.7s | | | | | | |
| BVA0 | Borovoye Array | 11.53 | 353 | ⇑Sn | Sn | 09 19 09.4 | +3.6 |
| | comp=E,2.2nm,0.6s,baz=167,slow=26,SNR=3.8 | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 09 20 20.1 | |
| | comp=E,5.8nm,0.8s,baz=152,slow=28,SNR=4.2 | | | | | | |
| AB31 | Akbulak array | 11.83 | 315 | Pn | Pn | 09 17 00.2 | -0.3 |
| | comp=E,2.6nm,0.6s,baz=119,slow=15,SNR=42 | | | | | | |

**KRSZO 02 09:25:58.3, 46.°27N×18.°45E, h0km, Explosion. GT info : GT2 explosion locality : Nagymnyok Hungary description : known quarry blast, Hungary**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MORH | Mrgy, Hungar | 0.14 | 110 | Pg | Pg | 09 26 01.8 | +0.8 |
| MORH | | | | Lg | Lg | 09 26 04.3 | |
| KOVH | Kovagotottos | 0.30 | 234 | Pg | Pb | 09 26 06.4 | -0.1 |
| KOVH | | | | Lg | Lg | 09 26 10.5 | |
| A273A | Marcsa | 0.56 | 232 | Pg | Pg | 09 26 09.7 | +0.7 |
| A273A | | | | Lg | Lg | 09 26 16.5 | |

*IDC **02** 09:31:57.5±1.1, 6.°26S×147.°18E, h0km, mb3.9/5, mbtmp3.9/7, ML3.3/2, MS3.1/9, Error ellipse: s-maj=39.9km s-min=16.5km az=117.0*
**ISC 02 09:32:04.1**±1.0, **6.°3S**±0.°1×**147.°1E**±0.°2, **h49**km, **n15**, σ**1.s67**/14, **mb3.8**/5, **MS3.0**/6, **Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 3.12 | 179 | Pn | Pn | 09 32 49.8 | -1.0 |
| | 28nm,0.4s,baz=38,slow=10,SNR=14 | | | | | | |
| PMG | | | | Sn | Sn | 09 33 28.3 | +1.4 |
| | 20nm,0.3s,baz=221,slow=21,SNR=7.4 | | | | | | |
| PMG | | | | LR | LR | 09 33 50.3 | |
| | comp=Z,154nm,20.4s,baz=29,slow=36 | | | | | | |
| CTA | Charters Tower | 13.77 | 183 | Pn | Pn | 09 35 16.1 | -0.6 |
| | baz=26,slow=11,SNR=1.5 | | | | | | |
| WRA | Warramunga Arr | 18.41 | 221 | P | P | 09 36 14.2 | -1.2 |
| | 0.3nm,0.3s,baz=50,slow=11,SNR=17 | | | | | | |
| WRA | | | | S | Sn | 09 39 38.8 | -2.1 |
| | 0.5nm,0.8s,baz=44,slow=24,SNR=2.3 | | | | | | |
| WRA | | | | PcP | PcP | 09 40 46.3 | +1.4 |
| | 0.5nm,0.7s,baz=19,slow=1.7,SNR=2.6 | | | | | | |
| WRA | | | | LR | LR | 09 43 55.7 | |
| | comp=Z,124nm,21.2s,baz=294,slow=39 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| GUMO | Guam | 19.85 | 354 | LR | LR | 09 44 14.5 | |
| | comp=Z,36nm,18.2s,baz=210,slow=37 | | | | | | |
| ASAR | Alice Springs | 21.47 | 215 | P | P | 09 36 48.0 | -0.7 |
| | 2.2nm,0.5s,baz=50,slow=7.9,SNR=43 | | | | | | |
| ASAR | | | | S | S | 09 40 48.3 | +4.0 |
| | 2.7nm,0.8s,baz=31,slow=22,SNR=7.5 | | | | | | |
| ASAR | | | | LR | LR | 09 46 44.4 | |
| | comp=Z,108nm,19.6s,baz=45,slow=41 | | | | | | |
| | 2.2nm,0.5s | | | | | | |
| STKA | Stephens Creek | 26.00 | 191 | P | P | 09 37 32.0 | -0.5 |
| | 3.2nm,0.9s,baz=17,slow=11,SNR=5.5 | | | | | | |
| STKA | | | | LR | LR | 09 49 23.2 | |
| | comp=Z,44nm,18.0s,baz=20,slow=40 | | | | | | |
| | 3.2nm,0.9s | | | | | | |
| KAPI | Kappang | 27.26 | 271 | LR | LR | 09 50 18.0 | |
| | comp=Z,33nm,19.6s,baz=136,slow=40 | | | | | | |
| JCJ | Chichijima | 33.51 | 352 | LR | LR | 09 50 31.9 | |
| | comp=Z,25nm,22.0s,baz=88,slow=33 | | | | | | |
| JNU | Nakatsue | 42.10 | 340 | LR | LR | 09 54 43.1 | |
| | comp=Z,30nm,18.9s,baz=110,slow=32 | | | | | | |
| KSRS | Korea Array | 47.04 | 339 | LR | LR | 09 57 55.3 | |
| | comp=Z,18nm,21.6s,baz=130,slow=33 | | | | | | |
| VNDA | Vanda | 71.64 | 177 | P | P | 09 43 20.5 | +0.3 |
| | 0.4nm,0.6s,baz=335,slow=7.5,SNR=5.9 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 83.70 | 180 | P | P | 09 44 27.1 | -0.6 |
| | 1.3nm,0.6s,baz=294,slow=0.7,SNR=18 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| ILAR | Eielson Array | 85.68 | 23 | P | P | 09 44 36.8 | -0.6 |
| | 0.5nm,0.7s,baz=260,slow=5.3,SNR=5.1 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| SIV | San Ignacio | 144.39 | 129 | PKP | PKPdf | 09 51 36.8 | +0.8 |
| | 0.9nm,0.7s,baz=237,slow=4.3,SNR=3.7 | | | | | | |
| TORD | Torodi Ar. Bea | 145.27 | 284 | PKPbc | PKPdf | 09 51 38.8 | +1.3 |
| | 4.3nm,0.8s,baz=79,slow=6.5,SNR=24 | | | | | | |

**IDC 02 09:42:10.4**±2.5, **3.°92S**×**154.°24E**, **h0**km, **mb3.4**/3, **mbtmp3.4**/3, **Error ellipse: s-maj=199.4km s-min=30.4km az=127.0, North of Solomon Islands**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 25.10 | 229 | P | P | 09 47 37.9 | +0.7 |
| | 0.5nm,0.5s,baz=53,slow=9.4,SNR=8.1 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| ASAR | Alice Springs | 27.77 | 223 | P | P | 09 48 00.4 | -0.8 |
| | 0.2nm,0.4s,baz=57,slow=9.1,SNR=5.4 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 0.2nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **80.81** | **22** | P | P | 09 54 25.9 | 0.0 |
| | 0.2nm,0.6s,baz=240,slow=4.8,SNR=4.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**KRNET 02 09:48:26.6**±0.1**, 39°.60N×72°.99E, h13km, mb2.6, 18C-3D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.57** | **43** | ⇑iP | Pg | 09 48 37.8 | -0.1 |
| | baz=43 | | | | | | |
| SFK | | | | ⇑iS | Sb | 09 48 46.3 | -0.5 |
| | baz=43 | | | | | | |
| **DRK** | **Karamyk** | **0.93** | **263** | ⇑iP | Pg | 09 48 44.4 | -0.2 |
| | baz=63 | | | | | | |
| DRK | | | | ⇑iS | Sb | 09 48 57.7 | +0.6 |
| | baz=63 | | | | | | |
| **OHH** | **Osh** | **0.94** | **350** | ⇑iP | Pg | 09 48 44.7 | -0.1 |
| | baz=50 | | | | | | |
| OHH | | | | ⇑iS | Sb | 09 48 58.0 | +0.7 |
| | baz=50 | | | | | | |
| **BTK** | **Batken** | **1.74** | **286** | ⇑iP | Pg | 09 48 59.2 | -0.7 |
| | baz=86 | | | | | | |
| BTK | | | | ⇑iS | Sg | 09 49 23.0 | +0.5 |
| | baz=86 | | | | | | |
| **GAR** | **Garm** | **2.16** | **255** | ⇓iP | Pb | 09 49 05.8 | +0.2 |
| | baz=55 | | | | | | |
| GAR | | | | ⇓iS | Sg | 09 49 34.8 | -1.2 |
| | baz=55 | | | | | | |
| **TRKS** | **Terek-Say** | **2.39** | **324** | ⇑iP | Pb | 09 49 08.3 | -1.3 |
| | baz=24 | | | | | | |
| TRKS | | | | ⇑iS | Sb | 09 49 38.7 | -0.4 |
| | baz=24 | | | | | | |
| **ARLS** | **Aral** | **2.48** | **24** | ⇑iP | Pb | 09 49 10.3 | -0.8 |
| | baz=24 | | | | | | |
| ARLS | | | | ⇑iS | Sb | 09 49 42.2 | +0.6 |
| | baz=24 | | | | | | |
| **AML** | **Almayashu** | **2.59** | **12** | ⇑iP | Pb | 09 49 12.0 | -1.1 |
| | baz=12 | | | | | | |
| AML | | | | ⇑iS | Sb | 09 49 45.3 | +0.3 |
| | baz=12 | | | | | | |
| **UCH** | **Uchtor** | **2.87** | **23** | ⇑iP | Pb | 09 49 16.2 | -1.7 |
| | baz=23 | | | | | | |
| UCH | | | | ⇑iS | Sb | 09 49 52.3 | -0.9 |
| | baz=23 | | | | | | |
| **MNAS** | **Manas** | **2.91** | **353** | ⇑iP | Pb | 09 49 16.5 | -2.0 |
| | baz=53 | | | | | | |
| MNAS | | | | ⇑iS | Sb | 09 49 52.9 | -1.1 |
| | baz=53 | | | | | | |
| **KK31** | **Karatay Array** | **3.97** | **333** | ⇓P | Pg | 09 49 42.0 | -0.7 |
| | 0.3nm,0.2s,baz=146,slow=16,SNR=5.0 | | | | | | |
| KK31 | | | | S | Sb | 09 50 19.4 | -4.9 |
| | 1.1nm,0.3s,baz=152,slow=22,SNR=5.4 | | | | | | |

**ISU 02 09:48:58.2, 39°.63N×73°.00E, h15km, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRG** | **Fergana** | **1.19** | **309** | P | Pb | 09 49 20.5 | -0.1 |
| FRG | | | | S | Sg | 09 49 36.9 | +0.1 |
| **CHMI** | **Chimion** | **1.30** | **300** | P | Pb | 09 49 22.7 | +0.3 |
| CHMI | | | | S | Sg | 09 49 40.8 | +0.5 |

**IDC 02 10:05:53.9**±6.1**, 47°.84N×80°.59E, h0km, Error ellipse: s-maj=43.5km s-min=32.8km az=132.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **1.56** | **132** | Pg | Pn | 10 06 22.5 | -0.4 |
| | 0.4nm,0.3s,baz=313,slow=13,SNR=11 | | | | | | |
| MKAR | | | | Lg | Lg | 10 06 43.3 | |
| | 0.2nm,0.3s,baz=314,slow=28,SNR=3.4 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.67** | **22** | I | I | 10 48 20.0 | |
| | 0.1nm,2.4s,baz=208,slow=315,SNR=3.0 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **14.98** | **288** | I | I | 11 33 50.0 | |
| | baz=93,slow=315,SNR=3.3 | | | | | | |

**JMA 02 10:23:48.3**±0.2**, 24°.3N**±0°.2×**123°.8E**±0°.5**, h13km**±1km**, MV0.3**/7**, NEAR ISHIGAKIJIMA ISLAND, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.10** | **325** | eP | Pg | 10 23 51.4 | 0.0 |
| IRIF | | | | eS | Sg | 10 23 53.9 | +0.4 |
| **HATJ** | **Hateruma jima** | **0.19** | **177** | eP | Pg | 10 23 52.7 | -0.1 |
| HATJ | | | | eS | Sg | 10 23 56.0 | +0.3 |
| **JKRS** | **Kuro-shima** | **0.20** | **94** | P | Pg | 10 23 52.6 | -0.1 |
| **JIJ** | **Ishigaki jima** | **0.34** | **71** | eS | Sg | 10 24 00.2 | +0.3 |
| **JISG** | **Ishigakijimahi** | **0.58** | **55** | S | Sg | 10 24 07.1 | -0.3 |
| **JTJ** | **Tarama** | **0.91** | **65** | eS | Sb | 10 24 18.6 | +0.6 |

**TAP 02 10:23:57.0, 24°.76N×122°.41E, h10km**±1km**, ML2.3, C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.38** | **206** | i P | Pg | 10 24 04.3 | -0.1 |
| | baz=205 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.46** | **303** | eP | Pg | 10 24 05.5 | -0.4 |
| | baz=303 | | | | | | |
| **EOS3** | **EOS3** | **0.48** | **190** | P | Pg | 10 24 06.1 | -0.2 |
| | baz=190 | | | | | | |
| EOS3 | | | | eS | Sb | 10 24 14.9 | +0.5 |
| | baz=190 | | | | | | |
| **TWC** | **Suao** | **0.53** | **254** | P | Pg | 10 24 06.5 | -0.9 |
| | baz=253 | | | | | | |
| TWC | | | | eS | Sg | 10 24 14.9 | +0.5 |
| | baz=253 | | | | | | |
| **TIPB** | **Shuangxi** | **0.57** | **292** | eP | Pg | 10 24 07.8 | -0.3 |
| | baz=291 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.59** | **305** | eP | Pg | 10 24 08.9 | +0.4 |
| | baz=304 | | | | | | |
| SXI1 | | | | eS | Sb | 10 24 17.3 | -0.6 |
| | baz=304 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.62** | **118** | P | Pg | 10 24 08.8 | -0.3 |
| | baz=118 | | | | | | |
| YOJ | | | | eS | Sb | 10 24 18.3 | -0.3 |
| | baz=118 | | | | | | |
| **EOS4** | **EOS4** | **0.64** | **188** | P | Pg | 10 24 09.3 | 0.0 |
| | baz=187 | | | | | | |
| EOS4 | | | | S | Sg | 10 24 18.1 | +0.5 |
| | baz=187 | | | | | | |
| **NDS** | **Dongshan** | **0.64** | **259** | eS | Sb | 10 24 19.0 | -0.4 |
| | baz=258 | | | | | | |
| **EWUT** | **Wuta** | **0.65** | **242** | eP | Pg | 10 24 09.3 | -0.3 |
| | baz=241 | | | | | | |
| EWUT | | | | eS | Sg | 10 24 18.6 | +0.4 |
| | baz=241 | | | | | | |
| **ENA** | **Nanau** | **0.69** | **242** | P | Pg | 10 24 09.7 | -0.7 |
| | baz=241 | | | | | | |
| ENA | | | | eS | Sg | 10 24 19.7 | +0.3 |
| | baz=241 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.75** | **270** | eP | Pg | 10 24 10.4 | -1.0 |
| | baz=270 | | | | | | |
| FUSB | | | | eS | Sb | 10 24 21.9 | -0.5 |
| | baz=270 | | | | | | |
| **ENTT** | **Nioudou** | **0.78** | **261** | eP | Pg | 10 24 11.8 | -0.1 |
| | baz=261 | | | | | | |
| **NWLT** | **Wulai** | **0.82** | **272** | eP | Pg | 10 24 12.5 | -0.4 |
| | baz=271 | | | | | | |
| NWLT | | | | eS | Sg | 10 24 23.9 | +0.2 |
| | baz=271 | | | | | | |
| **NDT** | **Datong Townshi** | **0.83** | **259** | eP | Pg | 10 24 12.7 | -0.3 |
| | baz=259 | | | | | | |
| **LATG** | **Datong** | **0.83** | **255** | P | Pg | 10 24 12.3 | -0.8 |
| | baz=254 | | | | | | |
| LATG | | | | eS | Sg | 10 24 24.0 | -0.1 |
| | baz=254 | | | | | | |
| **NACB** | **Ninganchiao** | **0.94** | **232** | eP | Pg | 10 24 13.4 | -1.7 |
| | baz=231 | | | | | | |
| **YHNB** | **Yeheng** | **0.94** | **265** | eP | Pg | 10 24 14.1 | -1.1 |
| | baz=264 | | | | | | |
| YHNB | | | | eS | Sg | 10 24 26.8 | -0.7 |
| | baz=264 | | | | | | |
| **NSK** | **Sanguang** | **0.96** | **265** | eP | Pg | 10 24 14.9 | -0.6 |
| | baz=264 | | | | | | |
| NSK | | | | eS | Sb | 10 24 28.8 | +0.2 |
| | baz=264 | | | | | | |
| **NNSB** | **Datong** | **0.99** | **251** | eP | Pg | 10 24 14.9 | -1.2 |
| | baz=250 | | | | | | |
| NNSB | | | | eS | Sg | 10 24 28.9 | -0.1 |
| | baz=250 | | | | | | |
| **NNS** | **Nan Shan** | **1.00** | **252** | eP | Pg | 10 24 15.8 | -0.4 |
| | baz=251 | | | | | | |
| NNS | | | | eS | Sb | 10 24 29.5 | -0.1 |
| | baz=251 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.01** | **237** | eP | Pg | 10 24 15.1 | -1.3 |
| | baz=237 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.17** | **231** | eP | Pb | 10 24 16.7 | -2.7 |
| | baz=231 | | | | | | |
| **FUSS** | **Fushou** | **1.18** | **245** | eP | Pb | 10 24 18.0 | -1.6 |
| | baz=244 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.21** | **240** | eP | Pb | 10 24 18.8 | -1.4 |
| | baz=239 | | | | | | |
| **WUSB** | **Renai** | **1.40** | **237** | eP | Pn | 10 24 21.9 | -0.8 |
| | baz=237 | | | | | | |

*SOME **02** 10:35:13.1, 43°.60N×69°.82E*
*KRNET **02** 10:35:15.2±0.1, 43°.57N×69°.86E, mb2.3*
*NNC **02** 10:35:21.1±2.4, 43°.96N×70°.34E, h0km, mb3.0, mpv3.1, Error ellipse: s-maj=32.0km s-min=10.8km az=160.0*
**ISC 02 10:35:19.9**±2.8**, 43°.39N**±0°.07×**70°.1E**±0°.2**, h0km, n12, σ0§76**/18**, 12C, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KKAR** | **Karatay Array** | **0.42** | **132** | ⇑iP | **Pg** | **10 35 28.0** | **0.0** |
| | baz=34 | | | | | | |
| KKAR | | | | ⇑iS | **Sb** | **10 35 37.4** | **+0.1** |
| | baz=34 | | | | | | |
| **MNAS** | **Manas** | **2.00** | **116** | ⇑iP | **Pn** | **10 35 54.4** | **-0.6** |
| | baz=18 | | | | | | |
| MNAS | | | | ⇑iS | **Sb** | **10 36 22.5** | **-0.1** |
| | baz=18 | | | | | | |
| **TRKS** | **Terek-Say** | **2.02** | **157** | ⇑iP | **Pn** | **10 35 55.3** | **0.0** |
| | baz=55 | | | | | | |
| TRKS | | | | ⇑iS | **Sg** | **10 36 24.9** | **+0.3** |
| | baz=55 | | | | | | |
| **ARK** | **Arkit** | **2.11** | **138** | ⇑iP | **Pn** | **10 35 55.8** | **-0.8** |
| | baz=38 | | | | | | |
| ARK | | | | ⇑iS | **Sb** | **10 36 26.0** | **+0.1** |
| | baz=38 | | | | | | |
| **MRKS** | **Merke** | **2.39** | **104** | Pg | **Pb** | **10 36 02.7** | **-1.2** |
| | 1.5nm,0.2s | | | | | | |
| MRKS | | | | Lg | Lg | 10 36 38.5 | |
| | 11nm,0.5s | | | | | | |
| **EKS2** | **Erkin-Say** | **2.81** | **104** | ⇑iP | **Pn** | **10 36 05.2** | **-1.0** |
| | baz=6.0 | | | | | | |
| EKS2 | | | | ⇑iS | **Sn** | **10 36 41.4** | **+0.6** |
| | baz=6.0 | | | | | | |
| **ARSB** | **Arslanbob** | **2.98** | **133** | ⇑iP | **Pn** | **10 36 08.2** | **-0.4** |
| | baz=33 | | | | | | |
| ARSB | | | | ⇑iS | **Sn** | **10 36 46.5** | **+1.4** |
| | baz=33 | | | | | | |
| **BTLS** | **Baital** | **3.30** | **59** | Pg | **Pn** | **10 36 13.0** | **+0.2** |
| | 1.0nm,0.4s | | | | | | |
| BTLS | | | | Lg | Lg | 10 36 56.3 | |
| | 2.7nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **4.08** | **84** | Pg | **Pb** | **10 36 31.6** | **-1.1** |
| | 1.5nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 10 37 28.2 | |
| **DGS** | **Degeres** | **4.16** | **90** | Pg | **Pb** | **10 36 34.6** | **+0.6** |
| | 1.2nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 10 37 33.4 | |
| | 6.5nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.81** | **84** | Pg | **Pb** | **10 36 45.2** | **+0.1** |
| | 0.7nm,0.6s | | | | | | |
| KTBS | | | | Lg | Lg | 10 37 51.6 | |
| | 7.6nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.03** | **92** | Pg | **Pb** | **10 36 50.0** | **+0.9** |
| | 0.5nm,0.1s | | | | | | |
| TNSS | | | | Lg | Lg | 10 37 59.7 | |
| | 3.2nm,0.8s | | | | | | |

*TEH **02** 10:50:01.7, 27°.74N×57°.68E, h13km±21km, ML3.5*
*DSN **02** 10:50:03.0±2.3, 27°.84N×57°.80E, h15km, ML2.9/8, Error ellipse: s-maj=41.9km s-min=15.5km az=145.0*
*OMAN **02** 10:50:05.6±0.3, 27°.63N×57°.84E, h10km, ml3.0/14, Error ellipse: s-maj=5.8km s-min=4.0km az=337.0*
**ISC 02 10:50:03.8**±1.6**, 27°.74N**±0°.04×**57°.73E**±0°.05**, h5km**±13km**, n44, σ1§20**/62**, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHNJ** | **Kahnooj** | **0.21** | **354** | Pg | **Pg** | **10 50 07.6** | **-0.4** |
| KHNJ | | | | Sg | **Sg** | **10 50 11.4** | **+0.7** |
| **IBND** | **Bandar-abas** | **1.09** | **255** | Pg | **Pn** | **10 50 22.8** | **-3.0** |
| **GENO** | **Geno** | **1.42** | **257** | Pg | **Pn** | **10 50 28.5** | **-2.0** |
| **KBAM** | **BAM** | **1.53** | **24** | Pg | **Pn** | **10 50 30.5** | **-1.4** |
| **JASK** | **Jask - Hormozg** | **1.87** | **176** | Pn | **Pn** | **10 50 36.4** | **-0.1** |
| **JASK** | **Jask - Hormozg** | **1.87** | **176** | P | **Pn** | **10 50 37.3** | **+0.8** |
| **CHMN** | **Cheshme madani** | **2.12** | **356** | Pn | **Pn** | **10 50 39.8** | **-0.5** |
| **SHME** | **Shamm** | **2.20** | **221** | P | **Pn** | **10 50 40.4** | **-0.6** |
| SHME | | | | S | **Sn** | **10 51 09.9** | **+1.3** |
| **SHME** | **Shamm** | **2.20** | **221** | P | **Pn** | **10 50 40.7** | **-0.3** |
| | SNR=12 | | | | | | |
| SHME | | | | S | **Sn** | **10 51 10.0** | **+1.3** |
| **BANOM** | **Banah** | **2.21** | **216** | P | **Pn** | **10 50 41.3** | **0.0** |
| **BANOM** | **Banah** | **2.21** | **216** | P | **Pn** | **10 50 41.5** | **+0.2** |
| BANOM | | | | S | **Sn** | **10 51 08.9** | **-0.1** |
| **TVBK** | **TV Kerman** | **2.40** | **339** | Pn | **Pn** | **10 50 44.3** | **+0.2** |
| **MASF** | **Masafi** | **2.75** | **211** | P | **Pn** | **10 50 48.8** | **+0.3** |
| MASF | | | | S | **Sn** | **10 51 24.0** | **+1.8** |
| **MDH** | **Madha** | **2.75** | **208** | P | **Pn** | **10 50 46.4** | **-2.2** |
| **MDH** | **Madha** | **2.75** | **208** | P | **Pn** | **10 50 46.8** | **-1.8** |
| MDH | | | | S | **Sn** | **10 51 21.5** | **-0.6** |
| **KHGB** | **Koh Gabri** | **2.85** | **338** | Pn | **Pn** | **10 50 50.2** | **0.0** |
| **UOSS** | **Minazif** | **3.10** | **207** | P | **Pn** | **10 50 53.5** | **+0.1** |
| **UOSS** | **Minazif** | **3.10** | **207** | P | **Pn** | **10 50 54.1** | **+0.7** |
| UOSS | | | | S | **Sn** | **10 51 30.6** | **-0.3** |
| **ZHDN** | **Zahedan** | **3.17** | **58** | Pn | **Pn** | **10 50 55.6** | **+1.0** |
| **HATD** | **Hatta, Dubai** | **3.23** | **207** | P | **Pn** | **10 50 56.2** | **+0.9** |
| **HATD** | **Hatta, Dubai** | **3.23** | **207** | P | **Pn** | **10 50 57.1** | **+1.8** |
| HATD | | | | S | **Sn** | **10 51 34.7** | **+0.4** |
| **ASHO** | **Ashiyiah** | **3.39** | **207** | P | **Pn** | **10 50 57.9** | **+0.4** |
| **ASHO** | **Ashiyiah** | **3.39** | **207** | P | **Pn** | **10 50 58.5** | **+1.0** |
| | SNR=12 | | | | | | |
| ASHO | | | | S | **Sn** | **10 51 41.0** | **+2.9** |
| **FAQ** | **Al Faqa, Dubai** | **3.54** | **213** | P | **Pn** | **10 50 59.0** | **-0.5** |
| **FAQ** | **Al Faqa, Dubai** | **3.54** | **213** | P | **Pn** | **10 50 59.3** | **-0.2** |
| FAQ | | | | S | **Sn** | **10 51 43.1** | **+1.3** |
| **SOHO** | **SOHO** | **3.75** | **197** | P | **Pn** | **10 51 01.7** | **-0.6** |
| **SOHO** | **SOHO** | **3.75** | **197** | P | **Pn** | **10 51 02.5** | **+0.2** |
| **ASUD** | **Al Ashush, Dub** | **3.77** | **215** | P | **Pn** | **10 51 02.9** | **+0.2** |
| **ASUD** | **Al Ashush, Dub** | **3.77** | **215** | P | **Pn** | **10 51 03.5** | **+0.8** |
| ASUD | | | | S | **Sn** | **10 51 49.4** | **+1.8** |
| **ALNE** | **Al Ain** | **4.08** | **206** | P | **Pn** | **10 51 08.1** | **+1.2** |
| ALNE | | | | S | **Sn** | **10 51 56.0** | **+1.0** |
| **HOQ** | **Hoqain** | **4.16** | **185** | P | **Pn** | **10 51 06.3** | **-1.7** |
| HOQ | | | | S | **Sn** | **10 51 56.2** | **-0.8** |
| **SRVN** | **Saravan** | **4.16** | **94** | Pn | **Pn** | **10 51 08.3** | **+0.2** |
| **NHDN** | **Nehbandan** | **4.17** | **28** | Pn | **Pn** | **10 51 08.4** | **+0.2** |
| **BIDO** | **Bidbid** | **4.21** | **175** | P | **Pn** | **10 51 08.2** | **-0.5** |
| **BSRN** | **Basiran** | **4.38** | **16** | Pn | **Pn** | **10 51 12.0** | **+0.8** |
| **ARQ** | **Araqi** | **4.52** | **194** | P | **Pn** | **10 51 14.0** | **+1.1** |
| | SNR=17 | | | | | | |
| **WSAR** | **Wadi Sarin** | **4.55** | **170** | P | **Pn** | **10 51 13.4** | **0.0** |
| | SNR=26 | | | | | | |
| WSAR | | | | S | **Sn** | **10 52 04.3** | **-2.5** |
| **SMDO** | **Samad** | **4.67** | **176** | P | **Pn** | **10 51 15.7** | **+0.6** |
| SMDO | | | | S | **Sn** | **10 52 08.9** | **-0.8** |
| **IKOO** | **Kooshah** | **4.80** | **13** | Pn | **Pn** | **10 51 17.6** | **+0.6** |
| **WBK** | **Wadi Bani Khal** | **5.23** | **167** | P | **Pn** | **10 51 22.4** | **-0.3** |
| WBK | | | | S | **Sn** | **10 52 21.0** | **-2.5** |
| **TPRV** | **Parvadeh(Tabas** | **5.35** | **351** | Pn | **Pn** | **10 51 24.9** | **+0.5** |
| **JMDO** | **Jabal Madar** | **5.36** | **176** | P | **Pn** | **10 51 26.3** | **+1.9** |
| JMDO | | | | S | **Sn** | **10 52 27.3** | **+0.7** |
| **JLN** | **Jalan Bani Buh** | **5.77** | **164** | P | **Pn** | **10 51 29.8** | **-0.3** |
| JLN | | | | S | **Sn** | **10 52 35.0** | **-1.8** |
| **KLNJ** | **Kolanjah** | **6.27** | **303** | Pn | **Pn** | **10 51 36.4** | **-0.9** |

*IDC **02** 11:04:02.8±1.2, 22°.38S×178°.66W, h0km, mb4.1/6, mbtmp4.1/6, Error ellipse: s-maj=51.6km s-min=25.5km az=159.0*
*NEIC **02** 11:05:01.9±1.1, 22°.5S±0°.4×179°.5W±0°.3, h583km±32km, mb4.3/18, Error ellipse: s-maj=57.9km s-min=29.7km az=208.0*
**ISC 02 11:05:03.3**±0.9**, 22°.3S**±0°.2×**179°.7W**±0°.1**, h600km, n25, σ0§63**/25**, mb4.2**/14**, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.03** | **335** | | **P** | **11 06 35.6** | **-1.1** |
| **ARMA** | **Armidale** | **26.85** | **247** | P | **P** | **11 09 58.5** | **+0.5** |
| ARMA | | | | IAmb | IAmb | 11 10 30.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **26.85** | **258** | P | **P** | **11 09 58.5** | **+0.6** |
| EIDS | | | | IAmb | IAmb | 11 10 02.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **30.17** | **238** | P | **P** | **11 10 26.9** | **+0.4** |
| CAN | | | | IAmb | IAmb | 11 10 27.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **31.77** | **268** | P | **P** | **11 10 41.2** | **+0.9** |
| **TOO** | **Toolangi** | **33.53** | **235** | P | **P** | **11 10 54.9** | **-0.1** |
| **STKA** | **Stephens Creek** | **35.57** | **246** | P | **P** | **11 11 10.6** | **-1.4** |
| STKA | | | | IAmb | IAmb | 11 11 31.6 | |
| | comp=Z,6.8nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.57** | **246** | P | **P** | **11 11 11.1** | **-0.9** |
| | comp=Z,5.6nm,0.8s,baz=91,slow=11,SNR=5.1 | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **40.31** | **245** | P | **P** | **11 11 50.0** | **-0.4** |
| **AS31** | **Alice Springs** | **42.57** | **259** | P | **P** | **11 12 08.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **42.57** | **259** | P | **P** | **11 12 08.1** | **-0.1** |
| | comp=Z,4.2nm,0.7s,baz=98,slow=6.9,SNR=54 | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.61** | **264** | P | **P** | **11 12 08.4** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 11 12 15.3 | |
| | comp=Z,9.5nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.78** | **265** | P | **P** | **11 12 09.9** | **0.0** |
| WB0 | | | | IAmb | IAmb | 11 12 11.0 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.78** | **264** | P | **P** | **11 12 09.9** | **0.0** |
| WB2 | | | | IAmb | IAmb | 11 12 10.7 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.79** | **264** | P | **P** | **11 12 09.9** | **0.0** |
| WRAB | | | | IAmb | IAmb | 11 12 10.7 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.80** | **264** | P | **P** | **11 12 09.8** | **-0.2** |
| **WRA** | **Warramunga Arr** | **42.80** | **264** | P | **P** | **11 12 09.6** | **-0.4** |
| | comp=Z,4.5nm,0.7s,baz=101,slow=8.5,SNR=102 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **47.12** | **248** | P | **P** | **11 12 42.2** | **-0.6** |
| **MTN** | **Manton Dam** | **47.62** | **273** | P | **P** | **11 12 47.3** | **+0.6** |
| MTN | | | | IAmb | IAmb | 11 12 48.0 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **48.97** | **268** | P | **P** | **11 12 57.5** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **51.23** | **264** | P | **P** | **11 13 13.9** | **+0.8** |
| **QSPA** | **South Pole Qui** | **67.74** | **180** | P | **P** | **11 15 01.7** | **-0.4** |
| **QSPA** | **South Pole Qui** | **67.74** | **180** | P | **P** | **11 15 01.5** | **-0.6** |
| | comp=Z,1.1nm,0.8s,baz=96,slow=9.2,SNR=2.5 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.45** | **44** | P | **P** | **11 16 29.7** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=212,slow=8.3,SNR=3.8 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **89.38** | **58** | P | **P** | **11 16 57.9** | **+0.4** |
| | comp=Z,0.2nm,0.8s,baz=210,slow=5.2,SNR=3.4 | | | | | | |
| | comp=Z,0.2nm,0.8s | | | | | | |

*IDC **02** 11:17:37.3±1.8, 21°.44S×179°.10W, h620km±24km, mb2.5/5, mbtmp3.6/7, Error ellipse: s-maj=29.4km s-min=19.9km az=125.0*
**ISC 02 11:17:36.3**±0.9**, 21°.5S**±0°.1×**179°.0W**±0°.2**, h602km, n7, σ1§44**/8**, mb3.1**/5**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.63** | **322** | P | **P** | **11 19 08.6** | **+1.8** |
| | 3.1nm,0.4s,baz=78,slow=23,SNR=9.3 | | | | | | |
| **URZ** | **Urewera** | **17.09** | **191** | P | **P** | **11 21 02.9** | **-0.5** |
| | 3.5nm,0.3s,baz=354,slow=3.2,SNR=17 | | | | | | |
| URZ | | | | S | **S** | **11 23 53.3** | **+1.5** |
| | 8.8nm,0.9s,baz=272,slow=19,SNR=1.8 | | | | | | |
| **ASAR** | **Alice Springs** | **43.42** | **258** | P | **P** | **11 24 47.2** | **-0.6** |
| | 0.2nm,0.6s,baz=93,slow=7.4,SNR=1.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.57** | **263** | P | **P** | **11 24 47.6** | **-1.3** |
| | 0.1nm,0.3s,baz=101,slow=7.0,SNR=8.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.34** | **44** | P | **P** | **11 28 56.0** | **-0.6** |
| | 0.5nm,0.8s,baz=223,slow=7.3,SNR=3.3 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **88.33** | **58** | P | **P** | **11 29 26.4** | **+0.9** |
| | 0.4nm,0.8s,baz=239,slow=5.1,SNR=4.6 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **89.44** | **13** | P | **P** | **11 29 28.4** | **-1.2** |
| | 0.1nm,0.4s,baz=219,slow=5.5,SNR=7.5 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **02** 11:26:08.9±2.0, 0°.15S×124°.71E, h0km, mb3.2/3, mbtmp3.2/3, MS2.7/1, Error ellipse: s-maj=188.4km s-min=28.8km az=63.0*
*DJA **02** 11:26:10.0±0.4, 1°N±4°×12°7E±°, h10km, M3.4/7, MLv3.4/7*
**ISC 02 11:26:07.7**±1.8**, 1°.2N**±0°.2×**127°.3E**±0°.2**, h10km, n7, σ1§67**/6**, mb3.2**/3**, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **0.46** | **169** | P | **Pb** | **11 26 19.2** | **+1.3** |
| **LBMI** | **Labuha** | **1.86** | **173** | P | **Pn** | **11 26 39.6** | **-0.1** |
| **GTOI** | **Gorontalo** | **4.31** | **262** | P | **Pn** | **11 27 13.1** | **-0.3** |
| **WRA** | **Warramunga Arr** | **22.15** | **162** | P | **P** | **11 31 01.6** | **-2.3** |
| | 0.2nm,0.4s,baz=332,slow=11,SNR=11 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **25.57** | **166** | P | **P** | **11 31 36.2** | **-0.9** |
| | 0.2nm,0.4s,baz=347,slow=10,SNR=1.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **KLR** | **Kul'dur** | **47.98** | **4** | LR | LR | 11 56 21.5 | |
| | comp=Z,8.4nm,20.7s,baz=68,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.92** | **326** | P | **P** | **11 36 14.8** | **+0.7** |
| | 0.2nm,0.4s,baz=145,slow=6.5,SNR=2.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*HEL **02** 11:30:18.4±0.1, 63°.98N×28°.11E, h0km, ML1.4, Suspected explosion*
*IDC **02** 11:30:31.7±1.8, 63°.90N×28°.12E, h0km, mbtmp2.6/2, ML1.7/2, Error ellipse: s-maj=43.2km s-min=10.5km az=96.0*
**ISC 02 11:30:16.5**±0.8**, 64°.03N**±0°.02×**28°.27E**±0°.04**, h0km, n19, σ1§68**/26**, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIF** | **Nilsia** | **0.67** | **198** | PG | **Pg** | **11 30 29.4** | **0.0** |
| NIF | | | | SG | **Sg** | **11 30 36.8** | **-1.3** |
| **RMF** | **Romuvaara** | **0.75** | **75** | PG | **Pn** | **11 30 33.9** | **-0.5** |
| RMF | | | | MSG | | 11 30 44.3 | |
| | comp=Z,4.5nm,0.2s | | | | | | |
| RMF | | | | SB | **Sn** | **11 30 46.4** | **-0.1** |
| **OBF4** | **Vikkela, Lumij** | **1.58** | **301** | PG | **Pb** | **11 30 46.6** | **0.0** |
| OBF4 | | | | MSG | | 11 31 04.8 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| **OUF** | **Merijarvi** | **1.58** | **284** | PG | **Pn** | **11 30 45.9** | **+0.1** |
| OUF | | | | MSG | | 11 31 04.3 | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| OUF | | | | SN | **Sg** | **11 31 09.4** | **+2.1** |
| **SUF** | **Sumiainen** | **1.62** | **217** | PG | **Pn** | **11 30 46.4** | **+0.1** |
| SUF | | | | MSG | | 11 31 04.8 | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| **JOF** | **Joensuu** | **1.76** | **128** | PG | **Pg** | **11 30 50.6** | **+0.3** |
| **OBF0** | **Syolatti, Pyha** | **1.82** | **287** | PG | **Pb** | **11 30 50.2** | **-0.5** |
| OBF0 | | | | MSG | | 11 31 11.3 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| **MSF** | **Maaselka** | **1.92** | **9** | PG | **Pg** | **11 30 53.8** | **+0.5** |
| | baz=194 | | | | | | |
| **RANF** | **Ranua** | **2.09** | **343** | PG | **Pg** | **11 30 56.7** | **+0.1** |
| RANF | | | | SG | **Sg** | **11 31 23.5** | **-0.2** |
| **KAF** | **Kangasniemi** | **2.12** | **206** | PG | **Pb** | **11 30 55.0** | **-0.8** |
| KAF | | | | MSG | | 11 31 19.3 | |
| | comp=Z,2.9nm,0.2s | | | | | | |
| KAF | | | | SG | **Sb** | **11 31 22.9** | **+0.3** |
| **KU6** | **Riekki** | **2.12** | **18** | PG | **Pg** | **11 30 57.1** | **0.0** |
| KU6 | | | | MSG | | 11 31 23.2 | |
| | comp=Z,0.7nm,0.2s | | | | | | |
| **OLKF** | **Oulanka, Finla** | **2.35** | **11** | PG | **Pg** | **11 31 01.2** | **-0.4** |
| OLKF | | | | MSG | | 11 31 29.7 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **KEF** | **Keuruu** | **2.42** | **221** | PG | **Pb** | **11 31 00.2** | **-0.7** |
| | baz=35 | | | | | | |
| KEF | | | | MSG | | 11 31 27.6 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| KEF | | | | SG | **Sb** | **11 31 30.1** | **-1.2** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **RUF** | **Ruokolahti** | **2.63** | **173** | PG | **Pb** | **11 31 05.1** | **+0.7** |
| RUF | | | | MSG | | 11 31 34.8 | |
| | comp=Z,1.5nm,0.2s | | | | | | |
| **VAF** | **Ylistaro** | **2.69** | **251** | MSG | | 11 31 35.6 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| VAF | | | | SG | **Sb** | **11 31 37.8** | **-1.3** |
| **FIA0** | **FINESS Array S** | **2.78** | **202** | PB | **Pb** | **11 31 05.1** | **-1.9** |
| | baz=22 | | | | | | |
| FIA0 | | | | MSG | | 11 31 38.5 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| FIA0 | | | | SB | **Sb** | **11 31 40.1** | **-1.5** |
| **FINES** | **FINESS Array B** | **2.78** | **202** | Pn | Pg | 11 31 17.0 | +7.2 |
| | comp=Z,0.3nm,0.3s,baz=22,slow=16,SNR=12 | | | | | | |
| FINES | | | | Sn | **Sg** | **11 31 50.9** | **+5.1** |
| | comp=Z,0.4nm,0.3s,baz=21,slow=27,SNR=14 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **5.64** | **350** | Pn | **Pb** | **11 31 58.3** | **+2.7** |
| | comp=Z,0.1nm,0.3s,baz=169,slow=9.7,SNR=1.3 | | | | | | |
| ARCES | | | | Sn | **Sb** | **11 33 00.0** | **-3.7** |
| | comp=Z,0.1nm,0.3s,baz=173,slow=23,SNR=1.0 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **I37NO** | **I37NO** | **6.36** | **327** | I | I | 12 10 10.0 | |
| | baz=139,slow=319,SNR=3.0 | | | | | | |

*TEH **02** 11:35:06.8, 34°.65N×46°.25E, h10km±38km, ML2.5*
*ISN **02** 11:35:06.1±0.6, 34°.67N×46°.31E, h14km±9km, ML2.6*
**ISC 02 11:35:06.6**±1.0**, 34°.66N**±0°.05×**46°.24E**±0°.04**, h10**km±10km**, n9, σ0s65**/14**, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.13** | **71** | Pg | **Pg** | **11 35 09.7** | **-0.1** |
| IDHR | | | | Sg | **Sg** | **11 35 12.3** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.43** | **140** | Pg | **Pb** | **11 35 15.2** | **-1.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **207** | Pg | **Pg** | **11 35 18.9** | **+0.5** |
| GLG1 | | | | Sg | **Sb** | **11 35 28.1** | **+0.1** |
| **ILBA** | **Ilam Banvizeh** | **1.03** | **182** | Pg | **Pg** | **11 35 26.4** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **80** | Pg | **Pn** | **11 35 29.9** | **+0.8** |
| **IBDR** | **Badra** | **1.57** | **190** | *e*Pn | **Pb** | **11 35 36.0** | **+0.4** |
| IBDR | | | | *e*Sn | **Sg** | **11 35 57.0** | **+0.1** |
| IBDR | | | | AML | AML | 11 36 02.5 | |
| | comp=E,74nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 11 36 04.6 | |
| | comp=N,60nm,0.4s | | | | | | |
| **IKRK** | **Kirkuk** | **1.73** | **296** | *e*Pn | **Pb** | **11 35 38.0** | **-0.4** |
| IKRK | | | | *e*Sn | **Sg** | **11 36 02.0** | **-0.1** |
| IKRK | | | | AML | AML | 11 36 08.5 | |
| | comp=N,133nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 11 36 09.3 | |
| | comp=E,113nm,0.4s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.75** | **130** | Pg | **Pg** | **11 35 40.1** | **0.0** |
| **BHD** | **Baghdad** | **2.08** | **229** | *e*Pn | **Pb** | **11 35 43.0** | **-1.3** |
| BHD | | | | *e*Sn | **Sb** | **11 36 10.0** | **-0.1** |

*IDC **02** 11:36:35.0±1.9, 1°.54N×126°.94E, h0km, mb3.5/4, mbtmp3.5/4, Error ellipse: s-maj=181.7km s-min=21.8km az=67.0*
*DJA **02** 11:36:48.5±1.3, 1°N±4°×12°6E±°, h23km±12km, M3.9/8, MLv3.9/8*
**ISC 02 11:36:49.4**±1.3**, 0°.60N**±0°.08×**125°.79E**±0°.05**, h44km, n10, σ2s40**/11**, mb3.5**/4**, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.58** | **84** | P | **Pn** | **11 37 16.2** | **+1.2** |
| TNTI | | | | S | **Sn** | **11 37 35.8** | **+1.5** |
| **KMSI** | **Cibinong** | **1.81** | **269** | P | **Pn** | **11 37 17.9** | **-0.3** |
| KMSI | | | | S | **Sn** | **11 37 42.0** | **+2.0** |
| **SANI** | **Sanana** | **2.64** | **176** | P | **Pn** | **11 37 30.8** | **+1.2** |
| SANI | | | | S | **Sn** | **11 38 01.7** | **+1.3** |
| **GTOI** | **Gorontalo** | **2.78** | **271** | P | **Pn** | **11 37 33.5** | **+2.0** |
| **LUWI** | **Luwuk** | **3.43** | **242** | P | **Pn** | **11 37 41.4** | **+0.9** |
| **NLAI** | **Namlea** | **4.03** | **161** | P | **Pn** | **11 37 50.7** | **+2.0** |
| **WRA** | **Warramunga Arr** | **22.07** | **158** | P | **P** | **11 41 36.8** | **-4.1** |
| | 0.7nm,0.5s,baz=340,slow=11,SNR=14 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **25.38** | **162** | P | **P** | **11 42 09.7** | **-3.1** |
| | 0.2nm,0.3s,baz=339,slow=9.9,SNR=12 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.61** | **327** | P | P | 11 46 40.0 | -8.9 |
| | 0.3nm,0.3s,baz=121,slow=8.0,SNR=6.3 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.88** | **329** | P | P | 11 47 08.0 | -10 |
| | 0.2nm,0.3s,baz=126,slow=7.0,SNR=1.7 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*TEH **02** 11:45:10.2, 34°.49N×45°.67E, h8km±14km, ML3.4*
*ISN **02** 11:45:11.3±0.5, 34°.50N×45°.67E, h28km±999km, ML3.5*
**ISC 02 11:45:10.8**±1.0**, 34°.48N**±0°.03×**45°.66E**±0°.04**, h6**km±8km**, n24, σ0s63**/28**, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KGS1** | **Ghasr-e-Shirin** | **0.06** | **294** | Pg | **Pg** | **11 45 12.2** | **-0.2** |
| KGS1 | | | | Sg | **Sg** | **11 45 13.9** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.42** | **150** | Pg | **Pg** | **11 45 18.9** | **-0.1** |
| **IDHR** | **Dehrash** | **0.64** | **70** | Pg | **Pg** | **11 45 22.0** | **-1.2** |
| **IGHG** | **Ghaleghazi** | **0.77** | **101** | Pg | **Pg** | **11 45 25.5** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **0.97** | **152** | Pg | **Pg** | **11 45 28.8** | **-0.7** |
| **ILIN** | **Lien** | **1.16** | **68** | Pg | **Pg** | **11 45 32.7** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **1.17** | **100** | Pg | **Pg** | **11 45 32.8** | **-0.4** |
| **IBDR** | **Badra** | **1.39** | **170** | *e*Pg | **Pn** | **11 45 37.0** | **+0.2** |
| IBDR | | | | *e*Sg | **Sg** | **11 45 55.0** | **-0.4** |
| IBDR | | | | AML | AML | 11 46 02.9 | |
| | comp=N,512nm,0.8s | | | | | | |
| IBDR | | | | AML | AML | 11 46 12.1 | |
| | comp=E,522nm,0.8s | | | | | | |
| **IKRK** | **Kirkuk** | **1.42** | **311** | *e*Pn | **Pn** | **11 45 37.0** | **-0.2** |
| IKRK | | | | *e*Sn | **Sg** | **11 45 56.0** | **-0.4** |
| IKRK | | | | AML | AML | 11 45 59.9 | |
| | comp=N,814nm,0.6s | | | | | | |
| IKRK | | | | AML | AML | 11 46 03.0 | |
| | comp=E,854nm,0.6s | | | | | | |
| **BHD** | **Baghdad** | **1.61** | **222** | *e*Pn | **Pn** | **11 45 40.0** | **+0.2** |
| BHD | | | | *e*Sn | **Sn** | **11 46 01.0** | **+0.1** |
| BHD | | | | AML | AML | 11 46 06.2 | |
| | comp=E,1μm,0.2s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.67** | **355** | Pg | **Pn** | **11 45 41.1** | **+0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.67** | **76** | Pg | **Pn** | **11 45 41.3** | **+0.3** |
| **IBZA** | **Bozab** | **1.82** | **90** | Pn | **Pn** | **11 45 42.9** | **-0.1** |
| **IKFM** | **Kafar-mosalman** | **2.06** | **117** | Pn | **Pn** | **11 45 47.1** | **+1.1** |
| **MAHB** | **Mahabad** | **2.28** | **1** | Pn | **Pn** | **11 45 50.0** | **+0.8** |
| **HSAM** | **Samen** | **2.45** | **95** | Pn | **Pn** | **11 45 52.2** | **+0.5** |
| **IHSH** | **Hashtrud** | **3.10** | **24** | Pn | **Pn** | **11 46 01.8** | **+1.0** |
| **IAZR** | **Azarshahr** | **3.20** | **5** | Pn | **Pn** | **11 46 03.2** | **+1.2** |
| **ISHB** | **Shabestar** | **3.79** | **360** | Pn | **Pn** | **11 46 09.9** | **-0.2** |
| **GRMI** | **Germi** | **4.68** | **22** | Pn | **Pn** | **11 46 22.6** | **+0.5** |
| **QAMS** | **Qamsar** | **4.82** | **97** | Pn | **Pn** | **11 46 25.1** | **+0.8** |
| **IKLH** | **Kolahrood** | **5.06** | **102** | Pn | **Pn** | **11 46 28.3** | **+0.8** |
| **KRSH** | **Karshahi** | **5.39** | **94** | Pn | **Pn** | **11 46 32.2** | **+0.1** |
| **IZEF** | **Zefreh** | **5.78** | **104** | Pn | **Pn** | **11 46 38.0** | **+0.5** |

*UPP **02** 12:30:33.6±0.3, 67°.43N×23°.39E, h0km, ML1.6, Unknown*
*IDC **02** 12:30:34.5±1.8, 67°.49N×23°.70E, h0km, mbtmp2.8/1, ML1.9/1, Error ellipse: s-maj=34.8km s-min=10.3km az=98.0*
*HEL **02** 12:30:34.2±0.2, 67°.40N×23°.30E, h0km, ML1.5, Explosion*
**ISC 02 12:30:33.2**±0.8**, 67°.42N**±0°.02×**23°.50E**±0°.03**, h0km, n21, σ0s88**/34**, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KLF** | **Kolari** | **0.26** | **136** | PG | **Pb** | **12 30 39.7** | **-1.1** |
| KLF | | | | SG | **Sb** | **12 30 44.2** | **-1.6** |
| **MASU** | **Masugnsbyn** | **0.58** | **274** | P | **Pg** | **12 30 43.8** | **-0.4** |
| **LANU** | **Lannavaara** | **0.85** | **318** | P | **Pg** | **12 30 49.0** | **-0.5** |
| LANU | | | | S | **Sg** | **12 31 00.8** | **+0.4** |
| **LANU** | **Lannavaara** | **0.85** | **318** | PG | **Pg** | **12 30 49.0** | **-0.5** |
| LANU | | | | SB | **Sb** | **12 31 02.0** | **-0.7** |
| **HEF** | **Hetta** | **0.99** | **3** | PG | **Pb** | **12 30 52.8** | **-0.4** |
| | baz=183 | | | | | | |
| HEF | | | | MSG | | 12 31 05.6 | |
| | comp=Z,3.6nm,0.2s | | | | | | |
| HEF | | | | SG | **Sb** | **12 31 06.6** | **-0.2** |
| **ERTU** | **Ertsjaerv** | **1.01** | **211** | P | **Pg** | **12 30 52.2** | **-0.4** |
| ERTU | | | | S | **Sb** | **12 31 06.7** | **-0.8** |
| **SGF** | **Sodankyl** | **1.17** | **88** | PG | **Pg** | **12 30 54.8** | **-0.8** |
| SGF | | | | SG | **Sn** | **12 31 13.4** | **+0.1** |
| **DUNU** | **Dundret** | **1.18** | **256** | P | **Pg** | **12 30 54.9** | **-0.8** |
| DUNU | | | | S | **Sg** | **12 31 10.5** | **-0.5** |
| **RNF** | **Rovaniemi** | **1.28** | **129** | PG | **Pn** | **12 30 58.4** | **0.0** |
| RNF | | | | SN | **Sn** | **12 31 17.7** | **+1.5** |
| **KALU** | **Kalix** | **1.57** | **182** | P | **Pb** | **12 31 02.8** | **-0.3** |
| **KALU** | **Kalix** | **1.57** | **182** | PN | **Pb** | **12 31 02.7** | **-0.3** |
| | baz=360 | | | | | | |
| **KTK1** | **Kautokeino** | **1.60** | **357** | PG | **Pb** | **12 31 02.8** | **-0.8** |
| KTK1 | | | | SG | **Sg** | **12 31 24.5** | **0.0** |
| **RANF** | **Ranua** | **1.93** | **136** | PG | **Pb** | **12 31 09.2** | **+0.1** |
| | baz=314 | | | | | | |
| RANF | | | | SG | **Sg** | **12 31 35.0** | **0.0** |
| **RAJF** | **Raja-Jooseppi** | **2.10** | **58** | PB | **Pb** | **12 31 11.8** | **-0.3** |
| RAJF | | | | SG | **Sg** | **12 31 41.4** | **+0.8** |
| **ARA0** | **ARCESS Array S** | **2.25** | **18** | PN | **Pn** | **12 31 12.7** | **+1.1** |
| | baz=200 | | | | | | |
| ARA0 | | | | SB | **Sb** | **12 31 42.9** | **0.0** |
| **ARCES** | **ARCESS Array B** | **2.25** | **18** | Pg | **Pb** | **12 31 13.0** | **-1.6** |
| | comp=Z,0.2nm,0.3s,baz=194,slow=18,SNR=9.0 | | | | | | |
| ARCES | | | | Lg | Lg | 12 31 42.4 | |
| | comp=Z,0.3nm,0.3s,baz=199,slow=30,SNR=9.1 | | | | | | |
| **I37NO** | **I37NO** | **2.46** | **315** | I | I | 12 45 30.0 | |
| | baz=131,slow=320,SNR=3.6 | | | | | | |
| **OLKF** | **Oulanka, Finla** | **2.58** | **113** | PG | **Pb** | **12 31 19.9** | **-0.4** |
| OLKF | | | | SN | **Sn** | **12 31 49.1** | **+0.9** |
| OLKF | | | | MSG | | 12 31 51.9 | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| **KEV** | **Kevo** | **2.67** | **27** | PB | **Pb** | **12 31 20.9** | **-1.0** |
| KEV | | | | MSG | | 12 31 54.8 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| KEV | | | | SB | **Sb** | **12 31 55.2** | **+0.1** |
| **MSF** | **Maaselka** | **2.68** | **122** | SG | **Sg** | **12 31 58.1** | **-1.0** |
| **FINES** | **FINESS Array B** | **6.11** | **168** | Pn | **Pn** | **12 32 07.0** | **+2.4** |
| | comp=Z,0.1nm,0.3s,baz=355,slow=12,SNR=1.8 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |

*JMA **02** 12:32:15.5±0.2, 25°N±4°×122°.5E±0°.9, h94km±1km, MV1.8/9, NW OFF ISHIGAKIJIMA IS*
*TAP **02** 12:32:15.2, 24°.58N×122°.42E, h104km, ML2.6, C*
**ISC 02 12:32:15.6**±1.4**, 24°.56N**±0°.04×**122°.49E**±0°.03**, h95**km±8km**, n65, σ0s85**/127**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.27** | **239** | *i* P | **Pn** | **12 32 29.8** | **+0.6** |
| | baz=244 | | | | | | |
| EOS2 | | | | *i* S | **Sn** | **12 32 41.4** | **+1.9** |
| | baz=244 | | | | | | |
| **EOS3** | **EOS3** | **0.31** | **210** | *i* P | **Pn** | **12 32 30.2** | **+0.8** |
| | baz=220 | | | | | | |
| EOS3 | | | | *i* S | **Sn** | **12 32 41.4** | **+1.7** |
| | baz=220 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.43** | **104** | P | **Pn** | **12 32 30.3** | **0.0** |
| JYNG | | | | *e*S | **Sn** | **12 32 41.2** | **-0.1** |
| **EOS4** | **EOS4** | **0.46** | **200** | P | **Pn** | **12 32 30.3** | **+0.2** |
| | baz=199 | | | | | | |
| EOS4 | | | | *i* S | **Sn** | **12 32 42.0** | **+1.0** |
| | baz=199 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.49** | **101** | *e*P | **Pn** | **12 32 30.5** | **-0.2** |
| | baz=106 | | | | | | |
| YOJ | | | | S | **Sn** | **12 32 42.2** | **+0.2** |
| | baz=106 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.49** | **101** | *e*P | **Pn** | **12 32 30.6** | **0.0** |
| **EGS** | | **0.58** | **299** | P | **Pn** | **12 32 31.1** | **-0.3** |
| | baz=295 | | | | | | |
| EGS | | | | *e*S | **Sn** | **12 32 38.8** | **-4.5** |
| | baz=295 | | | | | | |
| **TWC** | **Suao** | **0.58** | **275** | *i* P | **Pn** | **12 32 31.0** | **-0.4** |
| | baz=274 | | | | | | |
| TWC | | | | S | **Sn** | **12 32 42.7** | **-0.6** |
| | baz=274 | | | | | | |
| **ESAO** | **Su ao** | **0.59** | **272** | P | **Pn** | **12 32 31.8** | **+0.4** |
| | baz=270 | | | | | | |
| ESAO | | | | *e*S | **Sn** | **12 32 43.2** | **-0.1** |
| | baz=270 | | | | | | |
| **EWUT** | **Wuta** | **0.66** | **260** | *i* P | **Pn** | **12 32 32.1** | **0.0** |
| | baz=255 | | | | | | |
| EWUT | | | | *i* S | **Sn** | **12 32 44.4** | **0.0** |
| | baz=255 | | | | | | |
| **ENA** | **Nanau** | **0.69** | **259** | *i* P | **Pn** | **12 32 32.5** | **+0.1** |
| | baz=252 | | | | | | |
| ENA | | | | *i* S | **Sn** | **12 32 45.3** | **+0.2** |
| | baz=252 | | | | | | |
| **NDS** | **Dongshan** | **0.71** | **276** | P | **Pn** | **12 32 32.8** | **+0.3** |
| | baz=276 | | | | | | |
| NDS | | | | S | **Sn** | **12 32 46.2** | **+0.9** |
| | baz=276 | | | | | | |
| **TIPB** | **Shuangxi** | **0.73** | **304** | *i* P | **Pn** | **12 32 32.8** | **0.0** |
| | baz=302 | | | | | | |
| TIPB | | | | S | **Sn** | **12 32 44.5** | **-1.3** |
| | baz=302 | | | | | | |
| **TWE** | **Neicheng** | **0.76** | **282** | *i* P | **Pn** | **12 32 33.1** | **+0.1** |
| | baz=282 | | | | | | |
| TWE | | | | S | **Sn** | **12 32 46.8** | **+0.6** |
| | baz=282 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.77** | **314** | P | **Pn** | **12 32 33.0** | **-0.3** |
| | baz=312 | | | | | | |
| SXI1 | | | | *e*S | **Sn** | **12 32 46.6** | **0.0** |
| | baz=312 | | | | | | |
| **ENTT** | **Nioudou** | **0.84** | **276** | *i* P | **Pn** | **12 32 34.5** | **+0.6** |
| | baz=277 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **12 32 47.7** | **0.0** |
| | baz=277 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.84** | **284** | P | **Pn** | **12 32 34.1** | **+0.1** |
| | baz=289 | | | | | | |
| FUSB | | | | S | **Sn** | **12 32 47.6** | **-0.2** |
| | baz=289 | | | | | | |
| **LATG** | **Datong** | **0.88** | **269** | *i* P | **Pn** | **12 32 34.4** | **+0.1** |
| | baz=263 | | | | | | |
| LATG | | | | *e*S | **Sn** | **12 32 48.5** | **0.0** |
| | baz=263 | | | | | | |
| **ETL** | **Fush Village** | **0.88** | **243** | *e*P | **Pn** | **12 32 34.4** | **+0.1** |
| | baz=246 | | | | | | |
| ETL | | | | S | **Sn** | **12 32 48.0** | **-0.5** |
| | baz=246 | | | | | | |
| **NDT** | **Datong Townshi** | **0.89** | **273** | *i* P | **Pn** | **12 32 34.9** | **+0.5** |
| | baz=276 | | | | | | |
| NDT | | | | S | **Sn** | **12 32 48.6** | **+0.1** |
| | baz=276 | | | | | | |
| **NACB** | **Ninganchiao** | **0.90** | **245** | *i* P | **Pn** | **12 32 34.2** | **-0.3** |
| | baz=246 | | | | | | |
| NACB | | | | S | **Sn** | **12 32 48.4** | **-0.3** |
| | baz=246 | | | | | | |
| **NWLT** | **Wulai** | **0.92** | **284** | *i* P | **Pn** | **12 32 34.8** | **0.0** |
| | baz=290 | | | | | | |
| NWLT | | | | S | **Sn** | **12 32 49.0** | **-0.2** |
| | baz=290 | | | | | | |
| **TWD** | **Chiawan** | **0.94** | **240** | *i* P | **Pn** | **12 32 34.4** | **-0.6** |
| | baz=234 | | | | | | |
| TWD | | | | *i* S | **Sn** | **12 32 49.2** | **-0.3** |
| | baz=234 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.98** | **249** | *i* P | **Pn** | **12 32 35.1** | **-0.4** |
| | baz=247 | | | | | | |
| ETLH | | | | *i* S | **Sn** | **12 32 49.6** | **-0.9** |
| | baz=247 | | | | | | |
| **TATO** | **Taipei** | **1.00** | **295** | *i* P | **Pn** | **12 32 34.9** | **-0.7** |
| | baz=296 | | | | | | |
| TATO | | | | *e*S | **Sn** | **12 32 50.1** | **-0.5** |
| | baz=296 | | | | | | |
| **NNSB** | **Datong** | **1.02** | **263** | *i* P | **Pn** | **12 32 36.1** | **+0.2** |
| | baz=256 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **12 32 50.9** | **-0.3** |
| | baz=256 | | | | | | |
| **YM01** | **YM01** | **1.02** | **305** | P | **Pn** | **12 32 35.8** | **-0.1** |
| | baz=299 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **12 32 50.8** | **-0.3** |
| | baz=299 | | | | | | |
| **YHNB** | **Yeheng** | **1.02** | **276** | *i* P | **Pn** | **12 32 36.3** | **+0.4** |
| | baz=276 | | | | | | |
| YHNB | | | | S | **Sn** | **12 32 51.0** | **-0.2** |
| | baz=276 | | | | | | |
| **NNS** | **Nan Shan** | **1.02** | **264** | *i* P | **Pn** | **12 32 36.2** | **+0.2** |
| | baz=257 | | | | | | |
| NNS | | | | S | **Sn** | **12 32 50.9** | **-0.5** |
| | baz=257 | | | | | | |
| **NSK** | **Sanguang** | **1.03** | **277** | *i* P | **Pn** | **12 32 36.4** | **+0.4** |
| | baz=276 | | | | | | |
| NSK | | | | *i* S | **Sn** | **12 32 51.2** | **-0.3** |
| | baz=276 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.06** | **230** | P | **Pn** | **12 32 36.2** | **-0.1** |
| | baz=221 | | | | | | |
| TEYL | | | | S | **Sn** | **12 32 51.9** | **-0.1** |
| | baz=221 | | | | | | |
| **ETM** | **Tongmen** | **1.08** | **237** | *i* P | **Pn** | **12 32 36.4** | **-0.2** |
| | baz=228 | | | | | | |
| ETM | | | | *i* S | **Sn** | **12 32 51.9** | **-0.5** |
| | baz=228 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.11** | **299** | *i* P | **Pn** | **12 32 36.8** | **-0.1** |
| | baz=305 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **12 32 52.6** | **-0.3** |
| | baz=305 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.12** | **242** | *i* P | **Pn** | **12 32 36.7** | **-0.4** |
| | baz=239 | | | | | | |
| LXIB | | | | S | **Sn** | **12 32 51.7** | **-1.6** |
| | baz=239 | | | | | | |
| **SHUL** | **Shoufeng** | **1.14** | **228** | P | **Pn** | **12 32 36.9** | **-0.3** |
| | baz=225 | | | | | | |
| SHUL | | | | *i* S | **Sn** | **12 32 54.3** | **+0.8** |
| | baz=225 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.15** | **101** | *e*P | **Pn** | **12 32 37.4** | **0.0** |
| **FUSS** | **Fushou** | **1.18** | **255** | *i* P | **Pn** | **12 32 38.3** | **+0.4** |
| | baz=251 | | | | | | |
| FUSS | | | | S | **Sn** | **12 32 54.4** | **-0.2** |
| | baz=251 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.19** | **250** | *i* P | **Pn** | **12 32 38.3** | **+0.1** |
| | baz=243 | | | | | | |
| WHF | | | | *i* S | **Sn** | **12 32 54.5** | **-0.8** |
| | baz=243 | | | | | | |
| **ESL** | **Shilin** | **1.22** | **233** | *i* P | **Pn** | **12 32 37.5** | **-0.6** |
| | baz=225 | | | | | | |
| ESL | | | | S | **Sn** | **12 32 53.5** | **-1.6** |
| | baz=225 | | | | | | |
| **TWT** | **Tachien** | **1.23** | **256** | *i* P | **Pn** | **12 32 39.4** | **+0.9** |
| | baz=255 | | | | | | |
| TWT | | | | *i* S | **Sn** | **12 32 56.0** | **+0.2** |
| | baz=255 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.25** | **274** | P | **Pn** | **12 32 38.9** | **+0.3** |
| | baz=278 | | | | | | |
| NFF | | | | S | **Sn** | **12 32 55.8** | **-0.1** |
| | baz=278 | | | | | | |
| **CHGB** | **Renai** | **1.30** | **248** | P | **Pn** | **12 32 39.8** | **+0.5** |
| | baz=242 | | | | | | |
| CHGB | | | | S | **Sn** | **12 32 56.7** | **-0.5** |
| | baz=242 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.31** | **230** | P | **Pn** | **12 32 38.4** | **-0.8** |
| | baz=222 | | | | | | |
| WARBT | | | | *e*S | **Sn** | **12 32 55.6** | **-1.5** |
| | baz=222 | | | | | | |
| **OWD** | **Renai** | **1.34** | **244** | *i* P | **Pn** | **12 32 40.2** | **+0.4** |
| | baz=238 | | | | | | |
| OWD | | | | *i* S | **Sn** | **12 32 57.0** | **-0.9** |
| | baz=238 | | | | | | |
| **LIOB** | **Emei** | **1.34** | **274** | P | **Pn** | **12 32 40.1** | **+0.4** |
| | baz=274 | | | | | | |
| LIOB | | | | S | **Sn** | **12 32 57.9** | **0.0** |
| | baz=274 | | | | | | |
| **NSTT** | **Nanjuang** | **1.36** | **273** | *i* P | **Pn** | **12 32 40.0** | **+0.2** |
| | baz=273 | | | | | | |
| NSTT | | | | *i* S | **Sn** | **12 32 58.2** | **+0.1** |
| | baz=273 | | | | | | |
| **WUSB** | **Renai** | **1.37** | **246** | P | **Pn** | **12 32 40.6** | **+0.5** |
| | baz=240 | | | | | | |
| WUSB | | | | S | **Sn** | **12 32 58.2** | **-0.4** |
| | baz=240 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.42** | **103** | P | **Pn** | **12 32 41.0** | **+0.4** |
| JKRS | | | | *e*S | **Sn** | **12 32 59.8** | **+0.2** |
| **WHP** | **Taichung City** | **1.43** | **259** | *i* P | **Pn** | **12 32 42.2** | **+1.4** |
| | baz=258 | | | | | | |
| WHP | | | | *i* S | **Sn** | **12 33 00.7** | **+0.8** |
| | baz=258 | | | | | | |
| **HGSD** | **Ruisui** | **1.44** | **223** | P | **Pn** | **12 32 40.8** | **0.0** |
| | baz=220 | | | | | | |
| HGSD | | | | S | **Sn** | **12 32 59.6** | **-0.3** |
| | baz=220 | | | | | | |
| **VWDT** | **VWDT** | **1.47** | **237** | P | **Pn** | **12 32 41.4** | **+0.3** |
| | baz=231 | | | | | | |
| VWDT | | | | S | **Sn** | **12 33 00.6** | **0.0** |
| | baz=231 | | | | | | |
| **EHY** | **Hungye** | **1.50** | **226** | *i* P | **Pn** | **12 32 40.8** | **-0.8** |
| | baz=223 | | | | | | |
| EHY | | | | *e*S | **Sn** | **12 32 57.5** | **-3.6** |
| | baz=223 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.52** | **97** | *e*P | **Pn** | **12 32 41.7** | **-0.1** |
| JIJ | | | | *e*S | **Sn** | **12 33 01.2** | **-0.5** |
| **WCS** | **Beigang Elemen** | **1.52** | **251** | *i* P | **Pn** | **12 32 43.0** | **+1.2** |
| | baz=250 | | | | | | |
| WCS | | | | S | **Sn** | **12 33 03.0** | **+1.2** |
| | baz=250 | | | | | | |
| **SSLB** | **Suanglung** | **1.60** | **242** | P | **Pn** | **12 32 43.7** | **+0.9** |
| | baz=238 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **12 33 04.2** | **+0.7** |
| | baz=238 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.60** | **245** | *i* P | **Pn** | **12 32 44.0** | **+1.1** |
| | baz=238 | | | | | | |
| SMLT | | | | S | **Sn** | **12 33 04.2** | **+0.6** |
| | baz=238 | | | | | | |
| **TWF1** | **Yuli** | **1.62** | **222** | P | **Pn** | **12 32 42.6** | **-0.5** |
| | baz=227 | | | | | | |
| TWF1 | | | | S | **Sn** | **12 33 03.1** | **-0.9** |
| | baz=227 | | | | | | |
| **TYC** | **Yuchr** | **1.63** | **247** | *i* P | **Pn** | **12 32 44.5** | **+1.4** |
| | baz=241 | | | | | | |
| TYC | | | | *i* S | **Sn** | **12 33 05.4** | **+1.4** |
| | baz=241 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.66** | **89** | *e*P | **Pn** | **12 32 43.6** | **+0.1** |
| **WHYT** | **Xinyi Township** | **1.72** | **240** | P | **Pn** | **12 32 45.4** | **+1.0** |
| | baz=235 | | | | | | |
| WHYT | | | | S | **Sn** | **12 33 07.2** | **+0.9** |
| | baz=235 | | | | | | |
| **FULB** | **Fuli** | **1.74** | **219** | *e*P | **Pn** | **12 32 44.0** | **-0.7** |
| | baz=213 | | | | | | |
| FULB | | | | *i* S | **Sn** | **12 33 06.4** | **-0.3** |
| | baz=213 | | | | | | |
| **CHKT** | **Chengkung** | **1.78** | **215** | *e*P | **Pn** | **12 32 45.7** | **+0.6** |
| | baz=207 | | | | | | |
| CHKT | | | | *i* S | **Sn** | **12 33 05.7** | **-1.8** |
| | baz=207 | | | | | | |
| **EDH** | **Donghe** | **1.92** | **215** | *e*P | **Pn** | **12 32 47.2** | **+0.3** |
| | baz=208 | | | | | | |
| EDH | | | | *i* S | **Sn** | **12 33 09.2** | **-1.5** |
| | baz=208 | | | | | | |
| **JTJ** | **Tarama** | **2.02** | **87** | *e*P | **Pn** | **12 32 48.3** | **+0.2** |
| JTJ | | | | *e*S | **Sn** | **12 33 13.1** | **+0.1** |
| **WCKO** | **Fanlu** | **2.05** | **237** | *e*P | **Pn** | **12 32 49.8** | **+1.2** |
| | baz=236 | | | | | | |
| WCKO | | | | S | **Sn** | **12 33 14.6** | **+0.7** |
| | baz=236 | | | | | | |

*NEIC **02** 12:46:39.2±1.3, 35°.06N±0°.01×97°.60W±0°.01, h5km±1km, Error ellipse: s-maj=2.6km s-min=1.9km az=36.0*
**TUL 02 12:46:39.6**±1.5**, 35°.046N**±0°.006×**97°.60W**±0°.02**, h5**km±2km**, ML2.1, mb_Lg2.2**/27(NEIC)**, ML2.1**/28(NEIC)**, Error ellipse: s-maj=1.8km s-min=0.8km az=94.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FNO** | **Franklin** | **0.26** | **37** | Pg | Pb | 12 46 45.8 | -1.0 |
| FNO | | | | Sg | Sg | 12 46 48.4 | +0.1 |
| FNO | | | | IAML | | 12 46 52.8 | |
| | comp=E,369nm,0.5s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.48** | **204** | Pg | Pb | 12 46 49.9 | -0.7 |
| **OK029** | **Liberty Lake** | **0.76** | **9** | Pg | Pg | 12 46 53.9 | -0.3 |
| OK029 | | | | Sg | Sg | 12 47 04.1 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.02** | **253** | Pg | Pg | 12 46 58.4 | -0.8 |
| WMOK | | | | Sg | Sg | 12 47 11.5 | -1.0 |
| **OK031** | **S. Brethren Rd** | **1.09** | **34** | Pg | Pg | 12 46 59.6 | -1.0 |
| **LOOK** | **Love County** | **1.11** | **162** | Pg | Pg | 12 47 00.7 | -0.1 |
| LOOK | | | | IAML | | 12 47 22.2 | |
| | comp=E,68nm,0.2s | | | | | | |
| **OK052** | **Battle Ridge R** | **1.15** | **34** | Pg | Pg | 12 46 59.9 | -1.7 |
| **QUOK** | **Quay** | **1.33** | **33** | | Pn | 12 47 03.8 | -1.1 |
| **WTFS** | **Witchita Falls** | **1.47** | **210** | | Pn | 12 47 06.5 | -0.2 |
| **OK048** | **Pawnee Station** | **1.47** | **21** | | Pn | 12 47 06.1 | -0.6 |
| **CROK** | **Carrier** | **1.49** | **348** | | Pn | 12 47 06.9 | -0.1 |
| **OK051** | **E0350 and S346** | **1.58** | **23** | | Pn | 12 47 07.7 | -0.6 |
| **GC02** | **Grant County #** | **1.81** | **353** | Pn | Pn | 12 47 11.2 | -0.3 |
| **X37A** | **Clayton** | **1.89** | **103** | Pn | Pn | 12 47 12.3 | -0.1 |
| **KAN13** | **South Haven SW** | **1.96** | **3** | Pn | Pn | 12 47 13.0 | -0.6 |
| KAN13 | | | | IAmb_Lg | | 12 47 43.6 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **2.04** | **191** | IAmb_Lg | | 12 47 45.6 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **T35A** | **Sooner Cattle** | **2.06** | **25** | Pn | Pn | 12 47 14.5 | -0.4 |
| **HHAR** | **Hobbs** | **3.22** | **66** | IAmb_Lg | | 12 48 30.1 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.34** | **97** | IAmb_Lg | | 12 48 31.0 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **3.36** | **235** | IAmb_Lg | | 12 48 35.3 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.48** | **233** | IAmb_Lg | | 12 48 38.9 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **3.93** | **198** | Pn | Pn | 12 47 41.1 | +0.5 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| X40A | Basin Creek Fa | 3.96 | 97 | IAmb_Lg | | 12 48 47.7 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| S39A | Bolivar | 4.34 | 51 | IAmb_Lg | | 12 49 05.3 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| WHAR | Wooly Hollow | 4.35 | 85 | IAmb_Lg | | 12 49 09.8 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| MSTX | Muleshoe | 4.41 | 257 | IAmb_Lg | | 12 49 04.1 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| FCAR | Ozark Folk Cen | 4.54 | 78 | IAmb_Lg | | 12 49 16.4 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| R40A | Maddies Statio | 5.37 | 51 | IAmb_Lg | | 12 49 29.9 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| P38A | Dawn | 5.60 | 34 | IAmb_Lg | | 12 49 33.8 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| Q24A | Divide | 7.20 | 305 | IAmb_Lg | | 12 50 40.2 | |
| | comp=Z,2.3nm,0.8s | | | | | | |

*JMA **02** 12:52:22.8±0.4, 44°N±1°×14°0E±°, h253km±3km, MV2.9/26, NW OFF HOKKAIDO*
*IDC **02** 12:52:23.3±1.7, 44.33N×140.22E, h235km±34km, mb3.4/5, mbtmp3.8/6, Error ellipse: s-maj=112.4km s-min=26.2km az=171.0*
*SKHL **02** 12:52:24.6±0.6, 44.30N×140.70E, h242km±4km, mb3.9/4, msha4.5/3*
**ISC 02 12:52:23.1**±0.9**, 44.22N**±0.07×**140.47E**±0.07**, h255**km±9km**, n25,** σ**1.26**/36**, mb3.6**/5**, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JSS | Shosan | 1.01 | 79 | P | Pn | 12 52 59.2 | +0.6 |
| JHR | Hokuryu | 1.03 | 117 | P | Pn | 12 52 59.4 | +0.6 |
| JISS | Ishikarishitsu | 1.17 | 144 | eP | Pn | 12 53 00.2 | +0.6 |
| ASAJ | Asahikawa | 1.54 | 93 | P | Pn | 12 53 01.9 | -0.2 |
| | 9.2nm,0.3s,baz=271,slow=7.7,SNR=74 | | | | | | |
| ASAJ | | | | S | S | 12 53 32.6 | -0.3 |
| | 3.4nm,0.6s,baz=245,slow=14,SNR=1.7 | | | | | | |
| JEW | Eniwo | 1.55 | 152 | P | Pn | 12 53 03.0 | +0.7 |
| JKK2 | Kamakawa 2 | 1.68 | 101 | P | Pn | 12 53 03.9 | +0.7 |
| JKK2 | | | | eS | S | 12 53 35.7 | +0.7 |
| JSE | Soyaes | 1.69 | 63 | P | Pn | 12 53 03.5 | +0.3 |
| JSE | | | | eS | S | 12 53 34.3 | -0.6 |
| JOSM | Okushiri--Mats | 2.26 | 199 | P | Pn | 12 53 08.1 | -0.3 |
| JTKR | Abashiri--Toko | 2.49 | 95 | P | Pn | 12 53 11.8 | +1.3 |
| JTKR | | | | eS | S | 12 53 49.7 | +1.6 |
| JNBK | Urakawa-nobuka | 2.56 | 138 | eP | Pn | 12 53 11.8 | +0.5 |
| JAR | Ashorobuto | 2.57 | 110 | P | Pn | 12 53 12.6 | +1.3 |
| JAR | | | | eS | S | 12 53 51.5 | +2.0 |
| JCH | Churui | 2.65 | 126 | P | Pn | 12 53 12.3 | +0.1 |
| JCH | | | | eS | S | 12 53 48.9 | -2.2 |
| JOMM | Oshimamatsumae | 2.71 | 187 | P | Pn | 12 53 12.8 | -0.1 |
| YSS | Yuzh-Sakhalins | 3.17 | 30 | eP | Pn | 12 53 17.8 | +0.2 |
| YSS | | | | AMB | AMB | 12 53 19.9 | |
| | 10.0nm,0.7s | | | | | | |
| YSS | | | | eS | S | 12 53 59.4 | -1.5 |
| YSS | | | | A | A | 12 54 06.4 | |
| | 10.0nm,0.5s | | | | | | |
| YSS | | | | A | A | 12 54 06.4 | |
| | 10.0nm,0.5s | | | | | | |
| AKK | Akkeshi | 3.40 | 109 | eP | Pn | 12 53 20.2 | 0.0 |
| AKK | | | | eS | S | 12 54 04.2 | -1.3 |
| YUK | Yuzh-Kuril'sk | 3.89 | 91 | eP | Pn | 12 53 26.0 | +0.3 |
| YUK | | | | AMB | AMB | 12 53 28.3 | |
| | 40nm,0.6s | | | | | | |
| YUK | | | | eS | S | 12 54 13.1 | -2.5 |
| YUK | | | | A | A | 12 54 27.4 | |
| | 50nm,0.4s | | | | | | |
| YUK | | | | A | A | 12 54 27.4 | |
| | 60nm,0.4s | | | | | | |
| NMR | Nemuro--Hokkai | 3.90 | 101 | eP | Pn | 12 53 26.0 | +0.1 |
| NMR | | | | eS | S | 12 54 13.7 | -2.2 |
| SHO | Shikotan | 4.60 | 92 | eP | Pn | 12 53 33.9 | -0.2 |
| SHO | | | | AMB | AMB | 12 53 40.6 | |
| | 10.0nm,0.6s | | | | | | |
| SHO | | | | eS | S | 12 54 28.1 | -2.7 |
| SHO | | | | A | A | 12 54 37.5 | |
| | 10.0nm,0.3s | | | | | | |
| SHO | | | | A | A | 12 54 37.5 | |
| | 20nm,0.3s | | | | | | |
| KUR | Kuril'sk | 5.37 | 77 | eP | Pn | 12 53 42.9 | -0.5 |
| KUR | | | | AMB | AMB | 12 53 44.4 | |
| | 20nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 6.09 | 273 | P | Pn | 12 53 49.3 | -3.0 |
| | 1.5nm,0.6s,baz=73,slow=13,SNR=3.0 | | | | | | |
| SONM | Songino Array | 23.81 | 291 | P | P | 12 57 12.8 | -0.3 |
| | 1.0nm,0.8s,baz=81,slow=9.3,SNR=3.9 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 36.83 | 306 | P | P | 12 59 07.0 | +0.3 |
| | 0.9nm,0.4s,baz=96,slow=10.0,SNR=4.6 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 40.05 | 295 | P | P | 12 59 34.2 | +0.7 |
| | 0.5nm,0.7s,baz=82,slow=8.7,SNR=4.0 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 41.30 | 302 | P | P | 12 59 44.0 | +0.5 |
| | 2.4nm,0.2s,baz=74,slow=9.1,SNR=5.5 | | | | | | |
| | 2.4nm,0.2s | | | | | | |
| FINES | FINESS Array B | 62.17 | 330 | P | P | 13 02 17.7 | +0.7 |
| | 1.0nm,0.5s,baz=47,slow=8.4,SNR=10 | | | | | | |
| | 1.0nm,0.5s | | | | | | |

*REY **02** 12:55:23.8, 63.64N×19.12W, h0km*
*IDC **02** 12:55:25.0±1.8, 63.85N×18.95W, h0km, mb3.4/3, mbtmp3.4/4, ML3.6/1, MS2.9/7, Error ellipse: s-maj=49.2km s-min=16.6km az=32.0*
**ISC 02 12:55:23.4**±0.7**, 63.69N**±0.03×**19.16W**±0.02**, h10**km±5km**, n62,** σ**1.07**/70**, MS2.7**/4**, Iceland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IAUS | Austmannsbunga | 0.04 | 119 | P | Pg | 12 55 25.0 | -0.6 |
| | baz=27 | | | | | | |
| IAUS | | | | S | Sg | 12 55 25.9 | -1.2 |
| | baz=27 | | | | | | |
| IGOD | Go??abunga | 0.08 | 248 | P | Pg | 12 55 25.9 | 0.0 |
| | baz=284 | | | | | | |
| IGOD | | | | S | Sg | 12 55 27.7 | -0.1 |
| | baz=284 | | | | | | |
| ISLY | Slysaalda | 0.14 | 7 | P | Pb | 12 55 28.1 | 0.0 |
| | baz=0.5 | | | | | | |
| ILOD | Lodnugiljahaus | 0.17 | 75 | P | Pb | 12 55 27.6 | -1.1 |
| | baz=57 | | | | | | |
| IESK | Eystri-Skogar | 0.21 | 219 | P | Pb | 12 55 27.9 | -1.5 |
| | baz=232 | | | | | | |
| IHVO | Lagu-Hvolar | 0.21 | 140 | P | Pg | 12 55 27.8 | -0.1 |
| | baz=133 | | | | | | |
| IHVO | | | | S | Sb | 12 55 31.6 | +0.7 |
| | baz=133 | | | | | | |
| IRJU | Rjupnafell | 0.23 | 109 | P | Pg | 12 55 28.2 | +0.1 |
| | baz=96 | | | | | | |
| IRJU | | | | S | Sb | 12 55 32.5 | +1.2 |
| | baz=96 | | | | | | |
| IMID | Miomork | 0.33 | 265 | P | Pb | 12 55 30.7 | -0.6 |
| | baz=274 | | | | | | |
| IMJO | Mjoaskard | 0.34 | 317 | P | Pb | 12 55 31.7 | +0.2 |
| | baz=321 | | | | | | |
| IHES | Hestalda | 0.40 | 334 | P | Pb | 12 55 32.9 | +0.3 |
| | baz=335 | | | | | | |
| IFED | Fedgar | 0.41 | 325 | P | Pb | 12 55 33.1 | +0.3 |
| | baz=327 | | | | | | |
| IHAU | Haukadalur | 0.46 | 308 | P | Pb | 12 55 33.3 | -0.2 |
| | baz=312 | | | | | | |
| IVAT | Vatnsfell | 0.51 | 12 | P | Pb | 12 55 34.6 | +0.2 |
| | baz=9.2 | | | | | | |
| IBEY | Bjarnarey | 0.53 | 243 | P | Pb | 12 55 34.2 | -0.5 |
| | baz=244 | | | | | | |
| IVES | Vestmannaeyjar | 0.56 | 244 | P | Pb | 12 55 34.9 | -0.5 |
| | baz=250 | | | | | | |
| IVEY | Vestmannaeyjar | 0.57 | 242 | P | Pb | 12 55 35.0 | -0.4 |
| | baz=247 | | | | | | |
| IIEY | Innrieyrar | 0.61 | 48 | P | Pb | 12 55 35.7 | -0.5 |
| | baz=44 | | | | | | |
| ISAU | Saurbar | 0.64 | 299 | P | Pb | 12 55 36.1 | -0.4 |
| | baz=302 | | | | | | |
| IASM | Asmuli | 0.67 | 283 | P | Pn | 12 55 37.0 | -1.8 |
| | baz=287 | | | | | | |
| IKAL | Kalfafell | 0.70 | 68 | P | Pb | 12 55 37.0 | -0.6 |
| | baz=63 | | | | | | |
| IKAL | | | | S | Sb | 12 55 47.9 | +0.6 |
| | baz=63 | | | | | | |
| IJOK | Jokulheimar | 0.75 | 33 | P | Pb | 12 55 38.3 | -0.2 |
| | baz=30 | | | | | | |
| IJOK | | | | S | Sn | 12 55 50.0 | -1.5 |
| | baz=30 | | | | | | |
| IGYG | Gygjarholskot | 0.76 | 322 | P | Pn | 12 55 38.5 | -1.6 |
| | baz=324 | | | | | | |
| ISOL | Solvholt | 0.83 | 288 | P | Pb | 12 55 39.2 | -0.6 |
| | baz=291 | | | | | | |
| ISOL | | | | S | Sn | 12 55 51.3 | -2.0 |
| | baz=291 | | | | | | |
| IHUS | Husbondi | 0.90 | 47 | P | Pb | 12 55 40.8 | -0.4 |
| | baz=44 | | | | | | |
| ISKR | Skrokkalda | 0.94 | 21 | P | Pn | 12 55 41.8 | -0.9 |
| | baz=19 | | | | | | |
| ISKR | | | | S | Sn | 12 55 54.4 | -1.7 |
| | baz=19 | | | | | | |
| IKRO | Krokur | 0.96 | 296 | P | Pn | 12 55 41.6 | -1.3 |
| | baz=298 | | | | | | |
| IHAE | Haedir | 1.02 | 70 | P | Pb | 12 55 42.1 | -1.0 |
| | baz=67 | | | | | | |
| IHAE | | | | S | Sn | 12 55 56.9 | -1.1 |
| | baz=67 | | | | | | |
| IHEI | Heioarbar | 1.05 | 300 | P | Pg | 12 55 43.0 | -0.7 |
| | baz=302 | | | | | | |
| IEDA | Engidalur | 1.06 | 293 | P | Pn | 12 55 43.4 | -0.9 |
| | baz=295 | | | | | | |
| IEDA | | | | S | Sn | 12 55 59.1 | 0.0 |
| | baz=295 | | | | | | |
| IFAL | Falljokull | 1.07 | 74 | P | Pb | 12 55 42.8 | -1.2 |
| | baz=72 | | | | | | |
| IFAL | | | | S | Sn | 12 55 58.0 | -1.2 |
| | baz=72 | | | | | | |
| IGRF | Grimsfjall | 1.10 | 48 | P | Pn | 12 55 44.2 | -0.8 |
| | baz=46 | | | | | | |
| IFAG | Fagurholsmyri | 1.13 | 79 | P | Pb | 12 55 43.7 | -1.2 |
| | baz=77 | | | | | | |
| IFAG | | | | S | Sn | 12 56 00.1 | -0.6 |
| | baz=77 | | | | | | |
| ISAN | Sandskeio | 1.13 | 290 | P | Pg | 12 55 44.4 | -0.7 |
| | baz=292 | | | | | | |
| IVOS | Vogsosar | 1.14 | 279 | P | Pn | 12 55 44.3 | -1.1 |
| | baz=282 | | | | | | |
| IVOS | | | | S | Sn | 12 56 01.1 | +0.1 |
| | baz=282 | | | | | | |
| IHOX | Haoxl | 1.15 | 78 | P | Pb | 12 55 44.3 | -1.0 |
| | baz=75 | | | | | | |
| IHOX | | | | S | Sg | 12 55 59.9 | -0.5 |
| | baz=75 | | | | | | |
| IVON | Vonarskard | 1.16 | 31 | P | Pn | 12 55 45.0 | -0.7 |
| | baz=29 | | | | | | |
| IDJK | Dyngjujokull | 1.17 | 45 | P | Pg | 12 55 45.6 | -0.4 |
| | baz=43 | | | | | | |
| ISTE | Stelbrattur | 1.19 | 350 | P | Pg | 12 55 45.8 | -0.5 |
| | baz=350 | | | | | | |
| IKIS | Kista | 1.21 | 35 | P | Pg | 12 55 46.3 | -0.4 |
| | baz=33 | | | | | | |
| IKVI | Kvisker | 1.24 | 75 | P | Pn | 12 55 45.5 | -1.3 |
| | baz=73 | | | | | | |
| IKVI | | | | S | Sb | 12 56 02.0 | -0.9 |
| | baz=73 | | | | | | |
| IKSK | Karasker | 1.28 | 67 | P | Pn | 12 55 45.9 | -1.4 |
| | baz=65 | | | | | | |
| IKSK | | | | S | Sn | 12 56 03.5 | -1.0 |
| | baz=65 | | | | | | |
| IMOR | Morastadir | 1.30 | 299 | P | Pn | 12 55 46.5 | -1.0 |
| | baz=301 | | | | | | |
| IKRI | Krysuvik | 1.31 | 280 | P | Pn | 12 55 46.1 | -1.6 |
| | baz=282 | | | | | | |
| IBJK | Bruarjokull | 1.31 | 52 | P | Pn | 12 55 47.0 | -0.9 |
| | baz=50 | | | | | | |
| IDYN | Dyngjuhals | 1.35 | 34 | P | Pb | 12 55 48.4 | -0.5 |
| | baz=33 | | | | | | |
| BORG | Borgarnes | 1.42 | 319 | Pg | Pg | 12 55 49.6 | -1.1 |
| | 29nm,0.3s,baz=136,slow=13,SNR=241 | | | | | | |
| BORG | | | | Lg | Lg | 12 56 09.2 | |
| | 13nm,0.3s,baz=127,slow=9.6,SNR=4.6 | | | | | | |
| BORG | | | | LR | LR | 12 56 12.4 | |
| | comp=Z,90nm,19.9s,baz=115,slow=34 | | | | | | |
| IASB | `sbjarnarst | 1.42 | 319 | P | Pb | 12 55 49.0 | -1.0 |
| | baz=320 | | | | | | |
| IURH | Urdarhals | 1.43 | 37 | P | Pb | 12 55 49.5 | -0.7 |
| | baz=35 | | | | | | |
| IVOG | Vogar | 1.46 | 283 | P | Pb | 12 55 49.6 | -1.0 |
| | baz=284 | | | | | | |
| IKRE | Kreppuhraun | 1.64 | 47 | P | Pb | 12 55 52.4 | -1.3 |
| | baz=45 | | | | | | |
| THOR | Thorvaldshraun | 1.65 | 40 | P | Pb | 12 55 52.7 | -1.2 |
| | baz=38 | | | | | | |
| IASK | Askja | 1.75 | 37 | P | Pb | 12 55 54.3 | -1.3 |
| | baz=36 | | | | | | |
| EKA | Eskdalemuir Ar | 11.63 | 129 | Pn | Pn | 12 58 12.0 | +2.7 |
| | baz=328,slow=12 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| SFJD | Kangerlussuaq | 13.45 | 298 | LR | LR | 13 03 14.1 | |
| | comp=Z,98nm,19.2s,baz=98,slow=35 | | | | | | |
| NOA | NORSAR Array B | 14.27 | 87 | LR | LR | 13 04 24.1 | |
| | comp=Z,26nm,18.6s,baz=300,slow=38 | | | | | | |
| HFS | Hagfors | 15.76 | 88 | LR | LR | 13 05 01.4 | |
| | comp=Z,25nm,21.3s,baz=258,slow=37 | | | | | | |
| FINES | FINESS Array B | 20.63 | 76 | P | Pn | 13 00 04.1 | -0.7 |
| | 2.2nm,0.7s,baz=304,slow=10,SNR=6.7 | | | | | | |
| FINES | | | | LR | LR | 13 08 06.0 | |
| | comp=Z,28nm,19.2s,baz=141,slow=37 | | | | | | |
| | 2.2nm,0.7s | | | | | | |
| FRB | Frobisher Bay | 21.44 | 293 | LR | LR | 13 08 08.8 | |
| | comp=Z,60nm,18.8s,baz=174,slow=36 | | | | | | |
| GERES | GERESS Array B | 23.17 | 114 | LR | LR | 13 09 44.5 | |
| | comp=Z,24nm,19.9s,baz=353,slow=37 | | | | | | |
| VRAC | Vranov | 24.00 | 110 | LR | LR | 13 09 37.8 | |
| | comp=Z,22nm,18.1s,baz=246,slow=36 | | | | | | |
| ILAR | Eielson Array | 46.21 | 332 | P | P | 13 03 50.9 | +3.0 |
| | 0.3nm,0.6s,baz=27,slow=7.3,SNR=4.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| PDAR | Pinedale Array | 52.89 | 293 | P | P | 13 04 43.1 | +3.7 |
| | 0.1nm,0.3s,baz=61,slow=7.5,SNR=3.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**IDC 02 12:55:33.0**±3.9**, 22.61N**×**12.24W, h0**km**, mb3.7**/2**, mbtmp3.7**/4**, ML3.6**/2**, Error ellipse: s-maj=122.2km s-min=36.6km az=77.0, Mauritania**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TORD | Torodi Ar. Bea | 16.24 | 123 | Pn | Pn | 12 59 22.6 | -0.2 |
| | 0.3nm,0.3s,baz=315,slow=12,SNR=9.4 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| DBIC | Dimbokro | 17.37 | 155 | P | Pn | 12 59 36.2 | -0.7 |
| | 0.2nm,0.3s,baz=323,slow=10,SNR=2.4 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| I42PT | GRACIOSA ISLAN | 21.20 | 324 | I | I | 14 58 40.0 | |
| | baz=139,slow=317,SNR=4.5 | | | | | | |
| FINES | FINESS Array B | 46.88 | 24 | P | P | 13 04 04.2 | -0.6 |
| | 0.7nm,0.7s,baz=224,slow=5.8,SNR=1.4 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 76.84 | 45 | P | P | 13 07 27.1 | +0.2 |
| | 0.3nm,0.5s,baz=298,slow=5.7,SNR=5.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 148.78 | 91 | PKPbc | PKPbc | 13 15 23.2 | -0.1 |
| | 1.0nm,1.0s,baz=284,slow=2.2,SNR=3.0 | | | | | | |

**IDC 02 12:56:42.9**±2.4**, 6.34S**×**129.22E, h0**km**, mb3.6**/1**, mbtmp3.3**/3**, ML3.2**/2**, Error ellipse: s-maj=155.4km s-min=32.3km az=68.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 14.41 | 160 | Pn | Pn | 13 00 07.0 | -1.4 |
| | 0.1nm,0.3s,baz=342,slow=14,SNR=1.5 | | | | | | |
| WRA | | | | Sn | Sn | 13 02 34.3 | -15 |
| | 0.4nm,0.3s,baz=340,slow=21,SNR=8.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| ASAR | Alice Springs | 17.81 | 166 | P | P | 13 00 53.2 | 0.0 |
| | 0.1nm,0.3s,baz=346,slow=10.0,SNR=16 | | | | | | |
| ASAR | | | | S | Sn | 13 04 00.2 | -12 |
| | 0.3nm,0.6s,baz=346,slow=23,SNR=1.5 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 67.25 | 327 | P | P | 13 07 39.3 | 0.0 |
| | 0.3nm,0.4s,baz=127,slow=6.2,SNR=4.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*IDC **02** 13:01:18.5±0.5, 34.52S×178.69W, h0km, mb4.4/16, mbtmp4.4/17, ML4.9/1, MS4.4/43, Error ellipse: s-maj=17.7km s-min=16.4km az=64.0*
*BJI **02** 13:01:21.2±0.0, 34.92S×178.60W, h11km, mb5.2/13, mB5.6/7, Ms5.3/13, Ms7 4.9/16*
*NEIC **02** 13:01:23.9, 34.93S×178.68W, h60km*
*WEL **02** 13:01:23.1±0.7, 35°S±5°×17°8W±°, h33km, M5.9/18, mB6.0/8, ML6.6/18, MLv6.3/18, Mw(mB)5.6/8, Error ellipse: s-maj=0.0km s-min=0.0km az=115.9, confirmed*
*NEIC **02** 13:01:23.9, 35.03S×178.19W, h60km, Moment Tensor Solution. Duration: 2.6 Moment tensor: Scale $10^{17}$Nm; Mrr0.65; Mθθ-0.38; Mφφ-0.27; Mrθ0.18; Mθφ-1.00; Mφr-0.75; Fault plane solution: M0 1.38000×$10^{17}$ NP1: φs191.33000°, δ69.05000°, λ43.64000°. NP2:φs82.50000°, δ49.87000°, λ152.12000°. Principal axes: T 1.3567, Plg45.0000°, Azm55.0000°; N 0.0514, Plg43.0000°, Azm212.0000°; P -1.4081, Plg12.0000°, Azm313.0000°;*
*MOS **02** 13:01:25.2±1.6, 34.80S×178.87W, h51km, mb5.4/12 Error ellipse: s-maj=14.1km s-min=11.7km az=105.0*
*GCMT **02** 13:01:26.8±0.1, 34.92S±0.01×178.68W±0.01, h58km, MW5.4/145, Moment Tensor Solution. s134,c229; s145,c265; Duration: 1.2 Moment tensor: Scale $10^{17}$ Nm; Mrr0.85±.02; Mθθ-0.58±.02; Mφφ-0.26±.02; Mrθ0.11±.01; Mθφ-0.90±.01; Mφr-0.73±.01; Best double couple: M0 1.38300×$10^{17}$ NP1:φs200.00000°, δ64.00000°, λ51.00000°. NP2:φs81.00000°, δ46.00000°, λ142.00000°. Principal axes: T 1.3600, Plg54.0000°, Azm61.0000°; N 0.0460, Plg34.0000°, Azm219.0000°; P -1.4070, Plg11.0000°, Azm316.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **02** 13:01:27.8±2.5, 34.87S±0.09×178.8W±0.1, h57km±4km, mb5.2/76, Mww5.4/34 Error ellipse: s-maj=15.4km s-min=12.5km az=89.0*
*NOU **02** 13:01:39.2, 36.15S×179.01W, h91km, mb5.5/15, East of North Island, N.Z.*
**ISC 02 13:01:25.4**±0.4**, 34.83S**±0.03×**178.70W**±0.04**, h44**km±3km**, h44**km**:pP-P, n377,** σ**2.06**/308**, mb5.1**/76**, MS4.5**/51**, 10C-2D, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 3.65 | 221 | P | Pn | 13 02 19.8 | +0.4 |
| MXZ | Matakaoa Point | 3.65 | 221 | Pn | Pn | 13 02 19.2 | -0.2 |
| MXZ | Matakaoa Point | 3.65 | 221 | P | Pn | 13 02 19.4 | 0.0 |
| MXZ | | | | S | Sn | 13 03 00.7 | -0.5 |
| PUZ | Puketiti | 4.07 | 216 | P | Pn | 13 02 24.5 | -0.6 |
| PUZ | | | | S | Sn | 13 03 11.1 | -0.3 |
| HAZ | Te Kaha | 4.08 | 223 | P | Pn | 13 02 25.4 | +0.1 |
| HAZ | | | | S | Sn | 13 03 13.4 | +1.7 |
| WIZ | White Island | 4.28 | 230 | P | Pn | 13 02 28.4 | +0.4 |
| TWGZ | Tauwhareparae | 4.28 | 218 | P | Pn | 13 02 28.1 | 0.0 |
| TWGZ | | | | S | Sn | 13 03 17.5 | +0.7 |
| WSRZ | White Island S | 4.29 | 230 | P | Pn | 13 02 30.0 | +1.9 |
| RUGZ | Raukumara Rang | 4.29 | 222 | P | Pn | 13 02 29.0 | +0.7 |
| RUGZ | | | | S | Sn | 13 03 17.5 | +0.5 |
| CNGZ | Carnagh Statio | 4.42 | 213 | P | Pn | 13 02 29.9 | 0.0 |
| TKGZ | Te Karaka | 4.55 | 217 | P | Pn | 13 02 31.2 | -0.5 |
| WHRZ | Whale Island | 4.62 | 228 | P | Pn | 13 02 34.0 | +1.2 |
| MWZ | Matawai | 4.64 | 220 | P | Pn | 13 02 32.4 | -0.5 |
| MWZ | | | | S | Sn | 13 03 24.9 | -0.6 |
| RIGZ | Rimuhau | 4.80 | 215 | P | Pn | 13 02 34.2 | -1.1 |
| URZ | Urewera | 4.81 | 223 | P | Pn | 13 02 35.3 | 0.0 |
| URZ | Urewera | 4.81 | 223 | Pn | Pn | 13 02 34.4 | -0.9 |
| | 48nm,0.3s,baz=337,slow=2.9,SNR=302 | | | | | | |
| URZ | | | | Sn | Sn | 13 03 29.0 | -0.7 |
| | 1µm,0.3s,baz=316,slow=5.5,SNR=25 | | | | | | |
| | 607nm,0.9s | | | | | | |
| URZ | Urewera | 4.81 | 223 | P | Pn | 13 02 35.1 | -0.2 |
| RAGZ | Rawiri | 4.81 | 219 | P | Pn | 13 02 35.5 | 0.0 |
| OPRZ | Ohinepanea | 4.88 | 230 | P | Pn | 13 02 36.7 | +0.5 |
| PRGZ | Paritu Road | 4.92 | 213 | P | Pn | 13 02 35.9 | -1.0 |
| KUZ | Kuaotunu | 4.93 | 246 | P | Pn | 13 02 38.8 | +1.9 |
| KUZ | | | | S | Sn | 13 03 36.4 | +3.8 |
| GRZ | Great Barrier | 4.97 | 252 | P | Pn | 13 02 39.9 | +2.3 |
| KNZ | Kokohu | 5.10 | 214 | P | Pn | 13 02 37.6 | -1.6 |
| MHGZ | Mahia Peninsul | 5.10 | 211 | P | Pn | 13 02 38.1 | -1.3 |
| RTZ | Ruatahuna | 5.13 | 221 | Pn | Pn | 13 02 38.9 | -0.9 |
| TOZ | Tahuroa Road | 5.51 | 237 | Pn | Pn | 13 02 45.2 | +0.3 |
| TOZ | Tahuroa Road | 5.51 | 237 | P | Pn | 13 02 46.1 | +1.2 |
| TOZ | | | | S | Sn | 13 03 46.1 | -0.9 |
| GLKZ | Green Lake | 5.59 | 7 | P | Pn | 13 02 42.8 | -3.2 |
| GLKZ | | | | S | Sn | 13 03 44.2 | -4.7 |
| RAO | Raoul Island | 5.60 | 7 | P | Pn | 13 03 18.0 | +32 |
| RIZ | Raoul Island | 5.60 | 7 | S | Sn | 13 03 46.4 | -2.9 |
| WCZ | Waipu Caves | 5.79 | 257 | P | Pn | 13 02 52.0 | +3.2 |
| BKZ | Black Stump Fm | 5.79 | 220 | P | Pn | 13 02 48.3 | -0.6 |
| BKZ | Black Stump Fm | 5.79 | 220 | Pn | Pn | 13 02 47.1 | -1.8 |
| OUZ | Omahuta | 6.34 | 264 | P | Pn | 13 02 59.5 | +3.2 |
| HIZ | Hauiti | 6.36 | 233 | P | Pn | 13 02 58.0 | +1.5 |
| HIZ | Hauiti | 6.36 | 233 | | Pn | 13 02 57.4 | +0.8 |
| BFZ | Birch Farm | 7.09 | 213 | P | Pn | 13 03 02.1 | -4.4 |
| BFZ | Birch Farm | 7.09 | 213 | | Pn | 13 03 02.1 | -4.4 |
| MRZ | Mangatainoka R | 7.38 | 216 | Pn | Pn | 13 03 05.9 | -4.6 |
| MSWZ | Moikau Station | 8.12 | 214 | | Pn | 13 03 15.9 | -4.9 |
| PLWZ | Palliser | 8.24 | 213 | | Pn | 13 03 17.9 | -4.5 |
| BHW | Baring Head | 8.30 | 216 | | Pn | 13 03 18.1 | -5.0 |
| SNZO | South Karori | 8.30 | 217 | P | Pn | 13 03 19.6 | -3.6 |
| SNZO | South Karori | 8.30 | 217 | | Pn | 13 03 18.2 | -5.0 |
| TCW | Tory Channel | 8.45 | 219 | Pn | Pn | 13 03 21.1 | -4.0 |
| TUWZ | Tuamarina | 8.78 | 219 | | Pn | 13 03 26.2 | -3.5 |
| NNZ | Nelson | 8.93 | 222 | | Pn | 13 03 34.0 | +2.2 |
| BSWZ | Blackbirch Sta | 9.02 | 218 | | Pn | 13 03 29.0 | -4.1 |
| CTZ | Chatham Island | 9.04 | 170 | P | Pn | 13 03 30.2 | -3.1 |
| CTZ | Chatham Island | 9.04 | 170 | | Pn | 13 03 31.3 | -2.0 |
| TKNZ | Takaka Hill | 9.04 | 224 | | Pn | 13 03 30.1 | -3.3 |
| QRZ | Quartz Range | 9.16 | 227 | P | Pn | 13 03 33.0 | -2.0 |
| QRZ | Quartz Range | 9.16 | 227 | | Pn | 13 03 31.8 | -3.2 |
| MRNZ | Matariki Terra | 9.40 | 223 | | Pn | 13 03 36.6 | -1.6 |
| THZ | Tophouse | 9.56 | 221 | | Pn | 13 03 36.8 | -3.7 |
| KHZ | Kahutara | 9.71 | 216 | P | Pn | 13 03 39.4 | -3.0 |
| KHZ | Kahutara | 9.71 | 216 | | Pn | 13 03 40.1 | -2.3 |
| GVZ | Greta Valley S | 10.37 | 216 | | Pn | 13 03 51.3 | -0.2 |
| LTZ | Lake Taylor | 10.61 | 219 | | Pn | 13 03 50.8 | -4.0 |
| AMCZ | Amberley | 10.71 | 216 | | Pn | 13 03 52.9 | -3.3 |
| INZ | Inchbonnie | 11.01 | 221 | | Pn | 13 03 58.4 | -1.9 |
| OXZ | Oxford | 11.12 | 218 | | Pn | 13 03 58.8 | -3.0 |
| RPZ | Rata Peaks | 11.90 | 219 | P | Pn | 13 04 09.2 | -3.3 |
| RPZ | Rata Peaks | 11.90 | 219 | Pn | Pn | 13 04 09.5 | -3.0 |
| RPZ | Rata Peaks | 11.90 | 219 | Pn | Pn | 13 04 09.3 | -3.1 |
| | 20nm,0.3s,baz=339,slow=0.5,SNR=84 | | | | | | |
| RPZ | | | | Sn | Sn | 13 06 10.9 | -13 |
| | 174nm,0.3s,baz=332,slow=22,SNR=21 | | | | | | |
| FOZ | Fox Glacier | 12.44 | 222 | | Pn | 13 04 16.5 | -3.3 |
| NFK | Norfolk Island | 12.73 | 293 | P | Pn | 13 04 28.5 | +4.7 |
| | 742nm,1.6s,SNR=10 | | | | | | |
| LBZ | Lake Benmore | 12.82 | 219 | Pn | Pn | 13 04 21.8 | -3.2 |
| ODZ | Otahua Downs | 13.06 | 215 | P | Pn | 13 04 25.0 | -3.3 |
| ODZ | Otahua Downs | 13.06 | 215 | Pn | Pn | 13 04 25.6 | -2.7 |
| JCZ | Jackson Bay | 13.36 | 223 | P | Pn | 13 04 29.3 | -3.1 |
| WKZ | Wanaka | 13.73 | 220 | Pn | Pn | 13 04 35.0 | -2.4 |
| MLZ | Mavora Lakes | 14.56 | 220 | Pn | Pn | 13 04 45.8 | -2.9 |
| SYZ | Scrubby Hill | 14.88 | 215 | P | Pn | 13 04 49.6 | -3.2 |
| WHZ | Wether Hill Ro | 15.01 | 219 | Pn | Pn | 13 04 51.2 | -3.2 |
| DCZ | Deep Cove | 15.14 | 221 | Pn | Pn | 13 04 54.0 | -2.2 |
| PYZ | Puysegur Point | 15.85 | 220 | P | Pn | 13 05 02.7 | -2.6 |
| PYZ | Puysegur Point | 15.85 | 220 | Pn | Pn | 13 05 02.7 | -2.6 |
| PYZ | | | | IAmb | IAmb | 13 05 04.7 | |
| | comp=Z,199nm,0.8s | | | | | | |
| MSVF | Nonsavu | 17.27 | 349 | Pn | Pn | 13 05 22.9 | -0.6 |
| MSVF | Nonsavu | 17.27 | 349 | Pn | Pn | 13 05 21.7 | -1.8 |
| | comp=Z,2.6nm,0.3s,baz=148,slow=11,SNR=11 | | | | | | |
| MSVF | | | | LR | LR | 13 11 30.9 | |
| | comp=Z,2µm,18.4s,baz=177,slow=36 | | | | | | |
| MSVF | Nonsavu | 17.27 | 349 | P | Pn | 13 05 22.9 | -0.6 |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,93nm,1.3s | | | | | | |
| ONTNC | Ouen Toro | 18.02 | 310 | P | Pn | 13 05 35.3 | +2.7 |
| DZM | Mont Dzumac | 18.20 | 310 | ePn | Pn | 13 05 36.8 | +1.9 |
| | comp=Z,244nm,1.5s | | | | | | |
| DZM | | | | eLR | LR | 13 09 41.9 | |
| | comp=Z,11µm,25.9s | | | | | | |
| DZM | Mont Dzumac | 18.20 | 310 | P | Pn | 13 05 36.9 | +2.0 |
| DZM | | | | IAmb | IAmb | 13 05 40.8 | |
| | comp=Z,330nm,1.8s | | | | | | |
| DZM | Mont Dzumac | 18.20 | 310 | P | Pn | 13 05 34.6 | -0.3 |
| | comp=Z,30nm,0.9s,baz=137,slow=13,SNR=16 | | | | | | |
| LIFNC | LIFOU | 18.70 | 315 | P | Pn | 13 05 41.9 | +1.0 |
| KOUNC | Koumac, New Ca | 20.68 | 309 | P | Pn | 13 06 03.6 | -0.8 |
| RAR | Rarotonga | 21.47 | 56 | P | P | 13 06 05.0 | -5.1 |
| | comp=Z,16nm,0.8s,baz=315,slow=20,SNR=2.3 | | | | | | |
| RAR | | | | S | S | 13 09 57.7 | -8.2 |
| | comp=Z,17nm,0.5s,baz=58,slow=15,SNR=5.6 | | | | | | |
| RAR | | | | LR | LR | 13 12 19.0 | |
| | comp=Z,1µm,21.4s,baz=224,slow=31 | | | | | | |
| | comp=Z,16nm,0.8s | | | | | | |
| RAR | Rarotonga | 21.47 | 56 | P | P | 13 06 12.0 | +1.8 |
| ARMA | Armidale | 25.33 | 272 | P | P | 13 06 48.1 | -0.2 |
| ARMA | Armidale | 25.33 | 272 | P | P | 13 06 49.7 | +1.4 |

comp=Z,21nm,1.4s,SNR=1.9
**CNB Canberra Magne 26.09 260** P **P** **13 06 59.0 +3.9**
comp=Z,40nm,1.3s,SNR=3.0
**CAN Canberra 26.39 260** P P 13 07 05.8 +8.0
comp=Z,25nm,1.4s,SNR=2.1
**EIDS Eidsvold 27.71 282** P **P** **13 07 10.2 +0.5**
**EIDS Eidsvold 27.71 282** P **P** **13 07 10.3 +0.7**
**TBI Tubuai 27.89 74** *e*P **P** **13 07 12.4 +1.1**
comp=Z,2µm,30.5s
TBI *e*S **S** **13 11 56.3 +4.5**
comp=Z,6µm,26.5s
TBI *e*LR LR 13 14 15.5
comp=Z,4µm,26.5s
TBI *e*LR LR 13 14 20.3
comp=Z,11µm,24.0s
**TOO Toolangi 28.92 254** P **P** **13 07 20.9 +0.4**
comp=Z,18nm,3.1s,SNR=1.5
**CMSA Cobar Meteorol 29.89 266** P **P** **13 07 29.8 +0.8**
comp=Z,29nm,1.2s,SNR=3.5
**PPT2 Papeete2 31.10 64** *e*P **P** **13 07 37.7 -2.1**
comp=Z,367nm,27.2s
PPT2 *e*S **S** **13 12 42.1 -0.4**
comp=Z,392nm,28.5s
PPT2 *e*LR LR 13 15 38.1
comp=Z,2µm,24.8s
PPT2 *e*LR LR 13 15 43.9
comp=Z,4µm,26.5s
**PPT Papeete 31.11 64** LR LR 13 17 09.9
comp=Z,858nm,20.3s,baz=254,slow=31
**ARPS Mount Arapiles 31.92 255** P **P** **13 07 48.9 +2.1**
**QLP Quilpie 32.77 274** P **P** **13 07 54.8 +0.4**
**STKA Stephens Creek 33.15 264** P **P** **13 07 58.0 +0.3**
**STKA Stephens Creek 33.15 264** P **P** **13 07 58.4 +0.7**
comp=Z,4.7nm,1.4s,SNR=1.8
**STKA Stephens Creek 33.15 264** P **P** **13 07 56.3 -1.4**
comp=Z,13nm,1.1s,baz=120,slow=8.5,SNR=5.1
STKA LR LR 13 19 43.8
comp=Z,959nm,21.8s,baz=96,slow=33
comp=Z,13nm,1.1s
**CTA Charters Tower 34.20 286** P **P** **13 08 04.4 -2.4**
comp=Z,1.5nm,1.1s,baz=130,slow=7.5,SNR=7.7
CTA S **S** **13 13 29.4 -1.2**
comp=Z,0.3nm,1.0s,baz=329,slow=20,SNR=5.8
CTA LR LR 13 20 43.8
comp=Z,26nm,20.9s,baz=104,slow=34
comp=Z,1.5nm,1.1s
**CTA Charters Tower 34.20 286** P **P** **13 08 08.4 +1.5**
**CTAO Charters Tower 34.20 286** P **P** **13 08 06.4 -0.5**
CTAO IAmb IAmb 13 08 22.0
comp=Z,57nm,1.3s
**CTAO Charters Tower 34.20 286** P **P** **13 08 06.4 -0.5**
CTAO pmax pmax
comp=Z,57nm,1.3s
**CTAO Charters Tower 34.20 286** P **P** **13 08 07.8 +1.0**
CTAO pP **sP** **13 08 21.2 -0.2**
**HTT Hallett 34.92 260** P **P** **13 08 11.7 -1.4**
**BBOO Buckleboo 37.41 260** P **P** **13 08 33.7 -0.6**
comp=Z,52nm,2.8s,SNR=1.5
**QIS Mount Isa 39.28 280** P **P** **13 08 49.7 -0.4**
**COEN Coen 40.13 292** P **P** **13 08 58.5 +1.2**
comp=Z,29nm,1.7s,SNR=3.1
**PMG Port Moresby 40.17 301** LR LR 13 23 10.7
comp=Z,2µm,20.5s,baz=122,slow=33
**PMG Port Moresby 40.17 301** P **P** **13 08 54.2 -3.4**
PMG pP **pP** **13 09 08.6 +0.7**
**ASAR Alice Springs 42.48 272** P **P** **13 09 15.3 -1.2**
ASAR pP **pP** **13 09 28.2 +1.4**
**ASAR Alice Springs 42.48 272** P **P** **13 09 15.3 -1.2**
comp=Z,9.6nm,0.6s,baz=115,slow=8.4,SNR=14.5
ASAR S **S** **13 15 32.0 -3.7**
comp=Z,3.9nm,1.1s,baz=108,slow=13,SNR=7.0
ASAR LR LR 13 26 06.9
comp=Z,1µm,21.9s,baz=126,slow=35
comp=Z,9.6nm,0.6s
**ASPA Alice Springs 42.48 272** P **P** **13 09 15.6 -0.9**
comp=Z,6.5nm,0.6s,SNR=7.7
**SBA Scott Base 43.59 184** P **P** **13 09 26.4 +1.7**
**SBA Scott Base 43.59 184** P **P** **13 09 26.4 +1.7**
SBA pmax pmax
comp=Z,19nm,1.2s
**VNDA Vanda 43.65 186** P **P** **13 09 27.2 +2.1**
comp=Z,0.8nm,0.8s,baz=21,slow=6.0,SNR=5.1
VNDA LR LR 13 23 17.7
comp=Z,557nm,21.8s,baz=26,slow=30
comp=Z,0.8nm,0.8s
**TAOE Nuku Hiva Isla 43.72 63** *e*P **P** **13 09 22.6 -4.0**
comp=Z,201nm,26.8s
**TAOE Nuku Hiva Isla 43.72 63** *e*PP **PP** **13 11 06.4 -2.5**
comp=Z,84nm,28.3s
TAOE *e*S **S** **13 15 53.5 -0.4**
comp=Z,226nm,27.1s
TAOE *e*SS **SS** **13 19 09.7 -0.9**
comp=Z,218nm,25.8s
TAOE *e*LR LR 13 21 36.2
comp=Z,1µm,23.1s
**WRAB Tennant Creek 43.87 277** P **P** **13 09 26.1 -1.6**
WRAB IAmb IAmb 13 09 51.0
comp=Z,19nm,0.7s
**WRAB Tennant Creek 43.87 277** *i* P **P** **13 09 26.2 -1.5**
WRAB pmax pmax
comp=Z,15nm,0.6s
**WRA Warramunga Arr 43.87 277** P **P** **13 09 26.5 -1.2**
**WRA Warramunga Arr 43.87 277** P **P** **13 09 26.5 -1.2**
comp=Z,11nm,0.5s,baz=119,slow=7.7,SNR=21.5
WRA S **S** **13 15 51.2 -4.7**
comp=Z,4.3nm,1.1s,baz=122,slow=15,SNR=6.0
WRA LR LR 13 28 04.6
comp=Z,727nm,18.2s,baz=143,slow=37
comp=Z,11nm,0.5s
**WB0 Warramunga Arr 43.91 277** P **P** **13 09 26.9 -1.1**
WB0 IAmb IAmb 13 09 48.2
comp=Z,30nm,0.9s
**FORT Forrest 44.51 260** P **P** **13 09 31.6 -1.1**
comp=Z,46nm,1.0s,SNR=1.2
**WRKA Warakurna 46.51 267** P **P** **13 09 47.3 -1.3**
comp=Z,26nm,2.2s,SNR=1.8
**CCD Concordia, Ant 48.55 197** P **P** **13 10 05.2 +0.9**
**KDU Kakadu 49.27 284** P **P** **13 10 07.3 -2.7**
comp=Z,14nm,0.8s,SNR=2.4
**KNRA Kununurra 50.61 278** P **P** **13 10 19.8 -0.4**
comp=Z,25nm,2.6s,SNR=2.2
**CASY Casey 50.98 209** P **P** **13 10 22.7 +0.4**
CASY pP **sP** **13 10 37.2 +0.2**
CASY sP **pwP** **13 10 43.6 +2.7**
**FITZ Fitzroy Crossi 51.91 274** P **P** **13 10 29.3 -0.6**
**NWAO Narrogin (SRO) 52.40 253** LR LR 13 31 08.1
comp=Z,517nm,20.9s,baz=86,slow=34
**KLBR Kellerberrin 52.48 254** P **P** **13 10 32.9 -1.2**
comp=Z,66nm,1.2s,SNR=2.8
**MEEK Meekatharra 53.75 260** P **P** **13 10 40.1 -3.4**
comp=Z,58nm,1.3s,SNR=2.7
**MORW Morawa 54.82 257** P **P** **13 10 50.7 -0.5**
comp=Z,37nm,2.0s,SNR=1.1
**MBWA Marble Bar 55.28 267** P P 13 10 59.1 +4.5
comp=Z,30nm,2.2s,SNR=1.4
**QSPA South Pole Qui 55.30 180** P **P** **13 10 56.2 +2.0**
QSPA IAmb IAmb 13 11 29.6
comp=Z,29nm,0.9s
**QSPA South Pole Qui 55.30 180** P **P** **13 10 56.3 +2.0**
comp=Z,11nm,0.9s,baz=35,slow=1.8,SNR=52
QSPA LR LR 13 30 21.6
comp=Z,784nm,21.3s,baz=43,slow=31
comp=Z,11nm,0.9s
**QSPA South Pole Qui 55.30 180** P **P** **13 10 56.2 +2.0**
QSPA sP **pwP** **13 11 18.8 +5.2**
**H11N1 WAKE ISLAND Hy 55.94 344** T T 14 11 34.3
baz=282,slow=74,SNR=11
**H11N3 WAKE ISLAND Hy 55.94 344** T T 14 11 34.7
baz=282,slow=74,SNR=9.4
**H11N2 WAKE ISLAND Hy 55.96 344** T T 14 11 34.2
baz=282,slow=74,SNR=16
**RPN Rapa Nui 58.92 103** LR LR 13 30 26.2
comp=Z,540nm,20.9s,baz=246,slow=30
**GUMO Guam 59.28 318** LR LR 13 34 54.1
comp=Z,131nm,19.9s,baz=149,slow=34
**KAPI Kappang 63.91 283** LR LR 13 40 15.4
comp=Z,323nm,21.0s,baz=124,slow=37
**BELA Belgrano 2 65.49 172** P **P** **13 12 03.0 -0.5**
BELA IAmb IAmb 13 12 05.0
comp=Z,45nm,1.3s
**SMAI San Martin Ant 65.56 158** IAmb IAmb 13 12 06.5
comp=Z,22nm,1.1s
**DAV Davao City (W) 67.03 297** LR LR 13 39 34.6
comp=Z,130nm,21.8s,baz=132,slow=34
**MAW Mawson 67.98 201** P **P** **13 12 21.7 +2.3**
comp=Z,1.4nm,1.0s,baz=84,slow=6.9,SNR=2.0
MAW LR LR 13 39 57.1
comp=Z,461nm,21.7s,baz=120,slow=34
comp=Z,1.4nm,1.0s
**PMSA Palmer Station 68.49 155** LR LR 13 35 50.2
comp=Z,463nm,20.2s,baz=246,slow=30
**JCJ Chichijima 71.85 324** LR LR 13 40 12.5
comp=Z,190nm,21.9s,baz=172,slow=33
**ELIB Princess Elisa 72.40 187** *d*P **P** **13 12 47.3 +0.6**
comp=Z,18nm,1.1s
**TROLL Troll, Antarti 73.46 180** ⇑P **P** **13 12 53.7 +0.8**
comp=Z,1µm,0.9s
**SNAA Sanae 73.76 179** P **P** **13 12 54.2 -0.4**
SNAA IAmb IAmb 13 12 56.4
comp=Z,45nm,1.2s
**SNAA Sanae 73.76 179** ⇑P **P** **13 12 55.1 +0.5**
comp=Z,428nm,1.3s
**SNAA Sanae 73.76 179** P **P** **13 12 54.8 +0.3**
comp=Z,27nm,1.1s,baz=183,slow=5.7,SNR=36
SNAA LR LR 13 41 29.9
comp=Z,577nm,21.8s,baz=250,slow=33
comp=Z,27nm,1.1s
**SNAA Sanae 73.76 179** *i* P **P** **13 12 53.1 -1.5**
SNAA pmax pmax
comp=Z,46nm,1.2s
**VNA3 Neumayer Olymp 73.94 176** ⇑P **P** **13 12 55.9 +0.3**
comp=Z,43nm,0.9s
**VNA2 Neumayer--Watz 74.36 177** ⇑P **P** **13 12 58.7 +0.6**
comp=Z,39nm,1.0s,baz=188,slow=5.9
**NVL N'lazarevskaya 74.44 184** ⇑*i*P **P** **13 12 56.9 -1.5**
NVL pmax pmax
comp=Z,12nm,1.0s
**VNA1 Neumayer--Stat 74.60 177** ⇑P **P** **13 13 00.2 +0.9**
comp=Z,53nm,1.0s
**LL02 Futaleuf 77.68 134** P **P** **13 13 18.1 +0.7**
LL02 IAmb IAmb 13 13 41.0
comp=Z,31nm,1.4s
**JHJ Hachijo jima 2 78.01 325** LR LR 13 43 55.1
comp=Z,124nm,19.4s,baz=86,slow=33
**H03S2 Juan Fernandez 78.53 123** T T 14 40 42.9
baz=230,slow=74,SNR=14
**H03S1 Juan Fernandez 78.54 123** T T 14 40 42.8
baz=230,slow=74,SNR=16
**H03S3 Juan Fernandez 78.55 123** T T 14 40 34.0
baz=230,slow=74,SNR=13
**LL04 Puerto Octay 78.70 132** IAmb IAmb 13 13 25.0
comp=Z,29nm,1.4s
**H03N3 Juan Fernandez 78.74 123** T T 14 41 06.5
baz=234,slow=72,SNR=51
**H03N2 Juan Fernandez 78.75 123** T T 14 40 57.8
baz=234,slow=72,SNR=39
**H03N1 Juan Fernandez 78.76 123** T T 14 41 00.7
baz=234,slow=72,SNR=12
**PLCA Paso Flores 79.93 133** P **P** **13 13 30.6 +0.7**
PLCA IAmb IAmb 13 13 32.3
comp=Z,22nm,1.2s
**PLCA Paso Flores 79.93 133** P **P** **13 13 30.6 +0.7**
comp=Z,12nm,1.2s,baz=254,slow=7.4,SNR=11
comp=Z,12nm,1.2s
**MJAR Matsushiro Arr 81.56 326** P **P** **13 13 36.3 -2.0**
comp=Z,0.6nm,0.5s,baz=139,slow=8.0,SNR=1.9
MJAR LR LR 13 45 44.2
comp=Z,95nm,21.3s,baz=141,slow=33
comp=Z,0.6nm,0.5s
**JNU Nakatsue 82.49 319** LR LR 13 46 38.2
comp=Z,125nm,21.0s,baz=148,slow=33
**MT01 Popeta 83.68 127** IAmb IAmb 13 13 51.4
comp=Z,50nm,1.3s
**MT09 Talagante 83.91 127** IAmb IAmb 13 13 52.5
comp=Z,31nm,1.2s
**MT13 San Alfonso 84.39 127** IAmb IAmb 13 13 55.8
comp=Z,40nm,1.5s
**PEL Peldehue 84.49 127** IAmb IAmb 13 13 55.9
comp=Z,35nm,1.1s
**PEL Peldehue 84.49 127** P **P** **13 13 53.8 -0.1**
PEL pmax pmax
comp=Z,29nm,1.2s
**ASAJ Asahikawa 86.10 333** LR LR 13 46 06.4
comp=Z,465nm,21.9s,baz=173,slow=31
**QIZ Qiongzhong 86.38 296** P P 13 14 10.3 +7.0
QIZ SS SS 13 30 26.3 +9.3
QIZ pmax pmax
comp=Z,160nm,7.9s
QIZ LR LR
comp=Z,600nm,16.7s
QIZ LR LR
comp=Z,340nm,12.0s
QIZ LR LR
comp=Z,470nm,19.4s
**TRQA Tornquist 86.73 135** P **P** **13 14 04.8 -0.1**
TRQA IAmb IAmb 13 14 06.5
comp=Z,16nm,1.1s
**TRQA Tornquist 86.73 135** P **P** **13 14 04.8 -0.1**
TRQA pmax pmax
comp=Z,16nm,1.2s
**ZON Zonda 86.81 127** IAmb IAmb 13 14 07.8
comp=Z,31nm,1.3s
**KSRS Korea Array 87.35 320** P **P** **13 14 07.0 -0.5**
comp=Z,0.5nm,0.6s,baz=106,slow=4.6,SNR=2.7
KSRS LR LR 13 49 34.5
comp=Z,59nm,20.2s,baz=145,slow=33
comp=Z,0.5nm,0.6s
**KSRS Korea Array 87.35 320** P **P** **13 14 07.0 -0.5**
**SHEM Shemya Is, Ala 87.42 356** LR LR 13 47 40.9
comp=Z,365nm,20.8s,baz=148,slow=32
**SCI2 San Clemente I 87.93 47** P **P** **13 14 12.9 +2.5**
baz=225
**CIS Catalina Islan 88.30 47** P **P** **13 14 14.8 +2.6**
baz=225
**YSS Yuzh-Sakhalins 88.48 335** *e*P P 13 14 06.7 -6.0
YSS *e* 13 24 34.2
YSS *e*S **S** **13 24 46.0 -8.8**
YSS pmax pmax
comp=Z,10.0nm,1.1s
YSS pmax pmax
comp=Z,100nm,4.5s
**PKM Mcpherson Peak 88.52 45** P **P** **13 14 15.5 +2.1**
baz=225
**FMP Fort Macarthur 88.59 46** P **P** **13 14 16.1 +2.6**
baz=226
**NJ2 Nanjing 88.69 311** *e*P **P** **13 14 17.8 +3.7**
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**SMMC Simmler 88.72 44** P **P** **13 14 17.0 +2.8**
baz=224
**109C Camp Elliot, M 88.73 48** P **P** **13 14 16.8 +2.5**
baz=226
**UNV Unalaska Valle 88.94 7** P P 13 14 20.0 +5.4
baz=190
**DECC Green Verdugo 88.94 46** P **P** **13 14 17.5 +2.2**
baz=225
**OSI Osito Audit: C 88.96 46** P **P** **13 14 17.5 +2.1**
baz=225
**MONP2 Monument Peak 89.15 48** P **P** **13 14 19.1 +2.6**
baz=226,SNR=6.0
**MURC Murrieta 89.17 47** P **P** **13 14 18.4 +2.1**
baz=226
**IKP In-Ko-Pah, Jac 89.18 48** P **P** **13 14 19.3 +2.8**
baz=227
**ARVC Arvin 89.26 45** P **P** **13 14 18.9 +2.2**
baz=225
**BFSC Mount Baldy Ra 89.33 46** P **P** **13 14 19.3 +2.1**
baz=226,SNR=7.2
**SWSC Sam W. Stewart 89.57 48** P **P** **13 14 20.8 +2.6**
baz=227
**EDW2 Edwards Air Fo 89.58 46** P **P** **13 14 20.6 +2.3**
baz=226,SNR=6.9
**VES Vestal, Richgr 89.61 44** P **P** **13 14 19.9 +1.6**
baz=225
**TPFO Pinon Flats 89.62 48** P **P** **13 14 21.0 +2.4**
baz=226
**PFO Pinyon Flats O 89.62 48** P **P** **13 14 20.8 +2.2**
baz=226
**PFO Pinyon Flats O 89.62 48** *i* P **P** **13 14 18.5 -0.1**
PFO pmax pmax
comp=Z,40nm,1.6s
**PET Petropavlovsk 89.68 347** *e*P **P** **13 14 19.5 +1.4**
PET *e*S **S** **13 25 10.7 +4.9**
PET pmax pmax
comp=Z,100nm,19.3s
PET MLR MLR
comp=Z,200nm,20.0s
**VOG Valley Oaks Go 89.78 44** P **P** **13 14 20.3 +1.2**
baz=225
**BBRC Big Bear Solar 89.79 47** P **P** **13 14 22.5 +3.0**
baz=226
**ISA Isabella, Lake 89.84 45** P **P** **13 14 21.7 +2.2**
baz=225,SNR=6.2
**BELC Belle Mtn. Jos 90.17 48** P **P** **13 14 23.0 +1.8**
baz=227,SNR=9.6
**LRMC Laurel Mtn Rad 90.18 46** P **P** **13 14 23.1 +1.9**
baz=226,SNR=8.3
**GLA Glamis 90.25 49** P **P** **13 14 24.6 +3.2**
baz=227
**BC3 Big Chuckawall 90.27 48** P **P** **13 14 24.3 +2.7**
baz=227,SNR=6.4
**CMB Columbia Colle 90.43 42** P **P** **13 14 23.2 +1.0**
CMB IAmb IAmb 13 14 25.4
comp=Z,35nm,1.9s
**CMB Columbia Colle 90.43 42** P **P** **13 14 23.2 +1.0**
CMB pmax pmax
comp=Z,35nm,1.9s
**USRK Ussuriysk Ar. 90.53 327** P **P** **13 14 23.3 +1.0**
USRK pP **sP** **13 14 37.6 0.0**
**USRK Ussuriysk Ar. 90.53 327** P **P** **13 14 19.1 -3.2**
comp=Z,2.1nm,0.7s,baz=81,slow=13,SNR=2.6
USRK LR LR 13 49 10.8
comp=Z,102nm,21.9s,baz=145,slow=32
comp=Z,2.1nm,0.7s
**HEC Hector,Ludlow 90.53 47** P **P** **13 14 25.1 +2.3**
baz=227
**GSC Goldstone, Bar 90.57 46** P **P** **13 14 25.3 +2.4**
**GSC Goldstone, Bar 90.57 46** P **P** **13 14 25.1 +2.1**
baz=226,SNR=6.0
**GSC Goldstone, Bar 90.57 46** P **P** **13 14 25.3 +2.4**
GSC pmax pmax
comp=Z,53nm,1.9s
**CWC Cottonwood Cre 90.61 45** P **P** **13 14 25.6 +2.4**
baz=226
**O02D Mt. Diablo Mer 90.69 39** P **P** **13 14 25.2 +1.9**
**MPMC Manual Prospec 90.69 45** P **P** **13 14 25.4 +1.8**
baz=226,SNR=7.0
**214A Organ Pipe Nat 90.78 51** P **P** **13 14 26.7 +2.8**
baz=228
**IRM Iron Mountain 90.79 48** P **P** **13 14 26.6 +2.7**
baz=227,SNR=16
**CHNA Chernabura Isl 90.80 11** P P 13 14 27.3 +4.0
baz=196
**GMRC Granite Mounta 90.91 47** P **P** **13 14 27.1 +2.5**
baz=227,SNR=6.8
**MLAC Mammoth, Mammo 91.01 43** P **P** **13 14 26.8 +1.7**
baz=225
**TUQ Turquoise Moun 91.19 47** P **P** **13 14 28.3 +2.4**
baz=227
**GWY Greenwater Val 91.26 46** P **P** **13 14 27.9 +1.7**
**WAKR Walker 91.29 42** IAmb IAmb 13 14 30.1
comp=Z,16nm,1.3s
**SHOC Shoshone, Teco 91.30 46** P **P** **13 14 28.5 +2.3**
baz=227
**DSP Deep Springs 91.32 44** IAmb IAmb 13 14 29.2
comp=Z,15nm,1.7s
**FURC Furnace Creek, 91.34 45** P **P** **13 14 28.5 +2.2**
baz=226
**GRAC Grapevine Rang 91.41 45** P **P** **13 14 28.8 +2.1**
baz=226
**PDMCI Parker Dam,Lak 91.51 48** P **P** **13 14 30.3 +3.1**
baz=228
**NEE2 Needles Airpor 91.53 48** P **P** **13 14 29.5 +2.3**
baz=228
**LHV Little Huntoon 91.64 43** IAmb IAmb 13 14 31.6
comp=Z,11nm,1.4s
**YERR Yerington 91.74 42** IAmb IAmb 13 14 31.6
comp=Z,11nm,1.4s
**DL2 Dalian 91.81 318** P P 13 14 35.5 +7.1
DL2 SKS **SKSac** **13 24 56.9 -0.6**
DL2 pmax pmax
comp=Z,14nm,1.3s
DL2 pmax pmax
comp=Z,130nm,3.7s
DL2 LR LR
comp=Z,240nm,14.3s
DL2 LR LR
comp=Z,200nm,19.6s
DL2 LR LR
comp=Z,190nm,11.5s
**YBH Yreka Blue Hor 91.86 38** IAmb IAmb 13 14 32.4
comp=Z,7.8nm,1.4s
**NVAR Mina Array Bea 91.87 43** P **P** **13 14 29.7 +0.7**
**NVAR Mina Array Bea 91.87 43** P **P** **13 14 29.2 +0.1**
comp=Z,0.8nm,0.7s,baz=221,slow=8.0,SNR=9.2
NVAR LR LR 13 47 07.2
comp=Z,196nm,21.3s,baz=223,slow=30
comp=Z,0.8nm,0.7s
**SPIA Saint Paul Isl 91.93 5** P P 13 14 34.8 +6.4
baz=187
**TPNV Topopah Spring 92.03 45** P **P** **13 14 32.3 +2.5**
baz=227
**V12A Nelson 92.03 47** IAmb IAmb 13 14 34.0
comp=Z,18nm,1.5s
**W13A Hualapai Mount 92.19 48** IAmb IAmb 13 14 34.9
comp=Z,27nm,1.8s
**LVC Limon Verde 92.29 120** LR LR 13 46 32.3
comp=Z,317nm,21.4s,baz=236,slow=29
**TUC Tucson 92.32 52** P **P** **13 14 32.6 +1.5**
**TUC Tucson 92.32 52** P **P** **13 14 33.9 +2.8**
baz=230
**TUC Tucson 92.32 52** P **P** **13 14 32.6 +1.5**
TUC pmax pmax
comp=Z,31nm,1.7s
**HUMO Hull Mountain 92.38 38** IAmb IAmb 13 14 35.0
comp=Z,27nm,1.6s
**NNA Nana 92.75 107** LR LR 13 46 40.9
comp=Z,584nm,21.6s,baz=229,slow=29
**X16A Lo Mia Camp, P 93.26 50** IAmb IAmb 13 14 40.0
comp=Z,19nm,1.6s
**CN2 Changchun 93.31 323** *e*P **P** **13 14 38.9 +3.6**
CN2 *e*S **S** **13 25 42.3 +3.1**
CN2 pmax pmax
comp=Z,10.0nm,0.7s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,200nm,10.0s
CN2 LR LR
comp=Z,200nm,10.0s
CN2 LR LR
comp=Z,300nm,11.1s
**I04A Tendick Farm, 93.52 37** P **P** **13 14 37.1 +0.8**
**J05D Fort Rock, OR 93.74 38** IAmb IAmb 13 14 40.9
comp=Z,22nm,1.6s
**BMN Battle Mountai 93.86 42** IAmb IAmb 13 14 41.3
comp=Z,21nm,1.8s
**U15A North Rim 94.04 48** IAmb IAmb 13 14 43.6
comp=Z,15nm,1.7s
**PINE Pine Mountain 94.25 38** IAmb IAmb 13 14 44.2
comp=Z,14nm,1.3s
**H04A Detroit Lake 94.28 37** IAmb IAmb 13 14 42.6
comp=Z,25nm,1.6s
**CMAR Chiang Mai Arr 94.31 289** P **P** **13 14 41.3 +0.8**
comp=Z,0.3nm,0.3s,baz=132,slow=3.8,SNR=1.6
CMAR LR LR 13 59 11.8
comp=Z,58nm,20.7s,baz=150,slow=37
comp=Z,0.3nm,0.3s
**ATAH Atahualpa 94.35 102** LR LR 13 47 51.9
comp=Z,196nm,21.5s,baz=233,slow=30
**121A Cookes Peak, D 94.42 53** P **P** **13 14 43.1 +2.2**
baz=231
**I05D Terrebonne, OR 94.45 37** P **P** **13 14 41.5 +1.0**
I05D IAmb IAmb 13 15 22.0
comp=Z,14nm,1.5s
**KLR Kul'dur 94.56 330** LR LR 13 55 19.6
comp=Z,110nm,18.8s,baz=176,slow=34
**CMIG Matias Romero 94.66 73** LR LR 13 47 13.2
comp=Z,278nm,21.8s,baz=204,slow=29
**W18A Petrified Fore 94.79 50** P **P** **13 14 44.6 +2.1**
baz=230
**KDAK Kodiak Island 94.84 14** LR LR 13 55 43.5
comp=Z,82nm,18.0s,baz=230,slow=34
**KDAK Kodiak Island 94.84 14** P P 13 14 46.7 +4.8
baz=201
**O15K Ungalikthiuk R 94.96 10** P P 13 14 46.5 +4.0
baz=195
**ELK Elko 95.18 43** LR LR 13 48 25.3
comp=Z,286nm,21.8s,baz=230,slow=30
**VHRN Van Horn 95.22 56** IAmb IAmb 13 14 48.2
comp=Z,14nm,1.6s
**TXAR Lajitas Array 95.25 58** P **P** **13 14 43.5 -1.2**
comp=Z,0.6nm,1.0s,baz=201,slow=6.6,SNR=5.8
TXAR LR LR 13 48 07.7
comp=Z,154nm,21.9s,baz=227,slow=30
comp=Z,0.6nm,1.0s
**MNTX Cornudas Mount 95.50 55** P **P** **13 14 47.9 +2.2**
baz=232
**ANMO Albuquerque 96.78 52** LR LR 13 49 30.3
comp=Z,270nm,21.8s,baz=312,slow=30
**ANMO Albuquerque 96.78 52** *i* P **P** **13 14 50.4 -1.2**
ANMO pmax pmax
comp=Z,3.0nm,1.9s

PZH PanZhiHua 96.82 297 P P 13 14 54.6 +2.7
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,100nm,4.7s
LPAZ La Paz 96.84 115 LR LR 13 50 47.1
comp=Z,168nm,21.0s,baz=207,slow=31
APG El Apazote 96.99 77 LR LR 13 48 14.4
comp=Z,32nm,22.0s,baz=232,slow=29
BBB Bella Bella 97.26 29 LR LR 13 50 40.8
comp=Z,201nm,21.7s,baz=218,slow=30
MA2 Magadan 97.40 345 *i* P Pdif 13 14 54.1 +0.5
MA2 pmax pmax
comp=Z,4.0nm,0.8s
CPUP Villa Florida 97.67 129 LR LR 13 50 52.2
comp=Z,571nm,21.9s,baz=232,slow=30
CD2 Chengdu 97.94 302 P Pdif 13 14 58.4 +1.6
JTS Las Juntas de 98.84 84 LR LR 13 49 27.8
comp=Z,286nm,21.5s,baz=252,slow=29
HHC Hu-ho-hao-te 98.88 314 *e*P Pdif 13 15 03.3 +2.5
HHC PP PP 13 19 11.1 +7.8
HHC SKS SKSac 13 25 37.8 +2.5
HHC S ScS 13 26 31.5 +3.9
HHC sS pS 13 26 40.8 -1.2
HHC pmax pmax
comp=Z,22nm,0.5s
HHC pmax pmax
comp=Z,38nm,3.8s
HHC LR LR
comp=Z,370nm,15.3s
HHC LR LR
comp=Z,800nm,15.3s
HHC LR LR
comp=Z,450nm,15.0s
NEW Newport 99.28 37 LR LR 13 51 20.8
comp=Z,317nm,21.9s,baz=221,slow=30
PDAR Pinedale Array 99.72 44 LR LR 13 51 48.2
comp=Z,184nm,21.4s,baz=214,slow=30
YKA Yellowknife Ar 109.67 26 PKKPbc PKKPbc 13 30 55.3 -0.8
comp=Z,1.1nm,0.9s,baz=50,slow=3.4,SNR=4.2
WMQ Urumqi 115.45 307 *e*PKP PKiKP 13 20 03.6 +1.4
WMQ LR LR
comp=Z,220nm,12.3s
WMQ LR LR
comp=Z,180nm,11.9s
WMQ LR LR
comp=Z,170nm,23.9s
MK31 Makanchi Array 120.11 308 *i* PKIKP PKiKP 13 20 10.3 -0.8
MKAR Makanchi Array 120.11 308 PKP PKiKP 13 20 10.1 -1.0
comp=Z,2.0nm,1.0s,baz=119,slow=1.8,SNR=7.4
ZALV Zalesovo Beam 120.90 317 PKP PKiKP 13 20 11.6 -0.8
comp=Z,0.5nm,0.4s,baz=147,slow=3.4,SNR=4.2
KSH Kashi 121.91 299 PKP PKiKP 13 20 15.5 +0.5
KURK Kurchatov 123.62 312 *i* PKIKP PKPdf 13 20 16.6 -1.0
KURBB Kurchatov Arra 123.65 312 PKP PKiKP 13 20 16.9 -1.0
comp=Z,1.3nm,0.2s,baz=112,slow=1.9,SNR=13
BRVK Borovoye 129.15 313 *i* PKIKP PKPdf 13 20 27.1 -1.0
MBAR Mbarara 135.28 224 *i* PKIKP PKPdf 13 20 40.0 -1.2
ARU Arti 136.05 318 PKP PKPdf 13 20 39.8 -1.2
comp=Z,1.4nm,0.3s,baz=310,slow=4.4,SNR=4.3
ARU Arti 136.05 318 *i* PKIKP PKPdf 13 20 40.3 -0.7
ARU 13 23 17.5
ARU SS SS 13 41 15.3 -2.5
AKTO Aktyubinsk 136.54 309 PKP PKPdf 13 20 40.5 -1.6
comp=Z,1.2nm,0.5s,baz=192,slow=1.2,SNR=3.3
KIRV Kirov 140.53 322 *i* PKIKP PKPdf 13 20 49.0 -0.1
APA Apatity 142.41 340⇓*i*PKHKP PKPpre 13 20 42.6
APA *i* 13 20 52.7
APA pmax pmax
comp=Z,8.0nm,1.1s
APA pmax pmax
comp=Z,8.0nm,1.2s
ARCES ARCESS Array B 142.76 346 PKP PKPdf 13 20 50.8 -2.1
comp=Z,2.0nm,0.7s,baz=354,slow=1.2,SNR=5.4
BELG Belogornoye 142.88 313 PKhKP PKPpre 13 20 48.7
comp=Z,11nm,0.7s,baz=319,slow=19,SNR=3.8
BELG Belogornoye 142.88 313 *i* PKIKP PKPdf 13 20 50.1 -3.4
MAK Makhachkala 143.52 297 *e*PKIKP PKPbc 13 20 50.9 -1.5
MAK *e* 13 24 03.4
MAK *e* 13 27 55.4
MAK *e*SS SS 13 42 42.9 -3.5
MAK *e*SSS SSS 13 48 04.8
MAK pmax pmax
comp=Z,180nm,1.1s
GNI Garni 145.39 292 PKPbc PKPab 13 20 58.4 -0.4
comp=Z,6.4nm,0.5s,baz=60,slow=2.1,SNR=4.4
GNI Garni 145.39 292 *i* PKP2 PKPdf 13 20 56.8 -1.8
JOF Joensuu 146.26 336 *e*P PKPab 13 21 01.1 +0.1
VRH Novokhopyorsk 146.72 312 *e*PKP2 PKPbc 13 21 01.0 -1.0
VRH pmax pmax
comp=Z,50nm,1.1s
KBZ Khabaz 146.89 298 PKPbc PKPbc 13 21 02.3 -0.4
comp=Z,5.1nm,0.9s,baz=101,slow=1.7,SNR=10
KBZ Khabaz 146.89 298 *i* PKHKP PKPpre 13 20 57.4
KIV Kislovodsk 147.04 299 *i* PKIKP PKPdf 13 21 00.6 -0.6
KIV pmax pmax
comp=Z,7.0nm,1.1s
KIV MLR MLR
comp=Z,100nm,25.0s
MOS Moscow 147.54 321 *i* PKP2 PKPbc 13 21 03.0 -1.1
MOS pmax pmax
comp=Z,57nm,1.1s
LPSR Galich'ya Gora 147.99 315 *e*PKP2 PKPbc 13 21 04.2 -1.2
LPSR pmax pmax
comp=Z,20nm,1.2s
VORR Voronezh 148.11 314 *e*PKP2 PKPbc 13 21 04.3 -1.5
VORR pmax pmax
comp=Z,20nm,1.0s
VORD Divnogorie 148.26 312 *e*PKP2 PKPbc 13 21 04.4 -1.8
VORD pmax pmax
comp=Z,9.0nm,1.0s
VSR Storozhevoye 148.26 313 *e*PKIKP PKPbc 13 21 03.9 -2.3
VSR pmax pmax
comp=Z,10.0nm,1.0s
OBN Obninsk 148.35 321 PKPbc PKPbc 13 21 05.2 -1.0
comp=Z,22nm,0.4s,baz=116,slow=3.3,SNR=3.0
OBN Obninsk 148.35 321⇑*e*PKIKP PKPbc 13 21 03.9 -2.4
OBN *i* 13 21 06.5
OBN 13 24 31.0
OBN *e*SS SS 13 43 36.7 -3.4
OBN pmax pmax
comp=Z,9.0nm,1.1s
OBN pmax pmax
comp=Z,59nm,1.8s
OBN MLR MLR
comp=Z,256nm,22.0s
VAF Ylistaro 148.78 341 *e*P PKPbc 13 21 06.3 -0.8
KEF Keuruu 148.86 339 *e*P PKiKP 13 21 07.7 -1.1
VSLR Vesyoloye 148.98 298 *i* PKIKP PKPdf 13 21 04.9 +0.7
FIA1 FINESS Array S 149.03 337 PKiKP 13 21 08.0 -1.1
FINES FINESS Array B 149.04 337 PKiKP 13 21 07.9 -1.2
FINES FINESS Array B 149.04 337 PKPbc PKPbc 13 21 07.2 -0.6
comp=Z,5.9nm,0.7s,baz=96,slow=10,SNR=9.3
FINES FINESS Array B 149.04 337 PKP2 PKiKP 13 21 07.9 -1.2
SOC Sochi 149.20 298 *e*PKHKP PKPpre 13 21 01.1
SOC *e* 13 24 35.7
SOC *e*PPP PPP 13 27 59.0
SOC *e*SSS SSS 13 49 30.6
MEF Metsahovi 150.50 337 *e*P PKiKP 13 21 12.0 -0.2
ARBE Arbavere 150.54 334 *e*P PKiKP 13 21 12.4 +0.2
LIC Lamto 150.94 167⇑*i*PKP1 PKiKP 13 21 14.2 -0.4
comp=Z,32nm,0.7s
KIC Kosan Boka 151.13 167⇑*i*PKP1 PKiKP 13 21 14.7 -0.3
comp=Z,13nm,0.6s
EIL Elat 151.17 269 PKPbc PKiKP 13 21 13.8 -0.7
comp=Z,10nm,0.9s,baz=56,slow=2.8,SNR=9.3
TIC Toumodi 151.35 167⇑*i*PKP1 PKiKP 13 21 15.2 -0.2
comp=Z,2.3nm,0.2s
DBIC Dimbokro 151.41 167 PKPbc PKiKP 13 21 15.2 -0.3
DBIC Dimbokro 151.41 167 PKPbc PKiKP 13 21 15.6 0.0
comp=Z,13nm,1.0s,baz=185,slow=2.4,SNR=6.5
DBIC Dimbokro 151.41 167 PKIKP PKiKP 13 21 15.2 -0.3
MMAI Mount Meron Ar 151.72 276 PKPbc PKiKP 13 21 15.1 -0.6
comp=Z,11nm,0.9s,baz=64,slow=7.5,SNR=7.8
MTSE Matsula 151.83 335 *e*P PKiKP 13 21 15.6 +0.6
AAL Aland 151.87 340 *e*P PKiKP 13 21 15.8 +0.8
NB2 NORSAR Subarra 153.00 349 PKP PKiKP 13 21 16.8 -0.6
comp=Z,32nm,2.0s,baz=17,slow=2.6
NOA NORSAR Array B 153.00 349 PKPbc PKPbc 13 21 15.8 -1.4
comp=Z,1.5nm,0.8s,baz=14,slow=4.1,SNR=7.0
HFS Hagfors 153.42 346 PKPbc PKPbc 13 21 15.9 -2.2
comp=Z,1.2nm,0.7s,baz=225,slow=18,SNR=2.5
BRTR Keskin Array B 153.89 290 PKPbc PKPbc 13 21 18.5 -1.5
comp=Z,1.6nm,0.9s,baz=141,slow=4.7,SNR=6.8
PABE Paberze 154.08 330 *e*P PKiKP 13 21 21.2 +1.5
AKASG Malin Array Be 154.29 317 PKPbc PKiKP 13 21 19.6 -0.7
comp=Z,0.6nm,0.4s,baz=55,slow=3.2,SNR=4.1
TORD Torodi Ar. Bea 158.41 181 PKP PKPdf 13 21 18.0 -0.4
comp=Z,1.5nm,1.1s,baz=93,slow=3.0,SNR=6.1
TORD PKPab PKPab 13 21 53.0 +0.1
comp=Z,9.9nm,1.0s,baz=122,slow=2.8,SNR=19
MLR Muntele Rosu 158.45 307 PKPab PKPab 13 21 51.9 -0.8
comp=Z,2.1nm,0.8s,baz=178,slow=4.6,SNR=4.0
EKA Eskdalemuir Ar 159.26 7 PKPab PKPab 13 21 53.2 -2.4
comp=Z,0.5nm,0.5s,baz=333,slow=4.1,SNR=3.9
CRVS Cervenica-Dubn 159.52 319 *e*PKP2 PKPab 13 21 57.9 +0.8
CRVS Cervenica-Dubn 159.52 319 *e*PKP PKPab 13 21 57.9 +0.8
OSTC Ostas 160.90 330 AMS AMS 14 34 10.0
comp=Z,200nm,22.0s
CHVC Chvalec 160.94 330 AMS AMS 14 31 50.0
comp=Z,200nm,19.7s
DPC Dobruska-Polom 161.01 329 AMS AMS 14 37 30.0
comp=Z,200nm,20.4s
KRLC Kraliky 161.02 328 AMS AMS 14 31 10.0
comp=Z,200nm,22.7s
VYHS Vyhne 161.14 322 *e*PKP2 PKPab 13 22 04.8 +0.7
VYHS Vyhne 161.14 322 *e*PKP PKPab 13 22 04.8 +0.7
CLL Collm 161.48 336 *e*PKIKP PKPdf 13 21 20.0 -0.8
CLL *e* 13 22 05.0
HSKC Hora Svate Kat 161.93 334 AMS AMS 14 32 50.0
comp=Z,300nm,30.4s
PRA Prague 161.99 332 AMS AMS 14 35 10.0
comp=Z,300nm,21.1s
PRU Pruhonice 162.01 331 AMS AMS 14 35 20.0
comp=Z,400nm,24.6s
ZVC Zvikov 162.59 331 AMS AMS 14 34 50.0
comp=Z,300nm,21.7s
CKRC Cesky Krumlov 163.02 329 AMS AMS 14 32 10.0
comp=Z,200nm,20.7s
KHC Kasperske Hory 163.07 331 AMS AMS 14 35 10.0
comp=Z,300nm,25.2s
MESJ Messejana 171.75 66 *e*PP PP 13 26 43.5 +0.6
ESDC Sonseca Array 173.59 39 PKP PKPdf 13 21 31.0 +1.1
comp=Z,0.2nm,0.3s,baz=258,slow=6.4,SNR=1.8

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*IDC **02** 13:11:56.0±1.5, 18.°12S×177.°95W, h640km±14km, mb2.9/6, mbtmp3.9/7, Error ellipse: s-maj=33.9km s-min=20.2km az=146.0*

**ISC 02 13:11:56.8**±0.9**, 18.°0S**±0.°2×**178.°1W**±0.°2**, h650**km**, n8, σ0.s62**/11**, mb3.3**/6**, Fiji Islands region**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
MSVF Nonsavu 3.69 274 P P 13 13 23.6 -0.6
28nm,0.6s,baz=131,slow=12,SNR=26
MSVF S S 13 14 34.9 -0.5
9.6nm,1.0s,baz=349,slow=22,SNR=2.0
WRA Warramunga Arr 44.91 260 P P 13 19 17.1 +0.5
1.0nm,0.4s,baz=96,slow=7.0,SNR=48
WRA PcP PcP 13 20 44.1 +0.6
0.1nm,0.3s,baz=98,slow=3.3,SNR=2.4
1.0nm,0.4s
ASAR Alice Springs 45.05 254 P P 13 19 18.4 +0.8
2.6nm,0.7s,baz=90,slow=8.0,SNR=46
ASAR PcP PcP 13 20 44.5 +0.5
0.4nm,0.5s,baz=104,slow=4.0,SNR=5.7
2.6nm,0.7s
QSPA South Pole Qui 72.01 180 P P 13 22 16.2 -0.6
0.6nm,0.6s,baz=34,slow=3.6,SNR=5.8
0.6nm,0.6s
TXAR Lajitas Array 85.81 57 P P 13 23 30.6 +0.7
0.4nm,0.8s,baz=222,slow=3.4,SNR=4.1
0.4nm,0.8s
ILAR Eielson Array 85.95 13 P P 13 23 29.1 -0.6
0.3nm,0.4s,baz=219,slow=4.7,SNR=10
0.3nm,0.4s
PDAR Pinedale Array 87.24 43 P P 13 23 36.5 0.0
0.2nm,0.6s,baz=193,slow=3.7,SNR=2.4
0.2nm,0.6s
GERES GERESS Array B 147.82 345 PKPbc PKPbc 13 30 30.6 0.0
0.6nm,0.5s,baz=2.9,slow=5.9,SNR=2.6

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*IDC **02** 13:38:15.9±0.7, 23.°59N×120.°67E, h0km, mb4.0/18, mbtmp4.0/22, ML3.6/4, MS4.3/5, Error ellipse: s-maj=18.4km s-min=14.5km az=63.0*
*TAP **02** 13:38:18.5, 23.°64N×120.°70E, h13km, ML4.9, B*
*ASIES **02** 13:38:18.5, 23.°64N×120.°70E, h13km, ML4.9, Mw4.3, Moment Tensor Solution. Moment tensor: Scale 10^22Nm; Mrr-1.11; Mθθ2.18; Mφφ-1.68; Mrθ-0.50; Mθφ-1.51; Mφr-1.57; Fault plane solution: M0 3.06312×10^22 NP1: φs328.08000°, δ66.04000°, λ-27.50000°. NP2: φs70.01000°, δ65.04000°, λ-153.39000°. Principal axes: T Plg0.6440°, Azm19.2260°; N Plg54.1520°, Azm110.1180°; P Plg35.8410°, Azm288.7610°;*
*BJI **02** 13:38:18.2±0.0, 23.°68N×120.°63E, h10km, mb4.3/31, mB4.4/10, ML4.8/9, Ms4.3/31, Ms7 4.1/32*
*NEIC **02** 13:38:18.4±2.0, 23.°69N±0.°03×120.°62E±0.°04, h10km±1km, mb4.2/10, Error ellipse: s-maj=6.1km s-min=4.3km az=117.0*
*JMA **02** 13:38:19.1±0.2, 23.°7N±0.°3×120.°7E±0.°6, h18km±2km, MV4.5/15, TAIWAN REGION*

**ISC 02 13:38:18.9**±0.7**, 23.°65N**±0.°01×**120.°69E**±0.°01**, h14**km±5km**, n237, σ0.s99**/347**, mb4.1**/21**, MS4.2**/7**, 86C-23D, Taiwan**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
WGK Gukeng 0.12 288⇓*i*P Pb 13 38 22.5 -0.4
baz=292
WGK S Sb 13 38 25.8 +0.2
baz=292
WDLH Douliu 0.14 286⇓*i*P Pb 13 38 23.1 -0.2
baz=289
WDLH *i* S Sb 13 38 26.5 +0.3
baz=289
WHYT Xinyi Township 0.16 73⇓*i*P Pb 13 38 22.9 -0.7
baz=75
WHYT *i* S Sb 13 38 26.1 -0.7
baz=75
WJS Zhushan 0.18 13⇑*i*P Pb 13 38 23.5 -0.4
baz=9.0
WJS *e*S Sb 13 38 27.2 0.0
baz=9.0
WCKO Fanlu 0.22 200⇑*i*P Pg 13 38 23.9 +0.1
baz=209
WCKO *e*S Sb 13 38 27.9 -0.7
baz=209
CHN2 Minshiung 0.23 239⇑*i*P Pb 13 38 24.4 -0.3
baz=243
CHN2 *i* S Sb 13 38 28.8 +0.2
baz=243
WNT Mingjian 0.23 360 *i* P Pb 13 38 24.6 -0.2
baz=359
WNT *i* S Sb 13 38 28.9 +0.2
baz=359
WTK Tuku 0.28 278⇓*i*P Pb 13 38 25.4 -0.2
baz=280
WTK *i* S Sb 13 38 31.0 +0.9
baz=280
SSLB Suanglung 0.28 61 P Pb 13 38 25.0 -0.7
SSLB Suanglung 0.28 61 Pg 13 38 24.2 -0.7
SSLB Sg Sb 13 38 29.7 -0.6
SSLB Suanglung 0.28 61⇑*i*P Pb 13 38 24.9 -0.7
baz=58
SSLB S Sb 13 38 29.5 -0.8
baz=58
CHY Chiayi 0.28 238⇑*i*P Pb 13 38 25.4 -0.3
baz=240
CHY *i* S Sb 13 38 30.6 +0.3
baz=240
TYC Yuchr 0.30 32⇑*i*P Pb 13 38 25.7 -0.3
baz=31
TYC *i* S Sb 13 38 31.2 +0.5
baz=31
SMLT Sun Moon Lake 0.30 40⇑*i*P Pb 13 38 25.7 -0.4
baz=48
TPUB Ta-pu 0.35 188 P Pg 13 38 25.9 -0.2
TPUB Ta-pu 0.35 188 Pg 13 38 25.8 -0.3
TPUB Ta-pu 0.35 188⇑*i*P Pg 13 38 26.1 0.0
baz=190
TPUB *e*S Sb 13 38 31.7 -0.6
baz=190
WRL Guolierlin Hig 0.38 312⇓*i*P Pb 13 38 27.1 -0.2
baz=312
WRL *i* S Sb 13 38 33.8 +0.7
baz=312
WTP Ta-pu 0.41 189⇑*i*P Pg 13 38 27.0 0.0
baz=190
WTP *e*S Sb 13 38 33.2 -0.7
baz=190
TWK Hsinying 0.42 206⇑*i*P Pb 13 38 27.5 -0.6
baz=205
TWK S Sb 13 38 34.0 -0.3
baz=205
WSF Szhu 0.43 269⇓*i*P Pb 13 38 27.6 -0.6
baz=270
WSF *i* S Sb 13 38 34.7 +0.3
baz=270
WTCT Ta-ch'eng 0.43 300⇓*i*P Pb 13 38 27.6 -0.5
baz=301
WTCT *i* S Sb 13 38 34.8 +0.3
baz=301
VWDT VWDT 0.43 76⇑*i*P Pb 13 38 28.1 -0.1
baz=73
VWDT S Sb 13 38 34.4 -0.2
baz=73
WSL Shuilin Townsh 0.44 253⇓*i*P Pb 13 38 28.1 -0.3
baz=255
WSL *i* S Sb 13 38 35.6 +0.9
baz=255
WCS Beigang Elemen 0.46 27⇑*i*P Pb 13 38 28.3 -0.3
baz=25
WCS *e*S Sb 13 38 35.0 -0.3
baz=25
SNST Tainan City 0.46 202⇑*i*P Pb 13 38 28.1 -0.6
baz=204
SNST S Sb 13 38 35.3 -0.2
baz=204
ICHU Yijhu 0.47 232⇑*i*P Pb 13 38 28.8 -0.1
baz=234
ICHU S Sb 13 38 36.7 +1.0
baz=234
STYH Taoyuan 0.48 170⇑*i*P Pg 13 38 28.2 -0.2
baz=167
STYH S Sg 13 38 35.2 +0.3
baz=167
CHN1 Nanshi 0.48 197⇑*i*P Pg 13 38 28.5 0.0
baz=199
CHN1 S Sb 13 38 36.2 +0.1
baz=199
TCU Taichung 0.50 359⇑*i*P Pb 13 38 29.5 +0.1
baz=359
TCU *i* S Sb 13 38 37.2 +0.7
baz=359
WUSB Renai 0.52 49⇑*i*P Pb 13 38 29.3 -0.5
baz=46
WUSB *i* S Sb 13 38 36.7 -0.6
baz=46
CHN8 Yiju 0.53 235⇑*i*P Pb 13 38 29.6 -0.3
baz=237
CHN8 *i* S Sb 13 38 38.3 +0.9
baz=237
OWD Renai 0.54 56⇑*i*P Pb 13 38 29.9 -0.3
baz=52
OWD S Sb 13 38 37.3 -0.6
baz=52
ELDTW Lidau 0.55 146⇑*i*P Pg 13 38 29.7 0.0
baz=147
ELDTW *e*S Sg 13 38 37.2 +0.1
baz=147
SGST Jiashian 0.57 190⇑*i*P Pg 13 38 29.2 -1.0
baz=190
SGST *e*S Sg 13 38 37.7 -0.1
baz=190
EHY Hungye 0.60 104⇓*i*P Pb 13 38 31.0 -0.1
baz=90
EHY *i* S Sb 13 38 39.6 +0.2
baz=90
CHGB Renai 0.60 47⇑*i*P Pb 13 38 30.9 -0.5
baz=45
CHGB S Sg 13 38 38.7 -0.3
baz=45
YULB Yu-li 0.62 114 P Pg 13 38 30.9 -0.1
YULB Yu-li 0.62 114 Pg 13 38 30.7 -0.3
YULB Yu-li 0.62 114⇓*i*P Pb 13 38 31.1 -0.3
baz=114
YULB S Sb 13 38 39.4 -0.5
baz=114
EHYH Wanrong 0.62 104⇓*i*P Pb 13 38 31.4 -0.1
baz=93
EHYH *e*S Sb 13 38 39.8 -0.3
baz=93
SSHA Shanhua 0.63 216⇑*i*P Pb 13 38 31.8 +0.2
baz=217
SSHA S Sn 13 38 42.3 -0.8
baz=217
TWF1 Yuli 0.63 118⇓*i*P Pb 13 38 31.5 -0.2
baz=117
TWF1 S Sb 13 38 40.4 0.0
baz=117
CHN3 Shinhua 0.64 207⇑*i*P Pb 13 38 32.3 +0.5
baz=209
WARBT Fenglin Townsh 0.65 84⇓*i*P Pb 13 38 31.7 -0.2
baz=89
WARBT *i* S Sg 13 38 40.0 -0.1
baz=89
SLGT Liugui 0.65 183⇑*i*P Pb 13 38 31.6 -0.4
baz=172
SLGT *e*S Sb 13 38 41.7 +0.7
baz=172
EYUL Yuli 0.66 117⇓*e*P Pb 13 38 31.9 -0.1
baz=117
EYUL *e*S Sb 13 38 41.4 +0.4
baz=117
WHP Taichung City 0.67 21⇑*i*P Pb 13 38 32.4 +0.1
baz=20
WHP S Sb 13 38 42.3 +0.8
baz=20
EHD Haiduan 0.69 136 P Pb 13 38 32.4 -0.2
baz=146
EHD *i* S Sb 13 38 41.8 -0.2
baz=146
HGSD Ruisui 0.69 103⇓*i*P Pb 13 38 33.0 +0.3
baz=93
HGSD S Sb 13 38 42.7 +0.5
baz=93
WDJ Dajia District 0.70 357⇑*i*P Pn 13 38 33.3 -1.0
baz=356
WDJ *i* S Sn 13 38 44.1 -0.7
baz=356
TWQ1 Liyutan 0.70 7⇑*i*P Pb 13 38 33.1 +0.3
baz=6.0
TWQ1 *i* S Sn 13 38 43.5 -1.5
baz=6.0
ESL Shilin 0.70 76⇑*i*P Pb 13 38 32.9 0.0
baz=75
ESL *e*S Sb 13 38 42.2 -0.2
baz=75
FULB Fuli 0.72 129⇓*i*P Pb 13 38 33.5 +0.4
baz=129
FULB *e*S Sn 13 38 44.1 -1.3
baz=129
WHF Hehuan Shan 0.72 47⇑*i*P Pb 13 38 33.4 -0.1
baz=45
WHF *i* S Sb 13 38 43.4 0.0
baz=45
ECS Chishang 0.74 138 ⇑P Pb 13 38 33.6 +0.1
baz=139
ECS *e*S Sb 13 38 43.6 +0.2
baz=139
TAI1 Yung-k'ang 0.74 215⇑*i*P Pb 13 38 33.8 +0.3
baz=215
TDCB Techi 0.74 36⇑*i*P Pg 13 38 33.0 -0.3
baz=42
TDCB S Sg 13 38 42.5 -0.6
baz=42
TSCK Chigu Township 0.74 228 *e*P Pb 13 38 33.3 -0.3
baz=244
TSCK S Sn 13 38 45.4 -0.6
baz=244
TWT Tachien 0.75 37⇑*i*P Pg 13 38 33.0 -0.5
baz=42
TWT S Sb 13 38 43.4 -0.5
baz=42
LXIB Xiulin Townshi 0.76 61⇑*i*P Pb 13 38 33.8 -0.2
baz=47
LXIB S Sb 13 38 44.9 +0.7
baz=47
NSY Sanyi 0.77 5⇑*i*P Pn 13 38 34.5 -0.7
baz=5.0
NSY *i* S Sn 13 38 46.0 -0.6
baz=5.0
ECBN Changbin 0.78 115⇓*i*P Pn 13 38 35.1 -0.2
baz=115
ECBN *e*S Sn 13 38 45.8 -0.9
baz=115
SCST Cishan 0.78 193⇑*i*P Pb 13 38 34.5 +0.3

baz=194
SCST eS Sn 13 38 46.2 -0.7
baz=194
**FUSS Fushou** 0.78 40⇑iP Pg 13 38 33.7 -0.5
baz=38
FUSS eS Sb 13 38 45.1 +0.1
baz=38
**CHKH Chenggong** 0.80 125⇓eP Pn 13 38 34.9 -0.7
baz=133
CHKH eS Sb 13 38 45.6 +0.6
baz=133
**ETM Tongmen** 0.80 67⇑iP Pb 13 38 34.3 -0.3
baz=65
ETM eS Sg 13 38 44.6 -0.5
baz=65
**SHUL Shoufeng** 0.81 80 ⇑P Pn 13 38 35.3 -0.6
baz=78
SHUL eS Sb 13 38 46.4 +0.8
baz=78
**CHKT Chengkung** 0.83 131⇑eP Pn 13 38 35.8 -0.3
baz=139
CHKT eS Sn 13 38 47.1 -1.0
baz=139
**LONT Longtian** 0.84 151⇑iP Pb 13 38 35.1 -0.2
baz=143
LONT S Sb 13 38 46.7 +0.2
baz=143
**TWM1 Shoushan** 0.86 196⇑iP Pn 13 38 36.4 -0.1
baz=197
**TEYL Yanliau Villag** 0.86 75⇑iP Pn 13 38 36.2 -0.4
baz=71
TEYL eS Sb 13 38 47.8 +0.8
baz=71
**EDH Donghe** 0.88 140 ⇑P Pn 13 38 36.2 -0.6
baz=148
EDH eS Sn 13 38 49.0 -0.4
baz=148
**NMLH Miaoli** 0.89 6⇑iP Pn 13 38 36.5 -0.4
baz=352
NMLH i S Sn 13 38 48.9 -0.7
baz=352
**TWG Pinlang** 0.90 157 Pg 13 38 35.8 -0.5
**TWG Pinlang** 0.90 157⇑iP Pg 13 38 36.0 -0.3
baz=158
TWG S Sg 13 38 47.9 -0.2
baz=158
**HWA Hwalien** 0.90 69⇑iP Pn 13 38 36.7 -0.4
baz=67
HWA S Sn 13 38 49.4 -0.5
baz=67
**TWGBT Beinan** 0.90 156 P Pg 13 38 35.9 -0.5
**TWGBT Beinan** 0.90 156⇑iP Pg 13 38 36.0 -0.5
baz=158
TWGBT S Sg 13 38 48.0 -0.3
baz=158
**ETLH Xiulin Townshi** 0.92 53⇑iP Pg 13 38 36.1 -0.5
baz=45
ETLH eS Sb 13 38 49.1 +0.5
baz=45
**TWD Chiawan** 0.94 63⇑iP Pb 13 38 36.5 -0.4
baz=60
TWD eS Sg 13 38 48.7 -0.6
baz=60
**SGLT Jiouru** 0.94 191 ⇑P Pn 13 38 37.4 -0.2
baz=191
**TSMG Majia** 0.94 182⇑iP Pb 13 38 36.5 -0.4
baz=176
TSMG eS Sb 13 38 49.9 +0.7
baz=176
**NACB Ninganchiao** 0.98 58 P Pb 13 38 37.2 -0.4
**NACB Ninganchiao** 0.98 58 Pb 13 38 36.9 -0.7
**NACB Ninganchiao** 0.98 58⇑iP Pb 13 38 37.0 -0.7
baz=55
NACB S Sb 13 38 49.5 -0.9
baz=55
**TTN Taitung** 0.99 154⇑iP Pn 13 38 38.4 +0.2
baz=156
TTN eS Sn 13 38 51.5 -0.5
baz=156
**ETL Fush Village** 1.00 59 eP Pb 13 38 37.6 -0.3
baz=57
ETL S Sb 13 38 50.6 -0.2
baz=57
**NNSB Datong** 1.00 39⇑iP Pb 13 38 37.4 -0.7
baz=47
**NNS Nan Shan** 1.01 38⇑iP Pb 13 38 37.6 -0.6
baz=37
NNS eS Sg 13 38 51.7 +0.1
baz=37
**NSTT Nanjuang** 1.02 16⇑iP Pn 13 38 38.3 -0.4
baz=16
NSTT i S Sn 13 38 52.2 -0.6
baz=16
**WDGT Dungji** 1.02 248⇓iP Pb 13 38 37.0 -1.2
baz=249
WDGT S Sb 13 38 51.2 -0.3
baz=249
**PHUB P'eng-hu** 1.03 263⇓iP Pb 13 38 37.0 -1.5
baz=264
PHUB S Sb 13 38 51.1 -0.8
baz=264
**MASBT Mashibuluo** 1.03 183⇑iP Pb 13 38 38.0 -0.5
baz=184
MASBT eS Sg 13 38 52.5 +0.2
baz=184
**LIOB Emei** 1.04 17⇑iP Pn 13 38 38.6 -0.4
baz=16
LIOB S Sn 13 38 53.3 +0.1
baz=16
**PNG Penghu** 1.04 266⇓iP Pb 13 38 37.2 -1.4
baz=266
PNG eS Sb 13 38 51.1 -1.0
baz=266
**NFF Wufeng Townshi** 1.05 22⇑iP Pg 13 38 38.8 -0.4
baz=10.0
NFF i S Sg 13 38 52.7 -0.4
baz=10.0
**ECL Taimali** 1.08 167⇑iP Pb 13 38 39.0 -0.3
baz=158
ECL eS Sg 13 38 53.8 +0.1
baz=158
**LATG Datong** 1.17 41⇑iP Pb 13 38 40.3 -0.6
baz=39
LATG S Sb 13 38 55.6 -0.4
baz=39
**SBCB Hsinchu** 1.17 13⇑iP Pn 13 38 40.6 -0.2
baz=13
SBCB i S Sn 13 38 57.5 +0.9
baz=13
**HSN Hsinchu** 1.18 13⇑iP Pg 13 38 41.1 -0.5
baz=13
HSN eS Sn 13 38 57.9 +1.2
baz=13
**EAHA Aohua** 1.18 55 ⇑P Pn 13 38 40.5 -0.3
baz=52
EAHA eS Sb 13 38 55.9 -0.2
baz=52
**NSK Sanguang** 1.19 31⇑iP Pb 13 38 41.0 -0.2
baz=30
NSK S Sn 13 38 57.1 -0.1
baz=30
**YHNB Yeheng** 1.20 32 P Pb 13 38 41.2 -0.1
**YHNB Yeheng** 1.20 32 Pb 13 38 41.0 -0.3
**YHNB Yeheng** 1.20 32⇑iP Pb 13 38 41.0 -0.3
baz=21
YHNB S Sb 13 38 55.3 -1.3
baz=21
**LDUT Ludao** 1.21 143⇑eP Pn 13 38 40.9 -0.4
baz=129
LDUT S Sn 13 38 57.6 +0.2
baz=129
**NDT Datong Townshi** 1.21 38⇑iP Pn 13 38 41.1 -0.3
baz=28
NDT eS Sg 13 38 58.4 +0.3
baz=28
**VCHM Qimei** 1.23 249⇓iP Pn 13 38 40.3 -1.3
baz=250
VCHM i S Sb 13 38 56.2 -1.5
baz=250
**ENA Nanau** 1.24 51⇑iP Pb 13 38 41.6 -0.4
baz=49
ENA S Sn 13 38 58.1 0.0
baz=49
**EAST Anshuo** 1.27 173⇑iP Pn 13 38 42.0 -0.2
baz=175
EAST eS Sg 13 38 59.4 -0.5
baz=175
**ENTT Nioudou** 1.27 39 eP Pb 13 38 42.2 -0.4
baz=29
ENTT eS Sb 13 38 58.1 -0.7
baz=29
**SCZT Fangliau** 1.27 183⇑iP Pn 13 38 41.9 -0.2
baz=184
SCZT eS Sn 13 38 59.3 +0.2
baz=184
**EWUT Wuta** 1.27 51 ⇑P Pb 13 38 42.3 -0.3
baz=49
EWUT eS Sn 13 38 59.1 0.0
baz=49
**TAW Tawu** 1.30 171 eP Pb 13 38 42.7 -0.4
baz=173
TAW eS Sn 13 38 59.7 0.0
baz=173
**TAWH Dawu Township** 1.32 172 eP Pn 13 38 42.8 0.0
baz=184
**TWP Hsiaoliuchiu** 1.33 193 eP Pb 13 38 43.1 -0.4
baz=194
**NWLT Wulai** 1.35 33 ⇑P Pb 13 38 43.5 -0.4
baz=38
NWLT eS Sg 13 39 01.5 -0.9
baz=38
**NDS Dongshan** 1.36 44 ⇑P Pb 13 38 44.0 -0.1
baz=51
NDS eS Sb 13 39 01.4 +0.1
baz=51
**FUSB Fushanzhiwuyua** 1.38 36⇑iP Pb 13 38 44.0 -0.5
baz=28
FUSB eS Sn 13 39 01.2 -0.6
baz=28
**NCUH Zhongli** 1.39 19 eP Pg 13 38 44.8 -0.8
baz=2.0
NCUH eS Sg 13 39 03.9 +0.2
baz=2.0
**TWE Neicheng** 1.39 40⇑iP Pb 13 38 44.6 -0.1
baz=33
TWE eS Sg 13 39 03.5 -0.3
baz=33
**ESAO Su ao** 1.40 49 ⇑P Pb 13 38 44.4 -0.4
baz=46
ESAO eS Sb 13 39 02.7 +0.1
baz=46
**TWC Suao** 1.43 48⇑iP Pb 13 38 44.9 -0.4
baz=46
TWC eS Sb 13 39 03.5 +0.3
baz=46
**SLIU Shizi** 1.43 176⇑eP Pn 13 38 44.1 -0.2
baz=178
SLIU eS Sg 13 39 05.8 +0.7
baz=178
**ILA Ilan** 1.48 41 eP Pb 13 38 45.8 -0.3
baz=48
ILA eS Sb 13 39 04.5 -0.1
baz=48
**TATO Taipei** 1.51 29 P Pn 13 38 45.7 +0.3
**TATO Taipei** 1.51 29 Pn 13 38 45.3 -0.1
**NHDH Xindian Distri** 1.52 30 eP Pn 13 38 45.8 +0.3
baz=17
NHDH eS Sb 13 39 06.0 +0.2
baz=17
**TWA Mucha** 1.56 32⇑iP Pn 13 38 46.3 +0.2
baz=18
TWA eS Sn 13 39 06.3 +0.2
baz=18
**EOS4 EOS4** 1.57 72 eP Pb 13 38 46.5 -0.9
baz=71
**TWS1 Kuangyinshan** 1.59 25 eP Pn 13 38 46.3 -0.2
baz=12
TWS1 S Sb 13 39 08.0 0.0
baz=12
**EOS2 EOS2** 1.61 61 eP Pg 13 38 48.6 -1.1
baz=59
**EOS3 EOS3** 1.62 67 eP Pb 13 38 48.0 -0.5
baz=81
**HEN Hengchun** 1.64 178 eP Pn 13 38 47.1 0.0
baz=179
**EGS** 1.65 43 eP Pg 13 38 49.5 -1.0
baz=29
**NTST Danshui** 1.66 25 eP Pn 13 38 47.6 0.0
baz=6.0
**TIPB Shuangxi** 1.68 38 eP Pb 13 38 48.8 -0.8
baz=22
**YM01 YM01** 1.69 28⇑eP Pn 13 38 47.8 -0.2
baz=9.0
YM01 eS Sn 13 39 09.7 +0.2
baz=9.0
**TWK1 Hengchun** 1.70 176 eP Pn 13 38 48.2 +0.1
baz=186
**ANP Anpu** 1.71 26 eP Pn 13 38 47.9 -0.3
baz=8.0
**NWF Wu-fen Shan** 1.73 35 eP Pb 13 38 49.6 -0.9
baz=15
**WFSB Wu-fen Shan** 1.73 35 eP Pn 13 38 48.9 +0.4
baz=15
**YM08 YM08** 1.74 28 eP Pn 13 38 48.2 -0.5
baz=9.0
**VWUC VWUC** 1.75 320 eP Pn 13 38 47.1 -1.6
baz=320
**LAY Lan-yu** 1.79 153 eP Pn 13 38 49.9 +0.6
baz=154
**TNOU National Taiwa** 1.79 33 eP Pn 13 38 49.6 +0.2
baz=14
**TWB1 Santiao Chiao** 1.80 41 eP Pn 13 38 50.2 +0.7
baz=23
**SXI1 Grass Mountain** 1.80 37 eP Pn 13 38 50.0 +0.5
baz=22
**LYUB Lan-yu** 1.84 153 eP Pn 13 38 48.2 -1.7
baz=154
**PTMZ Houxiangcun** 1.99 314 eP Pn 13 38 50.6 -1.4
baz=314
**KNM Kinmen** 2.20 291 eP Pn 13 38 55.1 +0.2
baz=289
**JYNG Yonagunijimaku** 2.21 68 eP Pn 13 38 56.1 +1.0
JYNG eS Sn 13 39 23.3 +1.1
**KNMB Chin-men Tao** 2.25 292 Pn 13 38 54.0 -1.6
**KNMB Chin-men Tao** 2.25 292 eP Pn 13 38 54.1 -1.6
baz=291
**YOJ Yonaguni jima** 2.27 69 P Pn 13 38 57.2 +1.3
**YOJ Yonaguni jima** 2.27 69 Pn Pn 13 38 56.8 +0.8
**YOJ Yonaguni jima** 2.27 69 eP Pn 13 38 56.8 +0.8
baz=68
**YOJ Yonaguni jima** 2.27 69 eP Pn 13 38 57.0 +1.1
**QZH Quanzhou** 2.30 304⇓iPn Pn 13 38 54.6 -1.8
QZH Pg Pg 13 39 01.5 -1.6
QZH Sn Sn 13 39 21.8 -2.7
QZH smax smax
comp=N,2μm,1.1s
QZH smax smax
comp=E,2μm,0.7s
**MATB Ma-tsu** 2.58 345 eP Pn 13 38 58.8 -1.4
baz=344
**ZPLA Ao Xicun** 2.70 277 eP Pn 13 39 02.3 +0.5
baz=277
**IRIF Iriomote-Funau** 2.87 76 eP Pn 13 39 05.1 +1.0
**HATJ Hateruma jima** 2.88 81 eP Pn 13 39 05.5 +1.2
**DSXP Dongshan** 2.99 272 eP Pn 13 39 04.6 -1.2
baz=272
**LYJJ Jianjiangzhen** 3.01 344 eP Pn 13 39 05.0 -1.1
baz=343
**JKRS Kuro-shima** 3.10 78 eP Pn 13 39 08.7 +1.4
**JIJ Ishigaki jima** 3.24 77 eP Pn 13 39 09.6 +0.3
**XPSS Dashiqiu** 3.30 352 eP Pn 13 39 08.7 -1.3
baz=351
**JISG Ishigakijimahi** 3.44 74 eP Pn 13 39 12.2 +0.2
**JTJ Tarama** 3.80 74 eP Pn 13 39 17.7 +0.8
**JMJ Miyako jima 2** 4.36 74 P Pn 13 39 26.5 +1.8
**HKPS Hong Kong Po S** 6.18 259 P Pn 13 39 49.3 -0.5
**HKPS Hong Kong Po S** 6.18 259 Pn Pn 13 39 49.3 -0.5
**JOW Kunigami** 7.57 64 P Pn 13 40 09.5 +0.8
**JOW Kunigami** 7.57 64 Pn Pn 13 40 08.2 -0.6
5.0nm,0.3s,baz=134,slow=21,SNR=8.4
JOW Sn Sn 13 41 33.5 -0.8
0.7nm,0.3s,baz=17,slow=30,SNR=2.2
13nm,0.3s
**CNSH ChangSha** 8.31 305 P Pn 13 40 16.2 -2.7
CNSH smax smax
comp=N,490nm,0.9s
CNSH smax smax
comp=E,470nm,1.2s
**NJ2 Nanjing** 8.53 349 eP Pn 13 40 22.3 +0.4
NJ2 pmax pmax
comp=Z,21nm,0.5s
NJ2 smax smax
comp=N,340nm,1.0s
NJ2 smax smax
comp=E,290nm,0.9s
NJ2 LR LR
comp=N,1μm,5.9s
NJ2 LR LR
comp=E,890nm,5.7s
NJ2 LR LR
comp=Z,820nm,6.4s
**WHN Wuhan** 8.89 322 P Pn 13 40 30.7 +3.9
WHN S Sn 13 42 13.3 +6.6
WHN LR LR
comp=Z,4μm,9.1s
**GULI GuiLin** 9.54 282 P Pn 13 40 36.3 +0.5
**QIZ Qiongzhong** 11.10 248 P Pn 13 40 56.0 -1.2
QIZ S Sn 13 43 01.1 -0.1
QIZ LR LR
comp=N,640nm,14.8s
QIZ LR LR
comp=E,370nm,13.4s
QIZ LR LR
comp=Z,470nm,19.5s
**JNU Nakatsue** 13.01 41 Pn Pn 13 41 22.8 -0.5
0.2nm,0.3s,baz=83,slow=21,SNR=1.6
8.1nm,1.0s
**GYA Guiyang** 13.01 285 P Pn 13 41 24.2 +0.7
GYA pmax pmax
comp=Z,26nm,0.9s
GYA LR LR
comp=Z,300nm,23.1s
**LYN LuoYang** 13.02 328 P Pn 13 41 26.3 +3.0
LYN PP P 13 41 37.2 +3.4
LYN LR LR
comp=N,1μm,10.6s
LYN LR LR
comp=E,580nm,9.3s
LYN LR LR
comp=Z,1μm,10.0s
**XAN Xi'an** 14.60 318 P P 13 41 52.6 +1.2
XAN pP Pn 13 41 57.3 +12
XAN pmax pmax
comp=Z,24nm,0.9s
XAN LR LR
comp=N,760nm,7.0s
XAN LR LR
comp=E,990nm,9.2s
XAN LR LR
comp=Z,1μm,10.5s
**HNS HongShan** 14.63 341 ⇑P P 13 41 54.2 +2.5
HNS S S 13 44 50.4 +4.0
HNS pmax pmax
comp=Z,16nm,0.7s
HNS LR LR
comp=N,740nm,11.2s
HNS LR LR
comp=E,670nm,11.2s
HNS LR LR
comp=Z,510nm,13.5s
**KSRS Korea Array** 15.10 23 Pn Pn 13 41 50.5 -1.2
comp=Z,0.3nm,0.3s,baz=232,slow=40,SNR=5.4
comp=Z,0.7nm,0.5s
**SLVN Son La** 15.68 265 Pn 13 42 00.9 +1.4
SLVN IAmb IAmb 13 42 02.1
comp=Z,8.1nm,0.6s
**CD2 Chengdu** 16.69 299 P P 13 42 13.4 -1.2
CD2 pP pP 13 42 16.2 -2.6
CD2 sP sP 13 42 19.5 -1.2
CD2 S Sn 13 45 16.4 -1.1
CD2 pmax pmax
comp=Z,70nm,0.9s
CD2 LR LR
comp=Z,520nm,9.0s
CD2 LR LR
comp=Z,430nm,8.7s
CD2 LR LR
comp=Z,540nm,9.8s
**BJI Beijing** 16.78 348 P Pn 13 42 12.8 -0.6
BJI sP pP 13 42 19.4 -0.2
BJI pmax pmax
comp=Z,3.0nm,0.8s
BJI pmax pmax
comp=Z,52nm,5.3s
BJI LR LR
comp=Z,140nm,12.8s
BJI LR LR
comp=Z,320nm,12.8s
BJI LR LR
comp=Z,120nm,16.3s
**LZH Lanzhou** 19.12 314 ⇑P Pn 13 42 44.2 +1.8
LZH pmax pmax
comp=Z,30nm,1.1s
LZH LR LR
comp=Z,230nm,10.0s
LZH LR LR
comp=Z,560nm,10.3s
LZH LR LR
comp=Z,640nm,11.3s
**JCJ Chichijima** 19.72 75 LR LR 13 49 19.6
comp=Z,27nm,20.2s,baz=230,slow=34
**MJAR Matsushiro Arr** 19.83 46 P Pn 13 42 49.9 -0.9
baz=229,slow=7.9,SNR=4.9
comp=Z,1.7nm,0.8s
**TNCH TengChong** 20.24 278 P P 13 42 52.4 -1.6
TNCH pP pP 13 42 58.4 +0.1
TNCH pmax pmax
comp=Z,110nm,3.3s
**CN2 Changchun** 20.48 10 eP P 13 42 56.5 +0.4
CN2 eS S 13 46 39.1 -5.8
CN2 pmax pmax
comp=Z,10.0nm,0.5s
CN2 pmax pmax
comp=Z,100nm,4.0s
CN2 LR LR
comp=Z,300nm,11.0s
CN2 LR LR
comp=Z,200nm,11.0s
CN2 LR LR
comp=Z,300nm,11.1s
**CHTO Chiang Mai** 20.82 261 P Pn 13 43 03.2 +0.7
CHTO IAmb IAmb 13 43 05.2
comp=Z,9.3nm,0.9s
**CMAR Chiang Mai Arr** 20.93 260 P P 13 43 00.3 -0.9
comp=Z,0.7nm,0.3s,baz=45,slow=10,SNR=5.1
comp=Z,0.7nm,0.3s
**USRK Ussuriysk Ar.** 22.50 22 P P 13 43 17.4 -0.4
comp=Z,2.4nm,0.7s,baz=197,slow=6.4,SNR=3.9
comp=Z,2.4nm,0.7s
**SONM Songino Array** 26.69 338 P P 13 43 55.8 -1.7
comp=Z,3.2nm,0.9s,baz=160,slow=9.7,SNR=13
SONM LR LR 13 55 57.1
comp=Z,333nm,19.4s,baz=144,slow=40
comp=Z,3.2nm,0.9s
**HEH HeiHe** 27.07 10 eP P 13 44 04.8 +4.0
HEH pmax pmax
comp=Z,6.0nm,0.8s
HEH LR LR
comp=Z,160nm,10.2s
HEH LR LR
comp=Z,230nm,11.7s
HEH LR LR
comp=Z,260nm,10.9s
**MK31 Makanchi Array** 38.41 317 P P 13 45 40.0 +0.2
**MKAR Makanchi Array** 38.41 317 P P 13 45 40.0 +0.2
**MKAR Makanchi Array** 38.41 317 P P 13 45 39.5 -0.4
comp=Z,2.7nm,0.7s,baz=109,slow=10,SNR=18
comp=Z,2.7nm,0.7s
**MAKZ Makanchi** 38.61 316 P P 13 45 41.0 -0.5
MAKZ IAmb IAmb 13 45 43.0
comp=Z,6.7nm,1.2s
**ZAA0 Zalesovo Array** 40.45 328 P P 13 45 55.5 -1.1
ZAA0 IAmb IAmb 13 45 57.3
comp=Z,13nm,0.8s
**ZALV Zalesovo Beam** 40.45 328 P P 13 45 56.2 -0.5
**ZALV Zalesovo Beam** 40.45 328 P P 13 45 56.5 -0.1
comp=Z,12nm,0.7s,baz=115,slow=8.4,SNR=41
comp=Z,12nm,0.7s
**KSH Kashi** 40.81 304 P P 13 46 03.0 +2.9
KSH pmax pmax
comp=Z,3.0nm,1.2s
**KURK Kurchatov** 42.21 321 P P 13 46 10.9 -0.3
**KURBB Kurchatov Arra** 42.23 320 P P 13 46 10.8 -0.5
comp=Z,0.9nm,0.6s,baz=112,slow=8.7,SNR=16
comp=Z,0.9nm,0.6s
**H11N1 WAKE ISLAND Hy** 42.98 86 T T 14 31 31.6
baz=283,slow=74,SNR=5.4
**H11N2 WAKE ISLAND Hy** 42.98 86 T T 14 31 31.8
baz=283,slow=74,SNR=5.0
**H11N3 WAKE ISLAND Hy** 42.99 86 T T 14 31 34.7
baz=283,slow=74,SNR=6.2
**H11S3 WAKE ISLAND Hy** 43.09 88 T T 14 32 10.9

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | baz=284 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 43.10 | 88 | T | T | 14 31 58.6 | |
| | baz=284 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 43.11 | 88 | T | T | 14 32 06.1 | |
| | baz=284 | | | | | | |
| COEN | Coen | 43.37 | 147 | P | P | 13 46 19.8 | -1.1 |
| WRA | Warramunga Arr | 45.33 | 162 | P | P | 13 46 33.9 | -2.7 |
| | comp=Z,1.2nm,0.5s,baz=344,slow=8.7,SNR=17 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| BRVK | Borovoye | 47.87 | 321 | P | P | 13 46 55.1 | -1.1 |
| ASAR | Alice Springs | 48.75 | 164 | P | P | 13 47 01.8 | -1.6 |
| | comp=Z,0.5nm,0.4s,baz=343,slow=7.3,SNR=8.5 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| ABKAR | Akbulak array | 53.49 | 315 | P | P | 13 47 39.0 | +0.3 |
| ABKAR | Akbulak array | 53.49 | 315 | P | P | 13 47 39.0 | +0.3 |
| ABKAR | | | | IAmb | IAmb | 13 47 39.6 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| AKTO | Aktyubinsk | 54.84 | 316 | P | P | 13 47 47.8 | -0.7 |
| | comp=Z,1.2nm,0.5s,baz=122,slow=3.9,SNR=6.3 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| ARU | Arti | 55.26 | 323 | P | P | 13 47 51.1 | -0.3 |
| | comp=Z,3.2nm,0.4s,baz=110,slow=1.9,SNR=7.6 | | | | | | |
| | comp=Z,3.2nm,0.4s | | | | | | |
| STKA | Stephens Creek | 58.73 | 159 | P | P | 13 48 17.0 | +0.8 |
| | comp=Z,2.2nm,0.8s,baz=322,slow=8.5,SNR=4.4 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| KBZ | Khabaz | 65.46 | 309 | P | P | 13 49 01.9 | +0.5 |
| | comp=Z,2.5nm,0.9s,baz=90,slow=3.7,SNR=4.7 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| ILAR | Eielson Array | 69.89 | 27 | P | P | 13 49 30.7 | +1.7 |
| | comp=Z,0.2nm,0.6s,baz=265,slow=5.4,SNR=4.4 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| FINES | FINESS Array B | 71.67 | 330 | P | P | 13 49 40.9 | +1.0 |
| | comp=Z,0.5nm,0.7s,baz=348,slow=5.8,SNR=1.4 | | | | | | |
| FINES | | | | LR | LR | 14 22 59.9 | |
| | comp=Z,152nm,21.2s,baz=63,slow=37 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| BRTR | Keskin Array B | 73.12 | 306 | P | P | 13 49 49.1 | 0.0 |
| | comp=Z,1.2nm,0.9s,baz=70,slow=7.1,SNR=4.5 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| NACGM | Naroch | 73.17 | 323 | eP | P | 13 49 43.8 | -5.1 |
| | comp=N,856nm,0.8s,baz=73 | | | | | | |
| MMAI | Mount Meron Ar | 73.76 | 299 | LR | LR | 14 26 54.8 | |
| | comp=N,308nm,21.0s,baz=58,slow=40 | | | | | | |
| HFS | Hagfors | 77.81 | 331 | P | P | 13 50 14.4 | -1.1 |
| | comp=N,0.8nm,0.7s,baz=148,slow=11,SNR=1.7 | | | | | | |
| | comp=N,0.8nm,0.7s | | | | | | |
| NB2 | NORSAR Subarra | 78.48 | 332 | P | P | 13 50 18.8 | -0.5 |
| | comp=Z,3.4nm,1.1s,baz=61,slow=5.6 | | | | | | |
| NOA | NORSAR Array B | 78.48 | 332 | P | P | 13 50 17.9 | -1.4 |
| | comp=Z,0.4nm,0.7s,baz=62,slow=5.5,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| VRAC | Vranov | 81.06 | 320 | LR | LR | 14 31 24.8 | |
| | comp=Z,104nm,19.3s,baz=30,slow=39 | | | | | | |
| KEST | Kesra | 92.27 | 311 | LR | LR | 14 39 16.5 | |
| | comp=Z,335nm,21.4s,baz=280,slow=40 | | | | | | |
| PDAR | Pinedale Array | 99.32 | 35 | P | Pdif | 13 51 59.2 | -1.8 |
| | comp=Z,0.2nm,0.8s,baz=298,slow=3.8,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.8s | | | | | | |

*KRNET **02** 13:54:10.0±0.1, 40.76N×78.09E, h18km, mb2.1*
*SOME **02** 13:54:09.0, 41.42N×79.20E, h20km*
*NNC **02** 13:54:10.3±0.7, 41.49N×79.06E, h0km, mb3.0, mpv2.9, Error ellipse: s-maj=4.9km s-min=3.3km az=155.0*
**ISC 02 13:54:09.0**±2.4, **41.51N**±0.09×**79.14E**±0.05, **h8**km±13km, **n44**, σ1s09/70, **6C-11D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TARG | Taragay, Kyrgy | 1.02 | 283 | ⇓iP | Pg | 13 54 29.0 | +0.3 |
| | baz=47 | | | | | | |
| TARG | | | | ⇓iS | Sb | 13 54 42.8 | -0.1 |
| | baz=47 | | | | | | |
| PRZ | Przheval'sk | 1.12 | 331 | ⇑eP | Sg | 13 54 42.5 | -2.5 |
| | baz=7.0 | | | | | | |
| PRZ | | | | ⇑eS | Sn | 13 55 06.2 | +19 |
| | baz=7.0 | | | | | | |
| KDJ | Kajisay | 1.59 | 294 | ⇓eP | Pb | 13 54 38.4 | -0.3 |
| | baz=34 | | | | | | |
| KDJ | | | | ⇓iS | Sb | 13 54 59.2 | +0.2 |
| | baz=34 | | | | | | |
| UZB | Uzynbulak | 1.64 | 357 | eP | Pb | 13 54 39.8 | +0.2 |
| | 1.2nm,0.1s | | | | | | |
| UZB | | | | eS | Sg | 13 55 02.1 | +0.4 |
| | 4.7nm,0.6s | | | | | | |
| UZB | Uzynbulak | 1.64 | 357 | P | Pb | 13 54 39.8 | +0.2 |
| | 1.2nm,0.1s | | | | | | |
| UZB | | | | S | Sg | 13 55 02.1 | +0.4 |
| | 4.7nm,0.6s | | | | | | |
| SATY | Saty | 1.64 | 341 | eP | Pg | 13 54 40.4 | 0.0 |
| | 3.3nm,0.5s | | | | | | |
| SATY | | | | eS | Sg | 13 55 03.1 | +1.3 |
| | 12nm,0.2s | | | | | | |
| SATY | Saty | 1.64 | 341 | P | Pg | 13 54 40.4 | 0.0 |
| | 3.3nm,0.5s | | | | | | |
| SATY | | | | S | Sg | 13 55 03.1 | +1.3 |
| | 12nm,0.2s | | | | | | |
| ZHN | Zhinishke | 1.74 | 343 | eP | Pb | 13 54 41.6 | +0.4 |
| | 5.8nm,0.2s | | | | | | |
| ZHN | | | | eS | Sg | 13 55 05.2 | +0.4 |
| | 37nm,0.3s | | | | | | |
| ZHN | Zhinishke | 1.74 | 343 | P | Pb | 13 54 41.6 | +0.4 |
| | 5.8nm,0.2s | | | | | | |
| ZHN | | | | S | Sg | 13 55 05.2 | +0.4 |
| | 37nm,0.3s | | | | | | |
| PDGK | Podgornoye | 1.84 | 8 | P | Pg | 13 54 44.3 | +0.1 |
| | 1.2nm,0.1s | | | | | | |
| PDGK | | | | S | Sg | 13 55 09.9 | +1.9 |
| | 7.4nm,0.8s | | | | | | |
| PDGK | Podgornoye | 1.84 | 8 | ⇓Pg | Pg | 13 54 44.3 | +0.1 |
| | 1.2nm,0.4s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 13 55 10.9 | |
| | 10nm,0.5s | | | | | | |
| KPKS | Kokpek | 1.98 | 350 | eP | Pg | 13 54 46.4 | -0.6 |
| | 6.8nm,0.0s | | | | | | |
| KPKS | | | | eS | Sg | 13 55 13.7 | +1.0 |
| | 16nm,0.5s | | | | | | |
| KPKS | Kokpek | 1.98 | 350 | Pg | Pg | 13 54 46.4 | -0.6 |
| | 6.8nm,0.0s | | | | | | |
| KPKS | | | | Lg | Lg | 13 55 13.7 | |
| | 16nm,0.5s | | | | | | |
| KURS | Kuram | 2.10 | 340 | eP | Pg | 13 54 48.5 | -0.8 |
| | 6.0nm,0.5s | | | | | | |
| KURS | | | | eS | Sg | 13 55 17.0 | +0.4 |
| | 3.6nm,0.2s | | | | | | |
| KURS | Kuram | 2.10 | 340 | Pg | Pg | 13 54 48.5 | -0.8 |
| | 6.0nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 13 55 17.0 | |
| | 3.6nm,0.2s | | | | | | |
| KTMS | Ketmen | 2.13 | 25 | eP | Pb | 13 54 48.4 | +0.4 |
| | 0.9nm,0.2s | | | | | | |
| KTMS | | | | eS | Sg | 13 55 16.7 | -0.9 |
| | 3.2nm,0.2s | | | | | | |
| TNSS | Tian-Shan | 2.23 | 314 | eP | Pb | 13 54 50.6 | +0.9 |
| | 3.5nm,0.2s | | | | | | |
| TNSS | | | | eS | Sg | 13 55 20.9 | +0.3 |
| | 6.6nm,0.0s | | | | | | |
| TNSS | Tian-Shan | 2.23 | 314 | Pg | Pb | 13 54 50.6 | +0.9 |
| | 3.5nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 13 55 20.9 | |
| | 6.6nm,0.0s | | | | | | |
| MDOK | Medeo | 2.26 | 318 | eP | Pb | 13 54 51.1 | +0.9 |
| | 1.9nm,0.3s | | | | | | |
| MDOK | | | | eS | Sg | 13 55 21.6 | -0.2 |
| | 7.8nm,0.6s | | | | | | |
| MDOK | Medeo | 2.26 | 318 | Pg | Pb | 13 54 50.6 | +0.4 |
| | 3.6nm,1.0s | | | | | | |
| MDOK | | | | Pg | Pb | 13 54 51.1 | +0.9 |
| | 1.9nm,0.3s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 13 55 21.1 | |
| | 7.1nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 13 55 21.6 | |
| | 7.8nm,0.6s | | | | | | |
| ULHL | Ulahol | 2.28 | 290 | ⇑eP | Pn | 13 54 47.2 | 0.0 |
| | baz=18 | | | | | | |
| ULHL | | | | ⇑eS | Sn | 13 55 14.2 | -1.4 |
| | baz=18 | | | | | | |
| KOTS | Kotyrbulak | 2.28 | 320 | eP | Pb | 13 54 51.7 | +1.1 |
| | 3.5nm,0.2s | | | | | | |
| KOTS | | | | eS | Sg | 13 55 22.6 | +0.2 |
| | 7.8nm,0.1s | | | | | | |
| KOTS | Kotyrbulak | 2.28 | 320 | Pg | Pb | 13 54 51.7 | +1.1 |
| | 3.5nm,0.2s | | | | | | |
| KOTS | | | | Lg | Lg | 13 55 22.6 | |
| | 7.8nm,0.1s | | | | | | |
| NRN | Naryn | 2.36 | 269 | ⇓eP | Pn | 13 54 42.1 | -6.2 |
| | baz=93 | | | | | | |
| NRN | | | | ⇓eS | Sn | 13 55 05.6 | -12 |
| | baz=93 | | | | | | |
| IZV | Izvestkoviy | 2.42 | 310 | eP | Pg | 13 54 54.4 | -0.9 |
| | 0.1nm,0.1s | | | | | | |
| IZV | | | | eS | Sg | 13 55 27.1 | +0.5 |
| | 19nm,0.3s | | | | | | |
| IZV | Izvestkoviy | 2.42 | 310 | Pg | Pg | 13 54 54.4 | -0.9 |
| | 0.1nm,0.1s | | | | | | |
| IZV | | | | Lg | Lg | 13 55 27.1 | |
| | 19nm,0.3s | | | | | | |
| BOOM | Boomskoye usch | 2.58 | 293 | ⇓eP | Pn | 13 54 51.7 | +0.5 |
| | baz=18 | | | | | | |
| BOOM | | | | ⇓iS | Sn | 13 55 22.2 | -0.5 |
| | baz=18 | | | | | | |
| MTBS | Maitube | 2.58 | 310 | eP | Pb | 13 54 57.1 | +1.6 |
| | 1.7nm,0.2s | | | | | | |
| MTBS | | | | eS | Sg | 13 55 32.0 | +0.1 |
| | 9.8nm,0.4s | | | | | | |
| MTBS | Maitube | 2.58 | 310 | Pg | Pb | 13 54 57.1 | +1.6 |
| | 1.7nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 13 55 32.0 | |
| | 9.8nm,0.4s | | | | | | |
| KST | Kastek | 2.81 | 304 | eP | Pb | 13 55 01.1 | +1.6 |
| | 1.6nm,0.6s | | | | | | |
| KST | | | | eS | Sg | 13 55 38.8 | -0.4 |
| | 7.7nm,0.7s | | | | | | |
| KST | Kastek | 2.81 | 304 | Pg | Pb | 13 55 01.1 | +1.6 |
| | 1.6nm,0.6s | | | | | | |
| KST | | | | Lg | Lg | 13 55 38.8 | |
| | 7.7nm,0.7s | | | | | | |
| CHKK | Chushkaly | 2.83 | 327 | eP | Pb | 13 55 01.4 | +1.7 |
| | 2.6nm,0.1s | | | | | | |
| CHKK | | | | eS | Sg | 13 55 39.3 | -0.6 |
| | 18nm,0.1s | | | | | | |
| CHKK | Chushkaly | 2.83 | 327 | Pg | Pb | 13 55 01.4 | +1.7 |
| | 2.6nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 13 55 39.3 | |
| | 18nm,0.1s | | | | | | |
| KNOS | Konyrlen | 2.85 | 1 | Pg | Pg | 13 55 02.1 | -1.4 |
| | 0.7nm,0.5s | | | | | | |
| KNOS | | | | Lg | Lg | 13 55 40.4 | |
| | 3.2nm,0.2s | | | | | | |
| KTBS | Karatobe | 2.85 | 321 | eP | Pb | 13 55 01.5 | +1.4 |
| | 0.9nm,0.3s | | | | | | |
| KTBS | | | | eS | Sg | 13 55 39.5 | -1.0 |
| | 14nm,0.5s | | | | | | |
| KTBS | Karatobe | 2.85 | 321 | Pg | Pb | 13 55 01.5 | +1.4 |
| | 0.9nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 13 55 39.5 | |
| | 14nm,0.5s | | | | | | |
| DJR | Jarkent | 2.86 | 9 | eP | Pg | 13 55 02.3 | -1.5 |
| | 0.8nm,0.2s | | | | | | |
| DJR | | | | eS | Sg | 13 55 40.8 | -0.2 |
| | 3.2nm,0.2s | | | | | | |
| DJR | Jarkent | 2.86 | 9 | Pg | Pg | 13 55 02.3 | -1.5 |
| | 0.8nm,0.2s | | | | | | |
| DJR | | | | Lg | Lg | 13 55 40.8 | |
| | 3.2nm,0.2s | | | | | | |
| ARXS | Arharly | 2.87 | 341 | eP | Pb | 13 55 02.1 | +1.6 |
| | 0.8nm,0.2s | | | | | | |
| ARXS | | | | eS | Sg | 13 55 40.1 | -1.0 |
| | 4.0nm,0.2s | | | | | | |
| TKM2 | Tokmak 2 | 2.98 | 299 | ⇓Pg | Pg | 13 55 05.2 | -0.9 |
| | 1.8nm,0.9s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 13 55 44.0 | |
| | 2.3nm,0.4s | | | | | | |
| DGS | Degeres | 3.03 | 306 | eP | Pb | 13 55 04.7 | +1.3 |
| | 1.1nm,0.3s | | | | | | |
| DGS | | | | eS | Sg | 13 55 44.8 | -1.7 |
| | 3.4nm,0.8s | | | | | | |
| DGS | Degeres | 3.03 | 306 | Pg | Pb | 13 55 04.7 | +1.3 |
| | 1.1nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 13 55 44.7 | |
| | 3.4nm,0.8s | | | | | | |
| KRBS | Karabastau | 3.36 | 312 | eP | Pb | 13 55 10.8 | +2.0 |
| | 1.0nm,0.3s | | | | | | |
| KRBS | | | | eS | Sg | 13 55 55.4 | -1.6 |
| | 3.5nm,0.6s | | | | | | |
| KRBS | Karabastau | 3.36 | 312 | Pg | Pb | 13 55 10.8 | +2.0 |
| | 1.0nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 13 55 55.4 | |
| | 3.5nm,0.6s | | | | | | |

*CATAC **02** 13:54:52.9±0.7, 9.25N×82.64W, h15km±4km, ML3.7*
*UCR **02** 13:54:52.4±1.0, 9.36N×82.56W, h13km±14km, MW3.5*
*UPA **02** 13:54:53.3±1.0, 9.25N×82.65W, h10km±5km, ML3.8, MW3.9*
**ISC 02 13:54:52.0**±1.3, **9.30N**±0.03×**82.60W**±0.02, **h15**km±10km, **n45**, σ0s73/72, **1C-2D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNI2 | El Empalme, Bo | 0.18 | 46 | ⇑iP | Pb | 13 54 57.9 | +0.8 |
| CNI2 | | | | AMP | | 13 54 58.0 | |
| | comp=Z,58µm,0.1s | | | | | | |
| CNI2 | | | | i S | Sb | 13 55 01.9 | +1.5 |
| BRU2 | Volcan | 0.51 | 190 | i P | Pb | 13 55 03.0 | +0.3 |
| BRU2 | | | | i S | Sb | 13 55 10.3 | +0.3 |
| BRU2 | | | | IAML | | 13 55 12.5 | |
| | comp=Z,2µm,1.0s | | | | | | |
| BRU2 | Volcan | 0.51 | 190 | ⇓iP | Pb | 13 55 03.2 | +0.4 |
| BRU2 | | | | AMP | | 13 55 04.2 | |
| | comp=Z,5µm,0.1s | | | | | | |
| BRU2 | | | | i S | Sb | 13 55 11.2 | +1.2 |
| BRU2 | Volcan | 0.51 | 190 | eP | Pb | 13 55 03.1 | +0.4 |
| BRU2 | | | | eS | Sb | 13 55 11.2 | +1.2 |
| BCO2 | Palmira | 0.58 | 173 | ⇓iP | Pb | 13 55 04.4 | +0.4 |
| BCO2 | | | | eS | Sb | 13 55 12.8 | +0.8 |
| VITO | San Vito | 0.60 | 217 | eP | Pb | 13 55 05.1 | +0.8 |
| VITO | | | | eS | Sn | 13 55 14.9 | -0.6 |
| EDP2 | Potrero Grande | 0.63 | 244 | eP | Pb | 13 55 05.2 | +0.5 |
| DRK0 | Durika | 0.63 | 267 | i P | Pb | 13 55 04.9 | 0.0 |
| DRK0 | | | | i S | Sb | 13 55 14.3 | +0.7 |
| DRK0 | | | | IAML | | 13 55 15.3 | |
| | comp=Z,21µm,1.0s | | | | | | |
| DRK0 | Durika | 0.63 | 267 | eP | Pb | 13 55 04.9 | 0.0 |
| DRK0 | | | | eS | Sb | 13 55 14.4 | +0.8 |
| DRK0 | Durika | 0.63 | 267 | eP | Pb | 13 55 04.9 | 0.0 |
| DRK0 | | | | eS | Sb | 13 55 14.3 | +0.7 |
| NELY | Ciudad Neily | 0.73 | 208 | eP | Pn | 13 55 07.6 | -0.1 |
| NELY | | | | eS | Sn | 13 55 19.5 | +0.9 |
| BURE | Buenos Aires | 0.74 | 260 | eP | Pb | 13 55 06.9 | +0.3 |
| BURE | | | | eS | Sb | 13 55 17.1 | +0.7 |
| CDITO | Canoas | 0.77 | 200 | i P | Pg | 13 55 06.7 | -0.3 |
| CDITO | | | | i S | Sb | 13 55 17.9 | +0.6 |
| CDITO | | | | IAML | | 13 55 24.5 | |
| | comp=Z,1µm,1.0s | | | | | | |
| EDAD | Golfito | 0.85 | 221 | eP | Pb | 13 55 08.8 | +0.4 |
| DVD | David | 0.87 | 170 | eP | Pn | 13 55 10.7 | +1.0 |
| DVD | | | | eS | Sn | 13 55 21.9 | -0.2 |
| EDPN | Palmar Norte | 0.91 | 248 | eP | Pn | 13 55 10.5 | +0.4 |
| PTJ1 | Puerto Jimnez | 1.02 | 222 | i P | Pb | 13 55 11.3 | -0.1 |
| PTJ1 | | | | IAML | | 13 55 12.0 | |
| | comp=Z,2µm,1.0s | | | | | | |
| PTJ1 | | | | i S | Sb | 13 55 24.2 | -0.5 |
| PTJ1 | Puerto Jimnez | 1.02 | 222 | eP | Pg | 13 55 11.8 | 0.0 |
| PTJ1 | | | | eS | Sn | 13 55 27.0 | +1.1 |
| PTJ1 | Puerto Jimnez | 1.02 | 222 | eP | Pg | 13 55 11.9 | 0.0 |
| OCHAL | Ojochal | 1.05 | 259 | i P | Pg | 13 55 12.3 | 0.0 |
| OCHAL | | | | i S | Sg | 13 55 26.0 | 0.0 |
| OCHAL | | | | IAML | | 13 55 29.4 | |
| | comp=Z,2µm,1.0s | | | | | | |
| ZELE | Perez Zeledon | 1.09 | 274 | eP | Pb | 13 55 12.9 | +0.3 |
| PTPM | Petroterminale | 1.12 | 194 | eP | Pg | 13 55 14.1 | +0.4 |
| PTPM | | | | AMP | | 13 55 14.2 | |
| | comp=Z,1µm,0.2s | | | | | | |
| PTPM | | | | eS | Sn | 13 55 29.0 | +0.8 |
| RVSTA | Santa Teresita | 1.23 | 303 | eP | Pn | 13 55 14.3 | -0.4 |
| VERB | Verbena | 1.25 | 301 | eP | Pn | 13 55 14.9 | -0.1 |
| VINA | Juan Vinas | 1.27 | 298 | eP | Pn | 13 55 15.1 | -0.3 |
| VTCV | VTCV, Calle Va | 1.30 | 302 | eP | Pn | 13 55 15.4 | -0.4 |
| VTLA | Turrialba Volc | 1.35 | 301 | eP | Pn | 13 55 16.5 | -0.1 |
| RAFA | San Farael, Vo | 1.36 | 299 | i P | Pn | 13 55 16.6 | -0.1 |
| RAFA | | | | i S | Sb | 13 55 35.0 | +0.3 |
| RAFA | | | | IAML | | 13 56 36.6 | |
| | comp=Z,6µm,1.0s | | | | | | |
| RAFA | San Farael, Vo | 1.36 | 299 | eP | Pn | 13 55 16.5 | -0.1 |
| NANC3 | Nancito, Chiri | 1.36 | 141 | eP | Pb | 13 55 17.4 | +0.2 |
| NANC3 | | | | eS | Sb | 13 55 35.0 | +0.6 |
| VICA | Volcano Irazu | 1.40 | 299 | eP | Pn | 13 55 17.0 | -0.4 |
| LCR2 | La Lucha 2 | 1.45 | 288 | i P | Pn | 13 55 18.2 | +0.3 |
| LCR2 | | | | i S | Sn | 13 55 37.2 | +0.5 |
| LCR2 | | | | IAML | | 13 55 38.6 | |
| | comp=Z,670nm,1.0s | | | | | | |
| LCR2 | La Lucha 2 | 1.45 | 288 | eP | Pn | 13 55 18.4 | +0.5 |
| ABE2 | San Pablo | 1.49 | 286 | eP | Pb | 13 55 19.3 | -0.1 |
| LLNJ | Naranjito | 1.49 | 277 | eP | Pb | 13 55 19.6 | +0.3 |
| ACOS | Acosta | 1.62 | 288 | eP | Pn | 13 55 21.0 | +1.0 |
| HDC3 | Heredia 3 | 1.64 | 295 | i P | Pn | 13 55 21.0 | +0.6 |
| HDC3 | | | | i S | Sn | 13 55 42.4 | +1.0 |
| HDC3 | | | | IAML | | 13 55 44.9 | |
| | comp=Z,420nm,1.0s | | | | | | |
| SAFE3 | Santa Fe, Vera | 1.70 | 117 | eP | Pn | 13 55 21.5 | +0.4 |
| SAFE3 | | | | eS | Sn | 13 55 42.9 | +0.4 |
| TCS1 | Tacares | 1.83 | 294 | eP | Pb | 13 55 24.5 | -0.7 |
| SFRA3 | San Francisco, | 1.92 | 123 | eP | Pn | 13 55 24.6 | +0.5 |
| SFRA3 | | | | eS | Sn | 13 55 49.3 | +1.3 |
| GMAL | Guarumal, Vera | 2.04 | 138 | eP | Pn | 13 55 26.2 | +0.4 |
| GMAL | | | | eS | Sn | 13 55 52.2 | +1.2 |
| GMAL | Guarumal, Vera | 2.04 | 138 | eP | Pn | 13 55 26.2 | +0.4 |
| COVE | Coope Vega, Sa | 2.27 | 309 | i P | Pn | 13 55 30.0 | +1.1 |
| COVE | | | | i S | Sn | 13 55 58.1 | +1.6 |
| COVE | | | | IAML | | 13 56 07.1 | |
| | comp=Z,180nm,1.0s | | | | | | |
| CHIT3 | Chitre | 2.54 | 122 | eP | Pn | 13 55 32.5 | -0.1 |
| CHIT3 | | | | eS | Sb | 13 56 06.5 | -1.8 |
| AZU | Azuero | 2.75 | 123 | eP | Pn | 13 55 36.7 | +1.2 |
| AZU | | | | eS | Sb | 13 56 12.5 | -1.8 |

*SNET **02** 13:57:12.0±0.9, 14.11N×89.70W, h6km±4km, ML3.5*
*CATAC **02** 13:57:12.5±0.2, 14.09N×89.69W, h3km±1km, ML3.5*
*GCG **02** 13:57:14.0±0.5, 14.16N×89.78W, h10km±18km, MD3.2*
**ISC 02 13:57:12.7**±0.9, **14.10N**±0.02×**89.70W**±0.02, **h8**km±6km, **n66**, σ0s59/114, **2C-2D, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLOZ | Alcaldia de Sa | 0.11 | 229 | eP | Pg | 13 57 15.0 | -0.2 |
| SLOZ | | | | eS | Sg | 13 57 16.9 | -0.1 |
| LOAL | Lomas de Alarc | 0.13 | 219 | ⇓eP | Pg | 13 57 15.5 | 0.0 |
| LOAL | | | | eS | Sg | 13 57 17.2 | -0.3 |
| LOAL | Lomas de Alarc | 0.13 | 219 | i P | Pg | 13 57 15.3 | -0.2 |
| LOAL | | | | i S | Sg | 13 57 17.3 | -0.2 |
| LOAL | | | | IAML | | 13 57 19.3 | |
| | comp=Z,68µm,1.0s | | | | | | |
| UNIC | Universidad Ca | 0.19 | 128 | eP | Pg | 13 57 16.7 | +0.2 |
| UNIC | | | | eS | Sg | 13 57 19.6 | +0.4 |
| UNIC | Universidad Ca | 0.19 | 128 | i P | Pg | 13 57 16.6 | +0.1 |
| UNIC | | | | i S | Sg | 13 57 18.9 | -0.3 |
| UNIC | | | | IAML | | 13 57 20.9 | |
| | comp=Z,8µm,1.0s | | | | | | |
| RTR | El Retiro | 0.21 | 165 | eP | Pg | 13 57 17.2 | +0.3 |
| NUBE | Las Nubes | 0.21 | 202 | ⇓eP | Pg | 13 57 16.9 | -0.1 |
| NUBE | | | | eS | Sg | 13 57 20.0 | +0.1 |
| NUBE | Las Nubes | 0.21 | 202 | i P | Pg | 13 57 16.8 | -0.1 |
| NUBE | | | | IAML | | 13 57 16.9 | |
| | comp=Z,13µm,1.0s | | | | | | |
| NUBE | | | | i S | Sg | 13 57 20.0 | +0.1 |
| SNJE | San Jose | 0.24 | 158 | eP | Pg | 13 57 17.9 | +0.3 |
| SNJE | | | | eS | Sg | 13 57 22.3 | +1.2 |
| CEVE | Cerro Verde | 0.28 | 165 | eP | Pg | 13 57 18.5 | +0.2 |
| CEVE | | | | eS | Sb | 13 57 23.8 | -1.2 |
| CEVE | | | | IAML | | 13 57 26.6 | |
| | comp=Z,8µm,0.4s | | | | | | |
| CEVE | Cerro Verde | 0.28 | 165 | i P | Pg | 13 57 18.3 | 0.0 |
| CEVE | | | | i S | Sg | 13 57 22.8 | +0.8 |
| CEVE | | | | IAML | | 13 57 26.5 | |
| | comp=Z,7µm,1.0s | | | | | | |
| CEDA | San Andres | 0.42 | 135 | eP | Pg | 13 57 20.8 | 0.0 |
| CEDA | | | | eS | Sg | 13 57 27.1 | +0.8 |
| CEDA | | | | IAML | | 13 57 30.0 | |
| | comp=Z,7µm,0.6s | | | | | | |
| CEDA | San Andres | 0.42 | 135 | i P | Pg | 13 57 20.8 | 0.0 |
| CEDA | | | | i S | Sg | 13 57 26.5 | +0.2 |
| CEDA | | | | IAML | | 13 57 29.0 | |
| | comp=Z,15µm,1.0s | | | | | | |
| MTO3 | Montecristo | 0.45 | 48 | ⇑eP | Pg | 13 57 21.1 | -0.4 |
| MTO3 | | | | eS | Sg | 13 57 27.7 | +0.4 |
| MTO3 | Montecristo | 0.45 | 48 | i P | Pg | 13 57 21.0 | -0.4 |
| MTO3 | | | | i S | Sg | 13 57 27.7 | +0.4 |
| MTO3 | | | | IAML | | 13 57 28.0 | |
| | comp=Z,2µm,1.0s | | | | | | |
| QUEZ | Alcaldia de Qu | 0.49 | 122 | eP | Pg | 13 57 22.3 | +0.1 |
| QUEZ | Alcaldia de Qu | 0.49 | 122 | i P | Pg | 13 57 22.2 | +0.1 |
| QUEZ | | | | i S | Sg | 13 57 28.2 | -0.4 |
| QUEZ | | | | IAML | | 13 57 34.3 | |
| | comp=Z,13µm,1.0s | | | | | | |
| JAYA | Jayaque - finc | 0.50 | 151 | eP | Pg | 13 57 22.5 | +0.1 |
| JAYA | | | | IAML | | 13 57 31.1 | |
| | comp=Z,2µm,0.2s | | | | | | |
| JAYA | Jayaque - finc | 0.50 | 151 | i P | Pg | 13 57 22.6 | +0.1 |
| JAYA | | | | i S | Sg | 13 57 29.3 | +0.2 |
| JAYA | | | | IAML | | 13 57 30.9 | |
| | comp=Z,6µm,1.0s | | | | | | |
| PMON | Piamonte | 0.54 | 136 | ⇑eP | Pg | 13 57 23.1 | +0.1 |
| PMON | Piamonte | 0.54 | 136 | i P | Pg | 13 57 23.3 | +0.2 |
| PMON | | | | i S | Sg | 13 57 29.5 | -0.6 |
| PMON | | | | IAML | | 13 57 32.9 | |
| | comp=Z,8µm,1.0s | | | | | | |
| BOQS | Boqueron | 0.54 | 131 | eP | Pg | 13 57 23.2 | -0.1 |
| BOQS | | | | eS | Sb | 13 57 31.8 | -0.8 |
| PIC2 | El Picacho | 0.56 | 129 | eP | Pg | 13 57 23.4 | 0.0 |
| MAGS | Ministerio de | 0.57 | 136 | eP | Pg | 13 57 23.5 | -0.3 |
| MAGS | | | | IAML | | 13 57 36.5 | |
| | comp=Z,2µm,0.3s | | | | | | |
| UEES | Universidad Ev | 0.59 | 130 | eP | Pg | 13 57 23.7 | -0.3 |
| UEES | Universidad Ev | 0.59 | 130 | i P | Pg | 13 57 23.9 | -0.1 |
| UEES | | | | i S | Sg | 13 57 31.6 | -0.1 |
| UEES | | | | IAML | | 13 57 35.3 | |
| | comp=Z,2µm,1.0s | | | | | | |
| ITCA | Escuela Especi | 0.59 | 136 | eP | Pg | 13 57 23.9 | -0.1 |
| ITCA | Escuela Especi | 0.59 | 136 | i P | Pg | 13 57 23.7 | -0.3 |
| ITCA | | | | i S | Sg | 13 57 32.0 | +0.2 |
| ITCA | | | | IAML | | 13 57 35.5 | |
| | comp=Z,8µm,1.0s | | | | | | |
| SNET | Serv Nac Est T | 0.61 | 132 | i P | Pg | 13 57 24.2 | -0.3 |
| SNET | | | | i S | Sg | 13 57 32.3 | -0.2 |
| SNET | | | | IAML | | 13 57 39.1 | |
| | comp=Z,3µm,1.0s | | | | | | |
| UESS | Universidad de | 0.61 | 128 | eP | Pg | 13 57 24.4 | -0.1 |
| IGN | Direccin Gen | 0.64 | 126 | i P | Pg | 13 57 24.8 | -0.2 |
| IGN | | | | i S | Sg | 13 57 33.7 | +0.3 |
| IGN | | | | IAML | | 13 57 36.2 | |
| | comp=Z,8µm,1.0s | | | | | | |
| UDBS | Universidad Do | 0.65 | 126 | eP | Pg | 13 57 25.0 | -0.2 |
| UDBS | | | | IAML | | 13 57 36.2 | |
| | comp=Z,2µm,0.3s | | | | | | |
| UDBS | Universidad Do | 0.65 | 126 | i P | Pg | 13 57 24.6 | -0.7 |
| UDBS | | | | i S | Sg | 13 57 33.9 | +0.1 |
| UDBS | | | | IAML | | 13 57 34.9 | |
| | comp=Z,2µm,1.0s | | | | | | |
| LFU | La Fuente | 0.67 | 121 | eP | Pg | 13 57 25.3 | -0.2 |
| LFU | | | | eS | Sg | 13 57 35.1 | +0.8 |
| LOMA | Loma Larga | 0.68 | 131 | eP | Pg | 13 57 25.5 | -0.4 |
| LOMA | Loma Larga | 0.68 | 131 | i P | Pg | 13 57 25.8 | -0.1 |
| LOMA | | | | i S | Sg | 13 57 34.4 | -0.4 |
| LOMA | | | | IAML | | 13 57 38.3 | |
| | comp=Z,830nm,1.0s | | | | | | |
| PANCS | Alcalda de | 0.70 | 134 | i P | Pg | 13 57 25.8 | -0.4 |
| PANCS | | | | i S | Sg | 13 57 35.2 | -0.1 |
| PANCS | | | | IAML | | 13 57 36.1 | |
| | comp=Z,3µm,1.0s | | | | | | |
| LALI | Alcalda de L | 0.71 | 149 | i P | Pg | 13 57 26.6 | +0.3 |
| LALI | | | | IAML | | 13 57 26.6 | |
| | comp=Z,380nm,1.0s | | | | | | |
| LALI | | | | i S | Sg | 13 57 34.9 | -0.7 |
| LLGN | La Laguna | 0.73 | 85 | eP | Pg | 13 57 26.3 | -0.6 |
| LLGN | La Laguna | 0.73 | 85 | i P | Pg | 13 57 26.2 | -0.6 |
| LLGN | | | | IAML | | 13 57 26.6 | |
| | comp=Z,1µm,1.0s | | | | | | |
| LLGN | | | | i S | Sg | 13 57 36.6 | +0.1 |
| LFRS | El Faro | 0.78 | 127 | eP | Pg | 13 57 26.8 | -0.9 |
| LFRS | | | | eS | Sb | 13 57 38.9 | -0.4 |
| NBG | Las Nubes | 0.79 | 308 | i P | Pg | 13 57 28.1 | +0.1 |
| NBG | | | | i S | Sg | 13 57 38.8 | +0.4 |
| PAVA | Las Pavas | 0.83 | 117 | eP | Pg | 13 57 28.0 | -0.7 |
| PAVA | | | | eS | Sg | 13 57 40.0 | +0.5 |
| COEG | Centro de Oper | 0.93 | 121 | eP | Pg | 13 57 29.7 | -0.8 |
| COEG | Centro de Oper | 0.93 | 121 | i P | Pg | 13 57 29.9 | -0.6 |
| COEG | | | | IAML | | 13 57 30.5 | |
| | comp=Z,490nm,1.0s | | | | | | |
| COEG | | | | i S | Sg | 13 57 41.8 | -0.8 |
| PCG | Pacaya | 0.93 | 288 | i P | Pg | 13 57 30.1 | -0.4 |
| PCG | | | | i S | Sg | 13 57 42.8 | +0.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GCG4 | OSOP | 0.94 | 301 | IAML | | 13 57 30.2 | |
| | comp=Z,2µm,1.0s | | | | | | |
| GCG4 | | | | i P | Pb | 13 57 31.3 | -0.1 |
| GCG4 | | | | i S | Sg | 13 57 43.2 | +0.1 |
| MRL | Marmol | 0.98 | 1 | i P | Pg | 13 57 31.3 | -0.3 |
| MRL | | | | i S | Sb | 13 57 45.4 | +0.2 |
| UESV | Universidad de | 1.00 | 117 | eP | Pg | 13 57 30.2 | -1.6 |
| UESV | Universidad de | 1.00 | 117 | i P | Pg | 13 57 31.1 | -0.7 |
| UESV | | | | i S | Sg | 13 57 45.1 | +0.3 |
| UESV | | | | IAML | | 13 57 52.1 | |
| | comp=Z,670nm,1.0s | | | | | | |
| SCLA | Alcaldia de Sa | 1.02 | 113 | eP | Pg | 13 57 31.3 | -1.0 |
| SCLA | Alcaldia de Sa | 1.02 | 113 | i P | Pg | 13 57 31.6 | -0.7 |
| SCLA | | | | i S | Sb | 13 57 46.0 | -0.2 |
| SCLA | | | | IAML | | 13 57 53.3 | |
| | comp=Z,500nm,1.0s | | | | | | |
| GUMI | Mixco | 1.03 | 301 | i P | Pg | 13 57 32.5 | 0.0 |
| GUMI | | | | i S | Sg | 13 57 46.1 | +0.1 |
| GUMI | | | | IAML | | 13 58 11.4 | |
| | comp=Z,3µm,1.0s | | | | | | |
| TECO | Alcaldia de Te | 1.05 | 122 | i P | Pg | 13 57 32.1 | -0.8 |
| TECO | | | | i S | Sg | 13 57 46.3 | -0.3 |
| TECO | | | | IAML | | 13 57 54.9 | |
| | comp=Z,220nm,1.0s | | | | | | |
| FUG | Fuego 3 | 1.16 | 288 | i P | Pg | 13 57 34.0 | -1.0 |
| PQSS | Presa 15 de Se | 1.20 | 113 | eP | Pg | 13 57 33.8 | -2.0 |
| PQSS | Presa 15 de Se | 1.20 | 113 | i P | Pg | 13 57 34.3 | -1.5 |
| PQSS | | | | IAML | | 13 57 34.9 | |
| | comp=Z,400nm,1.0s | | | | | | |
| PQSS | | | | i S | Sg | 13 57 51.2 | -0.2 |
| TECA | Tecapa | 1.31 | 117 | eP | Pn | 13 57 36.2 | -1.2 |
| INTHN | La Esperanza I | 1.56 | 82 | i P | Pn | 13 57 40.7 | -0.3 |
| INTHN | | | | i S | Sb | 13 58 02.2 | +0.2 |
| MARCA | Marcala la Paz | 1.62 | 88 | i P | Pn | 13 57 41.6 | 0.0 |
| MARCA | | | | i S | Sb | 13 58 03.6 | +0.2 |
| JUCU | Jucuar¡n | 1.64 | 121 | i P | Pn | 13 57 42.2 | +0.3 |
| JUCU | | | | i S | Sn | 13 58 03.5 | +0.3 |
| JUCU | | | | IAML | | 13 59 10.2 | |
| | comp=Z,160nm,1.0s | | | | | | |
| QUIS | Sacapulas | 1.79 | 312 | i P | Pn | 13 57 44.5 | +0.4 |
| QUIS | | | | i S | Sb | 13 58 08.2 | -0.4 |
| QUIS | | | | IAML | | 13 58 11.5 | |
| | comp=Z,410nm,1.0s | | | | | | |
| SOKI | Kika Raxquin | 1.80 | 294 | i P | Pn | 13 57 43.5 | -0.9 |
| SOKI | | | | IAML | | 13 57 48.2 | |
| | comp=Z,290nm,1.0s | | | | | | |
| SOKI | | | | i S | Sn | 13 58 08.4 | +0.8 |
| CNCH | Conchagua | 1.99 | 114 | i P | Pn | 13 57 46.6 | -0.1 |
| CNCH | | | | IAML | | 13 57 50.8 | |
| | comp=Z,310nm,1.0s | | | | | | |
| CNCH | | | | i S | Sn | 13 58 12.5 | +0.6 |
| YUSH | Yuscaran | 2.78 | 93 | i P | Pn | 13 57 57.5 | 0.0 |
| YUSH | | | | i S | Sn | 13 58 33.3 | +2.0 |
| CRIN | San Cristobal | 2.93 | 118 | i P | Pn | 13 58 00.1 | +0.5 |
| CRIN | | | | i S | Sn | 13 58 36.7 | +1.7 |
| CRIN | | | | IAML | | 13 58 53.8 | |
| | comp=Z,310nm,1.0s | | | | | | |

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*NAO **02** 14:17:30.1, 41°.42N×26°.26E, h33km, mb3.6*
*TIR **02** 14:17:31.6, 41°.53N×24°.17E, h27km±9km, Ml4.0*
*IDC **02** 14:17:35.5±0.8, 41°.69N×23°.61E, h0km, mb3.6/9, mbtmp3.7/17, ML3.6/8, MS3.6/1, Error ellipse: s-maj=11.7km s-min=11.0km az=50.0*
*MOS **02** 14:17:36.6±1.0, 41°.69N×23°.62E, h11km, mb4.4/3, Error ellipse: s-maj=6.3km s-min=3.7km az=83.1*
*SOF **02** 14:17:36.9, 41°.69N±0°.01×23°.63E±0°.01, h12km±1km, MD4.3/13*
*PDG **02** 14:17:37.9±0.5, 41°.67N×23°.64E, h15km±1km, ML4.0/10, Error ellipse: s-maj=0.5km s-min=0.6km az=0.0*
*ATH **02** 14:17:37.4, 41°.69N×23°.61E, h7km±2km, ML4.0/19, Manual Solution by A.Fokaefs This location: 2020/06/26 08:28:26 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 1 km; Longitude uncertainty: 0 km*
*ISK **02** 14:17:37.0, 41°.68N×23°.59E, h9km, ML4.4/26*
*CFUSG **02** 14:17:37.3, 41°.70N×23°.60E, h10km, mb3.4/3, Bulgaria Magtype MSH 3.6 from 3 stations*
*BEO **02** 14:17:38.2±0.3, 41°.67N×23°.60E, h4km±2km, ML4.0/12*
*THE **02** 14:17:38.3, 41°.66N×23°.57E, h9km±1km, ML3.8/8, Error ellipse: s-maj=1.7km s-min=0.7km az=165.0*
*SKO **02** 14:17:38.8, 41°.69N×23°.56E, h0km, ML3.7*
*NEIC **02** 14:17:38.6±1.8, 41°.69N±0°.05×23°.59E±0°.05, h13km±6km, mb4.2/11, ML4.5/3(BUC), Error ellipse: s-maj=7.0km s-min=5.1km az=210.0*
*MCSM **02** 14:17:40.9±0.4, 42°N±4°×2°4E±°, h10km, mb4.1, mB4.3, MLv4.5, Mw(mB)3.4*
**ISC 02 14:17:37.6**±0.9, **41°.69N**±0°.01×**23°.59E**±0°.01, **h13**km±6km, **n384**, σ1§**62**/479, **mb4.1**/13, **44C-18D, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KKB | Krupnik | 0.38 | 293 | ⇑P | Pg | 14 17 45.5 | +0.3 |
| KKB | | | | S | Sg | 14 17 50.5 | +0.1 |
| KKB | Krupnik | 0.38 | 293 | ⇑i Pg | Pg | 14 17 45.6 | +0.3 |
| KKB | | | | i Sg | Sg | 14 17 51.0 | +0.6 |
| NVR | Nevrokopi | 0.40 | 150 | P | Pb | 14 17 46.3 | -0.2 |
| NVR | | | | S | Sb | 14 17 51.7 | -0.8 |
| | 13µm,0.2s | | | | | | |
| NVR | Nevrokopi | 0.40 | 150 | P | Pb | 14 17 46.0 | -0.5 |
| PEHC | Pehcevo | 0.53 | 280 | i Pg | Pg | 14 17 48.3 | +0.3 |
| PEHC | | | | i Sg | Sg | 14 17 55.0 | 0.0 |
| SRS | Serrai | 0.58 | 180 | P | Pg | 14 17 48.8 | -0.1 |
| SRS | | | | S | Sb | 14 17 56.7 | -0.9 |
| | 19µm,0.3s | | | | | | |
| SRS | Serrai | 0.58 | 180 | ePg | Pg | 14 17 48.7 | -0.1 |
| SRS | | | | eSg | Sb | 14 17 56.8 | -0.9 |
| SRS | Serrai | 0.58 | 180 | ⇑i Pg | Pg | 14 17 48.8 | -0.1 |
| SRS | | | | i Sg | Sb | 14 17 56.8 | -0.9 |
| SRS | Serrai | 0.58 | 180 | P | Pg | 14 17 48.8 | -0.1 |
| SRS | | | | S | Sb | 14 17 56.7 | -0.9 |
| SRS | Serrai | 0.58 | 180 | P | Pg | 14 17 48.7 | -0.1 |
| SRS | | | | S | Sg | 14 17 56.2 | -0.3 |
| DRA2 | DRAMA | 0.68 | 142 | P | Pg | 14 17 50.6 | -0.2 |
| DRA2 | | | | S | Sg | 14 17 59.1 | -0.6 |
| KNT | Kendrikon | 0.75 | 225 | P | Pg | 14 17 51.8 | -0.3 |
| KNT | | | | S | Sg | 14 18 01.6 | -0.3 |
| | 9µm,0.2s | | | | | | |
| KNT | Kendrikon | 0.75 | 225 | ⇓i Pg | Pg | 14 17 51.9 | -0.3 |
| KNT | | | | i Sg | Sg | 14 18 01.6 | -0.3 |
| KNT | Kendrikon | 0.75 | 225 | P | Pg | 14 17 51.8 | -0.3 |
| KNT | | | | S | Sg | 14 18 01.6 | -0.3 |
| PLNA | Plana | 0.79 | 351 | S | Sg | 14 18 03.6 | +0.2 |
| PLNA | | | | ⇑P | Pg | 14 17 53.0 | 0.0 |
| VAY | Valandovo | 0.85 | 245 | i Pg | Pg | 14 17 54.0 | -0.2 |
| VAY | | | | i Sg | Sb | 14 18 06.2 | +0.5 |
| VAY | | | | eLg | Lg | 14 18 06.9 | |
| | comp=E,1µm,0.5s | | | | | | |
| VAY | | | | eLg | Lg | 14 18 08.3 | |
| | comp=N,2µm,0.3s | | | | | | |
| RZN | Rozhen | 0.86 | 90 | S | Sg | 14 18 04.8 | -0.7 |
| RZN | | | | ⇑P | Pg | 14 17 53.3 | -0.9 |
| SOH | Sokhos | 0.89 | 192 | P | Pg | 14 17 54.3 | -0.5 |
| SOH | | | | S | Sb | 14 18 06.8 | +0.1 |
| | comp=N,12µm,0.4s | | | | | | |
| SOH | Sokhos | 0.89 | 192 | ⇑i Pg | Pg | 14 17 54.3 | -0.5 |
| SOH | | | | i Sg | Sb | 14 18 06.7 | +0.1 |
| SOH | Sokhos | 0.89 | 192 | P | Pg | 14 17 54.3 | -0.5 |
| SOH | | | | S | Sb | 14 18 06.8 | +0.1 |
| SOH | Sokhos | 0.89 | 192 | P | Pg | 14 17 54.3 | -0.5 |
| SOH | | | | S | Sb | 14 18 06.7 | -0.1 |
| KOKK | Kokkinochori, | 0.93 | 161 | P | Pg | 14 17 54.8 | -0.7 |
| KOKK | | | | S | Sb | 14 18 07.9 | +0.2 |
| | comp=N,4µm,0.3s | | | | | | |
| KOKK | Kokkinochori, | 0.93 | 161 | P | Pg | 14 17 54.9 | -0.7 |
| KOKK | | | | S | Sb | 14 18 07.4 | -0.3 |
| PGB | Panagyurishte | 0.93 | 28 | S | Sg | 14 18 07.4 | -0.3 |
| PGB | | | | P | Pb | 14 17 55.5 | -0.1 |
| VTS | Vitosha | 0.96 | 344 | S | Sg | 14 18 07.8 | -1.0 |
| VTS | | | | ⇑P | Pg | 14 17 55.6 | -0.6 |
| VTS | Vitosha | 0.96 | 344 | ePg | Pg | 14 17 55.8 | -0.4 |
| VTS | | | | eSg | Sg | 14 18 08.2 | -0.6 |
| KVLA | Kavala | 0.96 | 141 | P | Pg | 14 17 55.5 | -0.7 |
| KVLA | | | | S | Sb | 14 18 08.3 | -0.4 |
| PLD | Plovdiv | 0.97 | 62 | S | Sg | 14 18 08.8 | -0.3 |
| PLD | | | | ⇓P | Pg | 14 17 55.5 | -0.9 |
| PLD | Plovdiv | 0.97 | 62 | ePg | Pg | 14 17 55.7 | -0.7 |
| PLD | | | | eSg | Sg | 14 18 08.4 | -0.7 |
| PLD | Plovdiv | 0.97 | 62 | ⇓i Pg | Pg | 14 17 55.7 | -0.7 |
| PLD | | | | i Sg | Sb | 14 18 09.3 | +0.2 |
| KAVA | Kavala | 0.98 | 135 | P | Pg | 14 17 55.5 | -1.1 |
| KAVA | Kavala | 0.98 | 135 | P | Pg | 14 17 55.2 | -1.3 |
| KAVA | | | | S | Sg | 14 18 08.7 | -0.6 |
| SOF | Sofia | 1.00 | 350 | P | Pg | 14 17 56.8 | -0.1 |
| STCV | Stivos | 1.07 | 192 | P | Pg | 14 17 57.7 | -0.5 |
| BOSS | Bosilegrad | 1.15 | 314 | ePg | Pb | 14 17 59.3 | -0.1 |
| BOSS | | | | eSg | Sn | 14 18 16.8 | +1.7 |
| HORT | Hortiatis | 1.16 | 199 | P | Pb | 14 17 59.3 | -0.2 |
| HORT | | | | S | Sn | 14 18 15.1 | -0.2 |
| | comp=N,4µm,0.5s | | | | | | |
| HORT | Hortiatis | 1.16 | 199 | P | Pb | 14 17 59.3 | -0.2 |
| HORT | | | | S | Sg | 14 18 14.6 | -0.3 |
| THE | Thessaloniki | 1.16 | 204 | P | Pb | 14 17 59.4 | -0.1 |
| THE | | | | S | Sn | 14 18 15.1 | -0.2 |
| | comp=N,7µm,0.5s | | | | | | |
| THE | Thessaloniki | 1.16 | 204 | ⇑i Pg | Pb | 14 17 59.4 | -0.1 |
| THE | | | | i Sg | Sn | 14 18 15.3 | +0.1 |
| THE | Thessaloniki | 1.16 | 204 | P | Pb | 14 17 59.4 | -0.1 |
| THE | | | | S | Sn | 14 18 15.1 | -0.2 |
| THE | Thessaloniki | 1.16 | 204 | P | Pb | 14 17 59.5 | 0.0 |
| THE | | | | S | Sn | 14 18 15.1 | -0.2 |
| MMAA | Thessaloniki | 1.17 | 205 | P | Pg | 14 18 00.2 | +0.1 |
| MMAA | | | | S | Sg | 14 18 15.0 | -0.3 |
| KDZ | Kurdzhali | 1.31 | 92 | Pn | Pb | 14 18 01.8 | -0.3 |
| KDZ | | | | Sn | Sg | 14 18 19.9 | +0.1 |
| KDZ | Kurdzhali | 1.31 | 92 | P | Pb | 14 18 01.8 | -0.3 |
| KDZ | Kurdzhali | 1.31 | 92 | P | Pg | 14 18 02.7 | -0.1 |
| KDZ | | | | S | Sg | 14 18 20.4 | +0.6 |
| THAS | Thassos island | 1.38 | 142 | P | Pn | 14 18 02.7 | +0.2 |
| THAS | Thassos island | 1.38 | 142 | P | Pn | 14 18 02.7 | +0.2 |
| THAS | | | | S | Sn | 14 18 20.9 | +0.3 |
| OUR | Ouranopolis | 1.39 | 168 | Pn | Pn | 14 18 02.9 | +0.3 |
| OUR | | | | Sn | Sg | 14 18 21.6 | -0.7 |
| OUR | Ouranopolis | 1.39 | 168 | P | Pn | 14 18 03.0 | +0.3 |
| OUR | Ouranopolis | 1.39 | 168 | P | Pn | 14 18 03.0 | +0.3 |
| OUR | Ouranopolis | 1.39 | 168 | P | Pb | 14 18 03.0 | -0.4 |
| OUR | | | | S | Sn | 14 18 21.1 | +0.2 |
| DIM | Dimitrovgrad | 1.52 | 76 | P | Pn | 14 18 05.0 | +0.5 |
| DIM | | | | S | Sg | 14 18 27.0 | +0.4 |
| RDO | Rodhopi | 1.56 | 110 | Pn | Pb | 14 18 06.0 | -0.3 |
| RDO | | | | Sn | Sb | 14 18 26.1 | +0.1 |
| RDO | Rodhopi | 1.56 | 110 | Pn | Pb | 14 18 06.2 | -0.1 |
| RDO | | | | Sn | Sb | 14 18 26.4 | +0.4 |
| RDO | Rodhopi | 1.56 | 110 | P | Pn | 14 18 05.5 | +0.5 |
| RDO | | | | S | Sg | 14 18 27.2 | -0.6 |
| | comp=N,16µm,0.4s | | | | | | |
| RDO | Rodhopi | 1.56 | 110 | P | Pn | 14 18 05.6 | +0.5 |
| MPEP | Malo Peshtene | 1.67 | 4 | P | Pb | 14 18 07.8 | -0.3 |
| ZAPS | Zavoj | 1.73 | 336 | ePn | Pb | 14 18 09.6 | +0.3 |
| BARS | Barje | 1.73 | 311 | ePn | Pb | 14 18 08.7 | -0.6 |
| BARS | Barje | 1.73 | 311 | i Pn | Pn | 14 18 08.6 | +1.1 |
| LIT | Litokhoron | 1.80 | 208 | Pn | Pn | 14 18 08.4 | +0.1 |
| LIT | Litokhoron | 1.80 | 208 | P | Pn | 14 18 08.5 | +0.1 |
| LIT | Litokhoron | 1.80 | 208 | i Pn | Pn | 14 18 08.4 | +0.1 |
| LIT | Litokhoron | 1.80 | 208 | P | Pn | 14 18 08.4 | +0.1 |
| PVL | Pavlikeni | 1.85 | 39 | P | Pb | 14 18 10.8 | -0.4 |
| PVL | | | | S | Sg | 14 18 37.5 | +0.5 |
| FNA | Florina | 1.90 | 242 | Pn | Pn | 14 18 10.6 | +0.8 |
| FNA | Florina | 1.90 | 242 | P | Pn | 14 18 10.8 | +1.0 |
| | baz=252 | | | | | | |
| FNA | | | | S | Sg | 14 18 39.5 | +0.7 |
| | baz=252 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,1.2nm,0.5s,baz=252 | | | | | | |
| FNA | Florina | 1.90 | 242 | ePn | Pn | 14 18 10.9 | +1.0 |
| FNA | | | | eSn | Sn | 14 18 35.1 | +1.4 |
| FNA | Florina | 1.90 | 242 | i Pn | Pb | 14 18 11.2 | -1.0 |
| FNA | Florina | 1.90 | 242 | P | Pn | 14 18 10.6 | +0.8 |
| FNA | Florina | 1.90 | 242 | P | Pn | 14 18 10.8 | +1.0 |
| SMTH | Samothraki Isl | 1.91 | 129 | P | Pn | 14 18 09.9 | +0.1 |
| SMTH | Samothraki Isl | 1.91 | 129 | P | Pn | 14 18 09.9 | +0.1 |
| KZN | Kozani | 1.96 | 225 | P | Pn | 14 18 11.4 | +0.8 |
| VALD | Valchedram | 2.00 | 357 | P | Pn | 14 18 12.0 | +0.9 |
| ALN | Alexandroupoli | 2.01 | 112 | Pn | Pn | 14 18 12.1 | +0.8 |
| ALN | Alexandroupoli | 2.01 | 112 | Pn | Pn | 14 18 12.0 | +0.8 |
| ALN | Alexandroupoli | 2.01 | 112 | P | Pn | 14 18 11.9 | +0.7 |
| ALN | Alexandroupoli | 2.01 | 112 | P | Pn | 14 18 12.0 | +0.8 |
| ALN | Alexandroupoli | 2.01 | 112 | P | Pn | 14 18 11.9 | +0.7 |
| BLKB | Belogradchik | 2.04 | 341 | | Sb | 14 18 39.6 | -0.3 |
| BLKB | Belogradchik | 2.04 | 341 | ⇑S | Sb | 14 18 39.6 | -0.3 |
| ELND | Elena | 2.09 | 53 | | Pn | 14 18 13.4 | +1.0 |
| ELND | | | | | Sb | 14 18 42.3 | +0.9 |
| ELND | Elena | 2.09 | 53 | ⇑P | Pn | 14 18 13.4 | +1.0 |
| ELND | | | | ⇑S | Sb | 14 18 42.3 | +0.9 |
| ENEZ | Enez | 2.15 | 116 | Pn | Pn | 14 18 13.9 | +0.7 |
| LIA | Limnos Island | 2.16 | 146 | P | Pn | 14 18 13.7 | +0.4 |
| OHR | Ohrid | 2.18 | 255 | i Pn | Pb | 14 18 17.4 | +0.4 |
| OHR | | | | i Sg | Sg | 14 18 48.9 | +1.1 |
| OHR | | | | eLg | Lg | 14 18 50.9 | |
| | comp=N,416nm,0.7s | | | | | | |
| OHR | | | | eLg | Lg | 14 18 52.1 | |
| | comp=E,407nm,0.7s | | | | | | |
| ENZZ | Sultanice-Enez | 2.21 | 119 | Pn | Pn | 14 18 14.4 | +0.5 |
| TYRN | Tyrnavos | 2.23 | 208 | P | Pn | 14 18 15.3 | +1.0 |
| GADA | Gvkgeada | 2.30 | 130 | Pn | Pn | 14 18 15.7 | +0.5 |
| JMB | Yambol | 2.33 | 69 | P | Pn | 14 18 16.0 | +0.4 |
| ZAGS | Zajecar | 2.34 | 335 | ePn | Pn | 14 18 17.2 | +1.4 |
| ZAGS | | | | eSn | Sb | 14 18 48.2 | -0.3 |
| UKOP | Uzunkopru-Edir | 2.35 | 103 | Pn | Pn | 14 18 16.7 | +0.8 |
| EDRB | Edirne | 2.36 | 85 | Pn | Pn | 14 18 16.6 | +0.5 |
| EDRB | Edirne | 2.36 | 85 | P | Pn | 14 18 16.3 | +0.2 |
| SZH | Strazhitsa | 2.36 | 47 | ⇓P | Pn | 14 18 16.9 | +0.8 |
| KBN | Korca | 2.37 | 244 | Pn | Pn | 14 18 17.9 | +1.6 |
| KBN | Korca | 2.37 | 244 | P | Pn | 14 18 17.5 | +1.2 |
| | baz=252 | | | | | | |
| KBN | | | | S | Sg | 14 18 52.5 | -1.4 |
| | baz=252 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,2.3nm,1.0s,baz=252 | | | | | | |
| KBN | Korca | 2.37 | 244 | P | Pn | 14 18 17.9 | +1.6 |
| VLAD | Vladila | 2.38 | 14 | ⇓P | Pn | 14 18 17.4 | +1.1 |
| SELS | Selova | 2.38 | 311 | ePn | Pn | 14 18 17.6 | +1.2 |
| SELS | | | | eSn | Sb | 14 18 49.4 | -0.3 |
| BOVS | Bovan | 2.39 | 325 | | Pn | 14 18 17.1 | +0.7 |
| BOVS | | | | | Sn | 14 18 47.0 | +1.5 |
| BOVS | Bovan | 2.39 | 325 | ePn | Pn | 14 18 17.1 | +0.7 |
| BOVS | | | | eSn | Sb | 14 18 48.8 | -1.0 |
| BOVS | Bovan | 2.39 | 325 | ⇓P | Pn | 14 18 17.1 | +0.7 |
| BOVS | | | | ⇑S | Sn | 14 18 47.0 | +1.5 |
| NEO | Neokhori | 2.40 | 187 | P | Pn | 14 18 16.9 | +0.3 |
| ERIK | Erikli-Kesan | 2.43 | 114 | Pn | Pn | 14 18 17.8 | +0.8 |
| THL | Klokotos Trika | 2.44 | 210 | P | Pn | 14 18 18.2 | +1.1 |
| GELI | Tayfur-Gelibol | 2.53 | 120 | Pn | Pn | 14 18 19.3 | +0.9 |
| PUNG | Punghina | 2.63 | 350 | ⇑P | Pn | 14 18 21.1 | +1.4 |
| BCI | Bajram Curri | 2.71 | 286 | P | Pb | 14 18 24.0 | -2.0 |
| | baz=287 | | | | | | |
| BCI | | | | S | Sg | 14 19 02.6 | -2.2 |
| | baz=287 | | | | | | |
| COPA | Copaceanca | 2.71 | 25 | ⇓P | Pn | 14 18 23.1 | +2.2 |
| LPK | Lapseki | 2.73 | 118 | Pn | Pn | 14 18 22.2 | +1.0 |
| PUK | Puka | 2.79 | 278 | Pn | Pn | 14 18 23.7 | +1.7 |
| PUK | Puka | 2.79 | 278 | P | Pb | 14 18 25.7 | -1.6 |
| | baz=281 | | | | | | |
| PUK | | | | S | Sg | 14 19 05.9 | -1.3 |
| | baz=281 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=E,1.2nm,1.0s,baz=281 | | | | | | |
| EZN | Ezine | 2.79 | 131 | Pn | Pn | 14 18 22.5 | +0.5 |
| EZN | Ezine | 2.79 | 131 | P | Pn | 14 18 22.4 | +0.5 |
| EZN | | | | S | Sn | 14 18 55.0 | -0.4 |
| TIR | Tirane | 2.82 | 264 | Pn | Pn | 14 18 22.3 | -0.1 |
| TIR | Tirane | 2.82 | 264 | P | Pb | 14 18 25.6 | -2.3 |
| | baz=269 | | | | | | |
| TIR | | | | S | Sg | 14 19 05.9 | -2.4 |
| | baz=269 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,0.7nm,0.9s,baz=269 | | | | | | |
| TIR | Tirane | 2.82 | 264 | ePn | Pn | 14 18 25.2 | +2.8 |
| TIR | Tirane | 2.82 | 264 | P | Pn | 14 18 22.3 | -0.1 |
| TIR | Tirane | 2.82 | 264 | P | Pb | 14 18 28.8 | +1.0 |
| AGG | Agios Georgios | 2.84 | 200 | Pn | Pn | 14 18 23.0 | +0.4 |
| AGG | Agios Georgios | 2.84 | 200 | P | Pn | 14 18 23.0 | +0.4 |
| AGG | Agios Georgios | 2.84 | 200 | P | Pn | 14 18 23.5 | +0.9 |
| EZNE | Ezine-Canakkal | 2.86 | 132 | Pn | Pn | 14 18 24.0 | +1.1 |
| RKY | Sarkoy-Tekirda | 2.88 | 109 | Pn | Pn | 14 18 23.9 | +0.6 |
| GPNR | Gulpinar-Canak | 2.96 | 138 | Pn | Pn | 14 18 25.2 | +1.0 |
| IVA | Berane | 2.99 | 294 | ⇑i Pn | Pn | 14 18 26.6 | +1.8 |
| IVA | | | | eSn | Sn | 14 19 04.2 | +3.7 |
| SIGR | SIGRI | 3.02 | 144 | Pn | Pn | 14 18 25.9 | +0.8 |
| SIGR | SIGRI | 3.02 | 144 | P | Pn | 14 18 26.0 | +0.8 |
| GRUS | Gruza | 3.05 | 317 | ePn | Pn | 14 18 26.4 | +0.9 |
| GRUS | | | | eSn | Sn | 14 19 04.8 | +2.9 |
| TKR | Tekirdag | 3.05 | 102 | Pn | Pn | 14 18 26.0 | +0.5 |
| DJES | Djerdap | 3.07 | 346 | ePn | Pn | 14 18 28.1 | +2.2 |
| DJES | | | | eSn | Sn | 14 19 05.9 | +3.4 |
| DJES | Djerdap | 3.07 | 346 | ⇑P | Pn | 14 18 27.4 | +1.5 |
| SGRR | Singureni | 3.07 | 34 | ⇑P | Pn | 14 18 27.1 | +1.3 |
| KYMI | Kymi, Euboea I | 3.08 | 173 | P | Pn | 14 18 26.2 | +0.3 |
| KRBG | Karabiga-Canak | 3.09 | 114 | Pn | Pn | 14 18 27.2 | +1.2 |
| SJES | Sjenica | 3.10 | 302 | ePn | Pn | 14 18 27.7 | +1.3 |
| SJES | | | | eSn | Sn | 14 19 06.4 | +3.0 |
| SJES | Sjenica | 3.10 | 302 | ePn | Pn | 14 18 27.4 | +1.0 |
| SVIS | Svilajnac | 3.11 | 327 | ePn | Pn | 14 18 28.7 | +2.4 |
| ROIA | ROIAK | 3.13 | 62 | P | Pn | 14 18 27.6 | +0.9 |
| NEF | NEVSHA | 3.14 | 59 | P | Pn | 14 18 27.5 | +0.7 |
| CRLT | Corlu | 3.17 | 99 | Pn | Pn | 14 18 28.6 | +1.5 |
| PRD | Provadia | 3.18 | 61 | P | Pn | 14 18 28.0 | +0.7 |
| PRK | Paraskevi | 3.19 | 139 | P | Pn | 14 18 28.5 | +1.1 |
| MRMT | Marmara Adasi | 3.21 | 108 | Pn | Pn | 14 18 28.8 | +1.0 |
| KOME | Kolasin | 3.24 | 292 | ⇑i Pn | Pn | 14 18 30.1 | +1.9 |
| KOME | | | | eSn | Sn | 14 19 10.2 | +3.5 |
| SRN | Sarande | 3.27 | 238 | P | Pn | 14 18 30.2 | +1.6 |
| | baz=244 | | | | | | |
| YENI | Yenice-Canakka | 3.28 | 121 | Pn | Pn | 14 18 29.7 | +1.0 |
| HERR | Herculane | 3.30 | 345 | ⇑P | Pn | 14 18 29.3 | +0.3 |
| PDG | Podgorica | 3.31 | 284 | Pn | Pn | 14 18 28.9 | -0.2 |
| PDG | Podgorica | 3.31 | 284 | ePn | Pn | 14 18 31.3 | +2.2 |
| PDG | Podgorica | 3.31 | 284 | ePn | Pn | 14 18 30.7 | +1.6 |
| PDG | Podgorica | 3.31 | 284 | ⇓i Pn | Pn | 14 18 31.0 | +1.9 |
| PDG | | | | i Sn | Sn | 14 19 12.0 | +3.7 |
| DRME | Dracevica, Mon | 3.33 | 280 | ePn | Pb | 14 18 33.4 | -3.0 |
| DRME | Dracevica, Mon | 3.33 | 280 | ⇑i Pn | Pn | 14 18 31.6 | +2.3 |
| DRME | | | | eSn | Sn | 14 19 12.3 | +3.6 |
| MDVR | Moldovita | 3.38 | 337 | ⇓P | Pn | 14 18 31.4 | +1.3 |
| TRUS | Trudelj | 3.44 | 318 | ePn | Pn | 14 18 31.6 | +0.6 |
| KEK | Kerkira | 3.50 | 237 | Pn | Pn | 14 18 33.8 | +2.1 |
| EDC | Edincik | 3.50 | 111 | Pn | Pn | 14 18 32.9 | +1.2 |
| EDC | Edincik | 3.50 | 111 | P | Pn | 14 18 32.6 | +0.9 |
| SLVT | Silivri | 3.50 | 96 | Pn | Pn | 14 18 32.9 | +1.2 |
| GONE | Gonen-Balikesi | 3.51 | 117 | Pn | Pn | 14 18 33.2 | +1.3 |
| PLE | Pljevlja | 3.51 | 299 | ePn | Pn | 14 18 34.0 | +2.0 |
| PLE | | | | eSn | Sn | 14 19 16.4 | +2.9 |
| BUM | Brajici-Budva | 3.56 | 281 | ePn | Pn | 14 18 34.7 | +2.2 |
| BUM | | | | i Sn | Sn | 14 19 17.9 | +3.4 |
| SULR | | 3.56 | 32 | ⇑P | Pn | 14 18 34.6 | +2.0 |
| DIVS | Divibare | 3.58 | 313 | ePn | Pn | 14 18 33.6 | +0.8 |
| DIVS | | | | eSn | Sn | 14 19 17.1 | +2.1 |
| CEME | Cevo | 3.58 | 285 | ⇑i Pn | Pn | 14 18 35.3 | +2.4 |
| CEME | | | | i Sn | Sn | 14 19 18.5 | +3.4 |
| NKME | Niksic | 3.61 | 289 | ⇑i Pn | Pn | 14 18 35.3 | +2.0 |
| NKME | | | | i Sn | Sn | 14 19 18.7 | +2.9 |
| DKL | Dikili | 3.64 | 135 | Pn | Pn | 14 18 34.9 | +1.3 |
| PTL | Penteli | 3.65 | 177 | P | Pn | 14 18 34.3 | +0.6 |
| RUDO | Rudo | 3.66 | 303 | ePn | Pn | 14 18 32.1 | -1.8 |
| LKD2 | Lefkada island | 3.67 | 219 | P | Pn | 14 18 35.2 | +1.1 |
| | baz=226 | | | | | | |
| LKD2 | | | | S | Sn | 14 19 21.2 | +4.0 |
| | baz=226 | | | | | | |
| CAND | Candarli | 3.67 | 137 | Pn | Pn | 14 18 35.5 | +1.4 |
| GZR | Gura Zlata | 3.75 | 351 | ⇑P | Pn | 14 18 35.4 | +0.3 |
| ARR | Arges | 3.75 | 11 | ⇑P | Pn | 14 18 36.5 | +1.2 |
| AVAS | Avala Beograd | 3.75 | 324 | ePn | Pn | 14 18 36.7 | +1.5 |
| LOT | Lotru | 3.76 | 2 | ⇑P | Pn | 14 18 36.0 | +0.6 |
| BBLS | Lazi&#263i | 3.77 | 307 | ePn | Pn | 14 18 37.4 | +1.9 |
| BBLS | Lazi&#263i | 3.77 | 307 | ePn | Pn | 14 18 36.6 | +1.1 |
| UPM | Unac-Piva | 3.78 | 295 | ePn | Pn | 14 18 37.7 | +1.9 |
| UPM | Unac-Piva | 3.78 | 295 | ⇑i Pn | Pn | 14 18 37.7 | +1.9 |
| UPM | | | | i Sn | Sn | 14 19 23.4 | +3.1 |
| CHOS | Chios island | 3.80 | 149 | Pn | Pn | 14 18 36.9 | +0.9 |
| SUSR | Susurluk-Balik | 3.82 | 115 | Pn | Pn | 14 18 37.4 | +1.3 |
| BALB | Balikesir | 3.85 | 121 | Pn | Pn | 14 18 37.7 | +1.2 |
| BALB | Balikesir | 3.85 | 121 | Pn | Pn | 14 18 37.4 | +0.8 |
| KCTX | Karacabey (Bur | 3.88 | 110 | Pn | Pn | 14 18 38.3 | +1.4 |
| VOIR | | 3.89 | 15 | ⇑P | Pn | 14 18 38.8 | +1.6 |
| VOIR | | 3.89 | 15 | P | Pn | 14 18 38.7 | +1.6 |
| VOIR | | 3.89 | 15 | P | Pn | 14 18 38.6 | +1.5 |
| SOMA | Soma-Manisa | 3.93 | 129 | Pn | Pn | 14 18 39.1 | +1.4 |
| BRY | Bratogost | 3.94 | 290 | ePn | Pn | 14 18 40.5 | +2.6 |
| BRY | Bratogost | 3.94 | 290 | ePn | Pn | 14 18 40.5 | +2.6 |
| BRY | | | | eSn | Sn | 14 19 27.2 | +3.2 |
| TNR | Turnu Rosu | 3.99 | 7 | | Pn | 14 18 40.4 | +1.9 |
| TNR | Turnu Rosu | 3.99 | 7 | ⇓P | Pn | 14 18 40.4 | +1.9 |
| TNR | Turnu Rosu | 3.99 | 7 | P | Pn | 14 18 40.3 | +1.9 |
| TREB | Trebinje | 4.03 | 286 | ePn | Pn | 14 18 40.9 | +1.9 |
| TREB | Trebinje | 4.03 | 286 | ePn | Pn | 14 18 41.5 | +2.5 |
| ISR | Istrita | 4.04 | 31 | ⇑P | Pn | 14 18 41.9 | +2.6 |
| ISR | Istrita | 4.04 | 31 | P | Pn | 14 18 41.8 | +2.6 |
| ISR | Istrita | 4.04 | 31 | P | Pn | 14 18 41.8 | +2.6 |
| URLA | Izmir | 4.05 | 144 | Pn | Pn | 14 18 40.5 | +1.2 |
| TEKS | Tekeris | 4.12 | 315 | ePn | Pn | 14 18 40.7 | +0.4 |
| TEKS | Tekeris | 4.12 | 315 | ePn | Pn | 14 18 40.4 | +0.1 |
| MLR | Muntele Rosu | 4.16 | 23 | Pn | Pn | 14 18 42.5 | +1.6 |
| MLR | Muntele Rosu | 4.16 | 23 | Pn | Pn | 14 18 42.4 | +1.5 |
| | comp=E,11nm,0.3s,baz=248,slow=11,SNR=24 | | | | | | |
| MLR | | | | Sn | Sn | 14 19 30.1 | +0.6 |
| | comp=E,7.8nm,0.3s,baz=203,slow=17,SNR=1.5 | | | | | | |
| MLR | | | | Lg | Lg | 14 19 48.6 | |
| | comp=E,28nm,0.3s,baz=99,slow=13,SNR=9.5 | | | | | | |
| MLR | Muntele Rosu | 4.16 | 23 | ⇑P | Pn | 14 18 43.6 | +2.7 |
| MLR | Muntele Rosu | 4.16 | 23 | P | Pn | 14 18 43.5 | +2.6 |
| HAPS | Han Pijesak,BI | 4.17 | 307 | ePn | Pn | 14 18 42.4 | +1.4 |
| HAPS | Han Pijesak,BI | 4.17 | 307 | ePn | Pn | 14 18 41.9 | +0.9 |
| BZS | Buzias | 4.18 | 341 | ⇑P | Pn | 14 18 43.0 | +2.0 |
| BZS | Buzias | 4.18 | 341 | P | Pn | 14 18 42.5 | +1.5 |
| SURR | Surduc | 4.20 | 346 | | Pn | 14 18 42.6 | +1.3 |
| SURR | Surduc | 4.20 | 346 | ⇓P | Pn | 14 18 42.6 | +1.3 |
| SCTE | Santa Cesarea | 4.21 | 249 | Pn | Pn | 14 18 43.5 | +2.1 |
| NEHR | Nehoiu | 4.22 | 27 | | Pn | 14 18 44.5 | +2.9 |
| NEHR | Nehoiu | 4.22 | 27 | ⇑P | Pn | 14 18 44.5 | +2.9 |
| DEV | Deva | 4.22 | 353 | ⇓P | Pn | 14 18 43.2 | +1.6 |
| DEV | Deva | 4.22 | 353 | P | Pn | 14 18 43.1 | +1.6 |
| FRGS | Fruska Gora | 4.42 | 323 | ePn | Pn | 14 18 45.9 | +1.4 |
| FRGS | Fruska Gora | 4.42 | 323 | ePn | Pn | 14 18 42.2 | -2.3 |
| FRGS | Fruska Gora | 4.42 | 323 | ⇓P | Pn | 14 18 45.5 | +1.1 |
| FRGS | Fruska Gora | 4.42 | 323 | P | Pn | 14 18 48.8 | +4.3 |
| DOPR | Dopca | 4.47 | 16 | ⇑P | Pn | 14 18 46.8 | +1.7 |
| YLV | Yalova | 4.51 | 103 | P | Pn | 14 18 49.9 | +4.3 |
| STON | Ston | 4.53 | 287 | ePn | Pn | 14 18 47.5 | +1.7 |
| COVR | Voineasa-Covas | 4.56 | 24 | | Pn | 14 18 49.1 | +2.8 |
| COVR | Voineasa-Covas | 4.56 | 24 | ⇑P | Pn | 14 18 49.1 | +2.8 |
| OZUR | | 4.68 | 19 | ⇑P | Pn | 14 18 50.2 | +2.2 |
| ITM | Ithomi | 4.69 | 197 | Pn | Pn | 14 18 50.1 | +2.1 |
| TURR | Turia | 4.70 | 21 | ⇑P | Pn | 14 18 50.9 | +2.7 |
| PLOR | Plostina | 4.71 | 27 | ⇑P | Pn | 14 18 51.0 | +2.7 |
| PLOR | Plostina | 4.71 | 27 | P | Pn | 14 18 51.0 | +2.7 |
| PLOR5 | Plostina Array | 4.71 | 27 | P | Pn | 14 18 51.0 | +2.6 |
| PLOR3 | Plostina Array | 4.71 | 27 | P | Pn | 14 18 50.8 | +2.4 |
| TPGR | Topolog | 4.73 | 46 | | Pn | 14 18 49.9 | +1.2 |
| TPGR | Topolog | 4.73 | 46 | ⇑P | Pn | 14 18 49.9 | +1.2 |
| VRI | Vrincioaia | 4.75 | 27 | ⇓P | Pn | 14 18 51.4 | +2.5 |
| VRI | Vrincioaia | 4.75 | 27 | P | Pn | 14 18 51.3 | +2.5 |
| VRI | Vrincioaia | 4.75 | 27 | P | Pn | 14 18 51.4 | +2.5 |
| SIRR | Siria | 4.78 | 344 | ⇑P | Pn | 14 18 50.3 | +1.0 |
| CFR | Carcaliu | 4.80 | 42 | ⇑P | Pn | 14 18 50.8 | +1.2 |
| CFR | Carcaliu | 4.80 | 42 | P | Pn | 14 18 50.8 | +1.2 |
| APE | Apeiranthos | 4.86 | 161 | | Pn | 14 18 50.9 | +0.5 |
| APE | Apeiranthos | 4.86 | 161 | ⇑P | Pn | 14 18 50.9 | +0.5 |
| APE | Apeiranthos | 4.86 | 161 | i P | Pn | 14 18 50.8 | +0.4 |
| ONER | Baraj Valea Uz | 5.06 | 23 | ⇑P | Pn | 14 18 55.3 | +2.2 |
| DRGR | | 5.14 | 353 | ⇑P | Pn | 14 18 55.2 | +0.9 |
| DRGR | | 5.14 | 353 | P | Pn | 14 18 55.1 | +0.9 |
| TLCR | | 5.16 | 46 | | Pn | 14 18 55.9 | +1.4 |
| TLCR | | 5.16 | 46 | ⇓P | Pn | 14 18 55.9 | +1.4 |
| TLCR | | 5.16 | 46 | P | Pn | 14 18 55.9 | +1.4 |
| TESR | Tescani | 5.29 | 24 | ⇓P | Pn | 14 18 58.5 | +2.1 |
| TESR | Tescani | 5.29 | 24 | P | Pn | 14 18 58.3 | +1.9 |
| | comp=E,33nm,0.8s,comp=E,553nmcomp=E,0.3nm | | | | | | |
| ARCR | ARCALIA | 5.42 | 6 | | Pn | 14 18 59.7 | +1.6 |
| ARCR | ARCALIA | 5.42 | 6 | ⇑P | Pn | 14 18 59.7 | +1.6 |
| MGRS | Mrkonjic Grad | 5.49 | 302 | ePn | Pn | 14 19 00.4 | +1.3 |
| BLY | Banja Luka | 5.59 | 305 | ePn | Pn | 14 19 02.2 | +1.8 |
| BLY | Banja Luka | 5.59 | 305 | ePn | Pn | 14 18 59.2 | -1.2 |
| MORH | Mrgy, Hungar | 5.76 | 323 | ⇑P | Pn | 14 19 02.9 | +0.2 |
| TIP | Timpagrande | 5.79 | 247 | Pn | Pn | 14 19 06.3 | +3.1 |
| A050A | Klekovaca | 5.87 | 301 | ePn | Pn | 14 19 06.2 | +1.8 |
| MDUB | Mudurnu | 5.87 | 99 | Pn | Pn | 14 19 06.2 | +1.7 |
| SGRT | San Giovanni R | 5.88 | 273 | Pn | Pn | 14 19 04.8 | +0.4 |
| A051A | Mrakovica | 5.90 | 306 | ePn | Pn | 14 19 05.4 | +0.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BUR01 | Bucovina Ar. S | 6.03 | 11 | | Pn | 14 19 08.0 | +1.4 |
| BURAR | Bucovina Array | 6.03 | 11 | Pn | Pn | 14 19 07.5 | +0.9 |
| BURAR | Bucovina Array | 6.03 | 11 | ⇓P | Pn | 14 19 07.9 | +1.4 |
| BUR08 | Bucovina Ar. S | 6.06 | 10 | Pn | Pn | 14 19 07.9 | +0.9 |
| CUC | Castrocucco | 6.14 | 257 | Pn | Pn | 14 19 11.1 | +3.1 |
| IDI | Anoyia | 6.48 | 171 | Pn | Pn | 14 19 13.6 | +1.0 |
| IDI | Anoyia | 6.48 | 171 | Pn | Pn | 14 19 13.4 | +0.8 |
| | comp=E,24nm,0.6s,baz=2.3,slow=10,SNR=21 | | | | | | |
| IDI | | | | Sn | Sn | 14 20 25.4 | -1.1 |
| | baz=102,slow=18 | | | | | | |
| ARG | Arkhangelos | 6.51 | 146 | Pn | Pn | 14 19 13.6 | +0.5 |
| ARG | Arkhangelos | 6.51 | 146 | P | Pn | 14 19 13.6 | +0.5 |
| PSZ | Piszkesteto | 6.76 | 338 | Pn | Pn | 14 19 17.2 | +0.7 |
| PSZ | Piszkesteto | 6.76 | 338 | P | Pn | 14 19 17.2 | +0.7 |
| CEL | Celeste | 6.83 | 242 | Pn | Pn | 14 19 18.9 | +1.3 |
| CEL | Celeste | 6.83 | 242 | P | Pn | 14 19 20.9 | +3.3 |
| | comp=E,19nm,0.9s,comp=E,0.1nm | | | | | | |
| MPLH | Magyarpolny | 6.98 | 324 | P | Pn | 14 19 21.3 | +1.8 |
| | comp=E,83nm,0.8s,comp=E,895nmcomp=E,0.3nm | | | | | | |
| KECS | Kecovo | 7.14 | 343 | eP | Pn | 14 19 25.1 | +3.5 |
| KECS | Kecovo | 7.14 | 343 | ePN | Pn | 14 19 25.1 | +3.5 |
| BOJS | Bojanci | 7.15 | 305 | i Pn | Pn | 14 19 25.1 | +3.3 |
| BOJS | Bojanci | 7.15 | 305 | ePn | Pn | 14 19 23.4 | +1.5 |
| CRES | Cresnjev | 7.19 | 308 | ePn | Pn | 14 19 17.8 | -4.7 |
| GOLS | Golise | 7.20 | 310 | i Pn | Pn | 14 19 24.2 | +1.7 |
| INTR | Introdacqua | 7.24 | 276 | Pn | Pn | 14 19 24.9 | +1.8 |
| KOLS | Kolonicke sedl | 7.30 | 353 | eP | Pn | 14 19 26.3 | +2.4 |
| KOLS | Kolonicke sedl | 7.30 | 353 | ePN | Pn | 14 19 26.3 | +2.4 |
| KOLS | Kolonicke sedl | 7.30 | 353 | eSG | Sg | 14 21 29.1 | -2.6 |
| CRVS | Cervenica-Dubn | 7.36 | 349 | eSG | Sg | 14 21 30.7 | -3.1 |
| TARU | Tarkhankut | 7.46 | 57 | eP | Pn | 14 19 26.6 | +0.5 |
| TARU | | | | Pm | | 14 19 27.5 | |
| | comp=Z,18nm,0.3s | | | | | | |
| TARU | | | | eS | Sn | 14 20 50.1 | -0.5 |
| TARU | | | | Sm | | 14 20 51.5 | |
| | comp=N,6.0nm,0.4s | | | | | | |
| TARU | | | | Sm | | 14 20 51.5 | |
| | comp=E,10.0nm,0.6s | | | | | | |
| VYHS | Vyhne | 7.59 | 335 | eP | Pn | 14 19 32.0 | +4.2 |
| VYHS | | | | e | | 14 20 55.5 | |
| VYHS | Vyhne | 7.59 | 335 | ePN | Pn | 14 19 32.0 | +4.2 |
| VYHS | | | | eSN | Sn | 14 20 55.5 | +1.9 |
| CAMP | Campotosto | 7.62 | 280 | Pn | Pn | 14 19 28.7 | +0.3 |
| CEY | Cerknica | 7.77 | 304 | ePn | Pn | 14 19 29.8 | -0.6 |
| NRCA | Norcia | 7.86 | 282 | Pn | Pn | 14 19 32.4 | +0.8 |
| BR106 | Keskin Array S | 7.86 | 101 | P | Pn | 14 19 33.3 | +1.5 |
| | comp=E,3.1nm,0.5s,comp=E,50nmcomp=E,0.0nm | | | | | | |
| BR105 | Keskin Array S | 7.87 | 101 | P | Pn | 14 19 34.7 | +2.9 |
| | comp=E,5.2nm,0.7s,comp=E,64nmcomp=E,0.0nm | | | | | | |
| BR131 | Keskin Array S | 7.88 | 101 | Pn | Pn | 14 19 32.0 | 0.0 |
| BR131 | Keskin Array S | 7.88 | 101 | i P | Pn | 14 19 33.6 | +1.6 |
| BRTR | Keskin Array B | 7.88 | 101 | Pn | Pn | 14 19 32.5 | +0.4 |
| BRTR | Keskin Array B | 7.88 | 101 | Pn | Pn | 14 19 33.0 | +1.0 |
| | comp=E,0.6nm,0.3s,baz=278,slow=13,SNR=9.0 | | | | | | |
| BRTR | | | | Sn | Sn | 14 20 58.9 | -2.2 |
| | comp=E,0.5nm,0.3s,baz=133,slow=32,SNR=1.8 | | | | | | |
| | comp=E,1.7nm,0.5s | | | | | | |
| FDMO | Fiordimonte | 7.90 | 283 | Pn | Pn | 14 19 33.2 | +1.1 |
| SEV | Sevastopol' | 7.90 | 65 | eP | Pn | 14 19 32.1 | 0.0 |
| SEV | | | | Pm | | 14 19 36.4 | |
| | comp=Z,13nm,0.4s | | | | | | |
| SEV | | | | eS | Sn | 14 21 01.5 | +0.2 |
| SEV | | | | Sm | | 14 21 08.4 | |
| | comp=N,13nm,0.5s | | | | | | |
| SEV | | | | Sm | | 14 21 08.4 | |
| | comp=E,21nm,0.7s | | | | | | |
| SEV | Sevastopol' | 7.90 | 65 | eP | Pn | 14 19 32.1 | 0.0 |
| SEV | | | | eS | Sn | 14 21 01.5 | +0.2 |
| SOKA | Soboth | 7.92 | 312 | ePn | Pn | 14 19 34.5 | +2.1 |
| | comp=E,0.6nm,0.2s | | | | | | |
| SOKA | | | | eSn | Sn | 14 20 58.2 | -3.6 |
| | comp=E,5.3nm,0.3s | | | | | | |
| RONA | Rosalia, Austr | 7.94 | 322 | ePn | Pn | 14 19 34.9 | +2.2 |
| | comp=E,2.1nm,0.4s | | | | | | |
| RONA | | | | eSn | Sn | 14 20 59.9 | -2.5 |
| | comp=E,1.5nm,0.3s | | | | | | |
| SKDS | Skadanscina | 7.95 | 302 | ePn | Pn | 14 19 36.2 | +3.4 |
| ARSA | Arzberg | 8.01 | 317 | ePn | Pn | 14 19 35.3 | +1.7 |
| | comp=E,6.0nm,0.3s | | | | | | |
| ARSA | | | | eSn | Sn | 14 21 00.6 | -3.4 |
| | comp=E,4.4nm,0.4s | | | | | | |
| MODS | Modra-Piesok | 8.04 | 328 | eP | Pn | 14 19 37.9 | +3.9 |
| MODS | | | | e | | 14 21 02.1 | |
| MODS | Modra-Piesok | 8.04 | 328 | ePN | Pn | 14 19 37.9 | +3.9 |
| MODS | | | | eSN | Sn | 14 21 02.1 | -2.6 |
| NIE | Niedzica | 8.06 | 344 | P | Pn | 14 19 39.5 | +5.1 |
| NIE | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| NIE | Niedzica | 8.06 | 344 | P | Pn | 14 19 39.1 | +4.7 |
| | comp=Z,3.3nm,1.1s | | | | | | |
| OBKA | Obir | 8.09 | 310 | ePn | Pn | 14 19 36.9 | +2.0 |
| | comp=Z,1.4nm,0.3s | | | | | | |
| OBKA | | | | eSn | Sn | 14 21 03.7 | -2.6 |
| | comp=Z,6.7nm,0.4s | | | | | | |
| LVV | L'vov | 8.13 | 2 | eP | Pn | 14 19 42.2 | +6.9 |
| CONA | Conrad Observa | 8.31 | 321 | ePn | Pn | 14 19 39.7 | +1.9 |
| | comp=Z,2.6nm,0.4s | | | | | | |
| CONA | | | | eSn | Sn | 14 21 08.6 | -2.9 |
| | comp=Z,8.1nm,0.5s | | | | | | |
| SABO | M.te Sabotino | 8.40 | 304 | Pn | Pn | 14 19 40.1 | +1.2 |
| PRED | Cave del Predi | 8.64 | 307 | Pn | Pn | 14 19 44.2 | +1.9 |
| MYKA | Terra Mystica | 8.69 | 308 | ePn | Pn | 14 19 46.8 | +3.8 |
| | comp=Z,2.9nm,0.3s | | | | | | |
| MYKA | | | | eSn | Sn | 14 21 19.4 | -1.5 |
| | comp=Z,3.0nm,0.5s | | | | | | |
| SUDU | Sudak | 8.91 | 65 | eP | Pn | 14 19 46.2 | +0.2 |
| SUDU | | | | Pm | | 14 19 50.4 | |
| | comp=Z,14nm,0.4s | | | | | | |
| SUDU | | | | eS | Sn | 14 21 26.5 | +0.4 |
| SUDU | | | | Sm | | 14 21 31.3 | |
| | comp=N,86nm,1.0s | | | | | | |
| SUDU | | | | Sm | | 14 21 31.3 | |
| | comp=E,27nm,0.8s | | | | | | |
| MOA | Molln | 9.05 | 316 | ePn | Pn | 14 19 49.5 | +1.7 |
| | comp=E,1.5nm,0.2s | | | | | | |
| MOA | | | | eSn | Sn | 14 21 28.0 | -1.6 |
| | comp=E,3.4nm,0.3s | | | | | | |
| VRAC | Vranov | 9.06 | 330 | Pn | Pn | 14 19 48.2 | +0.2 |
| | comp=E,0.4nm,0.3s,baz=198,slow=3.1,SNR=1.8 | | | | | | |
| | comp=E,1.6nm,0.4s | | | | | | |
| KBA | Koelnbreinsper | 9.10 | 310 | ePn | Pn | 14 19 57.0 | +8.2 |
| | comp=E,2.2nm,0.4s | | | | | | |
| KBA | | | | eSn | Sn | 14 21 28.1 | -3.0 |
| | comp=E,4.9nm,0.6s | | | | | | |
| BIOA | Bad Ischl, Aus | 9.28 | 314 | ePn | Pn | 14 19 54.1 | +3.0 |
| | comp=E,3.8nm,0.3s | | | | | | |
| BIOA | | | | eSn | Sn | 14 21 33.3 | -2.0 |
| | comp=E,8.1nm,0.6s | | | | | | |
| ABTA | Abfaltersbach | 9.42 | 306 | Pn | Pn | 14 19 56.6 | +3.5 |
| | comp=E,3.8nm,0.5s | | | | | | |
| LESA | Schwarzleotal | 9.67 | 310 | ePn | Pn | 14 20 00.3 | +3.9 |
| | comp=E,4.5nm,0.4s | | | | | | |
| LESA | | | | eSn | Sn | 14 21 44.1 | -0.7 |
| | comp=E,4.3nm,0.4s | | | | | | |
| KIEV | Kiev | 9.80 | 21 | Pn | Pn | 14 19 59.1 | +0.9 |
| KIEV | Kiev | 9.80 | 21 | P | Pn | 14 19 59.1 | +0.9 |
| KIEV | Kiev | 9.80 | 21 | P | Pn | 14 20 00.1 | +1.9 |
| | comp=E,28nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 9.81 | 21 | Pn | Pn | 14 19 58.5 | +0.1 |
| | comp=E,0.8nm,0.3s,baz=214,slow=12,SNR=1.4 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| AKBB | Malin Array Si | 9.81 | 21 | Pn | Pn | 14 19 58.9 | +0.5 |
| AKBB | Malin Array Si | 9.81 | 21 | i P | Pn | 14 19 59.2 | +0.9 |
| GERES | GERESS Array B | 9.98 | 319 | Pn | Pn | 14 19 59.3 | -1.5 |
| GERES | GERESS Array B | 9.98 | 319 | P | Pn | 14 19 59.3 | -1.5 |
| WTTA | Wattenberg | 10.20 | 307 | i Pn | Pn | 14 20 07.4 | +3.6 |
| | comp=E,2.9nm,0.3s | | | | | | |
| WTTA | | | | eSn | Sn | 14 21 58.8 | +0.8 |
| | comp=E,5.3nm,0.6s | | | | | | |
| KHC | Kasperske Hory | 10.23 | 320 | i P | Pn | 14 20 02.4 | -1.8 |
| WATA | Walderalm | 10.27 | 307 | i Pn | Pn | 14 20 09.2 | +4.6 |
| | comp=E,7.8nm,0.4s | | | | | | |
| WATA | | | | eSn | Sn | 14 21 59.2 | -0.4 |
| | comp=E,5.0nm,0.4s | | | | | | |
| MOTA | Moosalm | 10.55 | 307 | i Pn | Pn | 14 20 12.7 | +4.1 |
| | comp=E,5.9nm,0.5s | | | | | | |
| FETA | Feichten | 10.64 | 304 | ePn | Pn | 14 20 12.8 | +3.1 |
| | comp=E,1.7nm,0.4s | | | | | | |
| FETA | | | | eSn | Sn | 14 22 10.2 | +1.5 |
| | comp=E,2.0nm,0.6s | | | | | | |
| MSSA | Maissana | 10.64 | 289 | Pn | Pn | 14 20 13.1 | +3.4 |
| FUORN | Ofenpass-Fuorn | 10.77 | 302 | Pn | Pn | 14 20 13.4 | +1.8 |
| RETA | Reutte | 10.82 | 307 | i Pn | Pn | 14 20 14.7 | +2.5 |
| | comp=E,0.5nm,0.4s | | | | | | |
| SLE | Schleitheim | 12.33 | 305 | P | Pn | 14 20 35.2 | +2.4 |
| SLE | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| ECH | Echery | 13.33 | 305 | Pn | Pn | 14 20 48.0 | +1.6 |
| ECH | Echery | 13.33 | 305 | P | Pn | 14 20 48.0 | +1.6 |
| KBZ | Khabaz | 14.34 | 75 | Pn | Pn | 14 21 01.1 | +0.9 |
| | comp=Z,0.1nm,0.3s,baz=288,slow=10,SNR=1.3 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| KBZ | Khabaz | 14.34 | 75 | i P | Pn | 14 21 00.1 | -0.1 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| OBN | Obninsk | 15.92 | 28 | ⇓eP | Pn | 14 21 20.4 | -0.7 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| HFS | Hagfors | 19.45 | 345 | P | P | 14 22 02.4 | -1.3 |
| | comp=Z,0.1nm,0.3s,baz=148,slow=9.6,SNR=2.5 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| BELG | Belogornoye | 19.47 | 48 | P | P | 14 22 03.4 | -0.5 |
| | comp=Z,0.7nm,0.3s,baz=232,slow=3.6,SNR=1.5 | | | | | | |
| | comp=Z,4.3nm,0.4s | | | | | | |
| FINES | FINESS Array B | 19.84 | 4 | P | P | 14 22 07.3 | -0.5 |
| FINES | FINESS Array B | 19.84 | 4 | P | P | 14 22 07.7 | -0.1 |
| | comp=Z,0.1nm,0.3s,baz=186,slow=9.8,SNR=6.4 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| FINES | FINESS Array B | 19.84 | 4 | eP | P | 14 22 08.0 | +0.2 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| FIA1 | FINESS Array S | 19.84 | 4 | P | P | 14 22 08.7 | +0.9 |
| FIA1 | | | | IAmb | IAmb | 14 22 31.6 | |
| | comp=Z,17nm,1.1s | | | | | | |
| NC602 | NORSAR Array S | 20.44 | 343 | P | P | 14 22 15.4 | +0.9 |
| NC602 | | | | IAmb | IAmb | 14 22 55.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| NC405 | NORSAR Array S | 20.75 | 344 | P | P | 14 22 17.0 | -0.8 |
| NB201 | NORSAR Array S | 20.78 | 343 | P | P | 14 22 18.1 | -0.1 |
| NB201 | | | | IAmb | IAmb | 14 22 35.5 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| NB2 | NORSAR Subarra | 20.79 | 343 | P | P | 14 22 17.7 | -0.6 |
| | comp=Z,1.8nm,0.6s,baz=148,slow=11 | | | | | | |
| NOA | NORSAR Array B | 20.79 | 343 | P | P | 14 22 17.8 | -0.4 |
| | comp=Z,1.6nm,0.8s,baz=156,slow=11,SNR=6.2 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| NBO00 | NORSAR Array S | 20.88 | 342 | P | P | 14 22 16.8 | -2.4 |
| NBO00 | | | | IAmb | IAmb | 14 22 39.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| ESDC | Sonseca Array | 20.96 | 274 | P | P | 14 22 20.5 | +0.2 |
| | comp=Z,0.2nm,0.5s,baz=67,slow=9.5,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| NC204 | NORSAR Array S | 21.10 | 343 | P | P | 14 22 20.7 | -1.0 |
| NC204 | | | | IAmb | IAmb | 14 22 27.3 | |
| | comp=Z,14nm,1.1s | | | | | | |
| EKA | Eskdalemuir Ar | 22.19 | 317 | P | P | 14 22 32.6 | -0.7 |
| | comp=Z,0.6nm,0.6s,baz=120,slow=11,SNR=1.8 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| ESK | Eskdalemuir | 22.20 | 317 | P | P | 14 22 31.5 | -2.0 |
| ESK | Eskdalemuir | 22.20 | 317 | P | P | 14 22 31.5 | -2.0 |
| ESK | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | |
| EKB | Eskdalemuir | 22.21 | 317 | P | P | 14 22 31.4 | -2.1 |
| EKB | | | | IAmb | IAmb | 14 22 49.3 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| AKTO | Aktyubinsk | 25.24 | 58 | LR | LR | 14 33 36.2 | |
| | comp=Z,125nm,20.5s,baz=126,slow=38 | | | | | | |
| ABKAR | Akbulak array | 26.39 | 61 | P | P | 14 23 12.1 | -1.4 |
| TORD | Torodi Ar. Bea | 34.24 | 220 | P | P | 14 24 22.8 | -0.4 |
| | comp=Z,1.1nm,1.0s,baz=27,slow=9.7,SNR=2.9 | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | |
| KKAR | Karatay Array | 34.33 | 72 | P | P | 14 24 25.7 | +1.9 |
| KKAR | Karatay Array | 34.33 | 72 | P | P | 14 24 25.7 | +1.9 |
| GAR | Garm | 35.37 | 78 | P | P | 14 24 31.7 | -1.3 |
| KURBB | Kurchatov Arra | 38.29 | 57 | P | P | 14 24 57.6 | +0.1 |
| | comp=Z,0.2nm,0.3s,baz=282,slow=8.5,SNR=1.9 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| KURK | Kurchatov | 38.33 | 57 | P | P | 14 24 57.6 | -0.3 |
| MKAR | Makanchi Array | 41.51 | 62 | P | P | 14 25 25.9 | +1.5 |
| MKAR | Makanchi Array | 41.51 | 62 | P | P | 14 25 25.1 | +0.7 |
| | comp=Z,0.5nm,0.6s,baz=278,slow=8.6,SNR=5.9 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| ZAA0 | Zalesovo Array | 41.62 | 51 | P | P | 14 25 25.3 | +0.1 |
| ZAA0 | | | | IAmb | IAmb | 14 25 26.7 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 41.62 | 51 | P | P | 14 25 25.4 | +0.3 |
| ZALV | Zalesovo Beam | 41.62 | 51 | P | P | 14 25 24.8 | -0.4 |
| | comp=Z,2.5nm,0.5s,baz=274,slow=8.8,SNR=10 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 41.62 | 51 | eP | P | 14 25 26.1 | +1.0 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| DBIC | Dimbokro | 43.07 | 224 | P | P | 14 25 36.5 | -0.8 |
| | comp=Z,1.0nm,0.5s,baz=22,slow=12,SNR=1.6 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| SONM | Songino Array | 56.43 | 53 | P | P | 14 27 19.3 | +0.4 |
| | comp=Z,0.4nm,0.3s,baz=299,slow=6.3,SNR=2.8 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| HHC | Hu-ho-hao-te | 63.14 | 58 | eP | P | 14 28 05.0 | -0.1 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,22nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,81nm,5.1s | | | | | | |
| PZH | PanZhiHua | 64.41 | 77 | P | P | 14 28 16.1 | +2.4 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,90nm,4.3s | | | | | | |

*SJA **02** 14:29:23.7±0.7, 21°.34S×70°.28W, h26km±2km, ML3.9, MW4.0*
*GUC **02** 14:29:26.3±0.8, 21°.34S×70°.26W, h36km±4km, ML3.8*
*VAO **02** 14:29:29.3±0.7, 21°.37S×69°.84W, h10km, mb4.1*
*IDC **02** 14:29:32.9±5.7, 20°.55S×71°.18W, h90km±44km, mb3.5/2, mbtmp3.8/3, Error ellipse: s-maj=133.2km s-min=36.3km az=116.0*
**ISC 02 14:29:23.4**±1.2**, 21°.31S**±0°.02×**70°.28W**±0°.05**, h9**km±9km**, n48,** σ1s.38/57**, 2D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TA01 | Diego Aracena | 0.74 | 7 | eP | Pn | 14 29 39.4 | -0.7 |
| TA01 | | | | eS | Sn | 14 29 50.4 | -1.1 |
| TA01 | | | | IAML | | 14 29 50.8 | |
| | comp=Z,2μm,0.5s | | | | | | |
| TA01 | Diego Aracena | 0.74 | 7 | ⇓iP | Pn | 14 29 39.6 | -0.5 |
| TA01 | | | | i S | Sn | 14 29 49.9 | -1.5 |
| PB04 | IPOC Station P | 1.03 | 173 | eP | Pg | 14 29 43.6 | +0.4 |
| PB04 | | | | eS | Sg | 14 29 57.4 | +0.7 |
| PB04 | | | | IAML | | 14 29 59.2 | |
| | comp=Z,4μm,0.3s | | | | | | |
| PB04 | IPOC Station P | 1.03 | 173 | eP | Pg | 14 29 43.7 | +0.4 |
| PB04 | | | | eS | Sb | 14 29 56.6 | -0.6 |
| PB04 | | | | IAML | | 14 29 58.5 | |
| | comp=N,6μm,0.3s | | | | | | |
| TA02 | Huaiquique | 1.04 | 8 | eP | Pg | 14 29 44.5 | +1.1 |
| TA02 | | | | eS | Sb | 14 29 46.8 | -10 |
| TA02 | | | | IAML | | 14 30 00.5 | |
| | comp=Z,1μm,0.1s | | | | | | |
| TA02 | Huaiquique | 1.04 | 8 | eP | Pg | 14 29 44.7 | +1.3 |
| TA02 | | | | eS | Sn | 14 29 57.3 | -1.5 |
| PB09 | IPOC Station P | 1.08 | 117 | eP | Pg | 14 29 44.6 | +0.4 |
| PB09 | | | | eS | Sn | 14 29 59.6 | -0.5 |
| PB09 | | | | IAML | | 14 30 01.6 | |
| | comp=Z,2μm,0.2s | | | | | | |
| PB09 | IPOC Station P | 1.08 | 117 | ⇓iP | Pg | 14 29 44.9 | +0.6 |
| PB09 | | | | eS | Sn | 14 29 58.9 | -1.2 |
| PB09 | | | | IAML | | 14 30 02.4 | |
| | comp=E,3μm,0.1s | | | | | | |
| PX03 | IPOC Station P | 1.08 | 34 | eP | Pg | 14 29 44.8 | +0.5 |
| PX03 | | | | IAML | | 14 30 02.8 | |
| | comp=N,3μm,0.4s | | | | | | |
| PB06 | IPOC Station P | 1.54 | 155 | eP | Pn | 14 29 51.0 | -0.2 |
| PB06 | | | | eS | Sb | 14 30 11.6 | -0.3 |
| PB06 | | | | IAML | | 14 30 17.3 | |
| | comp=Z,1μm,0.3s | | | | | | |
| PB06 | IPOC Station P | 1.54 | 155 | eP | Pn | 14 29 50.8 | -0.4 |
| PB06 | | | | eS | Sn | 14 30 10.4 | -1.0 |
| PB06 | | | | IAML | | 14 30 13.0 | |
| | comp=N,2μm,0.2s | | | | | | |
| PB05 | IPOC Station P | 1.54 | 177 | eP | Pn | 14 29 50.7 | -0.5 |
| PB05 | | | | eS | Sb | 14 30 11.8 | -0.2 |
| PB05 | | | | IAML | | 14 30 15.2 | |
| | comp=Z,1μm,0.3s | | | | | | |
| PB05 | IPOC Station P | 1.54 | 177 | eP | Pn | 14 29 50.7 | -0.5 |
| PB05 | | | | eS | Sn | 14 30 10.2 | -1.2 |
| PB05 | | | | IAML | | 14 30 14.2 | |
| | comp=N,2μm,0.5s | | | | | | |
| LVC | Limon Verde | 1.81 | 136 | eP | Pb | 14 29 56.2 | -0.8 |
| LVC | | | | eS | Sn | 14 30 04.5 | -14 |
| LVC | Limon Verde | 1.81 | 136 | i P | Pb | 14 29 56.1 | -1.0 |
| LVC | | | | eS | Sb | 14 30 18.6 | -1.4 |
| LVC | | | | IAML | | 14 30 25.6 | |
| | comp=N,4μm,0.3s | | | | | | |
| LVC | Limon Verde | 1.81 | 136 | eP | Pb | 14 29 56.2 | -0.8 |
| LVC | | | | eS | Sn | 14 30 16.6 | -1.9 |
| GO01 | Chusmiza | 1.92 | 32 | eP | Pb | 14 29 58.1 | -0.8 |
| GO01 | | | | eS | Sg | 14 30 23.6 | -1.6 |
| GO01 | | | | IAML | | 14 30 26.2 | |
| | comp=Z,1μm,0.1s | | | | | | |
| GO01 | Chusmiza | 1.92 | 32 | i P | Pb | 14 29 58.0 | -0.9 |
| GO01 | | | | eS | Sb | 14 30 22.4 | -0.7 |
| GO01 | | | | IAML | | 14 30 26.2 | |
| | comp=N,2μm,0.2s | | | | | | |
| PB15 | IPOC Station P | 2.04 | 159 | eP | Pn | 14 29 58.3 | +0.2 |
| PB15 | | | | eS | Sn | 14 30 23.9 | +0.2 |
| PB15 | | | | IAML | | 14 30 36.5 | |
| | comp=Z,3μm,0.2s | | | | | | |
| PB15 | IPOC Station P | 2.04 | 159 | eP | Pn | 14 29 58.3 | +0.2 |
| PB15 | | | | eS | Sn | 14 30 23.5 | -0.2 |
| AF01 | San Pedro de A | 2.54 | 130 | eP | Pn | 14 30 06.5 | +1.3 |
| AF01 | | | | IAML | | 14 30 58.3 | |
| | comp=Z,2μm,0.5s | | | | | | |
| AF01 | San Pedro de A | 2.54 | 130 | eP | Pb | 14 30 08.6 | -0.8 |
| PB14 | IPOC Station P | 3.31 | 182 | eP | Pn | 14 30 15.4 | -0.3 |
| PB14 | | | | eS | Sb | 14 30 58.5 | -4.5 |
| PB14 | | | | IAML | | 14 31 14.6 | |
| | comp=Z,216nm,0.8s | | | | | | |
| PB14 | IPOC Station P | 3.31 | 182 | eP | Pn | 14 30 15.8 | +0.1 |
| PB14 | | | | IAML | | 14 31 10.8 | |
| | comp=E,104nm,0.4s | | | | | | |
| GO02 | Mina Guanaco | 3.89 | 171 | eP | Pn | 14 30 24.0 | +0.3 |
| AC01 | Pan de Azucar | 4.83 | 183 | eP | Pn | 14 30 34.6 | -1.7 |
| AC01 | | | | eS | Sb | 14 31 43.5 | -3.0 |
| AC01 | | | | IAML | | 14 31 54.7 | |
| | comp=Z,90nm,0.8s | | | | | | |
| AC01 | Pan de Azucar | 4.83 | 183 | eP | Pn | 14 30 36.4 | 0.0 |
| LPAZ | La Paz | 5.39 | 23 | P | Pn | 14 30 49.9 | +5.3 |
| | comp=Z,8.5nm,0.6s,baz=202,slow=16,SNR=18 | | | | | | |
| LPAZ | | | | S | Sn | 14 31 45.4 | -1.7 |
| | comp=Z,5.3nm,0.7s,baz=210,slow=8.1,SNR=1.4 | | | | | | |
| LPAZ | La Paz | 5.39 | 23 | eP | Pn | 14 30 49.3 | +4.7 |
| BBSD | Serra de San D | 10.01 | 67 | eP | Pn | 14 31 47.1 | -0.4 |
| BBSD | | | | eS | Sn | 14 33 38.4 | -1.5 |
| MURT | Porto Murtinho | 11.80 | 94 | eP | Pn | 14 32 11.0 | -1.0 |
| ETMB | Extrema | 12.07 | 20 | eP | | 14 32 21.2 | |
| VILB | Vilhena | 12.71 | 51 | eP | Pn | 14 32 26.1 | +1.5 |
| CPUP | Villa Florida | 12.86 | 115 | eP | Pn | 14 32 26.8 | +0.3 |
| H03N1 | Juan Fernandez | 14.31 | 211 | T | T | 14 47 13.3 | |
| | baz=36,slow=72,SNR=16 | | | | | | |
| H03N2 | Juan Fernandez | 14.31 | 211 | T | T | 14 47 14.6 | |
| | baz=36,slow=72,SNR=16 | | | | | | |
| H03N3 | Juan Fernandez | 14.32 | 211 | T | T | 14 47 14.6 | |
| | baz=36,slow=72,SNR=17 | | | | | | |
| SALV | Santo Antonio | 14.83 | 71 | eP | Pn | 14 32 54.4 | +0.9 |
| PDRB | Porto dos Gac | 16.17 | 56 | eP | P | 14 33 12.4 | -1.8 |
| QSPA | South Pole Qui | 68.88 | 180 | P | P | 14 40 31.7 | +3.4 |
| | comp=Z,1.5nm,1.1s,baz=186,slow=3.6,SNR=2.4 | | | | | | |
| | comp=Z,1.5nm,1.1s | | | | | | |
| TORD | Torodi Ar. Bea | 78.49 | 71 | P | P | 14 41 28.8 | +3.3 |
| | comp=Z,0.4nm,0.5s,baz=260,slow=5.7,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| H11S2 | WAKE ISLAND Hy | 126.59 | 278 | T | T | 17 07 44.5 | |
| | baz=103,slow=75,SNR=27 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 126.60 | 278 | T | T | 17 07 45.2 | |
| | baz=103,slow=75,SNR=26 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 126.61 | 278 | T | T | 17 07 45.0 | |
| | baz=103,slow=75,SNR=27 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 126.67 | 279 | T | T | 17 07 46.5 | |
| | baz=103,slow=75,SNR=28 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 126.68 | 279 | T | T | 17 07 50.2 | |
| | baz=103,slow=75,SNR=33 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 126.69 | 279 | T | T | 17 07 49.5 | |
| | baz=103,slow=75,SNR=24 | | | | | | |
| MKAR | Makanchi Array | 146.21 | 35 | PKPbc | PKPdf | 14 49 01.5 | -1.7 |
| | comp=Z,0.4nm,0.8s,baz=325,slow=1.8,SNR=3.8 | | | | | | |

*IDC **02** 14:34:19.8±1.1, 32°.94N×105°.42E, h0km, mb3.4/7, mbtmp3.4/10, ML3.6/3, MS2.6/1, Error ellipse: s-maj=34.0km s-min=20.3km az=60.0*
**ISC 02 14:34:22.0**±0.9**, 32°.9N**±0°.1×**105°.5E**±0°.2**, h14**km**, n10,** σ1s.07/10**, mb3.5**/7**, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SONM | Songino Array | 14.92 | 2 | Pn | Pn | 14 37 53.0 | +0.4 |
| | 0.2nm,0.3s,baz=170,slow=8.8,SNR=1.6 | | | | | | |
| SONM | | | | LR | LR | 14 42 48.6 | |
| | comp=Z,21nm,19.2s,baz=278,slow=34 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| CMAR | Chiang Mai Arr | 15.54 | 204 | Pn | Pn | 14 38 00.5 | -0.3 |
| | 0.2nm,0.3s,baz=12,slow=9.2,SNR=1.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| KSRS | Korea Array | 18.90 | 70 | P | P | 14 38 41.1 | -1.0 |
| | 0.1nm,0.3s,baz=252,slow=12,SNR=1.8 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 22.44 | 315 | P | P | 14 39 20.4 | -0.1 |
| | 0.1nm,0.3s,baz=106,slow=9.6,SNR=6.7 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| ZALV | Zalesovo Beam | 25.64 | 331 | P | P | 14 39 49.0 | -2.0 |
| | 0.3nm,0.4s,baz=122,slow=7.0,SNR=1.9 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| KURBB | Kurchatov Arra | 26.54 | 320 | P | P | 14 39 58.9 | -0.2 |
| | 0.4nm,0.2s,baz=129,slow=10,SNR=1.7 | | | | | | |
| | 0.4nm,0.2s | | | | | | |
| WRA | Warramunga Arr | 59.37 | 148 | P | P | 14 44 23.3 | -0.6 |
| | 0.5nm,0.7s,baz=341,slow=7.4,SNR=4.0 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| ASAR | Alice Springs | 62.47 | 150 | P | P | 14 44 46.2 | +1.3 |
| | 0.3nm,0.8s,baz=334,slow=6.7,SNR=1.5 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| ILAR | Eielson Array | 67.71 | 26 | P | P | 14 45 18.7 | +0.2 |
| | 0.3nm,0.8s,baz=289,slow=6.3,SNR=2.6 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| YKA | Yellowknife Ar | 79.62 | 18 | P | P | 14 46 29.2 | +0.7 |
| | 0.6nm,0.7s,baz=331,slow=5.1,SNR=3.1 | | | | | | |
| | 0.6nm,0.7s | | | | | | |

**NOU 02 15:00:52.8, 21°.71S×169°.39E, h0km, MLv3.4**/10**, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MARNC | Mare, Loyalty | 1.29 | 280 | P | Pg | 15 01 17.0 | -0.5 |
| PINNC | Pines Island, | 2.01 | 243 | P | Pn | 15 01 27.1 | -0.9 |
| LIFNC | LIFOU | 2.21 | 294 | P | Pn | 15 01 29.9 | -0.8 |
| YATNC | Mamie plateau, | 2.35 | 261 | P | Pn | 15 01 32.6 | -0.1 |
| DZM | Mont Dzumac | 2.76 | 262 | P | Pn | 15 01 38.5 | +0.1 |
| ONTNC | Ouen Toro | 2.79 | 257 | P | Pn | 15 01 39.3 | +0.6 |
| NOUC | Port Laguerre | 2.89 | 262 | P | Pn | 15 01 40.5 | +0.3 |
| KOUNC | Koumac, New Ca | 4.90 | 283 | P | Pn | 15 02 08.2 | +0.4 |

*SOF **02** 15:02:57.6, 41°.68N×23°.62E±0°.01, h7km±2km, MD3.2/5*
*SKO **02** 15:02:59.7, 41°.69N×23°.58E, h0km, ML2.7*
*ATH **02** 15:02:59.3, 41°.66N×23°.59E, h6km±2km, ML2.7/10, Error ellipse: s-maj=3.0km s-min=1.2km az=176.0*
*BEO **02** 15:02:59.4±0.3, 41°.68N×23°.54E, h7km±2km, ML2.8/12*
*THE **02** 15:02:59.9, 41°.63N×23°.57E, h12km, ML2.5/11, Error ellipse: s-maj=1.2km s-min=0.6km az=169.0*
**ISC 02 15:02:58.5**±1.0**, 41°.69N**±0°.01×**23°.60E**±0°.02**, h9**km±8km**, n72,** σ0s.58/122**, 9C-9D, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KKB | Krupnik | 0.38 | 294 | ⇑iPg | Pg | 15 03 06.4 | +0.4 |
| KKB | | | | i Sg | Sg | 15 03 11.8 | +0.8 |
| NVR | Nevrokopi | 0.39 | 149 | P | Pb | 15 03 07.3 | -0.4 |
| NVR | | | | S | Sb | 15 03 12.7 | -1.2 |
| | 1μm,0.2s | | | | | | |
| NVR | Nevrokopi | 0.39 | 149 | P | Pb | 15 03 07.2 | -0.4 |
| NVR | | | | S | Sg | 15 03 11.8 | +0.5 |
| NVR | | | | AML | AML | 15 03 12.9 | |
| | comp=E,2220μm,0.3s | | | | | | |
| NVR | | | | AML | AML | 15 03 13.1 | |
| | comp=N,2942μm,0.1s | | | | | | |
| PEHC | Pehcevo | 0.53 | 280 | i Pg | Pb | 15 03 09.3 | -0.8 |
| PEHC | | | | i Sg | Sb | 15 03 16.9 | -0.9 |
| SRS | Serrai | 0.57 | 180 | P | Pg | 15 03 09.9 | +0.3 |
| SRS | | | | S | Sg | 15 03 17.4 | +0.4 |
| | comp=N,845nm,0.2s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SRS | Serrai | 0.57 | 180 | ePg | Pg | 15 03 09.9 | +0.3 |
| SRS | | | | eSg | Sg | 15 03 17.5 | +0.4 |
| SRS | Serrai | 0.57 | 180 | ⇑iPg | Pg | 15 03 09.8 | +0.3 |
| SRS | | | | iSg | Sg | 15 03 17.7 | +0.7 |
| SRS | Serrai | 0.57 | 180 | P | Pg | 15 03 09.7 | +0.2 |
| SRS | | | | S | Sg | 15 03 17.6 | +0.5 |
| SRS | | | | AML | AML | 15 03 19.4 | |
| | comp=N,2036µm,0.4s | | | | | | |
| SRS | | | | AML | AML | 15 03 19.5 | |
| | comp=E,1646µm,0.4s | | | | | | |
| KNT | Kendrikon | 0.74 | 225 | P | Pg | 15 03 12.8 | 0.0 |
| KNT | | | | S | Sg | 15 03 22.4 | 0.0 |
| | comp=E,430nm,0.2s | | | | | | |
| KNT | Kendrikon | 0.74 | 225 | iPg | Pg | 15 03 12.7 | 0.0 |
| KNT | | | | iSg | Sg | 15 03 22.5 | 0.0 |
| PLNA | Plana | 0.80 | 351 | iPg | Pg | 15 03 14.1 | +0.2 |
| PLNA | | | | Sg | Sg | 15 03 24.4 | +0.2 |
| VAY | Valandovo | 0.85 | 245 | iPg | Pb | 15 03 15.3 | -0.2 |
| VAY | | | | iSg | Sb | 15 03 27.5 | +0.5 |
| VAY | | | | eLg | Lg | 15 03 29.1 | |
| | comp=E,130nm,0.3s | | | | | | |
| VAY | | | | eLg | Lg | 15 03 30.0 | |
| | comp=N,176nm,0.2s | | | | | | |
| RZN | Rozhen | 0.86 | 89 | ⇑iPg | Pg | 15 03 14.4 | -0.6 |
| RZN | | | | Sg | Sg | 15 03 26.3 | +0.1 |
| SOH | Sokhos | 0.89 | 192 | P | Pg | 15 03 15.4 | -0.1 |
| SOH | | | | S | Sb | 15 03 27.8 | -0.2 |
| | comp=N,418nm,0.3s | | | | | | |
| SOH | Sokhos | 0.89 | 192 | iPg | Pb | 15 03 16.1 | 0.0 |
| SOH | | | | iSg | Sb | 15 03 28.0 | 0.0 |
| SOH | Sokhos | 0.89 | 192 | P | Pg | 15 03 15.0 | -0.5 |
| SOH | | | | S | Sb | 15 03 27.4 | -0.6 |
| SOH | | | | AML | AML | 15 03 32.8 | |
| | comp=E,1067µm,0.4s | | | | | | |
| SOH | | | | AML | AML | 15 03 33.0 | |
| | comp=N,1051µm,0.3s | | | | | | |
| KOKK | Kokkinochori, | 0.92 | 161 | P | Pg | 15 03 15.8 | -0.4 |
| KOKK | | | | S | Sg | 15 03 28.6 | +0.4 |
| | comp=N,325nm,0.2s | | | | | | |
| KOKK | Kokkinochori, | 0.92 | 161 | P | Pg | 15 03 15.9 | -0.3 |
| KOKK | | | | S | Sg | 15 03 27.7 | -0.5 |
| KOKK | | | | AML | AML | 15 03 31.6 | |
| | comp=E,2195µm,0.2s | | | | | | |
| KOKK | | | | AML | AML | 15 03 32.1 | |
| | comp=N,1245µm,0.2s | | | | | | |
| PGB | Panagyurishte | 0.93 | 27 | iPg | Pg | 15 03 16.4 | 0.0 |
| PGB | | | | Sg | Sb | 15 03 29.0 | -0.3 |
| KVLA | Kavala | 0.96 | 141 | P | Pg | 15 03 16.6 | -0.4 |
| KVLA | | | | S | Sg | 15 03 29.5 | +0.1 |
| VTS | Vitosha | 0.97 | 344 | ⇑iPg | Pg | 15 03 16.6 | -0.5 |
| VTS | | | | Sg | Sg | 15 03 29.0 | -0.7 |
| VTS | Vitosha | 0.97 | 344 | ePg | Pg | 15 03 16.6 | -0.5 |
| VTS | | | | eSg | Sg | 15 03 28.7 | -1.0 |
| PLD | Plovdiv | 0.97 | 62 | Pg | Pg | 15 03 16.5 | -0.7 |
| PLD | | | | Sg | Sg | 15 03 28.8 | -1.1 |
| PLD | Plovdiv | 0.97 | 62 | ePg | Pg | 15 03 16.6 | -0.7 |
| PLD | | | | eSg | Sb | 15 03 30.8 | +0.2 |
| PLD | Plovdiv | 0.97 | 62 | iPg | Pg | 15 03 16.6 | -0.6 |
| PLD | | | | iSg | Sg | 15 03 29.2 | -0.6 |
| KAVA | Kavala | 0.98 | 135 | P | Pg | 15 03 17.1 | -0.1 |
| KAVA | | | | S | Sg | 15 03 30.2 | +0.2 |
| SOF | Sofia | 1.00 | 350 | Pg | Pn | 15 03 18.7 | -0.1 |
| SOF | | | | Sg | Sb | 15 03 31.0 | -0.4 |
| HORT | Hortiatis | 1.15 | 199 | P | Pg | 15 03 20.4 | -0.2 |
| HORT | | | | S | Sb | 15 03 35.6 | -0.1 |
| | comp=N,132nm,0.3s | | | | | | |
| HORT | Hortiatis | 1.15 | 199 | P | Pg | 15 03 20.2 | -0.4 |
| HORT | | | | S | Sb | 15 03 35.7 | -0.1 |
| HORT | | | | AML | AML | 15 03 37.7 | |
| | comp=N,235µm,0.3s | | | | | | |
| HORT | | | | AML | AML | 15 03 38.6 | |
| | comp=E,314µm,0.2s | | | | | | |
| BOSS | Bosilegrad | 1.16 | 315 | ePg | Pg | 15 03 20.1 | -0.6 |
| BOSS | | | | eSg | Sn | 15 03 37.2 | +0.3 |
| THE | Thessaloniki | 1.16 | 204 | P | Pg | 15 03 20.4 | -0.3 |
| THE | | | | S | Sn | 15 03 36.3 | -0.5 |
| | comp=E,155nm,0.4s | | | | | | |
| THE | Thessaloniki | 1.16 | 204 | iPg | Pg | 15 03 20.4 | -0.3 |
| THE | | | | iSg | Sn | 15 03 36.4 | -0.5 |
| THE | Thessaloniki | 1.16 | 204 | P | Pg | 15 03 20.3 | -0.5 |
| THE | | | | S | Sb | 15 03 35.8 | 0.0 |
| THE | | | | AML | AML | 15 03 36.7 | |
| | comp=N,366µm,0.4s | | | | | | |
| THE | | | | AML | AML | 15 03 37.2 | |
| | comp=E,244µm,0.3s | | | | | | |
| KDZ | Kurdzhali | 1.31 | 92 | P | Pn | 15 03 22.6 | -0.4 |
| KDZ | | | | Sg | Sb | 15 03 40.2 | 0.0 |
| THAS | Thassos island | 1.38 | 141 | P | Pn | 15 03 23.6 | -0.3 |
| THAS | | | | S | Sb | 15 03 41.9 | -0.2 |
| | comp=E,280nm,0.2s | | | | | | |
| THAS | Thassos island | 1.38 | 141 | P | Pn | 15 03 23.6 | -0.3 |
| THAS | | | | S | Sb | 15 03 42.2 | +0.2 |
| THAS | | | | AML | AML | 15 03 44.7 | |
| | comp=E,559µm,0.4s | | | | | | |
| THAS | | | | AML | AML | 15 03 44.9 | |
| | comp=N,554µm,0.2s | | | | | | |
| OUR | Ouranopolis | 1.39 | 168 | P | Pn | 15 03 23.9 | -0.1 |
| OUR | | | | S | Sb | 15 03 42.1 | -0.2 |
| | comp=N,638nm,0.3s | | | | | | |
| OUR | Ouranopolis | 1.39 | 168 | P | Pn | 15 03 23.9 | -0.1 |
| OUR | | | | AML | AML | 15 03 45.0 | |
| | comp=N,1264µm,0.3s | | | | | | |
| OUR | | | | AML | AML | 15 03 45.0 | |
| | comp=E,1295µm,0.3s | | | | | | |
| RDO | Rodhopi | 1.56 | 110 | P | Pn | 15 03 26.6 | +0.2 |
| RDO | | | | S | Sb | 15 03 47.7 | +0.3 |
| | comp=E,380nm,0.2s | | | | | | |
| RDO | Rodhopi | 1.56 | 110 | P | Pn | 15 03 26.9 | +0.4 |
| RDO | | | | AML | AML | 15 03 51.6 | |
| | comp=N,914µm,0.3s | | | | | | |
| RDO | | | | AML | AML | 15 03 54.5 | |
| | comp=E,610µm,0.2s | | | | | | |
| MPEP | Malo Peshtene | 1.67 | 4 | P | Pb | 15 03 29.2 | -0.2 |
| MPEP | | | | S | Sg | 15 03 52.3 | +0.1 |
| BARS | Barje | 1.74 | 311 | ePn | Pb | 15 03 29.9 | -0.6 |
| BARS | Barje | 1.74 | 311 | iPn | Pb | 15 03 30.0 | -0.6 |
| ZAPS | Zavoj | 1.74 | 336 | ePg | Pb | 15 03 30.4 | -0.2 |
| ZAPS | | | | eSg | Sg | 15 03 54.0 | -0.3 |
| LIT | Litokhoron | 1.79 | 208 | iPn | Pg | 15 03 32.9 | 0.0 |
| PVL | Pavlikeni | 1.85 | 39 | P | Pg | 15 03 33.9 | 0.0 |
| PVL | | | | Sg | Sg | 15 03 59.3 | +1.4 |
| FNA | Florina | 1.90 | 242 | ePn | Pb | 15 03 32.8 | -0.6 |
| FNA | Florina | 1.90 | 242 | iPn | Pb | 15 03 33.3 | -0.1 |
| FNA | Florina | 1.90 | 242 | P | Pn | 15 03 31.6 | +0.4 |
| SMTH | Samothraki Isl | 1.90 | 129 | P | Pn | 15 03 30.9 | -0.3 |
| VALD | Valchedram | 2.00 | 357 | P | Pg | 15 03 36.2 | -0.7 |
| ALN | Alexandroupoli | 2.01 | 112 | P | Pn | 15 03 32.9 | +0.3 |
| ALN | | | | S | Sn | 15 03 58.7 | +0.8 |
| | comp=E,58nm,0.3s | | | | | | |
| ALN | Alexandroupoli | 2.01 | 112 | P | Pn | 15 03 32.9 | +0.3 |
| ALN | | | | AML | AML | 15 04 07.0 | |
| | comp=N,124µm,0.3s | | | | | | |
| ALN | | | | AML | AML | 15 04 09.3 | |
| | comp=E,116µm,0.6s | | | | | | |
| BLKB | Belogradchik | 2.05 | 341 | ⇓S | Sb | 15 04 00.6 | -0.9 |
| ELND | Elena | 2.10 | 53 | ⇑P | Pn | 15 03 34.2 | +0.3 |
| ELND | | | | ⇓S | Sn | 15 04 00.8 | +0.7 |
| LIA | Limnos Island | 2.16 | 146 | P | Pn | 15 03 34.7 | +0.1 |
| ZAGS | Zajecar | 2.35 | 335 | ePn | Pn | 15 03 38.5 | +1.2 |
| ZAGS | | | | eSn | Sn | 15 04 07.4 | +1.2 |
| SZH | Strazhitsa | 2.36 | 47 | P | Pb | 15 03 41.7 | +0.4 |
| SZH | | | | S | Sg | 15 04 13.8 | -0.6 |
| SELS | Selova | 2.39 | 311 | ePn | Pn | 15 03 38.3 | +0.4 |
| SELS | | | | eSn | Sn | 15 04 08.8 | +1.5 |
| BOVS | Bovan | 2.39 | 325 | ePn | Pn | 15 03 38.3 | +0.4 |
| BOVS | | | | eSn | Sn | 15 04 09.0 | +1.6 |
| BOVS | Bovan | 2.39 | 325 | ⇓P | Pn | 15 03 37.9 | 0.0 |
| BOVS | | | | ⇑S | Sn | 15 04 08.3 | +1.0 |
| GRUS | Gruza | 3.05 | 317 | ePn | Pn | 15 03 47.4 | +0.4 |
| GRUS | | | | eSn | Sn | 15 04 23.0 | -0.7 |
| HERR | Herculane | 3.30 | 345 | ⇑P | Pn | 15 03 50.1 | -0.3 |
| MDVR | Moldovita | 3.38 | 337 | ⇓P | Pn | 15 03 52.6 | +1.0 |
| DIVS | Divibare | 3.58 | 313 | ePn | Pn | 15 03 54.6 | +0.3 |
| DIVS | | | | eSn | Sn | 15 04 35.7 | -1.0 |
| GZR | Gura Zlata | 3.75 | 351 | ⇓P | Pn | 15 03 57.3 | +0.6 |
| ARR | Arges | 3.75 | 11 | ⇑P | Pn | 15 03 57.4 | +0.7 |
| LOT | Lotru | 3.76 | 2 | ⇓P | Pn | 15 03 57.4 | +0.6 |
| VOIR | | 3.89 | 15 | ⇑P | Pn | 15 04 00.2 | +1.6 |
| MLR | Muntele Rosu | 4.17 | 23 | ⇓P | Pn | 15 04 03.8 | +1.4 |
| BZS | Buzias | 4.18 | 341 | ⇓P | Pn | 15 04 02.3 | -0.1 |
| DOPR | Dopca | 4.47 | 16 | ⇓P | Pn | 15 04 07.0 | +0.5 |

*BUL* ***02*** *15:08:58.4±0.4, 17°.59S×27°.98E, h10km, MD3.1*
**ISC 02 15:09:05.2**±3.2**, 18°.2S**±0°.2×**27°.7E**±0°.1**, h10km, n10, σ1s.36**/14**, Zimbabwe**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BLWY | Bulawayo | 2.16 | 156 | iP | Pn | 15 09 40.2 | -1.2 |
| BLWY | | | | iS | Sb | 15 10 11.1 | -0.4 |
| BLWY | Bulawayo | 2.16 | 156 | iP | Pn | 15 09 40.2 | -1.2 |
| BLWY | | | | iS | Sb | 15 10 11.1 | -0.4 |
| CHIPN | CHIPINGE | 5.14 | 114 | iP | Pn | 15 10 20.9 | -1.4 |
| CHIPN | CHIPINGE | 5.14 | 114 | iP | Pn | 15 10 20.9 | -1.4 |
| MOPA | Mopani | 6.37 | 147 | iP | Pn | 15 10 41.2 | +2.1 |
| MOPA | Mopani | 6.37 | 147 | iP | Pn | 15 10 41.2 | +2.1 |
| LBTB | Lobatse | 7.08 | 195 | iP | Pn | 15 10 49.4 | +0.3 |
| LBTB | | | | iS | Sn | 15 12 10.6 | +0.9 |
| LBTB | Lobatse | 7.08 | 195 | iP | Pn | 15 10 49.4 | +0.3 |
| LBTB | | | | iS | Sn | 15 12 10.6 | +0.9 |
| BOSA | Boshof | 10.63 | 192 | iP | Pn | 15 11 36.6 | -1.2 |
| BOSA | Boshof | 10.63 | 192 | iP | Pn | 15 11 36.6 | -1.2 |

*IDC* ***02*** *15:12:50.0±3.7, 7°.73S×147°.64E, h72km±33km, mb3.3/5, mbtmp3.7/6, ML3.9/1, MS3.4/1, Error ellipse: s-maj=55.1km s-min=30.9km az=103.0*
*NEIC* ***02*** *15:12:52.0±1.8, 7°.93S±0°.10×147°.2E±0°.1, h77km±8km, mb4.2/11, Error ellipse: s-maj=20.4km s-min=13.7km az=83.0*
**ISC 02 15:12:48.7**±0.8**, 7°.72S**±0°.08×**147°.1E**±0°.1**, h50km, n24, σ1s.78**/26**, mb3.6**/5**, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 1.68 | 178 | | Pn | 15 13 17.0 | +1.4 |
| PMG | | | | Sn | Sn | 15 13 35.4 | -0.6 |
| PMG | Port Moresby | 1.68 | 178 | P | Pn | 15 13 17.0 | +1.4 |
| | 428nm,0.5s,baz=18,slow=9.3,SNR=152 | | | | | | |
| PMG | | | | S | Sn | 15 13 40.0 | +4.0 |
| | 562nm,0.3s,baz=326,slow=22,SNR=15 | | | | | | |
| PMG | | | | LR | LR | 15 13 56.5 | |
| | comp=Z,137nm,18.7s,baz=28,slow=38 | | | | | | |
| COEN | Coen | 7.31 | 212 | Pn | Pn | 15 14 35.0 | +2.0 |
| COEN | | | | Sn | Sn | 15 15 53.8 | -0.7 |
| WB0 | Warramunga Arr | 17.19 | 225 | Pn | Pn | 15 16 44.4 | -1.1 |
| WB0 | | | | IAmb | IAmb | 15 16 56.1 | |
| | comp=Z,15nm,1.5s | | | | | | |
| WR0 | Warramunga Arr | 17.22 | 224 | | Pn | 15 16 46.0 | +0.1 |
| WRA | Warramunga Arr | 17.35 | 224 | P | P | 15 16 49.8 | +1.6 |
| | comp=Z,0.4nm,0.3s,baz=48,slow=12,SNR=17 | | | | | | |
| WRA | | | | S | Sn | 15 19 55.1 | -4.6 |
| | comp=Z,0.3nm,0.5s,baz=50,slow=22,SNR=2.4 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| EIDS | Eidsvold | 17.95 | 168 | P | Pn | 15 16 54.4 | -0.4 |
| EIDS | | | | IAmb | IAmb | 15 17 36.1 | |
| | comp=Z,15nm,1.4s | | | | | | |
| KNRA | Kununurra | 19.62 | 245 | P | Pn | 15 17 16.4 | +1.5 |
| KNRA | | | | IAmb | IAmb | 15 17 55.3 | |
| | comp=Z,19nm,1.1s | | | | | | |
| AS31 | Alice Springs | 20.30 | 217 | | P | 15 17 21.5 | +1.0 |
| ASAR | Alice Springs | 20.30 | 217 | P | P | 15 17 20.7 | +0.2 |
| ASAR | Alice Springs | 20.30 | 217 | P | Pn | 15 17 23.4 | +0.4 |
| | comp=Z,1.0nm,0.4s,baz=50,slow=9.1,SNR=20 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ARMA | Armidale | 22.97 | 170 | P | P | 15 17 46.9 | -2.3 |
| ARMA | | | | IAmb | IAmb | 15 18 26.1 | |
| | comp=Z,16nm,1.2s | | | | | | |
| FITZ | Fitzroy Crossi | 23.31 | 242 | | P | 15 17 54.0 | +1.5 |
| JAGI | Jajag, Banyuwa | 32.64 | 266 | P | P | 15 19 16.5 | +0.3 |
| MJAR | Matsushiro Arr | 44.81 | 350 | LR | LR | 15 37 38.3 | |
| | comp=Z,40nm,18.8s,baz=358,slow=33 | | | | | | |
| CASY | Casey | 63.64 | 196 | P | P | 15 23 14.2 | -0.1 |
| MKAR | Makanchi Array | 78.89 | 321 | P | P | 15 24 47.9 | +1.1 |
| MKAR | Makanchi Array | 78.89 | 321 | P | P | 15 24 48.0 | +1.2 |
| | comp=Z,0.2nm,0.4s,baz=104,slow=4.6,SNR=3.2 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| ZALV | Zalesovo Beam | 80.52 | 328 | P | P | 15 24 55.6 | +0.2 |
| | comp=Z,0.3nm,0.3s,baz=111,slow=5.0,SNR=2.0 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| OHAK | Old Harbor | 80.75 | 28 | P | P | 15 24 57.0 | +0.4 |
| QSPA | South Pole Qui | 82.26 | 180 | P | P | 15 25 03.4 | -1.2 |
| QSPA | | | | IAmb | IAmb | 15 25 18.4 | |
| | comp=Z,5.8nm,1.5s | | | | | | |
| QSPA | South Pole Qui | 82.26 | 180 | P | P | 15 25 03.0 | -1.6 |
| | comp=Z,0.4nm,0.5s,baz=347,slow=1.2,SNR=3.5 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| ILAR | Eielson Array | 87.01 | 23 | P | P | 15 25 26.2 | -2.2 |
| | comp=Z,0.4nm,1.0s,baz=247,slow=5.3,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,1.0s | | | | | | |
| TORD | Torodi Ar. Bea | 145.59 | 282 | PKPbc | PKPbc | 15 32 23.0 | +0.2 |
| | comp=Z,0.6nm,0.6s,baz=61,slow=3.8,SNR=6.9 | | | | | | |

**DJA 02 15:28:16.6**±0.7**, 8°S**±3°×**10°6E**±°**, h28km**±6km**, M3.8**/11**, mb3.9**/1**, MLv3.7**/11**, Jawa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKJI | Sukabumi | 0.74 | 48 | P | Pb | 15 28 30.9 | 0.0 |
| SKJI | | | | S | Sb | 15 28 40.4 | -0.3 |
| CNJI | Cibinong | 1.14 | 80 | P | Pn | 15 28 36.7 | +0.1 |
| CNJI | | | | S | Sn | 15 28 50.4 | -0.9 |
| DBJI | Dramaga | 1.20 | 38 | P | Pn | 15 28 38.0 | +0.5 |
| DBJI | | | | S | Sb | 15 28 53.4 | -0.4 |
| CBJI | Citeko | 1.36 | 38 | P | Pn | 15 28 38.1 | -1.7 |
| CBJI | | | | S | Sn | 15 28 53.5 | -3.5 |
| SBJI | Serang | 1.38 | 5 | P | Pn | 15 28 40.0 | 0.0 |
| SBJI | | | | S | Sb | 15 28 59.1 | +0.2 |
| LEM | Lembang | 1.74 | 67 | P | Pb | 15 28 47.5 | -0.5 |
| CMJI | Cimerak | 2.44 | 97 | P | Pn | 15 28 56.1 | +1.5 |
| CMJI | | | | S | Sn | 15 29 22.9 | -0.7 |
| KASI | Kota Agung | 2.47 | 323 | P | Pn | 15 28 55.8 | +0.8 |
| KASI | | | | S | Sn | 15 29 23.3 | -0.9 |
| UGM | Wanagama | 4.50 | 96 | P | Pn | 15 29 22.6 | -0.4 |
| PWJI | Pagerwojo | 5.78 | 96 | P | Pn | 15 29 43.9 | +3.4 |

*IDC* ***02*** *15:42:31.5±1.2, 2°.06N×122°.77E, h0km, mb3.6/6, mbtmp3.6/6, Error ellipse: s-maj=285.6km s-min=18.7km az=63.0*
*DJA* ***02*** *15:42:36.2±0.7, 0°N±4°×11°9E±°, h20km±6km, M4.1/10, mb4.2/2, MLv4.1/10*
**ISC 02 15:42:33.6**±1.0**, 0°.4N**±0°.1×**119°.39E**±0°.07**, h10km, n14, σ1s.73**/15**, mb3.6**/6**, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MPSI | Mapaga | 0.51 | 95 | P | Pg | 15 42 45.0 | +1.5 |
| MRSI | Marisa | 2.55 | 88 | P | Pn | 15 43 16.0 | +1.0 |
| BKB | Balikpapan | 2.98 | 237 | P | Pn | 15 43 22.3 | +1.4 |
| BKB | | | | S | Sn | 15 43 56.1 | -0.6 |
| LUWI | Luwuk | 3.66 | 113 | P | Pn | 15 43 31.7 | +1.4 |
| KMSI | Cibinong | 4.59 | 88 | P | Pn | 15 43 44.6 | +1.5 |
| BNSI | Bone | 4.80 | 171 | P | Pn | 15 43 47.9 | +1.9 |
| BBSI | Bau Bau | 6.64 | 151 | P | Pn | 15 44 13.3 | +2.0 |
| | 19nm,1.0s,0.1nm | | | | | | |
| SANI | Sanana | 7.02 | 110 | P | Pn | 15 44 16.5 | -0.1 |
| WRA | Warramunga Arr | 24.95 | 145 | P | P | 15 47 55.2 | -2.2 |
| | 0.9nm,0.8s,baz=334,slow=9.4,SNR=7.9 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| ASAR | Alice Springs | 27.75 | 150 | P | P | 15 48 21.2 | -1.5 |
| | 0.4nm,0.7s,baz=341,slow=11,SNR=8.9 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| STKA | Stephens Creek | 38.35 | 149 | P | P | 15 49 52.8 | -2.2 |
| | 2.2nm,0.9s,baz=325,slow=12,SNR=1.8 | | | | | | |
| | 2.2nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 56.44 | 330 | P | P | 15 52 16.8 | +1.2 |
| | 0.3nm,0.5s,baz=129,slow=8.6,SNR=4.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 60.53 | 337 | P | P | 15 52 42.1 | -1.8 |
| | 0.5nm,0.6s,baz=120,slow=8.5,SNR=1.9 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 60.87 | 332 | P | P | 15 52 47.8 | +1.5 |
| | 0.3nm,0.5s,baz=131,slow=6.6,SNR=5.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*IDC* ***02*** *15:47:27.1±4.5, 36°.15N×28°.77E, h0km, mb3.4/2, mbtmp3.3/3, ML2.7/1, Error ellipse: s-maj=72.6km s-min=46.8km az=174.0*
*AFAD* ***02*** *15:47:30.3±0.0, 36°.41N×28°.72E, h7km±2km, MW3.2*
*ISK* ***02*** *15:47:30.0, 36°.45N×28°.74E, h5km, ML3.1/19*
**ISC 02 15:47:30.7**±1.1**, 36°.42N**±0°.03×**28°.74E**±0°.02**, h8km**±8km**, n41, σ1s.02**/69**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FETY | Fethiye | 0.35 | 53 | Pg | Pg | 15 47 37.6 | 0.0 |
| FETY | | | | Sg | Sb | 15 47 43.5 | -1.4 |
| FETY | Fethiye | 0.35 | 53 | P | Pb | 15 47 37.9 | -1.3 |
| FETY | | | | S | Sb | 15 47 44.0 | -0.9 |
| IZZE | Mula-Seydike | 0.40 | 88 | P | Pg | 15 47 38.1 | -0.4 |
| IZZE | | | | S | Sb | 15 47 44.5 | -1.7 |
| IZZE | | | | iAML | AML | 15 47 45.0 | |
| | comp=Z,1µm,0.2s | | | | | | |
| IZZE | | | | iAML | AML | 15 47 45.0 | |
| | comp=E,1µm,0.2s | | | | | | |
| IZZE | | | | iAML | AML | 15 47 48.0 | |
| | comp=N,2µm,0.3s | | | | | | |
| SABU | Mula-Dalaman | 0.44 | 25 | P | Pg | 15 47 39.6 | +0.3 |
| SABU | | | | iAML | AML | 15 47 46.0 | |
| | comp=N,763nm,0.2s | | | | | | |
| SABU | | | | S | Sg | 15 47 46.1 | +1.0 |
| SABU | | | | iAML | AML | 15 47 47.0 | |
| | comp=Z,392nm,0.3s | | | | | | |
| SABU | | | | iAML | AML | 15 47 47.0 | |
| | comp=E,670nm,0.3s | | | | | | |
| MRSB | Marmaris-Mugla | 0.52 | 304 | Pg | Pb | 15 47 41.2 | -0.9 |
| MRSB | | | | Sg | Sb | 15 47 49.3 | -0.5 |
| TURN | Turunc | 0.53 | 312 | Pg | Pb | 15 47 41.3 | -0.9 |
| TURN | | | | Sg | Sb | 15 47 49.4 | -0.6 |
| TURN | Turunc | 0.53 | 312 | P | Pg | 15 47 40.5 | -0.4 |
| TURN | | | | S | Sg | 15 47 48.8 | +0.9 |
| TURN | | | | iAML | AML | 15 47 49.0 | |
| | comp=N,534nm,0.7s | | | | | | |
| TURN | | | | iAML | AML | 15 47 50.0 | |
| | comp=Z,374nm,0.5s | | | | | | |
| TURN | | | | iAML | AML | 15 47 51.0 | |
| | comp=E,380nm,0.4s | | | | | | |
| ARG | Arkhangelos | 0.53 | 247 | Pg | Pb | 15 47 41.4 | -0.9 |
| ARG | | | | Sg | Sb | 15 47 50.4 | +0.3 |
| CAME | Cameli-Denizli | 0.69 | 41 | Pg | Pg | 15 47 43.8 | -0.3 |
| CAME | | | | Sg | Sb | 15 47 54.4 | -0.4 |
| AKAS | Kas | 0.73 | 105 | Pg | Pb | 15 47 45.2 | -0.5 |
| AKAS | | | | Sg | Sb | 15 47 56.3 | +0.5 |
| AKAS | Kas | 0.73 | 105 | P | Pb | 15 47 45.5 | -0.2 |
| AKAS | | | | S | Sn | 15 47 57.4 | -1.4 |
| AKAS | | | | iAML | AML | 15 48 05.0 | |
| | comp=Z,403nm,0.7s | | | | | | |
| AKAS | | | | iAML | AML | 15 48 05.0 | |
| | comp=N,1µm,0.5s | | | | | | |
| AKAS | | | | iAML | AML | 15 48 05.0 | |
| | comp=E,475nm,0.8s | | | | | | |
| KNIK | Mula-Seydike | 0.79 | 58 | P | Pb | 15 47 46.0 | -0.8 |
| KNIK | | | | S | Sb | 15 47 57.4 | -0.4 |
| KNIK | | | | iAML | AML | 15 48 01.0 | |
| | comp=Z,389nm,0.6s | | | | | | |
| KNIK | | | | iAML | AML | 15 48 01.0 | |
| | comp=N,394nm,1.2s | | | | | | |
| KNIK | | | | iAML | AML | 15 48 01.0 | |
| | comp=E,205nm,0.4s | | | | | | |
| CAEL | Denizli, Camel | 0.84 | 34 | P | Pn | 15 47 48.6 | -0.3 |
| CAEL | | | | S | Sb | 15 47 58.9 | -0.2 |
| CAEL | | | | iAML | AML | 15 48 11.0 | |
| | comp=Z,489nm,0.7s | | | | | | |
| CAEL | | | | iAML | AML | 15 48 11.0 | |
| | comp=E,624nm,0.6s | | | | | | |
| CAEL | | | | iAML | AML | 15 48 14.0 | |
| | comp=N,561nm,0.7s | | | | | | |
| DNZT | Denizli-Tavas- | 0.88 | 15 | P | Pg | 15 47 47.6 | -0.2 |
| DNZT | | | | S | Sb | 15 48 00.3 | -0.1 |
| DNZT | | | | iAML | AML | 15 48 07.0 | |
| | comp=E,115nm,0.5s | | | | | | |
| DNZT | | | | iAML | AML | 15 48 08.0 | |
| | comp=Z,110nm,0.9s | | | | | | |
| DNZT | | | | iAML | AML | 15 48 23.0 | |
| | comp=N,67nm,0.7s | | | | | | |
| MULA | Mugla, Merkez- | 0.90 | 338 | P | Pb | 15 47 48.3 | -0.2 |
| MULA | | | | S | Sb | 15 48 00.5 | -0.1 |
| MULA | | | | iAML | AML | 15 48 02.0 | |
| | comp=N,112nm,0.7s | | | | | | |
| MULA | | | | iAML | AML | 15 48 08.0 | |
| | comp=Z,138nm,0.5s | | | | | | |
| MULA | | | | iAML | AML | 15 48 14.0 | |
| | comp=E,161nm,0.4s | | | | | | |
| DEMR | Demre-Antalya | 0.96 | 101 | Pg | Pb | 15 47 49.5 | -0.1 |
| DAT | Datca | 0.98 | 288 | Pg | Pb | 15 47 49.9 | -0.1 |
| DAT | | | | Sg | Sn | 15 48 04.5 | -0.4 |
| ELL | Elmali | 1.00 | 71 | Pg | Pb | 15 47 50.1 | -0.2 |
| GOLH | Golhisar | 1.05 | 39 | P | Pg | 15 47 50.3 | -0.5 |
| GOLH | | | | S | Sn | 15 48 06.3 | -0.3 |
| GOLH | | | | iAML | AML | 15 48 10.0 | |
| | comp=Z,138nm,0.5s | | | | | | |
| GOLH | | | | iAML | AML | 15 48 15.0 | |
| | comp=N,319nm,0.5s | | | | | | |
| GOLH | | | | iAML | AML | 15 48 15.0 | |
| | comp=E,254nm,0.5s | | | | | | |
| TAVA | DENIZLI_Tavas | 1.05 | 8 | P | Pb | 15 47 51.1 | 0.0 |
| TAVA | | | | S | Sb | 15 48 05.0 | -0.1 |
| TAVA | | | | iAML | AML | 15 48 10.0 | |
| | comp=E,130nm,0.5s | | | | | | |
| TAVA | | | | iAML | AML | 15 48 11.0 | |
| | comp=Z,116nm,0.6s | | | | | | |
| TAVA | | | | iAML | AML | 15 48 13.0 | |
| | comp=N,136nm,0.4s | | | | | | |
| APMY | Acipayam-Deniz | 1.14 | 23 | Pn | Pb | 15 47 52.6 | -0.1 |
| APMY | | | | Sn | Sn | 15 48 08.9 | 0.0 |
| MLSB | Milas | 1.16 | 319 | Pn | Pn | 15 47 53.1 | -0.1 |
| MLSB | | | | Sn | Sn | 15 48 10.1 | +0.8 |
| DNIZ | Denizli-Tavas- | 1.22 | 11 | P | Pn | 15 47 54.2 | 0.0 |
| DNIZ | | | | S | Sb | 15 48 10.1 | 0.0 |
| DNIZ | | | | iAML | AML | 15 48 14.0 | |
| | comp=N,766nm,0.6s | | | | | | |
| DNIZ | | | | iAML | AML | 15 48 15.0 | |
| | comp=E,1µm,0.4s | | | | | | |
| DNIZ | | | | iAML | AML | 15 48 19.0 | |
| | comp=Z,123nm,0.5s | | | | | | |
| AKUM | Antalya-Kumluc | 1.30 | 94 | P | Pg | 15 47 56.3 | +0.7 |
| AKUM | | | | S | Sn | 15 48 16.8 | +4.2 |
| AKUM | | | | iAML | AML | 15 48 23.0 | |
| | comp=Z,80nm,0.7s | | | | | | |
| AKUM | | | | iAML | AML | 15 48 24.0 | |
| | comp=N,103nm,0.7s | | | | | | |
| AKUM | | | | iAML | AML | 15 48 24.0 | |
| | comp=E,176nm,1.0s | | | | | | |
| BODT | Bodrum | 1.31 | 300 | Pn | Pg | 15 47 56.1 | +0.2 |
| BODT | | | | Sn | Sn | 15 48 15.1 | +2.2 |
| YKAV | Yalikavak-Bodr | 1.36 | 301 | Pn | Pg | 15 47 57.1 | +0.3 |
| INCE | Denizli-Bozkur | 1.45 | 27 | P | Pg | 15 47 58.7 | +0.2 |
| INCE | | | | S | Sg | 15 48 18.0 | +0.7 |
| INCE | | | | iAML | AML | 15 48 21.0 | |
| | comp=N,190nm,0.9s | | | | | | |
| INCE | | | | iAML | AML | 15 48 23.0 | |
| | comp=Z,134nm,1.0s | | | | | | |
| INCE | | | | iAML | AML | 15 48 23.0 | |
| | comp=E,158nm,1.2s | | | | | | |
| KARP | Karpathos | 1.55 | 236 | Pn | Pg | 15 48 00.0 | -0.4 |
| NAZL | Nazilli-Aydin | 1.58 | 347 | Pn | Pb | 15 47 59.9 | -0.2 |
| NAZL | | | | Sn | Sg | 15 48 21.7 | +0.3 |
| ANTB | Antalya | 1.61 | 72 | Pn | Pg | 15 48 00.6 | -1.1 |
| AYDB | Zeytinkoy-Aydi | 1.66 | 336 | Pn | Pb | 15 48 01.2 | -0.4 |
| AYDB | | | | Sn | Sg | 15 48 23.9 | -0.3 |
| GCAM | G?zelcaml? | 1.75 | 317 | Pn | Pb | 15 48 02.6 | -0.4 |
| GCAM | | | | Sn | Sg | 15 48 26.3 | -0.7 |
| BCK | Bucak | 1.81 | 55 | Pn | Pb | 15 48 03.2 | -0.9 |
| BASM | Basmaki-Afyon | 1.82 | 35 | Pn | Pb | 15 48 03.2 | -1.2 |
| KULA | Kula-Manisa | 2.09 | 358 | Pn | Pn | 15 48 07.0 | +1.0 |
| SHUT | Suhut-Afyon | 2.57 | 34 | Pn | Pn | 15 48 14.0 | +1.3 |
| URLA | Izmir | 2.58 | 319 | Pn | Pn | 15 48 14.5 | +1.8 |
| SEYD | Seydisehir-KON | 2.67 | 68 | Pn | Pn | 15 48 15.7 | +1.6 |
| BRTR | Keskin Array B | 5.08 | 48 | Pn | Pn | 15 48 49.7 | +2.5 |
| | 0.2nm,0.3s,baz=224,slow=14,SNR=6.7 | | | | | | |
| BRTR | | | | Sn | Sn | 15 49 48.0 | +1.9 |
| | 0.1nm,0.3s,baz=236,slow=21,SNR=2.9 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| FINES | FINESS Array B | 25.10 | 357 | P | P | 15 52 55.8 | +0.3 |
| | 0.7nm,0.6s,baz=156,slow=9.8,SNR=4.0 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 40.65 | 58 | P | P | 15 55 09.1 | -2.1 |
| | 0.2nm,0.6s,baz=270,slow=8.5,SNR=2.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC* ***02*** *15:49:23.1±1.7, 8°.22S×116°.63E, h0km, mb3.4/4, mbtmp3.5/5, ML3.6/1, MS2.3/1, Error ellipse: s-maj=41.4km s-min=23.5km az=59.0*
*DJA* ***02*** *15:49:24.6±0.4, 8°S±5°×11°6E±°, h10km, M3.8/7, MLv3.8/7*

**ISC 02 15:49:27.4±0.9, 8.°26S±0.°07×116.°52E±0.°04, h35km, n12, σ1.41s/15, mb3.5/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.59 | 143 | P | Pn | 15 49 36.5 | -2.9 |
| SRBI | Singaraja | 1.30 | 278 | P | Pn | 15 49 47.6 | -1.5 |
| SRBI | | | | S | Sn | 15 50 05.2 | -0.1 |
| DNP | Denpasar | 1.36 | 252 | P | Pn | 15 49 49.9 | 0.0 |
| PLAI | Plampang | 1.37 | 114 | P | Pn | 15 49 50.1 | +0.1 |
| PLAI | | | | S | Sn | 15 50 09.1 | +2.2 |
| JAGI | Jajag, Banyuwa | 2.35 | 265 | P | Pn | 15 50 01.8 | -1.7 |
| BSSI | Bau Bau, Buton | 4.47 | 62 | P | Pn | 15 50 32.1 | -0.6 |
| KAPI | Kappang | 4.55 | 45 | Pn | Pn | 15 50 32.8 | -1.1 |
| | 3.1nm,0.3s,baz=218,slow=4.5,SNR=14 | | | | | | |
| KAPI | | | | Sn | Sn | 15 51 24.2 | -1.4 |
| | 2.7nm,0.3s,baz=224,slow=20,SNR=2.3 | | | | | | |
| KAPI | | | | LR | LR | 15 52 16.0 | |
| | comp=Z,33nm,19.2s,baz=220,slow=39 | | | | | | |
| | 7.6nm,0.2s | | | | | | |
| PWJI | Pagerwojo | 4.67 | 273 | P | Pn | 15 50 35.5 | 0.0 |
| WRA | Warramunga Arr | 20.80 | 126 | P | P | 15 54 05.4 | -0.4 |
| | 0.8nm,0.5s,baz=301,slow=12,SNR=14 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| ASAR | Alice Springs | 22.63 | 135 | P | P | 15 54 25.5 | 0.0 |
| | 0.6nm,0.5s,baz=315,slow=10,SNR=12 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| SONM | Songino Array | 56.57 | 352 | P | P | 15 59 07.5 | +0.9 |
| | 0.5nm,0.6s,baz=166,slow=7.4,SNR=1.6 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 62.71 | 334 | P | P | 15 59 49.6 | +0.7 |
| | 0.3nm,0.8s,baz=141,slow=9.3,SNR=0.1 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

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**IDC 02 16:00:22.1±4.3, 47.°48N×93.°29W, h0km, mbtmp2.3/1, ML1.3/1, Error ellipse: s-maj=67.6km s-min=28.8km az=60.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULM | Lac du Bonnet | 3.26 | 329 | Pn | Pn | 16 01 13.4 | -1.0 |
| | 0.5nm,0.3s,baz=153,slow=16,SNR=2.3 | | | | | | |
| ULM | | | | Pg | Pb | 16 01 20.3 | -0.5 |
| | 0.5nm,0.3s,baz=152,slow=16,SNR=2.5 | | | | | | |
| ULM | | | | Sn | Sn | 16 01 50.0 | -4.0 |
| | 0.5nm,0.3s,baz=158,slow=1.9,SNR=3.4 | | | | | | |
| ULM | | | | Lg | Lg | 16 02 03.6 | |
| | 1.7nm,0.3s,baz=41,slow=21,SNR=7.9 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| I10CA | LAC DU BONNET | 3.27 | 327 | I | I | 16 20 45.0 | |
| | 0.1nm,1.2s,baz=145,slow=331,SNR=8.7 | | | | | | |
| PDAR | Pinedale Array | 12.41 | 254 | Lg | Lg | 16 06 47.9 | |
| | 0.1nm,0.3s,baz=56,slow=34,SNR=1.8 | | | | | | |
| I56US | NEWPORT INFRAS | 16.01 | 282 | I | I | 17 34 10.0 | |
| | baz=84,slow=312,SNR=1.5 | | | | | | |

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*NOU **02** 16:12:36.3, 21.°75S×169.°63E, h0km, MLv5.1/9, Southeast of Loyalty Islands*

*MOS **02** 16:12:41.8±1.1, 21.°64S×169.°27E, h10km, mb5.1/20, Error ellipse: s-maj=13.5km s-min=12.7km az=164.6*

*NEIC **02** 16:12:43.0±1.2, 21.°63S±0.°10×169.°11E±0.°09, h10km±1km, mb5.0/76, Error ellipse: s-maj=16.7km s-min=13.1km az=155.0*

*IDC **02** 16:12:43.9±0.6, 21.°65S×169.°02E, h0km, mb4.1/13, mbtmp4.1/16, ML4.4/3, MS4.0/48, Error ellipse: s-maj=19.8km s-min=17.3km az=148.0*

*GCMT **02** 16:12:47.0±0.2, 21.°83S±0.°01×169.°05E±0.°01, h20km±1km, MW4.9/103, Moment Tensor Solution. s31,c41; s103,c148; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.32±.10; $M_{\theta\theta}$0.14±.09; $M_{\phi\phi}$-0.46±.08; $M_{r\theta}$0.13±.15; $M_{\theta\phi}$-2.75±.08; $M_{\phi r}$-0.36±.14; Best double couple: $M_0$2.79600×$10^{16}$ NP1:$\phi_s$177.00000°,δ86.00000°, λ8.00000°. NP2:$\phi_s$87.00000°,δ82.00000°,λ176.00000°. Principal axes: T 2.6540, Plg8.0000°, Azm42.0000°; N 0.2840, Plg81.0000°, Azm200.0000°; P -2.9390, Plg3.0000°, Azm312.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR **02** 16:13:00.7, 20.°46S×169.°36E, h33km*

**ISC 02 16:12:44.0±0.3, 21.°69S±0.°06×169.°13E±0.°05, h10km, n345, σ1.81s/321, mb4.9/72, MS4.1/48, 8C-2D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MARNC | Mare, Loyalty | 1.04 | 282 | P | Pg | 16 13 03.5 | -0.6 |
| PINNC | Pines Island, | 1.81 | 239 | P | Pn | 16 13 13.9 | -1.3 |
| PINNC | Pines Island, | 1.81 | 239 | | Pn | 16 13 13.6 | -1.6 |
| PINNC | | | | Sn | Sn | 16 13 36.5 | -1.7 |
| LIFNC | LIFOU | 1.98 | 297 | P | Pn | 16 13 16.6 | -1.0 |
| LIFNC | LIFOU | 1.98 | 297 | | Pn | 16 13 16.0 | -1.6 |
| YATNC | Mamie plateau, | 2.11 | 260 | P | Pn | 16 13 18.1 | -1.3 |
| DZM | Mont Dzumac | 2.52 | 261 | P | Pn | 16 13 24.9 | -0.2 |
| DZM | Mont Dzumac | 2.52 | 261 | ePn | Pn | 16 13 24.1 | -1.0 |
| | 1µm,0.8s | | | | | | |
| DZM | | | | eSn | Sn | 16 13 53.4 | -2.6 |
| | 11µm,1.2s | | | | | | |
| DZM | Mont Dzumac | 2.52 | 261 | | Pn | 16 13 24.5 | -0.6 |
| DZM | | | | Sn | Sn | 16 13 52.5 | -3.5 |
| DZM | Mont Dzumac | 2.52 | 261 | Pn | Pn | 16 13 25.0 | -0.2 |
| | 44nm,0.3s,baz=138,slow=12,SNR=412 | | | | | | |
| DZM | | | | Sn | Sn | 16 13 55.8 | -0.2 |
| | 254nm,0.3s,baz=165,slow=22,SNR=7.4 | | | | | | |
| | 122nm,0.2s | | | | | | |
| ONTNC | Ouen Toro | 2.56 | 256 | P | Pn | 16 13 25.0 | -0.5 |
| ONTNC | Ouen Toro | 2.56 | 256 | | Pn | 16 13 24.7 | -0.8 |
| NOUC | Port Laguerre | 2.66 | 261 | P | Pn | 16 13 26.4 | -0.5 |
| KOUNC | Koumac, New Ca | 4.66 | 283 | P | Pn | 16 13 55.4 | +0.9 |
| KOUNC | Koumac, New Ca | 4.66 | 283 | | Pn | 16 13 53.8 | -0.6 |
| MSVF | Nonsavu | 9.28 | 66 | Pn | Pn | 16 15 00.7 | +2.7 |
| | 0.4nm,0.3s,baz=277,slow=9.4,SNR=6.3 | | | | | | |
| MSVF | | | | LR | LR | 16 17 54.9 | |
| | comp=Z,2µm,18.6s,baz=242,slow=33 | | | | | | |
| | 17nm,0.9s | | | | | | |
| MSVF | Nonsavu | 9.28 | 66 | iP | Pn | 16 14 56.6 | -1.4 |
| RAO | Raoul Island | 13.90 | 125 | LR | LR | 16 20 17.1 | |
| | comp=Z,1µm,19.6s,baz=347,slow=32 | | | | | | |
| HNR | Honiara | 15.05 | 323 | LR | LR | 16 21 04.5 | |
| | comp=Z,9µm,20.0s,baz=161,slow=34 | | | | | | |
| EIDS | Eidsvold | 16.95 | 254 | | Pn | 16 16 40.5 | -0.8 |
| URZ | Urewera | 17.89 | 159 | P | Pn | 16 16 54.5 | +1.7 |
| | 0.3nm,0.3s,baz=109,slow=5.9,SNR=5.0 | | | | | | |
| URZ | | | | LR | LR | 16 22 31.0 | |
| | comp=Z,586nm,19.7s,baz=62,slow=33 | | | | | | |
| | 17nm,0.8s | | | | | | |
| ARMA | Armidale | 17.95 | 237 | P | Pn | 16 16 52.8 | -1.0 |
| RTZ | Ruatahuna | 18.17 | 160 | P | Pn | 16 16 56.2 | -0.2 |
| BKZ | Black Stump Fm | 18.52 | 162 | P | P | 16 17 00.0 | -0.6 |
| MRZ | Mangatainoka R | 19.68 | 165 | P | P | 16 17 13.1 | -0.1 |
| BFZ | Birch Farm | 19.87 | 164 | P | P | 16 17 12.4 | -2.9 |
| CTA | Charters Tower | 21.43 | 270 | P | P | 16 17 33.7 | +1.3 |
| | 0.2nm,0.7s,baz=328,slow=20,SNR=2.0 | | | | | | |
| CTA | | | | LR | LR | 16 24 51.0 | |
| | comp=Z,9.3nm,21.4s,baz=92,slow=34 | | | | | | |
| CTAO | Charters Tower | 21.43 | 270 | P | P | 16 17 30.0 | -2.4 |
| CTAO | Charters Tower | 21.43 | 270 | P | P | 16 17 32.0 | -0.4 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| RPZ | Rata Peaks | 22.02 | 176 | LR | LR | 16 25 35.9 | |
| | comp=Z,748nm,18.1s,baz=348,slow=35 | | | | | | |
| PMG | Port Moresby | 24.40 | 297 | LR | LR | 16 26 12.5 | |
| | comp=Z,770nm,19.4s,baz=115,slow=33 | | | | | | |
| PMG | Port Moresby | 24.40 | 297 | iP | P | 16 18 02.9 | +0.2 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,46nm,1.0s | | | | | | |
| STKA | Stephens Creek | 26.52 | 242 | P | P | 16 18 23.0 | +1.1 |
| | comp=Z,2.2nm,0.9s,baz=86,slow=14,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 16 27 52.8 | |
| | comp=Z,664nm,20.4s,baz=69,slow=34 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| STKA | Stephens Creek | 26.52 | 242 | iP | P | 16 18 23.4 | +1.5 |
| RAR | Rarotonga | 28.93 | 95 | LR | LR | 16 31 00.7 | |
| | comp=Z,121nm,18.1s,baz=272,slow=38 | | | | | | |
| AS31 | Alice Springs | 32.51 | 260 | P | P | 16 19 14.3 | -0.9 |
| ASAR | Alice Springs | 32.51 | 260 | P | P | 16 19 14.9 | -0.3 |
| | comp=Z,2.1nm,0.9s,baz=98,slow=9.5,SNR=22 | | | | | | |
| ASAR | | | | PcP | PcP | 16 22 03.5 | +1.4 |
| | comp=Z,0.6nm,0.9s,baz=111,slow=2.1,SNR=1.9 | | | | | | |
| ASAR | | | | LR | LR | 16 31 43.8 | |
| | comp=Z,858nm,19.2s,baz=101,slow=35 | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 32.52 | 267 | iP | P | 16 19 16.5 | +1.2 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,52nm,3.8s | | | | | | |
| WRA | Warramunga Arr | 32.53 | 267 | P | P | 16 19 14.4 | -0.9 |
| | comp=Z,0.6nm,0.5s,baz=96,slow=7.8,SNR=13 | | | | | | |
| WRA | | | | PcP | PcP | 16 22 04.2 | +2.1 |
| | comp=Z,0.6nm,1.1s,baz=96,slow=2.8,SNR=1.6 | | | | | | |
| WRA | | | | LR | LR | 16 31 29.4 | |
| | comp=Z,498nm,18.4s,baz=77,slow=35 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| TBI | Tubuai | 38.20 | 101 | eS | S | 16 25 52.0 | -5.8 |
| | comp=Z,429nm,33.8s | | | | | | |
| TBI | | | | eLR | LR | 16 30 20.5 | |
| | comp=Z,1µm,29.5s | | | | | | |
| TBI | | | | eLR | LR | 16 30 22.6 | |
| | comp=Z,960nm,29.2s | | | | | | |
| PPT2 | Papeete2 | 39.02 | 91 | eS | S | 16 26 08.0 | -2.5 |
| | comp=Z,59nm,25.8s | | | | | | |
| PPT2 | | | | eLQ | LQ | 16 29 01.0 | |
| | comp=Z,780nm,29.0s | | | | | | |
| PPT2 | | | | eLR | LR | 16 30 44.0 | |
| | comp=Z,143nm,34.5s | | | | | | |
| PPT2 | | | | eLR | LR | 16 30 44.2 | |
| | comp=Z,357nm,33.2s | | | | | | |
| GUMO | Guam | 42.38 | 324 | LR | LR | 16 36 18.2 | |
| | comp=Z,179nm,21.4s,baz=126,slow=33 | | | | | | |
| NWAO | Narrogin (SRO) | 47.04 | 245 | LR | LR | 16 40 01.9 | |
| | comp=Z,692nm,21.4s,baz=74,slow=35 | | | | | | |
| TAOE | Nuku Hiva Isla | 50.35 | 83 | eS | S | 16 28 50.7 | -4.4 |
| | comp=Z,41nm,26.8s | | | | | | |
| TAOE | | | | eLR | LR | 16 35 59.9 | |
| | comp=Z,208nm,29.0s | | | | | | |
| KAPI | Kappang | 50.57 | 282 | LR | LR | 16 45 16.2 | |
| | comp=Z,123nm,18.4s,baz=117,slow=39 | | | | | | |
| DAV | Davao City (W) | 51.39 | 299 | LR | LR | 16 44 09.5 | |
| | comp=Z,65nm,19.3s,baz=114,slow=37 | | | | | | |
| JCJ | Chichijima | 55.07 | 330 | LR | LR | 16 42 57.1 | |
| | comp=Z,113nm,21.9s,baz=142,slow=33 | | | | | | |
| VNDA | Vanda | 55.99 | 182 | P | P | 16 22 21.9 | -0.2 |
| VNDA | Vanda | 55.99 | 182 | P | P | 16 22 23.7 | +1.5 |
| | comp=Z,0.8nm,0.8s,baz=24,slow=6.8,SNR=6.9 | | | | | | |
| VNDA | | | | LR | LR | 16 42 44.2 | |
| | comp=Z,118nm,18.6s,baz=18,slow=32 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| VNDA | Vanda | 55.99 | 182 | P | P | 16 22 21.9 | -0.2 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| SBA | Scott Base | 56.22 | 181 | P | P | 16 22 24.3 | +0.5 |
| SBA | | | | IAmb | IAmb | 16 22 45.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| SBA | Scott Base | 56.22 | 181 | P | P | 16 22 24.3 | +0.5 |
| SBA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| KSM | Kuching | 61.84 | 284 | P | P | 16 23 01.4 | -2.4 |
| JOW | Kunigami | 62.38 | 319 | LR | LR | 16 46 53.8 | |
| | comp=Z,98nm,21.8s,baz=121,slow=33 | | | | | | |
| MJAR | Matsushiro Arr | 64.87 | 333 | P | P | 16 23 24.0 | +0.6 |
| | comp=Z,2.3nm,1.0s,baz=166,slow=6.9,SNR=4.6 | | | | | | |
| MJAR | | | | LR | LR | 16 50 11.6 | |
| | comp=Z,80nm,20.2s,baz=150,slow=35 | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | |
| JNU | Nakatsue | 65.61 | 325 | LR | LR | 16 47 57.5 | |
| | comp=Z,38nm,21.8s,baz=168,slow=32 | | | | | | |
| QSPA | South Pole Qui | 68.37 | 180 | P | P | 16 23 45.2 | -0.3 |
| QSPA | | | | IAmb | IAmb | 16 23 54.5 | |
| | comp=Z,19nm,1.4s | | | | | | |
| QSPA | South Pole Qui | 68.37 | 180 | P | P | 16 23 45.2 | -0.3 |
| | comp=Z,4.9nm,0.9s,baz=67,slow=2.0,SNR=10.0 | | | | | | |
| QSPA | | | | LR | LR | 16 50 08.7 | |
| | comp=Z,150nm,19.0s,baz=38,slow=33 | | | | | | |
| ASAJ | Asahikawa | 69.86 | 340 | LR | LR | 16 50 24.8 | |
| | comp=Z,202nm,21.6s,baz=168,slow=32 | | | | | | |
| KSRS | Korea Array | 70.47 | 326 | P | P | 16 24 00.0 | +1.3 |
| | comp=Z,1.1nm,0.8s,baz=139,slow=6.3,SNR=5.5 | | | | | | |
| KSRS | | | | LR | LR | 16 52 08.6 | |
| | comp=Z,56nm,20.3s,baz=140,slow=34 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| NJ2 | Nanjing | 71.90 | 317 | eP | P | 16 24 07.2 | -0.3 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,210nm,3.8s | | | | | | |
| YSS | Yuzh-Sakhalins | 72.36 | 341 | eP | P | 16 24 06.1 | -3.8 |
| YSS | | | | eS | S | 16 33 27.0 | -6.2 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,100nm,3.6s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| RPN | Rapa Nui | 73.22 | 113 | LR | LR | 16 48 54.4 | |
| | comp=Z,133nm,20.4s,baz=283,slow=30 | | | | | | |
| USA0B | Ussuriysk Arra | 73.86 | 333 | iP | P | 16 24 18.5 | -0.4 |
| USRK | Ussuriysk Ar. | 73.86 | 333 | P | P | 16 24 17.4 | -1.5 |
| USRK | Ussuriysk Ar. | 73.86 | 333 | P | P | 16 24 20.5 | +1.7 |
| | comp=Z,1.9nm,1.0s,baz=150,slow=4.2,SNR=7.2 | | | | | | |
| USRK | | | | LR | LR | 16 54 10.7 | |
| | comp=Z,108nm,20.7s,baz=194,slow=34 | | | | | | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| USRK | Ussuriysk Ar. | 73.86 | 333 | P | P | 16 24 17.4 | -1.5 |
| SHEM | Shemya Is, Ala | 74.23 | 3 | LR | LR | 16 51 28.9 | |
| | comp=Z,214nm,21.1s,baz=151,slow=31 | | | | | | |
| MDJ | Mudanjiang | 75.23 | 332 | P | P | 16 24 30.4 | +3.6 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.9s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| MAW | Mawson | 76.13 | 202 | P | P | 16 24 33.9 | +2.2 |
| | comp=Z,2.9nm,0.9s,baz=92,slow=12,SNR=4.1 | | | | | | |
| MAW | | | | LR | LR | 16 54 05.6 | |
| | comp=Z,148nm,19.7s,baz=108,slow=33 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| CN2 | Changchun | 76.50 | 329 | eP | P | 16 24 34.8 | +0.8 |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| NIKH | Nikolski High | 76.78 | 13 | P | P | 16 24 35.2 | -0.2 |
| | baz=201 | | | | | | |
| GRNR | Gornyy | 77.70 | 339 | ⇑iP | P | 16 24 40.2 | -0.5 |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| KLR | Kul'dur | 78.06 | 336 | LR | LR | 16 55 13.6 | |
| | comp=Z,86nm,21.8s,baz=148,slow=33 | | | | | | |
| KLR | Kul'dur | 78.06 | 336 | eP | P | 16 24 44.4 | +1.7 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,14nm,1.5s | | | | | | |
| CMAR | Chiang Mai Arr | 79.42 | 295 | P | P | 16 24 49.9 | -1.0 |
| CMAR | Chiang Mai Arr | 79.42 | 295 | P | P | 16 24 53.1 | +2.2 |
| | comp=Z,0.5nm,0.7s,baz=117,slow=5.6,SNR=1.3 | | | | | | |
| CMAR | | | | LR | LR | 17 01 26.8 | |
| | comp=Z,28nm,19.7s,baz=140,slow=37 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 79.42 | 295 | P | P | 16 24 49.9 | -1.0 |
| CHTO | Chiang Mai | 79.58 | 295 | P | P | 16 24 50.4 | -1.4 |
| CHTO | | | | IAmb | IAmb | 16 25 03.5 | |
| | comp=Z,20nm,1.6s | | | | | | |
| CHTO | Chiang Mai | 79.58 | 295 | P | P | 16 24 50.4 | -1.4 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,20nm,1.6s | | | | | | |
| BELA | Belgrano 2 | 79.67 | 175 | P | P | 16 24 51.0 | -0.3 |
| XAN | Xi'an | 79.69 | 313 | P | P | 16 24 48.6 | -3.5 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| HEH | HeiHe | 80.57 | 334 | eP | P | 16 24 59.5 | +3.1 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,170nm,15.5s | | | | | | |
| PZH | PanZhiHua | 80.95 | 303 | P | P | 16 24 59.7 | +0.6 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.7s | | | | | | |
| XLT | XiLinHaoTe | 81.36 | 324 | eP | P | 16 25 03.0 | +2.1 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| SMAI | San Martin Ant | 81.54 | 162 | P | P | 16 25 01.4 | 0.0 |
| SMAI | | | | IAmb | IAmb | 16 25 11.0 | |
| | comp=Z,18nm,1.1s | | | | | | |
| CD2 | Chengdu | 81.65 | 308 | P | P | 16 25 01.9 | -0.8 |
| HHC | Hu-ho-hao-te | 82.01 | 320 | eP | P | 16 25 05.8 | +1.4 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,61nm,5.4s | | | | | | |
| MA2 | Magadan | 82.36 | 351 | LR | LR | 16 57 52.7 | |
| | comp=Z,48nm,21.1s,baz=168,slow=33 | | | | | | |
| TNCH | TengChong | 82.79 | 300 | P | P | 16 25 02.4 | -6.6 |
| TNCH | | | | pP | pP | 16 25 06.2 | -4.6 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,43nm,3.2s | | | | | | |
| ZEA | Zeya | 83.35 | 336 | eP | P | 16 25 12.2 | +1.3 |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| ELIB | Princess Elisa | 83.72 | 190 | dP | P | 16 25 12.1 | -0.8 |
| | comp=Z,4.4nm,1.3s | | | | | | |
| O14K | Tigyukauivet M | 84.25 | 15 | P | P | 16 25 16.8 | +1.5 |
| | baz=208 | | | | | | |
| PMSA | Palmer Station | 84.65 | 160 | P | P | 16 25 16.2 | -1.4 |
| PMSA | Palmer Station | 84.65 | 160 | LR | LR | 16 58 42.4 | |
| | comp=Z,142nm,18.5s,baz=242,slow=33 | | | | | | |
| OHAK | Old Harbor | 84.69 | 19 | P | P | 16 25 18.8 | +1.1 |
| | baz=215 | | | | | | |
| N14K | Kuskokwak Cree | 84.75 | 14 | P | P | 16 25 17.8 | -0.1 |
| | baz=207 | | | | | | |
| N15K | Kwethluk River | 85.34 | 15 | P | P | 16 25 22.3 | +1.4 |
| | baz=208 | | | | | | |
| Q18K | Katmai Hardscr | 85.37 | 18 | P | P | 16 25 20.8 | -0.4 |
| | baz=213 | | | | | | |
| KDAK | Kodiak Island | 85.37 | 19 | LR | LR | 16 57 38.4 | |
| | comp=Z,83nm,19.7s,baz=226,slow=32 | | | | | | |
| SEY | Seymchan | 85.38 | 352 | iP | P | 16 25 19.2 | -1.8 |
| L14K | Kuka Creek | 85.80 | 13 | P | P | 16 25 23.0 | -0.2 |
| | baz=206 | | | | | | |
| P18K | Big Mountain, | 85.93 | 17 | P | P | 16 25 24.1 | +0.2 |
| | baz=213 | | | | | | |
| N16K | Nishlik Lake | 85.93 | 15 | P | P | 16 25 23.8 | 0.0 |
| | baz=210 | | | | | | |
| Q19K | Cape Douglas, | 85.99 | 18 | P | P | 16 25 23.9 | -0.3 |
| | baz=214 | | | | | | |
| TROLL | Troll, Antarti | 86.09 | 184 | ⇑P | P | 16 25 27.2 | +2.3 |
| | comp=Z,455nm,0.7s | | | | | | |
| M16K | Timber Creek | 86.36 | 15 | P | P | 16 25 26.2 | +0.3 |
| | baz=210 | | | | | | |
| L15K | Ungalak Mounta | 86.36 | 14 | P | P | 16 25 26.5 | +0.6 |
| | baz=207 | | | | | | |
| N17K | Nushagak Hills | 86.37 | 16 | P | P | 16 25 26.3 | +0.3 |
| | baz=211 | | | | | | |
| SNAA | Sanae | 86.72 | 183 | P | P | 16 25 26.6 | -1.3 |
| SNAA | Sanae | 86.72 | 183 | ⇑P | P | 16 25 30.5 | +2.6 |
| | comp=Z,147nm,1.1s | | | | | | |
| SNAA | Sanae | 86.72 | 183 | P | P | 16 25 30.3 | +2.4 |
| | comp=Z,6.5nm,1.2s,baz=177,slow=4.7,SNR=6.6 | | | | | | |
| SNAA | | | | LR | LR | 17 00 50.8 | |
| | comp=Z,93nm,21.1s,baz=232,slow=33 | | | | | | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| SNAA | Sanae | 86.72 | 183 | ceP | P | 16 25 27.6 | -0.3 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,29nm,2.5s | | | | | | |
| K15K | Wolf Creek Mou | 86.90 | 13 | P | P | 16 25 29.9 | +1.4 |
| | baz=207 | | | | | | |
| M17K | Holitna River | 87.06 | 15 | P | P | 16 25 30.9 | +1.6 |
| | baz=211 | | | | | | |
| VNA3 | Neumayer Olymp | 87.31 | 180 | ⇑P | P | 16 25 30.9 | +0.3 |
| | comp=Z,10nm,0.8s | | | | | | |
| M18K | Stony River | 87.54 | 16 | P | P | 16 25 33.0 | +1.3 |
| | baz=212 | | | | | | |
| VNA1 | Neumayer--Stat | 87.89 | 181 | ⇑P | P | 16 25 32.8 | -0.6 |
| | comp=Z,9.7nm,1.0s | | | | | | |
| KHMM | Horse Mountain | 88.03 | 44 | P | P | 16 25 33.0 | -1.7 |
| O02D | Mt. Diablo Mer | 88.29 | 45 | P | P | 16 25 33.5 | -2.3 |
| GTA | Gaotai | 88.73 | 314 | eP | P | 16 25 45.0 | +7.0 |
| GTA | | | | pP | pwP | 16 25 52.0 | +6.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.5s | | | | | | |
| ULN | Ulaanbaatar | 88.77 | 323 | P | P | 16 25 36.3 | -1.7 |
| ULN | | | | IAmb | IAmb | 16 25 59.7 | |
| | comp=Z,10nm,1.2s | | | | | | |
| ULN | Ulaanbaatar | 88.77 | 323 | ceP | P | 16 25 36.7 | -1.3 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| CMB | Columbia Colle | 88.86 | 48 | P | P | 16 25 36.8 | -1.8 |
| CMB | | | | IAmb | IAmb | 16 25 39.7 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| CMB | Columbia Colle | 88.86 | 48 | P | P | 16 25 36.8 | -1.8 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| F14K | Arctic Creek | 88.90 | 10 | P | P | 16 25 39.1 | +1.1 |
| | baz=203 | | | | | | |
| AFDM | Forest Hills D | 88.90 | 47 | P | P | 16 25 37.2 | -1.5 |
| AFDM | | | | IAmb | IAmb | 16 25 39.9 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| BFSC | Mount Baldy Ra | 89.04 | 52 | P | P | 16 25 40.6 | +0.9 |
| | baz=243 | | | | | | |
| EDW2 | Edwards Air Fo | 89.09 | 52 | P | P | 16 25 40.5 | +0.8 |
| | baz=243 | | | | | | |
| MURC | Murrieta | 89.10 | 53 | P | P | 16 25 40.0 | +0.2 |
| | baz=243 | | | | | | |
| ISA | Isabella, Lake | 89.10 | 51 | P | P | 16 25 37.8 | -2.0 |
| ISA | | | | IAmb | IAmb | 16 25 41.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| ISA | Isabella, Lake | 89.10 | 51 | P | P | 16 25 40.1 | +0.3 |
| | baz=242 | | | | | | |
| ISA | Isabella, Lake | 89.10 | 51 | P | P | 16 25 37.8 | -2.0 |
| ISA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| SONM | Songino Array | 89.11 | 323 | P | P | 16 25 38.8 | -0.8 |
| SONM | | | | IAmb | IAmb | 16 26 00.4 | |
| | comp=Z,16nm,1.8s | | | | | | |
| SONM | Songino Array | 89.11 | 323 | P | P | 16 25 40.8 | +1.2 |
| | comp=Z,1.3nm,0.8s,baz=122,slow=5.0,SNR=7.9 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| SONM | Songino Array | 89.11 | 323 | P | P | 16 25 38.8 | -0.8 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,16nm,1.8s | | | | | | |
| YBH | Yreka Blue Hor | 89.13 | 44 | P | P | 16 25 38.5 | -1.3 |
| YBH | | | | IAmb | IAmb | 16 25 41.6 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| YBH | Yreka Blue Hor | 89.13 | 44 | LR | LR | 16 57 40.8 | |
| | comp=Z,98nm,21.1s,baz=306,slow=30 | | | | | | |
| YBH | Yreka Blue Hor | 89.13 | 44 | P | P | 16 25 38.5 | -1.3 |
| YBH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| YAK | Yakutsk | 89.17 | 343 | LR | LR | 17 00 58.5 | |
| | comp=Z,71nm,21.7s,baz=156,slow=32 | | | | | | |
| YAK | Yakutsk | 89.17 | 343 | iP | P | 16 25 37.1 | -2.2 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| MONP2 | Monument Peak | 89.36 | 54 | P | P | 16 25 42.0 | +0.8 |
| | baz=244 | | | | | | |
| HUMO | Hull Mountain | 89.41 | 43 | P | P | 16 25 40.2 | -0.8 |
| HUMO | | | | IAmb | IAmb | 16 25 49.9 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| HATC | Hat Creek Radi | 89.49 | 45 | P | P | 16 25 40.4 | -1.1 |
| IKP | In-Ko-Pah, Jac | 89.49 | 54 | P | P | 16 25 41.9 | +0.2 |
| | baz=244 | | | | | | |
| BILL | Bilibino | 89.49 | 359 | ⇑eP | P | 16 25 40.3 | -0.4 |
| BILL | | | | i | | 16 25 48.2 | |
| BILL | | | | S | S | 16 36 27.0 | -3.9 |
| BILL | | | | iSSS | SSS | 16 45 54.4 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| RMX | La Rumorosa | 89.49 | 55 | P | P | 16 25 40.7 | -1.1 |
| KNK | Knik Glacier | 89.54 | 19 | P | P | 16 25 41.8 | +0.6 |
| | baz=219 | | | | | | |
| MDPB | Devils Postpil | 89.58 | 49 | P | P | 16 25 40.5 | -1.7 |
| MDPB | | | | IAmb | IAmb | 16 25 43.7 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| LRMC | Laurel Mtn Rad | 89.59 | 51 | P | P | 16 25 43.1 | +1.0 |
| | baz=243 | | | | | | |
| OMMB | Old Mammoth Mi | 89.63 | 49 | P | P | 16 25 40.6 | -2.0 |
| OMMB | | | | IAmb | IAmb | 16 25 44.6 | |
| | comp=Z,11nm,1.3s | | | | | | |
| PFO | Pinyon Flats O | 89.65 | 53 | LR | LR | 16 58 22.5 | |
| | comp=Z,89nm,20.2s,baz=229,slow=30 | | | | | | |
| PFO | Pinyon Flats O | 89.65 | 53 | P | P | 16 25 42.6 | +0.1 |
| | baz=244 | | | | | | |
| PFO | Pinyon Flats O | 89.65 | 53 | iP | P | 16 25 39.0 | -3.5 |
| PFO | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| TPFO | Pinon Flats | 89.65 | 54 | P | P | 16 25 43.1 | +0.6 |
| | baz=244 | | | | | | |
| CWC | Cottonwood Cre | 89.74 | 50 | P | P | 16 25 43.3 | +0.4 |
| | baz=243 | | | | | | |
| WAKR | Walker | 89.74 | 48 | P | P | 16 25 41.0 | -1.9 |
| WAKR | | | | IAmb | IAmb | 16 25 44.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| SWSC | Sam W. Stewart | 89.85 | 54 | P | P | 16 25 43.3 | 0.0 |
| | baz=244 | | | | | | |
| PNTR | Pine Nut | 89.91 | 47 | P | P | 16 25 41.6 | -2.0 |
| PNTR | | | | IAmb | IAmb | 16 25 45.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| MPMC | Manual Prospec | 89.99 | 51 | P | P | 16 25 44.8 | +0.7 |
| | baz=243,SNR=7.4 | | | | | | |
| GSC | Goldstone, Bar | 90.15 | 52 | P | P | 16 25 42.5 | -2.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GSC | | | | IAmb | IAmb | 16 25 46.0 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **GSC** | **Goldstone, Bar** | **90.15** | **52** | P | **P** | **16 25 45.2** | **+0.5** |
| | baz=243 | | | | | | |
| **GSC** | **Goldstone, Bar** | **90.15** | **52** | P | **P** | **16 25 42.5** | **-2.2** |
| GSC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **90.17** | **53** | P | **P** | **16 25 45.7** | **+0.8** |
| | baz=244,SNR=10 | | | | | | |
| **J20K** | **Nowinta River** | **90.22** | **15** | P | **P** | **16 25 45.5** | **+1.2** |
| | baz=214 | | | | | | |
| **DSP** | **Deep Springs** | **90.24** | **50** | P | **P** | **16 25 43.5** | **-1.5** |
| **LHV** | **Little Huntoon** | **90.27** | **49** | P | **P** | **16 25 44.1** | **-1.0** |
| **HEC** | **Hector,Ludlow** | **90.28** | **52** | P | **P** | **16 25 45.3** | **-0.1** |
| | baz=244 | | | | | | |
| **KLU** | **Klutina** | **90.38** | **20** | P | **P** | **16 25 46.2** | **+1.1** |
| | baz=221 | | | | | | |
| **BMRM** | **Bremner River** | **90.41** | **21** | P | **P** | **16 25 45.3** | **0.0** |
| | baz=222 | | | | | | |
| **BC3** | **Big Chuckawall** | **90.42** | **54** | P | **P** | **16 25 47.0** | **+0.9** |
| | baz=244,SNR=5.5 | | | | | | |
| **RYN** | **Ryan** | **90.44** | **48** | P | **P** | **16 25 42.8** | **-3.3** |
| RYN | | | | IAmb | IAmb | 16 25 47.3 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.50** | **49** | P | **P** | **16 25 45.0** | **-1.4** |
| **NVAR** | **Mina Array Bea** | **90.50** | **49** | P | **P** | **16 25 47.0** | **+0.6** |
| | comp=Z,4.7nm,0.8s,baz=228,slow=8.0,SNR=23 | | | | | | |
| NVAR | | | | LR | LR | 16 57 47.6 | |
| | comp=Z,107nm,21.8s,baz=268,slow=30 | | | | | | |
| **GRAC** | **Grapevine Rang** | **90.50** | **50** | P | **P** | **16 25 44.5** | **-1.7** |
| GRAC | | | | IAmb | IAmb | 16 25 47.8 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **GRAC** | **Grapevine Rang** | **90.50** | **50** | P | **P** | **16 25 47.2** | **+1.0** |
| | baz=243,SNR=7.7 | | | | | | |
| **LPIG** | **La Paz** | **90.57** | **64** | LR | LR | 16 56 43.5 | |
| | comp=Z,110nm,21.8s,baz=235,slow=29 | | | | | | |
| **NV11** | **Mina Array Sit** | **90.60** | **49** | P | **P** | **16 25 44.9** | **-2.0** |
| NV11 | | | | IAmb | IAmb | 16 25 48.1 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **WAT1** | **Susitna Watana** | **90.62** | **18** | P | **P** | **16 25 47.8** | **+1.6** |
| | baz=219 | | | | | | |
| **FURC** | **Furnace Creek,** | **90.63** | **51** | P | **P** | **16 25 47.2** | **+0.4** |
| | baz=243 | | | | | | |
| **GLA** | **Glamis** | **90.64** | **55** | P | **P** | **16 25 47.4** | **+0.4** |
| | baz=244 | | | | | | |
| **GWY** | **Greenwater Val** | **90.64** | **51** | P | **P** | **16 25 45.2** | **-1.9** |
| GWY | | | | IAmb | IAmb | 16 25 48.6 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **GMN** | **Gold Mountain** | **90.72** | **50** | P | **P** | **16 25 45.7** | **-1.8** |
| **GMRC** | **Granite Mounta** | **90.76** | **53** | P | **P** | **16 25 48.3** | **+0.7** |
| | baz=244,SNR=5.2 | | | | | | |
| **MZP** | **Montezuma Peak** | **90.81** | **50** | P | **P** | **16 25 45.9** | **-2.1** |
| **J05D** | **Fort Rock, OR** | **90.84** | **43** | P | **P** | **16 25 46.4** | **-1.5** |
| J05D | | | | IAmb | IAmb | 16 25 49.5 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **TUQ** | **Turquoise Moun** | **90.85** | **52** | P | **P** | **16 25 48.7** | **+0.7** |
| | baz=244 | | | | | | |
| **IRM** | **Iron Mountain** | **90.87** | **53** | P | **P** | **16 25 48.5** | **+0.5** |
| | baz=244,SNR=8.5 | | | | | | |
| **KVN** | **Kaiserville** | **90.92** | **48** | P | **P** | **16 25 47.7** | **-0.7** |
| KVN | | | | IAmb | IAmb | 16 25 49.5 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **KVN** | **Kaiserville** | **90.92** | **48** | P | **P** | **16 25 47.7** | **-0.7** |
| KVN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **H04A** | **Detroit Lake** | **90.94** | **42** | P | **P** | **16 25 46.9** | **-1.2** |
| **WCT** | **Wildcat Mounta** | **90.94** | **51** | P | **P** | **16 25 46.7** | **-1.7** |
| WCT | | | | IAmb | IAmb | 16 25 49.7 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **TPH** | **Tonopah** | **91.09** | **49** | P | **P** | **16 25 47.6** | **-1.6** |
| **TPH** | **Tonopah** | **91.09** | **49** | P | **P** | **16 25 47.6** | **-1.6** |
| TPH | | | | pmax | pmax | | |
| | comp=Z,50nm,1.1s | | | | | | |
| **F18K** | **Selawik** | **91.10** | **12** | P | **P** | **16 25 48.8** | **+0.5** |
| | baz=209 | | | | | | |
| **CRAG** | **Craig** | **91.12** | **29** | P | **P** | **16 25 49.9** | **+1.3** |
| | baz=232 | | | | | | |
| **E17K** | **Hotham Inlet** | **91.13** | **11** | P | **P** | **16 25 49.1** | **+0.7** |
| | baz=207 | | | | | | |
| **DHY** | **Denali Highway** | **91.15** | **18** | P | **P** | **16 25 48.7** | **-0.1** |
| | baz=220 | | | | | | |
| **H20K** | **Anotleneega Mo** | **91.15** | **14** | P | **P** | **16 25 50.0** | **+1.5** |
| | baz=213 | | | | | | |
| **SIT** | **Sitka** | **91.17** | **27** | P | **P** | **16 25 49.8** | **+1.1** |
| | baz=230 | | | | | | |
| **PALK** | **Pallekele** | **91.20** | **277** | LR | LR | 17 08 18.0 | |
| | comp=Z,78nm,20.0s,baz=221,slow=37 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **91.24** | **21** | P | **P** | **16 25 49.6** | **+0.6** |
| | baz=224 | | | | | | |
| **PINE** | **Pine Mountain** | **91.28** | **43** | IAmb | IAmb | 16 25 51.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **TPNV** | **Topopah Spring** | **91.28** | **51** | P | **P** | **16 25 49.9** | **-0.1** |
| | baz=244,SNR=16 | | | | | | |
| **113A** | **Mohawk Valley,** | **91.32** | **55** | IAmb | IAmb | 16 25 52.2 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **U33K** | **Whale Pass** | **91.52** | **28** | P | **P** | **16 25 50.9** | **+0.5** |
| | baz=232 | | | | | | |
| **BBB** | **Bella Bella** | **91.58** | **33** | LR | LR | 16 59 14.4 | |
| | comp=Z,39nm,21.0s,baz=253,slow=30 | | | | | | |
| **PAX** | **Paxson** | **91.64** | **19** | P | **P** | **16 25 52.0** | **+1.0** |
| | baz=222 | | | | | | |
| **C16K** | **Lisburne Hills** | **91.64** | **9** | P | **P** | **16 25 51.6** | **+0.9** |
| | baz=204 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **91.68** | **12** | P | **P** | **16 25 52.2** | **+1.3** |
| | baz=210 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **91.69** | **54** | P | **P** | **16 25 52.1** | **+0.3** |
| | baz=245 | | | | | | |
| **V35K** | **Ketchikan** | **91.71** | **29** | P | **P** | **16 25 52.3** | **+1.0** |
| | baz=233 | | | | | | |
| **214A** | **Organ Pipe Nat** | **91.72** | **56** | P | **P** | **16 25 52.2** | **+0.1** |
| | baz=246 | | | | | | |
| **V12A** | **Nelson** | **91.77** | **52** | P | **P** | **16 25 50.2** | **-2.1** |
| V12A | | | | IAmb | IAmb | 16 26 06.5 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **P29M** | **Windy Craggy** | **91.89** | **24** | P | **P** | **16 25 50.3** | **-1.9** |
| **P29M** | **Windy Craggy** | **91.89** | **24** | P | **P** | **16 25 53.2** | **+1.0** |
| | baz=228 | | | | | | |
| **M26K** | **Nabesna, AK** | **91.99** | **20** | P | **P** | **16 25 52.5** | **0.0** |
| | baz=224 | | | | | | |
| **ZAK** | **Zakamensk** | **92.22** | **324** | *e*P | **P** | **16 25 53.5** | **-0.5** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **92.22** | **16** | P | **P** | **16 25 54.2** | **+0.7** |
| | baz=218 | | | | | | |
| **R32K** | **Eaglecrest** | **92.28** | **26** | P | **P** | **16 25 52.9** | **-1.0** |
| | baz=231 | | | | | | |
| **YUK8** | **Steele Glacier** | **92.28** | **22** | P | **P** | **16 25 54.4** | **+0.2** |
| | baz=226 | | | | | | |
| **F20K** | **Avaraart Lake** | **92.28** | **13** | P | **P** | **16 25 55.0** | **+1.3** |
| | baz=212 | | | | | | |
| **HDA** | **Harding Lake** | **92.30** | **18** | P | **P** | **16 25 54.0** | **+0.1** |
| | baz=220 | | | | | | |
| **PLBC** | **Pleasant Camp** | **92.30** | **25** | P | **P** | **16 25 54.2** | **+0.2** |
| | baz=229 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **92.31** | **15** | P | **P** | **16 25 54.6** | **+0.6** |
| | baz=216 | | | | | | |
| **M27K** | **Edge Creek, AK** | **92.32** | **21** | P | **P** | **16 25 53.0** | **-1.3** |
| M27K | | | | IAmb | IAmb | 16 25 55.4 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **M27K** | **Edge Creek, AK** | **92.32** | **21** | P | **P** | **16 25 54.3** | **+0.1** |
| | baz=225 | | | | | | |
| **YUK3** | **Moose Creek** | **92.38** | **22** | P | **P** | **16 25 55.2** | **+0.5** |
| | baz=226 | | | | | | |
| **P30M** | **Million Dollar** | **92.51** | **24** | P | **P** | **16 25 55.7** | **+0.7** |
| | baz=229 | | | | | | |
| **YUK6** | **Outpost Mounta** | **92.55** | **23** | P | **P** | **16 25 55.4** | **0.0** |
| | baz=228 | | | | | | |
| **ILAR** | **Eielson Array** | **92.59** | **17** | P | **P** | **16 25 54.4** | **-0.8** |
| | comp=Z,0.4nm,0.5s,baz=235,slow=5.3,SNR=3.6 | | | | | | |
| ILAR | | | | LR | LR | 17 03 24.5 | |
| | comp=Z,81nm,19.9s,baz=244,slow=33 | | | | | | |
| **C18K** | **Utukok River** | **92.64** | **10** | P | **P** | **16 25 56.9** | **+1.4** |
| | baz=207 | | | | | | |
| **SCRK** | **Sand Creek** | **92.83** | **19** | P | **P** | **16 25 56.9** | **+0.4** |
| | baz=223 | | | | | | |
| **L27K** | **Beaver Creek,** | **92.84** | **20** | P | **P** | **16 25 56.4** | **0.0** |
| | baz=225 | | | | | | |
| **J25K** | **Salcha River,** | **92.90** | **18** | P | **P** | **16 25 56.2** | **-0.6** |
| | baz=222 | | | | | | |
| **F21K** | **Alatna River** | **92.91** | **14** | P | **P** | **16 25 57.3** | **+0.6** |
| | baz=214 | | | | | | |
| **G22K** | **Bettles** | **93.11** | **15** | P | **P** | **16 25 57.4** | **-0.1** |
| | baz=216 | | | | | | |
| **B18K** | **Kokolik River** | **93.18** | **10** | P | **P** | **16 25 57.7** | **-0.1** |
| | baz=207 | | | | | | |
| **E20K** | **Nigu River** | **93.22** | **12** | P | **P** | **16 25 58.7** | **+0.6** |
| | baz=212 | | | | | | |
| **O30N** | **Mendenhall** | **93.27** | **24** | P | **P** | **16 25 58.6** | **+0.2** |
| | baz=230 | | | | | | |
| **J26L** | **Joseph Creek** | **93.34** | **19** | P | **P** | **16 25 57.6** | **-1.2** |
| J26L | | | | IAmb | IAmb | 16 26 11.9 | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **J26L** | **Joseph Creek** | **93.34** | **19** | P | **P** | **16 25 59.0** | **+0.2** |
| | baz=223 | | | | | | |
| **N30M** | **Aishikik Lake** | **93.35** | **23** | P | **P** | **16 25 59.3** | **+0.4** |
| | baz=229 | | | | | | |
| **TUC** | **Tucson** | **93.43** | **57** | P | **P** | **16 25 59.4** | **-0.6** |
| | baz=247 | | | | | | |
| **F22K** | **John River** | **93.44** | **14** | P | **P** | **16 25 59.1** | **0.0** |
| | baz=216 | | | | | | |
| **K27K** | **Chicken** | **93.45** | **19** | IAmb | IAmb | 16 26 11.9 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **K27K** | **Chicken** | **93.45** | **19** | P | **P** | **16 25 59.5** | **+0.3** |
| | baz=224 | | | | | | |
| **S34M** | **Telegraph Cree** | **93.47** | **28** | P | **P** | **16 26 00.7** | **+1.2** |
| | baz=234 | | | | | | |
| **M29M** | **Somme Creek** | **93.53** | **22** | P | **P** | **16 25 58.5** | **-1.2** |
| M29M | | | | IAmb | IAmb | 16 26 11.8 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **M29M** | **Somme Creek** | **93.53** | **22** | P | **P** | **16 25 59.0** | **-0.7** |
| | baz=228 | | | | | | |
| **ELK** | **Elko** | **93.65** | **48** | LR | LR | 17 01 04.4 | |
| | comp=Z,67nm,20.3s,baz=248,slow=31 | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **93.77** | **55** | P | **P** | **16 25 58.2** | **-3.4** |
| X16A | | | | IAmb | IAmb | 16 26 03.8 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **93.82** | **13** | P | **P** | **16 26 00.1** | **-0.8** |
| | baz=214 | | | | | | |
| **N31M** | **Braeburn, Yuko** | **93.84** | **23** | P | **P** | **16 25 59.4** | **-1.7** |
| | baz=230 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **93.92** | **16** | P | **P** | **16 26 01.9** | **+0.6** |
| | baz=220 | | | | | | |
| **L29M** | **L29M** | **94.09** | **21** | P | **P** | **16 25 59.8** | **-2.5** |
| L29M | | | | IAmb | IAmb | 16 26 15.8 | |
| | comp=Z,9.7nm,1.2s | | | | | | |
| **L29M** | **L29M** | **94.09** | **21** | P | **P** | **16 26 00.3** | **-2.0** |
| | baz=228 | | | | | | |
| **M30M** | **Minto, Yukon** | **94.19** | **22** | IAmb | IAmb | 16 26 14.7 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **M30M** | **Minto, Yukon** | **94.19** | **22** | P | **P** | **16 26 03.7** | **+1.0** |
| | baz=229 | | | | | | |
| **C21K** | **Knifeblade Rid** | **94.25** | **12** | P | **P** | **16 26 04.0** | **+1.1** |
| | baz=213 | | | | | | |
| **DLBC** | **Dease Lake** | **94.26** | **27** | LR | LR | 16 59 21.5 | |
| | comp=Z,67nm,20.9s,baz=272,slow=30 | | | | | | |
| **EGAK** | **Eagle** | **94.27** | **19** | P | **P** | **16 26 00.9** | **-2.1** |
| EGAK | | | | IAmb | IAmb | 16 26 14.9 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **94.27** | **19** | P | **P** | **16 26 03.8** | **+0.8** |
| | baz=225 | | | | | | |
| **DAWY** | **Dawson** | **94.32** | **20** | P | **P** | **16 26 04.3** | **+1.0** |
| | baz=227 | | | | | | |
| **G25K** | **Bearman Lake** | **94.32** | **16** | P | **P** | **16 26 04.0** | **+0.9** |
| | baz=221 | | | | | | |
| **R33M** | **Jennings River** | **94.42** | **26** | P | **P** | **16 26 03.9** | **0.0** |
| | baz=234 | | | | | | |
| **E23K** | **Chandalar** | **94.46** | **14** | P | **P** | **16 26 05.2** | **+1.3** |
| | baz=218 | | | | | | |
| **I27K** | **Kandik River** | **94.71** | **18** | P | **P** | **16 26 05.0** | **-0.1** |
| | baz=225 | | | | | | |
| **K29M** | **Barlow Dome** | **94.78** | **21** | P | **P** | **16 26 06.4** | **+0.9** |
| | baz=228 | | | | | | |
| **M31M** | **Drury Creek, Y** | **94.81** | **23** | P | **P** | **16 26 06.2** | **+0.7** |
| | baz=231 | | | | | | |
| **D23K** | **Nanushuk River** | **94.95** | **14** | P | **P** | **16 26 07.1** | **+1.1** |
| | baz=217 | | | | | | |
| **F25K** | **Christian Rive** | **95.07** | **16** | P | **P** | **16 26 05.9** | **-0.8** |
| | baz=222 | | | | | | |
| **G26K** | **Porcupine Rive** | **95.08** | **17** | P | **P** | **16 26 06.3** | **-0.2** |
| | baz=223 | | | | | | |
| **I28M** | **Miner Creek** | **95.11** | **19** | P | **P** | **16 26 06.2** | **-0.7** |
| | baz=226 | | | | | | |
| **H27K** | **Steamboat Moun** | **95.19** | **18** | P | **P** | **16 26 07.4** | **+0.2** |
| | baz=225 | | | | | | |
| **BMAR** | **Burnt Mountain** | **95.22** | **16** | P | **P** | **16 26 05.1** | **-2.2** |
| **D24K** | **Happy Valley** | **95.50** | **14** | P | **P** | **16 26 09.1** | **+0.6** |
| | baz=219 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **95.55** | **20** | P | **P** | **16 26 06.9** | **-2.0** |
| I29M | | | | IAmb | IAmb | 16 26 20.6 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **95.55** | **20** | P | **P** | **16 26 09.0** | **+0.2** |
| | baz=228 | | | | | | |
| **G27K** | **Doyon Strip** | **95.56** | **18** | P | **P** | **16 26 07.9** | **-1.0** |
| | baz=225 | | | | | | |
| **J30M** | **Hart River** | **95.66** | **21** | P | **P** | **16 26 09.0** | **-0.5** |
| | baz=230 | | | | | | |
| **NEW** | **Newport** | **95.71** | **40** | LR | LR | 17 02 27.5 | |
| | comp=Z,68nm,19.8s,baz=233,slow=31 | | | | | | |
| **NEW** | **Newport** | **95.71** | **40** | P | **P** | **16 26 09.4** | **-0.6** |
| | baz=244 | | | | | | |
| **A21K** | **Barrow** | **95.75** | **11** | P | **P** | **16 26 10.4** | **+0.8** |
| | baz=212 | | | | | | |
| **I30M** | **Mount Dempster** | **96.06** | **20** | P | **P** | **16 26 09.5** | **-1.8** |
| I30M | | | | IAmb | IAmb | 16 26 23.0 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **I30M** | **Mount Dempster** | **96.06** | **20** | P | **P** | **16 26 11.4** | **0.0** |
| | baz=230 | | | | | | |
| **E27K** | **Coleen River** | **96.55** | **17** | P | **P** | **16 26 13.3** | **-0.1** |
| | baz=225 | | | | | | |
| **EPYK** | **Eagle Plains** | **96.71** | **19** | P | **P** | **16 26 14.0** | **-0.2** |
| | baz=229 | | | | | | |
| **PLCA** | **Paso Flores** | **96.77** | **139** | LR | LR | 17 00 04.9 | |
| | comp=Z,37nm,20.8s,baz=211,slow=29 | | | | | | |
| **C27K** | **Jago River** | **97.05** | **15** | P | **P** | **16 26 15.2** | **-0.3** |
| | baz=223 | | | | | | |
| **TIXI** | **Tiksi** | **97.11** | **348** | LR | LR | 17 08 39.5 | |
| | comp=Z,90nm,19.6s,baz=142,slow=35 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **97.25** | **19** | P | **P** | **16 26 14.4** | **-2.2** |
| **G30M** | **tAoh Zraii Nji** | **97.25** | **19** | P | **P** | **16 26 17.0** | **+0.4** |
| | baz=230 | | | | | | |
| **MNTX** | **Cornudas Mount** | **97.46** | **59** | P | **P** | **16 26 15.8** | **-2.5** |
| | baz=249 | | | | | | |
| **ANMO** | **Albuquerque** | **97.77** | **56** | LR | LR | 17 02 59.1 | |
| | comp=Z,51nm,20.3s,baz=318,slow=31 | | | | | | |
| **G31M** | **Satah River** | **97.81** | **19** | P | **P** | **16 26 18.3** | **-0.7** |
| | baz=232 | | | | | | |
| **TXAR** | **Lajitas Array** | **98.02** | **62** | P | **P** | **16 26 22.2** | **+1.2** |
| | comp=Z,0.5nm,0.9s,baz=258,slow=4.5,SNR=2.6 | | | | | | |
| TXAR | | | | LR | LR | 17 01 28.4 | |
| | comp=Z,68nm,21.8s,baz=238,slow=30 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **98.10** | **16** | P | **P** | **16 26 19.3** | **-0.9** |
| | baz=228 | | | | | | |
| **PDAR** | **Pinedale Array** | **98.35** | **47** | P | Pdif | 16 26 24.4 | +2.1 |
| | comp=Z,0.5nm,0.8s,baz=209,slow=2.7,SNR=3.9 | | | | | | |
| PDAR | | | | LR | LR | 17 06 44.2 | |
| | comp=Z,25nm,18.7s,baz=247,slow=33 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **WMQ** | **Urumqi** | **98.82** | **314** | *e*P | **P** | **16 26 23.9** | **-0.3** |
| WMQ | | | | LR | LR | | |
| | comp=Z,79nm,21.5s | | | | | | |
| **INK** | **Inuvik** | **98.89** | **18** | LR | LR | 17 07 14.8 | |
| | comp=Z,96nm,20.1s,baz=256,slow=33 | | | | | | |
| **BRVK** | **Borovoye** | **112.29** | **320** | *i* PKIKP | **PKiKP** | **16 31 17.3** | **-2.5** |
| **ARU** | **Arti** | **119.15** | **323** | *i* PKIKP | **PKPdf** | **16 31 31.1** | **-1.7** |
| ARU | | | | | | 16 32 52.7 | |
| ARU | | | | | | 16 38 41.8 | |
| ARU | | | | SS | SS | 16 49 12.6 | -1.7 |
| **BELG** | **Belogornoye** | **126.03** | **320** | *i* PKIKP | **PKPdf** | **16 31 45.4** | **-0.7** |
| **KIV** | **Kislovodsk** | **130.78** | **310** | *i* PKIKP | **PKPdf** | **16 31 53.6** | **-2.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **VYHS** | **Vyhne** | **144.27** | **326** | *e*PKIKP | PKPbc | 16 32 19.9 | +1.5 |
| **VYHS** | **Vyhne** | **144.27** | **326** | *e*PKP | PKPbc | 16 32 19.9 | +1.5 |
| **JAVC** | **Velka Javorina** | **144.64** | **327** | *e*PKP | **PKPdf** | **16 32 22.2** | **+1.3** |
| **VRAC** | **Vranov** | **144.88** | **328** | *e*PKP | **PKPab** | **16 32 20.4** | **+0.1** |
| **PVCC** | **Panska Ves** | **144.98** | **331** | *e*PKP | **PKiKP** | **16 32 31.4** | **+6.3** |
| **PVCC** | **Panska Ves** | **144.98** | **331** | *e*PKIKP | **PKiKP** | **16 32 31.4** | **+6.3** |
| **BRG** | **Berggiesshubel** | **145.00** | **332** | *e*PKP | **PKPab** | **16 32 21.3** | **+0.7** |
| BRG | | | | Amp | | 16 32 22.2 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **145.00** | **332** | P | **PKiKP** | **16 32 30.8** | **+5.6** |
| BRG | | | | Amp | | 16 32 32.1 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **CLL** | **Collm** | **145.08** | **334** | *i* PKPbc | **PKPbc** | **16 32 20.9** | **0.0** |
| | comp=Z,11nm,1.3s | | | | | | |
| CLL | | | | *i* x | x | 16 32 29.9 | |
| | comp=Z,25nm,1.0s | | | | | | |
| CLL | | | | *e*SKPdf | **SKPdf** | **16 35 55.0** | **-0.9** |
| **CLL** | **Collm** | **145.08** | **334** | *i* PKIKP | **PKPbc** | **16 32 20.9** | **0.0** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| **KRUC** | **Moravsky** | **145.14** | **328** | *e*PKP | **PKPbc** | **16 32 20.9** | **-0.3** |
| **MODS** | **Modra-Piesok** | **145.15** | **327** | *e*PKIKP | **PKPdf** | **16 32 23.2** | **+1.5** |
| **MODS** | **Modra-Piesok** | **145.15** | **327** | *e*PKP | **PKPdf** | **16 32 23.2** | **+1.5** |
| **EKA** | **Eskdalemuir Ar** | **145.91** | **352** | PKPbc | **PKPdf** | **16 32 23.1** | **+0.3** |
| | comp=Z,2.8nm,0.7s,baz=357,slow=2.1,SNR=7.7 | | | | | | |
| **RONA** | **Rosalia, Austr** | **146.09** | **326** | *e*PKiKP | **PKPbc** | **16 32 25.3** | **+1.1** |
| | comp=Z,8.3nm,1.3s | | | | | | |
| **CONA** | **Conrad Observa** | **146.16** | **327** | *e*PKiKP | **PKPbc** | **16 32 26.0** | **+1.4** |
| | comp=Z,14nm,1.8s | | | | | | |
| CONA | | | | *e*pPKiKP | **pPKiKP** | **16 32 34.1** | **+4.3** |
| | comp=Z,32nm,1.6s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **146.31** | **330** | *e*PKP | **PKPbc** | **16 32 26.0** | **+1.1** |
| CKRC | | | | *e*x | x | 16 32 34.8 | |
| **CKRC** | **Cesky Krumlov** | **146.31** | **330** | *e*PKP2 | **PKPbc** | **16 32 26.0** | **+1.1** |
| **KHC** | **Kasperske Hory** | **146.43** | **331** | *e*PKP | **PKPbc** | **16 32 26.4** | **+1.2** |
| KHC | | | | *e*x | x | 16 32 35.5 | |
| **KHC** | **Kasperske Hory** | **146.43** | **331** | *i* PKIKP | **PKPdf** | **16 32 22.3** | **-1.6** |
| **GERES** | **GERESS Array B** | **146.58** | **330** | PKPbc | **PKPdf** | **16 32 26.1** | **+1.8** |
| | comp=Z,1.6nm,0.7s,baz=329,slow=0.8,SNR=7.7 | | | | | | |
| **ARSA** | **Arzberg** | **146.78** | **326** | *e*pPKiKP | **PKiKP** | **16 32 36.3** | **+7.3** |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **MOA** | **Molln** | **147.01** | **328** | *e*pPKiKP | PKiKP | 16 32 38.2 | +8.8 |
| | comp=Z,12nm,1.3s | | | | | | |
| **GRF** | **Grafenberg Arr** | **147.04** | **333** | *e*PKPbc | **PKiKP** | **16 32 36.5** | **+7.1** |
| | baz=46,slow=3.0 | | | | | | |
| **SOKA** | **Soboth** | **147.41** | **326** | *e*PKP | **PKPbc** | **16 32 28.5** | **+0.3** |
| | comp=Z,3.9nm,1.2s | | | | | | |
| SOKA | | | | *e*pPKiKP | **sPKPab** | **16 32 37.8** | **+5.1** |
| | comp=Z,13nm,1.2s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **147.42** | **329** | *e*pPKiKP | PKiKP | 16 32 38.7 | +8.4 |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **OBKA** | **Obir** | **147.77** | **326** | *e*pPKP | **PKPab** | **16 32 37.0** | **+5.4** |
| | comp=Z,12nm,1.5s | | | | | | |
| **KBA** | **Koelnbreinsper** | **147.99** | **328** | *e*PKiKP | **PKPbc** | **16 32 30.2** | **+0.3** |
| | comp=Z,5.0nm,1.6s | | | | | | |
| KBA | | | | *e*pPKP | **sPKPab** | **16 32 39.4** | **+4.3** |
| | comp=Z,11nm,1.4s | | | | | | |
| **LESA** | **Schwarzleotal** | **148.07** | **329** | *e*PKiKP | **PKPbc** | **16 32 30.5** | **+0.5** |
| | comp=Z,2.6nm,0.7s | | | | | | |
| LESA | | | | *e*pPKP | **sPKPab** | **16 32 39.6** | **+4.4** |
| | comp=Z,13nm,1.0s | | | | | | |
| **MYKA** | **Terra Mystica** | **148.15** | **327** | *e*PKP | **PKPdf** | **16 32 28.7** | **+1.8** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| MYKA | | | | *e*pPKP | **sPKPab** | **16 32 39.5** | **+3.9** |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **ABTA** | **Abfaltersbach** | **148.63** | **328** | *e*PKiKP | **PKPbc** | **16 32 31.2** | **-0.2** |
| | comp=Z,4.7nm,1.2s | | | | | | |
| ABTA | | | | *e*pPKP | **sPKPab** | **16 32 40.6** | **+3.1** |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **WATA** | **Walderalm** | **148.65** | **330** | *e*pPKP | **PKPab** | **16 32 41.4** | **+6.3** |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **WTTA** | **Wattenberg** | **148.68** | **330** | *e*PKP | **PKPbc** | **16 32 32.9** | **+1.2** |
| | comp=Z,13nm,1.5s | | | | | | |
| WTTA | | | | *e*pPKP | **sPKPab** | **16 32 41.1** | **+3.2** |
| | comp=Z,11nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **148.87** | **331** | *e*PKiKP | **PKPbc** | **16 32 32.6** | **+0.6** |
| | comp=Z,5.6nm,1.2s | | | | | | |
| MOTA | | | | *e*pPKP | **sPKPab** | **16 32 40.9** | **+2.4** |
| | comp=Z,14nm,0.9s | | | | | | |
| **BMRD** | **Maredsous** | **148.91** | **340** | *d*PKPdf | **PKPdf** | **16 32 26.0** | **-1.9** |
| **SQTA** | **Sankt Quirin** | **148.91** | **330** | *e*PKiKP | **PKPbc** | **16 32 32.8** | **+0.6** |
| | comp=Z,1.8nm,0.6s | | | | | | |
| SQTA | | | | *e*pPKP | **sPKPab** | **16 32 41.9** | **+3.2** |
| | comp=Z,16nm,0.9s | | | | | | |
| **RETA** | **Reutte** | **148.91** | **331** | *e*pPKP | **PKPbc** | **16 32 33.1** | **+1.0** |
| | comp=Z,1.1nm,0.7s | | | | | | |
| RETA | | | | *e*pPKP | **sPKPab** | **16 32 42.1** | **+3.5** |
| | comp=Z,9.1nm,1.3s | | | | | | |
| **FETA** | **Feichten** | **149.28** | **330** | *e*pPKP | **PKPbc** | **16 32 34.7** | **+1.5** |
| | comp=Z,2.3nm,1.0s | | | | | | |
| FETA | | | | *e*pPKP | **sPKPab** | **16 32 43.0** | **+2.7** |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **TUE** | **Stuetta** | **150.32** | **331** | | **PKPdf** | **16 32 31.2** | **+0.6** |
| **TORD** | **Torodi Ar. Bea** | **165.31** | **237** | PKP | **PKPdf** | **16 32 50.8** | **+1.2** |
| | comp=Z,0.8nm,1.0s,baz=191,slow=2.9,SNR=2.6 | | | | | | |

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*PRU **02** 16:17:49.5, 51°.42N×16°.07E, h0km*

*VIE **02** 16:17:50.6±1.1, 51°.26N×16°.09E, h0km, mb2.1/4, ml2.6/4, Error ellipse: s-maj=7.7km s-min=6.3km az=80.0, Suspected Mining induced.*

**ISC 02 16:17:46.6**±1.2**, 51°.52N**±0°.06×**16°.10E**±0°.03**, h0km, n26, σ0s.90**/48**, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.69** | **170** | *e*Pg | **Pg** | **16 18 00.2** | **+0.4** |
| KSP | | | | *e*Sg | **Sg** | **16 18 08.7** | **0.0** |
| **CHVC** | **Chvalec** | **0.94** | **182** | *e*PG | **Pg** | **16 18 05.0** | **+0.5** |
| CHVC | | | | *e*SG | **Sg** | **16 18 16.9** | **+0.3** |
| **OSTC** | **Ostas** | **0.97** | **176** | *e*PG | **Pb** | **16 18 05.8** | **-0.5** |
| OSTC | | | | *e*SG | **Sg** | **16 18 17.5** | **-0.2** |
| | comp=Z,26nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.02** | **183** | *e*PG | **Pg** | **16 18 06.5** | **+0.4** |
| UPC | | | | *e*SG | **Sg** | **16 18 19.1** | **-0.1** |
| | comp=Z,47nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.18** | **173** | *e*PG | **Pg** | **16 18 09.1** | **-0.1** |
| DPC | | | | *e*SG | **Sg** | **16 18 23.5** | **-1.0** |
| | comp=Z,26nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.39** | **225** | *e*PG | **Pn** | **16 18 13.4** | **+0.2** |
| PVCC | | | | *e*SG | **Sb** | **16 18 31.6** | **0.0** |
| | comp=Z,73nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.50** | **245** | Pg | **Pn** | **16 18 15.4** | **+0.6** |
| BRG | | | | Sg | **Sn** | **16 18 35.5** | **+0.4** |
| BRG | | | | Amp | | 16 18 36.5 | |
| | comp=Z,43nm,0.4s | | | | | | |
| **KRLC** | **Kraliky** | **1.51** | **163** | *e*PG | **Pn** | **16 18 14.8** | **-0.1** |
| KRLC | | | | *e*SG | **Sg** | **16 18 34.3** | **-0.8** |
| | comp=Z,18nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.83** | **213** | *e*SG | **Sb** | **16 18 43.9** | **-0.3** |
| **HSKC** | **Hora Svate Kat** | **1.92** | **242** | *e*SG | **Sb** | **16 18 46.9** | **0.0** |
| | comp=Z,20nm,0.3s | | | | | | |
| **CLL** | **Collm** | **1.95** | **265** | *e*Pn | **Pn** | **16 18 20.0** | **-0.9** |
| CLL | | | | *e*Pg | **Pb** | **16 18 23.0** | **+0.1** |
| CLL | | | | *i* x | x | 16 18 27.1 | |
| CLL | | | | *e*Sg | **Sb** | **16 18 48.0** | **+0.2** |
| | comp=Z,12nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.98** | **152** | *e*PN | **Pn** | **16 18 20.9** | **-0.4** |
| MORC | | | | *e*SG | **Sb** | **16 18 47.6** | **-1.0** |
| **OKC** | **Ostrava-Krasne** | **2.13** | **142** | *e*SG | **Sb** | **16 18 53.5** | **+0.5** |
| | comp=Z,16nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **2.24** | **172** | *e*PN | **Pn** | **16 18 25.1** | **+0.2** |
| VRAC | | | | *e*SG | **Sb** | **16 18 56.6** | **+0.5** |
| **TREC** | **Trest** | **2.27** | **190** | *e*SG | **Sg** | **16 18 57.9** | **-1.4** |
| | comp=Z,15nm,0.3s | | | | | | |
| **KRUC** | **Moravsky** | **2.47** | **175** | *e*PN | **Pn** | **16 18 28.7** | **+0.6** |
| KRUC | | | | *e*SG | **Sb** | **16 19 03.9** | **+1.1** |
| **OJC** | **Ojcow** | **2.68** | **118** | *e*Pg | **Pg** | **16 18 38.2** | **+0.3** |
| OJC | | | | *e*Sg | **Sg** | **16 19 13.0** | **+0.3** |
| **JAVC** | **Velka Javorina** | **2.85** | **159** | *e*PN | **Pn** | **16 18 33.0** | **-0.4** |
| **KHC** | **Kasperske Hory** | **2.89** | **215** | *e*PN | **Pn** | **16 18 33.8** | **0.0** |
| KHC | | | | *e*PG | **Pb** | **16 18 39.6** | **+0.6** |
| KHC | | | | *e*SN | **Sn** | **16 19 07.9** | **-1.4** |
| KHC | | | | *e*SG | **Sg** | **16 19 18.3** | **-1.0** |
| | comp=Z,7.8nm,0.3s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **2.94** | **204** | *e*PN | **Pn** | **16 18 34.7** | **+0.2** |
| CKRC | | | | *e*PG | **Pb** | **16 18 40.2** | **+0.4** |
| CKRC | | | | *e*SG | **Sg** | **16 19 19.3** | **-1.7** |
| **LANS** | **Liptovska Anna** | **3.21** | **136** | *e*SG | **Sg** | **16 19 27.4** | **-2.2** |
| **MODS** | **Modra-Piesok** | **3.24** | **166** | *e*PG | **Pg** | **16 18 50.5** | **+1.8** |
| MODS | | | | *e*SG | **Sg** | **16 19 31.4** | **+0.7** |
| **CONA** | **Conrad Observa** | **3.60** | **183** | *i* Pn | **Pn** | **16 18 44.6** | **+0.9** |
| | comp=Z,0.2nm,0.1s | | | | | | |
| CONA | | | | *e*Sg | **Sg** | **16 19 40.2** | **-2.0** |
| | comp=Z,7.3nm,0.3s | | | | | | |
| **MOA** | **Molln** | **3.87** | **199** | *i* Pn | **Pn** | **16 18 48.0** | **+0.8** |
| | comp=Z,0.8nm,0.2s | | | | | | |
| MOA | | | | *e*Sg | **Sg** | **16 19 51.0** | **+0.3** |
| | comp=Z,5.7nm,0.3s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **4.16** | **204** | *e*Sg | **Sg** | **16 19 59.6** | **-0.4** |
| | comp=Z,5.8nm,0.3s | | | | | | |
| **ARSA** | **Arzberg** | **4.29** | **185** | *e*Sg | **Sg** | **16 20 02.0** | **-2.4** |
| | comp=Z,7.0nm,0.8s | | | | | | |

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*NEIC **02** 16:34:08.7±2.1, 15°.5S±0°.2×177°.4W±0°.1, h420km±8km, mb4.3/90, Error ellipse: s-maj=29.0km s-min=14.6km az=146.0*

*IDC **02** 16:34:11.4±1.2, 15°.40S×177°.78W, h451km±14km, mb3.4/12, mbtmp4.2/14, Error ellipse: s-maj=36.3km s-min=11.1km az=148.0*

**ISC 02 16:34:10.9**±0.6**, 15°.5S**±0°.2×**177°.6W**±0°.1**, h450km, n121, σ1s.13**/120**, mb4.2**/56**, 3D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.70** | **241** | | **P** | **16 35 31.1** | **-1.4** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.70** | **241** | P | **P** | **16 35 31.5** | **-0.9** |
| | 42nm,0.6s,baz=84,slow=6.5,SNR=36 | | | | | | |
| MSVF | | | | S | **S** | **16 36 39.1** | **+0.2** |
| | 18nm,1.0s,baz=106,slow=23,SNR=8.0 | | | | | | |
| **AFI** | **Afiamalu** | **5.89** | **75** | | P | 16 35 36.7 | -7.6 |
| **LIFNC** | **LIFOU** | **15.30** | **248** | P | **P** | **16 37 23.7** | **-1.6** |
| **DZM** | **Mont Dzumac** | **16.42** | **244** | P | **P** | **16 37 37.6** | **+0.2** |
| DZM | | | | IAmb | IAmb | 16 37 45.7 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.42** | **244** | P | **P** | **16 37 37.5** | **+0.2** |
| | comp=Z,4.4nm,0.9s,baz=101,slow=20,SNR=1.6 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.91** | **251** | P | **P** | **16 37 53.5** | **+0.8** |
| KOUNC | | | | IAmb | IAmb | 16 37 57.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **30.85** | **246** | P | **P** | **16 39 51.0** | **+2.2** |
| **CTAO** | **Charters Tower** | **34.64** | **257** | P | **P** | **16 40 23.4** | **+2.1** |
| CTAO | | | | IAmb | IAmb | 16 40 25.5 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.89** | **267** | P | **P** | **16 40 49.1** | **+0.7** |
| COEN | | | | IAmb | IAmb | 16 41 29.6 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **39.29** | **229** | P | **P** | **16 41 01.2** | **+1.7** |
| TOO | | | | IAmb | IAmb | 16 41 14.1 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **40.47** | **239** | P | **P** | **16 41 09.2** | **+0.1** |
| **STKA** | **Stephens Creek** | **40.47** | **239** | P | **P** | **16 41 08.7** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=77,slow=6.6,SNR=7.3 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **45.25** | **239** | P | **P** | **16 41 46.5** | **-0.3** |
| **WR0** | **Warramunga Arr** | **45.65** | **257** | P | **P** | **16 41 47.6** | **-2.5** |
| **WB2** | **Warramunga Arr** | **45.83** | **257** | P | P | 16 41 46.4 | -5.1 |
| **WRA** | **Warramunga Arr** | **45.84** | **257** | P | **P** | **16 41 50.7** | **-0.8** |
| | comp=Z,2.0nm,0.6s,baz=90,slow=6.8,SNR=24 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **46.19** | **252** | P | **P** | **16 41 54.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **46.19** | **252** | P | **P** | **16 41 54.5** | **+0.3** |
| | comp=Z,32nm,0.5s,baz=84,slow=7.7,SNR=504 | | | | | | |
| ASAR | | | | S | **S** | **16 48 05.4** | **-1.3** |
| | comp=Z,0.4nm,0.8s,baz=91,slow=18,SNR=1.8 | | | | | | |
| **KNRA** | **Kununurra** | **51.50** | **262** | P | **P** | **16 42 35.1** | **+1.2** |
| KNRA | | | | IAmb | IAmb | 16 42 42.4 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **51.73** | **243** | P | **P** | **16 42 34.6** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **54.18** | **259** | P | **P** | **16 42 52.2** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **59.26** | **254** | P | **P** | **16 43 27.8** | **-0.4** |
| PSA00 | | | | IAmb | IAmb | 16 43 29.4 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **MBWA** | **Marble Bar** | **59.40** | **254** | P | **P** | **16 43 28.5** | **-0.7** |
| **SBA** | **Scott Base** | **62.88** | **184** | P | **P** | **16 43 51.7** | **+0.6** |
| **VNDA** | **Vanda** | **62.91** | **185** | P | **P** | **16 43 51.9** | **+0.6** |
| **VNDA** | **Vanda** | **62.91** | **185** | P | **P** | **16 43 52.0** | **+0.6** |
| | comp=Z,0.3nm,0.5s,baz=51,slow=16,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **KMPM** | **Mount Pierce** | **74.56** | **40** | P | **P** | **16 45 01.6** | **-1.2** |
| **XMIS** | **Christmas Isla** | **74.57** | **263** | P | **P** | **16 45 04.2** | **+0.8** |
| **KMRM** | **Mail Ridge** | **74.69** | **40** | P | **P** | **16 45 04.3** | **+0.7** |
| **PLK4** | **Peulik 4** | **74.95** | **12** | P | **P** | **16 45 05.0** | **+0.4** |
| **OHAK** | **Old Harbor** | **75.21** | **13** | P | **P** | **16 45 05.5** | **-0.4** |
| **O02D** | **Mt. Diablo Mer** | **75.24** | **40** | P | **P** | **16 45 04.5** | **-2.1** |
| O02D | | | | IAmb | IAmb | 16 45 08.8 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KRMB** | **Red Mountain** | **75.34** | **39** | P | **P** | **16 45 08.3** | **+1.2** |
| KRMB | | | | IAmb | IAmb | 16 45 26.6 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **KSXB** | **Camp Six Broad** | **75.54** | **39** | P | **P** | **16 45 09.4** | **+1.1** |
| KSXB | | | | IAmb | IAmb | 16 45 47.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **O14K** | **Tigyukauivet M** | **75.66** | **9** | P | **P** | **16 45 07.1** | **-1.3** |
| **KDAK** | **Kodiak Island** | **75.88** | **14** | P | **P** | **16 45 08.5** | **-1.1** |
| **YBH** | **Yreka Blue Hor** | **76.19** | **39** | P | **P** | **16 45 13.1** | **+1.2** |
| **YBH** | **Yreka Blue Hor** | **76.19** | **39** | P | **P** | **16 45 12.8** | **+0.9** |
| | comp=Z,2.0nm,0.5s,baz=203,slow=16,SNR=6.4 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **O16K** | **Kokwok River B** | **76.48** | **10** | P | **P** | **16 45 12.8** | **-0.1** |
| O16K | | | | IAmb | IAmb | 16 45 13.2 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **HUMO** | **Hull Mountain** | **76.55** | **38** | P | **P** | **16 45 15.1** | **+1.3** |
| HUMO | | | | IAmb | IAmb | 16 45 15.8 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **PNTR** | **Pine Nut** | **76.67** | **43** | P | **P** | **16 45 14.4** | **-0.4** |
| PNTR | | | | IAmb | IAmb | 16 45 16.3 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **N15K** | **Kwethluk River** | **76.71** | **9** | P | **P** | **16 45 14.7** | **+0.5** |
| **P18K** | **Big Mountain,** | **76.81** | **12** | P | **P** | **16 45 14.1** | **-0.8** |
| **NVAR** | **Mina Array Bea** | **77.17** | **44** | P | **P** | **16 45 18.2** | **+0.6** |
| | comp=Z,2.0nm,0.7s,baz=227,slow=8.4,SNR=13 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **O18K** | **Koktuh Hills** | **77.24** | **11** | P | **P** | **16 45 17.0** | **-0.1** |
| O18K | | | | IAmb | IAmb | 16 45 18.0 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **NV11** | **Mina Array Sit** | **77.28** | **44** | P | **P** | **16 45 18.0** | **0.0** |
| **GMN** | **Gold Mountain** | **77.30** | **45** | P | **P** | **16 45 18.3** | **0.0** |
| **MZP** | **Montezuma Peak** | **77.42** | **45** | P | **P** | **16 45 18.8** | **-0.2** |
| **KVN** | **Kaiserville** | **77.64** | **43** | P | **P** | **16 45 20.0** | **-0.1** |
| **M16K** | **Timber Creek** | **77.70** | **9** | P | **P** | **16 45 20.2** | **+0.6** |
| M16K | | | | IAmb | IAmb | 16 45 22.5 | |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **N18K** | **Kilae Creek** | **77.89** | **11** | P | **P** | **16 45 20.7** | **0.0** |
| **J05D** | **Fort Rock, OR** | **77.98** | **38** | P | **P** | **16 45 22.0** | **+0.3** |
| J05D | | | | IAmb | IAmb | 16 45 23.6 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **L16K** | **Owhat River** | **78.28** | **9** | P | **P** | **16 45 23.7** | **+1.0** |
| L16K | | | | IAmb | IAmb | 16 45 26.0 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **M17K** | **Holitna River** | **78.30** | **10** | P | **P** | **16 45 24.5** | **+1.7** |
| **PINE** | **Pine Mountain** | **78.44** | **38** | P | **P** | **16 45 25.0** | **+0.8** |
| PINE | | | | IAmb | IAmb | 16 45 26.2 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **78.55** | **8** | P | **P** | **16 45 25.5** | **+1.3** |
| **BMN** | **Battle Mountai** | **78.94** | **43** | P | **P** | **16 45 26.8** | **-0.2** |
| BMN | | | | IAmb | IAmb | 16 45 34.2 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **L18K** | **Granite Mounta** | **79.19** | **10** | P | **P** | **16 45 28.9** | **+1.3** |
| L18K | | | | IAmb | IAmb | 16 45 29.6 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **K17K** | **Iditarod** | **79.41** | **9** | P | **P** | **16 45 29.6** | **+0.9** |
| K17K | | | | IAmb | IAmb | 16 46 10.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **SUA** | **Susitna One** | **79.62** | **13** | P | **P** | **16 45 30.6** | **+0.5** |
| **J16K** | **Anvik River** | **79.63** | **8** | P | **P** | **16 45 31.2** | **+1.3** |
| **BBB** | **Bella Bella** | **79.85** | **28** | P | **P** | **16 45 31.6** | **+0.3** |
| BBB | | | | IAmb | IAmb | 16 45 32.3 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **BBB** | **Bella Bella** | **79.85** | **28** | P | **P** | **16 45 31.5** | **+0.3** |
| | comp=Z,3.4nm,0.6s,baz=278,slow=1.5,SNR=6.4 | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **J17K** | **VABM Dome** | **79.94** | **8** | | **P** | **16 45 32.7** | **+1.2** |
| J17K | | | | IAmb | IAmb | 16 45 33.8 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **J18K** | **Innoko River** | **80.36** | **9** | P | **P** | **16 45 35.0** | **+1.2** |
| J18K | | | | IAmb | IAmb | 16 45 35.7 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **ELK** | **Elko** | **80.39** | **43** | P | **P** | **16 45 35.2** | **+0.4** |
| | comp=Z,1.2nm,0.6s,baz=238,slow=8.5,SNR=4.8 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **G08A** | **Pilot Rock** | **80.45** | **38** | P | **P** | **16 45 34.9** | **0.0** |
| **K20K** | **Telida** | **80.70** | **11** | P | **P** | **16 45 36.3** | **+0.7** |
| K20K | | | | IAmb | IAmb | 16 45 37.1 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **J19K** | **Poorman** | **81.03** | **10** | P | **P** | **16 45 38.5** | **+1.3** |
| **N25K** | **Chitina, Valde** | **81.18** | **15** | P | **P** | **16 45 38.3** | **+0.1** |
| N25K | | | | IAmb | IAmb | 16 45 39.3 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **RND** | **Reindeer** | **81.75** | **13** | P | **P** | **16 45 40.7** | **-0.4** |
| RND | | | | IAmb | IAmb | 16 45 42.2 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **M26K** | **Nabesna, AK** | **82.26** | **15** | P | **P** | **16 45 44.0** | **+0.3** |
| **HLID** | **Hailey** | **82.33** | **41** | P | **P** | **16 45 45.4** | **+0.7** |
| HLID | | | | IAmb | IAmb | 16 45 46.5 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **TMUT** | **Trail Mountain** | **82.43** | **46** | P | **P** | **16 45 46.1** | **+0.6** |
| TMUT | | | | IAmb | IAmb | 16 45 47.5 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **M27K** | **Edge Creek, AK** | **82.52** | **16** | P | **P** | **16 45 45.7** | **+0.6** |
| M27K | | | | IAmb | IAmb | 16 45 47.0 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **HVU** | **Hansel Valley** | **82.52** | **43** | P | **P** | **16 45 45.7** | **+0.1** |
| **MLY** | **Manley** | **82.83** | **11** | P | **P** | **16 45 45.9** | **-0.6** |
| MLY | | | | IAmb | IAmb | 16 45 48.1 | |
| | comp=Z,5.7nm,1.3s | | | | | | |
| **H21K** | **Melozitna Rive** | **83.03** | **10** | P | **P** | **16 45 47.0** | **-0.4** |
| H21K | | | | IAmb | IAmb | 16 45 50.2 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **83.04** | **13** | P | **P** | **16 45 46.8** | **-0.8** |
| HDA | | | | IAmb | IAmb | 16 45 48.4 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.07** | **12** | P | **P** | **16 45 47.5** | **-0.2** |
| CCB | | | | IAmb | IAmb | 16 45 48.3 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **TCUT** | **Toone Canyon** | **83.12** | **44** | P | **P** | **16 45 48.7** | **-0.1** |
| **NEW** | **Newport** | **83.13** | **36** | P | **P** | **16 45 47.6** | **-0.8** |
| | comp=Z,1.3nm,0.4s,baz=293,slow=10,SNR=2.3 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **MDM** | **Murphy Dome** | **83.26** | **12** | P | **P** | **16 45 47.2** | **-1.4** |
| MDM | | | | IAmb | IAmb | 16 45 49.4 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **SCRK** | **Sand Creek** | **83.34** | **14** | P | **P** | **16 45 49.0** | **-0.2** |
| SCRK | | | | IAmb | IAmb | 16 45 50.4 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **IL31** | | **83.37** | **13** | P | **P** | **16 45 48.5** | **-0.6** |
| IL31 | | | | IAmb | IAmb | 16 45 50.0 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **83.37** | **13** | P | **P** | **16 45 48.5** | **-0.6** |
| **ILAR** | **Eielson Array** | **83.37** | **13** | P | **P** | **16 45 49.0** | **-0.2** |
| | comp=Z,2.3nm,0.6s,baz=226,slow=5.9,SNR=28 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **J25K** | **Salcha River,** | **83.56** | **13** | P | **P** | **16 45 49.3** | **-1.0** |
| J25K | | | | IAmb | IAmb | 16 45 51.3 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **G21K** | **Allakaket** | **83.71** | **9** | P | **P** | **16 45 50.8** | **0.0** |
| G21K | | | | IAmb | IAmb | 16 45 52.5 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **83.87** | **8** | P | **P** | **16 45 52.3** | **+0.7** |
| **J26L** | **Joseph Creek** | **83.88** | **14** | P | **P** | **16 45 52.0** | **+0.1** |
| J26L | | | | IAmb | IAmb | 16 45 53.7 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **84.02** | **51** | P | **P** | **16 45 54.0** | **+0.6** |
| | comp=Z,1.1nm,0.5s,baz=309,slow=7.1,SNR=3.9 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **84.08** | **58** | P | **P** | **16 45 53.6** | **-0.1** |
| **TXAR** | **Lajitas Array** | **84.08** | **58** | P | **P** | **16 45 55.1** | **+1.5** |
| | comp=Z,1.8nm,0.8s,baz=217,slow=6.6,SNR=16 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **M30M** | **Minto, Yukon** | **84.11** | **18** | P | **P** | **16 45 53.0** | **0.0** |
| M30M | | | | IAmb | IAmb | 16 45 54.3 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **L29M** | **L29M** | **84.15** | **17** | P | **P** | **16 45 53.1** | **0.0** |
| L29M | | | | IAmb | IAmb | 16 45 54.9 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **84.31** | **13** | P | **P** | **16 45 53.8** | **-0.2** |
| **XLT** | **XiLinHaoTe** | **84.42** | **318** | *e*P | P | 16 45 58.6 | +3.6 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **84.69** | **15** | P | **P** | **16 45 55.6** | **-0.1** |
| EGAK | | | | IAmb | IAmb | 16 45 57.5 | |
| | comp=Z,4.7nm,1.2s | | | | | | |
| **IMW** | **Indian Meadow** | **84.70** | **42** | P | **P** | **16 45 56.9** | **+0.3** |
| **K29M** | **Barlow Dome** | **84.89** | **17** | P | **P** | **16 45 57.3** | **+0.4** |
| **YHL** | **Hebgen Lake** | **84.98** | **41** | P | **P** | **16 45 58.1** | **0.0** |
| YHL | | | | IAmb | IAmb | 16 46 00.4 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **85.09** | **43** | P | **P** | **16 45 58.4** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=225,slow=4.0,SNR=4.0 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **FYU** | **Fort Yukon** | **85.27** | **12** | P | **P** | **16 45 57.8** | **-0.7** |
| **HHC** | **Hu-ho-hao-te** | **86.11** | **314** | *e*P | **P** | **16 46 06.1** | **+2.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **124.06** | **350** | PKP | **PKiKP** | **16 52 16.7** | **-0.3** |
| | comp=Z,2.5nm,0.8s,baz=31,slow=0.7,SNR=7.8 | | | | | | |
| **BR131** | **Keskin Array S** | **143.55** | **318** | | **PKPdf** | **16 52 53.3** | **-0.7** |
| **BRTR** | **Keskin Array B** | **143.55** | **318** | | **PKPdf** | **16 52 52.2** | **-1.8** |
| **BRTR** | **Keskin Array B** | **143.55** | **318** | PKP | **PKPdf** | **16 52 53.8** | **-0.1** |
| | comp=Z,4.4nm,0.8s,baz=92,slow=2.8,SNR=18 | | | | | | |
| **MORC** | **Moravsky Berou** | **143.63** | **343** | *e*PKP | **PKPdf** | **16 52 52.8** | **-0.8** |
| **MLR** | **Muntele Rosu** | **144.10** | **331** | PKP | **PKPdf** | **16 52 54.2** | **-0.5** |
| | comp=Z,3.8nm,0.7s,baz=184,slow=4.8,SNR=5.0 | | | | | | |
| **VRAC** | **Vranov** | **144.31** | **344** | *e*PKP | **PKiKP** | **16 52 55.1** | **-3.5** |
| **JAVC** | **Velka Javorina** | **144.42** | **343** | *e*PKP | **PKiKP** | **16 52 56.5** | **-2.4** |
| **KRUC** | **Moravsky** | **144.59** | **344** | *e*PKP | **PKiKP** | **16 52 55.5** | **-3.6** |
| **BTNL** | **Ternell** | **144.85** | **356** | *d*PKP | **PKiKP** | **16 52 57.0** | **-2.7** |
| **BMRD** | **Maredsous** | **145.21** | **357** | *d*PKP | **PKiKP** | **16 52 57.4** | **-3.0** |
| **MMAI** | **Mount Meron Ar** | **145.37** | **306** | PKPbc | **PKPbc** | **16 52 56.8** | **-1.3** |
| | comp=Z,1.7nm,0.6s,baz=65,slow=3.8,SNR=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **145.45** | **347** | PKPbc | **PKiKP** | **16 52 58.4** | **-2.6** |
| | comp=Z,1.1nm,0.7s,baz=328,slow=3.6,SNR=6.2 | | | | | | |
| **WLF** | **Walferdange** | **145.77** | **356** | *d*PKP | **PKiKP** | **16 52 59.6** | **-1.9** |
| **FNA** | **Florina** | **149.86** | **330** | | **PKiKP** | **16 53 09.5** | **-0.8** |

*NEIC **02** 16:39:09.6±2.2, 41°.78N±0°.02×110°.73W±0°.06, h0km±1km, ML2.7/113, Error ellipse: s-maj=7.5km s-min=3.4km az=97.0*

*IDC **02** 16:39:10.3±1.5, 41°.71N×110°.57W, h0km, mbtmp2.9/1, ML2.6/1, Error ellipse: s-maj=29.8km s-min=6.2km az=143.0*

**ISC 02 16:39:10.1**±1.0, **41°.74N**±0°.02×**110°.66W**±0°.03, **h0**km, **n67**, σ**0s.96**/65, **Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HWUT** | **Hardware Ranch** | **0.69** | **259** | Pg | **Pb** | **16 39 24.6** | **-0.6** |
| HWUT | | | | IAML | | 16 39 43.1 | |
| | 322nm,1.2s | | | | | | |
| HWUT | | | | IAML | | 16 39 43.7 | |
| | 338nm,1.2s | | | | | | |
| **TCUT** | **Toone Canyon** | **0.84** | **222** | | **Pb** | **16 39 27.6** | **-0.2** |
| TCUT | | | | IAML | | 16 39 53.2 | |
| | comp=E,370nm,0.9s | | | | | | |
| **AHID** | **Auburn Hatcher** | **1.07** | **342** | | **Pb** | **16 39 31.9** | **+0.2** |
| AHID | | | | IAML | | 16 39 53.2 | |
| | comp=E,136nm,0.7s | | | | | | |
| AHID | | | | IAML | | 16 39 58.6 | |
| | comp=E,187nm,0.4s | | | | | | |
| **JLU** | **Jordanelle** | **1.28** | **208** | | **Pg** | **16 39 34.9** | **+0.1** |
| JLU | | | | IAML | | 16 39 58.8 | |
| | comp=E,103nm,1.0s | | | | | | |
| JLU | | | | IAML | | 16 40 07.3 | |
| | comp=N,91nm,0.9s | | | | | | |
| **PD31** | **Pinedale Array** | **1.31** | **38** | | **Pb** | **16 39 35.9** | **+0.1** |
| **PDAR** | **Pinedale Array** | **1.31** | **38** | | **Pb** | **16 39 35.9** | **+0.1** |
| **PDAR** | **Pinedale Array** | **1.31** | **38** | Pg | **Pn** | **16 39 36.4** | **+0.4** |
| | comp=N,5.6nm,0.3s,baz=205,slow=12,SNR=101 | | | | | | |
| PDAR | | | | Lg | Lg | 16 39 51.6 | |
| | comp=N,3.5nm,0.3s,baz=207,slow=23,SNR=6.7 | | | | | | |
| **CTU** | **Camp Tracy** | **1.33** | **218** | Pn | **Pb** | **16 39 36.2** | **+0.1** |
| CTU | | | | IAML | | 16 40 07.5 | |
| | comp=E,100nm,1.1s | | | | | | |
| **SPUT** | **South Promonto** | **1.41** | **253** | | **Pb** | **16 39 38.0** | **+0.6** |
| **RDMU** | **Red Mountain** | **1.43** | **144** | | **Pb** | **16 39 37.7** | **-0.1** |
| RDMU | | | | IAML | | 16 39 59.5 | |
| | comp=N,80nm,1.2s | | | | | | |
| RDMU | | | | IAML | | 16 40 02.7 | |
| | comp=E,72nm,0.9s | | | | | | |
| **HVU** | **Hansel Valley** | **1.58** | **272** | Pg | **Pb** | **16 39 40.6** | **+0.3** |
| HVU | | | | IAML | | 16 40 07.7 | |
| | comp=N,106nm,0.7s | | | | | | |
| **REDW** | **Red Top Meadow** | **1.63** | **355** | | **Pg** | **16 39 41.5** | **+0.2** |
| **SNOW** | **Snow King Moun** | **1.72** | **358** | | **Pn** | **16 39 41.8** | **+0.2** |
| SNOW | | | | IAML | | 16 40 19.5 | |
| | comp=N,101nm,1.7s | | | | | | |
| **TPAW** | **Teton Pass** | **1.76** | **353** | | **Pn** | **16 39 42.0** | **-0.2** |
| TPAW | | | | IAML | | 16 40 20.9 | |
| | comp=N,96nm,1.4s | | | | | | |
| **LOHW** | **Long Hollow** | **1.87** | **1** | Pn | **Pn** | **16 39 43.0** | **-0.7** |
| LOHW | | | | IAML | | 16 40 18.5 | |
| | comp=N,58nm,0.9s | | | | | | |
| **MPU** | **Maple Canyon** | **1.88** | **203** | | **Pn** | **16 39 44.2** | **+0.5** |
| MPU | | | | IAML | | 16 40 17.1 | |
| | comp=E,67nm,1.2s | | | | | | |
| **FXWY** | **Fox Creek** | **1.92** | **352** | | **Pn** | **16 39 45.3** | **+1.0** |
| FXWY | | | | IAML | | 16 40 20.3 | |
| | comp=E,65nm,1.3s | | | | | | |
| **BGU** | **Big Grassy Mou** | **1.96** | **246** | Pn | **Pn** | **16 39 45.3** | **+0.5** |
| BGU | | | | IAML | | 16 40 27.4 | |
| | comp=E,42nm,1.0s | | | | | | |
| **NLU** | **North Lily Min** | **2.08** | **211** | Pn | **Pn** | **16 39 46.9** | **+0.4** |
| **P18A** | **Preston Nutter** | **2.13** | **171** | | **Pb** | **16 39 49.4** | **-0.5** |
| P18A | | | | IAML | | 16 40 30.2 | |
| | comp=E,37nm,1.1s | | | | | | |
| P18A | | | | IAML | | 16 40 34.8 | |
| | comp=N,46nm,1.0s | | | | | | |
| **IMW** | **Indian Meadow** | **2.17** | **355** | Pn | **Pn** | **16 39 48.5** | **+0.7** |
| IMW | | | | IAML | | 16 40 36.6 | |
| | comp=N,50nm,1.5s | | | | | | |
| **DUG** | **Dugway, Tooele** | **2.25** | **227** | Pn | **Pn** | **16 39 48.6** | **-0.1** |
| DUG | | | | IAML | | 16 40 28.7 | |
| | comp=N,33nm,1.2s | | | | | | |
| DUG | | | | IAML | | 16 40 30.7 | |
| | comp=N,49nm,1.1s | | | | | | |
| **P17A** | **Butcher Ranch,** | **2.27** | **182** | | **Pb** | **16 39 50.8** | **-1.3** |
| P17A | | | | IAML | | 16 40 26.9 | |
| | comp=E,48nm,1.0s | | | | | | |
| P17A | | | | IAML | | 16 40 28.4 | |
| | comp=N,60nm,1.3s | | | | | | |
| **FLWY** | **Flagg Ranch** | **2.34** | **359** | Pn | **Pn** | **16 39 51.5** | **+1.4** |
| FLWY | | | | IAML | | 16 40 44.4 | |
| | comp=N,60nm,1.4s | | | | | | |
| **O20A** | **White River Ci** | **2.44** | **130** | | **Pb** | **16 39 53.9** | **-1.1** |
| **TMUT** | **Trail Mountain** | **2.48** | **190** | | **Pn** | **16 39 53.9** | **+1.9** |
| TMUT | | | | IAML | | 16 40 34.8 | |
| | comp=N,56nm,0.8s | | | | | | |
| TMUT | | | | IAML | | 16 40 52.4 | |
| | comp=E,48nm,1.2s | | | | | | |
| **YPP** | **Pitchstone Pla** | **2.53** | **358** | | **Pn** | **16 39 54.2** | **+1.4** |
| YPP | | | | IAML | | 16 40 43.6 | |
| | comp=E,28nm,1.6s | | | | | | |
| **RWWY** | **Rawlins** | **2.58** | **90** | | **Pn** | **16 39 55.2** | **+1.8** |
| **SRU** | **San Rafael Swe** | **2.63** | **178** | Pn | **Pb** | **16 39 56.5** | **-1.7** |
| **H17A** | **Grant Village** | **2.65** | **1** | | **Pn** | **16 39 55.2** | **+0.8** |
| H17A | | | | IAML | | 16 40 33.1 | |
| | comp=N,27nm,0.1s | | | | | | |
| H17A | | | | IAML | | 16 40 53.3 | |
| | comp=E,24nm,0.5s | | | | | | |
| **Q16A** | **Castle Valley** | **2.85** | **188** | | **Pn** | **16 39 58.8** | **+1.8** |
| Q16A | | | | IAML | | 16 40 46.2 | |
| | comp=N,30nm,1.5s | | | | | | |
| Q16A | | | | IAML | | 16 40 49.4 | |
| | comp=E,27nm,1.7s | | | | | | |
| **YMR** | **Madison River** | **2.94** | **356** | Pn | **Pb** | **16 40 01.3** | **-2.2** |
| YMR | | | | IAML | | 16 41 00.0 | |
| | comp=E,24nm,1.2s | | | | | | |
| YMR | | | | IAML | | 16 41 06.8 | |
| | comp=N,29nm,1.1s | | | | | | |
| **YNR** | **Norris Junctio** | **2.97** | **360** | Pn | **Pn** | **16 39 58.6** | **-0.2** |
| YNR | | | | IAML | | 16 41 47.4 | |
| | comp=N,23nm,0.3s | | | | | | |
| YNR | | | | IAML | | 16 41 48.7 | |
| | comp=E,21nm,0.3s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **3.02** | **7** | | **Pn** | **16 40 00.4** | **+0.9** |
| YMP | | | | IAML | | 16 40 22.8 | |
| | comp=E,16nm,0.7s | | | | | | |
| YMP | | | | IAML | | 16 41 01.8 | |
| | comp=N,24nm,1.5s | | | | | | |
| **YHB** | **Horse Butte** | **3.03** | **353** | | **Pn** | **16 39 59.1** | **-0.5** |
| **YHH** | **Holmes Hill** | **3.05** | **357** | | **Pn** | **16 40 00.7** | **+0.8** |
| **YHL** | **Hebgen Lake** | **3.13** | **353** | | **Pn** | **16 40 01.6** | **+0.5** |
| YHL | | | | IAML | | 16 41 09.0 | |
| | comp=E,14nm,2.3s | | | | | | |
| YHL | | | | IAML | | 16 41 26.4 | |
| | comp=N,15nm,1.5s | | | | | | |
| **K22A** | **Casper** | **3.21** | **72** | | **Pn** | **16 40 03.6** | **+1.7** |
| **HLID** | **Hailey** | **3.31** | **305** | | **Pn** | **16 40 03.5** | **0.0** |
| **TCRU** | **Three Creeks R** | **3.41** | **204** | Pn | **Pn** | **16 40 06.2** | **+1.3** |
| TCRU | | | | IAML | | 16 41 04.0 | |
| | comp=E,22nm,1.1s | | | | | | |
| TCRU | | | | IAML | | 16 41 06.4 | |
| | comp=N,22nm,1.0s | | | | | | |
| **MSU** | **Marysvale** | **3.43** | **200** | | **Pn** | **16 40 05.0** | **-0.1** |
| **MVU** | **Marysvale** | **3.44** | **201** | | **Pn** | **16 40 05.7** | **+0.4** |
| **RLMT** | **Red Lodge** | **3.53** | **16** | Pn | **Pn** | **16 40 07.6** | **+1.2** |
| **ELK** | **Elko** | **3.59** | **255** | Pn | **Pn** | **16 40 07.7** | **+0.4** |
| **ELK** | **Elko** | **3.59** | **255** | Pg | **Pb** | **16 40 16.1** | **+1.4** |
| | comp=N,0.2nm,0.3s,baz=81,slow=13,SNR=12 | | | | | | |
| ELK | | | | Lg | Lg | 16 41 04.7 | |
| | comp=N,0.3nm,0.3s,baz=190,slow=20,SNR=1.1 | | | | | | |
| **N23A** | **Red Feather La** | **3.65** | **102** | | **Pn** | **16 40 08.3** | **+0.1** |
| **HMU** | **Henry Mountain** | **3.80** | **181** | | **Pn** | **16 40 10.7** | **+0.6** |
| **SMCO** | **Snowmass** | **3.80** | **131** | | **Pn** | **16 40 11.4** | **+1.1** |
| **MTPU** | **Mount Pierson** | **3.88** | **198** | | **Pn** | **16 40 12.8** | **+1.5** |
| MTPU | | | | IAML | | 16 41 29.7 | |
| | comp=E,9.3nm,2.0s | | | | | | |
| **DLMT** | **Dillon** | **3.88** | **339** | | **Pn** | **16 40 11.4** | **+0.1** |
| DLMT | | | | IAML | | 16 41 34.5 | |
| | comp=E,12nm,2.0s | | | | | | |
| DLMT | | | | IAML | | 16 41 37.4 | |
| | comp=E,8.4nm,2.7s | | | | | | |
| **BOZ** | **Bozeman (W)** | **3.92** | **350** | | **Pn** | **16 40 11.4** | **-0.3** |
| **SPR3** | **Spring Creek 3** | **3.92** | **227** | Pn | **Pn** | **16 40 11.1** | **-0.8** |
| SPR3 | | | | IAML | | 16 41 28.4 | |
| | comp=N,7.6nm,1.2s | | | | | | |
| **PHWY** | **Pilot Hill** | **3.93** | **95** | Pn | **Pn** | **16 40 11.3** | **-0.7** |
| PHWY | | | | IAML | | 16 41 20.4 | |
| | comp=N,15nm,0.9s | | | | | | |
| PHWY | | | | IAML | | 16 41 21.7 | |
| | comp=N,9.4nm,2.3s | | | | | | |
| **PSUT** | **Pine Spring** | **4.03** | **218** | | **Pn** | **16 40 12.3** | **-1.0** |
| PSUT | | | | IAML | | 16 41 32.9 | |
| | comp=E,8.4nm,1.1s | | | | | | |
| **MFID** | **Camas Ranch** | **4.17** | **295** | Pn | **Pn** | **16 40 13.5** | **-1.6** |
| MFID | | | | IAML | | 16 41 31.4 | |
| | comp=E,8.2nm,0.8s | | | | | | |
| MFID | | | | IAML | | 16 41 36.9 | |
| | comp=E,9.1nm,1.8s | | | | | | |
| **Q12A** | **Willow Creek R** | **4.17** | **231** | | **Pn** | **16 40 14.1** | **-1.1** |
| **ISCO** | **Idaho Springs** | **4.29** | **115** | | **Pn** | **16 40 16.5** | **-0.5** |
| ISCO | | | | IAML | | 16 41 42.2 | |
| | comp=E,7.5nm,1.4s | | | | | | |
| ISCO | | | | IAML | | 16 41 49.3 | |
| | comp=E,7.2nm,1.5s | | | | | | |
| **PKCU** | **Pink Cliffs** | **4.48** | **197** | Pn | **Pn** | **16 40 18.5** | **-1.0** |
| **MVCO** | **Mesa Verde** | **4.82** | **159** | | **Pn** | **16 40 24.0** | **-0.3** |
| **S22A** | **4UR Ranch, Cre** | **4.96** | **142** | | **Pn** | **16 40 25.7** | **-0.5** |
| S22A | | | | IAML | | 16 42 27.8 | |
| | comp=E,6.6nm,1.1s | | | | | | |
| **BPMT** | **Black Pine Rid** | **5.11** | **338** | | **Pn** | **16 40 27.6** | **-0.5** |
| **U15A** | **North Rim** | **5.46** | **194** | | **Pn** | **16 40 33.2** | **+0.2** |
| **PRN** | **Pahroc Range** | **5.50** | **220** | | **Pn** | **16 40 33.5** | **+0.1** |
| **KVN** | **Kaiserville** | **6.28** | **247** | Pn | **Pn** | **16 40 43.2** | **-1.0** |
| **NVAR** | **Mina Array Bea** | **6.73** | **243** | Pn | **Pn** | **16 40 52.7** | **+2.3** |
| | comp=E,0.1nm,0.3s,baz=66,slow=15,SNR=7.5 | | | | | | |
| NVAR | | | | Lg | Lg | 16 42 40.3 | |
| | comp=E,0.1nm,0.3s,baz=62,slow=31,SNR=2.1 | | | | | | |
| | comp=E,0.8nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **7.54** | **153** | Lg | Lg | 16 43 09.5 | |
| | comp=E,0.1nm,0.3s,baz=31,slow=5.0,SNR=1.9 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **7.97** | **327** | I | I | 17 24 20.0 | |
| | baz=145,slow=315,SNR=2.5 | | | | | | |

*TAP **02** 17:01:11.2, 24°.78N×122°.62E, h110km, ML2.8, D*

*JMA **02** 17:01:11.7±0.1, 25°N±2°×122°.6E±0°.4, h108km±1km, MV1.8/11, NW OFF ISHIGAKIJIMA IS*

**ISC 02 17:01:12.6**±1.6, **24°.71N**±0°.05×**122°.61E**±0°.03, **h100**km±8km, **n91**, σ**0s.91**/158, **Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.40** | **130** | P | **Pn** | **17 01 27.8** | **0.0** |
| JYNG | | | | *e*S | **Sn** | **17 01 39.6** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **0.44** | **124** | P | **Pn** | **17 01 27.9** | **-0.2** |
| | baz=138 | | | | | | |
| YOJ | | | | *e*S | **Sn** | **17 01 40.6** | **+1.0** |
| | baz=138 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.44** | **124** | P | **Pn** | **17 01 28.0** | **-0.1** |
| YOJ | | | | *e*S | **Sn** | **17 01 40.4** | **+0.8** |
| **EOS2** | **EOS2** | **0.45** | **230** | P | **Pn** | **17 01 28.3** | **+0.3** |
| | baz=231 | | | | | | |
| EOS2 | | | | S | **Sn** | **17 01 40.8** | **+1.4** |
| | baz=231 | | | | | | |
| **EOS3** | **EOS3** | **0.50** | **212** | P | **Pn** | **17 01 28.9** | **+0.6** |
| | baz=220 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **17 01 41.5** | **+1.6** |
| | baz=220 | | | | | | |
| **EOS4** | **EOS4** | **0.64** | **204** | *e*P | **Pn** | **17 01 30.2** | **+1.0** |
| | baz=208 | | | | | | |
| EOS4 | | | | S | **Sn** | **17 01 42.1** | **+0.4** |
| | baz=208 | | | | | | |
| **TWC** | **Suao** | **0.70** | **262** | P | **Pn** | **17 01 29.4** | **-0.7** |
| | baz=251 | | | | | | |
| TWC | | | | S | **Sn** | **17 01 42.4** | **-0.7** |
| | baz=251 | | | | | | |
| **TIPB** | **Shuangxi** | **0.76** | **290** | P | **Pn** | **17 01 30.3** | **-0.3** |
| | baz=280 | | | | | | |
| TIPB | | | | *e*S | **Sn** | **17 01 43.0** | **-1.2** |
| | baz=280 | | | | | | |
| **EWUT** | **Wuta** | **0.80** | **251** | P | **Pn** | **17 01 31.0** | **-0.1** |
| | baz=247 | | | | | | |
| EWUT | | | | S | **Sn** | **17 01 45.2** | **+0.4** |
| | baz=247 | | | | | | |
| **ENA** | **Nanau** | **0.84** | **251** | P | **Pn** | **17 01 31.5** | **0.0** |
| | baz=241 | | | | | | |
| ENA | | | | S | **Sn** | **17 01 45.8** | **+0.3** |
| | baz=241 | | | | | | |
| **TWE** | **Neicheng** | **0.86** | **271** | *e*P | **Pn** | **17 01 31.4** | **-0.2** |
| | baz=264 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EAHA** | **Aohua** | **0.88** | **245** | *e*P | **Pn** | **17 01 31.6** | **-0.2** |
| | baz=235 | | | | | | |
| EAHA | | | | *e*S | **Sn** | **17 01 46.2** | **0.0** |
| | baz=235 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.93** | **273** | P | **Pn** | **17 01 32.2** | **-0.3** |
| | baz=269 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **17 01 46.3** | **-1.0** |
| | baz=269 | | | | | | |
| **ENTT** | **Nioudou** | **0.95** | **266** | *e*P | **Pn** | **17 01 32.8** | **+0.2** |
| | baz=268 | | | | | | |
| **LATG** | **Datong** | **1.00** | **260** | P | **Pn** | **17 01 33.4** | **+0.1** |
| | baz=251 | | | | | | |
| LATG | | | | S | **Sn** | **17 01 49.1** | **+0.4** |
| | baz=251 | | | | | | |
| **NDT** | **Datong Townshi** | **1.00** | **264** | *e*P | **Pn** | **17 01 33.7** | **+0.6** |
| | baz=260 | | | | | | |
| NDT | | | | S | **Sn** | **17 01 49.6** | **+1.0** |
| | baz=260 | | | | | | |
| **NWLT** | **Wulai** | **1.01** | **274** | *e*P | **Pn** | **17 01 32.4** | **-0.8** |
| | baz=270 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **17 01 48.6** | **-0.1** |
| | baz=270 | | | | | | |
| **YM01** | **YM01** | **1.04** | **295** | *e*P | **Pn** | **17 01 32.9** | **-0.6** |
| | baz=283 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **17 01 49.0** | **-0.3** |
| | baz=283 | | | | | | |
| **YM08** | **YM08** | **1.04** | **297** | *e*S | **Sn** | **17 01 48.5** | **-0.8** |
| | baz=286 | | | | | | |
| **ETL** | **Fush Village** | **1.05** | **239** | *e*P | **Pn** | **17 01 33.3** | **-0.5** |
| | baz=229 | | | | | | |
| **NACB** | **Ninganchiao** | **1.07** | **240** | P | **Pn** | **17 01 33.4** | **-0.4** |
| **NACB** | **Ninganchiao** | **1.07** | **240** | P | **Pn** | **17 01 33.1** | **-0.7** |
| | baz=237 | | | | | | |
| NACB | | | | *e*S | **Sn** | **17 01 49.2** | **-0.7** |
| | baz=237 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.09** | **110** | *e*P | **Pn** | **17 01 33.6** | **-0.4** |
| IRIF | | | | *e*S | **Sn** | **17 01 50.6** | **+0.4** |
| **TWD** | **Chiawan** | **1.12** | **236** | *e*P | **Pn** | **17 01 33.7** | **-0.7** |
| | baz=228 | | | | | | |
| TWD | | | | *e*S | **Sn** | **17 01 49.5** | **-1.2** |
| | baz=228 | | | | | | |
| **YHNB** | **Yeheng** | **1.12** | **268** | P | **Pn** | **17 01 34.6** | **+0.1** |
| **YHNB** | **Yeheng** | **1.12** | **268** | P | **Pn** | **17 01 34.6** | **+0.1** |
| | baz=271 | | | | | | |
| YHNB | | | | S | **Sn** | **17 01 50.8** | **-0.2** |
| | baz=271 | | | | | | |
| **NSK** | **Sanguang** | **1.14** | **269** | P | **Pn** | **17 01 34.7** | **0.0** |
| | baz=271 | | | | | | |
| NSK | | | | S | **Sn** | **17 01 51.0** | **-0.4** |
| | baz=271 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.14** | **244** | *e*P | **Pn** | **17 01 34.4** | **-0.4** |
| | baz=236 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **17 01 50.8** | **-0.7** |
| | baz=236 | | | | | | |
| **NTST** | **Danshui** | **1.15** | **293** | *e*S | **Sn** | **17 01 50.9** | **-0.4** |
| | baz=283 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.15** | **290** | *e*S | **Sn** | **17 01 50.6** | **-0.8** |
| | baz=279 | | | | | | |
| **NNSB** | **Datong** | **1.15** | **256** | P | **Pn** | **17 01 34.7** | **-0.2** |
| | baz=247 | | | | | | |
| NNSB | | | | S | **Sn** | **17 01 51.5** | **-0.2** |
| | baz=247 | | | | | | |
| **NNS** | **Nan Shan** | **1.16** | **257** | P | **Pn** | **17 01 35.0** | **0.0** |
| | baz=247 | | | | | | |
| NNS | | | | *e*S | **Sn** | **17 01 50.9** | **-0.9** |
| | baz=247 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.25** | **228** | *e*P | **Pn** | **17 01 35.4** | **-0.5** |
| | baz=222 | | | | | | |
| **ETM** | **Tongmen** | **1.26** | **234** | P | **Pn** | **17 01 35.5** | **-0.6** |
| | baz=225 | | | | | | |
| ETM | | | | S | **Sn** | **17 01 52.7** | **-1.0** |
| | baz=225 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.29** | **238** | P | **Pn** | **17 01 36.0** | **-0.6** |
| | baz=236 | | | | | | |
| LXIB | | | | S | **Sn** | **17 01 53.5** | **-1.1** |
| | baz=236 | | | | | | |
| **SHUL** | **Shoufeng** | **1.32** | **226** | *e*P | **Pn** | **17 01 36.4** | **-0.4** |
| | baz=224 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **17 01 55.5** | **+0.4** |
| | baz=224 | | | | | | |
| **FUSS** | **Fushou** | **1.33** | **250** | *e*P | **Pn** | **17 01 37.3** | **+0.2** |
| | baz=242 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **17 01 55.2** | **-0.4** |
| | baz=242 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.35** | **246** | P | **Pn** | **17 01 37.3** | **-0.2** |
| | baz=238 | | | | | | |
| WHF | | | | S | **Sn** | **17 01 55.3** | **-1.0** |
| | baz=238 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.36** | **267** | *e*P | **Pn** | **17 01 37.1** | **-0.2** |
| | baz=268 | | | | | | |
| NFF | | | | S | **Sn** | **17 01 55.3** | **-0.6** |
| | baz=268 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.36** | **110** | *e*P | **Pn** | **17 01 37.4** | **+0.2** |
| **TWT** | **Tachien** | **1.38** | **251** | P | **Pn** | **17 01 38.4** | **+0.7** |
| | baz=242 | | | | | | |
| TWT | | | | *e*S | **Sn** | **17 01 56.6** | **0.0** |
| | baz=242 | | | | | | |
| **ESL** | **Shilin** | **1.40** | **231** | P | **Pn** | **17 01 36.9** | **-0.8** |
| | baz=223 | | | | | | |
| ESL | | | | *e*S | **Sn** | **17 01 55.1** | **-1.5** |
| | baz=223 | | | | | | |
| **TDCB** | **Techi** | **1.40** | **251** | P | **Pn** | **17 01 38.2** | **+0.4** |
| | baz=242 | | | | | | |
| TDCB | | | | S | **Sn** | **17 01 56.4** | **-0.5** |
| | baz=242 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.44** | **104** | *e*P | **Pn** | **17 01 38.1** | **-0.1** |
| JIJ | | | | *e*S | **Sn** | **17 01 57.1** | **-0.4** |
| **LIOB** | **Emei** | **1.45** | **268** | *e*P | **Pn** | **17 01 38.3** | **-0.1** |
| | baz=265 | | | | | | |
| LIOB | | | | *e*S | **Sn** | **17 01 57.5** | **-0.4** |
| | baz=265 | | | | | | |
| **CHGB** | **Renai** | **1.46** | **244** | P | **Pn** | **17 01 38.9** | **+0.2** |
| | baz=236 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **17 01 57.7** | **-0.7** |
| | baz=236 | | | | | | |
| **NSTT** | **Nanjuang** | **1.47** | **267** | *e*P | **Pn** | **17 01 38.4** | **-0.1** |
| | baz=264 | | | | | | |
| NSTT | | | | S | **Sn** | **17 01 57.4** | **-0.7** |
| | baz=264 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.49** | **229** | P | **Pn** | **17 01 37.9** | **-0.9** |
| | baz=220 | | | | | | |
| WARBT | | | | *e*S | **Sn** | **17 01 56.8** | **-1.9** |
| | baz=220 | | | | | | |
| **OWD** | **Renai** | **1.51** | **240** | P | **Pn** | **17 01 39.1** | **-0.1** |
| | baz=233 | | | | | | |
| OWD | | | | S | **Sn** | **17 01 58.5** | **-0.7** |
| | baz=233 | | | | | | |
| **WUSB** | **Renai** | **1.54** | **243** | P | **Pn** | **17 01 39.7** | **+0.2** |
| | baz=236 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **17 01 59.3** | **-0.6** |
| | baz=236 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.55** | **94** | *e*P | **Pn** | **17 01 39.4** | **-0.1** |
| **WHP** | **Taichung City** | **1.58** | **254** | P | **Pn** | **17 01 40.8** | **+0.9** |
| | baz=252 | | | | | | |
| WHP | | | | *e*S | **Sn** | **17 02 01.2** | **+0.5** |
| | baz=252 | | | | | | |
| **HGSD** | **Ruisui** | **1.63** | **222** | P | **Pn** | **17 01 40.1** | **-0.4** |
| | baz=220 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **17 02 01.3** | **-0.4** |
| | baz=220 | | | | | | |
| **VWDT** | **VWDT** | **1.64** | **235** | P | **Pn** | **17 01 40.9** | **+0.2** |
| | baz=229 | | | | | | |
| VWDT | | | | *e*S | **Sn** | **17 02 01.7** | **-0.3** |
| | baz=229 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.68** | **248** | *e*P | **Pn** | **17 01 42.1** | **+0.9** |
| | baz=241 | | | | | | |
| WCS | | | | *e*S | **Sn** | **17 02 03.9** | **+1.1** |
| | baz=241 | | | | | | |
| **EHY** | **Hungye** | **1.68** | **225** | P | **Pn** | **17 01 40.2** | **-1.0** |
| | baz=231 | | | | | | |
| **TWQ1** | **Liyutan** | **1.71** | **258** | *e*S | **Sn** | **17 02 03.4** | **-0.2** |
| | baz=256 | | | | | | |
| **ECBN** | **Changbin** | **1.75** | **218** | *e*S | **Sn** | **17 02 03.7** | **-0.6** |
| | baz=211 | | | | | | |
| **SSLB** | **Suanglung** | **1.77** | **239** | P | **Pn** | **17 01 42.7** | **+0.4** |
| **SSLB** | **Suanglung** | **1.77** | **239** | P | **Pn** | **17 01 43.3** | **+1.0** |
| | baz=234 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **17 02 05.6** | **+0.7** |
| | baz=234 | | | | | | |
| **YULB** | **Yu-li** | **1.78** | **223** | P | **Pn** | **17 01 41.7** | **-0.7** |
| **YULB** | **Yu-li** | **1.78** | **223** | *e*P | **Pn** | **17 01 41.4** | **-1.0** |
| | baz=228 | | | | | | |
| YULB | | | | *e*S | **Sn** | **17 02 03.3** | **-1.8** |
| | baz=228 | | | | | | |
| **TYC** | **Yuchr** | **1.79** | **244** | *e*P | **Pn** | **17 01 43.3** | **+0.7** |
| | baz=241 | | | | | | |
| TYC | | | | *e*S | **Sn** | **17 02 06.2** | **+0.9** |
| | baz=241 | | | | | | |
| **TWF1** | **Yuli** | **1.81** | **222** | *e*P | **Pn** | **17 01 41.8** | **-1.0** |
| | baz=227 | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **17 02 04.5** | **-1.3** |
| | baz=227 | | | | | | |
| **CHKH** | **Chenggong** | **1.88** | **217** | *e*P | **Pn** | **17 01 42.9** | **-0.8** |
| | baz=209 | | | | | | |
| CHKH | | | | *e*S | **Sn** | **17 02 05.5** | **-1.8** |
| | baz=209 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.90** | **238** | P | **Pn** | **17 01 45.2** | **+1.2** |
| | baz=231 | | | | | | |
| WHYT | | | | S | **Sn** | **17 02 09.7** | **+1.9** |
| | baz=231 | | | | | | |
| **FULB** | **Fuli** | **1.93** | **219** | *e*P | **Pn** | **17 01 44.0** | **-0.4** |
| | baz=212 | | | | | | |
| FULB | | | | *e*S | **Sn** | **17 02 08.2** | **-0.3** |
| | baz=212 | | | | | | |
| **WJS** | **Zhushan** | **1.93** | **243** | *e*P | **Pn** | **17 01 45.6** | **+1.2** |
| | baz=251 | | | | | | |
| WJS | | | | *e*S | **Sn** | **17 02 10.1** | **+1.5** |
| | baz=251 | | | | | | |
| **WNT** | **Mingjian** | **1.94** | **245** | *e*P | **Pn** | **17 01 45.4** | **+0.9** |
| | baz=243 | | | | | | |
| WNT | | | | *e*S | **Sn** | **17 02 09.5** | **+0.7** |
| | baz=243 | | | | | | |
| **CHKT** | **Chengkung** | **1.97** | **216** | *e*S | **Sn** | **17 02 06.9** | **-2.5** |
| | baz=209 | | | | | | |
| **CHN5** | **Tsauling** | **2.08** | **238** | *e*P | **Pn** | **17 01 46.7** | **+0.3** |
| | baz=246 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **17 02 14.1** | **+1.9** |
| | baz=246 | | | | | | |
| **ELDTW** | **Lidau** | **2.10** | **224** | *e*P | **Pn** | **17 01 46.0** | **-0.6** |
| | baz=221 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **17 02 11.6** | **-1.1** |
| | baz=221 | | | | | | |
| **EDH** | **Donghe** | **2.10** | **215** | P | **Pn** | **17 01 46.0** | **-0.5** |
| | baz=209 | | | | | | |
| EDH | | | | S | **Sn** | **17 02 10.7** | **-1.8** |
| | baz=209 | | | | | | |
| **WDLH** | **Douliu** | **2.15** | **242** | *e*S | **Sn** | **17 02 14.7** | **+1.2** |
| | baz=250 | | | | | | |
| **WRL** | **Guolierlin Hig** | **2.19** | **249** | *e*P | **Pn** | **17 01 47.1** | **-0.6** |
| | baz=254 | | | | | | |
| WRL | | | | *e*S | **Sn** | **17 02 13.6** | **-0.9** |
| | baz=254 | | | | | | |
| **WCKO** | **Fanlu** | **2.23** | **236** | P | **Pn** | **17 01 49.6** | **+1.4** |
| | baz=234 | | | | | | |
| WCKO | | | | *e*S | **Sn** | **17 02 17.5** | **+2.1** |
| | baz=234 | | | | | | |
| **WTK** | **Tuku** | **2.27** | **244** | *e*P | **Pn** | **17 01 49.1** | **+0.4** |
| | baz=242 | | | | | | |
| WTK | | | | *e*S | **Sn** | **17 02 16.8** | **+0.5** |
| | baz=242 | | | | | | |
| **STYH** | **Taoyuan** | **2.27** | **228** | *e*P | **Pn** | **17 01 49.6** | **+0.8** |
| | baz=227 | | | | | | |
| STYH | | | | *e*S | **Sn** | **17 02 16.8** | **+0.4** |
| | baz=227 | | | | | | |
| **LDUT** | **Ludao** | **2.28** | **207** | *e*P | **Pn** | **17 01 48.1** | **-0.8** |
| | baz=211 | | | | | | |
| LDUT | | | | *e*S | **Sn** | **17 02 14.0** | **-2.6** |
| | baz=211 | | | | | | |
| **TPUB** | **Ta-pu** | **2.29** | **233** | P | **Pn** | **17 01 50.6** | **+1.5** |
| **TPUB** | **Ta-pu** | **2.29** | **233** | *e*P | **Pn** | **17 01 50.2** | **+1.1** |
| | baz=226 | | | | | | |
| TPUB | | | | *e*S | **Sn** | **17 02 18.5** | **+1.6** |
| | baz=226 | | | | | | |
| **WTP** | **Ta-pu** | **2.34** | **232** | *e*P | **Pn** | **17 01 50.6** | **+0.9** |
| | baz=230 | | | | | | |
| WTP | | | | *e*S | **Sn** | **17 02 20.6** | **+2.6** |
| | baz=230 | | | | | | |
| **TWGBT** | **Beinan** | **2.35** | **217** | *e*P | **Pn** | **17 01 49.4** | **-0.4** |
| | baz=220 | | | | | | |
| **TWG** | **Pinlang** | **2.35** | **217** | *e*P | **Pn** | **17 01 49.4** | **-0.4** |
| | baz=220 | | | | | | |
| **TWK** | **Hsinying** | **2.41** | **234** | *e*P | **Pn** | **17 01 50.9** | **+0.2** |
| | baz=232 | | | | | | |
| TWK | | | | *e*S | **Sn** | **17 02 21.1** | **+1.2** |
| | baz=232 | | | | | | |
| **WSF** | **Szhu** | **2.43** | **244** | *e*S | **Sn** | **17 02 20.1** | **0.0** |
| | baz=243 | | | | | | |
| **CHN1** | **Nanshi** | **2.44** | **232** | *e*P | **Pn** | **17 01 52.1** | **+1.1** |
| | baz=230 | | | | | | |
| **SGST** | **Jiashian** | **2.46** | **229** | *e*P | **Pn** | **17 01 51.6** | **+0.3** |
| | baz=228 | | | | | | |
| SGST | | | | *e*S | **Sn** | **17 02 22.4** | **+1.4** |
| | baz=228 | | | | | | |
| **SLGT** | **Liugui** | **2.48** | **227** | *e*P | **Pn** | **17 01 53.0** | **+1.5** |
| | baz=226 | | | | | | |
| SLGT | | | | *e*S | **Sn** | **17 02 23.6** | **+2.2** |
| | baz=226 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.77** | **221** | *e*P | **Pn** | **17 01 56.3** | **+1.0** |
| | baz=220 | | | | | | |
| **TSCK** | **Chigu Township** | **2.78** | **237** | P | **Pn** | **17 01 55.8** | **+0.2** |
| | baz=235 | | | | | | |
| TSCK | | | | S | **Sn** | **17 02 28.5** | **0.0** |
| | baz=235 | | | | | | |

*CNRM **02** 17:03:29.7, 36°.43N×4°.75W, h25$^{km}$, ML3.2*
*MDD **02** 17:03:35.5±0.5, 36°.54N×4°.74W, h73$^{km}$±9$^{km}$, Mb2.6/20, Error ellipse: s-maj=4.5km s-min=2.5km az=164.0*
*INMG **02** 17:03:35.2±1.6, 36°.57N×4°.78W, h74$^{km}$±7$^{km}$, ML1.8, Error ellipse: s-maj=4.3km s-min=3.0km az=169.0*
*SFS **02** 17:03:35.2, 36°.45N×4°.82W, h52$^{km}$, ML2.4/9, ML2.4/8, MLv2.4/9*
*IGIL **02** 17:03:35.9, 36°.54N×4°.74W, h73$^{km}$, ML1.8*
**ISC 02 17:03:31.4**±1.3**, 36°.42N**±0°.03×**4°.73W**±0°.03**, h92**$^{km}$±8$^{km}$**,**
**n45, σ1$^s$56**/73**, 13C, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EMAL** | **Malaga-Limoner** | **0.42** | **36** | Pg | **Pn** | **17 03 45.0** | **-0.7** |
| **EJIF** | **Jimena Fronter** | **0.59** | **273** | Pg | **Pn** | **17 03 49.4** | **+2.4** |
| EJIF | | | | Sg | **Sn** | **17 03 58.4** | **-0.3** |
| **LIJA** | **Lijar** | **0.72** | **312** | Pg | **Pn** | **17 03 49.3** | **+1.0** |
| **CEU** | **Ceuta** | **0.73** | **225** | Pg | **Pn** | **17 03 48.0** | **-0.4** |
| **EGOR** | **Sierra Gorda,** | **0.85** | **36** | Sg | **Sn** | **17 04 03.6** | **+0.2** |
| EGOR | | | | Pg | **Pn** | **17 03 50.7** | **+1.0** |
| **EGOR** | **Sierra Gorda,** | **0.85** | **36** | Pg | **Pn** | **17 03 50.8** | **+1.1** |
| EGOR | | | | ⇑*i*Vmb_V | | 17 03 52.4 | |
| | 68nm,SNR=1.5 | | | | | | |
| EGOR | | | | Sg | **Sn** | **17 04 02.3** | **-1.1** |
| **ELGU** | **Los Guajares,** | **0.99** | **63** | Pg | **Pn** | **17 03 53.9** | **+2.7** |
| ELGU | | | | Sg | **Sn** | **17 04 05.2** | **-0.8** |
| **ELGU** | **Los Guajares,** | **0.99** | **63** | Pg | **Pn** | **17 03 51.8** | **+0.6** |
| ELGU | | | | ⇑*i*Vmb_V | | 17 03 52.4 | |
| | 142nm,SNR=1.2 | | | | | | |
| ELGU | | | | Sg | **Sn** | **17 04 03.8** | **-2.2** |
| **ESPR** | **Espera** | **1.01** | **297** | Pn | **Pn** | **17 03 50.5** | **-0.7** |
| **ESPR** | **Espera** | **1.01** | **297** | Pg | **Pn** | **17 03 53.0** | **+1.8** |
| ESPR | | | | ⇑*i*Vmb_V | | 17 03 54.0 | |
| | 122nm,SNR=1.0 | | | | | | |
| ESPR | | | | Sg | **Sn** | **17 04 05.6** | **-0.5** |
| **EQUE** | **Quentar** | **1.30** | **53** | Pg | **Pn** | **17 03 56.9** | **+2.1** |
| EQUE | | | | ⇑*i*Vmb_V | | 17 03 58.6 | |
| | 87nm,SNR=1.3 | | | | | | |
| EQUE | | | | Sg | **Sn** | **17 04 13.1** | **+0.7** |
| **ECAB** | **El Cabril** | **1.74** | **342** | Pn | **Pn** | **17 04 01.0** | **+0.7** |
| ECAB | | | | Sn | **Sn** | **17 04 20.5** | **-1.7** |
| **ECAB** | **El Cabril** | **1.74** | **342** | Pn | **Pn** | **17 04 00.9** | **+0.7** |
| ECAB | | | | ⇑*i*Vmb_V | | 17 04 03.3 | |
| | 104nm,SNR=1.7 | | | | | | |
| ECAB | | | | Sn | **Sn** | **17 04 20.9** | **-1.3** |
| **EADA** | **Adamuz** | **1.75** | **4** | Pn | **Pn** | **17 04 01.9** | **+1.5** |
| EADA | | | | Sn | **Sn** | **17 04 21.2** | **-1.1** |
| **EADA** | **Adamuz** | **1.75** | **4** | Pn | **Pn** | **17 04 01.6** | **+1.3** |
| EADA | | | | ⇑*i*Vmb_V | | 17 04 01.9 | |
| | 291nm,SNR=4.4 | | | | | | |
| EADA | | | | Sn | **Sn** | **17 04 21.3** | **-1.1** |
| **EQES** | **Quesada** | **1.91** | **43** | Pn | **Pn** | **17 04 04.1** | **+1.5** |
| EQES | | | | ⇑*i*Vmb_V | | 17 04 05.9 | |
| | 54nm,SNR=0.7 | | | | | | |
| EQES | | | | Sn | **Sn** | **17 04 26.1** | **-0.3** |
| **EMIN** | **Mina Concepcio** | **2.05** | **311** | Pn | **Pn** | **17 04 05.4** | **+1.1** |
| EMIN | | | | ⇑*i*Vmb_V | | 17 04 07.0 | |
| | 104nm,SNR=0.9 | | | | | | |
| EMIN | | | | Sn | **Sn** | **17 04 27.9** | **-1.5** |
| **EGRO** | **El Granado** | **2.47** | **298** | Pn | **Pn** | **17 04 11.4** | **+1.7** |
| EGRO | | | | Sn | **Sn** | **17 04 38.3** | **-0.9** |
| **EGRO** | **El Granado** | **2.47** | **298** | Pn | **Pn** | **17 04 12.0** | **+2.2** |
| EGRO | | | | ⇑*i*Vmb_V | | 17 04 12.3 | |
| | 426nm,SNR=1.9 | | | | | | |
| EGRO | | | | Sn | **Sn** | **17 04 38.7** | **-0.5** |
| **PSIM** | **Granatula de C** | **2.52** | **18** | Pn | **Pn** | **17 04 11.8** | **+1.3** |
| PSIM | | | | Sn | **Sn** | **17 04 38.5** | **-2.0** |
| **PBAR** | **Barrancos** | **2.54** | **314** | *e*P | **Pn** | **17 04 12.1** | **+1.4** |
| PBAR | | | | *e*S | **Sn** | **17 04 39.7** | **-1.2** |
| PBAR | | | | A | A | 17 04 42.5 | |
| | 2.3nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.58** | **293** | *e*P | **Pn** | **17 04 12.8** | **+1.5** |
| PVAQ | | | | *e*S | **Sn** | **17 04 41.4** | **-0.6** |
| PVAQ | | | | A | A | 17 04 43.8 | |
| | 3.1nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.58** | **293** | Pn | **Pn** | **17 04 12.5** | **+1.2** |
| PVAQ | | | | Sn | **Sn** | **17 04 40.8** | **-1.3** |
| **PVAQ** | **Vaqueiros** | **2.58** | **293** | P | **Pn** | **17 04 09.0** | **-2.3** |
| **PCVE** | **Castro Verde** | **2.91** | **296** | *e*P | **Pn** | **17 04 17.6** | **+2.0** |
| PCVE | | | | *e*S | **Sn** | **17 04 48.9** | **-0.9** |
| PCVE | | | | A | A | 17 04 51.4 | |
| | 3.1nm,0.4s | | | | | | |
| **PCVE** | **Castro Verde** | **2.91** | **296** | Pn | **Pn** | **17 04 17.3** | **+1.7** |
| PCVE | | | | Sn | **Sn** | **17 04 49.1** | **-0.7** |
| **EBAD** | **Badajoz** | **2.95** | **323** | Pn | **Pn** | **17 04 18.2** | **+2.0** |
| EBAD | | | | ⇑*i*Vmb_V | | 17 04 18.9 | |
| | 146nm,SNR=1.3 | | | | | | |
| EBAD | | | | Sn | **Sn** | **17 04 49.8** | **-0.9** |
| **MESJ** | **Messejana** | **3.12** | **298** | *e*P | **Pn** | **17 04 20.7** | **+2.1** |
| MESJ | | | | *e*S | **Sn** | **17 04 53.7** | **-1.3** |
| MESJ | | | | A | A | 17 04 55.8 | |
| | 2.6nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **3.12** | **298** | *e*P | **Pn** | **17 04 20.6** | **+2.1** |
| MESJ | | | | *e*S | **Sn** | **17 04 53.5** | **-1.5** |
| MESJ | | | | IAML | | 17 04 56.1 | |
| | comp=N,3.0nm,0.2s | | | | | | |
| **PAB** | **San Pablo** | **3.13** | **5** | Pn | **Pn** | **17 04 20.3** | **+1.5** |
| PAB | | | | ⇑*i*Vmb_V | | 17 04 21.3 | |
| | comp=N,81nm,SNR=1.0 | | | | | | |
| PAB | | | | Sn | **Sn** | **17 04 53.3** | **-2.0** |
| **MORF** | **Marmelete** | **3.26** | **287** | *e*S | **Sn** | **17 04 58.8** | **+0.4** |
| **PESTR** | **Estremoz** | **3.33** | **318** | *e*S | **Sn** | **17 04 58.9** | **-1.1** |
| PESTR | | | | A | A | 17 05 00.1 | |
| | comp=N,2.1nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **3.33** | **318** | P | **Pn** | **17 04 19.3** | **-2.1** |
| **PESTR** | **Estremoz** | **3.33** | **318** | S | **Sn** | **17 04 59.9** | **-0.1** |
| **EVO** | **Evora** | **3.35** | **310** | *e*S | **Sn** | **17 04 59.7** | **-0.8** |
| EVO | | | | A | A | 17 05 01.2 | |
| | comp=N,4.6nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **3.46** | **300** | *e*S | **Sn** | **17 05 02.0** | **-1.2** |
| PNCL | | | | A | A | 17 05 03.7 | |
| | comp=N,1.8nm,0.5s | | | | | | |
| **MD31** | **MD31** | **3.55** | **180** | P | **Pn** | **17 04 24.3** | **-0.1** |
| **MD31** | **MD31** | **3.55** | **180** | S | **Sn** | **17 05 05.2** | **-0.2** |
| **MDT** | **Midelt** | **3.60** | **178** | P | **Pn** | **17 04 24.8** | **-0.4** |
| **MDT** | **Midelt** | **3.60** | **178** | S | **Sn** | **17 05 06.6** | **-0.1** |
| **PMRV** | **Marv??o** | **3.66** | **326** | *e*S | **Sn** | **17 05 06.8** | **-1.2** |
| **EPLA** | **Plasencia** | **3.79** | **344** | Pn | **Pn** | **17 04 29.5** | **+1.9** |
| EPLA | | | | ⇑*i*Vmb_V | | 17 04 30.8 | |
| | comp=N,73nm,SNR=0.7 | | | | | | |
| EPLA | | | | Sn | **Sn** | **17 05 09.4** | **-1.6** |
| **PMTG** | **Montargil** | **3.83** | **315** | *e*S | **Sn** | **17 05 10.7** | **-1.2** |
| **EVIV** | **Cofrentes, Val** | **4.03** | **44** | Pn | **Pn** | **17 04 33.6** | **+2.8** |
| EVIV | | | | ⇑*i*Vmb_V | | 17 04 34.2 | |
| | comp=N,80nm,SNR=1.0 | | | | | | |
| EVIV | | | | Sn | **Sn** | **17 05 14.0** | **-3.0** |
| **ETOR** | **Torete** | **4.87** | **25** | Pn | **Pn** | **17 04 43.7** | **+1.5** |
| ETOR | | | | Sn | **Sn** | **17 05 32.8** | **-4.5** |

**DJA 02 17:17:03.1**±0.9**, 6°S**±6°×**10°2E**±°**, h10**$^{km}$**, M3.9**/6**, mb4.4**/2**,**
**MLv3.7**/6**, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LWLI** | **Liwa** | **1.85** | **58** | P | Pn | 17 17 34.9 | -0.1 |
| **KASI** | **Kota Agung** | **2.05** | **76** | P | Pn | 17 17 38.1 | +0.4 |
| KASI | | | | S | Sn | 17 18 04.0 | +0.6 |
| **CNJI** | **Cibinong** | **4.79** | **106** | P | Pn | 17 18 14.9 | -0.4 |
| **CMJI** | **Cimerak** | **6.17** | **107** | P | Pn | 17 18 34.6 | +0.2 |

*BGS **02** 17:42:51.9±1.2, 52°.61N×0°.45E, h4$^{km}$±4$^{km}$, ML2.7*
*LDG **02** 17:42:53.7±0.4, 52°.35N×0°.47E, h2$^{km}$, Ml2.7/15, Error ellipse: s-maj=7.2km s-min=5.0km az=7.0*
**ISC 02 17:42:50.3**±1.1**, 52°.52N**±0°.05×**0°.45E**±0°.04**, h13**$^{km}$±11$^{km}$**,**
**n20, σ2$^s$10**/30**, 1C, United Kingdom**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WACR** | **West Acre** | **0.23** | **28** | ⇑*i*P | **Pg** | **17 42 55.2** | **0.0** |
| WACR | | | | *e*S | **Sg** | **17 42 57.7** | **-1.0** |
| WACR | | | | IAML | | 17 42 58.1 | |
| | comp=E,3μm,0.1s | | | | | | |
| WACR | | | | IAML | | 17 42 58.1 | |
| | comp=N,1μm,0.2s | | | | | | |
| **LMK** | **Market Rasen** | **1.05** | **334** | *e*P | **Pg** | **17 43 10.7** | **+0.2** |
| LMK | | | | *e*S | **Sg** | **17 43 23.7** | **-0.5** |
| LMK | | | | IAML | | 17 43 26.1 | |
| | comp=E,242nm,0.3s | | | | | | |
| LMK | | | | IAML | | 17 43 28.7 | |
| | comp=N,306nm,0.3s | | | | | | |
| **CWF** | **Charnwood Fore** | **1.09** | **282** | *e*P | **Pg** | **17 43 11.8** | **+0.5** |
| CWF | | | | *e*S | **Sg** | **17 43 25.4** | **-0.1** |
| CWF | | | | IAML | | 17 43 26.5 | |
| | comp=N,105nm,0.2s | | | | | | |
| CWF | | | | IAML | | 17 43 29.9 | |
| | comp=E,73nm,0.2s | | | | | | |
| **ELSH** | **Elham, Standar** | **1.44** | **163** | *e*P | **Pn** | **17 43 18.5** | **+2.5** |
| ELSH | | | | *e*S | **Sn** | **17 43 38.7** | **+3.9** |
| ELSH | | | | IAML | | 17 43 40.1 | |
| | comp=E,133nm,0.3s | | | | | | |
| ELSH | | | | IAML | | 17 43 41.2 | |
| | comp=N,105nm,0.2s | | | | | | |
| **LBWR** | **Ladybower, Pea** | **1.58** | **305** | *e*P | **Pn** | **17 43 18.9** | **+0.8** |
| LBWR | | | | IAML | | 17 43 42.1 | |
| | comp=E,73nm,0.6s | | | | | | |
| LBWR | | | | IAML | | 17 43 44.3 | |
| | comp=N,59nm,0.2s | | | | | | |
| **HLM1** | **Long Mynd** | **2.04** | **271** | *e*P | **Pn** | **17 43 26.0** | **+1.8** |
| HLM1 | | | | *e*S | **Sn** | **17 43 51.4** | **+1.8** |
| HLM1 | | | | IAML | | 17 43 54.4 | |
| | comp=N,49nm,0.3s | | | | | | |
| HLM1 | | | | IAML | | 17 43 57.3 | |
| | comp=E,45nm,0.2s | | | | | | |
| **GDLE** | **Glaisdale, N Y** | **2.05** | **339** | *e*P | **Pn** | **17 43 24.6** | **+0.1** |
| GDLE | | | | IAML | | 17 43 59.5 | |
| | comp=N,139nm,0.3s | | | | | | |
| GDLE | | | | IAML | | 17 44 02.2 | |
| | comp=E,107nm,0.3s | | | | | | |
| **FOEL** | **Foel Wylfa** | **2.25** | **281** | *e*P | **Pn** | **17 43 28.7** | **+1.4** |
| FOEL | | | | IAML | | 17 44 02.3 | |
| | comp=E,41nm,0.5s | | | | | | |
| FOEL | | | | IAML | | 17 44 06.5 | |
| | comp=N,26nm,0.6s | | | | | | |
| **FLN** | **La Foliniere** | **3.81** | **189** | *e*Pn | **Pn** | **17 43 48.8** | **+0.2** |
| | baz=7.8 | | | | | | |
| FLN | | | | *e*Sn | **Sn** | **17 44 30.0** | **-3.2** |
| | comp=N,7.4nm,0.5s | | | | | | |
| **LDF** | **La Druitiere** | **3.95** | **186** | *e*P | **Pn** | **17 43 54.1** | **+3.6** |
| LDF | | | | *e*Sn | **Sn** | **17 44 35.0** | **-1.7** |
| | comp=N,2.1nm,0.2s | | | | | | |
| **GRR** | **Gorron** | **4.22** | **192** | *e*Pn | **Pn** | **17 43 54.6** | **+0.3** |
| GRR | | | | *e*Sn | Sn | 17 44 39.0 | -4.4 |
| | comp=N,1.9nm,0.2s | | | | | | |
| **SGMF** | **Saint Gilles** | **4.68** | **205** | *e*Pn | **Pn** | **17 44 01.0** | **+0.4** |
| SGMF | | | | *e*Sn | Sn | 17 44 49.4 | -5.4 |
| | comp=N,3.3nm,0.5s | | | | | | |
| **ROSF** | **Rostrenen** | **4.81** | **211** | *e*Pn | **Pn** | **17 44 03.8** | **+1.3** |
| ROSF | | | | *e*Sn | **Sn** | **17 44 54.9** | **-3.2** |
| | comp=N,4.7nm,0.4s | | | | | | |
| **QUIF** | **Quistinic** | **5.16** | **208** | *e*Pn | **Pn** | **17 44 08.0** | **+0.8** |
| QUIF | | | | *e*Sn | **Sn** | **17 45 02.7** | **-3.8** |
| | comp=N,0.7nm,0.2s | | | | | | |
| **LOR** | **Lormes** | **5.70** | **156** | *e*Pn | **Pn** | **17 44 14.2** | **-0.4** |
| | baz=340 | | | | | | |
| LOR | | | | *e*Sn | Sn | 17 45 15.3 | -4.6 |
| | comp=N,3.5nm,0.4s,baz=340 | | | | | | |
| **SSF** | **Saint Saulge** | **5.81** | **159** | *e*Pn | **Pn** | **17 44 16.6** | **+0.5** |
| SSF | | | | *e*Sn | Sn | 17 45 16.7 | -5.9 |
| | comp=N,1.9nm,0.4s | | | | | | |
| **MFF** | **Saint Martin d** | **5.94** | **184** | *e*Pn | **Pn** | **17 44 17.7** | **-0.1** |
| MFF | | | | *e*Sn | Sn | 17 45 20.6 | -5.1 |
| | comp=N,1.5nm,0.3s | | | | | | |
| **AVF** | **Avril sur Loir** | **6.04** | **161** | *e*Pn | **Pn** | **17 44 20.1** | **+0.9** |
| AVF | | | | *e*Sn | Sn | 17 45 24.3 | -3.8 |
| | comp=N,0.6nm,0.3s | | | | | | |
| **BGF** | **Bois d'Agland** | **6.17** | **164** | *e*P | **Pn** | **17 44 25.1** | **+4.1** |
| BGF | | | | *e*Sn | **Sn** | **17 45 28.2** | **-3.2** |
| | comp=N,5.0nm,0.4s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **6.34** | **169** | *e*Pn | **Pn** | **17 44 24.4** | **+0.9** |
| TCF | | | | *e*Sn | Sn | 17 45 30.5 | -5.2 |
| | comp=N,0.6nm,0.2s | | | | | | |

*TEH **02** 17:45:52.4, 34.°67N×46.°22E, h9km±29km, ML2.7*
*ISN **02** 17:45:53.1±1.2, 34.°67N×46.°27E, h28km±23km, ML2.7*
**ISC 02 17:45:52.2**±1.3**, 34.°69N**±0.°06×**46.°26E**±0.°06**, h14**km±12km**, n6, σ0.°88**/9**, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IDHR | Dehrash | 0.11 | 86 | Pg | Pg | 17 45 55.8 | +0.2 |
| IGHG | Ghaleghazi | 0.44 | 144 | Pg | Pb | 17 46 01.3 | -0.6 |
| IGHG | | | | Sg | Sb | 17 46 08.4 | -0.1 |
| GLG1 | Gilan-e-Gharb | 0.64 | 207 | Pg | Pg | 17 46 04.6 | -0.2 |
| IBDR | Badra | 1.60 | 190 | *e*Pg | Pb | 17 46 21.0 | -0.5 |
| | baz=10.0 | | | | | | |
| IBDR | | | | *e*Sg | Sb | 17 46 43.0 | +1.4 |
| IKRK | Kirkuk | 1.72 | 295 | *e*Pn | Pb | 17 46 23.0 | -0.6 |
| IKRK | | | | *e*Sn | Sb | 17 46 46.0 | +0.8 |
| IKFM | Kafar-mosalman | 1.76 | 131 | Pg | Pg | 17 46 26.3 | +0.3 |

*MOS **02** 17:50:22.8, 42.°77N×41.°47E, h14km, MPVA3.2*
*AFAD **02** 17:50:23.5±0.0, 42.°42N×41.°17E, h7km±2km, ML2.1*
**ISC 02 17:50:21.7**±1.9**, 42.°68N**±0.°04×**41.°41E**±0.°07**, h14**km±16km**, n19, σ0.°77**/38**, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DOMR | Dombai | 0.63 | 15 | *e*Pg | Pb | 17 50 34.0 | -0.7 |
| DOMR | | | | *e*Sg | Sb | 17 50 41.8 | -1.7 |
| ARXR | Arkhyz | 0.88 | 354 | *e*Pg | Pb | 17 50 38.8 | -0.2 |
| ARXR | | | | *e*Sg | Sb | 17 50 50.3 | -0.5 |
| VSLR | Vesyoloye | 1.27 | 308 | *e*Pg | Pg | 17 50 46.6 | +0.4 |
| VSLR | | | | *e*Sg | Sg | 17 51 03.4 | +0.7 |
| RPOR | Krasnaya Polya | 1.31 | 321 | *e*Pg | Pb | 17 50 46.9 | +0.7 |
| RPOR | | | | *e*Sg | Sg | 17 51 03.8 | -0.3 |
| DBOC | Borcka | 1.35 | 172 | P | Pn | 17 50 46.5 | +0.3 |
| DBOC | | | | S | Sn | 17 51 04.4 | +0.3 |
| DBOC | | | | *i* AML | AML | 17 51 07.0 | |
| | comp=Z,34nm,0.5s | | | | | | |
| SHA1 | Shidzhatmaz | 1.40 | 41 | *i* Pg | Pn | 17 50 47.4 | +0.3 |
| SHA1 | | | | *i* Sg | Sn | 17 51 04.4 | -1.0 |
| KBZ | Khabaz | 1.51 | 46 | *i* Pg | Pn | 17 50 49.4 | +1.0 |
| KBZ | | | | *i* Sg | Sn | 17 51 07.7 | -0.2 |
| SOC | Sochi | 1.53 | 307 | *e*Pg | Pg | 17 50 51.5 | +0.4 |
| SOC | | | | *e*Sg | Sg | 17 51 10.8 | -0.2 |
| EPOS | Posof | 1.54 | 140 | P | Pn | 17 50 49.5 | +0.6 |
| EPOS | | | | S | Sn | 17 51 07.9 | -0.9 |
| EPOS | | | | *i* AML | AML | 17 51 16.0 | |
| | comp=N,40nm,1.0s | | | | | | |
| EPOS | | | | *i* AML | AML | 17 51 16.0 | |
| | comp=E,25nm,0.3s | | | | | | |
| KIV | Kislovodsk | 1.58 | 36 | *e*Pg | Pn | 17 50 50.4 | +1.0 |
| KIV | | | | *i* Sg | Sn | 17 51 10.2 | +0.5 |
| KIV0 | Kislovodsk Arr | 1.58 | 36 | *e*Pg | Pn | 17 50 50.5 | +1.0 |
| KIV0 | | | | *i* Sg | Sn | 17 51 10.3 | +0.5 |
| GUZR | Guzeripl' | 1.61 | 325 | *e*Pg | Pb | 17 50 51.2 | -0.2 |
| GUZR | | | | *e*Sg | Sg | 17 51 12.5 | -1.2 |
| DAGI | Agillar | 1.65 | 167 | P | Pn | 17 50 51.0 | +0.5 |
| DAGI | | | | S | Sn | 17 51 11.2 | -0.3 |
| DBAD | Bademkaya | 1.68 | 173 | P | Pn | 17 50 51.2 | +0.4 |
| DBAD | | | | S | Sn | 17 51 11.8 | -0.4 |
| DBAD | | | | *i* AML | AML | 17 51 18.0 | |
| | comp=Z,21nm,0.4s | | | | | | |
| DBAD | | | | *i* AML | AML | 17 51 19.0 | |
| | comp=N,32nm,0.5s | | | | | | |
| DBAD | | | | *i* AML | AML | 17 51 25.0 | |
| | comp=E,30nm,0.5s | | | | | | |
| BEYR | Belyy Ugol+ | 1.68 | 37 | *e*Pg | Pn | 17 50 52.1 | +1.3 |
| BEYR | | | | *e*Sg | Sb | 17 51 13.7 | +0.1 |
| DDEM | Demirkent | 1.81 | 172 | P | Pn | 17 50 53.4 | +0.7 |
| DDEM | | | | S | Sn | 17 51 16.2 | +0.8 |
| DDEM | | | | *i* AML | AML | 17 51 20.0 | |
| | comp=E,37nm,0.2s | | | | | | |
| DDEM | | | | *i* AML | AML | 17 51 23.0 | |
| | comp=N,59nm,0.3s | | | | | | |
| PYA1 | Pyatigorsk | 1.85 | 41 | *e*Pg | Pn | 17 50 53.9 | +0.8 |
| PYA1 | | | | *e*Sg | Sb | 17 51 18.3 | -0.1 |
| MRNR | Maryino | 1.88 | 312 | *e*Pg | Pb | 17 50 56.0 | +0.1 |
| MRNR | | | | *e*Sg | Sg | 17 51 20.4 | -1.9 |
| IZDR | Rize | 2.00 | 199 | P | Pn | 17 50 55.4 | +0.2 |
| IZDR | | | | S | Sn | 17 51 19.3 | -0.8 |

*NEIC **02** 18:07:23.4±1.2, 38.°16N±0.°02×118.°19W±0.°04, h12km±8km, Error ellipse: s-maj=4.7km s-min=2.5km az=84.0*
**REN 02 18:07:23.6**±1.2**, 38.°16N**±0.°02×**118.°19W**±0.°04**, h7**km±3km**, ML2.6**/12**, ML2.4**/64(NEIC)**, Error ellipse: s-maj=4.8km s-min=3.2km az=97.0, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LHV | Little Huntoon | 0.26 | 291 | | Pg | 18 07 29.1 | +0.4 |
| LHV | | | | | Sg | 18 07 33.0 | +0.7 |
| LHV | Little Huntoon | 0.26 | 291 | IAML | | 18 07 33.5 | |
| | comp=N,888nm,0.5s | | | | | | |
| LHV | | | | IAML | | 18 07 34.3 | |
| | comp=E,984nm,0.5s | | | | | | |
| NV08 | Mina Array Sit | 0.27 | 338 | | Pg | 18 07 29.0 | +0.1 |
| NV08 | | | | | Sg | 18 07 33.0 | +0.5 |
| NV11 | Mina Array Sit | 0.28 | 6 | | Pg | 18 07 29.1 | 0.0 |
| NV11 | | | | | Sg | 18 07 33.4 | +0.6 |
| NV11 | Mina Array Sit | 0.28 | 6 | IAML | | 18 07 35.1 | |
| | comp=E,411nm,0.7s | | | | | | |
| NV11 | | | | IAML | | 18 07 35.8 | |
| | comp=N,342nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 0.28 | 342 | | Pg | 18 07 28.1 | -1.2 |
| NV09 | Mina Array Sit | 0.30 | 338 | | Pg | 18 07 29.6 | 0.0 |
| MGNR | McGee Canyon | 0.53 | 229 | | Pg | 18 07 33.9 | +0.1 |
| BENR | Benton | 0.53 | 214 | | Pg | 18 07 33.9 | 0.0 |
| RYN | Ryan | 0.54 | 331 | | Pg | 18 07 34.0 | 0.0 |
| RYN | | | | | Sg | 18 07 41.5 | +0.5 |
| RYN | Ryan | 0.54 | 331 | IAML | | 18 07 41.7 | |
| | comp=E,238nm,0.6s | | | | | | |
| RYN | | | | IAML | | 18 07 41.9 | |
| | comp=N,313nm,0.2s | | | | | | |
| MLNR | Milner Canyon | 0.57 | 192 | | Pg | 18 07 34.8 | 0.0 |
| MLAC | Mammoth, Mammo | 0.73 | 224 | | Pg | 18 07 37.9 | +0.2 |
| MCBM | Casa Benchmark | 0.76 | 228 | | Pg | 18 07 38.3 | +0.1 |
| MCBM | | | | | Sg | 18 07 48.6 | +0.6 |
| TPH | Tonopah | 0.77 | 96 | | Pg | 18 07 38.4 | 0.0 |
| TPH | | | | | Sg | 18 07 49.1 | +0.6 |
| MZP | Montezuma Peak | 0.79 | 125 | | Pg | 18 07 38.7 | 0.0 |
| MZP | | | | | Sg | 18 07 49.6 | +0.6 |
| MZP | Montezuma Peak | 0.79 | 125 | IAML | | 18 07 54.1 | |
| | comp=N,108nm,0.3s | | | | | | |
| POCCA | Poleta Canyon | 0.80 | 185 | | Pg | 18 07 38.9 | 0.0 |
| DSP | Deep Springs | 0.81 | 167 | | Pg | 18 07 39.2 | +0.1 |
| DSP | | | | | Sg | 18 07 50.2 | +0.7 |
| MDYM | Dry Creek | 0.82 | 233 | | Pg | 18 07 39.6 | +0.3 |
| OMMB | Old Mammoth Mi | 0.84 | 230 | | Pg | 18 07 39.5 | -0.2 |
| OMMB | | | | | Sg | 18 07 50.6 | 0.0 |
| MDPB | Devils Postpil | 0.88 | 233 | | Pg | 18 07 40.2 | -0.3 |
| MDPB | Devils Postpil | 0.88 | 233 | IAML | | 18 07 52.1 | |
| | comp=N,115nm,0.4s | | | | | | |
| BHPR | Bishop | 0.89 | 195 | | Pg | 18 07 40.6 | 0.0 |
| KVN | Kaiserville | 0.90 | 5 | | Pg | 18 07 40.3 | -0.5 |
| KVN | Kaiserville | 0.90 | 5 | IAML | | 18 07 56.4 | |
| | comp=E,186nm,0.5s | | | | | | |
| KVN | | | | IAML | | 18 07 57.1 | |
| | comp=N,162nm,0.7s | | | | | | |
| WAKR | Walker | 1.04 | 290 | | Pg | 18 07 43.2 | -0.3 |
| Q09A | Carvers | 1.04 | 49 | | Pg | 18 07 43.5 | -0.2 |
| GMN | Gold Mountain | 1.13 | 139 | | Pg | 18 07 45.2 | -0.1 |
| YERR | Yerington | 1.17 | 316 | | Pg | 18 07 45.2 | -0.7 |
| YERR | Yerington | 1.17 | 316 | IAML | | 18 08 08.3 | |
| | comp=N,94nm,0.7s | | | | | | |
| YERR | | | | IAML | | 18 08 08.9 | |
| | comp=E,108nm,0.5s | | | | | | |
| GRAC | Grapevine Rang | 1.33 | 150 | | Pb | 18 07 49.0 | +0.1 |
| GRAC | Grapevine Rang | 1.33 | 150 | | Pn | 18 07 48.5 | -0.2 |
| GRAC | Grapevine Rang | 1.33 | 150 | IAML | | 18 08 14.1 | |
| | comp=N,111nm,0.6s | | | | | | |
| PNTR | Pine Nut | 1.44 | 311 | | Pn | 18 07 50.2 | -0.2 |
| PNTR | Pine Nut | 1.44 | 311 | IAML | | 18 08 11.8 | |
| | comp=E,54nm,1.0s | | | | | | |
| PNTR | | | | IAML | | 18 08 14.0 | |
| | comp=N,62nm,1.1s | | | | | | |
| SGV | South Grapevin | 1.49 | 142 | | Pn | 18 07 50.9 | -0.1 |
| EMB | Emerald Bay | 1.71 | 299 | | Pb | 18 07 54.9 | -0.5 |
| EMB | Emerald Bay | 1.71 | 299 | IAML | | 18 08 24.2 | |
| | comp=E,28nm,0.9s | | | | | | |
| EMB | | | | IAML | | 18 08 27.2 | |
| | comp=N,38nm,0.7s | | | | | | |
| CMB | Columbia Colle | 1.73 | 267 | | Pn | 18 07 54.9 | +0.7 |
| CMB | Columbia Colle | 1.73 | 267 | Pn | Pn | 18 07 54.0 | -0.3 |
| PAHR | Pah Rah Range | 1.80 | 329 | | Pn | 18 07 55.4 | +0.2 |
| PAHR | Pah Rah Range | 1.80 | 329 | IAML | | 18 08 21.8 | |
| | comp=E,43nm,0.7s | | | | | | |
| PAHR | | | | IAML | | 18 08 22.4 | |
| | comp=N,23nm,0.5s | | | | | | |
| MPK | Martis Peak | 1.83 | 309 | | Pb | 18 07 57.8 | +0.2 |
| MPK | Martis Peak | 1.83 | 309 | IAML | | 18 08 24.9 | |
| | comp=N,34nm,1.0s | | | | | | |
| MPK | | | | IAML | | 18 08 25.7 | |
| | comp=E,43nm,0.9s | | | | | | |
| WCT | Wildcat Mounta | 1.85 | 137 | | Pn | 18 07 55.9 | +0.1 |
| WCT | Wildcat Mounta | 1.85 | 137 | IAML | | 18 08 24.5 | |
| | comp=N,45nm,0.5s | | | | | | |
| WCT | | | | IAML | | 18 08 26.6 | |
| | comp=E,49nm,0.4s | | | | | | |
| PEAR | Peavine Mounta | 2.00 | 317 | | Pb | 18 07 60.0 | -0.5 |
| S11A | Rachel | 2.00 | 104 | | Pb | 18 08 00.9 | +0.5 |
| DONR | Donner Summit | 2.05 | 306 | | Pb | 18 08 00.6 | -0.6 |
| CPY | CP-1 | 2.09 | 125 | | Pb | 18 08 00.8 | -1.2 |
| SDH | Striped Hills | 2.11 | 135 | | Pb | 18 08 02.4 | +0.1 |
| NSP | Numbskull Pass | 2.13 | 132 | | Pn | 18 07 59.9 | +0.2 |
| AMDNV | Amargosa | 2.29 | 138 | | Pb | 18 08 05.2 | +0.1 |
| GWY | Greenwater Val | 2.31 | 148 | | Pb | 18 08 05.4 | -0.4 |
| GWY | | | | IAML | | 18 08 43.5 | |
| | comp=E,16nm,0.4s | | | | | | |
| GWY | | | | IAML | | 18 08 46.1 | |
| | comp=N,15nm,0.4s | | | | | | |
| AFDM | Forest Hills D | 2.32 | 291 | Pg | Pb | 18 08 05.7 | -0.1 |
| MCY | Mercury | 2.32 | 129 | | Pn | 18 08 03.0 | +0.7 |
| BMN | Battle Mountai | 2.39 | 18 | Pg | Pb | 18 08 06.9 | -0.2 |
| BMN | | | | IAML | | 18 08 42.6 | |
| | comp=E,17nm,0.5s | | | | | | |
| BMN | Battle Mountai | 2.39 | 18 | | Pn | 18 08 03.0 | -0.4 |
| BEKR | Beckworth | 2.40 | 316 | | Pb | 18 08 05.9 | -1.3 |
| ISA | Isabella, Lake | 2.50 | 185 | Pg | Pb | 18 08 09.2 | +0.3 |
| ISA | | | | IAML | | 18 08 47.0 | |
| | comp=E,18nm,0.4s | | | | | | |
| PRN | Pahroc Range | 2.60 | 106 | | Pn | 18 08 05.7 | -0.5 |
| PRN | | | | | Pg | 18 08 12.2 | -1.2 |
| Q12A | Willow Creek R | 2.78 | 70 | | Pn | 18 08 06.7 | -2.0 |
| SHPR | Sheep Range | 2.93 | 123 | | Pn | 18 08 08.9 | -1.8 |
| SPR3 | Spring Creek 3 | 3.14 | 73 | | Pb | 18 08 18.3 | -1.6 |
| PSUT | Pine Spring | 3.43 | 82 | | Pb | 18 08 25.0 | +0.1 |
| ELK | Elko | 3.45 | 41 | | Pn | 18 08 16.7 | -1.3 |
| CCUT | Cedar City | 3.87 | 98 | Pn | Pn | 18 08 21.8 | -2.0 |
| MVU | Marysvale | 4.72 | 84 | Pn | Pn | 18 08 34.4 | -1.0 |

*NEIC **02** 18:33:51.9±1.2, 18.°4S±0.°1×174.°9W±0.°1, h83km±7km, mb4.6/98, Error ellipse: s-maj=14.8km s-min=14.1km az=204.0*
*NOU **02** 18:33:58.2, 18.°74S×174.°39W, h96km, mb4.5/7, Tonga Islands*
*IDC **02** 18:34:00.9±3.1, 18.°72S×174.°81W, h170km±27km, mb3.9/14, mbtmp4.4/16, MS3.1/1, Error ellipse: s-maj=17.8km s-min=14.4km az=117.0*
**ISC 02 18:33:52.7**±0.4**, 18.°42S**±0.°07×**174.°71W**±0.°06**, h100**km**, n167, σ1.°41**/126**, mb4.5**/63**, 3D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIUE | Niue | 4.58 | 99 | P | Pn | 18 35 00.5 | +0.8 |
| NIUE | Niue | 4.58 | 99 | Pn | Pn | 18 35 00.2 | +0.5 |
| NIUE | | | | Sn | Sn | 18 35 47.7 | -4.1 |
| AFI | Afiamalu | 5.30 | 33 | Pn | Pn | 18 35 09.4 | -0.2 |
| AFI | | | | Sn | Sn | 18 36 04.8 | -4.6 |
| MSVF | Nonsavu | 6.92 | 275 | P | Pn | 18 35 41.6 | +10 |
| MSVF | Nonsavu | 6.92 | 275 | Pn | Pn | 18 35 36.6 | +5.0 |
| MSVF | Nonsavu | 6.92 | 275 | P | Pn | 18 35 41.0 | +9.4 |
| | 25nm,0.7s,baz=91,slow=12,SNR=20 | | | | | | |
| MSVF | | | | LR | LR | 18 37 46.0 | |
| | comp=Z,158nm,20.1s,baz=47,slow=33 | | | | | | |
| RAR | Rarotonga | 14.32 | 104 | Pn | Pn | 18 37 12.7 | +1.8 |
| PINNC | Pines Island, | 17.23 | 253 | P | P | 18 37 47.7 | +0.5 |
| PINNC | | | | IAmb | IAmb | 18 38 16.2 | |
| | comp=Z,91nm,1.4s | | | | | | |
| DZM | Mont Dzumac | 18.05 | 255 | P | Pn | 18 37 58.5 | +1.3 |
| | comp=Z,6.9nm,1.0s,baz=94,slow=20,SNR=3.6 | | | | | | |
| NOUC | Port Laguerre | 18.19 | 255 | P | Pn | 18 38 06.7 | +7.9 |
| KOUNC | Koumac, New Ca | 19.92 | 260 | P | Pn | 18 38 25.0 | +5.8 |
| KOUNC | Koumac, New Ca | 19.92 | 260 | P | P | 18 38 15.8 | -0.8 |
| KOUNC | | | | IAmb | IAmb | 18 38 35.8 | |
| | comp=Z,40nm,1.2s | | | | | | |
| KUZ | Kuaotunu | 20.11 | 203 | P | P | 18 38 19.6 | +1.2 |
| HAZ | Te Kaha | 20.35 | 197 | P | P | 18 38 21.7 | +0.5 |
| PUZ | Puketiti | 20.52 | 196 | P | P | 18 38 23.4 | +0.4 |
| RUGZ | Raukumara Rang | 20.58 | 197 | P | P | 18 38 24.4 | +0.7 |
| MKAZ | Moumakai | 20.63 | 204 | P | P | 18 38 25.2 | +1.1 |
| WHRZ | Whale Island | 20.68 | 199 | P | P | 18 38 22.6 | -2.1 |
| TWGZ | Tauwhareparae | 20.69 | 196 | P | Pn | 18 38 26.5 | -1.6 |
| CNGZ | Carnagh Statio | 20.92 | 196 | P | Pn | 18 38 29.5 | -1.2 |
| MWZ | Matawai | 20.96 | 197 | P | P | 18 38 28.8 | +1.1 |
| KMRZ | Kaimai | 21.01 | 201 | P | P | 18 38 30.2 | +2.0 |
| URZ | Urewera | 21.02 | 198 | P | P | 18 38 27.7 | -0.6 |
| | comp=Z,13nm,0.3s,baz=13,slow=2.1,SNR=30 | | | | | | |
| URZ | | | | S | S | 18 42 02.5 | -14 |
| | comp=Z,2.7nm,0.6s,baz=30,slow=20,SNR=0.9 | | | | | | |
| | comp=Z,13nm,0.3s | | | | | | |
| URZ | Urewera | 21.02 | 198 | P | P | 18 38 27.7 | -0.6 |
| TOZ | Tahuroa Road | 21.06 | 202 | P | P | 18 38 28.7 | 0.0 |
| OMRZ | Omania | 21.10 | 200 | P | P | 18 38 30.8 | +1.6 |
| RAGZ | Rawiri | 21.15 | 197 | P | P | 18 38 28.4 | -1.4 |
| RIGZ | Rimuhau | 21.25 | 196 | P | P | 18 38 31.7 | +1.0 |
| SNGZ | Shannon Statio | 21.43 | 197 | P | P | 18 38 33.8 | +1.0 |
| KNZ | Kokohu | 21.57 | 196 | P | P | 18 38 35.0 | +0.9 |
| TLZ | Tolley Road | 21.58 | 201 | P | P | 18 38 35.5 | +1.1 |
| RAHZ | Arahi | 21.63 | 198 | P | P | 18 38 34.6 | -0.3 |
| NMHZ | Naumai | 21.88 | 198 | P | P | 18 38 37.4 | -0.2 |
| HIZ | Hauiti | 21.99 | 202 | P | P | 18 38 39.5 | +0.9 |
| BKZ | Black Stump Fm | 22.04 | 198 | P | P | 18 38 36.8 | -2.4 |
| WNVZ | Wahianoa | 22.46 | 200 | P | P | 18 38 40.8 | -3.0 |
| BHW | Baring Head | 24.59 | 199 | P | P | 18 39 02.3 | -1.1 |
| QRZ | Quartz Range | 24.88 | 203 | P | P | 18 39 10.4 | +4.4 |
| EIDS | Eidsvold | 32.42 | 252 | P | P | 18 40 12.4 | -1.0 |
| EIDS | | | | IAmb | IAmb | 18 40 42.2 | |
| | comp=Z,15nm,1.4s | | | | | | |
| ARMA | Armidale | 32.77 | 242 | P | P | 18 40 15.0 | -1.5 |
| ARMA | | | | IAmb | IAmb | 18 40 58.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| CTAO | Charters Tower | 36.84 | 261 | P | P | 18 40 51.1 | -0.5 |
| CTAO | | | | IAmb | IAmb | 18 40 53.2 | |
| | comp=Z,11nm,0.8s | | | | | | |
| COEN | Coen | 40.63 | 270 | P | P | 18 41 23.2 | -0.1 |
| COEN | | | | IAmb | IAmb | 18 41 26.0 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| STKA | Stephens Creek | 41.49 | 243 | P | P | 18 41 30.4 | +0.3 |
| STKA | Stephens Creek | 41.49 | 243 | P | P | 18 41 28.5 | -1.7 |
| | comp=Z,2.4nm,0.8s,baz=72,slow=9.8,SNR=5.7 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| BBOO | Buckleboo | 46.26 | 242 | P | P | 18 42 06.3 | -2.0 |
| WR0 | Warramunga Arr | 47.81 | 259 | P | P | 18 42 18.6 | -1.9 |
| WR0 | | | | IAmb | IAmb | 18 42 22.2 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| WB0 | Warramunga Arr | 47.97 | 260 | P | P | 18 42 20.2 | -1.5 |
| WB0 | | | | IAmb | IAmb | 18 42 21.4 | |
| | comp=Z,17nm,1.0s | | | | | | |
| WB2 | Warramunga Arr | 47.99 | 259 | P | P | 18 42 20.4 | -1.5 |
| WB2 | | | | IAmb | IAmb | 18 42 22.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 47.99 | 259 | P | P | 18 42 20.3 | -1.6 |
| WRAB | | | | IAmb | IAmb | 18 42 22.0 | |
| | comp=Z,13nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 48.00 | 259 | P | P | 18 42 20.1 | -1.9 |
| WRA | Warramunga Arr | 48.00 | 259 | P | P | 18 42 20.8 | -1.2 |
| | comp=Z,4.7nm,0.3s,baz=98,slow=6.6,SNR=194 | | | | | | |
| WRA | | | | PcP | PcP | 18 43 48.6 | -0.1 |
| | comp=Z,1.4nm,0.6s,baz=93,slow=3.4,SNR=6.5 | | | | | | |
| | comp=Z,4.7nm,0.3s | | | | | | |
| AS31 | Alice Springs | 48.04 | 254 | P | P | 18 42 20.8 | -1.5 |
| AS31 | | | | IAmb | IAmb | 18 42 22.6 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| ASAR | Alice Springs | 48.04 | 254 | P | P | 18 42 21.6 | -0.8 |
| ASAR | Alice Springs | 48.04 | 254 | P | P | 18 42 21.1 | -1.2 |
| | comp=Z,20nm,0.8s,baz=88,slow=8.5,SNR=181 | | | | | | |
| ASAR | | | | PcP | PcP | 18 43 48.6 | -0.2 |
| | comp=Z,2.2nm,0.6s,baz=103,slow=3.9,SNR=8.7 | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| MTN | Manton Dam | 52.30 | 268 | P | P | 18 42 53.2 | -1.3 |
| FORT | Forrest | 52.98 | 245 | P | P | 18 42 57.6 | -1.7 |
| KNRA | Kununurra | 53.94 | 264 | P | P | 18 43 05.4 | -1.1 |
| FAKI | Fak Fak | 54.13 | 280 | P | P | 18 43 06.3 | -1.6 |
| FITZ | Fitzroy Crossi | 56.41 | 260 | P | P | 18 43 23.4 | -0.9 |
| SOEI | Soe | 59.59 | 269 | P | P | 18 43 46.6 | 0.0 |
| SBA | Scott Base | 60.15 | 184 | P | P | 18 43 49.3 | -0.1 |
| VNDA | Vanda | 60.26 | 186 | P | P | 18 43 50.7 | +0.6 |
| VNDA | Vanda | 60.26 | 186 | P | P | 18 43 48.9 | -1.2 |
| | comp=Z,0.7nm,0.8s,baz=341,slow=6.1,SNR=4.6 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| PSA00 | Pilbara Seismi | 61.18 | 255 | P | P | 18 43 56.1 | -1.2 |
| MBWA | Marble Bar | 61.36 | 256 | P | P | 18 43 57.7 | -0.8 |
| MMRI | Maumere | 61.82 | 270 | P | P | 18 44 00.8 | -0.8 |
| TOLI2 | Tolitoli | 66.27 | 280 | P | P | 18 44 29.7 | -1.1 |
| TOLI2 | | | | IAmb | IAmb | 18 44 33.3 | |
| | comp=Z,10nm,0.8s | | | | | | |
| JAGI | Jajag, Banyuwa | 69.54 | 268 | P | P | 18 44 49.8 | -1.6 |
| MJAR | Matsushiro Arr | 70.47 | 321 | P | P | 18 44 57.0 | +0.5 |
| | comp=Z,2.9nm,0.6s,baz=158,slow=5.4,SNR=10 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 71.64 | 180 | P | P | 18 45 03.9 | +0.5 |
| QSPA | South Pole Qui | 71.64 | 180 | P | P | 18 45 02.2 | -1.2 |
| | comp=Z,3.2nm,0.9s,baz=15,slow=2.5,SNR=8.2 | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| KKM | Kota Kinabalu | 72.28 | 283 | P | P | 18 45 07.5 | -0.6 |
| JNU | Nakatsue | 72.98 | 314 | P | P | 18 45 12.4 | +0.8 |
| UGM | Wanagama | 73.14 | 267 | P | P | 18 45 12.8 | -0.2 |
| TWG | Pinlang | 74.94 | 301 | P | P | 18 45 22.5 | -0.8 |
| TWG | | | | IAmb | IAmb | 18 45 25.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| SSLB | Suanglung | 75.49 | 301 | P | P | 18 45 26.4 | -0.1 |
| TPUB | Ta-pu | 75.52 | 301 | P | P | 18 45 26.8 | +0.2 |
| KSM | Kuching | 76.24 | 276 | P | P | 18 45 30.8 | -0.1 |
| MDPB | Devils Postpil | 76.44 | 42 | IAmb | IAmb | 18 45 31.0 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| RYN | Ryan | 77.38 | 42 | P | P | 18 45 38.1 | +1.1 |
| NVAR | Mina Array Bea | 77.40 | 42 | P | P | 18 45 38.1 | +0.9 |
| NVAR | Mina Array Bea | 77.40 | 42 | P | P | 18 45 38.9 | +1.7 |
| | comp=Z,1.7nm,0.7s,baz=231,slow=8.6,SNR=9.8 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| KSRS | Korea Array | 77.46 | 317 | P | P | 18 45 39.1 | +1.9 |
| | comp=Z,1.8nm,0.9s,baz=136,slow=5.7,SNR=8.4 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| KSAR | Wonju Array Be | 77.48 | 317 | P | P | 18 45 37.3 | 0.0 |
| NV11 | Mina Array Sit | 77.50 | 42 | P | P | 18 45 39.0 | +1.4 |
| J05D | Fort Rock, OR | 78.58 | 37 | P | P | 18 45 44.9 | +1.4 |
| J05D | | | | IAmb | IAmb | 18 45 46.6 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| PINE | Pine Mountain | 79.06 | 37 | P | P | 18 45 47.4 | +1.2 |
| PINE | | | | IAmb | IAmb | 18 45 49.9 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| TUC | Tucson | 79.26 | 51 | P | P | 18 45 48.7 | +1.3 |
| X16A | Lo Mia Camp, P | 79.84 | 49 | IAmb | IAmb | 18 45 54.3 | |
| | comp=Z,6.3nm,1.3s | | | | | | |
| 319A | Douglas | 79.92 | 52 | IAmb | IAmb | 18 45 57.7 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ELK | Elko | 80.67 | 42 | P | P | 18 45 55.9 | +0.9 |
| NJ2 | Nanjing | 81.00 | 308 | *e*P | P | 18 45 58.2 | +1.6 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| F10A | Beach Ranch, E | 82.48 | 36 | IAmb | IAmb | 18 46 06.5 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| GHO | Glory Hole Cre | 82.53 | 12 | IAmb | IAmb | 18 46 05.9 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| J18K | Innoko River | 82.83 | 8 | P | P | 18 46 07.6 | +2.1 |
| VHRN | Van Horn | 82.92 | 54 | P | P | 18 46 09.1 | +2.2 |
| VHRN | | | | IAmb | IAmb | 18 46 10.0 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| N25K | Chitina, Valde | 83.30 | 14 | IAmb | IAmb | 18 46 10.2 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| TX31 | Lajitas Ar. Si | 83.32 | 56 | IAmb | IAmb | 18 46 12.3 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| TXAR | Lajitas Array | 83.33 | 56 | P | P | 18 46 11.1 | +2.1 |
| TXAR | Lajitas Array | 83.33 | 56 | P | P | 18 46 10.7 | +1.7 |
| | comp=Z,2.2nm,0.8s,baz=219,slow=9.4,SNR=23 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| ANMO | Albuquerque | 83.69 | 50 | P | P | 18 46 12.3 | +1.4 |
| RND | Reindeer | 84.03 | 11 | IAmb | IAmb | 18 46 13.9 | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| M26K | Nabesna, AK | 84.37 | 14 | IAmb | IAmb | 18 46 15.5 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| H03S2 | Juan Fernandez | 84.58 | 124 | T | T | 20 19 07.9 | |
| | baz=250,slow=75,SNR=83 | | | | | | |
| H03S1 | Juan Fernandez | 84.59 | 124 | T | T | 20 19 09.1 | |
| | baz=250,slow=75,SNR=82 | | | | | | |
| H03S3 | Juan Fernandez | 84.59 | 124 | T | T | 20 19 09.4 | |
| | baz=250,slow=75,SNR=88 | | | | | | |
| M27K | Edge Creek, AK | 84.59 | 15 | IAmb | IAmb | 18 46 17.6 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| H03N2 | Juan Fernandez | 84.70 | 123 | T | T | 20 19 23.1 | |
| | baz=257,slow=72 | | | | | | |
| H03N3 | Juan Fernandez | 84.70 | 123 | T | T | 20 19 20.4 | |
| | baz=257,slow=72 | | | | | | |
| H03N1 | Juan Fernandez | 84.71 | 123 | T | T | 20 19 20.2 | |
| | baz=257,slow=72 | | | | | | |
| SAND | Sanderson | 84.80 | 56 | IAmb | IAmb | 18 46 18.9 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| WRH | Wood River Hil | 85.14 | 11 | IAmb | IAmb | 18 46 19.2 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| HDA | Harding Lake | 85.30 | 12 | IAmb | IAmb | 18 46 19.8 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| PDAR | Pinedale Array | 85.34 | 42 | P | P | 18 46 20.3 | +1.3 |
| | comp=Z,1.0nm,0.6s,baz=222,slow=5.6,SNR=8.8 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| R33M | Jennings River | 85.35 | 21 | IAmb | IAmb | 18 46 21.6 | |
| | comp=Z,11nm,1.4s | | | | | | |
| CCB | Clear Creek Bu | 85.35 | 11 | IAmb | IAmb | 18 46 19.9 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| SCRK | Sand Creek | 85.52 | 13 | IAmb | IAmb | 18 46 21.1 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| COLA | College | 85.55 | 11 | P | P | 18 46 19.7 | +0.5 |
| MDM | Murphy Dome | 85.56 | 11 | IAmb | IAmb | 18 46 20.5 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| IL31 | | 85.64 | 12 | IAmb | IAmb | 18 46 20.9 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| ILAR | Eielson Array | 85.64 | 12 | P | P | 18 46 19.5 | -0.2 |
| ILAR | Eielson Array | 85.64 | 12 | P | P | 18 46 20.3 | +0.6 |
| | comp=Z,1.9nm,0.6s,baz=226,slow=6.4,SNR=23 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| DRIO | Del Rio | 85.78 | 57 | IAmb | IAmb | 18 46 23.8 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| J25K | Salcha River, | 85.79 | 12 | IAmb | IAmb | 18 46 22.6 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| J26L | Joseph Creek | 86.07 | 13 | IAmb | IAmb | 18 46 24.8 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| L29M | L29M | 86.16 | 16 | IAmb | IAmb | 18 46 25.2 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| PRP | Porcupine Dome | 86.57 | 12 | IAmb | IAmb | 18 46 26.6 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| EGAK | Eagle | 86.84 | 14 | IAmb | IAmb | 18 46 27.9 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| I26K | Coal Creek Min | 86.86 | 13 | IAmb | IAmb | 18 46 28.2 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| K29M | Barlow Dome | 86.92 | 16 | IAmb | IAmb | 18 46 28.6 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| I28M | Miner Creek | 87.68 | 14 | IAmb | IAmb | 18 46 31.4 | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| APMT | Aspermont | 87.74 | 54 | IAmb | IAmb | 18 46 33.7 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| I30M | Mount Dempster | 88.34 | 15 | IAmb | IAmb | 18 46 35.1 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| GYA | Guiyang | 88.36 | 298 | P | P | 18 46 36.1 | +2.2 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| H29M | Whitestone | 88.68 | 14 | IAmb | IAmb | 18 46 35.9 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| ELIB | Princess Elisa | 89.02 | 186 | *d*P | P | 18 46 35.6 | -0.6 |
| SNAA | Sanae | 89.96 | 177 | P | P | 18 46 39.2 | -1.4 |
| | comp=Z,1.6nm,0.9s,baz=222,slow=6.3,SNR=3.6 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| HHC | Hu-ho-hao-te | 90.17 | 313 | *e*P | P | 18 46 43.2 | +1.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,35nm,0.6s | | | | | | |
| G31M | Satah River | 90.22 | 15 | P | P | 18 46 41.9 | +0.4 |
| G31M | | | | IAmb | IAmb | 18 46 43.7 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 92.38 | 289 | P | P | 18 46 53.9 | +1.2 |
| | comp=Z,1.4nm,0.7s,baz=91,slow=2.5,SNR=8.8 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| CHTO | Chiang Mai | 92.49 | 289 | P | P | 18 46 52.9 | -0.3 |
| PZH | PanZhiHua | 92.51 | 297 | P | P | 18 46 54.3 | +1.0 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.4s | | | | | | |
| ZALV | Zalesovo Beam | 110.82 | 322 | PKiKP | PKiKP | 18 52 12.8 | -1.0 |
| | comp=Z,0.9nm,0.5s,baz=90,slow=2.0,SNR=5.6 | | | | | | |
| MKAR | Makanchi Array | 112.03 | 314 | PKiKP | PKiKP | 18 52 15.8 | -0.5 |
| | comp=Z,0.9nm,0.5s,baz=103,slow=1.0,SNR=16 | | | | | | |
| KURBB | Kurchatov Arra | 114.62 | 318 | PKP | PKPdf | 18 52 20.1 | -1.0 |

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.9nm,0.5s,baz=92,slow=2.1,SNR=21 | | | | | | |
| ARCES | ARCESS Array B | 127.40 | 351 | PKP | PKPdf | 18 52 44.8 | -0.4 |
| | comp=Z,0.7nm,0.5s,baz=17,slow=1.3,SNR=6.7 | | | | | | |
| FINES | FINESS Array B | 134.59 | 346 | PKP | PKPdf | 18 52 58.8 | -0.2 |
| | comp=Z,1.7nm,0.8s,baz=36,slow=1.5,SNR=5.9 | | | | | | |
| HFS | Hagfors | 137.90 | 354 | PKhKP | PKPpre | 18 53 03.4 | |
| | comp=Z,0.8nm,0.5s,baz=64,slow=3.4,SNR=6.3 | | | | | | |
| AKASG | Malin Array Be | 142.59 | 335 | PKhKP | PKPpre | 18 53 09.1 | |
| | comp=Z,0.4nm,0.4s,baz=44,slow=3.9,SNR=4.1 | | | | | | |
| BRTR | Keskin Array B | 147.60 | 317 | PKPbc | PKPbc | 18 53 26.4 | +0.4 |
| | comp=Z,4.1nm,0.7s,baz=79,slow=3.1,SNR=18 | | | | | | |
| MEM | Membach | 147.88 | 359 | *d*PKP | PKPbc | 18 53 25.7 | -0.4 |
| BMRD | Maredsous | 148.19 | 1 | *d*PKP | PKiKP | 18 53 28.3 | -0.3 |
| GERES | GERESS Array B | 148.90 | 349 | PKPbc | PKiKP | 18 53 29.8 | -0.4 |
| | comp=Z,1.0nm,0.7s,baz=336,slow=2.9,SNR=6.7 | | | | | | |
| CONA | Conrad Observa | 149.33 | 346 | *i* PKiKP | PKiKP | 18 53 31.3 | +0.2 |
| | comp=Z,4.7nm,1.2s | | | | | | |
| MMAI | Mount Meron Ar | 149.36 | 304 | PKPbc | PKiKP | 18 53 31.5 | -0.1 |
| | comp=Z,8.2nm,0.6s,baz=73,slow=3.4,SNR=20 | | | | | | |
| RONA | Rosalia, Austr | 149.44 | 345 | *i* PKP | PKiKP | 18 53 31.3 | 0.0 |
| | comp=Z,3.3nm,0.8s | | | | | | |
| MOA | Molln | 149.75 | 348 | *e*PKiKP | PKiKP | 18 53 32.9 | +1.0 |
| | comp=Z,4.4nm,1.3s | | | | | | |
| RETA | Reutte | 150.67 | 352 | *e*PKP | PKiKP | 18 53 34.0 | +0.1 |
| | comp=Z,4.7nm,1.2s | | | | | | |
| SOKA | Soboth | 150.70 | 346 | *i* PKP | PKiKP | 18 53 33.7 | -0.3 |
| | comp=Z,4.2nm,1.0s | | | | | | |
| WATA | Walderalm | 150.71 | 351 | *e*PKP | PKiKP | 18 53 34.0 | -0.1 |
| | comp=Z,5.2nm,0.9s | | | | | | |
| MOTA | Moosalm | 150.76 | 352 | *e*PKP | PKiKP | 18 53 34.2 | -0.1 |
| | comp=Z,6.6nm,1.1s | | | | | | |
| WTTA | Wattenberg | 150.77 | 351 | *e*PKP | PKiKP | 18 53 34.1 | -0.2 |
| | comp=Z,5.8nm,0.6s | | | | | | |
| SQTA | Sankt Quirin | 150.87 | 352 | *e*PKP | PKPbc | 18 53 34.1 | +0.3 |
| | comp=Z,2.3nm,0.6s | | | | | | |
| DAVA | Damuels | 150.97 | 354 | *e*PKP | PKiKP | 18 53 35.0 | +0.4 |
| | comp=Z,3.9nm,1.0s | | | | | | |
| FETA | Feichten | 151.13 | 352 | *e*PKP | PKiKP | 18 53 34.8 | -0.2 |
| | comp=Z,4.9nm,1.0s | | | | | | |
| ABTA | Abfaltersbach | 151.13 | 350 | *e*PKP | PKPbc | 18 53 34.1 | -0.3 |
| | comp=Z,4.8nm,0.6s | | | | | | |
| ESDC | Sonseca Array | 157.36 | 19 | PKPab | PKPab | 18 54 09.6 | +0.6 |
| | comp=Z,0.3nm,0.7s,baz=327,slow=3.8,SNR=6.5 | | | | | | |

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*TEH **02** 18:40:18.3, 34°.65N×46°.24E, h10$^{km}$, ML2.6*
*ISN **02** 18:40:19.8±1.2, 34°.61N×46°.25E, h36$^{km}$±24$^{km}$, ML2.5*
**ISC 02 18:40:18.5**±2.1**, 34°.65N**±0°.05×**46°.2E**±0°.1**, h1**$^{km}$±22$^{km}$**, n5,** σ**0$^{s}$29**/8**, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IDHR | Dehrash | 0.17 | 71 | Pg | Pg | 18 40 21.7 | -0.1 |
| IDHR | | | | Sg | Sg | 18 40 24.3 | +0.3 |
| IGHG | Ghaleghazi | 0.44 | 135 | Pg | Pg | 18 40 26.9 | -0.1 |
| ILBA | Ilam Banvizeh | 1.02 | 179 | Pg | Pg | 18 40 38.1 | 0.0 |
| IBDR | Badra | 1.55 | 188 | *e*Pg | Pn | 18 40 47.0 | -0.2 |
| | baz=10.0 | | | | | | |
| IBDR | | | | *e*Sg | Sb | 18 41 08.0 | 0.0 |
| IBDR | | | | AML | AML | 18 41 13.6 | |
| | comp=E,149nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 18 41 15.1 | |
| | comp=N,42nm,0.4s | | | | | | |
| IKRK | Kirkuk | 1.70 | 297 | *e*Pn | Pn | 18 40 49.0 | -0.3 |
| IKRK | | | | *e*Sn | Sn | 18 41 12.0 | +0.4 |

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*KRSC **02** 18:52:11.8±2.1, 48°.80N×154°.68E, h253$^{km}$±22$^{km}$, Ml4.4*
*MOS **02** 18:52:16.1±1.1, 49°.61N×153°.43E, h235$^{km}$, mb3.9/4, Error ellipse: s-maj=13.6km s-min=5.4km az=63.6*
*NEIC **02** 18:52:16.7±1.4, 49°.67N±0°.07×153°.4E±0°.1, h223$^{km}$±7$^{km}$, mb4.1/42, Error ellipse: s-maj=13.5km s-min=10.0km az=109.0*
*IDC **02** 18:52:19.5±2.5, 49°.69N×153°.31E, h245$^{km}$±24$^{km}$, mb3.3/16, mbtmp3.9/22, Error ellipse: s-maj=14.8km s-min=10.7km az=123.0*
**ISC 02 18:52:17.9**±0.5**, 49°.59N**±0°.07×**153°.53E**±0°.06**, h250**$^{km}$**, n134,** σ**2$^{s}$18**/141**, mb3.8**/35**, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 1.99 | 56 | *e*P | Pn | 18 52 57.3 | -2.8 |
| SKR | | | | *e*S | S | 18 53 29.1 | -4.5 |
| SKR | Severo-Kuril's | 1.99 | 56 | *e*PN | Pn | 18 52 57.5 | -2.6 |
| SKR | | | | *e*S | S | 18 53 29.2 | -4.3 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,462nm,0.6s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,136nm,0.6s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,225nm,0.5s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,500nm,13.0s | | | | | | |
| KDTR | Khodutka, Kamc | 3.65 | 51 | *e*P | Pn | 18 53 14.2 | -3.2 |
| KDTR | | | | *e*S | S | 18 53 56.9 | -7.8 |
| KDTR | Khodutka, Kamc | 3.65 | 51 | PN | Pn | 18 53 14.2 | -3.2 |
| ASAK | Asacha | 3.93 | 43 | *e*P | Pn | 18 53 19.6 | -1.2 |
| ASAK | Asacha | 3.93 | 43 | PN | Pn | 18 53 19.6 | -1.2 |
| APC | Apacha | 4.04 | 33 | *e*P | Pn | 18 53 20.4 | -1.6 |
| APC | Apacha | 4.04 | 33 | PN | Pn | 18 53 20.4 | -1.6 |
| GRL | Gorelyy | 4.12 | 42 | *e*P | Pn | 18 53 22.0 | -1.2 |
| GRL | Gorelyy | 4.12 | 42 | PN | Pn | 18 53 21.9 | -1.2 |
| MTVR | Mutnovka | 4.12 | 44 | *e*P | Pn | 18 53 21.4 | -1.8 |
| MTVR | | | | *e*S | S | 18 54 09.8 | -5.2 |
| MTVR | Mutnovka | 4.12 | 44 | PN | Pn | 18 53 21.3 | -1.8 |
| MTVR | | | | S | S | 18 54 09.8 | -5.2 |
| KRMR | Karymshinskiy | 4.34 | 40 | *e*S | S | 18 54 17.8 | -1.7 |
| PET | Petropavlovsk | 4.71 | 41 | Pn | Pn | 18 53 28.1 | -1.8 |
| PET | Petropavlovsk | 4.71 | 41 | *e*P | Pn | 18 53 29.3 | -0.6 |
| PET | Petropavlovsk | 4.71 | 41 | PN | Pn | 18 53 29.3 | -0.6 |
| DALK | Dalny | 4.75 | 42 | *e*P | Pn | 18 53 29.2 | -1.3 |
| DALK | Dalny | 4.75 | 42 | PN | Pn | 18 53 29.1 | -1.3 |
| KOK | Koryaka | 4.89 | 39 | *e*P | Pn | 18 53 31.8 | -0.5 |
| KOK | Koryaka | 4.89 | 39 | PN | Pn | 18 53 31.8 | -0.5 |
| UGLR | Uglovaya | 4.91 | 40 | *e*P | Pn | 18 53 31.7 | -0.8 |
| UGLR | Uglovaya | 4.91 | 40 | PN | Pn | 18 53 31.7 | -0.8 |
| AVH | Avacha | 4.91 | 40 | *e*P | Pn | 18 53 32.0 | -0.6 |
| AVH | Avacha | 4.91 | 40 | PN | Pn | 18 53 31.9 | -0.6 |
| SMAR | Somma | 4.94 | 40 | *e*P | Pn | 18 53 32.1 | -0.8 |
| SMAR | Somma | 4.94 | 40 | PN | Pn | 18 53 32.1 | -0.8 |
| GNL | Ganaly | 4.94 | 32 | *e*P | Pn | 18 53 32.0 | -1.0 |
| GNL | Ganaly | 4.94 | 32 | PN | Pn | 18 53 31.9 | -1.0 |
| KRX | Arik | 4.95 | 38 | *e*P | Pn | 18 53 32.8 | -0.2 |
| KRX | Arik | 4.95 | 38 | PN | Pn | 18 53 32.8 | -0.2 |
| KRER | Koryakskii | 4.95 | 39 | *e*P | Pn | 18 53 33.1 | +0.1 |
| KRER | Koryakskii | 4.95 | 39 | PN | Pn | 18 53 33.1 | +0.1 |
| SPN | Mys Shipunski | 5.37 | 47 | *e*P | Pn | 18 53 34.9 | -3.2 |
| SPN | Mys Shipunski | 5.37 | 47 | PN | Pn | 18 53 34.8 | -3.2 |
| KUR | Kuril'sk | 5.81 | 224 | PN | Pn | 18 53 43.2 | -0.4 |
| KUR | | | | *e*S | S | 18 54 52.0 | -0.1 |
| KUR | | | | smax | smax | | |
| | comp=E,34nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,12nm,0.2s | | | | | | |
| SHO | Shikotan | 7.34 | 221 | *e*P | Pn | 18 53 58.4 | -4.5 |
| SHO | | | | *e*S | S | 18 55 17.0 | -10 |
| SHO | Shikotan | 7.34 | 221 | PN | Pn | 18 53 58.3 | -4.5 |
| BZGR | Bezymyannyi-Gr | 7.70 | 32 | *e*P | Pn | 18 54 06.6 | -0.6 |
| BZGR | Bezymyannyi-Gr | 7.70 | 32 | PN | Pn | 18 54 06.6 | -0.6 |
| KBTR | Krutoberegovo | 8.68 | 37 | *e*P | Pn | 18 54 17.4 | -2.1 |
| KBTR | Krutoberegovo | 8.68 | 37 | PN | Pn | 18 54 17.4 | -2.1 |
| JKA | Kamikawa-asahi | 9.27 | 238 | | Pn | 18 54 26.2 | -1.0 |
| ASAJ | Asahikawa | 9.27 | 238 | P | Pn | 18 54 27.9 | +0.7 |
| | comp=N,6.1nm,0.6s,baz=75,slow=14,SNR=21 | | | | | | |
| ASAJ | Asahikawa | 9.27 | 238 | PN | Pn | 18 54 26.2 | -1.0 |
| BKI | Bering | 9.45 | 49 | *e*S | S | 18 56 02.4 | -13 |
| ERM | Erimo | 10.47 | 228 | Pn | Pn | 18 54 39.8 | -2.5 |
| ERM | Erimo | 10.47 | 228 | PN | Pn | 18 54 39.8 | -2.5 |
| JTM | Tenmabayashi | 12.43 | 230 | Pn | Pn | 18 55 03.4 | -3.2 |
| SEY | Seymchan | 13.39 | 358 | P | P | 18 55 19.4 | -0.2 |
| | comp=N,1.4nm,0.4s,baz=170,slow=13,SNR=4.9 | | | | | | |
| KLR | Kul'dur | 14.18 | 277 | P | P | 18 55 28.9 | +0.4 |
| | comp=N,2.0nm,0.7s,baz=76,slow=12,SNR=5.3 | | | | | | |
| JMM | Marumori | 14.88 | 223 | Pn | P | 18 55 32.9 | -3.3 |
| USA0B | Ussuriysk Arra | 15.66 | 258 | P | P | 18 55 40.2 | -4.6 |
| USA0B | | | | IAmb | IAmb | 18 56 11.0 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| USA0B | Ussuriysk Arra | 15.66 | 258 | P | P | 18 55 40.2 | -4.6 |
| USA0B | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 15.66 | 258 | P | P | 18 55 39.5 | -5.3 |
| USRK | Ussuriysk Ar. | 15.66 | 258 | P | Pn | 18 55 44.9 | -0.9 |
| | comp=Z,2.2nm,0.7s,baz=66,slow=14,SNR=4.7 | | | | | | |
| MDJ | Mudanjiang | 17.01 | 262 | P | Pn | 18 56 04.0 | +2.4 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| MDJ | Mudanjiang | 17.01 | 262 | | Pn | 18 55 58.4 | -3.3 |
| MDJ | | | | IAmb | IAmb | 18 56 05.5 | |
| | comp=Z,13nm,0.8s | | | | | | |
| MJB9 | Matsu-Tunnel | 17.14 | 226 | | P | 18 55 57.8 | -3.3 |
| MJB9 | | | | IAmb | IAmb | 18 56 06.3 | |
| | comp=Z,6.7nm,0.6s | | | | | | |
| MAJO | Matsushiro | 17.14 | 226 | | P | 18 55 58.5 | -2.6 |
| MAJO | | | | IAmb | IAmb | 18 56 06.3 | |
| | comp=Z,6.9nm,0.6s | | | | | | |
| MAJO | Matsushiro | 17.14 | 226 | P | P | 18 55 58.5 | -2.6 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| MJAR | Matsushiro Arr | 17.14 | 226 | P | Pn | 18 56 02.6 | -0.7 |
| | comp=Z,3.2nm,0.5s,baz=20,slow=12,SNR=9.7 | | | | | | |
| YAK | Yakutsk | 18.15 | 322 | | P | 18 56 08.7 | -3.0 |
| YAK | Yakutsk | 18.15 | 322 | P | Pn | 18 56 11.6 | -3.3 |
| | comp=Z,14nm,0.5s,baz=123,slow=2.1,SNR=5.5 | | | | | | |
| YAK | Yakutsk | 18.15 | 322 | *e*P | P | 18 56 10.1 | -1.6 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,2.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,3.0nm,1.0s | | | | | | |
| KIWB | Kanaga Island | 18.65 | 72 | P | P | 18 56 16.8 | -0.4 |
| INU | Inuyama | 18.67 | 227 | P | Pn | 18 56 18.4 | -2.8 |
| INU | | | | IAmb | IAmb | 18 56 19.5 | |
| | comp=Z,10nm,0.9s | | | | | | |
| KSRS | Korea Array | 22.06 | 246 | P | P | 18 56 53.9 | +1.7 |
| | comp=Z,2.0nm,0.7s,baz=44,slow=9.8,SNR=9.6 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| TIXI | Tiksi | 24.84 | 342 | P | P | 18 57 16.5 | -0.5 |
| TIXI | | | | IAmb | IAmb | 18 57 22.4 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| TIXI | Tiksi | 24.84 | 342 | P | P | 18 57 16.5 | -0.5 |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| H18K | Honhosa River | 29.33 | 40 | P | P | 18 57 58.7 | +1.5 |
| G18K | Tagagawik | 29.34 | 38 | P | P | 18 57 58.8 | +1.6 |
| G18K | | | | IAmb | IAmb | 18 57 58.9 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| M17K | Holitna River | 29.44 | 48 | P | P | 18 58 00.5 | +2.4 |
| C19K | Lookout Ridge | 29.74 | 32 | P | P | 18 58 02.4 | +1.7 |
| F19K | Shaleruckik Mo | 29.86 | 37 | P | P | 18 58 02.6 | +1.0 |
| F19K | | | | IAmb | IAmb | 18 58 36.7 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| D19K | Kuna River | 30.09 | 33 | P | P | 18 58 05.4 | +1.6 |
| D19K | | | | IAmb | IAmb | 18 58 42.7 | |
| | comp=Z,14nm,1.4s | | | | | | |
| H19K | Roundabout Mou | 30.18 | 39 | P | P | 18 58 06.6 | +2.1 |
| H19K | | | | IAmb | IAmb | 18 58 16.2 | |
| | comp=Z,9.9nm,1.5s | | | | | | |
| E19K | Redstone River | 30.19 | 36 | P | P | 18 58 06.2 | +1.6 |
| E19K | | | | IAmb | IAmb | 18 58 07.6 | |
| | comp=Z,3.6nm,1.2s | | | | | | |
| J20K | Nowinta River | 31.04 | 42 | P | P | 18 58 13.6 | +1.5 |
| J20K | | | | IAmb | IAmb | 18 58 44.5 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| IMAR | Indian Mountai | 31.34 | 39 | P | P | 18 58 15.6 | +0.9 |
| G21K | Allakaket | 31.49 | 38 | P | P | 18 58 18.8 | +2.8 |
| B21K | Ikpikpuk River | 31.57 | 32 | P | P | 18 58 17.9 | +1.3 |
| B21K | | | | IAmb | IAmb | 18 58 21.1 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| H21K | Melozitna Rive | 31.70 | 39 | P | P | 18 58 19.4 | +1.6 |
| MLY | Manley | 32.54 | 41 | P | P | 18 58 25.2 | 0.0 |
| CNPM | China Poot | 32.61 | 51 | P | P | 18 58 26.0 | +0.2 |
| G23K | Bananza Creek | 32.89 | 38 | P | P | 18 58 28.1 | -0.1 |
| ILAR | Eielson Array | 34.19 | 41 | P | P | 18 58 41.5 | +2.2 |
| | comp=Z,0.4nm,0.5s,baz=274,slow=7.7,SNR=5.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| D25K | Kavik River | 34.41 | 33 | P | P | 18 58 42.5 | +1.3 |
| D25K | | | | IAmb | IAmb | 18 58 45.2 | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| L27K | Beaver Creek, | 36.59 | 44 | P | P | 18 59 00.9 | +1.0 |
| BCAR | Beaver Creek A | 36.61 | 44 | P | P | 18 59 01.2 | +1.2 |
| I30M | Mount Dempster | 38.56 | 39 | P | P | 18 59 19.1 | +2.7 |
| MK31 | Makanchi Array | 45.93 | 295 | P | P | 19 00 15.5 | -0.2 |
| MK31 | Makanchi Array | 45.93 | 295 | P | P | 19 00 15.5 | -0.2 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 45.93 | 295 | P | P | 19 00 15.3 | -0.3 |
| MKAR | Makanchi Array | 45.93 | 295 | P | P | 19 00 15.9 | +0.2 |
| | comp=Z,1.1nm,0.7s,baz=64,slow=8.2,SNR=10 | | | | | | |
| MKAR | | | | PcP | PcP | 19 01 49.3 | +1.3 |
| | comp=Z,0.2nm,0.4s,baz=49,slow=3.3,SNR=4.2 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| KURK | Kurchatov | 46.07 | 302 | P | P | 19 00 17.3 | +0.7 |
| KURK | | | | | | 19 01 49.9 | |
| KURBB | Kurchatov Arra | 46.16 | 301 | P | P | 19 00 17.2 | -0.1 |
| | comp=Z,0.6nm,0.7s,baz=67,slow=8.4,SNR=4.1 | | | | | | |
| KURBB | | | | PcP | PcP | 19 01 49.9 | +1.2 |
| | comp=Z,0.4nm,0.6s,baz=77,slow=3.4,SNR=3.6 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| CHTO | Chiang Mai | 53.09 | 255 | P | P | 19 01 10.0 | +0.2 |
| CHTO | | | | IAmb | IAmb | 19 01 13.7 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| CHTO | Chiang Mai | 53.09 | 255 | P | P | 19 01 10.0 | +0.2 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| ARU | Arti | 53.13 | 316 | P | P | 19 01 09.2 | -0.4 |
| CMAR | Chiang Mai Arr | 53.35 | 255 | P | P | 19 01 14.2 | +2.5 |
| | comp=Z,0.8nm,0.4s,baz=32,slow=7.9,SNR=7.1 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| KEV | Kevo | 54.76 | 340 | P | P | 19 01 23.1 | +2.0 |
| KEV | Kevo | 54.76 | 340 | P | P | 19 01 23.1 | +2.0 |
| KEV | | | | pmax | pmax | | |
| | comp=Z,38nm,1.5s | | | | | | |
| ARCES | ARCESS Array B | 55.26 | 340 | P | P | 19 01 25.7 | +0.9 |
| | comp=Z,3.7nm,1.0s,baz=39,slow=7.1,SNR=3.7 | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| FAKI | Fak Fak | 55.45 | 206 | P | P | 19 01 28.6 | +1.9 |
| ABKAR | Akbulak array | 56.84 | 309 | P | P | 19 01 36.2 | 0.0 |
| KVN | Kaiserville | 60.61 | 63 | P | P | 19 02 05.2 | +2.8 |
| KVN | Kaiserville | 60.61 | 63 | P | P | 19 02 05.2 | +2.8 |
| KVN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| NVAR | Mina Array Bea | 60.90 | 64 | P | P | 19 02 07.2 | +2.8 |
| | comp=Z,0.5nm,0.5s,baz=310,slow=6.1,SNR=4.4 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| FINES | FINESS Array B | 61.59 | 334 | P | P | 19 02 09.1 | +0.7 |
| | comp=Z,0.6nm,0.4s,baz=29,slow=8.4,SNR=10 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| DUG | Dugway, Tooele | 62.85 | 59 | P | P | 19 02 18.4 | +1.1 |
| DUG | | | | IAmb | IAmb | 19 02 19.4 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| DUG | Dugway, Tooele | 62.85 | 59 | P | P | 19 02 18.4 | +1.1 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| PDAR | Pinedale Array | 62.87 | 55 | P | P | 19 02 19.0 | +1.5 |
| PDAR | Pinedale Array | 62.87 | 55 | P | P | 19 02 20.0 | +2.5 |
| | comp=Z,0.4nm,0.6s,baz=322,slow=2.3,SNR=5.4 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| NB201 | NORSAR Array S | 65.60 | 341 | P | P | 19 02 35.9 | +1.3 |
| NOA | NORSAR Array B | 65.63 | 341 | P | P | 19 02 35.9 | +1.1 |
| | comp=Z,0.4nm,0.6s,baz=27,slow=6.5,SNR=4.1 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| HFS | Hagfors | 65.89 | 339 | P | P | 19 02 38.3 | +1.9 |
| | comp=Z,0.5nm,0.4s,baz=42,slow=4.6,SNR=7.4 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| LIFNC | LIFOU | 71.11 | 166 | P | P | 19 03 11.2 | +2.2 |
| WB0 | Warramunga Arr | 71.11 | 199 | P | P | 19 03 10.6 | +1.6 |
| WB0 | | | | IAmb | IAmb | 19 03 32.0 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 71.27 | 199 | P | P | 19 03 11.4 | +1.5 |
| WR0 | | | | IAmb | IAmb | 19 03 43.4 | |
| | comp=Z,9.1nm,1.3s | | | | | | |
| WB2 | Warramunga Arr | 71.29 | 199 | P | P | 19 03 11.5 | +1.4 |
| WB2 | | | | IAmb | IAmb | 19 03 30.3 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 71.29 | 199 | P | P | 19 03 11.4 | +1.3 |
| WRA | Warramunga Arr | 71.29 | 199 | P | P | 19 03 11.8 | +1.7 |
| | comp=Z,0.8nm,0.6s,baz=20,slow=6.8,SNR=13 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 71.29 | 199 | P | P | 19 03 11.4 | +1.3 |
| FITZ | Fitzroy Crossi | 71.78 | 208 | P | P | 19 03 14.0 | +1.0 |
| EKA | Eskdalemuir Ar | 73.64 | 346 | P | P | 19 03 24.8 | +1.2 |
| | comp=Z,0.2nm,0.3s,baz=18,slow=6.1,SNR=4.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| AS31 | Alice Springs | 74.99 | 199 | P | P | 19 03 34.2 | +2.5 |
| AS31 | | | | IAmb | IAmb | 19 03 56.6 | |
| | comp=Z,4.3nm,1.5s | | | | | | |
| ASAR | Alice Springs | 74.99 | 199 | P | P | 19 03 33.7 | +2.0 |
| ASAR | Alice Springs | 74.99 | 199 | P | P | 19 03 34.2 | +2.6 |
| | comp=Z,1.0nm,0.6s,baz=11,slow=5.4,SNR=31 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 74.99 | 199 | P | P | 19 03 33.7 | +2.0 |
| TX31 | Lajitas Ar. Si | 75.87 | 61 | P | P | 19 03 38.7 | +1.8 |
| TX31 | | | | IAmb | IAmb | 19 03 40.4 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 75.87 | 61 | P | P | 19 03 38.5 | +1.6 |
| TXAR | Lajitas Array | 75.87 | 61 | P | P | 19 03 39.6 | +2.8 |
| | comp=Z,1.0nm,0.6s,baz=295,slow=4.3,SNR=16 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 75.87 | 61 | P | P | 19 03 38.5 | +1.6 |
| MMAI | Mount Meron Ar | 81.14 | 311 | P | P | 19 04 07.4 | +1.9 |
| | comp=Z,2.8nm,0.7s,baz=32,slow=8.5,SNR=2.4 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |

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*IDC **02** 18:59:21.9±12.0, 32°.50N×69°.25E, h191$^{km}$±114$^{km}$, mb3.2/8, mbtmp3.6/11, MS3.2/2, Error ellipse: s-maj=58.3km s-min=20.4km az=26.0*
**ISC 02 18:59:00.5**±1.3**, 32°.0N**±0°.2×**69°.0E**±0°.2**, h10**$^{km}$**, n12,** σ**0$^{s}$91**/11**, mb3.6**/8**, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MKAR | Makanchi Array | 17.91 | 31 | P | P | 19 03 11.3 | +1.0 |
| | 0.6nm,0.6s,baz=217,slow=11,SNR=6.2 | | | | | | |
| MKAR | | | | LR | LR | 19 10 57.3 | |
| | comp=Z,28nm,20.8s,baz=226,slow=40 | | | | | | |
| KURBB | Kurchatov Arra | 19.86 | 18 | P | Pn | 19 03 33.3 | +0.1 |
| | 0.5nm,0.6s,baz=206,slow=9.7,SNR=3.6 | | | | | | |
| AKTO | Aktyubinsk | 20.11 | 339 | P | Pn | 19 03 37.1 | +0.9 |
| | 0.9nm,0.6s,baz=170,slow=8.5,SNR=4.8 | | | | | | |
| ZALV | Zalesovo Beam | 24.65 | 23 | P | P | 19 04 20.4 | -0.7 |
| | 0.3nm,0.3s,baz=212,slow=8.8,SNR=3.3 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| FINES | FINESS Array B | 40.38 | 330 | P | P | 19 06 38.6 | +0.4 |
| | 0.9nm,0.9s,baz=100,slow=7.6,SNR=4.2 | | | | | | |
| | 0.9nm,0.9s | | | | | | |
| HFS | Hagfors | 45.66 | 325 | P | P | 19 07 21.6 | +0.6 |
| | 1.1nm,0.7s,baz=90,slow=5.8,SNR=4.6 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| NOA | NORSAR Array B | 47.04 | 326 | P | P | 19 07 31.7 | -0.2 |
| | 0.3nm,0.5s,baz=104,slow=7.7,SNR=3.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| JNU | Nakatsue | 51.45 | 71 | LR | LR | 19 35 09.3 | |
| | comp=Z,60nm,18.9s,baz=202,slow=42 | | | | | | |
| SPITS | Spitsbergen Ar | 51.47 | 348 | P | P | 19 08 03.7 | -1.9 |
| | 1.8nm,0.4s,baz=88,slow=7.8,SNR=4.4 | | | | | | |
| | 1.8nm,0.4s | | | | | | |
| ESDC | Sonseca Array | 58.15 | 300 | P | P | 19 08 55.1 | +0.4 |
| | 0.3nm,0.5s,baz=65,slow=7.2,SNR=2.3 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 81.11 | 120 | P | P | 19 11 16.6 | +0.2 |
| | 0.7nm,0.8s,baz=306,slow=5.3,SNR=7.4 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| ASAR | Alice Springs | 83.13 | 123 | P | P | 19 11 27.0 | +0.1 |
| | 0.4nm,0.8s,baz=310,slow=5.9,SNR=4.8 | | | | | | |
| | 0.4nm,0.8s | | | | | | |

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*IDC **02** 19:07:17.2±0.5, 8°.26S×116°.49E, h0$^{km}$, mb4.5/18, mbtmp4.5/19, ML4.7/1, MS3.7/36, Error ellipse: s-maj=18.9km s-min=11.3km az=90.0*
*GCMT **02** 19:07:21.6±0.4, 8°.36S±0°.02×116°.70E±0°.04, h14$^{km}$±1$^{km}$, MW4.8/57, Moment Tensor Solution. s19,c25; s57,c81; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.07±.12; $M_{\theta\theta}$-1.13±.07; $M_{\phi\phi}$0.05±.09; $M_{r\theta}$-0.39±.16; $M_{\theta\phi}$0.81±.06; $M_{\phi r}$1.62±.32; Best double couple: $M_0$2.14600×$10^{16}$ NP1:$\phi_s$331.00000°, δ74.00000°, λ118.00000°. NP2: $\phi_s$89.00000°, δ32.00000°, λ32.00000°. Principal axes: T 2.2700, Plg53.0000°, Azm275.0000°; N -0.2500, Plg27.0000°, Azm142.0000°; P -2.0210, Plg23.0000°, Azm40.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA **02** 19:07:21.1±0.3, 8°S±3°×11°7E±°, h11$^{km}$±3$^{km}$, M5.0/20, mb5.0/19, mB5.4/7, MLv5.1/20, Mw(mB)4.8/7, MwMwp4.6/1, Mwp5.0/1*
*NEIC **02** 19:07:23.6±1.7, 8°.21S±0°.08×116°.63E±0°.06, h35$^{km}$±2$^{km}$, mb4.9/52, Error ellipse: s-maj=11.5km s-min=8.9km az=174.0*
**ISC 02 19:07:19.9**±0.3**, 8°.29S**±0°.04×**116°.63E**±0°.04**, h10**$^{km}$**, n225,** σ**1$^{s}$80**/211**, mb4.8**/60**, MS3.9**/46**, 4C-1D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.51 | 151 | P | Pb | 19 07 31.8 | +0.7 |
| TWSI | | | | S | Sb | 19 07 39.6 | +1.0 |
| PLAI | Plampang | 1.25 | 116 | P | Pb | 19 07 45.0 | +1.3 |
| PLAI | Plampang | 1.25 | 116 | P | Pn | 19 07 44.7 | +1.1 |
| PLAI | | | | S | Sn | 19 08 02.1 | +1.6 |
| SRBI | Singaraja | 1.42 | 278 | P | Pn | 19 07 45.8 | 0.0 |
| SRBI | | | | S | Sg | 19 08 06.4 | +0.8 |
| DNP | Denpasar | 1.46 | 254 | P | Pb | 19 07 48.0 | +0.8 |
| JAGI | Jajag, Banyuwa | 2.46 | 266 | P | Pn | 19 08 00.7 | +0.5 |
| JAGI | Jajag, Banyuwa | 2.46 | 266 | Pn | Pn | 19 08 00.3 | +0.1 |
| JAGI | Jajag, Banyuwa | 2.46 | 266 | P | Pn | 19 08 00.2 | +0.1 |
| GRJI | Gresik | 4.33 | 288 | P | Pn | 19 08 27.0 | +1.0 |
| BASI | Baing, Sumba | 4.34 | 117 | P | Pn | 19 08 29.4 | +3.3 |
| BSSI | Bau Bau, Buton | 4.38 | 61 | P | Pn | 19 08 26.7 | +0.1 |
| KAPI | Kappang | 4.49 | 44 | Pn | Pn | 19 08 27.7 | -0.4 |
| | 38nm,0.3s,baz=197,slow=7.0,SNR=90 | | | | | | |
| KAPI | | | | Sn | Sn | 19 09 18.5 | -1.9 |
| | 48nm,0.3s,baz=204,slow=20,SNR=11 | | | | | | |
| KAPI | | | | Lg | Lg | 19 09 40.7 | |
| | 32nm,0.3s,baz=311,slow=20,SNR=5.0 | | | | | | |
| | 107nm,0.2s | | | | | | |
| BWJI | Bawean | 4.62 | 301 | P | Pn | 19 08 30.9 | +0.9 |
| PWJI | Pagerwojo | 4.79 | 273 | P | Pn | 19 08 32.6 | +0.4 |
| BNSI | Bone | 5.18 | 42 | P | Pn | 19 08 39.0 | +1.4 |
| MMRI | Maumere | 5.56 | 94 | P | Pn | 19 08 43.5 | +0.7 |
| MMRI | Maumere | 5.56 | 94 | Pn | Pn | 19 08 43.1 | +0.3 |
| MMRI | Maumere | 5.56 | 94 | P | Pn | 19 08 43.2 | +0.4 |
| UGM | Wanagama | 6.06 | 273 | P | Pn | 19 08 51.7 | +2.0 |
| UGM | Wanagama | 6.06 | 273 | Pn | Pn | 19 08 51.0 | +1.3 |
| UGM | Wanagama | 6.06 | 273 | P | Pn | 19 08 50.8 | +1.1 |
| SMRI | Semarang | 6.26 | 281 | Pn | Pn | 19 08 50.3 | -2.2 |
| BBSI | Bau Bau | 6.52 | 65 | P | Pn | 19 08 58.0 | +2.0 |
| | 126nm,0.7s,1μm0.4nm | | | | | | |
| BATI | Baumata | 7.20 | 106 | P | Pn | 19 09 07.2 | +1.8 |
| | 91nm,0.5s,2μm0.5nm | | | | | | |
| MTKI | Muara Teweh, K | 7.50 | 347 | P | Pn | 19 09 09.9 | +0.5 |
| | 66nm,0.7s,3μm0.4nm | | | | | | |
| SOEI | Soe | 7.68 | 102 | P | Pn | 19 09 14.4 | +2.3 |
| SOEI | Soe | 7.68 | 102 | Pn | Pn | 19 09 12.4 | +0.3 |
| SOEI | Soe | 7.68 | 102 | P | Pn | 19 09 14.0 | +1.9 |
| | 110nm,0.7s,2μm0.7nm | | | | | | |
| BBJI | Bungbulang | 8.94 | 275 | P | Pn | 19 09 30.8 | +1.5 |
| MPSI | Mapaga | 9.16 | 21 | P | Pn | 19 09 33.9 | +1.6 |
| LUWI | Luwuk | 9.44 | 41 | | Pn | 19 09 33.7 | -2.5 |
| LUWI | Luwuk | 9.44 | 41 | P | Pn | 19 09 37.1 | +0.9 |
| CNJI | Cibinong | 9.46 | 275 | P | Pn | 19 09 38.6 | +2.2 |
| | 47nm,1.1s | | | | | | |
| NLAI | Namlea | 11.56 | 65 | P | Pn | 19 10 08.4 | +3.3 |
| KASI | Kota Agung | 12.36 | 282 | P | Pn | 19 10 18.8 | +2.8 |
| | 54nm,1.4s | | | | | | |
| FITZ | Fitzroy Crossi | 13.11 | 139 | Pn | Pn | 19 10 27.0 | +0.6 |
| MBWA | Marble Bar | 13.14 | 167 | | Pn | 19 10 25.1 | -1.7 |
| PSA00 | Pilbara Seismi | 13.57 | 167 | P | Pn | 19 10 33.8 | +1.2 |
| PSA00 | Pilbara Seismi | 13.57 | 167 | Pn | Pn | 19 10 30.1 | -2.5 |
| PSA00 | Pilbara Seismi | 13.57 | 167 | Pn | Pn | 19 10 30.1 | -2.5 |
| KNRA | Kununurra | 13.95 | 123 | Pn | Pn | 19 10 37.6 | -0.3 |
| GIRL | Giralia | 14.46 | 189 | P | Pn | 19 10 46.4 | +1.6 |
| GIRL | Giralia | 14.46 | 189 | Pn | Pn | 19 10 43.1 | -1.8 |
| SAUI | Saumlaki | 14.53 | 90 | Pn | Pn | 19 10 43.7 | -2.1 |
| MTN | Manton Dam | 14.96 | 109 | Pn | Pn | 19 10 48.0 | -3.6 |
| SWI | Sorong | 16.33 | 64 | P | Pn | 19 11 12.0 | +2.5 |
| | 48nm,1.4s | | | | | | |
| FAKI | Fak Fak | 16.43 | 72 | P | Pn | 19 11 11.2 | +0.4 |
| FAKI | Fak Fak | 16.43 | 72 | Pn | Pn | 19 11 10.3 | -0.5 |
| FAKI | Fak Fak | 16.43 | 72 | P | Pn | 19 11 10.1 | -0.7 |
| | 63nm,0.9s | | | | | | |
| DAV | Davao City (W) | 17.67 | 31 | LR | LR | 19 20 03.3 | |
| | comp=Z,312nm,18.6s,baz=204,slow=43 | | | | | | |
| MEEK | Meekatharra | 18.35 | 174 | P | P | 19 11 38.0 | +3.2 |
| WRKA | Warakurna | 20.04 | 148 | P | P | 19 11 55.1 | +1.8 |
| WB0 | Warramunga Arr | 20.64 | 125 | P | P | 19 12 00.1 | +0.1 |
| WB0 | | | | IAmb | IAmb | 19 12 09.9 | |
| | comp=Z,46nm,1.1s | | | | | | |
| MORW | Morawa | 20.68 | 181 | P | P | 19 12 02.4 | +2.2 |
| MORW | Morawa | 20.68 | 181 | P | P | 19 12 00.6 | +0.4 |
| MORW | | | | IAmb | IAmb | 19 12 08.3 | |

comp=Z,50nm,1.4s
**WRA Warramunga Arr 20.69 126** P **P** **19 12 00.9 +0.4**
**WRA Warramunga Arr 20.69 126** P **P** **19 12 00.1 -0.4**
comp=Z,11nm,0.8s,baz=300,slow=12,SNR=64
WRA S **S** **19 15 49.0 -2.7**
comp=Z,1.4nm,0.6s,baz=294,slow=20,SNR=5.6
WRA LR LR 19 20 50.2
comp=Z,307nm,21.5s,baz=18,slow=39
comp=Z,11nm,0.8s
**WRAB Tennant Creek 20.70 126** P **P** **19 12 00.7 +0.2**
WRAB IAmb IAmb 19 12 10.6
comp=Z,37nm,0.7s
**WB2 Warramunga Arr 20.70 126** P **P** **19 12 00.9 +0.3**
WB2 IAmb IAmb 19 12 10.5
comp=Z,32nm,0.7s
**WR0 Warramunga Arr 20.86 126** P **P** **19 12 02.5 +0.2**
WR0 IAmb IAmb 19 12 12.4
comp=Z,120nm,1.6s
**KULM Kulim 20.88 310** P **P** **19 12 01.2 -1.2**
**GSI Gunungsitoli 21.25 296** P **P** **19 12 09.7 +3.1**
GSI IAmb IAmb 19 12 14.7
comp=Z,62nm,1.4s
**BLDU Ballidu 22.22 180** P **P** **19 12 18.6 +1.9**
**AS31 Alice Springs 22.53 135** P **P** **19 12 20.5 +0.3**
**ASAR Alice Springs 22.53 135** P **P** **19 12 20.9 +0.6**
**ASAR Alice Springs 22.53 135** P **P** **19 12 19.2 -1.0**
comp=Z,13nm,1.0s,baz=313,slow=9.0,SNR=76
ASAR PcP **PcP** **19 16 13.6 -0.6**
comp=Z,0.5nm,0.6s,baz=315,slow=1.8,SNR=4.0
ASAR S **S** **19 16 25.5 -2.1**
comp=Z,0.7nm,0.6s,baz=339,slow=2.6,SNR=4.4
ASAR LR LR 19 21 14.8
comp=Z,238nm,20.0s,baz=306,slow=37
comp=Z,13nm,1.0s
**AS01 Alice Springs 22.57 135** P **P** **19 12 20.5 -0.1**
comp=Z,29nm,0.9s
**KLBR Kellerberrin 23.21 178** P **P** **19 12 30.1 +2.9**
**NWAO Narrogin (SRO) 24.53 179** P **P** **19 12 38.9 -0.8**
**NWAO Narrogin (SRO) 24.53 179** LR LR 19 24 01.3
comp=Z,196nm,18.1s,baz=36,slow=41
**FORT Forrest 24.80 156** P **P** **19 12 43.7 +1.5**
**FORT Forrest 24.80 156** P **P** **19 12 41.0 -1.2**
**QIS Mount Isa 25.33 121** P **P** **19 12 49.9 +2.7**
**OOD Oodnadatta 26.47 140** P **P** **19 12 58.4 +0.9**
**COEN Coen 26.64 105** P **P** **19 12 59.2 +0.1**
**COEN Coen 26.64 105** P **P** **19 12 58.9 -0.2**
**MULG Mulgathing 27.30 146** P **P** **19 13 05.5 +0.6**
**QIZ Qiongzhong 27.95 346** P **P** **19 13 11.8 +1.0**
QIZ S **S** **19 17 57.1 +2.2**
QIZ LR LR
comp=Z,160nm,18.4s
QIZ LR LR
comp=Z,300nm,14.9s
**LCRK Leigh Creek 29.90 140** P **P** **19 13 29.1 +1.1**
**PMG Port Moresby 30.18 94** LR LR 19 28 46.6
comp=Z,192nm,20.1s,baz=294,slow=42
**BBOO Buckleboo 30.32 146** P **P** **19 13 33.5 +1.7**
**BBOO Buckleboo 30.32 146** P **P** **19 13 31.9 +0.1**
**TWGBT Beinan 31.22 8** P **P** **19 13 42.9 +3.2**
**CM31 Chiang Mai Arr 31.79 327** P **P** **19 13 44.6 -0.2**
CM31 IAmb IAmb 19 13 48.3
comp=Z,39nm,1.4s
**CMAR Chiang Mai Arr 31.79 327** P **P** **19 13 46.0 +1.1**
**CMAR Chiang Mai Arr 31.79 327** LR LR 19 26 23.6
comp=Z,158nm,20.0s,baz=155,slow=36
**SLVN Son La 31.98 337** P **P** **19 13 47.8 +1.3**
**CHTO Chiang Mai 32.08 327** P **P** **19 13 45.4 -2.0**
CHTO IAmb IAmb 19 13 50.6
comp=Z,13nm,1.1s
**HTT Hallett 32.41 144** P **P** **19 13 51.8 +1.6**
**STKA Stephens Creek 33.01 139** P **P** **19 13 56.7 +1.2**
**STKA Stephens Creek 33.01 139** P **P** **19 13 55.5 +0.1**
comp=Z,3.8nm,0.6s,baz=305,slow=10,SNR=9.1
comp=Z,3.8nm,0.6s
**GUMO Guam 35.47 52** LR LR 19 29 02.3
comp=Z,54nm,21.5s,baz=220,slow=37
**CMSA Cobar Meteorol 35.59 135** P **P** **19 14 19.9 +2.1**
**MISM Misima Island 35.78 97** P **P** **19 14 21.1 +1.4**
**KMI Kunming 35.86 338** ⇑P **P** **19 14 23.1 +2.7**
KMI S **S** **19 20 00.0 +1.5**
KMI pmax pmax
comp=Z,30nm,1.1s
KMI LR LR
comp=Z,180nm,17.2s
KMI LR LR
comp=Z,220nm,18.5s
KMI LR LR
comp=Z,230nm,18.8s
**GYA Guiyang 35.87 345** P **P** **19 14 22.0 +1.7**
GYA S **S** **19 20 01.8 +3.4**
GYA pmax pmax
comp=Z,14nm,0.9s
GYA pmax pmax
comp=Z,91nm,3.1s
**ARPS Mount Arapiles 36.45 145** P **P** **19 14 26.9 +1.8**
comp=Z,26nm,1.1s
**PZH PanZhiHua 37.48 338** P **P** **19 14 36.6 +2.5**
PZH pmax pmax
comp=Z,6.0nm,0.9s
PZH pmax pmax
comp=Z,110nm,4.7s
**TNCH TengChong 37.52 332** ⇑P **P** **19 14 36.4 +1.9**
TNCH pP sP 19 14 40.8 +2.2
TNCH PP **PnPn** **19 16 03.4 +2.3**
TNCH S **S** **19 20 28.4 +4.6**
TNCH sS sS 19 20 32.1 +3.2
TNCH pmax pmax
comp=Z,27nm,1.5s
TNCH pmax pmax
comp=Z,67nm,2.7s
TNCH LR LR
comp=Z,200nm,16.0s
TNCH LR LR
comp=Z,170nm,10.2s
TNCH LR LR
comp=Z,220nm,18.1s
**PALK Pallekele 39.01 292** LR LR 19 30 41.0
comp=Z,108nm,19.8s,baz=223,slow=36
**YNG Young 39.02 136** P **P** **19 14 49.1 +2.1**
**TOO Toolangi 39.14 143** P **P** **19 14 49.8 +1.9**
**TOO Toolangi 39.14 143** P **P** **19 14 48.6 +0.7**
TOO IAmb IAmb 19 14 55.4
comp=Z,48nm,1.5s
**NJ2 Nanjing 40.16 3** *eP* **P** **19 14 57.9 +1.5**
NJ2 pmax pmax
comp=Z,4.0nm,0.5s
**CD2 Chengdu 40.88 343** P **P** **19 15 03.3 +0.9**
CD2 pP pP 19 15 06.4 +1.1
CD2 sP sP 19 15 08.0 +1.6
CD2 S **S** **19 21 17.0 +3.0**
CD2 pmax pmax
comp=Z,60nm,1.0s
CD2 pmax pmax
comp=Z,100nm,6.3s
CD2 LR LR
comp=Z,210nm,14.8s
CD2 LR LR
comp=Z,300nm,14.3s
CD2 LR LR
comp=Z,230nm,14.8s
**SHL Shillong 41.38 325** P **P** **19 15 06.2 -0.5**
**XAN Xi'an 42.72 351** P **P** **19 15 18.8 +1.4**
XAN pP sP 19 15 27.1 +5.6
XAN pmax pmax
comp=Z,16nm,0.9s
XAN LR LR
comp=Z,250nm,15.9s
XAN LR LR
comp=Z,290nm,17.8s
XAN LR LR
comp=Z,400nm,17.5s
**HNR Honiara 42.80 95** LR LR 19 33 54.0
comp=Z,1μm,20.0s,baz=223,slow=37
**JCJ Chichijima 43.02 34** P **P** **19 15 18.7 -1.2**
**JCJ Chichijima 43.02 34** P P 19 15 16.0 -3.9
comp=Z,21nm,0.8s,baz=239,slow=12,SNR=2.7
JCJ LR LR 19 30 59.6
comp=Z,57nm,21.6s,baz=252,slow=33
**JNU Nakatsue 43.35 18** P P 19 15 18.9 -3.7
comp=Z,2.6nm,0.8s,baz=195,slow=22,SNR=1.2
**LSA Lhasa 45.03 328** P **P** **19 15 38.4 +1.9**
LSA pmax pmax
comp=Z,8.0nm,1.0s
**LSA Lhasa 45.03 328** P **P** **19 15 38.6 +2.0**
**LZH Lanzhou 45.75 346** P **P** **19 15 43.3 +1.5**
LZH sP sP 19 15 52.2 +6.4
LZH pmax pmax
comp=Z,23nm,1.1s
LZH LR LR
comp=Z,170nm,12.5s
LZH LR LR
comp=Z,200nm,13.4s
LZH LR LR
comp=Z,180nm,15.6s
**KSAR Wonju Array Be 46.69 12** P **P** **19 15 48.8 -0.2**
**KSRS Korea Array 46.71 12** P **P** **19 15 48.1 -1.0**
comp=Z,3.3nm,0.9s,baz=190,slow=8.5,SNR=16
KSRS LR LR 19 36 33.9
comp=Z,36nm,20.3s,baz=225,slow=38
comp=Z,3.3nm,0.9s
**BJI Beijing 48.08 360** P **P** **19 16 00.4 +0.7**
BJI sP **sP** **19 16 06.9 +3.1**
BJI S **S** **19 22 57.2 -1.1**
BJI pmax pmax
comp=Z,5.0nm,1.1s
BJI pmax pmax
comp=Z,39nm,5.1s
BJI LR LR
comp=Z,100nm,17.5s
BJI LR LR
comp=Z,50nm,17.3s
**GOMU GeErMu 48.77 336** P **P** **19 16 07.0 +1.3**
GOMU pP pP 19 16 10.3 +1.7
GOMU PcP **PcP** **19 17 30.9 +0.3**
GOMU S **S** **19 23 12.7 +3.7**
GOMU pmax pmax
comp=Z,13nm,1.3s
GOMU pmax pmax
comp=Z,180nm,5.0s
GOMU LR LR
comp=Z,190nm,17.6s
GOMU LR LR
comp=Z,330nm,17.2s
**MAJO Matsushiro 48.98 23** P **P** **19 16 05.9 -0.9**
MAJO IAmb IAmb 19 16 13.1
comp=Z,9.4nm,0.9s
**MAJO Matsushiro 48.98 23** P **P** **19 16 06.8 0.0**
**MJAR Matsushiro Arr 48.98 23** P **P** **19 16 05.9 -0.9**
comp=Z,4.2nm,0.7s,baz=198,slow=7.5,SNR=10
MJAR LR LR 19 36 40.2
comp=Z,50nm,21.6s,baz=201,slow=36
comp=Z,4.2nm,0.7s
**MJB9 Matsu-Tunnel 48.98 23** IAmb IAmb 19 16 13.1
comp=Z,9.4nm,1.0s
**HHC Hu-ho-hao-te 49.11 355** *eP* **P** **19 16 11.6 +3.8**
HHC PP **PP** **19 18 05.1 +3.4**
HHC S **S** **19 23 15.6 +2.5**
HHC SS **SS** **19 26 41.5 -3.0**
HHC pmax pmax
comp=Z,18nm,0.7s
HHC LR LR
comp=Z,71nm,14.5s
HHC LR LR
comp=Z,140nm,16.8s
HHC LR LR
comp=Z,83nm,16.8s
**DZM Mont Dzumac 49.77 112** LR LR 19 37 18.3
comp=Z,68nm,21.0s,baz=248,slow=36
**GTA Gaotai 49.95 343** ⇓P **P** **19 16 16.8 +2.5**
GTA S **S** **19 23 25.8 +0.8**
GTA pmax pmax
comp=Z,13nm,1.6s
GTA LR LR
comp=Z,110nm,15.3s
GTA LR LR
comp=Z,98nm,16.4s
GTA LR LR
comp=Z,99nm,17.1s
**CN2 Changchun 52.45 8** *eP* **P** **19 16 34.5 +1.7**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**MDJ Mudanjiang 53.94 11** P **P** **19 16 44.0 +0.2**
MDJ pmax pmax
comp=Z,10.0nm,0.8s
**MDJ Mudanjiang 53.94 11** P **P** **19 16 43.9 +0.2**
**USA0B Ussuriysk Arra 54.06 14** IAmb IAmb 19 16 46.3
comp=Z,15nm,1.4s
**USRK Ussuriysk Ar. 54.06 14** P **P** **19 16 44.5 -0.2**
**USRK Ussuriysk Ar. 54.06 14** P **P** **19 16 44.1 -0.5**
comp=Z,3.5nm,0.6s,baz=172,slow=6.1,SNR=11
comp=Z,3.5nm,0.6s
**ULN Ulaanbaatar 56.54 352** **P** **19 17 01.0 -1.7**
ULN IAmb IAmb 19 17 04.6
comp=Z,9.7nm,1.0s
**SONM Songino Array 56.60 352** P **P** **19 17 02.3 -0.9**
SONM IAmb IAmb 19 17 05.0
comp=Z,10.0nm,1.0s
**SONM Songino Array 56.60 352** P **P** **19 17 02.5 -0.6**
comp=Z,7.2nm,0.8s,baz=170,slow=9.5,SNR=36
comp=Z,7.2nm,0.8s
**ASAJ Asahikawa 57.21 22** P **P** **19 17 07.1 -0.2**
comp=Z,13nm,0.7s,baz=244,slow=11,SNR=19
comp=Z,13nm,0.7s
**CASY Casey 58.06 183** P **P** **19 17 13.2 +0.2**
CASY IAmb IAmb 19 19 14.7
comp=Z,27nm,1.9s
**CASY Casey 58.06 183** P **P** **19 17 13.0 0.0**
**WMQ Urumqi 58.12 336** *eP* **P** **19 17 14.8 +1.0**
WMQ pmax pmax
comp=Z,28nm,0.9s
**KLR Kul'dur 58.79 12** P **P** **19 17 17.6 -0.6**
comp=Z,1.4nm,0.6s,baz=198,slow=6.8,SNR=5.3
KLR LR LR 19 44 53.8
comp=Z,42nm,20.4s,baz=191,slow=38
comp=Z,1.4nm,0.6s
**HEH HeiHe 59.05 8** *eP* **P** **19 17 20.4 +0.4**
HEH pmax pmax
comp=Z,27nm,1.2s
HEH pmax pmax
comp=Z,120nm,4.7s
**YSS Yuzh-Sakhalins 59.71 20** P **P** **19 17 24.3 -0.3**
**YSS Yuzh-Sakhalins 59.71 20** P **P** **19 17 25.2 +0.6**
**KSH Kashi 60.66 325** P **P** **19 17 30.0 -1.5**
KSH pmax pmax
comp=Z,3.0nm,1.0s
**SHLS Shalkode 61.34 330** *eP* **P** **19 17 32.8 -3.4**
comp=Z,6.8nm,1.2s,baz=330
**UZB Uzynbulak 61.56 329** *eP* **P** **19 17 35.5 -2.1**
baz=330
**SATY Saty 61.80 329** *eP* **P** **19 17 37.3 -2.0**
comp=Z,6.5nm,1.3s,baz=329
**URZ Urewera 61.83 129** LR LR 19 46 29.0
comp=Z,182nm,18.1s,baz=30,slow=38
**ZHN Zhinishke 61.87 329** *eP* **P** **19 17 37.6 -2.1**
baz=329
**KPKS Kokpek 61.96 330** *eP* **P** **19 17 38.0 -2.2**
baz=330
**ZSN Zaisan 62.23 336** *eP* **P** **19 17 40.3 -1.6**
comp=Z,7.1nm,1.2s,baz=336
**TNSS Tian-Shan 62.54 328** *eP* **P** **19 17 41.8 -2.8**
baz=328
**MDOK Medeo 62.58 328** *eP* **P** **19 17 42.2 -2.3**
baz=328
**MK31 Makanchi Array 62.78 334** IAmb IAmb 19 17 47.1
comp=Z,6.6nm,0.9s
**MKAR Makanchi Array 62.78 334** P **P** **19 17 44.2 -1.4**
**MKAR Makanchi Array 62.78 334** P **P** **19 17 44.0 -1.6**
comp=Z,6.7nm,1.0s,baz=146,slow=7.2,SNR=26
comp=Z,6.7nm,1.0s
**MAKZ Makanchi 62.92 334** P **P** **19 17 45.4 -1.2**
**MAKZ Makanchi 62.92 334** P **P** **19 17 45.0 -1.5**
**TDK Taldygorghan 63.21 331** *eP* **P** **19 17 46.4 -2.1**
comp=Z,11nm,1.0s,baz=331
**ARSB Arslanbob 63.56 325** P **P** **19 17 49.0 -2.0**
**AAK Ala-Archa 63.58 326** P **P** **19 17 48.3 -2.9**
**AAK Ala-Archa 63.58 326** LR LR 19 49 43.3
comp=Z,91nm,19.4s,baz=130,slow=40
**GAR Garm 63.71 321** IAmb IAmb 19 17 51.1
comp=Z,19nm,1.3s
**SGDS Sogindy 64.06 327** *eP* **P** **19 17 52.1 -2.1**
comp=Z,10nm,1.0s,baz=327
**BTLS Baital 65.44 328** *eP* **P** **19 18 00.9 -2.2**
baz=328
**DZA Taraz 65.51 325** *eP* **P** **19 18 01.0 -2.6**
baz=325
**CHM Chimkent 66.15 324** *eP* **P** **19 18 04.8 -3.0**
baz=324
**BRLS Borolday 66.45 324** *eP* **P** **19 18 06.4 -3.3**
baz=324
**KURBB Kurchatov Arra 67.31 335** P **P** **19 18 13.2 -1.7**
comp=Z,2.8nm,1.0s,baz=144,slow=6.6,SNR=11
comp=Z,2.8nm,1.0s
**KURK Kurchatov 67.34 335** P **P** **19 18 13.7 -1.5**
KURK IAmb IAmb 19 18 16.5
comp=Z,11nm,1.4s
**KURK Kurchatov 67.34 335** P **P** **19 18 14.0 -1.1**
**ZAA0 Zalesovo Array 67.56 340** IAmb IAmb 19 18 16.9
comp=Z,6.5nm,0.9s
**ZALV Zalesovo Beam 67.56 340** P **P** **19 18 14.3 -2.2**
**ZALV Zalesovo Beam 67.56 340** P **P** **19 18 14.4 -2.0**
comp=Z,5.6nm,0.7s,baz=141,slow=5.6,SNR=24
comp=Z,5.6nm,0.7s
**MAW Mawson 69.12 199** P **P** **19 18 25.0 -1.0**
comp=Z,7.0nm,0.9s,baz=33,slow=8.5,SNR=10.0
MAW LR LR 19 43 04.2
comp=Z,49nm,18.9s,baz=70,slow=31
comp=Z,7.0nm,0.9s
**YAK Yakutsk 70.83 6** P **P** **19 18 34.9 -1.7**
**YAK Yakutsk 70.83 6** LR LR 19 52 38.0
comp=Z,35nm,19.8s,baz=210,slow=38
**VNDA Vanda 73.06 171** P **P** **19 18 50.1 +0.3**
**VNDA Vanda 73.06 171** P **P** **19 18 49.5 -0.3**
comp=Z,3.0nm,1.0s,baz=300,slow=6.7,SNR=13
comp=Z,3.0nm,1.0s
**SBA Scott Base 74.08 170** P **P** **19 18 56.3 +0.5**
**ABKAR Akbulak array 75.64 326** P **P** **19 19 02.7 -2.5**
**ABKAR Akbulak array 75.64 326** IAmb IAmb 19 19 04.2
comp=Z,7.7nm,1.0s
**AKTO Aktyubinsk 77.32 326** LR LR 19 56 50.4
comp=Z,70nm,20.8s,baz=6.5,slow=38
**FURI Furi 79.51 281** LR LR 19 53 33.6
comp=Z,84nm,18.8s,baz=124,slow=35
**ARU Arti 80.11 331** LR LR 20 00 43.7
comp=Z,41nm,19.1s,baz=116,slow=40
**TIXI Tiksi 80.18 4** LR LR 19 58 18.7
comp=Z,35nm,18.8s,baz=214,slow=38
**QSPA South Pole Qui 81.71 180** P **P** **19 19 39.1 +0.5**
QSPA IAmb IAmb 19 19 43.8
comp=Z,12nm,1.1s
**QSPA South Pole Qui 81.71 180** P **P** **19 19 38.5 -0.1**
comp=Z,10nm,1.0s,baz=316,slow=1.0,SNR=13
comp=Z,10nm,1.0s
**GNI Garni 81.73 313** LR LR 20 01 58.5
comp=Z,19nm,18.0s,baz=117,slow=40
**LODK Lodwar 81.87 275** P **P** **19 19 39.3 -1.1**
LODK IAmb IAmb 19 19 41.3
comp=Z,20nm,1.9s
**BELG Belogornoye 84.02 325** LR LR 20 03 35.8
comp=Z,61nm,18.1s,baz=143,slow=40
**MBAR Mbarara 85.85 270** P **P** **19 19 59.2 -1.7**
MBAR IAmb IAmb 19 20 01.6
comp=Z,6.3nm,0.8s
**MBAR Mbarara 85.85 270** LR LR 19 54 21.6
comp=Z,72nm,18.1s,baz=60,slow=33
**LSZ Lusaka 86.36 255** P **P** **19 20 01.9 -1.4**
**EIL Elat 86.90 300** LR LR 20 00 06.4
comp=Z,60nm,20.2s,baz=69,slow=36
**MMAI Mount Meron Ar 87.18 304** LR LR 20 04 05.2
comp=Z,69nm,18.1s,baz=66,slow=39
**BOSA Boshof 87.29 242** P **P** **19 20 06.2 -1.4**
comp=Z,8.4nm,1.0s,baz=54,slow=3.7,SNR=7.6
BOSA LR LR 19 55 08.5
comp=Z,47nm,20.0s,baz=106,slow=33
comp=Z,8.4nm,1.0s
**LBTB Lobatse 87.48 245** LR LR 19 56 12.7
comp=Z,34nm,18.0s,baz=140,slow=34
**TROLL Troll, Antarti 89.40 196** ⇑P **P** **19 20 18.2 +1.4**
comp=Z,142nm,0.6s
**BRTR Keskin Array B 89.89 310** P **P** **19 20 16.7 -3.0**
comp=Z,1.2nm,0.9s,baz=112,slow=1.3,SNR=4.1
BRTR LR LR 20 05 36.4
comp=Z,28nm,19.3s,baz=110,slow=39
comp=Z,1.2nm,0.9s
**SNAA Sanae 91.05 196** P **P** **19 20 23.2 -1.2**
SNAA IAmb IAmb 19 20 27.2
comp=Z,9.5nm,1.1s
**SNAA Sanae 91.05 196** ⇑P **P** **19 20 24.8 +0.4**
comp=Z,113nm,1.0s
**SNAA Sanae 91.05 196** P **P** **19 20 24.0 -0.3**
comp=Z,8.2nm,1.1s,baz=62,slow=5.4,SNR=9.0
SNAA LR LR 19 55 48.6
comp=Z,79nm,19.9s,baz=73,slow=32
comp=Z,8.2nm,1.1s
**OBN Obninsk 91.09 326** LR LR 20 08 40.3
comp=Z,36nm,18.1s,baz=178,slow=40
**BELA Belgrano 2 92.50 186** IAmb IAmb 19 20 32.2
comp=Z,5.2nm,1.1s
**AKASG Malin Array Be 94.70 320** LR LR 20 09 23.3
comp=Z,21nm,21.0s,baz=86,slow=39
**MLR Muntele Rosu 96.32 315** LR LR 20 12 00.2
comp=Z,43nm,18.2s,baz=346,slow=40
**KDAK Kodiak Island 97.36 33** LR LR 20 06 25.8
comp=Z,26nm,18.5s,baz=261,slow=36
**FINES FINESS Array B 97.48 331** LR LR 20 10 11.6
comp=Z,59nm,18.2s,baz=90,slow=39
**ARCES ARCESS Array B 98.10 339** LR LR 20 10 40.4
comp=Z,46nm,19.5s,baz=83,slow=39
**TORD Torodi Ar. Bea 116.03 281** PKP **PKPdf** **19 26 00.7 -3.6**
comp=Z,1.1nm,0.5s,baz=359,slow=2.2,SNR=9.2
**NVAR Mina Array Bea 122.36 50** PKP **PKPdf** **19 26 12.8 -3.4**
comp=Z,0.3nm,0.5s,baz=304,slow=1.3,SNR=2.5
**PDAR Pinedale Array 126.97 42** PKP **PKPdf** **19 26 23.3 -1.6**
comp=Z,0.2nm,0.3s,baz=45,slow=12,SNR=2.3
**TXAR Lajitas Array 136.79 56** PKP **PKPdf** **19 26 41.2 -2.5**
comp=Z,0.1nm,0.5s,baz=312,slow=3.3,SNR=2.8
**WVT Waverly 144.42 35** **PKPab** **19 26 53.6 -1.6**
**Q51A Peebles 144.52 27** PKPdf **PKPab** **19 26 53.4 -2.1**
**CPUP Villa Florida 145.10 189** **PKPbc** **19 26 57.7 -0.2**
**CPUP Villa Florida 145.10 189** PKPbc **PKPbc** **19 26 56.6 -1.2**
comp=Z,19nm,1.0s,baz=168,slow=3.5,SNR=28
**SSPA Standing Stone 145.28 20** **PKPbc** **19 26 53.8 -4.3**
**GO02 Mina Guanaco 146.21 170** PKPab **PKPbc** **19 27 02.6 +0.8**
**AQDB Aquidauana 150.44 195** **PKPdf** **19 27 10.9 +3.4**
**BDFB Brasilia 151.78 213** PKPbc **PKPdf** **19 27 12.9 +3.1**
comp=Z,3.7nm,0.4s,baz=210,slow=0.8,SNR=5.6
**LPAZ La Paz 155.13 169** **PKPab** **19 27 41.1 +1.6**
**LPAZ La Paz 155.13 169** PKPab **PKPab** **19 27 38.1 -1.4**
comp=Z,3.5nm,0.8s,baz=122,slow=3.4,SNR=8.2
**ETMB Extrema 161.80 171** **PKPab** **19 28 07.4 -0.3**
**BOAV Boa Vista 173.50 206** PKPdf **PKPdf** **19 27 28.1 -2.7**
BOAV PKPab **PKPab** **19 28 59.9 +0.5**

**IDC 02 19:16:52.9±3.0, 21°.92S×178°.49W, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=232.5km s-min=27.9km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **43.76** | **258** | P | P | 19 25 00.1 | -0.4 |
| | 0.8nm,0.4s,baz=96,slow=7.6,SNR=13 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.97** | **264** | P | P | 19 25 02.5 | +0.3 |
| | 1.5nm,0.5s,baz=96,slow=8.4,SNR=20 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.37** | **43** | P | P | 19 29 18.7 | +1.7 |
| | 0.1nm,0.4s,baz=218,slow=5.7,SNR=1.6 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **88.20** | **57** | P | P | 19 29 44.9 | -1.4 |
| | 0.1nm,0.4s,baz=204,slow=8.6,SNR=1.7 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **140.86** | **350** | PKP | PKPdf | 19 36 22.0 | -2.4 |
| | 0.9nm,0.3s,baz=66,slow=3.6,SNR=14 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **148.09** | **298** | PKPbc | PKPbc | 19 36 40.1 | -0.9 |
| | 0.9nm,0.4s,baz=68,slow=2.2,SNR=4.6 | | | | | | |

*IDC **02** 19:17:37.9±1.4, 8°.17S×116°.40E, h0km, mb3.4/5, mbtmp3.5/6, ML3.9/1, Error ellipse: s-maj=28.0km s-min=21.8km az=57.0*

*NEIC **02** 19:17:40.2±1.4, 8°.48S±0°.06×116°.66E±0°.06, h10km±1km, mb4.0/8, Error ellipse: s-maj=11.8km s-min=9.4km az=48.0*

*DJA **02** 19:17:43.0±0.2, 8°S±3°×11°7E±°, h10km, M4.3/14, mb4.4/7, MLv4.3/14*

**ISC 02 19:17:39.9±0.6, 8°.33S±0°.05×116°.66E±0°.04, h10km, n39, σ2.957/43, mb3.6/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.46** | **151** | P | **Pn** | **19 17 53.5** | **+1.0** |
| TWSI | | | | S | **Sb** | **19 18 01.5** | **+4.5** |
| **PLAI** | **Plampang** | **1.21** | **114** | P | **Pn** | **19 18 06.6** | **+3.7** |
| PLAI | | | | S | **Sn** | **19 18 24.0** | **+4.6** |
| **SRBI** | **Singaraja** | **1.45** | **280** | P | **Pb** | **19 18 08.1** | **+1.1** |
| SRBI | | | | S | **Sg** | **19 18 27.8** | **+1.2** |
| **DNP** | **Denpasar** | **1.47** | **256** | P | **Pg** | **19 18 10.2** | **+2.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **267** | Pn | **Pn** | **19 18 22.4** | **+2.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **267** | P | | **Pn** | **19 18 22.3** | **+2.0** |
| **BSSI** | **Bau Bau, Buton** | **4.38** | **60** | P | | **Pn** | **19 18 48.5** | **+2.0** |
| **KAPI** | **Kappang** | **4.51** | **43** | Pn | | **Pn** | **19 18 49.9** | **+1.6** |
| | 6.1nm,0.3s,baz=187,slow=16,SNR=29 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **19 19 40.1** | **-0.7** |
| | 7.2nm,0.3s,baz=226,slow=20,SNR=4.7 | | | | | | | |
| KAPI | | | | Lg | | Lg | 19 20 00.5 | |
| | 2.5nm,0.3s,baz=244,slow=23,SNR=1.3 | | | | | | | |
| | 18nm,0.3s | | | | | | | |
| **PWJI** | **Pagerwojo** | **4.81** | **273** | P | | **Pn** | **19 18 55.3** | **+2.9** |
| **BNSI** | **Bone** | **5.20** | **41** | P | | **Pn** | **19 19 00.4** | **+2.7** |
| | 29nm,0.6s,0.2nm | | | | | | | |
| **MMRI** | **Maumere** | **5.53** | **94** | Pn | | **Pn** | **19 19 03.4** | **+1.1** |
| **UGM** | **Wanagama** | **6.09** | **273** | Pn | | **Pn** | **19 19 10.1** | **+0.1** |
| **UGM** | **Wanagama** | **6.09** | **273** | P | | **Pn** | **19 19 12.8** | **+2.8** |
| **BBSI** | **Bau Bau** | **6.52** | **65** | P | | **Pn** | **19 19 19.4** | **+3.5** |
| | 16nm,0.5s,0.1nm | | | | | | | |
| **BATI** | **Baumata** | **7.16** | **106** | P | | **Pn** | **19 19 28.7** | **+3.9** |
| | 29nm,0.6s,0.2nm | | | | | | | |
| **SOEI** | **Soe** | **7.65** | **101** | Pn | | **Pn** | **19 19 31.4** | **-0.2** |
| **SOEI** | **Soe** | **7.65** | **101** | P | | **Pn** | **19 19 35.3** | **+3.8** |
| | 35nm,1.6s | | | | | | | |
| **LUWI** | **Luwuk** | **9.46** | **40** | Pn | | **Pn** | **19 19 54.9** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **13.06** | **139** | Pn | | **Pn** | **19 20 42.6** | **-2.9** |
| FITZ | | | | Sn | | **Sn** | **19 23 10.3** | **-0.7** |
| **MBWA** | **Marble Bar** | **13.09** | **167** | Pn | | **Pn** | **19 20 44.4** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **13.52** | **167** | Pn | | **Pn** | **19 20 49.1** | **-2.8** |
| PSA00 | | | | Sn | | **Sn** | **19 23 14.9** | **-7.3** |
| **KNRA** | **Kununurra** | **13.90** | **123** | Pn | | **Pn** | **19 20 55.6** | **-1.5** |
| **GIRL** | **Giralia** | **14.42** | **189** | | | **Pn** | **19 21 06.1** | **+1.9** |
| **MTN** | **Manton Dam** | **14.92** | **109** | Pn | | **Pn** | **19 21 09.9** | **-1.1** |
| **FAKI** | **Fak Fak** | **16.42** | **72** | Pn | | **Pn** | **19 21 29.5** | **-1.1** |
| **WB0** | **Warramunga Arr** | **20.60** | **125** | | | Pn | 19 22 21.5 | -0.1 |
| WB0 | | | | IAmb | | IAmb | 19 22 52.8 | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.64** | **126** | P | | **P** | **19 22 18.3** | **-1.5** |
| **WRA** | **Warramunga Arr** | **20.64** | **126** | P | | Pn | 19 22 22.0 | -0.2 |
| | comp=Z,1.0nm,0.6s,baz=300,slow=12,SNR=13 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.65** | **126** | P | | **P** | **19 22 18.9** | **-1.1** |
| WB2 | | | | IAmb | | IAmb | 19 22 48.1 | |
| | comp=Z,7.3nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.81** | **126** | P | | **P** | **19 22 21.1** | **-0.6** |
| WR0 | | | | IAmb | | IAmb | 19 23 02.7 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **GSI** | **Gunungsitoli** | **21.30** | **296** | P | | **P** | **19 22 26.3** | **-0.6** |
| GSI | | | | IAmb | | IAmb | 19 22 32.8 | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **22.48** | **135** | P | | **P** | **19 22 38.0** | **-1.6** |
| **ASAR** | **Alice Springs** | **22.48** | **135** | P | | **P** | **19 22 38.9** | **-0.7** |
| **ASAR** | **Alice Springs** | **22.48** | **135** | P | | **P** | **19 22 42.2** | **+2.6** |
| | comp=Z,1.3nm,0.8s,baz=307,slow=9.1,SNR=12 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **26.60** | **105** | P | | **P** | **19 23 15.8** | **-2.8** |
| **SONM** | **Songino Array** | **56.66** | **352** | P | | **P** | **19 27 23.2** | **-0.2** |
| | comp=Z,0.3nm,0.5s,baz=182,slow=7.2,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.83** | **334** | P | | **P** | **19 28 04.7** | **-1.1** |
| **MKAR** | **Makanchi Array** | **62.83** | **334** | P | | **P** | **19 28 03.5** | **-2.3** |
| | comp=Z,0.3nm,0.7s,baz=146,slow=7.3,SNR=3.7 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.36** | **335** | P | | **P** | **19 28 32.4** | **-2.8** |
| | comp=Z,0.1nm,0.5s,baz=138,slow=6.3,SNR=2.2 | | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | | |

*IDC **02** 19:32:45.0±4.0,5°.40S×147°.09E,h197km±52km,**mb2.5**/2,*
*mbtmp3.3/4,Error ellipse: s-maj=93.7km s-min=35.9km*
*az=111.0,Eastern New Guinea region*

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.98** | **179** | P | Pn | 19 33 48.1 | +1.6 |
| | 8.1nm,0.3s,baz=350,slow=12,SNR=18 | | | | | | |
| PMG | | | | S | Sn | 19 34 34.3 | -0.5 |
| | 21nm,0.4s,baz=342,slow=16,SNR=9.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.05** | **220** | P | P | 19 36 52.6 | +0.1 |
| | 1.4nm,0.7s,baz=43,slow=11,SNR=9.2 | | | | | | |
| **ASAR** | **Alice Springs** | **22.16** | **214** | P | P | 19 37 25.6 | +0.4 |
| | 0.3nm,0.7s,baz=51,slow=8.4,SNR=6.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **77.09** | **320** | P | P | 19 44 16.3 | -0.4 |
| | 0.1nm,0.5s,baz=106,slow=5.1,SNR=1.5 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.02** | **285** | PKPbc | PKPbc | 19 51 58.5 | -1.1 |
| | 0.4nm,0.5s,baz=72,slow=3.2,SNR=4.6 | | | | | | |

**RSNC 02 19:39:46.3±0.0,7°N±1°×7°3W±°,h146km±2km,M2.1,ML2.1,**
**Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.24** | **183** | P | Pn | 19 40 05.6 | -0.9 |
| BARC | | | | S | Sn | 19 40 20.4 | -1.5 |
| **PAMC** | **Pamplona, Colo** | **0.69** | **43** | P | Pn | 19 40 08.6 | -0.3 |
| PAMC | | | | S | Sn | 19 40 25.6 | -0.4 |
| **RUSC** | **La Rusia** | **0.94** | **175** | P | Pn | 19 40 09.7 | -1.0 |
| RUSC | | | | S | Sn | 19 40 28.2 | -1.1 |
| **PTBC** | **PUERTO BERRIO,** | **1.31** | **257** | P | Pn | 19 40 12.4 | -1.2 |
| PTBC | | | | S | Sn | 19 40 33.0 | -1.0 |
| **TAMC** | **Tame, Arauca** | **1.43** | **106** | P | Pn | 19 40 14.0 | -0.8 |
| **SPBC** | **San Pablo de B** | **1.47** | **218** | P | Pn | 19 40 14.7 | -0.7 |
| SPBC | | | | S | Sn | 19 40 37.0 | -0.7 |
| **ZARC** | **Zaragoza, Cauc** | **1.80** | **292** | P | Pn | 19 40 18.1 | -0.8 |
| **NORC** | **Norcasia** | **2.11** | **233** | P | Pn | 19 40 22.0 | -0.5 |
| **CHIC** | **Chingaza** | **2.26** | **194** | P | Pn | 19 40 24.1 | -0.6 |
| CHIC | | | | S | Sn | 19 40 51.8 | -2.4 |
| **ROSC** | **El Rosal** | **2.28** | **210** | P | Pn | 19 40 24.1 | -0.9 |
| ROSC | | | | S | Sn | 19 40 53.7 | -1.0 |
| **CVER** | **Cruz Verde, Cu** | **2.46** | **201** | P | Pn | 19 40 27.3 | 0.0 |
| CVER | | | | S | Sn | 19 40 58.0 | -0.8 |
| **VILC** | **Villavicencio,** | **2.75** | **191** | P | Pn | 19 40 29.3 | -1.2 |
| VILC | | | | S | Sn | 19 41 03.0 | -1.6 |
| **PTGC** | **Puerto Gaitan,** | **2.81** | **158** | P | Pn | 19 40 28.8 | -2.4 |
| PTGC | | | | S | Sn | 19 41 02.1 | -3.7 |
| **DBBC** | **Dabeiba** | **3.02** | **274** | P | Pn | 19 40 34.0 | +0.1 |
| DBBC | | | | S | Sn | 19 41 10.4 | -0.3 |
| **ORTC** | **Ortega, Tolima** | **3.56** | **216** | P | Pn | 19 40 40.5 | -0.3 |
| ORTC | | | | S | Sn | 19 41 22.8 | -0.3 |
| **SJCC** | **San Jacinto, C** | **3.64** | **327** | P | Pn | 19 40 39.9 | -1.9 |
| SJCC | | | | S | Sn | 19 41 20.0 | -4.9 |
| **URMC** | **La Uribe, Meta** | **3.76** | **199** | P | Pn | 19 40 41.1 | -2.3 |
| URMC | | | | S | Sn | 19 41 27.8 | +0.1 |
| **CRJC** | **Cerrejon, Guaj** | **4.17** | **4** | P | Pn | 19 40 46.6 | -2.2 |
| CRJC | | | | S | Sn | 19 41 38.1 | +0.6 |

**RSNC 02 19:40:12.7±0.0,7°N±1°×7°3W±°,h137km±3km,M2.5,ML2.5,**
**Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.18** | **193** | P | Pn | 19 40 30.2 | -1.5 |
| BARC | | | | S | Sn | 19 40 45.1 | -1.0 |
| **PAMC** | **Pamplona, Colo** | **0.71** | **38** | P | Pn | 19 40 33.2 | -1.3 |
| PAMC | | | | S | Sn | 19 40 50.1 | -0.9 |
| **RUSC** | **La Rusia** | **0.87** | **176** | P | Pn | 19 40 34.5 | -1.2 |
| RUSC | | | | S | Sn | 19 40 52.9 | -0.3 |
| **PTBC** | **PUERTO BERRIO,** | **1.33** | **260** | P | Pn | 19 40 40.6 | +1.1 |
| PTBC | | | | S | Sn | 19 40 58.1 | -1.7 |
| **TAMC** | **Tame, Arauca** | **1.38** | **104** | P | Pn | 19 40 38.6 | -1.5 |
| TAMC | | | | S | Sn | 19 41 00.4 | -0.5 |
| **SPBC** | **San Pablo de B** | **1.45** | **220** | P | Pn | 19 40 39.1 | -1.7 |
| SPBC | | | | S | Sn | 19 41 01.0 | -1.3 |
| **OCAC** | **Ocana** | **1.47** | **353** | P | Pn | 19 40 42.2 | +1.0 |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **293** | P | Pn | 19 40 43.6 | -1.7 |
| ZARC | | | | S | Sn | 19 41 08.2 | -2.0 |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **293** | S | Pn | 19 40 43.6 | -1.7 |
| **NORC** | **Norcasia** | **2.10** | **235** | P | Pn | 19 40 47.0 | -1.3 |
| NORC | | | | S | Sn | 19 41 14.3 | -1.3 |
| **NORC** | **Norcasia** | **2.10** | **235** | S | Pn | 19 40 46.8 | -1.5 |
| **CHIC** | **Chingaza** | **2.21** | **196** | P | Pn | 19 40 48.3 | -1.7 |
| CHIC | | | | S | Sn | 19 41 18.2 | -0.4 |
| **ROSC** | **El Rosal** | **2.25** | **212** | P | Pn | 19 40 50.2 | -0.3 |
| ROSC | | | | S | Sn | 19 41 20.9 | +1.4 |
| **CVER** | **Cruz Verde, Cu** | **2.42** | **203** | P | Pn | 19 40 51.8 | -0.9 |
| **UREC** | **San Jos de Ur** | **2.57** | **292** | P | Pn | 19 40 50.7 | -3.4 |
| UREC | | | | S | Sn | 19 41 21.4 | -4.5 |
| **VILC** | **Villavicencio,** | **2.70** | **192** | P | Pn | 19 40 53.9 | -2.0 |
| VILC | | | | S | Sn | 19 41 28.8 | -0.3 |
| **PTGC** | **Puerto Gaitan,** | **2.74** | **159** | P | Pn | 19 40 53.4 | -2.9 |
| PTGC | | | | S | Sn | 19 41 26.7 | -3.3 |
| **DBBC** | **Dabeiba** | **3.06** | **275** | P | Pn | 19 40 58.0 | -2.4 |
| DBBC | | | | S | Sn | 19 41 32.4 | -4.8 |
| **ANIL** | **Santa Ana** | **3.19** | **225** | P | Pn | 19 41 01.4 | -1.0 |
| ANIL | | | | S | Sn | 19 41 40.9 | +0.2 |
| **ARGC** | **Ariguani, Magd** | **3.26** | **340** | P | Pn | 19 40 58.8 | -4.1 |
| ARGC | | | | S | Sn | 19 41 38.4 | -3.4 |
| **PRAC** | **Prado** | **3.50** | **210** | P | Pn | 19 41 04.0 | -2.1 |
| PRAC | | | | S | Sn | 19 41 46.2 | -1.3 |
| **ORTC** | **Ortega, Tolima** | **3.53** | **217** | P | Pn | 19 41 04.5 | -2.1 |
| ORTC | | | | S | Sn | 19 41 48.0 | -0.2 |
| **APAC** | **Apartado, Choc** | **3.59** | **288** | P | Pn | 19 41 03.8 | -3.5 |
| APAC | | | | S | Sn | 19 41 44.6 | -4.9 |
| **PLMC** | **San Jos del P** | **3.63** | **240** | P | Pn | 19 41 06.0 | -1.9 |
| **SJCC** | **San Jacinto, C** | **3.71** | **327** | P | Pn | 19 41 04.2 | -4.6 |
| SJCC | | | | S | Sn | 19 41 45.9 | -6.4 |
| **URMC** | **La Uribe, Meta** | **3.71** | **199** | P | Pn | 19 41 07.3 | -1.6 |
| URMC | | | | S | Sn | 19 41 51.1 | -1.4 |
| **YOTC** | **Yotoco, Valle** | **4.22** | **229** | P | Pn | 19 41 13.4 | -2.3 |
| YOTC | | | | S | Sn | 19 42 03.8 | -0.9 |
| **CRJC** | **Cerrejon, Guaj** | **4.23** | **3** | P | Pn | 19 41 10.7 | -5.1 |
| CRJC | | | | S | Sn | 19 41 59.0 | -5.8 |
| **URIC** | **Uribia, Colomb** | **5.03** | **13** | P | Pn | 19 41 20.4 | -5.9 |
| URIC | | | | S | Sn | 19 42 16.8 | -6.9 |

*IDC **02** 19:45:46.5±0.8,0°.51N×126°.70E,h0km,mb4.0/8,*
*mbtmp4.0/8,Error ellipse: s-maj=67.9km s-min=16.0km*
*az=70.0*
*DJA **02** 19:45:54.4±1.0,1°.N±3°×12°.7E±°,h24km±10km,M4.0/13,*
*mb4.3/4,MLv3.9/13*
*NEIC **02** 19:45:54.8±0.5,0°.47N±0°.09×126°.63E±0°.06,h55km±8km,*
*mb4.3/17,Error ellipse: s-maj=14.0km s-min=8.0km*
*az=161.0*

**ISC 02 19:45:53.8±0.6,0°.48N±0°.06×126°.64E±0°.04,h47km,n42,**
**σ1§32/46,mb4.3/16,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **0.78** | **68** | Pn | **Pn** | **19 46 09.9** | **+1.4** |
| TNTI | | | | Sn | **Sn** | **19 46 20.9** | **+1.7** |
| **TNTI** | **Ternate** | **0.78** | **68** | P | **Pn** | **19 46 09.9** | **+1.4** |
| TNTI | | | | S | **Sn** | **19 46 21.3** | **+2.1** |
| **LBMI** | **Labuha** | **1.41** | **142** | P | **Pn** | **19 46 19.0** | **+2.0** |
| **SANI** | **Sanana** | **2.60** | **195** | P | **Pn** | **19 46 33.9** | **+0.6** |
| **KMSI** | **Cibinong** | **2.66** | **272** | P | **Pn** | **19 46 35.8** | **+1.6** |
| KMSI | | | | S | **Sn** | **19 47 07.3** | **+2.1** |
| **GTOI** | **Gorontalo** | **3.63** | **272** | P | **Pn** | **19 46 51.3** | **+3.8** |
| **NLAI** | **Namlea** | **3.72** | **173** | P | **Pn** | **19 46 50.6** | **+1.8** |
| **LUWI** | **Luwuk** | **4.15** | **249** | Pn | **Pn** | **19 46 53.5** | **-1.2** |
| **LUWI** | **Luwuk** | **4.15** | **249** | P | **Pn** | **19 46 55.9** | **+1.2** |
| **SWI** | **Sorong** | **4.81** | **106** | P | **Pn** | **19 47 05.7** | **+2.0** |
| **TOLI2** | **Tolitoli** | **5.89** | **276** | Pn | **Pn** | **19 47 19.5** | **+1.0** |
| **FAKI** | **Fak Fak** | **6.55** | **121** | P | **Pn** | **19 47 28.6** | **+1.0** |
| | 57nm,1.4s | | | | | | |
| **BBSI** | **Bau Bau** | **7.19** | **214** | P | **Pn** | **19 47 39.0** | **+2.6** |
| | 15nm,1.0s,0.1nm | | | | | | |
| **BNSI** | **Bone** | **8.13** | **233** | P | **Pn** | **19 47 51.1** | **+1.8** |
| **SBUM** | **Sibu** | **14.55** | **278** | Pn | **Pn** | **19 49 17.0** | **+0.1** |
| **KNRA** | **Kununurra** | **16.19** | **173** | Pn | **Pn** | **19 49 38.3** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 19 50 07.2 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.51** | **160** | P | **P** | **19 50 38.4** | **-0.5** |
| **WRAB** | **Tennant Creek** | **21.65** | **160** | P | **P** | **19 50 39.9** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 19 50 42.2 | |
| | comp=Z,9.1nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.66** | **160** | P | **P** | **19 50 38.8** | **-1.6** |
| **WRA** | **Warramunga Arr** | **21.66** | **160** | P | **P** | **19 50 38.8** | **-1.6** |
| | comp=Z,6.7nm,0.4s,baz=334,slow=11,SNR=63 | | | | | | |
| | comp=Z,6.7nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.66** | **160** | P | **P** | **19 50 40.1** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 19 50 42.6 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.74** | **160** | P | **P** | **19 50 41.0** | **-0.4** |
| **COEN** | **Coen** | **21.77** | **132** | P | **P** | **19 50 41.9** | **+0.1** |
| **AS31** | **Alice Springs** | **25.02** | **164** | P | **P** | **19 51 13.2** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 19 51 15.8 | |
| | comp=Z,3.6nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **25.02** | **164** | P | **P** | **19 51 13.3** | **-0.3** |
| **ASAR** | **Alice Springs** | **25.02** | **164** | P | **P** | **19 51 12.7** | **-0.8** |
| | comp=Z,2.4nm,0.3s,baz=344,slow=12,SNR=66 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 54 47.1** | **-0.7** |
| | comp=Z,0.1nm,0.3s,baz=360,slow=1.7,SNR=1.7 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **BBOO** | **Buckleboo** | **34.28** | **166** | P | **P** | **19 52 35.1** | **-0.5** |
| **STKA** | **Stephens Creek** | **35.16** | **158** | P | **P** | **19 52 42.6** | **-0.6** |
| | comp=Z,1.1nm,0.3s,baz=328,slow=6.4,SNR=6.6 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **37.45** | **15** | P | **P** | **19 53 01.2** | **-1.5** |
| | comp=Z,0.6nm,0.4s,baz=189,slow=8.4,SNR=1.4 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **60.17** | **326** | P | **P** | **19 55 56.2** | **-0.6** |
| MK31 | | | | IAmb | IAmb | 19 55 58.0 | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.17** | **326** | P | **P** | **19 55 56.5** | **-0.4** |
| **MKAR** | **Makanchi Array** | **60.17** | **326** | P | **P** | **19 55 56.6** | **-0.3** |
| | comp=Z,0.5nm,0.3s,baz=117,slow=7.7,SNR=16 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.44** | **334** | P | **P** | **19 56 17.8** | **-0.8** |
| | comp=Z,0.3nm,0.4s,baz=130,slow=6.9,SNR=1.6 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.42** | **328** | P | **P** | **19 56 24.6** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=128,slow=6.4,SNR=16 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **64.43** | **328** | P | **P** | **19 56 24.8** | **-0.4** |
| KURK | | | | IAmb | IAmb | 19 56 25.8 | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **80.24** | **173** | P | **P** | **19 57 58.1** | **-0.8** |
| **VNDA** | **Vanda** | **80.24** | **173** | P | **P** | **19 57 58.1** | **-0.8** |
| | comp=Z,0.2nm,0.4s,baz=290,slow=7.2,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **G18K** | **Tagagawik** | **83.34** | **24** | P | **P** | **19 58 14.8** | **-0.7** |
| G18K | | | | IAmb | IAmb | 19 58 40.3 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **L18K** | **Granite Mounta** | **83.38** | **27** | P | **P** | **19 58 16.0** | **+0.3** |
| L18K | | | | IAmb | IAmb | 19 58 30.5 | |
| | comp=Z,9.9nm,1.5s | | | | | | |
| **G19K** | **Purcell Mounta** | **84.02** | **23** | P | **P** | **19 58 19.0** | **0.0** |
| G19K | | | | IAmb | IAmb | 19 58 35.9 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **84.17** | **21** | P | **P** | **19 58 19.9** | **+0.2** |
| **QSPA** | **South Pole Qui** | **90.41** | **180** | P | **P** | **19 58 49.1** | **-1.0** |

*IDC **02** 20:06:43.0±2.5,6°.29S×130°.69E,h0km,mb3.7/1,*
*mbtmp3.6/3,ML3.9/2,Error ellipse: s-maj=154.6km*
*s-min=31.1km az=71.0*
*DJA **02** 20:06:59.2±0.5,7°.S±4°×13°.0E±°,h197km±10km,M4.1/9,*
*mb3.8/6,mB4.6/2,MLv4.2/9,Mw(mB)3.8/2*

**ISC 02 20:06:58.8±1.1,7°.07S±0°.06×129°.90E±0°.10,h200km,n10,**
**σ3§11/13,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.66** | **123** | P | **Pn** | **20 07 35.1** | **+1.2** |
| SAUI | | | | S | **Sn** | **20 08 01.3** | **+0.1** |
| **MSAI** | **Masohi** | **3.83** | **345** | P | **Pn** | **20 08 00.0** | **+1.6** |
| **FAKI** | **Fak Fak** | **4.74** | **30** | P | **Pn** | **20 08 10.3** | **+0.3** |
| FAKI | | | | S | **Sn** | **20 09 02.4** | **-3.7** |
| **KMPI** | **Kaimana, Papua** | **5.08** | **48** | P | **Pn** | **20 08 17.1** | **+2.8** |
| **SOEI** | **Soe** | **6.18** | **244** | P | **Pn** | **20 08 28.0** | **-0.5** |
| | 26nm,2.1s,0.2nm | | | | | | |
| **SWI** | **Sorong** | **6.32** | **12** | P | **Pn** | **20 08 30.0** | **-0.2** |
| **BATI** | **Baumata** | **6.91** | **243** | P | **Pn** | **20 08 37.1** | **-0.8** |
| **WRA** | **Warramunga Arr** | **13.50** | **162** | Pn | **Pn** | **20 10 03.6** | **+1.0** |
| | 0.7nm,0.3s,baz=349,slow=13,SNR=31 | | | | | | |
| WRA | | | | Sn | **S** | **20 12 26.3** | **-6.8** |
| | 0.6nm,0.3s,baz=338,slow=23,SNR=7.8 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **16.94** | **167** | P | **Pn** | **20 10 49.1** | **+4.6** |
| | 0.2nm,0.3s,baz=352,slow=12,SNR=16 | | | | | | |
| ASAR | | | | S | **S** | **20 13 50.9** | **+1.2** |
| | 0.4nm,0.6s,baz=325,slow=16,SNR=1.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.23** | **327** | P | P | 20 17 44.2 | +6.4 |
| | 0.4nm,0.5s,baz=120,slow=7.8,SNR=7.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

**IDC 02 20:18:55.2±4.4,3°.97S×140°.60E,h0km,mb3.0/2,**
**mbtmp3.1/3,ML2.9/1,Error ellipse: s-maj=153.9km**
**s-min=35.2km az=89.0,Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.01** | **201** | P | P | 20 22 56.4 | -0.3 |
| | baz=19,slow=12,SNR=4.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **20.62** | **198** | P | P | 20 23 35.4 | -1.0 |
| | 0.3nm,0.7s,baz=27,slow=11,SNR=4.9 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **71.93** | **322** | P | P | 20 30 20.7 | +0.1 |
| | 0.3nm,0.9s,baz=103,slow=5.2,SNR=2.1 | | | | | | |
| | 0.3nm,0.9s | | | | | | |

**NEIC 02 20:20:13.6±1.4,29°.09N±0°.04×97°.80W±0°.02,h5km±2km,**
**mb_Lg2.6/33,Error ellipse: s-maj=6.7km s-min=3.0km**
**az=167.0,Central Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **735A** | **Kenedy** | **0.23** | **182** | Pg | Pg | 20 20 18.8 | +0.6 |
| 735A | | | | Sg | Sg | 20 20 26.5 | +5.2 |
| **MLDN** | **Muldoon** | **0.94** | **43** | | Pg | 20 20 30.9 | -0.7 |
| MLDN | | | | IAmb_Lg | | 20 20 42.3 | |
| | comp=Z,89nm,0.8s | | | | | | |
| MLDN | | | | | Sg | 20 20 43.4 | -0.4 |
| **HNDO** | **Hondo** | **1.37** | **289** | | Pn | 20 20 39.1 | -0.3 |
| HNDO | | | | Pn | Pb | 20 20 39.3 | -0.4 |
| **833A** | **Chaparral WMA,** | **1.60** | **242** | | Pn | 20 20 42.0 | -0.5 |
| **435B** | **Jarrell** | **1.70** | **6** | Pn | Pn | 20 20 42.0 | -1.9 |
| 435B | | | | | Sn | 20 21 05.3 | -0.7 |
| **HKT** | **Hockley** | **1.92** | **63** | Pn | Pn | 20 20 46.4 | -0.4 |
| **HBVL** | **Hebbronville** | **2.16** | **201** | | Pn | 20 20 50.3 | +0.1 |
| **JCT** | **Junction City** | **2.22** | **309** | | Pn | 20 20 49.9 | -1.3 |
| **BRDY** | **Brady** | **2.42** | **335** | | Pn | 20 20 52.7 | -1.2 |
| BRDY | | | | | Sn | 20 21 22.5 | -1.4 |
| BRDY | | | | IAmb_Lg | | 20 21 36.3 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **DRIO** | **Del Rio** | **2.49** | **278** | | Pn | 20 20 54.3 | -0.5 |
| DRIO | | | | | Sn | 20 21 26.6 | +1.1 |
| **HNVL** | **Huntsville, TX** | **2.62** | **50** | Pn | Pn | 20 20 56.2 | -0.3 |
| **WHTX** | **Lake Whitney,** | **2.91** | **6** | Pn | Pn | 20 20 59.2 | -1.3 |
| **OZNA** | **Ozona** | **3.42** | **303** | IAmb_Lg | | 20 22 10.3 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **FW07** | **Weatherford** | **3.60** | **0** | Pn | Pn | 20 21 09.0 | -1.1 |
| **PLPT** | **Palo Pinto** | **3.74** | **353** | IAmb_Lg | | 20 22 15.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.86** | **336** | | Pn | 20 21 12.6 | -1.1 |
| ABTX | | | | IAmb_Lg | | 20 22 19.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **FW06** | **Azle** | **3.88** | **3** | Pn | Pn | 20 21 12.8 | -1.1 |
| FW06 | | | | IAmb_Lg | | 20 22 22.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **3.94** | **357** | IAmb_Lg | | 20 22 25.5 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **SGCY** | **Sterling City** | **4.02** | **315** | Pn | Pn | 20 21 14.0 | -1.9 |
| **APMT** | **Aspermont** | **4.67** | **335** | Pn | Pn | 20 21 23.9 | -0.8 |
| APMT | | | | IAmb_Lg | | 20 22 51.8 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **WTFS** | **Witchita Falls** | **4.70** | **353** | IAmb_Lg | | 20 22 52.2 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **SN07** | **Snyder 07** | **4.79** | **327** | Pn | Pn | 20 21 25.6 | -0.9 |
| **MNHN** | **Monahans** | **4.84** | **299** | Pn | Pn | 20 21 26.2 | -1.1 |
| **POST** | **Post** | **5.08** | **322** | Pn | Pn | 20 21 30.3 | -0.2 |
| POST | | | | IAmb_Lg | | 20 22 58.8 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **ODSA** | **Odessa** | **5.09** | **308** | IAmb_Lg | | 20 22 58.1 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **ALPN** | **Alpine** | **5.24** | **286** | IAmb_Lg | | 20 23 09.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **5.29** | **330** | | Pn | 20 21 33.4 | +0.1 |
| DKNS | | | | IAmb_Lg | | 20 23 09.0 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **5.49** | **360** | Pn | Pn | 20 21 36.6 | +0.5 |
| X34A | | | | IAmb_Lg | | 20 23 18.3 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WMOK** | **Wichita Mounta** | **5.69** | **352** | Pn | Pn | 20 21 38.8 | -0.1 |
| **X37A** | **Clayton** | **5.86** | **20** | Pn | Pn | 20 21 39.4 | -1.7 |
| **MSTX** | **Muleshoe** | **6.46** | **320** | IAmb_Lg | | 20 23 41.6 | |
| | comp=Z,6.2nm,0.9s | | | | | | |

*IDC **02** 21:17:59.6±0.9,47°.49N×89°.36E,h0km,mb3.6/10,*
*mbtmp3.8/14,ML3.7/4,MS2.7/6,Error ellipse:*
*s-maj=17.2km s-min=12.5km az=1.0*
*BJI **02** 21:18:00.1±0.0,47°.56N×89°.56E,h5km,mB4.3/1,ML4.1/9,*
*Ms3.8/2*
*MOS **02** 21:18:02.6±2.8,47°.31N×89°.15E,h18km,mb4.1/4,Error*
*ellipse: s-maj=7.6km s-min=6.4km az=110.6*
*ASRS **02** 21:18:05.0±0.5,48°.N±3°×8°.9E±°,h10km,MLh4.8/16,Error*
*ellipse: s-maj=6.5km s-min=5.2km az=143.3,conf

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MAKZ** | **Makanchi** | **5.03** | **264** | ⇑Pn | | **Pn** | **21** | **19** | **20.2** | **+2.0** |
| | comp=Z,3.7nm,0.4s | | | | | | | | | |
| MAKZ | | | | ⇓Pg | | **Pb** | **21** | **19** | **32.3** | **+1.4** |
| | comp=Z,24nm,0.6s | | | | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | Lg | 21 | 20 | 39.2 | |
| | comp=Z,157nm,0.7s | | | | | | | | | |
| **MAKZ** | **Makanchi** | **5.03** | **264** | ⇑P | | **Pn** | **21** | **19** | **15.8** | **-2.4** |
| MAKZ | | | | S | | **Sn** | **21** | **20** | **20.7** | **+4.4** |
| **MAKZ** | **Makanchi** | **5.03** | **264** | PN | | **Pn** | **21** | **19** | **20.2** | **+2.0** |
| **TASR** | **Tashtagol** | **5.28** | **351** | P | | **Pn** | **21** | **19** | **26.1** | **+4.4** |
| **KZLR** | **Kyzyl** | **5.34** | **37** | P | | **Pn** | **21** | **19** | **21.8** | **-0.8** |
| **DJO** | **Djoy, Khakassi** | **5.37** | **13** | P | | **Pn** | **21** | **19** | **24.1** | **+1.1** |
| **ARDR** | **Aradan** | **5.69** | **27** | P | | **Pn** | **21** | **19** | **29.1** | **+1.7** |
| **VEH** | **Verkhnyaya Baz** | **5.74** | **6** | P | | **Pn** | **21** | **19** | **30.8** | **+2.8** |
| **ELT** | **Eltsovka** | **6.02** | **342** | P | | **Pn** | **21** | **19** | **33.9** | **+2.0** |
| **LUZB** | **Luzhba, Kemero** | **6.11** | **358** | P | | **Pn** | **21** | **19** | **37.0** | **+3.9** |
| **TDJR** | **Todzha** | **6.54** | **40** | P | | **Pn** | **21** | **19** | **40.5** | **+1.4** |
| **VCHU** | **Verkh-Chumysh,** | **6.64** | **345** | S | | **Sn** | **21** | **20** | **58.8** | **+2.7** |
| **ZAA0** | **Zalesovo Array** | **6.98** | **338** | ⇓Pn | | **Pn** | **21** | **19** | **45.7** | **+0.7** |
| | comp=Z,0.5nm,0.5s | | | | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | Lg | 21 | 21 | 45.0 | |
| | comp=Z,20nm,0.9s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.98** | **338** | Pn | | **Pn** | **21** | **19** | **45.5** | **+0.4** |
| | comp=Z,1.3nm,0.3s,baz=158,slow=13,SNR=17 | | | | | | | | | |
| ZALV | | | | Sn | | **Sn** | **21** | **21** | **01.7** | **-2.7** |
| | comp=Z,2.7nm,0.3s,baz=163,slow=16,SNR=3.6 | | | | | | | | | |
| ZALV | | | | Lg | Lg | Lg | 21 | 21 | 43.7 | |
| | comp=Z,4.6nm,0.3s,baz=147,slow=30,SNR=6.6 | | | | | | | | | |
| | comp=Z,3.6nm,0.3s | | | | | | | | | |
| **SALR** | **Pechorkino, Sa** | **7.22** | **343** | P | | **Pn** | **21** | **19** | **52.3** | **+4.0** |
| **DJR** | **Jarkent** | **7.35** | **247** | Pg | | **Pn** | **21** | **19** | **52.2** | **+2.0** |
| | comp=Z,4.0nm,0.1s | | | | | | | | | |
| DJR | | | | Lg | Lg | Lg | 21 | 21 | 16.4 | |
| | comp=Z,28nm,0.4s | | | | | | | | | |
| **KURK** | **Kurchatov** | **7.66** | **298** | ⇑Pn | | **Pn** | **21** | **19** | **53.9** | **-0.5** |
| | comp=Z,24nm,0.6s | | | | | | | | | |
| KURK | | | | ⇓Sn | | **Sn** | **21** | **21** | **20.5** | **-0.5** |
| | comp=Z,33nm,0.6s | | | | | | | | | |
| KURK | | | | ⇓Lg | Lg | Lg | 21 | 22 | 01.7 | |
| | comp=Z,105nm,0.6s | | | | | | | | | |
| **KURK** | **Kurchatov** | **7.66** | **298** | ⇑P | | **Pn** | **21** | **19** | **54.9** | **+0.6** |
| KURK | | | | S | | **Sn** | **21** | **21** | **21.6** | **+0.6** |
| **KURK** | **Kurchatov** | **7.66** | **298** | *ce*P | | **Pn** | **21** | **19** | **54.9** | **+0.6** |
| KURK | | | | pmax | pmax | | | | | |
| | comp=Z,42nm,1.0s | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.68** | **297** | Pn | | **Pn** | **21** | **19** | **55.0** | **+0.4** |
| | comp=Z,1.3nm,0.3s,baz=104,slow=14,SNR=91 | | | | | | | | | |
| KURBB | | | | Sn | | **Sn** | **21** | **21** | **22.4** | **+0.8** |
| | comp=Z,1.3nm,0.3s,baz=99,slow=27,SNR=4.6 | | | | | | | | | |
| KURBB | | | | Lg | Lg | Lg | 21 | 22 | 06.0 | |
| | comp=Z,2.3nm,0.3s,baz=96,slow=33,SNR=6.4 | | | | | | | | | |
| | comp=Z,13nm,0.6s | | | | | | | | | |
| **KNOS** | **Konyrlen** | **7.72** | **249** | Pg | | **Pn** | **21** | **19** | **57.8** | **+2.4** |
| | comp=Z,0.6nm,0.5s | | | | | | | | | |
| KNOS | | | | Lg | Lg | Lg | 21 | 21 | 26.7 | |
| | comp=Z,38nm,1.1s | | | | | | | | | |
| **KHAR** | **Kharino, NSO,** | **7.91** | **335** | S | | **Sn** | **21** | **21** | **27.7** | **+0.6** |
| **TDK** | **Taldyqorghan** | **7.95** | **255** | Pg | | **Pn** | **21** | **19** | **59.9** | **+1.6** |
| | comp=Z,30nm,0.3s | | | | | | | | | |
| TDK | | | | Lg | Lg | Lg | 21 | 21 | 30.3 | |
| | comp=Z,81nm,0.3s | | | | | | | | | |
| **PDGK** | **Podgornoye** | **8.07** | **242** | Pg | | **Pn** | **21** | **20** | **00.5** | **+0.4** |
| | comp=Z,1.8nm,0.3s | | | | | | | | | |
| PDGK | | | | Lg | Lg | Lg | 21 | 21 | 31.6 | |
| | comp=Z,19nm,0.3s | | | | | | | | | |
| **PDGK** | **Podgornoye** | **8.07** | **242** | ⇓Pn | | **Pn** | **21** | **20** | **00.4** | **+0.2** |
| | comp=Z,2.6nm,0.4s | | | | | | | | | |
| PDGK | | | | ⇓Sn | | **Sn** | **21** | **21** | **30.4** | **-1.1** |
| | comp=Z,29nm,0.6s | | | | | | | | | |
| PDGK | | | | ⇓Lg | Lg | Lg | 21 | 22 | 15.6 | |
| | comp=Z,80nm,0.7s | | | | | | | | | |
| **PDGK** | **Podgornoye** | **8.07** | **242** | *i* P | | **Pn** | **21** | **19** | **59.8** | **-0.3** |
| PDGK | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | | | |
| **SHLS** | **Shalkode** | **8.19** | **241** | *e*P | | **Pn** | **21** | **19** | **59.7** | **-2.0** |
| **BLB** | **Baldybastay** | **8.29** | **249** | Pg | | **Pn** | **21** | **20** | **04.6** | **+1.5** |
| | comp=Z,97nm,0.2s | | | | | | | | | |
| BLB | | | | Lg | Lg | Lg | 21 | 21 | 39.2 | |
| | comp=Z,53nm,0.4s | | | | | | | | | |
| **UZB** | **Uzynbulak** | **8.45** | **242** | *e*P | | **Pn** | **21** | **20** | **06.0** | **+0.6** |
| **KPKS** | **Kokpek** | **8.48** | **245** | *e*P | | **Pn** | **21** | **20** | **06.3** | **+0.5** |
| **ARXS** | **Arharly** | **8.65** | **251** | *e*P | | **Pn** | **21** | **20** | **09.4** | **+1.3** |
| **ZHN** | **Zhinishke** | **8.80** | **244** | *e*P | | **Pn** | **21** | **20** | **13.0** | **+2.9** |
| **SHTK** | **Zheleznogorsk-** | **9.18** | **15** | S | | **Sn** | **21** | **21** | **58.7** | **+0.4** |
| **MDOK** | **Medeo** | **9.66** | **247** | Sn | | **Sn** | **21** | **22** | **08.6** | **-1.8** |
| | comp=Z,27nm,0.6s | | | | | | | | | |
| MDOK | | | | Lg | Lg | Lg | 21 | 23 | 05.5 | |
| | comp=Z,58nm,1.0s | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **10.69** | **249** | P | | **Pn** | **21** | **20** | **37.6** | **+1.5** |
| | SNR=6.4 | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **10.69** | **249** | ⇑Pn | | **Pn** | **21** | **20** | **37.3** | **+1.1** |
| | comp=Z,2.0nm,0.6s | | | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sn** | **21** | **22** | **34.8** | **-1.1** |
| | comp=Z,4.8nm,0.5s | | | | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | Lg | 21 | 23 | 40.5 | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **10.69** | **249** | *i* P | | **Pn** | **21** | **20** | **35.7** | **-0.5** |
| TKM2 | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | | |
| **BTLS** | **Baital** | **10.83** | **262** | *e*P | | **Pn** | **21** | **20** | **37.5** | **-0.3** |
| **GTA** | **Gaotai** | **11.18** | **133** | *e*P | | **Pn** | **21** | **20** | **39.5** | **-3.2** |
| GTA | | | | sP | | | 21 | 20 | 45.8 | |
| GTA | | | | LR | LR | | | | | |
| | comp=N,130nm,8.7s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=E,130nm,7.3s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=Z,70nm,7.3s | | | | | | | | | |
| **CHMS** | **Chumysh** | **11.19** | **251** | P | | **Pn** | **21** | **20** | **44.8** | **+1.9** |
| | SNR=7.1 | | | | | | | | | |
| **KBK** | **Karagaybulak** | **11.24** | **249** | P | | **Pn** | **21** | **20** | **45.9** | **+2.3** |
| | SNR=14 | | | | | | | | | |
| **OTUK** | **Ortayu** | **11.38** | **280** | ⇓Pn | | **Pn** | **21** | **20** | **44.6** | **-0.8** |
| | comp=Z,34nm,0.5s | | | | | | | | | |
| OTUK | | | | ⇑Sn | | **Sn** | **21** | **22** | **50.3** | **-2.2** |
| | comp=Z,8.2nm,0.8s | | | | | | | | | |
| OTUK | | | | ⇓Lg | Lg | Lg | 21 | 24 | 01.0 | |
| | comp=Z,30nm,0.8s | | | | | | | | | |
| **OTUK** | **Ortayu** | **11.38** | **280** | P | | **Pn** | **21** | **20** | **44.6** | **-0.8** |
| OTUK | | | | S | | **Sn** | **21** | **22** | **50.3** | **-2.2** |
| **AAK** | **Ala-Archa** | **11.54** | **250** | Pn | | **Pn** | **21** | **20** | **46.1** | **-1.5** |
| | comp=Z,1.3nm,0.3s,baz=136,slow=7.8,SNR=4.1 | | | | | | | | | |
| AAK | | | | Sn | | **Sn** | **21** | **22** | **53.4** | **-3.1** |
| | comp=Z,0.4nm,0.3s,baz=80,slow=22,SNR=1.3 | | | | | | | | | |
| AAK | | | | Lg | Lg | Lg | 21 | 24 | 04.8 | |
| | comp=Z,0.2nm,0.3s,baz=24,slow=20,SNR=5.4 | | | | | | | | | |
| AAK | | | | LR | LR | | 21 | 25 | 34.1 | |
| | comp=Z,29nm,20.9s,baz=35,slow=39 | | | | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | | | | |
| **AAK** | **Ala-Archa** | **11.54** | **250** | *ce*P | | **Pn** | **21** | **20** | **49.4** | **+1.8** |
| AAK | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | | |
| **SONM** | **Songino Array** | **11.55** | **82** | Pg | | Pn | 21 | 21 | 28.5 | +41 |
| | comp=Z,0.3nm,0.3s,baz=286,slow=18,SNR=3.2 | | | | | | | | | |
| SONM | | | | Sn | | Sn | 21 | 22 | 45.8 | -11 |
| | comp=Z,0.2nm,0.3s,baz=211,slow=34,SNR=1.2 | | | | | | | | | |
| SONM | | | | Lg | | Lg | 21 | 23 | 56.4 | |
| | comp=Z,0.9nm,0.3s,baz=272,slow=23,SNR=8.4 | | | | | | | | | |
| SONM | | | | LR | | LR | 21 | 25 | 42.8 | |
| | comp=Z,27nm,19.0s,baz=53,slow=40 | | | | | | | | | |
| **UCH** | **Uchtor** | **11.74** | **248** | P | | **Pn** | **21** | **20** | **54.4** | **+3.8** |
| | SNR=6.8 | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **11.98** | **252** | P | | **Pn** | **21** | **20** | **56.1** | **+2.3** |
| | SNR=5.0 | | | | | | | | | |
| **AML** | **Almayashu** | **12.31** | **250** | P | | **Pn** | **21** | **21** | **01.1** | **+2.8** |
| | SNR=5.7 | | | | | | | | | |
| **BVA0** | **Borovoye Array** | **13.23** | **301** | ⇓Pn | | **Pn** | **21** | **21** | **09.2** | **-1.4** |
| | comp=Z,2.3nm,0.5s | | | | | | | | | |
| BVA0 | | | | ⇑Sn | | **Sn** | **21** | **23** | **35.2** | **-2.4** |
| | comp=Z,7.1nm,0.7s | | | | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | Lg | 21 | 24 | 58.7 | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| **BVA0** | **Borovoye Array** | **13.23** | **301** | P | | **Pn** | **21** | **21** | **09.2** | **-1.4** |
| BVA0 | | | | S | | **Sn** | **21** | **23** | **35.2** | **-2.4** |
| **BRVK** | **Borovoye** | **13.30** | **301** | ⇑Pn | | **Pn** | **21** | **21** | **11.1** | **-0.4** |
| | comp=Z,2.6nm,0.6s | | | | | | | | | |
| BRVK | | | | ⇑Sn | | **Sn** | **21** | **23** | **36.4** | **-2.9** |
| | comp=Z,2.8nm,0.6s | | | | | | | | | |
| BRVK | | | | ⇑Lg | Lg | Lg | 21 | 25 | 00.6 | |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| **BRVK** | **Borovoye** | **13.30** | **301** | *ce*P | | **Pn** | **21** | **21** | **10.7** | **-0.8** |
| BRVK | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,1.7s | | | | | | | | | |
| **KK31** | **Karatay Array** | **13.92** | **258** | ⇑Pn | | **Pn** | **21** | **21** | **18.1** | **-1.9** |
| | comp=Z,6.0nm,0.9s,baz=55,slow=14,SNR=28 | | | | | | | | | |
| KK31 | | | | ⇓Sn | | **Sn** | **21** | **23** | **53.5** | **-0.9** |
| | comp=Z,3.1nm,0.7s,baz=61,slow=24,SNR=5.2 | | | | | | | | | |
| KK31 | | | | ⇑Lg | Lg | | 21 | 25 | 18.8 | |
| | comp=Z,7.1nm,0.8s | | | | | | | | | |
| **KK31** | **Karatay Array** | **13.92** | **258** | *i* P | | **Pn** | **21** | **21** | **18.1** | **-1.9** |
| KK31 | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | | |
| **AB31** | **Akbulak array** | **19.49** | **286** | Pn | | **P** | **21** | **22** | **29.9** | **+0.2** |
| | comp=Z,1.3nm,0.5s,baz=86,slow=11,SNR=54 | | | | | | | | | |
| **AB31** | **Akbulak array** | **19.49** | **286** | P | | **P** | **21** | **22** | **29.9** | **+0.2** |
| **AKTO** | **Aktyubinsk** | **20.62** | **290** | P | | **P** | **21** | **22** | **40.4** | **-1.7** |
| | comp=Z,0.8nm,0.4s,baz=46,slow=4.9,SNR=3.5 | | | | | | | | | |
| AKTO | | | | Lg | | Lg | 21 | 28 | 53.6 | |
| | comp=Z,0.1nm,0.3s,baz=50,slow=16,SNR=1.6 | | | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | | | |
| **ARU** | **Arti** | **20.73** | **307** | P | | **P** | **21** | **22** | **42.8** | **-0.3** |
| | comp=Z,4.0nm,0.4s,baz=99,slow=4.8,SNR=10 | | | | | | | | | |
| ARU | | | | S | | **S** | **21** | **26** | **26.8** | **-7.4** |
| | comp=Z,0.7nm,0.4s,baz=90,slow=20,SNR=1.9 | | | | | | | | | |
| ARU | | | | LR | | LR | 21 | 31 | 35.8 | |
| | comp=Z,18nm,19.4s,baz=113,slow=39 | | | | | | | | | |
| | comp=Z,4.0nm,0.4s | | | | | | | | | |
| **ARU** | **Arti** | **20.73** | **307** | *c i* P | | **P** | **21** | **22** | **44.1** | **+1.0** |
| ARU | | | | PPP | | PPP | 21 | 23 | 10.7 | |
| ARU | | | | S | | **S** | **21** | **26** | **35.9** | **+1.7** |
| ARU | | | | SS | | **SnSn** | **21** | **26** | **55.1** | **+1.5** |
| ARU | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| **TNCH** | **TengChong** | **23.66** | **159** | P | | **P** | **21** | **23** | **16.2** | **+1.7** |
| TNCH | | | | pP | | sP | 21 | 23 | 19.4 | -0.5 |
| TNCH | | | | PP | | **PnPn** | **21** | **23** | **49.1** | **+7.4** |
| TNCH | | | | pmax | pmax | | | | | |
| | comp=Z,38nm,3.5s | | | | | | | | | |
| **YAK** | **Yakutsk** | **26.88** | **43** | *i* P | | **P** | **21** | **23** | **45.6** | **+2.2** |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | | |
| **KSRS** | **Korea Array** | **29.96** | **95** | LR | | LR | 21 | 35 | 37.6 | |
| | comp=Z,8.6nm,19.8s,baz=295,slow=35 | | | | | | | | | |
| **KIV** | **Kislovodsk** | **32.31** | **281** | *e*P | | **P** | **21** | **24** | **30.6** | **-1.3** |
| KIV | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | |
| KIV | | | | MLR | | MLR | | | | |
| | comp=Z,11nm,15.0s | | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.62** | **315** | P | | **P** | **21** | **25** | **16.7** | **-0.6** |
| | comp=Z,1.7nm,0.7s,baz=87,slow=8.5,SNR=7.4 | | | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.62** | **315** | *e*P | | **P** | **21** | **25** | **18.7** | **+1.4** |
| FINES | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **40.25** | **280** | P | | **P** | **21** | **25** | **38.3** | **-1.4** |
| | comp=Z,1.0nm,0.8s,baz=72,slow=7.9,SNR=5.7 | | | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **40.25** | **280** | *e*P | | **P** | **21** | **25** | **41.2** | **+1.4** |
| BRTR | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | | |
| **HFS** | **Hagfors** | **43.82** | **316** | P | | **P** | **21** | **26** | **06.2** | **-2.3** |
| | comp=Z,2.5nm,0.9s,baz=108,slow=3.3,SNR=4.2 | | | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.68** | **317** | P | | **P** | **21** | **26** | **14.7** | **-0.7** |
| | comp=Z,1.3nm,0.7s,baz=64,slow=7.9 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.68** | **317** | P | | **P** | **21** | **26** | **13.6** | **-1.8** |
| | comp=Z,0.7nm,0.7s,baz=66,slow=7.6,SNR=8.9 | | | | | | | | | |
| NOA | | | | LR | | LR | 21 | 46 | 07.6 | |
| | comp=Z,15nm,18.2s,baz=305,slow=38 | | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.68** | **317** | *e*P | | **P** | **21** | **26** | **15.0** | **-0.4** |
| NOA | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **59.79** | **24** | P | | **P** | **21** | **28** | **06.5** | **-1.1** |
| | comp=Z,0.3nm,0.7s,baz=314,slow=4.7,SNR=2.1 | | | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **59.79** | **24** | *e*P | | **P** | **21** | **28** | **12.3** | **+4.7** |
| **WRA** | **Warramunga Arr** | **78.44** | **137** | P | | **P** | **21** | **30** | **03.2** | **-0.5** |
| | comp=Z,0.4nm,0.8s,baz=342,slow=5.9,SNR=5.4 | | | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **78.44** | **137** | *e*P | | **P** | **21** | **30** | **03.5** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **78.80** | **277** | P | | **P** | **21** | **30** | **04.8** | **-1.1** |
| | comp=Z,0.1nm,0.4s,baz=19,slow=6.9,SNR=1.5 | | | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **81.48** | **139** | P | | **P** | **21** | **30** | **16.3** | **-3.8** |
| | comp=Z,0.3nm,0.8s,baz=316,slow=6.4,SNR=1.5 | | | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | | | |

*NEIC* ***02*** *21:42:44.4±1.4, 35.06N±0.01×97.58W±0.02, h5km±1km, Error ellipse: s-maj=3.0km s-min=2.6km az=158.0*
**TUL 02 21:42:44.5±0.8, 35.04N±0.02×97.60W±0.02, h5km±5km, ML2.6, mb_Lg2.8**/93(NEIC), **ML2.9**/39(NEIC), **Error ellipse: s-maj=2.4km s-min=1.7km az=145.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FNO** | **Franklin** | **0.27** | **37** | Pg | Pg | 21 42 49.9 | +0.1 |
| FNO | | | | Sg | Sg | 21 42 53.2 | -0.1 |
| FNO | | | | IAML | | 21 42 58.0 | |
| | comp=E,2μm,0.6s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.39** | **20** | Pg | Pg | 21 42 52.5 | +0.5 |
| OKCSW | | | | Sg | Sb | 21 42 59.9 | -0.2 |
| OKCSW | | | | IAML | | 21 43 01.9 | |
| | comp=N,794nm,0.6s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.48** | **204** | Pg | Pg | 21 42 53.8 | +0.1 |
| X34A | | | | Sg | Sb | 21 43 02.1 | -0.8 |
| X34A | | | | IAML | | 21 43 02.8 | |
| | comp=N,484nm,0.6s | | | | | | |
| **ADOK** | **Arcadia Dam** | **0.64** | **17** | Pg | Pg | 21 42 56.8 | +0.1 |
| ADOK | | | | Sg | Sg | 21 43 05.7 | +0.7 |
| **OK029** | **Liberty Lake** | **0.76** | **9** | Pg | Pg | 21 42 59.1 | -0.1 |
| OK029 | | | | Sg | Sg | 21 43 09.3 | +0.3 |
| OK029 | | | | IAML | | 21 43 17.6 | |
| | comp=N,257nm,0.3s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.02** | **253** | Pg | Pg | 21 43 02.6 | -1.4 |
| **CSTR** | **Hydro, Custer** | **1.07** | **304** | | Pg | 21 43 05.2 | 0.0 |
| **OK031** | **S. Brethren Rd** | **1.10** | **34** | | Pg | 21 43 04.8 | -0.8 |
| **LOOK** | **Love County** | **1.10** | **162** | Pg | Pg | 21 43 05.5 | -0.1 |
| LOOK | | | | IAML | | 21 43 31.4 | |
| | comp=N,267nm,0.3s | | | | | | |
| **OK052** | **Battle Ridge R** | **1.15** | **34** | Pg | Pg | 21 43 05.7 | -0.9 |
| **DEOK** | **Depew** | **1.20** | **48** | | Pg | 21 43 06.8 | -0.7 |
| DEOK | | | | IAML | | 21 43 28.4 | |
| | comp=E,254nm,0.2s | | | | | | |
| DEOK | | | | IAML | | 21 43 30.9 | |
| | comp=N,219nm,0.4s | | | | | | |
| **WTFS** | **Witchita Falls** | **1.46** | **210** | | Pn | 21 43 11.2 | -0.3 |
| **CROK** | **Carrier** | **1.49** | **348** | | Pn | 21 43 11.8 | -0.2 |
| **TUL3** | **Leonard** | **1.71** | **59** | | Pn | 21 43 15.0 | 0.0 |
| **Z35A** | **Perchaven, San** | **1.73** | **170** | | Pn | 21 43 15.4 | +0.1 |
| **U32A** | **Winter Ranch,** | **1.75** | **320** | Pn | Pn | 21 43 16.3 | +0.7 |
| **ELIS** | **Ellis County** | **1.80** | **305** | | Pb | 21 43 17.2 | -0.7 |
| **GC02** | **Grant County #** | **1.82** | **353** | | Pb | 21 43 17.5 | -0.8 |
| **X37A** | **Clayton** | **1.89** | **103** | Pn | Pn | 21 43 18.2 | +0.8 |
| X37A | | | | IAmb_Lg | | 21 43 45.3 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **NOKA** | **Waynoka** | **1.92** | **326** | Pn | Pb | 21 43 19.0 | -1.0 |
| **KAN13** | **South Haven SW** | **1.97** | **3** | | Pn | 21 43 19.4 | +0.9 |
| **FW03** | **Perrin-Whitt E** | **2.04** | **191** | | Pn | 21 43 19.3 | -0.1 |
| FW03 | | | | IAmb_Lg | | 21 43 53.8 | |
| | comp=Z,49nm,0.7s | | | | | | |
| **FW06** | **Azle** | **2.07** | **179** | | Pn | 21 43 20.4 | +0.5 |
| **T35A** | **Sooner Cattle** | **2.07** | **25** | | Pn | 21 43 20.3 | +0.4 |
| T35A | | | | IAmb_Lg | | 21 43 50.3 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **KAN09** | **Caldwell North** | **2.09** | **360** | | Pn | 21 43 20.1 | 0.0 |
| KAN09 | | | | IAmb_Lg | | 21 43 50.5 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **KAN01** | **Argonia South** | **2.11** | **357** | | Pn | 21 43 20.6 | +0.1 |
| KAN01 | | | | IAmb_Lg | | 21 43 53.8 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **SMWD** | **Samnorwood** | **2.17** | **272** | | Pn | 21 43 22.2 | +0.9 |
| **KAN08** | **Anthony NE Sta** | **2.20** | **352** | | Pn | 21 43 22.0 | +0.3 |
| **KS21** | **Milan North St** | **2.24** | **359** | Pn | Pn | 21 43 22.2 | 0.0 |
| **KAN12** | **Harper NE Stat** | **2.27** | **352** | | Pg | 21 43 28.1 | +0.1 |
| **PLPT** | **Palo Pinto** | **2.30** | **195** | | Pn | 21 43 24.3 | +1.2 |
| **FW07** | **Weatherford** | **2.34** | **184** | | Pn | 21 43 22.9 | -0.7 |
| **RLO** | **Rose Lookout** | **2.38** | **61** | | Pn | 21 43 25.0 | +0.8 |
| **FW16** | **Waxahatchie** | **2.62** | **167** | | Pg | 21 43 33.4 | -1.3 |
| **FW14** | **Alvarado** | **2.66** | **173** | Pn | Pn | 21 43 28.8 | +0.8 |
| **FW13** | **Cleburne** | **2.69** | **177** | Pn | Pn | 21 43 28.8 | +0.4 |
| FW13 | | | | IAmb_Lg | | 21 44 13.3 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **APMT** | **Aspermont** | **2.70** | **231** | | Pn | 21 43 29.9 | +1.2 |
| **Z38A** | **Mt. Pleasant** | **2.81** | **129** | Pn | Pn | 21 43 30.8 | +0.8 |
| Z38A | | | | | Pg | 21 43 38.6 | +0.4 |
| Z38A | | | | IAmb_Lg | | 21 44 16.1 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **2.95** | **216** | Pn | Pn | 21 43 33.5 | +1.5 |
| **U38A** | **Gravette** | **2.96** | **61** | | Pn | 21 43 33.1 | +1.0 |
| **WHTX** | **Lake Whitney,** | **3.05** | **178** | | Pn | 21 43 33.9 | +0.5 |
| **DKNS** | **Dickens** | **3.07** | **244** | | Pn | 21 43 34.8 | +1.0 |
| DKNS | | | | IAmb_Lg | | 21 44 29.2 | |
| | comp=Z,55nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **3.23** | **66** | | Pn | 21 43 36.8 | +1.0 |
| HHAR | | | | IAmb_Lg | | 21 44 35.0 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **3.35** | **97** | | Pn | 21 43 38.7 | +1.2 |
| MIAR | | | | IAmb_Lg | | 21 44 37.2 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **AMTX** | **Amarillo** | **3.35** | **268** | | Pn | 21 43 39.0 | +1.4 |
| **SN07** | **Snyder 07** | **3.35** | **235** | | Pn | 21 43 39.3 | +1.6 |
| SN07 | | | | IAmb_Lg | | 21 44 40.0 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **237A** | **Washetta, Mont** | **3.38** | **153** | Pn | Pn | 21 43 39.2 | +1.2 |
| 237A | | | | IAmb_Lg | | 21 44 40.4 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.48** | **233** | Pn | Pn | 21 43 40.3 | +0.9 |
| SN05 | | | | IAmb_Lg | | 21 44 42.3 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **3.49** | **346** | | Pn | 21 43 40.0 | +0.6 |
| **POST** | **Post** | **3.79** | **240** | | Pn | 21 43 44.1 | +0.5 |
| **BRDY** | **Brady** | **3.93** | **198** | | Pn | 21 43 45.3 | -0.1 |
| **WLAR** | **White Oak Lake** | **3.95** | **109** | IAmb_Lg | | 21 44 52.6 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.96** | **97** | | Pb | 21 43 57.5 | +2.7 |
| X40A | | | | IAmb_Lg | | 21 44 55.9 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **KSU1** | **Kansas State U** | **4.13** | **11** | IAmb_Lg | | 21 45 03.9 | |
| | comp=Z,41nm,1.0s | | | | | | |
| **435B** | **Jarrell** | **4.25** | **180** | IAmb_Lg | | 21 45 04.6 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **UALR** | **University of** | **4.33** | **92** | IAmb_Lg | | 21 45 06.9 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **4.35** | **51** | IAmb_Lg | | 21 45 12.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.36** | **85** | IAmb_Lg | | 21 45 05.0 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **Z41A** | **Richland Creek** | **4.36** | **113** | IAmb_Lg | | 21 45 09.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.80** | **62** | IAmb_Lg | | 21 45 27.2 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **ODSA** | **Odessa** | **5.06** | **236** | IAmb_Lg | | 21 45 26.1 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **OZNA** | **Ozona** | **5.07** | **217** | IAmb_Lg | | 21 45 34.2 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **5.37** | **51** | IAmb_Lg | | 21 45 35.8 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.61** | **34** | IAmb_Lg | | 21 45 41.6 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **T42A** | **Van Buren** | **5.63** | **68** | IAmb_Lg | | 21 45 48.8 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.64** | **316** | IAmb_Lg | | 21 45 58.0 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **HNDO** | **Hondo** | **5.68** | **195** | IAmb_Lg | | 21 45 50.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.90** | **293** | IAmb_Lg | | 21 45 57.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **PECS** | **Pecos** | **6.40** | **237** | IAmb_Lg | | 21 46 12.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **FVM** | **French Village** | **6.48** | **61** | IAmb_Lg | | 21 46 23.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **OXF** | **Oxford** | **6.76** | **92** | IAmb_Lg | | 21 46 35.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.81** | **68** | IAmb_

comp=E,5μm,1.3s
**HTC Hot Caves 0.25 223 Pg 21 46 42.0 +2.4**

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*HVO **02** 21:47:27.7±1.3, 19°.417N±0°.006×155°.274W±0°.006, h-0km±2km, ML3.9/23, ML3.2/27(NEIC), Error ellipse: s-maj=1.2km s-min=0.4km az=138.0*
*NEIC **02** 21:47:27.9±1.4, 19°.43N±0°.01×155°.273W±0°.008, h5km±1km, Error ellipse: s-maj=1.9km s-min=1.6km az=351.0*
*IDC **02** 21:47:30.3±2.0, 19°.73N×155°.33W, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=72.7km s-min=16.3km az=158.0*
**ISC 02 21:47:28.8**±0.9,**19°.43N**±0°.04×**155°.28W**±0°.03,**h10**km,**n35**, σ1§**69**/34,**mb3.7**/3,**Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UWB** | **Uwekahuna B** | **0.00** | **204** | | **Pg** | **21 47 28.5** | **-2.3** |
| **SBLHI** | **Steaming Bluff** | **0.01** | **90** | | **Pg** | **21 47 28.6** | **-2.1** |
| **OBL** | **Observatory Le** | **0.01** | **215** | | **Pg** | **21 47 28.6** | **-2.2** |
| **HATHI** | **Halema'uma'u T** | **0.02** | **105** | Pg | **Pg** | **21 47 28.3** | **-2.5** |
| HATHI | | | | | **Sg** | **21 47 30.8** | **-1.3** |
| **UWE** | **Uwekahuna** | **0.02** | **249** | | **Pg** | **21 47 28.6** | **-2.2** |
| **BYL** | **Byron's Ledge** | **0.02** | **133** | Pg | **Pg** | **21 47 28.4** | **-2.3** |
| BYL | | | | Sg | **Sg** | **21 47 30.0** | **-2.1** |
| **WRMHI** | **West Rim** | **0.03** | **227** | | **Pg** | **21 47 29.6** | **-1.3** |
| **KKO** | **Keanakako`i** | **0.03** | **160** | | **Pg** | **21 47 29.5** | **-1.4** |
| **RIM** | **Rim** | **0.03** | **175** | | **Pg** | **21 47 29.6** | **-1.2** |
| **RSD** | **Rainshed** | **0.04** | **358** | | **Pg** | **21 47 29.1** | **-1.8** |
| **SDHHI** | **Sand Hill** | **0.04** | **203** | | **Pg** | **21 47 29.1** | **-1.8** |
| **PUH** | **Pauahi** | **0.08** | **132** | Pg | **Pg** | **21 47 29.1** | **-2.2** |
| PUH | | | | IAML | | 21 47 29.6 | |
| | comp=E,4μm,1.2s | | | | | | |
| PUH | | | | IAML | | 21 47 30.6 | |
| | comp=N,8μm,1.4s | | | | | | |
| PUH | | | | Sg | **Sg** | **21 47 31.9** | **-1.1** |
| **KNHH** | **Kane Nui o Ham** | **0.11** | **115** | | **Pg** | **21 47 30.6** | **-1.1** |
| **MLH** | **Mauna Loa** | **0.12** | **303** | | **Pg** | **21 47 30.8** | **-1.2** |
| MLH | | | | IAML | | 21 47 34.0 | |
| | comp=E,14μm,0.6s | | | | | | |
| MLH | | | | IAML | | 21 47 34.4 | |
| | comp=N,8μm,0.6s | | | | | | |
| **HLP** | **Hilina Pali** | **0.13** | **193** | Pg | **Pg** | **21 47 30.3** | **-1.7** |
| HLP | | | | IAML | | 21 47 33.7 | |
| | comp=N,7μm,0.7s | | | | | | |
| HLP | | | | IAML | | 21 47 33.9 | |
| | comp=E,20μm,1.2s | | | | | | |
| **STCH** | **Steam Cracks** | **0.15** | **106** | | **Pg** | **21 47 30.9** | **-1.3** |
| STCH | | | | IAML | | 21 47 35.2 | |
| | comp=N,10μm,0.7s | | | | | | |
| STCH | | | | IAML | | 21 47 35.3 | |
| | comp=E,16μm,1.0s | | | | | | |
| **NPOC** | **North of Pu'u** | **0.16** | **102** | | **Pg** | **21 47 31.9** | **-0.6** |
| **HTC** | **Hot Caves** | **0.22** | **211** | | **Pg** | **21 47 32.9** | **-0.5** |
| **JOKA** | **Jonika Flow** | **0.26** | **88** | Pg | **Pg** | **21 47 33.5** | **-0.6** |
| JOKA | | | | IAML | | 21 47 40.2 | |
| | comp=E,6μm,1.2s | | | | | | |
| **HMH** | **Humu'ula Sheep** | **0.26** | **312** | | **Pg** | **21 47 33.1** | **-1.2** |
| HMH | | | | IAML | | 21 47 38.8 | |
| | comp=E,6μm,0.8s | | | | | | |
| HMH | | | | IAML | | 21 47 41.7 | |
| | comp=N,7μm,0.5s | | | | | | |
| **MLOA** | **Mauna Loa Obse** | **0.30** | **291** | Pg | **Pg** | **21 47 34.4** | **-0.7** |
| MLOA | | | | IAML | | 21 47 41.9 | |
| | comp=N,7μm,1.1s | | | | | | |
| **MWH** | **Moku'aweowe** | **0.31** | **281** | Pg | **Pg** | **21 47 33.5** | **-1.8** |
| **PAH** | **Pahoa** | **0.32** | **78** | Pg | **Pg** | **21 47 33.0** | **-2.2** |
| **ALEP** | **Alea Permanent** | **0.36** | **288** | | **Pg** | **21 47 35.6** | **-0.6** |
| **POHA** | **Pohakuloa** | **0.41** | **324** | Pg | **Pg** | **21 47 35.5** | **-1.5** |
| **HUH** | **Hualalai** | **0.59** | **296** | Pg | **Pg** | **21 47 39.1** | **-1.2** |
| **I59US** | **HAWAII INFRASO** | **0.60** | **286** | Pg | **Pb** | **21 47 40.8** | **-0.8** |
| | baz=117,slow=66 | | | | | | |
| **HPAH** | **Hawaii Prepara** | **0.72** | **327** | Pg | **Pg** | **21 47 41.2** | **-1.6** |
| **H11N3** | **WAKE ISLAND Hy** | **35.58** | **277** | T | T | 22 31 33.4 | |
| | baz=84,slow=74,SNR=9.1 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.59** | **277** | T | T | 22 31 34.2 | |
| | baz=84,slow=74,SNR=5.7 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.60** | **277** | T | T | 22 31 31.7 | |
| | baz=84,slow=74,SNR=5.4 | | | | | | |
| **H02S1** | **DAWSON INLET T** | **38.05** | **22** | T | T | 22 34 53.1 | |
| | SNR=11 | | | | | | |
| **PDAR** | **Pinedale Array** | **44.85** | **48** | P | **P** | **21 55 45.3** | **+1.7** |
| | comp=N,0.3nm,0.6s,baz=251,slow=11,SNR=2.5 | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **45.66** | **5** | P | **P** | **21 55 49.9** | **+0.5** |
| | comp=N,0.3nm,0.4s,baz=200,slow=7.6,SNR=4.3 | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **47.71** | **68** | P | **P** | **21 56 08.5** | **+2.4** |
| | comp=N,1.2nm,0.9s,baz=251,slow=7.8,SNR=5.0 | | | | | | |
| | comp=N,1.2nm,0.9s | | | | | | |

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*BJI **02** 21:55:10.4±0.0, 18°.87N×154°.85W, h18km, mb4.8/23, mB5.7/32, Ms5.1/31, Ms7 4.9/32*
*NEIC **02** 21:55:12, 19°.41N×155°.28W, h12km*
*HVO **02** 21:55:12.0±2.2, 19°.412N±0°.010×155°.283W±0°.008, h1km±3km, ML4.0/48, mb5.0/50(NEIC), ML3.6/40(NEIC), Mww5.3/7(NEIC), Error ellipse: s-maj=1.5km s-min=1.0km az=180.0*
*NEIC **02** 21:55:12, 19°.31N×155°.39W, h12km, Moment Tensor Solution. Duration: 2§2 Moment tensor: Scale 10^17^Nm; Mrr=0.92; Mθθ=0.38; Mφφ=0.54; Mrθ=-0.28; Mθφ=0.65; Mφr=0.56; Fault plane solution: M0=1.20000×10^17^ NP1:φs=32.43000°, δ=61.05000°, λ=-99.85000°. NP2:φs=232.15000°, δ=30.44000°, λ=-72.82000°. Principal axes: T 1.2810, Plg=16.0000°, Azm=130.0000°; N -0.1640, Plg=9.0000°, Azm=37.0000°; P -1.1170, Plg=72.0000°, Azm=279.0000°;*
*NEIC **02** 21:55:13.5±2.9, 19°.395N±0°.009×155°.284W±0°.009, h5km±1km Error ellipse: s-maj=2.0km s-min=1.6km az=20.0*
*IDC **02** 21:55:13.2±1.2, 19°.37N×155°.35W, h0km, mb3.8/7, mbtmp3.8/7, MS4.4/62, Error ellipse: s-maj=31.6km s-min=15.6km az=0.0*
*GCMT **02** 21:55:20.0±0.1, 19°.31N±0°.01×155°.12W±0°.01, h12km, MW5.2/156, Moment Tensor Solution. s100,c146; s156,c282; Duration: 1s0 Moment tensor: Scale 10^17^ Nm; Mrr=0.98±.01; Mθθ=0.53±.01; Mφφ=0.45±.01; Mrθ=0.22±.03; Mθφ=0.34±.01; Mφr=0.13±.03; Best double couple: M0=0.93800×10^17^ NP1:φs=240.00000°, δ=49.00000°, λ=-74.00000°. NP2:φs=37.00000°, δ=44.00000°, λ=-107.00000°. Principal axes: T 0.8390, Plg=3.0000°, Azm=319.0000°; N 0.1980, Plg=12.0000°, Azm=49.0000°; P -1.0370, Plg=78.0000°, Azm=217.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 02 21:55:13.7**±0.7,**19°.41N**±0°.03×**155°.28W**±0°.03,**h4**km±3km, **n557**, σ1§**65**/486,**mb4.9**/31,**MS4.6**/88,**2C-2D**,**Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OBL** | **Observatory Le** | **0.01** | **328** | | **Pg** | **21 55 13.5** | **-1.2** |
| **UWB** | **Uwekahuna B** | **0.01** | **6** | | **Pg** | **21 55 13.6** | **-1.1** |
| **RIM** | **Rim** | **0.02** | **161** | | **Pg** | **21 55 13.0** | **-1.7** |
| **UWE** | **Uwekahuna** | **0.02** | **309** | Pg | **Pg** | **21 55 12.8** | **-1.9** |
| **KKO** | **Keanakako`i** | **0.02** | **135** | | **Pg** | **21 55 13.1** | **-1.6** |
| **BYL** | **Byron's Ledge** | **0.02** | **87** | Pg | **Pg** | **21 55 12.8** | **-1.9** |
| **SBLHI** | **Steaming Bluff** | **0.02** | **34** | | **Pg** | **21 55 13.9** | **-0.8** |
| **WRMHI** | **West Rim** | **0.02** | **257** | | **Pg** | **21 55 12.9** | **-1.8** |
| **HATHI** | **Halema'uma'u T** | **0.02** | **56** | Pg | **Pg** | **21 55 13.2** | **-1.5** |
| **SDHHI** | **Sand Hill** | **0.03** | **212** | | **Pg** | **21 55 13.1** | **-1.7** |
| **RSD** | **Rainshed** | **0.05** | **2** | Pg | **Pg** | **21 55 13.9** | **-1.2** |
| **PUH** | **Pauahi** | **0.07** | **121** | Pg | **Pg** | **21 55 15.2** | **-0.1** |
| PUH | | | | IAML | | 21 55 15.7 | |
| | comp=E,5μm,0.6s | | | | | | |
| PUH | | | | IAML | | 21 55 15.9 | |
| | comp=N,5μm,0.3s | | | | | | |
| **KNHH** | **Kane Nui o Ham** | **0.11** | **107** | | **Pg** | **21 55 15.4** | **-0.6** |
| **HLP** | **Hilina Pali** | **0.12** | **193** | Pg | **Pg** | **21 55 16.2** | **+0.1** |
| HLP | | | | IAML | | 21 55 17.6 | |
| | comp=N,10μm,1.3s | | | | | | |
| HLP | | | | IAML | | 21 55 18.2 | |
| | comp=E,17μm,0.8s | | | | | | |
| **MLH** | **Mauna Loa** | **0.13** | **310** | Pg | **Pg** | **21 55 15.3** | **-1.1** |
| MLH | | | | IAML | | 21 55 18.2 | |
| | comp=E,15μm,0.4s | | | | | | |
| MLH | | | | IAML | | 21 55 18.4 | |
| | comp=N,11μm,0.2s | | | | | | |
| **STCH** | **Steam Cracks** | **0.15** | **100** | Pg | **Pg** | **21 55 17.2** | **+0.6** |
| STCH | | | | IAML | | 21 55 19.4 | |
| | comp=E,27μm,1.2s | | | | | | |
| STCH | | | | IAML | | 21 55 20.2 | |
| | comp=N,10μm,0.3s | | | | | | |
| **JOKA** | **Jonika Flow** | **0.26** | **85** | Pg | **Pg** | **21 55 19.7** | **+0.9** |
| JOKA | | | | IAML | | 21 55 24.4 | |
| | comp=N,23μm,0.8s | | | | | | |
| JOKA | | | | IAML | | 21 55 24.6 | |
| | comp=E,23μm,2.1s | | | | | | |
| **HMH** | **Humu'ula Sheep** | **0.27** | **315** | Pg | **Pg** | **21 55 18.5** | **-0.6** |
| HMH | | | | IAML | | 21 55 24.9 | |
| | comp=E,15μm,1.4s | | | | | | |
| **MLOA** | **Mauna Loa Obse** | **0.31** | **294** | Pg | **Pg** | **21 55 19.6** | **-0.2** |
| MLOA | | | | IAML | | 21 55 25.7 | |
| | comp=N,18μm,1.4s | | | | | | |
| **MWH** | **Moku'aweowe** | **0.31** | **284** | | **Pg** | **21 55 20.1** | **+0.2** |
| **PAH** | **Pahoa** | **0.33** | **75** | Pg | **Pb** | **21 55 21.3** | **-0.8** |
| **KHU** | **Kahuku** | **0.36** | **243** | Pg | **Pg** | **21 55 21.2** | **+0.5** |
| KHU | | | | IAML | | 21 55 28.8 | |
| | comp=E,13μm,1.8s | | | | | | |
| KHU | | | | IAML | | 21 55 29.3 | |
| | comp=N,21μm,1.3s | | | | | | |
| **HPO** | **Honuapo** | **0.41** | **219** | | **Pg** | **21 55 21.5** | **-0.1** |
| **POHA** | **Pohakuloa** | **0.42** | **325** | IAML | | 21 55 33.1 | |
| | comp=N,14μm,1.7s | | | | | | |
| **POHA** | **Pohakuloa** | **0.42** | **325** | Pg | **Pg** | **21 55 22.0** | **+0.2** |
| **HUH** | **Hualalai** | **0.59** | **298** | Pg | **Pg** | **21 55 25.5** | **+0.4** |
| **I59US** | **HAWAII INFRASO** | **0.61** | **287** | Pg | **Pg** | **21 55 25.0** | **-0.4** |
| | baz=142,slow=6.3 | | | | | | |
| I59US | | | | I | I | 21 59 20.0 | |
| | baz=107,slow=300,SNR=0.8 | | | | | | |
| **HPAH** | **Hawaii Prepara** | **0.73** | **328** | | **Pg** | **21 55 27.4** | **-0.4** |
| **MHA** | **Mahukona** | **0.97** | **323** | Pg | **Pg** | **21 55 30.5** | **-1.8** |
| **HLK** | **Haleakala** | **1.62** | **326** | | **Pn** | **21 55 42.2** | **-1.1** |
| **KHLH** | **Kahului Airpor** | **1.83** | **324** | | **Pn** | **21 55 45.0** | **-0.9** |
| **KPA** | **Kalaupapa** | **2.39** | **318** | Pn | **Pn** | **21 55 53.2** | **-0.4** |
| **DHH** | **Diamond Head** | **3.00** | **308** | Pn | **Pn** | **21 56 02.1** | **+0.1** |
| **HON** | **Honolulu** | **3.19** | **307** | Pn | **Pn** | **21 56 05.0** | **+0.4** |
| **KEKH** | **Kekaha** | **4.87** | **302** | Pn | **Pn** | **21 56 27.5** | **-0.3** |
| **MIDW** | **Midway** | **22.00** | **298** | P | **P** | **22 00 07.2** | **-1.8** |
| **TAOE** | **Nuku Hiva Isla** | **31.80** | **151** | *e*PKP1 | **P** | **22 01 35.0** | **-4.6** |
| | comp=N,187nm,24.0s | | | | | | |
| TAOE | | | | *e*LR | LR | 22 09 55.7 | |
| | comp=N,4μm,24.6s | | | | | | |
| **KMRM** | **Mail Ridge** | **34.08** | **46** | P | **P** | **22 01 58.4** | **-1.1** |
| KMRM | | | | IAmb | IAmb | 22 03 12.3 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **JCC** | **Jacoby Creek,** | **34.16** | **45** | P | **P** | **22 01 59.9** | **0.0** |
| **SAO** | **San Andreas Ge** | **34.26** | **53** | P | **P** | **22 02 02.6** | **+1.6** |
| SAO | | | | IAmb | IAmb | 22 02 52.0 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **KRPM** | **Rodgers** | **34.33** | **44** | P | **P** | **22 02 03.5** | **+2.0** |
| **KHMM** | **Horse Mountain** | **34.38** | **45** | P | **P** | **22 02 03.5** | **+1.5** |
| **KRMB** | **Red Mountain** | **34.58** | **44** | P | **P** | **22 02 04.5** | **+0.7** |
| KRMB | | | | IAmb | IAmb | 22 02 12.6 | |
| | comp=Z,29nm,1.7s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **34.69** | **46** | P | **P** | **22 02 05.1** | **+0.4** |
| **SNCC** | **San Nicolas Is** | **34.70** | **59** | P | **P** | **22 02 02.5** | **-2.2** |
| **SNCC** | **San Nicolas Is** | **34.70** | **59** | P | **P** | **22 02 02.5** | **-2.2** |
| | baz=256 | | | | | | |
| **KBO** | **Bosley Butte** | **34.73** | **42** | P | **P** | **22 02 03.6** | **-1.4** |
| **SCZ2** | **Santa Cruz Isl** | **34.80** | **58** | P | **P** | **22 02 04.3** | **-1.4** |
| | baz=254 | | | | | | |
| **SBC** | **Santa Barbara** | **34.86** | **57** | P | **P** | **22 02 04.4** | **-1.7** |
| | baz=254 | | | | | | |
| **SMMC** | **Simmler** | **34.89** | **56** | P | **P** | **22 02 05.1** | **-1.3** |
| | baz=252 | | | | | | |
| **PKM** | **Mcpherson Peak** | **34.91** | **56** | P | **P** | **22 02 06.1** | **-0.6** |
| | baz=253 | | | | | | |
| **L02F** | **Cave Junction** | **35.10** | **43** | P | **P** | **22 02 09.4** | **+1.2** |
| **NIKH** | **Nikolski High** | **35.12** | **346** | P | **P** | **22 02 08.0** | **-0.1** |
| | baz=157 | | | | | | |
| **CLES** | **Cleveland East** | **35.23** | **345** | P | **P** | **22 02 09.0** | **0.0** |
| **BCW** | **Bitter Crk WRg** | **35.24** | **57** | P | **P** | **22 02 08.8** | **-0.8** |
| BCW | | | | IAmb | IAmb | 22 02 30.8 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **SCI2** | **San Clemente I** | **35.43** | **60** | P | **P** | **22 02 08.0** | **-3.1** |
| | baz=257 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **35.47** | **44** | LR | LR | 22 12 42.6 | |
| | comp=Z,223nm,20.8s,baz=262,slow=30 | | | | | | |
| **CHNA** | **Chernabura Isl** | **35.51** | **356** | P | **P** | **22 02 12.2** | **+0.8** |
| | baz=173 | | | | | | |
| **CIS** | **Catalina Islan** | **35.64** | **59** | P | **P** | **22 02 11.5** | **-1.4** |
| | baz=256 | | | | | | |
| **VOG** | **Valley Oaks Go** | **35.68** | **54** | P | **P** | **22 02 11.8** | **-1.3** |
| | baz=252 | | | | | | |
| **OSI** | **Osito Audit: C** | **35.70** | **57** | P | **P** | **22 02 11.5** | **-1.9** |
| | baz=254 | | | | | | |
| **ARVC** | **Arvin** | **35.75** | **56** | P | **P** | **22 02 13.1** | **-0.7** |
| | baz=254 | | | | | | |
| **VES** | **Vestal, Richgr** | **35.76** | **55** | P | **P** | **22 02 13.4** | **-0.5** |
| | baz=252 | | | | | | |
| **FMP** | **Fort Macarthur** | **35.81** | **59** | P | **P** | **22 02 14.9** | **+0.6** |
| | baz=256 | | | | | | |
| **DECC** | **Green Verdugo** | **35.91** | **58** | P | **P** | **22 02 14.6** | **-0.6** |
| | baz=255 | | | | | | |
| **FALS** | **False Pass** | **35.92** | **352** | P | **P** | **22 02 16.5** | **+1.6** |
| | baz=167 | | | | | | |
| **SDPT** | **Sand Point** | **36.09** | **355** | P | **P** | **22 02 16.2** | **-0.2** |
| | baz=172 | | | | | | |
| **ISA** | **Isabella, Lake** | **36.18** | **56** | P | **P** | **22 02 17.8** | **+0.2** |
| | baz=253 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **36.35** | **57** | P | **P** | **22 02 18.7** | **-0.2** |
| | baz=255 | | | | | | |
| **CHIR** | **Chirikof Islan** | **36.35** | **360** | P | **P** | **22 02 19.9** | **+1.2** |
| | baz=180 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **36.45** | **58** | P | **P** | **22 02 20.5** | **+0.5** |
| | baz=256 | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **36.52** | **52** | P | **P** | **22 02 19.9** | **-0.8** |
| | baz=250 | | | | | | |
| **S12K** | **Black Hills** | **36.59** | **354** | P | **P** | **22 02 20.2** | **-0.5** |
| | baz=169 | | | | | | |
| **109C** | **Camp Elliot, M** | **36.60** | **61** | P | **P** | **22 02 21.3** | **+0.2** |
| | baz=256 | | | | | | |
| **MURC** | **Murrieta** | **36.68** | **60** | P | **P** | **22 02 21.6** | **-0.1** |
| | baz=257 | | | | | | |
| **CWC** | **Cottonwood Cre** | **36.72** | **55** | P | **P** | **22 02 21.9** | **-0.3** |
| | baz=253 | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **36.75** | **56** | P | **P** | **22 02 23.9** | **+1.3** |
| | baz=254 | | | | | | |
| **TIN** | **Tinemaha, Big** | **36.79** | **54** | P | **P** | **22 02 23.4** | **+0.6** |
| | baz=252 | | | | | | |
| **CHGN** | **Chignik** | **36.91** | **357** | P | **P** | **22 02 25.4** | **+2.0** |
| | baz=175 | | | | | | |
| **S14K** | **Fog Glacier** | **36.96** | **356** | P | **P** | **22 02 24.7** | **+0.8** |
| | baz=173 | | | | | | |
| **BBRC** | **Big Bear Solar** | **37.05** | **59** | P | **P** | **22 02 24.6** | **-0.6** |
| | baz=256 | | | | | | |
| **MPMC** | **Manual Prospec** | **37.06** | **55** | P | **P** | **22 02 24.9** | **-0.4** |
| | baz=254 | | | | | | |
| **SII** | **Sitkinak Islan** | **37.10** | **1** | P | **P** | **22 02 26.6** | **+1.6** |
| | baz=182 | | | | | | |
| **RRX** | **Edison Barstow** | **37.14** | **58** | P | **P** | **22 02 25.9** | **+0.2** |
| | baz=256 | | | | | | |
| **MONP2** | **Monument Peak** | **37.16** | **61** | P | **P** | **22 02 26.1** | **-0.1** |
| | baz=259 | | | | | | |
| **PPT** | **Papeete** | **37.17** | **171** | LR | LR | 22 13 47.4 | |
| | comp=Z,1μm,21.6s,baz=346,slow=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **37.18** | **51** | LR | LR | 22 13 40.4 | |
| | comp=Z,261nm,20.8s,baz=260,slow=30 | | | | | | |
| **PPT2** | **Papeete2** | **37.19** | **171** | *e*PKP1 | **P** | **22 02 28.0** | **+1.8** |
| | comp=Z,92nm,23.5s | | | | | | |
| PPT2 | | | | *e*S | **S** | **22 08 15.0** | **+1.2** |
| | comp=Z,426nm,25.0s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 22 10 50.0 | |
| | comp=Z,605nm,24.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 22 12 21.7 | |
| | comp=Z,3μm,27.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 22 12 22.7 | |
| | comp=Z,4μm,25.2s | | | | | | |
| **PFO** | **Pinyon Flats O** | **37.28** | **60** | LR | LR | 22 14 12.6 | |
| | comp=Z,202nm,18.1s,baz=249,slow=30 | | | | | | |
| **PFO** | **Pinyon Flats O** | **37.28** | **60** | P | **P** | **22 02 26.2** | **-0.8** |
| | baz=258 | | | | | | |
| **TPFO** | **Pinon Flats** | **37.28** | **60** | P | **P** | **22 02 26.3** | **-0.8** |
| | baz=258 | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **37.37** | **61** | P | **P** | **22 02 27.1** | **-0.7** |
| | baz=259 | | | | | | |
| **GSC** | **Goldstone, Bar** | **37.40** | **57** | P | **P** | **22 02 28.5** | **+0.5** |
| | baz=255 | | | | | | |
| **GRAC** | **Grapevine Rang** | **37.43** | **54** | IAmb | IAmb | 22 02 39.0 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **GRAC** | **Grapevine Rang** | **37.43** | **54** | P | **P** | **22 02 29.2** | **+1.1** |
| | baz=252 | | | | | | |
| **HEC** | **Hector,Ludlow** | **37.65** | **58** | P | **P** | **22 02 30.7** | **+0.5** |
| | baz=256 | | | | | | |
| **FURC** | **Furnace Creek,** | **37.66** | **55** | P | **P** | **22 02 30.8** | **+0.7** |
| | baz=254 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **37.69** | **61** | P | **P** | **22 02 30.6** | **+0.3** |
| | baz=259 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **37.74** | **59** | P | **P** | **22 02 30.0** | **-0.9** |
| | baz=258 | | | | | | |
| **OHAK** | **Old Harbor** | **37.79** | **2** | P | **P** | **22 02 31.6** | **+0.8** |
| | baz=183 | | | | | | |
| **SHOC** | **Shoshone, Teco** | **37.97** | **56** | P | **P** | **22 02 33.0** | **+0.4** |
| | baz=255 | | | | | | |
| **H02S1** | **DAWSON INLET T** | **38.06** | **22** | T | T | 22 42 43.6 | |
| | SNR=65 | | | | | | |
| **R18K** | **Karluk** | **38.11** | **1** | P | **P** | **22 02 35.0** | **+1.6** |
| | baz=181 | | | | | | |
| **BC3** | **Big Chuckawall** | **38.11** | **60** | P | **P** | **22 02 34.1** | **0.0** |
| | baz=258 | | | | | | |
| **TUQ** | **Turquoise Moun** | **38.13** | **57** | P | **P** | **22 02 34.2** | **0.0** |
| | baz=256 | | | | | | |
| **R16K** | **Pilot Point** | **38.14** | **358** | P | **P** | **22 02 36.0** | **+2.2** |
| | baz=176 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **38.17** | **359** | P | **P** | **22 02 36.5** | **+2.4** |
| | baz=178 | | | | | | |
| **GMRC** | **Granite Mounta** | **38.18** | **58** | P | **P** | **22 02 34.7** | **0.0** |
| | baz=257 | | | | | | |
| **TPNV** | **Topopah Spring** | **38.27** | **55** | P | **P** | **22 02 35.9** | **+0.5** |
| | baz=254 | | | | | | |
| **KDAK** | **Kodiak Island** | **38.37** | **2** | P | **P** | **22 02 37.7** | **+2.0** |
| | baz=184 | | | | | | |
| **IRM** | **Iron Mountain** | **38.46** | **59** | P | **P** | **22 02 37.6** | **+0.7** |
| | baz=258 | | | | | | |
| **GLA** | **Glamis** | **38.51** | **61** | P | **P** | **22 02 38.6** | **+1.3** |
| | baz=260 | | | | | | |
| **P08K** | **Saint George I** | **38.64** | **347** | P | **P** | **22 02 40.1** | **+2.1** |
| | baz=158 | | | | | | |
| **D05A** | **Enumclaw** | **38.77** | **37** | IAmb | IAmb | 22 02 41.4 | |
| | comp=Z,24nm,0.5s | | | | | | |
| **Q17K** | **Contact Creek** | **38.80** | **359** | P | **P** | **22 02 41.3** | **+1.9** |
| | baz=179 | | | | | | |
| **BBB** | **Bella Bella** | **38.98** | **27** | LR | LR | 22 14 47.0 | |
| | comp=Z,274nm,19.6s,baz=241,slow=30 | | | | | | |
| **NEE2** | **Needles Airpor** | **39.02** | **58** | P | **P** | **22 02 42.5** | **+1.0** |
| | baz=258 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **39.19** | **0** | P | **P** | **22 02 44.5** | **+1.8** |
| | baz=180 | | | | | | |
| **Q20K** | **Shuyak Island** | **39.20** | **2** | P | **P** | **22 02 44.4** | **+1.7** |
| | baz=184 | | | | | | |
| **Q16K** | **King Salmon** | **39.23** | **359** | P | **P** | **22 02 45.1** | **+2.2** |
| | baz=178 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **39.31** | **59** | P | **P** | **22 02 45.3** | **+1.4** |
| | baz=258 | | | | | | |
| **Q19K** | **Cape Douglas,** | **39.49** | **1** | P | **P** | **22 02 47.2** | **+2.1** |
| | baz=182 | | | | | | |
| **P16K** | **Nushagak River** | **39.62** | **358** | P | **P** | **22 02 48.1** | **+2.0** |
| | baz=176 | | | | | | |
| **CRAG** | **Craig** | **39.70** | **20** | P | **P** | **22 02 48.7** | **+1.8** |
| | baz=214 | | | | | | |
| **P17K** | **Kvichak River** | **39.74** | **359** | P | **P** | **22 02 48.7** | **+1.5** |
| | baz=178 | | | | | | |
| **O15K** | **Ungalikthiuk R** | **39.85** | **356** | P | **P** | **22 02 49.6** | **+1.5** |
| | baz=173 | | | | | | |
| **P18K** | **Big Mountain,** | **39.93** | **0** | P | **P** | **22 02 51.1** | **+2.3** |
| | baz=180 | | | | | | |
| **214A** | **Organ Pipe Nat** | **40.02** | **63** | P | **P** | **22 02 50.8** | **+0.8** |
| | baz=262 | | | | | | |
| **O14K** | **Tigyukauivet M** | **40.03** | **355** | P | **P** | **22 02 51.5** | **+2.0** |
| | baz=171 | | | | | | |
| **V35K** | **Ketchikan** | **40.08** | **21** | P | **P** | **22 02 51.8** | **+1.8** |
| | baz=216 | | | | | | |
| **O16K** | **Kokwok River B** | **40.19** | **358** | P | **P** | **22 02 52.8** | **+2.0** |
| | baz=176 | | | | | | |
| **P19K** | **Oil Pt** | **40.22** | **2** | P | **P** | **22 02 52.7** | **+1.5** |
| | baz=183 | | | | | | |
| **U33K** | **Whale Pass** | **40.24** | **19** | P | **P** | **22 02 53.6** | **+2.3** |
| | baz=213 | | | | | | |
| **HOM** | **Homer** | **40.28** | **3** | P | **P** | **22 02 53.4** | **+1.7** |
| | baz=185 | | | | | | |
| **O17K** | **Koliganek Bris** | **40.34** | **359** | P | **P** | **22 02 53.4** | **+1.3** |
| | baz=177 | | | | | | |
| **O18K** | **Koktuh Hills** | **40.40** | **0** | P | **P** | **22 02 53.7** | **+1.1** |
| | baz=180 | | | | | | |
| **SIT** | **Sitka** | **40.41** | **17** | P | **P** | **22 02 54.1** | **+1.4** |
| | baz=210 | | | | | | |
| **BRSE** | **Bradley Lake S** | **40.42** | **4** | P | **P** | **22 02 53.8** | **+1.0** |
| | baz=187 | | | | | | |
| **Q23K** | **Middleton Isla** | **40.49** | **7** | P | **P** | **22 02 55.3** | **+2.0** |
| | baz=193 | | | | | | |
| **RAR** | **Rarotonga** | **40.61** | **186** | LR | LR | 22 15 58.0 | |
| | comp=Z,695nm,19.7s,baz=9.0,slow=31 | | | | | | |
| **O20K** | **Slope Mountain** | **40.67** | **2** | P | **P** | **22 02 55.7** | **+0.7** |
| | baz=184 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **40.73** | **355** | P | **P** | **22 02 55.9** | **+0.6** |
| | baz=171 | | | | | | |
| **N15K** | **Kwethluk River** | **40.86** | **356** | P | **P** | **22 02 57.5** | **+1.0** |
| | baz=173 | | | | | | |
| **SEW** | **Seward** | **40.86** | **4** | P | **P** | **22 02 57.9** | **+1.5** |
| | baz=188 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **40.87** | **332** | LR | LR | 22 16 28.0 | |
| | comp=Z,1μm,21.6s,baz=136,slow=31 | | | | | | |
| **T33K** | **Petersburg** | **40.88** | **19** | P | **P** | **22 02 58.0** | **+1.4** |
| | baz=213 | | | | | | |
| **P23K** | **Montague Islan** | **40.93** | **6** | P | **P** | **22 02 59.2** | **+2.1** |
| | baz=191 | | | | | | |
| **S31K** | **Pelican** | **40.97** | **15** | P | **P** | **22 02 59.2** | **+1.9** |
| | baz=208 | | | | | | |
| **S32K** | **Killisnoo** | **40.97** | **17** | P | **P** | **22 03 00.0** | **+2.7** |
| | baz=211 | | | | | | |
| **N16K** | **Nishlik Lake** | **41.09** | **357** | P | **P** | **22 03 00.3** | **+1.9** |
| | baz=175 | | | | | | |
| **N17K** | **Nushagak Hills** | **41.09** | **359** | P | **P** | **22 03 01.4** | **+3.0** |
| | baz=177 | | | | | | |
| **U35K** | **Hyder** | **41.09** | **21** | P | **P** | **22 03 00.6** | **+2.2** |
| | baz=218 | | | | | | |
| **KAIM** | **Kayak Island** | **41.22** | **8** | P | **P** | **22 03 01.3** | **+1.9** |
| | baz=196 | | | | | | |
| **O22K** | **Cooper Landing** | **41.22** | **4** | P | **P** | **22 03 01.3** | **+1.9** |
| | baz=188 | | | | | | |
| **N18K** | **Kilae Creek** | **41.23** | **360** | P | **P** | **22 03 02.2** | **+2.7** |
| | baz=178 | | | | | | |
| **M13K** | **Dall Lake** | **41.36** | **354** | P | **P** | **22 03 02.5** | **+1.9** |
| | baz=168 | | | | | | |
| **N19K** | **Bonanza Creek** | **41.36** | **1** | P | **P** | **22 03 03.6** | **+2.9** |
| | baz=181 | | | | | | |
| **CAPN** | **Captain Cook N** | **41.42** | **3** | P | **P** | **22 03 04.0** | **+3.0** |
| | baz=186 | | | | | | |
| **M15K** | **Kasigluk River** | **41.42** | **356

NEW **Newport** 42.12 38 LR LR 22 16 28.4
comp=Z,176nm,20.4s,baz=216,slow=30
NEW **Newport** 42.12 38 P P 22 03 07.0 0.0
baz=240
SUA **Susitna One** 42.13 3 P P 22 03 08.3 +1.3
baz=186
CRQE **Cirque** 42.20 9 P P 22 03 08.6 +1.0
baz=197
BMRM **Bremner River** 42.20 8 P P 22 03 08.8 +1.3
baz=195
L14K **Kuka Creek** 42.21 355 P P 22 03 09.2 +1.7
baz=170
KNK **Knik Glacier** 42.23 5 P P 22 03 09.6 +1.9
baz=190
PLBC **Pleasant Camp** 42.27 14 P P 22 03 10.2 +2.2
baz=207
S34M **Telegraph Cree** 42.35 19 P P 22 03 11.5 +2.8
baz=215
L16K **Owhat River** 42.36 357 P P 22 03 10.8 +2.1
baz=174
PMR **Palmer** 42.36 4 P P 22 03 10.6 +1.9
baz=189
L15K **Ungalak Mounta** 42.45 356 P P 22 03 11.4 +1.9
baz=171
M22K **Willow** 42.46 4 P P 22 03 11.4 +1.9
baz=187
M19K **Big River Lodg** 42.46 1 P P 22 03 11.8 +2.3
baz=181
M20K **Styx River** 42.46 2 P P 22 03 11.4 +1.8
baz=183
SKAG **Skagway** 42.51 15 P P 22 03 12.2 +2.3
baz=208
KLU **Klutina** 42.55 7 P P 22 03 11.8 +1.4
baz=193
O29M **Mount Kennedy** 42.55 12 P P 22 03 11.8 +1.3
baz=204
SKT **Skwentna** 42.61 3 P P 22 03 11.8 +1.0
baz=185
SML **Sawmill** 42.63 5 P P 22 03 11.2 +0.2
baz=190
CTG **Chitna Glacier** 42.67 10 P P 22 03 13.1 +1.7
baz=200
M23K **Glacier View** 42.67 5 P P 22 03 12.7 +1.4
baz=190
O28M **Mount Upton** 42.69 11 P P 22 03 13.6 +1.9
baz=201
P30M **Million Dollar** 42.73 13 P P 22 03 13.5 +1.7
baz=206
L19K **White Mountain** 42.73 0 P P 22 03 12.4 +0.6
baz=181
L17K **Donlin** 42.74 358 P P 22 03 12.4 +0.7
baz=176
SCM **Sheep Creek Mo** 42.75 6 P P 22 03 13.3 +1.4
baz=191
L18K **Granite Mounta** 42.78 359 P P 22 03 14.0 +1.9
baz=178
MCARA **McCarthy VSAT** 42.81 9 P P 22 03 14.3 +1.9
baz=197
N25K **Chitina, Valde** 42.82 7 P P 22 03 13.4 +0.9
baz=195
TBI **Tubuai** 42.88 172 *e*P P 22 03 15.1 +1.8
comp=Z,395nm,26.2s
TBI *e*S S 22 09 36.0 -2.6
comp=Z,3µm,41.2s
TBI *e*LQ LQ 22 13 10.5
comp=Z,3µm,27.5s
TBI *e*LR LR 22 14 57.7
comp=Z,13µm,28.5s
TBI *e*LR LR 22 15 01.9
comp=Z,2µm,25.8s
Q32M **Nakina River** 42.88 17 P P 22 03 14.8 +1.5
baz=213
W18A **Petrified Fore** 43.02 59 P P 22 03 16.3 +1.5
baz=261
P32M **Atlin** 43.03 16 P P 22 03 15.2 +0.9
baz=210
L20K **Farewell, AK** 43.04 1 P P 22 03 14.6 +0.3
baz=182
K15K **Wolf Creek Mou** 43.06 356 P P 22 03 16.3 +1.9
baz=171
CUT **Chulitna** 43.10 3 P P 22 03 16.6 +1.9
baz=187
DLBC **Dease Lake** 43.12 19 LR LR 22 17 13.3
comp=Z,542nm,20.6s,baz=260,slow=31
DLBC **Dease Lake** 43.12 19 P P 22 03 17.3 +2.3
baz=216
M24K **Tolsona, Glenn** 43.13 6 P P 22 03 17.2 +2.2
baz=193
YUK6 **Outpost Mounta** 43.19 12 P P 22 03 17.7 +1.9
baz=204
YUK8 **Steele Glacier** 43.24 11 P P 22 03 18.1 +1.9
baz=202
K17K **Iditarod** 43.32 358 P P 22 03 17.9 +1.4
baz=176
MSO **Missoula** 43.38 41 P P 22 03 19.4 +2.0
baz=245
WAT6 **Susitna Watana** 43.45 5 P P 22 03 19.2 +1.4
baz=190
YUK4 **Talbot Arm** 43.50 12 P P 22 03 21.0 +2.8
baz=203
O30N **Mendenhall** 43.50 14 P P 22 03 19.8 +1.7
baz=207
PPLA **Purkeypile** 43.50 2 P P 22 03 19.0 +0.9
baz=184
HARP **HAARP** 43.52 7 P P 22 03 19.2 +1.0
baz=194
YUK3 **Moose Creek** 43.58 10 P P 22 03 20.9 +2.0
baz=200
R33M **Jennings River** 43.62 18 P P 22 03 21.9 +2.8
baz=214
WAT1 **Susitna Watana** 43.63 4 P P 22 03 20.8 +1.8
baz=189
J14K **Nanvaranak Lak** 43.68 354 P P 22 03 20.8 +1.4
baz=169
WHY **Whitehorse** 43.68 14 P P 22 03 21.8 +2.3
baz=208
M26K **Nabesna, AK** 43.79 8 P P 22 03 22.8 +2.4
baz=197
P33M **Teslin, Yukon** 43.80 16 P P 22 03 21.1 +0.5
baz=211
M27K **Edge Creek, AK** 43.91 9 P P 22 03 23.9 +2.5
baz=198
N30M **Aishikik Lake** 43.91 12 P P 22 03 24.2 +2.8
baz=205
K20K **Telida** 43.92 1 P P 22 03 23.2 +1.8
baz=182
DHY **Denali Highway** 43.97 5 P P 22 03 22.9 +1.0
baz=191
J16K **Anvik River** 43.99 357 P P 22 03 23.1 +1.2
baz=173
CAST **Castle Rocks** 44.03 2 P P 22 03 21.8 -0.4
baz=184
J17K **VABM Dome** 44.03 358 P P 22 03 23.4 +1.2
baz=175
J18K **Innoko River** 44.03 359 P P 22 03 23.7 +1.4
baz=178
PAX **Paxson** 44.05 6 P P 22 03 23.9 +1.5
baz=193
KTH **Kantishna Hill** 44.21 3 IAmb IAmb 22 03 33.6
comp=Z,24nm,1.1s
N31M **Braeburn, Yuko** 44.21 13 P P 22 03 26.3 +2.6
baz=207
121A **Cookes Peak, D** 44.31 63 P P 22 03 26.0 +0.8
baz=265
L26K **Log Cabin Wild** 44.35 8 P P 22 03 26.6 +1.8
baz=196
MVCO **Mesa Verde** 44.36 56 P P 22 03 27.1 +1.5
baz=260
BOZ **Bozeman (W)** 44.38 44 P P 22 03 26.7 +1.2
baz=249
CHUM **Lake Minchumin** 44.48 2 P P 22 03 26.6 +0.8
baz=184
MCK **McKinley** 44.50 4 P P 22 03 26.5 +0.5
baz=189
N32M **Quiet Lake** 44.54 15 P P 22 03 27.2 +0.8
baz=210
M29M **Somme Creek** 44.55 11 P P 22 03 27.5 +1.0
baz=203
J19K **Poorman** 44.55 360 P P 22 03 27.8 +1.4
baz=180
L27K **Beaver Creek,** 44.59 9 P P 22 03 28.9 +2.2
baz=198
I17K **Unalakleet** 44.60 357 P P 22 03 29.4 +2.7
baz=173
H17A **Grant Village** 44.66 46 P P 22 03 29.8 +1.9
baz=251
J20K **Nowinta River** 44.74 1 P P 22 03 28.1 +0.2
baz=182

BPAW **Bear Paw Mtn.** 44.75 3 P P 22 03 29.4 +1.3
baz=186
K24K **Donnelly Dome** 44.83 6 P P 22 03 30.8 +2.2
baz=193
WTLY **Watson Lake, Y** 44.84 18 P P 22 03 31.8 +2.9
baz=217
BW06 **Boulder Array** 44.87 48 P P 22 03 30.3 +0.8
baz=253
PDAR **Pinedale Array** 44.87 48 P P 22 03 30.2 +0.7
comp=Z,1.3nm,1.0s,baz=233,slow=5.5,SNR=4.4
PDAR LR LR 22 20 05.4
comp=Z,28nm,22.0s,baz=268,slow=33
comp=Z,1.3nm,1.0s
M30M **Minto, Yukon** 44.99 12 P P 22 03 31.4 +1.5
baz=205
TOAD **Toad River Com** 45.02 22 P P 22 03 32.9 +2.7
baz=222
LIRD **Liard River Hi** 45.14 21 P P 22 03 34.5 +3.3
baz=220
O20A **White River Ci** 45.15 52 P P 22 03 33.6 +1.8
baz=257
M31M **Drury Creek, Y** 45.15 14 P P 22 03 33.8 +2.6
baz=208
Y22D **IRIS PASSCAL I** 45.19 61 P P 22 03 34.0 +1.9
baz=264
SCRK **Sand Creek** 45.19 7 P P 22 03 33.5 +1.9
baz=195
L29M **L29M** 45.23 11 P P 22 03 33.5 +1.7
baz=203
MSVF **Nonsavu** 45.26 217 LR LR 22 19 17.3
comp=Z,375nm,18.8s,baz=5.9,slow=32
HDA **Harding Lake** 45.32 5 P P 22 03 33.6 +1.1
baz=191
GCSA **Galena City Sc** 45.32 359 P P 22 03 34.3 +1.9
baz=178
NEA2 **Nenana** 45.35 4 IAmb IAmb 22 04 31.1
comp=Z,9.1nm,0.8s
NEA2 **Nenana** 45.35 4 P P 22 03 35.4 +2.6
baz=188
I20K **Naaghedeneel** 45.36 0 P P 22 03 33.7 +1.0
baz=181
FARO **Faro, Yukon** 45.41 14 P P 22 03 35.7 +2.3
baz=210
H16K **Elim** 45.44 356 P P 22 03 36.1 +2.7
baz=171
K27K **Chicken** 45.48 8 P P 22 03 36.2 +2.4
baz=198
H17K **Granite Mounta** 45.60 357 P P 22 03 37.8 +3.1
baz=174
ANM **Nome** 45.63 354 P P 22 03 38.3 +3.3
baz=167
J25K **Salcha River,** 45.66 6 P P 22 03 37.8 +2.6
baz=193
ANMO **Albuquerque** 45.66 60 P P 22 03 36.4 +0.5
comp=Z,0.8nm,0.6s,baz=186,slow=10,SNR=1.8
ANMO LR LR 22 18 02.3
comp=Z,214nm,21.4s,baz=0.5,slow=30
comp=Z,0.8nm,0.6s
ANMO **Albuquerque** 45.66 60 P P 22 03 37.8 +1.9
baz=263
ILAR **Eielson Array** 45.68 5 P P 22 03 34.4 -1.0
comp=Z,1.1nm,0.8s,baz=193,slow=7.1,SNR=11
ILAR LR LR 22 18 23.7
comp=Z,515nm,22.0s,baz=195,slow=30
comp=Z,1.1nm,0.8s
MLY **Manley** 45.69 3 IAmb IAmb 22 04 26.8
comp=Z,28nm,1.9s
MLY **Manley** 45.69 3 P P 22 03 35.6 +0.1
baz=186
COLA **College** 45.71 4 P P 22 03 37.8 +2.3
baz=190
GAMB **Gambell** 45.72 350 P P 22 03 38.1 +2.5
baz=158
J26L **Joseph Creek** 45.75 7 P P 22 03 38.1 +2.1
baz=196
H18K **Honhosa River** 45.76 358 P P 22 03 37.8 +1.8
baz=176
S22A **4UR Ranch, Cre** 45.76 56 P P 22 03 38.0 +1.2
baz=260
MDM **Murphy Dome** 45.76 4 IAmb IAmb 22 03 41.4
comp=Z,34nm,1.5s
RLMT **Red Lodge** 45.78 45 P P 22 03 39.7 +2.9
baz=251
I23K **Minto, Yukon-K** 45.88 3 P P 22 03 38.3 +1.4
baz=188
DAWY **Dawson** 45.90 10 P P 22 03 38.9 +1.7
baz=201
G15K **Niukluk** 45.93 355 P P 22 03 38.4 +1.2
baz=168
POKR **Poker Plat Res** 45.98 5 P P 22 03 39.0 +1.3
baz=190
K29M **Barlow Dome** 46.01 11 P P 22 03 39.9 +1.8
baz=204
H20K **Anotleneega Mo** 46.06 0 P P 22 03 38.6 +0.2
baz=180
H19K **Roundabout Mou** 46.10 359 IAmb IAmb 22 04 02.9
comp=Z,19nm,1.1s
H19K **Roundabout Mou** 46.10 359 P P 22 03 39.6 +1.0
baz=178
TGTN **Hyland Airport** 46.14 18 P P 22 03 41.1 +2.0
baz=216
G16K **Koyuk River** 46.20 356 P P 22 03 41.0 +1.6
baz=171
G17K **Kiwalik Mounta** 46.20 357 P P 22 03 40.6 +1.1
baz=173
H21K **Melozitna Rive** 46.25 1 P P 22 03 41.7 +1.8
baz=183
MNTX **Coroudas Mount** 46.29 64 P P 22 03 41.9 +1.2
baz=267
EGAK **Eagle** 46.31 8 P P 22 03 41.3 +1.0
baz=199
KOTAN **Kotaneelee Air** 46.37 21 P P 22 03 42.2 +1.4
baz=222
J29N **Klondike Camp** 46.45 10 P P 22 03 43.2 +1.7
baz=202
EGMT **Eagleton** 46.47 41 P P 22 03 42.2 +0.3
baz=248
G18K **Tagagawik** 46.51 358 P P 22 03 43.5 +1.6
baz=176
H22K **Ishtalitna Cre** 46.53 2 P P 22 03 43.8 +1.8
baz=185
PRP **Porcupine Dome** 46.53 6 P P 22 03 43.4 +1.2
baz=193
H23K **Yukon River** 46.54 3 IAmb IAmb 22 04 31.1
comp=Z,13nm,1.1s
H23K **Yukon River** 46.54 3 P P 22 03 43.9 +1.7
baz=188
I26K **Coal Creek Min** 46.57 7 P P 22 03 43.7 +1.3
baz=196
F14K **Arctic Creek** 46.62 354 P P 22 03 43.3 +0.6
baz=166
H24K **Noodor Dome** 46.66 4 P P 22 03 44.2 +1.1
baz=190
F15K **North Star Dit** 46.68 355 P P 22 03 43.8 +0.6
baz=168
G19K **Purcell Mounta** 46.73 359 P P 22 03 45.4 +1.8
baz=178
SDCO **Great Sand Dun** 46.80 56 P P 22 03 45.5 +0.5
baz=261
TNA **Tin City** 46.88 353 P P 22 03 46.1 +1.4
baz=164
J30M **Hart River** 46.89 11 IAmb IAmb 22 03 54.3
comp=Z,25nm,2.0s
J30M **Hart River** 46.89 11 P P 22 03 46.2 +1.2
baz=205
K22A **Casper** 46.99 49 P P 22 03 46.2 0.0
baz=256
N23A **Red Feather La** 47.02 52 P P 22 03 47.3 +0.6
baz=258
I27K **Kandik River** 47.04 8 P P 22 03 48.2 +2.1
baz=198
ISCO **Idaho Springs** 47.06 53 P P 22 03 47.9 +1.0
baz=259
G21K **Jakaet** 47.10 1 P P 22 03 48.7 +2.2
baz=182
I28M **Miner Creek** 47.12 9 IAmb IAmb 22 05 05.9
comp=Z,10nm,1.1s
I28M **Miner Creek** 47.12 9 P P 22 03 48.8 +2.1
baz=200
F17K **Baldwin Pennin** 47.17 357 P P 22 03 48.8 +1.8
baz=172
H25L **Birch Creek** 47.24 5 P P 22 03 49.1 +1.6
baz=192
F18K **Selawik** 47.26 358 P P 22 03 49.5 +1.9
baz=174
Q24A **Divide** 47.27 55 P P 22 03 49.5 +0.9
baz=260
I29M **Ogilvie Camp,** 47.28 10 P P 22 03 48.8 +0.8
baz=202

G23K **Bananza Creek** 47.40 3 P P 22 03 50.0 +1.1
baz=187
F19K **Shaleruckik Mo** 47.43 359 P P 22 03 49.7 +0.7
baz=177
I30M **Mount Dempster** 47.48 11 P P 22 03 50.1 +0.5
baz=204
G24K **Hadweenzic Riv** 47.54 4 P P 22 03 50.9 +0.9
baz=190
G22K **Bettles** 47.55 2 P P 22 03 50.7 +0.7
baz=185
T25A **Trinidad** 47.58 57 P P 22 03 50.8 -0.1
baz=263
F20K **Avaraart Lake** 47.62 360 P P 22 03 51.5 +1.0
baz=179
H27K **Steamboat Moun** 47.65 7 P P 22 03 51.4 +0.6
baz=198
G25K **Bearman Lake** 47.71 5 P P 22 03 51.6 +0.5
baz=192
TXAR **Lajitas Array** 47.72 68 P P 22 03 54.4 +2.4
comp=Z,2.7nm,0.7s,baz=256,slow=8.0,SNR=35
TXAR LR LR 22 19 53.4
comp=Z,82nm,21.6s,baz=246,slow=31
comp=Z,2.7nm,0.7s
F21K **Alatna River** 47.81 1 P P 22 03 53.8 +1.8
baz=182
E17K **Hotham Inlet** 47.84 357 P P 22 03 53.2 +1.0
baz=172
COLD **Coldfoot** 47.91 3 P P 22 03 52.6 -0.2
baz=186
E19K **Redstone River** 48.05 359 P P 22 03 54.3 +0.4
baz=178
H29M **Whitestone** 48.07 9 IAmb IAmb 22 05 04.8
comp=Z,9.1nm,0.8s
H29M **Whitestone** 48.07 9 P P 22 03 54.2 +0.1
baz=202
G26K **Porcupine Rive** 48.10 6 P P 22 03 54.6 +0.5
baz=195
E18K **Tukpahlearik C** 48.12 357 P P 22 03 55.3 +1.0
baz=173
F22K **John River** 48.12 2 P P 22 03 54.2 -0.2
baz=184
G27K **Doyon Strip** 48.19 7 P P 22 03 55.2 +0.2
baz=197
LAO **LASA Array** 48.29 44 P P 22 03 56.2 +0.1
baz=253
F24K **Squaw Lake** 48.32 4 P P 22 03 57.3 +1.3
baz=189
EPYK **Eagle Plains** 48.47 10 P P 22 03 58.0 +0.9
baz=204
D17K **Noatak River** 48.53 356 P P 22 03 58.9 +1.4
baz=170
F25K **Christian Rive** 48.56 5 P P 22 03 58.2 +0.3
baz=192
MSTX **Muleshoe** 48.61 62 IAmb IAmb 22 04 08.6
comp=Z,18nm,1.2s
MSTX **Muleshoe** 48.61 62 P P 22 03 59.1 +0.2
baz=267
E23K **Chandalar** 48.77 3 P P 22 04 00.3 +0.8
baz=187
G29M **Pine Creek** 48.77 9 P P 22 04 00.7 +1.3
baz=202
F26K **Sheenjek River** 48.79 6 P P 22 04 00.2 +0.6
baz=194
E20K **Nigu River** 48.84 360 P P 22 04 00.9 +0.9
baz=179
E24K **Your Creek** 48.84 3 P P 22 04 00.4 +0.4
baz=188
RDOG **Red Dog Mine** 48.87 356 P P 22 04 01.0 +0.9
baz=170
WRGLY **Wrigley** 48.87 18 P P 22 04 01.0 +0.8
baz=221
E21K **Killik River** 49.03 1 P P 22 04 02.4 +1.0
baz=182
RSSD **Black Hills** 49.10 48 P P 22 04 03.3 +0.7
baz=257
D19K **Kuna River** 49.10 359 P P 22 04 03.3 +1.3
baz=176
G30M **tAoh Zraii Nji** 49.11 10 IAmb IAmb 22 05 15.0
comp=Z,21nm,1.5s
G30M **tAoh Zraii Nji** 49.11 10 P P 22 04 03.1 +1.0
baz=204
F28M **Old Crow** 49.18 8 P P 22 04 04.2 +1.7
baz=199
KSCO **Kaye Shedlock'** 49.22 55 P P 22 04 04.1 +0.7
baz=262
C16K **Lisburne Hills** 49.26 355 P P 22 04 05.7 +2.6
baz=167
D20K **Etivluk River** 49.30 359 P P 22 04 04.3 +0.8
baz=178
C17K **DeLong Mountai** 49.30 356 P P 22 04 03.9 +0.4
baz=170
TOLK **Toolik Lake Re** 49.35 3 P P 22 04 04.2 +0.4
baz=187
C18K **Utukok River** 49.37 357 P P 22 04 04.8 +0.8
baz=173
G31M **Satah River** 49.39 11 P P 22 04 04.3 +0.2
baz=206
D22K **Ayikyak River** 49.49 1 P P 22 04 05.4 +0.5
baz=183
E27K **Coleen River** 49.52 7 P P 22 04 06.4 +1.2
baz=197
AMTX **Amarillo** 49.57 60 P P 22 04 06.8 +0.7
baz=266
D23K **Nanushuk River** 49.63 2 P P 22 04 06.8 +0.8
baz=186
C21K **Knifeblade Rid** 49.74 0 P P 22 04 09.4 +2.6
baz=181
C19K **Lookout Ridge** 49.76 358 P P 22 04 09.1 +2.1
baz=175
F30M **Barrier River** 49.76 10 P P 22 04 09.5 +2.5
baz=204
D24K **Happy Valley** 49.90 3 P P 22 04 10.1 +2.2
baz=188
F31M **Tsiigehtchic** 49.95 11 P P 22 04 08.5 +0.2
baz=207
OGNE **Ogallala** 49.95 52 P P 22 04 10.2 +1.2
baz=261
B18K **Kokolik River** 50.11 357 P P 22 04 10.9 +1.3
baz=172
DGMT **Dagmar** 50.12 42 P P 22 04 11.2 +1.1
baz=253
E28M **Babbage River** 50.16 7 P P 22 04 11.3 +1.2
baz=200
E29M **Blow River** 50.17 8 P P 22 04 11.3 +1.3
baz=202
B21K **Ikpikpuk River** 50.21 0 P P 22 04 11.6 +1.3
baz=181
D25K **Kavik River** 50.21 4 P P 22 04 11.8 +1.4
baz=191
C24K **Franklin Bluff** 50.47 3 P P 22 04 12.5 +0.2
baz=188
D27M **Malcolm River** 50.60 7 P P 22 04 14.2 +0.8
baz=198
B20K **Meade River** 50.61 359 P P 22 04 14.0 +0.7
baz=178
C27K **Jago River** 50.71 5 P P 22 04 14.5 +0.4
baz=194
INK **Inuvik** 50.76 10 LR LR 22 21 52.4
comp=Z,606nm,21.7s,baz=202,slow=32
INK **Inuvik** 50.76 10 P P 22 04 15.8 +1.3
baz=207
C26K **Camden Bay** 50.90 5 P P 22 04 16.4 +0.9
baz=193
A19K **Wainwright** 50.91 357 P P 22 04 16.3 +0.7
baz=173
B22K **Teshekpuk Lake** 50.94 1 P P 22 04 18.0 +2.2
baz=182
D28M **Stokes Point** 50.94 7 P P 22 04 17.6 +1.8
baz=200
JCT **Junction City** 51.06 66 P P 22 04 17.2 -0.2
baz=271
ABTX **Abilene, Hawle** 51.18 63 P P 22 04 19.0 +0.7
baz=270
YKA **Yellowknife Ar** 51.32 23 P P 22 04 19.0 +0.2
comp=Z,1.2nm,0.7s,baz=232,slow=7.0,SNR=3.1
YKA LR LR 22 22 00.4
comp=Z,225nm,22.0s,baz=239,slow=31
comp=Z,1.2nm,0.7s
CBKS **Cedar Bluff** 51.43 55 P P 22 04 20.7 +0.5
baz=264
833A **Chaparral WMA,** 51.49 69 P P 22 04 21.4 +0.7
baz=273
A22K **Sinclair Lake** 51.59 0 P P 22 04 22.1 +1.4
baz=180
A21K **Barrow** 51.92 359 P P 22 04 23.7 +0.5
baz=178
WMOK **Wichita Mounta** 51.94 61 P P 22 04 24.7 +0.7
baz=268
SUSD **Miller** 52.74 48 P P 22 04 30.0 +0.2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=261 | | | | | | | | |
| **BGNE** | **Belgrade** | **52.91** | **52** | P | **P** | **22 04 31.9** | **+0.8** | | |
| | baz=264 | | | | | | | | |
| **MDND** | **Maddock** | **52.94** | **44** | P | **P** | **22 04 32.2** | **+1.0** | | |
| | baz=258 | | | | | | | | |
| **435B** | **Jarrell** | **52.96** | **66** | P | **P** | **22 04 31.8** | **+0.2** | | |
| | baz=272 | | | | | | | | |
| **WHTX** | **Lake Whitney,** | **53.04** | **64** | P | **P** | **22 04 32.4** | **+0.3** | | |
| | baz=271 | | | | | | | | |
| **RAO** | **Raoul Island** | **53.08** | **205** | LR | LR | 22 22 48.9 | | | |
| | comp=Z,173nm,21.4s,baz=78,slow=31 | | | | | | | | |
| **C36M** | **Paulatuk** | **53.47** | **13** | P | **P** | **22 04 35.1** | **+0.4** | | |
| | baz=218 | | | | | | | | |
| **KSU1** | **Kansas State U** | **53.89** | **55** | P | **P** | **22 04 39.3** | **+1.0** | | |
| | baz=266 | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **54.31** | **50** | P | **P** | **22 04 41.8** | **+0.5** | | |
| | baz=263 | | | | | | | | |
| **TUL3** | **Leonard** | **54.41** | **59** | P | **P** | **22 04 41.8** | **-0.4** | | |
| | baz=269 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **55.38** | **11** | P | **P** | **22 04 48.9** | **+0.4** | | |
| | baz=215 | | | | | | | | |
| **NATX** | **Nacogdoches** | **55.42** | **64** | P | **P** | **22 04 49.4** | **-0.1** | | |
| | baz=273 | | | | | | | | |
| **MA2** | **Magadan** | **55.45** | **330** | LR | LR | 22 24 15.4 | | | |
| | comp=Z,959nm,21.8s,baz=118,slow=31 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **55.49** | **44** | P | **P** | **22 04 49.9** | **+0.2** | | |
| | baz=260 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **55.67** | **224** | *e*P | P | 22 04 34.3 | -17 | | |
| | comp=Z,115nm,26.2s | | | | | | | | |
| DZM | | | | *e*S | **S** | **22 12 38.0** | **-0.6** | | |
| | comp=Z,230nm,24.5s | | | | | | | | |
| DZM | | | | *e*SS | **SS** | **22 16 27.0** | **+2.8** | | |
| | comp=Z,154nm,26.4s | | | | | | | | |
| DZM | | | | *e*LQ | LQ | 22 18 33.2 | | | |
| | comp=Z,713nm,35.6s | | | | | | | | |
| DZM | | | | *e*LR | LR | 22 21 01.8 | | | |
| | comp=Z,503nm,31.6s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **55.83** | **42** | LR | LR | 22 24 52.3 | | | |
| | comp=Z,138nm,21.0s,baz=262,slow=32 | | | | | | | | |
| **MIAR** | **Mount Ida** | **56.23** | **61** | P | **P** | **22 04 54.8** | **-0.5** | | |
| | baz=271 | | | | | | | | |
| **SCIA** | **State Center** | **56.64** | **52** | P | **P** | **22 04 58.1** | **0.0** | | |
| | baz=267 | | | | | | | | |
| **CMIG** | **Matias Romero** | **57.15** | **82** | LR | LR | 22 23 40.3 | | | |
| | comp=Z,256nm,21.7s,baz=290,slow=30 | | | | | | | | |
| **SPMN** | **Marine on St.** | **57.18** | **48** | P | **P** | **22 05 01.9** | **+0.1** | | |
| | baz=265 | | | | | | | | |
| **GUMO** | **Guam** | **57.45** | **274** | LR | LR | 22 24 30.8 | | | |
| | comp=Z,322nm,21.9s,baz=68,slow=31 | | | | | | | | |
| **JCJ** | **Chichijima** | **57.47** | **290** | LR | LR | 22 24 52.2 | | | |
| | comp=Z,271nm,20.0s,baz=89,slow=31 | | | | | | | | |
| **CCM** | **Cathedral Cave** | **58.06** | **57** | P | **P** | **22 05 07.7** | **-0.5** | | |
| | baz=270 | | | | | | | | |
| **EYMN** | **Ely** | **58.34** | **45** | P | **P** | **22 05 08.9** | **-1.1** | | |
| | baz=264 | | | | | | | | |
| **JFWS** | **Jewell Farm** | **58.88** | **51** | P | **P** | **22 05 12.9** | **-0.9** | | |
| | baz=268 | | | | | | | | |
| **VBMS** | **Vicksburg** | **58.91** | **64** | P | **P** | **22 05 13.3** | **-0.8** | | |
| | baz=274 | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **58.99** | **298** | LR | LR | 22 27 11.7 | | | |
| | comp=Z,355nm,19.9s,baz=94,slow=33 | | | | | | | | |
| **HDIL** | **Hopedale** | **59.56** | **54** | P | **P** | **22 05 18.0** | **-0.5** | | |
| | baz=270 | | | | | | | | |
| **OXF** | **Oxford** | **59.67** | **61** | P | **P** | **22 05 19.0** | **-0.4** | | |
| | baz=274 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **60.08** | **302** | LR | LR | 22 27 03.2 | | | |
| | comp=Z,272nm,21.4s,baz=72,slow=32 | | | | | | | | |
| **L44A** | **Lake County Fo** | **60.60** | **52** | P | **P** | **22 05 25.6** | **-0.1** | | |
| | baz=270 | | | | | | | | |
| **WVT** | **Waverly** | **60.86** | **59** | P | **P** | **22 05 27.9** | **+0.3** | | |
| | baz=274 | | | | | | | | |
| **SFIN** | **Lafayette** | **61.24** | **54** | P | **P** | **22 05 30.4** | **+0.4** | | |
| | baz=272 | | | | | | | | |
| **APG** | **El Apazote** | **61.76** | **83** | LR | LR | 22 26 22.7 | | | |
| | comp=Z,21nm,20.2s,baz=277,slow=30 | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **61.80** | **62** | P | **P** | **22 05 33.7** | **-0.2** | | |
| | baz=276 | | | | | | | | |
| **BRAL** | **Brewton** | **61.95** | **64** | P | **P** | **22 05 35.3** | **+0.3** | | |
| | baz=277 | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **61.96** | **56** | P | **P** | **22 05 34.6** | **-0.4** | | |
| | baz=273 | | | | | | | | |
| **TEIG** | **Tepich** | **62.62** | **77** | LR | LR | 22 29 10.2 | | | |
| | comp=Z,126nm,20.5s,baz=239,slow=32 | | | | | | | | |
| **O48B** | **Farmland** | **62.73** | **54** | P | **P** | **22 05 40.4** | **+0.3** | | |
| | baz=273 | | | | | | | | |
| **URZ** | **Urewera** | **62.95** | **204** | LR | LR | 22 28 27.3 | | | |
| | comp=Z,315nm,20.6s,baz=116,slow=32 | | | | | | | | |
| **GLMI** | **Grayling** | **62.97** | **49** | P | **P** | **22 05 40.8** | **-0.8** | | |
| | baz=271 | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **63.11** | **55** | P | **P** | **22 05 42.2** | **-0.4** | | |
| | baz=274 | | | | | | | | |
| **RES** | **Resolute Bay** | **63.74** | **15** | LR | LR | 22 29 30.2 | | | |
| | comp=Z,451nm,21.6s,baz=218,slow=32 | | | | | | | | |
| **AAM** | **Ann Arbor** | **63.75** | **52** | P | **P** | **22 05 47.2** | **+0.4** | | |
| | baz=273 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **64.18** | **59** | LR | LR | 22 32 06.7 | | | |
| | comp=Z,89nm,19.4s,baz=296,slow=34 | | | | | | | | |
| **RPN** | **Rapa Nui** | **64.21** | **135** | LR | LR | 22 26 56.6 | | | |
| | comp=Z,460nm,18.2s,baz=344,slow=30 | | | | | | | | |
| **TZTN** | **Tazewell** | **64.27** | **58** | P | **P** | **22 05 50.6** | **+0.3** | | |
| | baz=276 | | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **64.39** | **54** | P | **P** | **22 05 51.8** | **+0.8** | | |
| | baz=274 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **64.47** | **310** | LR | LR | 22 29 19.1 | | | |
| | comp=Z,573nm,20.5s,baz=93,slow=32 | | | | | | | | |
| **KLR** | **Kul'dur** | **64.49** | **316** | LR | LR | 22 29 10.8 | | | |
| | comp=Z,409nm,20.9s,baz=118,slow=32 | | | | | | | | |
| **GOGA** | **Godfrey** | **64.69** | **62** | P | **P** | **22 05 53.4** | **+0.2** | | |
| | baz=277 | | | | | | | | |
| **TIGA** | **Tifton** | **64.85** | **64** | P | **P** | **22 05 54.7** | **+0.4** | | |
| | baz=278 | | | | | | | | |
| **P52A** | **Corning** | **65.09** | **55** | P | **P** | **22 05 55.2** | **-0.5** | | |
| | baz=275 | | | | | | | | |
| **O53A** | **New Philadelph** | **65.74** | **54** | P | **P** | **22 05 59.0** | **-0.8** | | |
| | baz=275 | | | | | | | | |
| **M53A** | **WI Miller and** | **66.03** | **52** | P | **P** | **22 06 00.9** | **-0.8** | | |
| | baz=275 | | | | | | | | |
| **KMSC** | **Kings Mountain** | **66.22** | **59** | P | **P** | **22 06 01.7** | **-1.3** | | |
| | baz=278 | | | | | | | | |
| **JNU** | **Nakatsue** | **66.42** | **298** | LR | LR | 22 35 16.3 | | | |
| | comp=Z,350nm,18.0s,baz=93,slow=36 | | | | | | | | |
| **ERPA** | **Erie** | **66.48** | **52** | P | **P** | **22 06 04.1** | **-0.5** | | |
| | baz=275 | | | | | | | | |
| **BLA** | **Blacksburg** | **66.69** | **57** | P | **P** | **22 06 05.9** | **-0.2** | | |
| | baz=277 | | | | | | | | |
| **MCWV** | **Mont Chateau** | **66.84** | **54** | P | **P** | **22 06 06.8** | **-0.1** | | |
| | baz=276 | | | | | | | | |
| **DWPF** | **Disney Wildern** | **67.25** | **67** | P | **P** | **22 06 10.3** | **+0.7** | | |
| | baz=281 | | | | | | | | |
| **TIXI** | **Tiksi** | **67.27** | **341** | LR | LR | 22 35 02.7 | | | |
| | comp=Z,353nm,19.6s,baz=135,slow=36 | | | | | | | | |
| **NHSC** | **New Hope** | **67.46** | **61** | P | **P** | **22 06 11.6** | **+0.7** | | |
| | baz=279 | | | | | | | | |
| **KSRS** | **Korea Array** | **68.19** | **303** | LR | LR | 22 34 37.6 | | | |
| | comp=Z,285nm,18.8s,baz=80,slow=35 | | | | | | | | |
| **JTS** | **Las Juntas de** | **68.20** | **86** | LR | LR | 22 28 39.8 | | | |
| | comp=Z,346nm,21.6s,baz=294,slow=29 | | | | | | | | |
| **SSPA** | **Standing Stone** | **68.22** | **53** | P | **P** | **22 06 15.7** | **+0.1** | | |
| | baz=277 | | | | | | | | |
| **CBN** | **Corbin Frederi** | **68.94** | **56** | P | **P** | **22 06 21.3** | **+1.1** | | |
| | baz=279 | | | | | | | | |
| **CNNC** | **Cliffs of the** | **69.00** | **59** | P | **P** | **22 06 21.7** | **+1.1** | | |
| | baz=279 | | | | | | | | |
| **CN2** | **Changchun** | **69.20** | **310** | *e*P | **P** | **22 06 21.9** | **+0.2** | | |
| CN2 | | | | SS | SS | 22 19 58.6 | +4.2 | | |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.3s | | | | | | | | |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,500nm,6.0s | | | | | | | | |
| CN2 | | | | LR | LR | | | | |
| | comp=Z,300nm,18.0s | | | | | | | | |
| CN2 | | | | LR | LR | | | | |
| | comp=Z,800nm,18.0s | | | | | | | | |
| CN2 | | | | LR | LR | | | | |
| | comp=Z,900nm,22.0s | | | | | | | | |
| **BINY** | **Binghamton** | **69.43** | **51** | P | **P** | **22 06 22.8** | **-0.4** | | |
| | baz=278 | | | | | | | | |
| **CTA** | **Charters Tower** | **69.44** | **239** | LR | LR | 22 33 30.8 | | | |
| | comp=Z,9.7nm,18.9s,baz=52,slow=33 | | | | | | | | |
| **JOW** | **Kunigami** | **69.76** | **292** | LR | LR | 22 30 29.4 | | | |
| | comp=Z,170nm,20.5s,baz=92,slow=30 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **70.00** | **205** | LR | LR | 22 31 34.1 | | | |
| | comp=Z,292nm,21.8s,baz=73,slow=31 | | | | | | | | |
| **LONY** | **Lake Ozonia** | **70.11** | **49** | P | **P** | **22 06 28.0** | **+0.7** | | |
| | baz=276 | | | | | | | | |
| **PAL** | **Palisades** | **71.15** | **52** | P | **P** | **22 06 33.3** | **-0.4** | | |
| | baz=280 | | | | | | | | |
| **L61B** | **Northampton** | **71.81** | **51** | P | **P** | **22 06 38.4** | **+0.7** | | |
| | baz=280 | | | | | | | | |
| **LBNH** | **Lisbon** | **72.05** | **49** | P | **P** | **22 06 39.4** | **+0.3** | | |
| | baz=280 | | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **72.62** | **50** | P | **P** | **22 06 42.8** | **+0.3** | | |
| | baz=281 | | | | | | | | |
| **DL2** | **Dalian** | **72.83** | **306** | P | **P** | **22 06 46.8** | **+3.0** | | |
| DL2 | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| DL2 | | | | pmax | pmax | | | | |
| | comp=Z,490nm,7.8s | | | | | | | | |
| DL2 | | | | LR | LR | | | | |
| | comp=Z,230nm,24.6s | | | | | | | | |
| DL2 | | | | LR | LR | | | | |
| | comp=Z,350nm,23.5s | | | | | | | | |
| DL2 | | | | LR | LR | | | | |
| | comp=Z,840nm,25.1s | | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **73.71** | **47** | P | **P** | **22 06 49.6** | **+0.7** | | |
| | baz=281 | | | | | | | | |
| **NJ2** | **Nanjing** | **76.57** | **299** | *e*P | **P** | **22 07 03.8** | **-1.8** | | |
| NJ2 | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| NJ2 | | | | pmax | pmax | | | | |
| | comp=Z,500nm,5.7s | | | | | | | | |
| **DAV** | **Davao City (W)** | **77.47** | **273** | LR | LR | 22 34 24.8 | | | |
| | comp=Z,294nm,21.9s,baz=78,slow=30 | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **77.88** | **23** | LR | LR | 22 37 20.6 | | | |
| | comp=Z,402nm,21.8s,baz=314,slow=32 | | | | | | | | |
| **HNS** | **HongShan** | **78.48** | **306** | ⇓P | **P** | **22 07 17.8** | **+1.6** | | |
| HNS | | | | PP | **PP** | **22 10 18.4** | **+5.0** | | |
| HNS | | | | pmax | pmax | | | | |
| | comp=Z,520nm,9.0s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,190nm,17.5s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,280nm,17.5s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,260nm,19.6s | | | | | | | | |
| **QZH** | **Quanzhou** | **78.67** | **293** | P | P | 22 07 22.9 | +5.4 | | |
| QZH | | | | pmax | pmax | | | | |
| | comp=Z,470nm,4.1s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=Z,520nm,19.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | **79.08** | **231** | LR | LR | 22 36 00.7 | | | |
| | comp=Z,169nm,21.3s,baz=26,slow=31 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **79.27** | **244** | P | **P** | **22 07 19.3** | **-1.5** | | |
| | comp=Z,1.5nm,1.3s,baz=78,slow=4.9,SNR=2.2 | | | | | | | | |
| | comp=Z,1.5nm,1.3s | | | | | | | | |
| **ROSC** | **El Rosal** | **79.89** | **88** | LR | LR | 22 34 25.9 | | | |
| | comp=Z,195nm,20.2s,baz=264,slow=29 | | | | | | | | |
| **ATAH** | **Atahualpa** | **80.11** | **101** | LR | LR | 22 36 36.5 | | | |
| | comp=Z,283nm,18.4s,baz=302,slow=31 | | | | | | | | |
| **TIY** | **Taiyuan** | **80.13** | **306** | ⇑P | P | 22 07 30.2 | +4.8 | | |
| TIY | | | | SS | SS | 22 22 49.4 | +8.5 | | |
| TIY | | | | pmax | pmax | | | | |
| | comp=Z,330nm,5.4s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,210nm,14.7s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,190nm,17.2s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,350nm,25.5s | | | | | | | | |
| **BTO** | **Baotou** | **81.07** | **310** | *e*P | **P** | **22 07 31.5** | **+1.1** | | |
| BTO | | | | pP | **PcP** | **22 07 36.6** | **-0.2** | | |
| BTO | | | | sP | **sP** | **22 07 38.5** | **+5.5** | | |
| BTO | | | | sS | sS | 22 17 54.6 | +11 | | |
| BTO | | | | SS | **SS** | **22 22 57.6** | **+2.8** | | |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,970nm,7.7s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,790nm,17.5s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,690nm,21.0s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **81.23** | **241** | P | **P** | **22 07 31.6** | **+0.2** | | |
| | comp=Z,0.4nm,0.7s,baz=53,slow=6.5,SNR=4.3 | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **81.25** | **318** | LR | LR | 22 41 18.5 | | | |
| | comp=Z,495nm,20.9s,baz=67,slow=34 | | | | | | | | |
| **SDV** | **Santo Domingo** | **82.08** | **83** | LR | LR | 22 38 52.5 | | | |
| | comp=Z,137nm,19.6s,baz=248,slow=32 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **82.49** | **2** | LR | LR | 22 40 31.9 | | | |
| | comp=Z,191nm,21.4s,baz=332,slow=33 | | | | | | | | |
| **NNA** | **Nana** | **83.28** | **105** | LR | LR | 22 35 37.7 | | | |
| | comp=Z,331nm,21.4s,baz=286,slow=29 | | | | | | | | |
| **XAN** | **Xi'an** | **83.98** | **304** | P | **P** | **22 07 44.1** | **-1.5** | | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,560nm,6.3s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,410nm,19.7s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,560nm,20.6s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,650nm,20.9s | | | | | | | | |
| **KAPI** | **Kappang** | **86.92** | **264** | LR | LR | 22 43 05.7 | | | |
| | comp=Z,98nm,19.6s,baz=70,slow=33 | | | | | | | | |
| **JMIC** | **Jan Mayen** | **86.94** | **10** | LR | LR | 22 43 40.8 | | | |
| | comp=Z,135nm,21.6s,baz=243,slow=33 | | | | | | | | |
| **LZH** | **Lanzhou** | **87.16** | **307** | P | **P** | **22 08 02.6** | **+1.0** | | |
| LZH | | | | S | **S** | **22 18 40.3** | **-2.0** | | |
| LZH | | | | SS | **SS** | **22 24 33.3** | **+8.1** | | |
| LZH | | | | pmax | pmax | | | | |
| | comp=Z,530nm,5.3s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,230nm,15.5s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,360nm,17.7s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,620nm,18.2s | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **87.27** | **80** | LR | LR | 22 44 12.2 | | | |
| | comp=Z,110nm,19.1s,slow=34 | | | | | | | | |
| **QIZ** | **Qiongzhong** | **88.22** | **289** | P | **P** | **22 08 04.6** | **-2.1** | | |
| QIZ | | | | PP | **PP** | **22 11 33.4** | **-0.3** | | |
| QIZ | | | | S | **S** | **22 18 51.6** | **-0.9** | | |
| QIZ | | | | SS | **SS** | **22 24 42.3** | **+1.2** | | |
| QIZ | | | | pmax | pmax | | | | |
| | comp=Z,280nm,8.1s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=Z,150nm,12.0s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=Z,220nm,21.8s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=Z,320nm,21.6s | | | | | | | | |
| **GTA** | **Gaotai** | **88.81** | **312** | *e*P | **P** | **22 08 11.8** | **+2.5** | | |
| GTA | | | | pP | sP | 22 08 17.0 | +5.3 | | |
| GTA | | | | SKS | **SKSac** | **22 18 36.3** | **-3.7** | | |
| GTA | | | | S | **SKKSac** | **22 18 52.1** | **+0.8** | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.8s | | | | | | | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,290nm,7.6s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,150nm,20.7s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,340nm,21.4s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,530nm,20.7s | | | | | | | | |
| **BORG** | **Borgarnes** | **89.00** | **18** | LR | LR | 22 44 42.5 | | | |
| | comp=Z,138nm,21.9s,baz=327,slow=33 | | | | | | | | |
| **CD2** | **Chengdu** | **89.16** | **302** | P | **P** | **22 08 08.7** | **-2.4** | | |
| CD2 | | | | SKS | **SKSac** | **22 18 39.6** | **-2.6** | | |
| CD2 | | | | S | **S** | **22 19 00.6** | **-0.6** | | |
| CD2 | | | | pmax | pmax | | | | |
| | comp=Z,380nm,7.6s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,370nm,18.7s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,410nm,25.1s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,400nm,22.2s | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **89.71** | **126** | T | T | 23 47 16.5 | | | |
| | baz=299,slow=76,SNR=13 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **89.72** | **126** | T | T | 23 47 21.6 | | | |
| | baz=299,slow=76,SNR=15 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **89.72** | **126** | T | T | 23 47 21.3 | | | |
| | baz=299,slow=76,SNR=16 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **90.67** | **329** | LR | LR | 22 46 58.2 | | | |
| | comp=Z,523nm,20.5s,baz=64,slow=34 | | | | | | | | |
| **KMI** | **Kunming** | **92.18** | **297** | ⇑P | P | 22 08 30.6 | +5.1 | | |
| KMI | | | | PP | **PP** | **22 12 05.5** | **+0.2** | | |
| **KMI** | **Kunming** | **92.18** | **297** | PP | P | 22 08 30.5 | +5.0 | | |
| **PZH** | **PanZhiHua** | **92.48** | **299** | P | **P** | **22 08 23.3** | **-3.4** | | |
| PZH | | | | S | **S** | **22 19 24.5** | **-7.4** | | |
| PZH | | | | SS | **SS** | **22 25 48.2** | **+5.5** | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,230nm,7.8s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,160nm,19.4s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,240nm,20.9s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,330nm,21.0s | | | | | | | | |
| **LPAZ** | **La Paz** | **92.69** | **106** | LR | LR | 22 42 20.5 | | | |
| | comp=Z,190nm,21.7s,baz=287,slow=30 | | | | | | | | |
| **LVC** | **Limon Verde** | **94.08** | **112** | LR | LR | 22 41 47.3 | | | |
| | comp=Z,390nm,20.2s,baz=280,slow=30 | | | | | | | | |
| **WMQ** | **Urumqi** | **94.73** | **320** | *e*P | **P** | **22 08 32.9** | **-3.7** | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,520nm,18.7s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,260nm,22.5s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,370nm,24.3s | | | | | | | | |
| **TNCH** | **TengChong** | **95.73** | **299** | ⇓P | **P** | **22 08 42.1** | **+0.4** | | |
| TNCH | | | | PP | **PP** | **22 12 34.5** | **+1.5** | | |
| TNCH | | | | pmax | pmax | | | | |
| | comp=Z,100nm,5.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **95.76** | **329** | LR | LR | 22 49 39.2 | | | |
| | comp=Z,500nm,21.9s,baz=82,slow=34 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **96.18** | **324** | LR | LR | 22 49 23.9 | | | |
| | comp=Z,377nm,21.6s,baz=64,slow=34 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **98.03** | **293** | LR | LR | 22 52 36.2 | | | |
| | comp=Z,158nm,19.2s,baz=70,slow=35 | | | | | | | | |
| **PLCA** | **Paso Flores** | **98.56** | **130** | LR | LR | 22 43 04.8 | | | |
| | comp=Z,437nm,21.2s,baz=274,slow=29 | | | | | | | | |
| **SIV** | **San Ignacio** | **99.04** | **104** | LR | LR | 22 46 51.4 | | | |
| | comp=Z,397nm,20.0s,baz=296,slow=31 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **99.09** | **7** | LR | LR | 22 51 24.3 | | | |
| | comp=Z,115nm,20.6s,baz=5.0,slow=34 | | | | | | | | |
| **ARU** | **Arti** | **99.25** | **342** | LR | LR | 22 54 19.1 | | | |
| | comp=Z,467nm,21.4s,baz=43,slow=36 | | | | | | | | |
| **KIRV** | **Kirov** | **99.66** | **347** | LR | LR | 22 56 48.2 | | | |
| | comp=Z,352nm,19.8s,baz=25,slow=37 | | | | | | | | |
| **VNDA** | **Vanda** | **99.90** | **189** | LR | LR | 22 44 13.4 | | | |
| | comp=Z,212nm,21.9s,baz=32,slow=29 | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **109.58** | **8** | AMS | AMS | 22 55 40.0 | | | |
| | comp=Z,200nm,20.8s | | | | | | | | |
| **CHVC** | **Chvalec** | **109.89** | **6** | AMS | AMS | 23 00 10.0 | | | |
| | comp=Z,200nm,18.9s | | | | | | | | |
| **UPC** | **Upice** | **109.97** | **6** | AMS | AMS | 23 00 00.0 | | | |
| | comp=Z,200nm,17.1s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **110.15** | **6** | *e*PP | PP | 22 14 01.2 | -18 | | |
| DPC | | | | AMS | AMS | 23 05 30.0 | | | |
| | comp=Z,200nm,14.5s | | | | | | | | |
| **PRU** | **Pruhonice** | **110.32** | **7** | *e*PP | PP | 22 14 12.3 | -8.2 | | |
| PRU | | | | *e*SP | SP | 22 23 52.2 | +2.8 | | |
| PRU | | | | AMS | AMS | 23 02 30.0 | | | |
| | comp=Z,100nm,19.4s | | | | | | | | |
| **KRLC** | **Kraliky** | **110.47** | **5** | AMS | AMS | 23 03 30.0 | | | |
| | comp=Z,100nm,18.8s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **110.81** | **5** | AMS | AMS | 23 02 40.0 | | | |
| | comp=Z,200nm,22.6s | | | | | | | | |
| **ZVC** | **Zvikov** | **110.82** | **7** | AMS | AMS | 23 02 10.0 | | | |
| | comp=Z,200nm,19.9s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **111.05** | **8** | *e*PP | **PP** | **22 14 18.8** | **-7.0** | | |
| KHC | | | | *e*SP | SP | 22 24 02.4 | +6.2 | | |
| KHC | | | | AMS | AMS | 23 01 10.0 | | | |
| | comp=Z,200nm,20.3s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **111.45** | **7** | *e*SP | SP | 22 24 01.1 | +1.3 | | |
| CKRC | | | | AMS | AMS | 23 03 50.0 | | | |
| | comp=Z,200nm,17.6s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **140.49** | **37** | PKP | **PKPdf** | **22 14 43.7** | **-1.5** | | |
| | comp=Z,0.5nm,0.8s,baz=333,slow=3.1,SNR=3.5 | | | | | | | | |

*KRSC* ***02*** *21:57:55.7±2.1,50.00N×156.95E,h47km±24km,Mc4.8, Ml5.6,Felt [IV-V] at Severo-Kurilsk; [II-III] at cape Lopatka; [II] at Podgornay, Paujetka.*

*BJI* ***02*** *21:57:57.7±0.0,50.39N×156.89E,h76km,mb4.8/60, mB4.8/25,Ms4.4/37,Ms7 4.2/38*

*MOS* ***02*** *21:57:58.7±0.9,50.23N×156.52E,h69km,mb5.0/85,Error ellipse: s-maj=6.7km s-min=4.6km az=91.3*

*MOS Felt (IV-V) at Severo-Kuril'sk.*

*IDC* ***02*** *21:57:59.5±0.5,50.40N×156.38E,h62km±4km,mb4.3/36, mbtmp4.6/42,MS3.8/27,Error ellipse: s-maj=10.0km s-min=8.0km az=167.0*

*NEIC* ***02*** *21:58:00.2±1.1,50.31N±0.08×156.5E±0.1,h62km±6km, mb4.9/447,Error ellipse: s-maj=12.8km s-min=9.4km az=143.0*

*GCMT* ***02*** *21:58:03.2±0.4,50.24N±0.02×156.72E±0.04,h82km±3km, MW4.9/87,Moment Tensor Solution. s39,c49; s87,c131; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.63±.14; $M_{\theta\theta}$1.60±.15; $M_{\phi\phi}$-2.23±.13; $M_{r\theta}$-2.09±.08; $M_{\theta\phi}$-1.09±.12; $M_{\phi r}$-0.78±.08; Best double couple: $M_o$3.17500×$10^{16}$ NP1:ϕs236.00000°,δ81.00000°,λ135.00000°. NP2: ϕs335.00000°,δ46.00000°,λ12.00000°. Principal axes: T 3.2870, Plg37.0000°, Azm185.0000°; N -0.2240, Plg44.0000°, Azm48.0000°; P -3.0640, Plg23.0000°, Azm294.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 02 21:58:00.5±0.4,50°25N±0°04×156°63E±0°03,h69km±2km, h68km:pP-P,n1185,σ1°15/**1199**,mb4.8/**360**,36C-27D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.54** | **323** | *i* P | | **Pn** | **21 58 13.5** | **0.0** |
| SKR | | | | *e*S | | **Sn** | **21 58 23.4** | **+0.3** |
| **SKR** | **Severo-Kuril's** | **0.54** | **323** | ⇑*i*PN | | **Pn** | **21 58 13.5** | **0.0** |
| SKR | | | | *e*S | | **Sn** | **21 58 23.6** | **+0.5** |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,29μm,0.6s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=N,168μm,0.3s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=E,193μm,0.6s | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **1.81** | **30** | *e*P | | **Pn** | **21 58 28.6** | **-0.8** |
| KDTR | | | | *e*S | | **Sn** | **21 58 50.2** | **-1.1** |
| **KDTR** | **Khodutka, Kamc** | **1.81** | **30** | PN | | **Pn** | **21 58 28.6** | **-0.8** |
| KDTR | | | | S | | **Sn** | **21 58 50.2** | **-1.1** |
| **ASAK** | **Asacha** | **2.28** | **20** | *e*P | | **Pn** | **21 58 36.0** | **+0.1** |
| **ASAK** | **Asacha** | **2.28** | **20** | PN | | **Pn** | **21 58 35.9** | **+0.1** |
| **MTVR** | **Mutnovka** | **2.44** | **23** | *e*P | | **Pn** | **21 58 38.2** | **+0.2** |
| MTVR | | | | *e*S | | **Sn** | **21 59 08.3** | **+1.5** |
| **MTVR** | **Mutnovka** | **2.44** | **23** | PN | | **Pn** | **21 58 38.2** | **+0.2** |
| MTVR | | | | S | | **Sn** | **21 59 08.3** | **+1.5** |
| **GRL** | **Gorelyy** | **2.47** | **21** | *e*P | | **Pn** | **21 58 39.5** | **+1.0** |
| **GRL** | **Gorelyy** | **2.47** | **21** | PN | | **

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **KRER** | **Koryakskii** | **3.33** | **23** | *e*P | **Pn** | **21 58 52.0 +1.7** |
| **KRER** | **Koryakskii** | **3.33** | **23** | PN | **Pn** | **21 58 51.9 +1.7** |
| **KRX** | **Arik** | **3.35** | **21** | *e*P | **Pn** | **21 58 52.3 +1.8** |
| **KRX** | **Arik** | **3.35** | **21** | PN | **Pn** | **21 58 52.3 +1.8** |
| **NLC** | **Nalytchevo** | **3.38** | **29** | *e*P | **Pn** | **21 58 49.8 -0.9** |
| **NLC** | **Nalytchevo** | **3.38** | **29** | PN | **Pn** | **21 58 49.7 -0.9** |
| **GNL** | **Ganaly** | **3.54** | **13** | *e*P | **Pn** | **21 58 54.9 +1.9** |
| **GNL** | **Ganaly** | **3.54** | **13** | PN | **Pn** | **21 58 54.9 +1.9** |
| **SPN** | **Mys Shipunski** | **3.55** | **35** | *e*P | **Pn** | **21 58 53.1 +0.1** |
| SPN | | | | *e*S | **Sn** | **21 59 33.2 -0.5** |
| **SPN** | **Mys Shipunski** | **3.55** | **35** | PN | **Pn** | **21 58 53.1 +0.1** |
| SPN | | | | S | **Sn** | **21 59 33.1 -0.5** |
| **KII** | **Karymskiy** | **4.17** | **24** | *e*P | **Pn** | **21 59 03.8 +2.2** |
| **KII** | **Karymskiy** | **4.17** | **24** | PN | **Pn** | **21 59 03.7 +2.2** |
| **MKZ** | **Mys Kozlova** | **5.32** | **34** | *e*P | **Pn** | **21 59 16.7 -0.5** |
| **MKZ** | **Mys Kozlova** | **5.32** | **34** | PN | **Pn** | **21 59 16.7 -0.5** |
| **TUMD** | **Tumrok D** | **5.46** | **23** | *e*P | **Pn** | **21 59 20.1 +1.0** |
| **TUMR** | **Tumrok** | **5.47** | **22** | *e*P | **Pn** | **21 59 21.5 +2.0** |
| **TUMR** | **Tumrok** | **5.47** | **22** | PN | **Pn** | **21 59 21.4 +2.0** |
| **KMNR** | **Kamenistaya** | **5.93** | **20** | *e*P | **Pn** | **21 59 28.7 +3.1** |
| **KMNR** | **Kamenistaya** | **5.93** | **20** | PN | **Pn** | **21 59 28.7 +3.1** |
| **KPT** | **Kopyto** | **6.12** | **19** | *e*P | **Pn** | **21 59 30.3 +2.1** |
| **KPT** | **Kopyto** | **6.12** | **19** | PN | **Pn** | **21 59 30.3 +2.1** |
| **KOZ** | **Kozyrevsk** | **6.13** | **17** | *e*P | **Pn** | **21 59 31.2 +2.8** |
| **KOZ** | **Kozyrevsk** | **6.13** | **17** | PN | **Pn** | **21 59 31.1 +2.8** |
| **BZP** | **Bezymyannyi-Pe** | **6.14** | **21** | *e*P | **Pn** | **21 59 32.0 +3.4** |
| **BZMR** | **Bezymyannaya** | **6.15** | **21** | *e*P | **Pn** | **21 59 31.0 +2.3** |
| **BZMR** | **Bezymyannaya** | **6.15** | **21** | PN | **Pn** | **21 59 31.0 +2.3** |
| **BZWR** | **Bezymyannyi-We** | **6.17** | **21** | *e*P | **Pn** | **21 59 31.7 +2.7** |
| **BZWR** | **Bezymyannyi-We** | **6.17** | **21** | PN | **Pn** | **21 59 31.7 +2.7** |
| **BZGR** | **Bezymyannyi-Gr** | **6.20** | **22** | *e*P | **Pn** | **21 59 31.7 +2.4** |
| **BZGR** | **Bezymyannyi-Gr** | **6.20** | **22** | PN | **Pn** | **21 59 31.7 +2.4** |
| **SRDR** | **Sredinnyy** | **6.35** | **16** | *e*P | **Pn** | **21 59 33.6 +2.2** |
| **SRDR** | **Sredinnyy** | **6.35** | **16** | PN | **Pn** | **21 59 33.5 +2.2** |
| **CIRR** | **Tsirk** | **6.37** | **21** | *e*P | **Pn** | **21 59 35.7 +4.0** |
| **CIRR** | **Tsirk** | **6.37** | **21** | PN | **Pn** | **21 59 35.7 +4.0** |
| **KBTR** | **Krutoberegovo** | **7.03** | **30** | *e*P | **Pn** | **21 59 40.4 -0.1** |
| **KBTR** | **Krutoberegovo** | **7.03** | **30** | PN | **Pn** | **21 59 40.4 -0.1** |
| **KUR** | **Kuril'sk** | **7.75** | **233** | *e*PN | **Pn** | **21 59 54.4 +3.9** |
| KUR | | | | *e*S | **Sn** | **22 01 22.7 +6.1** |
| KUR | | | | pmax | pmax | |
| | comp=Z,248nm,0.6s | | | | | |
| KUR | | | | pmax | pmax | |
| | comp=N,104nm,0.8s | | | | | |
| KUR | | | | pmax | pmax | |
| | comp=E,98nm,0.8s | | | | | |
| KUR | | | | smax | smax | |
| | comp=E,417nm,0.7s | | | | | |
| KUR | | | | smax | smax | |
| | comp=N,281nm,0.4s | | | | | |
| **TYV** | **Tymovskoe** | **8.92** | **279** | *e*PN | Pn | 22 00 11.3 +4.9 |
| TYV | | | | *e*S | **Sn** | **22 01 47.4 +2.2** |
| TYV | | | | pmax | pmax | |
| | comp=Z,300nm,3.2s | | | | | |
| TYV | | | | pmax | pmax | |
| | comp=Z,32nm,1.4s | | | | | |
| TYV | | | | smax | smax | |
| | comp=N,15nm,1.5s | | | | | |
| TYV | | | | smax | smax | |
| | comp=E,15nm,1.5s | | | | | |
| **SHO** | **Shikotan** | **9.24** | **230** | *e*P | **Pn** | **22 00 08.4 -2.4** |
| **SHO** | **Shikotan** | **9.24** | **230** | *e*PN | **Pn** | **22 00 08.1 -2.7** |
| SHO | | | | pmax | pmax | |
| | comp=Z,95nm,0.5s | | | | | |
| SHO | | | | pmax | pmax | |
| | comp=E,32nm,0.2s | | | | | |
| SHO | | | | pmax | pmax | |
| | comp=N,35nm,0.4s | | | | | |
| **UGL** | **Uglegorsk** | **9.52** | **268** | *e*PN | Pn | 22 00 19.5 +4.9 |
| UGL | | | | pmax | pmax | |
| | comp=Z,600nm,1.0s | | | | | |
| UGL | | | | pmax | pmax | |
| | comp=Z,451nm,0.8s | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **9.61** | **234** | *e*PN | **Pn** | **22 00 15.9 0.0** |
| YUK | | | | pmax | pmax | |
| | comp=Z,586nm,0.5s | | | | | |
| YUK | | | | pmax | pmax | |
| | comp=E,343nm,0.4s | | | | | |
| YUK | | | | pmax | pmax | |
| | comp=N,289nm,0.5s | | | | | |
| YUK | | | | pmax | pmax | |
| | comp=Z,697nm,1.2s | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.77** | **256** | P | **Pn** | **22 00 18.6 +0.6** |
| **YSS** | **Yuzh-Sakhalins** | **9.77** | **256** | Pn | **Pn** | **22 00 16.4 -1.6** |
| **YSS** | **Yuzh-Sakhalins** | **9.77** | **256** | *ke*PN | **Pn** | **22 00 22.1 +4.1** |
| YSS | | | | *e*S | **Sn** | **22 02 09.5 +3.6** |
| YSS | | | | pmax | pmax | |
| | comp=Z,80nm,1.0s | | | | | |
| YSS | | | | pmax | pmax | |
| | comp=N,40nm,1.1s | | | | | |
| YSS | | | | pmax | pmax | |
| | comp=E,40nm,0.8s | | | | | |
| YSS | | | | pmax | pmax | |
| | comp=Z,100nm,4.7s | | | | | |
| YSS | | | | smax | smax | |
| | comp=N,300nm,6.9s | | | | | |
| YSS | | | | smax | smax | |
| | comp=E,200nm,6.6s | | | | | |
| **RUSJ** | **Misakicho** | **9.89** | **236** | *e*PN | **Pn** | **22 00 22.8 +3.2** |
| **MA2** | **Magadan** | **9.93** | **342** | P | **Pn** | **22 00 22.2 +2.1** |
| **MA2** | **Magadan** | **9.93** | **342** | Pn | **Pn** | **22 00 19.1 -1.0** |
| **MA2** | **Magadan** | **9.93** | **342** | P | **Pn** | **22 00 15.7 -4.4** |
| | comp=E,2.6nm,0.3s,baz=163,slow=19,SNR=1.7 | | | | | |
| MA2 | | | | S | **Sn** | **22 02 04.5 -5.2** |
| | comp=E,4.4nm,0.3s,baz=150,slow=12,SNR=1.4 | | | | | |
| MA2 | | | | LR | LR | 22 04 20.4 |
| | comp=E,518nm,21.1s,baz=149,slow=39 | | | | | |
| **MA2** | **Magadan** | **9.93** | **342** | *ce*PN | **Pn** | **22 00 21.1 +1.0** |
| MA2 | | | | pmax | pmax | |
| | comp=Z,76nm,0.8s | | | | | |
| **MA2** | **Magadan** | **9.93** | **342** | P | **Pn** | **22 00 19.0 -1.1** |
| | comp=Z,117nm,0.7s,comp=Z,2µm | | | | | |
| **NMR** | **Nemuro--Hokkai** | **10.15** | **231** | *e*PN | **Pn** | **22 00 19.7 -3.6** |
| **SHEM** | **Shemya Is, Ala** | **11.17** | **70** | P | **Pn** | **22 00 36.1 -1.0** |
| | comp=Z,40nm,0.4s,baz=244,slow=2.2,SNR=6.7 | | | | | |
| SHEM | | | | S | Sn | 22 02 30.0 -10 |
| | comp=Z,79nm,0.3s,baz=332,slow=22,SNR=15 | | | | | |
| SHEM | | | | LR | LR | 22 05 44.2 |
| | comp=Z,167nm,18.9s,baz=294,slow=41 | | | | | |
| **JKA** | **Kamikawa-asahi** | **11.34** | **243** | Pn | **Pn** | **22 00 39.6 +0.1** |
| **ASAJ** | **Asahikawa** | **11.34** | **243** | P | **Pn** | **22 00 37.4 -2.1** |
| | comp=Z,37nm,0.6s,baz=69,slow=11,SNR=42 | | | | | |
| ASAJ | | | | LR | LR | 22 04 44.4 |
| | comp=Z,318nm,20.5s,baz=58,slow=36 | | | | | |
| **ASAJ** | **Asahikawa** | **11.34** | **243** | PN | **Pn** | **22 00 39.6 +0.1** |
| **ERM** | **Erimo** | **12.44** | **234** | P | **Pn** | **22 00 53.6 -0.9** |
| **ERM** | **Erimo** | **12.44** | **234** | Pn | **Pn** | **22 00 52.5 -2.0** |
| **ERM** | **Erimo** | **12.44** | **234** | *ce*PN | **Pn** | **22 00 51.7 -2.8** |
| ERM | | | | pmax | pmax | |
| | comp=Z,105nm,1.0s | | | | | |
| **JEM** | **Erimo** | **12.44** | **234** | P | **Pn** | **22 00 53.8 -0.7** |
| **GRNR** | **Gornyy** | **12.87** | **280** | ⇓ *i*PN | **Pn** | **22 01 04.1 +3.8** |
| GRNR | | | | pmax | pmax | |
| | comp=E,30nm,1.1s | | | | | |
| GRNR | | | | pmax | pmax | |
| | comp=Z,30nm,1.1s | | | | | |
| **SEY** | **Seymchan** | **12.92** | **351** | P | **Pn** | **22 01 02.4 +1.5** |
| | comp=Z,64nm,1.0s,baz=156,slow=11,SNR=50 | | | | | |
| **SEY** | **Seymchan** | **12.92** | **351** | *ce*PN | **Pn** | **22 01 02.7 +1.9** |
| SEY | | | | pmax | pmax | |
| | comp=Z,111nm,1.3s | | | | | |
| **AMKA** | **Amchitka** | **14.37** | **77** | P | **P** | **22 01 24.9 -0.3** |
| **JTM** | **Tenmabayashi** | **14.42** | **235** | P | **Pn** | **22 01 20.7 -0.1** |
| **JTM** | **Tenmabayashi** | **14.42** | **235** | Pn | **Pn** | **22 01 18.1 -2.7** |
| **TEY** | **Ternei** | **14.46** | **257** | *e*P | **P** | **22 01 24.0 -2.2** |
| TEY | | | | *e* | | 22 04 03.0 |
| **KLR** | **Kul'dur** | **16.10** | **276** | P | **P** | **22 01 45.9 +1.5** |
| | comp=Z,57nm,0.9s,baz=74,slow=12,SNR=29 | | | | | |
| KLR | | | | LR | LR | 22 08 37.0 |
| | comp=Z,361nm,18.1s,baz=80,slow=40 | | | | | |
| **KLR** | **Kul'dur** | **16.10** | **276** | *e*P | **P** | **22 01 44.2 -0.2** |
| KLR | | | | pmax | pmax | |
| | comp=Z,63nm,0.9s | | | | | |
| **KIWB** | **Kanaga Island** | **16.54** | **74** | Pn | **Pn** | **22 01 47.8 +0.1** |
| **JMM** | **Marumori** | **16.77** | **228** | P | **P** | **22 01 52.2 +0.3** |
| **JMM** | **Marumori** | **16.77** | **228** | | **Pn** | **22 01 48.6 -2.1** |
| **USA0B** | **Ussuriysk Arra** | **17.75** | **260** | P | **P** | **22 02 02.0 -0.7** |
| **USA0B** | **Ussuriysk Arra** | **17.75** | **260** | P | **Pn** | **22 02 03.3 +0.5** |
| **USRK** | **Ussuriysk Ar.** | **17.75** | **260** | | **P** | **22 02 01.7 -1.0** |
| **USRK** | **Ussuriysk Ar.** | **17.75** | **260** | P | **P** | **22 02 00.7 -2.0** |
| | comp=Z,6.1nm,0.6s,baz=61,slow=12,SNR=21 | | | | | |
| USRK | | | | LR | LR | 22 08 43.4 |
| | comp=Z,186nm,21.4s,baz=37,slow=36 | | | | | |
| **USRK** | **Ussuriysk Ar.** | **17.75** | **260** | P | **P** | **22 02 01.7 -1.0** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ZEA** | **Zeya** | **18.36** | **292** | *e*P | **Pn** | **22 02 11.3 +1.3** |
| ZEA | | | | *e*S | **Sn** | **22 05 25.9 -8.4** |
| ZEA | | | | pmax | pmax | |
| | comp=Z,100nm,1.8s | | | | | |
| ZEA | | | | pmax | pmax | |
| | comp=E,50nm,0.9s | | | | | |
| ZEA | | | | pmax | pmax | |
| | comp=Z,70nm,1.0s | | | | | |
| ZEA | | | | smax | smax | |
| | comp=E,200nm,7.2s | | | | | |
| ZEA | | | | MLR | MLR | |
| | comp=E,200nm,16.0s | | | | | |
| **BILL** | **Bilibino** | **18.47** | **11** | P | **P** | **22 02 10.7 +0.3** |
| **BILL** | **Bilibino** | **18.47** | **11** | *d i*P | **P** | **22 02 08.9 -1.5** |
| BILL | | | | S | **S** | **22 05 41.0 +4.2** |
| BILL | | | | pmax | pmax | |
| | comp=Z,35nm,1.3s | | | | | |
| BILL | | | | MLR | MLR | |
| | comp=Z,566nm,19.0s | | | | | |
| **HEH** | **HeiHe** | **18.63** | **281** | *e*P | **Pn** | **22 02 13.7 +0.4** |
| HEH | | | | S | **Sn** | **22 05 41.1 +0.1** |
| HEH | | | | pmax | pmax | |
| | comp=Z,190nm,1.1s | | | | | |
| HEH | | | | LR | LR | |
| | comp=Z,280nm,13.4s | | | | | |
| HEH | | | | LR | LR | |
| | comp=Z,300nm,12.1s | | | | | |
| HEH | | | | LR | LR | |
| | comp=Z,410nm,17.3s | | | | | |
| **YAK** | **Yakutsk** | **18.92** | **319** | P | **P** | **22 02 14.9 -0.4** |
| **YAK** | **Yakutsk** | **18.92** | **319** | P | **P** | **22 02 13.9 -1.4** |
| | comp=Z,224nm,0.8s,baz=65,slow=1.4,SNR=62 | | | | | |
| YAK | | | | S | **S** | **22 05 43.7 -2.5** |
| | comp=Z,8.1nm,0.7s,baz=188,slow=23,SNR=1.4 | | | | | |
| YAK | | | | LR | LR | 22 09 33.5 |
| | comp=Z,608nm,21.3s,baz=118,slow=37 | | | | | |
| **YAK** | **Yakutsk** | **18.92** | **319** | *e*P | **P** | **22 02 14.9 -0.4** |
| YAK | | | | *e*S | **S** | **22 05 46.5 +0.2** |
| YAK | | | | pmax | pmax | |
| | comp=Z,333nm,1.3s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=N,35nm,1.0s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=E,132nm,1.5s | | | | | |
| YAK | | | | smax | smax | |
| | comp=N,122nm,2.0s | | | | | |
| YAK | | | | smax | smax | |
| | comp=E,83nm,2.7s | | | | | |
| **MDJ** | **Mudanjiang** | **19.08** | **263** | P | **Pn** | **22 02 20.2 +1.5** |
| **MDJ** | **Mudanjiang** | **19.08** | **263** | P | **P** | **22 02 16.6 -0.7** |
| MDJ | | | | pmax | pmax | |
| | comp=E,8.0nm,1.1s | | | | | |
| MDJ | | | | pmax | pmax | |
| | comp=E,150nm,3.6s | | | | | |
| MDJ | | | | LR | LR | |
| | comp=E,310nm,18.6s | | | | | |
| MDJ | | | | LR | LR | |
| | comp=E,530nm,22.4s | | | | | |
| MDJ | | | | LR | LR | |
| | comp=E,1µm,23.6s | | | | | |
| **MDJ** | **Mudanjiang** | **19.08** | **263** | P | **P** | **22 02 16.2 -1.1** |
| MDJ | | | | IAmb | IAmb | 22 02 24.7 |
| | comp=Z,90nm,0.9s | | | | | |
| **MJB9** | **Matsu-Tunnel** | **19.08** | **231** | P | **P** | **22 02 16.7 -0.7** |
| MJB9 | | | | IAmb | IAmb | 22 02 24.2 |
| | comp=Z,54nm,0.6s | | | | | |
| **MAJO** | **Matsushiro** | **19.09** | **231** | P | **Pn** | **22 02 18.4 -0.5** |
| **MAJO** | **Matsushiro** | **19.09** | **231** | | **P** | **22 02 16.7 -0.8** |
| MAJO | | | | IAmb | IAmb | 22 02 24.2 |
| | comp=Z,57nm,0.6s | | | | | |
| **MAJO** | **Matsushiro** | **19.09** | **231** | *i* P | **P** | **22 02 16.6 -0.8** |
| **MJAR** | **Matsushiro Arr** | **19.09** | **231** | P | **P** | **22 02 17.2 -0.2** |
| | comp=Z,9.3nm,0.8s,baz=29,slow=10,SNR=26 | | | | | |
| MJAR | | | | LR | LR | 22 09 57.8 |
| | comp=Z,186nm,18.9s,baz=21,slow=38 | | | | | |
| **MSHR** | **Mys Shultsa** | **19.10** | **256** | *ce*P | **P** | **22 02 18.1 +0.6** |
| MSHR | | | | pmax | pmax | |
| | comp=Z,3.0nm,0.6s | | | | | |
| **BNX** | **BinXian** | **20.00** | **268** | ⇓P | **P** | **22 02 27.7 +0.4** |
| BNX | | | | pmax | pmax | |
| | comp=Z,42nm,0.8s | | | | | |
| **JGF** | **Kuroka** | **20.25** | **231** | P | Pn | 22 02 32.4 -0.2 |
| **JGF** | **Kuroka** | **20.25** | **231** | P | **P** | **22 02 29.6 -0.4** |
| JGF | | | | IAmb | IAmb | 22 02 35.9 |
| | comp=Z,55nm,0.9s | | | | | |
| **INU** | **Inuyama** | **20.62** | **231** | P | Pn | 22 02 35.7 -1.2 |
| **INU** | **Inuyama** | **20.62** | **231** | P | **P** | **22 02 33.0 -1.0** |
| **JHJ2** | **Mitsune** | **21.15** | **222** | P | **P** | **22 02 38.0 -1.7** |
| **JHJ** | **Hachijo jima 2** | **21.16** | **222** | P | **P** | **22 02 38.0 -1.9** |
| | comp=Z,207nm,0.9s,baz=98,slow=15,SNR=5.3 | | | | | |
| | comp=Z,207nm,0.9s | | | | | |
| **NIKH** | **Nikolski High** | **21.48** | **69** | P | **P** | **22 02 43.6 +0.5** |
| | baz=277 | | | | | |
| **GAMB** | **Gambell** | **21.62** | **39** | P | **P** | **22 02 44.6 +0.2** |
| | baz=246 | | | | | |
| **CN2** | **Changchun** | **22.10** | **265** | *e*P | **P** | **22 02 47.5 -2.3** |
| CN2 | | | | *e*S | **S** | **22 06 43.1 -6.2** |
| CN2 | | | | pmax | pmax | |
| | comp=Z,10.0nm,0.4s | | | | | |
| CN2 | | | | pmax | pmax | |
| | comp=Z,100nm,3.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,100nm,13.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,300nm,13.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,300nm,14.0s | | | | | |
| **JMN** | **Monobe** | **23.49** | **234** | P | **P** | **22 03 06.6 +2.5** |
| **JMN** | **Monobe** | **23.49** | **234** | P | **P** | **22 03 03.8 -0.2** |
| JMN | | | | IAmb | IAmb | 22 03 12.8 |
| | comp=Z,73nm,1.5s | | | | | |
| **HIA** | **Hailar** | **23.70** | **282** | P | **P** | **22 03 08.4 +2.6** |
| **HIA** | **Hailar** | **23.70** | **282** | P | **P** | **22 03 04.9 -0.9** |
| **HIA** | **Hailar** | **23.70** | **282** | P | **P** | **22 03 04.9 -0.9** |
| HIA | | | | pmax | pmax | |
| | comp=Z,11nm,0.8s | | | | | |
| **TNA** | **Tin City** | **23.82** | **37** | P | **P** | **22 03 06.9 +0.2** |
| | baz=247 | | | | | |
| **KSRS** | **Korea Array** | **24.16** | **249** | P | **P** | **22 03 09.5 -0.6** |
| | comp=Z,13nm,1.0s,baz=47,slow=9.9,SNR=29 | | | | | |
| | comp=Z,13nm,1.0s | | | | | |
| **KS19** | **Wonju Array Si** | **24.17** | **249** | P | **P** | **22 03 09.2 -0.9** |
| **KSAR** | **Wonju Array Be** | **24.19** | **249** | P | **P** | **22 03 09.8 -0.5** |
| **KSAR** | **Wonju Array Be** | **24.19** | **249** | P | **P** | **22 03 09.8 -0.5** |
| **SNY** | **Shenyang** | **24.28** | **262** | ⇑P | **P** | **22 03 11.4 +0.4** |
| SNY | | | | pmax | pmax | |
| | comp=Z,13nm,1.0s | | | | | |
| **F14K** | **Arctic Creek** | **24.41** | **37** | P | **P** | **22 03 12.1 +0.1** |
| | baz=250 | | | | | |
| **ANM** | **Nome** | **24.49** | **40** | P | **P** | **22 03 13.0 +0.3** |
| | baz=253 | | | | | |
| **M13K** | **Dall Lake** | **24.54** | **50** | P | **P** | **22 03 12.2 -1.1** |
| **M13K** | **Dall Lake** | **24.54** | **50** | P | **P** | **22 03 14.5 +1.2** |
| | baz=264 | | | | | |
| **J14K** | **Nanvaranak Lak** | **24.82** | **45** | P | **P** | **22 03 15.6 -0.1** |
| J14K | | | | IAmb | IAmb | 22 03 34.9 |
| | comp=Z,39nm,1.4s | | | | | |
| **J14K** | **Nanvaranak Lak** | **24.82** | **45** | P | **P** | **22 03 16.5 +0.8** |
| | baz=259 | | | | | |
| **TIXI** | **Tiksi** | **24.88** | **339** | P | **P** | **22 03 14.9 -1.3** |
| TIXI | | | | IAmb | IAmb | 22 03 34.1 |
| | comp=Z,49nm,1.1s | | | | | |
| **TIXI** | **Tiksi** | **24.88** | **339** | LR | LR | 22 13 15.1 |
| | comp=Z,241nm,21.9s,baz=144,slow=37 | | | | | |
| **TIXI** | **Tiksi** | **24.88** | **339** | *ce*P | **P** | **22 03 15.2 -1.0** |
| TIXI | | | | pmax | pmax | |
| | comp=Z,11nm,0.7s | | | | | |
| **L14K** | **Kuka Creek** | **24.98** | **48** | | **P** | **22 03 18.6 +1.3** |
| L14K | | | | IAmb | IAmb | 22 03 36.1 |
| | comp=Z,33nm,1.1s | | | | | |
| **F15K** | **North Star Dit** | **25.14** | **38** | P | **P** | **22 03 18.9 +0.2** |
| F15K | | | | IAmb | IAmb | 22 03 37.4 |
| | comp=Z,53nm,1.6s | | | | | |
| **F15K** | **North Star Dit** | **25.14** | **38** | P | **P** | **22 03 19.1 +0.4** |
| | baz=251 | | | | | |
| **S12K** | **Black Hills** | **25.17** | **61** | P | **P** | **22 03 20.1 +1.0** |
| | baz=275 | | | | | |
| **M14K** | **Bethel** | **25.26** | **50** | | **P** | **22 03 19.8 +0.1** |
| M14K | | | | IAmb | IAmb | 22 03 36.6 |
| | comp=Z,60nm,1.2s | | | | | |
| **M14K** | **Bethel** | **25.26** | **50** | P | **P** | **22 03 20.0 +0.2** |
| | baz=264 | | | | | |
| **N14K** | **Kuskokwak Cree** | **25.33** | **52** | P | **P** | **22 03 21.1 +0.6** |
| | baz=266 | | | | | |
| **O14K** | **Tigyukauivet M** | **25.51** | **53** | | **P** | **22 03 21.0 -1.1** |
| O14K | | | | IAmb | IAmb | 22 03 40.9 |
| | comp=Z,64nm,1.1s | | | | | |
| **O14K** | **Tigyukauivet M** | **25.51** | **53** | P | **P** | **22 03 23.2 +1.2** |
| | baz=268 | | | | | |
| **JNU** | **Nakatsue** | **25.55** | **238** | P | **P** | **22 03 24.3 +1.6** |
| **JNU** | **Nakatsue** | **25.55** | **238** | P | **P** | **22 03 21.6 -1.2** |
| JNU | | | | IAmb | IAmb | 22 03 31.9 |
| | comp=Z,38nm,0.9s | | | | | |
| **JCJ** | **Chichijima** | **25.64** | **211** | P | **P** | **22 03 23.1 -0.4** |
| JCJ | | | | IAmb | IAmb | 22 03 50.5 |
| | comp=Z,31nm,0.8s | | | | | |
| **K15K** | **Wolf Creek Mou** | **25.66** | **46** | | **P** | **22 03 24.0 +0.6** |
| K15K | | | | IAmb | IAmb | 22 03 41.1 |
| | comp=Z,39nm,1.0s | | | | | |
| **BOD** | **Bodaibo** | **25.78** | **304** | *e*P | **P** | **22 03 25.4 +0.9** |
| BOD | | | | pmax | pmax | |
| | comp=Z,20nm,1.3s | | | | | |
| **C16K** | **Lisburne Hills** | **25.86** | **32** | P | **P** | **22 03 25.3 +0.2** |
| **C16K** | **Lisburne Hills** | **25.86** | **32** | P | **P** | **22 03 25.2 +0.1** |
| | baz=245 | | | | | |
| **M15K** | **Kasigluk River** | **25.88** | **50** | P | **P** | **22 03 26.1 +0.7** |
| | baz=266 | | | | | |
| **G16K** | **Koyuk River** | **25.96** | **39** | P | **P** | **22 03 26.6 +0.6** |
| | baz=254 | | | | | |
| **SDPT** | **Sand Point** | **26.10** | **62** | P | **P** | **22 03 28.2 +0.8** |
| | baz=277 | | | | | |
| **N15K** | **Kwethluk River** | **26.14** | **51** | P | **P** | **22 03 28.8 +1.0** |
| N15K | | | | IAmb | IAmb | 22 03 47.3 |
| | comp=Z,22nm,0.8s | | | | | |
| **N15K** | **Kwethluk River** | **26.14** | **51** | P | **P** | **22 03 29.1 +1.3** |
| | baz=267 | | | | | |
| **J16K** | **Anvik River** | **26.24** | **44** | P | **P** | **22 03 30.0 +1.4** |
| **O15K** | **Ungalikthiuk R** | **26.25** | **53** | P | **P** | **22 03 29.6 +0.8** |
| | baz=270 | | | | | |
| **I17K** | **Unalakleet** | **26.30** | **43** | P | **P** | **22 03 30.9 +1.7** |
| I17K | | | | IAmb | IAmb | 22 03 33.6 |
| | comp=Z,32nm,1.1s | | | | | |
| **D17K** | **Noatak River** | **26.41** | **34** | P | **P** | **22 03 30.3 +0.1** |
| | baz=249 | | | | | |
| **S14K** | **Fog Glacier** | **26.52** | **60** | P | **P** | **22 03 32.0 +0.7** |
| | baz=276 | | | | | |
| **L16K** | **Owhat River** | **26.55** | **48** | P | **P** | **22 03 32.3 +0.9** |
| **RDOG** | **Red Dog Mine** | **26.61** | **33** | P | **P** | **22 03 32.4 +0.5** |
| **RDOG** | **Red Dog Mine** | **26.61** | **33** | P | **P** | **22 03 32.7 +0.8** |
| | baz=249 | | | | | |
| **E17K** | **Hotham Inlet** | **26.66** | **35** | P | **P** | **22 03 32.9 +0.5** |
| | baz=252,SNR=9.2 | | | | | |
| **C17K** | **DeLong Mountai** | **26.67** | **32** | P | **P** | **22 03 32.7 +0.1** |
| | baz=248 | | | | | |
| **G17K** | **Kiwalik Mounta** | **26.67** | **39** | P | **P** | **22 03 33.4 +0.8** |
| | baz=256 | | | | | |
| **CHNA** | **Chernabura Isl** | **26.68** | **63** | P | **P** | **22 03 34.3 +1.7** |
| | baz=279 | | | | | |
| **F17K** | **Baldwin Pennin** | **26.69** | **37** | P | **P** | **22 03 32.9 +0.3** |
| **F17K** | **Baldwin Pennin** | **26.69** | **37** | P | **P** | **22 03 33.6 +1.0** |
| | baz=254 | | | | | |
| **M16K** | **Timber Creek** | **26.75** | **49** | P | **P** | **22 03 34.4 +1.1** |
| M16K | | | | IAmb | IAmb | 22 03 50.9 |
| | comp=Z,37nm,1.0s | | | | | |
| **N16K** | **Nishlik Lake** | **26.81** | **50** | P | **P** | **22 03 34.9 +1.0** |
| | baz=268 | | | | | |
| **H17K** | **Granite Mounta** | **26.85** | **40** | P | **P** | **22 03 34.2 +0.1** |
| **J17K** | **VABM Dome** | **26.93** | **44** | P | **P** | **22 03 34.7 -0.2** |
| J17K | | | | IAmb | IAmb | 22 03 58.7 |
| | comp=Z,30nm,1.1s | | | | | |
| **O16K** | **Kokwok River B** | **27.14** | **52** | P | **P** | **22 03 37.4 +0.7** |
| | baz=270 | | | | | |
| **DL2** | **Dalian** | **27.14** | **259** | P | **P** | **22 03 38.6 +1.6** |
| DL2 | | | | pmax | pmax | |
| | comp=Z,17nm,0.8s | | | | | |
| DL2 | | | | LR | LR | |
| | comp=Z,140nm,16.2s | | | | | |
| DL2 | | | | LR | LR | |
| | comp=Z,310nm,14.2s | | | | | |
| DL2 | | | | LR | LR | |
| | comp=Z,530nm,25.4s | | | | | |
| **L17K** | **Donlin** | **27.14** | **47** | P | **P** | **22 03 37.7 +0.9** |
| | baz=265 | | | | | |
| **P16K** | **Nushagak River** | **27.20** | **54** | P | **P** | **22 03 38.2 +0.9** |
| | baz=272 | | | | | |
| **K17K** | **Iditarod** | **27.20** | **46** | | **P** | **22 03 37.8 +0.6** |
| **K17K** | **Iditarod** | **27.20** | **46** | P | **P** | **22 03 38.3 +1.0** |
| | baz=264 | | | | | |
| **E18K** | **Tukpahlearik C** | **27.22** | **35** | P | **P** | **22 03 37.9 +0.5** |
| **E18K** | **Tukpahlearik C** | **27.22** | **35** | P | **P** | **22 03 38.4 +0.9** |
| | baz=253 | | | | | |
| **F18K** | **Selawik** | **27.35** | **37** | P | **P** | **22 03 38.7 +0.2** |
| | baz=255 | | | | | |
| **C18K** | **Utukok River** | **27.41** | **32** | P | **P** | **22 03 39.5 +0.3** |
| | baz=250 | | | | | |
| **B18K** | **Kokolik River** | **27.47** | **31** | P | **P** | **22 03 40.0 +0.4** |
| | baz=248 | | | | | |
| **M17K** | **Holitna River** | **27.50** | **48** | P | **P** | **22 03 41.3 +1.3** |
| **M17K** | **Holitna River** | **27.50** | **48** | P | **P** | **22 03 40.8 +0.8** |
| | baz=267 | | | | | |
| **H18K** | **Honhosa River** | **27.54** | **40** | P | **P** | **22 03 39.2 -1.1** |
| **G18K** | **Tagagawik** | **27.57** | **39** | P | **P** | **22 03 39.9 -0.6** |
| **N17K** | **Nushagak Hills** | **27.60** | **50** | P | **P** | **22 03 41.1 +0.3** |
| N17K | | | | IAmb | IAmb | 22 03 59.3 |
| | comp=Z,63nm,1.9s | | | | | |
| **N17K** | **Nushagak Hills** | **27.60** | **50** | P | **P** | **22 03 41.1 +0.3** |
| | baz=268 | | | | | |
| **O17K** | **Koliganek Bris** | **27.64** | **52** | P | **P** | **22 03 41.1 -0.1** |
| | baz=271 | | | | | |
| **L18K** | **Granite Mounta** | **27.90** | **47** | P | **P** | **22 03 44.5 +1.0** |
| **L18K** | **Granite Mounta** | **27.90** | **47** | P | **P** | **22 03 43.8 +0.2** |
| | baz=267 | | | | | |
| **P17K** | **Kvichak River** | **27.99** | **53** | P | **P** | **22 03 45.0 +0.7** |
| | baz=272 | | | | | |
| **J18K** | **Innoko River** | **28.00** | **44** | | **P** | **22 03 44.6 +0.2** |
| **XLT** | **XiLinHaoTe** | **28.06** | **273** | *e*P | **P** | **22 03 46.5 +1.2** |
| XLT | | | | pmax | pmax | |
| | comp=Z,17nm,0.9s | | | | | |
| XLT | | | | LR | LR | |
| | comp=Z,210nm,20.4s | | | | | |
| XLT | | | | LR | LR | |
| | comp=Z,280nm,16.7s | | | | | |
| **C19K** | **Lookout Ridge** | **28.12** | **32** | P | **P** | **22 03 45.9 +0.4** |
| | baz=251 | | | | | |
| **F19K** | **Shaleruckik Mo** | **28.13** | **37** | P | **P** | **22 03 45.3 -0.2** |
| **F19K** | **Shaleruckik Mo** | **28.13** | **37** | P | **P** | **22 03 45.8 +0.3** |
| | baz=257 | | | | | |
| **R17L** | **Mt. Peulik Vol** | **28.14** | **57** | P | **P** | **22 03 46.3 +0.6** |
| | baz=276 | | | | | |
| **N18K** | **Kilae Creek** | **28.24** | **50** | P | **P** | **22 03 47.8 +1.2** |
| **N18K** | **Kilae Creek** | **28.24** | **50** | P | **P** | **22 03 47.0 +0.4** |
| | baz=270 | | | | | |
| **M18K** | **Stony River** | **28.28** | **48** | P | **P** | **22 03 47.3 +0.4** |
| | baz=269 | | | | | |
| **Q17K** | **Contact Creek** | **28.33** | **55** | P | **P** | **22 03 47.5 0.0** |
| | baz=275 | | | | | |
| **SVW2** | **Sparrevohn** | **28.39** | **49** | P | **P** | **22 03 48.9 +0.9** |
| **H19K** | **Roundabout Mou** | **28.39** | **40** | P | **P** | **22 03 48.1 +0.3** |
| | baz=261 | | | | | |
| **D19K** | **Kuna River** | **28.43** | **33** | P | **P** | **22 03 48.9 +0.7**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **L20K** | **Farewell, AK** | **29.23** | **46** | P | | **P** | | **22 03 55.8** | **+0.5** |
| | baz=269 | | | | | | | | |
| **SII** | **Sitkinak Islan** | **29.45** | **58** | P | | **P** | | **22 03 58.0** | **+0.7** |
| | baz=279 | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **29.45** | **54** | P | | **P** | | **22 03 57.3** | **0.0** |
| **Q19K** | **Cape Douglas,** | **29.45** | **54** | P | | **P** | | **22 03 58.0** | **+0.7** |
| | baz=275 | | | | | | | | |
| **IMAR** | **Indian Mountai** | **29.56** | **39** | P | | **P** | | **22 03 58.2** | **0.0** |
| **G21K** | **Allakaket** | **29.74** | **38** | P | | **P** | | **22 04 00.2** | **+0.4** |
| **G21K** | **Allakaket** | **29.74** | **38** | P | | **P** | | **22 04 00.3** | **+0.5** |
| | baz=262 | | | | | | | | |
| **OHAK** | **Old Harbor** | **29.84** | **57** | P | | **P** | | **22 04 02.1** | **+1.4** |
| | baz=278 | | | | | | | | |
| **O20K** | **Slope Mountain** | **29.88** | **51** | P | | **P** | | **22 04 02.6** | **+1.5** |
| | baz=274 | | | | | | | | |
| **E21K** | **Killik River** | **29.90** | **34** | P | | **P** | | **22 04 01.1** | **-0.1** |
| **H21K** | **Melozitna Rive** | **29.91** | **40** | P | | **P** | | **22 04 01.9** | **+0.5** |
| **H21K** | **Melozitna Rive** | **29.91** | **40** | P | | **P** | | **22 04 01.7** | **+0.4** |
| | baz=264 | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **29.95** | **32** | | | **P** | | **22 04 02.0** | **+0.4** |
| B21K | | | | IAmb | | IAmb | | 22 04 20.5 | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **29.95** | **32** | P | | **P** | | **22 04 02.0** | **+0.4** |
| | baz=255 | | | | | | | | |
| **BJT** | **Baijiatuau** | **29.98** | **266** | P | | **P** | | **22 04 01.9** | **-0.2** |
| **BJT** | **Baijiatuau** | **29.98** | **266** | P | | **P** | | **22 04 02.0** | **-0.2** |
| BJT | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **29.98** | **44** | P | | **P** | | **22 04 03.1** | **+1.1** |
| | baz=268 | | | | | | | | |
| **PPLA** | **Purkeypile** | **30.01** | **46** | P | | **P** | | **22 04 02.8** | **+0.4** |
| | baz=269 | | | | | | | | |
| **N20K** | **Mount Spurr** | **30.02** | **49** | P | | **P** | | **22 04 02.6** | **+0.1** |
| | baz=272 | | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **30.02** | **49** | P | | **P** | | **22 04 02.8** | **+0.4** |
| | baz=272 | | | | | | | | |
| **CAST** | **Castle Rocks** | **30.07** | **44** | P | | **P** | | **22 04 02.3** | **-0.5** |
| **KDAK** | **Kodiak Island** | **30.13** | **56** | P | | **P** | | **22 04 03.3** | **0.0** |
| | baz=278 | | | | | | | | |
| **SKT** | **Skwentna** | **30.32** | **47** | P | | **P** | | **22 04 05.4** | **+0.3** |
| | baz=272 | | | | | | | | |
| **D22K** | **Ayikyak River** | **30.45** | **34** | P | | **P** | | **22 04 06.3** | **+0.2** |
| D22K | | | | IAmb | | IAmb | | 22 04 37.7 | |
| | comp=Z,61nm,1.9s | | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **30.52** | **40** | P | | **P** | | **22 04 07.5** | **+0.7** |
| | baz=265 | | | | | | | | |
| **CAPN** | **Captain Cook N** | **30.56** | **50** | P | | **P** | | **22 04 07.6** | **+0.6** |
| | baz=274 | | | | | | | | |
| **G22K** | **Bettles** | **30.58** | **38** | P | | **P** | | **22 04 07.7** | **+0.5** |
| | baz=263 | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **30.58** | **43** | P | | **P** | | **22 04 07.5** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **30.58** | **43** | P | | **P** | | **22 04 08.4** | **+1.2** |
| | baz=268 | | | | | | | | |
| **CNPM** | **China Poot** | **30.62** | **52** | P | | **P** | | **22 04 08.1** | **+0.4** |
| CNPM | | | | IAmb | | IAmb | | 22 04 24.4 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **SUA** | **Susitna One** | **30.72** | **48** | P | | **P** | | **22 04 09.3** | **+0.7** |
| | baz=273 | | | | | | | | |
| **MLY** | **Manley** | **30.72** | **41** | P | | **P** | | **22 04 09.3** | **+0.7** |
| **MLY** | **Manley** | **30.72** | **41** | P | | **P** | | **22 04 09.5** | **+0.9** |
| | baz=267 | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **30.85** | **52** | P | | **P** | | **22 04 10.2** | **+0.5** |
| | baz=276 | | | | | | | | |
| **COLD** | **Coldfoot** | **31.12** | **37** | P | | **P** | | **22 04 12.5** | **+0.5** |
| | baz=264 | | | | | | | | |
| **G23K** | **Bananza Creek** | **31.14** | **38** | P | | **P** | | **22 04 12.6** | **+0.4** |
| | baz=265 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **31.23** | **49** | P | | **P** | | **22 04 13.7** | **+0.7** |
| | baz=275 | | | | | | | | |
| **H23K** | **Yukon River** | **31.27** | **40** | P | | **P** | | **22 04 13.8** | **+0.5** |
| | baz=267 | | | | | | | | |
| **O22K** | **Cooper Landing** | **31.29** | **50** | P | | **P** | | **22 04 14.2** | **+0.7** |
| | baz=276 | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **31.31** | **41** | P | | **P** | | **22 04 14.3** | **+0.7** |
| | baz=268 | | | | | | | | |
| **C23K** | **Itkillik River** | **31.36** | **32** | P | | **P** | | **22 04 14.3** | **+0.3** |
| C23K | | | | IAmb | | IAmb | | 22 04 22.1 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **C23K** | **Itkillik River** | **31.36** | **32** | P | | **P** | | **22 04 14.3** | **+0.3** |
| | baz=186 | | | | | | | | |
| **NEA2** | **Nenana** | **31.42** | **42** | P | | **P** | | **22 04 14.8** | **+0.2** |
| **NEA2** | **Nenana** | **31.42** | **42** | P | | **P** | | **22 04 15.5** | **+0.8** |
| | baz=269 | | | | | | | | |
| **E23K** | **Chandalar** | **31.44** | **36** | P | | **P** | | **22 04 15.6** | **+0.7** |
| | baz=263 | | | | | | | | |
| **SEW** | **Seward** | **31.46** | **51** | P | | **P** | | **22 04 15.2** | **+0.2** |
| | baz=276 | | | | | | | | |
| **MCK** | **McKinley** | **31.48** | **44** | P | | **P** | | **22 04 15.6** | **+0.3** |
| | baz=271 | | | | | | | | |
| **PMR** | **Palmer** | **31.48** | **48** | P | | **P** | | **22 04 16.1** | **+0.9** |
| | baz=274 | | | | | | | | |
| **RND** | **Reindeer** | **31.52** | **45** | P | | **P** | | **22 04 15.8** | **+0.1** |
| RND | | | | IAmb | | IAmb | | 22 04 30.8 | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **RND** | **Reindeer** | **31.52** | **45** | P | | **P** | | **22 04 15.8** | **+0.1** |
| RND | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **31.53** | **34** | | | **P** | | **22 04 16.2** | **+0.6** |
| **TOLK** | **Toolik Lake Re** | **31.53** | **34** | P | | **P** | | **22 04 16.1** | **+0.5** |
| TOLK | | | | IAmb | | IAmb | | 22 04 31.2 | |
| | comp=Z,6.8nm,0.8s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **31.53** | **34** | P | | **P** | | **22 04 15.9** | **+0.3** |
| | baz=262 | | | | | | | | |
| **H11N2** | **WAKE iSLAND Hy** | **31.53** | **161** | T | | T | | 22 37 59.3 | |
| | baz=348,slow=76,SNR=1265 | | | | | | | | |
| **H11N1** | **WAKE iSLAND Hy** | **31.55** | **161** | T | | T | | 22 38 00.6 | |
| | baz=348,slow=76,SNR=1631 | | | | | | | | |
| **H11N3** | **WAKE iSLAND Hy** | **31.55** | **161** | T | | T | | 22 38 00.5 | |
| | baz=348,slow=76,SNR=1179 | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **31.57** | **48** | P | | **P** | | **22 04 16.4** | **+0.3** |
| **WAT1** | **Susitna Watana** | **31.68** | **46** | P | | **P** | | **22 04 17.6** | **+0.6** |
| | baz=273 | | | | | | | | |
| **KNK** | **Knik Glacier** | **31.82** | **48** | P | | **P** | | **22 04 18.6** | **+0.4** |
| KNK | | | | IAmb | | IAmb | | 22 04 33.7 | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **KNK** | **Knik Glacier** | **31.82** | **48** | P | | **P** | | **22 04 18.8** | **+0.6** |
| | baz=275 | | | | | | | | |
| **SML** | **Sawmill** | **31.85** | **48** | P | | **P** | | **22 04 18.4** | **-0.1** |
| SML | | | | IAmb | | IAmb | | 22 04 34.0 | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **SML** | **Sawmill** | **31.85** | **48** | P | | **P** | | **22 04 18.8** | **+0.3** |
| | baz=275,SNR=5.8 | | | | | | | | |
| **WRH** | **Wood River Hil** | **31.85** | **42** | P | | **P** | | **22 04 18.5** | **+0.1** |
| WRH | | | | IAmb | | IAmb | | 22 04 33.7 | |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **E24K** | **Your Creek** | **31.86** | **36** | P | | **P** | | **22 04 18.3** | **-0.3** |
| **E24K** | **Your Creek** | **31.86** | **36** | P | | **P** | | **22 04 19.1** | **+0.5** |
| | baz=264 | | | | | | | | |
| **D24K** | **Happy Valley** | **31.87** | **34** | P | | **P** | | **22 04 19.2** | **+0.7** |
| **D24K** | **Happy Valley** | **31.87** | **34** | P | | **P** | | **22 04 18.7** | **+0.1** |
| | baz=262 | | | | | | | | |
| **PWL** | **Port Wells** | **31.93** | **49** | P | | **P** | | **22 04 20.0** | **+0.9** |
| | baz=276 | | | | | | | | |
| **COLA** | **College** | **31.95** | **42** | P | | **P** | | **22 04 22.2** | **+3.0** |
| **COLA** | **College** | **31.95** | **42** | P | | **P** | | **22 04 18.6** | **-0.6** |
| COLA | | | | IAmb | | IAmb | | 22 04 34.6 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| **COLA** | **College** | **31.95** | **42** | P | | **P** | | **22 04 20.0** | **+0.8** |
| | baz=270 | | | | | | | | |
| **COLA** | **College** | **31.95** | **42** | *i* P | | **P** | | **22 04 17.6** | **-1.6** |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **H24K** | **Noodor Dome** | **31.95** | **40** | P | | **P** | | **22 04 19.4** | **+0.1** |
| H24K | | | | IAmb | | IAmb | | 22 04 20.3 | |
| | comp=Z,22nm,1.6s | | | | | | | | |
| **H24K** | **Noodor Dome** | **31.95** | **40** | P | | **P** | | **22 04 19.7** | **+0.3** |
| | baz=268 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **31.97** | **42** | P | | **P** | | **22 04 19.6** | **+0.2** |
| **F24K** | **Squaw Lake** | **32.04** | **37** | P | | **P** | | **22 04 20.6** | **+0.5** |
| **F24K** | **Squaw Lake** | **32.04** | **37** | P | | **P** | | **22 04 20.0** | **-0.1** |
| | baz=266 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **32.07** | **46** | P | | **P** | | **22 04 20.5** | **0.0** |
| | baz=274 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **32.09** | **285** | P | | **P** | | **22 04 20.8** | **-0.2** |
| **ULN** | **Ulaanbaatar** | **32.09** | **285** | *ce* P | | **P** | | **22 04 21.0** | **+0.1** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **POKR** | **Poker Plat Res** | **32.13** | **41** | P | | **P** | | **22 04 21.7** | **+0.9** |
| **POKR** | **Poker Plat Res** | **32.13** | **41** | P | | **P** | | **22 04 21.4** | **+0.5** |
| | baz=270 | | | | | | | | |
| **M23K** | **Glacier View** | **32.13** | **48** | P | | **P** | | **22 04 21.3** | **+0.4** |
| | baz=275 | | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **32.15** | **38** | P | | **P** | | **22 04 21.4** | **+0.4** |
| G24K | | | | IAmb | | IAmb | | 22 04 38.9 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **32.15** | **38** | P | | **P** | | **22 04 21.8** | **+0.7** |
| | baz=268 | | | | | | | | |
| **DHY** | **Denali Highway** | **32.21** | **45** | P | | **P** | | **22 04 23.0** | **+1.2** |
| **DHY** | **Denali Highway** | **32.21** | **45** | P | | **P** | | **22 04 22.0** | **+0.3** |
| | baz=273 | | | | | | | | |
| **IRK** | **Irkutsk** | **32.25** | **294** | *e* P | | **P** | | **22 04 21.6** | **-0.4** |
| IRK | | | | pmax | | pmax | | | |
| | comp=Z,27nm,1.0s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **32.32** | **47** | P | | **P** | | **22 04 22.8** | **+0.2** |
| SCM | | | | IAmb | | IAmb | | 22 04 40.2 | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **32.32** | **47** | P | | **P** | | **22 04 22.7** | **+0.1** |
| | baz=275 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **32.32** | **47** | P | | **P** | | **22 04 22.8** | **+0.2** |
| SCM | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **HDA** | **Harding Lake** | **32.34** | **43** | P | | **P** | | **22 04 22.5** | **-0.2** |
| **HDA** | **Harding Lake** | **32.34** | **43** | P | | **P** | | **22 04 22.9** | **+0.2** |
| | baz=272 | | | | | | | | |
| **IL31** | | **32.36** | **42** | P | | **P** | | **22 04 22.8** | **0.0** |
| **ILAR** | **Eielson Array** | **32.36** | **42** | P | | **P** | | **22 04 23.2** | **+0.3** |
| **ILAR** | **Eielson Array** | **32.36** | **42** | P | | **P** | | **22 04 22.3** | **-0.6** |
| | comp=Z,2.5nm,0.7s,baz=261,slow=6.3,SNR=26 | | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **32.36** | **42** | P | | **P** | | **22 04 23.2** | **+0.3** |
| **HNS** | **HongShan** | **32.42** | **263** | ⇓P | | **P** | | **22 04 25.5** | **+1.8** |
| HNS | | | | pmax | | pmax | | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **32.48** | **271** | *e* P | | **P** | | **22 04 24.2** | **-0.2** |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,98nm,5.1s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=Z,160nm,16.0s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=Z,150nm,16.0s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=Z,170nm,17.6s | | | | | | | | |
| **P23K** | **Montague Islan** | **32.49** | **51** | P | | **P** | | **22 04 24.3** | **+0.2** |
| | baz=278 | | | | | | | | |
| **SONM** | **Songino Array** | **32.51** | **286** | P | | **P** | | **22 04 23.9** | **-0.7** |
| **SONM** | **Songino Array** | **32.51** | **286** | P | | **P** | | **22 04 22.8** | **-1.8** |
| | comp=Z,0.9nm,0.4s,baz=64,slow=10,SNR=5.3 | | | | | | | | |
| SONM | | | | PcP | | **PcP** | | **22 07 09.1** | **-0.6** |
| | comp=Z,1.4nm,0.6s,baz=27,slow=2.6,SNR=4.0 | | | | | | | | |
| SONM | | | | LR | | LR | | 22 19 11.5 | |
| | comp=Z,200nm,18.5s,baz=64,slow=39 | | | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | | | |
| **SONM** | **Songino Array** | **32.51** | **286** | P | | **P** | | **22 04 23.9** | **-0.7** |
| SONM | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.4s | | | | | | | | |
| **GLI** | **Glacier Island** | **32.53** | **49** | P | | **P** | | **22 04 25.0** | **+0.6** |
| | baz=277 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **32.68** | **162** | T | | T | | 22 38 47.1 | |
| | baz=348,slow=76,SNR=3959 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **32.69** | **162** | T | | T | | 22 38 50.2 | |
| | baz=348,slow=76,SNR=5900 | | | | | | | | |
| **G25K** | **Bearman Lake** | **32.70** | **38** | P | | **P** | | **22 04 26.3** | **+0.5** |
| | baz=269 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **32.70** | **162** | T | | T | | 22 38 48.5 | |
| | baz=348,slow=76,SNR=2458 | | | | | | | | |
| **D25K** | **Kavik River** | **32.76** | **33** | P | | **P** | | **22 04 26.7** | **+0.3** |
| D25K | | | | IAmb | | IAmb | | 22 04 30.8 | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **D25K** | **Kavik River** | **32.76** | **33** | P | | **P** | | **22 04 26.6** | **+0.3** |
| | baz=264 | | | | | | | | |
| **H25L** | **Birch Creek** | **32.80** | **39** | P | | **P** | | **22 04 27.5** | **+0.9** |
| | baz=270 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **32.84** | **47** | P | | **P** | | **22 04 27.9** | **+0.7** |
| | baz=276 | | | | | | | | |
| **K24K** | **Donnelly Dome** | **32.88** | **44** | P | | **P** | | **22 04 28.0** | **+0.5** |
| | baz=274 | | | | | | | | |
| **F25K** | **Christian Rive** | **32.90** | **37** | P | | **P** | | **22 04 28.3** | **+0.6** |
| | baz=268 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **32.92** | **40** | P | | **P** | | **22 04 27.8** | **-0.2** |
| PRP | | | | IAmb | | IAmb | | 22 04 46.1 | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **32.92** | **40** | P | | **P** | | **22 04 28.1** | **+0.1** |
| | baz=271,SNR=5.4 | | | | | | | | |
| **J25K** | **Salcha River,** | **33.02** | **42** | P | | **P** | | **22 04 27.5** | **-1.2** |
| **J25K** | **Salcha River,** | **33.02** | **42** | P | | **P** | | **22 04 28.9** | **+0.2** |
| | baz=273 | | | | | | | | |
| **KLU** | **Klutina** | **33.02** | **48** | P | | **P** | | **22 04 29.2** | **+0.4** |
| | baz=277 | | | | | | | | |
| **PAX** | **Paxson** | **33.08** | **45** | P | | **P** | | **22 04 30.1** | **+0.8** |
| | baz=275 | | | | | | | | |
| **HARP** | **HAARP** | **33.28** | **46** | P | | **P** | | **22 04 31.8** | **+0.9** |
| | baz=276 | | | | | | | | |
| **NJ2** | **Nanjing** | **33.30** | **251** | *e* P | | **P** | | **22 04 32.5** | **+1.1** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,310nm,3.6s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **33.31** | **37** | P | | **P** | | **22 04 31.2** | **+0.1** |
| **ZAK** | **Zakamensk** | **33.45** | **291** | *e* P | | **P** | | **22 04 33.2** | **+0.5** |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **F26K** | **Shenjek River** | **33.48** | **36** | P | | **P** | | **22 04 33.3** | **+0.6** |
| | baz=269 | | | | | | | | |
| **BTO** | **Baotou** | **33.60** | **272** | *e* P | | **P** | | **22 04 32.8** | **-1.3** |
| BTO | | | | pP | | **pP** | | **22 04 48.0** | **-2.7** |
| BTO | | | | S | | **S** | | **22 09 50.4** | **-1.3** |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,150nm,7.4s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,380nm,21.0s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,800nm,20.2s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,680nm,16.5s | | | | | | | | |
| **G26K** | **Porcupine Rive** | **33.61** | **38** | P | | **P** | | **22 04 34.1** | **+0.3** |
| | baz=270 | | | | | | | | |
| **N25K** | **Chitina, Valde** | **33.64** | **48** | P | | **P** | | **22 04 34.3** | **+0.2** |
| | baz=278 | | | | | | | | |
| **SCRK** | **Sand Creek** | **33.66** | **43** | P | | **P** | | **22 04 34.1** | **-0.2** |
| SCRK | | | | IAmb | | IAmb | | 22 04 49.3 | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **SCRK** | **Sand Creek** | **33.66** | **43** | P | | **P** | | **22 04 34.1** | **-0.2** |
| | baz=275,SNR=5.0 | | | | | | | | |
| **C27K** | **Jago River** | **33.72** | **33** | P | | **P** | | **22 04 34.9** | **+0.3** |
| | baz=266 | | | | | | | | |
| **BMRM** | **Bremner River** | **33.72** | **49** | P | | **P** | | **22 04 35.3** | **+0.4** |
| | baz=279 | | | | | | | | |
| **J26L** | **Joseph Creek** | **33.80** | **42** | P | | **P** | | **22 04 36.0** | **+0.4** |
| | baz=274 | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **34.04** | **45** | P | | **P** | | **22 04 38.0** | **+0.4** |
| **M26K** | **Nabesna, AK** | **34.28** | **46** | P | | **P** | | **22 04 40.2** | **+0.6** |
| | baz=278 | | | | | | | | |
| **MOY** | **Mondy** | **34.35** | **294** | *e* P | | **P** | | **22 04 41.2** | **+0.7** |
| MOY | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **34.42** | **48** | P | | **P** | | **22 04 41.1** | **+0.3** |
| MCARA | | | | IAmb | | IAmb | | 22 05 16.2 | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **E27K** | **Coleen River** | **34.45** | **36** | P | | **P** | | **22 04 41.3** | **+0.3** |
| E27K | | | | IAmb | | IAmb | | 22 04 57.0 | |
| | comp=Z,18nm,1.6s | | | | | | | | |
| **E27K** | **Coleen River** | **34.45** | **36** | P | | **P** | | **22 04 41.3** | **+0.3** |
| | baz=271 | | | | | | | | |
| **G27K** | **Doyon Strip** | **34.46** | **38** | P | | **P** | | **22 04 41.8** | **+0.7** |
| G27K | | | | IAmb | | IAmb | | 22 05 00.1 | |
| | comp=Z,26nm,1.9s | | | | | | | | |
| **G27K** | **Doyon Strip** | **34.46** | **38** | P | | **P** | | **22 04 41.2** | **+0.1** |
| | baz=273 | | | | | | | | |
| **CRQM** | **Cirque** | **34.47** | **49** | P | | **P** | | **22 04 41.6** | **+0.1** |
| CRQM | | | | IAmb | | IAmb | | 22 04 52.8 | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **CRQE** | **Cirque** | **34.49** | **49** | P | | **P** | | **22 04 41.8** | **+0.3** |
| | baz=280 | | | | | | | | |
| **K27K** | **Chicken** | **34.49** | **43** | P | | **P** | | **22 04 41.9** | **+0.5** |
| K27K | | | | IAmb | | IAmb | | 22 04 56.9 | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **K27K** | **Chicken** | **34.49** | **43** | P | | **P** | | **22 04 41.7** | **+0.3** |
| | baz=276 | | | | | | | | |
| **H27K** | **Steamboat Moun** | **34.54** | **39** | P | | **P** | | **22 04 41.4** | **-0.4** |
| | baz=274 | | | | | | | | |
| **I27K** | **Kandik River** | **34.55** | **40** | P | | **P** | | **22 04 42.0** | **+0.1** |
| | baz=274 | | | | | | | | |
| **D27M** | **Malcolm River** | **34.67** | **34** | P | | **P** | | **22 04 42.9** | **-0.1** |
| D27M | | | | IAmb | | IAmb | | 22 04 53.4 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **D27M** | **Malcolm River** | **34.67** | **34** | P | | **P** | | **22 04 42.7** | **-0.4** |
| | baz=270 | | | | | | | | |
| **L27K** | **Beaver Creek,** | **34.72** | **45** | P | | **P** | | **22 04 43.9** | **+0.4** |
| L27K | | | | IAmb | | IAmb | | 22 04 59.7 | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **34.72** | **45** | P | | **P** | | **22 04 44.0** | **+0.5** |
| | baz=278,SNR=12 | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **34.74** | **45** | P | | **P** | | **22 04 44.1** | **+0.4** |
| **M27K** | **Edge Creek, AK** | **34.80** | **46** | P | | **P** | | **22 04 44.2** | **0.0** |
| M27K | | | | IAmb | | IAmb | | 22 05 03.1 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **34.80** | **46** | P | | **P** | | **22 04 44.4** | **+0.2** |
| | baz=279 | | | | | | | | |
| **EGAK** | **Eagle** | **34.81** | **42** | P | | **P** | | **22 04 44.1** | **0.0** |
| EGAK | | | | IAmb | | IAmb | | 22 04 58.7 | |
| | comp=Z,8.9nm,0.8s | | | | | | | | |
| **EGAK** | **Eagle** | **34.81** | **42** | P | | **P** | | **22 04 44.4** | **+0.2** |
| | baz=276,SNR=6.6 | | | | | | | | |
| **F28M** | **Old Crow** | **35.12** | **37** | P | | **P** | | **22 04 47.3** | **+0.6** |
| F28M | | | | IAmb | | IAmb | | 22 04 48.8 | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **F28M** | **Old Crow** | **35.12** | **37** | P | | **P** | | **22 04 46.8** | **0.0** |
| | baz=273 | | | | | | | | |
| **GRNC** | **Granite Creek** | **35.14** | **49** | P | | **P** | | **22 04 48.2** | **+0.9** |
| GRNC | | | | IAmb | | IAmb | | 22 05 34.9 | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| **MESA** | **MESA** | **35.15** | **50** | P | | **P** | | **22 04 47.3** | **-0.1** |
| | baz=282 | | | | | | | | |
| **E28M** | **Babbage River** | **35.20** | **35** | P | | **P** | | **22 04 47.3** | **-0.1** |
| **E28M** | **Babbage River** | **35.20** | **35** | P | | **P** | | **22 04 47.7** | **+0.3** |
| | baz=272 | | | | | | | | |
| **I28M** | **Miner Creek** | **35.26** | **40** | P | | **P** | | **22 04 47.3** | **-0.8** |
| **I28M** | **Miner Creek** | **35.26** | **40** | P | | **P** | | **22 04 47.9** | **-0.2** |
| | baz=276 | | | | | | | | |
| **CTG** | **Chitna Glacier** | **35.29** | **48** | P | | **P** | | **22 04 49.0** | **+0.5** |
| | baz=281 | | | | | | | | |
| **CTGM** | **Chitina Glacie** | **35.30** | **48** | P | | **P** | | **22 04 48.7** | **+0.1** |
| CTGM | | | | IAmb | | IAmb | | 22 05 06.0 | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **D28M** | **Stokes Point** | **35.47** | **34** | P | | **P** | | **22 04 50.2** | **+0.5** |
| | baz=272 | | | | | | | | |
| **LOGN** | **Logan Glacier** | **35.48** | **48** | P | | **P** | | **22 04 50.4** | **+0.3** |
| LOGN | | | | IAmb | | IAmb | | 22 05 16.8 | |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| **YUK3** | **Moose Creek** | **35.56** | **47** | P | | **P** | | **22 04 50.9** | **+0.1** |
| | baz=281 | | | | | | | | |
| **DAWY** | **Dawson** | **35.66** | **43** | P | | **P** | | **22 04 51.7** | **+0.1** |
| | baz=278 | | | | | | | | |
| **E29M** | **Blow River** | **35.81** | **35** | P | | **P** | | **22 04 52.0** | **-0.7** |
| **E29M** | **Blow River** | **35.81** | **35** | P | | **P** | | **22 04 52.7** | **0.0** |
| | baz=274,SNR=7.8 | | | | | | | | |
| **H29M** | **Whitestone** | **35.82** | **39** | P | | **P** | | **22 04 52.9** | **+0.1** |
| | baz=276 | | | | | | | | |
| **O28M** | **Mount Upton** | **35.88** | **48** | P | | **P** | | **22 04 54.0** | **+0.3** |
| | baz=282 | | | | | | | | |
| **G29M** | **Pine Creek** | **35.88** | **38** | P | | **P** | | **22 04 54.7** | **+1.3** |
| G29M | | | | IAmb | | IAmb | | 22 05 09.8 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **G29M** | **Pine Creek** | **35.88** | **38** | P | | **P** | | **22 04 53.7** | **+0.3** |
| | baz=276,SNR=6.0 | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **35.94** | **40** | P | | **P** | | **22 04 54.4** | **+0.5** |
| **I29M** | **Ogilvie Camp,** | **35.94** | **40** | P | | **P** | | **22 04 54.0** | **+0.1** |
| | baz=276 | | | | | | | | |
| **YUK8** | **Steele Glacier** | **35.98** | **47** | P | | **P** | | **22 04 54.0** | **-0.5** |
| | baz=282 | | | | | | | | |
| **PINM** | **Pinnacle** | **36.00** | **49** | P | | **P** | | **22 04 54.3** | **-0.2** |
| | baz=283 | | | | | | | | |
| **M29M** | **Somme Creek** | **36.35** | **45** | P | | **P** | | **22 04 58.0** | **+0.5** |
| M29M | | | | IAmb | | IAmb | | 22 04 59.6 | |
| | comp=Z,6.6nm,0.6s | | | | | | | | |
| **M29M** | **Somme Creek** | **36.35** | **45** | P | | **P** | | **22 04 57.6** | **+0.1** |
| | baz=281,SNR=7.7 | | | | | | | | |
| **L29M** | **L29M** | **36.38** | **44** | P | | **P** | | **22 04 58.9** | **+1.3** |
| L29M | | | | IAmb | | IAmb | | 22 05 14.3 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **L29M** | **L29M** | **36.38** | **44** | P | | **P** | | **22 04 57.8** | **+0.2** |
| | baz=281,SNR=10 | | | | | | | | |
| **EPYK** | **Eagle Plains** | **36.46** | **39** | P | | **P** | | **22 04 58.6** | **+0.3** |
| EPYK | | | | IAmb | | IAmb | | 22 05 14.2 | |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **36.46** | **39** | P | | **P** | | **22 04 58.6** | **+0.3** |
| | baz=278 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **36.49** | **47** | P | | **P** | | **22 05 00.1** | **+1.3** |
| | baz=283 | | | | | | | | |
| **K29M** | **Barlow Dome** | **36.51** | **43** | P | | **P** | | **22 04 59.4** | **+0.6** |
| | baz=280 | | | | | | | | |
| **PNL** | **Peninsula** | **36.52** | **50** | P | | **P** | | **22 04 59.2** | **+0.3** |
| | baz=284 | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **36.58** | **37** | P | | **P** | | **22 04 59.8** | **+0.5** |
| | baz=277 | | | | | | | | |
| **F30M** | **Barrier River** | **36.67** | **36** | P | | **P** | | **22 05 00.7** | **+0.6** |
| | baz=277 | | | | | | | | |
| **YUK6** | **Outpost Mounta** | **36.72** | **48** | P | | **P** | | **22 05 01.3** | **+0.5** |
| | baz=284 | | | | | | | | |
| **I30M** | **Mount Dempster** | **36.77** | **40** | P | | **P** | | **22 05 01.2** | **+0.2** |
| I30M | | | | IAmb | | IAmb | | 22 05 02.9 | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **I30M** | **Mount Dempster** | **36.77** | **40** | P | | **P** | | **22 05 01.0** | **0.0** |
| | baz=279,SNR=8.9 | | | | | | | | |
| **O29M** | **Mount Kennedy** | **36.77** | **49** | P | | **P** | | **22 05 01.5** | **+0.4** |
| | baz=284 | | | | | | | | |
| **J30M** | **Hart River** | **36.90** | **41** | P | | **P** | | **22 05 01.6** | **-0.5** |
| | baz=280 | | | | | | | | |
| **M30M** | **Minto, Yukon** | **37.08** | **45** | P | | **P** | | **22 05 03.4** | **-0.3** |
| | baz=282 | | | | | | | | |
| **N30M** | **Aishikik Lake** | **37.20** | **47** | P | | **P** | | **22 05 04.6** | **-0.1** |
| | baz=284

comp=Z,440nm,14.3s
LZH LR LR
comp=Z,270nm,15.6s
**Q32M Nakina River 40.22 49 P P 22 05 30.2 0.0**
**Q32M Nakina River 40.22 49 P P 22 05 31.0 +0.8**
baz=290
**ENH Enshi 40.33 258 P P 22 05 32.7 +1.6**
**ENH Enshi 40.33 258 P P 22 05 30.7 -0.4**
ENH IAmb IAmb 22 05 33.6
comp=Z,13nm,0.8s
**C36M Paulatuk 40.61 32 P P 22 05 33.3 +0.4**
baz=284
**R33M Jennings River 40.70 48 P P 22 05 35.1 +1.1**
**R33M Jennings River 40.70 48 P P 22 05 35.2 +1.1**
baz=290,SNR=7.7
**GTA Gaotai 40.80 277** *e*P **P 22 05 35.2 +0.2**
GTA PP **PnPn 22 07 15.9 +1.3**
GTA PcP **PcP 22 07 35.7 +0.9**
GTA S **S 22 11 42.4 +1.6**
GTA pmax pmax
comp=Z,6.0nm,1.4s
GTA LR LR
comp=Z,170nm,15.3s
GTA LR LR
comp=Z,310nm,13.5s
GTA LR LR
comp=Z,280nm,14.2s
**U33K Whale Pass 40.83 54** P **P 22 05 35.6 +0.8**
baz=293
**CRAG Craig 41.08 55** P **P 22 05 37.9 +1.0**
baz=293
**S34M Telegraph Cree 41.16 51** P **P 22 05 37.5 -0.1**
baz=292
**TGTN Hyland Airport 41.23 45** P **P 22 05 38.5 +0.3**
baz=290
**DLBC Dease Lake 41.50 50** P **P 22 05 41.5 +1.0**
**DLBC Dease Lake 41.50 50** P **P 22 05 40.7 +0.2**
comp=Z,3.2nm,0.6s,baz=311,slow=7.3,SNR=3.5
comp=Z,3.2nm,0.6s
**DLBC Dease Lake 41.50 50** P **P 22 05 42.0 +1.5**
baz=292
**V35K Ketchikan 41.92 54** P **P 22 05 45.3 +1.5**
baz=294
**T35M Bob Quinn 41.95 52** P **P 22 05 45.6 +1.5**
T35M IAmb IAmb 22 05 48.1
comp=Z,16nm,0.8s
**T35M Bob Quinn 41.95 52** P **P 22 05 45.2 +1.1**
baz=293,SNR=6.6
**ZALV Zalesovo Beam 42.53 304** P **P 22 05 46.7 -2.1**
comp=Z,2.0nm,0.6s,baz=64,slow=7.7,SNR=9.9
ZALV PcP **PcP 22 07 39.9 -0.2**
comp=Z,4.6nm,0.9s,baz=50,slow=2.3,SNR=6.5
ZALV LR LR 22 25 26.6
comp=Z,82nm,19.2s,baz=51,slow=39
comp=Z,2.0nm,0.6s
**GRNB Grenville Isla 43.43 56** P **P 22 05 57.0 +0.9**
GRNB IAmb IAmb 22 05 59.2
comp=Z,17nm,0.7s
**CD2 Chengdu 43.53 264** P **P 22 05 55.5 -1.8**
**TOAD Toad River Com 43.65 47** P **P 22 05 59.0 +1.2**
baz=295,SNR=5.6
**BBB Bella Bella 45.19 57** P **P 22 06 10.8 +0.7**
comp=Z,7.5nm,0.9s,baz=282,slow=11,SNR=3.9
comp=Z,7.5nm,0.9s
**EUNU Eureka 45.21 13** P **P 22 06 10.6 +0.5**
**GOMU GeErMu 45.88 277** P **P 22 06 16.3 0.0**
GOMU pP pP 22 06 30.3 -3.2
GOMU sP sP 22 06 39.0 -2.3
GOMU PcP **PcP 22 07 54.1 +1.7**
GOMU pmax pmax
comp=Z,14nm,1.0s
**WMQ Urumqi 45.89 290** *e*P **P 22 06 18.4 +2.5**
WMQ pmax pmax
comp=Z,15nm,0.7s
WMQ LR LR
comp=Z,210nm,20.7s
WMQ LR LR
comp=Z,170nm,24.0s
WMQ LR LR
comp=Z,210nm,24.2s
**YKA Yellowknife Ar 46.72 40** P **P 22 06 21.1 -0.9**
comp=Z,4.2nm,0.7s,baz=299,slow=8.3,SNR=7.4
YKA PP **PP 22 08 12.6 +0.2**
comp=Z,3.4nm,1.0s,baz=310,slow=3.6,SNR=3.9
comp=Z,4.2nm,0.7s
**KURK Kurchatov 47.42 302** P **P 22 06 27.1 -0.5**
KURK IAmb IAmb 22 06 30.3
comp=Z,14nm,0.7s
**KURK Kurchatov 47.42 302** *ce*P **P 22 06 26.9 -0.7**
KURK pmax pmax
comp=Z,21nm,1.0s
**MK31 Makanchi Array 47.45 296** P **P 22 06 27.0 -1.0**
MK31 IAmb IAmb 22 06 30.9
comp=Z,9.6nm,0.9s
**MK31 Makanchi Array 47.45 296** *ce*P **P 22 06 27.6 -0.4**
**MKAR Makanchi Array 47.45 296** P **P 22 06 27.0 -1.0**
**MKAR Makanchi Array 47.45 296** P **P 22 06 26.5 -1.6**
comp=Z,10nm,0.9s,baz=62,slow=7.6,SNR=42
MKAR ScP **ScP 22 11 45.5 +0.4**
comp=Z,0.4nm,0.7s,baz=8.1,slow=2.0,SNR=2.6
MKAR LR LR 22 27 06.2
comp=Z,380nm,21.5s,baz=20,slow=37
comp=Z,10nm,0.9s
**MKAR Makanchi Array 47.45 296** P **P 22 06 27.0 -1.0**
**KURBB Kurchatov Arra 47.51 302** P **P 22 06 26.1 -2.2**
comp=Z,9.2nm,0.7s,baz=66,slow=8.0,SNR=26
KURBB PcP **PcP 22 07 57.3 0.0**
comp=Z,1.6nm,0.8s,baz=63,slow=7.1,SNR=4.7
KURBB ScP **ScP 22 11 46.6 +1.3**
comp=Z,2.0nm,1.1s,baz=86,slow=3.9,SNR=3.2
KURBB LR LR 22 27 57.2
comp=Z,115nm,18.7s,baz=127,slow=38
comp=Z,9.2nm,0.7s
**MAKZ Makanchi 47.63 296** P **P 22 06 28.2 -1.1**
**MAKZ Makanchi 47.63 296** P **P 22 06 28.3 -1.1**
MAKZ pmax pmax
comp=Z,8.0nm,1.1s
**KMI Kunming 48.19 259** ⇑P **P 22 06 36.9 +2.7**
KMI pmax pmax
comp=Z,12nm,0.8s
**UWE Uwekahuna 48.84 111** P **P 22 06 37.9 -1.2**
**CLRS Cowichan Lake 49.11 59** **P 22 06 41.4 +0.7**
CLRS IAmb IAmb 22 06 59.8
comp=Z,19nm,1.2s
**BRLDA Berland Lookou 49.74 50** P **P 22 06 46.0 +0.4**
BRLDA IAmb IAmb 22 07 02.7
comp=Z,26nm,1.4s
**NLWA Neilton Lookou 50.05 61** P **P 22 06 48.7 +0.8**
NLWA IAmb IAmb 22 07 06.5
comp=Z,18nm,1.1s
**SLVN Son La 50.22 255** P **P 22 06 49.6 +0.1**
**BRVK Borovoye 50.50 309** P **P 22 06 49.9 -1.3**
BRVK IAmb IAmb 22 06 55.4
comp=Z,6.0nm,0.7s
**BRVK Borovoye 50.50 309** *ce*P **P 22 06 50.1 -1.1**
BRVK pmax pmax
comp=Z,8.0nm,1.0s
**BRVK Borovoye 50.50 309** P **P 22 06 49.9 -1.3**
**E03A Lebam 50.71 61** P **P 22 06 53.2 +0.4**
**TNCH TengChong 50.93 263** P **P 22 06 55.4 +0.4**
TNCH pP pP 22 07 09.9 -2.5
TNCH pmax pmax
comp=Z,6.0nm,0.6s
TNCH pmax pmax
comp=Z,44nm,7.1s
**NEEM North Greenlan 51.40 7** *i*P **P 22 06 55.5 -2.5**
NEEM IAmb IAmb 22 06 58.6
comp=Z,22nm,0.9s
**B08A Colville Reser 51.99 57** P **P 22 07 02.5 +0.1**
B08A IAmb IAmb 22 07 19.7
comp=Z,9.0nm,0.8s
**H04D Lebanon 52.37 63** P **P 22 07 05.1 -0.2**
H04D IAmb IAmb 22 07 26.3
comp=Z,13nm,1.0s
**SVE Sverdlovsk 52.87 317** *e*P **P 22 07 08.8 +0.1**
SVE pmax pmax
comp=Z,6.0nm,0.8s
**I04A Tendick Farm, 53.00 64** P **P 22 07 09.2 -0.8**
I04A IAmb IAmb 22 07 29.6
comp=Z,13nm,1.1s
**TARG Taragay, Kyrgy 53.02 293** P **P 22 07 09.4 -1.2**
**TARG Taragay, Kyrgy 53.02 293** P **P 22 07 09.4 -1.2**
TARG pmax pmax
comp=Z,6.0nm,0.8s
**DAG Danmarks Havn 53.21 359** P **P 22 07 10.2 -0.8**
DAG pmax pmax
comp=Z,15nm,1.0s
**DAG Danmarks Havn 53.21 359** *i*P **P 22 07 10.0 -1.0**
DAG IAmb IAmb 22 07 12.9
comp=Z,9.3nm,0.9s
**NEW Newport 53.23 56** P **P 22 07 10.8 -0.8**
NEW IAmb IAmb 22 07 13.4
comp=Z,13nm,1.4s
**NEW Newport 53.23 56** P **P 22 07 11.8 +0.2**
comp=Z,3.3nm,0.7s,baz=314,slow=8.7,SNR=5.1
NEW LR LR 22 28 32.0
comp=Z,92nm,20.2s,baz=220,slow=34
comp=Z,3.3nm,0.7s
**NEW Newport 53.23 56** P **P 22 07 12.1 +0.5**
baz=307
**L02F Cave Junction 53.35 66** P **P 22 07 13.5 +1.0**
L02F IAmb IAmb 22 07 32.7
comp=Z,12nm,1.2s
**BOOM Boomskoye usch 53.64 295** P **P 22 07 15.2 +0.4**
BOOM IAmb IAmb 22 07 18.6
comp=Z,12nm,0.8s
**BOOM Boomskoye usch 53.64 295** P **P 22 07 15.2 +0.4**
BOOM pmax pmax
comp=Z,12nm,0.8s
**PINE Pine Mountain 53.84 63** P **P 22 07 16.6 +0.2**
PINE IAmb IAmb 22 07 18.7
comp=Z,8.7nm,1.0s
**UBPT Khong Chiam 53.89 249** P **P 22 07 19.0 +2.3**
**UBPT Khong Chiam 53.89 249** P **P 22 07 16.1 -0.6**
**J05D Fort Rock, OR 53.99 63** P **P 22 07 17.5 +0.2**
J05D IAmb IAmb 22 07 20.3
comp=Z,16nm,1.1s
**ARU Arti 54.02 317** P **P 22 07 15.6 -1.6**
ARU IAmb IAmb 22 07 20.3
comp=Z,7.8nm,0.9s
**ARU Arti 54.02 317** *c i*P **P 22 07 17.2 0.0**
ARU *PP **pP 22 07 35.0 +0.3**
ARU 22 08 19.9
ARU 22 09 16.6
ARU S **S 22 14 50.9 +3.2**
ARU SS **SS 22 18 30.1 +1.0**
ARU pmax pmax
comp=Z,11nm,1.2s
**ARU Arti 54.02 317** P **P 22 07 16.9 -0.3**
comp=Z,10nm,0.9s
**KHMM Horse Mountain 54.03 67** P **P 22 07 17.4 -0.3**
**KMPM Mount Pierce 54.08 68** P **P 22 07 18.4 +0.4**
**YBH Yreka Blue Hor 54.09 66** P **P 22 07 19.4 +1.3**
YBH IAmb IAmb 22 07 21.2
comp=Z,17nm,1.4s
**YBH Yreka Blue Hor 54.09 66** P **P 22 07 18.1 0.0**
comp=Z,8.6nm,1.0s,baz=332,slow=3.9,SNR=12
YBH LR LR 22 27 30.6
comp=Z,69nm,19.9s,baz=302,slow=33
comp=Z,8.6nm,1.0s
**NRN Naryn 54.26 294** P **P 22 07 19.5 -0.1**
**NRN Naryn 54.26 294** P **P 22 07 19.5 -0.1**
NRN pmax pmax
comp=Z,3.0nm,0.8s
**AAK Ala-Archa 54.39 296** P **P 22 07 20.7 +0.4**
AAK IAmb IAmb 22 07 23.7
comp=Z,8.9nm,0.7s
**AAK Ala-Archa 54.39 296** LR LR 22 32 19.3
comp=Z,221nm,18.2s,baz=32,slow=38
**AAK Ala-Archa 54.39 296** *ce*P **P 22 07 21.5 +1.2**
AAK pmax pmax
comp=Z,9.0nm,0.7s
**GENI Genyem 54.51 200** P **P 22 07 23.1 +1.9**
**GENI Genyem 54.51 200** P **P 22 07 21.8 +0.6**
**F10A Beach Ranch, E 54.58 59** P **P 22 07 22.2 +0.7**
**PHRA Phrae 54.62 256** P **P 22 07 21.9 -0.2**
**SHL Shillong 54.80 269** P **P 22 07 23.4 -0.1**
**SHL Shillong 54.80 269** P **P 22 07 23.4 -0.1**
SHL pmax pmax
comp=Z,19nm,0.6s
**CHTO Chiang Mai 55.19 257** P **P 22 07 25.9 -0.2**
**CHTO Chiang Mai 55.19 257** P **P 22 07 26.0 -0.2**
CHTO pmax pmax
comp=Z,20nm,1.0s
**ARCES ARCESS Array B 55.30 341** P **P 22 07 24.9 -1.4**
comp=Z,3.2nm,0.8s,baz=44,slow=7.1,SNR=6.4
ARCES LR LR 22 35 38.1
comp=Z,145nm,20.1s,baz=43,slow=41
comp=Z,3.2nm,0.8s
**SWI Sorong 55.35 211** P **P 22 07 28.0 +0.7**
comp=Z,48nm,1.4s
**SWI Sorong 55.35 211** P **P 22 07 27.0 -0.3**
**BUKA Buka 55.45 182** P **P 22 07 29.2 +1.3**
**CM31 Chiang Mai Arr 55.46 257** P **P 22 07 28.2 +0.2**
**CMAR Chiang Mai Arr 55.46 257** P **P 22 07 28.0 -0.1**
**CMAR Chiang Mai Arr 55.46 257** P **P 22 07 27.2 -0.8**
comp=Z,8.6nm,0.8s,baz=33,slow=7.1,SNR=39
comp=Z,8.6nm,0.8s
**CMAR Chiang Mai Arr 55.46 257** P **P 22 07 28.0 -0.1**
**KSH Kashi 55.49 292** P **P 22 07 32.4 +4.2**
KSH pP pP 22 07 48.0 +2.1
KSH pmax pmax
comp=Z,8.0nm,0.9s
KSH LR LR
comp=Z,390nm,19.9s
KSH LR LR
comp=Z,280nm,15.8s
KSH LR LR
comp=Z,190nm,19.6s
**MSO Missoula 55.82 56** P **P 22 07 30.9 +0.5**
MSO IAmb IAmb 22 07 48.0
comp=Z,12nm,1.1s
**MSO Missoula 55.82 56** P **P 22 07 31.1 +0.7**
baz=309
**WVOR Wild Horse Val 56.01 63** P **P 22 07 33.2 +1.3**
**WVOR Wild Horse Val 56.01 63** P **P 22 07 33.2 +1.3**
WVOR pmax pmax
comp=Z,19nm,0.9s
**ARSB Arslanbob 56.09 296** P **P 22 07 32.7 +0.2**
**ARSB Arslanbob 56.09 296** P **P 22 07 32.7 +0.2**
ARSB pmax pmax
comp=Z,1.0nm,0.9s
**OVMT Ovando 56.17 55** P **P 22 07 33.2 +0.2**
**ORV Oroville 56.19 67** P **P 22 07 32.8 -0.2**
ORV IAmb IAmb 22 07 34.8
comp=Z,8.8nm,1.1s
**ORV Oroville 56.19 67** P **P 22 07 32.8 -0.2**
ORV pmax pmax
comp=Z,9.0nm,1.1s
**BPMT Black Pine Rid 56.33 56** P **P 22 07 35.0 +0.7**
**KK31 Karatay Array 56.36 299** P **P 22 07 32.7 -1.6**
**KK31 Karatay Array 56.36 299** P **P 22 07 32.7 -1.6**
KK31 pmax pmax
comp=Z,3.0nm,0.8s
**KKAR Karatay Array 56.36 299** P **P 22 07 32.9 -1.4**
**KKAR Karatay Array 56.36 299** P **P 22 07 33.2 -1.1**
KKAR IAmb IAmb 22 07 36.0
comp=Z,2.6nm,0.8s
**KKAR Karatay Array 56.36 299** P **P 22 07 33.2 -1.1**
KKAR pmax pmax
comp=Z,3.0nm,0.8s
**KIRV Kirov 56.38 323** *i*P **P 22 07 34.3 +0.2**
**FFC Flin Flon 56.56 43** P **P 22 07 36.6 +1.1**
FFC IAmb IAmb 22 07 52.1
comp=Z,9.7nm,1.1s
**FFC Flin Flon 56.56 43** P **P 22 07 36.6 +1.1**
FFC pmax pmax
comp=Z,10.0nm,1.1s
**FFC Flin Flon 56.56 43** P **P 22 07 36.5 +1.0**
FFC pP **pP 22 07 51.7 -1.5**
FFC PcP **PcP 22 08 32.1 +0.8**
**LYMT Lyon Mountain 56.60 55** P **P 22 07 37.3 +1.1**
LYMT **pP 22 07 50.5 -3.3**
**TABU Tabubil 56.88 198** P **P 22 07 39.9 +1.7**
**AFDM Forest Hills D 56.89 67** P **P 22 07 38.8 +0.7**
AFDM IAmb IAmb 22 07 57.8
comp=Z,12nm,1.4s
**MFID Camas Ranch 56.96 60** P **P 22 07 39.3 +0.7**
MFID IAmb IAmb 22 07 57.9
comp=Z,6.5nm,0.9s
**SUMG Summit 57.02 5** P **P 22 07 38.8 -0.1**
**SUMG Summit 57.02 5** P **P 22 07 38.8 -0.1**
SUMG pmax pmax
comp=Z,24nm,0.9s
**SUMG Summit 57.02 5** *i*P **P 22 07 38.3 -0.6**
SUMG IAmb IAmb 22 07 56.4
comp=Z,24nm,0.9s
**EGMT Eagleton 57.24 53** P **P 22 07 41.4 +0.9**
baz=311
**PAHR Pah Rah Range 57.33 66** P **P 22 07 41.0 -0.3**
PAHR IAmb IAmb 22 08 01.1
comp=Z,13nm,1.1s
**DLMT Dillon 57.48 57** P **P 22 07 42.4 +0.2**
DLMT IAmb IAmb 22 08 02.4
comp=Z,21nm,1.6s
**PNTR Pine Nut 57.61 66** P **P 22 07 43.6 +0.2**
PNTR IAmb IAmb 22 07 46.0
comp=Z,9.9nm,0.8s
**HLID Hailey 57.65 59** P **P 22 07 43.8 +0.2**
HLID IAmb IAmb 22 07 46.2
comp=Z,11nm,1.2s
**HLID Hailey 57.65 59** P **P 22 07 44.5 +0.9**
baz=311,SNR=6.8
**CMB Columbia Colle 57.83 68** P **P 22 07 45.4 +0.7**
CMB IAmb IAmb 22 07 47.1
comp=Z,6.8nm,1.0s
**CMB Columbia Colle 57.83 68** P **P 22 07 45.4 +0.7**
CMB pmax pmax
comp=Z,7.0nm,1.0s
**BOZ Bozeman (W) 57.84 56** P **P 22 07 45.5 +0.7**
BOZ IAmb IAmb 22 07 47.2
comp=Z,8.9nm,0.8s
**BOZ Bozeman (W) 57.84 56** P **P 22 07 45.4 +0.7**
baz=311,SNR=12
**BOZ Bozeman (W) 57.84 56** P **P 22 07 45.5 +0.7**
BOZ pmax pmax
comp=Z,9.0nm,0.9s
**YERR Yerington 57.89 66** P **P 22 07 45.7 +0.4**
YERR IAmb IAmb 22 07 47.8
comp=Z,8.3nm,0.8s
**DRK Karamyk 57.97 295** P **P 22 07 44.9 -1.1**
DRK IAmb IAmb 22 07 50.1
comp=Z,12nm,0.8s
**DRK Karamyk 57.97 295** P **P 22 07 44.9 -1.1**
DRK pmax pmax
comp=Z,12nm,0.8s
**ABKAR Akbulak array 57.97 310** P **P 22 07 43.9 -1.6**
**ABKAR Akbulak array 57.97 310** P **P 22 07 43.3 -2.2**
**WAKR Walker 58.09 67** P **P 22 07 47.5 +0.8**
WAKR IAmb IAmb 22 07 49.4
comp=Z,8.7nm,0.8s
**BMN Battle Mountai 58.11 64** P **P 22 07 47.2 +0.5**
BMN IAmb IAmb 22 07 49.5
comp=Z,10.0nm,0.9s
**BMN Battle Mountai 58.11 64** P **P 22 07 47.3 +0.5**
BMN pmax pmax
comp=Z,10.0nm,0.9s
**BTK Batken 58.16 296** P **P 22 07 46.5 -0.6**
BTK IAmb IAmb 22 07 50.5
comp=Z,10nm,0.8s
**BTK Batken 58.16 296** P **P 22 07 46.5 -0.6**
BTK pmax pmax
comp=Z,10.0nm,0.8s
**SANI Sanana 58.35 217** P **P 22 07 47.6 -0.9**
comp=Z,45nm,0.9s
**BBGB Big Mountain B 58.41 69** P **P 22 07 48.9 0.0**
**KVN Kaiserville 58.51 66** P **P 22 07 50.7 +1.0**
KVN IAmb IAmb 22 07 52.2
comp=Z,16nm,1.1s
**KVN Kaiserville 58.51 66** P **P 22 07 50.7 +1.0**
KVN pmax pmax
comp=Z,16nm,1.1s
**RYN Ryan 58.54 66** P **P 22 07 50.2 +0.4**
RYN IAmb IAmb 22 08 11.5
comp=Z,8.4nm,0.9s
**YHL Hebgen Lake 58.57 56** P **P 22 07 50.7 +0.6**
**YHB Horse Butte 58.63 57** P **P 22 07 48.7 -1.7**
**YHH Holmes Hill 58.79 56** P **P 22 07 52.5 +0.9**
**YMR Madison River 58.80 56** P **P 22 07 52.6 +1.0**
**NVAR Mina Array Bea 58.80 66** P **P 22 07 52.1 +0.4**
**NVAR Mina Array Bea 58.80 66** P **P 22 07 52.4 +0.6**
comp=Z,5.1nm,0.7s,baz=292,slow=7.6,SNR=10
NVAR pP **pP 22 08 09.4 0.0**
comp=Z,7.2nm,0.9s,baz=290,slow=7.9,SNR=4.7
NVAR LR LR 22 29 06.1
comp=Z,42nm,21.7s,baz=278,slow=32
comp=Z,5.1nm,0.7s
**LHV Little Huntoon 58.80 66** P **P 22 07 52.6 +1.2**
**NV11 Mina Array Sit 58.89 66** P **P 22 07 52.6 +0.4**
NV11 IAmb IAmb 22 08 11.7
comp=Z,8.1nm,1.1s
**YNR Norris Junctio 58.92 56** P **P 22 07 52.7 +0.2**
YNR IAmb IAmb 22 07 55.7
comp=Z,11nm,0.8s
**OMMB Old Mammoth Mi 58.94 67** P **P 22 07 53.1 +0.3**
OMMB IAmb IAmb 22 09 08.9
comp=Z,5.1nm,0.7s
**ELK Elko 59.04 62** P **P 22 07 53.8 +0.4**
ELK IAmb IAmb 22 08 12.6
comp=Z,6.3nm,0.9s
**ELK Elko 59.04 62** P **P 22 07 54.1 +0.8**
comp=Z,3.8nm,0.8s,baz=302,slow=7.4,SNR=19
comp=Z,3.8nm,0.8s
**GAR Garm 59.15 295** P **P 22 07 53.1 -0.9**
**YPP Pitchstone Pla 59.15 57** P **P 22 07 54.2 0.0**
YPP IAmb IAmb 22 08 12.9
comp=Z,9.7nm,1.2s
**YMP Mirror Lake Pl 59.19 56** P **P 22 07 55.4 +1.0**
**H17A Grant Village 59.19 56** P **P 22 07 55.4 +1.1**
**H17A Grant Village 59.19 56** P **P 22 07 56.7 +2.3**
baz=312
**IMW Indian Meadow 59.33 57** P **P 22 07 56.2 +0.9**
IMW IAmb IAmb 22 08 14.1
comp=Z,10nm,0.9s
**FLWY Flagg Ranch 59.34 57** P **P 22 07 56.3 +1.0**
FLWY IAmb IAmb 22 07 58.7
comp=Z,16nm,1.1s
**RLMT Red Lodge 59.40 55** P **P 22 07 56.7 +1.0**
**RLMT Red Lodge 59.40 55** P **P 22 07 56.6 +0.8**
baz=312,SNR=6.5
**FXWY Fox Creek 59.45 57** P **P 22 07 57.1 +0.9**
FXWY IAmb IAmb 22 08 14.9
comp=Z,8.1nm,0.9s
**TPAW Teton Pass 59.59 57** P **P 22 07 58.1 +0.9**
**TPH Tonopah 59.67 66** P **P 22 07 58.7 +1.0**
**TPH Tonopah 59.67 66** P **P 22 07 58.7 +1.0**
TPH pmax pmax
comp=Z,91nm,1.2s
**LOHW Long Hollow 59.70 57** P **P 22 07 58.4 +0.5**
**DSP Deep Springs 59.71 67** P **P 22 07 59.2 +1.6**
DSP IAmb IAmb 22 08 00.6
comp=Z,11nm,1.0s
**SNOW Snow King Moun 59.72 57** P **P 22 07 59.2 +1.2**
**DGMT Dagmar 59.72 50** P **P 22 07 57.0 -0.7**
**DGMT Dagmar 59.72 50** P **P 22 07 58.5 +0.9**
baz=313
**REDW Red Top Meadow 59.73 58** P **P 22 07 59.0 +0.9**
**HVU Hansel Valley 59.74 60** P **P 22 07 59.4 +1.3**
HVU IAmb IAmb 22 08 16.6
comp=Z,8.4nm,1.0s
**HVU Hansel Valley 59.74 60** P **P 22 07 59.4 +1.3**
HVU pmax pmax
comp=Z,8.0nm,1.0s
**MZP Montezuma Peak 59.83 66** P **P 22 07 58.8 -0.1**
**SMMC Simmler 59.88 70** P **P 22 07 59.6 +0.6**
baz=313
**LAO LASA Array 59.92 52** P **P 22 07 59.3 +0.1**
**LAO LASA Array 59.92 52** P **P 22 07 59.7 +0.6**
baz=313,SNR=5.9
**PMG Port Moresby 59.98 191** P **P 22 08 00.2 +0.6**
**PMG Port Moresby 59.98 191** *i*P **P 22 07 58.4 -1.3**
PMG pmax pmax
comp=Z,41nm,1.5s
**AHID Auburn Hatcher 60.00 58** P **P 22 08 00.3 +0.4**
AHID IAmb IAmb 22 08 18.3
comp=Z,12nm,0.9s
**CHGR Chuyangaron 60.05 295** P **P 22 07 59.0 -1.2**
**CHGR Chuyangaron 60.05 295** P **P 22 07 59.0 -1.2**
CHGR pmax pmax
comp=Z,39nm,0.7s
**SIMJ Simiganj 60.14 296** P **P 22 08 00.3 -0.5**
**SIMJ Simiganj 60.14 296** P **P 22 07 59.8 -1.0**
**BGU Big Grassy Mou 60.17 61** **P 22 08 01.8 +0.8**
**GMN Gold Mountain 60.17 67** P **P 22 08 02.4 +1.2**
**SPUT South Promonto 60.23 60** P **P 22 08 01.6 +0.2**
**CWC Cottonwood Cre 60.27 68** P **P 22 08 02.2 +0.4**
baz=313
**PKM Mcpherson Peak 60.28 70** P **P 22 08 03.1 +1.2**
baz=313
**GRAC Grapevine Rang 60.31 67** P **P 22 08 00.6 -1.3**
**GRAC Grapevine Rang 60.31 67** P **P 22 08 03.3 +1.3**
baz=313,SNR=5.2
**ICESG Greenland Ices 60.37 7** *i*P **P 22 08 00.6 -1.5**
ICESG IAmb IAmb 22 08 07.0
comp=Z,23nm,0.8s
**Q12A Willow Creek R 60.41 64** P **P 22 08 02.2 -0.5**

**HWUT Hardware Ranch 60.52 59** P **P** 22 08 03.9 +0.4
HWUT IAmb IAmb 22 08 22.0
comp=Z,11nm,0.9s
**ISA Isabella, Lake 60.56 69** P **P** 22 08 03.2 -0.4
**ISA Isabella, Lake 60.56 69** P **P** 22 08 04.2 +0.6
baz=313
**ISA Isabella, Lake 60.56 69** P **P** 22 08 03.2 -0.4
ISA pmax pmax
comp=Z,7.0nm,1.2s
**SBUM Sibu 60.61 233** P **P** 22 08 05.3 +1.2
SBUM IAmb IAmb 22 09 06.6
comp=Z,15nm,1.5s
**SBC Santa Barbara 60.64 70** P **P** 22 08 05.2 +1.1
baz=313
**ARVC Arvin 60.71 69** P **P** 22 08 05.7 +1.1
baz=313
**SPR3 Spring Creek 3 60.73 63** P **P** 22 08 06.5 +1.4
SPR3 IAmb IAmb 22 08 08.1
comp=Z,9.7nm,0.8s
**DUG Dugway, Tooele 60.78 61** P **P** 22 08 06.0 +0.8
DUG IAmb IAmb 22 08 24.2
comp=Z,13nm,0.9s
**DUG Dugway, Tooele 60.78 61** P **P** 22 08 06.2 +1.1
baz=313,SNR=7.7
**DUG Dugway, Tooele 60.78 61** P **P** 22 08 06.0 +0.8
DUG pmax pmax
comp=Z,13nm,1.0s
**S11A Rachel 60.83 65** P **P** 22 08 06.6 +1.1
**BW06 Boulder Array 60.84 57** P **P** 22 08 06.2 +0.6
baz=313,SNR=11
**PD31 Pinedale Array 60.84 57** P **P** 22 08 06.1 +0.5
**PDAR Pinedale Array 60.84 57** P **P** 22 08 06.6 +1.0
**PDAR Pinedale Array 60.84 57** P **P** 22 08 06.5 +0.8
comp=Z,10nm,0.8s,baz=336,slow=3.3,SNR=37
PDAR pP **pP** 22 08 22.9 -0.5
comp=Z,11nm,0.8s,baz=316,slow=3.0,SNR=13
comp=Z,10nm,0.8s
**MPMC Manual Prospec 60.88 68** P **P** 22 08 07.1 +1.2
baz=313,SNR=8.3
**WCT Wildcat Mounta 60.89 67** P **P** 22 08 06.8 +0.9
**FURC Furnace Creek, 60.97 67** P **P** 22 08 07.7 +1.4
baz=313,SNR=9.7
**TPNV Topopah Spring 61.00 66** P **P** 22 08 07.7 +1.0
baz=313,SNR=10
**NIL Nilore 61.01 289** P **P** 22 08 06.0 -0.6
**NIL Nilore 61.01 289** P **P** 22 08 06.1 -0.6
NIL pmax pmax
comp=Z,38nm,0.9s
**NIL Nilore 61.01 289** P **P** 22 08 08.0 +1.3
**CTU Camp Tracy 61.04 60** P **P** 22 08 07.5 +0.5
CTU IAmb IAmb 22 08 26.6
comp=Z,12nm,1.0s
**LRMC Laurel Mtn Rad 61.16 68** P **P** 22 08 08.6 +0.9
baz=313
**GWY Greenwater Val 61.28 67** P **P** 22 08 09.0 +0.4
**PSUT Pine Spring 61.32 63** P **P** 22 08 08.9 0.0
**NLU North Lily Min 61.36 61** P **P** 22 08 10.5 +1.3
NLU IAmb IAmb 22 08 28.1
comp=Z,11nm,0.9s
**EDW2 Edwards Air Fo 61.38 69** P **P** 22 08 10.3 +1.1
baz=313,SNR=5.4
**PRN Pahroc Range 61.39 65** P **P** 22 08 10.1 +0.7
PRN IAmb IAmb 22 08 28.0
comp=Z,11nm,1.1s
**MPU Maple Canyon 61.57 61** P **P** 22 08 11.0 +0.5
MPU IAmb IAmb 22 08 29.0
comp=Z,12nm,0.9s
**SOEG Soedalen 61.71 3** *i* P **P** 22 08 11.9 +1.1
SOEG IAmb IAmb 22 08 13.1
comp=Z,42nm,1.5s
**GSC Goldstone, Bar 61.80 68** P **P** 22 08 12.8 +0.7
GSC IAmb IAmb 22 08 14.0
comp=Z,8.4nm,0.9s
**GSC Goldstone, Bar 61.80 68** P **P** 22 08 13.0 +0.9
baz=314,SNR=5.2
**GSC Goldstone, Bar 61.80 68** P **P** 22 08 12.8 +0.7
GSC pmax pmax
comp=Z,8.0nm,1.0s
**FINES FINESS Array B 61.84 336** P **P** 22 08 09.4 -2.3
comp=Z,1.8nm,0.7s,baz=57,slow=7.0,SNR=8.9
FINES ScP **ScP** 22 12 49.5 +1.9
comp=Z,2.1nm,0.8s,baz=70,slow=6.3,SNR=5.5
comp=Z,1.8nm,0.7s
**SHPR Sheep Range 61.95 66** P **P** 22 08 13.6 +0.5
**BFSC Mount Baldy Ra 62.02 69** P **P** 22 08 14.8 +1.2
baz=314
**CIS Catalina Islan 62.14 70** P **P** 22 08 15.4 +1.2
baz=314
**TUQ Turquoise Moun 62.23 67** P **P** 22 08 16.0 +1.0
baz=314
**CCUT Cedar City 62.27 64** P **P** 22 08 16.1 +0.7
CCUT IAmb IAmb 22 08 17.9
comp=Z,8.4nm,1.0s
**MVU Marysvale 62.28 62** P **P** 22 08 16.4 +1.0
**MSU Marysvale 62.29 62** P **P** 22 08 15.7 +0.3
**MSU Marysvale 62.29 62** P **P** 22 08 15.7 +0.3
**DY2G Dye2 62.30 10** *i* P **P** 22 08 13.0 -2.1
DY2G IAmb IAmb 22 08 30.4
comp=Z,97nm,1.8s
**ULM Lac du Bonnet 62.35 44** P **P** 22 08 15.0 -0.4
comp=Z,4.7nm,0.8s,baz=300,slow=5.4,SNR=6.2
comp=Z,4.7nm,0.8s
**ULM Lac du Bonnet 62.35 44** P **P** 22 08 15.0 -0.4
**HEC Hector,Ludlow 62.40 68** P **P** 22 08 17.1 +1.0
baz=314,SNR=5.5
**P17A Butcher Ranch, 62.44 61** P **P** 22 08 17.4 +1.0
P17A IAmb IAmb 22 08 47.4
comp=Z,9.4nm,1.0s
**Q16A Castle Valley 62.58 61** P **P** 22 08 18.1 +0.7
Q16A IAmb IAmb 22 08 35.8
comp=Z,9.8nm,0.9s
**MTPU Mount Pierson 62.61 63** P **P** 22 08 18.6 +0.8
MTPU IAmb IAmb 22 08 36.6
comp=Z,6.4nm,0.8s
**SRIT Nakonsritamara 62.66 249** P **P** 22 08 19.2 +1.4
**V12A Nelson 62.66 66** P **P** 22 08 18.4 +0.6
V12A IAmb IAmb 22 08 20.4
comp=Z,12nm,1.2s
**LCMT Little Creek M 62.71 64** P **P** 22 08 19.3 +1.1
LCMT IAmb IAmb 22 08 20.9
comp=Z,12nm,0.9s
**MURC Murrieta 62.74 70** P **P** 22 08 19.1 +0.8
baz=314
**RSSD Black Hills 62.81 53** P **P** 22 08 19.7 +1.0
baz=315
**RSSD Black Hills 62.81 53** P **P** 22 08 19.8 +1.0
RSSD pP **pP** 22 08 35.8 -1.0
**SRU San Rafael Swe 62.81 61** P **P** 22 08 19.6 +0.7
**SRU San Rafael Swe 62.81 61** P **P** 22 08 19.6 +0.7
SRU pmax pmax
comp=Z,19nm,0.9s
**GMRC Granite Mounta 62.84 68** P **P** 22 08 20.2 +1.1
baz=314,SNR=9.7
**KBL Kabul 62.93 292** P **P** 22 08 19.3 -0.5
**KBL Kabul 62.93 292** P **P** 22 08 19.3 -0.5
KBL pmax pmax
comp=Z,15nm,0.8s
**PKCU Pink Cliffs 62.95 63** P **P** 22 08 19.9 -0.1
PKCU IAmb IAmb 22 08 22.9
comp=Z,9.2nm,0.9s
**KNB Kanab 62.95 64** P **P** 22 08 20.9 +1.0
KNB IAmb IAmb 22 08 22.7
comp=Z,12nm,0.9s
**KNB Kanab 62.95 64** P **P** 22 08 20.9 +1.0
KNB pmax pmax
comp=Z,12nm,0.9s
**PFO Pinyon Flats O 63.17 69** P **P** 22 08 21.5 +0.3
comp=Z,1.7nm,0.5s,baz=324,slow=8.5,SNR=3.9
PFO LR LR 22 32 16.9
comp=Z,24nm,20.8s,baz=258,slow=32
comp=Z,1.7nm,0.5s
**PFO Pinyon Flats O 63.17 69** P **P** 22 08 22.1 +0.8
baz=314
**BELC Belle Mtn. Jos 63.18 68** P **P** 22 08 22.1 +0.8
baz=314
**TPFO Pinon Flats 63.18 69** P **P** 22 08 21.8 +0.5
baz=314
**O20A White River Ci 63.37 59** P **P** 22 08 23.0 +0.4
baz=315
**HMU Henry Mountain 63.50 62** P **P** 22 08 24.2 +0.6
**IRM Iron Mountain 63.58 68** P **P** 22 08 24.9 +1.1
baz=314,SNR=7.4
**W13A Hualapai Mount 63.66 66** P **P** 22 08 25.0 +0.4
**U15A North Rim 63.67 64** P **P** 22 08 24.8 +0.1
**MONP2 Monument Peak 63.69 70** P **P** 22 08 25.6 +0.8
baz=315

**OBN Obninsk 63.71 326**⇑ *eP* **P** 22 08 25.1 +0.8
OBN *SP **sP** 22 08 52.0 +2.1
OBN 22 09 03.0
OBN *e*SS SS 22 20 55.6 -5.3
OBN *e*SSS SSS 22 23 47.5
OBN pmax pmax
comp=Z,6.0nm,0.6s
OBN MLR MLR
comp=Z,162nm,22.0s
**BC3 Big Chuckawall 63.74 68** P **P** 22 08 26.0 +1.0
baz=315
**AGMN Agassiz Nation 63.78 45** P **P** 22 08 25.1 +0.2
AGMN IAmb IAmb 22 08 41.9
comp=Z,14nm,1.2s
**AGMN Agassiz Nation 63.78 45** P **P** 22 08 25.7 +0.8
baz=317
**SWSC Sam W. Stewart 64.03 69** P **P** 22 08 28.6 +1.9
baz=315
**IKP In-Ko-Pah, Jac 64.05 70** P **P** 22 08 28.1 +1.1
baz=315
**PDMCI Parker Dam,Lak 64.07 67** P **P** 22 08 28.4 +1.4
baz=315
**N23A Red Feather La 64.08 57** P **P** 22 08 28.6 +1.3
baz=315,SNR=5.4
**BLYC Blythe 64.23 68** P **P** 22 08 28.2 +0.2
BLYC IAmb IAmb 22 08 30.3
comp=Z,13nm,1.0s
**GLA Glamis 64.54 68** P **P** 22 08 31.1 +0.9
GLA IAmb IAmb 22 08 31.8
comp=Z,13nm,0.9s
**GLA Glamis 64.54 68** P **P** 22 08 31.3 +1.1
baz=315
**GLA Glamis 64.54 68** P **P** 22 08 31.1 +0.9
GLA pmax pmax
comp=Z,13nm,1.0s
**ESJX Sierra Juarez 64.60 70** P **P** 22 08 31.1 +0.3
**KULM Kulim 64.67 246** P **P** 22 08 32.1 +1.0
**SMCO Snowmass 64.73 59** P **P** 22 08 32.2 +0.5
SMCO IAmb IAmb 22 08 49.9
comp=Z,13nm,0.8s
**WUAZ Wupatki 64.84 64** P **P** 22 08 33.2 +1.0
WUAZ IAmb IAmb 22 08 34.9
comp=Z,17nm,1.1s
**Y14A Wickenburg 65.00 67** P **P** 22 08 33.6 +0.5
Y14A IAmb IAmb 22 08 35.4
comp=Z,13nm,1.2s
**COEN Coen 65.02 194** P **P** 22 08 34.5 +1.3
**COEN Coen 65.02 194** P **P** 22 08 32.9 -0.3
**COEN Coen 65.02 194** P **P** 22 08 33.5 +0.3
comp=Z,35nm,0.8s,SNR=4.9
**ISCO Idaho Springs 65.03 57** P **P** 22 08 33.4 -0.2
ISCO IAmb IAmb 22 08 52.3
comp=Z,12nm,0.8s
**ISCO Idaho Springs 65.03 57** P **P** 22 08 35.3 +1.8
baz=316
**ISCO Idaho Springs 65.03 57** P **P** 22 08 33.4 -0.2
ISCO pmax pmax
comp=Z,12nm,0.9s
**SUSD Miller 65.13 50** P **P** 22 08 34.3 +0.5
baz=317
**MVCO Mesa Verde 65.28 61** P **P** 22 08 35.8 +0.6
MVCO IAmb IAmb 22 08 53.5
comp=Z,13nm,0.9s
**MVCO Mesa Verde 65.28 61** P **P** 22 08 36.1 +0.9
baz=316,SNR=5.0
**113A Mohawk Valley, 65.37 68** P **P** 22 08 35.8 +0.4
**F33A 5 Mile Ranch, 65.39 47** P **P** 22 08 35.1 -0.2
F33A IAmb IAmb 22 08 53.5
comp=Z,22nm,1.2s
**NC405 NORSAR Array S 65.47 342** P **P** 22 08 35.1 -0.5
**NC204 NORSAR Array S 65.50 343** P **P** 22 08 35.1 -0.9
**X16A Lo Mia Camp, P 65.57 65** P **P** 22 08 37.1 0.0
X16A IAmb IAmb 22 08 39.7
comp=Z,12nm,0.9s
**NB2 NORSAR Subarra 65.63 342** P **P** 22 08 35.0 -1.8
comp=Z,1.9nm,0.8s,baz=22,slow=6.9
**NOA NORSAR Array B 65.63 342** P **P** 22 08 35.0 -1.8
comp=Z,2.6nm,0.7s,baz=24,slow=6.5,SNR=12
comp=Z,2.6nm,0.7s
**NOA NORSAR Array B 65.63 342** P **P** 22 08 35.0 -1.8
**S22A 4UR Ranch, Cre 65.83 60** P **P** 22 08 39.0 +0.2
S22A IAmb IAmb 22 08 57.6
comp=Z,12nm,0.9s
**S22A 4UR Ranch, Cre 65.83 60** P **P** 22 08 39.9 +1.1
baz=316,SNR=10
**Q24A Divide 65.88 58** P **P** 22 08 40.0 +0.9
**Q24A Divide 65.88 58** P **P** 22 08 40.0 +0.9
baz=316
**HFS Hagfors 65.95 341** P **P** 22 08 36.9 -1.9
comp=Z,1.1nm,0.6s,baz=72,slow=4.8,SNR=7.4
comp=Z,1.1nm,0.6s
**EYMN Ely 66.00 43** P **P** 22 08 39.3 0.0
EYMN IAmb IAmb 22 08 56.2
comp=Z,25nm,1.2s
**EYMN Ely 66.00 43** P **P** 22 08 39.4 0.0
baz=320,SNR=7.5
**W18A Petrified Fore 66.06 64** P **P** 22 08 41.4 +1.3
baz=316
**OGNE Ogallala 66.11 54** P **P** 22 08 41.2 +0.9
baz=317
**KDU Kakadu 66.16 206** P **P** 22 08 41.1 +0.6
**KDU Kakadu 66.16 206** P **P** 22 08 40.6 +0.1
comp=Z,34nm,0.9s,SNR=5.3
**X18A Snowflake 66.36 64** P **P** 22 08 42.9 +0.9
X18A IAmb IAmb 22 08 44.7
comp=Z,13nm,1.0s
**214A Organ Pipe Nat 66.51 68** P **P** 22 08 44.2 +1.3
214A IAmb IAmb 22 08 45.1
comp=Z,12nm,0.9s
**214A Organ Pipe Nat 66.51 68** P **P** 22 08 44.5 +1.6
baz=316,SNR=5.0
**SDCO Great Sand Dun 66.56 59** P **P** 22 08 43.6 +0.2
**SDCO Great Sand Dun 66.56 59** P **P** 22 08 44.8 +1.3
baz=316,SNR=8.3
**MTN Manton Dam 66.69 207** P **P** 22 08 45.0 +1.1
**MTN Manton Dam 66.69 207** P **P** 22 08 43.8 -0.2
**MTN Manton Dam 66.69 207** P **P** 22 08 42.7 -1.3
comp=Z,36nm,1.1s,SNR=4.6
**ECSD EROS Data Cent 66.79 49** P **P** 22 08 44.5 0.0
ECSD IAmb IAmb 22 08 45.7
comp=Z,14nm,0.9s
**ECSD EROS Data Cent 66.79 49** P **P** 22 08 44.6 +0.1
baz=318,SNR=8.9
**E38A The Farm, Brul 66.99 44** P **P** 22 08 45.8 +0.2
**MNK Minsk 67.14 330** *i* P **P** 22 08 44.1 -2.3
MNK *i* *PP **pP** 22 09 05.6 +1.0
MNK *i* 22 09 12.8
MNK *i* 22 11 11.9
MNK *i* PPP PPP 22 12 52.3
MNK *i* S **S** 22 17 33.9 -1.1
MNK *i* *SS **sS** 22 18 12.3 +6.7
MNK pmax pmax
comp=E,4.0nm,0.8s
MNK pmax pmax
comp=Z,18nm,0.9s
MNK pmax pmax
comp=N,8.0nm,0.9s
MNK MLR MLR
comp=Z,192nm,21.0s
MNK MLR MLR
comp=E,55nm,19.0s
MNK MLR MLR
comp=N,138nm,21.0s
**KSCO Kaye Shedlock' 67.20 56** P **P** 22 08 48.1 +0.8
baz=317
**TUC Tucson 67.46 66** P **P** 22 08 49.5 +0.6
**TUC Tucson 67.46 66** P **P** 22 08 50.2 +1.2
baz=316
**TUC Tucson 67.46 66** P **P** 22 08 49.5 +0.6
TUC pmax pmax
comp=Z,7.0nm,1.0s
**TUC Tucson 67.46 66** P **P** 22 08 50.1 +1.2
TUC pP **pP** 22 09 06.4 -0.6
**PABE Paberze 67.47 333** P **P** 22 08 48.2 -0.3
PABE IAmb IAmb 22 08 51.7
comp=Z,12nm,0.9s
**SPMN Marine on St. 67.47 46** P **P** 22 08 49.2 +0.5
baz=320
**T25A Trinidad 67.60 59** P **P** 22 08 48.8 -1.1
T25A IAmb IAmb 22 08 52.1
comp=Z,19nm,1.2s
**T25A Trinidad 67.60 59** P **P** 22 08 50.6 +0.6
baz=317,SNR=5.7
**MLSI Meulaboh, Aceh 68.00 249** P **P** 22 08 52.0 -0.4
comp=Z,30nm,0.8s
**ANMO Albuquerque 68.05 62** P **P** 22 08 52.6 -0.1
comp=Z,4.0nm,0.8s,baz=39,slow=9.0,SNR=9.8
ANMO LR LR 22 34 54.5
comp=Z,41nm,21.9s,baz=52,slow=32
comp=Z,4.0nm,0.8s
**ANMO Albuquerque 68.05 62** P **P** 22 08 53.5 +0.7
baz=317
**ANMO Albuquerque 68.05 62** P **P** 22 08 54.1 +1.3
ANMO pP **pP** 22 09 10.3 -0.5
**I37A Lemond, Waseca 68.11 47** P **P** 22 08 53.5 +0.7
**DUN6 Lazy B Ranch 68.28 65** P **P** 22 08 54.9 +0.8
**CBKS Cedar Bluff 68.87 54** P **P** 22 08 58.2 +0.6
baz=318
**MTSU Mount Surprise 68.95 193** P **P** 22 08 59.4 +1.3
**319A Douglas 69.02 66** P **P** 22 08 59.5 +0.8
**RTBA Rita Blanca 69.03 58** P **P** 22 08 59.0 +0.2
RTBA IAmb IAmb 22 09 16.3
comp=Z,12nm,0.8s
**121A Cookes Peak, D 69.05 64** P **P** 22 08 58.9 -0.1
121A IAmb IAmb 22 09 01.8
comp=Z,15nm,1.3s
**121A Cookes Peak, D 69.05 64** P **P** 22 08 59.9 +0.9
baz=317,SNR=5.9
**SCHQ Schefferville 69.16 25** LR LR 22 41 56.5
comp=Z,137nm,18.3s,baz=290,slow=38
**SCIA State Center 69.81 48** P **P** 22 09 03.7 +0.4
baz=320
**AK03 Malin Array Si 69.87 327** P **P** 22 09 02.3 -1.2
**AKASG Malin Array Be 69.89 327** P **P** 22 09 01.2 -2.4
comp=Z,5.1nm,0.6s,baz=34,slow=6.3,SNR=10
comp=Z,5.1nm,0.6s
**AKBB Malin Array Si 69.89 327** P **P** 22 09 03.0 -0.6
AKBB IAmb IAmb 22 09 06.0
comp=Z,8.7nm,0.7s
**AKBB Malin Array Si 69.89 327** P **P** 22 09 03.0 -0.6
AKBB pmax pmax
comp=Z,9.0nm,0.7s
**AKBB Malin Array Si 69.89 327** P **P** 22 09 03.1 -0.5
**KIEV Kiev 69.90 327** P **P** 22 09 03.3 -0.4
KIEV IAmb IAmb 22 09 06.0
comp=Z,7.8nm,0.7s
**KIEV Kiev 69.90 327** P **P** 22 09 03.3 -0.4
KIEV pmax pmax
comp=Z,8.0nm,0.7s
**KIEV Kiev 69.90 327** P **P** 22 09 03.1 -0.6
comp=Z,53nm,0.8s
**KIV Kislovodsk 69.99 315** *e*P P 22 08 55.4 -9.1
KIV pmax pmax
comp=Z,3.0nm,1.1s
KIV MLR MLR
comp=Z,32nm,17.0s
**KBZ Khabaz 70.07 315** P **P** 22 09 02.6 -2.2
comp=Z,1.5nm,0.6s,baz=27,slow=4.5,SNR=3.6
comp=Z,1.5nm,0.6s
**KNRA Kununurra 70.08 209** P P 22 08 59.5 -5.6
**KSU1 Kansas State U 70.27 52** P **P** 22 09 06.6 +0.5
baz=319
**MSVF Nonsavu 70.28 158** LR LR 22 32 22.0
comp=Z,120nm,21.4s,baz=346,slow=29
**RNPP9 Sopachiv 70.40 330** P **P** 22 09 06.7 0.0
**JFWS Jewell Farm 70.43 46** P **P** 22 09 07.2 +0.1
baz=321
**RNPP5 Staryi Chortor 70.56 330** P **P** 22 09 07.1 -0.6
**CTA Charters Tower 70.63 190** P **P** 22 09 09.4 +1.0
**AMTX Amarillo 70.75 59** P **P** 22 09 09.7 +0.4
AMTX IAmb IAmb 22 09 27.4
comp=Z,10nm,0.9s
**AMTX Amarillo 70.75 59** P **P** 22 09 09.9 +0.5
baz=318
**KOUNC Koumac, New Ca 70.81 172** P **P** 22 09 11.2 +1.7
**KOUNC Koumac, New Ca 70.81 172** P **P** 22 09 10.7 +1.2
**MSTX Muleshoe 70.83 60** P **P** 22 09 09.9 +0.1
MSTX IAmb IAmb 22 09 12.2
comp=Z,13nm,0.9s
**MSTX Muleshoe 70.83 60** P **P** 22 09 10.3 +0.5
baz=318,SNR=6.3
**MNTX Cornudas Mount 71.04 63** P **P** 22 09 11.9 +0.9
baz=318,SNR=12
**SMWD Samnorwood 71.37 57** P **P** 22 09 13.7 +0.7
**P38A Dawn 71.41 50** P **P** 22 09 12.8 -0.2
P38A IAmb IAmb 22 09 31.0
comp=Z,14nm,0.8s
**VLDQ Val d'Or 71.53 35** P **P** 22 09 12.6 -1.0
**SOC Sochi 71.60 317** *e*P **P** 22 09 10.8 -3.4
SOC *e* 22 11 49.6
SOC *e*PPP PPP 22 13 38.4
SOC *e*S **S** 22 18 24.1 -3.8
SOC *e*SS **SS** 22 23 07.9 +4.7
SOC MLR MLR
comp=Z,96nm,18.0s
**BLOK Blackwell 71.73 54** P **P** 22 09 15.5 +0.4
**N41A Harden Midland 71.86 48** P **P** 22 09 16.1 +0.3
**VHRN Van Horn 71.94 64** P **P** 22 09 17.6 +1.0
VHRN IAmb IAmb 22 09 18.8
comp=Z,12nm,0.9s
**L44A Lake County Fo 72.07 45** P **P** 22 09 17.3 +0.3
baz=323
**DKNS Dickens 72.08 59** P **P** 22 09 18.1 +0.8
DKNS IAmb IAmb 22 09 19.1
comp=Z,12nm,1.0s
**QIS Mount Isa 72.09 197** P **P** 22 09 19.1 +1.9
**QIS Mount Isa 72.09 197** P **P** 22 09 16.7 -0.5
comp=Z,13nm,3.3s,SNR=2.7
**HORU Horodok 72.11 328** P **P** 22 09 16.5 -0.6
**HORU Horodok 72.11 328** P **P** 22 09 16.5 -0.6
**PECS Pecos 72.15 62** P **P** 22 09 17.9 +0.1
**P40A Paris 72.21 49** P **P** 22 09 18.0 +0.1
**POST Post 72.21 60** P **P** 22 09 18.6 +0.6
POST IAmb IAmb 22 09 19.9
comp=Z,14nm,0.8s
**ODSA Odessa 72.33 61** P **P** 22 09 17.8 -1.0
ODSA IAmb IAmb 22 09 36.9
comp=Z,16nm,0.8s
**SORM Soroca 72.36 327**⇑P **P** 22 09 16.7 -1.9
**SORM Soroca 72.36 327**⇑P **P** 22 09 16.7 -1.9
**SORM Soroca 72.36 327** P **P** 22 09 17.8 -0.8
comp=Z,9.2nm,0.8s
**WMOK Wichita Mounta 72.44 57** IAmb IAmb 22 09 37.1
comp=Z,11nm,0.8s
**WMOK Wichita Mounta 72.44 57** P **P** 22 09 19.9 +0.6
baz=320,SNR=13
**WMOK Wichita Mounta 72.44 57** P **P** 22 09 19.8 +0.5
**DZM Mont Dzumac 72.53 170** P **P** 22 09 21.4 +1.6
**DZM Mont Dzumac 72.53 170** *e*LR LR 22 31 34.6
comp=Z,249nm,25.6s
**DZM Mont Dzumac 72.53 170** P **P** 22 09 20.5 +0.7
**SN07 Snyder 07 72.53 59** P **P** 22 09 20.4 +0.5
SN07 IAmb IAmb 22 09 37.8
comp=Z,11nm,0.8s
**NOUC Port Laguerre 72.54 171** P **P** 22 09 21.6 +1.8
**WRA Warramunga Arr 72.61 202** P **P** 22 09 19.9 -0.5
**WRA Warramunga Arr 72.61 202** P **P** 22 09 20.2 -0.1
comp=Z,20nm,0.8s,baz=16,slow=6.2,SNR=140
WRA pP **PcP** 22 09 37.7 +0.2
comp=Z,7.9nm,1.1s,baz=21,slow=6.6,SNR=4.6
comp=Z,20nm,0.8s
**KMPD K-Podol'skiy 72.66 328** P **P** 22 09 19.2 -1.1
KMPD P **P** 22 09 19.2 -1.1
**SN05 Snyder 5 72.69 59** P **P** 22 09 21.3 +0.3
SN05 **PcP** 22 09 37.8 -0.2
SN05 IAmb IAmb 22 09 38.7
comp=Z,14nm,0.8s
**HDIL Hopedale 72.72 47** P **P** 22 09 20.9 0.0
HDIL **PcP** 22 09 36.8 -1.1
**HDIL Hopedale 72.72 47** P **P** 22 09 21.2 +0.3
baz=322
**APMT Aspermont 72.78 59** P **P** 22 09 21.9 +0.5
APMT IAmb IAmb 22 09 39.0
comp=Z,12nm,0.7s
**MNHN Monahans 72.80 62** **PcP** 22 09 39.2 +0.8
MNHN IAmb IAmb 22 09 40.1
comp=Z,14nm,0.7s
**KWP Kalwaria Pacla 72.96 331** *e*P **P** 22 09 23.0 +0.8
**KWP Kalwaria Pacla 72.96 331** IAmb IAmb 22 09 33.9
comp=Z,23nm,1.1s
**KWP Kalwaria Pacla 72.96 331** P **P** 22 09 22.0 -0.2
**KWP Kalwaria Pacla 72.96 331** P **P** 22 09 22.0 -0.2
comp=Z,20nm,1.0s
**S39A Bolivar 73.01 51** IAmb IAmb 22 09 39.8
comp=Z,21nm,1.6s
**ALPN Alpine 73.02 63** P **P** 22 09 22.9 -0.2
ALPN **pP** 22 09 40.6 -0.7
**R40A Maddies Statio 73.06 50** IAmb IAmb 22 09 40.8
comp=Z,12nm,0.8s
**TUL3 Leonard 73.12 54** P **P** 22 09 23.9 +0.5
baz=320

**STNU Staruna** 73.19 329 P **P** 22 09 23.1 -0.4
**SGCY Sterling City** 73.28 60 P **P** 22 09 24.9 +0.5
SGCY IAmb IAmb 22 09 26.3
comp=Z,32nm,1.5s
**OJC Ojcow** 73.33 333 *eP* **P** 22 09 22.9 -1.4
**OJC Ojcow** 73.33 333 P **P** 22 09 23.9 -0.4
**OJC Ojcow** 73.33 333 P **P** 22 09 23.9 -0.4
OJC pmax pmax
comp=Z,8.0nm,1.1s
**FITZ Fitzroy Crossi** 73.34 211 P **P** 22 09 25.1 +0.5
**KSV Kosov** 73.34 329 P **P** 22 09 23.7 -0.8
**KSV Kosov** 73.34 329 P **P** 22 09 23.7 -0.8
**EKA Eskdalemuir Ar** 73.44 348 P **P** 22 09 22.7 -2.1
comp=Z,2.2nm,0.6s,baz=21,slow=5.1,SNR=13
comp=Z,2.2nm,0.6s
**ABTX Abilene, Hawle** 73.57 59 P **P** 22 09 26.4 +0.4
ABTX IAmb IAmb 22 09 44.1
comp=Z,18nm,1.0s
**ABTX Abilene, Hawle** 73.57 59 P **P** 22 09 26.9 +0.8
baz=320
**KOLS Kolonicke sedl** 73.71 331 *eP* **P** 22 09 27.4 +0.8
KOLS pmax pmax
comp=Z,4.0nm,0.8s
**KOLS Kolonicke sedl** 73.71 331 *eP* **P** 22 09 27.4 +0.8
**LPIG La Paz** 73.74 72 LR LR 22 39 45.2
comp=Z,25nm,19.1s,baz=232,slow=34
**CCM Cathedral Cave** 73.75 50 P **P** 22 09 26.6 -0.4
CCM IAmb IAmb 22 09 44.2
comp=Z,18nm,1.3s
**CCM Cathedral Cave** 73.75 50 P **P** 22 09 27.6 +0.6
baz=322
**CCM Cathedral Cave** 73.75 50 P **P** 22 09 26.6 -0.4
CCM pmax pmax
comp=Z,18nm,1.3s
**KSP Ksiaz** 73.76 335 *eP* **P** 22 09 26.2 -0.6
**TX31 Lajitas Ar. Si** 73.78 64 IAmb IAmb 22 09 29.6
comp=Z,20nm,0.9s
**TXAR Lajitas Array** 73.78 64 P **P** 22 09 28.4 +0.9
**TXAR Lajitas Array** 73.78 64 P **P** 22 09 27.0 -0.5
comp=Z,15nm,0.7s,baz=298,slow=4.6,SNR=159
TXAR pP **pP** 22 09 44.7 -1.1
comp=Z,11nm,0.8s,baz=303,slow=5.4,SNR=12
comp=Z,15nm,0.7s
**TXAR Lajitas Array** 73.78 64 P **P** 22 09 28.4 +0.9
**HHAR Hobbs** 73.79 53 P **P** 22 09 27.1 -0.2
HHAR IAmb IAmb 22 09 45.1
comp=Z,10nm,0.9s
**LDAQ Lac Daran** 73.84 31 P **P** 22 09 27.9 +0.4
**AAM Ann Arbor** 73.85 42 P **P** 22 09 27.6 +0.1
baz=325
**SFIN Lafayette** 73.88 45 P **P** 22 09 27.8 +0.1
baz=323
**BUR08 Bucovina Ar. S** 73.88 328 P **P** 22 09 26.6 -1.1
**NIE Niedzica** 73.89 332 *eP* **P** 22 09 28.5 +0.9
**BURAR Bucovina Array** 73.90 328 P **P** 22 09 26.8 -1.0
**BURAR Bucovina Array** 73.90 328 ⇑P **P** 22 09 27.0 -0.8
**BURAR Bucovina Array** 73.90 328 P **P** 22 09 26.8 -1.0
BURAR pmax pmax
comp=Z,6.0nm,0.7s
**MGMO Mountain Grove** 73.95 51 P **P** 22 09 28.9 +0.7
MGMO IAmb IAmb 22 09 44.8
comp=Z,26nm,1.7s
**OZNA Ozona** 74.03 61 P **P** 22 09 29.2 +0.3
OZNA IAmb IAmb 22 09 30.4
comp=Z,14nm,1.2s
**FW03 Perrin-Whitt E** 74.11 57 P **P** 22 09 29.3 +0.1
FW03 IAmb IAmb 22 09 30.6
comp=Z,17nm,0.9s
**PLPT Palo Pinto** 74.15 58 P **P** 22 09 29.3 -0.2
PLPT IAmb IAmb 22 09 30.9
comp=Z,20nm,1.2s
**CLL Collm** 74.19 337 *eP* **P** 22 09 28.0 -1.3
comp=Z,6.0nm,1.3s
CLL *i* x x 22 09 39.0
comp=Z,6.0nm,1.0s
CLL *e*PcP **PcP** 22 09 44.0 0.0
CLL *e*pP **pP** 22 09 48.0 +0.3
CLL *e*S **S** 22 19 00.0 +3.0
**CLL Collm** 74.19 337 *eP* **P** 22 09 28.0 -1.3
CLL *e**PP **pP** 22 09 48.0 +0.3
CLL pmax pmax
comp=Z,6.0nm,1.3s
**TRQ Mont Tremblant** 74.19 34 P **P** 22 09 29.6 +0.1
TRQ **PcP** 22 09 45.4 +1.2
**DPC Dobruska-Polom** 74.20 335 *eP* **P** 22 09 29.9 +0.4
**DPC Dobruska-Polom** 74.20 335 *eP* **P** 22 09 29.9 +0.4
**SAND Sanderson** 74.20 62 P **P** 22 09 30.0 +0.2
SAND IAmb IAmb 22 09 31.8
comp=Z,17nm,1.3s
**FVM French Village** 74.21 49 IAmb IAmb 22 09 30.7
comp=Z,8.7nm,0.8s
**TESR Tescani** 74.36 327 ⇑P **P** 22 09 29.5 -0.9
**TESR Tescani** 74.36 327 P **P** 22 09 30.3 -0.1
comp=Z,8.7nm,0.7s
**MORC Moravsky Berou** 74.38 334 *eP* **P** 22 09 29.9 -0.6
**LANS Liptovska Anna** 74.38 332 *eP* **P** 22 09 30.6 +0.1
LANS *e* 22 09 38.2
LANS pmax pmax
comp=Z,4.0nm,0.7s
**LANS Liptovska Anna** 74.38 332 *eP* **P** 22 09 30.6 +0.1
LANS *e* 22 09 38.2
**HPIG** 74.42 67 P **P** 22 09 31.4 +0.1
HPIG IAmb IAmb 22 09 33.1
comp=Z,11nm,0.8s
**P46A Rosedale** 74.43 46 IAmb IAmb 22 09 48.0
comp=Z,19nm,0.8s
**LMQ La Malbaie** 74.50 31 P **P** 22 09 31.8 +0.5
**T42A Van Buren** 74.63 50 IAmb IAmb 22 09 49.1
comp=Z,28nm,1.7s
**O48B Farmland** 74.85 44 IAmb IAmb 22 09 50.0
comp=Z,19nm,0.9s
**O48B Farmland** 74.85 44 P **P** 22 09 33.1 -0.3
baz=324
**VRI Vrincioaia** 74.88 326 ⇑P **P** 22 09 31.8 -1.7
**VRI Vrincioaia** 74.88 326 ⇑P **P** 22 09 31.8 -1.7
**PLOR Plostina** 74.92 326 ⇓P **P** 22 09 32.1 -1.6
**PLOR Plostina** 74.92 326 ⇓P **P** 22 09 32.1 -1.6
**S44A Carbondale** 75.00 49 IAmb IAmb 22 09 51.7
comp=Z,21nm,1.1s
**PRU Pruhonice** 75.00 336 *eP* **P** 22 09 34.2 +0.1
**PRU Pruhonice** 75.00 336 *eP* **P** 22 09 34.2 +0.1
**FCAR Ozark Folk Cen** 75.01 52 IAmb IAmb 22 09 51.2
comp=Z,24nm,1.5s
**VRAC Vranov** 75.07 334 *eP* **P** 22 09 34.0 -0.5
**VRAC Vranov** 75.07 334 LR LR 22 45 33.6
comp=Z,214nm,21.9s,baz=12,slow=38
**VRAC Vranov** 75.07 334 ⇑P **P** 22 09 32.7 -1.7
**VRAC Vranov** 75.07 334 ⇑P **P** 22 09 32.7 -1.7
**JCT Junction City** 75.11 60 IAmb IAmb 22 09 36.6
comp=Z,23nm,1.2s
**JCT Junction City** 75.11 60 P **P** 22 09 35.6 +0.5
baz=320,SNR=5.5
**VYHS Vyhne** 75.15 332 *eP* **P** 22 09 34.8 -0.2
VYHS *e* 22 09 42.2
VYHS pmax pmax
comp=Z,3.0nm,0.7s
**VYHS Vyhne** 75.15 332 *eP* **P** 22 09 34.8 -0.2
VYHS *e* 22 09 42.2
**PBMO Poplar Bluff** 75.16 50 P **P** 22 09 35.4 +0.3
**JAVC Velka Javorina** 75.17 333 *eP* **P** 22 09 35.5 +0.4
**PECO Prince Edward** 75.22 37 P **P** 22 09 36.1 +0.7
PECO IAmb IAmb 22 09 51.9
comp=Z,16nm,0.9s
**WHTX Lake Whitney,** 75.25 58 P **P** 22 09 36.1 +0.4
WHTX IAmb IAmb 22 09 37.4
comp=Z,19nm,1.1s
**WHTX Lake Whitney,** 75.25 58 P **P** 22 09 36.5 +0.7
baz=321
**MEDO Medina** 75.30 38 P **P** 22 09 36.3 +0.4
MEDO IAmb IAmb 22 09 52.8
comp=Z,12nm,1.0s
**MIAR Mount Ida** 75.32 53 IAmb IAmb 22 09 37.5
comp=Z,8.8nm,0.8s
MIAR pP pP 22 09 54.0 -0.5
**MIAR Mount Ida** 75.32 53 P **P** 22 09 36.6 +0.4
baz=322,SNR=6.0
**MIAR Mount Ida** 75.32 53 P **P** 22 09 36.8 +0.6
**KRUC Moravsky** 75.34 334 *eP* **P** 22 09 35.6 -0.4
**P48A Milroy** 75.38 45 IAmb IAmb 22 09 53.2
comp=Z,16nm,1.0s
**EIDS Eidsvold** 75.45 185 P **P** 22 09 37.7 +1.0
comp=Z,22nm,1.7s,SNR=2.8
**DRGR** 75.45 329 ⇑P **P** 22 09 35.9 -0.9
**DRGR** 75.45 329 ⇑P **P** 22 09 35.9 -0.9
**DRIO Del Rio** 75.45 62 IAmb IAmb 22 09 39.4
comp=Z,19nm,1.0s
**M52A Chesterland** 75.46 41 P **P** 22 09 37.4 +0.5
**MLR Muntele Rosu** 75.48 327 ⇑P **P** 22 09 36.8 -0.3
**MLR Muntele Rosu** 75.48 327 ⇑P **P** 22 09 36.8 -0.3
**MLR Muntele Rosu** 75.48 327 P **P** 22 09 37.4 +0.3
comp=Z,8.4nm,0.7s
**N51A Ashland** 75.54 42 P **P** 22 09 37.3 0.0
**USIN University of** 75.54 47 P **P** 22 09 38.0 +0.7
**LONY Lake Ozonia** 75.55 35 P **P** 22 09 36.9 -0.4
baz=329
**ERPA Erie** 75.55 40 P **P** 22 09 37.4 +0.1
baz=327
**P49A Miami Univ. Ec** 75.64 44 P **P** 22 09 37.9 0.0
P49A IAmb IAmb 22 09 54.8
comp=Z,23nm,1.1s
**P49A Miami Univ. Ec** 75.64 44 P **P** 22 09 38.3 +0.4
baz=325
**X40A Basin Creek Fa** 75.75 53 P **P** 22 09 39.0 +0.4
X40A IAmb IAmb 22 09 56.2
comp=Z,16nm,1.3s
**M53A WI Miller and** 75.83 41 P **P** 22 09 39.4 +0.4
baz=326
**ACSO Alum Creek Sta** 75.84 43 P **P** 22 09 39.5 +0.4
baz=325
**VOIR** 75.84 327 ⇑P **P** 22 09 38.8 -0.2
**VOIR** 75.84 327 ⇑P **P** 22 09 38.8 -0.2
**VOIR** 75.84 327 P **P** 22 09 38.9 -0.2
comp=Z,7.3nm,0.8s
**WVNY West Valley, N** 75.87 39 P **P** 22 09 39.6 +0.4
**ALLY Alegheny Colle** 75.88 40 P **P** 22 09 39.5 +0.2
**MMNY Mt. Morris Dam** 75.88 38 P **P** 22 09 39.4 +0.2
MMNY IAmb IAmb 22 09 55.9
comp=Z,8.3nm,0.8s
**WCI Wyandotte Cave** 75.97 46 P **P** 22 09 40.7 +0.9
**WCI Wyandotte Cave** 75.97 46 P **P** 22 09 40.1 +0.3
baz=324
**WCI Wyandotte Cave** 75.97 46 P **P** 22 09 40.7 +0.9
WCI pmax pmax
comp=Z,17nm,0.8s
**KHC Kasperske Hory** 76.04 336 *eP* **P** 22 09 40.2 +0.1
KHC *ex* x 22 09 46.3
**KHC Kasperske Hory** 76.04 336 *eP* **P** 22 09 40.2 +0.1
KHC *e* 22 09 46.3
**KHC Kasperske Hory** 76.04 336 P **P** 22 09 40.1 0.0
comp=Z,7.5nm,0.8s
**ARR Arges** 76.05 327 ⇑P **P** 22 09 41.4 +1.2
**F62A Pittston Farm,** 76.07 32 P **P** 22 09 40.6 +0.4
**SIRR Siria** 76.26 330 ⇓P **P** 22 09 41.9 +0.5
**GERES GERESS Array B** 76.27 336 P **P** 22 09 40.6 -0.8
**GERES GERESS Array B** 76.27 336 P **P** 22 09 40.1 -1.4
comp=Z,1.1nm,0.6s,baz=318,slow=1.8,SNR=9.9
comp=Z,1.1nm,0.6s
**GERES GERESS Array B** 76.27 336 P **P** 22 09 40.7 -0.8
**N53A Lisbon** 76.28 41 P **P** 22 09 41.5 0.0
**AS01 Alice Springs** 76.29 201 P **P** 22 09 43.0 +1.4
**ASAR Alice Springs** 76.30 201 P **P** 22 09 42.4 +0.8
**ASAR Alice Springs** 76.30 201 P **P** 22 09 41.7 0.0
comp=Z,12nm,0.7s,baz=15,slow=5.3,SNR=153
comp=Z,12nm,0.7s
**ASPA Alice Springs** 76.30 201 P **P** 22 09 42.6 +1.0
comp=Z,7.8nm,0.7s,SNR=8.0
**J58A Remsen** 76.36 36 pP **pP** 22 09 58.0 -2.5
J58A IAmb IAmb 22 09 58.6
comp=Z,19nm,0.9s
**O52A Adamsville** 76.43 42 P **P** 22 09 42.3 0.0
**BTNL Ternell** 76.43 341 *d*P **P** 22 09 42.1 -0.1
**MEM Membach** 76.43 341 *d*P **P** 22 09 43.4 +1.2
**VT1 Waterbury** 76.46 34 P **P** 22 09 43.1 +0.6
VT1 IAmb IAmb 22 09 59.8
comp=Z,14nm,0.9s
**G62A West of Eustis** 76.47 32 P **P** 22 09 43.5 +0.9
**CONA Conrad Observa** 76.52 334 *eP* **P** 22 09 43.0 +0.1
comp=Z,2.5nm,0.7s
**SURR Surduc** 76.56 329 ⇓P **P** 22 09 42.7 -0.3
**O53A New Philadelph** 76.59 42 P **P** 22 09 43.3 +0.1
baz=326
**T47A Sharon Grove** 76.59 48 P **P** 22 09 43.5 +0.1
**GZR Gura Zlata** 76.66 329 ⇓P **P** 22 09 42.3 -1.4
**GZR Gura Zlata** 76.66 329 ⇓P **P** 22 09 42.3 -1.4
**BHOU Houvegnez** 76.68 341 *d*P **P** 22 09 44.4 +0.8
**P52A Corning** 76.70 43 P **P** 22 09 44.1 +0.2
baz=326
**MPLH Magyarpolny** 76.73 333 P **P** 22 09 44.6 +0.7
comp=Z,18nm,1.5s
**BCLA Clavier** 76.76 342 *d*P **P** 22 09 44.0 0.0
**BGES Gesves** 76.83 342 *d*P **P** 22 09 43.6 -0.9
**LBNH Lisbon** 76.84 34 P **P** 22 09 45.3 +0.7
LBNH IAmb IAmb 22 10 02.3
comp=Z,17nm,1.0s
**LBNH Lisbon** 76.84 34 P **P** 22 09 45.1 +0.4
baz=331
**LBNH Lisbon** 76.84 34 P **P** 22 09 45.3 +0.7
LBNH pmax pmax
comp=Z,17nm,1.0s
**BZS Buzias** 76.85 329 ⇓P **P** 22 09 45.2 +0.6
**BZS Buzias** 76.85 329 ⇓P **P** 22 09 45.2 +0.6
**NATX Nacogdoches** 76.92 56 P **P** 22 09 46.3 +1.0
baz=322
**WVT Waverly** 76.94 49 P **P** 22 09 46.1 +0.8
**WVT Waverly** 76.94 49 P **P** 22 09 46.0 +0.7
baz=324
**WVT Waverly** 76.94 49 P **P** 22 09 46.1 +0.8
WVT pmax pmax
comp=Z,11nm,1.3s
**ACCN Adirondack Com** 76.95 35 P **P** 22 09 46.2 +0.9
ACCN IAmb IAmb 22 10 02.1
comp=Z,15nm,0.9s
**BMRD Maredsous** 76.98 342 *d*P **P** 22 09 43.3 -1.9
**833A Chaparral WMA,** 76.98 61 P **P** 22 09 46.7 +1.0
baz=320
**RCHB Rochefort** 77.02 342 *d*P **P** 22 09 45.3 -0.2
**MOA Molln** 77.03 335 *eP* **P** 22 09 46.6 +0.9
comp=Z,1.9nm,0.6s
**BNN Bunyan** 77.14 317 P **P** 22 09 46.7 +0.1
**Q52A Bidwell** 77.19 43 P **P** 22 09 47.5 +0.8
**DOU Dourbes** 77.21 342 *d*P **P** 22 09 47.1 +0.6
**HERR Herculane** 77.23 328 ⇓P **P** 22 09 46.6 -0.2
**ARSA Arzberg** 77.23 334 *eP* **P** 22 09 48.0 +1.2
comp=Z,3.1nm,0.8s
**MORH Mrgy, Hungar** 77.25 332 ⇑P **P** 22 09 44.9 -2.0
**HNVL Huntsville, TX** 77.27 57 P **P** 22 09 47.9 +0.7
**BAIF Baives** 77.32 342 *eP* **P** 22 09 47.5 +0.3
BAIF pmax pmax
comp=Z,3.0nm,0.9s
**BIOA Bad Ischl, Aus** 77.35 335 *eP* **P** 22 09 48.9 +1.4
comp=Z,6.6nm,1.0s
**M57A Sunshine Farm,** 77.36 38 P **P** 22 09 48.7 +1.1
M57A IAmb IAmb 22 10 04.7
comp=Z,16nm,0.8s
**BRTR Keskin Array B** 77.38 318 P **P** 22 09 47.5 -0.3
**BRTR Keskin Array B** 77.38 318 P **P** 22 09 44.9 -3.0
comp=Z,2.4nm,0.7s,baz=40,slow=2.9,SNR=10
comp=Z,2.4nm,0.7s
**BRTR Keskin Array B** 77.38 318 P **P** 22 09 47.6 -0.3
**L59A Walton** 77.45 37 P **P** 22 09 48.6 +0.4
**OXF Oxford** 77.46 51 P **P** 22 09 48.7 +0.4
baz=323
**UOSS Minazif** 77.52 294 P **P** 22 09 48.6 -0.2
**MDVR Moldovita** 77.56 329 ⇓P **P** 22 09 47.4 -1.2
**U49A Red Boiling Sp** 77.60 47 IAmb IAmb 22 10 06.5
comp=Z,18nm,1.1s
**T50A Nancy** 77.63 46 P **P** 22 09 49.6 +0.5
T50A IAmb IAmb 22 10 06.7
comp=Z,19nm,0.9s
**SSPA Standing Stone** 77.65 39 P **P** 22 09 49.3 +0.1
SSPA IAmb IAmb 22 10 06.5
comp=Z,16nm,1.1s
**SSPA Standing Stone** 77.65 39 P **P** 22 09 49.7 +0.5
baz=328
**CLTN Cedars of Leba** 77.68 48 IAmb IAmb 22 10 07.2
comp=Z,18nm,1.0s
**S51A Beattyville** 77.69 45 IAmb IAmb 22 10 06.8
comp=Z,11nm,1.0s
**V48A Smith Brothers** 77.73 48 P **P** 22 09 50.3 +0.5
V48A IAmb IAmb 22 10 07.3
comp=Z,20nm,1.2s
**PLAL Pickwick Lake** 77.74 49 IAmb IAmb 22 10 07.0
comp=Z,24nm,1.4s
**FRGS Fruska Gora** 77.84 330 ⇓P **P** 22 09 49.5 -0.7
**LESA Schwarzleotal** 77.85 336 *eP* **P** 22 09 51.3 +1.0
comp=Z,7.4nm,0.8s
**SOKA Soboth** 77.89 334 *eP* **P** 22 09 50.9 +0.4
comp=Z,5.5nm,0.8s
**KBA Koelnbreinsper** 77.99 335 *eP* **P** 22 09 51.8 +0.6
comp=Z,15nm,0.7s
**OBKA Obir** 78.19 334 *eP* **P** 22 09 52.3 +0.1
comp=Z,7.3nm,1.2s
**WATA Walderalm** 78.22 337 *eP* **P** 22 09 54.2 +1.7
comp=Z,6.4nm,0.8s
**CDF Champ du Feu** 78.24 340 *eP* **P** 22 09 53.0 +0.5
CDF pmax pmax
comp=Z,6.0nm,1.2s
**WTTA Wattenberg** 78.27 336 *eP* **P** 22 09 54.5 +1.7
comp=Z,11nm,0.8s
**RETA Reutte** 78.28 337 *eP* **P** 22 09 53.6 +0.9
comp=Z,3.5nm,1.1s
**MOTA Moosalm** 78.33 337 *eP* **P** 22 09 54.0 +1.0
comp=Z,12nm,1.4s
**HBVL Hebbronville** 78.36 62 P **P** 22 09 54.1 +0.8
**SQTA Sankt Quirin** 78.42 337 *eP* **P** 22 09 55.1 +1.6
comp=Z,13nm,1.5s
**ECH Echery** 78.45 340 P **P** 22 09 53.8 +0.3
**ECH Echery** 78.45 340 P **P** 22 09 53.8 +0.3
ECH pmax pmax
comp=Z,11nm,1.5s
**ABTA Abfaltersbach** 78.52 336 *eP* **P** 22 09 54.7 +0.7
comp=Z,3.6nm,1.0s
**SWET Sewanee** 78.58 48 IAmb IAmb 22 10 11.7
comp=Z,21nm,1.1s
**TZTN Tazewell** 78.61 45 P **P** 22 09 55.1 +0.5
baz=326
**R55A Marlinton** 78.69 42 P **P** 22 09 54.4 -0.7
**FETA Feichten** 78.72 337 *eP* **P** 22 09 56.9 +1.6
comp=Z,7.0nm,1.5s
**HAU Haudompre** 78.83 340 *eP* **P** 22 09 56.0 +0.4
HAU pmax pmax
comp=Z,2.0nm,0.6s
**INKA Innaminka** 78.92 194 P **P** 22 09 57.7 +1.6
**CPCT Cooper Cave** 79.06 47 P **P** 22 09 57.3 +0.2
CPCT IAmb IAmb 22 10 14.4
comp=Z,16nm,1.2s
**WRKA Warakurna** 79.06 206 P **P** 22 09 58.5 +1.5
**WRKA Warakurna** 79.06 206 P **P** 22 09 57.6 +0.7
comp=Z,32nm,0.9s,SNR=2.1
**FUORN Ofenpass-Fuorn** 79.21 337 P **P** 22 09 58.1 +0.1
**TKL Tuckaleechee C** 79.23 46 P **P** 22 09 58.2 +0.2
comp=Z,4.6nm,0.8s,baz=290,slow=5.3,SNR=4.7
comp=Z,4.6nm,0.8s
**CTI Castel Tesino** 79.39 336 P **P** 22 09 59.3 +0.5
**CTI Castel Tesino** 79.39 336 P **P** 22 09 59.3 +0.5
CTI pmax pmax
comp=Z,4.0nm,0.8s
**ZAIG Zacatecas** 79.40 67 P **P** 22 10 00.1 +0.6
ZAIG IAmb IAmb 22 10 01.9
comp=Z,9.5nm,0.9s
**U54A Nelsons Funny** 79.41 44 P **P** 22 09 59.6 +0.5
U54A IAmb IAmb 22 10 16.6
comp=Z,14nm,0.8s
**FLN La Foliniere** 79.42 345 *eP* **P** 22 10 01.9 +3.1
FLN pmax pmax
comp=Z,29nm,1.3s
**BLA Blacksburg** 79.46 43 P **P** 22 09 59.4 +0.2
baz=327
**LDF La Druitiere** 79.52 345 *eP* **P** 22 10 00.3 +0.9
**TUE Stuetta** 79.58 338 P **P** 22 09 60.0 0.0
**S57A Dark Hollow, R** 79.63 42 P **P** 22 09 59.9 -0.2
S57A IAmb IAmb 22 10 17.9
comp=Z,25nm,1.2s
**CLF Chambon-Foret** 79.64 343 P **P** 22 10 00.5 +0.5
CLF IAmb IAmb 22 10 01.7
comp=Z,25nm,1.3s
**LRAL Lakeview Retre** 79.83 50 P **P** 22 10 02.1 +0.8
baz=324
**GRR Gorron** 79.84 345 *eP* **P** 22 10 00.3 -0.8
GRR pmax pmax
comp=Z,18nm,0.9s
**TEOL Teolo** 80.02 336 P **P** 22 10 01.4 -0.8
TEOL IAmb IAmb 22 10 05.3
comp=Z,17nm,0.8s
**LOR Lormes** 80.05 342 *eP* **P** 22 10 01.7 -0.6
LOR pmax pmax
comp=Z,28nm,1.7s
**BG3 Lake Jocassee** 80.17 46 P **P** 22 10 03.0 -0.2
BG3 IAmb IAmb 22 10 20.9
comp=Z,26nm,1.3s
**SGMF Saint Gilles** 80.25 346 *eP* **P** 22 10 03.1 -0.2
SGMF pmax pmax
comp=Z,10.0nm,0.8s
**ROSF Rostrenen** 80.28 347 *eP* **P** 22 10 03.3 -0.1
ROSF pmax pmax
comp=Z,21nm,1.0s
**TAOE Nuku Hiva Isla** 80.30 116 *e*LR LR 22 35 07.1
comp=Z,284nm,25.3s
**SSF Saint Saulge** 80.32 342 *eP* **P** 22 10 03.6 -0.1
SSF pmax pmax
comp=Z,9.0nm,1.0s
**PDG Podgorica** 80.46 329 ⇑P **P** 22 10 04.7 +0.2
**PUK Puka** 80.60 329 P **P** 22 10 05.8 +0.4
**AVF Avril sur Loir** 80.61 342 *eP* **P** 22 10 04.9 -0.3
AVF pmax pmax
comp=Z,14nm,0.9s
**SMF Signal de Mont** 80.65 341 *eP* **P** 22 10 06.4 +0.9
SMF pmax pmax
comp=Z,18nm,1.0s
**QUIF Quistinic** 80.67 346 *eP* **P** 22 10 05.2 -0.3
QUIF pmax pmax
comp=Z,27nm,1.2s
**RAR Rarotonga** 80.91 139 LR LR 22 38 21.5
comp=Z,103nm,21.6s,baz=270,slow=30
**LPL La Plagne** 81.09 339 *eP* **P** 22 10 08.4 +0.2
LPL pmax pmax
comp=Z,7.0nm,0.8s
**LPG La Plagne** 81.11 339 *eP* **P** 22 10 08.6 +0.3
LPG pmax pmax
comp=Z,14nm,0.9s
**ZCCA Zocca** 81.14 336 P **P** 22 10 08.9 +0.7
ZCCA IAmb IAmb 22 10 20.0
comp=Z,11nm,0.9s
**GOGA Godfrey** 81.22 47 P **P** 22 10 09.5 +0.7
baz=326
**TCF Toulx Ste Croi** 81.32 342 *eP* **P** 22 10 09.0 -0.1
TCF pmax pmax
comp=Z,6.0nm,0.8s
**BRAL Brewton** 81.32 51 P **P** 22 10 10.0 +0.7
baz=325
**BNI Bardonecchia** 81.55 339 P **P** 22 10 10.1 -0.3
**BNI Bardonecchia** 81.55 339 P **P** 22 10 10.1 -0.3
BNI pmax pmax
comp=Z,8.0nm,1.0s
**MSSA Maissana** 81.55 337 IAmb IAmb 22 10 11.4
comp=Z,15nm,1.1s
**SSB Saint Sauveur** 81.81 340 P **P** 22 10 11.9 +0.2
**SSB Saint Sauveur** 81.81 340 P **P** 22 10 11.9 +0.2
SSB pmax pmax
comp=Z,8.0nm,0.9s
**MBDF Montbardon** 81.83 339 *eP* **P** 22 10 12.7 +0.7
MBDF pmax pmax
comp=Z,5.0nm,0.8s
**OSSC Osservatorio P** 81.84 335 P **P** 22 10 11.8 -0.1
OSSC IAmb IAmb 22 10 13.0
comp=Z,9.5nm,1.0s
**ORIF Oris-en-Rattie** 81.86 339 *eP* **P** 22 10 12.2 +0.2
ORIF pmax pmax
comp=Z,6.0nm,0.8s
**NRCA Norcia** 81.97 334 P **P** 22 10 12.5 -0.1
**LCRK Leigh Creek** 81.99 196 P **P** 22 10 14.6 +2.1
**CMSA Cobar Meteorol** 82.01 189 P **P** 22 10 14.5 +1.9
**CMSA Cobar Meteorol** 82.01 189 P **P** 22 10 13.4 +0.8
comp=Z,30nm,1.0s,SNR=2.7
**CAMP Campotosto** 82.16 333 P **P** 22 10 13.2 -0.4
CAMP IAmb IAmb 22 10 18.4
comp=Z,13nm,0.7s
**MMAI Mount Meron Ar** 82.17 314 P **P** 22 10 13.1 -0.7
comp=Z,8.5nm,0.7s,baz=40,slow=6.6,SNR=13
comp=Z,8.5nm,0.7s
**VIVF Saint-Julien-l** 82.18 340 *eP* **P** 22 10 13.7 +0.1
VIVF pmax pmax
comp=Z,4.0nm,0.7s
**RJF Les Rejaudoux** 82.40 343 *eP* **P** 22 10 14.8 +0.1
RJF pmax pmax
comp=Z,9.0nm,0.9s
**PPT Papeete** 82.43 129 LR LR 22 39 24.3
comp=Z,92nm,21.4s,baz=342,slow=30
**PPT2 Papeete2** 82.45 129 *e*LR LR 22 36 06.4
comp=Z,151nm,24.2s
PPT2 *e*LR LR 22 36 13.0
comp=Z,144nm,22.5s
**SBF Sospel** 82.49 338 *eP* **P** 22 10 15.3 0.0
SBF pmax pmax
comp=Z,14nm,0.8s
**INTR Introdacqua** 82.50 333 P **P** 22 10 15.6 +0.2

INTR IAmb IAmb 22 10 17.8
comp=Z,10nm,0.8s
**CAF Calviac 82.66 342** *e*P **P 22 10 16.4 +0.3**
CAF pmax pmax
comp=Z,9.0nm,0.9s
**BALJ Balqa 82.83 313** P **P 22 10 17.2 -0.1**
**STKA Stephens Creek 82.85 193** P **P 22 10 17.2 +0.3**
comp=Z,10nm,1.0s,baz=317,slow=9.6,SNR=5.0
comp=Z,10nm,1.0s
**LMR La Mourre 83.21 339** *e*P **P 22 10 18.5 -0.5**
LMR pmax pmax
comp=Z,14nm,1.2s
**PGF Pioggiola 83.34 337** *e*P **P 22 10 20.3 +0.5**
PGF pmax pmax
comp=Z,6.0nm,0.8s
**MTLF Montolieu 84.15 342** *e*P **P 22 10 23.9 +0.1**
MTLF pmax pmax
comp=Z,8.0nm,0.8s
**TIP Timpagrande 84.20 330** ⇓P **P 22 10 23.6 -0.6**
**FORT Forrest 84.56 204** P **P 22 10 24.6 -1.1**
**FORT Forrest 84.56 204** P **P 22 10 24.8 -0.9**
comp=Z,54nm,0.3s,SNR=1.7
**RAYN Ar Rayn 84.72 301** P **P 22 10 26.6 -0.4**
**RAYN Ar Rayn 84.72 301** P **P 22 10 26.6 -0.4**
RAYN pmax pmax
comp=Z,20nm,0.7s
**EPF Esparros 84.81 343** *e*P **P 22 10 27.5 +0.3**
EPF pmax pmax
comp=Z,4.0nm,0.7s
**SJPF Ste Jean 85.02 344** *e*P **P 22 10 29.0 +0.8**
SJPF pmax pmax
comp=Z,4.0nm,0.7s
**CEST Esterri de Car 85.05 342** P **P 22 10 28.6 0.0**
CEST IAmb IAmb 22 10 30.6
comp=Z,7.4nm,0.9s
**ETSF Etsaut 85.11 343** *e*P **P 22 10 29.1 +0.4**
ETSF pmax pmax
comp=Z,4.0nm,0.6s
**VSL Villasalto 86.10 335** P **P 22 10 33.0 -0.6**
VSL IAmb IAmb 22 10 34.8
comp=Z,9.9nm,0.9s
**TBI Tubuai 87.40 132** *e*LR LR 22 38 25.3
TBI comp=Z,839nm,27.5s
*e*LR LR 22 38 29.9
comp=Z,1µm,27.5s
**ESDC Sonseca Array 88.84 345** P **P 22 10 46.4 -0.4**
ESDC IAmb IAmb 22 11 02.8
comp=Z,5.4nm,1.0s
ESDC pP **pP 22 11 02.8 -2.9**
**ESDC Sonseca Array 88.84 345** P **P 22 10 45.7 -1.1**
comp=Z,2.4nm,0.8s,baz=2.5,slow=4.2,SNR=17
ESDC pP **pP 22 11 02.0 -3.7**
comp=Z,3.5nm,0.9s,baz=360,slow=4.0,SNR=8.9
comp=Z,2.4nm,0.8s
**KEST Kesra 89.63 334** P **P 22 10 49.8 -0.9**
KEST IAmb IAmb 22 10 52.5
comp=Z,7.2nm,0.8s
**KEST Kesra 89.63 334** P **P 22 10 50.1 -0.5**
comp=Z,5.7nm,0.7s,baz=315,slow=2.5,SNR=13
comp=Z,5.7nm,0.7s
**URZ Urewera 89.97 164** LR LR 22 42 55.2
comp=Z,89nm,21.7s,baz=47,slow=30
**RTZ Ruatahuna 90.29 164** P **P 22 10 52.5 -0.8**
**BKZ Black Stump Fm 90.74 165** P **P 22 10 54.3 -1.0**
**JTS Las Juntas de 99.47 61** LR LR 23 00 31.6
comp=Z,22nm,18.5s,baz=344,slow=38
**VNDA Vanda 127.54 179** PKP **PKPdf 22 16 54.8 -1.0**
comp=Z,0.6nm,0.7s,baz=281,slow=10,SNR=5.5
**H03N2 Juan Fernandez 136.40 89** T T 00 49 23.4
baz=313,slow=77,SNR=23
**H03N1 Juan Fernandez 136.41 89** T T 00 49 24.7
baz=313,slow=77,SNR=22
**H03N3 Juan Fernandez 136.41 89** T T 00 49 24.0
baz=313,slow=77,SNR=40
**BOSA Boshof 137.59 282** PKP **PKPdf 22 17 15.7 -0.7**
comp=Z,3.8nm,0.9s,baz=344,slow=4.4,SNR=3.6
**CPUP Villa Florida 144.70 60** PKP PKPbc 22 17 28.2 +0.2
comp=Z,12nm,0.8s,baz=324,slow=3.7,SNR=27
**PLCA Paso Flores 146.10 92** PKPbc **PKPbc 22 17 32.5 +0.3**
comp=Z,10nm,0.7s,baz=290,slow=3.6,SNR=36
**ELIB Princess Elisa 149.97 207** *d*PKP **PKPbc 22 17 41.8 +0.2**
**TROLL Troll, Antarti 155.26 199** ⇑P **PKPab 22 18 09.8 -0.1**
comp=Z,523nm,0.7s
**SNAA Sanae 156.57 196** ⇑P **PKPab 22 18 15.1 -0.4**
comp=Z,126nm,0.9s
**SNAA Sanae 156.57 196** PKPab **PKPab 22 18 15.2 -0.2**
comp=Z,6.3nm,0.9s,baz=129,slow=3.3,SNR=12

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**GEN 02 22:07:23.2, 44.70N×10.13E, h12km±12km, MI1.3, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VLC** | **Villacollemand** | **0.57** | **161** | P | Pb | 22 07 35.1 | -0.1 |
| VLC | | | | S | Sb | 22 07 44.3 | +0.9 |
| **BDI** | **Bagni Di Lucca** | **0.72** | **152** | P | Pb | 22 07 38.1 | +0.3 |
| BDI | | | | S | Sn | 22 07 49.2 | -1.2 |
| **MDI** | **Monti di Nese** | **1.11** | **345** | P | Pn | 22 07 46.2 | +1.5 |

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*AEIC **02** 22:40:20±2.3, 61.24N±0.04×147.03W±0.05, h4km±7km, ML3.2, ML3.4/206(NEIC), Error ellipse: s-maj=6.1km s-min=2.6km az=199.0*
*NEIC **02** 22:40:21.4±3.0, 61.24N±0.04×147.03W±0.07, h10km±2km, Error ellipse: s-maj=7.1km s-min=5.9km az=17.0*
*IDC **02** 22:40:24.3±2.4, 61.18N×147.49W, h42km±18km, mb3.5/6, mbtmp3.7/8, ML3.6/3, MS3.0/2, Error ellipse: s-maj=47.0km s-min=10.4km az=114.0*

**ISC 02 22:40:20.3±0.6, 61.20N±0.02×147.06W±0.02, h10km, n239, σ1$46/204, mb3.8/6, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLI** | **Glacier Island** | **0.32** | **183** | | **Pg** | **22 40 27.0** | **+0.2** |
| GLI | | | | | **Sg** | **22 40 32.2** | **+1.1** |
| **KLU** | **Klutina** | **0.62** | **61** | | **Pg** | **22 40 31.6** | **-0.7** |
| KLU | | | | | **Sg** | **22 40 39.3** | **-1.2** |
| **DIV** | **Divide** | **0.63** | **96** | | **Pg** | **22 40 31.5** | **-1.0** |
| **SCM** | **Sheep Creek Mo** | **0.65** | **349** | | **Pg** | **22 40 32.1** | **-0.7** |
| SCM | | | | | **Sg** | **22 40 40.1** | **-1.3** |
| **M23K** | **Glacier View** | **0.67** | **332** | | **Pg** | **22 40 32.7** | **-0.7** |
| **KNK** | **Knik Glacier** | **0.71** | **288** | | **Pg** | **22 40 33.7** | **-0.3** |
| KNK | | | | | **Sg** | **22 40 43.3** | **0.0** |
| KNK | | | | IAML | | 22 40 43.9 | |
| comp=N,2µm,0.5s | | | | | | | |
| **PWL** | **Port Wells** | **0.71** | **242** | | **Pg** | **22 40 33.9** | **-0.1** |
| PWL | | | | IAML | | 22 40 48.2 | |
| comp=E,1µm,0.6s | | | | | | | |
| **PWL** | **Port Wells** | **0.71** | **242** | | **Sg** | **22 40 43.9** | **+0.6** |
| **HIN** | **Hinchinbrook I** | **0.85** | **161** | | **Pg** | **22 40 36.6** | **-0.1** |
| **HIN** | **Hinchinbrook I** | **0.85** | **161** | IAML | | 22 40 54.8 | |
| comp=E,1µm,0.8s | | | | | | | |
| HIN | | | | IAML | | 22 40 58.0 | |
| comp=N,1µm,0.7s | | | | | | | |
| **SML** | **Sawmill** | **0.86** | **315** | | **Pg** | **22 40 36.0** | **-0.9** |
| SML | | | | | **Sg** | **22 40 49.1** | **+0.9** |
| **SML** | **Sawmill** | **0.86** | **315** | IAML | | 22 40 50.8 | |
| comp=N,1µm,0.6s | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **0.92** | **135** | | **Pg** | **22 40 37.1** | **-0.8** |
| **M24K** | **Tolsona, Glenn** | **1.00** | **24** | | **Pg** | **22 40 38.4** | **-1.2** |
| **M24K** | **Tolsona, Glenn** | **1.00** | **24** | IAML | | 22 40 56.4 | |
| comp=N,675nm,1.3s | | | | | | | |
| M24K | | | | IAML | | 22 40 57.4 | |
| comp=E,919nm,1.1s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.06** | **303** | | **Pg** | **22 40 39.5** | **-1.3** |
| **GHO** | **Glory Hole Cre** | **1.06** | **303** | IAML | | 22 40 57.4 | |
| comp=E,935nm,1.0s | | | | | | | |
| GHO | | | | IAML | | 22 40 58.5 | |
| comp=N,1µm,1.0s | | | | | | | |
| **PMR** | **Palmer** | **1.07** | **292** | | **Pg** | **22 40 40.3** | **-0.6** |
| PMR | | | | | **Sg** | **22 40 54.4** | **-0.4** |
| **PMR** | **Palmer** | **1.07** | **292** | IAML | | 22 40 56.6 | |
| comp=E,541nm,0.6s | | | | | | | |
| **BMRM** | **Bremner River** | **1.22** | **100** | | **Pn** | **22 40 40.8** | **-2.6** |
| BMRM | | | | | **Sb** | **22 41 00.2** | **+1.0** |
| **P23K** | **Montague Islan** | **1.22** | **188** | | **Pb** | **22 40 43.1** | **-0.3** |
| **N25K** | **Chitina, Valde** | **1.25** | **70** | | **Pn** | **22 40 41.5** | **-2.4** |
| **N25K** | **Chitina, Valde** | **1.25** | **70** | IAML | | 22 41 05.2 | |
| comp=E,730nm,0.4s | | | | | | | |
| N25K | | | | IAML | | 22 41 10.3 | |
| comp=N,426nm,0.6s | | | | | | | |
| **GOAT** | **Goat Mountain** | **1.30** | **118** | | **Pn** | **22 40 44.8** | **+0.2** |
| **RC01** | **Rabbit Creek A** | **1.30** | **266** | | **Pn** | **22 40 44.8** | **+0.2** |
| **RC01** | **Rabbit Creek A** | **1.30** | **266** | IAML | | 22 41 06.2 | |
| comp=E,368nm,0.6s | | | | | | | |
| RC01 | | | | IAML | | 22 41 08.0 | |
| comp=N,436nm,0.5s | | | | | | | |
| **WAT6** | **Susitna Watana** | **1.42** | **347** | | **Pn** | **22 40 44.0** | **-2.3** |
| **RAGM** | **Ragged Mountai** | **1.43** | **124** | | **Pn** | **22 40 47.1** | **+0.8** |
| **O22K** | **Cooper Landing** | **1.49** | **242** | | **Pn** | **22 40 48.0** | **+0.9** |
| **HARP** | **HAARP** | **1.50** | **36** | | **Pn** | **22 40 46.2** | **-1.2** |
| **WACK** | **Wrangell Chich** | **1.52** | **58** | | **Pn** | **22 40 46.3** | **-1.5** |
| **WASW** | **Wrangell South** | **1.56** | **61** | | **Pn** | **22 40 46.9** | **-1.5** |
| **M22K** | **Willow** | **1.57** | **292** | | **Pn** | **22 40 48.2** | **0.0** |
| **GLB** | **Gilahina Butte** | **1.58** | **80** | | **Pn** | **22 40 47.5** | **-1.0** |
| GLB | | | | IAML | | 22 41 12.4 | |
| comp=E,305nm,0.4s | | | | | | | |
| GLB | | | | IAML | | 22 41 12.5 | |
| comp=N,301nm,0.7s | | | | | | | |
| **SEW** | **Seward** | **1.61** | **228** | | **Pn** | **22 40 49.4** | **+0.6** |
| **HMT** | **Hamilton** | **1.62** | **121** | | **Pn** | **22 40 49.4** | **+0.4** |
| **SLKM** | **Skilak Lake** | **1.70** | **247** | | **Pn** | **22 40 51.1** | **+1.0** |
| **VRDI** | **Verde Repeater** | **1.75** | **88** | | **Pn** | **22 40 50.3** | **-0.6** |
| **VRDI** | **Verde Repeater** | **1.75** | **88** | IAML | | 22 41 16.7 | |
| comp=E,229nm,0.5s | | | | | | | |
| VRDI | | | | IAML | | 22 41 16.8 | |
| comp=N,277nm,0.4s | | | | | | | |
| **SUA** | **Susitna One** | **1.80** | **280** | | **Pn** | **22 40 52.0** | **+0.6** |
| **NICHA** | **Nichawak Mount** | **1.80** | **121** | | **Pn** | **22 40 51.9** | **+0.5** |
| **Q23K** | **Middleton Isla** | **1.81** | **168** | | **Pn** | **22 40 52.6** | **+1.0** |
| **Q23K** | **Middleton Isla** | **1.81** | **168** | IAML | | 22 41 26.0 | |
| comp=E,461nm,0.8s | | | | | | | |
| **MID** | **Middleton Isla** | **1.82** | **168** | | **Pn** | **22 40 53.1** | **+1.6** |
| MID | | | | IAML | | 22 41 25.9 | |
| comp=E,460nm,0.9s | | | | | | | |
| **KAIM** | **Kayak Island** | **1.83** | **133** | | **Pn** | **22 40 52.1** | **+0.3** |
| **KAIM** | **Kayak Island** | **1.83** | **133** | IAML | | 22 41 24.3 | |
| comp=N,365nm,0.5s | | | | | | | |
| KAIM | | | | IAML | | 22 41 25.0 | |
| comp=E,388nm,0.6s | | | | | | | |
| **WAT7** | **Susitna Watana** | **1.84** | **334** | | **Pn** | **22 40 51.0** | **-1.1** |
| **DHY** | **Denali Highway** | **1.89** | **356** | Pn | **Pn** | **22 40 51.9** | **-0.8** |
| DHY | | | | IAML | | 22 41 21.1 | |
| comp=N,405nm,0.8s | | | | | | | |
| DHY | | | | IAML | | 22 41 22.7 | |
| comp=E,366nm,0.5s | | | | | | | |
| **CUT** | **Chulitna** | **1.94** | **310** | | **Pn** | **22 40 53.9** | **+0.5** |
| **MCARA** | **McCarthy VSAT** | **1.96** | **83** | | **Pn** | **22 40 53.8** | **+0.3** |
| **MCARA** | **McCarthy VSAT** | **1.96** | **83** | IAML | | 22 41 28.4 | |
| comp=E,412nm,0.8s | | | | | | | |
| MCARA | | | | IAML | | 22 41 29.9 | |
| comp=N,368nm,0.5s | | | | | | | |
| **CRQM** | **Cirque** | **1.96** | **101** | | **Pn** | **22 40 54.9** | **+1.1** |
| **SUCK** | **Suckling Hills** | **1.97** | **124** | | **Pn** | **22 40 54.8** | **+1.0** |
| **SUCK** | **Suckling Hills** | **1.97** | **124** | IAML | | 22 41 25.0 | |
| comp=E,400nm,0.5s | | | | | | | |
| **CAPN** | **Captain Cook N** | **2.04** | **260** | Pn | **Pn** | **22 40 55.2** | **+0.5** |
| **GRIN** | **Grindle Hills** | **2.06** | **115** | | **Pn** | **22 40 55.4** | **+0.4** |
| **TGL** | **Tana Glacier** | **2.11** | **100** | | **Pn** | **22 40 56.1** | **+0.3** |
| **TGL** | **Tana Glacier** | **2.11** | **100** | IAML | | 22 41 27.8 | |
| comp=E,328nm,0.5s | | | | | | | |
| **WAX** | **Waxell Ridge** | **2.19** | **108** | | **Pn** | **22 40 57.5** | **+0.6** |
| **M26K** | **Nabesna, AK** | **2.27** | **56** | | **Pn** | **22 40 58.9** | **+0.9** |
| **M26K** | **Nabesna, AK** | **2.27** | **56** | IAML | | 22 41 31.4 | |
| comp=E,156nm,0.6s | | | | | | | |
| M26K | | | | IAML | | 22 41 32.0 | |
| comp=N,261nm,0.7s | | | | | | | |
| **SKT** | **Skwentna** | **2.28** | **292** | Pn | **Pn** | **22 40 59.2** | **+1.2** |
| SKT | | | | IAML | | 22 41 33.9 | |
| comp=E,209nm,0.6s | | | | | | | |
| **BALM** | **Baldy** | **2.29** | **92** | | **Pn** | **22 40 59.5** | **+1.2** |
| **SNH** | **Sunshine Point** | **2.31** | **114** | | **Pn** | **22 40 59.0** | **+0.5** |
| SNH | | | | IAML | | 22 41 33.5 | |
| comp=E,237nm,0.8s | | | | | | | |
| SNH | | | | IAML | | 22 41 35.0 | |
| comp=N,209nm,0.3s | | | | | | | |
| **STLK** | **Strandline Lak** | **2.32** | **279** | | **Pn** | **22 41 00.2** | **+1.6** |
| **BRSE** | **Bradley Lake S** | **2.34** | **233** | | **Pn** | **22 40 59.8** | **+1.0** |
| **MENT** | **Mentasta** | **2.35** | **41** | | **Pn** | **22 40 59.8** | **+0.8** |
| MENT | | | | IAML | | 22 41 37.6 | |
| comp=E,274nm,0.4s | | | | | | | |
| MENT | | | | IAML | | 22 41 43.8 | |
| comp=N,236nm,0.6s | | | | | | | |
| **RND** | **Reindeer** | **2.37** | **340** | | **Pn** | **22 41 00.3** | **+1.1** |
| **RND** | **Reindeer** | **2.37** | **340** | IAML | | 22 41 34.4 | |
| comp=N,260nm,1.0s | | | | | | | |
| RND | | | | IAML | | 22 41 34.9 | |
| comp=E,226nm,0.8s | | | | | | | |
| **BRLK** | **Bradley Lake** | **2.38** | **234** | | **Pn** | **22 41 00.7** | **+1.3** |
| BRLK | | | | IAML | | 22 41 43.9 | |
| comp=E,113nm,1.5s | | | | | | | |
| **ISLE** | **Juniper Island** | **2.38** | **103** | | **Pn** | **22 41 00.0** | **+0.5** |
| **ISLE** | **Juniper Island** | **2.38** | **103** | IAML | | 22 41 36.4 | |
| comp=E,265nm,0.7s | | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **2.40** | **274** | | **Pn** | **22 41 01.0** | **+1.2** |
| **SPU** | **Mount Spurr** | **2.42** | **272** | | **Pn** | **22 41 01.1** | **+1.2** |
| **SPCP** | **Crater Peak Br** | **2.46** | **274** | | **Pn** | **22 41 01.6** | **+0.9** |
| **L26K** | **Log Cabin Wild** | **2.53** | **42** | | **Pn** | **22 41 03.3** | **+1.9** |
| L26K | | | | IAML | | 22 41 40.4 | |
| comp=N,221nm,0.4s | | | | | | | |
| L26K | | | | IAML | | 22 41 44.0 | |
| comp=E,226nm,0.5s | | | | | | | |
| **GRNC** | **Granite Creek** | **2.63** | **98** | | **Pn** | **22 41 04.0** | **+1.0** |
| GRNC | | | | IAML | | 22 41 46.6 | |
| comp=N,136nm,0.5s | | | | | | | |
| **CNPM** | **China Poot** | **2.67** | **233** | | **Pn** | **22 41 04.2** | **+0.8** |
| **K24K** | **Donnelly Dome** | **2.68** | **12** | | **Pn** | **22 41 05.6** | **+2.1** |
| **MCK** | **McKinley** | **2.69** | **342** | | **Pn** | **22 41 05.5** | **+1.9** |
| **RDT** | **Redoubt** | **2.69** | **259** | | **Pn** | **22 41 04.8** | **+1.1** |
| **MESA** | **MESA** | **2.71** | **110** | | **Pn** | **22 41 04.6** | **+0.5** |
| **M27K** | **Edge Creek, AK** | **2.72** | **63** | | **Pn** | **22 41 06.2** | **+2.0** |
| **CTGM** | **Chitina Glacie** | **2.79** | **92** | IAML | | 22 41 51.0 | |
| comp=N,89nm,0.9s | | | | | | | |
| **DOT** | **Dot Lake** | **2.82** | **28** | | **Pn** | **22 41 07.2** | **+1.7** |
| **RSO** | **Redoubt South** | **2.89** | **258** | | **Pn** | **22 41 07.5** | **+1.0** |
| **RKAV** | **Rock Avalanche** | **2.95** | **105** | | **Pn** | **22 41 08.3** | **+1.0** |
| **PPLA** | **Purkeypile** | **2.96** | **307** | | **Pn** | **22 41 08.8** | **+1.4** |
| **O20K** | **Slope Mountain** | **2.96** | **250** | | **Pn** | **22 41 08.6** | **+1.2** |
| **KTH** | **Kantishna Hill** | **2.97** | **324** | | **Pn** | **22 41 09.3** | **+1.8** |
| **LOGN** | **Logan Glacier** | **2.97** | **95** | IAML | | 22 41 52.1 | |
| comp=N,90nm,0.7s | | | | | | | |
| **M20K** | **Styx River** | **2.99** | **286** | | **Pn** | **22 41 08.9** | **+1.2** |
| **TABL** | **Table Mountain** | **3.00** | **102** | | **Pn** | **22 41 08.7** | **+0.6** |
| TABL | | | | IAML | | 22 42 03.5 | |
| comp=E,72nm,0.5s | | | | | | | |
| TABL | | | | IAML | | 22 42 07.2 | |
| comp=N,88nm,0.8s | | | | | | | |
| **YUK2** | **White River** | **3.04** | **76** | | **Pn** | **22 41 09.9** | **+1.4** |
| **L27K** | **Beaver Creek,** | **3.08** | **50** | | **Pn** | **22 41 10.7** | **+1.6** |
| **BCAR** | **Beaver Creek A** | **3.10** | **51** | Pn | **Pn** | **22 41 10.9** | **+1.6** |
| **SCRK** | **Sand Creek** | **3.13** | **26** | | **Pn** | **22 41 10.9** | **+1.2** |
| **SCRK** | **Sand Creek** | **3.13** | **26** | IAML | | 22 42 02.9 | |
| comp=N,75nm,0.7s | | | | | | | |
| SCRK | | | | IAML | | 22 42 04.0 | |
| comp=E,71nm,1.3s | | | | | | | |
| **HDA** | **Harding Lake** | **3.22** | **1** | | **Pn** | **22 41 12.8** | **+1.9** |
| **CAST** | **Castle Rocks** | **3.23** | **316** | | **Pn** | **22 41 12.7** | **+1.6** |
| **CAST** | **Castle Rocks** | **3.23** | **316** | IAML | | 22 41 54.9 | |
| comp=N,60nm,0.9s | | | | | | | |
| CAST | | | | IAML | | 22 42 00.9 | |
| comp=E,82nm,0.5s | | | | | | | |
| **SAMH** | **Samovar Hills** | **3.27** | **106** | | **Pn** | **22 41 12.9** | **+1.2** |
| **WRH** | **Wood River Hil** | **3.32** | **352** | | **Pn** | **22 41 13.7** | **+1.5** |
| **WRH** | **Wood River Hil** | **3.32** | **352** | IAML | | 22 42 07.4 | |
| comp=E,102nm,0.7s | | | | | | | |
| WRH | | | | IAML | | 22 42 08.6 | |
| comp=N,106nm,0.9s | | | | | | | |
| **O28M** | **Mount Upton** | **3.37** | **94** | | **Pn** | **22 41 14.9** | **+1.6** |
| **BPAW** | **Bear Paw Mtn.** | **3.43** | **330** | | **Pn** | **22 41 14.8** | **+1.0** |
| **BPAW** | **Bear Paw Mtn.** | **3.43** | **330** | IAML | | 22 42 12.2 | |
| comp=N,81nm,0.7s | | | | | | | |
| BPAW | | | | IAML | | 22 42 12.3 | |
| comp=E,61nm,0.7s | | | | | | | |
| **P19K** | **Oil Pt** | **3.43** | **246** | | **Pn** | **22 41 14.4** | **+0.6** |
| **P19K** | **Oil Pt** | **3.43** | **246** | IAML | | 22 42 17.4 | |
| comp=N,79nm,0.7s | | | | | | | |
| P19K | | | | IAML | | 22 42 21.5 | |
| comp=E,85nm,0.7s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **3.48** | **355** | | **Pn** | **22 41 15.5** | **+1.1** |
| **CCB** | **Clear Creek Bu** | **3.48** | **355** | IAML | | 22 42 02.6 | |
| comp=N,50nm,0.6s | | | | | | | |
| CCB | | | | IAML | | 22 42 13.3 | |
| comp=E,74nm,1.2s | | | | | | | |
| **L20K** | **Farewell, AK** | **3.48** | **295** | | **Pn** | **22 41 14.8** | **+0.3** |
| **J25K** | **Salcha River,** | **3.51** | **12** | | **Pn** | **22 41 15.6** | **+0.7** |
| **J25K** | **Salcha River,** | **3.51** | **12** | IAML | | 22 42 14.7 | |
| comp=N,62nm,1.1s | | | | | | | |
| J25K | | | | IAML | | 22 42 14.8 | |
| comp=E,79nm,0.9s | | | | | | | |
| **NEA2** | **Nenana** | **3.53** | **346** | | **Pn** | **22 41 15.6** | **+0.5** |
| **NEA2** | **Nenana** | **3.53** | **346** | IAML | | 22 42 13.1 | |
| comp=N,69nm,0.9s | | | | | | | |
| NEA2 | | | | IAML | | 22 42 15.9 | |
| comp=E,88nm,1.0s | | | | | | | |
| **M19K** | **Big River Lodg** | **3.58** | **285** | | **Pn** | **22 41 16.5** | **+0.6** |
| **M19K** | **Big River Lodg** | **3.58** | **285** | IAML | | 22 42 22.9 | |
| comp=E,47nm,1.1s | | | | | | | |
| **IL31** | | **3.58** | **1** | | **Pn** | **22 41 17.2** | **+1.3** |
| **ILAR** | **Eielson Array** | **3.58** | **1** | | **Pn** | **22 41 17.9** | **+2.0** |
| **ILAR** | **Eielson Array** | **3.58** | **1** | P | **Pn** | **22 41 16.9** | **+0.9** |
| comp=E,17nm,0.3s,baz=188,slow=14,SNR=364 | | | | | | | |
| ILAR | | | | S | **Sn** | **22 41 59.9** | **+1.7** |
| comp=E,23nm,0.7s,baz=184,slow=12,SNR=5.0 | | | | | | | |
| ILAR | | | | LR | LR | 22 43 00.7 | |
| comp=E,102nm,21.1s,baz=181,slow=43 | | | | | | | |
| **CHUM** | **Lake Minchumin** | **3.63** | **320** | | **Pn** | **22 41 17.1** | **+0.6** |
| **N19K** | **Bonanza Creek** | **3.64** | **267** | Pn | **Pn** | **22 41 17.7** | **+0.9** |
| **J26L** | **Joseph Creek** | **3.68** | **24** | IAML | | 22 42 23.0 | |
| comp=N,68nm,0.9s | | | | | | | |
| J26L | | | | IAML | | 22 42 26.0 | |
| comp=E,54nm,0.8s | | | | | | | |
| **COLA** | **College** | **3.70** | **355** | | **Pn** | **22 41 18.6** | **+1.1** |
| **SYI** | **Shuyak Island** | **3.74** | **228** | | **Pn** | **22 41 19.2** | **+1.3** |
| **SYI** | **Shuyak Island** | **3.74** | **228** | IAML | | 22 42 29.7 | |
| comp=E,38nm,1.4s | | | | | | | |
| **MDM** | **Murphy Dome** | **3.81** | **352** | | **Pn** | **22 41 20.5** | **+1.5** |
| **MDM** | **Murphy Dome** | **3.81** | **352** | IAML | | 22 42 22.3 | |
| comp=N,66nm,1.4s | | | | | | | |
| MDM | | | | IAML | | 22 42 26.2 | |
| comp=E,74nm,1.0s | | | | | | | |
| **L19K** | **White Mountain** | **3.84** | **288** | IAML | | 22 42 32.6 | |
| comp=E,34nm,0.8s | | | | | | | |
| **BCPM** | **Bancas Point** | **3.87** | **106** | Pn | **Pn** | **22 41 20.4** | **+0.5** |
| BCPM | | | | IAML | | 22 42 17.7 | |
| comp=N,66nm,0.2s | | | | | | | |
| BCPM | | | | IAML | | 22 42 20.1 | |
| comp=E,71nm,0.8s | | | | | | | |
| **K20K** | **Telida** | **3.92** | **306** | | **Pn** | **22 41 21.2** | **+0.6** |
| **K20K** | **Telida** | **3.92** | **306** | IAML | | 22 42 29.2 | |
| comp=N,52nm,1.1s | | | | | | | |
| **POKR** | **Poker Plat Res** | **3.93** | **358** | Pn | **Pn** | **22 41 21.7** | **+1.0** |
| POKR | | | | IAML | | 22 42 30.3 | |
| comp=N,56nm,0.8s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **4.01** | **238** | Pn | **Pn** | **22 41 22.3** | **+0.5** |
| **I23K** | **Minto, Yukon-K** | **4.10** | **346** | | **Pn** | **22 41 24.1** | **+1.3** |
| **PNL** | **Peninsula** | **4.10** | **109** | | **Pn** | **22 41 23.7** | **+0.8** |
| **MLY** | **Manley** | **4.19** | **338** | IAML | | 22 42 20.3 | |
| comp=E,36nm,0.5s | | | | | | | |
| MLY | | | | IAML | | 22 42 21.2 | |
| comp=N,38nm,0.4s | | | | | | | |
| **M18K** | **Stony River** | **4.23** | **278** | | **Pn** | **22 41 25.3** | **+0.5** |
| **YUK6** | **Outpost Mounta** | **4.23** | **90** | | **Pn** | **22 41 26.2** | **+1.1** |
| **O18K** | **Koktuh Hills** | **4.25** | **255** | Pn | **Pn** | **22 41 26.2** | **+1.2** |
| O18K | | | | IAML | | 22 42 41.3 | |
| comp=N,36nm,0.9s | | | | | | | |
| **O29M** | **Mount Kennedy** | **4.26** | **99** | | **Pn** | **22 41 26.9** | **+1.7** |
| O29M | | | | IAML | | 22 42 29.1 | |
| comp=E,51nm,0.4s | | | | | | | |
| O29M | | | | IAML | | 22 42 30.8 | |
| comp=N,40nm,0.5s | | | | | | | |
| **M29M** | **Somme Creek** | **4.26** | **69** | | **Pn** | **22 41 26.9** | **+1.6** |
| **N18K** | **Kilae Creek** | **4.34** | **267** | | **Pn** | **22 41 27.8** | **+1.4** |
| N18K | | | | IAML | | 22 42 53.1 | |
| comp=N,26nm,1.3s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.39** | **8** | | **Pn** | **22 41 27.9** | **+0.8** |
| **PRP** | **Porcupine Dome** | **4.39** | **8** | IAML | | 22 42 41.7 | |
| comp=E,43nm,0.7s | | | | | | | |
| **J20K** | **Nowinta River** | **4.42** | **316** | | **Pn** | **22 41 28.6** | **+1.2** |
| **J20K** | **Nowinta River** | **4.42** | **316** | IAML | | 22 42 42.8 | |
| comp=E,50nm,0.7s | | | | | | | |
| **KDAK** | **Kodiak Island** | **4.44** | **222** | Pn | **Pn** | **22 41 27.6** | **+0.1** |
| KDAK | | | | IAML | | 22 42 21.4 | |
| comp=E,22nm,1.1s | | | | | | | |
| **KDAK** | **Kodiak Island** | **4.44** | **222** | P | **Pn** | **22 41 28.0** | **+0.4** |
| comp=E,2.8nm,0.3s,baz=55,slow=7.0,SNR=109 | | | | | | | |
| KDAK | | | | S | **Sn** | **22 42 15.8** | **-3.4** |
| comp=E,10nm,0.4s,baz=131,slow=20,SNR=8.2 | | | | | | | |
| comp=E,5.5nm,0.3s | | | | | | | |
| **EGAK** | **Eagle** | **4.48** | **34** | | **Pn** | **22 41 30.7** | **+2.4** |
| EGAK | | | | IAML | | 22 42 44.3 | |
| comp=E,44nm,0.9s | | | | | | | |
| EGAK | | | | IAML | | 22 42 51.1 | |
| comp=E,43nm,0.8s | | | | | | | |
| **DAWY** | **Dawson** | **4.56** | **48** | | **Pn** | **22 41 31.6** | **+2.3** |
| DAWY | | | | IAML | | 22 42 55.3 | |
| comp=N,20nm,1.0s | | | | | | | |
| **L29M** | **L29M** | **4.60** | **62** | | **Pn** | **22 41 31.7** | **+1.7** |
| **L29M** | **L29M** | **4.60** | **62** | IAML | | 22 42 57.1 | |
| comp=N,20nm,0.9s | | | | | | | |
| L29M | | | | IAML | | 22 43 06.7 | |
| comp=E,20nm,0.6s | | | | | | | |
| **H24K** | **Noodor Dome** | **4.67** | **356** | | **Pn** | **22 41 32.5** | **+1.6** |
| **H24K** | **Noodor Dome** | **4.67** | **356** | IAML | | 22 42 32.8 | |
| comp=E,33nm,1.1s | | | | | | | |
| H24K | | | | IAML | | 22 42 45.6 | |
| comp=N,27nm,1.1s | | | | | | | |
| **L18K** | **Granite Mounta** | **4.70** | **287** | | **Pn** | **22 41 32.4** | **+1.2** |
| L18K | | | | IAML | | 22 42 57.1 | |
| comp=N,22nm,0.9s | | | | | | | |
| **KAHC** | **Katmai Hardscr** | **4.75** | **241** | | **Pn** | **22 41 33.5** | **+1.5** |
| **H23K** | **Yukon River** | **4.77** | **348** | IAML | | 22 42 37.9 | |
| comp=N,25nm,1.3s | | | | | | | |
| H23K | | | | IAML | | 22 42 50.9 | |
| comp=E,25nm,0.7s | | | | | | | |
| **N30M** | **Aishikik Lake** | **4.81** | **83** | | **Pn** | **22 41 33.7** | **+0.9** |
| **J19K** | **Poorman** | **4.85** | **309** | | **Pn** | **22 41 35.5** | **+2.2** |
| J19K | | | | IAML | | 22 42 54.2 | |
| comp=E,32nm,0.8s | | | | | | | |
| J19K | | | | IAML | | 22 43 05.4 | |
| comp=N,29nm,1.1s | | | | | | | |
| **P29M** | **Windy Craggy** | **4.88** | **105** | | **Pn** | **22 41 35.2** | **+1.5** |
| **P29M** | **Windy Craggy** | **4.88** | **105** | IAML | | 22 42 53.7 | |
| comp=E,27nm,0.6s | | | | | | | |
| P29M | | | | IAML | | 22 42 54.6 | |
| comp=N,32nm,1.3s | | | | | | | |
| **I20K** | **Naaghedeneel** | **4.94** | **320** | | **Pn** | **22 41 35.8** | **+1.3** |
| **N17K** | **Nushagak Hills** | **5.00** | **267** | Pn | **Pn** | **22 41 35.9** | **+0.6** |
| N17K | | | | IAML | | 22 43 04.9 | |
| comp=N,22nm,0.9s | | | | | | | |
| **M17K** | **Holitna River** | **5.01** | **277** | | **Pn** | **22 41 35.9** | **+0.4** |
| **M17K** | **Holitna River** | **5.01** | **277** | IAML | | 22 43 23.0 | |
| comp=E,33nm,1.4s | | | | | | | |
| **J18K** | **Innoko River** | **5.04** | **301** | | **Pn** | **22 41 36.9** | **+1.0** |
| **J18K** | **Innoko River** | **5.04** | **301** | IAML | | 22 43 07.8 | |
| comp=N,16nm,1.2s | | | | | | | |
| J18K | | | | IAML | | 22 43 08.1 | |
| comp=E,22nm,1.5s | | | | | | | |
| **M30M** | **Minto, Yukon** | **5.05** | **70** | | **Pn** | **22 41 36.8** | **+0.8** |
| **I27K** | **Kandik River** | **5.05** | **27** | | **Pn** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| H29M | Whitestone | 6.34 | 34 | | | Pn | 22 41 55.3 | +1.6 |
| BMAR | Burnt Mountain | 6.34 | 9 | Pn | | Pn | 22 41 55.5 | +1.7 |
| F24K | Squaw Lake | 6.35 | 357 | | | Pn | 22 41 56.0 | +2.0 |
| H18K | Honhosa River | 6.47 | 313 | | | Pn | 22 41 57.5 | +2.0 |
| N15K | Kwethluk River | 6.49 | 267 | Pn | | Pn | 22 41 57.0 | +1.2 |
| J16K | Anvik River | 6.66 | 294 | Pn | | Pn | 22 41 59.8 | +1.6 |
| P32M | Atlin | 6.81 | 98 | Pn | | Pn | 22 42 01.1 | +0.9 |
| I17K | Unalakleet | 6.85 | 299 | Pn | | Pn | 22 42 01.9 | +1.2 |
| EPYK | Eagle Plains | 6.91 | 37 | Pn | | Pn | 22 42 03.2 | +1.6 |
| H17K | Granite Mounta | 6.93 | 308 | | | Pn | 22 42 03.2 | +1.4 |
| R32K | Eaglecrest | 6.98 | 109 | Pn | | Pn | 22 42 03.2 | +0.7 |
| SIT | Sitka | 7.33 | 119 | Pn | | Pn | 22 42 07.8 | +0.6 |
| E27K | Coleen River | 7.39 | 16 | Pn | | Pn | 22 42 10.5 | +2.4 |
| S32K | Killisnoo | 7.40 | 115 | Pn | | Pn | 22 42 09.1 | +0.9 |
| L14K | Kuka Creek | 7.53 | 278 | Pn | | Pn | 22 42 12.5 | +2.4 |
| TOLK | Toolik Lake Re | 7.55 | 353 | | | Pn | 22 42 12.7 | +2.4 |
| MMPY | Sheldon Lake, | 7.59 | 72 | Pn | | Pn | 22 42 13.0 | +2.1 |
| Q32M | Nakina River | 7.73 | 100 | Pn | | Pn | 22 42 14.4 | +1.5 |
| J14K | Nanvaranak Lak | 7.92 | 288 | Pn | | Pn | 22 42 17.5 | +2.2 |
| G31M | Satah River | 8.01 | 39 | Pn | | Pn | 22 42 17.9 | +1.4 |
| D24K | Happy Valley | 8.02 | 355 | Pn | | Pn | 22 42 20.3 | +3.6 |
| G16K | Koyuk River | 8.06 | 308 | Pn | | Pn | 22 42 19.6 | +2.3 |
| E28M | Babbage River | 8.08 | 20 | Pn | | Pn | 22 42 19.8 | +2.2 |
| D25K | Kavik River | 8.16 | 2 | Pn | | Pn | 22 42 23.0 | +4.3 |
| F17K | Baldwin Pennin | 8.17 | 316 | | | Pn | 22 42 21.1 | +2.3 |
| R33M | Jennings River | 8.19 | 96 | Pn | | Pn | 22 42 20.6 | +1.3 |
| D27M | Malcolm River | 8.46 | 15 | Pn | | Pn | 22 42 26.1 | +3.2 |
| E18K | Tukpahlearik C | 8.56 | 323 | Pn | | Pn | 22 42 27.3 | +3.2 |
| D19K | Kuna River | 8.69 | 332 | Pn | | Pn | 22 42 28.8 | +2.9 |
| C23K | Itkillik River | 8.79 | 352 | Pn | | Pn | 22 42 30.9 | +3.6 |
| U33K | Whale Pass | 8.87 | 119 | Pn | | Pn | 22 42 29.1 | +0.8 |
| F15K | North Star Dit | 9.06 | 307 | Pn | | Pn | 22 42 34.0 | +3.0 |
| INK | Inuvik<br>comp=E,0.2nm,0.3s,baz=315,slow=23,SNR=1.7<br>comp=E,0.8nm,0.3s | 9.16 | 33 | P | | Pn | 22 42 34.1 | +1.9 |
| ARCES | ARCESS Array B<br>comp=E,3.2nm,1.1s,baz=355,slow=6.4,SNR=4.5<br>comp=E,3.2nm,1.1s | 49.44 | 3 | P | | P | 22 49 09.3 | -0.5 |
| FINES | FINESS Array B<br>comp=E,0.4nm,0.3s,baz=7.4,slow=8.2,SNR=11<br>comp=E,0.4nm,0.3s | 57.57 | 4 | P | | P | 22 50 09.1 | -0.3 |
| ZALV | Zalesovo Beam<br>comp=E,0.4nm,0.4s,baz=12,slow=7.8,SNR=2.0<br>comp=E,0.4nm,0.4s | 58.06 | 327 | P | | P | 22 50 12.3 | -0.8 |
| OBN | Obninsk<br>comp=E,30nm,19.5s,baz=186,slow=39 | 63.99 | 358 | LR | LR | | 23 22 18.1 | |
| MKAR | Makanchi Array<br>comp=E,0.1nm,0.4s,baz=59,slow=7.9,SNR=1.4<br>comp=E,0.1nm,0.4s | 65.23 | 325 | P | | P | 22 50 59.3 | -2.2 |
| AKASG | Malin Array Be<br>comp=E,0.6nm,0.4s,baz=357,slow=14,SNR=1.2<br>comp=E,0.6nm,0.4s | 68.41 | 3 | P | | P | 22 51 21.5 | -0.2 |
| ESDC | Sonseca Array<br>comp=E,0.6nm,0.7s,baz=347,slow=5.6,SNR=4.7<br>comp=E,0.6nm,0.7s | 75.08 | 29 | P | | P | 22 52 02.5 | +0.5 |

*IDC **02** 22:45:42.1±2.5, 7°.75S×127°.84E, h0km, mb3.2/1, mbtmp3.6/3, ML4.0/2, Error ellipse: s-maj=290.3km s-min=33.4km az=64.0*
*DJA **02** 22:45:52.6±0.3, 7°.5S×12°.9E±°, h146km±10km, M4.4/7, mb4.3/6, MLv4.4/7*
**ISC 02 22:45:52.3±1.0, 7°.40S±0°.09×129°.38E±0°.09, h150km, n10, σ2s86/10, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| SAUI | Saumlaki | 1.99 | 107 | P | | Pn | 22 46 31.1 | +3.8 |
| FAKI | Fak Fak<br>30nm,0.9s,0.2nm | 5.29 | 33 | P | | Pn | 22 47 10.6 | +1.0 |
| SOEI | Soe | 5.57 | 245 | P | | Pn | 22 47 14.5 | +1.1 |
| KMPI | Kaimana, Papua | 5.69 | 49 | S | | Sn | 22 48 17.1 | -2.3 |
| BATI | Baumata<br>15nm,0.4s | 6.30 | 243 | P | | Pn | 22 47 24.5 | +1.5 |
| PLAI | Plampang | 11.57 | 262 | P | | Pn | 22 48 32.2 | -0.9 |
| WRA | Warramunga Arr<br>0.9nm,0.3s,baz=330,slow=13,SNR=37 | 13.36 | 159 | Pn | | Pn | 22 48 55.8 | -0.4 |
| WRA | <br>1.2nm,0.3s,baz=332,slow=22,SNR=12<br>4.0nm,0.8s | | | Sn | | Sn | 22 51 18.9 | -5.3 |
| JAGI | Jajag, Banyuwa | 15.12 | 265 | P | | Pn | 22 49 17.7 | -0.6 |
| ASAR | Alice Springs<br>0.3nm,0.3s,baz=335,slow=9.5,SNR=14 | 16.75 | 165 | Pn | | Pn | 22 49 40.9 | +2.6 |
| ASAR | <br>0.3nm,0.3s,baz=41,slow=22,SNR=6.8<br>1.1nm,0.6s | | | Sn | | S | 22 52 39.5 | -5.0 |
| MKAR | Makanchi Array<br>0.1nm,0.4s,baz=120,slow=6.8,SNR=1.7<br>0.1nm,0.4s | 68.22 | 327 | P | | P | 22 56 41.3 | +4.6 |

*SKHL **02** 22:53:49.8±0.7, 46°.50N×141°.60E, h5km±2km, mb3.7/4*
*JMA **02** 22:53:49.9±0.5, 47°N±2°×14°.2E±°, h0km, MV2.6/10, SOUTH SAKHALIN*
**ISC 02 22:53:48.0±2.6, 46°.8N±0°.1×141°.5E±0°.1, h9km, n4, σ0s78/8, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| NEVR | Nevel`sk | 0.29 | 113 | ePg | | Pg | 22 53 54.0 | +0.2 |
| NEVR | <br>250nm,0.2s | | | AMB | | AMB | 22 53 54.1 | |
| NEVR | | | | eSg | | Sg | 22 53 57.9 | +0.2 |
| NEVR | <br>4µm,0.2s | | | A | | A | 22 53 59.1 | |
| NEVR | <br>9µm,0.2s | | | A | | A | 22 53 59.1 | |
| YSS | Yuzh-Sakhalins | 0.90 | 79 | ePg | | Pn | 22 54 07.0 | +0.2 |
| YSS | <br>10.0nm,0.3s | | | AMB | | AMB | 22 54 07.5 | |
| YSS | | | | eSg | | Sn | 22 54 19.0 | -0.9 |
| YSS | <br>90nm,0.3s | | | A | | A | 22 54 19.3 | |
| YSS | <br>40nm,0.3s | | | A | | A | 22 54 19.3 | |
| JRBN | Rebuntou | 1.39 | 192 | eP | | Pn | 22 54 13.9 | +0.4 |
| JRBN | | | | eS | | Sn | 22 54 31.0 | -1.0 |
| JWK2 | Keihoku | 1.50 | 168 | eP | | Pn | 22 54 15.6 | +0.6 |
| JWK2 | | | | eS | | Sn | 22 54 34.0 | -0.7 |

*IDC **02** 23:27:06.2±1.4, 6°.25S×155°.27E, h0km, mb3.9/7, mbtmp3.9/7, MS3.2/5, Error ellipse: s-maj=48.1km s-min=26.8km az=113.0*
**ISC 02 23:27:11.8±1.2, 6°.2S±0°.2×155°.2E±0°.3, h35km, n13, σ0s71/9, mb3.9/7, MS2.9/3, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| HNR | Honiara<br>comp=Z,990nm,19.9s,baz=321,slow=38 | 5.67 | 124 | LR | | LR | 23 30 36.9 | |
| PMG | Port Moresby<br>comp=Z,78nm,21.2s,baz=52,slow=34 | 8.56 | 248 | LR | | LR | 23 32 01.0 | |
| WRA | Warramunga Arr<br>5.9nm,1.0s,baz=57,slow=9.7,SNR=19<br>5.9nm,1.0s | 24.41 | 234 | P | | P | 23 32 26.7 | -0.6 |
| ASAR | Alice Springs<br>1.3nm,0.8s,baz=61,slow=8.5,SNR=12<br>1.3nm,0.8s | 26.82 | 228 | P | | P | 23 32 48.8 | -0.4 |
| DAV | Davao City (W)<br>comp=Z,24nm,18.4s,baz=32,slow=36 | 32.37 | 294 | LR | | LR | 23 46 41.8 | |
| JOW | Kunigami<br>comp=Z,40nm,18.4s,baz=74,slow=35 | 41.96 | 323 | LR | | LR | 23 51 48.7 | |
| KSRS | Korea Array<br>comp=Z,7.8nm,18.4s,baz=265,slow=35 | 50.37 | 332 | LR | | LR | 23 56 53.4 | |
| CMAR | Chiang Mai Arr<br>0.9nm,0.5s,baz=117,slow=5.7,SNR=5.7<br>0.9nm,0.5s | 60.64 | 295 | P | | P | 23 37 20.2 | +0.4 |
| ILAR | Eielson Array<br>0.1nm,0.5s,baz=260,slow=5.4,SNR=2.4<br>0.1nm,0.5s | 82.60 | 21 | P | | P | 23 39 30.7 | -0.4 |
| MKAR | Makanchi Array<br>0.9nm,0.7s,baz=99,slow=5.6,SNR=7.8<br>0.9nm,0.7s | 82.97 | 319 | P | | P | 23 39 33.5 | 0.0 |
| ZALV | Zalesovo Beam<br>0.3nm,0.3s,baz=90,slow=10,SNR=2.2<br>0.3nm,0.3s | 83.67 | 326 | P | | P | 23 39 36.5 | -0.2 |
| QSPA | South Pole Qui<br>1.6nm,1.0s,baz=303,slow=2.2,SNR=3.2<br>1.6nm,1.0s | 83.73 | 180 | P | | P | 23 39 37.4 | +0.3 |
| TORD | Torodi Ar. Bea<br>0.1nm,0.3s,baz=76,slow=2.5,SNR=2.3 | 153.01 | 287 | PKPbc | | PKPbc | 23 47 06.2 | -0.5 |
| TORD | <br>0.6nm,1.0s,baz=16,slow=7.5,SNR=1.7 | | | PKPab | | pPKPbc | 23 47 19.5 | +1.4 |
| WAKR | <br>comp=Z,2.6nm,1.0s | | | IAmb | | IAmb | 23 43 58.5 | |
| LHV | Little Huntoon<br>comp=Z,3.4nm,0.8s | 87.97 | 51 | P | | P | 23 43 54.6 | +1.2 |
| LHV | | | | IAmb | | IAmb | 23 43 55.8 | |
| KVN | Kaiserville<br>comp=Z,3.6nm,0.7s | 88.07 | 50 | P | | P | 23 43 54.6 | +0.4 |
| KVN | | | | IAmb | | IAmb | 23 43 56.0 | |
| NVAR | Mina Array Bea | 88.08 | 51 | P | | P | 23 43 54.9 | +0.7 |
| NVAR | Mina Array Bea<br>comp=Z,4.7nm,0.7s,baz=264,slow=5.6,SNR=34<br>comp=Z,4.7nm,0.7s | 88.08 | 51 | P | | P | 23 43 55.0 | +0.7 |
| NV11 | Mina Array Sit<br>comp=Z,3.2nm,0.8s | 88.19 | 51 | | | P | 23 43 55.4 | +0.7 |
| NV11 | | | | IAmb | | IAmb | 23 43 57.0 | |
| BMN | Battle Mountai<br>comp=Z,2.4nm,0.6s | 88.36 | 49 | P | | P | 23 43 55.4 | -0.1 |
| BMN | | | | IAmb | | IAmb | 23 43 57.3 | |
| MFID | Camas Ranch | 88.53 | 46 | P | | P | 23 43 56.5 | +0.4 |
| DSP | Deep Springs<br>comp=Z,2.8nm,0.7s | 88.61 | 52 | P | | P | 23 43 57.3 | +0.9 |
| DSP | | | | IAmb | | IAmb | 23 43 58.8 | |
| MZP | Montezuma Peak<br>comp=Z,2.6nm,0.7s | 88.97 | 52 | P | | P | 23 43 59.5 | +1.0 |
| MZP | | | | IAmb | | IAmb | 23 44 00.3 | |
| TPH | Tonopah | 88.99 | 51 | P | | P | 23 43 58.6 | +0.1 |
| GMN | Gold Mountain<br>comp=Z,2.8nm,0.7s | 89.17 | 52 | P | | P | 23 44 00.1 | +0.6 |
| GMN | | | | IAmb | | IAmb | 23 44 01.2 | |
| GWY | Greenwater Val<br>comp=Z,2.1nm,0.5s | 89.93 | 53 | P | | P | 23 44 03.9 | +0.9 |
| GWY | | | | IAmb | | IAmb | 23 44 04.7 | |
| FINES | FINESS Array B<br>comp=Z,0.3nm,0.3s,baz=55,slow=3.8,SNR=7.7<br>comp=Z,0.3nm,0.3s | 91.22 | 335 | P | | P | 23 44 06.7 | -1.4 |
| PDAR | Pinedale Array<br>comp=Z,0.4nm,0.7s,baz=234,slow=3.9,SNR=6.1<br>comp=Z,0.4nm,0.7s | 93.09 | 45 | P | | P | 23 44 17.6 | +0.1 |
| TORD | Torodi Ar. Bea<br>comp=Z,0.3nm,0.4s,baz=38,slow=3.0,SNR=6.3 | 134.31 | 303 | PKP | | PKiKP | 23 50 22.0 | -0.6 |

**RSNC 02 23:47:38.7±0.0, 4°N±2°×77°W±°, h91km±4km, M2.1, mb3.7, ML2.1, Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| YOTC | Yotoco, Valle | 0.34 | 125 | P | | Pn | 23 47 50.3 | -2.3 |
| YOTC | | | | S | | Sn | 23 48 01.4 | -1.5 |
| MALC | Bahia Malaga | 0.73 | 257 | P | | Pn | 23 47 54.6 | -1.0 |
| MALC | | | | S | | Sn | 23 48 09.3 | +1.1 |
| PLMC | San Jos del P | 0.80 | 25 | P | | Pn | 23 47 53.5 | -2.9 |
| PLMC | | | | S | | Sn | 23 48 06.6 | -2.9 |
| JAMC | Jamundi, Valle | 0.96 | 183 | P | | Pn | 23 47 56.0 | -2.3 |
| JAMC | | | | S | | Sn | 23 48 11.5 | -1.4 |
| PIZC | Pizarro, Choco | 1.07 | 317 | P | | Pn | 23 47 58.3 | -1.0 |
| PIZC | | | | S | | Sn | 23 48 14.3 | -0.5 |
| ANIL | Santa Ana | 1.25 | 76 | P | | Pn | 23 47 59.7 | -2.0 |
| ANIL | | | | S | | Sn | 23 48 18.7 | -0.4 |
| ORTC | Ortega, Tolima | 1.40 | 101 | P | | Pn | 23 48 02.0 | -1.3 |
| ORTC | | | | S | | Sn | 23 48 21.1 | -0.7 |
| RECRC | Villamaria, Ca | 1.48 | 58 | P | | Pn | 23 48 03.7 | -1.1 |
| RECRC | | | | S | | Sn | 23 48 23.6 | -0.9 |
| POPC | Popayan, Colom | 1.63 | 182 | P | | Pn | 23 48 04.8 | -1.6 |
| POPC | | | | S | | Sn | 23 48 26.4 | -1.0 |
| PRAC | Prado | 1.79 | 105 | P | | Pn | 23 48 06.9 | -1.4 |
| PRAC | | | | S | | Sn | 23 48 30.0 | -0.8 |
| BETC | Betania | 1.90 | 142 | P | | Pn | 23 48 07.4 | -2.3 |
| BETC | | | | S | | Sn | 23 48 33.0 | -0.3 |
| GR1C | Gorgona, Isla | 1.94 | 233 | P | | Pn | 23 48 05.8 | -4.3 |
| GR1C | | | | S | | Sn | 23 48 28.8 | -5.3 |
| NORC | Norcasia | 2.22 | 52 | P | | Pn | 23 48 12.6 | -1.3 |
| BBAC | Balboa, Cauca | 2.23 | 196 | P | | Pn | 23 48 13.0 | -1.3 |
| BBAC | | | | S | | Sn | 23 48 40.8 | -0.6 |
| GARC | Garzon, Huila | 2.28 | 150 | P | | Pn | 23 48 13.2 | -1.7 |
| GARC | | | | S | | Sn | 23 48 41.2 | -1.3 |
| ROSC | El Rosal | 2.38 | 74 | P | | Pn | 23 48 16.8 | +0.4 |
| ROSC | | | | S | | Sn | 23 48 41.7 | -3.5 |
| URMC | La Uribe, Meta | 2.42 | 112 | P | | Pn | 23 48 14.8 | -1.8 |
| URMC | | | | S | | Sn | 23 48 44.0 | -1.6 |
| FLOC | Florencia | 2.75 | 159 | P | | Pn | 23 48 19.3 | -1.7 |
| FLOC | | | | S | | Sn | 23 48 52.2 | -1.4 |
| VILC | Villavicencio, | 2.92 | 91 | P | | Pn | 23 48 22.5 | -0.8 |
| VILC | | | | S | | Sn | 23 48 57.6 | -0.1 |
| PTAC | Punta Ardita, | 3.18 | 338 | P | | Pn | 23 48 23.6 | -3.1 |
| PTAC | | | | S | | Sn | 23 48 57.8 | -5.8 |
| PTBC | PUERTO BERRIO, | 3.18 | 42 | P | | Pn | 23 48 25.6 | -1.2 |
| PTBC | | | | S | | Sn | 23 49 01.8 | -2.0 |
| AZU | Azuero | 5.11 | 315 | P | | Pn | 23 48 50.2 | -2.6 |
| AZU | | | | S | | Sn | 23 49 46.7 | -3.8 |

*IDC **03** 00:02:26.6±1.4, 52°.41S×13°.82E, h0km, mb3.7/4, mbtmp3.7/4, MS3.5/17, Error ellipse: s-maj=55.9km s-min=35.4km az=62.0*
**ISC 03 00:02:28.2±1.2, 52°.4S±0°.2×13°.9E±0°.3, h10km, n24, σ1s64/5, mb3.8/4, MS3.5/17, 2C, Southwest of Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| TROLL | Troll, Antarti<br>comp=Z,42nm,0.6s | 20.32 | 190 | ⇑P | | Pn | 00 07 06.6 | +0.4 |
| SUR | Sutherland<br>comp=Z,93nm,20.6s,baz=190,slow=31 | 20.61 | 17 | LR | | LR | 00 13 14.8 | |
| SNAA | Sanae | 20.73 | 195 | ⇑P | | P | 00 07 08.6 | +0.1 |
| SNAA | Sanae<br>comp=Z,87nm,21.3s,baz=69,slow=31 | 20.73 | 195 | LR | | LR | 00 13 14.9 | |
| H04S2 | CROZET ISLANDS<br>baz=244,slow=75,SNR=5.6 | 25.00 | 92 | T | | T | 00 34 47.2 | |
| H04S3 | CROZET ISLANDS<br>baz=244,slow=75,SNR=7.4 | 25.01 | 92 | T | | T | 00 34 51.4 | |
| H04S1 | CROZET ISLANDS<br>baz=244,slow=75,SNR=7.0 | 25.02 | 92 | T | | T | 00 34 47.4 | |
| BOSA | Boshof<br>comp=Z,111nm,19.4s,baz=204,slow=33 | 25.20 | 24 | LR | | LR | 00 16 13.5 | |
| MAW | Mawson<br>comp=Z,59nm,21.8s,baz=260,slow=32 | 27.86 | 142 | LR | | LR | 00 17 25.2 | |
| LBTB | Lobatse<br>comp=Z,74nm,18.4s,baz=174,slow=33 | 28.73 | 22 | LR | | LR | 00 18 19.5 | |
| TSUM | Tsumeb<br>comp=Z,89nm,19.9s,baz=174,slow=32 | 33.24 | 6 | LR | | LR | 00 20 28.2 | |
| QSPA | South Pole Qui<br>comp=Z,73nm,19.5s,baz=231,slow=35 | 37.85 | 180 | LR | | LR | 00 24 31.0 | |
| PMSA | Palmer Station<br>comp=Z,86nm,18.9s,baz=84,slow=30 | 39.77 | 221 | LR | | LR | 00 22 17.8 | |
| VNDA | Vanda<br>comp=Z,0.4nm,0.9s,baz=198,slow=6.6,SNR=2.1 | 46.84 | 171 | P | | P | 00 11 14.3 | +1.3 |
| VNDA | <br>comp=Z,79nm,21.9s,baz=215,slow=34<br>comp=Z,0.4nm,0.9s | | | LR | | LR | 00 30 10.0 | |
| MBAR | Mbarara<br>comp=Z,81nm,18.3s,baz=184,slow=35 | 53.49 | 21 | LR | | LR | 00 33 53.3 | |
| FURI | Furi<br>comp=Z,37nm,18.4s,baz=186,slow=36 | 64.62 | 27 | LR | | LR | 00 41 20.9 | |
| TORD | Torodi Ar. Bea<br>comp=Z,0.6nm,0.9s,baz=157,slow=4.6,SNR=2.2 | 66.11 | 347 | P | | P | 00 13 16.3 | +1.0 |
| TORD | <br>comp=Z,29nm,20.1s,baz=170,slow=32<br>comp=Z,0.6nm,0.9s | | | LR | | LR | 00 37 14.0 | |
| SIV | San Ignacio<br>comp=Z,34nm,18.6s,baz=114,slow=33 | 68.35 | 272 | LR | | LR | 00 40 12.7 | |
| LPAZ | La Paz<br>comp=Z,2.5nm,0.9s,baz=115,slow=6.5,SNR=5.9<br>comp=Z,2.5nm,0.9s | 72.44 | 266 | P | | P | 00 13 54.6 | -0.9 |
| EIL | Elat<br>comp=Z,28nm,18.5s,baz=249,slow=34 | 83.75 | 18 | LR | | LR | 00 50 37.9 | |
| MDT | Midelt<br>comp=Z,17nm,18.9s,baz=194,slow=32 | 86.38 | 344 | LR | | LR | 00 49 17.3 | |
| MMAI | Mount Meron Ar<br>comp=Z,22nm,19.2s,baz=103,slow=36 | 87.09 | 18 | LR | | LR | 00 55 17.7 | |
| ASAR | Alice Springs<br>comp=Z,0.6nm,1.0s,baz=201,slow=4.9,SNR=2.3<br>comp=Z,0.6nm,1.0s | 88.02 | 127 | P | | P | 00 15 17.3 | -1.4 |
| URZ | Urewera<br>comp=Z,37nm,20.1s,baz=301,slow=33 | 88.55 | 167 | LR | | LR | 00 51 32.2 | |

*NEIC **03** 00:18:03.9±1.3, 62°.22N±0°.03×149°.56W±0°.06, h59km±8km, Error ellipse: s-maj=4.1km s-min=3.8km az=89.0*
*AEIC **03** 00:18:04.4±1.1, 62°.21N±0°.02×149°.57W±0°.06, h55km±7km, ML3.4, ML3.6/232(NEIC), Error ellipse: s-maj=4.0km s-min=3.0km az=114.0*
**ISC 03 00:18:04.1±1.1, 62°.19N±0°.03×149°.57W±0°.03, h58km±11km, n246, σ0s65/204, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CUT** | **Chulitna** | **0.39** | **303** | | **Pn** | **00 18 14.2** | **-0.5** |
| CUT | | | | | **Sn** | **00 18 22.7** | **+0.4** |
| **M22K** | **Willow** | **0.51** | **211** | | **Pn** | **00 18 15.4** | **-0.6** |
| M22K | | | | | **Sn** | **00 18 25.4** | **+0.9** |
| M22K | | | | IAML | | 00 18 26.1 | |
| | comp=N,3µm,0.6s | | | | | | |
| M22K | | | | IAML | | 00 18 30.5 | |
| | comp=E,3µm,0.5s | | | | | | |
| **GHO** | **Glory Hole Cre** | **0.52** | **144** | | **Pn** | **00 18 15.9** | **-0.3** |
| **GHO** | **Glory Hole Cre** | **0.52** | **144** | | **Sn** | **00 18 25.3** | **+0.4** |
| **PMR** | **Palmer** | **0.64** | **161** | P | **Pn** | **00 18 16.7** | **-0.7** |
| **PMR** | **Palmer** | **0.64** | **161** | | **Pn** | **00 18 16.8** | **-0.7** |
| PMR | | | | IAML | | 00 18 28.4 | |
| | comp=N,2µm,0.5s | | | | | | |
| PMR | | | | IAML | | 00 18 28.6 | |
| | comp=E,2µm,0.4s | | | | | | |
| **PMR** | **Palmer** | **0.64** | **161** | | **Sn** | **00 18 27.5** | **+0.4** |
| **SML** | **Sawmill** | **0.70** | **123** | | **Pn** | **00 18 17.6** | **-0.6** |
| **SML** | **Sawmill** | **0.70** | **123** | | **Sn** | **00 18 29.5** | **+1.0** |
| **WAT7** | **Susitna Watana** | **0.72** | **27** | | **Pn** | **00 18 17.7** | **-0.8** |
| WAT7 | | | | | **Sn** | **00 18 28.8** | **-0.3** |
| **WAT1** | **Susitna Watana** | **0.79** | **36** | | **Pn** | **00 18 18.5** | **-0.9** |
| **SUA** | **Susitna One** | **0.92** | **218** | | **Pn** | **00 18 21.1** | **0.0** |
| SUA | | | | IAML | | 00 18 35.9 | |
| | comp=E,1µm,0.8s | | | | | | |
| SUA | | | | IAML | | 00 18 36.6 | |
| | comp=N,1µm,0.6s | | | | | | |
| **WAT6** | **Susitna Watana** | **0.94** | **65** | | **Pn** | **00 18 20.5** | **-0.8** |
| WAT6 | | | | | **Sn** | **00 18 33.6** | **-0.5** |
| **KNK** | **Knik Glacier** | **0.94** | **146** | | **Pn** | **00 18 21.3** | **0.0** |
| **SKT** | **Skwentna** | **0.95** | **258** | Pn | **Pn** | **00 18 20.7** | **-0.7** |
| **SKT** | **Skwentna** | **0.95** | **258** | | **Sn** | **00 18 34.3** | **+0.2** |
| **M23K** | **Glacier View** | **0.96** | **114** | | **Sn** | **00 18 35.0** | **+0.7** |
| **FIS** | **Fire Island** | **1.10** | **197** | | **Pn** | **00 18 24.0** | **+0.7** |
| **FIS** | **Fire Island** | **1.10** | **197** | IAML | | 00 18 49.5 | |
| | comp=N,1µm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.11** | **184** | | **Pn** | **00 18 23.3** | **-0.2** |
| RC01 | | | | IAML | | 00 18 39.5 | |
| | comp=E,1µm,0.8s | | | | | | |
| RC01 | | | | IAML | | 00 18 40.2 | |
| | comp=N,1µm,0.4s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.12** | **108** | | **Pn** | **00 18 23.3** | **-0.3** |
| **RND** | **Reindeer** | **1.26** | **15** | | **Pn** | **00 18 24.8** | **-0.7** |
| RND | | | | IAML | | 00 18 41.9 | |
| | comp=E,657nm,0.3s | | | | | | |
| **STLK** | **Strandline Lak** | **1.28** | **238** | | **Sn** | **00 18 42.1** | **+0.1** |
| **DHY** | **Denali Highway** | **1.34** | **48** | | **Pn** | **00 18 25.8** | **-0.9** |
| **PPLA** | **Purkeypile** | **1.40** | **301** | | **Pn** | **00 18 26.9** | **-0.6** |
| **PWL** | **Port Wells** | **1.46** | **156** | | **Pn** | **00 18 27.8** | **-0.4** |
| PWL | | | | IAML | | 00 18 52.5 | |
| | comp=E,788nm,0.6s | | | | | | |
| **KTH** | **Kantishna Hill** | **1.50** | **336** | | **Pn** | **00 18 28.3** | **-0.4** |
| KTH | | | | | **Sn** | **00 18 47.0** | **-0.3** |
| **KTH** | **Kantishna Hill** | **1.50** | **336** | IAML | | 00 18 47.9 | |
| | comp=N,879nm,0.9s | | | | | | |
| **CRP** | **Crater Peak** | **1.54** | **234** | | **Pn** | **00 18 29.5** | **+0.1** |
| **SPCP** | **Crater Peak Br** | **1.54** | **234** | | **Pn** | **00 18 29.3** | **-0.1** |
| **SPU** | **Mount Spurr** | **1.56** | **230** | | **Pn** | **00 18 29.6** | **0.0** |
| **M24K** | **Tolsona, Glenn** | **1.60** | **92** | | **Pn** | **00 18 30.6** | **+0.6** |
| **SPCR** | **Spurr Chakacha** | **1.60** | **233** | | **Pn** | **00 18 30.1** | **-0.1** |
| **CAPN** | **Captain Cook N** | **1.62** | **209** | Pn | **Pn** | **00 18 31.5** | **+1.3** |
| **CAST** | **Castle Rocks** | **1.69** | **318** | | **Pn** | **00 18 30.5** | **-0.7** |
| **CAST** | **Castle Rocks** | **1.69** | **318** | IAML | | 00 18 52.7 | |
| | comp=E,402nm,0.4s | | | | | | |
| CAST | | | | IAML | | 00 18 53.4 | |
| | comp=N,429nm,0.4s | | | | | | |
| **SPWE** | **Spurr West** | **1.70** | **238** | | **Pn** | **00 18 31.6** | **+0.2** |
| **M20K** | **Styx River** | **1.71** | **261** | | **Sn** | **00 18 52.5** | **+0.2** |
| **M20K** | **Styx River** | **1.71** | **261** | | **Pn** | **00 18 31.4** | **-0.1** |
| M20K | | | | IAML | | 00 18 53.6 | |
| | comp=E,978nm,0.6s | | | | | | |
| M20K | | | | IAML | | 00 18 54.4 | |
| | comp=N,887nm,1.0s | | | | | | |
| **O22K** | **Cooper Landing** | **1.72** | **183** | | **Pn** | **00 18 31.9** | **+0.3** |
| **GLI** | **Glacier Island** | **1.77** | **137** | | **Pn** | **00 18 31.9** | **-0.4** |
| GLI | | | | IAML | | 00 19 00.9 | |
| | comp=N,902nm,0.6s | | | | | | |
| **KLU** | **Klutina** | **1.87** | **111** | | **Pn** | **00 18 33.4** | **-0.4** |
| KLU | | | | IAML | | 00 19 06.3 | |
| | comp=E,647nm,0.4s | | | | | | |
| KLU | | | | IAML | | 00 19 07.9 | |
| | comp=N,510nm,0.4s | | | | | | |
| **BWN** | **Browne** | **1.99** | **1** | | **Pn** | **00 18 34.6** | **-0.6** |
| **BWN** | **Browne** | **1.99** | **1** | IAML | | 00 19 01.1 | |
| | comp=N,491nm,0.7s | | | | | | |
| BWN | | | | IAML | | 00 19 09.1 | |
| | comp=E,415nm,0.6s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **2.02** | **342** | | **Pn** | **00 18 34.9** | **-0.9** |
| BPAW | | | | IAML | | 00 19 02.0 | |
| | comp=N,381nm,0.6s | | | | | | |
| BPAW | | | | IAML | | 00 19 02.1 | |
| | comp=E,401nm,0.4s | | | | | | |
| **SEW** | **Seward** | **2.10** | **178** | | **Pn** | **00 18 36.8** | **+0.1** |
| **CHUM** | **Lake Minchumin** | **2.11** | **325** | | **Pn** | **00 18 36.4** | **-0.5** |
| **DFR** | **Drift River** | **2.20** | **224** | | **Pn** | **00 18 38.1** | **-0.1** |
| **M19K** | **Big River Lodg** | **2.29** | **265** | | **Pn** | **00 18 38.8** | **-0.7** |
| **M19K** | **Big River Lodg** | **2.29** | **265** | IAML | | 00 19 27.6 | |
| | comp=N,222nm,0.6s | | | | | | |
| M19K | | | | IAML | | 00 19 29.1 | |
| | comp=E,244nm,0.8s | | | | | | |
| **RSO** | **Redoubt South** | **2.32** | **223** | | **Pn** | **00 18 40.0** | **+0.1** |
| **HIN** | **Hinchinbrook I** | **2.33** | **139** | | **Pn** | **00 18 39.1** | **-0.9** |
| **RED** | **Redoubt Volcan** | **2.36** | **222** | | **Pn** | **00 18 40.2** | **-0.2** |
| **K24K** | **Donnelly Dome** | **2.37** | **45** | | **Pn** | **00 18 42.4** | **+1.9** |
| **K20K** | **Telida** | **2.38** | **301** | Pn | **Pn** | **00 18 40.0** | **-0.6** |
| K20K | | | | IAML | | 00 19 09.6 | |
| | comp=E,205nm,0.5s | | | | | | |
| **NEA2** | **Nenana** | **2.42** | **5** | IAML | | 00 19 09.2 | |
| | comp=E,192nm,0.4s | | | | | | |
| **N25K** | **Chitina, Valde** | **2.43** | **102** | IAML | | 00 19 19.6 | |
| | comp=E,363nm,0.4s | | | | | | |
| N25K | | | | IAML | | 00 19 20.1 | |
| | comp=N,445nm,0.4s | | | | | | |
| **P23K** | **Montague Islan** | **2.44** | **154** | | **Pn** | **00 18 40.0** | **-1.4** |
| **EYAK** | **Cordova Ski Ar** | **2.47** | **130** | P | **Pn** | **00 18 40.6** | **-1.2** |
| **WACK** | **Wrangell Chich** | **2.47** | **93** | | **Pn** | **00 18 42.2** | **+0.1** |
| **L19K** | **White Mountain** | **2.48** | **272** | IAML | | 00 19 12.6 | |
| | comp=E,244nm,0.8s | | | | | | |
| L19K | | | | IAML | | 00 19 13.9 | |
| | comp=N,240nm,0.7s | | | | | | |
| **HDA** | **Harding Lake** | **2.52** | **27** | IAML | | 00 19 30.3 | |
| | comp=E,278nm,0.5s | | | | | | |
| HDA | | | | IAML | | 00 19 35.5 | |
| | comp=N,206nm,0.5s | | | | | | |
| **BRLK** | **Bradley Lake** | **2.52** | **195** | | **Pn** | **00 18 42.0** | **-0.6** |
| **BRSE** | **Bradley Lake S** | **2.53** | **194** | | **Pn** | **00 18 42.5** | **-0.2** |
| **WAZA** | **Wrangell Mount** | **2.55** | **90** | | **Pn** | **00 18 43.5** | **+0.4** |
| **WASW** | **Wrangell South** | **2.56** | **94** | | **Pn** | **00 18 43.7** | **+0.1** |
| **O20K** | **Slope Mountain** | **2.59** | **216** | | **Pn** | **00 18 43.7** | **+0.2** |
| **BMRM** | **Bremner River** | **2.67** | **115** | | **Pn** | **00 18 43.7** | **-1.0** |
| **N19K** | **Bonanza Creek** | **2.73** | **242** | IAML | | 00 19 39.4 | |
| | comp=E,140nm,0.9s | | | | | | |
| **HOM** | **Homer** | **2.74** | **203** | Pn | **Pn** | **00 18 45.5** | **0.0** |
| HOM | | | | IAML | | 00 19 50.3 | |
| | comp=N,312nm,0.7s | | | | | | |
| **COLA** | **College** | **2.80** | **15** | | **Pn** | **00 18 45.9** | **-0.3** |
| COLA | | | | IAML | | 00 19 19.2 | |
| | comp=N,340nm,0.6s | | | | | | |
| **CNPM** | **China Poot** | **2.80** | **198** | | **Pn** | **00 18 46.9** | **+0.5** |
| CNPM | | | | IAML | | 00 19 30.4 | |
| | comp=N,145nm,0.5s | | | | | | |
| **MENT** | **Mentasta** | **2.81** | **72** | | **Pn** | **00 18 47.4** | **+0.9** |
| **ILSW** | **Iliamna Southw** | **2.82** | **220** | | **Pn** | **00 18 47.0** | **+0.4** |
| **GLB** | **Gilahina Butte** | **2.83** | **103** | IAML | | 00 19 31.7 | |
| | comp=E,236nm,0.6s | | | | | | |
| **GOAT** | **Goat Mountain** | **2.84** | **123** | | **Pn** | **00 18 46.1** | **-0.8** |
| **MDM** | **Murphy Dome** | **2.84** | **12** | IAML | | 00 19 19.1 | |
| | comp=E,133nm,0.5s | | | | | | |
| MDM | | | | IAML | | 00 19 19.2 | |
| | comp=N,177nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **2.85** | **24** | | **Pn** | **00 18 45.9** | **-1.2** |
| **J20K** | **Nowinta River** | **2.88** | **316** | IAML | | 00 19 21.4 | |
| | comp=N,245nm,0.7s | | | | | | |
| J20K | | | | IAML | | 00 19 21.5 | |
| | comp=E,220nm,0.5s | | | | | | |
| **MLY** | **Manley** | **2.90** | **350** | | **Pn** | **00 18 46.9** | **-0.8** |
| MLY | | | | IAML | | 00 19 20.7 | |
| | comp=N,142nm,0.5s | | | | | | |
| **DOT** | **Dot Lake** | **2.91** | **57** | | **Pn** | **00 18 47.6** | **-0.3** |
| **I23K** | **Minto, Yukon-K** | **2.97** | **2** | IAML | | 00 19 23.6 | |
| | comp=N,148nm,0.7s | | | | | | |
| **RAGM** | **Ragged Mountai** | **2.98** | **125** | | **Pn** | **00 18 48.7** | **-0.1** |
| **VRDI** | **Verde Repeater** | **3.07** | **106** | | **Pn** | **00 18 49.2** | **-1.0** |
| **VRDI** | **Verde Repeater** | **3.07** | **106** | IAML | | 00 19 38.4 | |
| | comp=N,198nm,0.6s | | | | | | |
| VRDI | | | | IAML | | 00 19 38.9 | |
| | comp=E,114nm,1.2s | | | | | | |
| **SVW2** | **Sparrevohn** | **3.07** | **252** | P | **Pn** | **00 18 49.4** | **-0.6** |
| **SVW2** | **Sparrevohn** | **3.07** | **252** | | **Pn** | **00 18 49.5** | **-0.6** |
| **J25K** | **Salcha River,** | **3.08** | **36** | IAML | | 00 19 30.0 | |
| | comp=E,146nm,0.6s | | | | | | |
| J25K | | | | IAML | | 00 19 32.8 | |
| | comp=N,154nm,0.4s | | | | | | |
| **M26K** | **Nabesna, AK** | **3.08** | **83** | | **Pn** | **00 18 49.9** | **-0.3** |
| **POKR** | **Poker Plat Res** | **3.08** | **17** | Pn | **Pn** | **00 18 49.8** | **-0.4** |
| **SCRK** | **Sand Creek** | **3.11** | **52** | IAML | | 00 19 42.8 | |
| | comp=E,118nm,0.9s | | | | | | |
| **P19K** | **Oil Pt** | **3.12** | **217** | Pn | **Pn** | **00 18 51.0** | **+0.3** |
| P19K | | | | IAML | | 00 19 38.0 | |
| | comp=E,173nm,0.5s | | | | | | |
| P19K | | | | IAML | | 00 19 51.3 | |
| | comp=N,169nm,0.7s | | | | | | |
| **HMT** | **Hamilton** | **3.17** | **124** | | **Pn** | **00 18 50.9** | **-0.6** |
| **Q23K** | **Middleton Isla** | **3.19** | **149** | Pn | **Pn** | **00 18 52.7** | **+1.0** |
| Q23K | | | | IAML | | 00 19 45.6 | |
| | comp=N,139nm,1.0s | | | | | | |
| Q23K | | | | IAML | | 00 20 06.8 | |
| | comp=E,140nm,1.0s | | | | | | |
| **MID** | **Middleton Isla** | **3.19** | **149** | P | Pn | 00 18 44.2 | -7.5 |
| **MID** | **Middleton Isla** | **3.19** | **149** | Pn | **Pn** | **00 18 52.7** | **+1.0** |
| MID | | | | IAML | | 00 19 50.3 | |
| | comp=N,125nm,0.8s | | | | | | |
| MID | | | | IAML | | 00 20 06.8 | |
| | comp=E,148nm,1.0s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **3.21** | **102** | | **Pn** | **00 18 51.6** | **-0.4** |
| **J19K** | **Poorman** | **3.29** | **306** | | **Pn** | **00 18 52.5** | **-0.5** |
| **J19K** | **Poorman** | **3.29** | **306** | IAML | | 00 19 31.2 | |
| | comp=E,156nm,0.6s | | | | | | |
| J19K | | | | IAML | | 00 19 31.2 | |
| | comp=N,191nm,0.4s | | | | | | |
| **KAIM** | **Kayak Island** | **3.38** | **130** | Pn | **Pn** | **00 18 54.1** | **-0.2** |
| KAIM | | | | IAML | | 00 20 01.5 | |
| | comp=E,80nm,1.1s | | | | | | |
| KAIM | | | | IAML | | 00 20 06.7 | |
| | comp=N,85nm,1.1s | | | | | | |
| **N18K** | **Kilae Creek** | **3.40** | **246** | Pn | **Pn** | **00 18 53.6** | **-0.9** |
| **J18K** | **Innoko River** | **3.52** | **294** | IAML | | 00 19 35.6 | |
| | comp=E,167nm,0.7s | | | | | | |
| **SUCK** | **Suckling Hills** | **3.52** | **125** | Pn | **Pn** | **00 18 57.2** | **+0.9** |
| SUCK | | | | IAML | | 00 19 52.5 | |
| | comp=N,169nm,0.4s | | | | | | |
| SUCK | | | | IAML | | 00 19 55.9 | |
| | comp=E,100nm,0.5s | | | | | | |
| **PTPK** | **Patty Peak** | **3.53** | **103** | | **Pn** | **00 18 56.0** | **-0.6** |
| **TGL** | **Tana Glacier** | **3.54** | **111** | | **Pn** | **00 18 55.6** | **-0.9** |
| **J26L** | **Joseph Creek** | **3.56** | **47** | | **Pn** | **00 18 56.8** | **0.0** |
| J26L | | | | IAML | | 00 19 43.2 | |
| | comp=E,177nm,0.5s | | | | | | |
| J26L | | | | IAML | | 00 19 43.6 | |
| | comp=N,149nm,0.5s | | | | | | |
| **M27K** | **Edge Creek, AK** | **3.60** | **84** | | **Pn** | **00 18 57.8** | **+0.4** |
| **M27K** | **Edge Creek, AK** | **3.60** | **84** | IAML | | 00 19 59.3 | |
| | comp=E,82nm,0.7s | | | | | | |
| M27K | | | | IAML | | 00 20 00.5 | |
| | comp=N,132nm,0.9s | | | | | | |
| **O18K** | **Koktuh Hills** | **3.61** | **232** | | **Pn** | **00 18 57.2** | **-0.3** |
| **H23K** | **Yukon River** | **3.65** | **0** | IAML | | 00 19 40.3 | |
| | comp=E,66nm,0.6s | | | | | | |
| **L27K** | **Beaver Creek,** | **3.68** | **73** | | **Pn** | **00 18 57.7** | **-0.8** |
| **WAX** | **Waxell Ridge** | **3.68** | **115** | | **Pn** | **00 18 57.6** | **-0.9** |
| **BCAR** | **Beaver Creek A** | **3.70** | **73** | Pn | **Pn** | **00 18 57.8** | **-0.9** |
| **H24K** | **Noodor Dome** | **3.73** | **11** | | **Pn** | **00 18 58.7** | **-0.4** |
| **H21K** | **Melozitna Rive** | **3.76** | **339** | IAML | | 00 19 40.8 | |
| | comp=N,68nm,0.5s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.79** | **26** | Pn | **Pn** | **00 18 59.9** | **-0.1** |
| PRP | | | | IAML | | 00 19 49.7 | |
| | comp=N,68nm,0.6s | | | | | | |
| **M17K** | **Holitna River** | **3.82** | **261** | | **Pn** | **00 18 59.4** | **-0.9** |
| **M17K** | **Holitna River** | **3.82** | **261** | IAML | | 00 20 12.1 | |
| | comp=E,128nm,0.8s | | | | | | |
| **ISLE** | **Juniper Island** | **3.83** | **111** | | **Pn** | **00 18 59.4** | **-1.1** |
| ISLE | | | | IAML | | 00 20 00.4 | |
| | comp=E,152nm,0.8s | | | | | | |
| **SNH** | **Sunshine Point** | **3.83** | **119** | Pn | **Pn** | **00 19 00.5** | **-0.1** |
| SNH | | | | IAML | | 00 20 05.8 | |
| | comp=N,88nm,0.3s | | | | | | |
| SNH | | | | IAML | | 00 20 05.8 | |
| | comp=E,104nm,0.9s | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.84** | **213** | Pn | **Pn** | **00 19 00.9** | **+0.2** |
| Q19K | | | | IAML | | 00 20 11.5 | |
| | comp=N,120nm,0.7s | | | | | | |
| **BARK** | **Barkley Ridge** | **3.86** | **115** | | **Pn** | **00 19 00.1** | **-0.8** |
| **SYI** | **Shuyak Island** | **3.86** | **203** | Pn | **Pn** | **00 19 01.0** | **+0.2** |
| **K27K** | **Chicken** | **3.87** | **58** | | **Pn** | **00 19 00.7** | **-0.2** |
| **K27K** | **Chicken** | **3.87** | **58** | IAML | | 00 20 03.3 | |
| | comp=N,54nm,0.9s | | | | | | |
| **P18K** | **Big Mountain,** | **3.95** | **227** | Pn | **Pn** | **00 19 02.8** | **+0.7** |
| **GRNC** | **Granite Creek** | **4.03** | **108** | | **Pn** | **00 19 02.3** | **-1.0** |
| **GRNC** | **Granite Creek** | **4.03** | **108** | IAML | | 00 20 12.2 | |
| | comp=N,78nm,0.7s | | | | | | |
| GRNC | | | | IAML | | 00 20 16.8 | |
| | comp=E,53nm,0.9s | | | | | | |
| **N17K** | **Nushagak Hills** | **4.03** | **249** | IAML | | 00 20 22.8 | |
| | comp=E,51nm,0.9s | | | | | | |
| **K17K** | **Iditarod** | **4.09** | **281** | IAML | | 00 19 49.2 | |
| | comp=E,90nm,0.7s | | | | | | |
| K17K | | | | IAML | | 00 19 49.3 | |
| | comp=N,118nm,0.9s | | | | | | |
| **CTGM** | **Chitina Glacie** | **4.12** | **104** | | **Pn** | **00 19 04.0** | **-0.6** |
| **CTGM** | **Chitina Glacie** | **4.12** | **104** | IAML | | 00 20 07.2 | |
| | comp=E,57nm,0.7s | | | | | | |
| CTGM | | | | IAML | | 00 20 09.9 | |
| | comp=N,82nm,0.6s | | | | | | |
| **MESA** | **MESA** | **4.21** | **115** | | **Pn** | **00 19 05.4** | **-0.3** |
| **IMAR** | **Indian Mountai** | **4.22** | **336** | | **Pn** | **00 19 05.3** | **-0.4** |
| **I26K** | **Coal Creek Min** | **4.23** | **40** | IAML | | 00 19 57.2 | |
| | comp=E,62nm,0.7s | | | | | | |
| I26K | | | | IAML | | 00 20 25.9 | |
| | comp=N,69nm,0.6s | | | | | | |
| **LOGN** | **Logan Glacier** | **4.33** | **105** | IAML | | 00 20 12.1 | |
| | comp=N,81nm,1.0s | | | | | | |
| LOGN | | | | IAML | | 00 20 12.1 | |
| | comp=E,65nm,1.2s | | | | | | |
| **O17K** | **Koliganek Bris** | **4.40** | **240** | | **Pn** | **00 19 07.8** | **-0.4** |
| **TABL** | **Table Mountain** | **4.43** | **110** | | **Pn** | **00 19 07.5** | **-1.3** |
| **TABL** | **Table Mountain** | **4.43** | **110** | IAML | | 00 20 18.8 | |
| | comp=E,54nm,0.7s | | | | | | |
| TABL | | | | IAML | | 00 20 27.6 | |
| | comp=N,78nm,1.0s | | | | | | |
| **KAHG** | **Katmai Hook Gl** | **4.46** | **216** | | **Pn** | **00 19 09.1** | **0.0** |
| **KAHC** | **Katmai Hardscr** | **4.46** | **220** | | **Pn** | **00 19 08.6** | **-0.6** |
| **P17K** | **Kvichak River** | **4.52** | **231** | | **Pn** | **00 19 09.8** | **0.0** |
| **H19K** | **Roundabout Mou** | **4.52** | **321** | IAML | | 00 20 02.3 | |
| | comp=N,57nm,0.7s | | | | | | |
| H19K | | | | IAML | | 00 20 02.7 | |
| | comp=E,35nm,0.4s | | | | | | |
| **J17K** | **VABM Dome** | **4.53** | **290** | IAML | | 00 20 00.4 | |
| | comp=N,74nm,0.7s | | | | | | |
| J17K | | | | IAML | | 00 20 13.8 | |
| | comp=E,51nm,0.7s | | | | | | |
| **G23K** | **Bananza Creek** | **4.54** | **358** | | **Pn** | **00 19 09.8** | **-0.4** |
| **EGAK** | **Eagle** | **4.58** | **52** | | **Pn** | **00 19 10.2** | **-0.4** |
| EGAK | | | | IAML | | 00 20 24.8 | |
| | comp=E,82nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 00 20 33.6 | |
| | comp=E,77nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **4.62** | **10** | | **Pn** | **00 19 10.9** | **-0.3** |
| **G24K** | **Hadweenzic Riv** | **4.62** | **10** | IAML | | 00 20 31.6 | |
| | comp=E,31nm,0.9s | | | | | | |
| **M16K** | **Timber Creek** | **4.63** | **259** | IAML | | 00 20 03.5 | |
| | comp=N,32nm,0.9s | | | | | | |
| **G21K** | **Allakaket** | **4.66** | **340** | IAML | | 00 20 05.3 | |
| | comp=E,74nm,0.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **4.68** | **200** | Pn | **Pn** | **00 19 11.0** | **-1.0** |
| KDAK | | | | IAML | | 00 20 04.0 | |
| | comp=E,37nm,0.3s | | | | | | |
| **O28M** | **Mount Upton** | **4.72** | **103** | | **Pn** | **00 19 12.4** | **-0.5** |
| **SAMH** | **Samovar Hills** | **4.73** | **112** | | **Pn** | **00 19 12.6** | **-0.3** |
| **N16K** | **Nishlik Lake** | **4.75** | **253** | | **Pn** | **00 19 12.7** | **-0.4** |
| **KVTA** | **Katmai Vly 10** | **4.77** | **219** | | **Pn** | **00 19 13.1** | **-0.2** |
| **FYU** | **Fort Yukon** | **4.78** | **21** | | **Pn** | **00 19 13.8** | **+0.5** |
| **G25K** | **Bearman Lake** | **4.83** | **17** | | **Pn** | **00 19 13.6** | **-0.5** |
| **I27K** | **Kandik River** | **4.90** | **42** | | **Pn** | **00 19 14.9** | **-0.3** |
| **O16K** | **Kokwok River B** | **4.91** | **242** | Pn | **Pn** | **00 19 15.2** | **0.0** |
| O16K | | | | IAML | | 00 20 57.3 | |
| | comp=N,24nm,1.0s | | | | | | |
| **H18K** | **Honhosa River** | **4.91** | **311** | IAML | | 00 20 11.7 | |
| | comp=N,26nm,0.7s | | | | | | |
| H18K | | | | IAML | | 00 20 11.8 | |
| | comp=E,42nm,0.8s | | | | | | |
| **ACHA** | **Angle Creek He** | **4.92** | **218** | Pn | **Pn** | **00 19 15.5** | **+0.1** |
| **PCA** | **Pinnacle** | **4.98** | **111** | | **Pn** | **00 19 15.4** | **-0.8** |
| **ANCK** | **Angle Creek** | **4.98** | **219** | | **Pn** | **00 19 16.0** | **-0.3** |
| **DAWY** | **Dawson** | **4.99** | **63** | | **Pn** | **00 19 16.3** | **0.0** |
| DAWY | | | | IAML | | 00 20 38.4 | |
| | comp=N,40nm,0.6s | | | | | | |
| DAWY | | | | IAML | | 00 20 52.1 | |
| | comp=E,36nm,0.5s | | | | | | |
| **G19K** | **Purcell Mounta** | **5.15** | **324** | IAML | | 00 20 16.8 | |
| | comp=E,24nm,1.2s | | | | | | |
| **M29M** | **Somme Creek** | **5.19** | **82** | Pn | **Pn** | **00 19 19.1** | **0.0** |
| **J16K** | **Anvik River** | **5.19** | **287** | Pn | **Pn** | **00 19 18.5** | **-0.6** |
| J16K | | | | IAML | | 00 20 14.6 | |
| | comp=N,29nm,0.7s | | | | | | |
| J16K | | | | IAML | | 00 20 17.8 | |
| | comp=E,26nm,0.7s | | | | | | |
| **P16K** | **Nushagak River** | **5.22** | **236** | | **Pn** | **00 19 19.4** | **0.0** |
| **F21K** | **Alatna River** | **5.32** | **343** | IAML | | 00 20 20.9 | |
| | comp=E,24nm,0.5s | | | | | | |
| **BCPM** | **Bancas Point** | **5.32** | **111** | | **Pn** | **00 19 19.6** | **-1.3** |
| **BCPM** | **Bancas Point** | **5.32** | **111** | IAML | | 00 20 45.4 | |
| | comp=E,44nm,0.6s | | | | | | |
| BCPM | | | | IAML | | 00 20 46.2 | |
| | comp=N,37nm,1.0s | | | | | | |
| **OHAK** | **Old Harbor** | **5.33** | **202** | P | Pn | 00 19 09.5 | -11 |
| **I17K** | **Unalakleet** | **5.34** | **293** | | **Pn** | **00 19 21.2** | **+0.2** |
| **I17K** | **Unalakleet** | **5.34** | **293** | IAML | | 00 20 22.4 | |
| | comp=N,28nm,0.8s | | | | | | |
| **L29M** | **L29M** | **5.36** | **75** | IAML | | 00 20 52.2 | |
| | comp=E,49nm,1.0s | | | | | | |
| L29M | | | | IAML | | 00 20 52.9 | |
| | comp=N,48nm,1.0s | | | | | | |
| **H27K** | **Steamboat Moun** | **5.36** | **37** | | **Pn** | **00 19 21.0** | **-0.4** |
| **I28M** | **Miner Creek** | **5.37** | **48** | IAML | | 00 20 28.4 | |
| | comp=E,28nm,0.7s | | | | | | |
| I28M | | | | IAML | | 00 20 56.5 | |
| | comp=N,27nm,0.8s | | | | | | |
| **H17K** | **Granite Mounta** | **5.38** | **305** | IAML | | 00 20 19.7 | |
| | comp=N,40nm,0.6s | | | | | | |
| H17K | | | | IAML | | 00 20 39.2 | |
| | comp=E,27nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **5.38** | **25** | | **Pn** | **00 19 21.7** | **+0.1** |
| **F24K** | **Squaw Lake** | **5.39** | **7** | | **Pn** | **00 19 21.7** | **-0.1** |
| **G18K** | **Tagagawik** | **5.45** | **317** | Pn | **Pn** | **00 19 22.4** | **-0.2** |
| **F22K** | **John River** | **5.45** | **349** | | **Pn** | **00 19 22.4** | **-0.2** |
| **N15K** | **Kwethluk River** | **5.48** | **253** | | **Pn** | **00 19 22.5** | **-0.5** |
| **YUK6** | **Outpost Mounta** | **5.50** | **98** | | **Pn** | **00 19 22.7** | **-0.9** |
| **M15K** | **Kasigluk River** | **5.54** | **259** | | **Pn** | **00 19 23.1** | **-0.7** |
| **PNL** | **Peninsula** | **5.57** | **113** | P | **Pn** | **00 19 24.2** | **0.0** |
| **PNL** | **Peninsula** | **5.57** | **113** | | **Pn** | **00 19 23.3** | **-0.9** |
| **K15K** | **Wolf Creek Mou** | **5.59** | **276** | Pn | **Pn** | **00 19 24.2** | **-0.3** |
| **L15K** | **Ungalek Mounta** | **5.65** | **270** | | **Pn** | **00 19 24.4** | **-0.9** |
| **BMAR** | **Burnt Mountain** | **5.67** | **20** | Pn | **Pn** | **00 19 24.9** | **-0.7** |
| **F25K** | **Christian Rive** | **5.67** | **15** | | **Pn** | **00 19 25.4** | **-0.2** |
| **PLK4** | **Peulik 4** | **5.71** | **220** | Pn | **Pn** | **00 19 25.6** | **-0.6** |
| **G27K** | **Doyon Strip** | **5.75** | **33** | | **Pn** | **00 19 26.3** | **-0.5** |
| **F19K** | **Shaleruckik Mo** | **5.85** | **326** | | **Pn** | **00 19 27.7** | **-0.3** |
| **I29M** | **Ogilvie Camp,** | **5.92** | **53** | | **Pn** | **00 19 28.9** | **-0.1** |
| **E24K** | **Your Creek** | **5.92** | **4** | | **Pn** | **00 19 29.0** | **-0.1** |
| **M30M** | **Minto, Yukon** | **5.96** | **81** | | **Pn** | **00 19 29.3** | **-0.3** |
| **F26K** | **Sheenjek River** | **5.98** | **20** | | **Pn** | **00 19 29.8** | **-0.1** |
| **SII** | **Sitkinak Islan** | **6.12** | **205** | P | Pn | 00 19 20.2 | -12 |
| **E19K** | **Redstone River** | **6.21** | **332** | | **Pn** | **00 19 33.4** | **+0.4** |
| **F18K** | **Selawik** | **6.21** | **320** | | **Pn** | **00 19 33.0** | **0.0** |
| **L14K** | **Kuka Creek** | **6.28** | **268** | Pn | **Pn** | **00 19 34.2** | **+0.3** |
| **N14K** | **Kuskokwak Cree** | **6.31** | **254** | | **Pn** | **00 19 33.9** | **-0.4** |
| **P29M** | **Windy Craggy** | **6.32** | **109** | Pn | **Pn** | **00 19 34.2** | **-0.3** |
| **H29M** | **Whitestone** | **6.34** | **46** | | **Pn** | **00 19 34.3** | **-0.4** |
| **J30M** | **Hart River** | **6.41** | **62** | | **Pn** | **00 19 36.0** | **+0.1** |
| **P30M** | **Million Dollar** | **6.45** | **103** | | **Pn** | **00 19 35.6** | **-0.7** |
| **O14K** | **Tigyukauivet M** | **6.45** | **248** | Pn | **Pn** | **00 19 37.2** | **+1.0** |
| **TOLK** | **Toolik Lake Re** | **6.47** | **360** | | **Pn** | **00 19 36.8** | **+0.1** |
| **G16K** | **Koyuk River** | **6.51** | **305** | | **Pn** | **00 19 37.3** | **+0.3** |
| **J14K** | **Nanvaranak Lak** | **6.51** | **281** | Pn | **Pn** | **00 19 37.0** | **0.0** |
| **E21K** | **Killik River** | **6.54** | **346** | | **Pn** | **00 19 37.5** | **0.0** |
| **N31M** | **Braeburn, Yuko** | **6.57** | **90** | | **Pn** | **00 19 37.2** | **-0.7** |
| **I30M** | **Mount Dempster** | **6.60** | **57** | Pn | **Pn** | **00 19 39.9** | **+1.5** |
| **O30N** | **Mendenhall** | **6.61** | **96** | | **Pn** | **00 19 37.6** | **-0.9** |
| **F17K** | **Baldwin Pennin** | **6.62** | **315** | | **Pn** | **00 19 38.5** | **-0.1** |
| **E20K** | **Nigu River** | **6.69** | **338** | | **Pn** | **00 19 40.3** | **+0.7** |
| **F28M** | **Old Crow** | **6.82** | **33** | Pn | **Pn** | **00 19 40.7** | **-0.7** |
| **E27K** | **Coleen River** | **6.88** | **26** | Pn | **Pn** | **00 19 42.7** | **+0.5** |
| **EPYK** | **Eagle Plains** | **6.98** | **48** | | **Pn** | **00 19 44.3** | **+0.7** |
| **D24K** | **Happy Valley** | **7.00** | **2** | Pn | **Pn** | **00 19 45.3** | **+1.6** |
| **G15K** | **Niukluk** | **7.03** | **300** | | **Pn** | **00 19 44.1** | **-0.1** |
| **E18K** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AGRB** | **Hanur-Agry** | **1.53** | **326** | Pn | | **Pg** | **00 25 34.1** | **-0.2** |
| **HYR** | **Heyderabad** | **1.54** | **23** | P | | **Pg** | **00 25 36.5** | **+2.1** |
| HYR | | | | S | | **Sg** | **00 25 59.3** | **+5.0** |
| **SIRN** | **Srnak** | **1.55** | **239** | P | | **Pg** | **00 25 39.0** | **+4.3** |
| SIRN | | | | S | | **Sn** | **00 25 50.5** | **-1.5** |
| **SBZ** | **Shahbuz** | **1.58** | **46** | P | | **Pb** | **00 25 33.8** | **-0.2** |
| SBZ | | | | S | | **Sg** | **00 25 57.6** | **+1.8** |
| **ORD** | **Ordubad** | **1.62** | **67** | P | | **Pb** | **00 25 33.8** | **-0.7** |
| ORD | | | | S | | **Sb** | **00 25 55.4** | **+0.6** |
| **IAZR** | **Azarshahr** | **1.62** | **112** | Pg | | **Pg** | **00 25 34.9** | **-1.1** |
| **GURO** | **Guroymak-BITLI** | **1.64** | **279** | Pn | | **Pg** | **00 25 38.1** | **+1.8** |
| **TASB** | **TASBURUN-IGDIR** | **1.68** | **4** | Pn | | **Pb** | **00 25 35.8** | **+0.2** |
| **VRTB** | **Varto-Mus** | **2.23** | **293** | Pn | | **Pb** | **00 25 45.4** | **+0.4** |
| **SVAN** | **Silvan-Diyarba** | **2.28** | **267** | Pn | | **Pb** | **00 25 47.9** | **-0.7** |
| **KOPR** | **Koprukoy-ERZUR** | **2.42** | **315** | Pn | | **Pb** | **00 25 47.2** | **-1.1** |
| **SENK** | **Senkaya-Erzuru** | **2.63** | **330** | Pn | | **Pb** | **00 25 49.4** | **-2.4** |
| **GDB** | **GEDABAY** | **2.74** | **28** | P | | **Pb** | **00 25 53.6** | **-0.1** |
| GDB | | | | S | | **Sb** | **00 26 28.2** | **+1.1** |
| **BNGB** | **Bingl** | **2.76** | **286** | Pn | | **Pb** | **00 25 53.4** | **-0.6** |

**WEL 03 00:26:15.7±0.3, 38°S±2'×17°8E±', h19km±2km, M3.4/32, ML3.7/32, MLv3.4/32, Error ellipse: s-maj=0.0km s-min=0.0km az=105.7, confirmed, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TKGZ** | **Te Karaka** | **0.08** | **253** | P | Pg | 00 26 19.9 | +0.6 |
| TKGZ | | | | S | Sg | 00 26 23.7 | +1.9 |
| **GWTS** | **Gisborne Waipa** | **0.21** | **185** | P | Pg | 00 26 21.0 | +0.1 |
| **CNGZ** | **Carnagh Statio** | **0.22** | **108** | P | Pg | 00 26 22.8 | +1.8 |
| **GHHS** | **Gisborne Hospi** | **0.23** | **165** | P | Pg | 00 26 21.5 | +0.2 |
| **TWGZ** | **Tauwhareparae** | **0.24** | **7** | P | Pg | 00 26 22.5 | +1.1 |
| TWGZ | | | | S | Sg | 00 26 28.1 | +2.8 |
| **GISS** | **Gisborne 2ZG** | **0.26** | **166** | P | Pg | 00 26 21.9 | +0.3 |
| **GKBS** | **Kaiti Beach** | **0.27** | **165** | P | Pn | 00 26 23.6 | -1.1 |
| **RIGZ** | **Rimuhau** | **0.32** | **206** | P | Pb | 00 26 23.8 | +1.0 |
| RIGZ | | | | S | Sn | 00 26 30.8 | -0.7 |
| **MWZ** | **Matawai** | **0.34** | **284** | P | Pb | 00 26 23.3 | +0.2 |
| MWZ | | | | S | Sb | 00 26 29.0 | +0.9 |
| **RAGZ** | **Rawiri** | **0.42** | **259** | P | Pb | 00 26 25.0 | +0.3 |
| RAGZ | | | | S | Sb | 00 26 32.2 | +1.6 |
| **PUZ** | **Puketiti** | **0.42** | **36** | P | Pb | 00 26 25.7 | +1.0 |
| PUZ | | | | S | Sn | 00 26 33.1 | -0.9 |
| **RUGZ** | **Raukumara Rang** | **0.50** | **335** | P | Pb | 00 26 25.9 | +0.1 |
| RUGZ | | | | S | Sb | 00 26 33.7 | +0.9 |
| **PRGZ** | **Paritu Road** | **0.51** | **185** | P | Pn | 00 26 27.0 | -0.9 |
| **SNGZ** | **Shannon Statio** | **0.60** | **232** | P | Pn | 00 26 28.6 | -0.5 |
| SNGZ | | | | S | Sn | 00 26 38.5 | +0.2 |
| **KNZ** | **Kokohu** | **0.64** | **199** | P | Pg | 00 26 28.7 | +0.3 |
| KNZ | | | | S | Sn | 00 26 39.6 | +0.3 |
| **HAZ** | **Te Kaha** | **0.67** | **349** | P | Pb | 00 26 28.7 | 0.0 |
| **URZ** | **Urewera** | **0.67** | **283** | P | Pg | 00 26 29.0 | +0.1 |
| **MHGZ** | **Mahia Peninsul** | **0.73** | **182** | P | Pg | 00 26 30.4 | +0.2 |
| MHGZ | | | | S | Sn | 00 26 43.0 | +1.3 |
| **RTZ** | **Ruatahuna** | **0.78** | **255** | P | Pg | 00 26 31.2 | +0.2 |
| RTZ | | | | S | Sn | 00 26 43.2 | +0.3 |
| **RAHZ** | **Arahi** | **0.84** | **233** | P | Pn | 00 26 32.6 | +0.2 |
| RAHZ | | | | S | Sn | 00 26 46.0 | +1.8 |
| **WHHZ** | **Waihua** | **0.86** | **220** | P | Pn | 00 26 32.7 | -0.1 |
| **MXZ** | **Matakaoa Point** | **0.90** | **19** | P | Pg | 00 26 33.2 | 0.0 |
| MXZ | | | | S | Sn | 00 26 47.9 | +2.2 |
| **MUGZ** | **Murupara** | **0.92** | **266** | P | Pn | 00 26 33.6 | 0.0 |
| **WHRZ** | **Whale Island** | **0.95** | **306** | P | Pg | 00 26 34.3 | +0.2 |
| **MTHZ** | **Maungataniwha** | **0.97** | **243** | P | Pb | 00 26 33.8 | 0.0 |
| **EDRZ** | **Edgecumbe** | **1.00** | **288** | P | Pg | 00 26 34.9 | -0.1 |
| **WIZ** | **White Island** | **1.07** | **326** | P | Pb | 00 26 35.3 | -0.2 |
| **WSRZ** | **White Island S** | **1.08** | **326** | P | Pb | 00 26 35.4 | -0.4 |
| **MARZ** | **Manawahe** | **1.09** | **293** | P | Pb | 00 26 35.8 | -0.1 |
| **NMHZ** | **Naumai** | **1.12** | **232** | P | Pn | 00 26 35.7 | -0.6 |
| **ARHZ** | **Aropaoanui** | **1.12** | **221** | P | Pn | 00 26 36.2 | -0.1 |
| **RRRZ** | **Republican Roa** | **1.12** | **274** | P | Pb | 00 26 36.8 | +0.3 |
| **TARZ** | **Mount Tarawera** | **1.15** | **279** | P | Pb | 00 26 37.2 | +0.3 |
| **MKRZ** | **Makatiti** | **1.19** | **283** | P | Pb | 00 26 38.0 | +0.3 |
| **OPRZ** | **Ohinepanea** | **1.23** | **297** | P | Pn | 00 26 37.3 | -0.5 |
| **MRHZ** | **Matea Rd** | **1.27** | **250** | P | Pn | 00 26 38.4 | +0.1 |
| **OMRZ** | **Omania** | **1.27** | **284** | P | Pb | 00 26 38.9 | -0.2 |
| **HRRZ** | **Handcock Road** | **1.30** | **271** | P | Pn | 00 26 39.1 | +0.2 |
| **HSRZ** | **Hossack Road** | **1.34** | **274** | P | Pn | 00 26 39.5 | +0.1 |
| **BKZ** | **Black Stump Fm** | **1.36** | **236** | P | Pn | 00 26 39.3 | -0.3 |
| **KARZ** | **Kaharoa** | **1.40** | **286** | P | Pn | 00 26 39.8 | -0.3 |
| **CKHZ** | **Cape Kidnapper** | **1.41** | **208** | P | Pn | 00 26 38.8 | -1.5 |
| **MCHZ** | **McNeill Hill** | **1.41** | **223** | P | Pn | 00 26 39.9 | -0.4 |
| **KWHZ** | **Kaweka Forest** | **1.56** | **229** | P | Pn | 00 26 41.1 | -1.3 |
| **KAHZ** | **Kahuranaki** | **1.61** | **211** | P | Pn | 00 26 41.6 | -1.4 |
| **KMRZ** | **Kaimai** | **1.68** | **289** | P | Pn | 00 26 43.6 | -0.4 |
| **KRHZ** | **Kereru** | **1.73** | **225** | P | Pn | 00 26 43.7 | -1.0 |
| **RATZ** | **Rangitukua** | **1.76** | **255** | P | Pn | 00 26 45.6 | +0.5 |
| **PXZ** | **Pawanui** | **1.82** | **207** | P | Pn | 00 26 44.0 | -1.9 |
| **KATZ** | **Kakaramea** | **1.84** | **252** | P | Pn | 00 26 47.2 | +0.8 |
| **TMVZ** | **Te Maari** | **1.88** | **248** | P | Pn | 00 26 46.7 | -0.2 |
| **ETVZ** | **East Tongariro** | **1.89** | **247** | P | Pn | 00 26 47.5 | +0.6 |
| **TLZ** | **Tolley Road** | **1.89** | **272** | P | Pn | 00 26 46.8 | -0.1 |
| **NTVZ** | **North Tongarir** | **1.90** | **248** | P | Pn | 00 26 47.7 | +0.6 |
| **KRVZ** | **Karewarewa** | **1.92** | **249** | P | Pn | 00 26 48.0 | +0.5 |
| **OTVZ** | **Oturere** | **1.93** | **247** | P | Pn | 00 26 47.8 | +0.2 |
| **NNVZ** | **North Ngauruho** | **1.95** | **248** | P | Pn | 00 26 47.8 | -0.1 |
| **SNVZ** | **South Ngauruho** | **1.96** | **246** | P | Pn | 00 26 47.9 | 0.0 |
| **WTVZ** | **West Tongariro** | **1.97** | **249** | P | Pg | 00 26 52.4 | -1.1 |
| **MOVZ** | **Moawhango** | **1.97** | **239** | P | Pn | 00 26 48.2 | +0.1 |
| **TUVZ** | **Tukino** | **1.98** | **244** | P | Pn | 00 26 49.4 | +1.1 |
| **NGZ** | **Ngauruhoe** | **1.98** | **247** | P | Pn | 00 26 48.5 | +0.2 |
| **WHVZ** | **Whangaehu Hut** | **2.03** | **244** | P | Pn | 00 26 49.9 | +0.9 |
| **COVZ** | **Chateau Observ** | **2.03** | **247** | P | Pg | 00 26 53.7 | -1.0 |
| **MAVZ** | **Matarangi** | **2.04** | **245** | P | Pb | 00 26 52.8 | +0.5 |
| **WNVZ** | **Wahianoa** | **2.04** | **243** | P | Pn | 00 26 49.7 | +0.6 |
| **FWVZ** | **Far West T-bar** | **2.04** | **245** | P | Pn | 00 26 50.3 | +1.1 |
| **TOZ** | **Tahuroa Road** | **2.04** | **289** | P | Pn | 00 26 48.7 | -0.2 |
| **PKVZ** | **Pokaka** | **2.21** | **246** | P | Pg | 00 26 56.8 | -1.2 |
| **TSZ** | **Takapari Road** | **2.25** | **223** | P | Pn | 00 26 49.8 | -2.0 |
| **HIZ** | **Hauiti** | **2.42** | **267** | P | Pn | 00 26 55.1 | +0.8 |
| **KUZ** | **Kuaotunu** | **2.43** | **313** | P | Pb | 00 26 59.7 | +1.0 |
| **MKAZ** | **Moumakai** | **2.56** | **300** | P | Pn | 00 27 01.3 | +0.2 |
| **PRWZ** | **Pori Road** | **2.62** | **215** | P | Pn | 00 26 54.7 | -2.2 |
| **MRZ** | **Mangatainoka R** | **2.89** | **218** | P | Pn | 00 26 57.5 | -3.1 |
| **MHEZ** | **Mangahewa** | **2.91** | **256** | P | Pn | 00 26 60.0 | -0.9 |
| **HOWZ** | **Holdsworth Sta** | **3.11** | **216** | P | Pn | 00 27 00.3 | -3.3 |
| **NEZ** | **North Egmont** | **3.12** | **253** | P | Pn | 00 27 05.8 | +1.9 |
| **PKE** | **Pukeiti** | **3.19** | **255** | P | Pn | 00 27 05.8 | +1.1 |
| **KHEZ** | **Kahui Hut** | **3.19** | **253** | P | Pn | 00 27 06.4 | +1.6 |
| **DSZ** | **Denniston Nort** | **5.76** | **233** | P | Pn | 00 27 41.4 | +1.3 |
| **CTZ** | **Chatham Island** | **6.72** | **144** | P | Pn | 00 27 51.5 | -1.6 |

*BJI **03** 00:28:44.7±0.0, 37°.34N×70°.99E, h104km, mb4.5/23, mB4.6/9*

*IDC **03** 00:28:45.8±0.9, 37°.08N×71°.24E, h92km±5km, mb3.8/21, mbtmp4.2/25, MS2.8/8, Error ellipse: s-maj=17.5km s-min=10.8km az=166.0*

*MOS **03** 00:28:45.6±0.8, 37°.22N×71°.22E, h101km, mb4.5/13, Error ellipse: s-maj=7.1km s-min=3.5km az=77.6*

*NEIC **03** 00:28:46.7±2.0, 37°.21N±0°.05×71°.08E±0°.07, h90km±4km, mb4.5/11, Error ellipse: s-maj=8.8km s-min=6.5km az=109.0*

*NNC **03** 00:28:50.4±7.2, 37°.51N×71°.15E, h168km±114km, mb3.8, mpv4.8, Error ellipse: s-maj=70.5km s-min=45.5km az=175.0*

**ISC 03 00:28:45.5±0.4, 37°.11N±0°.04×71°.21E±0°.04, h88km±3km, h88km:pP-P, n419, σ1s36/452, mb4.4/53, 11C-8D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GAR** | **Garm** | **2.02** | **340** | Pn | **Pn** | **00 29 18.1** | **+0.1** |
| GAR | | | | Sn | **Sn** | **00 29 41.0** | **-1.7** |
| **CHGR** | **Chuyangaron** | **2.24** | **314** | Pn | **Pn** | **00 29 20.0** | **-0.9** |
| CHGR | | | | Sn | **Sn** | **00 29 45.5** | **-2.5** |
| **CHGR** | **Chuyangaron** | **2.24** | **314** | PN | **Pn** | **00 29 20.0** | **-0.9** |
| CHGR | | | | | | 00 29 45.5 | |
| **SIMJ** | **Simiganj** | **2.33** | **312** | Pn | **Pn** | **00 29 21.1** | **-1.0** |
| SIMJ | | | | Sn | **Sn** | **00 29 46.8** | **-3.3** |
| **DRK** | **Karamyk** | **2.42** | **11** | | **Pn** | **00 29 24.1** | **+0.6** |
| **DRK** | **Karamyk** | **2.42** | **11** | PN | **Pn** | **00 29 24.1** | **+0.6** |
| **BTK** | **Batken** | **2.96** | **354** | Pn | **Pn** | **00 29 30.4** | **-0.2** |
| **BTK** | **Batken** | **2.96** | **354** | PN | **Pn** | **00 29 30.4** | **-0.2** |
| **KBL** | **Kabul** | **3.10** | **215** | Pn | **Pn** | **00 29 35.5** | **+2.9** |
| **KBL** | **Kabul** | **3.10** | **215** | PN | **Pn** | **00 29 35.5** | **+2.9** |
| **OHH** | **Osh** | **3.63** | **19** | PN | **Pn** | **00 29 41.1** | **+1.5** |
| **NIL** | **Nilore** | **3.83** | **154** | | **Pn** | **00 29 45.7** | **+3.4** |
| **NIL** | **Nilore** | **3.83** | **154** | PN | **Pn** | **00 29 45.7** | **+3.4** |
| **TRKS** | **Terek-Say** | **4.42** | **359** | PN | **Pn** | **00 29 49.0** | **-1.3** |
| **ARSB** | **Arslanbob** | **4.43** | **18** | | **Pn** | **00 29 50.6** | **+0.2** |
| **ARSB** | **Arslanbob** | **4.43** | **18** | PN | **Pn** | **00 29 50.7** | **+0.2** |
| **KSH** | **Kashi** | **4.46** | **56** | P | **Pn** | **00 29 48.9** | **-1.9** |
| KSH | | | | S | **Sn** | **00 30 36.0** | **-5.5** |
| **ARLS** | **Aral** | **5.33** | **26** | PN | **Pn** | **00 30 02.0** | **-0.7** |
| ARLS | | | | pmax | pmax | | |
| | comp=Z,25nm,0.7s | | | | | | |
| **JMU** | **Jammu** | **5.33** | **144** | *e*P | **Pn** | **00 30 04.8** | **+2.2** |
| JMU | | | | *e*S | **Sn** | **00 31 01.5** | **-1.2** |
| JMU | | | | IAML | | 00 31 05.8 | |
| | comp=E,610nm,0.5s | | | | | | |
| JMU | | | | IAML | | 00 31 07.0 | |
| | comp=N,534nm,0.6s | | | | | | |
| **CHM** | **Chimkent** | **5.35** | **347** | *e*P | **Pn** | **00 30 03.4** | **+0.5** |
| | baz=346 | | | | | | |
| **CHM** | **Chimkent** | **5.35** | **347** | *e*PN | **Pn** | **00 30 03.4** | **+0.5** |
| **AML** | **Almayashu** | **5.37** | **20** | P | **Pn** | **00 30 04.3** | **+0.8** |
| | SNR=181 | | | | | | |
| **NRN** | **Naryn** | **5.70** | **39** | Pn | **Pn** | **00 30 08.0** | **+0.1** |
| **NRN** | **Naryn** | **5.70** | **39** | PN | **Pn** | **00 30 08.0** | **+0.1** |
| **UCH** | **Uchtor** | **5.71** | **25** | P | **Pn** | **00 30 09.0** | **+0.8** |
| | SNR=102 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.89** | **19** | P | **Pn** | **00 30 11.1** | **+0.8** |
| | SNR=98 | | | | | | |
| **THN** | **Thein Dam** | **5.96** | **140** | *e*P | **Pn** | **00 30 12.1** | **+1.0** |
| THN | | | | *e*S | **Sn** | **00 31 17.9** | **-0.1** |
| THN | | | | IAML | | 00 31 21.5 | |
| | comp=N,304nm,0.4s | | | | | | |
| THN | | | | IAML | | 00 31 22.2 | |
| | comp=E,388nm,0.5s | | | | | | |
| **BRLS** | **Boroldoy** | **6.01** | **350** | *e*P | **Pn** | **00 30 08.8** | **-3.0** |
| | baz=348 | | | | | | |
| **BRLS** | **Boroldoy** | **6.01** | **350** | *e*PN | **Pn** | **00 30 08.8** | **-3.0** |
| **KK31** | **Karatay Array** | **6.01** | **355** | Pn | **Pn** | **00 30 11.9** | **+0.1** |
| **KK31** | **Karatay Array** | **6.01** | **355** | ⇓P | **Pn** | **00 30 11.7** | **-0.2** |
| | comp=E,4.0nm,0.2s,baz=176,slow=12,SNR=210 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **00 31 14.8** | **-4.5** |
| | comp=E,35nm,0.3s,baz=184,slow=21,SNR=8.3 | | | | | | |
| **KK31** | **Karatay Array** | **6.01** | **355** | PN | **Pn** | **00 30 11.7** | **-0.2** |
| **KKAR** | **Karatay Array** | **6.01** | **355** | Pn | **Pn** | **00 30 11.9** | **+0.1** |
| **KKAR** | **Karatay Array** | **6.01** | **355** | Pn | **Pn** | **00 30 11.8** | **-0.1** |
| **KKAR** | **Karatay Array** | **6.01** | **355** | PN | **Pn** | **00 30 11.8** | **-0.1** |
| **AAK** | **Ala-Archa** | **6.08** | **24** | P | **Pn** | **00 30 14.1** | **+1.2** |
| | SNR=41 | | | | | | |
| **AAK** | **Ala-Archa** | **6.08** | **24** | Pn | **Pn** | **00 30 13.4** | **+0.6** |
| **AAK** | **Ala-Archa** | **6.08** | **24** | P | **Pn** | **00 30 14.0** | **+1.2** |
| | comp=E,50nm,0.4s,baz=206,slow=11,SNR=50 | | | | | | |
| AAK | | | | S | **Sn** | **00 31 20.8** | **-0.3** |
| | comp=E,40nm,0.6s,baz=163,slow=19,SNR=9.1 | | | | | | |
| AAK | | | | LR | LR | 00 32 45.2 | |
| | comp=E,78nm,20.1s,baz=225,slow=39 | | | | | | |
| **AAK** | **Ala-Archa** | **6.08** | **24** | ⇓P | **Pn** | **00 30 13.8** | **+1.0** |
| | comp=E,49nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **00 31 21.0** | **-0.1** |
| | comp=E,76nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **6.08** | **24** | *ce*PN | **Pn** | **00 30 13.9** | **+1.0** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,72nm,0.8s | | | | | | |
| **KBK** | **Karagaybulak** | **6.25** | **26** | P | **Pn** | **00 30 16.9** | **+1.7** |
| | SNR=14 | | | | | | |
| **FRU1** | **Bishkek** | **6.27** | **24** | | **Pn** | **00 30 16.1** | **+0.6** |
| **FRU1** | **Bishkek** | **6.27** | **24** | PN | **Pn** | **00 30 16.1** | **+0.6** |
| **DHRM** | **DHARAMSHALA** | **6.41** | **138** | *e*P | **Pn** | **00 30 14.4** | **+0.8** |
| DHRM | | | | *e*S | **Sn** | **00 31 31.8** | **+2.4** |
| DHRM | | | | IAML | | 00 31 32.9 | |
| | comp=E,500nm,0.4s | | | | | | |
| DHRM | | | | IAML | | 00 31 35.9 | |
| | comp=E,696nm,0.5s | | | | | | |
| **ULHL** | **Ulahol** | **6.44** | **36** | P | **Pn** | **00 30 19.9** | **+2.0** |
| | SNR=7.8 | | | | | | |
| **CHMS** | **Chumysh** | **6.48** | **24** | P | **Pn** | **00 30 19.4** | **+1.1** |
| | SNR=122 | | | | | | |
| **CHMS** | **Chumysh** | **6.48** | **24** | ⇓P | **Pn** | **00 30 19.2** | **+0.9** |
| | comp=E,180nm,0.6s | | | | | | |
| CHMS | | | | ⇓S | **Sn** | **00 31 28.6** | **-2.1** |
| | comp=E,27nm,0.7s | | | | | | |
| **CHMS** | **Chumysh** | **6.48** | **24** | PN | **Pn** | **00 30 19.2** | **+0.9** |
| **BOOM** | **Boomskoye usch** | **6.50** | **33** | PN | **Pn** | **00 30 19.7** | **+1.1** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,47nm,1.3s | | | | | | |
| **USP** | **Ospenovka** | **6.65** | **21** | P | **Pn** | **00 30 21.0** | **+0.4** |
| | SNR=74 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.71** | **29** | P | **Pn** | **00 30 22.8** | **+1.2** |
| | SNR=38 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.71** | **29** | ⇑P | **Pn** | **00 30 22.6** | **+1.0** |
| | comp=Z,101nm,0.6s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **00 31 40.0** | **+3.3** |
| | comp=Z,20nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.71** | **29** | PN | **Pn** | **00 30 22.6** | **+1.0** |
| TKM2 | | | | S | **Sn** | **00 31 39.9** | **+3.3** |
| **SGDS** | **Sogindy** | **6.86** | **21** | *e*P | **Pn** | **00 30 23.6** | **+0.1** |
| | comp=Z,11nm,0.6s,baz=21 | | | | | | |
| **SGDS** | **Sogindy** | **6.86** | **21** | *e*PN | **Pn** | **00 30 23.5** | **+0.1** |
| SGDS | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **6.88** | **46** | PN | **Pn** | **00 30 24.6** | **+0.5** |
| TARG | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| **BHK** | **Bhakra** | **7.13** | **141** | *e*P | **Pn** | **00 30 28.6** | **+1.4** |
| BHK | | | | *e*S | **Sn** | **00 31 43.8** | **-2.8** |
| BHK | | | | IAML | | 00 31 48.5 | |
| | comp=N,199nm,0.7s | | | | | | |
| BHK | | | | IAML | | 00 31 49.0 | |
| | comp=E,272nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **7.38** | **35** | *e*P | **Pn** | **00 30 30.9** | **+0.1** |
| | baz=35 | | | | | | |
| TNSS | | | | *e*S | **Sn** | **00 31 52.5** | **-0.6** |
| | baz=35 | | | | | | |
| **TNSS** | **Tian-Shan** | **7.38** | **35** | *e*PN | **Pn** | **00 30 30.9** | **+0.1** |
| **AAA** | **Alma-Ata** | **7.50** | **34** | *e*P | **Pn** | **00 30 32.5** | **+0.3** |
| | baz=34 | | | | | | |
| **AAA** | **Alma-Ata** | **7.50** | **34** | *e*PN | **Pn** | **00 30 32.4** | **+0.3** |
| **MDOK** | **Medeo** | **7.52** | **35** | *e*P | **Pn** | **00 30 32.6** | **0.0** |
| | baz=35 | | | | | | |
| **MDOK** | **Medeo** | **7.52** | **35** | ⇓P | **Pn** | **00 30 33.5** | **+0.9** |
| | comp=E,22nm,0.5s | | | | | | |
| MDOK | | | | ⇑S | **Sn** | **00 31 49.0** | **-7.4** |
| | comp=E,14nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **7.52** | **35** | PN | **Pn** | **00 30 33.5** | **+0.9** |
| **PRZ** | **Przheval'sk** | **7.71** | **44** | Pn | **Pn** | **00 30 36.5** | **+1.3** |
| **PRZ** | **Przheval'sk** | **7.71** | **44** | PN | **Pn** | **00 30 36.5** | **+1.3** |
| **SMLA** | **Simla** | **7.74** | **139** | *e*P | **Pn** | **00 30 35.8** | **+0.3** |
| SMLA | | | | *e*S | **Sn** | **00 31 59.1** | **-2.4** |
| SMLA | | | | IAML | | 00 32 02.0 | |
| | comp=E,254nm,0.7s | | | | | | |
| SMLA | | | | IAML | | 00 32 04.8 | |
| | comp=E,178nm,0.6s | | | | | | |
| **HRA** | **Herat** | **7.77** | **252** | Pn | **Pn** | **00 30 34.4** | **-1.7** |
| **KLP** | **Kalpa** | **8.05** | **132** | *e*P | **Pn** | **00 30 40.8** | **+0.7** |
| KLP | | | | *e*S | **Sn** | **00 32 04.2** | **-5.4** |
| KLP | | | | IAML | | 00 32 10.0 | |
| | comp=E,377nm,0.8s | | | | | | |
| KLP | | | | IAML | | 00 32 14.9 | |
| | comp=N,326nm,0.4s | | | | | | |
| **SATY** | **Saty** | **8.11** | **41** | *e*P | **Pn** | **00 30 40.8** | **+0.2** |
| | baz=41 | | | | | | |
| **SATY** | **Saty** | **8.11** | **41** | *e*PN | **Pn** | **00 30 40.8** | **+0.2** |
| **UZB** | **Uzynbulak** | **8.50** | **42** | *e*P | **Pn** | **00 30 45.8** | **-0.1** |
| | baz=43 | | | | | | |
| **UZB** | **Uzynbulak** | **8.50** | **42** | *e*PN | **Pn** | **00 30 45.8** | **-0.1** |
| **KPKS** | **Kokpek** | **8.54** | **40** | *e*P | **Pn** | **00 30 46.1** | **-0.4** |
| | baz=40 | | | | | | |
| **KPKS** | **Kokpek** | **8.54** | **40** | *e*PN | **Pn** | **00 30 46.0** | **-0.4** |
| **ARXS** | **Arharly** | **8.70** | **33** | *e*PN | **Pn** | **00 30 47.4** | **-1.1** |
| **SHLS** | **Shalkode** | **8.74** | **44** | *e*P | **Pn** | **00 30 52.3** | **+3.1** |
| | baz=45 | | | | | | |
| **SHLS** | **Shalkode** | **8.74** | **44** | *e*PN | **Pn** | **00 30 52.3** | **+3.1** |
| **DDI** | **Dehra Dun** | **8.85** | **138** | *e*P | **Pn** | **00 30 52.1** | **+1.4** |
| DDI | | | | *e*S | **Sn** | **00 32 27.6** | **-1.0** |
| **TDK** | **Taldyqorghan** | **9.58** | **32** | *e*P | **Pn** | **00 31 00.1** | **-0.4** |
| | baz=32 | | | | | | |
| **TDK** | **Taldyqorghan** | **9.58** | **32** | *e*P | **Pn** | **00 31 00.0** | **-0.4** |
| **NDI** | **New Delhi** | **9.80** | **147** | *e*P | **Pn** | **00 31 04.2** | **+0.7** |
| NDI | | | | *e*S | **Sn** | **00 32 46.1** | **-5.6** |
| **NPLP** | **NPLP New Delhi** | **9.82** | **148** | *e*P | **Pn** | **00 31 04.0** | **+0.2** |
| NPLP | | | | *e*S | **Sn** | **00 32 47.6** | **-4.6** |
| **KUDL** | **Kundal** | **9.98** | **152** | *e*P | **Pn** | **00 31 04.5** | **-1.5** |
| KUDL | | | | *e*S | Sn | 00 32 47.2 | -9.0 |
| KUDL | | | | IAML | | 00 32 52.6 | |
| | comp=E,55nm,1.0s | | | | | | |
| KUDL | | | | IAML | | 00 32 57.1 | |
| | comp=N,24nm,0.3s | | | | | | |
| **PTH** | **Pithoragarh** | **10.65** | **132** | *e*P | **Pn** | **00 31 14.0** | **-1.3** |
| PTH | | | | IAML | | 00 33 15.1 | |
| | comp=E,41nm,0.7s | | | | | | |
| PTH | | | | IAML | | 00 33 16.6 | |
| | comp=N,30nm,0.3s | | | | | | |
| **LGTI** | **Lohaghat** | **10.74** | **133** | *e*P | **Pn** | **00 31 13.8** | **-2.5** |
| LGTI | | | | *e*S | Sn | 00 33 05.5 | -9.3 |
| LGTI | | | | IAML | | 00 33 10.3 | |
| | comp=E,61nm,0.6s | | | | | | |
| LGTI | | | | IAML | | 00 33 11.6 | |
| | comp=N,77nm,0.4s | | | | | | |
| **AJM** | **Ajmer** | **10.99** | **164** | *e*P | **Pn** | **00 31 18.6** | **-1.2** |
| AJM | | | | *e*S | Sn | 00 33 10.2 | -11 |
| AJM | | | | IAML | | 00 33 21.7 | |
| | comp=N,16nm,0.8s | | | | | | |
| AJM | | | | IAML | | 00 33 31.1 | |
| | comp=E,19nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **12.57** | **36** | | **Pn** | **00 31 39.4** | **-1.5** |
| **MAKZ** | **Makanchi** | **12.57** | **36** | P | **Pn** | **00 31 39.4** | **-1.5** |
| **MK31** | **Makanchi Array** | **12.71** | **37** | Pn | **Pn** | **00 31 41.5** | **-1.2** |
| **MK31** | **Makanchi Array** | **12.71** | **37** | P | **Pn** | **00 31 41.4** | **-1.4** |
| | comp=E,7.5nm,0.7s,baz=221,slow=13,SNR=49 | | | | | | |
| **MK31** | **Makanchi Array** | **12.71** | **37** | *ce*P | **Pn** | **00 31 42.1** | **-0.7** |
| **MKAR** | **Makanchi Array** | **12.71** | **37** | Pn | **Pn** | **00 31 41.6** | **-1.2** |
| **MKAR** | **Makanchi Array** | **12.71** | **37** | P | **Pn** | **00 31 41.2** | **-1.6** |
| | comp=E,8.0nm,0.7s,baz=219,slow=15,SNR=66 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.71** | **37** | P | **Pn** | **00 31 41.6** | **-1.2** |
| **JHNI** | **Jhansi** | **13.18** | **150** | *e*P | **Pn** | **00 31 47.2** | **-2.0** |
| JHNI | | | | *e*S | Sn | 00 34 03.3 | -11 |
| JHNI | | | | IAML | | 00 34 10.3 | |
| | comp=N,12nm,0.4s | | | | | | |
| JHNI | | | | IAML | | 00 34 11.8 | |
| | comp=E,22nm,0.2s | | | | | | |
| **WMQ** | **Urumqi** | **14.22** | **57** | *e*P | **P** | **00 32 06.1** | **-1.3** |
| **ZSN** | **Zaisan** | **14.44** | **40** | *e*P | **Pn** | **00 32 05.8** | **+0.3** |
| | baz=40 | | | | | | |
| **ZSN** | **Zaisan** | **14.44** | **40** | *e*P | **Pn** | **00 32 05.7** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **14.50** | **19** | P | **Pn** | **00 32 03.4** | **-2.7** |
| | comp=E,2.2nm,0.7s,baz=209,slow=12,SNR=9.4 | | | | | | |
| **KURK** | **Kurchatov** | **14.61** | **19** | Pn | **Pn** | **00 32 04.2** | **-3.3** |
| **KURK** | **Kurchatov** | **14.61** | **19** | *ce*P | **Pn** | **00 32 04.9** | **-2.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **AB31** | **Akbulak array** | **14.64** | **330** | P | **Pn** | **00 32 04.2** | **-3.8** |
| | comp=Z,5.3nm,0.5s,baz=139,slow=13,SNR=145 | | | | | | |
| **AB31** | **Akbulak array** | **14.64** | **330** | P | **Pn** | **00 32 04.2** | **-3.8** |
| **ABKAR** | **Akbulak array** | **14.64** | **330** | Pn | **Pn** | **00 32 04.3** | **-3.7** |
| **ABKAR** | **Akbulak array** | **14.64** | **330** | Pn | **Pn** | **00 32 04.2** | **-3.7** |
| **BHPL** | **Bhopal** | **14.82** | **157** | *ex* | **P** | **00 32 16.0** | **+1.8** |
| BHPL | | | | *e*S | Sn | 00 34 42.6 | -11 |
| **NRDN** | **NARMADA NAGAR** | **15.24** | **159** | *e*P | **Pn** | **00 32 16.3** | **+0.6** |
| NRDN | | | | *ex* | x | 00 34 59.3 | |
| **BVA0** | **Borovoye Array** | **15.93** | **358** | ⇓P | **Pn** | **00 32 22.1** | **-2.2** |
| | comp=Z,8.6nm,0.8s,baz=158,slow=13,SNR=39 | | | | | | |
| **BVA0** | **Borovoye Array** | **15.93** | **358** | P | **Pn** | **00 32 22.8** | **-1.5** |
| **BRVK** | **Borovoye** | **15.96** | **358** | Pn | **Pn** | **00 32 22.2** | **-2.5** |
| BRVK | | | | IAmb | IAmb | 00 32 27.4 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **15.96** | **358** | *ce*P | **Pn** | **00 32 22.9** | **-1.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.34** | **329** | P | **Pn** | **00 32 28.8** | **-0.7** |
| | comp=Z,27nm,0.4s,baz=136,slow=8.4,SNR=56 | | | | | | |
| AKTO | | | | S | Sn | 00 35 13.6 | -17 |
| | comp=Z,8.9nm,0.

comp=Z,12nm,20.9s,baz=200,slow=39
**HHC Hu-ho-hao-te 31.40 71** *e*P P 00 34 58.9 +0.7
HHC pmax pmax
comp=Z,22nm,0.5s
HHC pmax pmax
comp=Z,71nm,4.7s
**AK09 Malin Array Si 32.65 308** P P 00 35 09.1 +0.3
**AKASG Malin Array Be 32.70 308** P P 00 35 09.1 -0.2
comp=Z,0.6nm,0.4s,baz=82,slow=7.3,SNR=4.3
comp=Z,0.6nm,0.4s
**AK05 Malin Array Si 32.70 308** P P 00 35 09.4 +0.1
**BOD Bodaibo 34.78 40** *e*P P 00 35 27.5 +0.3
BOD pmax pmax
comp=Z,6.0nm,1.1s
**RNPP5 Staryi Chortor 34.86 309** P P 00 35 27.8 -0.2
**JOF Joensuu 35.43 330** *e*P P 00 35 33.7 +1.0
**ARBE Arbavere 36.47 322** *e*P P 00 35 42.4 +0.7
**FINES FINESS Array B 37.07 326** P P 00 35 47.3 +0.6
comp=Z,3.7nm,0.4s,baz=120,slow=9.3,SNR=73
comp=Z,3.7nm,0.4s
**MTSE Matsula 37.36 321** *e*P P 00 35 49.8 +0.7
**MEF Metsahovi 37.47 323** *e*P P 00 35 50.8 +0.7
**KEF Keuruu 37.86 326** *e*P P 00 35 54.1 +0.7
**NIE Niedzica 38.36 305** P P 00 35 59.6 +1.8
**NIE Niedzica 38.36 305** P P 00 35 59.6 +1.8
comp=Z,2.4nm,1.2s
**VAF Ylistaro 39.11 327** *e*P P 00 36 04.4 +0.6
**NJ2 Nanjing 39.23 83** *e*P P 00 36 06.1 +0.8
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
**VADS Vadso 39.81 339** *e*P P 00 36 10.4 +0.9
**ARCES ARCESS Array B 40.65 337** P P 00 36 16.9 +0.4
comp=Z,1.4nm,0.4s,baz=120,slow=8.6,SNR=27
ARCES pP pP 00 36 39.0 +0.8
comp=Z,2.5nm,0.6s,baz=104,slow=7.6,SNR=3.5
ARCES LR LR 00 53 45.1
comp=Z,27nm,18.9s,baz=61,slow=37
comp=Z,1.4nm,0.4s
**VRAC Vranov 40.78 305** LR LR 00 55 00.9
comp=Z,15nm,18.8s,baz=118,slow=39
**KTK1 Kautokeino 41.13 336** *e*P P 00 36 20.6 +0.1
KTK1 IAmb IAmb 00 36 24.7
comp=Z,78nm,1.8s
**TREC Trest 41.51 305** P P 00 36 23.0 -0.8
TREC pmax pmax
comp=Z,6.0nm,2.3s
**HAMF Hammerfest 41.72 338** *e*P P 00 36 26.4 +1.1
HAMF IAmb IAmb 00 36 27.8
comp=Z,49nm,1.4s
**HEH HeiHe 41.75 53** *e*P P 00 36 26.6 +0.8
HEH pmax pmax
comp=Z,16nm,0.8s
**BRG Berggiesshubel 42.38 308** Amp 00 36 33.4
comp=Z,2.2nm,0.7s
**BRG Berggiesshubel 42.38 308** *e*P P 00 36 32.0 +1.1
**HFS Hagfors 42.69 321** P P 00 36 33.7 +0.4
comp=Z,4.0nm,0.4s,baz=103,slow=11,SNR=42
HFS pP pP 00 36 56.1 +0.9
comp=Z,5.3nm,0.6s,baz=98,slow=11,SNR=6.9
comp=Z,4.0nm,0.4s
**GERES GERESS Array B 42.72 305** P P 00 36 34.7 +0.9
comp=Z,0.2nm,0.5s,baz=76,slow=8.2,SNR=1.6
comp=Z,0.2nm,0.5s
**TRO Tromso 42.78 336** *e*P P 00 36 35.3 +1.4
TRO IAmb IAmb 00 36 37.5
comp=Z,36nm,1.4s
**CLL Collm 42.94 308** *e*P P 00 36 35.0 -0.4
CLL *e*PP PP 00 38 16.0 -0.5
**CLL Collm 42.94 308** *e*P P 00 36 35.0 -0.4
**FAUS Fauske 43.34 332** *e*P P 00 36 39.0 +0.6
FAUS IAmb IAmb 00 36 39.6
comp=Z,15nm,1.0s
**YAK Yakutsk 43.38 36** *e*P P 00 36 38.6 -0.2
YAK pmax pmax
comp=Z,14nm,0.9s
**STEI Steigen 43.51 333** *e*P P 00 36 40.1 +0.4
STEI IAmb IAmb 00 36 40.9
comp=Z,8.2nm,0.9s
**NC602 NORSAR Array S 43.81 322** *e*P P 00 36 42.4 +0.1
NC602 IAmb IAmb 00 36 42.9
comp=Z,8.1nm,1.0s
**NORES NORESS Array B 43.81 322** P P 00 36 42.5 +0.2
**NC303 NORSAR Array S 43.94 323** P P 00 36 43.9 +0.6
NC303 IAmb IAmb 00 36 44.9
comp=Z,11nm,0.8s
**KONS Konsvik 43.96 331** IAmb IAmb 00 36 43.6
KONS *e*P P 00 36 44.0 +0.6
**MDJ Mudanjiang 43.97 61** P P 00 36 42.5 -1.3
MDJ pmax pmax
comp=Z,7.0nm,0.7s
MDJ pmax pmax
comp=Z,61nm,6.1s
**STOK Stokkvaagen 43.97 330** *e*P P 00 36 43.4 0.0
STOK IAmb IAmb 00 36 48.0
comp=Z,77nm,2.0s
**NB2 NORSAR Subarra 44.00 323** P P 00 36 43.7 -0.1
comp=Z,4.3nm,0.7s,baz=93,slow=7.9
**NB2 NORSAR Subarra 44.00 323** P P 00 36 43.7 -0.1
baz=93,slow=7.9
**NB2 NORSAR Subarra 44.00 323** P P 00 36 41.4 -2.4
**NOA NORSAR Array B 44.00 323** P P 00 36 43.7 -0.1
comp=Z,4.1nm,0.7s,baz=95,slow=7.8,SNR=31
NOA pP pP 00 37 05.6 -0.3
comp=Z,1.6nm,0.7s,baz=96,slow=8.0,SNR=4.4
NOA sP sP 00 37 16.3 -0.1
comp=Z,1.5nm,0.6s,baz=96,slow=8.0,SNR=4.3
comp=Z,4.1nm,0.7s
**NSS Namsos 44.07 328** IAmb IAmb 00 36 44.7
comp=Z,7.5nm,1.0s
NSS *e*P P 00 36 45.0 +0.7
**LOF Lofoten 44.18 333** *e*P P 00 36 45.3 +0.2
LOF IAmb IAmb 00 36 48.0
comp=Z,76nm,2.1s
**NC204 NORSAR Array S 44.23 323** P P 00 36 46.0 +0.3
NC204 IAmb IAmb 00 36 46.6
comp=Z,5.4nm,0.6s
**HOPEN Hopen 44.45 346** *e*P P 00 36 50.0 +2.9
**KSRS Korea Array 44.53 72** P P 00 36 48.1 -0.2
comp=Z,0.4nm,0.3s,baz=281,slow=7.8,SNR=4.1
comp=Z,0.4nm,0.3s
**TBLU Trondheim 44.65 326** *e*P P 00 36 49.1 +0.2
TBLU IAmb IAmb 00 36 49.4
comp=Z,5.5nm,0.9s
**BJO1 Bjornoya 44.74 342** *e*P P 00 36 50.3 +0.8
**DOMB Dombas 45.10 324** *e*P P 00 36 53.0 +0.4
**TIXI Tiksi 45.15 22** *ce*P P 00 36 52.2 -0.6
TIXI pmax pmax
comp=Z,7.0nm,0.8s
**USRK Ussuriysk Ar. 45.73 61** P P 00 36 57.2 -0.6
comp=Z,1.5nm,0.6s,baz=259,slow=8.1,SNR=2.6
comp=Z,1.5nm,0.6s
**SPITS Spitsbergen Ar 46.94 347** P P 00 37 07.8 +1.0
comp=Z,6.5nm,0.6s,baz=114,slow=12,SNR=5.4
comp=Z,6.5nm,0.6s
**KEST Kesra 49.00 288** P P 00 37 24.6 +1.3
comp=Z,1.7nm,0.5s,baz=331,slow=4.9,SNR=9.7
comp=Z,1.7nm,0.5s
**EKA Eskdalemuir Ar 51.97 316** P P 00 37 44.7 -0.5
comp=Z,1.8nm,0.9s,baz=92,slow=8.7,SNR=4.3
comp=Z,1.8nm,0.9s
**DAG Danmarks Havn 54.20 344** P P 00 38 02.2 +0.9
DAG pmax pmax
comp=Z,14nm,0.8s
**ESDC Sonseca Array 57.32 298** P P 00 38 24.5 +0.2
comp=Z,2.2nm,0.6s,baz=55,slow=7.5,SNR=27
ESDC pP pP 00 38 47.0 -0.1
comp=Z,0.4nm,0.3s,baz=56,slow=7.0,SNR=2.9
comp=Z,2.2nm,0.6s
**BILL Bilibino 57.99 26** *e*P P 00 38 28.3 -0.2
BILL *e**PP pP 00 38 52.6 +1.2
BILL *e**SP sP 00 39 03.6 +2.0
BILL *e* 00 39 18.8
BILL *e* 00 40 38.5
BILL pmax pmax
comp=Z,9.0nm,1.0s
**SUMG Summit 60.54 341** P P 00 38 48.1 +1.6
**SUMG Summit 60.54 341** P P 00 38 48.1 +1.6
SUMG pmax pmax
comp=Z,9.0nm,0.7s
**TORD Torodi Ar. Bea 65.90 268** P P 00 39 21.5 -0.8
comp=Z,1.4nm,0.5s,baz=48,slow=6.4,SNR=36
TORD pP pP 00 39 44.1 -1.3
comp=Z,0.5nm,0.5s,baz=49,slow=6.1,SNR=2.9
comp=Z,1.4nm,0.5s
**A19K Wainwright 66.54 17** P P 00 39 25.4 0.0
baz=317
**A21K Barrow 66.69 15** P P 00 39 26.1 -0.2
baz=320
**C16K Lisburne Hills 66.83 20** P P 00 39 27.7 +0.4
baz=314
**B18K Kokolik River 66.97 18** P P 00 39 28.8 +0.5
baz=316
**C17K DeLong Mountai 67.26 19** P P 00 39 30.5 +0.4
baz=315
**A22K Sinclair Lake 67.27 15** P P 00 39 30.2 +0.1
baz=321
**B20K Meade River 67.58 16** P P 00 39 32.1 +0.1
baz=320
**C18K Utukok River 67.64 18** P P 00 39 32.4 -0.2
baz=317
**C19K Lookout Ridge 67.70 17** P P 00 39 33.4 +0.4
baz=318
**D17K Noatak River 67.84 20** P P 00 39 34.3 +0.6
baz=316,SNR=5.5
**GAMB Gambell 67.89 25** P P 00 39 34.0 0.0
baz=310
**TNA Tin City 67.94 23** P P 00 39 34.5 +0.1
baz=312
**B21K Ikpikpuk River 68.44 16** P P 00 39 37.8 +0.4
baz=322
**F14K Arctic Creek 68.48 22** P P 00 39 38.1 +0.3
baz=314
**D19K Kuna River 68.52 17** P P 00 39 38.6 +0.6
baz=320,SNR=6.0
**E17K Hotham Inlet 68.63 20** P P 00 39 39.2 +0.5
baz=317
**E18K Tukpahlearik C 68.70 19** P P 00 39 39.2 +0.1
baz=318
**D20K Etivluk River 68.70 17** P P 00 39 39.4 +0.2
baz=321
**C21K Knifeblade Rid 68.77 16** P P 00 39 39.8 +0.2
baz=322
**F15K North Star Dit 68.82 22** P P 00 39 40.6 +0.6
baz=315
**C23K Itkillik River 69.09 14** P P 00 39 42.1 +0.6
baz=325
**E20K Nigu River 69.16 17** P P 00 39 42.6 +0.6
baz=321,SNR=8.0
**F17K Baldwin Pennin 69.25 20** P P 00 39 43.1 +0.6
baz=318
**D22K Ayikyak River 69.45 16** P P 00 39 44.3 +0.6
baz=324
**G15K Niukluk 69.51 22** P P 00 39 44.9 +0.8
baz=316
**E21K Killik River 69.52 16** P P 00 39 44.4 +0.2
baz=323
**E19K Redstone River 69.53 18** P P 00 39 45.0 +0.7
baz=320
**C24K Franklin Bluff 69.56 14** P P 00 39 45.1 +0.7
baz=327
**F18K Selawik 69.56 19** P P 00 39 45.0 +0.6
baz=319,SNR=5.3
**G16K Koyuk River 69.71 21** P P 00 39 46.1 +0.7
baz=317
**D23K Nanushuk River 69.80 15** P P 00 39 46.5 +0.6
baz=326
**F19K Shaleruckik Mo 69.87 19** P P 00 39 46.6 +0.3
baz=320
**D24K Happy Valley 70.02 14** P P 00 39 47.8 +0.6
baz=327
**G17K Kiwalik Mounta 70.12 20** P P 00 39 48.1 +0.2
baz=318
**F20K Avaraart Lake 70.22 18** P P 00 39 48.7 +0.3
baz=322
**TOLK Toolik Lake Re 70.30 15** P P 00 39 49.4 +0.4
baz=326,SNR=6.3
**D25K Kavik River 70.34 13** P P 00 39 50.2 +0.9
baz=329,SNR=7.5
**G18K Tagagawik 70.36 19** P P 00 39 50.1 +0.7
baz=320
**C27K Jago River 70.54 12** P P 00 39 51.3 +0.9
baz=331,SNR=5.0
**G19K Purcell Mounta 70.58 19** P P 00 39 51.4 +0.6
baz=321,SNR=5.6
**A36M Sachs Harbour 70.59 5** P P 00 39 51.0 +0.4
baz=346
**F21K Alatna River 70.61 17** P P 00 39 51.3 +0.4
baz=324,SNR=8.5
**F22K John River 70.67 16** P P 00 39 51.9 +0.7
baz=325
**H17K Granite Mounta 70.75 21** P P 00 39 52.4 +0.6
baz=319
**E23K Chandalar 70.77 15** P P 00 39 52.3 +0.3
baz=327
**E24K Your Creek 70.99 15** P P 00 39 53.6 +0.4
baz=328
**H18K Honhosa River 71.01 20** P P 00 39 53.6 +0.2
baz=320
**G21K Allakaket 71.17 17** P P 00 39 54.6 +0.3
baz=324
**H19K Roundabout Mou 71.23 19** P P 00 39 55.2 +0.6
baz=322
**J14K Nanvaranak Lak 71.28 23** P P 00 39 56.1 +1.2
baz=317
**G22K Bettles 71.31 16** P P 00 39 56.0 +0.9
baz=325
**COLD Coldfoot 71.34 16** P P 00 39 56.0 +0.7
baz=326
**F24K Squaw Lake 71.58 15** P P 00 39 57.3 +0.5
baz=328
**H20K Anotleneega Mo 71.66 18** P P 00 39 57.8 +0.5
baz=323,SNR=8.9
**J16K Anvik River 71.79 22** P P 00 39 58.8 +0.7
baz=319
**G23K Bananza Creek 71.81 16** P P 00 39 58.8 +0.6
baz=326
**F25K Christian Rive 71.97 14** P P 00 39 59.9 +0.8
baz=330,SNR=6.5
**H21K Melozitna Rive 72.04 18** P P 00 40 00.1 +0.5
baz=324
**E28M Babbage River 72.14 11** P P 00 40 00.9 +0.8
baz=335,SNR=5.1
**J17K VAM Dome 72.16 21** P P 00 40 00.9 +0.6
baz=320
**F26K Sheenjek River 72.16 13** P P 00 40 01.3 +1.0
baz=331
**E27K Coleen River 72.18 12** P P 00 40 01.3 +0.9
baz=333,SNR=6.1
**H22K Ishtalitna Cre 72.19 17** P P 00 40 01.4 +1.0
baz=326
**K15K Wolf Creek Mou 72.25 23** P P 00 40 02.0 +1.2
baz=318
**I20K Naagheneel 72.32 19** P P 00 40 01.8 +0.6
baz=323
**G24K Hadweenzic Riv 72.37 15** P P 00 40 02.2 +0.7
baz=328,SNR=5.9
**E29M Blow River 72.59 11** P P 00 40 03.6 +0.8
baz=336
**L14K Kuka Creek 72.59 24** P P 00 40 04.0 +1.1
baz=318
**G25K Bearman Lake 72.59 15** P P 00 40 04.1 +1.4
baz=330
**J19K Poorman 72.66 20** P P 00 40 03.9 +0.7
baz=322
**H23K Yukon River 72.66 16** P P 00 40 04.3 +1.1
baz=327,SNR=6.3
**J18K Innoko River 72.78 20** P P 00 40 04.6 +0.7
baz=322
**G26K Porcupine Rive 72.89 14** P P 00 40 05.5 +1.0
baz=332
**J20K Nowinta River 72.90 19** P P 00 40 05.7 +1.0
baz=324,SNR=7.7
**K17K Iditarod 72.91 22** P P 00 40 05.5 +0.8
baz=321
**F28M Old Crow 72.98 12** P P 00 40 06.0 +0.9
baz=335
**H24K Noodor Dome 73.02 16** P P 00 40 06.1 +0.7
baz=328,SNR=5.0
**MLY Manley 73.05 17** P P 00 40 06.1 +0.5
baz=326,SNR=5.1
**H25L Birch Creek 73.08 15** P P 00 40 06.7 +1.0
baz=330
**C36M Paulatuk 73.26 6** P P 00 40 07.1 +0.5
baz=347
**M14K Bethel 73.27 24** P P 00 40 07.8 +1.0
baz=318
**I23K Minto, Yukon-K 73.28 17** P P 00 40 07.7 +0.9
baz=327,SNR=5.4
**INK Inuvik 73.28 9** P P 00 40 07.4 +0.6
baz=340,SNR=6.5
**INK Inuvik 73.28 9** P P 00 40 07.8 +1.0
INK pmax pmax
comp=Z,8.0nm,0.9s
**L16K Owhat River 73.33 23** P P 00 40 08.3 +1.1
baz=320
**L17K Donlin 73.36 22** P P 00 40 08.1 +0.7
baz=321
**G27K Doyon Strip 73.40 13** P P 00 40 08.4 +0.8
baz=333,SNR=7.1
**K20K Telida 73.59 20** P P 00 40 09.0 +0.3
baz=324,SNR=6.0
**CHUM Lake Minchumin 73.61 19** P P 00 40 09.6 +0.8
baz=325
**F30M Barrier River 73.62 10** P P 00 40 09.8 +0.9
baz=338
**M15K Kasigluk River 73.72 24** P P 00 40 10.7 +1.2
baz=319
**POKR Poker Plat Res 73.73 16** P P 00 40 10.3 +0.7
baz=329
**BPAW Bear Paw Mtn. 73.77 18** P P 00 40 10.1 +0.3
baz=326,SNR=7.0
**L18K Granite Mounta 73.77 21** P P 00 40 10.4 +0.6
baz=322
**PRP Porcupine Dome 73.80 15** P P 00 40 10.5 +0.5
baz=330
**NEA2 Nenana 73.81 17** P P 00 40 10.4 +0.4
baz=328,SNR=7.5
**G29M Pine Creek 73.93 12** P P 00 40 11.3 +0.7
baz=336
**H27K Steamboat Moun 73.94 13** P P 00 40 11.8 +1.0
baz=333,SNR=8.7
**N14K Kuskokwak Cree 73.98 25** P P 00 40 12.2 +1.3
baz=319
**M16K Timber Creek 74.02 23** P P 00 40 11.9 +0.6
baz=320
**CAST Castle Rocks 74.06 19** P P 00 40 12.2 +0.7
baz=325,SNR=16
**F31M Tsiigehtchic 74.07 10** P P 00 40 12.1 +0.7
baz=340,SNR=5.5
**G30M tAoh Zraii Nji 74.14 11** P P 00 40 13.3 +1.4
baz=338,SNR=5.9
**ILAR Eielson Array 74.15 16** P P 00 40 11.7 -0.3
comp=Z,2.3nm,0.8s,baz=325,slow=4.6,SNR=23
comp=Z,2.3nm,0.8s
**M17K Holitna River 74.19 22** P P 00 40 13.4 +1.2
baz=322
**N15K Kwethluk River 74.32 24** P P 00 40 14.0 +1.0
baz=320
**L19K White Mountain 74.32 21** P P 00 40 13.8 +0.8
baz=324
**L20K Farewell, AK 74.35 20** P P 00 40 13.8 +0.6
baz=324
**HDA Harding Lake 74.45 16** P P 00 40 14.2 +0.5
baz=329
**PPLA Purkeypile 74.46 19** P P 00 40 14.7 +0.7
baz=325
**I26K Coal Creek Min 74.46 14** P P 00 40 14.4 +0.6
baz=332
**G31M Satah River 74.48 10** P P 00 40 14.2 +0.4
baz=339
**TRF Thorofare Moun 74.48 18** P P 00 40 14.9 +0.8
baz=327
**I27K Kandik River 74.49 14** P P 00 40 14.6 +0.7
baz=333,SNR=5.2
**N16K Nishlik Lake 74.50 23** P P 00 40 15.3 +1.1
baz=321
**H29M Whitestone 74.50 12** P P 00 40 14.7 +0.7
baz=336
**MCK McKinley 74.57 17** P P 00 40 15.2 +0.7
baz=328
**M18K Stony River 74.60 21** P P 00 40 15.9 +1.3
baz=323
**J25K Salcha River, 74.62 15** P P 00 40 14.7 0.0
baz=331,SNR=5.2
**O14K Tigyukauivet M 74.62 25** P P 00 40 15.1 +0.3
baz=319
**EPYK Eagle Plains 74.63 11** P P 00 40 15.4 +0.7
baz=337
**M19K Big River Lodg 74.67 21** P P 00 40 16.1 +1.0
baz=324
**I28M Miner Creek 74.94 13** P P 00 40 17.1 +0.5
baz=335,SNR=8.7
**N17K Nushagak Hills 74.95 23** P P 00 40 17.8 +1.2
baz=322
**M20K Styx River 75.04 20** P P 00 40 17.7 +0.5
baz=325
**J26L Joseph Creek 75.09 15** P P 00 40 17.8 +0.3
baz=332,SNR=8.0
**O15K Ungalikthiuk R 75.16 24** P P 00 40 18.8 +0.9
baz=320
**N18K Kilae Creek 75.22 22** P P 00 40 18.9 +0.7
baz=323
**K24K Donnelly Dome 75.23 16** P P 00 40 18.2 -0.1
baz=330
**I29M Ogilvie Camp, 75.30 12** P P 00 40 19.2 +0.6
baz=336
**EGAK Eagle 75.32 14** P P 00 40 18.9 +0.2
baz=334
**SKT Skwentna 75.39 19** P P 00 40 18.8 -0.4
baz=326,SNR=7.2
**O16K Kokwok River B 75.40 23** P P 00 40 20.0 +0.8
baz=321
**WAT1 Susitna Watana 75.43 18** P P 00 40 18.8 -0.7
baz=328
**SCRK Sand Creek 75.47 15** P P 00 40 19.9 +0.1
baz=332,SNR=7.4
**DHY Denali Highway 75.50 17** P P 00 40 20.6 +0.6
baz=329,SNR=6.9
**N19K Bonanza Creek 75.53 21** P P 00 40 20.7 +0.6
baz=324
**O17K Koliganek Bris 75.58 23** P P 00 40 21.0 +0.8
baz=322
**I30M Mount Dempster 75.75 12** P P 00 40 21.8 +0.4
baz=338,SNR=13
**K27K Chicken 75.81 14** P P 00 40 22.0 +0.5
baz=333,SNR=6.7
**WAT6 Susitna Watana 75.84 17** P P 00 40 21.4 -0.5
baz=329
**M22K Willow 75.95 19** P P 00 40 21.8 -0.5
baz=327
**SUA Susitna One 76.03 19** P P 00 40 22.7 -0.3
baz=327
**PAX Paxson 76.03 16** P P 00 40 22.9 -0.1
baz=331,SNR=5.3
**O18K Koktuh Hills 76.09 22** P P 00 40 24.0 +0.8
baz=324
**P17K Kvichak River 76.24 23** P P 00 40 24.5 +0.5
baz=323
**NIKH Nikolski High 76.28 33** P P 00 40 24.3 0.0
baz=315
**DAWY Dawson 76.30 13** P P 00 40 24.6 +0.3
baz=335
**J30M Hart River 76.36 12** P P 00 40 25.1 +0.3
baz=338,SNR=5.6
**SML Sawmill 76.36 18** P P 00 40 24.6 -0.1
baz=329,SNR=6.2
**P18K Big Mountain, 76.46 22** P P 00 40 25.4 +0.1
baz=324
**M23K Glacier View 76.52 18** P P 00 40 25.9 +0.3
baz=329,SNR=6.6
**SCM Sheep Creek Mo 76.58 18** P P 00 40 25.9 -0.1
baz=329
**HARP HAARP 76.60 16** P P 00 40 26.2 +0.1
baz=331
**RC01 Rabbit Creek A 76.61 19** P P 00 40 25.7 -0.4
baz=328
**M24K Tolsona, Glenn 76.62 17** P P 00 40 26.3 +0.1
baz=330
**KNK Knik Glacier 76.66 18** P P 00 40 26.6 +0.2
baz=328
**L27K Beaver Creek, 76.73 15** P P 00 40 27.8 +1.0
baz=334
**K29M Barlow Dome 76.83 13** P P 00 40 27.7 +0.2
baz=337,SNR=8.1
**M26K Nabesna, AK 77.08 16** P P 00 40 29.5 +0.8
baz=333
**Q18K Katmai Hardscr 77.12 23** P P 00 40 29.0 -0.1
baz=324
**Q17K Contact Creek 77.16 23** P P 00 40 30.2 +0.8
baz=323
**PWL Port Wells 77.17 19** P P 00 40 29.1 -0.2
baz=329
**KLU Klutina 77.22 17** P P 00 40 30.5 +0.9
baz=330
**Q19K Cape Douglas, 77.31 22** P P 00 40 30.8 +0.7
baz=325
**M27K Edge Creek, AK 77.35 15** P P 00 40 31.2 +0.8
baz=334
**L29M L29M 77.40 13** P P 00 40 31.5 +1.0
baz=336,SNR=5.8
**N25K Chitina, Valde 77.42 17** P P 00 40 31.7 +1.0
baz=332

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **R17L** | **Mt. Peulik Vol** | **77.51** | **24** | P | **P** | **00 40 32.2** | **+0.9** |
| | baz=323 | | | | | | |
| **M29M** | **Somme Creek** | **77.95** | **14** | P | **P** | **00 40 34.5** | **+0.8** |
| | baz=336 | | | | | | |
| **M30M** | **Minto, Yukon** | **78.13** | **13** | P | **P** | **00 40 35.3** | **+0.6** |
| | baz=338 | | | | | | |
| **P23K** | **Montague Islan** | **78.15** | **19** | P | **P** | **00 40 35.2** | **+0.5** |
| | baz=330 | | | | | | |
| **YUK3** | **Moose Creek** | **78.17** | **15** | P | **P** | **00 40 35.4** | **+0.3** |
| | baz=335,SNR=5.2 | | | | | | |
| **CRQE** | **Cirque** | **78.52** | **16** | P | **P** | **00 40 36.9** | **0.0** |
| | baz=333 | | | | | | |
| **KDAK** | **Kodiak Island** | **78.58** | **22** | P | **P** | **00 40 37.3** | **+0.3** |
| | baz=326 | | | | | | |
| **CTG** | **Chitna Glacier** | **78.72** | **16** | P | **P** | **00 40 38.3** | **+0.3** |
| | baz=334 | | | | | | |
| **YUK8** | **Steele Glacier** | **78.76** | **15** | P | **P** | **00 40 38.7** | **+0.4** |
| | baz=335 | | | | | | |
| **OHAK** | **Old Harbor** | **78.82** | **23** | P | **P** | **00 40 38.9** | **+0.5** |
| | baz=325 | | | | | | |
| **M31M** | **Drury Creek, Y** | **78.89** | **12** | P | **P** | **00 40 39.0** | **+0.2** |
| | baz=340 | | | | | | |
| **YUK4** | **Talbot Arm** | **78.92** | **14** | P | **P** | **00 40 39.3** | **+0.1** |
| | baz=336 | | | | | | |
| **KAIM** | **Kayak Island** | **78.95** | **17** | P | **P** | **00 40 39.0** | **-0.1** |
| | baz=332 | | | | | | |
| **MMPY** | **Sheldon Lake,** | **78.98** | **10** | P | **P** | **00 40 40.0** | **+0.7** |
| | baz=342 | | | | | | |
| **FARO** | **Faro, Yukon** | **79.04** | **11** | P | **P** | **00 40 40.1** | **+0.5** |
| | baz=340 | | | | | | |
| **SII** | **Sitkinak Islan** | **79.08** | **24** | P | **P** | **00 40 40.8** | **+0.9** |
| | baz=325 | | | | | | |
| **N30M** | **Aishikik Lake** | **79.12** | **13** | P | **P** | **00 40 41.0** | **+0.9** |
| | baz=338 | | | | | | |
| **O28M** | **Mount Upton** | **79.14** | **15** | P | **P** | **00 40 40.8** | **+0.3** |
| | baz=335 | | | | | | |
| **N31M** | **Braeburn, Yuko** | **79.33** | **13** | P | **P** | **00 40 41.6** | **+0.4** |
| | baz=338 | | | | | | |
| **YUK6** | **Outpost Mounta** | **79.35** | **14** | P | **P** | **00 40 42.3** | **+0.7** |
| | baz=336 | | | | | | |
| **PINM** | **Pinnacle** | **79.74** | **15** | P | **P** | **00 40 44.3** | **+0.8** |
| | baz=335 | | | | | | |
| **O30N** | **Mendenhall** | **79.94** | **13** | P | **P** | **00 40 45.0** | **+0.5** |
| | baz=338 | | | | | | |
| **WHY** | **Whitehorse** | **80.26** | **13** | P | **P** | **00 40 46.7** | **+0.4** |
| | baz=339 | | | | | | |
| **PNL** | **Peninsula** | **80.31** | **15** | P | **P** | **00 40 47.3** | **+0.8** |
| | baz=336 | | | | | | |
| **P30M** | **Million Dollar** | **80.38** | **14** | P | **P** | **00 40 47.2** | **+0.3** |
| | baz=338 | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.63** | **3** | P | **P** | **00 40 48.5** | **+0.4** |
| | comp=Z,3.5nm,0.7s,baz=351,slow=5.6,SNR=11 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **P33M** | **Teslin, Yukon** | **81.03** | **12** | P | **P** | **00 40 51.2** | **+0.8** |
| | baz=341 | | | | | | |
| **PLBC** | **Pleasant Camp** | **81.11** | **14** | P | **P** | **00 40 51.4** | **+0.7** |
| | baz=338,SNR=5.5 | | | | | | |
| **R33M** | **Jennings River** | **82.11** | **11** | P | **P** | **00 40 56.7** | **+0.6** |
| | baz=342 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.17** | **122** | P | **P** | **00 40 55.8** | **-1.1** |
| | comp=Z,0.5nm,1.0s,baz=320,slow=4.7,SNR=1.8 | | | | | | |
| | comp=Z,0.5nm,1.0s | | | | | | |
| **Q32M** | **Nakina River** | **82.31** | **12** | P | **P** | **00 40 58.0** | **+0.7** |
| | baz=341 | | | | | | |
| **S31K** | **Pelican** | **82.53** | **14** | P | **P** | **00 40 58.9** | **+0.7** |
| | baz=338 | | | | | | |
| **R32K** | **Eaglecrest** | **82.56** | **13** | P | **P** | **00 40 59.5** | **+1.1** |
| | baz=340 | | | | | | |
| **DLBC** | **Dease Lake** | **83.17** | **11** | P | **P** | **00 41 02.4** | **+0.7** |
| | baz=343 | | | | | | |
| **TOAD** | **Toad River Com** | **83.42** | **9** | P | **P** | **00 41 04.1** | **+1.2** |
| | baz=347 | | | | | | |
| **S34M** | **Telegraph Cree** | **83.50** | **12** | P | **P** | **00 41 04.5** | **+1.3** |
| | baz=342 | | | | | | |
| **SIT** | **Sitka** | **83.55** | **14** | P | **P** | **00 41 05.2** | **+1.7** |
| | baz=339 | | | | | | |
| **T35M** | **Bob Quinn** | **84.53** | **12** | P | **P** | **00 41 09.4** | **+0.9** |
| | baz=343 | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **90.59** | **333** | P | **P** | **00 41 38.3** | **+0.5** |
| | baz=30 | | | | | | |
| **LBNH** | **Lisbon** | **92.41** | **334** | P | **P** | **00 41 46.7** | **+0.4** |
| | baz=29 | | | | | | |
| **LONY** | **Lake Ozonia** | **92.96** | **336** | P | **P** | **00 41 49.2** | **+0.4** |
| | baz=27 | | | | | | |
| **HRV** | **Adam Dziewonsk** | **93.80** | **333** | P | **P** | **00 41 53.2** | **+0.5** |
| | baz=29 | | | | | | |
| **L61B** | **Northampton** | **94.25** | **334** | P | **P** | **00 41 55.6** | **+0.8** |
| | baz=28 | | | | | | |
| **EGMT** | **Eagleton** | **95.24** | **1** | P | **P** | **00 41 59.3** | **0.0** |
| | baz=359 | | | | | | |
| **L44A** | **Lake County Fo** | **98.82** | **344** | P | Pdif | 00 42 15.5 | +0.1 |
| | baz=17 | | | | | | |
| **ZON** | **Zonda** | **146.59** | **268** | PKHKP | PKPpre | 00 48 11.1 | |

*SOF **03** 00:33:38.4,41°.32N±0°.01×24°.95E±0°.01,h16km±3km, MD2.5/6*
*BEO **03** 00:33:42.4±1.0,41°.31N×24°.91E,h0km,ML2.1/6*
**ATH 03 00:33:39.4,41°.29N×24°.98E,h10km±1km,ML2.0/5,2C, Error ellipse: s-maj=2.2km s-min=0.8km az=173.0, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDZ** | **Kurdzhali** | **0.43** | **38** | *i* Pg | Pg | 00 33 47.3 | -0.6 |
| KDZ | | | | Sg | Sg | 00 33 52.6 | -1.0 |
| **RZN** | **Rozhen** | **0.44** | **336** | ⇑*i*Pg | Pg | 00 33 47.6 | -0.5 |
| RZN | | | | Sg | Sg | 00 33 53.3 | -0.7 |
| **RDO** | **Rodhopi** | **0.44** | **109** | P | Pg | 00 33 48.0 | -0.1 |
| RDO | | | | S | Sg | 00 33 54.0 | +0.1 |
| RDO | | | | AML | AML | 00 33 54.5 | |
| | comp=N,1576μm,0.2s | | | | | | |
| RDO | | | | AML | AML | 00 33 55.1 | |
| | comp=E,1497μm,0.1s | | | | | | |
| **KAVA** | **Kavala** | **0.46** | **230** | P | Pg | 00 33 48.3 | 0.0 |
| KAVA | | | | S | Sg | 00 33 54.6 | +0.2 |
| **KVLA** | **Kavala** | **0.57** | **232** | P | Pg | 00 33 50.5 | +0.1 |
| KVLA | | | | S | Sg | 00 33 58.2 | +0.2 |
| **THAS** | **Thassos island** | **0.71** | **196** | P | Pg | 00 33 52.5 | -0.7 |
| THAS | | | | S | Sg | 00 34 02.6 | +0.2 |
| THAS | | | | AML | AML | 00 34 05.7 | |
| | comp=E,498μm,0.3s | | | | | | |
| THAS | | | | AML | AML | 00 34 06.1 | |
| | comp=N,422μm,0.3s | | | | | | |
| **NVR** | **Nevrokopi** | **0.84** | **274** | P | Pg | 00 33 55.2 | -0.5 |
| NVR | | | | S | Sb | 00 34 07.4 | -0.1 |
| NVR | | | | AML | AML | 00 34 09.8 | |
| | comp=E,157μm,0.3s | | | | | | |
| NVR | | | | AML | AML | 00 34 11.2 | |
| | comp=N,131μm,0.2s | | | | | | |
| **PLD** | **Plovdiv** | **0.87** | **349** | ⇑*i*Pg | Pg | 00 33 55.2 | -1.0 |
| PLD | | | | Sg | Sg | 00 34 06.3 | -1.2 |
| **PLD** | **Plovdiv** | **0.87** | **349** | *e*Pg | Pg | 00 33 55.3 | -0.9 |
| PLD | | | | *e*Sg | Sb | 00 34 08.1 | -0.2 |
| **DIM** | **Dimitrovgrad** | **0.88** | **30** | P | Pg | 00 33 55.7 | -0.5 |
| DIM | | | | Sg | Sg | 00 34 07.4 | -0.3 |
| **KOKK** | **Kokkinochori,** | **0.88** | **238** | P | Pg | 00 33 55.6 | -0.7 |
| KOKK | | | | S | Sg | 00 34 07.9 | +0.1 |
| **ALN** | **Alexandroupoli** | **0.90** | **116** | P | Pg | 00 33 56.4 | -0.2 |
| ALN | | | | S | Sg | 00 34 07.8 | -0.4 |
| ALN | | | | AML | AML | 00 34 11.5 | |
| | comp=N,145μm,0.2s | | | | | | |
| ALN | | | | AML | AML | 00 34 12.0 | |
| | comp=E,115μm,0.2s | | | | | | |
| **SMTH** | **Samothraki Isl** | **0.92** | **153** | P | Pg | 00 33 57.0 | -0.1 |
| SMTH | | | | S | Sg | 00 34 09.0 | 0.0 |
| **MMB** | **Musomishta** | **0.96** | **286** | *i* Pg | Pg | 00 33 56.3 | -1.6 |
| MMB | | | | Sg | Sg | 00 34 09.0 | -1.4 |
| **SRS** | **Serrai** | **1.06** | **261** | *e*Pg | Pb | 00 33 59.9 | +0.1 |
| SRS | | | | *e*Sg | Sb | 00 34 14.0 | +0.3 |
| **SRS** | **Serrai** | **1.06** | **261** | P | Pg | 00 33 58.9 | -0.9 |
| SRS | | | | S | Sb | 00 34 13.9 | +0.2 |
| SRS | | | | AML | AML | 00 34 15.8 | |
| | comp=E,133μm,0.2s | | | | | | |
| SRS | | | | AML | AML | 00 34 17.8 | |
| | comp=N,156μm,0.3s | | | | | | |
| **OUR** | **Ouranopolis** | **1.22** | **219** | P | Pn | 00 34 01.6 | -0.8 |
| OUR | | | | S | Sb | 00 34 18.3 | +0.1 |
| **SOH** | **Sokhos** | **1.32** | **250** | P | Pn | 00 34 02.9 | -0.9 |
| SOH | | | | S | Sb | 00 34 20.3 | -0.8 |
| **PEHC** | **Pehcevo** | **1.64** | **288** | *i* Pn | Pb | 00 34 09.9 | +0.2 |
| **PLNA** | **Plana** | **1.66** | **316** | P | Pb | 00 34 10.0 | 0.0 |
| PLNA | | | | Sg | Sg | 00 34 33.0 | +0.3 |
| **JMB** | **Yambol** | **1.67** | **43** | P | Pn | 00 34 07.8 | -0.7 |
| **VAY** | **Valandovo** | **1.82** | **272** | *i* Pn | Pb | 00 34 12.9 | +0.2 |
| **VTS** | **Vitosha** | **1.86** | **316** | *e*Pg | Pb | 00 34 13.4 | -0.1 |
| VTS | | | | *e*Sg | Sg | 00 34 39.1 | 0.0 |
| **BOSS** | **Bosilegrad** | **2.22** | **304** | *e*Pn | Pb | 00 34 20.2 | +0.6 |
| BOSS | | | | *e*Sn | Sb | 00 34 48.9 | +1.8 |
| **MPEP** | **Malo Peshtene** | **2.26** | **336** | P | Pg | 00 34 21.8 | -0.8 |
| **ZAPS** | **Zavoj** | **2.64** | **319** | *e*Pn | Pb | 00 34 28.2 | +1.5 |
| ZAPS | | | | *e*Sn | Sb | 00 34 58.4 | -0.7 |
| **BARS** | **Barje** | **2.81** | **304** | *e*Pn | Pb | 00 34 27.7 | -1.8 |
| BARS | | | | *e*Sn | Sb | 00 35 01.9 | -2.0 |

*IDC **03** 00:35:01.1±1.5,29°.78S×72°.65W,h0km,mb3.9/2, mbtmp3.8/5,ML3.7/3,MS3.2/1,Error ellipse: s-maj=80.8km s-min=25.4km az=106.0*
*SJA **03** 00:35:01.0±1.0,29°.66S×72°.53W,h10km,ML3.5,MW3.5*
*GUC **03** 00:35:04.4±0.8,29°.87S×72°.48W,h15km,ML3.5*
**ISC 03 00:34:56.0±1.8,29°.85S±0°.04×72°.83W±0°.04,h0km±11km, n39,σ3°06/50,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **1.32** | **129** | *e*P | **Pn** | **00 35 23.6** | **+1.9** |
| CO06 | | | | *e*S | **Sn** | **00 35 38.4** | **-1.6** |
| CO06 | | | | IAML | | 00 35 39.1 | |
| | comp=E,2μm,0.2s | | | | | | |
| **CO05** | **La Serena** | **1.39** | **93** | *e*P | **Pn** | **00 35 23.7** | **+1.1** |
| CO05 | | | | *e*S | **Sg** | **00 35 37.9** | **-2.6** |
| CO05 | | | | IAML | | 00 35 39.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| **GO04** | **Tololo Observa** | **1.79** | **101** | *i* P | **Pg** | **00 35 30.7** | **+0.3** |
| GO04 | | | | *i* S | **Sb** | **00 35 50.6** | **-2.4** |
| **GO04** | **Tololo Observa** | **1.79** | **101** | *i* P | **Pg** | **00 35 30.3** | **-0.1** |
| GO04 | | | | *e*S | **Sn** | **00 35 49.9** | **-2.1** |
| **LCO** | **Las Campanas** | **2.04** | **66** | *i* P | **Pn** | **00 35 32.8** | **+1.0** |
| **CO02** | **Combarbal** | **2.08** | **131** | *e*P | **Pb** | **00 35 35.4** | **+0.7** |
| **CO03** | **El Pedregal** | **2.10** | **118** | *e*P | **Pb** | **00 35 35.0** | **+0.1** |
| CO03 | | | | *e*S | **Sb** | **00 35 58.7** | **-2.9** |
| CO03 | | | | IAML | | 00 35 59.8 | |
| | comp=E,803nm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.25** | **44** | *e*P | **Pn** | **00 35 34.6** | **+0.1** |
| AC04 | | | | IAML | | 00 35 59.0 | |
| | comp=N,365nm,0.3s | | | | | | |
| **CO01** | **Juntas del Tor** | **2.38** | **94** | *e*P | **Pb** | **00 35 39.3** | **-0.6** |
| CO01 | | | | IAML | | 00 36 05.6 | |
| | comp=N,344nm,0.5s | | | | | | |
| **AC05** | **El Transito** | **2.45** | **66** | *e*P | **Pn** | **00 35 39.2** | **+1.8** |
| AC05 | | | | IAML | | 00 36 11.3 | |
| | comp=N,272nm,0.4s | | | | | | |
| **AROD** | **Rodeo** | **2.93** | **97** | *i* S | **Sb** | **00 36 21.9** | **-3.9** |
| **VA06** | **Catapilco** | **3.00** | **154** | *e*P | **Pn** | **00 35 48.4** | **+3.6** |
| VA06 | | | | IAML | | 00 36 22.4 | |
| | comp=N,196nm,0.2s | | | | | | |
| **GO03** | **Copiap** | **3.20** | **46** | *i* P | **Pn** | **00 35 49.0** | **+1.4** |
| **GO03** | **Copiap** | **3.20** | **46** | *e*P | **Pn** | **00 35 48.8** | **+1.1** |
| GO03 | | | | IAML | | 00 36 24.6 | |
| | comp=N,147nm,0.4s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **3.23** | **97** | *i* P | **Pb** | **00 35 54.3** | **-0.2** |
| ACDV | | | | *i* S | **Sb** | **00 36 32.0** | **-2.5** |
| ACDV | | | | IAML | | 00 36 33.9 | |
| | comp=Z,77nm,0.5s | | | | | | |
| **AC06** | **Mina Casimiro** | **3.31** | **42** | *e*P | **Pn** | **00 35 50.6** | **+1.6** |
| AC06 | | | | IAML | | 00 36 27.6 | |
| | comp=E,78nm,0.3s | | | | | | |
| **ACCO** | **Cerro Coronel** | **3.34** | **104** | *i* P | **Pb** | **00 35 55.8** | **-0.5** |
| ACCO | | | | *i* S | **Sb** | **00 36 34.4** | **-3.2** |
| ACCO | | | | IAML | | 00 36 37.6 | |
| | comp=Z,150nm,0.4s | | | | | | |
| **VA03** | **San Esteban** | **3.50** | **147** | *e*P | **Pn** | **00 35 56.1** | **+4.3** |
| VA03 | | | | IAML | | 00 36 41.6 | |
| | comp=N,153nm,0.2s | | | | | | |
| **RTLS** | **Leoncito** | **3.61** | **123** | *i* P | **Pb** | **00 35 59.6** | **-1.2** |
| RTLS | | | | *e*S | **Sn** | **00 36 39.4** | **+2.6** |
| RTLS | | | | IAML | | 00 36 43.7 | |
| | comp=Z,299nm,0.3s | | | | | | |
| **AUSP** | **Uspallata** | **3.79** | **130** | *i* P | **Pb** | **00 36 02.4** | **-1.5** |
| AUSP | | | | *i* S | **Sb** | **00 36 46.9** | **-3.5** |
| **VCA** | **Vinchina** | **4.19** | **76** | *i* P | **Pb** | **00 36 07.4** | **-3.3** |
| VCA | | | | *e*S | **Sb** | **00 36 55.2** | **-6.8** |
| VCA | | | | IAML | | 00 37 02.4 | |
| | comp=Z,138nm,0.7s | | | | | | |
| **ASAL** | **Salagasta** | **4.38** | **130** | *e*P | **Pb** | **00 36 10.4** | **-3.4** |
| ASAL | | | | *e*S | **Sb** | **00 37 00.3** | **-6.9** |
| ASAL | | | | IAML | | 00 37 21.7 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **5.14** | **87** | *i* P | Pn | 00 36 18.4 | +4.1 |
| ACLC | | | | *e*S | **Sn** | **00 37 15.8** | **+1.4** |
| ACLC | | | | IAML | | 00 37 18.9 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **ACHE** | **Chepes** | **5.48** | **105** | *i* P | **Pn** | **00 36 21.8** | **+2.8** |
| **H03N1** | **Juan Fernandez** | **6.30** | **234** | Pn | Pn | 00 36 35.1 | +5.2 |
| | baz=113,slow=18 | | | | | | |
| H03N1 | | | | Sn | **Sn** | **00 37 42.1** | **-0.3** |
| H03N1 | | | | T | T | 00 44 03.0 | |
| | baz=56 | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.31** | **234** | Pn | Pn | 00 36 35.4 | +5.4 |
| | baz=113,slow=18 | | | | | | |
| H03N2 | | | | Sn | **Sn** | **00 37 40.4** | **-2.3** |
| H03N2 | | | | T | T | 00 44 02.5 | |
| | baz=56 | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.31** | **234** | Pn | **Pn** | **00 36 34.7** | **+4.5** |
| | baz=113,slow=18 | | | | | | |
| H03N3 | | | | Sn | **Sn** | **00 37 41.8** | **-1.1** |
| H03N3 | | | | T | T | 00 43 58.7 | |
| | baz=56,SNR=4.5 | | | | | | |
| **H03S3** | **Juan Fernandez** | **6.51** | **231** | Pn | **Pn** | **00 36 37.0** | **+4.2** |
| | baz=178,slow=26 | | | | | | |
| H03S3 | | | | Sn | **Sn** | **00 37 45.0** | **-2.7** |
| **H03S1** | **Juan Fernandez** | **6.52** | **231** | Pn | **Pn** | **00 36 36.6** | **+3.6** |
| | baz=178,slow=26 | | | | | | |
| H03S1 | | | | Sn | **Sn** | **00 37 45.2** | **-2.6** |
| **H03S2** | **Juan Fernandez** | **6.53** | **231** | Pn | **Pn** | **00 36 37.3** | **+4.2** |
| | baz=178,slow=26 | | | | | | |
| H03S2 | | | | Sn | Sn | 00 37 44.9 | -3.2 |
| **LVC** | **Limon Verde** | **8.03** | **27** | Pn | **Pn** | **00 36 55.5** | **+1.3** |
| | comp=Z,0.4nm,0.3s,baz=212,slow=12,SNR=1.6 | | | | | | |
| LVC | | | | Sn | **Sn** | **00 38 20.6** | **-5.3** |
| | comp=Z,0.5nm,0.3s,baz=120,slow=20,SNR=1.8 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **PLCA** | **Paso Flores** | **11.01** | **171** | Pn | Pn | 00 37 39.6 | +4.8 |
| | comp=Z,0.2nm,0.3s,baz=342,slow=12,SNR=8.9 | | | | | | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **14.13** | **79** | LR | LR | 00 44 05.1 | |
| | comp=Z,92nm,20.1s,baz=262,slow=39 | | | | | | |
| **SIV** | **San Ignacio** | **17.52** | **41** | P | **P** | **00 39 05.9** | **+2.9** |
| | baz=227,slow=11,SNR=10 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.37** | **180** | P | P | 00 45 12.6 | +5.8 |
| | comp=Z,1.3nm,1.0s,baz=126,slow=1.7,SNR=5.1 | | | | | | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.46** | **71** | P | P | 00 47 30.3 | +4.4 |
| | comp=Z,0.8nm,0.6s,baz=256,slow=3.9,SNR=13 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.16** | **38** | PKPbc | **PKiKP** | **00 54 53.7** | **+4.4** |
| | comp=Z,1.8nm,0.6s,baz=302,slow=2.8,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.98** | **28** | PKPbc | **PKiKP** | **00 54 55.3** | **+4.4** |
| | comp=Z,3.2nm,0.5s,baz=304,slow=2.8,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **154.34** | **42** | PKPbc | **PKiKP** | **00 55 01.0** | **+2.9** |
| | comp=Z,0.3nm,0.7s,baz=325,slow=2.5,SNR=3.6 | | | | | | |

**MEX 03 00:42:32.0±0.6,16°.54N×93°.74W,h139km±6km,MD3.6, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TGIG** | | **0.64** | **68** | *e*P | Pn | 00 42 51.6 | -1.4 |
| TGIG | | | | *e*S | Sn | 00 43 07.0 | -2.0 |
| **UXUV** | **UXUV** | **0.86** | **333** | *e*P | Pn | 00 42 54.1 | -0.5 |
| UXUV | | | | *e*S | Sn | 00 43 09.8 | -2.1 |
| **PCIG** | | **0.97** | **149** | *e*S | Sn | 00 43 11.3 | -2.1 |
| **CMIG** | **Matias Romero** | **1.22** | **297** | *e*P | Pn | 00 42 57.6 | -0.3 |
| CMIG | | | | *e*S | Sn | 00 43 17.0 | -0.6 |
| **PAVE** | **Pavencul** | **2.02** | **131** | *e*P | Pn | 00 43 06.2 | -0.8 |
| PAVE | | | | *e*S | Sn | 00 43 32.3 | -1.4 |
| **CHUJ** | **Union Juarez** | **2.13** | **132** | *e*P | Pn | 00 43 06.6 | -1.7 |
| CHUJ | | | | *e*S | Sn | 00 43 34.1 | -2.1 |
| **NEUV** | **Arroyo Zacate** | **2.29** | **301** | *e*P | Pn | 00 43 09.1 | -0.9 |
| NEUV | | | | *e*S | Sn | 00 43 31.6 | -7.6 |
| **HUIG** | **Huatulco** | **2.40** | **252** | *e*S | Sn | 00 43 39.3 | -2.4 |
| **FTIG** | **Fresnillo de T** | **4.41** | **289** | *e*P | Pn | 00 43 38.8 | +1.2 |
| FTIG | | | | *e*S | Sn | 00 44 01.3 | -27 |
| **FTIG** | **Fresnillo de T** | **4.41** | **289** | *e* | Pn | 00 43 38.7 | +1.2 |
| FTIG | | | | *e* | | 00 44 02.1 | |

**MEX 03 00:43:12.1±0.3,16°.25N×97°.87W,h19km±24km,MD3.0, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.29** | **300** | *e*P | Pg | 00 43 17.6 | -0.9 |
| PNIG | | | | *e*S | Sg | 00 43 21.8 | -1.1 |
| **YOIG** | **Yosondua** | **0.68** | **27** | *e*P | Pb | 00 43 23.4 | -2.2 |
| YOIG | | | | *e*S | Sb | 00 43 32.2 | -2.5 |
| **MGIG** | **Malinaltepec** | **1.23** | **323** | *e*S | Sb | 00 43 46.0 | -4.4 |

*SOME **03** 01:01:19.5,42°.20N×81°.35E,h15km*
*NNC **03** 01:01:20.9±1.4,42°.21N×81°.29E,h0km,mb3.6,mpv3.3, Error ellipse: s-maj=9.6km s-min=7.1km az=156.0*
**ISC 03 01:01:22.3±2.1,42°.28N±0°.08×81°.20E±0°.05,h1km±12km, n44,σ1°80/70,11C-7D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **1.32** | **332** | *e*P | **Pb** | **01 01 46.9** | **-1.1** |
| | 14nm,0.3s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **01 02 06.8** | **+2.0** |
| | 62nm,0.5s | | | | | | |
| **KTMS** | **Ketmen** | **1.32** | **332** | P | **Pb** | **01 01 46.9** | **-1.1** |
| | 14nm,0.3s | | | | | | |
| KTMS | | | | S | **Sg** | **01 02 07.6** | **+2.8** |
| | 62nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **1.55** | **305** | *e*P | **Pn** | **01 01 47.8** | **-3.4** |
| | 45nm,0.3s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **01 02 08.1** | **-3.9** |
| | 195nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **1.55** | **305** | P | **Pn** | **01 01 47.8** | **-3.4** |
| | 44nm,0.3s | | | | | | |
| SHLS | | | | S | **Sn** | **01 02 08.1** | **-3.9** |
| | 195nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **1.64** | **310** | P | **Pb** | **01 01 52.9** | **-0.5** |
| | 16nm,0.5s | | | | | | |
| PDGK | | | | S | **Sg** | **01 02 17.0** | **+2.1** |
| | 29nm,0.5s | | | | | | |
| **PDGK** | **Podgornoye** | **1.64** | **310** | ⇑Pn | **Pb** | **01 01 52.6** | **-0.7** |
| | 18nm,0.5s | | | | | | |
| PDGK | | | | ⇑Sn | **Sg** | **01 02 17.0** | **+2.1** |
| | 26nm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **1.82** | **299** | *e*P | **Pb** | **01 01 55.5** | **-1.0** |
| | 20nm,0.6s | | | | | | |
| UZB | | | | *e*S | **Sg** | **01 02 21.5** | **+0.6** |
| | 31nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **1.82** | **299** | Pg | **Pb** | **01 01 55.5** | **-1.0** |
| | 20nm,0.6s | | | | | | |
| UZB | | | | Lg | Lg | 01 02 21.5 | |
| | 31nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.20** | **304** | *e*P | **Pb** | **01 02 01.8** | **-1.1** |
| | 14nm,0.3s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **01 02 32.5** | **+1.9** |
| | 124nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.20** | **304** | Pg | **Pb** | **01 02 01.8** | **-1.1** |
| | 14nm,0.3s | | | | | | |
| KPKS | | | | Lg | Lg | 01 02 32.5 | |
| | 124nm,0.4s | | | | | | |
| **SATY** | **Saty** | **2.20** | **292** | *e*P | **Pb** | **01 02 02.9** | **-0.1** |
| | 11nm,0.4s | | | | | | |
| SATY | | | | *e*S | **Sg** | **01 02 34.1** | **+1.1** |
| | 37nm,0.5s | | | | | | |
| **SATY** | **Saty** | **2.20** | **292** | Pg | **Pb** | **01 02 02.9** | **-0.1** |
| | 11nm,0.4s | | | | | | |
| SATY | | | | Lg | Lg | 01 02 34.2 | |
| | 37nm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **2.22** | **295** | *e*P | **Pb** | **01 02 02.3** | **-1.0** |
| | 4.7nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **01 02 33.1** | **+1.8** |
| | 24nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **2.22** | **295** | Pg | **Pb** | **01 02 02.3** | **-1.0** |
| | 4.7nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 01 02 33.1 | |
| | 24nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.30** | **334** | *e*P | **Pb** | **01 02 04.0** | **-0.6** |
| | 4.3nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **01 02 36.2** | **+0.1** |
| | 58nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **2.30** | **334** | Pg | **Pb** | **01 02 03.8** | **-0.7** |
| | 4.3nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 01 02 36.2 | |
| | 58nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **2.53** | **300** | *e*P | **Pb** | **01 02 08.5** | **0.0** |
| | 5.5nm,0.5s | | | | | | |
| KURS | | | | *e*S | **Sg** | **01 02 44.0** | **+0.4** |
| | 14nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **2.53** | **300** | Pg | **Pb** | **01 02 08.5** | **0.0** |
| | 5.5nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 01 02 44.0 | |
| | 14nm,0.6s | | | | | | |
| **KNOS** | **Konyrlen** | **2.55** | **325** | Pg | **Pb** | **01 02 07.1** | **-1.8** |
| | 8.8nm,0.3s | | | | | | |
| KNOS | | | | Lg | Lg | 01 02 42.0 | |
| | 24nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **2.69** | **313** | Pg | **Pb** | **01 02 10.9** | **-0.5** |
| | 12nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 01 02 48.4 | |
| | 24nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **3.13** | **309** | *e*P | **Pb** | **01 02 18.2** | **-0.5** |
| | 2.6nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **01 03 00.7** | **+3.2** |
| | 10nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **3.13** | **309** | Pg | **Pb** | **01 02 18.0** | **-0.8** |
| | 2.6nm,0.3s | | | | | | |
| ARXS | | | | Lg | Lg | 01 03 00.7 | |
| | 10nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **3.18** | **288** | *e*P | **Pb** | **01 02 18.7** | **-1.0** |
| | 1.2nm,0.1s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **01 03 01.4** | **+2.4** |
| | 7.6nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **3.18** | **288** | Pg | **Pb** | **01 02 18.7** | **-1.0** |
| | 1.2nm,0.1s | | | | | | |
| MDOK | | | | Lg | Lg | 01 03 01.4 | |
| | 7.6nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.23** | **285** | *e*P | **Pb** | **01 02 21.4** | **+0.8** |
| | 2.9nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **01 03 05.6** | **-0.3** |
| | 4.1nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.23** | **285** | Pg | **Pb** | **01 02 21.6** | **+1.0** |
| | 2.9nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 01 03 05.6 | |
| | 4.1nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **3.46** | **298** | *e*P | **Pb** | **01 02 24.5** | **+0.1** |
| | 3.5nm,0.4s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **01 03 11.6** | **-1.9** |
| | 12nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **3.46** | **298** | Pg | **Pb** | **01 02 24.5** | **+0.1** |
| | 3.5nm,0.4s | | | | | | |
| CHKK | | | | Lg | Lg | 01 03 11.6 | |
| | 12nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.61** | **295

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TKM2 | | | | ⇑Lg | Lg | 01 03 39.3 | | |
| | 4.8nm,0.6s | | | | | | | |
| **KRBS** | **Karabastau** | **4.29** | **291** | *e*P | **Pb** | **01 02 39.3** | **+0.7** | |
| | 1.9nm,0.4s | | | | | | | |
| KRBS | | | | *e*S | **Sg** | **01 03 36.8** | **-3.4** | |
| | 1.8nm,0.4s | | | | | | | |
| **KRBS** | **Karabastau** | **4.29** | **291** | Pg | **Pb** | **01 02 39.3** | **+0.7** | |
| | 1.9nm,0.4s | | | | | | | |
| KRBS | | | | Lg | Lg | 01 03 36.8 | | |
| | 1.8nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **4.56** | **7** | ⇓Pn | **Pn** | **01 02 31.7** | **-0.7** | |
| | 1.9nm,0.3s | | | | | | | |
| MAKZ | | | | ⇓Sn | **Sn** | **01 03 26.4** | **+0.3** | |
| | 2.6nm,0.5s | | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 01 03 44.9 | | |
| | 3.3nm,0.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **4.58** | **9** | ⇑Pn | **Pn** | **01 02 31.9** | **-0.8** | |
| | 0.4nm,0.2s,baz=193,slow=13,SNR=39 | | | | | | | |
| MK31 | | | | ⇓Pg | **Pb** | **01 02 43.9** | **+0.4** | |
| | 0.6nm,0.2s,baz=189,slow=15,SNR=2.9 | | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **01 03 25.7** | **-0.8** | |
| | 1.1nm,0.5s | | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 01 03 45.0 | | |
| | 11nm,0.5s,baz=186,slow=29,SNR=10 | | | | | | | |
| **ZSN** | **Zaisan** | **5.79** | **25** | *e*P | **Pb** | **01 03 06.4** | **+2.4** | |
| | 1.5nm,0.2s | | | | | | | |
| ZSN | | | | *e*S | **Sg** | **01 04 23.0** | **-5.3** | |
| | 9.6nm,0.8s | | | | | | | |
| KURBB | **Kurchatov Arra** | **8.55** | **348** | ⇑Pn | **Pn** | **01 03 29.7** | **+2.6** | |
| | 1.2nm,0.8s | | | | | | | |
| KURBB | | | | ⇓Sn | Sn | 01 05 13.7 | +10 | |
| | 1.8nm,0.5s | | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 01 05 56.0 | | |
| | 4.7nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **8.62** | **349** | ⇓Pn | Pn | 01 03 32.5 | +4.4 | |
| | 2.1nm,0.5s | | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **01 05 07.2** | **+1.3** | |
| | 0.8nm,0.5s | | | | | | | |
| KURK | | | | ⇓Lg | Lg | 01 05 54.5 | | |
| | 2.9nm,0.8s | | | | | | | |

*JMA **03** 01:15:31.6±0.5, 44˚N±1˚×14˚6E±˚, h162km±3km, MV2.9/30, NEAR KUNASHIRI ISLAND*
*SKHL **03** 01:15:31.0±0.2, 44˚.40N×146˚.50E, h148km±9km, mb4.3/2, msha5.1/2*

**ISC 03 01:15:30.6±3.6, 44˚4N±0˚.1×146˚6E±0˚.1, h166km±19km, n17, σ0s56/26, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHO** | **Shikotan** | **0.57** | **161** | *i* P | **Pn** | **01 15 54.2** | **+0.1** |
| SHO | | | | AMB | AMB | 01 15 54.5 | |
| | 80nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **01 16 11.6** | **-0.4** |
| SHO | | | | A | A | 01 16 12.7 | |
| | 660nm,0.3s | | | | | | |
| SHO | | | | A | A | 01 16 12.7 | |
| | 420nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.63** | **234** | *i* P | **Pn** | **01 15 54.6** | **+0.2** |
| YUK | | | | AMB | AMB | 01 15 55.2 | |
| | 130nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **01 16 12.5** | **0.0** |
| YUK | | | | A | A | 01 16 20.8 | |
| | 220nm,0.3s | | | | | | |
| YUK | | | | A | A | 01 16 20.8 | |
| | 210nm,0.3s | | | | | | |
| **JRA** | **Rausu** | **1.14** | **246** | *e*P | **Pn** | **01 15 58.1** | **+0.2** |
| **NEM2** | **Nemuro 2** | **1.20** | **210** | P | **Pn** | **01 15 58.8** | **+0.2** |
| NEM2 | | | | *e*S | **Sn** | **01 16 19.4** | **-0.6** |
| **NMR** | **Nemuro--Hokkai** | **1.20** | **211** | *i* P | **Pn** | **01 15 58.8** | **+0.2** |
| NMR | | | | *e*S | **Sn** | **01 16 19.5** | **-0.5** |
| **JNSB** | **Nemuroshibetsu** | **1.29** | **241** | P | **Pn** | **01 16 00.0** | **+0.7** |
| **JNK** | **Nakash** | **1.57** | **239** | P | **Pn** | **01 16 02.5** | **+0.5** |
| **JKHN** | **Kushirohamanak** | **1.67** | **218** | P | **Pn** | **01 16 03.6** | **+0.5** |
| JKHN | | | | *e*S | **Sn** | **01 16 28.4** | **+0.2** |
| **AKK** | **Akkeshi** | **1.87** | **223** | *i* P | **Pn** | **01 16 05.7** | **+0.5** |
| AKK | | | | *e*S | **Sn** | **01 16 31.5** | **-0.4** |
| **JAK** | **Akkeshi** | **1.96** | **225** | P | **Pn** | **01 16 06.7** | **+0.5** |
| JAK | | | | *e*S | **Sn** | **01 16 33.3** | **-0.3** |
| **JTKR** | **Abashiri--Toko** | **1.96** | **258** | *e*P | **Pn** | **01 16 06.2** | **-0.1** |
| **JAR** | **Ashorobuto** | **2.31** | **242** | P | **Pn** | **01 16 11.4** | **+1.2** |
| **JMP** | **Maruseppu** | **2.34** | **261** | *e*P | **Pn** | **01 16 10.5** | **-0.1** |
| **JOB** | **Onbets** | **2.49** | **234** | P | **Pn** | **01 16 13.2** | **+0.9** |
| JOB | | | | *e*S | **Sn** | **01 16 44.9** | **+0.3** |
| **ASAJ** | **Asahikawa** | **2.87** | **266** | *e*P | **Pn** | **01 16 17.3** | **+0.4** |
| **JCH** | **Churui** | **2.94** | **234** | *e*P | **Pn** | **01 16 18.0** | **+0.2** |
| JCH | | | | *e*S | **Sn** | **01 16 53.3** | **-1.2** |
| **JNBK** | **Urakawa-nobuka** | **3.50** | **234** | *e*P | **Pn** | **01 16 24.3** | **-0.6** |

*GEN **03** 01:21:46.9, 44˚.50N×7˚.10E, h6km, Ml3.1*
*IDC **03** 01:21:46.9±1.9, 44˚.68N×6˚.98E, h0km, mb3.1/1, mbtmp3.3/5, ML3.7/4, Error ellipse: s-maj=36.4km s-min=18.7km az=132.0*
*LDG **03** 01:21:47.3±0.1, 44˚.54N×7˚.13E, h2km, Md2.2/3, Ml3.3/39, Error ellipse: s-maj=1.8km s-min=1.3km az=77.0*
*ROM **03** 01:21:47.4±0.2, 44˚.521N±0˚.009×7˚.08E±0˚.02, h17km±1km, ML3.0/20, Error ellipse: s-maj=1.2km s-min=0.8km az=43.0*
*STR **03** 01:21:47.3±0.3, 45˚N±1˚×±˚, h4km±3km, MLv3.4/66, Error ellipse: s-maj=0.0km s-min=0.0km az=68.2, preliminary*
*PRU **03** 01:21:50.6, 44˚.74N×7˚.21E, h10km*

**ISC 03 01:21:47.2±0.8, 44˚.53N±0˚.01×7˚.11E±0˚.01, h15km±4km, n200, σ2s01/322, 2C-7D, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PZZ** | **Stroppo** | **0.03** | **172** | P | **Pg** | **01 21 48.8** | **-1.2** |
| PZZ | | | | S | **Sg** | **01 21 49.6** | **-2.2** |
| **SURF** | **Saint Ours** | **0.22** | **256** | Pg | **Pg** | **01 21 51.7** | **-0.5** |
| SURF | | | | Sg | **Sg** | **01 21 55.2** | **-0.5** |
| **SURF** | **Saint Ours** | **0.22** | **256** | P | **Pg** | **01 21 51.8** | **-0.5** |
| SURF | | | | S | **Sg** | **01 21 55.0** | **-0.7** |
| **JAUF** | **Jausiers** | **0.28** | **248** | Pg | **Pg** | **01 21 52.7** | **-0.5** |
| JAUF | | | | Sg | **Sg** | **01 21 56.3** | **-1.0** |
| **MBDF** | **Montbardon** | **0.31** | **309** | *e*Pg | **Pg** | **01 21 53.7** | **0.0** |
| MBDF | | | | *e*Sg | **Sg** | **01 21 58.4** | **+0.2** |
| | 1µm,0.2s | | | | | | |
| **BHB** | **Bricherasio** | **0.33** | **19** | P | **Pg** | **01 21 54.2** | **+0.3** |
| BHB | | | | S | **Sg** | **01 21 59.3** | **+0.7** |
| **STV** | **Sant Anna di V** | **0.33** | **152** | P | **Pg** | **01 21 53.1** | **-0.8** |
| STV | | | | S | **Sg** | **01 21 57.4** | **-1.2** |
| **CREF** | **Crivoux** | **0.35** | **273** | Pg | **Pg** | **01 21 54.2** | **-0.2** |
| CREF | | | | Sg | **Sg** | **01 21 59.5** | **+0.1** |
| **ISO** | **Isola** | **0.35** | **187** | Pg | **Pg** | **01 21 53.7** | **-0.7** |
| ISO | | | | Sg | **Sg** | **01 21 58.0** | **-1.4** |
| **ISO** | **Isola** | **0.35** | **187** | P | **Pg** | **01 21 54.3** | **-0.2** |
| ISO | | | | S | **Sg** | **01 21 58.5** | **-0.9** |
| **ENR** | **Entracque** | **0.38** | **144** | P | **Pg** | **01 21 54.1** | **-0.8** |
| **OGAG** | **Argentiere** | **0.41** | **259** | Pg | **Pb** | **01 21 56.9** | **+0.5** |
| OGAG | | | | Sg | **Sb** | **01 22 04.2** | **+1.7** |
| **OGAG** | **Argentiere** | **0.41** | **259** | P | **Pb** | **01 21 56.8** | **+0.5** |
| OGAG | | | | S | **Sb** | **01 22 04.2** | **+1.7** |
| **SPIF** | **crte de Spivo** | **0.49** | **169** | Pg | **Pg** | **01 21 56.2** | **-0.6** |
| SPIF | | | | Sg | **Sg** | **01 22 02.1** | **-1.3** |
| **ENAUX** | **Enaux** | **0.49** | **210** | Pg | **Pg** | **01 21 56.5** | **-0.4** |
| ENAUX | | | | Sg | **Sg** | **01 22 02.9** | **-0.6** |
| **TURF** | **col de Turini** | **0.59** | **160** | Pg | **Pg** | **01 21 58.3** | **-0.6** |
| TURF | | | | Sg | **Sg** | **01 22 06.0** | **-0.9** |
| **GBOS** | **Grotte di Boss** | **0.60** | **119** | P | **Pg** | **01 21 58.6** | **-0.3** |
| GBOS | | | | S | **Sg** | **01 22 06.1** | **-0.8** |
| **BNI** | **Bardonecchia** | **0.60** | **329** | ⇓P | **Pg** | **01 21 59.0** | **-0.1** |
| BNI | | | | S | **Sg** | **01 22 07.4** | **+0.3** |
| BNI | | | | AML | AML | | |
| | comp=E,1084µm,0.3s | | | | | | |
| BNI | | | | AML | AML | | |
| | comp=N,856µm,0.3s | | | | | | |
| BNI | | | | AML | AML | | |
| | comp=E,5395µm,1.1s | | | | | | |
| BNI | | | | AML | AML | | |
| | comp=E,1083µm,0.3s | | | | | | |
| BNI | | | | AML | AML | | |
| | comp=N,4340µm,0.3s | | | | | | |
| BNI | | | | AML | AML | | |
| | comp=N,855µm,0.3s | | | | | | |
| **BNI** | **Bardonecchia** | **0.60** | **329** | P | **Pg** | **01 21 59.0** | **-0.1** |
| BNI | | | | S | **Sg** | **01 22 07.5** | **+0.3** |
| **RSP** | **Reno Superiore** | **0.62** | **10** | ⇓P | **Pg** | **01 21 59.5** | **+0.1** |
| RSP | | | | S | **Sg** | **01 22 08.4** | **+0.7** |
| RSP | | | | AML | AML | | |
| | comp=E,1900µm,0.8s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=N,2390µm,1.3s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=E,2065µm,0.8s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=N,2615µm,1.3s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=N,2615µm,0.7s | | | | | | |
| RSP | | | | AML | AML | | |
| | comp=N,2390µm,0.7s | | | | | | |
| **RSP** | **Reno Superiore** | **0.62** | **10** | P | **Pg** | **01 21 59.5** | **+0.1** |
| **MVIF** | **Mont Vial** | **0.64** | **177** | Pg | **Pg** | **01 21 59.1** | **-0.6** |
| MVIF | | | | Sg | **Sg** | **01 22 07.5** | **-0.7** |
| **MVIF** | **Mont Vial** | **0.64** | **177** | P | **Pg** | **01 21 59.6** | **-0.1** |
| MVIF | | | | S | **Sg** | **01 22 08.1** | **-0.1** |
| **SBF** | **Sospel** | **0.71** | **161** | *e*P | **Pg** | **01 22 00.3** | **-0.7** |
| SBF | | | | *e*Sg | **Sg** | **01 22 07.6** | **-2.8** |
| | comp=N,370nm,0.3s | | | | | | |
| **OGDI** | **Digne** | **0.72** | **234** | Pg | **Pb** | **01 22 02.6** | **+1.2** |
| OGDI | | | | Sg | **Sb** | **01 22 13.6** | **+2.4** |
| **OGDI** | **Digne** | **0.72** | **234** | P | **Pb** | **01 22 02.7** | **+1.2** |
| **SALSA** | **La sagne** | **0.72** | **205** | Pg | **Pg** | **01 22 00.9** | **-0.3** |
| SALSA | | | | Sg | **Sg** | **01 22 11.1** | **+0.4** |
| **ESCA** | **l'Escarene** | **0.73** | **165** | Pg | **Pg** | **01 22 00.7** | **-0.6** |
| ESCA | | | | Sg | **Sg** | **01 22 10.4** | **-0.6** |
| **ESCA** | **l'Escarene** | **0.73** | **165** | P | **Pg** | **01 22 01.3** | **-0.1** |
| ESCA | | | | S | **Sg** | **01 22 11.0** | **+0.1** |
| **OGMO** | **Fort Saint-Gob** | **0.74** | **336** | Pg | **Pg** | **01 22 01.6** | **0.0** |
| OGMO | | | | Sg | **Sg** | **01 22 11.9** | **+0.5** |
| **OGMO** | **Fort Saint-Gob** | **0.74** | **336** | P | **Pg** | **01 22 01.6** | **0.0** |
| OGMO | | | | S | **Sg** | **01 22 11.9** | **+0.5** |
| **CALF** | **Calern** | **0.79** | **190** | Pg | **Pg** | **01 22 02.1** | **-0.5** |
| CALF | | | | Sg | **Sg** | **01 22 13.5** | **+0.4** |
| **MONC** | **Moncucco Torin** | **0.79** | **47** | ⇑P | **Pb** | **01 22 03.2** | **+0.5** |
| MONC | | | | S | **Sg** | **01 22 12.8** | **-0.2** |
| **MENA** | **Menton** | **0.80** | **160** | P | **Pg** | **01 22 02.9** | **+0.2** |
| **BURY** | **Giardini Botan** | **0.82** | **157** | ⇓P | **Pg** | **01 22 02.5** | **-0.5** |
| BURY | | | | S | **Sg** | **01 22 13.2** | **-0.6** |
| **BURY** | **Giardini Botan** | **0.82** | **157** | Pg | **Pg** | **01 22 02.5** | **-0.5** |
| **BURY** | **Giardini Botan** | **0.82** | **157** | Sg | **Sg** | **01 22 13.5** | **-0.3** |
| **BURY** | **Giardini Botan** | **0.82** | **157** | P | **Pg** | **01 22 02.5** | **-0.5** |
| BURY | | | | S | **Sg** | **01 22 13.3** | **-0.4** |
| **LSD** | **Lago del Serru** | **0.93** | **1** | ⇓P | **Pg** | **01 22 05.0** | **-0.1** |
| LSD | | | | S | **Sg** | **01 22 17.4** | **+0.1** |
| LSD | | | | AML | AML | | |
| | comp=N,2565µm,0.3s | | | | | | |
| LSD | | | | AML | AML | | |
| | comp=E,3285µm,0.7s | | | | | | |
| **TRIGF** | **Trigance** | **0.94** | **213** | Pg | **Pg** | **01 22 04.8** | **-0.5** |
| TRIGF | | | | Sg | **Sg** | **01 22 18.1** | **+0.5** |
| **ROTM** | **Rocchetta Tana** | **0.94** | **70** | P | **Pb** | **01 22 06.0** | **+0.8** |
| **ORIF** | **Oris-en-Rattie** | **0.96** | **294** | *e*Pg | **Pg** | **01 22 05.6** | **-0.2** |
| ORIF | | | | *e*Sg | **Sg** | **01 22 18.5** | **+0.2** |
| | comp=E,342nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **0.96** | **294** | ⇓P | **Pg** | **01 22 05.5** | **-0.2** |
| ORIF | | | | S | **Sg** | **01 22 17.8** | **-0.5** |
| ORIF | | | | AML | AML | | |
| | comp=E,642µm,0.3s | | | | | | |
| ORIF | | | | AML | AML | | |
| | comp=N,478µm,1.6s | | | | | | |
| ORIF | | | | AML | AML | | |
| | comp=E,642µm,1.7s | | | | | | |
| ORIF | | | | AML | AML | | |
| | comp=N,478µm,0.4s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **0.96** | **294** | Pg | **Pg** | **01 22 05.5** | **-0.2** |
| **BLAF** | **les Blancs** | **0.96** | **233** | Pg | **Pg** | **01 22 06.1** | **+0.3** |
| BLAF | | | | Sg | **Sb** | **01 22 19.5** | **+1.4** |
| **EILF** | **Villa Eilenroc** | **0.99** | **179** | Pg | **Pg** | **01 22 05.6** | **-0.6** |
| **EILF** | **Villa Eilenroc** | **0.99** | **179** | P | **Pg** | **01 22 06.2** | **0.0** |
| **LPG** | **La Plagne** | **1.00** | **345** | *e*Pn | **Pg** | **01 22 06.3** | **-0.2** |
| LPG | | | | *e*Sg | **Sg** | **01 22 18.6** | **-1.0** |
| | comp=N,703nm,0.4s | | | | | | |
| **LPL** | **La Plagne** | **1.02** | **345** | *e*P | **Pb** | **01 22 07.8** | **+1.1** |
| LPL | | | | *e*Sg | **Sg** | **01 22 19.7** | **-0.6** |
| | comp=N,907nm,0.4s | | | | | | |
| **PCP** | **Piancastagn** | **1.03** | **89** | P | **Pg** | **01 22 06.5** | **-0.5** |
| PCP | | | | S | **Sg** | **01 22 20.1** | **-0.3** |
| **MLYF** | **Mely** | **1.11** | **241** | Pg | **Pn** | **01 22 09.5** | **+1.2** |
| **RSL** | **Roselend** | **1.20** | **344** | Pg | **Pg** | **01 22 10.4** | **0.0** |
| **RSL** | **Roselend** | **1.20** | **344** | P | **Pg** | **01 22 10.5** | **+0.1** |
| **MRGE** | **Morge** | **1.24** | **358** | ⇓P | **Pg** | **01 22 10.7** | **-0.3** |
| MRGE | | | | S | **Sb** | **01 22 27.7** | **+1.5** |
| MRGE | | | | AML | AML | | |
| | comp=E,1012µm,0.9s | | | | | | |
| MRGE | | | | AML | AML | | |
| | comp=N,1520µm,0.5s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.24** | **244** | *e*P | **Pn** | **01 22 11.3** | **+1.3** |
| SMRF | | | | *e*Sg | **Sg** | **01 22 27.2** | **+0.1** |
| | comp=N,196nm,0.2s | | | | | | |
| **BSTF** | **la Bastide-des** | **1.24** | **239** | Pg | **Pn** | **01 22 11.9** | **+1.8** |
| BSTF | | | | Sg | **Sn** | **01 22 29.4** | **+2.8** |
| **LMR** | **La Mourre** | **1.28** | **200** | *e*Pg | **Pn** | **01 22 10.4** | **-0.1** |
| LMR | | | | *e*Sg | **Sg** | **01 22 26.9** | **-1.4** |
| | comp=N,205nm,0.2s | | | | | | |
| **RUSF** | **Rustrel** | **1.31** | **244** | Pg | **Pg** | **01 22 12.7** | **+0.3** |
| RUSF | | | | Sg | **Sn** | **01 22 30.7** | **+2.4** |
| **SARZ** | **Sarezzano** | **1.32** | **75** | ⇑P | **Pg** | **01 22 13.2** | **+0.5** |
| **ARTF** | **Artigues** | **1.33** | **225** | Pg | **Pn** | **01 22 12.3** | **+1.0** |
| ARTF | | | | Sg | **Sn** | **01 22 31.1** | **+2.3** |
| **LEPF** | **PUYLOUBIER** | **1.43** | **226** | Pn | **Pn** | **01 22 13.9** | **+1.2** |
| LEPF | | | | Sg | **Sb** | **01 22 33.0** | **+1.3** |
| **OGSM** | **Saint Maurice** | **1.47** | **318** | Pn | **Pn** | **01 22 15.5** | **+0.1** |
| OGSM | | | | Sn | **Sg** | **01 22 37.2** | **+2.6** |
| **OGSI** | **Sixt** | **1.55** | **351** | Pn | **Pb** | **01 22 16.5** | **+0.8** |
| OGSI | | | | Sn | **Sg** | **01 22 37.4** | **+0.1** |
| **SAUF** | **chteau de Sau** | **1.56** | **248** | Pn | **Pn** | **01 22 15.9** | **+1.5** |
| **DIX** | **Grande Dixence** | **1.56** | **8** | P | **Pn** | **01 22 15.1** | **+0.4** |
| DIX | | | | S | **Sg** | **01 22 37.5** | **0.0** |
| **DIX** | **Grande Dixence** | **1.56** | **8** | Pn | **Pn** | **01 22 14.8** | **+0.1** |
| **MMK** | **Mattmark** | **1.63** | **21** | P | **Pn** | **01 22 15.7** | **+0.1** |
| MMK | | | | S | **Sg** | **01 22 39.7** | **-0.1** |
| **BOB** | **Bobbio (Coli)** | **1.68** | **81** | P | **Pb** | **01 22 18.6** | **+0.6** |
| BOB | | | | S | **Sg** | **01 22 41.9** | **+0.5** |
| **MSSA** | **Maissana** | **1.74** | **96** | P | **Pn** | **01 22 16.8** | **-0.2** |
| MSSA | | | | S | **Sb** | **01 22 41.3** | **+0.7** |
| **EMBD** | **Embd, Matterta** | **1.76** | **17** | Pn | **Pn** | **01 22 17.7** | **+0.5** |
| **VIVF** | **Saint-Julien-l** | **1.77** | **281** | *e*P | **Pn** | **01 22 18.9** | **+1.6** |
| VIVF | | | | *e*Sg | **Sg** | **01 22 43.8** | **-0.3** |
| | comp=N,78nm,0.3s | | | | | | |
| **VARE** | **Varese** | **1.78** | **41** | P | **Pn** | **01 22 17.9** | **+0.4** |
| VARE | | | | S | **Sn** | **01 22 39.7** | **-0.3** |
| VARE | | | | AML | AML | | |
| | comp=E,152µm,0.9s | | | | | | |
| VARE | | | | AML | AML | | |
| | comp=N,174µm,0.4s | | | | | | |
| VARE | | | | AML | AML | | |
| | comp=N,174µm,1.6s | | | | | | |
| VARE | | | | AML | AML | | |
| | comp=E,152µm,1.1s | | | | | | |
| **AIGLE** | **Aigle** | **1.81** | **357** | Pn | **Pb** | **01 22 20.7** | **+0.6** |
| **OG35** | **Corcelles** | **1.86** | **325** | Pn | **Pb** | **01 22 21.3** | **+0.4** |
| OG35 | | | | Sn | **Sb** | **01 22 45.9** | **+1.8** |
| **MUGIO** | **Muggio** | **1.95** | **44** | P | **Pn** | **01 22 20.2** | **+0.4** |
| MUGIO | | | | S | **Sn** | **01 22 44.3** | **+0.3** |
| **SSB** | **Saint Sauveur** | **1.97** | **293** | Pn | **Pn** | **01 22 21.9** | **+1.8** |
| SSB | | | | Sn | **Sn** | **01 22 46.7** | **+2.0** |
| **GIMEL** | **St. Georges /** | **2.09** | **344** | Pn | **Pb** | **01 22 24.8** | **0.0** |
| **CABF** | **La Chapelle** | **2.20** | **341** | *e*P | **Pn** | **01 22 25.0** | **+1.7** |
| CABF | | | | *e*Sn | **Sn** | **01 22 48.6** | **-1.7** |
| CABF | | | | *e*Sg | **Sb** | **01 22 56.4** | **+2.6** |
| | comp=E,69nm,0.3s | | | | | | |
| **FUSIO** | **Fusio** | **2.21** | **29** | P | **Pn** | **01 22 23.9** | **+0.4** |
| **TORNY** | **Torny/Romont** | **2.24** | **357** | Pn | **Pb** | **01 22 27.2** | **-0.2** |
| **TORNY** | **Torny/Romont** | **2.24** | **357** | Pg | **Pg** | **01 22 30.9** | **+0.7** |
| **MORSI** | **Morsiglia** | **2.27** | **133** | Pn | **Pn** | **01 22 22.8** | **-1.4** |
| **RIVEL** | **MONT RIVEL** | **2.38** | **340** | Pn | **Pn** | **01 22 27.4** | **+1.7** |
| **LASF** | **Ste Croix** | **2.38** | **260** | *e*Pn | **Pn** | **01 22 26.2** | **+0.5** |
| LASF | | | | *e*Sg | **Sg** | **01 23 03.3** | **-0.4** |
| | comp=E,24nm,0.4s | | | | | | |
| **PGF** | **Pioggiola** | **2.41** | **145** | *e*Pn | **Pn** | **01 22 26.0** | **-0.3** |
| PGF | | | | *e*Sn | **Sn** | **01 22 52.3** | **-3.3** |
| | comp=E,29nm,0.5s | | | | | | |
| **PGF** | **Pioggiola** | **2.41** | **145** | Pn | **Pn** | **01 22 25.0** | **-1.3** |
| **BRANT** | **Les Verrieres** | **2.44** | **350** | Pn | **Pn** | **01 22 29.6** | **+2.9** |
| **A317A** | **Capraia (LI)** | **2.47** | **126** | P | **Pn** | **01 22 28.2** | **+1.3** |
| **TUE** | **Stuetta** | **2.50** | **38** | P | **Pn** | **01 22 28.0** | **+0.5** |
| TUE | | | | S | **Sn** | **01 22 56.5** | **-1.3** |
| TUE | | | | AML | AML | | |
| | comp=E,75µm,0.3s | | | | | | |
| TUE | | | | AML | AML | | |
| | comp=N,63µm,1.1s | | | | | | |
| TUE | | | | AML | AML | | |
| | comp=N,294µm,0.4s | | | | | | |
| TUE | | | | AML | AML | | |
| | comp=N,63µm,0.9s | | | | | | |
| TUE | | | | AML | AML | | |
| | comp=E,406µm,0.3s | | | | | | |
| **STFL** | **Fournets-Luisa** | **2.61** | **352** | Pn | **Pn** | **01 22 31.9** | **+3.0** |
| STFL | | | | Pg | **Pg** | **01 22 37.6** | **+0.5** |
| **COLF** | **Collangettes** | **2.61** | **293** | Pn | **Pn** | **01 22 30.3** | **+1.4** |
| **CHMF** | **Charmoille** | **2.73** | **353** | Pn | **Pn** | **01 22 33.0** | **+2.4** |
| CHMF | | | | Pg | **Pg** | **01 22 39.8** | **+0.2** |
| **BALST** | **Balsthal** | **2.83** | **8** | Pn | **Pn** | **01 22 34.0** | **+2.1** |
| **BALST** | **Balsthal** | **2.83** | **8** | Sn | **Sn** | **01 23 09.5** | **+3.6** |
| **LBL** | **Lubilhac** | **2.83** | **286** | Pn | **Pn** | **01 22 33.7** | **+1.7** |
| **BOURR** | **Bourrignon** | **2.86** | **2** | Pn | **Pn** | **01 22 34.7** | **+2.3** |
| **BOURR** | **Bourrignon** | **2.86** | **2** | Pg | **Pg** | **01 22 41.6** | **-0.4** |
| **AJAC** | **Base Areonaval** | **2.87** | **155** | ⇓P | **Pn** | **01 22 33.4** | **+1.0** |
| AJAC | | | | S | **Sn** | **01 23 06.7** | **0.0** |
| **AJAC** | **Base Areonaval** | **2.87** | **155** | Pn | **Pn** | **01 22 33.0** | **+0.6** |
| **SMPL** | **Sampolo** | **2.91** | **146** | P | **Pn** | **01 22 34.2** | **+1.3** |
| SMPL | | | | S | **Sn** | **01 23 07.5** | **-0.2** |
| SMPL | | | | AML | AML | | |
| | comp=E,27µm,1.3s | | | | | | |
| SMPL | | | | AML | AML | | |
| | comp=N,35µm,0.5s | | | | | | |
| **SMPL** | **Sampolo** | **2.91** | **146** | Pn | **Pn** | **01 22 33.8** | **+0.8** |
| **SULZ** | **Cheisacher** | **3.07** | **13** | Pn | **Pn** | **01 22 36.8** | **+1.5** |
| **SULZ** | **Cheisacher** | **3.07** | **13** | Sn | **Sb** | **01 23 17.0** | **-2.0** |
| **SMF** | **Signal de Mont** | **3.12** | **314** | *e*P | **Pn** | **01 22 38.3** | **+2.4** |
| **SMF** | **Signal de Mont** | **3.12** | **314** | *e*Pg | **Pb** | **01 22 44.9** | **+2.5** |
| SMF | | | | *e*Sg | **Sg** | **01 23 25.8** | **-1.5** |
| | comp=N,30nm,0.3s | | | | | | |
| **RONF** | **Ronchamp** | **3.19** | **354** | Pn | **Pn** | **01 22 39.1** | **+2.2** |
| **ENDD** | **Endenburg** | **3.21** | **8** | Pn | **Pn** | **01 22 38.4** | **+1.2** |
| **ENDD** | **Endenburg** | **3.21** | **8** | Pg | **Pg** | **01 22 48.0** | **-0.7** |
| **CLAF** | **Gruissan** | **3.23** | **246** | Pn | **Pn** | **01 22 38.1** | **+0.7** |
| **HINF** | **Hinteralfeld** | **3.29** | **357** | *e*P | **Pn** | **01 22 40.2** | **+2.0** |
| HINF | | | | *e*Sn | **Sn** | **01 23 13.7** | **-3.4** |
| HINF | | | | *e*Sg | **Sb** | **01 23 29.5** | **+4.4** |
| | comp=N,23nm,0.3s | | | | | | |
| **MOF** | **Molkenrain** | **3.32** | **0** | Pn | **Pn** | **01 22 40.7** | **+2.1** |
| MOF | | | | Pg | **Pg** | **01 22 50.1** | **-0.6** |
| **FRNF** | **Fournols** | **3.34** | **286** | Pn | **Pn** | **01 22 41.3** | **+2.4** |
| FRNF | | | | Sn | **Sn** | **01 23 20.2** | **+1.8** |
| **DAVA** | **Damuels** | **3.36** | **34** | *i* Pn | **Pn** | **01 22 42.1** | **+2.8** |
| | comp=N,1.1nm,0.2s | | | | | | |
| **SLE** | **Schleitheim** | **3.37** | **16** | Pn | **Pn** | **01 22 40.8** | **+1.4** |
| **KIZ** | **Kirchzarten** | **3.47** | **9** | Pn | **Pn** | **01 22 41.1** | **+0.5** |
| **AVF** | **Avril sur Loir** | **3.47** | **312** | *e*P | **Pn** | **01 22 43.2** | **+2.6** |
| **AVF** | **Avril sur Loir** | **3.47** | **312** | *e*Pg | **Pb** | **01 22 51.1** | **+2.8** |
| AVF | | | | *e*Sn | **Sn** | **01 23 19.5** | **-2.0** |
| AVF | | | | *e*Sg | **Sg** | **01 23 37.3** | **-1.2** |
| | comp=N,10nm,0.3s | | | | | | |
| **VERF** | **Verneugheol** | **3.49** | **292** | Pn | **Pn** | **01 22 42.7** | **+1.6** |
| **HAU** | **Haudompre** | **3.51** | **352** | *e*P | **Pn** | **01 22 43.3** | **+2.0** |
| HAU | | | | *e*Sn | **Sn** | **01 23 19.4** | **-3.2** |
| HAU | | | | *e*Sg | **Sg** | **01 23 36.7** | **-3.2** |
| | comp=N,28nm,0.3s | | | | | | |
| **FETA** | **Feichten** | **3.55** | **44** | *i* Pn | **Pn** | **01 22 45.6** | **+3.7** |
| | comp=N,1.3nm,0.4s | | | | | | |
| **LOR** | **Lormes** | **3.55** | **321** | *e*P | **Pn** | **01 22 44.1** | **+2.2** |
| | baz=144 | | | | | | |
| **LOR** | **Lormes** | **3.55** | **321** | *e*Pn | **Pn** | **01 22 44.3** | **+2.5** |
| **LOR** | **Lormes** | **3.55** | **321** | *e*Pg | **Pg** | **01 22 53.4** | **-1.8** |
| LOR | | | | *e*Sn | **Sn** | **01 23 21.7** | **-1.9** |
| LOR | | | | *e*Sg | **Sg** | **01 23 39.1** | **-2.2** |
| | comp=N,25nm,0.3s | | | | | | |
| **LOR** | **Lormes** | **3.55** | **321** | Pn | **Pn** | **01 22 44.3** | **+2.5** |
| **SSF** | **Saint Saulge** | **3.57** | **316** | *e*P | **Pn** | **01 22 44.9** | **+2.8** |
| **SSF** | **Saint Saulge** | **3.57** | **316** | *e*Pg | **Pg** | **01 22 53.4** | **-2.1** |
| SSF | | | | *e*Sn | **Sn** | **01 23 27.2** | **+3.2** |
| SSF | | | | *e*Sg | **Sg** | **01 23 39.9** | **-1.9** |
| | comp=N,33nm,0.5s | | | | | | |
| **BGF** | **Bois d'Agland** | **3.62** | **306** | *e*P | **Pn** | **01 22 45.0** | **+2.3** |
| **BGF** | **Bois d'Agland** | **3.62** | **306** | *e*Pg | **Pb** | **01 22 53.9** | **+3.1** |
| BGF | | | | *e*Sn | **Sn** | **01 23 23.7** | **-1.4** |
| BGF | | | | *e*Sg | **Sg** | **01 23 40.8** | **-2.4** |
| | comp=N,44nm,0.4s | | | | | | |
| **CAF** | **Calviac** | **3.62** | **278** | *e*P | **Pn** | **01 22 44.7** | **+2.0** |
| CAF | | | | *e*Sn | **Sn** | **01 23 23.8** | **-1.4** |
| CAF | | | | *e*Sg | **Sg** | **01 23 42.0** | **-1.3** |
| | comp=N,9.5nm,0.4s | | | | | | |
| **ECH** | **Echery** | **3.68** | **0** | Pn | **Pn** | **01 22 45.4** | **+1.7** |
| ECH | | | | Sn | **Sn** | **01 23 28.0** | **+1.2** |
| **SJAF** | **Saint Jean de** | **3.69** | **238** | Pn | **Pn** | **01 22 44.3** | **+0.5** |
| SJAF | | | | Pg | **Pg** | **01 22 56.5** | **-1.5** |
| **MTLF** | **Montolieu** | **3.73** | **253** | *e*Pn | **Pn** | **01 22 45.2** | **+0.9** |
| MTLF | | | | *e

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EPF | | | | *e*Sn | | **Sn** | **01 23 59.7** | **-2.8** |
| EPF | | | | *e*Sg | | **Sg** | **01 24 28.6** | **-3.1** |
| | comp=N,6.4nm,0.5s | | | | | | | |
| **ECHI** | **Chisagues Biel** | **5.36** | **252** | Pn | | **Pn** | **01 23 08.2** | **+1.5** |
| **MFF** | **Saint Martin d** | **5.50** | **295** | *e*P | | **Pn** | **01 23 11.2** | **+2.7** |
| MFF | | | | *e*Sn | | **Sn** | **01 24 08.8** | **-2.7** |
| MFF | | | | *e*Sg | | **Sg** | **01 24 39.7** | **-3.9** |
| | comp=N,6.8nm,0.6s | | | | | | | |
| **OBKA** | **Obir** | **5.59** | **67** | *i* Pn | | Pn | 01 23 15.0 | +5.1 |
| | comp=N,1.1nm,0.4s | | | | | | | |
| **GIVF** | **Givet** | **5.78** | **345** | *e*P | | **Pn** | **01 23 15.1** | **+2.7** |
| GIVF | | | | *e*Sn | | **Sn** | **01 24 14.7** | **-3.8** |
| GIVF | | | | *e*Sg | | **Sg** | **01 24 53.5** | **+0.8** |
| | comp=N,20nm,0.9s | | | | | | | |
| **ETSF** | **Etsaut** | **5.79** | **256** | *e*P | | **Pn** | **01 23 15.7** | **+3.0** |
| **ETSF** | **Etsaut** | **5.79** | **256** | *e*Pg | | **Pg** | **01 23 34.0** | **-4.1** |
| ETSF | | | | *e*Sn | | **Sn** | **01 24 15.2** | **-3.7** |
| | comp=N,6.4nm,0.5s | | | | | | | |
| **CANF** | **Canfranc** | **5.81** | **255** | Pn | | **Pn** | **01 23 16.9** | **+3.9** |
| **DOU** | **Dourbes** | **5.82** | **344** | Pn | | **Pn** | **01 23 15.7** | **+2.7** |
| **BAIF** | **Baives** | **5.87** | **341** | *e*P | | **Pn** | **01 23 16.3** | **+2.7** |
| BAIF | | | | *e*Sn | | **Sn** | **01 24 15.6** | **-5.0** |
| BAIF | | | | *e*Sg | | **Sg** | **01 24 49.4** | **-6.0** |
| | comp=N,6.7nm,0.6s | | | | | | | |
| **SOKA** | **Soboth** | **5.96** | **66** | *e*Pn | | **Pn** | **01 23 17.2** | **+2.3** |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **MOA** | **Molln** | **5.97** | **54** | *i* Pn | | **Pn** | **01 23 17.5** | **+2.4** |
| | comp=N,0.3nm,0.2s | | | | | | | |
| **OSSF** | **Osses** | **6.18** | **261** | Pn | | **Pn** | **01 23 19.1** | **+1.1** |
| **SJPF** | **Ste Jean** | **6.20** | **260** | *e*Pn | | **Pn** | **01 23 17.5** | **-0.6** |
| SJPF | | | | *e*Sn | | **Sn** | **01 24 24.4** | **-4.3** |
| SJPF | | | | *e*Sg | | **Sg** | **01 25 01.5** | **-4.4** |
| | comp=N,1.2nm,0.5s | | | | | | | |
| **GERES** | **GERESS Array B** | **6.25** | **44** | Pn | | **Pn** | **01 23 19.9** | **+0.9** |
| | comp=N,1.1nm,0.3s,baz=227,slow=17,SNR=15 | | | | | | | |
| GERES | | | | Sn | | **Sn** | **01 24 29.4** | **-0.9** |
| | comp=N,1.3nm,0.3s,baz=237,slow=27,SNR=9.8 | | | | | | | |
| | comp=N,1.6nm,0.3s | | | | | | | |
| **KHC** | **Kasperske Hory** | **6.39** | **42** | *e*PN | | **Pn** | **01 23 21.4** | **+0.6** |
| KHC | | | | *e*SN | | **Sn** | **01 24 30.4** | **-3.1** |
| **LDF** | **La Druitiere** | **6.43** | **312** | *e*P | | **Pn** | **01 23 23.9** | **+2.6** |
| LDF | | | | *e*Sn | | **Sn** | **01 24 29.8** | **-4.6** |
| LDF | | | | *e*Sg | | **Sg** | **01 25 08.5** | **-4.9** |
| | comp=N,9.9nm,0.7s | | | | | | | |
| **ARSA** | **Arzberg** | **6.47** | **62** | *i* Pn | | Pn | 01 23 26.8 | +4.9 |
| | comp=N,1.3nm,0.4s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **6.55** | **47** | *e*PN | | **Pn** | **01 23 23.6** | **+0.6** |
| CKRC | | | | *e*SN | | **Sn** | **01 24 33.0** | **-4.4** |
| **GRR** | **Gorron** | **6.72** | **308** | *e*P | | **Pn** | **01 23 27.9** | **+2.6** |
| **GRR** | **Gorron** | **6.72** | **308** | *e*Pg | | **Pg** | **01 23 51.6** | **-4.1** |
| GRR | | | | *e*Sn | | **Sn** | **01 24 37.7** | **-3.8** |
| | comp=N,4.1nm,0.4s | | | | | | | |
| **FLN** | **La Foliniere** | **6.72** | **312** | *e*P | | **Pn** | **01 23 28.5** | **+3.2** |
| **FLN** | **La Foliniere** | **6.72** | **312** | *e*Pg | | **Pg** | **01 23 51.4** | **-4.4** |
| FLN | | | | *e*Sn | | **Sn** | **01 24 37.1** | **-4.5** |
| FLN | | | | *e*Sg | | **Sg** | **01 25 18.6** | **-4.1** |
| | comp=N,1.9nm,0.3s | | | | | | | |
| **ZVC** | **Zvikov** | **6.89** | **42** | *e*PN | | **Pn** | **01 23 28.3** | **+0.6** |
| ZVC | | | | *e*SN | | **Sn** | **01 24 41.2** | **-4.6** |
| **CONA** | **Conrad Observa** | **6.95** | **58** | *i* Pn | | **Pn** | **01 23 27.4** | **-1.2** |
| | comp=N,0.6nm,0.3s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **7.12** | **60** | *e*Pn | | Pn | 01 23 37.7 | +6.8 |
| | comp=N,0.3nm,0.2s | | | | | | | |
| **KEST** | **Kesra** | **8.96** | **168** | Pn | | **Pn** | **01 23 59.5** | **+3.4** |
| | comp=N,0.3nm,0.3s,baz=167,slow=2.0,SNR=12 | | | | | | | |
| | comp=N,0.9nm,0.4s | | | | | | | |
| **ESDC** | **Sonseca Array** | **9.55** | **243** | Pn | | **Pn** | **01 24 05.7** | **+1.4** |
| | comp=N,0.1nm,0.3s,baz=56,slow=14,SNR=2.2 | | | | | | | |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **12.66** | **332** | Pn | | **Pn** | **01 24 47.0** | **+0.5** |
| | baz=147,slow=14 | | | | | | | |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **20.29** | **27** | P | | **P** | **01 26 21.0** | **-1.1** |
| | comp=N,1.0nm,0.9s,baz=214,slow=22,SNR=2.6 | | | | | | | |
| | comp=N,1.0nm,0.9s | | | | | | | |

*BGR **03** 01:34:18.5,34°.37N×92°.42E,h20km,mb5.4,Ms4.8*
*IDC **03** 01:34:18.3±0.4,34°.83N×92°.24E,h0km,mb4.9/29, mbtmp4.8/35,ML4.1/6,MS4.4/56,Error ellipse: s-maj=12.9km s-min=10.1km az=29.0*
*MOS **03** 01:34:19.8±0.9,34°.94N×92°.21E,h18km,mb5.5/81, MS4.8/30,Error ellipse: s-maj=5.5km s-min=2.7km az=130.4*
*BJI **03** 01:34:20.5±0.0,34°.84N×92°.29E,h10km,mb4.8/71, mB5.1/59,ML5.3/7,Ms5.3/92,Ms7 5.1/89*
*NEIC **03** 01:34:21.4,34°.94N×92°.17E,h24km*
*NEIC **03** 01:34:21.4,34°.94N×92°.17E,h24km,Moment Tensor Solution. Duration: 1ŝ7 Moment tensor: Scale 10^16^Nm; Mrr-8.03; Mθθ0.83; Mϕϕ7.20; Mrθ-0.70; Mθϕ1.52; Mϕr0.17; Fault plane solution: M0 7.82000×10^16^ NP1: ϕs187.99000°,δ45.23000°,λ-96.79000°. NP2:ϕs17.58000°, δ45.18000°,λ-83.21000°. Principal axes: T 7.5432, Plg0.0000°, Azm283.0000°; N 0.5468, Plg5.0000°, Azm193.0000°; P -8.0900, Plg85.0000°, Azm13.0000°;*
*NEIC **03** 01:34:22.4±1.7,34°.94N±0°.06×92°.16E±0°.07,h19km±3km, mb5.3/232,Mww5.2/22 Error ellipse: s-maj=10.2km s-min=7.1km az=212.0*
*GCMT **03** 01:34:23.8±0.1,34°.94N±0°.01×92°.32E±0°.01,h22km, MW5.2/119,Moment Tensor Solution. s97,c150; s119,c228; Duration: 1ŝ0 Moment tensor: Scale 10^17^ Nm; Mrr-0.72±.02; Mθθ-0.25±.01; Mϕϕ0.96±.01; Mrθ-0.08±.03; Mθϕ0.19±.01; Mϕr-0.10±.02; Best double couple: M0 0.86700×10^17^ NP1:ϕs16.00000°,δ49.00000°, λ-80.00000°. NP2:ϕs181.00000°,δ42.00000°, λ-101.00000°. Principal axes: T 1.0030, Plg4.0000°, Azm99.0000°; N -0.2700, Plg8.0000°, Azm189.0000°; P -0.7320, Plg82.0000°, Azm343.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NDI **03** 01:34:31.0±4.3,34°.45N×91°.88E,h20km±50km,mb5.0, mb5.3(NEIC)*

**ISC 03 01:34:20.2±0.3,34°.92N±0°.03×92°.20E±0°.02,h8km±1km, h8km:pP-P,n1227,σ1ŝ27/1235,mb5.3/353,MS4.8/110, 33C-66D,Qinghai**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GOMU** | **GeErMu** | **2.49** | **58** | Pn | **Pb** | **01 35 04.2** | **-1.2** |
| GOMU | | | | Sn | **Sb** | **01 35 35.8** | **-0.6** |
| GOMU | | | | smax | smax | | |
| | comp=N,5μm,1.4s | | | | | | |
| GOMU | | | | smax | smax | | |
| | comp=E,4μm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **5.28** | **190** | P | Pn | 01 35 45.4 | +5.6 |
| LSA | | | | S | **Sn** | **01 36 47.4** | **+6.4** |
| LSA | | | | LR | LR | | |
| | comp=N,5μm,9.1s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,17μm,6.7s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,24μm,8.6s | | | | | | |
| **LSA** | **Lhasa** | **5.28** | **190** | Pn | **Pn** | **01 35 44.1** | **+4.3** |
| **LSA** | **Lhasa** | **5.28** | **190** | P | Pn | 01 35 45.0 | +5.3 |
| **LSA** | **Lhasa** | **5.28** | **190** | P | **Pn** | **01 35 44.1** | **+4.3** |
| **TAWA** | **Tawang** | **7.30** | **182** | IAmb | IAmb | 01 37 16.9 | |
| | comp=Z,91nm,1.1s | | | | | | |
| **GTA** | **Gaotai** | **7.56** | **51** | Pn | **Pn** | **01 36 13.0** | **+2.2** |
| GTA | | | | Sn | **Sn** | **01 37 40.6** | **+3.9** |
| GTA | | | | LR | LR | | |
| | comp=Z,6μm,9.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,8μm,9.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,10μm,9.1s | | | | | | |
| **GTK** | **Tadong** | **8.17** | **203** | *e*P | **Pn** | **01 36 18.9** | **-0.4** |
| GTK | | | | IAmb | IAmb | 01 37 03.1 | |
| | comp=Z,93nm,0.9s | | | | | | |
| **LKP** | **Lekhapani** | **8.18** | **157** | *e*P | **Pn** | **01 36 21.1** | **+1.9** |
| LKP | | | | IAmb | IAmb | 01 36 30.5 | |
| | comp=Z,306nm,1.2s | | | | | | |
| **TEZP** | **TEZPUR** | **8.29** | **176** | *e*P | **Pn** | **01 36 20.9** | **+0.2** |
| TEZP | | | | IAmb | IAmb | 01 36 39.6 | |
| | comp=Z,62nm,1.1s | | | | | | |
| **MOKO** | **MOKOCHONG** | **8.80** | **166** | *e*P | **Pn** | **01 36 29.7** | **+1.9** |
| MOKO | | | | IAmb | IAmb | 01 36 35.6 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **SHL** | **Shillong** | **9.32** | **182** | | **Pn** | **01 36 34.6** | **-0.4** |
| **SHL** | **Shillong** | **9.32** | **182** | *e*P | **Pn** | **01 36 35.2** | **+0.1** |
| SHL | | | | IAmb | IAmb | 01 36 41.9 | |
| | comp=Z,43nm,1.0s | | | | | | |
| **SHL** | **Shillong** | **9.32** | **182** | P | **Pn** | **01 36 34.9** | **-0.2** |
| | SNR=12 | | | | | | |
| **SHL** | **Shillong** | **9.32** | **182** | P | **Pn** | **01 36 35.3** | **+0.2** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,46nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **9.55** | **340** | P | **Pn** | **01 36 39.8** | **+1.8** |
| WMQ | | | | smax | smax | | |
| | comp=Z,220nm,1.7s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=Z,270nm,1.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,14μm,10.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,13μm,16.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,4μm,12.7s | | | | | | |
| **LZH** | **Lanzhou** | **9.57** | **80** | P | **Pn** | **01 36 38.2** | **-0.2** |
| LZH | | | | sP | | 01 36 44.8 | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,47nm,1.1s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,380nm,4.4s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,11μm,10.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,12μm,9.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,11μm,10.6s | | | | | | |
| **IMP** | **Imphal** | **10.16** | **171** | *e*P | **Pn** | **01 36 48.4** | **+1.8** |
| IMP | | | | IAmb | IAmb | 01 36 54.6 | |
| | comp=Z,85nm,1.6s | | | | | | |
| **CD2** | **Chengdu** | **10.51** | **109** | P | **Pn** | **01 36 53.9** | **+2.7** |
| CD2 | | | | S | **Sn** | **01 38 53.0** | **+3.9** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,490nm,3.9s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,11μm,6.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,11μm,5.9s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,12μm,6.3s | | | | | | |
| **AGT** | **Agartala** | **11.03** | **185** | *e*P | **Pn** | **01 36 58.0** | **-0.2** |
| AGT | | | | IAmb | IAmb | 01 37 05.0 | |
| | comp=Z,350nm,1.1s | | | | | | |
| **HNLY** | **HANLEY** | **11.20** | **263** | *e*P | **Pn** | **01 37 05.4** | **+4.3** |
| **TNCH** | **TengChong** | **11.27** | **149** | P | **Pn** | **01 37 04.9** | **+3.1** |
| TNCH | | | | pP | | 01 37 06.8 | |
| TNCH | | | | sP | | 01 37 08.3 | |
| TNCH | | | | PP | **PnPn** | **01 37 13.2** | **+3.6** |
| TNCH | | | | S | **Sn** | **01 39 12.0** | **+3.9** |
| TNCH | | | | sS | | 01 39 15.3 | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,47nm,0.7s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,170nm,4.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,8μm,6.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,7μm,5.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,7μm,8.0s | | | | | | |
| **PZH** | **PanZhiHua** | **11.73** | **133** | P | **Pn** | **01 37 06.7** | **-1.3** |
| PZH | | | | S | **Sn** | **01 39 18.7** | **-0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,40nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,170nm,3.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,6μm,8.9s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,7μm,9.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,7μm,10.2s | | | | | | |
| **KLP** | **Kalpa** | **12.15** | **258** | *e*P | **Pn** | **01 37 15.8** | **+1.8** |
| KLP | | | | IAmb | IAmb | 01 37 35.9 | |
| | comp=Z,113nm,1.2s | | | | | | |
| **BOK** | **Bokaro** | **12.37** | **208** | *e*P | **Pn** | **01 37 16.0** | **-0.6** |
| BOK | | | | IAmb | IAmb | 01 37 33.1 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **SHLS** | **Shalkode** | **12.86** | **314** | *e*P | **Pn** | **01 37 20.5** | **-2.9** |
| | comp=Z,20nm,1.0s,baz=314 | | | | | | |
| **SHLS** | **Shalkode** | **12.86** | **314** | *e*P | **Pn** | **01 37 20.5** | **-2.9** |
| SHLS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **PDGK** | **Podgornoye** | **12.95** | **314** | P | **Pn** | **01 37 23.8** | **-0.7** |
| **UZB** | **Uzynbulak** | **13.12** | **313** | *e*P | **Pn** | **01 37 27.3** | **+0.4** |
| | comp=Z,25nm,1.0s,baz=313 | | | | | | |
| UZB | | | | *e*S | **Sn** | **01 39 54.5** | **+1.3** |
| | baz=313 | | | | | | |
| **UZB** | **Uzynbulak** | **13.12** | **313** | *e*P | **Pn** | **01 37 27.3** | **+0.4** |
| UZB | | | | *e*S | **Sn** | **01 39 54.4** | **+1.3** |
| UZB | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| **ALBI** | **Allahabad** | **13.12** | **226** | *e*P | **Pn** | **01 37 26.6** | **-0.3** |
| **PRZ** | **Przheval'sk** | **13.15** | **309** | | **Pn** | **01 37 25.5** | **-1.9** |
| **PRZ** | **Przheval'sk** | **13.15** | **309** | P | **Pn** | **01 37 30.1** | **+2.7** |
| **SMLA** | **Simla** | **13.16** | **258** | *e*P | **Pn** | **01 37 27.1** | **-0.3** |
| SMLA | | | | IAmb | IAmb | 01 37 42.9 | |
| | comp=Z,65nm,0.9s | | | | | | |
| **KMI** | **Kunming** | **13.36** | **134** | ⇓P | **Pn** | **01 37 31.7** | **+1.4** |
| KMI | | | | pP | P | 01 37 37.2 | -2.9 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,8μm,8.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,8μm,9.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,7μm,11.0s | | | | | | |
| **SATY** | **Saty** | **13.45** | **311** | *e*P | **Pn** | **01 37 31.7** | **+0.3** |
| | comp=Z,25nm,1.1s,baz=311 | | | | | | |
| SATY | | | | *e*S | **Sn** | **01 40 02.3** | **+1.2** |
| | baz=311 | | | | | | |
| **SATY** | **Saty** | **13.45** | **311** | *e*P | **Pn** | **01 37 31.6** | **+0.3** |
| SATY | | | | *e*S | **Sn** | **01 40 02.3** | **+1.2** |
| SATY | | | | pmax | pmax | | |
| | comp=Z,25nm,1.1s | | | | | | |
| **ZHN** | **Zhinishke** | **13.49** | **312** | *e*P | **Pn** | **01 37 32.3** | **+0.3** |
| | comp=Z,26nm,1.2s,baz=312 | | | | | | |
| **ZHN** | **Zhinishke** | **13.49** | **312** | *e*P | **Pn** | **01 37 32.2** | **+0.3** |
| ZHN | | | | pmax | pmax | | |
| | comp=Z,27nm,1.2s | | | | | | |
| **KPKS** | **Kokpek** | **13.50** | **313** | *e*P | **Pn** | **01 37 32.3** | **+0.2** |
| | comp=Z,25nm,0.9s,baz=313 | | | | | | |
| KPKS | | | | *e*S | **Sn** | **01 40 03.7** | **+1.2** |
| | baz=313 | | | | | | |
| **KPKS** | **Kokpek** | **13.50** | **313** | *e*P | **Pn** | **01 37 32.3** | **+0.2** |
| KPKS | | | | *e*S | **Sn** | **01 40 03.6** | **+1.2** |
| KPKS | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **13.52** | **263** | *e*P | **Pn** | **01 37 34.6** | **+2.2** |
| DHRM | | | | IAmb | IAmb | 01 37 49.4 | |
| | comp=Z,160nm,1.5s | | | | | | |
| **ZSN** | **Zaisan** | **13.68** | **339** | ⇓*i*P | **Pn** | **01 37 34.6** | **+0.2** |
| | comp=Z,46nm,1.1s,baz=339 | | | | | | |
| **ZSN** | **Zaisan** | **13.68** | **339** | *d i*P | **Pn** | **01 37 34.5** | **+0.2** |
| ZSN | | | | pmax | pmax | | |
| | comp=Z,46nm,1.1s | | | | | | |
| **KSH** | **Kashi** | **13.72** | **294** | P | **Pn** | **01 37 39.3** | **+4.2** |
| KSH | | | | pP | P | 01 37 42.4 | -1.5 |
| KSH | | | | sP | | 01 37 47.8 | |
| KSH | | | | S | S | 01 40 19.8 | -11 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,25nm,1.7s | | | | | | |
| KSH | | | | pmax | pmax | | |
| | comp=Z,850nm,5.0s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,3μm,11.3s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,4μm,11.3s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,4μm,12.0s | | | | | | |
| **XAN** | **Xi'an** | **13.83** | **89** | ⇓P | **Pn** | **01 37 34.9** | **-1.7** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,340nm,5.1s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,5μm,8.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,14μm,9.2s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,14μm,9.5s | | | | | | |
| **THN** | **Thein Dam** | **13.95** | **264** | *e*P | **Pn** | **01 37 41.2** | **+3.1** |
| THN | | | | IAmb | IAmb | 01 37 51.4 | |
| | comp=Z,507nm,1.6s | | | | | | |
| **MK31** | **Makanchi Array** | **14.02** | **331** | | **Pn** | **01 37 38.0** | **-1.0** |
| **MK31** | **Makanchi Array** | **14.02** | **331** | *e*P | **Pn** | **01 37 37.2** | **-1.9** |
| **MKAR** | **Makanchi Array** | **14.02** | **331** | | **Pn** | **01 37 38.1** | **-1.0** |
| **MKAR** | **Makanchi Array** | **14.02** | **331** | Pn | **Pn** | **01 37 37.7** | **-1.4** |
| | comp=Z,5.0nm,0.3s,baz=143,slow=14,SNR=318 | | | | | | |
| MKAR | | | | Lg | Lg | 01 41 43.2 | |
| | baz=140,slow=25,SNR=1.9 | | | | | | |
| | comp=Z,35nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **14.02** | **331** | P | **Pn** | **01 37 38.1** | **-1.0** |
| **MAKZ** | **Makanchi** | **14.16** | **330** | | **Pn** | **01 37 39.7** | **-1.3** |
| **MAKZ** | **Makanchi** | **14.16** | **330** | P | **Pn** | **01 37 39.7** | **-1.3** |
| **NDI** | **New Delhi** | **14.16** | **248** | ⇑*e*P | **Pn** | **01 37 39.5** | **-1.7** |
| NDI | | | | IAmb | IAmb | 01 37 45.3 | |
| | comp=Z,48nm,0.9s | | | | | | |
| **NRN** | **Naryn** | **14.29** | **302** | Pn | **Pn** | **01 37 43.6** | **+0.5** |
| **NRN** | **Naryn** | **14.29** | **302** | P | **Pn** | **01 37 43.7** | **+0.5** |
| **MDOK** | **Medeo** | **14.35** | **310** | *e*P | **Pn** | **01 37 44.1** | **+0.3** |
| | baz=310 | | | | | | |
| MDOK | | | | *e*S | **Sn** | **01 40 24.4** | **+1.2** |
| | baz=310 | | | | | | |
| MDOK | | | | LR | LR | 01 44 19.4 | |
| | comp=Z,2μm,10.8s,baz=310 | | | | | | |
| **MDOK** | **Medeo** | **14.35** | **310** | *e*P | **Pn** | **01 37 44.1** | **+0.3** |
| MDOK | | | | *e*S | **Sn** | **01 40 24.4** | **+1.2** |
| MDOK | | | | MLR | MLR | | |
| | comp=Z,2μm,11.0s | | | | | | |
| **TNSS** | **Tian-Shan** | **14.35** | **309** | *e*P | **Pn** | **01 37 44.1** | **+0.1** |
| | baz=309 | | | | | | |
| **TNSS** | **Tian-Shan** | **14.35** | **309** | *e*P | **Pn** | **01 37 44.1** | **+0.1** |
| **BHGR** | **Bahadurgarh** | **14.38** | **249** | ⇓*ex* | Pn | 01 37 37.0 | -7.0 |
| **ULHL** | **Ulahol** | **14.45** | **305** | P | **Pn** | **01 37 46.6** | **+1.4** |
| | SNR=30 | | | | | | |
| **AAA** | **Alma-Ata** | **14.46** | **309** | *e*P | **Pn** | **01 37 45.5** | **+0.3** |
| | baz=310 | | | | | | |
| AAA | | | | LR | LR | 01 44 24.2 | |
| | comp=Z,3μm,12.0s,baz=310 | | | | | | |
| **AAA** | **Alma-Ata** | **14.46** | **309** | *e*P | **Pn** | **01 37 45.4** | **+0.3** |
| AAA | | | | MLR | MLR | | |
| | comp=Z,3μm,12.0s | | | | | | |
| **TDK** | **Taldyorghan** | **14.58** | **318** | *e*P | **Pn** | **01 37 46.5** | **-0.4** |
| | comp=Z,52nm,0.9s,baz=318 | | | | | | |
| TDK | | | | LR | LR | 01 44 31.9 | |
| | comp=Z,2μm,11.2s,baz=318 | | | | | | |
| **TDK** | **Taldyqorghan** | **14.58** | **318** | *e*P | **Pn** | **01 37 46.4** | **-0.4** |
| TDK | | | | pmax | pmax | | |
| | comp=Z,52nm,0.9s | | | | | | |
| TDK | | | | MLR | MLR | | |
| | comp=Z,2μm,11.0s | | | | | | |
| **CHKK** | **Chushkaly** | **14.74** | **312** | *e*P | **Pn** | **01 37 48.8** | **-0.2** |
| | baz=312 | | | | | | |
| **CHKK** | **Chushkaly** | **14.74** | **312** | *e*P | **Pn** | **01 37 48.8** | **-0.2** |
| **BOOM** | **Boomskoye usch** | **14.76** | **306** | Pn | **Pn** | **01 37 49.7** | **+0.3** |
| **BOOM** | **Boomskoye usch** | **14.76** | **306** | P | **Pn** | **01 37 49.7** | **+0.3** |
| **GYA** | **Guiyang** | **15.02** | **120** | P | **Pn** | **01 37 51.1** | **-1.8** |
| GYA | | | | S | **Sn** | **01 40 39.0** | **-0.6** |
| GYA | | | | SS | **S** | **01 41 00.7** | **+3.3** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,58nm,0.9s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,470nm,3.1s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,5μm,8.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,4μm,7.6s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,6μm,10.0s | | | | | | |
| **JHNI** | **Jhansi** | **15.09** | **235** | *e*P | **Pn** | **01 37 50.6** | **-3.1** |
| JHNI | | | | IAmb | IAmb | 01 37 58.6 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **15.18** | **307** | P | **Pn** | **01 37 55.4** | **+0.4** |
| | SNR=44 | | | | | | |
| **TKM2** | **Tokmak 2** | **15.18** | **307** | P | **Pn** | **01 37 54.8** | **-0.2** |
| **BTO** | **Baotou** | **15.19** | **63** | *e*P | **Pn** | **01 37 51.9** | **-3.2** |
| BTO | | | | PP | **PnPn** | **01 38 03.1** | **0.0** |
| BTO | | | | SS | **S** | **01 41 03.2** | **+2.4** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,360nm,3.7s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,7μm,8.3s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,2μm,7.3s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,4μm,8.4s | | | | | | |
| **ENH** | **Enshi** | **15.29** | **103** | Pn | **Pn** | **01 37 55.2** | **-1.2** |
| ENH | | | | IAmb | IAmb | 01 38 00.2 | |
| | comp=Z,139nm,1.3s | | | | | | |
| **BLSP** | **Bilaspur** | **15.49** | **217** | *e*P | **Pn** | **01 37 57.1** | **-2.0** |
| BLSP | | | | IAmb | IAmb | 01 38 07.1 | |
| | comp=Z,34nm,1.1s | | | | | | |
| **KBK** | **Karagaybulak** | **15.49** | **305** | P | **Pn** | **01 38 00.8** | **+1.6** |
| | SNR=16 | | | | | | |
| **UCH** | **Uchtor** | **15.62** | **303** | P | **Pn** | **01 38 02.1** | **+1.0** |
| | SNR=14 | | | | | | |
| **NIL** | **Nilore** | **15.71** | **271** | Pn | **Pn** | **01 37 59.6** | **-2.3** |
| **NIL** | **Nilore** | **15.71** | **271** | P | **Pn** | **01 37 59.6** | **-2.3** |
| NIL | | | | pmax | pmax | | |
| | comp=Z,88nm,0.9s | | | | | | |
| **CHMS** | **Chumysh** | **15.77** | **306** | P | **Pn** | **01 38 03.5** | **+0.9** |
| | SNR=11 | | | | | | |
| **FRU1** | **Bishkek** | **15.77** | **305** | P | **Pn** | **01 38 04.1** | **+1.4** |
| **FRU1** | **Bishkek** | **15.77** | **305** | P | **Pn** | **01 38 04.1** | **+1.4** |
| FRU1 | | | | pmax | pmax | | |
| | comp=Z,150nm,1.7s | | | | | | |
| **AAK** | **Ala-Archa** | **15.79** | **304** | P | **Pn** | **01 38 04.4** | **+1.3** |
| | SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **15.79** | **304** | Pn | **Pn** | **01 38 03.0** | **-0.1** |
| AAK | | | | IAmb | IAmb | 01 38 10.3 | |
| | comp=Z,460nm,1.9s | | | | | | |
| **AAK** | **Ala-Archa** | **15.79** | **304** | *i* P | **Pn** | **01 38 04.5** | **+1.4** |
| | SNR=25 | | | | | | |
| **AAK** | **Ala-Archa** | **15.79** | **304** | Pn | **Pn** | **01 38 04.0** | **+1.0** |
| | comp=Z,0.3nm,0.3s,baz=127,slow=10,SNR=28 | | | | | | |
| AAK | | | | LR | LR | 01 45 08.5 | |
| | comp=Z,4μm,20.3s,baz=116,slow=41 | | | | | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **15.79** | **304** | P | **P** | **01 38 05.2** | **-1.8** |
| AAK | | | | P | **P** | **01 38 05.2** | **-1.8** |
| **AAK** | **Ala-Archa** | **15.79** | **304** | *ce*P | **Pn** | **01 38 04.1** | **+1.0** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,91nm,1.3s | | | | | | |
| **SGDS** | **Sogindy** | **16.04** | **307** | *e*P | **Pn** | **01 38 06.5** | **+0.2** |
| | baz=307 | | | | | | |
| **SGDS** | **Sogindy** | **16.04** | **307** | *e*P | **Pn** | **01 38 06.4** | **+0.2** |
| **USP** | **Ospenovka** | **16.05** | **307** | P | **Pn** | **01 38 07.5** | **+1.3** |
| | SNR=13 | | | | | | |
| **AML** | **Almayashu** | **16.16** | **302** | P | **Pn** | **01 38 09.1** | **+1.2** |
| | SNR=8.0 | | | | | | |
| **EKS2** | **Erkin-Say** | **16.29** | **304** | P | **P** | **01 38 11.7** | **-0.8** |
| | SNR=17 | | | | | | |
| **OHH** | **Osh** | **16.34** | **296** | P | **P** | **01 38 14.7** | **+1.8** |
| OHH | | | | pmax | pmax | | |
| | comp=Z,63nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **16.39** | **63** | *e*P | **P** | **01 38 12.4** | **-1.1** |
| HHC | | | | sP | pP | 01 38 18.2 | +1.1 |
| HHC | | | | SS | S | 01 41 36.6 | +11 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,60nm,1.2s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,270nm,4.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,3μm,11.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,4μm,10.3s | | | | | | |
| HHC | | | | LR | LR | | |

comp=Z,4μm,11.0s
**LYN LuoYang 16.67 85** *e*P **P 01 38 18.9 +2.3**
LYN pmax pmax
comp=Z,43nm,0.9s
LYN pmax pmax
comp=Z,540nm,4.7s
LYN LR LR
comp=Z,4μm,10.3s
LYN LR LR
comp=Z,7μm,11.0s
LYN LR LR
comp=Z,9μm,10.3s
**SONM Songino Array 16.70 35** Pn **Pn 01 38 14.2 -0.4**
**SONM Songino Array 16.70 35** Pn **Pn 01 38 14.3 -0.4**
comp=Z,0.4nm,0.3s,baz=222,slow=12,SNR=47
SONM Lg Lg 01 43 08.1
comp=Z,0.1nm,0.3s,baz=255,slow=21,SNR=3.5
SONM LR LR 01 45 09.9
comp=Z,2μm,19.4s,baz=224,slow=39
comp=Z,9.1nm,0.9s
**DRK Karamyk 16.87 292** Pn **Pn 01 38 16.7 -0.3**
**DRK Karamyk 16.87 292** P **Pn 01 38 16.7 -0.3**
DRK pmax pmax
comp=Z,120nm,1.4s
**SLVN Son La 17.00 140** **P 01 38 19.9 -0.5**
**ULN Ulaanbaatar 17.04 36** Pn **Pn 01 38 18.9 0.0**
**ULN Ulaanbaatar 17.04 36** P **P 01 38 20.0 -0.8**
**ULN Ulaanbaatar 17.04 36** *i* P **Pn 01 38 18.7 -0.2**
**CHTO Chiang Mai 17.12 158** Pn **Pn 01 38 20.6 +0.7**
**CHTO Chiang Mai 17.12 158** P **Pn 01 38 20.6 +0.7**
CHTO pmax pmax
comp=Z,65nm,1.7s
**BTLS Baital 17.16 312** ⇓ *i* P **Pn 01 38 20.3 0.0**
baz=312
**BTLS Baital 17.16 312** *d i* P **Pn 01 38 20.2 0.0**
**AJM Ajmer 17.26 246** *e*P **Pn 01 38 20.8 -0.9**
AJM IAmb IAmb 01 38 29.0
comp=Z,130nm,1.2s
**ARK Arkit 17.27 299** P **P 01 38 23.6 +0.3**
ARK pmax pmax
comp=Z,96nm,2.5s
**BHPL Bhopal 17.35 232** *e*P **Pn 01 38 22.4 -0.4**
BHPL IAmb IAmb 01 38 24.8
comp=Z,194nm,1.9s
**RAGD RAYAGADA 17.42 209** IAmb IAmb 01 38 31.0
comp=Z,186nm,1.7s
**ZAK Zakamensk 17.44 24** *e*P **Pn 01 38 23.8 -0.1**
ZAK pmax pmax
comp=Z,121nm,1.5s
**CMAR Chiang Mai Arr 17.46 158** P **Pn 01 38 23.2 -0.9**
comp=Z,0.7nm,0.3s,baz=335,slow=11,SNR=17
CMAR PcP **PcP 01 43 05.5 +0.3**
comp=Z,2.2nm,0.3s,baz=310,slow=2.6,SNR=10
CMAR LR LR 01 44 44.0
comp=Z,369nm,21.9s,baz=340,slow=36
comp=Z,2.0nm,0.3s
**BTK Batken 17.71 293** **P 01 38 28.0 -0.2**
**BTK Batken 17.71 293** P **P 01 38 28.0 -0.2**
BTK pmax pmax
comp=Z,192nm,1.7s
**TRKS Terek-Say 17.79 298** P **P 01 38 28.9 -0.2**
TRKS pmax pmax
comp=Z,80nm,1.3s
**PHRA Phrae 17.84 154** **P 01 38 29.9 +0.2**
PHRA IAmb IAmb 01 38 35.6
comp=Z,329nm,1.1s
**MOY Mondy 17.90 18** *e*P **Pn 01 38 28.3 -1.3**
MOY pmax pmax
comp=Z,201nm,2.5s
**GAR Garm 17.95 290** Pn **Pn 01 38 28.6 -1.7**
GAR IAmb IAmb 01 38 37.0
comp=Z,280nm,1.4s
**HNS HongShan 18.34 76** ⇓ P **P 01 38 36.0 +1.0**
HNS pmax pmax
comp=Z,20nm,1.5s
HNS LR LR
comp=Z,2μm,12.0s
HNS LR LR
comp=Z,5μm,11.2s
HNS LR LR
comp=Z,5μm,12.0s
**GULI GuiLin 18.39 117** ⇓ P **Pn 01 38 35.3 -0.3**
GULI S **Sn 01 41 56.4 -4.9**
GULI pmax pmax
comp=Z,50nm,1.1s
GULI pmax pmax
comp=Z,330nm,5.2s
GULI LR LR
comp=Z,2μm,14.0s
GULI LR LR
comp=Z,1μm,14.2s
GULI LR LR
comp=Z,3μm,12.3s
**KURBB Kurchatov Arra 18.58 332** P **P 01 38 36.1 -1.4**
comp=Z,0.3nm,0.3s,baz=139,slow=11,SNR=84
KURBB Lg Lg 01 44 14.1
baz=153,slow=28
KURBB LR LR 01 46 02.6
comp=Z,2μm,18.9s,baz=136,slow=38
comp=Z,22nm,0.8s
**KURK Kurchatov 18.62 332** **P 01 38 35.8 -2.2**
KURK IAmb IAmb 01 38 44.1
comp=Z,321nm,1.9s
**KURK Kurchatov 18.62 332** P **Pn 01 38 38.6 +0.4**
**KURK Kurchatov 18.62 332** *ce*P **P 01 38 36.4 -1.5**
KURK pmax pmax
comp=Z,122nm,1.7s
**KK31 Karatay Array 18.69 302** **Pn 01 38 39.2 0.0**
**KK31 Karatay Array 18.69 302** *i* P **Pn 01 38 39.3 0.0**
**KKAR Karatay Array 18.69 302** **Pn 01 38 39.3 +0.1**
**KKAR Karatay Array 18.69 302** **Pn 01 38 40.0 +0.8**
**KKAR Karatay Array 18.69 302** P **Pn 01 38 39.3 +0.1**
KKAR pmax pmax
comp=Z,45nm,0.9s
**CHGR Chuyangaron 18.82 288** P **P 01 38 39.9 -0.4**
CHGR IAmb IAmb 01 38 41.4
comp=Z,190nm,0.8s
**CHGR Chuyangaron 18.82 288** P **P 01 38 39.9 -0.4**
CHGR pmax pmax
comp=Z,190nm,0.8s
**CNSH ChangSha 18.89 105** P **P 01 38 39.3 -1.8**
CNSH S **Sn 01 42 07.6 -5.6**
CNSH pmax pmax
comp=Z,38nm,1.4s
CNSH LR LR
comp=Z,3μm,7.7s
CNSH LR LR
comp=Z,3μm,9.9s
CNSH LR LR
comp=Z,3μm,10.7s
**SIMJ Simiganj 18.93 288** **P 01 38 41.3 -0.4**
**KBL Kabul 19.03 276** **Pn 01 38 43.6 +0.1**
**KBL Kabul 19.03 276** P **Pn 01 38 43.8 +0.3**
SNR=176
**KBL Kabul 19.03 276** P **Pn 01 38 43.6 +0.1**
KBL pmax pmax
comp=Z,457nm,1.3s
**WHN Wuhan 19.13 97** ⇑ P **Pn 01 38 44.8 +0.2**
WHN pP **sP 01 38 48.7 -0.2**
WHN S **Sn 01 42 18.5 -0.6**
WHN sS **sS 01 42 24.8 -1.8**
WHN pmax pmax
comp=Z,110nm,1.0s
WHN pmax pmax
comp=Z,2μm,4.9s
WHN LR LR
comp=Z,15μm,7.1s
WHN LR LR
comp=Z,7μm,8.1s
WHN LR LR
comp=Z,14μm,9.4s
**BRLS Borolday 19.14 302** ⇓ *i* P **Pn 01 38 44.6 -0.1**
baz=301
**BRLS Borolday 19.14 302** *d i* P **Pn 01 38 44.5 -0.1**
**IRK Irkutsk 19.36 23** *e*P **Pn 01 38 48.2 +1.1**
IRK pmax pmax
comp=Z,311nm,2.2s
**AKL Akola 19.48 227** *e*P **P 01 38 46.9 -0.7**
**BJT Baijiatuau 19.68 68** P **Pn 01 38 51.3 +0.3**
**BJI Beijing 19.68 68** P **Pn 01 38 51.2 +0.1**
BJI sP **sP 01 38 58.4 +3.4**
BJI S **S 01 42 24.9 -6.9**
BJI PcP **PcP 01 43 09.0 +0.4**
BJI pmax pmax
comp=Z,410nm,8.6s
BJI LR LR
comp=Z,1μm,10.1s
BJI LR LR
comp=Z,2μm,11.3s
BJI LR LR
comp=Z,3μm,11.8s
**ZAA0 Zalesovo Array 19.72 347** P **P 01 38 49.7 -0.4**
**ZALV Zalesovo Beam 19.72 347** P **P 01 38 49.3 -0.7**
comp=Z,1.6nm,0.3s,baz=163,slow=12,SNR=44
ZALV LR LR 01 47 13.6
comp=Z,1μm,19.2s,baz=166,slow=39
comp=Z,25nm,0.8s
**OTUK Ortayu 19.87 318** P **P 01 38 51.7 -0.1**
**TIA Tai'an 20.31 79** P Pn 01 38 57.8 -0.8
TIA sP sP 01 39 04.4 +2.5
TIA S **S 01 42 40.6 -3.9**
TIA pmax pmax
comp=Z,28nm,1.2s
TIA pmax pmax
comp=Z,850nm,4.1s
TIA LR LR
comp=Z,2μm,7.6s
TIA LR LR
comp=Z,4μm,10.0s
TIA LR LR
comp=Z,5μm,10.3s
**XLT XiLinHaoTe 20.46 57** *e*P **P 01 38 58.8 +0.5**
XLT sP sP 01 39 06.3 +2.7
XLT S **S 01 42 49.1 +1.5**
XLT pmax pmax
comp=Z,21nm,1.3s
XLT pmax pmax
comp=Z,410nm,6.7s
XLT LR LR
comp=Z,320nm,9.9s
XLT LR LR
comp=Z,3μm,10.2s
XLT LR LR
comp=Z,4μm,10.9s
**HYB Hyderabad 21.26 218** *e*P **P 01 39 07.5 +0.6**
HYB *e*S **S 01 43 04.1 +0.6**
HYB IVMs_BB IVMs_BB 01 48 10.9
comp=Z,2μm,7.5s
**SRDT SRDT 21.41 161** P **P 01 39 10.3 +1.8**
**QIZ Qiongzhong 22.25 131** P **P 01 39 18.3 +0.7**
QIZ S **S 01 43 22.4 -0.4**
QIZ pmax pmax
comp=Z,86nm,0.9s
QIZ pmax pmax
comp=Z,560nm,4.1s
QIZ LR LR
comp=Z,5μm,10.0s
QIZ LR LR
comp=Z,5μm,10.6s
QIZ LR LR
comp=Z,10μm,10.8s
**NJ2 Nanjing 22.40 90** *e*P **P 01 39 19.9 +0.8**
NJ2 sP **sP 01 39 27.1 +2.8**
NJ2 S **S 01 43 25.1 -0.2**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
NJ2 LR LR
comp=Z,1μm,8.3s
NJ2 LR LR
comp=Z,2μm,7.5s
NJ2 LR LR
comp=Z,3μm,8.4s
**UBPT Khong Chiam 22.91 145** P **P 01 39 25.1 +0.5**
**UBPT Khong Chiam 22.91 145** P **P 01 39 24.9 +0.4**
UBPT IAmb IAmb 01 39 30.0
comp=Z,108nm,1.2s
**CIT Chita 22.94 35** *e*P **P 01 39 23.2 -1.5**
CIT *e* 01 39 55.1
CIT *e* 01 40 09.5
CIT *e* 01 50 28.7
CIT pmax pmax
comp=Z,140nm,1.6s
**HKPS Hong Kong Po S 22.96 117** P **P 01 39 26.7 +1.6**
**HKPS Hong Kong Po S 22.96 117** P **P 01 39 25.1 0.0**
HKPS IAmb IAmb 01 39 31.6
comp=Z,167nm,1.1s
**BVA0 Borovoye Array 23.80 326** *i* P **P 01 39 33.5 +0.2**
**DL2 Dalian 23.82 72** P **P 01 39 31.8 -1.8**
DL2 S **S 01 43 49.5 0.0**
DL2 pmax pmax
comp=Z,31nm,1.0s
DL2 pmax pmax
comp=Z,410nm,7.2s
DL2 LR LR
comp=Z,960nm,12.2s
DL2 LR LR
comp=Z,2μm,14.1s
DL2 LR LR
comp=Z,3μm,17.7s
**BRVK Borovoye 23.87 326** P **P 01 39 33.8 -0.1**
BRVK IAmb IAmb 01 39 36.6
comp=Z,70nm,0.9s
**BRVK Borovoye 23.87 326** P **P 01 39 34.8 +0.9**
**BRVK Borovoye 23.87 326** *ce*P **P 01 39 34.4 +0.5**
BRVK pmax pmax
comp=Z,235nm,2.5s
**SSE Sheshan 24.57 91** P **P 01 39 39.1 -1.5**
SSE S **S 01 44 00.7 -1.0**
SSE pmax pmax
comp=Z,15nm,1.8s
SSE pmax pmax
comp=Z,250nm,4.2s
SSE LR LR
comp=Z,930nm,10.2s
SSE LR LR
comp=Z,380nm,10.3s
**HRA Herat 24.61 277** P **P 01 39 41.5 +0.3**
HRA IAmb IAmb 01 39 44.4
comp=Z,59nm,0.9s
**QZH Quanzhou 24.88 106** P **P 01 39 43.7 +0.3**
QZH S **S 01 44 05.4 -1.3**
QZH pmax pmax
comp=Z,460nm,6.5s
QZH LR LR
comp=Z,4μm,9.0s
QZH LR LR
comp=Z,3μm,7.6s
QZH LR LR
comp=Z,4μm,8.2s
**SNY Shenyang 25.46 65** ⇑ P **P 01 39 49.0 +0.5**
SNY S **S 01 44 17.1 +1.4**
SNY pmax pmax
comp=Z,26nm,0.9s
SNY pmax pmax
comp=Z,370nm,6.1s
SNY LR LR
comp=Z,1μm,11.8s
SNY LR LR
comp=Z,2μm,12.3s
SNY LR LR
comp=Z,2μm,11.6s
**SURA Surathani 26.52 163** P **P 01 40 03.2 +4.9**
**CN2 Changchun 27.05 61** P **P 01 40 03.4 +0.4**
CN2 pP pP 01 40 07.6 +0.8
CN2 S **S 01 44 37.6 -3.3**
CN2 pmax pmax
comp=Z,30nm,0.9s
CN2 pmax pmax
comp=Z,200nm,3.0s
CN2 LR LR
comp=Z,2μm,16.0s
CN2 LR LR
comp=Z,2μm,16.0s
CN2 LR LR
comp=Z,2μm,17.0s
**SRIT Nakonsritamara 27.06 164** P **P 01 40 07.2 +4.0**
**SRIT Nakonsritamara 27.06 164** P **P 01 40 03.3 +0.1**
SRIT IAmb IAmb 01 40 08.2
comp=Z,67nm,0.9s
**BOD Bodaibo 27.17 26** *e*P **P 01 40 04.9 +1.0**
BOD pmax pmax
comp=Z,94nm,1.6s
**AB31 Akbulak array 27.65 311** *i* P **P 01 40 07.2 -1.1**
**ABKAR Akbulak array 27.65 311** P **P 01 40 07.6 -0.7**
**ABKAR Akbulak array 27.65 311** P **P 01 40 08.0 -0.3**
**BNX BinXian 28.72 57** ⇓ P **P 01 40 18.1 +0.2**
BNX S **S 01 45 09.1 +1.9**
BNX sS **sS 01 45 13.1 -0.5**
BNX pmax pmax
comp=Z,13nm,1.3s
BNX LR LR
comp=Z,3μm,14.6s
BNX LR LR
comp=Z,1μm,12.5s
BNX LR LR
comp=Z,2μm,9.8s
**KSAR Wonju Array Be 28.81 74** P **P 01 40 18.2 -0.5**
**KSAR Wonju Array Be 28.81 74** P **P 01 40 18.3 -0.5**
**KSRS Korea Array 28.84 74** P **P 01 40 18.6 -0.4**
comp=Z,4.5nm,0.9s,baz=272,slow=8.7,SNR=22
KSRS PcP **PcP 01 43 27.8 -0.7**
comp=Z,1.0nm,0.7s,baz=270,slow=1.7,SNR=5.0
comp=Z,4.5nm,0.9s
**AKTO Aktyubinsk 29.21 313** LR LR 01 53 10.5
comp=Z,3μm,19.6s,baz=108,slow=39
**PALK Pallekele 29.47 204** LR LR 01 53 13.2
comp=Z,360nm,18.0s,baz=135,slow=39
**HEH HeiHe 29.79 48** *e*P **P 01 40 27.4 +0.1**
HEH S **S 01 45 25.7 +1.9**
HEH pmax pmax
comp=Z,12nm,1.2s
HEH pmax pmax
comp=Z,160nm,4.6s
HEH LR LR
comp=Z,1μm,10.4s
HEH LR LR
comp=Z,3μm,11.2s
HEH LR LR
comp=Z,4μm,11.1s
**MDJ Mudanjiang 30.11 60** P **P 01 40 30.5 +0.3**
MDJ pP sP 01 40 36.7 +1.1
MDJ sP pP 01 40 41.1 +7.0
MDJ PcP **PcP 01 43 32.8 +1.2**
MDJ ScP **ScP 01 47 19.4 +5.3**
MDJ pmax pmax
comp=Z,14nm,1.1s
MDJ pmax pmax
comp=Z,170nm,4.7s
MDJ LR LR
comp=Z,3μm,17.9s
MDJ LR LR
comp=Z,350nm,11.8s
MDJ LR LR
comp=Z,3μm,11.2s
**KULM Kulim 30.50 163** P **P 01 40 33.0 -0.8**
KULM IAmb IAmb 01 40 38.1
comp=Z,60nm,1.3s
**SVE Sverdlovsk 30.58 326** *ce*P **P 01 40 35.3 +1.1**
SVE *e*S **S 01 45 38.6 +2.5**
SVE pmax pmax
comp=Z,65nm,1.1s
SVE MLR MLR
comp=Z,1μm,10.0s
**ZEA Zeya 30.91 42** *e*P **P 01 40 38.1 +1.0**
ZEA *e*S **S 01 45 38.0 -3.3**
ZEA pmax pmax
comp=E,10.0nm,1.0s
ZEA pmax pmax
comp=Z,20nm,1.1s
ZEA pmax pmax
comp=E,100nm,5.1s
ZEA pmax pmax
comp=N,100nm,5.0s
ZEA pmax pmax
comp=Z,100nm,5.2s
ZEA smax smax
comp=N,100nm,11.8s
ZEA MLR MLR
comp=E,2μm,9.0s
ZEA MLR MLR
comp=Z,2μm,10.0s
**JLN Jalan Bani Buh 31.34 255** P **P 01 40 41.8 +0.5**
**ARU Arti 31.36 324** P **P 01 40 40.7 -0.4**
ARU IAmb IAmb 01 40 42.8
comp=Z,42nm,1.1s
**ARU Arti 31.36 324** LR LR 01 54 05.4
comp=Z,1μm,20.5s,baz=114,slow=38
**ARU Arti 31.36 324** *d i* P **P 01 40 41.6 +0.5**
ARU 01 41 39.5
ARU 01 43 34.4
ARU S **S 01 45 52.6 +4.2**
ARU SS **SnSn 01 47 34.4 +2.8**
ARU pmax pmax
comp=Z,48nm,1.2s
ARU MLR MLR
comp=Z,935nm,14.0s
**ARU Arti 31.36 324** P **P 01 40 41.4 +0.3**
comp=Z,44nm,1.2s,comp=Z,604nm
**WSAR Wadi Sarin 31.41 257** P **P 01 40 43.3 +1.4**
SNR=5.9
**BIDO Bidbid 31.68 258** P **P 01 40 45.7 +1.4**
BIDO P **P 01 40 45.7 +1.4**
**USA0B Ussuriysk Arra 31.79 61** P **P 01 40 43.9 -1.1**
**USA0B Ussuriysk Arra 31.79 61** *i* P **P 01 40 44.2 -0.8**
**USRK Ussuriysk Ar. 31.79 61** P **P 01 40 44.2 -0.8**
**USRK Ussuriysk Ar. 31.79 61** P **P 01 40 44.5 -0.4**
comp=Z,3.3nm,0.7s,baz=259,slow=6.8,SNR=14
USRK LR LR 01 54 21.3
comp=Z,1μm,18.2s,baz=272,slow=38
comp=Z,3.3nm,0.7s
**JOW Kunigami 31.87 95** LR LR 01 54 07.8
comp=Z,1μm,21.7s,baz=296,slow=37
**SMDO Samad 31.97 258** P **P 01 40 48.1 +1.2**
SMDO P **P 01 40 48.1 +1.2**
**JNU Nakatsue 31.98 82** LR LR 01 56 18.4
comp=Z,210nm,20.1s,baz=34,slow=41
**KLR Kul'dur 32.26 51** P **P 01 40 48.5 -0.6**
comp=Z,12nm,0.9s,baz=269,slow=11,SNR=14
comp=Z,12nm,0.9s
**KLR Kul'dur 32.26 51** *e*P **P 01 40 47.0 -2.1**
KLR pmax pmax
comp=Z,25nm,1.4s
**JMDO Jabal Madar 32.27 256** P **P 01 40 49.8 +0.4**
**HOQ Hoqain 32.31 259** P **P 01 40 49.8 -0.1**
HOQ P **P 01 40 49.8 -0.1**
**MASF Masafi 32.44 263** P **P 01 40 52.4 +1.5**
**MSFE Esma-Masafi 32.44 263** P **P 01 40 52.1 +1.2**
**UOSS Minazif 32.59 262** P **P 01 40 52.9 +0.6**
**SOHO SOHO 32.68 261** P **P 01 40 53.6 +0.5**
SOHO P **P 01 40 53.6 +0.5**
**HATD Hatta, Dubai 32.70 262** P **P 01 40 57.3 +4.1**
**ASHO Ashiyiah 32.82 262** *i* P **P 01 40 56.2 +1.9**
SNR=6.5
**ASHO Ashiyiah 32.82 262** P **P 01 40 55.5 +1.2**
ASHO P **P 01 40 55.5 +1.2**
**NAZ Nazwa, Dubai 33.01 263** *i* P **P 01 40 57.5 +1.6**
SNR=7.7
**NAZ Nazwa, Dubai 33.01 263** P **P 01 40 57.6 +1.8**
NAZ P **P 01 40 57.6 +1.8**
**ARQ Araqi 33.06 259** P **P 01 40 57.7 +1.3**
SNR=7.7
**MHTO MHTO 33.09 254** P **P 01 40 56.6 0.0**
MHTO P **P 01 40 56.6 0.0**
**FAQ Al Faqa, Dubai 33.17 262** P **P 01 40 58.5 +1.2**
SNR=5.9
**ALNE Al Ain 33.35 261** *i* P **P 01 41 00.2 +1.2**
SNR=9.1
**ALNE Al Ain 33.35 261** P **P 01 41 00.2 +1.2**
SNR=5.2
**ASUD Al Ashush, Dub 33.44 262** *i* P **P 01 41 00.7 +1.0**
SNR=7.1
**ASUD Al Ashush, Dub 33.44 262** P **P 01 41 01.3 +1.7**
**AJN Ajban 33.75 262** P **P 01 41 03.8 +1.5**
**GSI Gunungsitoli 33.81 170** P **P 01 41 02.1 -0.8**
**GSI Gunungsitoli 33.81 170** P **P 01 41 02.5 -0.4**
comp=Z,141nm,1.7s
**DQM DQM 34.00 253** P **P 01 41 05.1 +0.5**
**LKRN Lenkeran, Azer 34.73 289** P **P 01 41 12.2 +1.5**
**MZWR Madinat Zayed 35.01 262** P **P 01 41 13.9 +0.6**
**TEY Ternei 35.11 60** ⇓ *e*P **P 01 41 12.7 -1.2**
TEY pmax pmax
comp=Z,10.0nm,1.3s
**JRN Qarnain Island 35.33 265** P **P 01 41 15.7 -0.2**
**MAK Makhachkala 35.33 297** *c i* P **P 01 41 12.1 -3.8**
MAK *e*S **S 01 46 45.2 -5.0**
MAK *e*SS **SnSn 01 49 10.5 +2.3**
MAK pmax pmax
comp=Z,176nm,1.3s
MAK MLR MLR
comp=Z,1μm,12.0s
**GRNR Gornyy 35.50 50** *e*P **P 01 41 17.4 +0.1**
GRNR MLR MLR
comp=E,2μm,13.0s
GRNR MLR MLR
comp=Z,1μm,11.0s
**SEKA Sheki 35.67 294** P **P 01 41 20.2 +1.3**
**MZR Muzera 35.69 261** *i* P **P 01 41 19.5 +0.3**

SNR=28
**MZR Muzera 35.69 261** P **P** **01 41 19.3 +0.2**
SNR=10
MZR P **P** **01 41 19.3 +0.2**
SNR=10
**GHWR Ruwais 35.73 263** P **P** **01 41 20.5 +1.0**
GHWR P **P** **01 41 20.5 +1.0**
**MNGR Mingechevir, A 35.79 293** P **P** **01 41 21.7 +1.9**
**YAK Yakutsk 35.91 29** LR LR 01 57 08.9
comp=Z,833nm,21.1s,baz=240,slow=38
**YAK Yakutsk 35.91 29** *e*P **P** **01 41 20.8 +0.2**
YAK *e* 01 42 45.4
YAK *e*S **S** **01 46 59.3 +0.6**
YAK *e*SS **SnSn** **01 49 24.6 +2.9**
YAK *e*SSS SSS 01 49 40.4
YAK pmax pmax
comp=Z,17nm,1.0s
YAK pmax pmax
comp=N,5.0nm,1.0s
YAK pmax pmax
comp=E,10.0nm,1.1s
YAK pmax pmax
comp=Z,45nm,1.8s
YAK pmax pmax
comp=E,41nm,1.5s
YAK pmax pmax
comp=N,35nm,1.6s
YAK smax smax
comp=E,42nm,2.6s
YAK smax smax
comp=N,43nm,2.6s
YAK MLR MLR
comp=Z,525nm,13.0s
YAK MLR MLR
comp=E,325nm,12.0s
**BELG Belogornoye 36.00 313** LR LR 01 57 44.3
comp=E,1µm,18.7s,baz=94,slow=39
**BELG Belogornoye 36.00 313** *i* P **P** **01 41 21.0 -0.4**
BELG pmax pmax
comp=Z,8.0nm,0.9s
**KKM Kota Kinabalu 36.28 137** P **P** **01 41 29.0 +4.6**
**SLWR Sila 36.65 264** P **P** **01 41 27.9 +0.5**
**KIRV Kirov 36.74 324** LR LR 01 57 53.7
comp=Z,574nm,19.7s,baz=115,slow=38
**KIRV Kirov 36.74 324** *ce*P **P** **01 41 28.4 +0.7**
**TRNA Turayna 36.75 265** P **P** **01 41 29.4 +1.1**
SNR=5.2
**SAKB Bahrain 36.79 268** P **P** **01 41 29.8 +1.3**
**SMRA Abu-Samra 37.07 266** P **P** **01 41 30.3 -0.6**
SNR=8.9
**MJAR Matsushiro Arr 37.12 74** P **P** **01 41 30.1 -1.1**
comp=Z,3.9nm,0.9s,baz=289,slow=10,SNR=8.9
MJAR PcP **PcP** **01 43 51.1 -0.5**
comp=Z,3.5nm,0.8s,baz=286,slow=2.7,SNR=9.4
comp=Z,3.9nm,0.9s
**NAX Nakhchivan 37.20 291** P **P** **01 41 33.4 +1.4**
**DMTO DMTO 37.26 252** P **P** **01 41 30.7 -2.0**
**SBUM Sibu 37.29 146** P **P** **01 41 34.0 +1.2**
**KSM Kuching 37.31 149** IAmb IAmb 01 41 39.2
comp=Z,72nm,1.3s
**DOK Doka 37.40 254** P **P** **01 41 33.2 -0.6**
DOK P **P** **01 41 33.2 -0.6**
**GNI Garni 37.64 292** P **P** **01 41 36.0 +0.3**
**GNI Garni 37.64 292** P **P** **01 41 37.7 +1.9**
GNI P **P** **01 41 37.7 +1.9**
**GNI Garni 37.64 292** *i* P **P** **01 41 36.1 +0.3**
GNI pmax pmax
comp=Z,29nm,1.4s
**KBD Kabd 37.91 274** P **P** **01 41 38.4 +0.3**
**WHFO Wadi Hawf 38.07 254** P **P** **01 41 39.0 -0.5**
**MYLDM Lahad Datu 38.30 135** pP 01 41 46.0 +0.8
**GOF Gofitskoye 38.47 300** *ce*P **P** **01 41 43.3 +0.7**
**KBZ Khabaz 38.65 298** P **P** **01 41 44.5 +0.5**
comp=Z,5.5nm,0.9s,baz=146,slow=5.4,SNR=8.6
KBZ LR LR 01 58 44.8
comp=Z,552nm,21.0s,baz=72,slow=38
comp=Z,5.5nm,0.9s
**KBZ Khabaz 38.65 298** *ce*P **P** **01 41 43.9 -0.1**
KBZ pmax pmax
comp=Z,8.0nm,1.0s
**KIV Kislovodsk 38.79 299** P **P** **01 41 47.3 +1.9**
**KIV Kislovodsk 38.79 299** *i* P **P** **01 41 46.8 +1.5**
SNR=5.6
**KIV Kislovodsk 38.79 299** P **P** **01 41 47.3 +1.9**
KIV P **P** **01 41 47.3 +1.9**
**KIV Kislovodsk 38.79 299** *e*P **P** **01 41 45.3 -0.1**
KIV *e* 01 43 14.4
KIV *e*S **S** **01 47 43.7 +0.7**
KIV pmax pmax
comp=Z,14nm,1.0s
KIV MLR MLR
comp=Z,719nm,16.0s
**KIV Kislovodsk 38.79 299** P **P** **01 41 46.0 +0.6**
comp=Z,17nm,1.8s,comp=Z,315nm
**SHA1 Shidzhatmaz 38.82 298** *ce*P **P** **01 41 46.1 +0.3**
**KARS Kars 38.83 293** IAmb IAmb 01 41 50.1
comp=Z,42nm,1.0s
**JHJ Hachijo jima 2 39.20 79** LR LR 01 58 50.5
comp=Z,396nm,18.9s,baz=91,slow=38
**YSS Yuzh-Sakhalins 39.40 56** P **P** **01 41 50.7 +0.4**
YSS IAmb IAmb 01 43 15.6
comp=Z,40nm,0.5s
**YSS Yuzh-Sakhalins 39.40 56** *e*P **P** **01 41 50.7 +0.4**
YSS pmax pmax
comp=Z,40nm,1.0s
YSS MLR MLR
comp=Z,1µm,16.0s
YSS MLR MLR
comp=N,2µm,14.0s
YSS MLR MLR
comp=E,1µm,15.0s
**ASAJ Asahikawa 39.42 61** P **P** **01 41 49.9 -0.6**
comp=E,2.8nm,0.3s,baz=41,slow=20,SNR=3.5
ASAJ LR LR 01 58 37.1
comp=E,661nm,18.4s,baz=284,slow=37
comp=E,2.8nm,0.3s
**TYV Tymovskoe 39.44 50** *e*P **P** **01 41 51.6 +1.0**
TYV *e*S **S** **01 47 57.2 +4.7**
TYV pmax pmax
comp=Z,100nm,2.1s
TYV pmax pmax
comp=Z,18nm,1.3s
TYV smax smax
comp=N,200nm,6.5s
TYV smax smax
comp=E,100nm,6.5s
**VRH Novokhopyorsk 39.47 310** *e*P **P** **01 41 50.5 -0.3**
VRH pmax pmax
comp=Z,31nm,1.1s
**VSLR Vesyoloye 40.75 298** *i* P **P** **01 42 02.1 +0.5**
VSLR pmax pmax
comp=Z,34nm,1.1s
**SOC Sochi 40.96 298** *e*P **P** **01 42 01.0 -2.3**
SOC *e* 01 43 35.7
SOC *e*PPP PPP 01 44 00.3
SOC *e*S **S** **01 48 13.6 -1.8**
SOC *e*SS **SS** **01 51 11.2 -5.7**
SOC *e*SSS SSS 01 51 41.8
SOC MLR MLR
comp=Z,453nm,12.0s
**VORD Divnogorie 40.99 310** *e*P **P** **01 42 03.5 +0.1**
VORD pmax pmax
comp=Z,10.0nm,0.7s
**VORR Voronezh 41.07 311** *e*P **P** **01 42 05.6 +1.5**
VORR pmax pmax
comp=Z,56nm,0.4s
**VSR Storozhevoye 41.08 310** *e*P **P** **01 42 02.1 -2.1**
VSR *e* 01 43 35.6
VSR pmax pmax
comp=Z,20nm,1.0s
**LPSR Galich'ya Gora 41.30 312** *e*P **P** **01 42 04.1 -1.8**
LPSR *e* 01 43 39.1
LPSR pmax pmax
comp=Z,30nm,0.8s
**DAV Davao City (W) 41.35 124** LR LR 02 00 16.6
comp=Z,658nm,18.4s,baz=322,slow=38
**TIXI Tiksi 41.48 17** P **P** **01 42 07.2 +0.1**
TIXI IAmb IAmb 01 42 08.0
comp=Z,38nm,0.8s
**TIXI Tiksi 41.48 17** *i* P **P** **01 42 06.9 -0.3**
TIXI pmax pmax
comp=Z,41nm,0.8s
**RAYN Ar Rayn 41.97 267** P **P** **01 42 11.5 -0.4**
**RAYN Ar Rayn 41.97 267** *i* P **P** **01 42 11.4 -0.4**
SNR=23
**RAYN Ar Rayn 41.97 267** P **P** **01 42 12.0 +0.1**
**RAYN Ar Rayn 41.97 267** P **P** **01 42 11.5 -0.4**
**MOS Moscow 42.33 317** *e*P **P** **01 42 12.7 -1.6**
MOS *e* 01 43 50.8
MOS *e*S **S** **01 48 32.4 -2.9**
MOS *e*SS **SS** **01 51 43.9 +0.4**
MOS *e*SSS SSS 01 52 18.0
MOS pmax pmax
comp=Z,300nm,1.7s
MOS pmax pmax
comp=Z,101nm,1.4s
MOS MLR MLR
comp=Z,2µm,14.0s
MOS MLR MLR
comp=E,1µm,13.0s
**ANN Anapa 42.47 301** *e*P **P** **01 42 13.4 -2.2**
ANN *e**PP **pP** **01 42 16.2 -3.4**
ANN *e*S **S** **01 48 36.3 -1.3**
ANN *e*SS **SS** **01 51 45.7 -0.9**
ANN pmax pmax
comp=Z,57nm,1.0s
ANN MLR MLR
comp=Z,1µm,23.0s
ANN MLR MLR
comp=E,1µm,22.0s
**OBN Obninsk 42.87 316** LR LR 02 01 01.9
comp=E,2µm,18.1s,baz=84,slow=37
**OBN Obninsk 42.87 316** *e*P **P** **01 42 18.4 -0.3**
OBN *e**PP **pP** **01 42 22.8 +0.2**
OBN *e* 01 43 59.0
OBN *e* 01 44 11.1
OBN *e*PPP PPP 01 44 27.8
OBN pmax pmax
comp=Z,33nm,0.5s
OBN MLR MLR
comp=Z,1µm,17.0s
**JCJ Chichijima 43.18 86** LR LR 02 01 32.8
comp=Z,209nm,18.4s,baz=281,slow=38
**ADZR Andozero 43.53 329** ⇓ *i* P **P** **01 42 24.4 +0.5**
ADZR *e* 01 44 08.7
ADZR pmax pmax
comp=Z,63nm,1.5s
**GAZ Gaziantep 43.99 290** IAmb IAmb 01 42 32.8
comp=Z,53nm,1.4s
**BNN Bunyan 44.64 292** PP 01 44 16.9 -0.6
BNN IAmb IAmb 01 44 17.2
comp=Z,48nm,1.0s
**SIM Simferopol' 44.79 301** *e*P **P** **01 42 32.8 -1.5**
SIM *e* 01 44 16.0
SIM pmax pmax
comp=Z,36nm,1.5s
**MA2 Magadan 44.88 38** P **P** **01 42 35.6 +0.7**
MA2 IAmb IAmb 01 42 36.3
comp=Z,32nm,1.0s
**MA2 Magadan 44.88 38** P **P** **01 42 34.8 0.0**
comp=Z,18nm,0.8s,baz=250,slow=6.6,SNR=6.8
MA2 LR LR 02 02 24.0
comp=Z,838nm,18.6s,baz=260,slow=38
comp=Z,18nm,0.8s
**MA2 Magadan 44.88 38** *i* P **P** **01 42 34.1 -0.8**
MA2 pmax pmax
comp=Z,31nm,1.0s
**MA2 Magadan 44.88 38** P **P** **01 42 35.4 +0.5**
comp=Z,34nm,1.1s,comp=Z,495nm
**LVZ Lovozero 46.03 334** *i* P **P** **01 42 42.9 -1.0**
LVZ pmax pmax
comp=Z,48nm,1.2s
**LVZ Lovozero 46.03 334** P **P** **01 42 43.6 -0.3**
comp=Z,77nm,2.5s
**SEY Seymchan 46.09 33** P **P** **01 42 45.1 +0.8**
comp=Z,13nm,0.7s,baz=265,slow=8.6,SNR=18
comp=Z,13nm,0.7s
**SEY Seymchan 46.09 33** *i* P **P** **01 42 44.8 +0.5**
SEY pmax pmax
comp=Z,24nm,0.9s
**BR131 Keskin Array S 46.11 294** P **P** **01 42 45.6 +0.6**
SNR=7.2
**BR131 Keskin Array S 46.11 294** *i* P **P** **01 42 44.7 -0.3**
**BRTR Keskin Array B 46.11 294** P **P** **01 42 44.1 -0.9**
BRTR PcP **PcP** **01 44 20.4 -0.8**
**BRTR Keskin Array B 46.11 294** P **P** **01 42 45.2 +0.2**
comp=Z,9.2nm,0.9s,baz=103,slow=6.8,SNR=29
BRTR PcP **PcP** **01 44 20.6 -0.6**
comp=Z,2.5nm,0.9s,baz=116,slow=2.9,SNR=4.5
comp=Z,9.2nm,0.9s
**BRTR Keskin Array B 46.11 294** P **P** **01 42 44.2 -0.9**
BRTR 01 44 20.4
**BR104 Keskin Array S 46.11 294** P **P** **01 42 45.0 0.0**
comp=Z,11nm,1.3s,comp=Z,74nm
**BR106 Keskin Array S 46.12 294** P **P** **01 42 45.0 -0.1**
comp=Z,12nm,1.3s,comp=Z,76nm
**BR105 Keskin Array S 46.12 294** P **P** **01 42 45.0 -0.2**
comp=Z,13nm,0.9s,comp=Z,81nm
**JOF Joensuu 46.40 326** *e*P **P** **01 42 47.5 +0.7**
**APA Apatity 46.40 333** ⇓ *i* P **P** **01 42 49.3 +2.5**
APA pmax pmax
comp=Z,8.0nm,0.9s
APA MLR MLR
comp=Z,1µm,12.0s
**MMAI Mount Meron Ar 46.60 285** PcP **PcP** **01 44 23.3 +0.4**
comp=Z,11nm,1.0s,baz=69,slow=4.6,SNR=4.6
**ANTO Ankara 46.71 294** P **P** **01 42 50.5 +0.8**
ANTO IAmb IAmb 01 42 52.1
comp=Z,43nm,0.9s
**ANTO Ankara 46.71 294** P **P** **01 42 50.8 +1.1**
ANTO P **P** **01 42 50.8 +1.1**
**ANTO Ankara 46.71 294** ⇓ P **P** **01 42 50.9 +1.3**
**ANTO Ankara 46.71 294** P **P** **01 42 50.5 +0.8**
ANTO pmax pmax
comp=Z,43nm,0.9s
**ANTO Ankara 46.71 294** P **P** **01 42 49.2 -0.5**
comp=Z,26nm,1.3s,comp=Z,295nm
**BR231 Keskin MP Arra 46.73 294** IAmb IAmb 01 42 52.4
comp=Z,42nm,0.9s
**AK09 Malin Array Si 47.34 310** P **P** **01 42 54.3 -0.1**
**AK08 Malin Array Si 47.36 310** P **P** **01 42 54.2 -0.3**
**AK10 Malin Array Si 47.37 310** P **P** **01 42 54.4 -0.1**
**AK03 Malin Array Si 47.37 310** P **P** **01 42 54.2 -0.4**
**AKASG Malin Array Be 47.37 310** P **P** **01 42 56.2 +1.7**
**AKASG Malin Array Be 47.37 310** P **P** **01 42 54.5 -0.1**
comp=Z,10.0nm,0.9s,baz=78,slow=6.4,SNR=27
AKASG PcP **PcP** **01 44 24.9 -0.4**
comp=Z,3.1nm,0.7s,baz=70,slow=3.5,SNR=4.9
AKASG LR LR 02 05 40.0
comp=Z,751nm,18.9s,baz=83,slow=40
comp=Z,10.0nm,0.9s
**AKBB Malin Array Si 47.37 310** IAmb IAmb 01 42 56.4
comp=Z,39nm,1.1s
**AKBB Malin Array Si 47.37 310** *d* i P **P** **01 42 54.0 -0.6**
AKBB pmax pmax
comp=Z,45nm,1.3s
**AKBB Malin Array Si 47.37 310** P **P** **01 42 54.2 -0.4**
**AK01 Malin Array Si 47.38 310** P **P** **01 42 54.4 -0.3**
**KIEV Kiev 47.38 310** P **P** **01 42 54.5 -0.1**
KIEV IAmb IAmb 01 42 56.4
comp=Z,32nm,1.1s
**KIEV Kiev 47.38 310** *i* P **P** **01 42 54.6 -0.1**
SNR=13
**KIEV Kiev 47.38 310** ⇑ P **P** **01 42 55.3 +0.7**
**KIEV Kiev 47.38 310** P **P** **01 42 54.5 -0.1**
KIEV pmax pmax
comp=Z,32nm,1.1s
**KIEV Kiev 47.38 310** P **P** **01 42 54.5 -0.1**
comp=Z,123nm,1.4s
**AK11 Malin Array Si 47.41 310** P **P** **01 42 54.6 -0.3**
**KAPI Kappang 47.44 141** LR LR 02 05 05.1
comp=Z,364nm,20.1s,baz=322,slow=39
**BAL3X Bal3x, Balta 47.46 306** P **P** **01 42 54.9 -0.4**
**AK22 Malin Array Si 47.46 310** P **P** **01 42 54.9 -0.4**
**PURM Purcari 47.49 304** P **P** **01 42 55.2 -0.3**
comp=Z,68nm,0.5s,comp=Z,7µm
**MNK Minsk 47.89 315** *i* P **P** **01 42 56.6 -1.9**
comp=E,6.0nm,1.0s
MNK *i* P **P** **01 42 56.6 -1.9**
comp=N,10.0nm,1.1s
MNK *i* P **P** **01 42 56.6 -1.9**
comp=Z,17nm,0.9s,baz=87
MNK *i* PP **PP** **01 44 47.7 -2.5**
MNK *i* PPP PPP 01 45 33.4
MNK *i* S **S** **01 49 53.6 -2.3**
MNK *i* SS **SS** **01 53 23.3 -0.7**
MNK *i* SSS SSS 01 54 30.7
MNK *i* LQ LQ 01 59 46.4
MNK *i* LR LR 02 02 39.7
MNK *i* LRM MLR 02 04 44.5
comp=N,264nm,13.2s
MNK *i* LRM MLR 02 04 44.9
comp=Z,909nm,12.9s
MNK *i* LRM MLR 02 04 45.4
comp=E,327nm,13.2s
**MNK Minsk 47.89 315** *i* P **P** **01 42 56.6 -1.9**
MNK *i* 01 44 47.7
MNK *i* PPP PPP 01 45 33.3
MNK *i* S **S** **01 49 53.5 -2.3**
MNK *i* SS **SS** **01 53 23.3 -0.7**
MNK *i* SSS SSS 01 54 30.7
MNK pmax pmax
comp=E,6.0nm,1.0s
MNK pmax pmax
comp=Z,17nm,0.9s
MNK pmax pmax
comp=N,10.0nm,1.1s
MNK MLR MLR
comp=N,264nm,13.0s
MNK MLR MLR
comp=Z,909nm,13.0s
MNK MLR MLR
comp=E,327nm,13.0s
**MI30 MI30,Zelenitsa 48.02 310** P **P** **01 42 59.3 -0.3**
**EIL Elat 48.12 281** LR LR 02 06 43.4
comp=E,410nm,20.6s,baz=64,slow=40
**KIS Kishinev 48.13 305** ⇓ *i* P **P** **01 43 00.0 -0.5**
comp=E,60nm,2.3s
**KIS Kishinev 48.13 305** *e*PP PP 01 44 52.0 -0.6
KIS *e*S **S** **01 50 00.0 +0.6**
KIS *e*L L 02 05 19.0
KIS LRM MLR 02 07 41.0
comp=E,300nm,15.5s
**KIS Kishinev 48.13 305** *d* i P **P** **01 43 00.0 -0.5**
KIS *e* 01 44 52.0
KIS *e*S **S** **01 50 00.0 +0.6**
KIS pmax pmax
comp=Z,60nm,2.3s
KIS MLR MLR
comp=Z,300nm,15.5s
**MILM Milestii Mici 48.15 305** ⇓ *i* P **P** **01 43 00.0 -0.6**
comp=Z,80nm,1.6s
**MILM Milestii Mici 48.15 305** *e*PP PP 01 44 53.0 +0.3
MILM *e*S **S** **01 50 00.0 +0.3**
MILM *e*L L 01 59 02.0
MILM LQM 02 05 56.0
comp=Z,450nm,21.5s
MILM LRM MLR 02 07 43.0
comp=Z,700nm,17.5s
**MILM Milestii Mici 48.15 305** *d* i P **P** **01 43 00.0 -0.6**
MILM *e* 01 44 53.0
MILM *e*S **S** **01 50 00.0 +0.3**
MILM pmax pmax
comp=Z,80nm,1.6s
**SORM Soroca 48.26 306** ⇑ P **P** **01 43 01.3 -0.2**
**SORM Soroca 48.26 306** P **P** **01 43 01.3 -0.2**
**SORM Soroca 48.26 306** P **P** **01 43 00.9 -0.6**
comp=Z,36nm,0.9s
**MI28 Mi28,Pidlybu 48.33 310** P **P** **01 43 01.7 -0.3**
**VSU Vasula 48.38 320** *i* P **P** **01 43 01.2 -1.1**
VSU pmax pmax
comp=Z,30nm,1.0s
**LUBAR Lubar, Ukraine 48.40 309** P **P** **01 43 02.1 -0.5**
**NACGM Naroch 48.50 315** *e*P **P** **01 43 04.1 +0.9**
comp=E,814nm,0.8s,baz=86
**FINES FINESS Array B 48.73 324** P **P** **01 43 05.0 +0.1**
**FINES FINESS Array B 48.73 324** P **P** **01 43 04.3 -0.6**
comp=E,3.7nm,0.7s,baz=91,slow=9.5,SNR=13
FINES PcP **PcP** **01 44 29.1 -0.8**
comp=E,3.7nm,0.8s,baz=123,slow=7.0,SNR=5.2
FINES LR LR 02 04 34.3
comp=E,464nm,19.8s,baz=88,slow=37
comp=E,3.7nm,0.7s
**FINES FINESS Array B 48.73 324** P **P** **01 43 05.0 +0.1**
**ARBE Arbavere 48.76 322** *e*P **P** **01 43 05.5 +0.3**
**TPGR Topolog 48.79 302** ⇑ P **P** **01 43 06.0 +0.3**
**ISAL Salakas 48.83 316** *e*P **P** **01 43 06.5 +0.7**
**SGF Sodankyl 48.98 332** P **P** **01 43 07.4 +0.6**
**HARR Harsova 49.16 302** ⇑ P **P** **01 43 09.5 +1.0**
**HARR Harsova 49.16 302** P **P** **01 43 09.5 +1.0**
**PET Petropavlovsk 49.28 47** *e*P **P** **01 43 08.5 -0.8**
PET *e* 01 45 06.9
PET *e*S **S** **01 50 08.2 -7.3**
PET pmax pmax
comp=Z,38nm,1.2s
PET pmax pmax
comp=Z,100nm,9.0s
PET MLR MLR
comp=Z,700nm,15.0s
PET MLR MLR
comp=Z,600nm,15.0s
**PET Petropavlovsk 49.28 47** P **P** **01 43 08.9 -0.4**
comp=Z,36nm,1.3s
**KEF Keuruu 49.32 325** *e*P **P** **01 43 09.7 +0.3**
**HORU Horodok 49.36 308** P **P** **01 43 09.7 -0.2**
**HORU Horodok 49.36 308** P **P** **01 43 09.7 -0.2**
**RNPP9 Sopachiv 49.38 311** P **P** **01 43 09.9 -0.2**
**RNPP5 Staryi Chortor 49.41 311** P **P** **01 43 10.0 -0.3**
**KMPD K-Podol'skiy 49.44 307** P **P** **01 43 10.0 -0.6**
KMPD P **P** **01 43 09.7 -0.9**
**MEF Metsahovi 49.55 323** *e*P **P** **01 43 11.4 +0.2**
**ARCES ARCESS Array B 49.63 335** P **P** **01 43 12.7 +1.0**
ARCES IAmb IAmb 01 44 17.4
comp=Z,59nm,1.6s
**ARCES ARCESS Array B 49.63 335** P **P** **01 43 11.7 -0.1**
comp=Z,7.3nm,0.9s,baz=61,slow=7.5,SNR=8.9
ARCES LR LR 02 05 40.6
comp=Z,751nm,21.4s,baz=98,slow=38
comp=Z,7.3nm,0.9s
**TESR Tescani 49.68 304** P **P** **01 43 12.3 -0.2**
comp=Z,25nm,1.1s
**VRI Vrincioaia 49.76 304** ⇑ P **P** **01 43 13.6 +0.5**
**VRI Vrincioaia 49.76 304** P **P** **01 43 13.5 +0.5**
**VRI Vrincioaia 49.76 304** P **P** **01 43 13.1 0.0**
comp=Z,19nm,1.3s,comp=Z,200nm
**PLOR5 Plostina Array 49.80 304** P **P** **01 43 13.9 +0.4**
comp=Z,63nm,1.4s
**PLOR Plostina 49.81 304** ⇑ P **P** **01 43 14.8 +1.2**
**PLOR Plostina 49.81 304** P **P** **01 43 14.7 +1.2**
**PLOR3 Plostina Array 49.82 304** P **P** **01 43 13.3 -0.3**
comp=Z,5.9nm,1.4s,comp=Z,800nm
**ONER Baraj Valea Uz 49.89 304** ⇑ P **P** **01 43 15.3 +1.2**
**MTSE Matsula 49.91 321** *e*P **P** **01 43 12.8 -1.2**
**ISR Istrita 50.04 303** ⇑ P **P** **01 43 16.2 +0.9**
**ISR Istrita 50.04 303** P **P** **01 43 16.1 +0.9**
**PABE Paberze 50.06 316** *e*P **P** **01 43 15.9 +0.7**
**COVR Voineasa-Covas 50.12 304** ⇑ P **P** **01 43 17.1 +1.3**
**NEHR Nehoiu 50.15 303** ⇑ P **P** **01 43 17.8 +1.7**
**TURR Turia 50.20 304** ⇑ P **P** **01 43 17.5 +1.0**
**VAF Ylistaro 50.34 326** *e*P **P** **01 43 18.2 +1.0**
**OZUR 50.35 304** ⇓ P **P** **01 43 18.0 +0.3**
**KTK1 Kautokeino 50.37 334** *e*P **P** **01 43 17.6 +0.2**
**MLR Muntele Rosu 50.37 303** IAmb IAmb 01 43 21.1
comp=Z,68nm,1.4s
**MLR Muntele Rosu 50.37 303** LR LR 02 08 14.1
comp=Z,1µm,18.9s,baz=65,slow=40
**MLR Muntele Rosu 50.37 303** ⇑ P **P** **01 43 19.3 +1.4**
**MLR Muntele Rosu 50.37 303** P **P** **01 43 19.3 +1.4**
**MLR Muntele Rosu 50.37 303** P **P** **01 43 18.5 +0.6**
comp=Z,33nm,1.2s,comp=Z,579nm
**KSV Kosov 50.40 307** P **P** **01 43 17.5 -0.4**
**KSV Kosov 50.40 307** P **P** **01 43 17.5 -0.4**
**BURAR Bucovina Array 50.43 306** P **P** **01 43 18.0 -0.3**
BURAR PcP **PcP** **01 44 37.6 +1.1**
**BURAR Bucovina Array 50.43 306** ⇓ P **P** **01 43 18.3 0.0**
**BURAR Bucovina Array 50.43 306** P **P** **01 43 18.0 -0.3**
BURAR pmax pmax
comp=Z,9.0nm,0.8s
**DOPR Dopca 50.65 304** ⇓ P **P** **01 43 21.0 +1.2**
**SUW Suwalki 50.68 315** *e*P **P** **01 43 20.0 +0.1**
SUW *e*L L 02 05 29.6
comp=Z,1µm,19.4s
**SUW Suwalki 50.68 315** *e*P **P** **01 43 20.5 +0.6**
**STNU Starunia 50.69 308** P **P** **01 43 20.0 -0.1**
**SLIT Slitere, Latvi 50.79 319** *e*P **P** **01 43 21.0 +0.3**
**LVV L'vov 50.80 309** *e*P **P** **01 43 20.8 -0.1**
LVV *e* 01 44 36.9
LVV *e* 01 45 24.8
LVV *e*S **S** **01 50 30.2 -6.6**
LVV *e*SS **SS** **01 54 03.1 -7.8**
LVV MLR MLR
comp=N,400nm,16.0s
LVV MLR MLR
comp=E,500nm,16.0s

LVV MLR MLR
comp=Z,500nm,16.0s
**VOIR** **51.00 303** ⇓P **P** **01 43 22.7 +0.1**
**VOIR** **51.00 303** P **P** **01 43 22.7 +0.1**
**VOIR** **51.00 303** P **P** **01 43 22.4 -0.2**
comp=Z,8.7nm,1.6s
**MORS Morshin** **51.01 308** P **P** **01 43 22.6 +0.1**
**MORS Morshin** **51.01 308** P **P** **01 43 22.6 +0.1**
**ARCR ARCALIA** **51.11 306** ⇑P **P** **01 43 24.8 +1.5**
**ARR Arges** **51.30 303** ⇑P **P** **01 43 25.6 +0.8**
**SHIU Shidnytsya** **51.33 308** P **P** **01 43 24.9 -0.1**
**MEZ Mezhgor'ye** **51.37 308** P **P** **01 43 25.1 -0.1**
**ALN Alexandroupoli** **51.43 298** P **P** **01 43 25.6 -0.1**
**EZN Ezine** **51.52 296** P **P** **01 43 26.0 -0.4**
**EZN Ezine** **51.52 296** P **P** **01 43 26.0 -0.4**
**KWP Kalwaria Pacla** **51.67 309** *e*P **P** **01 43 27.3 -0.2**
KWP *e*L L 02 07 16.3
comp=Z,888nm,19.3s
**KWP Kalwaria Pacla** **51.67 309** P **P** **01 43 27.1 -0.4**
**KWP Kalwaria Pacla** **51.67 309** P **P** **01 43 27.1 -0.4**
comp=Z,116nm,1.3s,comp=Z,1µm
**CJR Cluj-Napoca** **51.70 305** ⇓P **P** **01 43 29.0 +1.2**
**CJR Cluj-Napoca** **51.70 305** P **P** **01 43 28.9 +1.2**
**TRSU Trosnyk** **51.82 307** P **P** **01 43 29.8 +1.2**
**GUMO Guam** **51.86 101** LR LR 02 04 43.6
comp=Z,131nm,21.5s,baz=308,slow=35
**TRO Tromso** **51.94 335** *e*P **P** **01 43 29.6 +0.5**
**BERU Beregovo** **52.00 307** P **P** **01 43 29.8 -0.1**
**KOLS Kolonicke sedl** **52.09 308** *e*P **P** **01 43 31.0 +0.4**
KOLS pmax pmax
comp=Z,10.0nm,0.8s
**KOLS Kolonicke sedl** **52.09 308** *e*P **P** **01 43 31.0 +0.4**
**BILL Bilibino** **52.21 27** *e*P **P** **01 43 32.1 +0.9**
BILL *e**PP **pP** **01 43 35.5 +0.3**
BILL *e* 01 44 43.4
BILL *e* 01 45 30.9
BILL *e*PPP PPP 01 46 32.3
BILL pmax pmax
comp=Z,38nm,1.0s
BILL MLR MLR
comp=Z,741nm,15.0s
**DRGR** **52.27 306** ⇓P **P** **01 43 32.3 +0.2**
**DRGR** **52.27 306** P **P** **01 43 32.3 +0.2**
**BEL Belsk** **52.45 312** *e*P **P** **01 43 33.6 +0.4**
BEL *e*L L 02 07 16.4
comp=Z,3µm,18.8s
**GZR Gura Zlata** **52.56 304** ⇑P **P** **01 43 34.7 +0.5**
**CRVS Cervenica-Dubn** **52.62 308** *e*P **P** **01 43 35.0 +0.5**
CRVS pmax pmax
comp=Z,33nm,1.4s
**CRVS Cervenica-Dubn** **52.62 308** *e*P **P** **01 43 35.0 +0.5**
**SURR Surduc** **52.92 304** ⇓P **P** **01 43 37.7 +1.0**
**HERR Herculane** **52.94 303** ⇑P **P** **01 43 37.9 +1.0**
**SIRR Siria** **53.10 305** ⇓P **P** **01 43 38.9 +0.8**
**SPA0 Spitsbergen Ar** **53.20 346** *e*P **P** **01 43 38.7 +0.3**
**SPITS Spitsbergen Ar** **53.20 346** P **P** **01 43 39.8 +1.4**
comp=Z,40nm,1.0s,baz=87,slow=16,SNR=9.9
SPITS LR LR 02 11 08.5
comp=Z,942nm,18.3s,baz=84,slow=42
comp=Z,40nm,1.0s
**NIE Niedzica** **53.25 309** *e*P **P** **01 43 40.6 +1.4**
NIE *e*S SKiKP 01 55 28.5 +32
NIE *e*L L 02 10 18.1
comp=Z,504nm,20.6s
**NIE Niedzica** **53.25 309** P **P** **01 43 40.8 +1.6**
**BZS Buzias** **53.30 304** ⇓P **P** **01 43 39.4 -0.1**
**BZS Buzias** **53.30 304** P **P** **01 43 39.4 -0.1**
**STEI Steigen** **53.30 333** *e*P **P** **01 43 39.8 +0.6**
**FAUS Fauske** **53.31 332** *e*P **P** **01 43 39.4 +0.1**
FAUS IAmb IAmb 01 43 40.4
comp=Z,58nm,1.1s
FAUS *e*S **S** **01 51 14.6 +3.8**
FAUS *e*SS **SKiKP** **01 54 57.1 +0.7**
FAUS IAMs_20 IAMs_20 02 07 06.8
comp=Z,1µm,16.8s
**OJC Ojcow** **53.39 310** *e*P **P** **01 43 39.8 -0.3**
OJC *e*L L 02 08 02.7
comp=Z,851nm,17.4s
**OJC Ojcow** **53.39 310** P **P** **01 43 39.9 -0.3**
**OJC Ojcow** **53.39 310** P **P** **01 43 39.9 -0.3**
comp=Z,44nm,1.3s,comp=Z,634nm
**MDVR Moldovita** **53.45 303** ⇓P **P** **01 43 41.5 +0.7**
**BOVS Bovan** **53.77 302** ⇓P **P** **01 43 42.8 -0.2**
**LANS Liptovska Anna** **53.84 309** *e*P **P** **01 43 44.7 +1.1**
LANS pmax pmax
comp=Z,3.0nm,1.1s
**LANS Liptovska Anna** **53.84 309** *e*P **P** **01 43 44.7 +1.1**
**PSZ Piszkesteto** **53.87 307** IAmb IAmb 01 43 51.3
comp=Z,36nm,1.3s
**PSZ Piszkesteto** **53.87 307** P **P** **01 43 43.5 -0.3**
**LOF Lofoten** **53.92 333** *e*P **P** **01 43 42.8 -1.0**
LOF IAmb IAmb 01 43 44.2
comp=Z,95nm,1.1s
LOF IAMs_20 IAMs_20 02 09 07.8
comp=Z,2µm,15.3s
**IDI Anoyia** **54.05 291** LR LR 02 11 51.6
comp=Z,148nm,18.2s,baz=48,slow=42
**KBS Kingsbay** **54.13 346** *e*P **P** **01 43 46.0 +0.9**
KBS IAmb IAmb 01 43 46.1
comp=Z,56nm,1.2s
KBS IAMs_20 IAMs_20 02 11 49.9
comp=Z,492nm,15.2s
**KBS Kingsbay** **54.13 346** *i*P **P** **01 43 45.4 +0.2**
KBS pmax pmax
comp=Z,99nm,2.2s
**GKP Gorka Klasztor** **54.29 314** *e*P **P** **01 43 46.1 -0.5**
**VYHS Vyhne** **54.41 308** *e*P **P** **01 43 48.3 +0.6**
VYHS pmax pmax
comp=Z,60nm,1.3s
**VYHS Vyhne** **54.41 308** *e*P **P** **01 43 48.3 +0.6**
**OKC Ostrava-Krasne** **54.52 310** AMS AMS 02 08 40.0
comp=Z,700nm,12.4s
**OKC Ostrava-Krasne** **54.52 310** P **P** **01 43 49.6 +1.2**
**BUD Budapest** **54.55 307** P **P** **01 43 48.9 +0.3**
**FRGS Fruska Gora** **54.65 304** ⇓P **P** **01 43 49.9 +0.5**
**FRGS Fruska Gora** **54.65 304** P **P** **01 43 49.1 -0.4**
comp=Z,38nm,1.3s,comp=Z,405nm
**AGG Agios Georgios** **54.71 296** IAmb IAmb 01 43 51.0
comp=Z,35nm,1.3s
**MAUC Maruska** **54.84 310** *e*P **P** **01 43 52.6 +1.8**
**HFS Hagfors** **54.88 323** P **P** **01 43 51.2 +0.3**
comp=Z,8.9nm,0.7s,baz=72,slow=9.5,SNR=22
HFS PcP **PcP** **01 44 51.5 -1.4**
comp=Z,6.2nm,0.9s,baz=95,slow=7.7,SNR=3.7
HFS LR LR 02 08 45.5
comp=Z,428nm,21.6s,baz=85,slow=38
comp=Z,8.9nm,0.7s
**MORC Moravsky Berou** **54.91 310** IAmb IAmb 01 43 53.3
comp=Z,36nm,1.2s
**MORC Moravsky Berou** **54.91 310** *e*P **P** **01 43 51.5 +0.2**
**MORC Moravsky Berou** **54.91 310** ⇑P **P** **01 43 52.5 +1.1**
**MORC Moravsky Berou** **54.91 310** P **P** **01 43 52.4 +1.1**
**SRO Srobarova** **54.92 308** *e*P **P** **01 43 52.2 +0.8**
SRO pmax pmax
comp=Z,36nm,1.2s
**SRO Srobarova** **54.92 308** *e*P **P** **01 43 52.2 +0.8**
**NSS Namsos** **54.97 329** *e*P **P** **01 43 50.8 -0.5**
NSS IAmb IAmb 01 43 51.9
comp=Z,121nm,1.6s
NSS IAMs_20 IAMs_20 02 07 05.5
comp=Z,11µm,81.3s
**JAVC Velka Javorina** **55.06 309** *e*P **P** **01 43 53.6 +1.1**
**MORH Mrgy, Hungar** **55.14 306** ⇑P **P** **01 43 53.2 +0.3**
**MORH Mrgy, Hungar** **55.14 306** P **P** **01 43 52.7 -0.2**
comp=Z,27nm,1.4s,comp=Z,299nm
**BSD Bornholm Skovb** **55.23 317** *i*P **P** **01 43 52.6 -0.9**
BSD IAmb IAmb 01 43 53.7
comp=Z,64nm,1.6s
**IVA Berane** **55.26 302** ⇓*i*P **P** **01 43 54.3 +0.3**
**SMOL Smolenice** **55.31 309** *e*P **P** **01 43 55.5 +1.3**
**KRLC Kraliky** **55.31 311** *e*P **P** **01 43 55.0 +0.8**
KRLC AMS AMS 02 09 10.0
comp=Z,700nm,14.5s
**KRLC Kraliky** **55.31 311** *e*P **P** **01 43 55.0 +0.8**
KRLC MLR MLR
comp=Z,700nm,14.5s
**KSP Ksiaz** **55.42 312** *e*P **P** **01 43 53.9 -1.1**
KSP *e*L L 02 08 58.7
comp=Z,952nm,17.3s
**KSP Ksiaz** **55.42 312** P **P** **01 43 54.6 -0.3**
**KSP Ksiaz** **55.42 312** P **P** **01 43 54.6 -0.3**
comp=Z,26nm,1.6s,comp=Z,455nm
**MODS Modra-Piesok** **55.44 309** *e*P **P** **01 43 56.2 +1.0**
MODS pmax pmax
comp=Z,71nm,1.3s
**MODS Modra-Piesok** **55.44 309** *e*P **P** **01 43 56.2 +1.0**
**PLE Pljevlja** **55.47 302** ⇓*i*P **P** **01 43 56.1 +0.6**
**KOME Kolasin** **55.53 302** ⇓*i*P **P** **01 43 56.0 +0.1**
**DPC Dobruska-Polom** **55.53 311** *e*P **P** **01 43 56.7 +0.9**
DPC AMS AMS 02 08 50.0
comp=Z,900nm,13.8s
**DPC Dobruska-Polom** **55.53 311** *e*P **P** **01 43 56.7 +0.9**
DPC MLR MLR
comp=Z,900nm,13.8s
**DPC Dobruska-Polom** **55.53 311** P **P** **01 43 55.5 -0.3**
comp=Z,40nm,1.2s,comp=Z,444nm
**OSTC Ostas** **55.54 311** *e*P **P** **01 43 56.8 +1.0**
OSTC AMS AMS 02 08 50.0
comp=Z,900nm,13.9s
**OSTC Ostas** **55.54 311** *e*P **P** **01 43 56.8 +1.0**
OSTC MLR MLR
comp=Z,900nm,13.9s
**MPLH Magyarpolny** **55.60 307** P **P** **01 43 56.0 -0.3**
comp=Z,90nm,1.3s,comp=Z,1µm
**VRAC Vranov** **55.63 310** *e*P **P** **01 43 57.1 +0.6**
**VRAC Vranov** **55.63 310** LR LR 02 09 56.1
comp=Z,713nm,19.6s,baz=87,slow=38
**VRAC Vranov** **55.63 310** ⇑P **P** **01 43 57.7 +1.2**
**VRAC Vranov** **55.63 310** P **P** **01 43 57.6 +1.2**
**CHVC Chvalec** **55.63 311** *e*P **P** **01 43 57.4 +0.9**
CHVC AMS AMS 02 08 50.0
comp=Z,1µm,13.9s
**CHVC Chvalec** **55.63 311** *e*P **P** **01 43 57.4 +0.9**
CHVC MLR MLR
comp=Z,1µm,13.9s
**UPC Upice** **55.68 311** *e*P **P** **01 43 57.8 +1.0**
UPC AMS AMS 02 08 50.0
comp=Z,1µm,14.1s
**UPC Upice** **55.68 311** *e*P **P** **01 43 57.8 +1.0**
UPC MLR MLR
comp=Z,1µm,14.1s
**NC602 NORSAR Array S** **55.82 324** IAmb IAmb 01 43 58.8
comp=Z,84nm,1.3s
**NC602 NORSAR Array S** **55.82 324** *e*P **P** **01 43 57.3 -0.3**
NC602 IAmb IAmb 01 43 58.4
comp=Z,87nm,1.3s
NC602 *e*S **S** **01 51 48.9 +4.2**
NC602 IAMs_20 IAMs_20 02 10 24.4
comp=Z,772nm,10.5s
**NORES NORESS Array B** **55.82 324** P **P** **01 43 57.5 -0.1**
NORES pmax pmax
comp=Z,12nm,1.1s
**KRUC Moravsky** **55.82 310** *e*P **P** **01 43 57.9 +0.1**
**PDG Podgorica** **55.84 301** ⇓P **P** **01 43 58.2 +0.2**
**PDG Podgorica** **55.84 301** ⇓*i*P **P** **01 43 57.7 -0.3**
**UPM Unac-Piva** **55.84 302** ⇓*i*P **P** **01 43 58.1 -0.2**
**NB2 NORSAR Subarra** **55.91 325** P **P** **01 43 57.7 -0.7**
comp=Z,116nm,1.7s,baz=78,slow=6.9
**NB2 NORSAR Subarra** **55.91 325** P **P** **01 43 57.7 -0.7**
baz=78,slow=6.8
**NB2 NORSAR Subarra** **55.91 325** P **P** **01 43 56.2 -2.2**
NB2 pmax pmax
comp=Z,55nm,1.5s
**NOA NORSAR Array B** **55.91 325** P **P** **01 43 57.9 -0.5**
comp=Z,16nm,1.0s,baz=78,slow=7.0,SNR=39
NOA LR LR 02 08 12.0
comp=Z,283nm,19.2s,baz=85,slow=36
comp=Z,16nm,1.0s
**TBLU Trondheim** **55.92 327** *e*P **P** **01 43 57.6 -0.7**
**NKME Niksic** **55.95 302** ⇓*i*P **P** **01 43 58.6 -0.3**
**DRME Dracevica, Mon** **55.97 301** ⇓*i*P **P** **01 43 58.5 -0.5**
**CEME Cevo** **56.04 301** ⇓*i*P **P** **01 43 59.2 -0.4**
**SOP Sopron** **56.10 308** P **P** **01 44 00.1 +0.3**
**BUM Brajici-Budva** **56.13 301** ⇓*i*P **P** **01 43 59.7 -0.6**
**BRY Bratogost** **56.19 302** ⇓*i*P **P** **01 44 00.3 -0.5**
**RGN Rugen** **56.26 317** *e*P **P** **01 44 01.6 +0.8**
comp=Z,96nm,1.2s,baz=72,slow=6.9
**RONA Rosalia, Austr** **56.26 308** *i*P **P** **01 44 01.5 +0.5**
comp=Z,36nm,1.1s,SNR=25
**TREC Trest** **56.33 310** AMS AMS 02 09 40.0
comp=Z,900nm,12.8s
**OSL Oslo** **56.38 323** *e*P **P** **01 44 01.7 +0.1**
OSL IAmb IAmb 01 44 02.7
comp=Z,118nm,1.2s
OSL *e*S **S** **01 51 48.9 -3.3**
OSL IAMs_20 IAMs_20 02 09 41.8
comp=Z,860nm,13.5s
**COP Copenhagen** **56.47 318** *i*P **P** **01 44 01.7 -0.6**
COP IAmb IAmb 01 44 04.0
comp=Z,91nm,1.1s
**CONA Conrad Observa** **56.48 308** *i*P **P** **01 44 02.9 +0.3**
comp=Z,55nm,1.1s,SNR=37
**RUE Ruedersdorf** **56.51 314** *e*P **P** **01 44 03.6 +0.9**
comp=Z,22nm,0.9s,baz=72,slow=6.9
**PVCC Panska Ves** **56.56 312** *e*P **P** **01 44 04.7 +1.6**
**PVCC Panska Ves** **56.56 312** *e*P **P** **01 44 04.7 +1.6**
**GOPC GO Pecny, Ondr** **56.60 311** AMS AMS 02 09 30.0
comp=Z,800nm,14.2s
**KOGS Kog** **56.66 307** *i*P **P** **01 44 03.6 -0.2**
KOGS *i*pP **pP** **01 44 08.7 +0.8**
**DOMB Dombas** **56.71 326** *e*P **P** **01 44 03.6 -0.4**
DOMB IAmb IAmb 01 44 04.8
comp=Z,64nm,1.3s
DOMB *e*S **S** **01 51 55.4 -1.2**
DOMB IAMs_20 IAMs_20 02 10 26.9
comp=Z,840nm,17.9s
**PRU Pruhonice** **56.73 311** *e*P **P** **01 44 05.4 +1.1**
PRU AMS AMS 02 09 40.0
comp=Z,900nm,15.2s
**PRU Pruhonice** **56.73 311** *e*P **P** **01 44 05.4 +1.1**
PRU MLR MLR
comp=Z,900nm,15.2s
**PRA Prague** **56.77 311** AMS AMS 02 09 40.0
comp=Z,1µm,14.9s
**BRG Berggiesshubel** **56.85 312** *i*P **P** **01 44 05.8 +0.7**
BRG Amp 01 44 07.1
comp=Z,31nm,1.1s
**BRG Berggiesshubel** **56.85 312** S **S** **01 52 04.0 +5.3**
**BRG Berggiesshubel** **56.85 312** *e*P **P** **01 44 05.5 +0.3**
comp=Z,31nm,1.1s,baz=72,slow=6.9
BRG *e*PcP **PcP** **01 45 01.6 +0.8**
baz=76,slow=3.9
**ARSA Arzberg** **56.90 308** *i*P **P** **01 44 05.9 +0.3**
comp=Z,23nm,1.2s,SNR=12
**KONO Kongsberg** **57.00 323** P **P** **01 44 06.5 +0.4**
**KONO Kongsberg** **57.00 323** *e*P **P** **01 44 06.1 0.0**
KONO IAmb IAmb 01 44 07.1
comp=Z,65nm,1.2s
KONO *e*S **S** **01 52 03.8 +3.4**
KONO IAMs_20 IAMs_20 02 10 01.9
comp=Z,903nm,13.2s
**KONO Kongsberg** **57.00 323** P **P** **01 44 06.5 +0.4**
KONO pmax pmax
comp=Z,70nm,1.3s
**ZVC Zvikov** **57.10 310** *e*P **P** **01 44 08.0 +1.0**
ZVC AMS AMS 02 11 20.0
comp=Z,800nm,13.2s
**CKRC Cesky Krumlov** **57.21 310** *e*P **P** **01 44 09.0 +1.2**
CKRC AMS AMS 02 10 20.0
comp=Z,800nm,13.1s
**CKRC Cesky Krumlov** **57.21 310** *e*P **P** **01 44 09.0 +1.2**
CKRC MLR MLR
comp=Z,800nm,13.1s
**HSKC Hora Svate Kat** **57.24 312** AMS AMS 02 10 00.0
comp=Z,1µm,13.8s
**MOL Molde** **57.28 327** *e*P **P** **01 44 08.2 +0.2**
**CLL Collm** **57.30 313** IAmb IAmb 01 44 09.8
comp=Z,41nm,1.3s
**CLL Collm** **57.30 313** ⇓*i*P **P** **01 44 08.2 -0.1**
comp=Z,46nm,1.4s
CLL *i*pP **pP** **01 44 13.2 +0.9**
CLL *e*PP **PP** **01 46 16.0 +0.8**
CLL *e*S **S** **01 52 03.0 -1.6**
CLL *e*SS **SS** **01 55 54.0 +0.7**
CLL AMS AMS 02 10 00.0
comp=Z,800nm,20.3s
CLL AMS AMS 02 10 00.0
**CLL Collm** **57.30 313** ⇓*i*P **P** **01 44 08.2 -0.1**
CLL *i* 01 44 13.2
CLL *e*S **S** **01 52 03.0 -1.6**
CLL pmax pmax
comp=Z,46nm,1.4s
CLL MLR MLR
comp=Z,800nm,20.3s
**CLL Collm** **57.30 313** P **P** **01 44 08.2 -0.1**
comp=Z,26nm,1.4s,comp=Z,368nm
**CLL Collm** **57.30 313** *e*P **P** **01 44 08.1 -0.2**
comp=Z,44nm,1.3s,baz=72,slow=6.9
CLL *e*pP **sP** **01 44 13.6 -0.3**
**SOKA Soboth** **57.39 307** *e*P **P** **01 44 09.3 +0.2**
comp=Z,49nm,1.1s,SNR=21
**MOA Molln** **57.53 309** *i*P **P** **01 44 10.5 +0.5**
comp=Z,23nm,1.2s,SNR=8.7
**KHC Kasperske Hory** **57.58 310** IAmb IAmb 01 44 12.3
comp=Z,30nm,1.4s
**KHC Kasperske Hory** **57.58 310** *e*P **P** **01 44 11.2 +0.8**
KHC *e*S **S** **01 52 06.1 -2.3**
KHC AMS AMS 02 11 40.0
comp=Z,700nm,13.5s
**KHC Kasperske Hory** **57.58 310** *e*P **P** **01 44 11.2 +0.8**
KHC *e*S **S** **01 52 06.1 -2.3**
KHC MLR MLR
comp=Z,700nm,13.5s
**KHC Kasperske Hory** **57.58 310** P **P** **01 44 10.6 +0.2**
comp=Z,20nm,1.9s,comp=Z,387nm
**GEC2 GERESS Array S** **57.59 310** IAmb IAmb 01 44 12.4
comp=Z,34nm,1.1s
**GEC2 GERESS Array S** **57.59 310** *e*P **P** **01 44 11.1 +0.6**
comp=Z,36nm,1.2s,baz=72,slow=6.9
**GERES GERESS Array B** **57.59 310** P **P** **01 44 09.9 -0.6**
**GERES GERESS Array B** **57.59 310** P **P** **01 44 10.7 +0.1**
comp=Z,11nm,1.0s,baz=90,slow=2.7,SNR=51
GERES LR LR 02 12 51.4
comp=Z,629nm,19.5s,baz=87,slow=40
comp=Z,11nm,1.0s
**OBKA Obir** **57.76 307** *i*P **P** **01 44 11.7 0.0**
comp=Z,18nm,1.1s,SNR=6.6
**GORT1 Trebel** **57.82 315** *e*P **P** **01 44 12.6 +0.7**
comp=Z,113nm,1.5s,baz=72,slow=6.9
**TANN Tannenbergstha** **57.88 312** *e*P **P** **01 44 12.6 +0.1**
comp=Z,32nm,1.2s,baz=72,slow=6.9
TANN *e*PcP **PcP** **01 45 05.6 +0.8**
baz=76,slow=3.9
**HOMB Homborsund** **57.90 322** *e*P **P** **01 44 12.2 -0.1**
**LJU Ljubljana** **57.92 307** *e*P **P** **01 44 12.8 0.0**
LJU *i*pP **pP** **01 44 17.7 +0.8**
**BIOA Bad Ischl, Aus** **57.98 309** *i*P **P** **01 44 13.6 +0.4**
comp=Z,14nm,1.2s,SNR=9.1
**WET Wettzell** **58.01 310** *e*P **P** **01 44 13.7 +0.3**
comp=Z,37nm,1.2s,baz=72,slow=6.9
**MUD Monsted U'grnd** **58.04 319** *i*P **P** **01 44 12.8 -0.6**
MUD IAmb IAmb 01 44 15.2
comp=Z,73nm,1.4s
**PLN Plauen** **58.05 312** *e*P **P** **01 44 13.7 +0.1**
comp=Z,32nm,1.3s,baz=72,slow=6.9
**FLTG Flechtingen** **58.05 314** *e*P **P** **01 44 13.1 -0.4**
comp=Z,54nm,1.4s,baz=72,slow=6.9
FLTG *e*pP **sP** **01 44 19.0 -0.2**
**NEUB Neuenburg** **58.06 313** *e*P **P** **01 44 13.7 0.0**
comp=Z,71nm,1.2s,baz=72,slow=6.9
NEUB *e*PcP **PcP** **01 45 06.5 +1.1**
baz=76,slow=3.9
**BSEG Bad Segeberg** **58.12 316** *e*P **P** **01 44 14.7 +0.7**
comp=Z,74nm,1.4s,baz=72,slow=6.9
**MANZ Manzenberg** **58.23 312** *e*P **P** **01 44 15.3 +0.3**
comp=Z,9.5nm,1.3s,baz=72,slow=6.9
MANZ *e*PcP **PcP** **01 45 06.9 +0.7**
baz=76,slow=3.9
**ROTZ Rotzenmuhle** **58.24 311** *e*P **P** **01 44 15.5 +0.5**
comp=Z,16nm,1.2s,baz=72,slow=6.9
ROTZ *e*PcP **PcP** **01 45 07.0 +0.8**
baz=76,slow=3.9
**HYA Hoyanger** **58.26 325** *e*P **P** **01 44 15.3 +0.4**
HYA IAmb IAmb 01 44 16.1
comp=Z,132nm,1.8s
HYA *e*S **S** **01 52 17.2 +0.4**
HYA IAMs_20 IAMs_20 02 10 58.2
comp=Z,1µm,12.4s
**MYKA Terra Mystica** **58.31 307** *i*P **P** **01 44 15.7 +0.1**
comp=Z,11nm,1.0s
**MOX Moxa** **58.33 312** *e*P **P** **01 44 15.7 +0.1**
comp=Z,41nm,1.3s,baz=72,slow=6.9
MOX *e*PcP **PcP** **01 45 07.1 +0.6**
baz=76,slow=3.9
MOX *e*L L 02 11 23.8
comp=Z,488nm,20.4s
**KBA Koelnbreinsper** **58.36 308** *i*P **P** **01 44 16.4 +0.3**
comp=Z,16nm,1.1s
**NOR Nord** **58.37 351** *i*P **P** **01 44 14.8 -0.6**
NOR IAmb IAmb 01 44 16.9
comp=Z,30nm,0.8s
**CADS Cadrg** **58.38 307** *i*P **P** **01 44 15.2 -0.9**
**ODD1 Odda** **58.39 324** *e*P **P** **01 44 16.2 +0.3**
ODD1 IAmb IAmb 01 44 17.4
comp=Z,29nm,1.2s
ODD1 *e*S **S** **01 52 20.6 +1.9**
ODD1 IAMs_20 IAMs_20 02 09 28.1
comp=Z,562nm,13.0s
**SHEM Shemya Is, Ala** **58.49 45** LR LR 02 11 27.3
comp=Z,330nm,18.3s,baz=273,slow=38
**RJOB Jochberg** **58.50 309** *e*P **P** **01 44 17.1 +0.2**
comp=Z,51nm,1.6s,baz=72,slow=6.9
**SNART Snartemo** **58.54 322** *e*P **P** **01 44 17.2 +0.4**
SNART IAmb IAmb 01 44 18.3
comp=Z,177nm,1.1s
**SABO M.te Sabotino** **58.55 307** IAmb IAmb 01 44 18.0
comp=Z,67nm,1.2s
**BLS5 Blasjo** **58.61 323** *e*P **P** **01 44 15.1 -2.3**
BLS5 IAmb IAmb 01 44 18.1
comp=Z,42nm,1.2s
BLS5 *e*S **S** **01 52 24.4 +2.9**
BLS5 *e*SS **SS** **01 56 18.2 +4.6**
BLS5 IAMs_20 IAMs_20 02 11 00.8
comp=Z,935nm,11.9s
**NRDL Niedersach Rie** **58.66 315** *e*P **P** **01 44 18.6 +0.8**
comp=Z,110nm,1.4s,baz=72,slow=6.9
NRDL *e*PcP **PcP** **01 45 09.1 +1.4**
baz=76,slow=3.9
**FOO Floro** **58.67 326** *e*P **P** **01 44 18.4 +0.6**
FOO IAmb IAmb 01 44 18.8
comp=Z,30nm,1.1s
FOO *e*S **S** **01 52 26.2 +4.1**
FOO IAMs_20 IAMs_20 02 11 57.3
comp=Z,1µm,14.6s
**LESA Schwarzleotal** **58.68 309** *i*P **P** **01 44 18.5 +0.3**
comp=Z,61nm,1.1s
**CLZ Clausthal** **58.71 314** *e*P **P** **01 44 18.5 +0.3**
comp=Z,76nm,1.2s,baz=72,slow=6.9
CLZ *e*pP **sP** **01 44 23.9 0.0**
CLZ *e*PcP **PcP** **01 45 09.3 +1.2**
baz=76,slow=3.9
**TIP Timpagrande** **58.73 298** IAmb IAmb 01 44 19.3
comp=Z,74nm,2.0s
**TIP Timpagrande** **58.73 298** P **P** **01 44 18.0 -0.6**
comp=Z,11nm,1.4s
**GRF Grafenberg Arr** **58.87 311** *e*P **P** **01 44 19.9 +0.6**
comp=Z,72nm,1.2s,baz=72,slow=6.9
GRF *e*L L 02 11 10.4
comp=Z,1µm,18.1s
**GRFO Grafenberg** **58.87 311** P **P** **01 44 20.7 +1.3**
**GRFO Grafenberg** **58.87 311** P **P** **01 44 20.7 +1.3**
GRFO pmax pmax
comp=Z,68nm,1.2s
**BER Bergen** **58.88 325** *e*P **P** **01 44 19.8 +0.6**
BER IAmb IAmb 01 44 20.5
comp=Z,78nm,1.2s
BER IAMs_20 IAMs_20 02 12 17.2
comp=Z,947nm,11.6s
**ASK Askoy** **58.91 325** *e*P **P** **01 44 19.5 +0.1**
**ABTA Abfaltersbach** **59.01 308** *e*P **P** **01 44 19.6 -0.9**
comp=Z,11nm,1.0s,SNR=6.9
**RETH Rethem/Aller,** **59.02 315** *e*P **P** **01 44 20.8 +0.5**
comp=Z,61nm,1.6s,baz=72,slow=6.9
**GTTG Gottingen** **59.04 314** *e*P **P** **01 44 20.9 +0.4**
comp=Z,72nm,1.3s,baz=72,slow=6.9
**STAL STALIGIAL** **59.04 307** IAmb IAmb 01 44 20.9
comp=Z,20nm,1.0s
**CUC Castrocucco** **59.11 300** IAmb IAmb 01 44 23.8
comp=Z,17nm,0.8s
**UBBA Unterbreizbach** **59.25 313** *e*P **P** **01 44 22.1 +0.2**
comp=Z,55nm,1.6s,baz=72,slow=6.9
UBBA *e*PcP **PcP** **01 45 10.6 +0.5**
baz=76,slow=3.9
**KMY Karmoy** **59.26 323** *e*P **P** **01 44 21.7 -0.1**
KMY IAmb IAmb 01 44 22.4
comp=Z,52nm,1.3s
KMY *e*S **S** **01 52 30.8 +0.9**
KMY IAMs_20 IAMs_20 02 11 15.0
comp=Z,874nm,12.6s
**FUR Furstenfeldbru** **59.33 310** *e*P **P** **01 44 23.1 +0.5**
comp=Z,82nm,1.1s,baz=72,slow=6.9
**WTTA Wattenberg** **59.40 309** *i*P **P** **01 44 22.9 -0.5**
comp=Z,52nm,1.4s,SNR=21
**HLG Helgoland** **59.41 317** *e*P **P** **01 44 23.7 +0.7**
comp=Z,133nm,1.5s,baz=72,slow=6.9
**WATA Walderalm** **59.42 309** *i*P **P** **01 44 23.4 0.0**

comp=Z,42nm,1.3s,SNR=17
**PAOL Paolisi 59.61 301** lAmb lAmb 01 44 25.2
comp=Z,66nm,1.8s
**SQTA Sankt Quirin 59.69 309** *e*P **P** **01 44 25.1 -0.2**
comp=Z,32nm,1.2s,SNR=19
**CEL Celeste 59.70 298** P **P** **01 44 24.8 -0.5**
comp=Z,49nm,1.1s,comp=Z,522nm
**MOTA Moosalm 59.72 309** *e*P **P** **01 44 24.9 -0.6**
comp=Z,44nm,1.2s
**INTR Introdacqua 59.72 302** lAmb lAmb 01 44 32.5
comp=Z,30nm,1.2s
**CTI Castel Tesino 59.81 307** lAmb lAmb 01 44 26.5
comp=Z,20nm,1.1s
**CAMP Campotosto 59.87 303** lAmb lAmb 01 44 27.7
comp=Z,24nm,1.2s
**RETA Reutte 59.88 309** *i* P **P** **01 44 26.2 -0.3**
comp=Z,27nm,1.0s,SNR=20
**FETA Feichten 60.07 309** *i* P **P** **01 44 27.6 -0.2**
comp=Z,27nm,1.0s,SNR=17
**KASTN Kahler Asten 60.07 314** *e*P **P** **01 44 27.9 +0.2**
comp=Z,34nm,1.5s,baz=72,slow=6.9
KASTN *e*PcP **PcP** **01 45 14.5 +1.0**
baz=76,slow=3.9
**IBBN Ibbenburen 60.09 315** *e*P **P** **01 44 27.9 +0.2**
comp=Z,95nm,1.6s,baz=72,slow=6.9
**UBR Ueberruh 60.23 310** *e*P **P** **01 44 28.6 -0.3**
comp=Z,46nm,1.2s,baz=72,slow=6.9
**TNS Taunus Mts 60.38 313** *e*P **P** **01 44 29.9 +0.1**
comp=Z,38nm,1.3s,baz=72,slow=6.9
**CESX Cesi 60.42 303** lAmb lAmb 01 44 31.9
comp=Z,25nm,1.2s
**STU Stuttgart 60.43 311** P **P** **01 44 30.5 +0.4**
**STU Stuttgart 60.43 311** *e*P **P** **01 44 30.2 +0.1**
comp=Z,165nm,1.4s,baz=72,slow=6.9
**FUORN Ofenpass-Fuorn 60.51 308** lAmb lAmb 01 44 37.8
comp=Z,76nm,2.0s
**DAVA Damuels 60.52 309** *e*P **P** **01 44 30.7 -0.2**
comp=Z,22nm,1.1s,SNR=11
**BUG Bochum--Univer 60.67 314** *e*P **P** **01 44 31.9 +0.3**
comp=Z,100nm,1.6s,baz=72,slow=6.9
BUG *e*pP **sP** **01 44 37.6 +0.4**
**JMIC Jan Mayen 60.77 338** LR LR 02 14 52.4
comp=Z,353nm,19.0s,baz=60,slow=40
**DAG Danmarks Havn 60.85 346** P **P** **01 44 32.1 -0.5**
**DAG Danmarks Havn 60.85 346** *i* P **P** **01 44 32.0 -0.5**
DAG lAmb lAmb 01 44 33.7
comp=Z,11nm,0.8s
**ZCCA Zocca 60.86 306** lAmb lAmb 01 44 45.1
comp=Z,48nm,1.3s
**OSSC Osservatorio P 60.98 305** P **P** **01 44 34.0 0.0**
OSSC lAmb lAmb 01 44 34.9
comp=Z,50nm,1.5s
**VAE Valguarnera 61.08 297** LR LR 02 16 24.9
comp=Z,186nm,18.4s,baz=88,slow=41
**AHRW Bad Neuenahr-A 61.10 313** *e*P **P** **01 44 34.8 +0.2**
comp=Z,36nm,1.2s,baz=72,slow=6.9
**BFO Black Forest 61.12 311** P **P** **01 44 34.9 0.0**
**BFO Black Forest 61.12 311** P **P** **01 44 34.9 0.0**
BFO pmax pmax
comp=Z,49nm,1.2s
**BFO Black Forest 61.12 311** *e*P **P** **01 44 34.6 -0.3**
comp=Z,48nm,1.2s,baz=72,slow=6.9
**LODK Lodwar 61.15 253** P **P** **01 44 34.5 -1.0**
**LODK Lodwar 61.15 253** P **P** **01 44 35.0 -0.5**
**TUE Stuetta 61.15 308** P **P** **01 44 35.2 -0.1**
TUE lAmb lAmb 01 44 46.4
comp=Z,40nm,1.4s
**TUE Stuetta 61.15 308** P **P** **01 44 34.5 -0.8**
comp=Z,100nm,1.6s,comp=Z,1µm
**RAFF Raffo Rosso 61.22 297** P **P** **01 44 36.0 +0.3**
**SLE Schleitheim 61.22 310** P **P** **01 44 35.3 -0.3**
**BTNL Ternell 61.64 314** *d*P **P** **01 44 39.0 +0.7**
comp=Z,16nm,1.3s
**MEM Membach 61.71 314** *d*P **P** **01 44 39.0 +0.3**
comp=Z,17nm,1.3s
MEM *d*P **P** **01 44 39.1 +0.3**
comp=Z,15nm,1.3s
MEM *d*PcP **PcP** **01 45 20.7 +0.6**
**CDF Champ du Feu 61.74 311** *e*P **P** **01 44 38.4 -0.8**
CDF pmax pmax
comp=Z,43nm,1.2s
**BHOU Houvegnez 61.80 314** *d*P **P** **01 44 40.3 +0.8**
comp=Z,9.2nm,1.3s
**BEBN Eben Emael 61.84 314** *d*P **P** **01 44 39.6 +0.1**
**MSSA Maissana 61.84 306** lAmb lAmb 01 44 40.8
comp=Z,39nm,1.2s
**GAMB Gambell 61.86 30** P **P** **01 44 39.3 -0.2**
baz=292
**ECH Echery 61.89 311** lAmb lAmb 01 44 41.3
comp=Z,33nm,1.2s
**ECH Echery 61.89 311** P **P** **01 44 39.8 -0.3**
**WLF Walferdange 61.97 313** *d*P **P** **01 44 41.5 +0.9**
comp=Z,35nm,1.3s
**WLF Walferdange 61.97 313** *e*P **P** **01 44 41.2 +0.7**
comp=Z,125nm,1.3s,baz=72,slow=6.9
**BSTI Sart Tilman 61.98 314** *d*P **P** **01 44 41.0 +0.4**
comp=Z,2.7nm,1.3s
BSTI *d*PcP **PcP** **01 45 20.4 -0.7**
**BCLA Clavier 62.20 314** *d*P **P** **01 44 42.6 +0.6**
comp=Z,14nm,1.2s
**HINF Hinteralfeld 62.23 311** *e*P **P** **01 44 41.5 -0.9**
HINF pmax pmax
comp=Z,29nm,1.3s
**BGES Gesves 62.34 314** *d*P **P** **01 44 42.7 -0.2**
comp=Z,11nm,1.3s
**RCHB Rochefort 62.34 314** *d*P **P** **01 44 43.0 +0.1**
comp=Z,15nm,1.2s
**C16K Lisburne Hills 62.43 24** P **P** **01 44 43.5 +0.2**
baz=295
**HAU Haudompre 62.47 311** *e*P **P** **01 44 43.0 -1.0**
HAU pmax pmax
comp=Z,59nm,1.8s
**BMRD Maredsous 62.56 314** *d*P **P** **01 44 45.0 +0.6**
comp=Z,12nm,1.3s
**KMBO Kilima Mbogo 62.56 247** P **P** **01 44 45.0 -0.3**
**KMBO Kilima Mbogo 62.56 247** *i* P **P** **01 44 44.7 -0.5**
SNR=12
**KMBO Kilima Mbogo 62.56 247** P **P** **01 44 44.8 -0.4**
KMBO P **P** **01 44 44.8 -0.4**
**KMBO Kilima Mbogo 62.56 247** P **P** **01 44 45.0 -0.3**
KMBO pmax pmax
comp=Z,10.0nm,1.0s
**GIVF Givet 62.60 314** *e*P **P** **01 44 44.4 -0.4**
GIVF pmax pmax
comp=Z,62nm,1.4s
**TNA Tin City 62.65 27** P **P** **01 44 45.2 +0.4**
baz=294
**DOU Dourbes 62.74 314** *d*P **P** **01 44 45.7 0.0**
comp=Z,13nm,1.2s
DOU *d*PcP **PcP** **01 45 25.0 +0.8**
**PGF Pioggiola 62.88 304** *e*P **P** **01 44 46.1 -0.8**
PGF pmax pmax
comp=Z,52nm,1.4s
**A19K Wainwright 62.93 21** P **P** **01 44 47.3 +0.7**
baz=298
**BAIF Baives 62.98 314** *e*P **P** **01 44 47.1 -0.2**
BAIF pmax pmax
comp=Z,48nm,1.3s
**C17K DeLong Mountai 63.06 24** P **P** **01 44 47.2 -0.4**
baz=297
**B18K Kokolik River 63.10 22** P **P** **01 44 48.0 +0.2**
baz=298
**CABF La Chapelle 63.18 310** *e*P **P** **01 44 47.8 -1.0**
CABF pmax pmax
comp=Z,19nm,1.2s
**LPG La Plagne 63.20 308** *e*P **P** **01 44 48.9 -0.3**
LPG pmax pmax
comp=Z,68nm,1.1s
**LPL La Plagne 63.20 308** *e*P **P** **01 44 48.8 -0.3**
LPL pmax pmax
comp=Z,66nm,1.0s
**F14K Arctic Creek 63.29 27** P **P** **01 44 49.3 +0.2**
baz=296
**RDOG Red Dog Mine 63.35 24** P **P** **01 44 49.2 -0.3**
baz=297
**SBF Sospel 63.40 306** *e*P **P** **01 44 49.5 -0.8**
SBF pmax pmax
comp=Z,63nm,1.0s
**BNI Bardonecchia 63.42 308** P **P** **01 44 50.1 -0.4**
**D17K Noatak River 63.45 24** P **P** **01 44 50.1 0.0**
baz=297
**MBDF Montbardon 63.49 307** *e*P **P** **01 44 49.4 -1.6**
MBDF pmax pmax
comp=Z,21nm,1.1s
**C18K Utukok River 63.63 23** P **P** **01 44 50.8 -0.6**
baz=298
**A21K Barrow 63.66 20** P **P** **01 44 51.7 +0.3**
baz=301
**F15K North Star Dit 63.81 27** lAmb lAmb 01 44 54.5
comp=Z,38nm,1.2s
**F15K North Star Dit 63.81 27** P **P** **01 44 52.8 +0.3**
baz=297,SNR=6.3
**VSL Villasalto 63.87 301** lAmb lAmb 01 44 54.1
comp=Z,56nm,1.8s
**C19K Lookout Ridge 63.92 22** P **P** **01 44 54.3 +1.0**
baz=300
**DRUM Mains of Drumt 63.92 323** *e*P **P** **01 44 53.8 +0.4**
DRUM lAmb lAmb 01 44 54.5
comp=Z,65nm,1.1s
**WACR West Acre 63.99 317** *e*P **P** **01 44 54.2 +0.4**
WACR lAmb lAmb 01 44 55.1
comp=Z,138nm,1.0s
**ORIF Oris-en-Rattie 63.99 308** *e*P **P** **01 44 53.9 -0.3**
ORIF pmax pmax
comp=Z,28nm,1.0s
**MCD Coleburn Disti 64.02 323** *e*P **P** **01 44 54.3 +0.2**
MCD lAmb lAmb 01 44 55.4
comp=Z,108nm,1.1s
**ANM Nome 64.06 28** P **P** **01 44 54.7 +0.6**
baz=297
**E17K Hotham Inlet 64.17 25** P **P** **01 44 55.4 +0.6**
baz=299
**B20K Meade River 64.19 21** P **P** **01 44 55.5 +0.6**
baz=301
**LMK Market Rasen 64.21 318** *e*P **P** **01 44 56.1 +0.8**
LMK lAmb lAmb 01 44 56.7
comp=Z,209nm,1.2s
**A22K Sinclair Lake 64.28 20** P **P** **01 44 55.9 +0.4**
baz=303
**LOR Lormes 64.31 311** *e*P **P** **01 44 54.9 -1.3**
LOR pmax pmax
comp=Z,39nm,1.3s
**ELSH Elham, Standar 64.34 316** *e*P **P** **01 44 56.6 +0.4**
ELSH lAmb lAmb 01 44 57.5
comp=Z,157nm,1.2s
**G15K Niukluk 64.37 27** P **P** **01 44 56.0 -0.1**
baz=298
**E18K Tukpahlearik C 64.42 24** lAmb lAmb 01 45 02.0
comp=Z,65nm,1.9s
**E18K Tukpahlearik C 64.42 24** P **P** **01 44 57.1 +0.5**
baz=300
**EDMD Edmundbyers 64.52 320** *e*P **P** **01 44 57.3 0.0**
EDMD lAmb lAmb 01 44 58.2
comp=Z,40nm,0.9s
**SMF Signal de Mont 64.58 310** *e*P **P** **01 44 57.0 -0.9**
SMF pmax pmax
comp=Z,87nm,1.3s
**F17K Baldwin Pennin 64.68 25** P **P** **01 44 59.6 +1.4**
F17K lAmb lAmb 01 45 00.4
comp=Z,22nm,1.0s
**F17K Baldwin Pennin 64.68 25** P **P** **01 44 58.8 +0.6**
baz=299
**EDI Edinburgh 64.69 322** *e*P **P** **01 44 58.2 -0.1**
EDI lAmb lAmb 01 44 59.4
comp=Z,97nm,1.4s
**D19K Kuna River 64.69 23** P **P** **01 44 58.9 +0.6**
baz=301,SNR=12
**HPK Haverah Park 64.70 319** *e*P **P** **01 44 58.9 +0.3**
**VIVF Saint-Julien-l 64.80 308** *e*P **P** **01 44 58.6 -0.8**
VIVF pmax pmax
comp=Z,47nm,1.2s
**G16K Koyuk River 64.80 26** lAmb lAmb 01 45 00.9
comp=Z,22nm,1.1s
**G16K Koyuk River 64.80 26** P **P** **01 44 59.3 +0.3**
baz=299,SNR=5.5
**AVF Avril sur Loir 64.83 311** *e*P **P** **01 44 58.6 -0.9**
AVF pmax pmax
comp=Z,95nm,1.4s
**INVG Invergeldie, C 64.90 322** *e*P **P** **01 44 59.7 -0.1**
INVG lAmb lAmb 01 45 00.8
comp=Z,11nm,1.1s
**HMNX Herstmonceux 64.92 316** *e*P **P** **01 45 00.4 +0.4**
HMNX lAmb lAmb 01 45 01.4
comp=Z,94nm,1.0s
**EKA Eskdalemuir Ar 64.93 321** P **P** **01 45 00.4 +0.4**
comp=Z,33nm,0.9s,baz=64,slow=7.0,SNR=61
comp=Z,33nm,0.9s
**ESK Eskdalemuir 64.96 321** P **P** **01 45 00.7 +0.5**
**ESK Eskdalemuir 64.96 321** *e*P **P** **01 45 00.5 +0.3**
ESK lAmb lAmb 01 45 01.2
comp=Z,61nm,1.0s
**ESK Eskdalemuir 64.96 321** P **P** **01 45 00.7 +0.5**
ESK pmax pmax
comp=Z,56nm,1.0s
**D20K Etivluk River 65.04 22** P **P** **01 45 00.9 +0.4**
baz=302,SNR=12
**B22K Teshepuk Lake 65.08 20** P **P** **01 45 01.1 +0.3**
baz=304
**B21K Ikpikpuk River 65.15 21** lAmb lAmb 01 45 07.9
comp=Z,32nm,1.1s
**B21K Ikpikpuk River 65.15 21** P **P** **01 45 01.6 +0.4**
baz=304
**F18K Selawik 65.16 25** P **P** **01 45 02.0 +0.7**
baz=301
**H16K Elim 65.21 27** P **P** **01 45 02.2 +0.6**
baz=299
**KESW Keswick, Cumbr 65.22 320** *e*P **P** **01 45 02.3 +0.4**
**SPIA Saint Paul Isl 65.23 36** P **P** **01 45 02.4 +0.5**
baz=296
**BGF Bois d'Agland 65.24 311** *e*P **P** **01 45 01.2 -1.0**
BGF pmax pmax
comp=Z,26nm,1.1s
**EUNU Eureka 65.28 360** P **P** **01 45 03.4 +1.4**
**KPL Plockton 65.30 324** *e*P **P** **01 45 01.8 -0.6**
**C21K Knifeblade Rid 65.35 21** P **P** **01 45 03.5 +1.0**
baz=304,SNR=8.7
**G17K Kiwalik Mounta 65.37 26** P **P** **01 45 02.9 +0.2**
baz=300
**PGBU Glenifferbraes 65.39 322** *e*P **P** **01 45 02.8 -0.2**
PGBU lAmb lAmb 01 45 04.3
comp=Z,56nm,1.0s
**E20K Nigu River 65.42 22** P **P** **01 45 03.6 +0.5**
baz=303,SNR=14
**KEST Kesra 65.51 297** P **P** **01 45 04.3 +0.1**
comp=Z,28nm,1.0s,baz=0.7,slow=1.1,SNR=41
comp=Z,28nm,1.0s
**KEST Kesra 65.51 297** P **P** **01 45 04.9 +0.7**
SNR=26
KEST P **P** **01 45 04.9 +0.7**
SNR=26
**E19K Redstone River 65.52 23** lAmb lAmb 01 45 05.7
comp=Z,61nm,1.9s
**E19K Redstone River 65.52 23** P **P** **01 45 03.9 +0.3**
baz=302,SNR=6.8
**K13K Kusilvak Mount 65.57 30** P **P** **01 45 04.1 +0.1**
baz=298
**WOL Wolverton 65.62 317** *e*P **P** **01 45 04.6 +0.1**
**J14K Nanvaranak Lak 65.62 29** P **P** **01 45 04.7 +0.4**
baz=299
**RER Riviere de l'E 65.64 217** P **P** **01 45 04.2 -0.8**
**M11K Mekoryuk 65.64 32** P **P** **01 45 04.5 0.0**
baz=298
**LAWE Loch Awe, Argy 65.66 323** *e*P **P** **01 45 04.8 +0.1**
LAWE lAmb lAmb 01 45 05.9
comp=Z,55nm,1.2s
**F19K Shaleruckik Mo 65.67 24** P **P** **01 45 04.6 0.0**
baz=302,SNR=12
**NEEM North Greenlan 65.67 352** *i* P **P** **01 45 03.3 -1.6**
NEEM lAmb lAmb 01 45 05.8
comp=Z,30nm,0.7s
**TCF Toulx Ste Croi 65.75 310** *e*P **P** **01 45 05.0 -0.6**
TCF pmax pmax
comp=Z,91nm,1.2s
**P08K Saint George I 65.83 37** P **P** **01 45 05.7 -0.1**
baz=297
**SWN1 Swindon 65.86 317** *e*P **P** **01 45 06.5 +0.5**
**G18K Tagawik 65.87 25** P **P** **01 45 05.6 -0.4**
baz=302
**H17K Granite Mounta 65.92 26** lAmb lAmb 01 45 08.2
comp=Z,22nm,0.9s
**H17K Granite Mounta 65.92 26** P **P** **01 45 06.2 -0.1**
baz=301,SNR=8.8
**E21K Killik River 66.00 22** P **P** **01 45 07.0 +0.2**
baz=305
**HLM1 Long Mynd 66.01 318** *e*P **P** **01 45 06.5 -0.6**
HLM1 lAmb lAmb 01 45 08.3
comp=Z,76nm,1.1s
**FOEL Foel Wylfa 66.02 319** *e*P **P** **01 45 07.6 +0.4**
FOEL lAmb lAmb 01 45 08.5
comp=Z,94nm,1.0s
**D22K Ayikyak River 66.14 21** lAmb lAmb 01 45 09.8
comp=Z,42nm,1.3s
**D22K Ayikyak River 66.14 21** P **P** **01 45 07.9 +0.2**
baz=306,SNR=9.4
**C23K Itkillik River 66.16 20** P **P** **01 45 08.0 +0.3**
baz=307
**LDF La Druitiere 66.17 314** *e*P **P** **01 45 07.1 -1.1**
LDF pmax pmax
comp=Z,42nm,1.1s
**I17K Unalakleet 66.17 28** P **P** **01 45 07.4 -0.5**
baz=301
**F20K Avaraart Lake 66.23 23** P **P** **01 45 08.2 0.0**
baz=304
**WIM Isle of Man 66.24 320** *e*P **P** **01 45 09.1 +0.6**
**G19K Purcell Mounta 66.28 25** P **P** **01 45 08.8 +0.3**
baz=303,SNR=7.4
**LLW Llanuwchllyn 66.29 319** *e*P **P** **01 45 09.2 +0.3**
**FLN La Foliniere 66.31 314** *e*P **P** **01 45 08.0 -1.0**
FLN pmax pmax
comp=Z,42nm,1.3s
**H18K Honhosa River 66.37 26** P **P** **01 45 09.1 -0.1**
baz=302
**YLL Llanberis 66.43 319** *e*P **P** **01 45 09.9 +0.1**
**CAF Calviac 66.44 309** *e*P **P** **01 45 09.6 -0.4**
CAF pmax pmax
comp=Z,34nm,1.2s
**WLF1 Llynfaes 66.48 319** *e*P **P** **01 45 10.6 +0.5**
WLF1 lAmb lAmb 01 45 11.3
comp=Z,96nm,0.9s
**J16K Anvik River 66.52 28** lAmb lAmb 01 45 12.1
comp=Z,32nm,1.0s
**J16K Anvik River 66.52 28** P **P** **01 45 10.7 +0.5**
baz=301,SNR=6.8
**RJF Les Rejaudoux 66.62 310** *e*P **P** **01 45 10.9 -0.2**
RJF pmax pmax
comp=Z,86nm,1.4s
**D23K Nanushuk River 66.67 20** P **P** **01 45 10.4 -0.7**
baz=307
**K15K Wolf Creek Mou 66.67 29** P **P** **01 45 11.5 +0.4**
baz=301,SNR=5.4
**L14K Kuka Creek 66.68 30** lAmb lAmb 01 45 13.1
comp=Z,38nm,1.1s
**L14K Kuka Creek 66.68 30** P **P** **01 45 11.7 +0.6**
baz=300,SNR=7.1
**GRR Gorron 66.70 314** *e*P **P** **01 45 10.5 -1.0**
GRR pmax pmax
comp=Z,57nm,1.1s
**C24K Franklin Bluff 66.75 19** P **P** **01 45 11.2 -0.3**
baz=309
**H19K Roundabout Mou 66.84 25** P **P** **01 45 12.4 +0.3**
baz=304,SNR=10
**F21K Alatna River 66.86 23** P **P** **01 45 13.0 +0.7**
baz=306,SNR=21
**M13K Dall Lake 66.87 32** P **P** **01 45 12.1 -0.2**
baz=300
**L15K Ungalak Mounta 67.00 30** P **P** **01 45 13.1 -0.2**
baz=301
**J17K VABM Dome 67.05 28** P **P** **01 45 14.5 +1.0**
J17K lAmb lAmb 01 45 15.4
comp=Z,25nm,1.0s
**J17K VABM Dome 67.05 28** P **P** **01 45 13.7 +0.2**
baz=302,SNR=7.4
**D24K Happy Valley 67.08 20** P **P** **01 45 13.5 -0.1**
baz=309,SNR=5.0
**F22K John River 67.10 22** P **P** **01 45 14.3 +0.5**
baz=306
**GCSA Galena City Sc 67.12 26** P **P** **01 45 14.2 +0.3**
baz=304,SNR=5.1
**TOLK Toolik Lake Re 67.19 20** lAmb lAmb 01 45 16.1
comp=Z,36nm,1.0s
**TOLK Toolik Lake Re 67.19 20** P **P** **01 45 14.6 +0.2**
baz=308,SNR=12
**MBAR Mbarara 67.25 252** P **P** **01 45 15.6 -0.1**
**MBAR Mbarara 67.25 252** P **P** **01 45 15.4 -0.3**
MBAR P **P** **01 45 15.4 -0.3**
**MBAR Mbarara 67.25 252** P **P** **01 45 15.6 -0.1**
MBAR pmax pmax
comp=Z,94nm,2.0s
**G21K Allakaket 67.26 23** P **P** **01 45 14.9 0.0**
baz=306,SNR=8.4
**M14K Bethel 67.28 31** P **P** **01 45 15.2 +0.2**
baz=301
**RSBS Rosebush, Pemb 67.29 318** *e*P **P** **01 45 15.2 0.0**
RSBS lAmb lAmb 01 45 16.2
comp=Z,47nm,1.0s
**H20K Anotleneega Mo 67.40 25** P **P** **01 45 16.2 +0.5**
baz=305,SNR=12
**E23K Chandalar 67.53 21** P **P** **01 45 17.4 +0.7**
baz=308,SNR=13
**SUMG Summit 67.54 346** P **P** **01 45 17.2 +0.2**
**SUMG Summit 67.54 346** P **P** **01 45 17.2 +0.2**
SUMG pmax pmax
comp=Z,71nm,1.3s
**SUMG Summit 67.54 346** *i* P **P** **01 45 16.0 -1.0**
SUMG lAmb lAmb 01 45 22.2
comp=Z,15nm,1.1s
**DYA Yadsworthy 67.54 317** *e*P **P** **01 45 16.6 -0.2**
DYA lAmb lAmb 01 45 17.0
comp=Z,34nm,1.1s
**C26K Camden Bay 67.63 18** P **P** **01 45 18.2 +1.1**
baz=312
**D25K Kavik River 67.64 19** P **P** **01 45 17.3 +0.1**
baz=311,SNR=13
**G22K Bettles 67.66 22** P **P** **01 45 17.1 -0.2**
baz=307
**WRAB Tennant Creek 67.66 137** P **P** **01 45 17.9 0.0**
WRAB lAmb lAmb 01 45 22.5
comp=Z,27nm,1.4s
**WRAB Tennant Creek 67.66 137** P **P** **01 45 17.9 0.0**
WRAB pmax pmax
comp=Z,27nm,1.4s
**WRA Warramunga Arr 67.66 137** P **P** **01 45 17.0 -0.9**
**WRA Warramunga Arr 67.66 137** P **P** **01 45 17.4 -0.6**
comp=Z,11nm,1.0s,baz=335,slow=6.5,SNR=23
WRA LR LR 02 17 38.0
comp=Z,136nm,18.2s,baz=299,slow=38
comp=Z,11nm,1.0s
**WB2 Warramunga Arr 67.67 137** lAmb lAmb 01 45 22.5
comp=Z,18nm,1.1s
**K17K Iditarod 67.71 28** P **P** **01 45 18.1 +0.4**
baz=303,SNR=12
**SGMF Saint Gilles 67.77 314** *e*P **P** **01 45 17.8 -0.5**
SGMF pmax pmax
comp=Z,51nm,1.2s
**L16K Owhat River 67.80 29** P **P** **01 45 18.7 +0.4**
baz=303
**N14K Kuskokwak Cree 67.83 31** P **P** **01 45 18.9 +0.4**
baz=302
**M15K Kasigluk River 67.85 31** P **P** **01 45 18.8 +0.2**
baz=302,SNR=8.5
**E24K Your Creek 67.86 21** P **P** **01 45 19.0 +0.4**
baz=309
**COLD Coldfoot 67.88 22** P **P** **01 45 19.2 +0.5**
baz=308
**NIKH Nikolski High 67.89 40** P **P** **01 45 18.6 -0.4**
baz=299
**J18K Innoko River 67.90 27** lAmb lAmb 01 45 20.5
comp=Z,22nm,1.1s
**J18K Innoko River 67.90 27** P **P** **01 45 19.0 +0.1**
baz=304,SNR=9.3
**I20K Naaghedeneel 67.94 25** P **P** **01 45 19.7 +0.6**
baz=306,SNR=6.0
**J19K Poorman 68.00 26** lAmb lAmb 01 45 21.7
comp=Z,33nm,1.4s
**J19K Poorman 68.00 26** P **P** **01 45 20.2 +0.7**
baz=305,SNR=9.1
**H21K Melozitna Rive 68.00 24** lAmb lAmb 01 45 21.4
comp=Z,36nm,1.4s
**H21K Melozitna Rive 68.00 24** P **P** **01 45 20.0 +0.5**
baz=307,SNR=13
**CEST Esterri de Car 68.02 307** lAmb lAmb 01 45 21.3
comp=Z,55nm,1.2s
**L17K Donlin 68.04 29** P **P** **01 45 20.5 +0.7**
baz=303,SNR=7.8
**BORG Borgarnes 68.04 335** LR LR 02 16 24.7
comp=Z,190nm,18.2s,baz=56,slow=37
**C27K Jago River 68.14 18** P **P** **01 45 20.8 +0.4**
baz=313,SNR=19
**ROSF Rostrenen 68.15 314** *e*P **P** **01 45 20.3 -0.4**
ROSF pmax pmax
comp=Z,69nm,1.1s
**G23K Bananza Creek 68.25 22** lAmb lAmb 01 45 23.1
comp=Z,50nm,1.6s
**G23K Bananza Creek 68.25 22** P **P** **01 45 21.4 +0.3**
baz=308,SNR=15
**QUIF Quistinic 68.29 314** *e*P **P** **01 45 20.9 -0.7**
QUIF pmax pmax
comp=Z,52nm,1.4s
**H22K Ishtalitna Cre 68.33 23** P **P** **01 45 22.5 +0.9**
baz=308,SNR=6.1
**O14K Tigyukauivet M 68.37 32** P **P** **01 45 21.6 -0.3**

baz=302
N15K **Kwethluk River** 68.38 31 P P 01 45 22.7 +0.7
baz=303
M16K **Timber Creek** 68.38 30 IAmb IAmb 01 45 24.0
comp=Z,36nm,1.1s
M16K **Timber Creek** 68.38 30 P P 01 45 22.6 +0.6
baz=303,SNR=5.5
F24K **Squaw Lake** 68.39 21 IAmb IAmb 01 45 24.0
comp=Z,17nm,1.1s
F24K **Squaw Lake** 68.39 21 P P 01 45 22.6 +0.6
baz=310,SNR=11
J20K **Nowinta River** 68.42 26 IAmb IAmb 01 45 24.3
comp=Z,16nm,0.9s
J20K **Nowinta River** 68.42 26 P P 01 45 23.1 +0.9
baz=306,SNR=13
ABPO **Ambohimpanom** 68.56 226 P P 01 45 23.0 -0.8
ABPO IAmb IAmb 01 45 23.9
comp=Z,44nm,1.2s
ABPO **Ambohimpanom** 68.56 226 P P 01 45 23.0 -0.8
ABPO pmax pmax
comp=Z,44nm,1.3s
L18K **Granite Mounta** 68.61 28 P P 01 45 23.9 +0.5
baz=305,SNR=5.1
UNV **Unalaska Valle** 68.68 39 P P 01 45 25.2 +1.2
baz=300
N16K **Nishlik Lake** 68.76 30 P P 01 45 25.2 +0.8
baz=304,SNR=5.4
M17K **Holitna River** 68.78 29 IAmb IAmb 01 45 26.9
comp=Z,30nm,0.9s
M17K **Holitna River** 68.78 29 P P 01 45 25.5 +1.0
baz=304,SNR=6.8
KULLO **Kullorsuaq** 68.92 352 *i* P P 01 45 24.1 -1.0
K20K **Telida** 68.93 26 IAmb IAmb 01 45 27.8
comp=Z,24nm,1.1s
K20K **Telida** 68.93 26 P P 01 45 26.6 +1.2
baz=306,SNR=9.1
H23K **Yukon River** 68.96 23 IAmb IAmb 01 45 27.8
comp=Z,25nm,1.1s
H23K **Yukon River** 68.96 23 P P 01 45 26.4 +0.9
baz=309,SNR=15
SOEG **Soedalen** 68.97 341 *i* P P 01 45 25.8 +0.3
SOEG IAmb IAmb 01 45 27.9
comp=Z,16nm,0.9s
F25K **Christian Rive** 68.99 20 P P 01 45 26.6 +0.8
baz=312,SNR=15
O15K **Ungalikthiuk R** 69.03 32 P P 01 45 26.1 0.0
baz=303
G24K **Hadweenzic Riv** 69.04 22 P P 01 45 26.7 +0.7
baz=311,SNR=24
MLY **Manley** 69.07 24 P P 01 45 26.4 +0.1
baz=308,SNR=14
D27M **Malcolm River** 69.10 18 P P 01 45 26.7 +0.2
baz=315
CHUM **Lake Minchumin** 69.24 25 P P 01 45 27.7 +0.5
baz=308
L19K **White Mountain** 69.34 27 IAmb IAmb 01 45 30.1
comp=Z,23nm,1.1s
L19K **White Mountain** 69.34 27 P P 01 45 28.5 +0.5
baz=306,SNR=9.3
F26K **Sheenjek River** 69.34 20 P P 01 45 28.3 +0.4
baz=313,SNR=5.9
M18K **Stony River** 69.37 28 P P 01 45 28.7 +0.6
baz=306,SNR=5.4
N17K **Nushagak Hills** 69.38 30 P P 01 45 29.0 +0.8
baz=305,SNR=5.1
BMAR **Burnt Mountain** 69.40 20 P P 01 45 29.0 +0.7
G25K **Bearman Lake** 69.41 21 P P 01 45 29.5 +1.3
baz=312,SNR=15
I23K **Minto, Yukon-K** 69.45 23 P P 01 45 29.1 +0.6
baz=310,SNR=8.9
H24K **Noodor Dome** 69.48 22 IAmb IAmb 01 45 30.9
comp=Z,36nm,1.6s
H24K **Noodor Dome** 69.48 22 P P 01 45 29.6 +0.7
baz=311,SNR=11
L20K **Farewell, AK** 69.53 27 P P 01 45 29.9 +0.7
baz=307,SNR=5.3
O16K **Kokwok River B** 69.54 31 P P 01 45 29.8 +0.6
baz=304,SNR=9.3
BPAW **Bear Paw Mtn.** 69.57 25 IAmb IAmb 01 45 30.9
comp=Z,17nm,1.1s
BPAW **Bear Paw Mtn.** 69.57 25 P P 01 45 29.7 +0.4
baz=309,SNR=8.6
CAST **Castle Rocks** 69.61 26 IAmb IAmb 01 45 31.0
comp=Z,24nm,1.2s
CAST **Castle Rocks** 69.61 26 P P 01 45 29.9 +0.3
baz=308,SNR=11
M19K **Big River Lodg** 69.68 28 P P 01 45 30.9 +0.9
baz=306
E27K **Coleen River** 69.69 19 IAmb IAmb 01 45 31.8
comp=Z,34nm,1.4s
E27K **Coleen River** 69.69 19 P P 01 45 30.4 +0.4
baz=315,SNR=22
FALS **False Pass** 69.71 37 P P 01 45 30.6 +0.3
baz=302
N18K **Kilae Creek** 69.82 29 IAmb IAmb 01 45 33.0
comp=Z,17nm,1.0s
N18K **Kilae Creek** 69.82 29 P P 01 45 31.0 +0.1
baz=306
H25L **Birch Creek** 69.83 21 P P 01 45 31.9 +1.0
baz=312
O17K **Koliganek Bris** 69.85 30 P P 01 45 30.9 -0.2
baz=305
PPLA **Purkeypile** 69.89 26 P P 01 45 32.0 +0.5
baz=308,SNR=10
P16K **Nushagak River** 69.90 31 P P 01 45 30.3 -1.1
baz=305
NEA2 **Nenana** 69.90 24 IAmb IAmb 01 45 32.9
comp=Z,29nm,1.3s
NEA2 **Nenana** 69.90 24 P P 01 45 31.5 +0.1
baz=310,SNR=6.8
S12K **Black Hills** 69.91 35 P P 01 45 31.7 +0.1
baz=303
E28M **Babbage River** 69.92 18 IAmb IAmb 01 45 33.1
comp=Z,29nm,1.6s
E28M **Babbage River** 69.92 18 P P 01 45 31.6 +0.2
baz=317,SNR=8.1
KTH **Kantishna Hill** 69.94 25 IAmb IAmb 01 45 33.4
comp=Z,36nm,1.2s
MDM **Murphy Dome** 69.94 23 IAmb IAmb 01 45 33.3
comp=Z,57nm,1.8s
G26K **Porcupine Rive** 69.96 20 P P 01 45 31.5 -0.1
baz=314,SNR=16
POKR **Poker Plat Res** 70.09 23 P P 01 45 32.9 +0.4
baz=311
COLA **College** 70.12 23 P P 01 45 32.8 +0.2
COLA **College** 70.12 23 P P 01 45 32.6 0.0
baz=311
COLA **College** 70.12 23 P P 01 45 32.8 +0.2
COLA pmax pmax
comp=Z,36nm,0.9s
M20K **Styx River** 70.17 27 P P 01 45 33.5 +0.3
baz=308
A36M **Sachs Harbour** 70.21 12 P P 01 45 33.2 +0.1
baz=328
CCB **Clear Creek Bu** 70.28 23 IAmb IAmb 01 45 34.7
comp=Z,25nm,1.5s
N19K **Bonanza Creek** 70.30 29 P P 01 45 34.1 +0.2
baz=307
ASAR **Alice Springs** 70.42 140 P P 01 45 34.1 -0.9
ASAR **Alice Springs** 70.42 140 P P 01 45 33.9 -1.2
comp=Z,4.7nm,0.7s,baz=324,slow=6.0,SNR=19
comp=Z,4.7nm,0.7s
ASAR **Alice Springs** 70.42 140 P P 01 45 34.1 -0.9
PRP **Porcupine Dome** 70.42 22 IAmb IAmb 01 45 36.8
comp=Z,35nm,1.2s
PRP **Porcupine Dome** 70.42 22 P P 01 45 35.2 +0.5
baz=312,SNR=23
ICESG **Greenland Ices** 70.43 344 *i* P P 01 45 33.8 -1.1
ICESG IAmb IAmb 01 45 38.5
comp=Z,30nm,0.9s
P17K **Kvichak River** 70.46 31 P P 01 45 35.1 +0.3
baz=306
E29M **Blow River** 70.49 18 IAmb IAmb 01 45 36.7
comp=Z,34nm,1.4s
E29M **Blow River** 70.49 18 P P 01 45 35.0 +0.1
baz=318,SNR=11
ILAR **Eielson Array** 70.50 23 P P 01 45 34.5 -0.5
comp=Z,9.5nm,0.9s,baz=298,slow=5.3,SNR=65
ILAR PP PP 01 48 08.0 -2.5
comp=Z,2.0nm,0.8s,baz=305,slow=7.1,SNR=8.1
comp=Z,9.5nm,0.9s
MCK **McKinley** 70.51 24 P P 01 45 33.9 -1.2
baz=310
F28M **Old Crow** 70.56 19 IAmb IAmb 01 45 37.0
comp=Z,36nm,1.5s
F28M **Old Crow** 70.56 19 P P 01 45 35.4 0.0
baz=317,SNR=14
RES **Resolute Bay** 70.58 2 IAmb IAmb 01 45 37.0
comp=Z,35nm,1.4s
RES **Resolute Bay** 70.58 2 LR LR 02 17 37.2
comp=Z,334nm,20.1s,baz=14,slow=37
O18K **Koktuh Hills** 70.58 30 IAmb IAmb 01 45 37.6
comp=Z,46nm,1.2s
O18K **Koktuh Hills** 70.58 30 P P 01 45 35.1 -0.5
baz=306
G27K **Doyon Strip** 70.66 20 P P 01 45 36.0 0.0
baz=315,SNR=7.8
Q16K **King Salmon** 70.67 31 P P 01 45 36.2 +0.1
baz=306
SKT **Skwentna** 70.70 27 IAmb IAmb 01 45 37.5
comp=Z,28nm,1.0s
SKT **Skwentna** 70.70 27 P P 01 45 36.2 -0.2
baz=309,SNR=13
HDA **Harding Lake** 70.72 23 P P 01 45 35.3 -1.1
baz=312
RND **Reindeer** 70.75 25 P P 01 45 36.3 -0.3
S14K **Fog Glacier** 70.77 34 P P 01 45 36.2 -0.7
baz=304
P18K **Big Mountain,** 70.85 30 P P 01 45 37.3 +0.1
baz=307
SDPT **Sand Point** 70.86 35 P P 01 45 37.4 +0.1
baz=304
CUT **Chulitna** 70.89 26 P P 01 45 37.2 -0.2
baz=310
N20K **Mount Spurr** 70.94 28 P P 01 45 37.7 -0.1
baz=308
VOI **Vohitsoka** 71.06 224 P P 01 45 38.0 -1.1
VOI **Vohitsoka** 71.06 224 P P 01 45 38.1 -1.1
J25K **Salcha River,** 71.09 23 P P 01 45 38.1 -0.6
baz=313,SNR=6.5
H27K **Steamboat Moun** 71.11 20 P P 01 45 39.2 +0.5
baz=316,SNR=17
QIS **Mount Isa** 71.20 133 P P 01 45 39.0 -0.8
comp=Z,15nm,1.3s,SNR=2.9
WAT1 **Susitna Watana** 71.23 25 P P 01 45 38.5 -1.0
baz=311
Q17K **Contact Creek** 71.24 31 P P 01 45 39.1 -0.7
baz=306
I26K **Coal Creek Min** 71.29 21 P P 01 45 40.3 +0.5
baz=314
SUA **Susitna One** 71.32 27 P P 01 45 39.9 -0.3
baz=310
M22K **Willow** 71.37 26 P P 01 45 39.9 -0.3
baz=310
Q18K **Katmai Hardscr** 71.38 31 P P 01 45 39.4 -1.2
baz=307
R17L **Mt. Peulik Vol** 71.42 32 P P 01 45 39.4 -1.3
baz=306
NWAO **Narrogin (SRO)** 71.46 158 LR LR 02 19 13.0
comp=Z,143nm,21.0s,baz=101,slow=38
DHY **Denali Highway** 71.47 24 P P 01 45 40.2 -0.9
baz=312,SNR=5.6
O20K **Slope Mountain** 71.47 29 P P 01 45 40.2 -0.9
baz=306
P19K **Oil Pt** 71.50 29 P P 01 45 40.9 -0.3
baz=308
K24K **Donnelly Dome** 71.51 23 P P 01 45 40.3 -0.9
baz=313,SNR=5.5
I27K **Kandik River** 71.53 21 P P 01 45 41.7 +0.3
baz=316,SNR=24
G29M **Pine Creek** 71.57 19 IAmb IAmb 01 45 43.1
comp=Z,45nm,1.8s
G29M **Pine Creek** 71.57 19 P P 01 45 41.5 0.0
baz=318,SNR=6.0
CHNA **Chernabura Isl** 71.57 35 P P 01 45 40.1 -1.5
baz=305
INK **Inuvik** 71.60 16 LR LR 02 20 18.4
comp=Z,215nm,20.7s,baz=283,slow=38
INK **Inuvik** 71.60 16 P P 01 45 41.3 -0.2
baz=322,SNR=11
INK **Inuvik** 71.60 16 P P 01 45 41.6 0.0
F30M **Barrier River** 71.60 17 P P 01 45 41.5 -0.2
baz=320,SNR=6.5
WAT6 **Susitna Watana** 71.67 25 P P 01 45 41.4 -0.9
baz=312
J26L **Joseph Creek** 71.73 22 P P 01 45 42.0 -0.6
baz=314,SNR=13
Q19K **Cape Douglas,** 71.78 30 P P 01 45 41.3 -1.6
baz=308
PMR **Palmer** 71.83 26 IAmb IAmb 01 45 44.1
comp=Z,28nm,1.0s
PMR **Palmer** 71.83 26 P P 01 45 42.7 -0.3
baz=311
RC01 **Rabbit Creek A** 71.94 27 P P 01 45 43.4 -0.4
baz=310
CART **Cartagena** 71.96 303 IAmb IAmb 01 45 45.4
comp=Z,49nm,1.2s
SCRK **Sand Creek** 71.97 23 IAmb IAmb 01 45 45.1
comp=Z,27nm,1.0s
SCRK **Sand Creek** 71.97 23 P P 01 45 43.6 -0.5
baz=314,SNR=24
SML **Sawmill** 71.98 26 P P 01 45 43.8 -0.2
baz=311,SNR=14
G30M **tAoh Zraii Nji** 71.98 18 IAmb IAmb 01 45 45.0
comp=Z,28nm,1.2s
G30M **tAoh Zraii Nji** 71.98 18 P P 01 45 43.3 -0.7
baz=320,SNR=13
H29M **Whitestone** 71.99 19 P P 01 45 43.6 -0.4
baz=318,SNR=6.2
HOM **Homer** 72.12 29 P P 01 45 44.6 -0.3
baz=309
I28M **Miner Creek** 72.13 20 P P 01 45 44.6 -0.4
baz=317,SNR=11
PAX **Paxson** 72.18 24 P P 01 45 44.8 -0.5
baz=313,SNR=5.3
KNK **Knik Glacier** 72.19 26 P P 01 45 45.1 -0.2
baz=311
M23K **Glacier View** 72.20 26 P P 01 45 45.2 -0.2
baz=312,SNR=9.5
F31M **Tsiigehtchic** 72.23 17 IAmb IAmb 01 45 46.4
comp=Z,25nm,1.4s
F31M **Tsiigehtchic** 72.23 17 P P 01 45 45.3 -0.1
baz=322,SNR=5.8
EGAK **Eagle** 72.26 21 IAmb IAmb 01 45 47.0
comp=Z,22nm,1.0s
EGAK **Eagle** 72.26 21 P P 01 45 46.0 +0.4
baz=316,SNR=16
R18K **Kaltuk** 72.28 31 P P 01 45 46.5 +0.7
baz=308
SCM **Sheep Creek Mo** 72.32 25 P P 01 45 45.9 -0.3
baz=312,SNR=6.2
EPYK **Eagle Plains** 72.32 19 P P 01 45 45.3 -0.7
baz=320
O22K **Cooper Landing** 72.33 27 P P 01 45 45.3 -0.8
baz=310
BRSE **Bradley Lake S** 72.42 28 P P 01 45 46.7 -0.1
baz=310
Q20K **Shuyak Island** 72.49 30 P P 01 45 46.4 -0.7
baz=309
G31M **Satah River** 72.51 17 P P 01 45 46.7 -0.4
baz=321,SNR=8.3
K27K **Chicken** 72.53 22 P P 01 45 47.7 +0.5
baz=316
M24K **Tolsona, Glenn** 72.53 25 P P 01 45 47.7 +0.3
baz=313
PWL **Port Wells** 72.60 27 P P 01 45 47.6 -0.2
baz=312
I29M **Ogilvie Camp,** 72.65 20 P P 01 45 47.6 -0.5
baz=318
HARP **HAARP** 72.68 24 P P 01 45 48.3 +0.1
baz=314
C36M **Paulatuk** 72.68 13 IAmb IAmb 01 45 48.9
comp=Z,60nm,1.3s
C36M **Paulatuk** 72.68 13 P P 01 45 47.5 -0.5
baz=329
SEW **Seward** 72.68 28 P P 01 45 47.5 -0.7
baz=311
CHIR **Chirikof Islan** 72.83 33 P P 01 45 48.9 -0.2
baz=307
L26K **Log Cabin Wild** 72.84 23 P P 01 45 48.9 -0.2
baz=315
ESBB **Sonseca Array** 72.88 307 IAmb IAmb 01 45 51.3
comp=Z,33nm,1.1s
ESDC **Sonseca Array** 72.89 307 P P 01 45 49.7 -0.2
ESDC IAmb IAmb 01 45 51.2
comp=Z,34nm,1.2s
ESDC **Sonseca Array** 72.89 307 P P 01 45 49.9 0.0
comp=Z,18nm,1.0s,baz=50,slow=5.9,SNR=91
ESDC LR LR 02 22 11.1
comp=Z,372nm,18.9s,baz=49,slow=39
comp=Z,18nm,1.0s
KDAK **Kodiak Island** 72.93 30 LR LR 02 20 23.3
comp=Z,368nm,18.3s,baz=333,slow=38
KDAK **Kodiak Island** 72.93 30 P P 01 45 48.8 -0.9
baz=309
OHAK **Old Harbor** 72.98 31 IAmb IAmb 01 45 51.0
comp=Z,44nm,1.2s
OHAK **Old Harbor** 72.98 31 P P 01 45 49.4 -0.7
baz=309,SNR=7.1
SII **Sitkinak Islan** 73.01 32 P P 01 45 50.2 -0.1
baz=308
GLI **Glacier Island** 73.04 26 P P 01 45 50.6 +0.3
baz=312
KLU **Klutina** 73.04 25 P P 01 45 50.7 +0.3
baz=313,SNR=8.7
PAB **San Pablo** 73.21 307 P P 01 45 52.3 +0.5
PAB IAmb IAmb 01 45 53.2
comp=Z,34nm,1.2s
PAB **San Pablo** 73.21 307 P P 01 45 52.3 +0.5
PAB pmax pmax
comp=Z,34nm,1.3s
I30M **Mount Dempster** 73.29 19 P P 01 45 51.1 -0.8
baz=320,SNR=16
L27K **Beaver Creek,** 73.30 23 IAmb IAmb 01 45 54.0
comp=Z,25nm,0.9s
L27K **Beaver Creek,** 73.30 23 P P 01 45 52.5 +0.6
baz=316,SNR=28
DAWY **Dawson** 73.31 21 P P 01 45 51.2 -0.7
baz=318,SNR=7.7
BCAR **Beaver Creek A** 73.31 23 P P 01 45 52.3 +0.3
J29N **Klondike Camp** 73.36 20 P P 01 45 52.7 +0.4
baz=319
M26K **Nabesna, AK** 73.40 24 P P 01 45 52.9 +0.4
baz=315,SNR=7.9
N25K **Chitina, Valde** 73.42 25 IAmb IAmb 01 45 54.7
comp=Z,25nm,1.0s
N25K **Chitina, Valde** 73.42 25 P P 01 45 53.1 +0.4
baz=314,SNR=13
P23K **Montague Islan** 73.53 27 P P 01 45 52.5 -0.7
baz=312
PBRG **Braganca** 73.56 310 *e*P P 01 45 53.8 0.0
comp=Z,35nm,1.9s
PBRG **Braganca** 73.56 310 *e*PP PP 01 48 39.2 +1.8
EYAK **Cordova Ski Ar** 73.75 26 P P 01 45 54.8 +0.3
baz=314
M27K **Edge Creek, AK** 73.79 23 P P 01 45 55.7 +0.8
baz=316,SNR=19
J30M **Hart River** 73.80 20 P P 01 45 54.7 -0.3
baz=320,SNR=7.4
BMRM **Bremner River** 73.86 25 P P 01 45 55.5 +0.2
baz=314
K29M **Barlow Dome** 74.02 21 IAmb IAmb 01 45 57.7
comp=Z,75nm,1.9s
K29M **Barlow Dome** 74.02 21 P P 01 45 56.2 0.0
baz=319,SNR=16
DY2G **Dye2** 74.04 344 *i* P P 01 45 55.8 -0.6
DY2G IAmb IAmb 01 45 58.2
comp=Z,12nm,0.6s
MVO **Moncorvo** 74.09 309 *e*P P 01 45 57.4 +0.4
comp=Z,54nm,1.1s
MVO **Moncorvo** 74.09 309 *e*LR LR 02 18 12.9
comp=Z,29nm,16.0s
MCARA **McCarthy VSAT** 74.11 24 P P 01 45 57.5 +0.8
baz=316,SNR=5.2
Q23K **Middleton Isla** 74.30 27 P P 01 45 58.2 +0.5
baz=313
L29M **L29M** 74.40 21 IAmb IAmb 01 46 00.2
comp=Z,33nm,1.4s
L29M **L29M** 74.40 21 P P 01 45 58.7 +0.3
baz=319,SNR=11
PCAB **Cabril** 74.42 310 *e*P P 01 45 59.7 +0.8
comp=Z,68nm,2.0s
PGAV **Gavieira, Arco** 74.44 310 *e*P P 01 45 59.9 +0.9
comp=Z,45nm,1.3s
PGAV **Gavieira, Arco** 74.44 310 *e*PP PP 01 48 49.1 +4.2
PGAV *e*S S 01 55 47.5 +13
PGAV **Gavieira, Arco** 74.44 310 *e*LR LR 02 18 51.0
comp=Z,199nm,18.0s
PVRL **Vila Real** 74.47 310 *e*P P 01 45 59.8 +0.7
comp=Z,24nm,1.9s
SFJD **Kangerlussuaq** 74.54 346 *i* P P 01 45 57.2 -1.7
SFJD IAmb IAmb 01 45 59.4
comp=Z,25nm,0.8s
CRQE **Cirque** 74.54 25 P P 01 45 59.5 +0.2
baz=316
KAIM **Kayak Island** 74.66 26 P P 01 46 00.0 +0.2
baz=315
YUK3 **Moose Creek** 74.68 23 P P 01 46 00.7 +0.5
baz=317
TAM **Tamanrasset** 74.72 287 IAmb IAmb 01 46 04.1
comp=Z,26nm,1.0s
M29M **Somme Creek** 74.80 22 P P 01 46 01.2 +0.4
baz=319,SNR=18
MTE **Manteigas** 74.83 309 *e*P P 01 46 02.3 +1.0
comp=Z,77nm,1.9s
MTE **Manteigas** 74.83 309 *e*PP PP 01 48 53.9 +5.7
MTE *e*S S 01 55 45.6 +7.1
MTE **Manteigas** 74.83 309 *e*LR LR 02 19 11.5
comp=Z,287nm,20.0s
PVIS **Viseu** 74.88 309 *e*P P 01 46 02.3 +0.7
comp=Z,49nm,1.9s
CTG **Chitna Glacier** 74.98 24 P P 01 46 02.5 +0.6
baz=317,SNR=7.1
PCBR **Castelo Branco** 75.09 308 *e*P P 01 46 03.3 +0.6
comp=Z,32nm,1.3s
M30M **Minto, Yukon** 75.21 21 P P 01 46 03.2 +0.2
baz=320
PMRV **Marv??o** 75.26 308 *e*P P 01 46 03.9 +0.2
comp=Z,64nm,1.7s
PMRV **Marv??o** 75.26 308 *e*PP PP 01 48 55.9 +4.1
PMRV **Marv??o** 75.26 308 *e*LR LR 02 17 28.9
comp=Z,205nm,20.0s
YUK8 **Steele Glacier** 75.26 23 P P 01 46 03.9 +0.2
baz=318
MESA **MESA** 75.35 25 P P 01 46 04.9 +0.8
baz=317
COI **Coimbra** 75.49 309 *e*P P 01 46 06.7 +1.7
comp=Z,131nm,2.1s
COI **Coimbra** 75.49 309 *e*PP PP 01 48 57.9 +4.2
O28M **Mount Upton** 75.51 24 P P 01 46 05.4 +0.3
baz=318,SNR=5.3
YUK4 **Talbot Arm** 75.58 23 P P 01 46 05.2 -0.1
baz=319
PCAS **Casmilo, Conde** 75.63 309 *e*P P 01 46 06.6 +0.8
comp=Z,54nm,1.6s
PCAS **Casmilo, Conde** 75.63 309 *e*PP PP 01 48 59.4 +4.5
PESTR **Estremoz** 75.70 307 *e*P P 01 46 06.9 +0.7
comp=Z,42nm,1.6s
PBAR **Barrancos** 75.71 307 *e*P P 01 46 06.7 +0.4
comp=Z,80nm,1.7s
YUK6 **Outpost Mounta** 75.97 23 P P 01 46 07.6 -0.1
baz=319
N30M **Aishikik Lake** 75.98 22 P P 01 46 07.8 +0.4
baz=320
PINM **Pinnacle** 75.99 24 P P 01 46 08.3 +0.7
baz=318
PMTG **Montargil** 76.00 308 *e*P P 01 46 08.2 +0.3
comp=Z,52nm,1.5s
PMTG **Montargil** 76.00 308 *e*PP PP 01 49 01.6 +3.6
PSBE **So Bento** 76.12 309 *e*P P 01 46 09.6 +0.9
comp=Z,114nm,2.1s
EVO **Evora** 76.16 307 *e*P P 01 46 09.4 +0.6
comp=Z,88nm,1.4s
M31M **Drury Creek, Y** 76.20 21 P P 01 46 09.0 +0.3
baz=322
PBEJ **Beja** 76.34 307 *e*P P 01 46 10.5 +0.6
comp=Z,66nm,1.8s
N31M **Braeburn, Yuko** 76.36 22 IAmb IAmb 01 46 11.2
comp=Z,30nm,1.1s
N31M **Braeburn, Yuko** 76.36 22 P P 01 46 10.5 +0.9
baz=321,SNR=9.3
O29M **Mount Kennedy** 76.39 23 P P 01 46 09.5 -0.4
baz=319
FARO **Faro, Yukon** 76.48 20 P P 01 46 09.8 -0.5
baz=323
PVAQ **Vaqueiros** 76.59 306 *e*P P 01 46 12.0 +0.7
comp=Z,93nm,1.5s
PVAQ **Vaqueiros** 76.59 306 *e*PP PP 01 49 05.7 +2.7
PVAQ **Vaqueiros** 76.59 306 *e*LR LR 02 20 03.8
comp=Z,303nm,20.0s
PNL **Peninsula** 76.59 24 P P 01 46 11.6 +0.6
baz=319
PCVE **Castro Verde** 76.67 307 *e*P P 01 46 12.0 +0.2
comp=Z,56nm,1.5s
MESJ **Messejana** 76.68 307 *e*P P 01 46 12.7 +0.9
comp=Z,80nm,1.9s
MESJ **Messejana** 76.68 307 *e*P P 01 46 12.6 +0.8
MESJ IAmb IAmb 01 46 13.2
comp=Z,48nm,0.9s
PNCL **Nicolau / Gran** 76.73 307 *e*P P 01 46 12.9 +0.8
comp=Z,63nm,1.7s
MMPY **Sheldon Lake,** 76.74 19 IAmb IAmb 01 46 13.8
comp=Z,24nm,1.2s
MMPY **Sheldon Lake,** 76.74 19 P P 01 46 12.1 +0.3

baz=325,SNR=12
**PBDV Barranco-do-Ve 76.82 306** *e*P **P 01 46 13.6 +0.9**
comp=Z,98nm,1.3s
**PBDV Barranco-do-Ve 76.82 306** *e*PP **PP 01 49 10.8 +5.8**
**O30N Mendenhall 76.82 22** P **P 01 46 12.7 +0.5**
baz=321,SNR=5.9
**MDT Midelt 76.98 301** LR LR 02 26 09.1
comp=Z,149nm,18.2s,baz=56,slow=40
**P30M Million Dollar 77.05 23** P **P 01 46 13.7 +0.1**
baz=320
**PTEO Sao Teotonio 77.17 307** *e*P **P 01 46 15.6 +1.0**
**P29M Windy Craggy 77.17 24** P **P 01 46 14.5 +0.3**
baz=320
**NUUK Nuuk 77.21 345** *i* P **P 01 46 13.3 -0.9**
NUUK IAmb IAmb 01 46 15.0
comp=Z,17nm,0.8s
**WHY Whitehorse 77.28 22** P **P 01 46 15.1 +0.2**
baz=322
**N32M Quiet Lake 77.42 21** P **P 01 46 15.5 -0.1**
baz=323
**PFVI Vila Bisbo 77.47 307** *e*P **P 01 46 16.6 +0.3**
**HNR Honiara 77.63 111** LR LR 02 21 07.8
comp=Z,1µm,18.6s,baz=360,slow=36
**PLBC Pleasant Camp 77.75 23** P **P 01 46 17.8 +0.3**
baz=321
**SKAG Skagway 78.08 23** P **P 01 46 20.0 +0.8**
baz=322
**WRGLY Wrigley 78.14 16** P **P 01 46 19.7 +0.2**
baz=331
**NRS Narsarsuaq 78.23 340** *i* P **P 01 46 18.7 -1.3**
NRS IAmb IAmb 01 46 20.2
comp=Z,14nm,0.7s
**P33M Teslin, Yukon 78.25 21** IAmb IAmb 01 46 21.9
comp=Z,36nm,1.6s
**P33M Teslin, Yukon 78.25 21** P **P 01 46 20.3 0.0**
baz=324
**TGTN Hyland Airport 78.44 19** P **P 01 46 21.8 +0.5**
baz=327
**P32M Atlin 78.48 22** P **P 01 46 22.1 +0.6**
baz=323
**LSZ Lusaka 78.56 242** P **P 01 46 22.5 -0.1**
LSZ P **P 01 46 22.5 -0.1**
**R31K City Hall, Gus 78.77 23** P **P 01 46 23.9 +0.8**
baz=322
**IVI Ivigtut 78.92 342** *i* P **P 01 46 22.1 -1.7**
**S31K Pelican 78.97 24** P **P 01 46 25.2 +1.0**
baz=321
**R32K Eaglecrest 79.28 23** P **P 01 46 26.6 +0.7**
baz=323
**Q32M Nakina River 79.43 22** P **P 01 46 27.3 +0.4**
baz=324
**R33M Jennings River 79.46 21** P **P 01 46 27.4 +0.3**
baz=325,SNR=8.0
**WTLY Watson Lake, Y 79.48 20** P **P 01 46 26.3 -0.7**
baz=327
**S32K Killisnoo 79.90 24** P **P 01 46 29.8 +0.6**
baz=323
**SIT Sitka 79.98 24** P **P 01 46 30.5 +0.8**
baz=322
**DLBC Dease Lake 80.53 21** IAmb IAmb 01 46 35.2
comp=Z,40nm,1.4s
**DLBC Dease Lake 80.53 21** LR LR 02 26 06.1
comp=Z,231nm,18.6s,baz=293,slow=39
**DLBC Dease Lake 80.53 21** P **P 01 46 33.4 +0.6**
baz=326
**YKA Yellowknife Ar 80.56 12** P **P 01 46 31.8 -0.9**
**YKA Yellowknife Ar 80.56 12** P **P 01 46 32.4 -0.4**
comp=Z,4.9nm,1.0s,baz=345,slow=4.8,SNR=12
YKA LR LR 02 24 50.1
comp=Z,120nm,21.3s,baz=311,slow=38
comp=Z,4.9nm,1.0s
**S34M Telegraph Cree 80.64 22** P **P 01 46 33.8 +0.6**
baz=325
**KOTAN Kotaneelee Air 80.70 17** P **P 01 46 33.6 0.0**
baz=331
**LIRD Liard River Hi 80.81 19** P **P 01 46 34.6 +0.5**
baz=329
**STKA Stephens Creek 81.05 139** P **P 01 46 33.5 -2.1**
comp=Z,4.4nm,0.9s,baz=331,slow=8.2,SNR=3.6
comp=Z,4.4nm,0.9s
**U33K Whale Pass 81.47 24** P **P 01 46 38.2 +0.5**
baz=324
**WRAK Wrangell Islan 81.48 23** P **P 01 46 38.3 +0.6**
baz=324
**TOAD Toad River Com 81.52 19** P **P 01 46 38.1 +0.2**
baz=330
**T35M Bob Quinn 81.67 22** P **P 01 46 39.6 +0.8**
baz=326
**CRAG Craig 81.99 24** P **P 01 46 40.6 +0.2**
baz=324
**V35K Ketchikan 82.61 24** P **P 01 46 43.9 +0.3**
baz=325
**TOA0 Torodi Ar. Sit 83.00 281** P **P 01 46 46.1 -0.3**
SNR=21
TOA0 P **P 01 46 46.1 -0.3**
SNR=21
**TORD Torodi Ar. Bea 83.00 281** P **P 01 46 45.8 -0.7**
**TORD Torodi Ar. Bea 83.00 281** P **P 01 46 45.8 -0.7**
comp=Z,68nm,1.0s,baz=37,slow=6.9,SNR=251
TORD LR LR 02 27 17.1
comp=Z,126nm,20.1s,baz=56,slow=38
comp=Z,68nm,1.0s
**PMAR Madeira 85.42 307** *e*P **P 01 46 59.9 +1.2**
comp=Z,204nm,1.3s
**ARMA Armidale 85.76 132** IAmb IAmb 01 47 01.6
comp=Z,20nm,1.1s
**BBB Bella Bella 86.38 24** LR LR 02 29 18.3
comp=Z,220nm,18.5s,baz=328,slow=38
**LBTB Lobatse 86.76 237** LR LR 02 22 43.1
comp=Z,79nm,20.4s,baz=44,slow=34
**SCHQ Schefferville 88.81 348** P **P 01 47 13.6 -1.0**
comp=Z,21nm,0.8s,baz=36,slow=8.3,SNR=18
comp=Z,21nm,0.8s
**TSUM Tsumeb 88.86 246** LR LR 02 26 47.8
comp=Z,92nm,18.4s,baz=39,slow=35
**BOSA Boshof 89.34 234** P **P 01 47 16.5 -0.9**
**BOSA Boshof 89.34 234** P **P 01 47 16.6 -0.8**
comp=Z,18nm,0.9s,baz=24,slow=4.9,SNR=20
comp=Z,18nm,0.9s
**BOSA Boshof 89.34 234** P **P 01 47 16.5 -0.9**
BOSA pmax pmax
comp=Z,29nm,1.0s
**FFC Flin Flon 89.89 8** P **P 01 47 19.0 -0.6**
**FFC Flin Flon 89.89 8** P **P 01 47 19.0 -0.6**
FFC pmax pmax
comp=Z,57nm,1.8s
**DZM Mont Dzumac 90.34 117** *e*LR LR 02 16 04.4
comp=Z,191nm,27.9s
**DBIC Dimbokro 91.97 279** P **P 01 47 29.1 -0.8**
comp=Z,16nm,0.8s,baz=46,slow=4.8,SNR=13
comp=Z,16nm,0.8s
**GNW Green Mountain 92.09 23** IAmb IAmb 01 47 32.4
comp=Z,18nm,1.4s
**NEW Newport 93.14 19** P **P 01 47 33.9 -1.0**
baz=336
**NEW Newport 93.14 19** P **P 01 47 35.4 +0.5**
**SUR Sutherland 94.69 234** LR LR 02 29 08.8
comp=Z,177nm,18.4s,baz=64,slow=35
**ULM Lac du Bonnet 94.90 5** P **P 01 47 41.1 -1.7**
comp=Z,3.3nm,0.8s,baz=349,slow=3.4,SNR=6.0
ULM LR LR 02 34 23.7
comp=Z,147nm,18.0s,baz=1.0,slow=38
comp=Z,3.3nm,0.8s
**ULM Lac du Bonnet 94.90 5** P **P 01 47 44.5 +1.7**
ULM pmax pmax
comp=Z,23nm,3.3s
**EGMT Eagleton 95.13 15** P **P 01 47 42.9 -1.1**
baz=342
**MSO Missoula 95.30 18** P **P 01 47 43.8 -1.0**
baz=339
**DGMT Dagmar 95.70 11** P **P 01 47 46.2 -0.3**
baz=347
**BBTS Babate 96.43 293** LR LR 02 38 34.8
comp=Z,164nm,18.5s,baz=300,slow=40
**MSVF Nonsavu 96.66 107** LR LR 02 30 31.1
comp=Z,60nm,19.4s,baz=304,slow=35
**AGMN Agassiz Nation 96.85 5** P **P 01 47 51.3 -0.4**
baz=353
**MDND Maddock 96.93 8** P **P 01 47 51.6 -0.5**
baz=350
**BOZ Bozeman (W) 97.01 17** P **P 01 47 52.3 -0.4**
baz=340
**LAO LASA Array 97.09 13** P **P 01 47 52.4 -0.6**
baz=345
**EYMN Ely 97.44 3** P **P 01 47 54.0 -0.4**
baz=357
**RLMT Red Lodge 97.99 15** P **P 01 47 56.6 -0.6**
baz=342

**HLID Hailey 98.21 19** P **P 01 47 57.7 -0.5**
baz=338
**H17A Grant Village 98.39 16** P **P 01 47 58.0 -1.0**
baz=341
**PKME Peaks-Kenny Pk 98.45 347** P **P 01 47 58.2 -0.7**
baz=15
**LBNH Lisbon 99.90 348** P **Pdif 01 48 04.8 -0.7**
baz=13
**LONY Lake Ozonia 99.93 350** P **Pdif 01 48 04.9 -0.8**
baz=11
**RSSD Black Hills 99.96 12** P **Pdif 01 48 04.0 -2.0**
baz=347
**SPMN Marine on St. 100.10 4** P **Pdif 01 48 05.3 -1.1**
baz=356
**BW06 Boulder Array 100.17 16** P **Pdif 01 48 05.6 -1.5**
baz=342
**SUSD Miller 100.37 8** P **Pdif 01 48 06.4 -1.2**
baz=351
**GLMI Grayling 100.58 358** P **Pdif 01 48 07.2 -1.3**
baz=2.7
**K22A Casper 100.93 14** P **Pdif 01 48 09.0 -1.3**
baz=344
**ECSD EROS Data Cent 101.31 6** P **Pdif 01 48 10.2 -1.6**
baz=353
**HRV Adam Dziewonsk 101.53 348** P **Pdif 01 48 11.4 -1.3**
baz=14
**L61B Northampton 101.77 349** P **Pdif 01 48 12.5 -1.3**
baz=13
**DUG Dugway, Tooele 101.78 19** P **Pdif 01 48 12.8 -1.4**
baz=339
**MLAC Mammoth, Mammt 102.28 25** P **Pdif 01 48 15.1 -1.4**
baz=334
**JFWS Jewell Farm 102.51 2** P **Pdif 01 48 15.8 -1.3**
baz=358
**VOG Valley Oaks Go 103.26 26** P **Pdif 01 48 19.4 -1.2**
baz=334
**GRAC Grapevine Rang 103.35 24** P **Pdif 01 48 20.6 -0.4**
baz=336
**OGNE Ogallala 103.38 11** P **Pdif 01 48 20.4 -0.8**
baz=348
**BGNE Belgrade 103.45 8** P **Pdif 01 48 20.9 -0.5**
baz=351
**CWC Cottonwood Cre 103.61 25** P **Pdif 01 48 21.9 -0.4**
baz=335
**TXAR Lajitas Array 114.36 15** PKP **PKiKP 01 52 59.2 -1.8**
comp=Z,0.6nm,0.9s,baz=346,slow=2.6,SNR=6.0
TXAR PKKPab **PKKPab 02 03 46.3 -3.5**
comp=Z,1.3nm,1.0s,baz=157,slow=6.8,SNR=9.4
**ELIB Princess Elisa 116.67 199** *d*PKPdf **PKPdf 01 53 03.1 -0.9**
**VNDA Vanda 119.60 166** PKPdf **PKPdf 01 53 08.5 -0.9**
**VNDA Vanda 119.60 166** PKP **PKPdf 01 53 08.1 -1.2**
comp=Z,2.6nm,0.9s,baz=288,slow=4.9,SNR=17
**SBA Scott Base 120.70 166** PKPdf **PKiKP 01 53 11.8 +0.3**
**SBA Scott Base 120.70 166** PKIKP **PKiKP 01 53 11.8 +0.3**
**TROLL Troll, Antarti 122.69 202** ⇓PKPdf **PKPdf 01 53 15.2 -0.5**
comp=Z,513nm,0.8s
**PPT2 Papeete2 122.81 89** *e*SS SS 02 11 33.7 -5.8
comp=Z,141nm,35.5s
**PPT2 Papeete2 122.81 89** *e*LR LR 02 31 12.2
comp=Z,366nm,26.8s
PPT2 *e*LR LR 02 31 18.8
comp=Z,253nm,27.0s
**SNAA Sanae 124.29 202** ⇓PKPdf **PKPdf 01 53 17.4 -1.2**
comp=Z,109nm,0.9s
**SNAA Sanae 124.29 202** PKP **PKPdf 01 53 17.5 -1.1**
comp=Z,4.4nm,0.9s,baz=109,slow=2.9,SNR=13
**QSPA South Pole Qui 124.69 180** PKP **PKPdf 01 53 18.3 -1.2**
comp=Z,16nm,0.9s,baz=288,slow=1.7,SNR=41
**TAOE Nuku Hiva Isla 125.68 74** *e*LR LR 02 32 28.7
comp=Z,130nm,25.2s
**VNA1 Neumayer--Stat 125.94 204** ⇓PKPdf **PKPdf 01 53 21.2 -0.4**
comp=Z,13nm,1.0s
**VNA3 Neumayer Olymp 126.43 203** ⇓PKPdf **PKPdf 01 53 21.7 -0.9**
comp=Z,3.1nm,0.8s
**ATAH Atahualpa 151.03 340** PKPbc **PKiKP 01 54 15.5 0.0**
comp=Z,6.6nm,0.9s,baz=147,slow=3.7,SNR=4.9
ATAH PKPab **PKPab 01 54 22.8 +0.6**
comp=Z,11nm,0.9s,baz=326,slow=6.7,SNR=4.4
**CPUP Villa Florida 152.50 280** PKP **PKPdf 01 54 09.4 -1.0**
comp=Z,3.4nm,0.8s,baz=124,slow=3.9,SNR=6.7
CPUP PKPbc **sPKPdf 01 54 16.2 0.0**
comp=Z,17nm,0.9s,baz=56,slow=2.7,SNR=23
CPUP PKPab **PKPab 01 54 27.7 0.0**
comp=Z,12nm,0.8s,baz=32,slow=4.4,SNR=5.2
**LPAZ La Paz 154.42 312** PKP **PKPdf 01 54 13.2 -1.1**
comp=Z,2.7nm,1.0s,baz=4.5,slow=7.0,SNR=4.4
LPAZ PKPbc **sPKPdf 01 54 20.4 +0.3**
comp=Z,4.3nm,1.2s,baz=4.0,slow=12,SNR=5.4
LPAZ PKPab **PKPab 01 54 35.9 -0.9**
comp=Z,3.5nm,0.8s,baz=17,slow=22,SNR=8.2
**PLCA Paso Flores 165.19 242** PKP **PKPdf 01 54 24.9 -0.1**
comp=Z,4.3nm,1.0s,baz=198,slow=3.2,SNR=3.8
PLCA PKPab **PKPab 01 55 21.2 -1.2**
comp=Z,2.6nm,0.9s,baz=29,slow=5.7,SNR=3.6

*IDC **03** 01:40:19.1±1.1,22°.21S×67°.51W,h0km,mb3.7/4,*
*mbtmp3.6/5,ML3.4/1,Error ellipse: s-maj=50.5km*
*s-min=27.1km az=92.0*
*GUC **03** 01:40:30.4±0.5,21°.71S×68°.47W,h118km±3km,ML3.1*
**ISC 03 01:40:30.4±1.2,21°.66S±0.07×68°.5W±0°.1,h115km±9km,**
**n15,σ0s73/17,mb3.4/4,6C,Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.72** | **259** | *e*P | | **Pn** | **01 40 49.7** | **+0.1** |
| PB09 | | | | *e*S | | **Sn** | **01 41 04.8** | **+0.6** |
| PB09 | | | | IAML | | | 01 41 07.0 | |
| | comp=E,455nm,0.6s | | | | | | | |
| **LVC** | **Limon Verde** | **1.03** | **203** | ⇑*e*P | | **Pn** | **01 40 52.1** | **-0.6** |
| LVC | | | | *e*S | | **Sn** | **01 41 09.5** | **-0.1** |
| **AF01** | **San Pedro de A** | **1.32** | **168** | ⇑*e*P | | **Pn** | **01 40 55.3** | **-0.4** |
| AF01 | | | | IAML | | | 01 41 33.6 | |
| | comp=E,378nm,0.6s | | | | | | | |
| **PB06** | **IPOC Station P** | **1.46** | **224** | ⇑*i*P | | **Pn** | **01 40 56.8** | **-0.4** |
| PB06 | | | | *e*S | | **Sn** | **01 41 17.3** | **-0.2** |
| PB06 | | | | IAML | | | 01 41 18.5 | |
| | comp=N,346nm,0.2s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.69** | **246** | ⇑*e*P | | **Pn** | **01 40 59.0** | **-0.9** |
| PB04 | | | | IAML | | | 01 41 25.3 | |
| | comp=E,256nm,0.2s | | | | | | | |
| **PB15** | **IPOC Station P** | **1.80** | **211** | *e*P | | **Pn** | **01 41 00.9** | **-0.3** |
| PB15 | | | | *e*S | | **Sn** | **01 41 25.8** | **+1.0** |
| **TA01** | **Diego Aracena** | **1.93** | **304** | ⇑*e*P | | **Pn** | **01 41 02.2** | **-0.4** |
| TA01 | | | | *e*S | | **Sn** | **01 41 26.9** | **-0.4** |
| TA01 | | | | IAML | | | 01 41 28.9 | |
| | comp=E,242nm,0.3s | | | | | | | |
| **GO01** | **Chusmiza** | **2.09** | **341** | *e*P | | Pn | 01 41 05.4 | +0.2 |
| GO01 | | | | *e*S | | Sn | 01 41 33.2 | +1.4 |
| **PB14** | **IPOC Station P** | **3.45** | **211** | ⇑*e*P | | **Pn** | **01 41 22.1** | **-0.7** |
| **GO02** | **Mina Guanaco** | **3.64** | **196** | *e*P | | **Pn** | **01 41 24.1** | **-1.1** |
| **LPAZ** | **La Paz** | **5.35** | **4** | Pn | | Pn | 01 41 50.1 | +1.5 |
| | comp=E,0.6nm,0.3s,baz=179,slow=5.9,SNR=12 | | | | | | | |
| | comp=E,1.7nm,0.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.53** | **180** | P | | **P** | **01 51 20.2** | **-0.1** |
| | comp=E,1.4nm,1.0s,baz=329,slow=0.7,SNR=7.4 | | | | | | | |
| | comp=E,1.4nm,1.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **74.45** | **330** | P | | P | 01 52 04.2 | +8.1 |
| | comp=E,0.2nm,0.3s,baz=138,slow=8.6,SNR=2.4 | | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | | |
| **VNDA** | **Vanda** | **76.76** | **190** | P | | **P** | **01 52 09.9** | **+1.3** |
| | comp=E,0.3nm,0.5s,baz=144,slow=3.9,SNR=2.2 | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.03** | **70** | P | | **P** | **01 52 10.7** | **-0.5** |
| | comp=E,0.3nm,0.5s,baz=255,slow=4.9,SNR=8.7 | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | |

*ISK **03** 01:40:37.6,34°.32N×32°.23E,h11km,ML3.1/25*
*AFAD **03** 01:40:40.7±0.0,34°.58N×32°.04E,h58km±2km,MW3.5*
*GII **03** 01:40:40.3±0.2,34°.562N±0°.001×32°.207E±0°.001,h60km,*
*Mws3.3,confirmed*
*NIC **03** 01:40:40.3,34°.46N×32°.18E,h30km,MI3.2/12*
*GRAL **03** 01:40:41.3±0.3,34°.43N×32°.39E,h0km±99km,MD3.6*
**ISC 03 01:40:40.3±1.2,34°.46N±0°.03×32°.17E±0°.03,h29km±12km,**
**n132,σ1s39/168,6C,Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NATA** | **Nata** | **0.45** | **46** | ⇑*i*P | | **Pn** | **01 40 50.4** | **-0.6** |
| NATA | | | | S | | **Sn** | **01 40 58.6** | **+0.5** |
| NATA | | | | AML | AML | | 01 41 08.1 | |
| | 7.2nm,0.5s | | | | | | | |
| NATA | | | | AML | AML | | 01 41 08.8 | |
| | 7.3nm,0.6s | | | | | | | |
| **AKMS** | **Akamas** | **0.57** | **14** | ⇑*i*P | | **Pb** | **01 40 51.8** | **-0.1** |
| AKMS | | | | S | | **Sn** | **01 41 01.3** | **+0.3** |
| AKMS | | | | AML | AML | | 01 41 01.7 | |
| | 8.1nm,0.4s | | | | | | | |
| AKMS | | | | AML | AML | | 01 41 02.1 | |
| | 5.4nm,0.3s | | | | | | | |
| **TROD** | **Troodos** | **0.75** | **50** | ⇑*i*P | | **Pb** | **01 40 54.2** | **-0.8** |
| TROD | | | | S | | **Sn** | **01 41 06.1** | **+0.5** |
| TROD | | | | AML | AML | | 01 41 11.1 | |
| | 2.3nm,0.3s | | | | | | | |
| TROD | | | | AML | AML | | 01 41 11.2 | |
| | 2.3nm,0.3s | | | | | | | |
| **ALFC** | **Alefka** | **0.78** | **27** | ⇑*i*P | | **Pn** | **01 40 54.7** | **-0.6** |
| ALFC | | | | S | | **Sn** | **01 41 06.4** | **+0.3** |
| ALFC | | | | AML | AML | | 01 41 10.1 | |
| | 3.3nm,0.3s | | | | | | | |
| ALFC | | | | AML | AML | | 01 41 10.1 | |
| | 3.2nm,0.3s | | | | | | | |
| **LEF** | **Lefka** | **0.88** | **42** | Pg | | **Pn** | **01 40 56.5** | **-0.3** |
| LEF | | | | Sg | | **Sb** | **01 41 09.6** | **+1.1** |
| **LEF** | **Lefka** | **0.88** | **42** | P | | **Pb** | **01 40 57.6** | **+0.6** |
| LEF | | | | S | | **Sb** | **01 41 10.5** | **+2.0** |
| **ASGA** | **Asgata** | **0.94** | **70** | ⇑*i*P | | **Pn** | **01 40 57.0** | **-0.6** |
| ASGA | | | | S | | **Sn** | **01 41 09.9** | **-0.3** |
| ASGA | | | | AML | AML | | 01 41 12.2 | |
| | 3.0nm,0.3s | | | | | | | |
| ASGA | | | | AML | AML | | 01 41 12.9 | |
| | 2.3nm,0.4s | | | | | | | |
| **AKDN** | **Akdeniz- Kıbrı** | **1.06** | **38** | Pn | | **Pb** | **01 41 00.3** | **+0.3** |
| **CSS** | **Mathiatis** | **1.08** | **62** | Pn | | **Pn** | **01 40 59.1** | **-0.3** |
| CSS | | | | Sn | | **Sb** | **01 41 14.7** | **+0.7** |
| **CSS** | **Mathiatis** | **1.08** | **62** | P | | **Pn** | **01 40 59.0** | **-0.5** |
| CSS | | | | S | | **Sn** | **01 41 12.5** | **-1.0** |
| **CSS** | **Mathiatis** | **1.08** | **62** | ⇑*i*P | | **Pn** | **01 40 59.2** | **-0.3** |
| CSS | | | | S | | **Sn** | **01 41 13.5** | **0.0** |
| CSS | | | | AML | AML | | 01 41 18.9 | |
| | 1.7nm,0.5s | | | | | | | |
| CSS | | | | AML | AML | | 01 41 21.6 | |
| | 1.3nm,0.6s | | | | | | | |
| **AKIN** | **Akıncılar- Kıb** | **1.20** | **62** | Pn | | **Pn** | **01 41 01.1** | **0.0** |
| AKIN | | | | Sn | | **Sb** | **01 41 18.7** | **+1.2** |
| **ATHAL** | **Athalassa** | **1.21** | **56** | P | | **Pn** | **01 41 01.8** | **+0.5** |
| ATHAL | | | | AML | AML | | 01 41 21.3 | |
| | 2.1nm,0.8s | | | | | | | |
| ATHAL | | | | AML | AML | | 01 41 26.9 | |
| | 2.0nm,1.0s | | | | | | | |
| **LAR1C** | **Larnaka City C** | **1.27** | **68** | P | | **Pn** | **01 41 02.7** | **+0.5** |
| **MVOU** | **Mavrovouni** | **1.32** | **65** | P | | **Pn** | **01 41 03.1** | **+0.2** |
| MVOU | | | | AML | AML | | 01 41 23.7 | |
| | 0.9nm,0.5s | | | | | | | |
| MVOU | | | | AML | AML | | 01 41 31.0 | |
| | 0.9nm,0.4s | | | | | | | |
| **PAR1C** | **Paralimni Civi** | **1.59** | **69** | P | | **Pb** | **01 41 08.1** | **-0.9** |
| **PARAL** | **Paralimni** | **1.63** | **70** | P | | **Pb** | **01 41 08.6** | **-1.1** |
| PARAL | | | | AML | AML | | 01 41 42.9 | |
| | 0.8nm,0.7s | | | | | | | |
| PARAL | | | | AML | AML | | 01 41 44.2 | |
| | 0.8nm,0.7s | | | | | | | |
| **GAZI** | **Gazipasa** | **1.77** | **4** | Pn | | **Pn** | **01 41 10.2** | **+1.2** |
| **GAZI** | **Gazipasa** | **1.77** | **4** | P | | **Pn** | **01 41 08.9** | **-0.1** |
| GAZI | | | | S | | **Sn** | **01 41 30.5** | **-0.1** |
| GAZI | | | | *i* AML | AML | | 01 41 41.0 | |
| | comp=Z,51nm,0.7s | | | | | | | |
| GAZI | | | | *i* AML | AML | | 01 41 42.0 | |
| | comp=N,54nm,0.4s | | | | | | | |
| GAZI | | | | *i* AML | AML | | 01 41 46.0 | |
| | comp=E,54nm,0.7s | | | | | | | |
| **TEKE** | **Tekeli-Mersin** | **1.84** | **24** | Pn | | **Pb** | **01 41 11.7** | **-1.7** |
| **EREN** | **Erenkoy** | **1.96** | **56** | Pn | | **Pn** | **01 41 12.5** | **+1.0** |
| **EREN** | **Erenkoy** | **1.96** | **56** | P | | **Pb** | **01 41 13.7** | **-1.6** |
| EREN | | | | S | | **Sn** | **01 41 35.4** | **+0.3** |
| EREN | | | | *i* AML | AML | | 01 41 41.0 | |
| | comp=N,124nm,1.0s | | | | | | | |
| EREN | | | | *i* AML | AML | | 01 41 42.0 | |
| | comp=Z,153nm,0.5s | | | | | | | |
| EREN | | | | *i* AML | AML | | 01 41 42.0 | |
| | comp=E,151nm,0.6s | | | | | | | |
| **YORU** | **Yoruktepe-Mers** | **1.96** | **31** | Pn | | **Pn** | **01 41 13.2** | **+1.5** |
| **AKK2** | **Akkuyu-Mersin** | **2.01** | **34** | Pn | | **Pb** | **01 41 18.4** | **+2.2** |
| **AKK1** | **Akkuyu-Mersin** | **2.02** | **33** | Pn | | **Pn** | **01 41 13.9** | **+1.6** |
| **AKKU** | **Akkuyu-Mersin** | **2.03** | **33** | Pn | | **Pn** | **01 41 14.2** | **+1.6** |
| **GULN** | **MERSIN_Gulnar** | **2.05** | **33** | P | | **Pn** | **01 41 14.2** | **+1.4** |
| GULN | | | | S | | **Sn** | **01 41 38.3** | **+0.8** |
| GULN | | | | *i* AML | AML | | 01 41 41.0 | |
| | comp=E,75nm,0.4s | | | | | | | |
| GULN | | | | *i* AML | AML | | 01 41 43.0 | |
| | comp=N,62nm,0.4s | | | | | | | |
| GULN | | | | *i* AML | AML | | 01 41 44.0 | |
| | comp=Z,39nm,0.5s | | | | | | | |
| **TISA** | **Tisan-Mersin** | **2.10** | **36** | Pn | | **Pn** | **01 41 14.9** | **+1.4** |
| **YESI** | **Yesilovacik-Me** | **2.10** | **34** | Pn | | **Pn** | **01 41 14.7** | **+1.1** |
| **KARG** | **Kargicak-Mersi** | **2.14** | **35** | Pn | | **Pn** | **01 41 16.1** | **+2.0** |
| **IKL** | **Isikli** | **2.16** | **34** | Pn | | **Pn** | **01 41 15.9** | **+1.5** |
| **TEVE** | **Tevekalti-Mers** | **2.23** | **27** | Pn | | **Pn** | **01 41 17.1** | **+1.8** |
| **KEBE** | **Keben-Mersin** | **2.34** | **32** | Pn | | **Pn** | **01 41 18.9** | **+1.9** |
| **SILI** | **Silifke-Mersin** | **2.38** | **36** | Pn | | **Pn** | **01 41 19.4** | **+2.1** |
| **AKUM** | **Antalya-Kumluc** | **2.38** | **322** | P | | **Pb** | **01 41 20.6** | **-1.9** |
| AKUM | | | | S | | **Sn** | **01 41 46.2** | **+0.5** |
| AKUM | | | | *i* AML | AML | | 01 41 57.0 | |
| | comp=E,22nm,1.2s | | | | | | | |
| AKUM | | | | *i* AML | AML | | 01 42 10.0 | |
| | comp=N,17nm,0.8s | | | | | | | |
| AKUM | | | | *i* AML | AML | | 01 42 25.0 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **SLFK** | **Silifke-Mersin** | **2.41** | **36** | Pn | | **Pn** | **01 41 19.3** | **+1.5** |
| **HDMB** | **Hadim** | **2.51** | **6** | Pn | | **Pn** | **01 41 21.6** | **+2.2** |
| **KIZK** | **Mersin** | **2.58** | **38** | Pn | | **Pn** | **01 41 21.9** | **+1.8** |
| **KIZK** | **Mersin** | **2.58** | **38** | P | | **Pn** | **01 41 21.6** | **+1.5** |
| KIZK | | | | S | | **Sn** | **01 41 52.2** | **+1.8** |
| KIZK | | | | *i* AML | AML | | 01 41 57.0 | |
| | comp=Z,27nm,0.2s | | | | | | | |
| KIZK | | | | *i* AML | AML | | 01 41 58.0 | |
| | comp=N,52nm,0.7s | | | | | | | |
| KIZK | | | | *i* AML | AML | | 01 41 59.0 | |
| | comp=E,56nm,0.7s | | | | | | | |
| **AKAS** | **Kas** | **2.74** | **311** | Pn | | **Pn** | **01 41 24.5** | **+2.0** |
| **AKAS** | **Kas** | **2.74** | **311** | P | | **Pn** | **01 41 24.6** | **+2.0** |
| AKAS | | | | S | | **Sn** | **01 41 54.9** | **+0.2** |
| AKAS | | | | *i* AML | AML | | 01 42 05.0 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| AKAS | | | | *i* AML | AML | | 01 42 20.0 | |
| | comp=E,50nm,1.2s | | | | | | | |
| AKAS | | | | *i* AML | AML | | 01 42 43.0 | |
| | comp=N,74nm,1.3s | | | | | | | |
| **KKBE** | **Karaman, Kazim** | **2.82** | **13** | P | | **Pb** | **01 41 27.5** | **-2.6** |
| KKBE | | | | S | | **Sn** | **01 41 56.9** | **+0.3** |
| KKBE | | | | *i* AML | AML | | 01 42 06.0 | |
| | comp=Z,24nm,0.6s | | | | | | | |
| KKBE | | | | *i* AML | AML | | 01 42 06.0 | |
| | comp=N,19nm,0.4s | | | | | | | |
| KKBE | | | | *i* AML | AML | | 01 42 08.0 | |
| | comp=E,32nm,0.6s | | | | | | | |
| **HNTI** | **Hanita** | **2.85** | **118** | P | | **Pn** | **01 41 24.2** | **+0.3** |
| **HNTI** | **Hanita** | **2.85** | **118** | S | | **Sn** | **01 41 57.1** | **-0.2** |
| **DQRL** | **Deir Qamar** | **2.92** | **104** | *e*P | | **Pn** | **01 41 25.2** | **+0.3** |
| DQRL | | | | *e*S | | **Sn** | **01 41 57.6** | **-1.4** |
| **ELL** | **Elmali** | **2.93** | **322** | Pn | | **Pn** | **01 41 27.4** | **+2.3** |
| **BHL** | **Bhannes** | **2.94** | **100** | *e*P | | **Pn** | **01 41 25.5** | **+0.3** |
| **OFRI** | **`Ofer** | **2.98** | **127** | P | | **Pn** | **01 41 26.1** | **+0.4** |
| **OFRI** | **`Ofer** | **2.98** | **127** | S | | **Sn** | **01 42 01.5** | **+0.9** |
| **OFRI** | **`Ofer** | **2.98** | **127** | P | | **Pn** | **01 41 26.0** | **+0.4** |
| **SEDI** | **Konya, Seydise** | **3.00** | **354** | P | | **Pb** | **01 41 31.7** | **-1.4** |
| SEDI | | | | S | | **Sb** | **01 42 08.2** | **-1.2** |
| SEDI | | | | *i* AML | AML | | 01 42 18.0 | |
| | comp=N,18nm,0.6s | | | | | | | |
| SEDI | | | | *i* AML | AML | | 01 42 21.0 | |
| | comp=Z,16nm,0.4s | | | | | | | |
| SEDI | | | | *i* AML | AML | | 01 42 21.0 | |
| | comp=E,25nm,0.5s | | | | | | | |
| **MMC7** | **Mount Meron ar** | **3.04** | **117** | P | | **Pn** | **01 41 26.6** | **0.0** |
| **BLGI** | **Bet Lehem HaGe** | **3.05** | **124** | P | | **Pn** | **01 41 26.8** | **+0.2** |
| **BLGI** | **Bet Lehem HaGe** | **3.05** | **124** | S | | **Sn** | **01 42 02.9** | **+0.6** |
| **MMA0** | **Mount Meron ar** | **3.06** | **117** | P | | **Pn** | **01 41 26.8** | **+0.1** |
| **MMA0B** | **Mount Meron ar** | **3.06** | **117** | S | | **Sn** | **01 42 02.2** | **-0.2** |
| **MMA0B** | **Mount Meron ar** | **3.06** | **117** | P | | **Pn** | **01 41 26.7** | **0.0** |
| **QRWL** | **Qaraoun** | **3.06** | **106** | *e*P | | **Pn** | **01 41 27.1** | **+0.4** |
| **MMB1** | **Mount Meron ar** | **3.06** | **117** | P | | **Pn** | **01 41 26.9** | **+0.1** |
| **IZZE** | **Mula-Seydike** | **3.11** | **310** | P | | **Pn** | **01 41 28.7** | **+1.3** |
| IZZE | | | | S | | **Sn** | **01 42 01.3** | **-2.3** |
| IZZE | | | | *i* AML | AML | | 01 42 07.0 | |
| | comp=N,40nm,0.3s | | | | | | | |
| IZZE | | | | *i* AML | AML | | 01 42 15.0 | |
| | comp=Z,27nm,0.3s | | | | | | | |
| IZZE | | | | *i* AML | AML | | 01 42 15.0 | |
| | comp=E,34nm,0.6s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HWQ** | **Hawqa** | **3.13** | **92** | *e*P | **Pn** | **01 41 28.1** | **+0.3** |
| **ZAHL** | **Zahle** | **3.14** | **100** | *e*P | **Pn** | **01 41 28.2** | **+0.3** |
| **BUCA** | **Burdur, Bucak-** | **3.14** | **336** | P | **Pb** | **01 41 34.6** | **-0.9** |
| BUCA | | | | *i* AML | AML | 01 42 18.0 | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| BUCA | | | | *i* AML | AML | 01 42 31.0 | |
| | comp=E,11nm,0.3s | | | | | | |
| BUCA | | | | *i* AML | AML | 01 42 36.0 | |
| | comp=N,8.7nm,0.7s | | | | | | |
| **GEM** | **Giv'at Ha'Em** | **3.16** | **112** | P | **Pn** | **01 41 28.6** | **+0.5** |
| **GEM** | **Giv'at Ha'Em** | **3.16** | **112** | S | **Sn** | **01 42 05.1** | **+0.2** |
| **GEM** | **Giv'at Ha'Em** | **3.16** | **112** | P | **Pn** | **01 41 28.1** | **-0.1** |
| **SHBL** | **Chebaa** | **3.17** | **110** | *e*P | **Pn** | **01 41 28.8** | **+0.4** |
| **KNIK** | **Mula-Seydike** | **3.18** | **319** | P | **Pn** | **01 41 30.8** | **+2.2** |
| KNIK | | | | S | **Sn** | **01 42 05.2** | **-0.4** |
| KNIK | | | | *i* AML | AML | 01 42 09.0 | |
| | comp=N,14nm,0.6s | | | | | | |
| KNIK | | | | *i* AML | AML | 01 42 11.0 | |
| | comp=E,21nm,0.9s | | | | | | |
| KNIK | | | | *i* AML | AML | 01 42 16.0 | |
| | comp=Z,10nm,0.4s | | | | | | |
| **RCY** | **Rachaya** | **3.19** | **107** | *e*P | **Pn** | **01 41 29.0** | **+0.3** |
| **NATI** | **Neve Ativ** | **3.20** | **111** | P | **Pn** | **01 41 28.6** | **0.0** |
| **NATI** | **Neve Ativ** | **3.20** | **111** | S | **Sn** | **01 42 05.2** | **-0.5** |
| **NATI** | **Neve Ativ** | **3.20** | **111** | P | **Pn** | **01 41 28.6** | **0.0** |
| **DED** | **Mersin** | **3.28** | **40** | P | **Pn** | **01 41 31.7** | **+1.9** |
| DED | | | | S | **Sn** | **01 42 07.2** | **-0.7** |
| DED | | | | *i* AML | AML | 01 42 13.0 | |
| | comp=Z,19nm,0.4s | | | | | | |
| DED | | | | *i* AML | AML | 01 42 14.0 | |
| | comp=E,26nm,0.8s | | | | | | |
| DED | | | | *i* AML | AML | 01 42 27.0 | |
| | comp=N,17nm,0.8s | | | | | | |
| **KMER** | **Konya-Meram** | **3.30** | **3** | P | **Pb** | **01 41 35.5** | **-2.8** |
| KMER | | | | S | **Sb** | **01 42 13.9** | **-4.1** |
| KMER | | | | *i* AML | AML | 01 42 22.0 | |
| | comp=N,14nm,0.4s | | | | | | |
| KMER | | | | *i* AML | AML | 01 42 27.0 | |
| | comp=Z,6.8nm,0.5s | | | | | | |
| KMER | | | | *i* AML | AML | 01 42 29.0 | |
| | comp=E,15nm,0.6s | | | | | | |
| **BEIL** | **Beino** | **3.31** | **88** | *e*P | **Pn** | **01 41 30.6** | **+0.3** |
| BEIL | | | | *e*S | **Sn** | **01 42 07.3** | **-1.5** |
| **FETY** | **Fethiye** | **3.32** | **312** | Pn | **Pn** | **01 41 32.6** | **+2.2** |
| **KERG** | **Konya-Eregli** | **3.34** | **28** | P | **Pn** | **01 41 34.6** | **+3.9** |
| KERG | | | | S | **Sn** | **01 42 12.6** | **+3.0** |
| KERG | | | | *i* AML | AML | 01 42 18.0 | |
| | comp=N,39nm,0.3s | | | | | | |
| KERG | | | | *i* AML | AML | 01 42 18.0 | |
| | comp=E,28nm,0.4s | | | | | | |
| KERG | | | | *i* AML | AML | 01 42 21.0 | |
| | comp=Z,33nm,0.5s | | | | | | |
| **KSHT** | **Keshet** | **3.37** | **115** | S | **Sn** | **01 42 10.5** | **+0.3** |
| **KSHT** | **Keshet** | **3.37** | **115** | P | **Pn** | **01 41 31.3** | **+0.2** |
| **MMLI** | **Mount Malkishu** | **3.38** | **126** | P | **Pn** | **01 41 31.4** | **+0.2** |
| **MMLI** | **Mount Malkishu** | **3.38** | **126** | P | **Pn** | **01 41 31.0** | **-0.3** |
| MMLI | | | | S | **Sn** | **01 42 10.8** | **+0.3** |
| MMLI | | | | AML | AML | 01 42 13.9 | |
| | 0.1nm,0.2s | | | | | | |
| MMLI | | | | AML | AML | 01 42 20.4 | |
| | 0.2nm,0.3s | | | | | | |
| **CAME** | **Cameli-Denizli** | **3.40** | **317** | Pn | **Pn** | **01 41 34.2** | **+2.6** |
| **KONT** | **Konya--Tatoy** | **3.48** | **2** | P | **Pb** | **01 41 37.1** | **-4.1** |
| KONT | | | | S | **Sn** | **01 42 16.3** | **+3.6** |
| KONT | | | | *i* AML | AML | 01 42 27.0 | |
| | comp=E,9.0nm,0.8s | | | | | | |
| KONT | | | | *i* AML | AML | 01 42 31.0 | |
| | comp=N,6.5nm,0.8s | | | | | | |
| KONT | | | | *i* AML | AML | 01 42 56.0 | |
| | comp=Z,11nm,1.7s | | | | | | |
| **GULE** | **Gulek** | **3.52** | **36** | P | **Pn** | **01 41 36.0** | **+2.7** |
| GULE | | | | S | **Sn** | **01 42 15.4** | **+1.4** |
| GULE | | | | *i* AML | AML | 01 42 24.0 | |
| | comp=E,56nm,0.8s | | | | | | |
| GULE | | | | *i* AML | AML | 01 42 30.0 | |
| | comp=Z,22nm,0.5s | | | | | | |
| GULE | | | | *i* AML | AML | 01 42 31.0 | |
| | comp=N,40nm,0.5s | | | | | | |
| **QRNJ** | **Al-Qirein** | **3.55** | **126** | P | **Pn** | **01 41 34.5** | **+1.1** |
| **HMDT** | **Nahal Hemdat** | **3.57** | **127** | P | **Pn** | **01 41 34.4** | **+0.7** |
| **HMDT** | **Nahal Hemdat** | **3.57** | **127** | S | **Sn** | **01 42 15.7** | **+0.8** |
| **HMDT** | **Nahal Hemdat** | **3.57** | **127** | P | **Pn** | **01 41 33.8** | **0.0** |
| **DOGA** | **KONYA_Doganhis** | **3.66** | **354** | P | **Pb** | **01 41 40.9** | **-3.5** |
| DOGA | | | | *i* AML | AML | 01 42 46.0 | |
| | comp=N,7.5nm,0.6s | | | | | | |
| DOGA | | | | *i* AML | AML | 01 43 00.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| DOGA | | | | *i* AML | AML | 01 43 05.0 | |
| | comp=E,11nm,1.2s | | | | | | |
| **YURE** | **YUREGIR** | **3.67** | **49** | P | **Pn** | **01 41 36.2** | **+1.0** |
| YURE | | | | S | **Sn** | **01 42 16.5** | **-1.1** |
| YURE | | | | *i* AML | AML | 01 42 38.0 | |
| | comp=N,29nm,2.6s | | | | | | |
| YURE | | | | *i* AML | AML | 01 42 41.0 | |
| | comp=Z,21nm,1.1s | | | | | | |
| YURE | | | | *i* AML | AML | 01 43 03.0 | |
| | comp=E,30nm,1.6s | | | | | | |
| **AMAZ** | **Amatzia** | **3.72** | **141** | P | **Pn** | **01 41 36.3** | **+0.5** |
| **AMAZ** | **Amatzia** | **3.72** | **141** | S | **Sn** | **01 42 20.1** | **+1.4** |
| **AMAZ** | **Amatzia** | **3.72** | **141** | P | **Pn** | **01 41 36.2** | **+0.3** |
| AMAZ | | | | S | **Sn** | **01 42 19.5** | **+0.7** |
| AMAZ | | | | AML | AML | 01 42 26.6 | |
| | 0.5nm,0.3s | | | | | | |
| AMAZ | | | | AML | AML | 01 42 27.9 | |
| | 0.5nm,0.4s | | | | | | |
| **UJAP** | **Al Uja** | **3.73** | **131** | P | **Pn** | **01 41 36.2** | **+0.3** |
| **UJAP** | **Al Uja** | **3.73** | **131** | S | **Sn** | **01 42 19.7** | **+0.9** |
| **ALIN** | **Konya, Altinte** | **3.87** | **8** | P | **Pb** | **01 41 45.5** | **-2.4** |
| ALIN | | | | S | **Sn** | **01 42 22.0** | **-0.5** |
| ALIN | | | | *i* AML | AML | 01 42 56.0 | |
| | comp=N,4.8nm,1.4s | | | | | | |
| ALIN | | | | *i* AML | AML | 01 42 56.0 | |
| | comp=E,3.2nm,0.9s | | | | | | |
| ALIN | | | | *i* AML | AML | 01 42 58.0 | |
| | comp=Z,7.7nm,2.1s | | | | | | |
| **DSI** | **Dead Sea** | **3.95** | **136** | P | **Pn** | **01 41 39.5** | **+0.6** |
| **DSI** | **Dead Sea** | **3.95** | **136** | P | **Pn** | **01 41 39.3** | **+0.3** |
| **DSI** | **Dead Sea** | **3.95** | **136** | S | **Sn** | **01 42 25.3** | **+1.0** |
| **YTIR** | **Yattir** | **3.96** | **141** | P | **Pn** | **01 41 39.9** | **+0.7** |
| **YTIR** | **Yattir** | **3.96** | **141** | S | **Sn** | **01 42 26.2** | **+1.4** |
| **YTIR** | **Yattir** | **3.96** | **141** | P | **Pn** | **01 41 39.6** | **+0.4** |
| **AKO** | **Adana** | **4.00** | **41** | P | **Pn** | **01 41 41.2** | **+1.6** |
| AKO | | | | S | **Sn** | **01 42 24.8** | **-0.9** |
| AKO | | | | *i* AML | AML | 01 42 30.0 | |
| | comp=E,11nm,0.4s | | | | | | |
| AKO | | | | *i* AML | AML | 01 42 35.0 | |
| | comp=N,16nm,0.9s | | | | | | |
| AKO | | | | *i* AML | AML | 01 42 45.0 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **KZIT** | **Kziot** | **4.01** | **152** | P | **Pn** | **01 41 40.4** | **+0.5** |
| **KZIT** | **Kziot** | **4.01** | **152** | S | **Sn** | **01 42 27.6** | **+1.7** |
| **KZIT** | **Kziot** | **4.01** | **152** | P | **Pn** | **01 41 40.3** | **+0.5** |
| KZIT | | | | S | **Sn** | **01 42 26.5** | **+0.6** |
| KZIT | | | | AML | AML | 01 42 28.6 | |
| | 0.6nm,0.5s | | | | | | |
| KZIT | | | | AML | AML | 01 42 29.4 | |
| | 0.6nm,0.5s | | | | | | |
| **RHAN** | **Hatay/Reyhanl** | **4.04** | **62** | P | **Pn** | **01 41 40.4** | **+0.2** |
| RHAN | | | | S | **Sn** | **01 42 24.9** | **-1.7** |
| RHAN | | | | *i* AML | AML | 01 42 34.0 | |
| | comp=N,45nm,0.9s | | | | | | |
| RHAN | | | | *i* AML | AML | 01 42 39.0 | |
| | comp=Z,26nm,0.8s | | | | | | |
| RHAN | | | | *i* AML | AML | 01 42 54.0 | |
| | comp=E,29nm,0.8s | | | | | | |
| **HSUJ** | **Al Zarqa** | **4.11** | **124** | P | **Pn** | **01 41 43.2** | **+2.0** |
| **NIDE** | **Nigde/Merkez-G** | **4.11** | **30** | P | **Pn** | **01 41 43.6** | **+2.3** |
| NIDE | | | | S | **Sn** | **01 42 32.6** | **+4.2** |
| NIDE | | | | *i* AML | AML | 01 42 43.0 | |
| | comp=E,23nm,0.3s | | | | | | |
| NIDE | | | | *i* AML | AML | 01 42 44.0 | |
| | comp=N,12nm,0.3s | | | | | | |
| NIDE | | | | *i* AML | AML | 01 42 48.0 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **MSBI** | **Mazada** | **4.13** | **139** | P | **Pn** | **01 41 41.7** | **+0.3** |
| **MSBI** | **Mazada** | **4.13** | **139** | S | **Sn** | **01 42 29.8** | **+1.1** |
| **GHAJ** | **Ghor Haditha** | **4.25** | **137** | P | **Pn** | **01 41 45.1** | **+2.0** |
| **GHAJ** | **Ghor Haditha** | **4.25** | **137** | P | **Pn** | **01 41 43.4** | **+0.3** |
| **ZFRI** | **Zfri** | **4.65** | **146** | P | **Pn** | **01 41 49.0** | **+0.4** |
| **ZFRI** | **Zfri** | **4.65** | **146** | P | **Pn** | **01 41 49.0** | **+0.4** |
| **ZFRI** | **Zfri** | **4.65** | **146** | S | **Sn** | **01 42 42.7** | **+1.1** |
| **PRNI** | **Paran** | **4.75** | **149** | P | **Pn** | **01 41 50.3** | **+0.3** |
| **PRNI** | **Paran** | **4.75** | **149** | P | **Pn** | **01 41 50.3** | **+0.3** |
| **PRNI** | **Paran** | **4.75** | **149** | S | **Sn** | **01 42 45.5** | **+1.4** |
| **KRMI** | **Paran Flat** | **4.84** | **153** | P | **Pn** | **01 41 51.8** | **+0.5** |
| **KRMI** | **Paran Flat** | **4.84** | **153** | S | **Sn** | **01 42 47.7** | **+1.3** |
| **HRFI** | **Mount Harif** | **5.04** | **150** | P | **Pn** | **01 41 54.3** | **+0.3** |
| **HRFI** | **Mount Harif** | **5.04** | **150** | S | **Sn** | **01 42 52.7** | **+1.5** |
| **HRFI** | **Mount Harif** | **5.04** | **150** | P | **Pn** | **01 41 54.3** | **+0.3** |
| **MBRI** | **Mt Berech** | **5.20** | **153** | P | **Pn** | **01 41 57.7** | **+1.4** |
| **MBRI** | **Mt Berech** | **5.20** | **153** | P | **Pn** | **01 41 57.3** | **+1.0** |
| **MBRI** | **Mt Berech** | **5.20** | **153** | S | **Sn** | **01 42 57.0** | **+1.6** |
| **AQBJ** | **Aqaba** | **5.32** | **152** | P | **Pn** | **01 41 59.1** | **+1.4** |
| **EIL** | **Elat** | **5.33** | **153** | P | **Pn** | **01 41 58.3** | **+0.3** |
| **EIL** | **Elat** | **5.33** | **153** | S | **Sn** | **01 42 59.8** | **+1.4** |
| **APE** | **Apeiranthos** | **5.99** | **298** | P | **Pn** | **01 42 06.2** | **-0.9** |
| **APE** | **Apeiranthos** | **5.99** | **298** | S | **Sn** | **01 43 14.1** | **-0.7** |

*BJI* ***03*** *01:41:44.9±0.0, 44°.46N×149°.63E, h43km, mb4.8/27, mB5.2/6, Ms4.8/5, Ms7 4.4/6*

*NIED* ***03*** *01:41:46.5, 44°.69N×149°.30E, h30km, MW4.6, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$1.49; $M_{\theta\theta}$4.89; $M_{\phi\phi}$-6.37; $M_{r\theta}$2.36; $M_{\theta\phi}$-1.71; $M_{\phi r}$5.14; Fault plane solution: $M_0$7.79000×$10^{15}$ NP1:$\phi_s$46.00000°, $\delta$87.00000°, $\lambda$136.00000°. NP2:$\phi_s$139.00000°, $\delta$46.00000°, $\lambda$5.00000°.*

*JMA* ***03*** *01:41:46.5±0.7, 45°.N×3°×14°.9E×, h30km, MV5.0/17, SE OFF ETOROFU*

*SKHL* ***03*** *01:41:46.2±0.5, 44°.30N×149°.50E, h47km±7km, mb5.4/6*

*IDC* ***03*** *01:41:48.7±5.2, 44°.55N×149°.03E, h33km±38km, mb4.2/28, mbtmp4.4/32, ML3.9/4, MS4.0/8, Error ellipse: s-maj=14.9km s-min=12.4km az=108.0*

*MOS* ***03*** *01:41:48.3±0.9, 44°.40N×149°.05E, h46km, mb5.0/61, Error ellipse: s-maj=7.1km s-min=4.9km az=119.9*

*NEIC* ***03*** *01:41:50.1±1.1, 44°.35N±0°.09×149°.1E±0°.1, h50km±7km, mb4.8/83, Error ellipse: s-maj=13.5km s-min=12.9km az=152.0*

*BGR* ***03*** *01:41:55.4, 45°.42N×148°.73E, h33km, mb4.8*

**ISC 03 01:41:48.7**±0.6, **44°.38N**±0°.04×**149°.26E**±0°.05, **h42**km±4km, **h42**km:**pP-P, n469,** σ1**$_s$24**/488, **mb4.8**/181, **MS4.0**/10, **28C-22D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **KUR** | **Kuril'sk** | **1.31** | **311** | *i* P | | **Pn** | **01** | **42** | **09.1** | **-1.4** |
| KUR | | | | | AMB | AMB | 01 | 42 | 11.2 | |
| | 4μm,0.4s | | | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **01** | **42** | **24.7** | **-2.0** |
| KUR | | | | | A | A | 01 | 42 | 27.8 | |
| | 11μm,0.4s | | | | | | | | | |
| KUR | | | | | A | A | 01 | 42 | 27.8 | |
| | 8μm,0.4s | | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.31** | **311** | *d i* PN | | **Pn** | **01** | **42** | **09.1** | **-1.4** |
| KUR | | | | *i* S | | **Sn** | **01** | **42** | **24.7** | **-2.0** |
| KUR | | | | | pmax | pmax | | | | |
| | comp=Z,4μm,0.4s | | | | | | | | | |
| KUR | | | | | pmax | pmax | | | | |
| | comp=N,3μm,0.3s | | | | | | | | | |
| KUR | | | | | pmax | pmax | | | | |
| | comp=E,2μm,0.3s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=N,11μm,0.4s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=E,8μm,0.3s | | | | | | | | | |
| **SHO** | **Shikotan** | **1.82** | **255** | *i* P | | **Pn** | **01** | **42** | **16.9** | **-0.7** |
| SHO | | | | | AMB | AMB | 01 | 42 | 18.7 | |
| | comp=E,380nm,0.3s | | | | | | | | | |
| SHO | | | | *i* S | | **Sn** | **01** | **42** | **39.7** | **+0.3** |
| SHO | | | | | A | A | 01 | 42 | 51.9 | |
| | comp=E,3μm,0.4s | | | | | | | | | |
| SHO | | | | | A | A | 01 | 42 | 51.9 | |
| | comp=E,4μm,0.4s | | | | | | | | | |
| **SHO** | **Shikotan** | **1.82** | **255** | ǁ *i* PN | | **Pn** | **01** | **42** | **16.9** | **-0.7** |
| SHO | | | | *i* S | | **Sn** | **01** | **42** | **40.4** | **+1.0** |
| SHO | | | | | smax | smax | | | | |
| | comp=N,803nm,0.2s | | | | | | | | | |
| SHO | | | | | smax | smax | | | | |
| | comp=E,4μm,0.4s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.47** | **263** | *e*P | | **Pn** | **01** | **42** | **26.0** | **-0.4** |
| YUK | | | | | AMB | AMB | 01 | 42 | 30.1 | |
| | comp=E,1μm,0.3s | | | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **01** | **42** | **56.3** | **+1.0** |
| YUK | | | | | A | A | 01 | 43 | 03.4 | |
| | comp=E,2μm,0.5s | | | | | | | | | |
| YUK | | | | | A | A | 01 | 43 | 03.4 | |
| | comp=E,5μm,0.5s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.47** | **263** | *e*PN | | **Pn** | **01** | **42** | **26.0** | **-0.4** |
| YUK | | | | *e*S | | **Sn** | **01** | **42** | **57.1** | **+1.8** |
| YUK | | | | | pmax | pmax | | | | |
| | comp=N,457nm,0.2s | | | | | | | | | |
| YUK | | | | | pmax | pmax | | | | |
| | comp=Z,1μm,0.2s | | | | | | | | | |
| YUK | | | | | pmax | pmax | | | | |
| | comp=E,544nm,0.3s | | | | | | | | | |
| YUK | | | | | smax | smax | | | | |
| | comp=E,5μm,0.6s | | | | | | | | | |
| YUK | | | | | smax | smax | | | | |
| | comp=N,2μm,0.5s | | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.74** | **249** | P | | **Pn** | **01** | **42** | **29.3** | **-0.8** |
| NEM2 | | | | *e*S | | **Sn** | **01** | **43** | **01.8** | **-0.2** |
| **NMR** | **Nemuro--Hokkai** | **2.75** | **250** | *i* P | | **Pn** | **01** | **42** | **29.4** | **-0.8** |
| NMR | | | | *e*S | | **Sn** | **01** | **43** | **02.1** | **-0.1** |
| **NMR** | **Nemuro--Hokkai** | **2.75** | **250** | ǁ *i* PN | | **Pn** | **01** | **42** | **29.3** | **-0.9** |
| NMR | | | | *e*S | | **Sn** | **01** | **43** | **04.2** | **+2.0** |
| **RUSJ** | **Misakicho** | **2.90** | **266** | ǁ *i* PN | | **Pn** | **01** | **42** | **33.1** | **+0.8** |
| RUSJ | | | | *i* S | | **Sn** | **01** | **43** | **08.6** | **+2.7** |
| **JRA** | **Rausu** | **3.01** | **263** | P | | **Pn** | **01** | **42** | **34.6** | **+0.7** |
| JRA | | | | *e*S | | **Sn** | **01** | **43** | **10.4** | **+1.7** |
| **JNK** | **Nakash** | **3.38** | **258** | P | | **Pn** | **01** | **42** | **39.2** | **+0.4** |
| **AKK** | **Akkeshi** | **3.48** | **248** | *e*P | | **Pn** | **01** | **42** | **40.0** | **-0.3** |
| AKK | | | | *e*S | | **Sn** | **01** | **43** | **20.2** | **-0.1** |
| **JAK** | **Akkeshi** | **3.59** | **249** | P | | **Pn** | **01** | **42** | **41.4** | **-0.4** |
| JAK | | | | *e*S | | **Sn** | **01** | **43** | **22.3** | **-0.6** |
| **JTKR** | **Abashiri--Toko** | **3.87** | **266** | *e*P | | **Pn** | **01** | **42** | **46.6** | **+0.9** |
| **JAR** | **Ashorobuto** | **4.12** | **257** | *e*P | | **Pn** | **01** | **42** | **49.8** | **+0.7** |
| **JOB** | **Onbets** | **4.21** | **251** | *e*P | | **Pn** | **01** | **42** | **50.5** | **+0.2** |
| **JCH** | **Churui** | **4.64** | **250** | *e*P | | **Pn** | **01** | **42** | **56.3** | **+0.1** |
| **JKK2** | **Kamakawa 2** | **4.72** | **266** | *e*P | | **Pn** | **01** | **42** | **59.6** | **+2.3** |
| **JKA** | **Kamikawa-asahi** | **4.79** | **269** | Pn | | **Pn** | **01** | **42** | **59.1** | **+0.8** |
| **JKA** | **Kamikawa-asahi** | **4.79** | **269** | *e*P | | **Pn** | **01** | **42** | **59.1** | **+0.8** |
| **ASAJ** | **Asahikawa** | **4.80** | **269** | Pn | | **Pn** | **01** | **43** | **00.7** | **+2.3** |
| | comp=N,8.5nm,0.3s,baz=42,slow=13,SNR=14 | | | | | | | | | |
| ASAJ | | | | | LR | LR | 01 | 45 | 03.8 | |
| | comp=N,2μm,18.4s,baz=144,slow=42 | | | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.80** | **269** | PN | | **Pn** | **01** | **42** | **59.1** | **+0.7** |
| **ERM** | **Erimo** | **5.05** | **244** | Pn | | **Pn** | **01** | **43** | **02.4** | **+0.6** |
| **ERM** | **Erimo** | **5.05** | **244** | *i* PN | | **Pn** | **01** | **43** | **01.6** | **-0.3** |
| **JAB** | **Ashibetsu** | **5.16** | **263** | *e*P | | **Pn** | **01** | **43** | **06.8** | **+3.4** |
| **JNBK** | **Urakawa-nobuka** | **5.19** | **248** | *e*P | | **Pn** | **01** | **43** | **03.6** | **-0.2** |
| **YSS** | **Yuzh-Sakhalins** | **5.24** | **302** | Pn | | **Pn** | **01** | **43** | **04.7** | **+0.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.24** | **302** | *e*P | | **Pn** | **01** | **43** | **05.0** | **+0.6** |
| YSS | | | | | AMB | AMB | 01 | 43 | 05.6 | |
| | comp=N,30nm,0.6s | | | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **01** | **44** | **03.6** | **+0.2** |
| YSS | | | | | A | A | 01 | 44 | 08.2 | |
| | comp=N,90nm,0.6s | | | | | | | | | |
| YSS | | | | | A | A | 01 | 44 | 08.2 | |
| | comp=N,40nm,0.6s | | | | | | | | | |
| YSS | | | | | AMS | AMS | 01 | 45 | 17.0 | |
| | comp=N,600nm,16.0s | | | | | | | | | |
| YSS | | | | | AMS | AMS | 01 | 45 | 17.0 | |
| | comp=N,600nm,16.0s | | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.24** | **302** | *e*PN | | **Pn** | **01** | **43** | **04.8** | **+0.4** |
| YSS | | | | *e*S | | **Sn** | **01** | **44** | **02.6** | **-0.8** |
| YSS | | | | | smax | smax | | | | |
| | comp=N,50nm,0.7s | | | | | | | | | |
| YSS | | | | | smax | smax | | | | |
| | comp=E,110nm,0.7s | | | | | | | | | |
| YSS | | | | | MLR | MLR | | | | |
| | comp=N,600nm,16.0s | | | | | | | | | |
| YSS | | | | | MLR | MLR | | | | |
| | comp=E,600nm,15.0s | | | | | | | | | |
| **JRBN** | **Rebuntou** | **5.92** | **283** | *e*P | | **Pn** | **01** | **43** | **15.8** | **+2.1** |
| **UGL** | **Uglegorsk** | **6.82** | **316** | *e*P | | **Pn** | **01** | **43** | **28.2** | **+2.1** |
| UGL | | | | | AMB | AMB | 01 | 43 | 30.0 | |
| | comp=E,40nm,0.6s | | | | | | | | | |
| **JANG** | **Nango** | **7.00** | **238** | *e*P | | **Pn** | **01** | **43** | **26.6** | **-1.9** |
| JANG | | | | *e*S | | **Sn** | **01** | **44** | **40.7** | **-6.2** |
| **JTM** | **Tenmabayashi** | **7.03** | **242** | Pn | | **Pn** | **01** | **43** | **28.5** | **-0.6** |
| **JTH** | **Tanohata** | **7.07** | **234** | *e*P | | **Pn** | **01** | **43** | **27.2** | **-2.4** |
| JTH | | | | *e*S | | **Sn** | **01** | **44** | **41.5** | **-7.0** |
| **SKR** | **Severo-Kuril's** | **7.82** | **34** | *e*P | | **Pn** | **01** | **43** | **38.5** | **-1.3** |
| SKR | | | | | AMB | AMB | 01 | 43 | 39.7 | |
| | comp=E,100nm,0.5s | | | | | | | | | |
| SKR | | | | | *e*S | **Sn** | **01** | **45** | **02.2** | **-4.8** |
| SKR | | | | | A | A | 01 | 45 | 28.5 | |
| | comp=E,380nm,0.7s | | | | | | | | | |
| SKR | | | | | A | A | 01 | 45 | 28.5 | |
| | comp=E,290nm,0.7s | | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.82** | **34** | *e*PN | | **Pn** | **01** | **43** | **39.1** | **-0.7** |
| SKR | | | | | pmax | pmax | | | | |
| | comp=Z,118nm,0.8s | | | | | | | | | |
| SKR | | | | | MLR | MLR | | | | |
| | comp=Z,500nm,14.0s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **7.87** | **328** | *e*P | | **Pn** | **01** | **43** | **42.7** | **+2.2** |
| TYV | | | | | AMB | AMB | 01 | 43 | 47.3 | |
| | comp=Z,10.0nm,0.7s | | | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **01** | **45** | **09.5** | **+1.4** |
| TYV | | | | | A | A | 01 | 45 | 15.2 | |
| | comp=Z,10.0nm,0.4s | | | | | | | | | |
| TYV | | | | | A | A | 01 | 45 | 15.2 | |
| | comp=Z,10.0nm,0.4s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **7.87** | **328** | *e*PN | | **Pn** | **01** | **43** | **42.7** | **+2.2** |
| TYV | | | | | pmax | pmax | | | | |
| | comp=Z,100nm,2.7s | | | | | | | | | |
| TYV | | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.1s | | | | | | | | | |
| **TEY** | **Ternei** | **9.04** | **279** | ǁ *e*PN | | Pn | 01 | 44 | 01.7 | +5.1 |
| TEY | | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,1.3s | | | | | | | | | |
| TEY | | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.3s | | | | | | | | | |
| **JMM** | **Marumori** | **9.12** | **227** | | | **Pn** | **01** | **43** | **55.4** | **-2.3** |
| **NKL** | **Nikolayevsk** | **10.44** | **330** | *e*P | | **Pn** | **01** | **44** | **16.1** | **+0.5** |
| NKL | | | | | AMB | AMB | 01 | 44 | 19.3 | |
| | comp=Z,20nm,0.4s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **11.49** | **231** | Pn | | **Pn** | **01** | **44** | **29.6** | **-0.6** |
| **MAJO** | **Matsushiro** | **11.49** | **231** | *i* PN | | **Pn** | **01** | **44** | **28.7** | **-1.5** |
| **MJAR** | **Matsushiro Arr** | **11.49** | **231** | Pn | | **Pn** | **01** | **44** | **29.3** | **-0.9** |
| | comp=Z,0.3nm,0.3s,baz=30,slow=13,SNR=25 comp=E,5.6nm,0.6s | | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **11.49** | **231** | Pn | | **Pn** | **01** | **44** | **29.3** | **-0.8** |
| **USA0B** | **Ussuriysk Arra** | **12.38** | **275** | Pn | | **Pn** | **01** | **44** | **42.6** | **+0.3** |
| **USA0B** | **Ussuriysk Arra** | **12.38** | **275** | *i* PN | | **Pn** | **01** | **44** | **42.0** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **12.38** | **275** | Pn | | **Pn** | **01** | **44** | **43.1** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **12.38** | **275** | Pn | | **Pn** | **01** | **44** | **43.8** | **+1.6** |
| | comp=Z,1.9nm,0.3s,baz=81,slow=14,SNR=21 | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.38** | **275** | PN | | **Pn** | **01** | **44** | **43.1** | **+0.8** |
| **JGF** | **Kuroka** | **12.65** | **230** | Pn | | **Pn** | **01** | **44** | **45.5** | **-0.5** |
| **KLR** | **Kul'dur** | **12.93** | **298** | Pn | | **Pn** | **01** | **44** | **53.4** | **+3.7** |
| | comp=Z,0.2nm,0.3s,baz=110,slow=16,SNR=8.3 | | | | | | | | | |
| **KLR** | **Kul'dur** | **12.93** | **298** | *e*P | | **Pn** | **01** | **44** | **49.1** | **-0.6** |
| **KLR** | **Kul'dur** | **12.93** | **298** | *e*PN | | **Pn** | **01** | **44** | **54.1** | **+4.4** |
| KLR | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.3s | | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **13.27** | **269** | *i* PN | | **Pn** | **01** | **44** | **54.1** | **-0.3** |
| **BNX** | **BinXian** | **15.50** | **283** | ǁ P | | **Pn** | **01** | **45** | **25.0** | **+0.8** |
| BNX | | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| **CN2** | **Changchun** | **17.11** | **276** | P | | **Pn** | **01** | **45** | **38.3** | **-6.3** |
| CN2 | | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | | |
| **ZEA** | **Zeya** | **17.13** | **311** | *e*P | | **Pn** | **01** | **45** | **41.2** | **-3.6** |
| **ZEA** | **Zeya** | **17.13** | **311** | *e*P | | **P** | **01** | **45** | **47.1** | **+1.0** |
| **KSRS** | **Korea Array** | **17.52** | **254** | P | | **Pn** | **01** | **45** | **48.2** | **-1.6** |
| | comp=Z,0.6nm,0.3s,baz=69,slow=10,SNR=12 comp=E,1.8nm,0.5s | | | | | | | | | |
| **JNU** | **Nakatsue** | **18.18** | **238** | P | | **Pn** | **01** | **45** | **58.5** | **+0.6** |
| | comp=Z,0.3nm,0.3s,baz=56,slow=6.5,SNR=3.5 comp=Z,5.3nm,0.7s | | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **18.37** | **54** | LR | | LR | 01 | 52 | 49.7 | |
| | comp=Z,141nm,21.5s,baz=300,slow=36 | | | | | | | | | |
| **SEY** | **Seymchan** | **18.67** | **4** | P | | **P** | **01** | **46** | **01.6** | **-1.3** |
| | comp=Z,0.7nm,0.3s,baz=207,slow=10,SNR=5.6 comp=Z,3.6nm,0.2s | | | | | | | | | |
| **SEY** | **Seymchan** | **18.67** | **4** | P | | **P** | **01** | **46** | **00.9** | **-2.0** |
| SEY | | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.3s | | | | | | | | | |
| **HIA** | **Hailar** | **20.71** | **294** | *i* P | | **P** | **01** | **46** | **24.6** | **-0.7** |
| HIA | | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | | |
| **YAK** | **Yakutsk** | **21.06** | **334** | P | | **P** | **01** | **46** | **29.7** | **+0.9** |
| YAK | | | | | IAmb | IAmb | 01 | 46 | 35.2 | |
| | comp=Z,43nm,0.7s | | | | | | | | | |
| **YAK** | **Yakutsk** | **21.06** | **334** | P | | **P** | **01** | **46** | **29.1** | **+0.2** |
| | comp=Z,13nm,0.3s,baz=304,slow=0.9,SNR=1.8 comp=Z,13nm,0.3s | | | | | | | | | |
| **YAK** | **Yakutsk** | **21.06** | **334** | *e*P | | **P** | **01** | **46** | **28.2** | **-0.6** |
| **YAK** | **Yakutsk** | **21.06** | **334** | *e*P | | **P** | **01** | **46** | **28.1** | **-0.

**E24K Your Creek 39.52 31** P **P** **01 49 16.0 +1.0**
**COLA College 39.66 37** *i* P **P** **01 49 14.3 -1.8**
COLA pmax pmax
comp=Z,11nm,1.6s
**F24K Squaw Lake 39.71 32** P **P** **01 49 17.8 +1.3**
**G24K Hadweenzic Riv 39.84 34** P **P** **01 49 19.0 +1.4**
G24K IAmb IAmb 01 49 46.3
comp=Z,10.0nm,0.9s
**ILAR Eielson Array 40.07 37** P **P** **01 49 20.9 +1.3**
**ILAR Eielson Array 40.07 37** P **P** **01 49 20.6 +1.0**
comp=Z,2.2nm,0.8s,baz=264,slow=7.1,SNR=11
comp=Z,2.2nm,0.8s
**D25K Kavik River 40.38 30** P **P** **01 49 22.4 +0.3**
D25K IAmb IAmb 01 49 39.8
comp=Z,8.9nm,0.7s
**FYU Fort Yukon 40.73 34** P **P** **01 49 27.0 +2.1**
FYU IAmb IAmb 01 49 53.4
comp=Z,19nm,1.1s
**BMAR Burnt Mountain 40.98 33** P **P** **01 49 28.4 +1.3**
**GOMU GeErMu 41.66 278** P **P** **01 49 33.2 -0.2**
GOMU pP pwP 01 49 49.1 +0.5
GOMU pmax pmax
comp=Z,19nm,0.7s
**ZALV Zalesovo Beam 41.83 307** PcP **PcP** **01 51 30.0 +0.6**
comp=Z,4.0nm,0.8s,baz=104,slow=1.1,SNR=10
**M26K Nabesna, AK 41.98 40** P **P** **01 49 36.9 +1.5**
**KMI Kunming 42.14 259** ⇓P **P** **01 49 38.1 +0.9**
KMI pmax pmax
comp=Z,15nm,1.0s
**K27K Chicken 42.21 38** P **P** **01 49 38.6 +1.5**
**E29M Blow River 43.46 31** P **P** **01 49 48.5 +1.3**
**G29M Pine Creek 43.57 33** P **P** **01 49 49.1 +1.0**
G29M IAmb IAmb 01 50 06.5
comp=Z,40nm,1.8s
**EPYK Eagle Plains 44.15 34** P **P** **01 49 54.1 +1.3**
**G30M tAoh Zraii Nji 44.26 33** P **P** **01 49 54.9 +1.2**
**I30M Mount Dempster 44.47 35** P **P** **01 49 56.6 +1.1**
I30M IAmb IAmb 01 50 12.5
comp=Z,20nm,1.5s
**P29M Windy Craggy 45.02 43** P **P** **01 50 01.4 +1.6**
P29M IAmb IAmb 01 50 20.8
comp=Z,22nm,1.4s
**G31M Satah River 45.03 33** P **P** **01 50 01.5 +1.9**
**INK Inuvik 45.08 31** P **P** **01 50 02.0 +1.9**
**MK31 Makanchi Array 45.64 298** P **P** **01 50 04.6 -0.2**
**MK31 Makanchi Array 45.64 298** *i* P **P** **01 50 04.5 -0.4**
**MKAR Makanchi Array 45.64 298** P **P** **01 50 04.1 -0.8**
**MKAR Makanchi Array 45.64 298** P **P** **01 50 04.5 -0.3**
comp=Z,2.0nm,0.5s,baz=78,slow=8.2,SNR=20
MKAR PcP **PcP** **01 51 43.1 +0.6**
comp=Z,3.4nm,1.0s,baz=72,slow=4.7,SNR=3.7
MKAR LR LR 02 10 18.2
comp=Z,221nm,20.0s,baz=67,slow=38
comp=Z,2.0nm,0.5s
**MAKZ Makanchi 45.83 298** P **P** **01 50 06.4 0.0**
**MAKZ Makanchi 45.83 298** P **P** **01 50 06.4 0.0**
MAKZ pmax pmax
comp=Z,4.0nm,0.9s
**MAKZ Makanchi 45.83 298** P **P** **01 50 06.2 -0.2**
**KURK Kurchatov 46.44 304** *eP* **P** **01 50 09.7 -1.3**
**KURK Kurchatov 46.44 304** *i* P **P** **01 50 09.7 -1.3**
**KURK Kurchatov 46.44 304** P **P** **01 50 09.9 -1.1**
**KURBB Kurchatov Arra 46.52 304** P **P** **01 50 11.1 -0.7**
comp=Z,1.3nm,0.3s,baz=74,slow=8.3,SNR=9.3
KURBB PcP **PcP** **01 51 45.2 -0.3**
comp=Z,2.1nm,0.8s,baz=75,slow=3.7,SNR=7.4
comp=Z,1.3nm,0.3s
**PHRA Phrae 48.25 254** P **P** **01 50 25.5 0.0**
**CMAR Chiang Mai Arr 49.16 255** P **P** **01 50 33.5 +0.9**
comp=Z,1.8nm,0.4s,baz=39,slow=7.3,SNR=10
CMAR LR LR 02 13 21.1
comp=Z,158nm,18.6s,baz=165,slow=39
comp=Z,1.8nm,0.4s
**SHL Shillong 49.59 268** P **P** **01 50 35.0 -0.9**
**SHL Shillong 49.59 268** P **P** **01 50 35.0 -0.9**
SHL pmax pmax
comp=Z,18nm,1.1s
**BRVK Borovoye 50.32 310** *eP* **P** **01 50 39.7 -1.2**
**BRVK Borovoye 50.32 310** *i* P **P** **01 50 39.7 -1.2**
BRVK pmax pmax
comp=Z,2.0nm,0.9s
**ULHL Ulahol 51.51 295** P **P** **01 50 51.0 +0.7**
SNR=5.6
**BOOM Boomskoye usch 51.59 295** P **P** **01 50 51.6 +0.8**
**TKM2 Tokmak 2 51.60 296** P **P** **01 50 51.8 +0.8**
SNR=9.2
**USP Ospenovka 52.14 297** P **P** **01 50 55.4 +0.6**
SNR=9.7
**KBK Karagaybulak 52.15 296** P **P** **01 50 55.7 +0.7**
SNR=5.5
**AAK Ala-Archa 52.45 296** *eP* **P** **01 50 57.0 -0.2**
**AAK Ala-Archa 52.45 296** *i* P **P** **01 50 57.0 -0.2**
AAK pmax pmax
comp=Z,10.0nm,1.1s
**AAK Ala-Archa 52.45 296** P **P** **01 50 57.4 +0.1**
**EKS2 Erkin-Say 52.90 296** P **P** **01 51 00.8 +0.3**
SNR=5.5
**KSH Kashi 53.04 292** P **P** **01 51 05.9 +4.3**
KSH pmax pmax
comp=Z,11nm,1.1s
**AML Almayashu 53.22 296** P **P** **01 51 04.1 +1.0**
SNR=6.1
**RES Resolute Bay 53.92 17** P **P** **01 51 07.5 +0.2**
RES IAmb IAmb 01 51 08.4
comp=Z,17nm,1.1s
**RES Resolute Bay 53.92 17** P **P** **01 51 07.5 +0.2**
RES pmax pmax
comp=Z,17nm,1.1s
**ARSB Arslanbob 54.08 295** P **P** **01 51 09.4 +0.2**
ARSB IAmb IAmb 01 51 10.9
comp=Z,6.7nm,1.0s
**ARSB Arslanbob 54.08 295** P **P** **01 51 09.4 +0.2**
ARSB pmax pmax
comp=Z,7.0nm,1.0s
**YKA Yellowknife Ar 54.42 35** P **P** **01 51 12.2 +1.0**
comp=Z,1.7nm,0.8s,baz=300,slow=6.3,SNR=3.9
comp=Z,1.7nm,0.8s
**KK31 Karatay Array 54.76 298** P **P** **01 51 13.7 -0.2**
KK31 IAmb IAmb 01 51 14.7
comp=Z,8.9nm,1.2s
**KK31 Karatay Array 54.76 298** P **P** **01 51 13.7 -0.2**
KK31 pmax pmax
comp=Z,9.0nm,1.3s
**KKAR Karatay Array 54.76 298** P **P** **01 51 13.6 -0.3**
**KKAR Karatay Array 54.76 298** P **P** **01 51 13.9 0.0**
KKAR IAmb IAmb 01 51 14.7
comp=Z,8.8nm,1.2s
**KKAR Karatay Array 54.76 298** P **P** **01 51 13.6 -0.3**
**ARU Arti 54.92 317** *c i* P **P** **01 51 13.2 -1.7**
ARU S **S** **01 58 54.9 +1.7**
ARU SS **SS** **02 02 30.0 -6.3**
ARU pmax pmax
comp=Z,10.0nm,1.7s
**DRK Karamyk 55.81 294** P **P** **01 51 22.4 +0.5**
**BTK Batken 56.15 295** P **P** **01 51 23.3 -0.8**
BTK IAmb IAmb 01 51 25.0
comp=Z,11nm,0.9s
**BTK Batken 56.15 295** P **P** **01 51 23.3 -0.8**
BTK pmax pmax
comp=Z,11nm,1.0s
**GAR Garm 57.04 294** P **P** **01 51 30.1 -0.4**
**ABKAR Akbulak array 57.85 309** P **P** **01 51 34.8 -1.0**
**ABKAR Akbulak array 57.85 309** P **P** **01 51 35.1 -0.7**
ABKAR IAmb IAmb 01 51 36.2
comp=Z,9.3nm,1.1s
**CHGR Chuyangaron 57.99 295** P **P** **01 51 37.0 -0.1**
**CHGR Chuyangaron 57.99 295** P **P** **01 51 37.0 -0.1**
CHGR pmax pmax
comp=Z,65nm,1.1s
**NIL Nilore 58.06 287** P **P** **01 51 36.8 -0.8**
**NIL Nilore 58.06 287** P **P** **01 51 36.8 -0.8**
NIL pmax pmax
comp=Z,28nm,1.1s
**SIMJ Simiganj 58.08 295** P **P** **01 51 37.6 -0.2**
**SIMJ Simiganj 58.08 295** P **P** **01 51 37.5 -0.3**
**ARCES ARCESS Array B 59.18 340** P **P** **01 51 42.7 -2.1**
comp=Z,2.2nm,0.9s,baz=55,slow=10,SNR=5.6
comp=Z,2.2nm,0.9s
**KBL Kabul 60.40 291** P **P** **01 51 53.7 -0.3**
**KBL Kabul 60.40 291** P **P** **01 51 53.7 -0.3**
KBL pmax pmax
comp=Z,12nm,0.9s
**FFC Flin Flon 64.28 38** P **P** **01 52 19.9 +0.6**
**FINES FINESS Array B 64.99 334** P **P** **01 52 22.2 -1.6**
comp=Z,2.3nm,0.7s,baz=40,slow=4.9,SNR=17
comp=Z,2.3nm,0.7s
**HRA Herat 64.99 294** P **P** **01 52 24.7 +0.1**
HRA IAmb IAmb 01 52 26.1
comp=Z,8.8nm,1.0s
**WRA Warramunga Arr 65.45 195** P **P** **01 52 26.9 -0.4**
**WRA Warramunga Arr 65.45 195** P **P** **01 52 28.2 +1.0**
comp=Z,4.0nm,0.7s,baz=17,slow=7.0,SNR=29
comp=Z,4.0nm,0.7s
**WRA Warramunga Arr 65.45 195** P **P** **01 52 26.9 -0.4**
WRA pmax pmax
comp=Z,1.0nm,1.6s
**OBN Obninsk 65.69 324** P **P** **01 52 26.3 -2.1**
comp=Z,9.7nm,0.4s,baz=77,slow=18,SNR=4.3
comp=Z,9.7nm,0.4s
**OBN Obninsk 65.69 324** *eP* **P** **01 52 26.7 -1.8**
**OBN Obninsk 65.69 324** *eP* **P** **01 52 26.7 -1.8**
OBN *e**PP **pP** **01 52 34.7 -5.3**
OBN *e* 01 53 01.8
OBN *e* 01 54 55.1
OBN *e*PPP PPP 01 56 28.1
OBN pmax pmax
comp=Z,29nm,1.6s
OBN MLR MLR
comp=Z,88nm,17.0s
**NVAR Mina Array Bea 65.95 59** P **P** **01 52 33.2 +2.5**
comp=Z,1.2nm,0.7s,baz=297,slow=6.6,SNR=8.2
comp=Z,1.2nm,0.7s
**VRH Novokhopyorsk 66.05 319** *eP* **P** **01 52 29.9 -1.0**
VRH pmax pmax
comp=Z,12nm,0.8s
**LPSR Galich'ya Gora 66.40 321** *eP* **P** **01 52 30.0 -3.0**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**VORR Voronezh 66.90 321** *eP* **P** **01 52 36.1 -0.2**
VORR pmax pmax
comp=Z,33nm,0.4s
**VSR Storozhevoye 67.23 320** *eP* **P** **01 52 37.0 -1.4**
VSR pmax pmax
comp=Z,20nm,1.2s
**VORD Divnogorie 67.35 320** *eP* **P** **01 52 37.4 -1.7**
VORD pmax pmax
comp=Z,20nm,0.6s
**PDAR Pinedale Array 68.33 51** P **P** **01 52 47.5 +1.8**
comp=Z,0.6nm,0.6s,baz=339,slow=3.7,SNR=5.0
comp=Z,0.6nm,0.6s
**ASAR Alice Springs 69.16 195** P **P** **01 52 52.2 +1.5**
comp=Z,4.5nm,0.7s,baz=13,slow=5.6,SNR=36
comp=Z,4.5nm,0.7s
**NC405 NORSAR Array S 69.36 339** P **P** **01 52 50.4 -1.1**
NC405 IAmb IAmb 01 52 51.9
comp=Z,15nm,1.1s
**NB201 NORSAR Array S 69.52 340** P **P** **01 52 51.4 -1.2**
NB201 IAmb IAmb 01 52 52.9
comp=Z,13nm,0.9s
**GOF Gofitskoye 69.53 313** *ceP* **P** **01 52 53.1 +0.3**
**NB2 NORSAR Subarra 69.55 340** P **P** **01 52 51.3 -1.5**
comp=Z,4.0nm,0.6s,baz=31,slow=6.5
**NB2 NORSAR Subarra 69.55 340** P **P** **01 52 49.5 -3.3**
**NOA NORSAR Array B 69.55 340** P **P** **01 52 51.7 -1.0**
comp=Z,2.8nm,0.6s,baz=33,slow=6.6,SNR=28
comp=Z,2.8nm,0.6s
**PALK Pallekele 69.66 260** LR LR 02 26 20.5
comp=Z,46nm,19.2s,baz=141,slow=38
**HFS Hagfors 69.68 338** P **P** **01 52 52.0 -1.5**
comp=Z,4.2nm,0.4s,baz=52,slow=5.8,SNR=46
comp=Z,4.2nm,0.4s
**NORES NORESS Array B 69.73 339** P **P** **01 52 52.1 -1.7**
**ULM Lac du Bonnet 70.07 38** P **P** **01 52 57.4 +1.3**
comp=Z,1.5nm,0.5s,baz=320,slow=8.5,SNR=3.0
comp=Z,1.5nm,0.5s
**KIV Kislovodsk 70.46 313** P **P** **01 52 58.8 +0.1**
**KIV Kislovodsk 70.46 313** ⇓P **P** **01 52 59.8 +1.1**
**KIV Kislovodsk 70.46 313** *eP* **P** **01 52 59.2 +0.5**
**KIV Kislovodsk 70.46 313** *eP* **P** **01 52 59.2 +0.5**
KIV pmax pmax
comp=Z,25nm,1.1s
KIV MLR MLR
comp=Z,130nm,18.0s
**KIV Kislovodsk 70.46 313** P **P** **01 52 59.8 +1.1**
comp=Z,30nm,1.2s,comp=Z,267nm
**KIV Kislovodsk 70.46 313** P **P** **01 53 00.3 +1.5**
**KBZ Khabaz 70.51 312** P **P** **01 52 59.9 +1.0**
comp=Z,12nm,0.9s,baz=185,slow=7.6,SNR=21
KBZ LR LR 02 28 38.7
comp=Z,159nm,18.3s,baz=60,slow=40
comp=Z,12nm,0.9s
**AK03 Malin Array Si 71.94 325** P **P** **01 53 06.8 -0.6**
**AK23 Malin Array Si 71.95 325** P **P** **01 53 06.9 -0.6**
**AKASG Malin Array Bs 71.96 325** P **P** **01 53 07.1 -0.4**
comp=Z,4.8nm,0.5s,baz=38,slow=6.2,SNR=18
comp=Z,4.8nm,0.5s
**AKBB Malin Array Si 71.96 325** P **P** **01 53 06.8 -0.7**
AKBB IAmb IAmb 01 53 07.8
comp=Z,11nm,0.8s
**AKBB Malin Array Si 71.96 325** P **P** **01 53 06.8 -0.7**
AKBB pmax pmax
comp=Z,11nm,0.9s
**AKBB Malin Array Si 71.96 325** P **P** **01 53 07.1 -0.4**
**KIEV Kiev 71.97 325** P **P** **01 53 06.8 -0.7**
KIEV IAmb IAmb 01 53 07.8
comp=Z,10.0nm,0.8s
**KIEV Kiev 71.97 325** ⇑P **P** **01 53 07.1 -0.5**
**KIEV Kiev 71.97 325** P **P** **01 53 06.8 -0.7**
KIEV pmax pmax
comp=Z,10.0nm,0.9s
**KIEV Kiev 71.97 325** P **P** **01 53 07.2 -0.4**
comp=Z,52nm,1.1s
**KIEV Kiev 71.97 325** P **P** **01 53 06.9 -0.7**
**AK10 Malin Array Si 72.02 325** P **P** **01 53 07.4 -0.5**
**AK05 Malin Array Si 72.03 325** P **P** **01 53 07.4 -0.5**
**MI30 MI30,Zelenitsa 72.35 325** P **P** **01 53 09.4 -0.5**
**MI28 MI28,Pidlybu 72.42 326** P **P** **01 53 10.1 -0.2**
**X16A Lo Mia Camp, P 72.76 59** P **P** **01 53 12.8 -0.1**
**RNPP9 Sopachiv 72.76 327** P **P** **01 53 12.3 0.0**
**RNPP5 Staryi Chortor 72.90 327** P **P** **01 53 13.0 -0.1**
**LUBAR Lubar, Ukraine 73.16 325** P **P** **01 53 14.0 -0.7**
**HORU Horodok 74.26 325** P **P** **01 53 20.7 -0.4**
**HORU Horodok 74.26 325** P **P** **01 53 20.7 -0.4**
**SORM Soroca 74.29 323** ⇑P **P** **01 53 20.8 -0.5**
**SORM Soroca 74.29 323** ⇑P **P** **01 53 20.8 -0.5**
**SORM Soroca 74.29 323** P **P** **01 53 20.8 -0.5**
comp=Z,18nm,0.9s
**GURO Guroymak-BITLI 74.57 309** P **P** **01 53 22.4 -0.9**
**LVV L'vov 74.74 327** *eP* **P** **01 53 23.6 -0.3**
**KMPD K-Podol'skiy 74.75 325** P **P** **01 53 23.7 -0.3**
KMPD P **P** **01 53 22.9 -1.1**
**MORS Morshin 75.34 326** P **P** **01 53 27.8 +0.4**
**MORS Morshin 75.34 326** P **P** **01 53 27.8 +0.4**
**KWP Kalwaria Pacla 75.41 327** P **P** **01 53 28.1 +0.3**
**KWP Kalwaria Pacla 75.41 327** P **P** **01 53 28.1 +0.3**
KWP pmax pmax
comp=Z,50nm,1.2s
**KWP Kalwaria Pacla 75.41 327** P **P** **01 53 28.5 +0.7**
comp=Z,37nm,1.2s
**STNU Starunia 75.44 326** P **P** **01 53 28.0 0.0**
**SHIU Shidnytsya 75.48 327** P **P** **01 53 29.7 +1.4**
**KSV Kosov 75.52 325** P **P** **01 53 28.6 +0.1**
**KSV Kosov 75.52 325** P **P** **01 53 28.6 +0.1**
**I37A Lemond, Waseca 75.81 41** P **P** **01 53 31.1 +0.9**
I37A IAmb IAmb 01 53 31.7
comp=Z,10.0nm,0.8s
**BSEG Bad Segeberg 75.97 336** *eP* **P** **01 53 31.0 +0.1**
comp=Z,11nm,1.2s,baz=29,slow=5.5
**MEZ Mezhgor'ye 75.99 326** P **P** **01 53 31.9 +0.8**
**BUR08 Bucovina Ar. S 76.00 325** P **P** **01 53 30.2 -1.2**
BUR08 IAmb IAmb 01 53 32.5
comp=Z,10nm,1.1s
**BURAR Bucovina Array 76.01 325** P **P** **01 53 31.6 +0.2**
**BURAR Bucovina Array 76.01 325** ⇑P **P** **01 53 31.4 0.0**
**OJC Ojcow 76.03 329** P **P** **01 53 31.4 +0.1**
**OJC Ojcow 76.03 329** P **P** **01 53 31.4 +0.1**
OJC pmax pmax
comp=Z,27nm,1.3s
**OJC Ojcow 76.03 329** P **P** **01 53 31.8 +0.5**
comp=Z,18nm,1.3s
**KOLS Kolonicke sedl 76.14 327** *eP* **P** **01 53 32.8 +0.8**
KOLS pmax pmax
comp=Z,10.0nm,1.1s
**KOLS Kolonicke sedl 76.14 327** *eP* **P** **01 53 32.8 +0.8**
**RUE Ruedersdorf 76.19 334** *eP* **P** **01 53 32.6 +0.5**
comp=Z,13nm,0.6s,baz=29,slow=5.5
**STKA Stephens Creek 76.22 187** P **P** **01 53 34.8 +2.4**
comp=Z,3.3nm,0.9s,baz=342,slow=13,SNR=3.2
comp=Z,3.3nm,0.9s
**TESR Tescani 76.28 323** ⇑P **P** **01 53 32.8 0.0**
**TESR Tescani 76.28 323** P **P** **01 53 33.1 +0.3**
comp=Z,21nm,1.0s
**BRIU Brid 76.33 326** P **P** **01 53 33.8 +0.8**
**TLCR 76.36 321** ⇓P **P** **01 53 33.3 +0.1**
**TLCR 76.36 321** ⇓P **P** **01 53 33.3 +0.1**
**KORU Korolevo 76.43 326** P **P** **01 53 34.6 +1.0**
**CRVS Cervenica-Dubn 76.48 328** *eP* **P** **01 53 34.3 +0.3**
CRVS pmax pmax
comp=Z,12nm,1.0s
**CRVS Cervenica-Dubn 76.48 328** *eP* **P** **01 53 34.2 +0.3**
**NIE Niedzica 76.50 329** P **P** **01 53 35.4 +1.3**
comp=Z,7.6nm,1.2s
**GORT1 Trebel 76.50 335** *eP* **P** **01 53 34.9 +1.0**
comp=Z,25nm,1.3s,baz=29,slow=5.5
**TRSU Trosnyk 76.55 326** P **P** **01 53 35.2 +0.9**
**TRSU Trosnyk 76.55 326** P **P** **01 53 35.2 +0.9**
**BERU Beregovo 76.56 327** P **P** **01 53 35.2 +0.9**
**KSP Ksiaz 76.75 332** P **P** **01 53 35.8 +0.4**
**KSP Ksiaz 76.75 332** P **P** **01 53 35.8 +0.4**
comp=Z,12nm,1.2s
**VRI Vrincioaia 76.75 323** P **P** **01 53 37.0 +1.5**
comp=Z,4.9nm,1.5s,comp=Z,76nm
**TPGR Topolog 76.79 321** ⇓P **P** **01 53 35.9 +0.1**
**TURR Turia 76.91 323** ⇑P **P** **01 53 36.8 +0.4**
**OZUR 76.97 323** ⇓P **P** **01 53 37.9 +1.1**
**LANS Liptovska Anna 77.03 329** *eP* **P** **01 53 38.3 +1.2**
LANS pmax pmax
comp=Z,10.0nm,1.1s
**LANS Liptovska Anna 77.03 329** *eP* **P** **01 53 38.3 +1.2**
**FLTG Flechtingen 77.10 335** *eP* **P** **01 53 37.0 -0.3**
comp=Z,14nm,1.0s,baz=29,slow=5.5
**UPC Upice 77.13 332** *eP* **P** **01 53 38.0 +0.5**
**UPC Upice 77.13 332** *eP* **P** **01 53 38.0 +0.5**
**DPC Dobruska-Polom 77.16 331** *eP* **P** **01 53 38.2 +0.5**
**DPC Dobruska-Polom 77.16 331** *eP* **P** **01 53 38.2 +0.5**
**MORC Moravsky Berou 77.21 330** P **P** **01 53 38.9 +0.8**
**MORC Moravsky Berou 77.21 330** *eP* **P** **01 53 38.1 0.0**
**MORC Moravsky Berou 77.21 330** ⇑P **P** **01 53 38.7 +0.7**
**MORC Moravsky Berou 77.21 330** P **P** **01 53 38.9 +0.8**
MORC pmax pmax
comp=Z,20nm,1.1s
**KRLC Kraliky 77.23 331** *eP* **P** **01 53 38.2 0.0**
**KRLC Kraliky 77.23 331** *eP* **P** **01 53 38.2 0.0**
**NRDL Niedersach Rie 77.29 336** *eP* **P** **01 53 38.7 +0.4**
comp=Z,17nm,1.4s,baz=29,slow=5.5
**RETH Rethem/Aller, 77.30 336** *eP* **P** **01 53 38.8 +0.5**
comp=Z,12nm,1.1s,baz=29,slow=5.5
**MESR Meseseni 77.31 326** ⇓P **P** **01 53 39.4 +0.8**
**MLR Muntele Rosu 77.38 323** P **P** **01 53 39.2 0.0**
MLR IAmb IAmb 01 53 41.3
comp=Z,7.1nm,0.8s
**MLR Muntele Rosu 77.38 323** P **P** **01 53 38.8 -0.5**
comp=Z,3.9nm,0.5s,baz=321,slow=6.5,SNR=8.0
comp=Z,3.9nm,0.5s
**MLR Muntele Rosu 77.38 323** ⇓P **P** **01 53 39.3 0.0**
**MLR Muntele Rosu 77.38 323** ⇓P **P** **01 53 39.3 0.0**
**MLR Muntele Rosu 77.38 323** P **P** **01 53 39.7 +0.5**
comp=Z,9.9nm,1.5s
**CLL Collm 77.44 334** P **P** **01 53 38.8 -0.4**
**CLL Collm 77.44 334** ⇑*iP* **P** **01 53 38.9 -0.4**
comp=Z,20nm,1.0s
CLL *i* x x 01 53 44.3
CLL *ep*P **pP** **01 53 55.0 +4.2**
**CLL Collm 77.44 334** ⇑*iP* **P** **01 53 38.9 -0.4**
CLL *e* 01 53 55.0
CLL pmax pmax
comp=Z,20nm,1.0s
**CLL Collm 77.44 334** P **P** **01 53 39.1 -0.1**
comp=Z,20nm,1.1s
**CLL Collm 77.44 334** *eP* **P** **01 53 38.9 -0.4**
comp=Z,19nm,1.0s,baz=29,slow=5.5
**ASSE Asse, Remlinge 77.44 335** *eP* **P** **01 53 39.9 +0.8**
comp=Z,0.2nm,1.0s,baz=29,slow=5.5
**BRG Berggiesshubel 77.51 333** *eP* **P** **01 53 39.0 -0.6**
BRG Amp 01 53 41.3
comp=Z,8.0nm,1.1s
**BRG Berggiesshubel 77.51 333** *eP* **P** **01 53 39.6 -0.1**
comp=Z,8.0nm,1.1s,baz=29,slow=5.5
**ICOR Ion Corvin 77.64 321** ⇑P **P** **01 53 40.4 -0.1**
**DRGR 77.70 326** ⇑P **P** **01 53 40.9 0.0**
**DRGR 77.70 326** ⇑P **P** **01 53 40.9 0.0**
**CLZ Clausthal 77.79 335** *eP* **P** **01 53 41.9 +0.7**
comp=Z,21nm,1.2s,baz=29,slow=5.5
**VYHS Vyhne 77.81 329** *eP* **P** **01 53 41.9 +0.5**
VYHS pmax pmax
comp=Z,18nm,1.4s
**VYHS Vyhne 77.81 329** *eP* **P** **01 53 41.9 +0.5**
**VOIR 77.81 323** ⇓P **P** **01 53 42.6 +1.1**
**VOIR 77.81 323** P **P** **01 53 42.3 +0.8**
**VOIR 77.81 323** P **P** **01 53 42.3 +0.8**
comp=Z,13nm,1.1s
**PSZ Piszkesteto 77.89 328** P **P** **01 53 42.3 +0.4**
PSZ IAmb IAmb 01 53 43.6
comp=Z,11nm,1.1s
**PSZ Piszkesteto 77.89 328** ⇑P **P** **01 53 42.8 +0.9**
**PSZ Piszkesteto 77.89 328** P **P** **01 53 42.3 +0.4**
PSZ pmax pmax
comp=Z,11nm,1.1s
**NEUB Neuenburg 77.91 334** *eP* **P** **01 53 41.9 0.0**
comp=Z,24nm,1.1s,baz=29,slow=5.5
**JAVC Velka Javorina 77.93 330** *eP* **P** **01 53 43.2 +1.1**
**VRAC Vranov 77.94 331** *eP* **P** **01 53 42.6 +0.5**
**VRAC Vranov 77.94 331** ⇓P **P** **01 53 42.6 +0.5**
**VRAC Vranov 77.94 331** ⇓P **P** **01 53 42.6 +0.5**
**EKA Eskdalemuir Ar 77.94 344** P **P** **01 53 42.0 0.0**
comp=Z,1.5nm,0.5s,baz=22,slow=4.6,SNR=12
comp=Z,1.5nm,0.5s
**EKA Eskdalemuir Ar 77.94 344** P **P** **01 53 42.0 0.0**
**ARR Arges 78.04 324** ⇓P **P** **01 53 44.2 +1.4**
**PRU Pruhonice 78.07 332** *eP* **P** **01 53 43.3 +0.5**
**PRU Pruhonice 78.07 332** *eP* **P** **01 53 43.3 +0.5**
**IBBN Ibbenburen 78.13 337** *eP* **P** **01 53 43.1 +0.1**
comp=Z,18nm,1.2s,baz=29,slow=5.5
**GTTG Gottingen 78.17 335** *eP* **P** **01 53 43.8 +0.5**
comp=Z,11nm,0.9s,baz=29,slow=5.5
**BR131 Keskin Array S 78.19 315** P **P** **01 53 43.5 -0.4**
BR131 IAmb IAmb 01 53 45.5
comp=Z,18nm,1.6s
**BR131 Keskin Array S 78.19 315** P **P** **01 53 43.5 -0.4**
BR131 pmax pmax
comp=Z,18nm,1.6s
**BRTR Keskin Array B 78.19 315** P **P** **01 53 43.8 -0.1**
**BRTR Keskin Array B 78.19 315** P **P** **01 53 44.2 +0.3**
comp=Z,1.7nm,0.8s,baz=98,slow=2.5,SNR=8.8
comp=Z,1.7nm,0.8s
**BRTR Keskin Array B 78.19 315** P **P** **01 53 43.8 -0.1**
**BR106 Keskin Array S 78.20 315** P **P** **01 53 45.3 +1.4**
comp=Z,3.6nm,1.5s,comp=Z,43nm
**BR104 Keskin Array S 78.21 315** P **P** **01 53 44.3 +0.4**
comp=Z,3.6nm,1.3s
**BR105 Keskin Array S 78.21 315** P **P** **01 53 44.8 +0.8**
comp=Z,4.5nm,1.4s
**KRUC Moravsky 78.22 330** *eP* **P** **01 53 43.7 +0.1**
**SMOL Smolenice 78.31 330** *eP* **P** **01 53 45.5 +1.4**
SMOL pmax pmax
comp=Z,14nm,1.4s
**TANN Tannenbergstha 78.39 333** *eP* **P** **01 53 44.4 -0.2**
comp=Z,5.4nm,1.3s,baz=29,slow=5.5
**PLN Plauen 78.42 334** *eP* **P** **01 53 44.9 +0.2**
comp=Z,6.7nm,1.0s,baz=29,slow=5.5
**MOX Moxa 78.45 334** *eP* **P** **01 53 44.7 -0.2**
comp=Z,10nm,1.1s,baz=29,slow=5.5
**MODS Modra-Piesok 78.48 330** *eP* **P** **01 53 45.9 +0.8**
MODS pmax pmax
comp=Z,30nm,1.2s
**MODS Modra-Piesok 78.48 330** *eP* **P** **01 53 45.9 +0.8**
**ANTO Ankara 78.52 315** P **P** **01 53 46.4 +0.9**
**ANTO Ankara 78.52 315** P **P** **01 53 46.4 +0.9**
comp=Z,4.6nm,0.6s
**SIRR Siria 78.55 326** ⇑P **P** **01 53 46.2 +0.7**
**SRO Srobarova 78.57 329** *eP* **P** **01 53 46.7 +1.1**
SRO pmax pmax
comp=Z,16nm,1.0s
**SRO Srobarova 78.57 329** *eP* **P** **01 53 46.7 +1.1**
**ZST Bratislava 78.69 330** *eP* **P** **01 53 47.5 +1.2**
**ZST Bratislava 78.69 330** *eP* **P** **01 53 47.5 +1.2**
**SURR Surduc 78.78 325** ⇓P **P** **01 53 47.2 +0.4**
**UBBA Unterbreizbach 78.80 335** *eP* **P** **01 53 46.7 +0.1**
comp=Z,8.6nm,1.3s,baz=29,slow=5.5
**GZR Gura Zlata 78.80 325** ⇑P **P** **01 53 46.4 -0.6**
**GZR Gura Zlata 78.80 325** ⇑P **P** **01 53 46.4 -0.6**
**MANZ Manzenberg 78.87 333** *eP* **P** **01 53 47.5 +0.3**
comp=Z,2.7nm,1.2s,baz=29,slow=5.5
**KASTN Kahler Asten 78.93 336** *eP* **P** **01 53 47.7 +0.2**
comp=Z,11nm,1.1s,baz=29,slow=5.5

**ROTZ Rotzenmuhle 79.03 333 eP P 01 53 48.6 +0.5**
comp=Z,2.6nm,1.1s,baz=29,slow=5.5
**BUG Bochum--Univer 79.05 337 eP P 01 53 48.1 0.0**
comp=Z,12nm,1.1s,baz=29,slow=5.5
**BZS Buzias 79.10 326 ⇓P P 01 53 48.7 +0.2**
**BZS Buzias 79.10 326 ⇓P P 01 53 48.7 +0.2**
**KHC Kasperske Hory 79.13 332 P P 01 53 49.0 +0.3**
KHC IAmb IAmb 01 53 50.2
comp=Z,13nm,1.0s
**KHC Kasperske Hory 79.13 332 eP P 01 53 48.8 +0.1**
**KHC Kasperske Hory 79.13 332 eP P 01 53 48.8 +0.1**
**KHC Kasperske Hory 79.13 332 P P 01 53 49.0 +0.3**
comp=Z,14nm,1.1s
**GEC2 GERESS Array S 79.33 332 P P 01 53 49.3 -0.6**
**GEC2 GERESS Array S 79.33 332 eP P 01 53 50.1 +0.2**
comp=Z,9.2nm,1.2s,baz=29,slow=5.5
**GERES GERESS Array B 79.33 332 P P 01 53 49.6 -0.3**
**GERES GERESS Array B 79.33 332 P P 01 53 49.8 -0.1**
comp=Z,2.0nm,0.7s,baz=318,slow=1.8,SNR=13
comp=Z,2.0nm,0.7s
**GERES GERESS Array B 79.33 332 P P 01 53 49.6 -0.3**
**WET Wettzell 79.35 333 eP P 01 53 50.5 +0.7**
comp=Z,16nm,1.1s,baz=29,slow=5.5
**CONA Conrad Observa 79.37 330 i P P 01 53 50.6 +0.6**
comp=Z,14nm,1.3s,SNR=7.4
**HERR Herculane 79.37 325 ⇑P P 01 53 49.6 -0.4**
**MPLH Magyarpolny 79.39 329 P P 01 53 50.7 +0.6**
comp=Z,33nm,1.3s
**RONA Rosalia, Austr 79.40 330 eP P 01 53 51.4 +1.2**
comp=Z,16nm,1.2s,SNR=9.6
**GRA1 Grafenberg Arr 79.41 334 P P 01 53 50.5 +0.3**
GRA1 IAmb IAmb 01 53 51.8
comp=Z,18nm,1.0s
**GRF Grafenberg Arr 79.41 334 P P 01 53 50.5 +0.3**
GRF pmax pmax
comp=Z,18nm,1.0s
**GRF Grafenberg Arr 79.41 334 eP P 01 53 50.8 +0.6**
comp=Z,20nm,1.1s,baz=29,slow=5.5
**GRFO Grafenberg 79.41 334 P P 01 53 50.5 +0.3**
GRFO IAmb IAmb 01 53 51.7
comp=Z,20nm,1.1s
**GRFO Grafenberg 79.41 334 P P 01 53 50.5 +0.3**
GRFO pmax pmax
comp=Z,20nm,1.1s
**MORH Mrgy, Hungar 79.78 328 ⇓P P 01 53 51.9 -0.3**
**MORH Mrgy, Hungar 79.78 328 P P 01 53 51.9 -0.3**
comp=Z,4.8nm,1.2s
**TNS Taunus Mts 79.79 336 eP P 01 53 52.2 -0.1**
comp=Z,5.8nm,0.9s,baz=29,slow=5.5
**AHRW Bad Neuenahr-A 79.91 337 eP P 01 53 53.3 +0.5**
comp=Z,13nm,1.2s,baz=29,slow=5.5
**MOA Molln 80.00 331 i P P 01 53 54.4 +1.0**
comp=Z,3.0nm,0.9s
**ARSA Arzberg 80.06 330 i P P 01 53 53.8 0.0**
comp=Z,3.3nm,0.9s
**FRGS Fruska Gora 80.20 326 ⇓P P 01 53 54.5 -0.1**
**FRGS Fruska Gora 80.20 326 P P 01 53 54.6 +0.1**
comp=Z,15nm,1.4s
**BIOA Bad Ischl, Aus 80.35 331 i P P 01 53 56.0 +0.7**
comp=Z,15nm,1.3s,SNR=7.2
**RJOB Jochberg 80.59 332 eP P 01 53 57.3 +0.6**
comp=Z,11nm,1.3s,baz=29,slow=5.5
**BOVS Bovan 80.68 324 ⇑P P 01 53 56.2 -0.9**
**SOKA Soboth 80.73 330 eP P 01 53 57.4 0.0**
comp=Z,16nm,1.1s,SNR=9.0
**STU Stuttgart 80.85 335 eP P 01 53 58.4 +0.4**
comp=Z,17nm,0.9s,baz=29,slow=5.5
**LESA Schwarzleotal 80.91 332 eP P 01 53 59.1 +0.8**
comp=Z,19nm,1.8s
**GIVF Givet 80.93 338 eP P 01 53 57.9 -0.4**
GIVF pmax pmax
comp=Z,1.0nm,0.3s
**KBA Koelnbreinsper 80.98 331 i P P 01 53 59.6 +0.7**
comp=Z,16nm,1.1s,SNR=5.2
**TX31 Lajitas Ar. Si 81.03 58 P 01 53 59.5 +0.1**
TX31 IAmb IAmb 01 54 04.5
comp=Z,15nm,1.8s
**TXAR Lajitas Array 81.03 58 P 01 53 60.0 +0.6**
**TXAR Lajitas Array 81.03 58 P P 01 54 00.6 +1.2**
comp=Z,1.4nm,0.5s,baz=300,slow=3.6,SNR=23
comp=Z,1.4nm,0.5s
**TXAR Lajitas Array 81.03 58 P P 01 54 00.0 +0.6**
**OBKA Obir 81.04 330 i P P 01 53 59.7 +0.6**
comp=Z,13nm,1.5s
**BAIF Baives 81.13 338 eP P 01 53 59.7 +0.3**
BAIF pmax pmax
comp=Z,16nm,1.5s
**MYKA Terra Mystica 81.26 331 eP P 01 53 59.7 -0.6**
comp=Z,2.4nm,0.7s
**WATA Walderalm 81.35 332 i P P 01 54 01.2 +0.4**
comp=Z,15nm,1.1s,SNR=6.4
**WTTA Wattenberg 81.39 332 eP P 01 54 01.3 +0.2**
comp=Z,22nm,1.4s,SNR=6.2
**PRED Cave del Predi 81.45 331 P P 01 54 00.4 -0.8**
**RETA Reutte 81.49 333 eP P 01 54 02.0 +0.5**
comp=Z,11nm,1.4s,SNR=7.4
**MOTA Moosalm 81.50 333 i P P 01 54 02.0 +0.4**
comp=Z,25nm,1.4s
**BFO Black Forest 81.51 335 eP P 01 54 01.7 +0.3**
comp=Z,8.4nm,1.3s,baz=29,slow=5.5
**UBR Ueberruh 81.53 333 eP P 01 54 02.0 +0.4**
comp=Z,13nm,1.6s,baz=29,slow=5.5
**ABTA Abfaltersbach 81.55 332 eP P 01 53 58.9 -2.9**
comp=Z,7.6nm,1.2s
**SQTA Sankt Quirin 81.58 333 eP P 01 54 03.1 +1.2**
comp=Z,13nm,1.1s,SNR=6.3
**FETA Feichten 81.91 333 i P P 01 54 04.6 +0.8**
comp=Z,5.9nm,1.1s
**DAVA Damuels 81.95 333 i P P 01 54 04.8 +0.8**
comp=Z,11nm,1.0s,SNR=6.3
**ECH Echery 81.97 335 P P 01 54 03.6 -0.3**
ECH IAmb IAmb 01 54 04.9
comp=Z,9.3nm,1.2s
**ECH Echery 81.97 335 P P 01 54 03.6 -0.3**
ECH pmax pmax
comp=Z,9.0nm,1.2s
**MMAI Mount Meron Ar 82.28 309 P P 01 54 06.9 +1.1**
comp=Z,5.6nm,0.7s,baz=60,slow=4.9,SNR=7.6
comp=Z,5.6nm,0.7s
**HAU Haudompre 82.39 336 eP P 01 54 06.8 +0.7**
HAU pmax pmax
comp=Z,4.0nm,0.9s
**FUORN Ofenpass-Fuorn 82.41 333 P P 01 54 05.8 -0.8**
FUORN IAmb IAmb 01 54 08.8
comp=Z,10nm,1.1s
**HINF Hinteralfeld 82.41 335 eP P 01 54 07.7 +1.4**
HINF pmax pmax
comp=Z,7.0nm,1.5s
**PDG Podgorica 82.69 325 P P 01 54 07.5 -0.2**
PDG IAmb IAmb 01 54 09.2
comp=Z,7.1nm,0.9s
**PDG Podgorica 82.69 325 ⇑P P 01 54 07.3 -0.4**
**TUE Stuetta 82.84 333 P P 01 54 08.7 -0.1**
TUE IAmb IAmb 01 54 10.7
comp=Z,30nm,1.9s
**TUE Stuetta 82.84 333 P P 01 54 09.3 +0.6**
comp=Z,25nm,1.3s
**MIAR Mount Ida 82.92 48 P P 01 54 09.5 +0.5**
**MIAR Mount Ida 82.92 48 P P 01 54 09.5 +0.5**
MIAR pmax pmax
comp=Z,5.0nm,0.9s
**FNA Florina 83.15 323 P P 01 54 09.9 -0.4**
**FNA Florina 83.15 323 P P 01 54 09.9 -0.4**
FNA pmax pmax
comp=Z,5.0nm,0.8s
**FLN La Foliniere 83.52 340 eP P 01 54 11.8 -0.1**
FLN pmax pmax
comp=Z,29nm,1.6s
**SENIN Lac Senin/Sane 83.58 335 P P 01 54 13.1 +0.5**
**LDF La Druitiere 83.59 340 eP P 01 54 11.7 -0.6**
LDF pmax pmax
comp=Z,17nm,1.6s
**LOR Lormes 83.77 337 eP P 01 54 13.0 -0.3**
LOR pmax pmax
comp=Z,6.0nm,1.0s
**GRR Gorron 83.96 340 eP P 01 54 14.0 -0.2**
GRR pmax pmax
comp=Z,24nm,1.3s
**SMF Signal de Mont 84.35 337 eP P 01 54 17.3 +1.1**
SMF pmax pmax
comp=Z,20nm,1.0s
**AVF Avril sur Loir 84.35 337 eP P 01 54 16.2 0.0**
AVF pmax pmax
comp=Z,13nm,1.0s
**LPL La Plagne 84.52 335 eP P 01 54 18.0 +0.7**
LPL pmax pmax
comp=Z,6.0nm,0.9s
**LPG La Plagne 84.53 335 eP P 01 54 18.1 +0.6**
LPG pmax pmax
comp=Z,6.0nm,0.9s
**BGF Bois d'Agland 84.70 337 eP P 01 54 20.0 +2.0**
BGF pmax pmax
comp=Z,3.0nm,0.8s
**NRCA Norcia 84.73 329 P P 01 54 18.4 +0.1**
**CAMP Campotosto 84.88 329 P P 01 54 19.2 +0.1**
CAMP IAmb IAmb 01 54 20.1
comp=Z,7.5nm,0.8s
**QUIF Quistinic 84.94 342 eP P 01 54 19.4 +0.3**
QUIF pmax pmax
comp=Z,38nm,1.6s
**BNI Bardonecchia 84.95 334 P P 01 54 20.0 +0.6**
BNI IAmb IAmb 01 54 21.3
comp=Z,21nm,2.0s
**BNI Bardonecchia 84.95 334 P P 01 54 20.0 +0.6**
BNI pmax pmax
comp=Z,21nm,2.0s
**EIL Elat 85.04 307 P P 01 54 20.1 +0.1**
comp=Z,8.8nm,0.9s,baz=9.4,slow=13,SNR=6.4
comp=Z,8.8nm,0.9s
**INTR Introdacqua 85.15 328 P P 01 54 20.0 -0.4**
INTR IAmb IAmb 01 54 20.9
comp=Z,8.4nm,1.0s
**ORIF Oris-en-Rattie 85.32 335 eP P 01 54 21.3 +0.1**
ORIF pmax pmax
comp=Z,8.0nm,0.8s
**SSB Saint Sauveur 85.39 336 P P 01 54 21.9 +0.5**
SSB IAmb IAmb 01 54 23.3
comp=Z,6.9nm,1.1s
**SSB Saint Sauveur 85.39 336 P P 01 54 22.0 +0.5**
SSB pmax pmax
comp=Z,7.0nm,1.1s
**MFF Saint Martin d 85.45 339 eP P 01 54 21.6 -0.1**
MFF pmax pmax
comp=Z,4.0nm,0.7s
**VIVF Saint-Julien-l 85.74 336 eP P 01 54 23.6 +0.4**
VIVF pmax pmax
comp=Z,12nm,1.3s
**SBF Sospel 85.78 333 eP P 01 54 23.2 -0.3**
SBF pmax pmax
comp=Z,5.0nm,0.6s
**Q56A Snyder Ridge, 86.16 36 P P 01 54 26.3 +0.9**
**CAF Calviac 86.42 337 eP P 01 54 27.5 +0.9**
CAF pmax pmax
comp=Z,15nm,1.5s
**LMR La Mourre 86.55 334 eP P 01 54 26.8 -0.4**
LMR pmax pmax
comp=Z,13nm,1.2s
**LFF La Frestale 86.77 338 eP P 01 54 29.4 +1.2**
LFF pmax pmax
comp=Z,6.0nm,0.8s
**CEST Esterri de Car 88.79 337 P P 01 54 38.9 +0.8**
CEST IAmb IAmb 01 54 42.2
comp=Z,9.2nm,1.2s
**ETSF Etsaut 89.01 338 eP P 01 54 38.5 -0.6**
ETSF pmax pmax
comp=Z,2.0nm,0.6s
**KEST Kesra 92.35 328 P P 01 54 54.9 +0.1**
KEST IAmb IAmb 01 54 56.0
comp=Z,4.1nm,1.1s
**KEST Kesra 92.35 328 P P 01 54 55.0 +0.3**
comp=Z,1.6nm,0.7s,baz=87,slow=4.8,SNR=3.6
comp=Z,1.6nm,0.7s
**FURI Furi 98.16 291 LR LR** 02 44 39.9
comp=Z,46nm,18.5s,baz=30,slow=38
**TORD Torodi Ar. Bea 115.59 325 PKP PKiKP 02 00 25.9 -0.7**
comp=Z,0.2nm,0.5s,baz=18,slow=2.4,SNR=4.8
**VNDA Vanda 121.88 177 PKP PKiKP 02 00 38.2 +1.3**
comp=Z,0.3nm,0.5s,baz=323,slow=4.6,SNR=3.9
**QSPA South Pole Qui 134.12 180 PKP PKiKP 02 01 02.2 +0.5**
comp=Z,1.0nm,0.9s,baz=306,slow=3.1,SNR=3.4
**H03N2 Juan Fernandez 141.44 90 T T** 04 39 15.4
baz=304,slow=77,SNR=24
**H03N3 Juan Fernandez 141.46 90 T T** 04 39 19.0
baz=304,slow=77,SNR=24
**H03N1 Juan Fernandez 141.46 90 T T** 04 39 19.5
baz=304,slow=77,SNR=25
**TROLL Troll, Antarti 148.09 199 ⇑PKPbc PKiKP 02 01 29.7 -0.6**
comp=Z,303nm,0.8s
**SNAA Sanae 149.51 197 ⇑PKPbc PKPbc 02 01 32.6 +0.5**
comp=Z,86nm,1.0s
**SNAA Sanae 149.51 197 PKPbc PKPbc 02 01 32.7 +0.6**
comp=Z,2.9nm,0.8s,baz=73,slow=1.3,SNR=9.4
**PLCA Paso Flores 150.65 97 PKPbc PKPbc 02 01 36.7 +0.9**
comp=Z,3.0nm,0.9s,baz=252,slow=8.7,SNR=4.3
**VNA2 Neumayer--Watz 151.01 196 ⇑PKPbc PKiKP 02 01 36.4 +0.2**
comp=Z,9.3nm,0.8s,baz=160,slow=1.3
**VNA3 Neumayer Olymp 151.17 194 ⇑PKPdf PKPdf 02 01 32.8 +2.7**
comp=Z,3.8nm,0.7s
**VNA1 Neumayer--Stat 151.41 195 ⇑PKPbc PKiKP 02 01 37.2 +0.3**
comp=Z,6.5nm,1.1s
**CPUP Villa Florida 152.00 59 PKPbc PKPbc 02 01 39.4 +0.1**
comp=Z,0.6nm,0.5s,baz=297,slow=4.5,SNR=3.0

**ROM 03 01:50:52.1±0.1, 42°867N±0°003×13°048E±0°005, h11km, ML2.0/80, 3C-3D, Error ellipse: s-maj=0.4km s-min=0.3km az=63.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NRCA** | **Norcia** | **0.06** | **124** | P | Pg | 01 50 54.7 | +0.2 |
| NRCA | | | | S | Sg | 01 50 56.2 | +0.1 |
| NRCA | | | | AML | AML | | |
| | comp=E,7775μm,0.2s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,11440μm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,10280μm,0.2s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,7225μm,0.2s | | | | | | |
| **FEMA** | **Monte Fema** | **0.10** | **1** | P | Pg | 01 50 55.4 | +0.4 |
| FEMA | | | | S | Sg | 01 50 57.4 | +0.4 |
| FEMA | | | | AML | AML | | |
| | comp=E,4215μm,1.2s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=E,4215μm,1.2s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,5000μm,0.1s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=E,4220μm,1.2s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,5000μm,0.1s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=E,4220μm,0.8s | | | | | | |
| **MC2** | **Monte Cornacci** | **0.11** | **66** | ⇓P | Pg | 01 50 55.6 | +0.3 |
| MC2 | | | | S | Sg | 01 50 58.0 | +0.5 |
| **CESI** | **CESI - Serrava** | **0.17** | **323** | ⇑P | Pg | 01 50 56.6 | +0.6 |
| CESI | | | | S | Sg | 01 50 59.6 | +0.9 |
| CESI | | | | AML | AML | | |
| | comp=E,983μm,0.5s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=N,1655μm,0.3s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=E,983μm,1.5s | | | | | | |
| **GAVE** | **Gavelli** | **0.21** | **213** | ⇑P | Pg | 01 50 57.2 | +0.6 |
| GAVE | | | | S | Sg | 01 51 00.8 | +1.1 |
| GAVE | | | | AML | AML | | |
| | comp=N,499μm,1.0s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=E,1500μm,0.5s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=N,1415μm,1.0s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=E,1490μm,0.5s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=N,499μm,1.0s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=N,1415μm,1.0s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=E,1490μm,1.5s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=E,1500μm,1.5s | | | | | | |
| **MMO1** | **Montemonaco** | **0.21** | **81** | P | Pg | 01 50 57.0 | +0.4 |
| MMO1 | | | | S | Sg | 01 51 00.5 | +0.8 |
| **CSP1** | **Cessapalombo** | **0.25** | **27** | P | Pg | 01 50 57.9 | +0.5 |
| **MML1** | **Montelago di S** | **0.25** | **347** | P | Pg | 01 50 57.7 | +0.4 |
| **LNSS** | **Leonessa** | **0.26** | **181** | ⇓P | Pg | 01 50 58.1 | +0.5 |
| LNSS | | | | S | Sb | 01 51 02.4 | -1.1 |
| LNSS | | | | AML | AML | | |
| | comp=N,674μm,0.4s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=E,697μm,0.1s | | | | | | |
| **MTRA** | **Matera** | **0.28** | **113** | P | Pg | 01 50 58.1 | +0.3 |
| MTRA | | | | S | Sg | 01 51 02.8 | +1.1 |
| MTRA | | | | AML | AML | | |
| | comp=E,1500μm,0.7s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,1099μm,0.5s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,1500μm,0.8s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,1160μm,0.5s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,1505μm,0.8s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,1500μm,1.2s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,1505μm,1.2s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.29** | **47** | P | Pb | 01 50 59.1 | -0.3 |
| **PF6** | **Pievefavera** | **0.30** | **21** | P | Pg | 01 50 58.4 | +0.2 |
| **SMA1** | **SAN MARTINO** | **0.32** | **138** | P | Pg | 01 50 58.8 | +0.3 |
| SMA1 | | | | AML | AML | | |
| | comp=E,724μm,0.3s | | | | | | |
| SMA1 | | | | AML | AML | | |
| | comp=N,608μm,0.3s | | | | | | |
| **MF5** | **Montefalcone A** | **0.33** | **68** | P | Pb | 01 50 59.5 | -0.6 |
| MF5 | | | | AML | AML | | |
| | comp=E,706μm,0.2s | | | | | | |
| MF5 | | | | AML | AML | | |
| | comp=N,491μm,0.2s | | | | | | |
| **RM33** | **Pellescritta (** | **0.38** | **161** | ⇑P | Pg | 01 50 59.9 | +0.2 |
| RM33 | | | | AML | AML | | |
| | comp=E,422μm,0.8s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=N,282μm,0.2s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=E,304μm,0.3s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=N,282μm,0.2s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=E,422μm,0.9s | | | | | | |
| RM33 | | | | AML | AML | | |
| | comp=N,374μm,0.9s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.40** | **349** | P | Pg | 01 51 00.2 | +0.2 |
| SNTG | | | | AML | AML | | |
| | comp=E,116μm,0.3s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,200μm,0.6s | | | | | | |
| **CAMP** | **Campotosto** | **0.42** | **141** | ⇓P | Pg | 01 51 00.6 | +0.1 |
| CAMP | | | | AML | AML | | |
| | comp=E,146μm,0.9s | | | | | | |
| CAMP | | | | AML | AML | | |
| | comp=E,146μm,1.1s | | | | | | |
| CAMP | | | | AML | AML | | |
| | comp=N,138μm,1.0s | | | | | | |

*IDC **03** 01:51:19.0±1.0, 10°17N×76°96W, h0km, mb3.7/7, mbtmp3.8/9, ML3.6/2, MS3.1/5, Error ellipse: s-maj=41.6km s-min=19.9km az=21.0*
*NEIC **03** 01:51:20.6±1.4, 10°33N±0°03×76°88W±0°07, h10km±1km, mb4.5/11, Error ellipse: s-maj=11.9km s-min=3.7km az=77.0*
*RSNC **03** 01:51:26.3±0.0, 11°N±6°×7°7W±°, h16km±10km, M3.9, mb4.3, mB5.0, ML3.6, Mw(mB)4.4*
**ISC 03 01:51:24.4±1.9, 10.72N±0°04×76.72W±0°04, h26km±15km, n68, σ1°93/90, mb4.2/14, MS3.0/3, North of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SJCC** | **San Jacinto, C** | **1.72** | **118** | P | **Pn** | **01 51 53.7** | **+1.0** |
| SJCC | | | | S | **Sb** | **01 52 17.4** | **+0.9** |
| **LCBC** | **Los crdobas,** | **1.88** | **169** | P | **Pn** | **01 51 55.5** | **+0.6** |
| LCBC | | | | S | **Sb** | **01 52 20.5** | **-0.7** |
| **CAPC** | **Capurgana** | **2.16** | **197** | P | **Pn** | **01 51 57.8** | **-0.9** |
| CAPC | | | | S | **Sn** | **01 52 22.2** | **-2.5** |
| **SMRC** | **Santa Marta, M** | **2.49** | **80** | P | **Pn** | **01 52 03.3** | **+0.1** |
| SMRC | | | | S | **Sn** | **01 52 33.1** | **+0.4** |
| **ARGC** | **Ariguani, Magd** | **2.58** | **109** | P | **Pn** | **01 52 06.2** | **+1.8** |
| ARGC | | | | S | **Sb** | **01 52 39.0** | **-2.2** |
| **APAC** | **Apartado, Choc** | **2.80** | **177** | P | **Pn** | **01 52 08.4** | **+0.8** |
| APAC | | | | S | **Sn** | **01 52 43.4** | **+2.9** |
| **UREC** | **San Jos de Ur** | **3.17** | **158** | P | **Pn** | **01 52 12.8** | **+0.2** |
| UREC | | | | S | **Sn** | **01 52 49.0** | **-0.6** |
| **BCIP** | **Isla Barro Col** | **3.44** | **244** | | Pn | 01 52 09.4 | -6.8 |
| **BCIP** | **Isla Barro Col** | **3.44** | **244** | P | **Pn** | **01 52 15.0** | **-1.3** |
| BCIP | | | | S | **Sn** | **01 52 50.3** | **-5.9** |
| **ZARC** | **Zaragoza, Cauc** | **3.69** | **150** | P | **Pn** | **01 52 20.2** | **+0.4** |
| ZARC | | | | S | **Sn** | **01 53 01.8** | **-0.7** |
| **PTAC** | **Punta Ardita,** | **3.71** | **197** | P | **Pn** | **01 52 23.7** | **+3.7** |
| PTAC | | | | S | **Sn** | **01 53 03.1** | **+0.2** |
| **DBBC** | **Dabeiba** | **3.71** | **172** | P | **Pn** | **01 52 20.1** | **0.0** |
| DBBC | | | | S | **Sn** | **01 53 01.6** | **-1.5** |
| **CRJC** | **Cerrejon, Guaj** | **3.78** | **85** | P | **Pn** | **01 52 20.2** | **-0.8** |
| CRJC | | | | S | **Sn** | **01 53 03.3** | **-1.4** |
| **OCAC** | **Ocana** | **4.16** | **126** | P | **Pn** | **01 52 26.5** | **+0.2** |
| OCAC | | | | S | **Sn** | **01 53 14.6** | **+0.4** |
| **AZU** | **Azuero** | **4.56** | **231** | P | **Pn** | **01 52 31.9** | **+0.2** |
| AZU | | | | S | **Sn** | **01 53 19.3** | **-4.6** |
| **PTBC** | **PUERTO BERRIO,** | **4.71** | **152** | P | **Pn** | **01 52 34.3** | **+0.4** |
| PTBC | | | | S | **Sn** | **01 53 25.7** | **-2.1** |
| **URIC** | **Uribia, Colomb** | **4.74** | **78** | P | **Pn** | **01 52 33.9** | **-0.2** |
| URIC | | | | S | **Sn** | **01 53 28.9** | **+0.6** |
| **PAMC** | **Pamplona, Colo** | **5.20** | **130** | P | **Pn** | **01 52 43.8** | **+2.9** |
| PAMC | | | | S | **Sn** | **01 53 42.8** | **+2.5** |
| **BAAC** | **Barichara** | **5.39** | **139** | P | **Pn** | **01 52 43.4** | **+0.1** |
| BARC | | | | S | **Sn** | **01 53 46.3** | **+1.7** |
| **NORC** | **Norcasia** | **5.44** | **160** | P | **Pn** | **01 52 46.0** | **+2.1** |
| | 14nm,0.5s,440nm | | | | | | |
| NORC | | | | S | **Sn** | **01 53 43.6** | **-2.1** |
| | 14nm,0.5s,440nm | | | | | | |
| **SPBC** | **San Pablo de B** | **5.67** | **152** | P | **Pn** | **01 52 47.5** | **+0.4** |
| | 8.7nm,0.5s,496nm | | | | | | |
| SPBC | | | | S | **Sn** | **01 53 50.2** | **-1.3** |
| | 8.7nm,0.5s,496nm | | | | | | |
| **RUSC** | **La Rusia** | **5.99** | **143** | P | **Pn** | **01 52 52.2** | **+0.3** |
| | 20nm,0.8s,390nm | | | | | | |
| RUSC | | | | S | **Sn** | **01 54 00.0** | **+0.1** |
| | 20nm,0.8s,390nm | | | | | | |
| **SDV** | **Santo Domingo** | **6.26** | **106** | | **Pn** | **01 52 53.1** | **-2.2** |
| **SDV** | **Santo Domingo** | **6.26** | **106** | Pn | **Pn** | **01 52 56.2** | **+0.8** |
| | 6.0nm,0.3s,baz=286,slow=12,SNR=7.5 | | | | | | |
| SDV | | | | Sn | **Sn** | **01 54 04.8** | **-1.5** |
| | 60nm,0.3s,baz=339,slow=17,SNR=17 | | | | | | |
| SDV | | | | LR | LR | 01 56 19.4 | |
| | comp=Z,154nm,18.4s,baz=256,slow=47 | | | | | | |
| | 18nm,0.4s | | | | | | |
| **ROSC** | **El Rosal** | **6.30** | **158** | Pn | Pn | 01 52 47.9 | -8.2 |
| **ROSC** | **El Rosal** | **6.30** | **158** | Pn | **Pn** | **01 52 58.8** | **+2.8** |
| | 2.5nm,0.3s,baz=7.4,slow=22,SNR=4.5 | | | | | | |
| ROSC | | | | Sn | **Sn** | **01 54 09.1** | **+1.6** |
| | 12nm,0.3s,baz=232,slow=23,SNR=14 | | | | | | |
| **CHIC** | **Chingaza** | **6.73** | **154** | P | **Pn** | **01 53 05.0** | **+3.0** |
| CHIC | | | | S | **Sn** | **01 54 19.7** | **+1.6** |
| **LCR2** | **La Lucha 2** | **7.24** | **263** | | Pn | 01 53 04.2 | -4.6 |
| **MTDJ** | **Mount Denham** | **7.51** | **354** | Pn | **Pn** | **01 53 13.6** | **+1.3** |
| **MTDJ** | **Mount Denham** | **7.51** | **354** | P | **Pn** | **01 53 13.7** | **+1.4** |
| | 58nm,1.2s | | | | | | |
| MTDJ | | | | S | **Sn** | **01 54 31.9** | **-4.8** |
| | 58nm,1.2s | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **7.91** | **145** | P | **Pn** | **01 53 17.5** | **-0.3** |
| | 19nm,0.5s | | | | | | |
| PTGC | | | | S | **Sn** | **01 54 45.0** | **-1.5** |
| | 19nm,0.5s | | | | | | |
| **JTS** | **Las Juntas de** | **8.11** | **268** | Pn | **Pn** | **01 53 17.5** | **-3.0** |
| **JTS** | **Las Juntas de** | **8.11** | **268** | Pn | **Pn** | **01 53 18.6** | **-1.9** |
| | 1.8nm,0.3s,baz=94,slow=24,SNR=8.5 | | | | | | |
| JTS | | | | Sn | Sn | 01 54 43.3 | -8.1 |
| | 1.7nm,0.3s,baz=82,slow=13,SNR=5.8 | | | | | | |
| **JTS** | **Las Juntas de** | **8.11** | **268** | P | **Pn** | **01 53 20.5** | **-0.1** |
| **POPC** | **Popayan, Colom** | **8.12** | **180** | P | **Pn** | **01 53 22.6** | **+1.7** |
| | 7.1nm,1.2s | | | | | | |
| **ACON** | **Acoyapa** | **8.39** | **279** | | Pn | 01 53 18.6 | -5.8 |
| **BAUV** | **El Baul** | **8.73** | **101** | | **Pn** | **01 53 27.9** | **-1.1** |
| **BOAB** | **BOACO BROADBAN** | **8.94** | **282** | Pn | Pn | 01 53 27.1 | -4.7 |
| **CHIV** | **Chivirico** | **9.21** | **2** | Pn | **Pn** | **01 53 38.8** | **+3.2** |
| **SDDR** | **Presa de Saban** | **9.75** | **32** | Pn | **Pn** | **01 53 44.5** | **+1.5** |
| **SDDR** | **Presa de Saban** | **9.75** | **32** | P | **Pn** | **01 53 44.5** | **+1.5** |
| SDDR | | | | S | **Sn** | **01 55 26.9** | **-4.8** |
| **PCRV** | **Puerto La Cruz** | **11.89** | **91** | Pn | **Pn** | **01 54 11.9** | **-0.6** |
| | 0.7nm,0.3s,baz=297,slow=8.0,SNR=2.0 | | | | | | |
| PCRV | | | | Sn | **Sn** | **01 56 21.4** | **-3.0** |
| | 1.1nm,0.3s,baz=142,slow=20,SNR=6.5 | | | | | | |
| | 4.7nm,0.7s | | | | | | |
| **TEIG** | **Tepich** | **14.60** | **312** | LR | LR | 02 00 45.0 | |
| | comp=Z,58nm,18.6s,baz=231,slow=38 | | | | | | |

**MACA** **Manacapuru-AM** **21.09 130** P **P** **01 56 02.8 -4.2**
MACA IAmb IAmb 01 56 10.3
comp=Z,11nm,0.6s
**NNA** **Nana** **22.56 180** LR LR 02 07 17.1
comp=Z,50nm,21.6s,baz=24,slow=44
**ETMB** **Extrema** **22.92 153** P **P** **01 56 21.5 -5.0**
**MDP** **Montagnes des** **24.48 101** LR LR 02 07 57.3
comp=Z,55nm,19.2s,baz=237,slow=41
**LPAZ** **La Paz** **28.15 162** LR LR 02 09 12.0
comp=Z,35nm,19.0s,baz=60,slow=39
**PARMO** **Parma** **28.39 338** P **P** **01 57 17.1 +0.5**
**TXAR** **Lajitas Array** **31.24 310** P **P** **01 57 40.2 -1.9**
**TXAR** **Lajitas Array** **31.24 310** P **P** **01 57 43.0 +0.8**
comp=Z,0.4nm,0.6s,baz=138,slow=9.1,SNR=5.9
TXAR PcP **PcP** **02 00 36.2 -0.3**
comp=Z,0.2nm,0.7s,baz=99,slow=5.6,SNR=2.3
comp=Z,0.4nm,0.6s
**SMWD** **Samnorwood** **32.37 322** P **P** **01 57 52.0 0.0**
SMWD IAmb IAmb 01 57 53.4
comp=Z,6.2nm,0.8s
**SDCO** **Great Sand Dun** **37.30 321** P **P** **01 58 34.4 -0.4**
**PDAR** **Pinedale Array** **42.86 324** P **P** **01 59 21.6 +0.9**
comp=Z,1.0nm,0.8s,baz=136,slow=12,SNR=6.6
PDAR PcP **PcP** **02 01 11.5 0.0**
comp=Z,0.4nm,0.6s,baz=125,slow=5.6,SNR=3.4
comp=Z,1.0nm,0.8s
**NVAR** **Mina Array Bea** **46.23 314** P **P** **01 59 48.5 +0.7**
comp=Z,0.7nm,0.8s,baz=152,slow=9.8,SNR=5.7
NVAR PcP **PcP** **02 01 23.6 +0.4**
comp=Z,0.5nm,0.7s,baz=133,slow=5.3,SNR=3.6
comp=Z,0.7nm,0.8s
**YKA** **Yellowknife Ar** **58.41 340** P **P** **02 01 18.2 +0.8**
comp=Z,1.4nm,0.7s,baz=138,slow=5.9,SNR=4.1
comp=Z,1.4nm,0.7s
**M30M** **Minto, Yukon** **67.00 334** P **P** **02 02 15.2 +0.4**
M30M IAmb IAmb 02 02 17.0
comp=Z,4.3nm,0.8s
**ESDC** **Sonseca Array** **69.98 52** P **P** **02 02 36.2 +2.3**
comp=Z,0.8nm,0.9s,baz=263,slow=10.0,SNR=3.2
comp=Z,0.8nm,0.9s
**E28M** **Babbage River** **70.33 340** P **P** **02 02 35.7 +0.2**
E28M IAmb IAmb 02 02 36.7
comp=Z,3.0nm,0.7s
**ILAR** **Eielson Array** **71.95 335** P **P** **02 02 46.0 +0.7**
comp=Z,0.6nm,0.8s,baz=98,slow=4.4,SNR=6.2
comp=Z,0.6nm,0.8s
**RND** **Reindeer** **72.50 333** P **P** **02 02 49.4 +0.7**
**D25K** **Kavik River** **72.90 340** P **P** **02 02 51.3 +0.4**
D25K IAmb IAmb 02 02 52.2
comp=Z,2.4nm,0.8s
**BPAW** **Bear Paw Mtn.** **73.56 334** P **P** **02 02 55.1 +0.2**
BPAW IAmb IAmb 02 02 56.7
comp=Z,4.9nm,0.9s
**J20K** **Nowinta River** **74.94 334** P **P** **02 03 03.2 +0.3**
J20K IAmb IAmb 02 03 04.5
comp=Z,4.9nm,0.8s
**TORD** **Torodi Ar. Bea** **76.46 79** P **P** **02 03 13.9 +1.3**
comp=Z,0.5nm,0.5s,baz=296,slow=6.4,SNR=8.8
comp=Z,0.5nm,0.5s
**ASAR** **Alice Springs** **148.12 242** PKPbc **PKPdf** **02 11 05.6 +0.1**
comp=Z,1.7nm,0.9s,baz=110,slow=2.3,SNR=9.7
**WRA** **Warramunga Arr** **148.73 249** PKPbc **PKPdf** **02 11 06.7 +0.2**
comp=Z,1.1nm,0.8s,baz=97,slow=2.8,SNR=6.5
**CMAR** **Chiang Mai Arr** **150.69 8** PKPbc **PKPbc** **02 11 13.6 -1.6**
comp=Z,0.6nm,0.3s,baz=343,slow=2.8,SNR=5.3

*SKHL **03** 02:02:05.5±0.3, 43.°90N× 146.°60E, h79km±2km, mb4.8/3*
*JMA **03** 02:02:05.0±0.3, 43.°9N±0.°8×14.°7E±.°, h79km±2km,*
*MV3.6/23, NEAR KUNASHIRI ISLAND*
**ISC 03 02:02:05.7±1.7, 43.°88N±0.°07×146.°56E±0.°06, h74km±11km, n14, σ0ˢ32/25, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.20** | **92** | *i* P | | **Pn** | **02 02 16.9** | **+0.2** |
| SHO | | | | AMB | | AMB | 02 02 17.3 | |
| | 400nm,0.2s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **02 02 24.5** | **-0.3** |
| SHO | | | | A | | A | 02 02 26.4 | |
| | 3μm,0.4s | | | | | | | |
| SHO | | | | A | | A | 02 02 26.4 | |
| | 3μm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.53** | **288** | *i* P | | **Pn** | **02 02 18.9** | **-0.2** |
| YUK | | | | AMB | | AMB | 02 02 19.3 | |
| | 1μm,0.2s | | | | | | | |
| YUK | | | | *i* S | | **Sn** | **02 02 29.1** | **+0.1** |
| YUK | | | | A | | A | 02 02 29.9 | |
| | 3μm,0.3s | | | | | | | |
| YUK | | | | A | | A | 02 02 29.9 | |
| | 4μm,0.3s | | | | | | | |
| **NEM2** | **Nemuro 2** | **0.78** | **230** | P | | **Pn** | **02 02 21.8** | **0.0** |
| NEM2 | | | | S | | **Sn** | **02 02 34.0** | **+0.3** |
| **NMR** | **Nemuro--Hokkai** | **0.79** | **230** | *i* P | | **Pn** | **02 02 21.8** | **-0.1** |
| NMR | | | | *i* S | | **Sn** | **02 02 33.9** | **+0.1** |
| **JRA** | **Rausu** | **1.04** | **274** | P | | **Pn** | **02 02 24.7** | **-0.1** |
| JRA | | | | *e*S | | **Sn** | **02 02 39.7** | **+0.5** |
| **JNSB** | **Nemuroshibetsu** | **1.13** | **265** | P | | **Pn** | **02 02 26.2** | **+0.2** |
| **JKHN** | **Kushirohamanak** | **1.29** | **233** | P | | **Pn** | **02 02 28.0** | **-0.1** |
| JKHN | | | | S | | **Sn** | **02 02 45.3** | **+0.4** |
| **JNK** | **Nakash** | **1.37** | **258** | *i* P | | **Pn** | **02 02 28.8** | **-0.3** |
| **AKK** | **Akkeshi** | **1.52** | **236** | *e*P | | **Pn** | **02 02 30.6** | **-0.4** |
| AKK | | | | *e*S | | **Sn** | **02 02 49.6** | **-0.5** |
| **JAK** | **Akkeshi** | **1.62** | **238** | *i* P | | **Pn** | **02 02 31.9** | **-0.4** |
| JAK | | | | *e*S | | **Sn** | **02 02 52.3** | **-0.2** |
| **KUR** | **Kuril'sk** | **1.65** | **34** | *e*P | | **Pn** | **02 02 32.7** | **0.0** |
| KUR | | | | AMB | | AMB | 02 02 33.0 | |
| | 120nm,0.4s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **02 02 53.2** | **0.0** |
| KUR | | | | A | | A | 02 02 54.2 | |
| | 1μm,0.4s | | | | | | | |
| KUR | | | | A | | A | 02 02 54.2 | |
| | 450nm,0.4s | | | | | | | |
| **JTKR** | **Abashiri--Toko** | **1.92** | **274** | P | | **Pn** | **02 02 36.2** | **-0.1** |
| JTKR | | | | *e*S | | **Sn** | **02 02 59.1** | **-0.5** |
| **JAR** | **Ashorobuto** | **2.11** | **255** | P | | **Pn** | **02 02 39.4** | **+0.5** |
| **JOB** | **Onbets** | **2.21** | **245** | P | | **Pn** | **02 02 40.5** | **+0.3** |
| JOB | | | | *e*S | | **Sn** | **02 03 07.0** | **+0.3** |

*IDC **03** 02:21:38.3±5.6, 5.°95S×154.°73E, h182km±51km, mb3.6/11,*
*mbtmp4.1/12, Error ellipse: s-maj=24.3km s-min=18.3km*
*az=57.0*
**ISC 03 02:21:40.3±0.8, 6.°0S±0.°2×154.°7E±0.°2, h200km, n13, σ0ˢ73/14, mb3.8/10, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **19.59** | **146** | P | | **P** | **02 25 52.7** | **-0.7** |
| | 5.8nm,0.5s,baz=285,slow=11,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.17** | **233** | P | | **P** | **02 26 38.7** | **+0.2** |
| | 1.4nm,0.5s,baz=57,slow=10,SNR=38 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **02 30 13.9** | **+0.1** |
| | 0.3nm,0.3s,baz=49,slow=2.7,SNR=4.9 | | | | | | | |
| | 1.4nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **26.64** | **227** | P | | **P** | **02 27 00.1** | **-0.6** |
| | 0.3nm,0.3s,baz=57,slow=9.2,SNR=3.0 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **02 30 19.6** | **+0.2** |
| | 0.6nm,0.6s,baz=67,slow=2.3,SNR=7.0 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **60.12** | **295** | P | | **P** | **02 31 27.4** | **+0.3** |
| | 1.2nm,0.3s,baz=134,slow=5.2,SNR=4.2 | | | | | | | |
| | 1.2nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **68.36** | **327** | P | | **P** | **02 32 20.6** | **+0.4** |
| | 0.8nm,0.5s,baz=120,slow=5.3,SNR=4.0 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |
| **VNDA** | **Vanda** | **71.58** | **178** | P | | **P** | **02 32 39.8** | **+0.6** |
| | 0.7nm,0.9s,baz=297,slow=3.8,SNR=3.7 | | | | | | | |
| | 0.7nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **82.48** | **319** | P | | **P** | **02 33 40.9** | **+0.4** |
| | 1.4nm,0.6s,baz=98,slow=6.1,SNR=14 | | | | | | | |
| | 1.4nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **83.21** | **326** | P | | **P** | **02 33 42.6** | **-1.4** |
| | 0.6nm,0.3s,baz=126,slow=6.3,SNR=5.9 | | | | | | | |
| | 0.6nm,0.3s | | | | | | | |
| **QSPA** | **South Pole Qui** | **83.97** | **180** | P | | **P** | **02 33 48.3** | **+0.4** |
| | 1.4nm,0.4s,baz=187,slow=1.7,SNR=32 | | | | | | | |
| | 1.4nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **85.92** | **322** | P | | **P** | **02 33 56.9** | **-0.8** |
| | 0.4nm,0.5s,baz=102,slow=4.8,SNR=5.9 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.32** | **52** | P | | **P** | **02 34 24.3** | **+0.5** |
| | 1.1nm,0.9s,baz=244,slow=7.5,SNR=5.9 | | | | | | | |
| | 1.1nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **98.24** | **48** | P | | Pdif | 02 34 55.0 | -0.3 |
| | 0.2nm,0.6s,baz=60,slow=3.6,SNR=3.4 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.49** | **287** | PKPbc | | **PKiKP** | **02 41 13.1** | **-1.0** |
| | 0.3nm,0.3s,baz=36,slow=2.6,SNR=11 | | | | | | | |

*CRAAG **03** 02:32:45.5, 35.°12N×1.°74W, Ml2.6, Algerie 04km NW*
*Bordj-Arima*
*CNRM **03** 02:32:49.5, 35.°20N×1.°81W, h14km, ML2.1*
*MDD **03** 02:32:49.2±1.4, 35.°06N×1.°58W, h29km±33km, mb_Lg2.5/4,*
*Error ellipse: s-maj=31.5km s-min=7.2km az=152.0*
**ISC 03 02:32:46.7±1.4, 35.°14N±0.°04×1.°73W±0.°03, h9km±12km, n20, σ1ˢ36/26, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OLHC** | **Oulhaca** | **0.28** | **66** | P | | **Pg** | **02 32 50.9** | **-1.4** |
| **TAF** | **Taforalt** | **0.65** | **240** | P | | **Pn** | **02 33 01.3** | **-0.8** |
| **TAF** | **Taforalt** | **0.65** | **240** | S | | **Sn** | **02 33 11.7** | **-0.9** |
| **OTSS** | **Djebel Tessala** | **0.78** | **79** | P | | **Pb** | **02 33 02.8** | **+0.2** |
| **EMEL** | **Melilla** | **1.01** | **280** | S | | **Sn** | **02 33 23.0** | **+1.4** |
| EMEL | | | | *i* Vmb_Lg | | | 02 33 26.8 | |
| **GOG** | **Mont Gurugu** | **1.04** | **275** | P | | **Pb** | **02 33 07.2** | **+0.3** |
| **GOG** | **Mont Gurugu** | **1.04** | **275** | S | | **Sn** | **02 33 22.5** | **+0.2** |
| **OBHAM** | **Bir El Hammam** | **1.26** | **124** | P | | **Pb** | **02 33 10.0** | **-0.7** |
| **ODJA** | **Bouhanifia** | **1.31** | **81** | P | | **Pg** | **02 33 15.0** | **+3.1** |
| **PALE** | **Palemas** | **1.81** | **273** | P | | **Pg** | **02 33 21.6** | **+0.2** |
| **AKLM** | **AKL** | **1.86** | **251** | P | | **Pb** | **02 33 20.3** | **-0.6** |
| **ENIJ** | **Nijar** | **1.87** | **348** | P | | **Pn** | **02 33 18.6** | **-0.3** |
| ENIJ | | | | S | | **Sn** | **02 33 40.8** | **-1.9** |
| ENIJ | | | | *i* Vmb_Lg | | | 02 33 42.5 | |
| **EBER** | **Berja** | **1.99** | **332** | P | | **Pn** | **02 33 21.9** | **+1.1** |
| EBER | | | | S | | **Sn** | **02 33 44.9** | **-1.1** |
| **ELGU** | **Los Guajares,** | **2.31** | **319** | P | | **Pn** | **02 33 24.9** | **-0.2** |
| ELGU | | | | S | | **Sn** | **02 33 52.6** | **-1.1** |
| ELGU | | | | *i* Vmb_Lg | | | 02 33 53.7 | |
| **EMUR** | **La Murta** | **2.73** | **8** | P | | **Pn** | **02 33 30.5** | **-0.3** |
| EMUR | | | | S | | **Sn** | **02 34 00.9** | **-3.0** |
| **EQES** | **Quesada** | **2.87** | **338** | P | | **Pn** | **02 33 34.7** | **+1.9** |
| EQES | | | | S | | **Sn** | **02 34 08.5** | **+0.9** |
| EQES | | | | *i* Vmb_Lg | | | 02 34 14.6 | |
| **FIGM** | **Figuig** | **3.02** | **172** | P | | **Pb** | **02 33 39.8** | **-1.0** |
| **MDT** | **Midelt** | **3.33** | **227** | P | | **Pn** | **02 33 39.9** | **+0.8** |
| **MD31** | **MD31** | **3.38** | **229** | P | | **Pn** | **02 33 40.5** | **+0.6** |
| **ETOB** | **Tobarra** | **3.50** | **2** | P | | **Pn** | **02 33 42.4** | **+0.9** |
| ETOB | | | | S | | **Sn** | **02 34 22.3** | **-0.9** |

*BUG **03** 02:57:44.5, 51.°58N×6.°87E, h1km, MD2.7/12, ML2.7/4*
*BNS **03** 02:57:44.8±0.5, 51.°57N×6.°91E, h1km±7km, ML2.1*
*BGR **03** 02:57:45.9±0.3, 51.°54N×6.°92E, h1km, ML2.2/10, Error*
*ellipse: s-maj=5.6km s-min=5.6km az=95.0*
*LDG **03** 02:57:45.1±0.2, 51.°57N×6.°71E, h1km, Ml2.8/21, Error*
*ellipse: s-maj=3.3km s-min=2.6km az=31.0, Suspected*
*Mining induced.*
*STR **03** 02:57:47.5±1.1, 52.°N±8.°×±.°, h10km, MLv2.8/19, Error*
*ellipse: s-maj=0.0km s-min=0.0km az=20.3, preliminary*
**ISC 03 02:57:42.6±0.8, 51.°58N±0.°02×6.°69E±0.°02, h0km, n86, σ1ˢ32/131, Germany**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BZER** | **Hinxe** | **0.12** | **71** | Pg | | **Pg** | **02 57 45.0** | **+0.2** |
| BZER | | | | Sg | | **Sg** | **02 57 46.3** | **0.0** |
| **LAUG** | **Laupendahl** | **0.28** | **146** | *e*Pg | | **Pg** | **02 57 49.0** | **+1.0** |
| **HES** | **Velbert-Hesper** | **0.31** | **135** | *e*Pg | | **Pg** | **02 57 49.4** | **+1.0** |
| HES | | | | *e*Sg | | **Sg** | **02 57 53.0** | **+0.6** |
| | 134nm,0.5s | | | | | | | |
| **BAVN** | **Auguste-Victor** | **0.31** | **60** | Pg | | **Pg** | **02 57 49.3** | **+0.8** |
| BAVN | | | | Sg | | **Sg** | **02 57 53.4** | **+0.9** |
| **BULI** | **Ruhr-Universit** | **0.38** | **110** | Pg | | **Pg** | **02 57 50.4** | **+0.6** |
| BULI | | | | Sg | | **Sg** | **02 57 55.1** | **+0.4** |
| **BKLB** | **Ruhr-Universit** | **0.39** | **111** | Pg | | **Pg** | **02 57 50.6** | **+0.6** |
| **BUG** | **Bochum--Univer** | **0.39** | **111** | Pg | | **Pg** | **02 57 50.6** | **+0.6** |
| BUG | | | | Sg | | **Sg** | **02 57 55.0** | **0.0** |
| **WTSB** | **Winterswijk** | **0.39** | **10** | *e*Pg | | **Pb** | **02 57 52.1** | **-0.2** |
| WTSB | | | | *e*Sg | | **Sb** | **02 58 00.7** | **+1.8** |
| **BTEZ** | **Ruhr-Universit** | **0.39** | **110** | Pg | | **Pg** | **02 57 50.9** | **+0.8** |
| **OPLO** | **Oploo** | **0.55** | **271** | *e*Sg | | **Sn** | **02 58 10.4** | **+2.9** |
| **ENTS** | **Ennepetalsperr** | **0.56** | **127** | *e*Pg | | **Pg** | **02 57 53.8** | **+0.4** |
| ENTS | | | | *e*Sg | | **Sg** | **02 58 00.6** | **-0.1** |
| **PLH** | **Pulheim** | **0.58** | **172** | *e*Pg | | **Pb** | **02 57 55.9** | **+0.2** |
| PLH | | | | *e*Sg | | **Sb** | **02 58 04.1** | **-0.4** |
| **HOBG** | **Hohbusch** | **0.72** | **146** | *e*Pg | | **Pg** | **02 57 57.5** | **+1.1** |
| **SORT** | **Sorpetalsperre** | **0.83** | **106** | *e*Pg | | **Pg** | **02 57 58.2** | **-0.3** |
| SORT | | | | *e*Sg | | **Sg** | **02 58 08.0** | **-1.4** |
| | 76nm,0.3s | | | | | | | |
| **WBS** | **Wahnbachtalspe** | **0.86** | **154** | *e*Pg | | **Pb** | **02 58 00.2** | **-0.2** |
| WBS | | | | *e*Sg | | **Sg** | **02 58 11.5** | **+1.2** |
| | 50nm,0.3s | | | | | | | |
| **GSH** | **Grosshau** | **0.87** | **193** | *e*Pg | | **Pn** | **02 58 02.0** | **-0.1** |
| GSH | | | | *e*Sg | | **Sb** | **02 58 14.4** | **+1.6** |
| | 62nm,0.3s | | | | | | | |
| **HGN** | **Heimansgroeve** | **0.95** | **211** | Pg | | **Pn** | **02 58 04.0** | **+0.9** |
| HGN | | | | Sg | | **Sn** | **02 58 17.4** | **0.0** |
| **DREG** | **Dreilaegerbach** | **0.97** | **198** | *e*Pg | | **Pn** | **02 58 03.7** | **+0.3** |
| **KLL** | **Kalltalsperre** | **0.97** | **195** | *e*Pg | | **Pn** | **02 58 03.8** | **+0.3** |
| KLL | | | | *e*Sg | | **Sn** | **02 58 17.7** | **-0.2** |
| **IBBN** | **Ibbenburen** | **0.98** | **42** | Pg | | **Pg** | **02 58 01.7** | **+0.4** |
| IBBN | | | | Sg | | **Sb** | **02 58 16.1** | **+0.2** |
| **IBBE** | **Ibbenbueren Ea** | **0.99** | **43** | Pg | | **Pn** | **02 58 03.3** | **-0.4** |
| IBBE | | | | Sg | | **Sb** | **02 58 16.7** | **+0.5** |
| **MEM** | **Membach** | **1.07** | **204** | *e*Pg | | **Pn** | **02 58 05.5** | **+0.7** |
| MEM | | | | *e*Sg | | **Sn** | **02 58 20.6** | **+0.3** |
| **AHRW** | **Bad Neuenahr-A** | **1.07** | **167** | *e*Pg | | **Pn** | **02 58 04.9** | **+0.1** |
| AHRW | | | | *e*Sg | | **Sn** | **02 58 20.6** | **+0.2** |
| **OLFT** | **Oleftalsperre** | **1.10** | **189** | *e*Pg | | **Pn** | **02 58 06.0** | **+0.7** |
| OLFT | | | | *e*Sg | | **Sn** | **02 58 21.2** | **0.0** |
| **KASTN** | **Kahler Asten** | **1.15** | **109** | Pg | | **Pg** | **02 58 04.3** | **-0.3** |
| KASTN | | | | Sg | | **Sg** | **02 58 18.6** | **-0.7** |
| **BHE** | **Schloss Buerre** | **1.27** | **166** | *e*Pg | | **Pn** | **02 58 08.0** | **+0.4** |
| BHE | | | | *e*Sg | | **Sb** | **02 58 24.9** | **+0.7** |
| | 26nm,0.3s | | | | | | | |
| **HILG** | **Hillesheim** | **1.29** | **180** | *e*Pg | | **Pn** | **02 58 08.7** | **+0.8** |
| **KOE** | **Koeppel** | **1.33** | **150** | *e*Pg | | **Pg** | **02 58 08.2** | **+0.1** |
| **LOH** | **Wallersheim-Lo** | **1.41** | **184** | *e*Pg | | **Pb** | **02 58 10.7** | **+1.0** |
| LOH | | | | *e*Sg | | **Sn** | **02 58 29.5** | **+0.8** |
| | 47nm,0.3s | | | | | | | |
| **BGG** | **Burgeitz** | **1.44** | **163** | *e*Pg | | **Pn** | **02 58 10.2** | **+0.3** |
| **RCHB** | **Rochefort** | **1.70** | **214** | P | | **Pg** | **02 58 15.9** | **+0.7** |
| **RCHB** | **Rochefort** | **1.70** | **214** | S | | **Sg** | **02 58 38.2** | **+0.9** |
| **RCHB** | **Rochefort** | **1.70** | **214** | *e*Sg | | **Sg** | **02 58 38.1** | **+0.8** |
| **TNS** | **Taunus Mts** | **1.76** | **140** | Pn | | **Pn** | **02 58 15.1** | **+0.8** |
| TNS | | | | Sg | | **Sn** | **02 58 37.3** | **-0.1** |
| **ABH** | **Alteburg** | **1.79** | **162** | P | | **Pn** | **02 58 15.1** | **+0.3** |
| **ABH** | **Alteburg** | **1.79** | **162** | S | | **Sn** | **02 58 38.2** | **0.0** |
| **GIVF** | **Givet** | **1.90** | **219** | *e*Pn | | **Pn** | **02 58 16.6** | **+0.4** |
| GIVF | | | | *e*Sn | | **Sn** | **02 58 39.9** | **-0.9** |
| | 40nm,0.5s | | | | | | | |
| **WLF** | **Walferdange** | **1.95** | **190** | P | | **Pg** | **02 58 20.8** | **+0.9** |
| **WLF** | **Walferdange** | **1.95** | **190** | S | | **Sb** | **02 58 44.7** | **+0.8** |
| **WLF** | **Walferdange** | **1.95** | **190** | *e*Pg | | **Pg** | **02 58 21.0** | **+1.1** |
| **DOU** | **Dourbes** | **2.00** | **223** | P | | **Pb** | **02 58 19.3** | **-0.5** |
| DOU | | | | S | | **Sg** | **02 58 46.1** | **-0.6** |
| **BAIF** | **Baives** | **2.19** | **227** | *e*Pn | | **Pn** | **02 58 20.6** | **+0.3** |
| **BAIF** | **Baives** | **2.19** | **227** | *e*Pg | | **Pg** | **02 58 25.5** | **+0.9** |
| BAIF | | | | *e*Sn | | **Sn** | **02 58 47.0** | **-1.1** |
| | 22nm,0.6s | | | | | | | |
| **CLZ** | **Clausthal** | **2.30** | **82** | Pn | | **Pn** | **02 58 20.6** | **-1.2** |
| CLZ | | | | *e*Sg | | **Sn** | **02 58 52.4** | **+1.5** |
| **VOEL** | **Voellerdingen** | **2.63** | **174** | P | | **Pn** | **02 58 27.4** | **+1.0** |
| VOEL | | | | S | | **Sn** | **02 58 59.0** | **+0.1** |
| **LEMB** | **Lembach** | **2.64** | **165** | P | | **Pn** | **02 58 28.9** | **+2.4** |
| LEMB | | | | S | | **Sn** | **02 58 59.8** | **+0.6** |
| **CIEL** | **Dossenheim-sur** | **2.79** | **171** | P | | **Pn** | **02 58 30.0** | **+1.6** |
| CIEL | | | | S | | **Sn** | **02 59 05.1** | **+2.3** |
| **MANO** | **Manonville** | **2.80** | **190** | P | | **Pn** | **02 58 30.1** | **+1.5** |
| **HOHE** | **HOHENGOEFT** | **2.97** | **170** | P | | **Pn** | **02 58 31.6** | **+0.7** |
| **PAGF** | **Fort de Pagny** | **3.10** | **192** | *e*Pn | | **Pn** | **02 58 33.3** | **+0.6** |
| **PAGF** | **Fort de Pagny** | **3.10** | **192** | *e*Pg | | **Pg** | **02 58 42.1** | **+0.2** |
| PAGF | | | | *e*Sn | | **Sn** | **02 59 08.6** | **-1.7** |
| | 16nm,0.8s | | | | | | | |
| **SAVF** | **Savonnieres en** | **3.14** | **199** | *e*Pg | | **Pg** | **02 58 41.7** | **-1.0** |
| SAVF | | | | *e*Sn | | **Sn** | **02 59 09.8** | **-1.6** |
| | 10nm,0.5s | | | | | | | |
| **XAFF** | **Xaffevillers** | **3.18** | **181** | P | | **Pn** | **02 58 34.7** | **+0.9** |
| **CDF** | **Champ du Feu** | **3.20** | **173** | *e*Pn | | **Pn** | **02 58 34.2** | **0.0** |
| CDF | | | | *e*Sn | | **Sn** | **02 59 10.9** | **-2.1** |
| | 11nm,0.8s | | | | | | | |
| **OPP** | **Oppenau** | **3.24** | **162** | P | | **Pn** | **02 58 35.7** | **+1.1** |
| **OPP** | **Oppenau** | **3.24** | **162** | S | | **Sn** | **02 59 11.6** | **-2.2** |
| **MEZF** | **Maizieres J'vi** | **3.26** | **200** | *e*Pn | | **Pn** | **02 58 34.9** | **0.0** |
| **MEZF** | **Maizieres J'vi** | **3.26** | **200** | *e*Pg | | **Pg** | **02 58 45.3** | **+0.2** |
| MEZF | | | | *e*Sn | | **Sn** | **02 59 12.3** | **-2.1** |
| | 14nm,0.6s | | | | | | | |
| **ELSH** | **Elham, Standar** | **3.51** | **265** | P | | **Pn** | **02 58 41.5** | **+3.1** |
| **SFTF** | **Sexfontaines** | **3.55** | **198** | *e*Pg | | **Pg** | **02 58 50.6** | **+0.1** |
| SFTF | | | | *e*Sn | | **Sn** | **02 59 19.2** | **-2.3** |
| | 2.5nm,0.3s | | | | | | | |
| **HAU** | **Haudompre** | **3.59** | **184** | *e*Pn | | **Pn** | **02 58 39.9** | **+0.4** |
| **HAU** | **Haudompre** | **3.59** | **184** | *e*Pg | | **Pg** | **02 58 52.1** | **+0.8** |
| HAU | | | | *e*Sn | | **Sn** | **02 59 20.1** | **-2.5** |
| | 3.2nm,0.3s | | | | | | | |
| **HINF** | **Hinteralfeld** | **3.77** | **178** | *e*Pn | | **Pn** | **02 58 42.7** | **+0.7** |
| **HINF** | **Hinteralfeld** | **3.77** | **178** | *e*Pg | | **Pg** | **02 58 54.2** | **-0.6** |
| HINF | | | | *e*Sn | | **Sn** | **02 59 25.6** | **-1.5** |
| | 4.6nm,0.5s | | | | | | | |
| **GUT** | **Gutenstein** | **3.85** | **155** | P | | **Pn** | **02 58 43.7** | **+0.6** |
| **RONF** | **Ronchamp** | **3.88** | **180** | P | | **Pn** | **02 58 44.1** | **+0.7** |
| **SLE** | **Schleitheim** | **4.00** | **162** | P | | **Pn** | **02 58 45.6** | **+0.5** |
| **SULZ** | **Cheisacher** | **4.16** | **167** | P | | **Pn** | **02 58 48.0** | **+0.6** |
| **BOURR** | **Bourrignon** | **4.21** | **175** | P | | **Pn** | **02 58 49.3** | **+1.2** |
| **BALST** | **Balsthal** | **4.30** | **171** | P | | **Pn** | **02 58 49.3** | **0.0** |
| **CHMF** | **Charmoille** | **4.34** | **180** | P | | **Pn** | **02 58 50.6** | **+0.7** |
| **BRG** | **Berggiesshubel** | **4.61** | **96** | Sg | | **Sg** | **03 00 09.1** | **-1.5** |
| BRG | | | | Amp | | | 03 00 14.3 | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **BRANT** | **Les Verrieres** | **4.65** | **182** | P | | **Pn** | **02 58 55.1** | **+0.9** |
| **LOR** | **Lormes** | **4.70** | **204** | *e*Pn | | **Pn** | **02 58 55.3** | **+0.6** |
| | baz=23 | | | | | | | |
| LOR | | | | *e*Sn | | **Sn** | **02 59 46.5** | **-3.4** |
| | comp=Z,5.5nm,0.6s | | | | | | | |
| **LOR** | **Lormes** | **4.70** | **204** | P | | **Pn** | **02 58 55.6** | **+0.9** |
| **SSF** | **Saint Saulge** | **4.98** | **206** | *e*Pn | | **Pn** | **02 58 59.2** | **+0.6** |
| SSF | | | | *e*Sn | | **Sn** | **02 59 54.1** | **-2.8** |
| | comp=Z,11nm,0.9s | | | | | | | |
| SSF | | | | *e*Sg | | **Sg** | **03 00 23.4** | **+0.9** |
| **CABF** | **La Chapelle** | **4.99** | **185** | *e*Pn | | **Pn** | **02 58 58.5** | **-0.3** |
| **HYF** | **Humbligny** | **5.06** | **213** | *e*Sn | | **Sn** | **02 59 56.2** | **-2.7** |
| **AVF** | **Avril sur Loir** | **5.27** | **206** | *e*Pn | | **Pn** | **02 59 02.9** | **+0.3** |
| AVF | | | | *e*Sn | | **Sn** | **03 00 01.1** | **-2.9** |
| | comp=Z,20nm,1.4s | | | | | | | |
| **SMF** | **Signal de Mont** | **5.29** | **202** | *e*Pn | | **Pn** | **02 59 02.7** | **-0.1** |
| SMF | | | | *e*Sn | | **Sn** | **03 00 01.3** | **-3.0** |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **LDF** | **La Druitiere** | **5.31** | **238** | *e*Pn | | **Pn** | **02 59 04.1** | **+1.0** |
| LDF | | | | *e*Sn | | **Sn** | **03 00 01.6** | **-3.3** |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **FLN** | **La Foliniere** | **5.41** | **241** | *e*Pn | | **Pn** | **02 59 04.8** | **+0.4** |
| | baz=54 | | | | | | | |
| FLN | | | | *e*Sn | | **Sn** | **03 00 03.6** | **-3.7** |
| | comp=Z,1.3nm,0.2s | | | | | | | |
| **BGF** | **Bois d'Agland** | **5.63** | **208** | *e*Pn | | **Pn** | **02 59 07.9** | **+0.4** |
| **BGF** | **Bois d'Agland** | **5.63** | **208** | *e*Pg | | **Pg** | **02 59 28.6** | **-1.8** |
| BGF | | | | *e*Sn | | **Sn** | **03 00 08.7** | **-4.1** |
| | comp=Z,9.5nm,0.5s | | | | | | | |
| **GRR** | **Gorron** | **5.83** | **240** | *e*Pn | | **Pn** | **02 59 10.2** | **0.0** |
| GRR | | | | *e*Sn | | **Sn** | **03 00 13.9** | **-3.7** |
| | comp=Z,5.9nm,0.2s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **6.07** | **211** | *e*Pn | | **Pn** | **02 59 14.1** | **+0.6** |

*IDC **03** 03:04:11.0±5.1, 36.°20N×70.°81E, h158km±46km, mb3.4/9,*
*mbtmp3.9/13, MS3.0/2, Error ellipse: s-maj=35.2km*
*s-min=17.6km az=30.0*
*NEIC **03** 03:04:16.1±1.2, 36.°52N±0.°07×70.°76E±0.°08, h192km±5km,*
*mb4.2/14, Error ellipse: s-maj=10.2km s-min=9.1km*
*az=164.0*
*NNC **03** 03:04:19.8±2.5, 36.°87N×70.°73E, h194km±34km, mb3.1,*
*mpv4.1, Error ellipse: s-maj=25.0km s-min=18.8km*
*az=170.0*
**ISC 03 03:04:14.3±0.6, 36.°42N±0.°06×70.°83E±0.°06, h188km, n65, σ1ˢ68/70, mb3.8/12, 2C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KBL** | **Kabul** | **2.38** | **218** | | | **Pn** | **03 04 58.2** | **+1.9** |
| **CHGR** | **Chuyangaron** | **2.59** | **330** | Pn | | **Pn** | **03 04 59.3** | **+0.6** |
| **GAR** | **Garm** | **2.60** | **351** | Pn | | **Pn** | **03 04 60.0** | **+1.2** |
| **SIMJ** | **Simiganj** | **2.66** | **328** | Pn | | **Pn** | **03 05 00.1** | **+0.6** |
| **DRK** | **Karam

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARU** | **Arti** | **21.66** | **341** | P | **P** | **03 08 50.4** | **+0.6** |
| ARU | | | | IAmb | IAmb | 03 08 53.3 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| **ARU** | **Arti** | **21.66** | **341** | P | **P** | **03 08 51.9** | **+2.1** |
| | comp=Z,3.8nm,0.4s,baz=89,slow=6.4,SNR=5.9 | | | | | | |
| | comp=Z,3.8nm,0.4s | | | | | | |
| **GAZ** | **Gaziantep** | **26.85** | **282** | P | **P** | **03 09 38.2** | **+0.7** |
| GAZ | | | | IAmb | IAmb | 03 10 16.3 | |
| | comp=Z,5.4nm,1.0s | | | | | | |
| **PALK** | **Pallekele** | **30.39** | **160** | LR | LR | 03 23 40.7 | |
| | comp=Z,17nm,21.2s,baz=140,slow=39 | | | | | | |
| **BURAR** | **Bucovina Array** | **35.21** | **303** | P | **P** | **03 10 49.8** | **-0.7** |
| **FINES** | **FINESS Array B** | **37.47** | **326** | P | **P** | **03 11 10.5** | **+1.2** |
| | comp=Z,0.7nm,0.4s,baz=106,slow=13,SNR=9.2 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.16** | **338** | P | **P** | **03 11 40.5** | **+0.7** |
| ARCES | | | | IAmb | IAmb | 03 11 53.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.16** | **338** | P | **P** | **03 11 40.6** | **+0.7** |
| | comp=Z,1.7nm,0.8s,baz=120,slow=6.1,SNR=5.0 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **43.04** | **322** | P | **P** | **03 11 56.1** | **+1.1** |
| | comp=Z,0.6nm,0.3s,baz=91,slow=7.9,SNR=11 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **YAK** | **Yakutsk** | **44.11** | **35** | LR | LR | 03 30 55.1 | |
| | comp=Z,31nm,20.8s,baz=1.5,slow=36 | | | | | | |
| **NC405** | **NORSAR Array S** | **44.12** | **323** | P | **P** | **03 12 04.2** | **+0.4** |
| NC405 | | | | IAmb | IAmb | 03 12 39.1 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **NC303** | **NORSAR Array S** | **44.30** | **323** | P | **P** | **03 12 05.7** | **+0.6** |
| NC303 | | | | IAmb | IAmb | 03 12 38.6 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **NB201** | **NORSAR Array S** | **44.32** | **323** | P | **P** | **03 12 05.6** | **+0.3** |
| **NB2** | **NORSAR Subarra** | **44.36** | **323** | P | **P** | **03 12 06.2** | **+0.5** |
| | comp=Z,2.5nm,1.1s,baz=97,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.36** | **323** | P | **P** | **03 12 06.1** | **+0.5** |
| | comp=Z,0.6nm,0.7s,baz=107,slow=7.2,SNR=4.9 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **NBO00** | **NORSAR Array S** | **44.57** | **323** | P | **P** | **03 12 07.5** | **+0.3** |
| NBO00 | | | | IAmb | IAmb | 03 12 38.0 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **KS19** | **Wonju Array Si** | **44.98** | **71** | P | **P** | **03 12 11.1** | **+0.3** |
| **VSL** | **Villasalto** | **47.72** | **293** | P | **P** | **03 12 32.6** | **+0.4** |
| **KBS** | **Kingsbay** | **48.66** | **347** | P | **P** | **03 12 38.6** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **65.58** | **269** | P | **P** | **03 14 37.4** | **-0.9** |
| | comp=Z,0.6nm,0.5s,baz=49,slow=6.2,SNR=13 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.07** | **122** | P | **P** | **03 16 13.7** | **-0.2** |
| | comp=Z,0.3nm,0.5s,baz=324,slow=4.9,SNR=8.2 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **84.33** | **125** | P | **P** | **03 16 24.6** | **-0.8** |
| | comp=Z,0.5nm,0.7s,baz=310,slow=5.7,SNR=4.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |

*WEL **03** 03:10:56.6±0.3,41°S±3°×17°5E±°, h21km±3km, M3.4/14, ML3.8/13, MLv3.4/14, Error ellipse: s-maj=0.0km s-min=0.0km az=177.2, confirmed*

*NOU **03** 03:10:57.2,41°.33S×174°.67E, h38km, MLv3.5/9, Cook Strait, New Zealand*

**ISC 03 03:10:57.8±0.9,41°25S±0°.03×174°52E±0°.02,h32km±6km, n80,σ1°00/92, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNZO** | **South Karori** | **0.15** | **115** | P | **Pb** | **03 11 03.6** | **-0.1** |
| **WEL** | **Wellington** | **0.19** | **102** | P | **Pb** | **03 11 04.1** | **0.0** |
| WEL | | | | S | **Sb** | **03 11 09.2** | **+0.9** |
| **TCW** | **Tory Channel** | **0.19** | **281** | P | **Pb** | **03 11 03.4** | **-0.6** |
| TCW | | | | S | **Sb** | **03 11 07.9** | **-0.5** |
| **BHW** | **Baring Head** | **0.31** | **122** | P | **Pb** | **03 11 05.5** | **0.0** |
| BHW | | | | S | **Sb** | **03 11 11.6** | **+0.9** |
| **CAW** | **Cannon Point** | **0.43** | **72** | P | **Pb** | **03 11 06.8** | **-0.4** |
| CAW | | | | S | **Sb** | **03 11 13.9** | **+0.1** |
| **TUWZ** | **Tuamarina** | **0.47** | **247** | P | **Pb** | **03 11 07.2** | **-0.6** |
| TUWZ | | | | S | **Sb** | **03 11 13.9** | **-1.0** |
| **KIW** | **Kapiti Island** | **0.48** | **37** | P | **Pb** | **03 11 07.0** | **-1.1** |
| KIW | | | | S | **Sb** | **03 11 14.0** | **-1.0** |
| **CMWZ** | **Cape Campbell** | **0.55** | **205** | P | **Pb** | **03 11 09.7** | **+0.6** |
| CMWZ | | | | S | **Sn** | **03 11 20.2** | **+2.6** |
| **MSWZ** | **Moikau Station** | **0.57** | **108** | P | **Pb** | **03 11 09.2** | **-0.2** |
| MSWZ | | | | S | **Sb** | **03 11 18.6** | **+1.2** |
| **DUWZ** | **D'Urville Isla** | **0.64** | **314** | P | **Pb** | **03 11 09.1** | **-1.4** |
| DUWZ | | | | S | **Sb** | **03 11 17.7** | **-1.5** |
| **PLWZ** | **Palliser** | **0.64** | **121** | P | **Pb** | **03 11 10.1** | **-0.5** |
| PLWZ | | | | S | **Sb** | **03 11 19.9** | **+0.6** |
| **OGWZ** | **Otaki Gorge** | **0.65** | **49** | P | **Pb** | **03 11 09.8** | **-0.9** |
| OGWZ | | | | S | **Sb** | **03 11 19.0** | **-0.5** |
| **BSWZ** | **Blackbirch Sta** | **0.68** | **226** | P | **Pn** | **03 11 10.3** | **-0.8** |
| BSWZ | | | | S | **Sb** | **03 11 20.8** | **+0.5** |
| **PAWZ** | **Paruwai Farm** | **0.69** | **102** | P | **Pn** | **03 11 10.7** | **-0.7** |
| PAWZ | | | | S | **Sb** | **03 11 21.3** | **+0.4** |
| **MTW** | **Mount Morrison** | **0.74** | **84** | P | **Pn** | **03 11 11.4** | **-0.6** |
| MTW | | | | S | **Sb** | **03 11 22.3** | **+0.2** |
| **HOWZ** | **Holdsworth Sta** | **0.83** | **65** | P | **Pn** | **03 11 12.4** | **-0.8** |
| HOWZ | | | | S | **Sn** | **03 11 24.5** | **+0.2** |
| **NNZ** | **Nelson** | **0.86** | **272** | P | **Pn** | **03 11 12.5** | **-1.2** |
| NNZ | | | | S | **Sn** | **03 11 23.8** | **-1.4** |
| **TRWZ** | **Traveller** | **0.89** | **100** | P | **Pn** | **03 11 13.3** | **-0.8** |
| TRWZ | | | | S | **Sn** | **03 11 25.8** | **0.0** |
| **MRZ** | **Mangatainoka R** | **0.99** | **54** | P | **Pn** | **03 11 14.6** | **-0.8** |
| MRZ | | | | S | **Sn** | **03 11 28.3** | **0.0** |
| **TMWZ** | **Te Maipa** | **1.04** | **83** | P | **Pn** | **03 11 15.4** | **-0.8** |
| **TIWZ** | **Tintock** | **1.13** | **66** | P | **Pn** | **03 11 16.3** | **-1.1** |
| **OHWZ** | **Ohakea** | **1.20** | **30** | P | **Pn** | **03 11 18.5** | **+0.2** |
| **TKNZ** | **Takaka Hill** | **1.20** | **280** | P | **Pn** | **03 11 17.7** | **-0.6** |
| **POWZ** | **Post Office Ro** | **1.27** | **48** | P | **Pn** | **03 11 18.1** | **-1.2** |
| **PRWZ** | **Pori Road** | **1.30** | **58** | P | **Pn** | **03 11 18.6** | **-1.1** |
| **CPWZ** | **Castlepoint** | **1.31** | **75** | P | **Pn** | **03 11 19.6** | **-0.3** |
| **THZ** | **Tophouse** | **1.32** | **246** | P | **Pn** | **03 11 19.8** | **-0.3** |
| **MRNZ** | **Matariki Terra** | **1.34** | **263** | P | **Pn** | **03 11 20.2** | **0.0** |
| **KHZ** | **Kahutara** | **1.38** | **212** | P | **Pn** | **03 11 20.4** | **-0.4** |
| **KHZ** | **Kahutara** | **1.38** | **212** | P | **Pn** | **03 11 20.3** | **-0.4** |
| **BFZ** | **Birch Farm** | **1.42** | **67** | P | **Pn** | **03 11 19.7** | **-1.7** |
| **BFZ** | **Birch Farm** | **1.42** | **67** | P | **Pn** | **03 11 19.7** | **-1.7** |
| **WAZ** | **Wanganui** | **1.53** | **13** | P | **Pn** | **03 11 23.3** | **+0.4** |
| **DVHZ** | **Dannevirke** | **1.56** | **53** | P | **Pn** | **03 11 21.6** | **-1.7** |
| **QRZ** | **Quartz Range** | **1.57** | **285** | P | **Pn** | **03 11 23.2** | **-0.2** |
| **QRZ** | **Quartz Range** | **1.57** | **285** | P | **Pn** | **03 11 23.1** | **-0.2** |
| **TSZ** | **Takapari Road** | **1.61** | **43** | P | **Pn** | **03 11 22.7** | **-1.3** |
| **ANWZ** | **Angora Road** | **1.68** | **63** | P | **Pn** | **03 11 23.0** | **-1.8** |
| **LREZ** | **Lake Rotokare** | **1.79** | **357** | P | **Pn** | **03 11 27.1** | **+0.8** |
| **PNHZ** | **Pukenui** | **1.84** | **44** | P | **Pn** | **03 11 25.5** | **-1.7** |
| **PRHZ** | **Porangahau** | **1.88** | **59** | P | Pn | 03 11 25.5 | -2.2 |
| **NMEZ** | **Namu Road** | **1.90** | **345** | P | **Pn** | **03 11 29.7** | **+1.8** |
| **PREZ** | **Palmer Road** | **1.92** | **352** | P | **Pn** | **03 11 29.5** | **+1.2** |
| **KHEZ** | **Kahui Hut** | **1.99** | **349** | P | **Pn** | **03 11 30.5** | **+1.3** |
| **KHEZ** | **Kahui Hut** | **1.99** | **349** | P | **Pn** | **03 11 30.3** | **+1.0** |
| **MTVZ** | **Mangateitei** | **2.00** | **22** | P | **Pn** | **03 11 30.5** | **+1.2** |
| **NEZ** | **North Egmont** | **2.00** | **350** | P | **Pn** | **03 11 30.6** | **+1.2** |
| **NBEZ** | **Newall Road No** | **2.04** | **346** | P | **Pn** | **03 11 30.5** | **+0.6** |
| **GVZ** | **Greta Valley S** | **2.05** | **212** | P | Pn | 03 11 27.7 | -2.2 |
| **PKVZ** | **Pokaka** | **2.05** | **18** | P | **Pn** | **03 11 30.3** | **+0.2** |
| **MOVZ** | **Moawhango** | **2.06** | **27** | P | **Pn** | **03 11 29.2** | **-1.0** |
| **WNVZ** | **Wahianoa** | **2.08** | **24** | P | **Pn** | **03 11 30.2** | **-0.4** |
| **PKE** | **Pukeiti** | **2.09** | **348** | P | **Pn** | **03 11 31.8** | **+1.2** |
| **DSZ** | **Denniston Nort** | **2.10** | **255** | P | **Pn** | **03 11 30.6** | **-0.2** |
| **WHVZ** | **Whangaehu Hut** | **2.12** | **23** | P | **Pn** | **03 11 31.0** | **-0.2** |
| **VRZ** | **Vera Road** | **2.13** | **5** | P | **Pn** | **03 11 31.7** | **+0.6** |
| VRZ | | | | S | **Sn** | **03 11 59.3** | **+3.0** |
| **MAVZ** | **Matarangi** | **2.13** | **22** | P | **Pn** | **03 11 31.3** | **-0.1** |
| MAVZ | | | | S | **Sn** | **03 11 59.7** | **+2.8** |
| **KRHZ** | **Kereru** | **2.13** | **42** | P | Pn | 03 11 29.3 | -1.9 |
| **FWVZ** | **Far West T-bar** | **2.14** | **22** | P | **Pn** | **03 11 31.6** | **+0.1** |
| **TUVZ** | **Tukino** | **2.16** | **24** | P | **Pn** | **03 11 31.3** | **-0.3** |
| **COVZ** | **Chateau Observ** | **2.19** | **21** | P | **Pn** | **03 11 34.1** | **+2.1** |
| **NGZ** | **Ngauruhoe** | **2.23** | **22** | P | **Pn** | **03 11 32.3** | **-0.2** |
| **SNVZ** | **South Ngauruho** | **2.23** | **23** | P | **Pn** | **03 11 32.3** | **-0.3** |
| **OTVZ** | **Oturere** | **2.26** | **23** | P | **Pn** | **03 11 32.7** | **-0.3** |
| **NNVZ** | **North Ngauruho** | **2.27** | **22** | P | **Pn** | **03 11 33.0** | **-0.2** |
| **LTZ** | **Lake Taylor** | **2.27** | **227** | P | **Pn** | **03 11 32.3** | **-0.9** |
| **WTVZ** | **West Tongariro** | **2.28** | **21** | P | **Pn** | **03 11 33.6** | **+0.3** |
| **TWVZ** | **Taurewa** | **2.28** | **18** | P | **Pn** | **03 11 33.0** | **-0.3** |
| **ETVZ** | **East Tongariro** | **2.29** | **24** | P | **Pn** | **03 11 33.2** | **-0.3** |
| **KAHZ** | **Kahuranaki** | **2.31** | **52** | P | Pn | 03 11 31.3 | -2.3 |
| **TMVZ** | **Te Maari** | **2.31** | **23** | P | **Pn** | **03 11 33.3** | **-0.4** |
| **KRVZ** | **Karewarewa** | **2.31** | **22** | P | **Pn** | **03 11 33.4** | **-0.3** |
| **NTVZ** | **North Tongariro** | **2.32** | **23** | P | **Pn** | **03 11 33.5** | **-0.4** |
| **KWHZ** | **Kaweka Forest** | **2.33** | **39** | P | Pn | 03 11 32.0 | -1.9 |
| **BKZ** | **Black Stump Fm** | **2.57** | **37** | P | Pn | 03 11 35.2 | -2.0 |
| **BKZ** | **Black Stump Fm** | **2.57** | **37** | P | Pn | 03 11 35.0 | -2.2 |
| **HIZ** | **Hauiti** | **2.74** | **5** | P | **Pn** | **03 11 40.4** | **+0.9** |
| **MRHZ** | **Matea Rd** | **2.81** | **32** | P | Pn | 03 11 38.2 | -2.4 |
| **ODZ** | **Otahua Downs** | **4.74** | **215** | P | **Pn** | **03 12 05.9** | **-1.1** |
| **JCZ** | **Jackson Bay** | **5.09** | **234** | P | **Pn** | **03 12 11.8** | **0.0** |

*VAO **03** 03:15:21.5±0.7,33°.89S×73°.60W, h10km, mb4.4*

*SJA **03** 03:15:23.1±0.6,33°.71S×73°.15W, h8km±7km, ML4.4, MW4.2*

*IDC **03** 03:15:30.4±0.7,33°.64S×72°.29W, h0km, mb4.0/10, mbtmp4.1/13, ML4.4/3, MS3.6/10, Error ellipse: s-maj=28.2km s-min=16.7km az=91.0*

*NEIC **03** 03:15:31.1±1.6,33°.63S±0°.04×72°.53W±0°.06, h10km±1km, mb4.5/21, Mwr4.2/59, Mwr4.4(GUC), Error ellipse: s-maj=8.3km s-min=6.9km az=130.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$2.05; $M_{\theta\theta}$0.36; $M_{\phi\phi}$-2.41; $M_{r\theta}$0.82; $M_{r\phi}$-0.69; $M_{\theta\phi}$-1.37; Fault plane solution: $M_o$2.85000×$10^{15}$ NP1:$\phi_s$169.52000°, $\delta$63.09000°, $\lambda$63.51000°. NP2:$\phi_s$37.28000°, $\delta$37.06000°, $\lambda$131.31000°. Principal axes: T 2.8331, Plg62.0000°, Azm37.0000°; N 0.0262, Plg23.0000°, Azm182.0000°; P -2.8593, Plg14.0000°, Azm279.0000°;*

*NEIC **03** 03:15:31.1,33°.63S×72°.53W, h10km*

*GUC **03** 03:15:32.1±0.9,33°.67S×72°.50W, h39km±2km, ML4.2*

**ISC 03 03:15:29.7±1.4,33°65S±0°.03×72°60W±0°.04,h3km±8km, n185,σ1°88/206,mb4.4/16,MS3.6/8,31C-1D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VA05** | **Santo Domingo** | **0.82** | **91** | | **Pb** | **03 15 46.3** | **-0.3** |
| **VA05** | **Santo Domingo** | **0.82** | **91** | *i* P | **Pn** | **03 15 46.5** | **-1.7** |
| VA05 | | | | *e*S | **Sn** | **03 15 57.6** | **-3.2** |
| VA05 | | | | IAML | | 03 16 01.9 | |
| | comp=E,39μm,0.4s | | | | | | |
| **BO03** | **Pichilemu** | **1.00** | **148** | *i* P | **Pn** | **03 15 49.5** | **-1.1** |
| BO03 | | | | *i* S | **Sb** | **03 16 02.1** | **-1.0** |
| BO03 | | | | IAML | | 03 16 04.7 | |
| | comp=E,7μm,0.6s | | | | | | |
| **VA01** | **Torpederas** | **1.01** | **52** | | **Pb** | **03 15 49.4** | **-0.4** |
| **VA01** | **Torpederas** | **1.01** | **52** | *i* P | **Pb** | **03 15 49.5** | **-0.4** |
| VA01 | | | | *i* S | **Sb** | **03 16 02.7** | **-0.8** |
| **MT01** | **Popeta** | **1.14** | **101** | | **Pg** | **03 15 51.2** | **-0.4** |
| **MT01** | **Popeta** | **1.14** | **101** | *i* P | **Pg** | **03 15 51.1** | **-0.4** |
| MT01 | | | | *i* S | **Sb** | **03 16 05.5** | **-1.9** |
| MT01 | | | | IAML | | 03 16 10.5 | |
| | comp=N,8μm,0.3s | | | | | | |
| **MT02** | **Curacav** | **1.28** | **73** | | **Pn** | **03 15 53.1** | **-1.4** |
| **MT02** | **Curacav** | **1.28** | **73** | *i* P | **Pn** | **03 15 53.1** | **-1.4** |
| MT02 | | | | *i* S | **Sn** | **03 16 12.3** | **+0.1** |
| **MT09** | **Talagante** | **1.35** | **96** | | **Pn** | **03 15 54.3** | **-1.3** |
| **MT09** | **Talagante** | **1.35** | **96** | *e*P | **Pn** | **03 15 54.1** | **-1.4** |
| MT09 | | | | *i* S | **Sb** | **03 16 11.5** | **-1.9** |
| MT09 | | | | IAML | | 03 16 19.4 | |
| | comp=E,6μm,0.5s | | | | | | |
| **BO01** | **Tunca** | **1.46** | **121** | | **Pn** | **03 15 55.6** | **-1.4** |
| **BO01** | **Tunca** | **1.46** | **121** | *i* P | **Pg** | **03 15 57.5** | **-0.1** |
| BO01 | | | | IAML | | 03 16 24.5 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **BO01** | **Tunca** | **1.46** | **121** | *e*P | **Pn** | **03 15 55.5** | **-1.4** |
| BO01 | | | | *i* S | **Sn** | **03 16 14.0** | **-2.6** |
| **GO05** | **Huala** | **1.47** | **158** | | **Pn** | **03 15 56.4** | **-0.7** |
| **GO05** | **Huala** | **1.47** | **158** | *e*P | **Pn** | **03 15 56.3** | **-0.7** |
| GO05 | | | | *i* S | **Sn** | **03 16 11.4** | **-5.4** |
| **ROCH** | **El Roble** | **1.49** | **63** | *e*P | **Pn** | **03 15 56.6** | **-1.0** |
| ROCH | | | | *i* S | **Sg** | **03 16 17.7** | **+0.1** |
| ROCH | | | | IAML | | 03 16 30.2 | |
| | comp=N,6μm,0.6s | | | | | | |
| **VA06** | **Catapilco** | **1.54** | **46** | | **Pn** | **03 15 57.1** | **-1.0** |
| **VA06** | **Catapilco** | **1.54** | **46** | *e*P | **Pn** | **03 15 57.0** | **-1.1** |
| VA06 | | | | *i* S | **Sn** | **03 16 14.9** | **-3.6** |
| VA06 | | | | IAML | | 03 16 30.4 | |
| | comp=E,6μm,0.3s | | | | | | |
| **MT05** | **Renca** | **1.57** | **81** | | **Pb** | **03 15 58.7** | **-0.8** |
| **MT05** | **Renca** | **1.57** | **81** | *i* P | **Pg** | **03 16 00.0** | **+0.2** |
| MT05 | | | | *i* S | **Sg** | **03 16 27.3** | **+7.0** |
| MT05 | | | | IAML | | 03 16 30.8 | |
| | comp=Z,2μm,0.9s | | | | | | |
| **MT05** | **Renca** | **1.57** | **81** | *e*P | **Pb** | **03 15 59.1** | **-0.4** |
| MT05 | | | | *e*S | **Sg** | **03 16 21.1** | **+0.8** |
| **PEL** | **Peldehue** | **1.68** | **73** | | **Pn** | **03 15 59.8** | **-0.2** |
| **PEL** | **Peldehue** | **1.68** | **73** | *i* P | **Pg** | **03 16 02.0** | **+0.2** |
| PEL | | | | *i* S | **Sg** | **03 16 30.0** | **+6.4** |
| **PEL** | **Peldehue** | **1.68** | **73** | *e*P | **Pn** | **03 15 59.3** | **-0.7** |
| PEL | | | | IAML | | 03 16 28.1 | |
| | comp=N,5μm,0.6s | | | | | | |
| **BO04** | **La Punta** | **1.69** | **102** | | **Pn** | **03 15 59.7** | **-0.5** |
| **BO04** | **La Punta** | **1.69** | **102** | *e*P | **Pn** | **03 15 59.5** | **-0.7** |
| BO04 | | | | *i* S | **Sn** | **03 16 18.5** | **-3.9** |
| BO04 | | | | IAML | | 03 16 31.1 | |
| | comp=E,5μm,0.4s | | | | | | |
| **MT12** | **Pirque** | **1.71** | **93** | *e*P | **Pn** | **03 15 59.5** | **-1.0** |
| MT12 | | | | *i* S | **Sn** | **03 16 20.2** | **-2.7** |
| MT12 | | | | IAML | | 03 16 36.8 | |
| | comp=N,7μm,0.5s | | | | | | |
| **MT14** | **Cerro Cal¡n** | **1.74** | **82** | *e*P | **Pn** | **03 16 00.5** | **-0.4** |
| MT14 | | | | *i* S | **Sg** | **03 16 24.3** | **-1.3** |
| MT14 | | | | IAML | | 03 16 36.3 | |
| | comp=E,8μm,0.8s | | | | | | |
| **MT15** | **Las Vizcachas** | **1.75** | **89** | *e*P | **Pn** | **03 16 00.1** | **-0.9** |
| MT15 | | | | *i* S | **Sn** | **03 16 18.3** | **-5.5** |
| MT15 | | | | IAML | | 03 16 33.5 | |
| | comp=E,5μm,0.4s | | | | | | |
| **MT16** | **CCHEN** | **1.75** | **83** | | **Pn** | **03 16 00.6** | **-0.4** |
| **MT16** | **CCHEN** | **1.75** | **83** | *e*P | **Pn** | **03 16 00.6** | **-0.4** |
| MT16 | | | | *i* S | **Sb** | **03 16 23.8** | **-1.1** |
| **MT03** | **Universidad Ad** | **1.75** | **85** | | **Pn** | **03 16 00.7** | **-0.3** |
| **MT03** | **Universidad Ad** | **1.75** | **85** | *i* P | **Pg** | **03 16 02.9** | **-0.3** |
| MT03 | | | | *i* S | **Sg** | **03 16 31.7** | **+5.8** |
| MT03 | | | | IAML | | 03 16 37.0 | |
| | comp=E,5μm,0.8s | | | | | | |
| **MT03** | **Universidad Ad** | **1.75** | **85** | *e*P | **Pn** | **03 16 00.5** | **-0.6** |
| MT03 | | | | IAML | | 03 16 34.1 | |
| | comp=E,6μm,0.5s | | | | | | |
| **MT10** | **Hacienda Santa** | **1.76** | **78** | *e*P | **Pb** | **03 16 01.2** | **-1.5** |
| **BO02** | **Sierra Bellavi** | **1.89** | **128** | | **Pn** | **03 16 02.9** | **-0.1** |
| **BO02** | **Sierra Bellavi** | **1.89** | **128** | *i* P | **Pb** | **03 16 03.3** | **-1.6** |
| BO02 | | | | IAML | | 03 16 35.5 | |
| | comp=Z,3μm,0.5s | | | | | | |
| **BO02** | **Sierra Bellavi** | **1.89** | **128** | *e*P | **Pn** | **03 16 02.6** | **-0.3** |
| BO02 | | | | *i* S | **Sn** | **03 16 25.2** | **-2.1** |
| BO02 | | | | IAML | | 03 16 39.2 | |
| | comp=E,5μm,0.6s | | | | | | |
| **MT13** | **San Alfonso** | **1.93** | **93** | | **Pn** | **03 16 03.2** | **-0.4** |
| **MT13** | **San Alfonso** | **1.93** | **93** | *e*P | **Pn** | **03 16 02.9** | **-0.6** |
| MT13 | | | | IAML | | 03 16 37.3 | |
| | comp=E,6μm,0.7s | | | | | | |
| **VA03** | **San Esteban** | **1.93** | **63** | | **Pn** | **03 16 02.8** | **-0.7** |
| **VA03** | **San Esteban** | **1.93** | **63** | *i* P | **Pb** | **03 16 05.0** | **-0.6** |
| VA03 | | | | *i* S | **Sg** | **03 16 36.1** | **+4.5** |
| VA03 | | | | IAML | | 03 16 40.7 | |
| | comp=Z,4μm,1.2s | | | | | | |
| **VA03** | **San Esteban** | **1.93** | **63** | *e*P | **Pn** | **03 16 03.0** | **-0.5** |
| VA03 | | | | IAML | | 03 16 40.6 | |
| | comp=N,5μm,0.6s | | | | | | |
| **FCH** | **Farellones** | **1.96** | **81** | *i* P | **Pn** | **03 16 03.9** | **-0.2** |
| FCH | | | | IAML | | 03 16 42.1 | |
| | comp=E,3μm,0.2s | | | | | | |
| **LMEL** | **Las Melosas** | **2.00** | **96** | | **Pn** | **03 16 03.9** | **-0.8** |
| **LMEL** | **Las Melosas** | **2.00** | **96** | *i* P | **Pn** | **03 16 04.1** | **-0.6** |
| LMEL | | | | *i* S | **Sn** | **03 16 28.3** | **-2.0** |
| LMEL | | | | IAML | | 03 16 37.3 | |
| | comp=N,4μm,0.4s | | | | | | |
| **MT04** | **Ro Olivares** | **2.07** | **84** | *e*P | **Pn** | **03 16 05.4** | **-0.2** |
| MT04 | | | | *i* S | **Sn** | **03 16 30.4** | **-1.6** |
| MT04 | | | | IAML | | 03 16 42.1 | |
| | comp=N,2μm,0.4s | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.17** | **85** | | **Pn** | **03 16 06.7** | **-0.2** |
| **MT08** | **Bocatoma Ro** | **2.17** | **85** | *e*P | **Pn** | **03 16 06.9** | **+0.1** |
| **ML02** | **Panimavida** | **2.32** | **156** | | **Pn** | **03 16 09.0** | **+0.2** |
| **ML02** | **Panimavida** | **2.32** | **156** | *e*P | **Pn** | **03 16 09.0** | **+0.2** |
| **CO02** | **Combarbal** | **2.79** | **29** | Pn | **Pn** | **03 16 14.8** | **-0.5** |
| **CO02** | **Combarbal** | **2.79** | **29** | *i* P | **Pn** | **03 16 15.1** | **-0.3** |
| CO02 | | | | IAML | | 03 17 12.8 | |
| | comp=Z,1μm,0.9s | | | | | | |
| **CO02** | **Combarbal** | **2.79** | **29** | *e*P | **Pn** | **03 16 15.0** | **-0.3** |
| CO02 | | | | *i* S | **Sn** | **03 16 47.3** | **-2.3** |
| **AUSP** | **Uspallata** | **3.05** | **63** | *i* P | **Pn** | **03 16 21.2** | **+2.1** |
| AUSP | | | | *i* S | **Sg** | **03 17 04.4** | **-3.3** |
| **CO06** | **Fray Jorge** | **3.08** | **16** | | **Pn** | **03 16 18.1** | **-1.1** |
| **CO06** | **Fray Jorge** | **3.08** | **16** | *e*P | **Pn** | **03 16 18.1** | **-1.1** |
| **ARCO** | **CERRO ARCO** | **3.17** | **76** | *i* P | **Pb** | **03 16 23.0** | **-3.9** |
| ARCO | | | | IAML | | 03 17 24.6 | |
| | comp=Z,511nm,1.0s | | | | | | |
| **BI02** | **San Fabin de** | **3.20** | **161** | Pn | **Pn** | **03 16 21.2** | **+0.3** |
| **AAGR** | **Agrelo** | **3.20** | **81** | *i* P | **Pb** | **03 16 23.4** | **-3.9** |
| AAGR | | | | IAML | | 03 17 30.1 | |
| | comp=Z,746nm,0.9s | | | | | | |
| **CO03** | **El Pedregal** | **3.23** | **31** | | **Pn** | **03 16 21.4** | **-0.1** |
| **CO03** | **El Pedregal** | **3.23** | **31** | *i* P | **Pn** | **03 16 21.4** | **-0.1** |
| CO03 | | | | IAML | | 03 17 24.1 | |
| | comp=Z,440nm,0.8s | | | | | | |
| **CO03** | **El Pedregal** | **3.23** | **31** | *e*P | **Pn** | **03 16 21.4** | **-0.1** |
| CO03 | | | | *i* S | **Sn** | **03 16 57.3** | **-3.3** |
| CO03 | | | | IAML | | 03 17 27.5 | |
| | comp=E,717nm,0.9s | | | | | | |
| **ASAL** | **Salagasta** | **3.33** | **73** | *i* P | **Pn** | **03 16 25.0** | **+2.3** |
| ASAL | | | | IAML | | 03 17 24.8 | |
| | comp=Z,347nm,0.8s | | | | | | |
| **RTLS** | **Leoncito** | **3.34** | **57** | *i* P | **Pn** | **03 16 25.7** | **+2.6** |
| RTLS | | | | *i* S | **Sb** | **03 17 11.8** | **+1.0** |
| RTLS | | | | IAML | | 03 17 24.3 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **EDS3** | **Malargue** | **3.38** | **130** | *i* P | **Pn** | **03 16 24.0** | **+0.5** |
| **RFA** | **San Rafael** | **3.60** | **109** | *i* P | **Pn** | **03 16 28.5** | **+2.0** |
| RFA | | | | *i* S | **Sb** | **03 17 16.4** | **-1.8** |
| RFA | | | | IAML | | 03 17 29.1 | |
| | comp=Z,334nm,0.7s | | | | | | |
| **GO04** | **Tololo Observa** | **3.79** | **24** | | **Pn** | **03 16 28.8** | **-0.4** |
| **GO04** | **Tololo Observa** | **3.79** | **24** | *i* P | **Pn** | **03 16 28.5** | **-0.7** |
| **GO04** | **Tololo Observa** | **3.79** | **24** | *e*P | **Pn** | **03 16 28.8** | **-0.4** |
| GO04 | | | | *i* S | **Sn** | **03 17 10.7** | **-3.8** |
| **CO05** | **La Serena** | **3.90** | **18** | | **Pn** | **03 16 29.9** | **-0.6** |
| **CO05** | **La Serena** | **3.90** | **18** | *e*P | **Pn** | **03 16 30.0** | **-0.5** |
| **ZON** | **Zonda** | **3.92** | **59** | | **Pn** | **03 16 30.9** | **+0.1** |
| **ZON** | **Zonda** | **3.92** | **59** | *i* P | **Pn** | **03 16 32.7** | **+1.9** |
| ZON | | | | *i* S | **Sb** | **03 17 24.6** | **-2.7** |
| ZON | | | | IAML | | 03 17 44.8 | |
| | comp=Z,269nm,1.1s | | | | | | |
| **SJA** | **San Juan** | **4.01** | **59** | *i* P | **Pn** | **03 16 34.1** | **+2.0** |
| SJA | | | | IAML | | 03 17 44.7 | |
| | comp=Z,239nm,1.1s | | | | | | |
| **RTLL** | **Cerro Villicun** | **4.18** | **58** | *i* P | **Pn** | **03 16 36.6** | **+2.2** |
| RTLL | | | | *i* S | **Sb** | **03 17 31.4** | **-3.5** |
| **CO01** | **Juntas del Tor** | **4.24** | **31** | | **Pn** | **03 16 35.2** | **-0.1** |
| **CO01** | **Juntas del Tor** | **4.24** | **31** | *e*P | **Pn** | **03 16 35.6** | **+0.3** |
| **ACCO** | **Cerro Coronel** | **4.28** | **45** | *i* P | **Pn** | **03 16 38.1** | **+2.1** |
| ACCO | | | | IAML | | 03 17 59.1 | |
| | comp=Z,437nm,1.0s | | | | | | |
| **AROD** | **Rodeo** | **4.37** | **38** | *i* P | **Pn** | **03 16 38.0** | **+0.6** |
| **ACDV** | **Cuesta del Vie** | **4.56** | **41** | *i* P | **Pn** | **03 16 41.4** | **+1.7** |
| ACDV | | | | IAML | | 03 17 59.6 | |
| | comp=Z,241nm,1.4s | | | | | | |
| **LCO** | **Las Campanas** | **4.90** | **20** | | **Pn** | **03 16 43.6** | **-0.9** |
| **LCO** | **Las Campanas** | **4.90** | **20** | *e*P | **Pn** | **03 16 43.7** | **-0.9** |
| **AC05** | **El Transito** | **5.19** | **23** | | **Pn** | **03 16 48.2** | **-0.3** |
| **VA04** | **Juan Fernndez** | **5.20** | **268** | Pn | **Pn** | **03 16 50.1** | **+1.7** |
| **H03S1** | **Juan Fernandez** | **5.26** | **266** | T | T | 03 22 16.2 | |
| | baz=86,slow=74,SNR=829 | | | | | | |
| **H03S3** | **Juan Fernandez** | **5.26** | **266** | T | T | 03 22 18.5 | |
| | baz=86,slow=74,SNR=708 | | | | | | |
| **H03S2** | **Juan Fernandez** | **5.28** | **266** | T | T | 03 22 16.8 | |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BDFB | | | | | | IAmb | IAmb | 03 21 40.3 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **BDFB** | **Brasilia** | **28.53** | **57** | P | | **P** | | **03 21 25.2** | **-1.6** |
| | comp=Z,3.5nm,0.5s,baz=222,slow=4.0,SNR=8.1 | | | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | | | |
| **TBTG** | **Tabatinga, AM** | **29.42** | **5** | P | | **P** | | **03 21 35.1** | **+0.6** |
| **PMSA** | **Palmer Station** | **31.59** | **173** | LR | | LR | | 03 34 25.2 | |
| | comp=Z,130nm,19.1s,baz=28,slow=36 | | | | | | | | |
| **RPN** | **Rapa Nui** | **32.23** | **272** | LR | | LR | | 03 32 14.8 | |
| | comp=Z,76nm,18.8s,baz=106,slow=31 | | | | | | | | |
| **MAL2** | **Monte Alegre,** | **35.88** | **33** | P | | **P** | | **03 22 29.7** | **-1.4** |
| **BOAV** | **Boa Vista** | **37.62** | **20** | P | | **P** | | **03 22 45.7** | **-0.2** |
| **RUSC** | **La Rusia** | **39.33** | **359** | P | | **P** | | **03 22 59.7** | **-1.1** |
| RUSC | | | | | | IAmb | IAmb | 03 23 31.3 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **BAUV** | **El Baul** | **42.58** | **7** | P | | **P** | | **03 23 27.0** | **-0.1** |
| BAUV | | | | | | IAmb | IAmb | 03 23 31.0 | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **MDP** | **Montagnes des** | **42.92** | **30** | LR | | LR | | 03 42 35.3 | |
| | comp=Z,107nm,21.4s,baz=153,slow=38 | | | | | | | | |
| **BELA** | **Belgrano 2** | **47.31** | **170** | P | | **P** | | **03 24 05.0** | **+0.9** |
| BELA | | | | | | IAmb | IAmb | 03 24 15.2 | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **49.86** | **158** | ⇑P | | **P** | | **03 24 24.6** | **+0.8** |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **OBIP** | **Obispado Ponce** | **51.72** | **7** | P | | **P** | | **03 24 37.8** | **-0.5** |
| **CELP** | **Cerrillos** | **51.75** | **7** | P | | **P** | | **03 24 37.5** | **-1.1** |
| **SNAA** | **Sanae** | **52.08** | **158** | P | | **P** | | **03 24 41.2** | **+0.6** |
| SNAA | | | | | | IAmb | IAmb | 03 25 03.7 | |
| | comp=Z,5.3nm,1.0s | | | | | | | | |
| **SNAA** | **Sanae** | **52.08** | **158** | ⇑P | | **P** | | **03 24 40.8** | **+0.2** |
| | comp=Z,60nm,0.7s | | | | | | | | |
| **SNAA** | **Sanae** | **52.08** | **158** | P | | **P** | | **03 24 41.5** | **+0.9** |
| | comp=Z,3.3nm,0.9s,baz=284,slow=9.0,SNR=9.8 | | | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **53.79** | **158** | ⇑P | | **P** | | **03 24 53.8** | **+0.6** |
| | comp=Z,76nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **56.59** | **180** | P | | **P** | | **03 25 15.1** | **+1.5** |
| QSPA | | | | | | IAmb | IAmb | 03 25 16.4 | |
| | comp=Z,7.5nm,1.1s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **56.59** | **180** | P | | **P** | | **03 25 14.8** | **+1.3** |
| | comp=Z,4.3nm,0.9s,baz=139,slow=3.2,SNR=12 | | | | | | | | |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.20** | **331** | P | | **P** | | **03 26 39.1** | **+1.3** |
| | comp=Z,0.2nm,0.6s,baz=154,slow=8.6,SNR=2.6 | | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | | |
| **MAW** | **Mawson** | **73.65** | **164** | P | | **P** | | **03 27 05.2** | **+1.1** |
| | comp=Z,1.4nm,0.5s,baz=230,slow=7.0,SNR=4.0 | | | | | | | | |
| MAW | | | | | | LR | LR | 04 01 09.6 | |
| | comp=Z,55nm,18.1s,baz=220,slow=37 | | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | | |
| **BOSA** | **Boshof** | **80.64** | **118** | P | | **P** | | **03 27 44.0** | **-0.4** |
| | comp=Z,1.3nm,0.6s,baz=235,slow=3.3,SNR=3.6 | | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **83.24** | **334** | P | | **P** | | **03 27 59.4** | **+1.8** |
| | comp=Z,0.5nm,0.8s,baz=116,slow=4.1,SNR=4.1 | | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.33** | **326** | P | | **P** | | **03 28 00.8** | **+2.6** |
| | comp=Z,0.6nm,0.7s,baz=164,slow=6.2,SNR=5.1 | | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.53** | **70** | P | | **P** | | **03 28 04.2** | **-0.4** |
| | comp=Z,1.9nm,0.8s,baz=287,slow=4.7,SNR=11 | | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **96.67** | **46** | LR | | LR | | 04 12 10.2 | |
| | comp=Z,36nm,18.6s,baz=204,slow=35 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **120.84** | **210** | PKP | | **PKiKP** | | **03 34 23.8** | **-0.3** |
| | comp=Z,0.5nm,0.9s,baz=174,slow=1.6,SNR=2.7 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **152.93** | **43** | PKPbc | | **PKiKP** | | **03 35 28.4** | **+0.3** |
| | comp=Z,1.6nm,0.6s,baz=303,slow=2.8,SNR=13 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.17** | **31** | PKPbc | | **PKiKP** | | **03 35 31.1** | **+0.5** |
| | comp=Z,3.3nm,0.6s,baz=307,slow=3.3,SNR=12 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **156.88** | **48** | PKPab | | **PKPab** | | **03 35 56.7** | **+0.5** |
| | comp=Z,1.8nm,0.6s,baz=295,slow=4.5,SNR=15 | | | | | | | | |
| **SONM** | **Songino Array** | **165.81** | **3** | PKPab | | **PKPab** | | **03 36 36.9** | **+1.7** |
| | comp=Z,0.3nm,0.3s,baz=334,slow=4.5,SNR=2.0 | | | | | | | | |

*IDC **03** 03:52:43.4±1.0, 47.°14S×13.°74W, h0km, mb4.0/5, mbtmp4.0/5, MS3.6/14, Error ellipse: s-maj=71.6km s-min=22.3km az=89.0*

*NEIC **03** 03:52:45.3±0.8, 47.°29S±0.°08×13.°0W±0.°2, h10km±1km, mb4.4/17, Error ellipse: s-maj=21.4km s-min=13.2km az=104.0*

**ISC 03 03:52:45.3**±0.6, **47°22S**±0.°10×**13°1W**±0.°1, **h10**km, **n41**, σ1s**33**/23, **mb4.3**/12, **MS3.6**/14, **Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **16.38** | **236** | Pn | | **Pn** | **03 56 35.0** | **-0.1** |
| **ORCD** | **Orcadas** | **22.74** | **222** | P | | P | 03 57 38.7 | -8.5 |
| ORCD | | | | | | IAmb | IAmb | 03 57 44.4 | |
| | comp=Z,29nm,1.0s | | | | | | | | |
| **SNAA** | **Sanae** | **25.00** | **172** | P | | **P** | **03 58 07.6** | **-1.2** |
| **SNAA** | **Sanae** | **25.00** | **172** | LR | | LR | 04 05 27.0 | |
| | comp=Z,39nm,19.5s,baz=74,slow=30 | | | | | | | | |
| **SUR** | **Sutherland** | **29.67** | **72** | LR | | LR | 04 07 53.5 | |
| | comp=Z,122nm,21.1s,baz=230,slow=30 | | | | | | | | |
| **BELA** | **Belgrano 2** | **31.88** | **188** | P | | **P** | **03 59 09.4** | **-0.7** |
| BELA | | | | | | IAmb | IAmb | 03 59 12.8 | |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **PMSA** | **Palmer Station** | **32.34** | **219** | LR | | LR | 04 10 30.4 | |
| | comp=Z,40nm,19.6s,baz=74,slow=33 | | | | | | | | |
| **SOE** | **Somerset East** | **32.59** | **78** | P | | **P** | **03 59 17.7** | **+0.9** |
| **PLTB** | **Pedras Altas** | **34.47** | **282** | P | | **P** | **03 59 33.9** | **+0.7** |
| **BOSA** | **Boshof** | **35.02** | **72** | P | | **P** | **03 59 34.9** | **-3.2** |
| BOSA | | | | | | IAmb | IAmb | 03 59 40.3 | |
| | comp=Z,8.5nm,1.4s | | | | | | | | |
| **BOSA** | **Boshof** | **35.02** | **72** | LR | | LR | 04 10 58.8 | |
| | comp=Z,113nm,21.4s,baz=237,slow=31 | | | | | | | | |
| **MG04** | **Isla Riesco** | **37.10** | **239** | P | | **P** | **03 59 54.9** | **-0.5** |
| **LBTB** | **Lobatse** | **37.75** | **68** | P | | **P** | **04 00 00.8** | **-0.6** |
| **LBTB** | **Lobatse** | **37.75** | **68** | LR | | LR | 04 12 47.0 | |
| | comp=Z,125nm,19.4s,baz=189,slow=32 | | | | | | | | |
| **PLCA** | **Paso Flores** | **41.07** | **257** | LR | | LR | 04 14 22.5 | |
| | comp=Z,94nm,20.7s,baz=129,slow=32 | | | | | | | | |
| **MAW** | **Mawson** | **42.32** | **146** | P | | **P** | **04 00 41.2** | **+2.5** |
| | comp=Z,3.8nm,1.0s,baz=279,slow=10,SNR=3.8 | | | | | | | | |
| | comp=Z,3.8nm,1.0s | | | | | | | | |
| **BDFB** | **Brasilia** | **42.76** | **306** | LR | | LR | 04 15 12.3 | |
| | comp=Z,66nm,18.7s,baz=149,slow=32 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **43.04** | **180** | P | | **P** | **04 00 44.3** | **-0.5** |
| QSPA | | | | | | IAmb | IAmb | 04 00 48.1 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **43.04** | **180** | P | | **P** | **04 00 46.3** | **+1.5** |
| | comp=Z,4.2nm,1.1s,baz=222,slow=5.8,SNR=5.4 | | | | | | | | |
| | comp=Z,4.2nm,1.1s | | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **43.09** | **114** | T | | T | 04 47 38.1 | |
| | baz=245,slow=75,SNR=24 | | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **43.09** | **114** | T | | T | 04 47 39.4 | |
| | baz=245,slow=75,SNR=25 | | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **43.11** | **114** | T | | T | 04 47 38.9 | |
| | baz=245,slow=75,SNR=20 | | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **49.49** | **294** | P | | **P** | **04 01 35.9** | **0.0** |
| **SIV** | **San Ignacio** | **50.30** | **292** | LR | | LR | 04 21 08.6 | |
| | comp=Z,94nm,18.1s,baz=116,slow=34 | | | | | | | | |
| **LPAZ** | **La Paz** | **54.64** | **285** | LR | | LR | 04 23 03.6 | |
| | comp=Z,56nm,21.4s,baz=91,slow=34 | | | | | | | | |
| **VNDA** | **Vanda** | **55.50** | **179** | P | | **P** | **04 02 19.2** | **-0.5** |
| **VNDA** | **Vanda** | **55.50** | **179** | P | | **P** | **04 02 19.0** | **-0.7** |
| | comp=Z,0.6nm,0.4s,baz=109,slow=19,SNR=16 | | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | | |
| **SAML** | **Samuel** | **56.99** | **295** | P | | **P** | **04 02 29.3** | **-1.8** |
| SAML | | | | | | IAmb | IAmb | 04 02 35.0 | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **MBAR** | **Mbarara** | **60.02** | **53** | LR | | LR | 04 26 36.4 | |
| | comp=Z,44nm,18.4s,baz=216,slow=34 | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **61.52** | **16** | P | | **P** | **04 03 02.1** | **-0.2** |
| TOA0 | | | | | | IAmb | IAmb | 04 03 02.8 | |
| | comp=Z,2.9nm,1.0s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **61.52** | **16** | P | | **P** | **04 03 01.8** | **-0.5** |
| TORD | | | | | | IAmb | IAmb | 04 03 03.6 | |
| | comp=Z,4.5nm,1.1s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **61.52** | **16** | P | | **P** | **04 03 01.9** | **-0.5** |
| | comp=Z,2.5nm,1.1s,baz=187,slow=1.3,SNR=6.8 | | | | | | | | |
| | comp=Z,2.5nm,1.1s | | | | | | | | |
| **BOAV** | **Boa Vista** | **64.53** | **305** | P | | **P** | **04 03 24.1** | **+1.6** |
| BOAV | | | | | | IAmb | IAmb | 04 03 59.8 | |
| | comp=Z,5.9nm,1.3s | | | | | | | | |
| **ATAH** | **Atahualpa** | **68.13** | **284** | LR | | LR | 04 33 23.2 | |
| | comp=Z,23nm,20.7s,baz=163,slow=36 | | | | | | | | |
| **TAM** | **Tamanrasset** | **71.67** | **18** | P | | **P** | **04 04 07.6** | **+0.4** |
| TAM | | | | | | IAmb | IAmb | 04 04 09.1 | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **73.23** | **306** | LR | | LR | 04 33 14.3 | |
| | comp=Z,86nm,21.4s,slow=33 | | | | | | | | |
| **JTS** | **Las Juntas de** | **85.50** | **290** | LR | | LR | 04 42 38.4 | |
| | comp=Z,60nm,19.0s,baz=120,slow=35 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **86.89** | **7** | P | | **P** | **04 05 31.0** | **+1.3** |
| | comp=Z,0.4nm,0.6s,baz=186,slow=6.0,SNR=5.3 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **CMIG** | **Matias Romero** | **96.96** | **287** | LR | | LR | 04 48 43.6 | | |
| | comp=Z,22nm,19.9s,baz=154,slow=35 | | | | | | | | |
| **ILAR** | **Eielson Array** | **149.70** | **322** | PKPbc | | **PKPbc** | **04 12 32.0** | **-1.9** |
| | comp=Z,1.2nm,0.8s,baz=11,slow=0.9,SNR=9.8 | | | | | | | | |
| **KSRS** | **Korea Array** | **149.82** | **95** | PKPbc | | **PKPbc** | **04 12 35.2** | **+0.2** |
| | comp=Z,1.2nm,0.8s,baz=262,slow=3.3,SNR=6.0 | | | | | | | | |

*IDC **03** 04:19:36.8±2.0, 8.°86S×157.°51E, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=72.3km s-min=38.0km az=148.0*

*NEIC **03** 04:19:37.9±0.4, 8.°8S±0.°2×157.°58E±0.°09, h10km±1km, mb4.3/8, Error ellipse: s-maj=32.4km s-min=11.5km az=196.0*

**ISC 03 04:19:38.7**±0.8, **8.°9S**±0.°2×**157.°6E**±0.°1, **h17**km, **n14**, σ0s**59**/14, **mb4.3**/7, **Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HNR** | **Honiara** | **2.42** | **102** | Pn | | **Pn** | **04 20 17.5** | **-0.1** |
| **WR0** | **Warramunga Arr** | **24.80** | **241** | P | | **P** | **04 25 00.4** | **+0.3** |
| **WB0** | **Warramunga Arr** | **24.86** | **242** | P | | **P** | **04 25 00.7** | **0.0** |
| **WB2** | **Warramunga Arr** | **24.96** | **241** | P | | **P** | **04 25 01.3** | **-0.3** |
| WB2 | | | | | | IAmb | IAmb | 04 25 07.2 | |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.97** | **241** | P | | **P** | **04 25 01.9** | **+0.2** |
| | comp=Z,1.5nm,0.7s,baz=68,slow=9.5,SNR=18 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| **MSWZ** | **Moikau Station** | **35.95** | **157** | P | | **P** | **04 26 38.6** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **63.90** | **296** | P | | **P** | **04 30 12.1** | **+0.9** |
| | comp=Z,1.7nm,0.3s,baz=104,slow=6.0,SNR=4.3 | | | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | | | |
| **PALK** | **Pallekele** | **78.25** | **279** | P | | **P** | **04 31 37.4** | **-1.0** |
| **L19K** | **White Mountain** | **79.83** | **21** | P | | **P** | **04 31 45.6** | **-0.5** |
| L19K | | | | | | IAmb | IAmb | 04 31 48.5 | |
| | comp=Z,6.7nm,1.4s | | | | | | | | |
| **G18K** | **Tagagawik** | **81.23** | **17** | P | | **P** | **04 31 53.1** | **-0.3** |
| **CAST** | **Castle Rocks** | **81.61** | **20** | P | | **P** | **04 31 54.8** | **-0.7** |
| CAST | | | | | | IAmb | IAmb | 04 32 02.2 | |
| | comp=Z,5.1nm,1.2s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **82.74** | **18** | P | | **P** | **04 32 01.7** | **+0.4** |
| **SCRK** | **Sand Creek** | **84.85** | **22** | P | | **P** | **04 32 11.8** | **-0.6** |
| SCRK | | | | | | IAmb | IAmb | 04 32 17.2 | |
| | comp=Z,2.8nm,1.4s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.93** | **51** | P | | **P** | **04 32 42.9** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=248,slow=6.6,SNR=3.1 | | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | | |

*IDC **03** 04:36:02.9±1.3, 44.°52N×149.°29E, h0km, mb3.6/5, mbtmp3.6/5, MS3.0/3, Error ellipse: s-maj=43.9km s-min=34.5km az=81.0*

*MOS **03** 04:36:09.1±1.1, 44.°52N×149.°13E, h62km, mb4.3/1, Error ellipse: s-maj=23.8km s-min=17.1km az=165.9*

*SKHL **03** 04:36:09.0±0.3, 44.°40N×149.°30E, h59km±4km, mb4.6/3*

**ISC 03 04:36:04.7**±3.8, **44°45N**±0.°07×**149°32E**±0.°09, **h11**km±23km, **n24**, σ1s**51**/25, **mb3.5**/5, **1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.30** | **308** | *i* P | | **Pn** | **04 36 29.7** | **+0.9** |
| KUR | | | | AMB | | AMB | 04 36 31.6 | |
| | 520nm,0.4s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **04 36 45.2** | **-0.9** |
| KUR | | | | A | | A | 04 36 48.6 | |
| | 880nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 04 36 48.6 | |
| | 1µm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.30** | **308** | *d* iPN | | **Pn** | **04 36 29.7** | **+0.9** |
| KUR | | | | *i* S | | **Sn** | **04 36 45.5** | **-0.6** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,719nm,0.4s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=N,364nm,0.2s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=E,364nm,0.3s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,875nm,0.3s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,1µm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **1.88** | **253** | *e*P | | **Pn** | **04 36 37.4** | **+0.6** |
| SHO | | | | AMB | | AMB | 04 36 40.4 | |
| | comp=E,50nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **04 36 58.4** | **-2.1** |
| SHO | | | | A | | A | 04 37 10.7 | |
| | comp=E,430nm,0.3s | | | | | | | |
| SHO | | | | A | | A | 04 37 10.7 | |
| | comp=E,380nm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **1.88** | **253** | *e*PN | | **Pn** | **04 36 37.4** | **+0.6** |
| SHO | | | | *e*S | | **Sn** | **04 36 58.2** | **-2.3** |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.2s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,103nm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,234nm,0.3s | | | | | | | |
| **YUK** | **Yuzn-Kuril'sk** | **2.52** | **262** | *e*P | | **Pn** | **04 36 46.9** | **+1.4** |
| YUK | | | | AMB | | AMB | 04 36 49.2 | |
| | comp=E,140nm,0.3s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **04 37 15.2** | **-1.0** |
| YUK | | | | A | | A | 04 37 22.5 | |
| | comp=E,290nm,0.4s | | | | | | | |
| YUK | | | | A | | A | 04 37 22.5 | |
| | comp=E,470nm,0.4s | | | | | | | |
| **YUK** | **Yuzn-Kuril'sk** | **2.52** | **262** | *e*PN | | **Pb** | **04 36 48.7** | **-1.2** |
| YUK | | | | *e*S | | **Sn** | **04 37 17.8** | **+1.6** |
| YUK | | | | pmax | | pmax | | |
| | comp=N,91nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=E,102nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,286nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,298nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,544nm,0.4s | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **2.81** | **249** | *e*P | | **Pn** | **04 36 50.6** | **+1.1** |
| NMR | | | | *e*S | | **Sn** | **04 37 22.1** | **-1.3** |
| **NMR** | **Nemuro--Hokkai** | **2.81** | **249** | *e*PN | | **Pn** | **04 36 50.6** | **+1.1** |
| NMR | | | | *e*S | | **Sn** | **04 37 24.0** | **+0.6** |
| **RUSJ** | **Misakicho** | **2.95** | **265** | *e*PN | | **Pn** | **04 36 53.9** | **+2.5** |
| RUSJ | | | | *e*S | | **Sn** | **04 37 30.1** | **+3.4** |
| **AKK** | **Akkeshi** | **3.55** | **248** | *e*P | | **Pn** | **04 37 01.4** | **+1.8** |
| AKK | | | | *e*S | | **Sn** | **04 37 40.7** | **-0.9** |
| **KLR** | **Kul'dur** | **12.94** | **298** | LR | | LR | 04 44 46.4 | |
| | comp=E,34nm,18.6s,baz=18,slow=41 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.67** | **144** | T | | T | 05 12 54.1 | |
| | baz=334,slow=76,SNR=115 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.68** | **144** | T | | T | 05 12 57.3 | |
| | baz=334,slow=76,SNR=87 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.68** | **144** | T | | T | 05 12 57.7 | |
| | baz=334,slow=76,SNR=86 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.68** | **145** | T | | T | 05 14 12.7 | |
| | baz=335,slow=76,SNR=98 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.68** | **145** | T | | T | 05 14 10.9 | |
| | baz=335,slow=76,SNR=73 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.70** | **145** | T | | T | 05 14 08.1 | |
| | baz=335,slow=76,SNR=49 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.65** | **298** | P | | **P** | **04 44 25.2** | **+0.1** |
| | comp=E,0.2nm,0.5s,baz=62,slow=7.5,SNR=2.1 | | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.22** | **255** | LR | | LR | 05 07 49.0 | |
| | comp=E,9.5nm,18.3s,baz=240,slow=39 | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.53** | **195** | P | | **P** | **04 46 48.2** | **+0.2** |
| | comp=E,0.7nm,0.9s,baz=17,slow=6.4,SNR=3.7 | | | | | | | |
| | comp=E,0.7nm,0.9s | | | | | | | |
| **FRB** | **Frobisher Bay** | **68.06** | **17** | LR | | LR | 05 21 34.2 | |
| | comp=E,33nm,18.1s,baz=142,slow=40 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.50** | **340** | P | | **P** | **04 47 12.3** | **-0.5** |
| | comp=E,0.2nm,0.5s,baz=29,slow=6.5,SNR=1.8 | | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **69.64** | **338** | P | | **P** | **04 47 12.7** | **-0.9** |
| | comp=E,0.9nm,0.5s,baz=39,slow=9.6,SNR=5.7 | | | | | | | |
| | comp=E,0.9nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.96** | **58** | P | | **P** | **04 48 19.8** | **+0.3** |
| | comp=E,0.2nm,0.5s,baz=306,slow=4.5,SNR=5.1 | | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | | |

**IGQ 03 04:39:15.7**±2.2, **6°S**±32°×**7°7W**±2°3, **h12**km, **M4.0**/7, **Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ZUMB** | **Zumba** | **2.07** | **294** | P | | **Pn** | 04 39 50.5 | 0.0 |
| ZUMB | | | | S | | Sn | 04 40 16.8 | +0.6 |
| **BOSC** | **San Juan Bosco** | **2.83** | **334** | P | | **Pn** | 04 39 58.1 | -2.9 |
| BOSC | | | | S | | Sn | 04 40 30.3 | -4.8 |
| **ARNL** | **Arenillas** | **3.54** | **307** | P | | **Pn** | 04 40 07.5 | -3.0 |
| **MORR** | **Playas El Morr** | **4.34** | **315** | P | | **Pn** | 04 40 20.9 | -0.6 |
| **BPAT** | **Tungurahua Vol** | **4.35** | **344** | P | | **Pn** | 04 40 22.0 | -0.1 |
| **ARRY** | **Arrayan** | **4.35** | **344** | P | | **Pn** | 04 40 21.9 | -0.1 |
| **BMAS** | **Trigal station** | **4.36** | **344** | P | | **Pn** | 04 40 22.1 | 0.0 |
| **TUYU** | **Q. Yuibug Volc** | **4.38** | **344** | P | | **Pn** | 04 40 22.6 | +0.2 |
| **BULB** | **Ulba Tungurahu** | **4.40** | **345** | P | | **Pn** | 04 40 22.4 | -0.3 |
| **JUI6** | **Juive** | **4.43** | **344** | P | | **Pn** | 04 40 22.5 | -0.6 |
| **ARDO** | **Archidona, Ten** | **4.72** | **353** | P | | **Pn** | 04 40 24.0 | -2.8 |
| **VCES** | **Cotopaxi** | **5.01** | **347** | P | | **Pn** | 04 40 30.8 | -0.4 |
| **BNAS** | **Cotopaxi Volca** | **5.16** | **346** | P | | **Pn** | 04 40 34.6 | +1.4 |
| **ANTS** | **Antisana-Sarah** | **5.26** | **350** | P | | **Pn** | 04 40 32.9 | -1.9 |
| **ANTG** | **Antisana-Guama** | **5.27** | **349** | P | | **Pn** | 04 40 33.6 | -1.3 |
| **FLOC** | **Florencia** | **7.42** | **12** | P | | **Pn** | 04 40 58.5 | -5.4 |

*IDC **03** 05:42:10.2±0.4, 6.°23S×132.°66E, h0km, mb5.2/23, mbtmp5.3/25, ML5.0/3, MS4.2/46, Error ellipse: s-maj=23.2km s-min=10.1km az=80.0*

*BJI **03** 05:42:12.2±0.0, 6.°31S×132.°93E, h35km, mb5.2/87, mB5.4/55, Ms4.7/73, Ms7 4.5/75*

*MOS **03** 05:42:13.9±0.8, 6.°17S×132.°67E, h35km, mb5.7/47, MS4.4/7, Error ellipse: s-maj=7.8km s-min=4.4km az=113.3*

*DJA **03** 05:42:15.8±0.2, 6°S±1°×13°3E±°, h37km±2km, M5.8/92, mb5.9/92, mB6.2/63, MLv6.3/12, Mw5.5/33, Mw(mB)5.9/63, MwMwp5.2/25, Mwp5.4/25*

*NEIC **03** 05:42:15.9±1.6, 6.°21S±0.°04×132.°71E±0.°06, h36km±4km, mb5.7/110, Mwb5.4/32, Mww5.4/18, Error ellipse: s-maj=9.3km s-min=3.5km az=123.0, Moment Tensor Solution. Moment tensor: Scale 10^17^Nm; Mrr=0.62; Mθθ=1.18; Mφφ 1.81; Mrθ=0.27; Mθφ 0.30; Mφr 0.21; Fault plane solution: M0 1.65000×10^17^ NP1:φs321.84000°, δ71.80000°, λ=-169.21000°. NP2:φs228.44000°, δ79.76000°, λ=-18.50000°. Principal axes: T 1.8602, Plg5.0000°, Azm276.0000°; N -0.5563, Plg69.0000°, Azm20.0000°; P -1.3039, Plg20.0000°, Azm184.0000°;*

*NEIC **03** 05:42:16.1, 6.°22S×132.°72E, h50km, Moment Tensor Solution. Duration: 2s6 Moment tensor: Scale 10^17^Nm; Mrr 0.16; Mθθ=1.21; Mφφ 1.05; Mrθ=0.40; Mθφ 1.43; Mφr 0.08; Fault plane solution: M0 1.86000×10^17^ NP1:φs70.48000°, δ85.21000°, λ=-9.95000°. NP2:φs161.32000°, δ80.09000°, λ=-175.13000°. Principal axes: T 1.7522, Plg4.0000°, Azm116.0000°; N 0.2238, Plg79.0000°, Azm225.0000°; P -1.9760, Plg10.0000°, Azm26.0000°;*

*NEIC **03** 05:42:16.1, 6.°22S×132.°72E, h50km*

*NEIC **03** 05:42:16.9, 6.°20S×132.°71E, h46km*

*GCMT **03** 05:42:17.9±0.1, 6.°15S±0.°01×132.°66E±0.°01, h80km, MW5.5/133, Moment Tensor Solution. s123,c212; s133,c226; Duration: 1s4 Moment tensor: Scale 10^17^ Nm; Mrr0.00±.03; Mθθ-1.27±.03; Mφφ1.26±.03; Mrθ-0.47±.02; Mθφ2.13±.03; Mφr0.14±.03; Best double couple: M0 2.52300×10^17^ NP1:φs74.00000°, δ85.00000°, λ-9.00000°. NP2:φs165.00000°, δ81.00000°, λ-174.00000°. Principal axes: T 2.4770, Plg3.0000°, Azm120.0000°; N 0.0860, Plg79.0000°, Azm224.0000°; P -2.5690, Plg10.0000°, Azm29.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 03 05:42:15.5**±0.3, **6°20S**±0.°03×**132°65E**±0.°03, **h42**km±2km, **h42**km:**pP-P, n984**, σ1s**47**/1039, **mb5.5**/169, **MS4.4**/78, **16C-16D, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.22** | **217** | P | | **Pn** | **05 42 52.6** | **+2.7** |
| **SAUI** | **Saumlaki** | **2.22** | **217** | | | **Pn** | **05 42 53.4** | **+3.4** |
| **SAUI** | **Saumlaki** | **2.22** | **217** | P | | **Pn** | **05 42 53.3** | **+3.4** |
| SAUI | | | | S | | **Sn** | **05 43 17.7** | **+1.5** |
| **KMPI** | **Kaimana, Papua** | **2.73** | **23** | P | | **Pn** | **05 42 58.9** | **+2.0** |
| KMPI | | | | S | | **Sn** | **05 43 29.2** | **+0.5** |
| **BNDI** | **Bandanaira** | **3.19** | **301** | P | | **Pn** | **05 43 05.9** | **+2.6** |
| **BNDI** | **Bandanaira** | **3.19** | **301** | P | | **Pn** | **05 43 06.1** | **+2.8** |
| **FAKI** | **Fak Fak** | **3.28** | **353** | P | | **Pn** | **05 43 05.9** | **+1.4** |
| **FAKI** | **Fak Fak** | **3.28** | **353** | Pn | | **Pn** | **05 43 06.3** | **+1.8** |
| **FAKI** | **Fak Fak** | **3.28** | **353** | P | | **Pn** | **05 43 06.2** | **+1.8** |
| **MSAI** | **Masohi** | **4.66** | **307** | P | | **Pn** | **05 43 24.8** | **+1.3** |
| **

**WB0 Warramunga Arr 13.60 173 Pn 05 45 23.0 -3.0**
**FITZ Fitzroy Crossi 13.66 209 P Pn 05 45 23.6 -3.2**
**FITZ Fitzroy Crossi 13.66 209 Pn 05 45 23.9 -2.9**
**WRAB Tennant Creek 13.76 173 *i* P Pn 05 45 26.3 -1.8**
**WRA Warramunga Arr 13.76 173 Pn 05 45 24.0 -4.2**
**WRA Warramunga Arr 13.76 173 Pn Pn 05 45 24.4 -3.8**
comp=Z,18nm,0.3s,baz=357,slow=13,SNR=252
WRA Sn Sn 05 47 43.2 -17
comp=Z,47nm,0.3s,baz=353,slow=21,SNR=6.6
WRA LR LR 05 50 55.2
comp=Z,3μm,20.4s,baz=354,slow=38
**TOLI2 Tolitoli 13.89 301 P Pn 05 45 31.1 +1.1**
**TOLI2 Tolitoli 13.89 301 Pn 05 45 29.1 -0.9**
**PMG Port Moresby 14.73 103 P Pn 05 45 42.0 +0.8**
**PMG Port Moresby 14.73 103 P Pn 05 45 41.8 +0.6**
**PMG Port Moresby 14.73 103 Pn 05 45 39.9 -1.3**
**PMG Port Moresby 14.73 103 Pn Pn 05 45 38.4 -2.9**
comp=Z,29nm,0.3s,baz=290,slow=4.6,SNR=48
PMG LR LR 05 52 20.1
comp=Z,3μm,19.1s,baz=298,slow=42
comp=Z,213nm,0.5s
**PMG Port Moresby 14.73 103** *ce*P **Pn 05 45 39.6 -1.6**
PMG pmax pmax
comp=Z,799nm,1.7s
**DAV Davao City (W) 14.95 332** Pn **P 05 45 46.4 -2.6**
comp=Z,140nm,0.3s,baz=333,slow=1.9,SNR=5.9
**DAV Davao City (W) 14.95 332 P Pn 05 45 44.0 -0.1**
**PLAI Plampang 14.97 259 P Pn 05 45 45.2 +0.7**
**PLAI Plampang 14.97 259 P Pn 05 45 42.4 -2.1**
comp=Z,399nm,0.8s,comp=Z,4μm
**MANU Manus Island 15.25 75 Pn 05 45 46.3 -1.8**
**QIS Mount Isa 15.79 155 P Pn 05 45 52.4 -2.7**
**QIS Mount Isa 15.79 155 P Pn 05 45 50.5 -4.6**
**TWSI Taliwang, Sumb 15.83 260 P Pn 05 45 54.3 -1.3**
**SMKI Samarinda 16.43 290 P P 05 46 04.8 -0.7**
comp=Z,472nm,1.0s
**MTSU Mount Surprise 16.45 137 P Pn 05 46 01.2 -2.3**
**AUCSH Cairns State H 16.69 131 P Pn 05 46 07.1 +0.6**
**SRBI Singaraja 17.40 263 P Pn 05 46 14.6 -0.8**
**AS31 Alice Springs 17.41 176 P Pn 05 46 12.3 -3.2**
**ASAR Alice Springs 17.41 176 P Pn 05 46 12.6 -3.0**
**ASAR Alice Springs 17.41 176 P Pn 05 46 12.7 -2.8**
comp=Z,24nm,0.3s,baz=353,slow=11,SNR=588
ASAR S Sn 05 49 14.6 -14
comp=Z,292nm,0.7s,baz=355,slow=28,SNR=14
comp=Z,227nm,0.7s
**ASPA Alice Springs 17.41 176 P Pn 05 46 11.8 -3.7**
**AS01 Alice Springs 17.41 176 P Pn 05 46 12.8 -2.7**
**MYLDM Lahad Datu 18.09 308 P Pn 05 46 23.3 -0.6**
MYLDM IAmb IAmb 05 46 30.5
comp=Z,963nm,1.8s
**KAVG Kavieng 18.46 80 P Pn 05 46 31.5 +3.1**
**MTKI Muara Teweh, K 18.46 286 P Pn 05 46 29.2 +0.8**
**JAGI Jajag, Banyuwa 18.48 262 P P 05 46 28.2 0.0**
**JAGI Jajag, Banyuwa 18.48 262 P P 05 46 25.0 -3.2**
**TV1H Townsville Har 18.93 135 P Pn 05 46 35.0 +1.0**
**CTA Charters Tower 19.12 138 P Pn 05 46 37.2 +0.9**
comp=Z,41nm,1.0s,baz=315,slow=12,SNR=283
CTA LR LR 05 54 15.7
comp=Z,206nm,20.7s,baz=314,slow=38
**CTA Charters Tower 19.12 138 P Pn 05 46 37.3 +1.0**
CTA pmax pmax
comp=Z,59nm,1.0s
**CTAO Charters Tower 19.12 138 P Pn 05 46 36.9 +0.6**
**CTAO Charters Tower 19.12 138 P Pn 05 46 36.3 0.0**
CTAO IAmb IAmb 05 46 38.6
comp=Z,751nm,1.1s
**CTAO Charters Tower 19.12 138 P Pn 05 46 36.3 0.0**
CTAO pmax pmax
comp=Z,751nm,1.1s
**WRKA Warakurna 19.19 192 P P 05 46 34.7 -1.3**
**WRKA Warakurna 19.19 192 P P 05 46 33.8 -2.2**
comp=Z,507nm,1.1s,SNR=34
**MBWA Marble Bar 19.44 219 P P 05 46 38.5 -0.1**
**MBWA Marble Bar 19.44 219 P P 05 46 37.4 -1.2**
MBWA IAmb IAmb 05 46 40.7
comp=Z,478nm,0.8s
**MBWA Marble Bar 19.44 219 P P 05 46 37.8 -0.8**
comp=Z,703nm,0.9s,SNR=30
**AUAYR Ayr State High 19.57 134 P P 05 46 40.7 +0.6**
**PSA00 Pilbara Seismi 19.67 218 P P 05 46 41.9 +0.7**
**PSA00 Pilbara Seismi 19.67 218 P P 05 46 40.7 -0.5**
PSA00 IAmb IAmb 05 46 52.4
comp=Z,308nm,0.8s
**PSA00 Pilbara Seismi 19.67 218 P P 05 46 40.7 -0.5**
comp=Z,442nm,0.8s,SNR=18
**GRJI Gresik 20.05 267** P Pn 05 46 46.9 -0.5
comp=Z,2μm,1.0s,comp=Z,14μm
**KKM Kota Kinabalu 20.41 306** P Pn 05 46 50.9 -0.9
**KKM Kota Kinabalu 20.41 306 P P 05 46 49.1 -0.3**
KKM IAmb IAmb 05 46 51.8
comp=Z,627nm,1.1s
**PWJI Pagerwojo 20.76 264 P P 05 46 52.8 -0.3**
**UWJI Ujung Watu 21.57 268 P P 05 47 02.9 +1.1**
comp=Z,458nm,0.8s
**OOD Oodnadatta 21.68 173 P P 05 47 03.6 +0.8**
**UGM Wanagama 22.02 264 P P 05 47 08.4 +1.7**
**STKI Sintang 22.02 286 P P 05 47 05.9 -0.8**
comp=Z,380nm,1.2s,comp=Z,20μm
**SMRI Semarang 22.07 267 P P 05 47 08.5 +1.3**
comp=Z,568nm,1.0s
**SMRI Semarang 22.07 267 P P 05 47 07.3 +0.1**
SMRI IAmb IAmb 05 47 10.1
comp=Z,428nm,0.8s
**SMRI Semarang 22.07 267 P P 05 47 07.9 +0.7**
comp=Z,562nm,0.9s
**SBUM Sibu 22.13 292 P P 05 47 07.2 -0.6**
SBUM IAmb IAmb 05 47 12.0
comp=Z,359nm,1.3s
**INKA Innaminka 22.77 161 P P 05 47 15.1 +0.7**
**QLP Quilpie 23.09 153 P P 05 47 18.4 +0.6**
**QLP Quilpie 23.09 153 P P 05 47 17.8 0.0**
comp=Z,983nm,1.4s,SNR=92
**GUMO Guam 23.10 32 P P 05 47 19.3 +1.3**
**GUMO Guam 23.10 32 P P 05 47 18.8 +0.9**
**GUMO Guam 23.10 32 P P 05 47 18.8 +0.9**
GUMO pmax pmax
comp=Z,1μm,1.2s
**KSM Kuching 23.57 288 P P 05 47 24.5 +1.9**
**KSM Kuching 23.57 288 P P 05 47 22.4 -0.2**
KSM IAmb IAmb 05 47 24.9
comp=Z,524nm,1.0s
**KPJI Karang Pucung 23.58 266 P P 05 47 21.9 -0.7**
comp=Z,237nm,0.8s
**MULG Mulgathing 24.00 177 P P 05 47 26.9 +0.5**
**CMJI Cimerak 24.07 265 P P 05 47 26.8 -0.4**
comp=Z,346nm,0.9s
**GIRL Giralia 24.14 226 P P 05 47 29.4 +1.6**
**JCJI Jatiwangi 24.23 268 P P 05 47 30.2 +1.5**
comp=Z,618nm,0.9s
**RK1H Rockhampton Ha 24.24 137 P P 05 47 29.4 +0.7**
**MEEK Meekatharra 24.33 212 P P 05 47 29.4 -0.2**
**MEEK Meekatharra 24.33 212 P P 05 47 29.1 -0.5**
comp=Z,345nm,1.0s,SNR=14
**LCRK Leigh Creek 24.69 168 P P 05 47 33.0 +0.3**
**FORT Forrest 24.83 189 P P 05 47 34.1 +0.1**
**FORT Forrest 24.83 189 P P 05 47 34.0 0.0**
**FORT Forrest 24.83 189 P P 05 47 33.6 -0.4**
comp=Z,956nm,1.0s,SNR=26
**BBJI Bungbulang 24.85 266 P P 05 47 32.9 -1.6**
**LEM Lembang 24.87 267 P P 05 47 35.3 +0.5**
comp=Z,332nm,1.1s
**LEM Lembang 24.87 267 P P 05 47 36.2 +1.4**
LEM pmax pmax
comp=Z,333nm,1.1s
**GD1S Gladstone Soft 25.00 137 P P 05 47 37.6 +2.0**
comp=Z,153nm,0.9s
**CNJI Cibinong 25.36 266 P P 05 47 39.6 +0.6**
comp=Z,295nm,1.0s,comp=Z,3μm
**CBJI Citeko 25.64 268 P P 05 47 42.1 +0.6**
comp=Z,515nm,1.0s
**DBJI Dramaga 25.74 268 P P 05 47 43.6 +1.1**
comp=Z,250nm,1.0s,comp=Z,11μm
**EIDS Eidsvold 25.98 139 P P 05 47 44.3 -0.2**
**EIDS Eidsvold 25.98 139 P P 05 47 43.9 -0.6**
**EIDS Eidsvold 25.98 139 P P 05 47 44.0 -0.4**
comp=Z,116nm,0.9s,SNR=18
**BBOO Buckleboo 26.67 174 P P 05 47 50.3 -0.4**
**BBOO Buckleboo 26.67 174 P P 05 47 49.9 -0.8**
BBOO IAmb IAmb 05 48 13.8
comp=Z,411nm,1.6s
**BBOO Buckleboo 26.67 174 P P 05 47 49.7 -0.9**
comp=Z,161nm,1.2s,SNR=6.9
**PPBI Pangkal Pinang 26.73 277 P P 05 47 51.9 +0.4**
comp=Z,181nm,0.9s

**STKA Stephens Creek 26.89 163 P P 05 47 52.4 -0.2**
**STKA Stephens Creek 26.89 163 P P 05 47 52.2 -0.4**
**STKA Stephens Creek 26.89 163 P P 05 47 52.2 -0.4**
comp=Z,16nm,0.9s,SNR=7.5
**STKA Stephens Creek 26.89 163 P P 05 47 52.6 0.0**
comp=Z,52nm,0.8s,baz=338,slow=9.0,SNR=42
STKA S S 05 52 50.0 +23
comp=Z,54nm,1.0s,baz=107,slow=19,SNR=2.4
STKA LR LR 05 59 51.4
comp=Z,3μm,18.2s,baz=334,slow=40
comp=Z,52nm,0.8s
**KMBL Kambalda 27.00 201 P P 05 47 53.3 -0.3**
**KMBL Kambalda 27.00 201 P P 05 47 52.6 -1.0**
comp=Z,144nm,1.2s,SNR=4.2
**WHYH Whyalla 27.09 171 P P 05 47 54.6 +0.2**
**HNR Honiara 27.23 99** LR LR 05 59 04.4
comp=Z,17μm,19.9s,baz=280,slow=37
**AULRC Lightning Ridg 27.27 150 P P 05 47 56.0 -0.1**
**MORW Morawa 27.64 213 P P 05 47 59.9 +0.5**
**MORW Morawa 27.64 213 P P 05 47 59.5 +0.1**
MORW IAmb IAmb 05 48 40.6
comp=Z,206nm,1.1s
**MORW Morawa 27.64 213 P P 05 47 58.8 -0.6**
comp=Z,149nm,1.8s,SNR=5.2
**HTT Hallett 27.72 169 P P 05 48 00.5 +0.4**
**HTT Hallett 27.72 169 P P 05 48 00.4 +0.2**
comp=Z,113nm,1.4s,SNR=6.6
**HTT Hallett 27.72 169 P P 05 48 00.3 +0.2**
**PMBI Palembang 27.97 275 P P 05 48 04.8 +2.3**
**KASI Kota Agung 28.01 270 P P 05 48 03.0 +0.1**
comp=Z,266nm,0.9s,comp=Z,3μm
**CMSA Cobar Meteorol 28.02 156 P P 05 48 02.6 -0.1**
**CMSA Cobar Meteorol 28.02 156 P P 05 48 01.7 -1.0**
comp=Z,113nm,1.4s,SNR=13
**BLDU Ballidu 28.54 210 P P 05 48 07.8 +0.4**
**BLDU Ballidu 28.54 210 P P 05 48 07.0 -0.4**
comp=Z,120nm,1.0s,SNR=3.2
**AUWSH Wavell State H 28.64 140 P P 05 48 08.8 +0.4**
**KLBR Kellerberrin 28.86 207 P P 05 48 10.4 +0.2**
**KLBR Kellerberrin 28.86 207 P P 05 48 09.6 -0.6**
comp=Z,162nm,0.8s,SNR=5.3
**TPRI Tanjung Pinang 28.95 283 P P 05 48 13.0 +1.8**
comp=Z,473nm,1.2s,comp=Z,6μm
**BTDF Bukit Timah Da 29.79 284 P P 05 48 20.1 +1.4**
**ARMA Armidale 29.99 146 P P 05 48 21.1 +0.7**
**ARMA Armidale 29.99 146 P P 05 48 20.6 +0.2**
ARMA IAmb IAmb 05 48 22.3
comp=Z,156nm,1.2s
**ARMA Armidale 29.99 146 P P 05 48 20.7 +0.3**
comp=Z,123nm,1.2s,SNR=13
**DLV T Lat 30.03 307 P P 05 48 22.0 +0.9**
**DLV T Lat 30.03 307 P P 05 48 21.4 +0.3**
**AUPHS Peel High Scho 30.11 148 P P 05 48 22.2 +0.8**
**NWAO Narrogin (SRO) 30.22 206 P P 05 48 23.1 +0.8**
comp=Z,20nm,0.7s,baz=25,slow=9.6,SNR=7.4
NWAO LR LR 06 01 29.2
comp=Z,986nm,19.1s,baz=356,slow=38
comp=Z,20nm,0.7s
**YNG Young 31.53 155 P P 05 48 34.6 +0.7**
**YNG Young 31.53 155 P P 05 48 34.1 +0.2**
comp=Z,1μm,1.0s,SNR=27
**ARPS Mount Arapiles 31.57 166 P P 05 48 35.1 +0.9**
**ARPS Mount Arapiles 31.57 166 P P 05 48 34.2 0.0**
comp=Z,192nm,1.0s,SNR=17
**TPUB Ta-pu 31.58 339 P P 05 48 35.7 +1.3**
**YOJ Yonaguni jima 31.89 343 P P 05 48 37.2 +0.2**
YOJ IAmb IAmb 05 48 39.2
comp=Z,73nm,1.0s
**YOJ Yonaguni jima 31.89 343 P P 05 48 37.2 +0.2**
YOJ pmax pmax
comp=Z,73nm,1.0s
**SSLB Suanglung 31.91 339 P P 05 48 36.7 -0.6**
**SSLB Suanglung 31.91 339 P P 05 48 37.1 -0.2**
**NTLH Newcastle Hard 31.95 149 P P 05 48 39.8 +2.3**
**SYDH Sydney Hard Ro 32.16 151 P P 05 48 40.8 +1.5**
**BKNI Bangkinang 32.20 280 P P 05 48 41.5 +1.5**
**BKNI Bangkinang 32.20 280 P P 05 48 40.2 +0.1**
**BKNI Bangkinang 32.20 280 P P 05 48 37.8 -2.3**
**BKNI Bangkinang 32.20 280 P P 05 48 41.1 +1.1**
**RIV Riverview 32.41 150 P P 05 48 43.2 +1.6**
**RIV Riverview 32.41 150 P P 05 48 42.7 +1.1**
comp=Z,186nm,1.3s,SNR=4.3
**RIV Riverview 32.41 150 P P 05 48 43.1 +1.5**
RIV pmax pmax
comp=Z,186nm,1.3s
**PDSI Padang 32.54 278 P P 05 48 42.0 -1.0**
comp=Z,82nm,0.8s,comp=Z,3μm
**YHNB Yeheng 32.58 341 P P 05 48 43.0 -0.3**
YHNB IAmb IAmb 05 49 49.7
comp=Z,250nm,1.9s
**CAN Canberra 32.66 155 P P 05 48 45.0 +1.2**
**CAN Canberra 32.66 155 P P 05 48 44.7 +0.9**
CAN IAmb IAmb 05 48 46.1
comp=Z,226nm,1.0s
**CAN Canberra 32.66 155 P P 05 48 44.0 +0.1**
comp=Z,244nm,1.1s,SNR=18
**CAN Canberra 32.66 155 P P 05 48 44.7 +0.9**
CAN pmax pmax
comp=Z,226nm,1.0s
**CAN Canberra 32.66 155 P P 05 48 44.9 +1.0**
**WOLH Wollongong Har 32.74 151 P P 05 48 46.0 +1.5**
**CNB Canberra Magne 32.81 154 P P 05 48 46.2 +1.0**
**CNB Canberra Magne 32.81 154 P P 05 48 45.8 +0.6**
comp=Z,148nm,1.2s,SNR=8.8
**BRAT Ballarat 32.86 163 P P 05 48 46.7 +1.3**
**JOW Kunigami 33.10 353 P P 05 48 49.4 +1.7**
**JOW Kunigami 33.10 353 P P 05 48 49.4 +1.7**
comp=Z,179nm,1.0s,baz=142,slow=28,SNR=5.1
JOW LR LR 06 03 32.5
comp=Z,566nm,18.9s,baz=171,slow=39
comp=Z,179nm,1.0s
**TOO Toolangi 33.35 161 P P 05 48 50.9 +1.1**
**TOO Toolangi 33.35 161 P P 05 48 51.0 +1.1**
TOO IAmb IAmb 05 48 52.5
comp=Z,81nm,1.0s
**TOO Toolangi 33.35 161 P P 05 48 50.8 +1.1**
comp=Z,89nm,1.0s,SNR=5.5
**TOO Toolangi 33.35 161 P P 05 48 51.0 +1.1**
TOO pmax pmax
comp=Z,81nm,1.0s
**GEXS Deakin Univers 33.57 163 P P 05 48 54.0 +2.4**
**QIZ Qiongzhong 33.66 319 P P 05 48 53.7 +1.0**
**QIZ Qiongzhong 33.66 319 P P 05 48 52.4 -0.3**
QIZ S S 05 54 18.0 +5.0
QIZ pmax pmax
comp=Z,50nm,1.5s
QIZ pmax pmax
comp=Z,330nm,3.5s
QIZ LR LR
comp=Z,610nm,16.7s
QIZ LR LR
comp=Z,540nm,17.4s
**KOUNC Koumac, New Ca 33.84 118 P P 05 48 54.7 +0.5**
**KOUNC Koumac, New Ca 33.84 118 P P 05 48 54.0 -0.2**
KOUNC IAmb IAmb 05 48 55.8
comp=Z,134nm,0.9s
**KULM Kulim 33.92 289 P P 05 48 54.7 -0.3**
**MILA Mila 34.22 156 P P 05 48 58.1 +0.7**
**MILA Mila 34.22 156 P P 05 48 57.9 +0.6**
comp=Z,105nm,1.3s,SNR=5.4
**UBPT Khong Chiam 34.36 309 P P 05 48 59.4 +0.7**
**UBPT Khong Chiam 34.36 309 P P 05 48 58.9 +0.2**
**JCJ Chichijima 34.36 15 P P 05 49 00.1 +1.5**
**JCJ Chichijima 34.36 15 P P 05 48 57.8 -0.7**
**JCJ Chichijima 34.36 15 P P** 05 48 53.4 -5.2
comp=Z,56nm,0.4s,baz=180,slow=4.7,SNR=8.4
JCJ LR LR 06 01 10.5
comp=Z,499nm,22.0s,baz=212,slow=33
**GSI Gunungsitoli 35.80 281 P P 05 49 10.0 -1.2**
**GSI Gunungsitoli 35.80 281 P P 05 49 10.2 -1.0**
**GSI Gunungsitoli 35.80 281 P P 05 49 10.0 -1.2**
comp=Z,404nm,1.1s,comp=Z,5μm
**SRIT Nakonsritamara 36.07 294 P P 05 49 14.4 +0.8**
**SRIT Nakonsritamara 36.07 294 P P 05 49 14.1 +0.6**
**NOUC Port Laguerre 36.14 119 P P 05 49 14.3 +0.3**
**NOUC Port Laguerre 36.14 119 P P 05 49 14.0 0.0**
NOUC pP **pP 05 49 24.7 0.0**
**DZM Mont Dzumac 36.25 119 P P 05 49 15.5 +0.4**
**DZM Mont Dzumac 36.25 119** *e*P **P 05 49 12.3 -2.8**
comp=Z,365nm,1.3s
**DZM Mont Dzumac 36.25 119** *e*PP **PP 05 50 34.4 -3.7**
comp=Z,102nm,24.0s
DZM *e*S **S 05 54 53.7 +0.7**
comp=Z,653nm,40.7s
DZM *e*SS **SS 05 57 27.9 -4.6**

comp=Z,1μm,26.4s
DZM *e*LR LR 05 58 56.4
comp=Z,1μm,24.6s
**DZM Mont Dzumac 36.25 119 P P 05 49 14.5 -0.6**
**DZM Mont Dzumac 36.25 119** LR LR 06 04 02.7
comp=Z,646nm,20.4s,baz=318,slow=36
**DZM Mont Dzumac 36.25 119 P P 05 49 15.3 +0.2**
**SURA Surathani 36.27 295 P P 05 49 16.4 +1.2**
**ONTNC Ouen Toro 36.34 120 P P 05 49 15.8 0.0**
**ONTNC Ouen Toro 36.34 120 P P 05 49 15.2 -0.6**
**LIFNC LIFOU 36.52 117 P P 05 49 17.9 +0.6**
**LIFNC LIFOU 36.52 117 P P 05 49 17.1 -0.2**
**YATNC Mamie plateau, 36.63 119 P P 05 49 19.2 +0.9**
**NAYO Nakonayok 37.16 303 P P 05 49 23.7 +0.9**
**SNSI Sinabang, Aceh 37.26 282 P P 05 49 23.6 -0.1**
comp=Z,254nm,1.2s
**PINNC Pines Island, 37.31 120 P P 05 49 24.9 +0.9**
**LHMI Lhok Sumawe 37.40 287 P P 05 49 25.7 +0.8**
**LHMI Lhok Sumawe 37.40 287 P P 05 49 25.3 +0.4**
**LHMI Lhok Sumawe 37.40 287 P P 05 49 25.6 +0.7**
LHMI pP **pP 05 49 34.0 -2.4**
**MARNC Mare, Loyalty 37.44 117 P P 05 49 25.8 +0.7**
**NONG Nongkai 37.80 310 P P 05 49 28.5 +0.4**
**GULI GuiLin 38.07 326** ⇑P **P 05 49 32.1 +1.8**
GULI S **S 05 55 16.0 -4.3**
GULI pmax pmax
comp=Z,20nm,1.4s
GULI pmax pmax
comp=Z,210nm,3.5s
GULI LR LR
comp=Z,470nm,18.4s
GULI LR LR
comp=Z,390nm,16.3s
GULI LR LR
comp=Z,560nm,20.6s
**MOO Moorlands 38.33 163 P P 05 49 33.5 +1.2**
**MOO Moorlands 38.33 163 P P 05 49 33.1 +0.8**
comp=Z,88nm,1.0s,SNR=2.3
**CNSH ChangSha 39.12 332 P P 05 49 40.4 +1.3**
CNSH S **S 05 55 34.7 -1.3**
CNSH pmax pmax
comp=Z,25nm,1.5s
CNSH LR LR
comp=Z,630nm,15.1s
CNSH LR LR
comp=Z,840nm,17.2s
CNSH LR LR
comp=Z,550nm,20.2s
**JNU Nakatsue 39.14 358 P P 05 49 40.3 +1.1**
**JNU Nakatsue 39.14 358 P P 05 49 40.1 +0.8**
**JNU Nakatsue 39.14 358 P P 05 49 40.3 +1.1**
comp=Z,347nm,1.0s,baz=173,slow=5.2,SNR=110
JNU LR LR 06 04 46.1
comp=Z,476nm,19.3s,baz=172,slow=35
comp=Z,347nm,1.0s
**JHJ Hachijo jima 2 39.68 9** LR LR 06 05 36.4
comp=Z,906nm,18.9s,baz=198,slow=35
**JMN Monobe 39.72 2 P P 05 49 45.8 +1.7**
**JMN Monobe 39.72 2 P P 05 49 45.2 +1.1**
**NJ2 Nanjing 40.24 342** ⇑P **P 05 49 48.5 +0.1**
NJ2 S **S 05 55 50.9 -1.9**
NJ2 SS **SS 05 58 49.1 -3.3**
NJ2 pmax pmax
comp=Z,26nm,0.7s
NJ2 pmax pmax
comp=Z,270nm,3.5s
NJ2 LR LR
comp=Z,520nm,18.9s
NJ2 LR LR
comp=Z,410nm,20.8s
NJ2 LR LR
comp=Z,890nm,19.9s
**PHRA Phrae 40.30 308 P P 05 49 49.8 +0.7**
**WHN Wuhan 40.52 335 P P 05 49 53.0 +2.3**
WHN S **S 05 55 57.1 +0.1**
WHN LR LR
comp=Z,3μm,33.0s
**JTU Tsushima 40.62 356 P P 05 49 53.0 +1.6**
**GYA Guiyang 41.09 323** ⇓P **P 05 49 56.9 +1.3**
GYA pP pP 05 50 05.8 -1.4
GYA PP **PnPn 05 51 39.0 +3.3**
GYA S **S 05 56 04.6 -1.3**
GYA SS **SS 05 59 07.5 -2.2**
GYA pmax pmax
comp=Z,44nm,0.8s
GYA pmax pmax
comp=Z,210nm,3.8s
GYA LR LR
comp=Z,330nm,22.7s
GYA LR LR
comp=Z,320nm,22.0s
GYA LR LR
comp=Z,590nm,21.3s
**CM31 Chiang Mai Arr 41.29 307 P P 05 49 57.9 +0.7**
CM31 IAmb IAmb 05 49 59.7
comp=Z,172nm,0.9s
**CM31 Chiang Mai Arr 41.29 307 P P 05 49 59.1 +1.8**
**CMAR Chiang Mai Arr 41.29 307 P P 05 49 57.7 +0.4**
**CMAR Chiang Mai Arr 41.29 307 P P 05 49 58.4 +1.1**
comp=Z,76nm,0.8s,baz=137,slow=7.4,SNR=288
CMAR S **S 05 56 02.0 -6.8**
comp=Z,1.0nm,0.3s,baz=132,slow=13,SNR=1.4
CMAR LR LR 06 09 40.3
comp=Z,215nm,21.6s,baz=125,slow=40
comp=Z,76nm,0.8s
**CHTO Chiang Mai 41.48 307 P P 05 49 59.0 +0.1**
CHTO IAmb IAmb 05 50 01.1
comp=Z,172nm,0.9s
**CHTO Chiang Mai 41.48 307 P P 05 49 59.0 +0.1**
CHTO pmax pmax
comp=Z,172nm,1.0s
**INU Inuyama 41.53 5 P P 05 49 59.6 +0.7**
**INU Inuyama 41.53 5 P P 05 49 59.1 +0.2**
INU IAmb IAmb 05 50 01.0
comp=Z,70nm,0.8s
**INU Inuyama 41.53 5 P P 05 49 59.8 +0.9**
**JGF Kuroka 41.81 6 P P 05 50 01.6 +0.3**
**JGF Kuroka 41.81 6 P P 05 50 02.1 +0.8**
JGF IAmb IAmb 05 50 03.1
comp=Z,177nm,1.0s
**KMI Kunming 42.61 318** ⇑P **P 05 50 09.5 +1.3**
KMI pP pP 05 50 19.0 -0.8
KMI S **S 05 56 23.6 -5.0**
KMI pmax pmax
comp=Z,63nm,1.1s
KMI LR LR
comp=Z,280nm,16.8s
KMI LR LR
comp=Z,160nm,14.8s
KMI LR LR
comp=Z,410nm,21.4s
**TJN Taejon 42.64 354 P P 05 50 09.2 +1.3**
**TJN Taejon 42.64 354 P P 05 50 08.8 +0.8**
**TJN Taejon 42.64 354** *ce*P **P 05 50 09.0 +1.1**
**MJAR Matsushiro Arr 42.83 7** P **P 05 50 09.0 -0.6**
comp=Z,87nm,0.8s,baz=188,slow=9.4,SNR=165
MJAR LR LR 06 06 15.3
comp=Z,676nm,21.3s,baz=176,slow=34
comp=Z,87nm,0.8s
**MAJO Matsushiro 42.83 7 P P 05 50 09.1 -0.5**
**MAJO Matsushiro 42.83 7 P P 05 50 09.1 -0.5**
MAJO IAmb IAmb 05 50 10.5
comp=Z,170nm,0.8s
**MAJO Matsushiro 42.83 7** *d*P **P 05 50 09.2 -0.4**
MAJO pmax pmax
comp=Z,198nm,0.9s
**MAJO Matsushiro 42.83 7 P P 05 50 09.6 0.0**
**MJB9 Matsu-Tunnel 42.83 7 P P 05 50 08.9 -0.7**
MJB9 IAmb IAmb 05 50 10.5
comp=Z,169nm,0.9s
**KSAR Wonju Array Be 43.64 355 P P 05 50 17.3 +1.3**
**KSAR Wonju Array Be 43.64 355 P P 05 50 17.3 +1.3**
**KSRS Korea Array 43.65 355 P P 05 50 17.8 +1.8**
comp=Z,32nm,0.9s,baz=177,slow=9.8,SNR=68
KSRS LR LR 06 11 41.3
comp=Z,205nm,18.0s,baz=180,slow=41
comp=Z,32nm,0.9s
**KS19 Wonju Array Si 43.70 354 P P 05 50 17.3 +0.8**
**INCN Inchon 43.81 353 P P 05 50 19.5 +2.0**
**INCN Inchon 43.81 353 P P 05 50 18.5 +1.0**
**INCN Inchon 43.81 353 P P 05 50 18.5 +1.0**
INCN pmax pmax
comp=Z,47nm,0.9s
**PZH PanZhiHua 44.20 319 P P 05 50 21.0 +0.1**
PZH S **S 05 56 46.4 -5.3**

PZH pmax pmax
comp=Z,40nm,0.9s
PZH pmax pmax
comp=Z,310nm,3.5s
PZH LR LR
comp=Z,210nm,15.7s
PZH LR LR
comp=Z,230nm,17.6s
PZH LR LR
comp=Z,300nm,18.1s
**JSD Sado 44.31 6** P **P** **05 50 22.0 +0.6**
**JSD Sado 44.31 6** P **P** **05 50 22.2 +0.8**
JSD IAmb IAmb 05 50 23.4
comp=Z,102nm,1.1s
**JMM Marumori 44.49 9** P **P** **05 50 23.8 +1.0**
**JMM Marumori 44.49 9** P **P** **05 50 23.6 +0.8**
**TIA Tai'an 44.63 342** P **P** **05 50 24.8 +0.8**
TIA S **S** **05 56 54.8 -2.5**
TIA SS **ScS** **06 00 10.7 -7.8**
TIA pmax pmax
comp=Z,32nm,0.9s
TIA LR LR
comp=Z,430nm,21.2s
TIA LR LR
comp=Z,430nm,13.7s
TIA LR LR
comp=Z,630nm,19.9s
**LYN LuoYang 44.78 336** *e*P **P** **05 50 25.9 +0.6**
LYN S **S** **05 56 56.3 -3.4**
LYN SS **ScS** **06 00 17.5 -2.1**
LYN pmax pmax
comp=Z,30nm,0.8s
LYN pmax pmax
comp=Z,330nm,3.8s
LYN LR LR
comp=Z,660nm,17.9s
LYN LR LR
comp=Z,230nm,15.8s
LYN LR LR
comp=Z,710nm,24.4s
**TNCH TengChong 45.45 314** ⇓P **P** **05 50 30.7 -0.3**
TNCH pP pP 05 50 42.7 0.0
TNCH PP **PP** **05 52 18.4 +0.5**
TNCH S **S** **05 57 07.6 -2.4**
TNCH pmax pmax
comp=Z,71nm,1.0s
TNCH pmax pmax
comp=Z,260nm,2.8s
TNCH LR LR
comp=Z,470nm,18.8s
TNCH LR LR
comp=Z,440nm,21.1s
TNCH LR LR
comp=Z,300nm,20.1s
**MSVF Nonsavu 45.75 109** P **P** **05 50 34.3 +1.0**
**MSVF Nonsavu 45.75 109** P **P** **05 50 33.4 0.0**
MSVF IAmb IAmb 05 50 35.6
comp=Z,103nm,0.9s
**MSVF Nonsavu 45.75 109***c i*P **P** **05 50 34.4 +1.0**
MSVF pmax pmax
comp=Z,127nm,1.0s
**MSVF Nonsavu 45.75 109** P **P** **05 50 34.4 +1.0**
**XAN Xi'an 45.88 332** ⇑P **P** **05 50 34.4 +0.3**
XAN pP pP 05 50 44.2 -1.6
XAN S **S** **05 57 10.7 -5.0**
XAN pmax pmax
comp=Z,42nm,1.3s
XAN LR LR
comp=Z,670nm,15.9s
XAN LR LR
comp=Z,390nm,17.8s
XAN LR LR
comp=Z,830nm,17.8s
**DL2 Dalian 46.02 348** P **P** **05 50 36.3 +1.3**
DL2 S **S** **05 57 15.3 -2.0**
DL2 pmax pmax
comp=Z,95nm,0.9s
DL2 LR LR
comp=Z,600nm,22.4s
DL2 LR LR
comp=Z,820nm,21.8s
**CD2 Chengdu 46.10 325** P **P** **05 50 36.6 +0.8**
CD2 S **S** **05 57 14.9 -4.0**
CD2 pmax pmax
comp=Z,30nm,0.5s
CD2 pmax pmax
comp=Z,250nm,3.5s
CD2 LR LR
comp=Z,290nm,17.8s
CD2 LR LR
comp=Z,370nm,18.4s
CD2 LR LR
comp=Z,420nm,21.6s
**FUNA Funafuti 46.20 96** P **P** **05 50 37.6 +0.7**
**HNS HongShan 46.49 340** ⇓P **P** **05 50 39.7 +1.0**
HNS S **S** **05 57 21.6 -2.5**
HNS pmax pmax
comp=Z,31nm,1.0s
HNS LR LR
comp=Z,320nm,19.1s
HNS LR LR
comp=Z,300nm,15.9s
HNS LR LR
comp=Z,460nm,19.1s
**JTM Tenmabayashi 47.39 9** P **P** **05 50 46.7 +1.1**
**BJT Baijiatuau 48.43 343** P **P** **05 50 54.9 +1.2**
**BJT Baijiatuau 48.43 343** P **P** **05 50 54.9 +1.2**
**BJI Beijing 48.45 343** P **P** **05 50 54.7 +0.8**
BJI sP **pP** **05 51 04.2 -1.4**
BJI PP **PP** **05 52 47.7 +0.7**
BJI S **S** **05 57 49.5 -2.4**
BJI pmax pmax
comp=Z,20nm,1.3s
BJI pmax pmax
comp=Z,91nm,4.4s
**SNY Shenyang 48.51 351** ⇓P **P** **05 50 54.4 +0.1**
SNY S **S** **05 57 51.8 -0.8**
SNY pmax pmax
comp=Z,7.0nm,0.4s
SNY pmax pmax
comp=Z,290nm,5.8s
SNY LR LR
comp=Z,390nm,20.2s
SNY LR LR
comp=Z,270nm,14.7s
SNY LR LR
comp=Z,610nm,19.8s
**MSHR Mys Shultsa 48.56 359***ce*P **P** **05 50 55.8 +1.1**
MSHR pmax pmax
comp=Z,43nm,1.1s
**PSTR Posyet 48.64 358** *i*P **P** **05 50 56.5 +1.2**
**ERM Erimo 48.93 10***ce*P **P** **05 50 58.7 +1.2**
ERM pmax pmax
comp=Z,81nm,1.7s
**FUTU Fugatoga 49.03 104** P **P** **05 50 59.5 +0.7**
**VLA Vladivostok 49.09 359** *i*P **P** **05 51 00.5 +1.8**
VLA pmax pmax
comp=Z,116nm,1.1s
**JCZ Jackson Bay 49.23 146** P **P** **05 51 01.3 +1.3**
**QRZ Quartz Range 49.55 140** P **P** **05 51 03.2 +0.8**
**DSZ Denniston Nort 49.61 142** P **P** **05 51 03.5 +0.6**
**KUZ Kuaotunu 49.67 134** P **P** **05 51 04.1 +0.7**
**MLZ Mavora Lakes 49.70 148** P **P** **05 51 04.0 +0.5**
**WKZ Wanaka 49.84 146** P **P** **05 51 05.1 +0.5**
WKZ IAmb IAmb 05 51 18.3
comp=Z,294nm,1.9s
**LZH Lanzhou 50.00 329** P **P** **05 51 08.2 +2.2**
LZH sP sP 05 51 20.7 -2.0
LZH S **S** **05 58 11.9 -2.2**
LZH pmax pmax
comp=Z,41nm,1.1s
LZH LR LR
comp=Z,890nm,15.1s
LZH LR LR
comp=Z,480nm,14.8s
LZH LR LR
comp=Z,1μm,18.2s
**USA0B Ussuriysk Arra 50.16 359** *i*P **P** **05 51 08.0 +1.1**
**USRK Ussuriysk Ar. 50.16 359** P **P** **05 51 07.5 +0.6**
**USRK Ussuriysk Ar. 50.16 359** P **P** **05 51 08.0 +1.1**
comp=Z,22nm,0.7s,baz=177,slow=7.5,SNR=42
USRK LR LR 06 13 06.9
comp=Z,126nm,19.0s,baz=175,slow=37
comp=Z,22nm,0.7s
**CN2 Changchun 50.19 353** P **P** **05 51 07.7 +0.6**
CN2 PcP **PcP** **05 52 27.1 +1.2**
CN2 pmax pmax
comp=Z,30nm,0.9s
CN2 pmax pmax
comp=Z,200nm,4.0s
CN2 LR LR
comp=Z,400nm,19.0s
**RPZ Rata Peaks 50.30 144** LR LR 06 12 46.3
comp=Z,853nm,18.4s,baz=308,slow=36
**SHL Shillong 50.64 310** P **P** **05 51 11.5 +0.4**
**SHL Shillong 50.64 310** P **P** **05 51 11.4 +0.3**
SHL pmax pmax
comp=Z,170nm,1.0s
**MDJ Mudanjiang 50.65 357** P **P** **05 51 12.0 +1.4**
**MDJ Mudanjiang 50.65 357** P **P** **05 51 11.6 +1.0**
MDJ S **S** **05 58 18.7 -3.9**
MDJ SS **SS** **06 01 50.2 -7.4**
MDJ pmax pmax
comp=Z,100nm,1.0s
MDJ pmax pmax
comp=Z,190nm,3.9s
MDJ LR LR
comp=Z,230nm,13.1s
MDJ LR LR
comp=Z,150nm,13.3s
MDJ LR LR
comp=Z,380nm,16.3s
**MDJ Mudanjiang 50.65 357** P **P** **05 51 11.8 +1.2**
MDJ pP **pP** **05 51 22.7 +0.2**
**HHC Hu-ho-hao-te 50.66 339** *e*P **P** **05 51 14.7 +3.8**
HHC pP pP 05 51 21.9 -0.9
HHC sP sP 05 51 25.3 -2.3
HHC S **S** **05 58 22.9 -0.2**
HHC sS sS 05 58 40.4 -2.0
HHC ScS **ScS** **06 00 56.2 -2.3**
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,90nm,3.8s
HHC LR LR
comp=Z,230nm,15.3s
HHC LR LR
comp=Z,180nm,16.0s
HHC LR LR
comp=Z,560nm,16.8s
**ASAJ Asahikawa 50.88 9** P **P** **05 51 13.0 +0.7**
comp=Z,19nm,0.6s,baz=234,slow=13,SNR=11
ASAJ LR LR 06 13 46.3
comp=Z,376nm,19.6s,baz=182,slow=37
comp=Z,19nm,0.6s
**AMCZ Amberley 50.94 143** P **P** **05 51 13.0 +0.1**
**BTO Baotou 51.01 338** *e*P **P** **05 51 15.8 +2.3**
BTO pP **pP** **05 51 25.9 +0.5**
BTO sP **sP** **05 51 29.6 -0.6**
BTO S **S** **05 58 32.7 +4.8**
BTO pmax pmax
comp=Z,14nm,0.6s
BTO LR LR
comp=Z,520nm,18.2s
BTO LR LR
comp=Z,500nm,13.1s
BTO LR LR
comp=Z,940nm,16.5s
**TEY Ternei 51.12 4** *e*P **P** **05 51 13.7 -0.4**
**SNZO South Karori 51.20 140** P **P** **05 51 14.1 -0.7**
**SNZO South Karori 51.20 140** P **P** **05 51 14.3 -0.6**
**SNZO South Karori 51.20 140** P **P** **05 51 13.9 -0.9**
**BKZ Black Stump Fm 51.33 136** P **P** **05 51 15.7 -0.2**
**URZ Urewera 51.34 135** LR LR 06 13 12.3
comp=Z,498nm,18.4s,baz=33,slow=36
**YUK Yuzh-Kuril'sk 51.40 12** *i*P **P** **05 51 17.3 +1.1**
**PLWZ Palliser 51.69 140** P **P** **05 51 17.8 -0.8**
**BFZ Birch Farm 51.89 138** P **P** **05 51 19.5 -0.5**
**RAO Raoul Island 51.89 122** LR LR 06 12 57.5
comp=Z,150nm,21.1s,baz=76,slow=36
**BNX BinXian 51.91 355** ⇓P **P** **05 51 20.2 +0.2**
BNX pP **pP** **05 51 29.1 -2.8**
BNX S **S** **05 58 36.7 -3.2**
BNX pmax pmax
comp=Z,95nm,1.0s
BNX pmax pmax
comp=Z,210nm,5.7s
BNX LR LR
comp=Z,350nm,16.8s
BNX LR LR
comp=Z,240nm,17.9s
BNX LR LR
comp=Z,620nm,23.9s
**XLT XiLinHaoTe 52.06 345** *e*P **P** **05 51 22.2 +0.9**
XLT S **S** **05 58 43.3 +1.0**
XLT SS **SS** **06 02 19.1 -1.0**
XLT pmax pmax
comp=Z,25nm,1.1s
XLT pmax pmax
comp=Z,260nm,6.0s
XLT LR LR
comp=Z,36nm,21.2s
XLT LR LR
comp=Z,310nm,20.2s
XLT LR LR
comp=Z,530nm,20.6s
**LSA Lhasa 53.48 314** P **P** **05 51 34.6 +2.1**
**LSA Lhasa 53.48 314** P **P** **05 51 34.6 +2.1**
**LSA Lhasa 53.48 314** P **P** **05 51 34.7 +2.1**
**PALK Pallekele 53.52 284** P **P** **05 51 33.0 +0.4**
**PALK Pallekele 53.52 284** LR LR 06 16 28.2
comp=Z,121nm,19.7s,baz=214,slow=38
**PALK Pallekele 53.52 284** P **P** **05 51 32.6 +0.1**
**PALK Pallekele 53.52 284** P **P** **05 51 33.0 +0.4**
PALK pmax pmax
comp=Z,260nm,1.4s
**PALK Pallekele 53.52 284** P **P** **05 51 33.2 +0.6**
**YSS Yuzh-Sakhalins 53.67 9** P **P** **05 51 34.2 +1.2**
**YSS Yuzh-Sakhalins 53.67 9** P **P** **05 51 33.5 +0.5**
YSS IAmb IAmb 05 51 34.6
comp=Z,55nm,0.9s
**YSS Yuzh-Sakhalins 53.67 9** *e*P **P** **05 51 33.4 +0.4**
YSS *e*S **S** **05 59 03.5 -0.4**
YSS pmax pmax
comp=Z,60nm,0.6s
YSS pmax pmax
comp=Z,300nm,5.3s
YSS MLR MLR
comp=Z,200nm,15.0s
YSS MLR MLR
comp=N,200nm,14.0s
YSS MLR MLR
comp=E,300nm,14.0s
**GTA Gaotai 54.59 329** ⇓P **P** **05 51 42.5 +2.5**
GTA pP pP 05 51 50.0 -2.0
GTA PcP **PcP** **05 52 45.3 +2.5**
GTA S **S** **05 59 15.2 -1.7**
GTA SS **SS** **06 03 05.7 +5.4**
GTA pmax pmax
comp=E,35nm,1.3s
GTA LR LR
comp=E,400nm,18.5s
GTA LR LR
comp=E,360nm,20.4s
GTA LR LR
comp=E,220nm,17.1s
**GOMU GeErMu 55.10 323** P **P** **05 51 45.5 +1.4**
GOMU pP pP 05 51 52.4 -3.6
GOMU sP sP 05 51 57.4 -3.5
GOMU PcP **PcP** **05 52 45.1 0.0**
GOMU S **S** **05 59 27.0 +2.7**
GOMU pmax pmax
comp=E,19nm,0.8s
GOMU pmax pmax
comp=E,340nm,5.0s
GOMU LR LR
comp=E,380nm,18.4s
GOMU LR LR
comp=E,560nm,20.8s
GOMU LR LR
comp=E,1μm,23.1s
**AFI Afiamalu 55.15 103** P **P** **05 51 44.8 +0.4**
AFI IAmb IAmb 05 51 46.2
comp=Z,121nm,1.1s
**AFI Afiamalu 55.15 103** P **P** **05 51 44.8 +0.4**
AFI pmax pmax
comp=Z,121nm,1.2s
**KLR Kul'dur 55.20 359** P **P** **05 51 45.0 +0.9**
comp=Z,9.1nm,0.7s,baz=214,slow=4.1,SNR=24
KLR LR LR 06 15 54.6
comp=Z,210nm,18.9s,baz=160,slow=37
comp=Z,9.1nm,0.7s
**KLR Kul'dur 55.20 359***d i*P **P** **05 51 44.9 +0.9**
KLR pmax pmax
comp=Z,66nm,2.5s
**UGL Uglegorsk 55.66 7** *e*P **P** **05 51 48.9 +1.6**
UGL pmax pmax
comp=Z,180nm,0.9s
**HIA Hailar 56.37 350** P **P** **05 51 53.8 +1.3**
**HEH HeiHe 56.40 356** *e*P **P** **05 51 53.0 +0.4**
HEH pP **pP** **05 51 59.5 -5.1**
HEH S **S** **05 59 37.5 -2.9**
HEH SS **SS** **06 03 23.6 -4.5**
HEH pmax pmax
comp=Z,72nm,1.0s
HEH pmax pmax
comp=Z,170nm,5.2s
HEH LR LR
comp=Z,310nm,13.1s
HEH LR LR
comp=Z,330nm,13.8s
HEH LR LR
comp=Z,440nm,19.9s
**GRNR Gornyy 56.83 3** *e*P **P** **05 51 56.8 +1.1**
**TYV Tymovskoe 57.48 8** *e*P **P** **05 52 01.4 +1.1**
TYV *e*S **S** **05 59 56.4 +1.8**
TYV pmax pmax
comp=Z,200nm,3.5s
TYV pmax pmax
comp=Z,24nm,1.4s
TYV smax smax
comp=N,300nm,5.6s
TYV smax smax
comp=E,200nm,5.6s
**HYB Hyderabad 58.34 295** *e*P **P** **05 52 07.8 +0.8**
HYB *es*P **sP** **05 52 23.1 -0.7**
HYB *e*PP **PP** **05 54 17.5 +0.9**
HYB *e*S **S** **06 00 09.1 +2.0**
**ULN Ulaanbaatar 58.36 340** P **P** **05 52 08.1 +1.3**
ULN IAmb IAmb 05 52 09.6
comp=Z,38nm,0.8s
**ULN Ulaanbaatar 58.36 340** P **P** **05 52 08.6 +1.9**
ULN P **P** **05 52 08.6 +1.9**
**ULN Ulaanbaatar 58.36 340***d i*P **P** **05 52 08.4 +1.7**
ULN pmax pmax
comp=Z,41nm,0.8s
**ULN Ulaanbaatar 58.36 340** P **P** **05 52 08.6 +1.9**
**SONM Songino Array 58.56 340** P **P** **05 52 08.2 +0.1**
**SONM Songino Array 58.56 340** P **P** **05 52 09.6 +1.5**
comp=Z,15nm,0.8s,baz=147,slow=8.0,SNR=55
comp=Z,15nm,0.8s
**DGAR Diego Garcia 59.74 265** P **P** **05 52 17.8 +1.1**
**DGAR Diego Garcia 59.74 265** P **P** **05 52 18.7 +1.9**
**DGAR Diego Garcia 59.74 265***ce*P **P** **05 52 19.2 +2.4**
DGAR pmax pmax
comp=Z,138nm,1.3s
**ZEA Zeya 59.88 356***de*P **P** **05 52 18.1 +1.2**
ZEA *e* 05 54 29.0
ZEA *e*S **S** **06 00 25.5 -0.2**
ZEA pmax pmax
comp=N,30nm,0.7s
ZEA pmax pmax
comp=Z,60nm,1.1s
ZEA pmax pmax
comp=Z,100nm,9.9s
ZEA pmax pmax
comp=Z,100nm,4.2s
ZEA smax smax
comp=E,300nm,15.8s
ZEA MLR MLR
comp=Z,200nm,15.0s
**KAAM Kaadhehdhoo 59.91 274** P **P** **05 52 19.0 +1.1**
**SKR Severo-Kuril's 60.17 17***ce*P **P** **05 52 20.5 +1.6**
**CIT Chita 60.24 347** *e*P **P** **05 52 20.8 +1.3**
CIT *e* 05 52 39.2
CIT *e* 05 53 09.2
CIT *e* 05 54 31.1
CIT pmax pmax
comp=Z,89nm,2.2s
**DRV Dumont d'Urvil 60.59 177** P **P** **05 52 22.1 +0.5**
**ZAK Zakamensk 61.81 339** *e*P **P** **05 52 31.0 +0.7**
ZAK pmax pmax
comp=Z,13nm,1.1s
**CASY Casey 61.92 190** P **P** **05 52 31.1 +0.5**
**CASY Casey 61.92 190** P **P** **05 52 31.3 +0.6**
**PET Petropavlovsk 62.98 17** P **P** **05 52 39.3 +1.5**
**PET Petropavlovsk 62.98 17** P **P** **05 52 38.6 +0.8**
PET IAmb IAmb 05 52 40.3
comp=Z,101nm,1.1s
**PET Petropavlovsk 62.98 17** *e*P **P** **05 52 35.4 -2.4**
PET *e*S **S** **06 01 05.3 +0.3**
PET pmax pmax
comp=Z,300nm,6.4s
PET pmax pmax
comp=Z,98nm,1.1s
PET pmax pmax
comp=Z,100nm,14.3s
PET MLR MLR
comp=Z,200nm,18.0s
**MOY Mondy 63.69 339** *e*P **P** **05 52 44.5 +1.7**
MOY pmax pmax
comp=Z,46nm,1.7s
**WMQ Urumqi 64.19 325** *e*P **P** **05 52 48.8 +2.6**
WMQ S **S** **06 01 21.1 +0.4**
WMQ pmax pmax
comp=Z,52nm,0.9s
WMQ pmax pmax
comp=Z,240nm,4.1s
WMQ LR LR
comp=Z,610nm,18.7s
WMQ LR LR
comp=Z,340nm,17.7s
WMQ LR LR
comp=Z,420nm,23.9s
**BOD Bodaibo 65.57 349** *e*P **P** **05 52 55.4 +0.7**
BOD pmax pmax
comp=Z,63nm,1.3s
**MA2 Magadan 67.13 10** P **P** **05 53 06.3 +1.6**
**MA2 Magadan 67.13 10** P **P** **05 53 06.0 +1.3**
MA2 IAmb IAmb 05 53 07.2
comp=Z,44nm,0.8s
**MA2 Magadan 67.13 10** LR LR 06 20 11.4
comp=Z,272nm,21.9s,baz=206,slow=34
**MA2 Magadan 67.13 10***d i*P **P** **05 53 05.7 +1.0**
MA2 pmax pmax
comp=Z,140nm,2.5s
**ZSN Zaisan 67.99 327** *e*P **P** **05 53 11.5 +1.0**
baz=327
**ZSN Zaisan 67.99 327** *e*P **P** **05 53 11.4 +1.0**
**YAK Yakutsk 68.06 358** P **P** **05 53 11.6 +1.1**
**YAK Yakutsk 68.06 358** P **P** **05 53 11.2 +0.6**
comp=Z,178nm,0.7s,baz=174,slow=2.3,SNR=37
YAK LR LR 06 23 37.1
comp=Z,104nm,19.7s,baz=174,slow=36
comp=Z,178nm,0.7s
**YAK Yakutsk 68.06 358***d i*P **P** **05 53 11.1 +0.6**
YAK *e**PP **pP** **05 53 19.9 -2.9**
YAK *e* 05 53 31.8
YAK *e* 05 55 45.8
YAK *e*S **S** **06 02 06.1 -0.7**
YAK *e* 06 03 00.4
YAK *e*SS **SS** **06 06 27.0 -3.0**
YAK pmax pmax
comp=Z,149nm,0.7s
YAK pmax pmax
comp=N,39nm,0.9s
YAK pmax pmax
comp=E,9.0nm,0.8s
YAK pmax pmax
comp=Z,47nm,1.4s
YAK pmax pmax
comp=N,35nm,1.5s
YAK pmax pmax
comp=E,13nm,1.4s
YAK smax smax
comp=E,270nm,2.9s
YAK smax smax
comp=N,60nm,2.3s
**SHEM Shemya Is, Ala 68.40 26** LR LR 06 19 39.2
comp=N,254nm,21.9s,baz=216,slow=33
**NIL Nilore 68.71 310** P **P** **05 53 16.4 +1.1**
NIL IAmb IAmb 05 53 17.5
comp=Z,52nm,0.8s
**NIL Nilore 68.71 310** P **P** **05 53 16.2 +0.9**
**NIL Nilore 68.71 310** P **P** **05 53 16.4 +1.1**

NIL pmax pmax
comp=Z,52nm,0.8s
**NIL Nilore 68.71 310** P **P** **05 53 16.6 +1.3**
**SHLS Shalkode 68.72 321** *e*P **P** **05 53 14.1 -1.2**
baz=321
**SHLS Shalkode 68.72 321** *e*P **P** **05 53 14.0 -1.2**
**PDGK Podgornoye 68.79 321** P **P** **05 53 15.8 +0.1**
**UZB Uzynbulak 68.99 321** *e*P **P** **05 53 17.5 +0.6**
baz=321
**UZB Uzynbulak 68.99 321** *e*P **P** **05 53 17.5 +0.6**
**MK31 Makanchi Array 69.03 325** P **P** **05 53 18.2 +1.4**
**MK31 Makanchi Array 69.03 325** *i*P **P** **05 53 18.3 +1.4**
**MKAR Makanchi Array 69.03 325** P **P** **05 53 17.8 +0.9**
**MKAR Makanchi Array 69.03 325** P **P** **05 53 18.5 +1.6**
comp=Z,13nm,0.5s,baz=117,slow=8.4,SNR=135
MKAR S **S** **06 02 17.4 -1.6**
comp=Z,3.9nm,1.2s,baz=124,slow=7.2,SNR=7.3
MKAR PKP2bc **P'P'bc** **06 21 24.4 -3.5**
comp=Z,0.6nm,0.9s,baz=289,slow=3.7,SNR=4.2
MKAR LR LR 06 25 34.1
comp=Z,185nm,21.5s,baz=133,slow=38
comp=Z,13nm,0.5s
**PRZ Przheval'sk 69.05 320** P **P** **05 53 19.4 +2.0**
PRZ pmax pmax
comp=Z,42nm,1.2s
**TARG Taragay, Kyrgy 69.06 319** P **P** **05 53 18.6 +0.9**
TARG IAmb IAmb 05 53 54.6
comp=Z,102nm,1.8s
**TARG Taragay, Kyrgy 69.06 319** P **P** **05 53 18.6 +0.9**
TARG pmax pmax
comp=Z,102nm,1.8s
**CCD Concordia, Ant 69.07 183** P **P** **05 53 18.0 +0.9**
**MAKZ Makanchi 69.21 325** P **P** **05 53 18.9 +0.8**
**MAKZ Makanchi 69.21 325** P **P** **05 53 19.0 +0.9**
**MAKZ Makanchi 69.21 325** P **P** **05 53 19.4 +1.3**
MAKZ pP **pP** **05 53 29.9 -0.5**
MAKZ sP **sP** **05 53 34.5 -0.6**
**KSH Kashi 69.23 316** P **P** **05 53 20.7 +2.2**
KSH pP pP 05 53 26.7 -4.0
KSH PcP **PcP** **05 53 42.8 +0.8**
KSH pmax pmax
comp=Z,30nm,1.0s
**SATY Saty 69.33 321** *e*P **P** **05 53 19.5 +0.5**
baz=320
**SATY Saty 69.33 321** *e*P **P** **05 53 19.5 +0.5**
**KPKS Kokpek 69.37 321** *e*P **P** **05 53 19.7 +0.5**
baz=321
**KPKS Kokpek 69.37 321** *e*P **P** **05 53 19.7 +0.5**
**ZHN Zhinishke 69.37 321** *e*P **P** **05 53 20.0 +0.7**
baz=321
**ZHN Zhinishke 69.37 321** *e*P **P** **05 53 20.0 +0.7**
**MDOK Medeo 70.25 320** *e*P **P** **05 53 25.1 +0.4**
baz=320
**MDOK Medeo 70.25 320** P **P** **05 53 25.8 +1.1**
**ARXS Arharly 70.28 321** *e*P **P** **05 53 25.6 +0.8**
**AAA Alma-Ata 70.36 320** *e*P **P** **05 53 25.9 +0.7**
comp=Z,13nm,0.4s,baz=320
**AAA Alma-Ata 70.36 320** *e*P **P** **05 53 25.9 +0.7**
AAA pmax pmax
comp=Z,13nm,0.4s
**SEY Seymchan 70.56 9***d i*P **P** **05 53 27.2 +1.2**
SEY pmax pmax
comp=Z,89nm,1.0s
**CHKK Chushkaly 70.62 321** *e*P **P** **05 53 27.4 +0.6**
baz=321
**CHKK Chushkaly 70.62 321** *e*P **P** **05 53 27.4 +0.6**
**BOOM Boomskoye usch 70.64 319** P **P** **05 53 28.0 +0.9**
**TKM2 Tokmak 2 71.06 319** P **P** **05 53 31.7 +2.0**
SNR=12
**TKM2 Tokmak 2 71.06 319** P **P** **05 53 30.9 +1.2**
**ARLS Aral 71.41 318** P **P** **05 53 33.9 +2.1**
ARLS pmax pmax
comp=Z,25nm,1.3s
**UCH Uchtor 71.45 318** P **P** **05 53 35.0 +2.6**
SNR=25
**AAK Ala-Archa 71.65 319** P **P** **05 53 35.3 +2.0**
**AAK Ala-Archa 71.65 319** P **P** **05 53 35.0 +1.8**
comp=Z,3.8nm,0.4s,baz=109,slow=6.6,SNR=9.4
AAK LR LR 06 29 06.4
comp=Z,147nm,21.6s,baz=100,slow=39
comp=Z,3.8nm,0.4s
**AAK Ala-Archa 71.65 319** P **P** **05 53 35.6 +2.4**
**AAK Ala-Archa 71.65 319** P **P** **05 53 35.3 +2.0**
AAK pmax pmax
comp=Z,48nm,1.4s
**OHH Osh 71.87 316** P **P** **05 53 36.6 +2.1**
OHH pmax pmax
comp=Z,29nm,1.1s
**KIWB Kanaga Island 71.90 30** P **P** **05 53 35.6 +1.3**
**USP Ospenovka 71.94 319** P **P** **05 53 36.9 +2.1**
SNR=15
**SGDS Sogindy 71.94 319** *e*P **P** **05 53 35.6 +0.8**
baz=320
**SGDS Sogindy 71.94 319** *e*P **P** **05 53 35.6 +0.8**
**AML Almayashu 71.95 318** P **P** **05 53 37.9 +2.5**
SNR=7.2
**ZAA0 Zalesovo Array 72.06 333** P **P** **05 53 35.9 +0.7**
**ZALV Zalesovo Beam 72.06 333** P **P** **05 53 35.2 +0.1**
comp=Z,16nm,0.6s,baz=116,slow=5.5,SNR=49
ZALV LR LR 06 28 35.3
comp=Z,67nm,20.8s,baz=134,slow=39
comp=Z,16nm,0.6s
**ARSB Arslanbob 72.08 317** P **P** **05 53 37.2 +1.4**
**ARSB Arslanbob 72.08 317** P **P** **05 53 37.2 +1.4**
ARSB pmax pmax
comp=Z,18nm,1.2s
**EKS2 Erkin-Say 72.14 318** P **P** **05 53 38.6 +2.5**
SNR=6.3
**ADK Adak 72.16 30** P **P** **05 53 36.7 +0.9**
ADK IAmb IAmb 05 53 37.8
comp=Z,261nm,1.8s
**ADK Adak 72.16 30** P **P** **05 53 36.7 +0.9**
ADK pmax pmax
comp=Z,261nm,1.8s
**SEM Semipalatinsk 72.19 328** *e*P **P** **05 53 37.0 +0.6**
baz=328
**SEM Semipalatinsk 72.19 328** *e*P **P** **05 53 37.0 +0.6**
**KBL Kabul 72.28 309** P **P** **05 53 38.0 +0.7**
**KBL Kabul 72.28 309** P **P** **05 53 38.6 +1.3**
SNR=17
**KBL Kabul 72.28 309** P **P** **05 53 38.0 +0.7**
KBL pmax pmax
comp=Z,35nm,0.9s
**VNDA Vanda 72.94 174** P **P** **05 53 40.0 -0.1**
**VNDA Vanda 72.94 174** P **P** **05 53 40.4 +0.3**
comp=Z,13nm,0.8s,baz=321,slow=6.6,SNR=72
VNDA LR LR 06 24 09.4
comp=Z,303nm,19.9s,baz=344,slow=35
comp=Z,13nm,0.8s
**GAR Garm 72.99 314** P **P** **05 53 42.7 +1.4**
GAR IAmb IAmb 05 54 03.5
comp=Z,50nm,0.8s
**BTLS Baital 73.04 321** *e*P **P** **05 53 42.0 +0.7**
baz=321
**BTLS Baital 73.04 321** *e*P **P** **05 53 41.9 +0.7**
**BTK Batken 73.05 315** P **P** **05 53 42.1 +0.6**
**BTK Batken 73.05 315** P **P** **05 53 42.1 +0.6**
BTK pmax pmax
comp=Z,23nm,0.8s
**KURBB Kurchatov Arra 73.23 327** P **P** **05 53 43.1 +0.9**
comp=Z,9.1nm,0.8s,baz=122,slow=4.9,SNR=58
KURBB S S 06 02 58.5 -8.8
comp=Z,0.4nm,0.7s,baz=132,slow=15,SNR=6.2
comp=Z,9.1nm,0.8s
**KURK Kurchatov 73.23 327** P **P** **05 53 42.5 +0.2**
**KURK Kurchatov 73.23 327** P **P** **05 53 43.4 +1.2**
KURK P **P** **05 53 43.4 +1.2**
**KURK Kurchatov 73.23 327** *i*P **P** **05 53 43.2 +1.0**
KURK pmax pmax
comp=Z,48nm,1.1s
**TRKS Terek-Say 73.42 316** P **P** **05 53 44.7 +0.9**
TRKS pmax pmax
comp=Z,27nm,1.3s
**CHGR Chuyangaron 73.69 313** P **P** **05 53 46.2 +0.8**
CHGR IAmb IAmb 05 54 01.9
comp=Z,81nm,1.1s
**CHGR Chuyangaron 73.69 313** P **P** **05 53 46.2 +0.8**
CHGR pmax pmax
comp=Z,81nm,1.1s
**SBA Scott Base 73.79 173** P **P** **05 53 45.7 +0.6**
**SBA Scott Base 73.79 173** P **P** **05 53 45.7 +0.6**
SBA pmax pmax
comp=Z,27nm,1.2s
**SIMJ Simiganj 73.80 313** P **P** **05 53 46.7 +0.6**
**KK31 Karatay Array 74.49 318** P **P** **05 53 50.7 +0.8**
KK31 IAmb IAmb 05 54 06.9
comp=Z,107nm,2.0s
**KK31 Karatay Array 74.49 318** *i*P **P** **05 53 51.0 +1.2**
**KKAR Karatay Array 74.49 318** P **P** **05 53 50.1 +0.3**
**KKAR Karatay Array 74.49 318** P **P** **05 53 50.8 +1.0**
KKAR IAmb IAmb 05 54 07.0
comp=Z,107nm,2.0s
**KKAR Karatay Array 74.49 318** P **P** **05 53 50.2 +0.3**
KKAR pmax pmax
comp=Z,107nm,2.0s
**BRLS Boroldav 74.92 318** *e*P **P** **05 53 52.9 +0.5**
baz=317
**BRLS Boroldav 74.92 318** *e*P **P** **05 53 52.8 +0.5**
**OTUK Ortayu 75.55 323** P **P** **05 53 56.4 +0.5**
**RER Riviere de l'E 75.59 250** P **P** **05 53 58.7 +2.0**
**TBI Tubuai 76.47 112** *e*S **S** **06 03 38.1 -6.6**
comp=Z,646nm,24.5s
TBI *e*SS **SS** **06 08 36.9 -3.2**
comp=Z,768nm,27.0s
TBI *e*LQ LQ 06 14 24.4
comp=Z,2µm,36.2s
TBI *e*LR LR 06 17 35.0
comp=Z,1µm,33.0s
TBI *e*LR LR 06 17 39.0
comp=Z,3µm,32.0s
**PPT2 Papeete2 76.53 107** *e*P **P** **05 54 02.0 -0.1**
comp=Z,64nm,23.2s
PPT2 *e*S **S** **06 03 38.7 -6.9**
comp=Z,136nm,27.5s
PPT2 *e*SS **SS** **06 08 39.2 -2.1**
comp=Z,163nm,28.5s
PPT2 *e*LQ LQ 06 14 25.6
comp=Z,1µm,38.0s
PPT2 *e*LR LR 06 17 31.7
comp=Z,511nm,25.0s
PPT2 *e*LR LR 06 17 34.8
comp=Z,401nm,26.0s
**PPT Papeete 76.53 107** LR LR 06 25 42.2
comp=Z,117nm,18.8s,baz=299,slow=34
**MAW Mawson 76.66 202** P **P** **05 54 03.4 +1.7**
comp=Z,8.6nm,0.9s,baz=69,slow=7.1,SNR=14
MAW LR LR 06 26 17.8
comp=Z,195nm,19.4s,baz=61,slow=34
comp=Z,8.6nm,0.9s
**NIKH Nikolski High 76.77 32** P **P** **05 54 03.3 +0.7**
baz=240
**MSEY Mahe Island 76.77 267** P **P** **05 54 04.7 +1.1**
**WBK Wadi Bani Khal 77.45 295** P **P** **05 54 08.9 +1.7**
**TIXI Tiksi 77.73 359** P **P** **05 54 08.1 +0.5**
**TIXI Tiksi 77.73 359** P **P** **05 54 07.8 +0.2**
comp=Z,21nm,0.7s,baz=186,slow=4.0,SNR=10.0
TIXI LR LR 06 29 46.0
comp=Z,184nm,19.8s,baz=191,slow=37
comp=Z,21nm,0.7s
**TIXI Tiksi 77.73 359** *i*P **P** **05 54 07.4 -0.2**
TIXI pmax pmax
comp=Z,30nm,0.9s
**BILL Bilibino 77.76 12** *e*P **P** **05 54 08.8 +1.0**
BILL *e* 05 54 17.6
BILL *e* 05 56 59.9
BILL pmax pmax
comp=Z,18nm,1.1s
BILL MLR MLR
comp=Z,224nm,19.0s
**WSAR Wadi Sarin 77.89 295** LR LR 06 30 12.8
comp=Z,71nm,21.2s,baz=122,slow=37
**WSAR Wadi Sarin 77.89 295** P **P** **05 54 10.7 +1.2**
**MHTO MHTO 78.03 293** P **P** **05 54 11.1 +0.7**
MHTO P **P** **05 54 11.1 +0.7**
**JMDO Jabal Madar 78.19 294** P **P** **05 54 12.0 +0.8**
JMDO P **P** **05 54 12.0 +0.8**
**SPIA Saint Paul Isl 78.22 28** P **P** **05 54 12.2 +1.6**
baz=238
**P08K Saint George I 78.25 29** P **P** **05 54 11.9 +1.2**
baz=239
**SMDO Samad 78.38 295** P **P** **05 54 14.0 +1.6**
SNR=7.8
**BIDO Bidbid 78.40 295** P **P** **05 54 13.7 +1.3**
**UNV Unalaska Valle 78.43 32** P **P** **05 54 12.4 +0.6**
baz=242
**BVA0 Borovoye Array 78.81 327** *i*P **P** **05 54 14.5 +0.5**
**BRVK Borovoye 78.88 327** P **P** **05 54 14.9 +0.5**
**BRVK Borovoye 78.88 327** P **P** **05 54 15.4 +1.1**
BRVK P **P** **05 54 15.4 +1.1**
**BRVK Borovoye 78.88 327***d i*P **P** **05 54 15.1 +0.8**
BRVK pmax pmax
comp=Z,11nm,0.9s
**HOQ Hoqain 79.15 295** P **P** **05 54 17.8 +1.3**
**ARQ Araqi 79.81 295** P **P** **05 54 21.3 +1.2**
ARQ P **P** **05 54 21.3 +1.2**
**SOHO SOHO 79.95 296** P **P** **05 54 21.6 +0.7**
**SOHO SOHO 79.95 296** P **P** **05 54 21.4 +0.6**
**DMTO DMTO 80.24 289** P **P** **05 54 23.2 +0.7**
**UOSS Minazif 80.41 296** P **P** **05 54 24.2 +0.9**
**HATD Hatta, Dubai 80.45 296** P **P** **05 54 24.4 +0.9**
**ASHO Ashiyiah 80.49 296** P **P** **05 54 24.8 +1.0**
**ASHO Ashiyiah 80.49 296** P **P** **05 54 24.7 +1.0**
**FALS False Pass 80.50 32** P **P** **05 54 23.9 +0.9**
baz=245
**MSFE Esma-Masafi 80.53 297** P **P** **05 54 25.9 +1.9**
**ALNE Al Ain 80.64 296** P **P** **05 54 25.7 +1.1**
ALNE P **P** **05 54 25.7 +1.1**
**SHME Shamm 80.68 298** P **P** **05 54 26.1 +1.3**
**RBK Rabkut 80.91 289** P **P** **05 54 26.8 +0.7**
**FAQ Al Faqa, Dubai 80.91 296** P **P** **05 54 27.1 +1.1**
**FAQ Al Faqa, Dubai 80.91 296** P **P** **05 54 26.8 +0.8**
**UMZA Um Al Zommool 80.92 294** P **P** **05 54 26.7 +0.7**
UMZA P **P** **05 54 26.7 +0.7**
**ASUD Al Ashush, Dub 81.13 296** P **P** **05 54 28.5 +1.4**
**ASUD Al Ashush, Dub 81.13 296** P **P** **05 54 28.5 +1.4**
ASUD P **P** **05 54 28.5 +1.4**
**DOK Doka 81.16 290** P **P** **05 54 28.0 +0.6**
DOK P **P** **05 54 28.0 +0.6**
**GAMB Gambell 81.19 22** P **P** **05 54 27.9 +1.3**
baz=236
**WHFO Wadi Hawf 81.38 289** P **P** **05 54 29.1 +0.4**
**AJN Ajban 81.42 296** P **P** **05 54 29.6 +1.0**
**SBV Sambava 81.53 257** P **P** **05 54 30.5 +1.1**
**S12K Black Hills 81.56 31** P **P** **05 54 29.4 +0.7**
baz=246
**M11K Mekoryuk 81.65 26** P **P** **05 54 29.9 +0.8**
baz=242
**ABTO Aybut 81.74 288** P **P** **05 54 31.0 +0.5**
**SDPT Sand Point 82.24 32** P **P** **05 54 32.8 +0.5**
baz=247
**MZR Muzera 82.50 294** P **P** **05 54 35.3 +0.8**
**CHNA Chernabura Isl 82.52 33** P **P** **05 54 34.6 +0.8**
baz=248
**M13K Dall Lake 82.92 27** P **P** **05 54 37.4 +1.7**
baz=244
**S14K Fog Glacier 83.08 31** P **P** **05 54 38.0 +1.2**
baz=248
**GHWR Ruwais 83.21 295** P **P** **05 54 39.4 +1.4**
**O14K Tigyukauivet M 83.39 28** P **P** **05 54 38.9 +0.7**
O14K IAmb IAmb 05 54 40.5
comp=Z,81nm,0.9s
**O14K Tigyukauivet M 83.39 28** P **P** **05 54 39.5 +1.4**
baz=246
**N14K Kuskokwak Cree 83.47 28** P **P** **05 54 39.7 +1.2**
baz=246
**TNA Tin City 83.52 21** P **P** **05 54 40.1 +1.4**
baz=239
**AB31 Akbulak array 83.53 321** *i*P **P** **05 54 39.7 +0.6**
**ABKAR Akbulak array 83.53 321** P **P** **05 54 39.6 +0.4**
**L14K Kuka Creek 83.62 26** P **P** **05 54 40.5 +1.2**
L14K IAmb IAmb 05 54 41.9
comp=Z,95nm,0.8s
**L14K Kuka Creek 83.62 26** P **P** **05 54 40.9 +1.6**
baz=245,SNR=23
**CHGN Chignik 83.68 32** P **P** **05 54 41.1 +1.4**
baz=249
**M14K Bethel 83.69 27** P **P** **05 54 41.0 +1.3**
baz=245,SNR=16
**QSPA South Pole Qui 83.78 180** P **P** **05 54 40.3 +0.1**
QSPA IAmb IAmb 05 54 41.4
comp=Z,29nm,0.8s
**QSPA South Pole Qui 83.78 180** P **P** **05 54 40.3 +0.1**
comp=Z,33nm,0.9s,baz=318,slow=1.5,SNR=121
QSPA LR LR 06 32 02.7
comp=Z,378nm,18.9s,baz=1.5,slow=36
comp=Z,33nm,0.9s
**J14K Nanvaranak Lak 83.86 25** P **P** **05 54 42.0 +1.5**
baz=244,SNR=5.8
**VOI Vohitsoka 83.88 249** P **P** **05 54 43.1 +1.3**
**ANM Nome 83.97 23** P **P** **05 54 42.4 +1.4**
baz=242
**O15K Ungalikthiuk R 84.04 29** P **P** **05 54 42.7 +1.2**
baz=247
**F14K Arctic Creek 84.05 22** P **P** **05 54 43.0 +1.5**
baz=241
**M15K Kasigluk River 84.24 27** P **P** **05 54 43.6 +1.1**
baz=246,SNR=7.0
**L15K Ungalak Mounta 84.28 26** P **P** **05 54 43.7 +1.0**
baz=246,SNR=12
**N15K Kwethluk River 84.30 28** P **P** **05 54 44.3 +1.5**
baz=247,SNR=5.9
**K15K Wolf Creek Mou 84.52 25** P **P** **05 54 45.6 +1.7**
baz=246,SNR=12
**G15K Niukluk 84.68 22** P **P** **05 54 45.2 +0.6**
baz=243
**F15K North Star Dit 84.78 22** P **P** **05 54 46.5 +1.4**
F15K IAmb IAmb 05 54 47.7
comp=Z,66nm,1.1s
**F15K North Star Dit 84.78 22** P **P** **05 54 46.5 +1.4**
baz=242,SNR=8.6
**TRNA Turayna 84.83 295** P **P** **05 54 48.0 +1.7**
SNR=5.4
**P16K Nushagak River 84.87 29** P **P** **05 54 46.9 +1.2**
baz=249,SNR=7.9
**CHIR Chirikof Islan 84.99 33** P **P** **05 54 47.2 +0.8**
baz=251
**O16K Kokwok River B 85.02 29** P **P** **05 54 47.2 +0.7**
O16K IAmb IAmb 05 54 48.7
comp=Z,69nm,1.4s
**O16K Kokwok River B 85.02 29** P **P** **05 54 47.6 +1.1**
baz=249,SNR=5.6
**N16K Nishlik Lake 85.03 28** P **P** **05 54 48.1 +1.6**
baz=248,SNR=9.7
**AKTO Aktyubinsk 85.06 322** P **P** **05 54 47.2 +0.4**
comp=Z,5.5nm,0.6s,baz=96,slow=6.1,SNR=16
AKTO LR LR 06 37 31.1
comp=Z,36nm,18.1s,baz=118,slow=39
comp=Z,5.5nm,0.6s
**M16K Timber Creek 85.14 27** P **P** **05 54 48.3 +1.2**
M16K IAmb IAmb 05 54 49.7
comp=Z,72nm,0.8s
**M16K Timber Creek 85.14 27** P **P** **05 54 48.3 +1.2**
baz=248,SNR=17
**L16K Owhat River 85.18 26** P **P** **05 54 48.3 +1.1**
baz=248
**SMRA Abu-Samra 85.18 295** P **P** **05 54 48.9 +0.9**
**R17L Mt. Peulik Vol 85.19 31** P **P** **05 54 47.7 +0.2**
baz=250
**H16K Elim 85.21 23** P **P** **05 54 48.8 +1.5**
baz=245,SNR=12
**SHMA Al-Shehemyia 85.23 297** P **P** **05 54 49.5 +1.2**
**J16K Anvik River 85.31 25** P **P** **05 54 49.6 +1.8**
baz=246,SNR=39
**Q16K King Salmon 85.40 30** P **P** **05 54 50.2 +1.8**
baz=250
**SVE Sverdlovsk 85.45 328** *e*P **P** **05 54 49.5 +0.8**
SVE pmax pmax
comp=Z,43nm,1.2s
**G16K Koyuk River 85.49 22** P **P** **05 54 49.7 +1.0**
baz=245,SNR=12
**I17K Unalakleet 85.52 24** P **P** **05 54 50.5 +1.7**
baz=246
**O17K Koliganek Bris 85.56 29** P **P** **05 54 50.3 +1.2**
baz=250
**Q17K Contact Creek 85.64 30** P **P** **05 54 49.5 -0.2**
baz=251,SNR=11
**P17K Kvichak River 85.68 29** P **P** **05 54 49.7 -0.1**
baz=250
**C16K Lisburne Hills 85.74 19** P **P** **05 54 51.5 +1.6**
baz=242
**N17K Nushagak Hills 85.78 28** P **P** **05 54 51.9 +1.7**
baz=250,SNR=12
**L17K Donlin 85.85 26** P **P** **05 54 52.3 +1.8**
baz=248,SNR=16
**M17K Holitna River 85.97 27** P **P** **05 54 53.1 +1.9**
baz=249,SNR=16
**SII Sitkinak Islan 85.98 32** P **P** **05 54 52.8 +1.4**
**SII Sitkinak Islan 85.98 32** P **P** **05 54 52.4 +1.0**
baz=252,SNR=5.0
**J17K VABM Dome 85.99 25** P **P** **05 54 52.9 +1.7**
baz=248,SNR=43
**K17K Iditarod 86.06 26** P **P** **05 54 53.3 +1.7**
baz=248,SNR=46
**R18K Karluk 86.15 31** P **P** **05 54 52.5 +0.4**
baz=252
**G17K Kiwalik Mounta 86.19 23** P **P** **05 54 53.2 +1.1**
baz=246,SNR=20
**Q18K Katmai Hardscr 86.20 30** P **P** **05 54 52.5 -0.1**
baz=252,SNR=13
**D17K Noatak River 86.24 20** P **P** **05 54 53.5 +1.2**
baz=244,SNR=12
**H17K Granite Mounta 86.25 23** P **P** **05 54 53.8 +1.3**
baz=247,SNR=23
**TAOE Nuku Hiva Isla 86.31 98** *e*S **S** **06 05 21.3 -5.9**
comp=Z,76nm,22.7s
TAOE *e*SS SS 06 10 52.3 -15
comp=Z,69nm,34.0s
TAOE *e*LQ LQ 06 18 31.4
comp=Z,2µm,35.5s
TAOE *e*LR LR 06 22 09.6
comp=Z,325nm,27.4s
**P18K Big Mountain, 86.33 29** P **P** **05 54 53.1 +0.1**
baz=251,SNR=6.4
**F17K Baldwin Pennin 86.35 22** P **P** **05 54 53.5 +0.7**
baz=246
**E17K Hotham Inlet 86.41 21** P **P** **05 54 54.2 +1.0**
baz=245
**ARU Arti 86.43 328** P **P** **05 54 52.9 -0.6**
comp=Z,4.7nm,0.4s,baz=155,slow=2.2,SNR=9.0
comp=Z,4.7nm,0.4s
**ARU Arti 86.43 328***c i*P **P** **05 54 52.9 -0.6**
ARU 05 58 15.0
ARU S **SKSac** **06 05 16.3 -0.2**
ARU SS **SS** **06 11 02.2 -4.9**
ARU pmax pmax
comp=Z,8.0nm,0.9s
**N18K Kilae Creek 86.43 28** P **P** **05 54 54.7 +1.2**
baz=251,SNR=17
**RDOG Red Dog Mine 86.45 20** P **P** **05 54 53.8 +0.3**
baz=244
**O18K Koktuh Hills 86.49 29** P **P** **05 54 54.2 +0.4**
baz=251,SNR=7.4
**C17K DeLong Mountai 86.55 19** P **P** **05 54 54.5 +0.6**
baz=244,SNR=5.3
**L18K Granite Mounta 86.59 26** P **P** **05 54 55.9 +1.7**
baz=250,SNR=34
**OHAK Old Harbor 86.65 32** P **P** **05 54 55.4 +0.9**
**OHAK Old Harbor 86.65 32** P **P** **05 54 55.7 +1.2**
baz=253,SNR=10
**SVW2 Sparrevohn 86.71 28** P **P** **05 54 56.4 +1.6**
**M18K Stony River 86.73 27** P **P** **05 54 56.5 +1.7**
baz=251,SNR=28
**H18K Honhosa River 86.94 23** P **P** **05 54 56.5 +0.6**
baz=248,SNR=6.4
**E18K Tukpahlearik C 86.98 21** P **P** **05 54 56.7 +0.7**
baz=246,SNR=13
**F18K Selawik 87.00 22** P **P** **05 54 57.0 +0.9**
baz=247
**J18K Innoko River 87.00 25** P **P** **05 54 57.3 +1.1**
baz=250,SNR=43
**O19K Port Alsworth 87.02 29** P **P** **05 54 56.6 +0.3**
baz=252
**G18K Tagagawik 87.10 23** P **P** **05 54 57.4 +0.7**
baz=248,SNR=16
**N19K Bonanza Creek 87.13 28** P **P** **05 54 58.3 +1.3**
baz=252,SNR=23
**KDAK Kodiak Island 87.17 31** LR LR 06 29 55.0
comp=Z,257nm,21.6s,baz=264,slow=33
**KDAK Kodiak Island 87.17 31** P **P** **05 54 57.9 +0.8**
baz=254
**C18K Utukok River 87.28 20** P **P** **05 54 57.8 +0.3**
baz=246
**P19K Oil Pt 87.38 29** P **P** **05 54 59.2 +1.1**
baz=253
**GCSA Galena City Sc 87.38 24** P **P** **05 54 59.1 +1.2**
baz=250
**B18K Kokolik River 87.39 19** P **P** **05 54 58.3 +0.4**
baz=245
**L19K White Mountain 87.39 27** P **P** **05 54 59.5 +1.3**
baz=252,SNR=51
**Q20K Shuyak Island 87.50 30** P **P** **05 54 59.1 +0.5**
baz=254
**M19K Big River Lodg 87.51 27** P **P** **05 55 00.1 +1.4**
baz=252,SNR=23
**J19K Poorman 87.64 25** P **P** **05 55 00.4 +1.1**
baz=251,SNR=28
**F19K Shaleruckik Mo 87.78 22** P **P** **05 55 00.6 +0.8**
baz=249,SNR=11

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| G19K | **Purcell Mounta** | **87.79** | **23** | P | **P** | **05 55 00.6** | **+0.7** | | |
| G19K | | | | IAmb | IAmb | 05 55 02.7 | | | |
| | comp=Z,53nm,1.0s | | | | | | | | |
| G19K | **Purcell Mounta** | **87.79** | **23** | P | **P** | **05 55 00.6** | **+0.7** | | |
| | baz=249,SNR=33 | | | | | | | | |
| O20K | **Slope Mountain** | **87.79** | **29** | P | **P** | **05 55 01.3** | **+1.2** | | |
| | baz=254 | | | | | | | | |
| H19K | **Roundabout Mou** | **87.82** | **23** | P | **P** | **05 55 00.8** | **+0.7** | | |
| | baz=250,SNR=18 | | | | | | | | |
| L20K | **Farewell, AK** | **87.91** | **26** | P | **P** | **05 55 01.8** | **+1.2** | | |
| | baz=252,SNR=24 | | | | | | | | |
| A19K | **Wainwright** | **87.97** | **18** | P | **P** | **05 55 02.6** | **+1.9** | | |
| | baz=246 | | | | | | | | |
| C19K | **Lookout Ridge** | **88.00** | **19** | P | **P** | **05 55 01.9** | **+1.0** | | |
| | baz=247,SNR=7.1 | | | | | | | | |
| M20K | **Styx River** | **88.07** | **27** | P | **P** | **05 55 02.7** | **+1.2** | | |
| | baz=253 | | | | | | | | |
| K20K | **Telida** | **88.10** | **26** | P | **P** | **05 55 02.4** | **+0.9** | | |
| K20K | | | | IAmb | IAmb | 05 55 04.2 | | | |
| | comp=Z,46nm,0.9s | | | | | | | | |
| K20K | **Telida** | **88.10** | **26** | P | **P** | **05 55 03.3** | **+1.8** | | |
| | baz=252,SNR=34 | | | | | | | | |
| HOM | **Homer** | **88.15** | **29** | P | **P** | **05 55 02.2** | **+0.4** | | |
| | baz=254 | | | | | | | | |
| E19K | **Redstone River** | **88.20** | **21** | P | **P** | **05 55 02.4** | **+0.5** | | |
| | baz=249,SNR=24 | | | | | | | | |
| D19K | **Kuna River** | **88.26** | **20** | P | **P** | **05 55 02.5** | **+0.3** | | |
| | baz=248,SNR=11 | | | | | | | | |
| N20K | **Mount Spurr** | **88.30** | **28** | P | **P** | **05 55 02.5** | **-0.1** | | |
| | baz=254 | | | | | | | | |
| J20K | **Nowinta River** | **88.31** | **25** | P | **P** | **05 55 03.4** | **+1.0** | | |
| | baz=252,SNR=36 | | | | | | | | |
| I20K | **Naaghedeneel** | **88.37** | **24** | P | **P** | **05 55 04.2** | **+1.5** | | |
| | baz=252,SNR=13 | | | | | | | | |
| H20K | **Anotleneega Mo** | **88.43** | **23** | P | **P** | **05 55 04.1** | **+1.1** | | |
| | baz=251,SNR=16 | | | | | | | | |
| KBD | **Kabd** | **88.59** | **299** | P | **P** | **05 55 04.5** | **-0.1** | | |
| F20K | **Avaraart Lake** | **88.61** | **22** | P | **P** | **05 55 04.4** | **+0.7** | | |
| | baz=251 | | | | | | | | |
| BRSE | **Bradley Lake S** | **88.62** | **30** | P | **P** | **05 55 04.0** | **0.0** | | |
| | baz=255 | | | | | | | | |
| CAPN | **Captain Cook N** | **88.68** | **28** | P | **P** | **05 55 04.5** | **+0.3** | | |
| | baz=255 | | | | | | | | |
| PPLA | **Purkeypile** | **88.78** | **26** | P | **P** | **05 55 04.8** | **0.0** | | |
| | baz=254 | | | | | | | | |
| SKT | **Skwentna** | **88.83** | **27** | P | **P** | **05 55 05.2** | **+0.3** | | |
| | baz=254,SNR=11 | | | | | | | | |
| E20K | **Nigu River** | **88.85** | **21** | P | **P** | **05 55 05.4** | **+0.5** | | |
| | baz=250 | | | | | | | | |
| D20K | **Etivluk River** | **88.86** | **20** | P | **P** | **05 55 05.4** | **+0.4** | | |
| | baz=250,SNR=11 | | | | | | | | |
| CAST | **Castle Rocks** | **88.97** | **26** | P | **P** | **05 55 06.6** | **+1.0** | | |
| | baz=254,SNR=16 | | | | | | | | |
| CHUM | **Lake Minchumin** | **89.00** | **25** | P | **P** | **05 55 06.6** | **+1.0** | | |
| | baz=254,SNR=28 | | | | | | | | |
| IMAR | **Indian Mountai** | **89.02** | **23** | P | **P** | **05 55 06.2** | **+0.4** | | |
| SUA | **Susitna One** | **89.05** | **28** | P | **P** | **05 55 05.8** | **-0.4** | | |
| | baz=255,SNR=6.7 | | | | | | | | |
| B20K | **Meade River** | **89.13** | **19** | P | **P** | **05 55 06.8** | **+0.6** | | |
| | baz=249 | | | | | | | | |
| G21K | **Allakaket** | **89.28** | **23** | P | **P** | **05 55 07.2** | **+0.3** | | |
| | baz=253,SNR=10 | | | | | | | | |
| O22K | **Cooper Landing** | **89.29** | **29** | P | **P** | **05 55 07.5** | **+0.3** | | |
| | baz=256 | | | | | | | | |
| H21K | **Melozitna Rive** | **89.30** | **24** | P | **P** | **05 55 07.3** | **+0.3** | | |
| H21K | | | | IAmb | IAmb | 05 58 38.0 | | | |
| | comp=Z,49nm,1.4s | | | | | | | | |
| H21K | **Melozitna Rive** | **89.30** | **24** | P | **P** | **05 55 07.6** | **+0.5** | | |
| | baz=253,SNR=18 | | | | | | | | |
| SEW | **Seward** | **89.33** | **29** | P | **P** | **05 55 07.5** | **+0.2** | | |
| | baz=256,SNR=5.9 | | | | | | | | |
| M22K | **Willow** | **89.41** | **28** | P | **P** | **05 55 08.0** | **+0.3** | | |
| M22K | **Willow** | **89.41** | **28** | P | **P** | **05 55 08.1** | **+0.5** | | |
| | baz=256,SNR=8.4 | | | | | | | | |
| RC01 | **Rabbit Creek A** | **89.43** | **28** | P | **P** | **05 55 08.0** | **+0.2** | | |
| | baz=256,SNR=5.9 | | | | | | | | |
| F21K | **Alatna River** | **89.50** | **22** | P | **P** | **05 55 09.1** | **+1.1** | | |
| | baz=253,SNR=6.2 | | | | | | | | |
| CUT | **Chulitna** | **89.51** | **27** | P | **P** | **05 55 07.5** | **-0.6** | | |
| | baz=256 | | | | | | | | |
| BPAW | **Bear Paw Mtn.** | **89.62** | **25** | P | **P** | **05 55 08.5** | **-0.2** | | |
| | baz=255 | | | | | | | | |
| C21K | **Knifeblade Rid** | **89.63** | **20** | P | **P** | **05 55 08.9** | **+0.4** | | |
| | baz=252,SNR=6.3 | | | | | | | | |
| E21K | **Killik River** | **89.69** | **21** | P | **P** | **05 55 09.1** | **+0.2** | | |
| | baz=252 | | | | | | | | |
| A21K | **Barrow** | **89.76** | **18** | P | **P** | **05 55 10.2** | **+1.1** | | |
| | baz=250 | | | | | | | | |
| RAYN | **Ar Rayn** | **89.83** | **294** | P | **P** | **05 55 11.2** | **+0.6** | | |
| RAYN | | | | IAmb | IAmb | 05 55 12.2 | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| RAYN | **Ar Rayn** | **89.83** | **294** | P | **P** | **05 55 11.4** | **+0.8** | | |
| RAYN | **Ar Rayn** | **89.83** | **294** | P | **P** | **05 55 11.1** | **+0.6** | | |
| RAYN | **Ar Rayn** | **89.83** | **294** | P | **P** | **05 55 11.2** | **+0.6** | | |
| RAYN | | | | pmax | pmax | | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| B21K | **Ikpikpuk River** | **89.83** | **20** | P | **P** | **05 55 10.0** | **+0.5** | | |
| | baz=252 | | | | | | | | |
| PMR | **Palmer** | **89.83** | **28** | P | **P** | **05 55 10.5** | **+0.9** | | |
| PMR | **Palmer** | **89.83** | **28** | P | **P** | **05 55 10.1** | **+0.5** | | |
| | baz=257,SNR=6.4 | | | | | | | | |
| PMR | **Palmer** | **89.83** | **28** | P | **P** | **05 55 10.3** | **+0.7** | | |
| H22K | **Ishtalitna Cre** | **89.93** | **23** | P | **P** | **05 55 10.8** | **+0.7** | | |
| | baz=255,SNR=18 | | | | | | | | |
| MLY | **Manley** | **89.96** | **24** | P | **P** | **05 55 10.4** | **+0.2** | | |
| | baz=255,SNR=15 | | | | | | | | |
| ELIB | **Princess Elisa** | **90.03** | **197** | *d*P | **P** | **05 55 12.0** | **+1.4** | | |
| | comp=Z,7.3nm,0.9s | | | | | | | | |
| PWL | **Port Wells** | **90.05** | **29** | P | **P** | **05 55 10.8** | **+0.1** | | |
| | baz=257 | | | | | | | | |
| F22K | **John River** | **90.06** | **22** | P | **P** | **05 55 11.2** | **+0.6** | | |
| | baz=254 | | | | | | | | |
| KNK | **Knik Glacier** | **90.11** | **28** | P | **P** | **05 55 11.5** | **+0.5** | | |
| | baz=257,SNR=6.2 | | | | | | | | |
| G22K | **Bettles** | **90.15** | **22** | P | **P** | **05 55 11.2** | **+0.2** | | |
| | baz=254 | | | | | | | | |
| A22K | **Sinclair Lake** | **90.16** | **18** | P | **P** | **05 55 11.2** | **+0.3** | | |
| | baz=251 | | | | | | | | |
| SML | **Sawmill** | **90.25** | **28** | P | **P** | **05 55 11.7** | **0.0** | | |
| | baz=257,SNR=8.9 | | | | | | | | |
| D22K | **Ayikyak River** | **90.27** | **20** | P | **P** | **05 55 12.0** | **+0.4** | | |
| | baz=253,SNR=5.6 | | | | | | | | |
| P23K | **Montague Islan** | **90.31** | **30** | P | **P** | **05 55 12.1** | **+0.2** | | |
| | baz=258 | | | | | | | | |
| E22K | **Anaktuvuk Pass** | **90.37** | **21** | P | **P** | **05 55 12.5** | **+0.5** | | |
| | baz=254 | | | | | | | | |
| WAT1 | **Susitna Watana** | **90.38** | **27** | P | **P** | **05 55 12.1** | **-0.2** | | |
| | baz=257 | | | | | | | | |
| MCK | **McKinley** | **90.41** | **26** | P | **P** | **05 55 11.9** | **-0.5** | | |
| | baz=257,SNR=10 | | | | | | | | |
| B22K | **Teshekpuk Lake** | **90.44** | **19** | P | **P** | **05 55 12.3** | **0.0** | | |
| | baz=253 | | | | | | | | |
| M23K | **Glacier View** | **90.53** | **28** | P | **P** | **05 55 13.1** | **+0.1** | | |
| | baz=258,SNR=7.7 | | | | | | | | |
| NEA2 | **Nenana** | **90.55** | **25** | P | **P** | **05 55 12.8** | **-0.1** | | |
| | baz=257,SNR=6.1 | | | | | | | | |
| I23K | **Minto, Yukon-K** | **90.56** | **24** | P | **P** | **05 55 13.0** | **+0.1** | | |
| | baz=256,SNR=31 | | | | | | | | |
| MAK | **Makhachkala** | **90.63** | **313** | *c i*P | **P** | **05 55 13.0** | **-0.8** | | |
| MAK | | | | *e* | | 05 58 45.1 | | | |
| MAK | | | | *e*PPP | PPP | 06 00 54.7 | | | |
| MAK | | | | *e* | | 06 05 42.3 | | | |
| MAK | | | | *e*SS | SS | 06 12 13.1 | +4.2 | | |
| MAK | | | | *e*SSS | SSS | 06 15 50.8 | | | |
| MAK | | | | pmax | pmax | | | | |
| | comp=Z,200nm,1.4s | | | | | | | | |
| GLI | **Glacier Island** | **90.64** | **29** | P | **P** | **05 55 13.2** | **-0.3** | | |
| | baz=258 | | | | | | | | |
| H23K | **Yukon River** | **90.64** | **24** | P | **P** | **05 55 13.5** | **+0.1** | | |
| H23K | | | | IAmb | IAmb | 05 58 48.8 | | | |
| | comp=Z,38nm,1.5s | | | | | | | | |
| H23K | **Yukon River** | **90.64** | **24** | P | **P** | **05 55 13.6** | **+0.2** | | |
| | baz=256,SNR=15 | | | | | | | | |
| G23K | **Bananza Creek** | **90.67** | **23** | P | **P** | **05 55 14.2** | **+0.7** | | |
| | baz=256,SNR=22 | | | | | | | | |
| WAT6 | **Susitna Watana** | **90.69** | **27** | P | **P** | **05 55 14.0** | **+0.2** | | |
| | baz=258,SNR=8.7 | | | | | | | | |
| SCM | **Sheep Creek Mo** | **90.73** | **28** | P | **P** | **05 55 14.1** | **+0.2** | | |
| | baz=258,SNR=5.2 | | | | | | | | |
| COLD | **Coldfoot** | **90.73** | **22** | P | **P** | **05 55 14.5** | **+0.8** | | |
| | baz=256 | | | | | | | | |
| Q23K | **Middleton Isla** | **90.73** | **30** | P | **P** | **05 55 14.6** | **+0.8** | | |
| | baz=259 | | | | | | | | |
| DHY | **Denali Highway** | **90.96** | **27** | P | **P** | **05 55 15.2** | **+0.2** | | |
| | baz=258,SNR=17 | | | | | | | | |
| D23K | **Nanushuk River** | **90.99** | **21** | P | **P** | **05 55 15.6** | **+0.7** | | |
| | baz=255,SNR=22 | | | | | | | | |
| COLA | **College** | **91.12** | **25** | P | **P** | **05 55 15.7** | **+0.2** | | |
| COLA | **College** | **91.12** | **25** | P | **P** | **05 55 15.8** | **+0.3** | | |
| | baz=258 | | | | | | | | |
| COLA | **College** | **91.12** | **25** | *i* P | **P** | **05 55 14.2** | **-1.3** | | |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| E23K | **Chandalar** | **91.14** | **22** | P | **P** | **05 55 16.4** | **+0.7** | | |
| | baz=256,SNR=38 | | | | | | | | |
| EYAK | **Cordova Ski Ar** | **91.23** | **29** | P | **P** | **05 55 16.7** | **+0.6** | | |
| | baz=260 | | | | | | | | |
| C23K | **Itkillik River** | **91.23** | **20** | P | **P** | **05 55 16.4** | **+0.4** | | |
| | baz=255,SNR=13 | | | | | | | | |
| TOLK | **Toolik Lake Re** | **91.30** | **21** | P | **P** | **05 55 16.5** | **+0.1** | | |
| TOLK | | | | IAmb | IAmb | 05 55 17.9 | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| TOLK | **Toolik Lake Re** | **91.30** | **21** | P | **P** | **05 55 17.0** | **+0.6** | | |
| | baz=256,SNR=16 | | | | | | | | |
| M24K | **Tolsona, Glenn** | **91.31** | **28** | P | **P** | **05 55 17.3** | **+0.7** | | |
| | baz=259 | | | | | | | | |
| H24K | **Noodor Dome** | **91.31** | **24** | P | **P** | **05 55 16.4** | **-0.1** | | |
| H24K | | | | IAmb | IAmb | 05 55 18.0 | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| H24K | **Noodor Dome** | **91.31** | **24** | P | **P** | **05 55 16.8** | **+0.3** | | |
| | baz=258,SNR=20 | | | | | | | | |
| KLU | **Klutina** | **91.32** | **28** | P | **P** | **05 55 17.3** | **+0.6** | | |
| | baz=260 | | | | | | | | |
| POKR | **Poker Plat Res** | **91.35** | **25** | P | **P** | **05 55 16.8** | **+0.2** | | |
| | baz=258 | | | | | | | | |
| HDA | **Harding Lake** | **91.41** | **25** | P | **P** | **05 55 16.4** | **-0.5** | | |
| | baz=259,SNR=9.4 | | | | | | | | |
| ILAR | **Eielson Array** | **91.51** | **25** | P | **P** | **05 55 15.8** | **-1.6** | | |
| ILAR | **Eielson Array** | **91.51** | **25** | P | **P** | **05 55 16.1** | **-1.3** | | |
| | comp=Z,8.6nm,0.8s,baz=274,slow=4.4,SNR=78 | | | | | | | | |
| ILAR | | | | PP | PP | 05 58 46.0 | -10 | | |
| | comp=Z,2.3nm,0.9s,baz=255,slow=6.6,SNR=5.8 | | | | | | | | |
| ILAR | | | | LR | LR | 06 32 15.6 | | | |
| | comp=Z,131nm,21.7s,baz=262,slow=33 | | | | | | | | |
| ILAR | **Eielson Array** | **91.51** | **25** | P | **P** | **05 55 15.8** | **-1.6** | | |
| E24K | **Your Creek** | **91.56** | **22** | P | **P** | **05 55 17.8** | **+0.1** | | |
| | baz=257 | | | | | | | | |
| G24K | **Hadweenzic Riv** | **91.65** | **23** | P | **P** | **05 55 18.5** | **+0.5** | | |
| | baz=258,SNR=14 | | | | | | | | |
| F24K | **Squaw Lake** | **91.67** | **22** | P | **P** | **05 55 18.4** | **+0.3** | | |
| F24K | | | | IAmb | IAmb | 05 55 20.1 | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| F24K | **Squaw Lake** | **91.67** | **22** | P | **P** | **05 55 18.4** | **+0.3** | | |
| | baz=258,SNR=18 | | | | | | | | |
| D24K | **Happy Valley** | **91.68** | **21** | P | **P** | **05 55 18.2** | **+0.1** | | |
| | baz=257,SNR=12 | | | | | | | | |
| KIRV | **Kirov** | **91.72** | **329** | LR | LR | 06 41 32.0 | | | |
| | comp=Z,54nm,21.3s,baz=93,slow=39 | | | | | | | | |
| KAIM | **Kayak Island** | **91.78** | **30** | P | **P** | **05 55 18.4** | **-0.4** | | |
| | baz=261 | | | | | | | | |
| PAX | **Paxson** | **91.79** | **27** | P | **P** | **05 55 19.2** | **+0.3** | | |
| | baz=260,SNR=9.3 | | | | | | | | |
| K24K | **Donnelly Dome** | **91.80** | **26** | P | **P** | **05 55 19.4** | **+0.6** | | |
| | baz=260 | | | | | | | | |
| BELG | **Belogornoye** | **91.82** | **322** | LR | LR | 06 42 44.6 | | | |
| | comp=Z,76nm,18.7s,baz=93,slow=40 | | | | | | | | |
| BELG | **Belogornoye** | **91.82** | **322** | *i* P | **P** | **05 55 18.1** | **-1.0** | | |
| BELG | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| HARP | **HAARP** | **91.83** | **27** | P | **P** | **05 55 19.2** | **+0.2** | | |
| | baz=260 | | | | | | | | |
| C24K | **Franklin Bluff** | **91.85** | **20** | P | **P** | **05 55 19.1** | **+0.3** | | |
| | baz=257 | | | | | | | | |
| BMRM | **Bremner River** | **91.86** | **29** | P | **P** | **05 55 19.1** | **-0.1** | | |
| | baz=261 | | | | | | | | |
| N25K | **Chitina, Valde** | **91.96** | **28** | P | **P** | **05 55 19.8** | **+0.1** | | |
| | baz=261,SNR=7.1 | | | | | | | | |
| J25K | **Salcha River,** | **92.12** | **25** | P | **P** | **05 55 19.9** | **-0.4** | | |
| | baz=260,SNR=12 | | | | | | | | |
| G25K | **Bearman Lake** | **92.20** | **23** | P | **P** | **05 55 20.7** | **+0.2** | | |
| | baz=260,SNR=8.9 | | | | | | | | |
| PRP | **Porcupine Dome** | **92.21** | **24** | P | **P** | **05 55 19.4** | **-1.4** | | |
| | baz=260 | | | | | | | | |
| H25L | **Birch Creek** | **92.22** | **24** | P | **P** | **05 55 21.2** | **+0.6** | | |
| | baz=260,SNR=20 | | | | | | | | |
| GNI | **Garni** | **92.35** | **310** | LR | LR | 06 43 38.0 | | | |
| | comp=Z,47nm,21.3s,baz=102,slow=40 | | | | | | | | |
| F25K | **Christian Rive** | **92.53** | **22** | P | **P** | **05 55 22.7** | **+0.6** | | |
| | baz=260,SNR=16 | | | | | | | | |
| CRQE | **Cirque** | **92.56** | **29** | P | **P** | **05 55 22.9** | **+0.5** | | |
| | baz=262,SNR=8.1 | | | | | | | | |
| D25K | **Kavik River** | **92.57** | **21** | P | **P** | **05 55 22.1** | **-0.2** | | |
| | baz=259 | | | | | | | | |
| SCRK | **Sand Creek** | **92.61** | **26** | P | **P** | **05 55 22.4** | **-0.2** | | |
| | baz=261,SNR=9.1 | | | | | | | | |
| MCARA | **McCarthy VSAT** | **92.68** | **29** | P | **P** | **05 55 23.3** | **+0.4** | | |
| | baz=262 | | | | | | | | |
| L26K | **Log Cabin Wild** | **92.75** | **27** | P | **P** | **05 55 23.9** | **+0.7** | | |
| | baz=262 | | | | | | | | |
| M26K | **Nabesna, AK** | **92.83** | **28** | P | **P** | **05 55 23.6** | **0.0** | | |
| | baz=262 | | | | | | | | |
| J26L | **Joeph Creek** | **92.87** | **26** | P | **P** | **05 55 24.1** | **+0.2** | | |
| | baz=262,SNR=34 | | | | | | | | |
| BMAR | **Burnt Mountain** | **92.90** | **23** | P | **P** | **05 55 24.2** | **+0.4** | | |
| MESA | **MESA** | **93.04** | **30** | P | **P** | **05 55 25.7** | **+0.9** | | |
| | baz=263 | | | | | | | | |
| F26K | **Sheenjek River** | **93.11** | **22** | P | **P** | **05 55 25.7** | **+1.0** | | |
| | baz=261,SNR=20 | | | | | | | | |
| G26K | **Porcupine Rive** | **93.14** | **23** | P | **P** | **05 55 25.6** | **+0.8** | | |
| | baz=262,SNR=18 | | | | | | | | |
| I26K | **Coal Creek Min** | **93.16** | **25** | P | **P** | **05 55 24.6** | **-0.4** | | |
| | baz=262 | | | | | | | | |
| C26K | **Camden Bay** | **93.18** | **20** | P | **P** | **05 55 25.1** | **+0.1** | | |
| | baz=261 | | | | | | | | |
| M27K | **Edge Creek, AK** | **93.34** | **28** | P | **P** | **05 55 26.4** | **+0.3** | | |
| | baz=263,SNR=8.4 | | | | | | | | |
| CTG | **Chitna Glacier** | **93.43** | **29** | P | **P** | **05 55 27.4** | **+0.8** | | |
| | baz=263,SNR=10 | | | | | | | | |
| L27K | **Beaver Creek,** | **93.45** | **27** | P | **P** | **05 55 27.4** | **+0.9** | | |
| | baz=263,SNR=12 | | | | | | | | |
| K27K | **Chicken** | **93.45** | **26** | P | **P** | **05 55 27.7** | **+1.4** | | |
| | baz=263 | | | | | | | | |
| BCAR | **Beaver Creek A** | **93.47** | **27** | P | **P** | **05 55 26.9** | **+0.4** | | |
| C27K | **Jago River** | **93.55** | **20** | P | **P** | **05 55 27.2** | **+0.5** | | |
| | baz=262 | | | | | | | | |
| I27K | **Kandik River** | **93.83** | **25** | P | **P** | **05 55 28.7** | **+0.5** | | |
| | baz=264,SNR=39 | | | | | | | | |
| PINM | **Pinnacle** | **93.88** | **30** | P | **P** | **05 55 28.3** | **-0.2** | | |
| | baz=264 | | | | | | | | |
| NVL | **N'lazarevskaya** | **93.88** | **197** | *e*P | P | 05 55 22.4 | -5.8 | | |
| NVL | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| NVL | | | | MLR | MLR | | | | |
| | comp=Z,233nm,18.0s | | | | | | | | |
| EGAK | **Eagle** | **93.93** | **25** | P | **P** | **05 55 28.6** | **+0.1** | | |
| | baz=264,SNR=23 | | | | | | | | |
| H27K | **Steamboat Moun** | **93.94** | **24** | P | **P** | **05 55 29.4** | **+0.8** | | |
| | baz=264,SNR=26 | | | | | | | | |
| YUK3 | **Moose Creek** | **93.94** | **28** | P | **P** | **05 55 28.7** | **-0.2** | | |
| | baz=264 | | | | | | | | |
| G27K | **Doyon Strip** | **93.95** | **23** | P | **P** | **05 55 29.4** | **+0.7** | | |
| | baz=264,SNR=10 | | | | | | | | |
| O28M | **Mount Upton** | **93.97** | **29** | P | **P** | **05 55 28.9** | **-0.4** | | |
| | baz=264 | | | | | | | | |
| KBZ | **Khabaz** | **94.05** | **313** | LR | LR | 06 45 39.5 | | | |
| | comp=Z,31nm,19.2s,baz=78,slow=40 | | | | | | | | |
| E27K | **Coleen River** | **94.13** | **22** | P | **P** | **05 55 29.7** | **+0.3** | | |
| | baz=264,SNR=16 | | | | | | | | |
| KIV | **Kislovodsk** | **94.22** | **314** | *e*P | **P** | **05 55 28.1** | **-2.4** | | |
| KIV | | | | *e* | | 06 06 00.1 | | | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| YUK8 | **Steele Glacier** | **94.23** | **29** | P | **P** | **05 55 30.1** | **-0.3** | | |
| | baz=265 | | | | | | | | |
| PNL | **Peninsula** | **94.27** | **31** | P | **P** | **05 55 30.1** | **-0.2** | | |
| | baz=265 | | | | | | | | |
| D27M | **Malcolm River** | **94.47** | **21** | P | **P** | **05 55 31.1** | **+0.1** | | |
| | baz=264 | | | | | | | | |
| I28M | **Miner Creek** | **94.51** | **25** | P | **P** | **05 55 31.8** | **+0.4** | | |
| | baz=265,SNR=46 | | | | | | | | |
| DAWY | **Dawson** | **94.63** | **26** | P | **P** | **05 55 32.1** | **+0.3** | | |
| DAWY | | | | IAmb | IAmb | 05 55 34.0 | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| DAWY | **Dawson** | **94.63** | **26** | P | **P** | **05 55 32.4** | **+0.6** | | |
| | baz=265,SNR=23 | | | | | | | | |
| F28M | **Old Crow** | **94.72** | **23** | P | **P** | **05 55 32.6** | **+0.4** | | |
| | baz=265,SNR=13 | | | | | | | | |
| O29M | **Mount Kennedy** | **94.73** | **30** | P | **P** | **05 55 32.3** | **-0.1** | | |
| | baz=264 | | | | | | | | |
| YUK4 | **Talbot Arm** | **94.77** | **29** | P | **P** | **05 55 33.2** | **+0.5** | | |
| | baz=266 | | | | | | | | |
| FURI | **Furi** | **94.84** | **278** | LR | LR | 06 38 38.1 | | | |
| | comp=Z,115nm,18.1s,baz=102,slow=36 | | | | | | | | |
| YUK6 | **Outpost Mounta** | **94.88** | **29** | P | **P** | **05 55 33.3** | **0.0** | | |
| | baz=266 | | | | | | | | |
| E28M | **Babbage River** | **94.92** | **22** | P | **P** | **05 55 33.4** | **+0.3** | | |
| | baz=266,SNR=8.9 | | | | | | | | |
| M29M | **Somme Creek** | **94.93** | **28** | P | **P** | **05 55 33.7** | **+0.4** | | |
| | baz=266,SNR=7.9 | | | | | | | | |
| P29M | **Windy Craggy** | **95.10** | **31** | P | **P** | **05 55 34.1** | **0.0** | | |
| | baz=266 | | | | | | | | |
| L29M | **L29M** | **95.13** | **27** | P | **P** | **05 55 34.5** | **+0.3** | | |
| | baz=266,SNR=7.0 | | | | | | | | |
| J29N | **Klondike Camp** | **95.17** | **26** | P | **P** | **05 55 34.3** | **0.0** | | |
| | baz=266 | | | | | | | | |
| I29M | **Ogilvie Camp,** | **95.19** | **25** | P | **P** | **05 55 34.7** | **+0.3** | | |
| | baz=266,SNR=22 | | | | | | | | |
| H29M | **Whitestone** | **95.21** | **24** | P | **P** | **05 55 34.6** | **+0.2** | | |
| | baz=266,SNR=6.3 | | | | | | | | |
| G29M | **Pine Creek** | **95.39** | **23** | P | **P** | **05 55 35.6** | **+0.4** | | |
| | baz=267,SNR=21 | | | | | | | | |
| K29M | **Barlow Dome** | **95.44** | **26** | P | **P** | **05 55 36.1** | **+0.4** | | |
| | baz=267,SNR=16 | | | | | | | | |
| E29M | **Blow River** | **95.51** | **22** | P | **P** | **05 55 35.5** | **-0.3** | | |
| | baz=267 | | | | | | | | |
| P30M | **Million Dollar** | **95.52** | **30** | P | **P** | **05 55 36.4** | **+0.4** | | |
| | baz=267 | | | | | | | | |
| N30M | **Aishikik Lake** | **95.52** | **29** | P | **P** | **05 55 35.4** | **-0.6** | | |
| | baz=267 | | | | | | | | |
| TROLL | **Troll, Antarti** | **95.58** | **194** | ⇑P | **P** | **05 55 36.8** | **+0.6** | | |
| | comp=Z,71nm,0.6s | | | | | | | | |
| M30M | **Minto, Yukon** | **95.71** | **28** | P | **P** | **05 55 36.9** | **0.0** | | |
| | baz=268,SNR=5.3 | | | | | | | | |
| PLBC | **Pleasant Camp** | **95.79** | **31** | P | **P** | **05 55 37.2** | **0.0** | | |
| | baz=268 | | | | | | | | |
| S31K | **Pelican** | **95.80** | **32** | P | **P** | **05 55 37.2** | **0.0** | | |
| | baz=268 | | | | | | | | |
| EPYK | **Eagle Plains** | **95.89** | **24** | P | **P** | **05 55 37.5** | **0.0** | | |
| | baz=268,SNR=9.0 | | | | | | | | |
| O30N | **Mendenhall** | **95.98** | **30** | P | **P** | **05 55 38.0** | **-0.1** | | |
| | baz=268 | | | | | | | | |
| I30M | **Mount Dempster** | **95.99** | **25** | P | **P** | **05 55 38.1** | **-0.1** | | |
| | baz=268,SNR=11 | | | | | | | | |
| J30M | **Hart River** | **95.99** | **26** | P | **P** | **05 55 38.6** | **+0.4** | | |
| | baz=268,SNR=14 | | | | | | | | |
| G30M | **tAoh Zraii Nji** | **96.10** | **23** | P | **P** | **05 55 38.0** | **-0.5** | | |
| | baz=269,SNR=14 | | | | | | | | |
| N31M | **Braeburn, Yuko** | **96.15** | **29** | P | **P** | **05 55 39.0** | **+0.1** | | |
| | baz=268 | | | | | | | | |
| SIT | **Sitka** | **96.26** | **33** | P | **P** | **05 55 39.3** | **0.0** | | |
| | baz=268 | | | | | | | | |
| F30M | **Barrier River** | **96.28** | **23** | P | **P** | **05 55 39.3** | **0.0** | | |
| | baz=269 | | | | | | | | |
| SKAG | **Skagway** | **96.32** | **31** | P | **P** | **05 55 39.3** | **-0.3** | | |
| | baz=268 | | | | | | | | |
| SOC | **Sochi** | **96.35** | **313** | *e*P | P | 05 55 34.3 | -5.8 | | |
| SOC | | | | *e* | | 05 59 32.5 | | | |
| SOC | | | | *e*PPP | PPP | 06 01 40.0 | | | |
| SOC | | | | *e*S | **SKSac** | **06 06 07.6** | **-6.0** | | |
| SOC | | | | *e*SS | **SS** | **06 13 35.8** | **+5.1** | | |
| SOC | | | | *e*SSS | SSS | 06 17 09.6 | | | |
| SOC | | | | MLR | MLR | | | | |
| | comp=Z,92nm,18.0s | | | | | | | | |
| WHY | **Whitehorse** | **96.57** | **30** | P | **P** | **05 55 41.1** | **+0.2** | | |
| | baz=269 | | | | | | | | |
| S32K | **Killisnoo** | **96.68** | **33** | P | **P** | **05 55 40.3** | **-0.9** | | |
| | baz=269 | | | | | | | | |
| R32K | **Eaglecrest** | **96.72** | **32** | P | **P** | **05 55 40.7** | **-0.7** | | |
| | baz=269 | | | | | | | | |
| M31M | **Drury Creek, Y** | **96.82** | **28** | P | **P** | **05 55 41.2** | **-0.7** | | |
| | baz=270 | | | | | | | | |
| G31M | **Satah River** | **96.87** | **23** | P | **P** | **05 55 41.7** | **-0.2** | | |
| | baz=270,SNR=12 | | | | | | | | |
| SNAA | **Sanae** | **97.04** | **193** | ⇑P | **P** | **05 55 41.2** | **-1.6** | | |
| | comp=Z,2.9nm,0.3s | | | | | | | | |
| SNAA | **Sanae** | **97.04** | **193** | P | Pdif | 05 55 43.2 | +0.3 | | |
| | comp=Z,1.0nm,0.6s,baz=84,slow=13,SNR=3.5 | | | | | | | | |
| SNAA | | | | LR | LR | 06 38 23.9 | | | |
| | comp=Z,282nm,21.0s,baz=80,slow=35 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| F31M | **Tsiigehtchic** | **97.07** | **23** | P | **P** | **05 55 42.3** | **-0.5** | | |
| | baz=271,SNR=6.4 | | | | | | | | |
| INK | **Inuvik** | **97.14** | **22** | LR | LR | 06 37 31.1 | | | |
| | comp=Z,43nm,20.9s,baz=243,slow=34 | | | | | | | | |
| INK | **Inuvik** | **97.14** | **22** | P | **P** | **05 55 42.6** | **-0.4** | | |
| | baz=271,SNR=11 | | | | | | | | |
| INK | **Inuvik** | **97.14** | **22** | P | **P** | **05 55 43.1** | **0.0** | | |
| INK | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| P32M | **Atlin** | **97.15** | **31** | P | Pdif | 05 55 43.6 | +0.2 | | |
| | baz=270 | | | | | | | | |
| FARO | **Faro, Yukon** | **97.31** | **28** | P | Pdif | 05 55 44.3 | +0.1 | | |
| | baz=271 | | | | | | | | |
| N32M | **Quiet Lake** | **97.45** | **29** | P | Pdif | 05 55 45.4 | +0.5 | | |
| | baz=271 | | | | | | | | |
| CRAG | **Craig** | **97.46** | **35** | P | Pdif | 05 55 45.4 | +0.5 | | |
| | baz=270 | | | | | | | | |
| U33K | **Whale Pass** | **97.47** | **34** | P | Pdif | 05 55 45.1 | +0.2 | | |
| | baz=270 | | | | | | | | |
| P33M | **Teslin, Yukon** | **97.59** | **30** | P | Pdif | 05 55 46.1 | +0.6 | | |
| | baz=271 | | | | | | | | |
| Q32M | **Nakina River** | **97.89** | **31** | P | Pdif | 05 55 47.4 | +0.4 | | |
| | baz=271 | | | | | | | | |
| ANN | **Anapa** | **98.02** | **314** | *e*P | **P** | **05 55 43.8** | **-3.8** | | |
| ANN | | | | *e**PP | **pP** | **05 55 56.1** | **-4.2** | | |
| ANN | | | | *e* | | 05 59 44.2 | | | |
| ANN | | | | *e*S | **SKSac** | **06 06 18.5** | **-3.6** | | |
| ANN | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| V35K | **Ketchikan** | **98.33** | **35** | P | Pdif | 05 55 49.1 | +0.4 | | |
| | baz=271 | | | | | | | | |
| S34M | **Telegraph Cree** | **98.52** | **32** | P | Pdif | 05 55 50.2 | +0.6 | | |
| | baz=272 | | | | | | | | |
| OBN | **Obninsk** | **98.52**

baz=276
MSO Missoula 110.44 42 P PKiKP 06 00 43.6 -0.1
baz=283
TPNV Topopah Spring 110.55 53 P PKiKP 06 00 43.5 -0.8
baz=278
HEC Hector,Ludlow 110.75 55 P PKiKP 06 00 44.2 -0.4
baz=277
PFO Pinyon Flats O 110.79 57 P PKiKP 06 00 45.3 +0.5
baz=276
TPFO Pinon Flats 110.80 57 P PKiKP 06 00 45.4 +0.7
baz=276
HLID Hailey 110.81 46 P PKiKP 06 00 45.0 +0.4
baz=282
MONP2 Monument Peak 110.90 57 P PKiKP 06 00 45.2 +0.1
baz=276
TUQ Turquoise Moun 111.01 55 P PKiKP 06 00 45.2 +0.1
baz=278
BELC Belle Mtn. Jos 111.13 56 P PKiKP 06 00 45.5 +0.1
baz=277
IKP In-Ko-Pah, Jac 111.19 57 P PKiKP 06 00 44.9 -0.5
baz=276
GMRC Granite Mounta 111.31 55 P PKiKP 06 00 45.5 -0.2
baz=277
SWSC Sam W. Stewart 111.42 57 P PKiKP 06 00 46.1 +0.4
baz=277
BC3 Big Chuckawall 111.62 56 P PKiKP 06 00 46.4 +0.1
baz=277
IRM Iron Mountain 111.81 56 P PKiKP 06 00 47.2 +0.6
baz=278
DUG Dugway, Tooele 112.66 49 P PKiKP 06 00 48.6 +0.5
baz=281
CLL Collm 113.09 324 *e*PKiKP PKiKP 06 00 49.0 +0.6
CLL *e* 06 01 36.0
CLL pmax pmax
comp=Z,6.0nm,1.2s
KHC Kasperske Hory 113.46 321 *e*PS PS 06 11 22.3 +4.8
KHC AMS AMS 06 51 30.0
comp=Z,200nm,22.5s
GERES GERESS Array B 113.47 321 PKiKP PKiKP 06 00 52.0 +2.7
comp=Z,1.1nm,0.4s,baz=64,slow=4.5,SNR=1.6
214A Organ Pipe Nat 114.05 58 P PKiKP 06 00 51.5 +0.7
baz=278
MOX Moxa 114.14 323 *e*L L 06 53 59.1
comp=Z,139nm,21.8s
BW06 Boulder Array 114.45 46 P PKiKP 06 00 52.2 +0.6
baz=285
PDAR Pinedale Array 114.45 46 PKP PKiKP 06 00 52.6 +1.0
comp=Z,0.8nm,0.7s,baz=229,slow=1.7,SNR=8.3
GRF Grafenberg Arr 114.72 322 *e*L L 06 59 11.7
comp=Z,107nm,21.8s
O20A White River Ci 116.08 48 P PKiKP 06 00 55.2 +0.4
baz=285
MVCO Mesa Verde 116.59 51 P PKiKP 06 00 56.0 +0.1
baz=283
S22A 4UR Ranch, Cre 117.75 50 P PKiKP 06 00 58.4 +0.2
baz=285
RSSD Black Hills 117.89 43 P PKiKP 06 00 59.1 +0.9
baz=290
121A Cookes Peak, D 118.15 56 P PKiKP 06 01 00.1 +1.1
baz=281
ANMO Albuquerque 118.72 53 P PKiKP 06 01 00.4 +0.3
baz=283
SDCO Great Sand Dun 118.77 50 P PKiKP 06 01 00.9 +0.8
baz=286
EKA Eskdalemuir Ar 119.69 333 PKP PKiKP 06 01 01.6 +0.6
comp=Z,0.9nm,0.5s,baz=18,slow=2.8,SNR=6.6
EKA PKKPbc PKKPab 06 11 11.3 -2.1
comp=Z,3.5nm,1.0s,baz=233,slow=4.0,SNR=6.3
T25A Trinidad 119.77 51 P PKPdf 06 01 01.9 -0.1
baz=286
MNTX Cornudas Mount 120.32 57 P PKPdf 06 01 03.0 0.0
baz=282
ULM Lac du Bonnet 120.33 34 PKP PKiKP 06 01 02.6 +0.2
comp=Z,1.5nm,0.6s,baz=106,slow=3.6,SNR=4.8
AGMN Agassiz Nation 121.31 36 P PKPdf 06 01 04.2 -0.1
baz=299
MSTX Muleshoe 121.91 54 P PKPdf 06 01 06.2 +0.1
baz=285
TXAR Lajitas Array 122.26 59 PKP PKiKP 06 01 08.0 +1.0
comp=Z,1.4nm,0.6s,baz=221,slow=2.2,SNR=12
AMTX Amarillo 122.53 52 P PKPdf 06 01 06.9 -0.3
baz=287
CBKS Cedar Bluff 122.75 47 P PKPdf 06 01 07.1 -0.3
baz=291
ECSD EROS Data Cent 122.97 41 P PKiKP 06 01 08.1 +0.3
baz=296
EYMN Ely 123.99 34 P PKiKP 06 01 10.1 +0.3
baz=303
SPMN Marine on St. 124.67 38 P PKiKP 06 01 11.2 0.0
baz=300
ABTX Abilene, Hawle 124.80 54 P PKPdf 06 01 12.5 +0.7
baz=287
WMOK Wichita Mounta 124.84 52 P PKPdf 06 01 11.6 0.0
baz=289
KSU1 Kansas State U 124.91 46 P PKiKP 06 01 11.8 0.0
baz=293
JCT Junction City 125.26 57 P PKPdf 06 01 12.2 -0.3
baz=285
SCIA State Center 126.03 41 P PKiKP 06 01 14.4 +0.4
baz=298
833A Chaparral WMA, 126.14 59 P PKiKP 06 01 15.2 +0.6
baz=284
TUL3 Leonard 126.73 49 P PKiKP 06 01 15.5 -0.1
baz=292
JFWS Jewell Farm 127.43 39 P PKiKP 06 01 17.0 +0.2
baz=302
PLCA Paso Flores 128.67 157 PKP PKiKP 06 01 20.5 +1.0
comp=Z,4.9nm,1.0s,baz=238,slow=0.5,SNR=6.3
ESDC Sonseca Array 128.74 317 PKP PKiKP 06 01 20.3 +0.8
comp=Z,0.2nm,0.3s,baz=17,slow=1.3,SNR=2.3
ESDC PP PP 06 03 26.1 +1.0
comp=Z,1.8nm,1.0s,baz=55,slow=4.3,SNR=2.2
MIAR Mount Ida 128.93 50 P PKPdf 06 01 19.3 0.0
baz=293
SCHQ Schefferville 129.03 14 PKP PKiKP 06 01 19.8 +0.2
comp=Z,5.1nm,0.6s,baz=249,slow=3.7,SNR=7.8
CCM Cathedral Cave 129.16 45 P PKPdf 06 01 19.7 +0.1
baz=297
HDIL Hopedale 129.27 41 P PKiKP 06 01 20.4 -0.1
baz=301
L44A Lake County Fo 129.29 39 P PKiKP 06 01 20.3 -0.1
baz=303
GLMI Grayling 129.67 34 P PKPdf 06 01 20.5 0.0
baz=309
SFIN Lafayette 130.78 40 P PKPdf 06 01 22.9 +0.3
baz=303
TORD Torodi Ar. Bea 131.22 282 PKP PKPdf 06 01 24.5 +0.4
comp=Z,1.6nm,0.5s,baz=81,slow=2.0,SNR=12
TORD SKPbc SKPbc 06 04 39.7 -6.1
comp=Z,3.1nm,0.7s,baz=57,slow=4.1,SNR=6.3
OXF Oxford 132.07 48 P PKPdf 06 01 25.4 +0.1
baz=296
O48B Farmland 132.08 39 P PKPdf 06 01 25.7 +0.5
baz=305
WCI Wyandotte Cave 132.46 42 P PKiKP 06 01 26.7 -0.3
baz=302
WVT Waverly 132.47 45 P PKPdf 06 01 26.6 +0.6
baz=299
P49A Miami Univ. Ec 132.77 40 P PKPdf 06 01 26.9 +0.5
baz=305
ACSO Alum Creek Sta 133.44 38 P PKPdf 06 01 28.2 +0.5
baz=307
ERPA Erie 133.99 34 P PKPdf 06 01 29.0 +0.4
baz=312
M53A WI Miller and 134.05 35 P PKPdf 06 01 29.2 +0.4
baz=311
P52A Corning 134.33 38 P PKPdf 06 01 29.1 -0.3
baz=308
O53A New Philadelph 134.50 37 P PKPdf 06 01 30.4 +0.7
baz=309
LRAL Lakeview Retre 134.53 49 P PKiKP 06 01 30.9 -0.5
baz=297
LONY Lake Ozonia 134.94 27 P PKiKP 06 01 31.4 -0.4
baz=320
TZTN Tazewell 135.21 42 P PKPdf 06 01 31.8 +0.7
baz=304
MCWV Mont Chateau 135.69 36 P PKPdf 06 01 32.4 +0.5
baz=310
BINY Binghamton 136.07 31 P PKPdf 06 01 32.9 +0.3
baz=317
SSPA Standing Stone 136.16 34 P PKPdf 06 01 33.7 +0.9
baz=313
LBNH Lisbon 136.42 26 P PKiKP 06 01 34.3 -0.6
baz=323
PKME Peaks-Kenny Pk 136.65 23 P PKiKP 06 01 34.9 -0.4
baz=327
BLA Blacksburg 136.87 40 P PKPdf 06 01 34.7 +0.4
baz=308

GOGA Godfrey 136.94 46 P PKPdf 06 01 35.1 +0.7
baz=301
KMSC Kings Mountain 137.49 43 P PKPdf 06 01 35.9 +0.5
baz=305
L61B Northampton 137.50 28 P PKPdf 06 01 35.9 +0.7
baz=321
DBIC Dimbokro 137.78 273 PKP PKiKP 06 01 37.6 -0.9
comp=Z,1.8nm,0.7s,baz=102,slow=5.9,SNR=4.5
TIGA Tifton 137.83 49 P PKPdf 06 01 36.2 +0.1
baz=299
HRV Adam Dziewonsk 137.97 27 P PKPdf 06 01 36.6 +0.6
baz=322
PAL Palisades 138.00 30 P PKPdf 06 01 36.4 +0.3
baz=318
NHSC New Hope 139.42 44 P PKPdf 06 01 39.5 +0.5
baz=304
CNNC Cliffs of the 139.69 40 P PKPdf 06 01 40.6 +1.2
baz=309
LVC Limon Verde 144.44 144 PKP PKPdf 06 01 48.6 -0.1
comp=Z,25nm,0.8s,baz=249,slow=4.0,SNR=12
NNA Nana 145.56 122 PKPbc PKPab 06 01 51.6 +0.7
comp=Z,72nm,0.6s,baz=259,slow=6.1,SNR=26
ATAH Atahualpa 146.32 113 PKPbc PKPab 06 01 55.2 +1.0
comp=Z,77nm,0.8s,baz=233,slow=2.2,SNR=50
OTAV Otavalo 148.41 100 PKIKP PKPdf 06 01 57.2 +1.4
LPAZ La Paz 149.64 138 PKPbc PKiKP 06 02 04.0 +0.5
comp=Z,33nm,0.8s,baz=125,slow=0.2,SNR=27
LPAZ La Paz 149.64 138 PKP2 PKiKP 06 02 04.0 +0.5
ROSC El Rosal 153.13 92 PKP PKPdf 06 02 04.8 +1.8
comp=Z,3.4nm,0.4s,baz=130,slow=18,SNR=5.7
ROSC PKPbc PKiKP 06 02 11.4 +0.9
comp=Z,16nm,0.6s,baz=214,slow=15,SNR=13
SDV Santo Domingo 156.77 82 PKP PKPdf 06 02 08.6 +0.9
comp=Z,6.9nm,0.3s,baz=334,slow=4.1,SNR=4.5
BDFB Brasilia 158.29 178 PKP PKPdf 06 02 09.4 0.0
comp=Z,4.0nm,0.8s,baz=162,slow=7.5,SNR=5.9

**IDC 03 05:50:11.9±3.6, 54°22N×87°30E, h0km, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=32.4km s-min=20.4km az=51.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.49 | 261 | I | I | 05 59 40.0 | |
| | baz=80,slow=317,SNR=5.0 | | | | | | |
| ZALV | Zalesovo Beam | 1.49 | 261 | Pg | Pn | 05 50 38.4 | -1.4 |
| | 3.0nm,0.3s,baz=76,slow=16,SNR=32 | | | | | | |
| ZALV | | | | Lg | Lg | 05 50 59.0 | |
| | 2.0nm,0.3s,baz=79,slow=26,SNR=4.8 | | | | | | |
| KURBB | Kurchatov Arra | 6.46 | 240 | Pn | Pn | 05 51 49.1 | +1.0 |
| | 0.1nm,0.3s,baz=58,slow=15,SNR=3.5 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 8.09 | 205 | Pn | Pn | 05 52 11.5 | +1.1 |
| | baz=27,slow=13,SNR=2.4 | | | | | | |
| | 0.1nm,0.2s | | | | | | |

**TEH 03 05:51:57.8, 31°58N×59°48E, h10km, ML1.7, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BSRN | Basiran | 0.49 | 321 | Pg | Pb | 05 52 08.1 | -0.5 |
| NHDN | Nehbandan | 0.52 | 111 | Pg | Pg | 05 52 08.3 | +0.3 |
| NHDN | | | | Sg | Sb | 05 52 16.2 | -0.6 |
| IKOO | Kooshah | 0.93 | 334 | Pg | Pb | 05 52 16.0 | -0.2 |

*IDC **03** 05:57:16.6±2.0, 23°21S×64°11W, h0km, mb3.7/1, mbtmp3.6/5, ML3.5/4, Error ellipse: s-maj=43.4km s-min=21.9km az=30.0*
*SJA **03** 05:57:19.1±0.7, 23°31S×64°41W, h34km±4km, ML3.7, MW4.2*
**ISC 03 05:57:16.6±1.5, 23°21S±0°04×64°14W±0°05, h11km±11km, n15, σ2s13/23, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ALOL | LOMAS DE OLMED | 0.62 | 166 | *e*P | Pg | 05 57 29.8 | +1.0 |
| ALOL | | | | *e*S | Sn | 05 57 42.9 | +1.3 |
| ASTB | Santa Barbara | 0.79 | 201 | *e*P | Pg | 05 57 31.7 | -0.3 |
| ASTB | | | | *e*S | Sb | 05 57 43.2 | -0.2 |
| AZAP | Zapla | 1.32 | 220 | *e*P | Pb | 05 57 40.4 | -1.2 |
| AZAP | | | | *e*S | Sn | 05 57 59.5 | +0.5 |
| AZAP | | | | IAML | | 05 58 07.0 | |
| | comp=Z,5μm,0.6s | | | | | | |
| YJA | Yavi | 1.63 | 309 | *e*P | Pn | 05 57 47.0 | +1.3 |
| YJA | | | | *e*S | Sg | 05 58 09.9 | +0.8 |
| YJA | | | | IAML | | 05 58 16.9 | |
| | comp=Z,388nm,0.4s | | | | | | |
| SLA | San Lorenzo | 1.96 | 219 | *e*P | Pn | 05 57 49.8 | -0.2 |
| SLA | | | | *e*S | Sg | 05 58 24.0 | +4.4 |
| SLA | | | | IAML | | 05 58 29.8 | |
| | comp=Z,652nm,0.8s | | | | | | |
| FSA | Cafayete | 3.34 | 210 | *e*P | Pn | 05 58 09.0 | 0.0 |
| FSA | | | | *e*S | Sg | 05 59 00.0 | -4.0 |
| LVC | Limon Verde | 4.43 | 277 | *e*P | Pn | 05 58 26.4 | +2.2 |
| LVC | | | | *e*S | Sb | 05 59 28.9 | +0.4 |
| LVC | Limon Verde | 4.43 | 277 | Pn | Pn | 05 58 26.3 | +2.1 |
| | comp=Z,1.2nm,0.3s,baz=99,slow=8.0,SNR=12 | | | | | | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| PB15 | IPOC Station P | 4.90 | 269 | *e*P | Pn | 05 58 33.4 | +2.9 |
| GO02 | Mina Guanaco | 5.34 | 248 | *e*P | Pg | 05 58 57.0 | -2.0 |
| CYA | Choya | 5.42 | 196 | *e*P | Pn | 05 58 37.5 | 0.0 |
| CYA | | | | IAML | | 06 00 23.6 | |
| | comp=Z,33nm,0.8s | | | | | | |
| CPUP | Villa Florida | 6.93 | 118 | Pn | Pn | 05 58 58.2 | +0.1 |
| | comp=Z,0.4nm,0.3s,baz=296,slow=10,SNR=6.0 | | | | | | |
| CPUP | | | | Lg | Lg | 06 00 55.5 | |
| | comp=Z,2.0nm,0.3s,baz=18,slow=19,SNR=2.0 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| SIV | San Ignacio | 7.74 | 23 | Pn | Pn | 05 59 10.0 | +0.7 |
| | comp=Z,0.1nm,0.3s,baz=206,slow=7.8,SNR=37 | | | | | | |
| SIV | | | | Sn | Sn | 06 00 33.2 | -3.9 |
| | comp=Z,0.4nm,0.3s,baz=173,slow=17,SNR=3.1 | | | | | | |
| | comp=Z,4.3nm,0.4s | | | | | | |
| LPAZ | La Paz | 7.84 | 331 | Pn | Pn | 05 59 09.9 | -1.3 |
| | comp=Z,0.2nm,0.3s,baz=140,slow=8.2,SNR=7.3 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| TORD | Torodi Ar. Bea | 73.84 | 68 | P | P | 06 08 54.0 | +2.2 |
| | comp=Z,0.3nm,0.4s,baz=244,slow=5.1,SNR=5.8 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |

*IDC **03** 06:04:52.8±3.5, 8°58S×116°65E, h0km, mb3.2/3, mbtmp3.3/3, Error ellipse: s-maj=263.3km s-min=25.3km az=49.0*
*DJA **03** 06:04:54.2±0.7, 8°S±11°×117°E±°, h10km, M3.5/5, MLv3.5/5*
**ISC 03 06:04:54.2±1.1, 8°3S±0°1×116°66E±0°07, h10km, n7, σ1s30/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.46 | 152 | P | Pg | 06 05 04.0 | +0.8 |
| PLAI | Plampang | 1.21 | 114 | P | Pn | 06 05 16.5 | -0.7 |
| PLAI | | | | S | Sn | 06 05 34.0 | +0.4 |
| SRBI | Singaraja | 1.46 | 279 | P | Pn | 06 05 19.5 | -1.1 |
| SRBI | | | | S | Sb | 06 05 39.5 | -0.5 |
| IGBI | Denpasar | 1.58 | 252 | P | Pn | 06 05 22.3 | +0.1 |
| WRA | Warramunga Arr | 20.64 | 126 | P | P | 06 09 32.5 | -1.6 |
| | 0.7nm,0.8s,baz=300,slow=12,SNR=14 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| ASAR | Alice Springs | 22.48 | 135 | P | P | 06 09 52.5 | -1.4 |
| | 0.6nm,0.4s,baz=309,slow=9.4,SNR=9.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 62.83 | 334 | P | P | 06 15 21.9 | +1.7 |
| | 0.3nm,0.7s,baz=152,slow=6.5,SNR=2.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*SSNC **03** 06:06:04.5±1.6, 18°44N×72°06W, h51km±11km, MD2.5, ML2.4*
*OSPL **03** 06:06:07.3±3.0, 18°80N×72°09W, h6km±13km, ML2.4*
**ISC 03 06:06:02.7±2.2, 18°95N±0°10×72°08W±0°04, h3km±18km, n11, σ1s61/20, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PAPH | Port-au-Prince | 0.47 | 206 | *e*P | Pg | 06 06 12.7 | +1.0 |
| PAPH | | | | *e*S | Sg | 06 06 18.4 | +0.5 |
| PAPH | | | | IAML | | 06 06 18.6 | |
| | comp=E,825nm,0.1s | | | | | | |
| PAPH | | | | IAML | | 06 06 19.0 | |
| | comp=N,588nm,0.1s | | | | | | |
| PAPH | Port-au-Prince | 0.47 | 206 | *i* P | Pg | 06 06 12.7 | +1.0 |
| PAPH | | | | *e*S | Sg | 06 06 18.5 | +0.5 |
| PAPH | | | | IAML | | 06 06 19.9 | |
| | comp=Z,252nm,0.2s | | | | | | |
| SDDR | Presa de Saban | 0.75 | 87 | *e*P | Pn | 06 06 20.7 | +0.4 |
| SDDR | | | | *e*S | Sn | 06 06 31.5 | -0.8 |
| SDDR | | | | IAML | | 06 06 33.2 | |
| | comp=Z,51nm,0.3s | | | | | | |
| SDDR | | | | IAML | | 06 06 33.5 | |
| | comp=Z,45nm,0.2s | | | | | | |
| SDDR | Presa de Saban | 0.75 | 87 | *i* P | Pn | 06 06 20.9 | +0.6 |
| SDDR | | | | *e*S | Sn | 06 06 31.9 | -0.3 |
| SDDR | | | | IAML | | 06 06 37.6 | |
| | comp=Z,90nm,0.2s | | | | | | |
| PODR | Polo | 1.09 | 136 | *i* P | Pn | 06 06 25.7 | +0.6 |
| PODR | | | | *e*S | Sg | 06 06 35.4 | -2.2 |
| PODR | | | | IAML | | 06 06 49.6 | |
| | comp=Z,93nm,0.6s | | | | | | |
| SC01 | Santiago de lo | 1.36 | 69 | *i* P | Pn | 06 06 32.4 | +3.7 |
| SC01 | | | | IAML | | 06 07 01.9 | |
| | comp=Z,78nm,0.8s | | | | | | |
| MASC | Masc | 2.37 | 301 | *e*P | Pn | 06 06 43.5 | +1.0 |
| QMBU | Quimbuelo | 2.86 | 296 | *e*P | Pn | 06 06 49.5 | +0.2 |
| QMBU | | | | *e*S | Sn | 06 07 23.0 | -1.4 |
| GTBY | Guantanamo Bay | 3.02 | 289 | *e*P | Pn | 06 06 52.5 | +1.0 |
| GTBY | | | | *e*S | Sn | 06 07 30.9 | +2.6 |
| GTBY | Guantanamo Bay | 3.02 | 289 | *i* P | Pb | 06 06 54.6 | -2.6 |
| GTBY | | | | *e*S | Sn | 06 07 29.3 | +1.1 |
| GTBY | | | | IAML | | 06 07 35.7 | |
| | comp=Z,21nm,2.3s | | | | | | |
| RCC | Rio Carpintero | 3.57 | 288 | *e*P | Pn | 06 06 59.3 | +0.3 |
| RCC | | | | *e*S | Sn | 06 07 41.0 | -0.7 |

**IDC 03 06:08:34.8±4.4, 5°14N×124°73E, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=242.3km s-min=33.0km az=87.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 26.65 | 160 | P | P | 06 14 15.3 | -0.2 |
| | 0.2nm,0.7s,baz=337,slow=10,SNR=10 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| ASAR | Alice Springs | 30.00 | 163 | P | P | 06 14 45.6 | +0.3 |
| | 0.3nm,0.5s,baz=354,slow=7.5,SNR=2.2 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| ILAR | Eielson Array | 84.69 | 25 | P | P | 06 21 10.3 | 0.0 |
| | 0.3nm,0.5s,baz=254,slow=5.3,SNR=6.0 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*IDC **03** 06:24:32.8±2.3, 36°30N×141°20E, h0km, mb3.7/3, mbtmp3.6/4, ML2.8/1, Error ellipse: s-maj=55.7km s-min=31.6km az=43.0*
*JMA **03** 06:24:38.3±0.1, 36°3N±0°3×141°E±°, h45km±1km, MV3.5/35, E OFF IBARAKI PREF*
**ISC 03 06:24:33.1±2.5, 36°35N±0°05×141°18E±0°08, h1km±14km, n19, σ0s71/20, mb3.5/3, 7D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHYU | Hitachinakayam | 0.48 | 269 | ⇓*i*P | Pn | 06 24 47.0 | -0.2 |
| JHYU | | | | ⇓*e*S | Sb | 06 24 53.0 | +1.1 |
| JHO | Hitachi | 0.56 | 298 | ⇓*i*P | Pn | 06 24 47.9 | -0.4 |
| JHO | | | | ⇓*e*S | Sb | 06 24 54.5 | +0.3 |
| JIHU | Itakohorinouch | 0.66 | 234 | *i* P | Pn | 06 24 50.0 | +0.5 |
| JIHU | | | | S | Sb | 06 24 58.3 | +1.3 |
| JYT | Yasato | 0.81 | 261 | P | Pb | 06 24 50.7 | +0.8 |
| JYT | | | | *e*S | Sg | 06 24 59.1 | +0.1 |
| ONAJ | Iwakimizuishiy | 0.81 | 338 | ⇓P | Pn | 06 24 52.4 | +0.6 |
| ONAJ | | | | ⇓*e*S | Sb | 06 25 01.9 | +0.4 |
| JSMT | Sammumatsuo | 0.92 | 220 | *e*P | Pn | 06 24 53.6 | +0.4 |
| JSMT | | | | *e*S | Sb | 06 25 04.8 | 0.0 |
| JFK | Kawauchi | 1.04 | 346 | P | Pn | 06 24 55.7 | +0.7 |
| JAG | Ashikaga | 1.40 | 274 | ⇓P | Pg | 06 24 59.2 | -0.7 |
| JKT | Katashina | 1.61 | 285 | P | Pn | 06 25 03.0 | +0.1 |
| MJAR | Matsushiro Arr | 2.40 | 275 | Pn | Pn | 06 25 13.8 | +0.1 |
| | 2.3nm,0.3s,baz=106,slow=8.9,SNR=59 | | | | | | |
| MJAR | | | | Sn | Sn | 06 25 43.1 | -0.6 |
| | 1.1nm,0.3s,baz=83,slow=20,SNR=12 | | | | | | |
| | 11nm,0.4s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.97 | 119 | T | T | 06 59 56.7 | |
| | baz=312,slow=75,SNR=16 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 27.98 | 119 | T | T | 06 59 48.6 | |
| | baz=312,slow=75,SNR=15 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 27.99 | 119 | T | T | 06 59 57.1 | |
| | baz=312,slow=75,SNR=14 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 28.66 | 122 | T | T | 07 00 41.2 | |
| | baz=314,slow=76,SNR=51 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 28.66 | 122 | T | T | 07 00 44.0 | |
| | baz=314,slow=76,SNR=31 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 28.67 | 122 | T | T | 07 00 43.6 | |
| | baz=314,slow=76,SNR=32 | | | | | | |
| MKAR | Makanchi Array | 44.33 | 303 | P | P | 06 32 45.5 | +0.8 |
| | 0.3nm,0.6s,baz=89,slow=7.6,SNR=3.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 46.28 | 308 | P | P | 06 32 59.2 | -0.9 |
| | 1.2nm,0.2s,baz=85,slow=8.7,SNR=5.5 | | | | | | |
| | 1.2nm,0.2s | | | | | | |
| WRA | Warramunga Arr | 56.36 | 188 | P | P | 06 34 15.1 | -0.8 |
| | 0.5nm,1.0s,baz=4.0,slow=7.3,SNR=1.5 | | | | | | |
| | 0.5nm,1.0s | | | | | | |

*IDC **03** 06:41:01.3±3.1, 53°71N×90°72E, h0km, mbtmp3.4/3, ML3.4/2, Error ellipse: s-maj=26.2km s-min=21.4km az=58.0*
*NNC **03** 06:41:04.9±2.4, 53°38N×90°43E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=18.5km s-min=15.0km az=84.0, Suspected Mining explosion.*
**ISC 03 06:41:04.7±3.9, 53°6N±0°1×90°4E±0°2, h0km, n8, σ1s12/14, 5C-6D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 3.31 | 279 | I | I | 07 03 00.0 | |
| | 0.1nm,1.1s,baz=91,slow=318,SNR=6.1 | | | | | | |
| ZAA0 | Zalesovo Array | 3.31 | 279 | ⇓Pn | Pn | 06 41 58.1 | +0.4 |
| | 0.3nm,0.4s | | | | | | |
| ZAA0 | | | | ⇑Pg | Pg | 06 42 08.1 | -0.1 |
| | 1.2nm,0.5s | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | 06 42 52.5 | |
| | 19nm,0.9s | | | | | | |
| ZALV | Zalesovo Beam | 3.31 | 279 | Pn | Pn | 06 41 58.8 | +1.1 |
| | 3.0nm,0.3s,baz=95,slow=12,SNR=4.5 | | | | | | |
| ZALV | | | | Pg | Pb | 06 42 03.6 | -0.7 |
| | 1.7nm,0.3s,baz=88,slow=16,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 06 42 51.3 | |
| | 1.4nm,0.3s,baz=94,slow=20,SNR=5.3 | | | | | | |
| KURK | Kurchatov | 7.77 | 253 | ⇑Pn | Pn | 06 42 58.4 | -0.5 |
| | 3.1nm,0.7s | | | | | | |
| KURK | | | | ⇓Sn | Sn | 06 44 28.0 | +0.5 |
| | 16nm,1.0s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 06 45 15.1 | |
| | 25nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 7.86 | 253 | Pn | Pn | 06 43 00.3 | +0.2 |
| | 0.3nm,0.3s,baz=66,slow=16,SNR=18 | | | | | | |
| KURBB | | | | Sn | Sn | 06 44 30.7 | +0.9 |
| | 0.1nm,0.3s,baz=66,slow=24,SNR=9.7 | | | | | | |
| KURBB | | | | Lg | Lg | 06 45 19.2 | |
| | 0.1nm,0.3s,baz=62,slow=35,SNR=5.6 | | | | | | |
| | 1.3nm,0.4s | | | | | | |
| KURBB | Kurchatov Arra | 7.86 | 253 | ⇑Pn | Pn | 06 43 00.0 | -0.2 |
| | 5.0nm,0.6s | | | | | | |
| KURBB | | | | ⇓Sn | Sn | 06 44 29.7 | -0.2 |
| | 23nm,0.8s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 06 45 16.7 | |
| | 44nm,1.2s | | | | | | |
| MK31 | Makanchi Array | 8.53 | 221 | Pn | Pn | 06 43 09.8 | +0.4 |
| | 1.4nm,0.6s,baz=34,slow=12,SNR=13 | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 06 44 44.3 | -2.0 |
| | 3.2nm,0.8s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 06 45 35.2 | |
| | 8.3nm,0.8s,baz=30,slow=20,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 8.53 | 221 | Pn | Pn | 06 43 09.5 | +0.1 |
| | 0.6nm,0.3s,baz=37,slow=12,SNR=12 | | | | | | |
| MKAR | | | | Sn | Sn | 06 44 48.9 | +2.5 |
| | baz=38,slow=24,SNR=5.5 | | | | | | |
| MKAR | | | | Lg | Lg | 06 45 38.9 | |
| | baz=34,slow=22 | | | | | | |
| | 0.8nm,0.3s | | | | | | |

**IDC 03 06:49:16.7±3.3, 54°35N×86°95E, h0km, mbtmp2.9/2,**

**ML2.6**/2, **Error ellipse: s-maj=30.1km s-min=18.3km az=52.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.31** | **253** | I | I | 06 57 50.0 | |
| | baz=73,slow=321,SNR=3.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.31** | **253** | Pg | Pg | 06 49 40.3 | -1.5 |
| | 2.9nm,0.3s,baz=74,slow=17,SNR=18 | | | | | | |
| ZALV | | | | Lg | Lg | 06 49 58.8 | |
| | 2.6nm,0.3s,baz=69,slow=28,SNR=8.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.35** | **237** | Pn | Pn | 06 50 52.8 | +1.4 |
| | 0.1nm,0.3s,baz=57,slow=14,SNR=2.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.12** | **203** | Pn | Pn | 06 51 16.9 | +1.1 |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=6.0 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*NNC **03** 07:05:34.0±2.5, 54.61N×86.68E, h0km, mb3.3, mpv3.1, Error ellipse: s-maj=33.8km s-min=14.4km az=156.0, Suspected Mining explosion.*

**IDC 03 07:05:35.4±2.8, 54.61N×86.51E, h0km, mbtmp3.4**/2, **ML3.2**/2, **9C-2D, Error ellipse: s-maj=22.3km s-min=14.8km az=48.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.19** | **237** | I | I | 07 14 00.0 | |
| | baz=53,slow=318,SNR=3.9 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.19** | **237** | ⇑P | Pg | 07 05 57.1 | -1.2 |
| | 0.9nm,0.2s | | | | | | |
| ZAA0 | | | | ⇑S | Sn | 07 06 15.5 | -0.7 |
| | 2.0nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.19** | **237** | Pg | Pg | 07 05 56.8 | -1.4 |
| | 8.5nm,0.3s,baz=55,slow=16,SNR=84 | | | | | | |
| ZALV | | | | Lg | Lg | 07 06 15.5 | |
| | 8.6nm,0.3s,baz=56,slow=28,SNR=17 | | | | | | |
| **KURK** | **Kurchatov** | **6.18** | **234** | ⇑Pn | Pn | 07 07 08.5 | +0.6 |
| | 1.3nm,0.4s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 07 08 21.4 | +2.2 |
| | 1.0nm,0.5s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 07 08 56.6 | |
| | 3.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.29** | **234** | Pn | Pn | 07 07 10.3 | +1.0 |
| | 0.3nm,0.3s,baz=52,slow=15,SNR=23 | | | | | | |
| KURBB | | | | Sn | Sn | 07 08 20.2 | -1.5 |
| | baz=47,slow=22 | | | | | | |
| KURBB | | | | Lg | Lg | 07 08 54.7 | |
| | 0.1nm,0.3s,baz=44,slow=28,SNR=2.9 | | | | | | |
| | 1.9nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.29** | **234** | ⇑Pn | Pn | 07 07 09.7 | +0.4 |
| | 2.4nm,0.3s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 07 08 23.3 | +1.5 |
| | 3.2nm,0.5s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 07 08 57.5 | |
| | 5.4nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **8.27** | **201** | ⇑Pn | Pn | 07 07 37.3 | +0.8 |
| | 0.2nm,0.3s,baz=25,slow=13,SNR=15 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 07 09 08.5 | -2.1 |
| | 0.3nm,0.3s,baz=153,slow=26,SNR=2.8 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 09 56.7 | |
| | 0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.27** | **201** | Pn | Pn | 07 07 37.4 | +0.8 |
| | 0.5nm,0.3s,baz=24,slow=13,SNR=14 | | | | | | |
| MKAR | | | | Sn | Sn | 07 09 09.9 | -0.7 |
| | 0.1nm,0.3s,baz=23,slow=26,SNR=3.8 | | | | | | |
| MKAR | | | | Lg | Lg | 07 09 54.2 | |
| | baz=15,slow=29,SNR=3.7 | | | | | | |
| | 0.9nm,0.3s | | | | | | |

*CRAAG **03** 07:16:51.7, 35.58N×1.49E, Ml3.9, Algerie 12km NW Sidi-Hosni*
*INMG **03** 07:16:51.8±1.9, 35.39N×1.53E, h13km, ML2.9, Error ellipse: s-maj=8.6km s-min=5.8km az=146.0*
*MDD **03** 07:16:51.6±0.5, 35.43N×1.51E, h0km±4km, Mb4.5/50, M_mb3.9/50, Error ellipse: s-maj=4.7km s-min=2.6km az=162.0*
*LDG **03** 07:16:51.8±0.4, 35.44N×1.52E, h10km, Ml3.6/5, Error ellipse: s-maj=7.8km s-min=4.6km az=14.0*
*IDC **03** 07:16:52.6±1.5, 35.58N×1.36E, h0km, mb3.8/2, mbtmp3.8/6, ML3.7/4, MS2.7/1, Error ellipse: s-maj=29.1km s-min=19.7km az=139.0*

**ISC 03 07:16:53.2±0.7, 35.61N±0.03×1.47E±0.02, h14km, n114, σ1s83/150, 26C, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EBGR** | **Bougara** | **0.38** | **97** | P | **Pg** | **07 17 00.3** | **-0.6** |
| **EOFD** | **Oued Fodda** | **0.45** | **15** | P | **Pg** | **07 17 02.2** | **+0.1** |
| **EANR** | **'Ain N'Sour** | **0.45** | **318** | P | **Pg** | **07 17 02.3** | **+0.1** |
| **ECHA** | **Ech Chlef** | **0.54** | **351** | P | **Pb** | **07 17 05.0** | **+0.5** |
| **EBNR** | **Beni Rached** | **0.68** | **4** | P | **Pg** | **07 17 06.7** | **+0.3** |
| **EDDR** | **Deurdeur** | **0.72** | **57** | P | **Pg** | **07 17 07.2** | **0.0** |
| **ESMB** | **Sidi M'hamed B** | **0.73** | **267** | P | **Pg** | **07 17 07.1** | **-0.2** |
| **EADEB** | **Ain Deheb** | **0.76** | **174** | P | **Pg** | **07 17 07.4** | **-0.6** |
| **EHRZ** | **Djelida** | **0.78** | **41** | P | **Pg** | **07 17 08.1** | **-0.2** |
| **OKGL** | **Djebel Kef Gue** | **0.80** | **302** | P | **Sg** | **07 17 20.0** | **+0.9** |
| **OJBR** | **Djebel Berber** | **0.92** | **268** | P | **Sg** | **07 17 22.0** | **-1.0** |
| **AFDJ** | **Sidi Ladjel** | **0.93** | **103** | P | **Pb** | **07 17 10.8** | **-0.3** |
| **EKMS** | **Oued Kramis** | **0.97** | **316** | P | **Pb** | **07 17 10.7** | **-1.1** |
| **EZEK** | **Zmalet El Emir** | **1.01** | **137** | P | **Pb** | **07 17 12.4** | **-0.1** |
| **ABKD** | **Sidi Amar** | **1.14** | **36** | P | **Pb** | **07 17 14.8** | **+0.1** |
| **OFRG** | **Douar Fergoug** | **1.17** | **266** | P | **Pb** | **07 17 14.3** | **-0.9** |
| **EMHD** | **Djebel Mahouad** | **1.34** | **64** | P | **Pb** | **07 17 18.6** | **+0.4** |
| **ABRIN** | **Birine** | **1.35** | **89** | P | **Pb** | **07 17 19.0** | **+0.7** |
| **ODJA** | **Bouhanifia** | **1.35** | **258** | P | **Pn** | **07 17 17.4** | **-0.3** |
| **ACHR** | **Chrea** | **1.40** | **54** | P | **Pn** | **07 17 18.6** | **+0.1** |
| **EASA** | **Ain Sidi Ali** | **1.46** | **178** | P | **Pn** | **07 17 20.0** | **+0.7** |
| **ADOR** | **Douera** | **1.57** | **48** | P | **Pg** | **07 17 24.0** | **+0.6** |
| **ADJB** | **Djebel Djouab** | **1.69** | **71** | P | **Pn** | **07 17 23.2** | **+0.8** |
| **ABA** | **Alger-Bouzarea** | **1.73** | **46** | P | **Pn** | **07 17 22.7** | **-0.2** |
| **ADCK** | **Dar Chioukh** | **1.76** | **113** | P | **Pn** | **07 17 24.0** | **+0.6** |
| **OTSS** | **Djebel Tessala** | **1.88** | **260** | P | **Pn** | **07 17 26.0** | **+1.0** |
| **AKED** | **El Kharrouba** | **1.88** | **56** | P | **Pn** | **07 17 24.5** | **-0.5** |
| **AKET** | **Djebel Ketaf** | **2.01** | **77** | P | **Pn** | **07 17 28.7** | **+1.9** |
| **ABSD** | **Ouled Sidi Bra** | **2.23** | **94** | P | **Pn** | **07 17 30.6** | **+0.8** |
| **ATAF** | **Djebel Tarf** | **2.30** | **83** | P | **Pn** | **07 17 31.9** | **+1.1** |
| **ATKJ** | **Tikjda** | **2.30** | **68** | P | **Pn** | **07 17 32.9** | **+2.0** |
| **AFRS** | **Ain Fares** | **2.60** | **109** | P | **Pb** | **07 17 38.0** | **-1.6** |
| **CTCHA** | **Tamokra** | **2.70** | **72** | P | **Pn** | **07 17 37.7** | **+1.4** |
| **CAZD** | **Ain Tagrout** | **3.04** | **78** | P | **Pn** | **07 17 43.6** | **+2.6** |
| **EMUR** | **La Murta** | **3.11** | **316** | P | **Pn** | **07 17 41.9** | **0.0** |
| EMUR | | | | S | **Sn** | **07 18 17.7** | **-1.2** |
| **CDCN** | **Doucen** | **3.16** | **108** | P | **Pn** | **07 17 44.8** | **+2.2** |
| **SET** | **Setif** | **3.24** | **78** | P | **Pn** | **07 17 47.0** | **+3.2** |
| **TLOR** | **Lorca, Murcia** | **3.26** | **310** | P | **Pn** | **07 17 44.5** | **+0.6** |
| TLOR | | | | S | **Sn** | **07 18 22.4** | **-0.1** |
| **ENIJ** | **Nijar** | **3.27** | **296** | P | **Pn** | **07 17 43.7** | **-0.3** |
| ENIJ | | | | ⇑iVmb_V | | 07 17 45.6 | |
| | 546nm,SNR=4.8 | | | | | | |
| ENIJ | | | | S | **Sn** | **07 18 19.0** | **-3.6** |
| **ELOR** | **Lorca, Murcia** | **3.28** | **309** | P | **Pn** | **07 17 45.2** | **+1.0** |
| ELOR | | | | S | **Sn** | **07 18 22.9** | **-0.2** |
| **EBEN2** | **Beniarda presa** | **3.33** | **337** | P | **Pn** | **07 17 45.6** | **+0.7** |
| EBEN2 | | | | ⇑iVmb_V | | 07 17 54.2 | |
| | 724nm,SNR=4.9 | | | | | | |
| EBEN2 | | | | S | **Sn** | **07 18 24.4** | **+0.1** |
| **EZAR** | **Zarzadilla de** | **3.40** | **313** | P | **Pn** | **07 17 45.6** | **-0.4** |
| EZAR | | | | ⇑iVmb_V | | 07 17 55.3 | |
| | 514nm,SNR=6.9 | | | | | | |
| EZAR | | | | S | **Sn** | **07 18 24.8** | **-1.3** |
| **EIBI** | **Ibiza** | **3.41** | **358** | P | **Pn** | **07 17 46.4** | **+0.5** |
| EIBI | | | | ⇑iVmb_V | | 07 17 49.4 | |
| | 535nm,SNR=5.0 | | | | | | |
| EIBI | | | | S | **Sn** | **07 18 23.6** | **-2.6** |
| **AFON** | **Font Roja** | **3.44** | **333** | P | **Pn** | **07 17 47.5** | **+1.0** |
| AFON | | | | S | **Sn** | **07 18 31.1** | **+3.9** |
| **CJSR** | **Ain Djasser** | **3.65** | **85** | P | **Pn** | **07 17 51.6** | **+2.2** |
| **EALB** | **Alboran** | **3.68** | **276** | P | **Pn** | **07 17 48.8** | **-0.8** |
| EALB | | | | ⇑iVmb_V | | 07 17 57.8 | |
| | 507nm,SNR=2.1 | | | | | | |
| EALB | | | | S | **Sn** | **07 18 30.2** | **-2.5** |
| **DFRA** | **Djebel Bou Aff** | **3.69** | **74** | P | **Pn** | **07 17 51.8** | **+1.9** |
| **EBER** | **Berja** | **3.75** | **291** | P | **Pn** | **07 17 49.9** | **-0.9** |
| EBER | | | | ⇑iVmb_V | | 07 17 50.9 | |
| | 887nm,SNR=13 | | | | | | |
| EBER | | | | S | **Sn** | **07 18 34.0** | **-0.9** |
| **ETOB** | **Tobarra** | **3.87** | **322** | P | **Pn** | **07 17 53.1** | **+0.7** |
| ETOB | | | | ⇑iVmb_V | | 07 17 57.6 | |
| | 1μm,SNR=21 | | | | | | |
| ETOB | | | | S | **Sn** | **07 18 39.3** | **+1.7** |
| **COAT** | **Oued Athmania** | **3.95** | **80** | P | **Pn** | **07 17 57.0** | **+3.5** |
| **CBHR** | **Beni Haroun da** | **4.00** | **75** | P | **Pn** | **07 17 54.8** | **+0.7** |
| **CTEI** | **Djebel Teioual** | **4.03** | **82** | P | **Pn** | **07 17 56.8** | **+2.1** |
| **CASM** | **Ain Smara** | **4.12** | **80** | P | **Pn** | **07 17 59.2** | **+3.4** |
| **EVIV** | **Cofrentes, Val** | **4.19** | **331** | P | **Pn** | **07 17 57.5** | **+0.8** |
| EVIV | | | | ⇑iVmb_V | | 07 18 00.6 | |
| | 218nm,SNR=3.3 | | | | | | |
| EVIV | | | | S | **Sn** | **07 18 45.7** | **+0.2** |
| **EQUE** | **Quentar** | **4.27** | **293** | P | **Pn** | **07 17 58.7** | **+0.9** |
| EQUE | | | | S | **Sn** | **07 18 49.5** | **+2.0** |
| **ETOS** | **Mallorca** | **4.28** | **14** | P | **Pn** | **07 17 58.3** | **+0.3** |
| ETOS | | | | S | **Sn** | **07 18 46.9** | **-0.8** |
| **CSGS** | **Sigus** | **4.29** | **82** | P | Pn | 07 18 03.6 | +5.5 |
| **ELGU** | **Los Guajares,** | **4.31** | **288** | P | **Pn** | **07 17 57.3** | **-1.1** |
| ELGU | | | | ⇑iVmb_V | | 07 17 58.9 | |
| | 629nm,SNR=17 | | | | | | |
| ELGU | | | | S | **Sn** | **07 18 46.0** | **-2.4** |
| **ECOL** | **Islas Columbre** | **4.32** | **352** | P | **Pn** | **07 17 58.8** | **+0.3** |
| ECOL | | | | S | **Sn** | **07 18 47.1** | **-1.5** |
| **ECHE** | **Chera** | **4.42** | **335** | P | **Pn** | **07 18 01.3** | **+1.5** |
| ECHE | | | | ⇑iVmb_V | | 07 18 09.0 | |
| | 218nm,SNR=3.6 | | | | | | |
| ECHE | | | | S | **Sn** | **07 18 52.9** | **+1.8** |
| **E0802** | **Ubeda,Jaen** | **4.57** | **303** | S | **Sn** | **07 18 57.3** | **+2.3** |
| **CBST** | **Bordj Sabath** | **4.63** | **79** | P | **Pn** | **07 18 04.7** | **+1.9** |
| **CBBAR** | **Babar** | **4.70** | **94** | P | **Pn** | **07 18 08.2** | **+4.4** |
| **EGOR** | **Sierra Gorda,** | **4.75** | **290** | P | **Pn** | **07 18 05.1** | **+0.6** |
| EGOR | | | | S | **Sn** | **07 19 04.8** | **+5.5** |
| **CMAH** | **Djebel Manchou** | **4.92** | **76** | P | **Pn** | **07 18 08.9** | **+2.1** |
| **EMOS** | **Mosqueruela** | **4.98** | **343** | P | **Pn** | **07 18 08.5** | **+0.7** |
| EMOS | | | | ⇑iVmb_V | | 07 18 12.5 | |
| | 230nm,SNR=5.1 | | | | | | |
| EMOS | | | | S | **Sn** | **07 19 03.9** | **-1.4** |
| **CRHA** | **Rehia** | **5.03** | **86** | P | Pn | 07 18 13.9 | +5.6 |
| **PSIM** | **Granatula de C** | **5.26** | **309** | P | **Pn** | **07 18 11.6** | **+0.2** |
| PSIM | | | | S | **Sn** | **07 19 09.2** | **-2.7** |
| **ERTA** | **Horta de San J** | **5.41** | **351** | P | **Pn** | **07 18 14.6** | **+1.1** |
| ERTA | | | | ⇑iVmb_V | | 07 18 20.5 | |
| | 169nm,SNR=4.1 | | | | | | |
| ERTA | | | | S | **Sn** | **07 19 18.5** | **+3.0** |
| **EADA** | **Adamuz** | **5.48** | **300** | P | **Pn** | **07 18 14.5** | **+0.1** |
| EADA | | | | ⇑iVmb_V | | 07 18 24.0 | |
| | 131nm,SNR=2.0 | | | | | | |
| EADA | | | | S | **Sn** | **07 19 16.6** | **-0.6** |
| **EJIF** | **Jimena Fronter** | **5.69** | **280** | P | **Pn** | **07 18 16.9** | **-0.3** |
| EJIF | | | | S | **Sn** | **07 19 22.3** | **0.0** |
| **EPOB** | **Poblet** | **5.74** | **357** | P | **Pn** | **07 18 18.7** | **+0.6** |
| EPOB | | | | ⇑iVmb_V | | 07 18 25.8 | |
| | 138nm,SNR=4.3 | | | | | | |
| EPOB | | | | S | **Sn** | **07 19 20.9** | **-2.8** |
| **MDT** | **Midelt** | **5.76** | **243** | Pn | **Pn** | **07 18 19.2** | **+0.9** |
| | 1.4nm,0.3s,baz=69,slow=18,SNR=21 | | | | | | |
| MDT | | | | Lg | Lg | 07 19 51.1 | |
| | 1.3nm,0.3s,baz=66,slow=20,SNR=1.9 | | | | | | |
| | 4.2nm,0.4s | | | | | | |
| **ETOR** | **Torete** | **5.89** | **333** | P | **Pn** | **07 18 22.7** | **+2.5** |
| **ESDC** | **Sonseca Array** | **5.92** | **315** | P | **Pn** | **07 18 21.3** | **+0.8** |
| ESDC | | | | ⇑iVmb_V | | 07 18 29.7 | |
| | 133nm,SNR=1.7 | | | | | | |
| ESDC | | | | S | **Sn** | **07 19 26.7** | **-1.4** |
| **ESDC** | **Sonseca Array** | **5.92** | **315** | Pn | **Pn** | **07 18 20.7** | **+0.2** |
| | 1.1nm,0.3s,baz=131,slow=13,SNR=17 | | | | | | |
| ESDC | | | | Sn | **Sn** | **07 19 25.3** | **-2.8** |
| | 1.0nm,0.3s,baz=133,slow=24,SNR=7.5 | | | | | | |
| | 2.0nm,0.3s | | | | | | |
| **ECAB** | **El Cabril** | **6.05** | **296** | P | **Pn** | **07 18 21.6** | **-0.6** |
| ECAB | | | | S | **Sn** | **07 19 31.4** | **+0.2** |
| **PAB** | **San Pablo** | **6.06** | **312** | P | **Pn** | **07 18 22.6** | **+0.1** |
| PAB | | | | ⇑iVmb_V | | 07 18 26.7 | |
| | 118nm,SNR=2.2 | | | | | | |
| PAB | | | | S | **Sn** | **07 19 29.2** | **-2.5** |
| **ESAC** | **San Caprasio** | **6.29** | **347** | P | **Pn** | **07 18 27.1** | **+1.5** |
| **EMIR** | **Miracle** | **6.29** | **0** | P | **Pn** | **07 18 27.5** | **+1.9** |
| EMIR | | | | ⇑iVmb_V | | 07 18 27.8 | |
| | 268nm,SNR=1.7 | | | | | | |
| **KEST** | **Kesra** | **6.41** | **87** | Pn | **Pn** | **07 18 29.5** | **+2.2** |
| | 0.5nm,0.3s,baz=254,slow=5.7,SNR=6.6 | | | | | | |
| KEST | | | | LR | LR | 07 21 23.3 | |
| | comp=Z,60nm,18.2s,baz=218,slow=42 | | | | | | |
| | 6.4nm,0.5s | | | | | | |
| **GUD** | **Guadarrama** | **6.70** | **320** | P | **Pn** | **07 18 32.7** | **+1.5** |
| GUD | | | | ⇑iVmb_V | | 07 18 37.1 | |
| | 216nm,SNR=5.3 | | | | | | |
| GUD | | | | S | **Sn** | **07 19 46.9** | **-0.5** |
| **EMIN** | **Mina Concepcio** | **6.89** | **291** | P | **Pn** | **07 18 33.3** | **-0.4** |
| EMIN | | | | ⇑iVmb_V | | 07 18 41.1 | |
| | 130nm,SNR=1.5 | | | | | | |
| **PBAR** | **Barrancos** | **7.28** | **293** | *e*P | **Pn** | **07 18 38.9** | **-0.3** |
| **VSL** | **Villasalto** | **7.38** | **56** | P | **Pn** | **07 18 40.5** | **+0.1** |
| VSL | | | | S | **Sn** | **07 20 00.3** | **-3.7** |
| **ETSF** | **Etsaut** | **7.44** | **348** | *e*Pn | **Pn** | **07 18 40.7** | **-0.7** |
| ETSF | | | | *e*Sn | **Sn** | **07 20 01.9** | **-3.8** |
| | 2.0nm,0.4s | | | | | | |
| **EPLA** | **Plasencia** | **7.44** | **309** | P | **Pn** | **07 18 42.9** | **+1.5** |
| EPLA | | | | ⇑iVmb_V | | 07 18 45.1 | |
| | 155nm,SNR=2.4 | | | | | | |
| **EGRO** | **El Granado** | **7.46** | **288** | P | **Pn** | **07 18 40.9** | **-0.7** |
| EGRO | | | | ⇑iVmb_V | | 07 18 50.1 | |
| | 223nm,SNR=1.8 | | | | | | |
| EGRO | | | | S | **Sn** | **07 20 04.7** | **-1.2** |
| **EPF** | **Esparros** | **7.46** | **354** | *e*Pn | **Pn** | **07 18 40.2** | **-1.4** |
| **EBAD** | **Badajoz** | **7.46** | **297** | P | **Pn** | **07 18 41.6** | **0.0** |
| EBAD | | | | ⇑iVmb_V | | 07 18 51.6 | |
| | 144nm,SNR=1.8 | | | | | | |
| **PVAQ** | **Vaqueiros** | **7.61** | **286** | *e*P | **Pn** | **07 18 42.5** | **-1.2** |
| PVAQ | | | | *e*S | **Sn** | **07 20 06.5** | **-3.2** |
| PVAQ | | | | A | A | 07 20 17.8 | |
| | 2.8nm,0.5s | | | | | | |
| **MTLF** | **Montolieu** | **7.74** | **4** | *e*Pn | **Pn** | **07 18 44.7** | **-0.7** |
| **SJPF** | **Ste Jean** | **7.77** | **345** | *e*Pn | **Pn** | **07 18 45.1** | **-0.8** |
| SJPF | | | | *e*Sn | **Sn** | **07 20 08.9** | **-4.8** |
| | 2.8nm,0.3s | | | | | | |
| **EJUZ** | **Juzbado, Salam** | **7.95** | **316** | P | **Pn** | **07 18 49.7** | **+1.3** |
| **PMRV** | **Marv??o** | **8.00** | **301** | *e*S | **Sn** | **07 20 16.3** | **-3.1** |
| PMRV | | | | A | A | 07 20 48.2 | |
| | 4.1nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **8.09** | **289** | *e*P | **Pn** | **07 18 49.8** | **-0.5** |
| **PCBR** | **Castelo Branco** | **8.25** | **303** | *e*P | **Pn** | **07 18 53.4** | **+1.0** |
| PCBR | | | | *e*S | **Sn** | **07 20 23.8** | **-1.6** |
| **PNCL** | **Nicolau / Gran** | **8.39** | **290** | *e*P | **Pn** | **07 18 53.9** | **-0.5** |
| **PMTG** | **Montargil** | **8.46** | **297** | *e*P | **Pn** | **07 18 55.9** | **+0.6** |
| PMTG | | | | *e*S | **Sn** | **07 20 25.7** | **-4.8** |
| PMTG | | | | A | A | 07 20 28.5 | |
| | 3.1nm,0.9s | | | | | | |
| **ELAN** | **Lanestosa** | **8.50** | **335** | P | **Pn** | **07 18 58.4** | **+2.5** |
| ELAN | | | | ⇑iVmb_V | | 07 19 04.8 | |
| | 140nm,SNR=1.3 | | | | | | |
| **MTE** | **Manteigas** | **8.57** | **307** | *e*S | **Sn** | **07 20 31.6** | **-1.8** |
| **MVO** | **Moncorvo** | **8.67** | **312** | *e*P | **Pn** | **07 19 00.2** | **+1.9** |
| MVO | | | | *e*S | **Sn** | **07 20 34.8** | **-1.1** |
| **PBRG** | **Braganca** | **8.91** | **316** | *e*P | **Pn** | **07 19 02.3** | **+0.8** |
| **PVIS** | **Viseu** | **8.96** | **307** | *e*S | **Sn** | **07 20 41.3** | **-1.7** |
| **ECAL** | **Calabor** | **9.00** | **317** | P | **Pn** | **07 19 04.1** | **+1.4** |
| ECAL | | | | ⇑iVmb_V | | 07 19 07.8 | |
| | 132nm,SNR=1.3 | | | | | | |
| **PGF** | **Pioggiola** | **9.06** | **38** | *e*Pn | **Pn** | **07 19 01.6** | **-2.1** |
| PGF | | | | *e*Sn | **Sn** | **07 20 39.5** | **-6.0** |
| | 27nm,1.2s | | | | | | |
| **EARI** | **Arriondas** | **9.25** | **328** | P | **Pn** | **07 19 07.8** | **+1.6** |
| EARI | | | | ⇑iVmb_V | | 07 19 12.6 | |
| | 179nm,SNR=1.2 | | | | | | |
| **CAF** | **Calviac** | **9.31** | **3** | *e*Pn | **Pn** | **07 19 06.2** | **-0.8** |
| **LFF** | **La Frestale** | **9.33** | **357** | *e*Sn | **Sn** | **07 20 47.2** | **-4.7** |
| | 12nm,0.4s | | | | | | |
| **ELOB** | **Lobios** | **9.71** | **313** | P | **Pn** | **07 19 13.5** | **+1.0** |
| ELOB | | | | ⇑iVmb_V | | 07 19 20.5 | |
| | 140nm,SNR=1.3 | | | | | | |
| **MFF** | **Saint Martin d** | **11.04** | **354** | *e*Pn | **Pn** | **07 19 29.4** | **-1.3** |
| **GERES** | **GERESS Array B** | **16.00** | **31** | Pn | **P** | **07 20 40.5** | **-0.8** |
| | 0.2nm,0.3s,baz=205,slow=17,SNR=2.4 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.37** | **179** | P | **P** | **07 21 52.0** | **+1.0** |
| | 0.9nm,0.6s,baz=356,slow=12,SNR=7.6 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **30.19** | **23** | P | **P** | **07 23 04.5** | **+1.8** |
| | 3.6nm,1.1s,baz=204,slow=9.1,SNR=2.6 | | | | | | |
| | 3.6nm,1.1s | | | | | | |

*TRN **03** 07:37:49.5, 10.64N×62.45W, h100km, MD3.6, Paria peninsula.*
*FUNV **03** 07:37:50.0, 10.61N×62.50W, h23km, MW3.5*

**ISC 03 07:37:47.1±1.4, 10.59N±0.05×62.46W±0.05, h118km±14km, n23, σ1s52/36, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TCE** | **Chacachacare** | **0.70** | **81** | *e*P | **Pn** | **07 38 07.2** | **+0.9** |
| TCE | | | | *e*S | **Sn** | **07 38 20.5** | **-0.2** |
| **TRN** | **Trinidad (W)** | **1.04** | **86** | *e*P | **Pn** | **07 38 10.8** | **+1.5** |
| TRN | | | | *e*S | **Sn** | **07 38 24.7** | **-1.4** |
| **GRFF** | **Grenada Fort F** | **1.62** | **26** | *e*P | **Pn** | **07 38 16.6** | **+0.8** |
| GRFF | | | | *e*S | **Sn** | **07 38 36.1** | **-1.6** |
| **GRGR** | **Grenville** | **1.73** | **27** | *e*P | **Pn** | **07 38 18.0** | **+0.9** |
| GRGR | | | | *e*S | **Sn** | **07 38 38.5** | **-1.6** |
| **GRW** | **Mount Saint Ca** | **1.75** | **26** | *e*S | **Sn** | **07 38 39.1** | **-1.5** |
| **GRHS** | **Sauteurs** | **1.81** | **26** | *e*P | **Pn** | **07 38 19.1** | **+0.9** |
| GRHS | | | | *e*S | **Sn** | **07 38 40.0** | **-1.9** |
| **GRSS** | **Sisters** | **1.89** | **26** | *e*P | **Pn** | **07 38 19.9** | **+0.8** |
| GRSS | | | | *e*S | **Sn** | **07 38 43.2** | **-0.4** |
| **GCMP** | **Grenada, Carri** | **2.14** | **28** | *e*P | **Pn** | **07 38 23.1** | **+0.9** |
| GCMP | | | | *e*S | **Sn** | **07 38 48.0** | **-1.2** |
| **PCRV** | **Puerto La Cruz** | **2.18** | **259** | *e*P | **Pn** | **07 38 24.4** | **+1.6** |
| PCRV | | | | *e*S | **Sn** | **07 38 48.0** | **-2.1** |
| **PCRV** | **Puerto La Cruz** | **2.18** | **259** | *e*P | **Pn** | **07 38 25.0** | **+2.2** |
| PCRV | | | | *e*S | **Sn** | **07 38 50.7** | **+0.6** |
| **SVOC** | **Richmond Hill,** | **2.83** | **25** | *e*S | **Sn** | **07 39 05.0** | **+0.1** |
| **SVT** | **Saint Vincent** | **2.83** | **25** | *e*S | **Sn** | **07 39 05.0** | **0.0** |
| **SVB** | **Belmont** | **2.92** | **24** | *e* | Pn | 07 38 37.2 | +4.8 |
| **SVB** | **Belmont** | **2.92** | **24** | *e* | **Sn** | **07 39 06.9** | **-0.3** |
| **SLBI** | **Saint Lucia, B** | **3.71** | **23** | *e*S | **Sn** | **07 39 24.6** | **-1.3** |
| **TACV** | **Tcata** | **4.52** | **265** | *e*P | **Pn** | **07 38 55.0** | **+1.4** |
| TACV | | | | *e*S | **Sn** | **07 39 43.8** | **-1.5** |
| **LUEV** | **Luepa** | **4.81** | **168** | *e*P | **Pn** | **07 38 59.7** | **+2.0** |
| LUEV | | | | *e*S | **Sn** | **07 39 51.9** | **-0.7** |
| **CACV** | **CAICARA DEL OR** | **5.03** | **234** | *e*P | **Pn** | **07 38 57.4** | **-3.0** |
| CACV | | | | *e*S | Sn | 07 39 47.1 | -10 |
| **BENV** | **Beln** | **5.10** | **263** | *e*P | **Pn** | **07 39 03.5** | **+2.1** |
| BENV | | | | *e*S | **Sn** | **07 39 57.4** | **-1.9** |
| **BAUV** | **El Baul** | **5.74** | **254** | *e*P | **Pn** | **07 39 10.9** | **+0.8** |
| BAUV | | | | *e*S | **Sn** | **07 40 11.9** | **-2.9** |
| **BAUV** | **El Baul** | **5.74** | **254** | *e*P | **Pn** | **07 39 11.3** | **+1.2** |
| BAUV | | | | *e*S | **Sn** | **07 40 14.7** | **-0.1** |
| **TEPV** | **Terepaima** | **6.66** | **265** | *e*P | **Pn** | **07 39 23.7** | **+1.3** |
| **SOCV** | **Socops** | **8.60** | **255** | *e*P | **Pn** | **07 39 49.8** | **+1.1** |

*NNC **03** 07:45:40.8±5.6, 54.31N×86.14E, h0km, mb3.5, mpv2.6, Error ellipse: s-maj=61.4km s-min=28.4km az=168.0, Suspected Mining explosion.*
*IDC **03** 07:45:42.1±2.3, 54.27N×86.13E, h0km, mbtmp3.2/2, ML2.8/2, Error ellipse: s-maj=17.6km s-min=11.1km az=54.0.*

**ISC 03 07:45:41.5±3.8, 54.3N±0.2×86.2E±0.1, h0km, n8, σ1s58/13, 8C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.87** | **247** | I | I | 07 51 30.0 | |
| | baz=66,slow=318,SNR=1.6 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.87** | **247** | ⇑P | **Pg** | **07 45 56.5** | **-1.6** |
| | 0.1nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | **Sg** | **07 46 08.6** | **-0.7** |
| | 1.0nm,0.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.87** | **247** | Pg | **Pg** | **07 45 56.5** | **-1.6** |
| | 0.9nm,0.3s,baz=63,slow=15,SNR=10.0 | | | | | | |
| ZALV | | | | Lg | Lg | 07 46 09.3 | |
| | 4.2nm,0.3s,baz=70,slow=29,SNR=16 | | | | | | |
| **KURK** | **Kurchatov** | **5.84** | **235** | ⇑Pn | **Pn** | **07 47 09.1** | **-0.1** |
| | 1.0nm,0.8s | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | **07 48 19.6** | **+2.8** |
| | 0.4nm,0.4s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 07 48 47.3 | |
| | 1.6nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.95** | **235** | Pn | **Pn** | **07 47 11.9** | **+1.3** |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=15 | | | | | | |
| KURBB | | | | Sn | **Sn** | **07 48 20.2** | **+0.8** |
| | baz=29,slow=23,SNR=1.8 | | | | | | |
| KURBB | | | | Lg | Lg | 07 48 50.2 | |
| | baz=54,slow=32,SNR=2.7 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.95** | **235** | ⇓Pn | **Pn** | **07 47 10.9** | **+0.3** |
| | 1.7nm,0.6s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **07 48 22.0** | **+2.6** |
| | 1.6nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 07 48 49.7 | |
| | 4.7nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **7.91** | **200** | ⇑Pn | **Pn** | **07 47 38.9** | **+1.2** |
| | 1.1nm,0.7s,baz=26,slow=13,SNR=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AKCZ | | | | S | Sn | 08 07 42.5 | 0.0 | |
| **MQZ** | **McQueen's Vall** | **1.45** | **226** | P | Pn | 08 07 24.7 | +0.3 | |
| MQZ | | | | S | Sn | 08 07 41.6 | -0.8 | |
| **SNZO** | **South Karori** | **1.46** | **18** | P | Pn | 08 07 25.1 | +0.6 | |
| **TCW** | **Tory Channel** | **1.50** | **5** | P | Pn | 08 07 25.2 | +0.3 | |
| **WEL** | **Wellington** | **1.50** | **20** | P | Pn | 08 07 25.9 | +0.8 | |
| WEL | | | | S | Sn | 08 07 42.6 | -1.0 | |
| **MSWZ** | **Moikau Station** | **1.55** | **34** | P | Pn | 08 07 26.2 | +0.5 | |
| **NNZ** | **Nelson** | **1.57** | **340** | P | Pn | 08 07 26.2 | +0.2 | |
| **OXZ** | **Oxford** | **1.63** | **247** | P | Pn | 08 07 27.1 | +0.3 | |
| OXZ | | | | S | Sn | 08 07 44.8 | -2.1 | |
| **MRNZ** | **Matariki Terra** | **1.64** | **322** | P | Pn | 08 07 27.9 | +1.0 | |
| MRNZ | | | | S | Sn | 08 07 46.5 | -0.5 | |
| **PAWZ** | **Paruwai Farm** | **1.65** | **37** | P | Pn | 08 07 27.6 | +0.5 | |
| **CAW** | **Cannon Point** | **1.75** | **25** | P | Pn | 08 07 29.1 | +0.6 | |
| **TRWZ** | **Traveller** | **1.76** | **43** | P | Pn | 08 07 29.4 | +0.8 | |
| **MTW** | **Mount Morrison** | **1.87** | **35** | P | Pn | 08 07 30.3 | +0.3 | |
| **TKNZ** | **Takaka Hill** | **1.87** | **333** | P | Pn | 08 07 30.9 | +0.8 | |
| **DUWZ** | **D'Urville Isla** | **1.90** | **356** | P | Pn | 08 07 30.9 | +0.3 | |
| **KIW** | **Kapiti Island** | **1.94** | **19** | P | Pn | 08 07 31.7 | +0.6 | |
| **DSZ** | **Denniston Nort** | **1.95** | **299** | P | Pn | 08 07 32.4 | +1.1 | |
| **INZ** | **Inchbonnie** | **1.95** | **268** | P | Pn | 08 07 32.0 | +0.8 | |
| **MHCZ** | **Mount Hutt** | **2.02** | **245** | P | Pn | 08 07 32.8 | +0.5 | |
| **OGWZ** | **Otaki Gorge** | **2.05** | **24** | P | Pn | 08 07 33.1 | +0.5 | |
| **WACZ** | **Wakanui South** | **2.06** | **232** | P | Pn | 08 07 33.6 | +0.9 | |
| **TMWZ** | **Te Maipa** | **2.08** | **41** | P | Pn | 08 07 34.7 | +1.6 | |
| **HOWZ** | **Holdsworth Sta** | **2.09** | **31** | P | Pn | 08 07 33.8 | +0.5 | |
| **QRZ** | **Quartz Range** | **2.21** | **328** | P | Pn | 08 07 35.8 | +1.0 | |
| **QRZ** | **Quartz Range** | **2.21** | **328** | P | Pn | 08 07 35.7 | +1.0 | |
| **MRZ** | **Mangatainoka R** | **2.32** | **29** | P | Pn | 08 07 36.7 | +0.3 | |
| **RPZ** | **Rata Peaks** | **2.44** | **244** | P | Pn | 08 07 38.5 | +0.5 | |
| **RPZ** | **Rata Peaks** | **2.44** | **244** | P | Pn | 08 07 38.6 | +0.5 | |
| **WVZ** | **Waitahaa Valley** | **2.49** | **260** | P | Pn | 08 07 39.8 | +1.1 | |
| **BFZ** | **Birch Farm** | **2.58** | **39** | P | Pn | 08 07 39.9 | 0.0 | |
| **TMZ** | **Timaru** | **2.80** | **232** | P | Pn | 08 07 43.8 | +0.9 | |
| **ANWZ** | **Angora Road** | **2.87** | **39** | P | Pn | 08 07 43.8 | 0.0 | |
| **KHEZ** | **Kahui Hut** | **3.41** | **359** | P | Pn | 08 07 53.3 | +2.0 | |
| **ODZ** | **Otahua Downs** | **3.42** | **226** | P | Pn | 08 07 52.6 | +1.2 | |
| **BKZ** | **Black Stump Fm** | **3.97** | **28** | P | Pn | 08 07 59.6 | +0.5 | |
| **JCZ** | **Jackson Bay** | **4.10** | **249** | P | Pn | 08 08 02.2 | +1.3 | |
| **HIZ** | **Hauiti** | **4.22** | **8** | P | Pn | 08 08 04.8 | +2.3 | |

*IDC **03** 08:24:42.6±3.0, 54°.33N×86°.97E, h0km, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=24.2km s-min=18.2km az=59.0*
*NNC **03** 08:24:43.0±5.2, 54°.32N×86°.91E, h0km, mb2.9, mpv2.8, Error ellipse: s-maj=43.8km s-min=28.6km az=6.0, Suspected Mining explosion.*

**ISC 03 08:24:37.2±2.0, 52°.86N±0°.05×86°.5E±0°.1, h0km, n8, σ2s44/11, 5C-6D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.48** | **318** | I | | I | 08 32 50.0 | |
| | baz=73,slow=320,SNR=5.6 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.48** | **318** | ⇑P | | **Pn** | **08 25 06.0** | **+0.9** |
| | 0.3nm,0.2s | | | | | | | |
| ZAA0 | | | | ⇑S | | **Sg** | **08 25 24.3** | **-0.4** |
| | 0.7nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.48** | **318** | Pg | | **Pb** | **08 25 06.2** | **+0.7** |
| | 2.0nm,0.3s,baz=73,slow=17,SNR=9.2 | | | | | | | |
| ZALV | | | | Lg | | Lg | 08 25 24.4 | |
| | 2.5nm,0.3s,baz=71,slow=29,SNR=6.9 | | | | | | | |
| **KURK** | **Kurchatov** | **5.33** | **249** | ⇑Pn | | **Pg** | **08 26 19.7** | **+0.4** |
| | 1.7nm,1.0s | | | | | | | |
| KURK | | | | ⇓Sn | | **Sg** | **08 27 32.8** | **+4.4** |
| | 1.6nm,0.6s | | | | | | | |
| KURK | | | | ⇓Lg | | Lg | 08 28 04.4 | |
| | 4.7nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.42** | **249** | Pn | | **Pg** | **08 26 18.8** | **-2.3** |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=7.5 | | | | | | | |
| KURBB | | | | Sn | | **Sg** | **08 27 30.3** | **-1.0** |
| | baz=58,slow=26,SNR=2.3 | | | | | | | |
| KURBB | | | | Lg | | Lg | 08 28 05.8 | |
| | baz=54,slow=32,SNR=2.2 | | | | | | | |
| | 1.0nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.42** | **249** | ⇓Pn | | **Pg** | **08 26 18.2** | **-2.9** |
| | 1.3nm,0.5s | | | | | | | |
| KURBB | | | | ⇓Sn | | **Sg** | **08 27 29.9** | **-1.4** |
| | 4.3nm,0.8s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 08 28 04.5 | |
| | 4.6nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **6.65** | **206** | ⇓Pn | | Pb | 08 26 38.9 | +5.3 |
| | baz=26,slow=13,SNR=6.4 | | | | | | | |
| MK31 | | | | ⇓Sn | | **Sg** | **08 28 12.8** | **+2.2** |
| | 0.4nm,0.5s | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 08 28 57.5 | |
| | 2.5nm,1.0s,baz=188,slow=25,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **6.65** | **206** | Pn | | **Pg** | **08 26 42.5** | **-2.1** |
| | 0.1nm,0.3s,baz=21,slow=15,SNR=2.8 | | | | | | | |
| MKAR | | | | Lg | | Lg | 08 29 00.5 | |
| | 0.3nm,0.3s,baz=24,slow=28,SNR=6.3 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |

*IDC **03** 08:31:21.6±0.7, 5°.47S×133°.60E, h0km, mb4.2/10, mbtmp4.2/13, ML3.9/3, MS3.3/12, Error ellipse: s-maj=46.4km s-min=14.4km az=69.0*
*DJA **03** 08:31:22.6±1.7, 5°.5S±3°×13°.4E±°, h13km±13km, M5.0/31, mb4.9/31, mB5.5/12, MLv5.1/11, Mw(mB)5.0/12, MwMwp4.4/1, Mwp4.8/1*
*NEIC **03** 08:31:22.7±1.5, 5°.29S±0°.06×133°.92E±0°.09, h10km±1km, mb4.6/24, Error ellipse: s-maj=14.8km s-min=10.2km az=84.0*

**ISC 03 08:31:22.5±0.4, 5°.33S±0°.06×133°.87E±0°.06, h10km, n128, σ1s12/117, mb4.6/40, MS3.5/8, 2D, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KMPI** | **Kaimana, Papua** | **1.67** | **354** | P | | **Pn** | **08 31 50.9** | **-0.8** |
| **FAKI** | **Fak Fak** | **2.89** | **326** | P | | **Pn** | **08 32 08.9** | **+0.3** |
| **FAKI** | **Fak Fak** | **2.89** | **326** | Pn | | **Pn** | **08 32 08.2** | **-0.4** |
| **FAKI** | **Fak Fak** | **2.89** | **326** | P | | **Pn** | **08 32 08.3** | **-0.3** |
| **SAUI** | **Saumlaki** | **3.67** | **224** | Pn | | **Pn** | **08 32 20.9** | **+1.6** |
| **SAUI** | **Saumlaki** | **3.67** | **224** | P | | **Pn** | **08 32 20.1** | **+0.8** |
| **BNDI** | **Bandanaira** | **4.03** | **281** | P | | **Pn** | **08 32 26.3** | **+2.0** |
| **BNDI** | **Bandanaira** | **4.03** | **281** | P | | **Pn** | **08 32 25.9** | **+1.6** |
| **SWI** | **Sorong** | **5.14** | **329** | P | | **Pn** | **08 32 39.7** | **+0.1** |
| | 156nm,0.7s,5μm1.9nm | | | | | | | |
| **MSAI** | **Masohi** | **5.30** | **292** | P | | **Pn** | **08 32 43.0** | **+1.2** |
| **NLAI** | **Namlea** | **7.06** | **287** | P | | **Pn** | **08 33 07.2** | **+1.2** |
| | 170nm,0.5s,1.0nm | | | | | | | |
| **TABU** | **Tabubil** | **7.32** | **90** | P | | **Pn** | **08 33 11.0** | **+1.4** |
| | 8μm,0.5s | | | | | | | |
| **JAY** | **Jayapura** | **7.37** | **68** | P | | **Pn** | **08 33 09.5** | **-0.8** |
| | 34nm,0.9s | | | | | | | |
| **KDU** | **Kakadu** | **7.44** | **191** | P | | **Pn** | **08 33 11.8** | **+0.6** |
| **KDU** | **Kakadu** | **7.44** | **191** | P | | **Pn** | **08 33 12.1** | **+0.9** |
| | 37nm,0.3s,SNR=4.4 | | | | | | | |
| **DRS** | **Darwin Rock St** | **7.64** | **202** | P | | **Pn** | **08 33 15.9** | **+1.9** |
| | 148nm,0.5s | | | | | | | |
| **MTN** | **Manton Dam** | **7.94** | **200** | P | | **Pn** | **08 33 18.9** | **+0.8** |
| | 83nm,0.4s | | | | | | | |
| **MTN** | **Manton Dam** | **7.94** | **200** | Pn | | **Pn** | **08 33 18.7** | **+0.7** |
| **MTN** | **Manton Dam** | **7.94** | **200** | P | | **Pn** | **08 33 18.9** | **+0.8** |
| | 83nm,0.4s,SNR=10 | | | | | | | |
| **SANI** | **Sanana** | **8.51** | **292** | P | | **Pn** | **08 33 24.9** | **-1.0** |
| | 110nm,0.5s | | | | | | | |
| **SANI** | **Sanana** | **8.51** | **292** | P | | **Pn** | **08 33 24.7** | **-1.2** |
| | 116nm,0.5s,2μm | | | | | | | |
| **SOEI** | **Soe** | **10.48** | **245** | P | | **Pn** | **08 33 52.7** | **-0.4** |
| | 205nm,1.0s | | | | | | | |
| **SOEI** | **Soe** | **10.48** | **245** | | | | **08 33 53.8** | **+0.7** |
| **SOEI** | **Soe** | **10.48** | **245** | P | | **Pn** | **08 33 53.2** | **+0.1** |
| **BATI** | **Baumata** | **11.21** | **244** | P | | **Pn** | **08 34 03.0** | **0.0** |
| **KNRA** | **Kununurra** | **11.44** | **206** | Pn | | **Pn** | **08 34 05.5** | **-0.6** |
| **KNRA** | **Kununurra** | **11.44** | **206** | P | | **Pn** | **08 34 05.5** | **-0.6** |
| **LUWI** | **Luwuk** | **11.87** | **291** | Pn | | **Pn** | **08 34 11.1** | **-0.8** |
| **LUWI** | **Luwuk** | **11.87** | **291** | P | | **Pn** | **08 34 11.6** | **-0.3** |
| | 77nm,0.6s | | | | | | | |
| **COEN** | **Coen** | **12.55** | **134** | P | | **Pn** | **08 34 20.1** | **-1.2** |
| | 17nm,0.6s | | | | | | | |
| **COEN** | **Coen** | **12.55** | **134** | Pn | | **Pn** | **08 34 19.0** | **-2.3** |
| **COEN** | **Coen** | **12.55** | **134** | P | | **Pn** | **08 34 19.3** | **-1.9** |
| **PMG** | **Port Moresby** | **13.79** | **108** | Pn | | **Pn** | **08 34 38.0** | **-0.2** |
| **PMG** | **Port Moresby** | **13.79** | **108** | LR | | LR | 08 41 18.7 | |
| | comp=Z,240nm,19.4s,baz=284,slow=43 | | | | | | | |
| **KAPI** | **Kappang** | **14.06** | **271** | Pn | | Pn | 08 34 46.5 | +4.6 |
| | 1.4nm,0.3s,baz=147,slow=6.4,SNR=7.8 | | | | | | | |
| **WB0** | **Warramunga Arr** | **14.36** | **178** | | | **Pn** | **08 34 42.6** | **-3.4** |
| **WRA** | **Warramunga Arr** | **14.53** | **178** | | | **Pn** | **08 34 45.6** | **-2.8** |
| **WRA** | **Warramunga Arr** | **14.53** | **178** | Pn | | **Pn** | **08 34 45.0** | **-3.4** |
| | 1.1nm,0.3s,baz=7.2,slow=13,SNR=52 | | | | | | | |
| WRA | | | | Sn | | Sn | 08 37 15.6 | -14 |
| | 1.0nm,0.3s,baz=6.6,slow=24,SNR=2.9 | | | | | | | |
| WRA | | | | Lg | | Lg | 08 38 58.5 | |
| | 0.7nm,0.3s,baz=6.3,slow=24,SNR=2.1 | | | | | | | |
| WRA | | | | LR | | LR | 08 41 07.1 | |
| | comp=Z,104nm,21.0s,baz=60,slow=41 | | | | | | | |
| | 2.0nm,0.3s | | | | | | | |
| **TOLI2** | **Tolitoli** | **14.55** | **296** | P | | **Pn** | **08 34 49.1** | **+0.4** |
| | 17nm,0.7s | | | | | | | |
| **TOLI2** | **Tolitoli** | **14.55** | **296** | Pn | | **Pn** | **08 34 48.4** | **-0.3** |
| **DAV** | **Davao City (W)** | **14.84** | **326** | LR | | LR | 08 41 44.6 | |
| | comp=Z,51nm,20.2s,baz=160,slow=42 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.02** | **212** | P | | **Pn** | **08 34 54.2** | **-0.8** |
| | 28nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.02** | **212** | | | **Pn** | **08 34 52.2** | **-2.8** |
| **QIS** | **Mount Isa** | **16.13** | **160** | P | | **Pn** | **08 35 08.3** | **-1.2** |
| | 17nm,0.8s | | | | | | | |
| **QIS** | **Mount Isa** | **16.13** | **160** | P | | **Pn** | **08 35 07.9** | **-1.7** |
| **MTSU** | **Mount Surprise** | **16.32** | **142** | P | | **Pn** | **08 35 13.0** | **+1.1** |
| | 26nm,0.8s | | | | | | | |
| **PLAI** | **Plampang** | **16.34** | **257** | P | | **Pn** | **08 35 12.2** | **0.0** |
| | 54nm,1.7s | | | | | | | |
| **PLAI** | **Plampang** | **16.34** | **257** | P | | **Pn** | **08 35 10.8** | **-1.4** |
| | 54nm,1.3s | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **17.19** | **258** | P | | **Pn** | **08 35 23.3** | **+0.3** |
| | 34nm,1.1s | | | | | | | |
| **AS01** | **Alice Springs** | **18.23** | **180** | P | | **Pn** | **08 35 34.4** | **-1.4** |
| | 39nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **18.23** | **180** | P | | **Pn** | **08 35 34.4** | **-1.5** |
| **ASAR** | **Alice Springs** | **18.23** | **180** | P | | **Pn** | **08 35 34.8** | **-1.0** |
| **ASAR** | **Alice Springs** | **18.23** | **180** | P | | **Pn** | **08 35 33.4** | **-2.4** |
| | 0.8nm,0.3s,baz=7.6,slow=9.2,SNR=41 | | | | | | | |
| ASAR | | | | Sn | | Sn | 08 38 46.8 | -13 |
| | 0.5nm,0.3s,baz=4.1,slow=27,SNR=3.6 | | | | | | | |
| ASAR | | | | Lg | | Lg | 08 40 58.5 | |
| | baz=2.5,slow=30 | | | | | | | |
| ASAR | | | | LR | | LR | 08 43 30.3 | |
| | comp=Z,200nm,19.2s,baz=342,slow=40 | | | | | | | |
| | 8.7nm,0.6s | | | | | | | |
| **ASPA** | **Alice Springs** | **18.23** | **180** | P | | **Pn** | **08 35 34.5** | **-1.4** |
| | 16nm,0.7s,SNR=15 | | | | | | | |
| **CTA** | **Charters Tower** | **18.98** | **142** | P | | **Pn** | **08 35 45.8** | **+0.8** |
| | 0.1nm,0.3s,baz=326,slow=9.9,SNR=13 | | | | | | | |
| CTA | | | | Lg | | Lg | 08 41 15.8 | |
| | baz=252,slow=19,SNR=2.3 | | | | | | | |
| CTA | | | | LR | | LR | 08 43 56.2 | |
| | comp=Z,30nm,18.4s,baz=308,slow=40 | | | | | | | |
| | 1.1nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **18.98** | **142** | P | | **Pn** | **08 35 45.4** | **+0.4** |
| | 26nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **18.98** | **142** | P | | **P** | **08 35 44.3** | **0.0** |
| **WRKA** | **Warakurna** | **20.31** | **195** | P | | **P** | **08 35 59.2** | **+0.4** |
| | 19nm,1.4s | | | | | | | |
| **MBWA** | **Marble Bar** | **20.87** | **220** | P | | **P** | **08 36 05.0** | **+0.1** |
| MBWA | | | | | IAmb | IAmb | 08 36 23.9 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.10** | **219** | P | | **P** | **08 36 07.5** | **+0.1** |
| PSA00 | | | | | IAmb | IAmb | 08 36 25.9 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **OOD** | **Oodnadatta** | **22.41** | **176** | P | | **P** | **08 36 23.2** | **+1.9** |
| | comp=Z,51nm,0.8s | | | | | | | |
| **INKA** | **Innaminka** | **23.23** | **164** | P | | **P** | **08 36 31.6** | **+1.7** |
| | comp=Z,26nm,0.6s | | | | | | | |
| **QLP** | **Quilpie** | **23.34** | **156** | P | | **P** | **08 36 31.5** | **+0.4** |
| | comp=Z,54nm,0.8s | | | | | | | |
| **QLP** | **Quilpie** | **23.34** | **156** | P | | **P** | **08 36 29.7** | **-1.3** |
| | comp=Z,6.3nm,SNR=6.3 | | | | | | | |
| **MULG** | **Mulgathing** | **24.82** | **180** | P | | **P** | **08 36 45.8** | **+0.8** |
| | comp=Z,33nm,2.4s | | | | | | | |
| **KPJI** | **Karang Pucung** | **24.86** | **264** | P | | **P** | **08 36 44.6** | **-0.9** |
| | comp=Z,39nm,1.1s | | | | | | | |
| **LCRK** | **Leigh Creek** | **25.32** | **171** | P | | **P** | **08 36 49.8** | **+0.3** |
| | comp=Z,32nm,0.9s | | | | | | | |
| **EIDS** | **Eidsvold** | **25.87** | **142** | P | | **P** | **08 36 54.4** | **-0.2** |
| EIDS | | | | | IAmb | IAmb | 08 37 01.6 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **FORT** | **Forrest** | **25.90** | **192** | P | | **P** | **08 36 54.5** | **-0.3** |
| | comp=Z,68nm,0.7s | | | | | | | |
| **FORT** | **Forrest** | **25.90** | **192** | P | | **P** | **08 36 54.7** | **-0.1** |
| **BBJI** | **Bungbulang** | **26.14** | **264** | P | | **P** | **08 36 56.9** | **-0.3** |
| | comp=Z,35nm,0.9s | | | | | | | |
| **HNR** | **Honiara** | **26.18** | **100** | LR | | LR | 08 47 45.6 | |
| | comp=Z,883nm,18.9s,baz=262,slow=37 | | | | | | | |
| **CNJI** | **Cibinong** | **26.65** | **264** | P | | **P** | **08 37 01.1** | **-0.6** |
| | comp=Z,67nm,1.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.39** | **166** | P | | **P** | **08 37 08.4** | **+0.2** |
| | comp=Z,2.4nm,2.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.39** | **166** | P | | **P** | **08 37 07.8** | **-0.4** |
| **STKA** | **Stephens Creek** | **27.39** | **166** | P | | **P** | **08 37 08.0** | **-0.2** |
| | comp=Z,7.1nm,1.0s,baz=345,slow=9.1,SNR=11 | | | | | | | |
| STKA | | | | LR | | LR | 08 48 59.4 | |
| | comp=Z,173nm,20.2s,baz=23,slow=39 | | | | | | | |
| | comp=Z,7.1nm,1.0s | | | | | | | |
| **BBOO** | **Buckleboo** | **27.42** | **176** | P | | **P** | **08 37 08.2** | **-0.3** |
| **ARMA** | **Armidale** | **30.05** | **148** | P | | **P** | **08 37 32.4** | **+0.4** |
| ARMA | | | | | IAmb | IAmb | 08 37 37.7 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **31.54** | **207** | LR | | LR | 08 52 27.3 | |
| | comp=Z,164nm,20.4s,baz=216,slow=40 | | | | | | | |
| **JCJ** | **Chichijima** | **33.22** | **14** | LR | | LR | 08 51 37.4 | |
| | comp=Z,39nm,18.8s,baz=98,slow=36 | | | | | | | |
| **JNU** | **Nakatsue** | **38.34** | **356** | P | | **P** | **08 38 43.9** | **+0.1** |
| JNU | | | | | IAmb | IAmb | 08 38 44.7 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **38.65** | **8** | LR | | LR | 08 51 50.4 | |
| | comp=Z,47nm,21.5s,baz=66,slow=32 | | | | | | | |
| **NJ2** | **Nanjing** | **39.83** | **340** | *e*P | | **P** | **08 38 58.0** | **+1.9** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **GYA** | **Guiyang** | **41.15** | **321** | P | | **P** | **08 39 06.5** | **-0.8** |
| GYA | | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.77** | **305** | P | | **P** | **08 39 12.0** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **41.77** | **305** | P | | **P** | **08 39 11.6** | **-0.8** |
| | comp=Z,1.7nm,0.3s,baz=127,slow=5.7,SNR=4.6 | | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| **MAJO** | **Matsushiro** | **41.85** | **5** | P | | **P** | **08 39 12.6** | **-0.2** |
| **MJB9** | **Matsu-Tunnel** | **41.85** | **5** | P | | **P** | **08 39 12.9** | **+0.1** |
| **KSRS** | **Korea Array** | **42.92** | **353** | P | | **P** | **08 39 22.9** | **+1.4** |
| | comp=Z,0.4nm,0.4s,baz=171,slow=9.7,SNR=1.9 | | | | | | | |
| KSRS | | | | LR | | LR | 08 59 05.4 | |
| | comp=Z,13nm,18.0s,baz=195,slow=39 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **JMM** | **Marumori** | **43.45** | **8** | | | **P** | **08 39 25.1** | **-0.7** |
| JMM | | | | | IAmb | IAmb | 08 39 41.7 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **PZH** | **PanZhiHua** | **44.38** | **317** | P | | **P** | **08 39 34.2** | **+0.6** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,40nm,3.5s | | | | | | | |
| **XAN** | **Xi'an** | **45.71** | **331** | P | | **P** | **08 39 41.6** | **-2.4** |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **JCZ** | **Jackson Bay** | **49.27** | **147** | P | | **P** | **08 40 12.9** | **+1.3** |
| | comp=Z,47nm,2.9s | | | | | | | |
| **ASAJ** | **Asahikawa** | **49.84** | **8** | LR | | LR | 08 59 49.7 | |
| | comp=Z,17nm,21.0s,baz=204,slow=34 | | | | | | | |
| **LZH** | **Lanzhou** | **49.89** | **328** | *e*P | | P | 08 40 23.8 | +7.3 |
| LZH | | | | | sP | pwP | 08 40 31.1 | +7.9 |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.30** | **338** | *e*P | | **P** | **08 40 19.9** | **+0.4** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,59nm,3.6s | | | | | | | |
| **BSWZ** | **Blackbirch Sta** | **50.79** | **142** | P | | **P** | **08 40 22.3** | **-0.8** |
| **KHZ** | **Kahutara** | **50.98** | **143** | P | | **P** | **08 40 23.9** | **-0.6** |
| | comp=Z,18nm,2.2s | | | | | | | |
| **KHZ** | **Kahutara** | **50.98** | **143** | P | | **P** | **08 40 23.5** | **-1.0** |
| KHZ | | | | | IAmb | IAmb | 08 40 42.7 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **51.13** | **137** | P | | **P** | **08 40 25.3** | **-0.4** |
| | comp=Z,13nm,2.1s | | | | | | | |
| **SONM** | **Songino Array** | **58.20** | **339** | P | | **P** | **08 41 18.9** | **+2.0** |
| | comp=Z,0.3nm,0.5s,baz=142,slow=5.4,SNR=2.6 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **WMQ** | **Urumqi** | **64.19** | **325** | *e*P | | P | 08 42 02.4 | +4.8 |
| WMQ | | | | | pmax | pmax | | |
| | comp=Z,38nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **69.02** | **325** | P | | **P** | **08 42 28.5** | **+0.2** |
| MK31 | | | | | IAmb | IAmb | 08 42 48.1 | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.02** | **325** | P | | **P** | **08 42 28.1** | **-0.2** |
| **MKAR** | **Makanchi Array** | **69.02** | **325** | P | | **P** | **08 42 29.1** | **+0.8** |
| | comp=Z,2.0nm,0.6s,baz=117,slow=8.0,SNR=19 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.17** | **327** | P | | **P** | **08 42 53.1** | **-0.2** |
| | comp=Z,0.9nm,0.2s,baz=126,slow=5.0,SNR=8.2 | | | | | | | |
| | comp=Z,0.9nm,0.2s | | | | | | | |
| **VNDA** | **Vanda** | **73.66** | **174** | P | | **P** | **08 42 55.8** | **0.0** |
| VNDA | | | | | IAmb | IAmb | 08 42 56.7 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **VNDA** | **Vanda** | **73.66** | **174** | P | | **P** | **08 42 56.1** | **+0.3** |
| | comp=Z,2.7nm,0.8s,baz=322,slow=6.5,SNR=19 | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **SBA** | **Scott Base** | **74.50** | **173** | P | | **P** | **08 43 01.8** | **+1.0** |
| SBA | | | | | IAmb | IAmb | 08 43 02.7 | |
| | comp=Z,5.7nm,1.0s | | | | | | | |
| **KK31** | **Karatay Array** | **74.68** | **317** | P | | **P** | **08 43 02.1** | **-0.4** |
| **KKAR** | **Karatay Array** | **74.68** | **317** | P | | **P** | **08 43 01.7** | **-0.8** |
| **MAW** | **Mawson** | **77.91** | **202** | P | | **P** | **08 43 21.2** | **+0.9** |
| | comp=Z,1.4nm,0.4s,baz=90,slow=7.6,SNR=4.4 | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| **ABKAR** | **Akbulak array** | **83.63** | **321** | P | | **P** | **08 43 50.5** | **-0.8** |
| ABKAR | | | | | IAmb | IAmb | 08 44 09.5 | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **M16K** | **Timber Creek** | **83.83** | **27** | P | | **P** | **08 43 52.0** | **0.0** |
| **J16K** | **Anvik River** | **84.02** | **24** | P | | **P** | **08 43 53.3** | **+0.3** |
| **QSPA** | **South Pole Qui** | **84.64** | **180** | P | | **P** | **08 43 56.0** | **-0.2** |
| | comp=Z,5.1nm,0.7s,baz=303,slow=0.9,SNR=41 | | | | | | | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **85.14** | **322** | P | | **P** | **08 43 59.1** | **+0.2** |
| | comp=Z,0.6nm,0.3s,baz=80,slow=6.1,SNR=2.5 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **J18K** | **Innoko River** | **85.71** | **25** | P | | **P** | **08 44 00.1** | **-1.4** |
| J18K | | | | | IAmb | IAmb | 08 44 02.2 | |
| | comp=Z,4.3nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **90.21** | **25** | P | | **P** | **08 44 21.8** | **-1.3** |
| | comp=Z,0.3nm,0.4s,baz=261,slow=4.5,SNR=4.2 | | | | | | | |
| **ELIB** | **Princess Elisa** | **91.21** | **197** | *d*P | | **P** | **08 44 28.9** | **+1.1** |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **91.64** | **22** | P | | **P** | **08 44 29.3** | **-0.4** |
| **TROLL** | **Troll, Antarti** | **96.70** | **194** | ⇓P | | **P** | **08 44 53.0** | **+0.1** |
| | comp=Z,37nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **98.15** | **193** | LR | | LR | 09 28 24.0 | |
| | comp=Z,49nm,19.6s,baz=65,slow=35 | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.78** | **59** | PKP | | **PKiKP** | **08 50 16.1** | **+0.2** |
| | comp=Z,0.1nm,0.6s,baz=169,slow=1.8,SNR=2.0 | | | | | | | |
| **PLCA** | **Paso Flores** | **128.98** | **156** | PKP | | **PKPdf** | **08 50 31.8** | **+0.6** |
| | comp=Z,2.2nm,0.8s,baz=296,slow=4.7,SNR=5.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.23** | **283** | PKP | | **PKPdf** | **08 50 38.5** | **+0.6** |
| | comp=Z,0.4nm,0.6s,baz=54,slow=3.3,SNR=6.8 | | | | | | | |
| **CPUP** | **Villa Florida** | **146.71** | **161** | PKPbc | | **PKPbc** | **08 51 05.8** | **+0.4** |
| | comp=Z,12nm,0.6s,baz=198,slow=2.4,SNR=28 | | | | | | | |
| **LPAZ** | **La Paz** | **149.42** | **135** | PKPbc | | **PKPbc** | **08 51 14.5** | **+0.8** |
| | comp=Z,5.1nm,0.8s,baz=353,slow=1.0,SNR=6.2 | | | | | | | |

**IDC 03 09:04:20.3±2.5, 54°.03N×86°.47E, h0km, mbtmp3.2/2, ML2.9/2, Error ellipse: s-maj=20.2km s-min=12.7km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.98** | **266** | I | | I | 09 10 50.0 | |
| | baz=83,slow=313,SNR=3.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.98** | **266** | Pg | | Pg | 09 04 38.2 | -0.9 |
| | 0.6nm,0.3s,baz=86,slow=18,SNR=7.7 | | | | | | | |
| ZALV | | | | Lg | | Lg | 09 04 52.9 | |
| | 1.9nm,0.3s,baz=84,slow=30,SNR=12 | | | | | | | |
| ZALV | | | | Rg | | Rg | 09 04 58.8 | |
| | 70nm,1.2s,baz=83,slow=25,SNR=34 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.95** | **238** | Pn | | Pn | 09 05 51.0 | +1.5 |
| | 0.2nm,0.3s,baz=57,slow=14,SNR=5.5 | | | | | | | |
| KURBB | | | | Lg | | Lg | 09 07 26.7 | |
| | baz=56,slow=32 | | | | | | | |
| | 1.7nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.72** | **202**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JMM** | **Marumori** | **43.48** | **8** | P | **P** | **09 16 14.8** | **-0.9** |
| JMM | | | | IAmb | IAmb | 09 16 29.5 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **TUWZ** | **Tuamarina** | **50.63** | **141** | P | **P** | **09 17 11.1** | **-0.4** |
| **BKZ** | **Black Stump Fm** | **51.09** | **137** | P | **P** | **09 17 15.0** | **-0.1** |
| BKZ | | | | IAmb | IAmb | 09 17 33.4 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **AFI** | **Afiamalu** | **54.14** | **103** | P | **P** | **09 17 37.5** | **-0.6** |
| **MKAR** | **Makanchi Array** | **69.05** | **325** | P | **P** | **09 19 19.4** | **+1.1** |
| **MKAR** | **Makanchi Array** | **69.05** | **325** | P | **P** | **09 19 18.8** | **+0.6** |
| | comp=Z,1.2nm,0.7s,baz=110,slow=8.1,SNR=8.6 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| KURBB | **Kurchatov Arra** | **73.20** | **327** | P | **P** | **09 19 43.4** | **+0.2** |
| | comp=Z,0.7nm,0.2s,baz=120,slow=5.1,SNR=4.4 | | | | | | |
| | comp=Z,0.7nm,0.2s | | | | | | |
| **VNDA** | **Vanda** | **73.62** | **174** | P | **P** | **09 19 46.2** | **+0.8** |
| **VNDA** | **Vanda** | **73.62** | **174** | P | **P** | **09 19 45.6** | **+0.3** |
| | comp=Z,1.2nm,0.8s,baz=326,slow=6.4,SNR=7.9 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **SBA** | **Scott Base** | **74.46** | **173** | P | **P** | **09 19 51.0** | **+0.8** |
| **KKAR** | **Karatay Array** | **74.72** | **317** | P | **P** | **09 19 52.8** | **+0.5** |
| ABKAR | **Akbulak array** | **83.67** | **321** | P | **P** | **09 20 41.0** | **-0.1** |
| **QSPA** | **South Pole Qui** | **84.60** | **180** | P | **P** | **09 20 46.3** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 09 20 47.1 | |
| | comp=Z,5.3nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.60** | **180** | P | **P** | **09 20 46.2** | **+0.5** |
| | comp=Z,2.0nm,0.7s,baz=306,slow=1.1,SNR=17 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **G19K** | **Purcell Mounta** | **86.55** | **22** | P | **P** | **09 20 55.7** | **+0.5** |
| G19K | | | | IAmb | IAmb | 09 21 22.2 | |
| | comp=Z,7.6nm,1.5s | | | | | | |
| **H19K** | **Roundabout Mou** | **86.58** | **23** | P | **P** | **09 20 55.3** | **0.0** |
| H19K | | | | IAmb | IAmb | 09 21 19.3 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **86.98** | **21** | P | **P** | **09 20 56.6** | **-0.7** |
| **J20K** | **Nowinta River** | **87.05** | **25** | P | **P** | **09 20 58.6** | **+0.9** |
| J20K | | | | IAmb | IAmb | 09 20 59.4 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **87.38** | **22** | P | **P** | **09 21 00.5** | **+1.3** |
| F20K | | | | IAmb | IAmb | 09 21 06.2 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **CAST** | **Castle Rocks** | **87.69** | **26** | P | **P** | **09 21 01.4** | **+0.6** |
| CAST | | | | IAmb | IAmb | 09 21 12.1 | |
| | comp=Z,3.5nm,1.4s | | | | | | |
| **CPUP** | **Villa Florida** | **146.67** | **161** | PKPbc | **PKPab** | **09 27 55.8** | **-0.2** |
| | comp=Z,5.7nm,0.8s,baz=215,slow=3.0,SNR=11 | | | | | | |
| **LPAZ** | **La Paz** | **149.39** | **135** | PKPbc | **PKPbc** | **09 28 03.8** | **+0.5** |
| | comp=Z,2.1nm,0.8s,baz=251,slow=0.2,SNR=6.8 | | | | | | |
| **SIV** | **San Ignacio** | **154.13** | **145** | PKPbc | **PKiKP** | **09 28 13.8** | **+0.3** |
| | comp=Z,0.6nm,0.7s,baz=214,slow=3.6,SNR=4.1 | | | | | | |

**NNC 03 09:37:29.0±1.3, 43°21N×81°67E, h0km, mb3.6, mpv3.3, 6C-2D, Error ellipse: s-maj=10.4km s-min=6.9km az=159.0, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **0.99** | **284** | P | Pb | 09 37 49.1 | -0.1 |
| | 3.1nm,0.1s | | | | | | |
| KTMS | | | | S | Sb | 09 38 03.6 | +0.7 |
| | 23nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **1.60** | **275** | P | Pg | 09 37 59.7 | 0.0 |
| | 7.7nm,0.2s | | | | | | |
| PDGK | | | | S | Sg | 09 38 21.7 | +1.3 |
| | 27nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **1.60** | **275** | ⇑P | Pb | 09 37 59.5 | 0.0 |
| | 6.2nm,0.3s | | | | | | |
| PDGK | | | | ⇓S | Sg | 09 38 22.2 | +1.8 |
| | 52nm,0.8s | | | | | | |
| **DJR** | **Jarkent** | **1.77** | **310** | P | Pg | 09 38 02.8 | -0.1 |
| | 16nm,0.2s | | | | | | |
| DJR | | | | S | Sg | 09 38 26.9 | +1.1 |
| | 36nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **1.94** | **269** | Pg | Pb | 09 38 05.6 | +0.3 |
| | 27nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 09 38 32.1 | |
| | 63nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **2.14** | **303** | Pg | Pb | 09 38 09.4 | +0.6 |
| | 7.2nm,0.4s | | | | | | |
| KNOS | | | | Lg | Lg | 09 38 39.2 | |
| | 39nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **2.20** | **278** | Pg | Pg | 09 38 10.5 | -0.6 |
| | 28nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 09 38 40.9 | |
| | 170nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **2.37** | **270** | Pg | Pg | 09 38 14.1 | -0.3 |
| | 6.7nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 09 38 46.5 | |
| | 98nm,0.3s | | | | | | |
| **SATY** | **Saty** | **2.40** | **268** | Pg | Pb | 09 38 13.4 | +0.3 |
| | 16nm,0.2s | | | | | | |
| SATY | | | | Lg | Lg | 09 38 46.6 | |
| | 69nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **2.48** | **292** | Pg | Pb | 09 38 14.1 | -0.4 |
| | 47nm,0.4s | | | | | | |
| BLB | | | | Lg | Lg | 09 38 46.5 | |
| | 88nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **2.57** | **277** | Pg | Pb | 09 38 16.5 | +0.5 |
| | 4.2nm,0.7s | | | | | | |
| KURS | | | | Lg | Lg | 09 38 51.8 | |
| | 27nm,0.7s | | | | | | |
| **ARXS** | **Arharly** | **2.96** | **291** | Pg | Pb | 09 38 20.9 | -1.8 |
| | 5.9nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 09 38 59.5 | |
| | 54nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **3.38** | **271** | Pg | Pb | 09 38 31.6 | +1.7 |
| | 1.9nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 09 39 16.5 | |
| | 14nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.46** | **269** | Pg | Pb | 09 38 32.3 | +0.9 |
| | 4.1nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 09 39 17.8 | |
| | 12nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **3.47** | **282** | Pg | Pb | 09 38 31.8 | +0.5 |
| | 0.8nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 09 39 16.8 | |
| | 15nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **3.61** | **7** | ⇑Pn | Pn | 09 38 26.7 | +0.5 |
| | 0.2nm,0.2s,baz=189,slow=13,SNR=17 | | | | | | |
| MK31 | | | | ⇑Pg | Pb | 09 38 35.4 | +1.7 |
| | 0.3nm,0.2s,baz=184,slow=15,SNR=9.2 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 09 39 12.6 | +3.0 |
| | 0.5nm,0.2s,baz=28,slow=30,SNR=5.5 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 39 23.4 | |
| | 0.9nm,0.2s,baz=186,slow=30,SNR=4.2 | | | | | | |
| **KTBS** | **Karatobe** | **3.67** | **280** | Pg | Pb | 09 38 35.8 | +1.1 |
| | 2.9nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 09 39 23.7 | |
| | 13nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **3.84** | **271** | Pg | Pg | 09 38 40.8 | -1.7 |
| | 2.4nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 09 39 32.3 | |
| | 6.7nm,0.3s | | | | | | |
| **KST** | **Kastek** | **4.18** | **270** | Pg | Pg | 09 38 47.5 | -1.7 |
| | 4.2nm,0.6s | | | | | | |
| KST | | | | Lg | Lg | 09 39 43.8 | |
| | 9.2nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.31** | **272** | Pg | Pb | 09 38 47.2 | +1.4 |
| | 3.4nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 09 39 43.1 | |
| | 6.7nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **4.39** | **278** | Pg | Pb | 09 38 50.0 | +2.9 |
| | 1.8nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 09 39 48.6 | |
| | 5.3nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.46** | **268** | ⇑Pg | Pg | 09 38 54.7 | +0.2 |
| | 2.7nm,0.7s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 09 39 50.0 | |
| | 5.5nm,0.5s | | | | | | |

*HEL **03** 09:43:59.3±0.3, 67°65N×20°87E, h0km, ML1.6, Suspected explosion*
*IDC **03** 09:44:00.6±2.2, 67°60N×21°40E, h0km, mbtmp2.6/2, ML1.8/2, Error ellipse: s-maj=32.4km s-min=10.2km az=96.0*
**ISC 03 09:43:58.9±1.1, 67°65N±0°03×20°93E±0°05, h0km, n25, σ1§29/41, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LANU** | **Lannavaara** | **0.57** | **45** | PG | **Pg** | **09 44 09.4** | **-0.4** |
| LANU | | | | SG | **Sg** | **09 44 17.7** | **+0.5** |
| **KLF** | **Kolari** | **1.24** | **108** | PG | **Pg** | **09 44 21.3** | **-1.4** |
| KLF | | | | MSG | | 09 44 37.4 | |
| | comp=Z,4.2nm,0.2s | | | | | | |
| KLF | | | | SG | **Sg** | **09 44 38.0** | **-0.8** |
| **HEF** | **Hetta** | **1.28** | **52** | *e*P | **Pg** | **09 44 22.4** | **-1.0** |
| **HEF** | **Hetta** | **1.28** | **52** | PG | **Pg** | **09 44 21.7** | **-1.7** |
| | baz=236 | | | | | | |
| HEF | | | | MSG | | 09 44 38.5 | |
| | comp=Z,4.7nm,0.2s | | | | | | |
| HEF | | | | SB | **Sg** | **09 44 39.6** | **-0.3** |
| **KIF** | **Kilpisjarvi** | **1.36** | **358** | *e*P | **Pg** | **09 44 24.8** | **-0.2** |
| **KTK1** | **Kautokeino** | **1.62** | **31** | PG | **Pn** | **09 44 28.6** | **0.0** |
| KTK1 | | | | SN | **Sg** | **09 44 51.0** | **+0.3** |
| **I37NO** | **I37NO** | **1.67** | **330** | I | I | 09 54 55.0 | |
| | baz=147,slow=314,SNR=9.4 | | | | | | |
| **KALU** | **Kalix** | **2.04** | **151** | PB | **Pn** | **09 44 34.9** | **+0.5** |
| | baz=330 | | | | | | |
| KALU | | | | SG | **Sn** | **09 45 01.7** | **+1.2** |
| **TOF** | **Tornio** | **2.07** | **138** | PB | **Pn** | **09 44 35.8** | **+1.0** |
| | baz=320 | | | | | | |
| TOF | | | | MSG | | 09 45 01.2 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| TOF | | | | SB | **Sn** | **09 45 02.3** | **+1.0** |
| **TRO** | **Tromso** | **2.12** | **341** | SG | **Sn** | **09 45 02.5** | **-0.1** |
| **SGF** | **Sodankyl** | **2.16** | **93** | PN | **Pn** | **09 44 36.6** | **+0.5** |
| | baz=276 | | | | | | |
| SGF | | | | SB | **Sn** | **09 45 04.5** | **+1.0** |
| **RNF** | **Rovaniemi** | **2.25** | **115** | PN | **Pn** | **09 44 38.0** | **+0.7** |
| RNF | | | | SB | **Sn** | **09 45 07.6** | **+2.0** |
| **ARA0** | **ARCESS Array S** | **2.53** | **39** | PB | **Pn** | **09 44 41.9** | **+0.7** |
| | baz=220 | | | | | | |
| ARA0 | | | | SG | **Sb** | **09 45 17.8** | **+1.0** |
| **ARCES** | **ARCESS Array B** | **2.53** | **39** | Pn | **Pn** | **09 44 42.0** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=217,slow=15,SNR=13 | | | | | | |
| ARCES | | | | Sn | **Sn** | **09 45 14.6** | **+1.9** |
| | comp=Z,0.5nm,0.3s,baz=218,slow=25,SNR=14 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **RANF** | **Ranua** | **2.84** | **123** | PN | **Pn** | **09 44 46.8** | **+1.4** |
| | baz=305 | | | | | | |
| RANF | | | | SB | **Sb** | **09 45 24.5** | **-1.1** |
| **RAJF** | **Raja-Jooseppi** | **2.89** | **70** | PB | **Pb** | **09 44 49.5** | **-1.8** |
| | baz=258 | | | | | | |
| RAJF | | | | SB | **Sb** | **09 45 26.4** | **-0.8** |
| **KEV** | **Kevo** | **3.07** | **44** | PN | **Pn** | **09 44 49.0** | **+0.5** |
| KEV | | | | SN | **Sn** | **09 45 26.8** | **+1.0** |
| KEV | | | | MSG | | 09 45 29.7 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| **VRF** | **Varrio** | **3.31** | **84** | PN | **Pn** | **09 44 52.9** | **+1.0** |
| VRF | | | | SG | **Sb** | **09 45 38.9** | **-0.3** |
| **OLKF** | **Oulanka, Finla** | **3.58** | **108** | PN | **Pn** | **09 44 56.6** | **+0.9** |
| **MSF** | **Maaselka** | **3.66** | **115** | PN | **Pn** | **09 44 58.0** | **+1.3** |
| **UMAU** | **Umeaa** | **3.78** | **182** | PN | **Pn** | **09 44 59.4** | **+1.1** |
| UMAU | | | | SN | **Sn** | **09 45 43.9** | **+0.4** |
| **KU6** | **Riekki** | **3.90** | **111** | PN | **Pn** | **09 45 01.5** | **+1.6** |
| KU6 | | | | SG | **Sb** | **09 46 00.2** | **+4.1** |
| **HUSU** | **Husum** | **4.38** | **190** | SN | **Sn** | **09 45 58.4** | **+0.1** |
| **VAF** | **Ylistaro** | **4.68** | **170** | PN | **Pn** | **09 45 12.0** | **+1.3** |
| **FINES** | **FINESS Array B** | **6.61** | **158** | Pn | **Pn** | **09 45 38.4** | **+1.2** |
| | comp=Z,0.1nm,0.3s,baz=350,slow=12,SNR=2.6 | | | | | | |
| FINES | | | | Sn | **Sn** | **09 46 50.9** | **-2.3** |
| | comp=Z,0.1nm,0.3s,baz=343,slow=22,SNR=1.9 | | | | | | |
| FINES | | | | Lg | Lg | 09 47 24.7 | |
| | baz=351,slow=27,SNR=1.8 | | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | |

*NEIC **03** 09:54:41.7±1.0, 36°67N±0°01×98°77W±0°02, h5km±1km, Error ellipse: s-maj=3.7km s-min=2.7km az=303.0*
**TUL 03 09:54:41.9±1.1, 36°67N±0°01×98°75W±0°03, h5km±3km, ML2.5, mb_Lg2.1/24(NEIC), ML2.4/17(NEIC), Error ellipse: s-maj=3.2km s-min=1.7km az=117.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOKA** | **Waynoka** | **0.15** | **257** | Pg | Pg | 09 54 45.4 | +0.5 |
| NOKA | | | | Sg | Sg | 09 54 47.8 | +1.0 |
| NOKA | | | | IAML | | 09 54 48.2 | |
| | comp=E,1μm,0.4s | | | | | | |
| **OK038** | **West end E0370** | **0.19** | **177** | | Pg | 09 54 46.2 | +0.6 |
| OK038 | | | | Sg | Sg | 09 54 49.4 | +1.2 |
| OK038 | | | | IAML | | 09 54 49.5 | |
| | comp=E,981nm,0.3s | | | | | | |
| OK038 | | | | IAML | | 09 54 53.0 | |
| | comp=E,614nm,0.3s | | | | | | |
| **U32A** | **Winter Ranch,** | **0.35** | **215** | Pg | Pg | 09 54 49.1 | +0.4 |
| U32A | | | | Sg | Sg | 09 54 54.1 | +0.8 |
| U32A | | | | IAML | | 09 54 54.8 | |
| | comp=N,326nm,0.1s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.46** | **73** | Pg | Pg | 09 54 51.1 | +0.4 |
| OK032 | | | | IAML | | 09 55 00.9 | |
| | comp=N,295nm,0.2s | | | | | | |
| OK032 | | | | IAML | | 09 55 02.0 | |
| | comp=N,341nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.64** | **105** | | Pg | 09 54 54.5 | +0.2 |
| CROK | | | | Sg | Sg | 09 55 03.2 | +0.6 |
| CROK | | | | IAML | | 09 55 10.0 | |
| | comp=E,156nm,0.2s | | | | | | |
| **KAN14** | **Manchester OK** | **0.70** | **65** | | Pg | 09 54 55.5 | +0.2 |
| KAN14 | | | | Sg | Sg | 09 55 05.2 | +0.8 |
| **GC02** | **Grant County #** | **0.74** | **75** | Pg | Pg | 09 54 56.3 | +0.2 |
| GC02 | | | | Sg | Sg | 09 55 06.5 | +0.7 |
| **ELIS** | **Ellis County** | **0.81** | **222** | Pg | Pg | 09 54 56.7 | -0.7 |
| ELIS | | | | Sg | Sg | 09 55 08.3 | +0.5 |
| ELIS | | | | IAML | | 09 55 16.3 | |
| | comp=N,167nm,0.1s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.84** | **48** | Pg | Pg | 09 54 57.9 | -0.1 |
| KAN08 | | | | Sg | Sg | 09 55 09.7 | +0.8 |
| **KAN12** | **Harper NE Stat** | **0.87** | **44** | Pg | Pg | 09 54 58.6 | -0.1 |
| **KAN17** | **Caldwell West** | **0.88** | **64** | Pg | Pg | 09 54 58.1 | -0.6 |
| KAN17 | | | | Sg | Sg | 09 55 10.8 | +0.6 |
| **KAN01** | **Argonia South** | **0.93** | **58** | Pg | Pg | 09 54 59.7 | -0.1 |
| KAN01 | | | | Sg | Sb | 09 55 12.7 | -0.5 |
| **CSTR** | **Hydro, Custer** | **1.02** | **177** | Pg | Pg | 09 55 00.7 | -0.8 |
| CSTR | | | | Sg | Sg | 09 55 15.0 | +0.3 |
| **KAN09** | **Caldwell North** | **1.02** | **63** | Pg | Pg | 09 55 01.3 | -0.3 |
| KAN09 | | | | Sg | Sg | 09 55 15.2 | +0.4 |
| **KAN13** | **South Haven SW** | **1.08** | **71** | Pg | Pg | 09 55 02.4 | -0.2 |
| **BLOK** | **Blackwell** | **1.24** | **85** | | Pg | 09 55 05.2 | -0.5 |
| **OK029** | **Liberty Lake** | **1.36** | **129** | | Pn | 09 55 07.3 | -0.3 |
| **OK048** | **Pawnee Station** | **1.48** | **99** | Pg | Pn | 09 55 09.1 | -0.1 |
| **OK051** | **E0350 and S346** | **1.55** | **95** | | Pn | 09 55 10.4 | +0.2 |
| **OK031** | **S. Brethren Rd** | **1.70** | **114** | | Pn | 09 55 12.0 | -0.3 |
| **OK052** | **Battle Ridge R** | **1.71** | **113** | Pg | Pn | 09 55 12.0 | -0.4 |
| **QUOK** | **Quay** | **1.72** | **106** | | Pn | 09 55 12.0 | -0.5 |
| **R32A** | **Long Quarter,** | **1.75** | **1** | Pn | Pn | 09 55 12.9 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.82** | **82** | Pn | Pn | 09 55 13.2 | -0.6 |
| **WMOK** | **Wichita Mounta** | **1.93** | **181** | Pn | Pn | 09 55 15.2 | -0.1 |
| **SMWD** | **Samnorwood** | **1.97** | **218** | | Pn | 09 55 16.1 | +0.1 |
| SMWD | | | | IAmb_Lg | | 09 55 49.5 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **DEOK** | **Depew** | **2.00** | **114** | Pn | Pn | 09 55 15.9 | -0.4 |
| **X34A** | **Smith Ranch, M** | **2.19** | **160** | Pn | Pn | 09 55 19.3 | +0.2 |
| X34A | | | | IAmb_Lg | | 09 55 55.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.97** | **234** | IAmb_Lg | | 09 56 17.1 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.45** | **126** | Pn | Pn | 09 55 36.0 | -0.2 |
| X37A | | | | IAmb_Lg | | 09 56 38.0 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **3.48** | **211** | IAmb_Lg | | 09 56 31.4 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **U38A** | **Gravette** | **3.52** | **92** | IAmb_Lg | | 09 56 33.9 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.86** | **309** | IAmb_Lg | | 09 56 41.0 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **3.98** | **207** | IAmb_Lg | | 09 56 52.5 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **4.25** | **232** | IAmb_Lg | | 09 56 58.2 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **4.56** | **278** | IAmb_Lg | | 09 57 07.8 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **6.97** | **314** | IAmb_Lg | | 09 58 29.4 | |
| | comp=Z,2.1nm,0.9s | | | | | | |

*BJI **03** 09:55:50.1±0.0, 20°10N×122°42E, h22km, mb4.4/10, mB4.5/5, ML3.9/1, Ms3.6/3, Ms7 3.4/4*
*NEIC **03** 09:55:50±2.6, 19°78N±0°09×122°44E±0°08, h28km±4km, mb4.5/83, Error ellipse: s-maj=14.3km s-min=9.8km az=212.0*
*IDC **03** 09:55:57.1±4.8, 19°57N×122°32E, h112km±46km, mb3.6/15, mbtmp4.0/16, MS2.9/8, Error ellipse: s-maj=21.2km s-min=14.4km az=74.0*
**ISC 03 09:55:46.8±0.6, 19°77N±0°07×122°58E±0°07, h10km, n131, σ1§50/113, mb4.5/59, MS2.9/4, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWGBT | **Beinan** | **3.34** | **336** | P | **Pn** | **09 56 38.3** | **-0.9** |
| **TWG** | **Pinlang** | **3.35** | **336** | | **Pn** | **09 56 38.3** | **-1.0** |
| TWG | | | | Sn | **Sn** | **09 57 17.1** | **-2.0** |
| **YULB** | **Yu-li** | **3.80** | **342** | P | **Pn** | **09 56 44.4** | **-1.1** |
| **YULB** | **Yu-li** | **3.80** | **342** | Pn | **Pn** | **09 56 44.1** | **-1.4** |
| YULB | | | | Sn | **Sn** | **09 57 29.1** | **-1.2** |
| **TPUB** | **Ta-pu** | **3.96** | **333** | P | **Pn** | **09 56 48.9** | **+1.2** |
| **TPUB** | **Ta-pu** | **3.96** | **333** | | **Pn** | **09 56 47.2** | **-0.5** |
| **SSLB** | **Suanglung** | **4.28** | **340** | P | **Pn** | **09 56 52.8** | **+0.7** |
| **SSLB** | **Suanglung** | **4.28** | **340** | Pn | **Pn** | **09 56 52.1** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **4.69** | **5** | Pn | **Pn** | **09 56 56.6** | **-1.1** |
| **YHNB** | **Yeheng** | **5.00** | **347** | P | **Pn** | **09 57 01.8** | **-0.3** |
| **TATO** | **Taipei** | **5.28** | **349** | Pn | **Pn** | **09 57 05.7** | **-0.1** |
| **KNMB** | **Chinemen Tao** | **6.08** | **321** | | **Pn** | **09 57 14.7** | **-2.0** |
| **JOW** | **Kunigami** | **8.77** | **36** | LR | LR | 10 01 23.7 | |
| | comp=Z,50nm,19.9s,baz=180,slow=36 | | | | | | |
| **QIZ** | **Qiongzhong** | **12.04** | **269** | P | **Pn** | **09 58 42.8** | **+4.2** |
| QIZ | | | | S | **Sn** | **10 00 55.2** | **+2.2** |
| QIZ | | | | LR | LR | | |
| | comp=N,130nm,15.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,110nm,16.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,100nm,13.9s | | | | | | |
| **DAV** | **Davao City (W)** | **12.95** | **167** | LR | LR | 10 03 34.9 | |
| | comp=Z,39nm,21.9s,baz=335,slow=36 | | | | | | |
| **JNU** | **Nakatsue** | **15.23** | **27** | LR | LR | 10 04 59.5 | |
| | comp=Z,36nm,21.3s,baz=218,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **18.23** | **14** | P | **Pn** | **10 00 03.1** | **+3.1** |
| | 3.1nm,0.9s,baz=196,slow=13,SNR=11 | | | | | | |
| **JCJ** | **Chichijima** | **19.40** | **64** | LR | LR | 10 06 14.3 | |
| | comp=Z,18nm,20.0s,baz=103,slow=31 | | | | | | |
| **PZH** | **PanZhiHua** | **20.28** | **293** | P | Pn | 10 00 25.8 | +0.9 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | |
| **LUWI** | **Luwuk** | **20.68** | **179** | P | **P** | **10 00 27.2** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **21.61** | **36** | P | **P** | **10 00 41.2** | **+4.1** |
| | 2.8nm,1.1s,baz=225,slow=8.4,SNR=4.8 | | | | | | |
| | 2.8nm,1.1s | | | | | | |
| **GUMO** | **Guam** | **22.21** | **103** | P | **P** | **10 00 44.2** | **+0.6** |
| **GUMO** | **Guam** | **22.21** | **103** | LR | LR | 10 07 26.6 | |
| | comp=Z,37nm,21.4s,baz=245,slow=31 | | | | | | |
| **CHTO** | **Chiang Mai** | **22.32** | **272** | P | **P** | **10 00 44.6** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **22.37** | **271** | P | **P** | **10 00 43.8** | **-1.6** |
| | 0.8nm,0.4s,baz=79,slow=8.5,SNR=7.3 | | | | | | |
| CMAR | | | | LR | LR | 10 08 47.5 | |
| | comp=Z,29nm,20.1s,baz=85,slow=35 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **23.02** | **338** | *e*P | **P** | **10 00 53.8** | **+1.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,78nm,4.0s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **25.60** | **16** | P | **P** | **10 01 13.5** | **-2.7** |
| **USRK** | **Ussuriysk Ar.** | **25.60** | **16** | P | **P** | **10 01 14.0** | **-2.2** |
| **USRK** | **Ussuriysk Ar.** | **25.60** | **16** | P | **P** | **10 01 19.4** | **+3.2** |
| | 6.2nm,1.1s,baz=193,slow=7.8,SNR=6.5 | | | | | | |
| | 6.2nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **30.93** | **339** | P | **P** | **10 02 02.7** | **-1.3** |
| | 0.4nm,0.4s,baz=146,slow=10,SNR=2.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **WMQ** | **Urumqi** | **37.70** | **317** | *e*P | **P** | **10 03 04.0** | **+1.3** |
| **WB0** | **Warramunga Arr** | **40.96** | **163** | P | P | 10 03 27.7 | -2.2 |
| **WRAB** | **Tennant Creek** | **41.11** | **163** | P | **P** | **10 03 30.3** | **-0.9** |
| **WRA** | **Warramunga Arr** | **41.11** | **163** | P | **P** | **10 03 30.5** | **-0.7** |
| **WRA** | **Warramunga Arr** | **41.11** | **163** | P | P | 10 03 28.3 | -2.9 |
| | 0.9nm,0.7s,baz=343,slow=9.1,SNR=8.7 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.12** | **163** | P | **P** | **10 03 30.3** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **41.17** | **184** | P | **P** | **10 03 30.5** | **-1.1** |
| **H11S3** | **WAKE ISLAND Hy** | **41.61** | **84** | T | T | 10 48 33.8 | |
| | baz=279,slow=75,SNR=85 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.62** | **84** | T | T | 10 48 31.0 | |
| | baz=279,slow=75,SNR=67 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.62** | **82** | T | T | 10 48 34.0 | |
| | baz=278,slow=75,SNR=76 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.62** | **82** | T | T | 10 48 39.3 | |
| | baz=278,slow=75,SNR=65 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.63** | **84** | T | T | 10 48 33.8 | |
| | baz=279,slow=75,SNR=59 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.64** | **82** | T | T | 10 48 34.0 | |
| | baz=278,slow=75,SNR=52 | | | | | | |
| **MK31** | **Makanchi Array** | **42.45** | **319** | P | **P** | **10 03 40.4** | **-1.6** |
| **MKAR** | **Makanchi Array** | **42.45** | **319** | P | **P** | **10 03 41.0** | **-1.0** |
| **MKAR** | **Makanchi Array** | **42.45** | **319** | P | **P** | **10 03 41.2** | **-0.8** |
| | 2.2nm,0.4s,baz=108,slow=8.6,SNR=20 | | | | | | |
| MKAR | | | | LR | LR | 10 22 25.2 | |
| | comp=Z,20nm,18.2s,baz=348,slow=37 | | | | | | |
| | 2.2nm,0.4s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **43.66** | **310** | P | **P** | **10 03 50.1** | **-2.2** |
| **KSH** | **Kashi** | **44.47** | **307** | P | **P** | **10 04 00.4** | **+1.9** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **44.56** | **165** | P | P | 10 03 57.7 | -1.5 |
| | 1.0nm,0.8s,baz=343,slow=7.6,SNR=7.7 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **44.66** | **329** | P | **P** | **10 03 58.5** | **-1.1** |
| ZAA0 | | | | IAmb | IAmb | 10 03 58.8 | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.66** | **329** | P | **P** | **10 03 58.3** | **-1.3** |
| | comp=Z,3.3nm,0.5s,baz=111,slow=7.8,SNR=13 | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **NRN** | **Naryn** | **44.89** | **309** | P | **P** | **10 03 59.9** | **-2.2** |
| NRN | | | | IAmb | IAmb | 10 04 02.9 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **46.33** | **322** | P | **P** | **10 04 12.1** | **-0.8** |
| KURBB | **Kurchatov Arra** | **46.34** | **322** | P | **P** | **10 04 12.2** | **-0.8** |
| | comp=Z,2.1nm,0.6s,baz=112,slow=9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CAST** | **Castle Rocks** | **70.45** | **28** | P | **P** | **10 07 03.0** | **+1.8** |
| CAST | | | | IAmb | IAmb | 10 07 44.6 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **OHAK** | **Old Harbor** | **70.46** | **35** | P | **P** | **10 07 02.7** | **+1.4** |
| **C23K** | **Itkillik River** | **70.52** | **22** | P | **P** | **10 07 03.3** | **+1.8** |
| C23K | | | | IAmb | IAmb | 10 07 06.2 | |
| | comp=Z,7.2nm,1.4s | | | | | | |
| **MLY** | **Manley** | **70.88** | **27** | P | **P** | **10 07 05.9** | **+2.0** |
| MLY | | | | IAmb | IAmb | 10 07 12.8 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **71.21** | **22** | P | **P** | **10 07 07.7** | **+1.9** |
| **H23K** | **Yukon River** | **71.30** | **26** | P | **P** | **10 07 08.6** | **+2.3** |
| H23K | | | | IAmb | IAmb | 10 07 09.1 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **71.45** | **23** | P | **P** | **10 07 09.1** | **+1.8** |
| E24K | | | | IAmb | IAmb | 10 07 09.4 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **71.45** | **26** | P | **P** | **10 07 07.7** | **+0.4** |
| I23K | | | | IAmb | IAmb | 10 07 46.8 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **F24K** | **Squaw Lake** | **71.75** | **24** | P | **P** | **10 07 10.9** | **+1.8** |
| F24K | | | | IAmb | IAmb | 10 07 11.3 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **KEKH** | **Kekaha** | **71.87** | **73** | P | **P** | **10 07 10.7** | **+0.2** |
| **RND** | **Reindeer** | **71.89** | **28** | P | **P** | **10 07 10.3** | **+0.2** |
| RND | | | | IAmb | IAmb | 10 07 11.2 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **MDM** | **Murphy Dome** | **71.95** | **27** | P | **P** | **10 07 11.8** | **+1.5** |
| MDM | | | | IAmb | IAmb | 10 07 13.8 | |
| | comp=Z,5.5nm,1.3s | | | | | | |
| **H24K** | **Noodor Dome** | **71.97** | **26** | P | **P** | **10 07 11.2** | **+0.8** |
| H24K | | | | IAmb | IAmb | 10 07 37.3 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **72.02** | **25** | P | **P** | **10 07 12.5** | **+1.8** |
| **PMR** | **Palmer** | **72.02** | **30** | P | **P** | **10 07 11.1** | **+0.4** |
| **D25K** | **Kavik River** | **72.05** | **22** | P | **P** | **10 07 11.9** | **+1.0** |
| **WRH** | **Wood River Hil** | **72.08** | **27** | P | **P** | **10 07 12.5** | **+1.4** |
| **GHO** | **Glory Hole Cre** | **72.09** | **30** | P | **P** | **10 07 13.0** | **+1.7** |
| **ILAR** | **Eielson Array** | **72.55** | **27** | P | **P** | **10 07 13.1** | **-0.8** |
| **ILAR** | **Eielson Array** | **72.55** | **27** | P | **P** | **10 07 13.4** | **-0.4** |
| | comp=Z,0.3nm,0.5s,baz=268,slow=4.7,SNR=7.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **73.02** | **24** | P | **P** | **10 07 17.8** | **+1.1** |
| **E27K** | **Coleen River** | **73.97** | **23** | P | **P** | **10 07 24.0** | **+1.7** |
| E27K | | | | IAmb | IAmb | 10 08 07.2 | |
| | comp=Z,4.3nm,1.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **74.00** | **26** | P | **P** | **10 07 22.2** | **-0.2** |
| I26K | | | | IAmb | IAmb | 10 07 51.7 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **J26L** | **Joseph Creek** | **74.00** | **27** | P | **P** | **10 07 23.1** | **+0.6** |
| **ARCES** | **ARCESS Array B** | **74.10** | **339** | P | **P** | **10 07 22.3** | **-0.6** |
| **ARCES** | **ARCESS Array B** | **74.10** | **339** | P | P | 10 07 20.4 | -2.6 |
| | comp=Z,1.5nm,0.8s,baz=74,slow=8.9,SNR=3.8 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **G27K** | **Doyon Strip** | **74.27** | **24** | P | **P** | **10 07 25.1** | **+1.1** |
| **MENT** | **Mentasta** | **74.27** | **28** | P | **P** | **10 07 25.6** | **+1.6** |
| MENT | | | | IAmb | IAmb | 10 07 30.7 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **K27K** | **Chicken** | **74.74** | **27** | P | **P** | **10 07 28.9** | **+2.2** |
| K27K | | | | IAmb | IAmb | 10 08 07.9 | |
| | comp=Z,4.3nm,1.3s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **74.94** | **30** | P | **P** | **10 07 27.8** | **-0.1** |
| **EGAK** | **Eagle** | **74.95** | **26** | P | **P** | **10 07 28.5** | **+0.6** |
| EGAK | | | | IAmb | IAmb | 10 08 03.6 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **L27K** | **Beaver Creek,** | **75.08** | **28** | P | **P** | **10 07 29.3** | **+0.5** |
| L27K | | | | IAmb | IAmb | 10 07 35.6 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **BCAR** | **Beaver Creek A** | **75.10** | **28** | P | **P** | **10 07 29.3** | **+0.4** |
| **M27K** | **Edge Creek, AK** | **75.23** | **29** | P | **P** | **10 07 31.5** | **+1.7** |
| M27K | | | | IAmb | IAmb | 10 07 41.6 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| **I28M** | **Miner Creek** | **75.28** | **25** | P | **P** | **10 07 29.9** | **-0.1** |
| I28M | | | | IAmb | IAmb | 10 07 32.0 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **75.63** | **24** | P | **P** | **10 07 31.7** | **-0.1** |
| G29M | | | | IAmb | IAmb | 10 08 00.5 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **75.69** | **24** | P | **P** | **10 07 33.4** | **+1.2** |
| H29M | | | | IAmb | IAmb | 10 07 40.8 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **KKH** | **Kailua Kona** | **75.82** | **74** | P | **P** | **10 07 32.8** | **-0.9** |
| **DAWY** | **Dawson** | **75.87** | **27** | P | **P** | **10 07 34.5** | **+1.2** |
| DAWY | | | | IAmb | IAmb | 10 07 35.3 | |
| | comp=Z,7.2nm,1.4s | | | | | | |
| **FIA1** | **FINESS Array S** | **75.90** | **331** | P | **P** | **10 07 31.9** | **-1.5** |
| **FINES** | **FINESS Array B** | **75.90** | **331** | P | **P** | **10 07 31.8** | **-1.6** |
| | comp=Z,1.1nm,0.4s,baz=50,slow=5.2,SNR=19 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **EPYK** | **Eagle Plains** | **76.28** | **24** | P | **P** | **10 07 35.8** | **+0.2** |
| **M29M** | **Somme Creek** | **76.74** | **28** | P | **P** | **10 07 39.3** | **+0.9** |
| M29M | | | | IAmb | IAmb | 10 07 40.9 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **I30M** | **Mount Dempster** | **76.77** | **25** | P | **P** | **10 07 37.8** | **-0.7** |
| **INK** | **Inuvik** | **76.82** | **22** | P | **P** | **10 07 39.0** | **+0.5** |
| INK | | | | IAmb | IAmb | 10 07 39.3 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **J30M** | **Hart River** | **77.00** | **26** | P | **P** | **10 07 40.2** | **+0.4** |
| J30M | | | | IAmb | IAmb | 10 07 47.4 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **G31M** | **Satah River** | **77.03** | **23** | P | **P** | **10 07 39.8** | **+0.1** |
| G31M | | | | IAmb | IAmb | 10 08 13.8 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **77.03** | **319** | P | P | 10 07 37.3 | -2.7 |
| | comp=Z,0.5nm,0.4s,baz=61,slow=5.8,SNR=3.0 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **M30M** | **Minto, Yukon** | **77.44** | **28** | P | **P** | **10 07 43.6** | **+1.4** |
| **M31M** | **Drury Creek, Y** | **78.62** | **28** | P | **P** | **10 07 49.9** | **+1.2** |
| **HFS** | **Hagfors** | **82.04** | **331** | P | P | 10 08 04.7 | -2.4 |
| | comp=Z,0.8nm,0.4s,baz=134,slow=6.4,SNR=11 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **NC405** | **NORSAR Array S** | **82.47** | **333** | P | **P** | **10 08 08.3** | **-1.1** |
| NC405 | | | | IAmb | IAmb | 10 08 32.7 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **82.72** | **333** | P | P | 10 08 08.1 | -2.7 |
| | comp=Z,0.3nm,0.6s,baz=65,slow=5.4,SNR=1.8 | | | | | | |
| NOA | | | | LR | LR | 10 50 00.7 | |
| | comp=Z,13nm,19.3s,baz=335,slow=39 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |

*NEIC **03** 09:56:14.9±1.2,36.77N±0.01×92.00W±0.01,h7km±4km, Error ellipse: s-maj=2.1km s-min=0.9km az=212.0*

**SLM 03 09:56:15.1±1.0,36.77N±0.02×91.997W±0.009,h2km±4km, Md2.6/11,mb_Lg2.0/13(NEIC),ML2.0/10(NEIC),Error ellipse: s-maj=2.2km s-min=1.2km az=179.0, Missouri-Arkansas border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MGMO** | **Mountain Grove** | **0.44** | **330** | Pg | Pg | 09 56 22.7 | -0.8 |
| MGMO | | | | IAML | | 09 56 29.3 | |
| | comp=E,156nm,0.1s | | | | | | |
| MGMO | | | | IAML | | 09 56 29.9 | |
| | comp=N,130nm,0.1s | | | | | | |
| **MGMO** | **Mountain Grove** | **0.44** | **330** | | Sg | 09 56 28.9 | -0.3 |
| **T42A** | **Van Buren** | **0.77** | **70** | Pg | Pg | 09 56 29.1 | -0.7 |
| T42A | | | | Sg | Sg | 09 56 39.1 | -0.7 |
| T42A | | | | IAML | | 09 56 39.4 | |
| | comp=E,53nm,0.2s | | | | | | |
| T42A | | | | IAML | | 09 56 39.5 | |
| | comp=N,37nm,0.2s | | | | | | |
| **U40A** | **Yellville** | **0.81** | **239** | | Pg | 09 56 29.8 | -0.7 |
| U40A | | | | | Sg | 09 56 40.3 | -0.6 |
| **FCAR** | **Ozark Folk Cen** | **0.89** | **187** | | Pg | 09 56 31.3 | -0.7 |
| FCAR | | | | IAML | | 09 56 44.1 | |
| | comp=E,76nm,0.1s | | | | | | |
| FCAR | | | | IAML | | 09 56 46.6 | |
| | comp=N,72nm,0.1s | | | | | | |
| **LCAR** | **Lake Charles** | **0.98** | **136** | | Pg | 09 56 32.8 | -1.0 |
| **PBMO** | **Poplar Bluff** | **1.26** | **89** | | Pg | 09 56 38.4 | -0.8 |
| **S39A** | **Bolivar** | **1.40** | **311** | | Sg | 09 56 58.5 | -1.5 |
| **S39A** | **Bolivar** | **1.40** | **311** | | Pn | 09 56 40.6 | -1.0 |
| **CCM** | **Cathedral Cave** | **1.41** | **25** | | Pn | 09 56 40.9 | -0.9 |
| **CCM** | **Cathedral Cave** | **1.41** | **25** | | Pn | 09 56 40.5 | -1.3 |
| **WHAR** | **Wooly Hollow** | **1.50** | **189** | | Pn | 09 56 41.9 | -1.0 |
| **R40A** | **Maddies Statio** | **1.53** | **352** | | Pn | 09 56 43.3 | -0.1 |
| **R40A** | **Maddies Statio** | **1.53** | **352** | | Pn | 09 56 41.9 | -1.5 |
| **QUAR** | **Qualls** | **1.57** | **136** | | Pn | 09 56 43.7 | -0.1 |
| **HBAR** | **Harrisburg** | **1.63** | **138** | | Pn | 09 56 43.5 | -1.2 |
| **HHAR** | **Hobbs** | **1.64** | **253** | | Pn | 09 56 43.0 | -1.8 |
| **FVM** | **French Village** | **1.74** | **45** | | Pn | 09 56 46.1 | -0.1 |
| **FVM** | **French Village** | **1.74** | **45** | Pn | Pn | 09 56 45.2 | -1.1 |
| **GNAR** | **Gosnell** | **1.79** | **116** | | Pn | 09 56 45.5 | -1.4 |
| **PARMO** | **Parma** | **1.81** | **93** | | Pn | 09 56 45.8 | -1.4 |
| PARMO | | | | IAmb_Lg | | 09 57 14.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CGM3** | **Cape Girardeau** | **1.94** | **74** | Pn | Pn | 09 56 46.4 | -2.6 |
| **S44A** | **Carbondale** | **2.37** | **66** | | Pn | 09 56 56.3 | +1.4 |
| **S44A** | **Carbondale** | **2.37** | **66** | Pn | Pn | 09 56 53.0 | -1.9 |
| **S44A** | **Carbondale** | **2.37** | **66** | IAmb_Lg | | 09 57 29.0 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **P40A** | **Paris** | **2.75** | **359** | IAmb_Lg | | 09 57 44.8 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **3.09** | **337** | Pn | Pn | 09 57 02.4 | -2.5 |
| **Q44A** | **Meyer Farm, Va** | **3.18** | **47** | | Pn | 09 57 05.4 | -0.5 |
| **TUL3** | **Leonard** | **3.18** | **255** | IAmb_Lg | | 09 57 55.5 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **OK048** | **Pawnee Station** | **4.00** | **266** | IAmb_Lg | | 09 58 31.0 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **N41A** | **Harden Midland** | **4.03** | **12** | IAmb_Lg | | 09 58 29.7 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **KAN14** | **Manchester OK** | **4.79** | **274** | IAmb_Lg | | 09 58 46.5 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **HKT** | **Hockley** | **7.52** | **206** | IAmb_Lg | | 10 00 09.4 | |
| | comp=Z,2.2nm,0.8s | | | | | | |

**TAP 03 09:56:37.9,24.26N×121.90E,h54km,ML2.6,2C,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.15** | **290** | *e*P | Pn | 09 56 45.9 | -0.6 |
| | baz=290 | | | | | | |
| **EAHA** | **Aohua** | **0.16** | **296** | P | Pn | 09 56 46.4 | -0.1 |
| | baz=296 | | | | | | |
| EAHA | | | | S | Sn | 09 56 53.7 | +1.0 |
| | baz=296 | | | | | | |
| **EWUT** | **Wuta** | **0.22** | **329** | P | Pn | 09 56 47.0 | +0.2 |
| | baz=329 | | | | | | |
| EWUT | | | | *e*S | Sn | 09 56 53.9 | +0.7 |
| | baz=329 | | | | | | |
| **ETL** | **Fush Village** | **0.27** | **249** | *i* P | Pn | 09 56 47.4 | +0.1 |
| | baz=248 | | | | | | |
| ETL | | | | S | Sn | 09 56 55.0 | +1.1 |
| | baz=248 | | | | | | |
| **NACB** | **Ninganchiao** | **0.29** | **254** | P | Sn | 09 56 55.0 | +0.8 |
| **NACB** | **Ninganchiao** | **0.29** | **254** | *i* P | Pn | 09 56 47.5 | +0.1 |
| | baz=253 | | | | | | |
| NACB | | | | *i* S | Sn | 09 56 54.8 | +0.6 |
| | baz=253 | | | | | | |
| **ESAO** | **Su ao** | **0.32** | **351** | P | Pn | 09 56 48.1 | +0.5 |
| | baz=350 | | | | | | |
| ESAO | | | | *i* S | Sn | 09 56 55.5 | +0.9 |
| | baz=350 | | | | | | |
| **TWD** | **Chiawan** | **0.33** | **238** | *i* P | Pn | 09 56 47.8 | +0.1 |
| | baz=237 | | | | | | |
| TWD | | | | *i* S | Sn | 09 56 55.7 | +1.0 |
| | baz=237 | | | | | | |
| **EOS2** | **EOS2** | **0.34** | **62** | *e*P | Pn | 09 56 48.7 | +1.0 |
| | baz=61 | | | | | | |
| **TWC** | **Suao** | **0.35** | **352** | *i*P | Pn | 09 56 48.4 | +0.4 |
| | baz=354 | | | | | | |
| TWC | | | | *i* S | Sn | 09 56 55.9 | +0.8 |
| | baz=354 | | | | | | |
| **EOS3** | **EOS3** | **0.38** | **86** | *i* P | Pn | 09 56 48.9 | +0.9 |
| | baz=85 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.39** | **263** | P | Pn | 09 56 48.6 | +0.3 |
| | baz=262 | | | | | | |
| ETLH | | | | S | Sn | 09 56 56.5 | +0.6 |
| | baz=262 | | | | | | |
| **HWA** | **Hwalien** | **0.39** | **224** | *e*P | Pn | 09 56 49.5 | +1.2 |
| | baz=222 | | | | | | |
| HWA | | | | *e*S | Sn | 09 56 58.5 | +2.8 |
| | baz=222 | | | | | | |
| **EOS4** | **EOS4** | **0.41** | **109** | *e*P | Pn | 09 56 49.1 | +1.1 |
| | baz=109 | | | | | | |
| EOS4 | | | | *e*S | Sn | 09 56 56.2 | +0.9 |
| | baz=109 | | | | | | |
| **NDS** | **Dongshan** | **0.41** | **336** | *e*P | Pn | 09 56 48.7 | +0.2 |
| | baz=336 | | | | | | |
| NDS | | | | *e*S | Sn | 09 56 57.2 | +1.1 |
| | baz=336 | | | | | | |
| **LATG** | **Datong** | **0.44** | **309** | *i* P | Pn | 09 56 49.0 | +0.1 |
| | baz=309 | | | | | | |
| LATG | | | | S | Sn | 09 56 57.8 | +0.9 |
| | baz=309 | | | | | | |
| **ETM** | **Tongmen** | **0.47** | **232** | P | Pn | 09 56 49.2 | 0.0 |
| | baz=232 | | | | | | |
| ETM | | | | S | Sn | 09 56 57.6 | +0.3 |
| | baz=232 | | | | | | |
| **ENTT** | **Nioudou** | **0.49** | **321** | *i* P | Pn | 09 56 49.7 | +0.4 |
| | baz=321 | | | | | | |
| ENTT | | | | *e*S | Sn | 09 56 58.3 | +0.7 |
| | baz=321 | | | | | | |
| **NDT** | **Datong Townshi** | **0.49** | **314** | *i* P | Pn | 09 56 50.0 | +0.6 |
| | baz=314 | | | | | | |
| NDT | | | | S | Sn | 09 56 58.4 | +0.7 |
| | baz=314 | | | | | | |
| **NNSB** | **Datong** | **0.50** | **290** | *i* P | Pn | 09 56 50.0 | +0.3 |
| | baz=289 | | | | | | |
| NNSB | | | | *e*S | Sn | 09 56 58.3 | +0.2 |
| | baz=289 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.50** | **242** | P | Pn | 09 56 49.7 | 0.0 |
| | baz=242 | | | | | | |
| LXIB | | | | S | Sn | 09 56 58.2 | +0.1 |
| | baz=242 | | | | | | |
| **TWE** | **Neicheng** | **0.51** | **335** | *i*P | Pn | 09 56 50.1 | +0.5 |
| | baz=336 | | | | | | |
| TWE | | | | *e*S | Sn | 09 56 58.1 | +0.2 |
| | baz=336 | | | | | | |
| **NNS** | **Nan Shan** | **0.51** | **291** | *i* P | Pn | 09 56 50.1 | +0.4 |
| | baz=290 | | | | | | |
| NNS | | | | *i* S | Sn | 09 56 59.2 | +1.0 |
| | baz=290 | | | | | | |
| **SHUL** | **Shoufeng** | **0.56** | **213** | *e*P | Pn | 09 56 51.5 | +1.3 |
| | baz=213 | | | | | | |
| SHUL | | | | S | Sn | 09 57 01.8 | +2.8 |
| | baz=213 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.58** | **330** | P | Pn | 09 56 51.2 | +0.7 |
| | baz=330 | | | | | | |
| FUSB | | | | S | Sn | 09 57 00.4 | +1.0 |
| | baz=330 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.59** | **259** | *e*P | Pn | 09 56 51.5 | +0.5 |
| | baz=258 | | | | | | |
| WHF | | | | *i* S | Sn | 09 57 00.8 | +0.4 |
| | baz=258 | | | | | | |
| **FUSS** | **Fushou** | **0.60** | **269** | *e*P | Pn | 09 56 51.6 | +0.7 |
| | baz=269 | | | | | | |
| FUSS | | | | S | Sn | 09 57 01.2 | +0.9 |
| | baz=269 | | | | | | |
| **ESL** | **Shilin** | **0.61** | **224** | *e*P | Pn | 09 56 49.6 | -1.2 |
| | baz=223 | | | | | | |
| ESL | | | | *e*S | Sn | 09 57 00.5 | +0.3 |
| | baz=223 | | | | | | |
| **YHNB** | **Yeheng** | **0.63** | **311** | *i* P | Pn | 09 56 51.7 | +0.6 |
| | baz=310 | | | | | | |
| YHNB | | | | S | Sn | 09 57 01.2 | +0.6 |
| | baz=310 | | | | | | |
| **NWLT** | **Wulai** | **0.63** | **325** | *e*P | Pn | 09 56 51.6 | +0.5 |
| | baz=325 | | | | | | |
| NWLT | | | | *i* S | Sn | 09 57 01.1 | +0.5 |
| | baz=325 | | | | | | |
| **NSK** | **Sanguang** | **0.65** | **310** | *e*P | Pn | 09 56 51.7 | +0.4 |
| | baz=310 | | | | | | |
| NSK | | | | S | Sn | 09 57 01.3 | +0.3 |
| | baz=310 | | | | | | |
| **TWT** | **Tachien** | **0.66** | **270** | P | Pn | 09 56 52.2 | +0.6 |
| | baz=269 | | | | | | |
| TWT | | | | S | Sn | 09 57 02.6 | +1.2 |
| | baz=269 | | | | | | |
| **TDCB** | **Techi** | **0.68** | **270** | *e*P | Pn | 09 56 52.7 | +1.0 |
| | baz=269 | | | | | | |
| TDCB | | | | *i* S | Sn | 09 57 02.7 | +0.9 |
| | baz=269 | | | | | | |
| **CHGB** | **Renai** | **0.69** | **254** | *e*P | Pn | 09 56 52.7 | +0.8 |
| | baz=253 | | | | | | |
| CHGB | | | | *e*S | Sn | 09 57 02.7 | +0.5 |
| | baz=253 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.71** | **221** | *e*P | Pn | 09 56 51.3 | -0.7 |
| | baz=221 | | | | | | |
| **TIPB** | **Shuangxi** | **0.71** | **355** | *e*P | Pn | 09 56 52.7 | +0.6 |
| | baz=354 | | | | | | |
| TIPB | | | | *e*S | Sn | 09 57 03.5 | +1.1 |
| | baz=354 | | | | | | |
| **OWD** | **Renai** | **0.73** | **246** | *e*P | Pn | 09 56 52.9 | +0.5 |
| | baz=245 | | | | | | |
| OWD | | | | *e*S | Sn | 09 57 03.3 | +0.5 |
| | baz=245 | | | | | | |
| **EGFH** | **Guangfu** | **0.73** | **217** | *e*P | Pn | 09 56 51.8 | -0.4 |
| | baz=216 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.75** | **6** | *e*P | Pn | 09 56 52.6 | +0.1 |
| | baz=6.0 | | | | | | |
| TWB1 | | | | *e*S | Sn | 09 57 03.2 | 0.0 |
| | baz=6.0 | | | | | | |
| **WUSB** | **Renai** | **0.76** | **250** | *e*P | Pn | 09 56 53.6 | +0.8 |
| | baz=249 | | | | | | |
| WUSB | | | | *e*S | Sn | 09 57 04.8 | +1.2 |
| | baz=249 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.81** | **298** | *e*P | Pn | 09 56 53.5 | +0.2 |
| | baz=297 | | | | | | |
| NFF | | | | *e*S | Sn | 09 57 06.0 | +1.5 |
| | baz=297 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.83** | **358** | *e*P | Pn | 09 56 54.5 | +0.8 |
| | baz=358 | | | | | | |
| **WHP** | **Taichung City** | **0.87** | **272** | P | Pn | 09 56 56.1 | +1.9 |
| | baz=271 | | | | | | |
| WHP | | | | *e*S | Sn | 09 57 07.7 | +1.6 |
| | baz=271 | | | | | | |
| **LIOB** | **Emei** | **0.89** | **296** | *e*P | Pn | 09 56 56.3 | +2.0 |
| | baz=295 | | | | | | |
| LIOB | | | | S | Sn | 09 57 08.8 | +2.4 |
| | baz=295 | | | | | | |
| **NSTT** | **Nanjuang** | **0.90** | **295** | *e*P | Pn | 09 56 55.9 | +1.4 |
| | baz=294 | | | | | | |
| NSTT | | | | *e*S | Sn | 09 57 07.2 | +0.6 |
| | baz=294 | | | | | | |

*IDC **03** 10:18:12.2±10.0,14.79S×168.57E,h0km,mb3.8/4, mbtmp3.8/4,Error ellipse: s-maj=264.5km s-min=36.2km az=24.0*

*NEIC **03** 10:18:34.9±1.6,15.35S±0.09×168.0E±0.1,h152km±8km, mb4.5/22,Error ellipse: s-maj=21.1km s-min=12.2km az=109.0*

*NOU **03** 10:18:41.0,15.72S×167.81E,h174km,MLv4.3/12, Vanuatu Islands*

**ISC 03 10:18:34.6±0.6,15.27S±0.09×167.9E±0.1,h150km,n42, σ1°27/42,mb4.4/15,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **2.46** | **174** | P | **Pn** | **10 19 18.2** | **+2.9** |
| **RTV** | **Rentapao** | **2.56** | **169** | P | **Pn** | **10 19 19.2** | **+2.7** |
| **LIFNC** | **LIFOU** | **5.52** | **186** | P | **Pn** | **10 19 54.7** | **-0.2** |
| **LIFNC** | **LIFOU** | **5.52** | **186** | Pn | **Pn** | **10 19 53.8** | **-1.1** |
| **MARNC** | **Mare, Loyalty** | **6.18** | **179** | P | **Pn** | **10 20 03.2** | **-0.6** |
| **KOUNC** | **Koumac, New Ca** | **6.28** | **213** | Pn | **Pn** | **10 20 05.3** | **+0.2** |
| **YATNC** | **Mamie plateau,** | **6.82** | **188** | P | **Pn** | **10 20 13.8** | **+1.4** |
| | 22nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **6.91** | **191** | P | **Pn** | **10 20 13.8** | **+0.2** |
| **DZM** | **Mont Dzumac** | **6.91** | **191** | Pn | **Pn** | **10 20 13.7** | **+0.1** |
| **NOUC** | **Port Laguerre** | **6.96** | **192** | P | **Pn** | **10 20 15.0** | **+0.8** |
| **ONTNC** | **Ouen Toro** | **7.14** | **191** | Pn | **Pn** | **10 20 13.2** | **-3.3** |
| **PINNC** | **Pines Island,** | **7.32** | **183** | P | **Pn** | **10 20 20.4** | **+1.4** |
| **PINNC** | **Pines Island,** | **7.32** | **183** | Pn | **Pn** | **10 20 16.9** | **-2.1** |
| **FUNA** | **Funafuti** | **12.92** | **60** | Pn | **Pn** | **10 21 31.2** | **-1.7** |
| **COEN** | **Coen** | **23.96** | **270** | P | **P** | **10 23 34.5** | **-0.9** |
| COEN | | | | IAmb | IAmb | 10 24 06.0 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **32.10** | **257** | P | **P** | **10 24 48.1** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 10 25 19.9 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.23** | **257** | P | **P** | **10 24 49.0** | **0.0** |
| WB0 | | | | IAmb | IAmb | 10 25 18.2 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.28** | **257** | P | **P** | **10 24 48.0** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 10 25 16.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **32.28** | **257** | P | **P** | **10 24 49.1** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 10 25 16.9 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.29** | **257** | P | **P** | **10 24 49.6** | **+0.1** |
| **WRA** | **Warramunga Arr** | **32.29** | **257** | P | **P** | **10 24 49.5** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=87,slow=9.2,SNR=29 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **TAU** | **Tasmania Unive** | **32.72** | **209** | P | **P** | **10 24 54.5** | **+1.6** |
| **AS31** | **Alice Springs** | **33.05** | **250** | P | **P** | **10 24 56.5** | **+0.4** |
| **ASAR** | **Alice Springs** | **33.06** | **250** | P | **P** | **10 24 57.2** | **+1.0** |
| **ASAR** | **Alice Springs** | **33.06** | **250** | P | **P** | **10 24 56.6** | **+0.4** |
| | comp=Z,2.4nm,0.6s,baz=77,slow=8.9,SNR=71 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **33.74** | **233** | P | **P** | **10 25 01.6** | **-0.4** |
| **MTN** | **Manton Dam** | **35.72** | **269** | P | **P** | **10 25 18.4** | **-0.8** |
| MTN | | | | IAmb | IAmb | 10 25 41.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **37.69** | **264** | P | **P** | **10 25 36.3** | **+0.6** |
| KNRA | | | | IAmb | IAmb | 10 25 58.5 | |
| | comp=Z,42nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.52** | **260** | P | **P** | **10 26 01.0** | **+1.7** |
| **PSA00** | **Pilbara Seismi** | **45.88** | **255** | P | **P** | **10 26 42.5** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 10 26 55.7 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **MBWA** | **Marble Bar** | **45.99** | **255** | P | **P** | **10 26 44.1** | **+0.9** |
| MBWA | | | | IAmb | IAmb | 10 27 04.9 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **62.34** | **181** | P | **P** | **10 28 39.3** | **-1.3** |
| **VNDA** | **Vanda** | **62.34** | **181** | P | **P** | **10 28 38.8** | **-1.8** |
| | comp=Z,0.2nm,0.6s,baz=12,slow=8.1,SNR=1.9 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **SBA** | **Scott Base** | **62.60** | **180** | P | **P** | **10 28 42.0** | **-0.3** |
| **CASY** | **Casey** | **63.27** | **202** | P | **P** | **10 28 46.4** | **-0.5** |
| CASY | | | | IAmb | IAmb | 10 28 48.8 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **67.64** | **333** | P | **P** | **10 29 15.7** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **67.64** | **333** | P | **P** | **10 29 14.7** | **-0.5** |
| **ADK** | **Adak** | **68.20** | **10** | P | **P** | **10 29 18.1** | **-0.5** |
| **PET** | **Petropavlovsk** | **68.47** | **354** | P | **P** | **10 29 21.2** | **+0.9** |
| **QSPA** | **South Pole Qui** | **74.77** | **180** | P | **P** | **10 29 57.3** | **-0.8** |
| QSPA | | | | IAmb | IAmb | 10 29 57.8 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.77** | **180** | P | **P** | **10 29 57.2** | **-0.8** |
| | comp=Z,1.0nm,0.7s,baz=9.7,slow=3.9,SNR=9.4 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **84.56** | **20** | P | **P** | **10 30 52.4** | **+1.7** |
| SCM | | | | IAmb | IAmb | 10 30 58.7 | |
| | comp=Z,31nm,1.1s | | | | | | |

*SKHL **03** 10:19:04.3±0.4,46.60N×141.60E,h6km±2km, mb4.4/3*
*JMA **03** 10:19:04.2±0.5,47°N±2°×14°2E±°,h0km,MV3.0/13, SOUTH SAKHALIN*

**ISC 03 10:19:05.0±1.9,46.62N±0.08×141.6E±0.1,h7km±14km,n6, σ0°64/11,Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NEVR** | **Nevel`sk** | **0.18** | **71** | *e*Pg | **Pg** | **10 19 08.4** | **-0.2** |
| NEVR | | | | AMB | AMB | 10 19 08.5 | |
| | 2µm,0.2s | | | | | | |
| NEVR | | | | *e*Sg | **Sg** | **10 19 11.4** | **+0.3** |
| NEVR | | |

σ1⁸69/50, **mb4.3**/9, **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **3.41** | **38** | | **Pn** | **10 25 57.2** | **+0.8** |
| **NIUE** | **Niue** | **4.52** | **123** | Pn | **Pn** | **10 26 13.0** | **+1.4** |
| **FUNA** | **Funafuti** | **10.48** | **319** | Pn | **Pn** | **10 27 35.2** | **+1.7** |
| **RAR** | **Rarotonga** | **14.14** | **111** | Pn | **Pn** | **10 28 22.2** | **-1.4** |
| **LIFNC** | **LIFOU** | **18.31** | **254** | | **Pn** | **10 29 16.4** | **-1.0** |
| **OUZ** | **Omahuta** | **21.61** | **209** | P | **P** | **10 29 57.8** | **+4.5** |
| **WCZ** | **Waipu Caves** | **21.89** | **206** | P | **P** | **10 29 58.5** | **+2.3** |
| **KUZ** | **Kuaotunu** | **22.04** | **203** | P | **P** | **10 29 60.0** | **+2.1** |
| **HAZ** | **Te Kaha** | **22.28** | **198** | P | **P** | **10 30 02.8** | **+2.3** |
| **PKGZ** | **Pakihiroa** | **22.30** | **197** | P | **P** | **10 30 04.3** | **+3.6** |
| **PUZ** | **Puketiti** | **22.44** | **196** | P | **P** | **10 30 03.8** | **+1.5** |
| **RUGZ** | **Raukumara Rang** | **22.51** | **198** | P | **P** | **10 30 04.1** | **+1.1** |
| **MKAZ** | **Moumakai** | **22.57** | **203** | P | **P** | **10 30 05.4** | **+1.9** |
| **TWGZ** | **Tauwhareparae** | **22.62** | **197** | P | **P** | **10 30 06.7** | **+2.6** |
| **AWAZ** | **Awhitu Peninsu** | **22.73** | **204** | P | **P** | **10 30 07.3** | **+2.0** |
| **MWZ** | **Matawai** | **22.89** | **197** | P | **P** | **10 30 08.4** | **+1.4** |
| **TKGZ** | **Te Karaka** | **22.90** | **197** | P | **P** | **10 30 06.1** | **-1.0** |
| **URZ** | **Urewera** | **22.95** | **198** | P | **P** | **10 30 07.3** | **-0.3** |
| **TOZ** | **Tahuroa Road** | **23.00** | **202** | P | **P** | **10 30 08.7** | **+0.7** |
| **RAGZ** | **Rawiri** | **23.07** | **198** | P | **P** | **10 30 10.1** | **+1.2** |
| **RIGZ** | **Rimuhau** | **23.17** | **197** | P | **P** | **10 30 11.8** | **+1.9** |
| **RTZ** | **Ruatahuna** | **23.31** | **198** | P | **P** | **10 30 10.4** | **-1.0** |
| **KNZ** | **Kokohu** | **23.49** | **197** | P | **P** | **10 30 14.9** | **+1.9** |
| **RAHZ** | **Arahi** | **23.56** | **198** | P | **P** | **10 30 15.1** | **+1.3** |
| **MTHZ** | **Maungataniwha** | **23.57** | **198** | P | **P** | **10 30 14.8** | **+0.9** |
| **WHHZ** | **Waihua** | **23.67** | **197** | P | **P** | **10 30 14.5** | **-0.3** |
| **NMHZ** | **Naumai** | **23.81** | **198** | P | **P** | **10 30 18.9** | **+2.6** |
| **BKZ** | **Black Stump Fm** | **23.97** | **199** | P | **P** | **10 30 15.5** | **-2.3** |
| **ETVZ** | **East Tongariro** | **24.19** | **200** | P | **P** | **10 30 20.2** | **+0.4** |
| **OTVZ** | **Oturere** | **24.23** | **200** | P | **P** | **10 30 19.3** | **-1.0** |
| **WNVZ** | **Wahianoa** | **24.40** | **200** | P | **P** | **10 30 21.3** | **-0.6** |
| **KAHZ** | **Kahuranaki** | **24.43** | **197** | P | **P** | **10 30 25.2** | **+3.1** |
| **NEZ** | **North Egmont** | **24.87** | **203** | P | **P** | **10 30 28.8** | **+2.8** |
| **ANWZ** | **Angora Road** | **25.17** | **197** | P | **P** | **10 30 30.3** | **+1.8** |
| **BFZ** | **Birch Farm** | **25.44** | **198** | P | **P** | **10 30 29.8** | **-1.3** |
| **MRZ** | **Mangatainoka R** | **25.62** | **199** | P | **P** | **10 30 33.3** | **+0.6** |
| **ARMA** | **Armidale** | **34.29** | **240** | P | **P** | **10 31 47.8** | **-2.0** |
| ARMA | comp=Z,15nm,1.4s | | | IAmb | IAmb | 10 32 02.4 | |
| **BBOO** | **Buckleboo** | **47.77** | **241** | P | **P** | **10 33 40.3** | **-0.4** |
| **WR0** | **Warramunga Arr** | **48.89** | **258** | P | **P** | **10 33 49.0** | **-0.5** |
| **WB0** | **Warramunga Arr** | **49.05** | **258** | P | **P** | **10 33 50.1** | **-0.7** |
| WB0 | comp=Z,4.0nm,1.1s | | | IAmb | IAmb | 10 34 10.8 | |
| **WB2** | **Warramunga Arr** | **49.07** | **258** | P | **P** | **10 33 50.6** | **-0.3** |
| WB2 | comp=Z,6.5nm,1.2s | | | IAmb | IAmb | 10 34 02.8 | |
| **WRA** | **Warramunga Arr** | **49.08** | **258** | P | **P** | **10 33 50.9** | **-0.1** |
| **WRA** | **Warramunga Arr** | **49.08** | **258** | P | **P** | **10 33 50.2** | **-0.9** |
| **AS31** | comp=Z,0.2nm,0.4s,baz=96,slow=7.1,SNR=9.1<br>comp=Z,0.2nm,0.4s<br>**Alice Springs** | **49.26** | **253** | P | **P** | **10 33 52.0** | **-0.4** |
| AS31 | comp=Z,2.0nm,0.6s | | | IAmb | IAmb | 10 33 52.4 | |
| **ASAR** | **Alice Springs** | **49.26** | **253** | P | **P** | **10 33 51.6** | **-0.8** |
| **ASAR** | **Alice Springs** | **49.26** | **253** | P | **P** | **10 33 52.0** | **-0.3** |
| ASAR | comp=Z,6.5nm,0.6s,baz=88,slow=8.4,SNR=145 | | | PcP | **PcP** | **10 35 14.3** | **-1.0** |
| **VNDA** | comp=Z,0.3nm,0.5s,baz=100,slow=4.4,SNR=4.1<br>comp=Z,6.5nm,0.6s<br>**Vanda** | **62.11** | **186** | P | **P** | **10 35 24.6** | **+0.9** |
| **QSPA** | comp=Z,1.1nm,0.8s,baz=12,slow=7.0,SNR=3.5<br>comp=Z,1.1nm,0.8s<br>**South Pole Qui** | **73.42** | **180** | P | **P** | **10 36 34.9** | **-0.5** |
| QSPA | comp=Z,8.6nm,1.4s | | | IAmb | IAmb | 10 36 42.4 | |
| **QSPA** | **South Pole Qui** | **73.42** | **180** | P | **P** | **10 36 34.9** | **-0.5** |
| **PDAR** | comp=Z,1.1nm,0.7s,baz=48,slow=2.3,SNR=7.2<br>comp=Z,1.1nm,0.7s<br>**Pinedale Array** | **83.51** | **42** | P | P | 10 37 51.2 | +20 |
| | comp=Z,0.3nm,0.8s,baz=197,slow=2.8,SNR=1.8<br>comp=Z,0.3nm,0.8s | | | | | | |

**TRN 03 10:53:37.1, 15°.92N×59°.70W, h52ᵏᵐ, MD3.6, Far North-east of Dominica., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAGL** | **Barre de l'ile** | **1.52** | **271** | *eP* | Pn | 10 54 03.4 | +1.4 |
| **BAMF** | **Morne Balai** | **1.78** | **232** | *eP* | Pn | 10 54 07.0 | +1.4 |
| **ABD** | **La Joyeuse, An** | **1.81** | **288** | *eP* | Pn | 10 54 07.1 | +1.3 |
| **PCM** | **Pelee Case Pet** | **1.82** | **233** | *eP* | Pn | 10 54 07.7 | +1.6 |
| **FDF** | **Fort de France** | **1.83** | **230** | *eP* | Pn | 10 54 08.0 | +1.8 |
| **CBE** | **Ff, Capester** | **1.84** | **275** | *eP* | Pn | 10 54 07.9 | +1.5 |
| **MPOM** | **Morne Pois Mar** | **1.84** | **218** | *eP* | Pn | 10 54 07.9 | +1.5 |
| **TDBA** | **Terre de Bas,** | **1.86** | **268** | *eP* | Pn | 10 54 08.2 | +1.6 |
| **TBG** | **Guadaloupe-3** | **1.87** | **268** | *eP* | Pn | 10 54 08.3 | +1.5 |
| TBG | | | | *eS* | Sn | 10 54 30.8 | +1.5 |
| **BIM** | **Bigot** | **1.92** | **224** | *eP* | Pn | 10 54 09.5 | +2.0 |
| **SLBI** | **Saint Lucia, B** | **2.25** | **213** | *eP* | Pn | 10 54 13.8 | +1.8 |
| SLBI | | | | *eS* | Sn | 10 54 39.6 | +1.0 |
| **ANBD** | **Bethesda, Anti** | **2.28** | **300** | *eP* | Pn | 10 54 14.4 | +2.1 |
| ANBD | | | | *eS* | Sn | 10 54 40.0 | +0.8 |

*SJA **03** 11:00:55.7±0.6,24°.19S×66°.79W,h200ᵏᵐ±5ᵏᵐ, ML3.6, MW3.8*

*NEIC **03** 11:00:57.2±2.4,24°.17S±0°.08×66°.9W±0°.1, h196ᵏᵐ±13ᵏᵐ, mb4.2/8, Error ellipse: s-maj=16.0km s-min=10.5km az=108.0*

*IDC **03** 11:00:58.3±1.4,24°.05S×66°.83W, h188ᵏᵐ±15ᵏᵐ, mb3.3/4, mbtmp3.8/9, Error ellipse: s-maj=21.5km s-min=16.7km az=122.0*

**ISC 03 11:00:57.2**±0.7, **24°.21S**±0°.04×**66°.92W**±0°.04, **h193**ᵏᵐ±7ᵏᵐ, **n80**, σ1⁸**56**/101, **mb3.5**/4, **5C, Salta Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.38** | **112** | *eP* | **Pn** | **11 01 31.7** | **+2.4** |
| SLA | | | | *eS* | **Sn** | **11 01 52.4** | **-1.9** |
| SLA | comp=Z,170nm,0.8s | | | IAML | | 11 01 57.6 | |
| **SLA** | **San Lorenzo** | **1.38** | **112** | *eP* | **Pn** | **11 01 31.8** | **+2.4** |
| **AZAP** | **Zapla** | **1.69** | **91** | *eP* | **Pn** | **11 01 31.0** | **-1.2** |
| AZAP | comp=Z,141nm,0.9s | | | IAML | | 11 02 04.8 | |
| **AF01** | **San Pedro de A** | **1.71** | **317** | | **Pn** | **11 01 34.3** | **+1.8** |
| **AF01** | **San Pedro de A** | **1.71** | **317** | *eP* | **Pn** | **11 01 34.4** | **+1.9** |
| AF01 | | | | *i* S | **Sn** | **11 02 02.2** | **+2.3** |
| **FSA** | **Cafayete** | **2.07** | **156** | *eP* | **Pn** | **11 01 38.3** | **+2.2** |
| FSA | | | | *eS* | **Sn** | **11 02 02.5** | **-4.0** |
| **ASTB** | **Santa Barbara** | **2.27** | **84** | *eP* | Pn | 11 01 44.7 | +6.5 |
| **YJA** | **Yavi** | **2.40** | **33** | *eP* | **Pn** | **11 01 36.6** | **-3.4** |
| **YJA** | **Yavi** | **2.40** | **33** | *eP* | **Pn** | **11 01 41.4** | **+1.4** |
| **LVC** | **Limon Verde** | **2.43** | **311** | *eP* | **Pn** | **11 01 41.2** | **+1.0** |
| LVC | | | | *eS* | **Sn** | **11 02 13.8** | **+0.2** |
| LVC | comp=Z,88nm,0.3s | | | IAML | | 11 02 14.8 | |
| **LVC** | **Limon Verde** | **2.43** | **311** | P | **Pn** | **11 01 41.2** | **+1.0** |
| LVC | comp=Z,38nm,0.2s,baz=115,slow=8.6,SNR=372 | | | S | **Sn** | **11 02 13.5** | **-0.1** |
| **LVC** | comp=Z,101nm,0.3s,baz=309,slow=21,SNR=43<br>**Limon Verde** | **2.43** | **311** | *eP* | **Pn** | **11 01 41.0** | **+0.8** |
| LVC | | | | *i* S | **Sn** | **11 02 13.0** | **-0.7** |
| LVC | comp=Z,840nm,0.4s | | | IAML | | 11 02 14.6 | |
| **PB15** | **IPOC Station P** | **2.55** | **293** | | **Pn** | **11 01 41.9** | **+0.6** |
| **PB15** | **IPOC Station P** | **2.55** | **293** | *eP* | **Pn** | **11 01 42.3** | **+1.0** |
| PB15 | | | | *eS* | **Sn** | **11 02 16.1** | **+0.3** |
| **PB15** | **IPOC Station P** | **2.55** | **293** | ⇑*iP* | **Pn** | **11 01 42.4** | **+1.0** |
| PB15 | | | | *i* S | **Sn** | **11 02 14.6** | **-1.1** |
| **GO02** | **Mina Guanaco** | **2.61** | **248** | | **Pn** | **11 01 43.4** | **+1.3** |
| **GO02** | **Mina Guanaco** | **2.61** | **248** | *eP* | **Pn** | **11 01 43.5** | **+1.3** |
| GO02 | | | | *eS* | **Sn** | **11 02 18.1** | **+0.9** |
| **GO02** | **Mina Guanaco** | **2.61** | **248** | ⇑*iP* | **Pn** | **11 01 43.4** | **+1.3** |
| GO02 | | | | *i* S | **Sn** | **11 02 17.5** | **+0.3** |
| GO02 | comp=E,813nm,0.2s | | | IAML | | 11 02 20.1 | |
| **ALOL** | **LOMAS DE OLMED** | **2.71** | **82** | *eP* | Pn | 11 01 27.7 | -15 |
| **PB06** | **IPOC Station P** | **2.86** | **301** | | **Pn** | **11 01 45.1** | **+0.1** |
| **PB06** | **IPOC Station P** | **2.86** | **301** | *eP* | **Pn** | **11 01 45.7** | **+0.7** |
| PB06 | | | | *eS* | **Sn** | **11 02 22.0** | **-0.3** |
| PB06 | comp=Z,311nm,0.1s | | | IAML | | 11 02 24.3 | |
| **PB06** | **IPOC Station P** | **2.86** | **301** | ⇑*eP* | **Pn** | **11 01 45.7** | **+0.7** |
| PB06 | | | | *i* S | **Sn** | **11 02 20.3** | **-2.0** |
| PB06 | comp=N,566nm,0.2s | | | IAML | | 11 02 24.8 | |
| **PB14** | **IPOC Station P** | **3.21** | **262** | | **Pn** | **11 01 49.5** | **+0.4** |
| **PB14** | **IPOC Station P** | **3.21** | **262** | *eP* | **Pn** | **11 01 49.6** | **+0.4** |
| PB14 | | | | *eS* | **Sn** | **11 02 28.7** | **-1.1** |
| PB14 | comp=Z,101nm,0.2s | | | IAML | | 11 02 33.5 | |
| **PB14** | **IPOC Station P** | **3.21** | **262** | ⇑*eP* | **Pn** | **11 01 49.6** | **+0.4** |
| PB14 | | | | *eS* | **Sn** | **11 02 27.7** | **-2.1** |
| PB14 | comp=E,125nm,0.2s | | | IAML | | 11 02 29.7 | |
| **PB09** | **IPOC Station P** | **3.22** | **318** | | **Pn** | **11 01 50.1** | **+0.8** |
| **PB05** | **IPOC Station P** | **3.31** | **294** | | **Pn** | **11 01 50.0** | **-0.2** |
| **PB04** | **IPOC Station P** | **3.51** | **302** | | **Pn** | **11 01 52.7** | **-0.1** |
| **PB04** | **IPOC Station P** | **3.51** | **302** | *eP* | **Pn** | **11 01 53.0** | **+0.2** |
| PB04 | | | | *eS* | **Sn** | **11 02 34.8** | **-1.6** |
| PB04 | comp=Z,204nm,0.2s | | | IAML | | 11 02 38.5 | |
| **PB04** | **IPOC Station P** | **3.51** | **302** | ⇑*eP* | **Pn** | **11 01 53.0** | **+0.2** |
| PB04 | | | | *i* S | **Sn** | **11 02 33.1** | **-3.2** |
| **AC01** | **Pan de Azucar** | **3.85** | **239** | | **Pn** | **11 01 56.7** | **-0.2** |
| **AC01** | **Pan de Azucar** | **3.85** | **239** | *eP* | **Pn** | **11 01 56.7** | **-0.2** |
| AC01 | | | | *eS* | **Sn** | **11 02 42.5** | **-1.1** |
| AC01 | comp=Z,73nm,0.2s | | | IAML | | 11 02 43.4 | |
| **AC01** | **Pan de Azucar** | **3.85** | **239** | *eP* | **Pn** | **11 01 56.6** | **-0.2** |
| AC01 | | | | *i* S | **Sn** | **11 02 41.7** | **-2.0** |
| **AC06** | **Mina Casimiro** | **4.41** | **224** | | **Pn** | **11 02 03.9** | **+0.1** |
| **AC06** | **Mina Casimiro** | **4.41** | **224** | *eP* | **Pn** | **11 02 03.7** | **-0.1** |
| **GO03** | **Copiap** | **4.50** | **221** | | **Pn** | **11 02 05.4** | **+0.3** |
| **GO03** | **Copiap** | **4.50** | **221** | *eP* | **Pn** | **11 02 05.4** | **+0.3** |
| GO03 | | | | *eS* | **Sn** | **11 02 57.3** | **-1.2** |
| **GO03** | **Copiap** | **4.50** | **221** | *eP* | **Pn** | **11 02 05.2** | **+0.1** |
| GO03 | | | | *i* S | **Sn** | **11 02 57.0** | **-1.5** |
| **TA01** | **Diego Aracena** | **4.72** | **320** | Pn | **Pn** | **11 02 06.9** | **-1.0** |
| **TA01** | **Diego Aracena** | **4.72** | **320** | *eP* | **Pn** | **11 02 07.2** | **-0.6** |
| TA01 | | | | *eS* | **Sn** | **11 03 01.4** | **-2.0** |
| TA01 | comp=Z,33nm,0.3s | | | IAML | | 11 03 13.1 | |
| **TA01** | **Diego Aracena** | **4.72** | **320** | *eP* | **Pn** | **11 02 07.3** | **-0.6** |
| TA01 | | | | *i* S | **Sn** | **11 02 59.4** | **-4.1** |
| **TA02** | **Huaiquique** | **4.92** | **322** | Pn | **Pn** | **11 02 06.9** | **-3.5** |
| **GO01** | **Chusmiza** | **4.99** | **335** | Pn | **Pn** | **11 02 11.6** | **-0.2** |
| **ACLC** | **CERRO LA CRUZ** | **5.19** | **180** | *eP* | **Pn** | **11 02 16.9** | **+2.8** |
| **AC04** | **Llanos de Chal** | **5.45** | **222** | Pn | **Pn** | **11 02 16.4** | **-0.8** |
| **AC04** | **Llanos de Chal** | **5.45** | **222** | *eP* | **Pn** | **11 02 16.5** | **-0.7** |
| AC04 | | | | *eS* | **Sn** | **11 03 18.7** | **-1.7** |
| AC04 | comp=Z,32nm,0.7s | | | IAML | | 11 03 24.8 | |
| **AC05** | **El Transito** | **5.50** | **212** | Pn | **Pn** | **11 02 18.1** | **+0.2** |
| **LCO** | **Las Campanas** | **5.86** | **215** | Pn | **Pn** | **11 02 22.1** | **-0.6** |
| **CO01** | **Juntas del Tor** | **6.40** | **206** | Pn | **Pn** | **11 02 28.5** | **-1.3** |
| **AP01** | **Chacalluta** | **6.63** | **331** | Pn | **Pn** | **11 02 32.6** | **0.0** |
| **CO05** | **La Serena** | **6.87** | **213** | Pn | **Pn** | **11 02 35.2** | **-0.4** |
| **PB18** | **Visviri** | **7.01** | **340** | Pn | **Pn** | **11 02 35.8** | **-2.3** |
| **CO03** | **El Pedregal** | **7.40** | **206** | Pn | **Pn** | **11 02 41.8** | **-0.8** |
| **CO06** | **Fray Jorge** | **7.68** | **212** | Pn | **Pn** | **11 02 44.2** | **-2.0** |
| **CO02** | **Combarbal** | **7.85** | **207** | Pn | **Pn** | **11 02 46.8** | **-1.7** |
| **LPAZ** | **La Paz** | **7.97** | **352** | Pn | **Pn** | **11 02 49.8** | **-0.9** |
| **LPAZ** | **La Paz** | **7.97** | **352** | P | **Pn** | **11 02 51.4** | **+0.7** |
| **CPUP** | comp=Z,1.2nm,0.5s,baz=162,slow=3.7,SNR=6.9<br>**Villa Florida** | **8.93** | **106** | Pn | **Pn** | **11 03 02.7** | **+0.1** |
| **VA03** | **San Esteban** | **9.10** | **200** | Pn | **Pn** | **11 03 03.2** | **-1.7** |
| **SIV** | **San Ignacio** | **9.85** | **35** | P | **Pn** | **11 03 13.6** | **-1.1** |
| **MT09** | comp=Z,1.1nm,0.4s,baz=245,slow=7.5,SNR=6.0<br>**Talagante** | **10.17** | **200** | Pn | **Pn** | **11 03 19.4** | **+0.6** |
| **TRQA** | **Tornquist** | **14.43** | **164** | Pn | **Pn** | **11 04 12.5** | **-0.1** |
| **GO06** | **Curarrehue** | **15.80** | **193** | P | **P** | **11 04 28.6** | **-0.9** |
| GO06 | comp=Z,12nm,1.2s | | | IAmb | IAmb | 11 04 35.4 | |
| **PLCA** | **Paso Flores** | **16.75** | **190** | P | **P** | **11 04 39.6** | **-0.2** |
| **PLCA** | **Paso Flores** | **16.75** | **190** | P | **Pn** | **11 04 44.4** | **+3.5** |
| **VAO** | comp=Z,2.0nm,0.9s,baz=356,slow=10,SNR=8.2<br>**Valinhos** | **18.32** | **90** | P | **Pn** | **11 04 57.8** | **-1.7** |
| **LL01** | **San Ignacio de** | **18.68** | **193** | P | **P** | **11 04 57.5** | **-3.2** |
| **LL02** | **Futaleuf** | **19.36** | **191** | P | **Pn** | **11 05 10.8** | **-0.7** |
| LL02 | comp=Z,16nm,1.2s | | | IAmb | IAmb | 11 05 15.2 | |
| **BDFB** | **Brasilia** | **19.69** | **68** | P | **P** | **11 05 11.3** | **-0.8** |
| BDFB | comp=Z,6.8nm,0.8s | | | IAmb | IAmb | 11 05 14.0 | |
| **BDFB** | **Brasilia** | **19.69** | **68** | P | **P** | **11 05 12.4** | **+0.4** |
| **SNAA** | comp=Z,5.1nm,0.6s,baz=224,slow=13,SNR=7.5<br>**Sanae** | **59.12** | **161** | P | **P** | **11 10 39.2** | **+2.1** |
| **SNAA** | **Sanae** | **59.12** | **161** | P | **P** | **11 10 39.1** | **+2.1** |
| **TXAR** | comp=Z,0.8nm,0.6s,baz=262,slow=10.0,SNR=7.6<br>comp=Z,0.8nm,0.6s<br>**Lajitas Array** | **63.90** | **324** | P | **P** | **11 11 11.5** | **+1.9** |
| **QSPA** | comp=Z,0.2nm,0.7s,baz=156,slow=8.9,SNR=2.8<br>comp=Z,0.2nm,0.7s<br>**South Pole Qui** | **65.99** | **180** | P | **P** | **11 11 25.6** | **+2.9** |
| QSPA | comp=Z,7.0nm,1.5s | | | IAmb | IAmb | 11 11 25.9 | |
| **QSPA** | **South Pole Qui** | **65.99** | **180** | P | **P** | **11 11 25.6** | **+2.9** |
| **TORD** | comp=Z,2.1nm,0.5s,baz=338,slow=1.3,SNR=42<br>comp=Z,2.1nm,0.5s<br>**Torodi Ar. Bea** | **76.57** | **69** | P | **P** | **11 12 27.0** | **+0.2** |
| **ASAR** | comp=Z,0.3nm,0.5s,baz=234,slow=4.3,SNR=4.8<br>comp=Z,0.3nm,0.5s<br>**Alice Springs** | **128.29** | **205** | PKP | **PKiKP** | **11 19 42.8** | **+0.7** |
| **WRA** | comp=Z,0.3nm,0.6s,baz=148,slow=2.5,SNR=4.9<br>**Warramunga Arr** | **131.47** | **207** | PKP | **PKiKP** | **11 19 49.1** | **+0.6** |
| **ZALV** | comp=Z,0.3nm,0.4s,baz=158,slow=1.8,SNR=13<br>**Zalesovo Beam** | **143.54** | **28** | PKP | **PKPdf** | **11 20 08.0** | **-0.6** |
| **MKAR** | comp=Z,0.4nm,0.3s,baz=298,slow=3.2,SNR=3.7<br>**Makanchi Array** | **146.64** | **40** | PKPbc | **PKPab** | **11 20 16.2** | **-1.3** |
| | comp=Z,0.7nm,0.5s,baz=312,slow=3.4,SNR=6.4 | | | | | | |

*IDC **03** 11:19:06.0±1.3,0°.81S×127°.35E, h0ᵏᵐ, mb3.6/4, mbtmp3.7/4, Error ellipse: s-maj=137.0km s-min=22.0km az=69.0*

*DJA **03** 11:19:06.9±0.5,1°.S±4°×12°.8E±1°.0, h10ᵏᵐ, M3.4/5, MLv3.4/5*

**ISC 03 11:19:06.2**±2.0, **0°.8S**±0°.1×**127°.4E**±0°.2, **h3**ᵏᵐ±15ᵏᵐ, **n7**, σ0⁸**79**/8, **mb3.8**/3, **Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBMI** | **Labuha** | **0.17** | **48** | P | **Pg** | **11 19 09.7** | **+0.3** |
| **TNTI** | **Ternate** | **1.51** | **360** | P | **Pn** | **11 19 33.2** | **-1.0** |
| **SANI** | **Sanana** | **1.90** | **227** | P | **Pb** | **11 19 41.5** | **0.0** |
| **WRA** | **Warramunga Arr** | **20.25** | **161** | P | **P** | **11 23 42.3** | **-0.7** |
| | 0.9nm,0.6s,baz=340,slow=11,SNR=18<br>0.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **23.64** | **165** | P | **P** | **11 24 18.8** | **-0.2** |
| ASAR | 1.4nm,0.6s,baz=344,slow=11,SNR=30 | | | PcP | **PcP** | **11 28 04.3** | **+0.4** |
| **SONM** | 0.4nm,0.6s,baz=354,slow=2.3,SNR=4.5<br>1.4nm,0.6s<br>**Songino Array** | **51.73** | **342** | P | **P** | **11 28 15.9** | **+0.9** |
| | 0.5nm,0.8s,baz=152,slow=6.5,SNR=1.6<br>0.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.60** | **326** | P | **P** | **11 29 25.2** | **+0.1** |
| | 0.8nm,0.5s,baz=119,slow=7.4,SNR=7.2<br>0.8nm,0.5s | | | | | | |

*IDC **03** 11:23:34.7±1.9,8°.24S×118°.02E, h0ᵏᵐ, mb4.0/3, mbtmp3.8/5, ML3.5/2, Error ellipse: s-maj=51.7km s-min=21.2km az=71.0*

*DJA **03** 11:23:36.5±1.1,9°.S±22°×11°.8E±1°.1, h36ᵏᵐ±11ᵏᵐ, M3.4/5, MLv3.4/5*

**ISC 03 11:23:37.8**±1.1, **8°.41S**±0°.10×**118°.06E**±0°.09, **h35**ᵏᵐ, **n8**, σ0⁸**98**/8, **mb4.2**/3, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **0.50** | **213** | P | **Pn** | **11 23 47.5** | **-1.0** |
| **TWSI** | **Taliwang, Sumb** | **1.21** | **254** | P | **Pn** | **11 23 57.4** | **-0.8** |
| TWSI | | | | S | **Sn** | **11 24 13.9** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **3.30** | **47** | P | **Pn** | **11 24 26.9** | **-0.1** |
| **KAPI** | **Kappang** | **3.77** | **27** | Pn | **Pn** | **11 24 32.6** | **-0.8** |
| KAPI | 2.2nm,0.3s,baz=184,slow=12,SNR=4.7<br>3.8nm,0.3s,baz=215,slow=23,SNR=7.0<br>6.3nm,0.3s | | | Sn | **Sn** | **11 25 15.6** | **-1.0** |
| **WRA** | **Warramunga Arr** | **19.49** | **128** | P | **Pn** | **11 28 03.8** | **+0.4** |
| | 0.2nm,0.3s,baz=302,slow=13,SNR=18<br>0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **21.46** | **137** | P | P | 11 28 27.3 | +3.9 |
| | 2.0nm,0.7s,baz=312,slow=9.1,SNR=26<br>2.0nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **32.00** | **140** | P | P | 11 30 04.1 | +3.2 |
| | 2.0nm,0.6s,baz=324,slow=12,SNR=2.9<br>2.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.94** | **351** | P | **P** | **11 33 20.7** | **+1.0** |
| | 2.6nm,0.8s,baz=170,slow=9.4,SNR=12<br>2.6nm,0.8s | | | | | | |

**NEIC 03 12:09:52.1**±1.1, **30°.98N**±0°.02×**103°.48W**±0°.02, **h5**ᵏᵐ±2ᵏᵐ, **mb_Lg2.5/33, ML2.5/28, Error ellipse: s-maj=4.0km s-min=3.0km az=147.0, Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PECS** | **Pecos** | **0.51** | **320** | Pg | Pb | 12 10 03.0 | -0.6 |
| **ALPN** | **Alpine** | **0.62** | **192** | | Pg | 12 10 03.2 | -0.8 |
| ALPN | | | | Sg | Sg | 12 10 11.2 | -1.0 |
| ALPN | 292nm,0.2s | | | IAML | | 12 10 12.1 | |
| ALPN | 286nm,0.6s | | | IAML | | 12 10 14.6 | |
| **MNHN** | **Monahans** | **0.71** | **60** | | Pg | 12 10 05.7 | -0.1 |
| **VHRN** | **Van Horn** | **1.31** | **262** | Pg | Pn | 12 10 16.8 | -0.3 |
| VHRN | 80nm,0.8s | | | IAML | | 12 10 38.2 | |
| VHRN | 78nm,0.3s | | | IAML | | 12 10 39.5 | |
| **CLNB** | **Carlsbad** | **1.32** | **345** | | Pn | 12 10 16.0 | -1.3 |
| **ODSA** | **Odessa** | **1.39** | **35** | | Pn | 12 10 17.3 | -0.9 |
| **CLN7** | **Carlsbad 7** | **1.45** | **349** | | Pn | 12 10 18.3 | -0.8 |
| **HTMS** | **Hat Mesa** | **1.49** | **355** | | Pn | 12 10 19.3 | -0.3 |
| **SAND** | **Sanderson** | **1.56** | **131** | Pg | Pn | 12 10 20.0 | -0.5 |
| **TX31** | **Lajitas Ar. Si** | **1.65** | **186** | | Pn | 12 10 21.6 | -0.3 |
| **TXAR** | **Lajitas Array** | **1.65** | **186** | | Pn | 12 10 21.8 | 0.1 |
| **OZNA** | **Ozona** | **2.02** | **91** | Pn | Pn | 12 10 26.8 | -0.1 |
| **CPRX** | **Cap Rock** | **2.07** | **351** | Pn | Pn | 12 10 26.7 | -0.9 |
| **SGCY** | **Sterling City** | **2.22** | **65** | Pn | Pn | 12 10 29.1 | -0.5 |
| SGCY | comp=Z,14nm,1.0s | | | IAmb_Lg | | 12 11 03.9 | |
| **POST** | **Post** | **2.67** | **39** | Pn | Pn | 12 10 35.2 | -0.6 |
| **EPT** | **El Paso** | **2.70** | **288** | Pn | Pn | 12 10 34.9 | -1.5 |
| **SN05** | **Snyder 5** | **2.91** | **49** | IAmb_Lg | | 12 11 29.3 | |
| **DRIO** | comp=Z,12nm,0.7s<br>**Del Rio** | **2.93** | **121** | IAmb_Lg | | 12 11 23.7 | |
| **MSTX** | comp=Z,15nm,0.7s<br>**Muleshoe** | **3.04** | **11** | Pn | Pn | 12 10 38.9 | -2.0 |
| **SN07** | **Snyder 07** | **3.04** | **46** | Pn | Pn | 12 10 40.0 | -1.0 |
| SN07 | comp=Z,18nm,0.8s | | | IAmb_Lg | | 12 11 35.5 | |
| **DKNS** | **Dickens** | **3.44** | **38** | IAmb_Lg | | 12 11 50.9 | |
| **ABTX** | comp=Z,18nm,0.9s<br>**Abilene, Hawle** | **3.66** | **62** | Pn | Pn | 12 10 48.3 | -1.0 |
| **APMT** | **Aspermont** | **3.68** | **50** | Pn | Pn | 12 10 48.6 | -1.1 |
| APMT | comp=Z,12nm,0.8s | | | IAmb_Lg | | 12 11 57.8 | |
| **BRDY** | **Brady** | **3.86** | **84** | Pn | Pn | 12 10 50.6 | -1.5 |
| **HNDO** | **Hondo** | **3.91** | **111** | Pn | Pn | 12 10 52.7 | -0.2 |
| **121A** | **Cookes Peak, D** | **3.98** | **294** | Pn | Pn | 12 10 51.8 | -2.1 |
| 121A | comp=E,12nm,0.5s | | | IAML | | 12 12 12.4 | |
| **AMTX** | **Amarillo** | **4.17** | **21** | Pn | Pn | 12 10 55.0 | -1.5 |
| AMTX | comp=Z,17nm,0.9s | | | IAmb_Lg | | 12 12 11.8 | |
| **SBM** | **South Baldy** | **4.32** | **315** | Pn | Pn | 12 10 57.1 | -1.7 |
| **LENM** | **Lemitar** | **4.33** | **318** | Pn | Pn | 12 10 57.8 | -0.9 |
| **833A** | **Chaparral WMA,** | **4.44** | **126** | Pn | Pn | 12 10 58.4 | -1.7 |
| **HPIG** | | **4.46** | **206** | Pn | Pn | 12 10 57.2 | -3.5 |
| HPIG | comp=N,5.0nm,0.8s | | | IAML | | 12 12 22.2 | |
| **PLPT** | **Palo Pinto** | **4.76** | **66** | Pn | Pn | 12 11 03.0 | -1.5 |
| PLPT | comp=Z,8.0nm,0.9s | | | IAmb_Lg | | 12 12 36.8 | |
| **SMWD** | **Samnorwood** | **4.93** | **33** | IAmb_Lg | | 12 12 36.8 | |
| **FW03** | comp=Z,11nm,1.0s<br>**Perrin-Whitt E** | **5.04** | **65** | IAmb_Lg | | 12 12 46.1 | |
| **WHTX** | comp=Z,7.3nm,0.8s<br>**Lake Whitney,** | **5.25** | **77** | IAmb_Lg | | 12 12 45.8 | |
| **WMOK** | comp=Z,9.5nm,0.9s<br>**Wichita Mounta** | **5.45** | **45** | IAmb_Lg | | 12 12 58.5 | |
| **X37A** | comp=Z,7.2nm,1.1s<br>**Clayton** | **7.72** | **60** | IAmb_Lg | | 12 14 10.3 | |
| | comp=Z,4.7nm,0.8s | | | | | | |

*MOS **03** 12:30:43.8±1.1,35°.55N×141°.16E, h38ᵏᵐ, mb4.5/18, Error ellipse: s-maj=12.0km s-min=6.4km az=113.5*

*NEIC **03** 12:30:45.8,35°.50N×141°.22E, h40ᵏᵐ*

*NEIC **

**JCJ Chichijima 8.43 173** P Pn 12 32 39.9 -5.2
30nm,0.3s,baz=290,slow=23,SNR=19
JCJ S Sn 12 34 06.6 -12
50nm,0.7s,baz=307,slow=20,SNR=2.0
**ASAJ Asahikawa 8.68 7** P **Pn 12 32 46.8 -1.7**
4.7nm,0.3s,baz=222,slow=12,SNR=9.4
ASAJ S **Sn 12 34 21.9 -3.2**
4.9nm,0.5s,baz=306,slow=19,SNR=1.7
**ASAJ Asahikawa 8.68 7** P **Pn 12 32 46.9 -1.6**
**JKA Kamikawa-asahi 8.68 7** Pn **Pn 12 32 46.9 -1.5**
**JNU Nakatsue 8.79 257** Pn **Pn 12 32 50.1 +0.1**
**JNU Nakatsue 8.79 257** P **Pn 12 32 49.5 -0.5**
0.1nm,0.3s,baz=205,slow=18,SNR=1.6
JNU LR LR 12 36 34.6
comp=Z,469nm,20.9s,baz=80,slow=40
2.9nm,0.8s
**SHO Shikotan 9.45 26** P **Pn 12 32 59.6 +0.7**
**KSRS Korea Array 10.80 284** P **Pn 12 33 20.9 +3.4**
1.7nm,0.7s,baz=98,slow=14,SNR=6.2
KSRS LR LR 12 37 27.7
comp=Z,376nm,20.7s,baz=95,slow=38
**USRK Ussuriysk Ar. 11.16 324** P **Pn 12 33 22.2 -0.1**
0.2nm,0.3s,baz=126,slow=14,SNR=4.1
USRK LR LR 12 37 28.7
comp=Z,220nm,18.6s,baz=152,slow=36
1.8nm,0.6s
**YSS Yuzh-Sakhalins 11.51 6** *e*P **Pn 12 33 24.0 -3.2**
YSS pmax pmax
comp=Z,10.0nm,0.7s
YSS MLR MLR
comp=N,100nm,15.0s
YSS MLR MLR
comp=Z,100nm,15.0s
YSS MLR MLR
comp=N,100nm,16.0s
**JOW Kunigami 13.97 235** LR LR 12 38 55.9
comp=N,107nm,22.0s,baz=87,slow=35
**KLR Kul'dur 15.35 336** LR LR 12 40 02.6
comp=N,153nm,20.0s,baz=146,slow=36
**KLR Kul'dur 15.35 336**||*e*P **Pn 12 34 19.3 0.0**
KLR pmax pmax
comp=Z,6.0nm,2.3s
**ZEA Zeya 20.67 336** *e*P **P 12 35 20.3 -1.8**
ZEA pmax pmax
comp=Z,10.0nm,0.6s
ZEA MLR MLR
comp=N,100nm,12.0s
ZEA MLR MLR
comp=Z,100nm,14.0s
**MA2 Magadan 24.90 12** LR LR 12 46 18.5
comp=Z,35nm,20.0s,baz=180,slow=37
**MA2 Magadan 24.90 12**||*e*P **P 12 36 06.2 +1.3**
MA2 pmax pmax
comp=Z,3.0nm,0.6s
**YAK Yakutsk 27.52 348** LR LR 12 47 33.6
comp=Z,72nm,19.1s,baz=174,slow=36
**YAK Yakutsk 27.52 348**||*e*P **P 12 36 29.0 +0.6**
YAK pmax pmax
comp=Z,10.0nm,0.5s
**H11N2 WAKE ISLAND Hy 27.61 118** T T 13 05 39.4
baz=310,slow=75,SNR=76
**H11N1 WAKE ISLAND Hy 27.62 118** T T 13 05 37.8
baz=310,slow=75,SNR=68
**H11N3 WAKE ISLAND Hy 27.63 118** T T 13 05 35.3
baz=310,slow=75,SNR=73
**ULN Ulaanbaatar 28.04 307**||*e*P **P 12 36 34.9 +1.4**
ULN pmax pmax
comp=Z,3.0nm,1.2s
**H11S1 WAKE ISLAND Hy 28.27 120** T T 13 06 18.9
baz=312,slow=75,SNR=351
**H11S3 WAKE ISLAND Hy 28.27 120** T T 13 06 22.5
baz=312,slow=75,SNR=240
**H11S2 WAKE ISLAND Hy 28.28 120** T T 13 06 20.1
baz=312,slow=75,SNR=220
**SEY Seymchan 28.34 11**||*e*P **P 12 36 36.9 +1.1**
SEY pmax pmax
comp=Z,4.0nm,0.9s
**SONM Songino Array 28.47 306** P **P 12 36 38.0 +0.7**
comp=Z,1.4nm,0.6s,baz=103,slow=8.6,SNR=6.3
SONM LR LR 12 47 50.1
comp=Z,62nm,21.7s,baz=99,slow=36
comp=Z,1.4nm,0.6s
**SONM Songino Array 28.47 306** P **P 12 36 38.0 +0.7**
**BILL Bilibino 35.57 16** *e*P **P 12 37 40.2 +1.2**
BILL *e* 12 38 58.4
BILL *e*PPP PPP 12 39 14.4
BILL *e* 12 40 07.7
BILL pmax pmax
comp=Z,4.0nm,0.9s
**TIXI Tiksi 36.78 354** LR LR 12 53 34.1
comp=Z,41nm,20.4s,baz=180,slow=37
**CMAR Chiang Mai Arr 40.89 257** LR LR 12 57 15.2
comp=Z,73nm,18.4s,baz=30,slow=39
**ZAA0 Zalesovo Array 42.78 314** P **P 12 38 39.3 -0.2**
**ZALV Zalesovo Beam 42.78 314** P **P 12 38 39.4 0.0**
**ZALV Zalesovo Beam 42.78 314** P **P 12 38 38.9 -0.6**
comp=Z,3.0nm,0.5s,baz=88,slow=7.6,SNR=11
ZALV LR LR 12 57 31.1
comp=Z,23nm,18.0s,baz=64,slow=38
comp=Z,3.0nm,0.5s
**ZALV Zalesovo Beam 42.78 314** *e*P **P 12 38 39.0 -0.4**
ZALV pmax pmax
comp=Z,3.0nm,0.5s
**MK31 Makanchi Array 44.74 303** P **P 12 38 54.5 -0.9**
**MK31 Makanchi Array 44.74 303** *c*P **P 12 38 54.7 -0.7**
**MKAR Makanchi Array 44.74 303** P **P 12 38 54.9 -0.5**
**MKAR Makanchi Array 44.74 303** P **P 12 38 55.0 -0.3**
comp=Z,1.5nm,0.5s,baz=88,slow=9.9,SNR=14
MKAR LR LR 12 58 07.1
comp=Z,64nm,19.9s,baz=81,slow=37
comp=Z,1.5nm,0.5s
**MAKZ Makanchi 44.95 303** P **P 12 38 56.5 -0.6**
**MAKZ Makanchi 44.95 303** P **P 12 38 56.5 -0.6**
MAKZ pmax pmax
comp=Z,5.0nm,1.1s
**KAPI Kappang 45.02 211** LR LR 12 58 32.9
comp=Z,31nm,20.3s,baz=342,slow=37
**E18K Tukpahlearik C 45.66 27** P **P 12 39 02.0 -0.3**
E18K IAmb IAmb 12 39 08.3
comp=Z,9.7nm,1.1s
**K17K Iditarod 45.76 34** P **P 12 39 02.1 -1.0**
K17K IAmb IAmb 12 39 10.0
comp=Z,17nm,1.4s
**C19K Lookout Ridge 46.44 25** P **P 12 39 08.4 -0.1**
**J18K Innoko River 46.56 33** P **P 12 39 08.9 -0.6**
J18K IAmb IAmb 12 39 23.0
comp=Z,10.0nm,1.4s
**KURK Kurchatov 46.70 309** P **P 12 39 10.2 -0.5**
KURK IAmb IAmb 12 39 23.4
comp=Z,7.5nm,0.9s
**KURK Kurchatov 46.70 309***c*P **P 12 39 09.7 -1.0**
KURK pmax pmax
comp=Z,9.0nm,1.1s
**KURBB Kurchatov Arra 46.77 309** P **P 12 39 10.4 -0.8**
comp=Z,3.6nm,0.6s,baz=85,slow=8.8,SNR=16
comp=Z,3.6nm,0.6s
**E19K Redstone River 46.94 28** P **P 12 39 12.8 +0.5**
E19K IAmb IAmb 12 39 31.8
comp=Z,5.0nm,1.1s
**P18K Big Mountain, 47.00 39** P **P 12 39 12.7 -0.3**
**J19K Poorman 47.10 33** P **P 12 39 13.2 -0.4**
J19K IAmb IAmb 12 39 30.4
comp=Z,8.8nm,1.4s
**P19K Oil Pt 48.02 38** P **P 12 39 20.4 -0.5**
**HNR Honiara 48.10 155** LR LR 12 58 42.6
comp=Z,277nm,21.3s,baz=333,slow=35
**D22K Ayikyak River 48.84 26** P **P 12 39 27.4 +0.3**
D22K IAmb IAmb 12 40 02.5
comp=Z,12nm,1.4s
**SKT Skwentna 48.86 35** P **P 12 39 26.4 -0.9**
**TARG Taragay, Kyrgy 48.88 297** P **P 12 39 26.5 -1.7**
TARG IAmb IAmb 12 39 44.0
comp=Z,4.7nm,0.9s
**TARG Taragay, Kyrgy 48.88 297** P **P 12 39 26.5 -1.7**
TARG pmax pmax
comp=Z,5.0nm,0.9s
**ILAR Eielson Array 50.92 32** P **P 12 39 44.0 +1.1**
comp=Z,0.5nm,0.6s,baz=267,slow=6.7,SNR=6.3
comp=Z,0.5nm,0.6s
**ILAR Eielson Array 50.92 32** *e*P **P 12 39 44.2 +1.3**
ILAR pmax pmax
comp=Z,1.0nm,0.6s
**AAK Ala-Archa 51.02 299** LR LR 13 02 15.7
comp=Z,75nm,21.1s,baz=86,slow=37
**AAK Ala-Archa 51.02 299**||*e*P **P 12 39 43.2 -1.0**
AAK pmax pmax
comp=Z,3.0nm,0.8s

**D25K Kavik River 51.13 26** P **P 12 39 44.8 +0.3**
**BRVK Borovoye 51.49 313**||*e*P **P 12 39 47.2 -0.1**
BRVK pmax pmax
comp=Z,4.0nm,1.1s
**BMAR Burnt Mountain 51.79 28** P **P 12 39 48.2 -1.3**
**N25K Chitina, Valde 52.16 36** P **P 12 39 51.1 -1.3**
**BMRM Bremner River 52.23 36** P **P 12 39 50.8 -2.0**
**EGAK Eagle 53.37 31** P **P 12 40 02.2 +1.1**
EGAK IAmb IAmb 12 40 34.0
comp=Z,6.5nm,1.4s
**I28M Miner Creek 53.80 31** P **P 12 40 05.8 +1.4**
**G29M Pine Creek 54.38 29** P **P 12 40 08.0 -0.5**
G29M IAmb IAmb 12 40 26.3
comp=Z,12nm,1.5s
**I30M Mount Dempster 55.31 31** P **P 12 40 15.4 0.0**
**WB0 Warramunga Arr 55.33 188** P **P 12 40 15.5 -0.4**
WB0 IAmb IAmb 12 40 16.2
comp=Z,5.1nm,0.7s
**WRA Warramunga Arr 55.51 188** P **P 12 40 16.6 -0.6**
comp=Z,3.0nm,0.7s,baz=5.4,slow=7.9,SNR=48
comp=Z,3.0nm,0.7s
**WRA Warramunga Arr 55.51 188** *e*P **P 12 40 17.1 0.0**
WRA pmax pmax
comp=Z,3.0nm,0.6s
**ARU Arti 57.35 319***c i*P **P 12 40 29.3 -0.6**
ARU 12 42 33.4
ARU S **S 12 48 24.7 +0.7**
ARU SS **SS 12 52 17.0 +3.9**
ARU pmax pmax
comp=Z,24nm,2.8s
**ABKAR Akbulak array 58.75 311** P **P 12 40 39.0 -0.8**
**ASAR Alice Springs 59.24 188** P **P 12 40 43.4 0.0**
comp=Z,0.8nm,0.9s,baz=8.3,slow=8.5,SNR=19
comp=Z,0.8nm,0.9s
**KIRV Kirov 61.33 323**||*e*P **P 12 40 57.5 +0.2**
**BELG Belogornoye 64.76 317** LR LR 13 12 10.1
comp=Z,44nm,18.7s,baz=100,slow=38
**ARCES ARCESS Array B 65.35 340** P **P 12 41 24.1 +0.4**
comp=Z,0.4nm,0.4s,baz=89,slow=9.4,SNR=5.2
ARCES LR LR 13 13 02.4
comp=Z,46nm,20.1s,baz=82,slow=39
comp=Z,0.4nm,0.4s
**OBN Obninsk 69.18 323** LR LR 13 13 52.6
comp=Z,43nm,19.1s,baz=352,slow=37
**OBN Obninsk 69.18 323** *e*P **P 12 41 47.6 -0.6**
OBN *e* 12 42 11.3
OBN *e* 12 44 20.5
OBN *e*PPP PPP 12 46 03.9
OBN pmax pmax
comp=Z,3.0nm,0.8s
**FIA1 FINESS Array S 70.06 332** P **P 12 41 53.7 +0.2**
**FINES FINESS Array B 70.06 332** P **P 12 41 53.5 0.0**
**FINES FINESS Array B 70.06 332** P **P 12 41 53.0 -0.5**
comp=Z,1.6nm,0.5s,baz=70,slow=5.0,SNR=15
comp=Z,1.6nm,0.5s
**FINES FINESS Array B 70.06 332** *e*P **P 12 41 53.3 -0.2**
FINES pmax pmax
comp=Z,2.0nm,0.5s
**KBZ Khabaz 71.72 311** P **P 12 42 03.6 -0.3**
comp=Z,2.2nm,0.8s,baz=52,slow=2.5,SNR=5.6
KBZ LR LR 13 15 26.6
comp=Z,19nm,20.1s,baz=150,slow=37
comp=Z,2.2nm,0.8s
**KIV Kislovodsk 71.73 311** *e*P **P 12 42 05.3 +1.2**
KIV pmax pmax
comp=Z,8.0nm,1.1s
**NC405 NORSAR Array S 75.29 337** P **P 12 42 25.1 +0.4**
**AKASG Malin Array Be 75.36 322** P **P 12 42 24.8 -0.4**
comp=Z,1.5nm,0.5s,baz=47,slow=5.5,SNR=6.5
AKASG LR LR 13 18 37.4
comp=Z,57nm,18.5s,baz=55,slow=38
comp=Z,1.5nm,0.5s
**AKBB Malin Array Si 75.36 322** P **P 12 42 25.1 -0.1**
AKBB IAmb IAmb 12 42 25.4
comp=Z,2.9nm,0.6s
**AKBB Malin Array Si 75.36 322** P **P 12 42 25.1 -0.1**
AKBB pmax pmax
comp=Z,3.0nm,0.6s
**KIEV Kiev 75.37 322** P **P 12 42 24.6 -0.7**
KIEV IAmb IAmb 12 42 25.1
comp=Z,2.9nm,0.6s
**KIEV Kiev 75.37 322** P **P 12 42 24.6 -0.7**
KIEV pmax pmax
comp=Z,3.0nm,0.6s
**HFS Hagfors 75.38 336** P **P 12 42 24.9 -0.3**
comp=Z,1.3nm,0.7s,baz=35,slow=5.3,SNR=5.1
HFS LR LR 13 17 57.4
comp=Z,53nm,20.3s,baz=40,slow=38
comp=Z,1.3nm,0.7s
**NC204 NORSAR Array S 75.47 338** P **P 12 42 26.2 +0.5**
NC204 IAmb IAmb 12 42 26.6
comp=Z,5.0nm,0.8s
**NB201 NORSAR Array S 75.47 337** P **P 12 42 26.4 +0.7**
NB201 IAmb IAmb 12 42 40.1
comp=Z,13nm,1.4s
**NB2 NORSAR Subarra 75.50 337** P **P 12 42 26.0 +0.1**
comp=Z,1.1nm,0.6s,baz=41,slow=5.9
**NOA NORSAR Array B 75.50 337** P **P 12 42 25.8 -0.2**
comp=Z,2.0nm,0.8s,baz=40,slow=5.7,SNR=9.2
NOA LR LR 13 18 34.8
comp=Z,41nm,19.9s,baz=55,slow=38
comp=Z,2.0nm,0.8s
**NOA NORSAR Array B 75.50 337** *e*P **P 12 42 26.1 +0.1**
NOA pmax pmax
comp=Z,2.0nm,0.8s
**NBO00 NORSAR Array S 75.65 337** P **P 12 42 26.6 -0.2**
NBO00 IAmb IAmb 12 42 59.7
comp=Z,9.4nm,1.2s
**NAO01 NORSAR Array S 75.76 337** P **P 12 42 27.6 +0.2**
NAO01 IAmb IAmb 12 42 27.9
comp=Z,8.0nm,1.1s
**PDAR Pinedale Array 78.92 45** P **P 12 42 47.3 +1.6**
comp=Z,0.2nm,0.5s,baz=320,slow=4.0,SNR=2.3
comp=Z,0.2nm,0.5s
**BR131 Keskin Array S 79.69 312**||*e*P **P 12 42 48.8 -1.0**
**BRTR Keskin Array B 79.69 312** P **P 12 42 49.1 -0.7**
comp=Z,0.5nm,0.4s,baz=112,slow=5.5,SNR=4.0
comp=Z,0.5nm,0.4s
**PFO Pinyon Flats O 80.10 56** LR LR 13 13 19.7
comp=Z,41nm,19.1s,baz=244,slow=32
**MLR Muntele Rosu 80.40 320** LR LR 13 21 20.0
comp=Z,52nm,18.3s,baz=96,slow=38
**ULM Lac du Bonnet 80.92 33** LR LR 13 23 33.6
comp=Z,15nm,18.1s,baz=46,slow=39
**CLL Collm 82.30 330** *e*P **P 12 43 03.0 -0.3**
**KHC Kasperske Hory 83.72 328**||*i*P **P 12 43 11.0 +0.2**
KHC pmax pmax
comp=Z,7.0nm,1.3s
**SCHQ Schefferville 86.88 16** LR LR 13 24 20.6
comp=Z,22nm,20.4s,baz=344,slow=37
comp=Z,15nm,21.0s,baz=261,slow=33
**TXAR Lajitas Array 91.25 52** LR LR 13 20 47.9
**ESDC Sonseca Array 98.55 333** LR LR 13 32 50.2
comp=Z,24nm,18.2s,baz=292,slow=38

*IDC **03** 12:40:14.5±1.8, 4.°77S×102.°82E, h0km, mb4.0/8, mbtmp4.0/8, MS3.6/2, Error ellipse: s-maj=87.6km s-min=16.9km az=52.0*
*DJA **03** 12:40:21.5±2.0, 5.°S±26.°×10.°3E±1.°8, h37km±88km, M4.2/5, MLv4.2/5*
*NEIC **03** 12:40:24.3±0.8, 4.°62S±0.°09×103.°0E±0.°2, h72km±6km, mb4.5/20, Error ellipse: s-maj=24.5km s-min=8.7km az=65.0*

**ISC 03 12:40:21.9±0.7, 4.°6S±0.°1×103.°0E±0.°1, h50km, n52,**
σ1§17/41, **mb4.4**/18, **Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LWLI** | **Liwa** | **1.15** | **111** | P | **Pn** | **12 40 43.1** | **+1.4** |
| LWLI | | | | S | **Sn** | **12 40 59.8** | **+3.4** |
| **KASI** | **Kota Agung** | **1.76** | **121** | P | **Pn** | **12 40 50.4** | **+0.4** |
| **PMBI** | **Palembang** | **2.45** | **47** | P | Pn | 12 41 08.2 | +8.8 |
| **PDSI** | **Padang** | **4.45** | **326** | P | **Pn** | **12 41 29.4** | **+2.5** |
| **XMIS** | **Christmas Isla** | **6.40** | **156** | Pn | **Pn** | **12 41 56.0** | **+2.3** |
| **GSI** | **Gunungsitoli** | **7.98** | **317** | Pn | **Pn** | **12 42 17.7** | **+2.4** |
| **TOLI2** | **Tolitoli** | **18.67** | **73** | P | **P** | **12 44 35.9** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **23.27** | **350** | P | **P** | **12 45 24.2** | **-1.0** |
| **TNTI** | **Ternate** | **24.94** | **78** | P | **P** | **12 45 40.2** | **-0.6** |
| TNTI | | | | IAmb | IAmb | 12 45 59.8 | |
| | comp=Z,54nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **27.62** | **115** | P | **P** | **12 46 05.7** | **+0.8** |
| KNRA | | | | IAmb | IAmb | 12 46 26.3 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **SAUI** | **Saumlaki** | **28.34** | **98** | P | **P** | **12 46 09.8** | **-1.7** |
**H08S2 Diego Garcia H 30.46 263** T T 13 17 34.0
baz=87,slow=75,SNR=7.2
**H08S3 Diego Garcia H 30.46 263** T T 13 17 37.5
baz=87,slow=75,SNR=9.8
**H08S1 Diego Garcia H 30.48 263** T T 13 17 30.4
baz=87,slow=75,SNR=5.5
**WB0 Warramunga Arr 34.10 119** P **P 12 47 01.6 -0.5**
WB0 IAmb IAmb 12 47 23.1
comp=Z,4.0nm,1.1s
**WRA Warramunga Arr 34.12 119** P **P 12 47 01.4 -0.8**
**WRA Warramunga Arr 34.12 119** P **P 12 47 01.3 -0.9**
comp=Z,0.6nm,0.8s,baz=300,slow=11,SNR=16
comp=Z,0.6nm,0.8s
**WRAB Tennant Creek 34.13 119** P **P 12 47 02.0 -0.3**
WRAB IAmb IAmb 12 47 12.5
comp=Z,14nm,1.4s
**WB2 Warramunga Arr 34.13 119** P **P 12 47 01.8 -0.5**
WB2 IAmb IAmb 12 47 20.8
comp=Z,6.7nm,1.3s
**WR0 Warramunga Arr 34.30 119** P **P 12 47 02.6 -1.2**
WR0 IAmb IAmb 12 47 23.4
comp=Z,10nm,1.5s
**AS31 Alice Springs 35.32 125** P **P 12 47 12.2 -0.4**
**ASAR Alice Springs 35.32 125** P **P 12 47 12.1 -0.5**
comp=Z,0.3nm,0.4s,baz=293,slow=7.1,SNR=19
comp=Z,0.3nm,0.4s
**STKA Stephens Creek 45.20 132** P **P 12 48 32.6 -1.7**
**STKA Stephens Creek 45.20 132** P **P 12 48 34.0 -0.2**
comp=Z,2.8nm,0.5s,baz=313,slow=6.4,SNR=6.4
comp=Z,2.8nm,0.5s
**GUMO Guam 45.34 66** P **P 12 48 34.4 -1.1**
**JHJ Hachijo jima 2 51.22 40** LR LR 13 09 53.0
comp=Z,65nm,21.1s,baz=354,slow=35
**SONM Songino Array 52.31 3** P **P 12 49 29.9 +1.3**
**SONM Songino Array 52.31 3** P **P 12 49 29.8 +1.2**
comp=Z,1.4nm,0.8s,baz=178,slow=10,SNR=6.4
comp=Z,1.4nm,0.8s
**MK31 Makanchi Array 54.36 343** P **P 12 49 42.9 -0.7**
MK31 IAmb IAmb 12 49 44.1
comp=Z,2.3nm,0.7s
**MKAR Makanchi Array 54.36 343** P **P 12 49 43.0 -0.5**
**MKAR Makanchi Array 54.36 343** P **P 12 49 43.6 0.0**
comp=Z,1.7nm,0.5s,baz=147,slow=8.5,SNR=15
comp=Z,1.7nm,0.5s
**JTM Tenmabayashi 57.06 34** P **P 12 50 03.2 +0.2**
**KURBB Kurchatov Arra 58.91 342** P **P 12 50 15.8 +0.1**
comp=Z,0.8nm,0.2s,baz=152,slow=6.3,SNR=0.9
comp=Z,0.8nm,0.2s
**ZAA0 Zalesovo Array 60.30 348** P **P 12 50 25.2 0.0**
ZAA0 IAmb IAmb 12 50 25.7
comp=Z,2.8nm,0.6s
**ZALV Zalesovo Beam 60.30 348** P **P 12 50 25.3 0.0**
**ZALV Zalesovo Beam 60.30 348** P **P 12 50 25.0 -0.2**
comp=Z,2.2nm,0.4s,baz=169,slow=4.0,SNR=13
comp=Z,2.2nm,0.4s
**H04N2 CROZET ISLANDS 60.55 218** T T 13 54 56.3
baz=62,slow=75,SNR=20
**H04N1 CROZET ISLANDS 60.56 218** T T 13 54 55.9
baz=62,slow=75,SNR=18
**H04N3 CROZET ISLANDS 60.56 218** T T 13 54 58.2
baz=62,slow=75,SNR=26
**H04S1 CROZET ISLANDS 60.78 218** T T 13 55 14.8
baz=62,slow=75,SNR=5.0
**H04S3 CROZET ISLANDS 60.80 218** T T 13 55 11.9
baz=62,slow=75,SNR=12
**H04S2 CROZET ISLANDS 60.80 218** T T 13 55 11.4
baz=62,slow=75,SNR=5.5
**ABKAR Akbulak array 65.35 331** P **P 12 50 58.4 -0.5**
**MCQ Macquarie Isla 67.03 148** P **P 12 51 09.7 0.0**
**YAK Yakutsk 69.55 13** LR LR 13 25 41.7
comp=Z,36nm,18.5s,baz=224,slow=39
**KBZ Khabaz 72.22 319** P **P 12 51 42.2 +0.4**
comp=Z,0.7nm,0.3s,baz=148,slow=7.0,SNR=2.3
comp=Z,0.7nm,0.3s
**BKZ Black Stump Fm 74.33 129** P **P 12 51 53.6 -0.9**
BKZ IAmb IAmb 12 52 11.3
comp=Z,18nm,1.4s
**BR131 Keskin Array S 77.27 312** P **P 12 52 10.5 -0.9**
BR131 IAmb IAmb 12 52 16.7
comp=Z,5.8nm,1.4s
**BRTR Keskin Array B 77.27 312** P **P 12 52 10.3 -1.0**
**FIA1 FINESS Array S 87.79 332** P **P 12 53 05.1 -0.3**
**FINES FINESS Array B 87.79 332** P **P 12 53 04.1 -1.3**
**TXAR Lajitas Array 144.77 43** PKPbc **PKPab 12 59 53.1 +0.1**
comp=Z,0.6nm,0.7s,baz=280,slow=1.4,SNR=8.6

**IDC 03 12:40:29.7±3.9, 24.°09N×95.°41E, h130km±40km, mb2.9/3, mbtmp3.2/4, Error ellipse: s-maj=174.2km s-min=24.4km az=60.0, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **6.51** | **149** | P | Pn | 12 42 03.1 | 0.0 |
| | 0.8nm,0.6s,baz=326,slow=14,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.98** | **338** | P | P | 12 45 41.1 | 0.0 |
| | 0.6nm,0.7s,baz=146,slow=10,SNR=3.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.92** | **136** | P | P | 12 50 08.1 | -0.4 |
| | 0.4nm,0.8s,baz=320,slow=7.7,SNR=4.9 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **60.41** | **139** | P | P | 12 50 26.1 | +0.5 |
| | 0.1nm,0.7s,baz=322,slow=6.7,SNR=1.0 | | | | | | |
| | 0.1nm,0.7s | | | | | | |

*SOME **03** 12:54:53.4, 43.°72N×81.°32E, h5km*
*NNC **03** 12:54:55.2±1.9, 43.°48N×81.°28E, h0km, mb3.5, mpv3.4, Error ellipse: s-maj=12.9km s-min=9.1km az=128.0, Suspected Mining explosion.*

**ISC 03 12:54:49.4±1.9, 43.°43N±0.°07×81.°60E±0.°08, h0km, n23,**
σ1§19/37, **2C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PDGK** | **Podgornoye** | **1.54** | **267** | P | **Pn** | **12 55 19.0** | **+0.8** |
| | 2.8nm,0.2s | | | | | | |
| PDGK | | | | S | **Sg** | **12 55 37.5** | **-1.4** |
| | 9.0nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **1.54** | **267** | ||P | **Pg** | **12 55 19.5** | **+0.6** |
| | 1.5nm,0.2s | | | | | | |
| PDGK | | | | ⇑S | **Sg** | **12 55 37.1** | **-1.8** |
| | 12nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **1.58** | **261** | *e*P | **Pn** | **12 55 15.7** | **-3.1** |
| | 34nm,0.1s | | | | | | |
| SHLS | | | | *e*S | Sg | 12 55 31.3 | -8.9 |
| | 46nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **1.58** | **261** | P | **Pn** | **12 55 15.7** | **-3.1** |
| | 34nm,0.1s | | | | | | |
| SHLS | | | | S | Sg | 12 55 31.3 | -8.9 |
| | 46nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.59** | **305** | *e*P | **Pb** | **12 55 19.7** | **0.0** |
| | 5.1nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **12 55 38.3** | **-2.1** |
| | 14nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.59** | **305** | P | **Pg** | **12 55 20.9** | **+1.1** |
| | 5.1nm,0.2s | | | | | | |
| DJR | | | | S | **Sn** | **12 55 41.0** | **+0.8** |
| | 14nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **1.90** | **262** | *e*P | **Pg** | **12 55 27.0** | **+1.2** |
| | 15nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sg** | **12 55 51.3** | **+0.8** |
| | 19nm,0.7s | | | | | | |
| **UZB** | **Uzynbulak** | **1.90** | **262** | P | **Pg** | **12 55 27.0** | **+1.2** |
| | 15nm,0.2s | | | | | | |
| UZB | | | | S | **Sg** | **12 55 51.3** | **+0.8** |
| | 19nm,0.7s | | | | | | |
| **KNOS** | **Konyrlen** | **1.98** | **299** | P | **Pb** | **12 55 27.0** | **+0.6** |
| | 2.3nm,0.2s | | | | | | |
| KNOS | | | | S | **Sb** | **12 55 51.4** | **-0.3** |
| | 5.0nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **2.12** | **272** | *e*P | **Pb** | **12 55 29.6** | **+0.8** |
| | 14nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **12 55 55.8** | **+0.1** |
| | 38nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **2.12** | **272** | Pg | **Pb** | **12 55 29.6** | **+0.8** |
| | 14nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 12 55 55.8 | |
| | 38nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **2.33** | **265** | *e*P | **Pg** | **12 55 34.3** | **+0.4** |
| | 6.1nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **12 56 03.8** | **-0.2** |
| | 22nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.33** | **265** | Pg | **Pg** | **12 55 34.3** | **+0.4** |
| | 6.1nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 12 56 03.8 | |
| | 22nm,0.2s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BLB** | **Baldybastay** | **2.36** | **288** | Pg | | **Pb** | **12 55 33.3** | **+0.5** |
| | 57nm,0.2s | | | | | | | |
| BLB | | | | Lg | | Lg | 12 56 01.8 | |
| | 42nm,0.3s | | | | | | | |
| **SATY** | **Saty** | **2.36** | **262** | *eP* | | **Pg** | **12 55 34.8** | **+0.2** |
| | 18nm,0.2s | | | | | | | |
| SATY | | | | *eS* | | **Sg** | **12 56 04.6** | **-0.7** |
| | 14nm,0.2s | | | | | | | |
| **SATY** | **Saty** | **2.36** | **262** | Pg | | **Pg** | **12 55 34.8** | **+0.2** |
| | 18nm,0.2s | | | | | | | |
| SATY | | | | Lg | | Lg | 12 56 04.6 | |
| | 14nm,0.2s | | | | | | | |
| **KURS** | **Kuram** | **2.50** | **273** | *eP* | | **Pb** | **12 55 36.0** | **+0.9** |
| | 3.6nm,0.4s | | | | | | | |
| KURS | | | | *eS* | | **Sb** | **12 56 06.7** | **+0.2** |
| | 5.0nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **2.50** | **273** | Pg | | **Pb** | **12 55 36.0** | **+0.9** |
| | 3.6nm,0.4s | | | | | | | |
| KURS | | | | Lg | | Lg | 12 56 06.7 | |
| | 5.0nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **2.84** | **287** | *eP* | | **Pb** | **12 55 41.9** | **+0.9** |
| | 3.0nm,0.2s | | | | | | | |
| ARXS | | | | *eS* | | **Sb** | **12 56 16.9** | **+0.5** |
| | 15nm,0.3s | | | | | | | |
| **ARXS** | **Arharly** | **2.84** | **287** | Pg | | **Pb** | **12 55 40.3** | **-0.7** |
| | 3.3nm,0.3s | | | | | | | |
| ARXS | | | | Lg | | Lg | 12 56 15.1 | |
| | 15nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **3.40** | **8** | ⇓Pn | | **Pb** | **12 55 50.9** | **+0.4** |
| | baz=185,slow=17,SNR=10 | | | | | | | |
| MK31 | | | | ⇑Sn | | **Sb** | **12 56 33.4** | **+1.0** |
| | 1.7nm,0.6s,baz=204,slow=24,SNR=4.9 | | | | | | | |
| **KTBS** | **Karatobe** | **3.58** | **276** | *eP* | | **Pb** | **12 55 55.1** | **+1.4** |
| | 0.4nm,0.1s | | | | | | | |
| KTBS | | | | *eS* | | **Sb** | **12 56 39.4** | **+1.7** |
| | 6.2nm,0.4s | | | | | | | |
| **KTBS** | **Karatobe** | **3.58** | **276** | Pg | | **Pb** | **12 55 53.8** | **+0.1** |
| | 1.5nm,0.4s | | | | | | | |
| KTBS | | | | Lg | | Lg | 12 56 37.3 | |
| | 3.5nm,0.4s | | | | | | | |

*GUC **03** 12:59:06.1±0.9,28°.84S×71°.25W, h45km±6km, ML3.8*
*SJA **03** 12:59:07.0±0.7,28°.81S×71°.29W, h33km±2km, ML3.9, MW4.0*

**ISC 03 12:59:05.0**±1.9,**28°.75S**±0°.02×**71°.37W**±0°.05,**h12**km±14km,
**n35**,σ1°**73**/64,**2C-4D**,**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AC04** | **Llanos de Chal** | **0.61** | **25** | *eP* | | **Pn** | | **12 59 20.5** | **+1.0** |
| AC04 | | | | *eS* | | **Sn** | | **12 59 30.0** | **+0.8** |
| AC04 | | | | IAML | | | | 12 59 31.9 | |
| | comp=Z,4μm,0.3s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **0.61** | **25** | ⇓*iP* | | **Pn** | | **12 59 20.7** | **+1.2** |
| AC04 | | | | *i* S | | **Sn** | | **12 59 30.2** | **+1.0** |
| AC04 | | | | IAML | | | | 12 59 31.3 | |
| | comp=E,10μm,0.2s | | | | | | | | |
| **LCO** | **Las Campanas** | **0.64** | **114** | *eP* | | **Pn** | | **12 59 19.5** | **-0.6** |
| LCO | | | | *eS* | | **Sn** | | **12 59 28.5** | **-1.9** |
| **LCO** | **Las Campanas** | **0.64** | **114** | *i* P | | **Pb** | | **12 59 18.6** | **+0.3** |
| LCO | | | | *i* S | | **Sn** | | **12 59 28.2** | **-2.2** |
| **AC05** | **El Transito** | **0.96** | **95** | *eP* | | **Pn** | | **12 59 24.5** | **0.0** |
| AC05 | | | | *eS* | | **Sn** | | **12 59 37.3** | **-1.0** |
| AC05 | | | | IAML | | | | 12 59 39.6 | |
| | comp=Z,1μm,0.4s | | | | | | | | |
| **CO05** | **La Serena** | **1.17** | **174** | ⇓*iP* | | **Pb** | | **12 59 27.1** | **0.0** |
| CO05 | | | | *i* S | | **Sb** | | **12 59 41.0** | **-1.2** |
| CO05 | | | | IAML | | | | 12 59 43.5 | |
| | comp=E,3μm,0.8s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.50** | **161** | *eP* | | **Pn** | | **12 59 32.2** | **+0.2** |
| GO04 | | | | *eS* | | **Sn** | | **12 59 51.7** | **+0.1** |
| GO04 | | | | *eS* | | | | 12 59 51.8 | |
| GO04 | | | | IAML | | | | 12 59 55.8 | |
| | comp=Z,2μm,0.6s | | | | | | | | |
| **GO04** | **Tololo Observa** | **1.50** | **161** | ⇑*iP* | | **Pn** | | **12 59 32.2** | **+0.2** |
| GO04 | | | | *i* S | | **Sn** | | **12 59 50.2** | **-1.4** |
| **GO03** | **Copiap** | **1.53** | **41** | *eP* | | **Pn** | | **12 59 33.0** | **+0.8** |
| GO03 | | | | *eS* | | **Sg** | | **12 59 54.2** | **0.0** |
| GO03 | | | | IAML | | | | 12 59 57.2 | |
| | comp=Z,1μm,0.6s | | | | | | | | |
| **GO03** | **Copiap** | **1.53** | **41** | *eP* | | **Pn** | | **12 59 33.0** | **+0.8** |
| GO03 | | | | *i* S | | **Sb** | | **12 59 52.9** | **+0.2** |
| GO03 | | | | IAML | | | | 12 59 54.1 | |
| | comp=E,2μm,0.2s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.65** | **138** | *eP* | | **Pn** | | **12 59 35.1** | **+1.0** |
| CO01 | | | | *eS* | | **Sn** | | **12 59 55.3** | **0.0** |
| CO01 | | | | IAML | | | | 12 59 57.1 | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.65** | **138** | ⇓*iP* | | **Pn** | | **12 59 35.0** | **+0.9** |
| CO01 | | | | *i* S | | **Sn** | | **12 59 54.5** | **-0.9** |
| CO01 | | | | IAML | | | | 12 59 56.7 | |
| | comp=N,1μm,0.2s | | | | | | | | |
| **AC06** | **Mina Casimiro** | **1.66** | **33** | ⇓*iP* | | **Pn** | | **12 59 35.7** | **+1.8** |
| AC06 | | | | *i* S | | **Sn** | | **12 59 55.9** | **+0.7** |
| AC06 | | | | IAML | | | | 12 59 58.8 | |
| | comp=E,2μm,0.2s | | | | | | | | |
| **CO06** | **Fray Jorge** | **1.93** | **187** | ⇑*iP* | | **Pn** | | **12 59 37.1** | **-0.5** |
| CO06 | | | | IAML | | | | 13 00 12.1 | |
| | comp=E,751nm,0.1s | | | | | | | | |
| **CO03** | **El Pedregal** | **2.16** | **164** | *eP* | | **Pn** | | **12 59 41.0** | **0.0** |
| CO03 | | | | IAML | | | | 13 00 16.9 | |
| | comp=Z,572nm,0.7s | | | | | | | | |
| **CO03** | **El Pedregal** | **2.16** | **164** | *eP* | | **Pn** | | **12 59 41.3** | **+0.3** |
| CO03 | | | | *i* S | | **Sn** | | **13 00 07.0** | **-0.8** |
| CO03 | | | | IAML | | | | 13 00 15.7 | |
| | comp=E,1μm,0.3s | | | | | | | | |
| **AROD** | **Rodeo** | **2.17** | **131** | *eP* | | **Pb** | | **12 59 43.8** | **-0.6** |
| AROD | | | | *eS* | | **Sb** | | **13 00 11.2** | **-0.3** |
| **ACDV** | **Cuesta del Vie** | **2.42** | **126** | *eP* | | **Pb** | | **12 59 47.3** | **-1.2** |
| ACDV | | | | IAML | | | | 13 00 19.7 | |
| | comp=Z,532nm,0.4s | | | | | | | | |
| ACDV | | | | *eS* | | **Sb** | | **13 00 19.7** | **+1.3** |
| **CO02** | **Combarbal** | **2.46** | **173** | *eP* | | **Pn** | | **12 59 45.0** | **-0.1** |
| CO02 | | | | *eS* | | Sn | | 12 59 59.4 | -16 |
| CO02 | | | | IAML | | | | 13 00 28.9 | |
| | comp=Z,498nm,0.4s | | | | | | | | |
| **CO02** | **Combarbal** | **2.46** | **173** | *eP* | | **Pn** | | **12 59 45.0** | **-0.1** |
| CO02 | | | | *i* S | | **Sn** | | **13 00 14.8** | **-0.4** |
| CO02 | | | | IAML | | | | 13 00 27.8 | |
| | comp=E,3μm,0.2s | | | | | | | | |
| **AC01** | **Pan de Azucar** | **2.69** | **15** | *eP* | | **Pn** | | **12 59 48.0** | **-0.1** |
| AC01 | | | | *eP* | | | | 12 59 48.1 | |
| AC01 | | | | *eS* | | **Sg** | | **13 00 32.4** | **+1.1** |
| AC01 | | | | IAML | | | | 13 00 34.6 | |
| | comp=Z,347nm,0.6s | | | | | | | | |
| **AC01** | **Pan de Azucar** | **2.69** | **15** | *eP* | | **Pn** | | **12 59 48.1** | **0.0** |
| AC01 | | | | IAML | | | | 13 00 36.5 | |
| | comp=E,359nm,0.3s | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.71** | **133** | *eP* | | **Pn** | | **12 59 51.7** | **+3.0** |
| ACCO | | | | *eS* | | **Sb** | | **13 00 24.7** | **-2.3** |
| **VCA** | **Vinchina** | **2.78** | **90** | *eP* | | **Pb** | | **12 59 53.2** | **-1.5** |
| VCA | | | | *eS* | | **Sb** | | **13 00 25.7** | **-3.0** |
| VCA | | | | IAML | | | | 13 00 37.4 | |
| | comp=Z,603nm,0.3s | | | | | | | | |
| **DOCA** | **Reserva Natura** | **2.95** | **138** | *eP* | | **Pn** | | **12 59 54.2** | **+2.1** |
| DOCA | | | | *eP* | | | | 12 59 55.2 | |
| DOCA | | | | *eS* | | **Sn** | | **13 00 28.9** | **+1.2** |
| DOCA | | | | IAML | | | | 13 00 43.7 | |
| | comp=Z,248nm,0.8s | | | | | | | | |
| **RTLS** | **Leoncito** | **3.52** | **150** | *eP* | | **Pn** | | **13 00 03.2** | **+3.3** |
| RTLS | | | | *eS* | | **Sn** | | **13 00 44.1** | **+2.4** |
| RTLS | | | | IAML | | | | 13 01 03.1 | |
| | comp=Z,623nm,0.9s | | | | | | | | |
| **AVFE** | **Valle Fertil** | **3.90** | **120** | *eP* | | **Pn** | | **13 00 07.0** | **+2.1** |
| AVFE | | | | *eS* | | **Sn** | | **13 00 48.0** | **-2.6** |
| AVFE | | | | IAML | | | | 13 00 59.3 | |
| | comp=Z,330nm,0.6s | | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **3.92** | **101** | *eP* | | **Pn** | | **13 00 07.4** | **+2.2** |
| ACLC | | | | *eS* | | **Sn** | | **13 00 55.2** | **+3.9** |
| ACLC | | | | IAML | | | | 13 01 00.6 | |
| | comp=Z,179nm,1.0s | | | | | | | | |
| **VA03** | **San Esteban** | **4.06** | **170** | *eP* | | **Pn** | | **13 00 08.1** | **+1.1** |
| VA03 | | | | *eS* | | **Sn** | | **13 00 56.2** | **+1.7** |
| VA03 | | | | IAML | | | | 13 01 12.7 | |
| | comp=Z,226nm,0.5s | | | | | | | | |
| **PB14** | **IPOC Station P** | **4.20** | **12** | *eP* | | **Pn** | | **13 00 08.8** | **-0.5** |
| PB14 | | | | *eS* | | **Sb** | | **13 01 07.2** | **-2.7** |
| PB14 | | | | *eS* | | | | 13 01 13.7 | |
| PB14 | | | | IAML | | | | 13 01 19.6 | |
| | comp=Z,141nm,0.7s | | | | | | | | |
| **ASAL** | **Salagasta** | **4.40** | **151** | *eP* | | **Pn** | | **13 00 14.4** | **+2.6** |
| ASAL | | | | *eS* | | **Sb** | | **13 01 10.6** | **-4.9** |
| ASAL | | | | IAML | | | | 13 01 30.4 | |
| | comp=Z,112nm,0.7s | | | | | | | | |
| **MT02** | **Curacav** | **4.50** | **178** | *eP* | | **Pn** | | **13 00 12.5** | **-0.4** |
| MT02 | | | | *eS* | | **Sn** | | **13 01 07.2** | **+2.0** |
| MT02 | | | | IAML | | | | 13 01 32.7 | |
| | comp=Z,113nm,0.6s | | | | | | | | |
| **ARCO** | **CERRO ARCO** | **4.58** | **153** | *eP* | | **Pn** | | **13 00 17.8** | **+3.5** |
| ARCO | | | | *eS* | | **Sn** | | **13 01 07.2** | **-0.4** |
| ARCO | | | | IAML | | | | 13 01 20.6 | |
| | comp=Z,149nm,0.7s | | | | | | | | |
| **ACHE** | **Chepes** | **4.73** | **122** | *eP* | | **Pn** | | **13 00 17.9** | **+1.6** |
| **MT04** | **Ro Olivares** | **4.75** | **167** | *eS* | | **Sb** | | **13 01 28.5** | **+2.8** |
| MT04 | | | | IAML | | | | 13 01 38.2 | |
| | comp=Z,66nm,0.7s | | | | | | | | |

*JMA **03** 13:07:00.4±0.2,30°N±1°×13°7E±°, h539km±3km, MD5.0/36, MW4.9/36, SHIKOKU BASIN*
*NIED **03** 13:07:00.4,30°.36N×137°.47E, h539km, MW4.9, Moment Tensor Solution. s3 Moment tensor: Scale 10^16^Nm; Mrr-1.69; Mθθ1.50; Mφφ0.19; Mrθ1.15; Mrφ1.88; Mθφ-0.87; Fault plane solution: M0 2.86000×10^16^ NP1: φs267.00000°, δ62.00000°, λ-45.00000°. NP2:φs22.00000°, δ52.00000°, λ-143.00000°.*
*BJI **03** 13:07:02.2±0.0,30°.38N×137°.23E, h507km, mb5.1/75, mB4.8/23*
*MOS **03** 13:07:02.6±0.8,30°.39N×137°.15E, h505km, mb4.6/33, Error ellipse: s-maj=7.9km s-min=4.3km az=107.8*
*IDC **03** 13:07:03.4±0.5,30°.41N×137°.20E, h500km±4km, mb3.9/27, mbtmp4.9/35,Error ellipse: s-maj=9.9km s-min=6.0km az=74.0*
*NEIC **03** 13:07:03.2±1.4,30°.38N±0°.04×137°.2E±0°.1, h494km±7km, mb4.6/120,Error ellipse: s-maj=13.8km s-min=3.5km az=66.0*

**ISC 03 13:07:03.4**±0.3,**30°.38N**±0°.03×**137°.21E**±0°.04,**h506**km±3km,
**h506**km:**pP-P**,**n671**,σ1**928**/754,**mb4.6**/139,**40C-12D**,
**Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TTO1** | **TONANKAI O.B.S** | **3.26** | **354** | P | | **P** | | **13 08 17.8** | **+1.7** |
| **TTO2** | **TONANKAI O.B.S** | **3.35** | **357** | A | | A | | 13 08 17.6 | |
| | comp=E,13nm,2.7s,comp=N,9.0nm,1.6s | | | | | | | | |
| **TTO3** | **TONANKAI O.B.S** | **3.48** | **3** | A | | A | | 13 08 18.4 | |
| | comp=E,22nm,1.8s,comp=N,13nm,3.1s | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **3.50** | **38** | P | | **P** | | **13 08 17.6** | **-0.7** |
| | comp=N,939nm,0.7s,baz=311,slow=14,SNR=189 | | | | | | | | |
| JHJ | | | | S | | **S** | | **13 09 13.1** | **-6.3** |
| | comp=N,207nm,0.3s,baz=259,slow=23,SNR=4.8 | | | | | | | | |
| **JHJ2** | **Mitsune** | **3.52** | **38** | P | | **P** | | **13 08 17.5** | **-0.8** |
| **JHJ2** | **Mitsune** | **3.52** | **38** | P | | **P** | | **13 08 16.9** | **-1.4** |
| **JHJ2** | **Mitsune** | **3.52** | **38** | *i* P | | **P** | | **13 08 17.5** | **-0.8** |
| **TTO4** | **TONANKAI O.B.S** | **3.63** | **4** | A | | A | | 13 08 19.4 | |
| | comp=E,13nm,5.6s,comp=N,15nm,2.6s | | | | | | | | |
| **JTNC** | **Tanabenakahech** | **3.69** | **339** | P | | **P** | | **13 08 20.4** | **+0.7** |
| JTNC | | | | *eS* | | **S** | | **13 09 22.0** | **-0.1** |
| **JWM** | **Minabe** | **3.81** | **336** | A | | A | | 13 08 21.5 | |
| | comp=E,6.0nm,1.9s,comp=N,2.0nm,2.2s | | | | | | | | |
| **JKN2** | **Miekihoku** | **3.93** | **349** | A | | A | | 13 08 22.1 | |
| | comp=E,4.0nm,2.7s,comp=N,3.0nm,3.0s | | | | | | | | |
| **JIE** | **Ise** | **4.03** | **354** | P | | **P** | | **13 08 23.3** | **+1.0** |
| JIE | | | | S | | **S** | | **13 09 26.9** | **+0.2** |
| **JIE** | **Ise** | **4.03** | **354** | A | | A | | 13 08 23.3 | |
| | comp=E,6.0nm,2.5s,comp=N,3.0nm,2.9s | | | | | | | | |
| **JSG** | **Sagara** | **4.37** | **11** | P | | **P** | | **13 08 26.9** | **+1.9** |
| **JSG** | **Sagara** | **4.37** | **11** | P | | **P** | | **13 08 24.2** | **-0.8** |
| **JMN** | **Monobe** | **4.38** | **321** | P | | **P** | | **13 08 26.7** | **+1.5** |
| **JMN** | **Monobe** | **4.38** | **321** | P | | **P** | | **13 08 26.4** | **+1.1** |
| **JMN** | **Monobe** | **4.38** | **321** | A | | A | | 13 08 26.4 | |
| | comp=E,3.0nm,1.6s,comp=N,4.0nm,4.0s | | | | | | | | |
| **JTO** | **Tosashimizu** | **4.50** | **304** | *i* P | | **P** | | **13 08 27.6** | **+1.4** |
| JTO | | | | S | | **S** | | **13 09 35.4** | **+1.4** |
| **SHZ3** | **Shizuoka 3** | **4.75** | **10** | A | | A | | 13 08 28.0 | |
| | comp=E,3.0nm,2.8s,comp=N,2.0nm,1.6s | | | | | | | | |
| **JMIK** | **Miki** | **4.78** | **338** | A | | A | | 13 08 29.3 | |
| | comp=E,5.0nm,2.7s,comp=N,4.0nm,2.4s | | | | | | | | |
| **INU** | **Inuyama** | **4.96** | **358** | P | | **P** | | **13 08 30.8** | **+0.6** |
| **INU** | **Inuyama** | **4.96** | **358** | P | | **P** | | **13 08 30.0** | **-0.2** |
| **JOD2** | **Odawara 2** | **5.12** | **17** | *i* P | | **P** | | **13 08 30.3** | **-1.4** |
| JOD2 | | | | *eS* | | **S** | | **13 09 40.4** | **-3.5** |
| **JGF** | **Kuroka** | **5.21** | **1** | P | | **P** | | **13 08 32.9** | **+0.4** |
| **JGF** | **Kuroka** | **5.21** | **1** | P | | **P** | | **13 08 31.8** | **-0.7** |
| **BSO1** | **Boso 1** | **5.32** | **36** | *i* P | | **P** | | **13 08 30.4** | **-2.5** |
| BSO1 | | | | S | | **S** | | **13 09 41.5** | **-4.6** |
| **CBIJ** | **Chichi jima** | **5.45** | **126** | P | | **P** | | **13 08 31.6** | **-3.3** |
| CBIJ | | | | *eS* | | **S** | | **13 09 42.2** | **-7.4** |
| **CBIJ** | **Chichi jima** | **5.45** | **126** | A | | A | | 13 08 31.6 | |
| | comp=E,4.0nm,1.4s,comp=N,6.0nm,3.4s | | | | | | | | |
| **JCJ** | **Chichijima** | **5.45** | **126** | P | | **P** | | **13 08 31.4** | **-3.5** |
| **JCJ** | **Chichijima** | **5.45** | **126** | P | | **P** | | **13 08 30.9** | **-4.0** |
| **JCJ** | **Chichijima** | **5.45** | **126** | P | | P | | 13 08 26.9 | -8.0 |
| | comp=N,105nm,0.3s,baz=173,slow=8.0,SNR=42 | | | | | | | | |
| JCJ | | | | S | | S | | 13 09 37.5 | -12 |
| | comp=N,370nm,0.5s,baz=254,slow=21,SNR=16 | | | | | | | | |
| **TOK** | **Tokyo** | **5.71** | **21** | A | | A | | 13 08 36.0 | |
| | comp=E,5.0nm,0.8s,comp=N,6.0nm,1.3s | | | | | | | | |
| **JHH2** | **Haha-jima-NKT2** | **5.74** | **129** | A | | A | | 13 08 35.2 | |
| | comp=E,14nm,0.5s,comp=N,11nm,0.5s | | | | | | | | |
| **JHS** | **Saijyo** | **5.76** | **324** | P | | **P** | | **13 08 38.4** | **+0.9** |
| JHS | | | | *eS* | | **S** | | **13 09 55.0** | **+0.3** |
| **JRY** | **Ryogami san** | **5.80** | **14** | *i* P | | **P** | | **13 08 37.0** | **-0.9** |
| JRY | | | | *eS* | | **S** | | **13 09 50.8** | **-4.6** |
| **JNU** | **Nakatsue** | **6.05** | **299** | P | | **P** | | **13 08 41.3** | **+0.9** |
| **JNU** | **Nakatsue** | **6.05** | **299** | P | | **P** | | **13 08 41.4** | **+0.9** |
| **JNU** | **Nakatsue** | **6.05** | **299** | P | | **P** | | **13 08 41.6** | **+1.2** |
| | comp=N,286nm,0.4s,baz=58,slow=3.0,SNR=779 | | | | | | | | |
| **JNG** | **Nsakai** | **6.06** | **7** | A | | A | | 13 08 39.8 | |
| | comp=E,3.0nm,2.1s,comp=N,2.0nm,1.5s | | | | | | | | |
| **MAJO** | **Matsushiro** | **6.21** | **7** | P | | **P** | | **13 08 40.7** | **-1.1** |
| **MAJO** | **Matsushiro** | **6.21** | **7** | P | | **P** | | **13 08 40.7** | **-1.1** |
| **MJAR** | **Matsushiro Arr** | **6.21** | **7** | P | | **P** | | **13 08 40.7** | **-1.1** |
| | comp=N,158nm,0.8s,baz=180,slow=10.0,SNR=250 | | | | | | | | |
| MJAR | | | | S | | **S** | | **13 09 57.8** | **-4.7** |
| | comp=N,34nm,0.8s,baz=173,slow=15,SNR=11 | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **6.21** | **7** | P | | **P** | | **13 08 40.7** | **-1.1** |
| **JSJ** | **Shimokoshiki** | **6.56** | **283** | P | | **P** | | **13 08 46.2** | **+0.8** |
| JSJ | | | | S | | **S** | | **13 10 09.4** | **+0.5** |
| **JOI** | **OKI** | **6.77** | **332** | *i* P | | **P** | | **13 08 47.6** | **+0.4** |
| JOI | | | | S | | **S** | | **13 10 12.1** | **-0.4** |
| **JMZ** | **Minamidaito 2** | **6.97** | **231** | P | | **P** | | **13 08 48.1** | **-1.4** |
| **JMZ** | **Minamidaito 2** | **6.97** | **231** | P | | **P** | | **13 08 49.7** | **+0.2** |
| **JMZ** | **Minamidaito 2** | **6.97** | **231** | *eP* | | **P** | | **13 08 50.7** | **+1.1** |
| **JAMN** | **Amaminishikomi** | **7.33** | **255** | P | | **P** | | **13 08 53.9** | **+0.7** |
| JAMN | | | | *eS* | | **S** | | **13 10 23.9** | **+0.9** |
| **JFK** | **Kawauchi** | **7.61** | **23** | A | | A | | 13 08 54.2 | |
| | comp=E,5.0nm,1.4s,comp=N,4.0nm,2.0s | | | | | | | | |
| **JSD** | **Sado** | **7.69** | **6** | P | | **P** | | **13 08 56.0** | **-0.6** |
| **JSD** | **Sado** | **7.69** | **6** | P | | **P** | | **13 08 55.7** | **-0.9** |
| **JTU** | **Tsushima** | **7.79** | **304** | P | | **P** | | **13 08 58.3** | **+0.6** |
| **JTU** | **Tsushima** | **7.79** | **304** | P | | **P** | | **13 08 58.5** | **+0.8** |
| **JMM** | **Marumori** | **8.04** | **21** | P | | **P** | | **13 08 58.9** | **-1.2** |
| **JMM** | **Marumori** | **8.04** | **21** | P | | **P** | | **13 08 58.5** | **-1.6** |
| **JYA** | **Atsumi** | **8.45** | **13** | A | | A | | 13 09 03.0 | |
| | comp=E,4.0nm,3.9s,comp=N,3.0nm,1.2s | | | | | | | | |
| **JOW** | **Kunigami** | **8.61** | **248** | P | | **P** | | **13 09 07.4** | **+1.1** |
| **JOW** | **Kunigami** | **8.61** | **248** | P | | **P** | | **13 09 06.8** | **+0.5** |
| **JOW** | **Kunigami** | **8.61** | **248** | P | | **P** | | **13 09 07.5** | **+1.1** |
| | comp=N,76nm,0.8s,baz=60,slow=5.9,SNR=20 | | | | | | | | |
| **JOW** | **Kunigami** | **8.61** | **248** | *eP* | | **P** | | **13 09 07.6** | **+1.3** |
| **JOFO** | **Osakifurukawao** | **8.76** | **19** | A | | A | | 13 09 05.8 | |
| | comp=E,8.0nm,2.3s,comp=N,9.0nm,2.7s | | | | | | | | |
| **JMK** | **Ichinoseki** | **9.17** | **20** | *eS* | | **S** | | **13 10 51.1** | **-6.5** |
| **JKE** | **Kume jima 2** | **10.03** | **249** | *eP* | | **P** | | **13 09 21.6** | **+0.5** |
| **TJN** | **Taejon** | **10.18** | **309** | P | | **P** | | **13 09 22.7** | **+0.2** |
| **TJN** | **Taejon** | **10.18** | **309** | P | | **P** | | **13 09 22.3** | **-0.3** |
| **TJN** | **Taejon** | **10.18** | **309** | *c iP* | | **P** | | **13 09 22.2** | **-0.3** |
| **KSRS** | **Korea Array** | **10.45** | **315** | P | | **P** | | **13 09 25.6** | **+0.2** |
| | comp=N,123nm,0.7s,baz=131,slow=10,SNR=298 | | | | | | | | |
| KSRS | | | | | | ScP | **ScP** | **13 17 25.8** | **+1.3** |
| | comp=N,2.0nm,0.7s,baz=192,slow=0.8,SNR=11 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **10.47** | **315** | P | | **P** | | **13 09 25.1** | **-0.5** |
| **KSAR** | **Wonju Array Be** | **10.47** | **315** | P | | **P** | | **13 09 25.1** | **-0.5** |
| **KS19** | **Wonju Array Si** | **10.52** | **315** | P | | **P** | | **13 09 25.5** | **-0.6** |
| **JTM** | **Tenmabayashi** | **10.85** | **16** | P | | **P** | | **13 09 29.7** | **+0.1** |
| **JTM** | **Tenmabayashi** | **10.85** | **16** | P | | **P** | | **13 09 29.1** | **-0.5** |
| **INCN** | **Inchon** | **11.28** | **312** | P | | **P** | | **13 09 33.1** | **-1.2** |
| **INCN** | **Inchon** | **11.28** | **312** | P | | **P** | | **13 09 33.1** | **-1.2** |
| **JOT** | **Ohata** | **11.41** | **15** | P | | **P** | | **13 09 35.4** | **-0.1** |
| JOT | | | | S | | **S** | | **13 11 38.6** | **-2.3** |
| **JOSM** | **Okushiri--Mats** | **11.82** | **8** | *i* P | | **P** | | **13 09 39.8** | **-0.1** |
| JOSM | | | | *eS* | | **S** | | **13 11 46.5** | **-2.2** |
| **ERM** | **Erimo** | **12.56** | **21** | P | | **P** | | **13 09 47.9** | **+0.2** |
| **ERM** | **Erimo** | **12.56** | **21** | ⇑*eP* | | **P** | | **13 09 47.8** | **+0.1** |
| **ERM** | **Erimo** | **12.56** | **21** | ⇑*eP* | | **P** | | **13 09 48.1** | **+0.4** |
| **JEM** | **Erimo** | **12.56** | **21** | P | | **P** | | **13 09 48.0** | **+0.3** |
| **JNBK** | **Urakawa-nobuka** | **12.69** | **19** | A | | A | | 13 09 46.3 | |
| | comp=E,6.0nm,2.6s,comp=N,3.0nm,2.2s | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **13.11** | **340** | *c iP* | | **P** | | **13 09 53.3** | **-0.1** |
| **JCH** | **Churui** | **13.17** | **20** | P | | **P** | | **13 09 54.5** | **+0.4** |
| JCH | | | | *eS* | | **S** | | **13 12 14.8** | **0.0** |
| **PSTR** | **Posyet** | **13.28** | **339** | *c iP* | | **P** | | **13 09 55.2** | **0.0** |
| **VLA** | **Vladivostok** | **13.41** | **343** | *i* P | | **P** | | **13 09 57.0** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **13.91** | **248** | P | | **P** | | **13 10 01.2** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **13.91** | **248** | P | | **P** | | **13 10 01.1** | **-1.1** |
| **YOJ** | **Yonaguni jima** | **13.91** | **248** | P | | **P** | | **13 10 01.1** | **-1.1** |
| **ASAJ** | **Asahikawa** | **14.37** | **16** | P | | **P** | | **13 10 07.0** | **+0.4** |
| | comp=N,45nm,0.9s,baz=235,slow=10,SNR=20 | | | | | | | | |
| ASAJ | | | | S | | **S** | | **13 12 37.1** | **-0.6** |
| | comp=N,49nm,0.9s,baz=5.9,slow=32,SNR=8.9 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **14.37** | **16** | P | | **P** | | **13 10 06.3** | **-0.3** |
| **USA0B** | **Ussuriysk Arra** | **14.41** | **345** | P | | **P** | | **13 10 06.9** | **-0.2** |
| **USA0B** | **Ussuriysk Arra** | **14.41** | **345** | *c iP* | | **P** | | **13 10 06.9** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **14.41** | **345** | P | | **P** | | **13 10 07.1** | **0.0** |
| | comp=N,308nm,0.6s,baz=170,slow=10,SNR=384 | | | | | | | | |
| **JTKR** | **Abashiri--Toko** | **14.57** | **20** | P | | **P** | | **13 10 09.5** | **+0.7** |
| JTKR | | | | *eS* | | **S** | | **13 12 41.1** | **-0.5** |
| **TEY** | **Ternei** | **14.64** | **358** | ⇑*eP* | | **P** | | **13 10 08.9** | **-0.6** |
| TEY | | | | pmax | | pmax | | | |
| | comp=N,30nm,0.6s | | | | | | | | |
| TEY | | | | pmax | | pmax | | | |
| | comp=Z,50nm,0.6s | | | | | | | | |
| TEY | | | | pmax | | pmax | | | |
| | comp=E,10.0nm,0.6s | | | | | | | | |
| **TATO** | **Taipei** | **14.93** | **253** | P | | **P** | | **13 10 11.3** | **-1.5** |
| **YHNB** | **Yeheng** | **15.15** | **252** | P | | **P** | | **13 10 13.6** | **-1.6** |
| **YHNB** | **Yeheng** | **15.15** | **252** | P | | **P** | | **13 10 13.4** | **-1.8** |
| **NACB** | **Ninganchiao** | **15.19** | **250** | P | | **P** | | **13 10 13.1** | **-2.5** |
| **NACB** | **Ninganchiao** | **15.19** | **250** | P | | **P** | | **13 10 13.0** | **-2.5** |
| **MDJ** | **Mudanjiang** | **15.44** | **339** | P | | **P** | | **13 10 17.3** | **-0.5** |
| MDJ | | | | S | | **S** | | **13 12 57.0** | **-1.2** |
| MDJ | | | | pmax | | pmax | | | |
| | comp=E,54nm,1.3s | | | | | | | | |
| **NJ2** | **Nanjing** | **15.80** | **281** | *eP* | | **P** | | **13 10 21.1** | **-0.7** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=E,14nm,0.6s | | | | | | | | |
| **YULB** | **Yu-li** | **15.80** | **248** | P | | **P** | | **13 10 20.4** | **-1.6** |
| **YULB** | **Yu-li** | **15.80** | **248** | P | | **P** | | **13 10 20.0** | **-2.0** |
| **SNY** | **Shenyang** | **15.85** | **320** | ⇑P | | **P** | | **13 10 22.0** | **-0.2** |
| SNY | | | | sP | | sP | | 13 12 15.0 | -11 |
| SNY | | | | S | | **S** | | **13 13 00.8** | **-5.2** |
| SNY | | | | pmax | | pmax | | | |
| | comp=E,140nm,0.8s | | | | | | | | |
| **SSLB** | **Suanglung** | **15.89** | **250** | P | | **P** | | **13 10 21.9** | **-1.0** |
| **SSLB** | **Suanglung** | **15.89** | **250** | P | | **P** | | **13 10 21.2** | **-1.7** |
| **TWGBT** | **Beinan** | **16.26** | **246** | P | | **P** | | **13 10 26.6** | **-0.2** |
| **TWG** | **Pinlang** | **16.27** | **246** | P | | **P** | | **13 10 25.3** | **-1.5** |
| **CN2** | **Changchun** | **16.34** | **328** | P | | **P** | | **13 10 26.6** | **-0.6** |
| CN2 | | | | sP | | sP | | 13 12 24.9 | -6.6 |
| CN2 | | | | S | | **S** | | **13 13 12.4** | **-2.4** |
| CN2 | | | | pmax | | pmax | | | |
| | comp=E,170nm,0.8s | | | | | | | | |
| **TPUB** | **Ta-pu** | **16.38** | **248** | P | | **P** | | **13 10 27.5** | **-0.5** |
| **TPUB** | **Ta-pu** | **16.38** | **248** | P | | **P** | | **13 10 27.3** | **-0.7** |
| **YSS** | **Yuzh-Sakhalins** | **17.10** | **13** | P | | **P** | | **13 10 35.0** | **+0.1** |
| **YSS** | **Yuzh-Sakhalins** | **17.10** | **13** | P | | **P** | | **13 10 34.8** | **-0.1** |
| **YSS** | **Yuzh-Sakhalins** | **17.10** | **13** | *ceP* | | **P** | | **13 10 34.9** | **+0.1** |
| YSS | | | | *eS* | | **S** | | **13 13 27.3** | **-0.5** |
| YSS | | | | pmax | | p

**ENH Enshi 23.91 277** P **P** **13 11 36.7 -0.3**
**ENH Enshi 23.91 277** P **P** **13 11 36.6 -0.3**
**XAN Xi'an 24.18 286** ⇑P **P** **13 11 39.8 +0.5**
XAN S **S** **13 15 20.0 -1.6**
XAN pmax pmax
comp=Z,52nm,0.7s
**GULI GuiLin 24.25 265** ⇓P **P** **13 11 41.8 +1.8**
GULI pmax pmax
comp=Z,30nm,0.8s
**ZEA Zeya 24.44 346***c* *i*P **P** **13 11 41.9 +0.6**
ZEA *e*S **S** **13 15 25.0 0.0**
ZEA pmax pmax
comp=N,40nm,0.9s
ZEA pmax pmax
comp=Z,70nm,0.8s
ZEA smax smax
comp=N,100nm,8.7s
**GYA Guiyang 27.11 269** ⇓P **P** **13 12 05.4 0.0**
GYA sP sP 13 14 31.2 +2.8
GYA S **S** **13 16 05.4 -2.4**
GYA ScP **ScP** **13 18 03.8 +1.7**
GYA ScS **ScS** **13 21 53.8 -0.8**
GYA pmax pmax
comp=N,42nm,0.9s
GYA pmax pmax
comp=N,99nm,4.4s
**PET Petropavlovsk 27.52 29** P **P** **13 12 08.3 -0.1**
comp=N,129nm,1.5s
**PET Petropavlovsk 27.52 29** *e*P **P** **13 12 09.5 +1.1**
PET pmax pmax
comp=Z,30nm,1.1s
PET MLR MLR
comp=Z,100nm,16.0s
**LZH Lanzhou 28.40 290**⇓ *i*P **P** **13 12 17.5 +0.9**
LZH sP sP 13 14 41.2 +0.4
LZH S **S** **13 16 25.9 -1.9**
LZH pmax pmax
comp=Z,41nm,0.9s
**CD2 Chengdu 28.73 280** P **P** **13 12 19.5 +0.1**
CD2 S **S** **13 16 30.8 -2.0**
CD2 pmax pmax
comp=Z,90nm,0.6s
**ULN Ulaanbaatar 28.94 316***c* *i*P **P** **13 12 21.7 +0.5**
ULN pmax pmax
comp=Z,47nm,1.5s
**SONM Songino Array 29.33 315** P **P** **13 12 24.4 0.0**
SONM IAmb IAmb 13 12 26.1
comp=Z,24nm,1.5s
**SONM Songino Array 29.33 315** P **P** **13 12 24.7 +0.2**
comp=Z,8.1nm,0.7s,baz=134,slow=10,SNR=28
SONM pP **pP** **13 13 50.3 +0.4**
comp=Z,9.9nm,1.0s,baz=128,slow=10,SNR=6.5
SONM ScP **ScP** **13 18 08.8 +0.1**
comp=Z,3.7nm,0.8s,baz=132,slow=3.3,SNR=12
comp=Z,8.1nm,0.7s
**MA2 Magadan 30.61 14** P **P** **13 12 35.7 +0.5**
**MA2 Magadan 30.61 14** P **P** **13 12 35.4 +0.2**
**MA2 Magadan 30.61 14***c* *i*P **P** **13 12 35.7 +0.5**
MA2 pmax pmax
comp=Z,70nm,0.7s
**MYLDM Lahad Datu 30.64 219** P **P** **13 12 36.0 -0.1**
**KMI Kunming 30.88 269** ⇓P **P** **13 12 38.8 +0.5**
KMI pmax pmax
comp=Z,18nm,0.9s
KMI pmax pmax
comp=Z,89nm,3.1s
**SLVN Son La 31.20 261** P **P** **13 12 41.5 +0.5**
SLVN IAmb IAmb 13 12 43.1
comp=Z,44nm,1.0s
**PZH PanZhiHua 31.35 272** P **P** **13 12 42.4 +0.2**
PZH pmax pmax
comp=Z,50nm,0.8s
PZH pmax pmax
comp=Z,80nm,3.5s
**SWI Sorong 31.58 191** P **P** **13 12 44.5 +0.4**
comp=Z,55nm,1.0s
**SWI Sorong 31.58 191** P **P** **13 12 41.5 -2.6**
SWI pmax pmax
comp=Z,55nm,1.0s
**BOD Bodaibo 31.78 336** *e*P **P** **13 12 45.3 0.0**
BOD pmax pmax
comp=Z,41nm,1.2s
**GTA Gaotai 31.79 297** ⇑P **P** **13 12 46.1 +0.3**
GTA pP pP 13 14 15.2 +2.8
GTA S **S** **13 17 17.3 -2.6**
GTA ScP **ScP** **13 18 17.5 +0.4**
GTA pmax pmax
comp=Z,23nm,1.2s
**YAK Yakutsk 32.05 353** P **P** **13 12 47.0 -0.4**
**YAK Yakutsk 32.05 353***c* *i*P **P** **13 12 47.1 -0.4**
YAK *e**PP **pP** **13 14 14.4 0.0**
YAK *e*S **S** **13 17 22.0 -0.9**
YAK *e**SS **sS** **13 20 08.4 +6.9**
YAK *e* 13 22 13.4
YAK pmax pmax
comp=Z,75nm,0.9s
YAK pmax pmax
comp=N,21nm,0.9s
YAK pmax pmax
comp=E,7.0nm,0.8s
YAK smax smax
comp=E,36nm,1.0s
YAK smax smax
comp=N,64nm,1.2s
**KMSI Cibinong 32.20 205** P **P** **13 12 50.0 +0.6**
**DLV T Lat 32.32 242** P **P** **13 12 51.2 +0.5**
**GTOI Gorontalo 32.51 207** P **P** **13 12 51.9 -0.2**
comp=N,67nm,1.0s
**IRK Irkutsk 32.57 322** *e*P **P** **13 12 51.6 -0.6**
IRK pmax pmax
comp=Z,49nm,1.0s
**UBPT Khong Chiam 32.75 250** P **P** **13 12 55.1 +1.0**
**TOLI2 Tolitoli 33.02 211** P **P** **13 12 56.2 -0.3**
**TOLI2 Tolitoli 33.02 211** P **P** **13 12 55.8 -0.7**
TOLI2 IAmb IAmb 13 12 57.3
comp=Z,37nm,0.9s
**MRSI Marisa 33.09 209** P **P** **13 12 57.6 +0.6**
comp=Z,140nm,1.1s,comp=Z,1µm
**FAKI Fak Fak 33.45 189** P **P** **13 13 00.2 +0.2**
**FAKI Fak Fak 33.45 189** P **P** **13 13 00.0 0.0**
FAKI IAmb IAmb 13 13 01.8
comp=Z,24nm,0.9s
**MANU Manus Island 33.66 161** P **P** **13 13 00.5 -1.3**
MANU IAmb IAmb 13 13 04.3
comp=Z,17nm,1.1s
**SANI Sanana 33.98 200** P **P** **13 13 03.9 -0.6**
**SANI Sanana 33.98 200** P **P** **13 13 03.9 -0.6**
comp=Z,116nm,0.8s,comp=Z,1µm
**SEY Seymchan 34.01 12***c* *i*P **P** **13 13 04.7 +0.6**
SEY pmax pmax
comp=Z,25nm,0.9s
**MPSI Mapaga 34.11 212** P **P** **13 13 05.3 -0.3**
**MOY Mondy 34.12 319** *e*P **P** **13 13 05.6 +0.2**
MOY pmax pmax
comp=Z,26nm,1.6s
**LUWI Luwuk 34.14 206** P **P** **13 13 04.6 -1.3**
**LUWI Luwuk 34.14 206** P **P** **13 13 04.4 -1.5**
LUWI IAmb IAmb 13 13 11.3
comp=Z,40nm,0.8s
**MSAI Masohi 34.45 195** P **P** **13 13 10.0 +1.5**
comp=Z,72nm,1.1s,comp=Z,836nm
**TNCH TengChong 34.55 271**⇓ *i*P **P** **13 13 09.9 +0.4**
TNCH pP pP 13 14 37.5 +0.8
TNCH sP PcP 13 15 31.0 +0.9
TNCH S **S** **13 18 03.0 +0.6**
TNCH ScP **ScP** **13 18 26.0 -1.2**
TNCH pmax pmax
comp=Z,69nm,1.1s
TNCH pmax pmax
comp=Z,120nm,4.1s
**GOMU GeErMu 35.70 291** P **P** **13 13 20.0 +0.8**
GOMU pP pP 13 14 45.0 -2.4
GOMU PcP **PcP** **13 15 34.4 +0.8**
GOMU S **S** **13 18 18.5 -1.3**
GOMU pmax pmax
comp=Z,44nm,0.8s
**CHTO Chiang Mai 36.49 261** P **P** **13 13 25.9 +0.4**
**CHTO Chiang Mai 36.49 261** P **P** **13 13 25.9 +0.4**
CHTO pmax pmax
comp=Z,88nm,0.8s
**SBUM Sibu 36.49 225** P **P** **13 13 25.9 +0.4**
SBUM IAmb IAmb 13 13 27.3
comp=Z,22nm,1.1s
**CM31 Chiang Mai Arr 36.64 260** P **P** **13 13 27.4 +0.6**
CM31 IAmb IAmb 13 13 28.5
comp=Z,43nm,0.7s
**CMAR Chiang Mai Arr 36.64 260** P **P** **13 13 27.1 +0.3**
**CMAR Chiang Mai Arr 36.64 260** P **P** **13 13 27.4 +0.6**
comp=Z,26nm,0.7s,baz=57,slow=6.4,SNR=154
CMAR PcP **PcP** **13 15 37.4 +1.0**
comp=Z,3.3nm,0.8s,baz=36,slow=1.4,SNR=5.1
CMAR S **S** **13 18 29.8 -3.8**
comp=Z,0.7nm,0.4s,baz=60,slow=13,SNR=5.4
CMAR ScP **ScP** **13 18 35.2 +0.5**
comp=Z,2.0nm,1.0s,baz=349,slow=1.8,SNR=5.5
comp=Z,26nm,0.7s
**BNSI Bone 38.26 208** P **P** **13 13 39.8 -0.2**
comp=Z,91nm,1.1s,comp=Z,975nm
**KSM Kuching 38.44 227** P **P** **13 13 42.3 +0.8**
**STKI Sintang 38.83 224** P **P** **13 13 46.0 +1.4**
**KAPI Kappang 38.96 208** P **P** **13 13 46.2 +0.6**
**KAPI Kappang 38.96 208** P **P** **13 13 46.6 +0.9**
comp=Z,96nm,1.1s,baz=29,slow=5.2,SNR=9.0
comp=Z,96nm,1.1s
**SHL Shillong 40.12 275** P **P** **13 13 55.0 -0.2**
SHL IAmb IAmb 13 13 56.7
comp=Z,22nm,1.0s
**SHL Shillong 40.12 275** P **P** **13 13 55.0 -0.2**
SHL pmax pmax
comp=Z,22nm,1.0s
**PMG Port Moresby 40.69 165** P **P** **13 13 59.8 +0.2**
comp=Z,12nm,0.9s,baz=0.0,slow=11,SNR=1.8
comp=Z,12nm,0.9s
**WMQ Urumqi 41.12 303** *e*P **P** **13 14 03.6 +0.8**
WMQ pmax pmax
comp=Z,24nm,0.8s
**SRIT Nakonsritamara 41.26 246** P **P** **13 14 04.9 +0.8**
**MMRI Maumere 41.37 203** P **P** **13 14 05.0 0.0**
**BILL Bilibino 41.38 16** P **P** **13 14 05.5 +1.1**
**BILL Bilibino 41.38 16***c* *i*P **P** **13 14 05.3 +0.9**
BILL *e* 13 15 49.1
BILL *e* 13 15 54.7
BILL *e**SP **sP** **13 16 33.0 +0.7**
BILL pmax pmax
comp=Z,131nm,1.0s
**TIXI Tiksi 41.58 356** P **P** **13 14 05.5 -0.4**
TIXI IAmb IAmb 13 14 06.5
comp=Z,39nm,0.6s
**TIXI Tiksi 41.58 356***ce*P **P** **13 14 05.8 0.0**
TIXI pmax pmax
comp=Z,25nm,0.6s
**SOEI Soe 41.80 199** P **P** **13 14 08.4 -0.1**
**SOEI Soe 41.80 199** P **P** **13 14 08.3 -0.1**
**SOEI Soe 41.80 199** P **P** **13 14 08.3 -0.2**
comp=Z,85nm,1.0s
**BATI Baumata 42.40 200** P **P** **13 14 14.0 +0.8**
comp=Z,119nm,1.0s
**KULM Kulim 42.50 241** P **P** **13 14 14.5 +0.5**
**KDU Kakadu 43.05 187** P **P** **13 14 18.2 0.0**
**PLAI Plampang 43.22 209** P **P** **13 14 18.6 -1.0**
**MTN Manton Dam 43.37 189** P **P** **13 14 20.1 -0.6**
**MTN Manton Dam 43.37 189** P **P** **13 14 20.4 -0.3**
MTN IAmb IAmb 13 14 21.3
comp=Z,39nm,0.9s
**TWSI Taliwang, Sumb 43.52 210** P **P** **13 14 21.5 -0.4**
comp=Z,98nm,1.0s
**ZAA0 Zalesovo Array 44.15 318** P **P** **13 14 26.1 -0.1**
ZAA0 IAmb IAmb 13 14 26.9
comp=Z,22nm,1.0s
**ZALV Zalesovo Beam 44.15 318** P **P** **13 14 25.6 -0.7**
ZALV **pP** **13 15 59.2 -0.3**
**ZALV Zalesovo Beam 44.15 318** P **P** **13 14 25.7 -0.6**
comp=Z,16nm,0.5s,baz=96,slow=7.9,SNR=72
ZALV PcP **pP** **13 15 59.9 +0.4**
comp=Z,6.8nm,0.7s,baz=108,slow=4.8,SNR=7.9
ZALV ScP **ScP** **13 19 03.3 -0.5**
comp=Z,2.7nm,0.6s,baz=119,slow=4.3,SNR=7.2
comp=Z,16nm,0.5s
**COEN Coen 44.45 172** P **P** **13 14 29.2 +0.1**
**JAGI Jajag, Banyuwa 44.52 214** P **P** **13 14 28.4 -1.4**
**NIKH Nikolski High 44.90 44** P **P** **13 14 32.3 +0.2**
baz=262
**SPIA Saint Paul Isl 44.91 38** P **P** **13 14 32.1 0.0**
baz=256
**MK31 Makanchi Array 45.02 307** P **P** **13 14 33.5 +0.3**
MK31 IAmb IAmb 13 14 34.5
comp=Z,9.6nm,0.8s
**MK31 Makanchi Array 45.02 307***c* *i*P **P** **13 14 33.5 +0.3**
**MKAR Makanchi Array 45.02 307** P **P** **13 14 33.3 0.0**
**MKAR Makanchi Array 45.02 307** P **P** **13 14 33.5 +0.3**
comp=Z,5.7nm,0.4s,baz=84,slow=9.8,SNR=102
MKAR PcP **PcP** **13 16 03.7 +0.1**
comp=Z,4.2nm,0.8s,baz=90,slow=3.8,SNR=7.1
MKAR ScP **ScP** **13 19 06.9 -0.7**
comp=Z,2.7nm,0.5s,baz=81,slow=4.1,SNR=12
MKAR S **S** **13 20 33.2 -1.3**
comp=Z,2.9nm,1.0s,baz=93,slow=18,SNR=6.0
comp=Z,5.7nm,0.4s
**P08K Saint George I 45.15 39** P **P** **13 14 34.5 +0.6**
baz=258
**MAKZ Makanchi 45.24 307** P **P** **13 14 34.8 -0.1**
MAKZ IAmb IAmb 13 14 36.9
comp=Z,12nm,0.8s
**MAKZ Makanchi 45.24 307** P **P** **13 14 34.8 -0.1**
MAKZ pmax pmax
comp=Z,12nm,0.8s
**PWJI Pagerwojo 45.31 217** P **P** **13 14 34.4 -1.3**
comp=Z,138nm,0.8s
**UGM Wanagama 45.89 218** P **P** **13 14 39.9 -0.3**
**GAMB Gambell 46.22 29** P **P** **13 14 42.5 +0.5**
baz=249
**KPJI Karang Pucung 46.28 221** P **P** **13 14 43.5 +0.3**
comp=Z,144nm,1.1s
**UNV Unalaska Valle 46.41 43** P **P** **13 14 44.2 +0.6**
**UNV Unalaska Valle 46.41 43** P **P** **13 14 43.8 +0.3**
baz=263
**MLSI Meulaboh, Aceh 46.41 244** P **P** **13 14 43.5 -0.7**
comp=Z,56nm,0.7s
**KNRA Kununurra 46.50 191** P **P** **13 14 45.0 +0.2**
KNRA IAmb IAmb 13 14 46.0
comp=Z,39nm,0.7s
**PDGK Podgornoye 47.09 303** P **P** **13 14 49.0 -0.2**
**GSI Gunungsitoli 47.41 240** P **P** **13 14 52.3 +0.5**
**GSI Gunungsitoli 47.41 240** P **P** **13 14 51.0 -0.7**
**GSI Gunungsitoli 47.41 240** P **P** **13 14 51.4 -0.4**
**KURK Kurchatov 47.57 313** P **P** **13 14 52.2 -0.3**
KURK IAmb IAmb 13 14 53.4
comp=Z,45nm,1.1s
**KURK Kurchatov 47.57 313***c* *i*P **P** **13 14 52.4 -0.1**
KURK pmax pmax
comp=Z,43nm,1.0s
**KURBB Kurchatov Arra 47.62 313** P **P** **13 14 52.6 -0.2**
comp=Z,24nm,0.6s,baz=92,slow=8.1,SNR=194
KURBB PcP **PcP** **13 16 12.2 -0.5**
comp=Z,1.7nm,0.7s,baz=97,slow=4.8,SNR=2.7
KURBB pP **pP** **13 16 28.7 +0.7**
comp=Z,2.2nm,0.9s,baz=95,slow=8.7,SNR=2.2
KURBB ScP **ScP** **13 19 17.0 -1.3**
comp=Z,0.7nm,0.6s,baz=113,slow=3.9,SNR=4.1
KURBB S **S** **13 21 02.2 -8.4**
comp=Z,1.2nm,0.8s,baz=98,slow=15,SNR=4.9
comp=Z,24nm,0.6s
**M11K Mekoryuk 47.70 34** P **P** **13 14 53.4 +0.2**
baz=257
**PRZ Przheval'sk 47.96 302** P **P** **13 14 56.2 +0.4**
PRZ IAmb IAmb 13 14 58.2
comp=Z,24nm,0.8s
**PRZ Przheval'sk 47.96 302** P **P** **13 14 56.2 +0.4**
PRZ pmax pmax
comp=Z,24nm,0.8s
**TARG Taragay, Kyrgy 48.48 301** P **P** **13 15 01.0 +1.0**
**TARG Taragay, Kyrgy 48.48 301** P **P** **13 15 01.0 +1.0**
TARG pmax pmax
comp=Z,7.0nm,0.8s
**K13K Kusilvak Mount 48.77 32** P **P** **13 15 02.5 +1.3**
baz=257
**MDOK Medeo 48.89 303** P **P** **13 15 03.3 +0.7**
**F14K Arctic Creek 48.96 27** P **P** **13 15 04.1 +1.5**
baz=253
**M13K Dail Lake 49.09 34** P **P** **13 15 05.1 +1.5**
baz=260
**ANM Nome 49.10 29** P **P** **13 15 04.9 +1.3**
baz=254
**J14K Nanvaranak Lak 49.45 31** P **P** **13 15 07.4 +1.2**
baz=258
**FITZ Fitzroy Crossi 49.47 195** P **P** **13 15 07.2 +0.3**
**L14K Kuka Creek 49.58 33** P **P** **13 15 08.8 +1.6**
baz=260
**F15K North Star Dit 49.70 27** P **P** **13 15 09.2 +1.1**
F15K IAmb IAmb 13 15 10.4
comp=Z,18nm,0.7s
**F15K North Star Dit 49.70 27** P **P** **13 15 09.4 +1.3**
baz=254
**G15K Niukluk 49.76 28** P **P** **13 15 10.0 +1.5**
baz=255
**BOOM Boomskoye usch 49.77 302** P **P** **13 15 10.3 +1.1**
BOOM IAmb IAmb 13 15 10.9
comp=Z,8.9nm,0.6s
**BOOM Boomskoye usch 49.77 302** P **P** **13 15 10.3 +1.1**
BOOM pmax pmax
comp=Z,9.0nm,0.6s
**M14K Bethel 49.82 34** P **P** **13 15 10.4 +1.4**
baz=261
**N14K Kuskokwak Cree 49.83 35** P **P** **13 15 10.5 +1.4**
baz=262
**NRN Naryn 49.86 300** P **P** **13 15 10.2 +0.1**
NRN IAmb IAmb 13 15 13.2
comp=Z,5.8nm,0.5s
**NRN Naryn 49.86 300** P **P** **13 15 10.2 +0.1**
NRN pmax pmax
comp=Z,6.0nm,0.5s
**WB0 Warramunga Arr 49.93 183** P **P** **13 15 10.4 +0.1**
WB0 IAmb IAmb 13 15 11.3
comp=Z,27nm,0.7s
**TKM2 Tokmak 2 49.97 302** P **P** **13 15 12.0 +1.3**
SNR=16
**TKM2 Tokmak 2 49.97 302** P **P** **13 15 11.2 +0.5**
**WRAB Tennant Creek 50.09 184** P **P** **13 15 11.5 -0.1**
WRAB IAmb IAmb 13 15 12.6
comp=Z,33nm,1.0s
**WRAB Tennant Creek 50.09 184***d* *i*P **P** **13 15 11.7 +0.1**
WRAB pmax pmax
comp=Z,39nm,1.0s
**WB2 Warramunga Arr 50.10 184** P **P** **13 15 11.8 +0.1**
WB2 IAmb IAmb 13 15 12.7
comp=Z,31nm,0.9s
**WRA Warramunga Arr 50.10 184** P **P** **13 15 10.8 -0.8**
**WRA Warramunga Arr 50.10 184** P **P** **13 15 11.7 0.0**
comp=Z,20nm,0.6s,baz=359,slow=7.6,SNR=173
WRA PcP **PcP** **13 16 23.5 +1.3**
comp=Z,8.6nm,0.8s,baz=354,slow=4.0,SNR=13
WRA S **S** **13 21 43.5 -1.7**
comp=Z,2.1nm,1.1s,baz=2.8,slow=14,SNR=6.0
comp=Z,20nm,0.6s
**WR0 Warramunga Arr 50.11 183** P **P** **13 15 11.8 +0.1**
WR0 IAmb IAmb 13 15 12.7
comp=Z,29nm,0.7s
**KSH Kashi 50.17 298** P **P** **13 15 16.2 +4.1**
KSH pmax pmax
comp=Z,9.0nm,0.6s
**L15K Ungalak Mounta 50.20 33** P **P** **13 15 12.5 +0.8**
baz=261
**C16K Lisburne Hills 50.20 24** P **P** **13 15 13.1 +1.4**
baz=252
**K15K Wolf Creek Mou 50.28 32** P **P** **13 15 13.6 +1.2**
baz=260
**H16K Elim 50.42 29** P **P** **13 15 14.3 +0.9**
baz=258
**M15K Kasigluk River 50.43 34** P **P** **13 15 14.6 +1.1**
baz=262
**KBK Karagaybulak 50.48 302** P **P** **13 15 15.5 +1.1**
SNR=5.9
**G16K Koyuk River 50.55 28** P **P** **13 15 14.5 +0.3**
baz=257
**S14K Fog Glacier 50.60 40** P **P** **13 15 16.3 +1.3**
baz=267
**N15K Kwethluk River 50.66 35** P **P** **13 15 16.5 +1.3**
baz=263
**O15K Ungalikthiuk R 50.69 36** P **P** **13 15 16.6 +1.2**
baz=264
**QIS Mount Isa 50.69 177** P **P** **13 15 15.8 -0.2**
**USP Ospenovka 50.73 303** P **P** **13 15 16.2 +0.2**
SNR=5.7
**AAK Ala-Archa 50.81 302***d* *i*P **P** **13 15 17.7 +0.9**
AAK pmax pmax
comp=Z,6.0nm,0.8s
**D17K Noatak River 50.84 25** P **P** **13 15 17.8 +1.4**
baz=254,SNR=5.3
**UCH Uchtor 50.85 302** P **P** **13 15 19.1 +1.7**
SNR=8.8
**J16K Anvik River 50.87 31** P **P** **13 15 18.0 +1.3**
baz=260
**CTA Charters Tower 50.92 169** P **P** **13 15 18.1 +0.5**
comp=Z,0.4nm,0.8s,baz=20,slow=5.7,SNR=8.2
**I17K Unalakleet 50.94 30** P **P** **13 15 18.1 +1.0**
baz=260
**RDOG Red Dog Mine 51.01 25** P **P** **13 15 19.0 +1.4**
baz=254
**C17K DeLong Mountai 51.03 24** P **P** **13 15 19.0 +1.3**
baz=254
**L16K Owhat River 51.15 33** P **P** **13 15 19.6 +0.9**
baz=262
**E17K Hotham Inlet 51.15 26** P **P** **13 15 19.9 +1.2**
baz=256
**F17K Baldwin Pennin 51.23 27** P **P** **13 15 20.5 +1.3**
baz=257
**G17K Kiwalik Mounta 51.26 28** P **P** **13 15 20.7 +1.2**
baz=258
**M16K Timber Creek 51.31 34** P **P** **13 15 20.7 +0.8**
baz=264
**N16K Nishlik Lake 51.35 35** P **P** **13 15 21.4 +1.1**
baz=264
**H17K Granite Mounta 51.46 29** P **P** **13 15 22.2 +1.2**
baz=260
**AML Almayashu 51.47 302** P **P** **13 15 23.3 +1.4**
SNR=7.6
**J17K VABM Dome 51.57 31** P **P** **13 15 23.2 +1.5**
baz=262
**O16K Kokwok River B 51.60 36** P **P** **13 15 23.4 +1.4**
baz=266
**E18K Tukpahlearik C 51.70 26** P **P** **13 15 23.8 +1.2**
baz=257
**OTUK Ortayu 51.72 310** P **P** **13 15 23.4 +0.2**
**B18K Kokolik River 51.75 23** P **P** **13 15 24.5 +1.5**
baz=254
**L17K Donlin 51.76 33** P **P** **13 15 24.5 +1.4**
baz=263
**C18K Utukok River 51.77 24** P **P** **13 15 24.5 +1.2**
baz=255
**K17K Iditarod 51.83 32** P **P** **13 15 25.4 +1.8**
K17K IAmb IAmb 13 15 26.2
comp=Z,12nm,0.7s
**K17K Iditarod 51.83 32** P **P** **13 15 25.1 +1.5**
baz=263,SNR=5.4
**F18K Selawik 51.89 27** P **P** **13 15 25.2 +1.2**
baz=258,SNR=6.3
**M17K Holitna River 52.09 34** P **P** **13 15 27.3 +1.7**
baz=265
**ARSB Arslanbob 52.12 301** P **P** **13 15 27.6 +1.2**
**ARSB Arslanbob 52.12 301** P **P** **13 15 27.6 +1.2**
ARSB pmax pmax
comp=Z,1.0nm,0.6s
**O17K Koliganek Bris 52.12 36** P **P** **13 15 27.5 +1.7**
baz=266
**N17K Nushagak Hills 52.13 35** P **P** **13 15 27.6 +1.7**
baz=266
**H18K Honhosa River 52.15 29** P **P** **13 15 26.9 +1.0**
baz=261
**G18K Tagagawik 52.15 28** P **P** **13 15 27.1 +1.2**
**G18K Tagagawik 52.15 28** P **P** **13 15 27.2 +1.2**
baz=260,SNR=6.7
**A19K Wainwright 52.23 22** P **P** **13 15 28.4 +2.1**
baz=254
**Q16K King Salmon 52.29 37** P **P** **13 15 28.1 +1.2**
baz=268
**P17K Kvichak River 52.42 36** P **P** **13 15 29.4 +1.5**
baz=267
**C19K Lookout Ridge 52.45 24** P **P** **13 15 29.6 +1.5**
C19K IAmb IAmb 13 15 30.8
comp=Z,20nm,0.8s
**C19K Lookout Ridge 52.45 24** P **P** **13 15 29.5 +1.4**
baz=257
**L18K Granite Mounta 52.52 33** P **P** **13 15 30.1 +1.5**
baz=265,SNR=5.0
**J18K Innoko River 52.63 31** P **P** **13 15 30.5 +1.1**
baz=264
**F19K Shaleruckik Mo 52.66 27** P **P** **13 15 30.7 +1.2**
baz=260
**BVA0 Borovoye Array 52.67 316** *i*P **P** **13 15 29.6 -0.3**
**Q17K Contact Creek 52.68 38** P **P** **13 15 30.5 +0.5**
baz=268
**BRVK Borovoye 52.73 316** P **P** **13 15 30.4 +0.1**
BRVK IAmb IAmb 13 15 31.5
comp=Z,41nm,1.4s
**BRVK Borovoye 52.73 316***c* *i*P **P** **13 15 30.4 +0.1**
BRVK pmax pmax
comp=Z,23nm,1.0s
**N18K Kilae Creek 52.78 35** P **P** **13 15 31.6 +1.0**

**G19K Purcell Mounta** 52.82 28 P P 13 15 31.7 +1.0
baz=261
**D19K Kuna River** 52.84 25 P P 13 15 31.8 +0.9
baz=259
**E19K Redstone River** 52.98 26 P P 13 15 33.1 +1.2
baz=260
**H19K Roundabout Mou** 52.99 29 P P 13 15 33.2 +1.3
**H19K Roundabout Mou** 52.99 29 P P 13 15 33.4 +1.4
baz=262,SNR=8.3
**P18K Big Mountain,** 53.05 36 P P 13 15 33.5 +1.0
P18K IAmb IAmb 13 15 34.6
comp=Z,34nm,0.8s
**P18K Big Mountain,** 53.05 36 P P 13 15 33.5 +1.0
baz=268,SNR=6.5
**O18K Koktuh Hills** 53.08 36 P P 13 15 34.7 +2.0
O18K IAmb IAmb 13 15 35.4
comp=Z,23nm,0.8s
**O18K Koktuh Hills** 53.08 36 P P 13 15 33.5 +0.8
baz=268
**Q18K Katmai Hardscr** 53.15 37 P P 13 15 33.9 +0.6
baz=269
**J19K Poorman** 53.17 31 P P 13 15 34.6 +1.3
**J19K Poorman** 53.17 31 P P 13 15 34.5 +1.2
baz=264,SNR=6.0
**L19K White Mountain** 53.37 33 P P 13 15 36.1 +1.3
baz=266
**D20K Ettuk River** 53.42 25 P P 13 15 36.3 +1.2
baz=260
**N19K Bonanza Creek** 53.48 35 P P 13 15 36.7 +1.1
baz=268
**B20K Meade River** 53.48 23 P P 13 15 37.0 +1.6
B20K IAmb IAmb 13 15 37.7
comp=Z,22nm,0.7s
**B20K Meade River** 53.48 23 P P 13 15 36.8 +1.4
baz=258,SNR=5.3
**F20K Avaraart Lake** 53.49 27 P P 13 15 36.7 +1.3
baz=262
**E20K Nigu River** 53.50 25 P P 13 15 36.6 +0.9
baz=261
**O19K Port Alsworth** 53.54 35 P P 13 15 36.9 +1.1
baz=268
**NIL Nilore** 53.56 291 P P 13 15 37.3 +0.7
NIL IAmb IAmb 13 15 38.4
comp=Z,22nm,0.7s
**NIL Nilore** 53.56 291 P P 13 15 37.3 +0.7
NIL pmax pmax
comp=Z,22nm,0.7s
**M19K Big River Lodg** 53.57 33 P P 13 15 37.5 +1.4
baz=267
**KK31 Karatay Array** 53.63 303 P P 13 15 37.5 +0.6
KK31 IAmb IAmb 13 15 38.1
comp=Z,12nm,0.5s
**KK31 Karatay Array** 53.63 303 *e*P P 13 15 37.4 +0.4
**KKAR Karatay Array** 53.63 303 P P 13 15 37.2 +0.2
**KKAR Karatay Array** 53.63 303 P P 13 15 37.5 +0.6
KKAR IAmb IAmb 13 15 38.1
comp=Z,12nm,0.5s
**KKAR Karatay Array** 53.63 303 P P 13 15 37.2 +0.2
KKAR pmax pmax
comp=Z,12nm,0.5s
**H20K Anotleneega Mo** 53.64 29 P P 13 15 38.0 +1.4
baz=264,SNR=6.5
**I20K Naaghedeneel** 53.74 30 P P 13 15 38.6 +1.4
I20K IAmb IAmb 13 15 40.0
comp=Z,44nm,1.2s
**I20K Naaghedeneel** 53.74 30 P P 13 15 38.9 +1.7
baz=265,SNR=7.7
**K20K Telida** 53.81 31 P P 13 15 39.6 +1.8
baz=266
**AS01 Alice Springs** 53.82 184 P P 13 15 38.3 -0.1
**AS31 Alice Springs** 53.83 184 P P 13 15 38.3 -0.1
**ASAR Alice Springs** 53.83 184 P P 13 15 38.3 -0.2
**ASAR Alice Springs** 53.83 184 P P 13 15 38.6 +0.1
comp=Z,13nm,0.8s,baz=13,slow=11,SNR=112
ASAR PcP **PcP** 13 16 37.8 +1.5
comp=Z,4.9nm,0.8s,baz=5.7,slow=4.1,SNR=8.2
ASAR ScP **ScP** 13 19 46.5 +1.0
comp=Z,0.9nm,0.8s,baz=12,slow=4.8,SNR=3.2
ASAR S **S** 13 22 34.4 -0.5
comp=Z,1.2nm,0.8s,baz=22,slow=20,SNR=6.3
comp=Z,13nm,0.8s
**J20K Nowinta River** 53.83 30 P P 13 15 39.0 +1.1
J20K IAmb IAmb 13 15 40.6
comp=Z,14nm,0.9s
**J20K Nowinta River** 53.83 30 P P 13 15 39.5 +1.6
baz=266,SNR=8.4
**L20K Farewell, AK** 53.84 32 P P 13 15 39.6 +1.5
baz=267
**MBWA Marble Bar** 53.93 200 P P 13 15 38.9 -0.3
comp=Z,23nm,0.9s
**MBWA Marble Bar** 53.93 200 P P 13 15 38.8 -0.3
MBWA IAmb IAmb 13 15 40.2
comp=Z,28nm,0.7s
**P19K Oil Pt** 54.08 36 P P 13 15 41.1 +1.3
baz=270
**C21K Knifeblade Rid** 54.15 24 P P 13 15 41.5 +1.4
baz=261
**M20K Styx River** 54.17 33 P P 13 15 41.8 +1.4
baz=268
**B21K Ikpikpuk River** 54.28 24 P P 13 15 42.9 +1.9
B21K IAmb IAmb 13 15 43.6
comp=Z,36nm,0.8s
**B21K Ikpikpuk River** 54.28 24 P P 13 15 42.4 +1.4
baz=261,SNR=17
**PSA00 Pilbara Seismi** 54.28 200 P P 13 15 41.8 +0.1
**PSA00 Pilbara Seismi** 54.28 200 P P 13 15 41.8 +0.1
**PSA00 Pilbara Seismi** 54.28 200 P P 13 15 42.0 +0.4
PSA00 IAmb IAmb 13 15 42.8
comp=Z,12nm,0.8s
**G21K Allakaket** 54.30 27 P P 13 15 42.3 +1.1
baz=264
**E21K Killik River** 54.34 25 P P 13 15 42.6 +1.1
baz=263
**F21K Alatna River** 54.38 27 P P 13 15 42.6 +0.8
**F21K Alatna River** 54.38 27 P P 13 15 43.0 +1.1
baz=264
**KDAK Kodiak Island** 54.43 38 P P 13 15 42.8 +0.6
baz=272
**H21K Melozitna Rive** 54.51 29 P P 13 15 44.1 +1.4
baz=266,SNR=11
**GAR Garm** 54.58 298 P P 13 15 44.6 +0.8
GAR IAmb IAmb 13 15 44.7
comp=Z,13nm,0.5s
**N20K Mount Spurr** 54.59 34 P P 13 15 44.6 +1.2
baz=270
**CHUM Lake Minchumin** 54.62 31 P P 13 15 44.9 +1.4
baz=268
**PPLA Purkeypile** 54.64 32 P P 13 15 44.9 +1.1
baz=269
**CAST Castle Rocks** 54.70 31 P P 13 15 45.5 +1.4
baz=268,SNR=7.1
**B22K Teshekpuk Lake** 54.80 23 P P 13 15 45.6 +1.0
baz=262
**D22K Ayikyak River** 54.86 25 P P 13 15 46.9 +1.7
baz=264,SNR=12
**F22K John River** 54.91 26 P P 13 15 47.3 +1.7
baz=265,SNR=16
**SKT Skwentna** 54.92 33 P P 13 15 46.6 +0.9
baz=270
**H22K Ishtalitna Cre** 55.12 28 P P 13 15 47.9 +0.9
baz=267,SNR=9.9
**G22K Bettles** 55.13 27 P P 13 15 47.9 +0.9
baz=266
**BPAW Bear Paw Mtn.** 55.21 31 P P 13 15 49.2 +1.5
**BPAW Bear Paw Mtn.** 55.21 31 P P 13 15 48.8 +1.1
baz=268
**SUA Susitna One** 55.30 34 P P 13 15 49.1 +0.6
baz=271
**BRSE Bradley Lake S** 55.34 36 P P 13 15 49.8 +1.2
baz=272
**MLY Manley** 55.35 29 P P 13 15 49.7 +1.0
**MLY Manley** 55.35 29 P P 13 15 49.8 +1.1
baz=268,SNR=7.6
**CUT Chulitna** 55.52 33 P P 13 15 50.5 +0.7
baz=270
**CHGR Chuyangaron** 55.54 298 P P 13 15 50.6 +0.1
**D23K Nanushuk River** 55.59 25 P P 13 15 52.2 +2.0
baz=265,SNR=18
**M22K Willow** 55.59 33 P P 13 15 50.9 +0.6
baz=271
**SIMJ Simiganj** 55.65 298 P P 13 15 51.5 +0.2
**COLD Coldfoot** 55.66 27 P P 13 15 51.9 +1.2
baz=267
**C23K Itkillik River** 55.69 24 P P 13 15 52.1 +1.2
C23K IAmb IAmb 13 15 53.4
comp=Z,31nm,0.9s
**C23K Itkillik River** 55.69 24 P P 13 15 52.5 +1.6
baz=265,SNR=20
**G23K Bananza Creek** 55.70 27 P P 13 15 52.7 +1.6
baz=268,SNR=14
**WRKA Warakurna** 55.76 190 P P 13 15 52.3 +0.3
**RC01 Rabbit Creek A** 55.80 34 P P 13 15 52.8 +1.0
baz=272
**H23K Yukon River** 55.87 28 P P 13 15 53.8 +1.6
baz=269,SNR=9.8
**E23K Chandalar** 55.92 26 P P 13 15 54.3 +1.6
baz=267,SNR=16
**I23K Minto, Yukon-K** 55.93 29 P P 13 15 53.9 +1.3
baz=269
**TOLK Toolik Lake Re** 55.97 25 P P 13 15 53.7 +0.7
baz=267,SNR=9.3
**NEA2 Nenana** 56.05 30 P P 13 15 54.6 +1.1
baz=270,SNR=7.6
**PMR Palmer** 56.07 34 P P 13 15 54.2 +0.6
PMR IAmb IAmb 13 15 54.9
comp=Z,16nm,1.0s
**PMR Palmer** 56.07 34 P P 13 15 54.2 +0.6
baz=272
**PMR Palmer** 56.07 34 P P 13 15 54.2 +0.6
PMR pmax pmax
comp=Z,16nm,1.0s
**MCK McKinley** 56.12 31 P P 13 15 54.7 +0.7
baz=271,SNR=5.8
**RND Reindeer** 56.16 31 P P 13 15 54.8 +0.5
RND IAmb IAmb 13 15 55.6
comp=Z,19nm,0.8s
**RND Reindeer** 56.16 31 P P 13 15 54.8 +0.5
RND pmax pmax
comp=Z,19nm,0.8s
**D24K Happy Valley** 56.27 24 P P 13 15 56.7 +1.7
baz=267,SNR=29
**WAT1 Susitna Watana** 56.31 32 P P 13 15 56.3 +1.0
baz=272
**C24K Franklin Bluff** 56.35 24 P P 13 15 56.7 +1.3
baz=267
**KNK Knik Glacier** 56.40 34 P P 13 15 56.7 +0.7
baz=273,SNR=5.9
**SML Sawmill** 56.44 33 P P 13 15 57.1 +0.8
baz=272
**PWL Port Wells** 56.49 34 P P 13 15 57.1 +0.5
baz=273
**H24K Noodor Dome** 56.55 28 P P 13 15 58.6 +1.6
baz=270,SNR=8.8
**F24K Squaw Lake** 56.56 26 P P 13 15 58.8 +1.7
baz=269,SNR=24
**COLA College** 56.57 30 P P 13 15 58.6 +1.6
**COLA College** 56.57 30 P P 13 15 58.1 +1.0
**COLA College** 56.57 30 P P 13 15 58.1 +1.0
baz=271
**COLA College** 56.57 30 *d* iP P 13 15 58.4 +1.4
COLA pmax pmax
comp=Z,5.0nm,0.7s
**CCB Clear Creek Bu** 56.60 30 P P 13 15 57.5 +0.3
**KBL Kabul** 56.68 294 P P 13 15 58.9 +0.2
KBL IAmb IAmb 13 16 00.4
comp=Z,8.1nm,0.5s
**KBL Kabul** 56.68 294 P P 13 15 58.9 +0.2
KBL pmax pmax
comp=Z,8.0nm,0.5s
**WAT6 Susitna Watana** 56.69 32 P P 13 15 58.7 +0.5
baz=272
**G24K Hadweenzic Riv** 56.72 27 P P 13 15 59.5 +1.4
baz=270,SNR=9.2
**M23K Glacier View** 56.73 33 P P 13 15 59.1 +0.8
baz=273
**POKR Poker Plat Res** 56.75 29 P P 13 15 59.2 +0.9
baz=271,SNR=6.0
**DHY Denali Highway** 56.83 32 P P 13 15 59.9 +0.8
baz=272
**SCM Sheep Creek Mo** 56.92 33 P P 13 16 00.3 +0.8
SCM IAmb IAmb 13 16 01.4
comp=Z,41nm,1.1s
**SCM Sheep Creek Mo** 56.92 33 P P 13 16 00.6 +0.9
baz=273
**SCM Sheep Creek Mo** 56.92 33 P P 13 16 00.4 +0.8
SCM pmax pmax
comp=Z,41nm,1.1s
**HDA Harding Lake** 56.97 30 P P 13 15 60.0 +0.1
baz=272,SNR=9.6
**IL31** 56.99 30 P P 13 16 00.1 +0.2
**ILAR Eielson Array** 56.99 30 P P 13 15 59.6 -0.4
**ILAR Eielson Array** 56.99 30 P P 13 15 59.8 -0.1
comp=Z,2.9nm,0.6s,baz=258,slow=5.3,SNR=41
ILAR pP **pP** 13 17 40.1 +0.6
comp=Z,1.1nm,0.9s,baz=278,slow=6.3,SNR=3.9
ILAR ScP **ScP** 13 19 57.3 -1.6
comp=Z,0.7nm,0.7s,baz=268,slow=4.0,SNR=6.4
comp=Z,2.9nm,0.6s
**QLP Quilpie** 57.03 173 P P 13 16 00.5 -0.2
**GLI Glacier Island** 57.09 34 P P 13 16 01.3 +0.6
baz=274
**D25K Kavik River** 57.15 24 P P 13 16 02.5 +1.5
D25K IAmb IAmb 13 16 03.5
comp=Z,19nm,0.8s
**D25K Kavik River** 57.15 24 P P 13 16 02.5 +1.5
baz=269,SNR=28
**G25K Bearman Lake** 57.26 27 P P 13 16 03.6 +1.8
baz=271,SNR=7.8
**H25L Birch Creek** 57.39 28 P P 13 16 04.2 +1.6
baz=272
**F25K Christian River** 57.42 26 P P 13 16 04.5 +1.6
baz=271,SNR=24
**M24K Tolsona, Glenn** 57.44 33 P P 13 16 04.2 +1.0
baz=274
**K24K Donnelly Dome** 57.51 31 P P 13 16 04.1 +0.5
baz=273
**PRP Porcupine Dome** 57.54 29 P P 13 16 04.1 +0.2
**PRP Porcupine Dome** 57.54 29 P P 13 16 04.2 +0.3
baz=272,SNR=6.5
**KLU Klutina** 57.61 34 P P 13 16 05.2 +0.9
baz=275
**J25K Salcha River,** 57.65 30 P P 13 16 04.8 +0.3
baz=273
**PAX Paxson** 57.71 32 P P 13 16 05.8 +0.8
baz=274,SNR=5.7
**BMAR Burnt Mountain** 57.84 27 P P 13 16 07.5 +1.7
**OOD Oodnadatta** 57.86 182 P P 13 16 06.8 +0.5
**INKA Innaminka** 57.89 176 P P 13 16 06.8 +0.3
**HARP HAARP** 57.90 32 P P 13 16 07.4 +1.2
baz=275,SNR=5.4
**F26K Sheenjek River** 57.99 26 P P 13 16 08.9 +2.1
baz=272,SNR=26
**C27K Jago River** 58.09 24 P P 13 16 09.0 +1.6
baz=272,SNR=16
**G26K Porcupine Rive** 58.17 27 P P 13 16 09.5 +1.6
baz=273,SNR=7.2
**N25K Chitina, Valde** 58.23 33 P P 13 16 08.6 0.0
baz=276
**SCRK Sand Creek** 58.29 31 P P 13 16 09.6 +0.7
SCRK IAmb IAmb 13 16 10.5
comp=Z,13nm,0.7s
**SCRK Sand Creek** 58.29 31 P P 13 16 09.7 +0.7
baz=275,SNR=16
**BMRM Bremner River** 58.30 34 P P 13 16 10.1 +1.1
baz=276,SNR=5.6
**J26L Joseph Creek** 58.43 30 P P 13 16 10.1 +0.2
J26L IAmb IAmb 13 16 11.0
comp=Z,14nm,0.8s
**J26L Joseph Creek** 58.43 30 P P 13 16 10.2 +0.3
baz=275,SNR=17
**I26K Coal Creek Min** 58.54 29 P P 13 16 11.0 +0.5
baz=275
**L26K Log Cabin Wild** 58.67 32 P P 13 16 12.7 +1.3
baz=276,SNR=8.2
**M26K Nabesna, AK** 58.90 32 P P 13 16 14.2 +1.2
baz=277
**E27K Coleen River** 58.93 26 P P 13 16 14.8 +1.7
baz=274,SNR=11
**MCARA McCarthy VSAT** 59.01 34 P P 13 16 14.9 +1.2
baz=277
**G27K Doyon Strip** 59.02 27 P P 13 16 14.8 +1.0
baz=275,SNR=6.8
**CRQE Cirque** 59.06 34 P P 13 16 14.8 +0.6
baz=278
**D27M Malcolm River** 59.08 24 P P 13 16 15.5 +1.4
baz=274,SNR=5.5
**H27K Steamboat Moun** 59.12 28 P P 13 16 15.8 +1.4
baz=276,SNR=17
**K27K Chicken** 59.13 30 P P 13 16 15.1 +0.6
baz=276
**ARU Arti** 59.15 321 P P 13 16 14.2 -0.5
ARU IAmb IAmb 13 16 15.4
comp=Z,22nm,0.9s
**ARU Arti** 59.15 321 P P 13 16 14.4 -0.3
comp=Z,16nm,0.4s,baz=132,slow=0.5,SNR=17
comp=Z,16nm,0.4s
**ARU Arti** 59.15 321 *c* iP P 13 16 14.6 -0.1
ARU *PP **pP** 13 17 53.7 -1.8
ARU 13 18 28.9
ARU S S 13 23 43.6 +0.9
ARU pmax pmax
comp=Z,23nm,0.9s
**I27K Kandik River** 59.15 29 P P 13 16 15.9 +1.2
baz=276,SNR=9.9
**DZM Mont Dzumac** 59.23 148 P P 13 16 17.0 +1.2
comp=Z,3.1nm,0.5s,baz=9.5,slow=12,SNR=1.8
comp=Z,3.1nm,0.5s
**L27K Beaver Creek,** 59.35 32 P P 13 16 17.1 +1.0
baz=277,SNR=6.3
**BCAR Beaver Creek A** 59.37 32 P P 13 16 17.4 +1.2
**M27K Edge Creek, AK** 59.42 32 P P 13 16 17.7 +1.1
baz=278
**MEEK Meekatharra** 59.42 199 P P 13 16 16.5 -0.4
**EGAK Eagle** 59.44 29 P P 13 16 17.0 +0.5
**EGAK Eagle** 59.44 29 P P 13 16 17.3 +0.8
baz=277,SNR=5.3
**F28M Old Crow** 59.63 26 P P 13 16 18.9 +1.1
baz=276,SNR=13
**E28M Babbage River** 59.65 25 P P 13 16 19.2 +1.3
baz=276,SNR=8.0
**AB31 Akbulak array** 59.68 312 *i* P P 13 16 18.5 +0.1
**ABKAR Akbulak array** 59.68 312 P P 13 16 18.1 -0.2
**I28M Miner Creek** 59.87 29 P P 13 16 20.6 +1.1
baz=278,SNR=16
**YUK3 Moose Creek** 60.17 33 P P 13 16 22.9 +1.1
baz=279,SNR=6.1
**E29M Blow River** 60.27 25 P P 13 16 23.2 +1.2
baz=278
**DAWY Dawson** 60.29 30 P P 13 16 23.0 +0.7
**DAWY Dawson** 60.29 30 P P 13 16 22.9 +0.6
baz=279
**H29M Whitestone** 60.40 28 P P 13 16 24.2 +1.3
**H29M Whitestone** 60.40 28 P P 13 16 24.4 +1.5
baz=278,SNR=6.3
**MULG Mulgathing** 60.40 183 P P 13 16 23.3 0.0
**G29M Pine Creek** 60.43 27 P P 13 16 24.6 +1.5
baz=278,SNR=19
**O28M Mount Upton** 60.46 34 P P 13 16 24.3 +0.5
baz=280
**LCRK Leigh Creek** 60.49 179 P P 13 16 24.5 +0.5
**I29M Ogilvie Camp,** 60.55 29 P P 13 16 25.4 +1.5
baz=279,SNR=6.2
**J29N Klondike Camp** 60.74 30 P P 13 16 26.8 +1.5
baz=280
**M29M Somme Creek** 60.98 32 P P 13 16 28.5 +1.5
baz=280,SNR=6.9
**L29M L29M** 61.01 31 P P 13 16 29.0 +2.0
baz=280,SNR=9.0
**EPYK Eagle Plains** 61.03 27 P P 13 16 28.5 +1.4
baz=280,SNR=19
**PNL Peninsula** 61.05 35 P P 13 16 28.9 +1.5
**YUK4 Talbot Arm** 61.10 33 P P 13 16 29.3 +1.4
baz=281
**G30M tAoh Zraii Nji** 61.12 27 P P 13 16 28.8 +1.1
baz=280,SNR=9.0
**K29M Barlow Dome** 61.14 30 P P 13 16 29.6 +1.6
baz=280,SNR=15
**F30M Barrier River** 61.18 26 P P 13 16 29.7 +1.7
baz=280,SNR=8.7
**YUK6 Outpost Mounta** 61.31 34 P P 13 16 30.8 +1.5
baz=281
**O29M Mount Kennedy** 61.33 34 P P 13 16 31.1 +1.8
baz=282
**I30M Mount Dempster** 61.38 29 P P 13 16 30.8 +1.3
baz=281,SNR=24
**FORT Forrest** 61.44 189 P P 13 16 30.3 +0.1
**FORT Forrest** 61.44 189 P P 13 16 30.7 +0.6
**J30M Hart River** 61.52 29 P P 13 16 31.8 +1.3
**J30M Hart River** 61.52 29 P P 13 16 31.8 +1.3
baz=281,SNR=6.8
**M30M Minto, Yukon** 61.71 32 P P 13 16 33.1 +1.4
baz=282
**N30M Aishikik Lake** 61.81 33 P P 13 16 32.9 +0.6
baz=282
**P29M Windy Craggy** 61.88 35 P P 13 16 33.9 +1.1
baz=283
**G31M Satah River** 61.89 27 P P 13 16 33.2 +0.6
G31M IAmb IAmb 13 16 34.1
comp=Z,9.0nm,0.8s
**G31M Satah River** 61.89 27 P P 13 16 33.3 +0.6
baz=282,SNR=6.9
**INK Inuvik** 61.89 25 P P 13 16 33.0 +0.4
INK IAmb IAmb 13 16 33.7
comp=Z,6.1nm,0.6s
**INK Inuvik** 61.89 25 P P 13 16 33.3 +0.7
baz=282,SNR=5.6
**INK Inuvik** 61.89 25 P P 13 16 33.0 +0.4
INK pmax pmax
comp=Z,6.0nm,0.6s
**STKA Stephens Creek** 62.05 176 P P 13 16 34.5 +0.3
**STKA Stephens Creek** 62.05 176 P P 13 16 34.3 +0.1
**STKA Stephens Creek** 62.05 176 P P 13 16 35.0 +0.9
comp=Z,12nm,0.7s,baz=337,slow=7.8,SNR=20
comp=Z,12nm,0.7s
**STKA Stephens Creek** 62.05 176 *i* iP P 13 16 34.3 +0.1
**CMSA Cobar Meteorol** 62.10 172 P P 13 16 35.5 +1.0
**P30M Million Dollar** 62.16 34 P P 13 16 35.7 +1.0
baz=283
**N31M Braeburn, Yuko** 62.41 33 P P 13 16 37.6 +1.3
baz=283
**O30N Mendenhall** 62.43 34 P P 13 16 37.9 +1.5
baz=283
**MORW Morawa** 62.47 201 P P 13 16 36.8 -0.1
**PLBC Pleasant Camp** 62.61 35 P P 13 16 38.7 +1.3
baz=284
**BBOO Buckleboo** 62.85 181 P P 13 16 39.9 +0.6
**M31M Drury Creek, Y** 62.89 32 P P 13 16 40.3 +1.0
M31M IAmb IAmb 13 16 41.0
comp=Z,5.6nm,0.6s
**M31M Drury Creek, Y** 62.89 32 P P 13 16 40.4 +1.1
baz=284,SNR=5.6
**WHY Whitehorse** 63.04 34 P P 13 16 41.5 +1.1
baz=284
**FARO Faro, Yukon** 63.35 32 P P 13 16 43.5 +1.2
FARO IAmb IAmb 13 16 44.6
comp=Z,11nm,1.2s
**FARO Faro, Yukon** 63.35 32 P P 13 16 43.4 +1.2
baz=285,SNR=6.5
**HTT Hallett** 63.48 178 P P 13 16 44.9 +1.4
**KIRV Kirov** 63.51 324 P P 13 16 42.6 -0.6
comp=Z,20nm,0.6s,baz=350,slow=1.9,SNR=7.6
comp=Z,20nm,0.6s
**KIRV Kirov** 63.51 324 *c* iP P 13 16 43.4 +0.1
**A36M Sachs Harbour** 63.71 20 P P 13 16 45.6 +1.2
baz=287,SNR=5.2
**BLDU Ballidu** 63.71 200 P P 13 16 44.8 -0.1
**SIT Sitka** 63.75 37 P P 13 16 46.1 +1.3
baz=286
**P32M Atlin** 63.88 35 P P 13 16 46.8 +1.0
baz=286
**P33M Teslin, Yukon** 64.14 34 P P 13 16 48.6 +1.2
baz=286
**Q32M Nakina River** 64.77 35 P P 13 16 52.4 +0.8
baz=287
**C36M Paulatuk** 64.92 23 P P 13 16 52.7 +0.7
C36M IAmb IAmb 13 16 53.7
comp=Z,13nm,0.8s
**C36M Paulatuk** 64.92 23 P P 13 16 52.7 +0.7
baz=289,SNR=5.7
**R33M Jennings River** 65.28 34 P P 13 16 55.9 +1.3
baz=288
**S34M Telegraph Cree** 65.66 36 P P 13 16 58.3 +1.3
baz=289
**NWAO Narrogin (SRO)** 65.74 198 P P 13 16 57.7 0.0
**TGTN Hyland Airport** 65.86 32 P P 13 16 59.7 +1.5
baz=289
**DLBC Dease Lake** 66.05 35 P P 13 17 01.1 +1.7
baz=289
**WTLY Watson Lake, Y** 66.09 33 P P 13 17 01.3 +1.7
baz=290
**BELG Belogornoye** 66.33 318 *d* iP P 13 17 01.6 +0.4
BELG pmax pmax
comp=Z,3.0nm,0.7s
**T35M Bob Quinn** 66.42 37 P P 13 17 02.9 +1.2
baz=290
**KBS Kingsbay** 66.60 350 *e*P P 13 17 03.9 +1.5
**EUNU Eureka** 67.25 7 P P 13 17 07.0 +0.5
**WRGLY Wrigley** 67.35 29 P P 13 17 09.1 +1.8
baz=292
**VADS Vadso** 67.53 339 *e*P P 13 17 09.2 +0.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LIRD | **Liard River Hi** | **67.61** | **33** | P | | **P** | **13 17 10.9** | **+1.9** |
| | baz=292 | | | | | | | |
| TOAD | **Toad River Com** | **68.24** | **34** | P | | **P** | **13 17 14.6** | **+1.7** |
| | baz=293 | | | | | | | |
| HAMF | **Hammerfest** | **68.94** | **341** | *eP* | | **P** | **13 17 17.1** | **+0.2** |
| ARCES | **ARCESS Array B** | **68.99** | **340** | P | | **P** | **13 17 17.5** | **+0.3** |
| ARCES | **ARCESS Array B** | **68.99** | **340** | P | | **P** | **13 17 17.6** | **+0.4** |
| | comp=Z,7.7nm,0.6s,baz=64,slow=8.2,SNR=47 | | | | | | | |
| | comp=Z,7.7nm,0.6s | | | | | | | |
| KTK1 | **Kautokeino** | **69.95** | **339** | *eP* | | **P** | **13 17 23.3** | **+0.3** |
| VRH | **Novokhopyorsk** | **70.18** | **318** | *eP* | | **P** | **13 17 24.3** | **-0.3** |
| VRH | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.4s | | | | | | | |
| TRO | **Tromso** | **70.86** | **341** | *eP* | | **P** | **13 17 28.4** | **+0.2** |
| VALR | **Valaam** | **71.11** | **331** | *ceP* | | **P** | **13 17 29.7** | **-0.2** |
| VALR | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| LPSR | **Galich'ya Gora** | **71.17** | **320** | *eP* | | **P** | **13 17 28.9** | **-1.5** |
| LPSR | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| YKA | **Yellowknife Ar** | **71.31** | **28** | P | | **P** | **13 17 31.7** | **+0.6** |
| | comp=Z,1.5nm,0.5s,baz=300,slow=5.6,SNR=6.6 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| OBN | **Obninsk** | **71.33** | **323** | *eP* | | **P** | **13 17 31.4** | **+0.1** |
| OBN | | | | *e* | | | 13 17 47.8 | |
| OBN | | | | *e**PP | | **pP** | **13 19 15.4** | **-0.5** |
| OBN | | | | *e**SP | | **sP** | **13 20 09.2** | **+0.8** |
| OBN | | | | *e* | | | 13 20 18.0 | |
| OBN | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| VORR | **Voronezh** | **71.41** | **319** | *eP* | | **P** | **13 17 33.7** | **+1.8** |
| VORR | | | | | pmax | pmax | | |
| | comp=Z,73nm,0.4s | | | | | | | |
| VSR | **Storozhevoye** | **71.63** | **319** | *eP* | | **P** | **13 17 30.8** | **-2.4** |
| VSR | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| KBZ | **Khabaz** | **72.58** | **311** | P | | **P** | **13 17 39.8** | **+0.9** |
| | comp=Z,7.1nm,0.7s,baz=112,slow=4.4,SNR=16 | | | | | | | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| KBZ | **Khabaz** | **72.58** | **311** | *ceP* | | **P** | **13 17 39.1** | **+0.3** |
| KBZ | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| KIV | **Kislovodsk** | **72.62** | **311** | *eP* | | **P** | **13 17 38.6** | **-0.6** |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| KIV | | | | | MLR | MLR | | |
| | comp=Z,22nm,18.0s | | | | | | | |
| STEI | **Steigen** | **72.97** | **340** | *eP* | | **P** | **13 17 40.8** | **+0.2** |
| FINES | **FINESS Array B** | **73.05** | **332** | P | | **P** | **13 17 41.0** | **-0.2** |
| | comp=Z,3.9nm,0.5s,baz=61,slow=5.9,SNR=34 | | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| FAUS | **Fauske** | **73.31** | **340** | *eP* | | **P** | **13 17 42.8** | **+0.3** |
| MOR8 | **Moi Rana** | **74.35** | **339** | *eP* | | **P** | **13 17 47.8** | **-0.8** |
| ANN | **Anapa** | **75.59** | **314** | *eP* | | **P** | **13 17 54.3** | **-1.6** |
| ANN | | | | *eS* | | **S** | **13 26 54.4** | **-1.1** |
| ANN | | | | | pmax | pmax | | |
| | comp=Z,82nm,1.0s | | | | | | | |
| MNK | **Minsk** | **76.00** | **325** | *i* P | | **P** | **13 17 56.5** | **-1.5** |
| MNK | | | | *i* *PP | | **pP** | **13 19 42.1** | **-2.3** |
| MNK | | | | *i* | | | 13 20 56.7 | |
| MNK | | | | *i* PPP | | PPP | 13 22 45.4 | |
| MNK | | | | *i* S | | **S** | **13 26 59.2** | **-0.4** |
| MNK | | | | *i* SS | | **SS** | **13 32 06.0** | **+0.9** |
| MNK | | | | *i* SSS | | SSS | 13 35 33.7 | |
| MNK | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| MNK | | | | | MLR | MLR | | |
| | comp=E,8.0nm,1.1s | | | | | | | |
| MNK | | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.9s | | | | | | | |
| B08A | **Colville Reser** | **76.07** | **42** | P | | **P** | **13 17 58.7** | **+0.2** |
| NSS | **Namsos** | **76.23** | **339** | *eP* | | **P** | **13 17 59.2** | **+0.1** |
| SUMG | **Summit** | **77.28** | **359** | P | | **P** | **13 18 05.7** | **+0.5** |
| SUMG | | | | IAmb | | IAmb | 13 18 07.0 | |
| | comp=Z,9.4nm,0.8s | | | | | | | |
| SUMG | **Summit** | **77.28** | **359** | P | | **P** | **13 18 05.7** | **+0.5** |
| SUMG | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| AK03 | **Malin Array Si** | **77.36** | **322** | P | | **P** | **13 18 05.0** | **-0.5** |
| AKASG | **Malin Array Be** | **77.37** | **322** | P | | **P** | **13 18 05.4** | **-0.1** |
| | comp=Z,1.0nm,0.3s,baz=53,slow=5.4,SNR=11 | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| AKBB | **Malin Array Si** | **77.37** | **322** | P | | **P** | **13 18 04.9** | **-0.7** |
| AKBB | **Malin Array Si** | **77.37** | **322** | *ci* P | | **P** | **13 18 05.4** | **-0.2** |
| AKBB | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| NEW | **Newport** | **77.38** | **41** | P | | **P** | **13 18 07.4** | **+1.6** |
| | baz=302 | | | | | | | |
| AK01 | **Malin Array Si** | **77.39** | **322** | P | | **P** | **13 18 05.0** | **-0.6** |
| KIEV | **Kiev** | **77.39** | **322** | P | | **P** | **13 18 05.1** | **-0.5** |
| KIEV | **Kiev** | **77.39** | **322** | P | | **P** | **13 18 05.1** | **-0.5** |
| KIEV | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| KIEV | **Kiev** | **77.39** | **322** | P | | **P** | **13 18 05.1** | **-0.5** |
| J05D | **Fort Rock, OR** | **77.45** | **47** | P | | **P** | **13 18 08.1** | **+1.7** |
| BKZ | **Black Stump Fm** | **78.26** | **150** | P | | **P** | **13 18 10.7** | **+0.3** |
| HFS | **Hagfors** | **78.65** | **335** | P | | **P** | **13 18 12.0** | **-0.3** |
| | comp=Z,5.5nm,0.6s,baz=69,slow=5.1,SNR=36 | | | | | | | |
| HFS | | | | PP | | **PP** | **13 21 17.4** | **-1.1** |
| | comp=Z,3.4nm,0.7s,baz=61,slow=9.2,SNR=6.5 | | | | | | | |
| | comp=Z,5.5nm,0.6s | | | | | | | |
| HFS | **Hagfors** | **78.65** | **335** | P | | **P** | **13 18 12.0** | **-0.3** |
| NC405 | **NORSAR Array S** | **78.69** | **336** | P | | **P** | **13 18 12.1** | **-0.4** |
| NC405 | | | | IAmb | | IAmb | 13 18 32.3 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| NC204 | **NORSAR Array S** | **78.90** | **337** | P | | **P** | **13 18 13.7** | **0.0** |
| NC204 | | | | IAmb | | IAmb | 13 18 14.1 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| NB2 | **NORSAR Subarra** | **78.91** | **336** | P | | **P** | **13 18 13.2** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=45,slow=5.3 | | | | | | | |
| NB2 | | | | PP | | **PP** | **13 21 19.4** | **-1.3** |
| | comp=Z,5.2nm,0.9s,baz=47,slow=8.6 | | | | | | | |
| NB2 | **NORSAR Subarra** | **78.91** | **336** | P | | **P** | **13 18 13.2** | **-0.5** |
| | baz=45,slow=5.3 | | | | | | | |
| NOA | **NORSAR Array B** | **78.91** | **336** | P | | **P** | **13 18 13.3** | **-0.5** |
| | comp=Z,3.6nm,0.7s,baz=46,slow=5.3,SNR=18 | | | | | | | |
| NOA | | | | PP | | **PP** | **13 21 17.1** | **-3.6** |
| | comp=Z,2.0nm,0.9s,baz=44,slow=8.1,SNR=7.5 | | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| DOMB | **Dombas** | **78.92** | **338** | *eP* | | **P** | **13 18 14.2** | **+0.4** |
| KHZ | **Kahutara** | **79.78** | **154** | P | | **P** | **13 18 18.2** | **-0.1** |
| RAYN | **Ar Rayn** | **79.86** | **291** | P | | **P** | **13 18 19.4** | **-0.1** |
| RAYN | | | | IAmb | | IAmb | 13 18 21.0 | |
| | comp=Z,46nm,1.4s | | | | | | | |
| RAYN | **Ar Rayn** | **79.86** | **291** | P | | **P** | **13 18 19.4** | **-0.1** |
| RAYN | | | | | pmax | pmax | | |
| | comp=Z,46nm,1.4s | | | | | | | |
| BR131 | **Keskin Array S** | **80.57** | **311** | ⇓*iP* | | **P** | **13 18 23.9** | **+0.9** |
| BRTR | **Keskin Array B** | **80.57** | **311** | P | | **P** | **13 18 23.4** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=85,slow=4.0,SNR=7.2 | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| BUR08 | **Bucovina Ar. S** | **81.28** | **321** | P | | **P** | **13 18 26.6** | **+0.2** |
| BURAR | **Bucovina Array** | **81.28** | **321** | P | | **P** | **13 18 27.0** | **+0.5** |
| BURAR | **Bucovina Array** | **81.28** | **321** | P | | **P** | **13 18 26.0** | **-0.5** |
| BURAR | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| HLID | **Hailey** | **81.52** | **44** | P | | **P** | **13 18 29.0** | **+1.1** |
| | baz=304 | | | | | | | |
| EGMT | **Eagleton** | **81.61** | **39** | P | | **P** | **13 18 29.2** | **+1.1** |
| | baz=307 | | | | | | | |
| KVN | **Kaiserville** | **81.66** | **50** | P | | **P** | **13 18 29.8** | **+1.1** |
| KVN | **Kaiserville** | **81.66** | **50** | P | | **P** | **13 18 29.8** | **+1.1** |
| KVN | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| NVAR | **Mina Array Bea** | **81.86** | **50** | P | | **P** | **13 18 31.1** | **+1.3** |
| | comp=Z,0.9nm,0.4s,baz=290,slow=5.4,SNR=17 | | | | | | | |
| NVAR | | | | pP | | **pP** | **13 20 20.1** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=298,slow=3.2,SNR=3.4 | | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | | |
| BOZ | **Bozeman (W)** | **81.99** | **41** | P | | **P** | **13 18 31.2** | **+0.9** |
| | baz=306 | | | | | | | |
| MMAI | **Mount Meron Ar** | **82.86** | **304** | P | | **P** | **13 18 35.6** | **+0.9** |
| | comp=Z,18nm,1.0s,baz=44,slow=6.1,SNR=6.7 | | | | | | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| CWC | **Cottonwood Cre** | **83.07** | **52** | P | | **P** | **13 18 36.9** | **+1.0** |
| | baz=303 | | | | | | | |
| GRAC | **Grapevine Rang** | **83.25** | **51** | P | | **P** | **13 18 37.7** | **+1.0** |
| | baz=303 | | | | | | | |
| RLMT | **Red Lodge** | **83.62** | **41** | P | | **P** | **13 18 39.1** | **+0.5** |
| | baz=307 | | | | | | | |
| TPNV | **Topopah Spring** | **84.03** | **51** | P | | **P** | **13 18 41.5** | **+0.8** |
| | baz=304 | | | | | | | |
| DUG | **Dugway, Tooele** | **84.42** | **46** | P | | **P** | **13 18 43.3** | **+0.8** |
| | baz=305 | | | | | | | |
| CIS | **Catalina Islan** | **84.48** | **54** | P | | **P** | **13 18 43.1** | **+0.4** |
| | baz=303 | | | | | | | |
| BW06 | **Boulder Array** | **84.87** | **43** | P | | **P** | **13 18 45.7** | **+0.9** |
| | baz=307 | | | | | | | |
| PDAR | **Pinedale Array** | **84.87** | **43** | P | | **P** | **13 18 45.6** | **+0.8** |
| | comp=Z,0.4nm,0.4s,baz=353,slow=1.6,SNR=9.2 | | | | | | | |
| PDAR | | | | pP | | **pP** | **13 20 34.5** | **-0.6** |
| | comp=Z,0.5nm,0.8s,baz=298,slow=3.9,SNR=3.0 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| ULM | **Lac du Bonnet** | **86.99** | **31** | P | | **P** | **13 18 54.1** | **-0.3** |
| | comp=Z,0.8nm,0.3s,baz=324,slow=8.7,SNR=2.0 | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| EKA | **Eskdalemuir Ar** | **88.13** | **339** | PP | | **PP** | **13 22 33.7** | **-1.1** |
| | comp=Z,0.9nm,0.6s,baz=30,slow=5.8,SNR=4.5 | | | | | | | |
| TXAR | **Lajitas Array** | **97.01** | **50** | P | | Pdif | 13 19 42.3 | +1.3 |
| | comp=Z,0.1nm,0.5s,baz=327,slow=1.5,SNR=2.2 | | | | | | | |
| TXAR | | | | pP | | pwP | 13 21 35.0 | -1.3 |
| | comp=Z,1.1nm,0.7s,baz=324,slow=3.3,SNR=6.5 | | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | | |
| ESDC | **Sonseca Array** | **101.52** | **330** | PP | | **PP** | **13 24 12.2** | **-5.3** |
| | comp=Z,0.8nm,1.0s,baz=14,slow=6.3,SNR=5.2 | | | | | | | |
| MAW | **Mawson** | **112.05** | **203** | PP | | **PP** | **13 25 34.4** | **+0.3** |
| | comp=Z,5.2nm,1.1s,baz=72,slow=13,SNR=5.9 | | | | | | | |
| TORD | **Torodi Ar. Bea** | **119.14** | **309** | PKP | | **PKPdf** | **13 24 54.8** | **-0.5** |
| | comp=Z,1.0nm,0.5s,baz=18,slow=1.7,SNR=10 | | | | | | | |
| TORD | | | | SKP | | **SKPdf** | **13 27 42.8** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=7.0,slow=2.6,SNR=4.4 | | | | | | | |
| QSPA | **South Pole Qui** | **120.14** | **180** | PKP | | **PKiKP** | **13 24 55.8** | **+0.1** |
| | comp=Z,4.2nm,0.9s,baz=292,slow=1.1,SNR=19 | | | | | | | |
| BOSA | **Boshof** | **121.59** | **253** | PKP | | **PKiKP** | **13 25 00.1** | **+0.2** |
| | comp=Z,3.9nm,0.7s,baz=61,slow=1.7,SNR=9.6 | | | | | | | |
| ELIB | **Princess Elisa** | **125.95** | **201** | *d*PKPdf | | **PKiKP** | **13 25 07.4** | **+0.1** |
| ELIB | | | | *d*pPKP | | **PP** | **13 27 07.5** | **-1.1** |
| TROLL | **Troll, Antarti** | **131.84** | **197** | ⇑PKPdf | | **PKiKP** | **13 25 18.7** | **-0.4** |
| | comp=Z,254nm,0.5s | | | | | | | |
| TROLL | | | | ⇑SKPbc | | **SKPbc** | **13 27 57.0** | **+0.6** |
| | comp=Z,315nm,0.8s | | | | | | | |
| SNAA | **Sanae** | **133.38** | **196** | ⇑PKPdf | | **PKPdf** | **13 25 21.0** | **+0.3** |
| | comp=Z,40nm,0.6s | | | | | | | |
| SNAA | | | | ⇑SKPbc | | **SKPbc** | **13 28 01.9** | **+0.4** |
| | comp=Z,103nm,0.7s | | | | | | | |
| SNAA | **Sanae** | **133.38** | **196** | PKP | | **PKPdf** | **13 25 21.1** | **+0.3** |
| | comp=Z,1.8nm,0.7s,baz=178,slow=6.2,SNR=10.0 | | | | | | | |
| SNAA | | | | PP | | **PP** | **13 27 55.6** | **-0.4** |
| | comp=Z,3.1nm,1.1s,baz=137,slow=8.9,SNR=3.7 | | | | | | | |
| SNAA | | | | SKPbc | | **SKPbc** | **13 28 02.2** | **+0.6** |
| | comp=Z,4.2nm,0.7s,baz=172,slow=5.3,SNR=15 | | | | | | | |
| VNA2 | **Neumayer--Watz** | **134.97** | **196** | ⇑PKPdf | | **PKPdf** | **13 25 24.4** | **+0.7** |
| | comp=Z,7.6nm,0.5s,baz=135,slow=0.9 | | | | | | | |
| VNA3 | **Neumayer Olymp** | **135.25** | **195** | ⇑PKPdf | | **PKPdf** | **13 25 23.8** | **-0.4** |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| VNA3 | | | | ⇑SKPbc | | **SKPbc** | **13 28 05.0** | **-2.4** |
| | comp=Z,3.2nm,0.9s | | | | | | | |
| LPAZ | **La Paz** | **152.91** | **65** | PKPbc | | **PKiKP** | **13 26 05.3** | **+0.8** |
| | comp=Z,2.2nm,0.9s,baz=215,slow=2.1,SNR=6.3 | | | | | | | |
| LPAZ | | | | pPKPbc | | **pPKPbc** | **13 28 04.5** | **+2.2** |
| | comp=Z,2.7nm,0.9s,baz=344,slow=9.0,SNR=4.9 | | | | | | | |
| PLCA | **Paso Flores** | **155.25** | **122** | PKPbc | | PKPdf | 13 26 09.1 | +10 |
| | comp=Z,2.8nm,1.0s,baz=248,slow=2.4,SNR=4.6 | | | | | | | |
| PLCA | | | | PKPab | | **PKPab** | **13 26 28.3** | **+1.4** |
| | comp=Z,4.7nm,1.0s,baz=191,slow=5.5,SNR=5.0 | | | | | | | |

*SOME **03** 13:59:42.3, 49°.72N×73°.73E, h0km*
*NNC **03** 13:59:44.3±3.4, 49°.92N×73°.73E, h0km, mb2.9, mpv2.6, Error ellipse: s-maj=36.8km s-min=11.0km az=20.0, Suspected Mining explosion.*
**ISC 03 13:59:44.4±1.4, 49.86N±0.06×73.77E±0.06, h0km, n6, σ1s90/7, 2C-5D, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KURBB | **Kurchatov Arra** | **3.15** | **74** | ⇓Pg | **Pb** | **14 00 42.1** | **+0.9** |
| | 1.5nm,0.6s,baz=263,slow=18 | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 14 01 25.8 | |
| | 6.7nm,0.6s,baz=274,slow=35 | | | | | | |
| KURK | **Kurchatov** | **3.23** | **73** | ⇑Pg | **Pb** | **14 00 42.8** | **+0.3** |
| | 0.7nm,0.6s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 14 01 26.9 | |
| | 4.2nm,0.7s | | | | | | |
| BVA0 | **Borovoye Array** | **3.81** | **328** | ⇓Pg | **Pb** | **14 00 52.8** | **+0.3** |
| | 1.9nm,1.0s | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 14 01 43.6 | |
| | 1.8nm,0.7s,baz=137,slow=27,SNR=5.4 | | | | | | |
| SEM | **Semipalatinsk** | **4.20** | **80** | *eP* | **Pg** | **14 01 02.9** | **-2.1** |
| | 2.3nm,0.1s | | | | | | |
| SEM | | | | *eS* | **Sg** | **14 02 00.4** | **+0.9** |
| | 14nm,0.2s | | | | | | |
| BTLS | **Baital** | **4.83** | **178** | *eP* | **Pb** | **14 01 08.9** | **-1.0** |
| | 0.9nm,0.2s | | | | | | |
| BTLS | | | | *eS* | **Sb** | **14 02 11.2** | **+2.7** |
| | 4.2nm,0.7s | | | | | | |
| MK31 | **Makanchi Array** | **6.46** | **115** | ⇑Lg | Lg | 14 03 06.6 | |
| | 1.4nm,0.7s,baz=310,slow=28,SNR=5.0 | | | | | | |

*NOU **03** 14:32:26.9, 36°.98S×177°.72E, h262km, MLv3.9/13, Off E. Coast of N. Island, N.Z.*
*WEL **03** 14:32:29.7±1.3, 37°.5S±12°×177°.7E±°, h206km±13km, M3.0/13, ML2.9/7, MLv3.0/13, Error ellipse: s-maj=0.0km s-min=0.0km az=34.4, confirmed*
**ISC 03 14:32:25.4±2.7, 36.7S±0.1×177.3E±0.1, h248km±14km, n56, σ1s53/63, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HAZ | **Te Kaha** | **1.13** | **162** | P | **Pn** | **14 33 01.4** | **+0.5** |
| HAZ | | | | S | **S** | **14 33 26.2** | **-2.7** |
| MXZ | **Matakaoa Point** | **1.17** | **139** | P | **Pn** | **14 33 02.6** | **+1.4** |
| MXZ | **Matakaoa Point** | **1.17** | **139** | P | **Pn** | **14 33 02.3** | **+1.1** |
| MXZ | | | | S | **S** | **14 33 28.4** | **-1.0** |
| KUZ | **Kuaotunu** | **1.30** | **267** | P | **Pn** | **14 33 02.1** | **0.0** |
| RUGZ | **Raukumara Rang** | **1.31** | **168** | P | **Pn** | **14 33 02.5** | **+0.2** |
| RUGZ | | | | S | **S** | **14 33 28.7** | **-2.7** |
| OPRZ | **Ohinepanea** | **1.32** | **208** | P | **Pn** | **14 33 03.9** | **+1.7** |
| PUZ | **Puketiti** | **1.57** | **153** | P | **Pn** | **14 33 05.4** | **+1.3** |
| PUZ | | | | S | **S** | **14 33 33.0** | **-1.6** |
| TWGZ | **Tauwhareparae** | **1.58** | **161** | P | **Pn** | **14 33 06.0** | **+1.9** |
| TWGZ | | | | S | **S** | **14 33 34.8** | **+0.1** |
| GRZ | **Great Barrier** | **1.58** | **285** | P | **Pn** | **14 33 04.0** | **-0.2** |
| URZ | **Urewera** | **1.59** | **187** | P | **Pn** | **14 33 05.2** | **+1.1** |
| URZ | **Urewera** | **1.59** | **187** | P | **Pn** | **14 33 04.8** | **+0.7** |
| URZ | | | | S | **S** | **14 33 33.0** | **-1.7** |
| KARZ | **Kaharoa** | **1.60** | **213** | P | **Pn** | **14 33 06.5** | **+2.3** |
| KMRZ | **Kaimai** | **1.61** | **223** | P | **Pn** | **14 33 06.0** | **+1.6** |
| OMRZ | **Omania** | **1.62** | **208** | P | **Pn** | **14 33 07.2** | **+2.8** |
| MWZ | **Matawai** | **1.66** | **175** | P | **Pn** | **14 33 05.9** | **+1.1** |
| MWZ | | | | S | **S** | **14 33 35.0** | **-0.8** |
| TARZ | **Mount Tarawera** | **1.69** | **203** | P | **Pn** | **14 33 07.6** | **+2.5** |
| WIAZ | **Waiheke Island** | **1.78** | **266** | P | **Pn** | **14 33 06.4** | **+0.7** |
| MKAZ | **Moumakai** | **1.80** | **256** | P | **Pn** | **14 33 06.9** | **+1.0** |
| TKGZ | **Te Karaka** | **1.80** | **167** | P | **Pn** | **14 33 07.4** | **+1.5** |
| TKGZ | | | | S | **S** | **14 33 37.2** | **-0.7** |
| TOZ | **Tahuroa Road** | **1.80** | **234** | P | **Pn** | **14 33 07.4** | **+1.5** |
| RAGZ | **Rawiri** | **1.81** | **178** | P | **Pn** | **14 33 07.3** | **+1.2** |
| MUGZ | **Murupara** | **1.85** | **194** | P | **Pn** | **14 33 07.3** | **+1.0** |
| HRRZ | **Handcock Road** | **1.90** | **206** | P | **Pn** | **14 33 09.4** | **+2.6** |
| CNGZ | **Carnagh Statio** | **1.93** | **159** | P | **Pn** | **14 33 09.1** | **+2.1** |
| RTZ | **Ruatahuna** | **1.95** | **188** | P | **Pn** | **14 33 08.1** | **+0.8** |
| ETAZ | **East Tamaki Re** | **1.96** | **261** | P | **Pn** | **14 33 08.5** | **+1.3** |
| MBAZ | **Motutapu North** | **1.96** | **267** | P | **Pn** | **14 33 08.3** | **+0.9** |
| PRRZ | **Plateau Road** | **1.96** | **202** | P | **Pn** | **14 33 08.6** | **+1.3** |
| ABAZ | **Army Bay** | **2.02** | **272** | P | **Pn** | **14 33 08.9** | **+1.0** |
| ALRZ | **Allen Road** | **2.04** | **203** | P | **Pn** | **14 33 09.5** | **+1.5** |
| RIGZ | **Rimuhau** | **2.05** | **171** | P | **Pn** | **14 33 09.7** | **+1.6** |
| WPRZ | **Whakapapataran** | **2.06** | **207** | P | **Pn** | **14 33 10.6** | **+2.4** |
| SNGZ | **Shannon Statio** | **2.10** | **180** | P | **Pn** | **14 33 10.1** | **+1.5** |
| AWAZ | **Awhitu Peninsu** | **2.20** | **259** | P | **Pn** | **14 33 10.7** | **+1.2** |
| RVAZ | **Riverhead Bore** | **2.22** | **267** | P | **Pn** | **14 33 10.7** | **+0.9** |
| MRHZ | **Matea Rd** | **2.27** | **199** | P | **Pn** | **14 33 11.3** | **+1.0** |
| PRGZ | **Paritu Road** | **2.28** | **169** | P | **Pn** | **14 33 12.0** | **+1.7** |
| KNZ | **Kokohu** | **2.35** | **174** | P | **Pn** | **14 33 12.1** | **+1.2** |
| NMHZ | **Naumai** | **2.45** | **190** | P | **Pn** | **14 33 13.7** | **+1.6** |
| MHGZ | **Mahia Peninsul** | **2.51** | **170** | P | **Pn** | **14 33 14.1** | **+1.6** |
| RATZ | **Rangitukua** | **2.51** | **209** | P | **Pn** | **14 33 14.4** | **+1.8** |
| WCZ | **Waipu Caves** | **2.53** | **286** | P | **Pn** | **14 33 13.0** | **+0.2** |
| BKZ | **Black Stump Fm** | **2.57** | **195** | P | **Pn** | **14 33 13.7** | **+0.5** |
| BKZ | **Black Stump Fm** | **2.57** | **195** | P | **Pn** | **14 33 13.8** | **+0.6** |
| ARHZ | **Aropaoanui** | **2.59** | **186** | P | **Pn** | **14 33 14.8** | **+1.5** |
| HIZ | **Hauiti** | **2.69** | **226** | P | **Pn** | **14 33 17.0** | **+2.6** |
| OUZ | **Omahuta** | **3.37** | **295** | P | Pn | 14 33 28.4 | +6.5 |
| OUZ | **Omahuta** | **3.37** | **295** | P | **Pn** | **14 33 22.7** | **+0.8** |
| KHEZ | **Kahui Hut** | **3.70** | **224** | P | **Pn** | **14 33 29.3** | **+3.6** |
| BFZ | **Birch Farm** | **4.08** | **192** | P | **Pn** | **14 33 30.0** | **0.0** |
| SNZO | **South Karori** | **5.06** | **203** | P | **Pn** | **14 33 41.1** | **-0.6** |
| QRZ | **Quartz Range** | **5.59** | **221** | P | **Pn** | **14 33 49.8** | **+1.5** |
| KHZ | **Kahutara** | **6.44** | **206** | P | **Pn** | **14 33 58.9** | **+0.1** |
| RPZ | **Rata Peaks** | **8.51** | **212** | P | **Pn** | **14 34 25.2** | **+0.1** |
| ODZ | **Otahua Downs** | **9.77** | **209** | P | **Pn** | **14 34 41.9** | **+1.0** |
| JCZ | **Jackson Bay** | **9.85** | **219** | P | **Pn** | **14 34 42.5** | **+0.4** |

*IDC **03** 14:38:44.6±1.0, 32°.91N×136°.52E, h0km, mb3.8/5, mbtmp3.8/11, ML3.3/6, MS3.1/15, Error ellipse: s-maj=26.3km s-min=16.9km az=56.0*
*JMA **03** 14:38:45.8±0.1, 32°.9N±0°.5×136°.5E±0°.3, h32km, MV3.9/40, SE OFF KII PENINSULA*
*NIED **03** 14:38:45.8, 32°.91N×136°.45E, h32km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10^14Nm; Mrr=3.51; Mθθ=1.11; Mφφ=2.40; Mrθ=4.15; Mθφ=6.13; Mφr=2.62; Fault plane solution: M0=7.88000×10^14 NP1: φs=250.00000°, δ=73.00000°, λ=-55.00000°. NP2: φs=3.00000°, δ=39.00000°, λ=-151.00000°.*
**ISC 03 14:38:44.1±1.8, 32.98N±0.06×136.43E±0.03, h2km±11km, n47, σ1s47/41, mb3.8/5, MS3.2/11, 4D, Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TTO1 | **TONANKAI O.B.S** | **0.71** | **24** | ⇓*iP* | **Pb** | **14 39 00.4** | **+1.4** |
| TTO1 | | | | ⇓*eX* | | 14 39 10.5 | |
| JWKM | **Wakayamakushim** | **0.74** | **310** | *iP* | **Pn** | **14 39 00.8** | **-0.7** |
| TTO2 | **TONANKAI O.B.S** | **0.90** | **33** | ⇓*iP* | **Pb** | **14 39 03.2** | **+0.8** |
| JMMH | **Miemihama** | **0.91** | **338** | *iP* | **Pb** | **14 39 03.4** | **+0.8** |
| JMMH | | | | S | **Sb** | **14 39 15.2** | **+0.1** |
| JTNC | **Tanabenakahech** | **1.08** | **321** | *iP* | **Pb** | **14 39 06.0** | **+0.4** |
| JTNC | | | | S | **Sb** | **14 39 19.9** | **-0.3** |
| TTO3 | **TONANKAI O.B.S** | **1.20** | **42** | P | **Pg** | **14 39 07.0** | **-0.1** |
| TTO3 | | | | S | **Sg** | **14 39 23.0** | **+0.5** |
| JWM | **Minabe** | **1.25** | **314** | *iP* | **Pb** | **14 39 08.6** | **+0.1** |
| JWM | | | | S | **Sg** | **14 39 24.1** | **-0.3** |
| JKN2 | **Miekihoku** | **1.26** | **354** | *iP* | **Pg** | **14 39 08.6** | **+0.2** |
| JKN2 | | | | S | **Sg** | **14 39 23.7** | **-1.0** |
| JNTK | **Naratenkawa** | **1.37** | **341** | *iP* | **Pg** | **14 39 10.2** | **-0.2** |
| JNTK | | | | S | **Sg** | **14 39 27.0** | **-1.0** |
| TTO4 | **TONANKAI O.B.S** | **1.38** | **42** | ⇓*iP* | **Pn** | **14 39 09.2** | **-0.9** |
| JWY | **Kouya** | **1.42** | **331** | *iP* | **Pg** | **14 39 11.4** | **0.0** |
| JWY | | | | S | **Sg** | **14 39 28.9** | **-1.0** |
| JIE | **Ise** | **1.43** | **9** | *iP* | **Pn** | **14 39 11.0** | **-0.1** |
| JIE | | | | S | **Sg** | **14 39 27.4** | **-2.6** |
| JSG | **Sagara** | **2.23** | **40** | P | **Pn** | **14 39 23.3** | **+1.2** |
| JMN | **Monobe** | **2.27** | **290** | P | **Pn** | **14 39 22.7** | **+0.1** |
| INU | **Inuyama** | **2.41** | **11** | P | **Pn** | **14 39 25.0** | **+0.4** |
| JGF | **Kuroka** | **2.73** | **16** | P | **Pn** | **14 39 29.2** | **+0.2** |
| JHJ | **Hachijo jima 2** | **2.82** | **86** | Pn | **Pn** | **14 39 30.3** | **+0.1** |
| | 4.6nm,0.3s,baz=227,slow=19,SNR=2.9 | | | | | | |
| JHJ | | | | Sn | **Sn** | **14 39 59.9** | **-4.8** |
| | 19nm,0.3s,baz=131,slow=23,SNR=7.1 | | | | | | |
| | 64nm,0.7s | | | | | | |
| MAJO | **Matsushiro** | **3.84** | **22** | P | **Pn** | **14 39 46.1** | **+1.8** |
| MJAR | **Matsushiro Arr** | **3.84** | **22** | Pn | **Pn** | **14 39 45.4** | **+1.1** |
| | 0.4nm,0.3s,baz=173,slow=29,SNR=20 | | | | | | |
| MJAR | | | | Sn | **Sn** | **14 40 27.8** | **-2.2** |
| | 1.0nm,0.3s,baz=208,slow=14,SNR=3.5 | | | | | | |
| MJAR | | | | LR | LR | 14 41 33.1 | |
| | comp=Z,137nm,19.1s,baz=162,slow=43 | | | | | | |
| | 2.8nm,0.4s | | | | | | |
| JNU | **Nakatsue** | **4.67** | **273** | P | **Pn** | **14 39 57.1** | **+1.4** |
| JNU | **Nakatsue** | **4.67** | **273** | Pn | **Pn** | **14 39 56.2** | **+0.5** |
| | 1.0nm,0.3s,baz=169,slow=14,SNR=14 | | | | | | |
| JNU | | | | Sn | **Sn** | **14 40 47.2** | **-3.3** |
| | 1.3nm,0.3s,baz=83,slow=2.4,SNR=4.1 | | | | | | |
| | 2.2nm,0.4s | | | | | | |
| JTU | **Tsushima** | **6.06** | **287** | P | **Pn** | **14 40 14.4** | **-0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ML02 | | | | *eS* | | **Sb** | **14 47 00.5** | **+0.1** |
| ML02 | | | | IAML | | | 14 47 09.1 | |
| | comp=E,941nm,0.4s | | | | | | | |
| **GO06** | **Curarrehue** | **2.79** | **138** | | | **Pn** | **14 46 25.2** | **+1.6** |
| **GO06** | **Curarrehue** | **2.79** | **138** | *eP* | | **Pn** | **14 46 25.1** | **+1.6** |
| GO06 | | | | *eS* | | **Sb** | **14 47 01.5** | **-2.3** |
| **GO05** | **Huala** | **2.99** | **33** | | | **Pn** | **14 46 28.0** | **+1.7** |
| **GO05** | **Huala** | **2.99** | **33** | *eP* | | **Pn** | **14 46 28.1** | **+1.8** |
| **LR05** | **Currie** | **3.07** | **152** | Pn | | **Pn** | **14 46 29.4** | **+2.2** |
| **LR05** | **Currie** | **3.07** | **152** | IAML | | | 14 47 19.9 | |
| | comp=E,482nm,0.7s | | | | | | | |
| **LL04** | **Puerto Octay** | **3.56** | **161** | | | **Pn** | **14 46 35.5** | **+1.6** |
| **BO02** | **Sierra Bellavi** | **3.73** | **44** | Pn | | **Pn** | **14 46 37.4** | **+0.9** |
| **BO02** | **Sierra Bellavi** | **3.73** | **44** | *eP* | | **Pn** | **14 46 37.7** | **+1.2** |
| **LL03** | **Petrohue** | **3.77** | **162** | Pn | | **Pn** | **14 46 37.7** | **+0.7** |
| **LL05** | **Los Muermos** | **3.87** | **175** | Pn | | **Pn** | **14 46 36.9** | **-1.4** |
| **BO01** | **Tunca** | **3.89** | **37** | Pn | | **Pn** | **14 46 39.8** | **+1.2** |
| **BO01** | **Tunca** | **3.89** | **37** | *eP* | | **Pn** | **14 46 39.8** | **+1.2** |
| **PLCA** | **Paso Flores** | **4.12** | **142** | | | **Pn** | **14 46 43.4** | **+1.6** |
| **MT01** | **Popeta** | **4.26** | **31** | | | **Pn** | **14 46 44.9** | **+1.1** |
| **MT01** | **Popeta** | **4.26** | **31** | *eP* | | **Pn** | **14 46 45.0** | **+1.3** |
| **VA05** | **Santo Domingo** | **4.31** | **26** | | | **Pn** | **14 46 45.1** | **+0.8** |
| **BO04** | **La Punta** | **4.45** | **38** | | | **Pn** | **14 46 47.5** | **+1.2** |
| **MT09** | **Talagante** | **4.45** | **33** | Pn | | **Pn** | **14 46 47.5** | **+1.1** |
| **LMEL** | **Las Melosas** | **4.76** | **40** | | | **Pn** | **14 46 52.7** | **+2.0** |
| **MT13** | **San Alfonso** | **4.80** | **39** | | | **Pn** | **14 46 51.9** | **+0.6** |
| **MT02** | **Curacav** | **4.84** | **29** | | | **Pn** | **14 46 52.6** | **+0.9** |
| **VA01** | **Torpederas** | **4.88** | **23** | | | **Pn** | **14 46 52.8** | **+0.7** |
| **MT03** | **Universidad Ad** | **4.90** | **35** | Pn | | **Pn** | **14 46 54.1** | **+1.5** |
| **MT16** | **CCHEN** | **4.95** | **35** | Pn | | **Pn** | **14 46 54.1** | **+0.9** |
| **LL01** | **San Ignacio de** | **4.96** | **167** | Pn | | **Pn** | **14 46 55.1** | **+1.8** |
| **PEL** | **Peldehue** | **5.12** | **32** | Pn | | **Pn** | **14 46 56.1** | **+0.6** |
| **MT08** | **Bocatoma Ro** | **5.18** | **39** | | | **Pn** | **14 46 58.5** | **+2.0** |
| **VA06** | **Catapilco** | **5.41** | **24** | Pn | | **Pn** | **14 46 60.0** | **+0.4** |
| **VA03** | **San Esteban** | **5.51** | **31** | | | **Pn** | **14 47 01.7** | **+0.8** |
| **CO02** | **Combarbal** | **6.77** | **22** | Pn | | **Pn** | **14 47 19.3** | **+1.0** |
| **CO06** | **Fray Jorge** | **7.11** | **16** | Pn | | **Pn** | **14 47 21.9** | **-0.9** |
| **CO03** | **El Pedregal** | **7.20** | **23** | | | **Pn** | **14 47 24.5** | **+0.3** |
| **GO04** | **Tololo Observa** | **7.79** | **20** | Pn | | **Pn** | **14 47 34.3** | **+1.9** |
| **CO01** | **Juntas del Tor** | **8.19** | **24** | | | **Pn** | **14 47 39.2** | **+1.4** |
| **LCO** | **Las Campanas** | **8.92** | **18** | Pn | | **Pn** | **14 47 48.8** | **+0.9** |
| **AC05** | **El Transito** | **9.20** | **20** | | | **Pn** | **14 47 52.5** | **+0.8** |
| **TRQA** | **Tornquist** | **9.46** | **97** | Pn | | **Pn** | **14 47 57.8** | **+2.8** |
| **AC04** | **Llanos de Chal** | **9.61** | **15** | Pn | | **Pn** | **14 47 58.0** | **+0.8** |
| **BOAV** | **Boa Vista** | **41.63** | **20** | P | | **P** | **14 53 24.0** | **-2.5** |
| **SNAA** | **Sanae** | **48.91** | **157** | P | | **P** | **14 54 24.5** | **+0.8** |
| SNAA | | | | IAmb | | IAmb | 14 54 28.3 | |
| | comp=Z,21nm,1.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **52.70** | **180** | P | | **P** | **14 54 52.6** | **+0.3** |
| QSPA | | | | IAmb | | IAmb | 14 56 29.2 | |
| | comp=Z,20nm,1.8s | | | | | | | |
| **VNDA** | **Vanda** | **60.33** | **192** | P | | **P** | **14 55 47.5** | **+1.2** |
| **X51A** | **Calhoun** | **72.46** | **351** | P | | **P** | **14 57 04.4** | **+0.1** |
| **FPAL** | **Fort Paine** | **72.54** | **350** | P | | **P** | **14 57 04.0** | **-0.8** |
| FPAL | | | | IAmb | | IAmb | 14 58 09.0 | |
| | comp=Z,21nm,1.7s | | | | | | | |
| **OXF** | **Oxford** | **73.13** | **347** | P | | **P** | **14 57 06.2** | **-2.0** |
| **TORD** | **Torodi Ar. Bea** | **86.83** | **71** | P | | **P** | **14 58 23.5** | **+0.8** |
| TORD | | | | IAmb | | IAmb | 15 00 41.9 | |
| | comp=Z,11nm,2.0s | | | | | | | |

*NSSP **03** 15:19:53.2,38˚.28N×45˚.10E,h10km,Ms3.8*
*AFAD **03** 15:19:54.7±0.0,38˚.37N×44˚.81E,h7km±3km,ML3.1*
*AZER **03** 15:19:54.4,38˚.47N×44˚.93E,h6km,ml3.4*
*TEH **03** 15:19:54.3,38˚.36N×44˚.89E,h10km±23km,MLh3.3*
*ISK **03** 15:19:54.8,38˚.64N×44˚.75E,h5km,ML3.1/7*

**ISC 03 15:19:54.6±0.7,38˚.35N±0˚.02×44˚.82E±0˚.02,h10km,n70,**
**σ1§74/109,4C-4D,Turkey-Iran border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ISHB** | **Shabestar** | **0.63** | **96** | **Pg** | **Pg** | **15 20 04.8** | **-2.0** |
| **OZAP** | **Van, Ozalp-Mer** | **0.72** | **296** | **P** | **Pg** | **15 20 08.6** | **0.0** |
| OZAP | | | | S | **Sg** | **15 20 15.8** | **-2.2** |
| OZAP | | | | *i* AML | AML | 15 20 26.0 | |
| | comp=E,530nm,0.8s | | | | | | |
| **IMRD** | **Marand** | **0.78** | **62** | Pg | **Pg** | **15 20 08.6** | **-1.0** |
| **YOVA** | **Hakkari_Yksek** | **0.87** | **209** | P | **Pg** | **15 20 11.3** | **-0.1** |
| YOVA | | | | S | **Sg** | **15 20 23.0** | **+0.3** |
| **YOVA** | **Hakkari_Yksek** | **0.87** | **209** | Pg | **Pg** | **15 20 11.3** | **-0.1** |
| **NAX** | **Nakhchivan** | **0.98** | **32** | P | **Pg** | **15 20 12.5** | **-0.9** |
| NAX | | | | S | **Sg** | **15 20 25.8** | **-0.3** |
| **ITBZ** | **Tabriz** | **1.05** | **96** | Pg | **Pg** | **15 20 12.2** | **-2.6** |
| **CLDR** | **Caldiran** | **1.06** | **319** | Pg | **Pg** | **15 20 11.3** | **-3.8** |
| CLDR | | | | Sg | **Sg** | **15 20 24.5** | **-4.4** |
| **CLDR** | **Caldiran** | **1.06** | **319** | P | **Pg** | **15 20 11.2** | **-3.8** |
| CLDR | | | | S | **Sg** | **15 20 25.6** | **-3.3** |
| **CLDR** | **Caldiran** | **1.06** | **319** | Pg | **Pg** | **15 20 13.2** | **-1.8** |
| **ORD** | **Ordubad** | **1.08** | **57** | P | **Pg** | **15 20 14.2** | **-1.2** |
| ORD | | | | S | **Sg** | **15 20 28.8** | **-0.7** |
| **TVAN** | **Van** | **1.13** | **280** | P | **Pn** | **15 20 17.4** | **+0.7** |
| TVAN | | | | S | **Sb** | **15 20 31.4** | **+0.3** |
| **TVAN** | **Van** | **1.13** | **280** | Pg | **Pn** | **15 20 17.3** | **+0.7** |
| **IAZR** | **Azarshahr** | **1.13** | **126** | Pg | **Pb** | **15 20 15.1** | **-1.3** |
| **VANB** | **Van** | **1.15** | **283** | Pg | **Pb** | **15 20 16.5** | **-0.1** |
| VANB | | | | Sg | **Sn** | **15 20 32.1** | **-0.6** |
| **VANB** | **Van** | **1.15** | **283** | Pg | **Pn** | **15 20 16.7** | **-0.2** |
| **VMUR** | **Van-Muradiye** | **1.17** | **304** | P | **Pn** | **15 20 17.3** | **+0.1** |
| VMUR | | | | S | **Sn** | **15 20 33.2** | **0.0** |
| VMUR | | | | *i* AML | AML | 15 20 40.0 | |
| | comp=E,465nm,0.8s | | | | | | |
| **VMUR** | **Van-Muradiye** | **1.17** | **304** | Pg | **Pn** | **15 20 17.2** | **+0.1** |
| **HAKT** | **HAKKARI** | **1.18** | **228** | P | **Pn** | **15 20 18.3** | **+0.8** |
| HAKT | | | | S | **Sn** | **15 20 35.3** | **+1.6** |
| HAKT | | | | *i* AML | AML | 15 20 43.0 | |
| | comp=E,230nm,0.7s | | | | | | |
| **HAKT** | **HAKKARI** | **1.18** | **228** | Pg | **Pn** | **15 20 18.2** | **+0.8** |
| **SBZ** | **Shahbuz** | **1.19** | **28** | P | **Pb** | **15 20 16.2** | **-1.2** |
| SBZ | | | | S | **Sb** | **15 20 32.3** | **-0.6** |
| **HYR** | **Heyderabad** | **1.37** | **1** | P | **Pn** | **15 20 19.4** | **-0.4** |
| HYR | | | | S | **Sg** | **15 20 38.6** | **0.0** |
| **GEVA** | **Gevas** | **1.39** | **269** | P | **Pb** | **15 20 20.7** | **-0.1** |
| **GEVA** | **Gevas** | **1.39** | **269** | Pg | **Pb** | **15 20 20.6** | **-0.1** |
| **AKDM** | **Akdamar-Van** | **1.45** | **270** | Pn | **Pg** | **15 20 22.7** | **+0.3** |
| **DYDN** | **Diyadin** | **1.48** | **324** | P | **Pb** | **15 20 21.9** | **-0.5** |
| DYDN | | | | S | **Sg** | **15 20 42.9** | **+0.5** |
| DYDN | | | | *i* AML | AML | 15 20 48.0 | |
| | comp=E,398nm,1.0s | | | | | | |
| **DYDN** | **Diyadin** | **1.48** | **324** | Pg | **Pb** | **15 20 21.9** | **-0.5** |
| **IGDI** | **IGDIR** | **1.62** | **339** | P | **Pg** | **15 20 24.9** | **-0.8** |
| IGDI | | | | S | **Sg** | **15 20 47.8** | **+1.0** |
| **IGDI** | **IGDIR** | **1.62** | **339** | Pg | **Pg** | **15 20 24.9** | **-0.8** |
| **NRKZ** | **NAREK** | **1.65** | **356** | *eP* | **Pb** | **15 20 25.3** | **+0.1** |
| NRKZ | | | | *eS* | **Sg** | **15 20 49.6** | **+1.8** |
| **TASB** | **TASBURUN-IGDIR** | **1.69** | **345** | Pn | **Pn** | **15 20 22.8** | **-1.5** |
| **ADCV** | **BITLIS_Adilcev** | **1.71** | **286** | P | **Pg** | **15 20 27.1** | **-0.2** |
| **MAHB** | **Mahabad** | **1.73** | **156** | Pg | **Pn** | **15 20 25.8** | **+1.0** |
| **IHRS** | **Heris** | **1.75** | **90** | Pg | **Pb** | **15 20 26.3** | **-0.5** |
| **GNI** | **Garni** | **1.80** | **358** | ⇓*iP* | **Pg** | **15 20 28.4** | **-0.6** |
| GNI | | | | ⇓*iS* | **Sg** | **15 20 54.3** | **+1.9** |
| **PERV** | **Siirt/Pervari-** | **1.84** | **258** | P | **Pg** | **15 20 30.2** | **+0.3** |
| PERV | | | | *i* AML | AML | 15 21 07.0 | |
| | comp=E,285nm,0.8s | | | | | | |
| PERV | | | | *i* AML | AML | 15 21 09.0 | |
| | comp=N,234nm,0.6s | | | | | | |
| **AGRB** | **Hanur-Agry** | **1.88** | **311** | Pn | **Pn** | **15 20 26.5** | **-0.5** |
| **METS** | **Metsamor** | **1.89** | **342** | *eP* | **Pg** | **15 20 30.3** | **-0.5** |
| METS | | | | *eS* | **Sg** | **15 20 58.4** | **+3.1** |
| **DORK** | **Agr/Tutak/Do** | **1.90** | **304** | P | **Pb** | **15 20 29.7** | **+0.2** |
| **VNNZ** | **Vanand** | **1.92** | **336** | ⇑*iP* | **Pg** | **15 20 30.2** | **-1.1** |
| VNNZ | | | | ⇓*iS* | **Sg** | **15 20 59.1** | **+2.9** |
| **KOTA** | **Agri, Merkez-K** | **1.92** | **320** | P | **Pb** | **15 20 29.9** | **+0.1** |
| KOTA | | | | S | **Sb** | **15 20 53.2** | **-0.7** |
| **KAPZ** | **Kaputan** | **1.97** | **357** | ⇑*iP* | **Pb** | **15 20 30.0** | **-0.7** |
| KAPZ | | | | ⇑*iS* | **Sg** | **15 20 58.5** | **+0.5** |
| **ARUZ** | **Aruch** | **2.01** | **344** | *eP* | **Pg** | **15 20 34.0** | **+0.8** |
| ARUZ | | | | *eS* | **Sg** | **15 21 04.9** | **+5.6** |
| **AMBZ** | **Amberd** | **2.08** | **348** | ⇓*iP* | **Pg** | **15 20 33.5** | **-1.0** |
| AMBZ | | | | ⇓*iS* | **Sg** | **15 21 04.1** | **+2.6** |
| **IHSH** | **Hashtrud** | **2.20** | **118** | Pn | **Pn** | **15 20 32.5** | **+1.1** |
| **GURO** | **Guroymak-BITLI** | **2.20** | **276** | Pn | **Pb** | **15 20 33.0** | **-1.5** |
| **QRD** | **Qoradiz** | **2.24** | **60** | P | **Pb** | **15 20 33.6** | **-1.5** |
| QRD | | | | S | **Sb** | **15 21 02.6** | **-0.4** |
| **SDS1** | **Sardasht. Az.** | **2.26** | **166** | Pn | **Pn** | **15 20 33.9** | **+1.8** |
| **ISRB** | **Sarab** | **2.31** | **102** | Pn | **Pn** | **15 20 33.4** | **+0.6** |
| **SRTM** | **Siirt_Merkez** | **2.31** | **262** | P | **Pb** | **15 20 35.5** | **-0.9** |
| SRTM | | | | S | **Sg** | **15 21 07.5** | **-1.4** |
| SRTM | | | | *i* AML | AML | 15 21 22.0 | |
| | comp=N,155nm,0.7s | | | | | | |
| SRTM | | | | *i* AML | AML | 15 21 29.0 | |
| | comp=E,132nm,1.0s | | | | | | |
| **DIGO** | **Kars** | **2.35** | **332** | P | **Pg** | **15 20 39.6** | **0.0** |
| **GDB** | **GEDABAY** | **2.48** | **17** | P | **Pb** | **15 20 38.4** | **-0.9** |
| GDB | | | | S | **Sb** | **15 21 09.8** | **-0.1** |
| **AGDM** | **Agdam** | **2.50** | **45** | P | **Pn** | **15 20 37.2** | **+1.9** |
| AGDM | | | | S | **Sb** | **15 21 10.6** | **+0.2** |
| **BLQ** | **Beylaqan** | **2.53** | **56** | P | **Pn** | **15 20 36.0** | **+0.2** |
| BLQ | | | | S | **Sb** | **15 21 10.9** | **-0.5** |
| **GANJ** | **Ganja** | **2.57** | **26** | P | **Pn** | **15 20 37.3** | **+1.0** |
| GANJ | | | | S | **Sb** | **15 21 11.3** | **-1.2** |
| **BRDA** | **Brd** | **2.65** | **43** | S | **Sb** | **15 21 12.0** | **-2.5** |
| **YRD** | **Yardimli** | **2.74** | **77** | P | **Pn** | **15 20 40.9** | **+2.2** |
| YRD | | | | S | **Sb** | **15 21 16.5** | **-0.9** |
| **QZX** | **Qazax, Azerbai** | **2.74** | **9** | P | **Pn** | **15 20 40.6** | **+2.0** |
| QZX | | | | S | **Sb** | **15 21 15.0** | **-2.3** |
| **LRK** | **Lerik** | **2.78** | **83** | P | **Pb** | **15 20 42.3** | **-2.0** |
| LRK | | | | S | **Sb** | **15 21 18.4** | **-0.1** |
| **KOPR** | **Koprukoy-ERZUR** | **2.83** | **306** | Pn | **Pn** | **15 20 40.1** | **+0.1** |
| **GLBA** | **Clilabad** | **2.93** | **71** | P | **Pn** | **15 20 42.9** | **+1.7** |
| GLBA | | | | S | **Sb** | **15 21 22.9** | **+0.1** |
| **ZRD** | **Zardab** | **2.94** | **48** | P | **Pn** | **15 20 43.4** | **+2.1** |
| ZRD | | | | S | **Sb** | **15 21 19.9** | **-3.1** |
| **ASTR** | **Astara** | **3.12** | **85** | P | **Pn** | **15 20 44.1** | **+0.2** |
| ASTR | | | | S | **Sb** | **15 21 27.0** | **-1.3** |
| **LKRN** | **Lenkeran, Azer** | **3.12** | **82** | P | **Pn** | **15 20 46.0** | **+2.1** |
| LKRN | | | | S | **Sb** | **15 21 26.2** | **-2.1** |
| **SEKA** | **Sheki** | **3.39** | **32** | P | **Pn** | **15 20 50.6** | **+2.9** |
| SEKA | | | | S | **Sb** | **15 21 32.7** | **-3.4** |
| **QBL** | **Gabala** | **3.48** | **41** | S | **Sb** | **15 21 36.2** | **-2.6** |
| **ZKTA** | **Zakatala** | **3.56** | **22** | P | **Pn** | **15 20 53.4** | **+3.4** |
| ZKTA | | | | S | **Sb** | **15 21 38.9** | **-2.1** |
| **XNQ** | **Khinaliq** | **3.81** | **41** | P | **Pn** | **15 20 54.8** | **+1.3** |
| XNQ | | | | S | **Sn** | **15 21 41.9** | **+3.5** |
| **SIZA** | **Siyzn** | **4.16** | **48** | P | **Pn** | **15 21 01.5** | **+3.3** |
| SIZA | | | | S | **Sn** | **15 21 50.3** | **+3.4** |
| **ILBA** | **Ilam Banvizeh** | **4.85** | **166** | Pn | **Pn** | **15 21 09.2** | **+1.6** |

*RSPR **03** 15:21:48.8,18˚.81N×68˚.28W,h82km±2km,MD3.2/3*
*SDD **03** 15:21:49.6±2.4,18˚.50N×68˚.13W,h12km±107km,MD2.8, ML2.1, MW2.1*
*NEIC **03** 15:21:50.8±1.5,18˚.99N±0˚.04×68˚.08W±0˚.03,h35km±2km, ML2.2/12,Md3.2/3(RSPR),Error ellipse: s-maj=7.1km s-min=3.3km az=35.0*

**ISC 03 15:21:50.2±1.1,18.75N±0˚.08×68.11W±0˚.03,h20km,n28,**
**σ1§80/31,10C-4D,Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCDR** | **Punta Cana, DR** | **0.35** | **228** | *eP* | **Pn** | **15 22 00.9** | **+0.7** |
| **PCDR** | **Punta Cana, DR** | **0.35** | **228** | *eS* | **Sn** | **15 22 10.4** | **+3.8** |
| **PCDR** | **Punta Cana, DR** | **0.35** | **228** | | **Pn** | **15 22 00.9** | **+0.7** |
| PCDR | | | | | **Sn** | **15 22 10.4** | **+3.8** |
| **PCDR** | **Punta Cana, DR** | **0.35** | **228** | IAML | | 15 22 12.9 | |
| | comp=N,122nm,1.1s | | | | | | |
| **SADR** | **Isla Saona** | **0.85** | **229** | *ePg* | Pb | 15 22 00.8 | -5.4 |
| SADR | | | | ⇑*eSg* | **Sb** | **15 22 12.1** | **-5.1** |
| SADR | | | | IAML | | 15 22 14.7 | |
| | comp=E,60nm,1.6s | | | | | | |
| SADR | | | | IAML | | 15 22 34.0 | |
| | comp=N,82nm,3.0s | | | | | | |
| **MIDR** | **Miches** | **0.92** | **285** | ⇑*ePg* | **Pb** | **15 22 06.2** | **-1.4** |
| MIDR | | | | ⇑*eSg* | **Sn** | **15 22 21.4** | **+0.6** |
| **AGPR** | **Aguadilla, PR** | **0.99** | **107** | Pn | **Pn** | **15 22 09.2** | **+0.3** |
| AGPR | | | | IAML | | 15 22 43.4 | |
| | comp=N,66nm,2.8s | | | | | | |
| **LSP** | **Las Mesas** | **1.13** | **120** | ⇓*eP* | **Pb** | **15 22 11.1** | **0.0** |
| **LSP** | **Las Mesas** | **1.13** | **120** | *eS* | **Sn** | **15 22 27.0** | **+1.2** |
| **LSP** | **Las Mesas** | **1.13** | **120** | | **Pb** | **15 22 11.1** | **0.0** |
| LSP | | | | | **Sn** | **15 22 27.0** | **+1.2** |
| **CRPR** | **Cabo Rojo, PR** | **1.20** | **128** | ⇓*eP* | **Pb** | **15 22 12.1** | **-0.2** |
| **CRPR** | **Cabo Rojo, PR** | **1.20** | **128** | | **Pb** | **15 22 12.1** | **-0.2** |
| **CRPR** | **Cabo Rojo, PR** | **1.20** | **128** | IAML | | 15 22 40.0 | |
| | comp=E,27nm,2.7s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.20** | **128** | ⇑*eSg* | **Sn** | **15 22 23.8** | **-3.9** |
| CRPR | | | | IAML | | 15 22 29.3 | |
| | comp=E,24nm,2.6s | | | | | | |
| CRPR | | | | IAML | | 15 22 33.0 | |
| | comp=N,29nm,1.9s | | | | | | |
| CRPR | | | | IAML | | 15 23 00.8 | |
| | comp=N,31nm,3.5s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.35** | **107** | ⇓*eP* | **Pb** | **15 22 15.4** | **+0.6** |
| **AOPR** | **Arecibo Observ** | **1.35** | **107** | *eS* | **Sb** | **15 22 33.5** | **+1.9** |
| **AOPR** | **Arecibo Observ** | **1.35** | **107** | | **Pb** | **15 22 15.4** | **+0.6** |
| AOPR | | | | | **Sb** | **15 22 33.5** | **+1.9** |
| **AOPR** | **Arecibo Observ** | **1.35** | **107** | IAML | | 15 22 40.1 | |
| | comp=N,36nm,0.7s | | | | | | |
| AOPR | | | | IAML | | 15 22 41.5 | |
| | comp=E,46nm,0.4s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.35** | **107** | ⇑*ePg* | **Pb** | **15 22 14.8** | **0.0** |
| AOPR | | | | IAML | | 15 22 39.8 | |
| | comp=N,34nm,0.9s | | | | | | |
| AOPR | | | | IAML | | 15 22 39.8 | |
| | comp=N,34nm,0.9s | | | | | | |
| AOPR | | | | IAML | | 15 22 41.5 | |
| | comp=E,44nm,0.3s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **1.41** | **110** | ⇑*eP* | **Pb** | **15 22 14.7** | **-1.1** |
| **UUPR** | **Utuado, UPR, P** | **1.41** | **110** | *eS* | **Sb** | **15 22 33.2** | **-0.1** |
| **UUPR** | **Utuado, UPR, P** | **1.41** | **110** | | **Pb** | **15 22 14.7** | **-1.1** |
| UUPR | | | | | **Sb** | **15 22 33.2** | **-0.1** |
| **CELP** | **Cerrillos** | **1.60** | **115** | ⇑*eP* | **Pn** | **15 22 16.6** | **-0.8** |
| **CELP** | **Cerrillos** | **1.60** | **115** | *eS* | **Sb** | **15 22 38.2** | **-0.7** |
| **CELP** | **Cerrillos** | **1.60** | **115** | | **Pn** | **15 22 16.6** | **-0.8** |
| CELP | | | | | **Sb** | **15 22 38.2** | **-0.7** |
| **CELP** | **Cerrillos** | **1.60** | **115** | IAML | | 15 22 53.4 | |
| | comp=E,18nm,2.8s | | | | | | |
| **CELP** | **Cerrillos** | **1.60** | **115** | ⇑*ePg* | **Pn** | **15 22 16.8** | **-0.6** |
| CELP | | | | ⇑*eSg* | **Sb** | **15 22 37.9** | **-1.0** |
| CELP | | | | IAML | | 15 22 56.4 | |
| | comp=N,18nm,3.0s | | | | | | |
| **ABDR** | **Alto Bandera** | **2.39** | **272** | ⇑*ePg* | **Pb** | **15 22 33.1** | **+0.3** |
| ABDR | | | | IAML | | 15 23 29.2 | |
| | comp=N,33nm,0.6s | | | | | | |

**IDC 03 15:23:08.5±508.0,53˚.40N×41˚.13E,h0km,Error ellipse: s-maj=234.2km s-min=82.2km az=139.0,Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.01** | **328** | I | I | 15 48 50.0 | |
| | baz=144,slow=319,SNR=1.2 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **17.74** | **266** | I | I | 17 03 50.0 | |
| | baz=61,slow=338,SNR=0.4 | | | | | | |
| **I37NO** | **I37NO** | **18.89** | **335** | I | I | 17 19 00.0 | |
| | baz=134,slow=324,SNR=0.8 | | | | | | |
| **I48TN** | **KESRA INFRASON** | **28.34** | **244** | I | I | 18 17 00.0 | |
| | baz=42,slow=307,SNR=0.4 | | | | | | |

**NOU 03 15:47:32.5,20˚.71S×169˚.63E,h0km,ML3.6/8,Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.68** | **243** | P | Pn | 15 48 02.3 | -0.8 |
| **LIFNC** | **LIFOU** | **2.24** | **268** | P | Pn | 15 48 09.7 | -1.1 |
| **PINNC** | **Pines Island,** | **2.78** | **227** | P | Pn | 15 48 17.6 | -0.6 |
| **YATNC** | **Mamie plateau,** | **2.88** | **242** | P | Pn | 15 48 19.9 | +0.2 |
| **DZM** | **Mont Dzumac** | **3.26** | **245** | P | Pn | 15 48 25.1 | +0.1 |
| **NOUC** | **Port Laguerre** | **3.40** | **245** | P | Pn | 15 48 27.7 | +0.9 |
| **KOUNC** | **Koumac, New Ca** | **5.01** | **271** | P | Pn | 15 48 50.0 | +1.1 |

*IDC **03** 16:09:28.5±2.0,4˚.21N×127˚.81E,h0km,mb3.7/5, mbtmp3.7/5,Error ellipse: s-maj=189.2km s-min=20.3km az=66.0*
*DJA **03** 16:09:35.3±0.3,4˚.N±3˚×12˚.7E±˚,h10km,M3.9/8,mb4.1/5, MLv3.7/8*

**ISC 03 16:09:35.4±1.2,3˚.7N±0˚.1×126˚.8E±0˚.1,h35km,n10,**
**σ1§30/10,mb3.5/5,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **3.00** | **168** | P | **Pn** | **16 10 19.1** | **-1.4** |
| **GTOI** | **Gorontalo** | **4.86** | **231** | P | **Pn** | **16 10 47.4** | **+1.4** |
| **SANI** | **Sanana** | **5.80** | **188** | P | **Pn** | **16 10 59.8** | **+0.8** |
| **SWI** | **Sorong** | **6.41** | **135** | P | **Pn** | **16 11 08.3** | **+1.0** |
| | 15nm,0.8s,0.1nm | | | | | | |
| **FAKI** | **Fak Fak** | **8.59** | **140** | P | **Pn** | **16 11 38.4** | **+1.1** |
| **WRA** | **Warramunga Arr** | **24.68** | **163** | P | **P** | **16 14 52.0** | **-1.2** |
| | 0.8nm,0.6s,baz=345,slow=9.9,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **28.11** | **166** | P | **P** | **16 15 25.3** | **+1.1** |
| | 0.2nm,0.4s,baz=341,slow=11,SNR=4.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **38.12** | **159** | P | **P** | **16 16 50.0** | **-1.2** |
| | 1.7nm,0.7s,baz=330,slow=10,SNR=3.9 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.57** | **325** | P | **P** | **16 19 22.0** | **+0.3** |
| | 0.2nm,0.4s,baz=116,slow=7.8,SNR=5.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.75** | **327** | P | **P** | **16 19 49.6** | **-0.7** |
| | 0.7nm,0.7s,baz=125,slow=6.8,SNR=6.5 | | | | | | |
| | 0.7nm,0.7s | | | | | | |

*IDC **03** 16:26:29.2±3.1,23˚.79N×120˚.98E,h0km,mb3.3/4, mbtmp3.3/4,Error ellipse: s-maj=279.8km s-min=23.3km az=63.0*
*TAP **03** 16:26:30.6,22˚.99N×120˚.03E,h18km,ML3.8,C*
*JMA **03** 16:26:30.6±0.3,23˚.1N±0˚.8×12˚0E±˚,h1km±3km,TAIWAN REGION*
*ASIES **03** 16:26:30.6,22˚.99N×120˚.03E,h18km,ML3.8,Mw3.4, Moment Tensor Solution. Moment tensor: Scale $10^{20}$Nm; $M_{rr}$-7.60; $M_{\theta\theta}$2.76; $M_{\phi\phi}$4.84; $M_{r\theta}$-7.26; $M_{\theta\phi}$8.57; $M_{r\phi}$0.35; Fault plane solution: $M_0$13.06480×$10^{20}$ NP1: $\phi_s$71.93000°,$\delta$66.23000°,$\lambda$-52.49000°. NP2:$\phi_s$189.63000°, $\delta$43.45000°,$\lambda$-144.12000°. Principal axes: T Plg13.1990°, Azm135.6790°; N Plg33.8640°, Azm234.7340°; P Plg52.9730°, Azm27.5640°;*

**ISC 03 16:26:31.8±0.8,23˚.04N±0˚.02×120˚.04E±0˚.02,h18km±5km, n127,σ1§08/217,mb3.2/4,23C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TSCK** | **Chigu Township** | **0.12** | **21** | ⇑*iP* | **Pg** | **16 26 35.5** | **-0.2** |
| | baz=17 | | | | | | |
| TSCK | | | | S | **Sg** | **16 26 40.2** | **+2.0** |
| | baz=17 | | | | | | |
| **TAI** | **Tainan** | **0.15** | **105** | ⇑*iP* | **Pb** | **16 26 35.6** | **-0.2** |
| | baz=87 | | | | | | |
| TAI | | | | *i* S | **Sb** | **16 26 40.1** | **+1.7** |
| | baz=87 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.17** | **88** | *eP* | **Pb** | **16 26 36.3** | **0.0** |
| | baz=68 | | | | | | |
| TAI1 | | | | S | **Sb** | **16 26 41.2** | **+2.0** |
| | baz=68 | | | | | | |
| **SCLT** | **Jiali** | **0.20** | **45** | *eP* | **Pb** | **16 26 36.9** | **+0.1** |
| | baz=30 | | | | | | |
| SCLT | | | | *i* S | **Sb** | **16 26 42.5** | **+2.4** |
| | baz=30 | | | | | | |
| **SSHA** | **Shanhua** | **0.25** | **66** | P | **Pb** | **16 26 37.7** | **-0.1** |
| | baz=58 | | | | | | |
| SSHA | | | | *eS* | **Sb** | **16 26 43.9** | **+2.2** |
| | baz=58 | | | | | | |
| **CHN3** | **Shinhua** | **0.30** | **82** | ⇑*eP* | **Pb** | **16 26 38.4** | **-0.3** |
| | baz=74 | | | | | | |
| CHN3 | | | | *eS* | **Sn** | **16 26 45.2** | **-2.2** |
| | baz=74 | | | | | | |
| **CHN8** | **Yiju** | **0.35** | **27** | ⇑*eP* | **Pb** | **16 26 39.6** | **+0.1** |
| | baz=27 | | | | | | |
| CHN8 | | | | *i* S | **Sn** | **16 26 47.0** | **-1.6** |
| | baz=27 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.39** | **136** | *eP* | **Pg** | **16 26 39.3** | **-0.6** |
| | baz=134 | | | | | | |
| **ICHU** | **Yijhu** | **0.39** | **34** | *eP* | **Pb** | **16 26 40.1** | **-0.2** |
| | baz=32 | | | | | | |
| ICHU | | | | *eS* | **Sn** | **16 26 48.0** | **-1.6** |
| | baz=32 | | | | | | |
| **TWM1** | **Shoushan** | **0.41** | **121** | ⇑*eP* | **Pb** | **16 26 40.6** | **+0.1** |
| | baz=114 | | | | | | |
| TWM1 | | | | *eS* | **Sn** | **16 26 49.7** | **-0.4** |
| | baz=114 | | | | | | |
| **WDGT** | **Dungji** | **0.42** | **303** | ⇑*iP* | **Pg** | **16 26 39.6** | **-0.8** |
| | baz=318 | | | | | | |
| WDGT | | | | *i* S | **Sg** | **16 26 45.9** | **-0.2** |
| | baz=318 | | | | | | |
| **WSSB** | **Gushan** | **0.44** | **152** | *eP* | **Pg** | **16 26 40.4** | **-0.4** |
| | baz=156

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WGK** | **Gukeng** | **0.81** | **36** | *e*P | **Pb** | **16 26 47.5** | **+0.1** |
| | baz=23 | | | | | | | |
| WGK | | | | *e*S | **Sn** | **16 27 00.3** | **+0.4** |
| | baz=23 | | | | | | | |
| **CHN5** | **Tsauling** | **0.81** | **46** | *e*P | **Pb** | **16 26 47.4** | **-0.1** |
| | baz=46 | | | | | | | |
| CHN5 | | | | *i* S | **Sn** | **16 26 59.7** | **-0.4** |
| | baz=46 | | | | | | | |
| **SCZT** | **Fangliau** | **0.85** | **141** | ⇑*i*P | **Pb** | **16 26 47.3** | **-0.8** |
| | baz=138 | | | | | | | |
| SCZT | | | | *i* S | **Sb** | **16 27 00.1** | **+1.0** |
| | baz=138 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.85** | **15** | *e*P | **Pb** | **16 26 47.5** | **-0.7** |
| | baz=16 | | | | | | | |
| WTCT | | | | *e*S | **Sn** | **16 27 01.0** | **-0.1** |
| | baz=16 | | | | | | | |
| **ELDTW** | **Lidau** | **0.91** | **80** | ⇑*i*P | **Pg** | **16 26 48.9** | **-0.7** |
| | baz=78 | | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **16 27 02.6** | **0.0** |
| | baz=78 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.92** | **20** | *e*P | **Pb** | **16 26 48.9** | **-0.3** |
| | baz=8.0 | | | | | | | |
| WRL | | | | *i* S | **Sn** | **16 27 02.2** | **-0.4** |
| | baz=8.0 | | | | | | | |
| **ECL** | **Taimali** | **0.95** | **117** | *e*P | **Pb** | **16 26 49.3** | **-0.4** |
| | baz=115 | | | | | | | |
| ECL | | | | *e*S | **Sn** | **16 27 02.8** | **-0.5** |
| | baz=115 | | | | | | | |
| **TWG** | **Pinlang** | **0.97** | **102** | ⇑*i*P | **Pg** | **16 26 50.0** | **-0.7** |
| | baz=100 | | | | | | | |
| TWG | | | | *e*S | **Sn** | **16 27 03.6** | **-0.4** |
| | baz=100 | | | | | | | |
| **TWGBT** | **Beinan** | **0.98** | **103** | ⇑P | **Pb** | **16 26 50.0** | **-0.3** |
| | baz=100 | | | | | | | |
| TWGBT | | | | *e*S | **Sn** | **16 27 03.4** | **-0.8** |
| | baz=100 | | | | | | | |
| **EAST** | **Anshuo** | **0.99** | **131** | ⇑P | **Pb** | **16 26 49.6** | **-0.9** |
| | baz=128 | | | | | | | |
| EAST | | | | *e*S | **Sb** | **16 27 02.8** | **-0.4** |
| | baz=128 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.00** | **48** | *i* P | **Pg** | **16 26 50.2** | **-1.0** |
| | baz=48 | | | | | | | |
| WHYT | | | | S | **Sn** | **16 27 04.8** | **+0.2** |
| | baz=48 | | | | | | | |
| **WJS** | **Zhushan** | **1.01** | **39** | *e*P | **Pb** | **16 26 50.2** | **-0.6** |
| | baz=39 | | | | | | | |
| WJS | | | | *e*S | **Sn** | **16 27 05.5** | **+0.7** |
| | baz=39 | | | | | | | |
| **LONT** | **Longtian** | **1.01** | **97** | *i* P | **Pg** | **16 26 50.7** | **-0.8** |
| | baz=95 | | | | | | | |
| LONT | | | | *i* S | **Sn** | **16 27 05.0** | **+0.1** |
| | baz=95 | | | | | | | |
| **WNT** | **Mingjian** | **1.03** | **35** | *e*P | **Pb** | **16 26 50.6** | **-0.5** |
| | baz=36 | | | | | | | |
| WNT | | | | *e*S | **Sn** | **16 27 05.8** | **+0.5** |
| | baz=36 | | | | | | | |
| **TAW** | **Tawu** | **1.04** | **130** | *e*P | **Pb** | **16 26 50.3** | **-0.9** |
| | baz=128 | | | | | | | |
| TAW | | | | *e*S | **Sb** | **16 27 04.1** | **-0.5** |
| | baz=128 | | | | | | | |
| **TAWH** | **Dawu Township** | **1.04** | **131** | *e*P | **Pb** | **16 26 50.4** | **-1.0** |
| | baz=129 | | | | | | | |
| **TTN** | **Taitung** | **1.06** | **105** | *i* P | **Pn** | **16 26 52.1** | **+0.4** |
| | baz=103 | | | | | | | |
| TTN | | | | *e*S | **Sn** | **16 27 07.2** | **+1.2** |
| | baz=103 | | | | | | | |
| **SLIU** | **Shizi** | **1.07** | **139** | *e*P | **Pb** | **16 26 50.2** | **-1.7** |
| | baz=137 | | | | | | | |
| **EHD** | **Haiduan** | **1.08** | **84** | *e*P | **Pn** | **16 26 51.7** | **-0.4** |
| | baz=82 | | | | | | | |
| EHD | | | | *i* S | **Sn** | **16 27 06.8** | **+0.2** |
| | baz=82 | | | | | | | |
| **ECS** | **Chishang** | **1.09** | **87** | *i* P | **Pg** | **16 26 52.6** | **-0.3** |
| | baz=85 | | | | | | | |
| ECS | | | | *e*S | **Sn** | **16 27 07.7** | **+0.9** |
| | baz=85 | | | | | | | |
| **SSLB** | **Suanglung** | **1.12** | **48** | *i* P | **Pb** | **16 26 52.2** | **-0.6** |
| | baz=48 | | | | | | | |
| SSLB | | | | *i* S | **Sn** | **16 27 08.1** | **+0.3** |
| | baz=48 | | | | | | | |
| **TYC** | **Yuchr** | **1.15** | **41** | *e*P | **Pb** | **16 26 52.5** | **-0.6** |
| | baz=43 | | | | | | | |
| TYC | | | | *i* S | **Sn** | **16 27 08.9** | **+0.7** |
| | baz=43 | | | | | | | |
| **EDH** | **Donghe** | **1.17** | **93** | *e*P | **Pb** | **16 26 53.0** | **-0.5** |
| | baz=91 | | | | | | | |
| EDH | | | | S | **Sg** | **16 27 09.8** | **+0.2** |
| | baz=91 | | | | | | | |
| **FULB** | **Fuli** | **1.17** | **82** | *i* P | **Pg** | **16 26 53.6** | **-0.8** |
| | baz=80 | | | | | | | |
| FULB | | | | S | **Sn** | **16 27 10.7** | **+2.0** |
| | baz=80 | | | | | | | |
| **TWF1** | **Yuli** | **1.20** | **74** | *i* P | **Pb** | **16 26 53.7** | **-0.3** |
| | baz=73 | | | | | | | |
| TWF1 | | | | *i* S | **Sg** | **16 27 10.1** | **-0.6** |
| | baz=73 | | | | | | | |
| **YULB** | **Yu-li** | **1.21** | **73** | *i* P | **Pb** | **16 26 53.7** | **-0.5** |
| | baz=71 | | | | | | | |
| YULB | | | | *e*S | **Sg** | **16 27 10.4** | **-0.7** |
| | baz=71 | | | | | | | |
| **HEN** | **Hengchun** | **1.21** | **148** | *e*P | **Pn** | **16 26 52.1** | **-1.7** |
| | baz=146 | | | | | | | |
| **EYUL** | **Yuli** | **1.22** | **75** | *e*P | **Pg** | **16 26 54.2** | **-1.1** |
| | baz=74 | | | | | | | |
| EYUL | | | | *e*S | **Sg** | **16 27 10.9** | **-0.4** |
| | baz=74 | | | | | | | |
| **CHKT** | **Chengkung** | **1.22** | **87** | *e*P | **Pb** | **16 26 54.1** | **-0.2** |
| | baz=86 | | | | | | | |
| CHKT | | | | *e*S | **Sg** | **16 27 11.2** | **-0.2** |
| | baz=86 | | | | | | | |
| **VWDT** | **VWDT** | **1.24** | **55** | *e*P | **Pg** | **16 26 54.8** | **-1.0** |
| | baz=44 | | | | | | | |
| VWDT | | | | *e*S | **Sg** | **16 27 10.5** | **-1.5** |
| | baz=44 | | | | | | | |
| **CHKH** | **Chenggong** | **1.26** | **83** | *e*P | **Pg** | **16 26 55.1** | **-1.0** |
| | baz=82 | | | | | | | |
| CHKH | | | | *e*S | **Sg** | **16 27 12.7** | **+0.1** |
| | baz=82 | | | | | | | |
| **EHY** | **Hungye** | **1.27** | **68** | *e*P | **Pb** | **16 26 54.9** | **-0.3** |
| | baz=68 | | | | | | | |
| EHY | | | | *i* S | **Sg** | **16 27 11.9** | **-1.0** |
| | baz=68 | | | | | | | |
| **EHYH** | **Wanrong** | **1.28** | **69** | *e*P | **Pb** | **16 26 55.3** | **-0.2** |
| | baz=68 | | | | | | | |
| EHYH | | | | *e*S | **Sg** | **16 27 12.3** | **-1.1** |
| | baz=68 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.29** | **38** | *e*P | **Pn** | **16 26 54.7** | **-0.3** |
| | baz=39 | | | | | | | |
| WCS | | | | S | **Sg** | **16 27 13.3** | **-0.4** |
| | baz=39 | | | | | | | |
| **TWK1** | **Hengchun** | **1.30** | **147** | *e*P | **Pn** | **16 26 53.5** | **-1.6** |
| | baz=145 | | | | | | | |
| TWK1 | | | | *e*S | **Sb** | **16 27 10.3** | **-1.7** |
| | baz=145 | | | | | | | |
| **TWKBT** | **Hengchun** | **1.30** | **147** | *e*P | **Pn** | **16 26 53.1** | **-2.0** |
| | baz=145 | | | | | | | |
| **ECBN** | **Changbin** | **1.33** | **78** | *e*P | **Pg** | **16 26 56.8** | **-0.6** |
| | baz=95 | | | | | | | |
| ECBN | | | | *e*S | **Sg** | **16 27 15.2** | **+0.4** |
| | baz=95 | | | | | | | |
| **HGSD** | **Ruisui** | **1.35** | **70** | *e*P | **Pg** | **16 26 56.9** | **-1.0** |
| | baz=69 | | | | | | | |
| HGSD | | | | *e*S | **Sg** | **16 27 14.3** | **-1.2** |
| | baz=69 | | | | | | | |
| **LDUT** | **Ludao** | **1.37** | **105** | *e*P | **Pn** | **16 26 55.3** | **-0.7** |
| | baz=104 | | | | | | | |
| LDUT | | | | *e*S | **Sb** | **16 27 14.0** | **0.0** |
| | baz=104 | | | | | | | |
| **WUSB** | **Renai** | **1.37** | **46** | P | **Pb** | **16 26 56.3** | **-0.8** |
| | baz=46 | | | | | | | |
| WUSB | | | | S | **Sg** | **16 27 14.2** | **-2.1** |
| | baz=46 | | | | | | | |
| **OWD** | **Renai** | **1.39** | **48** | *e*P | **Pb** | **16 26 56.9** | **-0.4** |
| | baz=49 | | | | | | | |
| OWD | | | | S | **Sg** | **16 27 15.5** | **-1.2** |
| | baz=49 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.41** | **61** | *i* P | **Pb** | **16 26 57.2** | **-0.5** |
| | baz=61 | | | | | | | |
| WARBT | | | | *i* S | **Sg** | **16 27 15.7** | **-1.7** |
| | baz=61 | | | | | | | |
| **WDJ** | **Dajia District** | **1.42** | **23** | *e*P | **Pb** | **16 26 57.5** | **-0.2** |
| | baz=15 | | | | | | | |
| **CHGB** | **Renai** | **1.46** | **45** | *e*P | **Pb** | **16 26 57.6** | **-0.9** |
| | baz=46 | | | | | | | |
| CHGB | | | | *i* S | **Sg** | **16 27 17.8** | **-1.2** |
| | baz=46 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.47** | **27** | *i* P | **Pb** | **16 26 58.3** | **-0.4** |
| | baz=30 | | | | | | | |
| TWQ1 | | | | S | **Sg** | **16 27 19.2** | **-0.1** |
| | baz=30 | | | | | | | |
| **WHP** | **Taichung City** | **1.49** | **34** | *e*P | **Pb** | **16 26 58.3** | **-0.7** |
| | baz=35 | | | | | | | |
| WHP | | | | *e*S | **Sg** | **16 27 18.3** | **-1.7** |
| | baz=35 | | | | | | | |
| **ESL** | **Shilin** | **1.50** | **59** | *e*P | **Pg** | **16 26 59.2** | **-1.5** |
| | baz=59 | | | | | | | |
| ESL | | | | *e*S | **Sg** | **16 27 18.6** | **-1.5** |
| | baz=59 | | | | | | | |
| **NSY** | **Sanyi** | **1.52** | **26** | *e*P | **Pb** | **16 26 58.9** | **-0.7** |
| | baz=39 | | | | | | | |
| NSY | | | | *e*S | **Sg** | **16 27 20.6** | **-0.5** |
| | baz=39 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.58** | **45** | *e*P | **Pb** | **16 27 00.4** | **-0.3** |
| | baz=46 | | | | | | | |
| WHF | | | | *e*S | **Sg** | **16 27 21.9** | **-1.0** |
| | baz=46 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.59** | **62** | *e*P | **Pg** | **16 27 00.8** | **-1.6** |
| | baz=62 | | | | | | | |
| SHUL | | | | *e*S | **Sg** | **16 27 21.3** | **-1.7** |
| | baz=62 | | | | | | | |
| **TDCB** | **Techi** | **1.59** | **40** | *e*P | **Pn** | **16 26 59.5** | **+0.3** |
| | baz=42 | | | | | | | |
| TDCB | | | | *e*S | **Sb** | **16 27 20.6** | **0.0** |
| | baz=42 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.60** | **52** | *e*P | **Pn** | **16 26 59.6** | **+0.3** |
| | baz=40 | | | | | | | |
| LXIB | | | | S | **Sg** | **16 27 22.2** | **-1.2** |
| | baz=40 | | | | | | | |
| **TWT** | **Tachien** | **1.60** | **40** | *e*P | **Pn** | **16 26 59.8** | **+0.4** |
| | baz=42 | | | | | | | |
| TWT | | | | *e*S | **Sb** | **16 27 21.0** | **+0.1** |
| | baz=42 | | | | | | | |
| **ETM** | **Tongmen** | **1.62** | **55** | *e*P | **Pn** | **16 26 59.6** | **0.0** |
| | baz=55 | | | | | | | |
| ETM | | | | *e*S | **Sg** | **16 27 22.0** | **-2.2** |
| | baz=55 | | | | | | | |
| **FUSS** | **Fushou** | **1.64** | **42** | *e*P | **Pn** | **16 27 00.3** | **+0.4** |
| | baz=44 | | | | | | | |
| FUSS | | | | *e*S | **Sg** | **16 27 22.4** | **-2.3** |
| | baz=44 | | | | | | | |
| **NMLH** | **Miaoli** | **1.65** | **25** | *e*P | **Pb** | **16 27 00.8** | **-0.9** |
| | baz=12 | | | | | | | |
| **LYUB** | **Lan-yu** | **1.76** | **125** | *e*P | **Pn** | **16 26 57.9** | **-3.5** |
| | baz=124 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.76** | **48** | *e*P | **Pb** | **16 27 02.6** | **-1.0** |
| | baz=49 | | | | | | | |
| ETLH | | | | *e*S | **Sg** | **16 27 26.3** | **-2.4** |
| | baz=49 | | | | | | | |
| **TWD** | **Chiawan** | **1.77** | **54** | *e*P | **Pb** | **16 27 03.5** | **-0.1** |
| | baz=55 | | | | | | | |
| TWD | | | | *e*S | **Sg** | **16 27 26.0** | **-2.8** |
| | baz=55 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.82** | **29** | *e*P | **Pb** | **16 27 03.7** | **-0.8** |
| | baz=34 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.82** | **51** | *e*P | **Pb** | **16 27 03.8** | **-0.9** |
| | baz=52 | | | | | | | |
| NACB | | | | *e*S | **Sb** | **16 27 25.7** | **-1.5** |
| | baz=52 | | | | | | | |
| **LIOB** | **Emei** | **1.83** | **29** | *e*P | **Pb** | **16 27 04.2** | **-0.7** |
| | baz=34 | | | | | | | |
| **NNSB** | **Datong** | **1.85** | **41** | P | **Pb** | **16 27 04.1** | **-1.1** |
| | baz=43 | | | | | | | |
| NNSB | | | | *e*S | **Sb** | **16 27 27.9** | **-0.3** |
| | baz=43 | | | | | | | |
| **NNS** | **Nan Shan** | **1.86** | **41** | *e*P | **Pb** | **16 27 04.6** | **-0.7** |
| | baz=43 | | | | | | | |
| NNS | | | | *e*S | **Sb** | **16 27 28.5** | **+0.3** |
| | baz=43 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.87** | **32** | *e*P | **Pb** | **16 27 04.7** | **-0.9** |
| | baz=36 | | | | | | | |
| **KNM** | **Kinmen** | **2.02** | **313** | *e*P | **Pn** | **16 27 05.4** | **+0.5** |
| | baz=313 | | | | | | | |
| **LATG** | **Datong** | **2.02** | **42** | *e*P | **Pn** | **16 27 06.2** | **+1.1** |
| | baz=44 | | | | | | | |
| LATG | | | | *e*S | **Sb** | **16 27 31.9** | **-1.1** |
| | baz=44 | | | | | | | |
| **VWUC** | **VWUC** | **2.02** | **345** | *e*P | **Pn** | **16 27 05.0** | **0.0** |
| | baz=351 | | | | | | | |
| **NSK** | **Sanguang** | **2.03** | **36** | *e*P | **Pn** | **16 27 05.0** | **-0.3** |
| | baz=24 | | | | | | | |
| **YHNB** | **Yeheng** | **2.04** | **37** | *e*P | **Pn** | **16 27 05.4** | **+0.1** |
| | baz=24 | | | | | | | |
| **NDT** | **Datong Townshi** | **2.06** | **41** | *i* P | **Pn** | **16 27 06.6** | **+1.0** |
| | baz=30 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.08** | **314** | *e*P | **Pn** | **16 27 04.0** | **-1.8** |
| | baz=318 | | | | | | | |
| **ENTT** | **Nioudou** | **2.12** | **41** | *e*P | **Pn** | **16 27 07.7** | **+1.2** |
| | baz=31 | | | | | | | |
| **EWUT** | **Wuta** | **2.12** | **48** | *e*P | **Pb** | **16 27 08.4** | **-1.4** |
| | baz=49 | | | | | | | |
| EWUT | | | | *e*S | **Sb** | **16 27 35.0** | **-0.9** |
| | baz=49 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.17** | **337** | *e*P | **Pn** | **16 27 06.8** | **-0.3** |
| | baz=344 | | | | | | | |
| **NWLT** | **Wulai** | **2.19** | **37** | *e*P | **Pn** | **16 27 07.7** | **+0.3** |
| | baz=26 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.23** | **39** | *e*P | **Pn** | **16 27 08.2** | **+0.3** |
| | baz=42 | | | | | | | |
| **TWE** | **Neicheng** | **2.24** | **41** | *e*P | **Pn** | **16 27 08.8** | **+0.7** |
| | baz=29 | | | | | | | |
| **ESAO** | **Su ao** | **2.25** | **47** | *e*P | **Pb** | **16 27 11.3** | **-0.7** |
| | baz=62 | | | | | | | |
| **TWC** | **Suao** | **2.28** | **46** | *e*P | **Pb** | **16 27 10.7** | **-1.8** |
| | baz=38 | | | | | | | |
| **ZPLA** | **Ao Xicun** | **2.28** | **293** | *e*P | **Pn** | **16 27 09.4** | **+0.7** |
| | baz=292 | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.65** | **39** | *e*P | **Pn** | **16 27 13.1** | **-0.7** |
| | baz=29 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **3.01** | **62** | *e*P | **Pn** | **16 27 20.5** | **+1.9** |
| **HATJ** | **Hateruma jima** | **3.60** | **73** | *e*S | **Sn** | **16 28 10.7** | **+1.8** |
| **IRIF** | **Iriomote-Funau** | **3.62** | **68** | *e*P | **Pn** | **16 27 28.7** | **+1.7** |
| **JKRS** | **Kuro-shima** | **3.83** | **71** | *e*P | **Pn** | **16 27 31.9** | **+2.0** |
| JKRS | | | | *e*S | **Sn** | **16 28 17.1** | **+2.6** |
| **JIJ** | **Ishigaki jima** | **3.99** | **70** | *e*P | **Pn** | **16 27 32.8** | **+0.7** |
| JIJ | | | | *e*S | **Sn** | **16 28 18.2** | **-0.2** |
| **JISG** | **Ishigakijimahi** | **4.21** | **68** | *e*P | **Pn** | **16 27 35.4** | **+0.3** |
| **MKAR** | **Makanchi Array** | **38.45** | **317** | P | **P** | **16 33 52.9** | **+0.2** |
| | 0.3nm,0.6s,baz=118,slow=9.8,SNR=4.5 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.65** | **328** | P | **P** | **16 34 09.4** | **-1.4** |
| | 0.5nm,0.5s,baz=128,slow=9.3,SNR=2.5 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.94** | **161** | P | **P** | **16 34 49.3** | **+3.4** |
| | 0.2nm,0.8s,baz=344,slow=7.9,SNR=0.7 | | | | | | | |
| | 0.2nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.34** | **163** | P | **P** | **16 35 16.4** | **+3.9** |
| | 0.1nm,0.4s,baz=348,slow=7.5,SNR=4.5 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |

**TRN 03 16:48:22.7, 17°.62N × 61°.56W, h12km, MD3.7, 1D, East of Barbuda., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANBD** | **Bethesda, Anti** | **0.60** | **200** | ⇓*i*P | Pn | 16 48 37.3 | +0.3 |
| ANBD | | | | *e*S | Sn | 16 48 47.0 | +0.2 |
| **MBFL** | **Flemmings, Mon** | **1.07** | **216** | *e*P | Pn | 16 48 44.9 | +1.4 |
| MBFL | | | | *e*S | Sn | 16 49 01.5 | +3.1 |
| **TBG** | **Guadaloupe-3** | **1.76** | **183** | *e*P | Pb | 16 48 54.4 | -0.5 |
| TBG | | | | *e*S | Sg | 16 49 19.8 | +0.6 |

**DJA 03 16:49:54.7±0.6, 9°S±6° × 12°4E±°, h91km±8km, M3.8/7, mb4.0/3, MLv3.7/7, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **0.80** | **177** | P | Pn | 16 50 13.5 | +1.0 |
| **BATI** | **Baumata** | **1.37** | **204** | P | Pn | 16 50 19.6 | +0.7 |
| **MMRI** | **Maumere** | **1.99** | **279** | P | Pn | 16 50 26.6 | -0.3 |
| **BASI** | **Baing, Sumba** | **3.82** | **250** | P | Pn | 16 50 53.0 | +1.7 |
| **PLAI** | **Plampang** | **6.38** | **271** | P | Pn | 16 51 24.9 | -1.2 |
| | 40nm,1.1s,0.2nm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **7.26** | **271** | P | Pn | 16 51 36.7 | -1.5 |
| | 32nm,1.5s,0.2nm | | | | | | |

*NOU **03** 16:52:58.4, 29°.59S × 177°.97W, h384km, mb4.1/14, Kermadec Islands, New Zealand*
*NEIC **03** 16:53:00.4±2.0, 29°.62S±0°.09 × 179°.3W±0°.2, h317km±10km, mb4.2/23, Error ellipse: s-maj=23.5km s-min=13.5km az=87.0*
*IDC **03** 16:53:00.7±0.5, 29°.14S × 179°.11W, h338km±5km, mb3.7/8, mbtmp4.4/9, Error ellipse: s-maj=17.6km s-min=15.5km az=48.0*

**ISC 03 16:53:01.7±0.6, 29°.65S±0°.06 × 179°.04W±0°.09, h350km, n170, σ2≥44/172, mb4.2/20, 5D, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.05** | **68** | P | **Pn** | **16 53 46.7** | **-0.9** |
| **RAO** | **Raoul Island** | **1.05** | **68** | Pn | **Pn** | **16 53 45.7** | **-1.9** |
| **RAO** | **Raoul Island** | **1.05** | **68** | P | **Pn** | **16 53 46.0** | **-1.6** |
| | 865nm,0.3s,baz=186,slow=24,SNR=6.5 | | | | | | |
| RAO | | | | S | **S** | **16 54 21.3** | **-3.2** |
| | 2μm,0.6s,baz=93,slow=22,SNR=12 | | | | | | |
| **KUZ** | **Kuaotunu** | **8.33** | **210** | P | **P** | **16 55 03.1** | **+0.7** |
| **OUZ** | **Omahuta** | **8.34** | **226** | P | **P** | **16 55 05.5** | **+2.9** |
| **HAZ** | **Te Kaha** | **8.51** | **197** | P | **Pn** | **16 55 02.3** | **+0.5** |
| **PKGZ** | **Pakihiroa** | **8.54** | **196** | P | **P** | **16 55 03.7** | **-1.1** |
| **PKGZ** | **Pakihiroa** | **8.54** | **196** | P | **S** | **16 56 40.7** | **+0.2** |
| **PUZ** | **Puketiti** | **8.70** | **194** | P | **S** | **16 56 42.0** | **-1.9** |
| **RUGZ** | **Raukumara Rang** | **8.74** | **197** | P | **Pn** | **16 55 05.0** | **+0.4** |
| **WHRZ** | **Whale Island** | **8.84** | **201** | P | S | 16 56 57.0 | +10 |
| **TWGZ** | **Tauwhareparae** | **8.86** | **195** | P | **P** | **16 55 08.1** | **-0.3** |
| **TWGZ** | **Tauwhareparae** | **8.86** | **195** | P | **S** | **16 56 48.7** | **+1.1** |
| **OPRZ** | **Ohinepanea** | **8.96** | **203** | P | **P** | **16 55 10.2** | **+0.8** |
| **CNGZ** | **Carnagh Statio** | **9.11** | **194** | P | Pn | 16 55 03.5 | -5.3 |
| **MWZ** | **Matawai** | **9.12** | **197** | P | **Pn** | **16 55 07.8** | **-1.3** |
| **MWZ** | **Matawai** | **9.12** | **197** | P | **S** | **16 56 51.4** | **-1.9** |
| **TKGZ** | **Te Karaka** | **9.14** | **196** | P | **P** | **16 55 10.6** | **-0.8** |
| **TKGZ** | **Te Karaka** | **9.14** | **196** | P | **S** | **16 56 51.9** | **-1.7** |
| **URZ** | **Urewera** | **9.17** | **199** | P | **Pn** | **16 55 09.5** | **0.0** |
| **URZ** | **Urewera** | **9.17** | **199** | P | **Pn** | **16 55 09.7** | **+0.2** |
| | 19nm,0.3s,baz=2.3,slow=3.5,SNR=67 | | | | | | |
| URZ | | | | S | **S** | **16 56 51.6** | **-2.5** |
| | 41nm,0.4s,baz=141,slow=22,SNR=17 | | | | | | |
| **URZ** | **Urewera** | **9.17** | **199** | P | **Pn** | **16 55 09.0** | **-0.5** |
| **KARZ** | **Kaharoa** | **9.23** | **204** | P | **P** | **16 55 14.0** | **+1.6** |
| **RAGZ** | **Rawiri** | **9.30** | **197** | P | **P** | **16 55 12.6** | **-0.7** |
| **RIGZ** | **Rimuhau** | **9.42** | **195** | P | **Pn** | **16 55 13.2** | **+0.7** |
| **RIGZ** | **Rimuhau** | **9.42** | **195** | P | **S** | **16 56 53.9** | **-5.9** |
| **RRRZ** | **Republican Roa** | **9.42** | **202** | P | **P** | **16 55 16.0** | **+1.4** |
| **MUGZ** | **Murupara** | **9.47** | **200** | P | **Pn** | **16 55 13.7** | **+0.5** |
| **HSRZ** | **Hossack Road** | **9.49** | **203** | P | **P** | **16 55 17.7** | **+2.4** |
| **RTZ** | **Ruatahuna** | **9.54** | **199** | Pn | **Pn** | **16 55 14.2** | **+0.2** |
| **RTZ** | **Ruatahuna** | **9.54** | **199** | P | **Pn** | **16 55 12.9** | **-1.1** |
| **RTZ** | **Ruatahuna** | **9.54** | **199** | P | **S** | **16 57 01.4** | **-1.1** |
| **HRRZ** | **Handcock Road** | **9.55** | **203** | P | **P** | **16 55 17.6** | **+1.7** |
| **GRRZ** | **Galatos Road** | **9.57** | **204** | P | **P** | **16 55 18.4** | **+2.2** |
| **PRGZ** | **Paritu Road** | **9.60** | **195** | P | **P** | **16 55 17.9** | **+1.4** |
| **PRGZ** | **Paritu Road** | **9.60** | **195** | P | **S** | **16 56 58.5** | **-5.2** |
| **PRGZ** | **Plateau Road** | **9.61** | **202** | P | **P** | **16 55 17.8** | **+1.2** |
| **WPRZ** | **Whakapapatarin** | **9.70** | **203** | P | **P** | **16 55 19.2** | **+1.5** |
| **KNZ** | **Kokohu** | **9.74** | **195** | P | **P** | **16 55 17.5** | **-0.5** |
| **KNZ** | **Kokohu** | **9.74** | **195** | P | **S** | **16 56 59.3** | **-7.4** |
| **TLZ** | **Tolley Road** | **9.76** | **206** | P | **P** | **16 55 21.1** | **+2.8** |
| **RAHZ** | **Arahi** | **9.79** | **198** | P | **P** | **16 55 18.3** | **-0.3** |
| **RAHZ** | **Arahi** | **9.79** | **198** | P | **S** | **16 57 06.4** | **-1.4** |
| **KUTZ** | **Kaahu Road** | **9.79** | **204** | P | **P** | **16 55 21.0** | **+2.3** |
| **MTHZ** | **Maungataniwha** | **9.79** | **199** | P | **P** | **16 55 18.0** | **-0.8** |
| **MHGZ** | **Mahia Peninsul** | **9.81** | **194** | P | **P** | **16 55 19.9** | **+1.0** |
| **MHGZ** | **Mahia Peninsul** | **9.81** | **194** | P | **S** | **16 57 03.5** | **-4.9** |
| **WHHZ** | **Waihua** | **9.90** | **197** | P | **P** | **16 55 20.5** | **+0.7** |
| **MRHZ** | **Matea Rd** | **9.90** | **201** | P | **P** | **16 55 19.4** | **-0.6** |
| **NMHZ** | **Naumai** | **10.03** | **199** | P | **P** | **16 55 21.5** | **+0.1** |
| **ARHZ** | **Aropaoanui** | **10.14** | **198** | P | **Pn** | **16 55 20.6** | **-0.5** |
| **RATZ** | **Rangitukua** | **10.15** | **204** | P | **P** | **16 55 23.4** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **10.19** | **200** | P | **P** | **16 55 22.3** | **-0.8** |
| **BKZ** | **Black Stump Fm** | **10.19** | **200** | Pn | **Pn** | **16 55 19.2** | **-2.6** |
| **HIZ** | **Hauiti** | **10.19** | **208** | P | **P** | **16 55 25.0** | **+1.9** |
| **HIZ** | **Hauiti** | **10.19** | **208** | P | **P** | **16 55 25.8** | **+2.7** |
| **KATZ** | **Kakaramea** | **10.27** | **204** | P | **P** | **16 55 25.0** | **+0.9** |
| **MCHZ** | **McNeill Hill** | **10.39** | **199** | P | **P** | **16 55 24.6** | **-0.6** |
| **NTVZ** | **North Tongarir** | **10.39** | **203** | P | **P** | **16 55 25.6** | **+0.1** |
| **TMVZ** | **Te Maari** | **10.39** | **203** | P | **P** | **16 55 25.8** | **+0.4** |
| **KRVZ** | **Karewarewa** | **10.40** | **204** | P | **P** | **16 55 26.0** | **+0.5** |
| **ETVZ** | **East Tongariro** | **10.41** | **203** | P | **P** | **16 55 26.2** | **+0.5** |
| **WTVZ** | **West Tongariro** | **10.44** | **204** | P | **P** | **16 55 26.1** | **+0.2** |
| **NNVZ** | **North Ngauruho** | **10.44** | **204** | P | **P** | **16 55 26.3** | **+0.2** |
| **KWHZ** | **Kaweka Forest** | **10.45** | **200** | P | **Pn** | **16 55 24.3** | **-0.5** |
| **TWVZ** | **Taurewa** | **10.45** | **204** | P | **P** | **16 55 26.7** | **+0.6** |
| **SNVZ** | **South Ngauruho** | **10.48** | **203** | P | **P** | **16 55 25.7** | **-0.8** |
| **NGZ** | **Ngauruhoe** | **10.48** | **204** | P | **P** | **16 55 27.3** | **+0.8** |
| **CKHZ** | **Cape Kidnapper** | **10.49** | **197** | P | **P** | **16 55 26.3** | **0.0** |
| **COVZ** | **Chateau Observ** | **10.53** | **204** | P | **P** | **16 55 27.6** | **+0.7** |
| **FWVZ** | **Far West T-bar** | **10.57** | **204** | P | **P** | **16 55 26.7** | **-0.9** |
| **MAVZ** | **Matarangi** | **10.58** | **203** | P | **P** | **16 55 27.7** | **0.0** |
| **WHVZ** | **Whangaehu Hut** | **10.58** | **203** | P | **P** | **16 55 26.9** | **-0.8** |
| **MOVZ** | **Moawhango** | **10.64** | **202** | P | **P** | **16 55 27.3** | **-0.9** |
| **KRHZ** | **Kereru** | **10.66** | **200** | P | **Pn** | **16 55 26.9** | **-0.5** |
| **PKVZ** | **Pokaka** | **10.68** | **204** | P | **P** | **16 55 28.4** | **-0.2** |
| **VRZ** | **Vera Road** | **10.75** | **207** | P | **P** | **16 55 31.3** | **+2.0** |
| **PXZ** | **Pawanui** | **10.89** | **197** | P | **Pn** | **16 55 29.0** | **-1.1** |
| **WPHZ** | **Waipukurau** | **11.04** | **198** | P | **P** | **16 55 32.7** | **+0.3** |
| **NEZ** | **North Egmont** | **11.14** | **209** | P | **P** | **16 55 38.0** | **+4.2** |
| **KHEZ** | **Kahui Hut** | **11.20** | **209** | P | **P** | **16 55 36.4** | **+2.0** |
| **DVHZ** | **Dannevirke** | **11.33** | **199** | P | **S** | **16 57 37.1** | **-4.8** |
| **ANWZ** | **Angora Road** | **11.40** | **198** | P | **S** | **16 57 38.0** | **-5.3** |
| **POWZ** | **Post Office Ro** | **11.53** | **200** | P | **S** | **16 57 40.7** | **-5.7** |
| **PRWZ** | **Pori Road** | **11.62** | **199** | P | **P** | **16 55 39.1** | **+0.2** |
| **PRWZ** | **Pori Road** | **11.62** | **199** | P | **S** | **16 57 43.1** | **-5.3** |
| **BFZ** | **Birch Farm** | **11.66** | **198** | P | **P** | **16 55 39.7** | **+0.3** |
| **BFZ** | **Birch Farm** | **11.66** | **198** | | **Pn** | **16 55 37.2** | **-2.1** |
| **BFZ** | **Birch Farm** | **11.66** | **198** | P | **S** | **16 57 44.3** | **-5.0** |
| **MRZ** | **Mangatainoka R** | **11.84** | **200** | Pn | **P** | **16 55 38.6** | **-2.7** |
| **MRZ** | **Mangatainoka R** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.25 267** | P | **P** | **17 00 21.1** | **-1.0** | |
| **ASAR** | **Alice Springs** | **42.25 267** | P | **P** | **17 00 21.3** | **-0.8** | |
| | comp=Z,4.8nm,0.5s,baz=105,slow=7.6,SNR=108 | | | | | | |
| ASAR | | | PcP | **sP** | **17 02 08.7** | **-0.9** | |
| | comp=Z,0.5nm,0.7s,baz=118,slow=5.2,SNR=2.3 | | | | | | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.99 272** | P | **P** | **17 00 27.0** | **-0.9** | |
| WR0 | | | IAmb | IAmb | 17 00 28.7 | | |
| | comp=Z,14nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.16 272** | P | **P** | **17 00 28.5** | **-0.8** | |
| WB2 | | | IAmb | IAmb | 17 00 29.5 | | |
| | comp=Z,10nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **43.17 272** | P | **P** | **17 00 28.6** | **-0.8** | |
| WRAB | | | IAmb | IAmb | 17 00 29.5 | | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.17 272** | P | **P** | **17 00 27.6** | **-1.9** | |
| **WRA** | **Warramunga Arr** | **43.17 272** | P | **P** | **17 00 28.5** | **-0.9** | |
| | comp=Z,3.8nm,0.3s,baz=110,slow=8.0,SNR=130 | | | | | | |
| WRA | | | PcP | **PcP** | **17 02 11.9** | **+0.1** | |
| | comp=Z,0.5nm,0.6s,baz=112,slow=3.0,SNR=5.1 | | | | | | |
| | comp=Z,3.8nm,0.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.19 272** | P | **P** | **17 00 28.6** | **-0.9** | |
| WB0 | | | IAmb | IAmb | 17 00 29.7 | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **45.37 255** | P | **P** | **17 00 45.9** | **-0.7** | |
| **SBA** | **Scott Base** | **48.72 184** | P | P | 17 01 16.9 | +5.5 | |
| SBA | | | IAmb | IAmb | 17 01 18.0 | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **48.76 185** | P | **P** | **17 01 15.8** | **+4.2** | |
| **VNDA** | **Vanda** | **48.76 185** | P | **P** | **17 01 16.0** | **+4.3** | |
| | comp=Z,1.2nm,0.7s,baz=14,slow=6.7,SNR=10 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **49.75 274** | P | **P** | **17 01 19.2** | **-0.8** | |
| KNRA | | | IAmb | IAmb | 17 01 19.9 | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.46 270** | P | **P** | **17 01 32.2** | **-0.5** | |
| **CASY** | **Casey** | **55.39 208** | P | **P** | **17 02 01.2** | **+1.1** | |
| CASY | | | IAmb | IAmb | 17 02 02.3 | | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **55.88 253** | P | **P** | **17 02 02.9** | **-1.5** | |
| **QSPA** | **South Pole Qui** | **60.46 180** | P | **P** | **17 02 37.1** | **+1.8** | |
| QSPA | | | IAmb | IAmb | 17 02 40.1 | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.46 180** | P | **P** | **17 02 39.1** | **+3.9** | |
| | comp=Z,9.4nm,0.7s,baz=21,slow=1.2,SNR=49 | | | | | | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **70.65 173** | P | **P** | **17 03 42.0** | **+2.5** | |
| BELA | | | IAmb | IAmb | 17 03 42.9 | | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **72.69 201** | P | **P** | **17 03 53.9** | **+2.3** | |
| | comp=Z,6.7nm,0.9s,baz=70,slow=0.5,SNR=5.5 | | | | | | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **78.62 180** | ⇓P | **P** | **17 04 27.7** | **+2.6** | |
| | comp=Z,470nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **78.93 179** | P | **P** | **17 04 28.6** | **+1.9** | |
| SNAA | | | IAmb | IAmb | 17 04 29.9 | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **78.93 179** | ⇓P | **P** | **17 04 28.9** | **+2.2** | |
| | comp=Z,22nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **78.93 179** | P | **P** | **17 04 28.9** | **+2.2** | |
| | comp=Z,2.7nm,0.8s,baz=207,slow=7.9,SNR=12 | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **79.11 177** | ⇓P | **P** | **17 04 29.9** | **+2.3** | |
| | comp=Z,17nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **79.54 177** | ⇓P | **P** | **17 04 32.3** | **+2.5** | |
| | comp=Z,10nm,0.7s,baz=180,slow=4.5 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **79.77 177** | ⇓P | **P** | **17 04 33.8** | **+2.7** | |
| | comp=Z,12nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.30 43** | P | **P** | **17 05 13.5** | **-0.9** | |
| | comp=Z,0.3nm,0.6s,baz=221,slow=8.0,SNR=2.8 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **144.13 340** | PKP | **PKPab** | **17 11 53.2** | **-0.9** | |
| | comp=Z,1.9nm,0.3s,baz=46,slow=4.2,SNR=29 | | | | | | |
| **NB2** | **NORSAR Subarra** | **147.87 351** | PKP | **PKPbc** | **17 12 03.9** | **-1.3** | |
| | comp=Z,0.5nm,0.5s,baz=16,slow=2.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **147.87 351** | PKPbc | **PKPbc** | **17 12 03.2** | **-2.0** | |
| | comp=Z,1.2nm,0.8s,baz=14,slow=4.5,SNR=5.7 | | | | | | |
| **HFS** | **Hagfors** | **148.32 348** | PKPbc | **PKPbc** | **17 12 04.8** | **-1.5** | |
| | comp=Z,4.0nm,0.9s,baz=67,slow=5.0,SNR=7.1 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **150.47 285** | PKPbc | **PKiKP** | **17 12 13.5** | **+0.3** | |
| | comp=Z,2.9nm,0.4s,baz=88,slow=7.7,SNR=11 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.45 299** | PKPbc | **PKiKP** | **17 12 14.5** | **-0.5** | |
| | comp=Z,1.2nm,0.8s,baz=291,slow=3.4,SNR=5.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.57 183** | PKPab | **PKPab** | **17 13 18.7** | **+1.6** | |
| | comp=Z,1.9nm,0.7s,baz=160,slow=3.3,SNR=9.1 | | | | | | |

**IDC 03 16:56:14.4±328.0, 57°.73N×29°.21E, h0km, Error ellipse: s-maj=133.3km s-min=101.2km az=103.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.47 100** | | I | I | 17 26 30.0 | |
| | baz=283,slow=309,SNR=4.0 | | | | | | |
| **I37NO** | **I37NO** | **12.31 342** | | I | I | 18 04 20.0 | |
| | baz=147,slow=324,SNR=0.5 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **12.81 233** | | I | I | 18 14 10.0 | |
| | baz=43,slow=278,SNR=0.2 | | | | | | |

*UPP **03** 17:00:53.6±0.1, 67°.07N×20°.94E, h0km, ML2.4, Unknown*
*IDC **03** 17:00:54.1±0.9, 67°.08N×21°.02E, h0km, mbtmp2.8/4, ML1.8/4, Error ellipse: s-maj=15.7km s-min=7.8km az=115.0*

**ISC 03 17:00:53.8±1.2, 67°.04N±0°.04×20°.91E±0°.05, h6km±10km, n13, σ1§12/17, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DUNU** | **Dundret** | **0.16 302** | | P | **Pg** | **17 00 56.9** | **-0.1** |
| DUNU | | | | S | **Sg** | **17 00 59.2** | **+0.1** |
| **MASU** | **Masugnsbyn** | **0.60 45** | | P | **Pg** | **17 01 04.4** | **-0.8** |
| **PAJU** | **Pajala** | **0.87 90** | | P | **Pg** | **17 01 09.6** | **-0.7** |
| **HARU** | **Harads** | **0.88 178** | | P | **Pg** | **17 01 10.6** | **0.0** |
| **KALU** | **Kalix** | **1.54 139** | | P | **Pn** | **17 01 22.2** | **+0.5** |
| **SJUU** | **Sjulsmark** | **1.56 169** | | P | **Pn** | **17 01 23.0** | **+1.0** |
| **HEF** | **Hetta** | **1.73 36** | | *e*P | **Pn** | **17 01 24.4** | **+0.1** |
| **KIF** | **Kilpisjarvi** | **1.98 359** | | *e*P | **Pb** | **17 01 29.9** | **-0.1** |
| **I37NO** | **I37NO** | **2.22 338** | | I | I | 17 13 40.0 | |
| | baz=156,slow=322,SNR=4.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **3.03 32** | | Pn | **Pn** | **17 01 42.4** | **+0.2** |
| | 0.3nm,0.3s,baz=211,slow=14,SNR=25 | | | | | | |
| ARCES | | | | Sn | **Sn** | **17 02 20.1** | **+1.3** |
| | 0.5nm,0.3s,baz=213,slow=28,SNR=9.2 | | | | | | |
| | 1.1nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **6.05 156** | | Pn | **Pn** | **17 02 25.6** | **+1.9** |
| | 0.1nm,0.3s,baz=345,slow=12,SNR=8.6 | | | | | | |
| FINES | | | | Sn | **Sn** | **17 03 33.3** | **+0.2** |
| | 0.2nm,0.3s,baz=346,slow=23,SNR=1.3 | | | | | | |
| FINES | | | | Lg | Lg | 17 04 05.9 | |
| | 0.2nm,0.3s,baz=347,slow=24,SNR=1.9 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **7.36 220** | | Pn | **Pn** | **17 02 41.4** | **-0.3** |
| | baz=26,slow=11,SNR=1.3 | | | | | | |
| NOA | | | | Sn | **Sn** | **17 04 03.4** | **-2.1** |
| | baz=40,slow=20,SNR=1.6 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **7.64 208** | | Pn | **Pn** | **17 02 46.2** | **+0.9** |
| | 0.1nm,0.3s,baz=22,slow=13,SNR=6.7 | | | | | | |
| HFS | | | | Sn | **Sn** | **17 04 10.2** | **-1.8** |
| | 0.1nm,0.3s,baz=36,slow=28,SNR=1.2 | | | | | | |
| | 1.7nm,1.0s | | | | | | |

*TIR **03** 17:10:05.2, 38°.90N×19°.96E, h16km±5km, Ml2.9*
*ATH **03** 17:10:07.0, 38°.95N×20°.02E, h8km±2km, ML3.0/11, Manual Solution by A.Fokaefs This location: 2020/06/26 08:16:06 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 1 km; Longitude uncertainty: 2 km*
*MCSM **03** 17:10:07.9±0.5, 39°N±5°×2°0E±°, h11km±4km, mb5.9, MLv3.0*
*THE **03** 17:10:08.3, 39°.02N×20°.11E, h13km±3km, ML2.9/9, Error ellipse: s-maj=3.3km s-min=0.7km az=65.0*

**ISC 03 17:10:07.6±1.0, 39°.01N±0°.02×20°.07E±0°.03, h14km±8km, n43, σ0§91/65, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TSLK** | **Tsoukalades, L** | **0.49 111** | | P | **Pg** | **17 10 17.0** | **-0.3** |
| TSLK | | | | S | **Sg** | **17 10 24.8** | **+0.9** |
| | 1µm,0.3s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.49 111** | | P | **Pg** | **17 10 17.1** | **-0.3** |
| **LKD2** | **Lefkada island** | **0.51 115** | | P | **Pg** | **17 10 17.1** | **-0.5** |
| | baz=101 | | | | | | |
| LKD2 | | | | S | **Sg** | **17 10 24.7** | **+0.2** |
| | baz=101 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=E,3.8nm,0.2s,baz=101 | | | | | | |
| **LKD2** | **Lefkada island** | **0.51 115** | | P | **Pg** | **17 10 17.1** | **-0.5** |
| LKD2 | | | | S | **Sg** | **17 10 25.1** | **+0.7** |
| | comp=E,1µm,0.3s | | | | | | |
| **LKD2** | **Lefkada island** | **0.51 115** | | P | **Pg** | **17 10 17.1** | **-0.5** |
| LKD2 | | | | S | **Sg** | **17 10 24.9** | **+0.4** |
| **NYDR** | **Nydri-Lefkada** | **0.57 120** | | P | **Pg** | **17 10 17.9** | **-0.9** |
| NYDR | | | | S | **Sg** | **17 10 26.5** | **+0.1** |
| | comp=E,720nm,0.4s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.57 120** | | P | **Pg** | **17 10 17.9** | **-0.9** |
| **EVGI** | **Lefkada island** | **0.60 130** | | P | **Pg** | **17 10 18.6** | **-0.7** |
| EVGI | | | | S | **Sg** | **17 10 28.4** | **+1.1** |
| **EVGI** | **Lefkada island** | **0.60 130** | | P | **Pg** | **17 10 18.3** | **-1.0** |
| **FSK** | **Fiskardo** | **0.67 144** | | P | **Pg** | **17 10 20.1** | **-0.5** |
| FSK | | | | S | **Sb** | **17 10 31.0** | **+0.9** |
| | comp=E,810nm,0.3s | | | | | | |
| **FSK** | **Fiskardo** | **0.67 144** | | P | **Pg** | **17 10 20.2** | **-0.5** |
| **KEK** | **Kerkira** | **0.74 344** | | P | **Pg** | **17 10 22.0** | **+0.1** |
| KEK | | | | S | **Sb** | **17 10 33.3** | **+1.1** |
| | comp=E,1µm,0.4s | | | | | | |
| **KEK** | **Kerkira** | **0.74 344** | | P | **Pg** | **17 10 22.0** | **+0.1** |
| KEK | | | | S | **Sn** | **17 10 33.9** | **-0.8** |
| **KASA** | **Kassiopi** | **0.75 352** | | P | **Pb** | **17 10 22.6** | **+0.2** |
| KASA | | | | S | **Sn** | **17 10 34.3** | **-0.6** |
| **DMLN** | **Damoulianata-K** | **0.80 163** | | P | **Pg** | **17 10 23.3** | **+0.2** |
| DMLN | | | | S | **Sn** | **17 10 36.5** | **+0.3** |
| | comp=E,1µm,0.5s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.80 163** | | P | **Pg** | **17 10 22.2** | **-1.0** |
| **SRN** | **Sarande** | **0.88 357** | | P | **Pg** | **17 10 23.6** | **-1.0** |
| | baz=1.0 | | | | | | |
| SRN | | | | S | **Sn** | **17 10 38.1** | **+0.2** |
| | baz=1.0 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,1.1nm,0.2s,baz=1.0 | | | | | | |
| **SRN** | **Sarande** | **0.88 357** | | P | **Pg** | **17 10 24.6** | **+0.1** |
| SRN | | | | S | **Sn** | **17 10 38.2** | **+0.2** |
| | comp=N,2µm,0.6s | | | | | | |
| **JAN** | **Janina** | **0.89 43** | | P | **Pg** | **17 10 24.5** | **-0.3** |
| JAN | | | | S | **Sb** | **17 10 37.4** | **+0.8** |
| | comp=N,845nm,0.3s | | | | | | |
| **JAN** | **Janina** | **0.89 43** | | P | **Pg** | **17 10 24.6** | **-0.3** |
| JAN | | | | S | **Sn** | **17 10 38.4** | **-0.1** |
| **VLS** | **Valsamata** | **0.92 154** | | P | **Pg** | **17 10 25.0** | **-0.4** |
| VLS | | | | S | **Sn** | **17 10 39.4** | **+0.2** |
| | comp=N,1µm,0.2s | | | | | | |
| **VLS** | **Valsamata** | **0.92 154** | | P | **Pg** | **17 10 24.5** | **-0.9** |
| **PSDA** | **Pessada-Kefalo** | **0.98 155** | | P | **Pb** | **17 10 25.6** | **-0.7** |
| **PVO** | **Paravola** | **1.20 108** | | P | **Pn** | **17 10 30.4** | **+0.4** |
| **KPRO** | **Kipourio** | **1.38 46** | | P | **Pb** | **17 10 33.7** | **+0.5** |
| **VLO** | **Vlora** | **1.53 343** | | P | **Pg** | **17 10 36.7** | **-0.2** |
| | baz=348 | | | | | | |
| VLO | | | | S | **Sg** | **17 10 58.5** | **+1.7** |
| | baz=348 | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.63 311** | | P | **Pn** | **17 10 36.2** | **+0.3** |
| | baz=316 | | | | | | |
| SCTE | | | | S | **Sg** | **17 10 59.2** | **-0.9** |
| | baz=316 | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.63 311** | | P | **Pn** | **17 10 36.1** | **+0.2** |
| **KBN** | **Korca** | **1.71 19** | | P | **Pg** | **17 10 40.1** | **-0.3** |
| | baz=20 | | | | | | |
| KBN | | | | S | **Sg** | **17 11 05.8** | **+3.2** |
| | baz=20 | | | | | | |
| **FNA** | **Florina** | **2.04 29** | | P | **Pb** | **17 10 43.5** | **-1.0** |
| | baz=29 | | | | | | |
| FNA | | | | S | **Sg** | **17 11 13.5** | **+0.3** |
| | baz=29 | | | | | | |
| **FNA** | **Florina** | **2.04 29** | | P | **Pb** | **17 10 43.4** | **-1.0** |
| **OHR** | **Ohrid** | **2.18 15** | | *i* Pn | **Pb** | **17 10 45.7** | **-1.1** |
| OHR | | | | *i* Sn | **Sg** | **17 11 15.9** | **-1.7** |
| **TIR** | **Tirane** | **2.34 356** | | P | **Pn** | **17 10 43.5** | **-2.2** |
| **TIP** | **Timpagrande** | **2.58 275** | | P | **Pn** | **17 10 49.7** | **+0.7** |
| **PUK** | **Puka** | **3.04 358** | | P | **Pn** | **17 10 56.1** | **+0.8** |
| | baz=0.0 | | | | | | |
| PUK | | | | S | **Sb** | **17 11 35.6** | **-2.8** |
| | baz=0.0 | | | | | | |
| **CEL** | **Celeste** | **3.35 258** | | P | **Pn** | **17 11 00.1** | **+0.5** |
| **TRSU** | **Trosnyk** | **9.32 12** | | P | **Pn** | **17 12 21.1** | **-0.4** |
| **BERU** | **Beregovo** | **9.41 11** | | P | **Pn** | **17 12 23.1** | **+0.4** |
| **BZK** | **Bozkurt** | **11.02 70** | | P | **Pn** | **17 12 45.1** | **+0.4** |
| | comp=N,66nm,1.9s | | | | | | |
| **NE56** | **Odesa** | **11.04 43** | | P | **Pn** | **17 12 45.1** | **+0.2** |
| **LUBAR** | **Lubar, Ukraine** | **12.21 24** | | P | **Pn** | **17 13 00.9** | **0.0** |
| **AK11** | **Malin Array Si** | **13.32 26** | | P | **Pn** | **17 13 16.4** | **+0.2** |
| **AK20** | **Malin Array Si** | **13.33 25** | | P | **Pn** | **17 13 16.3** | **+0.1** |

*IDC **03** 17:10:24.7±5.9, 17°.90N×147°.10E, h55km±44km, mb3.3/10, mbtmp3.6/10, ML4.0/1, MS2.8/1, Error ellipse: s-maj=63.6km s-min=16.4km az=84.0*

**ISC 03 17:10:23.7±1.5, 17°.91N±0°.09×147°.2E±0°.3, h50km, n15, σ0§64/14, mb3.6/9, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **4.86 208** | | P | **Pn** | **17 11 34.6** | **+0.4** |
| | 6.0nm,0.3s,baz=179,slow=14,SNR=1.9 | | | | | | |
| GUMO | | | | S | **Sn** | **17 12 28.8** | **-0.4** |
| | 31nm,0.5s,baz=214,slow=22,SNR=1.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **18.71 81** | | T | T | 17 33 36.1 | |
| | baz=268,slow=74,SNR=13 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **18.72 81** | | T | T | 17 33 45.5 | |
| | baz=268,slow=74,SNR=7.5 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **18.73 81** | | T | T | 17 33 37.9 | |
| | baz=268,slow=74,SNR=10 | | | | | | |
| **JOW** | **Kunigami** | **19.62 300** | | LR | LR | 17 21 48.7 | |
| | comp=Z,29nm,19.5s,baz=73,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.19 339** | | P | **P** | **17 14 55.4** | **+1.1** |
| | 1.0nm,0.6s,baz=167,slow=10,SNR=2.0 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **25.81 323** | | P | **P** | **17 15 50.0** | **-0.1** |
| | 0.8nm,0.8s,baz=151,slow=8.0,SNR=5.0 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.69 199** | | P | **P** | **17 17 51.9** | **+0.7** |
| | 0.3nm,0.8s,baz=29,slow=8.8,SNR=1.4 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 19 57.6** | **+0.3** |
| | 0.2nm,0.6s,baz=18,slow=3.6,SNR=1.6 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **43.32 198** | | P | **P** | **17 18 20.4** | **-0.5** |
| | 0.3nm,0.7s,baz=21,slow=9.2,SNR=6.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 20 09.0** | **-0.2** |
| | 0.2nm,0.6s,baz=25,slow=3.4,SNR=2.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **44.66 321** | | P | **P** | **17 18 31.3** | **-0.3** |
| | 0.2nm,0.4s,baz=140,slow=6.7,SNR=1.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.76 279** | | P | **P** | **17 18 40.8** | **+0.2** |
| | 0.3nm,0.3s,baz=93,slow=4.5,SNR=1.5 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.52 323** | | P | **P** | **17 20 20.6** | **-1.1** |
| | 0.5nm,0.4s,baz=114,slow=8.7,SNR=2.8 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.04 314** | | P | **P** | **17 20 26.1** | **+0.5** |
| | 0.4nm,0.7s,baz=92,slow=9.1,SNR=4.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.87 318** | | P | **P** | **17 20 44.0** | **-0.5** |
| | 0.6nm,0.5s,baz=96,slow=7.9,SNR=3.7 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **88.20 336** | | P | **P** | **17 23 09.1** | **-0.1** |
| | 0.8nm,0.6s,baz=33,slow=5.3,SNR=5.6 | | | | | | |
| | 0.8nm,0.6s | | | | | | |

**IDC 03 17:28:05.7±4.7, 47°.52N×92°.64W, h0km, mbtmp2.6/1, ML0.9/1, Error ellipse: s-maj=75.7km s-min=29.7km az=53.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ULM** | **Lac du Bonnet** | **3.47 323** | | Pn | Pn | 17 28 59.8 | -1.1 |
| | 0.2nm,0.3s,baz=139,slow=11,SNR=1.6 | | | | | | |
| ULM | | | | Lg | Lg | 17 29 52.8 | |
| | 2.8nm,0.3s,baz=49,slow=23,SNR=15 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.49 321** | | I | I | 17 49 00.0 | |
| | 0.1nm,0.8s,baz=140,slow=323,SNR=27 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **16.43 282** | | I | I | 19 11 40.0 | |
| | baz=82,slow=313,SNR=2.5 | | | | | | |

**IDC 03 17:34:22.1±3.0, 22°.45N×12°.15W, h0km, mbtmp3.7/2, ML3.6/2, Error ellipse: s-maj=130.1km s-min=57.2km az=62.0, Mauritania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BBTS** | **Babate** | **8.79 209** | | Lg | Lg | 17 38 57.1 | |
| | 2.8nm,0.3s,baz=162,slow=20,SNR=1.6 | | | | | | |
| **I11CV** | **MAIO ISLAND IN** | **12.65 237** | | I | I | 18 47 40.0 | |
| | 0.1nm,0.7s,baz=50,slow=314,SNR=0.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **16.09 123** | | Pn | Pn | 17 38 08.7 | -1.2 |
| | 0.1nm,0.3s,baz=311,slow=15,SNR=2.3 | | | | | | |
| TORD | | | | Sn | Sn | 17 41 04.0 | -5.1 |
| | 0.1nm,0.3s,baz=308,slow=24,SNR=1.8 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **DBIC** | **Dimbokro** | **17.20 155** | | Pn | Pn | 17 38 24.1 | +0.3 |
| | 0.5nm,0.3s,baz=333,slow=14,SNR=2.0 | | | | | | |
| | 3.5nm,0.8s | | | | | | |
| **I42PT** | **GRACIOSA ISLAN** | **21.37 324** | | I | I | 19 40 00.0 | |
| | baz=138,slow=321,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **148.69 92** | | PKPbc | PKPbc | 17 54 11.2 | -0.9 |
| | 0.5nm,1.1s,baz=290,slow=2.2,SNR=1.9 | | | | | | |
| **ASAR** | **Alice Springs** | **148.78 99** | | PKPbc | PKPbc | 17 54 12.1 | -0.2 |
| | 0.2nm,0.7s,baz=283,slow=2.9,SNR=4.7 | | | | | | |

*DNK **03** 18:03:31.9±1.6, 51°.74N×16°.19E, h0km, ML2.0, Suspected explosion*
*IPEC **03** 18:03:32.8±0.2, 51°.61N×16°.05E, h1km, ML2.9/4, Error ellipse: s-maj=2.0km s-min=1.2km az=34.0*
*BGR **03** 18:03:34.0±0.5, 51°.59N×16°.01E, h1km, ML3.1/15, Error ellipse: s-maj=5.6km s-min=2.2km az=18.0*
*VIE **03** 18:03:33.5±0.7, 51°.55N×16°.04E, h0km, mb2.6/5, ml3.3/4, Error ellipse: s-maj=9.4km s-min=4.1km az=62.0, Suspected Mining induced.*
*PRU **03** 18:03:35.7, 51°.52N×15°.98E, h0km*

**ISC 03 18:03:31.9±0.8, 51°.67N±0°.03×15°.99E±0°.02, h0km, n56, σ1§20/102, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.85 167** | | *e*Pg | **Pg** | **18 03 48.2** | **0.0** |
| KSP | | | | *e*Sg | **Sg** | **18 03 58.6** | **-0.6** |
| **KSP** | **Ksiaz** | **0.85 167** | | *e*Pg | **Pg** | **18 03 48.2** | **0.0** |
| KSP | | | | *e*Sg | **Sg** | **18 03 58.6** | **-0.6** |
| **CHVC** | **Chvalec** | **1.08 178** | | *e*PG | **Pg** | **18 03 53.0** | **+0.3** |
| CHVC | | | | *e*SG | **Sg** | **18 04 06.5** | **-0.2** |
| | comp=Z,170nm,0.5s | | | | | | |
| **OSTC** | **Ostas** | **1.12 173** | | *e*PG | **Pg** | **18 03 53.8** | **+0.4** |
| OSTC | | | | *e*SG | **Sg** | **18 04 07.3** | **-0.7** |
| | comp=Z,161nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.16 179** | | *e*PG | **Pg** | **18 03 54.2** | **0.0** |
| UPC | | | | *e*SG | **Sg** | **18 04 08.5** | **-0.8** |
| | comp=Z,218nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.34 171** | | *e*SG | **Sg** | **18 04 13.3** | **-1.6** |
| | comp=Z,99nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.34 171** | | *e*Pn | **Pg** | **18 03 56.9** | **-0.6** |
| DPC | | | | *e*Sg | **Sg** | **18 04 13.9** | **-0.9** |
| **PVCC** | **Panska Ves** | **1.45 219** | | *e*PG | **Pn** | **18 03 59.8** | **+0.4** |
| PVCC | | | | *e*SG | **Sg** | **18 04 18.8** | **+0.2** |
| | comp=Z,386nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.51 239** | | Pg | **Pb** | **18 04 01.1** | **+0.3** |
| BRG | | | | Sg | **Sn** | **18 04 20.9** | **+0.1** |
| BRG | | | | Amp | | 18 04 22.3 | |
| | comp=Z,176nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.51 239** | | *e*Pn | **Pn** | **18 04 00.9** | **+0.6** |
| BRG | | | | *e*Sg | **Sn** | **18 04 20.8** | **+0.1** |
| **KRLC** | **Kraliky** | **1.67 162** | | *e*PG | **Pb** | **18 04 03.1** | **-0.5** |
| KRLC | | | | *e*SG | **Sn** | **18 04 24.7** | **0.0** |
| | comp=Z,181nm,0.3s | | | | | | |
| **FBE** | **Freiberg** | **1.82 247** | | *e*Pn | **Pb** | **18 04 06.8** | **+0.8** |
| FBE | | | | *e*Sg | **Sb** | **18 04 30.5** | **+1.2** |
| **PRA** | **Prague** | **1.88 212** | | *e*PG | **Pb** | **18 04 06.6** | **-0.5** |
| PRA | | | | *e*SG | **Sb** | **18 04 31.3** | **+0.1** |
| | comp=Z,97nm,0.6s | | | | | | |
| **CLL** | **Collm** | **1.90 260** | | *i* Pn | **Pn** | **18 04 05.3** | **-0.3** |
| CLL | | | | *i* Pg | **Pb** | **18 04 08.3** | **+0.8** |
| CLL | | | | *i* x | x | 18 04 12.3 | |
| CLL | | | | *e*Sg | **Sb** | **18 04 33.0** | **+1.2** |
| | comp=Z,52nm,0.5s | | | | | | |
| **CLL** | **Collm** | **1.90 260** | | *e*Pn | **Pn** | **18 04 05.5** | **-0.2** |
| **PRU** | **Pruhonice** | **1.92 209** | | *e*PN | **Pn** | **18 04 05.4** | **-0.4** |
| PRU | | | | *e*PG | **Pb** | **18 04 07.4** | **-0.4** |
| PRU | | | | *e*SG | **Sb** | **18 04 32.2** | **0.0** |
| | comp=Z,84nm,0.5s | | | | | | |
| **HSKC** | **Hora Svate Kat** | **1.93 238** | | *e*SG | **Sb** | **18 04 33.4** | **+0.7** |
| | comp=Z,82nm,0.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **2.14 152** | | *e*Pn | **Pn** | **18 04 08.2** | **-0.7** |
| | baz=333 | | | | | | |
| MORC | | | | *e*Sg | **Sb** | **18 04 37.6** | **-1.0** |
| | comp=Z,67nm,0.4s,baz=333 | | | | | | |
| **MORC** | **Moravsky Berou** | **2.14 152** | | *e*Pn | **Pn** | **18 04 08.3** | **-0.6** |
| MORC | | | | *e*Sg | **Sg** | **18 04 39.3** | **-1.2** |
| **OKC** | **Ostrava-Krasne** | **2.29 142** | | *e*SG | **Sg** | **18 04 44.1** | **-1.3** |
| | comp=Z,82nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **2.40 171** | | *e*Pn | **Pn** | **18 04 12.3** | **-0.1** |
| | baz=352 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **18 04 45.5** | **-0.4** |
| | comp=Z,48nm,0.4s,baz=352 | | | | | | |
| **VRAC** | **Vranov** | **2.40 171** | | *e*PN | **Pn** | **18 04 12.4** | **0.0** |
| VRAC | | | | *e*SG | **Sb** | **18 04 45.6** | **-0.4** |
| **TREC** | **Trest** | **2.40 188** | | *e*SG | **Sb** | **18 04 46.9** | **+0.8** |
| **TANN** | **Tannenbergstha** | **2.56 242** | | *e*Pn | **Pn** | **18 04 14.8** | **+0.1** |
| TANN | | | | *e*Sg | **Sg** | **18 04 53.4** | **-0.6** |
| **MAUC** | **Maruska** | **2.59 152** | | *e

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BJUU** | **Bjuv** | **4.75** | **339** | *i* P | **Pn** | **18 04 44.0** | **-0.7** |
| BJUU | | | | *e*S | **Sn** | **18 05 37.5** | **-2.9** |
| **KOLS** | **Kolonicke sedl** | **4.87** | **122** | *e*SG | **Sg** | **18 06 12.0** | **+3.8** |
| **KBA** | **Koelnbreinsper** | **4.91** | **202** | *i* Pn | **Pn** | **18 04 47.6** | **+0.5** |
| | comp=Z,1.8nm,0.3s,SNR=4.9 | | | | | | |
| KBA | | | | *e*Sg | **Sg** | **18 06 06.8** | **-2.8** |
| | comp=Z,14nm,0.5s | | | | | | |
| **DEL** | **Delary** | **4.97** | **346** | *i* P | **Pn** | **18 04 47.0** | **-0.7** |
| DEL | | | | *e*S | **Sn** | **18 05 43.1** | **-2.7** |

**IDC 03 18:12:22.8±2.3, 5°11'N×124°43'E, h0km, mb3.5/4, mbtmp3.5/4, Error ellipse: s-maj=294.7km s-min=21.2km az=65.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **26.73** | **159** | P | P | 18 18 04.7 | +0.5 |
| | 0.3nm,0.3s,baz=337,slow=9.8,SNR=9.3 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **30.05** | **162** | P | P | 18 18 33.5 | -0.4 |
| | 0.2nm,0.4s,baz=344,slow=6.9,SNR=11 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.13** | **326** | P | P | 18 21 57.9 | +0.9 |
| | 0.3nm,0.3s,baz=127,slow=7.5,SNR=7.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.35** | **328** | P | P | 18 22 25.8 | -1.0 |
| | 0.2nm,0.4s,baz=128,slow=5.8,SNR=6.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

**KRSC 03 18:20:31.3±1.3, 51°61'N×160°23'E, h43km±23km, Ml3.6, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **1.35** | **279** | *e*P | Pn | 18 20 55.6 | +2.0 |
| KDTR | | | | *e*S | Sn | 18 21 12.1 | +1.8 |
| **SPN** | **Mys Shipunski** | **1.50** | **355** | *e*P | Pn | 18 20 56.6 | +1.0 |
| SPN | | | | *e*S | Sn | 18 21 14.5 | +0.7 |
| **MTVR** | **Mutnovka** | **1.54** | **306** | *e*P | Pn | 18 20 58.3 | +2.0 |
| MTVR | | | | *e*S | Sn | 18 21 17.7 | +2.6 |
| **GRL** | **Gorelyy** | **1.63** | **306** | *e*P | Pn | 18 21 00.1 | +2.5 |
| **ASAK** | **Asacha** | **1.63** | **299** | *e*P | Pn | 18 21 00.2 | +2.6 |
| **NLC** | **Nalytchevo** | **1.65** | **341** | *e*P | Pn | 18 20 59.8 | +2.0 |
| **DALK** | **Dalny** | **1.69** | **328** | *e*P | Pn | 18 20 60.0 | +1.8 |
| DALK | | | | *e*S | Sn | 18 21 20.0 | +1.4 |
| **PET** | **Petropavlovsk** | **1.71** | **326** | *e*P | Pn | 18 21 00.2 | +1.6 |
| PET | | | | *e*S | Sn | 18 21 20.6 | +1.3 |
| **KRMR** | **Karymshinskiy** | **1.78** | **314** | *e*P | Pn | 18 21 01.4 | +1.9 |
| KRMR | | | | *e*S | Sn | 18 21 23.7 | +2.9 |
| **UGLR** | **Uglovaya** | **1.82** | **332** | *e*P | Pn | 18 21 02.5 | +2.4 |
| **SMAR** | **Somma** | **1.87** | **333** | *e*P | Pn | 18 21 02.9 | +2.0 |
| **AVH** | **Avacha** | **1.89** | **332** | *e*P | Pn | 18 21 03.7 | +2.6 |
| **KRER** | **Koryakskii** | **1.92** | **333** | *e*P | Pn | 18 21 04.1 | +2.5 |
| **KOK** | **Koryaka** | **1.95** | **331** | *e*P | Pn | 18 21 04.4 | +2.5 |
| **KRX** | **Arik** | **2.00** | **332** | *e*P | Pn | 18 21 04.9 | +2.2 |
| **APC** | **Apacha** | **2.30** | **306** | *e*P | Pn | 18 21 10.2 | +3.6 |
| **GNL** | **Ganaly** | **2.51** | **327** | *e*P | Pn | 18 21 12.8 | +3.1 |
| **SKR** | **Severo-Kuril's** | **2.75** | **252** | *e*P | Pn | 18 21 15.8 | +3.0 |
| SKR | | | | *e*S | Sn | 18 21 47.2 | +2.4 |
| **TUMR** | **Tumrok** | **3.68** | **359** | *e*P | Pn | 18 21 28.9 | +3.2 |
| **KMNR** | **Kamenistaya** | **4.15** | **0** | *e*P | Pn | 18 21 37.1 | +4.9 |

*BJI **03** 18:50:51.8±0.0, 0°.56S×22°.33W, h9km, mB5.5/5, Ms5.5/19, Ms7 5.2/18*

*IDC **03** 18:50:51.3±0.5, 0°.91S×21°.87W, h0km, mb4.3/21, mbtmp4.4/23, ML4.5/2, MS4.7/66, Error ellipse: s-maj=16.1km s-min=10.9km az=132.0*

*MOS **03** 18:50:51.5±1.0, 0°.92S×21°.94W, h10km, mb5.0/33, MS4.9/22, Error ellipse: s-maj=12.4km s-min=6.0km az=53.2*

*NEIC **03** 18:50:53.9±1.7, 0°.87S±0°.05×22°.00W±0°.08, h10km±1km, mb5.0/86, Ms_20 4.8/535, Mwb5.8/71, Mww5.8/35, Error ellipse: s-maj=16.0km s-min=3.2km az=239.0, Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.26; $M_{\theta\theta}$1.39; $M_{\phi\phi}$-1.14; $M_{r\theta}$0.23; $M_{r\phi}$-5.32; $M_{\theta\phi}$0.47; Fault plane solution: $M_0$5.50000×$10^{17}$ NP1: $\phi_s$263.43000°, δ85.22000°, λ-176.72000°. NP2: $\phi_s$173.16000°, δ86.73000°, λ-4.79000°. Principal axes: T 5.5965, Plg1.0000°, Azm218.0000°; N -0.2066, Plg84.0000°, Azm319.0000°; P -5.3899, Plg6.0000°, Azm128.0000°;*

*NEIC **03** 18:50:54, 0°.91S×21°.83W, h26km, Moment Tensor Solution. Duration: 3s5 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.94; $M_{\theta\theta}$2.58; $M_{\phi\phi}$-1.64; $M_{r\theta}$-0.04; $M_{\theta\phi}$-5.41; $M_{r\phi}$-0.15; Fault plane solution: $M_0$5.81000×$10^{17}$ NP1: $\phi_s$349.35000°, δ88.94000°, λ-1.60000°. NP2: $\phi_s$79.37000°, δ88.40000°, λ-178.94000°. Principal axes: T 6.2757, Plg0.0000°, Azm34.0000°; N -0.9323, Plg88.0000°, Azm136.0000°; P -5.3434, Plg2.0000°, Azm304.0000°;*

*IPGP **03** 18:50:54.0, 0°.90S×22°.03W, h18km, Mw5.8, Fault plane solution: NP1: $\phi_s$264.00000°, δ85.00000°, λ-177.00000°. NP2: $\phi_s$173.00000°, δ87.00000°, λ-5.00000°.*

*NEIC **03** 18:50:54.3, 0°.89S×22°.03W, h10km*

*NEIC **03** 18:50:54, 0°.91S×22°.03W, h26km*

*BGR **03** 18:50:59.3, 0°.68S×21°.38W, h33km, mb4.8, Ms5.0*

*GCMT **03** 18:51:01.9±0.1, 0°.69S×21°.69W, h21km, MW5.8/150, Moment Tensor Solution. s144,c297; s150,c488; Duration: 2s0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.69±.05; $M_{\theta\theta}$2.26±.04; $M_{\phi\phi}$-1.58±.05; $M_{r\theta}$1.83±.10; $M_{\theta\phi}$-6.65±.04; $M_{r\phi}$0.80±.09; Best double couple: $M_0$7.22300×$10^{17}$ NP1: $\phi_s$263.00000°, δ84.00000°, λ-164.00000°. NP2: $\phi_s$171.00000°, δ74.00000°, λ-6.00000°. Principal axes: T 7.3840, Plg7.0000°, Azm36.0000°; N -0.3300, Plg73.0000°, Azm282.0000°; P -7.0610, Plg15.0000°, Azm128.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 03 18:50:54.7±0.3, 0°.89S±0°.05×22°.00W±0°.05, h18km, n602, σ2s96/324, mb4.8/116, MS4.8/343, 12C-19D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR10.17** | **133** | | T | T | 19 03 41.2 | |
| | baz=315,slow=74,SNR=340 | | | | | | |
| **H10N2** | **ASCENSION HYDR10.17** | **133** | | T | T | 19 03 40.6 | |
| | baz=315,slow=74,SNR=456 | | | | | | |
| **H10N1** | **ASCENSION HYDR10.19** | **133** | | T | T | 19 03 42.7 | |
| | baz=315,slow=74,SNR=458 | | | | | | |
| **ASCN** | **Ascension** | **10.34** | **133** | | **Pn** | **18 53 21.3** | **-0.9** |
| **H10S3** | **ASCENSION HYDR10.84** | **138** | | T | T | 19 04 38.5 | |
| | baz=319,slow=74,SNR=371 | | | | | | |
| **H10S2** | **ASCENSION HYDR10.86** | **138** | | T | T | 19 04 38.4 | |
| | baz=261,slow=74,SNR=584 | | | | | | |
| **RCBR** | **Riachuelo** | **14.72** | **250** | Pn | Pn | 18 54 16.8 | -5.4 |
| **RCBR** | **Riachuelo** | **14.72** | **250** | Pn | Pn | 18 54 17.2 | -5.0 |
| | 4.4nm,0.3s,baz=61,slow=19,SNR=47 | | | | | | |
| RCBR | | | | Sn | Sn | 18 56 47.0 | -18 |
| | 2.9nm,0.3s,baz=63,slow=22,SNR=10 | | | | | | |
| RCBR | | | | LR | LR | 18 58 17.4 | |
| | comp=Z,587nm,18.4s,baz=334,slow=30 | | | | | | |
| **RCBR** | **Riachuelo** | **14.72** | **250** | P | Pn | 18 54 16.8 | -5.4 |
| **BBTS** | **Babate** | **16.37** | **19** | Pn | **Pn** | **18 54 41.4** | **-2.3** |
| | 3.6nm,0.3s,baz=178,slow=1.2,SNR=3.7 | | | | | | |
| BBTS | | | | Sn | Sn | 18 57 25.2 | -20 |
| | 1.4nm,0.3s,baz=91,slow=2.5,SNR=1.1 | | | | | | |
| BBTS | | | | LR | LR | 18 59 41.6 | |
| | comp=Z,5μm,18.3s,baz=94,slow=32 | | | | | | |
| | 29nm,0.5s | | | | | | |
| **NBCL** | **Cascavel-CE** | **16.61** | **258** | *e*P | **Pn** | **18 54 45.4** | **-1.4** |
| **NBLA** | **Lagarto - SE** | **18.62** | **237** | *e*P | **P** | **18 55 10.3** | **-1.1** |
| **DBIC** | **Dimbokro** | **18.68** | **66** | | **P** | **18 55 10.7** | **-1.4** |
| DBIC | | | | IAmb | IAmb | 18 55 17.5 | |
| | comp=Z,236nm,1.8s | | | | | | |
| **DBIC** | **Dimbokro** | **18.68** | **66** | P | **P** | **18 55 10.2** | **-1.8** |
| | comp=Z,0.6nm,0.3s,baz=240,slow=14,SNR=10 | | | | | | |
| DBIC | | | | S | Sn | 18 58 24.4 | -17 |
| | comp=Z,30nm,0.6s,baz=140,slow=20,SNR=7.9 | | | | | | |
| DBIC | | | | LR | LR | 19 00 46.4 | |
| | comp=Z,3μm,18.6s,baz=232,slow=32 | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **18.68** | **66** | P | **P** | **18 55 10.7** | **-1.4** |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,236nm,1.8s | | | | | | |
| **GUA01** | **Guaratinga, BA** | **23.48** | **227** | *e*P | **P** | **18 56 03.2** | **-0.3** |
| **SDBA** | **SAO DESIDERIO** | **25.43** | **242** | *e*P | **P** | **18 56 21.1** | **-0.6** |
| **RIB01** | **Linhares ES** | **25.70** | **223** | *e*P | **P** | **18 56 24.9** | **+0.9** |
| **JANB** | **Januaria** | **26.15** | **236** | *e*P | **P** | **18 56 27.3** | **-1.0** |
| **ALF01** | **Guarapari-ES** | **26.82** | **222** | *e*P | **P** | **18 56 35.4** | **+1.2** |
| **TOA0** | **Torodi Ar. Sit** | **27.32** | **59** | P | **P** | **18 56 37.6** | **-1.1** |
| **TORD** | **Torodi Ar. Bea** | **27.32** | **59** | P | **P** | **18 56 37.4** | **-1.4** |
| TORD | | | | IAmb | IAmb | 18 57 10.2 | |
| | comp=Z,46nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **27.32** | **59** | P | **P** | **18 56 37.1** | **-1.6** |
| | comp=Z,6.0nm,0.8s,baz=244,slow=9.4,SNR=20 | | | | | | |
| TORD | | | | S | **S** | **19 01 17.5** | **-0.3** |
| | comp=Z,3.2nm,0.8s,baz=257,slow=26,SNR=1.8 | | | | | | |
| TORD | | | | LR | LR | 19 05 46.0 | |
| | comp=Z,5μm,20.0s,baz=241,slow=33 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **BDFB** | **Brasilia** | **29.56** | **239** | P | **P** | **18 56 57.6** | **-1.2** |
| | comp=Z,1.9nm,0.4s,baz=59,slow=14,SNR=3.1 | | | | | | |
| BDFB | | | | LR | LR | 19 08 19.3 | |
| | comp=Z,1μm,18.5s,baz=60,slow=35 | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **MCPB** | **Macapa, AP** | **30.06** | **271** | *e*P | **P** | **18 57 01.4** | **-1.9** |
| **IPMB** | **Ipameri, GO** | **30.85** | **235** | *e*P | **P** | **18 57 09.4** | **-0.8** |
| **SNDB** | **Serra Nova Dou** | **31.08** | **248** | *e*P | **P** | **18 57 12.1** | **-0.1** |
| **VAO** | **Valinhos** | **32.73** | **226** | IAMs_20 | IAMs_20 | 19 09 00.2 | |
| | comp=Z,2μm,19.0s | | | | | | |
| **SPB** | **Sao Paulo** | **33.44** | **226** | IAMs_20 | IAMs_20 | 19 09 20.8 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **FUL** | **Funchal** | **33.70** | **8** | *e*PP | PP | 18 58 56.1 | +4.7 |
| **PMAR** | **Madeira** | **33.77** | **8** | *e*PP | PP | 18 58 55.2 | +2.8 |
| **NPGB** | **Novo Progresso** | **33.82** | **259** | *e*P | **P** | **18 57 35.6** | **-0.7** |
| **ITTB** | **Itaituba** | **33.87** | **264** | *e*P | **P** | **18 57 36.3** | **-0.4** |
| **PMPST** | **Porto Santo, M** | **34.20** | **8** | *e*PP | PP | 18 58 56.0 | -1.0 |
| **TAM** | **Tamanrasset** | **35.67** | **47** | P | **P** | **18 57 51.7** | **-0.6** |
| **TAM** | **Tamanrasset** | **35.67** | **47** | P | **P** | **18 57 51.7** | **-0.6** |
| TAM | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| TAM | | | | MLR | MLR | | |
| | comp=Z,3μm,19.0s | | | | | | |
| **PDRB** | **Porto dos Gac** | **36.08** | **251** | *e*P | **P** | **18 57 55.5** | **-0.2** |
| **SALV** | **Santo Antonio** | **36.42** | **244** | *e*P | **P** | **18 57 59.0** | **+0.4** |
| **AVE** | **Averroes** | **36.68** | **21** | IAMs_20 | IAMs_20 | 19 10 58.3 | |
| | comp=Z,2μm,19.0s | | | | | | |
| **MDT** | **Midelt** | **37.33** | **25** | LR | LR | 19 12 06.1 | |
| | comp=Z,4μm,20.5s,baz=231,slow=34 | | | | | | |
| **AQDB** | **Aquidauana** | **38.26** | **237** | IAMs_20 | IAMs_20 | 19 14 11.5 | |
| | comp=Z,2μm,18.0s | | | | | | |
| **BOAV** | **Boa Vista** | **38.66** | **275** | *e*P | **P** | **18 58 18.0** | **+0.4** |
| **ITAB** | **Concordia** | **39.02** | **225** | IAMs_20 | IAMs_20 | 19 12 21.7 | |
| | comp=Z,2μm,21.0s | | | | | | |
| **PTLB** | **Pontes e Lacer** | **39.40** | **247** | P | **P** | **18 58 24.2** | **+0.4** |
| **PTLB** | **Pontes e Lacer** | **39.40** | **247** | *e*P | **P** | **18 58 24.4** | **+0.7** |
| **VILB** | **Vilhena** | **39.70** | **251** | IAMs_20 | IAMs_20 | 19 12 59.7 | |
| | comp=Z,1μm,22.0s | | | | | | |
| **VILB** | **Vilhena** | **39.70** | **251** | *e*P | **P** | **18 58 26.2** | **-0.1** |
| **PFVI** | **Vila Bisbo** | **39.75** | **17** | IAMs_20 | IAMs_20 | 19 11 52.7 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **PFVI** | **Vila Bisbo** | **39.75** | **17** | *e*PP | PP | 19 00 05.6 | +7.7 |
| PFVI | | | | *e*S | **S** | **19 04 30.2** | **+0.6** |
| PFVI | | | | *e*SS | **SS** | **19 07 17.7** | **-8.1** |
| **MORF** | **Marmelete** | **39.96** | **17** | IAMs_20 | IAMs_20 | 19 11 50.2 | |
| | comp=Z,2μm,19.0s | | | | | | |
| **MORF** | **Marmelete** | **39.96** | **17** | *e*P | **P** | **18 58 29.8** | **+1.6** |
| MORF | | | | *e*PP | **PP** | **19 00 01.5** | **+1.3** |
| MORF | | | | *e*S | **S** | **19 04 36.3** | **+3.5** |
| MORF | | | | IAMs_20 | IAMs_20 | 19 14 29.6 | |
| | comp=N,4μm,29.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **40.33** | **18** | P | **P** | **18 58 32.9** | **+1.7** |
| PVAQ | | | | IAMs_20 | IAMs_20 | 19 12 24.0 | |
| | comp=Z,2μm,21.0s | | | | | | |
| **PVAQ** | **Vaqueiros** | **40.33** | **18** | *e*PP | PP | 19 00 12.6 | +8.4 |
| PVAQ | | | | *e*S | S | 19 04 50.7 | +12 |
| PVAQ | | | | *e*SS | **SS** | **19 07 27.9** | **-9.4** |
| PVAQ | | | | *e*LR | LR | 19 09 57.1 | |
| | comp=Z,1μm,20.0s | | | | | | |
| **PCVE** | **Castro Verde** | **40.44** | **17** | *e*P | P | 18 58 39.8 | +7.7 |
| **PCVE** | **Castro Verde** | **40.44** | **17** | *e*PP | PP | 19 00 14.8 | +9.3 |
| **MESJ** | **Messejana** | **40.58** | **17** | *e*PP | PP | 19 00 15.8 | +8.8 |
| **MESJ** | **Messejana** | **40.58** | **17** | *e*P | **P** | **18 58 34.9** | **+1.6** |
| MESJ | | | | *e*PP | **PP** | **19 00 08.2** | **+1.2** |
| MESJ | | | | *e*S | S | **19 04 45.6** | **+3.6** |
| MESJ | | | | IAMs_20 | IAMs_20 | 19 17 03.9 | |
| | comp=N,1μm,13.9s | | | | | | |
| **MESJ** | **Messejana** | **40.58** | **17** | *e*P | **P** | **18 58 34.9** | **+1.6** |
| MESJ | | | | *e* | | 19 00 08.2 | |
| MESJ | | | | *e*S | **S** | **19 04 45.6** | **+3.6** |
| **PNCL** | **Nicolau / Gran** | **40.75** | **16** | *e*PP | PP | 19 00 17.8 | +9.0 |
| PNCL | | | | *e*S | **S** | **19 04 51.2** | **+6.8** |
| PNCL | | | | *e*SS | **SS** | **19 07 37.7** | **-7.9** |
| **LIS** | **Lisbon** | **41.15** | **15** | *e*S | **S** | **19 04 53.8** | **+3.5** |
| LIS | | | | IAMs_20 | IAMs_20 | 19 17 41.0 | |
| | comp=Z,1μm,10.2s | | | | | | |
| **PBAR** | **Barrancos** | **41.25** | **18** | *e*PP | PP | 19 00 23.1 | +8.9 |
| PBAR | | | | *e*S | **S** | **19 04 55.5** | **+3.6** |
| PBAR | | | | *e*SS | **SS** | **19 07 52.4** | **-3.2** |
| **EVO** | **Evora** | **41.29** | **17** | *e*P | **P** | **18 58 42.2** | **+3.1** |
| **EVO** | **Evora** | **41.29** | **17** | *e*PP | PP | 19 00 24.7 | +10 |
| **BBSD** | **Serra de San D** | **41.29** | **245** | *e*P | **P** | **18 58 40.6** | **+1.1** |
| **SIV** | **San Ignacio** | **41.34** | **247** | LR | LR | 19 14 46.2 | |
| | comp=Z,485nm,21.4s,baz=106,slow=35 | | | | | | |
| **PESTR** | **Estremoz** | **41.72** | **17** | IAMs_20 | IAMs_20 | 19 12 52.8 | |
| | comp=Z,2μm,21.0s | | | | | | |
| **PMTG** | **Montargil** | **41.73** | **16** | *e*P | **P** | **18 58 46.7** | **+4.0** |
| **PMTG** | **Montargil** | **41.73** | **16** | *e*PP | PP | 19 00 27.9 | +8.5 |
| PMTG | | | | *e*S | **S** | **19 05 06.7** | **+7.7** |
| PMTG | | | | *e*SS | **SS** | **19 08 07.4** | **+2.4** |
| **SAML** | **Samuel** | **41.77** | **258** | P | **P** | **18 58 43.3** | **-0.1** |
| SAML | | | | IAMs_20 | IAMs_20 | 19 15 11.7 | |
| | comp=Z,2μm,19.0s | | | | | | |
| **SAML** | **Samuel** | **41.77** | **258** | P | **P** | **18 58 43.3** | **-0.1** |
| SAML | | | | pmax | pmax | | |
| | comp=Z,20nm,1.4s | | | | | | |
| SAML | | | | MLR | MLR | | |
| | comp=Z,2μm,19.0s | | | | | | |
| **SAML** | **Samuel** | **41.77** | **258** | *e*P | **P** | **18 58 44.1** | **+0.7** |
| **PSBE** | **So Bento** | **41.99** | **15** | *e*PP | PP | 19 00 31.5 | +9.3 |
| PSBE | | | | *e*S | S | 19 05 12.3 | +9.4 |
| PSBE | | | | *e*SS | **SS** | **19 08 09.5** | **-0.8** |
| **GDSD** | **La Dsirade Is** | **42.17** | **296** | IAMs_20 | IAMs_20 | 19 11 17.3 | |
| | comp=Z,1μm,19.0s | | | | | | |
| **PMRV** | **Marv??o** | **42.30** | **17** | *e*P | **P** | **18 58 50.9** | **+3.5** |
| **PMRV** | **Marv??o** | **42.30** | **17** | *e*PP | PP | 19 00 35.7 | +10 |
| PMRV | | | | *e*S | **S** | **19 05 07.0** | **-0.4** |
| PMRV | | | | *e*SS | **SS** | **19 08 12.2** | **-4.2** |
| PMRV | | | | *e*LR | LR | 19 10 50.0 | |
| | comp=Z,1μm,20.0s | | | | | | |
| **CPUP** | **Villa Florida** | **42.37** | **230** | P | **P** | **18 58 48.3** | **+0.2** |
| | comp=Z,1.4nm,0.6s,baz=58,slow=6.5,SNR=3.1 | | | | | | |
| CPUP | | | | LR | LR | 19 16 15.9 | |
| | comp=Z,582nm,18.9s,baz=60,slow=36 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **42.57** | **15** | *e*P | P | 18 58 55.9 | +6.3 |
| **COI** | **Coimbra** | **42.74** | **15** | IAMs_20 | IAMs_20 | 19 13 48.8 | |
| | comp=Z,1μm,20.0s | | | | | | |
| **TSUM** | **Tsumeb** | **42.83** | **118** | P | **P** | **18 58 52.1** | **-0.1** |
| **TSUM** | **Tsumeb** | **42.83** | **118** | LR | LR | 19 14 05.1 | |
| | comp=Z,2μm,18.1s,baz=290,slow=33 | | | | | | |
| **CART** | **Cartagena** | **42.93** | **25** | IAMs_20 | IAMs_20 | 19 15 50.9 | |
| | comp=Z,1μm,20.0s | | | | | | |
| **RODS** | **Rosario do Sul** | **43.03** | **224** | *e*P | **P** | **18 58 54.8** | **+1.3** |
| **MTE** | **Manteigas** | **43.16** | **16** | IAMs_20 | IAMs_20 | 19 13 20.8 | |
| | comp=Z,1μm,20.0s | | | | | | |
| **ESDC** | **Sonseca Array** | **43.61** | **20** | P | **P** | **18 58 58.9** | **+0.8** |
| **ESDC** | **Sonseca Array** | **43.61** | **20** | P | **P** | **18 58 57.5** | **-0.6** |
| | comp=Z,6.7nm,1.1s,baz=206,slow=7.9,SNR=17 | | | | | | |
| ESDC | | | | S | **S** | **19 05 25.9** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=348,slow=26,SNR=1.2 | | | | | | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **ESBB** | **Sonseca Array** | **43.62** | **20** | P | **P** | **18 58 58.8** | **+0.7** |
| **ITQB** | **Itaqui** | **43.65** | **226** | P | **P** | **18 58 57.7** | **-0.7** |
| ITQB | | | | IAmb | IAmb | 18 59 37.1 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **43.83** | **286** | LR | LR | 19 15 28.2 | |
| | comp=Z,357nm,21.9s,slow=34 | | | | | | |
| **MVO** | **Moncorvo** | **44.01** | **16** | P | **P** | **18 59 05.1** | **+3.8** |
| MVO | | | | *e*S | **S** | **19 05 38.1** | **+5.5** |
| MVO | | | | *e*SS | **SS** | **19 08 48.3** | **-1.7** |
| MVO | | | | *e*LR | LR | 19 11 33.2 | |
| | comp=Z,860nm,22.0s | | | | | | |
| **ETMB** | **Extrema** | **44.86** | **257** | P | **P** | **18 59 08.4** | **0.0** |
| ETMB | | | | IAmb | IAmb | 18 59 20.7 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **ETMB** | **Extrema** | **44.86** | **257** | *e*P | **P** | **18 59 08.8** | **+0.4** |
| **TATN** | **Tataouine** | **45.29** | **40** | P | **P** | **18 59 11.7** | **+0.1** |
| **KEST** | **Kesra** | **46.70** | **36** | P | **P** | **18 59 22.7** | **0.0** |
| KEST | | | | IAmb | IAmb | 19 00 05.1 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **KEST** | **Kesra** | **46.70** | **36** | P | **P** | **18 59 21.6** | **-1.1** |
| | comp=Z,5.4nm,1.1s,baz=243,slow=2.3,SNR=3.8 | | | | | | |
| KEST | | | | S | **S** | **19 06 07.1** | **-4.5** |
| | comp=Z,0.9nm,0.5s,baz=210,slow=15,SNR=1.7 | | | | | | |
| KEST | | | | LR | LR | 19 18 56.7 | |
| | comp=Z,4μm,20.9s,baz=177,slow=36 | | | | | | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **BAUV** | **El Baul** | **46.90** | **283** | P | **P** | **18 59 24.6** | **+0.1** |
| **LPAZ** | **La Paz** | **47.95** | **249** | P | **P** | **18 59 32.9** | **-0.6** |
| **LPAZ** | **La Paz** | **47.95** | **249** | P | **P** | **18 59 33.6** | **+0.2** |
| | comp=Z,17nm,0.7s,baz=72,slow=4.4,SNR=68 | | | | | | |
| LPAZ | | | | LR | LR | 19 18 43.0 | |
| | comp=Z,715nm,21.9s,baz=82,slow=35 | | | | | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **47.95** | **249** | *e*P | **P** | **18 59 33.3** | **-0.1** |
| **TBTG** | **Tabatinga, AM** | **47.97** | **265** | IAMs_20 | IAMs_20 | 19 21 00.9 | |
| | comp=Z,696nm,20.0s | | | | | | |
| **CEST** | **Esterri de Car** | **48.09** | **23** | P | **P** | **18 59 34.5** | **+1.0** |
| CEST | | | | IAmb | IAmb | 19 00 18.5 | |
| | comp=Z,42nm,1.8s | | | | | | |
| CEST | | | | IAMs_20 | IAMs_20 | 19 18 14.5 | |
| | comp=Z,2μm,22.0s | | | | | | |
| **VSL** | **Villasalto** | **49.40** | **32** | IAMs_20 | IAMs_20 | 19 23 54.3 | |
| | comp=Z,1μm,18.0s | | | | | | |
| **SDV** | **Santo Domingo** | **49.42** | **282** | LR | LR | 19 19 31.4 | |
| | comp=Z,288nm,21.6s,baz=78,slow=35 | | | | | | |
| **PB18** | **Visviri** | **49.52** | **248** | P | **P** | **18 59 44.2** | **-1.2** |
| PB18 | | | | IAMs_20 | IAMs_20 | 19 18 45.1 | |
| | comp=Z,848nm,21.0s | | | | | | |
| **LVC** | **Limon Verde** | **50.43** | **241** | LR | LR | 19 21 50.9 | |
| | comp=Z,465nm,19.4s,baz=68,slow=37 | | | | | | |
| **PB09** | **IPOC Station P** | **50.47** | **242** | P | **P** | **18 59 51.7** | **-0.4** |
| **RAFF** | **Raffo Rosso** | **50.69** | **38** | P | **P** | **18 59 53.7** | **+0.4** |
| RAFF | | | | IAmb | IAmb | 19 00 27.9 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **TA02** | **Huaiquique** | **50.82** | **244** | IAMs_20 | IAMs_20 | 19 25 13.4 | |
| | comp=Z,780nm,22.0s | | | | | | |
| **VAE** | **Valguarnera** | **50.89** | **37** | LR | LR | 19 21 53.1 | |
| | comp=Z,3μm,19.0s,baz=183,slow=37 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **50.98** | **261** | IAMs_20 | IAMs_20 | 19 19 32.8 | |
| | comp=Z,949nm,22.0s | | | | | | |
| **SUR** | **Sutherland** | **51.03** | **132** | IAMs_20 | IAMs_20 | 19 14 58.0 | |
| | comp=Z,932nm,18.0s | | | | | | |
| **SUR** | **Sutherland** | **51.03** | **132** | LR | LR | 19 18 33.6 | |
| | comp=Z,747nm,18.2s,baz=299,slow=33 | | | | | | |
| **PB06** | **IPOC Station P** | **51.04** | **241** | P | **P** | **18 59 55.2** | **-1.1** |
| PB06 | | | | IAmb | IAmb | 19 00 01.0 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **LSZ** | **Lusaka** | **51.54** | **109** | P | **P** | **18 59 60.0** | **-0.2** |
| **LSZ** | **Lusaka** | **51.54** | **109** | P | **P** | **19 00 00.0** | **-0.2** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,22nm,0.3s | | | | | | |
| **SSB** | **Saint Sauveur** | **51.63** | **24** | P | **P** | **19 00 00.4** | **+0.1** |
| **SSB** | **Saint Sauveur** | **51.63** | **24** | IAMs_20 | IAMs_20 | 19 19 42.3 | |
| | comp=Z,2μm,22.0s | | | | | | |
| **SSB** | **Saint Sauveur** | **51.63** | **24** | P | **P** | **19 00 00.4** | **+0.1** |
| SSB | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| SSB | | | | MLR | MLR | | |
| | comp=Z,2μm,22.0s | | | | | | |
| **LBTB** | **Lobatse** | **51.81** | **122** | P | **P** | **19 00 02.2** | **+0.1** |
| **LBTB** | **Lobatse** | **51.81** | **122** | LR | LR | 19 19 58.4 | |
| | comp=Z,1μm,18.3s,baz=288,slow=34 | | | | | | |
| **LBTB** | **Lobatse** | **51.81** | **122** | P | **P** | **19 00 02.2** | **+0.1** |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,32nm,1.1s | | | | | | |
| **ISO** | **Isola** | **51.81** | **26** | P | **P** | **19 00 01.5** | **-0.2** |
| ISO | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **GO02** | **Mina Guanaco** | **51.86** | **238** | P | **P** | **19 00 02.8** | **+0.2** |
| GO02 | | | | IAmb | IAmb | 19 00 04.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **51.89** | **25** | P | **P** | **19 00 05.0** | **+2.7** |
| ORIF | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.7s | | | | | | |
| **TRQA** | **Tornquist** | **52.10** | **220** | IAMs_20 | IAMs_20 | 19 16 30.1 | |
| | comp=Z,1μm,20.0s | | | | | | |
| **CEL** | **Celeste** | **52.29** | **38** | P | **P** | **19 00 06.4** | **+1.1** |
| CEL | | | | IAmb | IAmb | 19 00 20.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **CEL** | **Celeste** | **52.29** | **38** | P | **P** | **19 00 05.8** | **+0.5** |
| | comp=Z,24nm,0.9s | | | | | | |
| **BNI** | **Bardonecchia** | **52.34** | **25** | P | **P** | **19 00 06.8** | **+1.1** |
| BNI | | | | IAMs_20 | IAMs_20 | 19 20 37.0 | |
| | comp=Z,1μm,19.0s | | | | | | |
| **BNI** | **Bardonecchia** | **52.34** | **25** | P | **P** | **19 00 06.8** | **+1.1** |
| BNI | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| BNI | | | | MLR | MLR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| **ROS

**DAVA Damuels 55.47 26** *i* P **P 19 00 28.3 -0.3**
comp=Z,10nm,1.0s
**NNA Nana 55.49 256** LR LR 19 23 19.9
comp=Z,943nm,21.8s,baz=70,slow=35
**KEK Kerkira 55.58 39** IAms_20 IAms_20 19 23 17.2
comp=Z,1μm,21.0s
**BFO Black Forest 55.63 24** P **P 19 00 30.4 +0.8**
BFO IAmb IAmb 19 00 55.3
comp=Z,14nm,1.1s
BFO IAms_20 IAms_20 19 24 52.1
comp=Z,1μm,18.0s
**BFO Black Forest 55.63 24** *e*P **P 19 00 29.3 -0.2**
**FETA Feichten 55.65 27** *i* P **P 19 00 29.3 -0.5**
comp=Z,15nm,0.9s
**DOU Dourbes 55.66 20** *d*P **P 19 00 30.4 +0.8**
**PEL Peldehue 55.80 230** IAms_20 IAms_20 19 23 44.8
comp=Z,1μm,19.0s
**TULM Tulcn-Chalpat 55.81 271** IAms_20 IAms_20 19 21 24.8
comp=Z,831nm,20.0s
**WLF Walferdange 55.86 22** *d*PcP **PcP 19 01 28.7 -1.1**
**RCHB Rochefort 55.94 21** *d*P **P 19 00 33.6 +2.0**
RCHB *d*x x 19 00 36.4
**STAL STALIGIAL 56.00 28** P **P 19 00 32.1 -0.1**
STAL IAmb IAmb 19 00 51.6
comp=Z,15nm,1.2s
STAL IAms_20 IAms_20 19 26 17.9
comp=Z,825nm,20.0s
**SQTA Sankt Quirin 56.01 27** *e*P **P 19 00 32.6 +0.2**
comp=Z,13nm,1.1s
**RETA Reutte 56.02 26** *i* P **P 19 00 32.6 +0.3**
comp=Z,15nm,1.2s
**MOTA Moosalm 56.06 27** *i* P **P 19 00 32.0 -0.8**
comp=Z,5.3nm,1.0s
**BGES Gesves 56.08 21** *d*x x 19 00 40.0
**ANTS Antisana-Sarah 56.17 270** IAms_20 IAms_20 19 26 34.3
comp=Z,635nm,20.0s
**BCLA Clavier 56.18 21** *d*PcP **PcP 19 01 30.9 -0.2**
**SABO M.te Sabotino 56.23 29** IAms_20 IAms_20 19 23 46.5
comp=Z,971nm,20.0s
**WTTA Wattenberg 56.24 27** *i* P **P 19 00 33.7 -0.4**
comp=Z,3.7nm,0.9s
**ABTA Abfaltersbach 56.26 28** *i* P **P 19 00 33.9 -0.3**
comp=Z,14nm,1.5s
**WATA Walderalm 56.27 27** *i* P **P 19 00 34.6 +0.4**
comp=Z,6.0nm,1.4s
**MT09 Talagante 56.29 229** P **P 19 00 33.8 -0.9**
MT09 IAmb IAmb 19 00 47.7
comp=Z,16nm,1.0s
**STU Stuttgart 56.34 24** IAms_20 IAms_20 19 23 03.7
comp=Z,867nm,20.0s
**CADS Cadrg 56.47 29** *e*P **P 19 00 35.9 +0.3**
CADS *e* 19 00 53.7
CADS *e*S **S 19 08 30.5 +4.5**
**VA01 Torpederas 56.48 230** IAms_20 IAms_20 19 16 43.0
comp=Z,566nm,20.0s
**PRED Cave del Predi 56.54 29** P **P 19 00 35.9 -0.2**
PRED IAms_20 IAms_20 19 22 45.2
comp=Z,847nm,20.0s
**ATAH Atahualpa 56.56 262** LR LR 19 24 33.4
comp=Z,560nm,21.0s,baz=91,slow=36
**BO02 Sierra Bellavi 56.57 228** IAms_20 IAms_20 19 22 43.4
comp=Z,1μm,20.0s
**MEM Membach 56.59 21** *d*x x 19 00 43.4
MEM *d*PcP **PcP 19 01 31.8 -0.8**
**BTNL Ternell 56.62 21** *d*P **P 19 00 37.4 +0.9**
BTNL *d*PcP **PcP 19 01 32.2 -0.6**
**MYKA Terra Mystica 56.71 29** *i* P **P 19 00 38.6 +1.2**
comp=Z,5.1nm,1.0s
**LJU Ljubljana 56.73 30** *i* P **P 19 00 38.1 +0.8**
LJU *i* 19 00 55.6
LJU *i* 19 02 49.7
LJU *i* S **S 19 08 33.2 +3.9**
**KBN Korca 56.73 38** IAms_20 IAms_20 19 25 16.6
comp=Z,1μm,20.0s
**LESA Schwarzleotal 56.83 27** *i* P **P 19 00 37.8 -0.4**
comp=Z,6.1nm,0.9s
**KBA Koelnbreinsper 56.89 28** *e*P **P 19 00 39.1 +0.4**
comp=Z,5.4nm,1.0s
**PDG Podgorica 56.89 36** IAms_20 IAms_20 19 27 36.9
comp=Z,1μm,18.0s
**PUK Puka 57.03 36** P **P 19 00 40.2 +0.5**
PUK IAmb IAmb 19 01 14.0
comp=Z,13nm,1.1s
PUK IAms_20 IAms_20 19 24 29.5
comp=Z,2μm,22.0s
**OBKA Obir 57.06 29** *i* P **P 19 00 41.6 +1.7**
comp=Z,6.1nm,1.3s
**FNA Florina 57.19 38** P **P 19 00 40.3 -0.5**
FNA IAmb IAmb 19 00 49.5
comp=Z,14nm,1.1s
**FNA Florina 57.19 38** P **P 19 00 40.3 -0.5**
FNA pmax pmax
comp=Z,14nm,1.1s
FNA MLR MLR
comp=Z,2μm,18.0s
**SOKA Soboth 57.42 29** *i* P **P 19 00 42.6 +0.3**
comp=Z,13nm,1.7s
**ML02 Panimavida 57.46 227** IAms_20 IAms_20 19 26 57.0
comp=Z,795nm,18.0s
**BIOA Bad Ischl, Aus 57.47 28** *i* P **P 19 00 41.7 -1.0**
comp=Z,4.7nm,1.2s
**LODK Lodwar 57.49 85** P **P 19 00 43.0 -0.4**
LODK IAmb IAmb 19 00 59.6
comp=Z,35nm,1.9s
**POGA Pongola 57.76 122** P **P 19 00 44.5 -0.5**
POGA IAmb IAmb 19 01 08.6
comp=Z,19nm,0.9s
POGA IAms_20 IAms_20 19 22 00.4
comp=Z,1μm,19.0s
**MOA Molln 57.88 28** *i* P **P 19 00 44.7 -0.9**
comp=Z,10nm,1.8s
MOA *e*PP **PP 19 02 53.8 -0.2**
comp=Z,5.7nm,1.2s
**GRFO Grafenberg 57.89 25** IAms_20 IAms_20 19 24 09.8
comp=Z,1μm,20.0s
**GRA1 Grafenberg Arr 57.89 25** IAms_20 IAms_20 19 24 09.9
comp=Z,1μm,20.0s
**GRF Grafenberg Arr 57.89 25** *e*P **P 19 00 46.3 +0.8**
comp=Z,11nm,1.2s,baz=217,slow=7.2
GRF *e*L L 19 24 10.4
comp=Z,1μm,20.2s
**ARSA Arzberg 58.06 29** *i* P **P 19 00 47.4 +0.6**
comp=Z,4.7nm,0.9s
ARSA *e*PP **PP 19 02 55.2 -0.4**
comp=Z,2.6nm,0.9s
**ARNL Arenillas 58.08 266** IAms_20 IAms_20 19 25 15.9
comp=Z,564nm,21.0s
**ESK Eskdalemuir 58.10 13** IAms_20 IAms_20 19 20 43.0
comp=Z,935nm,18.0s
**EKA Eskdalemuir Ar 58.12 13** P **P 19 00 46.8 -0.2**
comp=Z,0.2nm,0.4s,baz=193,slow=5.8,SNR=2.1
comp=Z,0.2nm,0.4s
**GEC2 GERESS Array S 58.34 27** P **P 19 00 48.1 -0.7**
GEC2 IAmb IAmb 19 01 16.0
comp=Z,11nm,1.1s
**GERES GERESS Array B 58.34 27** P **P 19 00 48.1 -0.7**
**GERES GERESS Array B 58.34 27** P **P 19 00 47.9 -1.0**
comp=Z,1.6nm,0.8s,baz=229,slow=9.0,SNR=9.5
GERES PP **PP 19 02 57.4 -0.8**
comp=Z,2.0nm,0.8s,baz=217,slow=15,SNR=2.0
GERES S **S 19 08 54.3 +3.7**
comp=Z,0.2nm,0.3s,baz=252,slow=42,SNR=1.5
GERES LR LR 19 24 29.5
comp=Z,513nm,21.7s,baz=230,slow=35
comp=Z,1.6nm,0.8s
**GERES GERESS Array B 58.34 27** P **P 19 00 48.1 -0.7**
**KHC Kasperske Hory 58.49 27** IAms_20 IAms_20 19 23 58.9
comp=Z,1μm,22.0s
**KHC Kasperske Hory 58.49 27** *e*P **P 19 00 49.7 -0.1**
KHC *e*PP PP 19 03 08.6 +9.2
KHC *e*S **S 19 08 56.4 +3.9**
KHC AMS AMS 19 22 20.0
comp=Z,2μm,27.5s
**KHC Kasperske Hory 58.49 27** *c* iP **P 19 00 50.8 +1.0**
KHC pmax pmax
comp=Z,12nm,1.3s
**DRLN Deer Lake 58.56 334** IAms_20 IAms_20 19 21 10.8
comp=Z,1μm,20.0s
**CKRC Cesky Krumlov 58.60 27** *e*P **P 19 00 47.8 -2.7**
CKRC *e*S **S 19 08 57.0 +3.1**
CKRC AMS AMS 19 27 30.0
comp=Z,900nm,15.2s
**CKRC Cesky Krumlov 58.60 27** *e*P **P 19 00 47.8 -2.7**
CKRC *e*S **S 19 08 57.0 +3.1**
CKRC MLR MLR
comp=Z,900nm,15.2s

**CONA Conrad Observa 58.70 29** *i* P **P 19 00 52.0 +0.7**
comp=Z,7.4nm,1.3s
CONA *e*PP **PP 19 03 00.5 -0.7**
comp=Z,9.2nm,1.6s
**RONA Rosalia, Austr 58.75 29** *i* P **P 19 00 51.7 +0.1**
comp=Z,12nm,1.3s
**MOX Moxa 58.78 24** *e*L L 19 24 15.2
comp=Z,1μm,20.2s
**FRGS Fruska Gora 58.91 33** P **P 19 00 53.7 +1.0**
comp=Z,16nm,1.3s,comp=Z,326nm
**MORH Mrgy, Hungar 58.95 32** P **P 19 00 53.8 +0.8**
comp=Z,4.7nm,1.2s
**ZVC Zvikov 58.99 27** AMS AMS 19 27 00.0
comp=Z,1μm,15.8s
**PLCA Paso Flores 59.14 222** LR LR 19 25 06.8
comp=Z,471nm,20.0s,baz=61,slow=35
**KMBO Kilima Mbogo 59.24 91** P **P 19 00 54.6 -1.3**
KMBO IAmb IAmb 19 01 01.5
comp=Z,16nm,1.8s
**KMBO Kilima Mbogo 59.24 91** P **P 19 00 54.6 -1.3**
KMBO pmax pmax
comp=Z,16nm,1.8s
KMBO MLR MLR
comp=Z,2μm,19.0s
**HSKC Hora Svate Kat 59.52 25** *e*S **S 19 09 12.2 +6.5**
HSKC AMS AMS 19 28 00.0
comp=Z,1μm,14.8s
**PRU Pruhonice 59.55 26** *e*S **S 19 09 09.0 +2.9**
PRU AMS AMS 19 22 50.0
comp=Z,2μm,25.2s
**PRA Prague 59.56 26** *e*S **S 19 09 11.4 +5.2**
PRA AMS AMS 19 27 10.0
comp=Z,900nm,16.3s
**MODS Modra-Piesok 59.69 29** *e*P **P 19 01 00.3 +2.2**
**MODS Modra-Piesok 59.69 29** *e*P **P 19 01 00.3 +2.2**
MODS *e* 19 01 13.6
**KRUC Moravsky 59.74 28** *e*P **P 19 00 59.4 +1.0**
**CLL Collm 59.86 25** IAms_20 IAms_20 19 27 23.9
comp=Z,689nm,18.0s
**CLL Collm 59.86 25** *e*P **P 19 01 00.0 +0.9**
CLL *i* 19 01 07.1
CLL *e*S **S 19 09 13.0 +3.0**
CLL pmax pmax
comp=Z,14nm,2.0s
**BRG Berggiesshubel 59.93 25** *e*P **P 19 01 03.0 +3.4**
BRG Amp 19 01 07.9
comp=Z,2.9nm,1.0s
**BRG Berggiesshubel 59.93 25** S S 19 09 22.0 +11
**VRAC Vranov 60.01 28** *e*P **P 19 01 00.0 -0.2**
**VRAC Vranov 60.01 28** LR LR 19 25 16.7
comp=Z,425nm,21.1s,baz=229,slow=34
**RDO Rodhopi 60.02 40** IAms_20 IAms_20 19 27 42.6
comp=Z,788nm,19.0s
**CBCY The Bluff, Cay 60.18 293** IAms_20 IAms_20 19 20 24.5
comp=Z,1μm,22.0s
**JAVC Velka Javorina 60.22 29** *e*P **P 19 01 02.1 +0.4**
**ALN Alexandroupoli 60.22 41** IAms_20 IAms_20 19 28 29.8
comp=Z,1μm,20.0s
**VYHS Vyhne 60.54 30** *e*P **P 19 01 04.0 +0.1**
**VYHS Vyhne 60.54 30** *e*P **P 19 01 04.0 +0.1**
VYHS *e* 19 01 19.4
**UPC Upice 60.58 27** AMS AMS 19 28 40.0
comp=Z,1μm,17.2s
**DPC Dobruska-Polom 60.61 27** AMS AMS 19 28 00.0
comp=Z,1μm,17.8s
**KRLC Kraliky 60.63 28** AMS AMS 19 32 50.0
comp=Z,800nm,12.0s
**CHVC Chvalec 60.66 27** AMS AMS 19 28 00.0
comp=Z,1μm,15.4s
**PSZ Piszkesteto 60.70 31** IAms_20 IAms_20 19 28 19.5
comp=Z,883nm,20.0s
**OSTC Ostas 60.71 27** AMS AMS 19 27 40.0
comp=Z,1μm,17.9s
**MORC Moravsky Berou 60.78 28** P **P 19 01 05.1 -0.4**
MORC IAmb IAmb 19 01 24.4
comp=Z,14nm,1.2s
MORC IAms_20 IAms_20 19 30 25.4
comp=Z,1μm,18.0s
**MORC Moravsky Berou 60.78 28** *e*P **P 19 01 05.4 -0.1**
**MORC Moravsky Berou 60.78 28** P **P 19 01 05.1 -0.4**
MORC pmax pmax
comp=Z,14nm,1.2s
MORC MLR MLR
comp=Z,1μm,18.0s
**FURI Furi 61.21 79** IAms_20 IAms_20 19 23 25.5
comp=Z,1μm,19.0s
**FURI Furi 61.21 79** LR LR 19 24 42.5
comp=Z,744nm,20.0s,baz=265,slow=33
**NIE Niedzica 61.88 30** *e*P **P 19 01 14.1 +1.1**
**NIE Niedzica 61.88 30** P **P 19 01 13.8 +0.8**
**NIE Niedzica 61.88 30** P **P 19 01 13.8 +0.8**
comp=Z,5.2nm,1.1s
**VOIR 62.05 36** P **P 19 01 15.0 +0.8**
**VOIR 62.05 36** P **P 19 01 15.0 +0.8**
comp=Z,16nm,1.0s,comp=Z,284nm
**UCCT U. Connecticut 62.09 319** IAms_20 IAms_20 19 20 30.5
comp=Z,571nm,20.0s
**OJC Ojcow 62.16 29** *e*P **P 19 01 16.8 +2.0**
**EIL Elat 62.16 56** LR LR 19 29 57.3
comp=Z,2μm,18.2s,baz=244,slow=38
**BERU Beregovo 62.34 32** P **P 19 01 15.5 -0.5**
**HOLU Holmets 62.38 32** P **P 19 01 16.8 +0.5**
**CAMR Camarioca 62.41 297** IAms_20 IAms_20 19 23 58.4
comp=Z,383nm,20.0s
**V61A Roper 62.47 312** IAms_20 IAms_20 19 20 43.8
comp=Z,586nm,22.0s
**MLR Muntele Rosu 62.60 36** P **P 19 01 17.6 -0.4**
**MLR Muntele Rosu 62.60 36** LR LR 19 29 58.7
comp=Z,854nm,19.4s,baz=238,slow=38
**MLR Muntele Rosu 62.60 36** P **P 19 01 17.6 -0.4**
MLR pmax pmax
comp=Z,24nm,1.2s
MLR MLR MLR
comp=Z,1μm,19.0s
**MLR Muntele Rosu 62.60 36** P **P 19 01 18.4 +0.4**
comp=Z,17nm,1.2s
**BRIU Brid 62.60 32** P **P 19 01 18.3 +0.5**
**061Z Ochoppi 62.71 300** IAms_20 IAms_20 19 20 02.3
comp=Z,503nm,21.0s
**D62A Allapoint, All 62.98 326** IAms_20 IAms_20 19 30 45.9
comp=Z,966nm,19.0s
**BRNJ Basking Ridge 63.12 317** IAms_20 IAms_20 19 24 19.7
comp=Z,498nm,20.0s
**PLOR5 Plostina Array 63.22 36** P **P 19 01 23.2 +1.2**
**VRI Vrincioaia 63.26 36** P **P 19 01 22.6 +0.3**
**BURAR Bucovina Array 63.37 34** P **P 19 01 22.7 -0.4**
**BURAR Bucovina Array 63.37 34** P **P 19 01 22.7 -0.4**
BURAR pmax pmax
comp=Z,6.0nm,1.1s
**BUR08 Bucovina Ar. S 63.38 34** P **P 19 01 23.4 +0.2**
BUR08 IAmb IAmb 19 01 42.1
comp=Z,19nm,1.4s
**JTS Las Juntas de 63.60 282** LR LR 19 29 11.9
comp=Z,225nm,20.4s,baz=86,slow=36
**MMAI Mount Meron Ar 63.62 52** LR LR 19 30 37.2
comp=Z,μm,18.4s,baz=190,slow=38
**ACCN Adirondack Com 63.80 320** IAms_20 IAms_20 19 32 24.7
comp=Z,709nm,21.0s
**LVV L'vov 64.03 31** *e*P **P 19 01 27.7 +0.5**
LVV *e* 19 03 54.3
LVV *e*S **S 19 10 01.0 -1.8**
LVV MLR MLR
comp=N,200nm,16.0s
LVV MLR MLR
comp=E,600nm,16.0s
LVV MLR MLR
comp=Z,500nm,16.0s
**L59A Walton 64.12 319** IAms_20 IAms_20 19 24 17.4
comp=Z,556nm,22.0s
**NCB Newcomb 64.43 321** IAms_20 IAms_20 19 26 40.5
comp=Z,405nm,18.0s
**BR131 Keskin Array S 64.82 45** P **P 19 01 31.9 -0.9**
BR131 IAmb IAmb 19 01 50.7
comp=Z,7.0nm,0.9s
**BR131 Keskin Array S 64.82 45** *d*eP **P 19 01 32.9 +0.1**
**BRTR Keskin Array B 64.82 45** P **P 19 01 31.5 -1.3**
**BRTR Keskin Array B 64.82 45** P **P 19 01 32.5 -0.4**
comp=Z,2.2nm,0.8s,baz=235,slow=6.7,SNR=10
BRTR LR LR 19 30 33.3
comp=Z,660nm,20.9s,baz=212,slow=37
comp=Z,2.2nm,0.8s
**BRTR Keskin Array B 64.82 45** *e*P **P 19 01 32.7 -0.1**
BRTR pmax pmax
comp=Z,5.0nm,0.9s
**BIRD Birdtown, Kers 65.01 309** IAms_20 IAms_20 19 23 13.2
comp=Z,496nm,22.0s

**MILM Milestii Mici 65.05 36** *e*P **P 19 01 33.5 -0.4**
**MILM Milestii Mici 65.05 36** *e*PP PP 19 04 04.0 +6.8
MILM *e*S **S 19 10 14.0 -1.4**
MILM *e*L L 19 21 46.0
MILM LQM 19 27 18.0
comp=Z,600nm,17.5s
MILM LRM MLR 19 31 44.0
comp=Z,700nm,15.0s
**MILM Milestii Mici 65.05 36** *e*P **P 19 01 33.5 -0.4**
MILM *i* 19 01 40.0
MILM *e* 19 04 04.0
MILM *e*S **S 19 10 14.0 -1.4**
MILM MLR MLR
comp=Z,700nm,15.0s
**KONO Kongsberg 65.21 17** IAms_20 IAms_20 19 29 16.3
comp=Z,918nm,20.0s
**BORG Borgarnes 65.48 0** LR LR 19 24 11.8
comp=Z,383nm,19.4s,baz=172,slow=30
**ATD Arta Tunnel 65.57 77** IAms_20 IAms_20 19 30 44.1
comp=Z,650nm,19.0s
**TRQ Mont Tremblant 65.73 323** IAms_20 IAms_20 19 29 35.8
comp=Z,408nm,20.0s
**RNPP5 Staryi Chortor 65.82 31** P **P 19 01 39.5 +0.7**
**PECO Prince Edward 66.19 320** IAms_20 IAms_20 19 23 49.0
comp=Z,412nm,21.0s
**SUW Suwalki 66.20 27** *e*P **P 19 01 41.6 +0.4**
**SUW Suwalki 66.20 27** IAms_20 IAms_20 19 28 39.9
comp=Z,737nm,21.0s
**SCHQ Schefferville 66.57 334** LR LR 19 26 09.8
comp=Z,777nm,20.3s,baz=133,slow=32
**NB2 NORSAR Subarra 66.81 17** P P 19 01 49.8 +4.7
comp=Z,25nm,2.0s,baz=213,slow=6.5
**NOA NORSAR Array B 66.81 17** P **P 19 01 44.4 -0.7**
comp=Z,0.7nm,1.0s,baz=214,slow=6.5,SNR=3.3
NOA LR LR 19 31 42.5
comp=Z,445nm,19.0s,baz=215,slow=37
comp=Z,0.7nm,1.0s
**HFS Hagfors 66.85 19** P **P 19 01 44.9 -0.4**
comp=Z,2.6nm,1.0s,baz=183,slow=9.8,SNR=2.4
HFS S **S 19 10 37.9 +0.9**
comp=Z,2.0nm,1.0s,baz=154,slow=28,SNR=2.0
HFS LR LR 19 31 04.0
comp=Z,497nm,20.0s,baz=222,slow=36
comp=Z,2.6nm,1.0s
**BG3 Lake Jocassee 67.04 309** P **P 19 01 47.1 0.0**
BG3 IAmb IAmb 19 01 57.8
comp=Z,12nm,1.0s
**KIEV Kiev 67.26 33** P **P 19 01 47.2 -0.8**
**KIEV Kiev 67.26 33** IAms_20 IAms_20 19 31 53.6
comp=Z,952nm,20.0s
**KIEV Kiev 67.26 33** P **P 19 01 47.3 -0.8**
KIEV pmax pmax
comp=Z,39nm,1.3s
KIEV MLR MLR
comp=Z,1μm,20.0s
**AKASG Malin Array Be 67.27 33** P **P 19 01 46.6 -1.5**
**AKASG Malin Array Be 67.27 33** P **P 19 01 47.1 -1.0**
comp=Z,2.4nm,0.6s,baz=239,slow=6.8,SNR=13
AKASG S **S 19 10 42.0 -0.3**
comp=Z,0.5nm,0.4s,baz=112,slow=30,SNR=1.2
AKASG LR LR 19 32 15.0
comp=Z,721nm,19.5s,baz=242,slow=37
comp=Z,2.4nm,0.6s
**AKBB Malin Array Si 67.27 33** P **P 19 01 46.9 -1.2**
**AKBB Malin Array Si 67.27 33** *c* iP **P 19 01 47.2 -0.9**
AKBB pmax pmax
comp=Z,39nm,1.3s
**PABE Paberze 67.50 26** IAms_20 IAms_20 19 31 20.2
comp=Z,935nm,19.0s
**V52A Sevierville 67.83 309** IAms_20 IAms_20 19 23 55.7
comp=Z,539nm,22.0s
**TKL Tuckaleechee C 67.91 309** LR LR 19 26 24.2
comp=Z,182nm,20.7s,baz=110,slow=31
**SADO Sadowa 67.94 320** IAms_20 IAms_20 19 27 06.3
comp=Z,397nm,19.0s
**SADO Sadowa 67.94 320** LR LR 19 27 25.7
comp=Z,310nm,18.5s,baz=122,slow=32
**TZTN Tazewell 68.01 310** IAms_20 IAms_20 19 25 13.5
comp=Z,456nm,19.0s
**SNET Serv Nac Est T 68.13 285** IAms_20 IAms_20 19 28 48.8
comp=Z,717nm,20.0s
**TEIG Tepich 68.14 292** LR LR 19 27 31.7
comp=Z,131nm,20.1s,baz=44,slow=32
**CPCT Cooper Cave 68.42 309** P **P 19 01 55.9 +0.1**
CPCT IAmb IAmb 19 02 01.2
comp=Z,18nm,1.4s
**MNK Minsk 68.70 29** *i* P **P 19 01 53.4 -3.6**
MNK *i* PPP PPP 19 06 03.2
MNK *i* S **S 19 10 56.7 -2.6**
MNK *i* SS **SS 19 15 19.8 -4.3**
MNK pmax pmax
comp=E,5.0nm,0.6s
MNK pmax pmax
comp=Z,21nm,0.6s
MNK pmax pmax
comp=N,13nm,0.7s
MNK MLR MLR
comp=Z,397nm,14.0s
MNK MLR MLR
comp=E,193nm,14.0s
MNK MLR MLR
comp=N,356nm,13.0s
**W50A Signal Mountai 68.97 308** P **P 19 01 59.0 -0.3**
W50A IAms_20 IAms_20 19 23 33.9
comp=Z,499nm,21.0s
**FPAL Fort Paine 69.02 308** IAms_20 IAms_20 19 24 34.2
comp=Z,461nm,22.0s
**T50A Nancy 69.14 310** IAmb IAmb 19 02 06.5
comp=Z,9.2nm,0.8s
**ANN Anapa 69.44 41** *e*P P 19 01 53.6 -8.2
ANN *e*PP pP 19 01 57.1 -9.0
ANN pmax pmax
comp=Z,37nm,1.1s
ANN MLR MLR
comp=E,422nm,15.0s
**Y49A Blount Mountai 69.47 307** IAms_20 IAms_20 19 24 45.2
comp=Z,450nm,22.0s
**K50A Casco 69.47 317** IAms_20 IAms_20 19 25 28.9
comp=Z,450nm,22.0s
**LRAL Lakeview Retre 69.72 306** P **P 19 02 03.9 +0.1**
LRAL IAmb IAmb 19 02 09.5
comp=Z,9.8nm,0.9s
**RAYN Ar Rayn 69.81 65** P **P 19 02 05.8 +1.1**
RAYN IAmb IAmb 19 02 21.1
comp=Z,11nm,1.1s
**RAYN Ar Rayn 69.81 65** IAms_20 IAms_20 19 32 18.8
comp=Z,913nm,21.0s
**RAYN Ar Rayn 69.81 65** P **P 19 02 05.8 +1.1**
RAYN pmax pmax
comp=Z,11nm,1.1s
RAYN MLR MLR
comp=Z,900nm,21.0s
**I49A Point Hope 70.04 318** IAms_20 IAms_20 19 30 58.9
comp=Z,418nm,20.0s
**X48A Hartselle 70.13 307** IAmb IAmb 19 02 11.9
comp=Z,11nm,0.9s
**L48A N Adams 70.43 315** IAms_20 IAms_20 19 32 06.4
comp=Z,353nm,20.0s
**GURO Guroymak-BITLI 70.50 48** IAms_20 IAms_20 19 33 29.1
comp=Z,578nm,19.0s
**SOC Sochi 70.50 43** *e*P **P 19 02 09.1 +0.7**
SOC *e* 19 04 44.8
SOC *e*PPP PPP 19 06 24.8
SOC *e*S **S 19 11 24.3 +3.3**
SOC *e*SS **SS 19 15 49.3 -3.2**
SOC MLR MLR
comp=Z,516nm,19.0s
**VNA2 Neumayer--Watz 70.57 175** ⇑P **P 19 02 11.1 +2.8**
comp=Z,3.8nm,0.8s,baz=328,slow=5.9
**PMSA Palmer Station 70.61 198** LR LR 19 26 08.5
comp=Z,447nm,21.2s,baz=40,slow=30
**Z47A Carrollton 70.63 306** IAms_20 IAms_20 19 25 46.2
comp=Z,414nm,22.0s
**SFJD Kangerlussuaq 70.68 348** LR LR 19 25 56.8
comp=Z,481nm,21.2s,baz=164,slow=30
**VNA3 Neumayer Olymp 70.70 176** ⇑P **P 19 02 11.8 +2.7**
comp=Z,1.1nm,0.7s
**PLAL Pickwick Lake 71.09 307** IAms_20 IAms_20 19 25 37.1
comp=Z,492nm,22.0s
**J47A Sumner 71.14 317** IAms_20 IAms_20 19 25 44.2
comp=Z,373nm,21.0s
**WVT Waverly 71.19 309** P **P 19 02 12.4 -0.4**
WVT IAmb IAmb 19 02 18.2
comp=Z,7.9nm,0.9s
**WVT Waverly 71.19 309** P **P 19 02 12.4 -0.4**
WVT pmax pmax
comp=Z,8.0nm,0.9s

WVT MLR MLR
comp=Z,300nm,19.0s
**SNAA Sanae 71.73 174** ⇑P **P 19 02 18.6 +3.2**
comp=Z,19nm,0.6s
**SNAA Sanae 71.73 174** LR LR 19 26 14.0
comp=Z,365nm,20.6s,baz=342,slow=30
**SNAA Sanae 71.73 174** *ceP* **P 19 02 18.4 +3.0**
SNAA pmax pmax
comp=Z,11nm,1.7s
**SFIN Lafayette 71.84 313** IAMs_20 IAMs_20 19 30 34.8
comp=Z,340nm,20.0s
**E46A Sault Ste Mari 71.90 320** IAMs_20 IAMs_20 19 30 11.2
comp=Z,372nm,19.0s
**FINES FINESS Array B 72.09 22** P **P 19 02 16.7 -0.9**
comp=Z,2.9nm,0.8s,baz=235,slow=4.9,SNR=8.1
FINES S **S 19 11 43.1 +4.5**
comp=Z,0.5nm,0.6s,baz=289,slow=24,SNR=1.1
FINES LR LR 19 32 28.6
comp=Z,448nm,20.5s,baz=238,slow=35
comp=Z,2.9nm,0.8s
**FINES FINESS Array B 72.09 22** *eP* **P 19 02 17.7 +0.1**
FINES pmax pmax
comp=Z,3.0nm,0.8s
**HALT Halls 72.32 308** IAMs_20 IAMs_20 19 32 56.8
comp=Z,314nm,18.0s
**I45A Fountain 72.38 317** IAMs_20 IAMs_20 19 25 02.8
comp=Z,356nm,20.0s
**LNXT Lenox 72.49 308** IAMs_20 IAMs_20 19 34 11.1
comp=Z,350nm,19.0s
**SHA1 Shidzhatmaz 72.56 43**⇑ *eP* **P 19 02 22.6 +1.4**
**KIV Kislovodsk 72.65 43** *eP* **P 19 02 22.8 +1.3**
KIV *e*PPP PPP 19 06 48.8
KIV *e*S **S 19 11 48.3 +2.3**
KIV pmax pmax
comp=Z,9.0nm,1.0s
**KVAR Kislovodsk Arr 72.66 43** LR LR 19 38 09.6
comp=Z,249nm,18.2s,baz=106,slow=39
**TROLL Troll, Antarti 72.70 172** ⇑P **P 19 02 23.8 +2.4**
comp=Z,73nm,0.6s
**KBZ Khabaz 72.72 43** P **P 19 02 21.9 +0.1**
comp=Z,3.2nm,0.8s,baz=221,slow=2.5,SNR=2.7
KBZ S **S 19 11 49.6 +3.0**
comp=Z,0.5nm,0.4s,baz=312,slow=7.3,SNR=1.5
KBZ LR LR 19 35 37.2
comp=Z,836nm,21.7s,baz=256,slow=37
comp=Z,3.2nm,0.8s
**KBZ Khabaz 72.72 43**⇓ *eP* **P 19 02 22.4 +0.6**
KBZ pmax pmax
comp=Z,18nm,1.0s
**L44A Lake County Fo 72.96 315** IAMs_20 IAMs_20 19 26 09.4
comp=Z,352nm,21.0s
**GNI Garni 72.97 47** LR LR 19 34 27.1
comp=Z,399nm,21.7s,baz=267,slow=36
**VORD Divnogorie 73.03 35** *eP* **P 19 02 23.5 0.0**
VORD *e* 19 02 38.3
VORD pmax pmax
comp=Z,10.0nm,1.5s
**VSR Storozhevoye 73.06 35** *eP* **P 19 02 23.6 0.0**
VSR *e* 19 02 39.1
VSR pmax pmax
comp=Z,10.0nm,1.5s
**VORR Voronezh 73.27 35** *eP* **P 19 02 25.0 +0.2**
VORR pmax pmax
comp=Z,42nm,0.4s
**OBN Obninsk 73.32 31** IAMs_20 IAMs_20 19 32 21.5
comp=Z,734nm,22.0s
**OBN Obninsk 73.32 31** LR LR 19 35 19.6
comp=Z,533nm,20.4s,baz=220,slow=36
**OBN Obninsk 73.32 31** *eP* **P 19 02 25.5 +0.4**
OBN *e* 19 02 42.2
OBN *e* 19 05 08.0
OBN *e*PPP PPP 19 06 53.1
OBN pmax pmax
comp=Z,18nm,1.4s
OBN MLR MLR
comp=Z,529nm,19.0s
**LPSR Galich'ya Gora 73.49 34** *eP* **P 19 02 25.8 -0.3**
LPSR *e* 19 02 41.2
LPSR pmax pmax
comp=Z,9.0nm,1.5s
**H43A Windswept, Lux 73.56 317** IAMs_20 IAMs_20 19 31 18.1
comp=Z,387nm,21.0s
**SLM Saint Louis 73.70 311** IAMs_20 IAMs_20 19 34 38.0
comp=Z,350nm,21.0s
**MOS Moscow 74.14 30** *eP* **P 19 02 28.3 -1.6**
MOS *e* 19 02 42.7
MOS *e*S **S 19 12 02.6 +0.5**
MOS pmax pmax
comp=Z,30nm,0.8s
MOS MLR MLR
comp=Z,700nm,19.0s
**F42A Maple Grove Fa 74.21 318** IAMs_20 IAMs_20 19 30 27.2
comp=Z,477nm,21.0s
**CCM Cathedral Cave 74.32 310** P **P 19 02 29.7 -1.6**
CCM IAmb IAmb 19 02 36.1
comp=Z,10nm,0.8s
**CCM Cathedral Cave 74.32 310** P **P 19 02 29.7 -1.6**
CCM pmax pmax
comp=Z,10.0nm,0.9s
CCM MLR MLR
comp=Z,300nm,20.0s
**WHAR Wooly Hollow 74.52 307** P **P 19 02 31.1 -1.4**
WHAR IAmb IAmb 19 02 38.0
comp=Z,32nm,1.6s
**VRH Novokhoyorsk 74.54 36** *eP* **P 19 02 32.2 -0.1**
VRH *e* 19 02 47.4
VRH pmax pmax
comp=Z,10.0nm,1.6s
**R40A Maddies Statio 75.16 310** P **P 19 02 34.4 -1.9**
**G40A Rib Lake 75.45 317** IAMs_20 IAMs_20 19 32 38.1
comp=Z,334nm,18.0s
**MAK Makhachkala 75.72 45***c iP* P 19 02 34.0 -5.3
MAK *e*S **S 19 12 12.3 -8.0**
MAK *e*SS **SS 19 17 09.1 -3.1**
MAK *e*SSS SSS 19 20 30.1
MAK pmax pmax
comp=Z,176nm,1.2s
MAK MLR MLR
comp=Z,378nm,14.0s
**NATX Nacogdoches 75.78 303** IAMs_20 IAMs_20 19 42 35.5
comp=Z,312nm,18.0s
**S39A Bolivar 75.84 309** P **P 19 02 39.0 -1.1**
**HHAR Hobbs 76.03 308** IAMs_20 IAMs_20 19 38 29.1
comp=Z,360nm,21.0s
**ELIB Princess Elisa 76.48 167** *dP* **P 19 02 46.0 +2.7**
comp=Z,5.0nm,0.9s
**E38A The Farm, Brul 76.72 318** IAMs_20 IAMs_20 19 33 33.8
comp=Z,360nm,21.0s
**EYMN Ely 77.05 320** IAMs_20 IAMs_20 19 36 44.5
comp=Z,502nm,19.0s
**ARCES ARCESS Array B 77.11 15** LR LR 19 36 31.0
comp=Z,402nm,19.8s,baz=236,slow=36
**I37A Lemond, Waseca 77.33 316** IAMs_20 IAMs_20 19 31 19.9
comp=Z,334nm,21.0s
**TUL3 Leonard 77.44 307** IAMs_20 IAMs_20 19 35 32.1
comp=Z,299nm,19.0s
**KEV Kevo 77.65 16** IAMs_20 IAMs_20 19 32 53.0
comp=Z,783nm,22.0s
**435B Jarrell 78.09 302** IAMs_20 IAMs_20 19 29 07.9
comp=Z,378nm,21.0s
**APA Apatity 78.25 19**⇓ *iP* **P 19 02 53.1 +0.1**
APA *i* 19 03 09.1
APA pmax pmax
comp=Z,5.0nm,0.9s
**OK051 E0350 and S346 78.37 307** IAMs_20 IAMs_20 19 26 37.0
comp=Z,695nm,22.0s
**BELG Belogornoye 78.39 36** LR LR 19 40 38.3
comp=Z,357nm,18.1s,baz=261,slow=38
**BELG Belogornoye 78.39 36**⇓ *eP* **P 19 02 57.0 +2.9**
BELG pmax pmax
comp=Z,2.0nm,0.8s
**KSU1 Kansas State U 78.65 310** IAMs_20 IAMs_20 19 31 44.2
comp=Z,323nm,21.0s
**PLPT Palo Pinto 79.00 304** P **P 19 02 57.2 -0.7**
**L34A Svendsen Farm, 79.02 313** IAMs_20 IAMs_20 19 34 45.7
comp=Z,432nm,18.0s
**BRDY Brady 79.36 302** P **P 19 02 59.0 -0.9**
**OK032 Salt Plains WL 79.51 308** IAMs_20 IAMs_20 19 30 33.1
comp=Z,504nm,22.0s
**WMOK Wichita Mounta 79.66 305** IAMs_20 IAMs_20 19 31 31.1
comp=Z,367nm,22.0s
**F33A 5 Mile Ranch, 79.74 317** IAMs_20 IAMs_20 19 33 37.6
comp=Z,339nm,21.0s
**U32A Winter Ranch, 80.08 307** IAMs_20 IAMs_20 19 29 56.1
comp=Z,312nm,20.0s
**BGNE Belgrade 80.22 312** IAMs_20 IAMs_20 19 35 26.6
comp=Z,308nm,20.0s
**ULM Lac du Bonnet 80.42 321** LR LR 19 33 12.9
comp=Z,504nm,21.6s,baz=97,slow=32
**ULM Lac du Bonnet 80.42 321** *eP* **P 19 03 07.8 +2.6**
ULM pmax pmax
comp=Z,2.0nm,0.2s
**DRIO Del Rio 80.53 300** IAmb IAmb 19 03 11.7
comp=Z,5.5nm,0.8s
**APMT Aspermont 80.57 304** P **P 19 03 05.1 -1.4**
APMT IAmb IAmb 19 03 13.3
comp=Z,34nm,1.7s
**OZNA Ozona 81.13 301** IAmb IAmb 19 03 15.1
comp=Z,13nm,0.8s
**KIRV Kirov 81.15 30** LR LR 19 40 24.8
comp=Z,494nm,21.1s,baz=257,slow=37
**KIRV Kirov 81.15 30**⇑ *eP* **P 19 03 09.2 +0.3**
**FCC Fort Churchill 81.54 330** IAMs_20 IAMs_20 19 33 24.7
comp=Z,699nm,22.0s
**WSAR Wadi Sarin 81.73 67** LR LR 19 39 12.8
comp=Z,448nm,19.4s,baz=276,slow=36
**SAND Sanderson 81.89 300** IAmb IAmb 19 03 18.8
comp=Z,7.3nm,0.7s
**OGNE Ogallala 83.05 311** IAMs_20 IAMs_20 19 35 26.6
comp=Z,351nm,19.0s
**TXAR Lajitas Array 83.17 300** P **P 19 03 19.6 -0.7**
**TXAR Lajitas Array 83.17 300** P **P 19 03 21.2 +0.9**
comp=Z,3.2nm,0.9s,baz=100,slow=4.9,SNR=17
comp=Z,3.2nm,0.9s
**ALPN Alpine 83.23 301** P **P 19 03 19.7 -1.0**
ALPN IAmb IAmb 19 03 26.6
comp=Z,6.6nm,0.8s
**KSCO Kaye Shedlock'** 83.27 309 IAMs_20 IAMs_20 19 39 37.6
comp=Z,330nm,19.0s
**AKTO Aktyubinsk 84.31 39** LR LR 19 46 16.8
comp=Z,312nm,18.2s,baz=252,slow=40
**VHRN Van Horn 84.42 301** IAmb IAmb 19 03 51.5
comp=Z,11nm,1.1s
**FFC Flin Flon 84.93 325** IAMs_20 IAMs_20 19 35 20.5
comp=Z,468nm,18.0s
**ABKAR Akbulak array 85.40 41** P **P 19 03 30.9 -0.2**
**DGMT Dagmar 85.48 319** IAMs_20 IAMs_20 19 41 02.4
comp=Z,377nm,20.0s
**ARU Arti 85.51 33** IAMs_20 IAMs_20 19 41 54.9
comp=Z,550nm,18.0s
**ARU Arti 85.51 33** LR LR 19 44 41.2
comp=Z,337nm,18.1s,baz=254,slow=38
**ARU Arti 85.51 33** *dP* **P 19 03 32.2 +0.7**
ARU 19 06 45.3
ARU S **SKSac 19 13 56.8 +1.0**
ARU SS **SS 19 19 32.9 -4.8**
ARU pmax pmax
comp=Z,5.0nm,1.6s
**PHWY Pilot Hill 85.66 311** IAMs_20 IAMs_20 19 34 29.7
comp=Z,368nm,22.0s
**ANMO Albuquerque 85.96 305** IAMs_20 IAMs_20 19 32 39.8
comp=Z,353nm,22.0s
**ANMO Albuquerque 85.96 305** LR LR 19 35 42.9
comp=Z,201nm,21.9s,baz=189,slow=31
**N23A Red Feather La 85.99 311** IAMs_20 IAMs_20 19 39 51.5
comp=Z,371nm,20.0s
**RES Resolute Bay 86.37 345** LR LR 19 34 08.7
comp=Z,383nm,21.6s,baz=128,slow=30
**S22A 4UR Ranch, Cre 86.44 308** IAMs_20 IAMs_20 19 46 37.7
comp=Z,256nm,20.0s
**K22A Casper 86.56 313** IAMs_20 IAMs_20 19 42 10.5
comp=Z,291nm,19.0s
**LAO LASA Array 86.67 317** IAMs_20 IAMs_20 19 38 15.1
comp=Z,404nm,19.0s
**121A Cookes Peak, D 86.92 302** IAMs_20 IAMs_20 19 31 42.2
comp=Z,321nm,22.0s
**RWWY Rawlins 87.00 312** IAMs_20 IAMs_20 19 37 08.2
comp=Z,299nm,21.0s
**MAW Mawson 87.22 158** P **P 19 03 40.3 +0.7**
comp=Z,1.4nm,0.6s,baz=297,slow=13,SNR=1.6
MAW LR LR 19 34 32.9
comp=Z,782nm,20.3s,baz=280,slow=30
comp=Z,1.4nm,0.6s
**RPN Rapa Nui 87.23 243** LR LR 19 39 39.2
comp=Z,172nm,20.8s,baz=36,slow=34
**O20A White River Ci 87.69 310** IAMs_20 IAMs_20 19 37 10.2
comp=Z,341nm,22.0s
**DUN6 Lazy B Ranch 88.02 302** IAMs_20 IAMs_20 19 43 46.3
comp=Z,752nm,22.0s
**319A Douglas 88.14 301** IAMs_20 IAMs_20 19 36 34.5
comp=Z,319nm,20.0s
**W18A Petrified Fore 88.65 305** IAMs_20 IAMs_20 19 45 29.0
comp=Z,266nm,20.0s
**RLMT Red Lodge 88.69 315** IAMs_20 IAMs_20 19 43 27.5
comp=Z,402nm,20.0s
**RDMU Red Mountain 88.72 310** IAMs_20 IAMs_20 19 39 29.6
comp=Z,340nm,20.0s
**PDAR Pinedale Array 88.80 313** P **P 19 03 49.1 +1.0**
comp=Z,0.3nm,0.6s,baz=119,slow=7.3,SNR=2.5
PDAR LR LR 19 39 42.4
comp=Z,86nm,20.1s,baz=86,slow=33
comp=Z,0.3nm,0.6s
**X18A Snowflake 88.81 304** IAMs_20 IAMs_20 19 46 27.1
comp=Z,228nm,19.0s
**QSPA South Pole Qui 89.19 180** P **P 19 03 49.8 +0.5**
**QSPA South Pole Qui 89.19 180** P **P 19 03 50.0 +0.8**
comp=Z,4.2nm,0.8s,baz=208,slow=1.6,SNR=26
QSPA LR LR 19 36 49.5
comp=Z,236nm,21.0s,baz=198,slow=31
comp=Z,4.2nm,0.8s
**YMP Mirror Lake Pl 89.31 315** IAMs_20 IAMs_20 19 37 18.8
comp=Z,280nm,22.0s
**TUC Tucson 89.44 302** IAMs_20 IAMs_20 19 35 54.1
comp=Z,274nm,22.0s
**HMU Henry Mountain 89.55 308** IAMs_20 IAMs_20 19 41 54.5
comp=Z,273nm,21.0s
**YPP Pitchstone Pla 89.76 314** IAMs_20 IAMs_20 19 45 39.7
comp=Z,531nm,19.0s
**TPAW Teton Pass 89.84 313** IAMs_20 IAMs_20 19 45 47.2
comp=Z,405nm,19.0s
**FXWY Fox Creek 89.90 313** IAMs_20 IAMs_20 19 45 45.6
comp=Z,391nm,19.0s
**AHID Auburn Hatcher 89.94 313** IAMs_20 IAMs_20 19 40 26.6
comp=Z,355nm,21.0s
**WUAZ Wupatki 90.00 305** IAMs_20 IAMs_20 19 41 21.4
comp=Z,250nm,20.0s
**X16A Lo Mia Camp, P 90.04 304** IAMs_20 IAMs_20 19 38 18.7
comp=Z,228nm,18.0s
**YHB Horse Butte 90.05 315** IAMs_20 IAMs_20 19 30 43.4
comp=Z,243nm,18.0s
**JLU Jordanelle 90.16 310** IAMs_20 IAMs_20 19 37 28.5
comp=Z,429nm,22.0s
**BOZ Bozeman (W) 90.37 315** IAMs_20 IAMs_20 19 45 02.9
comp=Z,392nm,20.0s
**PKCU Pink Cliffs 90.78 307** IAMs_20 IAMs_20 19 38 41.3
comp=Z,247nm,21.0s
**DLMT Dillon 91.05 315** IAMs_20 IAMs_20 19 39 49.8
comp=Z,375nm,22.0s
**HVU Hansel Valley 91.17 312** IAMs_20 IAMs_20 19 42 33.2
comp=Z,274nm,18.0s
**DUG Dugway, Tooele 91.19 310** IAMs_20 IAMs_20 19 45 59.9
comp=Z,300nm,19.0s
**BGU Big Grassy Mou 91.36 311** IAMs_20 IAMs_20 19 38 08.3
comp=Z,377nm,21.0s
**MSO Missoula 91.98 317** IAMs_20 IAMs_20 19 41 33.3
comp=Z,483nm,20.0s
**YKA Yellowknife Ar 91.99 332** P **P 19 04 03.5 +1.4**
comp=Z,1.4nm,0.7s,baz=91,slow=5.1,SNR=2.7
YKA LR LR 19 44 16.1
comp=Z,438nm,18.0s,baz=80,slow=35
comp=Z,1.4nm,0.7s
**BRVK Borovoye 92.08 37** IAMs_20 IAMs_20 19 48 21.8
comp=Z,573nm,19.0s
**BRVK Borovoye 92.08 37**⇑ *eP* **P 19 04 03.9 +1.1**
BRVK pmax pmax
comp=Z,11nm,3.2s
**HLID Hailey 92.36 313** IAMs_20 IAMs_20 19 41 32.7
comp=Z,367nm,21.0s
**PRN Pahroc Range 92.97 307** IAMs_20 IAMs_20 19 39 44.0
comp=Z,321nm,20.0s
**ELK Elko 93.04 311** IAMs_20 IAMs_20 19 42 08.7
comp=Z,307nm,20.0s
**MFID Camas Ranch 93.40 313** IAMs_20 IAMs_20 19 48 59.0
comp=Z,328nm,18.0s
**NEW Newport 94.08 318** IAMs_20 IAMs_20 19 40 26.8
comp=Z,457nm,21.0s
**NEW Newport 94.08 318** LR LR 19 42 03.2
comp=Z,336nm,20.9s,baz=78,slow=33
**PFO Pinyon Flats O 94.21 303** LR LR 19 46 01.0
comp=Z,70nm,18.3s,baz=90,slow=35
**F10A Beach Ranch, E 94.28 316** IAMs_20 IAMs_20 19 47 16.2
comp=Z,404nm,20.0s
**BMO Blue Mountains 94.39 315** IAMs_20 IAMs_20 19 43 25.4
comp=Z,303nm,21.0s
**GSC Goldstone, Bar 94.44 305** IAMs_20 IAMs_20 19 49 55.2
comp=Z,368nm,20.0s
**BMN Battle Mountai 94.56 310** IAMs_20 IAMs_20 19 48 03.0
comp=Z,258nm,20.0s
**Q09A Carvers 94.60 309** IAMs_20 IAMs_20 19 39 08.2
comp=Z,294nm,21.0s
**C09A Chrisman Ranch 94.88 318** IAMs_20 IAMs_20 19 42 07.3
comp=Z,421nm,21.0s
**A36M Sachs Harbour 94.93 342** IAMs_20 IAMs_20 19 38 37.1
comp=Z,490nm,20.0s
**DSP Deep Springs 95.29 307** IAMs_20 IAMs_20 19 48 54.6
comp=Z,255nm,20.0s
**KVN Kaiserville 95.30 309** IAMs_20 IAMs_20 19 36 39.9
comp=Z,274nm,20.0s
**AAK Ala-Archa 95.38 47** LR LR 19 52 50.3
comp=Z,410nm,18.8s,baz=268,slow=39
**AAK Ala-Archa 95.38 47**⇓ *eP* **P 19 04 18.0 -0.5**
AAK pmax pmax
comp=Z,4.0nm,0.6s
**CCAC Calif City Air 95.44 305** IAMs_20 IAMs_20 19 37 41.6
comp=Z,306nm,21.0s
**NVAR Mina Array Bea 95.50 308** LR LR 19 45 41.7
comp=Z,104nm,18.3s,baz=93,slow=34
**WVOR Wild Horse Val 95.51 312** IAMs_20 IAMs_20 19 47 48.9
comp=Z,291nm,19.0s
**B08A Colville Reser 95.55 318** IAMs_20 IAMs_20 19 41 21.6
comp=Z,392nm,21.0s
**ISA Isabella, Lake 95.78 306** IAMs_20 IAMs_20 19 44 58.8
comp=Z,241nm,22.0s
**MDPB Devils Postpil 96.16 308** IAMs_20 IAMs_20 19 49 35.5
comp=Z,221nm,20.0s
**YERR Yerington 96.19 309** IAMs_20 IAMs_20 19 50 25.4
comp=Z,308nm,21.0s
**PAHR Pah Rah Range 96.26 310** IAMs_20 IAMs_20 19 44 47.0
comp=Z,342nm,21.0s
**WAKR Walker 96.38 308** IAMs_20 IAMs_20 19 40 41.4
comp=Z,384nm,22.0s
**BOOM Boomskoye usch 96.46 47** IAMs_20 IAMs_20 19 48 29.6
comp=Z,530nm,20.0s
**PNTR Pine Nut 96.47 309** IAMs_20 IAMs_20 19 43 39.6
comp=Z,253nm,20.0s
**G06A Carlson Farm, 96.72 315** IAMs_20 IAMs_20 19 44 45.9
comp=Z,378nm,20.0s
**MPK Martis Peak 96.78 309** IAMs_20 IAMs_20 19 50 01.1
comp=Z,238nm,20.0s
**CMB Columbia Colle 97.16 308** IAMs_20 IAMs_20 19 40 24.0
comp=Z,257nm,21.0s
**I05D Terrebonne, OR 97.31 314** IAMs_20 IAMs_20 19 51 13.5
comp=Z,408nm,18.0s
**J05D Fort Rock, OR 97.34 313** IAMs_20 IAMs_20 19 50 27.4
comp=Z,389nm,19.0s
**KURBB Kurchatov Arra 97.37 39** PP **PP 19 08 24.6 +0.8**
comp=Z,1.4nm,1.1s,baz=284,slow=7.6,SNR=5.0
KURBB LR LR 19 53 37.2
comp=Z,385nm,18.2s,baz=265,slow=39
**LON Longmire 97.38 317** IAMs_20 IAMs_20 19 42 54.1
comp=Z,399nm,22.0s
**KURK Kurchatov 97.41 39** IAMs_20 IAMs_20 19 49 07.0
comp=Z,420nm,19.0s
**HOOD Mount Hood Mea 97.42 315** IAMs_20 IAMs_20 19 43 37.5
comp=Z,286nm,19.0s
**AFDM Forest Hills D 97.54 309** IAMs_20 IAMs_20 19 40 07.0
comp=Z,221nm,18.0s
**F04A Amboy 97.89 316** IAMs_20 IAMs_20 19 44 39.8
comp=Z,383nm,22.0s
**ORV Oroville 97.90 310** IAMs_20 IAMs_20 19 51 38.4
comp=Z,255nm,18.0s
**GNW Green Mountain 97.96 318** IAMs_20 IAMs_20 19 45 10.6
comp=Z,343nm,20.0s
**I04A Tendick Farm, 98.14 314** IAMs_20 IAMs_20 19 52 01.4
comp=Z,282nm,20.0s
**YBH Yreka Blue Hor 98.59 312** IAMs_20 IAMs_20 19 47 31.6
comp=Z,251nm,22.0s
**CLRS Cowichan Lake 98.65 319** IAMs_20 IAMs_20 19 42 28.8
comp=Z,394nm,22.0s
**INK Inuvik 98.67 340** LR LR 19 46 59.3
comp=Z,340nm,19.0s,baz=78,slow=34
**HUMO Hull Mountain 98.67 313** IAMs_20 IAMs_20 19 52 38.6
comp=Z,345nm,19.0s
**RADR Rader Ridge 98.78 317** IAMs_20 IAMs_20 19 46 55.2
comp=Z,515nm,22.0s
**L02F Cave Junction 99.18 312** IAMs_20 IAMs_20 19 52 45.2
comp=Z,425nm,19.0s
**G31M Satah River 99.41 338** IAMs_20 IAMs_20 19 45 12.9
comp=Z,525nm,20.0s
**KSXB Camp Six Broad 99.44 312** IAMs_20 IAMs_20 19 51 07.2
comp=Z,394nm,20.0s
**KHMM Horse Mountain 99.45 311** IAMs_20 IAMs_20 19 44 56.5
comp=Z,404nm,21.0s
**KRMB Red Mountain 99.50 312** IAMs_20 IAMs_20 19 52 03.8
comp=Z,462nm,18.0s
**DLBC Dease Lake 100.13 329** IAMs_20 IAMs_20 19 49 19.1
comp=Z,534nm,20.0s
**E29M Blow River 100.14 340** IAMs_20 IAMs_20 19 42 05.1
comp=Z,483nm,22.0s
**MKAR Makanchi Array 100.41 43** PP **PP 19 08 46.0 -1.2**
comp=Z,0.3nm,0.8s,baz=289,slow=4.4,SNR=4.3
**BBB Bella Bella 100.55 323** IAMs_20 IAMs_20 19 46 58.6
comp=Z,349nm,20.0s
**E28M Babbage River 100.60 341** IAMs_20 IAMs_20 19 43 02.0
comp=Z,434nm,21.0s
**D27M Malcolm River 100.78 341** IAMs_20 IAMs_20 19 49 01.9
comp=Z,388nm,20.0s
**S34M Telegraph Cree 100.83 329** IAMs_20 IAMs_20 19 46 06.0
comp=Z,443nm,19.0s
**M31M Drury Creek, Y 101.08 334** IAMs_20 IAMs_20 19 47 23.0
comp=Z,527nm,21.0s
**F28M Old Crow 101.14 340** IAMs_20 IAMs_20 19 42 32.6
comp=Z,536nm,22.0s
**V35K Ketchikan 101.80 327** IAMs_20 IAMs_20 19 47 30.7
comp=Z,511nm,21.0s
**G27K Doyon Strip 102.13 339** IAMs_20 IAMs_20 19 43 14.4
comp=Z,535nm,22.0s
**SKAG Skagway 102.44 331** IAMs_20 IAMs_20 19 46 37.2
comp=Z,501nm,20.0s
**N30M Aishikik Lake 102.54 334** IAMs_20 IAMs_20 19 49 52.7
comp=Z,507nm,19.0s
**S32K Killisnoo 102.73 329** IAMs_20 IAMs_20 19 46 18.0
comp=Z,434nm,21.0s
**DIB Dawson Inlet, 102.87 325** IAMs_20 IAMs_20 19 50 01.9
comp=Z,479nm,21.0s
**SIT Sitka 103.25 329** IAMs_20 IAMs_20 19 45 10.7
comp=Z,394nm,19.0s
**PRP Porcupine Dome 104.13 339** IAMs_20 IAMs_20 19 44 37.4
comp=Z,423nm,19.0s
**G24K Hadweenzic Riv 104.18 340** IAMs_20 IAMs_20 19 50 50.8
comp=Z,378nm,20.0s
**J25K Salcha River, 104.54 338** IAMs_20 IAMs_20 19 44 52.2
comp=Z,544nm,21.0s
**B21K Ikpikpuk River 104.57 345** IAMs_20 IAMs_20 19 48 59.0
comp=Z,346nm,20.0s
**H24K Noodor Dome 104.79 340** IAMs_20 IAMs_20 19 44 06.8
comp=Z,491nm,22.0s
**POKR Poker Plat Res 105.02 339** IAMs_20 IAMs_20 19 45 06.0
comp=Z,565nm,22.0s
**E21K Killik River 105.16 343** IAMs_20 IAMs_20 19 48 12.3
comp=Z,217nm,19.0s
**HDA Harding Lake 105.23 338** IAMs_20 IAMs_20 19 45 22.2
comp=Z,537nm,21.0s
**MDM Murphy Dome 105.39 339** IAMs_20 IAMs_20 19 45 26.8
comp=Z,505nm,20.0s
**CCB Clear Creek Bu 105.41 339** IAMs_20 IAMs_20 19 47 53.3
comp=Z,393nm,20.0s
**WRH Wood River Hil 105.61 339** IAMs_20 IAMs_20 19 49 24.6
comp=Z,498nm,20.0s
**F21K Alatna River 105.79 342** IAMs_20 IAMs_20 19 50 46.3
comp=Z,362nm,20.0s
**C19K Lookout Ridge 106.21 345** IAMs_20 IAMs_20 19 54 01.2
comp=Z,508nm,20.0s
**G21K Allakaket 106.24 342** IAMs_20 IAMs_20 19 47 42.2
comp=Z,305nm,20.0s
**D19K Kuna River 106.26 345** IAMs_20 IAMs_20 19 50 43.5
comp=Z,472nm,20.0s
**H21K Melozitna Rive 106.55 341** IAMs_20 IAMs_20 19 46 34.3
comp=Z,398nm,20.0s
**F20K Avaraart Lake 106.57 343** IAMs_20 IAMs_20 19 48 25.9
comp=Z,367nm,22.0s
**E19K Redstone River 106.73 344** IAMs_20 IAMs_20 19 47 57.2
comp=Z,397nm,20.0s
**BPAW Bear Paw Mtn. 106.87 339** IAMs_20 IAMs_20 19 46 11.7
comp=Z,472nm,21.0s
**TIXI Tiksi 106.93 9** IAMs_20 IAMs_20 19 55 25.7
comp=Z,381nm,21.0s
**KTH Kantishna Hill 107.16 339** IAMs_20 IAMs_20 19 46 32.5
comp=Z,489nm,21.0s
**F19K Shaleruckik Mo 107.31 343** IAMs_20 IAMs_20 19 47 34.4
comp=Z,429nm,20.0s
**GHO Glory Hole Cre 107.41 337** IAMs_20 IAMs_20 19 39 17.2

comp=Z,157nm,18.0s
**E18K Tukpahlearik C 107.69 344** IAMs_20 IAMs_20 19 48 12.2
comp=Z,483nm,22.0s
**J20K Nowinta River 107.92 340** IAMs_20 IAMs_20 19 49 44.5
comp=Z,432nm,20.0s
**J18K Innoko River 109.25 340** IAMs_20 IAMs_20 19 52 47.9
comp=Z,410nm,20.0s
**G16K Koyuk River 109.66 344** IAMs_20 IAMs_20 19 47 53.4
comp=Z,405nm,21.0s
**F15K North Star Dit 110.05 345** IAMs_20 IAMs_20 19 49 40.8
comp=Z,469nm,21.0s
**I17K Unalakleet 110.26 342** IAMs_20 IAMs_20 19 49 04.2
comp=Z,357nm,21.0s
**BILL Bilibino 112.73 357** *i* PKIKP **PKiKP 19 09 31.5 +1.6**
BILL *e* 19 10 15.5
BILL *e*PPP PPP 19 12 37.2
BILL pmax pmax
comp=Z,5.0nm,1.1s
BILL MLR MLR
comp=Z,158nm,18.0s
**GTA Gaotai 114.71 46** *e*PKP PKPdf 19 09 39.4 +4.7
**GTA Gaotai 114.71 46** SS SS 19 26 32.5 +6.7
GTA LR LR
comp=N,500nm,20.7s
GTA LR LR
comp=E,320nm,20.0s
GTA LR LR
comp=Z,620nm,22.5s
**YAK Yakutsk 115.38 14** IAMs_20 IAMs_20 20 02 50.9
comp=Z,295nm,20.0s
**YAK Yakutsk 115.38 14***c i* PKIKP **PKPdf 19 09 35.5 +0.4**
**TAOE Nuku Hiva Isla 117.64 260** *e*LR LR 19 45 27.3
comp=Z,316nm,25.5s
**TNCH TengChong 117.84 62** PKP **PKiKP 19 09 41.2 0.0**
TNCH AMB AMB
comp=Z,100nm,6.1s
**LZH Lanzhou 118.90 49** *e*PKP **PKPdf 19 09 37.8 -5.1**
LZH LR LR
comp=Z,750nm,14.6s
LZH LR LR
comp=Z,200nm,15.8s
LZH LR LR
comp=Z,710nm,21.0s
**PZH PanZhiHua 120.30 60** PKP **PKPdf 19 09 44.9 -0.9**
PZH PP **PP 19 11 14.3 +2.8**
PZH AMB AMB
comp=Z,80nm,4.7s
PZH LR LR
comp=Z,340nm,19.8s
PZH LR LR
comp=Z,320nm,20.1s
PZH LR LR
comp=Z,380nm,21.6s
**BTO Baotou 121.30 41** *e*PKP **PKiKP 19 09 49.4 +2.0**
BTO LR LR
comp=Z,530nm,20.2s
BTO LR LR
comp=Z,810nm,18.0s
BTO LR LR
comp=Z,1μm,21.8s
**HHC Hu-ho-hao-te 122.19 41** *e*PKP **PKPdf 19 09 45.9 -3.1**
HHC PP **PP 19 11 21.6 -2.1**
HHC SS SS 19 28 00.4 -1.8
HHC AMB AMB
comp=Z,70nm,10.7s
HHC LR LR
comp=Z,410nm,16.8s
HHC LR LR
comp=Z,290nm,18.3s
HHC LR LR
comp=Z,450nm,19.1s
**TBI Tubuai 123.57 241** *e*SS SS 19 28 10.4 -10
comp=Z,3μm,32.2s
**TBI Tubuai 123.57 241** *e*LR LR 19 48 00.4
comp=Z,1μm,29.8s
TBI *e*LR LR 19 48 02.9
comp=Z,4μm,38.5s
**PPT2 Papeete2 125.24 248** *e*PP **PP 19 11 39.9 -5.3**
comp=Z,74nm,25.0s
**PPT2 Papeete2 125.24 248** *e*SS SS 19 28 40.9 -1.7
comp=Z,536nm,30.5s
**PPT2 Papeete2 125.24 248** *e*LR LR 19 48 49.8
comp=Z,415nm,30.0s
PPT2 *e*LR LR 19 48 57.6
comp=Z,221nm,30.5s
**ENH Enshi 125.50 53** IAMs_20 IAMs_20 20 11 49.9
comp=Z,361nm,20.0s
**HNS HongShan 126.08 43** ⇓PKP **PKiKP 19 09 59.5 +2.7**
HNS PP **PP 19 11 55.2 +5.5**
HNS LR LR
comp=Z,500nm,22.3s
HNS LR LR
comp=Z,260nm,19.1s
HNS LR LR
comp=Z,540nm,23.9s
**QIZ Qiongzhong 129.49 66** PKP **PKPdf 19 10 02.7 -0.7**
QIZ PP **PP 19 12 12.0 -1.1**
QIZ SS SS 19 29 36.2 +0.9
QIZ LR LR
comp=Z,210nm,16.3s
QIZ LR LR
comp=Z,260nm,22.0s
QIZ LR LR
comp=Z,400nm,36.8s
**NJ2 Nanjing 131.80 46** *e*PKP **PKPdf 19 10 06.7 -0.7**
**SSE Sheshan 133.99 46** PKP **PKPdf 19 10 11.9 +0.3**
SSE PP **PP 19 12 47.2 +5.9**
SSE SS SS 19 30 30.8 +2.1
SSE AMB AMB
comp=Z,37nm,4.0s
SSE LR LR
comp=Z,290nm,21.4s
SSE LR LR
comp=Z,160nm,21.4s
**JKA Kamikawa-asahi 134.83 16** IAMs_20 IAMs_20 20 13 50.3
comp=Z,352nm,21.0s
**KAPI Kappang 141.34 99** IAMs_20 IAMs_20 20 13 60.0
comp=Z,236nm,20.0s
**STKA Stephens Creek 143.90 156** PKP PKPbc 19 10 27.7 +0.3
comp=Z,1.3nm,0.7s,baz=180,slow=13,SNR=1.2
**ASAR Alice Springs 146.17 138** **PKPdf 19 10 32.4 -1.5**
**ASAR Alice Springs 146.17 138** PKPbc **PKPdf 19 10 32.0 -1.9**
comp=Z,1.5nm,0.7s,baz=214,slow=2.4,SNR=15
**WRA Warramunga Arr 148.91 133** **PKPbc 19 10 41.5 -0.9**
**WRA Warramunga Arr 148.91 133** PKPbc **PKPdf 19 10 39.9 +1.4**
comp=Z,0.3nm,0.9s,baz=241,slow=2.5,SNR=1.4
**FAKI Fak Fak 153.98 98** IAMs_20 IAMs_20 20 12 50.9
comp=Z,264nm,21.0s
**DZM Mont Dzumac 155.74 199** *e*PP **PP 19 14 46.3 -3.9**
comp=Z,89nm,34.8s
**DZM Mont Dzumac 155.74 199** *e*SS SS 19 34 30.9 -5.1
comp=Z,193nm,25.6s

*IDC **03** 18:51:02.6±2.1,34.˚79S×179.˚83E,h0km,mb3.7/3, mbtmp3.7/4,ML3.3/1,MS2.9/1,Error ellipse: s-maj=51.0km s-min=32.7km az=59.0*
*WEL **03** 18:51:09.0±1.1,35.˚5S×18.˚0W±1.˚1,h33km,M3.9/13, ML4.2/15,MLv3.9/13,Error ellipse: s-maj=0.0km s-min=0.0km az=100.4,confirmed*
**ISC 03 18:51:07.4±1.5,34.˚99S±0.˚08×179.˚9W±0.˚1,h35km,n31, σ1§69/36,mb3.7/3,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **2.94** | **209** | P | **Pn** | **18 51 52.7** | **+1.1** |
| MXZ | | | | S | **Sn** | **18 52 23.0** | **-2.7** |
| **PKGZ** | **Pakihiroa** | **3.29** | **209** | P | **Pn** | **18 51 57.9** | **+1.4** |
| PKGZ | | | | S | **Sn** | **18 52 36.5** | **+2.1** |
| **HAZ** | **Te Kaha** | **3.33** | **213** | P | **Pn** | **18 51 58.8** | **+1.9** |
| HAZ | | | | S | **Sn** | **18 52 37.9** | **+2.8** |
| **PUZ** | **Puketiti** | **3.41** | **205** | P | **Pn** | **18 51 58.9** | **+0.8** |
| PUZ | | | | S | **Sn** | **18 52 35.2** | **-2.1** |
| **RUGZ** | **Raukumara Rang** | **3.54** | **212** | P | **Pn** | **18 52 01.2** | **+1.2** |
| RUGZ | | | | S | **Sn** | **18 52 42.3** | **+1.5** |
| **TWGZ** | **Tauwhareparae** | **3.60** | **207** | P | **Pn** | **18 52 00.8** | **0.0** |
| TWGZ | | | | S | **Sn** | **18 52 42.3** | **+0.2** |
| **CNGZ** | **Carnagh Statio** | **3.80** | **203** | P | **Pn** | **18 52 04.7** | **+1.3** |
| **MWZ** | **Matawai** | **3.92** | **211** | P | **Pn** | **18 52 05.3** | **+0.2** |
| **URZ** | **Urewera** | **4.04** | **215** | Pn | **Pn** | **18 52 06.9** | **+0.2** |
| | 2.0nm,0.3s,baz=353,slow=3.7,SNR=18 | | | | | | |
| URZ | | | | Sn | **Sn** | **18 52 47.2** | **-5.6** |
| | 2.5nm,0.3s,baz=263,slow=22,SNR=1.9 7.0nm,0.4s | | | | | | |
| **URZ** | **Urewera** | **4.04** | **215** | P | **Pn** | **18 52 07.0** | **+0.2** |
| URZ | | | | S | **Sn** | **18 52 51.9** | **-0.9** |
| **RAGZ** | **Rawiri** | **4.10** | **211** | P | **Pn** | **18 52 08.0** | **+0.3** |
| RAGZ | | | | S | **Sn** | **18 52 56.6** | **+2.2** |
| **RIGZ** | **Rimuhau** | **4.15** | **206** | P | **Pn** | **18 52 08.7** | **+0.5** |
| RIGZ | | | | S | **Sn** | **18 52 54.0** | **-1.6** |
| **PRGZ** | **Paritu Road** | **4.30** | **203** | P | **Pn** | **18 52 10.2** | **-0.1** |
| PRGZ | | | | S | **Sn** | **18 52 58.4** | **-1.0** |
| **MUGZ** | **Murupara** | **4.38** | **216** | P | **Pn** | **18 52 11.1** | **-0.3** |
| **RTZ** | **Ruatahuna** | **4.39** | **214** | P | **Pn** | **18 52 11.8** | **+0.1** |
| RTZ | | | | S | **Sn** | **18 53 01.2** | **-0.4** |
| **WIAZ** | **Waiheke Island** | **4.40** | **244** | P | **Pn** | **18 52 13.2** | **+1.5** |
| **MHGZ** | **Mahia Peninsul** | **4.50** | **202** | P | **Pn** | **18 52 12.5** | **-0.6** |
| **MKAZ** | **Moumakai** | **4.51** | **241** | P | **Pn** | **18 52 15.3** | **+2.1** |
| **WCZ** | **Waipu Caves** | **4.77** | **257** | P | **Pn** | **18 52 17.7** | **+0.9** |
| **OUZ** | **Omahuta** | **5.32** | **266** | P | **Pn** | **18 52 24.4** | **+0.1** |
| **MSVF** | **Nonsavu** | **17.28** | **353** | LR | LR | 18 59 29.3 | |
| | comp=Z,420nm,21.9s,baz=148,slow=30 | | | | | | |
| **ASAR** | **Alice Springs** | **41.48** | **273** | P | **P** | **18 58 50.0** | **-1.1** |
| | 0.8nm,0.4s,baz=114,slow=7.8,SNR=49 0.8nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.89** | **278** | P | **P** | **18 59 00.5** | **-2.1** |
| | 0.3nm,0.3s,baz=118,slow=7.7,SNR=12 0.3nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **55.13** | **180** | P | **P** | **19 00 37.6** | **+1.6** |
| | 0.5nm,0.6s,baz=14,slow=4.2,SNR=6.2 0.5nm,0.6s | | | | | | |
| **H03S2** | **Juan Fernandez** | **79.28** | **124** | T | T | 20 31 18.8 | |
| | baz=233,slow=74,SNR=8.0 | | | | | | |
| **H03S1** | **Juan Fernandez** | **79.29** | **124** | T | T | 20 31 24.4 | |
| | baz=233,slow=74,SNR=6.4 | | | | | | |
| **H03S3** | **Juan Fernandez** | **79.30** | **124** | T | T | 20 31 12.1 | |
| | baz=233,slow=74,SNR=6.4 | | | | | | |
| **H03N3** | **Juan Fernandez** | **79.50** | **123** | T | T | 20 31 28.0 | |
| | baz=237,slow=72,SNR=13 | | | | | | |
| **H03N2** | **Juan Fernandez** | **79.50** | **123** | T | T | 20 31 28.1 | |
| | baz=237,slow=72,SNR=12 | | | | | | |
| **H03N1** | **Juan Fernandez** | **79.52** | **123** | T | T | 20 31 39.3 | |
| | baz=237,slow=72,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **148.78** | **336** | PKPbc | **PKPbc** | **19 10 50.4** | **+0.2** |
| | 1.1nm,0.7s,baz=58,slow=3.4,SNR=1.9 | | | | | | |

*IDC **03** 18:53:43.2±2.0,6.˚83N×126.˚94E,h180km±16km,mb3.3/9, mbtmp3.8/9,Error ellipse: s-maj=47.3km s-min=15.6km az=65.0*
**ISC 03 18:53:45.1±1.0,6.˚7N±0.˚2×126.˚7E±0.˚2,h200km,n10, σ1§25/11,mb3.6/9,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **1.12** | **288** | P | **Pn** | **18 54 14.3** | **-1.4** |
| | 330nm,0.4s,baz=42,slow=13,SNR=2.8 | | | | | | |
| DAV | | | | S | **Sn** | **18 54 37.8** | **-1.6** |
| | 294nm,0.4s,baz=240,slow=22,SNR=14 | | | | | | |
| DAV | | | | LR | LR | 18 54 51.3 | |
| | comp=Z,28nm,22.0s,baz=2.0,slow=50 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.56** | **164** | P | **P** | **18 59 14.6** | **+0.9** |
| | 0.3nm,0.8s,baz=344,slow=8.2,SNR=2.0 0.3nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.40** | **296** | P | **P** | **18 59 32.2** | **+2.2** |
| | 0.4nm,0.3s,baz=104,slow=6.6,SNR=2.2 0.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **31.02** | **167** | P | **P** | **18 59 44.0** | **-0.3** |
| | 0.2nm,0.4s,baz=345,slow=7.1,SNR=6.5 0.2nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **44.46** | **341** | P | **P** | **19 01 36.0** | **-0.5** |
| | 0.6nm,0.5s,baz=158,slow=8.1,SNR=2.5 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.08** | **324** | P | **P** | **19 02 57.4** | **+1.0** |
| | 0.8nm,0.5s,baz=122,slow=7.3,SNR=13 0.8nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.91** | **332** | P | **P** | **19 03 16.2** | **+0.1** |
| | 0.7nm,0.3s,baz=119,slow=7.2,SNR=4.9 0.7nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.20** | **326** | P | **P** | **19 03 26.1** | **+1.0** |
| | 1.4nm,0.5s,baz=124,slow=6.8,SNR=6.7 1.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **82.45** | **26** | P | **P** | **19 05 44.5** | **-0.3** |
| | 0.2nm,0.5s,baz=244,slow=5.5,SNR=4.2 0.2nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.63** | **340** | P | **P** | **19 06 10.1** | **-0.4** |
| | 2.4nm,0.9s,baz=92,slow=8.1,SNR=7.1 2.4nm,0.9s | | | | | | |

*KRNET **03** 19:02:54.0±0.1,39.˚51N×71.˚50E,h14km,mb3.0*
*ISU **03** 19:02:55.7,39.˚50N×71.˚56E,h15km*
*NNC **03** 19:02:59.5±3.8,39.˚71N×71.˚46E,h0km,mb3.2,mpv2.9, Error ellipse: s-maj=34.1km s-min=22.0km az=3.0*
**ISC 03 19:02:55.1±1.2,39.˚52N±0.˚03×71.˚54E±0.˚02,h1km±10km, n32,σ1§28/61,23C-18D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DRK** | **Karamyk** | **0.21** | **101** | ⇑*e*P | **Pg** | **19 02 58.9** | **-0.3** |
| | baz=97 | | | | | | |
| DRK | | | | ⇑*e*S | **Sg** | **19 03 02.1** | **+0.2** |
| | baz=97 | | | | | | |
| **BTK** | **Batken** | **0.77** | **314** | ⇑*i*P | **Pg** | **19 03 08.9** | **-1.0** |
| | baz=16 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **19 03 19.0** | **-0.9** |
| | baz=16 | | | | | | |
| **FRG** | **Fergana** | **0.87** | **13** | P | **Pb** | **19 03 12.6** | **-0.5** |
| FRG | | | | S | **Sb** | **19 03 25.1** | **-0.1** |
| **MINT** | **Mingtut** | **1.04** | **336** | P | **Pb** | **19 03 15.7** | **-0.2** |
| MINT | | | | S | **Sn** | **19 03 30.5** | **-1.4** |
| **OHH** | **Osh** | **1.39** | **43** | ⇑*i*P | **Pn** | **19 03 20.8** | **-0.8** |
| | baz=44 | | | | | | |
| OHH | | | | ⇑*i*S | **Sn** | **19 03 39.5** | **-1.1** |
| | baz=44 | | | | | | |
| **NAM** | **Namangan** | **1.47** | **4** | P | **Pn** | **19 03 23.2** | **+0.5** |
| NAM | | | | S | **Sg** | **19 03 43.5** | **+1.1** |
| **CHDK** | **Chadak** | **1.57** | **338** | P | **Pb** | **19 03 25.0** | **0.0** |
| CHDK | | | | S | **Sg** | **19 03 46.8** | **+1.3** |
| **SFK** | **Sufi-Kurgan** | **1.59** | **71** | ⇓*i*P | **Pn** | **19 03 24.4** | **-0.2** |
| | baz=71 | | | | | | |
| SFK | | | | ⇓*i*S | **Sn** | **19 03 46.0** | **0.0** |
| | baz=71 | | | | | | |
| **KSNS** | **Kasansay** | **1.64** | **360** | P | **Pb** | **19 03 26.0** | **-0.1** |
| KSNS | | | | S | **Sg** | **19 03 48.5** | **+0.8** |
| **TRKS** | **Terek-Say** | **2.03** | **352** | ⇑*i*P | **Pn** | **19 03 30.2** | **-0.4** |
| | baz=53 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sn** | **19 03 56.2** | **-0.4** |
| | baz=53 | | | | | | |
| **CHGR** | **Chuyangaron** | **2.04** | **246** | ⇑*i*P | **Pn** | **19 03 30.7** | **0.0** |
| | baz=46 | | | | | | |
| CHGR | | | | ⇑*i*S | **Sb** | **19 03 57.6** | **-1.4** |
| | baz=46 | | | | | | |
| **ARK** | **Arkit** | **2.30** | **8** | ⇓*e*P | **Pn** | **19 03 34.6** | **+0.4** |
| | baz=9.0 | | | | | | |
| ARK | | | | ⇓*e*S | **Sb** | **19 04 04.7** | **-1.6** |
| | baz=9.0 | | | | | | |
| **CHMG** | **Chimgan** | **2.34** | **331** | P | **Pb** | **19 03 37.7** | **-0.4** |
| CHMG | | | | S | **Sg** | **19 04 09.6** | **-0.6** |
| **KUMR** | **Kumaryk** | **2.44** | **315** | P | **Pb** | **19 03 39.0** | **-0.8** |
| KUMR | | | | S | **Sg** | **19 04 12.2** | **-1.4** |
| **TGS** | **TashGRES** | **2.44** | **322** | P | **Pb** | **19 03 39.9** | **+0.1** |
| TGS | | | | S | **Sg** | **19 04 14.0** | **+0.4** |
| **NZBK** | **Nazarbek** | **2.51** | **313** | P | **Pb** | **19 03 41.1** | **+0.1** |
| NZBK | | | | S | **Sg** | **19 04 16.0** | **+0.3** |
| **BXML** | **Bakhmal** | **2.71** | **275** | P | **Pb** | **19 03 45.8** | **+1.3** |
| BXML | | | | S | **Sg** | **19 04 25.1** | **+2.8** |
| **MNAS** | **Manas** | **3.05** | **14** | ⇓*i*P | **Pn** | **19 03 45.3** | **+0.7** |
| | baz=14 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sn** | **19 04 22.6** | **+0.8** |
| | baz=14 | | | | | | |
| **AML** | **Almayashu** | **3.08** | **31** | ⇑*i*P | **Pn** | **19 03 45.9** | **+0.7** |
| | baz=32 | | | | | | |
| AML | | | | ⇑*i*S | **Sn** | **19 04 23.5** | **+0.7** |
| | baz=32 | | | | | | |
| **ARLS** | **Aral** | **3.15** | **41** | ⇑*i*P | **Pn** | **19 03 46.7** | **+0.7** |
| | baz=42 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **19 04 25.5** | **+1.1** |
| | baz=42 | | | | | | |
| **UCH** | **Uchtor** | **3.52** | **39** | ⇓*i*P | **Pn** | **19 03 51.6** | **+0.3** |
| | baz=39 | | | | | | |
| UCH | | | | ⇓*i*S | **Sn** | **19 04 34.2** | **+0.4** |
| | baz=39 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.56** | **28** | ⇓*e*P | **Pn** | **19 03 51.9** | **+0.3** |
| | baz=28 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sn** | **19 04 35.2** | **+0.8** |
| | baz=28 | | | | | | |
| **KK31** | **Karatay Array** | **3.66** | **348** | ⇓Pn | **Pn** | **19 03 54.2** | **+1.4** |
| | 0.9nm,0.4s,baz=168,slow=13 | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **19 04 02.7** | **+2.2** |
| | 0.8nm,0.2s,baz=164,slow=15 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 19 04 51.1 | |
| | 14nm,0.5s,baz=171,slow=29 | | | | | | |
| **KKAR** | **Karatay Array** | **3.66** | **348** | ⇑*i*P | **Pn** | **19 03 52.8** | **-0.1** |
| | baz=49 | | | | | | |
| KKAR | | | | ⇑*i*S | **Sn** | **19 04 37.0** | **+0.3** |
| | baz=49 | | | | | | |
| **AAK** | **Ala-Archa** | **3.83** | **35** | ⇓Pn | Pn | 19 03 59.7 | +4.4 |
| | 1.7nm,0.4s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 19 04 56.7 | |
| | 7.6nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.83** | **35** | ⇑*i*P | **Pn** | **19 03 55.8** | **+0.5** |
| | baz=35 | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **19 04 41.8** | **+0.7** |
| | baz=35 | | | | | | |
| **CHMS** | **Chumysh** | **4.24** | **34** | ⇓*i*P | **Pn** | **19 04 01.1** | **+0.3** |
| | baz=34 | | | | | | |
| CHMS | | | | ⇓*i*S | **Sn** | **19 04 51.3** | **+0.5** |
| | baz=34 | | | | | | |
| **ZRB** | **Zarabog** | **4.34** | **252** | P | **Pn** | **19 04 03.4** | **+1.2** |
| ZRB | | | | S | **Sb** | **19 04 59.6** | **-5.5** |
| **ULHL** | **Ulahol** | **4.49** | **51** | ⇓*i*P | **Pn** | **19 04 05.1** | **+0.7** |
| | baz=51 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sn** | **19 04 57.4** | **+0.1** |
| | baz=51 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.57** | **41** | ⇑Pn | **Pn** | **19 04 07.9** | **+2.3** |
| | 1.2nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 19 05 17.8 | |
| | 2.2nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.57** | **41** | ⇑*i*P | **Pn** | **19 04 06.0** | **+0.4** |
| | baz=41 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sn** | **19 04 59.7** | **+0.3** |
| | baz=41 | | | | | | |
| **NUT** | **Nurota** | **4.61** | **285** | P | **Pn** | **19 04 09.8** | **+3.9** |
| NUT | | | | S | **Sb** | **19 05 12.9** | **+0.1** |

*IDC **03** 19:08:51.7±1.7,2.˚52S×11.˚91W,h0km,mb3.8/6, mbtmp3.8/6,Error ellipse: s-maj=94.7km s-min=32.5km az=108.0*
**ISC 03 19:08:53.2±1.5,2.˚5S±0.˚3×11.˚9W±0.˚5,h10km,n12,σ1§13/6, mb3.9/5,North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N2** | **ASCENSION HYDR** | **5.88** | **206** | T | T | 19 16 09.1 | |
| | baz=23,slow=74,SNR=31 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **5.90** | **206** | T | T | 19 16 12.1 | |
| | baz=23,slow=74,SNR=59 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **5.90** | **206** | T | T | 19 16 08.2 | |
| | baz=23,slow=74,SNR=29 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **6.97** | **203** | T | T | 19 17 41.1 | |
| | baz=22,slow=74,SNR=10 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **6.97** | **203** | T | T | 19 17 40.0 | |
| | baz=198,slow=74,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **20.59** | **41** | P | **P** | **19 13 33.6** | **+0.9** |
| | 2.9nm,0.7s,baz=230,slow=9.6,SNR=7.9 2.9nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **55.76** | **20** | P | **P** | **19 18 31.2** | **+0.9** |
| | 1.0nm,0.6s,baz=215,slow=9.6,SNR=8.3 1.0nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **58.08** | **6** | P | **P** | **19 18 46.3** | **-0.3** |
| | 0.5nm,0.7s,baz=194,slow=5.5,SNR=2.5 0.5nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **59.20** | **40** | P | **P** | **19 18 53.5** | **-1.4** |
| | 0.6nm,0.8s,baz=224,slow=6.0,SNR=2.2 0.6nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **63.57** | **28** | P | **P** | **19 19 24.0** | **-0.1** |
| | 0.3nm,0.3s,baz=236,slow=6.6,SNR=1.4 0.3nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **87.58** | **180** | P | **P** | **19 21 41.8** | **+0.3** |
| | 2.0nm,0.9s,baz=256,slow=2.3,SNR=5.2 2.0nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **140.07** | **125** | PKhKP | PKPpre | 19 28 15.6 | |
| | 0.2nm,0.6s,baz=244,slow=3.1,SNR=1.5 | | | | | | |

**IDC 03 19:36:46.0±1.4,26.˚59N×139.˚72E,h682km±109km, mb2.4/3,mbtmp3.6/5,Error ellipse: s-maj=292.3km s-min=20.2km az=70.0,Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **2.26** | **77** | P | P | 19 38 10.4 | +1.8 |
| | 45nm,0.8s,baz=285,slow=20,SNR=28 | | | | | | |
| JCJ | | | | S | S | 19 39 15.5 | -0.4 |
| | 21nm,0.3s,baz=307,slow=20,SNR=6.5 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **6.51** | **0** | P | P | 19 38 37.1 | +1.8 |
| | 44nm,0.7s,baz=72,slow=23,SNR=1.2 | | | | | | |
| JHJ | | | | S | S | 19 40 00.5 | -4.3 |
| | 85nm,0.6s,baz=216,slow=23,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.55** | **187** | P | P | 19 44 15.6 | -0.6 |
| | 0.7nm,0.6s,baz=13,slow=8.3,SNR=14 0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **49.11** | **310** | P | P | 19 44 34.1 | -0.7 |
| | 0.7nm,0.8s,baz=92,slow=7.7,SNR=5.1 0.7nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **50.28** | **187** | P | P | 19 44 44.3 | +0.9 |
| | 0.1nm,0.6s,baz=9.9,slow=5.9,SNR=5.6 0.1nm,0.6s | | | | | | |

*JMA **03** 19:37:11.0±0.1,24.˚3N±0.˚5×12.˚1E±.˚,h5km,MV3.1/12, TAIWAN REGION*
*TAP **03** 19:37:10.5,24.˚34N×121.˚44E,h7km,ML3.6,C*
**ISC 03 19:37:11.0±0.8,24.˚35N±0.˚01×121.˚44E±0.˚01,h7km±5km, n150,σ0§67/252,44C-3D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NNSB** | **Datong** | **0.09** | **328** | ⇑*i*P | **Pg** | **19 37 13.3** | **0.0** |
| | baz=330 | | | | | | |
| NNSB | | | | *i* S | **Sg** | **19 37 14.8** | **-0.1** |
| | baz=330 | | | | | | |
| **NNSH** | **Datong** | **0.09** | **328** | ⇑*i*P | **Pg** | **19 37 13.3** | **0.0** |
| | baz=326 | | | | | | |
| NNSH | | | | *i* S | **Sg** | **19 37 14.8** | **-0.1** |
| | baz=326 | | | | | | |
| **NNS** | **Nan Shan** | **0.11** | **328** | ⇑*i*P | **Pg** | **19 37 13.5** | **0.0** |
| | baz=332 | | | | | | |
| NNS | | | | *i* S | **Sg** | **19 37 15.1** | **-0.2** |
| | baz=332 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.15** | **164** | ⇓P | **Pg** | **19 37 14.5** | **+0.4** |
| | baz=173 | | | | | | |
| ETLH | | | | S | **Sg** | **19 37 16.8** | **+0.6** |
| | baz=173 | | | | | | |
| **FUSS** | **Fushou** | **0.20** | **240** | ⇑*i*P | **Pg** | **19 37 15.3** | **+0.2** |
| | baz=242 | | | | | | |
| FUSS | | | | *i* S | **Sg** | **19 37 18.2** | **+0.2** |
| | baz=242 | | | | | | |
| **LATG** | **Datong** | **0.20** | **24** | ⇑*i*P | **Pg** | **19 37 15.0** | **-0.1** |
| | baz=23 | | | | | | |
| LATG | | | | S | **Sg** | **19 37 17.9** | **0.0** |
| | baz=23 | | | | | | |
| **NACB** | **Ninganchiao** | **0.23** | **140** | P | **Pg** | **19 37 15.8** | **+0.4** |
| **NACB** | **Ninganchiao** | **0.23** | **140** | ⇑*i*P | **Pg** | **19 37 15.8** | **+0.4** |
| | baz=139 | | | | | | |
| NACB | | | | *e*S | **Sg** | **19 37 18.4** | **-0.2** |
| | baz=139 | | | | | | |
| **ETL** | **Fush Village** | **0.25** | **138** | ⇑*i*P | **Pg** | **19 37 16.3** | **+0.3** |
| | baz=137 | | | | | | |
| ETL | | | | *e*S | **Sg** | **19 37 19.6** | **+0.2** |
| | baz=137 | | | | | | |
| **TWT** | **Tachien** | **0.26** | **248** | ⇑*i*P | **Pg** | **19 37 16.6** | **+0.5** |
| | baz=240 | | | | | | |
| TWT | | | | S | **Sg** | **19 37 20.7** | **+1.1** |
| | baz=240 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.26** | **218** | ⇓*i*P | **Pg** | **19 37 16.2** | **0.0** |
| | baz=207 | | | | | | |
| WHF | | | | S | **Sg** | **19 37 19.9** | **+0.2** |
| | baz=207 | | | | | | |
| **NDT** | **Datong Townshi** | **0.26** | **15** | ⇑*i*P | **Pg** | **19 37 16.3** | **+0.2** |
| | baz=15 | | | | | | |
| NDT | | | | *e*S | **Sg** | **19 37 20.0** | **+0.3** |
| | baz=15 | | | | | | |
| **TDCB** | **Techi** | **0.27** | **250** | ⇑*i*P | **Pg** | **19 37 16.6** | **+0.2** |
| | baz=241 | | | | | | |
| TDCB | | | | S | **Sg** | **19 37 20.2** | **+0.2** |
| | baz=241 | | | | | | |
| **EAHA** | **Aohua** | **0.28** | **94** | ⇑P | **Pg** | **19 37 16.4** | **0.0** |
| | baz=80 | | | | | | |
| EAHA | | | | S | **Sg** | **19 37 20.1** | **0.0** |
| | baz=80 | | | | | | |
| **EHP** | **Heping Village** | **0.28** | **98** | *e*P | **Pg** | **19 37 17.0** | **+0.5** |
| | baz=96 | | | | | | |
| EHP | | | | *e*S | **Sg** | **19 37 21.0** | **+0.8** |
| | baz=96 | | | | | | |
| **TWD** | **Chiawan** | **0.30** | **151** | ⇑*i*P | **Pg** | **19 37 17.3** | **+0.3** |
| | baz=149 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TWD | | | | *e*S | **Sg** | **19 37 21.4** | **+0.4** |
| | baz=149 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.31** | **22** | ⇑*i*P | **Pg** | **19 37 17.3** | **+0.1** |
| | baz=14 | | | | | | | | |
| ENTT | | | | S | **Sg** | **19 37 21.7** | **+0.4** |
| | baz=14 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.33** | **350** | P | **Pg** | **19 37 17.9** | **+0.5** |
| **YHNB** | **Yeheng** | **0.33** | **350** | ⇑*i*P | **Pg** | **19 37 17.8** | **+0.5** |
| | baz=351 | | | | | | | | |
| YHNB | | | | *e*S | **Sg** | **19 37 21.2** | **-0.5** |
| | baz=351 | | | | | | | | |
| **EWUT** | **Wuta** | **0.33** | **73** | ⇑*i*P | **Pg** | **19 37 17.1** | **-0.2** |
| | baz=71 | | | | | | | | |
| EWUT | | | | *e*S | **Sg** | **19 37 21.2** | **-0.5** |
| | baz=71 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.33** | **184** | ⇑*i*P | **Pg** | **19 37 17.6** | **+0.2** |
| | baz=195 | | | | | | | | |
| LXIB | | | | S | **Sg** | **19 37 22.2** | **+0.5** |
| | baz=195 | | | | | | | | |
| **NSK** | **Sanguang** | **0.33** | **348** | ⇑*i*P | **Pg** | **19 37 18.0** | **+0.4** |
| | baz=350 | | | | | | | | |
| NSK | | | | *e*S | **Sg** | **19 37 22.3** | **+0.3** |
| | baz=350 | | | | | | | | |
| **CHGB** | **Renai** | **0.37** | **220** | ⇑*i*P | **Pg** | **19 37 18.2** | **-0.1** |
| | baz=219 | | | | | | | | |
| CHGB | | | | S | **Sg** | **19 37 22.9** | **-0.3** |
| | baz=219 | | | | | | | | |
| **NDS** | **Dongshan** | **0.38** | **42** | ⇑*i*P | **Pg** | **19 37 18.3** | **-0.1** |
| | baz=52 | | | | | | | | |
| NDS | | | | S | **Sg** | **19 37 23.2** | **-0.2** |
| | baz=52 | | | | | | | | |
| **ETM** | **Tongmen** | **0.39** | **172** | ⇑*i*P | **Pg** | **19 37 18.7** | **+0.2** |
| | baz=172 | | | | | | | | |
| ETM | | | | *e*S | **Sg** | **19 37 23.2** | **-0.3** |
| | baz=172 | | | | | | | | |
| **HWA** | **Hwalien** | **0.40** | **157** | ⇓P | **Pb** | **19 37 19.6** | **-0.8** |
| | baz=156 | | | | | | | | |
| HWA | | | | *i* S | **Sb** | **19 37 25.5** | **-1.2** |
| | baz=156 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.41** | **314** | ⇑*i*P | **Pb** | **19 37 19.5** | **-1.0** |
| | baz=326 | | | | | | | | |
| NFF | | | | *i* S | **Sg** | **19 37 25.0** | **+0.8** |
| | baz=326 | | | | | | | | |
| **TWE** | **Neicheng** | **0.43** | **29** | ⇑*i*P | **Pg** | **19 37 19.5** | **+0.2** |
| | baz=43 | | | | | | | | |
| TWE | | | | *e*S | **Sg** | **19 37 24.9** | **0.0** |
| | baz=43 | | | | | | | | |
| **NWLT** | **Wulai** | **0.43** | **8** | ⇑*i*P | **Pg** | **19 37 19.7** | **+0.3** |
| | baz=2.0 | | | | | | | | |
| NWLT | | | | *e*S | **Sg** | **19 37 25.1** | **+0.1** |
| | baz=2.0 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.43** | **19** | ⇑*i*P | **Pg** | **19 37 19.6** | **+0.2** |
| | baz=12 | | | | | | | | |
| FUSB | | | | S | **Sg** | **19 37 24.6** | **-0.4** |
| | baz=12 | | | | | | | | |
| **ESAO** | **Su ao** | **0.43** | **59** | ⇑*i*P | **Pg** | **19 37 18.9** | **-0.5** |
| | baz=48 | | | | | | | | |
| ESAO | | | | *e*S | **Sg** | **19 37 24.8** | **-0.3** |
| | baz=48 | | | | | | | | |
| **WHP** | **Taichung City** | **0.45** | **261** | ⇑*i*P | **Pb** | **19 37 20.6** | **-0.8** |
| | baz=261 | | | | | | | | |
| WHP | | | | S | **Sg** | **19 37 26.1** | **+0.4** |
| | baz=261 | | | | | | | | |
| **TWC** | **Suao** | **0.46** | **55** | ⇑*i*P | **Pg** | **19 37 19.6** | **-0.2** |
| | baz=46 | | | | | | | | |
| TWC | | | | *i* S | **Sg** | **19 37 25.8** | **-0.1** |
| | baz=46 | | | | | | | | |
| **OWD** | **Renai** | **0.46** | **211** | ⇑*i*P | **Pg** | **19 37 19.6** | **-0.3** |
| | baz=210 | | | | | | | | |
| OWD | | | | *e*S | **Sg** | **19 37 25.3** | **-0.6** |
| | baz=210 | | | | | | | | |
| **WUSB** | **Renai** | **0.46** | **219** | ⇑*i*P | **Pg** | **19 37 19.8** | **-0.1** |
| | baz=218 | | | | | | | | |
| WUSB | | | | *e*S | **Sg** | **19 37 25.6** | **-0.3** |
| | baz=218 | | | | | | | | |
| **LIOB** | **Emei** | **0.48** | **308** | ⇑P | **Pb** | **19 37 21.5** | **-0.4** |
| | baz=310 | | | | | | | | |
| LIOB | | | | *e*S | **Sb** | **19 37 28.1** | **-1.1** |
| | baz=310 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.49** | **305** | ⇑*i*P | **Pb** | **19 37 21.3** | **-0.6** |
| | baz=308 | | | | | | | | |
| NSTT | | | | S | **Sb** | **19 37 27.9** | **-1.3** |
| | baz=308 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.50** | **163** | *e*P | **Pg** | **19 37 20.8** | **+0.2** |
| | baz=161 | | | | | | | | |
| TEYL | | | | *e*S | **Sg** | **19 37 27.0** | **-0.2** |
| | baz=161 | | | | | | | | |
| **ILA** | **Ilan** | **0.50** | **34** | *e*P | **Pg** | **19 37 20.9** | **+0.2** |
| | baz=43 | | | | | | | | |
| ILA | | | | *e*S | **Sb** | **19 37 28.8** | **-0.9** |
| | baz=43 | | | | | | | | |
| **ESL** | **Shilin** | **0.53** | **180** | ⇑*i*P | **Pg** | **19 37 21.3** | **+0.1** |
| | baz=179 | | | | | | | | |
| ESL | | | | *e*S | **Sg** | **19 37 28.5** | **+0.3** |
| | baz=179 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.56** | **239** | ⇑*i*P | **Pb** | **19 37 22.2** | **-0.9** |
| | baz=238 | | | | | | | | |
| WCS | | | | *e*S | **Sg** | **19 37 29.0** | **-0.1** |
| | baz=238 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.57** | **168** | *e*P | **Pb** | **19 37 22.7** | **-0.6** |
| | baz=168 | | | | | | | | |
| SHUL | | | | *e*S | **Sg** | **19 37 30.1** | **+0.7** |
| | baz=168 | | | | | | | | |
| **SBCB** | **Hsinchu** | **0.60** | **317** | *e*P | **Pb** | **19 37 24.5** | **+0.7** |
| | baz=318 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.60** | **270** | ⇑*i*P | **Pb** | **19 37 23.8** | **0.0** |
| | baz=271 | | | | | | | | |
| TWQ1 | | | | S | **Sb** | **19 37 32.0** | **-0.6** |
| | baz=271 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.62** | **7** | *e*P | **Pg** | **19 37 23.3** | **+0.4** |
| | baz=20 | | | | | | | | |
| NHDH | | | | *e*S | **Sg** | **19 37 31.3** | **+0.3** |
| | baz=20 | | | | | | | | |
| **NMLH** | **Miaoli** | **0.62** | **288** | *e*P | **Pb** | **19 37 24.3** | **+0.2** |
| | baz=289 | | | | | | | | |
| NMLH | | | | *e*S | **Sb** | **19 37 33.4** | **+0.4** |
| | baz=289 | | | | | | | | |
| **NTC** | **Toucheng** | **0.62** | **35** | *e*P | **Pb** | **19 37 23.6** | **-0.4** |
| | baz=43 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.62** | **317** | *e*P | **Pb** | **19 37 24.8** | **+0.7** |
| | baz=323 | | | | | | | | |
| HSN | | | | *e*S | **Sb** | **19 37 33.3** | **+0.2** |
| | baz=323 | | | | | | | | |
| **NSY** | **Sanyi** | **0.62** | **276** | P | **Pb** | **19 37 24.6** | **+0.4** |
| | baz=277 | | | | | | | | |
| NSY | | | | S | **Sb** | **19 37 33.6** | **+0.6** |
| | baz=277 | | | | | | | | |
| **TATO** | **Taipei** | **0.63** | **4** | P | **Pb** | **19 37 23.8** | **-0.4** |
| **WARBT** | **Fenglin Townsh** | **0.63** | **184** | ⇑*i*P | **Pg** | **19 37 22.9** | **-0.2** |
| | baz=172 | | | | | | | | |
| WARBT | | | | *e*S | **Sg** | **19 37 31.0** | **-0.4** |
| | baz=172 | | | | | | | | |
| **TWA** | **Mucha** | **0.64** | **12** | ⇑*i*P | **Pb** | **19 37 23.9** | **-0.6** |
| | baz=13 | | | | | | | | |
| TWA | | | | S | **Sg** | **19 37 32.6** | **+0.8** |
| | baz=13 | | | | | | | | |
| **VWDT** | **VWDT** | **0.65** | **205** | ⇑*i*P | **Pg** | **19 37 23.1** | **-0.4** |
| | baz=209 | | | | | | | | |
| VWDT | | | | *e*S | **Sg** | **19 37 31.8** | **-0.2** |
| | baz=209 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.66** | **340** | *e*P | **Pn** | **19 37 25.7** | **-1.0** |
| | baz=339 | | | | | | | | |
| **EGS** | | **0.67** | **42** | ⇑*i*P | **Pg** | **19 37 24.0** | **+0.1** |
| | baz=54 | | | | | | | | |
| EGS | | | | *e*S | **Sb** | **19 37 35.0** | **+0.6** |
| | baz=54 | | | | | | | | |
| **TYC** | **Yuchr** | **0.69** | **230** | ⇑*i*P | **Pg** | **19 37 24.3** | **+0.1** |
| | baz=220 | | | | | | | | |
| TYC | | | | S | **Sg** | **19 37 32.7** | **-0.5** |
| | baz=220 | | | | | | | | |
| **TAP** | **Taipei** | **0.69** | **5** | *e*P | **Pb** | **19 37 25.1** | **-0.2** |
| | baz=17 | | | | | | | | |
| TAP | | | | *e*S | **Sb** | **19 37 34.9** | **-0.1** |
| | baz=17 | | | | | | | | |
| **NHY** | **Taipei** | **0.70** | **10** | *e*P | **Pg** | **19 37 24.8** | **+0.4** |
| | baz=24 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.71** | **218** | P | **Pg** | **19 37 24.0** | **-0.7** |
| **SSLB** | **Suanglung** | **0.71** | **218** | ⇑*i*P | **Pg** | **19 37 24.1** | **-0.5** |
| | baz=218 | | | | | | | | |
| SSLB | | | | S | **Sg** | **19 37 32.9** | **-1.1** |
| | baz=218 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.71** | **30** | ⇑*i*P | **Pg** | **19 37 24.6** | **-0.1** |
| | baz=18 | | | | | | | | |
| TIPB | | | | *e*S | **Sg** | **19 37 33.7** | **-0.4** |
| | baz=18 | | | | | | | | |
| **WDJ** | **Dajia District** | **0.73** | **270** | *e*P | **Pn** | **19 37 26.9** | **-0.7** |
| | baz=271 | | | | | | | | |
| WDJ | | | | *e*S | **Sb** | **19 37 36.9** | **+0.8** |
| | baz=271 | | | | | | | | |
| **EOS2** | **EOS2** | **0.73** | **84** | *e*P | **Pb** | **19 37 25.7** | **-0.2** |
| | baz=82 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.75** | **359** | ⇑*e*P | **Pb** | **19 37 27.0** | **+0.6** |
| | baz=8.0 | | | | | | | | |
| TWS1 | | | | *e*S | **Sb** | **19 37 37.6** | **+0.9** |
| | baz=8.0 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.79** | **23** | *e*P | **Pg** | **19 37 26.2** | **+0.1** |
| | baz=24 | | | | | | | | |
| NWF | | | | *e*S | **Sg** | **19 37 36.5** | **+0.2** |
| | baz=24 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.79** | **23** | *e*P | **Pg** | **19 37 26.1** | **+0.1** |
| | baz=24 | | | | | | | | |
| WFSB | | | | *e*S | **Sg** | **19 37 36.3** | **0.0** |
| | baz=24 | | | | | | | | |
| **YM01** | **YM01** | **0.80** | **9** | ⇑*i*P | **Pb** | **19 37 27.3** | **0.0** |
| | baz=25 | | | | | | | | |
| YM01 | | | | *e*S | **Sg** | **19 37 36.7** | **-0.2** |
| | baz=25 | | | | | | | | |
| **EOS3** | **EOS3** | **0.81** | **94** | *e*P | **Pb** | **19 37 27.4** | **+0.2** |
| | baz=93 | | | | | | | | |
| **NTST** | **Danshui** | **0.81** | **1** | *e*P | **Pb** | **19 37 27.7** | **+0.3** |
| | baz=11 | | | | | | | | |
| NTST | | | | *e*S | **Sn** | **19 37 40.9** | **-0.3** |
| | baz=11 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.83** | **37** | P | **Pg** | **19 37 26.8** | **-0.1** |
| | baz=45 | | | | | | | | |
| TWB1 | | | | S | **Sg** | **19 37 37.1** | **-0.5** |
| | baz=45 | | | | | | | | |
| **WNT** | **Mingjian** | **0.83** | **236** | *e*P | **Pn** | **19 37 28.4** | **-0.7** |
| | baz=227 | | | | | | | | |
| WNT | | | | *e*S | **Sn** | **19 37 40.3** | **-1.3** |
| | baz=227 | | | | | | | | |
| **WJS** | **Zhushan** | **0.83** | **231** | *e*P | **Pb** | **19 37 27.8** | **0.0** |
| | baz=225 | | | | | | | | |
| WJS | | | | *e*S | **Sb** | **19 37 39.7** | **+0.5** |
| | baz=225 | | | | | | | | |
| **EOS4** | **EOS4** | **0.84** | **106** | *e*P | **Pb** | **19 37 27.7** | **+0.1** |
| | baz=95 | | | | | | | | |
| **ANP** | **Anpu** | **0.84** | **5** | *e*P | **Pb** | **19 37 28.0** | **+0.1** |
| | baz=19 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.84** | **220** | *i* P | **Pg** | **19 37 26.7** | **-0.4** |
| | baz=221 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.84** | **28** | *e*P | **Pg** | **19 37 27.2** | **0.0** |
| | baz=14 | | | | | | | | |
| **EHY** | **Hungye** | **0.84** | **187** | *i* P | **Pg** | **19 37 26.8** | **-0.4** |
| | baz=179 | | | | | | | | |
| EHY | | | | *e*S | **Sg** | **19 37 38.2** | **0.0** |
| | baz=179 | | | | | | | | |
| **YM08** | **YM08** | **0.85** | **9** | *e*P | **Pb** | **19 37 27.7** | **-0.4** |
| | baz=9.0 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.85** | **181** | ⇑P | **Pb** | **19 37 27.6** | **-0.5** |
| | baz=186 | | | | | | | | |
| HGSD | | | | S | **Sb** | **19 37 39.4** | **-0.3** |
| | baz=186 | | | | | | | | |
| **EHYH** | **Wanrong** | **0.85** | **186** | *e*P | **Pg** | **19 37 27.1** | **-0.3** |
| | baz=178 | | | | | | | | |
| EHYH | | | | *e*S | **Sg** | **19 37 38.3** | **-0.2** |
| | baz=178 | | | | | | | | |
| **TNOU** | **National Taiwa** | **0.85** | **21** | *e*P | **Pg** | **19 37 27.4** | **0.0** |
| | baz=22 | | | | | | | | |
| TNOU | | | | *e*S | **Sg** | **19 37 38.6** | **+0.1** |
| | baz=22 | | | | | | | | |
| **TWY** | **Chenhua** | **0.94** | **9** | *e*P | **Pb** | **19 37 29.7** | **+0.2** |
| | baz=9.0 | | | | | | | | |
| **YULB** | **Yu-li** | **0.96** | **188** | P | **Pg** | **19 37 29.0** | **-0.4** |
| **YULB** | **Yu-li** | **0.96** | **188** | P | **Pg** | **19 37 29.1** | **-0.4** |
| | baz=176 | | | | | | | | |
| YULB | | | | *e*S | **Sg** | **19 37 41.2** | **-0.6** |
| | baz=176 | | | | | | | | |
| **TWF1** | **Yuli** | **1.00** | **187** | *e*P | **Pg** | **19 37 29.6** | **-0.6** |
| | baz=175 | | | | | | | | |
| TWF1 | | | | *i* S | **Sb** | **19 37 43.5** | **-0.5** |
| | baz=175 | | | | | | | | |
| **EYUL** | **Yuli** | **1.00** | **186** | *i* P | **Pb** | **19 37 30.4** | **-0.2** |
| | baz=192 | | | | | | | | |
| EYUL | | | | S | **Sb** | **19 37 43.5** | **-0.6** |
| | baz=192 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.02** | **223** | *e*P | **Pn** | **19 37 31.5** | **-0.3** |
| | baz=215 | | | | | | | | |
| CHN5 | | | | S | **Sn** | **19 37 46.4** | **0.0** |
| | baz=215 | | | | | | | | |
| **ECBN** | **Changbin** | **1.03** | **179** | *e*P | **Pn** | **19 37 31.3** | **-0.5** |
| | baz=162 | | | | | | | | |
| **WGK** | **Gukeng** | **1.04** | **231** | P | **Pn** | **19 37 32.4** | **+0.4** |
| | baz=228 | | | | | | | | |
| WGK | | | | *e*S | **Sn** | **19 37 47.0** | **+0.4** |
| | baz=228 | | | | | | | | |
| **WDLH** | **Douliu** | **1.05** | **232** | *e*P | **Pn** | **19 37 32.2** | **+0.1** |
| | baz=229 | | | | | | | | |
| WDLH | | | | *i* S | **Sn** | **19 37 48.4** | **+1.3** |
| | baz=229 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.06** | **246** | *e*P | **Pn** | **19 37 32.5** | **+0.2** |
| | baz=258 | | | | | | | | |
| WRL | | | | *e*S | **Sn** | **19 37 47.7** | **+0.3** |
| | baz=258 | | | | | | | | |
| **CHKH** | **Chenggong** | **1.15** | **182** | *e*P | **Pg** | **19 37 32.6** | **-0.4** |
| | baz=167 | | | | | | | | |
| **FULB** | **Fuli** | **1.15** | **187** | *e*P | **Pn** | **19 37 33.7** | **+0.2** |
| | baz=170 | | | | | | | | |
| **WTK** | **Tuku** | **1.16** | **236** | *e*P | **Pn** | **19 37 33.8** | **+0.2** |
| | baz=233 | | | | | | | | |
| WTK | | | | *i* S | **Sn** | **19 37 51.3** | **+1.5** |
| | baz=233 | | | | | | | | |
| **WCKO** | **Fanlu** | **1.18** | **220** | P | **Pn** | **19 37 34.5** | **+0.6** |
| | baz=216 | | | | | | | | |
| WCKO | | | | *i* S | **Sn** | **19 37 51.5** | **+1.2** |
| | baz=216 | | | | | | | | |
| **CHN2** | **Minshiung** | **1.20** | **227** | *e*P | **Pn** | **19 37 35.1** | **+1.0** |
| | baz=224 | | | | | | | | |
| CHN2 | | | | *e*S | **Sn** | **19 37 52.2** | **+1.6** |
| | baz=224 | | | | | | | | |
| **EHD** | **Haiduan** | **1.21** | **190** | *i* P | **Pg** | **19 37 33.8** | **-0.4** |
| | baz=175 | | | | | | | | |
| EHD | | | | *e*S | **Sg** | **19 37 48.8** | **-1.2** |
| | baz=175 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.22** | **199** | *e*P | **Pg** | **19 37 32.9** | **-1.5** |
| | baz=196 | | | | | | | | |
| ELDTW | | | | S | **Sg** | **19 37 49.5** | **-0.6** |
| | baz=196 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.25** | **183** | *e*P | **Pg** | **19 37 34.0** | **-0.9** |
| | baz=169 | | | | | | | | |
| **CHY** | **Chiayi** | **1.25** | **228** | *e*P | **Pn** | **19 37 35.8** | **+0.8** |
| | baz=224 | | | | | | | | |
| CHY | | | | *e*S | **Sn** | **19 37 53.3** | **+1.3** |
| | baz=224 | | | | | | | | |
| **ECS** | **Chishang** | **1.26** | **189** | *e*P | **Pg** | **19 37 34.7** | **-0.5** |
| | baz=186 | | | | | | | | |
| ECS | | | | *e*S | **Sb** | **19 37 51.6** | **0.0** |
| | baz=186 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.28** | **215** | P | **Pb** | **19 37 35.4** | **0.0** |
| **TPUB** | **Ta-pu** | **1.28** | **215** | *i* P | **Pb** | **19 37 35.4** | **0.0** |
| | baz=212 | | | | | | | | |
| TPUB | | | | *e*S | **Sn** | **19 37 52.4** | **-0.3** |
| | baz=212 | | | | | | | | |
| **WSF** | **Szhu** | **1.32** | **238** | *e*P | **Pg** | **19 37 36.3** | **+0.1** |
| | baz=234 | | | | | | | | |
| WSF | | | | *e*S | **Sn** | **19 37 54.7** | **+1.1** |
| | baz=234 | | | | | | | | |
| **STYH** | **Taoyuan** | **1.32** | **207** | *e*P | **Pg** | **19 37 36.0** | **-0.3** |
| | baz=209 | | | | | | | | |
| STYH | | | | S | **Sn** | **19 37 54.1** | **+0.4** |
| | baz=209 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.33** | **215** | P | **Pg** | **19 37 36.5** | **-0.1** |
| | baz=229 | | | | | | | | |
| **EDH** | **Donghe** | **1.38** | **185** | *e*P | **Pn** | **19 37 36.5** | **-0.1** |
| | baz=172 | | | | | | | | |
| EDH | | | | *e*S | **Sb** | **19 37 53.2** | **-1.6** |
| | baz=172 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.38** | **234** | *e*P | **Pg** | **19 37 37.6** | **+0.1** |
| | baz=230 | | | | | | | | |
| WSL | | | | *e*S | **Sn** | **19 37 57.2** | **+2.1** |
| | baz=230 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.38** | **85** | P | **Pb** | **19 37 36.9** | **-0.2** |
| **TWK** | **Hsinying** | **1.38** | **219** | P | **Pg** | **19 37 37.8** | **+0.3** |
| | baz=215 | | | | | | | | |
| TWK | | | | *e*S | **Sn** | **19 37 56.7** | **+1.4** |
| | baz=215 | | | | | | | | |
| **SNST** | **Tainan City** | **1.42** | **218** | P | **Pg** | **19 37 38.7** | **+0.6** |
| | baz=214 | | | | | | | | |
| SNST | | | | *e*S | **Sg** | **19 37 58.5** | **+2.0** |
| | baz=214 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.43** | **216** | *e*P | **Pg** | **19 37 38.8** | **+0.5** |
| | baz=212 | | | | | | | | |
| CHN1 | | | | S | **Sg** | **19 37 58.1** | **+1.3** |
| | baz=212 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.44** | **85** | P | **Pn** | **19 37 37.8** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **1.44** | **85** | P | **Pn** | **19 37 37.1** | **-0.3** |
| | baz=75 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.44** | **85** | P | **Pb** | **19 37 38.2** | **+0.1** |
| **ICHU** | **Yijhu** | **1.45** | **227** | *e*P | **Pg** | **19 37 38.3** | **-0.4** |
| | baz=236 | | | | | | | | |
| ICHU | | | | *e*S | **Sg** | **19 37 59.3** | **+1.8** |
| | baz=236 | | | | | | | | |
| **LONT** | **Longtian** | **1.46** | **191** | *e*P | **Pb** | **19 37 38.3** | **-0.2** |
| | baz=172 | | | | | | | | |
| **SGST** | **Jiashian** | **1.48** | **212** | *i* P | **Pb** | **19 37 38.6** | **-0.2** |
| | baz=201 | | | | | | | | |
| SGST | | | | *i* S | **Sg** | **19 37 59.5** | **+0.8** |
| | baz=201 | | | | | | | | |
| **CHN8** | **Yiju** | **1.50** | **229** | *e*P | **Pg** | **19 37 39.4** | **-0.4** |
| | baz=237 | | | | | | | | |
| CHN8 | | | | *i* S | **Sg** | **19 38 00.7** | **+1.4** |
| | baz=237 | | | | | | | | |
| **SLGT** | **Liugui** | **1.53** | **208** | *e*P | **Pg** | **19 37 40.1** | **-0.3** |
| | baz=209 | | | | | | | | |
| SLGT | | | | *i* S | **Sg** | **19 38 02.4** | **+2.2** |
| | baz=209 | | | | | | | | |
| **TWG** | **Pinlang** | **1.56** | **192** | *e*P | **Pb** | **19 37 40.1** | **0.0** |
| | baz=176 | | | | | | | | |
| TWG | | | | *e*S | **Sn** | **19 37 58.3** | **-1.2** |
| | baz=176 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.56** | **192** | P | **Pb** | **19 37 40.0** | **-0.2** |
| **TWGBT** | **Beinan** | **1.56** | **192** | *e*P | **Pb** | **19 37 39.9** | **-0.2** |
| | baz=173 | | | | | | | | |
| **SCLT** | **Jiali** | **1.63** | **225** | *e*P | **Pg** | **19 37 41.8** | **-0.4** |
| | baz=219 | | | | | | | | |
| SCLT | | | | *e*S | **Sg** | **19 38 05.0** | **+1.6** |
| | baz=219 | | | | | | | | |
| **LDUT** | **Ludao** | **1.67** | **179** | *e*P | **Pb** | **19 37 41.3** | **-0.7** |
| | baz=163 | | | | | | | | |
| **SCST** | **Cishan** | **1.69** | **211** | *i* P | **Pg** | **19 37 43.7** | **+0.3** |
| | baz=206 | | | | | | | | |
| SCST | | | | S | **Sg** | **19 38 07.1** | **+1.6** |
| | baz=206 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.72** | **226** | *e*P | **Pb** | **19 37 42.8** | **-0.1** |
| | baz=234 | | | | | | | | |
| TSCK | | | | *i* S | **Sg** | **19 38 06.8** | **+0.5** |
| | baz=234 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.78** | **212** | *e*P | **Pg** | **19 37 45.3** | **+0.2** |
| | baz=211 | | | | | | | | |
| **TSMG** | **Majia** | **1.79** | **204** | *e*P | **Pg** | **19 37 44.7** | **-0.6** |
| | baz=200 | | | | | | | | |
| TSMG | | | | *e*S | **Sg** | **19 38 09.6** | **+1.1** |
| | baz=200 | | | | | | | | |
| **ECL** | **Taimali** | **1.80** | **194** | *e*P | **Pg** | **19 37 44.8** | **-0.7** |
| | baz=177 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.88** | **203** | *e*P | **Pg** | **19 37 46.5** | **-0.5** |
| | baz=198 | | | | | | | | |
| MASBT | | | | *e*S | **Sg** | **19 38 10.1** | **-1.3** |
| | baz=198 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.90** | **244** | *e*P | **Pn** | **19 37 43.6** | **-0.1** |
| | baz=244 | | | | | | | | |
| **VWUC** | **VWUC** | **1.92** | **290** | *e*P | **Pn** | **19 37 43.3** | **-0.8** |
| | baz=288 | | | | | | | | |
| **WDGT** | **Dungji** | **1.96** | **237** | *e*P | **Pg** | **19 37 47.5** | **-1.0** |
| | baz=237 | | | | | | | | |
| **EAST** | **Anshuo** | **2.03** | **196** | *e*P | **Pb** | **19 37 48.2** | **0.0** |
| | baz=177 | | | | | | | | |
| **TAW** | **Tawu** | **2.04** | **194** | *e*P | **Pg** | **19 37 49.8** | **-0.3** |
| | baz=194 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **2.09** | **90** | P | **Pn** | **19 37 47.0** | **+0.6** |
| IRIF | | | | *e*S | **Sn** | **19 38 13.4** | **+0.7** |
| **SCZT** | **Fangliau** | **2.11** | **201** | *e*P | **Pb** | **19 37 49.5** | **0.0** |
| | baz=215 | | | | | | | | |
| SCZT | | | | *e*S | **Sb** | **19 38 15.1** | **-0.8** |
| | baz=215 | | | | | | | | |
| **VCHM** | **Qimei** | **2.16** | **239** | *e*P | **Pb** | **19 37 49.3** | **-1.1** |
| | baz=234 | | | | | | | | |
| VCHM | | | | *e*S | **Sn** | **19 38 14.4** | **0.0** |
| | baz=234 | | | | | | | | |
| **SLIU** | **Shizi** | **2.20** | **196** | *e*P | **Pb** | **19 37 51.1** | **0.0** |
| | baz=177 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.22** | **289** | *e*P | **Pn** | **19 37 47.3** | **-0.8** |
| | baz=287 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.25** | **323** | *e*P | **Pn** | **19 37 47.0** | **-1.5** |
| | baz=320 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.35** | **92** | *e*P | **Pn** | **19 37 51.5** | **+1.5** |
| JKRS | | | | *e*S | **Sn** | **19 38 21.0** | **+1.9** |
| **TWK1** | **Hengchun** | **2.46** | **194** | *e*P | **Pb** | **19 37 54.4** | **-1.2** |
| | baz=177 | | | | | | | | |
| **TWKBT** | **Hengchun** | **2.46** | **194** | *e*P | **Pn** | **19 37 52.9** | **+1.3** |
| | baz=177 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.47** | **89** | *e*P | **Pn** | **19 37 52.2** | **+0.6** |
| **JISG** | **Ishigakijimahi** | **2.63** | **84** | *e*P | **Pn** | **19 37 54.2** | **+0.4** |
| **KNMB** | **Chin-men Tao** | **2.78** | **273** | *e*P | **Pn** | **19 37 55.2** | **-0.7** |
| | baz=274 | | | | | | | | |
| **MHZQ** | **Yeshan** | **2.79** | **309** | *e*P | **Pn** | **19 37 55.3** | **-0.7** |
| | baz=307 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **2.81** | **337** | *e*P | **Pn** | **19 37 54.7** | **-1.6** |
| | baz=334 | | | | | | | | |

**IDC 03 19:41:22.9±8.1, 40°.48N×104°.14E, h0km, mb3.3/1, mbtmp3.4/4, ML3.1/3, Error ellipse: s-maj=104.8km s-min=33.6km az=134.0, Western Nei Mongol**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **7.53** | **12** | Pn | | Pn | | 19 43 14.0 | 0.0 |
| | 0.5nm,0.3s,baz=191,slow=14,SNR=8.2 | | | | | | | | |
| SONM | | | | Pg | | Pb | | 19 43 39.4 | +5.0 |
| | 1.9nm,0.3s,baz=196,slow=16,SNR=5.4 | | | | | | | | |
| SONM | | | | Sn | | Sn | | 19 44 37.0 | -3.2 |
| | 1.2nm,0.3s,baz=193,slow=28,SNR=1.8 | | | | | | | | |
| SONM | | | | Lg | | Lg | | 19 45 22.7 | |
| | 2.0nm,0.3s,baz=193,slow=30,SNR=3.9 | | | | | | | | |
| | 0.9nm,0.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **17.00** | **299** | P | | Pn | | 19 45 20.6 | -1.4 |
| | 0.1nm,0.3s,baz=102,slow=13,SNR=2.7 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.73** | **322** | P | | Pn | | 19 45 43.2 | 0.0 |
| | 0.1nm,0.3s,baz=116,slow=13,SNR=2.3 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.51** | **308** | P | | P | | 19 46 02.9 | +0.5 |
| | 0.6nm,0.3s,baz=116,slow=10,SNR=5.3 | | | | | | | | |
| | 0.6nm,0.3s | | | | | | | | |

*SJA **03** 19:47:11.9±0.8, 23°.31S×66°.76W, h224km±7km, ML3.5, MW3.6*
*GUC **03** 19:47:13.6±0.5, 23°.37S×66°.91W, h222km±7km, ML3.6*
*IDC **03** 19:47:19.4±9.6, 22°.75S×66°.47W, h246km±65km, mb3.0/1, mbtmp3.8/3, Error ellipse: s-maj=112.8km s-min=39.1km az=25.0*

**ISC 03 19:47:12.7±0.9, 23°.33S±0°.04×66°.85W±0°.04, h220km±8km, n32, σ1°16/53, 7C, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **YJA** | **Yavi** | **1.68** | **47** | *e*P | | **Pn** | | **19 47 50.6** | **+0.2** |
| YJA | | | | *e*S | | **S** | | **19 48 17.9** | **-1.6** |
| **SLA** | **San Lorenzo** | **1.85** | **139** | *e*P | | **Pn** | | **19 47 52.3** | **+0.8** |
| SLA | | | | *e*S | | **S** | | **19 48 21.6** | **-0.2** |
| **SLA** | **San Lorenzo** | **1.85** | **139** | *e*P | | **Pn** | | **19 47 52.3** | **+0.8** |
| **AZAP** | **Zapla** | **1.86** | **119** | *e*P | | **Pn** | | **19 47 51.3** | **-0.4** |
| **LVC** | **Limon Verde** | **2.03** | **290** | *e*P | | **Pn** | | **19 47 54.3** | **+0.8** |
| LVC | | | | *e*S | | **S** | | **19 48 25.5** | **+0.4** |
| **LVC** | **Limon Verde** | **2.03** | **290** | *e*P | | **Pn** | | **19 47 54.0** | **+0.5** |
| **PB15** | **IPOC Station P** | **2.42** | **272** | *e*P | | **Pn** | | **19 47 58.1** | **+0.8** |
| PB15 | | | |

GO02 *i* S **S** **19 48 45.4 -0.2**
**PB05** **IPOC Station P** **3.12 278** *e*P **Pn** **19 48 05.6 +0.5**
PB05 *e*S **S** **19 48 45.9 +0.1**
PB05 IAML 19 48 48.2
comp=Z,51nm,0.4s
**PB05** **IPOC Station P** **3.12 278** ⇑*i*P **Pn** **19 48 05.5 +0.5**
PB05 *i* S **S** **19 48 44.1 -1.7**
**PB04** **IPOC Station P** **3.20 287** *e*P **Pn** **19 48 06.6 +0.6**
PB04 *e*S **S** **19 48 47.5 0.0**
PB04 IAML 19 48 51.6
comp=Z,98nm,0.1s
**PB04** **IPOC Station P** **3.20 287** ⇑*i*P **Pn** **19 48 06.4 +0.4**
PB04 *e*S **S** **19 48 46.3 -1.2**
**PB14** **IPOC Station P** **3.50 248** *e*P **Pn** **19 48 09.8 +0.2**
PB14 *e*S **S** **19 48 52.5 -1.6**
PB14 IAML 19 48 53.6
comp=Z,140nm,0.2s
**PB14** **IPOC Station P** **3.50 248** ⇑*i*P **Pn** **19 48 09.9 +0.3**
PB14 *e*S **S** **19 48 52.3 -1.8**
**TA01** **Diego Aracena** **4.14 311** *e*P **Pn** **19 48 16.4 -0.6**
TA01 *i* S **S** **19 49 04.3 -3.1**
**GO01** **Chusmiza** **4.24 329** *e*P **Pn** **19 48 19.8 +0.9**
**AC01** **Pan de Azucar** **4.42 230** *e*P **Pn** **19 48 19.7 -0.7**
AC01 *e*S **S** **19 49 11.1 -2.6**
AC01 IAML 19 49 11.8
comp=Z,52nm,0.2s
**AC01** **Pan de Azucar** **4.42 230** *e*P **Pn** **19 48 19.8 -0.7**
**CYA** **Choya** **5.18 170** *e*P **Pn** **19 48 31.3 +1.4**
CYA IAML 19 50 16.0
comp=Z,11nm,3.9s
**GO03** **Copiap** **5.24 215** *e*P **Pn** **19 48 29.9 -0.8**
GO03 *e*S **S** **19 49 29.4 -2.9**
**LPAZ** **La Paz** **7.10 350** P **Pn** **19 48 55.6 +0.5**
comp=Z,2.6nm,0.3s,baz=158,slow=5.9,SNR=23
LPAZ S **S** **19 50 13.4 -3.2**
comp=Z,1.2nm,0.5s,baz=320,slow=16,SNR=3.7
**BDFB** **Brasilia** **19.32 70** P **P** **19 51 22.3 +0.6**
comp=Z,1.8nm,0.4s,baz=233,slow=14,SNR=4.3
**TORD** **Torodi Ar. Bea** **76.20 69** P **P** **19 58 36.9 -0.3**
comp=Z,0.4nm,0.7s,baz=249,slow=5.9,SNR=6.2
comp=Z,0.4nm,0.7s
**MKAR** **Makanchi Array** **145.91 39** PKPbc **PKPab** **20 06 28.6 +1.5**
comp=Z,0.2nm,0.7s,baz=293,slow=4.4,SNR=1.6

*JMA **03** 20:05:56.9±0.1,36.9N±0.3×141.3E±0.7,h34km±1km, MD4.0/40,MV3.7/40,E OFF FUKUSHIMA PREF*
*JMA Felt I J1 at E OFF FUKUSHIMA PREF .*
*IDC **03** 20:05:59.6±3.0,36.89N×141.17E,h38km±25km,mb3.5/12, mbtmp3.7/16,ML3.0/4,MS3.7/2,Error ellipse: s-maj=26.5km s-min=15.9km az=85.0*
**ISC 03 20:05:56.4±1.9,36.84N±0.04×141.12E±0.06,h14km±11km, n53,σ1ˢ48/41,mb3.8/12,6D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ONAJ** | **Iwakimizuishiy** | **0.37** | **316** | *i* P | | **Pn** | **20 06 06.6** | **-0.8** |
| ONAJ | | | | S | | **Sn** | **20 06 13.6** | **-0.8** |
| **ONAJ** | **Iwakimizuishiy** | **0.37** | **316** | A | | A | 20 06 06.6 | |
| | comp=E,19nm,0.4s,comp=N,13nm,0.2s | | | | | | | |
| **JHO** | **Hitachi** | **0.50** | **243** | ⇓*i*P | | **Pn** | **20 06 09.3** | **+0.2** |
| JHO | | | | ⇓S | | **Sn** | **20 06 18.5** | **+1.1** |
| **JFFD** | **Fukushimafurud** | **0.52** | **300** | ⇓*i*P | | **Pn** | **20 06 09.1** | **-0.2** |
| JFFD | | | | ⇓S | | **Sn** | **20 06 17.6** | **-0.3** |
| **JFFD** | **Fukushimafurud** | **0.52** | **300** | A | | A | 20 06 09.1 | |
| | comp=E,3.0nm,1.0s,comp=N,3.0nm,1.0s | | | | | | | |
| **JFK** | **Kawauchi** | **0.57** | **340** | *i* P | | **Pn** | **20 06 08.6** | **-1.4** |
| JFK | | | | S | | **Sb** | **20 06 16.8** | **+0.8** |
| **JFK** | **Kawauchi** | **0.57** | **340** | A | | A | 20 06 08.6 | |
| | comp=E,7.0nm,0.4s,comp=N,10.0nm,0.5s | | | | | | | |
| **JOTO** | **OTAMA OYAMA** | **0.96** | **319** | *i* P | | **Pn** | **20 06 16.1** | **+0.6** |
| JOTO | | | | S | | **Sn** | **20 06 29.6** | **+0.7** |
| **JOTO** | **OTAMA OYAMA** | **0.96** | **319** | A | | A | 20 06 16.1 | |
| | comp=E,7.0nm,1.8s,comp=N,13nm,0.4s | | | | | | | |
| **JYT** | **Yasato** | **0.96** | **231** | P | | **Pn** | **20 06 16.0** | **+0.6** |
| **JSB** | **Shiboa** | **0.97** | **278** | P | | **Pn** | **20 06 17.7** | **+2.1** |
| JSB | | | | S | | **Sn** | **20 06 32.8** | **+3.5** |
| **JSB** | **Shiboa** | **0.97** | **278** | A | | A | 20 06 17.7 | |
| | comp=E,6.0nm,1.2s,comp=N,4.0nm,4.4s | | | | | | | |
| **JIHU** | **Itakohorinouch** | **0.99** | **209** | A | | A | 20 06 16.4 | |
| | comp=E,8.0nm,4.0s,comp=N,8.0nm,3.2s | | | | | | | |
| **JMM** | **Marumori** | **1.06** | **346** | P | | **Pb** | **20 06 15.5** | **-1.0** |
| **JMM** | **Marumori** | **1.06** | **346** | *i* P | | **Pb** | **20 06 15.6** | **-0.9** |
| **JFY** | **Yanaizu** | **1.27** | **297** | ⇓*i*P | | **Pg** | **20 06 21.5** | **+0.7** |
| JFY | | | | ⇓S | | **Sg** | **20 06 39.3** | **+1.9** |
| **JYAR** | **Yonezawaarcadi** | **1.33** | **324** | A | | A | 20 06 20.6 | |
| | comp=E,6.0nm,0.7s,comp=N,7.0nm,1.0s | | | | | | | |
| **JOU** | **Okura** | **1.57** | **347** | A | | A | 20 06 23.4 | |
| | comp=E,2.0nm,1.7s,comp=N,2.0nm,1.6s | | | | | | | |
| **JOFO** | **Osakifurukawao** | **1.77** | **355** | A | | A | 20 06 25.9 | |
| | comp=E,10.0nm,1.4s,comp=N,5.0nm,1.1s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.36** | **264** | Pn | | **Pb** | **20 06 37.6** | **-1.0** |
| | comp=N,0.5nm,0.3s,baz=88,slow=15,SNR=20 | | | | | | | |
| MJAR | | | | Sn | | **Sg** | **20 07 09.7** | **-2.6** |
| | comp=N,1.5nm,0.3s,baz=87,slow=27,SNR=7.2 | | | | | | | |
| | comp=N,5.4nm,0.6s | | | | | | | |
| **MAJO** | **Matsushiro** | **2.36** | **264** | P | | **Pb** | **20 06 38.0** | **-0.7** |
| **JGF** | **Kuroka** | **3.29** | **249** | P | | **Pb** | **20 06 52.8** | **-1.6** |
| **INU** | **Inuyama** | **3.64** | **247** | P | | **Pb** | **20 06 58.2** | **-2.3** |
| **JHJ** | **Hachijo jima 2** | **3.87** | **197** | Pn | | **Pn** | **20 06 56.5** | **+1.1** |
| | comp=N,4.8nm,0.3s,baz=62,slon=18,SNR=11 | | | | | | | |
| JHJ | | | | Sn | | **Sn** | **20 07 41.7** | **+1.2** |
| | comp=N,6.9nm,0.3s,baz=58,slow=21,SNR=1.9 | | | | | | | |
| | comp=N,17nm,0.4s | | | | | | | |
| **JTM** | **Tenmabayashi** | **3.95** | **359** | P | | **Pn** | **20 06 57.2** | **+0.8** |
| **ERM** | **Erimo** | **5.41** | **16** | P | | **Pn** | **20 07 19.0** | **+2.5** |
| **JEM** | **Erimo** | **5.41** | **16** | P | | **Pn** | **20 07 20.8** | **+4.3** |
| **ASAJ** | **Asahikawa** | **7.36** | **8** | Pn | | **Pn** | **20 07 43.0** | **-0.3** |
| | comp=N,0.6nm,0.3s,baz=214,slow=5.3,SNR=7.8 | | | | | | | |
| | comp=N,4.3nm,0.8s | | | | | | | |
| **JCJ** | **Chichijima** | **9.75** | **174** | Pn | | Pn | 20 08 10.3 | -5.9 |
| | comp=N,2.0nm,0.3s,baz=294,slow=20,SNR=1.6 | | | | | | | |
| JCJ | | | | Sn | | Sn | 20 09 53.8 | -12 |
| | comp=N,2.2nm,0.3s,baz=307,slow=15,SNR=1.7 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.12** | **319** | Pn | | Pn | 20 08 25.3 | +4.2 |
| | comp=N,0.1nm,0.3s,baz=123,slow=15,SNR=2.5 | | | | | | | |
| **KSRS** | **Korea Array** | **10.56** | **277** | Pn | | **Pn** | **20 08 27.7** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=88,slow=14,SNR=4.6 | | | | | | | |
| | comp=N,0.5nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **27.70** | **304** | P | | **P** | **20 11 43.1** | **-1.0** |
| | comp=N,0.4nm,0.4s,baz=120,slow=11,SNR=3.6 | | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.25** | **120** | T | | T | 20 41 12.2 | |
| | baz=312,slow=75 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.26** | **120** | T | | T | 20 41 13.8 | |
| | baz=312,slow=75 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.27** | **120** | T | | T | 20 41 14.5 | |
| | baz=312,slow=75 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.95** | **122** | T | | T | 20 42 05.8 | |
| | baz=315,slow=76,SNR=132 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.95** | **122** | T | | T | 20 42 04.5 | |
| | baz=315,slow=76,SNR=95 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.96** | **122** | T | | T | 20 42 07.4 | |
| | baz=315,slow=76,SNR=75 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.88** | **313** | P | | **P** | **20 13 45.1** | **-0.7** |
| | comp=N,1.0nm,0.6s,baz=92,slow=7.8,SNR=5.5 | | | | | | | |
| | comp=N,1.0nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.03** | **302** | P | | **P** | **20 14 03.9** | **+0.5** |
| | comp=N,0.8nm,0.6s,baz=87,slow=9.9,SNR=12 | | | | | | | |
| | comp=N,0.8nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.94** | **308** | P | | **P** | **20 14 18.8** | **+0.3** |
| | comp=N,0.7nm,0.5s,baz=83,slow=8.7,SNR=5.6 | | | | | | | |
| | comp=N,0.7nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **49.79** | **32** | P | | **P** | **20 14 48.0** | **-0.2** |
| | comp=N,0.7nm,0.7s,baz=267,slow=7.1,SNR=8.0 | | | | | | | |
| | comp=N,0.7nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.83** | **188** | P | | **P** | **20 15 40.5** | **+0.1** |
| | comp=N,1.4nm,1.1s,baz=5.6,slow=7.4,SNR=15 | | | | | | | |
| WRA | | | | LR | | LR | 20 39 07.3 | |
| | comp=N,173nm,19.7s,baz=36,slow=35 | | | | | | | |
| | comp=N,1.4nm,1.1s | | | | | | | |
| **ASAR** | **Alice Springs** | **60.56** | **188** | P | | **P** | **20 16 06.7** | **+0.3** |
| | comp=N,0.4nm,0.8s,baz=14,slow=12,SNR=4.2 | | | | | | | |
| | comp=N,0.4nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.10** | **339** | P | | **P** | **20 16 30.1** | **+0.6** |
| | comp=N,0.9nm,0.7s,baz=52,slow=5.8,SNR=1.4 | | | | | | | |
| | comp=N,0.9nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **68.88** | **332** | P | | **P** | **20 16 59.5** | **-0.6** |
| | comp=N,1.4nm,1.0s,baz=72,slow=4.5,SNR=1.1 | | | | | | | |
| | comp=N,1.4nm,1.0s | | | | | | | |
| **HFS** | **Hagfors** | **74.17** | **336** | P | | **P** | **20 17 31.5** | **-0.5** |
| | comp=N,1.0nm,0.8s,baz=76,slow=6.1,SNR=1.5 | | | | | | | |
| | comp=N,1.0nm,0.8s | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.28** | **337** | P | | **P** | **20 17 30.7** | **-2.1** |
| | comp=N,0.3nm,0.6s,baz=42,slow=5.9,SNR=3.7 | | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.31** | **322** | P | | **P** | **20 17 32.9** | **-0.2** |
| | comp=N,0.5nm,0.4s,baz=49,slow=6.1,SNR=2.6 | | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **76.10** | **5** | LR | | LR | 20 52 49.4 | |
| | comp=N,19nm,19.1s,baz=322,slow=37 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.23** | **96** | T | | T | 23 09 58.8 | |
| | baz=291,slow=76,SNR=27 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.25** | **96** | T | | T | 23 09 59.9 | |
| | baz=291,slow=76,SNR=24 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.25** | **96** | T | | T | 23 10 00.1 | |
| | baz=291,slow=76,SNR=24 | | | | | | | |

*IDC **03** 20:26:58.4±0.7,3.24S×131.12E,h0km,mb4.0/13, mbtmp4.1/15,ML3.8/2,MS3.5/4,Error ellipse: s-maj=34.0km s-min=14.5km az=78.0*
*NEIC **03** 20:27:03.7±1.7,3.50S±0.06×131.01E±0.07,h38km±9km, mb4.4/23,Error ellipse: s-maj=10.0km s-min=9.4km az=83.0*
*DJA **03** 20:27:04.0±0.2,3.2S×13.1E±°,h42km±10km,M4.3/13, mB4.7/1,mb4.5/13,MLv4.2/11,Mw(mB)3.9/1*
**ISC 03 20:27:03.4±0.4,3.41S±0.04×131.01E±0.05,h35km,n91, σ2ˢ14/92,mb4.3/23,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **1.33** | **68** | P | | **Pn** | **20 27 26.0** | **+0.6** |
| **FAKI** | **Fak Fak** | **1.33** | **68** | | | **Pn** | **20 27 26.3** | **+0.9** |
| **FAKI** | **Fak Fak** | **1.33** | **68** | P | | **Pn** | **20 27 26.3** | **+0.9** |
| **MSAI** | **Masohi** | **2.08** | **272** | P | | **Pn** | **20 27 36.2** | **+0.4** |
| **SWI** | **Sorong** | **2.54** | **6** | P | | **Pn** | **20 27 40.5** | **-1.7** |
| SWI | | | | S | | **Sn** | **20 28 09.4** | **-2.5** |
| **KMPI** | **Kaimana, Papua** | **2.70** | **95** | P | | **Pn** | **20 27 46.1** | **+1.8** |
| **NLAI** | **Namlea** | **3.91** | **272** | P | | **Pn** | **20 28 01.9** | **+0.9** |
| NLAI | | | | S | | **Sn** | **20 28 47.5** | **+1.8** |
| **LBMI** | **Labuha** | **4.46** | **308** | P | | **Pn** | **20 28 07.8** | **-0.8** |
| **SAUI** | **Saumlaki** | **4.55** | **176** | Pn | | **Pn** | **20 28 08.3** | **-1.4** |
| **SAUI** | **Saumlaki** | **4.55** | **176** | P | | **Pn** | **20 28 12.0** | **+2.2** |
| SAUI | | | | S | | **Sn** | **20 29 06.9** | **+5.4** |
| **SANI** | **Sanana** | **5.20** | **285** | P | | **Pn** | **20 28 17.6** | **-1.1** |
| **SANI** | **Sanana** | **5.20** | **285** | P | | **Pn** | **20 28 16.5** | **-2.2** |
| | 57nm,0.7s,720nm0.2nm | | | | | | | |
| **TNTI** | **Ternate** | **5.53** | **319** | Pn | | **Pn** | **20 28 23.5** | **+0.3** |
| **LUWI** | **Luwuk** | **8.56** | **286** | Pn | | **Pn** | **20 29 05.1** | **+0.1** |
| **GTOI** | **Gorontalo** | **8.95** | **297** | P | | **Pn** | **20 29 12.0** | **+1.7** |
| | 12nm,0.8s | | | | | | | |
| **DRS** | **Darwin Rock St** | **8.96** | **181** | P | | **Pn** | **20 29 10.2** | **-0.2** |
| **SOEI** | **Soe** | **9.20** | **226** | Pn | | **Pn** | **20 29 13.3** | **-0.5** |
| **SOEI** | **Soe** | **9.20** | **226** | P | | **Pn** | **20 29 14.9** | **+1.1** |
| | 77nm,1.6s | | | | | | | |
| **KDU** | **Kakadu** | **9.33** | **171** | P | | **Pn** | **20 29 15.1** | **-0.3** |
| **MTN** | **Manton Dam** | **9.37** | **179** | P | | **Pn** | **20 29 16.3** | **+0.3** |
| **MTN** | **Manton Dam** | **9.37** | **179** | Pn | | **Pn** | **20 29 15.6** | **-0.5** |
| **JAY** | **Jayapura** | **9.72** | **85** | P | | **Pn** | **20 29 23.1** | **+2.3** |
| | 27nm,1.2s | | | | | | | |
| **BATI** | **Baumata** | **9.94** | **227** | P | | **Pn** | **20 29 26.9** | **+3.1** |
| **BNSI** | **Bone** | **10.93** | **264** | P | | **Pn** | **20 29 40.3** | **+3.0** |
| **BKSI** | **Bulukumba** | **11.02** | **260** | P | | **Pn** | **20 29 39.3** | **+0.6** |
| | 18nm,0.8s | | | | | | | |
| **KAPI** | **Kappang** | **11.34** | **262** | Pn | | **Pn** | **20 29 42.6** | **-0.4** |
| | 0.7nm,0.3s,baz=117,slow=18,SNR=1.3 | | | | | | | |
| KAPI | | | | LR | | LR | 20 35 14.0 | |
| | comp=Z,274nm,21.6s,baz=70,slow=43 | | | | | | | |
| | 3.6nm,0.3s | | | | | | | |
| **DAV** | **Davao City (W)** | **11.74** | **332** | LR | | LR | 20 35 00.1 | |
| | comp=Z,216nm,19.9s,baz=130,slow=41 | | | | | | | |
| **KNRA** | **Kununurra** | **12.39** | **190** | Pn | | **Pn** | **20 29 53.8** | **-3.5** |
| KNRA | | | | | | **Sn** | **20 32 06.7** | **-7.5** |
| **FITZ** | **Fitzroy Crossi** | **15.52** | **199** | P | | **Pn** | **20 30 37.1** | **-2.6** |
| **FITZ** | **Fitzroy Crossi** | **15.52** | **199** | Pn | | **Pn** | **20 30 36.4** | **-3.3** |
| **COEN** | **Coen** | **15.94** | **132** | P | | **Pn** | **20 30 44.8** | **-0.3** |
| **COEN** | **Coen** | **15.94** | **132** | Pn | | **Pn** | **20 30 41.9** | **-3.2** |
| **WB0** | **Warramunga Arr** | **16.59** | **169** | P | | **Pn** | **20 30 48.8** | **-4.6** |
| WB0 | | | | IAmb | | IAmb | 20 31 11.3 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.75** | **169** | P | | **Pn** | **20 30 51.9** | **-3.5** |
| **WRA** | **Warramunga Arr** | **16.75** | **169** | Pn | | **Pn** | **20 30 55.3** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=346,slow=13,SNR=19 | | | | | | | |
| WRA | | | | Sn | | Sn | 20 33 50.6 | -10 |
| | comp=Z,0.5nm,0.3s,baz=356,slow=23,SNR=6.7 | | | | | | | |
| | comp=Z,6.7nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **16.75** | **169** | P | | **Pn** | **20 30 52.4** | **-3.0** |
| WB2 | | | | IAmb | | IAmb | 20 31 02.9 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **WR0** | **Warramunga Arr** | **16.80** | **168** | P | | **Pn** | **20 30 53.3** | **-2.8** |
| **QIS** | **Mount Isa** | **18.99** | **105** | P | | **Pn** | **20 31 23.3** | **+0.3** |
| **SBUM** | **Sibu** | **19.67** | **287** | P | | **Pn** | **20 31 30.6** | **-0.5** |
| **AS31** | **Alice Springs** | **20.33** | **172** | Pn | | **P** | **20 31 37.9** | **+1.2** |
| AS31 | | | | IAmb | | IAmb | 20 31 39.5 | |
| | comp=Z,8.4nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **20.33** | **172** | P | | **P** | **20 31 38.2** | **+1.5** |
| | comp=Z,17nm,0.6s,baz=350,slow=11,SNR=284 | | | | | | | |
| ASAR | | | | S | | **S** | **20 35 16.3** | **-6.5** |
| | comp=Z,1.9nm,0.8s,baz=351,slow=26,SNR=5.8 | | | | | | | |
| | comp=Z,17nm,0.6s | | | | | | | |
| **AS01** | **Alice Springs** | **20.33** | **172** | P | | Pn | 20 31 38.8 | -0.2 |
| **MBWA** | **Marble Bar** | **20.78** | **211** | P | | **P** | **20 31 40.2** | **-1.3** |
| **MBWA** | **Marble Bar** | **20.78** | **211** | P | | **P** | **20 31 39.4** | **-2.2** |
| MBWA | | | | IAmb | | IAmb | 20 31 56.0 | |
| | comp=Z,61nm,1.4s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.06** | **210** | P | | **P** | **20 31 44.0** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **21.06** | **210** | P | | **P** | **20 31 41.3** | **-3.3** |
| PSA00 | | | | IAmb | | IAmb | 20 32 14.1 | |
| | comp=Z,59nm,1.5s | | | | | | | |
| **KSM** | **Kuching** | **21.26** | **283** | P | | **P** | **20 31 46.2** | **-0.6** |
| KSM | | | | IAmb | | IAmb | 20 32 03.9 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **WRKA** | **Warakurna** | **21.66** | **187** | P | | **P** | **20 31 51.2** | **+0.2** |
| **CTAO** | **Charters Tower** | **22.26** | **139** | P | | **P** | **20 31 56.2** | **-1.3** |
| CTAO | | | | IAmb | | IAmb | 20 32 19.0 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **OOD** | **Oodnadatta** | **24.65** | **170** | P | | **P** | **20 32 23.5** | **+2.6** |
| **GIRL** | **Giralia** | **25.10** | **219** | P | | **P** | **20 32 23.9** | **-1.1** |
| **INKA** | **Innaminka** | **25.92** | **160** | P | | **P** | **20 32 34.5** | **+2.2** |
| **MEEK** | **Meekatharra** | **25.97** | **206** | P | | **P** | **20 32 32.6** | **-0.3** |
| **MULG** | **Mulgathing** | **26.88** | **174** | P | | **P** | **20 32 42.4** | **+1.4** |
| **FORT** | **Forrest** | **27.36** | **186** | P | | **P** | **20 32 46.1** | **+0.7** |
| | comp=Z,28nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **27.36** | **186** | P | | **P** | **20 32 43.0** | **-2.4** |
| **RK1H** | **Rockhampton Ha** | **27.37** | **138** | P | | **P** | **20 32 46.4** | **+0.9** |
| **LCRK** | **Leigh Creek** | **27.74** | **167** | P | | **P** | **20 32 51.8** | **+3.1** |
| **KMBL** | **Kambalda** | **29.11** | **196** | P | | **P** | **20 33 01.2** | **+0.2** |
| **MORW** | **Morwell** | **29.21** | **208** | P | | **P** | **20 32 59.8** | **-2.1** |
| **BBOO** | **Buckleboo** | **29.63** | **171** | P | | **P** | **20 33 04.0** | **-1.5** |
| **STKA** | **Stephens Creek** | **30.01** | **162** | P | | **P** | **20 33 11.8** | **+2.8** |
| **STKA** | **Stephens Creek** | **30.01** | **162** | P | | **P** | **20 33 07.6** | **-1.4** |
| **STKA** | **Stephens Creek** | **30.01** | **162** | P | | **P** | **20 33 09.9** | **+0.9** |
| | comp=Z,2.9nm,0.8s,baz=339,slow=5.5,SNR=3.9 | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **KLBR** | **Kellerberrin** | **30.68** | **203** | P | | **P** | **20 33 15.3** | **+0.4** |
| **KULM** | **Kulim** | **31.54** | **286** | P | | **P** | **20 33 25.1** | **+2.5** |
| **JNU** | **Nakatsue** | **36.34** | **360** | LR | | LR | 20 51 08.9 | |
| | comp=Z,44nm,18.2s,baz=132,slow=40 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.34** | **306** | P | | **P** | **20 34 22.9** | **+1.7** |
| **CMAR** | **Chiang Mai Arr** | **38.34** | **306** | P | | **P** | **20 34 21.0** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=123,slow=6.6,SNR=2.1 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **40.31** | **9** | P | | **P** | **20 34 34.3** | **-3.1** |
| | comp=Z,2.3nm,0.8s,baz=192,slow=9.1,SNR=5.2 | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **40.76** | **356** | P | | **P** | **20 34 39.8** | **-1.3** |
| | comp=Z,1.2nm,0.7s,baz=177,slow=8.8,SNR=7.6 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **41.05** | **318** | P | | **P** | **20 34 47.0** | **+3.1** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.40** | **1** | P | | **P** | **20 35 34.0** | **-0.3** |
| | comp=Z,2.9nm,0.7s,baz=172,slow=6.6,SNR=10.0 | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **47.50** | **340** | *e*P | | **P** | **20 35 38.4** | **+3.1** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,85nm,4.6s | | | | | | | |
| **PALK** | **Pallekele** | **51.32** | **282** | LR | | LR | 21 00 47.8 | |
| | comp=Z,50nm,18.3s,baz=194,slow=40 | | | | | | | |
| **GTA** | **Gaotai** | **51.38** | **329** | *e*P | | **P** | **20 36 05.3** | **+0.4** |
| GTA | | | | sP | | sP | 20 36 20.2 | +0.9 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **HEH** | **HeiHe** | **53.54** | **357** | *e*P | | **P** | **20 36 20.6** | **+0.1** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **55.41** | **340** | P | | **P** | **20 36 33.8** | **-0.6** |
| | comp=Z,1.0nm,1.1s,baz=167,slow=7.9,SNR=4.4 | | | | | | | |
| | comp=Z,1.0nm,1.1s | | | | | | | |
| **YAK** | **Yakutsk** | **65.27** | **359** | P | | **P** | **20 37 41.2** | **-0.1** |
| **MK31** | **Makanchi Array** | **65.83** | **326** | P | | **P** | **20 37 45.1** | **-0.2** |
| MK31 | | | | IAmb | | IAmb | 20 38 02.9 | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.83** | **326** | P | | **P** | **20 37 45.3** | **+0.1** |
| **MKAR** | **Makanchi Array** | **65.83** | **326** | P | | **P** | **20 37 45.8** | **+0.5** |
| | comp=Z,1.3nm,0.8s,baz=122,slow=8.1,SNR=10 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **66.01** | **325** | P | | **P** | **20 37 46.4** | **0.0** |
| MAKZ | | | | IAmb | | IAmb | 20 38 04.0 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.85** | **333** | P | | **P** | **20 38 03.4** | **-0.8** |
| | comp=Z,1.2nm,0.8s,baz=130,slow=10,SNR=5.9 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.02** | **327** | P | | **P** | **20 38 11.6** | **+0.1** |
| | comp=Z,1.2nm,0.6s,baz=123,slow=6.1,SNR=9.2 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **75.67** | **327** | P | | **P** | **20 38 44.4** | **-0.7** |
| BRVK | | | | IAmb | | IAmb | 20 38 46.9 | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **VNDA** | **Vanda** | **75.87** | **173** | P | | **P** | **20 38 47.5** | **+1.7** |
| | comp=Z,1.5nm,0.8s,baz=325,slow=6.3,SNR=3.8 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **86.54** | **180** | P | | **P** | **20 39 43.8** | **+1.0** |
| | comp=Z,1.8nm,0.8s,baz=305,slow=2.1,SNR=9.0 | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **89.69** | **25** | P | | **P** | **20 39 56.0** | **-1.6** |
| | comp=Z,0.3nm,0.8s,baz=259,slow=5.0,SNR=2.6 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.01** | **284** | PKP | | **PKPdf** | **20 46 08.7** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=90,slow=2.0,SNR=2.6 | | | | | | | |
| **LPAZ** | **La Paz** | **152.77** | **136** | PKPbc | | **PKiKP** | **20 47 01.4** | **+2.7** |
| | comp=Z,0.8nm,0.4s,baz=180,slow=2.9,SNR=3.7 | | | | | | | |

**ROM 03 20:27:21.1±0.0,42.872N±0.002×12.906E±0.003, h11km,ML1.2/20,2C-2D,Error ellipse: s-maj=0.2km s-min=0.2km az=102.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CESI** | **CESI - Serrava** | **0.13** | **359** | P | | Pg | 20 27 24.8 | +0.5 |
| CESI | | | | S | | Sg | 20 27 27.5 | +0.8 |
| CESI | | | | AML | | AML | | |
| | comp=N,494μm,0.5s | | | | | | | |
| CESI | | | | AML | | AML | | |
| | comp=E,213μm,0.3s | | | | | | | |
| **NRCA** | **Norcia** | **0.16** | **104** | P | | Pg | 20 27 25.2 | +0.5 |
| NRCA | | | | S | | Sg | 20 27 28.2 | +0.9 |
| NRCA | | | | AML | | AML | | |
| | comp=E,244μm,0.7s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,170μm,0.1s | | | | | | | |
| **GAVE** | **Gavelli** | **0.18** | **183** | ⇑P | | Pg | 20 27 25.8 | +0.7 |
| GAVE | | | | S | | Sg | 20 27 28.9 | +1.1 |
| GAVE | | | | AML | | AML | | |
| | comp=N,294μm,0.2s | | | | | | | |
| GAVE | | | | AML | | AML | | |
| | comp=E,386μm,0.3s | | | | | | | |
| **MC2** | **Monte Cornacci** | **0.21** | **79** | ⇑P | | Pg | 20 27 26.3 | +0.6 |
| MC2 | | | | S | | Sg | 20 27 30.1 | +1.2 |
| **ASSB** | **Assisi San Ben** | **0.25** | **313** | ⇓P | | Pg | 20 27 26.7 | +0.4 |
| ASSB | | | | S | | Sg | 20 27 30.8 | +1.1 |
| ASSB | | | | AML | | AML | | |
| | comp=E,85μm,0.6s | | | | | | | |
| ASSB | | | | AML | | AML | | |
| | comp=N,78μm,0.9s | | | | | | | |
| **CSP1** | **Cessapalombo** | **0.31** | **45** | P | | Pg | 20 27 27.9 | +0.4 |
| CSP1 | | | | S | | Sb | 20 27 32.9 | -1.1 |
| CSP1 | | | | AML | | AML | | |
| | comp=E,42μm,0.6s | | | | | | | |
| CSP1 | | | | AML | | AML | | |
| | comp=N,85μm,1.2s | | | | | | | |
| CSP1 | | | | AML | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=N,2015µm,0.2s | | | | | | | | |
| MTRA | | | | | AML | AML | | | |
| | comp=N,1860µm,0.2s | | | | | | | | |
| MTRA | | | | | AML | AML | | | |
| | comp=N,2015µm,0.2s | | | | | | | | |
| MTRA | | | | | AML | AML | | | |
| | comp=E,1820µm,0.2s | | | | | | | | |
| MTRA | | | | | AML | AML | | | |
| | comp=E,1690µm,0.2s | | | | | | | | |
| **FAGN** | **Fagnano** | **0.30** | **138** | | P | Pg | 20 28 20.0 | +0.4 | |
| FAGN | | | | | AML | AML | | | |
| | comp=E,466µm,0.4s | | | | | | | | |
| FAGN | | | | | AML | AML | | | |
| | comp=N,482µm,0.3s | | | | | | | | |
| FAGN | | | | | AML | AML | | | |
| | comp=E,466µm,1.6s | | | | | | | | |
| **GAVE** | **Gavelli** | **0.37** | **304** | | P | Pg | 20 28 21.0 | +0.2 | |
| GAVE | | | | | S | Sg | 20 28 26.5 | +0.7 | |
| GAVE | | | | | AML | AML | | | |
| | comp=E,198µm,0.2s | | | | | | | | |
| GAVE | | | | | AML | AML | | | |
| | comp=N,223µm,0.2s | | | | | | | | |
| GAVE | | | | | AML | AML | | | |
| | comp=N,224µm,0.2s | | | | | | | | |
| GAVE | | | | | AML | AML | | | |
| | comp=E,198µm,1.8s | | | | | | | | |
| **NRCA** | **Norcia** | **0.37** | **337** | | P | Pg | 20 28 21.0 | +0.2 | |
| NRCA | | | | | S | Sg | 20 28 26.6 | +0.7 | |
| NRCA | | | | | AML | AML | | | |
| | comp=E,516µm,0.5s | | | | | | | | |
| NRCA | | | | | AML | AML | | | |
| | comp=N,498µm,0.1s | | | | | | | | |
| NRCA | | | | | AML | AML | | | |
| | comp=E,516µm,1.5s | | | | | | | | |
| NRCA | | | | | AML | AML | | | |
| | comp=N,498µm,1.9s | | | | | | | | |
| **MMO1** | **Montemonaco** | **0.41** | **2** | | P | Pg | 20 28 21.8 | +0.2 | |
| MMO1 | | | | | S | Sb | 20 28 28.1 | -0.8 | |
| **ARRO** | **Arrone** | **0.41** | **283** | | P | Pg | 20 28 21.6 | +0.1 | |
| ARRO | | | | | AML | AML | | | |
| | comp=E,133µm,1.1s | | | | | | | | |
| ARRO | | | | | AML | AML | | | |
| | comp=N,156µm,0.2s | | | | | | | | |
| ARRO | | | | | AML | AML | | | |
| | comp=E,133µm,0.9s | | | | | | | | |
| **MC2** | **Monte Cornacci** | **0.43** | **348** | | P | Pg | 20 28 22.2 | +0.2 | |
| MC2 | | | | | S | Sb | 20 28 29.1 | -0.5 | |
| **FDMO** | **Fiordimonte** | **0.57** | **343** | | P | Pg | 20 28 24.4 | -0.1 | |
| FDMO | | | | | S | Sb | 20 28 33.3 | -0.2 | |
| FDMO | | | | | AML | AML | | | |
| | comp=N,109µm,0.2s | | | | | | | | |
| FDMO | | | | | AML | AML | | | |
| | comp=E,80µm,0.8s | | | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.57** | **2** | | P | Pg | 20 28 25.0 | +0.4 | |
| GUMA | | | | | AML | AML | | | |
| | comp=N,949µm,1.6s | | | | | | | | |
| GUMA | | | | | AML | AML | | | |
| | comp=E,452µm,0.3s | | | | | | | | |
| GUMA | | | | | AML | AML | | | |
| | comp=N,398µm,0.4s | | | | | | | | |
| GUMA | | | | | AML | AML | | | |
| | comp=E,296µm,0.3s | | | | | | | | |
| GUMA | | | | | AML | AML | | | |
| | comp=N,949µm,0.4s | | | | | | | | |
| **CESI** | **CESI - Serrava** | **0.59** | **330** | | P | Pg | 20 28 24.9 | -0.1 | |
| CESI | | | | | AML | AML | | | |
| | comp=E,74µm,1.0s | | | | | | | | |
| CESI | | | | | AML | AML | | | |
| | comp=N,128µm,0.2s | | | | | | | | |
| CESI | | | | | AML | AML | | | |
| | comp=E,74µm,1.0s | | | | | | | | |
| **CSP1** | **Cessapalombo** | **0.61** | **353** | | P | Pg | 20 28 25.2 | -0.1 | |
| CSP1 | | | | | AML | AML | | | |
| | comp=E,87µm,0.4s | | | | | | | | |
| CSP1 | | | | | AML | AML | | | |
| | comp=N,79µm,0.8s | | | | | | | | |

*BEO **03** 20:37:28.2±0.6, 40°.71N×20°.49E, h4km±3km, ML2.3/8*
*SKO **03** 20:37:29.5, 40°.93N×20°.64E, h18km, ML2.3*
*TIR **03** 20:37:29.0, 40°.98N×20°.64E, h19km±1km, Ml2.5*

**ISC 03 20:37:29.4±1.1, 40°.93N±0°.02×20°.58E±0°.03, h6km±10km, n35, σ1s39/55, 2C-2D, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **OHR** | **Ohrid** | **0.24** | **42** | *i* Pg | **Pg** | **20** | **37** | **34.6** | **+0.4** |
| OHR | | | | *i* Sg | **Sg** | **20** | **37** | **38.8** | **+1.3** |
| OHR | | | | *e*Lg | Lg | 20 | 37 | 39.0 | |
| | comp=E,1µm,0.6s | | | | | | | | |
| OHR | | | | *e*Lg | Lg | 20 | 37 | 39.7 | |
| | comp=N,992nm,0.6s | | | | | | | | |
| **KBN** | **Korca** | **0.34** | **153** | P | **Pb** | **20** | **37** | **36.6** | **-1.3** |
| | baz=162 | | | | | | | | |
| KBN | | | | S | **Sb** | **20** | **37** | **43.2** | **-0.5** |
| | baz=162 | | | | | | | | |
| KBN | | | | AMP | | | | | |
| | comp=E,1.8nm,0.2s,baz=162 | | | | | | | | |
| **FNA** | **Florina** | **0.62** | **103** | P | **Pb** | **20** | **37** | **41.1** | **-1.5** |
| | baz=108 | | | | | | | | |
| FNA | | | | S | **Sb** | **20** | **37** | **50.5** | **-1.2** |
| | baz=108 | | | | | | | | |
| FNA | | | | AMP | | | | | |
| | comp=E,1.8nm,0.2s,baz=108 | | | | | | | | |
| **FNA** | **Florina** | **0.62** | **103** | *e*Pg | **Pb** | **20** | **37** | **41.1** | **-1.5** |
| FNA | | | | *e*Sg | **Sb** | **20** | **37** | **51.2** | **-0.4** |
| **FNA** | **Florina** | **0.62** | **103** | *i* Pg | **Pb** | **20** | **37** | **41.2** | **-1.5** |
| FNA | | | | *i* Sg | **Sb** | **20** | **37** | **51.3** | **-0.4** |
| **TIR** | **Tirane** | **0.68** | **308** | P | **Pg** | **20** | **37** | **41.9** | **-0.7** |
| | baz=303 | | | | | | | | |
| TIR | | | | S | **Sb** | **20** | **37** | **54.1** | **+0.6** |
| | baz=303 | | | | | | | | |
| **TIR** | **Tirane** | **0.68** | **308** | *e*Pg | **Pg** | **20** | **37** | **41.8** | **-0.7** |
| TIR | | | | *e*Sg | **Sg** | **20** | **37** | **53.3** | **+1.8** |
| **SRN** | **Sarande** | **1.14** | **203** | P | **Pn** | **20** | **37** | **51.7** | **-0.1** |
| | baz=205 | | | | | | | | |
| SRN | | | | S | **Sn** | **20** | **38** | **09.4** | **+1.7** |
| | baz=205 | | | | | | | | |
| **PUK** | **Puka** | **1.23** | **335** | P | **Pg** | **20** | **37** | **52.0** | **-1.0** |
| | baz=333 | | | | | | | | |
| PUK | | | | S | **Sn** | **20** | **38** | **10.7** | **+0.6** |
| | baz=333 | | | | | | | | |
| **BCI** | **Bajram Curri** | **1.49** | **345** | P | **Pn** | **20** | **37** | **56.6** | **-0.1** |
| | baz=344 | | | | | | | | |
| BCI | | | | S | **Sn** | **20** | **38** | **16.8** | **+0.4** |
| | baz=344 | | | | | | | | |
| **VAY** | **Valandovo** | **1.55** | **75** | *i* Pg | **Pn** | **20** | **37** | **57.0** | **-0.5** |
| VAY | | | | *i* Sg | **Sg** | **20** | **38** | **19.2** | **-0.1** |
| VAY | | | | *e*Lg | Lg | 20 | 38 | 22.3 | |
| | comp=E,47nm,0.8s | | | | | | | | |
| VAY | | | | *e*Lg | Lg | 20 | 38 | 24.1 | |
| | comp=N,34nm,0.8s | | | | | | | | |
| **DRME** | **Dracevica, Mon** | **1.64** | **321** | *e*Pn | **Pn** | **20** | **37** | **58.4** | **-0.3** |
| **LIT** | **Litokhoron** | **1.67** | **119** | *i* Pn | **Pb** | **20** | **37** | **59.1** | **-1.5** |
| LIT | | | | *i* Sn | **Sg** | **20** | **38** | **26.3** | **+3.1** |
| **PDG** | **Podgorica** | **1.80** | **327** | *e*Pn | **Pn** | **20** | **38** | **02.0** | **+1.1** |
| PDG | | | | *e*Sn | **Sg** | **20** | **38** | **27.2** | **0.0** |
| **PDG** | **Podgorica** | **1.80** | **327** | *e*Pn | **Pn** | **20** | **38** | **01.5** | **+0.6** |
| **THE** | **Thessaloniki** | **1.83** | **99** | *i* Pn | **Pb** | **20** | **38** | **01.8** | **-1.5** |
| THE | | | | *i* Sn | **Sg** | **20** | **38** | **34.1** | **+5.8** |
| **BARS** | **Barje** | **2.10** | **26** | *e*Pn | **Pb** | **20** | **38** | **07.3** | **-0.5** |
| BARS | | | | *e*Sn | **Sg** | **20** | **38** | **35.9** | **-0.9** |
| **BARS** | **Barje** | **2.10** | **26** | *i* Pn | **Pn** | **20** | **38** | **03.9** | **-1.2** |
| BARS | | | | *i* Sn | **Sg** | **20** | **38** | **35.8** | **-1.0** |
| **SOH** | **Sokhos** | **2.10** | **92** | *i* Pn | **Pn** | **20** | **38** | **05.2** | **0.0** |
| **BOSS** | **Bosilegrad** | **2.11** | **42** | *e*Pn | **Pn** | **20** | **38** | **04.5** | **-0.8** |
| **KKB** | **Krupnik** | **2.12** | **64** | *i* Pn | **Pn** | **20** | **38** | **04.9** | **-0.5** |
| **LKD2** | **Lefkada island** | **2.14** | **178** | P | **Pb** | **20** | **38** | **08.1** | **-0.4** |
| | baz=179 | | | | | | | | |
| LKD2 | | | | S | **Sg** | **20** | **38** | **37.3** | **-0.8** |
| | baz=179 | | | | | | | | |
| **SELS** | **Selova** | **2.32** | **10** | *e*Pn | **Pb** | **20** | **38** | **11.5** | **-0.2** |
| SELS | | | | *e*Sn | **Sb** | **20** | **38** | **41.3** | **+0.7** |
| **SJES** | **Sjenica** | **2.37** | **349** | *e*Pn | **Pb** | **20** | **38** | **10.9** | **-1.7** |
| SJES | | | | *e*Sn | **Sb** | **20** | **38** | **43.1** | **+0.9** |
| **SJES** | **Sjenica** | **2.37** | **349** | *e*Pn | **Pb** | **20** | **38** | **12.2** | **-0.4** |
| **TREB** | **Trebinje** | **2.44** | **318** | *e*Pn | **Pn** | **20** | **38** | **09.6** | **-0.2** |
| **TREB** | **Trebinje** | **2.44** | **318** | *e*Pn | **Pn** | **20** | **38** | **08.1** | **-1.7** |
| **BRY** | **Bratogost** | **2.49** | **323** | *e*Pn | **Pn** | **20** | **38** | **08.8** | **-1.8** |
| **RUDO** | **Rudo** | **2.83** | **342** | *e*Pn | **Pn** | **20** | **38** | **15.4** | **+0.2** |
| **STON** | **Ston** | **2.90** | **313** | *e*Pn | **Pn** | **20** | **38** | **15.9** | **-0.1** |
| STON | | | | *e*Sn | **Sn** | **20** | **38** | **54.0** | **+2.9** |
| **STON** | **Ston** | **2.90** | **313** | *e*Pn | **Pn** | **20** | **38** | **15.6** | **-0.4** |
| **BBLS** | **Lazi&#263i** | **3.06** | **344** | *e*Pn | **Pn** | **20** | **38** | **19.3** | **+0.9** |
| **A050A** | **Klekovaca** | **4.64** | **321** | *e*Pn | **Pn** | **20** | **38** | **39.9** | **-0.1** |
| **A051A** | **Mrakovica** | **4.89** | **328** | *e*Pn | **Pn** | **20** | **38** | **43.1** | **-0.4** |
| **CRES** | **Cresnjev** | **6.16** | **324** | *e*Pn | **Pn** | **20** | **38** | **59.8** | **-1.0** |

*NEIC **03** 20:58:21.2±0.3, 36°.482N±0°.008×97°.73W±0°.01, h3km±3km, Error ellipse: s-maj=1.7km s-min=0.6km az=52.0*

**TUL 03 20:58:21.4±0.4, 36°.48N±0°.01×97°.73W±0°.01, h5km±1km, ML3.2, mb_Lg2.8/95(NEIC), ML3.0/67(NEIC), Error ellipse: s-maj=1.7km s-min=1.3km az=221.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **CROK** | **Carrier** | **0.20** | **276** | Pg | Pg | 20 | 58 | 25.7 | +0.3 |
| CROK | | | | Sg | Sg | 20 | 58 | 28.9 | +0.8 |
| CROK | | | | IAML | | 20 | 58 | 31.1 | |
| | comp=E,4µm,0.4s | | | | | | | | |
| **GC02** | **Grant County #** | **0.38** | **345** | | Pg | 20 | 58 | 29.2 | +0.4 |
| GC02 | | | | Sg | Sg | 20 | 58 | 34.8 | +1.0 |
| **BLOK** | **Blackwell** | **0.50** | **56** | Pg | Pg | 20 | 58 | 31.4 | +0.4 |
| BLOK | | | | IAML | | 20 | 58 | 42.0 | |
| | comp=E,2µm,0.2s | | | | | | | | |
| **OK032** | **Salt Plains WL** | **0.50** | **310** | Pg | Pg | 20 | 58 | 31.4 | +0.3 |
| OK032 | | | | Sg | Sg | 20 | 58 | 38.1 | +0.5 |
| OK032 | | | | IAML | | 20 | 58 | 40.6 | |
| | comp=E,2µm,0.2s | | | | | | | | |
| OK032 | | | | IAML | | 20 | 58 | 40.6 | |
| | comp=E,2µm,0.2s | | | | | | | | |
| **KAN14** | **Manchester OK** | **0.51** | **339** | | Pg | 20 | 58 | 31.5 | +0.3 |
| KAN14 | | | | Sg | Sg | 20 | 58 | 38.6 | +0.8 |
| KAN14 | | | | IAML | | 20 | 58 | 41.0 | |
| | comp=N,997nm,0.5s | | | | | | | | |
| **KAN17** | **Caldwell West** | **0.56** | **357** | | Pg | 20 | 58 | 32.6 | +0.4 |
| KAN17 | | | | Sg | Sg | 20 | 58 | 40.4 | +0.8 |
| KAN17 | | | | IAML | | 20 | 58 | 44.3 | |
| | comp=E,1µm,0.4s | | | | | | | | |
| KAN17 | | | | IAML | | 20 | 58 | 50.0 | |
| | comp=N,841nm,0.2s | | | | | | | | |
| **KAN13** | **South Haven SW** | **0.57** | **21** | | Pg | 20 | 58 | 32.7 | +0.4 |
| KAN13 | | | | IAML | | 20 | 58 | 50.4 | |
| | comp=E,848nm,0.2s | | | | | | | | |
| KAN13 | | | | IAML | | 20 | 58 | 51.7 | |
| | comp=N,849nm,0.4s | | | | | | | | |
| **OK048** | **Pawnee Station** | **0.64** | **96** | Pg | Pg | 20 | 58 | 33.9 | +0.2 |
| **KAN09** | **Caldwell North** | **0.66** | **8** | Pg | Pg | 20 | 58 | 34.4 | +0.3 |
| **KAN01** | **Argonia South** | **0.67** | **358** | Pg | Pg | 20 | 58 | 34.6 | +0.3 |
| KAN01 | | | | IAML | | 20 | 58 | 46.2 | |
| | comp=E,540nm,0.5s | | | | | | | | |
| **OK029** | **Liberty Lake** | **0.72** | **162** | Pg | Pg | 20 | 58 | 35.1 | -0.1 |
| OK029 | | | | IAML | | 20 | 58 | 45.4 | |
| | comp=E,902nm,0.4s | | | | | | | | |
| **OK051** | **E0350 and S346** | **0.72** | **88** | Pg | Pg | 20 | 58 | 35.5 | +0.2 |
| OK051 | | | | IAML | | 20 | 58 | 51.0 | |
| | comp=E,813nm,0.2s | | | | | | | | |
| OK051 | | | | IAML | | 20 | 58 | 53.5 | |
| | comp=E,904nm,0.2s | | | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.77** | **346** | | Pg | 20 | 58 | 36.3 | +0.2 |
| KAN08 | | | | IAML | | 20 | 58 | 50.6 | |
| | comp=E,624nm,0.5s | | | | | | | | |
| **KS21** | **Milan North St** | **0.81** | **4** | IAML | | 20 | 58 | 50.1 | |
| | comp=E,546nm,0.3s | | | | | | | | |
| KS21 | | | | IAML | | 20 | 58 | 53.2 | |
| | comp=E,409nm,0.1s | | | | | | | | |
| **KS21** | **Milan North St** | **0.81** | **4** | Pg | Pg | 20 | 58 | 37.0 | +0.1 |
| **OK038** | **West end E0370** | **0.81** | **270** | Pg | Pg | 20 | 58 | 36.9 | -0.1 |
| **KAN12** | **Harper NE Stat** | **0.84** | **345** | | Pg | 20 | 58 | 37.6 | 0.0 |
| **ADOK** | **Arcadia Dam** | **0.88** | **160** | | Pg | 20 | 58 | 38.0 | -0.3 |
| **QUOK** | **Quay** | **0.88** | **110** | Pg | Pg | 20 | 58 | 38.4 | 0.0 |
| QUOK | | | | IAML | | 20 | 59 | 01.9 | |
| | comp=E,532nm,0.2s | | | | | | | | |
| QUOK | | | | IAML | | 20 | 59 | 02.8 | |
| | comp=N,450nm,0.2s | | | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.90** | **126** | | Pg | 20 | 58 | 38.5 | -0.1 |
| **OK052** | **Battle Ridge R** | **0.90** | **123** | Pg | Pg | 20 | 58 | 38.6 | 0.0 |
| OK052 | | | | IAML | | 20 | 58 | 59.9 | |
| | comp=N,515nm,0.2s | | | | | | | | |
| OK052 | | | | IAML | | 20 | 59 | 00.6 | |
| | comp=N,354nm,0.3s | | | | | | | | |
| **NOKA** | **Waynoka** | **0.98** | **279** | | Pg | 20 | 58 | 39.6 | -0.5 |
| NOKA | | | | IAML | | 20 | 58 | 58.0 | |
| | comp=E,443nm,0.3s | | | | | | | | |
| NOKA | | | | IAML | | 20 | 59 | 04.9 | |
| | comp=N,560nm,0.3s | | | | | | | | |
| **U32A** | **Winter Ranch,** | **1.03** | **265** | | Pg | 20 | 58 | 40.7 | -0.4 |
| U32A | | | | IAML | | 20 | 58 | 59.8 | |
| | comp=N,454nm,0.7s | | | | | | | | |
| **T35A** | **Sooner Cattle** | **1.07** | **66** | | Pg | 20 | 58 | 41.9 | -0.1 |
| T35A | | | | IAML | | 20 | 58 | 58.7 | |
| | comp=N,401nm,0.3s | | | | | | | | |
| T35A | | | | IAML | | 20 | 59 | 02.7 | |
| | comp=E,341nm,0.3s | | | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **1.10** | **167** | | Pg | 20 | 58 | 42.1 | -0.4 |
| **CSTR** | **Hydro, Custer** | **1.14** | **223** | | Pg | 20 | 58 | 42.8 | -0.4 |
| **DEOK** | **Depew** | **1.19** | **122** | | Pg | 20 | 58 | 43.5 | -0.6 |
| DEOK | | | | IAML | | 20 | 59 | 01.2 | |
| | comp=N,334nm,0.2s | | | | | | | | |
| DEOK | | | | IAML | | 20 | 59 | 02.9 | |
| | comp=E,321nm,0.3s | | | | | | | | |
| **FNO** | **Franklin** | **1.25** | **167** | | Pg | 20 | 58 | 44.6 | -0.8 |
| FNO | | | | IAML | | 20 | 59 | 14.2 | |
| | comp=E,384nm,0.7s | | | | | | | | |
| **ELIS** | **Ellis County** | **1.42** | **254** | | Pn | 20 | 58 | 48.0 | +0.1 |
| **TUL3** | **Leonard** | **1.67** | **109** | Pg | Pn | 20 | 58 | 51.5 | +0.2 |
| **X34A** | **Smith Ranch, M** | **1.88** | **183** | | Pn | 20 | 58 | 55.0 | +0.8 |
| X34A | | | | IAmb_Lg | | 20 | 59 | 20.8 | |
| | comp=E,32nm,0.8s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.94** | **206** | | Pn | 20 | 58 | 55.3 | +0.3 |
| WMOK | | | | IAmb_Lg | | 20 | 59 | 25.1 | |
| | comp=E,73nm,0.8s | | | | | | | | |
| **R32A** | **Long Quarter,** | **2.09** | **338** | Pn | Pb | 20 | 58 | 58.9 | -0.9 |
| **RLO** | **Rose Lookout** | **2.21** | **97** | | Pn | 20 | 58 | 59.3 | +0.5 |
| **SMWD** | **Samnorwood** | **2.46** | **237** | | Pn | 20 | 59 | 02.3 | +0.1 |
| **LOOK** | **Love County** | **2.52** | **170** | | Pn | 20 | 59 | 03.4 | +0.3 |
| LOOK | | | | IAmb_Lg | | 20 | 59 | 41.3 | |
| | comp=E,33nm,0.8s | | | | | | | | |
| **X37A** | **Clayton** | **2.70** | **134** | | Pn | 20 | 59 | 05.9 | +0.5 |
| X37A | | | | IAmb_Lg | | 20 | 59 | 47.7 | |
| | comp=Z,26nm,0.7s | | | | | | | | |
| **U38A** | **Gravette** | **2.70** | **90** | | Pn | 20 | 59 | 07.3 | +1.8 |
| **KSU1** | **Kansas State U** | **2.76** | **18** | | Pn | 20 | 59 | 07.2 | +0.9 |
| **WTFS** | **Witchita Falls** | **2.77** | **193** | | Pn | 20 | 59 | 07.3 | +0.7 |
| **CBKS** | **Cedar Bluff** | **2.82** | **326** | Pn | Pn | 20 | 59 | 08.4 | +1.2 |
| **HHAR** | **Hobbs** | **3.07** | **93** | | Pn | 20 | 59 | 10.7 | +0.1 |
| **Z35A** | **Perchaven, San** | **3.17** | **173** | Pn | Pn | 20 | 59 | 11.7 | -0.3 |
| **FW03** | **Perrin-Whitt E** | **3.44** | **185** | | Pn | 20 | 59 | 15.5 | -0.3 |
| **FW06** | **Azle** | **3.50** | **178** | Pn | Pn | 20 | 59 | 16.6 | 0.0 |
| FW06 | | | | IAmb_Lg | | 21 | 00 | 20.1 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **AMTX** | **Amarillo** | **3.59** | **245** | | Pn | 20 | 59 | 16.9 | -0.9 |
| AMTX | | | | IAmb_Lg | | 21 | 00 | 24.4 | |
| | comp=Z,35nm,0.8s | | | | | | | | |
| **PLPT** | **Palo Pinto** | **3.69** | **188** | | Pn | 20 | 59 | 16.8 | -2.3 |
| **APMT** | **Aspermont** | **3.71** | **213** | | Pn | 20 | 59 | 17.4 | -2.0 |
| **S39A** | **Bolivar** | **3.73** | **70** | | Pn | 20 | 59 | 18.0 | -1.6 |
| S39A | | | | IAmb_Lg | | 21 | 00 | 29.4 | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **FW07** | **Weatherford** | **3.77** | **181** | IAmb_Lg | | 21 | 00 | 29.2 | |
| | comp=Z,17nm,0.7s | | | | | | | | |
| **DKNS** | **Dickens** | **3.84** | **224** | | Pn | 20 | 59 | 18.8 | -2.5 |
| **MIAR** | **Mount Ida** | **3.90** | **118** | Pn | Pn | 20 | 59 | 20.3 | -1.7 |
| MIAR | | | | IAmb_Lg | | 21 | 00 | 26.4 | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **RTBA** | **Rita Blanca** | **4.03** | **271** | Pn | Pn | 20 | 59 | 22.0 | -2.0 |
| RTBA | | | | IAmb_Lg | | 21 | 00 | 38.1 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **FW14** | **Alvarado** | **4.10** | **174** | IAmb_Lg | | 21 | 00 | 36.2 | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| **FW13** | **Cleburne** | **4.13** | **176** | IAmb_Lg | | 21 | 00 | 42.2 | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.16** | **203** | | Pn | 20 | 59 | 24.1 | -1.5 |
| **SN07** | **Snyder 07** | **4.27** | **218** | | Pn | 20 | 59 | 25.9 | -1.2 |
| SN07 | | | | IAmb_Lg | | 21 | 00 | 40.1 | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.43** | **80** | | Pn | 20 | 59 | 30.0 | +0.6 |
| **X40A** | **Basin Creek Fa** | **4.46** | **115** | | Pn | 20 | 59 | 30.2 | +0.4 |
| **WHTX** | **Lake Whitney,** | **4.49** | **177** | Pn | Pn | 20 | 59 | 30.0 | -0.1 |
| WHTX | | | | IAmb_Lg | | 21 | 00 | 55.5 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **P38A** | **Dawn** | **4.56** | **45** | | Pn | 20 | 59 | 32.4 | +1.3 |
| P38A | | | | IAmb_Lg | | 21 | 00 | 54.1 | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.58** | **96** | | Pn | 20 | 59 | 31.4 | +0.1 |
| FCAR | | | | IAmb_Lg | | 21 | 00 | 47.9 | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.58** | **103** | | Pn | 20 | 59 | 31.9 | +0.6 |
| WHAR | | | | IAmb_Lg | | 21 | 00 | 52.4 | |
| | comp=Z,31nm,0.8s | | | | | | | | |
| **POST** | **Post** | **4.61** | **223** | | Pn | 20 | 59 | 30.9 | -0.9 |
| **KSCO** | **Kaye Shedlock'** | **4.63** | **305** | | Pn | 20 | 59 | 29.9 | -2.2 |
| KSCO | | | | IAmb_Lg | | 21 | 00 | 54.4 | |
| | comp=E,18nm,0.8s | | | | | | | | |
| **N35A** | **Tabor** | **4.67** | **20** | | Pn | 20 | 59 | 31.0 | -1.6 |
| **WLAR** | **White Oak Lake** | **4.70** | **125** | Pn | Pn | 20 | 59 | 32.7 | -0.3 |
| WLAR | | | | IAmb_Lg | | 21 | 01 | 01.8 | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **UALR** | **University of** | **4.71** | **110** | Pn | Pn | 20 | 59 | 33.2 | +0.1 |
| UALR | | | | IAmb_Lg | | 21 | 00 | 55.8 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **R40A** | **Maddies Statio** | **4.71** | **66** | | Pn | 20 | 59 | 32.5 | -0.6 |
| R40A | | | | IAmb_Lg | | 21 | 00 | 51.8 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| **237A** | **Washetta, Mont** | **4.75** | **160** | IAmb_Lg | | 21 | 01 | 02.7 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **MSTX** | **Muleshoe** | **4.83** | **240** | Pn | Pn | 20 | 59 | 34.1 | -0.7 |
| MSTX | | | | IAmb_Lg | | 21 | 00 | 56.0 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **Z41A** | **Richland Creek** | **5.17** | **127** | IAmb_Lg | | 21 | 01 | 12.4 | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **BRDY** | **Brady** | **5.29** | **192** | Pn | Pn | 20 | 59 | 39.3 | -1.8 |
| **LCAR** | **Lake Charles** | **5.33** | **92** | Pn | Pn | 20 | 59 | 39.2 | -2.4 |
| LCAR | | | | IAmb_Lg | | 21 | 01 | 14.9 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **SGCY** | **Sterling City** | **5.35** | **213** | IAmb_Lg | | 21 | 01 | 22.6 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **T42A** | **Van Buren** | **5.36** | **82** | Pn | Pn | 20 | 59 | 40.3 | -1.8 |
| T42A | | | | IAmb_Lg | | 21 | 01 | 21.7 | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **T25A** | **Trinidad** | **5.40** | **279** | | Pn | 20 | 59 | 42.3 | -0.5 |
| T25A | | | | IAmb_Lg | | 21 | 01 | 18.5 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.41** | **71** | | Pn | 20 | 59 | 43.5 | +0.8 |
| **P40A** | **Paris** | **5.42** | **54** | | Pn | 20 | 59 | 45.2 | +2.3 |
| **N38A** | **Joes South For** | **5.56** | **38** | Pn | Pn | 20 | 59 | 45.3 | +0.4 |
| **L34A** | **Svendsen Farm,** | **5.58** | **10** | Pn | Pn | 20 | 59 | 46.0 | +0.9 |
| L34A | | | | IAmb_Lg | | 21 | 01 | 23.8 | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **OGNE** | **Ogallala** | **5.58** | **324** | Pn | Pn | 20 | 59 | 45.4 | +0.2 |
| **435B** | **Jarrell** | **5.69** | **179** | IAmb_Lg | | 21 | 01 | 31.7 | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.88** | **85** | Pn | Pn | 20 | 59 | 49.6 | +0.4 |
| **FVM** | **French Village** | **6.02** | **73** | Pn | Pn | 20 | 59 | 49.7 | -1.4 |
| **OZNA** | **Ozona** | **6.22** | **208** | Pn | Pn | 20 | 59 | 53.1 | -0.9 |
| **JCT** | **Junction City** | **6.23** | **197** | IAmb_Lg | | 21 | 01 | 44.9 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **K30B** | **Basset** | **6.35** | **347** | IAmb_Lg | | 21 | 02 | 00.5 | |
| | comp=Z,23nm,0.7s | | | | | | | | |
| **Q24A** | **Divide** | **6.38** | **295** | IAmb_Lg | | 21 | 01 | 52.4 | |
| | comp=Z,8.1nm,0.7s | | | | | | | | |
| **SCIA** | **State Center** | **6.45** | **32** | IAmb_Lg | | 21 | 01 | 59.3 | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.52** | **80** | IAmb_Lg | | 21 | 01 | 51.2 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **BRIGG** | **Briggsdale** | **6.59** | **310** | IAmb_Lg | | 21 | 02 | 00.8 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **N41A** | **Harden Midland** | **6.84** | **50** | IAmb_Lg | | 21 | 02 | 04.8 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **HNDO** | **Hondo** | **7.05** | **191** | IAmb_Lg | | 21 | 02 | 12.5 | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| **PECS** | **Pecos** | **7.21** | **227** | IAmb_Lg | | 21 | 02 | 29.2 | |
| | comp=Z,7.3nm,0.8s | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.29** | **6** | IAmb_Lg | | 21 | 02 | 19.9 | |
| | comp=Z,8.1nm,1.0s | | | | | | | | |
| **L40A** | **Anamosa** | **7.52** | **40** | IAmb_Lg | | 21 | 02 | 23.5 | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **735A** | **Kenedy** | **7.61** | **180** | IAmb_Lg | | 21 | 02 | 30.3 | |
| | comp=Z,17nm,0.7s | | | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.00** | **98** | IAmb_Lg | | 21 | 02 | 37.4 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **WVT** | **Waverly** | **8.00** | **90** | IAmb_Lg | | 21 | 02 | 42.5 | |
| | comp=Z,5.9nm,0.8s | | | | | | | | |
| **VHRN** | **Van Horn** | **8.29** | **229** | IAmb_Lg | | 21 | 03 | 05.3 | |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| **JFWS** | **Jewell Farm** | **8.63** | **40** | IAmb_Lg | | 21 | 02 | 59.1 | |
| | comp=Z,11nm,0.8s | | | | | | | | |

**TAP 03 20:59:21.6, 22°.64N×121°.36E, h24km, ML2.2, B, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **LDUT** | **Ludao** | **0.11** | **72** | P | Pb | 20 | 59 | 26.4 | +0.3 |
| | baz=72 | | | | | | | | |
| LDUT | | | | S | Sb | 20 | 59 | 29.7 | +0.5 |
| | baz=72 | | | | | | | | |
| **TTN** | **Taitung** | **0.23** | **300** | P | Pb | 20 | 59 | 27.8 | +0.3 |
| | baz=300 | | | | | | | | |
| TTN | | | | S | Sb | 20 | 59 | 32.9 | +1.5 |
| | baz=300 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.31** | **304** | P | Pb | 20 | 59 | 29.0 | +0.3 |
| | baz=304 | | | | | | | | |
| TWGBT | | | | S | Sb | 20 | 59 | 34.5 | +0.9 |
| | baz=304 | | | | | | | | |
| **TWG** | **Pinlang** | **0.32** | **304** | P | Pb | 20 | 59 | 29.1 | +0.2 |
| | baz=304 | | | | | | | | |
| TWG | | | | *e*S | Sb | 20 | 59 | 33.7 | -0.1 |
| | baz=304 | | | | | | | | |
| **EDH** | **Donghe** | **0.33** | **351** | P | Pb | 20 | 59 | 29.1 | 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MASBT | | | | *e*S | Sb | 20 59 44.2 | +0.6 |
| | baz=265 | | | | | | | | |
| **ECBN** | **Changbin** | **0.68** | **7** | *e*P | Pn | 20 59 35.6 | -0.1 |
| | baz=14 | | | | | | | | |
| ECBN | | | | *e*S | Sb | 20 59 43.8 | +0.1 |
| | baz=14 | | | | | | | | |
| **SSD** | **Sandimen** | **0.68** | **279** | *e*P | Pb | 20 59 34.4 | -0.4 |
| | baz=276 | | | | | | | | |
| SSD | | | | *e*S | Sb | 20 59 43.1 | -0.7 |
| | baz=276 | | | | | | | | |
| **EYUL** | **Yuli** | **0.70** | **357** | P | Pb | 20 59 35.1 | -0.1 |
| | baz=342 | | | | | | | | |
| EYUL | | | | *e*S | Sn | 20 59 47.5 | +1.3 |
| | baz=342 | | | | | | | | |
| **TWF1** | **Yuli** | **0.71** | **355** | P | Pb | 20 59 35.4 | +0.1 |
| | baz=343 | | | | | | | | |
| TWF1 | | | | *e*S | Sn | 20 59 46.3 | -0.1 |
| | baz=343 | | | | | | | | |
| **SCZT** | **Fangliau** | **0.73** | **249** | *e*P | Pb | 20 59 36.0 | +0.3 |
| | baz=242 | | | | | | | | |
| SCZT | | | | *e*S | Sn | 20 59 46.9 | 0.0 |
| | baz=242 | | | | | | | | |
| **YULB** | **Yu-li** | **0.75** | **356** | *e*P | Pb | 20 59 36.3 | +0.3 |
| | baz=343 | | | | | | | | |
| YULB | | | | *e*S | Sn | 20 59 47.0 | -0.4 |
| | baz=343 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.75** | **314** | *e*P | Pb | 20 59 36.2 | +0.2 |
| | baz=314 | | | | | | | | |
| STYH | | | | *e*S | Sn | 20 59 47.1 | -0.2 |
| | baz=314 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.76** | **313** | P | Pb | 20 59 36.1 | -0.1 |
| | baz=313 | | | | | | | | |
| STYT | | | | *e*S | Sn | 20 59 47.6 | -0.1 |
| | baz=313 | | | | | | | | |
| **SGST** | **Jiashian** | **0.84** | **302** | P | Pn | 20 59 38.1 | +0.2 |
| | baz=302 | | | | | | | | |
| SGST | | | | *e*S | Sb | 20 59 48.7 | +0.2 |
| | baz=302 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.85** | **4** | *e*P | Pn | 20 59 38.5 | +0.4 |
| | baz=10.0 | | | | | | | | |
| HGSD | | | | *e*S | Sn | 20 59 50.6 | +0.9 |
| | baz=10.0 | | | | | | | | |
| **EHY** | **Hungye** | **0.86** | **358** | *i* P | Pb | 20 59 37.9 | 0.0 |
| | baz=345 | | | | | | | | |
| EHY | | | | *e*S | Sn | 20 59 49.6 | -0.5 |
| | baz=345 | | | | | | | | |
| **TWKBT** | **Hengchun** | **0.86** | **216** | *e*P | Pb | 20 59 37.7 | -0.2 |
| | baz=216 | | | | | | | | |
| TWKBT | | | | *e*S | Sb | 20 59 49.1 | +0.1 |
| | baz=216 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.91** | **311** | *e*P | Pn | 20 59 39.7 | +0.7 |
| | baz=318 | | | | | | | | |
| WTP | | | | S | Sn | 20 59 52.1 | +0.7 |
| | baz=318 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.92** | **336** | *e*P | Pb | 20 59 38.7 | -0.5 |
| | baz=330 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.94** | **305** | *i* P | Pn | 20 59 40.0 | +0.7 |
| | baz=311 | | | | | | | | |
| CHN1 | | | | S | Sn | 20 59 53.8 | +1.8 |
| | baz=311 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.94** | **314** | P | Pn | 20 59 39.5 | +0.2 |
| | baz=314 | | | | | | | | |
| TPUB | | | | S | Sn | 20 59 52.9 | +0.9 |
| | baz=314 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.95** | **277** | *e*P | Pn | 20 59 42.0 | +2.5 |
| | baz=276 | | | | | | | | |
| SNJT | | | | *i* S | Sn | 20 59 55.8 | +3.6 |
| | baz=276 | | | | | | | | |
| **TWK** | **Hsinying** | **1.02** | **308** | *e*P | Pb | 20 59 41.6 | +1.1 |
| | baz=316 | | | | | | | | |
| TWK | | | | *e*S | Sn | 20 59 54.8 | +0.8 |
| | baz=316 | | | | | | | | |
| **WCKO** | **Fanlu** | **1.06** | **319** | *i* P | Pb | 20 59 41.4 | +0.2 |
| | baz=318 | | | | | | | | |
| WCKO | | | | *e*S | Sn | 20 59 58.2 | +3.3 |
| | baz=318 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.07** | **1** | *e*P | Pb | 20 59 42.3 | +0.8 |
| | baz=3.0 | | | | | | | | |
| **VWDT** | **VWDT** | **1.13** | **350** | *e*P | Pb | 20 59 43.5 | +1.1 |
| | baz=4.0 | | | | | | | | |
| VWDT | | | | *e*S | Sb | 20 59 57.7 | +1.1 |
| | baz=4.0 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.15** | **336** | *e*P | Pb | 20 59 44.5 | +1.7 |
| | baz=343 | | | | | | | | |
| WHYT | | | | *e*S | Sb | 21 00 00.0 | +2.7 |
| | baz=343 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.20** | **342** | *e*P | Pb | 20 59 43.9 | +0.2 |
| | baz=351 | | | | | | | | |
| SSLB | | | | *e*S | Sb | 20 59 59.8 | +1.0 |
| | baz=351 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.28** | **293** | *e*P | Pb | 20 59 45.9 | +0.9 |
| | baz=291 | | | | | | | | |
| TSCK | | | | S | Sb | 21 00 03.6 | +2.6 |
| | baz=291 | | | | | | | | |
| **TYC** | **Yuchr** | **1.34** | **340** | P | Pb | 20 59 45.9 | -0.1 |
| | baz=339 | | | | | | | | |
| TYC | | | | *e*S | Sb | 21 00 05.9 | +3.1 |
| | baz=339 | | | | | | | | |
| **WUSB** | **Renai** | **1.36** | **351** | P | Pn | 20 59 45.4 | +0.2 |
| | baz=4.0 | | | | | | | | |
| WUSB | | | | *i* S | Sn | 21 00 03.1 | +0.4 |
| | baz=4.0 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.38** | **2** | *e*P | Pb | 20 59 46.4 | -0.3 |
| | baz=3.0 | | | | | | | | |
| LXIB | | | | *e*S | Sb | 21 00 04.8 | +0.9 |
| | baz=3.0 | | | | | | | | |
| **CHGB** | **Renai** | **1.42** | **353** | *e*P | Pn | 20 59 46.8 | +0.6 |
| | baz=7.0 | | | | | | | | |
| CHGB | | | | *e*S | Sb | 21 00 05.6 | +0.2 |
| | baz=7.0 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.47** | **344** | S | Sb | 21 00 07.4 | +0.9 |
| | baz=343 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.50** | **357** | *e*P | Pn | 20 59 48.0 | +0.6 |
| | baz=10.0 | | | | | | | | |
| WHF | | | | *e*S | Sb | 21 00 07.6 | -0.2 |
| | baz=10.0 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.54** | **8** | *e*P | Pb | 20 59 48.9 | -0.6 |
| | baz=357 | | | | | | | | |
| NACB | | | | *e*S | Sn | 21 00 07.7 | +0.8 |
| | baz=357 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.56** | **4** | *e*P | Pb | 20 59 49.8 | -0.1 |
| | baz=5.0 | | | | | | | | |
| **FUSS** | **Fushou** | **1.60** | **356** | *e*P | Pb | 20 59 49.9 | -0.8 |
| | baz=9.0 | | | | | | | | |
| **EOS4** | **EOS4** | **1.72** | **31** | *e*P | Pb | 20 59 51.4 | -0.8 |
| | baz=42 | | | | | | | | |
| EOS4 | | | | *i* S | Sn | 21 00 10.2 | -0.4 |
| | baz=42 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.36** | **40** | P | Pn | 20 59 60.0 | +1.1 |
| | baz=52 | | | | | | | | |
| YOJ | | | | *e*S | Sn | 21 00 29.3 | +2.2 |
| | baz=52 | | | | | | | | |

*SJA **03** 21:13:27.0±1.3, 32°.01S×71°.84W, h45km, ML3.2, MW3.5*
*GUC **03** 21:13:29.6±0.7, 32°.04S×71°.62W, h47km±3km, ML3.5*
**ISC 03 21:13:25.7**±1.3, **32.00S**±0.02×**71.79W**±0.05, **h13**km±10km, **n64**, σ1§19/95, **20C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VA06** | **Catapilco** | **0.70** | **144** | ⇑*i*P | **Pn** | **21 13 42.9** | **+1.6** |
| VA06 | | | | *i* S | **Sn** | **21 13 52.7** | **+0.7** |
| VA06 | | | | IAML | | 21 13 53.6 | |
| | comp=N,7μm,0.3s | | | | | | |
| **VA01** | **Torpederas** | **1.03** | **173** | *e*P | **Pn** | **21 13 47.1** | **+1.2** |
| VA01 | | | | IAML | | 21 14 02.1 | |
| | comp=Z,427nm,0.1s | | | | | | |
| **VA01** | **Torpederas** | **1.03** | **173** | ⇑*i*P | **Pn** | **21 13 47.1** | **+1.2** |
| VA01 | | | | *i* S | **Sg** | **21 14 00.1** | **+1.1** |
| **CO02** | **Combarbal** | **1.04** | **41** | *e*P | **Pn** | **21 13 47.6** | **+1.6** |
| CO02 | | | | *e*S | **Sn** | **21 14 01.0** | **+0.6** |
| **CO02** | **Combarbal** | **1.04** | **41** | ⇓*i*P | **Pn** | **21 13 47.4** | **+1.3** |
| CO02 | | | | *i* S | **Sn** | **21 14 01.2** | **+0.8** |
| **ROCH** | **El Roble** | **1.18** | **146** | ⇑*i*P | **Pn** | **21 13 49.0** | **+1.0** |
| ROCH | | | | ⇑*i*P | **Pn** | **21 13 49.0** | **+1.0** |
| ROCH | | | | *i* S | **Sg** | **21 14 03.3** | **-0.4** |
| ROCH | | | | *i* S | | 21 14 03.4 | |
| ROCH | | | | IAML | | 21 14 04.9 | |
| | comp=E,1μm,0.1s | | | | | | |
| **ROC1** | **El Roble** | **1.18** | **146** | *e*P | **Pb** | **21 13 49.0** | **+1.0** |
| ROC1 | | | | *e*S | **Sg** | **21 14 03.9** | **+0.2** |
| **VA03** | **San Esteban** | **1.30** | **127** | *e*P | **Pb** | **21 13 50.5** | **+0.5** |
| VA03 | | | | *e*S | **Sg** | **21 14 07.3** | **-0.3** |
| VA03 | | | | IAML | | 21 14 09.7 | |
| | comp=Z,753nm,0.1s | | | | | | |
| **VA03** | **San Esteban** | **1.30** | **127** | ⇑*i*P | **Pb** | **21 13 50.5** | **+0.5** |
| VA03 | | | | *i* S | **Sb** | **21 14 06.2** | **-0.4** |
| VA03 | | | | IAML | | 21 14 09.5 | |
| | comp=E,3μm,0.2s | | | | | | |
| **CO06** | **Fray Jorge** | **1.32** | **6** | ⇑*i*P | **Pb** | **21 13 51.0** | **+0.6** |
| CO06 | | | | *i* S | **Sb** | **21 14 06.7** | **-0.5** |
| **MT02** | **Curacav** | **1.38** | **157** | *e*P | **Pn** | **21 13 51.4** | **+0.8** |
| MT02 | | | | *e*S | **Sb** | **21 14 06.8** | **-2.0** |
| MT02 | | | | IAML | | 21 14 10.3 | |
| | comp=Z,170nm,0.5s | | | | | | |
| **MT02** | **Curacav** | **1.38** | **157** | ⇑*i*P | **Pn** | **21 13 51.3** | **+0.8** |
| **PEL** | **Peldehue** | **1.48** | **141** | *e*P | **Pn** | **21 13 53.1** | **+1.2** |
| PEL | | | | *e*S | **Sn** | **21 14 10.3** | **-0.9** |
| **PEL** | **Peldehue** | **1.48** | **141** | ⇑*i*P | **Pn** | **21 13 53.2** | **+1.2** |
| PEL | | | | *i* S | **Sn** | **21 14 10.6** | **-0.6** |
| PEL | | | | IAML | | 21 14 12.6 | |
| | comp=N,624nm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **1.49** | **39** | *e*P | **Pg** | **21 13 53.8** | **-0.5** |
| CO03 | | | | IAML | | 21 14 13.6 | |
| | comp=Z,689nm,0.1s | | | | | | |
| **CO03** | **El Pedregal** | **1.49** | **39** | ⇓*i*P | **Pg** | **21 13 53.8** | **-0.5** |
| CO03 | | | | *i* S | **Sb** | **21 14 12.0** | **-0.1** |
| CO03 | | | | IAML | | 21 14 13.6 | |
| | comp=E,2μm,0.1s | | | | | | |
| **MT05** | **Renca** | **1.65** | **148** | *e*P | **Pb** | **21 13 57.2** | **+1.2** |
| MT05 | | | | IAML | | 21 14 20.3 | |
| | comp=Z,390nm,0.2s | | | | | | |
| **MT05** | **Renca** | **1.65** | **148** | ⇑*i*P | **Pb** | **21 13 57.0** | **+1.0** |
| MT05 | | | | IAML | | 21 14 18.1 | |
| | comp=E,1μm,0.4s | | | | | | |
| **MT10** | **Hacienda Santa** | **1.66** | **141** | ⇑*i*P | **Pn** | **21 13 55.8** | **+1.3** |
| MT10 | | | | *i* S | **Sn** | **21 14 15.1** | **-0.6** |
| MT10 | | | | IAML | | 21 14 16.6 | |
| | comp=N,1μm,0.5s | | | | | | |
| **VA05** | **Santo Domingo** | **1.66** | **175** | *e*P | **Pn** | **21 13 55.6** | **+1.1** |
| **MT14** | **Cerro Calן** | **1.75** | **143** | ⇑*i*P | **Pn** | **21 13 57.1** | **+1.3** |
| MT14 | | | | *i* S | **Sn** | **21 14 17.8** | **-0.3** |
| MT14 | | | | IAML | | 21 14 19.1 | |
| | comp=E,1μm,0.1s | | | | | | |
| **MT16** | **CCHEN** | **1.78** | **144** | ⇑*i*P | **Pn** | **21 13 57.6** | **+1.4** |
| MT16 | | | | *i* S | **Sn** | **21 14 18.2** | **-0.6** |
| MT16 | | | | IAML | | 21 14 19.4 | |
| | comp=N,334nm,0.3s | | | | | | |
| **FCH** | **Farellones** | **1.83** | **137** | ⇑*i*P | **Pn** | **21 13 58.2** | **+1.1** |
| FCH | | | | *i* S | **Sn** | **21 14 19.4** | **-1.1** |
| **MT03** | **Universidad Ad** | **1.84** | **145** | *e*P | **Pn** | **21 13 58.5** | **+1.4** |
| MT03 | | | | IAML | | 21 14 22.6 | |
| | comp=Z,584nm,0.1s | | | | | | |
| **MT03** | **Universidad Ad** | **1.84** | **145** | ⇑*i*P | **Pn** | **21 13 58.5** | **+1.4** |
| MT03 | | | | *i* S | **Sn** | **21 14 19.6** | **-0.8** |
| MT03 | | | | IAML | | 21 14 22.6 | |
| | comp=E,1μm,0.2s | | | | | | |
| **MT09** | **Talagante** | **1.90** | **159** | ⇑*i*P | **Pn** | **21 13 59.5** | **+1.6** |
| MT09 | | | | *i* S | **Sn** | **21 14 22.2** | **+0.5** |
| MT09 | | | | IAML | | 21 14 24.3 | |
| | comp=E,487nm,0.2s | | | | | | |
| **MT01** | **Popeta** | **1.92** | **167** | *e*P | **Pn** | **21 13 59.2** | **+1.2** |
| MT01 | | | | IAML | | 21 14 26.6 | |
| | comp=Z,152nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **1.92** | **167** | ⇑*i*P | **Pn** | **21 13 59.3** | **+1.2** |
| MT01 | | | | *i* S | **Sn** | **21 14 21.2** | **-0.8** |
| **MT15** | **Las Vizcachas** | **1.93** | **146** | *e*P | **Pn** | **21 13 59.4** | **+1.1** |
| MT15 | | | | *e*S | **Sn** | **21 14 22.1** | **-0.4** |
| MT15 | | | | IAML | | 21 14 23.3 | |
| | comp=E,942nm,0.2s | | | | | | |
| **MT04** | **Ro Olivares** | **1.98** | **136** | *e*P | **Pn** | **21 14 00.6** | **+1.5** |
| MT04 | | | | IAML | | 21 14 26.7 | |
| | comp=Z,178nm,0.2s | | | | | | |
| **MT04** | **Ro Olivares** | **1.98** | **136** | *e*P | **Pn** | **21 14 00.4** | **+1.3** |
| MT04 | | | | *e*S | **Sn** | **21 14 23.4** | **-0.4** |
| MT04 | | | | IAML | | 21 14 26.3 | |
| | comp=N,270nm,0.1s | | | | | | |
| **GO04** | **Tololo Observa** | **2.00** | **25** | *e*P | **Pn** | **21 14 00.6** | **+1.1** |
| **GO04** | **Tololo Observa** | **2.00** | **25** | *i* P | **Pn** | **21 14 00.5** | **+1.1** |
| GO04 | | | | *e*S | **Sn** | **21 14 24.2** | **-0.3** |
| **MT12** | **Pirque** | **2.02** | **149** | ⇑*i*P | **Pn** | **21 14 00.9** | **+1.4** |
| MT12 | | | | *i* S | **Sn** | **21 14 24.4** | **-0.4** |
| MT12 | | | | IAML | | 21 14 25.8 | |
| | comp=E,479nm,0.3s | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.08** | **135** | *e*P | **Pn** | **21 14 02.4** | **+1.9** |
| MT08 | | | | IAML | | 21 14 31.7 | |
| | comp=Z,83nm,0.2s | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.08** | **135** | *i* P | **Pn** | **21 14 02.5** | **+2.0** |
| **CO05** | **La Serena** | **2.12** | **13** | *e*P | **Pn** | **21 14 01.9** | **+1.0** |
| CO05 | | | | *e*S | **Sn** | **21 14 26.8** | **-0.3** |
| **RTLS** | **Leoncito** | **2.13** | **85** | *e*P | **Pb** | **21 14 03.9** | **-0.4** |
| RTLS | | | | IAML | | 21 14 36.6 | |
| | comp=Z,212nm,0.3s | | | | | | |
| **MT13** | **San Alfonso** | **2.15** | **144** | *e*P | **Pn** | **21 14 03.0** | **+1.6** |
| MT13 | | | | *e*S | **Sn** | **21 14 28.0** | **-0.1** |
| MT13 | | | | IAML | | 21 14 41.8 | |
| | comp=Z,156nm,0.3s | | | | | | |
| **MT13** | **San Alfonso** | **2.15** | **144** | ⇑*i*P | **Pn** | **21 14 02.8** | **+1.4** |
| MT13 | | | | *i* S | **Sn** | **21 14 27.8** | **-0.2** |
| MT13 | | | | IAML | | 21 14 29.8 | |
| | comp=N,476nm,0.2s | | | | | | |
| **BO04** | **La Punta** | **2.22** | **154** | ⇑*i*P | **Pn** | **21 14 03.7** | **+1.4** |
| **LMEL** | **Las Melosas** | **2.28** | **145** | *e*P | **Pn** | **21 14 04.8** | **+1.7** |
| **LMEL** | **Las Melosas** | **2.28** | **145** | ⇑*i*P | **Pn** | **21 14 04.9** | **+1.7** |
| LMEL | | | | *i* S | **Sn** | **21 14 31.1** | **-0.1** |
| LMEL | | | | IAML | | 21 14 32.9 | |
| | comp=E,522nm,0.1s | | | | | | |
| **BO01** | **Tunca** | **2.46** | **166** | *e*P | **Pn** | **21 14 06.7** | **+1.1** |
| BO01 | | | | IAML | | 21 14 43.4 | |
| | comp=Z,55nm,0.3s | | | | | | |
| **CO01** | **Juntas del Tor** | **2.48** | **36** | *e*P | **Pn** | **21 14 08.0** | **+2.0** |
| CO01 | | | | IAML | | 21 14 42.5 | |
| | comp=Z,112nm,0.1s | | | | | | |
| **DOCA** | **Reserva Natura** | **2.54** | **66** | *e*P | **Pb** | **21 14 10.1** | **-1.2** |
| DOCA | | | | IAML | | 21 14 44.7 | |
| | comp=Z,192nm,0.3s | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.56** | **110** | *e*P | **Pb** | **21 14 11.4** | **-0.1** |
| ARCO | | | | IAML | | 21 14 48.3 | |
| | comp=Z,72nm,0.7s | | | | | | |
| **ASAL** | **Salagasta** | **2.57** | **104** | *e*P | **Pn** | **21 14 09.6** | **+2.5** |
| ASAL | | | | IAML | | 21 14 49.6 | |
| | comp=Z,42nm,1.0s | | | | | | |
| **ZON** | **Zonda** | **2.69** | **81** | *e*P | **Pb** | **21 14 12.3** | **-1.3** |
| ZON | | | | IAML | | 21 15 10.9 | |
| | comp=Z,39nm,0.5s | | | | | | |
| **AROD** | **Rodeo** | **2.69** | **48** | *e*P | **Pb** | **21 14 14.0** | **0.0** |
| **ACCO** | **Cerro Coronel** | **2.72** | **60** | *e*P | **Pb** | **21 14 12.4** | **-2.0** |
| ACCO | | | | *e*S | **Sb** | **21 14 46.1** | **-1.7** |
| ACCO | | | | IAML | | 21 14 46.3 | |
| | comp=Z,111nm,0.7s | | | | | | |
| **AAGR** | **Agrelo** | **2.73** | **114** | *e*P | **Pb** | **21 14 13.3** | **-1.0** |
| AAGR | | | | IAML | | 21 14 31.2 | |
| | comp=Z,92nm,0.6s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **2.77** | **88** | *e*P | **Pb** | **21 14 13.6** | **-1.4** |
| **RTLL** | **Cerro Villicun** | **2.90** | **78** | *e*P | **Pn** | **21 14 14.2** | **+2.6** |
| **BO02** | **Sierra Bellavi** | **2.91** | **163** | *e*P | **Pn** | **21 14 13.2** | **+1.3** |
| BO02 | | | | IAML | | 21 14 54.8 | |
| | comp=Z,147nm,0.2s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.92** | **52** | *e*P | **Pb** | **21 14 18.5** | **+0.7** |
| ACDV | | | | IAML | | 21 15 08.7 | |
| | comp=Z,31nm,0.4s | | | | | | |
| **GO05** | **Huala** | **3.01** | **182** | *e*P | **Pn** | **21 14 13.4** | **+0.4** |
| **GO05** | **Huala** | **3.01** | **182** | *e*P | **Pn** | **21 14 13.5** | **+0.4** |
| GO05 | | | | *e*S | **Sn** | **21 14 46.4** | **-2.6** |
| **LCO** | **Las Campanas** | **3.12** | **18** | *e*P | **Pn** | **21 14 15.6** | **+0.9** |
| **LCO** | **Las Campanas** | **3.12** | **18** | *e*P | **Pn** | **21 14 15.7** | **+0.9** |
| **AC05** | **El Transito** | **3.41** | **23** | *e*P | **Pn** | **21 14 20.4** | **+1.8** |
| AC05 | | | | IAML | | 21 14 59.9 | |
| | comp=Z,58nm,0.2s | | | | | | |
| **AC04** | **Llanos de Chal** | **3.83** | **9** | IAML | | 21 15 24.3 | |
| | comp=Z,31nm,0.6s | | | | | | |
| **AVFE** | **Valle Fertil** | **3.94** | **71** | *e*P | **Pn** | **21 14 27.6** | **+1.7** |
| **GO03** | **Copiap** | **4.59** | **18** | *e*P | **Pn** | **21 14 34.6** | **-0.2** |
| GO03 | | | | *e*S | **Sn** | **21 15 27.8** | **-0.2** |

**NNC 03 21:22:34.1**±4.3, **36.92N**×70.47E, **h206**km±94km, **mb2.5, mpv3.6, 2C-5D, Error ellipse: s-maj=47.8km s-min=20.8km az=6.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK31** | **Karatay Array** | **6.18** | **0** | ⇑P | Pn | 21 24 03.1 | -0.5 |
| | 0.4nm,0.2s,baz=179,slow=13 | | | | | | |
| KK31 | | | | ⇓S | S | 21 25 15.1 | +0.6 |
| | 0.6nm,0.3s,baz=181,slow=24 | | | | | | |
| **AAK** | **Ala-Archa** | **6.50** | **27** | ⇓P | Pn | 21 24 08.3 | +0.4 |
| | 1.1nm,0.2s | | | | | | |
| AAK | | | | ⇓S | S | 21 25 24.0 | +1.8 |
| | 2.3nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.17** | **32** | ⇓P | Pn | 21 24 16.6 | -0.1 |
| | 5.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | S | 21 25 37.7 | -0.5 |
| | 0.9nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **14.51** | **331** | ⇓P | Pn | 21 25 50.4 | +0.5 |
| | 0.6nm,0.6s,baz=162,slow=11,SNR=8.8 | | | | | | |

*TIR **03** 21:33:17.0, 38°.92N×19°.90E, h9km±2km, Ml3.0*
*THE **03** 21:33:20.9, 38°.98N×20°.03E, h14km±2km, ML2.8/8, Error ellipse: s-maj=2.8km s-min=0.6km az=208.0*
*ATH **03** 21:33:21.6, 39°.01N×20°.04E, h6km±1km, ML3.1/18, Manual Solution by A.Papageorgiou This location: 2020/06/12 15:17:45 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 0 km; Longitude uncertainty: 1 km*
**ISC 03 21:33:20.6**±1.1, **38.98N**±0.02×**20.00E**±0.03, **h12**km±8km, **n79**, σ1§11/124, **Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TSLK** | **Tsoukalades, L** | **0.54** | **107** | P | **Pg** | **21 33 30.7** | **-0.3** |
| TSLK | | | | S | **Sb** | **21 33 39.5** | **-0.1** |
| | 1μm,0.3s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.54** | **107** | P | **Pg** | **21 33 31.0** | **0.0** |
| TSLK | | | | S | **Sg** | **21 33 38.3** | **+0.2** |
| **DRAG** | **Dragano-Lefkad** | **0.54** | **123** | P | **Pg** | **21 33 30.8** | **-0.3** |
| DRAG | | | | S | **Sb** | **21 33 39.0** | **-0.8** |
| **LKD2** | **Lefkada island** | **0.55** | **111** | P | **Pg** | **21 33 30.2** | **-1.1** |
| | baz=102 | | | | | | |
| LKD2 | | | | S | **Sg** | **21 33 37.6** | **-0.9** |
| | baz=102 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=E,3.8nm,0.3s,baz=102 | | | | | | |
| **LKD2** | **Lefkada island** | **0.55** | **111** | P | **Pg** | **21 33 30.7** | **-0.6** |
| LKD2 | | | | S | **Sg** | **21 33 38.9** | **+0.3** |
| | comp=E,1μm,0.3s | | | | | | |
| **LKD2** | **Lefkada island** | **0.55** | **111** | P | **Pg** | **21 33 31.3** | **0.0** |
| LKD2 | | | | S | **Sg** | **21 33 38.7** | **+0.1** |
| **NYDR** | **Nydri-Lefkada** | **0.61** | **116** | P | **Pg** | **21 33 31.5** | **-0.9** |
| NYDR | | | | S | **Sb** | **21 33 41.1** | **-0.6** |
| | comp=E,875nm,0.5s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.61** | **116** | P | **Pg** | **21 33 32.2** | **-0.2** |
| NYDR | | | | S | **Sb** | **21 33 41.2** | **-0.5** |
| **EVGI** | **Lefkada island** | **0.63** | **125** | P | **Pg** | **21 33 31.9** | **-0.9** |
| EVGI | | | | S | **Sb** | **21 33 42.2** | **-0.1** |
| | comp=E,902nm,0.2s | | | | | | |
| **EVGI** | **Lefkada island** | **0.63** | **125** | P | **Pb** | **21 33 33.3** | **-0.2** |
| **FSK** | **Fiskardo** | **0.69** | **140** | P | **Pg** | **21 33 33.3** | **-0.5** |
| FSK | | | | S | **Sb** | **21 33 43.7** | **-0.2** |
| | comp=E,1μm,0.4s | | | | | | |
| **FSK** | **Fiskardo** | **0.69** | **140** | P | **Pg** | **21 33 34.2** | **+0.4** |
| FSK | | | | S | **Sb** | **21 33 44.4** | **+0.5** |
| **KEK** | **Kerkira** | **0.74** | **348** | P | **Pg** | **21 33 35.1** | **+0.1** |
| KEK | | | | S | **Sb** | **21 33 46.3** | **+0.6** |
| | comp=E,2μm,0.3s | | | | | | |
| **KEK** | **Kerkira** | **0.74** | **348** | P | **Pg** | **21 33 35.6** | **+0.6** |
| KEK | | | | S | **Sb** | **21 33 46.5** | **+0.9** |
| **KASA** | **Kassiopi** | **0.76** | **356** | P | **Pb** | **21 33 36.1** | **+0.3** |
| KASA | | | | S | **Sb** | **21 33 46.9** | **+0.7** |
| **DMLN** | **Damoulianata-K** | **0.80** | **158** | P | **Pb** | **21 33 36.8** | **+0.4** |
| **DMLN** | **Damoulianata-K** | **0.80** | **158** | P | **Pb** | **21 33 37.4** | **+1.0** |
| DMLN | | | | S | **Sb** | **21 33 48.1** | **+0.8** |
| **LXRA** | **Lixouri, Kepha** | **0.85** | **156** | P | **Pn** | **21 33 38.5** | **+0.1** |
| LXRA | | | | S | **Sb** | **21 33 50.1** | **+1.4** |
| **SMHA** | **Samh** | **0.89** | **145** | P | **Pb** | **21 33 38.8** | **+0.8** |
| SMHA | | | | S | **Sb** | **21 33 50.7** | **+0.9** |
| **SRN** | **Sarande** | **0.90** | **0** | P | **Pg** | **21 33 36.0** | **-1.8** |
| | baz=4.0 | | | | | | |
| SRN | | | | S | **Sg** | **21 33 50.2** | **+0.7** |
| | baz=4.0 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,1.6nm,0.2s,baz=4.0 | | | | | | |
| **SRN** | **Sarande** | **0.90** | **0** | P | **Pg** | **21 33 37.7** | **-0.1** |
| SRN | | | | S | **Sb** | **21 33 51.4** | **+1.4** |
| | comp=N,482nm,0.5s | | | | | | |
| **VLS** | **Valsamata** | **0.93** | **150** | P | **Pb** | **21 33 39.3** | **+0.7** |
| VLS | | | | S | **Sb** | **21 33 51.9** | **+0.9** |
| **JAN** | **Janina** | **0.94** | **44** | P | **Pg** | **21 33 38.0** | **-0.7** |
| JAN | | | | S | **Sb** | **21 33 51.5** | **+0.1** |
| | comp=N,1μm,0.4s | | | | | | |
| **JAN** | **Janina** | **0.94** | **44** | P | **Pg** | **21 33 38.2** | **-0.5** |
| JAN | | | | S | **Sb** | **21 33 52.0** | **+0.6** |
| **PSDA** | **Pessada-Kefalo** | **0.98** | **152** | P | **Pb** | **21 33 40.0** | **+0.5** |
| PSDA | | | | S | **Sn** | **21 33 53.9** | **-0.1** |
| **PVO** | **Paravola** | **1.25** | **107** | P | **Pn** | **21 33 44.1** | **+0.3** |
| PVO | | | | S | **Sn** | **21 34 01.2** | **+0.6** |
| **EVR** | **Evrytania** | **1.41** | **92** | P | **Pg** | **21 33 48.0** | **+0.3** |
| EVR | | | | S | **Sg** | **21 34 06.3** | **+0.3** |
| **LTHK** | **Lithakia** | **1.43** | **152** | P | **Pg** | **21 33 48.3** | **+0.2** |
| LTHK | | | | S | **Sg** | **21 34 07.3** | **+0.6** |
| **KPRO** | **Kipourio** | **1.43** | **47** | P | **Pn** | **21 33 47.2** | **+0.7** |
| KPRO | | | | S | **Sg** | **21 34 06.7** | **-0.1** |
| **RLS** | **Riolos of Patr** | **1.48** | **128** | P | **Pb** | **21 33 48.5** | **+0.5** |
| RLS | | | | S | **Sg** | **21 34 08.2** | **+0.1** |
| **PENT** | **Pentalofos** | **1.50** | **36** | P | **Pb** | **21 33 48.5** | **+0.1** |
| PENT | | | | S | **Sb** | **21 34 07.8** | **+0.4** |
| **ANX** | **Ano Chora** | **1.55** | **104** | P | **Pb** | **21 33 49.6** | **+0.3** |
| ANX | | | | S | **Sg** | **21 34 09.7** | **-0.8** |
| **EFP** | **Efpalio** | **1.59** | **110** | P | **Pb** | **21 33 50.0** | **+0.1** |
| EFP | | | | S | **Sg** | **21 34 11.1** | **-0.7** |
| **SCTE** | **Santa Cesarea** | **1.61** | **313** | P | **Pn** | **21 33 47.9** | **-1.0** |
| | baz=317 | | | | | | |
| SCTE | | | | S | **Sn** | **21 34 08.7** | **-0.9** |
| | baz=317 | | | | | | |
| **NEST** | **Nestorio** | **1.64** | **29** | P | **Pb** | **21 33 51.1** | **+0.2** |
| NEST | | | | S | **Sb** | **21 34 11.9** | **+0.2** |
| **THL** | **Klokotos Trika** | **1.67** | **69** | P | **Pg** | **21 33 51.1** | **-0.1** |
| THL | | | | S | **Sb** | **21 34 12.5** | **+0.3** |
| **DRO** | **Drossia** | **1.69** | **127** | P | **Pb** | **21 33 51.6** | **0.0** |
| DRO | | | | S | **Sb** | **21 34 13.3** | **+0.4** |
| **KBN** | **Korca** | **1.75** | **20** | P | **Pn** | **21 33 52.1** | **+1.3** |
| | baz=21 | | | | | | |
| KBN | | | | S | **Sg** | **21 34 18.2** | **+1.4** |
| | baz=21 | | | | | | |
| **KALE** | **Kalithea** | **1.78** | **109** | P | **Pb** | **21 33 53.2** | **+0.1** |
| KALE | | | | S | **Sb** | **21 34 15.3** | **-0.2** |
| **KZN** | **Kozani** | **1.90** | **45** | P | **Pb** | **21 33 54.6** | **-0.7** |
| KZN | | | | S | **Sb** | **21 34 18.9** | **-0.2** |
| **KLV** | **Kal

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BLY** | **Banja Luka** | **6.13** | **341** | *e*Pn | **Pn** | **21 34 48.0** | **-3.0** |
| **A051A** | **Mrakovica** | **6.45** | **340** | *e*Pn | **Pn** | **21 34 55.1** | **-0.3** |
| **BOJS** | **Bojanci** | **7.41** | **333** | *e*Pn | **Pn** | **21 35 08.7** | **+0.2** |
| **CRES** | **Cresnjev** | **7.62** | **335** | *e*Pn | **Pn** | **21 35 11.0** | **-0.4** |
| **CEY** | **Cerknica** | **7.91** | **330** | *e*Pn | **Pn** | **21 35 14.4** | **-1.0** |
| **SKDS** | **Skadanscina** | **7.92** | **328** | *e*Pn | **Pn** | **21 35 15.1** | **-0.4** |
| **SOKA** | **Soboth** | **8.51** | **336** | *i* Pn | **Pn** | **21 35 24.4** | **+0.7** |
| | comp=N,0.7nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **8.52** | **334** | *i* Pn | **Pn** | **21 35 26.5** | **+2.6** |
| OBKA | comp=N,0.6nm,0.3s | | | *i* Sn | **Sn** | **21 36 55.2** | **-4.8** |
| | comp=N,1.9nm,0.4s | | | | | | |
| **MOA** | **Mollη** | **9.79** | **337** | *e*Pn | **Pn** | **21 35 42.5** | **+1.3** |
| | comp=N,0.5nm,0.2s | | | | | | |

**KRSC 03 21:52:18.5±2.2, 48°67N×156°17E, h4km±32km, Ml4.2, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDTR** | **Khodutka, Kamc** | **3.37** | **21** | *e*P | Pn | 21 53 14.2 | +2.3 |
| KDTR | | | | *e*S | Sn | 21 53 54.1 | +1.7 |
| **ASAK** | **Asacha** | **3.88** | **16** | *e*P | Pn | 21 53 22.0 | +3.0 |
| **MTVR** | **Mutnovka** | **4.03** | **18** | *e*P | Pn | 21 53 23.7 | +2.6 |
| MTVR | | | | *e*S | Sn | 21 54 11.5 | +2.8 |
| **GRL** | **Gorelyy** | **4.07** | **17** | *e*P | Pn | 21 53 24.9 | +3.3 |
| GRL | | | | *e*S | Sn | 21 54 14.6 | +4.8 |
| **UGLR** | **Uglovaya** | **4.84** | **19** | *e*P | Pn | 21 53 35.3 | +3.0 |
| **AVH** | **Avacha** | **4.88** | **18** | *e*P | Pn | 21 53 35.9 | +3.2 |
| **KOK** | **Koryaka** | **4.88** | **18** | *e*P | Pn | 21 53 37.5 | +4.7 |
| **SMAR** | **Somma** | **4.89** | **19** | *e*P | Pn | 21 53 37.7 | +4.7 |
| **KRER** | **Koryakskii** | **4.92** | **18** | *e*S | Sn | 21 54 34.9 | +4.2 |
| **KRX** | **Arik** | **4.95** | **17** | *e*P | Pn | 21 53 37.3 | +3.5 |
| KRX | | | | *e*S | Sn | 21 54 37.9 | +6.4 |
| **SPN** | **Mys Shipunskii** | **5.06** | **27** | *e*P | Pn | 21 53 38.9 | +3.8 |
| SPN | | | | *e*S | Sn | 21 54 41.1 | +7.1 |
| **GNL** | **Ganaly** | **5.15** | **12** | *e*P | Pn | 21 53 39.9 | +3.4 |
| GNL | | | | *e*S | Sn | 21 54 43.2 | +6.7 |

*DJA **03** 22:09:47.9±8.8, 10°S±8°×12°1E±6°6, h68km±96km, M4.0/5, MLv4.0/5*
*IDC **03** 22:09:55.6±4.6, 9°54S×122°14E, h61km±38km, mb3.6/2, mbtmp3.6/5, ML3.4/3, MS4.3/1, Error ellipse: s-maj=205.7km s-min=23.1km az=55.0*

**ISC 03 22:09:50.4±1.4, 10°5S±0°2×121°0E±0°2, h35km, n9, σ3$40/8, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **2.24** | **34** | P | Pn | 22 10 15.3 | -10 |
| **BATI** | **Baumata** | **2.68** | **84** | P | **Pn** | **22 10 30.9** | **-0.2** |
| **SOEI** | **Soe** | **3.34** | **77** | P | **Pn** | **22 10 40.7** | **+0.4** |
| **KAPI** | **Kappang** | **5.58** | **348** | P | **Pn** | **22 11 10.2** | **-0.8** |
| | 1.6nm,0.3s,baz=145,slow=12,SNR=1.3 | | | | | | |
| | 7.0nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.95** | **128** | P | **Pn** | **22 13 32.0** | **-0.3** |
| | 0.2nm,0.3s,baz=309,slow=14,SNR=10 | | | | | | |
| WRA | | | | S | Sn | 22 16 16.2 | -12 |
| | 0.9nm,0.7s,baz=301,slow=22,SNR=4.6 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **17.99** | **138** | P | **P** | **22 14 03.0** | **+4.8** |
| | 0.1nm,0.3s,baz=316,slow=11,SNR=14 | | | | | | |
| ASAR | | | | S | **Sn** | **22 17 12.1** | **-5.6** |
| | 0.6nm,0.7s,baz=318,slow=23,SNR=3.7 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **HNR** | **Honiara** | **38.40** | **92** | LR | LR | 22 33 52.7 | |
| | comp=Z,423nm,18.3s,baz=296,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.67** | **332** | P | **P** | **22 20 38.5** | **+0.8** |
| | 0.7nm,0.6s,baz=141,slow=7.0,SNR=9.5 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.13** | **338** | P | **P** | **22 21 03.8** | **-1.5** |
| | 0.8nm,0.5s,baz=138,slow=5.0,SNR=4.6 | | | | | | |
| | 0.8nm,0.5s | | | | | | |

*DRS **03** 22:43:04.4, 41°24N×43°23E, h5km*
*ISK **03** 22:43:09.5, 41°24N×43°61E, h7km, ML2.6/8*
*AFAD **03** 22:43:09.0±0.0, 41°23N×43°65E, h2km±2km, ML2.7*
*NORS **03** 22:43:10.3, 41°32N×44°23E, h8km, MPVA3.4*
*MOS **03** 22:43:11.0, 41°24N×44°13E, h5km, MPVA3.6*

**ISC 03 22:43:09.0±1.1, 41°20N±0°02×43°62E±0°02, h3km±9km, n68, σ1$56/121, 2C-3D, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKH** | **Akhalkalaki** | **0.23** | **335** | Pg | **Pg** | **22 43 13.8** | **+0.3** |
| AKH | | | | Sg | **Sg** | **22 43 17.1** | **+0.6** |
| **AKH** | **Akhalkalaki** | **0.23** | **335** | *e*PG | **Pg** | **22 43 13.6** | **+0.1** |
| **EAK** | **Akyaka** | **0.52** | **181** | P | **Pg** | **22 43 19.4** | **+0.6** |
| EAK | | | | S | **Sg** | **22 43 26.6** | **+1.0** |
| EAK | | | | *i* AML | AML | 22 43 28.0 | |
| | comp=E,591nm,0.5s | | | | | | |
| **KARS** | **Kars** | **0.70** | **216** | Pg | **Pb** | **22 43 24.1** | **+0.1** |
| KARS | | | | Sg | **Sb** | **22 43 34.6** | **+0.5** |
| **EPOS** | **Posof** | **0.74** | **294** | P | **Pg** | **22 43 23.8** | **+0.7** |
| EPOS | | | | S | **Sg** | **22 43 32.5** | **-0.1** |
| **AHAN** | **Ardahan-Merkez** | **0.75** | **267** | P | **Pb** | **22 43 24.5** | **-0.3** |
| AHAN | | | | S | **Sb** | **22 43 36.1** | **+0.5** |
| AHAN | | | | *i* AML | AML | 22 43 46.0 | |
| | comp=E,294nm,0.7s | | | | | | |
| **BOZK** | **Kars-Merkez-Bo** | **0.78** | **219** | P | **Pb** | **22 43 25.4** | **+0.1** |
| **DIGO** | **Kars** | **0.81** | **193** | P | **Pb** | **22 43 25.7** | **-0.1** |
| DIGO | | | | S | **Sg** | **22 43 36.2** | **+1.2** |
| DIGO | | | | *i* AML | AML | 22 43 44.0 | |
| | comp=N,342nm,0.6s | | | | | | |
| DIGO | | | | *i* AML | AML | 22 43 45.0 | |
| | comp=E,316nm,0.4s | | | | | | |
| **GOLE** | **Ardahan-G¶le** | **0.86** | **245** | P | **Pb** | **22 43 26.3** | **-0.3** |
| GOLE | | | | *i* AML | AML | 22 43 42.0 | |
| | comp=E,154nm,0.2s | | | | | | |
| **SENK** | **Senkaya-Erzuru** | **1.16** | **237** | Pn | **Pb** | **22 43 32.2** | **+0.5** |
| SENK | | | | Sn | **Sn** | **22 43 49.0** | **+0.4** |
| **DAGI** | **Agillar** | **1.29** | **265** | P | **Pg** | **22 43 33.2** | **-0.5** |
| DAGI | | | | S | **Sg** | **22 43 48.5** | **-2.1** |
| **GNI** | **Garni** | **1.35** | **141** | *i* Pg | **Pn** | **22 43 34.5** | **-0.4** |
| GNI | | | | *e*Sg | **Sb** | **22 43 53.5** | **+0.7** |
| **GNI** | **Garni** | **1.35** | **141** | *c i* PG | **Pn** | **22 43 34.3** | **-0.6** |
| **IGDI** | **IGDIR** | **1.38** | **165** | P | **Pn** | **22 43 34.2** | **-1.0** |
| IGDI | | | | S | **Sg** | **22 43 51.0** | **-2.2** |
| **GUDG** | **Gudauri** | **1.42** | **27** | *e*Pg | **Pn** | **22 43 34.1** | **-1.7** |
| GUDG | | | | *e*Sg | **Sg** | **22 43 53.5** | **-1.0** |
| **GUDG** | **Gudauri** | **1.42** | **27** | *e*PG | **Pn** | **22 43 34.1** | **-1.7** |
| GUDG | | | | *e*S | **Sg** | **22 43 53.5** | **-1.0** |
| **KOTA** | **Agri, Merkez-K** | **1.43** | **193** | P | **Pg** | **22 43 37.5** | **+1.1** |
| **DDEM** | **Demirkent** | **1.45** | **258** | P | **Pn** | **22 43 36.6** | **+0.5** |
| DDEM | | | | *i* AML | AML | 22 43 59.0 | |
| | comp=N,142nm,0.4s | | | | | | |
| DDEM | | | | *i* AML | AML | 22 44 06.0 | |
| | comp=E,77nm,0.4s | | | | | | |
| **DBAD** | **Bademkaya** | **1.47** | **263** | P | **Pn** | **22 43 36.7** | **+0.3** |
| **DBOC** | **Borcka** | **1.48** | **276** | P | **Pn** | **22 43 37.0** | **+0.5** |
| DBOC | | | | S | **Sb** | **22 43 53.6** | **-2.7** |
| **BATM** | **Batumi** | **1.50** | **286** | Pn | **Pn** | **22 43 37.2** | **+0.4** |
| BATM | | | | Sn | **Sn** | **22 43 57.0** | **+0.1** |
| **BCA** | **Borcka** | **1.52** | **280** | Pn | **Pb** | **22 43 37.7** | **-0.2** |
| BCA | | | | Sn | **Sg** | **22 43 58.2** | **+0.3** |
| **HOPA** | **Hopa-Artvin** | **1.65** | **277** | Pn | **Pb** | **22 43 39.4** | **+0.6** |
| **AGRB** | **Hanur-Agry** | **1.69** | **197** | Pn | **Pb** | **22 43 40.7** | **-0.2** |
| **LACR** | **Lac** | **1.70** | **17** | *e*Pg | **Pn** | **22 43 39.5** | **-0.2** |
| LACR | | | | *e*Sg | **Sn** | **22 44 02.0** | **0.0** |
| **LACR** | **Lac** | **1.70** | **17** | *e*PN | **Pn** | **22 43 39.5** | **-0.2** |
| LACR | | | | *e*S | **Sn** | **22 44 02.0** | **0.0** |
| **HOMI** | **Horasan** | **1.74** | **229** | P | **Pb** | **22 43 42.0** | **+0.3** |
| **KOPR** | **Koprukoy-ERZUR** | **1.81** | **229** | Pn | **Pb** | **22 43 42.4** | **-0.4** |
| **KORR** | **Kora** | **1.91** | **10** | *e*Pg | **Pb** | **22 43 44.8** | **+0.3** |
| KORR | | | | *e*Sg | **Sg** | **22 44 11.1** | **+0.7** |
| **KORR** | **Kora** | **1.91** | **10** | *e*PN | **Pb** | **22 43 44.8** | **+0.3** |
| KORR | | | | *e*S | **Sg** | **22 44 11.1** | **+0.7** |
| **ARNR** | **Ardon** | **2.04** | **14** | *e*Pg | **Pb** | **22 43 47.0** | **+0.3** |
| ARNR | | | | *e*Sg | **Sb** | **22 44 12.3** | **-0.1** |
| **ARNR** | **Ardon** | **2.04** | **14** | *de*PN | **Pb** | **22 43 46.9** | **+0.3** |
| ARNR | | | | pmax | pmax | | |
| | comp=Z,111nm,0.4s | | | | | | |
| **KMGR** | **Komgaron** | **2.07** | **26** | *e*Pg | **Pn** | **22 43 45.8** | **+1.1** |
| KMGR | | | | *e*Sg | **Sn** | **22 44 11.3** | **+0.2** |
| **KMGR** | **Komgaron** | **2.07** | **26** | *e*PN | **Pn** | **22 43 45.8** | **+1.1** |
| **LSNR** | **Lesken** | **2.08** | **4** | *e*Pg | **Pb** | **22 43 47.4** | **0.0** |
| LSNR | | | | *e*Sg | **Sg** | **22 44 16.2** | **+0.4** |
| **LSNR** | **Lesken** | **2.08** | **4** | *e*PN | **Pb** | **22 43 47.4** | **0.0** |
| LSNR | | | | *e*S | **Sg** | **22 44 16.2** | **+0.4** |
| **STDR** | **Stavd-Durt** | **2.19** | **8** | *e*Pg | **Pb** | **22 43 49.8** | **+0.6** |
| STDR | | | | *e*Sg | **Sb** | **22 44 17.7** | **+0.9** |
| **STDR** | **Stavd-Durt** | **2.19** | **8** | *e*PN | **Pb** | **22 43 49.8** | **+0.6** |
| STDR | | | | *e*S | **Sb** | **22 44 17.7** | **+0.9** |
| **BTKR** | **Batakoyurt** | **2.27** | **17** | *e*Pg | **Pb** | **22 43 50.7** | **0.0** |
| BTKR | | | | *e*Sg | **Sb** | **22 44 17.8** | **-1.4** |
| **BTKR** | **Batakoyurt** | **2.27** | **17** | *e*PN | **Pb** | **22 43 50.7** | **0.0** |
| BTKR | | | | *e*S | **Sb** | **22 44 17.8** | **-1.4** |
| **NCK** | **Nalchik** | **2.29** | **360** | *e*Pn | **Pb** | **22 43 49.7** | **-1.3** |
| NCK | | | | *e*Sn | **Sb** | **22 44 19.0** | **-0.7** |
| **NCK** | **Nalchik** | **2.29** | **360** | *e*PN | **Pb** | **22 43 49.7** | **-1.3** |
| NCK | | | | *e*S | **Sb** | **22 44 19.0** | **-0.7** |
| **IZDR** | **Rize** | **2.35** | **261** | P | **Pb** | **22 43 52.7** | **+0.7** |
| IZDR | | | | S | **Sn** | **22 44 17.7** | **-0.2** |
| **ETEKE** | **Tekederesi - E** | **2.36** | **234** | P | **Pb** | **22 43 53.0** | **+0.8** |
| **BTLR** | **Botlikh** | **2.43** | **52** | *e*PN | **Pn** | **22 43 50.0** | **+0.4** |
| BTLR | | | | *e*S | **Sb** | **22 44 22.5** | **-1.2** |
| BTLR | | | | *e*S | **Sn** | **22 44 23.0** | **+3.1** |
| BTLR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| BTLR | | | | smax | smax | | |
| | comp=N,37nm,0.8s | | | | | | |
| BTLR | | | | smax | smax | | |
| | comp=E,35nm,0.8s | | | | | | |
| BTLR | | | | smax | smax | | |
| | comp=N,36nm,0.8s | | | | | | |
| **DOMR** | **Dombai** | **2.56** | **325** | *e*PN | **Pg** | **22 43 58.8** | **+0.7** |
| **GROC** | **Groznyy** | **2.57** | **38** | *e*PN | **Pb** | **22 43 56.2** | **+0.5** |
| GROC | | | | *e* | | 22 44 30.4 | |
| GROC | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| GROC | | | | smax | smax | | |
| | comp=E,40nm,0.6s | | | | | | |
| GROC | | | | smax | smax | | |
| | comp=E,36nm,0.6s | | | | | | |
| GROC | | | | smax | smax | | |
| | comp=N,27nm,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **2.58** | **348** | *e*Pn | **Pb** | **22 43 57.2** | **+1.3** |
| KBZ | | | | *e*Sn | **Sb** | **22 44 28.4** | **+0.5** |
| **KBZ** | **Khabaz** | **2.58** | **348** | *e*PN | **Pb** | **22 43 56.6** | **+0.7** |
| **SHA1** | **Shidzhatmaz** | **2.63** | **345** | *e*Pn | **Pb** | **22 43 57.5** | **+0.6** |
| SHA1 | | | | *e*Sn | **Sg** | **22 44 31.7** | **-1.9** |
| **SHA1** | **Shidzhatmaz** | **2.63** | **345** | *e*PN | **Pb** | **22 43 57.5** | **+0.6** |
| SHA1 | | | | *e*S | **Sg** | **22 44 31.7** | **-1.9** |
| **BAYB** | **BAYBURT** | **2.72** | **251** | P | **Pg** | **22 44 00.6** | **-0.6** |
| **KMKR** | **Kumukh** | **2.77** | **69** | *e*PN | **Pn** | **22 43 55.3** | **+0.9** |
| KMKR | | | | *e*S | **Sb** | **22 44 32.6** | **-0.9** |
| KMKR | | | | *e*S | **Sn** | **22 44 33.2** | **+4.8** |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.1s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=E,38nm,0.2s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,40nm,0.4s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,33nm,0.5s | | | | | | |
| **GNBR** | **Gunib** | **2.77** | **64** | *e*Pn | **Pn** | **22 43 53.3** | **-0.9** |
| GNBR | | | | *e*Sn | **Sn** | **22 44 24.7** | **-3.5** |
| **GNBR** | **Gunib** | **2.77** | **64** | *e*PN | **Pn** | **22 43 53.3** | **-0.9** |
| GNBR | | | | *e*S | **Sn** | **22 44 24.7** | **-3.5** |
| **UNCR** | **Uncukul** | **2.81** | **56** | *e*PN | **Pn** | **22 43 55.7** | **+0.9** |
| UNCR | | | | *e*S | **Sb** | **22 44 33.4** | **-1.2** |
| UNCR | | | | *e*S | **Sn** | **22 44 34.1** | **+4.9** |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=N,22nm,0.9s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=E,36nm,0.5s | | | | | | |
| UNCR | | | | smax | smax | | |
| | comp=E,13nm,0.6s | | | | | | |
| **KIV** | **Kislovodsk** | **2.84** | **346** | *e*Pn | **Pb** | **22 44 00.5** | **+0.2** |
| KIV | | | | *e*Sn | **Sb** | **22 44 36.2** | **+0.7** |
| **KIV** | **Kislovodsk** | **2.84** | **346** | *e*PN | **Pb** | **22 44 00.5** | **+0.2** |
| KIV | | | | *e*S | **Sb** | **22 44 36.2** | **+0.7** |
| **BEYR** | **Belyy Ugol+** | **2.87** | **348** | *e*Pn | **Pb** | **22 44 00.1** | **-0.7** |
| BEYR | | | | *e*Sn | **Sb** | **22 44 36.5** | **+0.1** |
| **BEYR** | **Belyy Ugol+** | **2.87** | **348** | *e*PN | **Pb** | **22 44 00.1** | **-0.7** |
| BEYR | | | | *e*S | **Sb** | **22 44 36.5** | **+0.1** |
| **PYA1** | **Pyatigorsk** | **2.88** | **352** | *e*Pn | **Pn** | **22 43 58.5** | **+2.6** |
| PYA1 | | | | *e*Sn | **Sb** | **22 44 37.8** | **+1.0** |
| **PYA1** | **Pyatigorsk** | **2.88** | **352** | *e*PN | **Pn** | **22 43 58.5** | **+2.6** |
| PYA1 | | | | *e*S | **Sb** | **22 44 37.8** | **+1.0** |
| **ARXR** | **Arkhyz** | **2.93** | **324** | *e*PN | **Pg** | **22 44 04.1** | **-1.0** |
| **KRNR** | **Karanay** | **2.94** | **55** | *e*Pn | **Pn** | **22 43 59.2** | **+2.5** |
| KRNR | | | | *e*Sn | **Sn** | **22 44 27.8** | **-4.7** |
| **KRNR** | **Karanay** | **2.94** | **55** | *e*PN | **Pn** | **22 43 59.2** | **+2.5** |
| KRNR | | | | *e*S | **Sn** | **22 44 27.8** | **-4.7** |
| **DBC** | **Dubki** | **3.00** | **52** | *e*PN | **Pn** | **22 43 58.2** | **+0.7** |
| DBC | | | | *e*S | **Sb** | **22 44 37.4** | **-2.7** |
| DBC | | | | *e*S | **Sn** | **22 44 38.0** | **+4.0** |
| DBC | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=E,14nm,0.6s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=N,6.0nm,0.6s | | | | | | |
| DBC | | | | smax | smax | | |
| | comp=E,14nm,0.9s | | | | | | |
| **AKT** | **Akhty** | **3.11** | **84** | *e*PN | **Pn** | **22 44 00.4** | **+1.4** |
| AKT | | | | *e*S | **Sb** | **22 44 41.3** | **-1.9** |
| AKT | | | | *e*S | **Sn** | **22 44 41.9** | **+5.2** |
| AKT | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| AKT | | | | smax | smax | | |
| | comp=N,19nm,0.5s | | | | | | |
| AKT | | | | smax | smax | | |
| | comp=E,30nm,0.4s | | | | | | |
| AKT | | | | smax | smax | | |
| | comp=E,26nm,0.4s | | | | | | |
| **OBN** | **Obninsk** | **14.68** | **344** | *e*P | **P** | **22 46 42.7** | **-1.1** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |

**IGQ 03 22:57:07.4±0.8, 4°S±5°×77°W±°, h12km, M4.0/19, Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAIS** | **Taisha** | **1.81** | **342** | P | Pn | 22 57 38.5 | 0.0 |
| **BOSC** | **San Juan Bosco** | **1.83** | **301** | P | Pn | 22 57 37.3 | -1.5 |
| **ZUMB** | **Zumba** | **2.33** | **251** | P | Pn | 22 57 45.1 | -0.5 |
| **GONZ** | **Gonzanam** | **2.46** | **267** | P | Pn | 22 57 47.8 | +0.1 |
| GONZ | | | | S | Sn | 22 58 17.2 | -0.7 |
| **PKYU** | **Pakayacu** | **2.54** | **345** | P | Pn | 22 57 47.6 | -0.9 |
| PKYU | | | | S | Sn | 22 58 17.7 | -1.6 |
| **BPAT** | **Tungurahua Vol** | **2.99** | **330** | P | Pn | 22 57 54.1 | -1.0 |
| **BMAS** | **Trigal station** | **3.02** | **329** | P | Pn | 22 57 54.5 | -0.8 |
| **MCRA** | **Macar, Loja** | **3.02** | **265** | P | Pn | 22 57 53.6 | -1.6 |
| **BBIL** | **Ulba Tungurahu** | **3.07** | **330** | P | Pn | 22 57 55.4 | -0.6 |
| **JUI6** | **Juive** | **3.08** | **330** | P | Pn | 22 57 55.5 | -0.7 |
| **IGUA** | **Igualata** | **3.11** | **327** | P | Pn | 22 57 56.8 | -0.1 |
| **JSCH** | **Cashca Tororas** | **3.13** | **319** | P | Pn | 22 57 57.9 | +0.9 |
| **TAMH** | **Tambohuasha Ch** | **3.15** | **324** | P | Pn | 22 57 58.2 | +0.9 |
| **CHSH** | **Refugio Sur-Vo** | **3.24** | **323** | P | Pn | 22 57 58.5 | -0.1 |
| **PIAT** | **Ana Tenorio** | **3.37** | **337** | P | Pn | 22 57 58.9 | -1.3 |
| **BMOR** | **Cotopaxi Volca** | **3.69** | **336** | P | Pn | 22 58 04.1 | -0.6 |
| **SLOR** | **San Lorenzo -** | **3.70** | **335** | P | Pn | 22 58 04.9 | -0.1 |
| **BTAM** | **Cotopaxi Volca** | **3.71** | **337** | P | Pn | 22 58 04.8 | -0.3 |
| **BVC2** | **Cotopaxi Volca** | **3.73** | **337** | P | Pn | 22 58 05.0 | -0.4 |
| **BREF** | **Cotopaxi Volca** | **3.74** | **336** | P | Pn | 22 58 05.5 | 0.0 |
| **BNAS** | **Cotopaxi Volca** | **3.75** | **336** | P | Pn | 22 58 05.7 | +0.1 |
| **ANTS** | **Antisana-Sarah** | **3.80** | **341** | P | Pn | 22 58 04.9 | -1.5 |
| **ANTG** | **Antisana-Guama** | **3.82** | **340** | P | Pn | 22 58 05.2 | -1.4 |
| **PITA** | **Cotopaxi Volc** | **3.83** | **337** | P | Pn | 22 58 06.7 | 0.0 |
| **ANTI** | **Antisana** | **3.84** | **341** | P | Pn | 22 58 05.3 | -1.6 |
| **REVS** | **Reventador Sur** | **4.04** | **350** | P | Pn | 22 58 07.2 | -2.1 |
| **LAV4** | **Lava4-Reventad** | **4.05** | **350** | P | Pn | 22 58 08.2 | -1.3 |
| **GGPT** | **Toaza - Volcan** | **4.21** | **336** | P | Pn | 22 58 14.2 | +2.3 |
| **JUA2** | **San Juan 2** | **4.22** | **337** | P | Pn | 22 58 14.0 | +2.0 |
| **CAYR** | **Refugio Cayamb** | **4.24** | **345** | P | Pn | 22 58 12.5 | +0.1 |
| **ANGU** | **Angureal** | **4.27** | **345** | P | Pn | 22 58 11.9 | -0.9 |
| **PINO** | **Pino** | **4.27** | **337** | P | Pn | 22 58 14.5 | +1.7 |
| **YANA** | **Yana** | **4.29** | **338** | P | Pn | 22 58 14.8 | +1.8 |
| **PAC1** | **Pacto, Paraso** | **4.73** | **337** | P | Pn | 22 58 19.6 | +0.9 |
| **LNGL** | **El Angel-Carch** | **4.94** | **347** | P | Pn | 22 58 23.1 | +1.2 |
| **FLOC** | **Florencia** | **5.80** | **13** | P | Pn | 22 58 30.1 | -3.2 |

**NEIC 03 23:06:53.2±0.9, 42°55N±0°06×126°2W±0°2, h10km±2km,**

**ML2.7/66, Error ellipse: s-maj=18.7km s-min=10.5km az=263.0, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBO** | **Bosley Butte** | **1.53** | **102** | Pn | Pn | 23 07 20.3 | -0.3 |
| KBO | | | | IAML | | 23 08 00.1 | |
| | comp=N,66nm,1.6s | | | | | | |
| KBO | | | | IAML | | 23 08 11.8 | |
| | comp=E,77nm,1.8s | | | | | | |
| **J01E** | **Myrtle Point** | **1.81** | **69** | | Pn | 23 07 24.1 | -0.2 |
| J01E | | | | IAML | | 23 07 51.1 | |
| | comp=E,86nm,0.3s | | | | | | |
| J01E | | | | IAML | | 23 07 56.4 | |
| | comp=N,62nm,0.7s | | | | | | |
| **KSXB** | **Camp Six Broad** | **1.90** | **111** | | Pn | 23 07 25.3 | -0.3 |
| **KRMB** | **Red Mountain** | **2.02** | **120** | Pn | Pn | 23 07 26.7 | -0.6 |
| **L02F** | **Cave Junction** | **2.02** | **101** | | Pn | 23 07 27.6 | +0.2 |
| **KRPM** | **Rodgers** | **2.16** | **129** | Pn | Pn | 23 07 27.3 | -1.9 |
| KRPM | | | | IAML | | 23 08 12.5 | |
| | comp=N,43nm,1.6s | | | | | | |
| KRPM | | | | IAML | | 23 08 45.7 | |
| | comp=E,45nm,2.6s | | | | | | |
| **DBO** | **Dodson Butte** | **2.28** | **74** | Pn | Pn | 23 07 31.6 | +0.7 |
| DBO | | | | IAML | | 23 08 06.8 | |
| | comp=N,33nm,1.1s | | | | | | |
| **I03D** | **Drain, OR** | **2.41** | **60** | | Pn | 23 07 32.2 | -0.4 |
| **HUMO** | **Hull Mountain** | **2.43** | **87** | Pn | Pn | 23 07 33.3 | +0.4 |
| **KMPM** | **Mount Pierce** | **2.66** | **142** | Pn | Pn | 23 07 35.4 | -0.7 |
| KMPM | | | | IAML | | 23 08 11.9 | |
| | comp=E,35nm,1.7s | | | | | | |
| KMPM | | | | IAML | | 23 09 21.2 | |
| | comp=N,29nm,1.5s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **2.75** | **106** | | Pn | 23 07 37.2 | -0.2 |
| **BUCK** | **Buck Mountain** | **2.89** | **54** | | Pn | 23 07 39.4 | 0.0 |
| BUCK | | | | IAML | | 23 08 01.1 | |
| | comp=N,26nm,2.9s | | | | | | |
| BUCK | | | | IAML | | 23 08 04.2 | |
| | comp=E,22nm,1.6s | | | | | | |
| **COR** | **Corvallis** | **2.95** | **45** | Pn | Pn | 23 07 40.2 | +0.2 |
| COR | | | | IAML | | 23 08 21.7 | |
| | comp=E,32nm,1.9s | | | | | | |
| COR | | | | IAML | | 23 08 36.6 | |
| | comp=E,27nm,1.7s | | | | | | |
| **KMRM** | **Mail Ridge** | **3.00** | **140** | Pn | Pn | 23 07 41.0 | +0.1 |
| KMRM | | | | IAML | | 23 08 10.4 | |
| | comp=N,32nm,2.4s | | | | | | |
| KMRM | | | | IAML | | 23 09 06.6 | |
| | comp=E,35nm,3.3s | | | | | | |
| **I04A** | **Tendick Farm,** | **3.07** | **65** | | Pn | 23 07 41.8 | +0.1 |
| I04A | | | | IAML | | 23 08 28.2 | |
| | comp=N,19nm,0.7s | | | | | | |
| I04A | | | | IAML | | 23 08 30.4 | |
| | comp=E,21nm,1.0s | | | | | | |
| **HEBO** | **Mount Hebo** | **3.22** | **33** | Pn | Pn | 23 07 42.5 | -1.3 |
| **H04D** | **Lebanon** | **3.22** | **51** | | Pn | 23 07 43.9 | +0.1 |
| **K04D** | **Chiloquin, OR** | **3.31** | **87** | | Pn | 23 07 45.7 | +0.5 |
| **G03D** | **McMinnville, O** | **3.42** | **38** | Pn | Pn | 23 07 46.3 | -0.3 |
| G03D | | | | IAML | | 23 08 33.3 | |
| | comp=N,24nm,3.2s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **3.51** | **131** | Pn | Pn | 23 07 48.1 | +0.2 |
| **H04A** | **Detroit Lake** | **3.64** | **53** | | Pn | 23 07 50.0 | +0.5 |
| H04A | | | | IAML | | 23 08 38.9 | |
| | comp=N,15nm,0.3s | | | | | | |
| H04A | | | | IAML | | 23 08 42.8 | |
| | comp=E,15nm,0.5s | | | | | | |
| **J05D** | **Fort Rock, OR** | **3.75** | **77** | | Pn | 23 07 51.3 | +0.1 |
| J05D | | | | IAML | | 23 08 26.4 | |
| | comp=E,12nm,3.5s | | | | | | |
| J05D | | | | IAML | | 23 09 00.9 | |
| | comp=N,11nm,1.1s | | | | | | |
| **F03A** | **Seaside** | **3.89** | **29** | Pn | Pn | 23 07 52.2 | -0.9 |
| **PINE** | **Pine Mountain** | **4.07** | **70** | | Pn | 23 07 56.0 | +0.4 |
| PINE | | | | IAML | | 23 08 36.6 | |
| | comp=N,8.1nm,1.1s | | | | | | |
| PINE | | | | IAML | | 23 08 52.0 | |
| | comp=E,9.5nm,3.1s | | | | | | |
| **RADR** | **Rader Ridge** | **4.25** | **23** | Pn | Pn | 23 07 58.0 | 0.0 |
| **HOOD** | **Mount Hood Mea** | **4.32** | **48** | | Pn | 23 07 58.8 | -0.3 |
| HOOD | | | | IAML | | 23 08 42.2 | |
| | comp=N,13nm,1.4s | | | | | | |
| **F04A** | **Amboy** | **4.36** | **38** | Pn | Pn | 23 07 59.5 | +0.1 |
| F04A | | | | IAML | | 23 09 04.8 | |
| | comp=E,11nm,1.1s | | | | | | |
| F04A | | | | IAML | | 23 10 58.1 | |
| | comp=N,10nm,3.2s | | | | | | |
| **E03A** | **Lebam** | **4.43** | **25** | Pn | Pn | 23 07 59.1 | -1.4 |
| **G05A** | **Wamic** | **4.46** | **51** | | Pn | 23 08 00.8 | -0.1 |
| **G06A** | **Carlson Farm,** | **4.86** | **55** | | Pn | 23 08 06.6 | +0.2 |
| G06A | | | | IAML | | 23 09 45.5 | |
| | comp=N,5.9nm,3.7s | | | | | | |
| G06A | | | | IAML | | 23 10 19.7 | |
| | comp=E,5.4nm,2.9s | | | | | | |
| **LON** | **Longmire** | **5.26** | **35** | | Pn | 23 08 11.4 | -0.4 |
| LON | | | | IAML | | 23 09 29.9 | |
| | comp=N,3.8nm,3.9s | | | | | | |
| LON | | | | IAML | | 23 09 39.5 | |
| | comp=E,3.4nm,2.1s | | | | | | |
| **G08A** | **Pilot Rock** | **5.93** | **60** | Pn | Pn | 23 08 21.3 | +0.2 |
| **LTY** | **Liberty** | **6.15** | **38** | Pn | Pn | 23 08 24.1 | 0.0 |
| **BMO** | **Blue Mountains** | **6.87** | **67** | Pn | Pn | 23 08 33.4 | -0.6 |

*IDC **03** 23:09:20.9±0.8, 34°79N×70°86E, h0km, mb3.9/12, mbtmp3.9/16, ML3.6/4, MS2.9/3, Error ellipse: s-maj=19.6km s-min=17.4km az=113.0*
*NDI **03** 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DDI | Dehra Dun | 7.50 | 124 | *e*S | | Sn | 23 12 34.8 | -1.9 | | |
| AML | Almayashu | 7.73 | 16 | P | | Pn | 23 11 17.8 | +1.4 | | |
| | SNR=35 | | | | | | | | | |
| NRN | Naryn | 7.84 | 30 | Pn | | Pn | 23 11 17.2 | -0.6 | | |
| UCH | Uchtor | 8.03 | 20 | P | | Pn | 23 11 21.9 | +1.4 | | |
| | SNR=14 | | | | | | | | | |
| KUDL | Kundal | 8.13 | 142 | *e*P | | Pn | 23 11 21.7 | +0.2 | | |
| KUDL | | | | *e*S | | Sn | 23 12 49.0 | -3.2 | | |
| KUDL | | | | IAML | | | 23 12 56.9 | | | |
| | comp=E,23nm,0.5s | | | | | | | | | |
| KUDL | | | | IAML | | | 23 12 57.9 | | | |
| | comp=N,17nm,0.5s | | | | | | | | | |
| EKS2 | Erkin-Say | 8.26 | 15 | P | | Pn | 23 11 26.1 | +2.8 | | |
| | SNR=24 | | | | | | | | | |
| KK31 | Karatay Array | 8.38 | 358 | Pn | | Pn | 23 11 25.2 | +0.4 | | |
| KK31 | Karatay Array | 8.38 | 358 | ⇑P | | Pn | 23 11 25.3 | +0.4 | | |
| | comp=N,5.0nm,0.4s,baz=177,slow=12 | | | | | | | | | |
| KK31 | | | | ⇓S | | Sn | 23 12 57.0 | -1.1 | | |
| | comp=N,16nm,0.6s,baz=170,slow=22 | | | | | | | | | |
| KKAR | Karatay Array | 8.38 | 358 | | | Pn | 23 11 25.2 | +0.3 | | |
| KKAR | Karatay Array | 8.38 | 358 | | | Pn | 23 11 25.6 | +0.7 | | |
| AAK | Ala-Archa | 8.41 | 19 | Pn | | Pn | 23 11 26.3 | +0.9 | | |
| AAK | Ala-Archa | 8.41 | 19 | Pn | | Pn | 23 11 25.3 | -0.1 | | |
| | comp=N,2.1nm,0.3s,baz=221,slow=17,SNR=6.9 | | | | | | | | | |
| AAK | | | | Sn | | Sn | 23 12 58.9 | -0.2 | | |
| | comp=N,0.4nm,0.3s,baz=266,slow=23,SNR=2.1 | | | | | | | | | |
| AAK | | | | LR | | LR | 23 14 47.8 | | | |
| | comp=N,69nm,18.9s,baz=214,slow=39 | | | | | | | | | |
| | comp=N,6.5nm,0.5s | | | | | | | | | |
| AAK | Ala-Archa | 8.41 | 19 | ⇑P | | Pn | 23 11 27.5 | +2.1 | | |
| | comp=N,5.5nm,0.5s | | | | | | | | | |
| AAK | | | | ⇓S | | Sn | 23 13 01.5 | +2.4 | | |
| | comp=N,9.6nm,0.7s | | | | | | | | | |
| BOOM | Boomskoye usch | 8.72 | 26 | Pn | | Pn | 23 11 29.6 | -0.2 | | |
| CHMS | Chumysh | 8.81 | 19 | P | | Pn | 23 11 33.3 | +2.5 | | |
| | SNR=7.5 | | | | | | | | | |
| AJM | Ajmer | 8.84 | 157 | *e*S | | Sn | 23 13 09.8 | +0.3 | | |
| TKM2 | Tokmak 2 | 8.99 | 23 | P | | Pn | 23 11 38.6 | +5.1 | | |
| | SNR=16 | | | | | | | | | |
| TKM2 | Tokmak 2 | 8.99 | 23 | ⇑P | | Pn | 23 11 35.0 | +1.6 | | |
| | comp=N,6.3nm,0.6s | | | | | | | | | |
| TKM2 | | | | ⇓S | | Sn | 23 13 14.9 | +1.5 | | |
| | comp=N,2.2nm,0.6s | | | | | | | | | |
| USP | Ospenovka | 9.00 | 17 | P | | Pn | 23 11 35.8 | +2.4 | | |
| | SNR=6.1 | | | | | | | | | |
| PTH | Pithoragarh | 9.47 | 120 | *e*P | | Pn | 23 11 39.3 | -0.7 | | |
| PTH | | | | *e*S | | Sn | 23 13 21.3 | -3.8 | | |
| PTH | | | | IAML | | | 23 13 26.5 | | | |
| | comp=E,10nm,0.5s | | | | | | | | | |
| PTH | | | | IAML | | | 23 13 28.0 | | | |
| | comp=N,12nm,0.5s | | | | | | | | | |
| JHNI | Jhansi | 11.37 | 142 | *e*P | | Pn | 23 12 06.3 | +0.5 | | |
| JHNI | | | | *e*S | | Sn | 23 14 06.3 | -5.3 | | |
| BHPL | Bhopal | 12.80 | 152 | *e*S | | Sn | 23 14 41.8 | -4.7 | | |
| MAKZ | Makanchi | 14.71 | 31 | | | Pn | 23 12 50.9 | -0.3 | | |
| MK31 | Makanchi Array | 14.84 | 32 | Pn | | Pn | 23 12 53.2 | +0.3 | | |
| MK31 | Makanchi Array | 14.84 | 32 | P | | P | 23 12 57.2 | -0.7 | | |
| | comp=N,2.2nm,0.6s,baz=210,slow=11,SNR=33 | | | | | | | | | |
| MKAR | Makanchi Array | 14.84 | 32 | | | Pn | 23 12 53.5 | +0.6 | | |
| MKAR | Makanchi Array | 14.84 | 32 | Pn | | Pn | 23 12 51.9 | -1.0 | | |
| | comp=N,0.1nm,0.3s,baz=212,slow=11,SNR=4.5 | | | | | | | | | |
| | comp=N,0.5nm,0.7s | | | | | | | | | |
| WMQ | Urumqi | 15.88 | 50 | *e*P | | Pn | 23 13 06.7 | +0.3 | | |
| AB31 | Akbulak array | 16.61 | 334 | ⇑P | | Pn | 23 13 15.0 | -0.5 | | |
| | comp=N,2.2nm,0.3s,baz=150,slow=12,SNR=95 | | | | | | | | | |
| ABKAR | Akbulak array | 16.61 | 334 | | | Pn | 23 13 14.8 | -0.7 | | |
| ABKAR | Akbulak array | 16.61 | 334 | | | Pn | 23 13 15.1 | -0.4 | | |
| ABKAR | | | | IAmb | | IAmb | 23 13 17.7 | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| KURBB | Kurchatov Arra | 16.86 | 17 | Pn | | Pn | 23 13 15.8 | -2.8 | | |
| | baz=204,slow=10,SNR=1.5 | | | | | | | | | |
| | comp=Z,0.8nm,0.2s | | | | | | | | | |
| KURK | Kurchatov | 16.96 | 17 | Pn | | Pn | 23 13 20.2 | +0.3 | | |
| AKTO | Aktyubinsk | 18.29 | 333 | P | | P | 23 13 35.1 | -0.9 | | |
| | comp=Z,0.7nm,0.3s,baz=155,slow=11,SNR=19 | | | | | | | | | |
| AKTO | | | | S | | Sn | 23 16 55.2 | -4.2 | | |
| | comp=Z,1.9nm,0.7s,baz=237,slow=12,SNR=2.4 | | | | | | | | | |
| | comp=Z,14nm,1.1s | | | | | | | | | |
| BRVK | Borovoye | 18.34 | 359 | P | | P | 23 13 36.6 | +0.1 | | |
| BRVK | | | | IAmb | | IAmb | 23 13 41.0 | | | |
| | comp=Z,3.5nm,0.7s | | | | | | | | | |
| HYB | Hyderabad | 18.55 | 156 | *e*P | | P | 23 13 34.8 | -4.4 | | |
| ZAA0 | Zalesovo Array | 21.60 | 23 | P | | P | 23 14 10.4 | -1.4 | | |
| ZAA0 | | | | IAmb | | IAmb | 23 14 20.6 | | | |
| | comp=Z,3.9nm,0.7s | | | | | | | | | |
| ZALV | Zalesovo Beam | 21.60 | 23 | P | | P | 23 14 11.0 | -0.9 | | |
| ZALV | Zalesovo Beam | 21.60 | 23 | P | | P | 23 14 11.2 | -0.7 | | |
| | comp=Z,3.0nm,0.5s,baz=220,slow=12,SNR=13 | | | | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | | |
| ARU | Arti | 23.28 | 343 | P | | P | 23 14 30.2 | +0.6 | | |
| ARU | Arti | 23.28 | 343 | LR | | LR | 23 24 28.9 | | | |
| | comp=Z,38nm,19.0s,baz=178,slow=39 | | | | | | | | | |
| SONM | Songino Array | 29.48 | 53 | P | | P | 23 15 27.5 | +1.6 | | |
| | comp=Z,0.5nm,0.7s,baz=260,slow=7.0,SNR=3.0 | | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | | |
| CMAR | Chiang Mai Arr | 29.75 | 116 | LR | | LR | 23 30 36.1 | | | |
| | comp=Z,21nm,19.0s,baz=85,slow=43 | | | | | | | | | |
| HHC | Hu-ho-hao-te | 32.54 | 67 | *e*P | | P | 23 15 50.9 | -2.0 | | |
| HHC | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,0.6s | | | | | | | | | |
| HHC | | | | pmax | | pmax | | | | |
| | comp=Z,100nm,3.7s | | | | | | | | | |
| FINES | FINESS Array B | 38.90 | 327 | P | | P | 23 16 46.7 | -0.3 | | |
| | comp=Z,1.7nm,0.8s,baz=141,slow=12,SNR=4.0 | | | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | | | |
| ARCES | ARCESS Array B | 42.75 | 338 | P | | P | 23 17 18.4 | -0.2 | | |
| | comp=Z,2.6nm,0.8s,baz=138,slow=7.9,SNR=5.3 | | | | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | | |
| HFS | Hagfors | 44.40 | 323 | P | | P | 23 17 32.5 | +0.6 | | |
| | comp=Z,2.0nm,0.7s,baz=99,slow=9.6,SNR=7.3 | | | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | | |
| NB2 | NORSAR Subarra | 45.74 | 324 | P | | P | 23 17 43.3 | +0.7 | | |
| | comp=Z,0.5nm,0.5s,baz=99,slow=7.9 | | | | | | | | | |
| NOA | NORSAR Array B | 45.74 | 324 | P | | P | 23 17 43.2 | +0.6 | | |
| | comp=Z,0.7nm,0.6s,baz=98,slow=7.8,SNR=10.0 | | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | | |
| EKA | Eskdalemuir Ar | 53.49 | 317 | P | | P | 23 18 41.2 | -0.4 | | |
| | comp=Z,0.2nm,0.5s,baz=36,slow=22,SNR=1.9 | | | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | | | |
| ESDC | Sonseca Array | 58.19 | 299 | P | | P | 23 19 17.6 | +2.0 | | |
| | comp=Z,0.9nm,0.7s,baz=59,slow=7.1,SNR=12 | | | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | | | |
| TORD | Torodi Ar. Bea | 65.56 | 269 | P | | P | 23 20 06.7 | +1.3 | | |
| | comp=Z,0.9nm,0.5s,baz=47,slow=6.2,SNR=22 | | | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | | | |
| BOSA | Boshof | 76.31 | 220 | P | | P | 23 21 12.4 | +2.1 | | |
| | comp=Z,1.8nm,0.7s,baz=20,slow=1.8,SNR=4.3 | | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | | |
| WRA | Warramunga Arr | 81.16 | 122 | P | | P | 23 21 38.1 | +1.0 | | |
| | comp=Z,0.5nm,0.7s,baz=324,slow=4.9,SNR=6.4 | | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | | |
| ASAR | Alice Springs | 83.34 | 125 | P | | P | 23 21 50.0 | +1.5 | | |
| | comp=Z,0.4nm,0.7s,baz=310,slow=5.3,SNR=4.7 | | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | | |

*TEH* ***03*** *23:24:02.1,24˚.90N×63˚.31E,h15km, ML3.9*
*NEIC* ***03*** *23:24:04.9±0.9,24˚.7N±0˚.1×63˚.05E±0˚.06,h10km±2km, mb4.0/17, Error ellipse: s-maj=21.9km s-min=5.9km az=160.0*
*MOS* ***03*** *23:24:04.5±1.8,24˚.84N×63˚.12E,h10km,mb4.3/12, Error ellipse: s-maj=13.0km s-min=7.2km az=77.0*
*IDC* ***03*** *23:24:05.7±1.5,24˚.95N×63˚.03E,h0km,mb3.8/14, mbtmp3.8/15,ML3.5/1,MS3.5/3, Error ellipse: s-maj=31.6km s-min=19.3km az=172.0*
*OMAN* ***03*** *23:24:15.4±1.4,24˚.88N×62˚.32E,h10km,mb4.6/14, ml3.6/8,ms2.9/1,Mwp5.1/5, Error ellipse: s-maj=14.1km s-min=9.6km az=129.0*
**ISC 03 23:24:08.8±0.5,24˚.90N±0˚.05×62˚.90E±0˚.04,h28km,n153, σ2s29/186,mb4.1/38,MS3.3/3,4C-5D, Off coast of Pakistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NGCH | Negor - Chabah | 1.66 | 286 | Pn | Pb | 23 24 37.8 | -0.9 |
| NGCH | Negor - Chabah | 1.66 | 286 | P | Pb | 23 24 38.0 | -0.7 |
| | SNR=18 | | | | | | |
| NGCH | | | | S | Sn | 23 24 57.7 | +1.2 |
| CHBR | Chabahar | 2.30 | 288 | Pn | Pn | 23 24 45.5 | +0.7 |
| SRVN | Saravan | 2.53 | 350 | Pn | Pn | 23 24 46.7 | -1.5 |
| JLN | Jalan Bani Buh | 4.22 | 230 | P | Pn | 23 25 12.2 | +1.0 |
| | SNR=28 | | | | | | |
| JLN | | | | S | Sn | 23 25 59.0 | -0.5 |
| WSAR | Wadi Sarin | 4.24 | 248 | Pn | Pn | 23 25 13.4 | +1.9 |
| | 2.3nm,0.3s,baz=74,slow=6.1,SNR=31 | | | | | | |
| WSAR | | | | Sn | Sn | 23 25 57.1 | -3.0 |
| | 8.4nm,0.3s,baz=221,slow=23,SNR=9.5 | | | | | | |
| | 8.2nm,0.6s | | | | | | |
| WSAR | Wadi Sarin | 4.24 | 248 | P | Pn | 23 25 14.2 | +2.7 |
| WSAR | | | | S | Sn | 23 25 57.0 | -3.2 |
| WBK | Wadi Bani Khal | 4.26 | 238 | Pn | Pn | 23 25 13.1 | +1.2 |
| WBK | Wadi Bani Khal | 4.26 | 238 | P | Pn | 23 25 13.2 | +1.3 |
| | SNR=113 | | | | | | |
| WBK | | | | S | Sn | 23 25 58.4 | -2.4 |
| BIDO | Bidbid | 4.57 | 253 | P | Pn | 23 25 18.2 | +2.2 |
| | SNR=7.8 | | | | | | |
| BIDO | | | | S | Sn | 23 26 04.5 | -3.8 |
| JASK | Jask - Hormozg | 4.66 | 283 | Pn | Pn | 23 25 19.4 | +2.1 |
| JASK | Jask - Hormozg | 4.66 | 283 | P | Pn | 23 25 19.8 | +2.6 |
| JASK | | | | S | Sn | 23 26 10.1 | -0.3 |
| SMDO | Samad | 4.80 | 249 | P | Pn | 23 25 21.4 | +2.0 |
| | SNR=28 | | | | | | |
| SMDO | | | | S | Sn | 23 26 13.4 | -0.8 |
| ZHDN | Zahedan | 4.85 | 338 | Pn | Pn | 23 25 18.5 | -1.6 |
| JMDO | Jabal Madar | 5.07 | 241 | P | Pn | 23 25 25.0 | +2.0 |
| | SNR=27 | | | | | | |
| JMDO | | | | S | Sn | 23 26 20.4 | -0.2 |
| HOQ | Hoqain | 5.27 | 257 | Pn | Pn | 23 25 26.4 | +0.7 |
| HOQ | Hoqain | 5.27 | 257 | P | Pn | 23 25 27.0 | +1.3 |
| | SNR=16 | | | | | | |
| HOQ | | | | S | Sn | 23 26 23.1 | -2.4 |
| KBAM | BAM | 5.79 | 318 | Pn | Pn | 23 25 32.2 | -0.7 |
| SOHO | SOHO | 5.85 | 264 | Pn | Pn | 23 25 34.5 | +0.8 |
| SOHO | SOHO | 5.85 | 264 | P | Pn | 23 25 34.6 | +1.0 |
| SOHO | | | | S | Sn | 23 26 36.9 | -3.0 |
| MHTO | MHTO | 5.99 | 230 | P | Pn | 23 25 38.3 | +2.7 |
| | SNR=9.1 | | | | | | |
| MHTO | | | | S | Sn | 23 26 40.8 | -2.5 |
| MDH | Madha | 6.00 | 275 | Pn | Pn | 23 25 35.8 | +0.1 |
| MDH | Madha | 6.00 | 275 | P | Pn | 23 25 37.0 | +1.3 |
| | SNR=12 | | | | | | |
| MDH | | | | P | Pn | 23 25 37.0 | +1.3 |
| | SNR=12 | | | | | | |
| MDH | | | | S | Sn | 23 26 38.1 | -5.4 |
| MDH | | | | S | Sn | 23 26 38.1 | -5.4 |
| ARQ | Araqi | 6.04 | 256 | P | Pn | 23 25 40.0 | +3.8 |
| | SNR=56 | | | | | | |
| BANOM | Banah | 6.06 | 281 | P | Pn | 23 25 38.2 | +1.7 |
| BANOM | | | | S | Sn | 23 26 40.3 | -4.7 |
| UOSS | Minazif | 6.08 | 272 | Pn | Pn | 23 25 37.4 | +0.5 |
| UOSS | Minazif | 6.08 | 272 | Pn | Pn | 23 25 37.6 | +0.7 |
| UOSS | | | | Sn | Sn | 23 26 39.8 | -5.8 |
| UOSS | Minazif | 6.08 | 272 | P | Pn | 23 25 37.6 | +0.7 |
| UOSS | | | | P | Pn | 23 25 37.6 | +0.7 |
| UOSS | | | | S | Sn | 23 26 39.9 | -5.6 |
| UOSS | | | | S | Sn | 23 26 39.9 | -5.6 |
| MSFE | Esma-Masafi | 6.13 | 276 | Pn | Pn | 23 25 38.7 | +1.2 |
| MASF | Masafi | 6.13 | 276 | P | Pn | 23 25 38.3 | +0.7 |
| MASF | | | | S | Sn | 23 26 41.4 | -5.4 |
| HATD | Hatta, Dubai | 6.15 | 271 | Pn | Pn | 23 25 39.2 | +1.4 |
| HATD | Hatta, Dubai | 6.15 | 271 | P | Pn | 23 25 39.3 | +1.5 |
| HATD | | | | P | Pn | 23 25 39.3 | +1.5 |
| HATD | | | | S | Sn | 23 26 43.2 | -4.0 |
| HATD | | | | S | Sn | 23 26 43.2 | -4.0 |
| SHME | Shamm | 6.22 | 282 | Pn | Pn | 23 25 41.7 | +3.0 |
| SHME | Shamm | 6.22 | 282 | P | Pn | 23 25 42.6 | +3.9 |
| | SNR=32 | | | | | | |
| SHME | | | | P | Pn | 23 25 42.6 | +3.9 |
| | SNR=32 | | | | | | |
| SHME | | | | S | Sn | 23 26 47.5 | -1.3 |
| SHME | | | | S | Sn | 23 26 47.5 | -1.3 |
| ASHO | Ashiyiah | 6.22 | 269 | Pn | Pn | 23 25 41.7 | +2.9 |
| ASHO | Ashiyiah | 6.22 | 269 | P | Pn | 23 25 41.0 | +2.1 |
| | SNR=56 | | | | | | |
| ASHO | | | | S | Sn | 23 26 46.4 | -2.7 |
| GENO | Geno | 6.54 | 294 | Pn | Pn | 23 25 45.1 | +1.9 |
| ALNE | Al Ain | 6.57 | 264 | Pn | Pn | 23 25 46.7 | +3.1 |
| ALNE | Al Ain | 6.57 | 264 | P | Pn | 23 25 47.1 | +3.5 |
| | SNR=13 | | | | | | |
| ALNE | | | | P | Pn | 23 25 47.1 | +3.5 |
| | SNR=13 | | | | | | |
| ALNE | | | | S | Sn | 23 26 56.5 | -1.1 |
| ALNE | | | | S | Sn | 23 26 56.5 | -1.1 |
| NAZ | Nazwa, Dubai | 6.57 | 272 | Pn | Pn | 23 25 47.7 | +4.1 |
| NAZ | Nazwa, Dubai | 6.57 | 272 | P | Pn | 23 25 47.6 | +4.1 |
| NAZ | | | | S | Sn | 23 26 56.8 | -0.9 |
| FAQ | Al Faqa, Dubai | 6.64 | 270 | Pn | Pn | 23 25 48.1 | +3.6 |
| FAQ | Al Faqa, Dubai | 6.64 | 270 | P | Pn | 23 25 48.6 | +4.0 |
| | SNR=8.4 | | | | | | |
| FAQ | | | | S | Sn | 23 26 58.5 | -0.8 |
| CHMN | Cheshme madani | 6.86 | 317 | Pn | Pn | 23 25 47.4 | -0.5 |
| ASUD | Al Ashush, Dub | 6.89 | 269 | Pn | Pn | 23 25 51.5 | +3.6 |
| ASUD | Al Ashush, Dub | 6.89 | 269 | P | Pn | 23 25 52.0 | +4.1 |
| | SNR=12 | | | | | | |
| ASUD | | | | S | Sn | 23 27 04.4 | -1.0 |
| NHDN | Nehbandan | 6.94 | 339 | Pn | Pn | 23 25 46.8 | -1.9 |
| DQM | DQM | 7.01 | 226 | P | Pn | 23 25 51.5 | +1.9 |
| DQM | | | | S | Sn | 23 27 06.3 | -2.1 |
| NGRK | Negar Kerman | 7.24 | 312 | Pn | Pn | 23 25 53.9 | +0.8 |
| KRM1 | Kerman Provinc | 7.48 | 319 | Pn | Pn | 23 25 55.8 | -0.5 |
| BSRN | Basiran | 7.78 | 336 | Pn | Pn | 23 25 58.1 | -2.2 |
| KHGB | Koh Gabri | 7.88 | 315 | Pn | Pn | 23 26 01.7 | -0.1 |
| MZR | Muzera | 8.82 | 260 | P | Pn | 23 26 16.3 | +1.8 |
| HRA | Herat | 9.47 | 357 | Pn | Pn | 23 26 24.3 | +0.8 |
| DOK | Doka | 10.27 | 234 | P | Pn | 23 26 36.2 | +1.9 |
| SMRA | Abu-Samra | 10.97 | 272 | P | Pn | 23 26 45.8 | +1.9 |
| KBL | Kabul | 10.98 | 28 | | Pn | 23 26 43.4 | -0.8 |
| KBL | Kabul | 10.98 | 28 | P | Pn | 23 26 43.4 | -0.8 |
| NIL | Nilore | 12.54 | 44 | | Pn | 23 27 02.7 | -2.7 |
| NIL | Nilore | 12.54 | 44 | P | Pn | 23 27 02.7 | -2.7 |
| KUDL | Kundal | 12.59 | 72 | *e*P | Pn | 23 27 03.3 | -2.6 |
| KUDL | | | | *e*S | Sn | 23 29 12.9 | -12 |
| THN | Thein Dam | 13.51 | 53 | *e*P | Pn | 23 27 16.4 | -2.2 |
| THN | | | | IAML | | 23 29 42.4 | |
| | comp=E,13nm,1.0s | | | | | | |
| THN | | | | *e*S | Sn | 23 29 50.8 | +2.9 |
| THN | | | | IAML | | 23 29 51.2 | |
| | comp=E,12nm,1.0s | | | | | | |
| DHRM | DHARAMSHALA | 13.85 | 55 | *e*P | Pn | 23 27 20.7 | -2.8 |
| DHRM | | | | IAML | | 23 29 52.5 | |
| | comp=N,23nm,0.7s | | | | | | |
| DHRM | | | | IAML | | 23 30 01.8 | |
| | comp=E,24nm,0.7s | | | | | | |
| SMLA | Simla | 14.04 | 61 | *e*P | Pn | 23 27 22.9 | -2.8 |
| SMLA | | | | *e*S | Sn | 23 29 49.4 | -11 |
| SMLA | | | | IAML | | 23 29 58.5 | |
| | comp=E,17nm,0.5s | | | | | | |
| SMLA | | | | IAML | | 23 29 59.4 | |
| | comp=E,19nm,0.6s | | | | | | |
| SIMJ | Simiganj | 14.66 | 19 | | Pn | 23 27 34.4 | 0.0 |
| CHGR | Chuyangaron | 14.70 | 20 | Pn | Pn | 23 27 35.4 | +0.5 |
| CHGR | Chuyangaron | 14.70 | 20 | P | Pn | 23 27 35.4 | +0.5 |
| GAR | Garm | 15.39 | 22 | | Pn | 23 27 44.1 | 0.0 |
| GAR | | | | IAmb | IAmb | 23 27 48.9 | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| RAYN | Ar Rayn | 15.94 | 269 | | Pn | 23 27 50.4 | -0.8 |
| RAYN | Ar Rayn | 15.94 | 269 | P | Pn | 23 27 50.8 | -0.4 |
| RAYN | Ar Rayn | 15.94 | 269 | P | Pn | 23 27 50.4 | -0.8 |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| HNLY | HANLEY | 16.11 | 57 | *e*P | Pn | 23 27 50.2 | -3.6 |
| KSH | Kashi | 18.26 | 34 | P | Pn | 23 28 14.3 | -5.9 |
| KSH | | | | pP | P | 23 28 16.3 | -3.9 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| KK31 | Karatay Array | 19.20 | 17 | P | P | 23 28 29.9 | -0.5 |
| KK31 | | | | IAmb | IAmb | 23 28 31.7 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KK31 | Karatay Array | 19.20 | 17 | P | P | 23 28 29.9 | -0.5 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KKAR | Karatay Array | 19.20 | 17 | P | P | 23 28 30.1 | -0.4 |
| KKAR | Karatay Array | 19.20 | 17 | P | P | 23 28 29.6 | -0.8 |
| KKAR | | | | IAmb | IAmb | 23 28 31.7 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KKAR | Karatay Array | 19.20 | 17 | P | P | 23 28 29.6 | -0.8 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| AML | Almayashu | 19.37 | 25 | P | Pn | 23 28 33.8 | 0.0 |
| | SNR=11 | | | | | | |
| NRN | Naryn | 19.76 | 30 | P | P | 23 28 35.0 | -1.9 |
| NRN | Naryn | 19.76 | 30 | P | P | 23 28 34.0 | -2.9 |
| NRN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| UCH | Uchtor | 19.77 | 26 | P | Pn | 23 28 39.1 | +0.4 |
| | SNR=6.2 | | | | | | |
| EKS2 | Erkin-Say | 19.85 | 24 | P | Pn | 23 28 39.7 | +0.3 |
| | SNR=7.3 | | | | | | |
| AAK | Ala-Archa | 20.11 | 26 | P | P | 23 28 39.8 | -0.7 |
| AAK | | | | IAmb | IAmb | 23 28 43.3 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| AAK | Ala-Archa | 20.11 | 26 | Pn | Pn | 23 28 42.2 | -0.2 |
| AAK | Ala-Archa | 20.11 | 26 | P | P | 23 28 40.2 | -0.2 |
| | comp=Z,3.4nm,0.6s,baz=223,slow=17,SNR=4.9 | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| AAK | Ala-Archa | 20.11 | 26 | ⇓*e*P | Pn | 23 28 42.1 | -0.3 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| ULHL | Ulahol | 20.52 | 29 | P | Pn | 23 28 46.5 | -0.8 |
| | SNR=7.9 | | | | | | |
| BOOM | Boomskoye usch | 20.58 | 28 | P | P | 23 28 44.8 | -0.8 |
| BOOM | | | | IAmb | IAmb | 23 28 55.8 | |
| | comp=Z,12nm,1.3s | | | | | | |
| BOOM | Boomskoye usch | 20.58 | 28 | P | P | 23 28 44.0 | -1.6 |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| USP | Ospenovka | 20.64 | 25 | P | P | 23 28 46.8 | +0.7 |
| | SNR=8.3 | | | | | | |
| GNI | Garni | 21.52 | 319 | P | P | 23 28 56.1 | +0.4 |
| GNI | | | | IAmb | IAmb | 23 29 12.2 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| GNI | Garni | 21.52 | 319 | P | P | 23 28 58.1 | +2.5 |
| GNI | Garni | 21.52 | 319 | P | P | 23 28 58.2 | +2.5 |
| | comp=Z,5.8nm,0.7s,baz=84,slow=19,SNR=6.7 | | | | | | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| GNI | Garni | 21.52 | 319 | P | P | 23 28 58.9 | +3.2 |
| GNI | Garni | 21.52 | 319 | ⇑*i*P | P | 23 28 58.9 | +3.2 |
| GNI | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| ABKAR | Akbulak array | 24.42 | 355 | P | P | 23 29 25.5 | +0.7 |
| ABKAR | | | | IAmb | IAmb | 23 29 36.0 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| KBZ | Khabaz | 24.90 | 324 | P | P | 23 29 31.4 | +2.2 |
| | comp=Z,6.0nm,0.8s,baz=136,slow=8.8,SNR=13 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| KBZ | Khabaz | 24.90 | 324 | ⇓*i*P | P | 23 29 32.9 | +3.7 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| SHA1 | Shidzhatmaz | 25.04 | 324 | *de*P | P | 23 29 33.9 | +3.1 |
| KIV | Kislovodsk | 25.17 | 324 | | P | 23 29 32.8 | +1.1 |
| KIV | Kislovodsk | 25.17 | 324 | *e*P | P | 23 29 35.1 | +3.3 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| MMAI | Mount Meron Ar | 25.33 | 295 | P | P | 23 29 36.4 | +3.1 |
| | comp=Z,0.8nm,0.7s,baz=102,slow=14,SNR=1.7 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 25.77 | 353 | LR | LR | 23 41 41.8 | |
| | comp=Z,51nm,20.8s,baz=288,slow=41 | | | | | | |
| MAKZ | Makanchi | 26.64 | 30 | P | P | 23 29 44.5 | -0.5 |
| MAKZ | | | | IAmb | IAmb | 23 29 47.2 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| MAKZ | Makanchi | 26.64 | 30 | P | P | 23 29 44.5 | -0.5 |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| MK31 | Makanchi Array | 26.77 | 30 | P | P | 23 29 45.3 | -0.9 |
| MK31 | | | | IAmb | IAmb | 23 29 47.9 | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| MK31 | Makanchi Array | 26.77 | 30 | ⇑*e*P | P | 23 29 47.0 | +0.8 |
| MKAR | Makanchi Array | 26.77 | 30 | P | P | 23 29 45.9 | -0.3 |
| MKAR | Makanchi Array | 26.77 | 30 | P | P | 23 29 46.9 | +0.7 |
| | comp=Z,1.6nm,0.6s,baz=210,slow=9.5,SNR=17 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 26.77 | 30 | P | P | 23 29 45.9 | -0.3 |
| KURBB | Kurchatov Arra | 28.37 | 21 | P | P | 23 30 00.8 | +0.4 |
| | comp=Z,0.2nm,0.4s,baz=220,slow=8.6,SNR=4.1 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| KURK | Kurchatov | 28.48 | 21 | ⇑*e*P | P | 23 30 03.1 | +1.7 |
| ANN | Anapa | 28.63 | 320 | *e*P | P | 23 30 00.6 | -2.2 |
| ANN | | | | *e**PP | pP | 23 30 04.7 | -6.3 |
| ANN | | | | *e* | | 23 30 56.8 | |
| ANN | | | | *e*S | S | 23 34 52.7 | +3.1 |
| ANN | | | | pmax | pmax | | |
| | comp=Z,53nm,1.4s | | | | | | |
| BRVK | Borovoye | 28.66 | 9 | ⇓*e*P | P | 23 30 04.0 | +1.0 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 33.31 | 24 | P | P | 23 30 43.4 | -0.5 |
| ZALV | Zalesovo Beam | 33.31 | 24 | P | P | 23 30 43.8 | -0.1 |
| | comp=Z,1.2nm,0.5s,baz=231,slow=9.8,SNR=7.1 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 33.31 | 24 | P | P | 23 30 43.4 | -0.5 |
| PZH | PanZhiHua | 34.95 | 79 | P | P | 23 30 58.1 | -0.5 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | |
| OBN | Obninsk | 35.87 | 334 | *e*P | P | 23 31 08.5 | +2.5 |
| OBN | | | | *e* | | 23 32 27.0 | |
| OBN | | | | *e*PPP | PPP | 23 32 42.0 | |
| OBN | | | | *e* | | 23 33 30.0 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 36.51 | 324 | P | P | 23 31 12.5 | +0.9 |
| | comp=Z,1.8nm,0.5s,baz=124,slow=7.4,SNR=7.6 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| AKBB | Malin Array Si | 36.51 | 324 | P | P | 23 31 12.1 | +0.6 |
| AKBB | Malin Array Si | 36.51 | 324 | *c*P | P | 23 31 12.6 | +1.0 |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| KIEV | Kiev | 36.52 | 324 | P | P | 23 31 12.0 | +0.3 |
| KIEV | | | | IAmb | IAmb | 23 31 13.5 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| KIEV | Kiev | 36.52 | 324 | P | P | 23 31 11.0 | -0.6 |
| KIEV | | | | pmax | pmax | | |
| | comp=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H04N1** | **CROZET ISLANDS** | **71.44** | **188** | T | | T | 00 53 23.0 | |
| | baz=11,slow=75,SNR=45 | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **71.44** | **188** | T | | T | 00 53 21.8 | |
| | baz=11,slow=75,SNR=59 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **71.46** | **188** | T | | T | 00 53 22.0 | |
| | baz=11,slow=75,SNR=43 | | | | | | | |
| **BILL** | **Bilibino** | **72.00** | **23** | *eP* | | **P** | **23 35 32.5 +2.9** | |
| BILL | | | | *e* | | | 23 35 51.2 | |
| BILL | | | | *e* | | | 23 38 11.0 | |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.53** | **116** | P | | **P** | **23 36 30.3 +0.9** | |
| | comp=Z,0.3nm,0.9s,baz=329,slow=4.1,SNR=1.7 | | | | | | | |
| WRA | | | | LR | | LR | 00 16 21.5 | |
| | comp=Z,106nm,19.3s,baz=313,slow=38 | | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | | |

**TRN 03 23:24:09.6, 15°.78N × 60°.61W, h32 km, MD3.9, 1C-4D, North-east of Dominica., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAGL** | **Barre de l'ile** | **0.67** | **285** ⇓ | *eP* | Pb | 23 24 23.8 | +0.9 |
| **TDBA** | **Terre de Bas,** | **0.99** | **274** | *eP* | Pb | 23 24 28.9 | +0.6 |
| **TBG** | **Guadaloupe-3** | **1.00** | **274** | *eP* | Pb | 23 24 28.8 | +0.3 |
| TBG | | | | *eS* | Sb | 23 24 42.1 | +0.7 |
| **CBE** | **Ff, Capester** | **1.00** | **287** | *eP* | Pb | 23 24 29.1 | +0.6 |
| **ILAM** | **Ilet Lapin Mar** | **1.03** | **195** | *eP* | Pb | 23 24 29.1 | +0.1 |
| ILAM | | | | *eS* | Sb | 23 24 43.7 | +1.5 |
| **SVN** | **Savane Anatole** | **1.08** | **210** | *eP* | Pb | 23 24 29.9 | +0.1 |
| SVN | | | | *eS* | Sb | 23 24 45.2 | +1.7 |
| **BAMF** | **Morne Balai** | **1.09** | **209** ⇓ | *eP* | Pb | 23 24 30.5 | +0.5 |
| **ABD** | **La Joyeuse, An** | **1.09** | **309** | *eP* | Pb | 23 24 29.6 | -0.4 |
| **CXM** | **Morne La Croix** | **1.10** | **209** | *eP* | Pb | 23 24 31.2 | +0.9 |
| **GBMF** | **Grand Be** | **1.11** | **209** | *eP* | Pb | 23 24 30.9 | +0.4 |
| **PCM** | **Pelee Case Pet** | **1.12** | **211** | *eP* | Pb | 23 24 30.8 | +0.3 |
| **PCM** | **Pelee Case Pet** | **1.12** | **211** | *eP* | Pb | 23 24 30.9 | +0.4 |
| **PML** | **Morne Lenard** | **1.14** | **209** ⇓ | *eP* | Pb | 23 24 31.1 | +0.3 |
| **FDF** | **Fort de France** | **1.17** | **207** ⇓ | *eP* | Pb | 23 24 31.5 | +0.2 |
| **LPMF** | **Morne Lapointe** | **1.25** | **196** | *eP* | Pb | 23 24 31.8 | -0.8 |
| **MVM** | **Montagne Vaucl** | **1.25** | **193** | *eP* | Pb | 23 24 32.4 | -0.2 |
| **TRMF** | **Trois Ilets** | **1.31** | **199** | *eP* | Pb | 23 24 33.0 | -0.6 |
| **BIM** | **Bigot** | **1.33** | **200** | *eP* | Pb | 23 24 33.7 | -0.4 |
| BIM | | | | *eS* | Sb | 23 24 50.8 | 0.0 |
| **MPOM** | **Morne Pois Mar** | **1.35** | **190** ⇑ | *eP* | Pb | 23 24 33.5 | -0.9 |
| **ANBD** | **Bethesda, Anti** | **1.68** | **319** | *eP* | Pn | 23 24 38.3 | +1.4 |
| ANBD | | | | *eS* | Sb | 23 25 00.5 | -0.2 |
| **SLBI** | **Saint Lucia, B** | **1.78** | **192** | *eP* | Pn | 23 24 39.7 | +1.4 |
| SLBI | | | | *eS* | Sb | 23 25 01.8 | -1.8 |
| **MBFL** | **Flemmings, Mon** | **1.82** | **302** | *eP* | Pb | 23 24 41.3 | -1.0 |
| MBFL | | | | *eS* | Sb | 23 25 03.0 | -1.7 |
| **SLB** | **Belfond** | **1.98** | **192** | *eP* | Pn | 23 24 42.8 | +1.7 |
| SLB | | | | *eS* | Sb | 23 25 08.2 | -1.4 |
| **SVB** | **Belmont** | **2.57** | **194** | *eP* | Pn | 23 24 51.0 | +1.9 |
| SVB | | | | *eS* | Sn | 23 25 20.3 | +1.0 |
| **SVT** | **Saint Vincent** | **2.67** | **193** | *eP* | Pn | 23 24 51.2 | +0.8 |
| SVT | | | | *eS* | Sn | 23 25 23.6 | +2.0 |

*IDC **03** 23:28:47.1±1.0, 34°.53N × 13°.79E, h0 km, mb3.6/7, mbtmp3.6/17, ML3.6/8, MS3.1/12, Error ellipse: s-maj=20.2km s-min=16.5km az=124.0*
*LDG **03** 23:28:50.3±0.9, 34°.42N × 14°.43E, h33 km, Ml3.2/4, Error ellipse: s-maj=98.7km s-min=18.3km az=61.0*

**ISC 03 23:28:47.8±0.8, 34°.43N±0°.07 × 13°.70E±0°.06, h10 km, n57, σ1§91/52, mb3.5/7, MS3.1/8, 17C-6D, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WDD** | **Wied Dalam** | **1.56** | **25** ⇑ | P | **Pn** | **23 29 14.5** | **-1.1** |
| **VAE** | **Valguarnera** | **3.10** | **10** | Pn | **Pn** | **23 29 37.0** | **+0.1** |
| | 17nm,0.3s,baz=192,slow=16,SNR=36 | | | | | | |
| VAE | | | | Sn | **Sn** | **23 30 13.7** | **-0.3** |
| | 14nm,0.3s,baz=0.0,slow=12,SNR=6.8 | | | | | | |
| **CLTB** | **Caltabellotta** | **3.17** | **353** ⇑ | P | **Pn** | **23 29 37.5** | **-0.4** |
| **TATN** | **Tataouine** | **3.23** | **236** ⇑ | P | **Pn** | **23 29 36.6** | **-2.1** |
| **KEST** | **Kesra** | **3.80** | **291** | Pn | **Pn** | **23 29 46.3** | **-0.3** |
| | 12nm,0.3s,baz=85,slow=9.0,SNR=278 | | | | | | |
| KEST | | | | Sn | **Sn** | **23 30 28.2** | **-3.2** |
| | 20nm,0.3s,baz=252,slow=23,SNR=5.5 | | | | | | |
| | 32nm,0.3s | | | | | | |
| **CEL** | **Celeste** | **4.21** | **24** ⇓ | P | **Pn** | **23 29 52.2** | **0.0** |
| **TIP** | **Timpagrande** | **5.34** | **26** ⇑ | P | **Pn** | **23 30 07.4** | **-0.3** |
| **TIP** | **Timpagrande** | **5.34** | **26** ⇑ | P | **Pn** | **23 30 07.3** | **-0.3** |
| **CUC** | **Castrocucco** | **5.81** | **16** ⇑ | P | **Pn** | **23 30 13.9** | **-0.2** |
| **VSL** | **Villasalto** | **6.13** | **327** ⇑ | P | **Pn** | **23 30 17.9** | **-0.6** |
| **KEK** | **Kerkira** | **7.18** | **41** ⇑ | P | **Pn** | **23 30 31.6** | **-1.3** |
| **ITM** | **Ithomi** | **7.22** | **65** ⇓ | P | **Pn** | **23 30 33.9** | **+0.3** |
| **FNA** | **Florina** | **8.79** | **42** ⇑ | P | **Pn** | **23 30 55.3** | **+0.4** |
| **PGF** | **Pioggiola** | **8.91** | **337** | *e*Pn | **Pn** | **23 30 59.1** | **+2.4** |
| PGF | | | | *e*Sn | **Sn** | **23 32 34.5** | **-2.6** |
| | 3.5nm,0.4s | | | | | | |
| **LIT** | **Litokhoron** | **9.01** | **48** ⇓ | P | **Pn** | **23 30 58.2** | **+0.2** |
| **PDG** | **Podgorica** | **9.10** | **27** ⇓ | P | **Pn** | **23 30 59.8** | **+0.6** |
| **IDI** | **Anoyia** | **9.23** | **81** | Pn | **Pn** | **23 31 00.3** | **-0.9** |
| | 12nm,1.1s,baz=242,slow=17,SNR=1.2 | | | | | | |
| IDI | | | | Sn | **Sn** | **23 32 40.5** | **-4.7** |
| | 0.6nm,0.3s,baz=323,slow=11,SNR=1.6 | | | | | | |
| **LMR** | **La Mourre** | **10.51** | **330** | *e*Pn | **Pn** | **23 31 21.0** | **+2.5** |
| LMR | | | | *e*Sn | **Sn** | **23 33 14.0** | **-2.3** |
| | 0.1nm,0.1s | | | | | | |
| **SBF** | **Sospel** | **10.60** | **335** | *e*Pn | **Pn** | **23 31 20.0** | **+0.2** |
| SBF | | | | *e*Sn | **Sn** | **23 33 16.2** | **-2.4** |
| | 0.4nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **11.43** | **329** | *e*Pn | **Pn** | **23 31 34.3** | **+3.2** |
| **MBDF** | **Montbardon** | **11.59** | **335** | *e*P | Pn | 23 31 38.9 | +5.5 |
| **ORIF** | **Oris-en-Rattie** | **12.08** | **332** | *e*Pn | **Pn** | **23 31 42.0** | **+1.9** |
| **LPL** | **La Plagne** | **12.29** | **336** | *e*P | Pn | 23 31 49.9 | +6.8 |
| **VIVF** | **Saint-Julien-I** | **12.52** | **329** | *e*P | Pn | 23 31 51.0 | +5.0 |
| **HUMR** | **Humele** | **13.31** | **37** ⇑ | P | **P** | **23 32 04.4** | **-2.2** |
| **LOT** | **Lotru** | **13.43** | **32** ⇓ | P | **Pn** | **23 31 58.4** | **-0.2** |
| **VOIR** | | **14.01** | **35** ⇑ | P | **P** | **23 32 18.0** | **+3.6** |
| **GERES** | **GERESS Array B** | **14.41** | **360** | Pn | **Pn** | **23 32 10.3** | **-1.5** |
| | 0.1nm,0.3s,baz=246,slow=9.5,SNR=2.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **GERES** | **GERESS Array B** | **14.41** | **360** | P | **Pn** | **23 32 10.4** | **-1.5** |
| **MLR** | **Muntele Rosu** | **14.48** | **37** | Pn | **Pn** | **23 32 12.0** | **-0.9** |
| | 0.1nm,0.3s,baz=170,slow=19,SNR=1.5 | | | | | | |
| MLR | | | | LR | LR | 23 38 47.0 | |
| | comp=Z,63nm,19.1s,baz=256,slow=42 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **MLR** | **Muntele Rosu** | **14.48** | **37** ⇑ | P | **P** | **23 32 23.2** | **+3.5** |
| **DOPR** | **Dopca** | **14.56** | **34** ⇑ | P | **P** | **23 32 23.7** | **+3.2** |
| **ESDC** | **Sonseca Array** | **15.04** | **296** | Pn | **Pn** | **23 32 21.6** | **+1.2** |
| | 0.1nm,0.3s,baz=106,slow=13,SNR=11 | | | | | | |
| | 1.6nm,0.9s | | | | | | |
| **PLOR** | **Plostina** | **15.09** | **37** ⇑ | P | **P** | **23 32 28.2** | **+1.9** |
| **VRI** | **Vrincioaia** | **15.13** | **37** ⇑ | P | **P** | **23 32 31.7** | **+4.8** |
| **MDT** | **Midelt** | **15.34** | **269** | Pn | **Pn** | **23 32 24.7** | **+0.2** |
| | 0.1nm,0.3s,baz=115,slow=17,SNR=2.8 | | | | | | |
| MDT | | | | LR | LR | 23 40 01.3 | |
| | comp=Z,143nm,18.1s,baz=102,slow=44 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **CFR** | **Carcaliu** | **15.41** | **42** ⇑ | P | **P** | **23 32 32.5** | **+2.6** |
| **BURAR** | **Bucovina Array** | **15.76** | **30** ⇑ | P | **P** | **23 32 34.7** | **+0.9** |
| **BRTR** | **Keskin Array B** | **16.76** | **66** | Pn | **Pn** | **23 32 42.4** | **-0.4** |
| | baz=203,slow=18,SNR=2.5 | | | | | | |
| BRTR | | | | LR | LR | 23 40 28.7 | |
| | comp=Z,30nm,18.1s,baz=318,slow=42 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **18.11** | **88** | P | **Pn** | **23 32 58.6** | **-0.9** |
| | 0.4nm,0.3s,baz=317,slow=12,SNR=2.1 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **19.81** | **30** | P | **P** | **23 33 17.0** | **-1.4** |
| | 0.4nm,0.3s,baz=225,slow=9.4,SNR=2.3 | | | | | | |
| AKASG | | | | LR | LR | 23 41 17.1 | |
| | comp=Z,20nm,19.1s,baz=203,slow=38 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **23.82** | **210** | P | **P** | **23 34 03.3** | **+2.2** |
| | 1.1nm,0.7s,baz=29,slow=9.6,SNR=13 | | | | | | |
| TORD | | | | LR | LR | 23 43 39.0 | |
| | comp=Z,66nm,20.7s,baz=319,slow=37 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.96** | **336** | P | **P** | **23 34 02.3** | **+0.2** |
| | 1.1nm,0.9s,baz=137,slow=15,SNR=2.4 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.96** | **336** | P | **P** | **23 34 02.3** | **+0.2** |
| **GNI** | **Garni** | **25.27** | **68** | LR | LR | 23 45 15.4 | |
| | comp=Z,34nm,18.4s,baz=263,slow=39 | | | | | | |
| **HFS** | **Hagfors** | **25.72** | **360** | LR | LR | 23 44 45.5 | |
| | comp=Z,33nm,21.4s,baz=186,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **26.68** | **357** | P | **P** | **23 34 27.0** | **+0.2** |
| | 0.5nm,0.8s,baz=177,slow=9.6,SNR=2.7 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **32.51** | **216** | LR | LR | 23 49 47.2 | |
| | comp=Z,87nm,18.9s,baz=40,slow=39 | | | | | | |
| **BBTS** | **Babate** | **33.62** | **242** | LR | LR | 23 50 09.4 | |
| | comp=Z,56nm,20.9s,baz=316,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **35.77** | **7** | LR | LR | 23 51 58.9 | |
| | comp=Z,40nm,18.7s,baz=236,slow=39 | | | | | | |
| **NRS** | **Narsarsuaq** | **45.74** | **324** ⇓ | P | P | 23 37 01.9 | -7.1 |
| **KURBB** | **Kurchatov Arra** | **48.87** | **50** | P | **P** | **23 37 32.9** | **-0.6** |
| | 0.2nm,0.4s,baz=281,slow=7.9,SNR=3.6 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.96** | **54** | P | **P** | **23 37 57.1** | **+0.1** |
| | 0.4nm,0.6s,baz=293,slow=6.0,SNR=5.7 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.26** | **45** | P | **P** | **23 37 59.4** | **+0.3** |
| | 1.5nm,0.8s,baz=280,slow=12,SNR=5.2 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **FRB** | **Frobisher Bay** | **56.38** | **328** | LR | LR | 00 00 15.8 | |
| | comp=Z,16nm,21.2s,baz=178,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **63.64** | **169** | P | **P** | **23 39 21.1** | **+1.8** |
| | 1.1nm,0.7s,baz=0.0,slow=5.1,SNR=1.3 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **71.00** | **27** | LR | LR | 00 14 38.1 | |
| | comp=Z,20nm,19.7s,baz=322,slow=39 | | | | | | |

*NEIC **03** 23:46:42.4±3.0, 21°.82S±0°.10 × 173°.81W±0°.08, h10 km±1 km, mb4.6/36, Error ellipse: s-maj=16.8km s-min=12.8km az=171.0*
*NOU **03** 23:46:43.6, 21°.46S × 173°.58W, h0 km, mb4.6/8, Tonga Islands*
*IDC **03** 23:46:52.5±4.3, 21°.74S × 174°.52W, h72 km±36 km, mb3.8/15, mbtmp4.2/18, ML4.6/3, MS3.7/13, Error ellipse: s-maj=22.1km s-min=17.6km az=101.0*
*BGR **03** 23:46:54.9, 19°.32S × 175°.15W, h33 km*

**ISC 03 23:46:45.0±0.4, 21°.73S±0°.08 × 173°.85W±0°.06, h25 km, n131, σ1§96/121, mb4.5/31, MS3.8/11, 4C, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **4.53** | **55** | P | **Pn** | **23 47 49.2** | **-2.7** |
| **NIUE** | **Niue** | **4.53** | **55** | | **Pn** | **23 47 49.5** | **-2.5** |
| **AFI** | **Afiamalu** | **8.02** | **15** | Pn | **Pn** | **23 48 40.4** | **+0.3** |
| **MSVF** | **Nonsavu** | **8.60** | **296** | P | **Pn** | **23 48 51.0** | **+3.0** |
| **MSVF** | **Nonsavu** | **8.60** | **296** | Pn | **Pn** | **23 48 49.1** | **+1.1** |
| **MSVF** | **Nonsavu** | **8.60** | **296** | P | **Pn** | **23 48 48.6** | **+0.6** |
| | 1.4nm,0.3s,baz=123,slow=12,SNR=22 | | | | | | |
| MSVF | | | | LR | LR | 23 51 40.8 | |
| | comp=Z,417nm,19.6s,baz=101,slow=36 | | | | | | |
| | 92nm,1.1s | | | | | | |
| **RAR** | **Rarotonga** | **13.12** | **90** | P | **Pn** | **23 49 47.1** | **-2.7** |
| **RAR** | **Rarotonga** | **13.12** | **90** | Pn | **Pn** | **23 49 47.7** | **-2.1** |
| **RAR** | **Rarotonga** | **13.12** | **90** | P | **Pn** | **23 49 47.3** | **-2.4** |
| | 36nm,0.4s,baz=270,slow=11,SNR=11 | | | | | | |
| RAR | | | | LR | LR | 23 54 47.2 | |
| | comp=Z,256nm,18.3s,baz=250,slow=34 | | | | | | |
| **PINNC** | **Pines Island,** | **17.35** | **264** | | **Pn** | **23 50 45.8** | **+0.3** |
| PINNC | | | | IAmb | IAmb | 23 50 56.1 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **LIFNC** | **LIFOU** | **17.66** | **270** | | **Pn** | **23 50 48.0** | **-1.3** |
| LIFNC | | | | IAmb | IAmb | 23 50 50.4 | |
| | comp=Z,62nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **18.23** | **203** | P | **P** | **23 51 02.2** | **+6.0** |
| **URZ** | **Urewera** | **18.23** | **203** | P | **Pn** | **23 50 55.6** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=360,slow=11,SNR=2.0 | | | | | | |
| URZ | | | | S | Sn | 23 54 01.4 | -18 |
| | comp=Z,5.2nm,0.6s,baz=267,slow=19,SNR=1.6 | | | | | | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.29** | **265** | P | **Pn** | **23 51 02.2** | **+4.9** |
| **DZM** | **Mont Dzumac** | **18.29** | **265** | P | **P** | **23 50 56.2** | **-1.1** |
| **DZM** | **Mont Dzumac** | **18.29** | **265** | P | **P** | **23 50 54.3** | **-3.0** |
| | comp=Z,0.3nm,0.3s,baz=85,slow=18,SNR=5.1 | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| **RTZ** | **Ruatahuna** | **18.59** | **203** | P | **P** | **23 50 57.5** | **-2.9** |
| **BFZ** | **Birch Farm** | **20.68** | **202** | P | Pn | 23 51 28.7 | +3.2 |
| **MRZ** | **Mangatainoka R** | **20.90** | **203** | P | **P** | **23 51 24.5** | **-1.0** |
| **MSWZ** | **Moikau Station** | **21.68** | **203** | P | **P** | **23 51 33.2** | **-0.7** |
| **QRZ** | **Quarry Range** | **22.27** | **208** | P | **P** | **23 51 45.9** | **+5.8** |
| **PPT** | **Papeete** | **23.22** | **84** | LR | LR | 23 59 26.2 | |
| | comp=Z,210nm,18.8s,baz=264,slow=32 | | | | | | |
| **OXZ** | **Oxford** | **24.54** | **205** | P | **P** | **23 52 03.5** | **+0.9** |
| OXZ | | | | IAmb | IAmb | 23 52 08.8 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **25.26** | **206** | P | **P** | **23 52 07.8** | **-1.3** |
| RPZ | | | | IAmb | IAmb | 23 52 25.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **FOZ** | **Fox Glacier** | **25.64** | **208** | P | **P** | **23 52 12.8** | **+0.3** |
| **ARMA** | **Armidale** | **32.09** | **247** | P | **P** | **23 53 08.5** | **-1.8** |
| ARMA | | | | IAmb | IAmb | 23 53 25.3 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **32.30** | **257** | P | **P** | **23 53 13.3** | **+1.2** |
| **TAOE** | **Nuku Hiva Isla** | **34.84** | **74** | P | **P** | **23 53 34.4** | **0.0** |
| **CAN** | **Canberra** | **35.13** | **239** | P | **P** | **23 53 36.1** | **-0.5** |
| **CTA** | **Charters Tower** | **37.24** | **265** | P | P | 23 53 50.1 | -4.7 |
| | comp=Z,0.3nm,0.6s,baz=94,slow=8.8,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **37.24** | **265** | P | **P** | **23 53 52.6** | **-2.2** |
| CTAO | | | | IAmb | IAmb | 23 53 55.3 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **38.38** | **236** | P | **P** | **23 54 01.8** | **-2.5** |
| TOO | | | | IAmb | IAmb | 23 54 03.5 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **40.79** | **246** | P | **P** | **23 54 23.2** | **-1.2** |
| **STKA** | **Stephens Creek** | **40.79** | **246** | P | **P** | **23 54 21.5** | **-2.9** |
| | comp=Z,3.5nm,0.8s,baz=88,slow=9.6,SNR=3.3 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **COEN** | **Coen** | **41.52** | **273** | P | **P** | **23 54 28.9** | **-1.8** |
| COEN | | | | IAmb | IAmb | 23 54 29.5 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **45.51** | **245** | P | **P** | **23 54 59.8** | **-2.8** |
| **AS31** | **Alice Springs** | **48.02** | **257** | P | **P** | **23 55 20.4** | **-2.1** |
| **ASAR** | **Alice Springs** | **48.02** | **257** | P | **P** | **23 55 19.4** | **-3.1** |
| **ASAR** | **Alice Springs** | **48.02** | **257** | P | **P** | **23 55 19.6** | **-2.8** |
| | comp=Z,8.2nm,0.9s,baz=93,slow=8.3,SNR=42 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 56 50.7** | **+0.4** |
| | comp=Z,1.2nm,1.0s,baz=107,slow=3.2,SNR=4.8 | | | | | | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **48.08** | **262** | P | **P** | **23 55 19.8** | **-3.1** |
| WR0 | | | | IAmb | IAmb | 23 55 24.9 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **48.26** | **262** | P | **P** | **23 55 21.3** | **-3.0** |
| **WB2** | **Warramunga Arr** | **48.26** | **262** | P | **P** | **23 55 21.3** | **-3.0** |
| WB2 | | | | IAmb | IAmb | 23 55 21.6 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.27** | **262** | P | **P** | **23 55 21.0** | **-3.4** |
| **WRA** | **Warramunga Arr** | **48.27** | **262** | P | **P** | **23 55 20.9** | **-3.4** |
| | comp=Z,6.5nm,0.8s,baz=97,slow=8.0,SNR=42 | | | | | | |
| WRA | | | | PcP | **PcP** | **23 56 50.7** | **-0.5** |
| | comp=Z,0.9nm,0.7s,baz=99,slow=2.7,SNR=1.1 | | | | | | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **52.38** | **247** | P | **P** | **23 55 53.3** | **-2.1** |
| **FAKI** | **Fak Fak** | **55.55** | **282** | P | **P** | **23 56 18.2** | **-0.5** |
| FAKI | | | | IAmb | IAmb | 23 56 23.4 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **56.70** | **262** | P | **P** | **23 56 25.5** | **-1.4** |
| **VNDA** | **Vanda** | **57.07** | **186** | P | **P** | **23 56 31.9** | **+3.3** |
| | comp=Z,0.7nm,0.8s,baz=1.7,slow=5.8,SNR=5.1 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **61.16** | **257** | P | **P** | **23 56 55.6** | **-2.2** |
| PSA00 | | | | IAmb | IAmb | 23 57 06.9 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **61.36** | **257** | P | **P** | **23 56 56.5** | **-2.7** |
| **MORW** | **Morawa** | **62.95** | **248** | P | **P** | **23 57 07.7** | **-2.1** |
| MORW | | | | IAmb | IAmb | 23 57 10.8 | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **TOLI2** | **Tolitoli** | **67.64** | **281** | P | **P** | **23 57 40.8** | **+0.5** |
| **QSPA** | **South Pole Qui** | **68.35** | **180** | P | **P** | **23 57 45.4** | **+1.3** |
| QSPA | | | | IAmb | IAmb | 23 57 59.6 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.35** | **180** | P | **P** | **23 57 46.5** | **+2.4** |
| | comp=Z,2.4nm,0.9s,baz=69,slow=2.8,SNR=6.4 | | | | | | |
| QSPA | | | | LR | LR | 00 23 32.8 | |
| | comp=Z,58nm,20.4s,baz=14,slow=32 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **ADK** | **Adak** | **73.33** | **358** | P | **P** | **23 58 14.3** | **+0.2** |
| **JGF** | **Kuroka** | **73.39** | **320** | P | **P** | **23 58 14.7** | **-0.2** |
| JGF | | | | IAmb | IAmb | 23 58 15.0 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **73.53** | **321** | P | **P** | **23 58 14.6** | **-1.2** |
| | comp=Z,4.2nm,0.7s,baz=159,slow=5.8,SNR=10 | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **75.86** | **315** | LR | LR | 00 27 54.2 | |
| | comp=Z,12nm,20.3s,baz=182,slow=33 | | | | | | |
| **ASAJ** | **Asahikawa** | **76.70** | **329** | LR | LR | 00 27 05.3 | |
| | comp=Z,39nm,20.5s,baz=63,slow=32 | | | | | | |
| **LPIG** | **La Paz** | **76.75** | **57** | LR | LR | 00 25 38.6 | |
| | comp=Z,112nm,19.6s,baz=213,slow=30 | | | | | | |
| **BELA** | **Belgrano 2** | **77.83** | **172** | P | **P** | **23 58 39.8** | **0.0** |
| **KRMB** | **Red Mountain** | **78.09** | **36** | P | **P** | **23 58 41.6** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **79.32** | **41** | P | **P** | **23 58 52.5** | **+3.7** |
| | comp=Z,0.9nm,0.7s,baz=221,slow=8.9,SNR=4.6 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **80.40** | **317** | P | **P** | **23 58 55.1** | **+0.7** |
| | comp=Z,1.6nm,0.6s,baz=133,slow=5.6,SNR=5.2 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **NLWA** | **Neilton Lookou** | **82.17** | **32** | P | **P** | **23 59 04.3** | **+0.6** |
| NLWA | | | | IAmb | IAmb | 23 59 10.7 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **82.19** | **324** | P | **P** | **23 59 03.3** | **-0.5** |
| USA0B | | | | IAmb | IAmb | 23 59 09.1 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **82.19** | **324** | P | **P** | **23 59 03.6** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **82.19** | **324** | P | **P** | **23 59 04.7** | **+1.0** |
| | comp=Z,1.3nm,0.8s,baz=176,slow=7.5,SNR=4.7 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **P18K** | **Big Mountain,** | **82.26** | **9** | P | **P** | **23 59 02.7** | **-1.1** |
| P18K | | | | IAmb | IAmb | 23 59 04.5 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.50** | **56** | P | P | 23 59 20.8 | +4.7 |
| | comp=Z,0.7nm,1.1s,baz=232,slow=4.1,SNR=4.0 | | | | | | |
| | comp=Z,0.7nm,1.1s | | | | | | |
| **ANMO** | **Albuquerque** | **85.19** | **50** | LR | LR | 00 31 16.7 | |
| | comp=Z,55nm,19.0s,baz=318,slow=31 | | | | | | |
| **KLR** | **Kul'dur** | **85.59** | **328** | LR | LR | 00 33 56.7 | |
| | comp=Z,35nm,19.6s,baz=148,slow=33 | | | | | | |
| **NEW** | **Newport** | **86.16** | **34** | LR | LR | 00 33 08.1 | |
| | comp=Z,117nm,19.0s,baz=201,slow=32 | | | | | | |
| **CMIG** | **Matias Romero** | **86.40** | **70** | LR | LR | 00 32 21.3 | |
| | comp=Z,61nm,18.2s,baz=190,slow=31 | | | | | | |
| **TROLL** | **Troll, Antarti** | **86.48** | **179** ⇑ | P | **P** | **23 59 28.2** | **+2.8** |
| | comp=Z,64nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.63** | **175** ⇑ | P | **P** | **23 59 27.6** | **+1.6** |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **86.64** | **177** ⇑ | P | **P** | **23 59 27.8** | **+1.7** |
| | comp=Z,24nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **86.64** | **177** | P | **P** | **23 59 26.9** | **+0.8** |
| | comp=Z,1.5nm,0.9s,baz=179,slow=8.9,SNR=6.3 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.11** | **176** ⇑ | P | **P** | **23 59 29.1** | **+0.8** |
| | comp=Z,1.1nm,0.6s,baz=193,slow=4.3 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.25** | **42** | P | **P** | **23 59 31.8** | **+2.2** |
| | comp=Z,0.4nm,0.5s,baz=212,slow=1.4,SNR=4.0 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **88.70** | **11** | P | **P** | **23 59 38.5** | **+2.7** |
| | comp=Z,0.3nm,0.6s,baz=200,slow=5.5,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **94.18** | **288** | P | **P** | **00 00 02.8** | **+0.5** |
| | comp=Z,1.0nm,0.3s,baz=119,slow=2.5,SNR=9.4 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **INK** | **Inuvik** | **94.48** | **14** | LR | LR | 00 36 08.0 | |
| | comp=Z,36nm,20.4s,baz=314,slow=31 | | | | | | |
| **SONM** | **Songino Array** | **99.24** | **318** | LR | LR | 00 42 13.7 | |
| | comp=Z,18nm,18.8s,baz=182,slow=34 | | | | | | |
| **MUD** | **Monsted U'grnd** | **145.25** | **357** | *i* P | **PKPdf** | **00 06 21.1** | **+1.1** |
| **BJUU** | **Bjuv** | **145.32** | **353** | *e*P | **PKPdf** | **00 06 21.1** | **+0.9** |
| **LUNU** | **Lund** | **145.71** | **353** | *e*P | **PKiKP** | **00 06 23.8** | **-1.2** |
| **EKA** | **Eskdalemuir Ar** | **145.72** | **9** | PKPbc | **PKPab** | **00 06 22.6** | **+0.8** |
| | comp=Z,0

| | | | | | | |
|---|---|---|---|---|---|---|
| CIRR | | | *e*S | | Sn | 00 09 56.4 +3.0 |
| **LGNR** | **Loginova** | **4.85 298** | *e*P | | Pn | 00 09 02.2 +4.0 |
| LGNR | | | *e*S | | Sn | 00 09 58.6 +4.6 |
| **SRKR** | **Sorokina** | **4.85 305** | *e*S | | Sn | 00 10 00.8 +6.9 |
| **BZP** | **Bezymyannyi-Pe** | **4.87 296** | *e*P | | Pn | 00 09 01.8 +3.4 |
| BZP | | | *e*S | | Sn | 00 09 59.3 +4.9 |
| **BZMR** | **Bezymyannaya** | **4.90 296** | *e*P | | Pn | 00 09 03.2 +4.3 |
| BZMR | | | *e*S | | Sn | 00 09 59.9 +4.7 |
| **BZWR** | **Bezymyannyi-We** | **4.91 296** | *e*P | | Pn | 00 09 03.8 +4.8 |
| BZWR | | | *e*S | | Sn | 00 10 00.9 +5.5 |
| **TUMR** | **Tumrok** | **4.92 288** | *e*P | | Pn | 00 09 03.8 +4.8 |
| TUMR | | | *e*S | | Sn | 00 10 00.6 +5.0 |
| **KRSR** | **Krestovskiy** | **4.96 299** | *e*P | | Pn | 00 09 04.3 +4.6 |
| **KMNR** | **Kamenistaya** | **4.98 293** | *e*P | | Pn | 00 09 04.5 +4.6 |
| KMNR | | | *e*S | | Sn | 00 10 02.2 +5.1 |
| **KIRR** | **Kirishev** | **4.99 296** | *e*P | | Pn | 00 09 04.3 +4.3 |
| KIRR | | | *e*S | | Sn | 00 10 03.1 +5.8 |
| **KPT** | **Kopyto** | **5.05 295** | *e*P | | Pn | 00 09 05.2 +4.3 |
| KPT | | | *e*S | | Sn | 00 10 05.5 +6.7 |
| **SPN** | **Mys Shipunski** | **5.06 262** | *e*P | | Pn | 00 09 05.0 +4.1 |
| SPN | | | *e*S | | Sn | 00 10 03.1 +4.3 |
| **KII** | **Karymskiy** | **5.25 273** | *e*P | | Pn | 00 09 08.1 +4.6 |
| **SRDR** | **Sredinnyy** | **5.44 298** | *e*P | | Pn | 00 09 12.5 +6.4 |
| **UGLR** | **Uglovaya** | **5.74 265** | *e*P | | Pn | 00 09 15.0 +4.7 |
| UGLR | | | *e*S | | Sn | 00 10 20.8 +5.1 |
| **SMAR** | **Somma** | **5.74 266** | *e*P | | Pn | 00 09 14.9 +4.5 |
| SMAR | | | *e*S | | Sn | 00 10 21.5 +5.6 |
| **KRER** | **Koryakskii** | **5.76 266** | *e*P | | Pn | 00 09 15.5 +4.8 |
| KRER | | | *e*S | | Sn | 00 10 22.0 +5.6 |
| **AVH** | **Avacha** | **5.77 266** | *e*P | | Pn | 00 09 15.5 +4.8 |
| AVH | | | *e*S | | Sn | 00 10 20.5 +3.9 |
| **KRX** | **Arik** | **5.81 267** | *e*P | | Pn | 00 09 15.9 +4.6 |
| KRX | | | *e*S | | Sn | 00 10 22.5 +5.0 |
| **KOK** | **Koryaka** | **5.83 266** | *e*P | | Pn | 00 09 16.2 +4.7 |
| KOK | | | *e*S | | Sn | 00 10 23.8 +5.8 |
| **ESO** | **Esso** | **5.86 292** | *e*P | | Pn | 00 09 15.8 +3.9 |
| **GNL** | **Ganaly** | **6.17 271** | *e*P | | Pn | 00 09 21.1 +4.8 |
| GNL | | | *e*S | | Sn | 00 10 31.2 +4.8 |
| **MTVR** | **Mutnovka** | **6.30 260** | *e*P | | Pn | 00 09 23.1 +5.0 |
| MTVR | | | *e*S | | Sn | 00 10 33.6 +3.8 |
| **GRL** | **Gorelyy** | **6.35 260** | *e*P | | Pn | 00 09 23.1 +4.4 |
| **ASAK** | **Asacha** | **6.50 259** | *e*P | | Pn | 00 09 26.1 +5.3 |
| ASAK | | | *e*S | | Sn | 00 10 40.1 +5.6 |
| **KDTR** | **Khodutka, Kamc** | **6.61 254** | *e*P | | Pn | 00 09 26.2 +4.0 |
| KDTR | | | *e*S | | Sn | 00 10 39.3 +2.2 |

**IDC 04 00:23:29.5±4.5, 6°24S×131°91E, *h*0km, mb3.4/1, mbtmp3.3/3, ML3.3/2, Error ellipse: s-maj=302.7km s-min=34.2km az=74.0, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.83** | **170** | Pn | | Pn | 00 26 46.4 | -0.5 |
| | 0.1nm,0.3s,baz=350,slow=13,SNR=2.0 | | | | | | | |
| WRA | | | | Sn | | Sn | 00 29 14.2 | -7.1 |
| | 0.1nm,0.3s,baz=0.3,slow=23,SNR=2.6 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **17.44** | **174** | P | | Pn | 00 27 34.8 | +0.4 |
| | 0.1nm,0.3s,baz=351,slow=13,SNR=6.7 | | | | | | | |
| | 0.5nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.65** | **326** | P | | P | 00 34 34.7 | 0.0 |
| | 0.1nm,0.3s,baz=115,slow=6.7,SNR=2.9 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |

*HVO **04** 00:25:10.5±1.5, 19°.416N±0°.009×155°.277W±0°.008, h0km±5km, ML4.0/18, ML3.6/25(NEIC), Error ellipse: s-maj=1.4km s-min=1.0km az=158.0*
*NEIC **04** 00:25:10.6±1.0, 19°.43N±0°.01×155°.283W±0°.009, h5km±1km, Error ellipse: s-maj=2.6km s-min=1.7km az=174.0*
*IDC **04** 00:25:11.9±2.3, 19°.61N×155°.31W, h0km, mb3.5/4, mbtmp3.5/4, Error ellipse: s-maj=75.7km s-min=15.7km az=169.0*
**ISC 04 00:25:11.1±1.0, 19°.45N±0°.03×155°.27W±0°.03, h2km±6km, n36, σ0§98/34, mb3.5/4, Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RSD** | **Rainshed** | **0.02** | **347** | | | **Pg** | **00 25 12.0** | **+0.2** |
| RSD | | | | IAML | | | 00 25 12.8 | |
| | comp=N,55μm,0.3s | | | | | | | |
| **SBLHI** | **Steaming Bluff** | **0.02** | **164** | | | **Pg** | **00 25 11.8** | **-0.1** |
| **UWB** | **Uwekahuna B** | **0.02** | **190** | | | **Pg** | **00 25 11.4** | **-0.4** |
| **HATHI** | **Halema'uma'u T** | **0.03** | **152** | | | **Pg** | **00 25 11.3** | **-0.6** |
| **OBL** | **Observatory Le** | **0.03** | **198** | | | **Pg** | **00 25 11.5** | **-0.4** |
| **UWE** | **Uwekahuna** | **0.03** | **215** | | | **Pg** | **00 25 11.4** | **-0.5** |
| **BYL** | **Byron's Ledge** | **0.04** | **159** | | | **Pg** | **00 25 11.4** | **-0.6** |
| **WRMHI** | **West Rim** | **0.05** | **211** | | | **Pg** | **00 25 12.4** | **+0.3** |
| **KKO** | **Keanakako`i** | **0.05** | **171** | | | **Pg** | **00 25 12.3** | **+0.1** |
| **RIM** | **Rim** | **0.05** | **180** | | | **Pg** | **00 25 12.2** | **-0.1** |
| **SDHHI** | **Sand Hill** | **0.06** | **198** | | | **Pg** | **00 25 12.9** | **+0.5** |
| **PUH** | **Pauahi** | **0.09** | **143** | | | **Pg** | **00 25 12.9** | **-0.1** |
| PUH | | | | IAML | | | 00 25 14.5 | |
| | comp=E,59μm,0.6s | | | | | | | |
| **MLH** | **Mauna Loa** | **0.12** | **294** | | | **Sg** | **00 25 17.1** | **+2.1** |
| **MLH** | **Mauna Loa** | **0.12** | **294** | | | **Pg** | **00 25 14.0** | **+0.6** |
| MLH | | | | IAML | | | 00 25 16.8 | |
| | comp=N,23μm,0.8s | | | | | | | |
| MLH | | | | IAML | | | 00 25 17.3 | |
| | comp=E,33μm,0.7s | | | | | | | |
| **KNHH** | **Kane Nui o Ham** | **0.12** | **124** | | | **Pg** | **00 25 13.6** | **+0.1** |
| **HLP** | **Hilina Pali** | **0.15** | **192** | | | **Sg** | **00 25 16.6** | **+0.5** |
| **HLP** | **Hilina Pali** | **0.15** | **192** | | | **Pg** | **00 25 13.3** | **-0.8** |
| HLP | | | | IAML | | | 00 25 16.7 | |
| | comp=E,11μm,0.6s | | | | | | | |
| HLP | | | | IAML | | | 00 25 17.1 | |
| | comp=N,34μm,0.6s | | | | | | | |
| **STCH** | **Steam Cracks** | **0.15** | **113** | | | **Pg** | **00 25 14.0** | **-0.1** |
| STCH | | | | IAML | | | 00 25 18.0 | |
| | comp=E,29μm,0.9s | | | | | | | |
| **HMH** | **Humu'ula Sheep** | **0.25** | **308** | | | **Pg** | **00 25 15.6** | **-0.4** |
| HMH | | | | | | **Sg** | **00 25 15.7** | **-3.6** |
| HMH | | | | IAML | | | 00 25 21.4 | |
| | comp=E,9μm,0.6s | | | | | | | |
| HMH | | | | IAML | | | 00 25 25.3 | |
| | comp=N,10μm,0.5s | | | | | | | |
| **JOKA** | **Jonika Flow** | **0.26** | **93** | Pg | | **Pg** | **00 25 15.4** | **-0.6** |
| JOKA | | | | IAML | | | 00 25 23.9 | |
| | comp=E,10μm,0.8s | | | | | | | |
| **MLOA** | **Mauna Loa Obse** | **0.30** | **287** | | | **Pg** | **00 25 16.1** | **-0.8** |
| MLOA | | | | IAML | | | 00 25 26.1 | |
| | comp=E,11μm,0.8s | | | | | | | |
| MLOA | | | | IAML | | | 00 25 27.3 | |
| | comp=N,8μm,0.9s | | | | | | | |
| **MWH** | **Moku'aweowe** | **0.31** | **277** | | | **Pg** | **00 25 17.0** | **-0.1** |
| MWH | | | | | | **Sg** | **00 25 21.4** | **+0.2** |
| **PAH** | **Pahoa** | **0.31** | **81** | Pg | | **Pg** | **00 25 15.8** | **-1.3** |
| **KHU** | **Kahuku** | **0.38** | **238** | | | **Pg** | **00 25 17.0** | **-1.5** |
| **POHA** | **Pohakuloa** | **0.39** | **322** | | | **Pg** | **00 25 18.6** | **-0.2** |
| **HPO** | **Honuapo** | **0.44** | **217** | | | **Pg** | **00 25 18.4** | **-1.3** |
| **HUH** | **Hualalai** | **0.58** | **294** | | | **Pg** | **00 25 21.7** | **-0.6** |
| **I59US** | **HAWAII INFRASO** | **0.60** | **284** | Pg | | **Pg** | **00 25 22.5** | **-0.2** |
| | baz=119,slow=36 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.58** | **277** | T | | T | 01 09 13.2 | |
| | baz=84,slow=74,SNR=12 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.59** | **277** | T | | T | 01 09 14.0 | |
| | baz=84,slow=74,SNR=12 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.60** | **277** | T | | T | 01 09 14.8 | |
| | baz=84,slow=74,SNR=10 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **37.16** | **51** | P | | **P** | **00 32 24.6** | **+0.9** |
| | comp=N,0.2nm,0.5s,baz=238,slow=8.4,SNR=1.7 | | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | | |
| **H02S1** | **DAWSON INLET T** | **38.03** | **22** | T | | T | 01 12 24.3 | |
| | SNR=7.5 | | | | | | | |
| **PDAR** | **Pinedale Array** | **44.84** | **48** | P | | **P** | **00 33 26.8** | **-0.2** |
| | comp=N,0.1nm,0.3s,baz=244,slow=7.9,SNR=2.0 | | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | | |
| **ILAR** | **Eielson Array** | **45.64** | **5** | P | | **P** | **00 33 32.6** | **-0.2** |
| | comp=N,0.9nm,0.8s,baz=198,slow=7.7,SNR=6.0 | | | | | | | |
| | comp=N,0.9nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **47.70** | **68** | P | | **P** | **00 33 50.3** | **+0.8** |
| | comp=N,1.3nm,0.8s,baz=260,slow=9.0,SNR=14 | | | | | | | |
| | comp=N,1.3nm,0.8s | | | | | | | |

*IDC **04** 00:42:38.6±8.2, 3°.19N×128°.91E, h202km±74km, mb3.6/8, mbtmp4.1/8, Error ellipse: s-maj=91.7km s-min=13.6km az=62.0*
**ISC 04 00:42:38.3±1.7, 3°.2N±0°.4×129°.0E±0°.6, h200km, n8, σ0§40/9, mb3.9/8, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.61** | **167** | P | | **P** | **00 47 31.3** | **0.0** |
| | 1.5nm,0.5s,baz=343,slow=10,SNR=14 | | | | | | | |
| | 1.5nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **27.15** | **170** | P | | **P** | **00 48 03.0** | **-0.1** |
| | 1.5nm,0.5s,baz=354,slow=7.4,SNR=6.7 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **00 51 18.9** | **+0.4** |
| | 0.5nm,0.4s,baz=357,slow=2.6,SNR=6.0 | | | | | | | |
| | 1.5nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **33.06** | **299** | P | | **P** | **00 48 55.3** | **+0.1** |
| | 1.1nm,0.3s,baz=101,slow=7.7,SNR=4.5 | | | | | | | |
| | 1.1nm,0.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.91** | **162** | P | | **P** | **00 49 28.3** | **+0.4** |
| | 2.6nm,0.4s,baz=332,slow=9.5,SNR=6.8 | | | | | | | |
| | 2.6nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.26** | **324** | P | | **P** | **00 52 19.2** | **+0.4** |
| | 0.6nm,0.4s,baz=117,slow=8.3,SNR=9.3 | | | | | | | |
| | 0.6nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.38** | **327** | P | | **P** | **00 52 45.8** | **-0.5** |
| | 0.4nm,0.3s,baz=118,slow=6.1,SNR=5.8 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |
| **VNDA** | **Vanda** | **82.64** | **173** | P | | **P** | **00 54 38.2** | **-0.5** |
| | 0.4nm,0.4s,baz=322,slow=6.8,SNR=3.1 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **93.12** | **180** | P | | **P** | **00 55 29.2** | **-0.1** |
| | 0.7nm,0.6s,baz=294,slow=0.9,SNR=6.8 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |

*AZER **04** 00:47:07.0, 41°.10N×44°.02E, h2km, ml2.2*
*NORS **04** 00:47:07.0, 41°.88N×45°.80E, h3km, MPVA3.1*
**ISC 04 00:47:04.2±2.0, 41°.17N±0°.06×43°.6E±0°.1, h13km±14km, n11, σ1§12/20, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **QZX** | **Qazax, Azerbai** | **1.38** | **94** | P | | **Pb** | **00 47 29.7** | **-0.1** |
| QZX | | | | S | | **Sn** | **00 47 47.0** | **-0.3** |
| **GUDG** | **Gudauri** | **1.47** | **28** | *e*Pg | | **Pb** | **00 47 31.3** | **-0.2** |
| GUDG | | | | *e*Sg | | **Sn** | **00 47 49.0** | **-0.9** |
| **GDB** | **GEDABAY** | **1.72** | **104** | P | | **Pb** | **00 47 35.8** | **-0.1** |
| GDB | | | | S | | **Sn** | **00 47 56.5** | **+0.4** |
| **LACR** | **Lac** | **1.75** | **18** | *e*Pg | | **Pg** | **00 47 37.3** | **-0.5** |
| LACR | | | | *e*Sg | | **Sb** | **00 47 59.3** | **+1.1** |
| **HYR** | **Heyderabad** | **1.75** | **145** | S | | **Sg** | **00 48 02.6** | **+2.1** |
| **KORR** | **Kora** | **1.96** | **11** | *e*Pg | | **Pg** | **00 47 42.1** | **+0.4** |
| KORR | | | | *e*Sg | | **Sg** | **00 48 08.2** | **+1.1** |
| **ARNR** | **Ardon** | **2.08** | **15** | *e*Pg | | **Pb** | **00 47 41.4** | **-0.5** |
| ARNR | | | | *e*Sg | | **Sb** | **00 48 06.5** | **-1.2** |
| **GANJ** | **Ganja** | **2.16** | **103** | P | | **Pb** | **00 47 43.1** | **-0.1** |
| GANJ | | | | S | | **Sn** | **00 48 09.0** | **+2.3** |
| **SBZ** | **Shahbuz** | **2.33** | **139** | P | | **Pg** | **00 47 48.5** | **-0.5** |
| SBZ | | | | S | | **Sg** | **00 48 17.8** | **-1.5** |
| **ZKTA** | **Zakatala** | **2.35** | **77** | S | | **Sb** | **00 48 16.0** | **+0.5** |
| **SEKA** | **Sheki** | **2.75** | **88** | P | | **Pb** | **00 47 52.1** | **-1.2** |
| SEKA | | | | S | | **Sb** | **00 48 26.1** | **-0.8** |

*ISK **04** 00:56:36.6, 35°.63N×29°.39E, h6km, ML3.2/18*
*NIC **04** 00:56:38.1, 35°.67N×29°.47E, h7km±2km, Ml2.6/9*
*AFAD **04** 00:56:40.8±0.0, 35°.77N×29°.47E, h6km±1km, ML3.0*
**ISC 04 00:56:38.3±1.4, 35°.69N±0°.04×29°.42E±0°.03, h9km±10km, n48, σ0§97/72, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AKAS** | **Kas** | **0.56** | **15** | Pg | | **Pg** | **00 56 48.5** | **-0.7** |
| **AKAS** | **Kas** | **0.56** | **15** | P | | **Pg** | **00 56 48.8** | **-0.4** |
| AKAS | | | | *i* AML | | AML | 00 57 05.0 | |
| | comp=E,1μm,0.6s | | | | | | | |
| AKAS | | | | *i* AML | | AML | 00 57 09.0 | |
| | comp=N,2μm,0.9s | | | | | | | |
| **DEMR** | **Demre-Antalya** | **0.67** | **36** | Pg | | **Pb** | **00 56 51.8** | **-0.4** |
| **IZZE** | **Mula-Seydike** | **0.76** | **348** | P | | **Pb** | **00 56 54.0** | **+0.3** |
| IZZE | | | | S | | **Sg** | **00 57 03.4** | **+0.5** |
| IZZE | | | | *i* AML | | AML | 00 57 08.0 | |
| | comp=E,1μm,0.4s | | | | | | | |
| IZZE | | | | *i* AML | | AML | 00 57 13.0 | |
| | comp=N,1μm,0.4s | | | | | | | |
| **AKUM** | **Antalya-Kumluc** | **0.97** | **50** | P | | **Pb** | **00 56 57.6** | **+0.2** |
| AKUM | | | | S | | **Sb** | **00 57 09.7** | **-0.7** |
| **FETY** | **Fethiye** | **0.98** | **344** | Pg | | **Pg** | **00 56 57.1** | **-0.1** |
| FETY | | | | Sg | | **Sb** | **00 57 11.7** | **+1.1** |
| **ELL** | **Elmali** | **1.12** | **20** | Pn | | **Pg** | **00 56 59.6** | **-0.3** |
| **ELL** | **Elmali** | **1.12** | **20** | P | | **Pg** | **00 56 59.4** | **-0.5** |
| ELL | | | | S | | **Sn** | **00 57 16.8** | **+0.7** |
| ELL | | | | AML | | AML | 00 57 22.8 | |
| | 2.3nm,0.9s | | | | | | | |
| ELL | | | | AML | | AML | 00 57 25.2 | |
| | 2.2nm,0.8s | | | | | | | |
| **KNIK** | **Mula-Seydike** | **1.16** | **6** | P | | **Pg** | **00 57 00.7** | **+0.2** |
| KNIK | | | | S | | **Sg** | **00 57 16.1** | **+0.6** |
| **ARG** | **Arkhangelos** | **1.17** | **297** | Pn | | **Pg** | **00 56 59.6** | **-1.3** |
| **ARG** | **Arkhangelos** | **1.17** | **297** | P | | **Pg** | **00 57 01.1** | **+0.2** |
| ARG | | | | S | | **Sn** | **00 57 19.5** | **+2.4** |
| ARG | | | | AML | | AML | 00 57 33.6 | |
| | 0.5nm,0.7s | | | | | | | |
| ARG | | | | AML | | AML | 00 57 44.8 | |
| | 0.5nm,0.9s | | | | | | | |
| **SABU** | **Mula-Dalaman** | **1.19** | **342** | P | | **Pg** | **00 57 00.4** | **-0.7** |
| SABU | | | | S | | **Sg** | **00 57 16.7** | **+0.2** |
| **CAME** | **Cameli-Denizli** | **1.25** | **356** | Pn | | **Pg** | **00 57 02.1** | **-0.3** |
| **CAEL** | **Denizli, Camel** | **1.43** | **357** | P | | **Pn** | **00 57 05.0** | **+0.4** |
| CAEL | | | | S | | **Sb** | **00 57 23.5** | **-0.1** |
| CAEL | | | | *i* AML | | AML | 00 57 43.0 | |
| | comp=N,351nm,0.8s | | | | | | | |
| CAEL | | | | *i* AML | | AML | 00 57 44.0 | |
| | comp=E,270nm,0.9s | | | | | | | |
| **KORT** | **Korkueli** | **1.50** | **30** | Pn | | **Pn** | **00 57 05.9** | **+0.3** |
| **KORT** | **Korkueli** | **1.50** | **30** | P | | **Pn** | **00 57 06.1** | **+0.5** |
| KORT | | | | S | | **Sn** | **00 57 24.5** | **-0.9** |
| KORT | | | | *i* AML | | AML | 00 57 43.0 | |
| | comp=E,195nm,0.6s | | | | | | | |
| **GOLH** | **Golhisar** | **1.54** | **4** | P | | **Pn** | **00 57 06.7** | **+0.6** |
| GOLH | | | | S | | **Sn** | **00 57 25.7** | **-0.7** |
| GOLH | | | | *i* AML | | AML | 00 57 38.0 | |
| | comp=N,159nm,1.1s | | | | | | | |
| GOLH | | | | *i* AML | | AML | 00 57 45.0 | |
| | comp=E,167nm,0.6s | | | | | | | |
| **ANTB** | **Antalya** | **1.56** | **39** | Pn | | **Pn** | **00 57 06.8** | **+0.5** |
| **DNZT** | **Denizli-Tavas-** | **1.61** | **349** | P | | **Pn** | **00 57 07.4** | **+0.3** |
| DNZT | | | | S | | **Sn** | **00 57 24.0** | **-4.1** |
| **APMY** | **Acipayam-Deniz** | **1.78** | **357** | Pn | | **Pn** | **00 57 09.6** | **+0.2** |
| **MULA** | **Mugla, Merkez-** | **1.79** | **331** | P | | **Pb** | **00 57 12.3** | **+0.8** |
| MULA | | | | S | | **Sn** | **00 57 29.5** | **-3.1** |
| **DAT** | **Datca** | **1.81** | **305** | Pn | | **Pn** | **00 57 09.3** | **-0.6** |
| **DAT** | **Datca** | **1.81** | **305** | P | | **Pn** | **00 57 10.5** | **+0.6** |
| **TAVA** | **DENIZLI_Tavas** | **1.81** | **347** | P | | **Pn** | **00 57 09.8** | **-0.1** |
| TAVA | | | | S | | **Sn** | **00 57 32.0** | **-1.1** |
| **BUCA** | **Burdur, Bucak-** | **1.87** | **29** | P | | **Pb** | **00 57 13.1** | **+0.4** |
| **YAZI** | **Mula-Dat§a-** | **1.87** | **302** | P | | **Pn** | **00 57 10.8** | **+0.2** |
| **DNIZ** | **Denizli-Tavas-** | **1.95** | **351** | P | | **Pn** | **00 57 12.9** | **+1.1** |
| DNIZ | | | | S | | **Sn** | **00 57 37.0** | **+0.5** |
| DNIZ | | | | *i* AML | | AML | 00 57 44.0 | |
| | comp=N,301nm,0.5s | | | | | | | |
| **BCK** | **Bucak** | **2.00** | **28** | Pn | | **Pn** | **00 57 13.0** | **+0.6** |
| **INCE** | **Denizli-Bozkur** | **2.02** | **3** | P | | **Pn** | **00 57 13.0** | **+0.4** |
| INCE | | | | S | | **Sn** | **00 57 39.6** | **+1.5** |
| INCE | | | | *i* AML | | AML | 00 57 52.0 | |
| | comp=E,148nm,0.7s | | | | | | | |
| **BRDR** | **BURDUR-Merkez** | **2.06** | **14** | P | | **Pn** | **00 57 13.4** | **+0.1** |
| BRDR | | | | S | | **Sn** | **00 57 37.3** | **-1.9** |
| **MLSB** | **Milas** | **2.08** | **321** | Pn | | **Pn** | **00 57 13.3** | **-0.1** |
| **BODT** | **Bodrum** | **2.18** | **309** | Pn | | **Pn** | **00 57 15.0** | **+0.1** |
| **ESEN** | **Aydn-Nazilli** | **2.27** | **338** | P | | **Pb** | **00 57 19.3** | **-0.2** |
| ESEN | | | | S | | **Sn** | **00 57 44.0** | **-0.2** |
| ESEN | | | | *i* AML | | AML | 00 57 57.0 | |
| | comp=E,90nm,0.7s | | | | | | | |
| **BASM** | **Basmaki-Afyon** | **2.28** | **13** | Pn | | **Pn** | **00 57 16.9** | **+0.7** |
| **GAZI** | **Gazipasa** | **2.41** | **76** | Pn | | **Pn** | **00 57 18.1** | **+0.1** |
| **NAZL** | **Nazilli-Aydin** | **2.44** | **339** | Pn | | **Pn** | **00 57 18.8** | **+0.4** |
| **AKMS** | **Akamas** | **2.47** | **105** | P | | **Pn** | **00 57 18.4** | **-0.4** |
| AKMS | | | | S | | **Sn** | **00 57 48.8** | **-0.4** |
| AKMS | | | | AML | | AML | 00 57 49.8 | |
| | 0.2nm,0.5s | | | | | | | |
| AKMS | | | | AML | | AML | 00 57 53.5 | |
| | 0.1nm,0.6s | | | | | | | |
| **AYDB** | **Zeytinkoy-Aydi** | **2.56** | **332** | Pn | | **Pn** | **00 57 20.5** | **+0.3** |
| **SEDI** | **Konya, Seydise** | **2.57** | **46** | P | | **Pn** | **00 57 21.8** | **+1.5** |
| SEDI | | | | S | | **Sn** | **00 57 51.2** | **-0.5** |
| SEDI | | | | *i* AML | | AML | 00 58 01.0 | |
| | comp=E,59nm,0.5s | | | | | | | |
| **SEYD** | **Seydisehir-KON** | **2.59** | **48** | Pn | | **Pn** | **00 57 21.4** | **+0.9** |
| **KZIL** | **AFYON_Kizioren** | **2.62** | **12** | P | | **Pb** | **00 57 25.2** | **-0.4** |
| **ALFC** | **Alefka** | **2.65** | **101** | P | | **Pn** | **00 57 20.9** | **-0.4** |
| ALFC | | | | S | | **Sn** | **00 57 53.2** | **-0.4** |
| ALFC | | | | AML | | AML | 00 57 54.8 | |
| | 0.1nm,0.6s | | | | | | | |
| ALFC | | | | AML | | AML | 00 57 58.5 | |
| | 0.1nm,0.5s | | | | | | | |
| **PASA** | **Karahalli, USA** | **2.65** | **1** | P | | **Pn** | **00 57 22.4** | **+1.0** |
| **NATA** | **Nata** | **2.73** | **109** | P | | **Pn** | **00 57 22.4** | **0.0** |
| NATA | | | | S | | **Sn** | **00 57 56.7** | **+1.1** |
| NATA | | | | AML | | AML | 00 58 07.9 | |
| | 0.2nm,0.7s | | | | | | | |
| NATA | | | | AML | | AML | 00 58 08.4 | |
| | 0.2nm,0.7s | | | | | | | |
| **TROD** | **Troodos** | **2.91** | **104** | P | | **Pn** | **00 57 23.7** | **-1.3** |
| TROD | | | | S | | **Sn** | **00 58 00.4** | **+0.1** |
| TROD | | | | AML | | AML | 00 58 07.1 | |
| | 0.1nm,0.9s | | | | | | | |
| **ASGA** | **Asgata** | **3.26** | **105** | P | | **Pn** | **00 57 29.0** | **-0.6** |
| ASGA | | | | S | | **Sn** | **00 58 09.9** | **+1.3** |
| ASGA | | | | AML | | AML | 00 58 16.7 | |
| | 0.1nm,0.5s | | | | | | | |
| ASGA | | | | AML | | AML | 00 58 26.2 | |
| | 0.1nm,0.6s | | | | | | | |
| **CSS** | **Mathiatis** | **3.28** | **102** | P | | **Pn** | **00 57 29.5** | **-0.4** |
| CSS | | | | S | | **Sn** | **00 58 09.6** | **+0.5** |
| CSS | | | | AML | | AML | 00 58 19.5 | |
| | 0.1nm,0.7s | | | | | | | |
| CSS | | | | AML | | AML | 00 58 20.4 | |
| **MVOU** | **Mavrovouni** | **3.51** | **100** | P | | **Pn** | **00 57 33.6** | **+0.6** |
| MVOU | | | | AML | | AML | 00 58 24.2 | |
| MVOU | | | | AML | | AML | 00 58 28.9 | |
| | 0.1nm,1.3s | | | | | | | |

*NEIC **04** 01:02:24.4, 19°.62S×69°.35W, h84km*
*SJA **04** 01:02:24.8±0.7, 19°.65S×69°.61W, h82km±3km, ML5.6, MW5.0*
*NEIC **04** 01:02:24.4±1.6, 19°.62S±0°.04×69°.36W±0°.07, h84km±3km, mb5.3/148, Mwr5.2/31, Mwr5.3(GUC), Error ellipse: s-maj=9.4km s-min=5.5km az=91.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr-4.30; Mθθ-0.34; Mφφ4.64; Mrθ0.51; Mθφ-1.02; Mφr-5.33; Fault plane solution: M₀7.06000×10¹⁶ NP1:φs163.28000°, δ20.47000°, λ-99.54000°. NP2:φs353.46000°, δ69.83000°, λ-86.46000°. Principal axes: T 7.2990, Plg25.0000°, Azm81.0000°; N -0.5122, Plg3.0000°, Azm172.0000°; P -6.7868, Plg65.0000°, Azm269.0000°;*
*MOS **04** 01:02:24.2±1.4, 19°.53S×69°.41W, h92km, mb5.3/24 Error ellipse: s-maj=11.1km s-min=5.3km az=104.9*
*IDC **04** 01:02:25.4±0.4, 19°.46S×69°.24W, h93km±3km, mb4.5/20, mbtmp4.9/24, MS3.9/48, Error ellipse: s-maj=11.8km s-min=7.4km az=81.0*
*VAO **04** 01:02:25.5±0.3, 19°.51S×69°.20W, h85km, mb5.2*
*GUC **04** 01:02:25.9±0.9, 19°.64S×69°.48W, h88km±4km, ML5.3*
*GCMT **04** 01:02:28.4±0.2, 19°.59S±0°.01×69°.59W±0°.01, h117km±1km, MW5.2/127, Moment Tensor Solution. s84,c123; s127,c203; Duration: 1§0 Moment tensor: Scale 10¹⁶ Nm; Mrr-3.27±.16; Mθθ-0.35±.18; Mφφ3.62±.23; Mrθ-0.57±.10; Mθφ-2.59±.16; Mφr-7.03±.14; Best double couple: M₀8.26700×10¹⁶ NP1:φs1.00000°, δ77.00000°, λ-71.00000°. NP2:φs124.00000°, δ23.00000°, λ-145.00000°. Principal axes: T 8.4230, Plg30.0000°, Azm76.0000°; N -0.3090, Plg18.0000°, Azm177.0000°; P -8.1110, Plg54.0000°, Azm294.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 04 01:02:24.5±0.2, 19°.59S±0°.02×69°.41W±0°.04, h89km±1km, h89km:pP-P, n684, σ1§25/717, mb5.3/110, 15C-31D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GO01** | **Chusmiza** | **0.22** | **111** | Pn | | **Pn** | **01 02 38.8** | **+0.7** |
| GO01 | | | | Sn | | **Sn** | **01 02 49.5** | **+1.5** |
| **GO01** | **Chusmiza** | **0.22** | **111** | *i* P | | **Pn** | **01 02 39.3** | **+1.3** |
| GO01 | | | | *i* S | | **Sn** | **01 02 50.0** | **+2.0** |
| **GO01** | **Chusmiza** | **0.22** | **111** | *e*P | | **Pn** | **01 02 38.8** | **+0.7** |
| GO01 | | | | *e*S | | **Sn** | **01 02 49.8** | **+1.8** |
| **HMBC** | **Humberstone** | **0.82** | **213** | | | **Pn** | **01 02 41.9** | **-0.4** |
| HMBC | | | | Sn | | **Sn** | **01 02 54.9** | **-0.7** |
| **PX03** | **IPOC Station P** | **0.83** | **194** | *e*P | | **Pn** | **01 02 42.0** | **-0.4** |
| PX03 | | | | *e*S | | **Sn** | **01 02 55.4** | **-0.4** |
| **TA02** | **Huaiquique** | **0.96** | **225** | Pn | | **Pn** | **01 02 43.6** | **0.0** |
| **TA02** | **Huaiquique** | **0.96** | **225** | *i* P | | **Pn** | **01 02 42.3** | **-1.3** |
| TA02 | | | | IAML | | | 01 03 05.1 | |
| | comp=Z,380μm,1.3s | | | | | | | |
| **TA02** | **Huaiquique** | **0.96** | **225** | *e*P | | **Pn** | **01 02 43.7** | **0.0** |
| TA02 | | | | *e*S | | **Sn** | **01 02 57.2** | **-0.8** |
| TA02 | | | | IAML | | | 01 02 59.0 | |
| | comp=N,201μm,0.5s | | | | | | | |
| **PX02** | **IPOC Station P** | **0.97** | **310** | *e*P | | **Pn** | **01 02 43.1** | **-0.8** |
| PX02 | | | | *i* S | | **Sn** | **01 02 57.6** | **-0.9** |
| **TA01** | **Diego Aracena** | **1.21** | **217** | Pn | | **Pn** | **01 02 46.4**

**PB15 IPOC Station P 3.60 181 Pn 01 03 18.0 -0.3**
**PB15 IPOC Station P 3.60 181** *i* P **Pn 01 03 19.4 +1.1**
PB15 IAML 01 04 19.7
comp=Z,25µm,0.7s
**YJA Yavi 4.46 126** *i* P **Pn 01 03 34.1 +4.0**
**GO02 Mina Guanaco 5.55 182** Pn **Pn 01 03 45.0 +0.2**
**BBSD Serra de San D 8.69 75** *e*P **Pn 01 04 26.1 -1.4**
**SIV San Ignacio 8.71 67** P **Pn 01 04 26.9 -0.9**
comp=Z,203nm,0.4s,baz=256,slow=10,SNR=1558
SIV S **Sn 01 06 02.0 -2.4**
comp=Z,36nm,0.7s,baz=188,slow=21,SNR=1.1
**ETMB Extrema 10.20 18** Pn **Pn 01 04 47.4 -0.6**
**ETMB Extrema 10.20 18** *e*P **Pn 01 04 46.7 -1.3**
**NNA Nana 10.41 316 Pn 01 04 48.6 -2.3**
**NNA Nana 10.41 316** P **Pn 01 04 48.5 -2.4**
comp=Z,44nm,0.6s,baz=141,slow=12,SNR=12
NNA S **Sn 01 06 46.2 +0.5**
comp=Z,18nm,0.3s,baz=225,slow=19,SNR=1.2
NNA LR LR 01 09 10.4
comp=Z,607nm,18.4s,baz=181,slow=39
**NNA Nana 10.41 316***c* P **Pn 01 04 50.2 -0.7**
**PTLB Pontes e Lacer 10.63 69** Pn **Pn 01 04 52.6 -1.2**
**PTLB Pontes e Lacer 10.63 69** *e*P **Pn 01 04 52.0 -1.9**
**VILB Vilhena 11.03 55** Pn **Pn 01 04 58.8 -0.6**
**VILB Vilhena 11.03 55** *e*P **Pn 01 04 57.9 -1.5**
**PAPY Pozo Azul 11.30 115** *e*P **Pn 01 05 02.2 -0.8**
**ZON Zonda 11.92 177** Pn **Pn 01 05 11.9 +0.6**
**ZON Zonda 11.92 177** P **Pn 01 05 12.0 +0.6**
**SAML Samuel 12.18 31** Pn **Pn 01 05 12.8 -1.9**
**SAML Samuel 12.18 31** P **Pn 01 05 12.9 -1.9**
**SAML Samuel 12.18 31** *e*P **Pn 01 05 12.9 -1.9**
**CZSB Cruzeiro do Su 12.22 344** Pn Pn 01 05 11.0 -4.4
**AQDB Aquidauana 12.92 96** Pn **Pn 01 05 21.9 -2.8**
**AQDB Aquidauana 12.92 96** *e*P **Pn 01 05 22.9 -1.8**
**CPUP Villa Florida 12.99 123 Pn 01 05 24.1 -1.5**
**CPUP Villa Florida 12.99 123** P **Pn 01 05 25.1 -0.5**
comp=Z,119nm,0.9s,baz=300,slow=12,SNR=103
CPUP S **Sn 01 07 46.1 -2.2**
comp=Z,33nm,0.9s,baz=24,slow=20,SNR=3.0
CPUP LR LR 01 11 34.6
comp=Z,565nm,21.5s,baz=310,slow=42
**CPUP Villa Florida 12.99 123** *e*P **Pn 01 05 25.1 -0.5**
**VA06 Catapilco 13.03 187 Pn 01 05 25.3 -0.7**
**VA03 San Esteban 13.16 184 Pn 01 05 28.2 +0.3**
**PEL Peldehue 13.54 185 Pn 01 05 31.6 -1.4**
**PEL Peldehue 13.54 185** P **Pn 01 05 31.6 -1.4**
**SALV Santo Antonio 13.57 76** *e*P **Pn 01 05 30.8 -2.5**
**MT02 Curacav 13.70 186 Pn 01 05 33.3 -1.6**
**MT05 Renca 13.80 185 Pn 01 05 35.3 -1.0**
**MT08 Bocatoma Ro 13.81 182 Pn 01 05 37.0 +0.5**
**MT16 CCHEN 13.82 184 Pn 01 05 37.6 +1.1**
**MT03 Universidad Ad 13.88 184 Pn 01 05 37.4 +0.1**
**MT13 San Alfonso 14.12 183 Pn 01 05 41.5 +1.1**
**VA05 Santo Domingo 14.15 188 Pn 01 05 39.5 -1.2**
**MT09 Talagante 14.20 185 Pn 01 05 39.4 -2.1**
**LMEL Las Melosas 14.22 183 Pn 01 05 39.3 -2.4**
**MT01 Popeta 14.31 186 Pn 01 05 41.1 -1.7**
**BO04 La Punta 14.38 184 Pn 01 05 42.2 -1.6**
**PDRB Porto dos Gac 14.56 59** *e*P **Pn 01 05 43.0 -3.1**
**BO01 Tunca 14.82 185 Pn 01 05 47.6 -1.7**
**ATAH Atahualpa 15.15 324** P **Pn 01 05 54.6 +0.6**
comp=Z,21nm,0.8s,baz=142,slow=15,SNR=2.9
ATAH S **Sn 01 08 42.2 +0.8**
comp=Z,4.2nm,0.7s,baz=274,slow=15,SNR=1.2
**TBTG Tabatinga, AM 15.32 358** Pn **Pn 01 05 55.4 -0.4**
**ITQB Itaqui 15.34 133 Pn 01 05 54.7 -1.3**
**ITQB Itaqui 15.34 133** *e*P **Pn 01 05 56.4 +0.3**
**GO05 Huala 15.52 188** P **Pn 01 05 57.4 -0.9**
**PSAL Palomas, Salto 15.63 139** *e*P **Pn 01 05 59.6 0.0**
**TRCB Terra Rica 15.97 104 Pn 01 06 02.8 -1.2**
**TRCB Terra Rica 15.97 104** *e*P **Pn 01 06 03.7 -0.3**
**CRSM Crissiumal (Br 16.13 122** *e*P **Pn 01 06 06.3 +0.4**
**ML02 Panimavida 16.21 186 Pn 01 06 05.0 -1.9**
**VA04 Juan Fernndez 16.32 209 Pn 01 06 07.5 -0.8**
**TEFE Tefe 16.65 17** *e*P **Pn 01 06 12.0 -0.5**
**RODS Rosario do Sul 16.74 133** *e*P **P 01 06 14.1 -0.1**
**PTGB Pitanga 16.85 111** *e*P **P 01 06 15.3 -0.4**
**TBOT Tacuaremb 17.08 137** *e*P **Pn 01 06 17.1 -0.6**
**BI02 San Fabin de 17.09 185 Pn 01 06 16.1 -1.7**
**PCMB Pacaembu 17.11 100** *e*P **Pn 01 06 17.1 -1.0**
**ARAG Araguaiana, MT 17.21 80** *e*P **Pn 01 06 18.4 -0.9**
**LDSE Londrina, Braz 17.44 106** *e*P **P 01 06 21.8 -0.3**
**ALGR Alto Alegre (B 17.52 125** *e*P **Pn 01 06 22.9 -0.1**
**ITAB Concordia 17.58 119** P **P 01 06 22.2 -1.3**
**ITAB Concordia 17.58 119** *e*P **P 01 06 23.4 -0.2**
**ITRB Iturama 17.95 94** *e*P **P 01 06 26.9 -0.8**
**CPSB Cacapava Do Su 18.02 130** *e*P **P 01 06 28.3 0.0**
**MACA Manacapuru-AM 18.42 29** P **P 01 06 31.1 -1.8**
**MACA Manacapuru-AM 18.42 29** *e*P **P 01 06 31.7 -1.2**
**NPGB Novo Progresso 18.49 49** *e*P **P 01 06 32.2 -1.5**
**PLTB Pedras Altas 18.68 134** P **P 01 06 34.1 -1.5**
**PLTB Pedras Altas 18.68 134** *e*P **P 01 06 32.8 -2.8**
**FRTB Fartura 18.84 105** *e*P **P 01 06 36.5 -1.0**
**SNDB Serra Nova Dou 19.00 69** *e*P **P 01 06 38.7 -0.5**
**ARNL Arenillas 19.04 326** P **P 01 06 40.3 +0.7**
**CNLB Canela 19.45 123** *e*P **P 01 06 44.1 0.0**
**TRQA Tornquist 19.50 162** P **P 01 06 44.6 0.0**
**TRQA Tornquist 19.50 162** P **P 01 06 44.6 0.0**
**GO06 Curarrehue 20.00 185** P **P 01 06 49.8 -0.3**
**IPMB Ipameri, GO 20.17 89** *e*P **P 01 06 50.4 -0.9**
**ITTB Itaituba 20.17 43** *e*P **P 01 06 50.7 -1.3**
**LR04 Corral 20.51 189** P **P 01 06 55.1 -0.3**
**RCLB Rio Claro- Sao 20.62 102** *e*P **P 01 06 56.3 -0.5**
**LR05 Currie 20.69 186** P **P 01 06 56.9 -0.5**
**SLOR San Lorenzo - 20.75 334** P **P 01 07 00.6 +1.8**
**BDFB Brasilia 20.76 82** P **P 01 06 57.1 -1.4**
**BDFB Brasilia 20.76 82** P **P 01 06 57.0 -1.5**
comp=Z,24nm,0.5s,baz=267,slow=11,SNR=19
BDFB LR LR 01 16 26.9
comp=Z,619nm,20.8s,baz=273,slow=41
comp=Z,24nm,0.5s
**BDFB Brasilia 20.76 82** P **P 01 06 57.1 -1.4**
**SPB Sao Paulo 20.82 105** P **P 01 06 57.3 -1.5**
**SPB Sao Paulo 20.82 105** *e*P **P 01 06 58.9 +0.1**
**ANTS Antisana-Sarah 20.83 335** P **P 01 07 01.6 +2.0**
**PET01 Itanhaem-SP 21.05 107** *e*P **P 01 07 01.0 -0.4**
**PLCA Paso Flores 21.09 182** P **P 01 07 01.6 -0.2**
**PLCA Paso Flores 21.09 182** P **P 01 07 02.8 +1.0**
comp=Z,78nm,0.8s,baz=0.8,slow=11,SNR=48
comp=Z,78nm,0.8s
**PLCA Paso Flores 21.09 182** *e*P **P 01 07 02.2 +0.4**
**VAO Valinhos 21.18 103** P **P 01 07 01.4 -1.5**
**VAO Valinhos 21.18 103** *e*P **P 01 07 02.1 -0.8**
**LL04 Puerto Octay 21.40 186** P **P 01 07 04.4 -0.6**
**PULU Pululahua 21.43 334** P **P 01 07 07.2 +1.2**
**IMBA Imbabura, San 21.54 335** P **P 01 07 08.4 +1.2**
**OTAV Otavalo 21.61 335** P **P 01 07 08.1 +0.2**
**OTAV Otavalo 21.61 335** *e*P **P 01 07 09.6 +1.7**
**LL03 Petrohue 21.63 186** P **P 01 07 06.4 -1.0**
**PMNB Patos De Minas 21.74 91** *e*P **P 01 07 07.9 -0.9**
**TULM Tulcn-Chalpat 21.79 337** P **P 01 07 10.4 +0.6**
**LL01 San Ignacio de 22.86 186** P **P 01 07 19.3 -1.0**
**MAL2 Monte Alegre, 22.95 42** P **P 01 07 19.0 -2.5**
**BSCB Bom Sucesso 23.14 98** *e*P **P 01 07 22.3 -1.1**
**PRPB Parauapebas 23.26 58** *e*P **P 01 07 22.3 -2.1**
**BOAV Boa Vista 23.53 23** P **P 01 07 26.8 0.0**
**BOAV Boa Vista 23.53 23** *e*P **P 01 07 27.0 +0.2**
**LL02 Futaleuf 23.62 184** P **P 01 07 26.1 -1.3**
**SMTB Santa Maria do 23.66 66** *e*P **P 01 07 27.8 -0.3**
**GO07 Milladeo Hill, 23.72 188** P **P 01 07 27.2 -1.2**
**JANB Januaria 24.37 83** *e*P **P 01 07 32.8 -1.7**
**DIAM Diamantina, MG 24.37 91** *e*P **P 01 07 34.5 -0.1**
**VAS01 Vassouras-RJ 24.39 101** *e*P **P 01 07 35.1 +0.5**
**SDBA SAO DESIDERIO 24.60 77** *e*P **P 01 07 36.0 -0.6**
**ROSC El Rosal 24.75 348** P **P 01 07 38.3 0.0**
**ROSC El Rosal 24.75 348** P **P 01 07 38.4 0.0**
comp=Z,15nm,0.5s,baz=27,slow=12,SNR=8.7
ROSC LR LR 01 18 46.2
comp=Z,634nm,19.1s,baz=222,slow=40
comp=Z,15nm,0.5s
**DUB01 Friburgo-RJ 25.38 100** *e*P **P 01 07 44.4 +0.8**
**MCPB Macapa, AP 25.58 44** *e*P **P 01 07 44.4 -1.0**
**COYC Coyhaique 26.00 184** P **P 01 07 47.7 -1.3**
**SJMB Sao Joao De Ma 26.67 93** *e*P **P 01 07 54.5 -0.7**
**ALF01 Guarapari-ES 26.94 97** *e*P **P 01 07 58.3 +0.6**
**TMAB Tom-Au,PA,Br 26.96 53** *e*P **P 01 07 57.8 -0.1**
**RIB01 Linhares ES 27.35 94** *e*P **P 01 08 00.9 -0.4**
**GUA01 Guaratinga, BA 28.28 89** *e*P **P 01 08 10.1 +0.4**
**SDV Santo Domingo 28.32 357** P **P 01 08 09.0 -1.2**
**SDV Santo Domingo 28.32 357** LR LR 01 20 38.7
comp=Z,298nm,20.4s,baz=203,slow=39
**SDV Santo Domingo 28.32 357** *e*P **P 01 08 10.8 +0.6**
**BAUV El Baul 28.39 3** P **P 01 08 09.8 -0.7**
BAUV IAmb IAmb 01 08 13.5
comp=Z,57nm,0.8s
**MDP Montagnes des 29.57 36** LR LR 01 21 34.8
comp=Z,268nm,20.3s,baz=214,slow=39
**PCRV Puerto La Cruz 29.95 9** LR LR 01 21 07.2
comp=Z,429nm,20.4s,slow=38
**BRU2 Volcan 31.09 334** P **P 01 08 34.9 +0.2**
BRU2 IAmb IAmb 01 08 38.9
comp=Z,67nm,1.3s
**NBLA Lagarto - SE 31.63 79** *e*P **P 01 08 38.3 -1.0**
**AUA1 Aruba 31.90 359** P **P 01 08 41.2 -0.3**
**NBPB Pedra_Branca-C 32.21 68** *e*P **P 01 08 45.0 +0.7**
**LCR2 La Lucha 2 32.50 332** P **P 01 08 47.5 +0.4**
LCR2 IAmb IAmb 01 08 50.6
comp=Z,45nm,1.0s
**EFI East Falkland 33.24 167** P **P 01 08 52.1 -0.8**
**EFI East Falkland 33.24 167***ll e*P **P 01 08 53.0 +0.1**
EFI pmax pmax
comp=Z,122nm,2.3s
**SOCE Pocosol 33.34 332** P **P 01 08 55.7 +1.5**
SOCE IAmb IAmb 01 08 58.2
comp=Z,73nm,1.0s
**JTS Las Juntas de 33.41 331** P **P 01 08 55.9 +1.1**
**JTS Las Juntas de 33.41 331** LR LR 01 24 26.1
comp=Z,240nm,20.4s,baz=151,slow=40
**JTS Las Juntas de 33.41 331** P **P 01 08 55.9 +1.1**
JTS pmax pmax
comp=Z,31nm,1.2s
**JTS Las Juntas de 33.41 331** P **P 01 08 56.7 +1.9**
**NBAN Anadia - AL 33.48 78** *e*P **P 01 08 55.5 0.0**
**NBCA Caruaru-PE 34.26 75** *e*P **P 01 09 01.1 -1.2**
**MPOM Morne Pois Mar 34.85 15** P **P 01 09 06.2 -1.0**
**BIM Bigot 34.87 14** P **P 01 09 05.9 -1.5**
**FDF Fort de France 35.06 14** P **P 01 09 07.8 -1.2**
**FDF Fort de France 35.06 14** P **P 01 09 07.9 -1.2**
FDF pmax pmax
comp=Z,92nm,1.0s
**FDF Fort de France 35.06 14** P **P 01 09 07.9 -1.2**
**RCBR Riachuelo 35.34 72** P **P 01 09 10.0 -1.6**
RCBR IAmb IAmb 01 09 13.5
comp=Z,54nm,1.4s
**RCBR Riachuelo 35.34 72** P **P 01 09 10.4 -1.2**
comp=Z,8.6nm,0.7s,baz=243,slow=17,SNR=14
RCBR LR LR 01 25 24.8
comp=Z,58nm,21.6s,baz=317,slow=39
comp=Z,8.6nm,0.7s
**RCBR Riachuelo 35.34 72** *e*P **P 01 09 12.0 +0.4**
**RCBR Riachuelo 35.34 72** P **P 01 09 11.7 0.0**
RCBR pP **pP 01 09 33.7 +0.1**
**BOAB BOACO BROADBAN 35.64 332** P **P 01 09 14.4 +0.4**
BOAB IAmb IAmb 01 10 16.6
comp=Z,70nm,1.3s
**RPN Rapa Nui 37.29 251** LR LR 01 20 51.6
comp=Z,352nm,19.9s,baz=90,slow=30
**MLPR Magueyes Islan 37.40 4** P **P 01 09 28.4 -0.5**
MLPR IAmb IAmb 01 09 32.3
comp=Z,49nm,1.1s
**IGPR InterUniversit 37.46 5** P **P 01 09 27.9 -1.5**
IGPR IAmb IAmb 01 10 08.2
comp=Z,36nm,0.9s
**OBIP Obispado Ponce 37.50 4** P **P 01 09 29.9 +0.1**
OBIP IAmb IAmb 01 09 53.4
comp=Z,32nm,0.7s
**MTO3 Montecristo 39.07 328** P **P 01 09 44.0 +0.8**
MTO3 IAmb IAmb 01 09 45.8
comp=Z,58nm,1.0s
**HUEH Huehuetenango 40.94 326** P **P 01 09 59.3 +0.6**
**PETF Flores 41.48 330** P **P 01 10 03.8 +0.9**
PETF IAmb IAmb 01 10 05.0
comp=Z,47nm,0.9s
**CCIG Comitan 42.07 326** P **P 01 10 07.9 -0.1**
**TEIG Tepich 43.68 334** P **P 01 10 20.7 +0.1**
TEIG IAmb IAmb 01 10 22.0
comp=Z,49nm,0.8s
**TEIG Tepich 43.68 334** P **P 01 10 20.8 +0.1**
TEIG pP **pP 01 10 43.2 +0.5**
TEIG sP **sP 01 10 54.4 +1.3**
**CAMR Camarioca 43.97 344** P **P 01 10 23.7 +0.7**
CAMR IAmb IAmb 01 10 56.8
comp=Z,106nm,0.6s
**CMIG Matias Romero 44.22 324** LR LR 01 28 22.4
comp=Z,45nm,18.5s,baz=169,slow=35
**PMSA Palmer Station 45.30 177** P **P 01 10 33.7 +0.7**
**PMSA Palmer Station 45.30 177** LR LR 01 30 52.0
comp=Z,154nm,18.6s,baz=28,slow=38
**PMSA Palmer Station 45.30 177** *e*P **P 01 10 35.6 +2.6**
**TLIG Tlapa 46.73 320** P **P 01 10 45.5 +0.5**
TLIG IAmb IAmb 01 10 48.0
comp=Z,61nm,1.4s
**SMAI San Martin Ant 48.55 179** P **P 01 10 58.5 +0.2**
SMAI IAmb IAmb 01 11 01.3
comp=Z,36nm,1.0s
**DWPF Disney Wildern 48.83 346** P **P 01 11 01.1 +0.2**
DWPF IAmb IAmb 01 11 02.3
comp=Z,48nm,0.8s
**DWPF Disney Wildern 48.83 346** P **P 01 11 01.3 +0.4**
baz=165
**DWPF Disney Wildern 48.83 346** P **P 01 11 01.2 +0.4**
DWPF pP **pP 01 11 24.2 +0.9**
DWPF sP **sP 01 11 33.2 -0.6**
**MOIG Morelia 49.93 320** P **P 01 11 10.7 +0.9**
**JRQG Juriquilla Cam 50.27 321** P **P 01 11 12.9 +0.6**
JRQG IAmb IAmb 01 11 15.1
comp=Z,34nm,1.6s
**656A Willston 50.30 345** P **P 01 11 12.2 +0.1**
**BBSR BB Station 51.87 5** P **P 01 11 22.9 -0.8**
BBSR sP **sP 01 11 54.8 -2.3**
**TIGA Tifton 52.53 345** P **P 01 11 29.0 +0.3**
baz=163,SNR=5.2
**ZAIG Zacatecas 53.11 321** P **P 01 11 34.6 +1.1**
ZAIG IAmb IAmb 01 11 36.5
comp=Z,38nm,1.0s
**BRAL Brewton 53.24 341** P **P 01 11 34.1 +0.3**
**BRAL Brewton 53.24 341** P **P 01 11 34.1 +0.3**
baz=159,SNR=7.9
**NHSC New Hope 53.40 349** P **P 01 11 35.7 +0.7**
baz=167,SNR=10
**HBVL Hebbronville 54.37 328** P **P 01 11 42.6 +0.4**
HBVL IAmb IAmb 01 11 43.7
comp=Z,18nm,0.8s
**GOGA Godfrey 54.39 346** P **P 01 11 41.7 -0.5**
baz=164,SNR=5.7
**LRAL Lakeview Retre 54.96 342** P **P 01 11 45.2 -1.2**
LRAL IAmb IAmb 01 11 46.4
comp=Z,17nm,0.8s
**LRAL Lakeview Retre 54.96 342** P **P 01 11 46.0 -0.5**
baz=160,SNR=12
**VBMS Vicksburg 55.34 338** P **P 01 11 49.0 -0.1**
baz=156
**HKT Hockley 55.44 332** P **P 01 11 50.3 +0.5**
HKT IAmb IAmb 01 11 52.2
comp=Z,59nm,1.2s
**HKT Hockley 55.44 332***d i*P **P 01 11 50.5 +0.7**
HKT pmax pmax
comp=Z,65nm,1.5s
**HKT Hockley 55.44 332** P **P 01 11 50.6 +0.8**
HKT pP **pP 01 12 14.1 +1.5**
HKT sP **sP 01 12 25.1 +2.4**
**KMSC Kings Mountain 55.60 348** P **P 01 11 50.2 -0.7**
KMSC IAmb IAmb 01 11 52.3
comp=Z,30nm,0.8s
**KMSC Kings Mountain 55.60 348** P **P 01 11 51.3 +0.3**
baz=166,SNR=12
**833A Chaparral WMA, 55.76 328** P **P 01 11 52.4 +0.1**
833A IAmb IAmb 01 11 53.5
comp=Z,44nm,0.8s
**833A Chaparral WMA, 55.76 328** P **P 01 11 52.9 +0.7**
baz=145,SNR=9.6
**BG3 Lake Jocassee 55.78 347** P **P 01 11 52.3 0.0**
**FPAL Fort Paine 56.00 344** P **P 01 11 52.6 -1.2**
FPAL IAmb IAmb 01 11 54.3
comp=Z,28nm,1.3s
**X48A Hartselle 56.30 342** P **P 01 11 55.2 -0.8**
X48A IAmb IAmb 01 11 56.0
comp=Z,33nm,0.8s
**NATX Nacogdoches 56.51 334** P **P 01 11 58.3 +0.8**
**NATX Nacogdoches 56.51 334** P **P 01 11 58.7 +1.2**
baz=151,SNR=5.8
**CPCT Cooper Cave 56.59 345** P **P 01 11 57.3 -0.7**
CPCT IAmb IAmb 01 11 58.8
comp=Z,28nm,1.1s
**TKL Tuckaleechee C 56.61 346** P **P 01 11 57.4 -0.8**
TKL IAmb IAmb 01 11 58.8
comp=Z,35nm,1.1s
**TKL Tuckaleechee C 56.61 346** LR LR 01 37 24.3
comp=Z,47nm,22.0s,baz=158,slow=37
**TKL Tuckaleechee C 56.61 346** P **P 01 11 57.4 -0.8**
TKL pmax pmax
comp=Z,35nm,1.1s
**HNDO Hondo 56.70 329** P **P 01 11 59.0 +0.1**
**435B Jarrell 56.94 331** P **P 01 12 00.9 +0.3**
baz=148
**OXF Oxford 57.07 340** P **P 01 11 59.6 -1.8**
**OXF Oxford 57.07 340** P **P 01 12 00.1 -1.2**
baz=158,SNR=16
**OXF Oxford 57.07 340** P **P 01 11 59.6 -1.8**
OXF pmax pmax
comp=Z,70nm,1.0s
**PLAL Pickwick Lake 57.10 342** P **P 01 12 00.2 -1.4**
PLAL IAmb IAmb 01 12 01.6
comp=Z,40nm,1.0s
**Z41A Richland Creek 57.10 337** P **P 01 12 01.6 -0.1**
Z41A IAmb IAmb 01 12 03.3
comp=Z,45nm,1.0s
**TZTN Tazewell 57.41 346** P **P 01 12 03.5 -0.3**
baz=164
**BLA Blacksburg 57.44 350** P **P 01 12 04.1 +0.1**
**BLA Blacksburg 57.44 350** P **P 01 12 04.6 +0.6**
baz=168,SNR=8.1
**BLA Blacksburg 57.44 350** P **P 01 12 04.1 +0.1**
BLA pmax pmax
comp=Z,135nm,1.8s
**JCT Junction City 57.73 329** P **P 01 12 05.4 -0.8**
**JCT Junction City 57.73 329** P **P 01 12 06.4 +0.2**
baz=146,SNR=8.1
**JCT Junction City 57.73 329** P **P 01 12 05.4 -0.8**
JCT pmax pmax
comp=Z,120nm,1.9s
**WHTX Lake Whitney, 57.91 332** P **P 01 12 07.4 +0.1**
**WHTX Lake Whitney, 57.91 332** P **P 01 12 07.9 +0.5**
baz=148,SNR=5.8
**CBN Corbin Frederi 57.97 353** P **P 01 12 07.6 -0.1**
baz=171
**HPIG 58.09 322** P **P 01 12 09.6 +0.6**
HPIG IAmb IAmb 01 12 11.0
comp=Z,34nm,1.2s
**WVT Waverly 58.10 342** P **P 01 12 07.1 -1.5**
**WVT Waverly 58.10 342** P **P 01 12 07.7 -0.9**
baz=160
**WVT Waverly 58.10 342** P **P 01 12 07.1 -1.5**
WVT pmax pmax
comp=Z,52nm,0.7s
**WVT Waverly 58.10 342** P **P 01 12 07.3 -1.3**
WVT pP **pP 01 12 30.8 -0.8**
WVT sP **sP 01 12 42.4 +0.5**
**SLBS Sierra La Lagu 58.42 316** P **P 01 12 11.3 +0.1**
SLBS IAmb IAmb 01 12 14.4
comp=Z,82nm,1.7s
**SLBS Sierra La Lagu 58.42 316** P **P 01 12 12.7 +1.5**
**MIAR Mount Ida 58.54 337** P **P 01 12 11.3 -0.4**
**MIAR Mount Ida 58.54 337** P **P 01 12 11.8 +0.1**
baz=153,SNR=26
**MIAR Mount Ida 58.54 337** P **P 01 12 11.3 -0.4**
MIAR pmax pmax
comp=Z,72nm,1.3s
**WHAR Wooly Hollow 58.74 338** P **P 01 12 12.5 -0.6**
WHAR IAmb IAmb 01 12 13.3
comp=Z,19nm,0.9s
**TXAR Lajitas Array 58.80 325** P **P 01 12 13.3 -0.5**
**TXAR Lajitas Array 58.80 325** P **P 01 12 14.0 +0.2**
comp=Z,4.5nm,0.8s,baz=147,slow=8.1,SNR=8
TXAR LR LR 01 35 56.4
comp=Z,53nm,19.2s,baz=97,slow=34
comp=Z,4.5nm,0.8s
**TXAR Lajitas Array 58.80 325** P **P 01 12 14.0 +0.2**
**TX31 Lajitas Ar. Si 58.80 325** P **P 01 12 13.4 -0.3**
**LCAR Lake Charles 59.06 340** P **P 01 12 13.8 -1.5**
LCAR IAmb IAmb 01 12 15.2
comp=Z,22nm,0.9s
**X37A Clayton 59.27 335 P 01 12 16.6 -0.1**
**ABTX Abilene, Hawle 59.43 330** P **P 01 12 17.4 -0.6**
ABTX IAmb IAmb 01 12 19.4
comp=Z,48nm,1.1s
**ABTX Abilene, Hawle 59.43 330** P **P 01 12 18.2 +0.3**
baz=147,SNR=13
**WUPA West Chester U 59.50 354** P **P 01 12 17.6 -0.6**
**MVL Millersville 59.63 354** P **P 01 12 18.9 -0.2**
**WCI Wyandotte Cave 59.66 345** P **P 01 12 18.5 -0.9**
baz=162
**WCI Wyandotte Cave 59.66 345** P **P 01 12 18.3 -1.1**
**MCWV Mont Chateau 59.74 351** P **P 01 12 20.2 +0.3**
**MCWV Mont Chateau 59.74 351** P **P 01 12 20.7 +0.8**
baz=169,SNR=14
**P52A Corning 60.10 349** P **P 01 12 22.1 -0.3**
baz=166,SNR=11
**SSPA Standing Stone 60.43 353** P **P 01 12 24.8 +0.2**
SSPA IAmb IAmb 01 12 25.6
comp=Z,13nm,0.8s
**SSPA Standing Stone 60.43 353** P **P 01 12 25.0 +0.4**
baz=171
**SSPA Standing Stone 60.43 353** P **P 01 12 25.0 +0.4**
SSPA pP **pP 01 12 49.0 +1.0**
**P49A Miami Univ. Ec 60.53 346** P **P 01 12 24.3 -1.1**
baz=163,SNR=7.9
**O53A New Philadelph 60.54 350** P **P 01 12 25.5 +0.2**
baz=167,SNR=14
**TUL3 Leonard 60.59 336** P **P 01 12 25.8 +0.1**
baz=151,SNR=14
**BELA Belgrano 2 60.69 172** P **P 01 12 26.6 +0.6**
BELA IAmb IAmb 01 12 29.0
comp=Z,29nm,1.1s
**RKT Rikitea 60.71 254** *e*LR LR 01 30 21.7
comp=Z,1µm,42.8s
RKT *e*LR LR 01 30 26.4
comp=Z,4µm,35.2s
**WMOK Wichita Mounta 60.82 332 P 01 12 26.7 -0.7**
**WMOK Wichita Mounta 60.82 332** P **P 01 12 26.6 -0.7**
baz=148,SNR=6.4
**WMOK Wichita Mounta 60.82 332** P **P 01 12 26.7 -0.7**
WMOK pmax pmax
comp=Z,7.0nm,0.8s
**ACSO Alum Creek Sta 60.84 348** P **P 01 12 26.7 -0.7**
**ACSO Alum Creek Sta 60.84 348** P **P 01 12 27.0 -0.4**
baz=165,SNR=10
**CCM Cathedral Cave 60.91 340** P **P 01 12 27.1 -0.8**
CCM IAmb IAmb 01 12 28.5
comp=Z,48nm,1.1s
**CCM Cathedral Cave 60.91 340** P **P 01 12 27.3 -0.6**
baz=156
**CCM Cathedral Cave 60.91 340** P **P 01 12 27.1 -0.8**
CCM pmax pmax
comp=Z,48nm,1.1s
**CCM Cathedral Cave 60.91 340** P **P 01 12 27.3 -0.6**
CCM pP **pP 01 12 51.5 +0.3**
CCM PcP **PcP 01 13 10.9 +0.4**
**O48B Farmland 61.32 346** P **P 01 12 29.7 -0.9**
**O48B Farmland 61.32 346** P **P 01 12 29.9 -0.8**
baz=163,SNR=11
**MNTX Cornudas Mount 61.57 325** P **P 01 12 32.2 -0.3**
baz=141,SNR=13
**M53A WI Miller and 61.61 350** P **P 01 12 32.8 +0.2**
baz=168,SNR=17
**ALLY Alegheny Colle 61.74 351** P **P 01 12 33.5 +0.1**
**BINY Binghamton 61.78 354** P **P 01 12 33.7 0.0**
BINY IAmb IAmb 01 12 35.3
comp=Z,28nm,0.9s
**BINY Binghamton 61.78 354** P **P 01 12 34.1 +0.4**
baz=173,SNR=9.7
**L61B Northampton 61.80 357** P **P 01 12 33.8 0.0**
baz=176
**HRV Adam Dziewonsk 61.82 358** P **P 01 12 34.1 +0.1**
HRV IAmb IAmb 01 13 00.1
comp=Z,41nm,1.1s
**HRV Adam Dziewonsk 61.82 358** P **P 01 12 34.0 0.0**
baz=178
**HRV Adam Dziewonsk 61.82 358** P **P 01 12 34.1 +0.1**
HRV pmax pmax
comp=Z,41nm,1.1s
**HRV Adam Dziewonsk 61.82 358** P **P 01 12 34.0 +0.1**
HRV pP **pP 01 12 58.0 +0.7**
HRV sP **sP 01 13 07.9 +0.4**
HRV PcP **PcP 01 13 14.9 +0.7**
**SFIN Lafayette 61.90 345** P **P 01 12 33.1 -1.4**
**SFIN Lafayette 61.90 345** P **P 01 12 33.1 -1.4**
baz=161,SNR=7.4
**VNA3 Neumayer Olymp 62.02 162***ll* P **P 01 12 36.4 +1.3**
comp=Z,13nm,0.8s

VNA3 ⇑pP **pP** **01 12 55.4 -2.9**
comp=Z,0.8nm,0.3s
**MSTX Muleshoe** 62.03 329 P **P** **01 12 35.2 -0.5**
**MSTX Muleshoe** 62.03 329 P **P** **01 12 35.4 -0.3**
baz=144,SNR=12
**BBTS Babate** 62.17 61 LR LR 01 37 35.6
comp=Z,192nm,21.9s,baz=142,slow=34
**ERPA Erie** 62.17 351 P **P** **01 12 36.4 +0.1**
**ERPA Erie** 62.17 351 P **P** **01 12 36.7 +0.4**
baz=169,SNR=39
**VNA1 Neumayer--Stat** 62.23 161 ⇓P **P** **01 12 38.2 +1.8**
comp=Z,11nm,0.8s
VNA1 ⇑pP **pP** **01 12 56.6 -3.0**
comp=Z,0.7nm,0.3s
**AMTX Amarillo** 62.25 330 P **P** **01 12 36.1 -1.0**
AMTX IAmb IAmb 01 12 38.1
comp=Z,41nm,1.4s
**AMTX Amarillo** 62.25 330 P **P** **01 12 36.9 -0.2**
baz=145
**SRIG Santa Rosalia** 62.42 317 P **P** **01 12 38.6 +0.4**
SRIG IAmb IAmb 01 12 41.1
comp=Z,24nm,0.8s
**VNA2 Neumayer--Watz** 62.60 161 ⇓P **P** **01 12 40.3 +1.4**
comp=Z,13nm,0.8s,baz=280,slow=8.1
VNA2 ⇑pP **pP** **01 12 58.9 -3.2**
comp=Z,1.0nm,0.3s,baz=296,slow=7.0
**HDIL Hopedale** 62.64 343 P **P** **01 12 38.4 -1.0**
**HDIL Hopedale** 62.64 343 P **P** **01 12 38.4 -1.0**
baz=159,SNR=12
**P38A Dawn** 63.07 339 P **P** **01 12 41.8 -0.6**
P38A IAmb IAmb 01 12 43.0
comp=Z,32nm,0.7s
**319A Douglas** 63.50 322 P **P** **01 12 46.2 +0.7**
319A IAmb IAmb 01 12 47.9
comp=Z,38nm,0.8s
**121A Cookes Peak, D** 63.52 324 P **P** **01 12 46.1 +0.4**
121A IAmb IAmb 01 12 48.4
comp=Z,87nm,1.8s
**121A Cookes Peak, D** 63.52 324 P **P** **01 12 47.0 +1.4**
baz=139,SNR=8.2
**LBNH Lisbon** 63.56 358 P **P** **01 12 46.1 +0.6**
**LBNH Lisbon** 63.56 358 P **P** **01 12 46.2 +0.7**
baz=177
**LBNH Lisbon** 63.56 358 P **P** **01 12 46.1 +0.6**
LBNH pmax pmax
comp=Z,15nm,1.0s
**PECO Prince Edward** 63.59 354 P **P** **01 12 45.1 -0.6**
PECO IAmb IAmb 01 12 46.9
comp=Z,33nm,1.0s
**KSU1 Kansas State U** 63.70 337 P **P** **01 12 45.4 -1.1**
KSU1 IAmb IAmb 01 12 47.3
comp=Z,36nm,1.0s
**KSU1 Kansas State U** 63.70 337 P **P** **01 12 46.3 -0.2**
baz=151,SNR=7.2
**L44A Lake County Fo** 63.79 345 P **P** **01 12 46.3 -0.8**
baz=160
**LONY Lake Ozonia** 64.07 356 P **P** **01 12 48.8 -0.1**
LONY IAmb IAmb 01 12 50.4
comp=Z,25nm,0.9s
**LONY Lake Ozonia** 64.07 356 P **P** **01 12 49.2 +0.3**
baz=174,SNR=10
**SNAA Sanae** 64.23 161 P **P** **01 12 50.3 +0.6**
SNAA IAmb IAmb 01 12 52.1
comp=Z,28nm,1.0s
**SNAA Sanae** 64.23 161 ⇓P **P** **01 12 50.9 +1.2**
comp=Z,281nm,0.8s
SNAA ⇑pP **pP** **01 13 10.6 -2.4**
comp=Z,25nm,0.3s
**SNAA Sanae** 64.23 161 P **P** **01 12 50.4 +0.7**
comp=Z,14nm,0.8s,baz=281,slow=6.2,SNR=83
comp=Z,14nm,0.8s
**SNAA Sanae** 64.23 161 *d* iP **P** **01 12 50.7 +1.0**
SNAA pmax pmax
comp=Z,34nm,1.1s
**GGN Saint George** 64.44 2 P **P** **01 12 51.5 +0.3**
GGN IAmb IAmb 01 13 16.8
comp=Z,40nm,1.4s
**PKME Peaks-Kenny Pk** 64.54 0 P **P** **01 12 52.2 +0.4**
PKME IAmb IAmb 01 13 17.4
comp=Z,34nm,1.4s
**PKME Peaks-Kenny Pk** 64.54 0 P **P** **01 12 52.2 +0.4**
baz=180
**ANMO Albuquerque** 64.65 327 P **P** **01 12 53.1 0.0**
**ANMO Albuquerque** 64.65 327 P **P** **01 12 53.8 +0.7**
baz=141
**ANMO Albuquerque** 64.65 327 *d* iP **P** **01 12 53.8 +0.7**
ANMO pmax pmax
comp=Z,16nm,2.3s
**ANMO Albuquerque** 64.65 327 P **P** **01 12 53.7 +0.7**
ANMO pP **pP** **01 13 18.3 +1.9**
ANMO sP **sP** **01 13 27.4 +1.0**
**SADO Sadowa** 64.66 352 P **P** **01 12 52.5 -0.2**
SADO IAmb IAmb 01 12 53.0
comp=Z,25nm,0.7s
**SADO Sadowa** 64.66 352 LR LR 01 41 48.5
comp=Z,140nm,21.8s,baz=192,slow=37
**CBKS Cedar Bluff** 64.68 334 P **P** **01 12 53.5 +0.5**
baz=148
**SCIA State Center** 65.03 341 P **P** **01 12 54.8 -0.3**
baz=155
**TUC Tucson** 65.05 322 P **P** **01 12 56.0 +0.5**
**TUC Tucson** 65.05 322 P **P** **01 12 56.7 +1.1**
baz=137
**TUC Tucson** 65.05 322 P **P** **01 12 56.1 +0.5**
TUC pmax pmax
comp=Z,19nm,1.2s
**TUC Tucson** 65.05 322 P **P** **01 12 56.6 +1.0**
**GBN Guysborough** 65.08 6 P **P** **01 12 55.2 -0.1**
**JFWS Jewell Farm** 65.09 343 P **P** **01 12 55.1 -0.4**
baz=158,SNR=12
**T25A Trinidad** 65.37 330 P **P** **01 12 58.7 +1.0**
baz=144,SNR=12
**TRQ Mont Tremblant** 65.67 356 P **P** **01 12 59.4 +0.2**
TRQ IAmb IAmb 01 13 00.3
comp=Z,36nm,0.7s
**TROLL Troll, Antarti** 65.94 161 ⇓P **P** **01 13 02.3 +1.4**
comp=Z,582nm,0.7s
TROLL ⇓pP **pP** **01 13 20.3 -4.1**
comp=Z,358nm,0.8s
**214A Organ Pipe Nat** 66.00 320 P **P** **01 13 02.4 +0.7**
**214A Organ Pipe Nat** 66.00 320 P **P** **01 13 03.3 +1.7**
baz=135,SNR=30
**KSCO Kaye Shedlock'** 66.08 332 P **P** **01 13 02.0 -0.2**
**KSCO Kaye Shedlock'** 66.08 332 P **P** **01 13 02.8 +0.7**
baz=146,SNR=5.2
**PIX Pinacate** 66.12 320 P **P** **01 13 02.4 0.0**
**BGNE Belgrade** 66.28 337 P **P** **01 13 03.1 -0.1**
**BGNE Belgrade** 66.28 337 P **P** **01 13 03.6 +0.3**
baz=150
**SDCO Great Sand Dun** 66.37 329 P **P** **01 13 04.4 +0.2**
SDCO IAmb IAmb 01 13 06.5
comp=Z,48nm,1.4s
**SDCO Great Sand Dun** 66.37 329 P **P** **01 13 05.3 +1.0**
baz=143,SNR=39
**W18A Petrified Fore** 66.53 325 P **P** **01 13 06.0 +0.9**
baz=138
**BATG Bathurst New B** 66.62 2 P **P** **01 13 05.4 +0.1**
**S22A 4UR Ranch, Cre** 67.02 328 P **P** **01 13 09.2 +0.8**
baz=142,SNR=12
**Q24A Divide** 67.18 330 P **P** **01 13 10.2 +0.8**
baz=143,SNR=10
**OGNE Ogallala** 67.42 334 P **P** **01 13 10.9 +0.4**
baz=147
**MVCO Mesa Verde** 67.45 327 P **P** **01 13 11.1 +0.1**
MVCO IAmb IAmb 01 13 13.4
comp=Z,100nm,1.9s
**MVCO Mesa Verde** 67.45 327 P **P** **01 13 11.9 +0.9**
baz=140,SNR=12
**ECSD EROS Data Cent** 67.78 339 P **P** **01 13 12.0 -0.7**
**ECSD EROS Data Cent** 67.78 339 P **P** **01 13 12.4 -0.3**
baz=152,SNR=18
**VLDQ Val d'Or** 67.78 354 P **P** **01 13 12.2 -0.3**
VLDQ IAmb IAmb 01 13 13.4
comp=Z,26nm,0.7s
**CPBX Cerro Prieto** 67.84 319 P **P** **01 13 13.8 +0.6**
CPBX IAmb IAmb 01 13 16.7
comp=Z,84nm,1.2s
**SPMN Marine on St.** 67.93 342 P **P** **01 13 13.0 -0.6**
baz=156,SNR=6.7
**ESJX Sierra Juarez** 67.96 318 P **P** **01 13 14.7 +0.4**
ESJX IAmb IAmb 01 13 17.6
comp=Z,39nm,1.4s
**GLA Glamis** 67.98 320 P **P** **01 13 13.9 -0.3**
GLA IAmb IAmb 01 13 17.2
comp=Z,84nm,1.8s
**GLA Glamis** 67.98 320 P **P** **01 13 15.8 +1.6**
baz=134,SNR=7.3
**GLA Glamis** 67.98 320 P **P** **01 13 13.9 -0.3**
GLA pmax pmax
comp=Z,85nm,1.8s
**ISCO Idaho Springs** 68.06 331 P **P** **01 13 14.8 -0.1**
ISCO IAmb IAmb 01 13 17.1
comp=Z,51nm,1.6s
**ISCO Idaho Springs** 68.06 331 P **P** **01 13 15.8 +0.9**
baz=133,SNR=7.1
**ISCO Idaho Springs** 68.06 331 P **P** **01 13 14.8 -0.1**
ISCO pmax pmax
comp=Z,51nm,1.6s
**SMCO Snowmass** 68.21 329 P **P** **01 13 16.6 +0.6**
**PDMCI Parker Dam,Lak** 68.44 321 P **P** **01 13 18.5 +1.5**
baz=135,SNR=5.3
**IKP In-Ko-Pah, Jac** 68.50 319 P **P** **01 13 19.6 +2.1**
baz=133,SNR=7.4
**SWSC Sam W. Stewart** 68.51 319 P **P** **01 13 19.2 +1.8**
baz=133
**DBIC Dimbokro** 68.66 74 P **P** **01 13 18.3 -0.5**
**DBIC Dimbokro** 68.66 74 P **P** **01 13 18.2 -0.5**
comp=Z,26nm,0.7s,baz=232,slow=6.4,SNR=31
DBIC pP **PcP** **01 13 42.0 -1.1**
comp=Z,269nm,1.4s,baz=224,slow=1.5,SNR=7.4
DBIC LR LR 01 42 13.0
comp=Z,177nm,20.3s,baz=248,slow=35
comp=Z,26nm,0.7s
**DBIC Dimbokro** 68.66 74 P **P** **01 13 18.3 -0.5**
DBIC pmax pmax
comp=Z,98nm,1.1s
**DBIC Dimbokro** 68.66 74 P **P** **01 13 18.2 -0.5**
DBIC pP **PcP** **01 13 42.7 -0.4**
DBIC sP **sP** **01 13 51.6 -1.6**
**NVL N'lazarevskaya** 68.77 159 ⇑ iP **P** **01 13 19.4 +0.9**
NVL *e**PP **pP** **01 13 44.1 +1.9**
NVL *e*S **S** **01 22 16.3 +1.5**
NVL pmax pmax
comp=Z,28nm,1.1s
**BC3 Big Chuckawall** 68.78 320 P **P** **01 13 21.0 +1.8**
baz=133,SNR=20
**ICQ Pointe Anglais** 68.83 1 P **P** **01 13 18.6 -0.5**
**MONP2 Monument Peak** 68.86 319 P **P** **01 13 21.7 +1.8**
baz=132,SNR=12
**IRM Iron Mountain** 68.94 320 P **P** **01 13 21.8 +1.7**
baz=134,SNR=35
**TAOE Nuku Hiva Isla** 69.00 268 *e*LR LR 01 34 07.0
comp=Z,258nm,39.6s
**NEE2 Needles Airpor** 69.05 321 P **P** **01 13 22.2 +1.5**
baz=134
**N23A Red Feather La** 69.09 331 P **P** **01 13 22.2 +1.0**
baz=143,SNR=12
**SUSD Miller** 69.21 338 P **P** **01 13 21.4 -0.1**
baz=150
**109C Camp Elliot, M** 69.28 318 P **P** **01 13 23.6 +1.3**
baz=132
**BELC Belle Mtn. Jos** 69.34 320 P **P** **01 13 24.5 +1.7**
baz=133,SNR=15
**DRLN Deer Lake** 69.35 8 P **P** **01 13 22.0 -0.3**
**TPFO Pinon Flats** 69.36 319 P **P** **01 13 24.7 +1.8**
baz=133,SNR=15
**PFO Pinyon Flats O** 69.36 319 P **P** **01 13 23.5 +0.6**
**PFO Pinyon Flats O** 69.36 319 LR LR 01 41 22.1
comp=Z,28nm,20.9s,baz=265,slow=34
**PFO Pinyon Flats O** 69.36 319 P **P** **01 13 24.8 +1.9**
baz=133,SNR=12
**PFO Pinyon Flats O** 69.36 319 *d* iP **P** **01 13 24.7 +1.8**
PFO pmax pmax
comp=Z,32nm,0.9s
**PFO Pinyon Flats O** 69.36 319 P **P** **01 13 24.6 +1.7**
PFO pP **pP** **01 13 48.0 +1.3**
PFO sP **sP** **01 13 57.8 +1.3**
**O20A White River Ci** 69.57 329 P **P** **01 13 25.3 +1.2**
baz=141,SNR=11
**KNB Kanab** 69.61 324 P **P** **01 13 25.7 +1.3**
**KNB Kanab** 69.61 324 P **P** **01 13 25.7 +1.3**
KNB pmax pmax
comp=Z,176nm,1.6s
**GMRC Granite Mounta** 69.68 321 P **P** **01 13 26.6 +1.8**
baz=134,SNR=34
**MURC Murrieta** 69.81 319 P **P** **01 13 27.2 +1.6**
baz=132
**MACI Morro de la Ar** 69.83 49 P **P** **01 13 25.6 -0.4**
MACI IAmb IAmb 01 14 05.9
comp=Z,56nm,1.0s
**EYMN Ely** 70.09 344 P **P** **01 13 26.4 -0.5**
baz=158
**HEC Hector,Ludlow** 70.11 320 P **P** **01 13 29.5 +2.1**
baz=133,SNR=9.6
**TUQ Turquoise Moun** 70.28 321 P **P** **01 13 30.3 +1.8**
baz=134,SNR=13
**CIS Catalina Islan** 70.44 318 P **P** **01 13 31.2 +1.8**
baz=131
**BFSC Mount Baldy Ra** 70.52 319 P **P** **01 13 31.7 +1.7**
baz=132,SNR=8.2
**QSPA South Pole Qui** 70.59 180 P **P** **01 13 31.0 +1.0**
QSPA IAmb IAmb 01 13 32.9
comp=Z,36nm,1.2s
**QSPA South Pole Qui** 70.59 180 P **P** **01 13 31.3 +1.3**
comp=Z,18nm,1.0s,baz=157,slow=1.2,SNR=58
QSPA LR LR 01 47 22.6
comp=Z,68nm,18.1s,baz=197,slow=38
comp=Z,18nm,1.0s
**QSPA South Pole Qui** 70.59 180 P **P** **01 13 31.6 +1.6**
QSPA PcP **pP** **01 13 53.0 -0.6**
QSPA sP **sP** **01 14 05.5 +1.8**
**GSC Goldstone, Bar** 70.72 320 P **P** **01 13 33.1 +2.0**
baz=133,SNR=16
**K22A Casper** 70.75 332 P **P** **01 13 32.1 +0.8**
baz=143
**SHOC Shoshone, Teco** 70.81 321 P **P** **01 13 33.2 +1.7**
baz=133,SNR=6.3
**RSSD Black Hills** 70.88 334 P **P** **01 13 33.0 +0.9**
baz=146
**RSSD Black Hills** 70.88 334 P **P** **01 13 32.8 +0.8**
RSSD pP **pP** **01 13 56.6 +0.8**
RSSD sP **sP** **01 14 06.8 +0.9**
**DECC Green Verdugo** 70.95 319 P **P** **01 13 34.3 +1.8**
baz=131
**PRN Pahroc Range** 71.14 323 P **P** **01 13 34.9 +1.2**
PRN IAmb IAmb 01 13 37.1
comp=Z,48nm,1.4s
**EDW2 Edwards Air Fo** 71.16 319 P **P** **01 13 35.1 +1.4**
baz=132,SNR=8.6
**MPU Maple Canyon** 71.17 327 P **P** **01 13 34.3 +0.4**
**LRMC Laurel Mtn Rad** 71.36 320 P **P** **01 13 36.7 +1.6**
baz=132
**TPNV Topopah Spring** 71.51 322 P **P** **01 13 38.1 +2.1**
baz=134,SNR=30
**FURC Furnace Creek,** 71.54 321 P **P** **01 13 38.0 +2.1**
baz=133,SNR=23
**AGMN Agassiz Nation** 71.61 342 P **P** **01 13 35.9 -0.1**
baz=154,SNR=6.3
**MPMC Manual Prospec** 71.64 321 P **P** **01 13 38.1 +1.3**
baz=132,SNR=14
**ARVC Arvin** 71.83 319 P **P** **01 13 39.5 +1.7**
baz=131
**DUG Dugway, Tooele** 71.92 326 P **P** **01 13 39.1 +0.8**
DUG IAmb IAmb 01 13 41.1
comp=Z,43nm,1.4s
**DUG Dugway, Tooele** 71.92 326 P **P** **01 13 39.9 +1.6**
baz=137,SNR=23
**DUG Dugway, Tooele** 71.92 326 P **P** **01 13 39.1 +0.8**
DUG pmax pmax
comp=Z,43nm,1.4s
**ISA Isabella, Lake** 71.97 320 P **P** **01 13 40.5 +1.9**
baz=132,SNR=9.4
**GRAC Grapevine Rang** 72.19 321 P **P** **01 13 42.0 +2.1**
baz=133
**BW06 Boulder Array** 72.23 330 P **P** **01 13 40.6 +0.4**
baz=140,SNR=9.6
**PD31 Pinedale Array** 72.23 330 P **P** **01 13 39.8 -0.5**
**PDAR Pinedale Array** 72.23 330 P **P** **01 13 40.0 -0.2**
comp=Z,2.3nm,0.8s,baz=141,slow=5.4,SNR=20
PDAR LR LR 01 49 09.7
comp=Z,15nm,18.2s,baz=123,slow=39
comp=Z,2.3nm,0.8s
**CWC Cottonwood Cre** 72.25 321 P **P** **01 13 42.1 +1.8**
baz=132
**PKM Mcpherson Peak** 72.29 318 P **P** **01 13 42.6 +1.9**
baz=130,SNR=13
**ELIB Princess Elisa** 72.39 161 *d*P **P** **01 13 42.2 +1.5**
ELIB *d*pP **pP** **01 14 03.9 -0.7**
**MDND Maddock** 72.39 339 P **P** **01 13 41.5 +0.7**
baz=150,SNR=19
**VES Vestal, Richgr** 72.46 319 P **P** **01 13 43.3 +1.9**
baz=131,SNR=10
**SMMC Simmler** 72.68 319 P **P** **01 13 45.0 +2.2**
baz=130
**TIN Tinemaha, Big** 72.75 321 P **P** **01 13 45.3 +2.0**
baz=132
**TPH Tonopah** 72.84 322 P **P** **01 13 44.9 +1.0**
**TPH Tonopah** 72.84 322 P **P** **01 13 44.9 +1.0**
TPH pmax pmax
comp=Z,150nm,1.3s
**AHID Auburn Hatcher** 72.97 329 P **P** **01 13 44.9 +0.4**
**ULM Lac du Bonnet** 73.36 343 P **P** **01 13 45.5 -0.9**
comp=Z,17nm,0.6s,baz=160,slow=6.0,SNR=37
ULM LR LR 01 48 17.0
comp=Z,66nm,21.6s,baz=112,slow=38
comp=Z,17nm,0.6s
**ULM Lac du Bonnet** 73.36 343 *d* iP **P** **01 13 45.9 -0.5**
**MLAC Mammoth, Mammo** 73.49 321 P **P** **01 13 49.5 +1.7**
baz=132
**ELK Elko** 73.59 325 P **P** **01 13 48.9 +0.6**
**ELK Elko** 73.59 325 LR LR 01 46 39.3
comp=Z,86nm,18.2s,baz=138,slow=36
**ELK Elko** 73.59 325 P **P** **01 13 48.9 +0.6**
ELK pmax pmax
comp=Z,22nm,1.3s
**TBI Tubuai** 73.68 251 *e*P P 01 13 43.3 -5.7
comp=Z,661nm,35.2s
TBI *e*S **SKiKP** **01 23 08.4 -2.0**
comp=Z,555nm,39.0s
**TBI Tubuai** 73.68 251 *e*LR LR 01 36 20.4
comp=Z,683nm,31.8s
TBI *e*LR LR 01 36 23.7
comp=Z,3µm,32.8s
**NVAR Mina Array Bea** 73.71 322 P **P** **01 13 49.6 +0.5**
**NVAR Mina Array Bea** 73.71 322 P **P** **01 13 50.5 +1.4**
comp=Z,11nm,0.8s,baz=153,slow=6.8,SNR=65
NVAR pP **pP** **01 14 13.1 +0.3**
comp=Z,3.2nm,0.8s,baz=146,slow=6.3,SNR=3.3
NVAR LR LR 01 44 05.1
comp=Z,62nm,21.2s,baz=94,slow=34
comp=Z,11nm,0.8s
**RLMT Red Lodge** 73.92 332 P **P** **01 13 51.3 +1.2**
baz=141,SNR=16
**SCHQ Schefferville** 74.15 2 P **P** **01 13 50.3 -0.7**
comp=Z,9.9nm,0.8s,baz=184,slow=3.2,SNR=10
SCHQ pP **pP** **01 14 14.3 -1.0**
comp=Z,10nm,0.9s,baz=178,slow=5.7,SNR=3.9
SCHQ LR LR 01 46 32.1
comp=Z,53nm,21.8s,baz=228,slow=36
comp=Z,9.9nm,0.8s
**BMN Battle Mountai** 74.46 324 P **P** **01 13 53.0 -0.2**
**BMN Battle Mountai** 74.46 324 P **P** **01 13 53.1 -0.2**
BMN pmax pmax
comp=Z,8.0nm,1.2s
**DGMT Dagmar** 74.54 337 P **P** **01 13 54.5 +1.1**
baz=146
**HLID Hailey** 75.19 328 P **P** **01 13 59.2 +1.8**
baz=136,SNR=43
**PPT2 Papeete2** 75.30 256 *e*P **P** **01 14 00.1 +1.5**
comp=Z,77nm,22.2s
PPT2 *e*S **S** **01 23 23.7 -7.7**
comp=Z,104nm,29.5s
**PPT2 Papeete2** 75.30 256 *e*LR LR 01 37 03.6
comp=Z,430nm,27.8s
PPT2 *e*LR LR 01 37 04.8
comp=Z,287nm,29.5s
**PPT Papeete** 75.31 256 LR LR 01 41 19.8
comp=Z,56nm,18.8s,baz=127,slow=31
**BOZ Bozeman (W)** 75.35 331 P **P** **01 13 58.5 +0.2**
**BOZ Bozeman (W)** 75.35 331 P **P** **01 13 59.2 +0.9**
baz=139,SNR=22
**BOZ Bozeman (W)** 75.35 331 P **P** **01 13 58.5 +0.2**
BOZ pmax pmax
comp=Z,31nm,1.5s
**EGMT Eagleton** 76.39 333 P **P** **01 14 04.2 +0.2**
EGMT IAmb IAmb 01 14 05.9
comp=Z,51nm,1.4s
**EGMT Eagleton** 76.39 333 P **P** **01 14 04.7 +0.7**
baz=141,SNR=7.6
**WVOR Wild Horse Val** 76.60 325 P **P** **01 14 05.9 +0.5**
**TOA0 Torodi Ar. Sit** 77.17 71 P **P** **01 14 08.0 -1.1**
TOA0 IAmb IAmb 01 14 34.4
comp=Z,59nm,1.1s
**TORD Torodi Ar. Bea** 77.17 71 P **P** **01 14 08.1 -0.9**
TORD IAmb IAmb 01 14 34.4
comp=Z,53nm,1.1s
**TORD Torodi Ar. Bea** 77.17 71 P **P** **01 14 08.2 -0.9**
comp=Z,14nm,0.4s,baz=253,slow=5.2,SNR=323
TORD pP **pP** **01 14 33.0 -0.6**
comp=Z,16nm,0.5s,baz=276,slow=4.7,SNR=6.1
TORD LR LR 01 47 09.3
comp=Z,204nm,20.0s,baz=258,slow=35
comp=Z,14nm,0.4s
**MSO Missoula** 77.34 330 P **P** **01 14 11.0 +1.5**
baz=137,SNR=9.9
**SBA Scott Base** 77.61 190 P **P** **01 14 11.7 +1.2**
**SBA Scott Base** 77.61 190 P **P** **01 14 11.7 +1.2**
SBA pmax pmax
comp=Z,25nm,1.3s
**YBH Yreka Blue Hor** 78.42 322 LR LR 01 48 25.8
comp=Z,60nm,19.8s,baz=138,slow=35
**J05D Fort Rock, OR** 78.59 324 P **P** **01 14 16.9 +0.4**
J05D IAmb IAmb 01 14 19.3
comp=Z,41nm,1.4s
**VNDA Vanda** 78.64 190 P **P** **01 14 17.4 +1.3**
**VNDA Vanda** 78.64 190 P **P** **01 14 17.9 +1.7**
comp=Z,5.4nm,0.9s,baz=131,slow=4.8,SNR=24
comp=Z,5.4nm,0.9s
**G08A Pilot Rock** 78.72 327 P **P** **01 14 17.9 +0.7**
**FFC Flin Flon** 79.08 341 P **P** **01 14 18.6 -0.2**
**FFC Flin Flon** 79.08 341 P **P** **01 14 18.6 -0.2**
FFC pmax pmax
comp=Z,36nm,1.7s
**HAWA Hanford** 79.76 327 P **P** **01 14 23.7 +1.1**
HAWA IAmb IAmb 01 14 25.5
comp=Z,88nm,1.8s
**NEW Newport** 79.87 330 LR LR 01 54 09.5
comp=Z,38nm,18.8s,baz=132,slow=39
**NEW Newport** 79.87 330 P **P** **01 14 23.8 +0.6**
baz=135,SNR=5.7
**NEW Newport** 79.87 330 P **P** **01 14 23.7 +0.5**
**SUR Sutherland** 79.95 121 P **P** **01 14 23.8 -0.5**
**SUR Sutherland** 79.95 121 LR LR 01 47 37.9
comp=Z,50nm,18.2s,baz=272,slow=34
**MORF Marmelete** 80.44 45 *e*P **P** **01 14 30.6 +4.0**
**PTEO Sao Teotonio** 80.52 45 *e*P **P** **01 14 30.7 +3.8**
**COR Corvallis** 80.57 324 P **P** **01 14 29.3 +2.3**
COR pmax pmax
comp=Z,213nm,1.8s
**PBDV Barranco-do-Ve** 80.89 45 *e*LQ LQ 01 14 33.7
**MDT Midelt** 80.90 51 LR LR 01 50 14.1
comp=Z,66nm,19.2s,baz=249,slow=36
**PNCL Nicolau / Gran** 80.97 44 *e*P **P** **01 14 29.8 +0.5**
**MESJ Messejana** 81.02 45 *e*P **P** **01 14 30.0 +0.4**
**PCVE Castro Verde** 81.03 45 *e*P **P** **01 14 31.0 +1.4**
**TSUM Tsumeb** 81.04 107 P **P** **01 14 30.1 -0.3**
**TSUM Tsumeb** 81.04 107 LR LR 01 47 55.5
comp=Z,68nm,20.6s,baz=312,slow=34
**PVAQ Vaqueiros** 81.12 45 *e*P **P** **01 14 31.5 +1.4**
**PBEJ Beja** 81.36 45 *e*P **P** **01 14 32.3 +0.9**
**PMTG Montargil** 81.69 44 *e*P **P** **01 14 34.8 +1.7**
**PBAR Barrancos** 81.98 45 *e*P **P** **01 14 37.5 +2.8**
**PCAS Casmilo, Conde** 82.06 43 *e*P **P** **01 14 35.4 +0.4**
**IVI Ivigtut** 82.31 10 P **P** **01 14 36.2 +0.4**
**FRB Frobisher Bay** 83.07 0 LR LR 01 55 12.6
comp=Z,54nm,18.1s,baz=192,slow=38
**RAR Rarotonga** 83.44 250 LR LR 01 43 28.4
comp=Z,82nm,21.1s,baz=96,slow=29
**MVO Moncorvo** 83.60 42 *e*P **P** **01 14 45.4 +2.3**
**SOE Somerset East** 83.66 122 P **P** **01 14 43.9 +0.2**
SOE IAmb IAmb 01 15 11.1
comp=Z,45nm,1.2s
**GRHM Grahamstown, E** 84.12 123 P **P** **01 14 45.6 -0.4**
GRHM IAmb IAmb 01 16 00.8
comp=Z,97nm,1.6s
**TAM Tamanrasset** 84.39 64 P **P** **01 14 47.6 0.0**
**TAM Tamanrasset** 84.39 64 P **P** **01 14 47.6 0.0**
TAM pmax pmax
comp=Z,29nm,1.6s
**PAB San Pablo** 84.49 45 P **P** **01 14 47.6 0.0**
PAB IAmb IAmb 01 15 13.8
comp=Z,42nm,1.9s
**PAB San Pablo** 84.49 45 P **P** **01 14 47.6 0.0**
PAB pmax pmax
comp=Z,42nm,1.9s
**BOSA Boshof** 84.76 118 P **P** **01 14 49.3 -0.2**
BOSA IAmb IAmb 01 18 04.6
comp=Z,69nm,1.9s
**BOSA Boshof** 84.76 118 P **P** **01 14 49.2 -0.2**

comp=Z,5.1nm,0.7s,baz=274,slow=3.5,SNR=14
BOSA pP **pP** **01 15 14.1 -0.3**
comp=Z,4.6nm,0.7s,baz=267,slow=3.0,SNR=3.3
BOSA LR LR 01 50 53.5
comp=Z,90nm,18.7s,baz=222,slow=34
comp=Z,5.1nm,0.7s
**ESDC Sonseca Array 84.81 45** P **P** **01 14 49.9 +0.7**
**ESDC Sonseca Array 84.81 45** P **P** **01 14 48.7 -0.6**
comp=Z,2.0nm,1.1s,baz=241,slow=4.3,SNR=15
ESDC pP **pP** **01 15 12.9 -1.2**
comp=Z,5.7nm,1.0s,baz=246,slow=5.7,SNR=5.3
ESDC LR LR 01 49 36.9
comp=Z,52nm,21.4s,baz=232,slow=34
comp=Z,2.0nm,1.1s
**LBTB Lobatse 86.24 115** P **P** **01 14 56.8 -0.1**
LBTB lAmb lAmb 01 15 45.0
comp=Z,50nm,1.9s
**LBTB Lobatse 86.24 115** LR LR 01 52 13.3
comp=Z,87nm,18.0s,baz=234,slow=35
**LBTB Lobatse 86.24 115** P **P** **01 14 56.8 -0.1**
LBTB pmax pmax
comp=Z,50nm,1.9s
**MAW Mawson 86.28 163** P **P** **01 14 56.1 +0.1**
comp=Z,4.6nm,0.9s,baz=275,slow=4.4,SNR=4.0
MAW pP **pP** **01 15 21.1 +0.5**
comp=Z,3.3nm,0.4s,baz=232,slow=18,SNR=3.4
comp=Z,4.6nm,0.9s
**SFJD Kangerlussuaq 87.46 7** LR LR 01 55 01.4
comp=Z,26nm,20.4s,baz=192,slow=36
**YKA Yellowknife Ar 89.24 341** P **P** **01 15 10.2 +0.3**
**YKA Yellowknife Ar 89.24 341** P **P** **01 15 10.4 +0.4**
comp=Z,30nm,0.8s,baz=136,slow=4.9,SNR=74
YKA pP **pP** **01 15 34.6 +0.2**
comp=Z,1.7nm,0.5s,baz=136,slow=4.9,SNR=4.2
YKA LR LR 01 58 14.4
comp=Z,62nm,20.0s,baz=130,slow=38
comp=Z,30nm,0.8s
**TOAD Toad River Com 90.54 335** P **P** **01 15 16.3 +0.1**
baz=129
**KOTAN Kotaneelee Air 90.89 336** P **P** **01 15 18.6 +0.9**
baz=130
**LIRD Liard River Hi 91.24 335** P **P** **01 15 19.9 +0.4**
baz=128
**T35M Bob Quinn 91.57 331** P **P** **01 15 22.0 +0.9**
baz=125
**BORG Borgarnes 91.77 19** LR LR 01 53 09.6
comp=Z,30nm,21.4s,baz=247,slow=33
**DLBC Dease Lake 92.30 333** LR LR 02 04 16.2
comp=Z,32nm,18.1s,baz=102,slow=40
**DLBC Dease Lake 92.30 333** P **P** **01 15 25.6 +1.2**
baz=125
**KEST Kesra 92.53 53** P **P** **01 15 25.3 -0.8**
comp=Z,1.2nm,0.6s,baz=228,slow=20,SNR=2.6
KEST LR LR 01 57 30.3
comp=Z,66nm,19.4s,baz=286,slow=36
comp=Z,1.2nm,0.6s
**EKA Eskdalemuir Ar 93.24 32** P **P** **01 15 27.4 -1.3**
comp=Z,0.2nm,0.4s,baz=232,slow=5.1,SNR=4.1
comp=Z,0.2nm,0.4s
**SUMG Summit 94.26 9** P **P** **01 15 34.2 +0.6**
**SUMG Summit 94.26 9** P **P** **01 15 34.2 +0.6**
SUMG pmax pmax
comp=Z,40nm,1.6s
**P33M Teslin, Yukon 94.48 333** P **P** **01 15 35.7 +1.3**
baz=122
**URZ Urewera 95.17 226** LR LR 01 51 15.5
comp=Z,116nm,18.4s,baz=214,slow=31
**RES Resolute Bay 95.46 353** LR LR 02 02 02.2
comp=Z,33nm,19.4s,baz=89,slow=38
**PLBC Pleasant Camp 95.63 332** P **P** **01 15 40.6 +1.0**
baz=119
**VAE Valguarnera 96.96 53** LR LR 02 01 26.3
comp=Z,36nm,18.6s,baz=294,slow=37
**M29M Somme Creek 97.95 334** P Pdif 01 15 50.7 +0.5
baz=117
**L29M L29M 98.12 335** P Pdif 01 15 51.3 +0.4
baz=118
**K29M Barlow Dome 98.22 335** P Pdif 01 15 51.8 +0.4
baz=118
**I30M Mount Dempster 98.44 337** P Pdif 01 15 52.8 +0.4
baz=119
**G31M Satah River 98.54 339** P Pdif 01 15 53.2 +0.7
baz=120
**F31M Tsiigehtchic 98.62 339** P Pdif 01 15 53.7 +0.8
baz=121
**INK Inuvik 99.00 340** LR LR 02 03 16.0
comp=Z,66nm,21.9s,baz=56,slow=37
**INK Inuvik 99.00 340** P **Pdif** **01 15 55.1 +0.5**
baz=121
**MBAR Mbarara 99.36 94** LR LR 01 58 57.6
comp=Z,98nm,19.6s,baz=236,slow=34
**MBAR Mbarara 99.36 94**‖ *e*P **Pdif** **01 16 00.6 +2.8**
MBAR pmax pmax
comp=Z,5.0nm,2.5s
**H29M Whitestone 99.64 337** P **Pdif** **01 15 57.8 +0.3**
baz=117
**GERES GERESS Array B 100.11 42** LR LR 01 58 03.1
comp=Z,31nm,21.9s,baz=214,slow=33
**CLL Collm 100.45 39** *e*SP SP 01 29 04.0 +4.0
CLL *e*PS PS 01 29 11.0 -0.5
**E29M Blow River 100.46 339** P **Pdif** **01 16 01.4 +0.3**
baz=117
**H27K Steamboat Moun 100.80 337** P **Pdif** **01 16 03.5 +0.7**
baz=114
**SCRK Sand Creek 100.87 334** P **Pdif** **01 16 03.9 +0.7**
baz=112
**J26L Joseph Creek 100.90 335** P **Pdif** **01 16 03.9 +0.7**
baz=112
**ILAR Eielson Array 102.33 335** PP **PP** **01 20 20.4 -2.7**
comp=Z,0.3nm,0.8s,baz=100,slow=7.1,SNR=4.7
**N18K Kilae Creek 105.17 329** P **PKiKP** **01 20 36.6 +0.5**
baz=103
**J20K Nowinta River 105.17 333** P **PKiKP** **01 20 37.1 +1.2**
baz=103
**F20K Avaraart Lake 106.43 336** P **PKiKP** **01 20 39.5 +1.2**
baz=101
**I17K Unalakleet 107.95 332** P **PKiKP** **01 20 42.0 +0.8**
baz=98
**G16K Koyuk River 108.84 334** P **PKiKP** **01 20 43.4 +0.7**
baz=96
**DZM Mont Dzumac 111.49 236** *e*LR LR 01 53 53.9
comp=Z,217nm,24.1s
**VALR Valaam 111.92 31**‖ *i*PKIKP **PKiKP** **01 20 51.7 +3.0**
**BRTR Keskin Array B 112.11 54** PP **PP** **01 21 35.4 -0.2**
comp=Z,1.1nm,0.9s,baz=251,slow=4.4,SNR=4.1
BRTR PKKPab **PKKPab** **01 31 50.6 +1.2**
comp=Z,0.8nm,0.8s,baz=131,slow=5.7,SNR=4.9
**OBN Obninsk 114.96 38**↑*i*PKIKP PKPdf 01 20 56.4 +1.8
OBN *e* 01 22 03.5
OBN pmax pmax
comp=Z,4.0nm,0.5s
**KIV Kislovodsk 119.12 50** *i* PKIKP **PKiKP** **01 21 04.3 +1.0**
KIV pmax pmax
comp=Z,4.0nm,1.1s
KIV MLR MLR
comp=Z,29nm,21.0s
**KBZ Khabaz 119.28 50**‖ *i*PKIKP **PKiKP** **01 21 04.6 +1.2**
**ARU Arti 126.83 33** PKPdf **PKiKP** **01 21 18.1 +0.2**
**ARU Arti 126.83 33** *i* PKIKP **PKiKP** **01 21 18.2 +0.2**
ARU 01 23 12.6
ARU 01 28 21.0
**SEY Seymchan 128.17 337**‖ *e*PKIKP **PKiKP** **01 21 20.5 +0.1**
**ABKAR Akbulak array 130.05 41** PKPdf **PKiKP** **01 21 24.7 0.0**
**ABKAR Akbulak array 130.05 41** PKPdf **PKiKP** **01 21 24.5 -0.1**
**PET Petropavlovsk 130.26 324** *de*PKIKP **PKPdf** **01 21 24.3 +0.2**
**MA2 Magadan 130.81 334**↑ *e*PKIKP **PKiKP** **01 21 26.0 +0.1**
**ASAR Alice Springs 131.36 209** PKPdf **PKPdf** **01 21 27.1 -0.2**
**ASAR Alice Springs 131.36 209** PKhKP PKPpre 01 21 18.1
comp=Z,0.3nm,0.6s,baz=139,slow=2.1,SNR=2.3
ASAR PKP **PKPdf** **01 21 27.4 +0.1**
comp=Z,10nm,1.1s,baz=151,slow=2.3,SNR=31
ASAR pPKP pPKPdf 01 21 53.1 +0.3
comp=Z,1.7nm,0.8s,baz=127,slow=1.8,SNR=2.9
ASAR PP **PP** **01 23 43.7 -1.4**
comp=Z,4.0nm,1.2s,baz=158,slow=5.6,SNR=6.1
ASAR SKPbc **SKPbc** **01 24 43.9 -0.6**
comp=Z,3.8nm,1.1s,baz=142,slow=4.7,SNR=6.1
**WR0 Warramunga Arr 134.22 212** **PKPdf** **01 21 31.8 -0.9**
**WB2 Warramunga Arr 134.33 212** PKPdf **PKPdf** **01 21 32.7 -0.2**
**WRA Warramunga Array 134.33 212** PKhKP PKPpre 01 21 21.2
comp=Z,0.3nm,0.5s,baz=136,slow=3.1,SNR=8.8
WRA PKP **PKPdf** **01 21 33.2 +0.3**
comp=Z,5.8nm,0.7s,baz=158,slow=1.8,SNR=37
WRA pPKP pPKPdf 01 21 58.9 +0.5
comp=Z,1.4nm,0.6s,baz=148,slow=1.9,SNR=2.5
WRA SKPbc **SKPbc** **01 24 54.2 -0.6**
comp=Z,3.1nm,1.0s,baz=146,slow=3.0,SNR=6.4

**BRVK Borovoye 134.40 33** *de*PKIKP **PKiKP** **01 21 33.1 -0.2**
**YAK Yakutsk 135.56 347**‖ *e*PKIKP **PKiKP** **01 21 34.8 -0.6**
**BRLS Borolday 138.62 46** *e*PKP **PKPdf** **01 21 40.4 +0.2**
baz=47
**BRLS Borolday 138.62 46** *e*PKIKP **PKPdf** **01 21 40.3 +0.2**
**CHM Chimkent 138.71 47** *e*PKP **PKPdf** **01 21 40.9 +0.6**
baz=47
**CHM Chimkent 138.71 47** *e*PKIKP **PKPdf** **01 21 40.9 +0.6**
**KURK Kurchatov 139.97 32**↑*i*PKIKP **PKiKP** **01 21 43.8 -0.9**
**KURBB Kurchatov Arra 139.99 32** PKhKP PKPpre 01 21 32.9
comp=Z,0.1nm,0.4s,baz=190,slow=23,SNR=1.3
KURBB PKP **PKPdf** **01 21 42.2 -0.1**
comp=Z,0.7nm,0.8s,baz=305,slow=2.4,SNR=5.6
KURBB pPKP pPKPdf 01 22 08.6 +0.7
comp=Z,3.1nm,1.0s,baz=304,slow=2.2,SNR=6.5
KURBB SKPbc **SKPbc** **01 25 08.6 -1.7**
comp=Z,0.6nm,0.7s,baz=296,slow=3.0,SNR=1.8
**ZAA0 Zalesovo Array 140.42 24** PKPdf **PKPdf** **01 21 43.1 +0.1**
**ZALV Zalesovo Beam 140.42 24** PKPdf **PKPdf** **01 21 43.4 +0.4**
**ZALV Zalesovo Beam 140.42 24** PKiKP PKPpre 01 21 38.9
comp=Z,1.4nm,0.5s,baz=295,slow=2.4,SNR=5.5
ZALV PKP **PKPdf** **01 21 43.1 +0.1**
comp=Z,4.8nm,0.6s,baz=329,slow=2.8,SNR=16
ZALV pPKP pPKPdf 01 22 08.4 -0.2
comp=Z,5.0nm,0.6s,baz=303,slow=2.8,SNR=3.8
**ZALV Zalesovo Beam 140.42 24** PKIKP **PKPdf** **01 21 43.4 +0.4**
**SGDS Sogindy 141.65 44** *e*PKP **PKPdf** **01 21 46.1 +0.4**
baz=43
**SGDS Sogindy 141.65 44** *e*PKIKP **PKPdf** **01 21 46.0 +0.4**
**BOD Bodaibo 141.74 357** *e*PKHKP PKPpre 01 21 39.4
BOD pmax pmax
comp=Z,6.0nm,1.0s
**AAK Ala-Archa 141.92 45**‖ *e*PKIKP **PKPdf** **01 21 46.9 +0.6**
**YSS Yuzh-Sakhalins 142.15 324** *e*PKHKP PKPpre 01 21 36.8
YSS *e* 01 21 45.7
**TDK Taldyqorghan 143.23 39** *e*PKP **PKPdf** **01 21 49.1 +0.7**
baz=39
**TDK Taldyqorghan 143.23 39** *e*PKIKP **PKPdf** **01 21 49.0 +0.7**
**TNSS Tian-Shan 143.34 43** *e*PKP **PKPdf** **01 21 49.2 +0.1**
baz=43
**TNSS Tian-Shan 143.34 43** *e*PKIKP **PKPdf** **01 21 49.2 +0.1**
**MDOK Medeo 143.34 43** *e*PKP **PKPdf** **01 21 49.0 +0.2**
baz=42
MDOK *e*PP **PP** **01 25 02.1 +1.6**
baz=42
**MDOK Medeo 143.34 43** *e*PKIKP **PKPdf** **01 21 49.0 +0.2**
MDOK *e* 01 25 02.1
**ZEA Zeya 143.58 343** *e*PKIKP PKPbc 01 21 47.1 +0.9
ZEA pmax pmax
comp=Z,10.0nm,1.5s
**MAKZ Makanchi 144.17 34** PKPbc 01 21 48.3 0.0
**MAKZ Makanchi 144.17 34** PKIKP PKPbc 01 21 48.3 0.0
**KPKS Kokpek 144.22 41** *e*PKP **PKPdf** **01 21 50.4 +0.2**
baz=41
**KPKS Kokpek 144.22 41** *e*PKIKP **PKPdf** **01 21 50.4 +0.2**
**KSH Kashi 144.24 49** PKP **PKPdf** **01 21 49.8 -0.6**
KSH pPKP pPKPdf 01 22 14.9 -1.2
**SATY Saty 144.25 42** *e*PKP **PKPdf** **01 21 50.3 -0.1**
baz=42
**SATY Saty 144.25 42** *e*PKIKP **PKPdf** **01 21 50.3 -0.1**
**MK31 Makanchi Array 144.34 34** PKPdf PKPbc 01 21 48.9 +0.1
**MK31 Makanchi Array 144.34 34** *d* iPKIKP PKPbc 01 21 49.0 +0.1
**MKAR Makanchi Array 144.34 34** PKPdf **PKPab** **01 21 48.7 +0.2**
**MKAR Makanchi Array 144.34 34** PKP PKPbc 01 21 49.1 +0.3
comp=Z,3.3nm,0.6s,baz=316,slow=3.8,SNR=31
MKAR pPKP pPKPdf 01 22 15.5 -0.4
comp=Z,3.9nm,0.9s,baz=318,slow=1.6,SNR=3.6
**UZB Uzynbulak 144.59 41** *e*PKP **PKPdf** **01 21 51.4 +0.4**
baz=41
UZB *e*PP **PP** **01 25 09.9 +1.9**
baz=41
**UZB Uzynbulak 144.59 41** *e*PKIKP **PKPdf** **01 21 51.4 +0.4**
UZB *e* 01 25 09.9
**ZSN Zaisan 145.21 31** *e*PKP **PKPdf** **01 21 52.4 +0.6**
baz=31
ZSN *e*PP **PP** **01 25 13.0 +1.9**
baz=31
**ZSN Zaisan 145.21 31** *e*PKIKP **PKPdf** **01 21 52.3 +0.6**
ZSN *e* 01 25 13.0
**KLR Kul'dur 145.90 335** *d* iPKP2 **PKPab** **01 21 54.1 -0.1**
**HEH HeiHe 146.60 340** *e*PKPbc **PKPbc** **01 21 55.9 +0.3**
**IRK Irkutsk 147.04 7** *e*PKIKP **PKPdf** **01 21 55.5 +0.8**
IRK *e* 01 22 19.9
IRK pmax pmax
comp=Z,63nm,1.4s
**MOY Mondy 147.11 11** *e*PKP2 **PKPbc** **01 21 57.0 -0.2**
MOY pmax pmax
comp=Z,42nm,1.6s
**SOEI Soe 147.88 206** **PKPbc** **01 21 60.0 -0.4**
**ZAK Zakamensk 148.73 9** *e*PKP2 **PKPbc** **01 22 01.2 -0.3**
ZAK pmax pmax
comp=Z,17nm,1.2s
**FAKI Fak Fak 149.12 226** **PKPbc** **01 22 02.4 -1.1**
**WMQ Urumqi 149.17 33** *e*PKPbc **PKPdf** **01 21 59.1 +0.6**
**HIA Hailar 149.50 348** **PKPdf** **01 21 58.2 -0.6**
**HIA Hailar 149.50 348** PKHKP PKPpre 01 21 58.2
**HYB Hyderabad 149.56 89** *e*PKiKP **PKPbc** **01 22 05.0 +0.5**
**USA0B Ussuriysk Arra 149.65 329** **PKPbc** **01 22 04.1 +0.2**
**USA0B Ussuriysk Arra 149.65 329**‖ *e*PKHKP PKPpre 01 22 02.3
**USRK Ussuriysk Ar. 149.65 329** **PKPbc** **01 22 03.8 -0.1**
**USRK Ussuriysk Ar. 149.65 329** PKPbc **PKiKP** **01 22 04.8 0.0**
comp=Z,27nm,0.9s,baz=358,slow=1.3,SNR=42
USRK pPKPbc **pPKPbc** **01 22 28.8 -0.7**
comp=Z,6.5nm,0.9s,baz=15,slow=2.2,SNR=3.0
**USRK Ussuriysk Ar. 149.65 329** PKP2 **PKPbc** **01 22 03.8 -0.1**
**BNX BinXian 150.46 336** PKPbc **PKPdf** **01 22 00.4 0.0**
**MJAR Matsushiro Arr 150.50 311** PKPbc **PKPbc** **01 22 06.7 +0.5**
comp=Z,18nm,0.8s,baz=89,slow=1.7,SNR=16
MJAR pPKPbc **pPKPbc** **01 22 32.3 +0.8**
comp=Z,6.8nm,0.7s,baz=84,slow=2.2,SNR=3.2
**MAJO Matsushiro 150.50 311** **PKPbc** **01 22 06.1 -0.1**
**MAJO Matsushiro 150.50 311** PKIKP **PKPbc** **01 22 06.1 -0.1**
**SONM Songino Array 151.62 6** PKPdf **PKPdf** **01 22 02.2 -0.1**
SONM **PKiKP** **01 22 09.0 0.0**
**SONM Songino Array 151.62 6** PKP **PKPdf** **01 22 01.5 -0.8**
comp=Z,2.4nm,1.0s,baz=350,slow=0.9,SNR=12
SONM PKPbc **PKiKP** **01 22 09.5 +0.5**
comp=Z,12nm,0.6s,baz=321,slow=1.8,SNR=46
SONM pPKPbc **pPKPbc** **01 22 34.6 +0.3**
comp=Z,16nm,0.8s,baz=334,slow=1.0,SNR=9.0
**SONM Songino Array 151.62 6** PKIKP **PKPdf** **01 22 02.2 -0.1**
**ULN Ulaanbaatar 151.65 5**↑*i*PKIKP **PKPdf** **01 22 03.8 +1.4**
**XLT XiLinHaoTe 155.33 350** *e*PKP **PKPab** **01 22 34.3 +1.1**
XLT PKS **PP** **01 26 02.2 -6.7**
**KSRS Korea Array 156.65 323** PKP **PKPdf** **01 22 10.0 +0.6**
comp=Z,0.9nm,0.5s,baz=78,slow=1.6,SNR=6.8
KSRS PKPab **PKPab** **01 22 38.4 -0.5**
comp=Z,3.8nm,0.7s,baz=54,slow=5.0,SNR=10.0
**KSAR Wonju Array Be 156.68 323** PKPdf **PKPdf** **01 22 09.1 -0.4**
KSAR PKPab **PKPab** **01 22 37.6 -1.5**
**KSAR Wonju Array Be 156.68 323** PKP2 **PKPab** **01 22 37.6 -1.5**
KSAR 02 22 09.1
**GTA Gaotai 158.17 23** *e*PKP **PKPdf** **01 22 13.1 +1.6**
GTA pPKP pPKPdf 01 22 38.4 +1.1
**HHC Hu-ho-hao-te 158.79 358** *e*PKP **PKPdf** **01 22 08.2 -4.0**
**BTO Baotou 159.05 1** *e*PKP **PKPdf** **01 22 10.6 -1.9**
BTO pPKP **pPKPdf** **01 22 36.0 -2.3**
BTO sPKP 01 22 50.4
BTO PP **PP** **01 26 32.0 +2.7**
BTO SS SS 01 46 30.7 +5.0
BTO LR LR
comp=Z,110nm,4.7s
BTO LR LR
comp=Z,140nm,5.1s
BTO LR LR
comp=Z,290nm,8.3s
**HNS HongShan 161.90 349**↑PKP **PKPdf** **01 22 17.3 +1.8**
**XAN Xi'an 165.53 6** PKP **PKPdf** **01 22 20.0 +0.9**
**NJ2 Nanjing 165.54 331** *e*PKP **PKPdf** **01 22 16.7 -2.4**
**PZH PanZhiHua 169.34 48** PKP **PKPdf** **01 22 21.1 -1.1**

**ATH 04 01:04:44.9±0.5, 40.18N×20.66E, h10km, ML1.2/5, Manual Solution by N.Liadopoulou This location: 2020/06/16 07:50:20 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 2 km; Longitude uncertainty: 3 km, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PENT** | **Pentalofos** | **0.37** | **87** | P | Pg | 01 04 52.3 | +0.1 |
| PENT | | | | S | Sb | 01 04 59.6 | +0.1 |
| **NEST** | **Nestorio** | **0.38** | **52** | P | Pg | 01 04 53.1 | +0.6 |
| NEST | | | | S | Sb | 01 04 59.9 | +0.1 |
| **JAN** | **Janina** | **0.54** | **164** | P | Pb | 01 04 56.1 | -0.4 |
| JAN | | | | S | Sb | 01 05 04.3 | 0.0 |
| **KPRO** | **Kipourio** | **0.59** | **112** | P | Pg | 01 04 56.2 | -0.1 |
| **KEK** | **Kerkira** | **0.81** | **235** | P | Pb | 01 05 00.9 | -0.1 |
| **FNA** | **Florina** | **0.82** | **42** | P | Pb | 01 05 01.0 | -0.2 |
| FNA | | | | S | Sb | 01 05 12.2 | -0.2 |

**ATH 04 01:05:13.9, 38.69N×22.29E, h15km±1km, ML1.1/4, Error ellipse: s-maj=1.6km s-min=0.9km az=229.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DLFA** | **Delphi** | **0.26** | **141** | P | Pg | 01 05 19.3 | -0.3 |
| DLFA | | | | S | Sg | 01 05 23.8 | +0.3 |
| **ANX** | **Ano Chora** | **0.30** | **252** | P | Pg | 01 05 19.6 | -0.7 |
| ANX | | | | S | Sg | 01 05 24.3 | -0.3 |
| ANX | | | | AML | AML | 01 05 25.6 | |
| | comp=E,92μm,0.2s | | | | | | |
| ANX | | | | AML | AML | 01 05 28.7 | |
| | comp=N,127μm,0.3s | | | | | | |
| **AXAR** | **Agios Charalam** | **0.30** | **74** | P | Pg | 01 05 19.9 | -0.3 |
| AXAR | | | | S | Sg | 01 05 25.0 | +0.4 |
| AXAR | | | | AML | AML | 01 05 25.8 | |
| | comp=E,307μm,0.4s | | | | | | |
| AXAR | | | | AML | AML | 01 05 27.7 | |
| | comp=N,165μm,0.3s | | | | | | |
| **KALE** | **Kalithea** | **0.32** | **201** | P | Pg | 01 05 20.2 | -0.3 |
| KALE | | | | S | Sg | 01 05 25.1 | +0.1 |
| KALE | | | | AML | AML | 01 05 27.1 | |
| | comp=N,134μm,0.3s | | | | | | |
| KALE | | | | AML | AML | 01 05 27.2 | |
| | comp=E,72μm,0.2s | | | | | | |
| **EFP** | **Efpalio** | **0.39** | **229** | P | Pg | 01 05 21.4 | -0.4 |
| EFP | | | | S | Sg | 01 05 27.7 | +0.4 |
| EFP | | | | AML | AML | 01 05 29.0 | |
| | comp=N,41μm,0.2s | | | | | | |
| EFP | | | | AML | AML | 01 05 29.9 | |
| | comp=E,49μm,0.1s | | | | | | |
| **EVR** | **Evrytania** | **0.44** | **302** | P | Pg | 01 05 23.0 | +0.2 |
| EVR | | | | S | Sg | 01 05 29.2 | +0.5 |
| **PVO** | **Paravola** | **0.60** | **264** | P | Pg | 01 05 25.5 | -0.1 |
| PVO | | | | S | Sg | 01 05 33.8 | +0.2 |
| **KLV** | **Kalavryta, Ach** | **0.65** | **189** | P | Pg | 01 05 26.4 | -0.3 |
| KLV | | | | S | Sg | 01 05 35.3 | +0.1 |
| **GUR** | **Goura** | **0.75** | **177** | P | Pg | 01 05 28.2 | -0.3 |
| GUR | | | | S | Sb | 01 05 38.8 | 0.0 |
| **DRO** | **Drossia** | **0.86** | **212** | P | Pb | 01 05 30.1 | -0.4 |
| DRO | | | | S | Sb | 01 05 41.8 | 0.0 |
| **THL** | **Klokotos Trika** | **0.90** | **347** | P | Pb | 01 05 30.7 | -0.5 |
| THL | | | | S | Sb | 01 05 42.6 | -0.4 |

*IDC **04** 01:28:41.9±1.5, 20.31S×178.04W, h517km±16km, mb3.0/8, mbtmp3.9/11, Error ellipse: s-maj=22.0km s-min=12.8km az=105.0*

**ISC 04 01:28:40.4±0.7, 20.4S±0.1×177.8W±0.1, h500km, n17, σ1§18, mb3.5/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.70** | **303** | P | **P** | **01 30 06.4** | **+1.6** |
| | 6.5nm,0.4s,baz=233,slow=21,SNR=20 | | | | | | |
| MSVF | | | | S | **S** | **01 31 14.5** | **+0.9** |
| | 8.3nm,0.9s,baz=307,slow=20,SNR=1.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.77** | **261** | P | **P** | **01 31 48.4** | **+0.1** |
| | 4.2nm,0.9s,baz=72,slow=19,SNR=1.8 | | | | | | |
| **URZ** | **Urewera** | **18.36** | **193** | P | **P** | **01 32 23.1** | **-0.8** |
| | 2.9nm,0.3s,baz=344,slow=2.9,SNR=6.9 | | | | | | |
| URZ | | | | S | **S** | **01 35 27.9** | **+1.7** |
| | 5.4nm,0.8s,baz=290,slow=17,SNR=1.6 | | | | | | |
| **ASAR** | **Alice Springs** | **44.71** | **257** | P | **P** | **01 36 06.8** | **-1.8** |
| | 0.3nm,0.5s,baz=97,slow=8.6,SNR=1.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.78** | **262** | P | **P** | **01 36 07.4** | **-1.8** |
| | 0.2nm,0.4s,baz=97,slow=7.5,SNR=12 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **58.06** | **185** | P | **P** | **01 37 44.1** | **-0.4** |
| | 0.4nm,0.6s,baz=22,slow=4.5,SNR=6.4 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.70** | **180** | P | **P** | **01 39 00.5** | **+1.3** |
| | 2.2nm,0.7s,baz=306,slow=0.6,SNR=20 | | | | | | |
| | 2.2nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.81** | **43** | P | **P** | **01 40 02.5** | **+0.6** |
| | 1.3nm,0.8s,baz=224,slow=9.8,SNR=7.2 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.85** | **57** | P | **P** | **01 40 32.6** | **+0.7** |
| | 1.1nm,0.8s,baz=223,slow=6.7,SNR=14 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **88.15** | **13** | P | **P** | **01 40 35.5** | **-1.5** |
| | 0.8nm,0.8s,baz=216,slow=5.6,SNR=7.0 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **88.75** | **43** | P | **P** | **01 40 40.4** | **-0.2** |
| | 0.6nm,0.6s,baz=207,slow=3.0,SNR=6.4 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.82** | **350** | PKP | **PKPdf** | **01 46 49.8** | **-0.2** |
| | 1.7nm,0.8s,baz=28,slow=8.1,SNR=4.2 | | | | | | |
| **HFS** | **Hagfors** | **139.43** | **351** | PKhKP | PKPpre | 01 47 02.0 | |
| | 1.5nm,0.9s,baz=27,slow=3.9,SNR=6.4 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **144.85** | **5** | PKP | **PKPdf** | **01 47 18.8** | **-0.9** |
| | 1.3nm,0.7s,baz=340,slow=2.9,SNR=4.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.87** | **313** | PKPbc | **PKPdf** | **01 47 25.1** | **+1.2** |
| | 0.5nm,0.5s,baz=103,slow=2.7,SNR=3.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.89** | **300** | PKPbc | **PKPbc** | **01 47 29.4** | **0.0** |
| | 0.7nm,0.4s,baz=76,slow=6.1,SNR=6.2 | | | | | | |
| **GERES** | **GERESS Array B** | **150.11** | **345** | PKPbc | **PKPbc** | **01 47 33.8** | **-0.5** |
| | 0.6nm,0.6s,baz=0.0,slow=1.0,SNR=5.5 | | | | | | |

*NEIC **04** 01:46:37.5±2.0, 22.5S±0.1×170.29E±0.07, h10km±1km, mb4.4/7, Error ellipse: s-maj=20.5km s-min=11.4km az=171.0*

*IDC **04** 01:46:40.8±3.8, 22.50S×170.26E, h39km±30km, mb3.7/7, mbtmp3.9/9, ML3.8/1, Error ellipse: s-maj=37.8km s-min=22.9km az=162.0*

*NOU **04** 01:46:43.3, 22.17S×169.77E, h0km, ML4.0/10, Southeast of Loyalty Islands*

**ISC 04 01:46:40.4±0.7, 22.43S±0.09×170.25E±0.07, h33km, n39, σ0§86/41, mb4.2/12, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.27** | **294** | P | **Pn** | **01 47 14.3** | **-1.3** |
| **PINNC** | **Pines Island,** | **2.60** | **265** | P | **Pn** | **01 47 20.9** | **+0.7** |
| **PINNC** | **Pines Island,** | **2.60** | **265** | | **Pn** | **01 47 20.0** | **-0.2** |
| PINNC | | | | Sn | **Sn** | **01 47 51.5** | **+0.9** |
| **YATNC** | **Mamie plateau,** | **3.13** | **276** | P | **Pn** | **01 47 26.6** | **-0.9** |
| **LIFNC** | **LIFOU** | **3.25** | **300** | P | **Pn** | **01 47 28.4** | **-0.7** |
| **LIFNC** | **LIFOU** | **3.25** | **300** | Pn | **Pn** | **01 47 28.1** | **-1.0** |
| **ONTNC** | **Ouen Toro** | **3.52** | **271** | P | **Pn** | **01 47 33.3** | **+0.5** |
| **ONTNC** | **Ouen Toro** | **3.52** | **271** | | **Pn** | **01 47 32.7** | **-0.1** |
| **DZM** | **Mont Dzumac** | **3.54** | **275** | P | **Pn** | **01 47 33.6** | **+0.3** |
| **DZM** | **Mont Dzumac** | **3.54** | **275** | | **Pn** | **01 47 33.4** | **+0.1** |
| **DZM** | **Mont Dzumac** | **3.54** | **275** | Pn | **Pn** | **01 47 33.6** | **+0.3** |
| | 8.0nm,0.3s,baz=109,slow=10,SNR=157 | | | | | | |
| DZM | | | | Sn | **Sn** | **01 48 15.0** | **+0.9** |
| | 12nm,0.3s,baz=315,slow=22,SNR=13 | | | | | | |
| | 17nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.67** | **274** | P | **Pn** | **01 47 35.2** | **+0.3** |
| **RTV** | **Rentapao** | **4.92** | **339** | P | **Pn** | **01 47 53.2** | **+1.1** |
| **DVP** | **Devils Point** | **5.07** | **337** | P | **Pn** | **01 47 54.9** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **5.86** | **288** | P | **Pn** | **01 48 05.2** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **5.86** | **288** | Pn | **Pn** | **01 48 05.3** | **+0.2** |
| **MSVF** | **Nonsavu** | **8.69** | **59** | | **Pn** | **01 48 43.1** | **-0.9** |
| **MSVF** | **Nonsavu** | **8.69** | **59** | Pn | **Pn** | **01 48 45.1** | **+1.2** |
| | 7.1nm,0.9s,baz=201,slow=16,SNR=4.5 | | | | | | |
| **WR0** | **Warramunga Arr** | **33.34** | **267** | P | **P** | **01 53 14.5** | **-1.2** |
| WR0 | | | | lAmb | lAmb | 01 53 17.8 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **ASAR** | **Alice Springs** | **33.41** | **261** | P | **P** | **01 53 15.4** | **-0.9** |
| | comp=Z,0.7nm,0.7s,baz=72,slow=9.7,SNR=7.2 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.53** | **267** | P | **P** | **01 53 16.1** | **-1.3** |
| **WRA** | **Warramunga Arr** | **33.53** | **267** | P | **P** | **01 53 16.5** | **-0.8** |
| | comp=Z,0.4nm,0.5s,baz=95,slow=8.5,SNR=9.4 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **38.38** | **278** | P | **P** | **01 53 59.2** | **+0.3** |
| MTN | | | | lAmb | lAmb | 01 54 09.3 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.96** | **268** | P | **P** | **01 54 29.0** | **+0.5** |
| **SBA** | **Scott Base** | **55.50** | **181** | P | **P** | **01 56 13.3** | **+1.6** |
| SBA | | | | lAmb | lAmb | 01 56 14.5 | |
| | comp=Z,3.1nm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **71.66** | **326** | P | | **P** | **01 57 58.6** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=138,slow=6.9,SNR=4.5 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.67** | **294** | P | | **P** | **01 58 51.7** | **+1.1** |
| **CMAR** | **Chiang Mai Arr** | **80.67** | **294** | P | | **P** | **01 58 52.3** | **+1.7** |
| | comp=Z,1.2nm,0.3s,baz=140,slow=4.7,SNR=4.2 | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.43** | **184** | ⇑P | | **P** | **01 59 14.1** | **-0.4** |
| | comp=Z,41nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **86.03** | **182** | P | | **P** | **01 59 16.7** | **-0.7** |
| SNAA | | | | IAmb | | IAmb | 01 59 31.2 | |
| | comp=Z,2.4nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **86.03** | **182** | ⇑P | | **P** | **01 59 16.5** | **-0.8** |
| | comp=Z,11nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **86.03** | **182** | P | | **P** | **01 59 16.7** | **-0.7** |
| | comp=Z,0.9nm,0.8s,baz=196,slow=12,SNR=6.6 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.58** | **180** | ⇑P | | **P** | **01 59 19.2** | **-0.8** |
| | comp=Z,3.1nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.88** | **181** | ⇑P | | **P** | **01 59 20.9** | **-0.6** |
| | comp=Z,2.7nm,0.7s,baz=178,slow=5.3 | | | | | | | |
| **SONM** | **Songino Array** | **90.32** | **323** | P | | **P** | **01 59 38.1** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=132,slow=6.6,SNR=4.4 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.99** | **17** | P | | **P** | **01 59 48.3** | **-1.6** |
| | comp=Z,0.2nm,0.7s,baz=238,slow=5.2,SNR=2.3 | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.78** | **353** | PKPbc | | **PKPdf** | **02 06 17.4** | **+0.4** |
| | comp=Z,2.1nm,0.6s,baz=358,slow=2.2,SNR=16 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.73** | **331** | PKPbc | | **PKPbc** | **02 06 21.6** | **-0.1** |
| | comp=Z,1.0nm,0.8s,baz=132,slow=2.0,SNR=6.7 | | | | | | | |

*ASIES **04** 01:49:20.2,24°.66N×121°.79E,h76km,ML4.2,Mw3.6,*
*Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm;*
*$M_{rr}$0.04; $M_{\theta\theta}$3.27; $M_{\phi\phi}$-3.32; $M_{r\theta}$-1.24; $M_{r\phi}$0.34; $M_{\theta\phi}$0.66;*
*Fault plane solution: $M_o$3.59894×$10^{21}$ NP1:*
*$\phi_s$312.73000°,$\delta$85.72000°,$\lambda$22.16000°. NP2:*
*$\phi_s$220.99000°,$\delta$67.91000°,$\lambda$175.38000°. Principal axes:*
*T Plg18.5840°, Azm179.0270°; N Plg67.4560°,*
*Azm323.1170°; P Plg12.3070°, Azm84.8210°;*
*JMA **04** 01:49:20.1±0.2,24°.6N±0°.5×121°.8E±0°.6,h75km±1km,*
*MV3.6/14,TAIWAN REGION*
*TAP **04** 01:49:20.2,24°.66N×121°.79E,h76km,ML4.2,B*
**ISC 04 01:49:19.9**±1.2,**24°.67N**±0°.03×**121°.81E**±0°.02,**h81**km±5km,
**n145,σ0°75**/245,**11C-33D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWC** | **Suao** | **0.07** | **151** | ⇓*i*P | | **Pn** | **01 49 32.0** | **+0.5** |
| | baz=116 | | | | | | | |
| TWC | | | | *i* S | | **Sn** | **01 49 40.7** | **+0.7** |
| | baz=116 | | | | | | | |
| **NDS** | **Dongshan** | **0.09** | **246** | P | | **Pn** | **01 49 32.0** | **+0.5** |
| | baz=248 | | | | | | | |
| NDS | | | | *e*S | | **Sn** | **01 49 40.4** | **+0.3** |
| | baz=248 | | | | | | | |
| **ESAO** | **Su ao** | **0.10** | **163** | *e*P | | **Pn** | **01 49 32.0** | **+0.4** |
| | baz=147 | | | | | | | |
| ESAO | | | | *e*S | | **Sn** | **01 49 40.4** | **+0.3** |
| | baz=147 | | | | | | | |
| **ILA** | **Ilan** | **0.11** | **329** | *e*P | | **Pn** | **01 49 32.2** | **+0.6** |
| | baz=336 | | | | | | | |
| ILA | | | | *e*S | | **Sn** | **01 49 40.9** | **+0.8** |
| | baz=336 | | | | | | | |
| **NTC** | **Toucheng** | **0.18** | **5** | *e*P | | **Pn** | **01 49 32.3** | **+0.5** |
| | baz=12 | | | | | | | |
| NTC | | | | *e*S | | **Sn** | **01 49 41.1** | **+0.6** |
| | baz=12 | | | | | | | |
| **EGS** | | **0.20** | **33** | *e*P | | **Pn** | **01 49 32.2** | **+0.4** |
| | baz=38 | | | | | | | |
| EGS | | | | *e*S | | **Sn** | **01 49 41.2** | **+0.6** |
| | baz=38 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.22** | **293** | ⇓*i*P | | **Pn** | **01 49 32.1** | **+0.1** |
| | baz=299 | | | | | | | |
| FUSB | | | | *i* S | | **Sn** | **01 49 40.1** | **-0.9** |
| | baz=299 | | | | | | | |
| **ENTT** | **Nioudou** | **0.23** | **262** | ⇓*i*P | | **Pn** | **01 49 32.2** | **+0.2** |
| | baz=263 | | | | | | | |
| ENTT | | | | *e*S | | **Sn** | **01 49 40.7** | **-0.2** |
| | baz=263 | | | | | | | |
| **EWUT** | **Wuta** | **0.23** | **187** | *e*P | | **Pn** | **01 49 32.2** | **+0.2** |
| | baz=187 | | | | | | | |
| EWUT | | | | *e*S | | **Sn** | **01 49 41.1** | **+0.3** |
| | baz=187 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.28** | **256** | ⇓*i*P | | **Pn** | **01 49 32.4** | **+0.2** |
| | baz=266 | | | | | | | |
| NDT | | | | *i* S | | **Sn** | **01 49 41.0** | **-0.3** |
| | baz=266 | | | | | | | |
| **LATG** | **Datong** | **0.29** | **242** | ⇓*i*P | | **Pn** | **01 49 32.6** | **+0.2** |
| | baz=253 | | | | | | | |
| LATG | | | | S | | **Sn** | **01 49 41.2** | **-0.4** |
| | baz=253 | | | | | | | |
| **NWLT** | **Wulai** | **0.30** | **291** | ⇓*i*P | | **Pn** | **01 49 32.2** | **-0.2** |
| | baz=294 | | | | | | | |
| NWLT | | | | S | | **Sn** | **01 49 40.4** | **-1.2** |
| | baz=294 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.30** | **3** | ⇑*i*P | | **Pn** | **01 49 32.6** | **+0.3** |
| | baz=359 | | | | | | | |
| TIPB | | | | *e*S | | **Sn** | **01 49 41.3** | **-0.2** |
| | baz=359 | | | | | | | |
| **EAHA** | **Aohua** | **0.35** | **191** | *e*P | | **Pn** | **01 49 32.8** | **+0.2** |
| | baz=194 | | | | | | | |
| EAHA | | | | *e*S | | **Sn** | **01 49 42.4** | **+0.5** |
| | baz=194 | | | | | | | |
| **EHP** | **Heping Village** | **0.37** | **190** | *e*P | | **Pn** | **01 49 33.1** | **+0.3** |
| | baz=192 | | | | | | | |
| EHP | | | | *e*S | | **Sn** | **01 49 43.3** | **+1.0** |
| | baz=192 | | | | | | | |
| **TWA** | **Mucha** | **0.37** | **326** | ⇓*i*P | | **Pn** | **01 49 32.9** | **+0.1** |
| | baz=324 | | | | | | | |
| TWA | | | | *i* S | | **Sn** | **01 49 42.1** | **-0.2** |
| | baz=324 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.37** | **26** | ⇑*i*P | | **Pn** | **01 49 33.1** | **+0.3** |
| | baz=36 | | | | | | | |
| TWB1 | | | | *i* S | | **Sn** | **01 49 41.7** | **-0.5** |
| | baz=36 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.39** | **318** | *e*P | | **Pn** | **01 49 33.0** | **+0.1** |
| | baz=313 | | | | | | | |
| NHDH | | | | *i* S | | **Sn** | **01 49 42.1** | **-0.4** |
| | baz=313 | | | | | | | |
| **YHNB** | **Yeheng** | **0.40** | **270** | P | | **Pn** | **01 49 32.7** | **-0.3** |
| **YHNB** | **Yeheng** | **0.40** | **270** | ⇓*i*P | | **Pn** | **01 49 32.8** | **-0.3** |
| | baz=271 | | | | | | | |
| YHNB | | | | *i* S | | **Sn** | **01 49 41.6** | **-1.1** |
| | baz=271 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.40** | **356** | ⇑*i*P | | **Pn** | **01 49 33.3** | **+0.3** |
| | baz=353 | | | | | | | |
| NWF | | | | *i* S | | **Sn** | **01 49 42.8** | **0.0** |
| | baz=353 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.40** | **356** | ⇑*i*P | | **Pn** | **01 49 33.4** | **+0.4** |
| | baz=353 | | | | | | | |
| WFSB | | | | *i* S | | **Sn** | **01 49 42.9** | **+0.3** |
| | baz=353 | | | | | | | |
| **NSK** | **Sanguang** | **0.41** | **271** | ⇓*i*P | | **Pn** | **01 49 32.8** | **-0.3** |
| | baz=272 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **01 49 41.5** | **-1.4** |
| | baz=272 | | | | | | | |
| **TATO** | **Taipei** | **0.42** | **316** | P | | **Pn** | **01 49 33.1** | **0.0** |
| **SXI1** | **Grass Mountain** | **0.42** | **8** | ⇑*i*P | | **Pn** | **01 49 33.4** | **+0.1** |
| | baz=11 | | | | | | | |
| SXI1 | | | | *e*S | | **Sn** | **01 49 44.0** | **+0.9** |
| | baz=11 | | | | | | | |
| **NHY** | **Taipei** | **0.43** | **329** | *e*P | | **Pn** | **01 49 33.8** | **+0.6** |
| | baz=326 | | | | | | | |
| NHY | | | | S | | **Sn** | **01 49 43.2** | **+0.3** |
| | baz=326 | | | | | | | |
| **EOS2** | **EOS2** | **0.46** | **123** | *e*P | | **Pn** | **01 49 34.1** | **+0.9** |
| | baz=117 | | | | | | | |
| **TAP** | **Taipei** | **0.46** | **323** | *e*P | | **Pn** | **01 49 33.6** | **+0.2** |
| | baz=320 | | | | | | | |
| TAP | | | | *i* S | | **Sn** | **01 49 43.0** | **-0.4** |
| | baz=320 | | | | | | | |
| **NNS** | **Nan Shan** | **0.46** | **240** | ⇓*i*P | | **Pn** | **01 49 33.7** | **+0.1** |
| | baz=242 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **01 49 43.8** | **+0.1** |
| | baz=242 | | | | | | | |
| **TNOU** | **National Taiwa** | **0.48** | **356** | *e*P | | **Pn** | **01 49 33.8** | **+0.2** |
| | baz=353 | | | | | | | |
| TNOU | | | | *e*S | | **Sn** | **01 49 43.4** | **-0.3** |
| | baz=353 | | | | | | | |
| **YM01** | **YM01** | **0.52** | **335** | ⇓*i*P | | **Pn** | **01 49 34.2** | **+0.2** |
| | baz=329 | | | | | | | |
| YM01 | | | | *e*S | | **Sn** | **01 49 44.5** | **+0.1** |
| | baz=329 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.53** | **202** | P | | **Pn** | **01 49 33.2** | **-0.8** |
| **NACB** | **Ninganchiao** | **0.53** | **202** | ⇓*i*P | | **Pn** | **01 49 33.3** | **-0.8** |
| | baz=209 | | | | | | | |
| NACB | | | | S | | **Sn** | **01 49 43.1** | **-1.4** |
| | baz=209 | | | | | | | |
| **ETL** | **Fush Village** | **0.54** | **199** | *e*P | | **Pn** | **01 49 33.5** | **-0.7** |
| | baz=205 | | | | | | | |
| ETL | | | | *e*S | | **Sn** | **01 49 43.7** | **-1.0** |
| | baz=205 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.55** | **213** | ⇓*i*P | | **Pn** | **01 49 34.0** | **-0.3** |
| | baz=219 | | | | | | | |
| ETLH | | | | *i* S | | **Sn** | **01 49 43.9** | **-1.1** |
| | baz=219 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.56** | **320** | ⇓*i*P | | **Pn** | **01 49 34.7** | **+0.4** |
| | baz=313 | | | | | | | |
| TWS1 | | | | *i* S | | **Sn** | **01 49 45.4** | **+0.5** |
| | baz=313 | | | | | | | |
| **ANP** | **Anpu** | **0.58** | **333** | ⇑P | | **Pn** | **01 49 34.6** | **+0.1** |
| | baz=329 | | | | | | | |
| ANP | | | | *i* S | | **Sn** | **01 49 45.1** | **-0.3** |
| | baz=329 | | | | | | | |
| **NTST** | **Danshui** | **0.59** | **326** | *e*P | | **Pn** | **01 49 35.0** | **+0.5** |
| | baz=335 | | | | | | | |
| NTST | | | | *e*S | | **Sn** | **01 49 46.1** | **+0.6** |
| | baz=335 | | | | | | | |
| **EOS3** | **EOS3** | **0.60** | **130** | ⇑*e*P | | **Pn** | **01 49 35.3** | **+0.8** |
| | baz=139 | | | | | | | |
| **TWD** | **Chiawan** | **0.62** | **198** | ⇑P | | **Pn** | **01 49 34.2** | **-0.7** |
| | baz=203 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **01 49 44.5** | **-1.4** |
| | baz=203 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.63** | **267** | ⇓*i*P | | **Pn** | **01 49 35.0** | **0.0** |
| | baz=276 | | | | | | | |
| NFF | | | | *i* S | | **Sn** | **01 49 45.6** | **-0.7** |
| | baz=276 | | | | | | | |
| **NCUH** | **Zhongli** | **0.64** | **298** | ⇓*e*P | | **Pn** | **01 49 35.2** | **+0.2** |
| | baz=291 | | | | | | | |
| NCUH | | | | *e*S | | **Sn** | **01 49 46.5** | **+0.2** |
| | baz=291 | | | | | | | |
| **FUSS** | **Fushou** | **0.67** | **231** | ⇓*e*P | | **Pn** | **01 49 36.0** | **+0.4** |
| | baz=224 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **01 49 47.0** | **-0.2** |
| | baz=224 | | | | | | | |
| **TWT** | **Tachien** | **0.71** | **234** | ⇓P | | **Pn** | **01 49 36.9** | **+0.9** |
| | baz=228 | | | | | | | |
| TWT | | | | *e*S | | **Sn** | **01 49 48.3** | **+0.3** |
| | baz=228 | | | | | | | |
| **HWA** | **Hwalien** | **0.72** | **195** | *e*P | | **Pn** | **01 49 35.9** | **+0.1** |
| | baz=202 | | | | | | | |
| HWA | | | | *e*S | | **Sn** | **01 49 47.1** | **-0.5** |
| | baz=202 | | | | | | | |
| **EOS4** | **EOS4** | **0.72** | **140** | *e*P | | **Pn** | **01 49 35.7** | **+0.2** |
| | baz=146 | | | | | | | |
| EOS4 | | | | *e*S | | **Sn** | **01 49 47.2** | **+0.2** |
| | baz=146 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.72** | **224** | ⇑*e*P | | **Pn** | **01 49 36.5** | **+0.1** |
| | baz=216 | | | | | | | |
| WHF | | | | *i* S | | **Sn** | **01 49 48.5** | **0.0** |
| | baz=216 | | | | | | | |
| **LIOB** | **Emei** | **0.72** | **268** | ⇓*i*P | | **Pn** | **01 49 36.1** | **+0.2** |
| | baz=268 | | | | | | | |
| LIOB | | | | *i* S | | **Sn** | **01 49 47.1** | **-0.7** |
| | baz=268 | | | | | | | |
| **TDCB** | **Techi** | **0.73** | **235** | ⇓*i*P | | **Pn** | **01 49 36.8** | **+0.7** |
| | baz=228 | | | | | | | |
| TDCB | | | | *e*S | | **Sn** | **01 49 47.2** | **-0.9** |
| | baz=228 | | | | | | | |
| **NSTT** | **Nanjuang** | **0.74** | **267** | ⇓P | | **Pn** | **01 49 36.0** | **0.0** |
| | baz=267 | | | | | | | |
| NSTT | | | | *i* S | | **Sn** | **01 49 47.4** | **-0.7** |
| | baz=267 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.74** | **209** | *e*P | | **Pn** | **01 49 35.4** | **-0.9** |
| | baz=199 | | | | | | | |
| LXIB | | | | *e*S | | **Sn** | **01 49 47.9** | **-0.6** |
| | baz=199 | | | | | | | |
| **SBCB** | **Hsinchu** | **0.76** | **279** | ⇓*i*P | | **Pn** | **01 49 36.5** | **+0.3** |
| | baz=279 | | | | | | | |
| SBCB | | | | *e*S | | **Sn** | **01 49 47.1** | **-1.3** |
| | baz=279 | | | | | | | |
| **ETM** | **Tongmen** | **0.76** | **202** | *e*P | | **Pn** | **01 49 35.7** | **-0.6** |
| | baz=201 | | | | | | | |
| **HSN** | **Hsinchu** | **0.78** | **280** | P | | **Pn** | **01 49 36.4** | **-0.1** |
| | baz=282 | | | | | | | |
| HSN | | | | *e*S | | **Sn** | **01 49 47.5** | **-1.3** |
| | baz=282 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.82** | **194** | *e*P | | **Pn** | **01 49 37.1** | **+0.1** |
| | baz=202 | | | | | | | |
| **CHGB** | **Renai** | **0.84** | **224** | ⇓*i*P | | **Pn** | **01 49 38.0** | **+0.5** |
| | baz=216 | | | | | | | |
| CHGB | | | | S | | **Sn** | **01 49 50.4** | **-0.1** |
| | baz=216 | | | | | | | |
| **WHP** | **Taichung City** | **0.88** | **244** | ⇓*i*P | | **Pn** | **01 49 38.6** | **+0.8** |
| | baz=252 | | | | | | | |
| WHP | | | | *i* S | | **Sn** | **01 49 51.3** | **+0.3** |
| | baz=252 | | | | | | | |
| **SHUL** | **Shoufeng** | **0.91** | **194** | *e*P | | **Pn** | **01 49 38.0** | **+0.1** |
| | baz=200 | | | | | | | |
| SHUL | | | | S | | **Sn** | **01 49 51.5** | **+0.1** |
| | baz=200 | | | | | | | |
| **OWD** | **Renai** | **0.92** | **219** | ⇑P | | **Pn** | **01 49 38.6** | **+0.4** |
| | baz=213 | | | | | | | |
| OWD | | | | S | | **Sn** | **01 49 51.7** | **-0.2** |
| | baz=213 | | | | | | | |
| **ESL** | **Shilin** | **0.92** | **202** | *e*P | | **Pn** | **01 49 36.9** | **-1.2** |
| | baz=194 | | | | | | | |
| ESL | | | | *e*S | | **Sn** | **01 49 49.9** | **-1.8** |
| | baz=194 | | | | | | | |
| **WUSB** | **Renai** | **0.93** | **223** | ⇓P | | **Pn** | **01 49 38.9** | **+0.6** |
| | baz=217 | | | | | | | |
| WUSB | | | | *e*S | | **Sn** | **01 49 52.5** | **+0.4** |
| | baz=217 | | | | | | | |
| **NMLH** | **Miaoli** | **0.94** | **262** | ⇓*e*P | | **Pn** | **01 49 38.7** | **+0.5** |
| | baz=261 | | | | | | | |
| NMLH | | | | S | | **Sn** | **01 49 52.0** | **0.0** |
| | baz=261 | | | | | | | |
| **NSY** | **Sanyi** | **0.99** | **255** | ⇓*i*P | | **Pn** | **01 49 39.5** | **+0.6** |
| | baz=254 | | | | | | | |
| NSY | | | | *e*S | | **Sn** | **01 49 53.1** | **0.0** |
| | baz=254 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.00** | **251** | ⇓P | | **Pn** | **01 49 39.3** | **+0.3** |
| | baz=250 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sn** | **01 49 52.7** | **-0.6** |
| | baz=250 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.02** | **233** | ⇓*e*P | | **Pn** | **01 49 40.1** | **+0.8** |
| | baz=240 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **01 49 54.7** | **+0.9** |
| | baz=240 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.03** | **202** | *e*P | | **Pn** | **01 49 38.0** | **-1.3** |
| | baz=196 | | | | | | | |
| WARBT | | | | *e*S | | **Sn** | **01 49 52.0** | **-1.9** |
| | baz=196 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.06** | **102** | P | | **Pn** | **01 49 39.8** | **+0.1** |
| JYNG | | | | *e*S | | **Sn** | **01 49 54.0** | **-0.5** |
| **EGFH** | **Guangfu** | **1.06** | **199** | *e*P | | **Pn** | **01 49 40.0** | **+0.2** |
| | baz=198 | | | | | | | |
| **VWDT** | **VWDT** | **1.10** | **214** | ⇓*i*P | | **Pn** | **01 49 40.8** | **+0.6** |
| | baz=208 | | | | | | | |
| VWDT | | | | *e*S | | **Sn** | **01 49 55.9** | **+0.4** |
| | baz=208 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.11** | **101** | P | | **Pn** | **01 49 40.3** | **0.0** |
| **YOJ** | **Yonaguni jima** | **1.11** | **101** | ⇓*e*P | | **Pn** | **01 49 40.4** | **0.0** |
| | baz=101 | | | | | | | |
| YOJ | | | | *e*S | | **Sn** | **01 49 54.5** | **-1.2** |
| | baz=101 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.11** | **101** | P | | **Pn** | **01 49 40.4** | **+0.1** |
| YOJ | | | | *e*S | | **Sn** | **01 49 55.2** | **-0.4** |
| **WDJ** | **Dajia District** | **1.11** | **253** | *e*P | | **Pn** | **01 49 40.8** | **+0.4** |
| | baz=252 | | | | | | | |
| WDJ | | | | *e*S | | **Sn** | **01 49 56.2** | **+0.4** |
| | baz=252 | | | | | | | |
| **TYC** | **Yuchr** | **1.16** | **229** | ⇓*i*P | | **Pn** | **01 49 41.6** | **+0.7** |
| | baz=235 | | | | | | | |
| TYC | | | | *i* S | | **Sn** | **01 49 57.8** | **+1.1** |
| | baz=235 | | | | | | | |
| **SSLB** | **Suanglung** | **1.18** | **222** | P | | **Pn** | **01 49 41.8** | **+0.6** |
| **SSLB** | **Suanglung** | **1.18** | **222** | ⇓P | | **Pn** | **01 49 42.0** | **+0.8** |
| | baz=231 | | | | | | | |
| SSLB | | | | *e*S | | **Sn** | **01 49 58.0** | **+0.8** |
| | baz=231 | | | | | | | |
| **HGSD** | **Ruisui** | **1.23** | **197** | ⇑*e*P | | **Pn** | **01 49 41.7** | **-0.1** |
| | baz=202 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **01 49 57.7** | **-0.5** |
| | baz=202 | | | | | | | |
| **EHY** | **Hungye** | **1.24** | **201** | *e*P | | **Pn** | **01 49 40.7** | **-1.4** |
| | baz=199 | | | | | | | |
| EHY | | | | S | | **Sn** | **01 49 57.8** | **-0.8** |
| | baz=199 | | | | | | | |
| **EHYH** | **Wanrong** | **1.25** | **200** | *e*P | | **Pn** | **01 49 42.2** | **+0.2** |
| | baz=198 | | | | | | | |
| EHYH | | | | *e*S | | **Sn** | **01 49 57.4** | **-1.3** |
| | baz=198 | | | | | | | |
| **WNT** | **Mingjian** | **1.30** | **233** | *e*P | | **Pn** | **01 49 43.4** | **+0.8** |
| | baz=241 | | | | | | | |
| WNT | | | | S | | **Sn** | **01 50 00.2** | **+0.5** |
| | baz=241 | | | | | | | |
| **WJS** | **Zhushan** | **1.30** | **230** | P | | **Pn** | **01 49 43.5** | **+0.8** |
| | baz=238 | | | | | | | |
| WJS | | | | S | | **Sn** | **01 50 00.8** | **+0.8** |
| | baz=238 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.31** | **222** | *i* P | | **Pn** | **01 49 43.9** | **+1.1** |
| | baz=230 | | | | | | | |
| WHYT | | | | *e*S | | **Sn** | **01 50 01.3** | **+1.2** |
| | baz=230 | | | | | | | |
| **YULB** | **Yu-li** | **1.36** | **200** | P | | **Pn** | **01 49 42.8** | **-0.7** |
| **YULB** | **Yu-li** | **1.36** | **200** | *e*P | | **Pn** | **01 49 42.5** | **-1.0** |
| | baz=194 | | | | | | | |
| YULB | | | | S | | **Sn** | **01 50 00.1** | **-1.1** |
| | baz=194 | | | | | | | |
| **EYUL** | **Yuli** | **1.39** | **199** | *e*P | | **Pn** | **01 49 43.7** | **-0.2** |
| | baz=198 | | | | | | | |
| **TWF1** | **Yuli** | **1.40** | **200** | *e*P | | **Pn** | **01 49 43.2** | **-0.8** |
| | baz=198 | | | | | | | |
| TWF1 | | | | *e*S | | **Sn** | **01 50 00.3** | **-1.7** |
| | baz=198 | | | | | | | |
| **CHN5** | **Tsauling** | **1.49** | **224** | *e*P | | **Pn** | **01 49 45.9** | **+0.7** |
| | baz=232 | | | | | | | |
| **WGK** | **Gukeng** | **1.50** | **230** | *i* P | | **Pn** | **01 49 46.4** | **+1.0** |
| | baz=239 | | | | | | | |
| WGK | | | | *e*S | | **Sn** | **01 50 05.8** | **+1.3** |
| | baz=239 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.52** | **240** | *i* P | | **Pn** | **01 49 45.8** | **+0.3** |
| | baz=238 | | | | | | | |
| WRL | | | | *i* S | | **Sn** | **01 50 04.4** | **-0.4** |
| | baz=238 | | | | | | | |
| **WDLH** | **Douliu** | **1.52** | **230** | *i* P | | **Pn** | **01 49 46.3** | **+0.8** |
| | baz=239 | | | | | | | |
| WDLH | | | | *e*S | | **Sn** | **01 50 05.1** | **+0.2** |
| | baz=239 | | | | | | | |
| **CHKH** | **Chenggong** | **1.52** | **195** | *e*P | | **Pn** | **01 49 45.8** | **+0.2** |
| | baz=199 | | | | | | | |
| CHKH | | | | *i* S | | **Sn** | **01 50 05.3** | **+0.4** |
| | baz=199 | | | | | | | |
| **FULB** | **Fuli** | **1.54** | **198** | *e*P | | **Pn** | **01 49 46.2** | **+0.3** |
| | baz=201 | | | | | | | |
| FULB | | | | *i* S | | **Sn** | **01 50 05.9** | **+0.5** |
| | baz=201 | | | | | | | |
| **EHD** | **Haiduan** | **1.61** | **200** | *e*P | | **Pn** | **01 49 47.3** | **+0.5** |
| | baz=195 | | | | | | | |
| **CHKT** | **Chengkung** | **1.62** | **195** | *e*P | | **Pn** | **01 49 46.4** | **-0.4** |
| | baz=183 | | | | | | | |
| CHKT | | | | *e*S | | **Sn** | **01 50 07.4** | **+0.2** |
| | baz=183 | | | | | | | |
| **WTK** | **Tuku** | **1.63** | **233** | *i* P | | **Pn** | **01 49 47.4** | **+0.5** |
| | baz=232 | | | | | | | |
| WTK | | | | *i* S | | **Sn** | **01 50 07.5** | **+0.2** |
| | baz=232 | | | | | | | |
| **ELDTW** | **Lidau** | **1.65** | **206** | *e*P | | **Pn** | **01 49 48.0** | **+0.7** |
| | baz=198 | | | | | | | |
| ELDTW | | | | S | | **Sn** | **01 50 08.2** | **+0.2** |
| | baz=198 | | | | | | | |
| **WCKO** | **Fanlu** | **1.65** | **222** | P | | **Pn** | **01 49 48.5** | **+1.2** |
| | baz=227 | | | | | | | |
| WCKO | | | | *i* S | | **Sn** | **01 50 08.5** | **+0.5** |
| | baz=227 | | | | | | | |
| **ECS** | **Chishang** | **1.66** | **199** | *e*P | | **Pn** | **01 49 48.8** | **+1.4** |
| | baz=198 | | | | | | | |
| ECS | | | | *e*S | | **Sn** | **01 50 08.1** | **-0.1** |
| | baz=198 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.74** | **219** | P | | **Pn** | **01 49 49.2** | **+0.7** |
| **TPUB** | **Ta-pu** | **1.74** | **219** | *e*P | | **Pn** | **01 49 49.2** | **+0.7** |
| | baz=217 | | | | | | | |
| TPUB | | | | *e*S | | **Sn** | **01 50 09.9** | **-0.1** |
| | baz=217 | | | | | | | |
| **EDH** | **Donghe** | **1.75** | **195** | *e*P | | **Pn** | **01 49 48.2** | **-0.3** |
| | baz=202 | | | | | | | |
| EDH | | | | S | | **Sn** | **01 50 10.2** | **-0.2** |
| | baz=202 | | | | | | | |
| **STYH** | **Taoyuan** | **1.77** | **213** | *e*P | | **Pn** | **01 49 50.7** | **+1.9** |
| | baz=221 | | | | | | | |
| STYH | | | | S | | **Sn** | **01 50 12.5** | **+1.8** |
| | baz=221 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.78** | **100** | P | | **Pn** | **01 49 49.0** | **+0.2** |
| IRIF | | | | *e*S | | **Sn** | **01 50 10.4** | **-0.5** |
| **WTP** | **Ta-pu** | **1.79** | **218** | *e*P | | **Pn** | **01 49 50.1** | **+0.9** |
| | baz=227 | | | | | | | |
| **WSL** | **Shulin Townsh** | **1.84** | **232** | *i* P | | **Pn** | **01 49 50.6** | **+0.8** |
| | baz=238 | | | | | | | |
| WSL | | | | *i* S | | **Sn** | **01 50 13.8** | **+1.3** |
| | baz=238 | | | | | | | |
| **TWK** | **Hsinying** | **1.85** | **221** | *e*P | | **Pn** | **01 49 50.4** | **+0.5** |
| | baz=219 | | | | | | | |
| TWK | | | | *e*S | | **Sn** | **01 50 13.2** | **+0.5** |
| | baz=219 | | | | | | | |
| **LONT** | **Longtian** | **1.86** | **200** | *e*P | | **Pn** | **01 49 49.7** | **-0.4** |
| | baz=191 | | | | | | | |
| **SNST** | **Tainan City** | **1.88** | **220** | *e*P | | **Pn** | **01 49 51.1** | **+0.9** |
| | baz=218 | | | | | | | |
| SNST | | | | *e*S | | **Sn** | **01 50 14.5** | **+1.2** |
| | baz=218 | | | | | | | |
| **CHN1** | **Nanshi** | **1.89** | **219** | *e*P | | **Pn** | **01 49 51.1** | **+0.7** |
| | baz=229 | | | | | | | |
| **ICHU** | **Yijhu** | **1.91** | **227** | *e*P | | **Pn** | **01 49 51.6** | **+1.0** |
| | baz=226 | | | | | | | |
| ICHU | | | | *i* S | | **Sn** | **01 50 14.4** | **+0.3** |
| | baz=226 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.92** | **108** | *e*P | | **Pn** | **01 49 51.4** | **+0.6** |
| HATJ | | | | *e*S | | **Sn** | **01 50 15.0** | **+0.8** |
| **SGST** | **Jiashian** | **1.94** | **216** | *e*P | | **Pn** | **01 49 51.2** | **+0.1** |
| | baz=224 | | | | | | | |
| **TWG** | **Pinlang** | **1.96** | **200** | *e*P | | **Pn** | **01 49 51.0** | **-0.4** |
| | baz=192 | | | | | | | |
| **TWGBT** | **Beinan** | **1.96** | **200** | P | | **Pn** | **01 49 50.6** | **-0.8** |
| **TWGBT** | **Beinan** | **1.96** | **200** | *e*P | | **Pn** | **01 49 51.1** | **-0.3** |
| | baz=192 | | | | | | | |
| **CHN8** | **Yiju** | **1.97** | **228** | *e*P | | **Pn** | **01 49 52.0** | **+0.6** |
| | baz=237 | | | | | | | |
| CHN8 | | | | *i* S | | **Sn** | **01 50 16.6** | **+1.2** |
| | baz=237 | | | | | | | |
| **SLGT** | **Liugui** | **1.98** | **213** | *e*P | | **Pn** | **01 49 54.0** | **+2.4** |
| | baz=212 | | | | | | | |
| **LDUT** | **Ludao** | **2.01** | **189** | *e*P | | **Pn** | **01 49 51.3** | **-0.7** |
| | baz=195 | | | | | | | |
| LDUT | | | | *e*S | | **Sn** | **01 50 15.6** | **-0.9** |
| | baz=195 | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.05** | **102** | P | | **Pn** | **01 49 53.0** | **+0.6** |
| JKRS | | | | *e*S | | **Sn** | **01 50 17.4** | **+0.1** |
| **JIJ** | **Ishigaki jima** | **2.15** | **98** | P | | **Pn** | **01 49 53.8** | **0.0** |
| JIJ | | | | S | | **Sn** | **01 50 18.9** | **-0.8** |
| **SCST** | **Cishan** | **2.15** | **214** | *e*P | | **Pn** | **01 49 55.8** | **+2.0** |
| | baz=224 | | | | | | | |
| **VWUC** | **VWUC** | **2.17** | **279** | *e*P | | **Pn** | **01 49 53.7** | **-0.4** |
| | baz=278 | | | | | | | |
| **TSCK** | **Chigu Township** | **2.19** | **226** | *e*P | | **Pn** | **01 49 54.9** | **+0.6** |
| | baz=236 | | | | | | | |
| **TSMG** | **Majia** | **2.23** | **209** | *e*P | | **Pn** | **01 49 56.5** | **+1.6** |
| | baz=220 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TWK1** | **Hengchun** baz=199 | **2.87** | **199** | *e*P | **Pn** | **01 50 04.1** | **+0.6** |
| **TWKBT** | **Hengchun** baz=199 | **2.87** | **199** | *e*P | **Pn** | **01 50 04.0** | **+0.5** |
| **MHZQ** | **Yeshan** baz=298 | **2.89** | **300** | *e*P | **Pn** | **01 50 02.9** | **-0.9** |
| **KNM** | **Kinmen** baz=265 | **3.09** | **266** | *e*P | **Pn** | **01 50 07.1** | **+0.7** |
| **KNMB** | **Chin-men Tao** baz=266 | **3.12** | **267** | *e*P | **Pn** | **01 50 06.2** | **-0.7** |
| **ZPLA** | **Ao Xicun** baz=259 | **3.78** | **260** | *e*P | **Pn** | **01 50 17.6** | **+1.7** |
| **JOW** | **Kunigami** | **6.21** | **68** | P | **Pn** | **01 50 49.3** | **+0.3** |

*TEH* ***04*** *01:50:07.7, 32˚.99N×46˚.16E, h10km±68km, ML2.5*
*ISN* ***04*** *01:50:07.2±1.2, 32˚.98N×46˚.11E, h6km±69km, ML2.7*
**ISC 04 01:50:08.4**±1.0**, 33˚.03N**±0˚.04×**46˚.14E**±0˚.06**, h10**km**, n11,**
**σ0§69/13, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** baz=133 | **0.19** | **295** | *e*P | **g** | **Pg** | **01 50 12.0** | **-0.5** |
| IBDR | | | | *e*Sg | | **Sg** | **01 50 15.0** | **-0.2** |
| IBDR | comp=N,2μm,0.5s | | | | AML | AML | 01 50 19.1 | |
| IBDR | comp=E,702nm,0.4s | | | | AML | AML | 01 50 19.8 | |
| **ILBA** | **Ilam Banvizeh** | **0.60** | **6** | Pg | | **Pg** | **01 50 19.4** | **-0.7** |
| **GLG1** | **Gilan-e-Gharb** | **1.10** | **350** | Pg | | **Pg** | **01 50 29.6** | **+0.1** |
| **RAFI** | **Al-Rafai** | **1.30** | **181** | *e*Pg | | **Pg** | **01 50 33.0** | **-0.4** |
| RAFI | | | | *e*Sg | | **Sn** | **01 50 51.0** | **+1.0** |
| **IGHG** | **Ghaleghazi** | **1.35** | **15** | Pg | | **Pg** | **01 50 34.5** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **1.45** | **31** | Pg | | **Pg** | **01 50 36.2** | **-0.1** |
| **IKFM** | **Kafar-mosalman** | **1.52** | **70** | Pg | | **Pb** | **01 50 35.7** | **-0.8** |
| **IDHR** | **Dehrash** | **1.68** | **7** | Pg | | **Pb** | **01 50 39.4** | **-0.1** |
| **ILIN** | **Lien** | **2.01** | **20** | Pn | | **Pb** | **01 50 45.2** | **+0.1** |
| **SNQR** | **Sonqor, Kerman** | **2.21** | **34** | Pn | | **Pb** | **01 50 47.3** | **-1.3** |
| **HSAM** | **Samen** | **2.37** | **59** | Pn | | **Pn** | **01 50 48.4** | **+0.8** |

*NNC* ***04*** *02:08:55.8±0.4, 42˚.92N×77˚.41E, h0km, mb3.4, mpv3.8, Error ellipse: s-maj=3.2km s-min=1.6km az=6.0*
*KRNET* ***04*** *02:08:56.3±0.1, 42˚.94N×77˚.38E, h22km, mb3.5*
*SOME* ***04*** *02:08:56.7, 42˚.93N×77˚.38E, h15km*
*KNET* ***04*** *02:08:58.0±0.5, 42˚.89N×77˚.24E, h15km±3km, ml2.9, Error ellipse: s-maj=4.1km s-min=3.6km az=15.0*
**ISC 04 02:08:56.1**±0.9**, 42˚.93N**±0˚.02×**77˚.41E**±0˚.01**, h17**km±6km**,**
**n99, σ1§20/178, 51C-25D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MDOK** | **Medeo** 300nm,0.1s | **0.35** | **312** | *e*P | | **Pg** | **02 09 03.3** | **-0.2** |
| MDOK | 1μm,0.2s | | | *e*S | | **Sg** | **02 09 07.8** | **-0.9** |
| **MDOK** | **Medeo** 452nm,0.6s | **0.35** | **312** | ⇑P | | **Pg** | **02 09 03.3** | **-0.2** |
| MDOK | 300nm,0.1s | | | Pg | | **Pg** | **02 09 03.4** | **-0.2** |
| MDOK | 928nm,0.5s | | | S | | **Sg** | **02 09 08.1** | **-0.6** |
| MDOK | 1μm,0.2s | | | Lg | | Lg | 02 09 08.4 | |
| **MDOK** | **Medeo** baz=13 | **0.35** | **312** | *e*P | | **Pg** | **02 09 03.3** | **-0.2** |
| MDOK | baz=13 | | | *e*S | | **Sg** | **02 09 07.7** | **-0.9** |
| **TNSS** | **Tian-Shan** 190nm,0.1s | **0.35** | **288** | *e*P | | **Pg** | **02 09 03.5** | **-0.2** |
| TNSS | 1μm,0.1s | | | *e*S | | **Sg** | **02 09 08.2** | **-0.6** |
| **TNSS** | **Tian-Shan** 190nm,0.1s | **0.35** | **288** | P | | **Pg** | **02 09 03.5** | **-0.2** |
| TNSS | 1μm,0.1s | | | S | | **Sg** | **02 09 08.5** | **-0.3** |
| **TNSS** | **Tian-Shan** baz=88 | **0.35** | **288** | *e*P | | **Pg** | **02 09 03.5** | **-0.2** |
| TNSS | baz=88 | | | *e*S | | **Sg** | **02 09 08.3** | **-0.6** |
| **KOTS** | **Kotyrbulak** 1μm,0.1s | **0.38** | **325** | *e*P | | **Pg** | **02 09 04.0** | **0.0** |
| KOTS | 3μm,0.3s | | | *e*S | | **Sg** | **02 09 09.0** | **-0.2** |
| **KOTS** | **Kotyrbulak** 1μm,0.1s | **0.38** | **325** | P | | **Pg** | **02 09 04.0** | **0.0** |
| KOTS | 3μm,0.3s | | | S | | **Sg** | **02 09 09.4** | **+0.1** |
| **KOTS** | **Kotyrbulak** baz=26 | **0.38** | **325** | *e*P | | **Pg** | **02 09 04.0** | **0.0** |
| KOTS | baz=26 | | | *e*S | | **Sg** | **02 09 09.1** | **-0.2** |
| **KNDC** | **Almaty** 81nm,0.3s | **0.43** | **312** | ⇓P | | **Pg** | **02 09 04.8** | **-0.1** |
| KNDC | 919nm,0.5s | | | ⇑S | | **Sg** | **02 09 11.2** | **+0.3** |
| **AAA** | **Alma-Ata** 799nm,0.2s | **0.46** | **308** | *e*P | | **Pb** | **02 09 05.8** | **0.0** |
| AAA | 4μm,0.1s | | | *e*S | | **Sb** | **02 09 12.4** | **+0.2** |
| **IZV** | **Izvestkoviy** 0.3nm,0.2s | **0.59** | **281** | *e*P | | **Pb** | **02 09 07.7** | **-0.4** |
| IZV | 537nm,0.2s | | | *e*S | | **Sb** | **02 09 15.5** | **-0.7** |
| **IZV** | **Izvestkoviy** 0.3nm,0.2s | **0.59** | **281** | P | | **Pb** | **02 09 07.9** | **-0.2** |
| IZV | 537nm,0.2s | | | S | | **Sb** | **02 09 16.0** | **-0.2** |
| **IZV** | **Izvestkoviy** baz=80 | **0.59** | **281** | *e*P | | **Pb** | **02 09 07.7** | **-0.4** |
| IZV | baz=80 | | | *e*S | | **Sb** | **02 09 15.5** | **-0.7** |
| **MTBS** | **Maitube** 23nm,0.2s | **0.74** | **286** | *e*P | | **Pb** | **02 09 10.4** | **-0.2** |
| MTBS | 317nm,0.2s | | | *e*S | | **Sb** | **02 09 20.2** | **-0.3** |
| **MTBS** | **Maitube** 23nm,0.2s | **0.74** | **286** | P | | **Pb** | **02 09 10.4** | **-0.2** |
| MTBS | 317nm,0.2s | | | S | | **Sb** | **02 09 20.2** | **-0.3** |
| **MTBS** | **Maitube** baz=86 | **0.74** | **286** | *e*P | | **Pb** | **02 09 10.4** | **-0.2** |
| MTBS | baz=86 | | | *e*S | | **Sb** | **02 09 20.3** | **-0.3** |
| **SATY** | **Saty** 66nm,0.1s | **0.75** | **79** | *e*P | | **Pg** | **02 09 10.8** | **+0.1** |
| SATY | 1μm,0.1s | | | *e*S | | **Sn** | **02 09 21.2** | **-1.7** |
| **SATY** | **Saty** 66nm,0.1s | **0.75** | **79** | P | | **Pg** | **02 09 10.8** | **+0.1** |
| SATY | 1μm,0.1s | | | S | | **Sn** | **02 09 21.2** | **-1.7** |
| **SATY** | **Saty** baz=80 | **0.75** | **79** | *e*P | | **Pg** | **02 09 10.8** | **+0.1** |
| SATY | baz=80 | | | *e*S | | **Sn** | **02 09 21.3** | **-1.7** |
| **KURS** | **Kuram** 37nm,0.2s | **0.79** | **45** | *e*P | | **Pg** | **02 09 11.3** | **-0.3** |
| KURS | 283nm,0.3s | | | *e*S | | **Sg** | **02 09 21.8** | **-0.3** |
| **KURS** | **Kuram** 37nm,0.2s | **0.79** | **45** | P | | **Pg** | **02 09 11.3** | **-0.3** |
| KURS | 283nm,0.3s | | | S | | **Sg** | **02 09 21.8** | **-0.3** |
| **KURS** | **Kuram** baz=46 | **0.79** | **45** | *e*P | | **Pg** | **02 09 11.3** | **-0.3** |
| KURS | baz=46 | | | *e*S | | **Sg** | **02 09 21.8** | **-0.3** |
| **ZHN** | **Zhinishke** 107nm,0.1s | **0.79** | **72** | *e*P | | **Pg** | **02 09 11.2** | **-0.4** |
| ZHN | 1μm,0.2s | | | *e*S | | **Sg** | **02 09 21.7** | **-0.4** |
| **ZHN** | **Zhinishke** 107nm,0.1s | **0.79** | **72** | P | | **Pg** | **02 09 11.2** | **-0.4** |
| ZHN | 1μm,0.2s | | | S | | **Sg** | **02 09 21.7** | **-0.4** |
| **KDJ** | **Kajisay** baz=90 | **0.81** | **192** | ⇑*i*P | | **Pg** | **02 09 11.9** | **-0.1** |
| KDJ | baz=90 | | | ⇑*i*S | | **Sg** | **02 09 22.9** | **+0.2** |
| **PRZ** | **Przheval'sk** baz=20 | **0.86** | **121** | ⇑*i*P | | **Pg** | **02 09 12.7** | **-0.1** |
| PRZ | baz=20 | | | ⇑*i*S | | **Sn** | **02 09 24.4** | **-1.4** |
| **KTBS** | **Karatobe** 48nm,0.1s | **0.95** | **326** | *e*P | | **Pb** | **02 09 13.8** | **-0.2** |
| KTBS | 315nm,0.2s | | | *e*S | | **Sb** | **02 09 26.2** | **-0.2** |
| **KTBS** | **Karatobe** 54nm,0.2s | **0.95** | **326** | P | | **Pb** | **02 09 13.8** | **-0.2** |
| KTBS | 315nm,0.2s | | | S | | **Sb** | **02 09 26.2** | **-0.2** |
| **KTBS** | **Karatobe** baz=27 | **0.95** | **326** | *e*P | | **Pb** | **02 09 13.8** | **-0.2** |
| KTBS | baz=27 | | | *e*S | | **Sb** | **02 09 26.1** | **-0.2** |
| **CHKK** | **Chushkaly** 211nm,0.2s | **0.98** | **342** | *e*P | | **Pb** | **02 09 14.4** | **-0.1** |
| CHKK | 538nm,0.2s | | | *e*S | | **Sb** | **02 09 27.3** | **+0.2** |
| **CHKK** | **Chushkaly** 211nm,0.2s | **0.98** | **342** | P | | **Pb** | **02 09 14.5** | **-0.1** |
| CHKK | 538nm,0.2s | | | S | | **Sb** | **02 09 27.3** | **+0.2** |
| **CHKK** | **Chushkaly** baz=43 | **0.98** | **342** | *e*P | | **Pb** | **02 09 14.5** | **-0.1** |
| CHKK | baz=43 | | | *e*S | | **Sb** | **02 09 27.3** | **+0.2** |
| **KST** | **Kastek** 25nm,0.2s | **1.06** | **277** | *e*P | | **Pn** | **02 09 16.4** | **+0.1** |
| KST | 113nm,0.2s | | | *e*S | | **Sn** | **02 09 30.3** | **-0.5** |
| **KST** | **Kastek** 25nm,0.2s | **1.06** | **277** | P | | **Pn** | **02 09 16.2** | **-0.1** |
| KST | 108nm,0.3s | | | S | | **Sn** | **02 09 30.2** | **-0.5** |
| **KST** | **Kastek** baz=76 | **1.06** | **277** | *e*P | | **Pn** | **02 09 16.4** | **+0.1** |
| KST | baz=76 | | | *e*S | | **Sn** | **02 09 30.3** | **-0.5** |
| **KPKS** | **Kokpek** 52nm,0.1s | **1.08** | **60** | *e*P | | **Pg** | **02 09 16.8** | **-0.2** |
| KPKS | 446nm,0.3s | | | *e*S | | **Sg** | **02 09 31.2** | **0.0** |
| **KPKS** | **Kokpek** 52nm,0.1s | **1.08** | **60** | P | | **Pg** | **02 09 16.7** | **-0.3** |
| KPKS | 446nm,0.3s | | | S | | **Sg** | **02 09 31.2** | **0.0** |
| **ULHL** | **Ulahol** 65nm,0.1s,SNR=255 | **1.10** | **232** | ⇓P | | **Pn** | **02 09 16.8** | **-0.1** |
| ULHL | 304nm,0.2s | | | ⇓S | | **Sn** | **02 09 31.3** | **-0.4** |
| **ULHL** | **Ulahol** baz=31 | **1.10** | **232** | ⇑*i*P | | **Pn** | **02 09 16.6** | **-0.2** |
| ULHL | baz=31 | | | ⇑*i*S | | **Sn** | **02 09 31.2** | **-0.4** |
| **BOOM** | **Boomskoye usch** baz=48 | **1.16** | **248** | ⇓*e*P | | **Pb** | **02 09 17.7** | **-0.1** |
| BOOM | baz=48 | | | ⇓*e*S | | **Sb** | **02 09 32.8** | **+0.1** |
| **UZB** | **Uzynbulak** 56nm,0.2s | **1.21** | **79** | *e*P | | **Pg** | **02 09 18.8** | **-0.6** |
| UZB | 183nm,0.1s | | | *e*S | | **Sg** | **02 09 34.7** | **-0.5** |
| **UZB** | **Uzynbulak** 56nm,0.2s | **1.21** | **79** | P | | **Pg** | **02 09 18.7** | **-0.6** |
| UZB | 183nm,0.1s | | | S | | **Sg** | **02 09 34.7** | **-0.5** |
| **UZB** | **Uzynbulak** baz=80 | **1.21** | **79** | *e*P | | **Pg** | **02 09 18.8** | **-0.6** |
| UZB | baz=80 | | | *e*S | | **Sg** | **02 09 34.8** | **-0.5** |
| **DGS** | **Degeres** 18nm,0.2s | **1.24** | **285** | *e*P | | **Pb** | **02 09 19.2** | **+0.2** |
| DGS | 47nm,0.2s | | | *e*S | | **Sn** | **02 09 35.4** | **+0.4** |
| **DGS** | **Degeres** 25nm,0.2s | **1.24** | **285** | P | | **Pb** | **02 09 19.0** | **0.0** |
| DGS | 47nm,0.2s | | | S | | **Sn** | **02 09 35.4** | **+0.4** |
| **DGS** | **Degeres** baz=85 | **1.24** | **285** | *e*P | | **Pb** | **02 09 19.2** | **+0.2** |
| DGS | baz=85 | | | *e*S | | **Sn** | **02 09 35.4** | **+0.4** |
| **ARXS** | **Arharly** 68nm,0.1s | **1.32** | **13** | *e*P | | **Pb** | **02 09 20.6** | **+0.1** |
| ARXS | 350nm,0.2s | | | *e*S | | **Sg** | **02 09 37.8** | **-1.0** |
| **ARXS** | **Arharly** 68nm,0.1s | **1.32** | **13** | P | | **Pb** | **02 09 20.6** | **+0.1** |
| ARXS | 350nm,0.2s | | | S | | **Sg** | **02 09 37.8** | **-1.0** |
| **TKM2** | **Tokmak 2** 9.7nm,0.1s,SNR=93 | **1.33** | **270** | ⇑P | | **Pb** | **02 09 20.6** | **0.0** |
| TKM2 | 106nm,0.1s | | | ⇓S | | **Sb** | **02 09 37.9** | **+0.4** |
| **TKM2** | **Tokmak 2** 5.7nm,0.4s | **1.33** | **270** | ⇓P | | **Pn** | **02 09 20.0** | **0.0** |
| TKM2 | 37nm,0.3s | | | ⇑S | | **Sb** | **02 09 38.2** | **+0.8** |
| **TKM2** | **Tokmak 2** baz=70 | **1.33** | **270** | ⇑*i*P | | **Pb** | **02 09 20.7** | **0.0** |
| TKM2 | baz=70 | | | ⇑*i*S | | **Sb** | **02 09 37.6** | **+0.1** |
| **BLB** | **Baldybastay** 277nm,0.3s | **1.41** | **33** | P | | **Pb** | **02 09 22.1** | **+0.2** |
| BLB | 434nm,0.2s | | | S | | **Sg** | **02 09 40.5** | **-1.1** |
| **KRBS** | **Karabastau** 83nm,0.2s | **1.48** | **302** | *e*P | | **Pb** | **02 09 23.3** | **+0.2** |
| KRBS | 238nm,0.2s | | | *e*S | | **Sb** | **02 09 42.4** | **+0.8** |
| **KRBS** | **Karabastau** 83nm,0.2s | **1.48** | **302** | P | | **Pb** | **02 09 23.2** | **+0.2** |
| **KRBS** | **Karabastau** baz=2.0 | **1.48** | **302** | *e*P | | **Pb** | **02 09 23.3** | **+0.2** |
| KRBS | baz=2.0 | | | *e*S | | **Sb** | **02 09 42.4** | **+0.8** |
| **PDGK** | **Podgornoye** 10nm,0.3s | **1.58** | **75** | P | | **Pb** | **02 09 25.1** | **+0.2** |
| PDGK | 38nm,0.3s | | | S | | **Sg** | **02 09 45.7** | **-1.4** |
| **PDGK** | **Podgornoye** 28nm,0.6s | **1.58** | **75** | ⇓P | | **Pb** | **02 09 24.8** | **-0.1** |
| PDGK | 141nm,0.7s | | | ⇑S | | **Sb** | **02 09 45.1** | **+0.5** |
| **NRN** | **Naryn** baz=15 | **1.82** | **215** | ⇑*e*P | | **Pb** | **02 09 29.4** | **+0.3** |
| NRN | baz=15 | | | ⇑*i*S | | **Sb** | **02 09 52.9** | **+1.2** |
| **KBK** | **Karagaybulak** 29nm,0.2s,SNR=24 | **1.83** | **262** | ⇓P | | **Pb** | **02 09 29.8** | **+0.6** |
| KBK | 325nm,0.4s | | | ⇑S | | **Sg** | **02 09 54.1** | **-0.9** |
| **KBK** | **Karagaybulak** baz=62 | **1.83** | **262** | ⇑*e*P | | **Pb** | **02 09 29.1** | **-0.1** |
| KBK | baz=62 | | | ⇑*i*S | | **Sb** | **02 09 52.5** | **+0.7** |
| **KNOS** | **Konyrlen** 230nm,0.3s | **1.93** | **41** | S | | **Sg** | **02 09 56.4** | **-1.7** |
| **CHMS** | **Chumysh** 12nm,0.2s,SNR=16 | **1.95** | **273** | ⇑P | | **Pb** | **02 09 31.4** | **+0.3** |
| CHMS | 64nm,0.2s | | | ⇓S | | **Sb** | **02 09 56.5** | **+1.4** |
| **CHMS** | **Chumysh** 16nm,0.8s | **1.95** | **273** | ⇑P | | **Pb** | **02 09 31.5** | **+0.3** |
| CHMS | 37nm,0.3s | | | ⇑S | | **Sb** | **02 09 56.6** | **+1.4** |
| **CHMS** | **Chumysh** baz=73 | **1.95** | **273** | ⇓*i*P | | **Pb** | **02 09 30.9** | **-0.2** |
| CHMS | baz=73 | | | ⇓*i*S | | **Sb** | **02 09 55.3** | **+0.2** |
| **FRU1** | **Bishkek** baz=67 | **2.04** | **268** | ⇑*i*P | | **Pb** | **02 09 32.0** | **-0.7** |
| FRU1 | baz=67 | | | ⇑*i*S | | **Sb** | **02 09 57.8** | **-0.1** |
| **SGDS** | **Sogindy** 36nm,0.3s | **2.10** | **285** | Lg | | Lg | 02 10 00.2 | |
| **USP** | **Ospenovka** 15nm,0.2s,SNR=16 | **2.15** | **280** | ⇑P | | **Pb** | **02 09 34.5** | **-0.1** |
| USP | 48nm,0.2s | | | ⇑S | | **Sg** | **02 10 03.4** | **-2.0** |
| **USP** | **Ospenovka** baz=80 | **2.15** | **280** | ⇑*i*P | | **Pb** | **02 09 33.8** | **-0.8** |
| USP | baz=80 | | | ⇑*i*S | | **Sb** | **02 10 00.5** | **-0.6** |
| **AAK** | **Ala-Archa** 27nm,0.3s,SNR=11 | **2.16** | **263** | ⇓P | | **Pb** | **02 09 34.6** | **-0.2** |
| AAK | 54nm,0.3s | | | ⇓S | | **Sb** | **02 10 03.4** | **+2.0** |
| **AAK** | **Ala-Archa** 18nm,0.4s | **2.16** | **263** | ⇑P | | **Pb** | **02 09 35.2** | **+0.3** |
| AAK | 78nm,0.7s | | | ⇑S | | **Sg** | **02 10 03.7** | **-1.9** |
| **AAK** | **Ala-Archa** baz=63 | **2.16** | **263** | ⇑*i*P | | **Pb** | **02 09 33.9** | **-0.9** |
| AAK | baz=63 | | | ⇑*i*S | | **Sb** | **02 10 00.6** | **-0.8** |
| **TDK** | **Taldyqorghan** 50nm,0.3s | **2.20** | **19** | *e*P | | **Pg** | **02 09 37.2** | **-1.0** |
| TDK | 2.3nm,0.5s | | | *e*S | | **Sg** | **02 10 06.5** | **-0.2** |
| **TDK** | **Taldyqorghan** 50nm,0.3s | **2.20** | **19** | Pg | | **Pg** | **02 09 38.6** | **+0.3** |
| **KTMS** | **Ketmen** 9.0nm,0.3s | **2.22** | **75** | *e*P | | **Pb** | **02 09 36.0** | **+0.2** |
| KTMS | 80nm,0.4s | | | *e*S | | **Sb** | **02 10 04.1** | **+1.1** |
| **KTMS** | **Ketmen** 80nm,0.4s | **2.22** | **75** | Lg | | Lg | 02 10 04.8 | |
| **DJR** | **Jarkent** 22nm,0.2s | **2.23** | **50** | *e*P | | **Pb** | **02 09 36.7** | **+0.7** |
| DJR | 243nm,0.4s | | | *e*S | | **Sg** | **02 10 05.6** | **-2.2** |
| **DJR** | **Jarkent** 243nm,0.4s | **2.23** | **50** | Lg | | Lg | 02 10 05.6 | |
| **UCH** | **Uchtor** 13nm,0.3s,SNR=24 | **2.25** | **253** | ⇑P | | **Pb** | **02 09 36.7** | **+0.3** |
| UCH | 36nm,0.3s | | | ⇑S | | **Sb** | **02 10 06.2** | **+2.1** |
| **UCH** | **Uchtor** baz=52 | **2.25** | **253** | ⇑*i*P | | **Pb** | **02 09 35.3** | **-1.2** |
| UCH | baz=52 | | | ⇑*i*S | | **Sb** | **02 10 02.9** | **-1.2** |
| **ARLS** | **Aral** baz=45 | **2.52** | **246** | ⇓*i*P | | **Pb** | **02 09 38.6** | **-2.3** |
| ARLS | baz=45 | | | ⇓*i*S | | **Sb** | **02 10 09.1** | **-2.6** |
| **EKS2** | **Erkin-Say** 11nm,0.3s,SNR=16 | **2.68** | **266** | ⇑P | | **Pb** | **02 09 42.2** | **-1.5** |
| **EKS2** | **Erkin-Say** baz=65 | **2.68** | **266** | ⇑*e*P | | **Pb** | **02 09 41.2** | **-2.5** |
| EKS2 | baz=65 | | | ⇑*i*S | | **Sn** | **02 10 12.9** | **+2.2** |
| **AML** | **Almayashu** baz=55 | **2.85** | **255** | ⇓*e*P | | **Pn** | **02 09 43.7** | **+2.5** |
| AML | baz=55 | | | ⇓*i*S | | **Sn** | **02 10 17.4** | **+2.0** |
| **MRKS** | **Merke** 7.0nm,0.3s | **3.08** | **268** | *e*P | | **Pb** | **02 09 52.5** | **+2.0** |
| MRKS | 24nm,0.3s | | | *e*S | | **Sg** | **02 10 32.5** | **-2.5** |
| **MRKS** | **Merke** 24nm,0.3s | **3.08** | **268** | Lg | | Lg | 02 10 32.4 | |
| **BTLS** | **Baital** 3.7nm,0.2s | **3.22** | **312** | *e*P | | **Pb** | **02 09 54.9** | **+2.2** |
| BTLS | 8.6nm,0.4s | | | *e*S | | **Sg** | **02 10 36.4** | **-3.0** |
| **MNAS** | **Manas** baz=65 | **3.64** | **265** | ⇓*i*P | | **Pn** | **02 09 54.4** | **+2.7** |
| MNAS | baz=65 | | | ⇓*i*S | | **Sn** | **02 10 36.0** | **+1.7** |
| **SFK** | **Sufi-Kurgan** baz=26 | **4.13** | **227** | ⇑*i*P | | **Pn** | **02 10 01.3** | **+2.7** |
| SFK | baz=26 | | | ⇑*i*S | | **Sn** | **02 10 47.9** | **+1.3** |
| **TRKS** | **Terek-Say** baz=54 | **4.86** | **255** | ⇑*i*P | | **Pn** | **02 10 11.0** | **+2.5** |
| TRKS | baz=54 | | | ⇑*i*S | | **Sn** | **02 11 04.9** | **+0.5** |
| **KK31** | **Karatay Array** 0.6nm,0.3s,baz=91,slow=16 | **5.06** | **274** | ⇑Pg | | **Pg** | **02 10 29.0** | **-3.9** |
| KK31 | 5.6nm,0.5s,baz=100,slow=27 | | | ⇑Lg | | Lg | 02 11 35.8 | |
| **KKAR** | **Karatay Array** baz=74 | **5.06** | **274** | ⇓*i*P | | **Pn** | **02 10 13.9** | **+2.8** |
| KKAR | baz=74 | | | ⇓*i*S | | **Sn** | **02 11 09.9** | **+0.8** |
| **MAKZ** | **Makanchi** 0.9nm,0.3s | **5.06** | **38** | ⇑Pn | | **Pn** | **02 10 14.2** | **+3.0** |
| MAKZ | 1.8nm,0.6s | | | ⇑Pg | | **Pg** | **02 10 28.5** | **-4.5** |
| MAKZ | 2.2nm,0.5s | | | ⇑Sn | | **Sn** | **02 11 11.6** | **+2.4** |
| MAKZ | 5.6nm,0.5s | | | ⇓Lg | | Lg | 02 11 36.1 | |
| **MK31** | **Makanchi Array** 0.3nm,0.2s,baz=217,slow=15,SNR=16 | **5.20** | **40** | Pn | | **Pn** | **02 10 15.4** | **+2.4** |
| MK31 | 0.4nm,0.3s,baz=225,slow=17,SNR=5.3 | | | ⇑Pg | | **Pg** | **02 10 31.1** | **-4.4** |
| MK31 | 5.8nm,0.4s,baz=219,slow=25 | | | ⇓Sn | | **Sn** | **02 11 16.4** | **+3.8** |
| MK31 | 5.7nm,0.5s,baz=216,slow=25 | | | ⇑Lg | | Lg | 02 11 40.3 | |
| **OTUK** | **Ortayu** 27nm,1.1s | **6.40** | **328** | ⇓Lg | | Lg | 02 12 19.2 | |
| **KURBB** | **Kurchatov Arra** 17nm,0.6s | **7.74** | **5** | ⇑Lg | | Lg | 02 13 02.1 | |
| **KURK** | **Kurchatov** 16nm,1.0s | **7.84** | **6** | ⇑Lg | | Lg | 02 13 04.6 | |
| **BVA0** | **Borovoye Array** 0.4nm,0.9s,baz=151,slow=28,SNR=5.8 | **11.14** | **338** | Lg | | Lg | 02 14 51.1 | |
| **BRVK** | **Borovoye** | **11.20** | **337** | Lg | | Lg | 02 14 52.3 | |

*NOU* ***04*** *02:54:44.2, 18˚.18S×176˚.53W, h653km, mb4.5/12, Fiji Islands Region*
*NEIC* ***04*** *02:54:51.9±2.0, 18˚.8S±0˚.1×177˚.6W±0˚.1, h606km±8km, mb4.2/32, Error ellipse: s-maj=23.1km s-min=16.8km az=136.0*
*IDC* ***04*** *02:54:53.9±1.5, 18˚.67S×177˚.83W, h637km±18km, mb3.3/10, mbtmp4.3/12, Error ellipse: s-maj=20.3km s-min=12.0km az=154.0*
**ISC 04 02:54:51.3**±0.5**, 18˚.8S**±0˚.1×**177˚.71W**±0˚.09**, h600**km**, n71,**
**σ1§26/74, mb4.3/34, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** 70nm,0.8s | **4.17** | **284** | P | | **P** | **02 56 21.8** | **+3.7** |
| **MSVF** | **Nonsavu** 28nm,0.5s,baz=142,slow=11,SNR=24 | **4.17** | **284** | P | | **P** | **02 56 21.2** | **+3.2** |
| **MSVF** | **Nonsavu** | **4.17** | **284** | P | | **P** | **02 56 21.5** | **+3.4** |
| **AFI** | **Afiamalu** | **7.49** | **50** | P | | **P** | **02 56 45.9** | **-0.1** |
| **PINNC** | **Pines Island,** | **14.40** | **252** | P | | **P** | **02 57 54.2** | **+0.2** |
| **DZM** | **Mont Dzumac** | **15.21** | **255** | P | | **P** | **02 58 02.1** | **+0.6** |
| DZM | comp=Z,17nm,1.3s | | | IAmb | | IAmb | 02 58 04.4 | |
| **DZM** | **Mont Dzumac** comp=Z,2.1nm,0.6s,baz=90,slow=20,SNR=2.3 | **15.21** | **255** | P | | **P** | **02 58 02.1** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **17.05** | **261** | P | | **P** | **02 58 19.4** | **+1.2** |
| **URZ** | **Urewera** comp=Z,25nm,1.6s | **19.91** | **192** | P | | **P** | **02 58 42.8** | **-1.2** |
| **URZ** | **Urewera** comp=Z,6.1nm,0.5s,baz=103,slow=0.9,SNR=11 | **19.91** | **192** | P | | **P** | **02 58 41.9** | **-2.1** |
| **RTZ** | **Ruatahuna** | **20.28** | **192** | P | | **P** | **02 58 46.7** | **-0.7** |
| **BKZ** | **Black Stump Fm** | **20.91** | **193** | P | | **P** | **02 58 51.4** | **-1.6** |
| **BFZ** | **Birch Farm** comp=Z,33nm,2.9s | **22.42** | **192** | P | | **P** | **02 59 06.4** | **0.0** |
| **QRZ** | **Quartz Range** comp=Z,59nm,2.5s | **23.49** | **199** | P | | **P** | **02 59 16.4** | **+0.4** |
| **QRZ** | **Quartz Range** | **23.49** | **199** | P | | **P** | **02 59 15.9** | **-0.1** |
| **KHZ** | **Kahutara** comp=Z,18nm,2.1s | **24.68** | **196** | P | | **P** | **02 59 25.6** | **-0.9** |
| **JCZ** | **Jackson Bay** comp=Z,30nm,0.6s | **27.63** | **201** | P | | **P** | **02 59 51.6** | **-0.8** |
| **ARMA** | **Armidale** comp=Z,9.5nm,1.9s | **30.08** | **242** | P | | **P** | **03 00 15.0** | **+1.1** |
| **ARMA** | **Armidale** | **30.08** | **242** | P | | **P** | **03 00 15.0** | **+1.1** |
| ARMA | comp=Z,5.3nm,0.6s | | | IAmb | | IAmb | 03 00 15.7 | |
| **CNB** | **Canberra Magne** comp=Z,31nm,0.7s | **33.42** | **234** | P | | **P** | **03 00 43.2** | **+1.1** |
| **CAN** | **Canberra** comp=Z,44nm,1.1s | **33.70** | **234** | P | | **P** | **03 00 45.7** | **+1.3** |
| **CAN** | **Canberra** | **33.70** | **234** | P | | **P** | **03 00 45.3** | **+0.9** |
| **CTAO** | **Charters Tower** | **33.97** | **262** | P | | **P** | **03 00 46.9** | **+0.1** |
| CTAO | comp=Z,9.2nm,0.7s | | | IAmb | | IAmb | 03 00 48.0 | |
| **CMSA** | **Cobar Meteorol** comp=Z,30nm,0.7s | **35.30** | **242** | P | | **P** | **03 00 58.4** | **+0.7** |
| **QLP** | **Quilpie** comp=Z,66nm,0.9s | **35.85** | **250** | P | | **P** | **03 01 02.9** | **+0.6** |
| **TOO** | **Toolangi** | **37.13** | **232** | P | | **P** | **03 01 13.2** | **+0.6** |
| TOO | comp=Z,14nm,0.9s | | | IAmb | | IAmb | 03 01 14.1 | |
| **COEN** | **Coen** | **37.78** | **271** | P | | **P** | **03 01 18.6** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.79** | **242** | P | | **P** | **03 01 27.0** | **+0.9** |
| **STKA** | **Stephens Creek** comp=Z,2.9nm,0.4s,baz=77,slow=6.2,SNR=7.3 | **38.79** | **242** | P | | **P** | **03 01 26.5** | **+0.3** |

comp=Z,2.9nm,0.4s
**BBOO Buckleboo 43.56 242 P P 03 02 03.7 0.0**
**WB0 Warramunga Arr 45.10 261 P P 03 02 15.3 -0.4**
WB0 IAmb IAmb 03 02 16.0
comp=Z,11nm,0.6s
**WRA Warramunga Arr 45.13 260 P P 03 02 15.4 -0.5**
**WRA Warramunga Arr 45.13 260 P P 03 02 15.7 -0.3**
comp=Z,6.8nm,0.6s,baz=97,slow=7.5,SNR=134
WRA PcP **PcP 03 03 42.3 -1.1**
comp=Z,0.4nm,0.6s,baz=99,slow=2.9,SNR=1.8
WRA S **S 03 08 10.5 -2.5**
comp=Z,1.0nm,1.1s,baz=96,slow=16,SNR=3.9
comp=Z,6.8nm,0.6s
**AS31 Alice Springs 45.20 255 P P 03 02 16.2 -0.2**
**ASAR Alice Springs 45.20 255 P P 03 02 15.6 -0.8**
**ASAR Alice Springs 45.20 255 P P 03 02 16.4 0.0**
comp=Z,10nm,0.7s,baz=88,slow=8.0,SNR=135
ASAR PcP **PcP 03 03 42.6 -1.0**
comp=Z,0.7nm,0.6s,baz=111,slow=3.6,SNR=3.6
ASAR S **S 03 08 11.3 -2.5**
comp=Z,0.7nm,0.8s,baz=89,slow=16,SNR=4.4
comp=Z,10nm,0.7s
**FORT Forrest 50.23 245 P P 03 02 53.1 -0.6**
**KNRA Kununurra 51.06 265 P P 03 02 59.3 -0.7**
KNRA IAmb IAmb 03 03 13.0
comp=Z,18nm,1.4s
**FITZ Fitzroy Crossi 53.54 261 P P 03 03 17.3 -0.3**
**PSA00 Pilbara Seismi 58.33 256 P P 03 03 49.4 -1.2**
PSA00 IAmb IAmb 03 03 57.5
comp=Z,24nm,1.4s
**MBWA Marble Bar 58.51 256 P P 03 03 50.8 -0.9**
MBWA IAmb IAmb 03 04 00.7
comp=Z,39nm,1.5s
**SBA Scott Base 59.57 184 P P 03 03 59.8 +2.0**
**VNDA Vanda 59.62 185 P P 03 03 58.9 +0.8**
**MJAR Matsushiro Arr 69.02 323 P P 03 04 56.8 -1.2**
comp=Z,0.9nm,0.5s,baz=159,slow=6.4,SNR=5.9
comp=Z,0.9nm,0.5s
**QSPA South Pole Qui 71.26 180 P P 03 05 11.7 +0.7**
QSPA IAmb IAmb 03 05 12.4
comp=Z,4.8nm,0.8s
**QSPA South Pole Qui 71.26 180 P P 03 05 11.6 +0.7**
comp=Z,4.4nm,0.7s,baz=9.1,slow=1.3,SNR=38
comp=Z,4.4nm,0.7s
**NVAR Mina Array Bea 79.61 43 P P 03 05 57.8 +0.1**
comp=Z,0.8nm,0.5s,baz=222,slow=8.1,SNR=6.0
comp=Z,0.8nm,0.5s
**PINE Pine Mountain 81.08 38 P P 03 06 05.4 +0.2**
PINE IAmb IAmb 03 06 06.6
comp=Z,4.6nm,0.8s
**CCUT Cedar City 82.44 46 P P 03 06 12.4 +0.2**
**M19K Big River Lodg 82.55 11 P P 03 06 10.8 -1.2**
M19K IAmb IAmb 03 06 30.4
comp=Z,7.2nm,1.4s
**U15A North Rim 82.62 48 P P 03 06 13.6 +0.3**
U15A IAmb IAmb 03 06 14.7
comp=Z,3.1nm,0.8s
**L19K White Mountain 82.73 11 P P 03 06 12.7 -0.1**
L19K IAmb IAmb 03 06 29.0
comp=Z,8.9nm,1.3s
**SUA Susitna One 82.85 13 P P 03 06 12.5 -1.1**
SUA IAmb IAmb 03 06 12.9
comp=Z,5.4nm,0.7s
**TXAR Lajitas Array 85.91 57 P P 03 06 29.8 +0.5**
**TXAR Lajitas Array 85.91 57 P P 03 06 29.6 +0.3**
comp=Z,1.3nm,0.7s,baz=218,slow=6.3,SNR=14
comp=Z,1.3nm,0.7s
**MLY Manley 86.08 11 P P 03 06 27.4 -1.8**
**WRH Wood River Hil 86.09 12 P P 03 06 27.3 -1.9**
WRH IAmb IAmb 03 06 30.7
comp=Z,5.2nm,1.4s
**CCB Clear Creek Bu 86.31 12 P P 03 06 28.3 -1.9**
CCB IAmb IAmb 03 06 56.8
comp=Z,4.7nm,1.5s
**BCAR Beaver Creek A 86.32 16 P P 03 06 29.9 -0.5**
**IMAR Indian Mountai 86.45 10 P P 03 06 29.4 -1.4**
**ILAR Eielson Array 86.61 13 P P 03 06 29.6 -1.9**
comp=Z,0.6nm,0.4s,baz=229,slow=4.9,SNR=29
comp=Z,0.6nm,0.4s
**PDAR Pinedale Array 87.54 43 P P 03 06 35.8 -1.0**
comp=Z,0.7nm,0.7s,baz=184,slow=4.4,SNR=6.7
comp=Z,0.7nm,0.7s
**TROLL Troll, Antarti 89.42 180 ⇑P P 03 06 43.9 -1.1**
comp=Z,60nm,0.5s
**SNAA Sanae 89.69 178 ⇑P P 03 06 44.7 -1.4**
comp=Z,15nm,0.6s
**SNAA Sanae 89.69 178 P P 03 06 45.0 -1.1**
comp=Z,0.6nm,0.6s,baz=205,slow=15,SNR=7.2
comp=Z,0.6nm,0.6s
**VNA3 Neumayer Olymp 89.81 176 ⇑P P 03 06 45.7 -0.9**
comp=Z,3.2nm,0.6s
**VNA2 Neumayer--Watz 90.25 177 ⇑P P 03 06 48.4 -0.2**
comp=Z,2.9nm,0.7s,baz=191,slow=5.7
**EKA Eskdalemuir Ar 143.30 5 PKP PKPab 03 13 14.9 -1.4**
comp=Z,1.0nm,0.4s,baz=321,slow=3.1,SNR=14
**KWP Kalwaria Pacla 145.15 337 PKPbc PKPbc 03 13 23.3 +0.9**
**BUR08 Bucovina Ar. S 145.70 332 PKPbc PKPbc 03 13 24.4 +0.2**
**CLL Collm 146.47 348 PKPbc PKPdf 03 13 25.1 +1.6**

*ISN* ***04*** *03:44:11.0±0.9, 32.91N×46.03E, h6km±999km, ML3.3*
*TEH* ***04*** *03:44:12.4, 32.93N×46.15E, h11km±47km, ML3.4*
**ISC 04 03:44:12.9±1.0, 32.94N±0.04×46.07E±0.05, h10km, n18, σ1§41/22, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.21** | **325** | *e*Pg | | **Pg** | **03 44 16.0** | **-1.3** |
| IBDR | | | | *e*Sg | | **Sg** | **03 44 18.5** | **-1.7** |
| IBDR | | | | AML | | AML | 03 44 26.7 | |
| | comp=N,7μm,0.8s | | | | | | | |
| IBDR | | | | AML | | AML | 03 44 30.0 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **0.69** | **9** | Pg | | **Pg** | **03 44 26.0** | **-0.4** |
| **GLG1** | **Gilan-e-Gharb** | **1.18** | **353** | Pg | | **Pg** | **03 44 36.7** | **+1.1** |
| GLG1 | | | | Sg | | **Sn** | **03 44 53.5** | **+1.7** |
| **RAFI** | **Al-Rafai** | **1.21** | **178** | *e*Pn | | **Pg** | **03 44 35.5** | **-0.7** |
| RAFI | | | | *e*Sn | | **Sn** | **03 44 54.5** | **+2.1** |
| **IGHG** | **Ghaleghazi** | **1.45** | **17** | Pg | | **Pg** | **03 44 40.2** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **1.56** | **31** | Pg | | **Pg** | **03 44 42.9** | **0.0** |
| **IKFM** | **Kafar-mosalman** | **1.60** | **68** | Pg | | **Pg** | **03 44 42.4** | **-1.2** |
| **KGS1** | **Ghasr-e-Shirin** | **1.61** | **346** | Pg | | **Pg** | **03 44 43.9** | **-0.1** |
| **IDHR** | **Dehrash** | **1.77** | **8** | Pg | | **Pg** | **03 44 46.2** | **-0.8** |
| **ILIN** | **Lien** | **2.11** | **20** | Pn | | **Pb** | **03 44 50.9** | **-0.5** |
| **IBZA** | **Bozab** | **2.13** | **44** | Pn | | **Pb** | **03 44 50.6** | **-1.2** |
| **HSAM** | **Samen** | **2.46** | **58** | Pn | | **Pb** | **03 44 55.0** | **-2.5** |
| **IKRK** | **Kirkuk** | **2.84** | **330** | *e*Pn | | **Pn** | **03 44 59.0** | **+0.6** |
| IKRK | | | | *e*Sn | | **Sn** | **03 45 34.0** | **+1.3** |
| IKRK | | | | AML | | AML | 03 46 03.4 | |
| | comp=N,143nm,0.5s | | | | | | | |
| IKRK | | | | AML | | AML | 03 46 06.7 | |
| | comp=E,177nm,0.5s | | | | | | | |
| **IPIR** | **Pirpir** | **4.07** | **92** | Pn | | **Pn** | **03 45 16.5** | **+1.0** |
| **QAMS** | **Qamsar** | **4.53** | **78** | Pn | | **Pn** | **03 45 23.5** | **+1.7** |
| **IKLH** | **Kolahrood** | **4.64** | **84** | Pn | | **Pn** | **03 45 25.2** | **+1.9** |
| **KRSH** | **Karshahi** | **5.17** | **77** | Pn | | **Pn** | **03 45 32.5** | **+2.0** |
| **IRAM** | **Ramesheh** | **5.46** | **100** | Pn | | **Pn** | **03 45 35.2** | **+0.7** |

*NNC* ***04*** *04:04:03.7±8.3, 34.14N×79.91E, h0km, mb5.3, Error ellipse: s-maj=87.3km s-min=76.9km az=167.0*
*IDC* ***04*** *04:04:07.8±0.5, 35.05N×81.14E, h0km, mb4.4/28, mbtmp4.5/32, ML3.9/4, MS4.7/67, Error ellipse: s-maj=12.0km s-min=10.1km az=45.0*
*MOS* ***04*** *04:04:09.1±1.2, 35.03N×81.05E, h15km, mb5.0/70, MS4.9/22, Error ellipse: s-maj=5.7km s-min=2.8km az=121.2*
*NEIC* ***04*** *04:04:10.2±1.3, 35.05N±0.07×81.04E±0.08, h10km±1km, mb5.1/149, Error ellipse: s-maj=12.9km s-min=10.1km az=217.0*
*BJI* ***04*** *04:04:10.2±0.0, 35.19N×81.11E, h10km, mb4.8/69, mB5.2/56, ML5.3/6, Ms5.3/86, MS7 5.1/82*
*GCMT* ***04*** *04:04:14.2±0.1, 35.10N±0.01×81.04E±0.01, h26km, MW5.4/138, Moment Tensor Solution. s103,c155; s138,c254; Duration: 1§2 Moment tensor: Scale 10^17 Nm; Mrr=0.11±.02; Mθθ=0.91±.02; Mφφ 1.03±.02; Mrθ 0.11±.05; Mθφ 1.06±.02; Mrφ 0.22±.04; Best double couple: M0 1.45600×10^17 NP1:φ=69.00000°, δ85.00000°, λ 7.00000°. NP2:φ=338.00000°, δ83.00000°, λ 175.00000°. Principal axes: T 1.5330, Plg8.0000°, Azm294.0000°; N -0.1500, Plg82.0000°, Azm108.0000°; P -1.3800, Plg1.0000°, Azm204.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*BGR* ***04*** *04:04:15.6, 34.87N×80.72E, h33km, mb4.7, Ms5.1*
**ISC 04 04:04:09.8±0.4, 35.04N±0.03×81.03E±0.02, h7km±2km, h7km:pP-P, n694, σ2§33/769, mb4.9/230, MS4.9/130, 29C-36D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HNLY** | **HANLEY** | **2.83** | **218** | *e*P | | **Pb** | **04 05 00.9** | **-0.1** |
| HNLY | | | | *e*S | | **Sb** | **04 05 36.8** | **+0.6** |
| **KLP** | **Kalpa** | **4.20** | **214** | *e*P | | **Pn** | **04 05 17.9** | **+3.3** |
| KLP | | | | IAmb | | IAmb | 04 05 32.6 | |
| | comp=Z,1μm,1.1s | | | | | | | |
| KLP | | | | *ex* | | **Sg** | **04 06 22.2** | **-2.6** |
| **DHRM** | **DHARAMSHALA** | **4.83** | **236** | *e*P | | **Pn** | **04 05 26.6** | **+3.4** |
| DHRM | | | | IAmb | | IAmb | 04 05 52.8 | |
| | comp=Z,406nm,0.7s | | | | | | | |
| **SMLA** | **Simla** | **5.08** | **221** | *e*P | | **Pn** | **04 05 29.5** | **+3.2** |
| SMLA | | | | IAmb | | IAmb | 04 05 36.0 | |
| | comp=Z,278nm,1.1s | | | | | | | |
| **THN** | **Thein Dam** | **5.14** | **241** | *e*P | | **Pn** | **04 05 29.6** | **+2.4** |
| THN | | | | *e*S | | **Sn** | **04 06 26.9** | **+0.2** |
| **BHK** | **Bhakra** | **5.29** | **228** | *e*P | | **Pn** | **04 05 33.1** | **+3.8** |
| BHK | | | | *e*S | | **Sn** | **04 06 31.9** | **+1.3** |
| **DDI** | **Dehra Dun** | **5.33** | **209** | *e*P | | Pn | 04 05 35.5 | +5.6 |
| DDI | | | | IAmb | | IAmb | 04 05 44.7 | |
| | comp=Z,225nm,0.7s | | | | | | | |
| **PTH** | **Pithoragarh** | **5.52** | **187** | *e*P | | **Pn** | **04 05 34.7** | **+2.1** |
| **JMU** | **Jammu** | **5.60** | **247** | *e*P | | **Pn** | **04 05 37.7** | **+4.2** |
| JMU | | | | IAmb | | IAmb | 04 05 45.1 | |
| | comp=Z,368nm,0.8s | | | | | | | |
| **LGTI** | **Lohaghat** | **5.62** | **187** | *e*P | | **Pn** | **04 05 37.5** | **+3.8** |
| **KSH** | **Kashi** | **6.02** | **319** | Pn | | **Pn** | **04 05 41.6** | **+2.2** |
| KSH | | | | Sn | | **Sn** | **04 06 50.1** | **+1.5** |
| KSH | | | | LR | | LR | | |
| | comp=Z,11μm,7.9s | | | | | | | |
| KSH | | | | LR | | LR | | |
| | comp=Z,10μm,7.6s | | | | | | | |
| KSH | | | | LR | | LR | | |
| | comp=Z,13μm,7.9s | | | | | | | |
| **NIL** | **Nilore** | **6.58** | **260** | Pn | | **Pn** | **04 05 46.6** | **-0.5** |
| **NIL** | **Nilore** | **6.58** | **260** | P | | **Pn** | **04 05 46.6** | **-0.5** |
| **NDI** | **New Delhi** | **7.12** | **208** | *e*P | | **Pn** | **04 05 55.9** | **+1.5** |
| **TARG** | **Taragay, Kyrgy** | **7.14** | **340** | Pn | | **Pn** | **04 05 58.1** | **+3.1** |
| **TARG** | **Taragay, Kyrgy** | **7.14** | **340** | P | | **Pn** | **04 05 58.1** | **+3.1** |
| **NPLP** | **NPLP New Delhi** | **7.18** | **208** | *e*P | | **Pn** | **04 05 57.9** | **+2.7** |
| **NRN** | **Naryn** | **7.51** | **330** | | | **Pn** | **04 06 01.6** | **+1.6** |
| **NRN** | **Naryn** | **7.51** | **330** | P | | **Pn** | **04 06 01.6** | **+1.6** |
| **PRZ** | **Przheval'sk** | **7.71** | **345** | Pn | | **Pn** | **04 06 03.2** | **+0.6** |
| **PRZ** | **Przheval'sk** | **7.71** | **345** | P | | **Pn** | **04 06 03.2** | **+0.6** |
| **FRKB** | **FARRUKHABAD** | **7.72** | **190** | *e*P | | **Pn** | **04 06 05.8** | **+3.2** |
| **KUDL** | **Kundal** | **7.89** | **211** | *e*P | | **Pn** | **04 06 06.6** | **+1.7** |
| **ULHL** | **Ulahol** | **8.11** | **334** | P | | **Pn** | **04 06 12.5** | **+4.4** |
| | SNR=14 | | | | | | | |
| **UZB** | **Uzunbulak** | **8.24** | **350** | *e*Pn | | **Pn** | **04 06 11.4** | **+1.5** |
| | baz=349 | | | | | | | |
| UZB | | | | *e*Pg | | Pb | 04 06 38.0 | +5.0 |
| | baz=349 | | | | | | | |
| UZB | | | | *e*Lg | | Lg | 04 08 27.6 | |
| | baz=349 | | | | | | | |
| **UZB** | **Uzunbulak** | **8.24** | **350** | *e*P | | **Pn** | **04 06 11.4** | **+1.5** |
| **SATY** | **Saty** | **8.26** | **346** | *e*Pn | | **Pn** | **04 06 11.7** | **+1.6** |
| | baz=346 | | | | | | | |
| SATY | | | | *e*Pg | | Pb | 04 06 39.1 | +5.8 |
| | baz=346 | | | | | | | |
| SATY | | | | *e*Sn | | **Sn** | **04 07 42.0** | **-1.8** |
| | baz=346 | | | | | | | |
| **SATY** | **Saty** | **8.26** | **346** | *e*P | | **Pn** | **04 06 11.7** | **+1.6** |
| SATY | | | | *e* | | | 04 07 42.0 | |
| **PDGK** | **Podgornoye** | **8.36** | **352** | ⇓Pn | | Pn | 04 06 16.6 | +5.1 |
| | comp=Z,68nm,0.8s | | | | | | | |
| PDGK | | | | ⇓Pg | | **Pg** | **04 06 49.5** | **-0.3** |
| | comp=Z,180nm,0.9s | | | | | | | |
| **PDGK** | **Podgornoye** | **8.36** | **352** | P | | **Pn** | **04 06 13.8** | **+2.3** |
| **ZHN** | **Zhinishke** | **8.36** | **347** | *e*Pn | | **Pn** | **04 06 12.9** | **+1.3** |
| | baz=346 | | | | | | | |
| **ZHN** | **Zhinishke** | **8.36** | **347** | *e*P | | **Pn** | **04 06 12.8** | **+1.3** |
| **BOOM** | **Boomskoye usch** | **8.43** | **333** | Pn | | **Pn** | **04 06 15.4** | **+2.9** |
| **BOOM** | **Boomskoye usch** | **8.43** | **333** | P | | **Pn** | **04 06 15.4** | **+2.9** |
| **OHH** | **Osh** | **8.52** | **312** | P | | **Pn** | **04 06 16.0** | **+2.4** |
| OHH | | | | pmax | | pmax | | |
| | comp=Z,118nm,0.8s | | | | | | | |
| **DRK** | **Karamyk** | **8.59** | **304** | Pn | | **Pn** | **04 06 16.6** | **+1.8** |
| **DRK** | **Karamyk** | **8.59** | **304** | P | | **Pn** | **04 06 16.6** | **+1.8** |
| **TNSS** | **Tian-Shan** | **8.59** | **340** | *e*Pn | | **Pn** | **04 06 16.6** | **+1.6** |
| | baz=339 | | | | | | | |
| TNSS | | | | *e*Pg | | Pg | 04 06 45.2 | -9.1 |
| | baz=339 | | | | | | | |
| TNSS | | | | *e*Sn | | **Sn** | **04 07 49.7** | **-2.6** |
| | baz=339 | | | | | | | |
| TNSS | | | | *e*Lg | | Lg | 04 08 38.9 | |
| | baz=339 | | | | | | | |
| **TNSS** | **Tian-Shan** | **8.59** | **340** | *e*P | | **Pn** | **04 06 16.5** | **+1.6** |
| TNSS | | | | *e* | | | 04 07 49.7 | |
| **ARLS** | **Aral** | **8.60** | **324** | P | | **Pn** | **04 06 19.4** | **+4.5** |
| ARLS | | | | pmax | | pmax | | |
| | comp=Z,70nm,0.8s | | | | | | | |
| **KPKS** | **Kokpek** | **8.61** | **348** | *e*Pn | | **Pn** | **04 06 16.5** | **+1.6** |
| | baz=348 | | | | | | | |
| KPKS | | | | *e*Pg | | Pg | 04 06 44.5 | -10 |
| | baz=348 | | | | | | | |
| **KPKS** | **Kokpek** | **8.61** | **348** | *e*P | | **Pn** | **04 06 16.4** | **+1.6** |
| **MDOK** | **Medeo** | **8.68** | **340** | *e*Pn | | **Pn** | **04 06 17.3** | **+1.4** |
| | baz=340 | | | | | | | |
| MDOK | | | | *e*Sn | | **Sn** | **04 07 51.9** | **-2.3** |
| | baz=340 | | | | | | | |
| MDOK | | | | *e*Lg | | Lg | 04 08 42.3 | |
| | baz=340 | | | | | | | |
| **MDOK** | **Medeo** | **8.68** | **340** | ⇑Pn | | **Pn** | **04 06 17.6** | **+1.7** |
| | comp=Z,20nm,0.6s | | | | | | | |
| MDOK | | | | ⇑Pg | | Pg | 04 06 50.7 | -5.2 |
| | comp=Z,184nm,1.1s | | | | | | | |
| **MDOK** | **Medeo** | **8.68** | **340** | P | | **Pn** | **04 06 17.6** | **+1.7** |
| **KNDC** | **Almaty** | **8.75** | **340** | ⇑Pg | | **Pg** | **04 06 53.6** | **-3.7** |
| | comp=Z,356nm,0.8s | | | | | | | |
| **UCH** | **Uchtor** | **8.80** | **327** | P | | **Pn** | **04 06 19.4** | **+1.6** |
| | SNR=76 | | | | | | | |
| **ARSB** | **Arslanbob** | **8.91** | **317** | Pn | | **Pn** | **04 06 21.1** | **+2.0** |
| **ARSB** | **Arslanbob** | **8.91** | **317** | P | | **Pn** | **04 06 21.1** | **+2.0** |
| **TKM2** | **Tokmak 2** | **8.93** | **333** | P | | **Pn** | **04 06 23.6** | **+4.2** |
| | SNR=39 | | | | | | | |
| **TKM2** | **Tokmak 2** | **8.93** | **333** | ⇑Pn | | **Pn** | **04 06 19.6** | **+0.2** |
| | comp=Z,31nm,1.1s | | | | | | | |
| TKM2 | | | | Pg | | Pg | 04 06 52.0 | -8.7 |
| **TKM2** | **Tokmak 2** | **8.93** | **333** | P | | **Pn** | **04 06 22.9** | **+3.5** |
| **KBK** | **Karagaybulak** | **8.96** | **330** | P | | Pn | 04 06 27.6 | +7.9 |
| | SNR=16 | | | | | | | |
| **AML** | **Almayashu** | **9.11** | **323** | P | | **Pn** | **04 06 26.6** | **+4.5** |
| | SNR=56 | | | | | | | |
| **AAK** | **Ala-Archa** | **9.14** | **328** | P | | Pn | 04 06 29.6 | +7.5 |
| | SNR=12 | | | | | | | |
| **AAK** | **Ala-Archa** | **9.14** | **328** | Pn | | **Pn** | **04 06 25.1** | **+3.0** |
| **AAK** | **Ala-Archa** | **9.14** | **328** | *i* P | | **Pn** | **04 06 26.1** | **+3.9** |
| | SNR=9.8 | | | | | | | |
| **AAK** | **Ala-Archa** | **9.14** | **328** | Pn | | **Pn** | **04 06 24.7** | **+2.5** |
| | comp=Z,1.3nm,0.3s,baz=142,slow=15,SNR=21 | | | | | | | |
| AAK | | | | Lg | | Lg | 04 08 56.2 | |
| | comp=Z,2.2nm,0.3s,baz=25,slow=20,SNR=7.5 | | | | | | | |
| AAK | | | | LR | | LR | 04 10 28.1 | |
| | comp=Z,12μm,18.2s,baz=140,slow=41 | | | | | | | |
| | comp=Z,9.1nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **9.14** | **328** | ⇑Pn | | **Pn** | **04 06 22.5** | **+0.3** |
| | comp=Z,56nm,1.1s | | | | | | | |
| AAK | | | | ⇑Pg | | | 04 06 56.9 | |
| | comp=Z,243nm,0.9s | | | | | | | |
| **AAK** | **Ala-Archa** | **9.14** | **328** | *ce*P | | **Pn** | **04 06 24.6** | **+2.5** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,38nm,1.3s | | | | | | | |
| **FRU1** | **Bishkek** | **9.22** | **329** | Pn | | **Pn** | **04 06 26.0** | **+2.8** |
| **FRU1** | **Bishkek** | **9.22** | **329** | P | | **Pn** | **04 06 26.0** | **+2.8** |
| **CHMS** | **Chumysh** | **9.33** | **330** | P | | **Pn** | **04 06 27.2** | **+2.6** |
| | SNR=15 | | | | | | | |
| **CHKK** | **Chushkaly** | **9.34** | **342** | *e*Pn | | **Pn** | **04 06 26.8** | **+1.9** |
| | baz=341 | | | | | | | |
| CHKK | | | | *e*Pg | | | 04 06 58.5 | |
| | baz=341 | | | | | | | |
| **CHKK** | **Chushkaly** | **9.34** | **342** | *e*P | | **Pn** | **04 06 26.7** | **+1.9** |
| **GAR** | **Garm** | **9.44** | **298** | | | **Pn** | **04 06 26.0** | **-0.2** |
| **EKS2** | **Erkin-Say** | **9.48** | **326** | P | | **Pn** | **04 06 31.4** | **+4.6** |
| | SNR=25 | | | | | | | |
| **ARXS** | **Arharly** | **9.49** | **346** | *e*P | | **Pn** | **04 06 27.9** | **+1.0** |
| **BTK** | **Batken** | **9.53** | **305** | Pn | | **Pn** | **04 06 28.4** | **+0.9** |
| **BTK** | **Batken** | **9.53** | **305** | P | | **Pn** | **04 06 28.4** | **+0.9** |
| **BKNR** | **BIKANER** | **9.63** | **226** | *e*P | | **Pn** | **04 06 31.5** | **+2.7** |
| BKNR | | | | *ex* | | **Sn** | **04 08 20.8** | **+3.5** |
| **USP** | **Ospenovka** | **9.65** | **330** | P | | **Pn** | **04 06 32.7** | **+3.6** |
| | SNR=11 | | | | | | | |
| **ALBI** | **Allahabad** | **9.72** | **176** | *e*P | | **Pn** | **04 06 29.4** | **-0.7** |
| ALBI | | | | IAmb | | IAmb | 04 06 34.8 | |
| | comp=Z,126nm,0.6s | | | | | | | |
| ALBI | | | | *ex* | | **Sn** | **04 08 18.4** | **-1.2** |
| **SGDS** | **Sogindy** | **9.75** | **331** | *e*Pn | | **Pn** | **04 06 33.0** | **+2.4** |
| | baz=331 | | | | | | | |
| SGDS | | | | *e*Pg | | | 04 07 06.4 | |
| | baz=331 | | | | | | | |
| **SGDS** | **Sogindy** | **9.75** | **331** | *e*P | | **Pn** | **04 06 32.9** | **+2.4** |
| **JHNI** | **Jhansi** | **9.78** | **193** | *e*P | | **Pn** | **04 06 30.1** | **-0.8** |
| JHNI | | | | *e*S | | **Sn** | **04 08 17.4** | **-3.7** |
| **ARK** | **Arkit** | **9.80** | **316** | P | | **Pn** | **04 06 33.1** | **+1.9** |
| ARK | | | | pmax | | pmax | | |
| | comp=Z,165nm,1.1s | | | | | | | |
| **KBL** | **Kabul** | **9.88** | **271** | Pn | | **Pn** | **04 06 32.0** | **-0.3** |
| **KBL** | **Kabul** | **9.88** | **271** | P | | **Pn** | **04 06 33.4** | **+1.1** |
| | SNR=34 | | | | | | | |
| **KBL** | **Kabul** | **9.88** | **271** | P | | **Pn** | **04 06 32.1** | **-0.3** |
| **GTK** | **Tadong** | **10.06** | **138** | *e*P | | **Pn** | **04 06 34.8** | **0.0** |
| GTK | | | | IAmb | | IAmb | 04 06 40.7 | |
| | comp=Z,39nm,0.7s | | | | | | | |
| **LSA** | **Lhasa** | **10.07** | **119** | P | | **Pn** | **04 06 39.8** | **+4.5** |
| LSA | | | | LR | | LR | | |
| | comp=Z,5μm,9.6s | | | | | | | |
| LSA | | | | LR | | LR | | |
| | comp=Z,6μm,10.7s | | | | | | | |
| LSA | | | | LR | | LR | | |
| | comp=Z,9μm,10.3s | | | | | | | |
| **LSA** | **Lhasa** | **10.07** | **119** | Pn | | **Pn** | **04 06 37.5** | **+2.2** |
| **LSA** | **Lhasa** | **10.07** | **119** | P | | **Pn** | **04 06 39.2** | **+3.9** |
| **LSA** | **Lhasa** | **10.07** | **119** | P | | **Pn** | **04 06 37.5** | **+2.2** |
| **TRKS** | **Terek-Say** | **10.12** | **313** | P | | **Pn** | **04 06 35.8** | **+0.2** |
| TRKS | | | | pmax | | pmax | | |
| | comp=Z,105nm,0.6s | | | | | | | |
| **AJM** | **Ajmer** | **10.15** | **214** | *e*P | | **Pn** | **04 06 38.7** | **+2.7** |
| AJM | | | | IAmb | | IAmb | 04 06 42.2 | |
| | comp=Z,82nm,1.0s | | | | | | | |
| AJM | | | | *e*S | | **Sn** | **04 08 26.2** | **-3.9** |
| **TDK** | **Taldyqorghan** | **10.15** | **349** | *e*Pn | | **Pn** | **04 06 37.7** | **+1.8** |
| | baz=349 | | | | | | | |
| **TDK** | **Taldyqorghan** | **10.15** | **349** | *e*P | | **Pn** | **04 06 37.7** | **+1.8** |
| **WMQ** | **Urumqi** | **10.16** | **28** | P | | **Pn** | **04 06 36.8** | **+0.6** |
| **CHGR** | **Chuyangaron** | **10.18** | **294** | P | | **Pn** | **04 06 37.8** | **+1.4** |
| CHGR | | | | pmax | | pmax | | |
| | comp=Z,96nm,0.6s | | | | | | | |
| **SIMJ** | **Simiganj** | **10.29** | **294** | Pn | | **Pn** | **04 06 36.7** | **-1.2** |
| **GUNA** | **GUNA** | **10.84** | **198** | *e*P | | **Pn** | **04 06 46.1** | **+0.7** |
| GUNA | | | | IAmb | | IAmb | 04 06 49.6 | |
| | comp=Z,146nm,1.1s | | | | | | | |
| GUNA | | | | *e*S | | **Sn** | **04 08 41.3** | **-5.8** |
| **GOMU** | **GeErMu** | **11.28** | **80** | P | | **Pn** | **04 06 51.7** | **0.0** |
| GOMU | | | | pP | | | 04 06 55.0 | |
| GOMU | | | | sP | | | 04 06 58.0 | |
| GOMU | | | | S | | **Sn** | **04 09 05.4** | **+7.2** |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,36nm,0.7s | | | | | | | |
| GOMU | | | | LR | | LR | | |
| | comp=Z,68μm,15.0s | | | | | | | |
| GOMU | | | | LR | | LR | | |
| | comp=Z,17μm,15.2s | | | | | | | |
| GOMU | | | | LR | | LR | | |
| | comp=Z,9μm,15.9s | | | | | | | |
| **BTLS** | **Baital** | **11.33** | **334** | *e*Pn | | **Pn** | **04 06 54.1** | **+2.1** |
| | baz=334 | | | | | | | |
| BTLS | | | | *e*Pg | | | 04 07 34.8 | |
| | baz=334 | | | | | | | |
| BTLS | | | | *e*Lg | | Lg | 04 10 07.2 | |
| | baz=334 | | | | | | | |
| **BTLS** | **Baital** | **11.33** | **334** | *e*P | | **Pn** | **04 06 54.1** | **+2.1** |
| **SHBG** | **Sahibganj** | **11.35** | **148** | *e*P | | **Pn** | **04 06 51.6** | **-0.7** |
| **KK31** | **Karatay Array** | **11.47** | **318** | Pn | | **Pn** | **04 06 53.6** | **-0.3** |
| **KK31** | **Karatay Array** | **11.47** | **318** | Pn | | **Pn** | **04 06 50.7** | **-3.3** |
| | comp=Z,23nm,0.8s,baz=128,slow=12,SNR=110 | | | | | | | |
| KK31 | | | | ⇑Sn | | **Sn** | **04 09 02.8** | **+0.5** |
| | comp=Z,43nm,1.0s,baz=153,slow=23 | | | | | | | |
| KK31 | | | | Lg | | Lg | 04 10 12.4 | |
| | baz=123,slow=33 | | | | | | | |
| **KK31** | **Karatay Array** | **11.47** | **318** | *i* P | | **Pn** | **04 06 54.2** | **+0.3** |
| KK31 | | | | | | | 04 09 04.8 | |
| **KKAR** | **Karatay Array** | **11.47** | **318** | Pn | | **Pn** | **04 06 53.8** | **-0.2** |
| **KKAR** | **Karatay Array** | **11.47** | **318** | P | | **Pn** | **04 06 53.8** | **-0.2** |
| **CHM** | **Chimkent** | **11.51** | **313** | *e*Pn | | **Pn** | **04 06 57.2** | **+2.6** |
| | baz=312 | | | | | | | |
| **CHM** | **Chimkent** | **11.51** | **313** | *e*P | | **Pn** | **04 06 57.1** | **+2.6** |
| **MAKZ** | **Makanchi** | **11.78** | **3** | Pn | | **Pn** | **04 06 56.4** | **-1.7** |
| **MAKZ** | **Makanchi** | **11.78** | **3** | ⇑Pn | | **Pn** | **04 06 57.9** | **-0.2** |
| | comp=Z,127nm,1.1s | | | | | | | |
| **MAKZ** | **Makanchi** | **11.78** | **3** | P | | **Pn** | **04 06 56.9** | **-1.3** |
| **MK31** | **Makanchi Array** | **11.78** | **4** | Pn | | **Pn** | **04 06 56.9** | **-1.3** |
| **MK31** | **Makanchi Array** | **11.78** | **4** | Pn | | **Pn** | **04 06 58.8** | **+0.6** |
| | comp=Z,62nm,0.8s,baz=185,slow=11,SNR=206 | | | | | | | |
| **MK31** | **Makanchi Array** | **11.78** | **4** | *i* P | | **Pn** | **04 06 56.7** | **-1.5** |
| **MKAR** | **Makanchi Array** | **11.78** | **4** | Pn | | **Pn** | **04 06 56.3** | **-1.9** |
| **MKAR** | **Makanchi Array** | **11.78** | **4** | Pn | | **Pn** | **04 06 57.1** | **-1.1** |
| | comp=Z,5.0nm,0.3s,baz=183,slow=12,SNR=95 | | | | | | | |
| MKAR | | | | Sn | | **Sn** | **04 09 03.9** | **-6.1** |
| | comp=Z,1.4nm,0.3s,baz=182,slow=20,SNR=2.1 | | | | | | | |
| MKAR | | | | Lg | | Lg | 04 10 22.6 | |
| | comp=Z,0.9nm,0.3s,baz=186,slow=25,SNR=1.0 | | | | | | | |
| MKAR | | | | LR | | LR | 04 12 27.1 | |
| | comp=Z,4μm,18.1s,baz=188,slow=42 | | | | | | | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **BRLS** | **Borolday** | **11.80** | **316** | *e*Pn | | **Pn** | **04 06 58.2** | **-0.3** |
| | baz=314 | | | | | | | |
| BRLS | | | | *e*Pg | | | 04 07 42.8 | |
| | baz=314 | | | | | | | |
| **BRLS** | **Borolday** | **11.80** | **316** | *e*P | | **Pn** | **04 06 58.2** | **-0.3** |
| **TAWA** | **Tawang** | **11.86** | **126** | ⇓*ex* | | x | 04 07 29.2 | |
| **JASL** | **Jaisalmer** | **11.87** | **230** | *e*P | | **Pn** | **04 07 00.5** | **+1.0** |
| JASL | | | | *ex* | | **Sn** | **04 09 11.3** | **-0.9** |
| **BHPL** | **Bhopal** | **12.17** | **196** | *e*P | | **Pn** | **04 07 02.0** | **-1.7

comp=Z,0.1nm,0.3s,baz=172,slow=30,SNR=5.0
KURBB LR LR 04 14 27.9
comp=Z,2μm,21.1s,baz=179,slow=40
comp=Z,21nm,1.0s
**KURK Kurchatov 15.76 354** Pn **Pn 04 07 48.7 -3.4**
**KURK Kurchatov 15.76 354***d i* P **Pn 04 07 48.6 -3.5**
KURK pmax pmax
comp=Z,48nm,1.3s
**SAIH SAIHA 16.30 137** *e* P **Pn 04 08 00.5 +1.2**
SAIH ⇓*ex* x 04 08 05.2
SAIH IAmb IAmb 04 08 09.2
comp=Z,62nm,0.9s
**POO Poona 17.64 203** *e* P **P 04 08 21.4 +4.2**
**HYB Hyderabad 17.69 188** *e* P **P 04 08 17.7 -0.1**
HYB *e* S **S 04 11 42.5 +0.8**
**TNCH TengChong 18.11 119** ⇓P **P 04 08 23.6 +1.2**
TNCH PP **PnPn 04 08 35.9 +2.8**
TNCH S **Sn 04 11 45.3 +0.9**
TNCH pmax pmax
comp=Z,150nm,1.4s
TNCH pmax pmax
comp=Z,1μm,5.5s
TNCH LR LR
comp=Z,1μm,7.7s
TNCH LR LR
comp=Z,2μm,8.2s
TNCH LR LR
comp=Z,4μm,18.3s
**LZH Lanzhou 18.58 80** *e* P **P 04 08 26.5 -1.1**
LZH sP sP 04 08 33.7 +1.1
LZH S **Sn 04 11 45.2 -11**
LZH pmax pmax
comp=Z,14nm,1.1s
LZH pmax pmax
comp=Z,1μm,4.1s
LZH LR LR
comp=Z,11μm,11.0s
LZH LR LR
comp=Z,7μm,12.7s
LZH LR LR
comp=Z,10μm,15.8s
**ZAA0 Zalesovo Array 19.09 7** P **P 04 08 30.4 -2.5**
**ZALV Zalesovo Beam 19.09 7** P **P 04 08 30.7 -2.2**
**ZALV Zalesovo Beam 19.09 7** P **P 04 08 31.2 -1.6**
comp=Z,1.4nm,0.3s,baz=205,slow=9.7,SNR=39
ZALV S **Sn 04 12 05.5 -2.0**
comp=Z,2.5nm,0.7s,baz=190,slow=16,SNR=1.9
ZALV Lg Lg 04 14 14.7
comp=Z,0.1nm,0.3s,baz=212,slow=30,SNR=1.6
ZALV LR LR 04 16 51.2
comp=Z,2μm,19.5s,baz=197,slow=40
comp=Z,13nm,0.7s
**CD2 Chengdu 19.50 96** P **Pn 04 08 39.9 +1.2**
CD2 S **Sn 04 12 16.5 -1.2**
CD2 pmax pmax
comp=Z,70nm,1.5s
CD2 pmax pmax
comp=Z,1μm,3.9s
CD2 LR LR
comp=Z,7μm,9.2s
CD2 LR LR
comp=Z,5μm,8.9s
CD2 LR LR
comp=Z,6μm,7.9s
**BVA0 Borovoye Array 19.50 340** ⇓P **P 04 08 37.5 +0.1**
comp=Z,51nm,1.2s,baz=146,slow=10,SNR=14
**BVA0 Borovoye Array 19.50 340** *i* P **P 04 08 37.5 +0.1**
**BRVK Borovoye 19.56 340** P **P 04 08 37.6 -0.3**
**BRVK Borovoye 19.56 340***ce* P **Pn 04 08 39.1 -0.2**
**PZH PanZhiHua 19.70 110** P **Pn 04 08 41.6 +0.4**
PZH S **Sn 04 12 26.6 +3.8**
PZH SS **SnSn 04 12 48.5 +12**
PZH pmax pmax
comp=Z,60nm,1.6s
PZH pmax pmax
comp=Z,800nm,5.7s
PZH LR LR
comp=Z,3μm,11.0s
PZH LR LR
comp=Z,3μm,11.9s
PZH LR LR
comp=Z,3μm,9.8s
**AB31 Akbulak array 21.03 319** P **P 04 08 51.8 -2.1**
comp=Z,18nm,0.7s,baz=119,slow=12,SNR=200
**AB31 Akbulak array 21.03 319** P **P 04 08 53.7 -0.3**
**ABKAR Akbulak array 21.03 319** P **P 04 08 52.6 -1.4**
**ABKAR Akbulak array 21.03 319** P **P 04 08 53.7 -0.3**
ABKAR IAmb IAmb 04 09 03.6
comp=Z,35nm,0.8s
**KMI Kunming 21.19 112** ⇓P **P 04 08 55.9 -0.2**
KMI S **S 04 12 50.8 -1.3**
KMI pmax pmax
comp=Z,83nm,1.2s
KMI pmax pmax
comp=Z,280nm,3.2s
KMI LR LR
comp=Z,3μm,10.8s
KMI LR LR
comp=Z,5μm,9.6s
KMI LR LR
comp=Z,5μm,13.7s
**MOY Mondy 21.95 35** *e* P **P 04 09 05.0 +1.0**
MOY pmax pmax
comp=Z,167nm,2.2s
**ZAK Zakamensk 22.29 40** *e* P **P 04 09 07.5 -0.1**
ZAK pmax pmax
comp=Z,39nm,1.7s
**CHTO Chiang Mai 22.66 131** P **P 04 09 10.1 -1.6**
CHTO IAmb IAmb 04 09 22.4
comp=Z,102nm,1.4s
**CHTO Chiang Mai 22.66 131** P **P 04 09 10.1 -1.6**
CHTO pmax pmax
comp=Z,102nm,1.5s
**AKTO Aktyubinsk 22.72 320** LR LR 04 19 08.0
comp=Z,4μm,19.6s,baz=133,slow=40
**WSAR Wadi Sarin 22.77 245** LR LR 04 20 56.2
comp=Z,2μm,18.5s,baz=86,slow=44
**WSAR Wadi Sarin 22.77 245** P **P 04 09 16.8 +3.9**
WSAR S **S 04 13 25.6 +3.4**
**SONM Songino Array 22.79 48** P **P 04 09 12.5 -0.5**
SONM IAmb IAmb 04 09 16.4
comp=Z,105nm,1.2s
**SONM Songino Array 22.79 48** P **P 04 09 13.3 +0.3**
comp=Z,58nm,1.1s,baz=244,slow=8.7,SNR=94
SONM LR LR 04 19 01.5
comp=Z,2μm,19.9s,baz=246,slow=39
comp=Z,58nm,1.1s
**JLN Jalan Bani Buh 22.86 242** P **P 04 09 18.6 +4.7**
JLN P **P 04 09 18.6 +4.7**
JLN S **S 04 13 30.9 +7.1**
JLN S **S 04 13 30.9 +7.1**
**WBK Wadi Bani Khal 22.90 243** P **P 04 09 19.7 +5.5**
WBK S **S 04 13 28.9 +4.3**
**CM31 Chiang Mai Arr 22.93 131** P **P 04 09 14.0 -0.6**
CM31 IAmb IAmb 04 09 19.7
comp=Z,73nm,0.9s
**CMAR Chiang Mai Arr 22.93 131** P **P 04 09 13.2 -1.3**
**CMAR Chiang Mai Arr 22.93 131** P **P 04 09 13.8 -0.8**
comp=Z,5.1nm,0.4s,baz=312,slow=10.0,SNR=34
CMAR LR LR 04 18 23.5
comp=Z,1μm,20.1s,baz=315,slow=37
comp=Z,5.1nm,0.4s
**XAN Xi'an 22.97 84** ⇑P **P 04 09 17.1 +2.2**
XAN pP sP 04 09 21.6 +1.7
XAN sP pP 04 09 24.2 +5.9
XAN S **S 04 13 25.2 -0.4**
XAN sS sS 04 13 35.4 +3.8
XAN pmax pmax
comp=Z,41nm,1.2s
XAN pmax pmax
comp=Z,620nm,4.4s
XAN LR LR
comp=Z,7μm,15.9s
XAN LR LR
comp=Z,6μm,13.0s
XAN LR LR
comp=Z,8μm,13.0s
**BIDO Bidbid 22.99 246** P **P 04 09 19.4 +4.3**
**SHME Shamm 23.19 254** *i* P **P 04 09 21.0 +3.8**
SNR=6.4
**SHME Shamm 23.19 254** P **P 04 09 18.7 +1.5**
SHME P **P 04 09 18.7 +1.5**
**ULN Ulaanbaatar 23.20 49** P **P 04 09 17.0 -0.4**
**ULN Ulaanbaatar 23.20 49***d i* P **P 04 09 17.9 +0.5**
ULN pmax pmax
comp=Z,173nm,1.7s

**SMDO Samad 23.31 245** P **P 04 09 22.3 +3.7**
SMDO P **P 04 09 22.3 +3.7**
SMDO S **S 04 13 35.2 +3.5**
SMDO S **S 04 13 35.2 +3.5**
**MDH Madha 23.43 252** P **P 04 09 23.9 +4.3**
**MDH Madha 23.43 252** P **P 04 09 23.6 +3.9**
MDH P **P 04 09 23.6 +3.9**
MDH S **S 04 13 35.4 +2.0**
MDH S **S 04 13 35.4 +2.0**
**BTO Baotou 23.50 68** *e* P **P 04 09 19.7 -0.7**
BTO pP **pP 04 09 24.2 +0.3**
BTO sP **sP 04 09 26.5 +1.1**
BTO PP **PnPn 04 09 47.9 +1.2**
BTO S **S 04 13 33.1 -1.4**
BTO SS **SnSn 04 14 14.3 +4.3**
BTO pmax pmax
comp=Z,75nm,1.1s
BTO pmax pmax
comp=Z,370nm,6.1s
BTO LR LR
comp=Z,9μm,11.6s
BTO LR LR
comp=Z,11μm,11.8s
BTO LR LR
comp=Z,15μm,12.6s
**MASF Masafi 23.51 253** P **P 04 09 22.2 +1.7**
MASF P **P 04 09 22.2 +1.7**
MASF S **S 04 13 37.4 +2.8**
MASF S **S 04 13 37.4 +2.8**
**MSFE Esma-Masafi 23.51 253** *i* P **P 04 09 24.1 +3.6**
SNR=8.6
**HOQ Hoqain 23.57 247** P **P 04 09 22.0 +1.0**
HOQ P **P 04 09 22.0 +1.0**
HOQ S **S 04 13 38.8 +3.2**
HOQ S **S 04 13 38.8 +3.2**
**GYA Guiyang 23.58 104** P **P 04 09 21.4 +0.1**
GYA S **S 04 13 34.1 -1.9**
GYA pmax pmax
comp=Z,35nm,1.7s
GYA pmax pmax
comp=Z,610nm,3.8s
GYA LR LR
comp=Z,3μm,10.6s
GYA LR LR
comp=Z,2μm,13.6s
GYA LR LR
comp=Z,2μm,11.6s
**JMDO Jabal Madar 23.68 244** P **P 04 09 23.9 +1.7**
JMDO P **P 04 09 23.9 +1.7**
JMDO S **S 04 13 43.4 +6.0**
JMDO S **S 04 13 43.4 +6.0**
**UOSS Minazif 23.69 252** P **P 04 09 26.7 +4.5**
**UOSS Minazif 23.69 252** P **P 04 09 26.7 +4.5**
UOSS P **P 04 09 26.7 +4.5**
UOSS S **S 04 13 39.8 +2.3**
UOSS S **S 04 13 39.8 +2.3**
**PHRA Phrae 23.70 129** P **P 04 09 21.7 -0.7**
**HATD Hatta, Dubai 23.80 251** P **P 04 09 30.3 +7.0**
**HATD Hatta, Dubai 23.80 251** P **P 04 09 28.1 +4.8**
HATD P **P 04 09 28.1 +4.8**
HATD S **S 04 13 42.3 +2.9**
HATD S **S 04 13 42.3 +2.9**
**UMQ Umm Al-Quwin 23.82 253** P **P 04 09 27.6 +4.2**
**SOHO SOHO 23.86 250** P **P 04 09 26.8 +3.0**
**SOHO SOHO 23.86 250** P **P 04 09 27.3 +3.5**
SOHO P **P 04 09 27.3 +3.5**
SOHO S **S 04 13 42.1 +1.9**
SOHO S **S 04 13 42.1 +1.9**
**IRK Irkutsk 23.88 37** *e* P **P 04 09 24.4 +0.6**
IRK pmax pmax
comp=Z,151nm,4.0s
**ASHO Ashiyiah 23.93 251** *i* P **P 04 09 29.5 +4.9**
SNR=9.7
**ASHO Ashiyiah 23.93 251** P **P 04 09 25.6 +1.0**
SNR=8.7
ASHO P **P 04 09 25.6 +1.0**
SNR=8.7
ASHO S **S 04 13 44.3 +2.8**
ASHO S **S 04 13 44.3 +2.8**
**NAZ Nazwa, Dubai 24.09 252** *i* P **P 04 09 31.1 +5.1**
SNR=6.8
**NAZ Nazwa, Dubai 24.09 252** P **P 04 09 30.6 +4.6**
SNR=6.1
NAZ P **P 04 09 30.6 +4.6**
SNR=6.1
**FAQ Al Faqa, Dubai 24.27 252** *i* P **P 04 09 30.2 +2.5**
SNR=6.6
**FAQ Al Faqa, Dubai 24.27 252** P **P 04 09 30.0 +2.3**
FAQ P **P 04 09 30.0 +2.3**
FAQ S **S 04 13 50.3 +3.6**
FAQ S **S 04 13 50.3 +3.6**
**SLVN Son La 24.27 118** P **P 04 09 27.8 0.0**
**ARQ Araqi 24.30 248** P **P 04 09 31.3 +3.3**
ARQ P **P 04 09 31.3 +3.3**
ARQ S **S 04 13 54.5 +7.1**
ARQ S **S 04 13 54.5 +7.1**
**ENH Enshi 24.38 93** P **P 04 09 28.0 -0.8**
ENH IAmb IAmb 04 09 44.8
comp=Z,34nm,1.1s
**ALNE Al Ain 24.50 250** P **P 04 09 34.6 +4.7**
SNR=6.5
ALNE S **S 04 13 53.3 +2.7**
**ASUD Al Ashush, Dub 24.53 252** *i* P **P 04 09 34.8 +4.7**
SNR=5.6
**ASUD Al Ashush, Dub 24.53 252** P **P 04 09 31.7 +1.6**
ASUD P **P 04 09 31.7 +1.6**
**MHTO MHTO 24.64 241** P **P 04 09 33.5 +2.5**
MHTO P **P 04 09 33.5 +2.5**
MHTO P **P 04 09 33.5 +2.5**
MHTO P **P 04 09 33.5 +2.5**
MHTO S **S 04 13 56.1 +3.4**
MHTO S **S 04 13 56.1 +3.4**
**HHC Hu-ho-hao-te 24.69 67** *e* P **P 04 09 32.6 +1.1**
HHC pP sP 04 09 36.3 -0.3
HHC sP pP 04 09 39.0 +3.9
HHC PP **PnPn 04 10 03.3 +0.3**
HHC S **S 04 13 50.7 -2.9**
HHC sS sS 04 13 59.3 -0.2
HHC SS **SnSn 04 14 43.0 +3.9**
HHC pmax pmax
comp=Z,31nm,1.1s
HHC pmax pmax
comp=Z,340nm,4.4s
HHC LR LR
comp=Z,3μm,14.9s
HHC LR LR
comp=Z,5μm,13.9s
HHC LR LR
comp=Z,6μm,15.5s
**AJN Ajban 24.83 252** *i* P **P 04 09 35.9 +3.2**
SNR=5.2
**AJN Ajban 24.83 252** P **P 04 09 35.4 +2.6**
AJN P **P 04 09 35.4 +2.6**
AJN S **S 04 13 58.8 +2.9**
AJN S **S 04 13 58.8 +2.9**
**TIY Taiyuan 25.36 75** ⇑P **P 04 09 40.7 +3.1**
TIY PP **PnPn 04 10 17.1 +4.9**
TIY pmax pmax
comp=Z,340nm,5.4s
TIY LR LR
comp=Z,1μm,8.8s
TIY LR LR
comp=Z,2μm,8.3s
TIY LR LR
comp=Z,4μm,10.0s
**DQM DQM 25.62 240** P **P 04 09 41.7 +1.7**
**LYN LuoYang 25.77 82** P **P 04 09 42.1 +0.9**
LYN pP pP 04 09 45.6 +0.8
LYN PP **PnPn 04 10 22.0 +4.4**
LYN S **S 04 14 08.0 -2.6**
LYN pmax pmax
comp=Z,70nm,0.9s
LYN pmax pmax
comp=Z,530nm,5.0s
LYN LR LR
comp=Z,4μm,16.7s
LYN LR LR
comp=Z,6μm,13.5s
LYN LR LR
comp=Z,9μm,13.3s
**SVE Sverdlovsk 25.81 334***ce* P **P 04 09 42.6 +1.3**
SVE *eS* **S 04 14 13.7 +2.9**
SVE pmax pmax

comp=Z,65nm,1.3s
SVE MLR MLR
comp=Z,3μm,14.0s
**MZWR Madinat Zayed 26.11 252** P **P 04 09 45.9 +1.5**
MZWR P **P 04 09 45.9 +1.5**
**ARU Arti 26.30 331** P **P 04 09 45.3 -0.4**
ARU IAmb IAmb 04 09 53.9
comp=Z,45nm,1.2s
**ARU Arti 26.30 331** P **P 04 09 45.7 -0.1**
comp=Z,5.8nm,0.7s,baz=131,slow=5.9,SNR=11
ARU LR LR 04 20 30.9
comp=Z,3μm,18.6s,baz=128,slow=37
comp=Z,5.8nm,0.7s
**ARU Arti 26.30 331***c i* P **P 04 09 47.6 +1.8**
ARU 04 10 25.5
ARU PPP PPP 04 10 35.2
ARU S **S 04 14 21.7 +3.1**
ARU pmax pmax
comp=Z,43nm,1.8s
ARU MLR MLR
comp=Z,3μm,18.0s
**ARU Arti 26.30 331** P **P 04 09 45.4 -0.4**
comp=Z,33nm,1.1s
**JRN Qarnain Island 26.33 255** P **P 04 09 48.7 +2.4**
SNR=5.6
**GHWR Ruwais 26.79 253** P **P 04 09 54.7 +4.2**
GHWR P **P 04 09 54.7 +4.2**
**MZR Muzera 26.82 251** *i* P **P 04 09 54.3 +3.4**
SNR=5.9
**MZR Muzera 26.82 251** P **P 04 09 57.0 +6.1**
SNR=6.8
MZR P **P 04 09 57.0 +6.1**
SNR=6.8
**GULI GuiLin 27.07 103** ⇑P **P 04 09 55.6 +2.5**
GULI S **S 04 14 31.1 -0.3**
GULI pmax pmax
comp=Z,20nm,0.9s
GULI LR LR
comp=Z,2μm,13.0s
GULI LR LR
comp=Z,2μm,13.0s
GULI LR LR
comp=Z,2μm,11.9s
**MAK Makhachkala 27.09 297** *e* P **P 04 09 49.3 -3.8**
MAK *e* 04 10 37.4
MAK *eS* **S 04 14 26.5 -4.9**
MAK MLR MLR
comp=Z,2μm,12.0s
**HNS HongShan 27.19 75** ⇓P **P 04 09 59.2 +5.2**
HNS S **S 04 14 35.5 +2.5**
HNS pmax pmax
comp=Z,15nm,1.1s
HNS LR LR
comp=Z,3μm,12.7s
HNS LR LR
comp=Z,5μm,14.3s
HNS LR LR
comp=Z,5μm,14.3s
**SHMA Al-Shehemyia 27.41 259** P **P 04 09 58.4 +2.4**
SNR=5.0
**PALK Pallekele 27.64 181** LR LR 04 20 03.6
comp=Z,2μm,19.1s,baz=106,slow=35
**PALK Pallekele 27.64 181** P **P 04 10 02.5 +4.3**
**SAKB Bahrain 27.70 259** P **P 04 10 01.3 +2.6**
**BJI Beijing 28.19 69** P **P 04 10 03.5 +0.6**
BJI S **S 04 14 47.4 -1.3**
BJI pmax pmax
comp=Z,43nm,7.7s
BJI LR LR
comp=Z,1μm,11.4s
BJI LR LR
comp=Z,1μm,16.7s
BJI LR LR
comp=Z,2μm,21.6s
**WHN Wuhan 28.29 90** ⇓P **P 04 10 07.9 +4.0**
WHN S **S 04 14 54.6 +4.2**
WHN pmax pmax
comp=Z,300nm,2.0s
WHN pmax pmax
comp=Z,560nm,8.4s
WHN LR LR
comp=Z,8μm,11.2s
WHN LR LR
comp=Z,5μm,10.3s
WHN LR LR
comp=Z,12μm,18.1s
**XLT XiLinHaoTe 28.29 61** *e* P **P 04 10 04.5 +0.6**
XLT pP sP 04 10 09.0 -0.1
XLT S **S 04 14 53.4 +2.9**
XLT ScS **ScS 04 20 48.5 -2.7**
XLT pmax pmax
comp=Z,30nm,0.9s
XLT pmax pmax
comp=Z,210nm,4.5s
XLT LR LR
comp=Z,2μm,10.8s
XLT LR LR
comp=Z,2μm,12.4s
**GROC Groznyy 28.36 297** *e* P **P 04 10 02.6 -1.8**
GROC *eS* **S 04 14 53.2 +1.8**
**DMTO DMTO 28.92 240** P **P 04 10 12.3 +2.7**
**DOK Doka 28.92 243** P **P 04 10 13.0 +3.4**
**GNI Garni 29.07 291** P **P 04 10 10.6 -0.4**
GNI IAmb IAmb 04 10 54.8
comp=Z,40nm,1.1s
**GNI Garni 29.07 291** P **P 04 10 12.7 +1.7**
**GNI Garni 29.07 291***c i* P **P 04 10 13.0 +2.0**
GNI pmax pmax
comp=Z,22nm,1.0s
**TIA Tai'an 29.26 77** *e* P P 04 10 05.8 -6.7
TIA S **S 04 15 06.4 +0.8**
TIA LR LR
comp=N,12μm,19.6s
TIA LR LR
comp=E,3μm,16.7s
TIA LR LR
comp=Z,4μm,17.2s
**BELG Belogornoye 29.38 317** P **P 04 10 13.3 0.0**
comp=Z,3.9nm,0.4s,baz=224,slow=4.6,SNR=4.7
BELG LR LR 04 23 34.3
comp=Z,3μm,19.0s,baz=101,slow=40
comp=Z,3.9nm,0.4s
**UBPT Khong Chiam 29.46 126** P **P 04 10 13.4 -1.0**
**WHFO Wadi Hawf 29.63 242** P **P 04 10 18.5 +2.5**
**QIZ Qiongzhong 30.07 115** P **P 04 10 18.2 -1.6**
QIZ S **S 04 15 18.4 -0.2**
QIZ LR LR
comp=Z,1μm,9.2s
QIZ LR LR
comp=Z,1μm,12.2s
QIZ LR LR
comp=Z,2μm,17.1s
**ABTO Aybut 30.34 242** P **P 04 10 25.4 +3.1**
**KBZ Khabaz 30.50 298** P **P 04 10 23.9 +0.4**
comp=Z,1.6nm,0.7s,baz=94,slow=16,SNR=1.8
comp=Z,1.6nm,0.7s
**KIV Kislovodsk 30.67 299** *e* P **P 04 10 25.5 +0.5**
KIV pmax pmax
comp=Z,5.0nm,1.0s
KIV MLR MLR
comp=Z,647nm,15.0s
**GURO Guroymak-BITLI 31.27 288** P **P 04 10 30.7 +0.3**
**KIRV Kirov 31.47 328** LR LR 04 23 46.5
comp=Z,3μm,18.2s,baz=126,slow=37
**KIRV Kirov 31.47 328***c i* P **P 04 10 31.1 -0.6**
**NJ2 Nanjing 31.54 85** *e* P **P 04 10 31.4 -1.3**
NJ2 S **S 04 15 44.9 +3.5**
NJ2 pmax pmax
comp=Z,23nm,0.8s
NJ2 pmax pmax
comp=Z,120nm,3.6s
NJ2 LR LR
comp=Z,2μm,13.3s
NJ2 LR LR
comp=Z,920nm,12.3s
NJ2 LR LR
comp=Z,2μm,13.3s
**HIA Hailar 31.64 51** P **P 04 10 32.9 -0.6**
**HIA Hailar 31.64 51***de* P **P 04 10 34.0 +0.5**
HIA pmax pmax
comp=Z,16nm,1.5s
**BOD Bodaibo 31.65 34** *e* P **P 04 10 33.4 0.0**
BOD pmax pmax
comp=Z,24nm,1.9s
**LABN Labinsk 32.12 300** *e* P **P 04 10 38.5 +0.8**
LABN *eS* **S 04 15 52.1 +1.8**

LABN pmax pmax
comp=Z,77nm,1.5s
LABN MLR MLR
comp=Z,2μm,13.0s
**ERBR Yeremizino-Bor 32.36 302** *e*P **P 04 10 40.5 +0.7**
ERBR *e*S **S 04 15 53.1 -1.0**
ERBR pmax pmax
comp=Z,15nm,0.3s
ERBR MLR MLR
comp=Z,2μm,13.0s
**VRH Novokhopyorsk 32.47 312** *e*P **P 04 10 39.7 -0.9**
VRH pmax pmax
comp=Z,24nm,1.5s
**DL2 Dalian 32.47 71** P P **04 10 37.1 -3.7**
DL2 S **S 04 15 47.0 -8.9**
DL2 pmax pmax
comp=Z,36nm,1.3s
DL2 pmax pmax
comp=Z,190nm,3.7s
DL2 LR LR
comp=N,4μm,16.6s
DL2 LR LR
comp=E,3μm,16.7s
DL2 LR LR
comp=Z,3μm,15.5s
**SOC Sochi 32.81 298** *e*P **P 04 10 42.0 -1.7**
SOC *e* 04 11 48.9
SOC *e*S **S 04 15 59.6 -1.4**
SOC *e*SS **SnSn 04 17 52.1 -4.6**
**RAYN Ar Rayn 32.88 259** P **P 04 10 44.8 +0.2**
**RAYN Ar Rayn 32.88 259** *i* P **P 04 10 46.2 +1.6**
SNR=8.1
**RAYN Ar Rayn 32.88 259** P **P 04 10 46.0 +1.4**
**RAYN Ar Rayn 32.88 259** P **P 04 10 44.8 +0.2**
RAYN pmax pmax
comp=Z,8.0nm,0.8s
**SSE Sheshan 33.72 85** P **P 04 10 50.1 -1.7**
SSE S **S 04 16 13.1 -2.3**
SSE pmax pmax
comp=Z,13nm,0.8s
SSE pmax pmax
comp=Z,44nm,4.4s
SSE LR LR
comp=Z,1μm,13.5s
SSE LR LR
comp=Z,890nm,13.8s
**SNY Shenyang 33.74 65** ⇑P **P 04 10 54.5 +2.7**
SNY S **S 04 16 18.6 +3.1**
SNY pmax pmax
comp=Z,12nm,0.7s
SNY pmax pmax
comp=Z,110nm,4.5s
SNY LR LR
comp=Z,1μm,10.3s
SNY LR LR
comp=Z,900nm,14.2s
SNY LR LR
comp=Z,3μm,18.1s
**VORD Divnogorie 33.91 311** *e*P **P 04 10 52.6 -0.6**
VORD pmax pmax
comp=Z,10.0nm,0.8s
**VSR Storozhevoye 34.03 311** *e*P **P 04 10 52.1 -2.2**
VSR pmax pmax
comp=Z,9.0nm,0.6s
VSR MLR MLR
comp=Z,3μm,17.0s
**ARPR Arapgir-MALATY 34.08 290** P **P 04 10 55.0 -0.1**
ARPR IAmb IAmb 04 11 07.2
comp=Z,30nm,1.0s
**VORR Voronezh 34.11 312** *e*P **P 04 10 55.4 +0.5**
VORR pmax pmax
comp=Z,10.0nm,0.8s
**ANN Anapa 34.47 300** *e*P **P 04 10 58.1 0.0**
ANN *e* 04 12 15.3
ANN *e*S **S 04 16 24.9 -1.8**
ANN pmax pmax
comp=Z,16nm,0.6s
ANN MLR MLR
comp=Z,1μm,13.0s
**LPSR Galich'ya Gora 34.49 314** *e*P **P 04 10 57.6 -0.6**
LPSR pmax pmax
comp=Z,10.0nm,0.6s
LPSR MLR MLR
comp=Z,2μm,19.0s
**KULM Kulim 34.71 144** P **P 04 10 59.8 -0.7**
KULM IAmb IAmb 04 11 20.8
comp=Z,32nm,1.2s
**CN2 Changchun 35.05 62** P **P 04 11 02.7 -0.5**
CN2 pP pP 04 11 07.0 +0.1
CN2 sP sP 04 11 09.7 +1.3
CN2 pmax pmax
comp=Z,30nm,0.7s
CN2 LR LR
comp=Z,2μm,13.0s
CN2 LR LR
comp=Z,2μm,13.0s
CN2 LR LR
comp=Z,3μm,15.0s
**GAZ Gaziantep 35.24 287** P **P 04 11 03.9 -1.1**
GAZ IAmb IAmb 04 11 11.0
comp=Z,24nm,1.0s
**MOS Moscow 36.05 319** *e*P **P 04 11 09.4 -2.2**
MOS *e* 04 12 28.9
MOS *e*S **S 04 16 45.0 -5.7**
MOS *e*SS **SnSn 04 19 13.7 -1.2**
MOS *e* 04 21 23.4
MOS pmax pmax
comp=Z,39nm,1.3s
MOS MLR MLR
comp=E,2μm,17.0s
MOS MLR MLR
comp=Z,2μm,17.0s
**SSLB Suanglung 36.32 97** P **P 04 11 13.3 -1.0**
SSLB IAmb IAmb 04 11 21.8
comp=Z,29nm,1.4s
**BNX BinXian 36.44 59** ⇓P **P 04 11 15.2 +0.1**
BNX pP **pP 04 11 17.9 -0.8**
BNX S **S 04 16 56.0 -0.9**
BNX sS **sS 04 17 02.5 -0.5**
BNX pmax pmax
comp=Z,14nm,1.6s
BNX LR LR
comp=Z,2μm,12.5s
BNX LR LR
comp=Z,2μm,14.1s
BNX LR LR
comp=Z,2μm,13.7s
**OBN Obninsk 36.46 317** P **P 04 11 14.1 -1.0**
**OBN Obninsk 36.46 317** LR LR 04 27 12.1
comp=Z,2μm,21.7s,baz=96,slow=38
**OBN Obninsk 36.46 317**⇑ *e*P **P 04 11 15.7 +0.6**
OBN *e* 04 12 38.0
OBN *e*S **S 04 16 57.3 +0.3**
OBN pmax pmax
comp=Z,9.0nm,0.4s
OBN MLR MLR
comp=Z,2μm,21.0s
**INCN Inchon 36.58 73** P **P 04 11 14.6 -1.8**
INCN IAmb IAmb 04 11 18.3
comp=Z,40nm,1.3s
**INCN Inchon 36.58 73** P **P 04 11 14.6 -1.8**
INCN pmax pmax
comp=Z,40nm,1.3s
**HEH HeiHe 36.71 51** *e*P **P 04 11 18.0 +0.7**
HEH pP **pP 04 11 21.8 +0.8**
HEH S **S 04 17 08.1 +7.1**
HEH pmax pmax
comp=Z,10.0nm,1.5s
HEH LR LR
comp=Z,1μm,10.8s
HEH LR LR
comp=Z,1μm,9.0s
HEH LR LR
comp=Z,2μm,9.8s
**SIM Simferopol' 36.83 300** *e*P **P 04 11 20.0 +1.6**
SIM *e*S **S 04 17 05.0 +2.0**
SIM pmax pmax
comp=Z,25nm,1.0s
SIM smax smax
comp=Z,120nm,11.0s
SIM pmax pmax
comp=Z,300nm,14.0s
**TWG Pinlang 36.86 98** P **P 04 11 18.4 -0.6**
**GSI Gunungsitoli 36.94 152** IAmb IAmb 04 11 28.4
comp=Z,36nm,0.8s

**ZEA Zeya 37.15 45** *de*P **P 04 11 22.1 +1.1**
ZEA *e* 04 12 51.8
ZEA *e*S **S 04 17 03.9 -3.7**
ZEA *e* 04 20 07.8
ZEA pmax pmax
comp=Z,20nm,1.6s
ZEA pmax pmax
comp=Z,100nm,3.7s
ZEA pmax pmax
comp=Z,100nm,5.5s
ZEA smax smax
comp=N,100nm,13.1s
ZEA smax smax
comp=E,200nm,14.0s
ZEA MLR MLR
comp=E,1μm,11.0s
ZEA MLR MLR
comp=N,800nm,15.0s
ZEA MLR MLR
comp=Z,1μm,13.0s
**KSAR Wonju Array Be 37.56 72** P **P 04 11 23.4 -1.3**
**KSAR Wonju Array Be 37.56 72** P **P 04 11 23.4 -1.3**
**KSRS Korea Array 37.59 72** P **P 04 11 22.9 -2.0**
comp=Z,1.4nm,0.6s,baz=266,slow=7.9,SNR=10
KSRS LR LR 04 28 10.7
comp=Z,1μm,18.0s,baz=275,slow=38
comp=Z,1.4nm,0.6s
**BR131 Keskin Array S 37.60 292** P **P 04 11 24.6 -0.7**
**BR131 Keskin Array S 37.60 292** *de*P **P 04 11 26.1 +0.8**
**BR104 Keskin Array S 37.61 291** P **P 04 11 24.8 -0.5**
comp=Z,5.5nm,1.1s,comp=Z,63nm
**BRTR Keskin Array B 37.61 292** P **P 04 11 24.4 -0.8**
**BRTR Keskin Array B 37.61 292** P **P 04 11 25.3 0.0**
comp=Z,4.4nm,0.8s,baz=108,slow=5.8,SNR=11
BRTR LR LR 04 29 36.5
comp=Z,668nm,21.8s,baz=87,slow=41
comp=Z,4.4nm,0.8s
**BR106 Keskin Array S 37.62 292** P **P 04 11 24.9 -0.5**
comp=Z,9.2nm,0.9s,comp=Z,74nm
**MMAI Mount Meron Ar 37.62 280** P **P 04 11 26.0 +0.6**
comp=Z,0.5nm,0.4s,baz=280,slow=11,SNR=5.6
MMAI LR LR 04 28 57.6
comp=Z,1μm,20.8s,baz=33,slow=40
comp=Z,0.5nm,0.4s
**BR105 Keskin Array S 37.62 292** P **P 04 11 25.0 -0.4**
comp=Z,12nm,1.2s,comp=Z,106nm
**MDJ Mudanjiang 38.01 60** P **P 04 11 29.2 +0.8**
MDJ sP sP 04 11 33.3 -0.3
MDJ S **S 04 17 21.9 +1.0**
MDJ ScS **ScS 04 21 40.4 -0.7**
MDJ pmax pmax
comp=Z,33nm,1.2s
MDJ pmax pmax
comp=Z,210nm,3.5s
MDJ LR LR
comp=Z,900nm,11.3s
MDJ LR LR
comp=Z,1μm,10.4s
MDJ LR LR
comp=Z,3μm,14.9s
**MDJ Mudanjiang 38.01 60** IAmb IAmb 04 11 34.2
comp=Z,35nm,0.9s
**ANTO Ankara 38.23 292** P **P 04 11 30.1 -0.3**
**ANTO Ankara 38.23 292** P **P 04 11 30.1 -0.3**
ANTO pmax pmax
comp=Z,26nm,1.3s
**ANTO Ankara 38.23 292** P **P 04 11 30.1 -0.3**
comp=Z,7.5nm,1.6s
**EIL Elat 39.03 275** LR LR 04 31 20.8
comp=Z,2μm,18.3s,baz=78,slow=42
**KLR Kul'dur 39.45 53** LR LR 04 29 35.0
comp=Z,876nm,18.4s,baz=268,slow=39
**KLR Kul'dur 39.45 53** *e*P **P 04 11 39.5 -0.9**
KLR pmax pmax
comp=Z,14nm,1.7s
**USA0B Ussuriysk Arra 39.75 61**⇓ *e*P **P 04 11 41.9 -1.1**
**USRK Ussuriysk Ar. 39.75 61** P **P 04 11 42.0 -1.0**
comp=Z,4.1nm,0.8s,baz=264,slow=9.0,SNR=13
USRK LR LR 04 29 24.1
comp=Z,2μm,20.2s,baz=272,slow=38
comp=Z,4.1nm,0.8s
**USRK Ussuriysk Ar. 39.75 61** P **P 04 11 42.0 -1.0**
**PURM Purcari 39.76 303** P **P 04 11 42.6 -0.4**
comp=Z,47nm,0.8s
**AK08 Malin Array Si 40.18 309** P **P 04 11 46.0 -0.5**
**AK10 Malin Array Si 40.18 309** P **P 04 11 45.3 -1.2**
**AKASG Malin Array Be 40.20 309** P **P 04 11 45.5 -1.2**
comp=Z,0.8nm,0.4s,baz=80,slow=7.9,SNR=14
AKASG PP **PP 04 13 18.7 -0.3**
comp=Z,1.7nm,0.7s,baz=85,slow=11,SNR=4.6
AKASG LR LR 04 31 04.2
comp=Z,2μm,19.3s,baz=76,slow=40
comp=Z,0.8nm,0.4s
**AK05 Malin Array Si 40.22 309** P **P 04 11 46.5 -0.3**
AK05 pP **pP 04 11 49.8 -0.7**
**KIEV Kiev 40.22 309** P **P 04 11 46.6 -0.2**
**KIEV Kiev 40.22 309** P **P 04 11 46.6 -0.2**
KIEV pmax pmax
comp=Z,9.0nm,0.7s
**KIEV Kiev 40.22 309** P **P 04 11 46.2 -0.6**
comp=Z,60nm,1.2s
**MILM Milestii Mici 40.47 303** *e*P **P 04 11 48.0 -0.9**
MILM *e*S **S 04 17 59.0 +1.2**
MILM *e*L L 04 25 15.0
MILM LQM 04 29 16.0
comp=Z,2μm,16.0s
MILM LRM MLR 04 32 24.0
comp=Z,1μm,16.0s
**MILM Milestii Mici 40.47 303** *e*P **P 04 11 48.0 -0.9**
MILM *e*S **S 04 17 59.0 +1.2**
MILM MLR MLR
comp=Z,1μm,16.0s
**YAK Yakutsk 40.56 33** *e*P **P 04 11 49.1 -0.4**
YAK *e**PP **sP 04 11 56.1 +1.4**
YAK *e* 04 13 49.6
YAK *e*S **S 04 17 57.5 -1.4**
YAK *e**SS **sS 04 18 07.4 +2.4**
YAK *e* 04 21 57.3
YAK pmax pmax
comp=Z,32nm,1.5s
YAK pmax pmax
comp=E,18nm,1.4s
YAK pmax pmax
comp=N,3.0nm,1.1s
YAK smax smax
comp=N,47nm,3.0s
YAK smax smax
comp=E,16nm,3.0s
YAK MLR MLR
comp=Z,1μm,16.0s
YAK MLR MLR
comp=E,850nm,16.0s
YAK MLR MLR
comp=N,302nm,14.0s
**MI30 MI30,Zelenitsa 40.86 309** P **P 04 11 51.0 -1.2**
**JNU Nakatsue 40.98 78** P **P 04 11 52.6 -0.8**
**JNU Nakatsue 40.98 78** LR LR 04 28 26.5
comp=N,1μm,20.1s,baz=294,slow=36
**JOW Kunigami 41.03 88** LR LR 04 29 54.1
comp=N,1μm,19.5s,baz=308,slow=38
**VALR Valaam 41.05 326**⇓ *e*P **P 04 11 51.4 -2.1**
VALR pmax pmax
comp=Z,25nm,0.9s
**ELL Elmali 41.05 288** P **P 04 11 54.3 +0.3**
**ELL Elmali 41.05 288** P **P 04 11 54.3 +0.3**
ELL pmax pmax
comp=Z,99nm,0.8s
**MI28 Mi28,Pidlybu 41.20 310** P **P 04 11 54.5 -0.4**
**MNK Minsk 41.30 315** *i* P **P 04 11 54.8 -0.9**
comp=E,10.0nm,0.8s,baz=96
MNK *i* P **P 04 11 54.8 -0.9**
comp=N,6.0nm,0.6s,baz=96
MNK *i* P **P 04 11 54.8 -0.9**
comp=Z,15nm,0.8s,baz=96
MNK *i* S **S 04 18 09.3 -0.7**
baz=96
MNK *i* SS **SS 04 21 13.7 +0.7**
baz=96
MNK *i* SSS SSS 04 21 40.1
baz=96
MNK *i* LQ LQ 04 25 59.6
baz=96
MNK *i* LR LR 04 29 34.7
baz=96
MNK *i* LRM MLR 04 30 33.2
comp=Z,2μm,16.5s,baz=96

MNK *i* LRM MLR 04 30 37.5
comp=E,551nm,15.1s,baz=96
MNK *i* LRM MLR 04 31 08.0
comp=N,885nm,14.3s,baz=96
**MNK Minsk 41.30 315** *i* P **P 04 11 54.7 -0.9**
MNK *i* S **S 04 18 09.2 -0.7**
MNK *i* SS **SS 04 21 13.7 +0.7**
MNK pmax pmax
comp=E,10.0nm,0.8s
MNK pmax pmax
comp=Z,15nm,0.8s
MNK pmax pmax
comp=N,6.0nm,0.6s
MNK MLR MLR
comp=Z,2μm,17.0s
MNK MLR MLR
comp=E,551nm,15.0s
MNK MLR MLR
comp=N,885nm,14.0s
**JOF Joensuu 41.32 328** *e*P **P 04 11 55.8 0.0**
**ATD Arta Tunnel 41.79 245** LR LR 04 30 42.1
comp=N,32nm,20.1s,baz=53,slow=38
**NACGM Naroch 41.97 316** *e*P **P 04 12 02.7 +1.5**
comp=E,959nm,0.9s,baz=95
**VRI Vrincioaia 41.98 302** P **P 04 11 59.7 -1.7**
**TESR Tescani 41.98 303** P **P 04 12 01.0 -0.4**
comp=E,15nm,0.7s
**KMPD K-Podol'skiy 41.99 306** P **P 04 12 01.1 -0.4**
KMPD P **P 04 12 01.2 -0.3**
**HORU Horodok 42.00 307** P **P 04 12 01.3 -0.2**
**HORU Horodok 42.00 307** P **P 04 12 01.3 -0.2**
**RNPP9 Sopachiv 42.33 310** P **P 04 12 03.6 -0.5**
**VSU Vasula 42.44 321***c* *i*P **P 04 12 04.8 -0.2**
VSU pmax pmax
comp=Z,38nm,1.5s
**MLR Muntele Rosu 42.56 301** P **P 04 12 06.5 +0.2**
MLR IAmb IAmb 04 12 13.6
comp=Z,33nm,0.9s
**MLR Muntele Rosu 42.56 301** P **P 04 12 06.5 +0.2**
comp=Z,7.2nm,0.6s,baz=118,slow=14,SNR=11
MLR LR LR 04 33 23.3
comp=Z,927nm,18.2s,baz=58,slow=41
comp=Z,7.2nm,0.6s
**MLR Muntele Rosu 42.56 301** P **P 04 12 05.7 -0.6**
comp=Z,42nm,0.9s
**BURAR Bucovina Array 42.88 305** P **P 04 12 08.0 -0.9**
**BURAR Bucovina Array 42.88 305** P **P 04 12 09.2 +0.4**
BURAR pmax pmax
comp=Z,3.0nm,0.9s
**BUR08 Bucovina Ar. S 42.89 305** P **P 04 12 08.7 -0.2**
**ARBE Arbavere 42.99 322** *e*P **P 04 12 09.8 +0.4**
**FIA1 FINESS Array S 43.31 325** P **P 04 12 11.4 -0.6**
FIA1 IAmb IAmb 04 12 17.2
comp=Z,33nm,0.8s
**FINES FINESS Array B 43.31 325** P **P 04 12 11.5 -0.4**
**FINES FINESS Array B 43.31 325** P **P 04 12 11.8 -0.2**
comp=Z,11nm,0.6s,baz=106,slow=9.2,SNR=95
FINES PP **PP 04 13 51.5 -0.9**
comp=Z,5.0nm,0.9s,baz=123,slow=10,SNR=2.0
FINES LR LR 04 31 05.3
comp=Z,3μm,20.1s,baz=98,slow=37
comp=Z,11nm,0.6s
**SBUM Sibu 43.48 131** P **P 04 12 13.6 -0.3**
**LVV L'vov 43.54 308** *e*P **P 04 12 15.1 +1.1**
**PABE Paberze 43.63 316** IAmb IAmb 04 12 15.6
comp=Z,26nm,0.6s
**PABE Paberze 43.63 316** *e*P **P 04 12 14.9 +0.4**
**MEF Metsahovi 43.90 323** *e*P **P 04 12 17.1 +0.3**
**MTSE Matsula 43.99 321** *e*P **P 04 12 17.8 +0.3**
**KEF Keuruu 44.02 326** *e*P **P 04 12 18.1 +0.5**
**TIXI Tiksi 44.22 20** LR LR 04 32 48.9
comp=Z,4μm,19.7s,baz=260,slow=39
**TIXI Tiksi 44.22 20**‖ *e*P **P 04 12 21.1 +1.9**
TIXI pmax pmax
comp=Z,47nm,2.0s
**KWP Kalwaria Pacla 44.41 308** *e*P **P 04 12 22.1 +1.2**
**KWP Kalwaria Pacla 44.41 308** IAmb IAmb 04 12 28.0
comp=Z,56nm,1.7s
**KWP Kalwaria Pacla 44.41 308** P **P 04 12 23.3 +2.3**
**DRGR 44.66 304** P **P 04 12 27.8 +4.7**
**KOLS Kolonicke sedl 44.74 307** *e*P **P 04 12 23.7 0.0**
**KOLS Kolonicke sedl 44.74 307** *e*P **P 04 12 23.7 0.0**
**VAF Ylistaro 45.18 327** *e*P **P 04 12 27.1 +0.2**
**VAF Ylistaro 45.18 327** P **P 04 12 28.5 +1.6**
VAF pmax pmax
comp=Z,35nm,0.8s
**CRVS Cervenica-Dubn 45.28 307** *e*P **P 04 12 30.1 +2.2**
**CRVS Cervenica-Dubn 45.28 307** *e*P **P 04 12 30.1 +2.2**
**BEL Belsk 45.50 311** *e*P **P 04 12 30.1 +0.5**
**BZS Buzias 45.56 302** P **P 04 12 34.9 +4.7**
BZS pmax pmax
comp=Z,8.0nm,1.0s
**ARCES ARCESS Array B 45.70 336** P **P 04 12 31.0 0.0**
ARCES IAmb IAmb 04 12 46.2
comp=Z,30nm,1.4s
**ARCES ARCESS Array B 45.70 336** P **P 04 12 31.3 +0.3**
comp=Z,3.7nm,0.7s,baz=116,slow=8.2,SNR=6.1
ARCES LR LR 04 34 30.1
comp=Z,256nm,19.8s,baz=109,slow=40
comp=Z,3.7nm,0.7s
**MJB9 Matsu-Tunnel 45.80 71** P **P 04 12 31.0 -1.3**
MJB9 IAmb IAmb 04 12 35.9
comp=Z,8.2nm,0.6s
**MAJO Matsushiro 45.81 71** P **P 04 12 31.0 -1.3**
**MAJO Matsushiro 45.81 71**⇑ *i*P **P 04 12 31.2 -1.1**
MAJO pmax pmax
comp=Z,19nm,1.5s
**MJAR Matsushiro Arr 45.81 71** P **P 04 12 31.2 -1.1**
comp=Z,6.4nm,0.7s,baz=290,slow=9.7,SNR=14
MJAR LR LR 04 33 33.5
comp=Z,795nm,18.8s,baz=296,slow=39
comp=Z,6.4nm,0.7s
**NIE Niedzica 45.99 308** *e*P **P 04 12 35.5 +1.9**
**NIE Niedzica 45.99 308** P **P 04 12 36.1 +2.5**
**AAL Aland 46.08 323** *e*P **P 04 12 33.6 -0.5**
**OJC Ojcow 46.23 309** *e*P **P 04 12 35.6 +0.1**
**OJC Ojcow 46.23 309** IAmb IAmb 04 12 45.8
comp=Z,16nm,1.2s
**OJC Ojcow 46.23 309** P **P 04 12 37.9 +2.4**
**KTK1 Kautokeino 46.31 335** *e*P **P 04 12 35.8 0.0**
KTK1 IAmb IAmb 04 12 37.1
comp=Z,12nm,1.1s
KTK1 *e*S **S 04 19 24.4 +1.6**
KTK1 *e*SS **SS 04 22 53.1 +5.2**
KTK1 IAMs_20 IAMs_20 04 32 27.9
comp=Z,2μm,14.0s
**PSZ Piszkesteto 46.42 306** P **P 04 12 36.0 -1.1**
PSZ IAmb IAmb 04 12 48.0
comp=Z,27nm,1.7s
**PSZ Piszkesteto 46.42 306** P **P 04 12 36.0 -1.1**
PSZ pmax pmax
comp=Z,27nm,1.7s
**FURI Furi 46.61 246** LR LR 04 35 11.9
comp=Z,1μm,19.0s,baz=44,slow=40
**HAMF Hammerfest 46.65 337** *e*P **P 04 12 39.0 +0.6**
HAMF IAmb IAmb 04 12 40.6
comp=Z,16nm,1.0s
HAMF *e*S **S 04 19 30.0 +2.4**
HAMF *e*SS **SS 04 22 57.7 +4.4**
HAMF IAMs_20 IAMs_20 04 31 01.8
comp=Z,1μm,14.6s
**YSS Yuzh-Sakhalins 46.94 56** P **P 04 12 40.4 -0.7**
**YSS Yuzh-Sakhalins 46.94 56** *e*P **P 04 12 40.5 -0.5**
YSS *e* 04 14 34.8
YSS *e*S **S 04 19 29.6 -2.8**
YSS *e*SS **ScS 04 22 28.6 -7.4**
YSS pmax pmax
comp=Z,20nm,1.3s
YSS pmax pmax
comp=Z,200nm,3.2s
YSS MLR MLR
comp=E,2μm,15.0s
YSS MLR MLR
comp=Z,1μm,15.0s
**VYHS Vyhne 47.05 306** *e*P **P 04 12 42.8 +0.9**
**VYHS Vyhne 47.05 306** *e*P **P 04 12 42.8 +0.9**
**UPP Uppsala 47.25 322** *e*P **P 04 12 43.4 +0.2**
**ASAJ Asahikawa 47.32 59** LR LR 04 33 58.1
comp=Z,2μm,19.5s,baz=320,slow=38
**OKC Ostrava-Krasne 47.33 308** AMS AMS 04 34 30.0
comp=Z,1μm,23.0s
**JMM Marumori 47.43 68** P **P 04 12 43.5 -1.5**
**MORH Mrgy, Hungar 47.52 303**⇓ P **P 04 12 46.2 +0.7**
**MAUC Maruska 47.60 308** *e*P **P 04 12 45.9 -0.2**
MAUC *e*P **P 04 12 46.0 -0.2**

**VIKU Vikbolandet 47.70 320** *eP* **P 04 12 46.1 -0.6**
**MORC Moravsky Berou 47.73 308** IAmb IAmb 04 12 54.9
comp=Z,19nm,1.3s
**MORC Moravsky Berou 47.73 308** *eP* **P 04 12 47.5 +0.3**
**MORC Moravsky Berou 47.73 308** ⇓P **P 04 12 48.1 +0.9**
**MORC Moravsky Berou 47.73 308** ⇓P **P 04 12 48.1 +0.9**
**JAVC Velka Javorina 47.77 307** *eP* **P 04 12 47.7 +0.2**
**TRO Tromso 47.95 335** *eP* **P 04 12 49.2 +0.7**
TRO IAmb IAmb 04 12 53.7
comp=Z,11nm,0.9s
TRO *eS* **S 04 19 47.0 +0.9**
TRO *eSS* **SS 04 23 16.5 +2.2**
TRO IAMs_20 IAMs_20 04 33 50.3
comp=Z,2µm,16.8s
**JHJ Hachijo jima 2 48.08 75** LR LR 04 33 19.8
comp=Z,1µm,18.1s,baz=212,slow=36
**MODS Modra-Piesok 48.09 307** *eP* **P 04 12 51.1 +1.1**
**MODS Modra-Piesok 48.09 307** *eP* **P 04 12 51.1 +1.1**
**KRLC Kraliky 48.18 309** *eP* **P 04 12 51.1 +0.4**
KRLC AMS AMS 04 35 00.0
comp=Z,1µm,21.8s
**KRLC Kraliky 48.18 309** *eP* **P 04 12 51.1 +0.4**
KRLC MLR MLR
comp=Z,1µm,21.8s
**KSP Ksiaz 48.39 310** *eP* **P 04 12 52.0 -0.3**
**KSP Ksiaz 48.39 310** P **P 04 12 53.6 +1.3**
**VRAC Vranov 48.41 308** *eP* **P 04 12 53.4 +1.0**
**VRAC Vranov 48.41 308** P **P 04 12 53.1 +0.7**
comp=Z,3.9nm,0.8s,baz=84,slow=8.2,SNR=8.3
VRAC LR LR 04 35 43.4
comp=Z,894nm,19.2s,baz=78,slow=39
comp=Z,3.9nm,0.8s
**VRAC Vranov 48.41 308** ⇑P **P 04 12 54.5 +2.1**
**VRAC Vranov 48.41 308** ⇑P **P 04 12 54.5 +2.1**
**DPC Dobruska-Polom 48.44 309** *eP* **P 04 12 53.6 +0.9**
DPC *eS* **S 04 19 55.7 +2.0**
DPC AMS AMS 04 35 00.0
comp=Z,2µm,19.7s
**DPC Dobruska-Polom 48.44 309** *eP* **P 04 12 53.6 +0.9**
DPC *eS* **S 04 19 55.7 +2.0**
DPC MLR MLR
comp=Z,2µm,19.7s
**OSTC Ostas 48.48 310** *eS* **S 04 19 54.2 0.0**
OSTC AMS AMS 04 35 10.0
comp=Z,2µm,16.9s
**KRUC Moravsky 48.57 308** *eP* **P 04 12 54.4 +0.7**
**CHVC Chvalec 48.58 310** AMS AMS 04 35 20.0
comp=Z,2µm,17.3s
**UPC Upice 48.61 310** *eP* **P 04 12 54.1 +0.1**
UPC AMS AMS 04 35 20.0
comp=Z,2µm,17.1s
**UPC Upice 48.61 310** *eP* **P 04 12 54.1 +0.1**
UPC MLR MLR
comp=Z,2µm,17.1s
**BSD Bornholm Skovb 48.80 316** *eP* **P 04 12 53.2 -2.1**
**BSD Bornholm Skovb 48.80 316** *i* P **P 04 12 52.0 -3.3**
BSD IAmb IAmb 04 12 59.1
comp=Z,23nm,1.3s
**RONA Rosalia, Austr 48.85 306** *i* P **P 04 12 55.8 -0.2**
comp=Z,12nm,1.3s
**FAUS Fauske 48.89 332** *eP* **P 04 12 56.0 +0.2**
FAUS *eS* **S 04 20 02.5 +3.0**
FAUS *eSS* **SS 04 23 30.9 +1.3**
**CONA Conrad Observa 49.10 306** *eP* **P 04 12 57.6 -0.3**
comp=Z,20nm,1.3s
**MOR8 Moi Rana 49.10 330** *eP* **P 04 12 56.7 -0.8**
MOR8 IAmb IAmb 04 12 59.7
comp=Z,6.6nm,0.8s
MOR8 *eS* **S 04 20 00.5 -2.1**
MOR8 *eSS* **SS 04 23 34.0 +0.9**
MOR8 IAMs_20 IAMs_20 04 34 01.4
comp=Z,2µm,17.0s
**TREC Trest 49.12 308** AMS AMS 04 35 40.0
comp=Z,1µm,19.6s
**HFS Hagfors 49.23 322** P **P 04 12 58.0 -0.5**
comp=Z,11nm,0.6s,baz=90,slow=10,SNR=52
HFS LR LR 04 34 03.1
comp=Z,2µm,20.4s,baz=85,slow=36
comp=Z,11nm,0.6s
**HFS Hagfors 49.23 322** P **P 04 12 58.0 -0.5**
**DEL Delary 49.29 318** *eP* **P 04 12 58.5 -0.5**
**DEL Delary 49.29 318** *i* P **P 04 12 58.0 -1.0**
**ARSA Arzberg 49.45 305** *i* P **P 04 13 00.0 -0.5**
comp=Z,7.9nm,1.2s
**GOPC GO Pecny, Ondr 49.48 309** AMS AMS 04 35 50.0
comp=Z,2µm,20.6s
**PVCC Panska Ves 49.52 310** AMS AMS 04 35 50.0
comp=Z,2µm,19.0s
**GROS Grobnik 49.61 304** *i* P **P 04 13 01.1 -0.6**
**PRU Pruhonice 49.62 309** *eP* **P 04 13 02.2 +0.5**
PRU AMS AMS 04 35 50.0
comp=Z,2µm,19.9s
**PRU Pruhonice 49.62 309** *eP* **P 04 13 02.2 +0.5**
PRU MLR MLR
comp=Z,2µm,19.9s
**PRA Prague 49.68 309** AMS AMS 04 36 00.0
comp=Z,2µm,18.0s
**RGN Rugen 49.77 315** *eP* **P 04 13 03.1 +0.4**
**BORU Boraas 49.81 319** *eP* **P 04 13 01.6 -1.4**
**RICC Richard 49.82 310** AMS AMS 04 35 50.0
comp=Z,2µm,17.3s
**BRG Berggiesshubel 49.87 310** *eP* **P 04 13 03.9 +0.4**
BRG Amp 04 13 05.8
comp=Z,4.8nm,0.7s
**BRG Berggiesshubel 49.87 310** P P 04 13 10.3 +6.8
BRG Amp 04 13 11.8
comp=Z,8.2nm,0.8s
**BRG Berggiesshubel 49.87 310** S **S 04 20 18.0 +4.4**
**BRG Berggiesshubel 49.87 310** SS **SS 04 23 45.0 -0.9**
**BRG Berggiesshubel 49.87 310** *eP* **P 04 13 03.6 +0.1**
comp=Z,7.5nm,0.9s,baz=79,slow=7.5
**FABU Falkenberg 49.88 318** *eP* **P 04 13 01.2 -2.3**
**SOKA Soboth 49.89 305** *eP* **P 04 13 03.5 -0.4**
comp=Z,26nm,1.4s
**ZVC Zvikov 49.94 308** AMS AMS 04 36 00.0
comp=Z,1µm,20.1s
**CKRC Cesky Krumlov 49.97 308** *eS* **S 04 20 14.9 -0.2**
CKRC AMS AMS 04 36 20.0
comp=Z,900nm,19.9s
**MOA Molln 50.17 306** *eP* **P 04 13 05.3 -0.6**
comp=Z,9.4nm,1.2s
**NC405 NORSAR Array S 50.18 324** IAmb IAmb 04 13 10.6
comp=Z,15nm,0.8s
**HSKC Hora Svate Kat 50.23 310** AMS AMS 04 36 10.0
comp=Z,2µm,17.9s
**OBKA Obir 50.25 305** *i* P **P 04 13 06.6 0.0**
comp=Z,7.4nm,1.1s
**NC602 NORSAR Array S 50.28 323** IAmb IAmb 04 13 10.9
comp=Z,10nm,0.8s
**NC602 NORSAR Array S 50.28 323** *eP* **P 04 13 06.4 -0.2**
NC602 IAmb IAmb 04 13 10.6
comp=Z,11nm,0.8s
NC602 *eS* **S 04 20 19.1 +0.1**
NC602 *eSS* **SS 04 23 59.7 +7.6**
NC602 IAMs_20 IAMs_20 04 34 55.6
comp=Z,2µm,18.9s
**NORES NORESS Array B 50.28 323** P **P 04 13 06.1 -0.4**
**NC303 NORSAR Array S 50.34 324** IAmb IAmb 04 13 14.1
comp=Z,20nm,1.1s
**GEC2 GERESS Array S 50.36 308** IAmb IAmb 04 13 14.4
comp=Z,27nm,1.6s
**GEC2 GERESS Array S 50.36 308** *eP* **P 04 13 07.4 0.0**
comp=Z,10nm,1.1s,baz=79,slow=7.5
**GERES GERESS Array B 50.36 308** P **P 04 13 06.8 -0.6**
**GERES GERESS Array B 50.36 308** P **P 04 13 07.1 -0.3**
comp=Z,2.8nm,0.8s,baz=90,slow=2.7,SNR=13
GERES LR LR 04 37 02.6
comp=Z,805nm,18.5s,baz=76,slow=39
comp=Z,2.8nm,0.8s
**CLL Collm 50.38 311** IAmb IAmb 04 13 13.9
comp=Z,24nm,1.7s
**CLL Collm 50.38 311** *eP* **P 04 13 06.0 -1.5**
CLL *ex* x 04 13 12.0
comp=Z,11nm,1.3s
CLL *eS* **S 04 20 24.0 +3.2**
CLL *eSS* **SS 04 23 54.0 -0.1**
CLL AMS AMS 04 32 00.0
comp=N,3µm,21.0s
CLL AMS AMS 04 32 00.0
comp=E,1µm,20.2s
CLL AMS AMS 04 36 00.0
comp=Z,2µm,20.4s
CLL AMS AMS 04 36 00.0
**CLL Collm 50.38 311** *eP* **P 04 13 06.0 -1.5**
CLL *e* 04 13 12.0
CLL *eS* **S 04 20 24.0 +3.2**
CLL pmax pmax
comp=Z,20nm,1.8s
CLL MLR MLR
comp=Z,2µm,20.4s
**CLL Collm 50.38 311** *eP* **P 04 13 06.9 -0.5**
comp=Z,12nm,1.4s,baz=79,slow=7.5
**KHC Kasperske Hory 50.38 308** IAmb IAmb 04 13 09.0
comp=Z,31nm,1.9s
**KHC Kasperske Hory 50.38 308** *eP* **P 04 13 06.1 -1.5**
KHC *eS* **S 04 20 22.4 +1.4**
KHC AMS AMS 04 36 20.0
comp=Z,1µm,18.7s
**KHC Kasperske Hory 50.38 308** *d iP* **P 04 13 08.2 +0.6**
KHC pmax pmax
comp=Z,24nm,1.7s
**NB201 NORSAR Array S 50.39 324** IAmb IAmb 04 13 12.6
comp=Z,37nm,1.6s
**NB2 NORSAR Subarra 50.42 324** P **P 04 13 06.7 -1.0**
comp=Z,6.2nm,0.6s,baz=88,slow=7.9
**NB2 NORSAR Subarra 50.42 324** P **P 04 13 06.7 -1.0**
baz=88,slow=7.9
**NOA NORSAR Array B 50.42 324** P **P 04 13 06.7 -1.0**
comp=Z,4.3nm,0.6s,baz=88,slow=7.5,SNR=60
NOA LR LR 04 35 16.4
comp=Z,2µm,19.7s,baz=80,slow=37
comp=Z,4.3nm,0.6s
**MA2 Magadan 50.46 38** P **P 04 13 07.7 -0.2**
**MA2 Magadan 50.46 38** LR LR 04 35 31.0
comp=Z,829nm,19.3s,baz=268,slow=37
**MA2 Magadan 50.46 38** *d iP* **P 04 13 08.2 +0.3**
MA2 pmax pmax
comp=Z,68nm,1.7s
**CRNS Crni Vrh 50.53 304** *i* P **P 04 13 08.6 -0.1**
**BIOA Bad Ischl, Aus 50.62 306** *eP* **P 04 13 09.1 -0.2**
comp=Z,6.8nm,0.9s
**NBO00 NORSAR Array S 50.64 324** IAmb IAmb 04 14 06.0
comp=Z,27nm,1.6s
**OSL Oslo 50.73 322** *eP* **P 04 13 10.1 +0.2**
OSL *eS* **S 04 20 25.7 +0.4**
OSL *eSS* **SS 04 24 06.7 +7.5**
**WET Wettzell 50.83 308** *eP* **P 04 13 11.0 0.0**
comp=Z,8.8nm,1.2s,baz=79,slow=7.5
**TANN Tannenbergstha 50.87 310** *eP* **P 04 13 11.4 +0.2**
comp=Z,6.5nm,1.1s,baz=79,slow=7.5
**KBA Koelnbreinsper 50.94 305** *eP* **P 04 13 10.9 -1.0**
comp=Z,5.8nm,1.1s
**CUC Castrococco 50.94 296** P **P 04 13 10.9 -1.0**
**PLN Plauen 51.05 310** *eP* **P 04 13 12.4 -0.2**
comp=Z,5.4nm,1.1s,baz=79,slow=7.5
**SEY Seymchan 51.07 34** LR LR 04 36 41.8
comp=Z,1µm,18.3s,baz=318,slow=38
**SEY Seymchan 51.07 34** ⇓*iP* **P 04 13 12.8 +0.3**
SEY pmax pmax
comp=Z,36nm,1.3s
**ROTZ Rotzenmuhle 51.15 309** *eP* **P 04 13 13.6 +0.3**
comp=Z,3.9nm,1.3s,baz=79,slow=7.5
**GORT1 Trebel 51.16 313** *eP* **P 04 13 13.5 +0.3**
comp=Z,27nm,1.4s,baz=79,slow=7.5
**NEUB Neuenburg 51.16 311** *eP* **P 04 13 13.3 -0.1**
comp=Z,12nm,0.9s,baz=79,slow=7.5
**RJOB Jochberg 51.17 306** *eP* **P 04 13 13.2 -0.3**
comp=Z,4.8nm,0.9s,baz=79,slow=7.5
**MANZ Manzenberg 51.17 309** *eP* **P 04 13 13.7 +0.2**
comp=Z,2.5nm,1.4s,baz=79,slow=7.5
**FLTG Flechtingen 51.30 312** *eP* **P 04 13 13.6 -0.8**
comp=Z,17nm,1.1s,baz=79,slow=7.5
**LESA Schwarzleotal 51.31 306** *eP* **P 04 13 14.5 -0.1**
comp=Z,13nm,1.2s
**KONO Kongsberg 51.31 322** *eP* **P 04 13 14.3 0.0**
KONO IAmb IAmb 04 13 14.9
comp=Z,8.5nm,0.8s
KONO *eS* **S 04 20 33.4 0.0**
KONO *eSS* **SS 04 24 16.4 +7.9**
KONO IAMs_20 IAMs_20 04 35 49.0
comp=Z,2µm,21.6s
**MOX Moxa 51.36 310** *eP* **P 04 13 14.8 -0.1**
comp=Z,5.7nm,1.0s,baz=79,slow=7.5
MOX *eL* L 04 36 53.8
comp=Z,2µm,20.8s
**DOMB Dombas 51.40 325** *eP* **P 04 13 15.1 +0.1**
DOMB IAmb IAmb 04 13 21.0
comp=Z,20nm,1.3s
DOMB *eSS* **SS 04 24 10.3 +0.3**
DOMB IAMs_20 IAMs_20 04 36 11.5
comp=Z,2µm,15.0s
**ABTA Abfaltersbach 51.57 305** *eP* **P 04 13 15.3 -1.3**
comp=Z,4.9nm,0.9s
**BSEG Bad Segeberg 51.60 315** *eP* **P 04 13 16.9 +0.4**
comp=Z,18nm,0.9s,baz=79,slow=7.5
**GRF Grafenberg Arr 51.79 309** *eP* **P 04 13 18.7 +0.6**
comp=Z,16nm,1.2s,baz=79,slow=7.5
GRF *eL* L 04 37 32.0
comp=Z,2µm,19.5s
**GRFO Grafenberg 51.79 309** P **P 04 13 18.1 0.0**
**GRFO Grafenberg 51.79 309** P **P 04 13 18.1 0.0**
GRFO pmax pmax
comp=Z,15nm,1.0s
**KBS Kingsbay 51.87 347** *eP* **P 04 13 17.2 -1.0**
KBS IAmb IAmb 04 13 24.0
comp=Z,43nm,1.6s
KBS *eS* **S 04 20 41.8 +1.1**
KBS *eSS* **SS 04 24 20.7 +3.9**
KBS IAMs_20 IAMs_20 04 39 05.7
comp=Z,1µm,12.6s
**CLZ Clausthal 51.91 312** *eP* **P 04 13 19.1 +0.1**
comp=Z,24nm,1.3s,baz=79,slow=7.5
**NRDL Niedersach Rie 51.96 313** *eP* **P 04 13 19.5 +0.3**
comp=Z,23nm,1.1s,baz=79,slow=7.5
**HOMB Hornsund 52.02 320** *i* P **P 04 13 19.0 -0.6**
**WTTA Wattenberg 52.04 306** *eP* **P 04 13 20.0 -0.2**
comp=Z,15nm,1.4s
**FUR Furstenfeldbru 52.07 307** *eP* **P 04 13 20.6 +0.4**
comp=Z,19nm,1.0s,baz=79,slow=7.5
**GTTG Gottingen 52.22 312** *eP* **P 04 13 21.4 +0.2**
comp=Z,15nm,0.7s,baz=79,slow=7.5
**JCJ Chichijima 52.27 81** LR LR 04 35 55.8
comp=Z,620nm,19.9s,baz=184,slow=37
**CTI Castel Tesino 52.31 305** P **P 04 13 21.9 -0.2**
**CTI Castel Tesino 52.31 305** P **P 04 13 21.9 -0.2**
CTI pmax pmax
comp=Z,4.0nm,0.7s
**SQTA Sankt Quirin 52.33 306** *eP* **P 04 13 21.5 -0.8**
comp=Z,9.9nm,1.2s
**UBBA Unterbreizbach 52.34 311** *eP* **P 04 13 22.0 0.0**
comp=Z,22nm,1.8s,baz=79,slow=7.5
**RETH Rethem/Aller, 52.36 313** *eP* **P 04 13 22.3 +0.1**
comp=Z,7.9nm,1.3s,baz=79,slow=7.5
**MOTA Moosalm 52.37 306** *eP* **P 04 13 22.0 -0.6**
comp=Z,7.6nm,0.9s
**RETA Reutte 52.56 306** *eP* **P 04 13 23.6 -0.3**
comp=Z,9.3nm,1.2s
**SNART Snartemo 52.69 320** *eP* **P 04 13 24.5 0.0**
**SNART Snartemo 52.69 320** *i* P **P 04 13 23.0 -1.6**
**FETA Feichten 52.70 306** *eP* **P 04 13 24.2 -0.8**
comp=Z,8.3nm,1.2s
**VAE Valguarnera 52.75 293** LR LR 04 40 32.6
comp=Z,363nm,18.1s,baz=86,slow=41
**HYA Hoyanger 52.85 324** *eP* **P 04 13 25.9 +0.1**
HYA IAmb IAmb 04 13 32.4
comp=Z,20nm,1.5s
HYA *eS* **S 04 20 58.3 +3.9**
HYA *eSS* **SS 04 24 34.1 +1.4**
HYA IAMs_20 IAMs_20 04 36 24.3
comp=Z,2µm,19.2s
**UBR Ueberruh 52.95 307** *eP* **P 04 13 26.8 0.0**
comp=Z,15nm,1.2s,baz=79,slow=7.5
**DAVA Damuels 53.19 306** *i* P **P 04 13 27.5 -1.2**
comp=Z,20nm,1.0s
**KASTN Kahler Asten 53.24 311** *eP* **P 04 13 28.7 -0.1**
comp=Z,2.2nm,0.9s,baz=79,slow=7.5
**STU Stuttgart 53.29 308** P **P 04 13 28.7 -0.5**
STU IAmb IAmb 04 13 36.8
comp=Z,11nm,0.7s
**STU Stuttgart 53.29 308** P **P 04 13 28.7 -0.5**
STU pmax pmax
comp=Z,11nm,0.7s
**STU Stuttgart 53.29 308** *eP* **P 04 13 29.3 +0.1**
comp=Z,28nm,0.8s,baz=79,slow=7.5
**FOO Floro 53.34 325** *eS* **S 04 21 04.1 +2.9**
FOO *eSS* **SS 04 24 41.4 +0.9**
FOO IAMs_20 IAMs_20 04 36 48.7
comp=Z,2µm,16.7s
**BER Bergen 53.36 323** *eP* **P 04 13 29.8 +0.3**
BER IAmb IAmb 04 13 30.3
comp=Z,12nm,0.6s
BER *eS* **S 04 21 02.1 +0.7**
BER *eSS* **SS 04 24 43.3 +2.5**
BER IAMs_20 IAMs_20 04 36 50.8
comp=Z,2µm,19.5s
**IBBN Ibbenburen 53.41 313** *eP* **P 04 13 29.9 0.0**
comp=Z,18nm,1.4s,baz=79,slow=7.5
**ASK Askoy 53.42 323** *eP* **P 04 13 30.2 +0.3**
**TNS Taunus Mts 53.43 310** *eP* **P 04 13 30.0 -0.3**
comp=Z,5.5nm,0.8s,baz=79,slow=7.5
**BUG Bochum--Univer 53.89 312** *eP* **P 04 13 33.5 0.0**
comp=Z,7.9nm,0.9s,baz=79,slow=7.5
**BFO Black Forest 53.95 308** *eP* **P 04 13 34.6 +0.5**
comp=Z,3.9nm,1.0s,baz=79,slow=7.5
**KAPI Kappang 53.97 130** LR LR 04 39 16.6
comp=Z,513nm,21.7s,baz=306,slow=39
**KMBO Kilima Mbogo 54.47 238** P **P 04 13 37.6 -0.9**
**KMBO Kilima Mbogo 54.47 238** P **P 04 13 37.6 -0.9**
KMBO pmax pmax
comp=Z,6.0nm,1.0s
**CDF Champ du Feu 54.61 308** *eP* **P 04 13 40.1 +1.1**
CDF pmax pmax
comp=Z,13nm,1.2s
**BTNL Ternell 54.79 311** *dP* **P 04 13 40.6 +0.4**
**MEM Membach 54.86 311** *dx* x 04 13 44.5
**WLF Walferdange 55.00 310** IAmb IAmb 04 13 48.0
comp=Z,9.3nm,0.8s
**WLF Walferdange 55.00 310** *dP* **P 04 13 42.6 +0.9**
WLF *dpP* **pP 04 13 45.6 +0.1**
**WLF Walferdange 55.00 310** *eP* **P 04 13 42.0 +0.3**
comp=Z,10nm,1.0s,baz=79,slow=7.5
**HINF Hinteralfeld 55.04 308** *eP* **P 04 13 41.5 -0.5**
HINF pmax pmax
comp=Z,17nm,1.3s
**SENIN Lac Senin/Sane 55.15 306** P **P 04 13 41.3 -1.7**
**HAU Haudompre 55.32 308** *eP* **P 04 13 47.0 +3.0**
HAU pmax pmax
comp=Z,9.0nm,1.0s
**BCLA Clavier 55.34 311** *dP* **P 04 13 44.6 +0.5**
**RCHB Rochefort 55.45 311** *dP* **P 04 13 45.3 +0.4**
**BGES Gesves 55.48 311** *dP* **P 04 13 45.3 +0.2**
BGES *dx* x 04 13 48.4
BGES *dPcP* **PcP 04 14 40.4 -4.8**
**BMRD Maredsous 55.70 311** *dx* x 04 13 50.7
**GIVF Givet 55.72 311** *eP* **P 04 13 46.9 +0.1**
GIVF pmax pmax
comp=Z,13nm,1.2s
**LPG La Plagne 55.76 305** *eP* **P 04 13 47.6 0.0**
LPG pmax pmax
comp=Z,13nm,0.9s
**LPL La Plagne 55.77 305** *eP* **P 04 13 47.5 0.0**
LPL pmax pmax
comp=Z,16nm,0.9s
**SBF Sospel 55.79 303** *eP* **P 04 13 48.7 +1.2**
SBF pmax pmax
comp=Z,12nm,0.8s
**PET Petropavlovsk 55.82 45** *eP* **P 04 13 45.8 -1.7**
PET *eS* **S 04 21 34.5 -0.2**
**DOU Dourbes 55.86 311** *dP* **P 04 13 48.1 +0.3**
comp=Z,4.0nm,1.1s
**BNI Bardonecchia 55.94 305** P **P 04 13 49.1 +0.5**
**BNI Bardonecchia 55.94 305** P **P 04 13 49.2 +0.5**
BNI pmax pmax
comp=Z,10.0nm,1.1s
**MBDF Montbardon 55.98 304** *eP* **P 04 13 50.3 +1.3**
MBDF pmax pmax
comp=Z,8.0nm,1.0s
**BILL Bilibino 56.27 27** P **P 04 13 50.1 -0.4**
**BILL Bilibino 56.27 27**⇓*eP* **P 04 13 51.0 +0.5**
BILL *e* 04 15 55.3
BILL pmax pmax
comp=Z,27nm,1.8s
BILL MLR MLR
comp=Z,1µm,16.0s
**LOR Lormes 57.14 308** *eP* **P 04 13 58.9 +1.9**
LOR pmax pmax
comp=Z,7.0nm,1.2s
**JMIC Jan Mayen 57.17 337** LR LR 04 38 31.0
comp=Z,488nm,21.2s,baz=82,slow=36
**KEST Kesra 57.17 293** LR LR 04 42 10.9
comp=Z,391nm,19.0s,baz=359,slow=40
**SSB Saint Sauveur 57.31 305** *eP* **P 04 13 58.2 -0.1**
**SMF Signal de Mont 57.34 307** *eP* **P 04 13 57.7 -0.8**
SMF pmax pmax
comp=Z,9.0nm,1.0s
**VIVF Saint-Julien-l 57.36 305** *eP* **P 04 13 59.4 +0.8**
VIVF pmax pmax
comp=Z,12nm,1.4s
**AVF Avril sur Loir 57.62 307** *eP* **P 04 13 59.6 -0.8**
AVF pmax pmax
comp=Z,26nm,1.6s
**MBAR Mbarara 58.79 244** LR LR 04 42 37.8
comp=Z,862nm,18.3s,baz=26,slow=39
**EKA Eskdalemuir Ar 58.90 318** P **P 04 14 08.5 -0.7**
comp=Z,3.0nm,0.5s,baz=82,slow=7.2,SNR=22
comp=Z,3.0nm,0.5s
**CAF Calviac 59.08 306** *eP* **P 04 14 10.5 -0.2**
CAF pmax pmax
comp=Z,6.0nm,1.1s
**RJF Les Rejaudoux 59.31 306** *eP* **P 04 14 12.8 +0.5**
RJF pmax pmax
comp=Z,24nm,1.6s
**GRR Gorron 59.79 310** *eP* **P 04 14 14.6 -0.8**
GRR pmax pmax
comp=Z,5.0nm,0.5s
**LFF La Frestale 59.96 306** *eP* **P 04 14 16.6 -0.1**
LFF pmax pmax
comp=Z,12nm,1.3s
**CEST Esterri de Car 60.46 303** P **P 04 14 19.8 -0.6**
CEST IAmb IAmb 04 14 27.2
comp=Z,7.1nm,0.9s
**SGMF Saint Gilles 60.90 311** *eP* **P 04 14 22.6 -0.4**
SGMF pmax pmax
comp=Z,8.0nm,0.9s
**EPF Esparros 60.93 304** *eP* **P 04 14 23.2 -0.2**
EPF pmax pmax
comp=Z,1.0nm,0.6s
**QUIF Quistinic 61.40 310** *eP* **P 04 14 26.1 -0.3**
QUIF pmax pmax
comp=Z,35nm,1.6s
**ETSF Etsaut 61.59 304** *eP* **P 04 14 28.1 +0.2**
ETSF pmax pmax
comp=Z,2.0nm,0.5s
**SJPF Ste Jean 61.95 305** *eP* **P 04 14 30.3 0.0**
SJPF pmax pmax
comp=Z,4.0nm,0.9s
**OPO Ambohidratompo 62.26 217** LR LR 04 37 33.5
comp=Z,223nm,19.8s,baz=172,slow=32
**BORG Borgarnes 63.83 332** LR LR 04 41 20.7
comp=Z,664nm,19.2s,baz=58,slow=35
**CART Cartagena 64.06 299** P **P 04 14 43.2 -1.2**
**SHEM Shemya Is, Ala 64.72 42** LR LR 04 46 20.1
comp=Z,356nm,18.3s,baz=314,slow=39
**ESDC Sonseca Array 65.25 302** P **P 04 14 50.5 -1.7**
**ESDC Sonseca Array 65.25 302** P **P 04 14 51.6 -0.6**
comp=Z,1.2nm,0.9s,baz=56,slow=6.8,SNR=11
ESDC LR LR 04 47 29.7
comp=Z,491nm,18.1s,baz=45,slow=40
comp=Z,1.2nm,0.9s
**MVO Moncorvo 66.69 305** *eLQ* LQ 04 35 48.5
MVO *eLR* LR 04 42 02.0
comp=Z,515nm,20.0s
**PGAV Gavieira, Arco 67.16 306** *eLQ* LQ 04 38 10.4
PGAV *eLR* LR 04 39 43.2
comp=Z,457nm,20.0s
**PSA00 Pilbara Seismi 67.28 141** P **P 04 15 05.2 0.0**
PSA00 IAmb IAmb 04 15 12.9
comp=Z,27nm,1.6s
**MTE Manteigas 67.38 304** *eLQ* LQ 04 35 34.1
MTE *eLR* LR 04 39 05.0
comp=Z,496nm,18.0s
**PMRV Marv??o 67.73 303** *eLQ* LQ 04 37 07.3
PMRV *eLR* LR 04 37 36.7
comp=Z,416nm,18.0s
**B21K Ikpikpuk River 68.09 18** P **P 04 15 09.2 -0.5**
B21K IAmb IAmb 04 15 15.7
comp=Z,11nm,0.9s
**E19K Redstone River 68.84 21** IAmb IAmb 04 15 36.7
comp=Z,14nm,1.3s
**MDT Midelt 68.85 296** P **P 04 15 15.6 +0.3**
comp=Z,2.6nm,0.8s,baz=76,slow=8.3,SNR=4.4
MDT LR LR 04 49 48.2
comp=Z,118nm,20.2s,baz=64,slow=40
comp=Z,2.6nm,0.8s
**PVAQ Vaqueiros 68.90 301** *eLQ* LQ 04 36 23.2

PVAQ eLR LR 04 39 29.6
comp=Z,428nm,18.0s
**C23K Itkillik River 68.93 17 P P 04 15 13.6 -1.3**
**F19K Shaleruckik Mo 69.10 21 IAmb IAmb** 04 15 21.4
comp=Z,10nm,1.2s
**D22K Ayikyak River 69.10 18 P P 04 15 15.7 -0.4**
**F20K Avaraart Lake 69.55 20 P P 04 15 18.7 -0.1**
**G19K Purcell Mounta 69.76 22 IAmb IAmb** 04 15 26.0
comp=Z,25nm,1.3s
**E22K Anaktuvuk Pass 69.86 19 IAmb IAmb** 04 15 26.4
comp=Z,30nm,1.6s
**F21K Alatna River 70.06 20 P P 04 15 22.0 0.0**
**J16K Anvik River 70.51 25 P P 04 15 24.8 0.0**
**RES Resolute Bay 70.52 359** LR LR 04 47 26.0
comp=Z,672nm,21.6s,baz=5.0,slow=37
**G21K Allakaket 70.56 20 IAmb IAmb** 04 15 27.0
comp=Z,27nm,1.7s
**IMAR Indian Mountai 70.86 21 P P 04 15 25.9 -1.0**
**G23K Bananza Creek 71.37 19 IAmb IAmb** 04 15 35.9
comp=Z,32nm,1.8s
**D27M Malcolm River 71.54 15 P P 04 15 31.3 +0.2**
D27M IAmb IAmb 04 15 37.0
comp=Z,23nm,1.5s
**SFJD Kangerlussuaq 71.87 342** LR LR 04 52 27.9
comp=Z,491nm,18.4s,baz=34,slow=40
**L16K Owhat River 71.93 26 P P 04 15 34.6 +1.2**
**G24K Hadweenzic Riv 72.05 18 IAmb IAmb** 04 15 40.2
comp=Z,30nm,1.4s
**H23K Yukon River 72.17 20 IAmb IAmb** 04 15 41.1
comp=Z,31nm,1.6s
**BMAR Burnt Mountain 72.20 17 P P 04 15 35.3 +0.2**
**E27K Coleen River 72.27 15 IAmb IAmb** 04 15 43.5
comp=Z,9.3nm,0.9s
**MLY Manley 72.42 20 P P 04 15 36.9 +0.5**
MLY IAmb IAmb 04 15 42.1
comp=Z,22nm,1.3s
**FYU Fort Yukon 72.72 18 P P 04 15 37.3 -0.8**
**I23K Minto, Yukon-K 72.72 20 IAmb IAmb** 04 15 40.8
comp=Z,22nm,1.4s
**E29M Blow River 72.88 14 IAmb IAmb** 04 15 47.1
comp=Z,11nm,0.8s
**BPAW Bear Paw Mtn. 73.04 21 IAmb IAmb** 04 15 44.6
comp=Z,38nm,1.8s
**POKR Poker Plat Res 73.28 19 P P 04 15 41.0 -0.5**
POKR IAmb IAmb 04 15 47.3
comp=Z,29nm,1.4s
**COLA College 73.35 20** *c* **e P IAmb 04 15 42.5 +0.7**
COLA pmax pmax
comp=Z,23nm,1.1s
**KTH Kantishna Hill 73.46 22 IAmb IAmb** 04 15 48.1
comp=Z,27nm,1.4s
**PRP Porcupine Dome 73.47 18 IAmb IAmb** 04 15 48.9
comp=Z,32nm,1.8s
**CCB Clear Creek Bu 73.54 20 P P 04 15 42.6 -0.3**
CCB IAmb IAmb 04 15 48.7
comp=Z,28nm,1.6s
**IL31 73.69 19 IAmb IAmb** 04 15 48.5
comp=Z,27nm,1.6s
**ILAR Eielson Array 73.69 19 P P 04 15 43.0 -0.9**
**ILAR Eielson Array 73.69 19 P P 04 15 42.6 -1.2**
comp=Z,2.4nm,0.8s,baz=308,slow=4.0,SNR=17
ILAR PP PP **04 18 26.1 -1.4**
comp=Z,1.7nm,1.0s,baz=317,slow=8.5,SNR=4.4
ILAR LR LR 04 52 39.9
comp=Z,999nm,18.9s,baz=316,slow=40
comp=Z,2.4nm,0.8s
**ILAR Eielson Array 73.69 19 P P 04 15 43.0 -0.9**
**INK Inuvik 73.78 13 IAmb IAmb** 04 15 50.6
comp=Z,32nm,1.5s
**TORD Torodi Ar. Bea 73.92 275 P P 04 15 45.0 -1.0**
TORD IAmb IAmb 04 16 01.7
comp=Z,13nm,1.1s
**TORD Torodi Ar. Bea 73.92 275 P P 04 15 44.9 -1.1**
comp=Z,5.2nm,0.7s,baz=48,slow=5.7,SNR=18
TORD LR LR 04 51 04.3
comp=Z,657nm,21.4s,baz=60,slow=38
comp=Z,5.2nm,0.7s
**G29M Pine Creek 74.10 15 IAmb IAmb** 04 16 36.1
comp=Z,27nm,1.6s
**I26K Coal Creek Min 74.24 18 P P 04 15 47.4 +0.3**
I26K IAmb IAmb 04 15 58.0
comp=Z,18nm,1.4s
**G30M tAoh Zraii Nji 74.41 14 IAmb IAmb** 04 15 54.1
comp=Z,28nm,1.4s
**WRA Warramunga Arr 74.49 128 P P 04 15 48.6 -0.5**
**WRA Warramunga Arr 74.49 128 P P 04 15 47.8 -1.3**
comp=Z,2.4nm,0.7s,baz=326,slow=5.7,SNR=24
WRA LR LR 04 53 46.9
comp=Z,187nm,18.2s,baz=307,slow=40
comp=Z,2.4nm,0.7s
**WRA Warramunga Arr 74.49 128 P P 04 15 48.6 -0.5**
WRA pmax pmax
comp=Z,1.0nm,1.3s
**WRAB Tennant Creek 74.49 128 P P 04 15 47.6 -1.5**
WRAB IAmb IAmb 04 15 59.5
comp=Z,37nm,1.7s
**WRAB Tennant Creek 74.49 128** ⇑ *e* **P P 04 15 51.0 +1.9**
WRAB pmax pmax
comp=Z,30nm,2.2s
**WB2 Warramunga Arr 74.49 128 P P 04 15 48.4 -0.7**
WB2 IAmb IAmb 04 15 59.5
comp=Z,19nm,1.1s
**F31M Tsiigehtchic 74.50 13** IAmb IAmb 04 15 54.5
comp=Z,19nm,1.4s
**H29M Whitestone 74.61 15 P P 04 15 48.8 -0.4**
H29M IAmb IAmb 04 15 55.6
comp=Z,26nm,1.4s
**J26L Joseph Creek 74.79 18 IAmb IAmb** 04 15 52.4
comp=Z,29nm,1.5s
**G31M Satah River 74.85 14 IAmb IAmb** 04 15 58.2
comp=Z,11nm,0.8s
**SCRK Sand Creek 75.10 19 IAmb IAmb** 04 15 58.5
comp=Z,37nm,1.6s
**K27K Chicken 75.56 18 P P 04 15 54.5 -0.2**
**I30M Mount Dempster 75.90 15 IAmb IAmb** 04 16 01.8
comp=Z,24nm,1.5s
**DAWY Dawson 76.19 17 IAmb IAmb** 04 16 10.3
comp=Z,40nm,1.9s
**BCAR Beaver Creek A 76.42 19 P P 04 15 58.5 -1.2**
**K29M Barlow Dome 76.82 16 IAmb IAmb** 04 16 55.6
comp=Z,26nm,1.7s
**AS31 Alice Springs 76.94 131 P P 04 16 03.3 +0.2**
**ASAR Alice Springs 76.94 131 P P 04 16 03.0 -0.1**
**ASAR Alice Springs 76.94 131 P P 04 16 01.8 -1.4**
comp=Z,3.1nm,0.7s,baz=316,slow=5.5,SNR=27
ASAR LR LR 04 54 47.7
comp=Z,92nm,20.7s,baz=300,slow=40
comp=Z,3.1nm,0.7s
**ASAR Alice Springs 76.94 131 P P 04 16 03.0 -0.1**
**KDAK Kodiak Island 77.18 26** LR LR 04 54 34.7
comp=Z,439nm,18.9s,baz=336,slow=39
**L29M L29M 77.30 17 IAmb IAmb** 04 16 10.5
comp=Z,26nm,1.6s
**FRB Frobisher Bay 78.62 347** LR LR 04 55 28.7
comp=Z,336nm,18.2s,baz=26,slow=39
**M31M Drury Creek, Y 78.96 16 IAmb IAmb** 04 16 20.2
comp=Z,29nm,1.5s
**N31M Braeburn, Yuko 79.27 17 P P 04 16 14.5 -1.1**
N31M IAmb IAmb 04 16 23.9
comp=Z,15nm,0.8s
**TSUM Tsumeb 80.81 239** LR LR 04 56 41.5
comp=Z,269nm,18.4s,baz=39,slow=39
**YKA Yellowknife Ar 81.99 7 P P 04 16 29.9 -0.1**
**YKA Yellowknife Ar 81.99 7 P P 04 16 28.5 -1.5**
comp=Z,1.1nm,0.7s,baz=346,slow=5.1,SNR=3.1
YKA LR LR 04 57 41.9
comp=Z,275nm,18.6s,baz=334,slow=39
comp=Z,1.1nm,0.7s
**YKA Yellowknife Ar 81.99 7 P P 04 16 29.9 -0.1**
**BOSA Boshof 82.33 227 P P 04 16 31.9 -0.6**
**BOSA Boshof 82.33 227 P P 04 16 31.3 -1.1**
comp=Z,7.9nm,0.9s,baz=61,slow=4.2,SNR=8.8
BOSA LR LR 04 51 23.4
comp=Z,267nm,21.6s,baz=29,slow=34
comp=Z,7.9nm,0.9s
**BOSA Boshof 82.33 227 P P 04 16 31.9 -0.6**
BOSA pmax pmax
comp=Z,96nm,2.0s
**CTA Charters Tower 82.64 121** LR LR 04 57 08.8
comp=Z,12nm,20.8s,baz=287,slow=38
**CTAO Charters Tower 82.64 121 P P 04 16 33.9 -0.2**
CTAO IAmb IAmb 04 16 56.5
comp=Z,18nm,1.4s
**CTAO Charters Tower 82.64 121 P P 04 16 33.9 -0.2**
CTAO pmax pmax
comp=Z,18nm,1.4s
**DBIC Dimbokro 82.86 273 P P 04 16 33.9 -1.5**
comp=Z,5.9nm,0.9s,baz=94,slow=7.2,SNR=2.2
DBIC LR LR 04 57 16.6
comp=Z,808nm,18.9s,baz=44,slow=38
comp=Z,5.9nm,0.9s
**HNR Honiara 86.41 104** LR LR 04 54 48.5
comp=Z,4µm,21.4s,baz=10,slow=35
**STKA Stephens Creek 87.55 132** LR LR 04 59 57.3
comp=Z,254nm,18.9s,baz=282,slow=38
**SUR Sutherland 87.70 227** LR LR 04 55 14.0
comp=Z,334nm,19.9s,baz=40,slow=35
**BBTS Babate 87.75 286** LR LR 05 04 18.4
comp=Z,298nm,18.1s,baz=304,slow=41
**ULM Lac du Bonnet 95.03 358** LR LR 05 03 51.7
comp=Z,417nm,20.6s,baz=6.5,slow=38
**NEW Newport 95.49 12** LR LR 05 04 48.0
comp=Z,170nm,20.5s,baz=349,slow=38
**SADO Sadowa 98.55 346** LR LR 05 07 15.9
comp=Z,423nm,19.8s,baz=60,slow=38
**DZM Mont Dzumac 98.78 111** *e* LR LR 04 49 54.9
comp=Z,276nm,24.1s
**DZM Mont Dzumac 98.78 111** *e* LR LR 05 05 08.1
comp=Z,100nm,19.2s,baz=290,slow=37
**TROLL Troll, Antarti 119.50 200** ⇑P **PKPdf 04 22 52.2 -7.1**
comp=Z,34nm,0.3s
**SNAA Sanae 120.97 202** PKP **PKPdf 04 23 01.1 -0.9**
comp=Z,0.5nm,0.8s,baz=247,slow=8.1,SNR=6.4
**VNDA Vanda 121.97 165** PKP **PKPdf 04 23 02.7 -0.9**
comp=Z,0.5nm,0.9s,baz=245,slow=4.1,SNR=3.6
**VNA2 Neumayer--Watz 122.17 203** ⇑P **PKPdf 04 23 02.0 -2.2**
baz=15,slow=1.1
**VNA3 Neumayer Olymp 122.96 203** ⇑P **PKPdf 04 23 03.9 -1.8**
**QSPA South Pole Qui 124.83 180** PKP **PKPdf 04 23 07.6 -1.9**
comp=Z,2.2nm,1.0s,baz=240,slow=0.2,SNR=4.3
**PPT2 Papeete2 131.94 82** *e* LR LR 05 05 09.6
comp=Z,542nm,27.0s
PPT2 *e* LR LR 05 05 17.7
comp=Z,359nm,27.5s
**TAOE Nuku Hiva Isla 134.24 65** *e* LR LR 05 06 12.7
comp=Z,359nm,29.1s
**CPUP Villa Florida 143.37 272** PKP **PKPdf 04 23 44.7 -0.5**
comp=Z,5.3nm,1.1s,baz=148,slow=1.1,SNR=5.2
**LPAZ La Paz 146.72 296** PKPbc **PKPdf 04 23 52.3 +0.3**
comp=Z,2.5nm,0.7s,baz=19,slow=3.5,SNR=4.3

*TUN* ***04*** *04:06:57.4, 34°.39N×14°.98E, h66km±2km, MD4.9*
*LDG* ***04*** *04:07:07.5±0.5, 34°.34N×13°.43E, h2km, Ml3.5/8, Error ellipse: s-maj=10.6km s-min=9.1km az=56.0*
*IDC* ***04*** *04:07:08.7±0.9, 34°.47N×13°.73E, h0km, mb3.7/7, mbtmp3.7/16, ML2.9/6, MS4.6/1, Error ellipse: s-maj=21.2km s-min=17.8km az=128.0*
*MED_RC* ***04*** *04:07:08.0±0.6, 34°.33N×13°.65E, h18km±2km, MW4.2/14, Moment Tensor Solution. Mantle waves: s14,c19; Duration: 1s0 Moment tensor: Scale 10^15 Nm; Mrr-1.80±.40; Mθθ 0.94±.24; Mϕϕ 0.86±.25; Mrθ-1.30±.34; Mθϕ-1.47±.14; Mϕr 1.01±.40; Best double couple: M=2.66000×10^15 NP1=ϕs 129.00000°, δ 64.00000°, λ-95.00000°. NP2=ϕs 321.00000°, δ 26.00000°, λ-79.00000°. Principal axes: T 2.9400, Plg19.0000°, Azm223.0000°; N -0.5500, Plg5.0000°, Azm132.0000°; P -2.3800, Plg70.0000°, Azm28.0000°; nsta1 refers to body waves, nsta2 refers to surface waves, cutoff=35s.*

**ISC 04 04:07:08.9±0.7, 34°.39N±0.06×13°.74E±0.05, h10km, n114, σ2s 8/0 8/120, mb3.7/7, 19C-6D, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WDD** | **Wied Dalam** | **1.58** | **24** | ⇑P | **Pn** | **04 07 35.7** | **-1.3** |
| **HANT** | **Hania** | **3.12** | **298** | *i* P | **Pn** | **04 07 56.5** | **-1.7** |
| **VAE** | **Valguarnera** | **3.13** | **10** | Pn | **Pn** | **04 07 58.2** | **-0.2** |
| | 12nm,0.3s,baz=358,slow=14,SNR=31 | | | | | | |
| VAE | | | | Sn | **Sn** | **04 08 33.4** | **-2.3** |
| | 52nm,0.3s,baz=186,slow=23,SNR=7.3 | | | | | | |
| | 28nm,0.3s | | | | | | |
| **MEDT** | **Meda** | **3.18** | **266** | *i* P | **Pn** | **04 07 58.1** | **-0.9** |
| **CLTB** | **Caltabellotta** | **3.21** | **352** | ⇑P | **Pn** | **04 07 57.9** | **-1.6** |
| **TATN** | **Tataouine** | **3.24** | **237** | ⇑P | **Pn** | **04 07 58.2** | **-1.6** |
| **TATN** | **Tataouine** | **3.24** | **237** | *i* P | **Pn** | **04 07 58.4** | **-1.4** |
| **SGNT** | **Sidi Gnaou** | **3.30** | **258** | *i* P | **Pn** | **04 08 00.4** | **-0.2** |
| **TROZ** | **Troza** | **3.60** | **290** | *i* P | **Pn** | **04 08 04.2** | **-0.6** |
| **KEST** | **Kesra** | **3.85** | **292** | Pn | **Pn** | **04 08 07.3** | **-0.9** |
| | 66nm,0.4s,baz=74,slow=6.8,SNR=270 | | | | | | |
| KEST | | | | Sn | **Sn** | **04 08 48.8** | **-4.7** |
| | 33nm,0.3s,baz=310,slow=20,SNR=24 | | | | | | |
| KEST | | | | LR | LR | 04 09 51.7 | |
| | comp=Z,74nm,18.7s,baz=318,slow=43 | | | | | | |
| **BERT** | **Berda** | **3.92** | **269** | *i* P | **Pn** | **04 08 09.6** | **+0.4** |
| **CEL** | **Celeste** | **4.23** | **24** | ⇑P | **Pn** | **04 08 13.7** | **+0.2** |
| **KRIT** | **Krib** | **4.28** | **298** | *i* P | **Pn** | **04 08 13.5** | **-0.7** |
| **BLIT** | **Baltah** | **4.54** | **302** | *i* P | **Pn** | **04 08 15.8** | **-1.9** |
| **GHAT** | **Ghardimaou** | **4.91** | **297** | *i* P | **Pn** | **04 08 13.0** | **-9.2** |
| **TIP** | **Timpagrande** | **5.36** | **26** | ⇑P | **Pn** | **04 08 28.7** | **-0.3** |
| **CUC** | **Castrocucco** | **5.83** | **16** | ⇑P | **Pn** | **04 08 35.2** | **-0.2** |
| **VSL** | **Villasalto** | **6.18** | **327** | ⇑P | **Pn** | **04 08 39.1** | **-1.1** |
| **DMLN** | **Damoulianata-K** | **6.59** | **52** | P | **Pn** | **04 08 45.4** | **-0.4** |
| DMLN | | | | S | **Sn** | **04 09 56.6** | **-4.4** |
| **LTHK** | **Lithakia** | **6.63** | **58** | P | **Pn** | **04 08 46.2** | **-0.2** |
| LTHK | | | | S | **Sn** | **04 09 57.7** | **-4.3** |
| **PSDA** | **Pessada-Kefalo** | **6.66** | **54** | P | **Pn** | **04 08 46.6** | **-0.2** |
| PSDA | | | | S | **Sn** | **04 09 57.8** | **-4.9** |
| **VLS** | **Valsamata** | **6.70** | **54** | P | **Pn** | **04 08 47.1** | **-0.2** |
| VLS | | | | S | **Sn** | **04 09 58.3** | **-5.4** |
| **RTZL** | **Ratzakli, Kefa** | **6.76** | **55** | P | **Pn** | **04 08 48.2** | **0.0** |
| RTZL | | | | S | **Sn** | **04 10 01.3** | **-4.0** |
| **FSK** | **Fiskardo** | **6.83** | **52** | P | **Pn** | **04 08 48.9** | **-0.3** |
| FSK | | | | S | **Sn** | **04 10 02.1** | **-4.9** |
| **PYL** | **PYLOS** | **6.97** | **67** | P | **Pn** | **04 08 51.3** | **+0.2** |
| **EVGI** | **Lefkada island** | **6.99** | **51** | P | **Pn** | **04 08 51.5** | **+0.2** |
| EVGI | | | | S | **Sn** | **04 10 07.2** | **-3.6** |
| **NYDR** | **Nydri-Lefkada** | **7.07** | **50** | P | **Pn** | **04 08 52.5** | **+0.2** |
| **LKD2** | **Lefkada island** | **7.08** | **50** | P | **Pn** | **04 08 52.6** | **-0.1** |
| **TSLK** | **Tsoukalades, L** | **7.10** | **49** | P | **Pn** | **04 08 53.1** | **+0.2** |
| **KEK** | **Kerkira** | **7.18** | **41** | P | **Pn** | **04 08 52.1** | **-1.9** |
| **KEK** | **Kerkira** | **7.18** | **41** | ⇑P | **Pn** | **04 08 52.5** | **-1.5** |
| **ITM** | **Ithomi** | **7.21** | **65** | P | **Pn** | **04 08 54.6** | **+0.2** |
| **ITM** | **Ithomi** | **7.21** | **65** | ⇓P | **Pn** | **04 08 55.1** | **+0.8** |
| **RLS** | **Riolos of Patr** | **7.23** | **57** | P | **Pn** | **04 08 56.4** | **+1.7** |
| **DRO** | **Drossia** | **7.36** | **59** | P | **Pn** | **04 08 57.5** | **+1.1** |
| **PVO** | **Paravola** | **7.55** | **54** | P | **Pn** | **04 09 00.0** | **+0.9** |
| **KLV** | **Kalavryta, Ach** | **7.71** | **59** | P | **Pn** | **04 09 02.3** | **+1.0** |
| **EFP** | **Efpalio** | **7.71** | **56** | P | **Pn** | **04 09 02.5** | **+1.2** |
| **JAN** | **Janina** | **7.74** | **45** | P | **Pn** | **04 09 00.4** | **-1.3** |
| **ALIK** | **Aliki, Aigiali** | **7.78** | **58** | P | **Pn** | **04 09 04.6** | **+2.5** |
| **GUR** | **Goura** | **7.80** | **61** | P | **Pn** | **04 09 03.7** | **+1.1** |
| **VLI** | **Veliai** | **7.84** | **70** | P | **Pn** | **04 09 04.1** | **+1.0** |
| **KALE** | **Kalithea** | **7.86** | **57** | P | **Pn** | **04 09 04.4** | **+1.1** |
| **EVR** | **Evrytania** | **7.90** | **53** | P | **Pn** | **04 09 06.7** | **+2.8** |
| **KPRO** | **Kipourio** | **8.23** | **45** | P | **Pn** | **04 09 09.4** | **+0.9** |
| **PENT** | **Pentalofos** | **8.26** | **43** | P | **Pn** | **04 09 09.0** | **+0.1** |
| **NEST** | **Nestorio** | **8.36** | **42** | P | **Pn** | **04 09 10.8** | **+0.6** |
| **THL** | **Klokotos Trika** | **8.39** | **50** | P | **Pn** | **04 09 11.0** | **+0.4** |
| **OHR** | **Ohrid** | **8.73** | **38** | *i* Pn | **Pn** | **04 09 16.1** | **+0.9** |
| **FNA** | **Florina** | **8.79** | **41** | P | **Pn** | **04 09 15.5** | **-0.7** |
| **FNA** | **Florina** | **8.79** | **41** | ⇑P | **Pn** | **04 09 17.3** | **+1.2** |
| **VLY** | **Voula,Athens** | **8.83** | **64** | P | **Pn** | **04 09 15.9** | **-0.8** |
| **PGF** | **Pioggiola** | **8.95** | **337** | *e* P | **Pn** | **04 09 19.7** | **+1.4** |
| PGF | | | | *e* Sn | Sn | 04 10 49.4 | -10 |
| | 9.3nm,0.4s | | | | | | |
| **PGF** | **Pioggiola** | **8.95** | **337** | ⇑P | **Pn** | **04 09 20.2** | **+1.9** |
| **LIT** | **Litokhoron** | **9.00** | **48** | P | **Pn** | **04 09 18.5** | **-0.5** |
| **LIT** | **Litokhoron** | **9.00** | **48** | ⇑P | **Pn** | **04 09 19.3** | **+0.4** |
| **NEO** | **Neokhori** | **9.04** | **54** | P | **Pn** | **04 09 19.4** | **-0.1** |
| **IDI** | **Anoyia** | **9.21** | **81** | Pn | **Pn** | **04 09 21.0** | **-0.8** |
| | 0.7nm,0.3s,baz=303,slow=13,SNR=1.4 | | | | | | |
| IDI | | | | Sn | **Sn** | **04 11 02.5** | **-3.1** |
| | 0.7nm,0.3s,baz=348,slow=20,SNR=2.0 | | | | | | |
| | 7.8nm,0.8s | | | | | | |
| **LMR** | **La Mourre** | **10.55** | **330** | *e* P | **Pn** | **04 09 40.1** | **-0.1** |
| **SBF** | **Sospel** | **10.65** | **335** | *e* P | **Pn** | **04 09 42.2** | **+0.7** |
| SBF | | | | *e* Sn | Sn | 04 11 30.3 | -11 |
| | 3.9nm,0.5s | | | | | | |
| **SMRF** | **Simiane la Rot** | **11.47** | **329** | *e* P | **Pn** | **04 09 56.1** | **+3.3** |
| **RDO** | **Rodhopi** | **11.51** | **51** | P | **Pn** | **04 09 51.9** | **-1.3** |
| **RDO** | **Rodhopi** | **11.51** | **51** | ⇓P | **Pn** | **04 09 53.6** | **+0.4** |
| **MBDF** | **Montbardon** | **11.63** | **335** | *e* P | **Pn** | **04 09 57.9** | **+2.8** |
| MBDF | | | | *e* Sn | Sn | 04 11 53.1 | -12 |
| | 2.7nm,0.7s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **12.12** | **332** | *e* P | **Pn** | **04 10 03.6** | **+1.8** |
| ORIF | | | | *e* Sn | Sn | 04 12 05.5 | -12 |
| | 0.9nm,0.4s | | | | | | |
| **LPG** | **La Plagne** | **12.31** | **336** | *e* P | **Pn** | **04 10 06.3** | **+1.8** |
| **LASF** | **Ste Croix** | **12.33** | **325** | *e* P | **Pn** | **04 10 03.9** | **-0.6** |
| **LPL** | **La Plagne** | **12.34** | **336** | *e* P | **Pn** | **04 10 06.3** | **+1.5** |
| **MTLF** | **Montolieu** | **12.66** | **318** | *e* P | **Pn** | **04 10 10.2** | **+1.2** |
| **SURR** | **Surduc** | **13.03** | **27** | ⇓S | **Sn** | **04 12 30.1** | **-8.8** |
| **SIRR** | **Siria** | **13.30** | **25** | ⇑S | Sn | 04 12 31.8 | -14 |
| **LOT** | **Lotru** | **13.45** | **32** | ⇑P | P | 04 10 36.2 | +7.0 |
| LOT | | | | ⇑S | Sn | 04 12 19.7 | -30 |
| **CABF** | **La Chapelle** | **13.51** | **337** | *e* P | **Pn** | **04 10 22.0** | **+1.3** |
| **EPF** | **Esparros** | **13.55** | **313** | *e* P | **Pn** | **04 10 20.7** | **-0.5** |
| EPF | | | | *e* Sn | Sn | 04 12 37.4 | -14 |
| | 0.3nm,0.2s | | | | | | |
| **ARR** | **Arges** | **13.77** | **34** | ⇑P | **P** | **04 10 37.2** | **+4.4** |
| ARR | | | | ⇓S | Sn | 04 12 15.6 | -42 |
| **VOIR** | | **14.02** | **35** | ⇓P | **P** | **04 10 39.7** | **+4.2** |
| VOIR | | | | ⇑S | Sn | 04 12 12.2 | -51 |
| **ETSF** | **Etsaut** | **14.02** | **311** | *e* P | **Pn** | **04 10 27.5** | **-0.2** |
| ETSF | | | | *e* Sn | Sn | 04 12 47.8 | -16 |
| | 0.8nm,0.5s | | | | | | |
| **SMF** | **Signal de Mont** | **14.35** | **331** | *e* P | **Pn** | **04 10 33.3** | **+1.2** |
| **RJF** | **Les Rejaudoux** | **14.37** | **323** | *e* P | **Pn** | **04 10 34.9** | **+2.6** |
| **HINF** | **Hinteralfeld** | **14.37** | **341** | *e* P | **Pn** | **04 10 33.2** | **+0.8** |
| **GERES** | **GERESS Array B** | **14.44** | **360** | Pn | **Pn** | **04 10 33.7** | **+0.3** |
| | 0.1nm,0.3s,baz=185,slow=16,SNR=1.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **14.49** | **36** | Pn | **Pn** | **04 10 34.9** | **+0.8** |
| | 0.9nm,0.6s,baz=180,slow=14,SNR=1.0 | | | | | | |
| **MLR** | **Muntele Rosu** | **14.49** | **36** | ⇑P | **P** | **04 10 42.6** | **+1.7** |
| **LFF** | **La Frestale** | **14.51** | **320** | *e* P | **Pn** | **04 10 34.8** | **+0.5** |
| LFF | | | | *e* Sn | Sn | 04 13 01.4 | -14 |
| | 0.3nm,0.2s | | | | | | |
| **SJPF** | **Ste Jean** | **14.55** | **311** | *e* P | **Pn** | **04 10 34.1** | **-0.8** |
| **DOPR** | **Dopca** | **14.57** | **34** | ⇓P | **P** | **04 10 44.7** | **+3.0** |
| **AVF** | **Avril sur Loir** | **14.67** | **331** | *e* P | **Pn** | **04 10 37.1** | **+0.7** |
| **HAU** | **Haudompre** | **14.68** | **340** | *e* P | **Pn** | **04 10 38.7** | **+2.0** |
| **BGF** | **Bois d'Agland** | **14.69** | **329** | *e* P | **Pn** | **04 10 37.2** | **+0.4** |
| **TCF** | **Toulx Ste Croi** | **14.76** | **327** | *e* Pn | Pn | 04 10 32.9 | -4.8 |
| **CDF** | **Champ du Feu** | **14.81** | **343** | *e* P | **Pn** | **04 10 40.3** | **+1.8** |
| **SSF** | **Saint Saulge** | **14.83** | **332** | *e* Pn | **Pn** | **04 10 35.6** | **-3.0** |
| **LOR** | **Lormes** | **14.86** | **333** | *e* P | **Pn** | **04 10 37.9** | **-1.2** |
| **ESDC** | **Sonseca Array** | **15.09** | **296** | Pn | **Pn** | **04 10 39.3** | **-2.9** |
| | 0.1nm,0.3s,baz=96,slow=13,SNR=3.0 | | | | | | |
| **PLOR** | **Plostina** | **15.09** | **37** | ⇑P | **P** | **04 10 47.5** | **0.0** |
| **VRI** | **Vrincioaia** | **15.14** | **37** | ⇑P | **P** | **04 10 45.7** | **-2.3** |
| **PAGF** | **Fort de Pagny** | **15.36** | **340** | *e* Pn | **Pn** | **04 10 41.2** | **-4.5** |
| **MDT** | **Midelt** | **15.37** | **269** | Pn | **Pn** | **04 10 45.0** | **-1.0** |
| | 0.1nm,0.3s,baz=90,slow=14,SNR=2.3 | | | | | | |
| MDT | | | | Sn | **Sn** | **04 13 35.1** | **-1.4** |
| | 0.1nm,0.3s,baz=8.1,slow=14,SNR=2.4 | | | | | | |
| MDT | | | | LR | LR | 04 18 13.7 | |
| | comp=Z,100nm,18.6s,baz=123,slow=43 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **16.74** | **66** | Pn | **P** | **04 11 05.6** | **-0.3** |
| | baz=262,slow=10.0,SNR=1.7 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **CLL** | **Collm** | **16.91** | **358** | *i* Px | Px | 04 11 09.9 | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| CLL | | | | *e* S | **Sn** | **04 14 18.0** | **+4.5** |
| **BAIF** | **Baives** | **17.15** | **339** | *e* P | **P** | **04 11 11.8** | **+1.6** |
| **EIL** | **Elat** | **18.58** | **99** | P | **Pn** | **04 11 27.0** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=350,slow=11,SNR=3.0 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **19.83** | **30** | P | **P** | **04 11 39.4** | **-0.2** |
| | comp=Z,2.1nm,0.6s,baz=227,slow=10,SNR=8.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **23.81** | **210** | P | **P** | **04 12 23.9** | **+1.8** |
| | comp=Z,0.8nm,0.6s,baz=20,slow=10,SNR=10.0 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **24.00** | **336** | P | **P** | **04 12 24.5** | **+0.9** |
| | comp=Z,1.0nm,0.8s,baz=132,slow=6.8,SNR=1.9 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **24.29** | **58** | LR | LR | 04 24 52.1 | |
| | comp=Z,1µm,18.4s,baz=211,slow=44 | | | | | | |
| **HFS** | **Hagfors** | **25.75** | **360** | P | **P** | **04 12 39.1** | **-0.3** |
| | comp=Z,1.5nm,0.9s,baz=160,slow=9.9,SNR=1.6 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **26.71** | **357** | P | **P** | **04 12 50.1** | **+2.0** |
| | comp=Z,0.3nm,0.7s,baz=194,slow=10,SNR=3.9 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.87** | **50** | P | **P** | **04 15 55.6** | **+1.1** |
| | comp=Z,0.4nm,0.3s,baz=281,slow=7.9,SNR=1.1 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.95** | **54** | P | **P** | **04 16 19.1** | **+1.0** |
| | comp=Z,1.3nm,0.6s,baz=271,slow=7.9,SNR=6.8 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.26** | **45** | P | **P** | **04 16 20.8** | **+0.7** |
| | comp=Z,0.7nm,0.3s,baz=284,slow=7.7,SNR=1.8 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **124.26** | **180** | PKP | **PKiKP** | **04 26 08.9** | **+1.6** |
| | comp=Z,0.8nm,0.9s,baz=288,slow=3.5,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **125.92** | **91** | PKP | **PKiKP** | **04 26 13.4** | **+1.4** |
| | comp=Z,0.3nm,0.8s,baz=315,slow=1.5,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **127.26** | **95** | PKP | **PKiKP** | **04 26 15.5** | **+0.9** |
| | comp=Z,0.8nm,1.0s,baz=299,slow=2.9,SNR=3.0 | | | | | | |

*IDC* ***04*** *04:31:16.9±3.0, 28°.05N×54°.37E, h0km, mb3.6/6, mbtmp3.6/6, Error ellipse: s-maj=63.6km s-min=32.9km az=143.0*
*TEH* ***04*** *04:31:20.3, 28°.10N×54°.32E, h20km±17km, ML3.2*
*OMAN* ***04*** *04:31:22.9±0.7, 28°.08N×54°.35E, h10km, mb4.5/2, ml3.2/16, Error ellipse: s-maj=6.6km s-min=3.3km az=13.0*

**ISC 04 04:31:21.2±0.7, 28°.18N±0°.04×54°.32E±0°.04, h17km, n59, σ1s 71/81, mb3.8/5, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAR1** | **LAR** | **0.52** | **175** | Pg | **Pg** | **04 31 29.2** | **-2.3** |
| **JHRM** | **Jahrom** | **0.73** | **296** | Pg | **Pb** | **04 31 35.1** | **-0.4** |
| **QIR1** | **Qir** | **1.16** | **285** | Pg | **Pn** | **04 31 43.0** | **+0.3** |
| **LMD1** | **Lamerd** | **1.32** | **231** | Pg | **Pn** | **04 31 44.0** | **-1.0** |
| **GENO** | **Geno** | **1.82** | **115** | Pg | **Pn** | **04 31 52.0** | **+0.1** |
| **IBND** | **Bandar-abas** | **2.10** | **110** | Pn | **Pn** | **04 31 56.0** | **+0.5** |
| **NGRK** | **Negar Kerman** | **2.57** | **55** | Pn | **Pn** | **04 32 03.1** | **+0.8** |
| **SHME** | **Shamm** | **2.68** | **142** | P | **Pn** | **04 32 06.4** | **+2.9** |
| SHME | | | | S | **Sn** | **04 32 37.9** | **+2.4** |
| **DSBU** | **Dashti - Bushe** | **2.70** | **274** | Pn | **Pn** | **04 32 04.5** | **+0.6** |
| **TVBK** | **TV Kerman** | **2.79** | **49** | Pn | **Pn** | **04 32 06.8** | **+1.4** |
| **KHGB** | **Koh Gabri** | **2.88** | **40** | Pn | **Pn** | **04 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **IGAR** | **Gharneh** | **4.64** | **335** | Pn | **Pn** | **04 32 32.7** | **+2.0** |
| **MZR** | **Muzera** | **5.22** | **189** | P | **Pn** | **04 32 38.8** | **+0.4** |
| MZR | | | | S | **Sn** | **04 33 39.3** | **+1.1** |
| **ARQ** | **Araqi** | **5.22** | **157** | P | **Pn** | **04 32 40.3** | **+1.7** |
| | SNR=14 | | | | | | |
| ARQ | | | | S | **Sn** | **04 33 39.0** | **+0.6** |
| | SNR=7.7 | | | | | | |
| **TPRV** | **Parvadeh(Tabas** | **5.24** | **22** | Pn | **Pn** | **04 32 40.7** | **+1.9** |
| **HOQ** | **Hoqain** | **5.32** | **149** | P | **Pn** | **04 32 42.6** | **+2.8** |
| HOQ | | | | S | **Sn** | **04 33 42.6** | **+1.8** |
| **IPIR** | **Pirpir** | **5.37** | **327** | Pn | **Pn** | **04 32 42.3** | **+1.4** |
| **IKLH** | **Kolahrood** | **5.63** | **336** | Pn | **Pn** | **04 32 45.9** | **+1.5** |
| **KRSH** | **Karshahi** | **6.06** | **343** | Pn | **Pn** | **04 32 51.6** | **+1.3** |
| **SMDO** | **Samad** | **6.11** | **146** | P | **Pn** | **04 32 52.3** | **+1.5** |
| SMDO | | | | S | **Sn** | **04 34 01.0** | **+0.4** |
| **WSAR** | **Wadi Sarin** | **6.27** | **141** | P | **Pn** | **04 32 53.7** | **+0.7** |
| | SNR=8.5 | | | | | | |
| **JMDO** | **Jabal Madar** | **6.73** | **149** | P | **Pn** | **04 33 00.3** | **+1.1** |
| **WBK** | **Wadi Bani Khal** | **6.96** | **142** | P | **Pn** | **04 33 02.6** | **+0.1** |
| | SNR=9.5 | | | | | | |
| **JLN** | **Jalan Bani Buh** | **7.57** | **141** | P | **Pn** | **04 33 11.5** | **+0.6** |
| **MHTO** | **MHTO** | **7.90** | **154** | P | **Pn** | **04 33 15.3** | **0.0** |
| **RAYN** | **Ar Rayn** | **9.20** | **242** | P | **Pn** | **04 33 33.6** | **+0.4** |
| **DOK** | **Doka** | **9.52** | **181** | P | **Pn** | **04 33 37.8** | **+0.2** |
| **WHFO** | **Wadi Hawf** | **10.23** | **183** | P | **Pn** | **04 33 47.2** | **-0.1** |
| **BRTR** | **Keskin Array B** | **20.61** | **309** | P | **P** | **04 36 00.6** | **+0.9** |
| | 0.5nm,0.5s,baz=123,slow=12,SNR=3.1 0.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.05** | **32** | P | **P** | **04 38 03.8** | **-0.5** |
| | 0.6nm,0.4s,baz=236,slow=10,SNR=3.6 0.6nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **38.21** | **338** | P | **P** | **04 38 38.5** | **-1.3** |
| | 1.7nm,0.9s,baz=146,slow=11,SNR=5.0 1.7nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **43.60** | **331** | P | **P** | **04 39 24.3** | **0.0** |
| | 0.4nm,0.8s,baz=117,slow=7.9,SNR=2.7 0.4nm,0.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **48.95** | **320** | P | **P** | **04 40 04.3** | **-2.0** |
| | 0.1nm,0.3s,baz=100,slow=7.3,SNR=1.6 0.1nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.08** | **264** | P | **P** | **04 40 21.6** | **-1.5** |
| | 1.9nm,0.6s,baz=60,slow=8.6,SNR=30 1.9nm,0.6s | | | | | | |

*SNET* ***04*** *04:49:29.3±0.8, 13°.27N×88°.07W, h7km±7km, ML2.0*
*CATAC* ***04*** *04:49:29.8±0.3, 13°.28N×88°.07W, h5km±2km, ML2.5*

**ISC 04 04:49:29.7±0.9, 13°.26N±0°.04×88°.07W±0°.02, h11km±6km, n19, σ0°.47/31, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **INTP** | **Intipuca** | **0.06** | **165** | *i* P | **Pg** | **Pg** | **04 49 31.8** | **-0.2** |
| INTP | | | | *e*S | **Sg** | **Sg** | **04 49 33.4** | **-0.3** |
| **JUCU** | **Jucuarįn** | **0.17** | **268** | *e*P | **Pg** | **Pg** | **04 49 33.6** | **0.0** |
| JUCU | | | | *e*S | **Sg** | **Sg** | **04 49 36.6** | **+0.3** |
| JUCU | | | | IAML | | | 04 49 37.6 | |
| | comp=Z,414nm,0.2s | | | | | | | |
| **JUCU** | **Jucuarįn** | **0.17** | **268** | *i* P | **Pg** | **Pg** | **04 49 33.4** | **-0.2** |
| JUCU | | | | *i* S | **Sg** | **Sg** | **04 49 36.7** | **+0.3** |
| JUCU | | | | IAML | | | 04 49 41.6 | |
| | comp=Z,500nm,1.0s | | | | | | | |
| **LCND** | **La Caada** | **0.18** | **74** | *e*S | | **Sg** | **04 49 36.9** | **+0.4** |
| **LCND** | **La Caada** | **0.18** | **74** | *i* P | | **Pg** | **04 49 33.7** | **0.0** |
| **CNCH** | **Conchagua** | **0.23** | **86** | *e*P | | **Pg** | **04 49 34.8** | **+0.2** |
| CNCH | | | | *e*S | | **Sg** | **04 49 38.4** | **+0.4** |
| **CNCH** | **Conchagua** | **0.23** | **86** | *i* P | | **Pg** | **04 49 34.8** | **+0.2** |
| CNCH | | | | *i* S | | **Sg** | **04 49 38.8** | **+0.8** |
| CNCH | | | | IAML | | | 04 49 39.2 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **CNRM** | **Centro Naciona** | **0.23** | **336** | *i* P | | **Pg** | **04 49 34.3** | **-0.3** |
| CNRM | | | | *i* S | | **Sg** | **04 49 37.8** | **-0.2** |
| CNRM | | | | IAML | | | 04 49 40.0 | |
| | comp=Z,4µm,1.0s | | | | | | | |
| **BLLM** | **Bellamira** | **0.24** | **318** | *e*P | | **Pg** | **04 49 34.8** | **-0.1** |
| **RANC** | **El Ranchito** | **0.27** | **309** | *e*P | | **Pg** | **04 49 35.5** | **+0.1** |
| **RANC** | **El Ranchito** | **0.27** | **309** | *i* P | | **Pg** | **04 49 35.6** | **+0.2** |
| RANC | | | | *i* S | | **Sg** | **04 49 39.8** | **+0.6** |
| RANC | | | | IAML | | | 04 49 46.8 | |
| | comp=Z,440nm,1.0s | | | | | | | |
| **PACA** | **Pacayal** | **0.32** | **310** | *e*P | | **Pb** | **04 49 36.7** | **-0.8** |
| **PACA** | **Pacayal** | **0.32** | **310** | *i* P | | **Pb** | **04 49 36.8** | **-0.8** |
| PACA | | | | *i* S | | **Sg** | **04 49 41.4** | **+0.7** |
| PACA | | | | IAML | | | 04 49 52.3 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.60** | **307** | *i* P | | **Pg** | **04 49 41.5** | **+0.1** |
| PQSS | | | | *i* S | | **Sg** | **04 49 49.8** | **+0.5** |
| PQSS | | | | IAML | | | 04 49 56.7 | |
| | comp=Z,61nm,1.0s | | | | | | | |
| **MARCA** | **Marcala la Paz** | **0.89** | **2** | *i* P | | **Pb** | **04 49 47.3** | **0.0** |
| MARCA | | | | *i* S | | **Sg** | **04 49 58.6** | **-0.1** |
| **PKGN** | **Cerro Pekin** | **1.22** | **119** | *i* P | | **Pg** | **04 49 52.5** | **-0.6** |
| PKGN | | | | *i* S | | **Sb** | **04 50 09.1** | **+0.7** |
| PKGN | | | | IAML | | | 04 50 12.5 | |
| | comp=Z,160nm,1.0s | | | | | | | |
| **YUSH** | **Yuscaran** | **1.38** | **60** | *e*P | | **Pn** | **04 49 54.2** | **-0.8** |
| **JAYA** | **Jayaque - finc** | **1.40** | **286** | *i* P | | **Pn** | **04 49 55.6** | **+0.3** |
| JAYA | | | | *i* S | | **Sb** | **04 50 13.9** | **+0.1** |
| JAYA | | | | IAML | | | 04 50 23.9 | |
| | comp=Z,290nm,1.0s | | | | | | | |
| **MACN** | **El Madrono** | **1.57** | **120** | *i* P | | **Pn** | **04 49 58.1** | **+0.5** |
| MACN | | | | IAML | | | 04 50 34.1 | |
| | comp=Z,21nm,1.0s | | | | | | | |

*NEIC* ***04*** *04:54:11.3±1.2, 13°.51N±0°.09×121°.0E±0°.1, h197km±9km, mb4.0/16, Error ellipse: s-maj=18.2km s-min=10.3km az=126.0*
*IDC* ***04*** *04:54:14.2±7.3, 13°.52N×120°.88E, h231km±74km, mb3.5/11, mbtmp4.1/12, Error ellipse: s-maj=45.6km s-min=11.3km az=60.0*

**ISC 04 04:54:11.4±0.7, 13°.53N±0°.09×120°.9E±0°.2, h200km, n34, σ0°.99/34, mb3.8/18, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MYLDM** | **Lahad Datu** | **8.62** | **196** | Pn | | **Pn** | **04 56 13.1** | **+0.2** |
| **SBUM** | **Sibu** | **13.95** | **219** | | | **Pn** | **04 57 22.2** | **+1.3** |
| **KAPI** | **Kappang** | **18.46** | **184** | P | | **Pn** | **04 58 14.9** | **0.0** |
| | 3.1nm,0.3s,baz=326,slow=11,SNR=2.1 | | | | | | | |
| **PHRA** | **Phrae** | **20.46** | **287** | P | | **P** | **04 58 34.8** | **+0.9** |
| **CMAR** | **Chiang Mai Arr** | **21.65** | **286** | P | | **P** | **04 58 46.0** | **-0.4** |
| | 2.8nm,0.4s,baz=94,slow=7.6,SNR=15 2.8nm,0.4s | | | | | | | |
| **SHL** | **Shillong** | **29.77** | **298** | P | | **P** | **04 59 58.6** | **-1.1** |
| **WB0** | **Warramunga Arr** | **35.66** | **158** | P | | **P** | **05 00 49.3** | **-1.3** |
| WB0 | | | | IAmb | | IAmb | 05 00 58.0 | |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **35.79** | **158** | P | | **P** | **05 00 50.9** | **-0.9** |
| **WRA** | **Warramunga Arr** | **35.80** | **158** | P | | **P** | **05 00 50.9** | **-0.9** |
| **WRA** | **Warramunga Arr** | **35.80** | **158** | P | | **P** | **05 00 50.9** | **-0.9** |
| | comp=Z,1.0nm,0.6s,baz=331,slow=10.0,SNR=27 comp=Z,1.0nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **35.80** | **158** | P | | **P** | **05 00 50.8** | **-1.0** |
| WB2 | | | | IAmb | | IAmb | 05 00 51.8 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **WR0** | **Warramunga Arr** | **35.89** | **158** | P | | **P** | **05 00 50.6** | **-2.0** |
| WR0 | | | | IAmb | | IAmb | 05 01 11.0 | |
| | comp=Z,10nm,1.5s | | | | | | | |
| **SONM** | **Songino Array** | **36.27** | **343** | P | | **P** | **05 00 54.6** | **-1.1** |
| **SONM** | **Songino Array** | **36.27** | **343** | P | | **P** | **05 00 55.4** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=163,slow=11,SNR=6.7 comp=Z,1.0nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **39.10** | **161** | P | | **P** | **05 01 18.2** | **-1.3** |
| **ASAR** | **Alice Springs** | **39.10** | **161** | P | | **P** | **05 01 19.6** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=336,slow=6.9,SNR=18 comp=Z,0.7nm,0.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **46.28** | **324** | P | | **P** | **05 02 17.0** | **0.0** |
| **MKAR** | **Makanchi Array** | **46.28** | **324** | P | | **P** | **05 02 16.5** | **-0.5** |
| **MKAR** | **Makanchi Array** | **46.28** | **324** | P | | **P** | **05 02 16.9** | **-0.1** |
| | comp=Z,1.0nm,0.7s,baz=130,slow=8.9,SNR=21 comp=Z,2.1nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **46.47** | **323** | P | | **P** | **05 02 19.1** | **+0.6** |
| MAKZ | | | | IAmb | | IAmb | 05 02 19.2 | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.29** | **333** | P | | **P** | **05 02 39.0** | **-0.9** |
| | comp=Z,1.5nm,0.5s,baz=110,slow=6.4,SNR=5.2 comp=Z,1.5nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.43** | **326** | P | | **P** | **05 02 48.6** | **+0.1** |
| | comp=Z,4.4nm,0.2s,baz=120,slow=8.7,SNR=15 comp=Z,4.4nm,0.2s | | | | | | | |
| **KURK** | **Kurchatov** | **50.44** | **326** | P | | **P** | **05 02 49.0** | **+0.4** |
| **KK31** | **Karatay Array** | **52.23** | **314** | P | | **P** | **05 03 02.3** | **+0.2** |
| KK31 | | | | IAmb | | IAmb | 05 03 03.2 | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **52.23** | **314** | P | | **P** | **05 03 02.3** | **+0.2** |
| **ABKAR** | **Akbulak array** | **60.98** | **319** | P | | **P** | **05 04 03.4** | **-0.2** |
| **ABKAR** | **Akbulak array** | **60.98** | **319** | P | | **P** | **05 04 03.3** | **-0.3** |
| ABKAR | | | | IAmb | | IAmb | 05 04 05.1 | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **77.12** | **27** | P | | **P** | **05 05 45.0** | **+2.4** |
| **ARCES** | **ARCESS Array B** | **79.31** | **339** | P | | **P** | **05 05 54.4** | **-0.1** |
| | comp=Z,1.3nm,0.8s,baz=95,slow=7.7,SNR=3.8 comp=Z,1.3nm,0.8s | | | | | | | |
| **CASY** | **Casey** | **79.95** | **184** | P | | **P** | **05 05 58.2** | **+0.5** |
| CASY | | | | IAmb | | IAmb | 05 06 21.3 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **80.52** | **331** | P | | **P** | **05 06 00.3** | **-0.8** |
| | comp=Z,1.1nm,0.8s,baz=35,slow=5.1,SNR=1.5 comp=Z,1.1nm,0.8s | | | | | | | |
| **I30M** | **Mount Dempster** | **83.08** | **24** | P | | **P** | **05 06 16.7** | **+2.1** |
| **HFS** | **Hagfors** | **86.71** | **331** | P | | **P** | **05 06 32.1** | **-0.5** |
| | comp=Z,1.3nm,0.9s,baz=116,slow=6.8,SNR=4.4 comp=Z,1.3nm,0.9s | | | | | | | |
| **NOA** | **NORSAR Array B** | **87.50** | **333** | P | | **P** | **05 06 35.6** | **-0.8** |
| | comp=Z,0.4nm,0.7s,baz=67,slow=4.6,SNR=2.6 comp=Z,0.4nm,0.7s | | | | | | | |

**IDC 04 05:03:53.9±5.7, 21°.50S×148°.18E, h0km, mbtmp2.9/2, ML2.2/3, Error ellipse: s-maj=59.7km s-min=34.6km az=55.0, Queensland**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **2.28** | **307** | Pn | | Pn | 05 04 33.4 | +0.5 |
| | 0.1nm,0.3s,baz=123,slow=17,SNR=20 | | | | | | | |
| CTA | | | | Lg | | Lg | 05 05 06.0 | |
| | 0.3nm,0.3s,baz=38,slow=19,SNR=6.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.04** | **274** | Pn | | Pn | 05 07 00.1 | -0.5 |
| | baz=96,slow=14,SNR=1.9 | | | | | | | |
| WRA | | | | Lg | | Lg | 05 10 52.3 | |
| | baz=103,slow=24,SNR=2.4 0.1nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **13.37** | **258** | Pn | | Pn | 05 07 04.2 | -0.8 |
| | baz=86,slow=14,SNR=1.6 0.2nm,0.7s | | | | | | | |
| **I22FR** | **PORTLAGUERRE I** | **17.34** | **96** | I | | I | 06 55 10.0 | |
| | baz=271,slow=285,SNR=1.4 | | | | | | | |

**IDC 04 05:06:01.7±1.2, 6°.10N×124°.90E, h0km, mb3.8/4, mbtmp3.8/4, Error ellipse: s-maj=28.3km s-min=13.1km az=116.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **1.17** | **35** | Pg | Pg | Pg | 05 06 23.4 | -0.8 |
| | 177nm,0.3s,baz=240,slow=20,SNR=10 | | | | | | | |
| DAV | | | | Lg | | Lg | 05 06 40.8 | |
| | 226nm,0.3s,baz=233,slow=20,SNR=15 | | | | | | | |
| **WRA** | **Warramunga Arr** | **27.50** | **160** | P | | P | 05 11 49.7 | -0.3 |
| | 0.5nm,0.6s,baz=342,slow=10,SNR=2.3 0.5nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **30.87** | **164** | P | | P | 05 12 20.4 | +0.4 |
| | 0.3nm,0.4s,baz=337,slow=6.5,SNR=8.4 0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.58** | **325** | P | | P | 05 15 31.9 | 0.0 |
| | 0.6nm,0.8s,baz=128,slow=7.7,SNR=5.4 0.6nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.77** | **327** | P | | P | 05 16 01.4 | -0.2 |
| | 0.8nm,0.2s,baz=134,slow=5.3,SNR=1.7 0.8nm,0.2s | | | | | | | |

**IDC 04 05:35:53.8±1.6, 7°.85S×119°.46E, h0km, mb3.2/3, mbtmp3.1/5, ML2.9/2, Error ellipse: s-maj=58.7km s-min=22.1km az=64.0, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **2.84** | **6** | Pn | Pn | Pn | 05 36 40.4 | 0.0 |
| | 0.6nm,0.3s,baz=188,slow=7.1,SNR=1.2 | | | | | | | |
| KAPI | | | | Sn | | Sn | 05 37 15.2 | -0.1 |
| | 2.0nm,0.3s,baz=192,slow=23,SNR=2.3 3.6nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.77** | **131** | P | | P | 05 40 14.2 | -0.5 |
| | 0.1nm,0.3s,baz=303,slow=12,SNR=5.5 0.1nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **20.95** | **140** | P | | P | 05 40 38.8 | +0.2 |
| | 0.2nm,0.3s,baz=315,slow=9.0,SNR=7.2 0.2nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.66** | **332** | P | | P | 05 46 27.3 | +0.4 |
| | 0.2nm,0.7s,baz=126,slow=7.3,SNR=1.7 0.2nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **68.15** | **333** | P | | P | 05 46 55.5 | -0.2 |
| | 0.3nm,0.5s,baz=133,slow=6.5,SNR=1.5 0.3nm,0.5s | | | | | | | |

*IDC* ***04*** *05:44:52.6±0.6, 8°.26S×116°.70E, h0km, mb4.1/16, mbtmp4.1/17, ML5.2/2, MS3.4/7, Error ellipse: s-maj=18.3km s-min=10.9km az=72.0*
*NEIC* ***04*** *05:44:53.9±1.7, 8°.39S±0°.08×116°.61E±0°.06, h10km±1km, mb4.4/9, Error ellipse: s-maj=14.4km s-min=10.6km az=169.0*
*DJA* ***04*** *05:44:54.7±0.2, 8°.5S±3°×117°.7E±°, h10km, M4.9/13, mB5.7/3, mb5.1/3, MLv4.8/13, Mw(mB)5.2/3*

**ISC 04 05:44:54.1±0.4, 8°.36S±0°.04×116°.63E±0°.04, h10km, n73, σ1§40/72, mb4.2/22, MS3.4/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.45** | **147** | P | | **Pn** | **05 45 05.3** | **-1.4** |
| TWSI | | | | S | | **Sb** | **05 45 12.6** | **+1.6** |
| **PLAI** | **Plampang** | **1.22** | **113** | P | | **Pg** | **05 45 18.3** | **+0.7** |
| **PLAI** | **Plampang** | **1.22** | **113** | P | | **Pg** | **05 45 18.1** | **+0.5** |
| PLAI | | | | S | | **Sn** | **05 45 35.6** | **+1.7** |
| **SRBI** | **Singaraja** | **1.43** | **281** | P | | **Pn** | **05 45 19.4** | **-0.8** |
| **DNP** | **Denpasar** | **1.44** | **257** | P | | **Pg** | **05 45 22.3** | **+0.5** |
| **IGBI** | **Denpasar** | **1.54** | **253** | P | | **Pg** | **05 45 22.7** | **-1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.46** | **267** | P | | **Pn** | **05 45 34.5** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.46** | **267** | Pn | | **Pn** | **05 45 33.1** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.46** | **267** | P | | **Pn** | **05 45 33.3** | **-1.0** |
| **GRJI** | **Gresik** | **4.36** | **289** | P | | **Pn** | **05 46 03.0** | **+2.5** |
| **BSSI** | **Bau Bau, Buton** | **4.41** | **60** | P | | **Pn** | **05 45 59.8** | **-1.4** |
| **KAPI** | **Kappang** | **4.54** | **43** | P | | **Pn** | **05 46 02.0** | **-1.0** |
| **KAPI** | **Kappang** | **4.54** | **43** | Pn | | **Pn** | **05 46 01.7** | **-1.3** |
| | 23nm,0.3s,baz=200,slow=4.8,SNR=78 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **05 46 52.8** | **-3.1** |
| | 42nm,0.3s,baz=216,slow=18,SNR=11 | | | | | | | |
| KAPI | | | | Lg | | Lg | 05 47 12.0 | |
| | 35nm,0.3s,baz=240,slow=20,SNR=8.9 | | | | | | | |
| KAPI | | | | LR | | LR | 05 48 08.2 | |
| | comp=Z,644nm,19.9s,baz=230,slow=44 71nm,0.2s | | | | | | | |
| **PWJI** | **Pagerwojo** | **4.79** | **274** | P | | **Pn** | **05 46 06.4** | **0.0** |
| **BNSI** | **Bone** | **5.23** | **41** | P | | **Pn** | **05 46 13.1** | **+0.6** |
| | 190nm,0.9s,3µm1.5nm | | | | | | | |
| **MMRI** | **Maumere** | **5.55** | **93** | | | **Pn** | **05 46 16.1** | **-0.8** |
| **MMRI** | **Maumere** | **5.55** | **93** | P | | Pb | 05 46 25.6 | -5.6 |
| **UGM** | **Wanagama** | **6.07** | **274** | P | | **Pn** | **05 46 25.5** | **+1.5** |
| **UGM** | **Wanagama** | **6.07** | **274** | Pn | | **Pn** | **05 46 23.9** | **-0.1** |
| **UGM** | **Wanagama** | **6.07** | **274** | P | | **Pn** | **05 46 25.3** | **+1.3** |
| | 192nm,1.1s | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.57** | **347** | P | | **Pn** | **05 46 44.9** | **+0.3** |
| **SOEI** | **Soe** | **7.67** | **101** | Pn | | **Pn** | **05 46 47.0** | **+1.0** |
| **BBJI** | **Bungbulang** | **8.94** | **275** | P | | **Pn** | **05 47 05.8** | **+2.3** |
| **FITZ** | **Fitzroy Crossi** | **13.06** | **139** | Pn | | **Pn** | **05 47 58.5** | **-1.3** |
| **MBWA** | **Marble Bar** | **13.07** | **167** | P | | **Pn** | **05 48 00.6** | **+0.6** |
| **MBWA** | **Marble Bar** | **13.07** | **167** | | | **Pn** | **05 47 57.9** | **-2.1** |
| **PSA00** | **Pilbara Seismi** | **13.50** | **167** | P | | **Pn** | **05 48 07.1** | **+1.3** |
| **PSA00** | **Pilbara Seismi** | **13.50** | **167** | Pn | | **Pn** | **05 48 02.9** | **-3.0** |
| **PSA00** | **Pilbara Seismi** | **13.50** | **167** | Pn | | **Pn** | **05 48 03.9** | **-1.9** |
| **KNRA** | **Kununurra** | **13.91** | **123** | Pn | | **Pn** | **05 48 11.1** | **-0.4** |
| **GIRL** | **Giralia** | **14.39** | **189** | Pn | | **Pn** | **05 48 14.8** | **-3.3** |
| **DAV** | **Davao City (W)** | **17.73** | **30** | Pn | | **Pn** | **05 49 00.1** | **-1.2** |
| | 37nm,0.3s,baz=213,slow=23,SNR=1.3 | | | | | | | |
| **MEEK** | **Meekatharra** | **18.28** | **174** | P | | **P** | **05 49 09.3** | **+1.1** |
| **WRKA** | **Warakurna** | **19.97** | **148** | P | | **Pn** | **05 49 28.0** | **-0.5** |
| **WB0** | **Warramunga Arr** | **20.60** | **125** | P | | **P** | **05 49 33.1** | **-0.5** |
| WB0 | | | | IAmb | | IAmb | 05 49 39.8 | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.65** | **126** | P | | **P** | **05 49 33.7** | **-0.4** |
| **WRA** | **Warramunga Arr** | **20.65** | **126** | P | | **P** | **05 49 34.2** | **+0.1** |
| | comp=Z,6.0nm,0.8s,baz=300,slow=12,SNR=96 | | | | | | | |
| WRA | | | | S | | **S** | **05 53 21.2** | **-3.8** |
| | comp=Z,0.4nm,0.5s,baz=277,slow=22,SNR=4.0 comp=Z,6.0nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **22.48** | **135** | P | | **P** | **05 49 53.0** | **-0.9** |
| **ASAR** | **Alice Springs** | **22.48** | **135** | P | | **P** | **05 49 54.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.48** | **135** | P | | **P** | **05 49 54.2** | **+0.4** |
| | comp=Z,7.3nm,1.0s,baz=313,slow=9.8,SNR=25 | | | | | | | |
| ASAR | | | | S | | **S** | **05 54 03.4** | **+2.6** |
| | comp=Z,1.3nm,0.8s,baz=316,slow=24,SNR=4.9 comp=Z,7.3nm,1.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.85** | **327** | P | | **P** | **05 51 20.0** | **+0.4** |
| | comp=Z,0.8nm,0.3s,baz=154,slow=6.9,SNR=2.1 | | | | | | | |
| CMAR | | | | LR | | LR | 06 05 06.0 | |
| | comp=Z,82nm,19.7s,baz=140,slow=38 comp=Z,0.8nm,0.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **32.95** | **139** | P | | **P** | **05 51 30.2** | **+1.1** |
| | comp=Z,1.7nm,0.3s,baz=316,slow=9.1,SNR=4.9 comp=Z,1.7nm,0.3s | | | | | | | |
| **JOW** | **Kunigami** | **36.76** | **18** | LR | | LR | 06 10 44.4 | |
| | comp=Z,28nm,18.2s,baz=339,slow=42 | | | | | | | |
| **PALK** | **Pallekele** | **39.04** | **292** | LR | | LR | 06 07 56.2 | |
| | comp=Z,50nm,20.8s,baz=229,slow=35 | | | | | | | |
| **SHL** | **Shillong** | **41.44** | **325** | P | | **P** | **05 52 40.8** | **-0.6** |
| SHL | | | | IAmb | | IAmb | 05 52 48.5 | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **JNU** | **Nakatsue** | **43.42** | **17** | P | | **P** | **05 52 57.3** | **0.0** |
| | comp=Z,3.2nm,0.7s,baz=202,slow=5.4,SNR=2.4 | | | | | | | |
| JNU | | | | LR | | LR | 06 12 33.2 | |
| | comp=Z,32nm,20.2s,baz=193,slow=38 comp=Z,3.2nm,0.7s | | | | | | | |
| **LZH** | **Lanzhou** | **45.82** | **346** | *e*P | | P | 05 53 03.8 | -13 |
| LZH | | | | pP | | pP | 05 53 14.2 | -5.5 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **KSRS** | **Korea Array** | **46.78** | **12** | P | | **P** | **05 53 22.9** | **-1.0** |
| | comp=Z,0.8nm,0.6s,baz=191,slow=8.9,SNR=4.6 comp=Z,0.8nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Ant** | **49.05** | **23** | P | | **P** | **05 53 39.7** | **-1.7** |
| | comp=Z,1.1nm,0.4s,baz=185,slow=8.0,SNR=6.5 | | | | | | | |
| MJAR | | | | LR | | LR | 06 15 53.1 | |
| | comp=Z,36nm,19.1s,baz=202,slow=38 comp=Z,1.1nm,0.4s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.18** | **355** | *e*P | | **P** | **05 53 45.6** | **+3.0** |
| HHC | | | | sP | | sP | 05 53 52.1 | +5.1 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,98nm,5.9s | | | | | | | |
| **GTA** | **Gaotai** | **50.02** | **343** | *e*P | | **P** | **05 53 51.9** | **+2.9** |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.13** | **14** | P | | **P** | **05 54 18.8** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** | **54.13** | **14** | P | | **P** | **05 54 18.6** | **-0.7** |
| | comp=Z,4.4nm,0.9s,baz=191,slow=7.8,SNR=7.0 comp=Z,4.4nm,0.9s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.13** | **14** | P | | **P** | **05 54 17.7** | **-1.6** |
| **SONM** | **Songino Array** | **56.68** | **352** | P | | **P** | **05 54 37.8** | **0.0** |
| | comp=Z,0.5nm,0.4s,baz=172,slow=9.9,SNR=4.0 comp=Z,0.5nm,0.4s | | | | | | | |
| **ASAJ** | **Asahikawa** | **57.27** | **22** | P | | **P** | **05 54 41.5** | **-0.4** |
| | comp=Z,4.8nm,0.5s,baz=246,slow=11,SNR=5.2 comp=Z,4.8nm,0.5s | | | | | | | |
| **HEH** | **HeiHe** | **59.12** | **8** | *e*P | | **P** | **05 54 54.0** | **-0.7** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **60.72** | **325** | P | | **P** | **05 55 04.6** | **-1.5** |
| **MK31** | **Makanchi Array** | **62.84** | **334** | P | | **P** | **05 55 19.6** | **-0.6** |
| MK31 | | | | IAmb | | IAmb | 05 55 35.6 | |
| | comp=Z,2.1nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | P | | **P** | **05 55 19.8** | **-0.3** |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | P | | **P** | **05 55 19.3** | **-0.9** |
| | comp=Z,2.1nm,0.9s,baz=143,slow=7.7,SNR=12 comp=Z,2.1nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.38** | **335** | P | | **P** | **05 55 49.7** | **+0.2** |
| | comp=Z,0.6nm,0.8s,baz=147,slow=5.5,SNR=5.4 comp=Z,0.6nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.63** | **340** | P | | **P** | **05 55 50.1** | **-0.9** |
| | comp=Z,0.8nm,0.6s,baz=143,slow=4.7,SNR=4.8 comp=Z,0.8nm,0.6s | | | | | | | |
| **OPO** | **Ambohidratompo** | **67.96** | **253** | LR | | LR | 06 21 55.4 | |
| | comp=Z,40nm,19.8s,baz=330,slow=33 | | | | | | | |
| **VNDA** | **Vanda** | **72.99** | **171** | P | | **P** | **05 56 23.0** | **-0.6** |
| VNDA | | | | IAmb | | IAmb | 05 56 50.0 | |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| **VNDA** | **Vanda** | **72.99** | **171** | P | | **P** | **05 56 23.6** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=276,slow=6.2,SNR=5.2 comp=Z,0.7nm,0.9s | | | | | | | |
| **SBA** | **Scott Base** | **74.01** | **170** | P | | **P** | **05 56 29.4** | **-0.1** |
| SBA | | | | IAmb | | IAmb | 05 56 40.6 | |
| | comp=Z,4.8nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.63** | **180** | P | | **P** | **05 57 12.4** | **0.0** |
| | comp=Z,2.3nm,0.9s,baz=18,slow=2.7,SNR=5.5 comp=Z,2.3nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **90.98** | **196** | P | | **P** | **05 

*GCG **04**:05:46:06.8±0.3,13°.60N×90°.94W,h26km±18km,MD5.1*
**ISC 04:05:46:00.8**±0.8,**13°.18N**±0°.04×**90°.89W**±0°.04,**h31**km±4km,
**n613**,σ1**115**/619,**mb4.8**/66,**MS4.6**/18,**Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCG** | **Pacaya** | **1.24** | **13** | *i* P | **Pb** | **05 46 23.3** | **-0.5** |
| **FUG** | **Fuego 3** | **1.26** | **2** | *i* P | **Pn** | **05 46 23.0** | **+0.4** |
| **NUBE** | **Las Nubes** | **1.30** | **56** | *e*P | **Pn** | **05 46 23.1** | **+0.1** |
| **NUBE** | **Las Nubes** | **1.30** | **56** | *i* P | **Pn** | **05 46 22.8** | **-0.1** |
| NUBE | | | | *i* S | **Sb** | **05 46 42.6** | **+1.5** |
| NUBE | | | | IAML | | 05 46 52.5 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.35** | **53** | *i* P | **Pn** | **05 46 24.2** | **+0.6** |
| LOAL | | | | *i* S | **Sb** | **05 46 44.7** | **+2.1** |
| LOAL | | | | IAML | | 05 46 58.3 | |
| | comp=Z,22μm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.37** | **52** | *e*P | **Pn** | **05 46 24.2** | **+0.4** |
| SLOZ | | | | IAML | | 05 46 55.5 | |
| | comp=Z,4μm,0.7s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.39** | **62** | *e*P | **Pn** | **05 46 24.9** | **+0.6** |
| CEVE | | | | IAML | | 05 46 55.3 | |
| | comp=Z,13μm,0.5s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.39** | **62** | *i* P | **Pn** | **05 46 25.3** | **+1.0** |
| CEVE | | | | IAML | | 05 47 03.2 | |
| | comp=Z,14μm,1.0s | | | | | | |
| **RTR** | **El Retiro** | **1.41** | **59** | *e*P | **Pn** | **05 46 25.2** | **+0.8** |
| **SNJE** | **San Jose** | **1.43** | **61** | *e*P | **Pn** | **05 46 25.7** | **+1.0** |
| **GCG4** | **OSOP** | **1.44** | **14** | *i* P | **Pb** | **05 46 26.1** | **-1.1** |
| GCG4 | | | | *i* S | **Sb** | **05 46 46.0** | **+0.7** |
| GCG4 | | | | IAML | | 05 46 59.8 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **GUMI** | **Mixco** | **1.47** | **10** | *i* P | **Pb** | **05 46 26.8** | **-0.9** |
| GUMI | | | | IAML | | 05 46 55.7 | |
| | comp=Z,19μm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.48** | **71** | *e*P | **Pn** | **05 46 25.6** | **+0.2** |
| **JAYA** | **Jayaque - finc** | **1.48** | **71** | *i* P | **Pn** | **05 46 26.0** | **+0.5** |
| JAYA | | | | IAML | | 05 46 56.8 | |
| | comp=Z,18μm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.50** | **21** | *i* P | **Pb** | **05 46 27.8** | **-0.4** |
| **UNIC** | **Universidad Ca** | **1.53** | **58** | *e*P | **Pn** | **05 46 26.9** | **+0.9** |
| **UNIC** | **Universidad Ca** | **1.53** | **58** | *i* P | **Pn** | **05 46 26.4** | **+0.3** |
| UNIC | | | | IAML | | 05 46 53.5 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **RTAL** | **Retalhuleu** | **1.55** | **330** | | **Pn** | **05 46 25.4** | **-0.9** |
| **RTAL** | **Retalhuleu** | **1.55** | **330** | *i* P | **Pn** | **05 46 26.2** | **-0.1** |
| RTAL | | | | IAML | | 05 46 55.4 | |
| | comp=Z,11μm,1.0s | | | | | | |
| **LALI** | **Alcalda de L** | **1.56** | **78** | *e*P | **Pn** | **05 46 27.0** | **+0.7** |
| **LALI** | **Alcalda de L** | **1.56** | **78** | *i* P | **Pn** | **05 46 27.5** | **+1.1** |
| LALI | | | | IAML | | 05 47 16.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CHTG** | **Tecpan** | **1.58** | **357** | *i* P | **Pn** | **05 46 27.2** | **+0.3** |
| CHTG | | | | *i* S | **Sb** | **05 46 49.9** | **+0.6** |
| CHTG | | | | IAML | | 05 46 56.9 | |
| | comp=Z,31μm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **1.58** | **67** | *e*P | **Pb** | **05 46 28.7** | **-0.8** |
| CEDA | | | | *e*S | **Sb** | **05 46 50.4** | **+1.3** |
| CEDA | | | | IAML | | 05 47 01.8 | |
| | comp=Z,10μm,0.5s | | | | | | |
| **CEDA** | **San Andres** | **1.58** | **67** | *i* P | **Pb** | **05 46 28.1** | **-1.3** |
| CEDA | | | | *i* S | **Sb** | **05 46 50.6** | **+1.5** |
| CEDA | | | | IAML | | 05 47 05.7 | |
| | comp=Z,30μm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **1.62** | **71** | *i* P | **Pn** | **05 46 28.3** | **+0.9** |
| PMON | | | | IAML | | 05 47 10.8 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **1.64** | **72** | *i* P | **Pn** | **05 46 28.7** | **+1.0** |
| ITCA | | | | IAML | | 05 47 13.4 | |
| | comp=Z,22μm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **1.66** | **70** | *e*P | **Pb** | **05 46 30.2** | **-0.7** |
| **SNET** | **Serv Nac Est T** | **1.69** | **72** | | **Pn** | **05 46 28.8** | **+0.5** |
| **SNET** | **Serv Nac Est T** | **1.69** | **72** | *e*P | **Pn** | **05 46 29.6** | **+1.3** |
| **SNET** | **Serv Nac Est T** | **1.69** | **72** | *i* P | **Pn** | **05 46 29.1** | **+0.8** |
| SNET | | | | IAML | | 05 47 07.1 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **UEES** | **Universidad Ev** | **1.69** | **71** | *i* P | **Pn** | **05 46 29.8** | **+1.5** |
| UEES | | | | *i* S | **Sb** | **05 46 52.5** | **+0.2** |
| UEES | | | | IAML | | 05 47 05.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **1.70** | **67** | *e*P | **Pn** | **05 46 29.8** | **+1.4** |
| **QUEZ** | **Alcaldia de Qu** | **1.70** | **67** | *i* P | **Pn** | **05 46 29.7** | **+1.3** |
| QUEZ | | | | *i* S | **Sb** | **05 46 55.5** | **+2.9** |
| QUEZ | | | | IAML | | 05 47 05.9 | |
| | comp=Z,34μm,1.0s | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.71** | **343** | *i* P | **Pn** | **05 46 28.5** | **-0.3** |
| SOKI | | | | IAML | | 05 47 13.1 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **PANCS** | **Alcalda de** | **1.72** | **75** | *i* P | **Pn** | **05 46 29.9** | **+1.2** |
| PANCS | | | | IAML | | 05 46 33.9 | |
| | comp=Z,13μm,1.0s | | | | | | |
| **UTEC** | **Universidad Te** | **1.72** | **72** | *i* P | **Pb** | **05 46 30.7** | **-1.2** |
| UTEC | | | | IAML | | 05 47 08.4 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **1.73** | **74** | *e*P | **Pn** | **05 46 30.5** | **+1.5** |
| LOMA | | | | IAML | | 05 47 07.3 | |
| | comp=Z,5μm,0.4s | | | | | | |
| **LOMA** | **Loma Larga** | **1.73** | **74** | *i* P | **Pb** | **05 46 30.6** | **-1.5** |
| LOMA | | | | *i* S | **Sb** | **05 46 54.6** | **+1.0** |
| LOMA | | | | IAML | | 05 47 04.8 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **1.77** | **72** | *i* P | **Pb** | **05 46 31.7** | **-1.0** |
| UDBS | | | | IAML | | 05 47 04.0 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **AEIL** | **Aeropuerto Ilo** | **1.80** | **73** | IAML | | 05 47 12.2 | |
| | comp=Z,8μm,0.5s | | | | | | |
| **LFU** | **La Fuente** | **1.82** | **72** | *e*P | **Pb** | **05 46 32.2** | **-1.3** |
| **APG** | **El Apazote** | **1.86** | **13** | P | **Pn** | **05 46 32.4** | **+1.6** |
| | comp=Z,45nm,0.4s,baz=190,slow=12,SNR=465 | | | | | | |
| APG | | | | S | **Sb** | **05 47 00.2** | **+2.8** |
| | comp=Z,333nm,0.7s,baz=252,slow=20,SNR=18 | | | | | | |
| **MTO3** | **Montecristo** | **1.92** | **51** | | **Pn** | **05 46 32.2** | **+0.6** |
| **MTO3** | **Montecristo** | **1.92** | **51** | *e*P | **Pn** | **05 46 33.0** | **+1.4** |
| MTO3 | | | | *e*S | **Sb** | **05 47 00.5** | **+1.5** |
| **MTO3** | **Montecristo** | **1.92** | **51** | *i* P | **Pn** | **05 46 33.3** | **+1.7** |
| MTO3 | | | | IAML | | 05 47 10.2 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **2.00** | **77** | *e*P | **Pn** | **05 46 34.1** | **+1.5** |
| **COEG** | **Centro de Oper** | **2.00** | **77** | *i* P | **Pn** | **05 46 33.2** | **+0.6** |
| COEG | | | | IAML | | 05 47 15.1 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **2.08** | **80** | *e*P | **Pn** | **05 46 34.6** | **+1.0** |
| **TECO** | **Alcaldia de Te** | **2.08** | **80** | *i* P | **Pn** | **05 46 34.6** | **+1.0** |
| TECO | | | | IAML | | 05 46 45.5 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **2.10** | **77** | *i* P | **Pn** | **05 46 35.9** | **+2.1** |
| UESV | | | | *i* S | **Sb** | **05 47 04.3** | **+0.5** |
| UESV | | | | IAML | | 05 47 19.1 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **LLGN** | **La Laguna** | **2.13** | **62** | *i* P | **Pn** | **05 46 35.5** | **+1.2** |
| LLGN | | | | *i* S | **Sb** | **05 47 04.4** | **-0.5** |
| LLGN | | | | IAML | | 05 47 30.3 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.17** | **76** | *e*P | **Pn** | **05 46 36.9** | **+2.1** |
| **SCLA** | **Alcaldia de Sa** | **2.17** | **76** | *i* P | **Pn** | **05 46 36.3** | **+1.5** |
| SCLA | | | | IAML | | 05 47 25.4 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **HUEH** | **Huehuetenango** | **2.21** | **344** | | **Pn** | **05 46 36.3** | **+0.7** |
| **HUEH** | **Huehuetenango** | **2.21** | **344** | *e*P | **Pn** | **05 46 37.5** | **+1.9** |
| HUEH | | | | *e*S | **Sb** | **05 47 08.0** | **+0.7** |
| HUEH | | | | IAML | | 05 47 16.3 | |
| | comp=Z,5μm,0.5s | | | | | | |
| **HUEH** | **Huehuetenango** | **2.21** | **344** | *i* P | **Pn** | **05 46 37.5** | **+1.9** |
| HUEH | | | | *i* S | **Sb** | **05 47 06.4** | **-0.9** |
| HUEH | | | | IAML | | 05 47 15.4 | |
| | comp=Z,13μm,1.0s | | | | | | |
| **MRL** | **Marmol** | **2.23** | **32** | *i* P | **Pb** | **05 46 38.4** | **-2.1** |
| **PQSS** | **Presa 15 de Se** | **2.31** | **79** | *e*P | **Pn** | **05 46 37.9** | **+1.1** |
| **PQSS** | **Presa 15 de Se** | **2.31** | **79** | *i* P | **Pn** | **05 46 37.5** | **+0.8** |
| PQSS | | | | IAML | | 05 47 37.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **PACA** | **Pacayal** | **2.51** | **83** | *e*P | **Pn** | **05 46 41.4** | **+1.7** |
| **PACA** | **Pacayal** | **2.51** | **83** | *i* P | **Pn** | **05 46 41.4** | **+1.7** |
| PACA | | | | IAML | | 05 47 27.5 | |
| | comp=Z,20μm,1.0s | | | | | | |
| **LCY** | **Lacayo** | **2.54** | **84** | *e*P | **Pn** | **05 46 41.1** | **+1.2** |
| **RANC** | **El Ranchito** | **2.54** | **84** | *e*P | **Pn** | **05 46 41.4** | **+1.3** |
| **RANC** | **El Ranchito** | **2.54** | **84** | *i* P | **Pn** | **05 46 41.4** | **+1.3** |
| RANC | | | | IAML | | 05 47 26.3 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **JUCU** | **Jucuarįn** | **2.57** | **88** | *e*P | **Pn** | **05 46 40.9** | **+0.5** |
| **JUCU** | **Jucuarįn** | **2.57** | **88** | *i* P | **Pn** | **05 46 41.0** | **+0.5** |
| JUCU | | | | IAML | | 05 47 26.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **2.59** | **84** | *e*P | **Pn** | **05 46 42.0** | **+1.3** |
| **SARH** | **Santa Rosa de** | **2.61** | **52** | *i* P | **Pn** | **05 46 42.7** | **+1.8** |
| **CNRM** | **Centro Naciona** | **2.66** | **83** | *i* P | **Pn** | **05 46 42.6** | **+1.0** |
| CNRM | | | | IAML | | 05 47 45.4 | |
| | comp=Z,15μm,1.0s | | | | | | |
| **CAHU** | **Cacaquatique** | **2.67** | **77** | *e*P | **Pn** | **05 46 43.0** | **+1.1** |
| **MARCA** | **Marcala la Paz** | **2.94** | **70** | *i* P | **Pn** | **05 46 46.9** | **+1.4** |
| **CNCH** | **Conchagua** | **2.98** | **88** | *e*P | **Pn** | **05 46 46.5** | **+0.4** |
| **CNCH** | **Conchagua** | **2.98** | **88** | *i* P | **Pn** | **05 46 47.0** | **+1.0** |
| CNCH | | | | IAML | | 05 47 43.6 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **CCIG** | **Comitan** | **3.31** | **339** | | **Pn** | **05 46 52.2** | **+1.5** |
| **CCIG** | **Comitan** | **3.31** | **339** | *i* P | **Pn** | **05 46 52.0** | **+1.3** |
| CCIG | | | | IAML | | 05 47 48.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **3.62** | **76** | Pn | **Pn** | **05 46 55.8** | **+0.8** |
| **TGUH** | **Tegucigalpa,Un** | **3.62** | **76** | *i* P | **Pn** | **05 46 56.2** | **+1.3** |
| TGUH | | | | IAML | | 05 47 40.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CRIN** | **San Cristobal** | **3.77** | **97** | | **Pn** | **05 46 58.0** | **+1.1** |
| **CRIN** | **San Cristobal** | **3.77** | **97** | *i* P | **Pn** | **05 46 58.6** | **+1.7** |
| CRIN | | | | IAML | | 05 48 01.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **PETF** | **Flores** | **3.85** | **15** | | **Pn** | **05 46 59.2** | **+1.3** |
| **PETF** | **Flores** | **3.85** | **15** | *e*P | **Pn** | **05 47 00.5** | **+2.6** |
| **PETF** | **Flores** | **3.85** | **15** | *i* P | **Pn** | **05 47 00.9** | **+3.0** |
| PETF | | | | IAML | | 05 48 06.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **PKGN** | **Cerro Pekin** | **3.85** | **97** | *i* P | **Pn** | **05 46 58.2** | **+0.3** |
| PKGN | | | | IAML | | 05 48 12.7 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **QUEN** | **Al S del Volca** | **3.98** | **98** | *i* P | **Pn** | **05 46 58.1** | **-1.7** |
| QUEN | | | | IAML | | 05 48 00.0 | |
| | comp=Z,550nm,1.0s | | | | | | |
| **TEL3** | **Telica 3** | **3.99** | **98** | *i* P | **Pn** | **05 46 59.3** | **-0.6** |
| TEL3 | | | | IAML | | 05 47 06.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **YUSH** | **Yuscaran** | **4.01** | **78** | *i* P | **Pn** | **05 47 01.5** | **+1.3** |
| **ILCN** | **San Idelfonso** | **4.13** | **98** | *i* P | **Pn** | **05 47 01.7** | **-0.1** |
| ILCN | | | | IAML | | 05 47 55.2 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **CNGA** | **Al SSO del Vol** | **4.14** | **99** | *i* P | **Pn** | **05 47 00.3** | **-1.7** |
| CNGA | | | | IAML | | 05 47 58.1 | |
| | comp=Z,360nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **4.14** | **99** | | **Pn** | **05 47 02.2** | **+0.2** |
| **CNGN** | **Cerro Negro** | **4.14** | **99** | *i* P | **Pn** | **05 47 02.2** | **+0.2** |
| CNGN | | | | IAML | | 05 48 03.1 | |
| | comp=Z,940nm,1.0s | | | | | | |
| **MACN** | **El Madrono** | **4.17** | **99** | *i* P | **Pn** | **05 47 02.5** | **+0.1** |
| MACN | | | | IAML | | 05 48 14.1 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **4.31** | **103** | *i* P | **Pn** | **05 47 05.0** | **+0.7** |
| COPN | | | | IAML | | 05 48 18.1 | |
| | comp=Z,600nm,1.0s | | | | | | |
| **OCON** | **Estacion meteo** | **4.32** | **83** | *i* P | **Pn** | **05 47 04.9** | **+0.5** |
| OCON | | | | IAML | | 05 47 38.1 | |
| | comp=Z,240nm,1.0s | | | | | | |
| **MOM2** | **El Cardon** | **4.36** | **99** | *i* P | **Pn** | **05 47 05.5** | **+0.6** |
| MOM2 | | | | IAML | | 05 48 35.6 | |
| | comp=Z,620nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **4.41** | **91** | *i* P | **Pn** | **05 47 05.8** | **+0.1** |
| LIMN | | | | IAML | | 05 48 32.3 | |
| | comp=Z,800nm,1.0s | | | | | | |
| **BRAN** | **Las Pilas** | **4.45** | **95** | *i* P | **Pn** | **05 47 07.4** | **+1.2** |
| BRAN | | | | *i* S | **Sn** | **05 48 00.7** | **+3.8** |
| BRAN | | | | IAML | | 05 48 26.1 | |
| | comp=Z,360nm,1.0s | | | | | | |
| **SAPS** | **Ciudad Sandino** | **4.49** | **102** | *i* P | **Pn** | **05 47 07.4** | **+0.7** |
| SAPS | | | | *i* S | **Sn** | **05 48 00.7** | **+2.8** |
| SAPS | | | | IAML | | 05 48 15.7 | |
| | comp=Z,980nm,1.0s | | | | | | |
| **APQ2** | **Apoyeque** | **4.56** | **102** | *i* P | **Pn** | **05 47 08.7** | **+1.0** |
| APQ2 | | | | IAML | | 05 48 15.5 | |
| | comp=Z,640nm,1.0s | | | | | | |
| **RA5A7** | **El Crucero** | **4.62** | **104** | *i* P | **Pn** | **05 47 09.8** | **+1.1** |
| RA5A7 | | | | IAML | | 05 48 55.7 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **R4DEC** | **Barrio San Lui** | **4.64** | **102** | *i* P | **Pn** | **05 47 09.7** | **+0.9** |
| R4DEC | | | | *i* P | **Pn** | **05 47 09.8** | **+0.9** |
| R4DEC | | | | IAML | | 05 48 44.3 | |
| | comp=Z,660nm,1.0s | | | | | | |
| R4DEC | | | | IAML | | 05 48 44.5 | |
| | comp=Z,470nm,1.0s | | | | | | |
| **HUEN** | | **4.68** | **100** | *i* P | **Pn** | **05 47 09.4** | **+0.1** |
| HUEN | | | | IAML | | 05 48 45.3 | |
| | comp=Z,410nm,1.0s | | | | | | |
| **RB213** | **Mirador 2 Volc** | **4.76** | **104** | *i* P | **Pn** | **05 47 08.7** | **-1.8** |
| **NADN** | **Granada** | **4.95** | **106** | *i* P | **Pn** | **05 47 14.2** | **+1.1** |
| NADN | | | | IAML | | 05 48 25.9 | |
| | comp=Z,390nm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **5.14** | **98** | Pn | **Pn** | **05 47 15.0** | **-0.8** |
| **BOAB** | **BOACO BROADBAN** | **5.14** | **98** | *i* P | **Pn** | **05 47 15.1** | **-0.7** |
| BOAB | | | | IAmb | IAmb | 05 47 44.3 | |
| | comp=Z,99nm,1.2s | | | | | | |
| BOAB | | | | IVmB_BB | | 05 47 59.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| BOAB | | | | IAML | | 05 48 44.8 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **5.71** | **102** | Pn | **Pn** | **05 47 22.9** | **-0.6** |
| **ACON** | **Acoyapa** | **5.71** | **102** | *i* P | **Pn** | **05 47 23.3** | **-0.2** |
| ACON | | | | IAmb | IAmb | 05 47 39.2 | |
| | comp=Z,83nm,0.9s | | | | | | |
| ACON | | | | IAML | | 05 48 46.6 | |
| | comp=Z,180nm,1.0s | | | | | | |
| **JTS** | **Las Juntas de** | **6.48** | **116** | P | **Pn** | **05 47 35.3** | **+1.1** |
| | comp=Z,14nm,0.4s,baz=291,slow=21,SNR=32 | | | | | | |
| JTS | | | | S | **Sn** | **05 48 45.3** | **-1.8** |
| | comp=Z,23nm,0.6s,baz=294,slow=20,SNR=0.9 | | | | | | |
| **ESPN** | **Las Esperanzas** | **6.50** | **98** | | **Pn** | **05 47 35.9** | **+1.5** |
| **SOCE** | **Pocosol** | **6.74** | **114** | Pn | **Pn** | **05 47 39.2** | **+1.5** |
| **HDC** | **Heredia** | **7.35** | **115** | | **Pn** | **05 47 48.4** | **+2.2** |
| **TEIG** | **Tepich** | **7.44** | **19** | | **Pn** | **05 47 49.1** | **+1.8** |
| **TEIG** | **Tepich** | **7.44** | **19** | P | **Pn** | **05 47 49.5** | **+2.2** |
| | comp=Z,203nm,0.8s,baz=209,slow=13,SNR=68 | | | | | | |
| TEIG | | | | LR | LR | 05 51 13.8 | |
| | comp=Z,9μm,18.0s,baz=205,slow=43 | | | | | | |
| **LCR2** | **La Lucha 2** | **7.56** | **116** | | **Pn** | **05 47 51.7** | **+2.6** |
| **TLIG** | **Tlapa** | **8.59** | **301** | | **Pn** | **05 48 04.8** | **+1.6** |
| **BRU2** | **Volcan** | **9.15** | **118** | | **Pn** | **05 48 13.2** | **+2.2** |
| **MOIG** | **Morelia** | **11.80** | **305** | | **Pn** | **05 48 49.4** | **+2.1** |
| **JRQG** | **Juriquilla Cam** | **11.81** | **311** | Pn | **Pn** | **05 48 51.2** | **+3.7** |
| **SOR** | **Soroa** | **12.15** | **37** | Pn | **Pn** | **05 48 54.2** | **+2.4** |
| **ZAIG** | **Zacatecas** | **14.63** | **312** | | **Pn** | **05 49 26.9** | **+0.8** |
| **HBVL** | **Hebbronville** | **15.62** | **333** | | **P** | **05 49 41.7** | **-1.0** |
| HBVL | | | | IAmb | IAmb | 05 49 48.7 | |
| | comp=Z,84nm,1.4s | | | | | | |
| **735A** | **Kenedy** | **16.88** | **339** | P | **P** | **05 49 55.8** | **-0.8** |
| 735A | | | | IAmb | IAmb | 05 50 02.4 | |
| | comp=Z,85nm,1.3s | | | | | | |
| **833A** | **Chaparral WMA,** | **17.03** | **334** | P | **Pn** | **05 49 57.1** | **+0.5** |
| **833A** | **Chaparral WMA,** | **17.03** | **334** | P | **P** | **05 49 57.4** | **-0.9** |
| | baz=150 | | | | | | |
| **DWPF** | **Disney Wildern** | **17.28** | **29** | P | **Pn** | **05 50 00.1** | **+0.3** |
| **DWPF** | **Disney Wildern** | **17.28** | **29** | P | **P** | **05 50 00.7** | **-0.4** |
| | baz=212 | | | | | | |
| **HKT** | **Hockley** | **17.31** | **345** | P | **P** | **05 50 01.4** | **+0.1** |
| HKT | | | | IAmb | IAmb | 05 50 07.0 | |
| | comp=Z,117nm,1.7s | | | | | | |
| **441A** | **DeRidder** | **17.62** | **353** | P | **P** | **05 50 06.2** | **+1.5** |
| **OTAV** | **Otavalo** | **17.81** | **135** | P | **P** | **05 50 09.1** | **+1.6** |
| **TULM** | **Tulcn-Chalpat** | **17.94** | **133** | P | **Pn** | **05 50 08.0** | **-0.5** |
| **553A** | **Crawfordville** | **17.95** | **18** | P | **Pn** | **05 50 07.9** | **-0.2** |
| 553A | | | | IAmb | IAmb | 05 50 18.5 | |
| | comp=Z,68nm,0.8s | | | | | | |
| **451A** | **Vernon** | **17.99** | **14** | P | **P** | **05 50 09.4** | **+0.6** |
| **HNDO** | **Hondo** | **18.04** | **336** | P | **P** | **05 50 09.8** | **+0.3** |
| **346A** | **Big Creek Wild** | **18.17** | **4** | P | **P** | **05 50 11.9** | **+1.0** |
| 346A | | | | IAmb | IAmb | 05 50 18.2 | |
| | comp=Z,53nm,0.9s | | | | | | |
| **BRAL** | **Brewton** | **18.25** | **11** | P | **P** | **05 50 11.5** | **-0.3** |
| **BRAL** | **Brewton** | **18.25** | **11** | P | **Pn** | **05 50 13.4** | **+1.6** |
| | baz=192 | | | | | | |
| **ROSC** | **El Rosal** | **18.33** | **115** | P | **Pn** | **05 50 16.3** | **+0.3** |
| ROSC | | | | IAmb | IAmb | 05 50 20.2 | |
| | comp=Z,157nm,1.2s | | | | | | |
| **ROSC** | **El Rosal** | **18.33** | **115** | P | **Pn** | **05 50 15.6** | **+2.4** |
| | comp=Z,129nm,1.2s,baz=349,slow=6.1,SNR=34 | | | | | | |
| **DRIO** | **Del Rio** | **18.52** | **332** | P | **Pn** | **05 50 15.3** | **+0.3** |
| **ANTS** | **Antisana-Sarah** | **18.54** | **136** | P | **Pn** | **05 50 18.2** | **+2.2** |
| **435B** | **Jarrell** | **18.58** | **342** | P | **Pn** | **05 50 15.5** | **-0.3** |
| **435B** | **Jarrell** | **18.58** | **342** | P | **Pn** | **05 50 17.1** | **+1.3** |
| | baz=159 | | | | | | |
| **NATX** | **Nacogdoches** | **18.82** | **350** | P | **P** | **05 50 17.8** | **-0.2** |
| NATX | | | | IAmb | IAmb | 05 50 22.3 | |
| | comp=Z,48nm,1.1s | | | | | | |
| **NATX** | **Nacogdoches** | **18.82** | **350** | P | **Pn** | **05 50 19.5** | **+0.8** |
| | baz=168 | | | | | | |
| **VBMS** | **Vicksburg** | **18.96** | **1** | P | **Pn** | **05 50 20.1** | **-0.2** |
| **VBMS** | **Vicksburg** | **18.96** | **1** | P | **Pn** | **05 50 21.0** | **+0.7** |
| | baz=181 | | | | | | |
| **352A** | **Blakely** | **19.02** | **16** | P | **Pn** | **05 50 21.2** | **0.0** |
| 352A | | | | IAmb | IAmb | 05 50 27.7 | |
| | comp=Z,82nm,1.0s | | | | | | |
| **JCT** | **Junction City** | **19.09** | **336** | P | **Pn** | **05 50 22.0** | **0.0** |
| **JCT** | **Junction City** | **19.09** | **336** | P | **Pn** | **05 50 22.7** | **+0.7** |
| | baz=152,SNR=8.1 | | | | | | |
| **250A** | **Grady** | **19.19** | **12** | | **Pn** | **05 50 24.2** | **+1.1** |
| 250A | | | | IAmb | IAmb | 05 50 31.9 | |
| | comp=Z,65nm,1.3s | | | | | | |
| **TIGA** | **Tifton** | **19.38** | **19** | P | **Pn** | **05 50 25.3** | **-0.1** |
| **TIGA** | **Tifton** | **19.38** | **19** | P | **Pn** | **05 50 24.9** | **-0.5** |
| | baz=202 | | | | | | |
| **143A** | **Socs Landing,** | **19.44** | **359** | P | **Pn** | **05 50 26.4** | **+0.2** |
| 143A | | | | IAmb | IAmb | 05 50 27.8 | |
| | comp=Z,79nm,1.2s | | | | | | |
| **146A** | **Union** | **19.44** | **5** | P | **Pn** | **05 50 25.5** | **-0.6** |
| **HPIG** | | **19.47** | **317** | P | **Pn** | **05 50 26.5** | **-0.2** |
| HPIG | | | | IAmb | IAmb | 05 50 35.6 | |
| | comp=Z,59nm,1.3s | | | | | | |
| **BRDY** | **Brady** | **19.51** | **339** | P | **P** | **05 50 26.2** | **+0.6** |
| **SAND** | **Sanderson** | **19.67** | **330** | P | **Pn** | **05 50 28.1** | **-0.8** |
| **WHTX** | **Lake Whitney,** | **19.67** | **343** | P | **P** | **05 50 27.6** | **+0.3** |
| **WHTX** | **Lake Whitney,** | **19.67** | **343** | P | **Pn** | **05 50 28.1** | **-0.8** |
| | baz=160 | | | | | | |
| **TXAR** | **Lajitas Array** | **19.98** | **326** | P | **Pn** | **05 50 32.7** | **0.0** |
| | comp=Z,12nm,0.7s,baz=153,slow=12,SNR=52 | | | | | | |
| TXAR | | | | PcP | **PcP** | **05 54 45.8** | **-0.8** |
| | comp=Z,0.2nm,0.6s,baz=160,slow=2.9,SNR=2.0 | | | | | | |
| TXAR | | | | LR | LR | 05 59 41.0 | |
| | comp=Z,184nm,19.0s,baz=128,slow=41 | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **19.98** | **326** | P | **Pn** | **05 50 32.1** | **-0.6** |
| **FW14** | **Alvarado** | **19.99** | **344** | P | **P** | **05 50 30.6** | **-0.1** |
| FW14 | | | | IAmb | IAmb | 05 50 46.6 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **OZNA** | **Ozona** | **20.03** | **334** | P | **P** | **05 50 31.8** | **+0.6** |
| OZNA | | | | IAmb | IAmb | 05 50 34.6 | |
| | comp=Z,100nm,1.3s | | | | | | |
| **TREL** | **Terrell** | **20.04** | **347** | P | Pn | 05 50 32.2 | -1.0 |
| TREL | | | | IAmb | IAmb | 05 50 41.5 | |
| | comp=Z,141nm,1.7s | | | | | | |
| **Z41A** | **Richland Creek** | **20.07** | **355** | P | **P** | **05 50 32.2** | **+0.6** |
| Z41A | | | | IAmb | IAmb | 05 50 34.3 | |
| | comp=Z,86nm,1.4s | | | | | | |
| **LRAL** | **Lakeview Retre** | **20.09** | **10** | P | **P** | **05 50 32.3** | **+0.5** |
| **LRAL** | **Lakeview Retre** | **20.09** | **10** | P | **P** | **05 50 32.0** | **+0.2** |
| | baz=191,SNR=17 | | | | | | |
| **Z47A** | **Carrollton** | **20.10** | **7** | P | **P** | **05 50 32.5** | **+0.6** |
| Z47A | | | | IAmb | IAmb | 05 50 38.5 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **20.33** | **100** | P | **P** | **05 50 32.5** | **-2.3** |
| | comp=Z,12nm,0.5s,baz=309,slow=9.7,SNR=2.2 | | | | | | |
| **SDV** | **Santo Domingo** | **20.33** | **100** | *e*P | **P** | **05 50 35.4** | **+0.6** |
| **154A** | **Montrose** | **20.62** | **19** | P | **P** | **05 50 38.2** | **+0.7** |
| 154A | | | | IAmb | IAmb | 05 50 43.9 | |
| | comp=Z,80nm,1.1s | | | | | | |
| **CCAR** | **Cane Creek** | **20.66** | **358** | P | **P** | **05 50 38.8** | **+0.8** |
| CCAR | | | | IAmb | IAmb | 05 50 55.7 | |
| | comp=Z,61nm,1.0s | | | | | | |
| **SGCY** | **Sterling City** | **20.89** | **335** | P | **P** | **05 50 40.4** | **-0.1** |
| SGCY | | | | IAmb | IAmb | 05 50 52.0 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **20.95** | **339** | P | **P** | **05 50 42.1** | **+0.8** |
| | baz=155,SNR=8.0 | | | | | | |
| **GOGA** | **Godfrey** | **21.25** | **17** | P | **P** | **05 50 44.6** | **+0.2** |
| | baz=200,SNR=19 | | | | | | |
| **OXF** | **Oxford** | **21.28** | **3** | P | **P** | **05 50 45.5** | **+0.7** |
| | baz=184,SNR=17 | | | | | | |
| **LPIG** | **La Paz** | **21.34** | **303** | P | **P** | **05 50 49.8** | **+4.3** |
| | comp=Z,6.6nm,0.3s,baz=167,slow=5.6,SNR=5.4 | | | | | | |
| LPIG | | | | LR | LR | 05 59 07.3 | |
| | comp=Z,584nm,20.3s,baz=116,slow=36 | | | | | | |
| | comp=Z,6.6nm,0.3s | | | | | | |
| **MIAR** | **Mount Ida** | **21.41** | **354** | P | **P** | **05 50 45.7** | **-0.5** |
| | baz=173,SNR=21 | | | | | | |
| **NHSC** | **New Hope** | **22.12** | **24** | P | **P** | **05 50 53.1** | **-0.7** |
| | baz=208 | | |

MVCO **Mesa Verde** 28.65 330 P P 05 51 56.0 +1.0
baz=142,SNR=13
L44A **Lake County Fo** 29.01 5 P P 05 51 56.1 -1.8
baz=186
GLA **Glamis** 29.47 316 P P 05 52 03.3 +1.1
baz=126
M53A **Wl Miller and** 29.54 16 P P 05 52 01.1 -1.4
baz=200
JFWS **Jewell Farm** 29.64 1 P P 05 52 02.0 -1.4
baz=181,SNR=6.6
SSPA **Standing Stone** 29.64 20 P P 05 52 02.7 -0.7
baz=206
PDMCI **Parker Dam,Lak** 29.79 319 P P 05 52 06.1 +1.2
baz=129,SNR=9.3
SWSC **Sam W. Stewart** 30.07 315 P P 05 52 08.8 +1.4
baz=125
IKP **In-Ko-Pah, Jac** 30.12 314 P P 05 52 09.2 +1.3
baz=124
BC3 **Big Chuckawall** 30.25 317 P P 05 52 11.0 +1.8
baz=126,SNR=14
IRM **Iron Mountain** 30.35 318 P P 05 52 11.6 +1.7
baz=128,SNR=8.6
ERPA **Erie** 30.35 16 P P 05 52 09.1 -0.6
baz=201
MONP2 **Monument Peak** 30.47 314 P P 05 52 11.3 +0.1
baz=124
N23A **Red Feather La** 30.60 337 P P 05 52 12.7 +0.4
baz=150
BBSR **BB Station** 30.65 47 P P 05 52 11.9 -0.6
BELC **Belle Mtn. Jos** 30.82 317 P P 05 52 14.5 +0.3
baz=126
ECSD **EROS Data Cent** 30.85 352 P P 05 52 13.2 -1.0
baz=169,SNR=5.5
O20A **White River Ci** 30.89 334 P P 05 52 15.0 +0.2
baz=146,SNR=5.1
TEFE **Tefe** 30.89 121 eP P 05 52 14.7 -0.1
TPFO **Pinon Flats** 30.90 315 P P 05 52 15.6 +0.7
baz=125
PFO **Pinyon Flats O** 30.91 315 P P 05 52 15.8 +0.9
baz=125
109C **Camp Elliot, M** 30.95 314 P P 05 52 16.0 +0.8
baz=123
GMRC **Granite Mounta** 31.07 318 P P 05 52 17.6 +1.2
baz=128,SNR=10
MURC **Murrieta** 31.41 315 P P 05 52 19.4 +0.2
baz=124
PAL **Palisades** 31.45 25 P P 05 52 19.3 -0.1
baz=213
HEC **Hector,Ludlow** 31.54 317 P P 05 52 21.3 +0.8
baz=127
BBRC **Big Bear Solar** 31.59 316 P P 05 52 21.5 +0.4
baz=125
BINY **Binghamton** 31.68 21 P P 05 52 20.2 -1.4
baz=208
TCRU **Three Creeks R** 31.74 327 P P 05 52 23.7 +1.3
TCRU IAmb IAmb 05 52 32.7
comp=Z,16nm,0.7s
RWWY **Rawlins** 31.77 336 P P 05 52 23.5 +0.9
RWWY IAmb IAmb 05 52 25.9
comp=Z,15nm,1.0s
J54A **Appleton** 31.80 17 P P 05 52 21.1 -1.4
J54A IAmb IAmb 05 52 23.7
comp=Z,23nm,0.8s
RDMU **Red Mountain** 31.83 332 P P 05 52 23.8 +0.7
BOAV **Boa Vista** 31.89 107 P P 05 52 23.5 -0.1
BOAV **Boa Vista** 31.89 107 eP P 05 52 23.8 +0.1
SPMN **Marine on St.** 31.98 357 P P 05 52 22.6 -1.5
baz=176,SNR=24
GLMI **Grayling** 31.99 8 P P 05 52 21.9 -2.3
baz=191
BFSC **Mount Baldy Ra** 32.08 315 P P 05 52 25.7 +0.4
baz=124
GSC **Goldstone, Bar** 32.13 318 P P 05 52 26.0 +0.4
baz=127
CIS **Catalina Islan** 32.15 313 P P 05 52 25.8 +0.1
baz=122
K22A **Casper** 32.34 338 P P 05 52 28.4 +0.9
baz=151
EDW2 **Edwards Air Fo** 32.67 316 P P 05 52 31.7 +1.3
baz=125
TPNV **Topopah Spring** 32.79 321 P P 05 52 32.7 +1.2
baz=130,SNR=5.7
LRMC **Laurel Mtn Rad** 32.81 317 P P 05 52 32.7 +1.1
baz=126
RSSD **Black Hills** 32.83 342 P P 05 52 32.8 +1.0
baz=156
RSSD **Black Hills** 32.83 342 P P 05 52 31.8 -0.1
RSSD PcP PcP 05 55 18.6 +2.2
FURC **Furnace Creek,** 32.87 319 P P 05 52 33.5 +1.5
baz=128,SNR=8.3
MPMC **Manual Prospec** 33.02 318 P P 05 52 35.3 +1.7
baz=127,SNR=18
SADO **Sadowa** 33.05 15 LR LR 06 06 38.0
comp=Z,2µm,20.5s,baz=240,slow=38
DUG **Dugway, Tooele** 33.10 328 P P 05 52 35.5 +1.4
baz=138,SNR=5.2
E38A **The Farm, Brul** 33.33 359 P P 05 52 34.3 -1.6
ARVC **Arvin** 33.38 316 P P 05 52 38.5 +2.0
baz=124
ISA **Isabella, Lake** 33.44 317 P P 05 52 38.7 +1.6
baz=125
ETMB **Extrema** 33.50 132 eP P 05 52 38.0 +0.3
GRAC **Grapevine Rang** 33.52 320 P P 05 52 39.7 +2.0
baz=128,SNR=17
BW06 **Boulder Array** 33.62 335 P P 05 52 39.5 +0.8
baz=146
PDAR **Pinedale Array** 33.62 335 P P 05 52 38.0 -0.7
comp=Z,2.1nm,0.8s,baz=134,slow=8.5,SNR=14
PDAR PcP PcP 05 55 18.2 -0.4
comp=Z,1.8nm,0.9s,baz=147,slow=3.0,SNR=6.8
comp=Z,2.1nm,0.8s
CWC **Cottonwood Cre** 33.63 318 P P 05 52 40.2 +1.3
baz=126
PKM **Mcpherson Peak** 33.92 315 P P 05 52 42.8 +1.3
baz=122
VES **Vestal, Richgr** 33.95 317 P P 05 52 43.1 +1.7
baz=124,SNR=14
MACA **Manacapuru-AM** 34.10 116 eP P 05 52 42.8 -0.1
AHID **Auburn Hatcher** 34.27 333 P P 05 52 45.0 +0.6
AHID IAmb IAmb 05 52 46.7
comp=Z,12nm,1.1s
LONY **Lake Ozonia** 34.29 21 P P 05 52 43.1 -1.3
baz=209,SNR=7.1
EYMN **Ely** 34.67 359 P P 05 52 45.9 -1.6
baz=179,SNR=7.1
SNOW **Snow King Moun** 34.69 334 P P 05 52 48.8 +0.8
LBNH **Lisbon** 34.96 24 P P 05 52 48.7 -1.3
baz=213
NVAR **Mina Array Bea** 34.99 321 P P 05 52 53.0 +2.3
NVAR PcP PcP 05 55 23.4 +0.8
comp=Z,20nm,0.9s,baz=136,slow=8.3,SNR=67
comp=Z,4.7nm,0.9s,baz=134,slow=4.6,SNR=4.8
comp=Z,20nm,0.9s
SAML **Samuel** 35.22 127 eP P 05 52 51.7 -0.9
AGMN **Agassiz Nation** 35.26 354 P P 05 52 51.0 -1.6
baz=172,SNR=19
MDND **Maddock** 35.32 350 P P 05 52 51.8 -1.3
baz=165
RLMT **Red Lodge** 35.48 337 P P 05 52 54.7 -0.1
baz=148,SNR=5.7
HLID **Hailey** 36.41 331 P P 05 53 03.3 +0.5
baz=139,SNR=11
BOZ **Bozeman (W)** 36.79 335 P P 05 53 06.0 +0.1
baz=145,SNR=5.1
PKME **Peaks-Kenny Pk** 36.88 26 P P 05 53 05.1 -1.4
baz=216
DGMT **Dagmar** 36.88 345 P P 05 53 05.9 -0.6
baz=158
LPAZ **La Paz** 36.92 142 P P 05 53 06.7 -1.1
comp=Z,1.3nm,0.8s,baz=348,slow=11,SNR=6.5
comp=Z,1.3nm,0.8s
LPAZ **La Paz** 36.92 142 eP P 05 53 07.1 -0.7
LPAZ **La Paz** 36.92 142 P P 05 53 08.1 +0.2
ULM **Lac du Bonnet** 37.19 355 P P 05 53 07.1 -2.0
comp=Z,41nm,1.0s,baz=176,slow=9.0,SNR=21
ULM PcP PcP 05 55 28.1 -0.5
comp=Z,8.9nm,0.9s,baz=140,slow=3.6,SNR=3.0
comp=Z,41nm,1.0s
EGMT **Eagleton** 38.13 339 P P 05 53 17.0 -0.2
baz=149,SNR=6.1
MSO **Missoula** 38.73 335 P P 05 53 21.7 -0.6
baz=142,SNR=7.7
ITTB **Itaituba** 39.02 114 eP P 05 53 24.7 -0.3
VILB **Vilhena** 39.99 129 P P 05 53 33.3 +0.2
VILB IAmb IAmb 05 53 48.9
comp=Z,34nm,1.2s
VILB **Vilhena** 39.99 129 eP P 05 53 33.7 +0.6

NPGB **Novo Progresso** 40.61 118 eP P 05 53 37.2 -1.0
NEW **Newport** 41.21 333 P P 05 53 42.7 0.0
baz=139
LVC **Limon Verde** 41.58 149 LR LR 06 10 58.1
comp=Z,164nm,18.2s,baz=314,slow=36
LVC **Limon Verde** 41.58 149 eP P 05 53 46.7 +0.3
PDRB **Porto dos Gac** 41.89 125 eP P 05 53 49.7 +1.0
CLDB **Colider** 42.24 123 eP P 05 53 54.0 +2.5
FFC **Flin Flon** 42.36 350 P P 05 53 51.2 -0.7
BBSD **Serra de San D** 42.48 134 eP P 05 53 53.8 +0.4
RPN **Rapa Nui** 43.88 204 LR LR 06 08 30.8
comp=Z,267nm,18.1s,baz=18,slow=30
PRPB **Parauapebas** 45.10 113 eP P 05 54 14.2 -0.5
TMAB **Tom-Au,PA,Br** 45.18 107 eP P 05 54 15.7 +0.4
SALV **Santo Antonio** 45.23 129 eP P 05 54 16.6 +1.0
SCHQ **Schefferville** 45.63 19 P P 05 54 15.9 -2.3
comp=Z,38nm,1.0s,baz=225,slow=7.3,SNR=21
comp=Z,38nm,1.0s
SNDB **Serra Nova Dou** 46.55 121 eP P 05 54 25.9 -0.1
H03N2 **Juan Fernandez** 47.74 166 T T 06 46 14.2
baz=342
H03N1 **Juan Fernandez** 47.74 166 T T 06 46 08.9
baz=342
H03N3 **Juan Fernandez** 47.76 166 T T 06 46 09.5
baz=342
ARAG **Araguaiana, MT** 48.14 125 eP P 05 54 38.3 -0.1
SMTB **Santa Maria do** 48.25 115 eP P 05 54 39.1 -0.2
CPUP **Villa Florida** 51.06 140 P P 05 54 59.1 -1.3
comp=Z,2.9nm,1.0s,baz=240,slow=0.9,SNR=3.5
comp=Z,2.9nm,1.0s
CPUP **Villa Florida** 51.06 140 P P 05 54 59.9 -0.5
CPUP pP pwP 05 55 10.7 -1.6
BDFB **Brasilia** 51.17 123 P P 05 54 59.6 -2.0
comp=Z,0.7nm,0.4s,baz=303,slow=14,SNR=1.4
comp=Z,0.7nm,0.4s
YKA **Yellowknife Ar** 52.07 346 P P 05 55 07.1 -0.4
comp=Z,7.2nm,1.0s,baz=145,slow=8.2,SNR=16
comp=Z,7.2nm,1.0s
TOAD **Toad River Com** 52.30 338 P P 05 55 09.9 +0.6
baz=136
KOTAN **Kotaneelee Air** 52.83 340 P P 05 55 13.8 +0.6
baz=138
LIRD **Liard River Hi** 53.01 338 P P 05 55 14.9 +0.4
baz=135
TAOE **Nuku Hiva Isla** 53.59 248 eS S 06 02 57.2 +5.8
comp=Z,125nm,24.8s
TAOE eLR LR 06 10 41.0
comp=Z,184nm,22.2s
U33K **Whale Pass** 53.73 332 P P 05 55 20.8 +0.9
baz=126
DLBC **Dease Lake** 53.84 336 P P 05 55 21.6 +0.8
baz=130,SNR=7.0
S34M **Telegraph Cree** 53.96 335 P P 05 55 22.3 +0.8
baz=129
PSAL **Palomas, Salto** 54.39 145 eP P 05 55 24.2 -0.7
R33M **Jennings River** 54.84 336 P P 05 55 28.2 +0.2
baz=130
WRGLY **Wrigley** 54.99 343 P P 05 55 28.8 -0.1
baz=140
NBCL **Cascavel-CE** 55.01 105 eP P 05 55 30.7 +0.8
Q32M **Nakina River** 55.08 335 P P 05 55 30.1 +0.2
baz=128
P32M **Atlin** 56.05 335 P P 05 55 36.8 +0.1
baz=127
RKT **Rikitea** 56.24 230 eLR LR 06 12 03.0
comp=Z,1µm,29.0s
PLCA **Paso Flores** 56.85 162 P P 05 55 41.6 -1.0
comp=Z,2.9nm,1.0s,baz=329,slow=6.0,SNR=3.8
comp=Z,2.9nm,1.0s
PLCA **Paso Flores** 56.85 162 P P 05 55 42.3 -0.3
IVI **Ivigtut** 57.00 23 P P 05 55 41.8 -1.5
IVI sP sP 05 55 56.9 +0.6
WHY **Whitehorse** 57.16 336 P P 05 55 44.6 -0.1
baz=126
FARO **Faro, Yukon** 57.54 338 P P 05 55 47.5 +0.4
baz=129
P30M **Million Dollar** 57.70 335 P P 05 55 48.3 0.0
baz=124
O30N **Mendenhall** 57.71 336 P P 05 55 48.6 +0.2
baz=125
P29M **Windy Craggy** 57.75 334 P P 05 55 48.8 +0.1
baz=123
RCBR **Riachuelo** 57.78 106 P P 05 55 49.1 -0.5
RCBR **Riachuelo** 57.78 106 eP P 05 55 50.4 +0.7
RCBR **Riachuelo** 57.78 106 P P 05 55 50.1 +0.5
NBLA **Lagarto - SE** 57.91 112 eP P 05 55 50.4 -0.1
M31M **Drury Creek, Y** 57.91 338 P P 05 55 50.1 +0.4
baz=128
N31M **Braeburn, Yuko** 58.01 336 P P 05 55 50.8 +0.3
baz=126
NBCA **Caruaru-PE** 58.50 108 eP P 05 55 55.7 +1.0
N30M **Aishikik Lake** 58.50 336 P P 05 55 54.3 +0.3
baz=124
YUK6 **Outpost Mounta** 58.73 335 P P 05 55 55.7 0.0
baz=123
NBAN **Anadia - AL** 58.78 110 eP P 05 55 57.2 +0.6
M30M **Minto, Yukon** 59.03 337 P P 05 55 58.0 +0.4
baz=125
YUK4 **Talbot Arm** 59.06 335 P P 05 55 58.3 +0.3
baz=125
YUK8 **Steele Glacier** 59.49 335 P P 05 56 01.3 +0.3
baz=122
M29M **Somme Creek** 59.59 337 P P 05 56 01.9 +0.3
baz=124,SNR=7.8
L29M **L29M** 59.84 337 P P 05 56 03.1 0.0
baz=124
YUK3 **Moose Creek** 60.03 335 P P 05 56 04.9 +0.2
baz=121
K29M **Barlow Dome** 60.03 338 P P 05 56 04.4 -0.2
baz=125
J30M **Hart River** 60.05 339 P P 05 56 05.3 +0.7
baz=127
I30M **Mount Dempster** 60.45 340 P P 05 56 08.1 +0.7
baz=127
KAIM **Kayak Island** 60.84 332 P P 05 56 10.3 +0.3
baz=116
DAWY **Dawson** 60.84 338 P P 05 56 10.3 +0.3
baz=123
G31M **Satah River** 60.84 342 P P 05 56 10.2 +0.3
baz=130
MCARA **McCarthy VSAT** 60.90 334 P P 05 56 10.6 +0.2
baz=118
M27K **Edge Creek, AK** 60.90 335 P P 05 56 10.7 +0.2
baz=120
F31M **Tsiigehtchic** 61.02 343 P P 05 56 11.4 +0.3
baz=131
I29M **Ogilvie Camp,** 61.19 339 P P 05 56 12.5 +0.2
baz=125
L27K **Beaver Creek,** 61.24 336 P P 05 56 13.0 +0.3
baz=120,SNR=6.2
EPYK **Eagle Plains** 61.26 341 P P 05 56 12.5 -0.3
baz=127
M26K **Nabesna, AK** 61.38 335 P P 05 56 13.8 +0.1
baz=119
BMRM **Bremner River** 61.39 333 P P 05 56 13.8 0.0
baz=116
INK **Inuvik** 61.53 343 P P 05 56 14.0 -0.5
baz=131,SNR=7.6
N25K **Chitina, Valde** 61.67 334 P P 05 56 15.5 -0.3
baz=117
H29M **Whitestone** 61.71 340 P P 05 56 15.6 -0.2
baz=125
F30M **Barrier River** 61.73 342 P P 05 56 15.8 -0.1
baz=129
I28M **Miner Creek** 61.80 339 P P 05 56 16.8 +0.2
baz=123
L26K **Log Cabin Wild** 61.82 336 P P 05 56 17.1 +0.5
baz=119
K27K **Chicken** 61.83 337 P P 05 56 16.7 +0.1
baz=120
EGAK **Eagle** 61.87 338 P P 05 56 17.4 +0.5
baz=122
G29M **Pine Creek** 62.00 341 P P 05 56 18.1 +0.3
baz=126
KLU **Klutina** 62.19 334 P P 05 56 19.7 +0.5
baz=116
I27K **Kandik River** 62.48 339 P P 05 56 21.5 +0.5
baz=122
SCRK **Sand Creek** 62.53 337 P P 05 56 22.7 +1.2
baz=118
M24K **Tolsona, Glenn** 62.56 334 P P 05 56 22.9 +1.2
baz=116
J26L **Joseph Creek** 62.62 337 P P 05 56 21.9 -0.2
baz=119,SNR=8.8
PAX **Paxson** 62.65 335 P P 05 56 22.9 +0.6
baz=117
H27K **Steamboat Moun** 62.78 339 P P 05 56 23.9 +0.9
baz=122,SNR=7.4
E29M **Blow River** 62.84 342 P P 05 56 23.8 +0.5
baz=127
I26K **Coal Creek Min** 62.87 338 P P 05 56 24.0 +0.4
baz=120
SCM **Sheep Creek Mo** 62.94 334 P P 05 56 24.6 +0.4
baz=114
F28M **Old Crow** 62.99 341 P P 05 56 25.2 +0.9
baz=124,SNR=18
M23K **Glacier View** 63.10 334 P P 05 56 25.7 +0.5
baz=114
G27K **Doyon Strip** 63.13 340 P P 05 56 25.0 -0.4
G27K **Doyon Strip** 63.13 340 P P 05 56 25.7 +0.4
baz=122
K24K **Donnelly Dome** 63.15 336 P P 05 56 25.7 +0.1
baz=117
SEW **Seward** 63.22 331 P P 05 56 27.4 +1.5
baz=111
KNK **Knik Glacier** 63.27 333 P P 05 56 27.0 +0.7
baz=113
J25K **Salcha River,** 63.36 337 P P 05 56 27.5 +0.6
baz=118
SML **Sawmill** 63.37 333 P P 05 56 27.9 +0.9
baz=113
WAT6 **Susitna Watana** 63.43 334 P P 05 56 28.2 +0.7
baz=114
E28M **Babbage River** 63.46 342 P P 05 56 27.8 +0.3
baz=125
GHO **Glory Hole Cre** 63.61 333 P P 05 56 28.3 -0.4
PMR **Palmer** 63.63 333 P P 05 56 29.2 +0.6
baz=112
BRSE **Bradley Lake S** 63.70 331 P P 05 56 30.2 +1.0
baz=110
RC01 **Rabbit Creek A** 63.72 332 P P 05 56 29.9 +0.6
baz=112
PRP **Porcupine Dome** 63.84 338 P P 05 56 30.7 +0.5
baz=118,SNR=6.4
E27K **Coleen River** 63.86 341 P P 05 56 30.6 +0.5
baz=123
WAT1 **Susitna Watana** 63.87 334 P P 05 56 31.0 +0.7
baz=114
HDA **Harding Lake** 63.88 336 P P 05 56 29.3 -1.0
HDA **Harding Lake** 63.88 336 P P 05 56 30.9 +0.6
baz=116
G26K **Porcupine Rive** 63.92 340 P P 05 56 30.9 +0.5
baz=120
ILAR **Eielson Array** 64.02 337 P P 05 56 30.9 -0.3
comp=Z,8.6nm,1.0s,baz=122,slow=4.2,SNR=45
comp=Z,8.6nm,1.0s
Q20K **Shuyak Island** 64.14 329 P P 05 56 32.2 +0.2
baz=108
D27M **Malcolm River** 64.25 342 P P 05 56 33.0 +0.3
baz=124
H25L **Birch Creek** 64.30 338 P P 05 56 33.6 +0.7
baz=118
SUA **Susitna One** 64.31 333 P P 05 56 33.7 +0.5
baz=111
POKR **Poker Plat Res** 64.38 337 P P 05 56 33.7 +0.2
baz=116
MCK **McKinley** 64.39 335 P P 05 56 34.2 +0.5
baz=114
F26K **Sheenjek River** 64.42 340 P P 05 56 34.2 +0.4
baz=120,SNR=5.9
COLA **College** 64.43 337 P P 05 56 34.9 +1.0
baz=115
COLA **College** 64.43 337 P P 05 56 34.1 +0.2
COLA PcP PcP 05 57 08.8 +0.8
CUT **Chulitna** 64.44 334 P P 05 56 34.7 +0.7
baz=112
ICESG **Greenland Ices** 64.51 18 iP P 05 56 31.4 -3.3
ICESG IAmb IAmb 05 56 34.8
comp=Z,12nm,0.8s
ICESG e 05 57 48.5
G25K **Bearman Lake** 64.64 339 P P 05 56 35.7 +0.6
baz=118
O20K **Slope Mountain** 64.71 331 P P 05 56 36.4 +0.5
baz=108
NEA2 **Nenana** 64.79 336 P P 05 56 37.0 +0.7
baz=114
SKT **Skwentna** 64.84 333 P P 05 56 36.7 +0.1
SKT **Skwentna** 64.84 333 P P 05 56 37.1 +0.5
baz=110
Q19K **Cape Douglas,** 64.85 329 P P 05 56 37.8 +1.0
baz=107
H24K **Noodor Dome** 64.86 338 P P 05 56 37.6 +0.9
baz=116,SNR=7.2
P19K **Oil Pt** 64.87 330 P P 05 56 37.6 +0.8
baz=108
F25K **Christian Rive** 64.87 340 P P 05 56 38.0 +1.2
baz=118,SNR=7.6
N20K **Mount Spurr** 64.88 332 P P 05 56 37.8 +0.8
baz=109
R18K **Karluk** 64.88 328 P P 05 56 37.4 +0.5
baz=106
G24K **Hadweenzic Riv** 65.09 339 P P 05 56 39.1 +0.9
baz=116
I23K **Minto, Yukon-K** 65.13 337 P P 05 56 38.0 -0.4
I23K IAmb IAmb 05 56 40.3
comp=Z,18nm,1.0s
I23K **Minto, Yukon-K** 65.13 337 P P 05 56 39.2 +0.8
baz=114,SNR=12
BPAW **Bear Paw Mtn.** 65.37 335 P P 05 56 40.1 +0.1
baz=112,SNR=7.5
Q18K **Katmai Hardscr** 65.46 329 P P 05 56 41.3 +0.5
baz=106
H23K **Yukon River** 65.48 337 P P 05 56 41.2 +0.5
baz=114
PPT **Papeete** 65.48 244 LR LR 06 20 12.0
comp=Z,168nm,18.9s,baz=36,slow=31
PPT2 **Papeete2** 65.49 244 eLR LR 06 16 17.0
comp=Z,182nm,22.8s
M20K **Styx River** 65.52 333 P P 05 56 41.4 +0.2
baz=109
O19K **Port Alsworth** 65.55 331 P P 05 56 41.9 +0.7
baz=107
F24K **Squaw Lake** 65.60 339 P P 05 56 42.4 +0.9
baz=116
MLY **Manley** 65.62 336 P P 05 56 41.5 -0.2
MLY IAmb IAmb 05 56 43.8
comp=Z,17nm,1.0s
MLY **Manley** 65.62 336 P P 05 56 42.0 +0.3
baz=112,SNR=16
P18K **Big Mountain,** 65.77 330 P P 05 56 43.8 +1.1
baz=106
Q17K **Contact Creek** 65.80 328 P P 05 56 43.7 +0.6
baz=104
N19K **Bonanza Creek** 65.81 331 P P 05 56 43.2 +0.2
baz=107,SNR=7.6
CHUM **Lake Minchumin** 65.84 335 P P 05 56 43.7 +0.7
baz=110
O18K **Kokhth Hills** 65.88 330 P P 05 56 43.8 +0.4
baz=106
R17L **Mt. Peulik Vol** 65.89 328 P P 05 56 44.4 +0.9
baz=104
D25K **Kavik River** 65.94 341 P P 05 56 44.6 +1.0
baz=118
G23K **Bananza Creek** 66.01 338 P P 05 56 44.7 +0.5
baz=114,SNR=5.5
L20K **Farewell, AK** 66.04 333 P P 05 56 44.8 +0.4
baz=108,SNR=6.3
E24K **Your Creek** 66.05 340 P P 05 56 45.2 +0.8
baz=116
M19K **Big River Lodg** 66.09 332 P P 05 56 45.4 +0.7
baz=108
H22K **Ishtalitna Cre** 66.20 337 P P 05 56 45.9 +0.5
baz=112,SNR=10
COLD **Coldfoot** 66.29 339 P P 05 56 47.2 +1.3
baz=114,SNR=9.1
P17K **Kvichak River** 66.32 329 P P 05 56 47.5 +1.4
baz=104
L19K **White Mountain** 66.39 333 P P 05 56 47.4 +0.8
baz=107
K20K **Telida** 66.40 334 P P 05 56 46.3 -0.4
K20K **Telida** 66.40 334 P P 05 56 47.1 +0.4
baz=108
E23K **Chandalar** 66.43 339 P P 05 56 47.7 +0.8
baz=115,SNR=8.4
N18K **Kilae Creek** 66.44 331 P P 05 56 47.8 +0.8
baz=106,SNR=5.4
M18K **Stony River** 66.63 332 P P 05 56 49.5 +1.4
baz=106
D24K **Happy Valley** 66.63 341 P P 05 56 48.9 +0.8
baz=116
G22K **Bettles** 66.64 338 P P 05 56 49.3 +1.2
baz=112
TOLK **Toolik Lake Re** 66.66 340 P P 05 56 48.9 +0.7
baz=115,SNR=5.7
H21K **Melozitna Rive** 66.66 337 P P 05 56 48.5 +0.2

baz=111,SNR=6.2
**J20K Nowinta River** 66.70 335 P P 05 56 48.9 +0.4
baz=109
**SUMG Summit** 66.74 15 *i* P P 05 56 47.0 -2.2
SUMG IAmb IAmb 05 56 51.5
comp=Z,10nm,1.0s
SUMG *e* 05 58 03.7
**SOEG Soedalen** 66.75 21 *i* P P 05 56 46.7 -2.1
SOEG IAmb IAmb 05 56 49.1
comp=Z,6,6nm,0.5s
**O17K Koliganek Bris** 66.78 330 P P 05 56 49.6 +0.5
baz=104
**C24K Franklin Bluff** 66.85 341 P P 05 56 49.9 +0.5
baz=116
**N17K Nushagak Hills** 67.02 331 P P 05 56 51.4 +0.8
baz=104
**I20K Naaghedeneel** 67.03 335 P P 05 56 51.5 +0.8
baz=109,SNR=8.7
**F22K John River** 67.10 339 P P 05 56 52.0 +0.9
baz=112
**D23K Nanushuk River** 67.16 340 P P 05 56 52.4 +1.0
baz=114
**E22K Anaktuvuk Pass** 67.21 339 P P 05 56 52.7 +0.9
baz=112
**L18K Granite Mounta** 67.22 332 P P 05 56 52.6 +0.7
baz=106
**G21K Allakaket** 67.23 337 P P 05 56 52.2 +0.3
baz=110,SNR=5.9
**O16K Kokwok River B** 67.23 329 P P 05 56 52.5 +0.6
baz=103
**J19K Poorman** 67.26 334 P P 05 56 52.9 +0.8
baz=107
**M17K Holitna River** 67.35 331 P P 05 56 53.7 +1.0
baz=104
**NEEM North Greenlan** 67.38 9 *i* P P 05 56 50.7 -2.3
NEEM IAmb IAmb 05 56 54.3
comp=Z,9.9nm,0.8s
NEEM *e* 05 58 08.4
**H20K Anotleneega Mo** 67.42 336 P P 05 56 53.7 +0.5
baz=108
**F21K Alatna River** 67.47 338 P P 05 56 54.6 +1.2
baz=110,SNR=31
**C23K Itkillik River** 67.50 341 P P 05 56 54.8 +1.3
baz=114,SNR=6.3
**N16K Nishlik Lake** 67.76 330 P P 05 56 56.5 +1.2
baz=103,SNR=5.6
**D22K Ayikyak River** 67.79 340 P P 05 56 55.0 -0.5
D22K IAmb IAmb 05 57 35.4
comp=Z,22nm,1.7s
**D22K Ayikyak River** 67.79 340 P P 05 56 55.8 +0.3
baz=112
**TBI Tubuai** 67.82 238 *e*LR LR 06 17 21.4
comp=Z,848nm,26.5s
**L17K Donlin** 67.93 332 P P 05 56 56.7 +0.3
baz=104
**O15K Ungalikthiuk R** 68.01 329 P P 05 56 57.0 +0.1
baz=101
**H19K Roundabout Mou** 68.05 336 P P 05 56 57.4 +0.4
baz=107,SNR=7.9
**E21K Killik River** 68.07 339 P P 05 56 57.8 +0.6
baz=110
**K17K Iditarod** 68.07 333 P P 05 56 58.7 +1.4
baz=104
**F20K Avaraart Lake** 68.24 338 P P 05 56 59.2 +1.1
baz=108
**N15K Kwethluk River** 68.34 330 P P 05 57 00.1 +1.1
baz=102
**L16K Owhat River** 68.37 332 P P 05 56 59.9 +0.8
baz=103
**G19K Purcell Mounta** 68.48 336 P P 05 57 00.5 +0.7
baz=107,SNR=7.1
**J17K VABM Dome** 68.58 333 P P 05 57 01.8 +1.3
baz=104
**C21K Knifeblade Rid** 68.60 340 P P 05 57 01.7 +1.2
baz=110
**S12K Black Hills** 68.61 325 P P 05 57 02.1 +1.4
baz=98
**B21K Ikpikpuk River** 68.70 340 P P 05 57 02.1 +1.1
baz=110
**H18K Honhosa River** 68.72 335 P P 05 57 02.7 +1.4
baz=105
**M15K Kasigluk River** 68.74 330 P P 05 57 02.7 +1.3
baz=101
**E20K Nigu River** 68.79 339 P P 05 57 02.9 +1.2
baz=108
**E19K Redstone River** 68.92 338 P P 05 57 03.5 +1.0
baz=107
**F19K Shaleruckik Mo** 68.94 337 P P 05 57 02.2 -0.4
**F19K Shaleruckik Mo** 68.94 337 P P 05 57 03.5 +0.9
baz=106
**G18K Tagagawik** 69.03 336 P P 05 57 04.2 +1.0
baz=105
**D20K Etivluk River** 69.08 339 P P 05 57 04.5 +1.0
baz=108,SNR=8.4
**J16K Anvik River** 69.23 333 P P 05 57 05.9 +1.4
baz=102
**L15K Ungalak Mounta** 69.31 331 P P 05 57 06.7 +1.8
baz=101,SNR=6.1
**M14K Bethel** 69.36 330 P P 05 57 06.9 +1.7
baz=100,SNR=8.9
**I17K Unalakleet** 69.40 334 P P 05 57 07.7 +2.3
baz=102
**K15K Wolf Creek Mou** 69.44 332 P P 05 57 07.1 +1.3
baz=101
**D19K Kuna River** 69.54 339 P P 05 57 07.3 +1.0
baz=106,SNR=5.7
**F18K Selawik** 69.60 337 P P 05 57 08.4 +1.7
baz=104
**B20K Meade River** 69.67 340 P P 05 57 08.2 +1.2
baz=108
**G17K Kiwalik Mounta** 69.73 335 P P 05 57 08.9 +1.3
baz=103
**L14K Kuka Creek** 69.81 331 P P 05 57 09.2 +1.2
baz=100
**M13K Dall Lake** 69.98 330 P P 05 57 11.0 +1.9
baz=99,SNR=5.2
**C19K Lookout Ridge** 70.22 339 P P 05 57 11.9 +1.4
baz=105
**G16K Koyuk River** 70.41 335 P P 05 57 13.1 +1.4
baz=101
**J14K Nanvaranak Lak** 70.45 332 P P 05 57 13.1 +1.2
baz=99
**E17K Hotham Inlet** 70.55 337 P P 05 57 13.9 +1.4
baz=102
**C18K Utukok River** 70.67 339 P P 05 57 14.0 +0.7
baz=104
**K13K Kusilvak Mount** 70.83 331 P P 05 57 14.4 +0.2
baz=98
**UNV Unalaska Valle** 70.98 323 P P 05 57 15.5 +0.1
baz=94
**B18K Kokolik River** 71.05 339 P P 05 57 16.5 +1.0
baz=103
**D17K Noatak River** 71.15 337 P P 05 57 16.8 +0.6
baz=101
**F15K North Star Dit** 71.40 335 P P 05 57 18.5 +0.8
baz=99
**DAG Danmarks Havn** 73.21 13 *i* P P 05 57 25.0 -3.3
DAG IAmb IAmb 05 57 28.3
comp=Z,6.5nm,0.8s
DAG *e* 05 58 43.0
**SPIA Saint Paul Isl** 73.27 326 P P 05 57 27.9 -1.1
baz=92
**PCAS Casmilo, Conde** 75.87 52 *e*P P 05 57 43.1 -1.4
**PMTG Montargil** 76.17 53 *e*P P 05 57 44.6 -1.6
**MESJ Messejana** 76.30 54 *e*P P 05 57 47.5 +0.5
MESJ IAMs_20 IAMs_20 06 29 33.9
comp=Z,264nm,17.7s
**PCBR Castelo Branco** 76.67 52 *e*P P 05 57 48.3 -0.7
**PVAQ Vaqueiros** 76.75 54 *e*P P 05 57 53.3 +3.8
**EKA Eskdalemuir Ar** 78.00 36 P P 05 57 52.9 -3.2
comp=Z,4.4nm,0.9s,baz=273,slow=5.7,SNR=8.8
comp=Z,4.4nm,0.9s
**ESDC Sonseca Array** 79.38 52 P P 05 58 01.4 -2.8
comp=Z,4.8nm,1.0s,baz=290,slow=6.1,SNR=27
comp=Z,4.8nm,1.0s
**SHEM Shemya Is, Ala** 82.64 322 LR LR 06 32 12.8
comp=Z,43nm,22.0s,baz=144,slow=34
**NB2 NORSAR Subarra** 84.35 29 P P 05 58 29.0 -0.8
comp=Z,13nm,1.7s,baz=289,slow=5.6
**NOA NORSAR Array B** 84.35 29 P P 05 58 28.5 -1.3
comp=Z,1.9nm,1.0s,baz=290,slow=5.2,SNR=4.7
comp=Z,1.9nm,1.0s
**DBIC Dimbokro** 84.66 84 P P 05 58 31.5 -0.7
comp=Z,11nm,0.8s,baz=267,slow=4.4,SNR=16
comp=Z,11nm,0.8s
**RETH Rethem/Aller,** 85.73 37 *e*P P 05 58 36.1 -0.7
comp=Z,6.5nm,1.0s,baz=279,slow=5.3
**HFS Hagfors** 85.79 29 P P 05 58 35.2 -1.8
comp=Z,2.1nm,0.7s,baz=222,slow=1.9,SNR=5.1
comp=Z,2.1nm,0.7s
**NRDL Niedersach Rie** 86.24 37 *e*P P 05 58 38.3 -1.0
comp=Z,8.0nm,1.3s,baz=279,slow=5.3
**GTTG Gottingen** 86.42 38 *e*P P 05 58 39.9 -0.4
comp=Z,8.0nm,0.9s,baz=279,slow=5.3
**ARCES ARCESS Array B** 86.57 18 P P 05 58 39.0 -1.7
comp=Z,2.2nm,0.8s,baz=318,slow=2.4,SNR=4.5
comp=Z,2.2nm,0.8s
**CLZ Clausthal** 86.58 38 *e*P P 05 58 40.4 -0.8
comp=Z,5.0nm,0.8s,baz=279,slow=5.3
**FLTG Flechtingen** 86.95 37 *e*P P 05 58 41.2 -1.6
comp=Z,7.9nm,1.1s,baz=279,slow=5.3
**DAVA Damuels** 87.59 42 *i* P P 05 58 45.6 -0.7
comp=Z,7.6nm,1.1s
**NEUB Neuenburg** 87.61 38 *e*P P 05 58 45.6 -0.5
comp=Z,9.3nm,1.1s,baz=279,slow=5.3
**UBR Ueberruh** 87.63 42 *e*P P 05 58 45.4 -0.9
comp=Z,8.9nm,1.2s,baz=279,slow=5.3
**MOX Moxa** 87.68 38 *e*P P 05 58 45.2 -1.2
comp=Z,6.4nm,1.3s,baz=279,slow=5.3
MOX *e*L L 06 39 37.0
comp=Z,178nm,18.5s
**GRF Grafenberg Arr** 87.73 39 *e*P P 05 58 46.6 -0.1
comp=Z,15nm,1.3s,baz=279,slow=5.3
GRF *e*L L 06 36 35.6
comp=Z,212nm,18.5s
**PLN Plauen** 88.06 39 *e*P P 05 58 47.1 -1.2
comp=Z,6.1nm,1.0s,baz=279,slow=5.3
**RETA Reutte** 88.11 42 *i* P P 05 58 47.9 -0.7
comp=Z,5.7nm,1.1s
**MANZ Manzenberg** 88.19 39 *e*P P 05 58 48.2 -0.7
comp=Z,1.1nm,1.1s,baz=279,slow=5.3
**FETA Feichten** 88.22 42 *i* P P 05 58 48.4 -0.9
comp=Z,3.8nm,1.0s
**TANN Tannenbergstha** 88.27 39 *e*P P 05 58 48.1 -1.3
comp=Z,6.1nm,1.0s,baz=279,slow=5.3
**CLL Collm** 88.31 38 *i* P P 05 58 48.0 -1.4
comp=Z,7.0nm,1.1s
CLL *e*S S 06 09 35.0 +2.7
CLL *e*PS PS 06 10 41.0 +2.0
CLL AMS AMS 06 42 00.0
comp=Z,200nm,19.1s
**CLL Collm** 88.31 38 *e*P P 05 58 48.3 -1.1
comp=Z,5.9nm,1.0s,baz=279,slow=5.3
**ROTZ Rotzenmuhle** 88.32 39 *e*P P 05 58 48.5 -1.0
comp=Z,1.7nm,1.3s,baz=279,slow=5.3
**SQTA Sankt Quirin** 88.48 42 *i* P P 05 58 49.8 -0.7
comp=Z,3.6nm,1.0s
**WATA Walderalm** 88.68 42 *i* P P 05 58 50.5 -0.9
comp=Z,4.2nm,1.0s
**WTTA Wattenberg** 88.74 42 *i* P P 05 58 50.7 -1.0
comp=Z,4.9nm,1.2s
**WET Wettzell** 88.93 40 *e*P P 05 58 51.5 -1.0
comp=Z,5.7nm,1.0s,baz=279,slow=5.3
**BRG Berggiesshubel** 89.01 38 *e*P P 05 58 50.9 -1.8
BRG Amp 05 58 53.2
comp=Z,2.0nm,0.9s
**LESA Schwarzleotal** 89.36 41 *i* P P 05 58 54.0 -0.6
comp=Z,1.6nm,0.6s
**KHC Kasperske Hory** 89.37 39 AMS AMS 06 37 30.0
comp=Z,200nm,20.1s
**ABTA Abfaltersbach** 89.47 42 *i* P P 05 58 54.1 -1.0
comp=Z,6.4nm,1.3s
**TORD Torodi Ar. Bea** 89.52 77 P P 05 58 53.7 -2.1
comp=Z,1.7nm,0.8s,baz=306,slow=5.5,SNR=8.8
comp=Z,1.7nm,0.8s
**GEC2 GERESS Array S** 89.54 40 *e*P P 05 58 54.1 -1.3
comp=Z,3.4nm,1.1s,baz=279,slow=5.3
**GERES GERESS Array B** 89.54 40 P P 05 58 53.7 -1.7
comp=Z,1.2nm,0.9s,baz=251,slow=8.3,SNR=6.1
comp=Z,1.2nm,0.9s
**PRA Prague** 89.58 38 AMS AMS 06 40 40.0
comp=Z,300nm,19.3s
**PRU Pruhonice** 89.67 38 AMS AMS 06 40 20.0
comp=Z,200nm,18.9s
**GOPC GO Pecny, Ondr** 89.85 38 AMS AMS 06 40 40.0
comp=Z,200nm,18.8s
**CKRC Cesky Krumlov** 89.93 40 AMS AMS 06 34 10.0
comp=Z,200nm,30.4s
**MOA Molln** 90.23 41 *i* P P 05 58 57.7 -0.9
comp=Z,4.1nm,1.1s
**MYKA Terra Mystica** 90.25 42 *i* P P 05 58 57.9 -0.8
comp=Z,3.0nm,0.8s
**KEST Kesra** 90.52 53 P P 05 58 58.9 -1.3
comp=Z,3.9nm,1.0s,baz=278,slow=7.1,SNR=2.8
comp=Z,3.9nm,1.0s
**DPC Dobruska-Polom** 90.61 38 AMS AMS 06 42 50.0
comp=Z,200nm,18.5s
**KRLC Kraliky** 90.99 38 AMS AMS 06 41 10.0
comp=Z,200nm,19.2s
**SOKA Soboth** 91.13 41 *i* P P 05 59 01.6 -1.2
comp=Z,5.0nm,1.6s
**CONA Conrad Observa** 91.21 40 *i* P P 05 59 02.7 -0.5
comp=Z,4.2nm,1.2s
**ARSA Arzberg** 91.24 41 *i* P P 05 59 02.2 -1.1
comp=Z,2.6nm,1.1s
**RONA Rosalia, Austr** 91.57 40 *i* P P 05 59 04.2 -0.6
comp=Z,5.1nm,1.5s
**DZM Mont Dzumac** 106.42 251 *e*LR LR 06 35 25.2
comp=Z,97nm,24.6s
**KURBB Kurchatov Arra** 115.80 7 PKP **PKiKP** 06 04 40.0 -0.3
comp=Z,0.5nm,0.7s,baz=352,slow=1.9,SNR=5.5
**SONM Songino Array** 117.34 347 PKP **PKiKP** 06 04 44.2 +0.6
comp=Z,0.2nm,0.3s,baz=5.4,slow=4.6,SNR=3.5
**KSRS Korea Array** 117.83 326 PKP **PKiKP** 06 04 45.5 +0.9
comp=Z,2.2nm,0.9s,baz=13,slow=1.1,SNR=6.9
**BOSA Boshof** 119.03 115 PKP **PKiKP** 06 04 47.5 +0.2
comp=Z,3.5nm,0.8s,baz=204,slow=3.6,SNR=3.8
**MKAR Makanchi Array** 119.99 5 PKP **PKPdf** 06 04 47.6 -0.9
comp=Z,0.3nm,0.6s,baz=354,slow=1.2,SNR=3.5
**HHC Hu-ho-hao-te** 122.36 340 *e*P **PKiKP** 06 04 54.9 +1.3
**WMQ Urumqi** 123.27 1 *e*PKP **PKiKP** 06 04 56.0 +0.8
WMQ LR LR
comp=N,400nm,24.2s
WMQ LR LR
comp=Z,260nm,23.1s
**NJ2 Nanjing** 126.76 328 *e*P **PKiKP** 06 05 03.6 +1.2
NJ2 pmax pmax
comp=Z,4.0nm,0.5s
**XAN Xi'an** 129.40 339 PKP **PKiKP** 06 05 08.5 +0.8
**WRA Warramunga Arr** 136.23 255 PKP **PKPdf** 06 05 19.6 -0.5
comp=Z,1.6nm,0.9s,baz=88,slow=2.8,SNR=8.9
**PZH PanZhiHua** 138.69 343 PKP **PKPdf** 06 05 24.6 -0.1
**CMAR Chiang Mai Arr** 147.10 343 PKPbc **PKPbc** 06 05 41.8 +0.2
comp=Z,3.1nm,0.3s,baz=335,slow=3.8,SNR=4.8

*NEIC **04** 05:47:18.4±2.0, 13°.06N±0°.10×90°.73W±0°.03, h35km±2km, mb4.6/25, Error ellipse: s-maj=17.4km s-min=3.5km az=194.0*
*IDC **04** 05:47:22.3±2.1, 13°.24N×90°.62W, h78km±16km, mb4.0/19, mbtmp4.4/22, MS4.1/6, Error ellipse: s-maj=24.4km s-min=9.9km az=52.0*
**ISC 04 05:47:17.3**±0.5, **13°.09N**±0°.07×**90°.80W**±0°.07, **h35**km, **n66,** σ1§**52/66, mb4.6**/22, **MS4.0**/6, **Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SNET** | **Serv Nac Est T** | **1.63** | **68** | Pn | **Pn** | **05 47 45.3** | **+1.6** |
| **RTAL** | **Retalhuleu** | **1.68** | **329** | Pn | **Pn** | **05 47 48.0** | **+3.8** |
| **MTO3** | **Montecristo** | **1.91** | **47** | Pn | **Pn** | **05 47 48.8** | **+1.2** |
| **APG** | **El Apazote** | **1.93** | **10** | P | **Pn** | **05 47 49.9** | **+2.0** |
| | 86nm,0.7s,baz=168,slow=23,SNR=1.0 | | | | | | |
| APG | | | | S | **Sn** | **05 48 14.5** | **+3.3** |
| | 141nm,0.7s,baz=92,slow=20,SNR=1.9 | | | | | | |
| **HUEH** | **Huehuetenango** | **2.32** | **343** | Pn | **Pn** | **05 47 54.6** | **+1.3** |
| **JTS** | **Las Juntas de** | **6.36** | **115** | P | **Pn** | **05 48 51.4** | **+2.7** |
| | 11nm,0.3s,baz=288,slow=21,SNR=6.0 | | | | | | |
| JTS | | | | S | **Sn** | **05 50 03.5** | **+3.3** |
| | 98nm,1.2s,baz=308,slow=11,SNR=0.6 | | | | | | |
| **LCR2** | **La Lucha 2** | **7.44** | **116** | Pn | **Pn** | **05 49 06.7** | **+3.0** |
| **TEIG** | **Tepich** | **7.50** | **18** | Pn | **Pn** | **05 49 06.2** | **+1.9** |
| **TEIG** | **Tepich** | **7.50** | **18** | P | **Pn** | **05 49 05.9** | **+1.6** |
| | 80nm,0.6s,baz=217,slow=20,SNR=1.3 | | | | | | |
| **SOR** | **Soroa** | **12.16** | **36** | Pn | **Pn** | **05 50 10.3** | **+2.1** |
| **HBVL** | **Hebbronville** | **15.74** | **333** | P | **P** | **05 51 01.7** | **+1.6** |
| **061Z** | **Ochoppi** | **15.75** | **35** | Pn | **Pn** | **05 50 54.8** | **-1.8** |
| **553A** | **Crawfordville** | **18.01** | **18** | P | **P** | **05 51 29.0** | **+3.8** |
| 553A | | | | IAmb | IAmb | 05 51 36.1 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **HNDO** | **Hondo** | **18.16** | **336** | P | **P** | **05 51 27.7** | **+0.9** |
| **ROSC** | **El Rosal** | **18.21** | **115** | P | **P** | **05 51 28.2** | **+0.4** |
| | comp=Z,2.1nm,0.3s,baz=286,slow=20,SNR=1.2 | | | | | | |
| **JCT** | **Junction City** | **19.21** | **336** | P | **P** | **05 51 38.8** | **+0.4** |
| **BRDY** | **Brady** | **19.62** | **339** | P | **P** | **05 51 43.8** | **+0.8** |
| **SAND** | **Sanderson** | **19.79** | **330** | P | **P** | **05 51 44.4** | **-0.5** |
| SAND | | | | IAmb | IAmb | 05 51 48.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **20.10** | **326** | P | **P** | **05 51 48.5** | **+0.3** |
| **TXAR** | **Lajitas Array** | **20.10** | **326** | P | **P** | **05 51 49.4** | **+1.1** |
| | comp=Z,7.8nm,0.8s,baz=134,slow=8.4,SNR=5.5 | | | | | | |
| TXAR | | | | PcP | **PcP** | **05 56 01.1** | **-1.7** |
| | comp=Z,0.6nm,0.6s,baz=116,slow=4.1,SNR=4.1 | | | | | | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **20.10** | **326** | P | **P** | **05 51 49.6** | **+1.4** |
| **OZNA** | **Ozona** | **20.15** | **333** | P | **P** | **05 51 49.9** | **+1.3** |
| OZNA | | | | IAmb | IAmb | 05 51 51.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **20.16** | **355** | P | **P** | **05 51 48.7** | **0.0** |
| Z41A | | | | IAmb | IAmb | 05 51 50.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **SDV** | **Santo Domingo** | **20.22** | **100** | P | **P** | **05 51 50.7** | **+1.0** |
| | comp=Z,15nm,0.4s,baz=338,slow=6.0,SNR=2.1 | | | | | | |
| | comp=Z,15nm,0.4s | | | | | | |
| **152A** | **Waverly Hall** | **20.27** | **15** | P | **P** | **05 51 50.6** | **+0.7** |
| 152A | | | | IAmb | IAmb | 05 51 56.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **20.80** | **342** | P | **P** | **05 51 56.0** | **+0.3** |
| PLPT | | | | IAmb | IAmb | 05 52 01.3 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **ALPN** | **Alpine** | **20.90** | **327** | P | **P** | **05 51 59.0** | **+2.0** |
| ALPN | | | | IAmb | IAmb | 05 52 00.2 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **LPIG** | **La Paz** | **21.47** | **303** | P | **P** | **05 52 04.5** | **+1.7** |
| | comp=Z,13nm,0.3s,baz=194,slow=7.1,SNR=1.7 | | | | | | |
| | comp=Z,13nm,0.3s | | | | | | |
| **PECS** | **Pecos** | **21.81** | **329** | P | **P** | **05 52 08.6** | **+1.9** |
| PECS | | | | IAmb | IAmb | 05 52 12.2 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **PLAL** | **Pickwick Lake** | **21.94** | **6** | P | **P** | **05 52 09.1** | **+1.3** |
| **DKNS** | **Dickens** | **22.47** | **337** | P | **P** | **05 52 14.7** | **+1.1** |
| DKNS | | | | IAmb | IAmb | 05 52 16.2 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.35** | **15** | P | **P** | **05 52 22.7** | **0.0** |
| **SMWD** | **Samnorwood** | **23.53** | **340** | P | **P** | **05 52 24.3** | **-0.2** |
| **V52A** | **Sevierville** | **23.57** | **15** | P | **P** | **05 52 25.2** | **+0.5** |
| V52A | | | | IAmb | IAmb | 05 52 26.6 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **25.97** | **330** | LR | LR | 06 03 42.4 | |
| | comp=Z,365nm,18.1s,baz=232,slow=38 | | | | | | |
| **J56A** | **Wolcott** | **32.40** | **19** | P | **P** | **05 53 42.1** | **-1.6** |
| **PDAR** | **Pinedale Array** | **33.74** | **335** | P | **P** | **05 53 55.7** | **-0.1** |
| | comp=Z,0.8nm,0.6s,baz=126,slow=7.5,SNR=3.4 | | | | | | |
| PDAR | | | | PcP | **PcP** | **05 56 35.5** | **+0.6** |
| | comp=Z,0.7nm,0.7s,baz=159,slow=3.8,SNR=3.6 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **LOHW** | **Long Hollow** | **34.87** | **334** | P | **P** | **05 54 05.8** | **+0.2** |
| LOHW | | | | IAmb | IAmb | 05 54 07.6 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.11** | **321** | P | **P** | **05 54 08.8** | **+1.0** |
| | comp=Z,12nm,0.7s,baz=134,slow=8.4,SNR=11 | | | | | | |
| NVAR | | | | PcP | **PcP** | **05 56 40.1** | **+1.2** |
| | comp=Z,1.6nm,0.7s,baz=122,slow=4.4,SNR=3.9 | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **36.80** | **142** | P | **P** | **05 54 23.2** | **+0.4** |
| | comp=Z,1.4nm,0.7s,baz=307,slow=10,SNR=2.3 | | | | | | |
| LPAZ | | | | LR | LR | 06 09 53.4 | |
| | comp=Z,168nm,19.8s,baz=316,slow=37 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.29** | **355** | P | **P** | **05 54 23.6** | **-2.4** |
| | comp=Z,17nm,0.7s,baz=175,slow=8.2,SNR=9.8 | | | | | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **MDP** | **Montagnes des** | **38.46** | **98** | LR | LR | 06 11 49.1 | |
| | comp=Z,219nm,20.7s,baz=310,slow=38 | | | | | | |
| **H04A** | **Detroit Lake** | **41.32** | **326** | P | **P** | **05 55 00.0** | **+0.3** |
| H04A | | | | IAmb | IAmb | 05 55 02.4 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **SCHQ** | **Schefferville** | **45.68** | **19** | P | **P** | **05 55 33.0** | **-1.6** |
| | comp=Z,6.8nm,0.7s,baz=208,slow=6.5,SNR=2.9 | | | | | | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **BBB** | **Bella Bella** | **49.13** | **330** | LR | LR | 06 19 02.8 | |
| | comp=Z,272nm,18.0s,baz=138,slow=39 | | | | | | |
| **CPUP** | **Villa Florida** | **50.94** | **140** | P | **P** | **05 56 15.6** | **+0.1** |
| | comp=Z,1.4nm,0.9s,baz=326,slow=15,SNR=1.8 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **BDFB** | **Brasilia** | **51.05** | **123** | P | **P** | **05 56 16.8** | **+0.1** |
| | comp=Z,2.4nm,0.9s,baz=282,slow=14,SNR=1.4 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.18** | **346** | P | **P** | **05 56 23.5** | **-0.8** |
| | comp=Z,2.3nm,0.7s,baz=149,slow=8.0,SNR=3.1 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **DLBC** | **Dease Lake** | **53.96** | **336** | LR | LR | 06 21 36.4 | |
| | comp=Z,232nm,18.7s,baz=124,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **64.14** | **337** | P | **P** | **05 57 47.5** | **-0.4** |
| | comp=Z,1.7nm,0.8s,baz=170,slow=5.2,SNR=9.1 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **BORG** | **Borgarnes** | **69.52** | **25** | P | **P** | **05 58 21.3** | **-0.9** |
| | comp=Z,7.5nm,1.2s,baz=291,slow=11,SNR=1.4 | | | | | | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **78.02** | **36** | P | **P** | **05 59 10.1** | **-2.1** |
| | comp=Z,1.1nm,0.7s,baz=271,slow=5.9,SNR=4.0 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **79.36** | **52** | P | **P** | **05 59 17.9** | **-2.1** |
| | comp=Z,1.1nm,0.8s,baz=291,slow=5.6,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **84.38** | **29** | P | **P** | **05 59 44.9** | **-1.1** |
| | comp=Z,0.3nm,0.6s,baz=291,slow=4.8,SNR=2.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **DBIC** | **Dimbokro** | **84.58** | **84** | P | **P** | **05 59 47.3** | **-0.5** |
| **DBIC** | **Dimbokro** | **84.58** | **84** | P | **P** | **05 59 47.4** | **-0.4** |
| | comp=Z,9.6nm,0.7s,baz=281,slow=5.6,SNR=8.5 | | | | | | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.63** | **18** | P | **P** | **05 59 56.8** | **-0.1** |
| | comp=Z,2.9nm,0.9s,baz=273,slow=4.5,SNR=2.1 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **89.45** | **77** | P | **P** | **06 00 10.7** | **-0.8** |
| | comp=Z,1.0nm,0.7s,baz=303,slow=6.1,SNR=4.1 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **URZ** | **Urewera** | **99.60** | **233** | LR | LR | 06 39 00.3 | |
| | comp=Z,45nm,18.3s,baz=56,slow=31 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **115.88** | **8** | PKP | **PKiKP** | **06 05 56.5** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=358,slow=1.5,SNR=2.5 | | | | | | |
| **KSRS** | **Korea Array** | **117.95** | **326** | PKP | **PKPdf** | **06 06 01.4** | **+0.7** |
| | comp=Z,2.9nm,0.8s,baz=21,slow=3.9,SNR=2.5 | | | | | | |
| **BOSA** | **Boshof** | **118.91** | **116** | PKP | **PKPdf** | **06 06 03.2** | **+0.2** |
| | comp=Z,1.9nm,0.8s,baz=132,slow=16,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **120.07** | **5** | PKP | **PKPdf** | **06 06 04.1** | **-0.6** |
| | comp=Z,0.4nm,0.8s,baz=0.0,slow=4.0,SNR=2.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **136.30** | **255** | PKP | **PKPdf** | **06 06 35.9** | **-0.3** |
| | comp=Z,1.5nm,0.7s,baz=91,slow=2.0,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **136.45** | **249** | PKP | **PKPdf** | **06 06 37.0** | **+0.6** |
| | comp=Z,0.8nm,0.7s,baz=82,slow=2.1,SNR=2.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.22** | **343** | PKPbc | **PKPdf** | **06 06 55.8** | **+0.1** |
| | comp=Z,2.0nm,0.6s,baz=4.3,slow=3.6,SNR=2.4 | | | | | | |

*ISK **04** 05:47:26.4, 37°.49N×36°.28E, h5km, ML3.3/17*
*AFAD **04** 05:47:27.3±0.0, 37°.46N×36°.27E, h13km, MW3.5*
**ISC 04 05:47:27.3**±0.9, **37°.46N**±0°.02×**36°.28E**±0°.02, **h10**km±7km, **n54,** σ0§**84/74, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANDN** | **Andirin** | **0.13** | **23** | P | **Pg** | **05 47 30.8** | **+0.4** |
| ANDN | | | | S | **Sg** | **05 47 33.3** | **+0.8** |
| **KOZT** | **Kozan** | **0.36** | **273** | Pg | **Pb** | **05 47 34.8** | **-1.0** |
| **KAMA** | **Osmaniye** | **0.41** | **132** | P | **Pg** | **05 47 35.5** | **+0.1** |
| KAMA | | | | S | **Sg** | **05 47 40.1** | **-0.8** |
| **KMRS** | **Kahramanmaras** | **0.49** | **85** | Pg | **Pb** | **05 47 37.2** | **-0.9** |
| KMRS | | | | Sg | **Sb** | **05 47 44.3** | **-1.1** |
| **HCB** | **Kahramanmara** | **0.51** | **103** | P | **Pb** | **05 47 37.6** | **-0.8** |
| HCB | | | | S | **Sg** | **05 47 43.5** | **-0.5** |
| **KHMR** | **Kahramanmara** | **0.51** | **103** | P | **Pb** | **05 47 37.5** | **-0.9** |
| KHMR | | | | S | **Sg** | **05 47 43.8** | **-0.1** |
| **SAIM** | **ADANA** | **0.54** | **343** | P | **Pb** | **05 47 37.9** | **-0.9** |
| SAIM | | | | S | **Sb** | **05 47 45.9** | **-0.9** |
| **KAHM** | **Kahramanmaras,** | **0.56** | **84** | P | **Pb** | **05 47 38.4** | **-0.9** |
| KAHM | | | | S | **Sg** | **05 47 44.0** | **-1.6** |
| **CEYT** | **Ceyhan** | **0.62** | **223** | Pg | **Pb** | **05 47 39.9** | **-0.3** |
| **AKO** | **Adana** | **0.67** | **270** | P | **Pb** | **05 47 40.4** | **-0.6** |
| AKO | | | | S | **Sg** | **05 47 49.1** | **+0.2** |
| **KHMN** | **Narli-Kahraman** | **0.70** | **96** | Pg | **Pb** | **05 47 41.1** | **-0.5** |
| **HASA** | **Hatay-Hassa-Ha** | **0.73** | **167** | P | **Pg** | **05 47 41.5** | **+0.1** |
| HASA | | | | S | **Sg** | **05 47 50.2** | **-0.6** |
| **GAZ** | **Gaziantep** | **0.80** | **111** | Pg | **Pb** | **05 47 43.0** | **-0.3** |
| **YURE** | **YUREGIR** | **0.82** | **219** | P | **Pn** | **05 47 44.5** | **-0.5** |
| **SARI** | **SarD1z-Kayseri** | **0.95** | **6** | Pg | **Pb** | **05 47 45.5** | **-0.5** |
| **YAHY** | **KAYSERI_Yahyal** | **0.96** | **311** | P | **Pb** | **05 47 45.5** | **-0.7** |
| **KARA** | **Karaisali** | **1.00** | **259** | Pg | **Pb** | **05 47 46.6** | **-0.1** |
| **GZT** | **Gaziantep** | **1.03** | **96** | P | **Pb** | **05 47 47.0** | **-0.2** |
| **CMRD** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ELBS** | **KAHRAMANMARAS** | **1.09** | **38** | P | | **Pg** | **05 47 47.5** | **-0.7** |
| ELBS | | | | S | | **Sb** | **05 48 02.8** | **0.0** |
| **AKCA** | **Adyaman/G¶ll** | **1.16** | **73** | P | | **Pn** | **05 47 49.7** | **-0.1** |
| AKCA | | | | S | | **Sb** | **05 48 04.9** | **+0.1** |
| **NZIP** | **Nizip/Gaziante** | **1.19** | **110** | P | | **Pn** | **05 47 50.4** | **+0.4** |
| NZIP | | | | S | | **Sg** | **05 48 05.4** | **-0.1** |
| **GULE** | **Gulek** | **1.21** | **262** | P | | **Pb** | **05 47 49.8** | **-0.6** |
| **RHAN** | **Hatay/Reyhanl** | **1.23** | **168** | P | | **Pg** | **05 47 51.9** | **+1.0** |
| RHAN | | | | S | | **Sb** | **05 48 05.6** | **-0.9** |
| **ASUZ** | **Hatay-Arsuz** | **1.23** | **199** | P | | **Pg** | **05 47 52.1** | **+1.2** |
| **DED** | **Mersin** | **1.28** | **248** | P | | **Pg** | **05 47 51.5** | **-0.5** |
| **NIDE** | **Nigde/Merkez-G** | **1.31** | **295** | P | | **Pg** | **05 47 51.8** | **-0.6** |
| **BNN** | **Bunyan** | **1.43** | **346** | Pn | | **Pg** | **05 47 54.2** | **-0.5** |
| **DARE** | **Darende-Malaty** | **1.46** | **40** | Pn | | **Pg** | **05 47 54.8** | **-0.4** |
| **NIG** | **Nigde** | **1.47** | **297** | Pn | | **Pg** | **05 47 55.0** | **-0.6** |
| **CUGUR** | **Gurin_SVAS** | **1.48** | **32** | P | | **Pg** | **05 47 55.8** | **+0.1** |
| **GUNE** | **Kayseri** | **1.53** | **340** | P | | **Pb** | **05 47 54.9** | **-0.9** |
| GUNE | | | | S | | **Sg** | **05 48 17.8** | **+1.4** |
| **AKCD** | **Akcadag** | **1.54** | **57** | P | | **Pb** | **05 47 56.0** | **0.0** |
| AKCD | | | | S | | **Sg** | **05 48 15.9** | **-0.9** |
| **AZEY** | **Adyaman-Merk** | **1.60** | **77** | P | | **Pb** | **05 47 56.7** | **-0.3** |
| **ATAB** | **Bozova** | **1.60** | **89** | P | | **Pn** | **05 47 56.0** | **+0.3** |
| ATAB | | | | S | | **Sb** | **05 48 17.4** | **+0.2** |
| **KERG** | **Konya-Eregli** | **1.72** | **269** | P | | **Pb** | **05 47 57.8** | **-1.2** |
| **AVNS** | **Nevsehir-Avano** | **1.75** | **320** | P | | **Pb** | **05 47 58.5** | **-1.1** |
| **BSIR** | **Belisirma, Guz** | **1.77** | **298** | P | | **Pg** | **05 48 00.3** | **-0.9** |
| BSIR | | | | S | | **Sg** | **05 48 25.0** | **+0.8** |
| **CUAYA** | **Sivas-Altinyay** | **1.84** | **11** | P | | **Pb** | **05 48 00.6** | **-0.5** |
| CUAYA | | | | S | | **Sg** | **05 48 25.7** | **-0.6** |
| **SURC** | **SANLIURFA_SURC** | **1.95** | **107** | P | | **Pn** | **05 48 01.4** | **+0.9** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.95** | **359** | P | | **Pb** | **05 48 03.0** | **0.0** |
| **KIZK** | **Mersin** | **1.97** | **241** | P | | **Pb** | **05 48 01.9** | **-1.4** |
| **YESY** | **Yesilyurt** | **2.04** | **280** | Pn | | **Pb** | **05 48 03.3** | **-1.2** |
| **HANM** | **anlurfa/Hi** | **2.07** | **86** | P | | **Pn** | **05 48 02.2** | **+0.1** |
| **KOZK** | **Kozakli-Nevseh** | **2.07** | **328** | Pn | | **Pb** | **05 48 03.4** | **-1.6** |
| **CUKAN** | **kangal_SIVAS** | **2.07** | **26** | P | | **Pb** | **05 48 04.3** | **-0.8** |
| **SIRC** | **Yozgat** | **2.07** | **335** | P | | **Pb** | **05 48 04.1** | **-1.0** |
| **MCUR** | **KIREHR** | **2.19** | **321** | P | | **Pb** | **05 48 06.2** | **-0.8** |
| MCUR | | | | S | | **Sb** | **05 48 34.2** | **-0.1** |
| **ARPR** | **Arapgir-MALATY** | **2.29** | **44** | Pn | | **Pn** | **05 48 06.5** | **+1.2** |
| **YOZ** | **Yozgat** | **2.30** | **341** | Pn | | **Pn** | **05 48 06.6** | **+1.2** |
| **YAYX** | **Yaylak** | **2.44** | **308** | Pn | | **Pn** | **05 48 08.8** | **+1.5** |
| **SVSK** | **Karacayir** | **2.51** | **13** | Pn | | **Pn** | **05 48 09.6** | **+1.4** |
| **CORM** | **Corum** | **3.00** | **335** | Pn | | **Pn** | **05 48 16.7** | **+1.6** |

*IDC **04** 05:53:08.0±3.8, 13°.29N×90°.40W, h99km±33km, mb3.5/4, mbtmp3.9/6, Error ellipse: s-maj=53.0km s-min=27.5km az=48.0*

**ISC 04 05:53:08.1±1.2, 13°.3N±0°.2×90°.4W±0°.2, h100km, n8, σ1§03/8, mb4.2/3, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **JTS** | **Las Juntas de** | **6.12** | **119** | P | | **Pn** | **05 54 36.0** | **0.0** |
| | 1.2nm,0.3s,baz=310,slow=20,SNR=1.3 | | | | | | | |
| **TEIG** | **Tepich** | **7.18** | **16** | P | | **Pn** | **05 54 50.4** | **0.0** |
| | 14nm,0.5s,baz=36,slow=3.2,SNR=4.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **20.15** | **324** | P | | **P** | **05 57 33.4** | **-1.2** |
| | 1.0nm,0.7s,baz=150,slow=11,SNR=7.2 | | | | | | | |
| | 1.0nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.19** | **320** | P | | **P** | **05 59 53.7** | **+0.8** |
| | 2.4nm,0.8s,baz=129,slow=8.6,SNR=10 | | | | | | | |
| | 2.4nm,0.8s | | | | | | | |
| **SCHQ** | **Schefferville** | **45.36** | **19** | P | | **P** | **06 01 16.7** | **+0.5** |
| | 4.0nm,0.9s,baz=180,slow=10,SNR=2.7 | | | | | | | |
| | 4.0nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **64.09** | **337** | P | | **P** | **06 03 31.3** | **0.0** |
| | 0.5nm,0.9s,baz=126,slow=4.6,SNR=4.2 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **119.83** | **6** | PKP | | **PKPdf** | **06 11 45.4** | **-1.5** |
| | 0.1nm,0.4s,baz=1.7,slow=4.9,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **136.72** | **255** | PKP | | **PKPdf** | **06 12 20.5** | **+0.8** |
| | 0.8nm,1.2s,baz=98,slow=2.1,SNR=2.6 | | | | | | | |

**IDC 04 06:02:11.3±1.0, 25°.63N×141°.36E, h265km±35km, mb3.3/2, mbtmp3.8/3, Error ellipse: s-maj=74.7km s-min=31.5km az=61.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **JCJ** | **Chichijima** | **1.64** | **27** | P | | Pn | 06 02 52.0 | 0.0 |
| | 22nm,0.4s,baz=208,slow=19,SNR=14 | | | | | | | |
| JCJ | | | | S | | S | 06 03 24.6 | +0.2 |
| | 28nm,0.3s,baz=204,slow=19,SNR=15 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.21** | **347** | P | | Pn | 06 04 44.4 | -0.3 |
| | 0.8nm,0.3s,baz=164,slow=16,SNR=4.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.81** | **189** | P | | P | 06 10 07.0 | -0.2 |
| | 2.6nm,0.4s,baz=6.5,slow=8.5,SNR=44 | | | | | | | |
| | 2.6nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **49.53** | **189** | P | | P | 06 10 35.7 | 0.0 |
| | 0.4nm,0.8s,baz=17,slow=13,SNR=1.8 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |

**DJA 04 07:00:10.3±0.3, 8°S±3°×111°E±°, h10km, M3.7/8, mb3.5/1, MLv3.8/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.51** | **152** | P | | Pb | 07 00 20.9 | -0.6 |
| TWSI | | | | S | | Sb | 07 00 28.5 | -0.5 |
| **PLAI** | **Plampang** | **1.25** | **116** | P | | Pn | 07 00 33.6 | -0.2 |
| PLAI | | | | S | | Sn | 07 00 50.9 | +0.2 |
| **SRBI** | **Singaraja** | **1.43** | **278** | P | | Pn | 07 00 36.6 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.47** | **265** | P | | Pn | 07 00 49.9 | -0.7 |
| **BSSI** | **Bau Bau, Buton** | **4.37** | **61** | P | | Pn | 07 01 16.3 | -0.5 |
| **PWJI** | **Pagerwojo** | **4.79** | **273** | P | | Pn | 07 01 23.0 | +0.4 |
| **BNSI** | **Bone** | **5.17** | **42** | P | | Pn | 07 01 28.8 | +1.0 |

*ISK **04** 07:09:27.9, 37°.49N×36°.27E, h1km, ML4.5/12*
*IDC **04** 07:09:28.4±0.6, 37°.45N×36°.21E, h0km, mb3.9/17, mbtmp3.9/28, ML4.0/7, MS3.4/27, Error ellipse: s-maj=10.4km s-min=10.3km az=20.0*
*CFUSG **04** 07:09:28.5, 37°.50N×36°.30E, h10km, mb3.3/5, Central Turkey Magtype MSH 3.4 from 1 stations*
*AFAD **04** 07:09:28.8±0.0, 37°.46N×36°.31E, h15km±1km, MW4.3*
*MOS **04** 07:09:29.5±0.9, 37°.58N×36°.36E, h12km, mb4.5/18, Error ellipse: s-maj=6.8km s-min=3.9km az=96.7*
*MCSM **04** 07:09:29.6±0.4, 38°N±3°×3°6E±°, h9km±3km, mb4.2, mB4.6, Mw(mB)3.8*
*NEIC **04** 07:09:30.1±1.7, 37°.42N±0°.05×36°.37E±0°.04, h10km±2km, mb4.2/18, Error ellipse: s-maj=9.5km s-min=4.1km az=205.0*
*NAO **04** 07:10:09.4, 41°.98N×36°.16E, h33km, mb3.5*

**ISC 04 07:09:29.6±0.7, 37°.46N±0°.02×36°.30E±0°.01, h7km±4km, n288, σ1§56/327, mb4.1/39, MS3.3/18, 21C-6D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **ANDN** | **Andirin** | **0.12** | **18** | P | | **Pg** | **07 09 32.3** | **-0.1** |
| ANDN | | | | S | | **Sg** | **07 09 35.2** | **+0.8** |
| ANDN | | | | *i* AML | | AML | 07 09 36.0 | |
| | comp=E,20μm,0.5s | | | | | | | |
| ANDN | | | | *i* AML | | AML | 07 09 37.0 | |
| | comp=N,16μm,0.7s | | | | | | | |
| **KOZT** | **Kozan** | **0.38** | **273** | Pg | | **Pg** | **07 09 35.9** | **-1.1** |
| **KAMA** | **Osmaniye** | **0.41** | **133** | P | | **Pg** | **07 09 36.8** | **-0.8** |
| KAMA | | | | S | | **Sg** | **07 09 41.3** | **-1.6** |
| KAMA | | | | *i* AML | | AML | 07 09 43.0 | |
| | comp=N,7μm,0.4s | | | | | | | |
| KAMA | | | | *i* AML | | AML | 07 09 45.0 | |
| | comp=E,7μm,0.5s | | | | | | | |
| **KMRS** | **Kahramanmaras** | **0.48** | **85** | Pg | | **Pg** | **07 09 38.4** | **-0.6** |
| **HCB** | **Kahramanmara** | **0.50** | **104** | P | | **Pg** | **07 09 38.8** | **-0.5** |
| HCB | | | | S | | **Sg** | **07 09 44.5** | **-1.4** |
| HCB | | | | *i* AML | | AML | 07 09 48.0 | |
| | comp=N,9μm,0.4s | | | | | | | |
| HCB | | | | *i* AML | | AML | 07 09 48.0 | |
| | comp=E,7μm,0.5s | | | | | | | |
| **KHMR** | **Kahramanmara** | **0.50** | **104** | P | | **Pg** | **07 09 38.8** | **-0.5** |
| KHMR | | | | P | | **Pg** | **07 09 38.8** | **-0.5** |
| KHMR | | | | S | | **Sg** | **07 09 44.8** | **-1.1** |
| KHMR | | | | S | | **Sb** | **07 09 45.2** | **-3.1** |
| KHMR | | | | *i* AML | | AML | 07 09 48.0 | |
| | comp=N,7μm,0.3s | | | | | | | |
| KHMR | | | | *i* AML | | AML | 07 09 48.0 | |
| | comp=E,6μm,0.5s | | | | | | | |
| KHMR | | | | *i* AML | | AML | 07 09 48.0 | |
| | comp=N,7μm,0.3s | | | | | | | |
| KHMR | | | | *i* AML | | AML | 07 09 48.0 | |
| | comp=E,6μm,0.5s | | | | | | | |
| **SAIM** | **ADANA** | **0.54** | **342** | P | | **Pg** | **07 09 39.1** | **-1.0** |
| SAIM | | | | S | | **Sb** | **07 09 47.7** | **-1.8** |
| SAIM | | | | *i* AML | | AML | 07 09 50.0 | |
| | comp=N,5μm,0.2s | | | | | | | |
| SAIM | | | | *i* AML | | AML | 07 09 52.0 | |
| | comp=E,5μm,0.4s | | | | | | | |
| **KAHM** | **Kahramanmaras,** | **0.55** | **84** | P | | **Pg** | **07 09 39.6** | **-0.7** |
| KAHM | | | | S | | **Sg** | **07 09 47.0** | **-0.5** |
| KAHM | | | | *i* AML | | AML | 07 09 49.0 | |
| | comp=N,8μm,0.4s | | | | | | | |
| KAHM | | | | *i* AML | | AML | 07 09 55.0 | |
| | comp=E,6μm,1.1s | | | | | | | |
| **CEYT** | **Ceyhan** | **0.63** | **224** | Pg | | **Pg** | **07 09 41.1** | **-0.7** |
| **AKO** | **Adana** | **0.68** | **270** | P | | **Pg** | **07 09 41.8** | **-0.9** |
| AKO | | | | *i* AML | | AML | 07 09 57.0 | |
| | comp=E,4μm,0.5s | | | | | | | |
| AKO | | | | *i* AML | | AML | 07 09 59.0 | |
| | comp=N,5μm,0.4s | | | | | | | |
| **KHMN** | **Narli-Kahraman** | **0.69** | **96** | Pg | | **Pg** | **07 09 42.8** | **-0.1** |
| **HASA** | **Hatay-Hassa-Ha** | **0.73** | **168** | P | | **Pg** | **07 09 42.6** | **-1.1** |
| HASA | | | | S | | **Sg** | **07 09 52.3** | **-0.8** |
| HASA | | | | *i* AML | | AML | 07 09 59.0 | |
| | comp=N,9μm,0.2s | | | | | | | |
| HASA | | | | *i* AML | | AML | 07 09 59.0 | |
| | comp=E,10μm,0.4s | | | | | | | |
| **GAZ** | **Gaziantep** | **0.78** | **112** | Pg | | **Pg** | **07 09 44.6** | **-0.1** |
| **GAZ** | **Gaziantep** | **0.78** | **112** | Pg | | **Pg** | **07 09 44.0** | **-0.7** |
| **YURE** | **YUREGIR** | **0.83** | **220** | P | | **Pg** | **07 09 45.6** | **0.0** |
| **KUZU** | **Kuzuini** | **0.93** | **138** | P | | **Pg** | **07 09 47.1** | **-0.4** |
| KUZU | | | | S | | **Sg** | **07 09 59.6** | **+0.1** |
| KUZU | | | | *i* AML | | AML | 07 10 02.0 | |
| | comp=E,2μm,0.3s | | | | | | | |
| KUZU | | | | *i* AML | | AML | 07 10 03.0 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **0.95** | **6** | Pg | | **Pg** | **07 09 46.7** | **-1.2** |
| **YAHY** | **KAYSERI_Yahyal** | **0.97** | **311** | P | | **Pg** | **07 09 47.1** | **-1.3** |
| YAHY | | | | S | | **Sb** | **07 10 02.0** | **+0.1** |
| YAHY | | | | *i* AML | | AML | 07 10 04.0 | |
| | comp=E,7μm,1.0s | | | | | | | |
| YAHY | | | | *i* AML | | AML | 07 10 05.0 | |
| | comp=N,5μm,0.5s | | | | | | | |
| **KARA** | **Karaisali** | **1.01** | **259** | Pg | | **Pg** | **07 09 47.9** | **-1.2** |
| **GZT** | **Gaziantep** | **1.01** | **96** | P | | **Pg** | **07 09 48.5** | **-0.6** |
| GZT | | | | S | | **Sg** | **07 10 02.1** | **-0.2** |
| GZT | | | | *i* AML | | AML | 07 10 05.0 | |
| | comp=N,1μm,0.3s | | | | | | | |
| GZT | | | | *i* AML | | AML | 07 10 05.0 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **CMRD** | **Camardi-Nigde** | **1.06** | **281** | Pg | | **Pg** | **07 09 48.4** | **-1.6** |
| **ELBS** | **KAHRAMANMARAS** | **1.08** | **37** | P | | **Pg** | **07 09 49.9** | **-0.5** |
| ELBS | | | | S | | **Sn** | **07 10 06.6** | **0.0** |
| ELBS | | | | *i* AML | | AML | 07 10 08.0 | |
| | comp=N,9μm,0.7s | | | | | | | |
| ELBS | | | | *i* AML | | AML | 07 10 10.0 | |
| | comp=E,9μm,0.9s | | | | | | | |
| **TAHT** | **Tahtakopru-Hat** | **1.09** | **185** | Pn | | **Pg** | **07 09 50.3** | **-0.3** |
| TAHT | | | | Sn | | **Sb** | **07 10 06.4** | **+1.2** |
| **AKCA** | **Adyaman/G¶ll** | **1.15** | **73** | P | | **Pg** | **07 09 50.9** | **-0.8** |
| AKCA | | | | S | | **Sn** | **07 10 07.8** | **-0.5** |
| AKCA | | | | *i* AML | | AML | 07 10 11.0 | |
| | comp=E,2μm,0.8s | | | | | | | |
| AKCA | | | | *i* AML | | AML | 07 10 17.0 | |
| | comp=N,8μm,0.8s | | | | | | | |
| **NZIP** | **Nizip/Gaziante** | **1.18** | **111** | P | | **Pb** | **07 09 52.1** | **-0.2** |
| NZIP | | | | S | | **Sg** | **07 10 07.4** | **0.0** |
| **GULE** | **Gulek** | **1.23** | **262** | P | | **Pb** | **07 09 51.8** | **-1.3** |
| **RHAN** | **Hatay/Reyhanl** | **1.23** | **168** | P | | **Pb** | **07 09 52.2** | **-1.0** |
| RHAN | | | | S | | **Sg** | **07 10 08.8** | **-0.3** |
| **ASUZ** | **Hatay-Arsuz** | **1.24** | **200** | P | | **Pn** | **07 09 53.1** | **-0.2** |
| ASUZ | | | | S | | **Sn** | **07 10 10.7** | **+0.5** |
| **DED** | **Mersin** | **1.30** | **248** | P | | **Pn** | **07 09 53.0** | **-1.2** |
| DED | | | | S | | **Sb** | **07 10 10.6** | **-0.6** |
| **NIDE** | **Nigde/Merkez-G** | **1.32** | **294** | P | | **Pn** | **07 09 53.5** | **-1.1** |
| NIDE | | | | S | | **Sg** | **07 10 12.1** | **0.0** |
| **BNN** | **Bunyan** | **1.43** | **346** | Pn | | **Pn** | **07 09 55.4** | **-0.7** |
| **BNN** | **Bunyan** | **1.43** | **346** | | | **Pn** | **07 09 55.6** | **-0.5** |
| **DARE** | **Darende-Malaty** | **1.45** | **40** | Pn | | **Pn** | **07 09 55.9** | **-0.4** |
| **CUGUR** | **Gurin_SVAS** | **1.47** | **31** | P | | **Pg** | **07 09 57.3** | **-0.6** |
| **NIG** | **Nigde** | **1.48** | **296** | Pn | | **Pn** | **07 09 56.2** | **-0.8** |
| **AKCD** | **Akcadag** | **1.53** | **57** | P | | **Pb** | **07 09 57.5** | **-0.8** |
| AKCD | | | | S | | **Sg** | **07 10 18.7** | **-0.2** |
| **GUNE** | **Kayseri** | **1.53** | **340** | P | | **Pg** | **07 09 59.2** | **+0.2** |
| GUNE | | | | S | | **Sg** | **07 10 20.2** | **+1.3** |
| **AZEY** | **Adyaman-Merk** | **1.59** | **77** | P | | **Pb** | **07 09 58.5** | **-0.8** |
| AZEY | | | | S | | **Sb** | **07 10 19.3** | **-0.3** |
| **ATAB** | **Bozova** | **1.59** | **89** | P | | **Pg** | **07 09 59.7** | **-0.4** |
| ATAB | | | | S | | **Sg** | **07 10 20.2** | **-0.5** |
| **KERG** | **Konya-Eregli** | **1.73** | **269** | P | | **Pn** | **07 10 00.6** | **+0.4** |
| **AVNS** | **Nevsehir-Avano** | **1.76** | **320** | P | | **Pb** | **07 10 02.1** | **-0.2** |
| AVNS | | | | S | | **Sg** | **07 10 25.2** | **-1.1** |
| **BSIR** | **Belisirma, Guz** | **1.78** | **297** | P | | **Pb** | **07 10 02.2** | **-0.4** |
| BSIR | | | | S | | **Sg** | **07 10 26.2** | **-0.7** |
| **CUAYA** | **Sivas-Altinyay** | **1.83** | **11** | P | | **Pn** | **07 10 02.1** | **+0.4** |
| CUAYA | | | | S | | **Sg** | **07 10 29.4** | **+0.8** |
| **MAYA** | **Malatya/Merkez** | **1.89** | **62** | P | | **Pn** | **07 10 02.6** | **+0.2** |
| MAYA | | | | S | | **Sb** | **07 10 28.7** | **+0.3** |
| **SURC** | **SANLIURFA_SURC** | **1.94** | **107** | P | | **Pb** | **07 10 05.8** | **+0.5** |
| SURC | | | | S | | **Sb** | **07 10 30.6** | **+0.9** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.95** | **359** | P | | **Pb** | **07 10 04.4** | **-1.2** |
| CUSAR | | | | S | | **Sg** | **07 10 32.3** | **-0.1** |
| **KIZK** | **Mersin** | **1.98** | **241** | P | | **Pn** | **07 10 03.3** | **-0.2** |
| **NARI** | **Adyaman-Kaht** | **2.00** | **77** | P | | **Sg** | **07 10 04.2** | **+0.3** |
| NARI | | | | S | | **Sg** | **07 10 33.7** | **-0.2** |
| **HANM** | **anlurfa/Hi** | **2.06** | **86** | P | | **Pn** | **07 10 03.0** | **-1.6** |
| HANM | | | | S | | **Sb** | **07 10 33.3** | **+0.3** |
| **CUKAN** | **kangal_SIVAS** | **2.06** | **26** | P | | **Pb** | **07 10 05.8** | **-1.7** |
| **SIRC** | **Yozgat** | **2.08** | **335** | P | | **Pn** | **07 10 04.9** | **-0.1** |
| SIRC | | | | S | | **Sb** | **07 10 33.3** | **-0.4** |
| **SANL** | **SANLIURFA_Merk** | **2.17** | **97** | P | | **Pn** | **07 10 05.1** | **-1.0** |
| SANL | | | | S | | **Sb** | **07 10 35.7** | **-0.5** |
| **MCUR** | **KIREHR** | **2.19** | **321** | P | | **Pb** | **07 10 08.6** | **-1.0** |
| MCUR | | | | S | | **Sg** | **07 10 39.0** | **-1.1** |
| **ARPR** | **Arapgir-MALATY** | **2.28** | **44** | Pn | | **Pn** | **07 10 08.3** | **+0.4** |
| **ARPR** | **Arapgir-MALATY** | **2.28** | **44** | | | **Pn** | **07 10 07.8** | **-0.1** |
| **AKSY** | **AKSARAY - Alti** | **2.33** | **301** | P | | **Pb** | **07 10 10.1** | **-1.8** |
| AKSY | | | | S | | **Sb** | **07 10 41.0** | **+0.2** |
| **ELZG** | **Elazig** | **2.36** | **63** | P | | **Pn** | **07 10 09.1** | **+0.2** |
| ELZG | | | | S | | **Sb** | **07 10 42.2** | **+0.3** |
| **SCER** | **sogukcermik** | **2.48** | **15** | P | | **Pn** | **07 10 12.1** | **+1.5** |
| SCER | | | | S | | **Sg** | **07 10 46.6** | **-2.8** |
| **KEMA** | **Kemaliye** | **2.50** | **43** | P | | **Pn** | **07 10 11.6** | **+0.9** |
| **KIRS** | **Kirsehir-Merke** | **2.51** | **312** | P | | **Pb** | **07 10 13.1** | **-1.9** |
| KIRS | | | | S | | **Sb** | **07 10 47.1** | **+1.0** |
| **YOZG** | **Bozok Univ. Me** | **2.59** | **333** | P | | **Pn** | **07 10 12.5** | **+0.4** |
| YOZG | | | | S | | **Sb** | **07 10 46.1** | **-2.6** |
| **CDAG** | **Cicekdag** | **2.63** | **326** | P | | **Pn** | **07 10 13.7** | **+1.1** |
| CDAG | | | | S | | **Sb** | **07 10 49.1** | **-0.6** |
| **CKRK** | **Yozgat, Cekere** | **2.68** | **347** | P | | **Pn** | **07 10 13.6** | **+0.4** |
| **CUZAR** | **Zara_SIVAS** | **2.68** | **25** | P | | **Pn** | **07 10 14.8** | **+1.5** |
| CUZAR | | | | S | | **Sb** | **07 10 51.5** | **+0.3** |
| **KKBE** | **Karaman, Kazim** | **2.69** | **266** | P | | **Pn** | **07 10 14.7** | **+1.3** |
| **BEIL** | **Beino** | **2.92** | **182** | *eP* | | **Pn** | **07 10 16.6** | **+0.2** |
| **KESK** | **Krkkale-Ke** | **3.04** | **316** | P | | **Pn** | **07 10 19.7** | **+1.6** |
| **BR131** | **Keskin Array S** | **3.07** | **318** | Pn | | **Pn** | **07 10 19.6** | **+0.9** |
| **BR131** | **Keskin Array S** | **3.07** | **318** | *i* P | | **Pn** | **07 10 19.7** | **+1.0** |
| **BRTR** | **Keskin Array B** | **3.07** | **318** | Pn | | **Pn** | **07 10 19.2** | **+0.5** |
| **BRTR** | **Keskin Array B** | **3.07** | **318** | Pn | | **Pn** | **07 10 20.4** | **+1.7** |
| | 4.5nm,0.3s,baz=47,slow=14,SNR=45 | | | | | | | |
| BRTR | | | | | | Lg | Lg | 07 11 05.0 |
| | 8.5nm,0.3s,baz=143,slow=27,SNR=5.1 | | | | | | | |
| BRTR | | | | | | LR | LR | 07 11 43.2 |
| | comp=Z,333nm,20.6s,baz=180,slow=44 | | | | | | | |
| | 19nm,0.5s | | | | | | | |
| **HWQ** | **Hawqa** | **3.19** | **185** | *eP* | | **Pn** | **07 10 20.7** | **+0.4** |
| **CSS** | **Mathiatis** | **3.46** | **225** | Pn | | **Pn** | **07 10 25.5** | **+1.6** |
| **CSS** | **Mathiatis** | **3.46** | **225** | P | | **Pn** | **07 10 27.6** | **+3.7** |
| **BHL** | **Bhannes** | **3.59** | **189** | *eP* | | **Pn** | **07 10 25.9** | **+0.1** |
| **ANTO** | **Ankara** | **3.65** | **312** | | | **Pn** | **07 10 28.9** | **+2.5** |
| **ANTO** | **Ankara** | **3.65** | **312** | ⇑P | | **Pg** | **07 10 36.7** | **-2.8** |
| **ANTO** | **Ankara** | **3.65** | **312** | P | | **Pn** | **07 10 29.0** | **+2.5** |
| **DQRL** | **Deir Qamar** | **3.80** | **189** | *eP* | | **Pn** | **07 10 28.4** | **-0.2** |
| **QRWL** | **Qaraoun** | **3.94** | **188** | *eP* | | **Pn** | **07 10 30.4** | **-0.2** |
| **RCY** | **Rachaya** | **3.98** | **186** | *eP* | | **Pn** | **07 10 30.8** | **-0.3** |
| **NATI** | **Neve Ativ** | **4.22** | **186** | P | | **Pn** | **07 10 36.7** | **+2.4** |
| **DIKM** | **Dikmen** | **4.26** | **349** | ⇓P | | **Pg** | **07 10 48.9** | **-2.3** |
| **DIKM** | **Dikmen** | **4.26** | **349** | P | | **Pn** | **07 10 33.5** | **-1.3** |
| **GEM** | **Giv'at Ha'Em** | **4.28** | **187** | P | | **Pn** | **07 10 36.9** | **+1.8** |
| **MMAI** | **Mount Meron Ar** | **4.50** | **190** | Pn | | **Pn** | **07 10 38.1** | **-0.1** |
| | 11nm,0.3s,baz=17,slow=14,SNR=36 | | | | | | | |
| MMAI | | | | | | Sn | **Sn** | **07 11 31.0** | **+0.2** |
| | 16nm,0.3s,baz=358,slow=25,SNR=5.7 | | | | | | | |
| MMAI | | | | | | Lg | Lg | 07 11 49.4 | |
| | 15nm,0.3s,baz=338,slow=20,SNR=5.1 | | | | | | | |
| MMAI | | | | | | LR | LR | 07 12 42.5 | |
| | comp=Z,376nm,20.0s,baz=320,slow=43 | | | | | | | |
| | 4.4nm,0.2s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **4.66** | **75** | Pn | | **Pn** | **07 10 41.0** | **+0.6** |
| **BZK** | **Bozkurt** | **4.83** | **339** | ⇑P | | **Pb** | **07 10 57.6** | **+3.1** |
| **QRNJ** | **Al-Qirein** | **5.15** | **187** | P | | **Pn** | **07 10 49.6** | **+2.5** |
| **ELL** | **Elmali** | **5.16** | **264** | Pn | | **Pn** | **07 10 50.2** | **+2.9** |
| **ELL** | **Elmali** | **5.16** | **264** | P | | **Pn** | **07 10 50.2** | **+2.9** |
| **HMDT** | **Nahal Hemdat** | **5.24** | **187** | P | | **Pn** | **07 10 51.6** | **+3.3** |
| **BALJ** | **Balqa** | **5.39** | **186** | Pn | | **Pn** | **07 10 51.3** | **+0.9** |
| **BALJ** | **Balqa** | **5.39** | **186** | P | | **Pn** | **07 10 53.9** | **+3.4** |
| **UJAP** | **Al Uja** | **5.54** | **187** | P | | **Pn** | **07 10 55.4** | **+3.0** |
| **BCA** | **Borcka** | **5.72** | **44** | ⇑P | | **Pg** | **07 11 16.9** | **-2.4** |
| **VSLR** | **Vesyoloye** | **6.63** | **24** | *i* P | | **Pn** | **07 11 07.3** | **-0.1** |
| VSLR | | | | pmax | | pmax | | |
| | comp=Z,46nm,1.2s | | | | | | | |
| **SOC** | **Sochi** | **6.64** | **22** | *eP* | | **Pn** | **07 11 05.6** | **-2.0** |
| SOC | | | | *e* | | | 07 12 21.2 | |
| SOC | | | | MLR | | MLR | | |
| | comp=Z,234nm,13.0s | | | | | | | |
| **GNI** | **Garni** | **7.12** | **65** | Pn | | **Pn** | **07 11 18.2** | **+3.9** |
| | comp=Z,0.8nm,0.3s,baz=136,slow=13,SNR=1.7 | | | | | | | |
| GNI | | | | LR | | LR | 07 14 24.6 | |
| | comp=Z,267nm,21.3s,baz=254,slow=41 | | | | | | | |
| | comp=Z,3.7nm,0.4s | | | | | | | |
| **GNI** | **Garni** | **7.12** | **65** | *i* P | | **Pn** | **07 11 13.3** | **-1.0** |
| **PRNI** | **Paran** | **7.17** | **189** | P | | **Pn** | **07 11 18.2** | **+3.2** |
| **YAL** | **Yalta** | **7.20** | **348** | *eP* | | **Pn** | **07 11 17.2** | **+2.0** |
| YAL | | | | Pm | | | 07 11 17.9 | |
| | comp=Z,8.0nm,0.3s | | | | | | | |
| YAL | | | | *eS* | | **Sn** | **07 12 40.9** | **+3.7** |
| YAL | | | | Sm | | | 07 12 41.0 | |
| | comp=N,6.0nm,0.4s | | | | | | | |
| YAL | | | | x | | **Sn** | **07 12 41.0** | **+3.7** |
| | comp=E,21nm,1.1s | | | | | | | |
| **YAL** | **Yalta** | **7.20** | **348** | *eP* | | **Pn** | **07 11 17.2** | **+2.0** |
| YAL | | | | *eS* | | **Sn** | **07 12 40.9** | **+3.7** |
| **SEV** | **Sevastopol'** | **7.35** | **345** | *eP* | | **Pn** | **07 11 20.2** | **+3.0** |
| SEV | | | | Pm | | | 07 11 21.9 | |
| | comp=Z,5.0nm,0.4s | | | | | | | |
| **SEV** | **Sevastopol'** | **7.35** | **345** | *eP* | | **Pn** | **07 11 20.2** | **+3.0** |
| **ALU** | **Alushta** | **7.35** | **349** | *eP* | | **Pn** | **07 11 18.9** | **+1.6** |
| ALU | | | | Pm | | | 07 11 19.2 | |
| | comp=Z,25nm,0.5s | | | | | | | |
| **ALU** | **Alushta** | **7.35** | **349** | *eP* | | **Pn** | **07 11 18.9** | **+1.6** |
| **SUDU** | **Sudak** | **7.48** | **353** | *eP* | | **Pn** | **07 11 20.8** | **+1.7** |
| SUDU | | | | Pm | | | 07 11 24.0 | |
| | comp=Z,30nm,0.8s | | | | | | | |
| SUDU | | | | *eS* | | **Sn** | **07 12 47.4** | **+3.3** |
| SUDU | | | | Sm | | | 07 12 47.7 | |
| | comp=N,11nm,0.3s | | | | | | | |
| SUDU | | | | Sm | | | 07 12 47.7 | |
| | comp=E,8.0nm,0.6s | | | | | | | |
| **SUDU** | **Sudak** | **7.48** | **353** | *eP* | | **Pn** | **07 11 20.8** | **+1.7** |
| SUDU | | | | *eS* | | **Sn** | **07 12 47.4** | **+3.3** |
| **SIM** | **Simferopol'** | **7.66** | **348** | *eP* | | **Pn** | **07 11 21.6** | **+0.1** |
| SIM | | | | Pm | | | 07 11 22.3 | |
| | comp=Z,48nm,0.4s | | | | | | | |
| **SIM** | **Simferopol'** | **7.66** | **348** | *eP* | | **Pn** | **07 11 21.6** | **+0.1** |
| **EIL** | **Elat** | **7.86** | **189** | Pn | | **Pn** | **07 11 23.5** | **-0.7** |
| | comp=Z,2.4nm,1.0s,baz=151,slow=19,SNR=1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CRVS** | **Cervenica-Dubn** | **15.71** | **321** | *e*P | | **P** | **07 13 22.0** | **+6.7** |
| **CRVS** | **Cervenica-Dubn** | **15.71** | **321** | *e*P | | **P** | **07 13 22.0** | **+6.7** |
| **RNPP8** | **Varash** | **15.72** | **335** | P | | **Pn** | **07 13 10.6** | **-0.8** |
| **MORH** | **Mrgy, Hungar** | **15.77** | **309** | P | | **Pn** | **07 13 10.5** | **-1.5** |
| | comp=Z,4.1nm,1.3s | | | | | | | |
| **RNPP9** | **Sopachiv** | **15.78** | **335** | P | | **Pn** | **07 13 11.8** | **-0.3** |
| **NIE** | **Niedzica** | **16.62** | **321** | P | | **Pn** | **07 13 22.7** | **-0.3** |
| **NIE** | **Niedzica** | **16.62** | **321** | P | | **Pn** | **07 13 22.7** | **-0.3** |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| **VYHS** | **Vyhne** | **16.83** | **316** | *e*P | | **P** | **07 13 32.6** | **+4.8** |
| **VYHS** | **Vyhne** | **16.83** | **316** | *e*P | | **P** | **07 13 32.6** | **+4.8** |
| **MPLH** | **Magyarpolny** | **16.89** | **311** | P | | **Pn** | **07 13 26.2** | **-0.2** |
| | comp=Z,13nm,1.2s | | | | | | | |
| **BELG** | **Belogornoye** | **16.91** | **24** | Pn | | **Pn** | **07 13 27.0** | **+0.5** |
| | comp=Z,12nm,0.6s,baz=317,slow=4.8,SNR=3.6 | | | | | | | |
| **BELG** | **Belogornoye** | **16.91** | **24** | *i* P | | **Pn** | **07 13 27.1** | **+0.5** |
| BELG | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **VAE** | **Valguarnera** | **17.37** | **277** | LR | | LR | 07 20 02.6 | |
| | comp=Z,99nm,19.7s,baz=137,slow=37 | | | | | | | |
| **OBN** | **Obninsk** | **17.66** | **1⇑** | *e*P | | **Pn** | **07 13 35.2** | **-0.6** |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,34nm,13.0s | | | | | | | |
| **JAVC** | **Velka Javorina** | **17.68** | **316** | *e*P | | **Pn** | **07 13 34.4** | **-1.9** |
| **MNK** | **Minsk** | **17.99** | **344** | *i* P | | **Pn** | **07 13 38.9** | **-1.1** |
| | comp=E,6.0nm,0.9s,baz=158 | | | | | | | |
| MNK | | | | *i* P | | **Pn** | **07 13 38.9** | **-1.1** |
| | comp=N,11nm,0.9s,baz=158 | | | | | | | |
| MNK | | | | *i* P | | **Pn** | **07 13 38.9** | **-1.1** |
| | comp=Z,15nm,0.9s,baz=158 | | | | | | | |
| MNK | | | | *i* PP | | **PnPn** | **07 13 49.7** | **-1.2** |
| | baz=158 | | | | | | | |
| MNK | | | | *i* PPP | | PPP | 07 13 57.4 | |
| | baz=158 | | | | | | | |
| MNK | | | | *i* S | | **Sn** | **07 16 59.8** | **-0.9** |
| | baz=158 | | | | | | | |
| MNK | | | | *i* SS | | **SnSn** | **07 17 14.8** | **+0.5** |
| | baz=158 | | | | | | | |
| MNK | | | | *i* SSS | | SSS | 07 17 27.6 | |
| | baz=158 | | | | | | | |
| MNK | | | | *i* LQ | | LQ | 07 19 06.5 | |
| | baz=158 | | | | | | | |
| MNK | | | | *i* LR | | LR | 07 20 21.0 | |
| | comp=Z,46nm,17.8s,baz=158 | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 07 22 14.0 | |
| | comp=N,52nm,21.7s,baz=158 | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 07 22 19.5 | |
| | comp=E,25nm,16.3s,baz=158 | | | | | | | |
| **MNK** | **Minsk** | **17.99** | **344** | *i* P | | **Pn** | **07 13 38.9** | **-1.1** |
| MNK | | | | *i* S | | **Sn** | **07 16 59.8** | **-0.9** |
| MNK | | | | pmax | | pmax | | |
| | comp=E,6.0nm,0.9s | | | | | | | |
| MNK | | | | pmax | | pmax | | |
| | comp=N,11nm,0.9s | | | | | | | |
| MNK | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| MNK | | | | MLR | | MLR | | |
| | comp=Z,46nm,18.0s | | | | | | | |
| MNK | | | | MLR | | MLR | | |
| | comp=N,52nm,22.0s | | | | | | | |
| MNK | | | | MLR | | MLR | | |
| | comp=E,25nm,16.0s | | | | | | | |
| **ARSA** | **Arzberg** | **18.15** | **309** | *i* Pn | | **Pn** | **07 13 40.3** | **-1.8** |
| | comp=E,0.9nm,0.4s | | | | | | | |
| **MORC** | **Moravsky Berou** | **18.26** | **318** | *e*P | | **P** | **07 13 43.4** | **-0.2** |
| **MOS** | **Moscow** | **18.30** | **2** | *e*P | | **Pn** | **07 13 41.1** | **-2.7** |
| MOS | | | | pmax | | pmax | | |
| | comp=Z,42nm,1.0s | | | | | | | |
| **VRAC** | **Vranov** | **18.52** | **316** | *e*P | | **Pn** | **07 13 46.4** | **-0.1** |
| **VRAC** | **Vranov** | **18.52** | **316** | P | | **P** | **07 13 45.7** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=166,slow=18,SNR=1.3 | | | | | | | |
| VRAC | | | | LR | | LR | 07 21 48.9 | |
| | comp=Z,79nm,21.1s,baz=126,slow=40 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **CESX** | **Cesi** | **18.85** | **293** | P | | **Pn** | **07 13 50.9** | **+0.3** |
| CESX | | | | IAmb | | IAmb | 07 13 51.9 | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| **SUW** | **Suwalki** | **18.86** | **336** | P | | **Pn** | **07 13 50.3** | **-0.3** |
| **SUW** | **Suwalki** | **18.86** | **336** | P | | **Pn** | **07 13 50.3** | **-0.3** |
| SUW | | | | pmax | | pmax | | |
| | comp=Z,47nm,1.2s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **19.24** | **318** | P | | **Pn** | **07 13 57.7** | **+2.4** |
| DPC | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | | | |
| **UPC** | **Upice** | **19.49** | **318** | P | | **Pn** | **07 13 58.4** | **+0.1** |
| UPC | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **KSP** | **Ksiaz** | **19.54** | **320** | P | | **Pn** | **07 14 00.0** | **+1.2** |
| KSP | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **KSP** | **Ksiaz** | **19.54** | **320** | P | | **P** | **07 13 56.3** | **-1.2** |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **19.87** | **305** | *i* Pn | | **P** | **07 14 00.3** | **-1.1** |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| **PABE** | **Paberze** | **19.89** | **339** | P | | **P** | **07 14 01.6** | **+0.3** |
| **GERES** | **GERESS Array B** | **19.95** | **312** | P | | **Pn** | **07 14 03.7** | **-0.1** |
| **GERES** | **GERESS Array B** | **19.95** | **312** | P | | **P** | **07 14 01.3** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=114,slow=12,SNR=3.9 | | | | | | | |
| GERES | | | | LR | | LR | 07 23 35.3 | |
| | comp=Z,63nm,18.6s,baz=127,slow=42 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **GERES** | **GERESS Array B** | **19.95** | **312** | P | | **Pn** | **07 14 03.7** | **-0.1** |
| **TEOL** | **Teolo** | **20.03** | **301** | P | | **P** | **07 14 03.3** | **+0.3** |
| **KHC** | **Kasperske Hory** | **20.15** | **313** | *e*P | | Pn | 07 14 06.0 | -0.1 |
| **KHC** | **Kasperske Hory** | **20.15** | **313** | *e*P | | Pn | 07 14 06.0 | -0.1 |
| **AKTO** | **Aktyubinsk** | **20.22** | **43** | P | | **P** | **07 14 05.2** | **+0.3** |
| | comp=Z,5.2nm,0.9s,baz=253,slow=10,SNR=11 | | | | | | | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **CTI** | **Castel Tesino** | **20.23** | **303** | P | | **P** | **07 14 05.1** | **-0.1** |
| CTI | | | | IAmb | | IAmb | 07 14 20.3 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **CTI** | **Castel Tesino** | **20.23** | **303** | P | | **P** | **07 14 05.1** | **-0.1** |
| CTI | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **WET** | **Wettzell** | **20.57** | **312** | P | | Pn | 07 14 10.7 | -0.3 |
| WET | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **20.61** | **306** | *i* P | | **P** | **07 14 08.3** | **-1.2** |
| | comp=Z,2.4nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **20.75** | **48** | P | | **P** | **07 14 10.7** | **-0.1** |
| **ABKAR** | **Akbulak array** | **20.75** | **48** | P | | **P** | **07 14 10.3** | **-0.5** |
| ABKAR | | | | IAmb | | IAmb | 07 14 34.0 | |
| | comp=Z,5.4nm,1.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **20.79** | **317** | *e*P | | Pn | 07 14 16.6 | +3.0 |
| BRG | | | | Amp | | | 07 14 16.9 | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **20.87** | **306** | *i* pP | | **P** | **07 14 11.5** | **-0.7** |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **MOTA** | **Moosalm** | **20.98** | **306** | *i* pP | | **P** | **07 14 12.6** | **-0.8** |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| **RETA** | **Reutte** | **21.25** | **306** | *i* Pn | | **P** | **07 14 16.3** | **+0.1** |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **21.31** | **304** | P | | **P** | **07 14 17.5** | **+0.4** |
| FUORN | | | | IAmb | | IAmb | 07 14 28.1 | |
| | comp=Z,8.6nm,1.4s | | | | | | | |
| **CLL** | **Collm** | **21.53** | **317** | P | | **P** | **07 14 20.2** | **+1.1** |
| **CLL** | **Collm** | **21.53** | **317** | *e*P | | **P** | **07 14 19.0** | **-0.1** |
| CLL | | | | *i* sP | | **sP** | **07 14 24.1** | **+1.8** |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| CLL | | | | *i* x | | x | 07 14 29.0 | |
| CLL | | | | *e*S | | **S** | **07 18 18.0** | **+0.2** |
| **CLL** | **Collm** | **21.53** | **317** | *e*P | | **P** | **07 14 19.0** | **-0.1** |
| CLL | | | | *i* | | | 07 14 24.1 | |
| CLL | | | | *e*S | | **S** | **07 18 18.0** | **+0.2** |
| **KEST** | **Kesra** | **21.68** | **274** | P | | **P** | **07 14 20.2** | **-0.8** |
| | comp=Z,2.5nm,0.8s,baz=247,slow=13,SNR=1.8 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **DAVA** | **Damuels** | **21.75** | **305** | *i* P | | **P** | **07 14 20.1** | **-1.7** |
| | comp=Z,3.0nm,0.2s | | | | | | | |
| **VSU** | **Vasula** | **21.92** | **346** | *ce*P | | **P** | **07 14 23.4** | **+0.2** |
| VSU | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **SLE** | **Schleitheim** | **22.79** | **306** | P | | **P** | **07 14 31.9** | **-0.8** |
| **KIRV** | **Kirov** | **22.80** | **18** | *ce*P | | **P** | **07 14 32.0** | **-0.6** |
| **BFO** | **Black Forest** | **23.06** | **307** | P | | **P** | **07 14 34.9** | **-0.7** |
| BFO | | | | IAmb | | IAmb | 07 14 42.4 | |
| | comp=Z,8.2nm,1.0s | | | | | | | |
| **BFO** | **Black Forest** | **23.06** | **307** | P | | **P** | **07 14 34.9** | **-0.7** |
| BFO | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **BNI** | **Bardonecchia** | **23.43** | **298** | P | | **P** | **07 14 39.7** | **+0.3** |
| BNI | | | | IAmb | | IAmb | 07 14 46.9 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **BNI** | **Bardonecchia** | **23.43** | **298** | P | | **P** | **07 14 39.7** | **+0.3** |
| BNI | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | | |
| **ECH** | **Echery** | **23.78** | **306** | P | | **P** | **07 14 42.5** | **-0.2** |
| ECH | | | | IAmb | | IAmb | 07 14 49.4 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **ECH** | **Echery** | **23.78** | **306** | P | | **P** | **07 14 42.5** | **-0.2** |
| ECH | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **ARU** | **Arti** | **24.12** | **31** | P | | **P** | **07 14 45.0** | **-0.8** |
| ARU | | | | IAmb | | IAmb | 07 14 47.1 | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **24.12** | **31** | LR | | LR | 07 25 53.1 | |
| | comp=Z,32nm,18.3s,baz=245,slow=41 | | | | | | | |
| **ARU** | **Arti** | **24.12** | **31** | *c i* P | | **P** | **07 14 46.3** | **+0.6** |
| ARU | | | | | | | 07 15 13.6 | |
| ARU | | | | S | | **S** | **07 19 06.5** | **+3.0** |
| ARU | | | | SS | | **SnSn** | **07 19 47.3** | **+3.0** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **24.12** | **31** | P | | **P** | **07 14 43.9** | **-1.8** |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **24.84** | **348** | P | | **P** | **07 14 52.0** | **-0.3** |
| | comp=Z,2.5nm,0.6s,baz=138,slow=9.2,SNR=14 | | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **SVE** | **Sverdlovsk** | **25.24** | **32** | *e*P | | **P** | **07 14 57.0** | **+1.0** |
| SVE | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| **CHGR** | **Chuyangaron** | **25.83** | **77** | P | | **P** | **07 15 00.6** | **-1.0** |
| **KK31** | **Karatay Array** | **26.58** | **67** | P | | **P** | **07 15 08.9** | **+0.6** |
| KK31 | | | | IAmb | | IAmb | 07 15 20.8 | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **26.58** | **67** | P | | **P** | **07 15 08.9** | **+0.6** |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **26.58** | **67** | P | | **P** | **07 15 08.0** | **-0.2** |
| KKAR | | | | IAmb | | IAmb | 07 15 20.8 | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **26.58** | **67** | P | | **P** | **07 15 08.0** | **-0.2** |
| **HFS** | **Hagfors** | **26.87** | **335** | P | | **P** | **07 15 10.5** | **-0.2** |
| | comp=Z,1.9nm,0.5s,baz=132,slow=9.9,SNR=9.3 | | | | | | | |
| HFS | | | | LR | | LR | 07 26 13.3 | |
| | comp=Z,56nm,21.4s,baz=127,slow=37 | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **BRVK** | **Borovoye** | **28.22** | **46** | *ce*P | | **P** | **07 15 23.3** | **+0.5** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **28.38** | **334** | P | | **P** | **07 15 23.2** | **-1.0** |
| | comp=Z,1.2nm,0.8s,baz=130,slow=10 | | | | | | | |
| **NOA** | **NORSAR Array B** | **28.38** | **334** | P | | **P** | **07 15 23.5** | **-0.7** |
| | comp=Z,0.9nm,0.8s,baz=128,slow=9.5,SNR=4.1 | | | | | | | |
| NOA | | | | LR | | LR | 07 28 49.3 | |
| | comp=Z,41nm,20.2s,baz=155,slow=41 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **29.52** | **68** | LR | | LR | 07 27 56.9 | |
| | comp=Z,69nm,19.1s,baz=269,slow=38 | | | | | | | |
| **ESDC** | **Sonseca Array** | **31.38** | **287** | P | | **P** | **07 15 50.0** | **-1.0** |
| | comp=Z,0.3nm,0.6s,baz=78,slow=9.2,SNR=2.1 | | | | | | | |
| ESDC | | | | LR | | LR | 07 29 19.8 | |
| | comp=Z,46nm,19.4s,baz=122,slow=38 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **31.99** | **317** | P | | **P** | **07 15 55.9** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=90,slow=18,SNR=2.1 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **32.63** | **53** | P | | **P** | **07 16 03.0** | **+1.2** |
| | comp=Z,2.9nm,0.9s,baz=266,slow=8.5,SNR=24 | | | | | | | |
| KURBB | | | | PcP | | **PcP** | **07 18 47.7** | **0.0** |
| | comp=Z,0.5nm,0.8s,baz=272,slow=2.9,SNR=5.2 | | | | | | | |
| KURBB | | | | LR | | LR | 07 30 53.4 | |
| | comp=Z,60nm,18.3s,baz=168,slow=39 | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.66** | **353** | P | | **P** | **07 16 02.1** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **32.66** | **353** | P | | **P** | **07 16 01.9** | **0.0** |
| | comp=Z,2.1nm,0.6s,baz=177,slow=8.5,SNR=6.0 | | | | | | | |
| ARCES | | | | LR | | LR | 07 29 34.8 | |
| | comp=Z,40nm,19.2s,baz=145,slow=37 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.66** | **353** | P | | **P** | **07 16 02.1** | **+0.2** |
| ARCES | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **KURK** | **Kurchatov** | **32.70** | **52** | P | | **P** | **07 16 02.8** | **+0.4** |
| KURK | | | | IAmb | | IAmb | 07 16 04.3 | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| **KURK** | **Kurchatov** | **32.70** | **52** | *ce*P | | **P** | **07 16 02.9** | **+0.5** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,12nm,2.5s | | | | | | | |
| **MDT** | **Midelt** | **33.58** | **275** | LR | | LR | 07 30 20.5 | |
| | comp=Z,49nm,20.8s,baz=144,slow=37 | | | | | | | |
| **MK31** | **Makanchi Array** | **34.92** | **60** | P | | **P** | **07 16 22.0** | **+0.1** |
| **MK31** | **Makanchi Array** | **34.92** | **60** | *ce*P | | **P** | **07 16 22.7** | **+0.8** |
| **MKAR** | **Makanchi Array** | **34.92** | **60** | P | | **P** | **07 16 21.9** | **0.0** |
| **MKAR** | **Makanchi Array** | **34.92** | **60** | P | | **P** | **07 16 23.0** | **+1.2** |
| | comp=Z,2.0nm,0.9s,baz=274,slow=7.9,SNR=14 | | | | | | | |
| MKAR | | | | LR | | LR | 07 32 41.5 | |
| | comp=Z,75nm,18.4s,baz=309,slow=40 | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **34.92** | **60** | P | | **P** | **07 16 21.9** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **36.86** | **48** | P | | **P** | **07 16 38.1** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **36.86** | **48** | P | | **P** | **07 16 38.3** | **0.0** |
| | comp=Z,1.8nm,0.6s,baz=267,slow=9.3,SNR=9.6 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **WMQ** | **Urumqi** | **38.99** | **64** | *e*P | | **P** | **07 16 58.0** | **+1.5** |
| WMQ | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **39.20** | **241** | P | | **P** | **07 16 57.5** | **-1.0** |
| | comp=Z,27nm,0.8s,baz=37,slow=10,SNR=16 | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **JMIC** | **Jan Mayen** | **40.78** | **339** | LR | | LR | 07 34 48.3 | |
| | comp=Z,28nm,18.4s,baz=244,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **50.94** | **55** | P | | **P** | **07 18 31.7** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=285,slow=7.1,SNR=1.8 | | | | | | | |
| SONM | | | | LR | | LR | 07 42 39.9 | |
| | comp=Z,146nm,18.8s,baz=286,slow=39 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.36** | **54** | *ce*P | | **P** | **07 18 35.3** | **+0.5** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | | |
| **BOD** | **Bodaibo** | **52.96** | **41** | *e*P | | **P** | **07 18 45.7** | **-0.7** |
| BOD | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.6s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **54.99** | **331** | LR | | LR | 07 45 01.2 | |
| | comp=Z,19nm,18.8s,baz=113,slow=39 | | | | | | | |
| **TIXI** | **Tiksi** | **55.72** | **23** | *i* P | | **P** | **07 19 06.1** | **-0.1** |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.76** | **61** | *e*P | | **P** | **07 19 15.2** | **+0.9** |
| HHC | | | | sP | | sP | 07 19 22.3 | +4.5 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,52nm,4.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.48** | **91** | P | | **P** | **07 19 19.9** | **+0.4** |
| | comp=Z,1.8nm,0.3s,baz=307,slow=6.9,SNR=2.5 | | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | | |
| **YAK** | **Yakutsk** | **59.20** | **33** | *i* P | | **P** | **07 19 32.3** | **+1.4** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **KLR** | **Kul'dur** | **65.93** | **46** | LR | | LR | 07 54 50.7 | |
| | comp=Z,28nm,18.9s,baz=286,slow=41 | | | | | | | |
| **KLR** | **Kul'dur** | **65.93** | **46** | *i* P | | **P** | **07 20 17.8** | **+1.7** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **SEY** | **Seymchan** | **67.76** | **26** | *ce*P | | **P** | **07 20 28.7** | **+1.2** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **BILL** | **Bilibino** | **68.35** | **18⇑** | *e*P | | **P** | **07 20 31.7** | **+0.6** |
| BILL | | | | *e* | | | 07 23 00.1 | |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **69.58** | **58** | P | | **P** | **07 20 39.8** | **+0.5** |
| | comp=Z,1.4nm,0.9s,baz=304,slow=4.4,SNR=4.1 | | | | | | | |
| KSRS | | | | LR | | LR | 07 53 55.7 | |
| | comp=Z,18nm,20.2s,baz=245,slow=38 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **ASAJ** | **Asahikawa** | **74.97** | **46** | LR | | LR | 08 00 12.4 | |
| | comp=Z,30nm,18.2s,baz=289,slow=41 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **76.89** | **54** | LR | | LR | 07 58 50.3 | |
| | comp=Z,39nm,18.2s,baz=270,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **78.07** | **1** | P | | **P** | **07 21 29.1** | **+0.5** |
| | comp=Z,0.5nm,0.8s,baz=0.0,slow=5.7,SNR=5.4 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **80.00** | **56** | LR | | LR | 08 01 47.6 | |
| | comp=Z,36nm,20.2s,baz=268,slow=39 | | | | | | | |
| **DLBC** | **Dease Lake** | **83.77** | **353** | LR | | LR | 08 01 11.6 | |
| | comp=Z,32nm,19.3s,baz=258,slow=37 | | | | | | | |
| **PDAR** | **Pinedale Array** | **94.31** | **336** | P | | **P** | **07 22 48.9** | **-1.1** |
| | comp=Z,0.2nm,0.6s,baz=78,slow=3.3,SNR=3.7 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |

*IDC **04** 07:20:15.1±0.8, 0.°58S×125.°41E, h0km, mb4.1/9, mbtmp4.1/9, Error ellipse: s-maj=55.4km s-min=17.5km az=71.0*
*DJA **04** 07:20:21.7±1.5, 1.°5S±11.°×12.°6E±.°, h10km, M3.7/4, MLv3.7/4*

**ISC 04 07:20:22.2±0.8, 0.°61S±0.°10×125.°74E±0.°09, h57km, n11, σ1§02/14, mb4.2/8, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SANI** | **Sanana** | **1.45** | **170** | P | | **Pn** | **07 20 45.5** | **-0.7** |
| **LBMI** | **Labuha** | **1.76** | **91** | P | | **Pn** | **07 20 50.7** | **+0.3** |
| LBMI | | | | S | | **Sn** | **07 21 10.4** | **-1.3** |
| **WRA** | **Warramunga Arr** | **20.98** | **157** | P | | **P** | **07 25 01.2** | **+0.3** |
| | 2.1nm,0.6s,baz=334,slow=11,SNR=22 | | | | | | | |
| | 2.1nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **24.25** | **162** | P | | **P** | **07 25 36.0** | **+1.9** |
| | 1.5nm,0.8s,baz=339,slow=10,SNR=15 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **07 29 14.8** | **+1.4** |
| | 0.1nm,0.3s,baz=349,slow=1.3,SNR=1.3 | | | | | | | |
| | 1.5nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **37.93** | **3** | P | | **P** | **07 27 34.1** | **0.0** |
| | 2.3nm,0.6s,baz=181,slow=9.3,SNR=14 | | | | | | | |
| | 2.3nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **44.96** | **6** | P | | **P** | **07 28 31.4** | **-0.2** |
| | 2.3nm,0.6s,baz=181,slow=7.1,SNR=8.2 | | | | | | | |
| | 2.3nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **51.11** | **343** | P | | **P** | **07 29 20.2** | **+0.9** |
| | 0.7nm,0.5s,baz=162,slow=8.4,SNR=4.3 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.59** | **327** | P | | **P** | **07 30 26.0** | **-1.0** |
| | 1.3nm,0.4s,baz=122,slow=8.0,SNR=27 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **07 31 10.7** | **-0.3** |
| | 0.2nm,0.6s,baz=116,slow=3.4,SNR=3.5 | | | | | | | |
| | 1.3nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **64.02** | **334** | P | | **P** | **07 30 48.9** | **-0.9** |
| | 0.6nm,0.3s,baz=130,slow=7.0,SNR=3.3 | | | | | | | |
| | 0.6nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.88** | **329** | P | | **P** | **07 30 54.7** | **-0.7** |
| | 1.0nm,0.4s,baz=126,slow=7.1,SNR=11 | | | | | | | |
| | 1.0nm,0.4s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **76.45** | **323** | P | | **P** | **07 32 05.6** | **-0.3** |
| | 3.3nm,0.6s,baz=103,slow=5.9,SNR=14 | | | | | | | |
| | 3.3nm,0.6s | | | | | | | |

*INMG **04** 07:26:53.7±2.0, 41.°65N×8.°48W, h3km, ML2.0, Error ellipse: s-maj=4.8km s-min=2.4km az=86.0*
*MDD **04** 07:26:54.0±0.5, 41.°66N×8.°47W, h12km, mb_Lg2.6/7, Error ellipse: s-maj=3.7km s-min=2.3km az=93.0*

**ISC 04 07:26:52.5±1.0, 41.°65N±0.°02×8.°49W±0.°03, h15km±8km, n28, σ1§03/61, 2C, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCAB** | **Cabril** | **0.35** | **81⇑** | *i* Pg | | **Pb** | **07 27 00.5** | **+0.1** |
| PCAB | | | | *e*Sg | | **Sg** | **07 27 05.0** | **+0.3** |
| PCAB | | | | A | | A | 07 27 05.2 | |
| | 156nm,0.1s | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.35** | **28⇑** | *i* Pg | | **Pb** | **07 27 00.4** | **-0.1** |
| PGAV | | | | *e*Sg | | **Sg** | **07 27 04.8** | **0.0** |
| PGAV | | | | A | | A | 07 27 05.7 | |
| | 113nm,0.2s | | | | | | | |
| **ELOB** | **Lobios** | **0.39** | **56** | Pg | | **Pb** | **07 27 00.9** | **-0.1** |
| ELOB | | | | Sg | | **Sg** | **07 27 06.3** | **+0.6** |
| ELOB | | | | *i* Vmb_Lg | | | 07 27 06.6 | |
| **EZAM** | **Zamans** | **0.52** | **343** | Pg | | **Pb** | **07 27 03.3** | **+0.1** |
| EZAM | | | | Sg | | **Sb** | **07 27 10.6** | **0.0** |
| EZAM | | | | *i* Vmb_Lg | | | 07 27 11.2 | |
| **POLO** | **Lamas de Olo** | **0.59** | **118** | *e*Pg | | **Pb** | **07 27 04.9** | **+0.4** |
| POLO | | | | *e*Sg | | **Sg** | **07 27 12.3** | **+0.2** |
| POLO | | | | A | | A | 07 27 13.8 | |
| | 12nm,0.1s | | | | | | | |
| **PVRL** | **Vila Real** | **0.69** | **123** | *e*P | | **Pb** | **07 27 06.8** | **+0.6** |
| PVRL | | | | *e*S | | **Sb** | **07 27 15.5** | **-0.1** |
| PVRL | | | | A | | A | 07 27 17.0 | |
| | 51nm,0.1s | | | | | | | |
| **PVIS** | **Viseu** | **1.04** | **154** | *e*P | | **Pn** | **07 27 13.0** | **+0.5** |
| PVIS | | | | *e*S | | **Sn** | **07 27 27.4** | **+0.7** |
| PVIS | | | | A | | A | 07 27 29.8 | |
| | 35nm,0.1s | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **1.19** | **14** | Pg | | **Pg** | **07 27 15.3** | **0.0** |
| EAGO | | | | Sg | | **Sb** | **07 27 30.3** | **+0.5** |
| **MVO** | **Moncorvo** | **1.20** | **114** | *e*P | | **Pg** | **07 27 15.7** | **0.0** |
| MVO | | | | *e*S | | **Sg** | **07 27 31.3** | **-0.1** |
| MVO | | | | A | | A | 07 27 32.3 | |
| | 27nm,0.1s | | | | | | | |
| **PBRG** | **Braganca** | **1.32** | **83** | *e*P | | **Pb** | **07 27 17.2** | **+0.3** |
| PBRG | | | | *e*S | | **Sg** | **07 27 34.9** | **-0.1** |
| PBRG | | | | A | | A | 07 27 36.4 | |
| | 10nm,0.1s | | | | | | | |
| **ECAL** | **Calabor** | **1.34** | **77** | Pn | | **Pn** | **07 27 16.2** | **-0.5** |
| ECAL | | | | Pg | | **Pg** | **07 27 18.1** | **-0.2** |
| ECAL | | | | Sn | | **Sb** | **07 27 32.7** | **-1.6** |
| ECAL | | | | Sg | | **Sg** | **07 27 35.2** | **-0

**Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **2.56** | **141** | P | Pn | 07 31 53.5 | +0.9 |
| **RTV** | **Rentapao** | **2.77** | **138** | P | Pn | 07 31 56.8 | +1.5 |
| **LIFNC** | **LIFOU** | **5.07** | **172** | P | Pn | 07 32 26.1 | -0.9 |
| **KOUNC** | **Koumac, New Ca** | **5.23** | **203** | P | Pn | 07 32 29.6 | +0.3 |
| **YATNC** | **Mamie plateau,** | **6.31** | **177** | P | Pn | 07 32 43.8 | -0.3 |
| **DZM** | **Mont Dzumac** | **6.31** | **180** | P | Pn | 07 32 44.3 | +0.1 |
| **NOUC** | **Port Laguerre** | **6.34** | **182** | P | Pn | 07 32 45.1 | +0.6 |

*AFAD **04** 07:50:32.4±0.0, 37°.42N×36°.32E, h7km±3km, ML1.7*
*ISK **04** 07:50:32.0, 37°.47N×36°.29E, h14km, ML2.5/7*
**ISC 04 07:50:32.0**±1.1, **37°.47N**±0°.05×**36°.31E**±0°.04, **h15**km±12km, **n13**, σ0.8**32**/19, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANDN** | **Andirin** | **0.12** | **13** | P | **Pb** | **07 50 36.0** | **-0.1** |
| ANDN | | | | S | **Sb** | **07 50 38.8** | **0.0** |
| **KOZT** | **Kozan** | **0.39** | **272** | Pg | **Pg** | **07 50 39.9** | **0.0** |
| **KAMA** | **Osmaniye** | **0.40** | **135** | P | **Pb** | **07 50 40.5** | **-0.3** |
| KAMA | | | | S | **Sg** | **07 50 45.2** | **-0.3** |
| KAMA | comp=E,61nm,0.1s | | | *i* AML | AML | 07 50 46.0 | |
| KAMA | comp=N,64nm,0.1s | | | *i* AML | AML | 07 50 47.0 | |
| **KMRS** | **Kahramanmaras** | **0.47** | **85** | Pg | **Pb** | **07 50 42.0** | **0.0** |
| KMRS | | | | Sg | **Sb** | **07 50 49.4** | **+0.6** |
| **HCB** | **Kahramanmara** | **0.49** | **104** | P | **Pb** | **07 50 42.3** | **0.0** |
| HCB | | | | S | **Sb** | **07 50 48.7** | **-0.7** |
| HCB | comp=E,67nm,0.1s | | | *i* AML | AML | 07 50 50.0 | |
| HCB | comp=N,77nm,0.1s | | | *i* AML | AML | 07 50 51.0 | |
| **KHMR** | **Kahramanmara** | **0.49** | **104** | P | **Pb** | **07 50 42.4** | **0.0** |
| KHMR | | | | S | **Sg** | **07 50 48.2** | **-0.1** |
| **SAIM** | **ADANA** | **0.54** | **340** | P | **Pb** | **07 50 43.4** | **+0.1** |
| SAIM | | | | S | **Sb** | **07 50 51.1** | **+0.1** |
| **KHMN** | **Narli-Kahraman** | **0.68** | **96** | Pg | **Pb** | **07 50 45.9** | **+0.4** |
| **AKO** | **Adana** | **0.69** | **270** | P | **Pb** | **07 50 46.0** | **+0.2** |
| **GAZ** | **Gaziantep** | **0.77** | **112** | Pg | **Pb** | **07 50 47.7** | **+0.5** |
| **SARI** | **SarD1z-Kayseri** | **0.94** | **5** | Pg | **Pn** | **07 50 50.7** | **-0.2** |
| **CMRD** | **Camardi-Nigde** | **1.07** | **281** | Pg | **Pb** | **07 50 52.3** | **0.0** |
| **TAHT** | **Tahtakopru-Hat** | **1.09** | **185** | Pn | **Pg** | **07 50 53.4** | **+0.3** |

*SJA **04** 07:56:54.3±0.7, 19°.77S×69°.18W, h104km±4km, ML3.8, MW3.7*
*GUC **04** 07:56:55.9±0.6, 19°.79S×69°.26W, h96km±3km, ML3.3*
**ISC 04 07:56:57.8**±1.4, **19°.80S**±0°.03×**69°.30W**±0°.06, **h87**km±9km, **n19**, σ1.**966**/32, **1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GO01** | **Chusmiza** | **0.17** | **37** | *e*P | **Pn** | **07 57 10.1** | **-0.9** |
| GO01 | | | | *e*S | **Sn** | **07 57 21.7** | **+1.0** |
| **GO01** | **Chusmiza** | **0.17** | **37** | *e*P | **Pn** | **07 57 10.4** | **-0.6** |
| GO01 | | | | *i* S | **Sn** | **07 57 21.5** | **+0.8** |
| **PX03** | **IPOC Station P** | **0.68** | **207** | *i* P | **Pn** | **07 57 12.6** | **-1.4** |
| **TA02** | **Huaiquique** | **0.91** | **239** | *e*P | **Pn** | **07 57 16.1** | **-0.2** |
| TA02 | comp=Z,2μm,0.1s | | | IAML | | 07 57 35.5 | |
| **TA02** | **Huaiquique** | **0.91** | **239** | *e*P | **Pn** | **07 57 15.9** | **-0.4** |
| TA02 | | | | *i* S | **Sn** | **07 57 30.8** | **+0.6** |
| **TA01** | **Diego Aracena** | **1.12** | **227** | *e*P | **Pn** | **07 57 18.0** | **-0.8** |
| TA01 | | | | *e*S | **Sn** | **07 57 36.7** | **+2.2** |
| **TA01** | **Diego Aracena** | **1.12** | **227** | *e*P | **Pn** | **07 57 18.2** | **-0.6** |
| TA01 | | | | *i* S | **Sn** | **07 57 35.1** | **+0.6** |
| TA01 | comp=E,831nm,0.4s | | | IAML | | 07 57 39.5 | |
| **PX02** | **IPOC Station P** | **1.19** | **314** | *e*P | **Pn** | **07 57 18.8** | **-0.9** |
| PX02 | | | | *i* S | **Sn** | **07 57 36.4** | **+0.3** |
| **AP01** | **Chacalluta** | **1.73** | **325** | *e*P | **Pn** | **07 57 25.1** | **-1.3** |
| AP01 | | | | IAML | | 07 57 51.6 | |
| AP01 | comp=Z,384nm,0.1s | | | | | | |
| **AP01** | **Chacalluta** | **1.73** | **325** | *e*P | **Pn** | **07 57 25.9** | **-0.5** |
| AP01 | | | | *i* S | **Sn** | **07 57 48.2** | **+0.1** |
| **PB09** | **IPOC Station P** | **1.99** | **178** | *e*P | **Pn** | **07 57 29.2** | **-0.7** |
| PB09 | | | | *e*S | **Sn** | **07 57 52.9** | **-1.5** |
| PB09 | comp=Z,485nm,0.7s | | | IAML | | 07 57 58.5 | |
| **PB09** | **IPOC Station P** | **1.99** | **178** | *e*P | **Pn** | **07 57 29.2** | **-0.7** |
| PB09 | | | | *i* S | **Sn** | **07 57 54.8** | **+0.5** |
| PB09 | comp=E,406nm,0.4s | | | IAML | | 07 58 00.6 | |
| **PB18** | **Visviri** | **2.21** | **356** | *i* S | **Sn** | **07 58 00.5** | **+0.4** |
| **PB04** | **IPOC Station P** | **2.64** | **197** | *e*P | **Pn** | **07 57 38.5** | **-0.2** |
| PB04 | | | | *e*S | **Sn** | **07 58 16.2** | **+6.2** |
| PB04 | comp=Z,294nm,0.4s | | | IAML | | 07 58 19.7 | |
| **LVC** | **Limon Verde** | **2.82** | **173** | *e*P | **Pn** | **07 57 40.5** | **-0.7** |
| LVC | | | | *e*S | **Sn** | **07 58 15.6** | **+1.1** |
| **PB06** | **IPOC Station P** | **2.90** | **185** | *e*P | **Pn** | **07 57 40.8** | **-1.4** |
| PB06 | | | | *e*S | **Sn** | **07 58 14.2** | **-2.0** |
| PB06 | comp=Z,278nm,0.3s | | | IAML | | 07 58 26.7 | |
| **AF01** | **San Pedro de A** | **3.31** | **162** | *e*P | **Pn** | **07 57 49.3** | **+1.6** |
| AF01 | comp=Z,143nm,0.8s | | | IAML | | 07 59 11.3 | |
| **PB15** | **IPOC Station P** | **3.39** | **183** | *e*P | **Pn** | **07 57 48.2** | **-0.6** |
| PB15 | | | | *e*S | **Sn** | **07 58 25.0** | **-3.2** |
| PB15 | comp=Z,535nm,0.2s | | | IAML | | 07 58 42.6 | |
| **LPAZ** | **La Paz** | **3.67** | **18** | *e*P | **Pn** | **07 57 53.3** | **+0.4** |

*NEIC **04** 07:57:11.6±2.8, 15°.65N±0°.07×95°.05W±0°.04, h35km±2km, mb4.1/16, Md4.4/90(MEX), Error ellipse: s-maj=12.7km s-min=5.7km az=190.0*
*MEX **04** 07:57:12.3±1.3, 15°.81N×95°.03W, h21km±155km, MD4.4*
**ISC 04 07:57:10.3**±1.6, **15°.77N**±0°.04×**95°.03W**±0°.02, **h25**km±14km, **n95**, σ2.**955**/142, **Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NILT** | **Santiago Nilte** | **0.89** | **26** | *e*P | **Pn** | **07 57 25.9** | **-1.3** |
| NILT | | | | *e*S | **Sb** | **07 57 36.3** | **-2.3** |
| **HUIG** | **Huatulco** | **1.04** | **270** | | **Pn** | **07 57 28.4** | **-0.9** |
| HUIG | | | | | **Sn** | **07 57 41.1** | **-2.0** |
| **HUIG** | **Huatulco** | **1.04** | **270** | *e*P | **Pn** | **07 57 28.4** | **-0.9** |
| HUIG | | | | *e*S | **Sn** | **07 57 41.1** | **-2.0** |
| **CARR** | **Arriaga** | **1.18** | **66** | *e*P | **Pn** | **07 57 29.8** | **-1.4** |
| CARR | | | | *e*S | **Sn** | **07 57 41.2** | **-5.3** |
| **PANG** | **Puerto Angel** | **1.39** | **266** | | **Pn** | **07 57 32.8** | **-1.4** |
| **PANG** | **Puerto Angel** | **1.39** | **266** | *e*P | **Pn** | **07 57 32.8** | **-1.4** |
| PANG | | | | *e*S | **Sn** | **07 57 48.0** | **-3.8** |
| **PCIG** | | **1.75** | **92** | | **Pn** | **07 57 38.7** | **-0.3** |
| **PCIG** | | **1.75** | **92** | *e*P | **Pn** | **07 57 38.7** | **-0.3** |
| PCIG | | | | *e*S | **Sn** | **07 57 58.0** | **-2.4** |
| **PEIG** | **Puerto Escondi** | **2.05** | **277** | | **Pn** | **07 57 42.4** | **-0.9** |
| **PEIG** | **Puerto Escondi** | **2.05** | **277** | *e*P | **Pn** | **07 57 42.4** | **-0.9** |
| PEIG | | | | *e*S | **Sn** | **07 58 04.5** | **-3.5** |
| **NEUV** | **Arroyo Zacate** | **2.07** | **339** | *e*P | **Pn** | **07 57 43.3** | **-0.2** |
| NEUV | | | | *e*S | **Sn** | **07 58 05.5** | **-3.1** |
| **OXBJ** | **Oaxaca** | **2.08** | **309** | | **Pb** | **07 57 46.8** | **-0.7** |
| OXBJ | | | | | **Sn** | **07 58 09.9** | **+0.9** |
| **OXBJ** | **Oaxaca** | **2.08** | **309** | *e*P | **Pb** | **07 57 46.8** | **-0.7** |
| OXBJ | | | | *e*S | **Sn** | **07 58 09.9** | **+0.9** |
| **OXIG** | **Oaxaca** | **2.09** | **309** | | **Pn** | **07 57 45.1** | **+1.1** |
| OXIG | | | | | **Sn** | **07 58 08.3** | **-0.9** |
| **VHO** | **Vista Hermosa** | **2.09** | **309** | *e*P | **Pn** | **07 57 45.1** | **+1.1** |
| VHO | | | | *e*S | **Sn** | **07 58 08.3** | **-0.9** |
| **TGIG** | | **2.09** | **61** | | **Pn** | **07 57 44.3** | **+0.5** |
| TGIG | | | | | **Sn** | **07 58 08.6** | **-0.6** |
| **TGIG** | | **2.09** | **61** | *e*P | **Pn** | **07 57 44.3** | **+0.5** |
| TGIG | | | | *e*S | **Sn** | **07 58 08.6** | **-0.6** |
| **TGBT** | **Tuxtla Gutierr** | **2.12** | **61** | *e*S | **Sn** | **07 58 08.9** | **-0.8** |
| **YOIG** | **Yosondua** | **2.65** | **295** | | **Pn** | **07 57 52.8** | **+1.1** |
| YOIG | | | | | **Sn** | **07 58 21.9** | **-1.3** |
| **YOIG** | **Yosondua** | **2.65** | **295** | *e*P | **Pn** | **07 57 52.8** | **+1.1** |
| YOIG | | | | *e*S | **Sn** | **07 58 21.9** | **-1.3** |
| **PMUV** | **Sontecomapan** | **2.77** | **358** | *e*P | **Pn** | **07 57 51.9** | **-1.3** |
| PMUV | | | | *e*S | **Sn** | **07 58 19.6** | **-6.2** |
| **THIG** | | **2.80** | **107** | | **Pn** | **07 57 53.5** | **0.0** |
| THIG | | | | | **Sn** | **07 58 24.8** | **-1.7** |
| **THIG** | | **2.80** | **107** | *e*P | **Pn** | **07 57 53.5** | **0.0** |
| THIG | | | | *e*S | **Sn** | **07 58 24.8** | **-1.7** |
| **PAVE** | **Pavencul** | **2.81** | **101** | *e*P | **Pn** | **07 57 54.4** | **+0.5** |
| PAVE | | | | *e*S | **Sn** | **07 58 23.7** | **-3.4** |
| **CCIG** | **Comitan** | **2.83** | **79** | | **Pn** | **07 57 55.6** | **+1.5** |
| **CCIG** | **Comitan** | **2.83** | **79** | *e*P | **Pn** | **07 57 55.3** | **+1.2** |
| CCIG | | | | *e*S | **Sn** | **07 58 25.3** | **-2.2** |
| **CHUJ** | **Union Juarez** | **2.90** | **103** | *e*P | **Pn** | **07 57 55.1** | **+0.1** |
| CHUJ | | | | *e*S | **Sn** | **07 58 26.9** | **-2.3** |
| **TXIG** | **Tlaxiaco** | **3.02** | **300** | | **Pn** | **07 57 58.4** | **+1.6** |
| **TXIG** | **Tlaxiaco** | **3.02** | **300** | *e*P | **Pn** | **07 57 58.4** | **+1.6** |
| TXIG | | | | *e*S | **Sn** | **07 58 25.9** | **-6.3** |
| **TOIG** | **Toxpalan** | **3.03** | **320** | | **Pn** | **07 57 59.9** | **+3.1** |
| TOIG | | | | | **Sn** | **07 58 32.8** | **+0.5** |
| **TOIG** | **Toxpalan** | **3.03** | **320** | *e*P | **Pn** | **07 57 59.9** | **+3.1** |
| TOIG | | | | *e*S | **Sn** | **07 58 32.8** | **+0.5** |
| **PNIG** | **Pinotepa** | **3.04** | **282** | | **Pn** | **07 57 56.6** | **-0.3** |
| **PNIG** | **Pinotepa** | **3.04** | **282** | *e*P | **Pn** | **07 57 56.6** | **-0.3** |
| PNIG | | | | *e*S | **Sn** | **07 58 26.5** | **-6.0** |
| **HLIG** | **Huajuapan de L** | **3.36** | **308** | | **Pn** | **07 58 03.5** | **+2.1** |
| HLIG | | | | | **Sn** | **07 58 39.7** | **-0.9** |
| **HLIG** | **Huajuapan de L** | **3.36** | **308** | *e*P | **Pn** | **07 58 03.5** | **+2.1** |
| HLIG | | | | *e*S | **Sn** | **07 58 39.7** | **-0.9** |
| **HUEH** | **Huehuetenango** | **3.43** | **97** | | **Pn** | **07 58 04.2** | **+1.8** |
| **HUEH** | **Huehuetenango** | **3.43** | **97** | *e*P | **Pn** | **07 58 05.0** | **+2.6** |
| HUEH | | | | *e*S | **Sn** | **07 58 43.8** | **+1.4** |
| **RTAL** | **Retalhuleu** | **3.45** | **111** | Pn | **Pn** | **07 58 02.7** | **+0.2** |
| **RTAL** | **Retalhuleu** | **3.45** | **111** | *e*P | **Pn** | **07 58 02.6** | **+0.2** |
| RTAL | | | | *e*S | **Sn** | **07 58 38.6** | **-4.0** |
| **TPIG** | **Tehuac#an** | **3.46** | **320** | *e*P | **Pn** | **07 58 07.0** | **+4.2** |
| TPIG | | | | *e*S | **Sn** | **07 58 39.9** | **-3.1** |
| **FTIG** | **Fresnillo de T** | **3.66** | **306** | | **Pn** | **07 58 07.7** | **+2.2** |
| FTIG | | | | | **Sn** | **07 58 46.3** | **-1.6** |
| **FTIG** | **Fresnillo de T** | **3.66** | **306** | *e*P | **Pn** | **07 58 07.7** | **+2.2** |
| FTIG | | | | *e*S | **Sn** | **07 58 46.3** | **-1.6** |
| **MGIG** | **Malinaltepec** | **3.75** | **293** | | **Pn** | **07 58 08.1** | **+1.3** |
| **MGIG** | **Malinaltepec** | **3.75** | **293** | *e*P | **Pn** | **07 58 08.1** | **+1.3** |
| MGIG | | | | *e*S | **Sn** | **07 58 47.4** | **-2.9** |
| **TLIG** | **Tlapa** | **3.83** | **298** | Pn | **Pn** | **07 58 09.7** | **+1.8** |
| **TLIG** | **Tlapa** | **3.83** | **298** | *e*P | **Pn** | **07 58 09.7** | **+1.8** |
| TLIG | | | | *e*S | **Sn** | **07 58 50.1** | **-2.1** |
| **JAUV** | **Jalcomulco** | **3.96** | **335** | *e*P | **Pn** | **07 58 08.5** | **-1.1** |
| JAUV | | | | *e*S | **Sn** | **07 58 47.6** | **-7.7** |
| **CRIG** | **Cruz Grande** | **4.06** | **284** | | **Pn** | **07 58 10.8** | **0.0** |
| **CRIG** | **Cruz Grande** | **4.06** | **284** | *e*P | **Pn** | **07 58 10.8** | **0.0** |
| CRIG | | | | *e*S | **Sn** | **07 58 52.0** | **-5.6** |
| **LVIG** | **Laguna Verde** | **4.15** | **342** | *e*P | **Pn** | **07 58 11.5** | **-0.7** |
| LVIG | | | | *e*S | **Sn** | **07 58 52.3** | **-7.6** |
| **DAIG** | **Los Arroyos** | **4.61** | **286** | | **Pn** | **07 58 18.7** | **+0.2** |
| **DAIG** | **Los Arroyos** | **4.61** | **286** | *e*P | **Pn** | **07 58 18.7** | **+0.2** |
| DAIG | | | | *e*S | **Sn** | **07 59 02.1** | **-9.1** |
| **PPM** | **Popocatepetl** | **4.75** | **314** | *e*P | **Pn** | **07 58 23.9** | **+3.1** |
| PPM | | | | *e*S | **Sn** | **07 59 08.7** | **-6.7** |
| **SCIG** | **Sabancuy** | **4.86** | **49** | *e*P | **Pn** | **07 58 21.4** | **-0.5** |
| SCIG | | | | *e*S | **Sn** | **07 59 08.6** | **-8.7** |
| **MEIG** | **Mezcala** | **4.89** | **297** | | **Pn** | **07 58 24.8** | **+2.3** |
| **MEIG** | **Mezcala** | **4.89** | **297** | *e*P | **Pn** | **07 58 24.8** | **+2.3** |
| MEIG | | | | *e*S | **Sn** | **07 59 14.7** | **-3.6** |
| **YAIG** | **Yautepec** | **4.94** | **309** | *e*P | **Pn** | **07 58 26.3** | **+3.2** |
| YAIG | | | | *e*S | **Sn** | **07 59 16.7** | **-2.8** |
| **PLIG** | **Platanillo** | **5.01** | **302** | | **Pn** | **07 58 26.7** | **+2.6** |
| **PLIG** | **Platanillo** | **5.01** | **302** | *e*P | **Pn** | **07 58 26.7** | **+2.6** |
| PLIG | | | | *e*S | **Sn** | **07 59 18.5** | **-2.8** |
| **PETF** | **Flores** | **5.09** | **76** | | **Pn** | **07 58 26.5** | **+1.5** |
| **PETF** | **Flores** | **5.09** | **76** | *e*P | **Pn** | **07 58 26.2** | **+1.2** |
| PETF | | | | *e*S | **Sn** | **07 59 19.0** | **-4.0** |
| **MPVM** | **San Francisco** | **5.11** | **313** | *e*S | **Sn** | **07 59 25.6** | **+1.7** |
| **TLVM** | **San Miguel Top** | **5.22** | **312** | *e*S | **Sn** | **07 59 25.6** | **-1.1** |
| **XCVM** | **Xochimilco** | **5.22** | **312** | *e*S | **Sn** | **07 59 29.8** | **+3.1** |
| **MAVM** | **Malinalco, Edo** | **5.32** | **307** | *e*P | Pn | 07 58 34.0 | +5.6 |
| MAVM | | | | *e*S | **Sn** | **07 59 08.1** | **-5.1** |
| **AOVM** | **Tlapan** | **5.38** | **311** | | **Pn** | **07 58 31.0** | **+1.6** |
| AOVM | | | | | **Sn** | **07 59 30.8** | **0.0** |
| **AOVM** | **Tlapan** | **5.38** | **311** | *e*P | **Pn** | **07 58 31.0** | **+1.6** |
| AOVM | | | | *e*S | **Sn** | **07 59 30.8** | **0.0** |
| **MTO3** | **Montecristo** | **5.64** | **103** | | **Pn** | **07 58 33.2** | **+0.4** |
| **ARIG** | **Puente Sto Nin** | **5.67** | **297** | *e*P | **Pn** | **07 58 35.7** | **+2.7** |
| ARIG | | | | *e*S | **Sn** | **07 59 32.7** | **-4.7** |
| **ZIIG** | **Zihuatanejo** | **6.43** | **287** | | **Pn** | **07 58 43.8** | **+0.3** |
| **ZIIG** | **Zihuatanejo** | **6.43** | **287** | *e*P | **Pn** | **07 58 43.8** | **+0.3** |
| ZIIG | | | | *e*S | **Sn** | **07 59 51.2** | **-5.0** |
| **MOIG** | **Morelia** | **7.04** | **304** | Pn | **Pn** | **07 58 53.0** | **+0.9** |
| **TEIG** | **Tepich** | **7.81** | **54** | | **Pn** | **07 59 02.2** | **-0.2** |
| **MMIG** | **Aquila** | **8.34** | **289** | | **Pn** | **07 59 11.6** | **+1.9** |
| **MMIG** | **Aquila** | **8.34** | **289** | *e*P | **Pn** | **07 59 11.6** | **+1.9** |
| **COIG** | **Colima** | **8.93** | **294** | *e*P | **Pn** | **07 59 22.1** | **+4.1** |
| **MNGA** | **Volcan de Coli** | **8.98** | **295** | *e*P | **Pn** | **07 59 22.9** | **+4.2** |
| **SOMAC** | **Volcano de Col** | **9.01** | **296** | *e*P | **Pn** | **07 59 23.7** | **+4.5** |
| **CEGR** | **Campo Tres** | **9.16** | **294** | *e*P | **Pn** | **07 59 25.0** | **+3.9** |
| **R15V** | | **9.19** | **293** | *e*P | **Pn** | **07 59 26.2** | **+4.8** |
| **BOAB** | **BOACO BROADBAN** | **9.66** | **109** | Pn | **Pn** | **07 59 29.9** | **+2.1** |
| **833A** | **Chaparral WMA,** | **13.13** | **343** | Pn | **Pn** | **08 00 17.6** | **+2.2** |
| **DRIO** | **Del Rio** | **14.54** | **340** | Pn | **Pn** | **08 00 36.6** | **+2.1** |
| **441A** | **DeRidder** | **15.01** | **6** | P | **P** | **08 00 46.6** | **+0.5** |
| **435B** | **Jarrell** | **15.13** | **352** | Pn | **Pn** | **08 00 43.3** | **+0.8** |
| **BRDY** | **Brady** | **15.87** | **347** | Pn | **P** | **08 00 54.5** | **-1.2** |
| **WHTX** | **Lake Whitney,** | **16.30** | **353** | Pn | **P** | **08 00 59.6** | **-0.8** |
| WHTX | comp=Z,11nm,0.7s | | | IAmb | IAmb | 08 01 02.2 | |
| **FW13** | **Cleburne** | **16.66** | **353** | | **Pn** | **08 01 03.1** | **+1.0** |
| FW13 | comp=Z,10nm,0.9s | | | IAmb | IAmb | 08 01 07.3 | |
| **FW14** | **Alvarado** | **16.68** | **354** | P | **P** | **08 01 04.0** | **-0.5** |
| FW14 | comp=Z,13nm,0.7s | | | IAmb | IAmb | 08 01 06.6 | |
| **FW07** | **Weatherford** | **17.05** | **352** | P | **P** | **08 01 09.1** | **+0.4** |
| **PLPT** | **Palo Pinto** | **17.23** | **351** | P | **Pn** | **08 01 09.9** | **+0.5** |
| PLPT | comp=Z,7.8nm,0.9s | | | IAmb | IAmb | 08 01 16.4 | |
| **APMT** | **Aspermont** | **18.08** | **346** | P | **P** | **08 01 21.5** | **+1.4** |
| **DKNS** | **Dickens** | **18.60** | **344** | P | **Pn** | **08 01 26.8** | **+0.6** |
| **MIAR** | **Mount Ida** | **18.75** | **4** | P | **Pn** | **08 01 28.3** | **+0.3** |
| **X37A** | **Clayton** | **18.75** | **359** | P | **Pn** | **08 01 28.6** | **+0.6** |
| X37A | comp=Z,5.7nm,0.6s | | | IAmb | IAmb | 08 01 35.0 | |

*IDC **04** 08:28:55.8±0.9, 33°.05S×177°.23W, h0km, mb4.2/6, mbtmp4.2/9, ML4.6/3, MS3.3/8, Error ellipse: s-maj=28.2km s-min=22.2km az=113.0*
*WEL **04** 08:28:56.8±1.4, 33°.5S×17°.7W±1°.7, h33km, M5.2/6, mB5.1/4, ML5.5/7, MLv5.5/6, Mw(mB)4.4/4, Error ellipse: s-maj=0.0km s-min=0.0km az=105.4, confirmed*
*NEIC **04** 08:28:56.9±2.4, 33°.19S±0°.08×176°.9W±0°.1, h10km±1km, mb4.5/21, Error ellipse: s-maj=20.5km s-min=12.8km az=93.0*
*NOU **04** 08:29:05.9, 33°.72S×177°.11W, h102km, mb4.4/16, South of Kermadec Islands*
**ISC 04 08:28:55.9**±0.7, **33°.09S**±0°.05×**177°.0W**±0°.1, **h10**km, **n142**, σ2.**947**/143, **mb4.5**/13, **MS3.5**/6, **South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **3.91** | **348** | P | **Pn** | **08 29 52.0** | **-4.0** |
| GLKZ | | | | S | **Sn** | **08 30 33.0** | **-8.8** |
| **RAO** | **Raoul Island** | **3.92** | **348** | Pn | **Pn** | **08 29 57.7** | **+1.6** |
| **RAO** | **Raoul Island** | **3.92** | **348** | Pn | **Pn** | **08 29 52.4** | **-3.6** |
| RAO | 112nm,0.3s,baz=85,slow=20,SNR=1.6 | | | Sn | **Sn** | **08 30 34.5** | **-7.5** |
| **MXZ** | **Matakaoa Point** | **5.90** | **220** | Pn | **Pn** | **08 30 22.4** | **-0.9** |
| **MXZ** | **Matakaoa Point** | **5.90** | **220** | P | **Pn** | **08 30 25.0** | **+1.6** |
| MXZ | | | | S | **Sn** | **08 31 29.7** | **-1.3** |
| **KUZ** | **Kuaotunu** | **7.03** | **237** | P | Pn | 08 30 41.5 | +2.7 |
| **KUZ** | **Kuaotunu** | **7.03** | **237** | P | Pn | 08 30 41.6 | +2.8 |
| **RIGZ** | **Rimuhau** | **7.05** | **216** | P | **Pn** | **08 30 37.1** | **-2.0** |
| RIGZ | | | | S | **Sn** | **08 31 56.7** | **-2.6** |
| **URZ** | **Urewera** | **7.06** | **221** | P | **Pn** | **08 30 39.3** | **+0.1** |
| **URZ** | **Urewera** | **7.06** | **221** | Pn | **Pn** | **08 30 38.1** | **-1.0** |
| URZ | 2.6nm,0.3s,baz=343,slow=4.8,SNR=21 | | | Sn | **Sn** | **08 31 56.7** | **-2.8** |
| URZ | 64nm,0.3s,baz=257,slow=19,SNR=20 | | | LR | LR | 08 33 41.1 | |
| **URZ** | **Urewera** | **7.06** | **221** | P | **Pn** | **08 30 37.7** | **-1.5** |
| URZ | | | | S | **Sn** | **08 31 55.9** | **-3.6** |
| **RAGZ** | **Rawiri** | **7.06** | **219** | P | **Pn** | **08 30 38.0** | **-1.3** |
| RAGZ | | | | S | **Sn** | **08 31 56.4** | **-3.3** |
| **SNGZ** | **Shannon Statio** | **7.32** | **218** | P | **Pn** | **08 30 42.0** | **-0.8** |
| SNGZ | | | | S | **Sn** | **08 32 03.2** | **-2.7** |
| **MHGZ** | **Mahia Peninsul** | **7.33** | **213** | P | **Pn** | **08 30 41.1** | **-1.9** |
| **RTZ** | **Ruatahuna** | **7.38** | **220** | | **Pn** | **08 30 44.8** | **+1.1** |
| **TOZ** | **Tahuroa Road** | **7.70** | **231** | | **Pn** | **08 30 48.3** | **+0.4** |
| **TOZ** | **Tahuroa Road** | **7.70** | **231** | P | **Pn** | **08 30 50.3** | **+2.3** |
| **ALRZ** | **Allen Road** | **7.70** | **223** | P | **Pn** | **08 30 50.3** | **+2.2** |
| ALRZ | | | | S | **Sn** | **08 32 13.1** | **-2.2** |
| **WCZ** | **Waipu Caves** | **7.71** | **246** | P | Pn | 08 30 52.3 | +4.1 |
| **BKZ** | **Black Stump Fm** | **8.04** | **219** | P | **Pn** | **08 30 51.5** | **-1.3** |
| **BKZ** | **Black Stump Fm** | **8.04** | **219** | | **Pn** | **08 30 51.5** | **-1.3** |
| **OUZ** | **Omahuta** | **8.11** | **252** | P | Pn | 08 30 56.8 | +3.2 |
| **OUZ** | **Omahuta** | **8.11** | **252** | P | Pn | 08 30 56.5 | +2.9 |
| **TMVZ** | **Te Maari** | **8.44** | **223** | P | **Pn** | **08 30 59.1** | **+0.7** |
| TMVZ | | | | S | **Sn** | **08 32 28.8** | **-5.0** |
| **NTVZ** | **North Tongariro** | **8.45** | **223** | P | **Pn** | **08 30 59.2** | **+0.8** |
| **ETVZ** | **East Tongariro** | **8.45** | **222** | P | **Pn** | **08 31 01.0** | **+2.5** |
| ETVZ | | | | S | **Sn** | **08 32 29.5** | **-4.5** |
| **KRHZ** | **Kereru** | **8.46** | **218** | P | **Pn** | **08 30 56.0** | **-2.5** |
| KRHZ | | | | S | **Sn** | **08 32 30.2** | **-3.9** |
| **OTVZ** | **Oturere** | **8.50** | **222** | P | **Pn** | **08 30 59.5** | **+0.4** |
| **NNVZ** | **North Ngauruho** | **8.50** | **223** | P | **Pn** | **08 31 00.9** | **+1.7** |
| **PXZ** | **Pawanui** | **8.52** | **214** | P | **Pn** | **08 30 56.4** | **-2.9** |
| PXZ | | | | S | **Sn** | **08 32 29.9** | **-5.5** |
| **SNVZ** | **South Ngauruho** | **8.53** | **222** | P | **Pn** | **08 31 00.7** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **8.54** | **223** | P | **Pn** | **08 31 01.3** | **+1.6** |
| **HIZ** | **Hauiti** | **8.56** | **229** | Pn | **Pn** | **08 31 01.3** | **+1.4** |
| **TUVZ** | **Tukino** | **8.57** | **222** | P | **Pn** | **08 31 00.7** | **+0.5** |
| **MOVZ** | **Moawhango** | **8.62** | **221** | P | **Pn** | **08 31 00.0** | **-0.7** |
| **FWVZ** | **Far West T-bar** | **8.62** | **222** | P | **Pn** | **08 31 01.9** | **+0.9** |
| **WNVZ** | **Wahianoa** | **8.65** | **222** | P | **Pn** | **08 30 59.9** | **-1.3** |
| **PNHZ** | **Pukenui** | **8.75** | **217** | P | **Pn** | **08 31 00.8** | **-1.6** |
| PNHZ | | | | S | **Sn** | **08 32 36.7** | **-4.5** |
| **MTVZ** | **Mangateitei** | **8.76** | **222** | P | **Pn** | **08 31 03.7** | **+1.1** |
| **PRHZ** | **Porangahau** | **8.81** | **214** | P | **Pn** | **08 31 00.7** | **-2.6** |
| **TSZ** | **Takapari Road** | **8.98** | **217** | P | **Pn** | **08 31 03.5** | **-2.2** |
| **WAZ** | **Wanganui** | **9.29** | **222** | P | **Pn** | **08 31 10.3** | **+0.5** |
| **BFZ** | **Birch Farm** | **9.32** | **214** | P | **Pn** | **08 31 09.3** | **-1.0** |
| **BFZ** | **Birch Farm** | **9.32** | **214** | Pn | **Pn** | **08 31 08.2** | **-2.1** |
| **BFZ** | **Birch Farm** | **9.32** | **214** | P | **Pn** | **08 31 05.6** | **-4.7** |
| **POWZ** | **Post Office Ro** | **9.33** | **217** | P | **Pn** | **08 31 10.2** | **-0.2** |
| **PRWZ** | **Pori Road** | **9.35** | **215** | P | **Pn** | **08 31 08.7** | **-2.0** |
| **NEZ** | **North Egmont** | **9.49** | **227** | P | Pn | 08 31 17.8 | +5.1 |
| **TIWZ** | **Tintock** | **9.56** | **215** | P | **Pn** | **08 31 10.4** | **-3.2** |
| **MRZ** | **Mangatainoka R** | **9.62** | **216** | P | **Pn** | **08 31 10.0** | **-4.5** |
| **TMWZ** | **Te Maipa** | **9.82** | **213** | P | **Pn** | **08 31 12.5** | **-4.6** |
| **HOWZ** | **Holdsworth Sta** | **9.84** | **216** | P | **Pn** | **08 31 14.0** | **-3.3** |
| **OGWZ** | **Otaki Gorge** | **9.95** | **217** | P | **Pn** | **08 31 18.2** | **-0.6** |
| **MTW** | **Mount Morrison** | **10.04** | **215** | P | **Pn** | **08 31 16.9** | **-3.3** |
| **KIW** | **Kapiti Island** | **10.11** | **218** | P | **Pn** | **08 31 19.6** | **-1.5** |
| **CAW** | **Cannon Point** | **10.22** | **216** | P | **Pn** | **08 31 19.8** | **-2.7** |
| **PAWZ** | **Paruwai Farm** | **10.25** | **214** | P | **Pn** | **08 31 18.3** | **-4.8** |
| **SNZO** | **South Karori** | **10.55** | **217** | P | **Pn** | **08 31 26.7** | **-0.4** |
| **CTZ** | **Chatham Island** | **10.63** | **179** | P | **Pn** | **08 31 26.6** | **-1.6** |
| **CTZ** | **Chatham Island** | **10.63** | **179** | | **Pn** | **08 31 26.6** | **-1.6** |
| **TCW** | **Tory Channel** | **10.69** | **218** | P | **Pn** | **08 31 27.0** | **-2.1** |
| **TUWZ** | **Tuamarina** | **11.03** | **218** | | **Pn** | **08 31 34.9** | **+1.3** |
| **TUWZ** | **Tuamarina** | **11.03** | **218** | P | **Pn** | **08 31 32.7** | **-0.9** |
| **NNZ** | **Nelson** | **11.18** | **221** | Pn | **Pn** | **08 31 35.5** | **-0.2** |
| **NNZ** | **

comp=Z,6.7nm,0.8s
**QSPA South Pole Qui 57.02 180** P **P** **08 38 43.9 +2.2**
comp=Z,2.5nm,0.9s,baz=103,slow=2.7,SNR=5.9
comp=Z,2.5nm,0.9s
**GUMO Guam 59.01 315** LR LR 09 04 46.4
comp=Z,21nm,18.1s,baz=181,slow=37
**KAPI Kappang 64.97 281** LR LR 09 09 20.3
comp=Z,40nm,18.1s,baz=48,slow=38
**SHEM Shemya Is, Ala 85.82 355** LR LR 09 12 01.9
comp=Z,33nm,21.4s,baz=124,slow=30
**YBH Yreka Blue Hor 89.62 37** LR LR 09 13 32.9
comp=Z,29nm,19.8s,baz=218,slow=30
**NVAR Mina Array Bea 89.63 42** P **P** **08 41 56.5 +2.5**
comp=Z,0.7nm,0.8s,baz=225,slow=4.3,SNR=5.1
comp=Z,0.7nm,0.8s
**KURBB Kurchatov Arra 123.56 312** PKP **PKiKP** **08 47 53.5 +0.2**
comp=Z,0.6nm,0.7s,baz=111,slow=2.9,SNR=4.9
**FINES FINESS Array B 147.97 339** PKPbc **PKiKP** **08 48 41.7 -0.8**
comp=Z,2.0nm,0.6s,baz=45,slow=4.3,SNR=12
**NB2 NORSAR Subarra151.54 352** PKP **PKiKP** **08 48 51.2 +1.2**
comp=Z,0.7nm,0.9s,baz=17,slow=2.6
**NOA NORSAR Array B151.54 352** PKPbc **PKiKP** **08 48 51.0 +1.0**
comp=Z,1.0nm,0.7s,baz=14,slow=4.1,SNR=5.6
**HFS Hagfors 152.05 349** PKPab **PKPab** **08 49 00.3 +0.2**
comp=Z,2.2nm,0.8s,baz=66,slow=3.5,SNR=5.8

*HEL **04** 08:49:10.5±0.1, 63.98N×28.09E, h0km, ML1.7, Explosion*
*IDC **04** 08:49:11.9±1.5, 63.94N×28.21E, h0km, mbtmp2.8/3, ML1.9/3, Error ellipse: s-maj=24.0km s-min=9.8km az=101.0*
**ISC 04 08:49:09.5**±0.8**, 63.98N**±0.02×**28.16E**±0.03**, h0km, n32,** σ1℘**40/52, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NIF** | **Nilsia** | **0.61** | **195** | PG | | **Pg** | **08 49 21.6** | **+0.4** |
| | baz=8.0 | | | | | | | |
| NIF | | | | SG | | **Sg** | **08 49 29.8** | **+0.7** |
| **RMF** | **Romuvaara** | **0.81** | **72** | PG | | **Pb** | **08 49 26.3** | **-0.2** |
| RMF | | | | MSG | | | 08 49 36.7 | |
| | comp=Z,15nm,0.2s | | | | | | | |
| RMF | | | | SG | | **Sb** | **08 49 37.3** | **-0.7** |
| **OUF** | **Merijarvi** | **1.55** | **286** | PG | | **Pn** | **08 49 38.1** | **-0.3** |
| OUF | | | | MSG | | | 08 49 56.1 | |
| | comp=Z,6.5nm,0.2s | | | | | | | |
| OUF | | | | SN | | **Sn** | **08 49 58.5** | **-0.7** |
| **SUF** | **Sumiainen** | **1.56** | **217** | PN | | **Pn** | **08 49 38.6** | **+0.2** |
| SUF | | | | MSG | | | 08 49 56.6 | |
| | comp=Z,2.9nm,0.2s | | | | | | | |
| **OBF4** | **Vikkela, Lumij** | **1.57** | **304** | PN | | **Pn** | **08 49 38.9** | **+0.3** |
| OBF4 | | | | MSG | | | 08 49 56.6 | |
| | comp=Z,7.2nm,0.2s | | | | | | | |
| OBF4 | | | | SN | | **Sb** | **08 49 59.9** | **+0.1** |
| **JOF** | **Joensuu** | **1.77** | **126** | PG | | **Pb** | **08 49 42.6** | **-0.2** |
| | baz=305 | | | | | | | |
| JOF | | | | SG | | **Sg** | **08 50 06.4** | **+0.1** |
| **OBF0** | **Syolatti, Pyha** | **1.79** | **289** | PG | | **Pb** | **08 49 42.6** | **-0.6** |
| OBF0 | | | | MSG | | | 08 50 03.1 | |
| | comp=Z,8.6nm,0.2s | | | | | | | |
| OBF0 | | | | SN | | **Sb** | **08 50 05.8** | **-0.3** |
| **MSF** | **Maaselka** | **1.98** | **10** | PG | | **Pb** | **08 49 45.9** | **-0.5** |
| | baz=195 | | | | | | | |
| MSF | | | | SG | | **Sb** | **08 50 11.1** | **-0.4** |
| **KAF** | **Kangasniemi** | **2.06** | **205** | PG | | **Pb** | **08 49 47.1** | **-0.6** |
| | baz=21 | | | | | | | |
| KAF | | | | MSG | | | 08 50 11.1 | |
| | comp=Z,6.1nm,0.2s | | | | | | | |
| KAF | | | | SG | | **Sb** | **08 50 14.2** | **+0.6** |
| **OBF8** | **Ulkokalla** | **2.10** | **282** | PG | | **Pb** | **08 49 48.2** | **-0.2** |
| | baz=99 | | | | | | | |
| OBF8 | | | | MSG | | | 08 50 11.7 | |
| | comp=Z,3.1nm,0.2s | | | | | | | |
| OBF8 | | | | SG | | **Sb** | **08 50 15.2** | **+0.3** |
| **RANF** | **Ranua** | **2.13** | **345** | PG | | **Pb** | **08 49 48.3** | **-0.6** |
| RANF | | | | SG | | **Sb** | **08 50 15.8** | **0.0** |
| **KU6** | **Riekki** | **2.18** | **19** | PG | | **Pb** | **08 49 49.5** | **-0.4** |
| | baz=204 | | | | | | | |
| KU6 | | | | MSG | | | 08 50 15.3 | |
| | comp=Z,2.6nm,0.2s | | | | | | | |
| KU6 | | | | SG | | **Sb** | **08 50 17.8** | **+0.4** |
| **KEF** | **Keuruu** | **2.36** | **221** | PG | | **Pb** | **08 49 52.4** | **-0.4** |
| KEF | | | | MSG | | | 08 50 19.7 | |
| | comp=Z,5.1nm,0.2s | | | | | | | |
| KEF | | | | SG | | **Sb** | **08 50 22.5** | **+0.1** |
| **OLKF** | **Oulanka, Finla** | **2.41** | **12** | PG | | **Pb** | **08 49 53.4** | **-0.3** |
| OLKF | | | | MSG | | | 08 50 21.8 | |
| | comp=Z,2.1nm,0.2s | | | | | | | |
| OLKF | | | | SG | | **Sb** | **08 50 24.5** | **+0.6** |
| **RUF** | **Ruokolahti** | **2.59** | **172** | PG | | **Pb** | **08 49 56.3** | **-0.4** |
| RUF | | | | MSG | | | 08 50 27.2 | |
| | comp=Z,4.2nm,0.2s | | | | | | | |
| RUF | | | | SG | | **Sb** | **08 50 29.9** | **+0.8** |
| **VAF** | **Ylistaro** | **2.63** | **252** | PG | | **Pb** | **08 49 56.7** | **-0.8** |
| VAF | | | | MSG | | | 08 50 27.5 | |
| | comp=Z,2.5nm,0.2s | | | | | | | |
| VAF | | | | SG | | **Sb** | **08 50 29.7** | **-0.6** |
| **TOF** | **Tornio** | **2.67** | **324** | PB | | **Pn** | **08 49 55.5** | **+1.8** |
| TOF | | | | MSG | | | 08 50 28.2 | |
| | comp=Z,1.1nm,0.2s | | | | | | | |
| TOF | | | | SB | | **Sn** | **08 50 28.7** | **+2.1** |
| **FINES** | **FINESS Array B** | **2.72** | **202** | Pn | | **Pb** | **08 49 57.9** | **-1.1** |
| FINES | comp=Z,0.5nm,0.3s,baz=24,slow=15,SNR=15 | | | Sn | | **Sb** | **08 50 32.1** | **-0.7** |
| | comp=Z,0.8nm,0.3s,baz=22,slow=27,SNR=18 | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| **KALU** | **Kalix** | **2.79** | **315** | SB | | **Sn** | **08 50 31.3** | **+1.8** |
| **RNF** | **Rovaniemi** | **2.79** | **342** | PG | | **Pb** | **08 50 01.5** | **+1.3** |
| RNF | | | | SG | | **Sb** | **08 50 35.1** | **+0.2** |
| **UMAU** | **Umeaa** | **3.31** | **272** | PN | | **Pn** | **08 50 02.9** | **+0.4** |
| **KPF** | **Kankaanpaa** | **3.52** | **235** | PB | | **Pn** | **08 50 08.6** | **+3.2** |
| **SGF** | **Sodankyl** | **3.54** | **350** | PN | | **Pn** | **08 50 08.3** | **+2.6** |
| **KLF** | **Kolari** | **3.71** | **334** | SN | | **Sn** | **08 50 52.6** | **+0.3** |
| **PAJU** | **Pajala** | **3.71** | **328** | PB | | **Pn** | **08 50 10.8** | **+2.8** |
| PAJU | | | | SN | | **Sn** | **08 50 52.9** | **+0.5** |
| **VRF** | **Varrio** | **3.83** | **8** | SB | | **Sb** | **08 51 02.7** | **-2.2** |
| **LVZ** | **Lovozero** | **4.75** | **31** | SG | | **Sg** | **08 51 38.0** | **-3.9** |
| **HEMU** | **Hemsoen** | **4.75** | **259** | PN | | **Pn** | **08 50 23.9** | **+1.7** |
| | baz=66 | | | | | | | |
| **HEF** | **Hetta** | **4.81** | **340** | PN | | **Pn** | **08 50 22.3** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **5.68** | **351** | Pn | | **Pn** | **08 50 37.9** | **+2.8** |
| | comp=Z,0.1nm,0.3s,baz=165,slow=14,SNR=5.6 | | | | | | | |
| ARCES | | | | Sn | | **Sn** | **08 51 38.7** | **-2.2** |
| | comp=Z,0.1nm,0.3s,baz=171,slow=23,SNR=1.6 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **I37NO** | **I37NO** | **6.38** | **328** | I | | I | 09 25 40.0 | |
| | baz=140,slow=320,SNR=11 | | | | | | | |
| **HFS** | **Hagfors** | **7.81** | **247** | Pn | | **Pn** | **08 51 05.0** | **+0.8** |
| | baz=62,slow=15,SNR=3.7 | | | | | | | |
| HFS | | | | Sn | | **Sn** | **08 52 29.4** | **-3.7** |
| | baz=56,slow=26,SNR=2.1 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |

*IDC **04** 08:59:19.7±0.7, 23.89N×143.12E, h0km, mb3.8/11, mbtmp3.8/14, ML3.5/3, MS2.9/2, Error ellipse: s-maj=31.6km s-min=15.0km az=81.0*
*JMA **04** 08:59:26.9±0.4, 24°N±1′×14°3E±′, h131km, MV3.9/15, IOTO ISLANDS REGION*
**ISC 04 08:59:24.1**±0.7**, 23.98N**±0.07×**143.0E**±0.2**, h29**km**, n30,** σ1℘**31/27, mb3.9/11, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JHH2** | **Haha-jima-NKT2** | **2.75** | **344** | eP | | **Pb** | **09 00 10.4** | **-2.1** |
| JHH2 | | | | eS | | **Sb** | **09 00 43.7** | **-2.1** |
| **CBIJ** | **Chichi jima** | **3.19** | **346** | eS | | **Sn** | **09 00 53.0** | **+3.6** |
| **JCJ** | **Chichijima** | **3.19** | **346** | Pn | | **Pn** | **09 00 10.9** | **-1.4** |
| | 17nm,0.3s,baz=304,slow=21,SNR=20 | | | | | | | |
| JCJ | | | | Sn | | **Sn** | **09 00 48.5** | **-0.9** |
| | 18nm,0.3s,baz=275,slow=23,SNR=11 | | | | | | | |
| | 45nm,0.3s | | | | | | | |
| **JRY** | **Ryogami san** | **12.51** | **344** | P | | **Pn** | **09 02 21.4** | **+1.2** |
| **JHO** | **Hitachi** | **12.76** | **351** | eP | | **Pn** | **09 02 25.0** | **+1.4** |
| **JAG** | **Ashikaga** | **12.78** | **347** | eP | | **Pn** | **09 02 24.1** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | **13.19** | **343** | Pn | | **Pn** | **09 02 29.8** | **+0.4** |
| | 0.1nm,0.3s,baz=158,slow=12,SNR=6.2 | | | | | | | |
| | 1.7nm,0.6s | | | | | | | |
| **KSRS** | **Korea Array** | **18.64** | **320** | P | | **Pn** | **09 03 41.2** | **+1.3** |
| | 0.1nm,0.3s,baz=133,slow=11,SNR=3.0 | | | | | | | |
| KSRS | | | | LR | | LR | 09 10 09.7 | |
| | comp=Z,29nm,20.3s,baz=125,slow=35 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **USRK** | **Ussurisyk Ar.** | **22.10** | **339** | P | | **P** | **09 04 17.7** | **+0.8** |
| | 0.5nm,0.5s,baz=153,slow=9.7,SNR=1.7 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 22.55** | | **96** | T | | T | 09 28 13.9 | |
| | baz=283 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 22.55** | | **96** | T | | T | 09 28 17.0 | |
| | baz=283 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 22.57** | | **96** | T | | T | 09 28 22.7 | |
| | baz=283 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 22.71** | | **99** | T | | T | 09 27 45.0 | |
| | baz=289 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 22.72** | | **99** | T | | T | 09 27 44.5 | |
| | baz=289 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 22.73** | | **99** | T | | T | 09 27 45.6 | |
| | baz=289 | | | | | | | |
| **KLR** | **Kul'dur** | | **26.71 343** | LR | | LR | 09 15 36.7 | |
| | comp=Z,28nm,18.1s,baz=122,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | | **44.47 192** | P | | **P** | **09 07 32.1** | **-0.8** |
| | 1.4nm,0.6s,baz=17,slow=9.2,SNR=57 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **09 09 16.6** | **+0.5** |
| | 0.2nm,0.4s,baz=12,slow=3.3,SNR=2.0 | | | | | | | |
| | 1.4nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | | **48.19 191** | P | | **P** | **09 08 00.9** | **-1.1** |
| | 0.3nm,0.5s,baz=16,slow=13,SNR=7.5 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | | **52.34 321** | PcP | | **PcP** | **09 09 45.2** | **+1.2** |
| | 0.5nm,0.4s,baz=126,slow=4.4,SNR=2.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | | **53.06 311** | P | | **P** | **09 08 39.2** | **+0.5** |
| | 0.1nm,0.3s,baz=85,slow=9.0,SNR=2.2 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **09 09 47.7** | **+0.7** |
| | 0.2nm,0.5s,baz=106,slow=3.1,SNR=2.0 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |
| **STKA** | **Stephens Creek** | | **55.56 181** | P | | **P** | **09 08 55.8** | **-1.1** |
| | 0.7nm,0.3s,baz=33,slow=6.7,SNR=6.5 | | | | | | | |
| | 0.7nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | | **55.77 316** | P | | **P** | **09 08 59.9** | **+1.6** |
| | 1.0nm,0.5s,baz=94,slow=8.3,SNR=12 | | | | | | | |
| | 1.0nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | | **60.09 28** | P | | **P** | **09 09 28.6** | **+0.3** |
| | 0.5nm,0.8s,baz=240,slow=5.3,SNR=6.4 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | | **81.06 334** | P | | **P** | **09 11 37.4** | **+1.2** |
| | 0.9nm,0.4s,baz=69,slow=4.8,SNR=16 | | | | | | | |
| | 0.9nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | | **81.85 52** | P | | **P** | **09 11 41.1** | **0.0** |
| | 0.4nm,0.6s,baz=273,slow=5.9,SNR=3.8 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | | **86.57 337** | P | | **P** | **09 12 04.7** | **+0.3** |
| | 0.9nm,0.6s,baz=54,slow=4.5,SNR=5.1 | | | | | | | |
| | 0.9nm,0.6s | | | | | | | |
| **NOA** | **NORSAR Array B** | | **86.77 339** | P | | **P** | **09 12 06.1** | **+0.7** |
| | 0.4nm,0.6s,baz=46,slow=4.7,SNR=3.5 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | **127.17 310** | PKP | | **PKPdf** | **09 18 25.9** | **-0.7** |
| | 0.3nm,0.8s,baz=45,slow=1.7,SNR=4.1 | | | | | | | |
| **PLCA** | **Paso Flores** | | **147.34 129** | PKPbc | | **PKPbc** | **09 19 05.2** | **0.0** |
| | 1.8nm,1.0s,baz=236,slow=3.6,SNR=1.5 | | | | | | | |
| **LPAZ** | **La Paz** | | **149.82 81** | PKPbc | | **PKPbc** | **09 19 13.0** | **+0.1** |
| | 0.7nm,0.7s,baz=259,slow=5.7,SNR=4.6 | | | | | | | |

*IDC **04** 09:26:31.1±1.8, 67.79N×27.38E, h0km, mbtmp3.0/1, ML1.8/1, Error ellipse: s-maj=33.3km s-min=9.6km az=78.0*
*KOLA **04** 09:26:31.1, 67.69N×26.52E, h0km, ML1.9, Error ellipse: s-maj=18.3km s-min=7.2km az=70.0, Finland, Lapland*
*HEL **04** 09:26:31.3±0.1, 67.72N×26.95E, h0km, ML1.6, Explosion*
*UPP **04** 09:26:32.1±1.0, 67.70N×26.72E, h0km, ML1.6*
**ISC 04 09:26:31.3**±0.8**, 67.70N**±0.02×**26.91E**±0.02**, h0km, n42,** σ0℘**77/61, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGF** | **Sodankyl** | **0.29** | **211** | PG | | **Pg** | **09 26 36.3** | **-0.6** |
| SGF | | | | SG | | **Sg** | **09 26 42.2** | **+1.5** |
| **RAJF** | **Raja-Jooseppi** | **0.94** | **33** | PB | | **Pg** | **09 26 48.2** | **-1.1** |
| RAJF | | | | SB | | **Sg** | **09 27 01.4** | **-0.1** |
| **VRF** | **Varrio** | **1.03** | **86** | PG | | **Pg** | **09 26 49.7** | **-1.3** |
| VRF | | | | MSG | | | 09 27 02.2 | |
| | comp=Z,4.3nm,0.2s | | | | | | | |
| VRF | | | | SB | | **Sg** | **09 27 02.9** | **-1.3** |
| **RNF** | **Rovaniemi** | **1.15** | **198** | PG | | **Pg** | **09 26 52.7** | **-0.5** |
| | baz=19 | | | | | | | |
| RNF | | | | SN | | **Sn** | **09 27 10.8** | **-0.1** |
| **KLF** | **Kolari** | **1.23** | **249** | PB | | **Pg** | **09 26 53.9** | **-0.8** |
| KLF | | | | MSG | | | 09 27 09.2 | |
| | comp=Z,4.7nm,0.2s | | | | | | | |
| KLF | | | | SB | | **Sg** | **09 27 10.7** | **+0.1** |
| **HEF** | **Hetta** | **1.42** | **302** | eP | | **Pn** | **09 26 57.4** | **-0.8** |
| **HEF** | **Hetta** | **1.42** | **302** | PN | | **Pn** | **09 26 57.5** | **-0.8** |
| HEF | | | | MSG | | | 09 27 13.8 | |
| | comp=Z,5.5nm,0.2s | | | | | | | |
| HEF | | | | SN | | **Sb** | **09 27 17.1** | **-0.1** |
| **PAJU** | **Pajala** | **1.62** | **247** | P | | **Pn** | **09 27 00.8** | **-0.3** |
| **PAJU** | **Pajala** | **1.62** | **247** | PG | | **Pn** | **09 27 00.8** | **-0.3** |
| PAJU | | | | SN | | **Sn** | **09 27 22.1** | **-0.5** |
| **RANF** | **Ranua** | **1.69** | **182** | PG | | **Pn** | **09 27 01.8** | **-0.2** |
| | baz=4.0 | | | | | | | |
| RANF | | | | SG | | **Sn** | **09 27 23.6** | **-0.7** |
| **OLKF** | **Oulanka, Finla** | **1.69** | **144** | PG | | **Pn** | **09 27 01.7** | **-0.3** |
| OLKF | | | | MSG | | | 09 27 22.1 | |
| | comp=Z,4.6nm,0.2s | | | | | | | |
| OLKF | | | | SN | | **Sg** | **09 27 25.8** | **+0.3** |
| **LANU** | **Lannavaara** | **1.90** | **283** | P | | **Pn** | **09 27 04.7** | **-0.2** |
| LANU | | | | S | | **Sb** | **09 27 30.8** | **-0.2** |
| **LANU** | **Lannavaara** | **1.90** | **283** | PG | | **Pn** | **09 27 05.4** | **+0.5** |
| **KTK1** | **Kautokeino** | **1.90** | **316** | eP | | **Pn** | **09 27 05.0** | **+0.1** |
| **KTK1** | **Kautokeino** | **1.90** | **316** | PG | | **Pn** | **09 27 05.5** | **+0.6** |
| **MASU** | **Masugnsbyn** | **1.90** | **265** | P | | **Pn** | **09 27 05.1** | **+0.1** |
| MASU | | | | S | | **Sb** | **09 27 30.9** | **-0.1** |
| **TOF** | **Tornio** | **1.92** | **213** | PG | | **Pn** | **09 27 05.6** | **+0.5** |
| | baz=33 | | | | | | | |
| TOF | | | | MSG | | | 09 27 29.1 | |
| | comp=Z,2.9nm,0.2s | | | | | | | |
| TOF | | | | SG | | **Sn** | **09 27 30.8** | **+0.9** |
| **ARA0** | **ARCESS Array S** | **1.92** | **345** | PG | | **Pn** | **09 27 05.1** | **-0.1** |
| | baz=159 | | | | | | | |
| ARA0 | | | | SG | | **Sb** | **09 27 31.5** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **1.92** | **345** | Pg | | **Pn** | **09 27 05.2** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=162,slow=18,SNR=20 | | | | | | | |
| ARCES | | | | Lg | | Lg | 09 27 30.3 | |
| | comp=Z,0.5nm,0.3s,baz=155,slow=29,SNR=11 | | | | | | | |
| **MSF** | **Maaselka** | **1.98** | **154** | PG | | **Pn** | **09 27 06.9** | **+0.9** |
| MSF | | | | SG | | **Sb** | **09 27 32.9** | **-0.4** |
| **KU6** | **Riekki** | **2.05** | **144** | PG | | **Pn** | **09 27 07.9** | **+0.9** |
| KU6 | | | | MSG | | | 09 27 32.5 | |
| | comp=Z,1.5nm,0.2s | | | | | | | |
| KU6 | | | | SG | | **Sb** | **09 27 35.3** | **0.0** |
| **KEV** | **Kevo** | **2.07** | **1** | PG | | **Pn** | **09 27 07.4** | **+0.2** |
| KEV | | | | MSG | | | 09 27 32.2 | |
| | comp=Z,4.2nm,0.2s | | | | | | | |
| KEV | | | | SG | | **Sn** | **09 27 34.6** | **+0.9** |
| **KALU** | **Kalix** | **2.32** | **219** | P | | **Pn** | **09 27 11.4** | **+0.8** |
| **KALU** | **Kalix** | **2.32** | **219** | PB | | **Pn** | **09 27 11.5** | **+0.8** |
| KALU | | | | SG | | **Sb** | **09 27 43.3** | **+0.2** |
| **APA** | **Apatity** | **2.49** | **90** | S | | **Sn** | **09 27 44.5** | **+0.6** |
| **VADS** | **Vadso** | **2.59** | **19** | P | | **Pn** | **09 27 14.4** | **+0.1** |
| VADS | | | | S | | **Sn** | **09 27 48.0** | **+1.5** |
| **KOVU** | **Salmi** | **2.60** | **285** | P | | **Pn** | **09 27 15.2** | **+0.6** |
| **HARU** | **Harads** | **2.80** | **239** | P | | **Pn** | **09 27 17.4** | **+0.2** |
| **PRVG** | **Vayda Guba** | **2.82** | **41** | P | | **Pn** | **09 27 18.5** | **+1.0** |
| PRVG | | | | S | | **Sn** | **09 27 53.4** | **+1.3** |
| **SJUU** | **Sjulsmark** | **3.05** | **226** | P | | **Pn** | **09 27 20.7** | **0.0** |
| **I37NO** | **I37NO** | **3.37** | **298** | I | | I | 09 46 40.0 | |
| | baz=110,slow=318,SNR=16 | | | | | | | |
| **OBF0** | **Syolatti, Pyha** | **3.39** | **200** | PN | | **Pn** | **09 27 26.1** | **+0.7** |
| **OUF** | **Merijarvi** | **3.46** | **196** | PN | | **Pn** | **09 27 27.2** | **+0.9** |
| **TRO** | **Tromso** | **3.51** | **307** | SB | | **Sn** | **09 28 11.7** | **+2.6** |
| **RMF** | **Romuvaara** | **3.71** | **159** | PN | | **Pn** | **09 27 30.4** | **+0.7** |
| **LILU** | **Lilltraesk** | **3.72** | **233** | P | | **Pn** | **09 27 29.1** | **-0.8** |
| LILU | | | | S | | **Sn** | **09 28 13.2** | **-1.2** |
| **ODEU** | **Stanfors** | **4.16** | **220** | P | | **Pn** | **09 27 35.9** | **+0.1** |
| **NIF** | **Nilsia** | **4.34** | **175** | PN | | **Pn** | **09 27 39.3** | **+0.9** |
| | baz=357 | | | | | | | |
| **SVAU** | **Svanoeiden** | **4.39** | **226** | P | | **Pn** | **09 27 38.9** | **-0.2** |
| **UMAU** | **Umeaa** | **4.61** | **217** | P | | **Pn** | **09 27 42.5** | **+0.4** |
| **UMAU** | **Umeaa** | **4.61** | **217** | PN | | **Pn** | **09 27 42.4** | **+0.4** |
| | baz=34 | | | | | | | |
| **FINES** | **FINESS Array B** | **6.29** | **184** | Pn | | **Pn** | **09 28 05.5** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=9.5,slow=13,SNR=1.5 | | | | | | | |
| | comp=Z,1.7nm,1.1s | | | | | | | |

*MOS **04** 09:35:53.1±0.7, 28.65N×57.36E, h16km, mb4.7/36, Error ellipse: s-maj=7.8km s-min=4.8km az=119.1*
*NEIC **04** 09:35:58.4±1.8, 29.20N±0.04×57.19E±0.09, h10km±1km,*
*mb4.4/66, Error ellipse: s-maj=14.5km s-min=6.2km az=107.0*
*TEH **04** 09:36:03.7, 28.77N×57.44E, h130km, ML4.6*
*OMAN **04** 09:36:04.8±0.2, 28.83N×57.43E, h34km±2km, mb4.8/19, ml4.5/16, Error ellipse: s-maj=2.9km s-min=1.2km az=33.0*
*IDC **04** 09:36:06.2±0.7, 28.79N×57.46E, h111km±6km, mb3.8/20, mbtmp4.1/23, MS3.0/3, Error ellipse: s-maj=12.5km s-min=11.5km az=59.0*
*DSN **04** 09:36:09.8±1.2, 28.08N×58.03E, h10km, ML4.3/14, Error ellipse: s-maj=25.7km s-min=8.4km az=142.0*
**ISC 04 09:36:05.2**±0.3**, 28.84N**±0.04×**57.44E**±0.04**, h100**km**, n403,** σ1℘**55/424, mb4.4/117, 13C-7D, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KHNJ** | **Kahnooj** | **0.92** | **165** | Pg | | **Pn** | **09 36 26.7** | **+1.9** |
| **KBAM** | **BAM** | **0.94** | **71** | Pg | | **Pn** | **09 36 25.8** | **+0.7** |
| **NGRK** | **Negar Kerman** | **1.01** | **323** | Pg | | **Pn** | **09 36 28.3** | **+2.1** |
| **CHMN** | **Cheshme madani** | **1.02** | **5** | Pg | | **Pn** | **09 36 27.6** | **+1.3** |
| **TVBK** | **TV Kerman** | **1.28** | **333** | Pg | | **Pn** | **09 36 31.1** | **+1.8** |
| **IBND** | **Bandar-abas** | **1.60** | **210** | Pg | | **Pn** | **09 36 33.5** | **+0.8** |
| **KRM1** | **Kerman Provinc** | **1.66** | **355** | Pg | | **Pn** | **09 36 35.4** | **+1.7** |
| **KHGB** | **Koh Gabri** | **1.74** | **332** | Pn | | **Pn** | **09 36 36.1** | **+1.4** |
| **GENO** | **Geno** | **1.82** | **218** | Pg | | **Pn** | **09 36 37.2** | **+1.6** |
| **ZRDN** | **Zarand Kerman** | **2.26** | **340** | Pn | | **Pn** | **09 36 43.2** | **+1.8** |
| **LAR1** | **LAR** | **2.94** | **247** | Pn | | **Pn** | **09 36 51.0** | **+0.7** |
| **JASK** | **Jask - Hormozg** | **2.99** | **173** | Pn | | **Pn** | **09 36 51.4** | **+0.6** |
| **JASK** | **Jask - Hormozg** | **2.99** | **173** | P | | **Pn** | **09 36 51.8** | **+1.0** |
| JASK | | | | S | | **Sn** | **09 37 25.7** | **-0.2** |
| **ZHDN** | **Zahedan** | **3.00** | **79** | Pn | | **Pn** | **09 36 52.6** | **+1.4** |
| **SHME** | **Shamm** | **3.01** | **203** | *eP* | | **Pn** | **09 36 51.9** | **+0.8** |
| | SNR=155 | | | | | | | |
| SHME | | | | S | | **Sn** | **09 37 25.4** | **-1.1** |
| **SHME** | **Shamm** | **3.01** | **203** | P | | **Pn** | **09 36 52.1** | **+1.0** |
| | SNR=517 | | | | | | | |
| SHME | | | | S | | **Sn** | **09 37 25.8** | **-0.6** |
| **BANOM** | **Banah** | **3.08** | **199** | *eP* | | **Pn** | **09 36 52.6** | **+0.5** |
| | SNR=34 | | | | | | | |
| **BANOM** | **Banah** | **3.08** | **199** | P | | **Pn** | **09 36 53.2** | **+1.1** |
| BANOM | | | | S | | **Sn** | **09 37 28.6** | **+0.5** |
| **NHDN** | **Nehbandan** | **3.41** | **41** | Pn | | **Pn** | **09 36 58.0** | **+1.5** |
| **JHRM** | **Jahrom** | **3.41** | **265** | Pn | | **Pn** | **09 36 57.2** | **+0.6** |
| **BSRN** | **Basiran** | **3.44** | **25** | Pn | | **Pn** | **09 36 57.6** | **+0.7** |
| **IMEH** | **Mehriz** | **3.53** | **317** | Pn | | **Pn** | **09 36 59.7** | **+1.5** |
| **MASF** | **Masafi** | **3.64** | **199** | P | | **Pn** | **09 37 00.2** | **+0.6** |
| | SNR=38 | | | | | | | |
| MASF | | | | S | | **Sn** | **09 37 41.6** | **0.0** |
| **MSFE** | **Esma-Masafi** | **3.65** | **198** | *i* P | | **Pn** | **09 37 00.1** | **+0.3** |
| | SNR=37 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **3.66** | **206** | *i* P | | **Pn** | **09 37 02.1** | **+2.3** |
| | SNR=24 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **3.66** | **206** | P | | **Pn** | **09 37 02.3** | **+2.5** |
| | SNR=24 | | | | | | | |
| UMQ | | | | S | | **Sn** | **09 37 42.0** | **-0.1** |
| **MDH** | **Madha** | **3.67** | **196** | *i* P | | **Pn** | **09 36 59.5** | **-0.5** |
| | SNR=79 | | | | | | | |
| **MDH** | **Madha** | **3.67** | **196** | P | | **Pn** | **09 36 59.6** | **-0.5** |
| | SNR=79 | | | | | | | |
| MDH | | | | S | | **Sn** | **09 37 39.9** | **-2.5** |
| **QIR1** | **Qir** | **3.88** | **266** | Pn | | **Pn** | **09 37 03.2** | **+0.4** |
| **UOSS** | **Minazif** | **4.03** | **196** | | | **Pn** | **09 37 04.0** | **-0.8** |
| **UOSS** | **Minazif** | **4.03** | **196** | *i* P | | **Pn** | **09 37 04.2** | **-0.6** |
| | SNR=73 | | | | | | | |
| **UOSS** | **Minazif** | **4.03** | **196** | P | | **Pn** | **09 37 04.3** | **-0.6** |
| UOSS | | | | S | | **Sn** | **09 37 50.3** | **-0.9** |
| **NAZ** | **Nazwa, Dubai** | **4.15** | **203** | *i* P | | **Pn** | **09 37 08.1** | **+1.6** |
| | SNR=158 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **4.15** | **203** | P | | **Pn** | **09 37 08.3** | **+1.8** |
| | SNR=158 | | | | | | | |
| NAZ | | | | S | | **Sn** | **09 37 54.6** | **+0.6** |
| | SNR=10 | | | | | | | |
| **HATD** | **Hatta, Dubai** | **4.17** | **197** | *i* P | | **Pn** | **09 37 06.0** | **-0.6** |
| | SNR=48 | | | | | | | |
| **HATD** | **Hatta, Dubai** | **4.17** | **197** | P | | **Pn** | **09 37 06.5** | **-0.2** |
| | SNR=20 | | | | | | | |
| **ITEG** | **Tejag** | **4.20** | **15** | Pn | | **Pn** | **09 37 08.8** | **+1.5** |
| **BAGH** | **Bagheran - Bir** | **4.21** | **21** | Pn | | **Pn** | **09 37 08.3** | **+0.7** |
| **CHBR** | **Chabahar** | **4.22** | **139** | Pn | | **Pn** | **09 37 06.6** | **-0.8** |
| **TPRV** | **Parvadeh(Tabas** | **4.22** | **351** | Pn | | **Pn** | **09 37 08.8** | **+1.3** |
| **ICHK** | **Chekchek** | **4.28** | **323** | Pn | | **Pn** | **09 37 10.2** | **+1.8** |
| **ASHO** | **Ashiyiah** | **4.32** | **197** | *i* P | | **Pn** | **09 37 10.0** | **+1.2** |
| | SNR=335 | | | | | | | |
| **ASHO** | **Ashiyiah** | **4.32** | **197** | P | | **Pn** | **09 37 10.2** | **+1.4** |
| | SNR=336 | | | | | | | |
| ASHO | | | | S | | **Sn** | **09 37 59.9** | **+1.8** |
| **SHI** | **Shiraz** | **4.38** | **282** | Pn | | **Pn** | **09 37 10.1** | **+0.5** |
| **FAQ** | **Al Faqa, Dubai** | **4.40** | **202** | *i* P | | **Pn** | **09 37 11.3** | **+1.5** |
| | SNR=84 | |

**MZR Muzera** 6.82 212 P **Pn** 09 37 42.1 -0.6
SNR=16
**KRSH Karshahi** 6.83 320 Pn **Pn** 09 37 44.5 +1.6
**TBJM Torbat-e-JAM** 6.86 20 Pn **Pn** 09 37 45.6 +2.2
**HRA Herat** 6.88 35 Pn Pn 09 37 35.7 -7.9
**JLN Jalan Bani Buh** 6.90 165 P **Pn** 09 37 42.5 -1.3
SNR=235
**TRNA Turayna** 6.90 235 P **Pn** 09 37 43.2 -0.5
**SLWR Sila** 7.01 229 P **Pn** 09 37 44.7 -0.5
**ISFB Sefidab** 7.06 322 Pn **Pn** 09 37 47.6 +1.7
**SMRA Abu-Samra** 7.18 237 P **Pn** 09 37 46.8 -0.7
**SBZV Sabzevar** 7.53 1 Pn **Pn** 09 37 55.0 +2.6
**IPAY Payeh** 7.70 9 Pn **Pn** 09 37 57.5 +2.7
**IMYA Miami** 7.81 16 Pn **Pn** 09 37 58.5 +2.2
**IAKL Akhelmad** 7.82 8 Pn **Pn** 09 37 58.4 +2.0
**IVRN Varamin** 7.82 323 Pn **Pn** 09 37 58.0 +1.7
**MHTO MHTO** 7.83 176 P **Pn** 09 37 56.7 +0.2
SNR=12
**IFIR Firoozkooh** 7.86 331 Pn **Pn** 09 37 58.8 +1.9
**IQOM Qom** 8.07 319 Pn **Pn** 09 38 01.7 +1.8
**IKRD Kardeh** 8.10 12 Pn **Pn** 09 38 02.6 +2.3
**IDMV Damavand** 8.13 327 Pn **Pn** 09 38 02.9 +2.2
**IGLO Ghaloghah** 8.22 339 Pn **Pn** 09 38 04.6 +2.7
**KBD Kabd** 8.54 275 P **Pn** 09 38 05.6 -0.5
**IEMG Emamgholi** 8.61 6 Pn **Pn** 09 38 09.6 +2.3
**MRVT Maraveh tapeh** 8.87 353 Pn **Pn** 09 38 13.2 +2.7
**DQM DQM** 8.87 179 P **Pn** 09 38 11.2 +0.6
SNR=6.7
**KLST Kelardasht - M** 9.35 327 Pn **Pn** 09 38 20.1 +2.8
**DOK Doka** 10.62 197 P **Pn** 09 38 33.4 -1.0
SNR=10
**SHAO Shalim** 10.90 189 P **Pn** 09 38 37.4 -0.8
SNR=18
**DMTO DMTO** 11.31 192 P **Pn** 09 38 42.8 -0.9
SNR=17
**WHFO Wadi Hawf** 11.38 198 P **Pn** 09 38 42.6 -2.1
**KBL Kabul** 11.40 57 Pn **Pn** 09 38 40.6 -4.4
**KBL Kabul** 11.40 57 P **Pn** 09 38 40.6 -4.4
**RBK Rabkut** 11.67 195 P **Pn** 09 38 47.5 -1.0
**RAYN Ar Rayn** 11.95 246 Pn Pn 09 38 47.3 -5.0
**RAYN Ar Rayn** 11.95 246 P **Pn** 09 38 47.7 -4.7
**RAYN Ar Rayn** 11.95 246 P Pn 09 38 47.3 -5.0
**ABTO Aybut** 12.05 199 P **Pn** 09 38 51.3 -2.4
**GEVA Gevas** 15.24 312 Pn Pn 09 39 27.5 -7.7
**GNI Garni** 15.37 321 Pn **Pn** 09 39 30.3 -6.4
**GNI Garni** 15.37 321 P **P** 09 39 38.8 -0.4
5.6nm,0.5s,baz=22,slow=22,SNR=2.3
**GNI Garni** 15.37 321 *i* P Pn 09 39 28.9 -7.8
**BTK Batken** 15.70 41 Pn **Pn** 09 39 37.2 -3.5
**BTK Batken** 15.70 41 P **Pn** 09 39 37.2 -3.5
BTK pmax pmax
comp=Z,7.0nm,1.1s
**KK31 Karatay Array** 17.70 33 P **P** 09 40 03.2 -1.5
**KK31 Karatay Array** 17.70 33 P **P** 09 40 03.2 -1.5
KK31 pmax pmax
comp=Z,5.0nm,1.0s
**KKAR Karatay Array** 17.70 33 P **P** 09 40 03.7 -1.0
**KKAR Karatay Array** 17.70 33 P **P** 09 40 03.2 -1.6
KKAR IAmb IAmb 09 40 08.8
comp=Z,5.4nm,1.0s
**KKAR Karatay Array** 17.70 33 P **P** 09 40 03.7 -1.0
KKAR pmax pmax
comp=Z,5.0nm,1.0s
**ARSB Arslanbob** 17.77 41 P **P** 09 40 04.2 -1.4
**ARSB Arslanbob** 17.77 41 P **P** 09 40 04.2 -1.4
ARSB pmax pmax
comp=Z,1.0nm,0.8s
**KSH Kashi** 18.64 50 P **P** 09 40 13.2 -1.9
KSH pmax pmax
comp=Z,5.0nm,1.0s
**GAZ Gaziantep** 18.86 301 **P** 09 40 13.6 -4.0
GAZ IAmb IAmb 09 40 21.6
comp=Z,15nm,0.8s
**KBZ Khabaz** 18.88 326 P **Pn** 09 40 19.3 +0.1
comp=Z,1.3nm,0.6s,baz=194,slow=17,SNR=1.7
**SHMJ Saham** 19.02 287 P **Pn** 09 40 20.9 -0.1
**GHAJ Ghor Haditha** 19.09 283 P **P** 09 40 14.7 -5.2
**KIV Kislovodsk** 19.15 326 *e*P **P** 09 40 15.6 -5.1
KIV pmax pmax
comp=Z,10.0nm,1.0s
**LISJ El Lisan** 19.16 283 P **Pn** 09 40 21.1 -1.5
**MMAI Mount Meron Ar** 19.35 288 P **Pn** 09 40 24.9 -0.1
comp=Z,11nm,0.7s,baz=98,slow=12,SNR=14
**AAK Ala-Archa** 19.47 40 P **P** 09 40 22.9 -1.4
**AAK Ala-Archa** 19.47 40 LR LR 09 49 04.0
comp=Z,32nm,20.7s,baz=255,slow=40
**AAK Ala-Archa** 19.47 40 *i* P **P** 09 40 23.7 -0.6
AAK pmax pmax
comp=Z,9.0nm,1.7s
**NRN Naryn** 19.66 45 P **P** 09 40 26.0 -0.4
**NRN Naryn** 19.66 45 P **P** 09 40 26.0 -0.4
NRN pmax pmax
comp=Z,5.0nm,0.7s
**KZIT Kziot** 20.08 282 P Pn 09 40 31.1 -2.4
**ABKAR Akbulak array** 20.48 5 P **P** 09 40 33.9 -1.0
**BNN Bunyan** 20.48 305 P **P** 09 40 31.6 -3.5
BNN IAmb IAmb 09 41 00.1
comp=Z,15nm,0.8s
**CSS Mathiatis** 21.33 293 P **P** 09 40 41.5 -2.6
**CSS Mathiatis** 21.33 293 P **P** 09 40 43.7 -0.5
comp=Z,51nm,1.0s,comp=Z,404nm
**AKTO Aktyubinsk** 21.57 1 P **P** 09 40 47.8 +1.3
comp=Z,1.7nm,0.3s,baz=186,slow=8.0,SNR=11
AKTO S **S** 09 44 40.7 +0.9
comp=Z,0.5nm,0.4s,baz=10,slow=22,SNR=7.3
comp=Z,1.7nm,0.3s
**BR104 Keskin Array S** 22.39 305 P **P** 09 40 54.6 -0.8
comp=Z,9.6nm,1.0s,comp=Z,79nm
**BR131 Keskin Array S** 22.40 305 P **P** 09 40 52.4 -3.2
BR131 IAmb IAmb 09 40 58.0
comp=Z,8.7nm,0.8s
**BR131 Keskin Array S** 22.40 305 P **P** 09 40 52.4 -3.2
BR131 pmax pmax
comp=Z,9.0nm,0.9s
**BRTR Keskin Array B** 22.40 305 P **P** 09 40 52.4 -3.2
**BRTR Keskin Array B** 22.40 305 P **P** 09 40 55.8 +0.2
comp=Z,5.9nm,0.8s,baz=126,slow=12,SNR=25
BRTR pP **pP** 09 41 18.4 +2.6
comp=Z,2.8nm,0.8s,baz=121,slow=13,SNR=4.1
BRTR LR LR 09 50 56.9
comp=Z,36nm,19.9s,baz=116,slow=40
comp=Z,5.9nm,0.8s
**BR105 Keskin Array S** 22.41 305 P **P** 09 40 54.8 -0.9
comp=Z,12nm,0.9s,comp=Z,86nm
**BR106 Keskin Array S** 22.42 305 P **P** 09 40 54.9 -0.8
comp=Z,11nm,0.9s,comp=Z,69nm
**ANTO Ankara** 23.06 305 P **P** 09 40 59.5 -2.5
ANTO IAmb IAmb 09 41 05.2
comp=Z,9.1nm,0.7s
**ANTO Ankara** 23.06 305 P **P** 09 40 59.6 -2.5
ANTO pmax pmax
comp=Z,9.0nm,0.7s
**BELG Belogornoye** 24.63 345 *i* P **P** 09 41 15.2 -0.9
BELG pmax pmax
comp=Z,4.0nm,1.2s
**VRH Novokhopyorsk** 25.27 336 *e*P **P** 09 41 25.3 +3.4
VRH pmax pmax
comp=Z,16nm,0.7s
**BRVK Borovoye** 25.99 18 *i* P **P** 09 41 28.3 -0.1
BRVK pmax pmax
comp=Z,5.0nm,1.6s
**MAKZ Makanchi** 26.24 40 P **P** 09 41 31.4 +0.6
**MAKZ Makanchi** 26.24 40 P **P** 09 41 31.4 +0.6
MAKZ pmax pmax
comp=Z,2.0nm,0.7s
**MK31 Makanchi Array** 26.41 40 P **P** 09 41 32.6 +0.3
**MK31 Makanchi Array** 26.41 40 *i* P **P** 09 41 33.4 +1.0
**MKAR Makanchi Array** 26.41 40 P **P** 09 41 33.9 +1.5
**MKAR Makanchi Array** 26.41 40 P **P** 09 41 32.9 +0.5
comp=Z,0.3nm,0.5s,baz=222,slow=8.0,SNR=4.6
MKAR pP **pP** 09 41 56.5 +1.6
comp=Z,0.5nm,0.5s,baz=238,slow=5.9,SNR=5.8
MKAR PcP **PcP** 09 44 54.7 -0.6
comp=Z,0.3nm,0.5s,baz=242,slow=2.4,SNR=2.5
comp=Z,0.3nm,0.5s
**MKAR Makanchi Array** 26.41 40 P **P** 09 41 33.9 +1.5
**KARP Karpathos** 26.41 292 P **P** 09 41 30.6 -1.9
**KARP Karpathos** 26.41 292 P **P** 09 41 32.8 +0.3
comp=Z,132nm,0.9s
**KHAM Kharkiv** 26.56 329 P **P** 09 41 33.1 -0.6
**VORR Voronezh** 26.57 334 P **P** 09 41 30.1 -3.5
VORR pmax pmax
comp=Z,13nm,0.5s
**KURBB Kurchatov Arra** 26.96 30 pP **pP** 09 42 02.1 +2.1
comp=Z,2.6nm,0.2s,baz=224,slow=8.6,SNR=4.6
KURBB PcP **PcP** 09 44 56.7 +0.3
comp=Z,0.4nm,0.2s,baz=248,slow=0.5,SNR=1.9
**KURK Kurchatov** 27.07 30 P **P** 09 41 39.0 +0.9
**KURK Kurchatov** 27.07 30 *i* P **P** 09 41 38.3 +0.2
KURK pmax pmax
comp=Z,5.0nm,2.0s
**IDI Anoyia** 28.24 292 P **P** 09 41 48.4 -0.5
**ALN Alexandroupoli** 28.27 304 P **P** 09 41 48.3 -0.7
ALN IAmb IAmb 09 42 09.5
comp=Z,12nm,1.0s
**ALN Alexandroupoli** 28.27 304 P **P** 09 41 48.3 -0.7
ALN pmax pmax
comp=Z,12nm,1.0s
**RDO Rodhopi** 28.71 304 P **P** 09 41 50.9 -2.0
RDO IAmb IAmb 09 41 58.2
comp=Z,7.0nm,1.1s
**BISRR Bisoca** 29.38 313 ⇑P **P** 09 41 57.4 -1.5
**PLOR5 Plostina Array** 29.53 313 P **P** 09 41 59.1 -1.1
comp=Z,5.3nm,0.7s
**PLOR3 Plostina Array** 29.55 313 P **P** 09 42 00.0 -0.3
comp=Z,5.4nm,1.4s
**SORM Soroca** 29.55 319 P **P** 09 41 59.6 -0.7
comp=Z,9.1nm,0.4s
**TESR Tescani** 29.82 315 ⇑P **P** 09 42 03.1 +0.4
**TESR Tescani** 29.82 315 P **P** 09 42 02.2 -0.5
comp=Z,6.8nm,0.9s
**COVR Voineasa-Covas** 29.82 313 ⇓P **P** 09 42 04.3 +1.5
**MLR Muntele Rosu** 29.85 312 ⇑P **P** 09 42 06.1 +3.0
**MLR Muntele Rosu** 29.85 312 ⇑P **P** 09 42 06.1 +3.0
**MLR Muntele Rosu** 29.85 312 P **P** 09 42 02.7 -0.4
comp=Z,6.9nm,1.9s
**KIRV Kirov** 30.25 352 LR LR 09 58 02.8
comp=Z,40nm,19.6s,baz=199,slow=43
**OBN Obninsk** 30.26 336 ⇓*e*P **P** 09 42 04.6 -1.8
OBN *e* 09 42 59.3
OBN pmax pmax
comp=Z,3.0nm,0.8s
**AK09 Malin Array Si** 30.38 324 P **P** 09 42 07.0 -0.5
**AK07 Malin Array Si** 30.38 323 P **P** 09 42 07.3 -0.3
**AK10 Malin Array Si** 30.39 323 P **P** 09 42 07.1 -0.5
**DOPR Dopca** 30.40 313 ⇑P **P** 09 42 08.4 +0.6
**VOIR** 30.41 312 ⇓P **P** 09 42 07.4 -0.6
**VOIR** 30.41 312 ⇓P **P** 09 42 07.4 -0.6
**VOIR** 30.41 312 P **P** 09 42 06.6 -1.4
comp=Z,2.4nm,1.3s
**AK05 Malin Array Si** 30.42 323 P **P** 09 42 06.4 -1.5
AK05 IAmb IAmb 09 42 08.5
comp=Z,5.6nm,1.0s
**AKASG Malin Array Be** 30.46 324 P **P** 09 42 08.0 -0.2
comp=Z,2.0nm,0.4s,baz=130,slow=8.7,SNR=7.8
comp=Z,2.0nm,0.4s
**AKBB Malin Array Si** 30.46 324 P **P** 09 42 07.5 -0.7
AKBB IAmb IAmb 09 42 08.8
comp=Z,7.6nm,0.8s
**AKBB Malin Array Si** 30.46 324 *ce*P **P** 09 42 07.9 -0.3
AKBB pmax pmax
comp=Z,8.0nm,0.8s
**AKBB Malin Array Si** 30.46 324 P **P** 09 42 07.5 -0.7
**KIEV Kiev** 30.46 324 P **P** 09 42 08.1 -0.1
KIEV IAmb IAmb 09 42 08.8
comp=Z,6.8nm,0.8s
**KIEV Kiev** 30.46 324 ⇓P **P** 09 42 08.2 -0.1
**KIEV Kiev** 30.46 324 ⇓P **P** 09 42 08.2 -0.1
**KIEV Kiev** 30.46 324 P **P** 09 42 07.5 -0.8
comp=Z,40nm,0.7s
**ITM Ithomi** 30.78 295 P **P** 09 42 11.8 +0.6
**LUBAR Lubar, Ukraine** 30.81 321 P **P** 09 42 11.0 -0.4
**KMPD K-Podol'skiy** 30.86 318 P **P** 09 42 11.0 -0.8
**KMPD K-Podol'skiy** 30.86 318 P **P** 09 42 10.8 -1.0
**BURAR Bucovina Array** 31.18 316 P **P** 09 42 15.0 +0.2
BURAR IAmb IAmb 09 42 15.6
comp=Z,2.3nm,0.6s
**BURAR Bucovina Array** 31.18 316 ⇑P **P** 09 42 15.3 +0.6
**BURAR Bucovina Array** 31.18 316 P **P** 09 42 14.0 -0.8
BURAR pmax pmax
comp=Z,2.0nm,0.6s
**BUR08 Bucovina Ar. S** 31.20 316 P **P** 09 42 15.3 +0.3
BUR08 IAmb IAmb 09 42 15.9
comp=Z,4.0nm,1.0s
**ZALV Zalesovo Beam** 32.05 31 P **P** 09 42 23.0 +0.8
comp=Z,1.1nm,0.3s,baz=231,slow=8.6,SNR=6.1
ZALV pP **pP** 09 42 47.9 +2.6
comp=Z,5.2nm,0.8s,baz=246,slow=9.6,SNR=7.7
ZALV PcP **PcP** 09 45 08.8 -0.6
comp=Z,1.4nm,0.5s,baz=249,slow=4.5,SNR=5.1
comp=Z,1.1nm,0.3s
**STNU Starunia** 32.09 317 P **P** 09 42 22.3 -0.3
**KBN Korca** 32.11 301 P **P** 09 42 23.0 0.0
**KBN Korca** 32.11 301 P **P** 09 42 23.0 0.0
KBN pmax pmax
comp=Z,16nm,1.0s
**RNPP8 Varash** 32.59 322 P **P** 09 42 27.1 +0.2
**RNPP9 Sopachiv** 32.61 323 P **P** 09 42 26.9 -0.2
**MORS Morshin** 32.63 318 P **P** 09 42 27.3 -0.1
**MORS Morshin** 32.63 318 P **P** 09 42 27.3 -0.1
**BRIU Brid** 32.82 316 P **P** 09 42 29.7 +0.7
**LODK Lodwar** 32.86 224 P **P** 09 42 32.5 +2.8
LODK IAmb IAmb 09 42 39.6
comp=Z,4.4nm,1.1s
**SIRR Siria** 32.92 312 ⇑P **P** 09 42 31.1 +1.1
**HOLU Holmets** 33.29 316 P **P** 09 42 33.8 +0.8
**MNK Minsk** 33.39 328 *i* P **P** 09 42 31.0 -2.9
MNK comp=E,8.0nm,0.8s,baz=128 *i* P **P** 09 42 31.0 -2.9
comp=N,11nm,0.8s,baz=128
MNK *i* P **P** 09 42 31.0 -2.9
comp=Z,14nm,0.9s,baz=128
MNK *i* PP **PnPn** 09 43 40.1 -8.1
baz=128
MNK *i* PPP PPP 09 43 50.4
baz=128
MNK *i* S **S** 09 47 50.1 +2.6
baz=128
MNK *i* SS **SnSn** 09 49 48.8 -11
baz=128
MNK *i* SSS SSS 09 50 04.4
baz=128
MNK *i* LQ LQ 09 52 54.9
baz=128
MNK *i* LR LR 09 53 56.8
baz=128
MNK *i* LRM MLR 09 55 19.0
comp=Z,47nm,18.2s,baz=128
MNK *i* LRM MLR 09 55 27.5
comp=N,104nm,17.5s,baz=128
MNK *i* LRM MLR 09 55 31.8
comp=E,76nm,18.1s,baz=128
**MNK Minsk** 33.39 328 *i* P **P** 09 42 31.0 -2.9
MNK *i* PPP PPP 09 43 50.4
MNK *i* S **S** 09 47 50.0 +2.6
MNK *i* SSS SSS 09 50 04.4
MNK pmax pmax
comp=E,8.0nm,0.8s
MNK pmax pmax
comp=N,11nm,0.8s
MNK pmax pmax
MNK comp=Z,14nm,0.9s MLR MLR
MNK comp=Z,47nm,18.0s MLR MLR
MNK comp=N,104nm,18.0s MLR MLR
MNK comp=E,76nm,18.0s MLR MLR
**KOLS Kolonicke sedl** 33.52 317 *e*P **P** 09 42 36.5 +1.4
**KOLS Kolonicke sedl** 33.52 317 *e*P **P** 09 42 36.5 +1.4
**CRVS Cervenica-Dubn** 34.00 316 *e*P **P** 09 42 39.9 +0.7
**CRVS Cervenica-Dubn** 34.00 316 *e*P **P** 09 42 39.9 +0.7
**MORH Mrgy, Hungar** 34.90 311 ⇑P **P** 09 42 47.5 +0.4
**MORH Mrgy, Hungar** 34.90 311 P **P** 09 42 47.3 +0.3
comp=E,4.2nm,0.8s
**TIP Timpagrande** 35.01 298 P **P** 09 42 48.5 +0.3
**TIP Timpagrande** 35.01 298 ⇓P **P** 09 42 49.5 +1.3
**TIP Timpagrande** 35.01 298 P **P** 09 42 48.6 +0.4
comp=E,11nm,1.0s
**VYHS Vyhne** 35.47 314 *e*P **P** 09 42 52.3 +0.4
**VYHS Vyhne** 35.47 314 *e*P **P** 09 42 52.3 +0.4
**OJC Ojcow** 35.51 318 P **P** 09 42 51.5 -0.7
**OJC Ojcow** 35.51 318 P **P** 09 42 51.5 -0.7
OJC pmax pmax
comp=Z,11nm,0.6s
**OJC Ojcow** 35.51 318 P **P** 09 42 52.3 +0.1
comp=Z,17nm,0.8s
OJC pP pP 09 42 55.1 -21
comp=Z,17nm,0.8s
**CUC Castrocucco** 35.80 299 P **P** 09 42 54.9 0.0
CUC IAmb IAmb 09 42 58.4
comp=Z,8.5nm,0.8s
**MPLH Magyarpolny** 35.90 312 P **P** 09 42 55.7 +0.1
comp=Z,26nm,1.3s
**JAVC Velka Javorina** 36.32 315 *e*P **P** 09 43 00.3 +1.1
**VSU Vasula** 36.41 333 *i* P **P** 09 42 59.0 -0.8
VSU pmax pmax
comp=Z,16nm,1.0s
**MODS Modra-Piesok** 36.42 314 *e*P **P** 09 43 00.3 +0.3
**MODS Modra-Piesok** 36.42 314 *e*P **P** 09 43 00.3 +0.3
**MORC Moravsky Berou** 36.70 316 P **P** 09 43 01.4 -1.0
MORC IAmb IAmb 09 43 03.1
comp=Z,3.6nm,0.8s
**MORC Moravsky Berou** 36.70 316 *e*P **P** 09 43 01.3 -1.2
**MORC Moravsky Berou** 36.70 316 ⇑P **P** 09 43 02.4 0.0
**MORC Moravsky Berou** 36.70 316 ⇑P **P** 09 43 02.4 0.0
**RONA Rosalia, Austr** 36.85 312 *i* P **P** 09 43 03.8 0.0
comp=Z,7.3nm,0.8s
**KRUC Moravsky** 37.18 314 *e*P **P** 09 43 06.2 -0.3
**CONA Conrad Observa** 37.20 312 *i* P **P** 09 43 06.5 -0.3
comp=Z,2.0nm,0.8s
**ARSA Arzberg** 37.24 311 *i* P **P** 09 43 07.2 +0.1
comp=Z,4.2nm,0.7s
**DPC Dobruska-Polom** 37.63 316 *e*P **P** 09 43 12.6 +2.3
**DPC Dobruska-Polom** 37.63 316 P **P** 09 43 10.3 0.0
**DPC Dobruska-Polom** 37.63 316 P **P** 09 43 10.3 0.0
comp=Z,3.1nm,1.6s
**KSP Ksiaz** 37.82 317 P **P** 09 43 11.8 0.0
**KSP Ksiaz** 37.82 317 P **P** 09 43 11.8 0.0
comp=Z,3.2nm,0.7s
**CAMP Campotosto** 37.86 303 P **P** 09 43 12.7 +0.2
CAMP IAmb IAmb 09 43 18.4
comp=Z,10nm,1.1s
**CHVC Chvalec** 37.87 317 *e*P **P** 09 43 12.2 -0.1
**CHVC Chvalec** 37.87 317 *e*P **P** 09 43 12.2 -0.1
**UPC Upice** 37.87 317 *e*P **P** 09 43 12.0 -0.3
**UPC Upice** 37.87 317 *e*P **P** 09 43 12.0 -0.3
**NRCA Norcia** 38.11 304 P **P** 09 43 13.6 -0.9
NRCA IAmb IAmb 09 43 16.1
comp=Z,5.5nm,0.9s
**FDMO Fiordimonte** 38.16 304 P **P** 09 43 15.0 +0.2
FDMO IAmb IAmb 09 43 35.0
comp=Z,5.0nm,1.0s
**MOA Molln** 38.22 312 *i* P **P** 09 43 15.1 -0.1
comp=Z,6.5nm,0.8s
**CKRC Cesky Krumlov** 38.43 313 *e*P **P** 09 43 17.9 +0.9
**CKRC Cesky Krumlov** 38.43 313 *e*P **P** 09 43 17.9 +0.9
**BIOA Bad Ischl, Aus** 38.59 311 *i* P **P** 09 43 18.2 -0.2
comp=Z,3.4nm,0.7s
**KBA Koelnbreinsper** 38.65 310 *e*P **P** 09 43 18.7 -0.4
comp=Z,3.4nm,0.5s
**FIA1 FINESS Array S** 38.66 336 P **P** 09 43 19.1 +0.4
FIA1 IAmb IAmb 09 43 35.5
comp=Z,10nm,1.0s
**FINES FINESS Array B** 38.66 336 P **P** 09 43 18.8 +0.1
**FINES FINESS Array B** 38.66 336 P **P** 09 43 18.7 0.0
comp=Z,2.4nm,0.6s,baz=136,slow=9.4,SNR=20
comp=Z,2.4nm,0.6s
**GEC2 GERESS Array S** 38.83 313 P **P** 09 43 20.4 0.0
GEC2 IAmb IAmb 09 43 21.0
comp=Z,5.3nm,0.9s
**GERES GERESS Array B** 38.83 313 P **P** 09 43 20.4 0.0
comp=Z,2.5nm,0.7s,baz=128,slow=8.6,SNR=6.0
comp=Z,2.5nm,0.7s
**MBAR Mbarara** 38.85 226 *ce*P **P** 09 43 23.8 +2.7
MBAR pmax pmax
comp=Z,4.0nm,0.8s
**STAL STALIGIAL** 38.92 309 P **P** 09 43 20.0 -1.1
**KHC Kasperske Hory** 38.98 314 P **P** 09 43 21.0 -0.6
KHC IAmb IAmb 09 43 22.2
comp=Z,6.2nm,0.9s
**KHC Kasperske Hory** 38.98 314 *e*P **P** 09 43 21.5 -0.1
**KHC Kasperske Hory** 38.98 314 *ce*P **P** 09 43 20.7 -0.9
KHC pmax pmax
comp=Z,20nm,1.3s
**KHC Kasperske Hory** 38.98 314 P **P** 09 43 21.2 -0.4
comp=Z,9.9nm,1.3s
**PZH PanZhiHua** 39.14 83 P P 09 43 28.6 +5.3
PZH pmax pmax
PZH comp=Z,20nm,0.8s pmax pmax
comp=Z,90nm,3.5s
**ABTA Abfaltersbach** 39.14 310 *e*P **P** 09 43 22.9 -0.1
comp=Z,4.1nm,0.8s
**LESA Schwarzleotal** 39.17 311 *i* P **P** 09 43 22.8 -0.4
comp=Z,2.4nm,0.5s
**WTTA Wattenberg** 39.83 310 *i* P **P** 09 43 28.3 -0.6
comp=Z,9.0nm,0.9s,SNR=4.8
**WATA Walderalm** 39.88 310 *i* P **P** 09 43 28.6 -0.7
comp=Z,12nm,1.5s
**CLL Collm** 39.93 317 P **P** 09 43 28.4 -1.0
**CLL Collm** 39.93 317 *i* P **P** 09 43 29.5 0.0
comp=Z,9.0nm,1.2s
**CLL Collm** 39.93 317 *i* P **P** 09 43 29.5 0.0
CLL pmax pmax
comp=Z,9.0nm,1.2s
**CLL Collm** 39.93 317 P **P** 09 43 29.4 0.0
comp=Z,6.6nm,1.2s
**SQTA Sankt Quirin** 40.11 310 *e*P **P** 09 43 30.3 -0.8
comp=Z,5.4nm,0.5s,SNR=4.5
**BSD Bornholm Skovb** 40.16 323 *i* P **P** 09 43 29.7 -1.5
**MOTA Moosalm** 40.20 310 *i* P **P** 09 43 31.1 -0.8
comp=Z,7.1nm,0.8s
**FETA Feichten** 40.40 310 *e*P **P** 09 43 33.1 -0.5
comp=Z,6.5nm,0.7s,SNR=11
**RETA Reute** 40.45 310 *i* P **P** 09 43 33.0 -0.9
comp=Z,3.5nm,0.6s
**FUORN Ofenpass-Fuorn** 40.65 309 P **P** 09 43 36.3 +0.6
**VSL Villasalto** 40.74 298 P **P** 09 43 37.5 +1.2
VSL IAmb IAmb 09 43 38.7
comp=Z,7.4nm,0.8s
**KEST Kesra** 40.91 292 P **P** 09 43 38.8 +1.0
comp=Z,3.3nm,0.9s,baz=252,slow=15,SNR=3.6
comp=Z,3.3nm,0.9s
**DAVA Damuels** 41.01 310 *i* P **P** 09 43 37.8 -0.7
comp=Z,7.3nm,0.6s
**DEL Delary** 41.24 325 *i* P **P** 09 43 39.8 -0.3
**TUE Stuetta** 41.25 309 P **P** 09 43 38.5 -2.2
**TUE Stuetta** 41.25 309 P **P** 09 43 40.2 -0.4
comp=Z,15nm,0.7s
**SONM Songino Array** 42.03 49 pP pP 09 44 12.5 +1.8
comp=Z,0.4nm,0.6s,baz=262,slow=10,SNR=3.0
**BORU Boraas** 42.25 326 *i* P **P** 09 43 48.4 0.0
**SBF Sospel** 42.33 305 *e*P **P** 09 43 48.2 -1.1
SBF pmax pmax
comp=Z,8.0nm,0.8s
**SENIN Lac Senin/Sane** 42.64 308 P **P** 09 43 51.4 -0.6
**MBDF Montbardon** 42.87 306 *e*P **P** 09 43 52.2 -1.5
MBDF pmax pmax
comp=Z,4.0nm,0.7s
**HFS Hagfors** 42.89 329 P **P** 09 43 53.1 -0.4
comp=Z,2.5nm,0.4s,baz=131,slow=8.3,SNR=8.5
comp=Z,2.5nm,0.4s
**LPG La Plagne** 42.94 307 *e*P **P** 09 43 53.1 -1.3
LPG pmax pmax
comp=Z,5.0nm,0.8s
**LPL La Plagne** 42.95 307 *e*P **P** 09 43 53.1 -1.4
LPL pmax pmax
comp=Z,17nm,1.4s
**BNI Bardonecchia** 42.95 306 P **P** 09 43 53.8 -0.6
BNI IAmb IAmb 09 43 54.2
comp=Z,5.1nm,0.8s
**BNI Bardonecchia** 42.95 306 P **P** 09 43 53.8 -0.6
BNI pmax pmax
comp=Z,5.0nm,0.8s
**ECH Echery** 42.97 311 P **P** 09 43 53.9 -0.4
**ECH Echery** 42.97 311 P **P** 09 43 53.9 -0.4
ECH pmax pmax
comp=Z,3.0nm,0.9s
**CABF La Chapelle** 43.50 309 *e*P **P** 09 43 57.8 -0.9
CABF pmax pmax
comp=Z,2.0nm,0.6s
**NORES NORESS Array B** 44.11 330 P **P** 09 44 03.5 +0.2
**NC405 NORSAR Array S** 44.20 330 P **P** 09 44 04.1 +0.1
**NB201 NORSAR Array S** 44.36 330 P **P** 09 44 05.2 -0.1
**VIVF Saint-Julien-l** 44.36 306 *e*P **P** 09 44 04.9 -0.7
VIVF pmax pmax
comp=Z,2.0nm,0.7s
**NB2 NORSAR Subarra** 44.39 330 P **P** 09 44 05.0 -0.5
comp=Z,0.6nm,0.4s,baz=134,slow=7.4
**NB2 NORSAR Subarra** 44.39 330 P **P** 09 44 06.0 +0.5
**NOA NORSAR Array B** 44.39 330 P **P** 09 44 05.0 -0.5
comp=Z,0.5nm,0.4s,baz=129,slow=7.6,SNR=8.2
comp=Z,0.5nm,0.4s
**NOA NORSAR Array B** 44.39 330 P **P** 09 44 05.0 -0.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SSB** | **Saint Sauveur** | **44.48** | **307** | P | **P** | **09 44 06.4** | **-0.1** |
| SSB | | | | IAmb | IAmb | 09 44 06.7 | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **SSB** | **Saint Sauveur** | **44.48** | **307** | P | **P** | **09 44 06.4** | **-0.1** |
| SSB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **KEV** | **Kevo** | **44.51** | **345** | P | **P** | **09 44 07.2** | **+0.9** |
| KEV | | | | IAmb | IAmb | 09 44 07.9 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **KEV** | **Kevo** | **44.51** | **345** | P | **P** | **09 44 07.2** | **+0.9** |
| KEV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **44.68** | **345** | P | **P** | **09 44 08.6** | **+1.0** |
| ARCES | | | | IAmb | IAmb | 09 44 09.3 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **44.68** | **345** | P | **P** | **09 44 07.8** | **+0.2** |
| | comp=Z,1.4nm,0.4s,baz=134,slow=8.7,SNR=21 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **44.68** | **345** | P | **P** | **09 44 08.6** | **+1.0** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **GIVF** | **Givet** | **44.75** | **313** | *eP* | **P** | **09 44 08.4** | **-0.1** |
| GIVF | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **SMF** | **Signal de Mont** | **45.05** | **308** | *eP* | **P** | **09 44 09.7** | **-1.2** |
| SMF | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **SSF** | **Saint Saulge** | **45.30** | **309** | *eP* | **P** | **09 44 11.8** | **-1.1** |
| SSF | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.36** | **60** | *eP* | **P** | **09 44 15.8** | **+2.2** |
| HHC | | | | sP | pP | 09 44 24.0 | -14 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,53nm,4.5s | | | | | | |
| **AVF** | **Avril sur Loir** | **45.39** | **309** | *eP* | **P** | **09 44 12.2** | **-1.4** |
| AVF | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BGF** | **Bois d'Agland** | **45.73** | **308** | *eP* | **P** | **09 44 15.1** | **-1.2** |
| BGF | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **46.15** | **308** | *eP* | **P** | **09 44 18.7** | **-1.0** |
| TCF | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **CAF** | **Calviac** | **46.22** | **306** | *eP* | **P** | **09 44 19.5** | **-0.7** |
| CAF | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **RJF** | **Les Rejaudoux** | **46.61** | **306** | *eP* | **P** | **09 44 22.7** | **-0.6** |
| RJF | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **CEST** | **Esterri de Car** | **46.83** | **303** | P | **P** | **09 44 25.0** | **-0.1** |
| CEST | | | | IAmb | IAmb | 09 44 41.2 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **QUIF** | **Quistinic** | **49.85** | **310** | *eP* | **P** | **09 44 47.0** | **-1.1** |
| QUIF | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| **ROSF** | **Rostrenen** | **49.92** | **310** | *eP* | **P** | **09 44 48.3** | **-0.3** |
| ROSF | | | | pmax | pmax | | |
| | comp=Z,53nm,1.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **50.21** | **320** | P | **P** | **09 44 50.4** | **-0.3** |
| | comp=Z,0.5nm,0.3s,baz=101,slow=7.6,SNR=7.7 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **ESK** | **Eskdalemuir** | **50.24** | **320** | P | **P** | **09 44 50.8** | **-0.1** |
| ESK | | | | IAmb | IAmb | 09 45 17.1 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **ESK** | **Eskdalemuir** | **50.24** | **320** | P | **P** | **09 44 50.8** | **-0.1** |
| ESK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **BKNI** | **Bangkinang** | **50.36** | **116** | P | P | 09 44 58.3 | +6.0 |
| **ESDC** | **Sonseca Array** | **51.00** | **299** | P | **P** | **09 44 57.0** | **+0.1** |
| | comp=Z,1.4nm,0.8s,baz=67,slow=6.6,SNR=11 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **PAB** | **San Pablo** | **51.32** | **299** | P | **P** | **09 44 59.7** | **+0.4** |
| PAB | | | | IAmb | IAmb | 09 45 00.5 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **PAB** | **San Pablo** | **51.32** | **299** | P | **P** | **09 44 59.7** | **+0.4** |
| PAB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **PBAR** | **Barrancos** | **53.61** | **298** | *eP* | **P** | **09 45 16.3** | **+0.1** |
| | comp=Z,15nm,1.4s | | | | | | |
| **PVRL** | **Vila Real** | **53.61** | **302** | *eP* | **P** | **09 45 15.7** | **-0.6** |
| **POLO** | **Lamas de Olo** | **53.66** | **302** | *eP* | **P** | **09 45 16.7** | **+0.1** |
| **PCBR** | **Castelo Branco** | **53.66** | **300** | *eP* | **P** | **09 45 17.3** | **+0.8** |
| **PMRV** | **Marv??o** | **53.66** | **300** | *eP* | **P** | **09 45 16.1** | **-0.5** |
| **PVIS** | **Viseu** | **53.83** | **301** | *eP* | **P** | **09 45 18.7** | **+0.8** |
| **KBS** | **Kingsbay** | **53.86** | **350** | P | **P** | **09 45 18.6** | **+1.3** |
| KBS | | | | IAmb | IAmb | 09 45 44.0 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **KBS** | **Kingsbay** | **53.86** | **350** | P | **P** | **09 45 18.7** | **+1.3** |
| KBS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **53.88** | **265** | P | **P** | **09 45 19.0** | **+0.6** |
| **TORD** | **Torodi Ar. Bea** | **53.88** | **265** | P | **P** | **09 45 18.4** | **0.0** |
| | comp=Z,7.0nm,0.6s,baz=60,slow=7.5,SNR=80 | | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **53.91** | **299** | *eP* | **P** | **09 45 18.8** | **+0.4** |
| **PBEJ** | **Beja** | **54.28** | **298** | *eP* | **P** | **09 45 21.5** | **+0.4** |
| **PVAQ** | **Vaqueiros** | **54.28** | **297** | *eP* | **P** | **09 45 21.1** | **0.0** |
| **EVO** | **Evora** | **54.30** | **299** | *eP* | **P** | **09 45 22.0** | **+0.8** |
| **PCVE** | **Castro Verde** | **54.49** | **297** | *eP* | **P** | **09 45 22.7** | **+0.1** |
| **PNCL** | **Nicolau / Gran** | **54.77** | **298** | *eP* | **P** | **09 45 25.4** | **+0.8** |
| **PFVI** | **Vila Bisbo** | **55.20** | **297** | P | **P** | **09 45 28.5** | **+0.7** |
| **KSRS** | **Korea Array** | **58.41** | **62** | P | **P** | **09 45 50.1** | **-0.3** |
| | comp=Z,0.8nm,0.5s,baz=279,slow=7.0,SNR=6.5 | | | | | | |
| KSRS | | | | pP | **pP** | **09 46 16.4** | **+0.7** |
| | comp=Z,0.7nm,0.8s,baz=274,slow=6.5,SNR=2.1 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **58.81** | **48** | pP | pP | 09 46 19.4 | +1.3 |
| | comp=Z,2.1nm,0.8s,baz=287,slow=4.7,SNR=3.8 | | | | | | |
| **BORG** | **Borgarnes** | **59.55** | **331** | P | **P** | **09 45 59.4** | **+1.6** |
| **SUMG** | **Summit** | **64.50** | **341** | P | **P** | **09 46 32.9** | **+1.6** |
| **SUMG** | **Summit** | **64.50** | **341** | P | **P** | **09 46 32.9** | **+1.6** |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **BOSA** | **Boshof** | **64.90** | **211** | P | **P** | **09 46 33.6** | **-0.5** |
| | comp=Z,1.6nm,0.5s,baz=50,slow=6.8,SNR=4.0 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **SUR** | **Sutherland** | **70.12** | **212** | P | P | 09 47 10.9 | +3.9 |
| **B20K** | **Meade River** | **78.33** | **12** | P | **P** | **09 47 55.6** | **+1.7** |
| **B21K** | **Ikpikpuk River** | **79.11** | **11** | P | **P** | **09 48 00.0** | **+1.8** |
| B21K | | | | IAmb | IAmb | 09 48 00.4 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **80.08** | **11** | P | **P** | **09 48 05.2** | **+1.6** |
| D22K | | | | IAmb | IAmb | 09 48 05.3 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **80.78** | **10** | P | **P** | **09 48 08.9** | **+1.6** |
| TOLK | | | | IAmb | IAmb | 09 48 09.4 | |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **81.46** | **10** | P | **P** | **09 48 13.1** | **+2.1** |
| E24K | | | | IAmb | IAmb | 09 48 13.5 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **82.49** | **12** | P | **P** | **09 48 17.3** | **+0.9** |
| **BMAR** | **Burnt Mountain** | **82.61** | **8** | P | **P** | **09 48 19.1** | **+2.2** |
| **G24K** | **Hadweenzic Riv** | **82.89** | **10** | P | **P** | **09 48 20.2** | **+1.8** |
| G24K | | | | IAmb | IAmb | 09 48 20.8 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **DRLN** | **Deer Lake** | **83.10** | **323** | P | **P** | **09 48 20.2** | **+0.4** |
| **SCHG** | **Schefferville** | **83.94** | **331** | P | **P** | **09 48 23.9** | **-0.1** |
| | comp=Z,3.6nm,0.6s,baz=20,slow=2.6,SNR=7.2 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.78** | **10** | P | **P** | **09 48 27.8** | **-0.2** |
| | comp=Z,0.7nm,0.6s,baz=319,slow=4.6,SNR=13 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **88.61** | **114** | P | **P** | **09 48 47.4** | **+0.1** |
| | comp=Z,0.3nm,0.6s,baz=317,slow=3.9,SNR=6.0 | | | | | | |
| WRA | | | | pP | **pP** | **09 49 15.3** | **+1.4** |
| | comp=Z,0.5nm,0.6s,baz=315,slow=4.1,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **90.19** | **117** | P | **P** | **09 48 54.6** | **-0.1** |
| | comp=Z,0.6nm,0.6s,baz=304,slow=4.7,SNR=8.7 | | | | | | |
| ASAR | | | | pP | **pP** | **09 49 22.2** | **+0.9** |
| | comp=Z,0.2nm,0.5s,baz=303,slow=5.0,SNR=1.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **119.40** | **341** | PKP | **PKiKP** | **09 54 42.9** | **-0.7** |
| | comp=Z,0.3nm,0.5s,baz=193,slow=2.1,SNR=5.1 | | | | | | |

**ISK 04 09:40:20.7,41°.27N×28°.88E,h0km,ML1.1/4,Suspected Mining explosion.,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BGKT** | **Bogazkoy** | **0.12** | **223** | Pg | Pg | 09 40 23.8 | +0.7 |
| BGKT | | | | Sg | Sg | 09 40 26.1 | +1.5 |
| **ISK** | **Istanbul-Kandi** | **0.24** | **147** | Pg | Pg | 09 40 25.9 | +0.5 |
| **KAVV** | **Kandilli-Istan** | **0.25** | **147** | Pg | Pg | 09 40 26.2 | +0.8 |
| KAVV | | | | Sg | Sg | 09 40 30.2 | +1.6 |
| **CTKS** | **Kestanelik-??a** | **0.29** | **263** | Pg | Pg | 09 40 26.9 | +0.7 |
| CTKS | | | | Sg | Sg | 09 40 31.4 | +1.5 |

*IDC **04** 09:41:48.7±1.1,40°.19N×139°.58E,h203km±15km,mb3.4/5, mbtmp3.9/9,Error ellipse: s-maj=25.3km s-min=13.0km az=94.0*
*JMA **04** 09:41:49.7±0.1,40°.2N±0°.3×139°.4E±0°.7,h203km±1km, MV3.4/37,OGA PENINSULA REGION*

**ISC 04 09:41:48.7±0.8,40°.12N±0°.06×139°.46E±0°.09,h200km,n20, σ1§84/25,mb3.6/5,Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOG3** | **Oga3** | **0.35** | **235** | *eP* | **Pn** | **09 42 16.8** | **+1.4** |
| JOG3 | | | | S | **Sn** | **09 42 37.8** | **+1.9** |
| **JNTW** | **Noshirotokiwa** | **0.56** | **74** | P | **Pn** | **09 42 17.5** | **+1.5** |
| **JIW** | **Iwasaki** | **0.63** | **42** | P | **Pn** | **09 42 17.7** | **+1.3** |
| **JYW** | **Yuwa** | **0.82** | **135** | P | **Pn** | **09 42 19.0** | **+1.6** |
| **JAH** | **Hinai** | **0.91** | **86** | P | **Pn** | **09 42 19.2** | **+1.3** |
| JAH | | | | S | **Sn** | **09 42 42.1** | **+1.7** |
| **JSZI** | **Iwateshizukuis** | **1.21** | **108** | P | **Pn** | **09 42 21.7** | **+1.7** |
| **JYK** | **Kaneyama** | **1.39** | **150** | P | **Pn** | **09 42 23.1** | **+1.5** |
| JYK | | | | S | **Sn** | **09 42 49.1** | **+2.2** |
| **JTM** | **Tenmabayashi** | **1.40** | **61** | P | **Pn** | **09 42 22.8** | **+1.3** |
| **JOMM** | **Oshimamatsumae** | **1.46** | **16** | P | **Pn** | **09 42 23.3** | **+1.3** |
| **JANG** | **Nango** | **1.59** | **80** | P | **Pn** | **09 42 24.4** | **+1.1** |
| **JMK** | **Ichinoseki** | **1.80** | **130** | P | **Pn** | **09 42 26.3** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **3.71** | **196** | P | **Pn** | **09 42 48.8** | **+1.8** |
| | 4.1nm,0.3s,baz=8.7,slow=13,SNR=28 | | | | | | |
| **ASAJ** | **Asahikawa** | **4.62** | **29** | P | **Pn** | **09 42 58.5** | **+0.3** |
| | 10nm,0.3s,baz=228,slow=8.1,SNR=46 | | | | | | |
| ASAJ | | | | S | **Sn** | **09 43 50.4** | **-2.7** |
| | 5.7nm,0.7s,baz=277,slow=34,SNR=1.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **6.88** | **309** | P | **Pn** | **09 43 28.0** | **+0.7** |
| | 1.2nm,0.5s,baz=119,slow=13,SNR=5.3 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **7.00** | **178** | P | **Pn** | **09 43 28.7** | **-0.3** |
| | 15nm,0.3s,baz=93,slow=23,SNR=11 | | | | | | |
| JHJ | | | | S | **Sn** | **09 44 43.0** | **-5.5** |
| | 23nm,0.3s,baz=49,slow=22,SNR=8.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.73** | **310** | P | **P** | **09 48 52.8** | **-0.5** |
| | 0.6nm,0.4s,baz=96,slow=9.4,SNR=3.4 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **41.23** | **299** | P | **P** | **09 49 13.8** | **-0.1** |
| | 0.3nm,0.4s,baz=78,slow=8.5,SNR=4.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.93** | **305** | P | **P** | **09 49 27.3** | **-0.2** |
| | 3.7nm,0.2s,baz=84,slow=9.2,SNR=4.2 | | | | | | |
| | 3.7nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **59.94** | **186** | P | **P** | **09 51 34.3** | **+0.4** |
| | 0.1nm,0.4s,baz=7.1,slow=6.7,SNR=6.0 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **65.37** | **331** | P | **P** | **09 52 08.8** | **-0.5** |
| | 2.6nm,1.0s,baz=66,slow=4.7,SNR=2.4 | | | | | | |
| | 2.6nm,1.0s | | | | | | |

*IDC **04** 10:09:15.2±1.3,31°.68S×178°.98W,h0km,mb3.6/3, mbtmp3.7/4,ML3.7/1,Error ellipse: s-maj=39.1km s-min=30.8km az=80.0*

**ISC 04 10:09:31.3±1.7,32.7S±0°.2×179.0W±0°.3,h150km,n8, σ1§22/8,mb3.4/3,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **6.40** | **209** | Pn | **Pn** | **10 11 02.0** | **-1.2** |
| | 1.2nm,0.3s,baz=344,slow=2.5,SNR=12 | | | | | | |
| URZ | | | | Sn | **Sn** | **10 12 16.4** | **+1.2** |
| | 0.2nm,0.3s,baz=81,slow=17,SNR=1.1 | | | | | | |
| | 16nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **42.23** | **270** | P | **P** | **10 17 09.8** | **0.0** |
| | 0.3nm,0.8s,baz=108,slow=6.8,SNR=5.2 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.43** | **275** | P | **P** | **10 17 19.5** | **0.0** |
| | 0.5nm,0.5s,baz=112,slow=7.9,SNR=14 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **57.40** | **180** | P | P | 10 19 12.6 | +8.8 |
| | 0.6nm,0.5s,baz=28,slow=19,SNR=9.6 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **147.01** | **338** | PKPbc | **PKPab** | **10 28 56.3** | **-1.1** |
| | 0.6nm,0.4s,baz=58,slow=4.9,SNR=15 | | | | | | |
| **NB2** | **NORSAR Subarra** | **150.89** | **350** | PKP | **PKiKP** | **10 29 06.6** | **+0.6** |
| | comp=Z,0.4nm,0.6s,baz=17,slow=2.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **150.89** | **350** | PKPbc | **PKPbc** | **10 29 05.1** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=15,slow=4.1,SNR=3.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **152.58** | **319** | PKPbc | **PKiKP** | **10 29 11.4** | **+1.7** |
| | comp=Z,0.2nm,0.2s,baz=42,slow=1.9,SNR=2.0 | | | | | | |

*NOU **04** 10:17:20.4,14°.33S×170°.22E,h623km,ML5.0/110, Vanuatu Islands Region*
*IDC **04** 10:17:20.1±0.5,14°.37S×170°.17E,h612km±5km,mb4.3/19, mbtmp5.3/20,Error ellipse: s-maj=8.5km s-min=8.0km az=141.0*
*NEIC **04** 10:17:21.1±1.7,14°.35S±0°.09×170°.18E±0°.10,h616km±7km, mb4.7/250,Error ellipse: s-maj=13.6km s-min=13.3km az=134.0*

**ISC 04 10:17:20.5±0.2,14°.37S±0°.04×170°.14E±0°.04,h614km, n663,σ1§26/618,mb4.7/168,12C-2D,Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **3.78** | **206** | P | **P** | **10 18 47.5** | **+2.0** |
| **DVP** | **Devils Point** | **3.83** | **209** | P | **P** | **10 18 46.6** | **+0.8** |
| **LIFNC** | **LIFOU** | **6.94** | **203** | P | **P** | **10 19 11.0** | **+0.4** |
| **MARNC** | **Mare, Loyalty** | **7.35** | **196** | P | **P** | **10 19 14.5** | **+0.3** |
| **KOUNC** | **Koumac, New Ca** | **8.30** | **221** | P | **P** | **10 19 24.6** | **+1.5** |
| **MSVF** | **Nonsavu** | **8.30** | **115** | P | **P** | **10 19 24.0** | **+0.7** |
| **MSVF** | **Nonsavu** | **8.30** | **115** | P | **P** | **10 19 24.3** | **+1.0** |
| | 1µm,0.7s,baz=272,slow=10,SNR=999 | | | | | | |
| MSVF | | | | S | **S** | **10 21 03.9** | **0.0** |
| | 20nm,0.8s,baz=223,slow=18,SNR=0.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **8.42** | **204** | P | **P** | **10 19 26.2** | **+1.8** |
| **DZM** | **Mont Dzumac** | **8.42** | **204** | P | **P** | **10 19 25.6** | **+1.2** |
| | 262nm,0.6s,baz=68,slow=19,SNR=191 | | | | | | |
| DZM | | | | S | **S** | **10 21 07.9** | **+2.0** |
| | 75nm,1.0s,baz=355,slow=13,SNR=4.0 | | | | | | |
| **PINNC** | **Pines Island,** | **8.59** | **197** | P | **P** | **10 19 27.1** | **+1.3** |
| **ONTNC** | **Ouen Toro** | **8.63** | **203** | P | **P** | **10 19 28.0** | **+1.7** |
| **HNR** | **Honiara** | **11.12** | **295** | P | **P** | **10 19 50.4** | **-0.3** |
| **HNR** | **Honiara** | **11.12** | **295** | P | **P** | **10 19 49.9** | **-0.8** |
| **NFK** | **Norfolk Island** | **14.74** | **188** | P | **P** | **10 20 26.9** | **+1.2** |
| **NFK** | **Norfolk Island** | **14.74** | **188** | P | **P** | **10 20 27.3** | **+1.6** |
| | 2µm,1.0s,SNR=19 | | | | | | |
| **TARA** | **Tarawa** | **15.87** | **10** | P | **P** | **10 20 35.0** | **-1.1** |
| **AFI** | **Afiamalu** | **17.54** | **91** | P | **P** | **10 20 51.0** | **-0.5** |
| **GLKZ** | **Green Lake** | **18.48** | **145** | P | **P** | **10 21 03.1** | **+3.4** |
| **NIUE** | **Niue** | **19.65** | **107** | P | **P** | **10 21 09.6** | **-0.9** |
| **NIUE** | **Niue** | **19.65** | **107** | P | **P** | **10 21 09.7** | **-0.8** |
| **LHI** | **Lord Howe Isla** | **19.86** | **209** | P | **P** | **10 21 13.3** | **+1.1** |
| **RABL** | **Rabaul** | **20.41** | **298** | P | **P** | **10 21 16.1** | **-1.4** |
| **RK1H** | **Rockhampton Ha** | **20.62** | **241** | P | **P** | **10 21 19.7** | **+0.5** |
| **EIDS** | **Eidsvold** | **20.97** | **236** | P | **P** | **10 21 22.3** | **0.0** |
| **EIDS** | **Eidsvold** | **20.97** | **236** | P | **P** | **10 21 22.6** | **+0.2** |
| **EIDS** | **Eidsvold** | **20.97** | **236** | P | **P** | **10 21 22.6** | **+0.2** |
| | 90nm,0.6s,SNR=20 | | | | | | |
| **OUZ** | **Omahuta** | **20.99** | **172** | P | **P** | **10 21 23.9** | **+1.6** |
| **OUZ** | **Omahuta** | **20.99** | **172** | P | **P** | **10 21 23.9** | **+1.6** |
| **WCZ** | **Waipu Caves** | **21.80** | **171** | P | **P** | **10 21 31.5** | **+1.9** |
| **GRZ** | **Great Barrier** | **22.30** | **169** | P | **P** | **10 21 35.5** | **+1.5** |
| **ABAZ** | **Army Bay** | **22.53** | **170** | P | **P** | **10 21 37.5** | **+1.5** |
| **MBAZ** | **Motutapu North** | **22.70** | **170** | P | **P** | **10 21 39.2** | **+1.7** |
| **WIAZ** | **Waiheke Island** | **22.77** | **170** | P | **P** | **10 21 39.5** | **+1.3** |
| **WTAZ** | **Waiatarua** | **22.81** | **171** | P | **P** | **10 21 40.1** | **+1.6** |
| **KUZ** | **Kuaotunu** | **22.83** | **168** | P | **P** | **10 21 39.4** | **+0.7** |
| **KUZ** | **Kuaotunu** | **22.83** | **168** | P | **P** | **10 21 39.6** | **+0.9** |
| **TV1H** | **Townsville Har** | **22.86** | **255** | P | **P** | **10 21 40.0** | **+0.8** |
| **ETAZ** | **East Tamaki Re** | **22.89** | **170** | P | **P** | **10 21 41.3** | **+2.1** |
| **AWAZ** | **Awhitu Peninsu** | **22.95** | **171** | P | **P** | **10 21 41.1** | **+1.3** |
| **PMG** | **Port Moresby** | **23.02** | **280** | P | **P** | **10 21 41.8** | **+1.1** |
| **PMG** | **Port Moresby** | **23.02** | **280** | P | **P** | **10 21 41.4** | **+0.7** |
| **PMG** | **Port Moresby** | **23.02** | **280** | P | **P** | **10 21 41.1** | **+0.4** |
| | 137nm,0.8s,baz=74,slow=7.4,SNR=24 | | | | | | |
| | 137nm,0.8s | | | | | | |
| **MKAZ** | **Moumakai** | **23.08** | **170** | P | **P** | **10 21 42.2** | **+1.4** |
| **RMQ** | **Roma** | **23.34** | **236** | P | **P** | **10 21 44.7** | **+1.2** |
| **RMQ** | **Roma** | **23.34** | **236** | P | **P** | **10 21 44.7** | **+1.2** |
| | 61nm,0.8s,SNR=3.8 | | | | | | |
| **ARMA** | **Armidale** | **23.35** | **224** | P | **P** | **10 21 44.5** | **+0.9** |
| **ARMA** | **Armidale** | **23.35** | **224** | P | **P** | **10 21 44.5** | **+0.9** |
| **ARMA** | **Armidale** | **23.35** | **224** | P | **P** | **10 21 44.4** | **+0.8** |
| | 162nm,1.0s,SNR=12 | | | | | | |
| **CTA** | **Charters Tower** | **23.50** | **253** | P | **P** | **10 21 45.6** | **+0.7** |
| **CTA** | **Charters Tower** | **23.50** | **253** | P | **P** | **10 21 45.6** | **+0.7** |
| | 3.7nm,0.7s,baz=81,slow=11,SNR=78 | | | | | | |
| CTA | | | | S | **S** | **10 25 16.4** | **-0.7** |
| | 1.2nm,1.1s,baz=9.8,slow=9.7,SNR=8.9 | | | | | | |
| CTA | | | | ScP | **ScP** | **10 27 49.5** | **+0.4** |
| | 0.3nm,0.9s,baz=37,slow=2.6,SNR=4.7 | | | | | | |
| **CTAO** | **Charters Tower** | **23.50** | **253** | P | **P** | **10 21 45.6** | **+0.7** |
| **CTAO** | **Charters Tower** | **23.50** | **253** | P | **P** | **10 21 45.4** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 10 21 46.5 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **TOZ** | **Tahuroa Road** | **23.75** | **169** | P | **P** | **10 21 47.9** | **+1.1** |
| **MXZ** | **Matakaoa Point** | **24.21** | **164** | P | **P** | **10 21 49.5** | **-1.4** |
| **HIZ** | **Hauiti** | **24.40** | **171** | P | **P** | **10 21 53.7** | **+1.1** |
| **HIZ** | **Hauiti** | **24.40** | **171** | P | **P** | **10 21 53.5** | **+0.9** |
| **URZ** | **Urewera** | **24.58** | **167** | P | **P** | **10 21 53.5** | **-0.6** |
| **RTZ** | **Ruatahuna** | **24.89** | **167** | P | **P** | **10 21 55.8** | **-1.2** |
| **KHEZ** | **Kahui Hut** | **25.06** | **173** | P | **P** | **10 21 58.0** | **-0.5** |
| **MTSU** | **Mount Surprise** | **25.07** | **258** | P | **P** | **10 21 59.4** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **25.32** | **168** | P | **P** | **10 21 59.9** | **-0.9** |
| **BKZ** | **Black Stump Fm** | **25.32** | **168** | P | **P** | **10 21 59.6** | **-1.1** |
| **MANU** | **Manus Island** | **25.62** | **297** | P | **P** | **10 22 03.5** | **-0.2** |
| **RIV** | **Riverview** | **25.91** | **218** | P | **P** | **10 22 07.5** | **+1.6** |
| **RIV** | **Riverview** | **25.91** | **218** | P | **P** | **10 22 06.6** | **+0.7** |
| | comp=Z,303nm,1.2s,SNR=9.1 | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **26.11** | **219** | P | **P** | **10 22 08.6** | **+0.9** |
| **COEN** | **Coen** | **26.15** | **268** | P | **P** | **10 22 09.1** | **+0.8** |
| **COEN** | **Coen** | **26.15** | **268** | P | **P** | **10 22 08.7** | **+0.3** |
| **COEN** | **Coen** | **26.15** | **268** | P | **P** | **10 22 08.5** | **+0.2** |
| | comp=Z,107nm,0.8s,SNR=14 | | | | | | |
| **QRZ** | **Quartz Range** | **26.44** | **176** | P | **P** | **10 22 11.5** | **+1.1** |
| **QRZ** | **Quartz Range** | **26.44** | **176** | P | **P** | **10 22 11.3** | **+0.9** |
| **WOLH** | **Wollongong Har** | **26.48** | **218** | P | **P** | **10 22 12.2** | **+1.3** |
| **MRZ** | **Mangatainoka R** | **26.62** | **171** | P | **P** | **10 22 10.3** | **-1.7** |
| **TKNZ** | **Takaka Hill** | **26.68** | **175** | P | **P** | **10 22 13.1** | **+0.6** |
| **BFZ** | **Birch Farm** | **26.75** | **170** | P | **P** | **10 22 11.4** | **-1.8** |
| **BFZ** | **Birch Farm** | **26.75** | **170** | P | **P** | **10 22 11.3** | **-1.9** |
| **NNZ** | **Nelson** | **26.89** | **175** | P | **P** | **10 22 14.6** | **+0.2** |
| **TCW** | **Tory Channel** | **26.98** | **173** | P | **P** | **10 22 14.7** | **-0.5** |
| **MRNZ** | **Matariki Terra** | **27.02** | **176** | P | **P** | **10 22 15.6** | **+0.1** |
| **QLP** | **Quilpie** | **27.08** | **239** | P | **P** | **10 22 16.7** | **+0.4** |
| **QLP** | **Quilpie** | **27.08** | **239** | P | **P** | **10 22 16.6** | **+0.4** |
| | comp=Z,296nm,1.0s,SNR=24 | | | | | | |
| **SNZO** | **South Karori** | **27.13** | **172** | P | **P** | **10 22 15.2** | **-1.3** |
| **SNZO** | **South Karori** | **27.13** | **172** | P | **P** | **10 22 15.2** | **-1.3** |
| **TUWZ** | **Tuamarina** | **27.16** | **174** | P | **P** | **10 22 16.5** | **-0.2** |
| **YNG** | **Young** | **27.93** | **221** | P | **P** | **10 22 24.4** | **+0.8** |
| **YNG** | **Young** | **27.93** | **221** | P | **P** | **10 22 24.7** | **+1.1** |
| | comp=Z,24nm,SNR=24 | | | | | | |
| **CNB** | **Canberra Magne** | **28.00** | **218** | P | **P** | **10 22 25.1** | **+0.8** |
| **CNB** | **Canberra Magne** | **28.00** | **218** | P | **P** | **10 22 25.4** | **+1.2** |
| | comp=Z,82nm,SNR=82 | | | | | | |
| **KHZ** | **Kahutara** | **28.10** | **175** | P | **P** | **10 22 23.4** | **-1.5** |
| **CMSA** | **Cobar Meteorol** | **28.16** | **228** | P | **P** | **10 22 25.9** | **+0.3** |
| **CMSA** | **Cobar Meteorol** | **28.16** | **228** | P | **P** | **10 22 26.2** | **+0.6** |
| | comp=Z,165nm,SNR=165 | | | | | | |
| **CAN** | **Canberra** | **28.22** | **219** | P | **P** | **10 22 26.9** | **+0.7** |
| **CAN** | **Canberra** | **28.22** | **219** | P | **P** | **10 22 26.8** | **+0.6** |
| **CAN** | **Canberra** | **28.22** | **219** | P | **P** | **10 22 27.1** | **+0.9** |
| | comp=Z,31nm,SNR=31 | | | | | | |
| **AMCZ** | **Amberley** | **28.78** | **176** | P | **P** | **10 22 30.1** | **-0.7** |
| **RPZ** | **Rata Peaks** | **29.25** | **179** | P | **P** | **10 22 34.2** | **-0.7** |
| **RPZ** | **Rata Peaks** | **29.25** | **179** | P | **P** | **10 22 34.1** | **-0.7** |
| | comp=Z,117nm,0.5s,baz=342,slow=1.5,SNR=81 | | | | | | |
| | comp=Z,117nm,0.5s | | | | | | |
| **MILA** | **Mila** | **29.32** | **216** | P | **P** | **10 22 36.0** | **+0.3** |
| **MILA** | **Mila** | **29.32** | **216** | P | **

MTN **Manton Dam** 37.92 267 P **P** **10 23 47.9 +0.2**
MTN **Manton Dam** 37.92 267 P **P** **10 23 48.0 +0.4**
MTN IAmb IAmb 10 23 48.5
comp=Z,61nm,0.7s
MTN **Manton Dam** 37.92 267 P **P** **10 23 47.7 0.0**
comp=Z,30nm,SNR=30
DRS **Darwin Rock St** 38.19 268 P **P** **10 23 49.7 -0.2**
SAUI **Saumlaki** 38.59 275 P **P** **10 23 54.5 +1.4**
PPT **Papeete** 38.81 100 P **P** **10 23 54.2 -0.6**
comp=Z,93nm,0.7s,baz=273,slow=7.1,SNR=8.1
comp=Z,93nm,0.7s
PPTF **Pamatai, Papee** 38.82 100 P **P** **10 23 55.1 +0.2**
PPTF **Pamatai, Papee** 38.82 100 P **P** **10 23 55.2 +0.2**
FAKI **Fak Fak** 39.08 283 P **P** **10 23 56.9 -0.1**
FAKI **Fak Fak** 39.08 283 P **P** **10 23 57.0 -0.1**
FAKI **Fak Fak** 39.08 283 P **P** **10 23 55.8 -1.3**
comp=Z,176nm,1.1s,comp=Z,2µm
KNRA **Kununurra** 39.94 263 P **P** **10 24 03.8 -0.1**
KNRA **Kununurra** 39.94 263 P **P** **10 24 03.6 -0.3**
comp=Z,39nm,SNR=39
WRKA **Warakurna** 40.65 248 P **P** **10 24 09.8 +0.3**
WRKA **Warakurna** 40.65 248 P **P** **10 24 09.9 +0.4**
comp=Z,23nm,SNR=23
SWI **Sorong** 40.71 286 P **P** **10 24 09.1 -0.9**
comp=Z,320nm,1.0s,comp=Z,3µm
FORT **Forrest** 41.87 240 P **P** **10 24 18.8 -0.1**
FORT **Forrest** 41.87 240 P **P** **10 24 19.0 +0.1**
FORT **Forrest** 41.87 240 P **P** **10 24 19.2 +0.3**
comp=Z,9.5nm,SNR=9.5
FITZ **Fitzroy Crossi** 42.81 259 P **P** **10 24 27.0 +0.5**
NLAI **Namlea** 43.86 280 P **P** **10 24 35.2 +0.6**
comp=Z,122nm,0.9s,comp=Z,1µm
SOEI **Soe** 45.04 270 P **P** **10 24 44.6 +0.8**
SOEI **Soe** 45.04 270 P **P** **10 24 44.8 +1.0**
SOEI **Soe** 45.04 270 P **P** **10 24 44.7 +1.0**
comp=Z,171nm,0.9s
SANI **Sanana** 45.28 282 P **P** **10 24 45.2 -0.3**
SANI **Sanana** 45.28 282 P **P** **10 24 45.1 -0.4**
comp=Z,87nm,0.8s,comp=Z,1µm
BATI **Baumata** 45.55 270 P **P** **10 24 48.3 +0.8**
KMBL **Kambalda** 47.18 240 P **P** **10 24 59.2 -0.4**
KMBL **Kambalda** 47.18 240 P **P** **10 24 59.4 -0.2**
comp=Z,8.2nm,SNR=8.2
MMRI **Maumere** 47.22 271 P **P** **10 24 59.9 -0.1**
MMRI **Maumere** 47.22 271 P **P** **10 24 59.2 -0.9**
comp=Z,197nm,0.9s,comp=Z,3µm
PSA00 **Pilbara Seismi** 48.21 254 P **P** **10 25 07.2 -0.1**
PSA00 **Pilbara Seismi** 48.21 254 P **P** **10 25 07.6 +0.3**
PSA00 IAmb IAmb 10 25 08.1
comp=Z,22nm,0.6s
PSA00 **Pilbara Seismi** 48.21 254 P **P** **10 25 07.7 +0.3**
comp=Z,6.4nm,SNR=6.4
MBWA **Marble Bar** 48.32 254 P **P** **10 25 08.3 +0.2**
MBWA **Marble Bar** 48.32 254 P **P** **10 25 08.4 +0.2**
MBWA IAmb IAmb 10 25 09.3
comp=Z,14nm,0.5s
MBWA **Marble Bar** 48.32 254 P **P** **10 25 08.5 +0.4**
comp=Z,4.6nm,SNR=4.6
LUWI **Luwuk** 48.65 281 P **P** **10 25 10.7 0.0**
LUWI **Luwuk** 48.65 281 P **P** **10 25 11.8 +1.1**
comp=Z,164nm,1.0s,comp=Z,3µm
JCJ **Chichijima** 49.36 327 P **P** **10 25 15.1 -0.5**
JCJ **Chichijima** 49.36 327 P **P** **10 25 15.4 -0.2**
MEEK **Meekatharra** 49.49 247 P **P** **10 25 16.2 -0.5**
MEEK **Meekatharra** 49.49 247 P **P** **10 25 12.9 -3.8**
comp=Z,5.7nm,SNR=5.7
BNSI **Bone** 50.25 276 P **P** **10 25 23.0 +0.6**
comp=Z,99nm,1.0s
KAPI **Kappang** 50.44 275 P **P** **10 25 24.0 +0.3**
KAPI **Kappang** 50.44 275 P **P** **10 25 24.0 +0.3**
KAPI IAmb IAmb 10 25 24.9
comp=Z,60nm,1.1s
KLBR **Kellerberrin** 50.70 241 P **P** **10 25 24.6 -0.8**
KLBR **Kellerberrin** 50.70 241 P **P** **10 25 24.8 -0.6**
comp=Z,8.0nm,SNR=8.0
TOLI2 **Tolitoli** 51.22 283 P **P** **10 25 28.9 -0.5**
TOLI2 **Tolitoli** 51.22 283 P **P** **10 25 29.0 -0.4**
TOLI2 IAmb IAmb 10 25 29.7
comp=Z,64nm,1.0s
NWAO **Narrogin (SRO)** 51.32 239 P **P** **10 25 29.4 -0.4**
NWAO **Narrogin (SRO)** 51.32 239 P **P** **10 25 29.7 -0.1**
NWAO IAmb IAmb 10 25 30.3
comp=Z,92nm,0.9s
BLDU **Ballidu** 51.48 242 P **P** **10 25 30.5 -0.6**
PLAI **Plampang** 51.51 270 P **P** **10 25 30.9 -0.5**
PLAI **Plampang** 51.51 270 P **P** **10 25 31.7 +0.3**
comp=Z,127nm,0.8s
MPSI **Mapaga** 51.81 282 P **P** **10 25 33.5 -0.1**
MORW **Morawa** 51.93 244 P **P** **10 25 34.2 -0.1**
MORW **Morawa** 51.93 244 P **P** **10 25 34.0 -0.2**
MORW IAmb IAmb 10 25 35.2
comp=Z,63nm,1.1s
MORW **Morawa** 51.93 244 P **P** **10 25 34.6 +0.4**
comp=Z,4.9nm,SNR=4.9
MUN **Mundaring** 52.06 241 P **P** **10 25 34.7 -0.4**
TWSI **Taliwang, Sumb** 52.39 270 P **P** **10 25 37.7 -0.1**
comp=Z,213nm,0.8s
GIRL **Giralia** 53.40 252 P **P** **10 25 45.7 +0.9**
GIRL **Giralia** 53.40 252 P **P** **10 25 46.1 +1.3**
MYLDM **Lahad Datu** 54.77 287 P **P** **10 25 57.1 +2.6**
MYLDM IAmb IAmb 10 25 58.6
comp=Z,140nm,1.5s
JAGI **Jajag, Banyuwa** 55.09 270 P **P** **10 25 54.9 -1.8**
JAGI **Jajag, Banyuwa** 55.09 270 P **P** **10 25 55.0 -1.7**
JAGI IAmb IAmb 10 25 55.7
comp=Z,48nm,0.5s
JHJ2 **Mitsune** 55.39 329 P **P** **10 25 59.0 +0.5**
JHJ2 IAmb IAmb 10 26 37.8
comp=Z,135nm,1.3s
KKM **Kota Kinabalu** 57.20 287 P **P** **10 26 11.0 -0.3**
KKM **Kota Kinabalu** 57.20 287 P **P** **10 26 11.4 +0.1**
KKM IAmb IAmb 10 26 11.7
comp=Z,42nm,0.5s
JOW **Kunigami** 57.72 315 P **P** **10 26 14.4 0.0**
JOW IAmb IAmb 10 26 15.6
comp=Z,26nm,0.6s
JGF **Kuroka** 58.60 329 P **P** **10 26 19.7 -0.5**
JGF **Kuroka** 58.60 329 P **P** **10 26 19.9 -0.3**
UGM **Wanagama** 58.72 269 P **P** **10 26 21.2 -0.3**
UGM **Wanagama** 58.72 269 P **P** **10 26 21.2 -0.3**
UGM IAmb IAmb 10 26 24.9
comp=Z,221nm,1.2s
MJAR **Matsushiro Arr** 58.93 330 P **P** **10 26 21.3 -1.1**
comp=Z,4.6nm,0.5s,baz=156,slow=6.6,SNR=21
comp=Z,4.6nm,0.5s
MAJO **Matsushiro** 58.93 330 P **P** **10 26 22.0 -0.4**
MAJO **Matsushiro** 58.93 330 P **P** **10 26 21.8 -0.6**
MJB9 **Matsu-Tunnel** 58.94 330 P **P** **10 26 21.6 -0.8**
JMN **Monobe** 59.01 325 P **P** **10 26 23.2 +0.2**
SBUM **Sibu** 59.75 281 P **P** **10 26 28.6 +0.3**
STKI **Sintang** 59.76 279 P **P** **10 26 30.3 +2.0**
YOJ **Yonaguni jima** 60.05 310 P **P** **10 26 29.7 -0.3**
YOJ IAmb IAmb 10 27 02.5
comp=Z,153nm,1.4s
JNU **Nakatsue** 60.30 322 P **P** **10 26 30.9 -0.6**
JNU **Nakatsue** 60.30 322 P **P** **10 26 31.1 -0.5**
JNU IAmb IAmb 10 26 32.7
comp=Z,31nm,0.9s
NACB **Ninganchiao** 60.96 308 P **P** **10 26 35.4 -0.6**
NACB **Ninganchiao** 60.96 308 IAmb IAmb 10 26 37.3
comp=Z,36nm,0.8s
TPUB **Ta-pu** 61.22 307 IAmb IAmb 10 26 37.6
comp=Z,92nm,0.7s
SSLB **Suanglung** 61.23 308 P **P** **10 26 36.9 -0.9**
SSLB **Suanglung** 61.23 308 IAmb IAmb 10 26 37.8
comp=Z,39nm,0.6s
KSM **Kuching** 61.28 280 P **P** **10 26 38.6 +0.3**
KSM IAmb IAmb 10 26 39.6
comp=Z,53nm,1.1s
ERM **Erimo** 61.38 337 P **P** **10 26 38.2 -0.1**
ERM **Erimo** 61.38 337 P **P** **10 26 38.4 +0.1**
YHNB **Yeheng** 61.40 309 P **P** **10 26 38.6 -0.3**
YHNB **Yeheng** 61.40 309 P **P** **10 26 38.6 -0.3**
YHNB IAmb IAmb 10 26 39.7
comp=Z,56nm,0.7s
BBJI **Bungbulang** 61.60 269 P **P** **10 26 39.9 -0.6**
JTU **Tsushima** 62.16 322 P **P** **10 26 43.0 -0.5**
VNDA **Vanda** 63.30 182 P **P** **10 26 50.5 +0.2**
VNDA IAmb IAmb 10 26 50.8
comp=Z,26nm,0.6s
VNDA **Vanda** 63.30 182 P **P** **10 26 50.4 +0.2**
comp=Z,23nm,0.6s,baz=356,slow=7.3,SNR=326
VNDA S **S** **10 34 33.1 -2.2**
comp=Z,0.3nm,0.4s,baz=288,slow=17,SNR=2.6
comp=Z,23nm,0.6s
JKA **Kamikawa-asahi** 63.40 338 P **P** **10 26 51.7 +0.4**
JKA IAmb IAmb 10 26 53.1
comp=Z,17nm,1.0s
SBA **Scott Base** 63.51 181 P **P** **10 26 52.9 +1.4**
CASY **Casey** 64.92 203 P **P** **10 27 00.5 -0.1**
CASY IAmb IAmb 10 27 01.1
comp=Z,74nm,0.6s
KSRS **Korea Array** 65.05 324 P **P** **10 27 02.1 +0.2**
comp=Z,4.4nm,1.0s,baz=148,slow=6.4,SNR=11
KSAR **Wonju Array Be** 65.07 324 P **P** **10 27 01.7 -0.3**
YSS **Yuzh-Sakhalins** 65.81 340 P **P** **10 27 07.3 +0.9**
DLV **T Lat** 66.45 290 IAmb IAmb 10 27 13.3
comp=Z,72nm,1.2s
KIWB **Kanaga Island** 66.87 9 P **P** **10 27 12.6 -0.2**
ADK **Adak** 66.97 9 P **P** **10 27 13.1 -0.3**
ADK IAmb IAmb 10 27 13.4
comp=Z,43nm,1.1s
GSTR **Great Sitkin T** 67.27 9 P **P** **10 27 14.5 -0.8**
NJ2 **Nanjing** 67.39 314 ⇑P **P** **10 27 14.1 -2.3**
NJ2 pmax pmax
comp=Z,25nm,0.9s
PET **Petropavlovsk** 67.85 353 P **P** **10 27 18.4 -0.3**
PET **Petropavlovsk** 67.85 353 P **P** **10 27 18.6 -0.1**
PET IAmb IAmb 10 27 18.7
comp=Z,16nm,0.5s
USA0B **Ussuriysk Arra** 67.87 331 P **P** **10 27 19.8 +0.7**
USRK **Ussuriysk Ar.** 67.87 331 P **P** **10 27 19.4 +0.3**
USRK **Ussuriysk Ar.** 67.87 331 P **P** **10 27 19.2 +0.1**
comp=Z,5.7nm,0.8s,baz=138,slow=5.3,SNR=11
comp=Z,5.7nm,0.8s
MDJ **Mudanjiang** 69.31 330 P **P** **10 27 28.1 +0.4**
MDJ S **S** **10 35 49.5 +2.7**
MDJ pmax pmax
comp=Z,16nm,1.0s
NIKH **Nikolski High** 69.47 13 P **P** **10 27 27.3 -1.1**
NIKH **Nikolski High** 69.47 13 P **P** **10 27 27.5 -0.9**
baz=202
DL2 **Dalian** 69.72 321 P **P** **10 27 30.9 +0.6**
DL2 pmax pmax
comp=Z,56nm,0.8s
WHN **Wuhan** 69.80 311 ⇑P **P** **10 27 31.2 +0.3**
WHN pmax pmax
comp=Z,50nm,0.7s
UBPT **Khong Chiam** 70.40 292 P **P** **10 27 35.2 +0.5**
UBPT IAmb IAmb 10 27 35.8
comp=Z,12nm,0.8s
CN2 **Changchun** 70.81 327 P **P** **10 27 36.9 +0.3**
CN2 pmax pmax
comp=Z,10.0nm,0.5s
UNV **Unalaska Valle** 70.82 14 P **P** **10 27 34.7 -1.7**
UNV **Unalaska Valle** 70.82 14 P **P** **10 27 35.0 -1.4**
baz=204
IPM **Ipoh** 71.02 280 P **P** **10 27 38.8 +0.3**
IPM IAmb IAmb 10 27 39.4
comp=Z,28nm,0.7s
BNX **BinXian** 71.19 330 ⇓P **P** **10 27 38.7 -0.1**
BNX pmax pmax
comp=Z,7.0nm,0.7s
KULM **Kulim** 71.61 281 P **P** **10 27 42.1 +0.2**
KULM IAmb IAmb 10 27 42.6
comp=Z,11nm,0.8s
HNS **HongShan** 73.22 317 ⇑P **P** **10 27 51.4 +0.8**
HNS S **S** **10 36 34.6 +3.8**
HNS pmax pmax
comp=Z,16nm,0.9s
LYN **LuoYang** 73.23 313 P **P** **10 27 51.6 +0.8**
LYN pmax pmax
comp=Z,62nm,0.8s
SDPT **Sand Point** 73.75 17 P **P** **10 27 53.0 -0.2**
baz=210
BJI **Beijing** 73.77 320 P **P** **10 27 54.1 +0.5**
BJI S **S** **10 36 38.8 +2.2**
BJI pmax pmax
comp=Z,5.0nm,0.7s
BJI pmax pmax
comp=Z,33nm,6.2s
GYA **Guiyang** 73.82 303 P **P** **10 27 54.1 -0.3**
GYA pP pP 10 29 58.6 -0.7
GYA S **S** **10 36 38.7 +0.6**
GYA pmax pmax
comp=Z,20nm,1.1s
GYA pmax pmax
comp=Z,160nm,4.7s
HEH **HeiHe** 74.47 333 *e*P **P** **10 27 57.4 +0.1**
HEH pmax pmax
comp=Z,11nm,0.8s
MA2 **Magadan** 75.35 350 P **P** **10 28 01.5 -0.5**
MA2 IAmb IAmb 10 28 02.0
comp=Z,13nm,0.9s
XAN **Xi'an** 75.52 311 P **P** **10 28 03.9 +0.2**
XAN pP pwP 10 30 16.0 +4.1
XAN pmax pmax
comp=Z,33nm,0.9s
QSPA **South Pole Qui** 75.65 180 P **P** **10 28 03.9 -0.1**
QSPA **South Pole Qui** 75.65 180 P **P** **10 28 03.7 -0.2**
comp=Z,48nm,0.5s,baz=304,slow=0.4,SNR=576
QSPA pP **pP** **10 30 10.0 +0.7**
comp=Z,5.9nm,0.9s,baz=18,slow=4.6,SNR=2.8
QSPA S **S** **10 36 55.4 -1.1**
comp=Z,3.3nm,1.2s,baz=42,slow=15,SNR=7.6
comp=Z,48nm,0.5s
PHRA **Phrae** 76.23 293 P **P** **10 28 09.1 +1.3**
M11K **Mekoryuk** 76.89 12 P **P** **10 28 09.4 -1.1**
baz=204
R17L **Mt. Peulik Vol** 76.89 18 P **P** **10 28 09.4 -1.2**
baz=213
O14K **Tigyukauivet M** 76.97 15 P **P** **10 28 09.9 -1.0**
baz=208
HHC **Hu-ho-hao-te** 77.14 318 *e*P **P** **10 28 13.7 +1.2**
HHC pmax pmax
comp=Z,9.0nm,0.7s
HHC pmax pmax
comp=Z,87nm,5.4s
O15K **Ungalikthiuk R** 77.26 15 P **P** **10 28 12.1 -0.4**
baz=210
CM31 **Chiang Mai Arr** 77.36 293 P **P** **10 28 15.5 +1.5**
CM31 IAmb IAmb 10 28 16.0
comp=Z,24nm,0.8s
CMAR **Chiang Mai Arr** 77.36 293 P **P** **10 28 15.1 +1.1**
comp=Z,21nm,0.8s,baz=125,slow=4.2,SNR=76
CMAR pP **pP** **10 30 21.0 +0.6**
comp=Z,0.5nm,0.4s,baz=142,slow=3.4,SNR=1.9
comp=Z,21nm,0.8s
R18K **Karluk** 77.42 19 P **P** **10 28 12.9 -0.4**
baz=215
N14K **Kuskokwak Cree** 77.46 14 P **P** **10 28 12.7 -0.8**
baz=208
CHTO **Chiang Mai** 77.48 293 P **P** **10 28 15.0 +0.4**
CHTO IAmb IAmb 10 28 16.2
comp=Z,23nm,0.8s
OHAK **Old Harbor** 77.50 19 P **P** **10 28 13.2 -0.6**
OHAK **Old Harbor** 77.50 19 P **P** **10 28 13.6 -0.2**
OHAK IAmb IAmb 10 28 13.8
comp=Z,43nm,1.2s
OHAK **Old Harbor** 77.50 19 P **P** **10 28 13.5 -0.3**
baz=216
M13K **Dall Lake** 77.51 13 P **P** **10 28 13.3 -0.5**
baz=206
Q17K **Contact Creek** 77.56 18 P **P** **10 28 13.7 -0.6**
baz=214
P16K **Nushagak River** 77.62 16 P **P** **10 28 13.8 -0.6**
baz=212
Q16K **King Salmon** 77.69 17 P **P** **10 28 13.7 -1.1**
baz=213
CD2 **Chengdu** 78.02 306 P **P** **10 28 17.8 +0.5**
CD2 pmax pmax
comp=Z,20nm,0.7s
N15K **Kwethluk River** 78.06 15 P **P** **10 28 17.1 +0.4**
N15K IAmb IAmb 10 28 17.9
comp=Z,27nm,0.8s
N15K **Kwethluk River** 78.06 15 P **P** **10 28 16.1 -0.7**
baz=209,SNR=5.1
O16K **Kokwok River B** 78.07 16 P **P** **10 28 15.6 -1.2**
baz=211
M14K **Bethel** 78.13 14 P **P** **10 28 17.0 -0.1**
M14K IAmb IAmb 10 28 20.5
comp=Z,15nm,0.8s
M14K **Bethel** 78.13 14 P **P** **10 28 17.2 +0.1**
baz=208
Q18K **Katmai Hardscr** 78.14 18 P **P** **10 28 16.9 -0.5**
baz=214
P17K **Kvichak River** 78.18 17 P **P** **10 28 16.7 -0.8**
baz=213
M15K **Kasigluk River** 78.37 14 P **P** **10 28 17.8 -0.6**
baz=209
O17K **Koliganek Bris** 78.49 16 P **P** **10 28 18.3 -0.8**
baz=212
L14K **Kuka Creek** 78.49 13 P **P** **10 28 18.3 -0.7**
baz=207
K13K **Kusilvak Mount** 78.62 12 P **P** **10 28 18.9 -0.8**
baz=205
N16K **Nishlik Lake** 78.65 15 P **P** **10 28 19.3 -0.7**
baz=211
P18K **Big Mountain,** 78.69 17 IAmb IAmb 10 28 20.0
comp=Z,37nm,1.0s
P18K **Big Mountain,** 78.69 17 P **P** **10 28 19.7 -0.5**
baz=214
Q19K **Cape Douglas,** 78.78 18 P **P** **10 28 20.4 -0.3**
baz=216
Q20K **Shuyak Island** 78.91 19 P **P** **10 28 20.7 -0.6**
baz=217
L15K **Ungalak Mounta** 79.06 13 P **P** **10 28 22.0 0.0**
baz=208
M16K **Timber Creek** 79.08 15 IAmb IAmb 10 28 24.1
comp=Z,22nm,1.1s
M16K **Timber Creek** 79.08 15 P **P** **10 28 21.7 -0.4**
baz=210
O18K **Koktuh Hills** 79.08 17 P **P** **10 28 21.5 -0.7**
O18K IAmb IAmb 10 28 22.1
comp=Z,12nm,0.8s
O18K **Koktuh Hills** 79.08 17 P **P** **10 28 22.1 -0.2**
baz=214
N17K **Nushagak Hills** 79.11 16 P **P** **10 28 22.1 -0.2**
baz=212
GAMB **Gambell** 79.16 8 P **P** **10 28 22.0 -0.5**
baz=198
P19K **Oil Pt** 79.49 18 P **P** **10 28 23.9 -0.5**
P19K IAmb IAmb 10 28 24.6
comp=Z,24nm,0.9s
P19K **Oil Pt** 79.49 18 P **P** **10 28 24.0 -0.5**
baz=216
L16K **Owhat River** 79.55 14 P **P** **10 28 24.6 0.0**
baz=210
J14K **Nanvaranak Lak** 79.58 12 P **P** **10 28 24.7 0.0**
baz=206
N18K **Kilae Creek** 79.58 16 P **P** **10 28 24.8 -0.1**
baz=213
K15K **Wolf Creek Mou** 79.59 13 IAmb IAmb 10 28 26.7
comp=Z,41nm,1.2s
K15K **Wolf Creek Mou** 79.59 13 P **P** **10 28 25.2 +0.4**
baz=238,SNR=6.7
O19K **Port Alsworth** 79.61 17 P **P** **10 28 24.6 -0.3**
baz=215
M17K **Holitna River** 79.78 15 P **P** **10 28 25.9 0.0**
baz=212
ILSW **Iliamna Southw** 79.78 18 IAmb IAmb 10 28 25.8
comp=Z,15nm,0.8s
HOM **Homer** 79.98 19 P **P** **10 28 27.0 +0.1**
baz=217
O20K **Slope Mountain** 80.02 18 P **P** **10 28 26.6 -0.6**
baz=216
N19K **Bonanza Creek** 80.08 17 P **P** **10 28 26.9 -0.6**
baz=215
LZH **Lanzhou** 80.16 311 *e*P **P** **10 28 29.8 +1.2**
LZH pmax pmax
comp=Z,21nm,1.0s
L17K **Donlin** 80.20 14 P **P** **10 28 28.6 +0.6**
baz=211
M18K **Stony River** 80.28 16 P **P** **10 28 28.6 +0.2**
baz=213,SNR=18
BRLK **Bradley Lake** 80.30 19 IAmb IAmb 10 28 29.0
comp=Z,32nm,0.9s
BRSE **Bradley Lake S** 80.32 19 P **P** **10 28 29.2 +0.4**
baz=218
L18K **Granite Mounta** 80.67 15 IAmb IAmb 10 28 31.9
comp=Z,28nm,1.1s
L18K **Granite Mounta** 80.67 15 P **P** **10 28 30.7 +0.3**
baz=212,SNR=14
J16K **Anvik River** 80.67 13 P **P** **10 28 30.4 0.0**
baz=209
K17K **Iditarod** 80.70 14 IAmb IAmb 10 28 31.9
comp=Z,34nm,1.3s
K17K **Iditarod** 80.70 14 P **P** **10 28 30.3 -0.2**
baz=211,SNR=6.1
M19K **Big River Lodg** 81.00 16 IAmb IAmb 10 28 34.0
comp=Z,17nm,0.8s
M19K **Big River Lodg** 81.00 16 P **P** **10 28 32.1 -0.1**
baz=215,SNR=14
CAPN **Captain Cook N** 81.01 18 P **P** **10 28 32.1 -0.1**
baz=218
SEW **Seward** 81.02 19 P **P** **10 28 31.7 -0.5**
baz=219
N20K **Mount Spurr** 81.04 17 P **P** **10 28 32.2 -0.3**
baz=217
J17K **VABM Dome** 81.11 13 IAmb IAmb 10 28 34.0
comp=Z,15nm,0.8s
J17K **VABM Dome** 81.11 13 P **P** **10 28 32.5 -0.1**
baz=210,SNR=5.7
L19K **White Mountain** 81.11 16 P **P** **10 28 33.2 +0.5**
L19K IAmb IAmb 10 28 34.7
comp=Z,60nm,1.0s
L19K **White Mountain** 81.11 16 P **P** **10 28 32.2 -0.6**
baz=214,SNR=43
I17K **Unalakleet** 81.18 13 P **P** **10 28 32.9 -0.1**
baz=208
O22K **Cooper Landing** 81.22 19 IAmb IAmb 10 28 34.7
comp=Z,45nm,1.1s
O22K **Cooper Landing** 81.22 19 P **P** **10 28 32.8 -0.4**
baz=219
M20K **Styx River** 81.33 17 P **P** **10 28 33.6 -0.3**
baz=216
F14K **Arctic Creek** 81.56 10 P **P** **10 28 34.9 -0.1**
baz=203
L20K **Farewell, AK** 81.61 16 P **P** **10 28 35.4 +0.1**
baz=215,SNR=41
SUA **Susitna One** 81.68 18 IAmb IAmb 10 28 35.8
comp=Z,37nm,1.4s
SUA **Susitna One** 81.68 18 P **P** **10 28 35.2 -0.6**
baz=218,SNR=7.8
RC01 **Rabbit Creek A** 81.69 18 IAmb IAmb 10 28 36.5
comp=Z,43nm,1.4s
RC01 **Rabbit Creek A** 81.69 18 P **P** **10 28 35.2 -0.5**
baz=219
J18K **Innoko River** 81.72 14 P **P** **10 28 35.5 -0.3**
baz=212
PWL **Port Wells** 81.95 19 IAmb IAmb 10 28 38.8
comp=Z,21nm,1.1s
PWL **Port Wells** 81.95 19 P **P** **10 28 36.7 -0.3**
baz=220
SNCC **San Nicolas Is** 82.03 53 P **P** **10 28 36.9 -1.1**
baz=247
M22K **Willow** 82.09 18 IAmb IAmb 10 28 38.2
comp=Z,31nm,0.8s
M22K **Willow** 82.09 18 P **P** **10 28 37.6 -0.1**
baz=219,SNR=5.6
G16K **Koyuk River** 82.19 11 P **P** **10 28 37.8 -0.3**
baz=207
PMR **Palmer** 82.27 18 P **P** **10 28 38.3 -0.2**
baz=220
H17K **Granite Mounta** 82.27 12 IAmb IAmb 10 28 39.5
comp=Z,14nm,0.9s
H17K **Granite Mounta** 82.27 12 P **P** **10 28 38.3 -0.3**
baz=209
K20K **Telida** 82.29 15 IAmb IAmb 10 28 39.7
comp=Z,15nm,1.1s
K20K **Telida** 82.29 15 P **P** **10 28 38.4 -0.2**
baz=215,SNR=5.9
KNK **Knik Glacier** 82.34 19 P **P** **10 28 38.3 -0.7**
baz=220
SBC **Santa Barbara** 82.35 52 P **P** **10 28 37.9 -1.8**
baz=247
GLI **Glacier Island** 82.36 20 P **P** **10 28 38.7 -0.4**
baz=222
J19K **Poorman** 82.43 14 IAmb IAmb 10 28 40.6
comp=Z,18nm,0.9s
J19K **Poorman** 82.43 14 P **P** **10 28 39.3 -0.1**
baz=213,SNR=9.7
O02D **Mt. Diablo Mer** 82.48 45 IAmb IAmb 10 28 42.2
comp=Z,13nm,0.8s
CUT **Chulitna** 82.56 17 P **P** **10 28 39.6 -0.4**
baz=218
EYAK **Cordova Ski Ar** 82.56 20 P **P** **10 28 39.3 -0.7**
baz=223
KAIM **Kayak Island** 82.57 21 P **P** **10 28 39.6 -0.6**
baz=224
G17K **Kiwalik Mounta** 82.62 12 P **P** **10 28 40.4 +0.2**
baz=208
SML **Sawmill** 82.68 19 P **P** **10 28 39.7 -1.0**
baz=220
SCI2 **San Clemente I** 82.68 53 P **P** **10 28 40.3 -1.0**
baz=248
H18K **Honhosa River** 82.79 13 P **P** **10 28 40.5 -0.6**
baz=211

**M23K Glacier View** 82.85 19 P P 10 28 41.0 -0.6
baz=221
**J20K Nowinta River** 82.94 15 IAmb IAmb 10 28 42.8
comp=Z,13nm,0.8s
**J20K Nowinta River** 82.94 15 P P 10 28 42.2 +0.3
baz=215,SNR=8.8
**CIS Catalina Islan** 82.94 53 P P 10 28 40.8 -1.9
baz=248
**CHUM Lake Minchumin** 83.17 16 P P 10 28 42.3 -0.8
baz=216
**KLU Klutina** 83.20 20 P P 10 28 42.6 -0.8
baz=223
**MAW Mawson** 83.25 202 P P 10 28 43.4 -0.1
comp=Z,14nm,0.6s,baz=113,slow=5.9,SNR=17
comp=Z,14nm,0.6s
**ARVC Arvin** 83.28 51 P P 10 28 43.5 -0.7
baz=247
**F17K Baldwin Pennin** 83.33 11 P P 10 28 43.7 -0.1
baz=208
**G18K Tagagawik** 83.37 12 IAmb IAmb 10 28 45.3
comp=Z,26nm,1.2s
**G18K Tagagawik** 83.37 12 P P 10 28 43.7 -0.3
baz=210
**VES Vestal, Richgr** 83.37 51 P P 10 28 44.4 -0.2
baz=247
**I20K Naaghedeneel** 83.37 14 IAmb IAmb 10 28 45.8
comp=Z,22nm,1.1s
**I20K Naaghedeneel** 83.37 14 P P 10 28 43.8 -0.2
baz=214
**WAT1 Susitna Watana** 83.39 18 P P 10 28 43.9 -0.3
baz=220
**WAT6 Susitna Watana** 83.45 18 P P 10 28 44.3 -0.4
baz=221
**H19K Roundabout Mou** 83.53 13 IAmb IAmb 10 28 45.9
comp=Z,16nm,0.8s
**H19K Roundabout Mou** 83.53 13 P P 10 28 44.9 +0.2
baz=212,SNR=8.6
**M24K Tolsona, Glenn** 83.58 19 P P 10 28 45.2 +0.1
baz=222
**HATC Hat Creek Radi** 83.67 45 IAmb IAmb 10 28 47.6
comp=Z,17nm,0.9s
**BPAW Bear Paw Mtn.** 83.70 16 P P 10 28 45.2 -0.5
baz=218
**N25K Chitina, Valde** 83.72 20 P P 10 28 45.7 -0.2
baz=224
**RND Reindeer** 83.75 17 IAmb IAmb 10 28 45.9
comp=Z,27nm,1.5s
**ISA Isabella, Lake** 83.76 51 IAmb IAmb 10 28 48.0
comp=Z,13nm,1.0s
**ISA Isabella, Lake** 83.76 51 P P 10 28 46.6 -0.2
baz=247,SNR=7.4
**109C Camp Elliot, M** 83.77 54 P P 10 28 45.0 -1.7
baz=248
**F18K Selawik** 83.78 12 P P 10 28 45.7 -0.2
baz=209
**E17K Hotham Inlet** 83.80 11 P P 10 28 46.6 +0.5
baz=207
**EDW2 Edwards Air Fo** 83.83 52 P P 10 28 46.9 -0.2
baz=248,SNR=6.0
**BFSC Mount Baldy Ra** 83.84 53 P P 10 28 47.2 -0.1
baz=248,SNR=9.0
**H20K Anotlenenega Mo** 83.86 14 P P 10 28 46.5 +0.1
baz=214,SNR=6.6
**SONM Songino Array** 83.89 323 P P 10 28 46.9 -0.3
comp=Z,1.5nm,0.6s,baz=132,slow=5.3,SNR=5.3
SONM pP **pP** 10 30 56.0 0.0
comp=Z,0.2nm,0.4s,baz=145,slow=5.3,SNR=1.5
**G19K Purcell Mounta** 83.91 13 IAmb IAmb 10 28 47.8
comp=Z,13nm,0.8s
**G19K Purcell Mounta** 83.91 13 P P 10 28 46.9 +0.3
baz=212
**CBX Cerro Bola** 83.91 55 IAmb IAmb 10 28 48.8
comp=Z,15nm,1.1s
**DHY Denali Highway** 83.93 18 P P 10 28 46.6 -0.4
baz=221
**MURC Murrieta** 83.96 53 P P 10 28 47.5 -0.2
baz=248
**MCK McKinley** 83.98 17 P P 10 28 46.9 -0.2
baz=220
**MPK Martis Peak** 84.05 47 IAmb IAmb 10 28 59.7
comp=Z,12nm,0.8s
**MDPB Devils Postpil** 84.07 49 IAmb IAmb 10 28 49.7
comp=Z,11nm,0.9s
**D17K Noatak River** 84.13 10 P P 10 28 48.0 +0.3
baz=206
**WAKR Walker** 84.15 48 IAmb IAmb 10 28 50.4
comp=Z,10nm,1.0s
**BWN Browne** 84.17 17 IAmb IAmb 10 28 47.9
comp=Z,27nm,0.9s
**LRMC Laurel Mtn Rad** 84.29 51 P P 10 28 49.0 -0.4
baz=248
**C16K Lisburne Hills** 84.30 9 P P 10 28 48.3 -0.2
baz=204
**MONP2 Monument Peak** 84.31 54 P P 10 28 49.6 -0.1
baz=249,SNR=6.5
**E18K Tukpahlearik C** 84.32 11 P P 10 28 48.5 -0.2
baz=208
**CWC Cottonwood Cre** 84.35 50 P P 10 28 50.0 +0.3
baz=248
**F19K Shaleruckik Mo** 84.36 12 IAmb IAmb 10 28 49.7
comp=Z,9.2nm,0.8s
**F19K Shaleruckik Mo** 84.36 12 P P 10 28 48.4 -0.4
baz=211
**CTG Chitna Glacier** 84.39 22 P P 10 28 48.5 -0.8
baz=227
**BBRC Big Bear Solar** 84.42 53 P P 10 28 49.5 -0.7
baz=248
**GTA Gaotai** 84.45 313 ⇑P P 10 28 51.0 +0.9
GTA pmax pmax
comp=Z,27nm,1.1s
**IKP In-Ko-Pah, Jac** 84.47 54 P P 10 28 49.2 -1.1
baz=249
**RDOG Red Dog Mine** 84.48 10 P P 10 28 48.6 -0.9
baz=206
**H21K Melozitna Rive** 84.49 15 P P 10 28 50.0 +0.5
baz=216
**MLY Manley** 84.50 16 P P 10 28 49.4 -0.2
baz=218
**IMAR Indian Mountai** 84.53 14 P P 10 28 49.1 -0.5
**PFO Pinyon Flats O** 84.54 53 P P 10 28 49.9 -0.8
baz=249,SNR=5.3
**TPFO Pinon Flats** 84.54 53 P P 10 28 50.6 -0.1
baz=249
**NEA2 Nenana** 84.61 16 P P 10 28 49.0 -1.1
**NEA2 Nenana** 84.61 16 P P 10 28 48.9 -1.2
baz=219
**MPMC Manual Prospec** 84.65 51 P P 10 28 51.5 +0.3
baz=248,SNR=9.0
**O28M Mount Upton** 84.67 22 P P 10 28 49.6 -1.3
baz=228
**DSP Deep Springs** 84.78 49 IAmb IAmb 10 28 53.2
comp=Z,18nm,1.0s
**M26K Nabesna, AK** 84.82 20 P P 10 28 51.2 0.0
baz=225
**SWSC Sam W. Stewart** 84.82 54 P P 10 28 51.2 -0.6
baz=249,SNR=5.5
**C17K DeLong Mountai** 84.82 10 P P 10 28 51.3 +0.2
baz=206
**GSC Goldstone, Bar** 84.89 52 P P 10 28 51.1 -1.1
baz=248
**NVAR Mina Array Bea** 84.94 48 P P 10 28 52.3 -0.3
**NVAR Mina Array Bea** 84.94 48 P P 10 28 52.8 +0.1
comp=Z,5.0nm,0.7s,baz=230,slow=7.9,SNR=47
NVAR pP **pP** 10 31 01.8 -0.6
comp=Z,2.1nm,1.0s,baz=231,slow=7.8,SNR=4.6
NVAR PKKPbc **PKKPbc** 10 46 56.6 -0.4
comp=Z,0.5nm,0.8s,baz=72,slow=2.9,SNR=3.7
comp=Z,5.0nm,0.7s
**K24K Donnelly Dome** 84.95 18 P P 10 28 51.5 -0.4
baz=222
**I23K Minto, Yukon-K** 84.96 16 P P 10 28 50.4 -1.4
baz=219
**F20K Avaraart Lake** 84.97 13 P P 10 28 51.7 -0.1
baz=213
**E19K Redstone River** 85.00 12 P P 10 28 52.8 +0.8
baz=212
**G21K Allakaket** 85.02 14 P P 10 28 51.7 -0.4
baz=215
**H22K Ishtalitna Cre** 85.03 15 P P 10 28 51.6 -0.5
baz=217
**BELC Belle Mtn. Jos** 85.04 53 P P 10 28 52.8 -0.2
baz=249,SNR=9.9
**HDA Harding Lake** 85.06 17 IAmb IAmb 10 28 52.5
comp=Z,11nm,0.8s
**HDA Harding Lake** 85.06 17 P P 10 28 51.6 -0.7
baz=221,SNR=7.4
**HEC Hector,Ludlow** 85.07 52 P P 10 28 52.2 -0.9
baz=249
**GRAC Grapevine Rang** 85.09 50 P P 10 28 53.0 -0.1
baz=248
**MDM Murphy Dome** 85.12 16 IAmb IAmb 10 28 52.9
comp=Z,13nm,1.2s
**L26K Log Cabin Wild** 85.15 19 P P 10 28 52.0 -0.8
baz=225
**COLA College** 85.16 17 P P 10 28 50.8 -1.9
COLA IAmb IAmb 10 28 51.9
comp=Z,9.1nm,0.8s
**COLA College** 85.16 17 P P 10 28 51.3 -1.4
baz=220
**M27K Edge Creek, AK** 85.16 20 P P 10 28 53.3 +0.3
M27K IAmb IAmb 10 29 31.3
comp=Z,18nm,1.4s
**YUK8 Steele Glacier** 85.17 22 P P 10 28 53.1 -0.1
baz=228
**YUK3 Moose Creek** 85.25 21 P P 10 28 53.2 -0.4
baz=226
**FURC Furnace Creek,** 85.27 51 P P 10 28 54.4 +0.5
baz=248,SNR=5.4
**BC3 Big Chuckawall** 85.34 54 P P 10 28 54.0 -0.5
baz=249
**ILAR Eielson Array** 85.35 17 P P 10 28 52.2 -1.5
**ILAR Eielson Array** 85.35 17 P P 10 28 51.6 -2.0
comp=Z,3.5nm,0.6s,baz=236,slow=4.8,SNR=41
ILAR pP **pP** 10 31 02.6 -0.7
comp=Z,3.4nm,0.9s,baz=230,slow=6.1,SNR=6.2
comp=Z,3.5nm,0.6s
**H23K Yukon River** 85.44 16 P P 10 28 54.2 +0.1
baz=219
**POKR Poker Plat Res** 85.46 17 P P 10 28 53.9 -0.4
baz=221
**SHOC Shoshone, Teco** 85.50 51 P P 10 28 54.5 -0.6
baz=249
**WCT Wildcat Mounta** 85.56 50 IAmb IAmb 10 28 56.8
comp=Z,17nm,1.2s
**GMRC Granite Mounta** 85.58 53 P P 10 28 55.1 -0.6
baz=249
**TPH Tonopah** 85.60 49 IAmb IAmb 10 28 56.4
comp=Z,19nm,0.7s
**TUQ Turquoise Moun** 85.61 52 P P 10 28 55.8 0.0
baz=249,SNR=7.1
**F21K Alatna River** 85.61 13 P P 10 28 54.6 -0.3
baz=215
**GLA Glamis** 85.62 54 P P 10 28 55.5 -0.3
baz=250
**SCRK Sand Creek** 85.63 19 P P 10 28 54.0 -1.1
baz=224
**L27K Beaver Creek,** 85.67 20 P P 10 28 54.7 -0.6
baz=226
**J25K Salcha River,** 85.67 18 P P 10 28 54.9 -0.4
baz=223,SNR=5.7
**D19K Kuna River** 85.72 11 P P 10 28 55.0 -0.4
baz=211
**IRM Iron Mountain** 85.75 53 P P 10 28 56.5 +0.1
baz=250
**G22K Bettles** 85.82 14 P P 10 28 55.7 -0.2
baz=217
**SHL Shillong** 85.86 298 IAmb IAmb 10 28 58.1
comp=Z,22nm,0.9s
**E20K Nigu River** 85.89 12 P P 10 28 56.7 +0.5
baz=212
**TPNV Topopah Spring** 85.90 50 P P 10 28 56.5 -0.7
baz=249,SNR=12
**C19K Lookout Ridge** 85.99 10 P P 10 28 56.7 0.0
baz=209
**G23K Bananza Creek** 86.01 15 P P 10 28 57.0 +0.2
baz=218
**BLYC Blythe** 86.10 54 IAmb IAmb 10 28 59.6
comp=Z,10.0nm,1.2s
**J26L Joseph Creek** 86.13 18 P P 10 28 56.9 -0.6
baz=224
**F22K John River** 86.13 14 P P 10 28 56.7 -0.7
baz=216
**D20K Etivluk River** 86.20 12 P P 10 28 58.1 +0.5
baz=212
**K27K Chicken** 86.26 19 P P 10 28 58.3 +0.3
baz=226
**PRP Porcupine Dome** 86.29 17 P P 10 28 57.6 -0.7
baz=223
**COLD Coldfoot** 86.38 14 P P 10 28 58.4 -0.1
baz=218
**P32M Atlin** 86.43 25 P P 10 28 59.2 +0.3
baz=234
**BMN Battle Mountai** 86.48 47 IAmb IAmb 10 29 00.7
comp=Z,6.2nm,0.8s
**E21K Killik River** 86.50 13 P P 10 28 59.3 +0.2
baz=215
**PDMCI Parker Dam,Lak** 86.59 53 P P 10 29 00.6 +0.4
baz=250,SNR=5.9
**G24K Hadweenzic Riv** 86.65 16 P P 10 28 59.5 -0.3
baz=221
**Q32M Nakina River** 86.67 26 P P 10 29 00.1 -0.2
baz=235
**E22K Anaktuvuk Pass** 86.72 13 P P 10 29 00.7 +0.5
baz=217
**I26K Coal Creek Min** 86.83 18 P P 10 28 59.5 -1.2
baz=225
**BELA Belgrano 2** 86.84 175 P P 10 28 59.0 -1.6
BELA IAmb IAmb 10 29 05.4
comp=Z,11nm,1.0s
**214A Organ Pipe Nat** 86.86 56 IAmb IAmb 10 29 03.3
comp=Z,8.4nm,0.9s
**214A Organ Pipe Nat** 86.86 56 P P 10 29 01.2 -0.5
baz=251
**C21K Knifeblade Rid** 86.93 12 P P 10 29 00.5 -0.5
baz=214
**L29M L29M** 86.95 21 P P 10 29 01.1 -0.2
baz=230
**PRN Pahroc Range** 86.96 50 IAmb IAmb 10 29 03.8
comp=Z,19nm,1.0s
**G25K Bearman Lake** 87.06 16 P P 10 29 00.4 -1.2
baz=222
**EGAK Eagle** 87.07 19 P P 10 29 01.1 -0.6
baz=227
**M30M Minto, Yukon** 87.08 22 P P 10 29 00.7 -1.2
baz=231
**D22K Ayikyak River** 87.14 13 P P 10 29 01.5 -0.6
baz=216
**DAWY Dawson** 87.15 20 P P 10 29 01.6 -0.6
baz=228
**E23K Chandalar** 87.17 14 P P 10 29 02.1 -0.2
baz=219
**F24K Squaw Lake** 87.17 15 P P 10 29 01.6 -0.6
baz=220
**B20K Meade River** 87.20 11 P P 10 29 01.8 -0.5
baz=212
**HAWA Hanford** 87.26 41 IAmb IAmb 10 29 14.0
comp=Z,5.0nm,0.7s
**B21K Ikpikpuk River** 87.35 12 P P 10 29 02.6 -0.4
baz=214
**E24K Your Creek** 87.45 14 P P 10 29 02.7 -0.9
baz=220
**E08A Dider Farm, El** 87.60 41 IAmb IAmb 10 29 06.1
comp=Z,8.5nm,0.9s
**N32M Quiet Lake** 87.61 24 P P 10 29 03.6 -0.9
baz=234
**K29M Barlow Dome** 87.63 21 P P 10 29 03.3 -1.3
baz=230
**TOLK Toolik Lake Re** 87.63 14 P P 10 29 04.2 -0.2
baz=219
**D23K Nanushuk River** 87.64 13 P P 10 29 04.0 -0.3
baz=218
**Q12A Willow Creek R** 87.69 49 IAmb IAmb 10 29 11.5
comp=Z,11nm,0.8s
**M31M Drury Creek, Y** 87.73 23 P P 10 29 05.2 +0.2
baz=233
**F25K Christian Rive** 87.80 16 P P 10 29 05.0 -0.2
baz=222
**G26K Porcupine Rive** 87.82 16 P P 10 29 04.6 -0.6
baz=224
**I28M Miner Creek** 87.90 19 P P 10 29 03.6 -2.2
baz=228
**H27K Steamboat Moun** 87.96 18 P P 10 29 04.1 -1.9
baz=226
**ELK Elko** 88.00 47 IAmb IAmb 10 29 08.3
comp=Z,6.8nm,1.1s
**SPR3 Spring Creek 3** 88.04 49 IAmb IAmb 10 29 08.4
comp=Z,8.0nm,1.0s
**FARO Faro, Yukon** 88.14 23 P P 10 29 05.5 -1.4
baz=234
**SMAI San Martin Ant** 88.15 162 IAmb IAmb 10 29 07.8
comp=Z,13nm,0.7s
**LCMT Little Creek M** 88.18 51 IAmb IAmb 10 29 09.3
comp=Z,12nm,0.9s
**CCUT Cedar City** 88.27 51 IAmb IAmb 10 29 10.2
comp=Z,8.5nm,1.0s
**C23K Itkillik River** 88.35 13 P P 10 29 07.1 -0.5
baz=218
**J30M Hart River** 88.50 20 P P 10 29 08.3 -0.3
baz=231
**KNB Kanab** 88.50 51 IAmb IAmb 10 29 11.1
comp=Z,11nm,1.0s
**F10A Beach Ranch, E** 88.57 42 IAmb IAmb 10 29 10.2
comp=Z,8.1nm,0.8s
**TUC Tucson** 88.61 56 P P 10 29 09.8 -0.1
TUC IAmb IAmb 10 29 11.0
comp=Z,6.6nm,0.9s
**TUC Tucson** 88.61 56 P P 10 29 09.7 -0.1
baz=252
**C24K Franklin Bluff** 88.67 13 P P 10 29 08.5 -0.7
baz=220
**U15A North Rim** 88.71 52 IAmb IAmb 10 29 12.2
comp=Z,12nm,0.8s
**X16A Lo Mia Camp, P** 88.73 54 IAmb IAmb 10 29 12.3
comp=Z,9.1nm,1.0s
**I30M Mount Dempster** 88.89 20 P P 10 29 09.6 -0.9
baz=231
**H29M Whitestone** 88.90 19 P P 10 29 09.8 -0.5
baz=229
**D25K Kavik River** 88.90 14 P P 10 29 09.4 -0.9
baz=222
**PKCU Pink Cliffs** 89.03 51 IAmb IAmb 10 29 14.3
comp=Z,19nm,1.4s
**E27K Colleen River** 89.29 16 P P 10 29 11.1 -1.0
baz=226
**TCRU Three Creeks R** 89.30 50 IAmb IAmb 10 29 14.9
comp=Z,5.7nm,0.9s
**MTPU Mount Pierson** 89.31 50 IAmb IAmb 10 29 14.9
comp=Z,5.1nm,0.9s
**G29M Pine Creek** 89.46 18 P P 10 29 12.6 -0.3
baz=230
**NEW Newport** 89.50 40 P P 10 29 13.4 -0.2
baz=248
**EPYK Eagle Plains** 89.51 19 P P 10 29 12.2 -1.0
baz=231
**319A Douglas** 89.55 58 IAmb IAmb 10 29 15.9
comp=Z,14nm,0.9s
**DUG Dugway, Tooele** 89.55 48 P P 10 29 13.6 -0.5
baz=251
**HLID Hailey** 89.56 45 P P 10 29 13.7 -0.4
baz=250,SNR=5.3
**C26K Camden Bay** 89.69 14 P P 10 29 13.8 0.0
baz=223
**TOAD Toad River Com** 89.70 28 P P 10 29 13.8 -0.4
baz=241
**C27K Jago River** 89.77 15 P P 10 29 14.4 +0.2
baz=224
**X18A Snowflake** 89.94 54 IAmb IAmb 10 29 17.7
comp=Z,12nm,1.4s
**DUN6 Lazy B Ranch** 90.05 56 IAmb IAmb 10 29 18.1
comp=Z,19nm,0.8s
**G30M tAoh Zraii Nji** 90.05 18 P P 10 29 15.1 -0.5
baz=231
**HVU Hansel Valley** 90.10 47 IAmb IAmb 10 29 17.8
comp=Z,4.0nm,0.8s
**E28M Babbage River** 90.14 16 P P 10 29 15.1 -0.9
baz=228
**F30M Barrier River** 90.57 18 P P 10 29 18.0 0.0
baz=232
**G31M Satah River** 90.62 19 P P 10 29 17.9 -0.2
baz=233
**TCUT Toone Canyon** 90.86 48 IAmb IAmb 10 29 22.1
comp=Z,7.6nm,0.8s
**MSO Missoula** 91.00 42 P P 10 29 20.3 -0.3
baz=250
**ELIB Princess Elisa** 91.06 190 *d*P P 10 29 19.8 -0.7
comp=Z,19nm,0.9s
**F31M Tsiigehtchic** 91.09 19 P P 10 29 20.7 +0.3
baz=234
**121A Cooks Peak, D** 91.10 57 P P 10 29 20.5 -1.0
baz=254
**P18A Preston Nutter** 91.25 49 IAmb IAmb 10 29 22.9
comp=Z,2.9nm,0.7s
**INK Inuvik** 91.68 18 P P 10 29 23.7 +0.7
baz=234
**MVCO Mesa Verde** 91.85 52 P P 10 29 24.1 -0.8
baz=253
**BOZ Bozeman (W)** 92.11 43 P P 10 29 25.5 -0.3
baz=252
**PDAR Pinedale Array** 92.67 47 P P 10 29 27.4 -1.2
comp=Z,0.3nm,0.5s,baz=205,slow=3.1,SNR=5.3
PDAR pP **pP** 10 31 41.5 +1.5
comp=Z,0.6nm,0.9s,baz=268,slow=4.5,SNR=3.5
**ANMO Albuquerque** 92.82 55 P P 10 29 28.9 -0.4
**ANMO Albuquerque** 92.82 55 P P 10 29 28.5 -0.9
baz=254
**MNTX Cornudas Mount** 92.83 58 P P 10 29 28.5 -0.7
baz=255
**O20A White River Ci** 92.87 49 IAmb IAmb 10 29 29.8
comp=Z,3.5nm,0.7s
**O20A White River Ci** 92.87 49 P P 10 29 28.9 -0.6
baz=254
**S22A 4UR Ranch, Cre** 93.28 52 P P 10 29 31.0 -0.5
baz=254
**TROLL Troll, Antarti** 93.42 184 ⇑P P 10 29 30.2 -1.1
comp=Z,468nm,0.6s
**RLMT Red Lodge** 93.56 44 P P 10 29 32.5 0.0
baz=253
**TXAR Lajitas Array** 93.67 61 P P 10 29 33.1 -0.1
comp=Z,1.0nm,0.5s,baz=226,slow=4.9,SNR=20
TXAR PKKPbc **PKKPdf** 10 46 32.4 -1.1
comp=Z,0.1nm,0.4s,baz=92,slow=2.9,SNR=2.0
comp=Z,1.0nm,0.5s
**SNAA Sanae** 94.03 182 P P 10 29 32.5 -1.5
SNAA IAmb IAmb 10 29 34.9
comp=Z,6.8nm,0.8s
**SNAA Sanae** 94.03 182 ⇑P P 10 29 32.4 -1.7
comp=Z,125nm,0.7s
**SNAA Sanae** 94.03 182 P P 10 29 32.5 -1.5
comp=Z,7.1nm,0.8s,baz=203,slow=6.8,SNR=65
comp=Z,7.1nm,0.8s
**VNA3 Neumayer Olymp** 94.59 180 ⇑P P 10 29 34.8 -1.7
comp=Z,5.2nm,0.6s
VNA3 ⇑SKSac **SKSac** 10 39 11.9 -1.3
comp=Z,0.6nm,0.8s
**N23A Red Feather La** 94.76 49 P P 10 29 38.2 0.0
baz=255
**Q24A Divide** 94.86 51 P P 10 29 38.2 -0.5
baz=256
**VNA2 Neumayer--Watz** 94.90 181 ⇑P P 10 29 36.4 -1.4
comp=Z,6.9nm,0.6s,baz=186,slow=4.5
VNA2 ⇑SKSac **SKSac** 10 39 12.7 -2.0
comp=Z,0.3nm,0.4s,baz=186,slow=0.5
**VNA1 Neumayer--Stat** 95.18 181 ⇑P P 10 29 36.5 -2.6
comp=Z,2.7nm,0.6s
VNA1 ⇑SKSac **SKSac** 10 39 16.7 +0.6
comp=Z,1.7nm,0.9s
**OZNA Ozona** 96.18 60 IAmb IAmb 10 29 44.9
comp=Z,3.1nm,0.8s
**RSSD Black Hills** 96.91 46 P P 10 29 46.3 -1.4
baz=257
**DGMT Dagmar** 97.78 42 P Pdif 10 29 50.8 -0.4
baz=257
**ABTX Abilene, Hawle** 97.78 58 P Pdif 10 29 49.4 -2.2
baz=258
**ZALV Zalesovo Beam** 98.76 323 P Pdif 10 29 54.6 -0.7
comp=Z,0.8nm,0.6s,baz=108,slow=9.3,SNR=2.4
comp=Z,0.8nm,0.6s
**MKAR Makanchi Array** 98.88 316 P Pdif 10 29 55.6 -0.5
comp=Z,1.1nm,0.6s,baz=97,slow=6.2,SNR=12
MKAR pP pP 10 32 07.9 -0.2
comp=Z,1.1nm,0.9s,baz=100,slow=5.4,SNR=4.1
comp=Z,1.1nm,0.6s
**LRAL Lakeview Retre** 108.36 60 P **PKiKP** 10 34 39.1 -1.6
baz=264
**WCI Wyandotte Cave** 109.33 54 P **PKiKP** 10 34 41.6 -0.8
baz=267
**GLMI Grayling** 110.77 47 P **PKiKP** 10 34 44.6 -0.4
baz=270
**L61B Northampton** 119.57 49 P **PKPdf** 10 35 00.9 -1.0
baz=278
**HRV Adam Dziewonsk** 120.38 49 P **PKiKP** 10 35 03.7 +0.1
baz=278
**ARCES ARCESS Array B** 120.59 346 PKP **PKPdf** 10 35 01.9 -1.2
comp=Z,0.9nm,0.3s,baz=70,slow=2.2,SNR=31
**BOSA Boshof** 125.41 218 PKP **PKPdf** 10 35 13.2 -0.6
comp=Z,3.5nm,0.8s,baz=65,slow=2.4,SNR=5.7
**FINES FINESS Array B** 126.40 339 PKP **PKPdf** 10 35 14.0 -0.3
comp=Z,0.7nm,0.3s,baz=117,slow=2.8,SNR=14
**NB2 NORSAR Subarra** 130.97 347 PKP **PKiKP** 10 35 23.8 -0.4
comp=Z,1.4nm,1.0s,baz=17,slow=2.6
**NB2 NORSAR Subarra** 130.97 347 PKP **PP** 10 37 52.0 +3.0
comp=Z,1.6nm,0.7s,baz=29,slow=2.6
**NOA NORSAR Array B** 130.97 347 PKP **PKPdf** 10 35 21.3 -1.8
comp=Z,0.2nm,0.5s,baz=30,slow=2.0,SNR=2.0
NOA SKPbc **PP** 10 37 52.0 +3.0

comp=Z,1.8nm,0.8s,baz=29,slow=2.7,SNR=7.8
**HFS Hagfors 131.16 345** PKP **PKPdf 10 35 22.6 -0.9**
comp=Z,0.7nm,0.4s,baz=106,slow=3.1,SNR=1.8
HFS SKPbc **SKPab 10 37 52.5 -0.4**
comp=Z,1.7nm,0.5s,baz=76,slow=6.3,SNR=7.9
**BDFB Brasilia 131.92 127** SKPbc **SKPbc 10 37 56.3 +0.1**
comp=Z,6.2nm,0.7s,baz=257,slow=4.5,SNR=5.4
**AKASG Malin Array Be 131.97 327** SKPbc **SKPab 10 37 56.7 0.0**
comp=Z,1.8nm,0.5s,baz=52,slow=4.6,SNR=5.4
**EKA Eskdalemuir Ar 138.80 354** PKP **PKPdf 10 35 38.8 +1.0**
comp=Z,0.1nm,0.3s,baz=24,slow=1.9,SNR=3.6
**CLL Collm 138.81 338** *e*SKPdf **SKPbc 10 38 16.0 0.0**
comp=Z,4.0nm,1.1s
**RONA Rosalia, Austr 140.31 332** *i* SKP 10 38 20.9
comp=Z,3.5nm,0.9s
**CONA Conrad Observa 140.33 333** *i* SKP 10 38 21.2
comp=Z,2.4nm,0.7s
**GERES GERESS Array B 140.53 335** PKP **PKPdf 10 35 41.2 -0.2**
comp=Z,0.3nm,0.5s,baz=46,slow=5.7,SNR=0.8
GERES SKPbc **SKPbc 10 38 20.8 0.0**
comp=Z,1.4nm,0.7s,baz=304,slow=1.0,SNR=7.0
**SOKA Soboth 141.64 332** *i* PKiKP **PKiKP 10 35 51.9 +5.5**
comp=Z,4.5nm,0.8s
SOKA *i* SKP 10 38 24.3
comp=Z,2.4nm,1.0s
**LESA Schwarzeotal 142.08 335** *i* SKP 10 38 25.3
comp=Z,2.3nm,0.6s
**MYKA Terra Mystica 142.30 333** *i* PKiKP **PKiKP 10 35 53.7 +6.0**
comp=Z,4.9nm,0.6s
**WATA Walderalm 142.60 336** *i* PKiKP **PKiKP 10 35 54.8 +6.3**
comp=Z,6.8nm,1.1s
**WTTA Wattenberg 142.63 336** *i* PKP **PKPdf 10 35 41.3 -3.9**
comp=Z,2.9nm,1.4s
WTTA *i* PKiKP **PKiKP 10 35 54.3 +5.7**
comp=Z,6.1nm,0.8s
WTTA *i* SKP 10 38 26.4
comp=Z,2.9nm,0.6s
**ABTA Abfaltersbach 142.69 334** *i* PKP **PKPdf 10 35 42.1 -3.1**
comp=Z,3.3nm,1.2s
ABTA *i* PKiKP **PKiKP 10 35 55.0 +6.5**
comp=Z,5.4nm,0.7s
ABTA *i* SKP 10 38 25.9
comp=Z,2.0nm,0.6s
**MOTA Moosalm 142.78 336** *i* PKiKP **PKiKP 10 35 55.3 +6.5**
comp=Z,12nm,1.0s
**RETA Reutte 142.79 337** *i* PKP **PKPdf 10 35 41.6 -3.7**
comp=Z,1.2nm,0.5s
RETA *i* PKiKP **PKiKP 10 35 54.8 +6.1**
comp=Z,4.5nm,0.5s
**SQTA Sankt Quirin 142.84 336** *i* PKiKP **PKiKP 10 35 55.7 +6.8**
comp=Z,11nm,0.9s
**FETA Feichten 143.19 336** *i* PKP PKPab 10 35 44.0 -0.3
comp=Z,2.2nm,0.6s
FETA *i* PKiKP **PKiKP 10 35 57.2 +7.5**
comp=Z,20nm,0.8s
**DAVA Damuels 143.29 337** *i* PKP PKPbc 10 35 45.4 +0.4
comp=Z,5.2nm,0.6s
DAVA *i* PKiKP **PKiKP 10 35 57.6 +7.7**
comp=Z,35nm,1.2s
**FUORN Ofenpass-Fuorn 143.70 336** PKPab 10 35 46.7 +0.3
**BNI Bardonecchia 146.36 339 PKPbc 10 35 54.5 +0.5**
**SSB Saint Sauveur 146.87 341 PKPab 10 35 58.8 +0.2**
**KEST Kesra 152.62 324** PKPab **PKPab 10 36 20.7 -2.3**
comp=Z,1.9nm,0.6s,baz=100,slow=11,SNR=2.6
**ESDC Sonseca Array 154.27 349** PKPab **PKPab 10 36 28.7 -1.1**
comp=Z,0.7nm,0.7s,baz=30,slow=3.5,SNR=6.3
ESDC SKP 10 38 38.0
comp=Z,0.7nm,1.0s,baz=8.5,slow=3.0,SNR=4.6
**TORD Torodi Ar. Bea 168.71 265** PKPab **PKPab 10 37 34.0 0.0**
comp=Z,2.1nm,0.8s,baz=90,slow=4.8,SNR=6.3
**DBIC Dimbokro 170.90 213** PKPab **PKPab 10 37 42.9 -0.5**
comp=Z,2.8nm,0.8s,baz=146,slow=7.1,SNR=3.8

**TAP 04 10:26:29.3, 23°.55N×121°.19E, h3km±1km, ML1.2, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **YULB** | **Yu-li** | **0.19** | **148** | | P | | Pg | 10 26 33.4 | +0.5 |
| **YULB** | **Yu-li** | **0.19** | **148** | | IAmb | | IAmb | 10 26 41.2 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **YULB** | **Yu-li** | **0.19** | **148** | *e*P | | | Pg | 10 26 33.5 | +0.5 |
| | baz=152 | | | | | | | | |
| YULB | | | | *e*S | | | Sg | 10 26 36.8 | +1.4 |
| | baz=152 | | | | | | | | |
| **YULB** | **Yu-li** | **0.19** | **148** | P | | | Pg | 10 26 33.6 | +0.7 |
| **VWDT** | **VWDT** | **0.21** | **348** | *e*S | | | Sg | 10 26 37.4 | +1.3 |
| | baz=341 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.25** | **47** | P | | | Pg | 10 26 35.3 | +1.2 |
| | baz=39 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.32** | **318** | *e*P | | | Pg | 10 26 36.1 | +0.6 |
| | baz=314 | | | | | | | | |
| SSLB | | | | *e*S | | | Sg | 10 26 41.5 | +1.7 |
| | baz=314 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.34** | **295** | *e*P | | | Pb | 10 26 37.1 | -0.9 |
| | baz=293 | | | | | | | | |
| WHYT | | | | *e*S | | | Sb | 10 26 42.7 | -1.3 |
| | baz=293 | | | | | | | | |
| **WUSB** | **Renai** | **0.45** | **352** | *e*P | | | Pg | 10 26 38.0 | +0.1 |
| | baz=345 | | | | | | | | |
| **TYC** | **Yuchr** | **0.47** | **319** | *e*P | | | Pg | 10 26 37.8 | -0.5 |
| | baz=308 | | | | | | | | |
| **CHGB** | **Renai** | **0.51** | **358** | *e*P | | | Pg | 10 26 38.3 | -0.8 |
| | baz=337 | | | | | | | | |

*CATAC* ***04*** *10:27:03.9±0.3, 13°.03N×91°.05W, h10km, MB5.3, mb5.1, ML5.1*
*GCG* ***04*** *10:27:06.8±0.6, 13°.24N×91°.20W, h26km, MD4.8*
*GCMT* ***04*** *10:27:07.7±0.2, 13°.11N±0°.01×91°.28W±0°.02, h14km, MW5.1/115, Moment Tensor Solution. s79,c110; s115,c185; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr3.48±.12; Mθθ-2.52±.08; Mϕϕ-0.96±.08; Mrθ2.49±.19; Mθϕ1.31±.05; Mϕr-2.53±.21; Best double couple: M=4.89100×10^16 NP1:ϕs131.00000°, δ68.00000°, λ98.00000°. NP2:ϕs291.00000°, δ23.00000°, λ72.00000°. Principal axes: T 5.0590, Plg66.0000°, Azm54.0000°; N -0.3380, Plg7.0000°, Azm308.0000°; P -4.7240, Plg23.0000°, Azm215.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC* ***04*** *10:27:08.7, 12°.85N×91°.09W, h26km, Moment Tensor Solution. Duration: 1s8 Moment tensor: Scale 10^16Nm; Mrr4.25; Mθθ-2.73; Mϕϕ-1.52; Mrθ4.27; Mϕθ1.26; Mϕr-1.58; Fault plane solution: M=5.98000×10^16 NP1: ϕs113.54000°, δ69.83000°, λ85.44000°. NP2: ϕs306.57000°, δ20.65000°, λ102.21000°. Principal axes: T 6.3776, Plg65.0000°, Azm16.0000°; N -0.7946, Plg4.0000°, Azm115.0000°; P -5.5831, Plg25.0000°, Azm207.0000°;*
*NEIC* ***04*** *10:27:08.7, 13°.25N×90°.78W, h26km*
*NEIC* ***04*** *10:27:08.6±1.6, 13°.24N±0°.07×90°.81W±0°.07, h35km±2km, mb5.0/542, Ms_20 4.6/471, Mww5.1/30, Error ellipse: s-maj=14.2km s-min=8.7km az=218.0*
*UPA* ***04*** *10:27:09.7±7.6, 10°.33N×91°.81W, h0km±999km, MW4.9*
*IDC* ***04*** *10:27:12.2±1.4, 13°.33N×90°.52W, h73km±11km, mb4.2/27, mbtmp4.6/31, MS4.4/56, Error ellipse: s-maj=15.2km s-min=7.6km az=54.0*
*BGR* ***04*** *10:27:17.2, 14°.28N×88°.66W, h33km, mb4.6*
**ISC 04 10:27:09.9±0.9, 13°.22N±0°.04×90°.81W±0°.04, h56km±8km, n1070, σ1°.43/712, mb4.9/259, MS4.6/288, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCG** | **Pacaya** | **1.18** | **9** | *i* P | | | **Pn** | **10 27 29.6** | **-0.9** |
| **NUBE** | **Las Nubes** | **1.21** | **56** | *e*P | | | **Pn** | **10 27 29.4** | **-1.4** |
| **NUBE** | **Las Nubes** | **1.21** | **56** | *i* P | | | **Pn** | **10 27 29.2** | **-1.6** |
| NUBE | | | | | | IAML | | 10 27 58.8 | |
| | comp=Z,16μm,1.0s | | | | | | | | |
| **FUG** | **Fuego 3** | **1.22** | **358** | *i* P | | | **Pn** | **10 27 29.2** | **-1.8** |
| **LOAL** | **Lomas de Alarc** | **1.27** | **52** | *e*P | | | **Pn** | **10 27 30.9** | **-0.5** |
| **LOAL** | **Lomas de Alarc** | **1.27** | **52** | *i* P | | | **Pn** | **10 27 30.7** | **-0.7** |
| LOAL | | | | *i* S | | | **Sn** | **10 27 52.7** | **+5.2** |
| LOAL | | | | | | IAML | | 10 28 08.5 | |
| | comp=Z,28μm,1.0s | | | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.28** | **51** | *e*P | | | **Pn** | **10 27 30.8** | **-0.9** |
| **CEVE** | **Cerro Verde** | **1.30** | **62** | *e*P | | | **Pn** | **10 27 31.2** | **-0.9** |
| **CEVE** | **Cerro Verde** | **1.30** | **62** | *i* P | | | **Pn** | **10 27 31.5** | **-0.6** |
| CEVE | | | | *i* S | | | **Sn** | **10 27 53.3** | **+4.7** |
| CEVE | | | | | | IAML | | 10 28 00.3 | |
| | comp=Z,20μm,1.0s | | | | | | | | |
| **SBLS** | **San Blas** | **1.31** | **62** | *e*P | | | **Pn** | **10 27 31.2** | **-1.0** |
| **SNJE** | **San Jose** | **1.34** | **61** | *e*P | | | **Pn** | **10 27 31.9** | **-0.6** |
| **GCG4** | **OSOP** | **1.39** | **11** | *i* P | | | **Pn** | **10 27 32.0** | **-1.2** |
| GCG4 | | | | | | IAML | | 10 28 10.4 | |
| | comp=Z,17μm,1.0s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.39** | **72** | *e*P | | | **Pn** | **10 27 31.9** | **-1.3** |
| JAYA | | | | *e*S | | | **Sn** | **10 27 53.1** | **+2.4** |
| **JAYA** | **Jayaque - finc** | **1.39** | **72** | *i* P | | | **Pn** | **10 27 32.0** | **-1.2** |
| JAYA | | | | | | IAML | | 10 28 08.4 | |
| | comp=Z,19μm,1.0s | | | | | | | | |
| **GUMI** | **Mixco** | **1.42** | **8** | *i* P | | | **Pn** | **10 27 32.6** | **-1.0** |
| GUMI | | | | *i* S | | | **Sn** | **10 27 54.9** | **+3.5** |
| GUMI | | | | | | IAML | | 10 27 57.8 | |
| | comp=Z,26μm,1.0s | | | | | | | | |
| **NBG** | **Las Nubes** | **1.43** | **18** | *i* P | | | **Pn** | **10 27 34.4** | **+0.5** |
| **UNIC** | **Universidad Ca** | **1.44** | **58** | *e*P | | | **Pn** | **10 27 33.0** | **-0.7** |
| **UNIC** | **Universidad Ca** | **1.44** | **58** | *i* P | | | **Pn** | **10 27 33.2** | **-0.6** |
| UNIC | | | | *i* S | | | **Sn** | **10 27 56.7** | **+5.0** |
| UNIC | | | | | | IAML | | 10 28 17.3 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **LALI** | **Alcalda de L** | **1.47** | **79** | *i* P | | | **Pn** | **10 27 33.7** | **-0.4** |
| LALI | | | | *i* S | | | **Sn** | **10 27 57.1** | **+4.7** |
| LALI | | | | | | IAML | | 10 28 19.5 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **CEDA** | **San Andres** | **1.49** | **67** | *e*P | | | **Pn** | **10 27 33.8** | **-0.7** |
| **CEDA** | **San Andres** | **1.49** | **67** | *i* P | | | **Pn** | **10 27 34.2** | **-0.3** |
| CEDA | | | | *i* S | | | **Sn** | **10 27 58.8** | **+5.9** |
| CEDA | | | | | | IAML | | 10 28 11.6 | |
| | comp=Z,51μm,1.0s | | | | | | | | |
| **PMON** | **Piamonte** | **1.53** | **71** | *e*P | | | **Pn** | **10 27 34.3** | **-0.8** |
| **PMON** | **Piamonte** | **1.53** | **71** | *i* P | | | **Pn** | **10 27 34.8** | **-0.3** |
| PMON | | | | *i* S | | | **Sn** | **10 27 59.4** | **+5.4** |
| PMON | | | | | | IAML | | 10 28 05.9 | |
| | comp=Z,13μm,1.0s | | | | | | | | |
| **CHTG** | **Tecpan** | **1.54** | **354** | *i* P | | | **Pn** | **10 27 33.7** | **-1.7** |
| CHTG | | | | *i* S | | | **Sn** | **10 27 56.9** | **+2.4** |
| CHTG | | | | | | IAML | | 10 28 04.7 | |
| | comp=Z,37μm,1.0s | | | | | | | | |
| **MAGS** | **Ministerio de** | **1.55** | **72** | *e*P | | | **Pn** | **10 27 35.0** | **-0.3** |
| **ITCA** | **Escuela Especi** | **1.56** | **73** | *i* P | | | **Pn** | **10 27 35.1** | **-0.3** |
| ITCA | | | | *i* S | | | **Sn** | **10 27 59.8** | **+5.2** |
| ITCA | | | | | | IAML | | 10 28 11.1 | |
| | comp=Z,49μm,1.0s | | | | | | | | |
| **RTAL** | **Retalhuleu** | **1.56** | **327** | | | | **Pn** | **10 27 31.9** | **-3.5** |
| **RTAL** | **Retalhuleu** | **1.56** | **327** | *i* P | | | **Pn** | **10 27 32.4** | **-2.9** |
| RTAL | | | | *i* S | | | **Sn** | **10 27 54.2** | **-0.3** |
| RTAL | | | | | | IAML | | 10 28 01.8 | |
| | comp=Z,15μm,1.0s | | | | | | | | |
| **BOQS** | **Boqueron** | **1.57** | **71** | *e*P | | | **Pn** | **10 27 35.5** | **-0.3** |
| **SNET** | **Serv Nac Est T** | **1.60** | **73** | | | | **Pn** | **10 27 35.0** | **-1.0** |
| **SNET** | **Serv Nac Est T** | **1.60** | **73** | *e*P | | | **Pn** | **10 27 36.1** | **+0.1** |
| SNET | | | | *e*S | | | **Sn** | **10 28 00.3** | **+4.6** |
| **SNET** | **Serv Nac Est T** | **1.60** | **73** | *i* P | | | **Pn** | **10 27 35.6** | **-0.4** |
| SNET | | | | *i* S | | | **Sn** | **10 28 01.2** | **+5.5** |
| SNET | | | | | | IAML | | 10 28 12.3 | |
| | comp=Z,21μm,1.0s | | | | | | | | |
| **UEES** | **Universidad Ev** | **1.60** | **72** | *i* P | | | **Pn** | **10 27 35.5** | **-0.5** |
| UEES | | | | *i* S | | | **Sn** | **10 28 01.3** | **+5.6** |
| UEES | | | | | | IAML | | 10 28 25.5 | |
| | comp=Z,6μm,1.0s | | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **1.61** | **68** | *e*P | | | **Pn** | **10 27 36.1** | **0.0** |
| **QUEZ** | **Alcaldia de Qu** | **1.61** | **68** | *i* P | | | **Pn** | **10 27 36.1** | **0.0** |
| QUEZ | | | | *i* S | | | **Sn** | **10 28 00.9** | **+5.0** |
| QUEZ | | | | | | IAML | | 10 28 11.8 | |
| | comp=Z,59μm,1.0s | | | | | | | | |
| **PANCS** | **Alcalda de** | **1.63** | **76** | *i* P | | | **Pn** | **10 27 36.1** | **-0.3** |
| PANCS | | | | | | IAML | | 10 27 40.2 | |
| | comp=Z,20μm,1.0s | | | | | | | | |
| **UTEC** | **Universidad Te** | **1.64** | **73** | *i* P | | | **Pn** | **10 27 36.6** | **+0.2** |
| UTEC | | | | *i* S | | | **Sn** | **10 28 01.1** | **+4.6** |
| UTEC | | | | | | IAML | | 10 28 24.7 | |
| | comp=Z,14μm,1.0s | | | | | | | | |
| **LOMA** | **Loma Larga** | **1.65** | **75** | *e*P | | | **Pn** | **10 27 36.0** | **-0.7** |
| LOMA | | | | *e*S | | | **Sn** | **10 28 02.2** | **+5.3** |
| **LOMA** | **Loma Larga** | **1.65** | **75** | *i* P | | | **Pn** | **10 27 36.4** | **-0.3** |
| LOMA | | | | *i* S | | | **Sn** | **10 28 01.8** | **+4.9** |
| LOMA | | | | | | IAML | | 10 28 11.2 | |
| | comp=Z,20μm,1.0s | | | | | | | | |
| **UDBS** | **Universidad Do** | **1.68** | **73** | *i* P | | | **Pn** | **10 27 37.6** | **+0.5** |
| UDBS | | | | *i* S | | | **Sn** | **10 28 03.0** | **+5.4** |
| UDBS | | | | | | IAML | | 10 28 06.7 | |
| | comp=Z,14μm,1.0s | | | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.69** | **340** | *i* P | | | **Pn** | **10 27 35.0** | **-2.6** |
| SOKI | | | | *i* S | | | **Sn** | **10 27 59.0** | **+0.6** |
| SOKI | | | | | | IAML | | 10 28 07.2 | |
| | comp=Z,19μm,1.0s | | | | | | | | |
| **AEIL** | **Aeropuerto Ilo** | **1.71** | **74** | *e*P | | | **Pn** | **10 27 38.0** | **+0.5** |
| **LFU** | **La Fuente** | **1.73** | **72** | *e*P | | | **Pn** | **10 27 38.1** | **+0.4** |
| **APG** | **El Apazote** | **1.81** | **11** | P | | | **Pn** | **10 27 38.5** | **-0.4** |
| | comp=Z,63nm,0.4s,baz=145,slow=9.2,SNR=717 | | | | | | | | |
| APG | | | | | | S | **Sn** | **10 28 01.1** | **+0.2** |
| | comp=Z,593nm,1.0s,baz=229,slow=20,SNR=8.1 | | | | | | | | |
| **MTO3** | **Montecristo** | **1.83** | **50** | | | | **Pn** | **10 27 38.8** | **-0.4** |
| **MTO3** | **Montecristo** | **1.83** | **50** | *i* P | | | **Pn** | **10 27 39.1** | **-0.2** |
| **MTO3** | **Montecristo** | **1.83** | **50** | *i* P | | | **Pn** | **10 27 38.7** | **-0.6** |
| MTO3 | | | | | | IAML | | 10 28 17.3 | |
| | comp=Z,5μm,1.0s | | | | | | | | |
| **COEG** | **Centro de Oper** | **1.92** | **78** | *e*P | | | **Pn** | **10 27 40.2** | **-0.1** |
| **COEG** | **Centro de Oper** | **1.92** | **78** | *i* P | | | **Pn** | **10 27 41.0** | **+0.7** |
| COEG | | | | | | IAML | | 10 27 44.0 | |
| | comp=Z,6μm,1.0s | | | | | | | | |
| **TECO** | **Alcaldia de Te** | **2.00** | **81** | *i* P | | | **Pn** | **10 27 41.5** | **+0.2** |
| TECO | | | | | | IAML | | 10 28 21.8 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **UESV** | **Universidad de** | **2.01** | **78** | *i* P | | | **Pn** | **10 27 42.1** | **+0.6** |
| UESV | | | | *i* S | | | **Sn** | **10 28 10.1** | **+4.6** |
| UESV | | | | | | IAML | | 10 28 25.4 | |
| | comp=Z,11μm,1.0s | | | | | | | | |
| **LLGN** | **La Laguna** | **2.04** | **62** | *e*P | | | **Pn** | **10 27 41.9** | **-0.1** |
| LLGN | | | | *e*P | | | **Pn** | **10 27 42.2** | **+0.2** |
| **LLGN** | **La Laguna** | **2.04** | **62** | *i* P | | | **Pn** | **10 27 42.1** | **+0.2** |
| LLGN | | | | *i* S | | | **Sn** | **10 28 12.9** | **+6.5** |
| LLGN | | | | | | IAML | | 10 28 36.7 | |
| | comp=Z,9μm,1.0s | | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.08** | **76** | *e*P | | | **Pn** | **10 27 42.3** | **-0.2** |
| **SCLA** | **Alcaldia de Sa** | **2.08** | **76** | *i* P | | | **Pn** | **10 27 42.5** | **0.0** |
| SCLA | | | | *i* S | | | **Sn** | **10 28 12.7** | **+5.4** |
| SCLA | | | | | | IAML | | 10 28 39.5 | |
| | comp=Z,5μm,1.0s | | | | | | | | |
| **MRL** | **Marmol** | **2.15** | **30** | *i* P | | | **Pn** | **10 27 44.5** | **+0.9** |
| **HUEH** | **Huehuetenango** | **2.19** | **342** | | | | **Pn** | **10 27 42.5** | **-1.7** |
| **HUEH** | **Huehuetenango** | **2.19** | **342** | *e*P | | | **Pn** | **10 27 43.5** | **-0.7** |
| HUEH | | | | *e*S | | | **Sn** | **10 28 14.1** | **+3.8** |
| **PQSS** | **Presa 15 de Se** | **2.22** | **79** | *e*P | | | **Pn** | **10 27 44.4** | **0.0** |
| **PQSS** | **Presa 15 de Se** | **2.22** | **79** | *i* P | | | **Pn** | **10 27 44.0** | **-0.4** |
| PQSS | | | | | | IAML | | 10 28 38.8 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **TECA** | **Tecapa** | **2.26** | **83** | *e*P | | | **Pn** | **10 27 44.5** | **-0.6** |
| **PACA** | **Pacayal** | **2.43** | **84** | *i* P | | | **Pn** | **10 27 47.9** | **+0.5** |
| PACA | | | | *i* S | | | **Sn** | **10 28 21.6** | **+5.6** |
| PACA | | | | | | IAML | | 10 28 36.8 | |
| | comp=Z,42μm,1.0s | | | | | | | | |
| **LCY** | **Lacayo** | **2.46** | **85** | *e*P | | | **Pn** | **10 27 47.6** | **0.0** |
| **RANC** | **El Ranchito** | **2.46** | **85** | *e*P | | | **Pn** | **10 27 47.5** | **-0.3** |
| **RANC** | **El Ranchito** | **2.46** | **85** | *i* P | | | **Pn** | **10 27 47.5** | **-0.3** |
| RANC | | | | | | IAML | | 10 28 32.2 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **VSM** | **San Miguel** | **2.48** | **85** | *e*P | | | **Pn** | **10 27 48.1** | **0.0** |
| **JUCU** | **Jucuarįn** | **2.49** | **89** | *e*P | | | **Pn** | **10 27 46.7** | **-1.4** |
| **JUCU** | **Jucuarįn** | **2.49** | **89** | *i* P | | | **Pn** | **10 27 47.4** | **-0.7** |
| JUCU | | | | | | IAML | | 10 28 29.7 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **BLLM** | **Bellamira** | **2.51** | **85** | *e*P | | | **Pn** | **10 27 48.0** | **-0.4** |
| **CAHU** | **Cacacuatique** | **2.59** | **77** | *e*P | | | **Pn** | **10 27 50.1** | **+0.5** |
| **CNCH** | **Conchagua** | **2.90** | **89** | *e*P | | | **Pn** | **10 27 52.7** | **-1.0** |
| **CNCH** | **Conchagua** | **2.90** | **89** | *i* P | | | **Pn** | **10 27 53.1** | **-0.6** |
| CNCH | | | | *i* S | | | **Sn** | **10 28 31.7** | **+4.3** |
| CNCH | | | | | | IAML | | 10 28 49.9 | |
| | comp=Z,10μm,1.0s | | | | | | | | |
| **CCIG** | **Comitan** | **3.31** | **337** | | | | **Pn** | **10 27 58.9** | **-0.5** |
| **TGUH** | **Tegucigalpa,Un** | **3.54** | **76** | Pn | | | **Pn** | **10 28 01.9** | **-0.6** |
| **TGUH** | **Tegucigalpa,Un** | **3.54** | **76** | *i* P | | | **Pn** | **10 28 03.0** | **+0.5** |
| TGUH | | | | | | IAML | | 10 28 35.8 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **CRIN** | **San Cristobal** | **3.70** | **98** | | | | **Pn** | **10 28 03.7** | **-1.0** |
| **CRIN** | **San Cristobal** | **3.70** | **98** | *i* P | | | **Pn** | **10 28 03.7** | **-1.0** |
| CRIN | | | | | | IAML | | 10 29 07.5 | |
| | comp=Z,6μm,1.0s | | | | | | | | |
| **PKGN** | **Cerro Pekin** | **3.77** | **98** | *i* P | | | **Pn** | **10 28 04.6** | **-1.0** |
| PKGN | | | | | | IAML | | 10 29 10.9 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **PETF** | **Flores** | **3.79** | **14** | | | | **Pn** | **10 28 06.3** | **+0.5** |
| **PETF** | **Flores** | **3.79** | **14** | *i* P | | | **Pn** | **10 28 07.0** | **+1.2** |
| PETF | | | | | | IAML | | 10 29 16.5 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **ILCN** | **San Idelfonso** | **4.06** | **99** | *i* P | | | **Pn** | **10 28 07.6** | **-1.9** |
| ILCN | | | | | | IAML | | 10 29 01.9 | |
| | comp=Z,300nm,1.0s | | | | | | | | |
| **CNGN** | **Cerro Negro** | **4.07** | **100** | | | | **Pn** | **10 28 07.6** | **-2.2** |
| **CNGN** | **Cerro Negro** | **4.07** | **100** | *i* P | | | **Pn** | **10 28 08.3** | **-1.5** |
| CNGN | | | | | | IAML | | 10 29 31.1 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **MACN** | **El Madrono** | **4.10** | **100** | *i* P | | | **Pn** | **10 28 08.3** | **-1.8** |
| MACN | | | | | | IAML | | 10 29 10.0 | |
| | comp=Z,210nm,1.0s | | | | | | | | |
| **COPN** | **Copaltepe** | **4.24** | **104** | *i* P | | | **Pn** | **10 28 09.7** | **-2.4** |
| COPN | | | | | | IAML | | 10 29 34.0 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **MOM2** | **El Cardon** | **4.29** | **100** | *i* P | | | **Pn** | **10 28 11.6** | **-1.1** |
| MOM2 | | | | | | IAML | | 10 29 36.2 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **LIMN** | **Finca el Limon** | **4.33** | **92** | *i* P | | | **Pn** | **10 28 12.0** | **-1.3** |
| LIMN | | | | | | IAML | | 10 29 30.9 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **RA5A7** | **El Crucero** | **4.56** | **105** | *i* P | | | Pn | 10 28 21.6 | +5.1 |
| RA5A7 | | | | | | IAML | | 10 29 30.2 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **CRUN** | **El Crucero** | **4.57** | **105** | *i* P | | | Pn | 10 28 21.6 | +5.0 |
| CRUN | | | | | | IAML | | 10 29 41.3 | |
| | comp=Z,5.5nm,1.0s | | | | | | | | |
| **HUEN** | | **4.61** | **100** | *i* P | | | **Pn** | **10 28 14.8** | **-2.2** |
| HUEN | | | | | | IAML | | 10 29 49.9 | |
| | comp=Z,830nm,1.0s | | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **5.07** | **98** | Pn | | | **Pn** | **10 28 21.2** | **-2.3** |
| **BOAB** | **BOACO BROADBAN** | **5.07** | **98** | *i* P | | | **Pn** | **10 28 21.5** | **-1.9** |
| BOAB | | | | | | IAmb | IAmb | 10 28 50.8 | |
| | comp=Z,210nm,1.0s | | | | | | | | |
| BOAB | | | | | | IVmB_BB | | 10 29 01.3 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| BOAB | | | | | | IAML | | 10 30 28.8 | |
| | comp=Z,460nm,1.0s | | | | | | | | |
| **ACON** | **Acoyapa** | **5.64** | **102** | Pn | | | **Pn** | **10 28 28.9** | **-2.3** |
| **JTS** | **Las Juntas de** | **6.43** | **116** | Pn | | | **Pn** | **10 28 42.0** | **-0.1** |
| **JTS** | **Las Juntas de** | **6.43** | **116** | P | | | **Pn** | **10 28 41.6** | **-0.5** |
| | comp=Z,14nm,0.3s,baz=288,slow=23,SNR=68 | | | | | | | | |
| JTS | | | | | | S | **Sn** | **10 29 50.7** | **-3.5** |
| | comp=Z,26nm,0.6s,baz=297,slow=20,SNR=0.7 | | | | | | | | |
| **ESPN** | **Las Esperanzas** | **6.43** | **98** | | | | **Pn** | **10 28 40.4** | **-1.7** |
| **SOCE** | **Pocosol** | **6.68** | **114** | | | | **Pn** | **10 28 43.9** | **-1.7** |
| **HDC** | **Heredia** | **7.30** | **115** | Pn | | | **Pn** | **10 28 52.6** | **-1.5** |
| **HDC** | **Heredia** | **7.30** | **115** | *e*P | | | **Pn** | **10 28 53.5** | **-0.5** |
| HDC | | | | *e*S | | | **Sn** | **10 30 20.4** | **+4.8** |
| **TEIG** | **Tepich** | **7.38** | **19** | Pn | | | **Pn** | **10 28 53.7** | **-1.4** |
| **TEIG** | **Tepich** | **7.38** | **19** | P | | | **Pn** | **10 28 56.1** | **+1.1** |
| | comp=Z,275nm,0.6s,baz=197,slow=9.6,SNR=158 | | | | | | | | |
| TEIG | | | | | | S | **Sn** | **10 30 16.2** | **-1.2** |
| | comp=Z,121nm,0.8s,baz=117,slow=16,SNR=0.8 | | | | | | | | |
| TEIG | | | | | | LR | LR | 10 32 20.7 | |
| | comp=Z,11μm,19.2s,baz=200,slow=43 | | | | | | | | |
| **LCR2** | **La Lucha 2** | **7.51** | **117** | Pn | | | **Pn** | **10 28 57.9** | **+0.8** |
| **DRK0** | **Durika** | **8.39** | **117** | *e*P | | | **Pn** | **10 29 10.3** | **+1.1** |
| **TLIG** | **Tlapa** | **8.64** | **301** | Pn | | | **Pn** | **10 29 10.2** | **-2.3** |
| **PTJ1** | **Puerto Jimnez** | **8.72** | **122** | *e*P | | | **Pn** | **10 29 17.5** | **+4.1** |
| PTJ1 | | | | *e*S | | | **Sn** | **10 30 47.3** | **-3.0** |
| **CNI2** | **El Empalme, Bo** | **9.00** | **114** | *e*P | | | **Pn** | **10 29 18.0** | **+0.7** |
| CNI2 | | | | *e*S | | | Sn | 10 31 07.5 | +10 |
| **BRU2** | **Volcan** | **9.10** | **118** | | | | **Pn** | **10 29 19.8** | **+1.0** |
| **BRU2** | **Volcan** | **9.10** | **118** | *e*P | | | **Pn** | **10 29 20.4** | **+1.5** |
| BRU2 | | | | *e*S | | | **Sn** | **10 31 03.6** | **+3.6** |
| **PTPM** | **Petroterminale** | **9.25** | **122** | *e*P | | | **Pn** | **10 29 23.4** | **+2.8** |
| PTPM | | | | *e*S | | | **Sn** | **10 30 57.0** | **-6.3** |
| **BCO2** | **Palmira** | **9.28** | **118** | *e*P | | | **Pn** | **10 29 22.1** | **+0.9** |
| **DVD** | **David** | **9.48** | **119** | *e*P | | | **Pn** | **10 29 27.3** | **+3.3** |
| **UNM** | **Universidad Na** | **10.07** | **308** | Pn | | | **Pn** | **10 29 31.0** | **-1.2** |
| **GMAL** | **Guarumal, Vera** | **10.86** | **119** | *e*P | | | **Pn** | **10 29 46.8** | **+4.0** |
| **BCIP** | **Isla Barro Col** | **11.49** | **109** | | | | **Pn** | **10 29 50.0** | **-1.4** |
| **JRQG** | **Juriquilla Cam** | **11.85** | **310** | Pn | | | **Pn** | **10 29 57.8** | **+1.4** |
| **MOIG** | **Morelia** | **11.85** | **304** | Pn | | | **Pn** | **10 29 55.9** | **-0.5** |
| **SOR** | **Soroa** | **12.07** | **37** | Pn | | | **Pn** | **10 29 59.8** | **+0.6** |
| **CAMR** | **Camarioca** | **13.27** | **41** | Pn | | | **Pn** | **10 30 13.2** | **-2.4** |
| **ZAIG** | **Zacatecas** | **14.66** | **312** | | | | **Pn** | **10 30 33.4** | **-1.1** |
| **HBVL** | **Hebbronville** | **15.62** | **333** | Pn | | | **Pn** | **10 30 46.3** | **-0.2** |
| **735A** | **Kenedy** | **16.87** | **338** | IAmb | | | IAmb | 10 31 06.9 | |
| | comp=Z,237nm,1.6s | | | | | | | | |
| **833A** | **Chaparral WMA,** | **17.03** | **333** | IAmb | | | IAmb | 10 31 09.3 | |
| | comp=Z,190nm,1.9s | | | | | | | | |
| **833A** | **Chaparral WMA,** | **17.03** | **333** | P | | | **Pn** | **10 31 02.9** | **-1.4** |
| | baz=150

**TXAR Lajitas Array 19.99 325 P P 10 31 38.4 +0.4**
**TXAR Lajitas Array 19.99 325 P P 10 31 38.9 +0.9**
comp=Z,5.7nm,0.5s,baz=152,slow=13,SNR=52
TXAR PcP PcP 10 35 52.1 -0.5
comp=Z,1.0nm,0.8s,baz=134,slow=5.2,SNR=2.5
TXAR LR LR 10 39 12.5
comp=Z,156nm,22.0s,baz=126,slow=36
comp=Z,5.7nm,0.5s
**TREL Terrell 20.01 347** IAmb IAmb 10 31 47.0
comp=Z,119nm,1.2s
**OZNA Ozona 20.02 333** IAmb IAmb 10 31 41.2
comp=Z,65nm,1.0s
**LRAL Lakeview Retre 20.03 9** IAmb IAmb 10 31 46.6
comp=Z,194nm,1.7s
LRAL IAMs_20 IAMs_20 10 40 41.5
comp=Z,2µm,21.0s
**LRAL Lakeview Retre 20.03 9 P P 10 31 38.4 +0.1**
baz=191,SNR=27
**Z41A Richland Creek 20.03 355 P P 10 31 38.1 -0.1**
Z41A IAmb IAmb 10 31 40.8
comp=Z,44nm,0.8s
**H06E1 SOCORRO T-PHAS 20.11 289** T T 10 51 58.8
SNR=107
**255A Hazlehurst 20.13 21** IAmb IAmb 10 31 47.5
comp=Z,104nm,1.4s
255A IAMs_20 IAMs_20 10 40 07.9
comp=Z,4µm,18.0s
**152A Waverly Hall 20.15 15 P P 10 31 39.3 -0.3**
152A IAmb IAmb 10 31 46.0
comp=Z,66nm,0.8s
152A IAMs_20 IAMs_20 10 40 14.4
comp=Z,3µm,19.0s
**SDV Santo Domingo 20.26 100 P P 10 31 41.2 +0.1**
SDV IAmb IAmb 10 31 51.4
comp=Z,47nm,1.0s
**SDV Santo Domingo 20.26 100 P P 10 31 40.2 -1.0**
comp=Z,29nm,0.7s,baz=290,slow=2.4,SNR=7.6
SDV S S 10 35 21.2 -4.4
comp=Z,7.4nm,0.3s,baz=355,slow=12,SNR=1.7
SDV LR LR 10 41 52.5
comp=Z,1µm,18.4s,baz=266,slow=44
**SDV Santo Domingo 20.26 100** *e*P P **10 31 41.8 +0.7**
**Z38A Mt. Pleasant 20.31 350** IAmb IAmb 10 31 52.1
comp=Z,70nm,1.1s
**FW07 Weatherford 20.42 343 P P 10 31 41.6 -0.9**
FW07 IAmb IAmb 10 31 47.0
comp=Z,39nm,0.6s
**WLAR White Oak Lake 20.48 355 P P 10 31 43.2 0.0**
WLAR IAmb IAmb 10 31 50.1
comp=Z,110nm,1.2s
**154A Montrose 20.55 19** IAMs_20 IAMs_20 10 40 33.1
comp=Z,3µm,18.0s
**CCAR Cane Creek 20.62 358 P P 10 31 44.8 +0.1**
**PLPT Palo Pinto 20.68 342 P P 10 31 44.3 -1.0**
PLPT IAmb IAmb 10 31 52.6
comp=Z,152nm,1.5s
**257A Skidaway Islan 20.71 24** IAMs_20 IAMs_20 10 40 33.4
comp=Z,3µm,18.0s
**Z35A Perchaven, San 20.87 345 P P 10 31 45.8 -1.5**
**SGCY Sterling City 20.88 335 P P 10 31 47.2 -0.4**
**SLBS Sierra La Lagu 20.90 303 P P 10 31 48.2 +0.3**
SLBS IAmb IAmb 10 32 04.5
comp=Z,65nm,1.4s
**Y49A Blount Mountai 20.93 10** IAmb IAmb 10 31 54.8
comp=Z,67nm,1.0s
Y49A IAMs_20 IAMs_20 10 40 45.2
comp=Z,2µm,21.0s
**ABTX Abilene, Hawle 20.94 339 P P 10 31 48.5 +0.3**
baz=155,SNR=15
**MNHN Monahans 21.13 331 P P 10 31 50.2 -0.1**
**GOGA Godfrey 21.19 17** IAMs_20 IAMs_20 10 40 43.9
comp=Z,3µm,20.0s
**GOGA Godfrey 21.19 17** IAmb IAmb 10 31 56.6
comp=Z,72nm,1.1s
**GOGA Godfrey 21.19 17 P P 10 31 50.3 -0.5**
baz=200,SNR=31
**OXF Oxford 21.24 3** IAmb IAmb 10 32 02.6
comp=Z,91nm,1.1s
**OXF Oxford 21.24 3 P P 10 31 51.4 +0.1**
baz=184,SNR=15
**MIAR Mount Ida 21.38 354 P P 10 31 51.9 -0.9**
MIAR IAmb IAmb 10 32 12.5
comp=Z,91nm,1.4s
**MIAR Mount Ida 21.38 354 P P 10 31 52.5 -0.3**
baz=173,SNR=22
**LPIG La Paz 21.38 303 P P 10 31 56.4 +3.4**
comp=Z,15nm,0.6s,baz=38,slow=5.2,SNR=5.0
LPIG LR LR 10 41 07.6
comp=Z,696nm,18.2s,baz=123,slow=39
comp=Z,15nm,0.6s
**X48A Hartselle 21.41 9** IAmb IAmb 10 32 06.6
comp=Z,40nm,1.0s
X48A IAMs_20 IAMs_20 10 41 35.0
comp=Z,2µm,20.0s
**Y52A Lilburn 21.45 16** IAmb IAmb 10 31 59.6
comp=Z,77nm,1.1s
Y52A IAMs_20 IAMs_20 10 40 44.9
comp=Z,3µm,19.0s
**UALR University of 21.51 357 P P 10 31 53.5 -0.6**
UALR IAmb IAmb 10 31 56.0
comp=Z,33nm,0.8s
**WTFS Witchita Falls 21.61 342 P P 10 31 54.8 -0.5**
WTFS IAmb IAmb 10 32 05.7
comp=Z,64nm,1.3s
**ODSA Odessa 21.68 332 P P 10 31 55.5 -0.7**
ODSA IAmb IAmb 10 31 56.8
comp=Z,33nm,0.8s
**PECS Pecos 21.70 328 P P 10 31 56.3 0.0**
**APMT Aspermont 21.74 339 P P 10 31 55.8 -1.0**
**FPAL Fort Paine 21.75 12** IAmb IAmb 10 32 03.0
comp=Z,62nm,1.1s
FPAL IAMs_20 IAMs_20 10 40 58.7
comp=Z,2µm,21.0s
**PLAL Pickwick Lake 21.81 6 P P 10 31 56.9 -0.5**
PLAL IAmb IAmb 10 32 07.8
comp=Z,72nm,1.4s
**SN07 Snyder 07 21.82 337** IAmb IAmb 10 32 10.8
comp=Z,92nm,1.7s
**VHRN Van Horn 21.83 325** IAmb IAmb 10 32 03.4
comp=Z,66nm,0.9s
**X51A Calhoun 21.93 13** IAmb IAmb 10 32 10.6
comp=Z,150nm,1.7s
X51A IAMs_20 IAMs_20 10 41 02.5
comp=Z,2µm,20.0s
**WHAR Wooly Hollow 22.02 357 P P 10 31 58.6 -1.1**
WHAR IAmb IAmb 10 32 20.9
comp=Z,52nm,1.2s
**POST Post 22.04 335 P P 10 31 59.3 -0.7**
POST IAmb IAmb 10 32 15.5
comp=Z,45nm,1.0s
**NHSC New Hope 22.05 24** IAMs_20 IAMs_20 10 41 24.7
comp=Z,3µm,18.0s
**NHSC New Hope 22.05 24 P P 10 31 59.3 -0.7**
baz=208,SNR=6.1
**PCDR Punta Cana, DR 22.20 73** IAMs_20 IAMs_20 10 40 56.0
comp=Z,2µm,21.0s
**X34A Smith Ranch, M 22.22 345** IAmb IAmb 10 32 21.2
comp=Z,64nm,1.2s
**HBAR Harrisburg 22.24 0** IAmb IAmb 10 32 21.0
comp=Z,48nm,0.9s
**HODGE Hodges 22.31 19** IAMs_20 IAMs_20 10 41 17.7
comp=Z,3µm,20.0s
**SWET Sewanee 22.34 11 P P 10 32 02.4 -0.8**
SWET IAmb IAmb 10 32 07.0
comp=Z,33nm,0.7s
SWET IAMs_20 IAMs_20 10 41 39.5
comp=Z,2µm,21.0s
**DKNS Dickens 22.34 337 P P 10 32 02.1 -1.2**
DKNS IAmb IAmb 10 32 06.6
comp=Z,54nm,0.7s
**W50A Signal Mountai 22.44 12** IAMs_20 IAMs_20 10 41 59.2
comp=Z,1µm,22.0s
**HTMS Hat Mesa 22.48 331 P P 10 32 03.6 -1.2**
**FCAR Ozark Folk Cen 22.61 357 P P 10 32 05.2 -0.7**
**WMOK Wichita Mounta 22.61 343 P P 10 32 04.0 -2.1**
**WMOK Wichita Mounta 22.61 343 P P 10 32 04.0 -2.1**
baz=160,SNR=11
**GDL2 Guadalupe Moun 22.61 329 P P 10 32 05.8 -0.5**
**W52A Murphy 22.65 15** IAmb IAmb 10 32 30.2
comp=Z,22nm,0.7s
W52A IAMs_20 IAMs_20 10 41 32.7
comp=Z,3µm,19.0s
**JSC Jenkinsville 22.69 21** IAMs_20 IAMs_20 10 41 45.7
comp=Z,3µm,18.0s
**V48A Smith Brothers 22.71 8** IAmb IAmb 10 32 09.2
comp=Z,39nm,0.8s
V48A IAMs_20 IAMs_20 10 42 25.3
comp=Z,2µm,20.0s
**BAUV El Baul 22.74 98 P P 10 32 05.9 -1.7**
BAUV IAMs_20 IAMs_20 10 41 44.8
comp=Z,2µm,22.0s
**MNTX Cornudas Mount 22.75 326 P P 10 32 06.5 -1.1**
baz=141,SNR=94
**LNXT Lenox 22.82 3 P P 10 32 07.7 -0.5**
LNXT IAmb IAmb 10 32 21.8
comp=Z,84nm,1.1s
**BG3 Lake Jocassee 22.82 17 P P 10 32 07.8 -0.4**
BG3 IAmb IAmb 10 32 27.9
comp=Z,65nm,1.2s
BG3 IAMs_20 IAMs_20 10 41 54.2
comp=Z,3µm,18.0s
**CPCT Cooper Cave 22.85 13 P P 10 32 07.4 -1.2**
CPCT IAMs_20 IAMs_20 10 41 30.0
comp=Z,2µm,21.0s
**OKCSW OKLAHOMA CITY 22.89 346 P 10 32 07.6 -1.4**
**WVT Waverly 22.97 6 P P 10 32 08.7 -1.0**
WVT IAmb IAmb 10 32 21.7
comp=Z,36nm,1.0s
**WVT Waverly 22.97 6 P P 10 32 08.0 -1.7**
baz=187
**TUL3 Leonard 23.04 350 P P 10 32 08.8 -1.6**
TUL3 IAmb IAmb 10 32 27.3
comp=Z,140nm,1.9s
**TUL3 Leonard 23.04 350 P P 10 32 08.3 -2.1**
baz=168,SNR=12
**CLTN Cedars of Leba 23.13 9** IAmb IAmb 10 32 14.8
comp=Z,70nm,1.5s
CLTN IAMs_20 IAMs_20 10 42 16.4
comp=Z,2µm,21.0s
**RLO Rose Lookout 23.16 351** IAmb IAmb 10 32 13.0
comp=Z,29nm,0.7s
**TKL Tuckaleechee C 23.23 15** IAmb IAmb 10 32 14.6
comp=Z,40nm,0.7s
**TKL Tuckaleechee C 23.23 15 P P 10 32 13.1 +0.9**
comp=Z,40nm,0.6s,baz=184,slow=10,SNR=50
TKL LR LR 10 42 01.7
comp=Z,3µm,20.1s,baz=204,slow=39
comp=Z,40nm,0.6s
**OK029 Liberty Lake 23.27 346** IAmb IAmb 10 32 13.4
comp=Z,32nm,1.0s
**HICK Hickman 23.27 3 P P 10 32 11.9 -0.8**
HICK IAmb IAmb 10 32 17.8
comp=Z,36nm,0.9s
**OK031 S. Brethren Rd 23.28 348** IAmb IAmb 10 32 12.7
comp=Z,28nm,0.8s
**BIRD Birdtown, Kers 23.30 22 P P 10 32 11.5 -1.5**
BIRD IAmb IAmb 10 32 29.8
comp=Z,52nm,1.6s
**CRPR Cabo Rojo, PR 23.31 75** IAMs_20 IAMs_20 10 42 19.4
comp=Z,1µm,18.0s
**OK052 Battle Ridge R 23.31 348** IAmb IAmb 10 32 13.0
comp=Z,35nm,0.8s
**MSTX Muleshoe 23.35 334 P P 10 32 12.8 -0.7**
MSTX IAmb IAmb 10 32 29.9
comp=Z,129nm,2.0s
**MSTX Muleshoe 23.35 334** P P **10 32 11.7 -1.9**
baz=150,SNR=9.4
**MLPR Magueyes Islan 23.36 75** IAMs_20 IAMs_20 10 42 36.9
comp=Z,2µm,20.0s
**PARMO Parma 23.37 2** IAmb IAmb 10 32 16.9
comp=Z,39nm,0.8s
**SMWD Samnorwood 23.40 340** IAmb IAmb 10 32 15.4
comp=Z,46nm,0.7s
**EPT El Paso 23.43 325** IAmb IAmb 10 32 18.3
comp=Z,94nm,1.8s
**V52A Sevierville 23.45 15** IAmb IAmb 10 32 20.6
comp=Z,42nm,1.0s
V52A IAMs_20 IAMs_20 10 41 56.7
comp=Z,3µm,20.0s
**KMSC Kings Mountain 23.45 20** IAMs_20 IAMs_20 10 42 10.8
comp=Z,3µm,19.0s
**KMSC Kings Mountain 23.45 20 P P 10 32 13.5 -0.9**
baz=204
**QUOK Quay 23.46 348** IAmb IAmb 10 32 37.3
comp=Z,38nm,1.0s
**PBMO Poplar Bluff 23.46 1** IAmb IAmb 10 32 28.5
comp=Z,71nm,1.4s
**V53A Saluda 23.49 17** IAmb IAmb 10 32 37.2
comp=Z,36nm,0.9s
V53A IAMs_20 IAMs_20 10 42 05.8
comp=Z,3µm,19.0s
**U49A Red Boiling Sp 23.63 10** IAmb IAmb 10 32 21.9
comp=Z,81nm,1.2s
U49A IAMs_20 IAMs_20 10 42 07.7
comp=Z,2µm,21.0s
**Y60A Bolivia 23.65 27** IAMs_20 IAMs_20 10 42 32.0
comp=Z,2µm,19.0s
**ATAH Atahualpa 23.68 148 P P 10 32 18.2 +1.0**
comp=Z,16nm,0.8s,baz=333,slow=5.5,SNR=12
ATAH LR LR 10 40 18.1
comp=Z,520nm,18.1s,baz=331,slow=33
comp=Z,16nm,0.8s
**AMTX Amarillo 23.71 337** IAmb IAmb 10 32 19.4
comp=Z,31nm,0.6s
**AMTX Amarillo 23.71 337 P P 10 32 14.8 -2.1**
baz=153
**OK048 Pawnee Station 23.75 348** IAmb IAmb 10 32 39.5
comp=Z,89nm,1.5s
**OBIP Obispado Ponce 23.79 75** IAMs_20 IAMs_20 10 42 48.1
comp=Z,1µm,20.0s
**MGMO Mountain Grove 23.87 357** IAmb IAmb 10 32 20.3
comp=Z,29nm,0.8s
**T47A Sharon Grove 23.90 7** IAMs_20 IAMs_20 10 43 21.8
comp=Z,2µm,19.0s
**CGM3 Cape Girardeau 24.00 2** IAmb IAmb 10 32 31.7
comp=Z,46nm,1.2s
**ELIS Ellis County 24.03 343** IAmb IAmb 10 32 48.1
comp=Z,78nm,1.6s
**TZTN Tazewell 24.12 14** IAmb IAmb 10 32 50.3
comp=Z,45nm,1.1s
TZTN IAMs_20 IAMs_20 10 42 19.7
comp=Z,2µm,19.0s
**TZTN Tazewell 24.12 14** P P **10 32 20.4 -0.2**
baz=198,SNR=9.1
**V55A Taylorsville 24.14 19** IAMs_20 IAMs_20 10 42 22.0
comp=Z,2µm,19.0s
**T50A Nancy 24.30 12** IAmb IAmb 10 32 28.1
comp=Z,29nm,1.0s
T50A IAMs_20 IAMs_20 10 42 39.3
comp=Z,2µm,22.0s
**OK032 Salt Plains WL 24.41 346** IAmb IAmb 10 32 42.1
comp=Z,98nm,1.8s
**S44A Carbondale 24.41 3** IAmb IAmb 10 32 53.0
comp=Z,34nm,0.9s
**HUMP Col San Antoni 24.51 75** IAMs_20 IAMs_20 10 43 22.4
comp=Z,1µm,19.0s
**U54A Nelsons Funny 24.57 18** IAmb IAmb 10 32 31.1
comp=Z,41nm,0.8s
**121A Cookes Peak, D 24.72 324 P P 10 32 27.5 +1.2**
**121A Cookes Peak, D 24.72 324 P P 10 32 27.5 +1.2**
baz=137,SNR=41
**CCM Cathedral Cave 24.74 359 P P 10 32 24.7 -1.4**
CCM IAmb IAmb 10 32 27.8
comp=Z,60nm,1.5s
**CCM Cathedral Cave 24.74 359 P P 10 32 24.7 -1.4**
baz=179
**V58A Windy Hill, Pi 24.83 23** IAmb IAmb 10 32 28.5
comp=Z,21nm,0.7s
**CNNC Cliffs of the 24.84 26** IAMs_20 IAMs_20 10 43 17.6
comp=Z,2µm,18.0s
**CNNC Cliffs of the 24.84 26 P P 10 32 26.2 -0.9**
baz=211
**U56A King 24.86 20** IAMs_20 IAMs_20 10 43 03.2
comp=Z,3µm,19.0s
**R40A Maddies Statio 25.00 357** IAmb IAmb 10 32 46.4
comp=Z,34nm,1.2s
**S51A Beattyville 25.16 14** IAmb IAmb 10 33 00.9
comp=Z,22nm,0.8s
S51A IAMs_20 IAMs_20 10 43 03.1
comp=Z,2µm,19.0s
**CRNM Carthage 25.21 328 P P 10 32 31.4 +0.6**
**WCI Wyandotte Cave 25.23 8 P P 10 32 28.8 -1.8**
WCI IAmb IAmb 10 33 01.4
comp=Z,46nm,0.8s
**WCI Wyandotte Cave 25.23 8** IAMs_20 IAMs_20 10 43 53.0
comp=Z,2µm,20.0s
**WCI Wyandotte Cave 25.23 8 P P 10 32 30.7 0.0**
baz=190
**BNM Barren Site 25.31 328 P P 10 32 32.8 +1.1**
**SLM Saint Louis 25.32 1** IAMs_20 IAMs_20 10 43 54.5
comp=Z,1µm,22.0s
**Y22D IRIS PASSCAL I 25.40 328 P P 10 32 33.4 +1.0**
baz=141,SNR=9.8
**R49A Shelbyville 25.47 10 P P 10 32 31.6 -1.2**
R49A IAmb IAmb 10 32 33.7
comp=Z,22nm,0.7s
R49A IAMs_20 IAMs_20 10 44 27.3
comp=Z,2µm,21.0s
**DUN6 Lazy B Ranch 25.50 322** IAMs_20 IAMs_20 10 44 22.9
comp=Z,2µm,19.0s
**OLIL Olney 25.53 5 P P 10 32 32.5 -0.8**
OLIL IAmb IAmb 10 32 34.3
comp=Z,28nm,0.7s
OLIL IAMs_20 IAMs_20 10 44 26.9
comp=Z,2µm,19.0s
**R50A Paris 25.62 12** IAmb IAmb 10 33 04.9
comp=Z,54nm,1.4s
R50A IAMs_20 IAMs_20 10 43 19.3
comp=Z,2µm,21.0s
**Q44A Meyer Farm, Va 25.63 3** IAMs_20 IAMs_20 10 44 33.7
comp=Z,1µm,21.0s
**BLA Blacksburg 25.64 19** IAMs_20 IAMs_20 10 43 19.7
comp=Z,2µm,20.0s
**BLA Blacksburg 25.64 19 P P 10 32 33.4 -1.0**
baz=204
**PCRV Puerto La Cruz 25.80 94 P P 10 32 35.7 -0.4**
comp=Z,6.1nm,0.9s,baz=321,slow=7.7,SNR=2.6
PCRV LR LR 10 44 57.5
comp=Z,789nm,18.3s,slow=42
comp=Z,6.1nm,0.9s
**ANMO Albuquerque 25.85 329 P P 10 32 36.4 -0.2**
**ANMO Albuquerque 25.85 329** PcP **PcP 10 36 04.9 +0.1**
comp=Z,2.2nm,0.8s,baz=180,slow=7.2,SNR=3.2
ANMO LR LR 10 44 58.6
comp=Z,372nm,19.1s,baz=233,slow=41
**ANMO Albuquerque 25.85 329 P P 10 32 35.6 -1.0**
baz=143
**V61A Roper 25.88 27** IAMs_20 IAMs_20 10 44 08.0
comp=Z,2µm,18.0s
**R32A Long Quarter, 26.07 346** IAmb IAmb 10 32 40.5
comp=Z,20nm,0.8s
**BLO Bloomington 26.13 8** IAmb IAmb 10 33 16.9
comp=Z,31nm,0.8s
**P40A Paris 26.23 358** IAmb IAmb 10 32 40.8
comp=Z,32nm,0.7s
**SSFO Shawnee State 26.26 14** IAmb IAmb 10 33 19.2
comp=Z,42nm,1.2s
**KSU1 Kansas State U 26.29 350 P P 10 32 40.4 +0.2**
baz=167
**P43A Skaggs, Pawnee 26.34 2** IAMs_20 IAMs_20 10 44 57.5
comp=Z,1µm,21.0s
**TUC Tucson 26.38 319 P P 10 32 41.8 +0.6**
**TUC Tucson 26.38 319** IAMs_20 IAMs_20 10 44 25.2
comp=Z,1µm,18.0s
**TUC Tucson 26.38 319 P P 10 32 40.2 -1.0**
baz=132
**T59A Double "B" Far 26.46 24** IAmb IAmb 10 33 10.8
comp=Z,35nm,1.3s
**P46A Rosedale 26.49 6** IAmb IAmb 10 32 43.0
comp=Z,27nm,0.8s
P46A IAMs_20 IAMs_20 10 44 45.3
comp=Z,1µm,20.0s
**P48A Milroy 26.57 9** IAMs_20 IAMs_20 10 44 21.4
comp=Z,2µm,20.0s
**CBKS Cedar Bluff 26.69 344** P P **10 32 44.5 +0.6**
baz=160
**Q52A Bidwell 26.73 15** IAmb IAmb 10 32 45.9
comp=Z,32nm,0.8s
Q52A IAMs_20 IAMs_20 10 43 50.8
comp=Z,2µm,20.0s
**T25A Trinidad 26.75 335 P P 10 32 45.4 +0.7**
baz=150,SNR=7.2
**P49A Miami Univ. Ec 26.76 11** IAMs_20 IAMs_20 10 43 55.4
comp=Z,2µm,21.0s
**P49A Miami Univ. Ec 26.76 11 P P 10 32 42.4 -2.0**
baz=193,SNR=6.6
**TBTG Tabatinga, AM 27.01 128** *e*P P **10 32 47.2 +0.3**
**P51A Williamsport 27.04 13** IAmb IAmb 10 33 24.8
comp=Z,27nm,1.1s
P51A IAMs_20 IAMs_20 10 44 00.9
comp=Z,2µm,20.0s
**SMRT St. Maarten 27.12 76** IAMs_20 IAMs_20 10 44 13.5
comp=Z,1µm,20.0s
**Q54A Coxs Mills 27.14 17** IAmb IAmb 10 32 49.8
comp=Z,34nm,0.7s
**SEUS St. Eustatius 27.15 77** IAMs_20 IAMs_20 10 45 02.4
comp=Z,2µm,18.0s
**R58B Mineral 27.20 23** IAMs_20 IAMs_20 10 44 40.1
comp=Z,2µm,18.0s
**SFIN Lafayette 27.25 6** IAmb IAmb 10 33 30.4
comp=Z,77nm,1.4s
SFIN IAMs_20 IAMs_20 10 45 09.5
comp=Z,1µm,20.0s
**SFIN Lafayette 27.25 6 P P 10 32 47.0 -1.8**
baz=188,SNR=6.6
**HDIL Hopedale 27.27 3** IAMs_20 IAMs_20 10 45 34.9
comp=Z,1µm,20.0s
**HDIL Hopedale 27.27 3 P P 10 32 47.0 -1.9**
baz=183
**O48B Farmland 27.39 9** IAmb IAmb 10 32 51.7
comp=Z,16nm,0.6s
O48B IAMs_20 IAMs_20 10 44 36.1
comp=Z,2µm,21.0s
**O48B Farmland 27.39 9 P P 10 32 48.3 -1.8**
baz=192,SNR=7.6
**P52A Corning 27.40 15 P P 10 32 48.4 -1.8**
baz=199
**P53A Whipple 27.46 16** IAmb IAmb 10 32 52.6
comp=Z,19nm,0.8s
**O49A Covington 27.46 11** IAMs_20 IAMs_20 10 44 38.1
comp=Z,2µm,20.0s
**214A Organ Pipe Nat 27.48 316** IAMs_20 IAMs_20 10 45 31.4
comp=Z,2µm,18.0s
**214A Organ Pipe Nat 27.48 316 P P 10 32 51.0 -0.1**
baz=128,SNR=6.9
**CZSB Cruzeiro do Su 27.50 138 P P 10 32 52.2 +0.9**
CZSB IAmb IAmb 10 33 00.0
comp=Z,34nm,1.1s
**CZSB Cruzeiro do Su 27.50 138** *e*P P **10 32 51.3 0.0**
**N38A Joes South For 27.55 356** IAmb IAmb 10 33 14.1
comp=Z,29nm,1.1s
**CBN Corbin Frederi 27.61 23 P P 10 32 51.4 -0.7**
baz=209
**W18A Petrified Fore 27.71 325 P P 10 32 54.1 +0.8**
baz=137
**SDCO Great Sand Dun 27.72 334 P P 10 32 53.8 +0.4**
**SDCO Great Sand Dun 27.72 334 P P 10 32 53.6 +0.2**
baz=148,SNR=6.3
**KSCO Kaye Shedlock' 27.74 340 P P 10 32 53.0 -0.4**
baz=155
**ACSO Alum Creek Sta 27.78 13** IAmb IAmb 10 32 54.9
comp=Z,28nm,0.7s
ACSO IAMs_20 IAMs_20 10 44 24.3
comp=Z,2µm,21.0s
**ACSO Alum Creek Sta 27.78 13 P P 10 32 52.7 -0.9**
baz=196,SNR=8.7
**S61A Accomac 27.85 26** IAMs_20 IAMs_20 10 45 19.3
comp=Z,2µm,18.0s
**N35A Tabor 27.86 352** IAmb IAmb 10 33 16.1
comp=Z,94nm,1.9s
**N47A Urbana 27.92 8** IAmb IAmb 10 32 55.0
comp=Z,19nm,0.8s
N47A IAMs_20 IAMs_20 10 45 15.2
comp=Z,1µm,20.0s
**O52A Adamsville 27.93 15** IAmb IAmb 10 32 56.5
comp=Z,26nm,0.8s
**MCWV Mont Chateau 28.06 18 P P 10 32 55.2 -0.8**
baz=203
**M44A Midewin, Midew 28.17 4** IAmb IAmb 10 32 56.3
comp=Z,30nm,1.1s
**N49A Columbus Grove 28.20 11** IAmb IAmb 10 33 51.8
comp=Z,34nm,1.6s
N49A IAMs_20 IAMs_20 10 44 59.7
comp=Z,2µm,20.0s
**O53A New Philadelph 28.22 16** IAmb IAmb 10 33 35.0
comp=Z,55nm,1.4s
**O53A New Philadelph 28.22 16 P P 10 32 57.0 -0.5**
baz=200,SNR=6.6
**GDHS Morne Mazeau, 28.24 80** IAMs_20 IAMs_20 10 43 35.2
comp=Z,1µm,21.0s
**S22A 4UR Ranch, Cre 28.30 333 P P 10 32 59.0 +0.4**
baz=146,SNR=8.8
**CBE Ff, Capester 28.38 81** IAMs_20 IAMs_20 10 43 28.0
comp=Z,2µm,19.0s
**O54A Avella 28.38 17** IAmb IAmb 10 33 00.3
comp=Z,32nm,0.7s
**P57A Homestead Farm 28.50 21** IAmb IAmb 10 33 02.3
comp=Z,56nm,1.8s
P57A IAMs_20 IAMs_20 10 44 54.4
comp=Z,2µm,20.0s
**ABD La Joyeuse, An 28.51 80** IAMs_20 IAMs_20 10 43 41.5
comp=Z,1µm,19.0s
**N51A Ashland 28.57 13** IAMs_20 IAMs_20 10 44 58.3

comp=Z,2µm,20.0s
**HQIL Hanson Quary C 28.59 5** IAMs_20 IAMs_20 10 44 54.0
comp=Z,1µm,18.0s
**113A Mohawk Valley, 28.61 317** IAmb IAmb 10 33 06.8
comp=Z,78nm,2.0s
113A IAMs_20 IAMs_20 10 46 07.5
comp=Z,1µm,19.0s
**NNA Nana 28.62 150** LR LR 10 42 16.3
comp=Z,282nm,19.8s,baz=315,slow=32
**MVCO Mesa Verde 28.65 330** IAmb IAmb 10 33 04.2
comp=Z,78nm,1.9s
**MVCO Mesa Verde 28.65 330** P **P** **10 33 02.8 +1.1**
baz=142,SNR=12
**SCIA State Center 28.66 356** P **P** **10 32 59.4 -2.0**
baz=175
**L42A Oliver, Polo 28.70 2** IAmb IAmb 10 33 01.9
comp=Z,25nm,0.7s
L42A IAMs_20 IAMs_20 10 46 40.8
comp=Z,2µm,19.0s
**L40A Anamosa 28.74 359** IAmb IAmb 10 33 02.7
comp=Z,32nm,0.8s
**FDF Fort de France 28.81 83** IAMs_20 IAMs_20 10 44 45.5
comp=Z,975nm,20.0s
**N53A Lisbon 28.84 16** IAmb IAmb 10 33 04.3
comp=Z,30nm,0.7s
**SDMD Soldier's Deli 28.86 23** IAMs_20 IAMs_20 10 45 49.0
comp=Z,1µm,18.0s
**M50A Fremont 28.89 12** IAmb IAmb 10 33 04.2
comp=Z,26nm,0.8s
M50A IAMs_20 IAMs_20 10 45 09.8
comp=Z,2µm,20.0s
**BIM Bigot 28.89 84** IAMs_20 IAMs_20 10 46 26.7
comp=Z,1µm,18.0s
**L46A Eue Claire 28.96 7** IAmb IAmb 10 33 03.3
comp=Z,20nm,0.6s
L46A IAMs_20 IAMs_20 10 46 09.6
comp=Z,2µm,20.0s
**L44A Lake County Fo 28.96 4** IAMs_20 IAMs_20 10 46 23.8
comp=Z,1µm,21.0s
**L44A Lake County Fo 28.96 4** P **P** **10 33 02.4 -1.7**
baz=186
**ILAM Ilet Lapin Mar 29.08 83** IAMs_20 IAMs_20 10 46 45.5
comp=Z,1µm,19.0s
**MPOM Morne Pois Mar 29.10 84** IAMs_20 IAMs_20 10 46 32.1
comp=Z,1µm,18.0s
**L48A N Adams 29.15 10** IAmb IAmb 10 33 06.5
comp=Z,22nm,0.6s
L48A IAMs_20 IAMs_20 10 45 39.8
comp=Z,2µm,20.0s
**OGNE Ogallala 29.32 342** P **P** **10 33 07.1 -0.3**
baz=157
**K43A Burlington 29.46 4** IAmb IAmb 10 33 08.7
comp=Z,27nm,0.8s
K43A IAMs_20 IAMs_20 10 46 49.9
comp=Z,1µm,19.0s
**M53A WI Miller and 29.47 16** IAmb IAmb 10 33 09.9
comp=Z,32nm,0.7s
**M53A WI Miller and 29.47 16** P **P** **10 33 07.4 -1.2**
baz=200,SNR=7.7
**GLA Glamis 29.50 316** IAmb IAmb 10 33 12.0
comp=Z,17nm,0.9s
GLA IAMs_20 IAMs_20 10 46 29.9
comp=Z,1µm,19.0s
**GLA Glamis 29.50 316** P **P** **10 33 08.6 -0.4**
baz=126
**SMCO Snowmass 29.55 334** P **P** **10 33 09.9 +0.1**
**MVL Millersville 29.56 23** IAMs_20 IAMs_20 10 46 02.5
comp=Z,2µm,18.0s
**SSPA Standing Stone 29.57 20** P **P** **10 33 08.4 -1.1**
**SSPA Standing Stone 29.57 20** P **P** **10 33 08.1 -1.4**
baz=206
**JFWS Jewell Farm 29.59 1** IAMs_20 IAMs_20 10 47 10.6
comp=Z,1µm,20.0s
**JFWS Jewell Farm 29.59 1** IAmb IAmb 10 33 10.0
comp=Z,27nm,0.6s
**JFWS Jewell Farm 29.59 1** P **P** **10 33 08.3 -1.3**
baz=181,SNR=13
**AAM Ann Arbor 29.64 11** IAMs_20 IAMs_20 10 45 55.6
comp=Z,2µm,20.0s
**AAM Ann Arbor 29.64 11** P **P** **10 33 09.7 -0.3**
baz=194
**BLYC Blythe 29.71 317** IAmb IAmb 10 33 15.9
comp=Z,52nm,1.6s
**WUPA West Chester U 29.79 24** IAMs_20 IAMs_20 10 45 60.0
comp=Z,1µm,19.0s
**PDMCI Parker Dam,Lak 29.81 319** P **P** **10 33 12.7 +1.1**
baz=129,SNR=12
**YUH Yuha Desert 30.02 314** P **P** **10 33 13.2 -0.3**
YUH IAmb IAmb 10 33 18.8
comp=Z,79nm,1.9s
YUH IAMs_20 IAMs_20 10 46 58.6
comp=Z,779nm,18.0s
**SWSC Sam W. Stewart 30.10 315** P **P** **10 33 15.0 +0.8**
baz=125,SNR=7.4
**IKP In-Ko-Pah, Jac 30.15 314** P **P** **10 33 16.6 +1.8**
baz=124
**W13A Hualapai Mount 30.15 320** IAmb IAmb 10 33 19.5
comp=Z,69nm,1.9s
W13A IAMs_20 IAMs_20 10 47 16.2
comp=Z,1µm,18.0s
**N58A Sunbury 30.16 22** IAMs_20 IAMs_20 10 46 13.4
comp=Z,2µm,19.0s
**BC3 Big Chuckawall 30.27 316** P **P** **10 33 17.6 +1.6**
baz=126,SNR=19
**ERPA Erie 30.29 16** P **P** **10 33 14.4 -1.5**
baz=201
**K50A Casco 30.29 12** IAmb IAmb 10 33 18.9
comp=Z,22nm,0.8s
**J47A Sunmer 30.36 9** IAmb IAmb 10 33 17.1
comp=Z,13nm,0.6s
J47A IAMs_20 IAMs_20 10 46 27.7
comp=Z,1µm,20.0s
**IRM Iron Mountain 30.37 317** P **P** **10 33 16.9 +0.2**
baz=128
**M57A Sunshine Farm, 30.45 21** IAMs_20 IAMs_20 10 46 24.2
comp=Z,2µm,18.0s
**MONP2 Monument Peak 30.50 314** P **P** **10 33 18.2 +0.1**
baz=124
**BBSR BB Station 30.57 47** IAMs_20 IAMs_20 10 45 49.2
comp=Z,733nm,18.0s
**BBSR BB Station 30.57 47** P **P** **10 33 18.5 +0.1**
**I40A Norwalk 30.57 0** IAMs_20 IAMs_20 10 47 52.3
comp=Z,1µm,19.0s
**N23A Red Feather La 30.59 337** P **P** **10 33 18.2 -0.7**
baz=150
**I42A Draeger Farm, 30.61 3** IAmb IAmb 10 33 19.1
comp=Z,23nm,0.8s
I42A IAMs_20 IAMs_20 10 47 46.4
comp=Z,1µm,20.0s
**KNB Kanab 30.81 324** IAmb IAmb 10 33 25.0
comp=Z,26nm,1.1s
**ECSD EROS Data Cent 30.82 352** P **P** **10 33 18.6 -1.9**
baz=169,SNR=8.9
**BELC Belle Mtn. Jos 30.84 316** P **P** **10 33 21.9 +0.8**
baz=126,SNR=6.8
**TEFE Tefe 30.84 121** *eP* **P** **10 33 21.2 +0.2**
**O20A White River Ci 30.89 333** P **P** **10 33 22.3 +1.0**
baz=146
**TPFO Pinon Flats 30.92 315** P **P** **10 33 22.9 +1.2**
baz=125,SNR=5.2
**PFO Pinyon Flats O 30.93 315** P **P** **10 33 21.9 +0.1**
**PFO Pinyon Flats O 30.93 315** IAMs_20 IAMs_20 10 47 27.8
comp=Z,852nm,18.0s
**PFO Pinyon Flats O 30.93 315** LR LR 10 47 41.1
comp=Z,730nm,18.1s,baz=128,slow=40
**PFO Pinyon Flats O 30.93 315** P **P** **10 33 22.8 +1.1**
baz=125
**PFO Pinyon Flats O 30.93 315** P **P** **10 33 24.4 +2.6**
**WVNY West Valley, N 30.95 18** IAmb IAmb 10 33 23.1
comp=Z,21nm,0.8s
**I45A Fountain 30.96 6** IAMs_20 IAMs_20 10 47 39.7
comp=Z,2µm,19.0s
**109C Camp Elliot, M 30.98 314** IAMs_20 IAMs_20 10 45 49.2
comp=Z,801nm,21.0s
**GMRC Granite Mounta 31.09 318** P **P** **10 33 24.8 +1.6**
baz=128,SNR=15
**KSPA Keystone Colle 31.13 22** IAMs_20 IAMs_20 10 47 01.1
comp=Z,2µm,18.0s
**SRU San Rafael Swe 31.13 329** IAmb IAmb 10 33 25.9
comp=Z,33nm,1.7s
**V12A Nelson 31.16 320** IAmb IAmb 10 33 27.6
comp=Z,20nm,0.9s
V12A IAMs_20 IAMs_20 10 46 49.8
comp=Z,906nm,20.0s
**MTPU Mount Pierson 31.19 326** IAmb IAmb 10 33 33.4
comp=Z,19nm,0.8s
MTPU IAMs_20 IAMs_20 10 47 09.5
comp=Z,736nm,20.0s

**Q16A Castle Valley 31.31 329** IAmb IAmb 10 33 27.9
comp=Z,52nm,1.9s
**SZCU Shurtz Canyon 31.37 325** IAmb IAmb 10 33 30.0
comp=Z,27nm,1.1s
**PAL Palisades 31.38 25** P **P** **10 33 23.3 -2.1**
baz=213
**MURC Murrieta 31.43 315** P **P** **10 33 24.5 -1.6**
baz=24
**CCUT Cedar City 31.49 324** IAmb IAmb 10 33 42.8
comp=Z,21nm,1.0s
**HEC Hector,Ludlow 31.56 317** P **P** **10 33 26.3 -0.9**
baz=127
**BINY Binghamton 31.61 21** IAMs_20 IAMs_20 10 47 08.9
comp=Z,2µm,18.0s
**BINY Binghamton 31.61 21** P **P** **10 33 26.0 -1.6**
baz=208
**BBRC Big Bear Solar 31.62 316** P **P** **10 33 26.0 -1.9**
baz=125
**ELS Elsinore Mount 31.62 315** IAMs_20 IAMs_20 10 46 31.1
comp=Z,811nm,20.0s
**TUQ Turquoise Moun 31.66 319** P **P** **10 33 26.9 -1.3**
baz=128
**TCRU Three Creeks R 31.75 327** IAmb IAmb 10 33 37.2
comp=Z,13nm,0.7s
TCRU IAMs_20 IAMs_20 10 48 03.2
comp=Z,943nm,19.0s
**BOAV Boa Vista 31.83 107** P **P** **10 33 29.8 +0.1**
BOAV IAmb IAmb 10 33 38.4
comp=Z,21nm,0.9s
**BOAV Boa Vista 31.83 107** *eP* **P** **10 33 30.6 +0.9**
**K57A Scipio Center 31.90 20** IAmb IAmb 10 33 30.0
comp=Z,11nm,0.7s
**GLMI Grayling 31.94 8** IAMs_20 IAMs_20 10 47 38.6
comp=Z,1µm,20.0s
**GLMI Grayling 31.94 8** P **P** **10 33 28.5 -1.8**
baz=191
**G40A Rib Lake 31.95 1** IAMs_20 IAMs_20 10 48 51.8
comp=Z,2µm,19.0s
**L59A Walton 31.95 22** IAmb IAmb 10 33 32.0
comp=Z,15nm,0.8s
**J55A Hilton 31.97 18** IAmb IAmb 10 33 31.7
comp=Z,18nm,0.8s
**BFSC Mount Baldy Ra 32.11 315** P **P** **10 33 31.8 -0.3**
baz=124
**GSC Goldstone, Bar 32.15 318** P **P** **10 33 32.3 -0.1**
baz=127
**SHOC Shoshone, Teco 32.17 319** P **P** **10 33 33.2 +0.7**
baz=128
**CIS Catalina Islan 32.18 313** P **P** **10 33 32.2 -0.5**
baz=122
**K22A Casper 32.33 338** P **P** **10 33 33.8 -0.2**
baz=150,SNR=6.2
**MPU Maple Canyon 32.38 329** IAMs_20 IAMs_20 10 48 30.7
comp=Z,762nm,20.0s
**PRN Pahroc Range 32.38 322** IAmb IAmb 10 33 39.2
comp=Z,31nm,1.6s
PRN IAMs_20 IAMs_20 10 48 11.0
comp=Z,850nm,18.0s
**PASC Pasadena Art C 32.43 315** IAMs_20 IAMs_20 10 47 53.7
comp=Z,789nm,18.0s
**F42A Maple Grove Fa 32.51 3** IAMs_20 IAMs_20 10 48 33.8
comp=Z,1µm,20.0s
**NLU North Lily Min 32.55 329** IAMs_20 IAMs_20 10 48 33.4
comp=Z,794nm,20.0s
**GWY Greenwater Val 32.59 319** IAmb IAmb 10 33 39.5
comp=Z,45nm,1.9s
GWY IAMs_20 IAMs_20 10 48 44.9
comp=Z,1µm,18.0s
**J57A Williamstown 32.68 20** IAmb IAmb 10 33 36.7
comp=Z,13nm,0.7s
**EDW2 Edwards Air Fo 32.70 316** P **P** **10 33 37.4 +0.2**
baz=125
**JLU Joanelle 32.73 330** IAmb IAmb 10 33 39.9
comp=Z,32nm,1.8s
**UCCT U. Connecticut 32.74 26** IAmb IAmb 10 33 37.9
comp=Z,18nm,0.7s
UCCT IAMs_20 IAMs_20 10 48 16.8
comp=Z,1µm,18.0s
**COWI Conover 32.81 2** IAMs_20 IAMs_20 10 49 06.5
comp=Z,1µm,20.0s
**TPNV Topopah Spring 32.81 321** P **P** **10 33 38.7 +0.4**
baz=130,SNR=10
**RSSD Black Hills 32.82 342** P **P** **10 33 38.1 -0.2**
**RSSD Black Hills 32.82 342** P **P** **10 33 38.7 +0.4**
baz=156
**RSSD Black Hills 32.82 342** P **P** **10 33 38.2 -0.2**
RSSD PcP **PcP** **10 36 22.7 +0.4**
**PECO Prince Edward 32.83 19** IAmb IAmb 10 33 39.1
comp=Z,23nm,0.8s
**LRMC Laurel Mtn Rad 32.83 317** P **P** **10 33 39.1 +0.6**
baz=126
**CCAC Calif City Air 32.87 316** IAMs_20 IAMs_20 10 48 35.1
comp=Z,722nm,18.0s
**J58A Remsen 32.88 21** IAmb IAmb 10 33 39.6
comp=Z,11nm,0.6s
J58A IAMs_20 IAMs_20 10 48 06.4
comp=Z,1µm,18.0s
**FURC Furnace Creek, 32.89 319** P **P** **10 33 39.4 +0.6**
baz=128,SNR=5.8
**WCT Wildcat Mounta 32.94 320** IAMs_20 IAMs_20 10 48 41.1
comp=Z,1µm,19.0s
**CTU Camp Tracy 32.95 330** IAmb IAmb 10 33 42.6
comp=Z,14nm,1.0s
**S11A Rachel 32.95 322** IAMs_20 IAMs_20 10 48 38.2
comp=Z,1µm,19.0s
**SADO Sadowa 32.98 15** P **P** **10 33 37.8 -1.7**
comp=Z,19nm,0.6s,baz=218,slow=9.0,SNR=28
SADO LR LR 10 48 12.5
comp=Z,2µm,18.3s,baz=241,slow=38
comp=Z,19nm,0.6s
**MPMC Manual Prospec 33.05 318** P **P** **10 33 39.9 -0.5**
baz=127,SNR=14
**SPR3 Spring Creek 3 33.05 325** IAmb IAmb 10 33 44.1
comp=Z,26nm,1.2s
**DUG Dugway, Tooele 33.10 328** IAmb IAmb 10 33 43.6
comp=Z,42nm,1.9s
**DUG Dugway, Tooele 33.10 328** P **P** **10 33 41.5 +0.7**
baz=138
**TCUT Toone Canyon 33.12 331** IAmb IAmb 10 33 44.2
comp=Z,14nm,0.8s
**J59A Pisco 33.25 22** IAmb IAmb 10 34 01.6
comp=Z,33nm,1.8s
**E38A The Farm, Brul 33.29 359** IAMs_20 IAMs_20 10 49 29.3
comp=Z,1µm,21.0s
**SCZ2 Santa Cruz Isl 33.35 313** P **P** **10 33 43.8 +0.9**
baz=122
**ARVC Arvin 33.40 316** P **P** **10 33 43.3 0.0**
baz=124,SNR=6.4
**K62A Royalston 33.46 25** IAMs_20 IAMs_20 10 48 20.7
comp=Z,1µm,18.0s
**ISA Isabella, Lake 33.46 317** P **P** **10 33 43.7 -0.2**
ISA IAmb IAmb 10 33 47.3
comp=Z,24nm,1.4s
ISA IAMs_20 IAMs_20 10 49 02.9
comp=Z,696nm,18.0s
**ISA Isabella, Lake 33.46 317** P **P** **10 33 43.6 -0.2**
baz=125
**ETMB Extrema 33.47 132** P **P** **10 33 43.6 -0.4**
**ETMB Extrema 33.47 132** *eP* **P** **10 33 43.6 -0.4**
**E46A Sault Ste Mari 33.49 8** IAmb IAmb 10 33 44.7
comp=Z,11nm,0.7s
E46A IAMs_20 IAMs_20 10 48 35.7
comp=Z,988nm,20.0s
**GRAC Grapevine Rang 33.53 320** IAMs_20 IAMs_20 10 48 33.7
comp=Z,663nm,20.0s
**GRAC Grapevine Rang 33.53 320** P **P** **10 33 44.6 +0.2**
baz=128,SNR=6.7
**HWUT Hardware Ranch 33.57 331** P **P** **10 33 45.0 +0.1**
**HRV Adam Dziewonsk 33.61 26** IAMs_20 IAMs_20 10 48 16.8
comp=Z,1µm,19.0s
**HRV Adam Dziewonsk 33.61 26** P **P** **10 33 44.9 0.0**
baz=215
**BW06 Boulder Array 33.61 335** P **P** **10 33 45.0 -0.3**
baz=146
**PDAR Pinedale Array 33.61 335** P **P** **10 33 44.0 -1.3**
**PDAR Pinedale Array 33.61 335** P **P** **10 33 45.4 +0.1**
comp=Z,2.6nm,0.9s,baz=140,slow=6.2,SNR=12
PDAR PcP **PcP** **10 36 26.2 +1.6**
comp=Z,1.3nm,0.6s,baz=142,slow=4.6,SNR=8.6
comp=Z,2.6nm,0.9s
**WES Weston 33.61 27** IAMs_20 IAMs_20 10 48 26.9
comp=Z,2µm,19.0s
**BCX Boston College 33.64 27** IAMs_20 IAMs_20 10 48 47.5
comp=Z,2µm,19.0s
**SBC Santa Barbara 33.64 314** P **P** **10 33 45.5 +0.1**
baz=122
**CWC Cottonwood Cre 33.66 318** P **P** **10 33 45.6 -0.1**
baz=126

**GMN Gold Mountain 33.66 320** IAMs_20 IAMs_20 10 49 41.9
comp=Z,899nm,20.0s
**BGU Big Grassy Mou 33.76 329** IAmb IAmb 10 33 49.1
comp=Z,52nm,1.9s
**NCB Newcomb 33.79 22** IAMs_20 IAMs_20 10 48 25.6
comp=Z,2µm,19.0s
**PKM Mcpherson Peak 33.95 314** P **P** **10 33 48.2 -0.1**
baz=122
**VES Vestal, Richgr 33.97 316** P **P** **10 33 48.5 +0.3**
baz=124,SNR=15
**MACA Manacapuru-AM 34.05 116** P **P** **10 33 49.5 +0.4**
**MACA Manacapuru-AM 34.05 116** *eP* **P** **10 33 49.6 +0.6**
**TIN Tinemaha, Big 34.12 319** P **P** **10 33 49.4 -0.3**
baz=127
**DSP Deep Springs 34.15 320** IAMs_20 IAMs_20 10 49 38.9
comp=Z,801nm,18.0s
**LONY Lake Ozonia 34.23 21** IAMs_20 IAMs_20 10 48 31.1
comp=Z,1µm,19.0s
**LONY Lake Ozonia 34.23 21** P **P** **10 33 48.4 -1.9**
baz=209
**EYMN Ely 34.63 359** IAMs_20 IAMs_20 10 50 35.8
comp=Z,1µm,18.0s
**EYMN Ely 34.63 359** P **P** **10 33 51.5 -2.3**
baz=179,SNR=10.0
**LOHW Long Hollow 34.74 334** IAmb IAmb 10 33 57.6
comp=Z,13nm,0.7s
**ELK Elko 34.78 327** IAmb IAmb 10 33 58.5
comp=Z,27nm,1.5s
**ELK Elko 34.78 327** PcP **PcP** **10 36 28.7 +0.8**
comp=Z,2.1nm,0.8s,baz=39,slow=1.5,SNR=4.9
ELK LR LR 10 48 56.3
comp=Z,365nm,18.1s,baz=136,slow=37
**TPAW Teton Pass 34.79 334** IAmb IAmb 10 34 00.6
comp=Z,13nm,0.8s
**I62A Tamworth 34.82 25** IAmb IAmb 10 34 19.9
comp=Z,26nm,1.4s
I62A IAMs_20 IAMs_20 10 50 01.9
comp=Z,1µm,18.0s
**LBNH Lisbon 34.89 24** P **P** **10 33 54.2 -1.9**
baz=213
**NV11 Mina Array Sit 34.91 321** IAmb IAmb 10 34 02.3
comp=Z,28nm,1.0s
**FXWY Fox Creek 34.94 334** IAmb IAmb 10 33 58.3
comp=Z,27nm,2.0s
**OMMB Old Mammoth Mi 34.95 319** IAmb IAmb 10 34 02.3
comp=Z,27nm,1.5s
**NVAR Mina Array Bea 35.00 321** P **P** **10 33 59.3 +1.9**
**NVAR Mina Array Bea 35.00 321** P **P** **10 33 59.5 +2.1**
comp=Z,20nm,0.7s,baz=134,slow=8.0,SNR=112
NVAR PcP **PcP** **10 36 29.6 +1.0**
comp=Z,2.9nm,0.7s,baz=130,slow=3.4,SNR=6.9
NVAR LR LR 10 50 46.4
comp=Z,726nm,18.6s,baz=128,slow=40
comp=Z,20nm,0.7s
**MDPB Devils Postpil 35.01 319** IAmb IAmb 10 34 01.5
comp=Z,17nm,0.9s
**LHV Little Huntoon 35.02 320** IAmb IAmb 10 34 01.9
comp=Z,26nm,0.9s
LHV IAMs_20 IAMs_20 10 49 23.0
comp=Z,839nm,20.0s
**IMW Indian Meadow 35.12 334** P **P** **10 33 58.4 0.0**
**SAML Samuel 35.18 127** P **P** **10 33 57.8 -1.1**
SAML IAmb IAmb 10 34 07.1
comp=Z,47nm,1.6s
**SAML Samuel 35.18 127** *eP* **P** **10 33 57.7 -1.1**
**AGMN Agassiz Nation 35.23 354** P **P** **10 33 56.6 -2.2**
baz=172,SNR=22
**RYN Ryan 35.26 321** IAmb IAmb 10 34 03.1
comp=Z,14nm,1.0s
RYN IAMs_20 IAMs_20 10 49 33.4
comp=Z,546nm,18.0s
**KVN Kaiserville 35.27 322** IAmb IAmb 10 34 04.9
comp=Z,14nm,1.0s
KVN IAMs_20 IAMs_20 10 50 59.6
comp=Z,1µm,20.0s
**I63A Otisfield 35.28 26** IAMs_20 IAMs_20 10 48 58.0
comp=Z,967nm,20.0s
**MDND Maddock 35.30 350** P **P** **10 33 57.7 -1.8**
baz=165,SNR=7.5
**MNTQ Montreal, Queb 35.33 21** IAmb IAmb 10 34 00.9
comp=Z,12nm,0.8s
**PMPB Monarch Peak 35.34 316** IAMs_20 IAMs_20 10 49 38.6
comp=Z,750nm,18.0s
**H17A Grant Village 35.37 335** IAmb IAmb 10 34 04.2
comp=Z,29nm,1.9s
**H17A Grant Village 35.37 335** P **P** **10 34 00.4 -0.1**
baz=145
**RLMT Red Lodge 35.47 337** P **P** **10 34 00.6 -0.6**
baz=148,SNR=7.5
**H62A Milan 35.47 24** IAMs_20 IAMs_20 10 49 33.1
comp=Z,1µm,18.0s
**BBGB Big Mountain B 35.70 316** IAMs_20 IAMs_20 10 50 22.1
comp=Z,861nm,18.0s
**WAKR Walker 35.75 320** IAmb IAmb 10 34 07.6
comp=Z,17nm,1.0s
WAKR IAMs_20 IAMs_20 10 50 45.5
comp=Z,871nm,19.0s
**LAO LASA Array 35.80 342** P **P** **10 34 03.0 -0.8**
baz=154
**YERR Yerington 35.92 321** IAmb IAmb 10 34 08.7
comp=Z,17nm,0.9s
YERR IAMs_20 IAMs_20 10 49 41.9
comp=Z,619nm,20.0s
**SAO San Andreas Ge 36.07 316** IAMs_20 IAMs_20 10 50 02.0
comp=Z,882nm,18.0s
**WVL Waterville 36.09 26** IAMs_20 IAMs_20 10 49 32.3
comp=Z,1µm,20.0s
**PNTR Pine Nut 36.21 321** IAmb IAmb 10 34 11.4
comp=Z,24nm,0.8s
PNTR IAMs_20 IAMs_20 10 51 10.5
comp=Z,705nm,19.0s
**G62A West of Eustis 36.26 24** IAmb IAmb 10 34 32.8
comp=Z,44nm,1.6s
G62A IAMs_20 IAMs_20 10 49 57.8
comp=Z,1µm,18.0s
**HLID Hailey 36.42 331** P **P** **10 34 09.8 +0.4**
HLID IAmb IAmb 10 34 12.4
comp=Z,27nm,1.4s
**HLID Hailey 36.42 331** P **P** **10 34 08.8 -0.6**
baz=139,SNR=17
**EMB Emerald Bay 36.45 320** IAMs_20 IAMs_20 10 51 16.9
comp=Z,920nm,19.0s
**VLDQ Val d'Or 36.52 15** IAmb IAmb 10 34 12.4
comp=Z,39nm,1.6s
**MPK Martis Peak 36.60 321** IAMs_20 IAMs_20 10 51 24.9
comp=Z,811nm,20.0s
**BOZ Bozeman (W) 36.79 335** P **P** **10 34 12.7 +0.2**
baz=145,SNR=17
**PKME Peaks-Kenny Pk 36.80 26** IAMs_20 IAMs_20 10 50 04.3
comp=Z,1µm,19.0s
**PKME Peaks-Kenny Pk 36.80 26** P **P** **10 34 11.2 -1.2**
baz=216
**DGMT Dagmar 36.86 345** P **P** **10 34 12.1 -0.8**
baz=158
**LPAZ La Paz 36.91 142** P **P** **10 34 14.0 -0.3**
**LPAZ La Paz 36.91 142** P **P** **10 34 13.4 -0.9**
comp=Z,1.6nm,0.7s,baz=354,slow=7.1,SNR=7.3
comp=Z,1.6nm,0.7s
**LPAZ La Paz 36.91 142** *eP* **P** **10 34 13.4 -0.9**
**LPAZ La Paz 36.91 142** P **P** **10 34 13.6 -0.7**
**DLMT Dillon 37.00 334** IAmb IAmb 10 34 25.0
comp=Z,22nm,1.4s
**MFID Camas Ranch 37.00 329** IAmb IAmb 10 34 18.5
comp=Z,20nm,1.1s
**F62A Pittston Farm, 37.04 24** IAMs_20 IAMs_20 10 50 31.5
comp=Z,1µm,18.0s
**ULM Lac du Bonnet 37.16 355** P **P** **10 34 13.3 -2.0**
**ULM Lac du Bonnet 37.16 355** P **P** **10 34 13.4 -2.0**
comp=Z,40nm,0.7s,baz=171,slow=9.3,SNR=51
ULM LR LR 10 52 49.3
comp=Z,838nm,18.6s,baz=154,slow=41
comp=Z,40nm,0.7s
**F63A Nahmakanta, Br 37.24 25** IAMs_20 IAMs_20 10 50 16.7
comp=Z,786nm,20.0s
**LRM Limekiln Ridge 37.31 335** P **P** **10 34 17.2 +0.2**
**F64A Sherman 37.68 26** IAMs_20 IAMs_20 10 50 48.5
comp=Z,1µm,19.0s
**MCCM Marconi Confer 37.78 317** IAMs_20 IAMs_20 10 51 51.1
comp=Z,769nm,18.0s
**WVOR Wild Horse Val 37.78 326** IAmb IAmb 10 34 24.5
comp=Z,46nm,1.4s
WVOR IAMs_20 IAMs_20 10 51 57.0
comp=Z,505nm,19.0s
**GDXM Geysers 38.08 318** IAmb IAmb 10 34 28.7
comp=Z,14nm,0.9s
GDXM IAMs_20 IAMs_20 10 50 41.1
comp=Z,898nm,19.0s
**EGMT Eagleton 38.12 339** IAmb IAmb 10 34 25.7

comp=Z,16nm,0.9s
**EGMT Eagleton** 38.12 339 P **P** 10 34 22.7 -0.9
baz=149,SNR=7.4
**HOPS Hopland Field** 38.36 318 IAMs_20 IAMs_20 10 52 06.5
comp=Z,634nm,19.0s
**D62A Allapoint, All** 38.37 24 IAmb IAmb 10 34 25.6
comp=Z,37nm,1.8s
D62A IAMs_20 IAMs_20 10 50 53.8
comp=Z,1µm,20.0s
**HATC Hat Creek Radi** 38.39 321 IAmb IAmb 10 34 30.4
comp=Z,19nm,0.9s
HATC IAMs_20 IAMs_20 10 52 32.2
comp=Z,900nm,19.0s
**PQI Presque Isle** 38.46 25 IAMs_20 IAMs_20 10 51 33.1
comp=Z,1µm,18.0s
**MSO Missoula** 38.73 334 IAmb IAmb 10 34 30.9
comp=Z,29nm,1.4s
**MSO Missoula** 38.73 334 P **P** 10 34 28.4 -0.5
baz=142,SNR=8.0
**O02D Mt. Diablo Mer** 38.84 320 IAMs_20 IAMs_20 10 51 32.1
comp=Z,476nm,18.0s
**ITTB Itaituba** 38.97 114 *e*P **P** 10 34 30.4 -0.6
**HAL Halifax** 38.98 31 IAMs_20 IAMs_20 10 52 46.9
comp=Z,657nm,18.0s
**KCPM Cahto Peak** 39.07 318 IAMs_20 IAMs_20 10 52 40.3
comp=Z,728nm,20.0s
**LMN Caledonia Moun** 39.26 29 IAMs_20 IAMs_20 10 53 45.4
comp=Z,816nm,18.0s
**KMRM Mail Ridge** 39.45 319 IAMs_20 IAMs_20 10 53 06.9
comp=Z,778nm,19.0s
**K04D Chiloquin, OR** 39.67 324 IAmb IAmb 10 34 39.7
comp=Z,29nm,0.9s
K04D IAMs_20 IAMs_20 10 53 05.9
comp=Z,525nm,18.0s
**YBH Yreka Blue Hor** 39.69 322 IAMs_20 IAMs_20 10 51 08.6
comp=Z,557nm,20.0s
**YBH Yreka Blue Hor** 39.69 322 LR LR 10 51 19.1
comp=Z,526nm,20.2s,baz=148,slow=36
**J05D Fort Rock, OR** 39.79 325 IAmb IAmb 10 34 41.7
comp=Z,31nm,1.4s
J05D IAMs_20 IAMs_20 10 53 48.0
comp=Z,956nm,18.0s
**KMPM Mount Pierce** 39.82 319 IAmb IAmb 10 34 43.0
comp=Z,38nm,0.9s
KMPM IAMs_20 IAMs_20 10 52 10.0
comp=Z,798nm,18.0s
**KHMM Horse Mountain** 39.83 320 IAmb IAmb 10 34 41.5
comp=Z,23nm,0.8s
KHMM IAMs_20 IAMs_20 10 53 39.2
comp=Z,778nm,19.0s
**PINE Pine Mountain** 39.95 326 IAMs_20 IAMs_20 10 53 50.3
comp=Z,724nm,18.0s
**VILB Vilhena** 39.96 129 P **P** 10 34 39.0 -0.3
**VILB Vilhena** 39.96 129 *e*P **P** 10 34 39.0 -0.3
**KRMB Red Mountain** 40.30 321 IAMs_20 IAMs_20 10 52 25.8
comp=Z,676nm,19.0s
**HUMO Hull Mountain** 40.36 323 IAMs_20 IAMs_20 10 54 01.3
comp=Z,804nm,18.0s
**L02F Cave Junction** 40.44 322 IAMs_20 IAMs_20 10 52 07.4
comp=Z,523nm,21.0s
**KSXB Camp Six Broad** 40.46 321 IAMs_20 IAMs_20 10 53 13.9
comp=Z,674nm,19.0s
**I05D Terrebonne, OR** 40.52 326 IAmb IAmb 10 35 20.4
comp=Z,28nm,1.6s
I05D IAMs_20 IAMs_20 10 54 20.4
comp=Z,699nm,18.0s
**NPGB Novo Progresso** 40.56 118 *e*P **P** 10 34 43.1 -1.2
**MCPB Macapa, AP** 40.71 106 *e*P **P** 10 34 45.6 0.0
**I04A Tendick Farm,** 40.77 324 IAMs_20 IAMs_20 10 54 12.1
comp=Z,651nm,18.0s
**K02D Willamette Mer** 40.83 322 IAMs_20 IAMs_20 10 54 24.8
comp=Z,733nm,18.0s
**KBO Bosley Butte** 40.89 321 IAMs_20 IAMs_20 10 53 07.4
comp=Z,739nm,19.0s
**HAWA Hanford** 40.97 330 IAMs_20 IAMs_20 10 53 34.1
comp=Z,526nm,19.0s
**ICQ Pointe Anglais** 41.05 23 P **P** 10 34 47.0 -0.8
**H04A Detroit Lake** 41.21 326 IAMs_20 IAMs_20 10 55 00.6
comp=Z,997nm,18.0s
**NEW Newport** 41.21 333 PcP **PcP** 10 36 48.4 +1.0
comp=Z,2.7nm,0.7s,baz=134,slow=5.7,SNR=6.2
NEW LR LR 10 55 31.3
comp=Z,344nm,19.0s,baz=134,slow=41
**NEW Newport** 41.21 333 P **P** 10 34 48.4 -0.9
baz=139,SNR=7.7
**E07A Sunnyside** 41.24 329 IAmb IAmb 10 34 51.9
comp=Z,16nm,0.8s
**J01E Myrtle Point** 41.27 323 IAMs_20 IAMs_20 10 54 30.3
comp=Z,630nm,19.0s
**SIV San Ignacio** 41.31 134 P **P** 10 34 50.1 -0.3
comp=Z,11nm,0.9s,baz=304,slow=9.1,SNR=42
SIV LR LR 10 51 14.9
comp=Z,255nm,18.2s,baz=322,slow=35
comp=Z,11nm,0.9s
**H04D Lebanon** 41.41 325 IAmb IAmb 10 35 01.8
comp=Z,22nm,0.8s
**MXC Moxie City** 41.47 329 IAmb IAmb 10 34 54.6
comp=Z,43nm,1.4s
**LVC Limon Verde** 41.57 149 LR LR 10 52 20.1
comp=Z,232nm,18.5s,baz=316,slow=36
**LVC Limon Verde** 41.57 149 *e*P **P** 10 34 52.2 -0.6
**COR Corvallis** 41.77 325 P **P** 10 34 54.8 +1.0
**COR Corvallis** 41.77 325 IAMs_20 IAMs_20 10 54 46.4
comp=Z,624nm,18.0s
**PDRB Porto dos Gac** 41.85 125 *e*P **P** 10 34 55.0 +0.1
**LTY Liberty** 42.13 330 P **P** 10 34 56.4 -0.4
**G03D McMinnville, O** 42.13 326 IAMs_20 IAMs_20 10 54 24.1
comp=Z,491nm,19.0s
**F04A Amboy** 42.14 327 IAmb IAmb 10 35 03.3
comp=Z,61nm,1.9s
F04A IAMs_20 IAMs_20 10 55 51.2
comp=Z,592nm,18.0s
**CLDB Colider** 42.19 123 *e*P **P** 10 34 59.5 +1.8
**FFC Flin Flon** 42.33 350 P **P** 10 34 57.4 -0.9
FFC IAmb IAmb 10 34 59.0
comp=Z,15nm,0.7s
FFC IAMs_20 IAMs_20 10 55 58.6
comp=Z,473nm,19.0s
**FFC Flin Flon** 42.33 350 P **P** 10 34 57.3 -0.9
**PTLB Pontes e Lacer** 42.34 131 *e*P **P** 10 34 59.0 +0.2
**LON Longmire** 42.36 328 P **P** 10 34 59.0 +0.3
LON IAmb IAmb 10 35 01.4
comp=Z,18nm,0.8s
LON IAMs_20 IAMs_20 10 55 13.0
comp=Z,447nm,20.0s
**BBSD Serra de San D** 42.45 135 *e*P **P** 10 34 59.0 -0.7
**F04D Rainier, OR** 42.55 327 P **P** 10 34 59.6 -0.5
F04D IAMs_20 IAMs_20 10 55 46.1
comp=Z,574nm,20.0s
**D05A Enumclaw** 42.74 329 IAmb IAmb 10 35 04.4
comp=Z,18nm,0.9s
**F03A Seaside** 42.75 326 IAMs_20 IAMs_20 10 55 08.3
comp=Z,537nm,19.0s
**E03A Lebam** 43.14 327 IAmb IAmb 10 35 08.0
comp=Z,29nm,0.9s
**RADR Rader Ridge** 43.19 327 IAMs_20 IAMs_20 10 55 40.9
comp=Z,897nm,19.0s
**GNW Green Mountain** 43.42 329 P **P** 10 35 07.0 -0.1
GNW IAmb IAmb 10 35 08.4
comp=Z,61nm,1.9s
GNW IAMs_20 IAMs_20 10 56 33.0
comp=Z,483nm,21.0s
**NLWA Neilton Lookou** 43.84 328 IAmb IAmb 10 35 13.9
comp=Z,47nm,1.3s
NLWA IAMs_20 IAMs_20 10 56 12.2
comp=Z,442nm,19.0s
**RPN Rapa Nui** 43.95 204 LR LR 10 48 44.8
comp=Z,334nm,19.8s,baz=1.5,slow=29
**PGC Sidney** 44.45 329 IAmb IAmb 10 35 17.5
comp=Z,20nm,0.8s
**CLRS Cowichan Lake** 44.90 329 IAMs_20 IAMs_20 10 56 23.2
comp=Z,405nm,20.0s
**PRPB Parauapebas** 45.04 113 *e*P **P** 10 35 20.0 -0.6
**TMAB Tom-Au,PA,Br** 45.12 107 *e*P **P** 10 35 22.4 +1.2
**SALV Santo Antonio** 45.20 129 *e*P **P** 10 35 21.0 -0.8
**SCHQ Schefferville** 45.56 19 P **P** 10 35 22.4 -1.8
SCHQ IAmb IAmb 10 35 23.5
comp=Z,19nm,0.8s
**SCHQ Schefferville** 45.56 19 P **P** 10 35 22.2 -2.0
comp=Z,12nm,0.6s,baz=215,slow=6.4,SNR=36
SCHQ LR LR 10 55 41.2
comp=Z,1µm,18.4s,baz=214,slow=38
comp=Z,12nm,0.6s
**OZB Mount Ozzard** 45.68 328 IAMs_20 IAMs_20 10 57 40.9
comp=Z,561nm,19.0s
**CBB Campbell River** 46.30 330 IAMs_20 IAMs_20 10 58 32.2
comp=Z,484nm,18.0s

**SNDB Serra Nova Dou** 46.50 121 *e*P **P** 10 35 32.9 +0.8
**AQDB Aquidauana** 48.09 134 *e*P **P** 10 35 45.0 +0.6
**ARAG Araguaiana, MT** 48.10 125 *e*P **P** 10 35 46.0 +1.5
**SMTB Santa Maria do** 48.20 115 *e*P **P** 10 35 45.1 -0.2
**BBB Bella Bella** 49.01 330 LR LR 11 00 45.2
comp=Z,199nm,19.3s,baz=139,slow=41
**MT05 Renca** 50.15 158 IAMs_20 IAMs_20 10 57 09.2
comp=Z,570nm,22.0s
**MT08 Bocatoma Ro** 50.46 157 P **P** 10 36 02.4 -0.2
MT08 IAmb IAmb 10 36 10.8
comp=Z,20nm,1.0s
**LMEL Las Melosas** 50.75 158 IAmb IAmb 10 36 14.0
comp=Z,17nm,1.1s
**BO01 Tunca** 50.93 159 IAmb IAmb 10 36 06.2
comp=Z,20nm,1.1s
**CPUP Villa Florida** 51.04 140 P **P** 10 36 04.7 -2.0
comp=Z,2.1nm,0.8s,baz=278,slow=7.6,SNR=3.9
CPUP LR LR 10 59 19.7
comp=Z,243nm,18.6s,baz=329,slow=38
comp=Z,2.1nm,0.8s
**CPUP Villa Florida** 51.04 140 P **P** 10 36 05.0 -1.7
**BDFB Brasilia** 51.13 123 P **P** 10 36 05.0 -2.7
comp=Z,1.4nm,0.5s,baz=360,slow=19,SNR=1.7
BDFB LR LR 10 58 37.2
comp=Z,373nm,19.9s,baz=321,slow=37
comp=Z,1.4nm,0.5s
**YKA Yellowknife Ar** 52.05 346 P **P** 10 36 12.4 -1.3
comp=Z,4.5nm,0.8s,baz=147,slow=7.6,SNR=8.0
YKA LR LR 11 01 17.2
comp=Z,322nm,20.6s,baz=146,slow=39
comp=Z,4.5nm,0.8s
**TOAD Toad River Com** 52.29 338 P **P** 10 36 15.5 -0.1
baz=136
**FRB Frobisher Bay** 52.82 12 LR LR 10 59 45.1
comp=Z,2µm,20.0s,baz=200,slow=37
**T35M Bob Quinn** 52.99 334 P **P** 10 36 21.1 +0.3
baz=129
**LIRD Liard River Hi** 53.00 338 P **P** 10 36 21.4 +0.5
baz=135
**CRAG Craig** 53.36 331 P **P** 10 36 23.7 +0.2
baz=125
**TAOE Nuku Hiva Isla** 53.68 249 *e*P **P** 10 36 29.1 +2.5
comp=Z,194nm,29.7s
TAOE *e*S **S** 10 44 00.9 +3.9
comp=Z,228nm,26.5s
TAOE *e*LR LR 10 51 46.1
comp=Z,255nm,23.6s
**U33K Whale Pass** 53.73 332 P **P** 10 36 26.7 +0.5
baz=126
**DLBC Dease Lake** 53.84 336 IAmb IAmb 10 36 30.5
comp=Z,17nm,0.9s
**DLBC Dease Lake** 53.84 336 P **P** 10 36 28.1 +1.0
baz=130,SNR=7.1
**ITQB Itaqui** 53.90 143 P **P** 10 36 27.1 -0.8
**ITQB Itaqui** 53.90 143 *e*P **P** 10 36 27.0 -0.8
**S34M Telegraph Cree** 53.95 335 P **P** 10 36 28.7 +0.9
baz=129
**PSAL Palomas, Salto** 54.38 145 *e*P **P** 10 36 30.4 -0.9
**R33M Jennings River** 54.83 336 P **P** 10 36 34.7 +0.4
baz=130
**WRGLY Wrigley** 54.98 343 IAmb IAmb 10 36 37.3
comp=Z,40nm,1.7s
**WRGLY Wrigley** 54.98 343 P **P** 10 36 35.4 +0.2
baz=140
**Q32M Nakina River** 55.08 335 P **P** 10 36 35.8 -0.4
baz=128
**S32K Killisnoo** 55.17 333 P **P** 10 36 36.9 +0.3
baz=125
**SIT Sitka** 55.27 332 P **P** 10 36 38.1 +0.8
baz=124
**P32M Atlin** 56.05 335 P **P** 10 36 43.3 +0.2
baz=127
**P33M Teslin, Yukon** 56.07 336 P **P** 10 36 43.5 +0.3
baz=128
**RKT Rikitea** 56.33 230 *e*LR LR 10 53 10.7
comp=Z,2µm,29.0s
**SKAG Skagway** 56.64 335 P **P** 10 36 47.5 +0.4
baz=125
**N32M Quiet Lake** 56.76 337 P **P** 10 36 48.2 +0.1
baz=128
**PLCA Paso Flores** 56.87 162 P **P** 10 36 48.3 -0.7
comp=Z,4.1nm,1.0s,baz=356,slow=6.0,SNR=3.2
PLCA LR LR 10 56 09.0
comp=Z,189nm,18.5s,baz=332,slow=30
comp=Z,4.1nm,1.0s
**IVI Ivigtut** 56.93 23 P **P** 10 36 47.4 -1.8
IVI PcP **PcP** 10 37 43.2 -0.7
**WHY Whitehorse** 57.16 336 P **P** 10 36 51.1 +0.2
baz=126
**PLTB Pedras Altas** 57.20 142 P **P** 10 36 50.3 -1.3
**PLTB Pedras Altas** 57.20 142 *e*P **P** 10 36 49.8 -1.8
**FARO Faro, Yukon** 57.53 338 P **P** 10 36 53.8 +0.3
baz=129
**O30N Mendenhall** 57.71 336 P **P** 10 36 55.1 +0.3
baz=125
**RCBR Riachuelo** 57.72 106 LR LR 11 06 10.1
comp=Z,119nm,18.6s,baz=331,slow=41
**RCBR Riachuelo** 57.72 106 P **P** 10 36 57.8 +2.2
**P29M Windy Craggy** 57.75 334 P **P** 10 36 55.2 +0.1
baz=123
**M31M Drury Creek, Y** 57.90 338 P **P** 10 36 56.7 +0.6
baz=128
**N31M Braeburn, Yuko** 58.00 336 P **P** 10 36 57.2 +0.5
baz=126
**N30M Aishikik Lake** 58.50 336 P **P** 10 37 01.2 +0.9
baz=124
**YUK6 Outpost Mounta** 58.73 335 P **P** 10 37 02.6 +0.5
baz=123
**M30M Minto, Yukon** 59.02 337 IAmb IAmb 10 37 19.3
comp=Z,28nm,1.8s
**M30M Minto, Yukon** 59.02 337 P **P** 10 37 04.5 +0.6
baz=125
**YUK4 Talbot Arm** 59.06 335 P **P** 10 37 05.3 +1.0
baz=123
**O28M Mount Upton** 59.40 334 P **P** 10 37 07.0 +0.2
baz=121
**YUK8 Steele Glacier** 59.48 335 P **P** 10 37 07.9 +0.5
baz=122
**M29M Somme Creek** 59.59 337 IAmb IAmb 10 37 10.4
comp=Z,15nm,0.8s
**M29M Somme Creek** 59.59 337 P **P** 10 37 08.8 +0.9
baz=124,SNR=9.3
**L29M L29M** 59.83 337 P **P** 10 37 09.8 +0.3
baz=124
**SFJD Kangerlussuaq** 59.91 17 LR LR 11 04 19.8
comp=Z,2µm,18.3s,baz=228,slow=37
**YUK3 Moose Creek** 60.02 335 P **P** 10 37 11.2 +0.2
baz=121
**K29M Barlow Dome** 60.02 338 P **P** 10 37 11.2 +0.4
baz=125
**J30M Hart River** 60.03 339 IAmb IAmb 10 37 27.7
comp=Z,26nm,1.9s
**J30M Hart River** 60.03 339 P **P** 10 37 11.3 +0.4
baz=127
**GRNC Granite Creek** 60.04 334 IAMs_20 IAMs_20 11 07 59.4
comp=Z,405nm,19.0s
**I30M Mount Dempster** 60.44 340 IAmb IAmb 10 37 15.4
comp=Z,9.8nm,1.1s
**I30M Mount Dempster** 60.44 340 P **P** 10 37 13.8 +0.2
baz=127,SNR=5.9
**CRQE Cirque** 60.63 334 P **P** 10 37 15.3 +0.3
baz=118
**G31M Satah River** 60.83 342 IAmb IAmb 10 37 17.4
comp=Z,11nm,0.8s
**G31M Satah River** 60.83 342 P **P** 10 37 15.8 -0.2
baz=130,SNR=7.1
**DAWY Dawson** 60.83 338 P **P** 10 37 16.0 -0.3
baz=123
**M27K Edge Creek, AK** 60.90 335 P **P** 10 37 16.7 -0.1
baz=120
**MCARA Mcarthy VSAT** 60.90 334 P **P** 10 37 17.0 +0.4
baz=118
**F31M Tsiigehtchic** 61.01 343 IAmb IAmb 10 37 18.5
comp=Z,7.4nm,0.8s
F31M IAMs_20 IAMs_20 11 07 34.6
comp=Z,461nm,18.0s
**F31M Tsiigehtchic** 61.01 343 P **P** 10 37 16.6 -0.7
baz=131,SNR=6.4
**I29M Ogilvie Camp,** 61.18 339 P **P** 10 37 18.4 -0.2
baz=125
**BCAR Beaver Creek A** 61.22 336 P **P** 10 37 18.9 0.0
**L27K Beaver Creek,** 61.23 336 IAmb IAmb 10 37 21.2
comp=Z,5.6nm,0.8s
**L27K Beaver Creek,** 61.23 336 P **P** 10 37 19.2 +0.2
baz=120
**EPYK Eagle Plains** 61.24 341 P **P** 10 37 19.4 +0.4
baz=127
**GLB Gilahina Butte** 61.26 334 IAmb IAmb 10 37 22.1

comp=Z,13nm,0.8s
**M26K Nabesna, AK** 61.37 335 P **P** 10 37 19.8 -0.2
baz=119
**BMRM Bremner River** 61.38 333 P **P** 10 37 20.5 +0.4
baz=116
**G30M tAoh Zraii Nji** 61.46 341 P **P** 10 37 20.5 +0.1
baz=128
**RES Resolute Bay** 61.50 359 LR LR 11 06 49.3
comp=Z,771nm,18.8s,baz=184,slow=39
**INK Inuvik** 61.51 343 IAmb IAmb 10 37 22.1
comp=Z,11nm,0.7s
INK IAMs_20 IAMs_20 11 08 20.0
comp=Z,371nm,20.0s
**INK Inuvik** 61.51 343 LR LR 11 08 30.1
comp=Z,299nm,18.5s,baz=146,slow=40
**INK Inuvik** 61.51 343 P **P** 10 37 20.1 -0.6
baz=131,SNR=11
**N25K Chitina, Valde** 61.67 334 P **P** 10 37 22.7 +0.7
baz=117,SNR=5.7
**H29M Whitestone** 61.69 340 P **P** 10 37 22.2 +0.2
baz=125
**EYAK Cordova Ski Ar** 61.71 333 P **P** 10 37 22.3 +0.1
baz=115
**F30M Barrier River** 61.72 342 P **P** 10 37 22.2 0.0
baz=129,SNR=8.0
**I28M Miner Creek** 61.79 339 P **P** 10 37 22.4 -0.4
baz=122
**L26K Log Cabin Wild** 61.81 336 P **P** 10 37 22.9 0.0
baz=119
**K27K Chicken** 61.82 337 P **P** 10 37 23.1 +0.3
baz=120
**EGAK Eagle** 61.86 338 IAmb IAmb 10 38 01.6
comp=Z,32nm,1.9s
**EGAK Eagle** 61.86 338 P **P** 10 37 22.9 -0.3
baz=122
**MENT Mentasta** 61.92 336 IAmb IAmb 10 37 25.8
comp=Z,5.2nm,0.7s
**G29M Pine Creek** 61.99 341 P **P** 10 37 23.6 -0.4
baz=126
**KLU Klutina** 62.19 334 IAmb IAmb 10 37 27.9
comp=Z,11nm,0.7s
**KLU Klutina** 62.19 334 P **P** 10 37 25.6 +0.1
baz=116
**P23K Montague Islan** 62.23 332 P **P** 10 37 25.9 +0.2
baz=113
**A36M Sachs Harbour** 62.24 349 P **P** 10 37 25.5 0.0
baz=142
**HARP HAARP** 62.26 335 P **P** 10 37 26.5 +0.6
baz=117
**GLI Glacier Island** 62.45 333 P **P** 10 37 27.1 0.0
baz=114
**I27K Kandik River** 62.47 339 P **P** 10 37 27.5 +0.2
baz=122
**SCRK Sand Creek** 62.52 337 IAmb IAmb 10 37 34.7
comp=Z,27nm,1.8s
**SCRK Sand Creek** 62.52 337 P **P** 10 37 28.1 +0.4
baz=118
**M24K Tolsona, Glenn** 62.56 334 P **P** 10 37 28.1 +0.2
baz=116
**J26L Joseph Creek** 62.62 337 IAmb IAmb 10 38 09.1
comp=Z,8.4nm,0.8s
**J26L Joseph Creek** 62.62 337 P **P** 10 37 29.1 +0.7
baz=119,SNR=9.3
**PAX Paxson** 62.65 335 P **P** 10 37 29.3 +0.7
baz=117
**H27K Steamboat Moun** 62.77 339 P **P** 10 37 29.9 +0.7
baz=122,SNR=11
**E29M Blow River** 62.83 342 IAMs_20 IAMs_20 11 08 41.7
comp=Z,479nm,19.0s
**E29M Blow River** 62.83 342 P **P** 10 37 30.6 +1.0
baz=127
**I26K Coal Creek Min** 62.86 338 P **P** 10 37 30.1 +0.3
baz=120
**SCM Sheep Creek Mo** 62.94 334 P **P** 10 37 30.7 +0.2
baz=114
**F28M Old Crow** 62.98 341 P **P** 10 37 30.9 +0.3
baz=124,SNR=26
**PWL Port Wells** 63.00 332 P **P** 10 37 31.3 +0.5
baz=113
**M23K Glacier View** 63.10 333 P **P** 10 37 31.4 0.0
baz=114
**G27K Doyon Strip** 63.12 340 P **P** 10 37 31.5 -0.1
baz=122,SNR=5.1
**K24K Donnelly Dome** 63.15 336 P **P** 10 37 31.7 -0.1
baz=117
**KNK Knik Glacier** 63.27 333 P **P** 10 37 33.6 +1.0
baz=113
**ANGG Ammassalik, Gr** 63.32 22 P **P** 10 37 31.5 -1.3
**J25K Salcha River,** 63.36 337 IAmb IAmb 10 37 35.4
comp=Z,6.7nm,0.7s
**J25K Salcha River,** 63.36 337 P **P** 10 37 34.2 +1.0
baz=117,SNR=9.4
**SML Sawmill** 63.37 333 P **P** 10 37 33.4 +0.1
baz=113
**WAT6 Susitna Watana** 63.42 334 P **P** 10 37 33.7 -0.1
baz=114
**E28M Babbage River** 63.44 342 P **P** 10 37 34.1 +0.4
baz=125
**D28M Stokes Point** 63.63 343 P **P** 10 37 34.8 0.0
baz=126
**PMR Palmer** 63.63 333 P **P** 10 37 35.0 0.0
baz=112
**BRSE Bradley Lake S** 63.70 331 P **P** 10 37 36.0 +0.5
baz=110
**RC01 Rabbit Creek A** 63.72 332 P **P** 10 37 36.3 +0.8
baz=112,SNR=5.7
**PRP Porcupine Dome** 63.84 338 P **P** 10 37 36.6 +0.2
baz=118,SNR=7.2
**E27K Coleen River** 63.84 341 IAmb IAmb 10 37 38.4
comp=Z,7.9nm,0.8s
**E27K Coleen River** 63.84 341 P **P** 10 37 36.5 +0.2
baz=123,SNR=6.3
**WAT1 Susitna Watana** 63.87 334 P **P** 10 37 36.8 +0.3
baz=114
**HDA Harding Lake** 63.88 336 P **P** 10 37 36.8 +0.2
baz=116
**G26K Porcupine Rive** 63.91 340 P **P** 10 37 36.9 +0.2
baz=120
**KDAK Kodiak Island** 63.99 328 LR LR 11 05 04.8
comp=Z,189nm,20.5s,baz=128,slow=36
**KDAK Kodiak Island** 63.99 328 P **P** 10 37 37.5 +0.2
baz=107
**KDAK Kodiak Island** 63.99 328 P **P** 10 37 38.8 +1.5
KDAK PcP **PcP** 10 38 13.7 +1.4
**ILAR Eielson Array** 64.01 337 P **P** 10 37 37.1 -0.3
comp=Z,4.9nm,0.9s,baz=172,slow=5.2,SNR=51
ILAR LR LR 11 08 36.0
comp=Z,291nm,18.9s,baz=108,slow=39
comp=Z,4.9nm,0.9s
**Q20K Shuyak Island** 64.14 329 P **P** 10 37 38.7 +0.4
baz=108
**OHAK Old Harbor** 64.19 328 P **P** 10 37 39.0 +0.4
baz=106
**D27M Malcolm River** 64.23 342 P **P** 10 37 38.9 0.0
baz=124
**CAPN Captain Cook N** 64.25 332 P **P** 10 37 40.2 +1.3
baz=110
**H25L Birch Creek** 64.29 338 P **P** 10 37 40.2 +1.0
baz=118
**SUA Susitna One** 64.31 333 P **P** 10 37 41.2 +1.6
baz=111,SNR=6.7
**CCB Clear Creek Bu** 64.31 336 IAmb IAmb 10 38 16.0
comp=Z,9.6nm,1.1s
**WRH Wood River Hil** 64.35 336 IAmb IAmb 10 38 16.3
comp=Z,15nm,1.2s
**MCK McKinley** 64.39 335 P **P** 10 37 40.6 +0.7
baz=114
**F26K Sheenjek River** 64.41 340 P **P** 10 37 40.3 +0.3
baz=120,SNR=6.1
**BMAR Burnt Mountain** 64.42 340 P **P** 10 37 40.3 +0.2
**COLA College** 64.43 337 P **P** 10 37 40.0 -0.1
COLA IAmb IAmb 10 38 16.7
comp=Z,16nm,0.9s
**COLA College** 64.43 337 P **P** 10 37 40.5 +0.5
baz=115
**COLA College** 64.43 337 P **P** 10 37 39.9 -0.2
COLA PcP **PcP** 10 38 14.6 +0.5
**CUT Chulitna** 64.44 334 P **P** 10 37 40.6 +0.3
baz=112
**SII Sitkinak Islan** 64.48 327 P **P** 10 37 41.5 +0.9
baz=105
**MDM Murphy Dome** 64.61 337 IAmb IAmb 10 38 17.5
comp=Z,8.5nm,0.9s
**G25K Bearman Lake** 64.62 339 P **P** 10 37 42.4 +1.0
baz=118,SNR=5.4
**O20K Slope Mountain** 64.71 331 P **P** 10 37 42.7 +0.5
baz=108
**NEA2 Nenana** 64.79 336 P **P** 10 37 43.8 +1.3

baz=114,SNR=6.9
**SPU Mount Spurr 64.80 332** IAmb IAmb 10 37 45.1
comp=Z,9.1nm,0.9s
**SKT Skwentna 64.84 333** IAmb IAmb 10 37 44.6
comp=Z,12nm,0.7s
**SKT Skwentna 64.84 333** P **P** **10 37 43.4 +0.6**
baz=110,SNR=6.1
**H24K Noodor Dome 64.85 338** IAmb IAmb 10 37 52.7
comp=Z,15nm,1.2s
H24K IAMs_20 IAMs_20 11 09 38.4
comp=Z,507nm,20.0s
**H24K Noodor Dome 64.85 338** P **P** **10 37 44.1 +1.1**
baz=116
**F25K Christian Rive 64.86 340** P **P** **10 37 43.9 +0.9**
baz=118,SNR=7.5
**Q19K Cape Douglas, 64.86 329** P **P** **10 37 43.9 +0.8**
baz=107
**P19K Oil Pt 64.87 330** P **P** **10 37 44.6 +1.5**
baz=108
**N20K Mount Spurr 64.88 332** P **P** **10 37 44.2 +1.0**
baz=109
**R18K Karluk 64.89 328** P **P** **10 37 44.5 +1.3**
baz=106
**ILSW Iliamna Southw 64.93 331** IAmb IAmb 10 37 45.4
comp=Z,13nm,0.9s
**G24K Hadweenzie Riv 65.08 339** P **P** **10 37 45.0 +0.6**
baz=116,SNR=7.1
**I23K Minto, Yukon-K 65.12 337** P **P** **10 37 45.5 +0.9**
baz=114,SNR=14
**KTH Kantishna Hill 65.14 335** IAmb IAmb 10 37 46.2
comp=Z,10nm,0.9s
**C27K Jago River 65.26 342** P **P** **10 37 46.0 +0.6**
baz=121
**BPAW Bear Paw Mtn. 65.37 335** IAmb IAmb 10 37 47.6
comp=Z,9.0nm,0.7s
**BPAW Bear Paw Mtn. 65.37 335** P **P** **10 37 46.5 +0.2**
baz=112,SNR=7.3
**PPLA Purkeypile 65.44 334** P **P** **10 37 47.5 +0.6**
baz=110
**Q18K Katmai Hardscr 65.46 329** P **P** **10 37 47.4 +0.3**
baz=106
**H23K Yukon River 65.47 337** IAmb IAmb 10 38 11.3
comp=Z,27nm,1.9s
**H23K Yukon River 65.47 337** P **P** **10 37 47.3 +0.3**
baz=114
**M20K Styx River 65.52 333** IAmb IAmb 10 37 49.0
comp=Z,11nm,0.8s
**M20K Styx River 65.52 333** P **P** **10 37 47.9 +0.5**
baz=109,SNR=5.3
**O19K Port Alsworth 65.56 331** P **P** **10 37 48.1 +0.6**
baz=107
**PPT Papeete 65.57 244** LR LR 10 57 59.5
comp=Z,359nm,20.2s,baz=72,slow=28
**PPT2 Papeete2 65.58 244** *e*S **S** **10 46 37.5 +7.3**
comp=Z,102nm,24.2s
**PPT2 Papeete2 65.58 244** *e*LR LR 10 57 15.0
comp=Z,250nm,24.5s
PPT2 *e*LR LR 10 57 21.3
comp=Z,248nm,22.2s
**F24K Squaw Lake 65.59 339** IAMs_20 IAMs_20 11 08 13.9
comp=Z,344nm,21.0s
**F24K Squaw Lake 65.59 339** P **P** **10 37 48.4 +0.7**
baz=116
**MLY Manley 65.62 336** P **P** **10 37 48.1 +0.2**
baz=112,SNR=19
**C26K Camden Bay 65.77 342** P **P** **10 37 49.0 +0.2**
baz=120
**P18K Big Mountain, 65.77 330** P **P** **10 37 49.4 +0.4**
baz=106
**Q17K Contact Creek 65.81 328** P **P** **10 37 49.8 +0.4**
baz=104
**N19K Bonanza Creek 65.81 331** P **P** **10 37 49.8 +0.4**
baz=107,SNR=6.8
**CHUM Lake Minchumin 65.83 335** P **P** **10 37 49.5 +0.2**
baz=110
**O18K Koktuh Hills 65.89 330** P **P** **10 37 50.1 +0.3**
baz=106
**R17L Mt. Peulik Vol 65.90 328** P **P** **10 37 50.2 +0.4**
baz=104
**D25K Kavik River 65.92 341** IAmb IAmb 10 37 52.1
comp=Z,14nm,1.0s
**D25K Kavik River 65.92 341** P **P** **10 37 50.4 +0.6**
baz=118,SNR=11
**G23K Bananza Creek 66.00 338** P **P** **10 37 50.6 +0.2**
baz=114,SNR=6.1
**E24K Your Creek 66.04 340** IAMs_20 IAMs_20 11 12 01.8
comp=Z,496nm,20.0s
**E24K Your Creek 66.04 340** P **P** **10 37 51.7 +1.1**
baz=116
**L20K Farewell, AK 66.04 333** P **P** **10 37 50.7 0.0**
baz=108,SNR=11
**M19K Big River Lodg 66.09 332** IAmb IAmb 10 37 55.1
comp=Z,18nm,1.3s
**M19K Big River Lodg 66.09 332** P **P** **10 37 51.6 +0.6**
baz=108
**H22K Ishtalitna Cre 66.19 337** P **P** **10 37 52.1 +0.6**
baz=112
**COLD Coldfoot 66.28 339** P **P** **10 37 53.0 +1.0**
baz=114,SNR=7.3
**Q16K King Salmon 66.30 329** P **P** **10 37 52.9 +0.6**
baz=104
**P17K Kvichak River 66.32 329** P **P** **10 37 52.6 +0.2**
baz=104
**L19K White Mountain 66.38 333** P **P** **10 37 53.2 +0.4**
baz=107
**K20K Telida 66.40 334** P **P** **10 37 53.0 0.0**
baz=108,SNR=5.5
**E23K Chandalar 66.42 339** P **P** **10 37 54.1 +1.1**
baz=115,SNR=14
**N18K Kilae Creek 66.44 331** IAmb IAmb 10 37 55.0
comp=Z,16nm,0.9s
**N18K Kilae Creek 66.44 331** P **P** **10 37 53.9 +0.7**
baz=106,SNR=6.1
**D24K Happy Valley 66.62 341** P **P** **10 37 55.1 +0.9**
baz=116
**G22K Bettles 66.63 338** P **P** **10 37 54.7 +0.4**
baz=112
**M18K Stony River 66.63 332** P **P** **10 37 54.6 +0.3**
baz=106,SNR=6.5
**TOLK Toolik Lake Re 66.65 340** P **P** **10 37 55.4 +0.9**
baz=115,SNR=5.1
**H21K Melozitna Rive 66.65 337** P **P** **10 37 54.4 -0.1**
baz=110
**J20K Nowinta River 66.69 335** IAmb IAmb 10 37 55.9
comp=Z,7.1nm,0.8s
**J20K Nowinta River 66.69 335** P **P** **10 37 54.9 +0.1**
baz=109,SNR=7.4
**O17K Koliganek Bris 66.79 330** P **P** **10 37 56.1 +0.7**
baz=104
**C24K Franklin Bluff 66.83 341** P **P** **10 37 56.0 +0.5**
baz=116
**EUNU Eureka 66.89 1** P **P** **10 37 56.0 +0.2**
**N17K Nushagak Hills 67.02 331** IAmb IAmb 10 37 59.5
comp=Z,9.7nm,0.8s
**N17K Nushagak Hills 67.02 331** P **P** **10 37 57.6 +0.7**
baz=104
**I20K Naaghedeneel 67.03 335** P **P** **10 37 57.0 +0.1**
baz=109,SNR=5.4
**CHNA Chernabura Isl 67.09 324** P **P** **10 37 58.0 +0.5**
baz=100
**F22K John River 67.09 338** P **P** **10 37 58.5 +1.3**
baz=112
**D23K Nanushuk River 67.15 340** P **P** **10 37 58.4 +0.8**
baz=114
**E22K Anaktuvuk Pass 67.20 339** P **P** **10 37 58.9 +0.9**
baz=112
**G21K Allakaket 67.22 337** P **P** **10 37 59.2 +1.1**
baz=110
**L18K Granite Mounta 67.22 332** P **P** **10 37 59.0 +0.8**
baz=105
**O16K Kokwok River B 67.24 329** P **P** **10 37 58.6 +0.4**
baz=103
**J19K Poorman 67.25 334** P **P** **10 37 58.5 +0.2**
baz=107
**M17K Holitna River 67.35 331** P **P** **10 37 59.9 +0.9**
baz=104
**H20K Anotleneega Mo 67.41 336** P **P** **10 37 59.5 +0.2**
baz=108
**F21K Alatna River 67.46 338** P **P** **10 38 00.3 +0.7**
baz=110,SNR=24
**C23K Itkillik River 67.48 341** P **P** **10 38 00.1 +0.4**
baz=114
**J18K Innoko River 67.57 334** P **P** **10 38 01.1 +0.7**
baz=106
**SDPT Sand Point 67.68 325** P **P** **10 38 01.7 +0.5**
baz=99
**N16K Nishlik Lake 67.77 330** P **P** **10 38 02.5 +0.9**
baz=103,SNR=5.5

**D22K Ayikyak River 67.78 340** IAmb IAmb 10 38 03.6
comp=Z,8.2nm,0.7s
**D22K Ayikyak River 67.78 340** P **P** **10 38 02.5 +0.9**
baz=112
**TBI Tubuai 67.91 238** *e*LR LR 10 58 33.0
comp=Z,1μm,28.8s
**L17K Donlin 67.93 332** P **P** **10 38 03.6 +0.9**
baz=104
**M16K Timber Creek 67.98 331** P **P** **10 38 04.1 +1.1**
baz=103
**O15K Ungalikthiuk R 68.02 329** P **P** **10 38 03.7 +0.4**
baz=101
**H19K Roundabout Mou 68.05 336** IAmb IAmb 10 38 12.6
comp=Z,13nm,1.1s
**H19K Roundabout Mou 68.05 336** P **P** **10 38 03.5 +0.2**
baz=107
**E21K Killik River 68.06 339** IAMs_20 IAMs_20 11 09 58.1
comp=Z,347nm,20.0s
**E21K Killik River 68.06 339** P **P** **10 38 04.1 +0.7**
baz=110
**F20K Avaraart Lake 68.23 338** IAmb IAmb 10 38 06.7
comp=Z,8.2nm,0.7s
**F20K Avaraart Lake 68.23 338** P **P** **10 38 05.0 +0.7**
baz=108,SNR=8.9
**N15K Kwethluk River 68.35 330** P **P** **10 38 06.1 +0.8**
baz=102
**L16K Owhat River 68.37 331** P **P** **10 38 06.3 +1.0**
baz=103
**G19K Purcell Mounta 68.47 336** IAmb IAmb 10 38 09.8
comp=Z,12nm,1.1s
**G19K Purcell Mounta 68.47 336** P **P** **10 38 07.1 +1.1**
baz=107
**B22K Teshekpuk Lake 68.57 341** P **P** **10 38 07.7 +1.2**
baz=112
**J17K VABM Dome 68.58 333** P **P** **10 38 08.1 +1.4**
baz=104
**C21K Kniferblade Rid 68.59 340** P **P** **10 38 08.0 +1.4**
baz=110
**S12K Black Hills 68.62 325** P **P** **10 38 07.9 +0.8**
baz=98
**B21K Ikpikpuk River 68.69 340** IAmb IAmb 10 38 11.5
comp=Z,24nm,1.4s
**B21K Ikpikpuk River 68.69 340** P **P** **10 38 07.4 +0.2**
baz=110
**H18K Honhosa River 68.71 335** P **P** **10 38 07.9 +0.4**
baz=105
**M15K Kasigluk River 68.74 330** P **P** **10 38 08.8 +1.2**
baz=101
**E20K Nigu River 68.78 339** P **P** **10 38 08.8 +1.0**
baz=108
**E19K Redstone River 68.91 338** IAMs_20 IAMs_20 11 11 51.6
comp=Z,264nm,20.0s
**E19K Redstone River 68.91 338** P **P** **10 38 09.9 +1.2**
baz=107
**F19K Shaleruckik Mo 68.93 337** IAmb IAmb 10 38 12.1
comp=Z,38nm,1.8s
**F19K Shaleruckik Mo 68.93 337** P **P** **10 38 09.2 +0.4**
baz=106,SNR=6.5
**G18K Tagagawik 69.02 336** P **P** **10 38 09.9 +0.5**
baz=105
**D20K Etivluk River 69.07 339** P **P** **10 38 10.3 +0.7**
baz=108
**J16K Anvik River 69.22 333** IAmb IAmb 10 38 13.3
comp=Z,11nm,0.7s
**J16K Anvik River 69.22 333** P **P** **10 38 11.6 +0.9**
baz=102
**A22K Sinclair Lake 69.29 342** P **P** **10 38 12.1 +1.2**
baz=110
**H17K Granite Mounta 69.30 335** P **P** **10 38 12.1 +1.0**
baz=104
**L15K Ungalak Mounta 69.31 331** P **P** **10 38 12.8 +1.6**
baz=101,SNR=6.0
**M14K Bethel 69.36 330** P **P** **10 38 12.9 +1.4**
baz=100,SNR=7.6
**BORG Borgarnes 69.41 25** LR LR 11 08 32.4
comp=Z,168nm,18.0s,baz=263,slow=36
**K15K Wolf Creek Mou 69.44 332** P **P** **10 38 13.1 +1.0**
baz=101,SNR=5.2
**D19K Kuna River 69.53 339** P **P** **10 38 13.3 +0.7**
baz=106
**F18K Selawik 69.59 337** P **P** **10 38 14.1 +1.3**
baz=104
**B20K Meade River 69.65 340** P **P** **10 38 13.8 +0.7**
baz=108,SNR=5.9
**G17K Kiwalik Mounta 69.73 335** P **P** **10 38 15.2 +1.4**
baz=103
**L14K Kuka Creek 69.81 331** P **P** **10 38 15.7 +1.4**
baz=100
**A21K Barrow 69.90 342** P **P** **10 38 16.3 +1.7**
baz=109
**M13K Dalton Lake 69.99 330** P **P** **10 38 16.9 +1.5**
baz=99
**E18K Tukpahlearik C 70.16 337** P **P** **10 38 17.4 +1.1**
baz=104
**F17K Baldwin Pennin 70.18 336** P **P** **10 38 17.4 +0.9**
baz=103
**H16K Elim 70.21 334** P **P** **10 38 17.6 +1.0**
baz=101
**C19K Lookout Ridge 70.21 339** P **P** **10 38 17.3 +0.6**
baz=105
**G16K Koyuk River 70.40 335** P **P** **10 38 18.8 +1.0**
baz=101
**J14K Nanvaranak Lak 70.45 332** IAmb IAmb 10 38 23.4
comp=Z,17nm,0.8s
**J14K Nanvaranak Lak 70.45 332** P **P** **10 38 19.2 +1.1**
baz=99
**E17K Hotham Inlet 70.54 337** P **P** **10 38 19.7 +1.0**
baz=102
**C18K Meade River 70.66 339** P **P** **10 38 20.3 +0.8**
baz=104
**K13K Kusilvak Mount 70.83 331** P **P** **10 38 21.8 +1.3**
baz=98
**A19K Wainwright 70.99 340** P **P** **10 38 22.8 +1.4**
baz=104
**UNV Unalaska Valle 71.00 323** P **P** **10 38 22.7 +1.0**
baz=94
**G15K Niukluk 71.03 335** P **P** **10 38 22.6 +1.0**
baz=100
**B18K Kokolik River 71.04 339** P **P** **10 38 22.4 +0.7**
baz=103
**D17K Noatak River 71.14 337** P **P** **10 38 23.4 +1.1**
baz=101
**C17K DeLong Mountai 71.34 338** P **P** **10 38 24.0 +0.5**
baz=102
**F15K North Star Dit 71.40 335** P **P** **10 38 25.3 +1.4**
baz=99
**ANM Nome 71.53 334** P **P** **10 38 25.6 +0.9**
baz=98
**BBTS Babate 71.78 79** LR LR 11 06 45.5
comp=Z,265nm,19.6s,baz=144,slow=33
**JMIC Jan Mayen 75.08 20** LR LR 11 12 43.5
comp=Z,322nm,19.4s,baz=254,slow=36
**COI Coimbra 75.83 52** IAMs_20 IAMs_20 11 11 00.7
comp=Z,320nm,20.0s
**RAR Rarotonga 75.85 244** LR LR 11 04 21.5
comp=Z,94nm,19.6s,baz=92,slow=29
**MESJ Messejana 76.22 54** IAMs_20 IAMs_20 11 06 17.0
comp=Z,318nm,20.0s
**MESJ Messejana 76.22 54** *e*P **P** **10 38 54.2 +1.5**
MESJ IAMs_20 IAMs_20 11 12 32.1
comp=Z,301nm,15.1s
**MTE Manteigas 76.47 51** IAMs_20 IAMs_20 11 09 45.6
comp=Z,320nm,20.0s
**PVAQ Vaqueiros 76.66 54** IAMs_20 IAMs_20 11 11 21.8
comp=Z,374nm,19.0s
**ESK Eskdalemuir 77.89 36** IAMs_20 IAMs_20 11 11 10.3
comp=Z,275nm,20.0s
**EKA Eskdalemuir Ar 77.92 36** P **P** **10 38 59.6 -2.2**
comp=Z,2.9nm,0.6s,baz=269,slow=6.0,SNR=16
comp=Z,2.9nm,0.6s
**PAB San Pablo 79.01 52** IAMs_20 IAMs_20 11 09 42.9
comp=Z,276nm,18.0s
**ESDC Sonseca Array 79.29 52** P **P** **10 39 07.7 -2.1**
comp=Z,2.5nm,0.9s,baz=288,slow=5.9,SNR=13
ESDC LR LR 11 10 01.6
comp=Z,190nm,19.5s,baz=276,slow=32
comp=Z,2.5nm,0.9s
**KBS Kingsbay 79.55 11** P **P** **10 39 11.8 +1.4**
KBS IAmb IAmb 10 39 14.8
comp=Z,13nm,0.9s
**MDT Midelt 79.81 59** P **P** **10 39 11.5 -1.3**
comp=Z,1.0nm,0.3s,baz=272,slow=4.8,SNR=1.8
MDT LR LR 11 09 12.7
comp=Z,322nm,20.6s,baz=304,slow=32
comp=Z,1.0nm,0.3s
**PMSA Palmer Station 80.37 169** LR LR 11 08 11.1
comp=Z,380nm,18.9s,baz=78,slow=31
**CART Cartagena 81.92 53** IAMs_20 IAMs_20 11 14 40.9
comp=Z,179nm,20.0s

**NB2 NORSAR Subarra 84.28 29** P **P** **10 39 35.0 -0.6**
comp=Z,26nm,2.0s,baz=290,slow=5.3
**NOA NORSAR Array B 84.28 29** P **P** **10 39 35.4 -0.2**
comp=Z,1.0nm,0.6s,baz=294,slow=5.5,SNR=7.9
NOA LR LR 11 14 42.0
comp=Z,184nm,21.3s,baz=285,slow=34
comp=Z,1.0nm,0.6s
**SSB Saint Sauveur 84.44 45** IAMs_20 IAMs_20 11 19 37.2
comp=Z,308nm,18.0s
**DBIC Dimbokro 84.58 84** P **P** **10 39 38.2 +0.2**
comp=Z,17nm,0.6s,baz=278,slow=4.8,SNR=22
comp=Z,17nm,0.6s
**HFS Hagfors 85.72 29** P **P** **10 39 42.2 -0.6**
comp=Z,4.1nm,0.7s,baz=240,slow=2.9,SNR=8.4
HFS LR LR 11 16 22.9
comp=Z,148nm,20.3s,baz=299,slow=34
comp=Z,4.1nm,0.7s
**BNI Bardonecchia 85.97 45** IAMs_20 IAMs_20 11 16 47.4
comp=Z,242nm,20.0s
**ARCES ARCESS Array B 86.51 18** P **P** **10 39 45.4 -1.1**
comp=Z,1.2nm,0.6s,baz=252,slow=7.3,SNR=5.7
ARCES LR LR 11 18 58.3
comp=Z,291nm,18.6s,baz=296,slow=36
comp=Z,1.2nm,0.6s
**CHRS Christianenhau 86.83 38** *e*P **P** **10 39 47.7 -0.8**
comp=Z,4.1nm,0.7s,baz=287,slow=5.0
**BBWF Bergwerk Finst 86.90 39** *e*P **P** **10 39 47.9 -0.9**
comp=Z,3.7nm,1.2s,baz=287,slow=5.0
**MOX Moxa 87.60 38** *e*P **P** **10 39 49.9 -2.3**
comp=Z,6.3nm,1.4s,baz=287,slow=5.0
**GRA1 Grafenberg Arr 87.65 39** IAMs_20 IAMs_20 11 19 43.6
comp=Z,317nm,18.0s
**GRF Grafenberg Arr 87.65 39** *e*P **P** **10 39 51.6 -0.9**
comp=Z,5.2nm,0.6s,baz=287,slow=5.0
**FUORN Ofenpass-Fuorn 87.95 43** IAMs_20 IAMs_20 11 22 04.8
comp=Z,259nm,18.0s
**PLN Plauen 87.98 39** *e*P **P** **10 39 52.6 -1.4**
comp=Z,7.7nm,1.4s,baz=287,slow=5.0
**WERD Werda 88.08 39** *e*P **P** **10 39 53.6 -1.0**
comp=Z,2.4nm,0.6s,baz=287,slow=5.0
**MULD Muldenberg 88.15 39** *e*P **P** **10 39 54.0 -0.9**
comp=Z,2.7nm,0.8s,baz=287,slow=5.0
**TANN Tannenbergstha 88.19 39** *e*P **P** **10 39 53.8 -1.3**
comp=Z,8.0nm,1.4s,baz=287,slow=5.0
**CLL Collm 88.23 38** P **P** **10 39 54.5 -0.6**
CLL IAMs_20 IAMs_20 11 16 40.7
comp=Z,273nm,20.0s
**CLL Collm 88.23 38** P **P** **10 39 54.8 -0.3**
comp=Z,4.5nm,1.0s
**CLL Collm 88.23 38** *e*P **P** **10 39 54.4 -0.7**
comp=Z,3.2nm,0.9s,baz=287,slow=5.0
**HSKC Hora Svate Kat 88.71 38** AMS AMS 11 20 50.0
comp=Z,200nm,19.6s
**WET Wettzell 88.85 40** *e*P **P** **10 39 57.5 -0.6**
comp=Z,3.9nm,1.1s,baz=287,slow=5.0
**KHC Kasperske Hory 89.29 40** IAMs_20 IAMs_20 11 20 53.0
comp=Z,321nm,19.0s
**KHC Kasperske Hory 89.29 40** AMS AMS 11 20 20.0
comp=Z,400nm,19.2s
**KHC Kasperske Hory 89.29 40** P **P** **10 40 00.5 +0.2**
comp=Z,2.3nm,1.1s
**TORD Torodi Ar. Bea 89.43 77** P **P** **10 39 59.9 -1.6**
comp=Z,2.1nm,0.7s,baz=310,slow=4.6,SNR=8.6
TORD LR LR 11 17 57.0
comp=Z,228nm,19.6s,baz=298,slow=34
comp=Z,2.1nm,0.7s
**GERES GERESS Array B 89.46 40** P **P** **10 40 00.1 -1.0**
comp=Z,0.8nm,0.7s,baz=264,slow=7.8,SNR=4.0
comp=Z,0.8nm,0.7s
**PRA Prague 89.50 38** AMS AMS 11 21 30.0
comp=Z,400nm,15.5s
**ZVC Zvikov 89.57 39** AMS AMS 11 20 20.0
comp=Z,400nm,18.9s
**PRU Pruhonice 89.59 38** AMS AMS 11 21 40.0
comp=Z,400nm,18.2s
**GOPC GO Pecny, Ondr 89.77 39** AMS AMS 11 21 50.0
comp=Z,400nm,18.7s
**CKRC Cesky Krumlov 89.85 40** AMS AMS 11 20 20.0
comp=Z,200nm,12.2s
**PRED Cave del Predi 90.17 42** IAMs_20 IAMs_20 11 16 10.5
comp=Z,245nm,20.0s
**LVZ Lovozero 90.20 18** P **P** **10 40 05.2 +1.1**
comp=Z,24nm,1.9s
**UPC Upice 90.29 38** AMS AMS 11 23 50.0
comp=Z,300nm,18.7s
**SABO M.te Sabotino 90.35 42** IAMs_20 IAMs_20 11 23 30.8
comp=Z,350nm,19.0s
**KEST Kesra 90.44 53** LR LR 11 16 43.3
comp=Z,71nm,19.4s,baz=254,slow=33
**DPC Dobruska-Polom 90.53 38** AMS AMS 11 21 50.0
comp=Z,200nm,19.7s
**FINES FINESS Array B 90.71 25** P **P** **10 40 05.0 -1.5**
comp=Z,2.5nm,1.0s,baz=277,slow=2.4,SNR=1.9
FINES LR LR 11 21 15.6
comp=Z,297nm,19.8s,baz=290,slow=36
comp=Z,2.5nm,1.0s
**FDMO Fiordimonte 90.97 45** IAMs_20 IAMs_20 11 21 11.9
comp=Z,253nm,20.0s
**VRAC Vranov 91.08 39** LR LR 11 22 12.0
comp=Z,270nm,18.3s,baz=292,slow=36
**TIXI Tiksi 91.25 348** LR LR 11 27 31.2
comp=Z,268nm,18.6s,baz=44,slow=40
**OKC Ostrava-Krasne 91.81 38** AMS AMS 11 23 00.0
comp=Z,200nm,17.9s
**MA2 Magadan 92.31 333** P **P** **10 40 15.0 +1.0**
**MA2 Magadan 92.31 333** LR LR 11 27 20.6
comp=Z,120nm,19.1s,baz=54,slow=39
**MA2 Magadan 92.31 333** P **P** **10 40 15.6 +1.6**
comp=Z,16nm,1.5s
**SUW Suwalki 92.88 33** IAMs_20 IAMs_20 11 25 50.8
comp=Z,258nm,21.0s
**NIE Niedzica 93.27 38** P **P** **10 40 18.7 0.0**
comp=Z,2.0nm,1.2s
**VAE Valguarnera 93.77 50** LR LR 11 20 46.6
comp=Z,230nm,18.0s,baz=313,slow=34
**CUC Castrocucco 93.93 48** IAMs_20 IAMs_20 11 20 55.5
comp=Z,194nm,18.0s
**TIP Timpagrande 94.90 48** IAMs_20 IAMs_20 11 24 45.2
comp=Z,235nm,18.0s
**TIP Timpagrande 94.90 48** P **P** **10 40 27.1 +0.6**
**MSVF Nonsavu 95.01 253** LR LR 11 14 01.9
comp=Z,111nm,21.3s,baz=128,slow=30
**RNPP9 Sopachiv 95.56 34** P **P** **10 40 28.7 -0.4**
**TARA Tarawa 95.80 273** IAMs_20 IAMs_20 11 27 25.1
comp=Z,169nm,19.0s
**MI28 Mi28,Pidlybu 96.77 34** P **P** **10 40 34.4 -0.2**
**AK12 Malin Array Si 97.73 34** P Pdif 10 40 39.6 +0.6
**KIEV Kiev 97.73 34** IAMs_20 IAMs_20 11 28 08.3
comp=Z,222nm,19.0s
**AKASG Malin Array Be 97.73 34** LR LR 11 26 06.4
comp=Z,179nm,18.9s,baz=276,slow=36
**AK10 Malin Array Si 97.80 34** P Pdif 10 40 39.3 0.0
**MLR Muntele Rosu 98.44 39** LR LR 11 22 13.3
comp=Z,152nm,20.1s,baz=315,slow=34
**YAK Yakutsk 98.56 342** IAMs_20 IAMs_20 11 31 53.0
comp=Z,274nm,20.0s
**YAK Yakutsk 98.56 342** LR LR 11 32 00.3
comp=Z,203nm,20.4s,baz=22,slow=40
**OBN Obninsk 98.84 28** LR LR 11 27 04.7
comp=Z,191nm,18.4s,slow=36
**URZ Urewera 99.67 233** LR LR 11 18 28.6
comp=Z,64nm,18.1s,baz=219,slow=31
**DZM Mont Dzumac 106.51 251** *e*LR LR 11 16 33.1
comp=Z,116nm,23.5s
**ZALV Zalesovo Beam 113.00 3** PP **PP** **10 46 27.4 -1.7**
comp=Z,1.0nm,0.5s,baz=15,slow=6.0,SNR=4.1
**KURBB Kurchatov Arra 115.75 8** PKP **PKPdf** **10 45 46.6 +0.5**
comp=Z,0.6nm,0.4s,baz=1.1,slow=1.6,SNR=5.3
**JMN Monobe 116.84 319** IAMs_20 IAMs_20 11 40 04.6
comp=Z,74nm,18.0s
**SONM Songino Array 117.31 347** PKP **PKiKP** **10 45 50.0 +0.5**
comp=Z,0.6nm,0.4s,baz=336,slow=3.2,SNR=3.2
**KSRS Korea Array 117.84 326** PKP **PKiKP** **10 45 52.5 +1.9**
comp=Z,1.8nm,0.7s,baz=6.6,slow=1.6,SNR=10
**BOSA Boshof 118.98 115** PKP **PKiKP** **10 45 54.4 +1.2**
comp=Z,4.7nm,0.7s,baz=259,slow=2.0,SNR=11
**MKAR Makanchi Array 119.94 5** PKP **PKPdf** **10 45 54.3 -0.1**
comp=Z,0.4nm,0.6s,baz=323,slow=1.8,SNR=4.2
**STKA Stephens Creek 128.67 240** PKP **PKPdf** **10 46 10.3 -1.2**
comp=Z,3.9nm,0.9s,baz=104,slow=2.4,SNR=3.5
**WRAB Tennant Creek 136.31 255** **PKPdf** **10 46 26.7 +0.5**
**WRA Warramunga Arr 136.32 255** PKPdf **PKPdf** **10 46 26.8 +0.5**
**WRA Warramunga Arr 136.32 255** PKhKP PKPpre 10 46 17.6
comp=Z,0.7nm,0.7s,baz=95,slow=2.2,SNR=7.1
WRA PKP **PKPdf** **10 46 26.3 +0.1**
comp=Z,2.5nm,0.8s,baz=88,slow=2.6,SNR=18
**ASAR Alice Springs 136.49 250** PKhKP PKPpre 10 46 17.2
comp=Z,0.1nm,0.3s,baz=101,slow=2.8,SNR=2.2

ASAR PKP **PKPdf** **10 46 26.9 +0.5**
comp=Z,1.3nm,0.7s,baz=97,slow=1.8,SNR=11
**CHTO Chiang Mai 146.75 343 PKPab 10 46 47.2 -0.6**
**CMAR Chiang Mai Arr 147.09 343 PKPab 10 46 49.0 -0.1**
**CMAR Chiang Mai Arr 147.09 343** PKPbc **PKPab 10 46 48.5 -0.6**
comp=Z,11nm,0.8s,baz=333,slow=3.7,SNR=42
**UBPT Khong Chiam 147.42 330** IAMs_20 IAMs_20 11 38 43.6
comp=Z,130nm,19.0s

**MEX 04 10:28:05.8±0.6, 15°98N×98°38W, h5km, MD3.0, Off coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.48** | **30** | *i* P | Pg | 10 28 14.2 | -0.8 |
| PNIG | | | | eS | Sg | 10 28 21.6 | +0.4 |
| **YOIG** | **Yosondua** | **1.18** | **42** | *e*P | Pg | 10 28 25.2 | -3.3 |
| YOIG | | | | eS | Sg | 10 28 41.5 | -2.4 |
| **TXIG** | **Tlaxiaco** | **1.40** | **25** | *e*P | Pn | 10 28 29.3 | -3.0 |

*SNET **04** 10:31:00.1±1.4, 13°.20N×91°.09W, h107km±68km, ML3.6*
*NEIC **04** 10:31:04.9±1.4, 13°.10N±0°.06×90°.78W±0°.08, h35km±2km, mb4.1/17, Error ellipse: s-maj=17.3km s-min=3.1km az=231.0*
*IDC **04** 10:31:07.2±2.7, 13°.23N×90°.58W, h78km±20km, mb3.7/9, mbtmp4.1/11, Error ellipse: s-maj=33.7km s-min=13.2km az=55.0*
**ISC 04 10:31:02.3±0.8, 13°.04N±0°.07×90°.84W±0°.06, h33km, n54, σ1s82/56, mb4.1/14, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SBLS** | **San Blas** | **1.42** | **56** | *e*P | **Pn** | **10 31 27.7** | **+1.6** |
| SBLS | | | | IAML | | 10 31 52.4 | |
| comp=Z,404nm,0.3s | | | | | | | |
| **RTR** | **El Retiro** | **1.44** | **54** | *e*P | **Pn** | **10 31 28.9** | **+2.6** |
| RTR | | | | IAML | | 10 32 01.2 | |
| comp=Z,576nm,0.3s | | | | | | | |
| **SNJE** | **San Jose** | **1.45** | **55** | *e*P | **Pn** | **10 31 28.2** | **+1.8** |
| **SNET** | **Serv Nac Est T** | **1.69** | **68** | Pn | **Pn** | **10 31 30.9** | **+1.3** |
| **SNET** | **Serv Nac Est T** | **1.69** | **68** | *e*P | **Pn** | **10 31 32.7** | **+3.1** |
| **RTAL** | **Retalhuleu** | **1.69** | **331** | Pn | **Pn** | **10 31 31.8** | **+2.2** |
| **LFRS** | **El Faro** | **1.82** | **71** | *e*P | **Pn** | **10 31 34.1** | **+2.7** |
| LFRS | | | | IAML | | 10 32 01.4 | |
| comp=Z,611nm,0.5s | | | | | | | |
| **MTO3** | **Montecristo** | **1.97** | **47** | Pn | **Pn** | **10 31 35.3** | **+1.7** |
| **MTO3** | **Montecristo** | **1.97** | **47** | *e*P | **Pn** | **10 31 34.9** | **+1.3** |
| MTO3 | | | | eS | **Sb** | **10 32 01.8** | **-0.2** |
| **APG** | **El Apazote** | **1.98** | **10** | P | **Pn** | **10 31 35.1** | **+1.3** |
| comp=Z,12nm,0.3s,baz=111,slow=13,SNR=13 | | | | | | | |
| APG | | | | S | **Sn** | **10 31 58.6** | **+1.0** |
| comp=Z,20nm,0.5s,baz=224,slow=7.5,SNR=3.8 | | | | | | | |
| **HUEH** | **Huehuetenango** | **2.35** | **344** | Pn | **Pn** | **10 31 40.8** | **+1.9** |
| **PACA** | **Pacayal** | **2.48** | **80** | *e*P | **Pn** | **10 31 43.2** | **+2.6** |
| **CNCH** | **Conchagua** | **2.93** | **85** | *e*P | **Pn** | **10 31 48.5** | **+1.8** |
| **CCIG** | **Comitan** | **3.46** | **339** | Pn | **Pn** | **10 31 58.2** | **+4.1** |
| **TGUH** | **Tegucigalpa,Un** | **3.61** | **73** | Pn | **Pn** | **10 31 57.1** | **+1.0** |
| **CRIN** | **San Cristobal** | **3.71** | **95** | Pn | **Pn** | **10 31 57.3** | **-0.1** |
| **PETF** | **Flores** | **3.96** | **14** | Pn | **Pn** | **10 32 01.8** | **+1.0** |
| **CNGN** | **Cerro Negro** | **4.07** | **97** | Pn | **Pn** | **10 32 04.3** | **+1.9** |
| **BOAB** | **BOACO BROADBAN** | **4.08** | **96** | Pn | **Pn** | **10 32 17.3** | **+1.2** |
| **JTS** | **Las Juntas de** | **6.38** | **115** | Pn | **Pn** | **10 32 36.9** | **+2.8** |
| **JTS** | **Las Juntas de** | **6.38** | **115** | P | **Pn** | **10 32 37.1** | **+3.0** |
| comp=Z,13nm,0.8s,baz=297,slow=19,SNR=11 | | | | | | | |
| JTS | | | | S | **Sn** | **10 33 47.3** | **+1.4** |
| comp=Z,3.8nm,0.6s,baz=310,slow=17,SNR=1.1 | | | | | | | |
| **LCR2** | **La Lucha 2** | **7.46** | **115** | Pn | Pn | 10 32 54.3 | +5.2 |
| **TEIG** | **Tepich** | **7.55** | **19** | Pn | **Pn** | **10 32 52.8** | **+2.7** |
| **TEIG** | **Tepich** | **7.55** | **19** | P | **Pn** | **10 32 52.3** | **+2.1** |
| comp=Z,203nm,1.4s,baz=135,slow=8.6,SNR=7.3 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **20.12** | **326** | P | **P** | **10 35 35.5** | **+1.9** |
| **TXAR** | **Lajitas Array** | **20.12** | **326** | P | **P** | **10 35 35.5** | **+1.9** |
| **TXAR** | **Lajitas Array** | **20.12** | **326** | P | **P** | **10 35 35.1** | **+1.5** |
| comp=Z,1.1nm,0.7s,baz=141,slow=11,SNR=4.8 | | | | | | | |
| comp=Z,1.1nm,0.7s | | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **20.14** | **289** | T | T | 10 55 56.8 | |
| SNR=6.9 | | | | | | | |
| **255A** | **Hazlehurst** | **20.30** | **21** | P | **P** | **10 35 36.7** | **+1.2** |
| **ALPN** | **Alpine** | **20.92** | **328** | P | **P** | **10 35 44.6** | **+2.2** |
| ALPN | | | | IAmb | IAmb | 10 35 46.2 | |
| comp=Z,5.7nm,0.8s | | | | | | | |
| **MNHN** | **Monahans** | **21.26** | **331** | P | **P** | **10 35 47.0** | **+1.1** |
| MNHN | | | | IAmb | IAmb | 10 35 48.4 | |
| comp=Z,7.4nm,0.8s | | | | | | | |
| **PECS** | **Pecos** | **21.83** | **329** | P | **P** | **10 35 53.8** | **+1.7** |
| PECS | | | | IAmb | IAmb | 10 36 01.4 | |
| comp=Z,7.3nm,0.7s | | | | | | | |
| **APMT** | **Aspermont** | **21.89** | **339** | P | **P** | **10 35 51.7** | **-1.0** |
| APMT | | | | IAmb | IAmb | 10 36 00.7 | |
| comp=Z,7.1nm,0.8s | | | | | | | |
| **FPAL** | **Fort Paine** | **21.92** | **12** | P | **P** | **10 35 54.4** | **+1.5** |
| FPAL | | | | IAmb | IAmb | 10 35 59.2 | |
| comp=Z,9.1nm,1.1s | | | | | | | |
| **VHRN** | **Van Horn** | **21.96** | **326** | P | **P** | **10 35 53.4** | **-0.2** |
| **W50A** | **Signal Mountai** | **22.62** | **12** | P | **P** | **10 36 00.1** | **-0.3** |
| W50A | | | | IAmb | IAmb | 10 36 28.8 | |
| comp=Z,6.6nm,0.9s | | | | | | | |
| **BAUV** | **El Baul** | **22.74** | **98** | P | **P** | **10 36 02.6** | **+0.8** |
| **MNTX** | **Cornudas Mount** | **22.88** | **327** | P | **P** | **10 36 02.3** | **-0.9** |
| **TKL** | **Tuckaleechee C** | **23.40** | **15** | P | **P** | **10 36 09.0** | **+0.6** |
| TKL | | | | IAmb | IAmb | 10 36 17.1 | |
| comp=Z,5.3nm,1.0s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.40** | **15** | P | **P** | **10 36 05.8** | **-2.5** |
| comp=Z,3.3nm,0.8s,baz=236,slow=6.2,SNR=2.1 | | | | | | | |
| comp=Z,3.3nm,0.8s | | | | | | | |
| **U49A** | **Red Boiling Sp** | **23.81** | **10** | P | **P** | **10 36 13.0** | **+0.7** |
| **AMTX** | **Amarillo** | **23.86** | **338** | P | **P** | **10 36 14.0** | **+1.1** |
| AMTX | | | | IAmb | IAmb | 10 36 15.6 | |
| comp=Z,4.7nm,0.6s | | | | | | | |
| **SPMN** | **Marine on St.** | **32.12** | **357** | P | **P** | **10 37 26.2** | **-0.3** |
| **SADO** | **Sadowa** | **33.16** | **15** | P | **P** | **10 37 33.1** | **-2.5** |
| comp=Z,3.0nm,0.7s,baz=231,slow=8.0,SNR=3.9 | | | | | | | |
| comp=Z,3.0nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.12** | **321** | P | **P** | **10 37 54.5** | **+1.4** |
| comp=Z,2.2nm,0.8s,baz=140,slow=8.5,SNR=4.8 | | | | | | | |
| NVAR | | | | PcP | **PcP** | **10 40 20.8** | **-3.4** |
| comp=Z,1.5nm,0.9s,baz=126,slow=4.6,SNR=7.1 | | | | | | | |
| comp=Z,2.2nm,0.8s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.33** | **355** | P | **P** | **10 38 09.7** | **-1.8** |
| comp=Z,5.9nm,0.8s,baz=212,slow=4.8,SNR=3.6 | | | | | | | |
| comp=Z,5.9nm,0.8s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **39.69** | **331** | P | **P** | **10 38 31.7** | **+0.2** |
| **NEW** | **Newport** | **41.35** | **333** | P | **P** | **10 38 44.5** | **-0.6** |
| comp=Z,1.5nm,0.7s,baz=90,slow=11,SNR=2.2 | | | | | | | |
| comp=Z,1.5nm,0.7s | | | | | | | |
| **SCHQ** | **Schefferville** | **45.73** | **19** | P | **P** | **10 39 19.1** | **-1.2** |
| comp=Z,4.4nm,0.8s,baz=242,slow=6.8,SNR=3.6 | | | | | | | |
| comp=Z,4.4nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **64.16** | **337** | P | **P** | **10 41 33.6** | **+0.3** |
| comp=Z,0.7nm,1.0s,baz=106,slow=4.8,SNR=3.6 | | | | | | | |
| comp=Z,0.7nm,1.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **79.42** | **52** | P | **P** | **10 43 04.5** | **-1.1** |
| comp=Z,0.4nm,0.9s,baz=245,slow=2.7,SNR=2.3 | | | | | | | |
| comp=Z,0.4nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **136.25** | **255** | PKhKP | PKPpre | 10 50 11.7 | |
| comp=Z,1.9nm,1.2s,baz=85,slow=1.0,SNR=4.6 | | | | | | | |
| WRA | | | | PKP | **PKPdf** | **10 50 20.0** | **-1.3** |
| comp=Z,0.5nm,0.9s,baz=80,slow=2.1,SNR=2.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **136.40** | **249** | PKhKP | PKPpre | 10 50 11.2 | |
| comp=Z,0.6nm,0.9s,baz=108,slow=4.1,SNR=4.1 | | | | | | | |
| ASAR | | | | PKP | **PKPdf** | **10 50 22.7** | **+1.1** |
| comp=Z,0.2nm,0.7s,baz=108,slow=3.0,SNR=1.6 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.25** | **343** | PKPbc | **PKPdf** | **10 50 42.5** | **+1.5** |
| comp=Z,0.5nm,0.3s,baz=342,slow=4.7,SNR=2.4 | | | | | | | |

*IDC **04** 10:48:25.6±0.9, 35°.98N×21°.40E, h0km, mb3.9/17, mbtmp3.8/26, ML3.7/6, MS3.4/6, Error ellipse: s-maj=18.9km s-min=12.5km az=4.0*
*TIR **04** 10:48:26.7, 36°.14N×20°.41E, h10km±24km, Ml3.9*
*THE **04** 10:48:27.1, 35°.84N×21°.21E, h2km±2km, ML3.7/4, Error ellipse: s-maj=2.3km s-min=1.4km az=52.0*
*ATH **04** 10:48:28.2, 35°.80N×21°.20E, h18km±7km, ML3.7/17, Error ellipse: s-maj=9.8km s-min=1.6km az=224.0*
*NAO **04** 10:49:00.9, 38°.98N×20°.41E, h33km, mb3.6*
**ISC 04 10:48:28.7±0.6, 35°.98N±0°.05×21°.25E±0°.04, h22km±4km, n107, σ2s07/123, mb3.9/16, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYL** | **PYLOS** | **1.00** | **23** | P | **Pn** | **10 48 47.5** | **0.0** |
| PYL | | | | S | **Sn** | **10 49 05.3** | **+4.3** |
| 4μm,0.6s | | | | | | | |
| **PYL** | **PYLOS** | **1.00** | **23** | P | **Pn** | **10 48 48.5** | **+1.0** |
| PYL | | | | S | **Sn** | **10 49 04.1** | **+3.1** |
| PYL | | | | AML | AML | 10 49 07.9 | |
| comp=N,6895μm,0.7s | | | | | | | |
| PYL | | | | AML | AML | 10 49 15.9 | |
| comp=E,7553μm,0.8s | | | | | | | |
| **ITM** | **Ithomi** | **1.32** | **24** | P | **Pb** | **10 48 53.1** | **+0.3** |
| ITM | | | | S | **Sb** | **10 49 14.0** | **+4.7** |
| comp=E,2μm,0.6s | | | | | | | |
| **ITM** | **Ithomi** | **1.32** | **24** | P | **Pb** | **10 48 53.5** | **+0.6** |
| ITM | | | | S | **Sb** | **10 49 11.5** | **+2.2** |
| ITM | | | | AML | AML | 10 49 23.0 | |
| comp=E,3545μm,0.6s | | | | | | | |
| ITM | | | | AML | AML | 10 49 24.2 | |
| comp=N,3654μm,0.7s | | | | | | | |
| **KTHA** | **Kythira Island** | **1.50** | **79** | P | **Pb** | **10 48 55.0** | **-0.8** |
| **KTHA** | **Kythira Island** | **1.50** | **79** | P | **Pn** | **10 48 54.6** | **+0.3** |
| KTHA | | | | S | **Sb** | **10 49 13.7** | **-0.7** |
| KTHA | | | | AML | AML | 10 49 26.0 | |
| comp=N,2508μm,0.8s | | | | | | | |
| KTHA | | | | AML | AML | 10 49 28.3 | |
| comp=E,5162μm,0.9s | | | | | | | |
| **VLI** | **Velíai** | **1.55** | **61** | P | **Pb** | **10 48 56.4** | **-0.4** |
| VLI | | | | S | **Sb** | **10 49 19.1** | **+3.1** |
| comp=E,2μm,0.8s | | | | | | | |
| **VLI** | **Velíai** | **1.55** | **61** | P | **Pb** | **10 48 56.0** | **-0.8** |
| VLI | | | | S | **Sb** | **10 49 16.3** | **+0.3** |
| VLI | | | | AML | AML | 10 49 33.5 | |
| comp=E,4409μm,0.8s | | | | | | | |
| VLI | | | | AML | AML | 10 49 34.2 | |
| comp=N,3609μm,0.8s | | | | | | | |
| **ANKY** | **Antikythira Is** | **1.67** | **93** | P | **Pn** | **10 48 57.1** | **+0.4** |
| **ANKY** | **Antikythira Is** | **1.67** | **93** | P | **Pn** | **10 48 56.7** | **0.0** |
| ANKY | | | | S | **Sn** | **10 49 18.0** | **+0.5** |
| ANKY | | | | AML | AML | 10 49 31.2 | |
| comp=E,4218μm,1.0s | | | | | | | |
| ANKY | | | | AML | AML | 10 49 40.9 | |
| comp=N,2838μm,0.9s | | | | | | | |
| **LTHK** | **Lithakia** | **1.76** | **349** | P | **Pb** | **10 48 58.9** | **-1.5** |
| LTHK | | | | S | **Sb** | **10 49 22.9** | **+0.9** |
| LTHK | | | | AML | AML | 10 49 47.2 | |
| comp=N,1575μm,0.9s | | | | | | | |
| LTHK | | | | AML | AML | 10 49 55.8 | |
| comp=E,1675μm,0.9s | | | | | | | |
| **DRO** | **Drossia** | **2.01** | **11** | P | **Pb** | **10 49 03.9** | **-0.7** |
| **DRO** | **Drossia** | **2.01** | **11** | P | **Pb** | **10 49 03.6** | **-0.9** |
| DRO | | | | AML | AML | 10 49 53.6 | |
| comp=E,3226μm,1.0s | | | | | | | |
| DRO | | | | AML | AML | 10 49 58.0 | |
| comp=N,2605μm,1.1s | | | | | | | |
| **KRND** | **KRANIDI** | **2.08** | **47** | P | **Pn** | **10 49 03.4** | **+1.1** |
| **RLS** | **Riolos of Patr** | **2.09** | **5** | P | **Pb** | **10 49 04.4** | **-1.4** |
| RLS | | | | AML | AML | 10 49 57.5 | |
| comp=E,906μm,0.7s | | | | | | | |
| RLS | | | | AML | AML | 10 50 01.1 | |
| comp=N,1323μm,0.8s | | | | | | | |
| **RTZL** | **Ratzakli, Kefa** | **2.13** | **350** | P | **Pb** | **10 49 05.5** | **-1.1** |
| **GUR** | **Goura** | **2.15** | **24** | P | **Pb** | **10 49 06.0** | **-0.9** |
| **GUR** | **Goura** | **2.15** | **24** | P | **Pb** | **10 49 05.5** | **-1.4** |
| GUR | | | | AML | AML | 10 49 55.2 | |
| comp=N,2342μm,0.7s | | | | | | | |
| GUR | | | | AML | AML | 10 49 55.9 | |
| comp=E,2382μm,0.7s | | | | | | | |
| **KLV** | **Kalavryta, Ach** | **2.19** | **19** | P | **Pb** | **10 49 06.0** | **-1.6** |
| **KLV** | **Kalavryta, Ach** | **2.19** | **19** | P | **Pb** | **10 49 05.6** | **-2.0** |
| **PSDA** | **Pessada-Kefalo** | **2.20** | **346** | P | **Pb** | **10 49 06.4** | **-1.4** |
| **VLS** | **Valsamata** | **2.26** | **347** | P | **Pn** | **10 49 06.1** | **+1.3** |
| **VLS** | **Valsamata** | **2.26** | **347** | P | **Pn** | **10 49 06.3** | **+1.4** |
| VLS | | | | AML | AML | 10 49 57.1 | |
| comp=N,538μm,0.5s | | | | | | | |
| VLS | | | | AML | AML | 10 49 59.8 | |
| comp=E,437μm,0.6s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **2.28** | **102** | P | **Pn** | **10 49 04.7** | **-0.4** |
| **IMMV** | **Iera Moni Meta** | **2.28** | **102** | P | **Pn** | **10 49 04.7** | **-0.4** |
| IMMV | | | | AML | AML | 10 50 09.6 | |
| comp=E,2407μm,0.9s | | | | | | | |
| IMMV | | | | AML | AML | 10 50 10.3 | |
| comp=N,1966μm,1.1s | | | | | | | |
| **DMLN** | **Damoulianata-K** | **2.37** | **343** | P | **Pn** | **10 49 07.3** | **+1.0** |
| DMLN | | | | S | **Sb** | **10 49 39.6** | **+0.2** |
| comp=N,620nm,0.6s | | | | | | | |
| **EFP** | **Efpalio** | **2.50** | **12** | P | **Pb** | **10 49 10.9** | **-2.0** |
| EFP | | | | AML | AML | 10 50 08.7 | |
| comp=E,1501μm,0.9s | | | | | | | |
| EFP | | | | AML | AML | 10 50 13.2 | |
| comp=N,1043μm,1.4s | | | | | | | |
| **FSK** | **Fiskardo** | **2.54** | **348** | P | **Pn** | **10 49 10.2** | **+1.6** |
| FSK | | | | AML | AML | 10 50 25.6 | |
| comp=E,808μm,1.2s | | | | | | | |
| FSK | | | | AML | AML | 10 50 28.9 | |
| comp=N,594μm,1.6s | | | | | | | |
| **MHLO** | **Agia Marina, M** | **2.65** | **73** | P | **Pn** | **10 49 11.4** | **+1.3** |
| MHLO | | | | AML | AML | 10 50 01.2 | |
| comp=N,4690μm,1.0s | | | | | | | |
| MHLO | | | | AML | AML | 10 50 18.6 | |
| comp=E,3774μm,1.0s | | | | | | | |
| **PVO** | **Paravola** | **2.65** | **5** | P | **Pb** | **10 49 12.9** | **-2.5** |
| **ANX** | **Ano Chora** | **2.67** | **11** | P | **Pn** | **10 49 12.1** | **+1.6** |
| **ANX** | **Ano Chora** | **2.67** | **11** | P | **Pb** | **10 49 13.5** | **-2.4** |
| ANX | | | | AML | AML | 10 50 12.8 | |
| comp=N,1368μm,0.7s | | | | | | | |
| ANX | | | | AML | AML | 10 50 24.7 | |
| comp=E,1016μm,0.8s | | | | | | | |
| **VLY** | **Voula,Athens** | **2.77** | **47** | P | **Pn** | **10 49 12.9** | **+1.1** |
| VLY | | | | AML | AML | 10 50 07.9 | |
| comp=E,672μm,1.1s | | | | | | | |
| VLY | | | | AML | AML | 10 50 16.2 | |
| comp=N,986μm,1.0s | | | | | | | |
| **LKD2** | **Lefkada island** | **2.85** | **351** | P | **Pn** | **10 49 13.5** | **+0.6** |
| baz=4.0 | | | | | | | |
| LKD2 | | | | S | **Sn** | **10 49 48.6** | **+2.0** |
| baz=4.0 | | | | | | | |
| LKD2 | | | | AMP | | | |
| comp=N,0.9nm,1.0s,baz=4.0 | | | | | | | |
| **LKD2** | **Lefkada island** | **2.85** | **351** | P | **Pn** | **10 49 15.3** | **+2.4** |
| LKD2 | | | | S | **Sb** | **10 49 51.7** | **-1.6** |
| **IDI** | **Anoyia** | **3.05** | **102** | Pn | **Pn** | **10 49 14.5** | **-1.2** |
| comp=N,10nm,0.6s,baz=252,slow=19,SNR=7.9 | | | | | | | |
| IDI | | | | Sn | **Sn** | **10 49 53.0** | **+1.5** |
| comp=N,6.7nm,0.3s,baz=296,slow=19,SNR=7.5 | | | | | | | |
| IDI | | | | LR | LR | 10 50 35.3 | |
| comp=N,459nm,18.2s,baz=282,slow=44 | | | | | | | |
| **IDI** | **Anoyia** | **3.05** | **102** | P | **Pn** | **10 49 15.0** | **-0.7** |
| IDI | | | | AML | AML | 10 50 02.3 | |
| comp=E,370μm,0.5s | | | | | | | |
| IDI | | | | AML | AML | 10 50 14.8 | |
| comp=N,338μm,1.2s | | | | | | | |
| **THL** | **Klokotos Trika** | **3.63** | **9** | P | **Pn** | **10 49 26.0** | **+2.3** |
| **KEK** | **Kerkira** | **3.90** | **343** | P | **Pn** | **10 49 28.9** | **+1.5** |
| **SRN** | **Sarande** | **4.02** | **346** | P | **Pn** | **10 49 30.4** | **+1.4** |
| baz=356 | | | | | | | |
| SRN | | | | S | **Sn** | **10 50 17.0** | **+1.6** |
| baz=356 | | | | | | | |
| **SCTE** | **Santa Cesarea** | **4.64** | **333** | P | **Pn** | **10 49 36.2** | **-1.3** |
| baz=340 | | | | | | | |
| SCTE | | | | S | **Sn** | **10 50 29.8** | **-1.0** |
| baz=340 | | | | | | | |
| SCTE | | | | AMP | | | |
| comp=N,0.1nm,0.4s,baz=340 | | | | | | | |
| **KBN** | **Korca** | **4.66** | **356** | S | **Sn** | **10 50 36.2** | **+5.0** |
| baz=3.0 | | | | | | | |
| KBN | | | | AMP | | | |
| comp=N,0.4nm,0.9s,baz=3.0 | | | | | | | |
| **FNA** | **Florina** | **4.80** | **1** | P | **Pn** | **10 49 41.6** | **+1.8** |
| baz=9.0 | | | | | | | |
| **OHR** | **Ohrid** | **5.14** | **356** | *i* Pn | **Pn** | **10 49 45.8** | **+1.4** |
| **VAY** | **Valandovo** | **5.44** | **11** | *i* Pn | **Pn** | **10 49 50.0** | **+1.6** |
| **VAE** | **Valguarnera** | **5.69** | **287** | Pn | **Pn** | **10 49 53.2** | **+1.2** |
| comp=N,13nm,0.6s,baz=184,slow=23,SNR=2.9 | | | | | | | |
| VAE | | | | Sn | **Sn** | **10 51 01.2** | **+4.5** |
| comp=N,1.8nm,0.3s,baz=78,slow=21,SNR=2.0 | | | | | | | |
| **NOCI** | **Noci** | **5.82** | **327** | P | **Pn** | **10 49 54.0** | **+0.2** |
| baz=332 | | | | | | | |
| NOCI | | | | S | **Sn** | **10 50 57.5** | **-2.3** |
| baz=332 | | | | | | | |
| NOCI | | | | AMP | | | |
| comp=E,0.7nm,0.5s,baz=332 | | | | | | | |
| **PUK** | **Puka** | **6.15** | **351** | P | **Pn** | **10 49 59.1** | **+0.7** |
| baz=357 | | | | | | | |
| **DRME** | **Dracevica, Mon** | **6.41** | **346** | *e*Pn | **Pn** | **10 50 01.1** | **-0.7** |
| **BCI** | **Bajram Curri** | **6.45** | **352** | P | **Pn** | **10 50 06.0** | **+3.7** |
| baz=358 | | | | | | | |
| **TREB** | **Trebinje** | **7.10** | **342** | *e*Pn | **Pn** | **10 50 12.4** | **+1.1** |
| **SGRT** | **San Giovanni R** | **7.19** | **325** | P | **Pn** | **10 50 12.5** | **-0.2** |
| baz=329 | | | | | | | |
| **SJES** | **Sjenica** | **7.34** | **353** | *e*Pn | **Pn** | **10 50 14.2** | **-0.5** |
| **STON** | **Ston** | **7.41** | **339** | *e*Pn | **Pn** | **10 50 14.9** | **-0.7** |
| **RUDO** | **Rudo** | **7.77** | **350** | *e*Pn | **Pn** | **10 50 18.1** | **-2.4** |
| **BBLS** | **Lazi&#263i** | **8.01** | **350** | *e*Pn | **Pn** | **10 50 21.8** | **-2.0** |
| **HAPS** | **Han Pijesak,Bl** | **8.29** | **348** | *e*Pn | **Pn** | **10 50 24.6** | **-3.1** |
| **TEKS** | **Tekeris** | **8.66** | **352** | *e*Pn | **Pn** | **10 50 30.2** | **-2.6** |
| **A050A** | **Klekovaca** | **9.23** | **338** | *e*Pn | **Pn** | **10 50 40.4** | **-0.2** |
| **BLY** | **Banja Luka** | **9.29** | **342** | *e*Pn | **Pn** | **10 50 42.0** | **+0.6** |
| **A051A** | **Mrakovica** | **9.61** | **341** | *e*Pn | **Pn** | **10 50 44.2** | **-1.6** |
| **KEST** | **Kesra** | **9.66** | **272** | Pn | **Pn** | **10 50 48.1** | **+1.5** |
| comp=E,0.2nm,0.3s,baz=42,slow=16,SNR=1.7 | | | | | | | |
| KEST | | | | Sn | **Sn** | **10 52 34.7** | **+0.2** |
| comp=E,0.2nm,0.3s,baz=29,slow=19,SNR=1.6 | | | | | | | |
| KEST | | | | LR | LR | 10 55 28.6 | |
| comp=E,73nm,18.9s,baz=202,slow=43 | | | | | | | |
| comp=E,1.3nm,0.6s | | | | | | | |
| **MLR** | **Muntele Rosu** | **10.15** | **19** | Pn | **Pn** | **10 50 52.0** | **-1.3** |
| comp=E,0.2nm,0.3s,baz=157,slow=12,SNR=2.1 | | | | | | | |
| comp=E,1.2nm,0.5s | | | | | | | |
| **BRTR** | **Keskin Array B** | **10.49** | **65** | Pn | **Pn** | **10 51 00.5** | **+2.6** |
| comp=E,0.1nm,0.3s,baz=251,slow=14,SNR=6.3 | | | | | | | |
| **BOJS** | **Bojanci** | **10.54** | **336** | *e*Pn | **Pn** | **10 51 02.0** | **+3.5** |
| **CRES** | **Cresnjev** | **10.77** | **338** | *e*Pn | **Pn** | **10 51 00.7** | **-0.9** |
| **CEY** | **Cerknica** | **11.03** | **334** | *e*Pn | **Pn** | **10 51 05.2** | **0.0** |
| **OBKA** | **Obir** | **11.66** | **337** | *e*Sn | **Sn** | **10 53 16.2** | **-7.2** |
| comp=E,8.8nm,0.7s | | | | | | | |
| **SOKA** | **Soboth** | **11.66** | **338** | *e*Pn | **Pn** | **10 51 15.6** | **+1.7** |
| comp=E,1.2nm,0.5s | | | | | | | |
| SOKA | | | | *i* Sn | Sn | 10 53 14.1 | -9.3 |
| comp=E,1.5nm,0.5s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **12.05** | **100** | Pn | **Pn** | **10 51 18.7** | **-0.5** |
| comp=E,0.8nm,0.3s,baz=285,slow=11,SNR=1.3 | | | | | | | |
| MMAI | | | | Sn | **Sn** | **10 53 32.1** | **-0.8** |
| comp=E,1.1nm,0.3s,baz=306,slow=27,SNR=1.6 | | | | | | | |
| comp=E,0.3nm,0.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **12.57** | **334** | *e*Pn | **Pn** | **10 51 28.2** | **+1.9** |
| comp=E,1.6nm,0.4s | | | | | | | |
| KBA | | | | *i* Sn | **Sn** | **10 53 42.0** | **-3.6** |
| comp=E,2.7nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **12.59** | **331** | *e*Sn | **Sn** | **10 53 41.6** | **-4.6** |
| comp=E,8.2nm,0.7s | | | | | | | |
| **MOA** | **Molln** | **12.95** | **339** | *i* Pn | **Pn** | **10 51 32.2** | **+0.9** |
| comp=E,0.1nm,0.1s | | | | | | | |
| MOA | | | | *e*Sn | **Sn** | **10 53 47.6** | **-7.0** |
| comp=E,2.8nm,0.7s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **13.00** | **337** | *i* Pn | **Pn** | **10 51 33.5** | **+1.4** |
| comp=E,1.4nm,0.3s | | | | | | | |
| **EIL** | **Elat** | **13.12** | **115** | Pn | **Pn** | **10 51 32.6** | **-1.2** |
| comp=E,0.3nm,0.3s,baz=238,slow=6.2,SNR=4.6 | | | | | | | |
| EIL | | | | Sn | Sn | 10 53 46.8 | -12 |
| comp=E,0.3nm,0.3s,baz=30,slow=16,SNR=1.8 | | | | | | | |
| comp=E,4.8nm,0.8s | | | | | | | |
| **WTTA** | **Wattenberg** | **13.36** | **331** | *e*Sn | **Sn** | **10 54 03.0** | **-2.0** |
| comp=E,6.1nm,0.5s | | | | | | | |
| **WATA** | **Walderalm** | **13.44** | **331** | *i* Sn | **Sn** | **10 54 05.7** | **-1.3** |
| comp=E,4.7nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **13.55** | **328** | *i* Sn | **Sn** | **10 54 07.0** | **-2.5** |
| comp=E,0.9nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **13.64** | **329** | *i* Sn | **Sn** | **10 54 08.3** | **-3.5** |
| comp=E,2.1nm,0.4s | | | | | | | |
| **VRAC** | **Vranov** | **13.75** | **347** | LR | LR | 10 57 40.8 | |
| comp=E,69nm,20.5s,baz=166,slow=40 | | | | | | | |
| **RETA** | **Reutte** | **13.90** | **329** | *e*Sn | **Sn** | **10 54 15.6** | **-2.4** |
| comp=E,2.0nm,0.6s | | | | | | | |
| **GERES** | **GERESS Array B** | **14.01** | **339** | Pn | **Pn** | **10 51 46.5** | **+0.6** |
| comp=E,0.2nm,0.3s,baz=178,slow=17,SNR=3.5 | | | | | | | |
| comp=E,1.1nm,0.9s | | | | | | | |
| **DAVA** | **Damuels** | **14.12** | **327** | *e*Sn | **Sn** | **10 54 20.7** | **-2.9** |
| comp=E,2.1nm,0.5s | | | | | | | |
| **KHC** | **Kasperske Hory** | **14.30** | **339** | *e*P | **P** | **10 52 00.0** | **+3.1** |
| **AKASG** | **Malin Array Be** | **15.81** | **19** | Pn | **Pn** | **10 52 07.0** | **-2.8** |
| comp=E,0.5nm,0.5s,baz=215,slow=10,SNR=0.7 | | | | | | | |
| **CLL** | **Collm** | **16.43** | **341** | *e*Px | Px | 10 52 22.0 | |
| CLL | | | | *ex* | x | 10 52 43.0 | |
| **KBZ** | **Khabaz** | **18.31** | **58** | P | **Pn** | **10 52 41.0** | **-0.2** |
| comp=E,0.3nm,0.3s,baz=227,slow=9.0,SNR=6.9 | | | | | | | |
| KBZ | | | | LR | LR | 11 02 17.4 | |
| comp=E,42nm,19.1s,baz=262,slow=46 | | | | | | | |
| comp=E,2.7nm,0.7s | | | | | | | |
| **ESDC** | **Sonseca Array** | **20.23** | **288** | P | Pn | 10 53 03.5 | -0.9 |
| comp=E,2.7nm,0.9s,baz=90,slow=12,SNR=20 | | | | | | | |
| comp=E,2.7nm,0.9s | | | | | | | |
| **MDT** | **Midelt** | **21.55** | **269** | P | **P** | **10 53 19.5** | **+2.8** |
| comp=E,1.5nm,0.2s,baz=94,slow=6.9,SNR=5.4 | | | | | | | |
| comp=E,1.5nm,0.2s | | | | | | | |
| **HFS** | **Hagfors** | **24.66** | **351** | P | **P** | **10 53 47.6** | **-0.1** |
| comp=E,2.3nm,0.5s,baz=159,slow=13,SNR=17 | | | | | | | |
| comp=E,2.3nm,0.5s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **25.57** | **327** | P | **P** | **10 53 57.0** | **+1.1** |
| comp=E,1.6nm,0.6s,baz=130,slow=9.3,SNR=11 | | | | | | | |
| comp=E,1.6nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **25.67** | **5** | P | **P** | **10 53 57.2** | **+0.4** |
| comp=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.78** | **273** | P | | **P** | **11 02 43.1** | **+2.4** |
| | 38nm,0.7s,baz=106,slow=4.6,SNR=26 | | | | | | | |
| **AFI** | **Afiamalu** | **7.21** | **57** | P | | **P** | **11 03 09.1** | **-1.3** |
| **URZ** | **Urewera** | **20.66** | **191** | P | | **P** | **11 05 20.8** | **-1.3** |
| | 5.8nm,0.8s,baz=357,slow=4.3,SNR=6.8 | | | | | | | |
| | 5.8nm,0.8s | | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.28** | **192** | P | | **P** | **11 05 45.4** | **-0.2** |
| MRZ | | | | IAmb | | IAmb | 11 05 50.2 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **ARMA** | **Armidale** | **30.25** | **240** | P | | **P** | **11 06 46.3** | **-0.8** |
| ARMA | | | | IAmb | | IAmb | 11 07 05.9 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **CAN** | **Canberra** | **33.98** | **233** | P | | **P** | **11 07 19.1** | **+0.4** |
| **TOO** | **Toolangi** | **37.44** | **231** | P | | **P** | **11 07 47.2** | **0.0** |
| TOO | | | | IAmb | | IAmb | 11 08 23.6 | |
| | comp=Z,22nm,1.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.95** | **241** | P | | **P** | **11 07 60.0** | **+0.5** |
| | comp=Z,5.0nm,0.8s,baz=95,slow=11,SNR=5.6 | | | | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.73** | **241** | P | | **P** | **11 08 36.8** | **-0.4** |
| **WR0** | **Warramunga Arr** | **44.82** | **260** | P | | **P** | **11 08 44.8** | **-1.1** |
| WR0 | | | | IAmb | | IAmb | 11 08 51.7 | |
| | comp=Z,8.1nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.98** | **260** | P | | **P** | **11 08 46.5** | **-0.7** |
| **WB2** | **Warramunga Arr** | **45.00** | **260** | P | | **P** | **11 08 46.4** | **-0.9** |
| WB2 | | | | IAmb | | IAmb | 11 09 00.2 | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.01** | **260** | P | | **P** | **11 08 46.5** | **-0.8** |
| WRAB | | | | IAmb | | IAmb | 11 09 12.1 | |
| | comp=Z,7.7nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.01** | **260** | P | | **P** | **11 08 46.3** | **-1.1** |
| **WRA** | **Warramunga Arr** | **45.01** | **260** | P | | **P** | **11 08 46.4** | **-1.0** |
| | comp=Z,1.3nm,0.5s,baz=94,slow=7.0,SNR=65 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **45.16** | **254** | P | | **P** | **11 08 48.0** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | | **P** | **11 08 47.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | | **P** | **11 08 48.3** | **-0.2** |
| | comp=Z,10.0nm,0.6s,baz=88,slow=8.4,SNR=184 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **11 10 16.9** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=111,slow=3.3,SNR=1.9 | | | | | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **49.20** | **268** | P | | **P** | **11 09 17.4** | **-1.5** |
| MTN | | | | IAmb | | IAmb | 11 09 25.9 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **50.34** | **245** | P | | **P** | **11 09 26.2** | **-0.9** |
| **KNRA** | **Kununurra** | **50.88** | **264** | P | | **P** | **11 09 30.3** | **-0.9** |
| KNRA | | | | IAmb | | IAmb | 11 10 10.9 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.41** | **261** | P | | **P** | **11 09 48.2** | **-1.1** |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | | **P** | **11 11 49.9** | **+1.0** |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | | **P** | **11 11 50.3** | **+1.4** |
| | comp=Z,1.5nm,0.8s,baz=27,slow=2.3,SNR=8.0 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.69** | **57** | P | | **P** | **11 13 03.1** | **+1.4** |
| | comp=Z,0.2nm,0.6s,baz=201,slow=6.6,SNR=3.7 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.52** | **178** | P | | **P** | **11 13 23.3** | **-0.2** |
| SNAA | | | | IAmb | | IAmb | 11 13 25.8 | |
| | comp=Z,5.7nm,1.4s | | | | | | | |

**SCB 04 11:03:37.8±1.1,20°.36S×65°.17W,h23km±6km,ML3.8/2, MW3.8,Error ellipse: s-maj=5.2km s-min=3.6km az=359.0,Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MOCB** | **Mochara** | **0.98** | **206** | Pg | Pn | 11 03 57.6 | +0.9 |
| MOCB | | | | Sg | Sn | 11 04 10.8 | +0.6 |
| MOCB | | | | IAML | | 11 04 20.7 | |
| | 5µm,0.4s | | | | | | |
| **AOEA** | **Aiquile** | **2.17** | **358** | Pn | Pb | 11 04 18.3 | +1.7 |
| **AOEA** | **Aiquile** | **2.17** | **358** | Pg | Pb | 11 04 18.4 | +1.8 |
| AOEA | | | | Sn | Sb | 11 04 49.7 | +6.4 |
| AOEA | | | | IAML | | 11 04 53.6 | |
| | 282nm,0.5s | | | | | | |
| **SOET** | **ToroToro** | **2.32** | **345** | Pn | Pb | 11 04 19.9 | +0.8 |
| **SOEO** | **Opoqueri** | **3.13** | **304** | Pn | Pb | 11 04 31.1 | -1.9 |
| **BBOE** | **La Paz, Chanca** | **4.43** | **322** | Pn | Pn | 11 04 49.4 | +5.3 |
| **PB15** | **IPOC Station P** | **4.90** | **234** | Pn | Pn | 11 04 55.3 | +5.0 |
| **BBOD** | **La Paz, Gloria** | **4.93** | **318** | Pn | Pn | 11 04 56.2 | +5.1 |
| **LPAZ** | **La Paz** | **4.93** | **325** | Pn | Pn | 11 04 56.3 | +5.1 |
| **BBSD** | **Serra de San D** | **5.35** | **55** | Pn | Pn | 11 05 01.6 | +5.2 |
| **SIV** | **San Ignacio** | **5.84** | **43** | Pn | Pn | 11 05 07.8 | +4.7 |

*HVO **04** 11:13:12.3±1.9, 19°.416N±0°.004×155°.274W±0°.007, h1km±4km, ML3.4/17, ML3.1/33(NEIC), Error ellipse: s-maj=0.9km s-min=0.7km az=84.0*
*NEIC **04** 11:13:13.9±2.6, 19°.409N±0°.008×155°.267W±0°.007, h5km±1km, Error ellipse: s-maj=1.8km s-min=1.4km az=354.0*
*IDC **04** 11:13:15.7±1.7, 19°.79N×155°.36W, h0km, mb3.4/3, mbtmp3.4/3, MS3.2/1, Error ellipse: s-maj=65.7km s-min=16.0km az=153.0*

**ISC 04 11:13:14.2±0.8,19°.42N±0°.03×155°.27W±0°.02,h10km,n45, σ1§77/46,mb3.6/3,Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HATHI** | **Halema'uma'u T** | **0.01** | **67** | | **Sg** | **11 13 13.7** | **-3.8** |
| **HATHI** | **Halema'uma'u T** | **0.01** | **67** | Pg | **Pg** | **11 13 13.1** | **-3.1** |
| **OBL** | **Observatory Le** | **0.01** | **265** | | **Pg** | **11 13 13.9** | **-2.3** |
| **BYL** | **Byron's Ledge** | **0.01** | **120** | Pg | **Pg** | **11 13 13.1** | **-3.0** |
| BYL | | | | | **Sg** | **11 13 13.8** | **-3.7** |
| **UWE** | **Uwekahuna** | **0.02** | **278** | Pg | **Pg** | **11 13 13.4** | **-2.8** |
| UWE | | | | | **Sg** | **11 13 14.7** | **-2.9** |
| **KKO** | **Keanakako`i** | **0.02** | **165** | | **Pg** | **11 13 14.1** | **-2.1** |
| **RIM** | **Rim** | **0.02** | **185** | | **Pg** | **11 13 13.9** | **-2.3** |
| **WRMHI** | **West Rim** | **0.03** | **246** | | **Pg** | **11 13 14.4** | **-1.8** |
| **SDHHI** | **Sand Hill** | **0.04** | **216** | | **Pg** | **11 13 14.3** | **-2.0** |
| **RSD** | **Rainshed** | **0.04** | **353** | Pg | **Pg** | **11 13 13.8** | **-2.5** |
| RSD | | | | | **Sg** | **11 13 15.2** | **-2.7** |
| **PUH** | **Pauahi** | **0.07** | **130** | Pg | **Pg** | **11 13 14.6** | **-2.0** |
| PUH | | | | | **Sg** | **11 13 16.4** | **-1.9** |
| **KNHH** | **Kane Nui o Ham** | **0.10** | **112** | | **Pg** | **11 13 15.1** | **-1.9** |
| **HLP** | **Hilina Pali** | **0.13** | **196** | Pg | **Pg** | **11 13 15.9** | **-1.4** |
| HLP | | | | IAML | | 11 13 16.0 | |
| | comp=E,4µm,1.2s | | | | | | |
| HLP | | | | IAML | | 11 13 18.4 | |
| | comp=N,8µm,1.1s | | | | | | |
| **MLH** | **Mauna Loa** | **0.13** | **305** | | **Pg** | **11 13 15.8** | **-1.7** |
| MLH | | | | | **Sg** | **11 13 17.9** | **-1.9** |
| **MLH** | **Mauna Loa** | **0.13** | **305** | IAML | | 11 13 18.9 | |
| | comp=N,7µm,0.5s | | | | | | |
| MLH | | | | IAML | | 11 13 19.2 | |
| | comp=E,11µm,0.5s | | | | | | |
| **STCH** | **Steam Cracks** | **0.14** | **103** | | **Pg** | **11 13 17.4** | **-0.1** |
| **STCH** | **Steam Cracks** | **0.14** | **103** | IAML | | 11 13 19.0 | |
| | comp=E,8µm,1.1s | | | | | | |
| STCH | | | | IAML | | 11 13 19.1 | |
| | comp=N,2µm,0.4s | | | | | | |
| **NPOC** | **North of Pu'u** | **0.15** | **99** | | **Pg** | **11 13 16.3** | **-1.4** |
| NPOC | | | | | **Sg** | **11 13 19.8** | **-0.3** |
| **JCUZ** | **Jacuzzi** | **0.16** | **102** | | **Pg** | **11 13 18.0** | **+0.2** |
| JCUZ | | | | | **Sg** | **11 13 20.2** | **-0.2** |
| **HTC** | **Hot Caves** | **0.22** | **213** | | **Pg** | **11 13 18.6** | **-0.1** |
| **JOKA** | **Jonika Flow** | **0.25** | **87** | Pg | **Pg** | **11 13 19.6** | **+0.1** |
| JOKA | | | | IAML | | 11 13 25.2 | |
| | comp=E,4µm,0.8s | | | | | | |
| **HMH** | **Humu'ula Sheep** | **0.27** | **313** | | **Pg** | **11 13 19.7** | **-0.2** |
| **HMH** | **Humu'ula Sheep** | **0.27** | **313** | IAML | | 11 13 25.0 | |
| | comp=E,5µm,0.7s | | | | | | |
| HMH | | | | IAML | | 11 13 26.8 | |
| | comp=N,7µm,0.5s | | | | | | |
| **MLOA** | **Mauna Loa Obse** | **0.31** | **292** | | **Pg** | **11 13 20.7** | **+0.1** |
| MLOA | | | | | **Sg** | **11 13 25.4** | **+0.6** |
| **MLOA** | **Mauna Loa Obse** | **0.31** | **292** | IAML | | 11 13 26.4 | |
| | comp=N,7µm,1.1s | | | | | | |
| MLOA | | | | IAML | | 11 13 27.4 | |
| | comp=E,7µm,1.4s | | | | | | |
| **MWH** | **Moku'aweowe** | **0.31** | **282** | | **Pg** | **11 13 20.5** | **-0.2** |
| **MWH** | **Moku'aweowe** | **0.31** | **282** | IAML | | 11 13 25.6 | |
| | comp=N,8µm,0.8s | | | | | | |
| MWH | | | | IAML | | 11 13 29.1 | |
| | comp=E,13µm,0.7s | | | | | | |
| **PAH** | **Pahoa** | **0.32** | **76** | Pg | **Pg** | **11 13 20.6** | **0.0** |
| **KHU** | **Kahuku** | **0.37** | **242** | | **Pg** | **11 13 21.9** | **+0.3** |
| KHU | | | | | **Sb** | **11 13 28.4** | **-0.4** |
| **KHU** | **Kahuku** | **0.37** | **242** | IAML | | 11 13 29.5 | |
| | comp=N,4µm,1.3s | | | | | | |
| KHU | | | | IAML | | 11 13 30.3 | |
| | comp=E,3µm,1.7s | | | | | | |
| **ALEP** | **Alea Permanent** | **0.37** | **289** | | **Pg** | **11 13 21.3** | **-0.4** |
| ALEP | | | | | **Sb** | **11 13 28.4** | **-0.7** |
| **POHA** | **Pohakuloa** | **0.42** | **324** | | **Pg** | **11 13 22.6** | **0.0** |
| POHA | | | | | **Sb** | **11 13 29.3** | **-1.0** |
| **POHA** | **Pohakuloa** | **0.42** | **324** | IAML | | 11 13 31.3 | |
| | comp=E,6µm,0.4s | | | | | | |
| POHA | | | | IAML | | 11 13 33.7 | |
| | comp=E,6µm,0.6s | | | | | | |
| **HPO** | **Honuapo** | **0.42** | **219** | | **Pg** | **11 13 22.4** | **-0.2** |
| **HPO** | **Honuapo** | **0.42** | **219** | | **Sb** | **11 13 30.1** | **-0.1** |
| **HUH** | **Hualalai** | **0.59** | **297** | | **Pg** | **11 13 25.9** | **+0.1** |
| **I59US** | **HAWAII INFRASO** | **0.61** | **286** | Pg | **Pg** | **11 13 26.1** | **-0.1** |
| | baz=120,slow=53 | | | | | | |
| **HPAH** | **Hawaii Prepara** | **0.73** | **327** | | **Pg** | **11 13 27.1** | **-1.3** |
| HPAH | | | | | **Sg** | **11 13 36.6** | **-1.3** |
| **YBH** | **Yreka Blue Hor** | **35.46** | **44** | LR | LR | 11 29 49.6 | |
| | comp=E,35nm,19.8s,baz=37,slow=28 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.59** | **277** | T | T | 11 57 17.3 | |
| | baz=84,slow=74,SNR=9.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.60** | **277** | T | T | 11 57 16.2 | |
| | baz=84,slow=74,SNR=6.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.60** | **277** | T | T | 11 57 16.7 | |
| | baz=84,slow=74,SNR=5.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **44.86** | **48** | P | **P** | **11 21 30.5** | **+1.4** |
| | comp=E,0.1nm,0.5s,baz=243,slow=6.9,SNR=2.0 | | | | | | |
| | comp=E,0.1nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **45.67** | **5** | P | **P** | **11 21 35.0** | **+0.2** |
| | comp=E,0.6nm,0.9s,baz=199,slow=6.8,SNR=5.6 | | | | | | |
| | comp=E,0.6nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **47.71** | **68** | P | **P** | **11 21 54.1** | **+2.6** |
| | comp=E,0.6nm,0.8s,baz=255,slow=8.1,SNR=7.4 | | | | | | |
| | comp=E,0.6nm,0.8s | | | | | | |

**IDC 04 11:17:43.6±4.8,22°.12S×177°.13W,h224km±47km, mb3.2/4,mbtmp3.7/5,Error ellipse: s-maj=50.3km s-min=29.3km az=166.0,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **6.29** | **313** | P | Pn | 11 19 15.0 | -0.2 |
| | 7.0nm,0.7s,baz=153,slow=19,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **44.96** | **258** | P | P | 11 25 37.1 | +0.2 |
| | 1.4nm,0.7s,baz=100,slow=7.2,SNR=17 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.20** | **263** | P | P | 11 25 38.5 | -0.3 |
| | 0.6nm,0.6s,baz=97,slow=7.9,SNR=16 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.96** | **180** | P | P | 11 28 18.0 | -0.2 |
| | 0.6nm,0.7s,baz=89,slow=0.8,SNR=1.8 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **87.25** | **57** | P | P | 11 30 05.2 | 0.0 |
| | 0.4nm,0.9s,baz=230,slow=5.9,SNR=3.5 | | | | | | |
| | 0.4nm,0.9s | | | | | | |

*NEIC **04** 11:42:15.6±1.7, 18°.45N±0°.09×68°.67W±0°.06, h156km±7km, mb4.3/13, ML4.6/40, Md4.3/21(RSPR), Error ellipse: s-maj=13.6km s-min=6.3km az=205.0*
*RSPR **04** 11:42:15.8, 18°.73N×68°.66W, h155km±3km, MD4.3/21*
*IDC **04** 11:42:15.8±0.8, 18°.29N×68°.75W, h163km±7km, mb3.3/11, mbtmp3.9/14, Error ellipse: s-maj=15.6km s-min=11.5km az=67.0*
*OSPL **04** 11:42:16.1±3.5, 18°.38N×68°.65W, h170km±18km, ML4.4*
*SDD **04** 11:42:16.7±1.2, 18°.23N×68°.72W, h155km±15km, MD4.2, ML4.4, MW4.1*

**ISC 04 11:42:15.3±0.5,18°.42N±0°.05×68°.70W±0°.03,h161km±5km, n168,σ1§53/179,mb3.9/15,19C-13D,Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HIDR** | **Higuey Centro** | **0.17** | **356** | i̊Pg | **Pn** | **11 42 36.4** | **-0.4** |
| HIDR | | | | IAML | | 11 42 54.9 | |
| | comp=N,18µm,0.2s | | | | | | |
| **SADR** | **Isla Saona** | **0.24** | **198** | ⇓*e*Pg | **Pn** | **11 42 36.5** | **-0.5** |
| SADR | | | | IAML | | 11 42 54.5 | |
| | comp=N,26µm,0.5s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.32** | **73** | i̊*e*P | **Pn** | **11 42 37.0** | **-0.1** |
| **PCDR** | **Punta Cana, DR** | **0.32** | **73** | *e*S | **Sn** | **11 42 53.5** | **-0.3** |
| **PCDR** | **Punta Cana, DR** | **0.32** | **73** | Pn | **Pn** | **11 42 37.0** | **-0.1** |
| PCDR | | | | Sn | **Sn** | **11 42 53.4** | **-0.3** |
| PCDR | | | | IAML | | 11 42 58.1 | |
| | comp=N,8µm,0.6s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.32** | **73** | ⇓*e*Pg | **Pn** | **11 42 37.3** | **+0.2** |
| PCDR | | | | IAML | | 11 42 57.9 | |
| | comp=N,7µm,0.7s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.32** | **73** | *i* P | **Pn** | **11 42 37.2** | **+0.1** |
| PCDR | | | | *e*S | **Sn** | **11 42 54.4** | **+0.7** |
| PCDR | | | | IAML | | 11 42 56.3 | |
| | comp=Z,3µm,0.6s | | | | | | |
| **SPM1** | **San Pedro UASD** | **0.57** | **273** | i̊Pg | **Pn** | **11 42 37.4** | **-0.7** |
| SPM1 | | | | IAML | | 11 42 56.4 | |
| | comp=N,6µm,0.5s | | | | | | |
| **MIDR** | **Miches** | **0.65** | **330** | i̊Pg | **Pn** | **11 42 38.6** | **+0.1** |
| MIDR | | | | ⇓*e*Pg | | 11 42 38.9 | |
| MIDR | | | | *e*Sg | **Sn** | **11 42 56.4** | **-0.1** |
| MIDR | | | | IAML | | 11 42 57.3 | |
| | comp=N,4µm,0.4s | | | | | | |
| MIDR | | | | IAML | | 11 42 57.3 | |
| | comp=N,2µm,0.4s | | | | | | |
| **SDD** | **Santo Domingo** | **1.15** | **272** | ⇓*e*P | **Pn** | **11 42 41.9** | **-0.3** |
| **SDD** | **Santo Domingo** | **1.15** | **272** | | **Pn** | **11 42 41.9** | **-0.3** |
| **SDD** | **Santo Domingo** | **1.15** | **272** | IAML | | 11 43 02.5 | |
| | comp=N,8µm,0.3s | | | | | | |
| **SDD** | **Santo Domingo** | **1.15** | **272** | *i* P | **Pn** | **11 42 42.0** | **-0.3** |
| SDD | | | | *e*S | **Sn** | **11 43 01.4** | **-1.6** |
| **LONA1** | **Toro Cenizo, N** | **1.46** | **311** | *i* P | **Pn** | **11 42 44.1** | **-1.1** |
| LONA1 | | | | *e*S | **Sn** | **11 43 06.5** | **-1.7** |
| LONA1 | | | | IAML | | 11 43 17.5 | |
| | comp=Z,3µm,0.4s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **1.50** | **97** | ⇓*e*P | **Pn** | **11 42 45.4** | **-0.2** |
| **PRSN** | **Puerto Rico Se** | **1.50** | **97** | *e*S | **Sn** | **11 43 07.9** | **-0.9** |
| **PRSN** | **Puerto Rico Se** | **1.50** | **97** | | **Pn** | **11 42 45.3** | **-0.3** |
| **PRSN** | **Puerto Rico Se** | **1.50** | **97** | | **Sn** | **11 43 07.9** | **-0.9** |
| **PRSN** | **Puerto Rico Se** | **1.50** | **97** | IAML | | 11 43 13.5 | |
| | comp=N,7µm,0.3s | | | | | | |
| PRSN | | | | IAML | | 11 43 15.7 | |
| | comp=E,5µm,0.3s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **1.50** | **97** | i̊*e*Pg | **Pn** | **11 42 45.6** | **0.0** |
| PRSN | | | | IAML | | 11 43 13.4 | |
| | comp=N,7µm,0.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.51** | **88** | ⇓*e*P | **Pn** | **11 42 46.0** | **+0.2** |
| **AGPR** | **Aguadilla, PR** | **1.51** | **88** | *e*S | **Sn** | **11 43 08.7** | **-0.4** |
| **AGPR** | **Aguadilla, PR** | **1.51** | **88** | | **Pn** | **11 42 45.8** | **+0.1** |
| AGPR | | | | Sn | **Sn** | **11 43 08.8** | **-0.4** |
| AGPR | | | | IAML | | 11 43 09.8 | |
| | comp=E,4µm,0.4s | | | | | | |
| AGPR | | | | IAML | | 11 43 10.1 | |
| | comp=N,3µm,0.4s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.51** | **88** | i̊*e*Pg | **Pn** | **11 42 46.1** | **+0.4** |
| AGPR | | | | IAML | | 11 43 10.0 | |
| | comp=N,3µm,0.3s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.51** | **88** | *i* P | **Pn** | **11 42 46.0** | **+0.2** |
| AGPR | | | | *e*S | **Sn** | **11 43 09.1** | **-0.1** |
| AGPR | | | | IAML | | 11 43 15.8 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **LSP** | **Las Mesas** | **1.56** | **99** | i̊*e*P | **Pn** | **11 42 46.1** | **-0.1** |
| **LSP** | **Las Mesas** | **1.56** | **99** | *e*S | **Sn** | **11 43 09.6** | **-0.4** |
| **LSP** | **Las Mesas** | **1.56** | **99** | | **Pn** | **11 42 46.1** | **-0.1** |
| LSP | | | | | **Sn** | **11 43 09.6** | **-0.4** |
| **CRPR** | **Cabo Rojo, PR** | **1.57** | **105** | ⇓*e*P | **Pn** | **11 42 46.3** | **0.0** |
| **CRPR** | **Cabo Rojo, PR** | **1.57** | **105** | *e*S | **Sn** | **11 43 09.7** | **-0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.57** | **105** | | **Sn** | **11 43 09.7** | **-0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.57** | **105** | | **Pn** | **11 42 46.2** | **-0.1** |
| **CRPR** | **Cabo Rojo, PR** | **1.57** | **105** | IAML | | 11 43 10.9 | |
| | comp=E,891nm,0.5s | | | | | | |
| CRPR | | | | IAML | | 11 43 14.4 | |
| | comp=N,908nm,0.6s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.57** | **105** | ⇓*e*Pg | **Pn** | **11 42 46.4** | **0.0** |
| CRPR | | | | IAML | | 11 43 14.4 | |
| | comp=N,1µm,0.4s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.57** | **105** | *i* P | **Pn** | **11 42 46.3** | **0.0** |
| CRPR | | | | IAML | | 11 43 14.0 | |
| | comp=Z,2µm,0.8s | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.64** | **106** | i̊*e*P | **Pn** | **11 42 45.6** | **-1.4** |
| **MLPR** | **Magueyes Islan** | **1.64** | **106** | *e*S | **Sn** | **11 43 09.7** | **-1.8** |
| **MLPR** | **Magueyes Islan** | **1.64** | **106** | | **Pn** | **11 42 45.8** | **-1.3** |
| **MLPR** | **Magueyes Islan** | **1.64** | **106** | | **Sn** | **11 43 09.7** | **-1.8** |
| **MLPR** | **Magueyes Islan** | **1.64** | **106** | IAML | | 11 43 10.5 | |
| | comp=E,1µm,0.4s | | | | | | |
| MLPR | | | | IAML | | 11 43 11.5 | |
| | comp=N,1µm,0.7s | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.64** | **106** | i̊*e*Pg | **Pn** | **11 42 45.8** | **-1.3** |
| MLPR | | | | IAML | | 11 43 15.5 | |
| | comp=N,1µm,0.2s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GBPR** | **Guanica, Bosqu** | **1.79** | **104** | i̊*e*P | | **Pn** | **11 42 48.9** | **+0.2** |
| **GBPR** | **Guanica, Bosqu** | **1.79** | **104** | *e*S | | **Sn** | **11 43 14.1** | **-0.3** |
| **GBPR** | **Guanica, Bosqu** | **1.79** | **104** | | | **Pn** | **11 42 48.9** | **+0.2** |
| GBPR | | | | | | **Sn** | **11 43 14.1** | **-0.3** |
| **AOPR** | **Arecibo Observ** | **1.85** | **92** | ⇓*e*P | | **Pn** | **11 42 49.0** | **-0.4** |
| **AOPR** | **Arecibo Observ** | **1.85** | **92** | *e*S | | **Sn** | **11 43 14.5** | **-1.2** |
| **AOPR** | **Arecibo Observ** | **1.85** | **92** | | | **Pn** | **11 42 49.0** | **-0.4** |
| AOPR | | | | | | **Sn** | **11 43 14.5** | **-1.2** |
| **AOPR** | **Arecibo Observ** | **1.85** | **92** | IAML | | | 11 43 17.9 | |
| | comp=N,6µm,0.3s | | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.85** | **92** | i̊*e*Pg | | **Pn** | **11 42 49.1** | **-0.4** |
| AOPR | | | | IAML | | | 11 43 20.3 | |
| | comp=N,5µm,0.2s | | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.85** | **92** | *e*P | | **Pn** | **11 42 49.1** | **-0.4** |
| AOPR | | | | *e*S | | **Sn** | **11 43 15.2** | **-0.5** |
| **ABDR** | **Alto Bandera** | **1.86** | **282** | i̊*e*Pg | | **Pn** | **11 42 50.4** | **+0.5** |
| ABDR | | | | IAML | | | 11 43 20.2 | |
| | comp=N,2µm,0.5s | | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **1.89** | **95** | i̊*e*P | | **Pn** | **11 42 49.5** | **-0.3** |
| **UUPR** | **Utuado, UPR, P** | **1.89** | **95** | *e*S | | **Sn** | **11 43 15.9** | **-0.5** |
| **UUPR** | **Utuado, UPR, P** | **1.89** | **95** | | | **Pn** | **11 42 49.8** | **-0.1** |
| **UUPR** | **Utuado, UPR, P** | **1.89** | **95** | | | **Sn** | **11 43 15.9** | **-0.5** |
| **UUPR** | **Utuado, UPR, P** | **1.89** | **95** | IAML | | | 11 43 19.9 | |
| | comp=E,19µm,0.4s | | | | | | | |
| UUPR | | | | IAML | | | 11 43 22.4 | |
| | comp=N,23µm,0.4s | | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.03** | **100** | i̊*e*P | | **Pn** | **11 42 50.1** | **-1.3** |
| **OBIP** | **Obispado Ponce** | **2.03** | **100** | *e*S | | **Sn** | **11 43 17.6** | **-1.6** |
| **OBIP** | **Obispado Ponce** | **2.03** | **100** | | | **Pn** | **11 42 49.8** | **-1.6** |
| **OBIP** | **Obispado Ponce** | **2.03** | **100** | | | **Sn** | **11 43 17.6** | **-1.6** |
| **OBIP** | **Obispado Ponce** | **2.03** | **100** | IAML | | | 11 43 22.8 | |
| | comp=E,869nm,0.6s | | | | | | | |
| OBIP | | | | IAML | | | 11 43 22.9 | |
| | comp=N,914nm,0.3s | | | | | | | |
| **CELP** | **Cerrillos** | **2.05** | **99** | i̊*e*P | | **Pn** | **11 42 51.4** | **-0.2** |
| **CELP** | **Cerrillos** | **2.05** | **99** | *e*S | | **Sn** | **11 43 18.8** | **-0.8** |
| **CELP** | **Cerrillos** | **2.05** | **99** | | | **Pn** | **11 42 51.5** | **-0.2** |
| **CELP** | **Cerrillos** | **2.05** | **99** | | | **Sn** | **11 43 18.8** | **-0.8** |
| **CELP** | **Cerrillos** | **2.05** | **99** | IAML | | | 11 43 21.4 | |
| | comp=E,1µm,0.3s | | | | | | | |
| CELP | | | | IAML | | | 11 43 23.8 | |
| | comp=N,2µm,0.5s | | | | | | | |
| **CELP** | **Cerrillos** | **2.05** | **99** | i̊*e*Pg | | **Pn** | **11 42 51.4** | **-0.2** |
| CELP | | | | IAML | | | 11 43 23.7 | |
| | comp=N,1µm,0.3s | | | | | | | |
| **EMPR** | **Esperanza - Ma** | **2.06** | **88** | ⇓*e*P | | **Pn** | **11 42 51.0** | **-0.8** |
| **EMPR** | **Esperanza - Ma** | **2.06** | **88** | *e*S | | **Sn** | **11 43 18.2** | **-1.7** |
| **EMPR** | **Esperanza - Ma** | **2.06** | **88** | | | **Pn** | **11 42 50.8** | **-0.9** |
| **EMPR** | **Esperanza - Ma** | **2.06** | **88** | | | **Sn** | **11 43 18.2** | **-1.7** |
| **EMPR** | **Esperanza - Ma** | **2.06** | **88** | IAML | | | 11 43 31.8 | |
| | comp=N,2µm,0.7s | | | | | | | |
| **SC01** | **Santiago de lo** | **2.16** | **298** | | | **Pn** | **11 42 52.7** | **-0.2** |
| SC01 | | | | | | **Sn** | **11 43 22.6** | **+0.6** |
| **SC01** | **Santiago de lo** | **2.16** | **298** | IAML | | | 11 43 28.1 | |
| | comp=N,2µm,0.8s | | | | | | | |
| SC01 | | | | IAML | | | 11 43 34.2 | |
| | comp=E,2µm,0.8s | | | | | | | |
| **SC01** | **Santiago de lo** | **2.16** | **298** | *i* P | | **Pn** | **11 42 53.3** | **+0.4** |
| SC01 | | | | *e*S | | **Sn** | **11 43 22.6** | **+0.6** |
| SC01 | | | | IAML | | | 11 43 27.5 | |
| | comp=Z,1µm,0.4s | | | | | | | |
| **PODR** | **Polo** | **2.46** | **265** | *i* P | | **Pn** | **11 42 56.4** | **-0.2** |
| PODR | | | | *e*S | | **Sn** | **11 43 28.3** | **-0.3** |
| PODR | | | | IAML | | | 11 43 29.6 | |
| | comp=Z,1µm,0.5s | | | | | | | |
| **GCPR** | **Guaynabo City** | **2.49** | **92** | i̊*e*P | | **Pn** | **11 42 54.4** | **-2.4** |
| **GCPR** | **Guaynabo City** | **2.49** | **92** | *e*S | | **Sn** | **11 43 26.1** | **-2.7** |
| **GCPR** | **Guaynabo City** | **2.49** | **92** | | | **Pn** | **11 42 55.1** | **-1.7** |
| **GCPR** | **Guaynabo City** | **2.49** | **92** | | | **Sn** | **11 43 26.1** | **-2.7** |
| **GCPR** | **Guaynabo City** | **2.49** | **92** | IAML | | | 11 43 32.5 | |
| | comp=N,872nm,0.5s | | | | | | | |
| GCPR | | | | IAML | | | 11 43 35.9 | |
| | comp=E,1µm,0.5s | | | | | | | |
| **IGPR** | **InterUniversit** | **2.51** | **100** | ⇓*e*P | | **Pn** | **11 42 56.7** | **-0.4** |
| **IGPR** | **InterUniversit** | **2.51** | **100** | *e*S | | **Sn** | **11 43 28.8** | **-0.5** |
| **IGPR** | **InterUniversit** | **2.51** | **100** | | | **Pn** | **11 42 56.5** | **-0.5** |
| **IGPR** | **InterUniversit** | **2.51** | **100** | | | **Sn** | **11 43 28.8** | **-0.5** |
| **IGPR** | **InterUniversit** | **2.51** | **100** | IAML | | | 11 43 33.0 | |
| | comp=N,2µm,0.3s | | | | | | | |
| IGPR | | | | IAML | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BIM** | **Bigot** | **8.29** | **117** | *eP* | **Pn** | **11 44 14.2** | **+1.7** | | |
| **BIM** | **Bigot** | **8.29** | **117** | *eS* | **Sn** | **11 45 42.1** | **-2.9** | | |
| **SLBI** | **Saint Lucia, B** | **8.62** | **119** | *eP* | **Pn** | **11 44 17.1** | **+0.3** | | |
| **SLBI** | **Saint Lucia, B** | **8.62** | **119** | *eS* | **Sn** | **11 45 50.3** | **-2.5** | | |
| **PCRV** | **Puerto La Cruz** | **9.09** | **154** | P | **Pn** | **11 44 24.8** | **+1.5** | | |
| | comp=N,5.8nm,0.8s,baz=353,slow=5.5,SNR=2.6 | | | | | | | | |
| PCRV | | | | S | Sn | 11 45 53.9 | -11 | | |
| | comp=N,3.3nm,0.5s,baz=52,slow=9.8,SNR=1.4 | | | | | | | | |
| **BAUV** | **El Baul** | **9.44** | **176** | Pn | **Pn** | **11 44 28.4** | **+0.6** | | |
| **SDV** | **Santo Domingo** | **9.66** | **191** | | **Pn** | **11 44 31.6** | **+0.7** | | |
| **SDV** | **Santo Domingo** | **9.66** | **191** | P | **Pn** | **11 44 31.3** | **+0.4** | | |
| | comp=N,17nm,0.3s,baz=28,slow=9.4,SNR=5.7 | | | | | | | | |
| **BBGH** | **Gun Hill** | **10.24** | **119** | Pn | **Pn** | **11 44 37.9** | **-0.5** | | |
| **BCIP** | **Isla Barro Col** | **14.19** | **231** | P | **Pn** | **11 45 30.2** | **+1.0** | | |
| **ROSC** | **El Rosal** | **14.57** | **203** | P | **P** | **11 45 37.2** | **+0.7** | | |
| **ROSC** | **El Rosal** | **14.57** | **203** | P | **P** | **11 45 36.0** | **-0.5** | | |
| | comp=N,20nm,0.6s,baz=73,slow=19,SNR=6.9 | | | | | | | | |
| **BOAV** | **Boa Vista** | **17.83** | **152** | | **P** | **11 46 12.1** | **0.0** | | |
| **TEIG** | **Tepich** | **18.56** | **279** | P | **P** | **11 46 20.2** | **+0.3** | | |
| | comp=N,3.2nm,0.3s,baz=110,slow=21,SNR=2.0 | | | | | | | | |
| **TULM** | **Tulcn-Chalpat** | **19.73** | **208** | P | **P** | **11 46 30.2** | **-2.9** | | |
| TULM | | | | IAmb | IAmb | 11 46 32.9 | | | |
| | comp=Z,17nm,0.7s | | | | | | | | |
| **T59A** | **Double "B" Far** | **20.05** | **339** | P | **P** | **11 46 37.2** | **+1.3** | | |
| T59A | | | | IAmb | IAmb | 11 46 38.4 | | | |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| **OTAV** | **Otavalo** | **20.45** | **209** | P | **P** | **11 46 41.6** | **+0.7** | | |
| OTAV | | | | IAmb | IAmb | 11 46 46.9 | | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **V53A** | **Saluda** | **21.24** | **327** | P | **P** | **11 46 49.8** | **+1.0** | | |
| **TKL** | **Tuckaleechee C** | **21.75** | **325** | P | **P** | **11 46 53.8** | **-0.3** | | |
| | comp=Z,1.7nm,0.8s,baz=186,slow=10,SNR=1.5 | | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | | |
| **Q54A** | **Coxs Mills** | **23.04** | **335** | P | **P** | **11 47 07.9** | **+1.4** | | |
| Q54A | | | | IAmb | IAmb | 11 47 10.0 | | | |
| | comp=Z,5.1nm,0.7s | | | | | | | | |
| **T50A** | **Nancy** | **23.33** | **326** | P | **P** | **11 47 09.8** | **+0.8** | | |
| **R50A** | **Paris** | **24.03** | **329** | P | **P** | **11 47 16.8** | **+1.4** | | |
| R50A | | | | IAmb | IAmb | 11 47 19.1 | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **WVT** | **Waverly** | **24.42** | **320** | P | **P** | **11 47 20.5** | **+1.5** | | |
| WVT | | | | IAmb | IAmb | 11 47 22.6 | | | |
| | comp=Z,4.2nm,0.5s | | | | | | | | |
| **N47A** | **Urbana** | **26.72** | **330** | P | **P** | **11 47 40.6** | **+0.9** | | |
| **SAML** | **Samuel** | **27.73** | **168** | P | **P** | **11 47 47.9** | **-1.1** | | |
| SAML | | | | IAmb | IAmb | 11 47 49.1 | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **33.65** | **295** | P | **P** | **11 48 41.9** | **+1.0** | | |
| | comp=Z,0.2nm,0.5s,baz=116,slow=8.8,SNR=6.9 | | | | | | | | |
| TXAR | | | | pP | **pP** | **11 49 16.1** | **+1.1** | | |
| | comp=Z,0.2nm,0.4s,baz=107,slow=8.9,SNR=2.4 | | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | | |
| **LPAZ** | **La Paz** | **34.49** | **179** | P | **P** | **11 48 48.9** | **+0.1** | | |
| **LPAZ** | **La Paz** | **34.49** | **179** | P | **P** | **11 48 48.4** | **-0.4** | | |
| | comp=Z,1.8nm,0.5s,baz=350,slow=3.4,SNR=8.8 | | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | | |
| **SCHQ** | **Schefferville** | **36.37** | **2** | P | **P** | **11 49 05.6** | **+1.7** | | |
| | comp=Z,5.3nm,0.5s,baz=187,slow=8.0,SNR=20 | | | | | | | | |
| | comp=Z,5.3nm,0.5s | | | | | | | | |
| **H07S1** | **FLORES T-PHASE** | **38.53** | **49** | T | T | 12 30 38.5 | | | |
| | SNR=8.3 | | | | | | | | |
| **LVC** | **Limon Verde** | **40.78** | **180** | P | **P** | **11 49 39.7** | **-1.6** | | |
| **PDAR** | **Pinedale Array** | **42.16** | **314** | P | **P** | **11 49 51.8** | **-0.5** | | |
| | comp=Z,0.1nm,0.4s,baz=129,slow=9.4,SNR=2.0 | | | | | | | | |
| PDAR | | | | pP | **pP** | **11 50 27.9** | **+0.4** | | |
| | comp=Z,0.6nm,0.9s,baz=113,slow=9.8,SNR=3.7 | | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | | |
| **CPUP** | **Villa Florida** | **45.84** | **166** | P | **P** | **11 50 19.4** | **-1.9** | | |
| | comp=Z,2.5nm,0.8s,baz=322,slow=8.1,SNR=5.0 | | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **47.34** | **306** | P | **P** | **11 50 35.2** | **+1.9** | | |
| | comp=Z,0.1nm,0.3s,baz=108,slow=14,SNR=1.4 | | | | | | | | |
| NVAR | | | | pP | **pP** | **11 51 10.4** | **+1.1** | | |
| | comp=Z,1.8nm,1.0s,baz=101,slow=6.1,SNR=8.1 | | | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | | | |
| **PLCA** | **Paso Flores** | **58.87** | **182** | P | **P** | **11 51 55.3** | **-1.9** | | |
| | comp=Z,2.9nm,0.9s,baz=347,slow=8.8,SNR=7.5 | | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **59.18** | **54** | P | **P** | **11 52 01.2** | **+1.7** | | |
| | comp=Z,0.6nm,0.7s,baz=274,slow=6.8,SNR=7.7 | | | | | | | | |
| ESDC | | | | pP | **pwP** | **11 52 38.0** | **+1.5** | | |
| | comp=Z,0.7nm,0.8s,baz=271,slow=7.0,SNR=4.4 | | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.59** | **83** | P | **P** | **11 52 55.3** | **+0.1** | | |
| | comp=Z,1.1nm,0.7s,baz=302,slow=7.1,SNR=6.3 | | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **68.46** | **333** | P | **P** | **11 52 60.0** | **+0.2** | | |
| | comp=Z,0.2nm,0.5s,baz=87,slow=4.5,SNR=6.1 | | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **158.19** | **262** | PKPab | **PKPab** | **12 02 28.3** | **-0.4** | | |
| | comp=Z,0.3nm,0.5s,baz=86,slow=3.9,SNR=6.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **158.27** | **252** | PKPab | **PKPab** | **12 02 28.9** | **-0.2** | | |
| | comp=Z,0.8nm,0.7s,baz=107,slow=4.4,SNR=9.6 | | | | | | | | |

*TAP* ***04*** *11:53:27.4, 22.99N×120.03E, h20km, ML4.0, C*
*JMA* ***04*** *11:53:27.3±0.3, 23.1N±0.9×12.0E, h2km±3km, MV3.7/14, TAIWAN REGION*
*ASIES* ***04*** *11:53:27.4, 22.99N×120.03E, h20km, ML4.0, Mw3.5, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; Mrr-2.40; Mθθ1.12; Mϕϕ1.51; Mrθ-0.01; Mϕr1.32; Mϕr-0.50; Fault plane solution: M0 2.57544×$10^{21}$ NP1:ϕs33.48000°, δ49.81000°, λ-99.55000°. NP2:ϕs228.09000°, δ41.12000°, λ-78.89000°. Principal axes: T Plg4.3810°, Azm130.2360°; N Plg7.2800°, Azm39.6750°; P Plg81.4910°, Azm251.0360°;*
*IDC* ***04*** *11:53:28.3±1.5, 23.02N×119.60E, h0km, mb3.3/3, mbtmp3.3/4, ML3.2/1 Error ellipse: s-maj=75.7km s-min=26.8km az=69.0*

**ISC 04 11:53:28.6±0.9, 22.99N±0.02×119.99E±0.02, h16km±6km, n142, σ1ϕ07/236, mb3.4/3, 27C-5D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TSCK** | **Chigu Township** | **0.18** | **30** | ⇑ | *i* | P | **Pb** | **11 53 32.4** | **-1.2** |
| | baz=14 | | | | | | | | |
| TSCK | | | | | *i* | S | **Sg** | **11 53 37.0** | **+1.0** |
| | baz=14 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.23** | **77** | ⇑ | | P | **Pb** | **11 53 33.0** | **-1.3** |
| | baz=78 | | | | | | | | |
| TAI1 | | | | | *i* | S | **Sb** | **11 53 38.2** | **0.0** |
| | baz=78 | | | | | | | | |
| **SCLT** | **Jiali** | **0.27** | **46** | | *eP* | | **Pb** | **11 53 33.7** | **-1.3** |
| | baz=42 | | | | | | | | |
| SCLT | | | | | *i* | S | **Sg** | **11 53 39.2** | **+0.9** |
| | baz=42 | | | | | | | | |
| **SSHA** | **Shanhua** | **0.31** | **62** | | *eP* | | **Pg** | **11 53 34.7** | **-0.4** |
| | baz=60 | | | | | | | | |
| SSHA | | | | | | S | **Sg** | **11 53 40.7** | **+1.1** |
| | baz=60 | | | | | | | | |
| **CHN3** | **Shinhua** | **0.36** | **76** | ⇑ | *i* | P | **Pg** | **11 53 35.4** | **-0.6** |
| | baz=77 | | | | | | | | |
| CHN3 | | | | | *eS* | | **Sg** | **11 53 41.5** | **+0.5** |
| | baz=77 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.40** | **126** | | *eP* | | **Pg** | **11 53 36.1** | **-0.6** |
| | baz=134 | | | | | | | | |
| **WDGT** | **Dungji** | **0.40** | **312** | ⇑ | *i* | P | **Pg** | **11 53 36.3** | **-0.5** |
| | baz=318 | | | | | | | | |
| WDGT | | | | | | S | **Sg** | **11 53 42.7** | **+0.3** |
| | baz=318 | | | | | | | | |
| **CHN8** | **Yiju** | **0.41** | **30** | | *i* | P | **Pg** | **11 53 36.5** | **-0.3** |
| | baz=18 | | | | | | | | |
| CHN8 | | | | | *i* | S | **Sb** | **11 53 43.7** | **+0.3** |
| | baz=18 | | | | | | | | |
| **WSSB** | **Gushan** | **0.43** | **144** | ⇓ | *eP* | | **Pg** | **11 53 37.5** | **+0.3** |
| | baz=155 | | | | | | | | |
| **TWM1** | **Shoushan** | **0.43** | **112** | ⇑ | | P | **Pg** | **11 53 37.0** | **-0.3** |
| | baz=115 | | | | | | | | |
| TWM1 | | | | | *eS* | | **Sb** | **11 53 44.9** | **+0.7** |
| | baz=115 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.46** | **36** | | *eP* | | **Pb** | **11 53 37.2** | **-1.0** |
| | baz=35 | | | | | | | | |
| ICHU | | | | | *eS* | | **Sb** | **11 53 45.2** | **+0.4** |
| | baz=35 | | | | | | | | |
| **SCST** | **Cishan** | **0.48** | **102** | ⇑ | | P | **Pb** | **11 53 38.2** | **-0.4** |
| | baz=104 | | | | | | | | |
| **SNST** | **Tainan City** | **0.52** | **64** | ⇑ | | P | **Pb** | **11 53 38.1** | **-1.2** |
| | baz=54 | | | | | | | | |
| SNST | | | | | *eS* | | **Sg** | **11 53 46.9** | **+0.9** |
| | baz=54 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.54** | **69** | ⇑ | | P | **Pb** | **11 53 38.0** | **-1.5** |
| | baz=69 | | | | | | | | |
| CHN1 | | | | | *eS* | | **Sg** | **11 53 47.4** | **+1.0** |
| | baz=69 | | | | | | | | |
| **SGLT** | **Jiouru** | **0.54** | **120** | | *eP* | | **Pb** | **11 53 39.3** | **-0.3** |
| | baz=110 | | | | | | | | |
| SGLT | | | | | *eS* | | **Sg** | **11 53 47.5** | **+1.1** |
| | baz=110 | | | | | | | | |
| **TWK** | **Hsinying** | **0.54** | **59** | ⇑ | *i* | P | **Pb** | **11 53 38.6** | **-1.0** |
| | baz=51 | | | | | | | | |
| TWK | | | | | | S | **Sb** | **11 53 47.0** | **-0.1** |
| | baz=51 | | | | | | | | |
| **SGST** | **Jiashian** | **0.56** | **80** | | *i* | P | **Pb** | **11 53 37.9** | **-2.0** |
| | baz=82 | | | | | | | | |
| SGST | | | | | *eS* | | **Sg** | **11 53 48.6** | **+1.5** |
| | baz=82 | | | | | | | | |
| **VCHM** | **Qimei** | **0.56** | **293** | ⇑ | *i* | P | **Pb** | **11 53 39.0** | **-0.9** |
| | baz=291 | | | | | | | | |
| VCHM | | | | | *i* | S | **Sb** | **11 53 47.8** | **+0.1** |
| | baz=291 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.57** | **23** | | *eP* | | **Pb** | **11 53 39.4** | **-0.9** |
| | baz=9.0 | | | | | | | | |
| WSL | | | | | *eS* | | **Sg** | **11 53 48.7** | **+1.0** |
| | baz=9.0 | | | | | | | | |
| **SLGT** | **Liugui** | **0.61** | **90** | | *i* | P | **Pb** | **11 53 39.8** | **-1.0** |
| | baz=102 | | | | | | | | |
| SLGT | | | | | | S | **Sg** | **11 53 49.6** | **+0.9** |
| | baz=102 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.63** | **66** | ⇑ | | P | **Pb** | **11 53 39.6** | **-1.6** |
| | baz=67 | | | | | | | | |
| WTP | | | | | *eS* | | **Sg** | **11 53 50.2** | **+0.7** |
| | baz=67 | | | | | | | | |
| **CHY** | **Chiayi** | **0.65** | **38** | | *eP* | | **Pb** | **11 53 40.8** | **-0.7** |
| | baz=24 | | | | | | | | |
| CHY | | | | | *i* | S | **Sg** | **11 53 50.9** | **+1.1** |
| | baz=24 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **0.65** | **324** | ⇑ | *i* | P | **Pb** | **11 53 40.1** | **-1.3** |
| | baz=322 | | | | | | | | |
| PHUB | | | | | *i* | S | **Sb** | **11 53 49.4** | **-0.9** |
| | baz=322 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.67** | **62** | | | P | **Pb** | **11 53 39.7** | **-2.1** |
| **TPUB** | **Ta-pu** | **0.67** | **62** | ⇑ | *i* | P | **Pb** | **11 53 40.1** | **-1.7** |
| | baz=62 | | | | | | | | |
| TPUB | | | | | | S | **Sb** | **11 53 50.5** | **-0.4** |
| | baz=62 | | | | | | | | |
| **TSMG** | **Majia** | **0.67** | **115** | ⇑ | | P | **Pb** | **11 53 41.1** | **-0.8** |
| | baz=117 | | | | | | | | |
| TSMG | | | | | *i* | S | **Sg** | **11 53 51.7** | **+1.1** |
| | baz=117 | | | | | | | | |
| **WSF** | **Szhu** | **0.68** | **19** | | *eP* | | **Pb** | **11 53 40.9** | **-1.2** |
| | baz=19 | | | | | | | | |
| WSF | | | | | | S | **Sb** | **11 53 51.1** | **-0.1** |
| | baz=19 | | | | | | | | |
| **PNG** | **Penghu** | **0.70** | **325** | ⇑ | | P | **Pb** | **11 53 41.1** | **-1.3** |
| | baz=324 | | | | | | | | |
| PNG | | | | | *i* | S | **Sb** | **11 53 51.1** | **-0.6** |
| | baz=324 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.70** | **40** | | *eP* | | **Pb** | **11 53 41.8** | **-0.6** |
| | baz=26 | | | | | | | | |
| CHN2 | | | | | *eS* | | **Sg** | **11 53 52.2** | **+0.6** |
| | baz=26 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.70** | **122** | ⇑ | *i* | P | **Pb** | **11 53 41.7** | **-0.8** |
| | baz=124 | | | | | | | | |
| MASBT | | | | | *i* | S | **Sg** | **11 53 52.8** | **+1.1** |
| | baz=124 | | | | | | | | |
| **WCKO** | **Fanlu** | **0.72** | **52** | ⇑ | *eP* | | **Pb** | **11 53 41.6** | **-1.1** |
| | baz=52 | | | | | | | | |
| WCKO | | | | | | S | **Sb** | **11 53 51.9** | **-0.6** |
| | baz=52 | | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.73** | **152** | | | P | **Pb** | **11 53 43.1** | **+0.3** |
| | baz=161 | | | | | | | | |
| TWP | | | | | *eS* | | **Sb** | **11 53 53.3** | **+0.7** |
| | baz=161 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.75** | **76** | | *eP* | | **Pb** | **11 53 41.8** | **-1.4** |
| | baz=77 | | | | | | | | |
| STYH | | | | | *eS* | | **Sb** | **11 53 53.1** | **-0.1** |
| | baz=77 | | | | | | | | |
| **WTK** | **Tuku** | **0.79** | **28** | ⇓ | *eP* | | **Pb** | **11 53 42.5** | **-1.4** |
| | baz=16 | | | | | | | | |
| WTK | | | | | | S | **Sg** | **11 53 54.9** | **+0.6** |
| | baz=16 | | | | | | | | |
| **SCZT** | **Fangliau** | **0.85** | **136** | ⇑ | *i* | P | **Pb** | **11 53 44.0** | **-0.9** |
| | baz=137 | | | | | | | | |
| SCZT | | | | | | S | **Sb** | **11 53 56.1** | **0.0** |
| | baz=137 | | | | | | | | |
| **WDLH** | **Douliu** | **0.86** | **36** | | *eP* | | **Pb** | **11 53 44.0** | **-1.1** |
| | baz=25 | | | | | | | | |
| WDLH | | | | | *eS* | | **Sg** | **11 53 57.1** | **+0.5** |
| | baz=25 | | | | | | | | |
| **WGK** | **Gukeng** | **0.87** | **37** | | *eP* | | **Pb** | **11 53 44.4** | **-0.9** |
| | baz=27 | | | | | | | | |
| WGK | | | | | *eS* | | **Sg** | **11 53 57.2** | **+0.2** |
| | baz=27 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.91** | **17** | | | P | **Pb** | **11 53 44.9** | **-1.1** |
| | baz=18 | | | | | | | | |
| WTCT | | | | | *i* | S | **Sb** | **11 53 57.9** | **0.0** |
| | baz=18 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.97** | **78** | ⇑ | *i* | P | **Pb** | **11 53 45.8** | **-1.2** |
| | baz=80 | | | | | | | | |
| ELDTW | | | | | | S | **Sb** | **11 53 59.5** | **-0.1** |
| | baz=80 | | | | | | | | |
| **ECL** | **Taimali** | **0.97** | **114** | | *eP* | | **Pb** | **11 53 46.1** | **-1.0** |
| | baz=114 | | | | | | | | |
| ECL | | | | | *eS* | | **Sb** | **11 53 59.7** | **0.0** |
| | baz=114 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.97** | **22** | | *eP* | | **Pb** | **11 53 45.5** | **-1.6** |
| | baz=12 | | | | | | | | |
| WRL | | | | | *eS* | | **Sb** | **11 53 58.9** | **-0.9** |
| | baz=12 | | | | | | | | |
| **EAST** | **Anshuo** | **1.00** | **127** | ⇑ | *i* | P | **Pb** | **11 53 46.3** | **-1.2** |
| | baz=128 | | | | | | | | |
| EAST | | | | | | S | **Sb** | **11 54 00.4** | **0.0** |
| | baz=128 | | | | | | | | |
| **TWG** | **Pinlang** | **1.01** | **99** | ⇑ | *i* | P | **Pb** | **11 53 46.7** | **-1.0** |
| | baz=101 | | | | | | | | |
| TWG | | | | | *eS* | | **Sb** | **11 54 00.7** | **-0.2** |
| | baz=101 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.02** | **99** | | | P | **Pb** | **11 53 47.0** | **-0.9** |
| **TWGBT** | **Beinan** | **1.02** | **99** | ⇑ | *i* | P | **Pb** | **11 53 46.8** | **-1.1** |
| | baz=101 | | | | | | | | |
| TWGBT | | | | | *eS* | | **Sb** | **11 54 01.0** | **-0.1** |
| | baz=101 | | | | | | | | |
| **TAW** | **Tawu** | **1.05** | **127** | | *eP* | | **Pb** | **11 53 46.8** | **-1.5** |
| | baz=127 | | | | | | | | |
| **TAWH** | **Dawu Township** | **1.05** | **128** | | *eP* | | **Pb** | **11 53 47.2** | **-1.2** |
| | baz=128 | | | | | | | | |
| **LONT** | **Longtian** | **1.06** | **94** | | *i* | P | **Pb** | **11 53 47.5** | **-1.0** |
| | baz=96 | | | | | | | | |
| LONT | | | | | *i* | S | **Sb** | **11 54 01.7** | **-0.4** |
| | baz=96 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.06** | **48** | ⇓ | *eP* | | **Pb** | **11 53 47.0** | **-1.6** |
| | baz=50 | | | | | | | | |
| WHYT | | | | | *eS* | | **Sb** | **11 54 01.7** | **-0.6** |
| | baz=50 | | | | | | | | |
| **WJS** | **Zhushan** | **1.07** | **39** | ⇑ | | P | **Pb** | **11 53 47.3** | **-1.5** |
| | baz=41 | | | | | | | | |
| WJS | | | | | *eS* | | **Sb** | **11 54 02.5** | **0.0** |
| | baz=41 | | | | | | | | |
| **SLIU** | **Shizi** | **1.08** | **136** | | *eP* | | **Pb** | **11 53 47.1** | **-1.7** |
| | baz=136 | | | | | | | | |
| **WNT** | **Mingjian** | **1.09** | **36** | | | P | **Pb** | **11 53 47.5** | **-1.6** |
| | baz=38 | | | | | | | | |
| WNT | | | | | | S | **Sb** | **11 54 02.7** | **-0.4** |
| | baz=38 | | | | | | | | |
| **TTN** | **Taitung** | **1.10** | **102** | | *eP* | | **Pn** | **11 53 49.1** | **-0.1** |
| | baz=103 | | | | | | | | |
| TTN | | | | | *eS* | | **Sn** | **11 54 04.0** | **0.0** |
| | baz=103 | | | | | | | | |
| **EHD** | **Haiduan** | **1.13** | **82** | | | P | **Pn** | **11 53 48.5** | **-1.2** |
| | baz=83 | | | | | | | | |
| EHD | | | | | | S | **Sb** | **11 54 03.8** | **-0.6** |
| | baz=83 | | | | | | | | |
| **ECS** | **Chishang** | **1.14** | **85** | | *eP* | | **Pn** | **11 53 49.1** | **-0.7** |
| | baz=86 | | | | | | | | |
| ECS | | | | | | S | **Sn** | **11 54 04.8** | **-0.4** |
| | baz=86 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.19** | **48** | | | P | **Pn** | **11 53 49.1** | **-1.5** |
| **SSLB** | **Suanglung** | **1.19** | **48** | ⇓ | | P | **Pn** | **11 53 48.6** | **-2.0** |
| | baz=50 | | | | | | | | |
| SSLB | | | | | *eS* | | **Sb** | **11 54 04.3** | **-1.7** |
| | baz=50 | | | | | | | | |
| **TYC** | **Yuchr** | **1.21** | **41** | ⇓ | | P | **Pn** | **11 53 49.2** | **-1.6** |
| | baz=43 | | | | | | | | |
| TYC | | | | | *eS* | | **Sb** | **11 54 06.3** | **-0.2** |
| | baz=43 | | | | | | | | |
| **EDH** | **Donghe** | **1.21** | **91** | | *i* | P | **Pn** | **11 53 49.8** | **-1.1** |
| | baz=92 | | | | | | | | |
| EDH | | | | | *eS* | | **Sb** | **11 54 06.4** | **-0.2** |
| | baz=92 | | | | | | | | |
| **FULB** | **Fuli** | **1.22** | **80** | | *eP* | | **Pn** | **11 53 50.4** | **-0.6** |
| | baz=81 | | | | | | | | |
| FULB | | | | | *i* | S | **Sn** | **11 54 07.5** | **+0.3** |
| | baz=81 | | | | | | | | |
| **TWF1** | **Yuli** | **1.26** | **73** | ⇑ | | P | **Pn** | **11 53 50.3** | **-1.2** |
| | baz=75 | | | | | | | | |
| TWF1 | | | | | | S | **Sb** | **11 54 07.0** | **-0.9** |
| | baz=75 | | | | | | | | |
| **YULB** | **Yu-li** | **1.27** | **71** | | | P | **Pn** | **11 53 50.9** | **-0.8** |
| **YULB** | **Yu-li** | **1.27** | **71** | ⇑ | *i* | P | **Pn** | **11 53 50.4** | **-1.3** |
| | baz=73 | | | | | | | | |
| YULB | | | | | *i* | S | **Sn** | **11 54 06.4** | **-2.0** |
| | baz=73 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.27** | **85** | | *eP* | | **Pn** | **11 53 50.7** | **-1.0** |
| | baz=87 | | | | | | | | |
| CHKT | | | | | *eS* | | **Sn** | **11 54 07.7** | **-0.8** |
| | baz=87 | | | | | | | | |
| **EYUL** | **Yuli** | **1.28** | **74** | ⇑ | *eP* | | **Pn** | **11 53 50.8** | **-0.9** |
| | baz=75 | | | | | | | | |
| EYUL | | | | | *eS* | | **Sn** | **11 54 07.8** | **-0.7** |
| | baz=75 | | | | | | | | |
| **TWK1** | **Hengchun** | **1.29** | **144** | | *eP* | | **Pn** | **11 53 50.1** | **-1.8** |
| | baz=144 | | | | | | | | |
| TWK1 | | | | | *eS* | | **Sn** | **11 54 05.3** | **-3.5** |
| | baz=144 | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.29** | **144** | | *eP* | | **Pn** | **11 53 49.9** | **-2.0** |
| | baz=143 | | | | | | | | |
| **VWDT** | **VWDT** | **1.30** | **54** | | *eP* | | **Pn** | **11 53 51.1** | **-1.0** |
| | baz=48 | | | | | | | | |
| **CHKH** | **Chenggong** | **1.31** | **81** | | *eP* | | **Pn** | **11 53 51.6** | **-0.6** |
| | baz=83 | | | | | | | | |
| CHKH | | | | | *eS* | | **Sn** | **11 54 09.3** | **-0.1** |
| | baz=83 | | | | | | | | |
| **TCU** | **Taichung** | **1.31** | **29** | | *eP* | | **Pn** | **11 53 51.4** | **-0.9** |
| | baz=41 | | | | | | | | |
| TCU | | | | | *i* | S | **Sb** | **11 54 09.5** | **0.0** |
| | baz=41 | | | | | | | | |
| **EHY** | **Hungye** | **1.33** | **67** | ⇑ | | P | **Pn** | **11 53 51.7** | **-0.8** |
| | baz=69 | | | | | | | | |
| EHY | | | | | *i* | S | **Sn** | **11 54 08.9** | **-1.0** |
| | baz=69 | | | | | | | | |
| **EHYH** | **Wanrong** | **1.35** | **68** | | *eP* | | **Pn** | **11 53 52.0** | **-0.7** |
| | baz=70 | | | | | | | | |
| EHYH | | | | | *eS* | | **Sn** | **11 54 09.0** | **-1.3** |
| | baz=70 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.36** | **38** | | *eP* | | **Pn** | **11 53 51.6** | **-1.3** |
| | baz=40 | | | | | | | | |
| WCS | | | | | *eS* | | **Sn** | **11 54 09.0** | **-1.6** |
| | baz=40 | | | | | | | | |
| **ECBN** | **Changbin** | **1.39** | **76** | | *eP* | | **Pn** | **11 53 53.5** | **+0.3** |
| | baz=94 | | | | | | | | |
| **LDUT** | **Ludao** | **1.40** | **103** | | | P | **Pn** | **11 53 52.1** | **-1.3** |
| | baz=104 | | | | | | | | |
| LDUT | | | | | *eS* | | **Sn** | **11 54 10.2** | **-1.4** |
| | baz=104 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.41** | **69** | | *eP* | | **Pn** | **11 53 53.6** | **0.0** |
| | baz=71 | | | | | | | | |
| HGSD | | | | | *eS* | | **Sn** | **11 54 10.9** | **-1.0** |
| | baz=71 | | | | | | | | |
| **WUSB** | **Renai** | **1.44** | **46** | | | P | **Pn** | **11 53 52.9** | **-1.2** |
| | baz=48 | | | | | | | | |
| WUSB | | | | | | S | **Sn** | **11 54 11.8** | **-0.9** |
| | baz=48 | | | | | | | | |
| **OWD** | **Renai** | **1.45** | **48** | | *eP* | | **Pn** | **11 53 53.6** | **-0.7** |
| | baz=51 | | | | | | | | |
| OWD | | | | | *eS* | | **Sn** | **11 54 12.3** | **-0.8** |
| | baz=51 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.48** | **60** | | | P | **Pn** | **11 53 53.6** | **-0.9** |
| | baz=62 | | | | | | | | |
| WARBT | | | | | *i* | S | **Sn** | **11 54 12.6** | **-0.9** |
| | baz=62 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.48** | **24** | | *eP* | | **Pn** | **11 53 54.1** | **-0.4** |
| | baz=12 | | | | | | | | |
| WDJ | | | | | *eS* | | **Sb** | **11 54 14.7** | **+0.4** |
| | baz=12 | | | | | | | | |
| **EGFH** | **Guangfu** | **1.49** | **63** | | *eP* | | **Pn** | **11 53 54.5** | **-0.2** |
| | baz=65 | | | | | | | | |
| EGFH | | | | | *eS* | | **Sn** | **11 54 12.4** | **-1.3** |
| | baz=65 | | | | | | | | |
| **CHGB** | **Renai** | **1.52** | **45** | | *eP* | | **Pn** | **11 53 54.1** | **-1.2** |
| | baz=48 | | | | | | | | |
| CHGB | | | | | *eS* | | **Sn** | **11 54 14.2** | **-0.7** |
| | baz=48 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.53** | **28** | | | P | **Pn** | **11 53 55.0** | **-0.3** |
| | baz=31 | | | | | | | | |
| TWQ1 | | | | | *i* | S | **Sb** | **11 54 15.9** | **+0.2** |
| | baz=31 | | | | | | | | |
| **WHP** | **Taichung City** | **1.55** | **34** | | *eP* | | **Pn** | **11 53 54.7** | **-1.0** |
| | baz=37 | | | | | | | | |
| WHP | | | | | *eS* | | **Sb** | **11 54 16.9** | **+0.4** |
| | baz=37 | | | | | | | | |
| **ESL** | **Shilin** | **1.56** | **58** | | *eP* | | **Pn** | **11 53 54.8** | **-0.9** |
| | baz=60 | | | | | | | | |
| ESL | | | | | | S | **Sn** | **11 54 15.8** | **+0.2** |
| | baz=60 | | | | | | | | |
| **NSY** | **Sanyi** | **1.59** | **26** | | *eP* | | **Pn** | **11 53 56.3** | **+0.3** |
| | baz=40 | | | | | | | | |
| NSY | | | | | *eS* | | **Sb** | **11 54 17.5** | **+0.1** |
| | baz=40 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.64** | **45** | | *eP* | | **Pn** | **11 53 57.0** | **-0.2** |
| | baz=48 | | | | | | | | |
| WHF | | | | | *eS* | | **Sn** | **11 54 18.2** | **0.0** |
| | baz=48 | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.65** | **61** | | *eP* | | **Pn** | **11 53 56.9** | **0.0** |
| | baz=64 | | | | | | | | |
| **TDCB** | **Techi** | **1.65** | **40** | | *eP* | | **Pn** | **11 53 55.9** | **-1.2** |
| | baz=43 | | | | | | | | |
| TDCB | | | | | *eS* | | **Sn** | **11 54 16.8** | **-1.2** |
| | baz=43 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.66** | **52** | | *eP* | | **Pn** | **11 53 56.3** | **-0.9** |
| | baz=54 | | | | | | | | |
| LXIB | | | | | | S | **Sb** | **11 54 18.9** | **-0.8** |
| | baz=54 | | | | | | | | |
| **TWT** | **Tachien** | **1.66** | **41** | | *eP* | | **Pn** | **11 53 56.8** | **-0.5** |
| | baz=43 | | | | | | | | |
| TWT | | | | | *eS* | | **Sn** | **11 54 18.1** | **-0.3** |
| | baz=43 | | | | | | | | |
| **ETM** | **Tongmen** | **1.69** | **55** | | *eP* | | **Pn** | **11 53 56.3** | **-1.1** |
| | baz=57 | | | | | | | | |
| **FUSS** | **Fushou** | **1.70** | **42** | | *eP*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YHNB** | **Yeheng** | **2.10** | **37** | *e*P | | **Pn** | **11 54 02.3** | **-0.9** |
| | baz=24 | | | | | | | |
| **NDT** | **Datong Townshi** | **2.13** | **41** | *e*P | | **Pn** | **11 54 03.3** | **-0.2** |
| | baz=27 | | | | | | | |
| NDT | | | | *e*S | | **Sn** | **11 54 30.5** | **+1.0** |
| | baz=27 | | | | | | | |
| **ENTT** | **Nioudou** | **2.19** | **41** | *e*P | | **Pn** | **11 54 04.4** | **+0.1** |
| | baz=31 | | | | | | | |
| **EWUT** | **Wuta** | **2.19** | **48** | *e*P | | **Pn** | **11 54 04.6** | **+0.4** |
| | baz=50 | | | | | | | |
| EWUT | | | | *e*S | | **Sn** | **11 54 31.8** | **+0.8** |
| | baz=50 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.19** | **339** | *e*P | | **Pn** | **11 54 02.8** | **-1.5** |
| | baz=343 | | | | | | | |
| **NWLT** | **Wulai** | **2.26** | **38** | *e*P | | **Pn** | **11 54 04.0** | **-1.3** |
| | baz=25 | | | | | | | |
| **ZPLA** | **Ao Xicun** | **2.26** | **295** | *e*P | | **Pn** | **11 54 06.0** | **+0.8** |
| | baz=293 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.29** | **39** | *e*P | | **Pn** | **11 54 04.6** | **-1.1** |
| | baz=29 | | | | | | | |
| **TWE** | **Neicheng** | **2.31** | **41** | *e*P | | **Pn** | **11 54 05.8** | **-0.1** |
| | baz=28 | | | | | | | |
| **ESAO** | **Su ao** | **2.32** | **47** | *e*P | | **Pn** | **11 54 06.8** | **+0.7** |
| | baz=64 | | | | | | | |
| **TWC** | **Suao** | **2.35** | **46** | *e*P | | **Pn** | **11 54 07.2** | **+0.7** |
| | baz=64 | | | | | | | |
| **EGS** | | **2.56** | **44** | *e*P | | **Pn** | **11 54 09.8** | **+0.4** |
| | baz=30 | | | | | | | |
| **YM01** | **YM01** | **2.59** | **34** | *e*P | | **Pn** | **11 54 08.2** | **-1.7** |
| | baz=37 | | | | | | | |
| **TIPB** | **Shuangxi** | **2.59** | **40** | *e*P | | **Pn** | **11 54 09.8** | **-0.1** |
| | baz=28 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.72** | **42** | *e*P | | **Pn** | **11 54 11.0** | **-0.6** |
| | baz=30 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **3.08** | **61** | *e*P | | **Pn** | **11 54 17.0** | **+0.5** |
| JYNG | | | | *e*S | | **Sn** | **11 54 53.6** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **3.13** | **62** | *e*P | | **Pn** | **11 54 17.2** | **-0.1** |
| | baz=63 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **3.13** | **62** | *e*P | | **Pn** | **11 54 18.2** | **+0.9** |
| **MATB** | **Ma-tsu** | **3.15** | **359** | *e*P | | **Pn** | **11 54 16.1** | **-1.4** |
| | baz=3.0 | | | | | | | |
| **MHZQ** | **Yeshan** | **3.22** | **344** | *e*P | | **Pn** | **11 54 17.9** | **-0.5** |
| | baz=349 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.55** | **357** | *e*P | | **Pn** | **11 54 21.9** | **-1.0** |
| | baz=1.0 | | | | | | | |
| **HATJ** | **Hateruma jima** | **3.66** | **72** | *e*P | | **Pn** | **11 54 24.5** | **-0.1** |
| HATJ | | | | *e*S | | **Sn** | **11 55 06.0** | **-1.4** |
| **IRIF** | **Iriomote-Funau** | **3.68** | **68** | *e*P | | **Pn** | **11 54 25.5** | **+0.7** |
| IRIF | | | | *e*S | | **Sn** | **11 55 09.3** | **+1.4** |
| **JKRS** | **Kuro-shima** | **3.89** | **71** | *e*P | | **Pn** | **11 54 28.8** | **+1.1** |
| JKRS | | | | *e*S | | **Sn** | **11 55 12.1** | **-1.0** |
| **XPSS** | **Dashiqiu** | **3.93** | **3** | *e*P | | **Pn** | **11 54 26.0** | **-2.1** |
| | baz=5.0 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **4.05** | **69** | *e*P | | **Pn** | **11 54 29.8** | **-0.1** |
| JIJ | | | | *e*S | | **Sn** | **11 55 15.1** | **-1.8** |
| **JISG** | **Ishigakijimahi** | **4.27** | **67** | P | | **Pn** | **11 54 32.5** | **-0.4** |
| JISG | | | | *e*S | | **Sn** | **11 55 19.8** | **-2.5** |
| **KSRS** | **Korea Array** | **15.95** | **24** | Pn | | **P** | **11 57 15.9** | **+0.1** |
| | 0.1nm,0.3s,baz=206,slow=10,SNR=2.9<br>0.4nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.33** | **321** | P | | **P** | **12 01 21.6** | **0.0** |
| | 0.5nm,0.8s,baz=107,slow=6.2,SNR=3.9<br>0.5nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.91** | **161** | P | | **P** | **12 01 45.6** | **+2.9** |
| | 0.3nm,0.6s,baz=343,slow=8.7,SNR=4.6<br>0.3nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.31** | **163** | P | | **P** | **12 02 12.9** | **+3.5** |
| | 0.3nm,0.6s,baz=345,slow=7.0,SNR=9.5<br>0.3nm,0.6s | | | | | | | |

*CATAC **04** 11:56:20.8±0.6, 13°.06N×91°.04W, h5km±5km, ML3.9*
*IDC **04** 11:56:21.1±1.8, 13°.11N×91°.04W, h0km, mb3.6/4, mbtmp3.6/7, ML3.9/3, MS3.3/8, Error ellipse: s-maj=32.4km s-min=28.8km az=41.0*
*NEIC **04** 11:56:21.6±2.2, 12°.99N±0°.05×90°.97W±0°.05, h10km±2km, mb4.1/14, Error ellipse: s-maj=9.9km s-min=6.9km az=135.0*
*GCG **04** 11:56:32.8±0.3, 13°.74N×90°.87W, h30km, MD3.8*
**ISC 04 11:56:20.8±2.1, 13°.09N±0°.06×90°.99W±0°.05, h4km±12km, n73, σ1°16/90, mb4.1/9, MS3.4/7, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PCG** | **Pacaya** | **1.34** | **16** | *i* P | | **Pg** | **11 56 47.0** | **+0.3** |
| **FUG** | **Fuego 3** | **1.35** | **6** | *i* P | | **Pn** | **11 56 46.8** | **+0.1** |
| **NUBE** | **Las Nubes** | **1.43** | **56** | *i* P | | **Pn** | **11 56 47.1** | **-0.6** |
| NUBE | | | | *i* S | | **Sg** | **11 57 07.7** | **+0.9** |
| NUBE | | | | IAML | | | 11 57 08.0 | |
| | comp=Z,520nm,1.0s | | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.48** | **53** | *i* P | | **Pn** | **11 56 48.0** | **-0.4** |
| LOAL | | | | *i* S | | **Sg** | **11 57 09.7** | **+1.1** |
| LOAL | | | | IAML | | | 11 57 31.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.52** | **61** | *i* P | | **Pn** | **11 56 48.8** | **-0.2** |
| CEVE | | | | *i* S | | **Sg** | **11 57 09.9** | **+0.2** |
| CEVE | | | | IAML | | | 11 57 25.9 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **GCG4** | **OSOP** | **1.55** | **17** | *i* P | | **Pn** | **11 56 49.1** | **-0.3** |
| GCG4 | | | | *i* S | | **Sg** | **11 57 10.3** | **-0.4** |
| GCG4 | | | | IAML | | | 11 57 40.4 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **GUMI** | **Mixco** | **1.57** | **14** | *i* P | | **Pn** | **11 56 50.1** | **+0.4** |
| GUMI | | | | *i* S | | **Sg** | **11 57 12.0** | **+0.5** |
| GUMI | | | | IAML | | | 11 58 08.6 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **RTAL** | **Retalhuleu** | **1.58** | **334** | Pn | | **Pn** | **11 56 50.8** | **+1.2** |
| **RTAL** | **Retalhuleu** | **1.58** | **334** | *i* P | | **Pn** | **11 56 50.0** | **+0.4** |
| RTAL | | | | *i* S | | **Sn** | **11 57 10.2** | **-0.3** |
| RTAL | | | | IAML | | | 11 57 37.1 | |
| | comp=Z,800nm,1.0s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.60** | **69** | *i* P | | **Pn** | **11 56 49.4** | **-0.7** |
| JAYA | | | | *i* S | | **Sg** | **11 57 11.6** | **-0.8** |
| JAYA | | | | IAML | | | 11 57 19.3 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **NBG** | **Las Nubes** | **1.61** | **23** | *i* P | | **Pb** | **11 56 51.4** | **0.0** |
| **CHTG** | **Tecpan** | **1.66** | **0** | *i* P | | **Pn** | **11 56 50.0** | **-1.0** |
| CHTG | | | | IAML | | | 11 57 13.9 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| CHTG | | | | *i* S | | **Sg** | **11 57 14.0** | **-0.2** |
| **UNIC** | **Universidad Ca** | **1.66** | **58** | *i* P | | **Pn** | **11 56 50.5** | **-0.3** |
| UNIC | | | | *i* S | | **Sg** | **11 57 13.7** | **-0.5** |
| UNIC | | | | IAML | | | 11 57 25.6 | |
| | comp=Z,240nm,1.0s | | | | | | | |
| **CEDA** | **San Andres** | **1.71** | **65** | *i* P | | **Pn** | **11 56 51.7** | **+0.3** |
| CEDA | | | | *i* S | | **Sg** | **11 57 15.5** | **-0.3** |
| CEDA | | | | IAML | | | 11 57 35.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **1.75** | **69** | *i* P | | **Pn** | **11 56 52.6** | **+0.6** |
| PMON | | | | *i* S | | **Sg** | **11 57 16.4** | **-0.6** |
| PMON | | | | IAML | | | 11 57 29.7 | |
| | comp=Z,810nm,1.0s | | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.76** | **347** | *i* P | | **Pn** | **11 56 52.1** | **-0.4** |
| SOKI | | | | *i* S | | **Sn** | **11 57 15.3** | **-0.3** |
| SOKI | | | | IAML | | | 11 57 22.7 | |
| | comp=Z,850nm,1.0s | | | | | | | |
| **ITCA** | **Escuela Especi** | **1.77** | **71** | *i* P | | **Pn** | **11 56 52.8** | **+0.5** |
| ITCA | | | | IAML | | | 11 57 52.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.81** | **71** | | | **Pn** | **11 56 52.5** | **-0.5** |
| **SNET** | **Serv Nac Est T** | **1.81** | **71** | *i* P | | **Pn** | **11 56 53.4** | **+0.5** |
| SNET | | | | IAML | | | 11 56 55.4 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| SNET | | | | *i* S | | **Sb** | **11 57 17.7** | **-0.1** |
| **UEES** | **Universidad Ev** | **1.82** | **70** | *i* P | | **Pn** | **11 56 53.7** | **+0.7** |
| UEES | | | | *i* S | | **Sb** | **11 57 17.8** | **-0.1** |
| UEES | | | | IAML | | | 11 57 33.7 | |
| | comp=Z,310nm,1.0s | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **1.83** | **66** | *i* P | | **Pn** | **11 56 53.2** | **+0.1** |
| QUEZ | | | | *i* S | | **Sb** | **11 57 17.8** | **-0.4** |
| QUEZ | | | | IAML | | | 11 57 38.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **PANCS** | **Alcalda de** | **1.84** | **74** | *i* P | | **Pn** | **11 56 54.4** | **+1.1** |
| PANCS | | | | IAML | | | 11 57 58.5 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **LOMA** | **Loma Larga** | **1.86** | **73** | *i* P | | **Pn** | **11 56 54.6** | **+1.0** |
| LOMA | | | | *i* S | | **Sg** | **11 57 19.4** | **-1.2** |
| LOMA | | | | IAML | | | 11 57 29.9 | |
| | comp=Z,530nm,1.0s | | | | | | | |
| **UDBS** | **Universidad Do** | **1.89** | **71** | *i* S | | **Sb** | **11 57 19.7** | **-0.3** |
| **APG** | **El Apazote** | **1.97** | **15** | Pn | | **Pn** | **11 56 56.0** | **+0.8** |
| | comp=Z,1.9nm,0.3s,baz=203,slow=15,SNR=53 | | | | | | | |
| APG | | | | Sn | | **Sb** | **11 57 22.1** | **-0.2** |
| | comp=Z,2.3nm,0.3s,baz=290,slow=20,SNR=11 | | | | | | | |
| **MTO3** | **Montecristo** | **2.05** | **51** | Pn | | **Pn** | **11 56 57.0** | **+0.7** |
| **MTO3** | **Montecristo** | **2.05** | **51** | *i* P | | **Pn** | **11 56 56.7** | **+0.4** |
| MTO3 | | | | IAML | | | 11 57 19.6 | |
| | comp=Z,220nm,1.0s | | | | | | | |
| MTO3 | | | | *i* S | | **Sb** | **11 57 24.4** | **-0.3** |
| **COEG** | **Centro de Oper** | **2.12** | **75** | *i* P | | **Pn** | **11 56 57.2** | **0.0** |
| COEG | | | | *i* S | | **Sb** | **11 57 25.4** | **-1.3** |
| COEG | | | | IAML | | | 11 57 32.2 | |
| | comp=Z,320nm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.29** | **74** | *i* P | | **Pn** | **11 57 00.1** | **+0.7** |
| SCLA | | | | *i* S | | **Sb** | **11 57 29.7** | **-1.7** |
| SCLA | | | | IAML | | | 11 57 53.1 | |
| | comp=Z,130nm,1.0s | | | | | | | |
| **MRL** | **Marmol** | **2.35** | **33** | *i* P | | **Pb** | **11 57 04.4** | **+0.5** |
| **PQSS** | **Presa 15 de Se** | **2.43** | **77** | *i* P | | **Pn** | **11 57 01.9** | **+0.6** |
| PQSS | | | | IAML | | | 11 57 03.1 | |
| | comp=Z,170nm,1.0s | | | | | | | |
| PQSS | | | | *i* S | | **Sb** | **11 57 33.2** | **-2.1** |
| **PACA** | **Pacayal** | **2.63** | **82** | *i* P | | **Pn** | **11 57 04.8** | **+0.6** |
| PACA | | | | *i* S | | **Sb** | **11 57 38.5** | **-2.7** |
| PACA | | | | IAML | | | 11 57 50.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **3.08** | **86** | *i* P | | **Pn** | **11 57 10.2** | **-0.2** |
| CNCH | | | | *i* S | | **Sn** | **11 57 49.7** | **+1.9** |
| CNCH | | | | IAML | | | 11 58 13.9 | |
| | comp=Z,260nm,1.0s | | | | | | | |
| **CCIG** | **Comitan** | **3.36** | **341** | Pn | | **Pn** | **11 57 16.2** | **+1.9** |
| **TGUH** | **Tegucigalpa,Un** | **3.74** | **75** | | | **Pn** | **11 57 19.1** | **-0.4** |
| **TGUH** | **Tegucigalpa,Un** | **3.74** | **75** | *i* P | | **Pn** | **11 57 19.2** | **-0.4** |
| TGUH | | | | IAML | | | 11 57 54.0 | |
| | comp=Z,82nm,1.0s | | | | | | | |
| **PKGN** | **Cerro Pekin** | **3.94** | **96** | *i* P | | **Pn** | **11 57 23.3** | **+1.2** |
| PKGN | | | | IAML | | | 11 58 11.8 | |
| | comp=Z,180nm,1.0s | | | | | | | |
| **PETF** | **Flores** | **3.95** | **16** | Pn | | **Pn** | **11 57 23.2** | **+0.9** |
| **YUSH** | **Yuscaran** | **4.13** | **78** | *i* P | | **Pn** | **11 57 24.7** | **-0.1** |
| YUSH | | | | *i* S | | **Sn** | **11 58 16.0** | **+2.4** |
| **ILCN** | **San Idelfonso** | **4.22** | **97** | *i* S | | **Sn** | **11 58 17.8** | **+2.1** |
| **LIMN** | **Finca el Limon** | **4.51** | **90** | *i* P | | **Pn** | **11 57 29.9** | **-0.1** |
| LIMN | | | | IAML | | | 11 57 30.5 | |
| | comp=Z,67nm,1.0s | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **5.24** | **96** | | | **Pn** | **11 57 38.6** | **-1.3** |
| **JTS** | **Las Juntas de** | **6.54** | **115** | Pn | | **Pn** | **11 57 56.6** | **-1.3** |
| **JTS** | **Las Juntas de** | **6.54** | **115** | Pn | | **Pn** | **11 57 59.8** | **+1.9** |
| | comp=Z,0.4nm,0.3s,baz=281,slow=23,SNR=9.1 | | | | | | | |
| JTS | | | | Sn | | **Sn** | **11 59 13.3** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=288,slow=22,SNR=0.9<br>comp=Z,1.9nm,0.3s | | | | | | | |
| **TEIG** | **Tepich** | **7.55** | **20** | Pn | | **Pn** | **11 58 13.2** | **+1.4** |
| | comp=Z,2.6nm,0.3s,baz=184,slow=19,SNR=10.0 | | | | | | | |
| TEIG | | | | LR | | LR | 12 01 38.0 | |
| | comp=Z,305nm,19.6s,baz=226,slow=42<br>comp=Z,18nm,0.8s | | | | | | | |
| **TLIG** | **Tlapa** | **8.55** | **302** | Pn | | **Pn** | **11 58 24.9** | **-0.7** |
| **H06E1** | **SOCORRO T-PHAS** | **9.98** | **289** | T | | T | 12 21 09.8 | |
| | SNR=11 | | | | | | | |
| **TXAR** | **Lajitas Array** | **19.99** | **326** | P | | **P** | **12 00 55.3** | **+0.8** |
| **TXAR** | **Lajitas Array** | **19.99** | **326** | P | | **P** | **12 00 56.0** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=150,slow=12,SNR=15<br>comp=Z,0.5nm,0.5s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **19.99** | **326** | P | | **P** | **12 00 55.8** | **+1.3** |
| **OZNA** | **Ozona** | **20.05** | **334** | P | | **P** | **12 00 55.5** | **+0.4** |
| **ALPN** | **Alpine** | **20.79** | **328** | | | **P** | **12 01 04.8** | **+1.5** |
| ALPN | | | | IAmb | | IAmb | 12 01 06.7 | |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **MNHN** | **Monahans** | **21.15** | **331** | P | | **P** | **12 01 06.7** | **-0.4** |
| MNHN | | | | IAmb | | IAmb | 12 01 08.9 | |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| **VHRN** | **Van Horn** | **21.83** | **326** | P | | **P** | **12 01 14.0** | **-0.5** |
| VHRN | | | | IAmb | | IAmb | 12 01 20.9 | |
| | comp=Z,6.6nm,1.2s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.39** | **15** | LR | | LR | 12 10 58.6 | |
| | comp=Z,98nm,19.2s,baz=209,slow=38 | | | | | | | |
| **MGMO** | **Mountain Grove** | **23.99** | **357** | P | | **P** | **12 01 34.0** | **-2.6** |
| MGMO | | | | IAmb | | IAmb | 12 01 36.1 | |
| | comp=Z,4.8nm,1.0s | | | | | | | |
| **T47A** | **Sharon Grove** | **24.05** | **8** | P | | **P** | **12 01 34.0** | **-3.0** |
| **S39A** | **Bolivar** | **24.58** | **356** | P | | **P** | **12 01 39.1** | **-2.9** |
| **121A** | **Cookes Peak, D** | **24.71** | **324** | P | | **P** | **12 01 45.0** | **+1.6** |
| 121A | | | | IAmb | | IAmb | 12 01 47.5 | |
| | comp=Z,4.7nm,0.9s | | | | | | | |
| **ANMO** | **Albuquerque** | **25.87** | **330** | P | | **P** | **12 01 54.0** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=225,slow=14,SNR=1.6<br>comp=Z,0.4nm,0.6s | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **28.19** | **322** | P | | **P** | **12 02 16.8** | **+2.0** |
| **SADO** | **Sadowa** | **33.15** | **16** | LR | | LR | 12 17 01.5 | |
| | comp=Z,72nm,18.6s,baz=298,slow=37 | | | | | | | |
| **PDAR** | **Pinedale Array** | **33.65** | **335** | P | | **P** | **12 03 02.9** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=141,slow=10,SNR=3.2<br>comp=Z,0.2nm,0.3s | | | | | | | |
| **NV11** | **Mina Array Sit** | **34.90** | **321** | P | | **P** | **12 03 16.0** | **+2.3** |
| NV11 | | | | IAmb | | IAmb | 12 03 16.5 | |
| | comp=Z,3.3nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.99** | **321** | P | | **P** | **12 03 16.8** | **+2.2** |
| **NVAR** | **Mina Array Bea** | **34.99** | **321** | P | | **P** | **12 03 16.2** | **+1.7** |
| | comp=Z,2.7nm,0.9s,baz=138,slow=8.2,SNR=20<br>comp=Z,2.7nm,0.9s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **39.68** | **322** | LR | | LR | 12 22 23.4 | |
| | comp=Z,31nm,18.9s,baz=242,slow=39 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **60.08** | **17** | LR | | LR | 12 34 04.1 | |
| | comp=Z,33nm,18.1s,baz=216,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **64.05** | **337** | P | | **P** | **12 06 54.4** | **-1.2** |
| | comp=Z,0.6nm,0.9s,baz=134,slow=7.7,SNR=4.9<br>comp=Z,0.6nm,0.9s | | | | | | | |
| **JMIC** | **Jan Mayen** | **75.26** | **20** | LR | | LR | 12 39 37.0 | |
| | comp=Z,13nm,22.0s,baz=242,slow=34 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.69** | **18** | LR | | LR | 12 46 30.1 | |
| | comp=Z,16nm,21.9s,baz=307,slow=35 | | | | | | | |
| **FINES** | **FINESS Array B** | **90.90** | **25** | LR | | LR | 12 51 03.7 | |
| | comp=Z,15nm,18.4s,baz=142,slow=36 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.15** | **342** | PKPbc | | **PKPbc** | **12 16 06.7** | **+0.5** |
| | comp=Z,0.3nm,0.3s,baz=335,slow=4.5,SNR=4.1 | | | | | | | |

**ATH 04 12:08:49.3, 35°.81N×21°.20E, h6km±2km, ML2.3/1, Error ellipse: s-maj=3.2km s-min=1.8km az=232.0, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PYL** | **PYLOS** | **1.17** | **22** | P | | Pg | 12 09 11.0 | -0.8 |
| PYL | | | | S | | Sg | 12 09 24.8 | -2.1 |
| PYL | | | | AML | AML | | 12 09 29.3 | |
| | comp=N,271μm,0.6s | | | | | | | |
| PYL | | | | AML | AML | | 12 09 40.5 | |
| | comp=E,311μm,0.5s | | | | | | | |
| **PYL** | **PYLOS** | **1.17** | **22** | P | | Pg | 12 09 11.0 | -0.8 |
| PYL | | | | S | | Sb | 12 09 27.4 | 0.0 |
| PYL | | | | AML | AML | | 12 09 29.3 | |
| | comp=N,271μm,0.6s | | | | | | | |
| PYL | | | | AML | AML | | 12 09 35.4 | |
| | comp=E,227μm,0.3s | | | | | | | |
| **ITM** | **Ithomi** | **1.49** | **23** | P | | Pn | 12 09 15.6 | -1.0 |
| ITM | | | | S | | Sn | 12 09 33.1 | -3.4 |
| ITM | | | | AML | AML | | 12 09 41.6 | |
| | comp=E,165μm,0.4s | | | | | | | |
| ITM | | | | AML | AML | | 12 09 47.4 | |
| | comp=N,136μm,0.5s | | | | | | | |
| **ITM** | **Ithomi** | **1.49** | **23** | P | | Pn | 12 09 15.8 | -0.9 |
| ITM | | | | S | | Sn | 12 09 35.0 | -1.4 |
| **KTHA** | **Kythira Island** | **1.57** | **73** | P | | Pn | 12 09 17.6 | -0.3 |
| **KTHA** | **Kythira Island** | **1.57** | **73** | P | | Pn | 12 09 17.2 | -0.6 |
| KTHA | | | | S | | Sn | 12 09 36.9 | -1.7 |
| **VLI** | **Veliai** | **1.67** | **57** | P | | Pn | 12 09 19.0 | -0.2 |
| VLI | | | | S | | Sn | 12 09 38.6 | -2.3 |
| **VLI** | **Veliai** | **1.67** | **57** | P | | Pn | 12 09 18.8 | -0.3 |
| VLI | | | | S | | Sn | 12 09 40.0 | -1.0 |
| **ANKY** | **Antikythira Is** | **1.71** | **87** | P | | Pn | 12 09 19.4 | -0.3 |
| **ANKY** | **Antikythira Is** | **1.71** | **87** | P | | Pn | 12 09 18.9 | -0.7 |
| ANKY | | | | S | | Sn | 12 09 39.8 | -2.0 |
| **LTHK** | **Lithakia** | **1.92** | **351** | P | | Pn | 12 09 22.4 | -0.1 |
| **DRO** | **Drossia** | **2.18** | **11** | P | | Pn | 12 09 25.5 | -0.7 |
| **DRO** | **Drossia** | **2.18** | **11** | P | | Pn | 12 09 25.2 | -0.9 |
| DRO | | | | S | | Sn | 12 09 52.0 | -1.5 |
| **KRND** | **KRANIDI** | **2.22** | **44** | P | | Pn | 12 09 25.9 | -0.8 |
| **RLS** | **Riolos of Patr** | **2.25** | **5** | P | | Pn | 12 09 26.7 | -0.5 |
| **GUR** | **Goura** | **2.31** | **23** | P | | Pn | 12 09 27.7 | -0.4 |
| **GUR** | **Goura** | **2.31** | **23** | P | | Pn | 12 09 27.1 | -0.9 |
| GUR | | | | S | | Sn | 12 09 55.7 | -1.2 |
| **PSDA** | **Pessada-Kefalo** | **2.35** | **348** | P | | Pn | 12 09 28.3 | -0.2 |
| **PSDA** | **Pessada-Kefalo** | **2.35** | **348** | P | | Pn | 12 09 28.0 | -0.5 |
| **KLV** | **Kalavryta, Ach** | **2.36** | **19** | P | | Pn | 12 09 28.1 | -0.6 |
| **VLS** | **Valsamata** | **2.41** | **349** | P | | Pn | 12 09 29.3 | 0.0 |
| **VLS** | **Valsamata** | **2.41** | **349** | P | | Pn | 12 09 31.0 | +1.6 |
| **DMLN** | **Damoulianata-K** | **2.51** | **345** | P | | Pn | 12 09 30.4 | -0.3 |
| **EFP** | **Efpalio** | **2.67** | **12** | P | | Pn | 12 09 32.0 | -0.9 |
| **KALE** | **Kalithea** | **2.69** | **16** | P | | Pn | 12 09 32.4 | -0.7 |
| **FSK** | **Fiskardo** | **2.69** | **349** | P | | Pn | 12 09 33.9 | +0.7 |
| **PVO** | **Paravola** | **2.81** | **5** | P | | Pn | 12 09 34.2 | -0.6 |
| **ANX** | **Ano Chora** | **2.84** | **12** | P | | Pn | 12 09 35.4 | +0.1 |
| **VIL2** | **Platees** | **2.92** | **34** | P | | Pn | 12 09 35.1 | -1.2 |
| **VLY** | **Voula,Athens** | **2.92** | **45** | P | | Pn | 12 09 35.6 | -0.7 |
| **LKD2** | **Lefkada island** | **3.01** | **352** | P | | Pn | 12 09 37.6 | 0.0 |
| **TSLK** | **Tsoukalades, L** | **3.04** | **352** | P | | Pn | 12 09 38.3 | +0.3 |
| **EVR** | **Evrytania** | **3.14** | **9** | P | | Pn | 12 09 39.4 | 0.0 |
| **DION** | **Dionisos Attik** | **3.15** | **43** | P | | Pn | 12 09 38.5 | -1.0 |
| **AXAR** | **Agios Charalam** | **3.17** | **21** | P | | Pn | 12 09 39.2 | -0.7 |

*SDD **04** 12:27:40.9±2.2, 18°.85N×70°.37W, h116km±17km, MD3.0, ML2.4, MW2.8*
*OSPL **04** 12:27:41.9±1.9, 18°.81N×70°.44W, h112km±23km, ML1.9*
**ISC 04 12:27:40.0±2.8, 18°.80N±0°.08×70°.38W±0°.06, h110km±20km, n8, σ1°02/15, 2C-6D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ABDR** | **Alto Bandera** | **0.23** | **273** | ⇓*e*Sg | | **Sn** | **12 28 07.1** | **-0.8** |
| ABDR | | | | IAML | | | 12 28 09.1 | |
| | comp=N,90nm,0.2s | | | | | | | |
| **BANI** | **BANI** | **0.41** | **177** | *e*Pg | | **Pn** | **12 27 56.6** | **+0.2** |
| BANI | | | | ⇑*e*Sg | | **Sn** | **12 28 09.2** | **+0.4** |
| BANI | | | | IAML | | | 12 28 10.3 | |
| | comp=N,206nm,0.2s | | | | | | | |
| **SC01** | **Santiago de lo** | **0.70** | **332** | *i* P | | **Pn** | **12 27 58.7** | **+0.3** |
| SC01 | | | | *e*S | | **Sn** | **12 28 12.3** | **0.0** |
| **SDDR** | **Presa de Saban** | **0.88** | **282** | ⇓*e*Pg | | **Pn** | **12 27 59.8** | **-0.3** |
| SDDR | | | | ⇓*e*Sg | | **Sn** | **12 28 16.1** | **+1.0** |
| SDDR | | | | IAML | | | 12 28 20.2 | |
| | comp=N,31nm,0.6s | | | | | | | |
| **SDDR** | **Presa de Saban** | **0.88** | **282** | *i* P | | **Pn** | **12 28 00.3** | **+0.3** |
| SDDR | | | | *e*S | | **Sn** | **12 28 14.5** | **-0.6** |
| SDDR | | | | IAML | | | 12 28 20.6 | |
| | comp=Z,19nm,0.3s | | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **0.99** | **224** | ⇓*e*Pg | | **Pn** | **12 28 01.2** | **+0.2** |
| LOBA2 | | | | ⇓*e*Sg | | **Sn** | **12 28 18.3** | **+1.4** |
| **PODR** | **Polo** | **1.06** | **234** | *i* P | | **Pn** | **12 28 02.6** | **+0.5** |
| PODR | | | | IAML | | | 12 28 14.5 | |
| | comp=Z,24nm,0.8s | | | | | | | |
| PODR | | | | *e*S | | **Sn** | **12 28 16.1** | **-2.6** |
| **MIDR** | **Miches** | **1.27** | **82** | ⇑*e*Pg | | **Pn** | **12 28 04.0** | **-0.1** |
| MIDR | | | | ⇓*e*Sg | | **Sn** | **12 28 22.2** | **-0.2** |

*IDC **04** 12:37:27.7±1.2, 56°.37S×24°.77W, h0km, mb3.9/5, mbtmp3.8/6, ML3.3/1, Error ellipse: s-maj=47.7km s-min=21.1km az=70.0*
*NEIC **04** 12:37:29.4±2.5, 56°.5S±0°.2×24°.9W±0°.7, h12km±11km, mb4.3/11, Error ellipse: s-maj=62.8km s-min=5.9km az=56.0*
**ISC 04 12:37:33.0±0.9, 56°.5S±0°.1×25°.0W±0°.2, h40km, n23, σ1°27/23, mb4.2/9, 5C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **VNA1** | **Neumayer--Stat** | **15.96** | **160** | ⇑P | | **Pn** | **12 41 14.0** | **-0.3** |
| | comp=Z,1.5nm,0.4s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.20** | **162** | ⇑P | | **Pn** | **12 41 16.5** | **-0.9** |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **16.36** | **159** | ⇑P | | **Pn** | **12 41 18.8** | **-0.5** |
| | comp=Z,0.5nm,0.3s,baz=328,slow=15 | | | | | | | |
| **SNAA** | **Sanae** | **17.87** | **157** | P | | **Pn** | **12 41 38.3** | **+0.1** |
| **SNAA** | **Sanae** | **17.87** | **157** | ⇑P | | **P** | **12 41 39.3** | **+0.8** |
| | comp=Z,4.0nm,0.3s | | | | | | | |
| **SNAA** | **Sanae** | **17.87** | **157** | P | | **Pn** | **12 41 38.5** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=310,slow=15,SNR=8.8<br>comp=Z,0.2nm,0.3s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **19.33** | **154** | ⇑P | | **Pn** | **12 41 58.4** | **+2.5** |
| | comp=Z,2.6nm,0.1s | | | | | | | |
| **BELA** | **Belgrano 2** | **21.77** | **185** | P | | **P** | **12 42 19.9** | **-0.9** |
| BELA | | | | IAmb | | IAmb | 12 42 23.8 | |
| | comp=Z,1.1nm,1.5s | | | | | | | |
| **TRQA** | **Tornquist** | **30.63** | **291** | P | | **P** | **12 43 41.9** | **-1.3** |
| TRQA | | | | IAmb | | IAmb | 12 44 11.9 | |
| | comp=Z,6.8nm,1.3s | | | | | | | |
| **QSPA** | **South Pole Qui** | **33.79** | **180** | P | | **P** | **12 44 12.2** | **+1.4** |
| QSPA | | | | IAmb | | IAmb | 12 44 24.6 | |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **33.79** |

*IDC **04** 13:46:26.9±2.4,40.°11N×77.°84E,h0km,mb3.9/7, mbtmp3.8/12,ML3.1/5,MS2.7/4,Error ellipse: s-maj=41.6km s-min=17.7km az=126.0*
*SOME **04** 13:46:28.6,40.°35N×77.°60E,h5km*
*KRNET **04** 13:46:30.0±0.1,40.°31N×77.°59E,h19km,mb3.9*
*MOS **04** 13:46:32.9±1.1,40.°40N×77.°54E,h10km,mb4.3/8,Error ellipse: s-maj=8.3km s-min=4.3km az=105.3*
*NNC **04** 13:46:33.8±1.0,40.°44N×77.°68E,h0km,mb4.5,mpv4.2, Error ellipse: s-maj=7.0km s-min=6.0km az=162.0*
**ISC 04 13:46:33.7**±1.3,**40.°43N**±0.°04×**77.°57E**±0.°03,**h11**km±7km, **n146**,σ1§**68**/210,**mb4.0**/14,**MS3.3**/4,**40C-32D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TARG** | **Taragay, Kyrgy** | **1.31** | **8** | ⇑ | *i* | P | **Pn** | **13 46 56.8** | **-1.6** |
| | baz=6.0 | | | | | | | | |
| TARG | | | | ⇑ | *i* | S | **Sb** | **13 47 16.3** | **+0.7** |
| | baz=6.0 | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.31** | **8** | *i* | Pg | | **Pn** | **13 46 56.8** | **-1.6** |
| TARG | | | | *i* | S | | **Sb** | **13 47 16.3** | **+0.7** |
| **KSH** | **Kashi** | **1.53** | **234** | | Pn | | **Pg** | **13 47 05.6** | **+2.6** |
| KSH | | | | | Sn | | Sg | 13 47 33.9 | +11 |
| KSH | | | | | smax | | smax | | |
| | comp=N,1μm,0.5s | | | | | | | | |
| KSH | | | | | smax | | smax | | |
| | comp=E,1μm,0.5s | | | | | | | | |
| **NRN** | **Naryn** | **1.56** | **311** | ⇓ | *e* | P | **Pn** | **13 47 00.6** | **-1.0** |
| | baz=13 | | | | | | | | |
| NRN | | | | ⇓ | *i* | S | **Sn** | **13 47 23.3** | **+1.3** |
| | baz=13 | | | | | | | | |
| **NRN** | **Naryn** | **1.56** | **311** | ⇓ | *e* | PN | **Pn** | **13 47 00.6** | **-1.0** |
| NRN | | | | | *i* | S | **Sn** | **13 47 23.3** | **+1.3** |
| **KDJ** | **Kajisay** | **1.73** | **350** | ⇑ | *i* | P | **Pn** | **13 47 04.1** | **+0.3** |
| | baz=51 | | | | | | | | |
| KDJ | | | | ⇑ | *i* | S | **Sb** | **13 47 28.9** | **+1.6** |
| | baz=51 | | | | | | | | |
| **KDJ** | **Kajisay** | **1.73** | **350** | *i* | PN | | **Pn** | **13 47 04.1** | **+0.3** |
| KDJ | | | | *i* | S | | **Sb** | **13 47 28.9** | **+1.6** |
| **ULHL** | **Ulahol** | **2.08** | **332** | | P | | **Pb** | **13 47 11.0** | **-0.5** |
| | SNR=124 | | | | | | | | |
| **ULHL** | **Ulahol** | **2.08** | **332** | ⇓ | *i* | P | **Pn** | **13 47 09.3** | **+0.7** |
| | baz=33 | | | | | | | | |
| ULHL | | | | ⇓ | *i* | S | **Sb** | **13 47 37.8** | **+0.4** |
| | baz=33 | | | | | | | | |
| **ULHL** | **Ulahol** | **2.08** | **332** | ⇓ | *i* | PN | **Pn** | **13 47 09.3** | **+0.7** |
| ULHL | | | | | *i* | S | **Sb** | **13 47 37.8** | **+0.4** |
| **PRZ** | **Przheval'sk** | **2.15** | **17** | ⇑ | *e* | P | **Pn** | **13 47 10.4** | **+0.8** |
| | baz=15 | | | | | | | | |
| PRZ | | | | ⇑ | *i* | S | **Sb** | **13 47 40.0** | **+0.6** |
| | baz=15 | | | | | | | | |
| **PRZ** | **Przheval'sk** | **2.15** | **17** | *e* | PN | | **Pn** | **13 47 10.4** | **+0.8** |
| PRZ | | | | | *i* | S | **Sb** | **13 47 40.0** | **+0.6** |
| **BOOM** | **Boomskoye usch** | **2.40** | **330** | ⇑ | *e* | P | **Pn** | **13 47 13.8** | **+0.7** |
| | baz=31 | | | | | | | | |
| BOOM | | | | ⇑ | *e* | S | **Sn** | **13 47 45.8** | **+3.3** |
| | baz=31 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **2.65** | **350** | *e* | P | | **Pb** | **13 47 21.4** | **0.0** |
| | comp=E,221nm,0.5s | | | | | | | | |
| TNSS | | | | | *e* | S | **Sg** | **13 47 59.3** | **+0.4** |
| | comp=E,364nm,0.7s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **2.65** | **350** | | Pg | | **Pb** | **13 47 21.8** | **+0.5** |
| | comp=E,221nm,0.5s | | | | | | | | |
| TNSS | | | | | Lg | | Lg | 13 47 59.6 | |
| | comp=E,364nm,0.7s | | | | | | | | |
| **SATY** | **Saty** | **2.70** | **13** | *e* | P | | **Pb** | **13 47 22.6** | **+0.4** |
| | comp=E,194nm,0.8s | | | | | | | | |
| SATY | | | | | *e* | S | **Sg** | **13 48 01.2** | **+0.6** |
| | comp=E,411nm,0.7s | | | | | | | | |
| **SATY** | **Saty** | **2.70** | **13** | | Pg | | **Pb** | **13 47 22.6** | **+0.4** |
| | comp=E,194nm,0.8s | | | | | | | | |
| SATY | | | | | Lg | | Lg | 13 48 01.2 | |
| | comp=E,411nm,0.7s | | | | | | | | |
| **IZV** | **Izvestkoviy** | **2.71** | **345** | *e* | P | | **Pb** | **13 47 22.8** | **+0.7** |
| | comp=E,41nm,0.2s | | | | | | | | |
| IZV | | | | | *e* | S | **Sg** | **13 48 01.3** | **+0.7** |
| | comp=E,457nm,0.5s | | | | | | | | |
| **IZV** | **Izvestkoviy** | **2.71** | **345** | | Lg | | Lg | 13 48 01.4 | |
| | comp=E,457nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **2.76** | **352** | *e* | P | | **Pb** | **13 47 23.5** | **+0.4** |
| | comp=E,114nm,0.7s | | | | | | | | |
| MDOK | | | | | *e* | S | **Sg** | **13 48 02.6** | **+0.2** |
| | comp=E,720nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **2.76** | **352** | ⇑ | Pn | | **Pb** | **13 47 21.2** | **-2.0** |
| | comp=E,129nm,0.7s | | | | | | | | |
| MDOK | | | | | Pg | | **Pb** | **13 47 23.5** | **+0.4** |
| | comp=E,114nm,0.7s | | | | | | | | |
| MDOK | | | | ⇓ | Lg | | Lg | 13 48 01.7 | |
| | comp=E,589nm,0.6s | | | | | | | | |
| MDOK | | | | | Lg | | Lg | 13 48 03.3 | |
| | comp=E,720nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **2.76** | **352** | | PN | | **Pb** | **13 47 21.2** | **-2.0** |
| MDOK | | | | | | | | 13 48 03.7 | |
| **ZHN** | **Zhinishke** | **2.81** | **13** | *e* | P | | **Pb** | **13 47 24.3** | **+0.3** |
| | comp=E,107nm,0.6s | | | | | | | | |
| ZHN | | | | | *e* | S | **Sg** | **13 48 04.1** | **0.0** |
| | comp=E,486nm,0.5s | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.81** | **13** | | Pg | | **Pb** | **13 47 24.3** | **+0.3** |
| | comp=E,107nm,0.6s | | | | | | | | |
| ZHN | | | | | Lg | | Lg | 13 48 04.1 | |
| | comp=E,486nm,0.5s | | | | | | | | |
| **ZHN** | **Zhinishke** | **2.81** | **13** | *e* | PN | | **Pn** | **13 47 20.5** | **+1.8** |
| **AAA** | **Alma-Ata** | **2.82** | **350** | *e* | P | | **Pb** | **13 47 25.8** | **+1.6** |
| | comp=E,170nm,0.5s | | | | | | | | |
| AAA | | | | | *e* | S | **Sg** | **13 48 06.3** | **+1.9** |
| | comp=E,752nm,0.5s | | | | | | | | |
| **AAA** | **Alma-Ata** | **2.82** | **350** | | Lg | | Lg | 13 48 06.3 | |
| | comp=E,752nm,0.5s | | | | | | | | |
| **AAA** | **Alma-Ata** | **2.82** | **350** | *e* | PN | | **Pb** | **13 47 22.4** | **-1.8** |
| **KNDC** | **Almaty** | **2.83** | **351** | ⇑ | Pn | | **Pb** | **13 47 22.8** | **-1.4** |
| | comp=E,158nm,0.8s | | | | | | | | |
| KNDC | | | | ⇓ | Lg | | Lg | 13 48 03.4 | |
| | comp=E,686nm,0.6s | | | | | | | | |
| **KNDC** | **Almaty** | **2.83** | **351** | | PN | | **Pb** | **13 47 22.8** | **-1.4** |
| KNDC | | | | | | | | 13 48 05.5 | |
| **KOTS** | **Kotyrbulak** | **2.83** | **353** | *e* | P | | **Pb** | **13 47 26.2** | **+2.0** |
| | comp=E,110nm,1.0s | | | | | | | | |
| KOTS | | | | | *e* | S | **Sg** | **13 48 06.4** | **+1.9** |
| | comp=E,855nm,0.6s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.83** | **353** | | Lg | | Lg | 13 48 06.4 | |
| | comp=E,855nm,0.6s | | | | | | | | |
| **MTBS** | **Maitube** | **2.83** | **343** | *e* | P | | **Pb** | **13 47 24.8** | **+0.5** |
| | comp=E,38nm,0.6s | | | | | | | | |
| MTBS | | | | | *e* | S | **Sg** | **13 48 04.4** | **-0.3** |
| | comp=E,216nm,0.6s | | | | | | | | |
| **MTBS** | **Maitube** | **2.83** | **343** | | Pg | | **Pb** | **13 47 24.8** | **+0.5** |
| | comp=E,38nm,0.6s | | | | | | | | |
| MTBS | | | | | Lg | | Lg | 13 48 04.4 | |
| | comp=E,216nm,0.6s | | | | | | | | |
| **ARLS** | **Aral** | **2.84** | **301** | ⇑ | *i* | P | **Pn** | **13 47 19.5** | **+0.4** |
| | baz=3.0 | | | | | | | | |
| ARLS | | | | ⇑ | *i* | S | **Sn** | **13 47 55.4** | **+2.0** |
| | baz=3.0 | | | | | | | | |
| **ARLS** | **Aral** | **2.84** | **301** | *i* | PN | | **Pn** | **13 47 19.5** | **+0.4** |
| ARLS | | | | *i* | S | | **Sn** | **13 47 55.4** | **+2.0** |
| **KST** | **Kastek** | **2.88** | **336** | *e* | P | | **Pb** | **13 47 25.4** | **+0.3** |
| | comp=E,47nm,0.6s | | | | | | | | |
| KST | | | | | *e* | S | **Sg** | **13 48 05.6** | **-0.5** |
| | comp=E,305nm,0.7s | | | | | | | | |
| **KST** | **Kastek** | **2.88** | **336** | | Pg | | **Pb** | **13 47 25.5** | **+0.4** |
| | comp=E,47nm,0.6s | | | | | | | | |
| KST | | | | | Lg | | Lg | 13 48 05.8 | |
| | comp=E,305nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.90** | **330** | | P | | **Pn** | **13 47 23.0** | **+3.1** |
| | SNR=76 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.90** | **330** | ⇓ | Pn | | **Pn** | **13 47 22.4** | **+2.5** |
| | comp=E,57nm,0.9s | | | | | | | | |
| TKM2 | | | | ⇑ | Lg | | Lg | 13 48 06.5 | |
| | comp=E,172nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.90** | **330** | ⇓ | *i* | P | **Pn** | **13 47 20.6** | **+0.6** |
| | baz=31 | | | | | | | | |
| TKM2 | | | | ⇓ | *i* | S | **Sn** | **13 47 57.7** | **+2.8** |
| | baz=31 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.90** | **330** | *i* | PN | | **Pn** | **13 47 20.6** | **+0.6** |
| TKM2 | | | | *i* | S | | **Sn** | **13 47 57.7** | **+2.8** |
| **UCH** | **Uchtor** | **2.92** | **309** | | P | | **Pn** | **13 47 22.6** | **+2.1** |
| | SNR=38 | | | | | | | | |
| **UCH** | **Uchtor** | **2.92** | **309** | ⇑ | *i* | P | **Pn** | **13 47 20.8** | **+0.3** |
| | baz=10.0 | | | | | | | | |
| UCH | | | | ⇑ | *i* | S | **Sn** | **13 47 58.1** | **+2.3** |
| | baz=10.0 | | | | | | | | |
| **UCH** | **Uchtor** | **2.92** | **309** | *i* | PN | | **Pn** | **13 47 20.8** | **+0.3** |
| UCH | | | | *i* | S | | **Sn** | **13 47 58.1** | **+2.3** |
| **UZB** | **Uzynbulak** | **2.93** | **21** | *e* | P | | **Pb** | **13 47 26.5** | **+0.5** |
| | comp=E,72nm,0.6s | | | | | | | | |
| UZB | | | | | *e* | S | **Sg** | **13 48 07.2** | **-0.6** |
| | comp=E,113nm,0.8s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.93** | **21** | | Pg | | **Pb** | **13 47 26.5** | **+0.5** |
| | comp=E,72nm,0.6s | | | | | | | | |
| UZB | | | | | Lg | | Lg | 13 48 07.1 | |
| | comp=E,113nm,0.8s | | | | | | | | |
| **UZB** | **Uzynbulak** | **2.93** | **21** | *e* | PN | | **Pn** | **13 47 22.6** | **+2.3** |
| **KBK** | **Karagaybulak** | **2.98** | **319** | | P | | **Pn** | **13 47 24.5** | **+3.5** |
| | SNR=17 | | | | | | | | |
| **KBK** | **Karagaybulak** | **2.98** | **319** | ⇑ | *i* | P | **Pn** | **13 47 21.7** | **+0.7** |
| | baz=21 | | | | | | | | |
| KBK | | | | ⇑ | *i* | S | **Sn** | **13 47 59.3** | **+2.6** |
| | baz=21 | | | | | | | | |
| **KBK** | **Karagaybulak** | **2.98** | **319** | *i* | PN | | **Pn** | **13 47 21.7** | **+0.7** |
| **KURS** | **Kuram** | **3.09** | **8** | *e* | P | | **Pb** | **13 47 29.1** | **+0.4** |
| | comp=E,69nm,0.6s | | | | | | | | |
| KURS | | | | | *e* | S | **Sg** | **13 48 12.4** | **-0.6** |
| | comp=E,242nm,0.8s | | | | | | | | |
| **KURS** | **Kuram** | **3.09** | **8** | | Pg | | **Pb** | **13 47 29.1** | **+0.4** |
| | comp=E,69nm,0.6s | | | | | | | | |
| KURS | | | | | Lg | | Lg | 13 48 12.4 | |
| | comp=E,242nm,0.8s | | | | | | | | |
| **DGS** | **Degeres** | **3.12** | **335** | *e* | P | | **Pb** | **13 47 30.0** | **+0.8** |
| | comp=E,39nm,0.6s | | | | | | | | |
| DGS | | | | | *e* | S | **Sg** | **13 48 13.8** | **-0.1** |
| | comp=E,245nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **3.12** | **335** | | Pg | | **Pb** | **13 47 30.0** | **+0.8** |
| | comp=E,39nm,0.6s | | | | | | | | |
| DGS | | | | | Lg | | Lg | 13 48 13.8 | |
| | comp=E,245nm,0.6s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.14** | **264** | ⇓ | *e* | P | **Pn** | **13 47 22.6** | **-0.7** |
| | baz=66 | | | | | | | | |
| SFK | | | | ⇓ | *i* | S | **Sn** | **13 48 01.2** | **+0.2** |
| | baz=66 | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.14** | **264** | *e* | PN | | **Pn** | **13 47 22.6** | **-0.7** |
| SFK | | | | *i* | S | | **Sn** | **13 48 01.2** | **+0.2** |
| **KPKS** | **Kokpek** | **3.15** | **15** | *e* | P | | **Pb** | **13 47 30.5** | **+0.8** |
| | comp=E,60nm,0.4s | | | | | | | | |
| KPKS | | | | | *e* | S | **Sg** | **13 48 15.0** | **+0.2** |
| | comp=E,296nm,0.5s | | | | | | | | |
| **KPKS** | **Kokpek** | **3.15** | **15** | | Pg | | **Pb** | **13 47 30.5** | **+0.8** |
| | comp=E,60nm,0.4s | | | | | | | | |
| KPKS | | | | | Lg | | Lg | 13 48 13.8 | |
| | comp=E,296nm,0.5s | | | | | | | | |
| **KPKS** | **Kokpek** | **3.15** | **15** | *e* | PN | | **Pn** | **13 47 25.7** | **+2.4** |
| **AAK** | **Ala-Archa** | **3.20** | **315** | | P | | **Pn** | **13 47 26.9** | **+2.9** |
| | SNR=29 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.20** | **315** | | Pn | | **Pn** | **13 47 26.5** | **+2.5** |
| | comp=E,4.6nm,0.3s,baz=95,slow=8.3,SNR=16 | | | | | | | | |
| AAK | | | | | Lg | | Lg | 13 48 15.6 | |
| | comp=E,27nm,0.3s,baz=260,slow=20,SNR=20 | | | | | | | | |
| AAK | | | | | LR | | LR | 13 48 51.0 | |
| | comp=E,154nm,19.5s,baz=152,slow=40 | | | | | | | | |
| | comp=E,72nm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.20** | **315** | ⇓ | Pn | | **Pn** | **13 47 26.4** | **+2.4** |
| | comp=E,49nm,0.6s | | | | | | | | |
| AAK | | | | | Lg | | Lg | 13 48 20.1 | |
| | comp=E,474nm,1.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.20** | **315** | ⇓ | *e* | P | **Pn** | **13 47 24.6** | **+0.6** |
| | baz=16 | | | | | | | | |
| AAK | | | | ⇓ | *i* | S | **Sn** | **13 48 04.5** | **+2.3** |
| | baz=16 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.20** | **315** | *c* | *i* | PN | **Pn** | **13 47 26.6** | **+2.5** |
| AAK | | | | | pmax | | pmax | | |
| | comp=Z,49nm,0.5s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.23** | **26** | | Pg | | **Pb** | **13 47 31.3** | **+0.1** |
| | comp=Z,56nm,0.6s | | | | | | | | |
| PDGK | | | | | Lg | | Lg | 13 48 15.8 | |
| | comp=Z,219nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.23** | **26** | ⇓ | Pn | | **Pn** | **13 47 26.1** | **+1.6** |
| | comp=Z,94nm,0.6s | | | | | | | | |
| PDGK | | | | ⇓ | Lg | | Lg | 13 48 13.1 | |
| | comp=Z,225nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.23** | **26** | | PN | | **Pn** | **13 47 26.1** | **+1.6** |
| PDGK | | | | | | | | 13 48 09.0 | |
| **FRU1** | **Bishkek** | **3.25** | **318** | ⇓ | *e* | P | **Pn** | **13 47 25.4** | **+0.8** |
| | baz=19 | | | | | | | | |
| FRU1 | | | | ⇓ | *i* | S | **Sn** | **13 48 06.3** | **+3.0** |
| | baz=19 | | | | | | | | |
| **FRU1** | **Bishkek** | **3.25** | **318** | ⇓ | *e* | PN | **Pn** | **13 47 25.4** | **+0.8** |
| FRU1 | | | | | *e* | S | **Sn** | **13 48 06.3** | **+3.0** |
| **CHMS** | **Chumysh** | **3.33** | **322** | | P | | **Pn** | **13 47 28.8** | **+3.1** |
| | SNR=27 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.33** | **322** | ⇓ | *i* | P | **Pn** | **13 47 26.2** | **+0.5** |
| | baz=23 | | | | | | | | |
| CHMS | | | | ⇓ | *i* | S | **Sn** | **13 48 07.6** | **+2.4** |
| | baz=23 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.33** | **322** | ⇓ | *i* | PN | **Pn** | **13 47 26.2** | **+0.5** |
| CHMS | | | | | *i* | S | **Sn** | **13 48 07.6** | **+2.4** |
| **KTBS** | **Karatobe** | **3.35** | **349** | *e* | P | | **Pb** | **13 47 33.8** | **+0.7** |
| | comp=Z,61nm,0.6s | | | | | | | | |
| KTBS | | | | | *e* | S | **Sg** | **13 48 20.6** | **-0.7** |
| | comp=Z,311nm,0.5s | | | | | | | | |
| **KTBS** | **Karatobe** | **3.35** | **349** | | Pg | | **Pb** | **13 47 33.8** | **+0.7** |
| | comp=Z,61nm,0.6s | | | | | | | | |
| KTBS | | | | | Lg | | Lg | 13 48 20.6 | |
| | comp=Z,311nm,0.5s | | | | | | | | |
| **AML** | **Almayashu** | **3.38** | **301** | | P | | **Pn** | **13 47 28.8** | **+2.1** |
| | SNR=42 | | | | | | | | |
| **AML** | **Almayashu** | **3.38** | **301** | ⇑ | *i* | P | **Pn** | **13 47 27.2** | **+0.4** |
| | baz=3.0 | | | | | | | | |
| AML | | | | ⇑ | *i* | S | **Sn** | **13 48 09.0** | **+1.9** |
| | baz=3.0 | | | | | | | | |
| **AML** | **Almayashu** | **3.38** | **301** | *i* | PN | | **Pn** | **13 47 27.2** | **+0.4** |
| AML | | | | *i* | S | | **Sn** | **13 48 09.0** | **+1.9** |
| **CHKK** | **Chushkaly** | **3.45** | **353** | *e* | P | | **Pb** | **13 47 35.7** | **+0.9** |
| | comp=Z,44nm,0.5s | | | | | | | | |
| CHKK | | | | | *e* | S | **Sg** | **13 48 23.3** | **-1.3** |
| | comp=Z,299nm,0.5s | | | | | | | | |
| **CHKK** | **Chushkaly** | **3.45** | **353** | | Pg | | **Pb** | **13 47 35.7** | **+0.9** |
| | comp=Z,44nm,0.5s | | | | | | | | |
| CHKK | | | | | Lg | | Lg | 13 48 23.1 | |
| | comp=Z,299nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.56** | **337** | *e* | P | | **Pb** | **13 47 37.4** | **+0.7** |
| | comp=Z,39nm,0.6s | | | | | | | | |
| KRBS | | | | | *e* | S | **Sg** | **13 48 26.5** | **-1.5** |
| | comp=Z,74nm,0.8s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.56** | **337** | | Pg | | **Pb** | **13 47 37.4** | **+0.7** |
| | comp=Z,39nm,0.6s | | | | | | | | |
| KRBS | | | | | Lg | | Lg | 13 48 26.1 | |
| | comp=Z,74nm,0.8s | | | | | | | | |
| **ARSB** | **Arslanbob** | **3.59** | **286** | ⇓ | *i* | P | **Pn** | **13 47 29.6** | **+0.1** |
| | baz=88 | | | | | | | | |
| ARSB | | | | ⇓ | *i* | S | **Sn** | **13 48 13.1** | **+1.1** |
| | baz=88 | | | | | | | | |
| **ARSB** | **Arslanbob** | **3.59** | **286** | ⇓ | *i* | PN | **Pn** | **13 47 29.6** | **+0.1** |
| ARSB | | | | *i* | S | | **Sn** | **13 48 13.1** | **+1.1** |
| **EKS2** | **Erkin-Say** | **3.62** | **309** | | P | | **Pn** | **13 47 32.8** | **+3.1** |
| | SNR=30 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.62** | **309** | ⇑ | *i* | P | **Pn** | **13 47 30.3** | **+0.5** |
| | baz=11 | | | | | | | | |
| EKS2 | | | | ⇑ | *i* | S | **Sn** | **13 48 14.3** | **+1.7** |
| | baz=11 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.62** | **309** | *i* | PN | | **Pn** | **13 47 30.3** | **+0.5** |
| EKS2 | | | | *i* | S | | **Sn** | **13 48 14.3** | **+1.7** |
| **USP** | **Ospenovka** | **3.65** | **322** | | P | | **Pn** | **13 47 32.5** | **+2.4** |
| | SNR=15 | | | | | | | | |
| **USP** | **Ospenovka** | **3.65** | **322** | ⇑ | *i* | P | **Pn** | **13 47 31.0** | **+0.9** |
| | baz=23 | | | | | | | | |
| USP | | | | ⇑ | *i* | S | **Sn** | **13 48 15.2** | **+2.0** |
| | baz=23 | | | | | | | | |
| **USP** | **Ospenovka** | **3.65** | **322** | *i* | PN | | **Pn** | **13 47 31.0** | **+0.9** |
| USP | | | | *i* | S | | **Sn** | **13 48 15.2** | **+2.0** |
| **KTMS** | **Ketmen** | **3.66** | **34** | *e* | P | | **Pb** | **13 47 37.7** | **-0.7** |
| | comp=Z,9.9nm,0.5s | | | | | | | | |
| KTMS | | | | | *e* | S | **Sg** | **13 48 26.9** | **-4.3** |
| | comp=Z,48nm,0.5s | | | | | | | | |
| **KTMS** | **Ketmen** | **3.66** | **34** | | Lg | | Lg | 13 48 27.7 | |
| | comp=Z,48nm,0.5s | | | | | | | | |
| **BLB** | **Baldybastay** | **3.73** | **10** | | Pg | | **Pb** | **13 47 40.7** | **+1.1** |
| | comp=Z,207nm,0.5s | | | | | | | | |
| BLB | | | | | Lg | | Lg | 13 48 31.7 | |
| | comp=Z,222nm,0.6s | | | | | | | | |
| **SGDS** | **Sogindy** | **3.74** | **325** | | Lg | | Lg | 13 48 31.1 | |
| | comp=Z,124nm,0.7s | | | | | | | | |
| **SGDS** | **Sogindy** | **3.74** | **325** | *e* | PN | | **Pb** | **13 47 38.1** | **-1.6** |
| **ARXS** | **Arharly** | **3.79** | **3** | *e* | P | | **Pb** | **13 47 41.7** | **+1.1** |
| | comp=Z,68nm,0.5s | | | | | | | | |
| ARXS | | | | | *e* | S | **Sg** | **13 48 33.5** | **-1.8** |
| | comp=Z,240nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **3.79** | **3** | | Pg | | **Pb** | **13 47 42.4** | **+1.8** |
| | comp=Z,68nm,0.5s | | | | | | | | |
| ARXS | | | | | Lg | | Lg | 13 48 34.5 | |
| | comp=Z,240nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **3.79** | **3** | *e* | PN | | **Pn** | **13 47 34.0** | **+1.9** |
| **MRKS** | **Merke** | **4.00** | **307** | *e* | P | | **Pb** | **13 47 45.0** | **+0.8** |
| | comp=Z,21nm,0.7s | | | | | | | | |
| MRKS | | | | | *e* | S | **Sg** | **13 48 39.4** | **-2.7** |
| | comp=Z,123nm,0.7s | | | | | | | | |
| **MRKS** | **Merke** | **4.00** | **307** | | Pg | | **Pb** | **13 47 45.0** | **+0.8** |
| | comp=Z,21nm,0.7s | | | | | | | | |
| **KNOS** | **Konyrlen** | **4.11** | **16** | | Pg | | **Pb** | **13 47 47.9** | **+1.9** |
| | comp=Z,0.9nm,0.6s | | | | | | | | |
| KNOS | | | | | Lg | | Lg | 13 48 43.6 | |
| | comp=Z,74nm,0.8s | | | | | | | | |
| **DJR** | **Jarkent** | **4.24** | **22** | *e* | P | | **Pb** | **13 47 49.1** | **+1.0** |
| | comp=Z,14nm,0.5s | | | | | | | | |
| DJR | | | | | *e* | S | **Sg** | **13 48 46.7** | **-2.9** |
| | comp=Z,68nm,0.6s | | | | | | | | |
| **DJR** | **Jarkent** | **4.24** | **22** | | Pg | | **Pb** | **13 47 49.7** | **+1.5** |
| | comp=Z,14nm,0.5s | | | | | | | | |
| DJR | | | | | Lg | | Lg | 13 48 46.7 | |
| | comp=Z,68nm,0.6s | | | | | | | | |
| **MNAS** | **Manas** | **4.33** | **300** | ⇑ | *i* | P | **Pn** | **13 47 40.0** | **+0.4** |
| | baz=1.0 | | | | | | | | |
| MNAS | | | | ⇑ | *i* | S | **Sn** | **13 48 31.0** | **+0.9** |
| | baz=1.0 | | | | | | | | |
| **MNAS** | **Manas** | **4.33** | **300** | *i* | PN | | **Pn** | **13 47 40.0** | **+0.4** |
| MNAS | | | | *i* | S | | **Sn** | **13 48 31.0** | **+0.9** |
| **TDK** | **Taldyqorghan** | **4.61** | **7** | *e* | P | | **Pb** | **13 47 55.4** | **+0.7** |
| | comp=Z,67nm,0.8s | | | | | | | | |
| TDK | | | | | *e* | S | **Sg** | **13 48 57.8** | **-4.0** |
| | comp=Z,160nm,0.6s | | | | | | | | |
| **TRKS** | **Terek-Say** | **4.99** | **285** | ⇑ | *i* | P | **Pn** | **13 47 48.4** | **-0.3** |
| | baz=85 | | | | | | | | |
| TRKS | | | | ⇑ | *i* | S | **Sn** | **13 48 45.5** | **-1.0** |
| | baz=85 | | | | | | | | |
| **TRKS** | **Terek-Say** | **4.99** | **285** | *i* | PN | | **Pn** | **13 47 48.4** | **-0.3** |
| **BTLS** | **Baital** | **5.29** | **332** | *e* | P | | **Pb** | **13 48 09.0** | **+2.9** |
| | comp=Z,22nm,0.6s | | | | | | | | |
| BTLS | | | | | *e* | S | **Sg** | **13 49 20.2** | **-3.4** |
| | comp=Z,44nm,0.8s | | | | | | | | |
| **BTLS** | **Baital** | **5.29** | **332** | | Lg | | Lg | 13 49 20.2 | |
| | comp=Z,44nm,0.8s | | | | | | | | |
| **BTLS** | **Baital** | **5.29** | **332** | *e* | PN | | **Pb** | **13 48 08.5** | **+2.3** |
| **KK31** | **Karatay Array** | **5.92** | **299** | ⇓ | Pg | | **Pg** | **13 48 24.9** | **-2.1** |
| | comp=Z,7.7nm,0.7s,baz=130,slow=16,SNR=10 | | | | | | | | |
| KK31 | | | | ⇑ | Lg | | Lg | 13 49 45.3 | |
| | comp=Z,29nm,0.6s | | | | | | | | |
| **KKAR** | **Karatay Array** | **5.92** | **299** | ⇑ | *e* | P | **Pn** | **13 48 01.8** | **+0.5** |
| | baz=0.0 | | | | | | | | |
| KKAR | | | | ⇑ | *i* | S | **Sn** | **13 49 08.9** | **-0.2** |
| | baz=0.0 | | | | | | | | |
| **KKAR** | **Karatay Array** | **5.92** | **299** | *e* | PN | | **Pn** | **13 48 01.8** | **+0.5** |
| KKAR | | | | *i* | S | | **Sn** | **13 49 08.9** | **-0.2** |
| **MAKZ** | **Makanchi** | **7.13** | **25** | ⇑ | Pn | | **Pn** | **13 48 18.9** | **+1.0** |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| MAKZ | | | | ⇓ | Sn | | **Sn** | **13 49 41.6** | **+2.6** |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| MAKZ | | | | ⇑ | Lg | | Lg | 13 50 17.8 | |
| | comp=Z,37nm,2.2s | | | | | | | | |
| **MAKZ** | **Makanchi** | **7.13** | **25** | | PN | | **Pn** | **13 48 18.9** | **+1.0** |
| MAKZ | | | | | S | | **Sn** | **13 49 41.5** | **+2.6** |
| **MK31** | **Makanchi Array** | **7.23** | **27** | | Pn | | **Pn** | **13 48 19.2** | **0.0** |
| | comp=Z,1.4nm,0.5s,baz=198,slow=14,SNR=25 | | | | | | | | |
| MK31 | | | | ⇑ | Sn | | **Sn** | **13 49 41.2** | **0.0** |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| MK31 | | | | ⇓ | Lg | | Lg | 13 50 20.6 | |
| | comp=Z,19nm,0.9s,baz=165,slow=39,SNR=4.9 | | | | | | | | |
| **MK31** | **Makanchi Array** | **7.23** | **27** | *c* | *i* | P | **Pn** | **13 48 20.1** | **+0.9** |
| MK31 | | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.23** | **27** | | Pn | | **Pn** | **13 48 18.3** | **-0.9** |
| | comp=Z,0.7nm,0.3s,baz=192,slow=14,SNR=27 | | | | | | | | |
| MKAR | | | | | Sn | | **Sn** | **13 49 41.4** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=207,slow=25,SNR=1.4 | | | | | | | | |
| MKAR | | | | | Lg | | Lg | 13 50 13.7 | |
| | comp=Z,0.8nm,0.3s,baz=200,slow=25,SNR=4.3 | | | | | | | | |
| MKAR | | | | | LR | | LR | 13 51 05.9 | |
| | comp=Z,15nm,20.9s,baz=202,slow=38 | | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | | |
| **WMQ** | **Urumqi** | **8.25** | **62** | | Pn | | **Pn** | **13 48 35.9** | **+2.6** |
| WMQ | | | | | smax | | smax | | |
| | comp=N,19nm,0.7s | | | | | | | | |
| WMQ | | | | | smax | | smax | | |
| | comp=E,25nm,0.9s | | | | | | | | |
| **OTUK** | **Ortayu** | **8.67** | **336** | ⇑ | Lg | | Lg | 13 51 09.5 | |
| | comp=E,43nm,1.0s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.22** | **3** | | Pn | | **Pn** | **13 48 57.7** | **-2.4** |
| | comp=E,0.1nm,0.3s,baz=194,slow=12,SNR=10.0 | | | | | | | | |
| KURBB | | | | | Sn | | **Sn** | **13 50 52.5** | **-2.2** |
| | baz=199,slow=28,SNR=1.6 | | | | | | | | |
| KURBB | | | | | Lg | | Lg | 13 51 55.4 | |
| | comp=E,0.1nm,0.3s,baz=189,slow=29,SNR=6.1 | | | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.22** | **3** | ⇑ | Lg | | Lg | 13 51 56.1 | |
| | comp=E,29nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **10.32** | **4** | ⇓ | Lg | |

comp=E,69nm,15.0s
MNK MLR MLR
comp=Z,75nm,24.0s
MNK MLR MLR
comp=N,110nm,20.0s
**VSU Vasula 36.59 317** *i* P **P 13 53 43.7 +4.3**
VSU pmax pmax
comp=Z,8.0nm,1.1s
**FINES FINESS Array B 37.36 322** P **P 13 53 44.7 -1.2**
comp=Z,3.9nm,1.0s,baz=106,slow=10,SNR=6.2
FINES LR LR 14 10 47.9
comp=Z,23nm,20.5s,baz=56,slow=39
comp=Z,3.9nm,1.0s
**YAK Yakutsk 37.75 37** *i* P P 13 53 54.1 +4.9
YAK pmax pmax
comp=Z,3.0nm,0.7s
**ARCES ARCESS Array B 39.67 334** P **P 13 54 02.4 -2.9**
comp=Z,3.2nm,0.9s,baz=73,slow=8.2,SNR=5.2
comp=Z,3.2nm,0.9s
**HFS Hagfors 43.33 319** P **P 13 54 32.6 -2.8**
comp=Z,0.9nm,0.6s,baz=84,slow=8.1,SNR=1.6
comp=Z,0.9nm,0.6s
**NB2 NORSAR Subarra 44.50 320** P **P 13 54 43.1 -1.7**
comp=Z,0.4nm,0.5s,baz=87,slow=7.9
**NOA NORSAR Array B 44.50 320** P **P 13 54 42.1 -2.6**
comp=Z,0.4nm,0.5s,baz=87,slow=7.9,SNR=3.8
comp=Z,0.4nm,0.5s
**GERES GERESS Array B 45.01 303** P **P 13 54 46.4 -2.7**
comp=Z,0.3nm,0.4s,baz=129,slow=1.9,SNR=3.8
comp=Z,0.3nm,0.4s
**BILL Bilibino 52.77 28** *i* *e* P **P 13 55 50.7 +2.5**
BILL *e* 13 57 04.8
BILL *e* S **S 14 03 14.5 -1.4**
BILL pmax pmax
comp=Z,2.0nm,1.0s
BILL MLR MLR
comp=Z,52nm,19.0s
**TORD Torodi Ar. Bea 70.89 271** P **P 13 57 47.4 -3.6**
comp=Z,1.3nm,0.5s,baz=44,slow=5.8,SNR=17
comp=Z,1.3nm,0.5s

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*ANF **04** 13:48:47.9±0.2,33.°93N×116.°83W,h5km, Error ellipse: s-maj=1.5km s-min=1.3km az=39.0*
*NEIC **04** 13:48:48.6±0.8,33.°923N±0.°009×116.°827W±0.°005, h5km±1km, Error ellipse: s-maj=2.7km s-min=1.4km az=176.0*
*PAS **04** 13:48:49.3±0.8,33.°932N±0.°010×116.°83W±0.°01, h6km±3km, ML3.1/288, ML3.0/58(NEIC), Error ellipse: s-maj=1.6km s-min=1.1km az=147.0*

**ISC 04 13:48:49.2±0.8,33.°92N±0.°01×116.°83W±0.°01,h17km±5km, n115,σ1°03/169,Southern California**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BBSC** | **Beaumont Base** | **0.12** | **271** | | **Pg** | | **13 48 52.3** | **-0.8** |
| BBSC | | | | | **Sg** | | **13 48 54.8** | **-0.9** |
| **DEVC** | **Devers** | **0.21** | **85** | | **Pg** | | **13 48 53.6** | **-0.7** |
| DEVC | | | | | **Sg** | | **13 48 56.7** | **-1.1** |
| **POB** | **Polly Butte** | **0.24** | **198** | | **Pg** | | **13 48 54.5** | **-0.3** |
| POB | | | | | **Sg** | | **13 48 58.1** | **-0.5** |
| **HMTC** | **Hemet** | **0.25** | **214** | | **Pg** | | **13 48 54.6** | **-0.3** |
| HMTC | | | | | **Sg** | | **13 48 58.4** | **-0.5** |
| **PEC** | **Perris** | **0.27** | **264** | | **Pn** | | **13 48 58.8** | **+0.4** |
| **SVD** | **Seven Oaks Dam** | **0.29** | **311** | | **Pg** | | **13 48 54.8** | **-0.7** |
| SVD | | | | | **Sg** | | **13 48 59.2** | **-0.6** |
| **DGR** | **Domenigoni Val** | **0.30** | **209** | | **Pg** | | **13 48 55.6** | **-0.3** |
| DGR | | | | | **Sg** | | **13 48 60.0** | **-0.3** |
| **BBRC** | **Big Bear Solar** | **0.35** | **348** | | **Pn** | | **13 49 00.7** | **+0.9** |
| **BBRC** | **Big Bear Solar** baz=167,SNR=246 | **0.35** | **348** | P | **Pg** | | **13 48 55.8** | **-0.9** |
| BBRC | | | | S | **Sg** | | **13 49 00.5** | **-1.3** |
| **BACC** | **Bachelor Mtn.** baz=167 | **0.35** | **209** | | **Pn** | | **13 49 01.2** | **+1.7** |
| **EW2** | **E Wide Canyon** | **0.35** | **86** | | **Pg** | | **13 48 56.1** | **-0.6** |
| EW2 | | | | | **Sg** | | **13 49 01.3** | **-0.4** |
| **CRY** | **Cary Ranch** | **0.36** | **167** | | **Sg** | | **13 49 01.9** | **-0.1** |
| **HLNC** | **Highland** | **0.38** | **302** | | **Pg** | | **13 48 56.5** | **-0.6** |
| HLNC | | | | | **Sg** | | **13 49 02.4** | **0.0** |
| **BLAC** | **Blackrock camp** | **0.40** | **68** | | **Sg** | | **13 49 02.3** | **-0.9** |
| **SNDA** | **J Saunders Pla** | **0.41** | **153** | | **Sg** | | **13 49 03.2** | **-0.2** |
| **RSBC** | **Riverside Bore** | **0.41** | **278** | | **Pg** | | **13 48 57.1** | **-0.5** |
| RSBC | | | | | **Sg** | | **13 49 02.7** | **-0.8** |
| **RSBC** | **Riverside Bore** | **0.41** | **278** | | **Pg** | | **13 48 57.2** | **-0.5** |
| RSBC | | | | | **Sg** | | **13 49 02.9** | **-0.5** |
| **CFSC** | **Central Fire S** | **0.42** | **297** | | **Pg** | | **13 48 57.5** | **-0.3** |
| CFSC | | | | | **Sg** | | **13 49 03.7** | **+0.1** |
| **CLTC** | **Calectric** | **0.44** | **294** | | **Pb** | | **13 48 58.1** | **-0.4** |
| CLTC | | | | | **Sb** | | **13 49 04.8** | **+0.1** |
| **PFO** | **Pinyon Flats O** | **0.44** | **134** | Pg | **Pg** | | **13 48 57.5** | **-0.6** |
| PFO | 2μm,0.4s | | | IAML | | | 13 49 04.1 | |
| PFO | 1μm,0.1s | | | IAML | | | 13 49 04.2 | |
| **PFO** | **Pinyon Flats O** | **0.44** | **134** | | **Sg** | | **13 49 03.6** | **-0.7** |
| **PFO** | **Pinyon Flats O** baz=316,SNR=170 | **0.44** | **134** | P | **Pg** | | **13 48 57.6** | **-0.6** |
| PFO | baz=316 | | | S | **Sg** | | **13 49 03.7** | **-0.5** |
| **MURC** | **Murrieta** | **0.44** | **224** | | **Sg** | | **13 49 04.2** | **0.0** |
| **MURC** | **Murrieta** baz=42,SNR=85 | **0.44** | **224** | P | **Pg** | | **13 48 57.8** | **-0.3** |
| MURC | baz=42 | | | S | **Sg** | | **13 49 03.8** | **-0.4** |
| **RVR** | **Riverside** | **0.46** | **280** | | **Pg** | | **13 48 57.8** | **-0.6** |
| RVR | | | | | **Sg** | | **13 49 04.0** | **-0.7** |
| **FRD** | **Ford Ranch, An** | **0.47** | **155** | | **Pg** | | **13 48 58.4** | **-0.3** |
| FRD | | | | | **Sg** | | **13 49 04.9** | **-0.1** |
| **PMD** | **Palm Desert** | **0.47** | **125** | | **Sg** | | **13 49 04.2** | **-0.8** |
| **FON** | **Fontana** | **0.53** | **290** | | **Pg** | | **13 48 59.3** | **-0.6** |
| FON | | | | | **Sg** | | **13 49 06.4** | **-0.7** |
| **GTM** | **Goat Mountain** | **0.55** | **46** | | **Pg** | | **13 48 59.0** | **-1.1** |
| GTM | | | | | **Sg** | | **13 49 06.1** | **-1.5** |
| **ELS** | **Elsinore Mount** | **0.56** | **241** | | **Pg** | | **13 48 59.8** | **-0.6** |
| ELS | comp=N,1μm,0.4s | | | IAML | | | 13 49 07.9 | |
| ELS | comp=E,691nm,0.2s | | | IAML | | | 13 49 08.0 | |
| **ELS** | **Elsinore Mount** | **0.56** | **241** | | **Sg** | | **13 49 07.6** | **-0.4** |
| **PLM** | **Palomar** | **0.56** | **182** | | **Sg** | | **13 49 08.3** | **+0.2** |
| **CSP** | **Cedar Springs** | **0.58** | **311** | | **Pg** | | **13 49 07.0** | **-0.7** |
| **CRNC** | **Corona** | **0.61** | **266** | | **Pg** | | **13 49 00.5** | **-0.7** |
| CRNC | | | | | **Sg** | | **13 49 08.7** | **-0.7** |
| **MLSC** | **Mira Loma** | **0.61** | **278** | | **Pg** | | **13 49 00.6** | **-0.8** |
| MLSC | | | | | **Sg** | | **13 49 08.7** | **-0.8** |
| **TPC** | **Twentynine Pal** | **0.68** | **74** | | **Pg** | | **13 49 01.7** | **-0.9** |
| **BELC** | **Belle Mtn. Jos** | **0.70** | **83** | | **Sg** | | **13 49 11.2** | **-1.2** |
| **BELC** | **Belle Mtn. Jos** baz=265,SNR=255 | **0.70** | **83** | P | **Pg** | | **13 49 02.3** | **-0.7** |
| BELC | baz=265 | | | S | **Sg** | | **13 49 11.3** | **-1.0** |
| **CHNC** | **Chino** | **0.71** | **277** | | **Sg** | | **13 49 11.9** | **-0.6** |
| **MATG** | **Mataguay Scout** | **0.73** | **168** | | **Pb** | | **13 49 03.4** | **-0.2** |
| MATG | | | | | **Sg** | | **13 49 13.3** | **-0.1** |
| **BORC** | **Borrego Spring** | **0.74** | **152** | | **Sg** | | **13 49 12.8** | **-0.6** |
| **CTCC** | **Cactus City** | **0.75** | **110** | | **Pg** | | **13 49 03.4** | **-0.5** |
| CTCC | | | | | **Sg** | | **13 49 13.6** | **-0.3** |
| **BFSC** | **Mount Baldy Ra** | **0.76** | **295** | | **Pg** | | **13 49 03.2** | **-0.9** |
| BFSC | | | | | **Sg** | | **13 49 13.7** | **-0.4** |
| **BFSC** | **Mount Baldy Ra** baz=114,SNR=112 | **0.76** | **295** | P | **Pg** | | **13 49 03.1** | **-0.9** |
| BFSC | baz=114 | | | S | **Sg** | | **13 49 13.2** | **-0.9** |
| **VTV** | **Victorville** | **0.76** | **327** | | **Pg** | | **13 49 03.3** | **-0.9** |
| VTV | | | | | **Sg** | | **13 49 13.1** | **-1.1** |
| **ADO** | **Adelanto Recei** | **0.80** | **322** | | **Sg** | | **13 49 15.2** | **-0.4** |
| **PSRC** | **Puddingstone R** | **0.83** | **282** | | **Sg** | | **13 49 15.2** | **-1.1** |
| **GORC** | **Green Oak Ranc** | **0.83** | **203** | | **Pg** | | **13 49 04.3** | **-1.1** |
| GORC | | | | | **Sg** | | **13 49 15.2** | **-1.2** |
| **CTW** | **Cottonwood Mou** | **0.84** | **106** | | **Pg** | | **13 49 04.9** | **-0.7** |
| CTW | | | | | **Sg** | | **13 49 15.6** | **-1.0** |
| **JUEM** | **Julian Eagle M** | **0.86** | **167** | | **Sb** | | **13 49 17.6** | **+0.6** |
| **SLH** | **Sleepy Hollow** | **0.87** | **146** | | **Pb** | | **13 49 05.8** | **0.0** |
| SLH | | | | | **Sb** | | **13 49 17.7** | **+0.5** |
| **DPP** | **Dos Picos Cty** | **0.92** | **186** | | **Pg** | | **13 49 06.0** | **-1.1** |
| DPP | | | | | **Sg** | | **13 49 18.3** | **-1.0** |
| **RRX** | **Edison Barstow** | **0.96** | **352** | | **Pg** | | **13 49 07.0** | **-0.9** |
| RRX | | | | | **Sg** | | **13 49 20.0** | **-0.7** |
| **RRX** | **Edison Barstow** baz=172,SNR=12 | **0.96** | **352** | P | **Pg** | | **13 49 07.0** | **-0.9** |
| RRX | baz=172 | | | S | **Sg** | | **13 49 20.0** | **-0.7** |
| **HEC** | **Hector,Ludlow** | **1.00** | **24** | P | **Pg** | | **13 49 07.5** | **-1.2** |
| HEC | baz=204,SNR=31 | | | S | **Sg** | | **13 49 20.6** | **-1.1** |
| **109C** | **Camp Elliot, M** baz=204 | **1.05** | **193** | | **Pg** | | **13 49 08.2** | **-1.4** |
| 109C | comp=E,514nm,0.4s | | | IAML | | | 13 49 22.7 | |
| 109C | comp=N,472nm,0.3s | | | IAML | | | 13 49 25.9 | |
| **109C** | **Camp Elliot, M** baz=12,SNR=30 | **1.05** | **193** | P | **Pg** | | **13 49 08.2** | **-1.4** |
| 109C | baz=12 | | | S | **Sg** | | **13 49 21.9** | **-1.5** |
| **MONP2** | **Monument Peak** baz=342,SNR=79 | **1.08** | **161** | P | **Pg** | | **13 49 09.4** | **-0.8** |
| MONP2 | baz=342 | | | S | **Sg** | | **13 49 23.7** | **-0.7** |
| **HYS** | **Haystack Butte** | **1.12** | **327** | | **Pg** | | **13 49 09.8** | **-1.2** |
| **SBB** | **Saddle Back Bu** | **1.12** | **313** | | **Pg** | | **13 49 09.7** | **-1.3** |
| **PASC** | **Pasadena Art C** | **1.15** | **283** | | **Pg** | | **13 49 09.7** | **-1.7** |
| PASC | comp=E,194nm,0.4s | | | IAML | | | 13 49 27.4 | |
| **BC3** | **Big Chuckawall** baz=284,SNR=130 | **1.18** | **103** | P | **Pg** | | **13 49 10.8** | **-1.3** |
| BC3 | baz=284 | | | S | **Sg** | | **13 49 26.6** | **-0.9** |
| **FMP** | **Fort Macarthur** baz=79 | **1.23** | **261** | P | **Pg** | | **13 49 11.3** | **-1.7** |
| FMP | baz=79 | | | S | **Sg** | | **13 49 27.9** | **-1.3** |
| **DECC** | **Green Verdugo** baz=104,SNR=36 | **1.29** | **285** | P | **Pn** | | **13 49 12.4** | **-0.1** |
| DECC | baz=104 | | | S | **Sg** | | **13 49 29.7** | **-1.2** |
| **GMRC** | **Granite Mounta** baz=229,SNR=82 | **1.30** | **48** | P | **Pg** | | **13 49 12.7** | **-1.7** |
| GMRC | baz=229 | | | S | **Sg** | | **13 49 30.2** | **-1.2** |
| **SWSC** | **Sam W. Stewart** baz=319,SNR=16 | **1.30** | **138** | P | **Pn** | | **13 49 11.9** | **-0.7** |
| SWSC | baz=319 | | | S | **Sg** | | **13 49 30.1** | **-1.2** |
| **EDW2** | **Edwards Air Fo** baz=134,SNR=124 | **1.36** | **315** | Pb | **Pn** | | **13 49 13.8** | **+0.4** |
| EDW2 | baz=134 | | | S | **Sg** | | **13 49 31.4** | **-1.7** |
| **TKX** | **Tecate** comp=N,346nm,0.1s | **1.36** | **172** | | **Pn** | | **13 49 13.7** | **+0.3** |
| TKX | | | | IAML | | | 13 49 32.1 | |
| **GSC** | **Goldstone, Bar** | **1.38** | **1** | | **Pn** | | **13 49 14.3** | **+0.5** |
| GSC | comp=N,215nm,0.9s | | | IAML | | | 13 49 39.0 | |
| **GSC** | **Goldstone, Bar** baz=181,SNR=198 | **1.38** | **1** | Pb | **Pn** | | **13 49 14.2** | **+0.5** |
| GSC | baz=181 | | | S | **Sb** | | **13 49 32.6** | **+0.6** |
| **IKP** | **In-Ko-Pah, Jac** baz=335,SNR=32 | **1.40** | **154** | P | **Pn** | | **13 49 13.9** | **-0.2** |
| IKP | baz=335 | | | Sb | **Sg** | | **13 49 33.7** | **-0.9** |
| **CIS** | **Catalina Islan** baz=68,SNR=13 | **1.42** | **249** | P | **Pn** | | **13 49 13.8** | **-0.3** |
| CIS | baz=68 | | | S | **Sb** | | **13 49 32.8** | **-0.1** |
| **TJX** | **Tijuana** | **1.42** | **188** | | **Pn** | | **13 49 14.6** | **+0.5** |
| **IRM** | **Iron Mountain** baz=261 | **1.42** | **80** | Pb | **Pb** | | **13 49 15.6** | **+0.3** |
| IRM | baz=261 | | | S | **Sb** | | **13 49 33.5** | **+0.3** |
| **YUH** | **Yuha Desert** comp=N,131nm,0.1s | **1.48** | **149** | | **Pn** | | **13 49 14.6** | **-0.4** |
| YUH | | | | IAML | | | 13 49 37.0 | |
| YUH | comp=E,221nm,0.1s | | | IAML | | | 13 49 37.5 | |
| **CCAC** | **Calif City Air** | **1.57** | **322** | | **Pn** | | **13 49 17.0** | **+0.7** |
| **CBX** | **Cerro Bola** | **1.61** | **175** | Pg | **Pn** | | **13 49 17.8** | **+0.9** |
| **TUQ** | **Turquoise Moun** baz=207 | **1.69** | **26** | Pb | **Pn** | | **13 49 19.5** | **+1.4** |
| TUQ | baz=207 | | | Sb | **Sb** | | **13 49 42.0** | **+1.1** |
| **LRMC** | **Laurel Mtn Rad** baz=155,SNR=64 | **1.71** | **336** | P | **Pn** | | **13 49 18.2** | **-0.1** |
| LRMC | baz=155 | | | Sb | **Sb** | | **13 49 42.8** | **+1.4** |
| **SCI2** | **San Clemente I** baz=56 | **1.71** | **237** | P | **Pn** | | **13 49 17.6** | **-0.6** |
| SCI2 | baz=56 | | | S | **Sn** | | **13 49 40.1** | **+0.4** |
| **OSI** | **Osito Audit: C** baz=113 | **1.71** | **294** | P | **Pn** | | **13 49 18.0** | **-0.3** |
| OSI | baz=113 | | | Sb | **Sb** | | **13 49 42.8** | **+1.3** |
| **GLA** | **Glamis** comp=N,153nm,0.4s | **1.89** | **117** | | **Pn** | | **13 49 20.8** | **+0.1** |
| GLA | | | | IAML | | | 13 49 51.8 | |
| GLA | comp=E,192nm,0.5s | | | IAML | | | 13 49 54.1 | |
| **GLA** | **Glamis** baz=298 | **1.89** | **117** | P | **Pn** | | **13 49 20.7** | **+0.1** |
| GLA | baz=298 | | | S | **Sn** | | **13 49 43.7** | **-0.4** |
| **BLYC** | **Blythe** | **1.93** | **94** | Pn | **Pn** | | **13 49 20.6** | **-0.6** |
| **NEE2** | **Needles Airpor** baz=246 | **2.02** | **65** | Pg | **Pb** | | **13 49 26.3** | **+0.9** |
| NEE2 | baz=246 | | | Sb | **Sb** | | **13 49 51.8** | **+1.5** |
| **SHOC** | **Shoshone, Teco** baz=193,SNR=20 | **2.03** | **13** | P | **Pn** | | **13 49 23.3** | **+0.6** |
| SHOC | baz=193 | | | Sb | **Sg** | | **13 49 53.0** | **-1.5** |
| **ARVC** | **Arvin** baz=125 | **2.04** | **307** | P | **Pn** | | **13 49 23.5** | **+0.7** |
| **ESJX** | **Sierra Juarez** comp=E,131nm,0.2s | **2.05** | **158** | | **Pn** | | **13 49 23.7** | **+0.7** |
| ESJX | | | | IAML | | | 13 49 55.3 | |
| ESJX | comp=N,90nm,0.4s | | | IAML | | | 13 49 55.7 | |
| **CCX** | **Cicese** comp=E,133nm,0.1s | **2.05** | **176** | | **Pn** | | **13 49 24.6** | **+1.7** |
| CCX | | | | IAML | | | 13 50 34.9 | |
| **MPMC** | **Manual Prospec** baz=166,SNR=24 | **2.20** | **346** | P | **Pn** | | **13 49 25.6** | **+0.5** |
| MPMC | baz=166 | | | Sb | **Sg** | | **13 49 58.0** | **-2.1** |
| **ISA** | **Isabella, Lake** comp=E,73nm,0.8s | **2.20** | **323** | | **Pn** | | **13 49 25.4** | **+0.3** |
| ISA | | | | IAML | | | 13 50 04.7 | |
| **ISA** | **Isabella, Lake** baz=142,SNR=45 | **2.20** | **323** | P | **Pn** | | **13 49 25.4** | **+0.4** |
| ISA | baz=142 | | | Sb | **Sb** | | **13 49 57.8** | **+2.2** |
| **GWY** | **Greenwater Val** | **2.27** | **3** | | **Pn** | | **13 49 26.6** | **+0.6** |
| **SNCC** | **San Nicolas Is** baz=72 | **2.34** | **254** | S | **Sn** | | **13 49 55.9** | **+0.7** |
| **BCW** | **Bitter Crk WRg** comp=E,114nm,0.7s | **2.36** | **296** | | **Pn** | | **13 49 28.6** | **+1.3** |
| BCW | | | | IAML | | | 13 50 06.1 | |
| BCW | comp=N,101nm,0.6s | | | IAML | | | 13 50 08.4 | |
| **V12A** | **Nelson** | **2.43** | **42** | | **Pn** | | **13 49 28.7** | **+0.4** |
| **PKM** | **Mcpherson Peak** baz=110 | **2.65** | **292** | P | **Pn** | | **13 49 31.9** | **+0.6** |
| **VTX** | **Valle De La Tr** comp=N,52nm,0.6s | **2.67** | **160** | | **Pn** | | **13 49 32.8** | **+1.3** |
| VTX | | | | IAML | | | 13 50 13.9 | |
| VTX | comp=E,62nm,0.4s | | | IAML | | | 13 50 15.1 | |
| **113A** | **Mohawk Valley,** | **2.81** | **113** | Pn | **Pn** | | **13 49 34.7** | **+1.4** |
| **WCT** | **Wildcat Mounta** comp=E,33nm,0.4s | **2.87** | **3** | IAML | | | 13 50 22.5 | |
| **SHPR** | **Sheep Range** | **2.92** | **27** | | **Pn** | | **13 49 35.9** | **+0.9** |
| **TPNV** | **Topopah Spring** baz=189 | **3.06** | **9** | P | **Pn** | | **13 49 38.0** | **+1.1** |
| **GRAC** | **Grapevine Rang** comp=N,59nm,0.6s | **3.10** | **352** | | **Pn** | | **13 49 39.7** | **+2.3** |
| GRAC | | | | IAML | | | 13 50 31.6 | |
| **DSP** | **Deep Springs** | **3.57** | **345** | | **Pn** | | **13 49 45.6** | **+1.9** |
| **PRN** | **Pahroc Range** | **3.77** | **22** | | **Pn** | | **13 49 48.6** | **+2.0** |
| **214A** | **Organ Pipe Nat** baz=302 | **3.91** | **119** | S | **Sn** | | **13 50 33.4** | **-0.5** |
| **PMPB** | **Monarch Peak** | **3.98** | **306** | Pn | **Pn** | | **13 49 50.1** | **+0.6** |
| **OMMB** | **Old Mammoth Mi** | **4.08** | **335** | Pn | **Pn** | | **13 49 54.3** | **+3.2** |
| **LCMT** | **Little Creek M** | **4.25** | **42** | | **Pn** | | **13 49 56.0** | **+2.6** |
| **X16A** | **Lo Mia Camp, P** | **4.50** | **82** | Pn | **Pn** | | **13 49 57.9** | **+1.2** |
| **KNB** | **Kanab** | **4.50** | **46** | | **Pn** | | **13 50 00.0** | **+3.3** |
| **NV11** | **Mina Array Sit** | **4.63** | **347** | Pn | **Pn** | | **13 50 00.8** | **+2.4** |
| **NVAR** | **Mina Array Bea** | **4.66** | **346** | | **Pn** | | **13 50 01.2** | **+2.3** |
| **KVN** | **Kaiserville** | **5.22** | **349** | Pn | **Pn** | | **13 50 07.3** | **+0.7** |
| **TUC** | **Tucson** baz=289 | **5.32** | **106** | S | **Sn** | | **13 51 07.3** | **-1.6** |

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*IDC **04** 13:57:43.5±0.9,54.°02N×169.°84E,h0km,mb3.7/12, mbtmp3.7/13,ML4.1/1,MS2.8/7, Error ellipse: s-maj=29.6km s-min=14.5km az=3.0*
*MOS **04** 13:57:47.6±0.7,53.°72N×169.°62E,h56km,mb4.3/3, Error ellipse: s-maj=10.1km s-min=5.8km az=26.0*
*KRSC **04** 13:57:47.4±1.8,53.°72N±0.°1×169.°42E,h63km±46km, Ml4.2*
*NEIC **04** 13:57:47.9±2.6,53.°7N±0.°1×169.°8E±0.°1,h30km±5km, mb4.0/25, Error ellipse: s-maj=18.7km s-min=9.1km az=193.0*

**ISC 04 13:57:48.0±0.6,53.°70N±0.°07×169.°72E±0.°05,h35km,n131, σ1°31/153,mb3.9/20,MS2.5/5,1C,Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **2.65** | **306** | *e*P | | **Pn** | **13 58 29.0** | **+0.7** |
| BKI | | | | *e*S | | **Sn** | **13 58 57.7** | **-1.4** |
| **BKI** | **Bering** | **2.65** | **306** | PN | | **Pn** | **13 58 28.9** | **+0.7** |
| BKI | | | | S | | **Sn** | **13 58 57.7** | **-1.4** |
| **SHEM** | **Shemya Is, Ala** 29nm,0.3s,baz=12,slow=2.9,SNR=34 | **2.81** | **109** | Pn | | **Pn** | **13 58 29.0** | **-1.4** |
| SHEM | 88nm,0.3s,baz=176,slow=22,SNR=16 | | | Sn | | **Sn** | **13 59 04.9** | **+1.9** |
| SHEM | comp=Z,210nm,20.5s,baz=160,slow=40 116nm,0.4s | | | LR | | LR | 13 59 37.6 | |
| **KBTR** | **Krutoberegovo** | **4.70** | **305** | *e*P | | **Pn** | **13 58 56.4** | **0.0** |
| KBTR | | | | *e*S | | **Sn** | **13 59 49.0** | **-0.6** |
| **KBTR** | **Krutoberegovo** | **4.70** | **305** | PN | | **Pn** | **13 58 56.3** | **0.0** |
| KBTR | | | | S | | **Sn** | **13 59 49.0** | **-0.6** |
| **MKZ** | **Mys Kozlova** | **4.78** | **284** | *e*P | | **Pn** | **13 58 56.6** | **-0.7** |
| **MKZ** | **Mys Kozlova** | **4.78** | **284** | PN | | **Pn** | **13 58 56.6** | **-0.7** |
| **TUMD** | **Tumrok D** | **5.64** | **289** | *e*P | | **Pn** | **13 59 08.9** | **-0.3** |
| TUMD | | | | *e*S | | **Sn** | **14 00 09.9** | **-2.9** |
| **BZGR** | **Bezymyannyi-Gr** | **5.68** | **297** | *e*P | | **Pn** | **13 59 11.0** | **+1.2** |
| BZGR | | | | *e*S | | **Sn** | **14 00 13.3** | **-0.5** |
| **BZGR** | **Bezymyannyi-Gr** | **5.68** | **297** | PN | | **Pn** | **13 59 11.0** | **+1.2** |
| BZGR | | | | S | | **Sn** | **14 00 13.3** | **-0.5** |
| **LGNR** | **Loginova** | **5.73** | **298** | *e*P | | **Pn** | **13 59 11.8** | **+1.1** |
| **LGNR** | **Loginova** | **5.73** | **298** | PN | | **Pn** | **13 59 11.8** | **+1.1** |
| **BZP** | **Bezymyannyi-Pe** | **5.75** | **296** | *e*P | | **Pn** | **13 59 11.7** | **+0.8** |
| BZP | | | | *e*S | | **Sn** | **14 00 14.2** | **-1.5** |
| **BZMR** | **Bezymyannaya** | **5.78** | **296** | *e*P | | **Pn** | **13 59 11.7** | **+0.4** |
| BZMR | | | | *e*S | | **Sn** | **14 00 13.5** | **-3.0** |
| **BZMR** | **Bezymyannaya** | **5.78** | **296** | PN | | **Pn** | **13 59 11.7** | **+0.4** |
| **BZWR** | **Bezymyannyi-We** | **5.79** | **297** | *e*P | | **Pn** | **13 59 12.4** | **+0.9** |
| BZWR | | | | *e*S | | **Sn** | **14 00 16.0** | **-0.7** |
| **BZWR** | **Bezymyannyi-We** | **5.79** | **297** | PN | | **Pn** | **13 59 12.4** | **+0.9** |
| BZWR | | | | S | | **Sn** | **14 00 16.0** | **-0.7** |
| **TUMR** | **Tumrok** | **5.80** | **290** | *e*P | | **Pn** | **13 59 12.6** | **+1.1** |
| TUMR | | | | *e*S | | **Sn** | **14 00 16.6** | **-0.3** |
| **TUMR** | **Tumrok** | **5.80** | **290** | PN | | **Pn** | **13 59 12.6** | **+1.1** |
| TUMR | | | | S | | **Sn** | **14 00 16.5** | **-0.3** |
| **SPN** | **Mys Shipunski** | **5.83** | **268** | *e*P | | **Pn** | **13 59 12.4** | **+0.5** |
| SPN | | | | *e*S | | **Sn** | **14 00 14.2** | **-3.2** |
| **SPN** | **Mys Shipunski** | **5.83** | **268** | PN | | **Pn** | **13 59 12.3** | **+0.5** |
| **KLY** | **Klyuchi** | **5.83** | **300** | *e*P | | **Pn** | **13 59 09.7** | **-2.3** |
| KLY | | | | *e*S | | **Sn** | **14 00 13.0** | **-4.5** |
| **KLY** | **Klyuchi** | **5.83** | **300** | PN | | **Pn** | **13 59 09.6** | **-2.3** |
| **KRSR** | **Krestovskiy** | **5.84** | **299** | *e*P | | **Pn** | **13 59 12.7** | **+0.5** |
| KRSR | | | | *e*S | | **Sn** | **14 00 17.9** | **0.0** |
| **KRSR** | **Krestovskiy** | **5.84** | **299** | PN | | **Pn** | **13 59 12.6** | **+0.5** |
| KRSR | | | | S | | **Sn** | **14 00 17.9** | **0.0** |
| **KMNR** | **Kamenistaya** | **5.87** | **294** | *e*P | | **Pn** | **13 59 13.3** | **+0.8** |
| KMNR | | | | *e*S | | **Sn** | **14 00 17.7** | **-0.7** |
| **KMNR** | **Kamenistaya** | **5.87** | **294** | PN | | **Pn** | **13 59 13.2** | **+0.8** |
| KMNR | | | | S | | **Sn** | **14 00 17.7** | **-0.7** |
| **KIRR** | **Kirishev** | **5.87** | **296** | *e*P | | **Pn** | **13 59 13.8** | **+1.2** |
| **KIRR** | **Kirishev** | **5.87** | **296** | PN | | **Pn** | **13 59 13.7** | **+1.2** |
| **KPT** | **Kopyto** | **5.94** | **296** | *e*P | | **Pn** | **13 59 14.4** | **+0.9** |
| KPT | | | | *e*S | | **Sn** | **14 00 20.2** | **0.0** |
| **KPT** | **Kopyto** | **5.94** | **296** | PN | | **Pn** | **13 59 14.3** | **+0.9** |
| KPT | | | | S | | **Sn** | **14 00 20.2** | **0.0** |
| **KII** | **Karymskiy** | **6.08** | **277** | *e*P | | **Pn** | **13 59 15.6** | **+0.1** |
| KII | | | | *e*S | | **Sn** | **14 00 23.1** | **-0.7** |
| **KII** | **Karymskiy** | **6.08** | **277** | PN | | **Pn** | **13 59 15.5** | **+0.1** |
| KII | | | | S | | **Sn** | **14 00 23.1** | **-0.7** |
| **KOZ** | **Kozyrevsk** | **6.15** | **297** | *e*P | | **Pn** | **13 59 17.7** | **+1.4** |
| **KOZ** | **Kozyrevsk** | **6.15** | **297** | PN | | **Pn** | **13 59 17.6** | **+1.4** |
| **NLC** | **Nalytchevo** | **6.22** | **269** | *e*P | | **Pn** | **13 59 17.6** | **+0.4** |
| **NLC** | **Nalytchevo** | **6.22** | **269** | PN | | **Pn** | **13 59 17.6** | **+0.4** |
| **AMKA** | **Amchitka** | **6.29** | **108** | Pn | | **Pn** | **13 59 16.9** | **-1.3** |
| **UGLR** | **Uglovaya** | **6.53** | **270** | *e*P | | **Pn** | **13 59 22.5** | **+0.9** |
| **UGLR** | **Uglovaya** | **6.53** | **270** | PN | | **Pn** | **13 59 22.4** | **+0.9** |
| **SMAR** | **Somma** | **6.53** | **271** | *e*P | | **Pn** | **13 59 22.3** | **+0.5** |
| **SMAR** | **Somma** | **6.53** | **271** | PN | | **Pn** | **13 59 22.2** | **+0.5** |
| **KRER** | **Koryakskii** | **6.56** | **271** | *e*P | | **Pn** | **13 59 22.7** | **+0.6** |
| **KRER** | **Koryakskii** | **6.56** | **271** | PN | | **Pn** | **13 59 22.6** | **+0.6** |
| **AVH** | **Avacha** | **6.57** | **271** | *e*P | | **Pn** | **13 59 23.1** | **+1.0** |
| AVH | | | | *e*S | | **Sn** | **14 00 37.3** | **+1.5** |
| **AVH** | **Avacha** | **6.57** | **271** | PN | | **Pn** | **13 59 23.0** | **+1.0** |
| AVH | | | | S | | **Sn** | **14 00 37.2** | **+1.5** |
| **DALK** | **Dalny** | **6.60** | **269** | *e*P | | **Pn** | **13 59 23.1** | **+0.7** |
| DALK | | | | *e*S | | **Sn** | **14 00 33.9** | **-2.3** |
| **DALK** | **Dalny** | **6.60** | **269** | PN | | **Pn** | **13 59 23.0** | **+0.7** |
| **KRX** | **Arik** | **6.61** | **271** | *e*P | | **Pn** | **13 59 23.3** | **+0.6** |
| KRX | | | | *e*S | | **Sn** | **14 00 35.5** | **-1.3** |
| **KRX** | **Arik** | **6.61** | **271** | PN | | **Pn** | **13 59 23.3** | **+0.6** |
| **KOK** | **Koryaka** | **6.63** | **271** | *e*P | | **Pn** | **13 59 23.8** | **+0.9** |
| **KOK** | **Koryaka** | **6.63** | **271** | PN | | **Pn** | **13 59 23.7** | **+0.9** |
| **PET** | **Petropavlovsk** | **6.66** | **269** | | | **Pn** | **13 59 24.3** | **+1.1** |
| **PET** | **Petropavlovsk** | **6.66** | **269** | *e*P | | **Pn** | **13 59 24.3** | **+1.1** |
| PET | | | | *e*S | | **Sn** | **14 00 36.0** | **-1.8** |
| **PET** | **Petropavlovsk** | **6.66** | **269** | PN | | **Pn** | **13 59 24.3** | **+1.1** |
| **OSSR** | **Ossora** | **6.67** | **329** | *e*P | | **Pn** | **13 59 25.1** | **+1.8** |
| **OSSR** | **Ossora** | **6.67** | **329** | PN | | **Pn** | **13 59 25.1** | **+1.8** |
| **ESO** | **Esso** | **6.75** | **294** | *e*P | | **Pn** | **13 59 25.4** | **+0.9** |
| ESO | | | | *e*S | | **Sn** | **14 00 38.4** | **-1.6** |
| **ESO** | **Esso** | **6.75** | **294** | PN | | **Pn** | **13 59 25.3** | **+0.9** |
| **GNL** | **Ganaly** | **6.99** | **275** | *e*P | | **Pn** | **13 59 29.2** | **+1.3** |
| **GNL** | **Ganaly** | **6.99** | **275** | PN | | **Pn** | **13 59 29.2** | **+1.3** |
| **KRMR** | **Karymshinskiy** | **7.01** | **268** | *e*P | | **Pn** | **13 59 28

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| F19K | | | | | IAmb | IAmb | 14 02 36.3 | |
| | comp=Z,6.7nm,1.1s | | | | | | | |
| **GRNR** | **Gornyy** | **20.49** | **275** | ⇑ *i*P | | Pn | 14 02 25.3 | +0.3 |
| GRNR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **H19K** | **Roundabout Mou** | **20.50** | **41** | P | | **P** | **14 02 22.1** | **-0.4** |
| H19K | | | | | IAmb | IAmb | 14 02 35.3 | |
| | comp=Z,7.9nm,1.0s | | | | | | | |
| **J20K** | **Nowinta River** | **21.07** | **46** | P | | **P** | **14 02 27.9** | **-0.9** |
| J20K | | | | | IAmb | IAmb | 14 02 49.0 | |
| | comp=Z,9.3nm,1.1s | | | | | | | |
| **KDAK** | **Kodiak Island** | **21.42** | **64** | LR | | LR | 14 11 55.2 | |
| | comp=Z,50nm,18.7s,baz=283,slow=40 | | | | | | | |
| **IMAR** | **Indian Mountai** | **21.70** | **41** | P | | **P** | **14 02 37.1** | **+1.6** |
| **H21K** | **Melozitna Rive** | **21.98** | **42** | P | | **P** | **14 02 41.4** | **+2.8** |
| **SUA** | **Susitna One** | **22.26** | **54** | P | | **P** | **14 02 40.9** | **-0.8** |
| SUA | | | | | IAmb | IAmb | 14 02 50.3 | |
| | comp=Z,15nm,1.5s | | | | | | | |
| **YAK** | **Yakutsk** | **22.53** | **308** | P | | **P** | **14 02 43.1** | **-1.3** |
| | comp=Z,9.8nm,0.7s,baz=83,slow=15,SNR=5.0 | | | | | | | |
| | comp=Z,9.8nm,0.7s | | | | | | | |
| **RND** | **Reindeer** | **23.27** | **49** | P | | **P** | **14 02 50.8** | **-1.4** |
| RND | | | | | IAmb | IAmb | 14 03 17.9 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| **RND** | **Reindeer** | **23.27** | **49** | P | | **P** | **14 02 50.8** | **-1.4** |
| RND | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **WRH** | **Wood River Hil** | **23.72** | **46** | P | | **P** | **14 02 55.7** | **-0.7** |
| WRH | | | | | IAmb | IAmb | 14 03 15.0 | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **MDM** | **Murphy Dome** | **23.73** | **45** | P | | **P** | **14 02 56.6** | **+0.1** |
| MDM | | | | | IAmb | IAmb | 14 03 14.0 | |
| | comp=Z,6.7nm,1.3s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **23.86** | **46** | P | | **P** | **14 02 58.4** | **+0.7** |
| **SCM** | **Sheep Creek Mo** | **23.90** | **53** | P | | **P** | **14 02 56.5** | **-1.7** |
| **SCM** | **Sheep Creek Mo** | **23.90** | **53** | P | | **P** | **14 02 56.5** | **-1.7** |
| SCM | | | | | pmax | pmax | | |
| | comp=Z,25nm,1.4s | | | | | | | |
| **DHY** | **Denali Highway** | **23.91** | **50** | P | | **P** | **14 02 56.6** | **-1.8** |
| **ILAR** | **Eielson Array** | **24.27** | **46** | P | | **P** | **14 02 59.2** | **-2.3** |
| | comp=Z,0.7nm,0.9s,baz=257,slow=9.0,SNR=6.6 | | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | | |
| **J25K** | **Salcha River,** | **24.91** | **46** | P | | **P** | **14 03 06.6** | **-0.8** |
| J25K | | | | | IAmb | IAmb | 14 03 21.2 | |
| | comp=Z,6.7nm,1.4s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **27.76** | **245** | P | | **P** | **14 03 36.2** | **+3.0** |
| | comp=Z,0.9nm,1.0s,baz=20,slow=6.2,SNR=3.1 | | | | | | | |
| MJAR | | | | | LR | LR | 14 16 25.6 | |
| | comp=Z,11nm,19.6s,baz=154,slow=40 | | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **32.90** | **258** | P | | **P** | **14 04 20.6** | **+2.1** |
| | comp=Z,1.1nm,0.9s,baz=61,slow=10,SNR=4.5 | | | | | | | |
| KSRS | | | | | LR | LR | 14 18 45.2 | |
| | comp=Z,9.9nm,19.2s,baz=185,slow=38 | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.98** | **185** | T | | T | 14 40 41.2 | |
| | baz=3.0,slow=76,SNR=345 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.99** | **185** | T | | T | 14 40 39.3 | |
| | baz=3.0,slow=76,SNR=401 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.00** | **185** | T | | T | 14 40 39.6 | |
| | baz=3.0,slow=76,SNR=585 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.20** | **185** | T | | T | 14 42 09.5 | |
| | baz=3.2,slow=76,SNR=391 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.22** | **185** | T | | T | 14 41 58.2 | |
| | baz=3.2,slow=76,SNR=244 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.22** | **185** | T | | T | 14 42 11.6 | |
| | baz=3.2,slow=76,SNR=383 | | | | | | | |
| **SONM** | **Songino Array** | **39.28** | **288** | P | | **P** | **14 05 14.0** | **+0.7** |
| | comp=Z,0.5nm,0.6s,baz=72,slow=6.8,SNR=4.0 | | | | | | | |
| SONM | | | | | LR | LR | 14 22 22.7 | |
| | comp=Z,41nm,19.6s,baz=109,slow=38 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **39.28** | **288** | P | | **P** | **14 05 14.0** | **+0.7** |
| **B08A** | **Colville Reser** | **43.24** | **67** | P | | **P** | **14 05 46.4** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **50.05** | **77** | P | | **P** | **14 06 39.4** | **+0.1** |
| | comp=Z,0.3nm,0.5s,baz=312,slow=8.4,SNR=3.2 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **52.08** | **67** | P | | **P** | **14 06 54.4** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=316,slow=4.1,SNR=3.7 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **52.16** | **306** | P | | **P** | **14 06 54.7** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **52.27** | **306** | P | | **P** | **14 06 54.7** | **-0.7** |
| | comp=Z,2.3nm,0.9s,baz=51,slow=7.5,SNR=14 | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.95** | **301** | P | | **P** | **14 07 00.1** | **-0.4** |
| | comp=Z,0.6nm,0.8s,baz=58,slow=5.0,SNR=3.9 | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **54.39** | **313** | P | | **P** | **14 07 11.2** | **+0.2** |
| **BRVK** | **Borovoye** | **54.39** | **313** | P | | **P** | **14 07 11.2** | **+0.2** |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **63.97** | **266** | P | | **P** | **14 08 18.6** | **+0.9** |
| | comp=Z,0.4nm,0.4s,baz=27,slow=8.1,SNR=2.0 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **64.33** | **349** | P | | **P** | **14 08 18.9** | **-0.6** |
| | comp=Z,0.6nm,0.7s,baz=12,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **64.33** | **349** | P | | **P** | **14 08 18.1** | **-1.5** |
| | comp=Z,0.6nm,0.7s,baz=17,slow=6.5,SNR=4.1 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **65.01** | **74** | P | | **P** | **14 08 24.6** | **+0.1** |
| | comp=Z,0.3nm,0.7s,baz=306,slow=4.2,SNR=5.1 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |

**RSNC 04 14:03:15.1±0.0, 2°N±4°×8°0W±°, h15km±5km, M3.1, mb4.5, ML2.8, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TUMC** | **Tumaco** | **1.10** | **99** | P | Pb | 14 03 34.6 | -1.3 |
| TUMC | | | | S | Sb | 14 03 50.4 | +0.2 |
| **GR1C** | **Gorgona, Isla** | **1.93** | **59** | P | Pn | 14 03 43.4 | -4.1 |
| **PAC1** | **Pacto, Paraso** | **2.00** | **149** | P | Pn | 14 03 47.7 | -0.8 |
| PAC1 | | | | S | Sn | 14 04 11.5 | -1.8 |
| **OTAV** | **Otavalo** | **2.21** | **142** | P | Pn | 14 03 51.3 | -0.4 |
| OTAV | | | | S | Sn | 14 04 17.8 | -1.3 |
| **BBAC** | **Balboa, Cauca** | **2.57** | **89** | P | Pn | 14 03 54.7 | -1.7 |
| BBAC | | | | S | Sn | 14 04 26.8 | -0.8 |
| **GCUF** | **Volcan Galeras** | **2.59** | **107** | P | Pn | 14 03 57.6 | +0.7 |
| GCUF | | | | S | Sn | 14 04 29.8 | +1.4 |
| **BONI** | **La Bonita** | **2.75** | **124** | P | Pn | 14 04 00.8 | +1.8 |
| **CRUC** | **La Cruz** | **2.90** | **98** | P | Pn | 14 04 03.2 | +2.1 |
| CRUC | | | | S | Sn | 14 04 36.9 | +1.0 |
| **POPC** | **Popayan, Colom** | **3.19** | **80** | P | Pn | 14 04 03.3 | -1.7 |
| POPC | | | | S | Sn | 14 04 40.9 | -2.0 |
| **MALC** | **Bahia Malaga** | **3.19** | **51** | P | Pn | 14 04 01.7 | -3.1 |
| MALC | | | | S | Sn | 14 04 40.9 | -1.7 |
| **JAMC** | **Jamundi, Valle** | **3.37** | **69** | P | Pn | 14 04 04.2 | -3.2 |
| JAMC | | | | P | Pn | 14 04 04.2 | -3.2 |
| JAMC | | | | S | Sn | 14 04 43.4 | -3.9 |
| **YOTC** | **Yotoco, Valle** | **4.00** | **60** | P | Pn | 14 04 12.2 | -3.8 |
| YOTC | | | | S | Sn | 14 04 56.4 | -6.2 |
| **FLOC** | **Florencia** | **4.18** | **95** | P | Pn | 14 04 20.1 | +1.6 |
| **GARC** | **Garzon, Huila** | **4.33** | **87** | P | Pn | 14 04 20.9 | +0.2 |
| **PLMC** | **San Jos del P** | **4.57** | **51** | P | Pn | 14 04 20.3 | -3.5 |
| PLMC | | | | P | Pn | 14 04 20.3 | -3.5 |
| PLMC | | | | P | Pn | 14 04 20.3 | -3.5 |
| **ORTC** | **Ortega, Tolima** | **4.95** | **67** | P | Pn | 14 04 28.8 | -0.2 |
| ORTC | | | | S | Sn | 14 05 25.8 | -0.3 |
| **ANIL** | **Santa Ana** | **5.06** | **60** | P | Pn | 14 04 29.1 | -1.7 |
| | 58nm,0.5s | | | | | | |
| **PRAC** | **Prado** | **5.22** | **71** | P | Pn | 14 04 32.5 | -0.2 |
| PRAC | | | | P | Pn | 14 04 32.6 | -0.1 |
| PRAC | | | | S | Sn | 14 05 32.9 | +0.2 |
| **URMC** | **La Uribe, Meta** | **5.58** | **77** | P | Pn | 14 04 35.9 | -1.8 |

*IDC **04** 14:38:14.0±1.5, 43°.91N×128°.71W, h0km, mb3.7/9, mbtmp3.6/12, ML2.5/3, MS3.4/24, Error ellipse: s-maj=40.5km s-min=13.7km az=38.0*
*NEIC **04** 14:38:15.9±1.9, 43°.9N±0°.1×128°.56W±0°.03, h10km±2km, ML3.2/44, Error ellipse: s-maj=17.3km s-min=4.3km az=182.0*
*PGC **04** 14:38:18.1±0.1, 43°.91N×128°.32W, h10km, MLSn3.0/6, Mw3.7/6, 600km Ssw of Ucluelet, Bc Off Coast Of Oregon*

**ISC 04 14:38:16.9±0.9, 43°.92N±0°.06×128°.44W±0°.08, h13km, n99, σ1s43/95, mb3.7/8, MS3.3/17, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **J01E** | **Myrtle Point** | **3.37** | **101** | | **Pn** | **14 39 08.6** | **-0.5** |
| J01E | | | | | IAML | 14 39 50.4 | |
| | comp=N,67nm,0.7s | | | | | | |
| **HEBO** | **Mount Hebo** | **3.59** | **67** | Pn | **Pn** | **14 39 12.2** | **-0.1** |
| HEBO | | | | | IAML | 14 39 58.9 | |
| | comp=N,40nm,1.1s | | | | | | |
| **I03D** | **Drain, OR** | **3.69** | **92** | | **Pn** | **14 39 13.1** | **-0.6** |
| I03D | | | | | IAML | 14 40 04.4 | |
| | comp=N,35nm,0.7s | | | | | | |
| **K02D** | **Willamette Mer** | **3.69** | **108** | | **Pn** | **14 39 13.0** | **-0.8** |
| K02D | | | | | IAML | 14 39 59.1 | |
| | comp=E,35nm,0.5s | | | | | | |
| **DBO** | **Dodson Butte** | **3.87** | **100** | | **Pn** | **14 39 16.0** | **-0.1** |
| **NC27** | **ODP1027** | **3.88** | **7** | Sn | **Sn** | **14 39 59.7** | **-1.3** |
| **G03D** | **McMinnville, O** | **3.92** | **69** | | **Pn** | **14 39 16.4** | **-0.3** |
| G03D | | | | | IAML | 14 40 09.4 | |
| | comp=E,32nm,1.1s | | | | | | |
| **BUCK** | **Buck Mountain** | **3.94** | **84** | | **Pn** | **14 39 17.9** | **+0.7** |
| BUCK | | | | | IAML | 14 40 10.7 | |
| | comp=N,33nm,2.7s | | | | | | |
| BUCK | | | | | IAML | 14 40 23.8 | |
| | comp=E,35nm,2.2s | | | | | | |
| **F03A** | **Seaside** | **4.01** | **58** | | **Pn** | **14 39 18.6** | **+0.6** |
| **RADR** | **Rader Ridge** | **4.13** | **51** | Pn | **Pn** | **14 39 22.0** | **+2.4** |
| RADR | | | | | IAML | 14 40 39.2 | |
| | comp=E,35nm,2.0s | | | | | | |
| RADR | | | | | IAML | 14 40 52.8 | |
| | comp=N,24nm,2.1s | | | | | | |
| **H04D** | **Lebanon** | **4.14** | **80** | | **Pn** | **14 39 20.5** | **+0.6** |
| H04D | | | | | IAML | 14 40 14.7 | |
| | comp=N,29nm,1.1s | | | | | | |
| H04D | | | | | IAML | 14 40 21.8 | |
| | comp=E,33nm,1.6s | | | | | | |
| **HUMO** | **Hull Mountain** | **4.21** | **106** | | **Pn** | **14 39 20.8** | **-0.1** |
| **E03A** | **Lebam** | **4.33** | **51** | | **Pn** | **14 39 23.8** | **+1.3** |
| E03A | | | | | IAML | 14 40 31.8 | |
| | comp=E,25nm,2.1s | | | | | | |
| **I04A** | **Tendick Farm,** | **4.36** | **90** | | **Pn** | **14 39 23.6** | **+0.6** |
| I04A | | | | | IAML | 14 40 17.9 | |
| | comp=E,24nm,1.4s | | | | | | |
| I04A | | | | | IAML | 14 40 22.9 | |
| | comp=N,20nm,1.8s | | | | | | |
| **H04A** | **Detroit Lake** | **4.56** | **78** | | **Pn** | **14 39 26.3** | **+0.7** |
| H04A | | | | | IAML | 14 40 23.1 | |
| | comp=N,25nm,0.4s | | | | | | |
| H04A | | | | | IAML | 14 40 29.3 | |
| | comp=E,19nm,0.4s | | | | | | |
| **WISH** | **Wishkah** | **4.58** | **44** | | **Pn** | **14 39 24.4** | **-1.4** |
| WISH | | | | | IAML | 14 40 39.5 | |
| | comp=E,27nm,2.3s | | | | | | |
| WISH | | | | | IAML | 14 40 41.9 | |
| | comp=N,26nm,1.6s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.73** | **41** | | **Pn** | **14 39 29.5** | **+1.6** |
| **F04A** | **Amboy** | **4.73** | **63** | | **Pn** | **14 39 29.2** | **+1.4** |
| **YBH** | **Yreka Blue Hor** | **4.75** | **115** | Pn | **Pn** | **14 39 28.0** | **-0.2** |
| | comp=N,0.2nm,0.3s,baz=291,slow=14,SNR=2.2 | | | | | | |
| YBH | | | | Sn | **Sn** | **14 40 24.9** | **+1.7** |
| | comp=N,0.2nm,0.3s,baz=336,slow=19,SNR=1.6 | | | | | | |
| YBH | | | | LR | LR | 14 41 19.1 | |
| | comp=N,692nm,20.0s,baz=346,slow=38 | | | | | | |
| **NCBC** | **Barkley Canyon** | **4.78** | **18** | Sn | **Sn** | **14 40 23.3** | **-0.3** |
| **HOOD** | **Mount Hood Mea** | **5.05** | **71** | | **Pn** | **14 39 34.1** | **+1.7** |
| **G05A** | **Wamic** | **5.26** | **73** | | **Pn** | **14 39 37.4** | **+2.2** |
| **J05D** | **Fort Rock, OR** | **5.27** | **94** | | **Pn** | **14 39 38.1** | **+2.6** |
| J05D | | | | | IAML | 14 41 03.0 | |
| | comp=E,12nm,1.5s | | | | | | |
| J05D | | | | | IAML | 14 41 44.0 | |
| | comp=N,12nm,2.5s | | | | | | |
| **HDW** | **Hoodsport** | **5.30** | **43** | Pn | **Pn** | **14 39 36.9** | **+1.1** |
| **GNW** | **Green Mountain** | **5.36** | **45** | Pn | **Pn** | **14 39 37.6** | **+1.1** |
| **B012** | **Ucluelet** | **5.39** | **21** | Pn | **Pn** | **14 39 37.7** | **+0.7** |
| B012 | | | | Sn | **Sn** | **14 40 37.2** | **-1.7** |
| **PTRF** | **Port Renfrew** | **5.41** | **30** | Pn | **Pn** | **14 39 37.9** | **+0.8** |
| PTRF | | | | Sn | **Sn** | **14 40 37.5** | **-1.7** |
| **PFB** | **Port Renfrew** | **5.42** | **29** | Pn | **Pn** | **14 39 38.3** | **+0.9** |
| PFB | | | | Sn | **Sn** | **14 40 37.3** | **-2.3** |
| **BFSB** | **Bamfield** | **5.42** | **24** | Pn | **Pn** | **14 39 38.1** | **+0.7** |
| BFSB | | | | Sn | **Sn** | **14 40 37.6** | **-2.0** |
| **B928** | **Bamfield** | **5.42** | **24** | Pn | **Pn** | **14 39 38.1** | **+0.7** |
| B928 | | | | Sn | **Sn** | **14 40 36.9** | **-2.7** |
| **OZB** | **Mount Ozzard** | **5.44** | **21** | Pn | **Pn** | **14 39 38.5** | **+0.9** |
| **OZB** | **Mount Ozzard** | **5.44** | **21** | Pn | **Pn** | **14 39 38.4** | **+0.7** |
| OZB | | | | Sn | **Sn** | **14 40 39.2** | **-0.9** |
| **LON** | **Longmire** | **5.47** | **56** | | **Pn** | **14 39 38.6** | **+0.6** |
| **LON** | **Longmire** | **5.47** | **56** | Pn | **Pn** | **14 39 39.1** | **+1.1** |
| **D05A** | **Enumclaw** | **5.59** | **52** | Pn | **Pn** | **14 39 40.6** | **+0.9** |
| **SYMB** | **Survey Mountai** | **5.65** | **33** | Pn | **Pn** | **14 39 41.3** | **+0.7** |
| **VGZ** | **Gonzales** | **5.73** | **37** | Pn | **Pn** | **14 39 42.4** | **+0.8** |
| **B926** | **Mesachie Lake** | **5.74** | **30** | Sn | **Sn** | **14 40 47.1** | **-0.3** |
| **CLRS** | **Cowichan Lake** | **5.74** | **30** | Pn | **Pn** | **14 39 42.6** | **+0.9** |
| **CLRS** | **Cowichan Lake** | **5.74** | **30** | Pn | **Pn** | **14 39 42.8** | **+1.1** |
| CLRS | | | | Sn | **Sn** | **14 40 47.0** | **-0.4** |
| **B010** | **North Saanich** | **5.86** | **34** | Pn | **Pn** | **14 39 44.5** | **+1.1** |
| B010 | | | | Sn | **Sn** | **14 40 49.9** | **-0.5** |
| **B011** | **North Saanich** | **5.86** | **34** | Pn | **Pn** | **14 39 44.0** | **+0.5** |
| B011 | | | | Sn | **Sn** | **14 40 49.9** | **-0.5** |
| **PGC** | **Sidney** | **5.86** | **34** | Sn | **Sn** | **14 40 49.5** | **-0.9** |
| **B927** | **Port Alberni** | **5.86** | **24** | Sn | **Sn** | **14 40 49.4** | **-1.0** |
| **SNB** | **Saturna Island** | **6.08** | **35** | Pn | **Pn** | **14 39 47.3** | **+0.9** |
| **GOBB** | **Galiano Island** | **6.08** | **32** | Pn | **Pn** | **14 39 46.8** | **+0.5** |
| GOBB | | | | Sn | **Sn** | **14 40 55.7** | **-0.1** |
| **GDR** | **Gold River** | **6.09** | **15** | Pn | **Pn** | **14 39 47.9** | **+1.3** |
| GDR | | | | Sn | **Sn** | **14 40 56.1** | **0.0** |
| **NLLB** | **Nanaimo Lost L** | **6.13** | **28** | Pn | **Pn** | **14 39 48.5** | **+1.3** |
| NLLB | | | | Sn | **Sn** | **14 40 57.0** | **-0.1** |
| **JCW** | **Jim Creek** | **6.23** | **44** | Pn | **Pn** | **14 39 50.5** | **+2.0** |
| **WOSB** | **Woss** | **6.38** | **11** | Pn | **Pn** | **14 39 52.7** | **+2.2** |
| **CBB** | **Campbell River** | **6.47** | **18** | Pn | **Pn** | **14 39 50.8** | **-1.0** |
| **CBB** | **Campbell River** | **6.47** | **18** | Pn | **Pn** | **14 39 53.8** | **+2.0** |
| CBB | | | | Sn | **Sn** | **14 41 05.7** | **+0.3** |
| **SHB** | **Sechelt** | **6.49** | **27** | Pn | **Pn** | **14 39 53.7** | **+1.6** |
| SHB | | | | Sn | **Sn** | **14 41 06.2** | **+0.2** |
| **BIB** | **Bowen Island** | **6.53** | **31** | Pn | **Pn** | **14 39 54.1** | **+1.6** |
| **PACB** | **Port Alice, BC** | **6.55** | **5** | Pn | **Pn** | **14 39 55.0** | **+2.1** |
| **NCSB** | **Newcastle Ridg** | **6.69** | **13** | Pn | **Pn** | **14 39 57.5** | **+2.6** |
| NCSB | | | | Sn | **Sn** | **14 41 11.4** | **+0.4** |
| **NCRB** | **Newcastle Ridg** | **6.69** | **13** | Pn | **Pn** | **14 39 57.2** | **+2.3** |
| **HNBB** | **Haney** | **6.72** | **35** | Pn | **Pn** | **14 39 57.1** | **+1.9** |
| **HOLB** | **Holberg** | **6.73** | **2** | Pn | **Pn** | **14 39 57.5** | **+2.1** |
| **WPB** | **Watts Point** | **6.77** | **30** | Pn | **Pn** | **14 39 57.6** | **+1.7** |
| **PHC** | **Port Hardy** | **6.83** | **5** | Pn | **Pn** | **14 39 59.4** | **+2.7** |
| **WSLR** | **Whistler** | **7.27** | **29** | Pn | **Pn** | **14 40 04.3** | **+1.6** |
| **BBB** | **Bella Bella** | **8.28** | **1** | Pn | **Pn** | **14 40 18.9** | **+2.4** |
| | comp=N,0.3nm,0.3s,baz=197,slow=11,SNR=6.8 | | | | | | |
| BBB | | | | Sn | **Sn** | **14 41 50.3** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=159,slow=14,SNR=1.2 | | | | | | |
| **NEW** | **Newport** | **8.98** | **57** | Pn | **Pn** | **14 40 26.7** | **+0.4** |
| **NEW** | **Newport** | **8.98** | **57** | Pn | **Pn** | **14 40 25.4** | **-0.9** |
| | comp=N,0.2nm,0.3s,baz=248,slow=18,SNR=2.0 | | | | | | |
| NEW | | | | LR | LR | 14 43 51.2 | |
| | comp=N,147nm,20.3s,baz=246,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **9.40** | **122** | Pn | **Pn** | **14 40 35.2** | **+2.9** |
| | comp=N,0.1nm,0.3s,baz=296,slow=13,SNR=4.9 | | | | | | |
| NVAR | | | | LR | LR | 14 44 12.2 | |
| | comp=N,271nm,19.8s,baz=272,slow=37 | | | | | | |
| | comp=N,0.9nm,0.8s | | | | | | |
| **ELK** | **Elko** | **10.28** | **103** | Pn | **Pn** | **14 40 48.2** | **+4.0** |
| | baz=306,slow=10.0,SNR=6.9 | | | | | | |
| ELK | | | | LR | LR | 14 44 51.3 | |
| | comp=N,222nm,19.7s,baz=314,slow=38 | | | | | | |
| | comp=N,1.1nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **13.79** | **88** | Pn | **P** | **14 41 39.1** | **-1.7** |
| | comp=N,0.3nm,0.7s,baz=279,slow=12,SNR=2.6 | | | | | | |
| PDAR | | | | LR | LR | 14 47 07.0 | |
| | comp=N,167nm,18.8s,baz=264,slow=38 | | | | | | |
| **PFO** | **Pinyon Flats O** | **13.89** | **134** | LR | LR | 14 46 37.5 | |
| | comp=N,74nm,18.9s,baz=6.5,slow=36 | | | | | | |
| **ANMO** | **Albuquerque** | **19.16** | **110** | P | **Pn** | **14 42 43.6** | **+2.6** |
| | comp=N,0.4nm,0.4s,baz=62,slow=11,SNR=2.0 | | | | | | |
| ANMO | | | | LR | LR | 14 50 30.7 | |
| | comp=N,278nm,19.0s,baz=50,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.29** | **19** | P | **P** | **14 42 52.3** | **+0.3** |
| | comp=N,4.8nm,0.8s,baz=208,slow=11,SNR=10 | | | | | | |
| YKA | | | | LR | LR | 14 51 20.8 | |
| | comp=N,27nm,20.1s,baz=348,slow=38 | | | | | | |
| | comp=N,4.8nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **20.46** | **321** | LR | LR | 14 48 45.9 | |
| | comp=N,132nm,21.1s,baz=156,slow=31 | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.94** | **62** | P | **P** | **14 43 21.2** | **+0.7** |
| | comp=N,6.6nm,0.8s,baz=289,slow=7.6,SNR=7.3 | | | | | | |
| ULM | | | | LR | LR | 14 52 27.2 | |
| | comp=N,84nm,19.3s,baz=266,slow=37 | | | | | | |
| | comp=N,6.6nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **23.32** | **340** | P | **P** | **14 43 24.9** | **+0.5** |
| | comp=N,0.6nm,0.7s,baz=155,slow=9.3,SNR=6.5 | | | | | | |
| ILAR | | | | LR | LR | 14 51 00.1 | |
| | comp=N,51nm,19.5s,baz=103,slow=33 | | | | | | |
| | comp=N,0.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **24.52** | **118** | P | **P** | **14 43 37.6** | **+1.5** |
| | comp=N,0.5nm,0.8s,baz=302,slow=5.2,SNR=5.4 | | | | | | |
| | comp=N,0.5nm,0.8s | | | | | | |
| **LPIG** | **La Paz** | **24.73** | **137** | LR | LR | 14 51 56.6 | |
| | comp=N,52nm,20.9s,baz=29,slow=33 | | | | | | |
| **SADO** | **Sadowa** | **34.84** | **71** | LR | LR | 14 59 04.1 | |
| | comp=N,61nm,18.8s,baz=288,slow=36 | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.95** | **88** | LR | LR | 15 00 04.1 | |
| | comp=N,173nm,19.0s,baz=296,slow=37 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **38.27** | **304** | LR | LR | 14 58 43.3 | |
| | comp=N,33nm,18.3s,baz=216,slow=32 | | | | | | |
| **SCHQ** | **Schefferville** | **40.31** | **52** | LR | LR | 15 01 48.2 | |
| | comp=N,46nm,19.5s,baz=139,slow=35 | | | | | | |
| **TEIG** | **Tepich** | **40.87** | **112** | LR | LR | 15 05 02.4 | |
| | comp=N,36nm,19.3s,baz=164,slow=39 | | | | | | |
| **MA2** | **Magadan** | **49.17** | **318** | LR | LR | 15 05 43.5 | |
| | comp=N,44nm,19.8s,baz=68,slow=34 | | | | | | |
| **JTS** | **Las Juntas de** | **50.31** | **118** | LR | LR | 15 11 43.1 | |
| | comp=N,24nm,18.2s,baz=306,slow=40 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **58.44** | **268** | T | T | 15 51 12.4 | |
| | baz=49,slow=75,SNR=630 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **58.45** | **268** | T | T | 15 51 08.3 | |
| | baz=49,slow=75,SNR=225 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **58.46** | **268** | T | T | 15 51 09.3 | |
| | baz=49,slow=75,SNR=214 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **59.37** | **267** | T | T | 15 52 22.4 | |
| | baz=50,slow=75,SNR=71 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **59.38** | **267** | T | T | 15 52 14.9 | |
| | baz=50,slow=75,SNR=72 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **59.39** | **267** | T | T | 15 52 23.9 | |
| | baz=50,slow=75,SNR=48 | | | | | | |
| **SDV** | **Santo Domingo** | **60.89** | **107** | LR | LR | 15 17 07.9 | |
| | comp=N,26nm,18.2s,baz=305,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **63.81** | **314** | LR | LR | 15 15 42.3 | |
| | comp=N,26nm,18.8s,baz=148,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.38** | **20** | P | **P** | **14 49 30.2** | **+0.1** |
| | comp=N,0.6nm,0.8s,baz=332,slow=6.1,SNR=2.9 | | | | | | |
| | comp=N,0.6nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **76.68** | **326** | P | **P** | **14 50 06.9** | **-0.6** |
| | comp=N,0.7nm,0.7s,baz=67,slow=3.7,SNR=4.4 | | | | | | |
| | comp=N,0.7nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **82.89** | **40** | P | **P** | **14 50 41.1** | **-0.1** |
| | comp=N,0.5nm,0.9s,baz=326,slow=0.8,SNR=2.5 | | | | | | |
| | comp=N,0.5nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.96** | **343** | P | **P** | **14 50 39.6** | **-1.7** |
| | comp=N,1.1nm,0.8s,baz=31,slow=5.3,SNR=8.4 | | | | | | |
| | comp=N,1.1nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **83.78** | **14** | P | **P** | **14 50 43.6** | **-1.9** |
| | comp=N,0.2nm,0.4s,baz=328,slow=3.3,SNR=4.4 | | | | | | |
| | comp=N,0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **85.67** | **339** | LR | LR | 15 31 32.6 | |
| | comp=N,29nm,18.2s,baz=152,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **92.44** | **259** | LR | LR | 15 28 07.9 | |
| | comp=N,66nm,18.1s,baz=212,slow=32 | | | | | | |
| **DAV** | **Davao City (W)** | **96.48** | **286** | LR | LR | 15 28 50.6 | |
| | comp=N,27nm,19.9s,baz=165,slow=32 | | | | | | |

*THE **04** 14:40:51.4, 35°.83N×21°.24E, h0km±4km, ML3.4/4, Error ellipse: s-maj=5.6km s-min=1.9km az=238.0*
*ATH **04** 14:40:52.1, 35°.82N×21°.16E, h17km±7km, ML3.4/6, Error ellipse: s-maj=8.8km s-min=1.8km az=232.0*
*NAO **04** 14:40:53.8, 35°.96N×21°.70E, h33km, mb3.6*
*IDC **04** 14:40:57.1±2.4, 35°.98N×21°.47E, h59km±27km, mb3.3/11, mbtmp3.6/15, ML2.0/2, MS2.5/1, Error ellipse: s-maj=23.6km s-min=16.3km az=10.0*
*MCSM **04** 14:40:58.6±0.6, 36°N±3°×2°1E±°, h13km±4km, mB5.6, mb4.0, Mw(mB)5.1*

**ISC 04 14:40:53.8±1.0, 35°.82N±0°.07×21°.21E±0°.08, h38km±2km, n61, σ1s39/72, mb3.7/10, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PYL** | **PYLOS** | **1.16** | **22** | P | **Pn** | **14 41 11.3** | **-2.2** |
| PYL | | | | S | **Sn** | **14 41 29.8** | **+1.8** |
| | 1µm,0.7s | | | | | | |
| **PYL** | **PYLOS** | **1.16** | **22** | P | **Pn** | **14 41 12.3** | **-1.2** |
| PYL | | | | S | **Sn** | **14 41 28.0** | **0.0** |
| PYL | | | | AML | AML | 14 41 32.3 | |
| | comp=N,2383µm,0.5s | | | | | | |
| PYL | | | | AML | AML | 14 41 41.8 | |
| | comp=E,3414µm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,1.4nm,1.1s | | | | | | | |
| **MI30** | **MI30,Zelenitsa** | **15.75** | **17** | P | | **Pn** | **14 44 33.8** | **+1.2** |
| **RNPP5** | **Staryi Chortor** | **15.77** | **11** | P | | **Pn** | **14 44 33.6** | **+0.7** |
| **MI28** | **Mi28,Pidlybu** | **15.81** | **15** | P | | **Pn** | **14 44 34.3** | **+0.9** |
| **AK07** | **Malin Array Si** | **15.82** | **19** | P | | **P** | **14 44 35.3** | **-1.6** |
| **RNPP8** | **Varash** | **15.87** | **11** | P | | **Pn** | **14 44 35.4** | **+1.3** |
| **AK05** | **Malin Array Si** | **15.89** | **19** | P | | **Pn** | **14 44 34.6** | **+0.2** |
| **RNPP9** | **Sopachiv** | **15.95** | **11** | P | | **P** | **14 44 36.8** | **-1.5** |
| **KIEV** | **Kiev** | **15.96** | **19** | P | | **Pn** | **14 44 35.4** | **+0.2** |
| | comp=N,13nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **15.96** | **19** | P | | **Pn** | **14 44 35.9** | **+0.5** |
| | comp=N,0.8nm,0.5s,baz=220,slow=11,SNR=7.7 | | | | | | | |
| **AKBB** | **Malin Array Si** | **15.96** | **19** | P | | **Pn** | **14 44 35.3** | **-0.1** |
| **ESDC** | **Sonseca Array** | **20.25** | **289** | P | | Pn | 14 45 30.0 | +2.0 |
| | comp=N,0.7nm,0.9s,baz=80,slow=9.5,SNR=6.6 | | | | | | | |
| | comp=N,0.7nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **24.81** | **351** | P | | **P** | **14 46 12.3** | **+0.2** |
| | comp=N,1.2nm,0.5s,baz=163,slow=11,SNR=13 | | | | | | | |
| | comp=N,1.2nm,0.5s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **25.69** | **327** | P | | **P** | **14 46 21.7** | **+1.7** |
| | comp=N,0.6nm,0.6s,baz=124,slow=8.2,SNR=4.5 | | | | | | | |
| | comp=N,0.6nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **25.83** | **5** | P | | **P** | **14 46 20.7** | **-0.5** |
| | comp=N,1.2nm,0.6s,baz=170,slow=11,SNR=9.2 | | | | | | | |
| | comp=N,1.2nm,0.6s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **26.04** | **349** | P | | **P** | **14 46 22.9** | **-0.3** |
| | comp=Z,1.2nm,0.8s,baz=160,slow=9.3 | | | | | | | |
| **NOA** | **NORSAR Array B** | **26.04** | **349** | P | | **P** | **14 46 23.1** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=160,slow=9.7,SNR=4.5 | | | | | | | |
| NOA | | | | LR | | LR | 14 57 30.4 | |
| | comp=Z,9.2nm,19.4s,baz=290,slow=38 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **28.61** | **223** | P | | **P** | **14 46 50.0** | **+3.5** |
| | comp=Z,0.3nm,0.5s,baz=29,slow=11,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **33.86** | **3** | P | | **P** | **14 47 32.1** | **-0.2** |
| | comp=Z,1.0nm,0.7s,baz=196,slow=12,SNR=5.1 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.23** | **52** | P | | **P** | **14 48 49.6** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=275,slow=8.3,SNR=3.3 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.10** | **57** | P | | **P** | **14 49 13.1** | **-1.0** |
| | comp=Z,0.6nm,0.5s,baz=267,slow=7.7,SNR=10.0 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.88** | **46** | P | | **P** | **14 49 18.7** | **-1.4** |
| | comp=Z,0.6nm,0.4s,baz=280,slow=8.3,SNR=4.5 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **61.54** | **50** | P | | **P** | **14 51 07.4** | **+0.4** |
| | comp=Z,0.9nm,0.9s,baz=298,slow=3.1,SNR=2.7 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |

**NEIC 04 14:52:43.3±1.2, 30°.94N±0°.02×103°.50W±0°.03, h5km±1km, mb_Lg2.7/39, ML2.6/14, Error ellipse: s-maj=5.1km s-min=3.5km az=277.0, Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PECS** | **Pecos** | **0.53** | **324** | Pg | Pb | 14 52 54.6 | -0.6 |
| **ALPN** | **Alpine** | **0.58** | **192** | Pg | Pg | 14 52 55.0 | +0.5 |
| ALPN | | | | Sg | Sg | 14 53 02.9 | +0.9 |
| ALPN | | | | IAML | | 14 53 06.3 | |
| | 369nm,0.6s | | | | | | |
| ALPN | | | | IAML | | 14 53 11.0 | |
| | 363nm,0.6s | | | | | | |
| **MNHN** | **Monahans** | **0.75** | **58** | Pg | Pg | 14 52 57.5 | -0.1 |
| **VHRN** | **Van Horn** | **1.29** | **263** | Pn | Pb | 14 53 08.5 | +0.4 |
| VHRN | | | | IAML | | 14 53 29.9 | |
| | 114nm,0.8s | | | | | | |
| VHRN | | | | IAML | | 14 53 30.3 | |
| | 112nm,0.6s | | | | | | |
| **ODSA** | **Odessa** | **1.43** | **34** | | Pn | 14 53 09.3 | -0.7 |
| **SAND** | **Sanderson** | **1.54** | **129** | | Pb | 14 53 12.1 | -0.4 |
| **TX31** | **Lajitas Ar. Si** | **1.61** | **185** | | Pb | 14 53 13.3 | -0.3 |
| **TXAR** | **Lajitas Array** | **1.61** | **185** | | Pb | 14 53 13.5 | -0.1 |
| **OZNA** | **Ozona** | **2.04** | **90** | Pn | Pb | 14 53 20.4 | -0.4 |
| OZNA | | | | IAmb_Lg | | 14 53 48.5 | |
| | comp=Z,55nm,0.9s | | | | | | |
| **SGCY** | **Sterling City** | **2.25** | **64** | Pn | Pn | 14 53 22.5 | +1.3 |
| **POST** | **Post** | **2.71** | **38** | Pn | Pn | 14 53 27.8 | +0.1 |
| **DRIO** | **Del Rio** | **2.92** | **121** | Pn | Pn | 14 53 30.6 | +0.2 |
| **SN05** | **Snyder 5** | **2.94** | **48** | Pn | Pn | 14 53 31.4 | +0.6 |
| SN05 | | | | IAmb_Lg | | 14 54 22.4 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **3.08** | **11** | IAmb_Lg | | 14 54 20.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **SN07** | **Snyder 07** | **3.08** | **45** | Pn | Pn | 14 53 34.0 | +1.3 |
| SN07 | | | | IAmb_Lg | | 14 54 26.2 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.69** | **62** | IAmb_Lg | | 14 54 48.5 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **APMT** | **Aspermont** | **3.72** | **49** | Pn | Pn | 14 53 42.7 | +1.2 |
| APMT | | | | IAmb_Lg | | 14 54 49.5 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **BRDY** | **Brady** | **3.87** | **84** | IAmb_Lg | | 14 54 52.1 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **4.22** | **21** | IAmb_Lg | | 14 55 03.5 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **SMWD** | **Samnorwood** | **4.97** | **33** | IAmb_Lg | | 14 55 35.0 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **5.07** | **64** | IAmb_Lg | | 14 55 35.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **5.27** | **77** | IAmb_Lg | | 14 55 37.8 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FW13** | **Cleburne** | **5.36** | **73** | IAmb_Lg | | 14 55 40.1 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **FW06** | **Azle** | **5.44** | **67** | Pn | Pn | 14 54 06.7 | +1.7 |
| **WMOK** | **Wichita Mounta** | **5.48** | **45** | Pn | Pn | 14 54 05.3 | -0.4 |
| **T25A** | **Trinidad** | **6.23** | **353** | IAmb_Lg | | 14 56 18.6 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **7.75** | **60** | IAmb_Lg | | 14 57 03.9 | |
| | comp=Z,6.3nm,0.7s | | | | | | |

*IDC **04** 14:55:19.6±2.1, 23°.61S×179°.99E, h544km±22km, mb3.2/8, mbtmp4.1/9, Error ellipse: s-maj=20.8km s-min=19.6km az=120.0*

**ISC 04 14:55:19.1±0.8, 23°.7S±0°.1×180°.0W±0°.2, h550km, n17, σ1s05/18, mb3.9/8, 2C, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **6.26** | **342** | P | **P** | **14 56 59.4** | **-1.0** |
| | 5.2nm,0.8s,baz=311,slow=6.8,SNR=122 | | | | | | |
| **URZ** | **Urewera** | **14.69** | **189** | P | **P** | **14 58 22.7** | **-2.6** |
| | 8.7nm,0.5s,baz=328,slow=6.1,SNR=8.7 | | | | | | |
| **CTA** | **Charters Tower** | **31.52** | **270** | P | **P** | **15 00 57.4** | **+0.6** |
| | 0.6nm,0.4s,baz=94,slow=11,SNR=9.6 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **34.83** | **248** | P | **P** | **15 01 25.2** | **+0.7** |
| | 5.0nm,1.0s,baz=107,slow=14,SNR=3.7 | | | | | | |
| | 5.0nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **42.11** | **260** | P | **P** | **15 02 24.0** | **+0.3** |
| | 2.9nm,0.5s,baz=96,slow=7.4,SNR=107 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 04 05.7** | **+0.3** |
| | 0.3nm,0.8s,baz=92,slow=5.7,SNR=1.9 | | | | | | |
| | 2.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.46** | **266** | P | **P** | **15 02 26.2** | **-0.3** |
| | 4.1nm,0.5s,baz=102,slow=8.3,SNR=233 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 04 06.6** | **-0.1** |
| | 0.5nm,0.8s,baz=92,slow=3.0,SNR=2.8 | | | | | | |
| | 4.1nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.35** | **180** | P | **P** | **15 05 15.6** | **+2.2** |
| | 2.0nm,0.6s,baz=359,slow=0.6,SNR=16 | | | | | | |
| | 2.0nm,0.6s | | | | | | |
| **JOW** | **Kunigami** | **70.92** | **312** | P | **P** | **15 05 41.1** | **-0.3** |
| | 5.9nm,0.6s,baz=97,slow=8.0,SNR=3.9 | | | | | | |
| | 5.9nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **84.50** | **181** | ⇑P | **P** | **15 06 54.2** | **+0.1** |
| | 2.74nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.60** | **44** | P | **P** | **15 06 56.0** | **+0.8** |
| | comp=Z,0.1nm,0.5s,baz=223,slow=3.7,SNR=1.6 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **84.83** | **179** | ⇑P | **P** | **15 06 55.6** | **0.0** |
| | comp=Z,14nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **84.83** | **179** | P | **P** | **15 06 55.8** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=198,slow=9.0,SNR=10 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **142.39** | **349** | PKhKP | PKPpre | 15 13 44.9 | |
| | comp=Z,2.0nm,0.4s,baz=64,slow=3.0,SNR=32 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.86** | **327** | PKP | **PKPdf** | **15 13 53.0** | **-0.5** |
| | comp=Z,1.3nm,0.5s,baz=45,slow=4.1,SNR=7.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.51** | **307** | PKPbc | **PKiKP** | **15 14 04.3** | **+0.7** |
| | comp=Z,0.8nm,0.5s,baz=67,slow=4.5,SNR=4.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.67** | **295** | PKPbc | **PKiKP** | **15 14 03.9** | **-0.2** |
| | comp=Z,3.8nm,0.5s,baz=76,slow=7.0,SNR=8.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **148.35** | **3** | PKPbc | **PKPbc** | **15 14 02.3** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=328,slow=2.1,SNR=6.6 | | | | | | |

*IDC **04** 14:56:43.5±0.9, 27°.92N×101°.57E, h0km, mb3.7/9, mbtmp3.7/10, ML3.4/1, MS3.3/17, Error ellipse: s-maj=28.7km s-min=16.1km az=74.0*

*BJI **04** 14:56:44.3±0.0, 27°.92N×101°.34E, h13km, mb3.6/6, mB4.0/1, ML4.0/12, Ms3.8/8, Ms7 3.7/8*

**ISC 04 14:56:46.8±0.6, 27°.94N±0°.05×101°.62E±0°.06, h10km, n30, σ2s33/25, mb3.7/8, MS3.4/16, 1C, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PZH** | **PanZhiHua** | **1.44** | **176** | Pg | Pn | 14 57 09.5 | -3.5 |
| PZH | | | | Sg | **Sn** | **14 57 31.1** | **-0.9** |
| PZH | | | | smax | smax | | |
| | comp=N,1μm,0.8s | | | | | | |
| PZH | | | | smax | smax | | |
| | comp=E,3μm,0.6s | | | | | | |
| **CD2** | **Chengdu** | **3.50** | **32** | Pn | **Pn** | **14 57 44.9** | **+3.6** |
| CD2 | | | | Pg | **Pb** | **14 57 53.4** | **+4.5** |
| CD2 | | | | Sn | **Sb** | **14 58 30.5** | **-1.0** |
| CD2 | | | | Sg | **Sg** | **14 58 39.5** | **+0.3** |
| CD2 | | | | smax | smax | | |
| | comp=N,1μm,1.1s | | | | | | |
| CD2 | | | | smax | smax | | |
| | comp=E,890nm,1.1s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,1μm,5.7s | | | | | | |
| **TNCH** | **TengChong** | **4.01** | **224** | Pg | **Pn** | **14 57 53.3** | **+4.7** |
| TNCH | | | | Sg | **Sb** | **14 58 47.4** | **+0.9** |
| TNCH | | | | smax | smax | | |
| | comp=N,820nm,1.5s | | | | | | |
| TNCH | | | | smax | smax | | |
| | comp=E,770nm,1.1s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,790nm,6.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **9.75** | **195** | Pn | **Pn** | **14 59 06.8** | **-0.4** |
| | 0.1nm,0.3s,baz=4.4,slow=13,SNR=9.6 | | | | | | |
| CMAR | | | | Lg | Lg | 15 01 52.6 | |
| | 0.3nm,0.3s,baz=3.9,slow=28,SNR=5.4 | | | | | | |
| CMAR | | | | LR | LR | 15 03 29.7 | |
| | comp=Z,100nm,21.8s,baz=5.0,slow=42 | | | | | | |
| | 2.0nm,1.0s | | | | | | |
| **CNSH** | **ChangSha** | **10.00** | **86** | P | **Pn** | **14 59 14.1** | **+3.6** |
| CNSH | | | | S | **Sn** | **15 01 01.6** | **-1.2** |
| **WHN** | **Wuhan** | **11.42** | **74** | ⇑P | **Pn** | **14 59 33.0** | **+3.0** |
| **GTA** | **Gaotai** | **11.54** | **353** | *e*P | **Pn** | **14 59 31.4** | **-0.3** |
| GTA | | | | sP | | 14 59 41.8 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,240nm,10.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,230nm,8.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,330nm,9.8s | | | | | | |
| **QIZ** | **Qiongzhong** | **11.64** | **138** | P | **Pn** | **14 59 31.6** | **-1.5** |
| QIZ | | | | S | **Sn** | **15 01 45.5** | **+2.3** |
| QIZ | | | | LR | LR | | |
| | comp=N,460nm,10.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,310nm,8.8s | | | | | | |
| **BJI** | **Beijing** | **17.04** | **41** | P | **Pn** | **15 00 42.7** | **-2.5** |
| BJI | | | | pP | **P** | **15 00 46.1** | **-0.9** |
| BJI | | | | S | **Sn** | **15 03 52.3** | **-2.4** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,52nm,6.6s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=N,150nm,13.8s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=E,120nm,14.0s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,77nm,14.7s | | | | | | |
| **WMQ** | **Urumqi** | **19.41** | **328** | *e*P | **P** | **15 01 14.3** | **+1.2** |
| WMQ | | | | LR | LR | | |
| | comp=N,140nm,12.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,110nm,10.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,88nm,12.7s | | | | | | |
| **SONM** | **Songino Array** | **20.21** | **9** | P | **P** | **15 01 20.2** | **-1.7** |
| | 1.9nm,0.9s,baz=191,slow=12,SNR=7.7 | | | | | | |
| SONM | | | | LR | LR | 15 09 40.9 | |
| | comp=Z,156nm,18.8s,baz=194,slow=38 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **24.02** | **60** | P | **P** | **15 02 01.4** | **-0.5** |
| | 1.7nm,0.8s,baz=262,slow=11,SNR=8.8 | | | | | | |
| KSRS | | | | LR | LR | 15 11 24.0 | |
| | comp=Z,37nm,19.9s,baz=265,slow=37 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.18** | **326** | P | **P** | **15 02 01.9** | **-1.4** |
| | 2.3nm,0.7s,baz=125,slow=11,SNR=9.7 | | | | | | |
| | 2.3nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **25.68** | **71** | LR | LR | 15 13 38.3 | |
| | comp=Z,58nm,19.3s,baz=288,slow=39 | | | | | | |
| **AAK** | **Ala-Archa** | **26.41** | **311** | LR | LR | 15 14 04.7 | |
| | comp=Z,55nm,18.1s,baz=174,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.63** | **329** | P | **P** | **15 02 41.3** | **-2.1** |
| | 0.8nm,0.7s,baz=138,slow=9.7,SNR=6.9 | | | | | | |
| KURBB | | | | LR | LR | 15 15 12.0 | |
| | comp=Z,98nm,20.5s,baz=195,slow=39 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **28.76** | **339** | P | P | 15 02 41.5 | -3.0 |
| | 0.3nm,0.3s,baz=141,slow=16,SNR=1.7 | | | | | | |
| ZALV | | | | LR | LR | 15 14 41.8 | |
| | comp=Z,56nm,19.2s,baz=142,slow=38 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **31.96** | **65** | LR | LR | 15 16 14.6 | |
| | comp=Z,25nm,19.9s,baz=163,slow=37 | | | | | | |
| **AKTO** | **Aktyubinsk** | **39.82** | **316** | LR | LR | 15 21 51.5 | |
| | comp=Z,36nm,18.4s,baz=100,slow=38 | | | | | | |
| **GNI** | **Garni** | **47.94** | **300** | LR | LR | 15 27 26.7 | |
| | comp=Z,27nm,19.3s,baz=114,slow=38 | | | | | | |
| **KBZ** | **Khabaz** | **49.15** | **305** | LR | LR | 15 29 37.7 | |
| | comp=Z,52nm,18.7s,baz=104,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.17** | **143** | P | **P** | **15 06 32.2** | **-1.8** |
| | 1.0nm,0.7s,baz=329,slow=7.9,SNR=9.6 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **EIL** | **Elat** | **57.69** | **289** | LR | LR | 15 33 41.5 | |
| | comp=Z,39nm,18.3s,baz=71,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **58.00** | **314** | LR | LR | 15 36 28.5 | |
| | comp=Z,25nm,20.2s,baz=96,slow=41 | | | | | | |
| **ASAR** | **Alice Springs** | **60.02** | **146** | P | P | 15 06 51.3 | -2.6 |
| | 0.3nm,0.4s,baz=328,slow=6.7,SNR=7.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **60.97** | **309** | LR | LR | 15 36 47.1 | |
| | comp=Z,37nm,20.0s,baz=86,slow=39 | | | | | | |
| **NOA** | **NORSAR Array B** | **66.16** | **328** | P | **P** | **15 07 33.1** | **-1.2** |
| | 0.4nm,0.6s,baz=75,slow=6.3,SNR=2.4 | | | | | | |
| NOA | | | | LR | LR | 15 37 56.9 | |
| | comp=Z,22nm,19.4s,baz=85,slow=37 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **66.26** | **315** | LR | LR | 15 40 09.1 | |
| | comp=Z,28nm,18.4s,baz=207,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **73.61** | **25** | P | **P** | **15 08 18.5** | **-1.6** |
| | 0.8nm,1.1s,baz=296,slow=4.9,SNR=4.6 | | | | | | |
| | 0.8nm,1.1s | | | | | | |
| **MDT** | **Midelt** | **87.52** | **306** | LR | LR | 15 57 35.4 | |
| | comp=Z,21nm,18.5s,baz=168,slow=42 | | | | | | |

**TAP 04 15:03:35.6, 24°.66N×121°.74E, h10km±1km, ML1.0, 1C, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NDS** | **Dongshan** | **0.03** | **216** | *i* P | Pg | 15 03 38.5 | +0.9 |
| | baz=215 | | | | | | |
| NDS | | | | *i* S | Sg | 15 03 39.7 | +0.8 |
| | baz=215 | | | | | | |
| **TWE** | **Neicheng** | **0.09** | **314** | *i* P | Pg | 15 03 39.0 | +0.9 |
| | baz=319 | | | | | | |
| TWE | | | | *i* S | Sg | 15 03 40.2 | +0.3 |
| | baz=319 | | | | | | |
| **TWC** | **Suao** | **0.11** | **116** | ⇑*i* P | Pb | 15 03 39.4 | -0.5 |
| | baz=114 | | | | | | |
| TWC | | | | *i* S | Sg | 15 03 41.2 | +0.7 |
| | baz=114 | | | | | | |
| **ESAO** | **Su ao** | **0.13** | **131** | *i* P | Pg | 15 03 39.4 | +0.7 |
| | baz=130 | | | | | | |
| **ENTT** | **Nioudou** | **0.16** | **263** | *i* P | Pb | 15 03 40.4 | -0.3 |
| | baz=261 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.17** | **306** | P | Pb | 15 03 40.5 | -0.4 |
| | baz=306 | | | | | | |
| **NDT** | **Datong Townshi** | **0.21** | **254** | *e*P | Pb | 15 03 40.9 | -0.7 |
| | baz=254 | | | | | | |
| **EWUT** | **Wuta** | **0.22** | **170** | P | Pb | 15 03 41.1 | -0.6 |
| | baz=170 | | | | | | |
| **LATG** | **Datong** | **0.23** | **237** | *e*P | Pb | 15 03 41.3 | -0.6 |
| | baz=237 | | | | | | |
| **NWLT** | **Wulai** | **0.24** | **299** | *e*P | Pg | 15 03 41.3 | +0.6 |
| | baz=298 | | | | | | |
| **YHNB** | **Yeheng** | **0.33** | **272** | *e*P | Pb | 15 03 42.8 | +0.5 |
| | baz=271 | | | | | | |
| **NSK** | **Sanguang** | **0.34** | **273** | P | Pg | 15 03 43.1 | +0.5 |
| | baz=272 | | | | | | |

**TAP 04 15:03:39.2, 24°.66N×121°.73E, h11km, ML1.2, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NDS** | **Dongshan** | **0.03** | **202** | *i* P | Pg | 15 03 42.1 | +0.9 |
| | baz=201 | | | | | | |
| NDS | | | | *i* S | Sg | 15 03 43.4 | +0.7 |
| | baz=201 | | | | | | |
| **TWE** | **Neicheng** | **0.08** | **319** | *i* P | Pg | 15 03 42.7 | +0.9 |
| | baz=325 | | | | | | |
| TWE | | | | *i* S | Sg | 15 03 43.9 | +0.3 |
| | baz=325 | | | | | | |
| **ILA** | **Ilan** | **0.11** | **10** | *e*S | Sg | 15 03 45.3 | +1.2 |
| | baz=14 | | | | | | |
| **TWC** | **Suao** | **0.12** | **114** | *i* P | Pb | 15 03 43.0 | -0.6 |
| | baz=112 | | | | | | |
| TWC | | | | *i* S | Sg | 15 03 46.0 | +1.6 |
| | baz=112 | | | | | | |
| **ESAO** | **Su ao** | **0.14** | **128** | P | Pb | 15 03 43.1 | -0.7 |
| | baz=127 | | | | | | |
| ESAO | | | | S | Sg | 15 03 44.9 | +0.1 |
| | baz=127 | | | | | | |
| **ENTT** | **Nioudou** | **0.15** | **263** | *e*P | Pg | 15 03 42.2 | -0.5 |
| | baz=261 | | | | | | |
| ENTT | | | | S | Sg | 15 03 46.2 | +1.1 |
| | baz=261 | | | | | | |
| **ENTT** | **Nioudou** | **0.15** | **263** | *i* S | Pg | 15 03 42.4 | -0.2 |
| | baz=261 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.16** | **308** | *e*P | Pg | 15 03 43.4 | +0.4 |
| | baz=308 | | | | | | |
| FUSB | | | | S | Sg | 15 03 47.0 | +1.4 |
| | baz=308 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.16** | **308** | S | Pg | 15 03 43.4 | +0.4 |
| | baz=306 | | | | | | |
| **NDT** | **Datong Townshi** | **0.20** | **254** | *e*P | Pb | 15 03 44.4 | -0.6 |
| | baz=254 | | | | | | |
| **EWUT** | **Wuta** | **0.22** | **168** | *e*P | Pb | 15 03 44.5 | -0.7 |
| | baz=167 | | | | | | |
| EWUT | | | | *e*S | Sg | 15 03 48.5 | +1.6 |
| | baz=167 | | | | | | |
| **LATG** | **Datong** | **0.22** | **236** | *e*P | Pb | 15 03 44.8 | -0.5 |
| | baz=236 | | | | | | |
| **NWLT** | **Wulai** | **0.24** | **300** | *e*P | Pg | 15 03 44.5 | +0.3 |
| | baz=300 | | | | | | |
| NWLT | | | | *e*S | Sg | 15 03 48.8 | +1.3 |
| | baz=300 | | | | | | |
| **YHNB** | **Yeheng** | **0.32** | **272** | *e*P | Pb | 15 03 47.3 | +0.2 |
| | baz=271 | | | | | | |
| **TIPB** | **Shuangxi** | **0.32** | **16** | P | Pb | 15 03 46.8 | -0.3 |
| | baz=15 | | | | | | |
| TIPB | | | | *e*S | Sg | 15 03 50.9 | +0.7 |
| | baz=15 | | | | | | |
| **NSK** | **Sanguang** | **0.34** | **273** | P | Pb | 15 03 47.4 | +0.1 |
| | baz=272 | | | | | | |
| NSK | | | | *e*S | Sb | 15 03 51.7 | -1.0 |
| | baz=272 | | | | | | |

**IDC 04 15:14:36.8±282.0, 48°.45N×53°.42E, h0km, Error ellipse: s-maj=130.5km s-min=80.6km az=41.0, Western Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **3.59** | **55** | I | I | 15 37 10.0 | |
| | baz=238,slow=314,SNR=2.2 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **12.84** | **316** | I | I | 16 30 20.0 | |
| | baz=125,slow=319,SNR=1.8 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **26.04** | **286** | I | I | 17 54 12.0 | |
| | baz=70,slow=344,SNR=0.4 | | | | | | |
| **I37NO** | **I37NO** | **26.78** | **333** | I | I | 17 58 30.0 | |
| | baz=123,slow=325,SNR=2.1 | | | | | | |

*SSNC **04** 15:43:39.2±1.3, 18°.81N×76°.63W, h13km±9km, MD2.7, ML1.6, MW2.1*

*JSN **04** 15:43:39.1±0.3, 18°.73N×76°.63W, h18km±5km, MD2.9*

**ISC 04 15:43:35.4±1.4, 18°.84N±0°.06×76°.60W±0°.06, h9km±12km, n9, σ0s9s77/17, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STH** | **Stony Hill** | **0.79** | **195** | *i* P | **Pb** | **15 43 51.3** | **+0.1** |
| **MTDJ** | **Mount Denham** | **1.08** | **236** | *i* P | **Pn** | **15 43 56.6** | **-0.1** |
| **MTDJ** | **Mount Denham** | **1.08** | **236** | *e*P | **Pb** | **15 43 56.2** | **-0.1** |
| MTDJ | | | | *e*S | **Sg** | **15 44 09.8** | **-0.3** |
| MTDJ | | | | IAML | | 15 44 10.4 | |
| | comp=Z,44nm,0.5s | | | | | | |
| MTDJ | | | | IAML | | 15 44 10.5 | |
| | 52nm,0.3s | | | | | | |
| **CHIV** | **Chivirico** | **1.14** | **9** | *e*P | **Pn** | **15 43 58.3** | **+0.8** |
| CHIV | | | | *e*S | **Sn** | **15 44 13.5** | **+0.2** |
| CHIV | | | | IAML | | 15 44 14.6 | |
| | comp=E,6.4nm,0.1s | | | | | | |
| CHIV | | | | IAML | | 15 44 16.3 | |
| | comp=N,7.6nm,0.1s | | | | | | |
| **LMGC** | **Las Mercedes** | **1.28** | **343** | *e*P | **Pn** | **15 43 60.0** | **+0.6** |
| LMGC | | | | *e*S | **Sg** | **15 44 15.2** | **-1.4** |
| LMGC | | | | IAML | | 15 44 17.0 | |
| | comp=N,33nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 15 44 18.0 | |
| | comp=E,26nm,0.1s | | | | | | |
| **MARVS** | **Santiago de Cu** | **1.33** | **30** | *e*P | **Pg** | **15 44 02.0** | **+1.1** |
| MARVS | | | | *e*S | **Sn** | **15 44 18.9** | **+1.0** |
| MARVS | | | | IAML | | 15 44 20.1 | |
| | comp=N,4.9nm,0.1s | | | | | | |
| MARVS | | | | IAML | | 15 44 20.7 | |
| | comp=E,5.0nm,0.1s | | | | | | |
| **RCC** | **Rio Carpintero** | **1.43** | **36** | *e*P | **Pg** | **15 44 02.6** | **-0.2** |
| RCC | | | | *e*S | **Sb** | **15 44 19.7** | **-0.8** |
| RCC | | | | *e*Sg | **Sg** | **15 44 21.9** | **+0.5** |
| RCC | | | | IAML | | 15 44 23.3 | |
| | comp=N,2.9nm,0.3s | | | | | | |
| RCC | | | | IAML | | 15 44 23.8 | |
| | comp=E,2.3nm,0.1s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.77** | **52** | *e*P | **Pb** | **15 44 08.0** | **0.0** |
| GTBY | | | | *e*S | **Sn** | **15 44 28.6** | **-0.3** |
| GTBY | | | | IAML | | 15 44 32.5 | |
| | comp=E,7.1nm,0.4s | | | | | | |
| GTBY | | | | IAML | | 15 44 33.0 | |
| | comp=E,3.3nm,0.4s | | | | | | |
| **QMBU** | **Quimbuelo** | **2.16** | **51** | *e*P | **Pb** | **15 44 13.5** | **-1.1** |
| QMBU | | | | *e*S | **Sn** | **15 44 38.0** | **-0.5** |
| QMBU | | | | IAML | | 15 44 40.1 | |
| | comp=N,8.1nm,0.3s | | | | | | |
| QMBU

*IDC **04** 15:49:33.1±5.9, 35°.63N×69°.69E, h54km±49km, mb3.5/8, mbtmp3.9/12, ML3.9/4, Error ellipse: s-maj=40.9km s-min=27.3km az=10.0*
*NNC **04** 15:49:41.6±1.8, 36°.81N×69°.36E, h0km, mb4.3, mpv4.3, Error ellipse: s-maj=16.6km s-min=11.0km az=156.0*
**ISC 04 15:49:33.7±1.1, 35°.8N±0°.1×69°.7E±0°.1, h50km, n31, σ1°83/35, mb3.6/7, 14C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** SNR=46 | **7.03** | **25** | P | **Pn** | **15 51 16.2** | **+1.9** |
| **KK31** | **Karatay Array** 12nm,0.4s,baz=200,slow=14,SNR=145 | **7.29** | **5** | P | **Pn** | **15 51 17.9** | **+0.4** |
| KK31 | 11nm,0.7s,baz=194,slow=27,SNR=6.2 | | | S | Sn | 15 52 31.4 | -7.5 |
| **UCH** | **Uchtor** SNR=9.2 | **7.42** | **29** | P | **Pn** | **15 51 22.0** | **+2.2** |
| **EKS2** | **Erkin-Say** SNR=7.0 | **7.53** | **24** | P | **Pn** | **15 51 22.7** | **+1.8** |
| **AAK** | **Ala-Archa** SNR=15 | **7.76** | **27** | P | **Pn** | **15 51 26.8** | **+2.6** |
| **AAK** | **Ala-Archa** 7.7nm,0.3s,baz=193,slow=6.7,SNR=29 | **7.76** | **27** | P | **Pn** | **15 51 26.7** | **+2.6** |
| AAK | 7.2nm,0.3s,baz=337,slow=23,SNR=12 | | | S | **Sn** | **15 52 47.4** | **-3.3** |
| **AAK** | **Ala-Archa** 14nm,0.5s | **7.76** | **27** | ⇑P | **Pn** | **15 51 26.5** | **+2.3** |
| AAK | 20nm,0.6s | | | ⇑S | **Sn** | **15 52 47.9** | **-2.8** |
| **KBK** | **Karagaybulak** SNR=9.2 | **7.95** | **29** | P | **Pn** | **15 51 29.8** | **+2.9** |
| **CHMS** | **Chumysh** SNR=16 | **8.17** | **27** | P | **Pn** | **15 51 31.9** | **+2.2** |
| **CHMS** | **Chumysh** 11nm,0.8s | **8.17** | **27** | ⇑P | **Pn** | **15 51 31.0** | **+1.3** |
| CHMS | 15nm,0.6s | | | ⇑S | **Sn** | **15 52 57.3** | **-3.3** |
| **USP** | **Ospenovka** SNR=6.8 | **8.31** | **25** | P | **Pn** | **15 51 33.2** | **+1.6** |
| **TKM2** | **Tokmak 2** SNR=8.8 | **8.44** | **31** | P | **Pn** | **15 51 35.4** | **+1.9** |
| **TKM2** | **Tokmak 2** 7.3nm,0.8s | **8.44** | **31** | ⇑P | **Pn** | **15 51 35.3** | **+1.8** |
| TKM2 | 5.6nm,0.7s | | | ⇑S | **Sn** | **15 53 06.9** | **-0.6** |
| **OTUK** | **Ortayu** 2.5nm,0.6s | **12.56** | **8** | ⇑P | **Pn** | **15 52 29.2** | **-0.4** |
| OTUK | 3.6nm,0.7s | | | ⇑S | Sn | 15 54 40.6 | -7.3 |
| **MAKZ** | **Makanchi** 31nm,1.4s | **14.33** | **36** | ⇓Pn | **P** | **15 53 01.7** | **+2.2** |
| MAKZ | 8.8nm,1.2s | | | ⇓Sn | Sn | 15 54 21.8 | -69 |
| MAKZ | 13nm,1.4s | | | ⇑Lg | Lg | 15 54 58.8 | |
| **MK31** | **Makanchi Array** 3.1nm,0.6s,baz=200,slow=9.7,SNR=13 | **14.47** | **37** | Pn | **P** | **15 53 01.9** | **+0.8** |
| MK31 | 23nm,1.6s,baz=190,slow=26 | | | ⇑Sn | Sn | 15 54 23.1 | -71 |
| MK31 | 13nm,1.5s,baz=198,slow=21 | | | ⇑Lg | Lg | 15 55 00.2 | |
| **MKAR** | **Makanchi Array** 0.2nm,0.3s,baz=214,slow=12,SNR=5.1 4.3nm,1.1s | **14.47** | **37** | P | **Pn** | **15 52 56.0** | **+0.5** |
| **AB31** | **Akbulak array** 1.8nm,0.5s | **15.18** | **335** | ⇑P | **Pn** | **15 53 03.9** | **-0.9** |
| AB31 | 0.8nm,0.4s | | | ⇑S | Sn | 15 55 42.4 | -9.2 |
| **KURBB** | **Kurchatov Arra** 0.2nm,0.3s,baz=206,slow=11,SNR=21 4.7nm,0.8s | **16.11** | **21** | P | **Pn** | **15 53 19.2** | **+2.6** |
| **AKTO** | **Aktyubinsk** 0.6nm,0.3s,baz=152,slow=10.0,SNR=7.4 2.2nm,0.6s | **16.85** | **334** | P | **Pn** | **15 53 25.9** | **0.0** |
| **BVA0** | **Borovoye Array** 1.2nm,0.4s,baz=168,slow=11,SNR=13 | **17.19** | **2** | P | **Pn** | **15 53 30.2** | **0.0** |
| **BRVK** | **Borovoye** 3.2nm,0.9s | **17.22** | **1** | ⇑P | **Pn** | **15 53 31.1** | **+0.5** |
| **ZALV** | **Zalesovo Beam** 18nm,0.6s,baz=221,slow=10,SNR=80 18nm,0.6s | **20.98** | **26** | P | **P** | **15 54 12.9** | **+0.5** |
| **ARCES** | **ARCESS Array B** 1.6nm,0.7s,baz=104,slow=7.5,SNR=6.1 1.6nm,0.7s | **41.35** | **338** | P | **P** | **15 57 15.2** | **+1.0** |
| **HFS** | **Hagfors** 1.1nm,0.6s,baz=84,slow=13,SNR=5.1 1.1nm,0.6s | **42.92** | **322** | P | **P** | **15 57 28.2** | **+1.0** |
| **NB2** | **NORSAR Subarra** comp=Z,0.6nm,0.6s,baz=97,slow=8.6 | **44.26** | **324** | P | **P** | **15 57 37.0** | **-1.0** |
| **NOA** | **NORSAR Array B** comp=Z,0.9nm,0.8s,baz=97,slow=7.9,SNR=3.9 comp=Z,0.9nm,0.8s | **44.26** | **324** | P | **P** | **15 57 37.3** | **-0.7** |
| **ESDC** | **Sonseca Array** comp=Z,0.3nm,0.7s,baz=51,slow=8.4,SNR=5.0 comp=Z,0.3nm,0.7s | **56.80** | **298** | P | **P** | **15 59 13.2** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.2nm,0.3s,baz=51,slow=7.0,SNR=1.9 comp=Z,0.2nm,0.3s | **64.61** | **268** | P | **P** | **16 00 05.3** | **-1.0** |
| **ILAR** | **Eielson Array** comp=Z,0.3nm,0.7s,baz=316,slow=5.1,SNR=4.7 comp=Z,0.3nm,0.7s | **75.71** | **15** | P | **P** | **16 01 13.6** | **+0.1** |
| **ASAR** | **Alice Springs** comp=Z,0.4nm,0.8s,baz=304,slow=5.3,SNR=2.6 comp=Z,0.4nm,0.8s | **84.78** | **124** | P | **P** | **16 02 01.0** | **-1.9** |

*IDC **04** 16:15:48.9±1.3, 53°.43N×160°.26W, h0km, mb3.5/8, mbtmp3.5/11, ML3.5/3, Error ellipse: s-maj=29.3km s-min=23.2km az=10.0*
*NEIC **04** 16:15:51.3±1.1, 53°.4N±0°.1×159°.89W±0°.09, h21km±12km, ML3.3/14, ML3.5(AEIC), Error ellipse: s-maj=15.6km s-min=6.4km az=164.0*
*AEIC **04** 16:15:53.0±1.3, 53°.45N±0°.08×159°.90W±0°.08, h25km±7km, Error ellipse: s-maj=12.9km s-min=6.2km az=158.0*
**ISC 04 16:15:50.9±0.8, 53°.49N±0°.08×159°.93W±0°.05, h10km, n74, σ1°90/77, mb3.5/8, South of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNBA** | **Chernabura Isl** | **1.34** | **8** | | **Pn** | **16 16 15.3** | **-0.4** |
| CNBA | | | | | **Sn** | **16 16 32.2** | **-1.4** |
| **CNBA** | **Chernabura Isl** comp=E,319nm,0.5s | **1.34** | **8** | IAML | | 16 16 33.9 | |
| **SDPT** | **Sand Point** | **1.89** | **350** | P | **Pn** | **16 16 23.1** | **-0.1** |
| **SDPT** | **Sand Point** | **1.89** | **350** | | **Pn** | **16 16 23.0** | **-0.1** |
| SDPT | | | | | **Sn** | **16 16 46.2** | **-0.8** |
| **SDPT** | **Sand Point** comp=N,151nm,0.6s | **1.89** | **350** | IAML | | 16 16 49.1 | |
| SDPT | comp=E,227nm,0.4s | | | IAML | | 16 16 49.8 | |
| **HAG** | **Hague Volcano** | **2.16** | **328** | | **Pn** | **16 16 27.1** | **+0.1** |
| **PS4A** | **Pavlof South-4** | **2.17** | **330** | | **Pn** | **16 16 27.2** | **+0.1** |
| PS4A | | | | | **Sn** | **16 16 53.5** | **-0.6** |
| **PVV** | **Pavlof Volcano** | **2.18** | **331** | | **Pn** | **16 16 27.2** | **0.0** |
| **PS1A** | **Pavlof South-1** | **2.20** | **332** | | **Pn** | **16 16 27.8** | **+0.2** |
| PS1A | | | | | **Sn** | **16 16 54.0** | **-0.8** |
| **PN7A** | **Pavlof North-7** | **2.29** | **329** | | **Pn** | **16 16 29.2** | **+0.4** |
| PN7A | | | | | **Sn** | **16 16 57.7** | **+0.7** |
| **FALS** | **False Pass** | **2.46** | **305** | P | **Pn** | **16 16 30.8** | **-0.3** |
| **FALS** | **False Pass** | **2.46** | **305** | | **Pn** | **16 16 30.6** | **-0.5** |
| **S12K** | **Black Hills** | **2.54** | **332** | | **Pn** | **16 16 32.8** | **+0.6** |
| **ISLZ** | **Isanotski Laza** | **2.55** | **301** | | **Pn** | **16 16 31.7** | **-0.6** |
| ISLZ | | | | | **Sn** | **16 17 01.6** | **-1.8** |
| **ISNN** | **Isanotski Nort** | **2.63** | **302** | | **Pn** | **16 16 33.6** | **+0.2** |
| ISNN | | | | | **Sn** | **16 17 04.5** | **-0.9** |
| **SSLS** | **Shishaldin Sou** | **2.69** | **299** | | **Pn** | **16 16 34.3** | **0.0** |
| **WECS** | **Westdahl Cape** | **3.05** | **292** | | **Pn** | **16 16 38.9** | **-0.3** |
| **CHIR** | **Chirikof Islan** | **3.42** | **45** | | **Pn** | **16 16 43.9** | **-0.3** |
| **CHIR** | **Chirikof Islan** comp=E,47nm,1.1s | **3.42** | **45** | IAML | | 16 17 12.3 | |
| **AKSA** | **Akutan Strait** | **3.48** | **283** | | **Pn** | **16 16 44.6** | **-0.4** |
| **AHB** | **Akutan Harbor** | **3.55** | **282** | | **Pn** | **16 16 45.6** | **-0.4** |
| **AKLV** | **Akutan Long Va** | **3.63** | **283** | | **Pn** | **16 16 47.5** | **+0.3** |
| **AKGG** | **Akutan Green G** | **3.66** | **284** | | **Pn** | **16 16 47.9** | **+0.3** |
| **LVA** | **Lava Point** | **3.68** | **283** | Pn | **Pn** | **16 16 48.1** | **+0.2** |
| LVA | comp=E,91nm,0.9s | | | IAML | | 16 17 33.2 | |
| **UNV** | **Unalaska Valle** | **3.93** | **278** | P | **Pn** | **16 16 51.3** | **+0.1** |
| **UNV** | **Unalaska Valle** | **3.93** | **278** | | **Pn** | **16 16 50.2** | **-1.0** |
| **MREP** | **Makushin Rep't** | **4.07** | **277** | | **Pn** | **16 16 52.9** | **-0.4** |
| **MSW** | **Makushin Switc** | **4.10** | **279** | | **Pn** | **16 16 53.1** | **-0.4** |
| **MAPS** | **Pakushin South** | **4.19** | **277** | | **Pn** | **16 16 54.5** | **-0.2** |
| **SII** | **Sitkinak Islan** | **4.51** | **45** | P | **Pn** | **16 16 59.2** | **-0.1** |
| **PLK4** | **Peulik 4** | **4.62** | **25** | | **Pn** | **16 17 01.5** | **+0.7** |
| **PLK4** | **Peulik 4** comp=N,40nm,0.8s | **4.62** | **25** | IAML | | 16 18 00.4 | |
| PLK4 | comp=E,38nm,1.1s | | | IAML | | 16 18 02.1 | |
| **PLK1** | **Peulik 1** | **4.71** | **22** | | **Pn** | **16 17 02.6** | **+0.7** |
| **PLK5** | **Peulik 5** | **4.83** | **20** | | **Pn** | **16 17 03.8** | **+0.1** |
| **OKSP** | **Okmok Steeple** | **5.01** | **271** | | **Pn** | **16 17 05.5** | **-0.7** |
| **CNTC** | **Contact Creek** | **5.30** | **24** | | **Pn** | **16 17 10.7** | **+0.5** |
| **OHAK** | **Old Harbor** comp=E,34nm,2.9s | **5.32** | **43** | P | **Pn** | **16 17 09.9** | **-0.4** |
| **OHAK** | **Old Harbor** | **5.32** | **43** | | **Pn** | **16 17 09.8** | **-0.4** |
| **OHAK** | **Old Harbor** comp=E,11nm,1.2s | **5.32** | **43** | IAML | | 16 18 23.0 | |
| **ANCK** | **Angle Creek** | **5.34** | **26** | | **Pn** | **16 17 11.2** | **+0.6** |
| **NIKH** | **Nikolski High** comp=E,35nm,1.7s | **5.39** | **268** | P | **Pn** | **16 17 11.1** | **-0.2** |
| **NIKH** | **Nikolski High** | **5.39** | **268** | | **Pn** | **16 17 10.6** | **-0.7** |
| **O15K** | **Ungalikthiuk R** | **5.70** | **1** | | **Pn** | **16 17 15.6** | **+0.1** |
| **O14K** | **Tigyukauivet M** | **5.82** | **353** | | **Pn** | **16 17 17.3** | **+0.1** |
| **CLCO** | **Concord Point,** | **5.94** | **267** | | **Pn** | **16 17 18.5** | **-0.4** |
| **KDAK** | **Kodiak Island** | **5.98** | **41** | Pn | **Pn** | **16 17 18.9** | **-0.4** |
| **KDAK** | **Kodiak Island** comp=E,1.2nm,0.3s,baz=224,slow=5.6,SNR=29 | **5.98** | **41** | Pn | **Pn** | **16 17 18.1** | **-1.2** |
| KDAK | baz=301,slow=18 comp=E,2.7nm,0.3s | | | Sn | **Sn** | **16 18 23.4** | **-4.5** |
| **CLES** | **Cleveland East** | **6.04** | **268** | | **Pn** | **16 17 19.9** | **-0.2** |
| **SYI** | **Shuyak Island** | **6.64** | **36** | | **Pn** | **16 17 27.8** | **-0.6** |
| **N15K** | **Kwethluk River** | **6.70** | **359** | Pn | **Pn** | **16 17 30.6** | **+1.4** |
| **O18K** | **Koktuh Hills** | **6.89** | **20** | Pn | **Pn** | **16 17 33.7** | **+1.9** |
| **M13K** | **Dall Lake** | **7.19** | **346** | Pn | **Pn** | **16 17 37.4** | **+1.5** |
| **M14K** | **Bethel** | **7.36** | **352** | Pn | **Pn** | **16 17 39.0** | **+0.7** |
| **M11K** | **Mekoryuk** | **7.71** | **336** | | **Pn** | **16 17 42.2** | **-0.9** |
| **CNPM** | **China Poot** | **7.72** | **35** | | **Pn** | **16 17 42.9** | **-0.3** |
| **L14K** | **Kuka Creek** | **8.01** | **350** | Pn | **Pn** | **16 17 47.6** | **+0.4** |
| **M17K** | **Holitna River** | **8.04** | **9** | | **Pn** | **16 17 47.7** | **0.0** |
| **K13K** | **Kusilvak Mount** | **8.83** | **345** | Pn | **Pn** | **16 17 59.0** | **+0.5** |
| **SUA** | **Susitna One** | **9.39** | **28** | Pn | **Pn** | **16 18 07.2** | **+1.0** |
| **PWL** | **Port Wells** | **9.69** | **36** | Pn | **Pn** | **16 18 09.5** | **-0.8** |
| **GHO** | **Glory Hole Cre** | **10.17** | **31** | Pn | **Pn** | **16 18 17.5** | **+0.6** |
| **SCM** | **Sheep Creek Mo** | **10.72** | **34** | Pn | **Pn** | **16 18 24.4** | **-0.1** |
| **KLU** | **Klutina** | **10.98** | **38** | Pn | **Pn** | **16 18 28.6** | **+0.6** |
| **DHY** | **Denali Highway** | **11.63** | **29** | Pn | **Pn** | **16 18 36.8** | **-0.2** |
| **ILAR** | **Eielson Array** comp=E,0.1nm,0.3s,baz=219,slow=13,SNR=6.4 comp=E,0.3nm,0.5s | **13.10** | **25** | Pn | **Pn** | **16 18 53.9** | **-3.0** |
| **INK** | **Inuvik** comp=E,0.2nm,0.3s,baz=261,slow=10,SNR=5.1 comp=E,1.3nm,0.4s | **19.38** | **30** | P | **P** | **16 20 18.0** | **+1.6** |
| **YKA** | **Yellowknife Ar** comp=E,0.2nm,0.4s,baz=222,slow=9.1,SNR=1.4 comp=E,0.2nm,0.4s | **25.14** | **51** | P | **P** | **16 21 17.7** | **+1.9** |
| **NVAR** | **Mina Array Bea** comp=E,0.4nm,0.6s,baz=302,slow=8.5,SNR=3.7 comp=E,0.4nm,0.6s | **32.10** | **101** | P | **P** | **16 22 19.6** | **+1.4** |
| **PDAR** | **Pinedale Array** comp=E,0.2nm,0.5s,baz=301,slow=3.8,SNR=1.7 comp=E,0.2nm,0.5s | **34.60** | **87** | P | **P** | **16 22 41.6** | **+1.6** |
| **MJAR** | **Matsushiro Arr** comp=E,0.2nm,0.5s,baz=72,slow=7.8,SNR=4.2 comp=E,0.2nm,0.5s | **45.39** | **274** | P | **P** | **16 24 07.2** | **-2.2** |
| **TXAR** | **Lajitas Array** comp=E,0.5nm,0.7s,baz=296,slow=4.5,SNR=8.1 comp=E,0.5nm,0.7s | **47.11** | **98** | P | **P** | **16 24 23.6** | **+0.5** |
| **FINES** | **FINESS Array B** comp=E,3.3nm,1.1s,baz=15,slow=8.1,SNR=5.0 comp=E,3.3nm,1.1s | **65.31** | **357** | P | **P** | **16 26 32.7** | **+0.2** |
| **HFS** | **Hagfors** comp=E,0.5nm,0.4s,baz=52,slow=2.4,SNR=5.0 comp=E,0.5nm,0.4s | **66.61** | **3** | P | **P** | **16 26 40.9** | **0.0** |
| **ESDC** | **Sonseca Array** comp=E,0.2nm,0.7s,baz=339,slow=6.9,SNR=1.7 comp=E,0.2nm,0.7s | **84.91** | **18** | P | **P** | **16 28 25.6** | **-0.3** |

*NNC **04** 16:18:59.1±2.4, 38°.26N×68°.32E, h0km, mb4.0, mpv3.8, Error ellipse: s-maj=19.4km s-min=16.5km az=26.0*
*IDC **04** 16:19:02.8±1.2, 38°.27N×69°.52E, h0km, mb3.7/4, mbtmp3.7/8, ML3.3/4, Error ellipse: s-maj=22.6km s-min=16.4km az=141.0*
**ISC 04 16:19:04.5±1.2, 38°.65N±0°.09×69°.05E±0°.09, h10km, n19, σ2°89/22, mb3.7/4, 5C-2D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BRLS** | **Boroldaу** 4.8nm,0.2s | **4.42** | **8** | Pg | **Pn** | **16 20 11.8** | **+0.2** |
| BRLS | 15nm,0.6s | | | Lg | Lg | 16 21 19.3 | |
| **KK31** | **Karatay Array** 1.1nm,0.3s,baz=199,slow=15,SNR=25 | **4.58** | **14** | ⇑Pn | **Pn** | **16 20 17.1** | **+3.2** |
| KK31 | 7.4nm,0.6s,baz=190,slow=17,SNR=18 | | | Pg | **Pg** | **16 20 31.1** | **-1.2** |
| KK31 | 4.5nm,0.5s,baz=202,slow=25 | | | ⇑Sn | **Sb** | **16 21 18.3** | **-2.0** |
| KK31 | 19nm,0.7s | | | ⇑Lg | Lg | 16 21 41.1 | |
| **AML** | **Almayashu** SNR=18 | **4.96** | **44** | P | **Pn** | **16 20 22.9** | **+3.4** |
| **MRKS** | **Merke** 9.8nm,0.6s | **5.18** | **36** | Pg | **Pn** | **16 20 25.8** | **+3.7** |
| MRKS | 13nm,0.7s | | | Lg | Lg | 16 21 44.7 | |
| **EKS2** | **Erkin-Say** SNR=13 | **5.38** | **40** | P | **Pn** | **16 20 28.5** | **+3.5** |
| **UCH** | **Uchtor** SNR=13 | **5.49** | **48** | P | **Pn** | **16 20 29.1** | **+2.4** |
| **AAK** | **Ala-Archa** 2.4nm,0.3s,baz=191,slow=2.8,SNR=7.2 | **5.74** | **44** | Pn | **Pn** | **16 20 32.0** | **+2.1** |
| AAK | 1.2nm,0.3s,baz=152,slow=17,SNR=1.9 | | | Sn | **Sn** | **16 21 37.5** | **+1.4** |
| **AAK** | **Ala-Archa** 3.7nm,0.4s,baz=202,slow=25 | **5.74** | **44** | Pn | Pn | 16 20 35.4 | +5.4 |
| **CHMS** | **Chumysh** SNR=7.2 | **6.13** | **43** | P | **Pn** | **16 20 39.0** | **+3.9** |
| **TKM2** | **Tokmak 2** SNR=7.6 | **6.55** | **47** | P | **Pn** | **16 20 41.0** | **0.0** |
| **TKM2** | **Tokmak 2** 4.7nm,0.6s,baz=202,slow=25 | **6.55** | **47** | ⇑Pn | **Pn** | **16 20 45.2** | **+4.2** |
| TKM2 | 8.0nm,0.7s,baz=202,slow=25 | | | ⇓Lg | Lg | 16 22 48.4 | |
| **AB31** | **Akbulak array** 0.3nm,0.3s,baz=202,slow=25 | **12.46** | **331** | ⇑P | **Pn** | **16 21 59.8** | **-2.0** |
| AB31 | 0.5nm,0.5s,baz=202,slow=25 | | | ⇓S | **Sn** | **16 24 21.3** | **+0.8** |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=222,slow=14,SNR=2.4 0.9nm,0.7s | **12.68** | **46** | Pn | **Pn** | **16 22 04.3** | **-0.5** |
| **AKTO** | **Aktyubinsk** 0.2nm,0.3s,baz=159,slow=6.4,SNR=2.1 0.8nm,0.5s | **14.15** | **330** | Pn | **P** | **16 22 28.8** | **-3.7** |
| **ZALV** | **Zalesovo Beam** 0.2nm,0.3s,baz=218,slow=12,SNR=6.5 2.0nm,0.7s | **18.71** | **30** | P | **P** | **16 23 22.5** | **-0.5** |
| **BRTR** | **Keskin Array B** 0.3nm,0.6s,baz=95,slow=7.4,SNR=2.0 0.3nm,0.6s | **27.36** | **284** | P | **P** | **16 24 54.2** | **+4.2** |
| **FINES** | **FINESS Array B** 2.6nm,0.9s,baz=128,slow=9.0,SNR=3.9 2.6nm,0.9s | **34.84** | **325** | P | **P** | **16 25 58.7** | **+3.3** |
| **WRA** | **Warramunga Arr** 0.4nm,0.7s,baz=322,slow=4.9,SNR=5.5 0.4nm,0.7s | **84.43** | **121** | P | **P** | **16 31 34.5** | **-3.0** |
| **ASAR** | **Alice Springs** 0.3nm,0.8s,baz=311,slow=4.7,SNR=6.0 0.3nm,0.8s | **86.74** | **124** | P | **P** | **16 31 46.6** | **-2.3** |

*IDC **04** 16:45:07.6±1.2, 36°.16N×69°.79E, h0km, mb3.8/12, mbtmp3.9/15, ML3.6/3, MS2.9/7, Error ellipse: s-maj=24.3km s-min=17.9km az=25.0*
*NNC **04** 16:45:16.0±4.9, 37°.00N×68°.85E, h0km, mb4.5, mpv4.2, Error ellipse: s-maj=40.4km s-min=29.3km az=172.0*
**ISC 04 16:45:10.1±1.1, 36°.29N±0°.10×69°.51E±0°.09, h10km, n31, σ2°25/30, mb3.8/11, MS2.9/5, 6C-5D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** SNR=24 | **6.67** | **28** | P | **Pn** | **16 46 50.6** | **+2.1** |
| **KK31** | **Karatay Array** 4.6nm,0.4s,baz=197,slow=14,SNR=78 | **6.85** | **6** | Pn | **Pn** | **16 46 50.1** | **-0.4** |
| KK31 | | | | ⇑Sn | **Sn** | **16 48 03.3** | **-5.2** |
| KK31 | 4.8nm,0.3s,baz=198,slow=22 **Karatay Array** 3.9nm,0.4s,baz=187,slow=13 | **6.85** | **6** | ⇑Pn | **Pg** | **16 47 23.1** | **+2.0** |
| KK31 | 22nm,0.6s,baz=187,slow=27 | | | ⇓Lg | Lg | 16 48 40.6 | |
| **UCH** | **Uchtor** SNR=24 | **7.08** | **32** | P | **Pn** | **16 46 56.2** | **+2.1** |
| **AAK** | **Ala-Archa** 1.6nm,0.3s,baz=230,slow=17,SNR=7.6 | **7.41** | **30** | Pn | **Pn** | **16 46 59.7** | **+1.2** |
| AAK | 1.8nm,0.3s,baz=166,slow=21,SNR=1.3 | | | Sn | **Sn** | **16 48 19.3** | **-3.4** |
| AAK | comp=Z,45nm,20.8s,baz=228,slow=41 4.2nm,0.3s | | | LR | LR | 16 50 14.8 | |
| **AAK** | **Ala-Archa** 11nm,0.6s,baz=198,slow=22 | **7.41** | **30** | ⇑P | Pn | 16 47 01.3 | +2.8 |
| AAK | 16nm,0.5s,baz=198,slow=22 | | | ⇑S | **Sn** | **16 48 23.5** | **+0.8** |
| **CHMS** | **Chumysh** SNR=14 | **7.82** | **29** | P | **Pn** | **16 47 06.0** | **+2.1** |
| **CHMS** | **Chumysh** 16nm,0.6s,baz=198,slow=22 | **7.82** | **29** | ⇓P | **Pn** | **16 47 06.4** | **+2.4** |
| CHMS | 14nm,0.7s,baz=198,slow=22 | | | ⇓S | **Sn** | **16 48 33.3** | **+0.8** |
| **USP** | **Ospenovka** SNR=5.3 | **7.95** | **27** | P | **Pn** | **16 47 07.2** | **+1.5** |
| **TKM2** | **Tokmak 2** SNR=8.4 | **8.11** | **33** | P | **Pn** | **16 47 09.6** | **+1.5** |
| **TKM2** | **Tokmak 2** 8.8nm,0.8s,baz=198,slow=22 | **8.11** | **33** | ⇑P | Pn | 16 47 11.0 | +2.9 |
| TKM2 | 5.4nm,0.6s,baz=198,slow=22 | | | ⇓S | **Sn** | **16 48 41.6** | **+1.7** |
| **AB31** | **Akbulak array** 1.4nm,0.3s,baz=198,slow=22 | **14.72** | **335** | ⇓P | **Pn** | **16 48 34.6** | **-3.7** |
| AB31 | 2.5nm,0.6s,baz=198,slow=22 | | | ⇑S | Sn | 16 51 10.9 | -10 |
| **KURBB** | **Kurchatov Arra** baz=210,slow=10,SNR=2.2 0.2nm,0.3s | **15.73** | **22** | Pn | **Pn** | **16 48 47.3** | **-4.3** |
| **AKTO** | **Aktyubinsk** 0.7nm,0.3s,baz=140,slow=12,SNR=12 | **16.39** | **333** | Pn | **Pn** | **16 49 00.7** | **+0.5** |
| AKTO | comp=Z,46nm,20.1s,baz=346,slow=40 2.9nm,0.5s | | | LR | LR | 16 56 20.6 | |
| **ZALV** | **Zalesovo Beam** 2.0nm,0.4s,baz=219,slow=9.8,SNR=11 2.0nm,0.4s | **20.62** | **26** | P | **P** | **16 49 48.1** | **-1.2** |
| **ARU** | **Arti** 2.8nm,0.5s,baz=167,slow=8.8,SNR=6.2 | **21.46** | **343** | P | **P** | **16 49 59.4** | **+1.0** |
| ARU | comp=Z,22nm,19.6s,baz=107,slow=38 2.8nm,0.5s | | | LR | LR | 16 58 39.8 | |
| **KBZ** | **Khabaz** 3.0nm,0.9s,baz=103,slow=8.9,SNR=3.1 3.0nm,0.9s | **21.64** | **298** | P | **P** | **16 50 02.1** | **+1.8** |
| **KVAR** | **Kislovodsk Arr** 1.0nm,0.3s,baz=135,slow=18,SNR=1.5 1.0nm,0.3s | **21.82** | **299** | P | **P** | **16 50 03.5** | **+0.9** |
| **BELG** | **Belogorsnoye** 13nm,0.7s,baz=71,slow=9.5,SNR=2.5 13nm,0.7s | **22.32** | **323** | P | **P** | **16 50 08.1** | **+0.5** |
| **KIRV** | **Kirov** comp=Z,35nm,20.4s,baz=180,slow=41 | **25.92** | **336** | LR | LR | 17 03 06.3 | |
| **SONM** | **Songino Array** 0.2nm,0.3s,baz=265,slow=12,SNR=2.1 0.2nm,0.3s | **29.44** | **55** | P | **P** | **16 51 13.2** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** comp=Z,21nm,18.1s,baz=175,slow=39 | **31.42** | **117** | LR | LR | 17 05 13.0 | |
| **AKASG** | **Malin Array Be** 0.6nm,0.5s,baz=84,slow=7.3,SNR=6.3 0.6nm,0.5s | **32.15** | **309** | P | **P** | **16 51 39.4** | **+1.8** |
| **FINES** | **FINESS Array B** 2.4nm,1.0s,baz=134,slow=16,SNR=5.7 2.4nm,1.0s | **36.99** | **327** | P | **P** | **16 52 18.9** | **-0.5** |
| **ARCES** | **ARCESS Array B** comp=Z,20nm,19.9s,baz=325,slow=39 | **40.88** | **338** | LR | LR | 17 11 59.0 | |
| **HFS** | **Hagfors** 1.4nm,0.5s,baz=104,slow=9.6,SNR=12 1.4nm,0.5s | **42.49** | **322** | P | **P** | **16 53 07.3** | **+2.2** |
| **NB2** | **NORSAR Subarra** comp=Z,0.5nm,0.6s,baz=97,slow=8.6 | **43.83** | **323** | P | **P** | **16 53 17.8** | **+1.8** |
| **NOA** | **NORSAR Array B** comp=Z,0.6nm,0.6s,baz=97,slow=8.0,SNR=5.2 comp=Z,0.6nm,0.6s | **43.83** | **323** | P | **P** | **16 53 17.6** | **+1.6** |
| **KSRS** | **Korea Array** comp=Z,25nm,18.1s,baz=150,slow=39 | **46.08** | **70** | LR | LR | 17 15 04.9 | |
| **WRA** | **Warramunga Arr** comp=Z,0.5nm,0.8s,baz=322,slow=5.0,SNR=4.9 comp=Z,0.5nm,0.8s | **82.91** | **121** | P | **P** | **16 57 32.0** | **-3.3** |
| **ASAR** | **Alice Springs** comp=Z,0.2nm,0.7s,baz=312,slow=4.6,SNR=5.0 comp=Z,0.2nm,0.7s | **85.13** | **124** | P | **P** | **16 57 45.2** | **-1.3** |

*IDC **04** 17:02:00.2±1.1, 34°.59N×46°.21E, h0km, mb3.7/12, mbtmp3.8/18, ML4.0/5, MS3.1/19, Error ellipse: s-maj=21.9km s-min=14.4km az=170.0*
*NEIC **04** 17:02:03.4±1.9, 34°.55N±0°.06×46°.23E±0°.07, h26km±8km, mb4.1/22, Error ellipse: s-maj=9.3km s-min=7.1km az=145.0*
*ISN **04** 17:02:03.8±0.6, 34°.63N×46°.35E, h12km±7km, ML4.2*
*TEH **04** 17:02:04.1, 34°.62N×46°.35E, h8km±24km, ML4.1*
**ISC 04 17:02:03.9±0.9, 34°.65N±0°.03×46°.33E±0°.02, h23km±7km, n229, σ2°14/232, mb3.9/32, MS2.9/16, 7C-7D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.07** | **46** | Pg | **Pb** | **17 02 06.9** | **-1.4** |
| **IGHG** | **Ghaleghazi** | **0.38** | **149** | Pg | **Pb** | **17 02 12.1** | **-0.1** |
| **ILIN** | **Lien** | **0.58** | **63** | Pg | **Pb** | **17 02 15.7** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.63** | **257** | Pg | **Pb** | **17 02 16.2** | **0.0** |
| **GLG1** | **Gilan-e-Gharb** | **0.64** | **213** | Pg | **Pb** | **17 02 16.2** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.70** | **123** | Pg | **Pb** | **17 02 17.2** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **1.03** | **186** | Pg | **Pb** | **17 02 23.9** | **+0.8** |
| ILBA | | | | Sg | **Sn** | **17 02 37.8** | **+1.0** |
| **SNQR** | **Sonqor, Kerman** | **1.09** | **79** | Pg | **Pb** | **17 02 25.0** | **+0.8** |
| **IBZA** | **Bozab** | **1.28** | **98** | Pg | **Pb** | **17 02 28.1** | **+0.7** |
| IBZA | | | | Sg | **Sb** | **17 02 45.8** | **+2.3** |
| **IBDR** | **Badra** | **1.58** | **192** | *e*Pn | **Pb** | **17 02 33.0** | **+0.6** |
| IBDR | | | | *e*Sn | **Sb** | **17 02 54.0** | **+2.2** |
| IBDR | comp=E,4μm,0.6s | | | AML | AML | 17 02 59.6 | |
| IBDR | comp=N,3μm,0.7s | | | AML | AML | 17 03 00.0 | |
| **SDS1** | **Sardasht. Az.** | **1.64** | **335** | Pg | **Pb** | **17 02 34.5** | **+0.9** |
| **IKFM** | **Kafar-mosalman** | **1.69** | **131** | Pg | **Pb** | **17 02 35.3** | **+1.0** |
| **IKRK** | **Kirkuk** | **1.79** | **295** | *e*Pn | **Pb** | **17 02 36.5** | **+0.4** |
| IKRK | | | | *e*Sn | **Sb** | **17 03 01.0** | **+2.8** |
| IKRK | comp=E,4μm,0.5s | | | AML | AML | 17 03 05.0 | |
| IKRK | comp=N,4μm,0.6s | | | AML | AML | 17 03 09.7 | |
| **HSAM** | **Samen** | **1.93** | **103** | Pn | **Pb** | **17 02 39.5** | **+1.0** |
| **BHD** | **Baghdad** | **2.13** | **230** | *e*Pn | **Pb** | **17 02 41.0** | **-0.8** |
| BHD | | | | *e*Sn | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GURO** | **Guroymak-BITLI** | **5.20** | **320** | *e*P | | **Pn** | **17 03 19.2** | **-1.3** |
| **GURO** | **Guroymak-BITLI** | **5.20** | **320** | | | **Pn** | **17 03 19.9** | **-0.6** |
| **IGAR** | **Gharneh** | **5.27** | **114** | Pn | | **Pn** | **17 03 25.3** | **+3.8** |
| **IZEF** | **Zefreh** | **5.29** | **108** | Pn | | **Pn** | **17 03 25.2** | **+3.3** |
| **IFIR** | **Firoozkooh** | **5.35** | **78** | Pn | | **Pn** | **17 03 26.9** | **+4.2** |
| **SVAN** | **Silvan-Diyarba** | **5.41** | **312** | P | | **Pn** | **17 03 23.1** | **-0.2** |
| **MAZI** | **Mazidag** | **5.53** | **302** | *e*P | | **Pn** | **17 03 25.9** | **+1.0** |
| **KBD** | **Kabd** | **5.58** | **168** | P | | **Pn** | **17 03 28.3** | **+2.7** |
| KBD | | | | S | | **Sn** | **17 04 31.1** | **+2.1** |
| **AGRB** | **Hanur-Agry** | **5.59** | **332** | *e*P | | **Pn** | **17 03 23.9** | **-1.9** |
| **GNI** | **Garni** | **5.63** | **347** | | | **Pn** | **17 03 27.6** | **+1.3** |
| **GNI** | **Garni** | **5.63** | **347** | Pb | | Pb | 17 03 47.7 | +6.2 |
| **GNI** | **Garni** | **5.63** | **347** | Pg | | **Pb** | **17 03 42.6** | **+1.1** |
| | comp=E,1.5nm,0.3s,baz=204,slow=16,SNR=3.9 | | | | | | | |
| GNI | | | | Lg | | Lg | 17 04 53.6 | |
| | comp=E,1.0nm,0.3s,baz=130,slow=17,SNR=3.3 | | | | | | | |
| **IRAM** | **Rameshеh** | **5.81** | **118** | Pn | | **Pn** | **17 03 32.5** | **+3.6** |
| **DYBB** | **Diyarbakir** | **5.99** | **305** | *e*P | | **Pn** | **17 03 32.1** | **+1.0** |
| **BNGB** | **Bingl** | **6.27** | **315** | *e*P | | **Pn** | **17 03 34.8** | **-0.2** |
| **PTK** | **Pertek** | **6.99** | **309** | *e*P | | **Pn** | **17 03 45.8** | **+0.7** |
| **GAZ** | **Gaziantep** | **7.81** | **291** | | | **Pn** | **17 03 54.8** | **-1.5** |
| **MMAI** | **Mount Meron Ar** | **9.24** | **263** | Pn | | Pn | 17 04 12.1 | -3.7 |
| | comp=E,0.3nm,0.3s,baz=90,slow=16,SNR=1.2 | | | | | | | |
| MMAI | | | | Sn | | **Sn** | **17 05 58.9** | **-0.1** |
| | comp=E,0.2nm,0.3s,baz=79,slow=18,SNR=1.2 | | | | | | | |
| MMAI | | | | Lg | | Lg | 17 06 42.1 | |
| | comp=E,0.8nm,0.3s,baz=108,slow=41,SNR=2.3 | | | | | | | |
| **BALJ** | **Balqa** | **9.30** | **257** | Pn | | **Pn** | **17 04 15.4** | **-1.2** |
| **SAKB** | **Bahrain** | **9.38** | **156** | P | | **Pn** | **17 04 19.9** | **+2.3** |
| **BNN** | **Bunyan** | **9.40** | **300** | | | **Pn** | **17 04 17.7** | **-0.3** |
| **SHMA** | **Al-Shehemyia** | **9.64** | **154** | P | | **Pn** | **17 04 23.0** | **+1.8** |
| SHMA | | | | S | | **Sn** | **17 06 08.4** | **-0.4** |
| **KVAR** | **Kislovodsk Arr** | **9.71** | **344** | LR | | LR | 17 07 49.7 | |
| | comp=E,153nm,20.8s,baz=58,slow=36 | | | | | | | |
| **SMRA** | **Abu-Samra** | **10.62** | **157** | P | | **Pn** | **17 04 35.4** | **+0.8** |
| SMRA | | | | S | | **Sn** | **17 06 33.1** | **+0.3** |
| **CSS** | **Mathiatis** | **10.69** | **275** | Pn | | **Pn** | **17 04 34.3** | **-1.4** |
| **TRNA** | **Turayna** | **10.76** | **155** | P | | **Pn** | **17 04 37.7** | **+1.2** |
| TRNA | | | | S | | **Sn** | **17 06 35.1** | **-1.1** |
| **EIL** | **Elat** | **10.85** | **246** | Pn | | **Pn** | **17 04 35.4** | **-2.4** |
| | comp=E,0.3nm,0.3s,baz=63,slow=16,SNR=2.9 | | | | | | | |
| EIL | | | | Lg | | Lg | 17 07 41.3 | |
| | comp=E,0.2nm,0.3s,baz=146,slow=21,SNR=1.6 | | | | | | | |
| EIL | | | | LR | | LR | 17 09 55.3 | |
| | comp=E,43nm,18.1s,baz=70,slow=44 | | | | | | | |
| | comp=E,2.3nm,0.6s | | | | | | | |
| **RAYN** | **Ar Rayn** | **11.12** | **184** | | | **Pn** | **17 04 38.8** | **-2.8** |
| **RAYN** | **Ar Rayn** | **11.12** | **184** | Pn | | **Pn** | **17 04 41.1** | **-0.4** |
| **RAYN** | **Ar Rayn** | **11.12** | **184** | P | | **Pn** | **17 04 41.3** | **-0.2** |
| **JRN** | **Qarnain Island** | **11.21** | **148** | P | | **Pn** | **17 04 42.8** | **+0.1** |
| **BR104** | **Keskin Array S** | **11.30** | **300** | P | | **Pn** | **17 04 45.7** | **+1.6** |
| | comp=E,5.4nm,0.9s | | | | | | | |
| **BR131** | **Keskin Array S** | **11.31** | **300** | | | **Pn** | **17 04 42.1** | **-2.2** |
| **BRTR** | **Keskin Array B** | **11.31** | **300** | | | **Pn** | **17 04 42.7** | **-1.6** |
| **BRTR** | **Keskin Array B** | **11.31** | **300** | Pn | | **Pn** | **17 04 43.9** | **-0.4** |
| | comp=E,0.3nm,0.7s,baz=119,slow=18,SNR=1.8 | | | | | | | |
| BRTR | | | | LR | | LR | 17 09 53.8 | |
| | comp=E,29nm,18.3s,baz=102,slow=42 | | | | | | | |
| **BR105** | **Keskin Array S** | **11.33** | **300** | P | | **Pn** | **17 04 45.7** | **+1.3** |
| | comp=E,4.5nm,0.9s | | | | | | | |
| **BR106** | **Keskin Array S** | **11.33** | **300** | P | | **Pn** | **17 04 45.0** | **+0.5** |
| | comp=E,4.3nm,0.9s | | | | | | | |
| **SLWR** | **Sila** | **11.53** | **155** | P | | **Pn** | **17 04 47.9** | **+0.7** |
| SLWR | | | | S | | **Sn** | **17 06 55.9** | **+0.6** |
| **SHME** | **Shamm** | **12.05** | **133** | Pn | | **Pn** | **17 04 53.4** | **-0.8** |
| **SHME** | **Shamm** | **12.05** | **133** | P | | **Pn** | **17 04 54.2** | **0.0** |
| SHME | | | | S | | **Sn** | **17 07 05.4** | **-2.5** |
| **BANOM** | **Banah** | **12.24** | **133** | P | | **Pn** | **17 04 56.4** | **-0.5** |
| **AJN** | **Ajban** | **12.56** | **141** | P | | **Pn** | **17 05 03.1** | **+1.9** |
| AJN | | | | S | | **Sn** | **17 07 19.9** | **-0.4** |
| **MASF** | **Masafi** | **12.57** | **135** | P | | **Pn** | **17 05 01.5** | **+0.2** |
| | SNR=6.2 | | | | | | | |
| MASF | | | | S | | **Sn** | **17 07 19.9** | **-0.7** |
| **MSFE** | **Esma-Masafi** | **12.57** | **135** | *i* Pn | | **Pn** | **17 05 01.0** | **-0.5** |
| | SNR=9.9 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **12.58** | **137** | *i* Pn | | **Pn** | **17 05 01.8** | **+0.3** |
| | SNR=24 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **12.58** | **137** | P | | **Pn** | **17 05 02.6** | **+1.2** |
| | SNR=24 | | | | | | | |
| NAZ | | | | S | | **Sn** | **17 07 20.4** | **-0.5** |
| **ASUD** | **Al Ashush, Dub** | **12.69** | **140** | *i* Pn | | **Pn** | **17 05 03.7** | **+0.8** |
| | SNR=17 | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **12.69** | **140** | P | | **Pn** | **17 05 04.1** | **+1.2** |
| | SNR=17 | | | | | | | |
| ASUD | | | | S | | **Sn** | **17 07 21.0** | **-2.5** |
| **MDH** | **Madha** | **12.70** | **135** | Pn | | **Pn** | **17 05 01.8** | **-1.4** |
| **MDH** | **Madha** | **12.70** | **135** | P | | **Pn** | **17 05 02.9** | **-0.3** |
| MDH | | | | S | | **Sn** | **17 07 20.6** | **-3.3** |
| **FAQ** | **Al Faqa, Dubai** | **12.73** | **138** | *i* Pn | | **Pn** | **17 05 04.5** | **+0.9** |
| | SNR=7.9 | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **12.73** | **138** | P | | **Pn** | **17 05 04.7** | **+1.2** |
| | SNR=8.0 | | | | | | | |
| FAQ | | | | S | | **Sn** | **17 07 19.6** | **-5.0** |
| **UOSS** | **Minazif** | **12.92** | **136** | | | **Pn** | **17 05 03.4** | **-2.8** |
| **UOSS** | **Minazif** | **12.92** | **136** | Pn | | **Pn** | **17 05 05.5** | **-0.6** |
| **UOSS** | **Minazif** | **12.92** | **136** | P | | **Pn** | **17 05 06.1** | **-0.1** |
| UOSS | | | | P | | **Pn** | **17 05 06.1** | **-0.1** |
| UOSS | | | | S | | **Sn** | **17 07 25.3** | **-3.9** |
| UOSS | | | | S | | **Sn** | **17 07 25.3** | **-3.9** |
| **HATD** | **Hatta, Dubai** | **12.97** | **136** | *i* Pn | | **Pn** | **17 05 06.9** | **0.0** |
| | SNR=11 | | | | | | | |
| **HATD** | **Hatta, Dubai** | **12.97** | **136** | P | | **Pn** | **17 05 07.4** | **+0.6** |
| | SNR=11 | | | | | | | |
| HATD | | | | S | | **Sn** | **17 07 26.1** | **-4.4** |
| **ASHO** | **Ashiyiah** | **13.04** | **137** | *i* Pn | | **Pn** | **17 05 07.3** | **-0.5** |
| | SNR=22 | | | | | | | |
| ASHO | | | | Sn | | Sn | 17 07 21.8 | -10 |
| **ASHO** | **Ashiyiah** | **13.04** | **137** | P | | **Pn** | **17 05 08.1** | **+0.2** |
| | SNR=21 | | | | | | | |
| ASHO | | | | S | | **Sn** | **17 07 27.9** | **-4.3** |
| **MZR** | **Muzera** | **13.19** | **150** | *i* Pn | | **Pn** | **17 05 09.5** | **-0.3** |
| | SNR=17 | | | | | | | |
| **MZR** | **Muzera** | **13.19** | **150** | S | | **Sn** | **17 07 33.6** | **-2.2** |
| **JASK** | **Jask - Hormozg** | **13.26** | **128** | P | | **Pn** | **17 05 10.3** | **-0.5** |
| JASK | | | | S | | **Sn** | **17 07 35.1** | **-2.4** |
| **ALNE** | **Al Ain** | **13.37** | **140** | *i* Pn | | **Pn** | **17 05 12.2** | **-0.1** |
| | SNR=7.8 | | | | | | | |
| **ALNE** | **Al Ain** | **13.37** | **140** | P | | **Pn** | **17 05 12.9** | **+0.6** |
| | SNR=7.8 | | | | | | | |
| ALNE | | | | S | | **Sn** | **17 07 36.4** | **-3.9** |
| **SOHO** | **SOHO** | **13.74** | **137** | *i* Pn | | **Pn** | **17 05 16.6** | **-0.7** |
| | SNR=5.2 | | | | | | | |
| **SOHO** | **SOHO** | **13.74** | **137** | P | | **Pn** | **17 05 16.9** | **-0.4** |
| SOHO | | | | S | | **Sn** | **17 07 46.0** | **-3.2** |
| **UMZA** | **Um Al Zommool** | **14.19** | **145** | P | | **Pn** | **17 05 26.2** | **+2.7** |
| UMZA | | | | S | | **Sn** | **17 07 59.2** | **-1.0** |
| **ARQ** | **Araqi** | **14.37** | **139** | P | | **Pn** | **17 05 26.0** | **0.0** |
| | SNR=14 | | | | | | | |
| ARQ | | | | P | | **Pn** | **17 05 26.0** | **0.0** |
| | SNR=14 | | | | | | | |
| ARQ | | | | S | | **Sn** | **17 08 02.5** | **-2.1** |
| ARQ | | | | S | | **Sn** | **17 08 02.5** | **-2.1** |
| **HOQ** | **Hoqain** | **14.61** | **136** | P | | **Pn** | **17 05 29.6** | **+0.3** |
| **BIDO** | **Bidbid** | **15.13** | **134** | P | | **Pn** | **17 05 35.9** | **-0.3** |
| **SMDO** | **Samad** | **15.44** | **135** | P | | **Pn** | **17 05 39.2** | **-1.2** |
| SMDO | | | | S | | **Sn** | **17 08 30.4** | **-0.5** |
| **WSAR** | **Wadi Sarin** | **15.64** | **133** | Pn | | **Pn** | **17 05 41.9** | **-1.1** |
| | comp=E,1.5nm,0.3s,baz=318,slow=11,SNR=18 | | | | | | | |
| WSAR | | | | Sn | | Sn | 17 08 20.9 | -15 |
| | comp=E,0.2nm,0.3s,baz=246,slow=18,SNR=2.1 | | | | | | | |
| | comp=E,8.6nm,0.6s | | | | | | | |
| **JMDO** | **Jabal Madar** | **16.01** | **137** | P | | **Pn** | **17 05 46.9** | **-0.8** |
| **WBK** | **Wadi Bani Khal** | **16.32** | **134** | P | | **Pn** | **17 05 52.1** | **+0.4** |
| **JLN** | **Jalan Bani Buh** | **16.94** | **134** | P | | **Pn** | **17 05 58.7** | **-0.7** |
| **MHTO** | **MHTO** | **17.05** | **140** | P | | **Pn** | **17 06 00.0** | **-0.8** |
| **DOK** | **Doka** | **17.41** | **155** | P | | **Pn** | **17 06 03.7** | **-1.7** |
| **IDI** | **Anoyia** | **17.59** | **278** | Pn | | **Pn** | **17 06 03.1** | **-4.4** |
| **IDI** | **Anoyia** | **17.59** | **278** | Pn | | **Pn** | **17 06 03.7** | **-3.9** |
| | comp=E,12nm,0.8s,baz=107,slow=13,SNR=3.6 | | | | | | | |
| **ABKAR** | **Akbulak array** | **17.72** | **30** | P | | **Pn** | **17 06 09.0** | **+0.1** |
| **ABKAR** | **Akbulak array** | **17.72** | **30** | | | **Pn** | **17 06 09.3** | **+0.3** |
| **AKTO** | **Aktyubinsk** | **17.93** | **25** | P | | **P** | **17 06 12.6** | **+0.5** |
| | comp=E,0.2nm,0.3s,baz=219,slow=12,SNR=5.6 | | | | | | | |
| | comp=E,2.0nm,0.7s | | | | | | | |
| **WHFO** | **Wadi Hawf** | **17.94** | **156** | P | | **Pn** | **17 06 09.6** | **-2.4** |
| **ABTO** | **Aybut** | **18.32** | **158** | P | | **Pn** | **17 06 14.2** | **-2.4** |
| **RBK** | **Rabkut** | **18.47** | **156** | P | | **P** | **17 06 15.7** | **-2.6** |
| **DMTO** | **DMTO** | **18.54** | **153** | P | | **P** | **17 06 18.0** | **-1.0** |
| | SNR=13 | | | | | | | |
| **PLOR3** | **Plostina Array** | **18.68** | **313** | P | | **Pn** | **17 06 21.6** | **+0.8** |
| | comp=E,6.5nm,1.9s | | | | | | | |
| **MLR** | **Muntele Rosu** | **18.93** | **311** | P | | **P** | **17 06 21.9** | **-1.4** |
| MLR | | | | IAmb | | IAmb | 17 06 53.5 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **MLR** | **Muntele Rosu** | **18.93** | **311** | P | | **P** | **17 06 22.3** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=108,slow=17,SNR=2.3 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **MLR** | **Muntele Rosu** | **18.93** | **311** | ⇓P | | **Pn** | **17 06 27.7** | **+3.7** |
| **MLR** | **Muntele Rosu** | **18.93** | **311** | P | | **Pn** | **17 06 25.2** | **+1.2** |
| | comp=Z,5.7nm,1.2s | | | | | | | |
| **SORM** | **Soroca** | **19.00** | **321** | ⇓P | | **Pn** | **17 06 27.5** | **+2.9** |
| **VOIR** | | **19.47** | **310** | ⇑P | | **Pn** | **17 06 33.5** | **+3.1** |
| **VOIR** | | **19.47** | **310** | P | | **Pn** | **17 06 31.9** | **+1.5** |
| | comp=Z,17nm,0.9s | | | | | | | |
| **DOPR** | **Dopca** | **19.50** | **312** | ⇓P | | **Pn** | **17 06 32.9** | **+2.2** |
| **ITM** | **Ithomi** | **19.91** | **284** | P | | **P** | **17 06 30.4** | **-3.5** |
| ITM | | | | IAmb | | IAmb | 17 06 55.4 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **AK07** | **Malin Array Si** | **20.20** | **327** | P | | Pn | 17 06 38.7 | -0.2 |
| **AK09** | **Malin Array Si** | **20.21** | **327** | P | | Pn | 17 06 38.5 | -0.5 |
| **AK10** | **Malin Array Si** | **20.21** | **327** | P | | Pn | 17 06 38.6 | -0.5 |
| **AK08** | **Malin Array Si** | **20.24** | **327** | P | | **P** | **17 06 38.6** | **+1.3** |
| **AK05** | **Malin Array Si** | **20.25** | **327** | P | | **P** | **17 06 38.6** | **+1.1** |
| **KMPD** | **K-Podol'skiy** | **20.26** | **319** | P | | **P** | **17 06 39.9** | **+2.3** |
| KMPD | | | | P | | Pn | 17 06 39.1 | -0.5 |
| **LOT** | **Lotru** | **20.29** | **309** | ⇑P | | Pn | 17 06 41.8 | +1.6 |
| **AKASG** | **Malin Array Be** | **20.30** | **327** | P | | **P** | **17 06 35.5** | **-2.5** |
| **AKASG** | **Malin Array Be** | **20.30** | **327** | P | | **P** | **17 06 39.0** | **+1.0** |
| | comp=Z,0.6nm,0.5s,baz=139,slow=9.0,SNR=14 | | | | | | | |
| AKASG | | | | LR | | LR | 17 16 00.9 | |
| | comp=Z,32nm,18.5s,baz=117,slow=41 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **AKBB** | **Malin Array Si** | **20.30** | **327** | P | | **P** | **17 06 36.1** | **-1.8** |
| AKBB | | | | IAmb | | IAmb | 17 06 46.7 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **AKBB** | **Malin Array Si** | **20.30** | **327** | P | | **P** | **17 06 38.4** | **+0.4** |
| **KIEV** | **Kiev** | **20.30** | **327** | P | | **P** | **17 06 37.4** | **-0.7** |
| KIEV | | | | IAmb | | IAmb | 17 06 46.7 | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **KIEV** | **Kiev** | **20.30** | **327** | ⇓P | | Pn | 17 06 39.6 | -0.5 |
| **BURAR** | **Bucovina Array** | **20.43** | **316** | P | | **P** | **17 06 37.7** | **-1.8** |
| BURAR | | | | IAmb | | IAmb | 17 06 49.1 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **BURAR** | **Bucovina Array** | **20.43** | **316** | ⇓P | | Pn | 17 06 42.3 | +0.6 |
| **LUBAR** | **Lubar, Ukraine** | **20.45** | **324** | P | | **P** | **17 06 39.9** | **+0.3** |
| **BUR08** | **Bucovina Ar. S** | **20.45** | **316** | P | | **P** | **17 06 37.3** | **-2.5** |
| BUR08 | | | | IAmb | | IAmb | 17 06 49.1 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **20.58** | **59** | P | | **P** | **17 06 41.1** | **0.0** |
| **KKAR** | **Karatay Array** | **20.58** | **59** | P | | **P** | **17 06 40.8** | **-0.3** |
| **KKAR** | **Karatay Array** | **20.58** | **59** | P | | **P** | **17 06 41.1** | **0.0** |
| KKAR | | | | IAmb | | IAmb | 17 07 00.3 | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **FNA** | **Florina** | **20.63** | **295** | P | | **P** | **17 06 39.3** | **-2.4** |
| FNA | | | | IAmb | | IAmb | 17 06 49.5 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **HORU** | **Horodok** | **20.67** | **321** | P | | Pn | 17 06 44.3 | -0.1 |
| **MI30** | **MI30,Zelenitsa** | **20.80** | **326** | P | | **P** | **17 06 44.9** | **+1.5** |
| **KSV** | **Kosov** | **20.89** | **317** | P | | **P** | **17 06 45.3** | **+0.9** |
| **GZR** | **Gura Zlata** | **20.91** | **308** | ⇑P | | Pn | 17 06 47.6 | +0.2 |
| **BOVS** | **Bovan** | **21.04** | **303** | ⇑P | | **P** | **17 06 49.2** | **+3.1** |
| **MI28** | **MI28,Pidlybu** | **21.17** | **326** | P | | **P** | **17 06 50.7** | **+3.4** |
| **MARR** | **Marisel-Cluj** | **21.23** | **311** | ⇓P | | **P** | **17 06 51.3** | **+3.1** |
| **MDVR** | **Moldovita** | **21.39** | **306** | ⇑P | | **P** | **17 06 53.3** | **+3.4** |
| **SURR** | **Surduc** | **21.47** | **308** | ⇑P | | **P** | **17 06 55.1** | **+4.4** |
| **OBN** | **Obninsk** | **21.55** | **345** | LR | | LR | 17 15 20.4 | |
| | comp=Z,45nm,21.5s,baz=112,slow=37 | | | | | | | |
| **MEZ** | **Mezhgor'ye** | **21.87** | **316** | P | | **P** | **17 06 57.6** | **+2.7** |
| **KORU** | **Korolevo** | **21.91** | **315** | P | | **P** | **17 06 57.6** | **+2.3** |
| **SIRR** | **Siria** | **21.97** | **309** | ⇑P | | **P** | **17 06 59.3** | **+3.2** |
| **MORS** | **Morshin** | **21.98** | **318** | P | | **P** | **17 06 58.5** | **+2.4** |
| **BRIU** | **Brid** | **22.06** | **315** | P | | **P** | **17 07 00.0** | **+3.0** |
| **RNPP8** | **Varash** | **22.29** | **325** | P | | **P** | **17 07 01.6** | **+2.2** |
| **SHIU** | **Shidnytsya** | **22.32** | **318** | P | | **P** | **17 07 02.4** | **+2.5** |
| **HOLU** | **Holmets** | **22.53** | **315** | P | | **P** | **17 07 04.3** | **+2.3** |
| **KOLS** | **Kolonicke sedl** | **22.79** | **316** | *e*P | | **P** | **17 07 10.3** | **+5.5** |
| **CRVS** | **Cervenica-Dubn** | **23.24** | **315** | *e*P | | **P** | **17 07 15.1** | **+5.7** |
| **AAK** | **Ala-Archa** | **23.32** | **62** | LR | | LR | 17 18 18.3 | |
| | comp=Z,34nm,19.5s,baz=251,slow=42 | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **23.91** | **307** | ⇓P | | **P** | **17 07 19.7** | **+3.9** |
| **MORH** | **Mrgy, Hungar** | **23.91** | **307** | P | | **P** | **17 07 17.3** | **+1.4** |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **VYHS** | **Vyhne** | **24.62** | **313** | *e*P | | **P** | **17 07 25.7** | **+3.2** |
| **OJC** | **Ojcow** | **24.82** | **317** | P | | **P** | **17 07 22.7** | **-1.5** |
| OJC | | | | IAmb | | IAmb | 17 07 30.4 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **OJC** | **Ojcow** | **24.82** | **317** | P | | **P** | **17 07 26.4** | **+2.1** |
| | comp=Z,11nm,0.8s | | | | | | | |
| **MPLH** | **Magyarpolny** | **24.94** | **309** | P | | **P** | **17 07 26.4** | **+1.1** |
| | comp=Z,16nm,1.0s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **25.91** | **309** | *e*P | | **P** | **17 07 37.9** | **+3.7** |
| | comp=Z,2.4nm,0.5s | | | | | | | |
| **MORC** | **Moravsky Berou** | **25.93** | **314** | P | | **P** | **17 07 32.8** | **-1.5** |
| MORC | | | | IAmb | | IAmb | 17 07 42.1 | |
| | comp=Z,6.9nm,1.4s | | | | | | | |
| **CONA** | **Conrad Observa** | **26.26** | **310** | *e*pP | | pP | 17 07 43.2 | -1.4 |
| | comp=Z,3.3nm,1.1s | | | | | | | |
| **VRAC** | **Vranov** | **26.30** | **313** | LR | | LR | 17 18 54.4 | |
| | comp=Z,26nm,19.6s,baz=136,slow=39 | | | | | | | |
| **SOKA** | **Soboth** | **26.43** | **307** | *e*pP | | pP | 17 07 44.4 | -1.7 |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **FURI** | **Furi** | **26.58** | **197** | LR | | LR | 17 17 36.7 | |
| | comp=Z,40nm,19.9s,baz=180,slow=35 | | | | | | | |
| **DPC** | **Dobruska-Polom** | **26.88** | **315** | P | | **P** | **17 07 45.6** | **+2.7** |
| | comp=Z,1.5nm,0.9s | | | | | | | |
| **NRCA** | **Norcia** | **27.03** | **298** | P | | **P** | **17 07 43.8** | **-0.6** |
| NRCA | | | | IAmb | | IAmb | 17 07 55.3 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **FDMO** | **Fiordimonte** | **27.07** | **298** | P | | **P** | **17 07 44.1** | **-0.6** |
| FDMO | | | | IAmb | | IAmb | 17 08 23.2 | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **MOA** | **Molln** | **27.26** | **309** | *i* P | | **P** | **17 07 49.6** | **+3.3** |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **27.65** | **307** | *e*P | | **P** | **17 07 52.9** | **+2.9** |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| **GERES** | **GERESS Array B** | **27.92** | **310** | P | | **P** | **17 07 52.9** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=106,slow=9.3,SNR=1.9 | | | | | | | |
| GERES | | | | LR | | LR | 17 22 05.5 | |
| | comp=Z,28nm,19.0s,baz=108,slow=43 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **LESA** | **Schwarzleotal** | **28.18** | **307** | *i* P | | **P** | **17 07 56.7** | **+2.1** |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.27** | **46** | P | | **P** | **17 07 56.2** | **+0.9** |
| | comp=Z,1.3nm,0.2s,baz=251,slow=7.7,SNR=2.3 | | | | | | | |
| | comp=Z,1.3nm,0.2s | | | | | | | |
| **WTTA** | **Wattenberg** | **28.82** | **306** | *i* P | | **P** | **17 08 02.6** | **+2.1** |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **29.10** | **306** | *e*P | | **P** | **17 08 04.7** | **+1.8** |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **CLL** | **Collm** | **29.19** | **315** | *e*Px | | Px | 17 08 06.0 | |
| CLL | | | | *e*PPP | | PPP | 17 09 09.0 | |
| **CLL** | **Collm** | **29.19** | **315** | P | | **P** | **17 08 05.7** | **+2.2** |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **MOTA** | **Moosalm** | **29.20** | **306** | *e*P | | **P** | **17 08 05.6** | **+1.8** |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **29.38** | **306** | *e*P | | **P** | **17 08 07.7** | **+2.3** |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| **RETA** | **Reutte** | **29.45** | **307** | *i* P | | **P** | **17 08 08.1** | **+2.2** |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **29.57** | **55** | P | | **P** | **17 08 07.4** | **+0.4** |
| **MKAR** | **Makanchi Array** | **29.57** | **55** | P | | **P** | **17 08 07.5** | **+0.5** |
| | comp=Z,1.1nm,0.8s,baz=256,slow=9.9,SNR=4.1 | | | | | | | |
| MKAR | | | | LR | | LR | 17 21 20.5 | |
| | comp=Z,43nm,19.6s,baz=236,slow=39 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **29.77** | **340** | P | | **P** | **17 08 08.2** | **-0.2** |
| **FINES** | **FINESS Array B** | **29.77** | **340** | P | | **P** | **17 08 06.9** | **-1.5** |
| | comp=Z,1.6nm,1.0s,baz=156,slow=9.7,SNR=6.3 | | | | | | | |
| FINES | | | | LR | | LR | 17 20 51.9 | |
| | comp=Z,38nm,20.6s,baz=140,slow=38 | | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | | |
| **DAVA** | **Damuels** | **30.00** | **306** | *i* P | | **P** | **17 08 12.5** | **+1.7** |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **31.59** | **304** | P | | **P** | **17 08 22.7** | **-2.3** |
| **BNI** | **Bardonecchia** | **31.88** | **301** | P | | **P** | **17 08 25.5** | **-1.9** |
| **ZALV** | **Zalesovo Beam** | **33.07** | **42** | P | | **P** | **17 08 37.9** | **+0.3** |
| | comp=Z,0.8nm,0.6s,baz=264,slow=8.8,SNR=4.1 | | | | | | | |
| ZALV | | | | LR | | LR | 17 23 57.9 | |
| | comp=Z,22nm,18.8s,baz=1.5,slow=40 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | **33.12** | **330** | P | | **P** | **17 08 38.0** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=133,slow=9.0,SNR=8.9 | | | | | | | |
| HFS | | | | LR | | LR | 17 24 16.3 | |
| | comp=Z,24nm,19.9s,baz=120,slow=40 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **NOA** | **NORSAR Array B** | **34.65** | **330** | LR | | LR | 17 24 18.8 | |
| | comp=Z,21nm,21.2s,baz=105,slow=39 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **36.79** | **348** | P | | **P** | **17 09 09.9** | **+0.4** |
| | comp=Z,2.3nm,1.1s,baz=204,slow=2.7,SNR=4.0 | | | | | | | |
| | comp=Z,2.3nm,1.1s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.60** | **317** | P | | **P** | **17 09 33.1** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=106,slow=8.7,SNR=4.2 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **EKB** | **Eskdalemuir** | **39.62** | **317** | P | | **P** | **17 09 34.5** | **+1.0** |
| **ESK** | **Eskdalemuir** | **39.62** | **317** | P | | **P** | **17 09 34.1** | **+0.6** |
| ESK | | | | IAmb | | IAmb | 17 09 39.5 | |
| | comp=Z,6.8nm,1.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **39.97** | **292** | P | | **P** | **17 09 35.6** | **-1.1** |
| | comp=Z,1.3nm,0.9s,baz=63,slow=8.7,SNR=10 | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **DSB** | **Dublin** | **41.18** | **313** | P | | **P** | **17 09 45.7** | **-0.8** |
| **TORD** | **Torodi Ar. Bea** | **45.62** | **253** | P | | **P** | **17 10 22.4** | **-0.3** |
| | comp=Z,0.1nm,0.4s,baz=38,slow=8.1,SNR=3.1 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.21** | **95** | P | | **P** | **17 10 51.3** | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=298,slow=8.1,SNR=2.1 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **KLR** | **Kul'dur** | **61.93** | **48** | LR | | LR | 17 42 31.3 | |
| | comp=Z,19nm,19.2s,baz=138,slow=39 | | | | | | | |
| **KSRS** | **Korea Array** | **63.98** | **61** | LR | | LR | 17 44 29.4 | |
| | comp=Z,12nm,18.4s,baz=35,slow=40 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **71.71** | **58** | LR | | LR | 17 48 52.4 | |
| | comp=Z,15nm,18.7s,baz=170,slow=39 | | | | | | | |
| **SCHQ** | **Schefferville** | **74.09** | **326** | LR | | LR | 17 47 33.9 | |
| | comp=Z,26nm,18.4s,baz=30,slow=37 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **89.09** | **337** | LR | | LR | 17 54 40.2 | |
| | comp=Z,23nm,18.8s,baz=311,slow=36 | | | | | | | |

*TEH* ***04*** *17:09:25.8,34°.65N×46°.31E,h12km±13km,ML2.9*
*ISN* ***04*** *17:09:25.1±0.6,34°.67N×46°.32E,h8km±8km,ML2.9*
**ISC 04 17:09:25.6±1.0,34°.67N±0°.04×46°.30E±0°.03,h14km±7km,**
**n13,σ0°46/18,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.07** | **68** | Pg | **Pg** | **17 09 28.5** | **-0.2** |
| IDHR | | | | Sg | **Sg** | **17 09 31.0** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.41** | **147** | Pg | **Pb** | **17 09 34.1** | **-0.6** |
| **ILIN** | **Lien** | **0.60** | **65** | Pg | **Pb** | **17 09 37.6** | **-0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.61** | **255** | Pg | **Pb** | **17 09 38.3** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.65** | **210** | Pg | **Pg** | **17 09 38.2** | **0.0** |
| **KCHF** | **Che

comp=N,419nm,0.2s
**OK038 West end E0370 0.58 302** Pg Pg 17 26 18.1 0.0
OK038 Sg Sg 17 26 25.2 -0.5
OK038 IAML 17 26 32.4
comp=N,349nm,0.2s
**OK032 Salt Plains WL 0.63 354** Pg Pg 17 26 19.1 +0.1
OK032 Sg Sg 17 26 26.8 -0.5
OK032 IAML 17 26 32.1
comp=N,233nm,0.2s
OK032 IAML 17 26 32.2
comp=N,247nm,0.2s
**OK029 Liberty Lake 0.66 124** Pg Pg 17 26 19.4 -0.2
OK029 Sg Sg 17 26 28.6 +0.3
OK029 IAML 17 26 29.0
comp=N,215nm,0.2s
OK029 IAML 17 26 29.0
comp=N,316nm,0.3s
**CSTR Hydro, Custer 0.70 221** Pg Pg 17 26 20.5 +0.2
CSTR Sg Sg 17 26 29.9 +0.5
**GC02 Grant County # 0.71 18** Pg Pg 17 26 20.6 0.0
GC02 Sg Sg 17 26 30.3 +0.5
**U32A Winter Ranch, 0.73 286** Pg Pg 17 26 20.8 -0.2
U32A Sg Sg 17 26 30.8 +0.2
U32A IAML 17 26 31.9
comp=E,175nm,0.1s
U32A IAML 17 26 32.5
comp=N,148nm,0.1s
**KAN14 Manchester OK 0.79 10** Pg Pg 17 26 21.4 -0.7
KAN14 Sg Sg 17 26 32.8 +0.3
**NOKA Waynoka 0.80 306** Pg Pg 17 26 21.9 -0.3
NOKA Sg Sg 17 26 32.9 +0.4
NOKA IAML 17 26 33.5
comp=E,200nm,0.4s
NOKA IAML 17 26 35.6
comp=N,197nm,0.3s
**ADOK Arcadia Dam 0.81 130** Pg Pg 17 26 21.4 -0.9
**KAN17 Caldwell West 0.92 18** Pg Pg 17 26 24.0 -0.5
KAN17 Sg Sg 17 26 36.8 +0.4
**BLOK Blackwell 0.94 51** Pg Pg 17 26 24.8 -0.2
BLOK IAML 17 26 44.8
comp=E,139nm,0.2s
BLOK IAML 17 26 55.2
comp=N,85nm,1.0s
**OKCSW OKLAHOMA CITY 0.95 144** Pg Pg 17 26 24.5 -0.6
OKCSW IAML 17 26 41.0
comp=E,103nm,0.1s
OKCSW IAML 17 26 43.3
comp=N,104nm,0.1s
**OK048 Pawnee Station 0.99 75** Pg Pg 17 26 25.4 -0.4
OK048 Sg Sg 17 26 38.8 +0.1
**KAN13 South Haven SW 0.99 32** Pg Pg 17 26 25.2 -0.7
KAN13 Sg Sg 17 26 39.0 +0.3
**KAN01 Argonia South 1.02 17** Pg Pg 17 26 25.9 -0.7
KAN01 Sg 17 26 39.9 +0.1
**KAN09 Caldwell North 1.04 23** Pg Pg 17 26 26.3 -0.6
KAN09 Sg Sg 17 26 40.6 +0.1
**ELIS Ellis County 1.05 264** Pg Pg 17 26 26.7 -0.3
ELIS Sg Sb 17 26 41.6 0.0
ELIS IAML 17 26 47.3
comp=N,148nm,0.2s
ELIS IAML 17 26 47.9
comp=E,116nm,0.2s
**OK031 S. Brethren Rd 1.07 102** Pg Pg 17 26 26.8 -0.6
OK031 Sg Sg 17 26 41.2 0.0
OK031 IAML 17 26 42.3
comp=E,139nm,0.1s
**FNO Franklin 1.09 147** Pg Pg 17 26 27.2 -0.6
FNO IAML 17 26 47.5
comp=E,80nm,0.1s
**OK052 Battle Ridge R 1.09 99** Pg 17 26 26.3 -1.5
OK052 Sg Sg 17 26 41.6 -0.3
OK052 IAML 17 26 48.7
comp=E,113nm,0.4s
**OK051 E0350 and S346 1.09 72** Pg Pg 17 26 27.0 -0.9
**KAN12 Harper NE Stat 1.13 5** Pg Pg 17 26 27.9 -0.6
KAN12 Pn 17 26 30.1 +0.8
**QUOK Quay 1.15 90** Pg Pg 17 26 28.1 -0.9
QUOK Sg Sg 17 26 43.8 0.0
**KS21 Milan North St 1.17 18** Pg Pg 17 26 27.4 -2.0
KS21 Sg Sg 17 26 44.0 -0.6
**DEOK Depew 1.36 104** Pn 17 26 31.4 -1.1
DEOK Sg Sb 17 26 50.6 +0.1
**T35A Sooner Cattle 1.50 60** Pn 17 26 34.7 +0.3
T35A Sn 17 26 54.2 0.0
**WMOK Wichita Mounta 1.53 201** Pn 17 26 34.3 -0.5
WMOK Sn 17 26 54.9 -0.2
**X34A Smith Ranch, M 1.59 171** Pn 17 26 35.7 +0.1
X34A Sg Sg 17 26 57.8 -0.1
**TUL3 Leonard 1.91 97** Pn 17 26 40.3 +0.3
TUL3 Sg Sb 17 27 06.3 0.0
TUL3 IAmb_Lg 17 27 09.0
comp=Z,14nm,0.9s
**SMWD Samnorwood 2.03 239** Pn 17 26 41.8 +0.1
SMWD IAmb_Lg 17 27 13.7
comp=Z,9.8nm,0.8s
**R32A Long Quarter, 2.29 348** Pn 17 26 44.1 -1.2
R32A IAmb_Lg 17 27 25.2
comp=Z,11nm,0.8s
**LOOK Love County 2.31 160** Pn Pn 17 26 45.9 +0.3
**WTFS Witchita Falls 2.42 187** Pn Pn 17 26 48.6 +1.6
**RLO Rose Lookout 2.51 89** Pn Pn 17 26 50.0 +1.6
**X37A Clayton 2.75 124** Pn Pn 17 26 52.0 +0.4
**Z35A Perchaven, San 2.93 165** Pn Pn 17 26 54.4 +0.3
**CBKS Cedar Bluff 2.93 335** Pn Pn 17 26 54.3 +0.2
**U38A Gravette 3.03 84** Pn 17 26 56.0 +0.5
**FW03 Perrin-Whitt E 3.13 179** Pn Pn 17 26 57.4 +0.6
FW03 IAmb_Lg 17 27 46.3
comp=Z,6.9nm,0.8s
**KSU1 Kansas State U 3.16 22** Pn Pn 17 26 55.2 -2.0
**AMTX Amarillo 3.17 247** Pn Pn 17 26 55.4 -2.1
**APMT Aspermont 3.28 211** Pn Pn 17 26 57.2 -1.7
**PLPT Palo Pinto 3.36 183** Pn Pn 17 26 56.9 -3.0
**HHAR Hobbs 3.39 87** Pn Pn 17 26 58.1 -2.3
**RTBA Rita Blanca 3.73 275** Pn 17 27 02.5 -2.7
**ABTX Abilene, Hawle 3.76 200** Pn 17 27 03.7 -1.8
**SN07 Snyder 07 3.83 217** Pn 17 27 03.9 -2.5
SN07 IAmb_Lg 17 28 19.0
comp=Z,6.4nm,1.0s
**SN05 Snyder 5 4.00 215** IAmb_Lg 17 28 18.5
comp=Z,4.3nm,0.7s
**MIAR Mount Ida 4.06 112** Pn 17 27 07.2 -2.4
MIAR IAmb_Lg 17 28 17.3
comp=Z,4.3nm,0.9s
**S39A Bolivar 4.14 67** Pn 17 27 07.6 -3.0
**X40A Basin Creek Fa 4.64 110** Pn Pn 17 27 16.5 -1.1
X40A IAmb_Lg 17 28 40.0
comp=Z,5.5nm,1.1s
**MGMO Mountain Grove 4.81 77** Pn Pn 17 27 18.8 -1.1
**WHAR Wooly Hollow 4.83 99** Pn Pn 17 27 17.2 -3.0
**FCAR Ozark Folk Cen 4.87 92** Pn Pn 17 27 18.6 -2.2
**BRDY Brady 4.93 189** Pn Pn 17 27 19.9 -1.7
BRDY IAmb_Lg 17 28 49.1
comp=Z,4.1nm,0.9s
**P38A Dawn 5.01 45** IAmb_Lg 17 28 45.6
comp=Z,3.9nm,0.7s
**T25A Trinidad 5.14 283** Pn Pn 17 27 22.8 -1.9
T25A IAmb_Lg 17 28 52.7
comp=Z,5.7nm,0.9s
**LCAR Lake Charles 5.65 89** Pn Pn 17 27 29.6 -1.8
**CCM Cathedral Cave 5.81 69** Pn Pn 17 27 30.8 -2.9
**P40A Paris 5.86 53** IAmb_Lg 17 29 12.8
comp=Z,4.4nm,0.7s

*CATAC **04** 17:26:48.5±0.4, 13°.19N×89°.86W, h23km±3km, ML4.1*
*GCG **04** 17:26:49.7±0.3, 15°.14N×91°.52W, h111km±999km, MD3.7*
**ISC 04 17:26:49.0±1.6, 13°.17N±0°.06×89°.86W±0°.04, h27km±12km, n66, σ0°62/107, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LALI** | **Alcalda de L** | **0.62** | **59** | ***e*P** | | **Pb** | **17 27 01.4** | **0.0** |
| LALI | | | | *e*S | | **Sb** | **17 27 10.2** | **+0.5** |
| **LALI** | **Alcalda de L** | **0.62** | **59** | ***i*P** | | **Pb** | **17 27 01.3** | **0.0** |
| LALI | | | | *i*S | | **Sb** | **17 27 09.6** | **0.0** |
| LALI | | | | IAML | | | 17 27 10.3 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.63** | **40** | ***i*P** | | **Pb** | **17 27 01.7** | **0.0** |
| JAYA | | | | *e*S | | **Sb** | **17 27 10.8** | **+0.6** |
| **JAYA** | **Jayaque - finc** | **0.63** | **40** | ***i*P** | | **Pb** | **17 27 01.6** | **0.0** |
| JAYA | | | | *i*S | | **Sb** | **17 27 11.3** | **+1.1** |
| JAYA | | | | IAML | | | 17 27 12.2 | |
| | comp=Z,28μm,1.0s | | | | | | | |
| **CEVE** | **Cerro Verde** | **0.70** | **20** | ***e*P** | | **Pb** | **17 27 02.5** | **-0.4** |
| CEVE | | | | *e*S | | **Sb** | **17 27 13.4** | **+1.2** |
| **CEVE** | **Cerro Verde** | **0.70** | **20** | ***i*P** | | **Pb** | **17 27 02.4** | **-0.4** |
| CEVE | | | | *i*S | | **Sb** | **17 27 13.4** | **+1.2** |
| CEVE | | | | IAML | | | 17 27 14.6 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| **SBLS** | **San Blas** | **0.71** | **19** | ***e*P** | | **Pb** | **17 27 02.5** | **-0.4** |
| **NUBE** | **Las Nubes** | **0.73** | **6** | ***i*P** | | **Pb** | **17 27 02.7** | **-0.7** |
| NUBE | | | | *e*S | | **Sb** | **17 27 13.0** | **-0.2** |
| **NUBE** | **Las Nubes** | **0.73** | **6** | ***i*P** | | **Pb** | **17 27 02.7** | **-0.7** |
| NUBE | | | | *i*S | | **Sb** | **17 27 12.9** | **-0.2** |
| NUBE | | | | IAML | | | 17 27 16.2 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **SNJE** | **San Jose** | **0.74** | **20** | ***e*P** | | **Pb** | **17 27 02.9** | **-0.6** |
| **RTR** | **El Retiro** | **0.76** | **16** | ***i*P** | | **Pb** | **17 27 03.3** | **-0.5** |
| **ITCA** | **Escuela Especi** | **0.76** | **48** | ***i*P** | | **Pb** | **17 27 03.2** | **-0.6** |
| ITCA | | | | *i*S | | **Sb** | **17 27 14.7** | **+0.9** |
| ITCA | | | | IAML | | | 17 27 23.5 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **0.76** | **45** | ***e*P** | | **Pb** | **17 27 03.4** | **-0.3** |
| **PMON** | **Piamonte** | **0.76** | **45** | ***i*P** | | **Pb** | **17 27 03.3** | **-0.5** |
| PMON | | | | *i*S | | **Sb** | **17 27 15.1** | **+1.3** |
| PMON | | | | IAML | | | 17 27 20.5 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| **CEDA** | **San Andres** | **0.78** | **36** | ***e*P** | | **Pb** | **17 27 03.6** | **-0.5** |
| **CEDA** | **San Andres** | **0.78** | **36** | ***i*P** | | **Pb** | **17 27 03.5** | **-0.5** |
| CEDA | | | | *i*S | | **Sb** | **17 27 14.7** | **+0.4** |
| CEDA | | | | IAML | | | 17 27 19.9 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| **PANCS** | **Alcalda de** | **0.80** | **56** | ***e*P** | | **Pb** | **17 27 03.8** | **-0.6** |
| **PANCS** | **Alcalda de** | **0.80** | **56** | ***i*P** | | **Pb** | **17 27 03.6** | **-0.8** |
| PANCS | | | | *i*S | | **Sb** | **17 27 14.8** | **-0.1** |
| PANCS | | | | IAML | | | 17 27 15.8 | |
| | comp=Z,31μm,1.0s | | | | | | | |
| **BOQS** | **Boqueron** | **0.80** | **45** | ***e*P** | | **Pb** | **17 27 04.1** | **-0.5** |
| **SNET** | **Serv Nac Est T** | **0.80** | **50** | ***i*P** | | **Pb** | **17 27 03.8** | **-0.7** |
| SNET | | | | *i*S | | **Sb** | **17 27 15.4** | **+0.4** |
| SNET | | | | IAML | | | 17 27 20.7 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **UEES** | **Universidad Ev** | **0.82** | **48** | ***i*P** | | **Pb** | **17 27 03.9** | **-0.8** |
| UEES | | | | *i*S | | **Sb** | **17 27 16.0** | **+0.6** |
| UEES | | | | IAML | | | 17 27 22.9 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **LOMA** | **Loma Larga** | **0.82** | **55** | ***e*P** | | **Pb** | **17 27 04.2** | **-0.7** |
| LOMA | | | | *e*S | | **Sb** | **17 27 16.4** | **+0.7** |
| **LOMA** | **Loma Larga** | **0.82** | **55** | ***i*P** | | **Pb** | **17 27 04.1** | **-0.7** |
| LOMA | | | | *i*S | | **Sb** | **17 27 16.1** | **+0.4** |
| LOMA | | | | IAML | | | 17 27 19.9 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| **LOAL** | **Lomas de Alarc** | **0.83** | **6** | ***e*P** | | **Pb** | **17 27 04.4** | **-0.6** |
| LOAL | | | | *e*S | | **Sb** | **17 27 16.6** | **+0.9** |
| **LOAL** | **Lomas de Alarc** | **0.83** | **6** | ***i*P** | | **Pb** | **17 27 04.2** | **-0.7** |
| LOAL | | | | *i*S | | **Sb** | **17 27 16.1** | **+0.3** |
| LOAL | | | | IAML | | | 17 27 19.1 | |
| | comp=Z,12μm,1.0s | | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **0.86** | **5** | ***e*P** | | **Pb** | **17 27 04.6** | **-0.8** |
| SLOZ | | | | *e*S | | **Sb** | **17 27 16.6** | **0.0** |
| **UNIC** | **Universidad Ca** | **0.87** | **21** | ***i*P** | | **Pb** | **17 27 04.5** | **-1.0** |
| UNIC | | | | *i*S | | **Sb** | **17 27 16.4** | **-0.4** |
| UNIC | | | | IAML | | | 17 27 21.5 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **IGN** | **Direccin Gen** | **0.87** | **51** | ***i*P** | | **Pb** | **17 27 04.6** | **-0.9** |
| IGN | | | | IAML | | | 17 27 20.3 | |
| | comp=Z,13μm,1.0s | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **0.88** | **41** | ***e*P** | | **Pb** | **17 27 05.3** | **-0.4** |
| **QUEZ** | **Alcaldia de Qu** | **0.88** | **41** | ***i*P** | | **Pb** | **17 27 05.2** | **-0.5** |
| QUEZ | | | | *i*S | | **Sb** | **17 27 17.5** | **+0.4** |
| QUEZ | | | | IAML | | | 17 27 22.7 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **UDBS** | **Universidad Do** | **0.88** | **52** | ***i*P** | | **Pb** | **17 27 04.7** | **-1.0** |
| UDBS | | | | *i*S | | **Sb** | **17 27 16.9** | **-0.3** |
| **LFRS** | **El Faro** | **0.90** | **60** | ***e*P** | | **Pb** | **17 27 05.4** | **-0.8** |
| **LFU** | **La Fuente** | **0.93** | **52** | ***e*P** | | **Pn** | **17 27 06.0** | **-0.4** |
| **COEG** | **Centro de Oper** | **1.06** | **65** | ***e*P** | | **Pn** | **17 27 07.6** | **-0.6** |
| **COEG** | **Centro de Oper** | **1.06** | **65** | ***i*P** | | **Pn** | **17 27 07.4** | **-0.8** |
| COEG | | | | *i*S | | **Sb** | **17 27 21.7** | **-0.6** |
| COEG | | | | IAML | | | 17 27 25.4 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **TECO** | **Alcaldia de Te** | **1.12** | **71** | ***e*P** | | **Pn** | **17 27 08.2** | **-0.8** |
| **TECO** | **Alcaldia de Te** | **1.12** | **71** | ***i*P** | | **Pn** | **17 27 08.3** | **-0.6** |
| TECO | | | | *i*S | | **Sn** | **17 27 23.2** | **-0.3** |
| TECO | | | | IAML | | | 17 27 27.6 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **UESV** | **Universidad de** | **1.15** | **66** | ***i*P** | | **Pn** | **17 27 08.8** | **-0.6** |
| UESV | | | | *i*S | | **Sn** | **17 27 24.8** | **+0.6** |
| UESV | | | | IAML | | | 17 27 28.7 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.23** | **64** | ***e*P** | | **Pn** | **17 27 10.5** | **+0.1** |
| SCLA | | | | *e*S | | **Sn** | **17 27 27.2** | **+1.0** |
| **SCLA** | **Alcaldia de Sa** | **1.23** | **64** | ***i*P** | | **Pn** | **17 27 10.7** | **+0.2** |
| SCLA | | | | *i*S | | **Sn** | **17 27 26.8** | **+0.6** |
| SCLA | | | | IAML | | | 17 27 28.5 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **MTO3** | **Montecristo** | **1.32** | **22** | ***e*P** | | **Pn** | **17 27 11.3** | **-0.6** |
| **MTO3** | **Montecristo** | **1.32** | **22** | ***i*P** | | **Pn** | **17 27 11.1** | **-0.8** |
| MTO3 | | | | *i*S | | **Sn** | **17 27 28.1** | **-0.6** |
| MTO3 | | | | IAML | | | 17 27 30.2 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **LLGN** | **La Laguna** | **1.33** | **42** | ***i*P** | | **Pn** | **17 27 11.4** | **-0.6** |
| LLGN | | | | *i*S | | **Sn** | **17 27 29.2** | **+0.3** |
| LLGN | | | | IAML | | | 17 27 32.4 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **PQSS** | **Presa 15 de Se** | **1.35** | **70** | ***e*P** | | **Pn** | **17 27 11.9** | **-0.2** |
| **PQSS** | **Presa 15 de Se** | **1.35** | **70** | ***i*P** | | **Pn** | **17 27 11.8** | **-0.2** |
| PQSS | | | | *i*S | | **Sn** | **17 27 29.1** | **0.0** |
| PQSS | | | | IAML | | | 17 27 30.7 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **TECA** | **Tecapa** | **1.36** | **76** | ***e*P** | | **Pn** | **17 27 12.0** | **-0.5** |
| **PCG** | **Pacaya** | **1.42** | **329** | ***i*P** | | **Pn** | **17 27 13.7** | **+0.4** |
| PCG | | | | *i*S | | **Sn** | **17 27 30.8** | **-0.4** |
| **NBG** | **Las Nubes** | **1.49** | **342** | ***i*P** | | **Pn** | **17 27 14.9** | **+0.7** |
| NBG | | | | *i*S | | **Sn** | **17 27 34.6** | **+1.6** |
| **PACA** | **Pacayal** | **1.53** | **79** | ***i*P** | | **Pn** | **17 27 14.9** | **+0.2** |
| PACA | | | | *i*S | | **Sn** | **17 27 34.9** | **+1.1** |
| PACA | | | | IAML | | | 17 27 39.1 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| **LCY** | **Lacayo** | **1.55** | **80** | ***e*P** | | **Pn** | **17 27 15.1** | **+0.2** |
| **RANC** | **El Ranchito** | **1.56** | **80** | ***e*P** | | **Pn** | **17 27 15.1** | **-0.1** |
| **RANC** | **El Ranchito** | **1.56** | **80** | ***i*P** | | **Pn** | **17 27 15.0** | **-0.1** |
| RANC | | | | *i*S | | **Sn** | **17 27 35.7** | **+1.2** |
| RANC | | | | IAML | | | 17 27 48.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **JUCU** | **Jucuarįn** | **1.57** | **87** | ***i*P** | | **Pn** | **17 27 14.7** | **-0.6** |
| JUCU | | | | *i*S | | **Sn** | **17 27 34.3** | **-0.6** |
| JUCU | | | | IAML | | | 17 27 38.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **BLLM** | **Bellamira** | **1.61** | **80** | ***e*P** | | **Pn** | **17 27 16.0** | **+0.3** |
| **CAHU** | **Cacacuatique** | **1.72** | **69** | ***e*P** | | **Pn** | **17 27 17.3** | **-0.1** |
| **MRL** | **Marmol** | **1.91** | **5** | ***i*P** | | **Pn** | **17 27 20.9** | **+0.9** |
| **CHTG** | **Tecpan** | **1.92** | **326** | ***i*P** | | **Pn** | **17 27 20.2** | **-0.1** |
| CHTG | | | | *i*S | | **Sn** | **17 27 43.9** | **+0.2** |
| CHTG | | | | IAML | | | 17 27 47.4 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **1.98** | **87** | ***i*P** | | **Pn** | **17 27 20.8** | **-0.1** |
| CNCH | | | | *i*S | | **Sn** | **17 27 45.8** | **+0.9** |
| CNCH | | | | IAML | | | 17 27 52.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **SOKI** | **Kika Raxquin** | **2.22** | **318** | ***i*P** | | **Pn** | **17 27 24.4** | **-0.1** |
| SOKI | | | | *i*S | | **Sn** | **17 27 50.0** | **-1.3** |
| SOKI | | | | IAML | | | 17 27 57.3 | |
| | comp=Z,360nm,1.0s | | | | | | | |
| **RTAL** | **Retalhuleu** | **2.23** | **307** | ***i*P** | | **Pn** | **17 27 24.4** | **+0.1** |
| RTAL | | | | *i*S | | **Sn** | **17 27 51.7** | **+0.7** |
| RTAL | | | | IAML | | | 17 28 06.4 | |
| | comp=Z,460nm,1.0s | | | | | | | |
| **CRIN** | **San Cristobal** | **2.78** | **99** | ***i*P** | | **Pn** | **17 27 32.1** | **+0.2** |
| CRIN | | | | *i*S | | **Sn** | **17 28 04.9** | **+0.2** |
| CRIN | | | | IAML | | | 17 28 08.3 | |
| | comp=Z,800nm,1.0s | | | | | | | |
| **PKGN** | **Cerro Pekin** | **2.86** | **100** | ***i*P** | | **Pn** | **17 27 32.8** | **-0.1** |
| PKGN | | | | IAML | | | 17 28 12.0 | |
| | comp=Z,820nm,1.0s | | | | | | | |
| **YUSH** | **Yuscaran** | **3.04** | **75** | ***i*P** | | **Pn** | **17 27 35.1** | **-0.4** |
| **CNGN** | **Cerro Negro** | **3.16** | **102** | ***i*P** | | **Pn** | **17 27 37.4** | **+0.3** |
| CNGN | | | | *i*S | | **Sn** | **17 28 14.1** | **+0.2** |
| CNGN | | | | IAML | | | 17 28 25.0 | |
| | comp=Z,210nm,1.0s | | | | | | | |
| **COPN** | **Copaltepe** | **3.34** | **107** | ***i*P** | | **Pn** | **17 27 39.6** | **+0.1** |
| COPN | | | | IAML | | | 17 28 25.4 | |
| | comp=Z,110nm,1.0s | | | | | | | |
| **LIMN** | **Finca el Limon** | **3.41** | **91** | ***i*P** | | **Pn** | **17 27 40.2** | **-0.4** |
| LIMN | | | | IAML | | | 17 28 28.4 | |
| | comp=Z,94nm,1.0s | | | | | | | |

*DJA **04** 18:02:31.3±0.5, 2°.S±3°×10°.0E±°, h48km±12km, M4.1/7, mb4.4/1, MLv4.0/7*
*IDC **04** 18:02:33.6±4.3, 0°.18S×101°.85E, h0km, mb3.6/5, mbtmp3.6/5, Error ellipse: s-maj=241.2km s-min=21.3km az=54.0*
**ISC 04 18:02:30.7±0.8, 1°.69S±0°.04×99°.71E±0°.06, h30km, n13, σ1°26/16, mb3.7/5, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SISI** | **Saibi** | **0.72** | **300** | P | | **Pn** | **18 02 45.7** | **+0.8** |
| SISI | | | | S | | **Sn** | **18 02 56.1** | **+1.2** |
| **PDSI** | **Padang** | **1.08** | **44** | P | | **Pb** | **18 02 50.3** | **-0.6** |
| PDSI | | | | S | | **Sb** | **18 03 04.9** | **+0.3** |
| **PPSI** | **Pulau Pagai** | **1.10** | **164** | P | | **Pb** | **18 02 50.4** | **-0.9** |
| PPSI | | | | S | | **Sb** | **18 03 06.3** | **+0.9** |
| **PBSI** | **Pulau Batu** | **2.17** | **319** | P | | **Pn** | **18 03 03.8** | **-1.0** |
| **BKNI** | **Bangkinang** | **2.41** | **34** | P | | **Pn** | **18 03 08.8** | **+0.7** |
| **MNAI** | **Manna** | **4.19** | **129** | P | | **Pn** | **18 03 33.9** | **+1.3** |
| **KASI** | **Kota Agung** | **6.11** | **129** | P | | **Pn** | **18 03 58.8** | **-0.2** |
| **WRA** | **Warramunga Arr** | **38.40** | **121** | P | | **P** | **18 09 49.3** | **-0.5** |
| | 0.6nm,0.5s,baz=303,slow=9.0,SNR=12 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **39.67** | **126** | P | | **P** | **18 10 00.5** | **0.0** |
| | 0.4nm,0.6s,baz=304,slow=7.8,SNR=15 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **50.66** | **345** | P | | **P** | **18 11 29.2** | **+1.9** |
| | 0.3nm,0.4s,baz=149,slow=8.3,SNR=1.8 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.17** | **344** | P | | **P** | **18 12 01.4** | **+0.9** |
| | 0.2nm,0.3s,baz=144,slow=7.9,SNR=2.2 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.81** | **350** | P | | **P** | **18 12 12.2** | **+0.1** |
| | 0.6nm,0.5s,baz=158,slow=7.0,SNR=2.7 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **144.63** | **37** | PKP | | **PKiKP** | **18 22 06.2** | **-2.9** |
| | 0.1nm,0.5s,baz=306,slow=2.1,SNR=2.1 | | | | | | | |

*NNC **04** 18:07:07.8±7.6, 41°.86N×80°.82E, h0km, mb3.1, mpv2.8, Error ellipse: s-maj=59.3km s-min=36.7km az=11.0*
*SOME **04** 18:07:11.7, 42°.43N×81°.10E, h0km*
**ISC 04 18:07:09.8±3.3, 41°.8N±0°.2×80°.7E±0°.1, h11km±19km, n7, σ0°76/14, 4C, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PDGK** | **Podgornoye** | **1.76** | **329** | ⇑P | | **Pn** | **18 07 39.5** | **-0.9** |
| | 4.7nm,1.6s,baz=181,slow=14 | | | | | | | |
| PDGK | | | | ⇑S | | **Sb** | **18 08 03.3** | **-1.2** |
| | 4.0nm,0.4s,baz=181,slow=14 | | | | | | | |
| **UZB** | **Uzynbulak** | **1.83** | **317** | ***e*P** | | **Pg** | **18 07 44.7** | **-0.2** |
| | 1.7nm,0.3s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **18 08 08.4** | **-0.3** |
| | 5.6nm,0.3s | | | | | | | |
| **SATY** | **Saty** | **2.12** | **306** | ***e*P** | | **Pg** | **18 07 51.0** | **+0.5** |
| | 2.3nm,0.3s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **18 08 19.1** | **+1.2** |
| | 7.9nm,0.3s | | | | | | | |
| **ZHN** | **Zhinishke** | **2.17** | **309** | ***e*P** | | **Pg** | **18 07 51.0** | **-0.3** |
| ZHN | | | | *e*S | | **Sg** | **18 08 19.2** | **-0.3** |
| **KPKS** | **Kokpek** | **2.23** | **318** | ***e*P** | | **Pb** | **18 07 50.5** | **+0.3** |
| | 5.8nm,0.2s | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | **18 08 18.5** | **+0.6** |
| | 11nm,0.3s | | | | | | | |
| **MAKZ** | **Makanchi** | **5.06** | **10** | Pn | | **Pn** | **18 08 25.1** | **-0.6** |
| | baz=181,slow=14 | | | | | | | |
| MAKZ | | | | Sn | | **Sn** | **18 09 24.8** | **+0.7** |
| | baz=181,slow=14 | | | | | | | |
| **MK31** | **Makanchi Array** | **5.09** | **12** | ⇑Pn | | **Pn** | **18 08 26.1** | **0.0** |
| | 5.5nm,1.4s,baz=181,slow=14,SNR=5.7 | | | | | | | |
| MK31 | | | | ⇑Sn | | **Sn** | **18 09 25.5** | **+0.6** |
| | 0.3nm,0.3s,baz=185,slow=23 | | | | | | | |

*ISN **04** 18:09:17.3±1.0, 34°.68N×46°.25E, h3km±10km, ML3.1*
*TEH **04** 18:09:19.2, 34°.64N×46°.30E, h8km±18km, ML3.0*
**ISC 04 18:09:19.4±1.0, 34°.63N±0°.03×46°.27E±0°.03, h6km±10km, n20, σ1°17/26, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.12** | **54** | Pg | | **Pg** | **18 09 21.8** | **-0.3** |
| IDHR | | | | Sg | | **Sg** | **18 09 23.9** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.39** | **141** | Pg | | **Pg** | **18 09 27.5** | **+0.5** |
| **KGS1** | **Ghasr-e-Shirin** | **0.58** | **258** | Pg | | **Pg** | **18 09 30.5** | **0.0** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **210** | Pg | | **Pg** | **18 09 31.4** | **+0.5** |
| **ILIN** | **Lien** | **0.64** | **63** | Pg | | **Pg** | **18 09 31.1** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **119** | Pg | | **Pg** | **18 09 32.9** | **-0.6** |
| KCHF | | | | Sg | | **Sb** | **18 09 44.2** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **183** | Pg | | **Pb** | **18 09 38.8** | **-0.4** |
| **SNQR** | **Sonqor, Kerman** | **1.14** | **78** | Pg | | **Pg** | **18 09 40.5** | **-0.8** |
| **IBZA** | **Bozab** | **1.32** | **97** | Pg | | **Pg** | **18 09 44.2** | **-0.5** |
| **IBDR** | **Badra** | **1.54** | **191** | ***e*Pn** | | **Pb** | **18 09 48.0** | **-0.4** |
| IBDR | | | | *e*Sn | | **Sg** | **18 10 10.0** | **+1.0** |
| IBDR | | | | AML | AML | | 18 10 15.9 | |
| | comp=E,230nm,0.5s | | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.71** | **130** | Pg | | **Pb** | **18 09 51.2** | **0.0** |
| **IKK** | **Kirkuk** | **1.76** | **296** | ***e*Pn** | | **Pn** | **18 09 50.0** | **-0.5** |
| IKRK | | | | *e*Sn | | **Sb** | **18 10 14.0** | **-0.5** |
| IKRK | | | | AML | AML | | 18 10 20.1 | |
| | comp=N,378nm,0.6s | | | | | | | |
| IKRK | | | | AML | AML | | 18 10 20.2 | |
| | comp=E,272nm,0.6s | | | | | | | |
| **HSAM** | **Samen** | **1.97** | **102** | Pn | | **Pb** | **18 09 55.5** | **-0.4** |
| **BHD** | **Baghdad** | **2.08** | **230** | ***e*Pn** | | **Pn** | **18 09 55.0** | **+0.2** |
| BHD | | | | *e*Sn | | **Sb** | **18 10 23.0** | **-0.5** |
| **MAHB** | **Mahabad** | **2.18** | **348** | Pn | | **Pb** | **18 09 58.8** | **-0.5** |
| **RAFI** | **Al-Rafai** | **2.90** | **183** | ***e*Pn** | | **Pn** | **18 10 07.5** | **+1.4** |
| RAFI | | | | *e*Sn | | **Sb** | **18 10 44.0** | **-3.3** |
| **IAZR** | **Azarshahr** | **3.05** | **356** | Pn | | **Pn** | **18 10 10.1** | **+1.6** |
| **ISRB** | **Sarab** | **3.38** | **19** | Pn | | **Pn** | **18 10 14.8** | **+1.9** |
| **ISHB** | **Shabestar** | **3.68** | **352** | Pn | | **Pn** | **18 10 18.7** | **+1.6** |
| **JHBN** | **Jahan bin** | **4.38** | **122** | Pn | | **Pn** | **18 10 28.5** | **+1.7** |

*DJA **04** 18:10:33.4±0.4, 2°.S±3°×10°.0E±°, h10km, M3.7/7, MLv3.7/7*
*IDC **04** 18:11:14.0±14.0, 0°.73S×101°.56E, h380km±133km, mb2.6/4, mbtmp3.4/4, Error ellipse: s-maj=234.8km s-min=21.8km az=55.0*
**ISC 04 18:10:34.6±1.0, 1°.77S±0°.06×99°.75E±0°.06, h35km, n11, σ1°71/13, mb3.4/4, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s |

1.1nm,0.5s
**MKAR Makanchi Array 76.67 321** P P 18 31 46.5 0.0
0.4nm,0.8s,baz=103,slow=5.4,SNR=2.1
0.4nm,0.8s

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*TEH **04** 18:29:17.5,34˚.64N×46˚.32E,h11km±17km,ML2.7*
*ISN **04** 18:29:17.7±0.5,34˚.64N×46˚.40E,h16km±8km,ML2.7*
**ISC 04 18:29:17.5±0.9,34˚.64N±0˚.04×46˚.33E±0˚.03,h12km±7km, n13,σ0°43/19,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.08** | **38** | Pg | **Pg** | **18 29 20.3** | **0.0** |
| IDHR | | | | Sg | **Sg** | **18 29 22.4** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.37** | **147** | Pg | **Pb** | **18 29 25.8** | **-0.4** |
| **ILIN** | **Lien** | **0.59** | **62** | Pg | **Pg** | **18 29 29.1** | **0.0** |
| ILIN | | | | Sg | **Sb** | **18 29 38.7** | **+0.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.63** | **258** | Pg | **Pg** | **18 29 29.8** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.63** | **214** | Pg | **Pg** | **18 29 29.9** | **+0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.69** | **122** | Pg | **Pb** | **18 29 31.1** | **-0.6** |
| KCHF | | | | Sg | **Sb** | **18 29 41.8** | **+0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **186** | Pg | **Pb** | **18 29 37.2** | **0.0** |
| **SNQR** | **Sonqor, Kerman** | **1.09** | **78** | Pg | **Pn** | **18 29 39.3** | **+0.3** |
| **IBZA** | **Bozab** | **1.27** | **97** | Pg | **Pg** | **18 29 42.1** | **0.0** |
| **IBDR** | **Badra** | **1.56** | **192** | *e*Pn | **Pb** | **18 29 47.0** | **+0.6** |
| IBDR | | | | *e*Sn | **Sg** | **18 30 08.0** | **+0.2** |
| IBDR | | | | AML | AML | 18 30 13.2 | |
| | comp=E,124nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 18 30 19.5 | |
| | comp=N,113nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.68** | **131** | Pg | **Pg** | **18 29 49.2** | **-0.6** |
| **IKRK** | **Kirkuk** | **1.80** | **295** | *e*Pn | **Pb** | **18 29 50.5** | **0.0** |
| IKRK | | | | *e*Sn | **Sg** | **18 30 15.0** | **-0.5** |
| **BHD** | **Baghdad** | **2.12** | **230** | *e*Pn | **Pb** | **18 29 55.0** | **-0.9** |
| BHD | | | | *e*Sn | **Sb** | **18 30 22.0** | **-0.2** |

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**IDC 04 18:31:00.1±6.5,23˚.74N×142˚.58E,h0km,mb3.4/2, mbtmp3.4/2,Error ellipse: s-maj=428.0km s-min=44.0km az=116.0,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.15** | **191** | P | P | 18 39 10.4 | -0.4 |
| | 0.4nm,0.7s,baz=11,slow=8.9,SNR=8.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **47.87** | **191** | P | P | 18 39 40.1 | +0.1 |
| | 0.3nm,0.6s,baz=18,slow=6.9,SNR=8.4 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **LPAZ** | **La Paz** | **150.25** | **81** | PKPbc | PKPbc | 18 50 54.4 | -0.4 |
| | 1.1nm,0.3s,baz=284,slow=2.2,SNR=8.7 | | | | | | |

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**IDC 04 18:31:26.9±7.4,11˚.89S×166˚.14E,h80km±60km,mb3.7/4, mbtmp3.9/5,ML3.3/1,MS4.2/1,Error ellipse: s-maj=55.9km s-min=36.8km az=39.0,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **6.56** | **291** | LR | LR | 18 35 49.3 | |
| | comp=Z,2μm,18.5s,baz=220,slow=40 | | | | | | |
| **DZM** | **Mont Dzumac** | **10.13** | **179** | P | Pn | 18 33 50.3 | +0.7 |
| | 0.3nm,0.3s,baz=353,slow=17,SNR=9.5 | | | | | | |
| DZM | | | | S | Sn | 18 35 40.2 | -1.4 |
| | 3.2nm,0.8s,baz=16,slow=21,SNR=1.9 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.57** | **251** | P | P | 18 37 42.3 | +0.2 |
| | 0.8nm,0.7s,baz=85,slow=9.1,SNR=8.6 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **32.77** | **245** | P | P | 18 37 52.6 | 0.0 |
| | 0.9nm,0.7s,baz=68,slow=9.9,SNR=13 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **78.12** | **180** | P | P | 18 43 17.7 | +0.5 |
| | 1.7nm,0.9s,baz=10,slow=5.4,SNR=3.6 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **94.40** | **317** | P | P | 18 44 37.2 | -0.8 |
| | 0.8nm,0.6s,baz=95,slow=4.7,SNR=6.2 | | | | | | |
| | 0.8nm,0.6s | | | | | | |

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*IDC **04** 18:37:20.9±1.4,39˚.13N×73˚.93E,h0km,mb3.9/4, mbtmp3.6/8,ML3.0/4,MS2.9/3,Error ellipse: s-maj=25.3km s-min=22.3km az=117.0*
*SOME **04** 18:37:20.6,39˚.27N×74˚.02E,h5km*
*KRNET **04** 18:37:23.5±0.1,39˚.32N×73˚.84E,h11km,mb3.7*
*NNC **04** 18:37:25.1±3.2,39˚.06N×73˚.70E,h0km,mb4.2,mpv3.8, Error ellipse: s-maj=24.8km s-min=16.8km az=159.0*
**ISC 04 18:37:22.5±1.6,39˚.17N±0˚.05×73˚.69E±0˚.03,h2km±10km, n75,σ2s14/117,mb3.7/5,36C-27D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **0.86** | **350** | ⇑*i*P | **Pg** | **18 37 37.8** | **-1.2** |
| | baz=39 | | | | | | |
| SFK | | | | ⇑*i*S | **Sg** | **18 37 48.4** | **-1.7** |
| | baz=39 | | | | | | |
| **DRK** | **Karamyk** | **1.50** | **283** | ⇑*e*P | **Pg** | **18 37 53.6** | **+2.3** |
| | baz=76 | | | | | | |
| DRK | | | | ⇑*e*S | **Sg** | **18 38 15.7** | **+4.9** |
| | baz=76 | | | | | | |
| **OHH** | **Osh** | **1.52** | **333** | ⇓*i*P | **Pn** | **18 37 50.7** | **-0.2** |
| | baz=26 | | | | | | |
| OHH | | | | ⇓*i*S | **Sg** | **18 38 10.8** | **-0.7** |
| | baz=26 | | | | | | |
| **ARSB** | **Arslanbob** | **2.22** | **346** | ⇓*i*P | **Pn** | **18 38 02.0** | **+1.4** |
| | baz=42 | | | | | | |
| ARSB | | | | ⇓*i*S | **Sb** | **18 38 30.3** | **-1.2** |
| | baz=42 | | | | | | |
| **BTK** | **Batken** | **2.39** | **293** | ⇓*i*P | **Pb** | **18 38 06.8** | **+0.4** |
| | baz=88 | | | | | | |
| BTK | | | | ⇓*i*S | **Sg** | **18 38 38.2** | **-1.2** |
| | baz=88 | | | | | | |
| **GAR** | **Garm** | **2.63** | **267** | ⇑*i*P | **Pb** | **18 38 11.2** | **+0.7** |
| | baz=64 | | | | | | |
| GAR | | | | ⇑*i*S | **Sg** | **18 38 45.8** | **-1.3** |
| | baz=64 | | | | | | |
| **ARLS** | **Aral** | **2.73** | **10** | ⇑*i*P | **Pn** | **18 38 08.2** | **+0.6** |
| | baz=8.0 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **18 38 41.0** | **-0.3** |
| | baz=8.0 | | | | | | |
| **NRN** | **Naryn** | **2.87** | **37** | ⇓*i*P | **Pn** | **18 38 09.8** | **+0.2** |
| | baz=37 | | | | | | |
| NRN | | | | ⇓*i*S | **Sn** | **18 38 43.5** | **-1.4** |
| | baz=37 | | | | | | |
| **ARK** | **Arkit** | **2.94** | **334** | ⇑*i*P | **Pn** | **18 38 12.4** | **+2.0** |
| | baz=31 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **18 38 48.2** | **-4.0** |
| | baz=31 | | | | | | |
| **AML** | **Almayashu** | **2.96** | **0** | P | **Pn** | **18 38 12.9** | **+1.9** |
| | SNR=56 | | | | | | |
| **AML** | **Almayashu** | **2.96** | **0** | ⇓*e*P | **Pn** | **18 38 11.9** | **+1.0** |
| | baz=58 | | | | | | |
| AML | | | | ⇓*i*S | **Sn** | **18 38 47.5** | **+0.2** |
| | baz=58 | | | | | | |
| **TRKS** | **Terek-Say** | **3.06** | **321** | ⇓*i*P | **Pn** | **18 38 13.6** | **+1.5** |
| | baz=17 | | | | | | |
| TRKS | | | | ⇓*i*S | **Sn** | **18 38 50.4** | **+1.0** |
| | baz=17 | | | | | | |
| **UCH** | **Uchtor** | **3.12** | **11** | P | **Pn** | **18 38 15.2** | **+2.0** |
| | SNR=82 | | | | | | |
| **UCH** | **Uchtor** | **3.12** | **11** | ⇑*i*P | **Pn** | **18 38 13.9** | **+0.7** |
| | baz=10.0 | | | | | | |
| UCH | | | | ⇑*i*S | **Sn** | **18 38 50.7** | **-0.6** |
| | baz=10.0 | | | | | | |
| **MNAS** | **Manas** | **3.44** | **345** | ⇓*i*P | **Pn** | **18 38 18.8** | **+1.5** |
| | baz=43 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sn** | **18 38 59.3** | **+0.7** |
| | baz=43 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.49** | **1** | P | **Pn** | **18 38 20.7** | **+2.7** |
| | SNR=30 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.49** | **1** | ⇑*i*P | **Pn** | **18 38 19.0** | **+1.0** |
| | baz=59 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **18 38 59.6** | **-0.4** |
| | baz=59 | | | | | | |
| **AAK** | **Ala-Archa** | **3.52** | **10** | P | **Pn** | **18 38 21.2** | **+2.8** |
| | SNR=13 | | | | | | |
| **AAK** | **Ala-Archa** | **3.52** | **10** | Pn | **Pn** | **18 38 21.0** | **+2.6** |
| | 4.2nm,0.3s,baz=240,slow=22,SNR=19 | | | | | | |
| AAK | | | | Lg | Lg | 18 39 08.7 | |
| | 3.3nm,0.3s,baz=264,slow=14,SNR=3.9 | | | | | | |
| AAK | | | | LR | LR | 18 39 46.2 | |
| | comp=Z,88nm,18.6s,baz=200,slow=41 | | | | | | |
| | 18nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.52** | **10** | ⇑Pn | **Pb** | **18 38 23.1** | **-2.6** |
| | 25nm,0.7s | | | | | | |
| AAK | | | | ⇑Sn | **Sb** | **18 39 08.3** | **-0.6** |
| | 35nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.52** | **10** | ⇑*i*P | **Pn** | **18 38 19.5** | **+1.1** |
| | baz=8.0 | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **18 39 00.2** | **-0.5** |
| | baz=8.0 | | | | | | |
| **CHGR** | **Chuyangaron** | **3.57** | **263** | ⇑*i*P | **Pb** | **18 38 24.3** | **-2.2** |
| | baz=61 | | | | | | |
| CHGR | | | | ⇑*i*S | **Sb** | **18 39 08.7** | **-1.7** |
| | baz=61 | | | | | | |
| **MRKS** | **Merke** | **3.59** | **355** | *e*P | **Pb** | **18 38 25.3** | **-1.5** |
| | 34nm,0.6s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **18 39 12.3** | **+1.4** |
| | 55nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.59** | **355** | Pg | **Pb** | **18 38 25.9** | **-0.9** |
| | 34nm,0.6s | | | | | | |
| MRKS | | | | Lg | Lg | 18 39 09.7 | |
| | 55nm,0.5s | | | | | | |
| **KBK** | **Karagaybulak** | **3.61** | **15** | P | **Pn** | **18 38 22.3** | **+2.6** |
| | SNR=27 | | | | | | |
| **KBK** | **Karagaybulak** | **3.61** | **15** | ⇑*i*P | **Pn** | **18 38 20.5** | **+0.8** |
| | baz=14 | | | | | | |
| KBK | | | | ⇑*i*S | **Sn** | **18 39 02.3** | **-0.7** |
| | baz=14 | | | | | | |
| **ULHL** | **Ulahol** | **3.63** | **31** | P | **Pb** | **18 38 26.2** | **-1.4** |
| | SNR=9.7 | | | | | | |
| **ULHL** | **Ulahol** | **3.63** | **31** | ⇓*i*P | **Pn** | **18 38 20.7** | **+0.7** |
| | baz=31 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sn** | **18 39 02.5** | **-1.1** |
| | baz=31 | | | | | | |
| **FRU1** | **Bishkek** | **3.71** | **11** | ⇓*i*P | **Pn** | **18 38 22.1** | **+1.2** |
| | baz=9.0 | | | | | | |
| FRU1 | | | | ⇓*i*S | **Sn** | **18 39 04.8** | **-0.4** |
| | baz=9.0 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.73** | **26** | ⇑*e*P | **Pn** | **18 38 21.9** | **+0.6** |
| | baz=26 | | | | | | |
| BOOM | | | | ⇑*e*S | **Sn** | **18 39 04.5** | **-1.5** |
| | baz=26 | | | | | | |
| **CHMS** | **Chumysh** | **3.91** | **11** | P | **Pn** | **18 38 25.6** | **+2.0** |
| | SNR=10 | | | | | | |
| **CHMS** | **Chumysh** | **3.91** | **11** | ⇓Pn | **Pn** | **18 38 27.1** | **+3.5** |
| | 12nm,0.6s | | | | | | |
| CHMS | | | | ⇓Sn | **Sb** | **18 39 17.8** | **-2.2** |
| | 42nm,0.8s | | | | | | |
| **CHMS** | **Chumysh** | **3.91** | **11** | ⇑*i*P | **Pn** | **18 38 24.4** | **+0.7** |
| | baz=10.0 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sn** | **18 39 09.3** | **-0.9** |
| | baz=10.0 | | | | | | |
| **KDJ** | **Kajisay** | **3.97** | **41** | ⇓*i*P | **Pn** | **18 38 25.5** | **+0.8** |
| | baz=41 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sn** | **18 39 10.5** | **-1.5** |
| | baz=41 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.01** | **20** | P | **Pn** | **18 38 27.6** | **+2.3** |
| | SNR=15 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.01** | **20** | ⇑Pn | **Pn** | **18 38 30.1** | **+4.8** |
| | 19nm,0.9s | | | | | | |
| TKM2 | | | | ⇑Sn | **Sb** | **18 39 19.9** | **-3.3** |
| | 18nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.01** | **20** | ⇑*i*P | **Pn** | **18 38 26.0** | **+0.7** |
| | baz=20 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sn** | **18 39 11.8** | **-1.2** |
| | baz=20 | | | | | | |
| **USP** | **Ospenovka** | **4.14** | **8** | P | **Pb** | **18 38 36.3** | **+0.1** |
| | SNR=6.7 | | | | | | |
| **USP** | **Ospenovka** | **4.14** | **8** | ⇓*i*P | **Pn** | **18 38 27.6** | **+0.8** |
| | baz=7.0 | | | | | | |
| USP | | | | ⇓*i*S | **Sn** | **18 39 14.7** | **-1.2** |
| | baz=7.0 | | | | | | |
| **KST** | **Kastek** | **4.23** | **23** | *e*P | Pn | 18 38 33.5 | +5.3 |
| | 8.0nm,0.6s | | | | | | |
| KST | | | | *e*S | **Sb** | **18 39 26.8** | **-2.7** |
| | 28nm,0.6s | | | | | | |
| **KST** | **Kastek** | **4.23** | **23** | Pg | **Pb** | **18 38 38.6** | **+0.8** |
| | 8.0nm,0.6s | | | | | | |
| KST | | | | Lg | Lg | 18 39 31.2 | |
| | 28nm,0.6s | | | | | | |
| **SGDS** | **Sogindy** | **4.34** | **9** | Pg | **Pb** | **18 38 40.8** | **+1.3** |
| | 12nm,0.5s | | | | | | |
| SGDS | | | | Lg | Lg | 18 39 34.2 | |
| | 23nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.36** | **20** | *e*P | **Pb** | **18 38 39.3** | **-0.7** |
| | 35nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sb** | **18 39 36.5** | **+3.5** |
| | 24nm,0.8s | | | | | | |
| **IZV** | **Izvestkoviy** | **4.45** | **29** | *e*P | **Pb** | **18 38 40.5** | **-1.0** |
| | 8.9nm,0.5s | | | | | | |
| IZV | | | | *e*S | **Sb** | **18 39 38.3** | **+2.6** |
| | 34nm,0.7s | | | | | | |
| **IZV** | **Izvestkoviy** | **4.45** | **29** | Pg | **Pb** | **18 38 43.4** | **+1.9** |
| | 0.2nm,0.1s | | | | | | |
| IZV | | | | Lg | Lg | 18 39 39.0 | |
| | 34nm,0.7s | | | | | | |
| **MTBS** | **Maitube** | **4.46** | **27** | *e*P | **Pb** | **18 38 40.2** | **-1.5** |
| | 10nm,0.4s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **18 39 38.0** | **+2.0** |
| | 24nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **4.46** | **27** | Pg | **Pb** | **18 38 43.9** | **+2.2** |
| | 10nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 18 39 39.4 | |
| | 24nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.58** | **31** | *e*P | **Pb** | **18 38 42.0** | **-1.9** |
| | 17nm,0.6s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **18 39 41.1** | **+1.4** |
| | 5.8nm,0.7s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.58** | **31** | Pg | **Pb** | **18 38 44.7** | **+0.8** |
| | 17nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 18 39 41.1 | |
| | 5.8nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **4.61** | **330** | Pn | **Pn** | **18 38 36.4** | **+3.2** |
| | 2.1nm,0.3s,baz=138,slow=15,SNR=76 | | | | | | |
| KK31 | | | | ⇑Pg | **Pg** | **18 38 49.7** | **-1.1** |
| | 8.4nm,0.6s,baz=147,slow=16,SNR=3.9 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **18 39 32.2** | **+4.8** |
| | 5.1nm,0.4s,baz=143,slow=28 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 18 39 55.0 | |
| | 10nm,0.5s,baz=146,slow=28 | | | | | | |
| **KKAR** | **Karatay Array** | **4.61** | **330** | ⇑*i*P | **Pn** | **18 38 35.5** | **+2.3** |
| | baz=27 | | | | | | |
| KKAR | | | | ⇑*i*S | **Sn** | **18 39 28.5** | **+1.2** |
| | baz=27 | | | | | | |
| **MDOK** | **Medeo** | **4.73** | **31** | *e*P | **Pb** | **18 38 44.9** | **-1.3** |
| | 10nm,0.5s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **18 39 46.1** | **+2.5** |
| | 16nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **4.73** | **31** | ⇓Pn | **Pn** | **18 38 38.1** | **+3.1** |
| | 12nm,0.6s | | | | | | |
| MDOK | | | | Pg | **Pb** | **18 38 47.2** | **+1.0** |
| | 10nm,0.5s | | | | | | |
| MDOK | | | | ⇓Sn | **Sn** | **18 39 36.7** | **+6.2** |
| | 32nm,0.8s | | | | | | |
| MDOK | | | | Lg | Lg | 18 39 45.9 | |
| | 16nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **4.76** | **18** | *e*P | **Pb** | **18 38 46.5** | **-0.3** |
| | 11nm,0.5s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **18 39 49.0** | **+4.4** |
| | 25nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **4.76** | **18** | Pg | **Pb** | **18 38 49.0** | **+2.3** |
| | 11nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 18 39 48.5 | |
| | 25nm,0.7s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.81** | **31** | *e*P | **Pb** | **18 38 47.0** | **-0.7** |
| | 17nm,0.6s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **18 39 49.6** | **+3.5** |
| | 41nm,0.8s | | | | | | |
| **BRLS** | **Borolday** | **4.83** | **324** | *e*P | **Pb** | **18 38 49.6** | **+1.7** |
| | 4.1nm,0.4s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **18 39 54.5** | **-3.3** |
| | 16nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **4.83** | **324** | Pg | **Pb** | **18 38 46.5** | **-1.5** |
| | 3.3nm,0.4s | | | | | | |
| BRLS | | | | Lg | Lg | 18 39 43.8 | |
| | 13nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **5.06** | **25** | *e*P | **Pb** | **18 38 51.3** | **-0.6** |
| | 13nm,0.6s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **18 39 56.9** | **+3.7** |
| | 30nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **5.06** | **25** | Pg | **Pb** | **18 38 53.9** | **+1.9** |
| | 13nm,0.6s | | | | | | |
| KTBS | | | | Lg | Lg | 18 39 56.7 | |
| | 30nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **5.29** | **27** | *e*P | **Pb** | **18 38 55.5** | **-0.4** |
| | 6.0nm,0.5s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **18 40 03.7** | **+3.9** |
| | 7.1nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **5.47** | **37** | *e*P | **Pb** | **18 38 58.9** | **0.0** |
| | 7.8nm,0.8s | | | | | | |
| KURS | | | | *e*S | **Sb** | **18 40 10.3** | **+5.3** |
| | 12nm,0.9s | | | | | | |
| **BTLS** | **Baital** | **5.87** | **2** | *e*P | **Pb** | **18 39 05.6** | **0.0** |
| | 3.9nm,0.5s | | | | | | |
| BTLS | | | | *e*S | **Sb** | **18 40 21.4** | **+5.0** |
| | 6.9nm,0.7s | | | | | | |
| **BTLS** | **Baital** | **5.87** | **2** | Lg | Lg | 18 40 21.7 | |
| | 6.9nm,0.7s | | | | | | |
| **OTUK** | **Ortayu** | **9.12** | **354** | ⇑Pn | **Pn** | **18 39 38.9** | **+3.6** |
| | 1.9nm,0.6s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 18 42 18.9 | |
| | 8.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **9.88** | **37** | Pn | **Pn** | **18 39 44.3** | **-1.3** |
| | baz=189,slow=14,SNR=1.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.79** | **321** | Pn | **Pn** | **18 41 05.4** | **-0.5** |
| | 0.2nm,0.3s,baz=126,slow=8.1,SNR=3.9 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.61** | **24** | Pn | **Pn** | **18 41 15.8** | **-0.6** |
| | 0.1nm,0.3s,baz=218,slow=9.4,SNR=5.5 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **OBN** | **Obninsk** | **29.43** | **315** | LR | LR | 18 57 18.5 | |
| | comp=Z,17nm,20.5s,baz=328,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **36.54** | **323** | P | **P** | **18 44 28.6** | **-0.6** |
| | 2.8nm,1.0s,baz=118,slow=11,SNR=6.6 | | | | | | |
| | 2.8nm,1.0s | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.54** | **336** | P | **P** | **18 44 54.2** | **-0.3** |
| | 1.5nm,0.8s,baz=113,slow=11,SNR=1.7 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **42.34** | **320** | P | **P** | **18 45 17.3** | **-0.4** |
| | 1.1nm,0.8s,baz=111,slow=7.9,SNR=1.4 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **50.95** | **40** | LR | LR | 19 08 36.4 | |
| | comp=Z,24nm,19.8s,baz=268,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.90** | **269** | P | **P** | **18 48 22.2** | **-0.8** |
| | 0.6nm,0.8s,baz=37,slow=7.5,SNR=3.7 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.65** | **124** | P | **P** | **18 49 40.5** | **-1.9** |
| | 0.7nm,1.1s,baz=326,slow=5.6,SNR=5.4 | | | | | | |

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**IDC 04 18:39:01.3±1.3,25˚.44S×70˚.81E,h0km,mb3.7/5, mbtmp3.7/5,MS3.3/7,Error ellipse: s-maj=44.1km s-min=30.5km az=179.0,Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S1** | **Diego Carcia H** | **17.77** | **5** | T | T | 19 02 25.9 | |
| | baz=186,slow=76,SNR=5.0 | | | | | | |
| **H08S2** | **Diego Garcia H** | **17.77** | **5** | T | T | 19 02 25.9 | |
| | baz=186,slow=76,SNR=5.4 | | | | | | |
| **H08S3** | **Diego Garcia H** | **17.79** | **5** | T | T | 19 02 25.9 | |
| | baz=186,slow=76,SNR=7.0 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **25.67** | **212** | T | T | 19 11 03.7 | |
| | baz=43,slow=74,SNR=313 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **25.68** | **212** | T | T | 19 10 58.6 | |
| | baz=43,slow=74,SNR=296 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **25.69** | **212** | T | T | 19 11 03.8 | |
| | baz=43,slow=74,SNR=402 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **38.37** | **115** | T | T | 19 27 14.8 | |
| | baz=272,slow=75,SNR=4.8 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **38.38** | **115** | T | T | 19 27 15.1 | |
| | baz=272,slow=75,SNR=4.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **38.39** | **115** | T | T | 19 27 16.2 | |
| | baz=272,slow=75,SNR=5.9 | | | | | | |
| **BOSA** | **Boshof** | **40.52** | **255** | P | P | 18 46 42.3 | -0.2 |
| | 3.2nm,1.0s,baz=96,slow=11,SNR=3.1 | | | | | | |
| BOSA | | | | LR | LR | 19 00 53.8 | |
| | comp=Z,64nm,20.1s,baz=148,slow=32 | | | | | | |
| | 3.2nm,1.0s | | | | | | |
| **SUR** | **Sutherland** | **43.99** | **249** | LR | LR | 19 01 15.6 | |
| | comp=Z,68nm,21.7s,baz=120,slow=30 | | | | | | |
| **KAPI** | **Kappang** | **51.04** | **75** | LR | LR | 19 08 01.7 | |
| | comp=Z,54nm,18.5s,baz=94,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **51.51** | **35** | P | P | 18 48 08.7 | -0.3 |
| | 0.8nm,0.8s,baz=228,slow=11,SNR=1.3 | | | | | | |
| CMAR | | | | LR | LR | 19 08 12.6 | |
| | comp=Z,11nm,18.4s,baz=225,slow=34 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **56.93** | **103** | P | P | 18 48 48.4 | -0.3 |
| | 0.5nm,0.9s,baz=253,slow=6.7,SNR=5.1 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.40** | **99** | P | P | 18 48 59.2 | +0.2 |
| | 1.2nm,1.0s,baz=262,slow=6.6,SNR=4.6 | | | | | | |
| | 1.2nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **73.44** | **339** | LR | LR | 19 21 25.8 | |
| | comp=Z,28nm,18.4s,baz=121,slow=35 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **76.03** | **5** | P | P | 18 50 50.4 | +0.3 |
| | 0.6nm,1.0s,baz=186,slow=4.4,SNR=4.4 | | | | | | |
| | 0.6nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **81.59** | **47** | LR | LR | 19 27 40.3 | |
| | comp=Z,16nm,18.9s,baz=38,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **82.41** | **42** | LR | LR | 19 28 23.2 | |
| | comp=Z,8.5nm,18.0s,baz=155,slow=36 | | | | | | |

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*NEIC **04** 18:41:49.4±1.1,18˚.7N±0˚.2×64˚.18W±0˚.05,h35km±2km, ML2.6/16,Md3.7/3(RSPR),Error ellipse: s-maj=35.0km s-min=4.4km az=11.0*
*RSPR **04** 18:41:49.8,18˚.48N×64˚.19W,h109km±5km,MD3.7/3*
**ISC 04 18:41:47.8±2.0,18˚.5N±0˚.3×64˚.20W±0˚.09,h11km±18km, n17,σ0s68/23,4C,Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SMRT** | **St. Maarten** | **1.16** | **113** | Pn | **Pg** | **18 42 10.4** | **+0.2** |
| SMRT | | | | Sn | **Sb** | **18 42 25.3** | **+0.3** |
| SMRT | | | | IAML | | 18 42 25.9 | |
| | comp=N,265nm,0.3s | | | | | | |
| **SABA** | **Saba** | **1.27** | **134** | Pn | **Pn** | **18 42 11.0** | **-0.5** |
| **HUMP** | **Col San Antoni** | **1.61** | **257** | ⇑*e*P | **Pb** | **18 42 17.6** | **0.0** |
| **HUMP** | **Col San Antoni** | **1.61** | **257** | *e*S | **Sn** | **18 42 37.1** | **+0.1** |
| **HUMP** | **Col San Antoni** | **1.61** | **257** | | **Pn** | **18 42 15.8** | **-0.4** |
| HUMP | | | | | **Sn** | **18 42 36.1** | **-0.9** |
| HUMP | | | | IAML | | 18 42 38.4 | |
| | comp=N,47nm,0.5s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.80** | **264** | ⇑*e*P | **Pb** | **18 42 20.0** | **-0.9** |
| **GCPR** | **Guaynabo City** | **1.80** | **264** | | **Pn** | **18 42 18.6** | **-0.2** |
| GCPR | | | | Sn | **Sn** | **18 42 42.1** | **+0.4** |
| GCPR | | | | IAML | | 18 42 48.6 | |
| | comp=N,45nm,0.7s | | | | | | |
| **IGPR** | **InterUniversit** | **1.89** | **254** | *e*S | **Sn** | **18 42 45.4** | **+1.4** |
| **IGPR** | **InterUniversit** | **1.89** | **254** | Pn | **Pn** | **18 42 19.4** | **-0.7** |
| IGPR | | | | | **Sn** | **18 42 43.6** | **-0.4** |
| IGPR | | | | IAML | | 18 42 50.1 | |
| | comp=N,55nm,0.3s | | | | | | |
| IGPR | | | | IAML | | 18 42 51.2 | |
| | comp=E,52nm,0.3s | | | | | | |
| **CELP** | **Cerrillos** | **2.30** | **260** | ⇑*e*P | **Pn** | **18 42 26.4** | **+0.7** |
| **CELP** | **Cerrillos** | **2.30** | **260** | *e*S | **Sn** | **18 42 55.1** | **+1.0** |
| **CELP** | **Cerrillos** | **2.30** | **260** | | **Pn** | **18 42 25.5** | **-0.3** |
| CELP | | | | | **Sn** | **18 42 53.7** | **-0.4** |
| **OBIP** | **Obispado Ponce** | **2.33** | **259** | *e*S | **Sn** | **18 42 55.8** | **+0.9** |
| **OBIP** | **Obispado Ponce** | **2.33** | **259** | Pn | **Pn** | **18 42 26.2** | **0.0** |
| OBIP | | | | IAML | | 18 43 23.9 | |
| | comp=N,25nm

σ0.57/14, **Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.26** | **307** | *e*Pg | **Pg** | **18 58 19.0** | **0.0** |
| IBDR | | | | *e*Sg | **Sg** | **18 58 22.0** | **-0.5** |
| IBDR | | | | AML | AML | 18 58 26.1 | |
| | comp=N,961nm,0.7s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **0.67** | **3** | Pg | **Pg** | **18 58 26.2** | **-0.6** |
| ILBA | | | | Sg | **Sb** | **18 58 37.3** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **1.18** | **349** | Pg | **Pg** | **18 58 36.7** | **+0.3** |
| **RAFI** | **Al-Rafai** | **1.23** | **182** | *e*Pg | **Pg** | **18 58 37.5** | **+0.1** |
| RAFI | | | | *e*Sg | **Sn** | **18 58 54.0** | **+0.3** |
| RAFI | | | | AML | AML | 18 58 55.5 | |
| | comp=N,97nm,0.3s | | | | | | |
| RAFI | | | | AML | AML | 18 59 00.6 | |
| | comp=E,118nm,0.6s | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.41** | **13** | Pg | **Pg** | **18 58 41.8** | **+0.9** |
| **IKFM** | **Kafar-mosalman** | **1.51** | **68** | Pg | **Pg** | **18 58 43.0** | **+0.1** |
| **BHD** | **Baghdad** | **1.54** | **282** | *e*Pg | **Pg** | **18 58 43.0** | **-0.3** |
| BHD | | | | *e*Sg | **Sg** | **18 59 04.0** | **+0.8** |
| **IDHR** | **Dehrash** | **1.75** | **6** | Pg | **Pb** | **18 58 46.5** | **+0.3** |
| **IBZA** | **Bozab** | **2.06** | **43** | Pn | **Pb** | **18 58 50.8** | **-0.7** |
| **ILIN** | **Lien** | **2.06** | **18** | Pn | **Pb** | **18 58 50.8** | **-0.8** |

*DRS **04** 19:19:56.6, 42˙.91N×46˙.25E, h24km*
*NORS **04** 19:19:57.2, 42˙.97N×46˙.31E, h1km, MPVA3.6*
**MOS 04 19:19:56.7, 42˙.87N×46˙.37E, h6km, MPVA3.5, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVE** | **Vedeno** | **0.20** | **296** | *i* Pg | Pg | 19 20 01.5 | +0.8 |
| DVE | | | | *e*Sg | Sg | 19 20 04.6 | +1.2 |
| **BTLR** | **Botlikh** | **0.23** | **208** | *e*Pg | Pg | 19 20 02.8 | +1.5 |
| | 160nm,0.1s | | | | | | |
| BTLR | | | | *e*Sg | Sg | 19 20 06.8 | +2.4 |
| | 200nm,1.2s | | | | | | |
| **DLMR** | **Dylym** | **0.28** | **44** | *e*Pg | Pb | 19 20 03.6 | -0.5 |
| | 80nm,0.1s | | | | | | |
| DLMR | | | | *e*Sg | Sb | 19 20 08.1 | -0.9 |
| | 280nm,0.5s | | | | | | |
| **UNCR** | **Uncukul** | **0.35** | **116** | *e*Pg | Pb | 19 20 05.5 | +0.2 |
| | 400nm,0.1s | | | | | | |
| UNCR | | | | *e*Sg | Sb | 19 20 11.8 | +0.7 |
| | 240nm,0.2s | | | | | | |
| **DBC** | **Dubki** | **0.37** | **66** | *i* Pg | Pb | 19 20 05.4 | -0.3 |
| | 150nm,0.0s | | | | | | |
| DBC | | | | *e*Sg | Sb | 19 20 11.9 | +0.2 |
| | 350nm,0.4s | | | | | | |
| **KRNR** | **Karanay** | **0.40** | **96** | *i* Pg | Pb | 19 20 06.3 | +0.1 |
| KRNR | | | | *i* Sg | Sb | 19 20 12.9 | +0.4 |
| **ARKR** | **Arakani** | **0.53** | **120** | Pg | Pb | 19 20 09.0 | +0.5 |
| | 280nm,0.1s | | | | | | |
| ARKR | | | | Sg | Sb | 19 20 18.2 | +1.8 |
| | 320nm,0.1s | | | | | | |
| **GROC** | **Groznyy** | **0.54** | **309** | *e*Pg | Pb | 19 20 08.3 | -0.1 |
| GROC | | | | *i* Sg | Sb | 19 20 16.8 | +0.3 |
| **BUJR** | **Buynaksk** | **0.55** | **94** | Pg | Pb | 19 20 09.8 | +1.1 |
| | 440nm,0.0s | | | | | | |
| BUJR | | | | Sg | Sn | 19 20 19.3 | -1.1 |
| | 320nm,0.5s | | | | | | |
| **GNBR** | **Gunib** | **0.65** | **137** | Pg | Pn | 19 20 11.9 | -0.6 |
| | 350nm,0.0s | | | | | | |
| GNBR | | | | Sg | Sn | 19 20 22.9 | -0.2 |
| | 250nm,0.1s | | | | | | |
| **MAK** | **Makhachkala** | **0.84** | **83** | *e*Pg | Pn | 19 20 18.0 | +3.0 |
| MAK | | | | *e*Sg | Sn | 19 20 27.9 | +0.3 |
| **KMKR** | **Kumukh** | **0.91** | **144** | Pg | Pn | 19 20 16.4 | +0.2 |
| | 120nm,0.0s | | | | | | |
| KMKR | | | | Sg | Sn | 19 20 31.1 | +1.3 |
| | 160nm,0.1s | | | | | | |
| **SGKR** | **Sergokala** | **1.03** | **113** | *e*Pg | Pn | 19 20 22.6 | +4.9 |
| SGKR | | | | *e*Sg | Sn | 19 20 36.2 | +3.7 |
| **URKR** | **Urkarakh** | **1.17** | **127** | Pg | Pn | 19 20 21.8 | +2.1 |
| | 320nm,0.0s | | | | | | |
| URKR | | | | Sg | Sn | 19 20 39.9 | +4.0 |
| | 600nm,0.1s | | | | | | |
| **BTKR** | **Batakoyurt** | **1.43** | **291** | *e*Pg | Pg | 19 20 26.3 | +2.2 |
| BTKR | | | | *e*Sg | Sg | 19 20 46.8 | +4.1 |
| **GUDG** | **Gudauri** | **1.45** | **254** | *e*Pg | Pg | 19 20 26.8 | +2.3 |
| GUDG | | | | *i* Sg | Sg | 19 20 48.9 | +5.5 |
| **TRKR** | **Terskaya** | **1.47** | **306** | *e*Pg | Pg | 19 20 26.8 | +1.9 |
| TRKR | | | | *e*Sg | Sg | 19 20 48.2 | +4.3 |
| **LACR** | **Lac** | **1.52** | **269** | *e*Pg | Pg | 19 20 26.7 | +0.8 |
| LACR | | | | *e*Sg | Sg | 19 20 47.9 | +2.2 |
| **ARNR** | **Ardon** | **1.56** | **282** | *e*Pg | Pg | 19 20 27.9 | +1.3 |
| ARNR | | | | *e*Sg | Sg | 19 20 52.6 | +5.7 |
| **KORR** | **Kora** | **1.70** | **278** | *e*Pg | Pg | 19 20 30.2 | +0.9 |
| KORR | | | | *e*Sg | Sg | 19 20 55.2 | +3.8 |
| **AKT** | **Akhty** | **1.72** | **143** | *e*Pg | Pg | 19 20 30.2 | +0.6 |
| AKT | | | | *e*Sg | Sg | 19 20 53.7 | +1.8 |
| **PRTR** | **Priterechnaya** | **1.76** | **301** | *e*Pg | Pb | 19 20 29.8 | +0.4 |
| PRTR | | | | *e*Sg | Sg | 19 20 56.7 | +3.5 |
| **STDR** | **Stavd-Durt** | **1.76** | **287** | *e*Pg | Pg | 19 20 31.4 | +0.9 |
| STDR | | | | *e*Sg | Sg | 19 20 55.5 | +2.2 |
| **LSNR** | **Lesken** | **1.91** | **283** | *e*Pg | Pg | 19 20 33.9 | +0.6 |
| LSNR | | | | *e*Sg | Sg | 19 21 00.3 | +2.4 |
| **DIGR** | **Digorskoe uzhe** | **2.05** | **272** | *e*Pg | Pg | 19 20 36.2 | +0.2 |
| DIGR | | | | *e*Sg | Sg | 19 21 03.2 | +0.6 |
| **KBZ** | **Khabaz** | **2.68** | **290** | *e*Pn | Pn | 19 20 42.5 | +2.3 |
| KBZ | | | | *e*Sn | Sb | 19 21 19.7 | +1.7 |
| **SHA1** | **Shidzhatmaz** | **2.85** | **289** | *e*Pn | Pn | 19 20 45.3 | +2.4 |
| SHA1 | | | | *e*Sn | Sb | 19 21 21.8 | -1.3 |

**TUN 04 19:32:42.6, 34˙.34N×9˙.70E, h0km, MD2.1, Tunisia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MEDT** | **Meda** | **0.29** | **141** | *i* P | Pg | 19 32 48.1 | -0.1 |
| **MEDT** | **Meda** | **0.29** | **141** | *i* P | Pg | 19 32 48.1 | -0.1 |
| **SGNT** | **Sidi Gnaou** | **0.69** | **168** | *i* P | Pg | 19 32 56.1 | +0.3 |

*IDC **04** 19:34:58.9±6.4, 60˙.08S×28˙.49W, h198km±63km, mb3.6/3, mbtmp4.0/4, Error ellipse: s-maj=45.0km s-min=27.9km az=32.0*
**ISC 04 19:34:58.8±0.9, 60˙.2S±0˙.2×28˙.5W±0˙.3, h200km, n10, σ1.9/11/10, mb3.8/3, 4C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **13.37** | **150** | ⇑P | **Pn** | **19 37 59.0** | **-1.5** |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **13.45** | **153** | ⇑P | **Pn** | **19 38 00.5** | **-1.0** |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **13.77** | **150** | ⇑P | **Pn** | **19 38 05.5** | **+0.1** |
| | comp=Z,0.5nm,0.3s,baz=309,slow=16 | | | | | | |
| **SNAA** | **Sanae** | **15.39** | **149** | ⇑P | **P** | **19 38 26.9** | **+1.3** |
| | comp=Z,34nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **15.39** | **149** | P | **P** | **19 38 26.8** | **+1.2** |
| | comp=Z,1.4nm,0.6s,baz=312,slow=13,SNR=22 | | | | | | |
| **CPUP** | **Villa Florida** | **39.18** | **317** | P | **P** | **19 42 06.1** | **-1.0** |
| | comp=Z,1.0nm,0.4s,baz=161,slow=7.0,SNR=3.9 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **LPAZ** | **La Paz** | **52.32** | **309** | P | **P** | **19 43 51.6** | **+1.0** |
| | comp=Z,1.0nm,0.4s,baz=104,slow=8.3,SNR=2.9 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.00** | **30** | P | **P** | **19 46 29.2** | **+0.1** |
| | comp=Z,0.9nm,0.3s,baz=196,slow=5.6,SNR=24 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **144.65** | **70** | PKP | **PKPab** | **19 54 09.2** | **-0.2** |
| | comp=Z,0.9nm,0.3s,baz=225,slow=1.7,SNR=5.1 | | | | | | |
| **ILAR** | **Eielson Array** | **152.17** | **306** | PKPbc | **PKPbc** | **19 54 28.7** | **-0.1** |
| | comp=Z,0.6nm,0.6s,baz=94,slow=2.3,SNR=7.9 | | | | | | |

*DNK **04** 19:53:19.4±1.6, 78˙.94N×2˙.75E, h23km±15km, ML2.2*
*BER **04** 19:53:19.4±2.1, 79˙.05N×2˙.65E, h10km, mb(Pn)3.9, ML2.2(DNK), Confirmed Earthquake*
**ISC 04 19:53:16.8±1.0, 79˙.0N±0˙.1×2˙.43E±0˙.05, h10km, n11, σ2.5/5.5/17, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBS** | **Kingsbay** | **1.83** | **89** | *e*P | **Pn** | **19 53 49.1** | **+0.8** |
| KBS | | | | *e*S | **Sn** | **19 54 08.0** | **-3.4** |
| KBS | | | | IAML | | 19 54 11.9 | |
| | comp=Z,36nm,0.6s | | | | | | |
| **KBS** | **Kingsbay** | **1.83** | **89** | *i* P | **Pn** | **19 53 48.7** | **+0.5** |
| KBS | | | | *i* S | **Sn** | **19 54 10.0** | **-1.4** |
| **BRBB** | **Barentsburg B** | **2.53** | **106** | *e*P | **Pn** | **19 53 59.3** | **+1.5** |
| BRBB | | | | *e*S | **Sn** | **19 54 26.3** | **-2.3** |
| **NOR** | **Nord** | **4.11** | **318** | *i* P | **Pn** | **19 54 21.0** | **+1.5** |
| NOR | | | | IAML | | 19 55 31.4 | |
| | comp=Z,7.1nm,2.9s | | | | | | |
| **NOR** | **Nord** | **4.11** | **318** | *i* P | **Pn** | **19 54 21.0** | **+1.5** |
| NOR | | | | IAML | | 19 55 31.4 | |
| | comp=Z,7.1nm,2.9s | | | | | | |
| **DAG** | **Danmarks Havn** | **4.96** | **254** | *i* P | **Pn** | **19 54 33.0** | **+1.9** |
| DAG | | | | *i* S | **Sn** | **19 55 25.1** | **-3.3** |
| DAG | | | | IAML | | 19 55 55.0 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **DAG** | **Danmarks Havn** | **4.96** | **254** | *i* P | **Pn** | **19 54 33.0** | **+1.9** |
| DAG | | | | *i* S | **Sn** | **19 55 25.1** | **-3.3** |
| DAG | | | | IAML | | 19 55 55.0 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **HOPEN** | **Hopen** | **5.39** | **106** | *e*P | **Pn** | **19 54 37.8** | **+0.7** |
| HOPEN | | | | *e*S | **Sn** | **19 55 35.2** | **-3.9** |
| HOPEN | | | | IAML | | 19 55 38.6 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **JMIC** | **Jan Mayen** | **8.54** | **205** | *e*P | **Pn** | **19 55 24.2** | **+3.9** |
| **NEEM** | **North Greenlan** | **10.69** | **289** | *i* P | **Pn** | **19 55 48.3** | **-1.6** |
| NEEM | | | | *i* S | Sn | 19 57 39.9 | -10 |
| NEEM | | | | IAML | | 19 58 40.4 | |
| | comp=Z,18nm,3.7s | | | | | | |
| **NEEM** | **North Greenlan** | **10.69** | **289** | *i* P | **Pn** | **19 55 48.3** | **-1.6** |
| NEEM | | | | *i* S | Sn | 19 57 39.9 | -10 |
| NEEM | | | | IAML | | 19 58 40.4 | |
| | comp=Z,18nm,3.7s | | | | | | |

*CATAC **04** 20:18:30.7±0.4, 12˙.96N×91˙.07W, h0km, ML4.4*
*IDC **04** 20:18:35.7±3.4, 13˙.37N×90˙.52W, h34km±22km, mb3.9/11, mbtmp4.1/12, ML3.6/1, MS3.8/33, Error ellipse: s-maj=32.7km s-min=13.3km az=51.0*
*NEIC **04** 20:18:36.5±1.6, 13˙.23N±0˙.03×90˙.89W±0˙.07, h35km±1km, mb4.5/63, Error ellipse: s-maj=12.8km s-min=4.3km az=254.0*
*GCG **04** 20:18:44.6±0.4, 13˙.78N×90˙.86W, h27km±999km, MD4.4*
**ISC 04 20:18:37.3±1.1, 13˙.15N±0˙.06×91˙.00W±0˙.05, h62km±10km, n190, σ1.9/5.7/17, mb4.4/36, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCG** | **Pacaya** | **1.29** | **17** | *i* P | **Pn** | **20 18 57.9** | **-1.7** |
| **FUG** | **Fuego 3** | **1.30** | **7** | *i* P | **Pn** | **20 18 57.9** | **-1.7** |
| **NUBE** | **Las Nubes** | **1.40** | **58** | *e*P | **Pn** | **20 18 58.4** | **-2.5** |
| **NUBE** | **Las Nubes** | **1.40** | **58** | *i* P | **Pn** | **20 18 58.4** | **-2.5** |
| NUBE | | | | *i* S | **Sn** | **20 19 20.2** | **+1.6** |
| NUBE | | | | IAML | | 20 19 29.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.45** | **54** | *i* P | **Pn** | **20 18 59.5** | **-2.0** |
| LOAL | | | | *i* S | **Sn** | **20 19 21.1** | **+1.4** |
| LOAL | | | | IAML | | 20 19 28.9 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.47** | **53** | *e*P | **Pn** | **20 18 59.6** | **-2.1** |
| **CEVE** | **Cerro Verde** | **1.50** | **63** | *e*P | **Pn** | **20 19 00.0** | **-2.3** |
| **CEVE** | **Cerro Verde** | **1.50** | **63** | *i* P | **Pn** | **20 19 00.5** | **-1.8** |
| CEVE | | | | IAML | | 20 19 38.0 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **1.50** | **63** | *e*P | **Pn** | **20 19 00.2** | **-2.1** |
| **RTR** | **El Retiro** | **1.51** | **60** | *e*P | **Pn** | **20 19 00.6** | **-1.8** |
| **GUMI** | **Mixco** | **1.52** | **14** | *i* P | **Pn** | **20 19 01.2** | **-1.4** |
| GUMI | | | | IAML | | 20 19 31.1 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **RTAL** | **Retalhuleu** | **1.52** | **334** | | **Pn** | **20 18 58.9** | **-3.5** |
| **RTAL** | **Retalhuleu** | **1.52** | **334** | *i* P | **Pn** | **20 19 00.9** | **-1.5** |
| RTAL | | | | IAML | | 20 19 29.4 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **SNJE** | **San Jose** | **1.53** | **62** | *e*P | **Pn** | **20 19 00.7** | **-2.0** |
| **NBG** | **Las Nubes** | **1.56** | **24** | *i* P | **Pn** | **20 19 02.8** | **-0.4** |
| **JAYA** | **Jayaque - finc** | **1.59** | **71** | *e*P | **Pn** | **20 19 01.1** | **-2.4** |
| **JAYA** | **Jayaque - finc** | **1.59** | **71** | *i* P | **Pn** | **20 19 01.5** | **-1.9** |
| JAYA | | | | IAML | | 20 19 34.4 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **CHTG** | **Tecpan** | **1.60** | **0** | *i* P | **Pn** | **20 19 01.8** | **-2.0** |
| CHTG | | | | IAML | | 20 19 33.2 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **UNIC** | **Universidad Ca** | **1.64** | **59** | *i* P | **Pn** | **20 19 02.4** | **-1.6** |
| UNIC | | | | IAML | | 20 19 49.7 | |
| | comp=Z,680nm,1.0s | | | | | | |
| **LALI** | **Alcalda de L** | **1.67** | **78** | *e*P | **Pn** | **20 19 02.6** | **-1.7** |
| **LALI** | **Alcalda de L** | **1.67** | **78** | *i* P | **Pn** | **20 19 02.5** | **-1.8** |
| LALI | | | | *i* S | **Sn** | **20 19 26.5** | **+1.7** |
| LALI | | | | IAML | | 20 19 42.4 | |
| | comp=Z,650nm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **1.69** | **67** | *i* P | **Pn** | **20 19 03.2** | **-1.5** |
| CEDA | | | | *i* S | **Sn** | **20 19 27.0** | **+1.6** |
| CEDA | | | | IAML | | 20 19 43.5 | |
| | comp=Z,11μm,1.0s | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.71** | **347** | *i* P | **Pn** | **20 19 03.7** | **-1.6** |
| SOKI | | | | IAML | | 20 19 32.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **1.73** | **71** | *i* P | **Pn** | **20 19 04.2** | **-1.1** |
| PMON | | | | *i* S | **Sn** | **20 19 29.0** | **+2.5** |
| PMON | | | | IAML | | 20 19 47.6 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **1.75** | **73** | *i* P | **Pn** | **20 19 03.6** | **-2.0** |
| ITCA | | | | IAML | | 20 19 35.9 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **1.77** | **71** | *e*P | **Pn** | **20 19 04.3** | **-1.6** |
| **QUEO** | **Labor Ovalle** | **1.78** | **344** | *i* P | **Pn** | **20 19 05.4** | **-0.8** |
| QUEO | | | | IAML | | 20 19 43.9 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.80** | **73** | Pn | **Pn** | **20 19 03.6** | **-2.6** |
| **SNET** | **Serv Nac Est T** | **1.80** | **73** | *i* P | **Pn** | **20 19 05.1** | **-1.1** |
| SNET | | | | *i* S | **Sn** | **20 19 29.8** | **+1.7** |
| SNET | | | | IAML | | 20 19 36.9 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **UEES** | **Universidad Ev** | **1.80** | **72** | *i* P | **Pn** | **20 19 05.0** | **-1.2** |
| UEES | | | | *i* S | **Sn** | **20 19 29.8** | **+1.6** |
| UEES | | | | IAML | | 20 19 44.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **1.81** | **68** | *i* P | **Pn** | **20 19 05.0** | **-1.3** |
| QUEZ | | | | *i* S | **Sn** | **20 19 30.5** | **+2.2** |
| QUEZ | | | | IAML | | 20 19 42.9 | |
| | comp=Z,11μm,1.0s | | | | | | |
| **PANCS** | **Alcalda de** | **1.83** | **75** | *i* P | **Pn** | **20 19 05.1** | **-1.5** |
| PANCS | | | | *i* S | **Sn** | **20 19 30.9** | **+2.1** |
| PANCS | | | | IAML | | 20 19 34.4 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **UTEC** | **Universidad Te** | **1.83** | **72** | *i* P | **Pn** | **20 19 04.6** | **-2.0** |
| UTEC | | | | *i* S | **Sn** | **20 19 31.9** | **+3.0** |
| UTEC | | | | IAML | | 20 19 43.8 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **1.84** | **74** | *e*P | **Pn** | **20 19 05.2** | **-1.7** |
| **LOMA** | **Loma Larga** | **1.84** | **74** | *i* P | **Pn** | **20 19 05.7** | **-1.2** |
| LOMA | | | | *i* S | **Sn** | **20 19 31.0** | **+1.7** |
| LOMA | | | | IAML | | 20 19 40.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **1.88** | **72** | *i* P | **Pn** | **20 19 05.7** | **-1.6** |
| UDBS | | | | *i* S | **Sn** | **20 19 32.4** | **+2.4** |
| UDBS | | | | IAML | | 20 19 45.7 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **APG** | **El Apazote** | **1.92** | **16** | Pg | **Pn** | **20 19 06.1** | **-1.8** |
| | comp=Z,11nm,0.3s,baz=155,slow=8.8,SNR=248 | | | | | | |
| APG | | | | LR | LR | 20 19 28.2 | |
| | comp=Z,67nm,18.3s,baz=232,slow=32 | | | | | | |
| APG | | | | Lg | Lg | 20 19 29.6 | |
| | comp=Z,6.0nm,0.3s,baz=224,slow=17,SNR=7.2 | | | | | | |
| **LFRS** | **El Faro** | **1.94** | **76** | *e*P | **Pn** | **20 19 06.5** | **-1.7** |
| **MTO3** | **Montecristo** | **2.02** | **52** | | **Pn** | **20 19 07.0** | **-2.3** |
| **MTO3** | **Montecristo** | **2.02** | **52** | *e*P | **Pn** | **20 19 08.1** | **-1.2** |
| **MTO3** | **Montecristo** | **2.02** | **52** | *i* P | **Pn** | **20 19 07.8** | **-1.5** |
| MTO3 | | | | *i* S | **Sn** | **20 19 37.2** | **+3.6** |
| MTO3 | | | | IAML | | 20 19 44.3 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **2.11** | **77** | *e*P | **Pn** | **20 19 09.4** | **-1.1** |
| **COEG** | **Centro de Oper** | **2.11** | **77** | *i* P | **Pn** | **20 19 09.1** | **-1.4** |
| COEG | | | | *i* S | **Sn** | **20 19 38.7** | **+3.0** |
| COEG | | | | IAML | | 20 20 00.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **2.19** | **80** | *e*P | **Pn** | **20 19 10.0** | **-1.5** |
| **TECO** | **Alcaldia de Te** | **2.19** | **80** | *i* P | **Pn** | **20 19 09.3** | **-2.2** |
| TECO | | | | IAML | | 20 19 54.7 | |
| | comp=Z,690nm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **2.21** | **77** | *i* P | **Pn** | **20 19 10.9** | **-0.8** |
| UESV | | | | IAML | | 20 20 05.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **HUEH** | **Huehuetenango** | **2.21** | **347** | Pn | **Pn** | **20 19 10.4** | **-1.5** |
| **HUEH** | **Huehuetenango** | **2.21** | **347** | *i* P | **Pn** | **20 19 10.7** | **-1.2** |
| HUEH | | | | *i* S | **Sn** | **20 19 42.0** | **+3.7** |
| **LLGN** | **La Laguna** | **2.24** | **63** | *i* P | **Pn** | **20 19 10.5** | **-1.7** |
| LLGN | | | | IAML | | 20 19 48.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.28** | **76** | *e*P | **Pn** | **20 19 11.4** | **-1.2** |
| **SCLA** | **Alcaldia de Sa** | **2.28** | **76** | *i* P | **Pn** | **20 19 10.5** | **-2.1** |
| SCLA | | | | IAML | | 20 19 59.0 | |
| | comp=Z,850nm,1.0s | | | | | | |
| **MRL** | **Marmol** | **2.31** | **33** | *i* P | **Pn** | **20 19 13.5** | **+0.3** |
| **PQSS** | **Presa 15 de Se** | **2.42** | **78** | *e*P | **Pn** | **20 19 13.4** | **-1.1** |
| **PQSS** | **Presa 15 de Se** | **2.42** | **78** | *i* P | **Pn** | **20 19 12.7** | **-1.8** |
| PQSS | | | | IAML | | 20 19 59.0 | |
| | comp=Z,390nm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **2.45** | **82** | *e*P | **Pn** | **20 19 13.6** | **-1.6** |
| **PACA** | **Pacayal** | **2.62** | **83** | *e*P | **Pn** | **20 19 16.6** | **-0.9** |
| **LCY** | **Lacayo** | **2.65** | **84** | *e*P | **Pn** | **20 19 16.8** | **-1.0** |
| **RANC** | **El Ranchito** | **2.65** | **84** | *i* P | **Pn** | **20 19 16.7** | **-1.2** |
| RANC | | | | IAML | | 20 20 17.9 | |
| | comp=Z,760nm,1.0s | | | | | | |
| **VSM** | **San Miguel** | **2.67** | **84** | *e*P | **Pn** | **20 19 17.3** | **-0.8** |
| **JUCU** | **Jucuarįn** | **2.68** | **87** | *i* P | **Pn** | **20 19 15.4** | **-2.8** |
| JUCU | | | | IAML | | 20 20 10.5 | |
| | comp=Z,470nm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **2.70** | **84** | *e*P | **Pn** | **20 19 17.7** | **-0.8** |
| **CNCH** | **Conchagua** | **3.08** | **87** | *e*P | **Pn** | **20 19 21.9** | **-1.8** |
| **CNCH** | **Conchagua** | **3.08** | **87** | *i* P | **Pn** | **20 19 21.9** | **-1.8** |
| CNCH | | | | IAML | | 20 20 22.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **CCIG** | **Comitan** | **3.30** | **341** | | **Pn** | **20 19 26.1** | **-0.7** |
| **CCIG** | **Comitan** | **3.30** | **341** | *i* P | **Pn** | **20 19 26.6** | **-0.2** |
| CCIG | | | | IAML | | 20 20 32.8 | |
| | comp=Z,570nm,1.0s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **3.73** | **76** | | **Pn** | **20 19 29.9** | **-2.7** |
| **TGUH** | **Tegucigalpa,Un** | **3.73** | **76** | *i* P | **Pn** | **20 19 31.2** | **-1.4** |
| TGUH | | | | IAML | | 20 20 21.0 | |
| | comp=Z,450nm,1.0s | | | | | | |
| **CRIN** | **San Cristobal** | **3.88** | **96** | | **Pn** | **20 19 32.6** | **-1.9** |
| **PETF** | **Flores** | **3.90** | **16** | | **Pn** | **20 19 33.0** | **-1.8** |
| **YUSH** | **Yuscaran** | **4.12** | **78** | *i* P | **Pn** | **20 19 36.7** | **-1.2** |
| **CNQN** | **Cerro Negro** | **4.24** | **98** | | **Pn** | **20 19 36.3** | **-3.2** |
| **BOAB** | **BOACC BROADBAN** | **5.25** | **97** | | **Pn** | **20 19 50.4** | **-2.8** |
| **ACON** | **Acoyapa** | **5.81** | **101** | | **Pn** | **20 19 58.5** | **-2.4** |
| **JTS** | **Las Juntas de** | **6.57** | **115** | | **Pn** | **20 20 10.0** | **-1.4** |
| **JTS** | **Las Juntas de** | **6.57** | **115** | Pn | Pn | 20 20 05.9 | -5.5 |
| | comp=Z,1.4nm,0.3s,baz=295,slow=22,SNR=4.4 | | | | | | |
| JTS | | | | Sn | Sn | 20 21 15.4 | -10 |
| | comp=Z,1.5nm,0.3s,baz=265,slow=21,SNR=1.4 | | | | | | |
| JTS | | | | Lg | Lg | 20 21 53.7 | |
| | baz=306,slow=21 | | | | | | |
| | comp=Z,3.4nm,0.3s | | | | | | |
| **ESPN** | **Las Esperanzas** | **6.61** | **98** | | **Pn** | **20 20 09.6** | **-2.3** |
| **HDC** | **Heredia** | **7.44** | **114** | Pn | **Pn** | **20 20 21.7** | **-1.6** |
| **TEIG** | **Tepich** | **7.50** | **20** | | **Pn** | **20 20 23.0** | **-1.2** |
| **TEIG** | **Tepich** | **7.50** | **20** | Pn | **Pn** | **20 20 23.7** | **-0.4** |
| | comp=Z,8.2nm,0.3s,baz=147,slow=0.6,SNR=26 | | | | | | |
| TEIG | | | | Sn | **Sn** | **20 21 45.7** | **-2.1** |
| | baz=202,slow=21 | | | | | | |
| TEIG | | | | Lg | Lg | 20 22 22.5 | |
| | baz=129,slow=17 | | | | | | |
| TEIG | | | | LR | LR | 20 23 49.2 | |
| | comp=Z,2μm,18.9s,baz=206,slow=44 | | | | | | |
| **LCR2** | **La Lucha 2** | **7.65** | **116** | Pn | **Pn** | **20 20 25.4** | **-1.0** |
| **TLIG** | **Tlapa** | **8.52** | **302** | Pn | **Pn** | **20 20 38.3** | **+0.2** |
| **BRU2** | **Volcan** | **9.23** | **117** | | **Pn** | **20 20 46.5** | **-1.4** |
| **MOIG** | **Morelia** | **11.73** | **305** | Pn | **Pn** | **20 21 22.6** | **+0.4** |
| **SOR** | **Soroa** | **12.23** | **37** | Pn | **Pn** | **20 21 26.6** | **-2.2** |
| **ZAIG** | **Zacatecas** | **14.57** | **313** | | **Pn** | **20 22 00.3** | **-0.2** |
| **HKT** | **Hockley** | **17.31** | **346** | P | **P** | **20 22 35.5** | **+0.2** |
| **MLDN** | **Muldoon** | **17.48** | **342** | | **P** | **20 22 37.9** | **+0.6** |
| MLDN | | | | IAmb | IAmb | 20 23 06.2 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **656A** | **Willston** | **17.95** | **25** | | **Pn** | **20 22 43.4** | **+0.8** |
| **PULU** | **Pululahua** | **17.99** | **136** | P | **Pn** | **20 22 44.4** | **+0.8** |
| **HNDO** | **Hondo** | **18.02** | **336** | P | **Pn** | **20 22 43.8** | **+0.3** |
| **346A** | **Big Creek Wild** | **18.21** | **4** | P | **Pn** | **20 22 46.5** | **+0.7** |
| 346A | | | | IAmb | IAmb | 20 23 12.4 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **DRIO** | **Del Rio** | **18.49** | **333** | P | **P** | **20 22 48.6** | **+0.1** |
| **ANTS** | **Antisana-Sarah** | **18.59** | **136** | P | **Pn** | **20 22 52.4** | **+1.2** |
| ANTS | | | | IAmb | IAmb | 20 23 00.6 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **JCT** | **Junction City** | **19.07** | **336** | P | **Pn** | **20 22 55.7** | **-0.5** |
| **HPIG** | | **19.41** | **317** | P | **Pn** | **20 23 00.3** | **-0.2** |
| **BRDY** | **Brady** | **19.50** | **339** | | **P** | **20 22 59.5** | **0.0** |
| **TXAR** | **Lajitas Array** | **19.94** | **326** | | **P** | **20 23 05.6** | **+1.3** |
| **TXAR** | **Lajitas Array** | **19.94** | **326** | P | **Pn** | **20 23 06.3** | **-0.2** |
| | comp=Z,3.1nm,0.7s,baz=149,slow=12,SNR=32 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **LRAL** | **Lakeview Retre** | **20.13** | **10** | P | Pn | 20 23 07.9 | -0.7 |
| **WLAR** | **White Oak Lake** | **20.54** | **355** | P | **P** | **20 23 10.5** | **-0.1** |
| WLAR | | | | IAmb | IAmb | 20 23 21.5 | |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BOAV | | | | IAmb | IAmb | 20 25 00.2 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **SPMN** | **Marine on St.** | **32.01** | **358** | P | **P** | **20 24 57.0** | **-0.7** |
| **COWI** | **Conover** | **32.88** | **2** | P | **P** | **20 25 03.9** | **-1.5** |
| **SADO** | **Sadowa** | **33.10** | **16** | LR | LR | 20 39 31.9 | |
| | comp=Z,477nm,18.7s,baz=184,slow=38 | | | | | | |
| **Q12A** | **Willow Creek R** | **33.31** | **325** | P | **P** | **20 25 10.3** | **+0.9** |
| **ETMB** | **Extrema** | **33.56** | **132** | P | **P** | **20 25 11.7** | **+0.1** |
| **BGU** | **Big Grassy Mou** | **33.72** | **329** | P | **P** | **20 25 14.0** | **+1.0** |
| BGU | | | | IAmb | IAmb | 20 25 20.1 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **REDW** | **Red Top Meadow** | **34.63** | **334** | P | **P** | **20 25 22.0** | **+1.2** |
| **ELK** | **Elko** | **34.73** | **327** | P | **P** | **20 25 22.7** | **+0.9** |
| ELK | | | | IAmb | IAmb | 20 25 28.9 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **NV11** | **Mina Array Sit** | **34.85** | **321** | P | **P** | **20 25 24.2** | **+1.5** |
| NV11 | | | | IAmb | IAmb | 20 25 27.9 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.94** | **321** | P | **P** | **20 25 25.7** | **+2.1** |
| | comp=Z,7.3nm,0.8s,baz=139,slow=8.5,SNR=35 | | | | | | |
| NVAR | | | | PcP | **PcP** | **20 27 58.7** | **+3.6** |
| | comp=Z,0.4nm,0.6s,baz=93,slow=3.6,SNR=4.4 | | | | | | |
| NVAR | | | | LR | LR | 20 41 20.6 | |
| | comp=Z,94nm,19.7s,baz=110,slow=39 | | | | | | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **SAML** | **Samuel** | **35.29** | **127** | P | **P** | **20 25 27.3** | **+0.7** |
| **LPAZ** | **La Paz** | **36.97** | **142** | P | **P** | **20 25 42.0** | **+0.4** |
| **LPAZ** | **La Paz** | **36.97** | **142** | P | **P** | **20 25 42.3** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=343,slow=11,SNR=1.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.21** | **355** | P | **P** | **20 25 40.0** | **-2.6** |
| **ULM** | **Lac du Bonnet** | **37.21** | **355** | P | **P** | **20 25 41.0** | **-1.6** |
| | comp=Z,12nm,1.0s,baz=169,slow=7.7,SNR=9.3 | | | | | | |
| ULM | | | | LR | LR | 20 44 17.9 | |
| | comp=Z,203nm,18.6s,baz=177,slow=42 | | | | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **37.74** | **326** | P | **P** | **20 25 48.0** | **+0.8** |
| WVOR | | | | IAmb | IAmb | 20 25 53.2 | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **BMO** | **Blue Mountains** | **38.74** | **330** | P | **P** | **20 25 56.1** | **+0.5** |
| **F10A** | **Beach Ranch, E** | **39.52** | **331** | P | **P** | **20 26 02.8** | **+0.7** |
| F10A | | | | IAmb | IAmb | 20 26 04.7 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **39.63** | **322** | LR | LR | 20 42 46.3 | |
| | comp=Z,99nm,19.1s,baz=154,slow=36 | | | | | | |
| **G05A** | **Wamic** | **41.06** | **327** | P | **P** | **20 26 16.2** | **+1.5** |
| **HOOD** | **Mount Hood Mea** | **41.29** | **327** | P | **P** | **20 26 18.4** | **+1.6** |
| **RPN** | **Rapa Nui** | **43.81** | **204** | LR | LR | 20 40 04.0 | |
| | comp=Z,117nm,21.4s,baz=332,slow=29 | | | | | | |
| **SCHQ** | **Schefferville** | **45.69** | **19** | P | **P** | **20 26 51.0** | **-0.9** |
| | comp=Z,4.6nm,0.6s,baz=228,slow=5.9,SNR=11 | | | | | | |
| SCHQ | | | | LR | LR | 20 47 10.3 | |
| | comp=Z,301nm,18.5s,baz=220,slow=38 | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **BBB** | **Bella Bella** | **48.98** | **330** | LR | LR | 20 51 54.3 | |
| | comp=Z,88nm,19.4s,baz=130,slow=41 | | | | | | |
| **CPUP** | **Villa Florida** | **51.11** | **140** | LR | LR | 20 50 50.5 | |
| | comp=Z,84nm,18.1s,baz=294,slow=38 | | | | | | |
| **BDFB** | **Brasilia** | **51.25** | **123** | LR | LR | 20 50 08.2 | |
| | comp=Z,101nm,19.9s,baz=318,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.07** | **346** | P | **P** | **20 27 41.0** | **+0.4** |
| | comp=Z,2.1nm,0.9s,baz=147,slow=8.5,SNR=5.8 | | | | | | |
| YKA | | | | LR | LR | 20 52 55.1 | |
| | comp=Z,70nm,18.9s,baz=132,slow=40 | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **FRB** | **Frobisher Bay** | **52.93** | **12** | LR | LR | 20 51 13.7 | |
| | comp=Z,311nm,19.8s,baz=196,slow=37 | | | | | | |
| **PLCA** | **Paso Flores** | **56.86** | **162** | LR | LR | 20 47 58.5 | |
| | comp=Z,49nm,18.4s,baz=289,slow=31 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **60.03** | **17** | LR | LR | 20 55 39.5 | |
| | comp=Z,312nm,18.5s,baz=218,slow=37 | | | | | | |
| **INK** | **Inuvik** | **61.53** | **343** | LR | LR | 20 59 49.5 | |
| | comp=Z,62nm,18.8s,baz=152,slow=40 | | | | | | |
| **RES** | **Resolute Bay** | **61.56** | **359** | LR | LR | 20 58 07.8 | |
| | comp=Z,154nm,19.0s,baz=204,slow=39 | | | | | | |
| **KDAK** | **Kodiak Island** | **63.95** | **328** | LR | LR | 20 57 07.0 | |
| | comp=Z,56nm,19.2s,baz=132,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **64.00** | **337** | P | **P** | **20 29 05.1** | **+1.0** |
| **ILAR** | **Eielson Array** | **64.00** | **337** | P | **P** | **20 29 04.1** | **0.0** |
| | comp=Z,1.7nm,0.9s,baz=130,slow=4.8,SNR=15 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **64.42** | **340** | | **P** | **20 29 08.5** | **+1.7** |
| **SKT** | **Skwentna** | **64.81** | **333** | P | **P** | **20 29 11.0** | **+1.6** |
| SKT | | | | IAmb | IAmb | 20 29 11.9 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **65.35** | **335** | P | **P** | **20 29 13.7** | **+0.9** |
| BPAW | | | | IAmb | IAmb | 20 29 15.6 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **MLY** | **Manley** | **65.60** | **336** | P | **P** | **20 29 15.9** | **+1.3** |
| MLY | | | | IAmb | IAmb | 20 29 16.6 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **N19K** | **Bonanza Creek** | **65.78** | **331** | P | **P** | **20 29 17.4** | **+1.5** |
| **BORG** | **Borgarnes** | **69.55** | **25** | LR | LR | 20 58 51.7 | |
| | comp=Z,29nm,19.3s,baz=275,slow=35 | | | | | | |
| **BBTS** | **Babate** | **71.98** | **79** | LR | LR | 20 57 45.3 | |
| | comp=Z,51nm,19.6s,baz=139,slow=33 | | | | | | |
| **JMIC** | **Jan Mayen** | **75.21** | **20** | LR | LR | 21 04 31.7 | |
| | comp=Z,66nm,19.4s,baz=244,slow=37 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **78.08** | **36** | P | **P** | **20 30 27.7** | **-1.7** |
| | comp=Z,0.2nm,0.4s,baz=289,slow=7.4,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **79.48** | **52** | P | **P** | **20 30 36.0** | **-1.5** |
| | comp=Z,1.0nm,0.9s,baz=295,slow=6.9,SNR=7.0 | | | | | | |
| ESDC | | | | LR | LR | 21 04 15.3 | |
| | comp=Z,36nm,18.1s,baz=298,slow=35 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **MDT** | **Midelt** | **80.01** | **59** | LR | LR | 21 00 41.2 | |
| | comp=Z,60nm,19.9s,baz=331,slow=32 | | | | | | |
| **NOA** | **NORSAR Array B** | **84.42** | **29** | LR | LR | 21 06 10.8 | |
| | comp=Z,37nm,21.5s,baz=285,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **84.77** | **84** | P | **P** | **20 31 05.5** | **-0.1** |
| | comp=Z,7.3nm,0.8s,baz=235,slow=3.7,SNR=4.7 | | | | | | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **85.87** | **29** | LR | LR | 21 07 51.6 | |
| | comp=Z,35nm,20.3s,baz=293,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.63** | **18** | LR | LR | 21 10 27.5 | |
| | comp=Z,80nm,18.9s,baz=280,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **89.63** | **77** | P | **P** | **20 31 27.2** | **-1.8** |
| | comp=Z,0.7nm,0.7s,baz=288,slow=6.1,SNR=3.6 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **90.85** | **25** | LR | LR | 21 12 34.6 | |
| | comp=Z,67nm,19.1s,baz=278,slow=36 | | | | | | |
| **VRAC** | **Vranov** | **91.25** | **39** | LR | LR | 21 13 50.4 | |
| | comp=Z,53nm,18.2s,baz=302,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **120.03** | **5** | PKP | **PKiKP** | **20 37 22.5** | **+1.3** |
| | comp=Z,0.8nm,0.9s,baz=339,slow=1.7,SNR=2.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **136.12** | **255** | PKP | **PKiKP** | **20 37 55.3** | **+1.1** |
| | comp=Z,0.3nm,0.7s,baz=78,slow=1.1,SNR=2.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.10** | **342** | PKPbc | **PKiKP** | **20 38 16.8** | **+0.1** |
| | comp=Z,3.0nm,0.8s,baz=337,slow=3.5,SNR=14 | | | | | | |

*IDC **04** 20:19:11.2±3.6,5.1S×146.6E,h136km±32km, mb3.3/5, mbtmp3.8/7, Error ellipse: s-maj=43.3km s-min=25.1km az=107.0*

**ISC 04 20:19:12.9±1.0,5.25S±0.10×146.6E±0.3,h150km,n9, σ2s51/10,mb3.5/5,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.16** | **172** | P | **Pn** | **20 20 14.7** | **-0.6** |
| | 10.0nm,0.3s,baz=324,slow=7.9,SNR=18 | | | | | | |
| PMG | | | | S | **Sn** | **20 20 59.8** | **-4.1** |
| | 41nm,0.6s,baz=158,slow=20,SNR=14 | | | | | | |
| **CTA** | **Charters Tower** | **14.75** | **181** | P | **P** | **20 22 40.6** | **+4.3** |
| | 0.1nm,0.4s,baz=352,slow=15,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.85** | **218** | P | **Pn** | **20 23 22.6** | **-1.1** |
| | 3.8nm,0.5s,baz=38,slow=12,SNR=89 | | | | | | |
| **ASAR** | **Alice Springs** | **22.01** | **212** | P | **P** | **20 23 56.1** | **+0.8** |
| | 0.8nm,0.4s,baz=47,slow=8.2,SNR=28 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **72.68** | **177** | P | **P** | **20 30 24.9** | **+1.1** |
| | 0.3nm,0.5s,baz=331,slow=6.6,SNR=5.7 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **78.16** | **328** | P | **P** | **20 30 53.9** | **-1.5** |
| | 0.2nm,0.3s,baz=134,slow=4.2,SNR=1.0 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.71** | **180** | P | **P** | **20 31 29.9** | **+0.1** |
| | 0.7nm,0.6s,baz=340,slow=1.0,SNR=7.8 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.96** | **23** | P | **P** | **20 31 31.1** | **+0.1** |
| | 0.7nm,0.6s,baz=252,slow=4.7,SNR=10 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.50** | **285** | PKP | **PKPdf** | **20 38 30.8** | **-1.7** |
| | 0.2nm,0.4s,baz=101,slow=1.5,SNR=2.5 | | | | | | |

**NNC 04 20:21:44.2±1.7,43.43N×87.39E,h0km,mb3.6,mpv3.2, 2C-3D,Error ellipse: s-maj=13.8km s-min=11.0km az=87.0,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MK31** | **Makanchi Array** | **4.93** | **315** | Pn | Pn | 20 23 00.0 | +0.4 |
| | 2.3nm,0.5s,baz=134,slow=16,SNR=37 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 20 23 58.4 | +1.0 |
| | 5.5nm,0.6s,baz=130,slow=30 | | | | | | |
| **MAKZ** | **Makanchi** | **5.11** | **313** | ⇑Pn | Pn | 20 23 02.0 | 0.0 |
| | 5.5nm,1.1s | | | | | | |
| MAKZ | | | | ⇓Sn | Sn | 20 24 03.0 | +1.3 |
| | 6.9nm,0.8s | | | | | | |
| **PDGK** | **Podgornoye** | **5.76** | **272** | ⇓Pn | Pn | 20 23 10.8 | -0.3 |
| | 1.2nm,0.8s,baz=130,slow=30 | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 20 24 45.7 | |
| | 5.1nm,0.8s,baz=130,slow=30 | | | | | | |

*IDC **04** 20:22:45.8±2.5, 12.97N×143.82E, h162km±48km, mb3.2/7, mbtmp3.7/7, Error ellipse: s-maj=115.2km s-min=19.3km az=89.0*

**ISC 04 20:22:45.0±1.0, 13.0N±0.2×143.6E±0.1, h150km, n8, σ0s42/9, mb3.5/7, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.36** | **63** | P | **Pn** | **20 23 13.3** | **+0.2** |
| | 55nm,0.3s,baz=269,slow=3.2,SNR=34 | | | | | | |
| GUMO | | | | S | **Sn** | **20 23 34.5** | **-0.2** |
| | 58nm,0.4s,baz=300,slow=13,SNR=2.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **23.97** | **349** | P | **P** | **20 27 45.5** | **-0.1** |
| | 0.6nm,0.5s,baz=174,slow=11,SNR=5.2 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.95** | **196** | P | **P** | **20 29 13.8** | **-0.5** |
| | 0.4nm,0.6s,baz=353,slow=10.0,SNR=3.0 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **37.63** | **195** | P | **P** | **20 29 46.0** | **+0.5** |
| | 0.2nm,0.7s,baz=25,slow=12,SNR=1.5 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.10** | **316** | P | **P** | **20 32 43.3** | **0.0** |
| | 0.4nm,0.6s,baz=94,slow=9.3,SNR=2.1 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.42** | **325** | P | **P** | **20 32 45.6** | **+0.3** |
| | 0.6nm,0.4s,baz=108,slow=9.3,SNR=1.9 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.32** | **320** | P | **P** | **20 33 04.9** | **+0.4** |
| | 0.9nm,0.7s,baz=103,slow=7.1,SNR=7.1 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **91.21** | **335** | P | **P** | **20 35 32.5** | **-0.4** |
| | 1.8nm,1.0s,baz=46,slow=4.0,SNR=3.5 | | | | | | |
| | 1.8nm,1.0s | | | | | | |

*NEIC **04** 20:34:09.2±0.6, 40.39N±0.05×116.49W±0.05, h10km±2km, Error ellipse: s-maj=8.2km s-min=6.3km az=346.0*

**REN 04 20:34:10.3±1.2, 40.41N±0.05×116.45W±0.05, h9km±8km, ML2.7/10, ML2.6/64(NEIC), Error ellipse: s-maj=7.7km s-min=5.4km az=167.0,Nevada**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BMN** | **Battle Mountai** | **0.59** | **272** | | Pg | 20 34 21.5 | -0.3 |
| BMN | | | | | Sg | 20 34 29.9 | +0.4 |
| **ELK** | **Elko** | **0.98** | **70** | | Pg | 20 34 28.6 | -0.6 |
| **Q09A** | **Carvers** | **1.68** | **200** | | Pn | 20 34 39.4 | -0.6 |
| **Q12A** | **Willow Creek R** | **1.85** | **137** | | Pb | 20 34 43.8 | -0.7 |
| Q12A | | | | IAML | | 20 35 11.0 | |
| | comp=E,54nm,0.6s | | | | | | |
| **KVN** | **Kaiserville** | **1.86** | **224** | | Pn | 20 34 41.8 | -0.8 |
| KVN | | | | IAML | | 20 35 11.8 | |
| | comp=N,52nm,0.6s | | | | | | |
| KVN | | | | IAML | | 20 35 12.2 | |
| | comp=E,31nm,0.6s | | | | | | |
| **SPR3** | **Spring Creek 3** | **2.16** | **130** | Pn | Pn | 20 34 48.1 | +1.3 |
| SPR3 | | | | IAML | | 20 35 22.6 | |
| | comp=N,21nm,0.3s | | | | | | |
| **PAHR** | **Pah Rah Range** | **2.36** | **254** | Pn | Pn | 20 34 48.3 | -1.0 |
| PAHR | | | | IAML | | 20 35 27.5 | |
| | comp=E,21nm,0.7s | | | | | | |
| **NV11** | **Mina Array Sit** | **2.38** | **214** | | Pn | 20 34 49.0 | -0.7 |
| NV11 | | | | IAML | | 20 35 25.9 | |
| | comp=E,20nm,0.8s | | | | | | |
| NV11 | | | | IAML | | 20 35 29.8 | |
| | comp=N,23nm,0.6s | | | | | | |
| **RYN** | **Ryan** | **2.40** | **223** | | Pn | 20 34 48.9 | -1.0 |
| RYN | | | | IAML | | 20 35 27.8 | |
| | comp=N,32nm,0.7s | | | | | | |
| RYN | | | | IAML | | 20 35 28.1 | |
| | comp=E,34nm,0.7s | | | | | | |
| **TPH** | **Tonopah** | **2.41** | **195** | | Pn | 20 34 49.7 | -0.5 |
| **NVAR** | **Mina Array Bea** | **2.45** | **217** | Pn | Pn | 20 34 49.4 | -1.2 |
| **NV09** | **Mina Array Sit** | **2.46** | **217** | | Pn | 20 34 50.1 | -0.6 |
| **NV08** | **Mina Array Sit** | **2.48** | **216** | | Pn | 20 34 50.4 | -0.6 |
| **BGU** | **Big Grassy Mou** | **2.65** | **78** | Pn | Pn | 20 34 53.1 | -0.3 |
| BGU | | | | IAML | | 20 35 34.6 | |
| | comp=E,20nm,0.5s | | | | | | |
| **LHV** | **Little Huntoon** | **2.68** | **217** | | Pn | 20 34 53.3 | -0.4 |
| **PSUT** | **Pine Spring** | **2.75** | **132** | Pn | Pn | 20 34 55.1 | +0.3 |
| PSUT | | | | IAML | | 20 35 37.2 | |
| | comp=N,25nm,0.6s | | | | | | |
| PSUT | | | | IAML | | 20 35 37.3 | |
| | comp=E,30nm,0.3s | | | | | | |
| **PNTR** | **Pine Nut** | **2.77** | **242** | Pn | Pn | 20 34 54.2 | -0.8 |
| PNTR | | | | IAML | | 20 35 40.6 | |
| | comp=N,26nm,0.9s | | | | | | |
| PNTR | | | | IAML | | 20 35 44.0 | |
| | comp=E,23nm,0.7s | | | | | | |
| **DUG** | **Dugway, Tooele** | **2.79** | **93** | | Pn | 20 34 55.1 | -0.1 |
| **MZP** | **Montezuma Peak** | **2.81** | **195** | | Pn | 20 34 55.0 | -0.6 |
| MZP | | | | IAML | | 20 35 41.7 | |
| | comp=N,26nm,0.4s | | | | | | |
| MZP | | | | IAML | | 20 35 42.6 | |
| | comp=E,23nm,0.4s | | | | | | |
| **S11A** | **Rachel** | **2.82** | **169** | | Pn | 20 34 55.6 | -0.1 |
| **WAKR** | **Walker** | **3.00** | **231** | Pn | Pn | 20 34 57.2 | -1.0 |
| WAKR | | | | IAML | | 20 35 48.7 | |
| | comp=E,11nm,0.5s | | | | | | |
| WAKR | | | | IAML | | 20 35 48.9 | |
| | comp=N,13nm,0.7s | | | | | | |
| **MFID** | **Camas Ranch** | **3.04** | **9** | | Pn | 20 34 59.1 | +0.5 |
| MFID | | | | IAML | | 20 35 44.0 | |
| | comp=N,21nm,0.8s | | | | | | |
| MFID | | | | IAML | | 20 35 51.3 | |
| | comp=N,17nm,0.7s | | | | | | |
| **HVU** | **Hansel Valley** | **3.09** | **63** | | Pn | 20 34 59.9 | +0.4 |
| HVU | | | | IAML | | 20 35 54.2 | |
| | comp=N,15nm,0.6s | | | | | | |
| HVU | | | | IAML | | 20 35 57.7 | |
| | comp=E,16nm,0.5s | | | | | | |
| **SPUT** | **South Promonto** | **3.16** | **72** | Pn | Pn | 20 35 02.3 | +1.9 |
| **GMN** | **Gold Mountain** | **3.17** | **192** | | Pn | 20 35 01.0 | +0.4 |
| GMN | | | | IAML | | 20 35 55.8 | |
| | comp=E,17nm,0.5s | | | | | | |
| **PRN** | **Pahroc Range** | **3.19** | **160** | Pn | Pn | 20 35 00.7 | -0.2 |
| **DSP** | **Deep Springs** | **3.26** | **202** | | Pn | 20 35 01.6 | -0.1 |
| DSP | | | | IAML | | 20 35 59.6 | |
| | comp=E,7.9nm,0.6s | | | | | | |
| **SGV** | **South Grapevin** | **3.46** | **188** | | Pn | 20 35 04.5 | +0.1 |
| **HLID** | **Hailey** | **3.49** | **25** | | Pn | 20 35 05.0 | 0.0 |
| HLID | | | | IAML | | 20 35 58.3 | |
| | comp=E,10nm,0.8s | | | | | | |
| HLID | | | | IAML | | 20 35 59.3 | |
| | comp=E,10nm,0.4s | | | | | | |
| **WCT** | **Wildcat Mounta** | **3.62** | **182** | | Pn | 20 35 06.4 | -0.2 |
| WCT | | | | IAML | | 20 36 06.7 | |
| | comp=E,12nm,0.6s | | | | | | |
| WCT | | | | IAML | | 20 36 07.3 | |
| | comp=N,8.3nm,0.7s | | | | | | |
| **GWY** | **Greenwater Val** | **4.22** | **182** | Pn | Pn | 20 35 15.1 | +0.1 |
| **V12A** | **Nelson** | **4.85** | **164** | Pn | Pn | 20 35 24.1 | +0.6 |
| V12A | | | | IAML | | 20 35 58.7 | |
| | comp=N,4.4nm,4.2s | | | | | | |
| V12A | | | | IAML | | 20 38 08.5 | |
| | comp=E,4.6nm,4.5s | | | | | | |

*IDC **04** 20:46:15.4±1.0, 3.29N×127.20E, h0km, mb3.8/8, mbtmp3.8/8, Error ellipse: s-maj=89.3km s-min=16.5km az=65.0*

*NEIC **04** 20:46:17.0±2.0, 3.42N±0.05×127.28E±0.06, h10km±1km, mb4.2/21, Error ellipse: s-maj=11.5km s-min=5.6km az=125.0*

**ISC 04 20:46:21.4±0.6, 3.31N±0.07×127.2E±0.1, h48km, n38, σ1s12/41, mb4.1/17, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.52** | **176** | Pn | **Pn** | **20 46 59.7** | **-0.3** |
| TNTI | | | | Sn | **Sn** | **20 47 32.0** | **+2.5** |
| **LUWI** | **Luwuk** | **6.17** | **226** | Pn | **Pn** | **20 47 51.2** | **+1.1** |
| **TOLI2** | **Tolitoli** | **6.76** | **251** | Pn | **Pn** | **20 47 56.6** | **-1.6** |
| **FAKI** | **Fak Fak** | **7.99** | **141** | Pn | **Pn** | **20 48 13.6** | **-1.4** |
| **MYLDM** | **Lahad Datu** | **8.86** | **282** | Pn | **Pn** | **20 48 26.1** | **-0.8** |
| **MTN** | **Manton Dam** | **16.52** | **166** | | **Pn** | **20 50 07.8** | **-2.1** |
| MTN | | | | IAmb | IAmb | 20 50 25.6 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **KSM** | **Kuching** | **16.96** | **264** | Pn | **Pn** | **20 50 15.0** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **17.49** | **228** | | **P** | **20 50 22.7** | **0.0** |
| **KNRA** | **Kununurra** | **18.93** | **175** | | **P** | **20 50 37.8** | **-0.7** |
| **YULB** | **Yu-li** | **20.76** | **345** | P | **P** | **20 50 57.2** | **-1.3** |
| YULB | | | | IAmb | IAmb | 20 51 12.8 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **SSLB** | **Suanglung** | **21.23** | **344** | P | **P** | **20 51 03.2** | **-0.3** |
| SSLB | | | | IAmb | IAmb | 20 51 09.3 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.32** | **184** | P | **P** | **20 51 02.6** | **-1.9** |
| **YHNB** | **Yeheng** | **21.96** | **346** | P | **P** | **20 51 11.0** | **-0.3** |
| YHNB | | | | IAmb | IAmb | 20 51 27.4 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **24.00** | **163** | P | **P** | **20 51 30.9** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 20 51 36.8 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.15** | **163** | P | **P** | **20 51 31.6** | **-1.6** |
| **WRA** | **Warramunga Arr** | **24.15** | **163** | P | **P** | **20 51 32.2** | **-1.0** |
| | comp=Z,1.7nm,0.5s,baz=338,slow=10,SNR=43 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 55 15.3** | **+1.9** |
| | comp=Z,0.2nm,0.4s,baz=333,slow=2.2,SNR=1.6 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **UBPT** | **Khong Chiam** | **24.47** | **300** | P | **P** | **20 51 36.2** | **0.0** |
| UBPT | | | | IAmb | IAmb | 20 51 47.2 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **MBWA** | **Marble Bar** | **25.39** | **196** | P | **P** | **20 51 43.5** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **25.75** | **196** | P | **P** | **20 51 46.6** | **-1.2** |
| **AS31** | **Alice Springs** | **27.60** | **167** | P | **P** | **20 52 03.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **27.60** | **167** | P | **P** | **20 52 03.6** | **-0.8** |
| **ASAR** | **Alice Springs** | **27.60** | **167** | P | **P** | **20 52 04.0** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=344,slow=7.6,SNR=9.7 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 55 23.2** | **+2.0** |
| | comp=Z,0.3nm,0.5s,baz=352,slow=2.3,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.48** | **301** | P | **P** | **20 52 40.1** | **+1.3** |
| | comp=Z,0.2nm,0.3s,baz=113,slow=6.9,SNR=2.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **37.58** | **160** | P | **P** | **20 53 31.8** | **+0.4** |
| **STKA** | **Stephens Creek** | **37.58** | **160** | P | **P** | **20 53 32.0** | **+0.6** |
| | comp=Z,1.4nm,0.4s,baz=354,slow=7.3,SNR=3.0 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **SHL** | **Shillong** | **40.49** | **307** | P | **P** | **20 53 55.0** | **-1.0** |
| SHL | | | | IAmb | IAmb | 20 53 56.5 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **47.84** | **341** | P | **P** | **20 54 56.4** | **+1.8** |
| | comp=Z,0.7nm,0.8s,baz=160,slow=8.9,SNR=2.5 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **58.16** | **325** | P | **P** | **20 56 11.0** | **+0.5** |
| MK31 | | | | IAmb | IAmb | 20 56 53.1 | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.16** | **325** | P | **P** | **20 56 10.3** | **-0.2** |
| **MKAR** | **Makanchi Array** | **58.16** | **325** | P | **P** | **20 56 10.9** | **+0.4** |
| | comp=Z,0.7nm,0.5s,baz=117,slow=7.3,SNR=2.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **58.35** | **325** | P | **P** | **20 56 11.5** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **61.17** | **333** | P | **P** | **20 56 30.2** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=133,slow=8.5,SNR=2.6 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.34** | **327** | P | **P** | **20 56 39.2** | **+0.3** |
| | comp=Z,1.8nm,0.8s,baz=124,slow=6.6,SNR=14 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **62.34** | **327** | P | **P** | **20 56 38.9** | **0.0** |
| KURK | | | | IAmb | IAmb | 20 56 42.0 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.76** | **321** | P | **P** | **20 57 45.0** | **+0.2** |
| **ABKAR** | **Akbulak array** | **72.76** | **321** | P | **P** | **20 57 44.8** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 20 58 02.8 | |
| | comp=Z,2.4nm,1.4s | | | | | | |
| **ARU** | **Arti** | **75.53** | **328** | P | **P** | **20 58 01.3** | **+0.5** |
| ARU | | | | IAmb | IAmb | 20 58 02.0 | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.48** | **288** | PKP | **PKiKP** | **21 05 15.9** | **+1.1** |
| | comp=Z,0.5nm,0.7s,baz=90,slow=2.3,SNR=3.4 | | | | | | |

*IDC **04** 20:52:12.3±0.4, 3.20N×126.84E, h0km, mb4.7/24, mbtmp4.6/26, ML3.9/2, MS3.8/29, Error ellipse: s-maj=24.8km s-min=10.5km az=76.0*

*BJI **04** 20:52:15.2±0.0, 2.83N×126.85E, h42km, mb4.8/71, mB5.0/22, Ms4.4/44, Ms7 4.3/46*

*MOS **04** 20:52:15.4±1.0, 3.22N×126.86E, h29km, mb5.3/48, Error ellipse: s-maj=10.8km s-min=4.9km az=111.0*

*NEIC **04** 20:52:16.2±1.2, 3.21N±0.06×127.01E±0.08, h23km±4km, mb5.0/127, Error ellipse: s-maj=11.3km s-min=7.6km az=68.0*

*DJA **04** 20:52:18.1±0.4, 3°N±4'×12°7E±', h10km, M4.8/16, mb5.0/15, mB5.2/10, MLv4.8/16, Mw(mB)4.6/10, MwMwp4.7/4, Mwp5.1/4*

*GCMT **04** 20:52:20.2±0.3, 3.19N±0.03×127.18E±0.02, h28km, MW5.0/67, Moment Tensor Solution. s47,c58; s67,c95; Duration: 0 Moment tensor: Scale 10¹⁶Nm

comp=Z,89nm,0.8s
BATI **Baumata** 13.72 194 P **Pn** **20 55 34.0 +4.3**
SBUM **Sibu** 14.80 268 **Pn** **20 55 44.4 +0.1**
DRS **Darwin Rock St** 15.99 166 P **Pn** **20 56 00.8 +0.9**
MTN **Manton Dam** 16.45 166 P **Pn** **20 56 05.2 -0.4**
MTN **Manton Dam** 16.45 166 Pn **Pn** **20 56 04.7 -0.9**
KDU **Kakadu** 16.68 161 P **Pn** **20 56 09.6 +1.0**
KSM **Kuching** 16.78 265 P **P** **20 56 14.2 +2.3**
KSM **Kuching** 16.78 265 P **P** **20 56 11.2 -0.7**
JAGI **Jajag, Banyuwa** 17.29 228 P **P** **20 56 20.0 +2.6**
JAGI **Jajag, Banyuwa** 17.29 228 P **P** **20 56 18.0 +0.5**
JAGI IAmb IAmb 20 56 21.6
comp=Z,77nm,0.8s
KNRA **Kununurra** 18.82 175 P **P** **20 56 33.4 -0.9**
KNRA IAmb IAmb 20 56 40.3
comp=Z,46nm,0.7s
UGM **Wanagama** 19.81 236 P **P** **20 56 44.2 -1.0**
DLV **T Lat** 20.31 296 P **P** **20 56 49.6 -1.2**
TWGBT **Beinan** 20.34 344 P **P** **20 56 51.6 +0.7**
TWG **Pinlang** 20.35 344 P **P** **20 56 48.4 -2.6**
TWG IAmb IAmb 20 56 59.9
comp=Z,33nm,0.6s
GUMO **Guam** 20.44 59 LR LR 21 03 41.5
comp=Z,328nm,21.7s,baz=238,slow=34
YULB **Yu-li** 20.83 345 P **P** **20 56 56.9 +0.7**
TPUB **Ta-pu** 20.93 343 P **P** **20 56 55.2 -2.0**
TPUB IAmb IAmb 20 56 59.1
comp=Z,91nm,0.8s
FITZ **Fitzroy Crossi** 21.20 184 P **P** **20 56 59.3 -0.8**
SSLB **Suanglung** 21.30 345 P **P** **20 56 58.6 -2.7**
SSLB IAmb IAmb 20 57 08.3
comp=Z,36nm,0.7s
YOJ **Yonaguni jima** 21.50 350 P **P** **20 57 04.4 +1.1**
YOJ **Yonaguni jima** 21.50 350 P **P** **20 57 01.4 -2.0**
YOJ **Yonaguni jima** 21.50 350 P **P** **20 57 01.4 -2.0**
YOJ pmax pmax
comp=Z,100nm,0.9s
NACB **Ninganchiao** 21.51 346 P **P** **20 57 04.1 +0.6**
NACB **Ninganchiao** 21.51 346 P **P** **20 57 01.8 -1.6**
LEM **Lembang** 21.77 243 P **P** **20 57 11.4 +4.8**
LEM pmax pmax
comp=Z,93nm,1.1s
BBJI **Bungbulang** 22.04 241 P **P** **20 57 11.9 +2.6**
YHNB **Yeheng** 22.04 346 P **P** **20 57 08.6 -0.6**
YHNB **Yeheng** 22.04 346 P **P** **20 57 07.6 -1.7**
YHNB IAmb IAmb 20 57 20.0
comp=Z,49nm,0.8s
TATO **Taipei** 22.30 347 P **P** **20 57 10.9 -1.2**
TATO IAmb IAmb 20 57 21.2
comp=Z,33nm,0.8s
HKPS **Hong Kong Po S** 22.72 328 **P** **20 57 15.9 -0.5**
HKPS IAmb IAmb 20 57 25.7
comp=Z,77nm,1.1s
KNMB **Chin-men Tao** 22.73 339 P **P** **20 57 17.1 +0.6**
QIZ **Qiongzhong** 23.02 314 P **P** **20 57 18.3 -1.3**
QIZ pP **sP** **20 57 30.5 -1.4**
QIZ S **S** **21 01 29.8 +1.6**
QIZ pmax pmax
comp=Z,14nm,1.2s
QIZ LR LR
comp=Z,260nm,14.5s
QIZ LR LR
comp=Z,200nm,14.7s
QIZ LR LR
comp=Z,440nm,17.3s
QIZ **Qiongzhong** 23.02 314 P **P** **20 57 17.9 -1.7**
QZH **Quanzhou** 23.10 340 P **P** **20 57 23.3 +2.9**
QZH S **S** **21 01 36.4 +7.0**
QZH LR LR
comp=Z,770nm,19.9s
QZH LR LR
comp=Z,480nm,18.2s
QZH LR LR
comp=Z,1µm,18.5s
MYKOM **Kota Tinggi** 23.19 267 P **P** **20 57 20.9 -0.5**
COEN **Coen** 23.39 137 P **P** **20 57 22.4 -1.0**
JOW **Kunigami** 23.54 3 P **P** **20 57 26.3 +1.6**
JOW **Kunigami** 23.54 3 P **P** **20 57 24.4 -0.3**
JOW **Kunigami** 23.54 3 P **P** **20 57 24.4 -0.3**
comp=Z,12nm,0.9s,baz=191,slow=9.7,SNR=8.3
comp=Z,12nm,0.9s
PMG **Port Moresby** 23.65 122 LR LR 21 07 43.0
comp=Z,302nm,20.7s,baz=276,slow=39
WB0 **Warramunga Arr** 23.94 163 P **P** **20 57 27.5 -1.0**
WB0 IAmb IAmb 20 57 36.8
comp=Z,59nm,0.7s
WRAB **Tennant Creek** 24.08 163 *i* P **P** **20 57 29.1 -0.8**
WRAB pmax pmax
comp=Z,26nm,0.9s
WRA **Warramunga Arr** 24.09 163 P **P** **20 57 27.6 -2.3**
WRA **Warramunga Arr** 24.09 163 P **P** **20 57 29.0 -0.9**
comp=Z,24nm,0.7s,baz=336,slow=11,SNR=133
WRA PcP **PcP** **21 01 12.4 +1.4**
comp=Z,1.4nm,0.5s,baz=334,slow=2.2,SNR=4.7
WRA S **S** **21 01 46.2 +0.7**
comp=Z,10nm,0.9s,baz=345,slow=18,SNR=9.7
WRA ScP **ScP** **21 04 49.7 +2.5**
comp=Z,0.7nm,0.9s,baz=342,slow=2.8,SNR=2.6
comp=Z,24nm,0.7s
WB2 **Warramunga Arr** 24.09 163 P **P** **20 57 28.9 -1.0**
WB2 IAmb IAmb 20 57 42.8
comp=Z,40nm,0.8s
WR0 **Warramunga Arr** 24.16 162 P **P** **20 57 29.9 -0.7**
WR0 IAmb IAmb 20 57 52.4
comp=Z,36nm,0.8s
UBPT **Khong Chiam** 24.39 301 P **P** **20 57 33.1 +0.3**
UBPT **Khong Chiam** 24.39 301 P **P** **20 57 31.6 -1.1**
UBPT IAmb IAmb 20 57 48.0
comp=Z,42nm,1.3s
MBWA **Marble Bar** 25.23 196 P **P** **20 57 41.3 +1.0**
MBWA **Marble Bar** 25.23 196 P **P** **20 57 40.1 -0.2**
PSA00 **Pilbara Seismi** 25.59 196 P **P** **20 57 44.7 +1.1**
PSA00 **Pilbara Seismi** 25.59 196 P **P** **20 57 43.7 +0.1**
PSA00 IAmb IAmb 20 57 45.4
comp=Z,48nm,0.8s
PSA00 **Pilbara Seismi** 25.59 196 P **P** **20 57 42.9 -0.6**
PSA00 IAmb IAmb 20 57 45.4
comp=Z,37nm,1.2s
IPM **Ipoh** 25.97 274 P **P** **20 57 47.1 0.0**
KULM **Kulim** 26.38 275 P **P** **20 57 49.8 -1.1**
KULM IAmb IAmb 20 57 52.5
comp=Z,87nm,1.9s
QIS **Mount Isa** 26.64 153 P **P** **20 57 53.4 +0.3**
AS31 **Alice Springs** 27.52 166 P **P** **20 58 00.3 -0.7**
ASAR **Alice Springs** 27.52 166 P **P** **20 58 00.7 -0.3**
comp=Z,3.4nm,0.5s,baz=348,slow=7.6,SNR=74
ASAR PcP **PcP** **21 01 19.7 +0.9**
comp=Z,4.0nm,0.7s,baz=349,slow=1.9,SNR=9.3
ASAR S **S** **21 02 39.2 -0.9**
comp=Z,1.2nm,0.9s,baz=355,slow=23,SNR=3.2
comp=Z,3.4nm,0.5s
AS01 **Alice Springs** 27.53 166 P **P** **20 58 01.4 +0.3**
WRKA **Warakurna** 28.09 178 P **P** **20 58 06.3 +0.2**
GIRL **Giralia** 28.55 205 P **P** **20 58 11.7 +1.5**
GSI **Gununguitoli** 29.48 267 P **P** **20 58 19.1 +0.5**
GSI **Gununguitoli** 29.48 267 P **P** **20 58 17.7 -0.9**
NJ2 **Nanjing** 29.72 346 *eP* **P** **20 58 19.3 -1.1**
NJ2 pmax pmax
comp=Z,10.0nm,0.8s
NJ2 pmax pmax
comp=Z,75nm,4.0s
WHN **Wuhan** 29.73 338 ⇑P **P** **20 58 20.0 -0.5**
WHN sP **pwP** **20 58 36.6 +4.3**
WHN pmax pmax
comp=Z,26nm,0.6s
WHN LR LR
comp=Z,2µm,20.0s
WHN LR LR
comp=Z,2µm,19.7s
WHN LR LR
comp=Z,2µm,20.4s
JNU **Nakatsue** 30.00 6 P **P** **20 58 23.5 +0.6**
JNU **Nakatsue** 30.00 6 P **P** **20 58 22.3 -0.6**
JNU IAmb IAmb 20 58 26.5
comp=Z,27nm,0.9s
GYA **Guiyang** 30.27 322 P **P** **20 58 25.2 -0.3**
GYA pP pwP 20 58 36.4 -1.1
GYA S **S** **21 03 27.8 +4.4**
GYA pmax pmax
comp=Z,5.0nm,0.8s
GYA pmax pmax
comp=Z,120nm,5.0s
GYA LR LR
comp=Z,310nm,15.5s
GYA LR LR
comp=Z,220nm,18.8s
GYA LR LR
comp=Z,370nm,19.1s
PHRA **Phrae** 30.32 302 P **P** **20 58 25.1 -0.8**
MEEK **Meekatharra** 30.75 195 P **P** **20 58 30.8 +1.2**
JMN **Monobe** 31.05 11 P **P** **20 58 31.2 -1.0**
JMN IAmb IAmb 20 58 34.8
comp=Z,18nm,1.1s
CMAR **Chiang Mai Arr** 31.39 301 P **P** **20 58 34.4 -1.0**
comp=Z,3.7nm,0.7s,baz=116,slow=6.9,SNR=26
CMAR PcP **PcP** **21 01 29.0 +0.3**
comp=Z,0.9nm,0.3s,baz=145,slow=1.5,SNR=6.3
CMAR LR LR 21 11 32.5
comp=Z,202nm,21.7s,baz=105,slow=37
comp=Z,3.7nm,0.7s
CHTO **Chiang Mai** 31.55 302 P **P** **20 58 36.0 -0.8**
CHTO **Chiang Mai** 31.55 302 P **P** **20 58 36.0 -0.8**
CHTO pmax pmax
comp=Z,13nm,1.1s
ENH **Enshi** 31.64 330 P **P** **20 58 36.8 -0.7**
ENH IAmb IAmb 20 58 49.3
comp=Z,32nm,1.1s
OOD **Oodnadatta** 31.92 165 P **P** **20 58 39.6 -0.3**
TJN **Taejon** 33.03 1 P **P** **20 58 48.7 -0.8**
TJN **Taejon** 33.03 1 *ce*P **P** **20 58 50.7 +1.2**
INU **Inuyama** 33.31 15 P **P** **20 58 51.2 -0.9**
INU IAmb IAmb 20 58 53.9
comp=Z,20nm,1.2s
INKA **Innaminka** 33.48 158 P **P** **20 58 54.6 +1.1**
PZH **PanZhiHua** 33.53 316 P **P** **20 58 56.2 +2.0**
PZH S **S** **21 04 14.9 +0.5**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,120nm,4.7s
PZH LR LR
comp=Z,130nm,19.6s
PZH LR LR
comp=Z,210nm,17.3s
PZH LR LR
comp=Z,210nm,20.1s
MORW **Morawa** 33.76 197 P **P** **20 58 56.5 +0.5**
MORW **Morawa** 33.76 197 P **P** **20 58 56.0 0.0**
FORT **Forrest** 33.79 178 P **P** **20 58 56.6 +0.4**
FORT **Forrest** 33.79 178 P **P** **20 58 56.0 -0.3**
MULG **Mulgathing** 33.96 169 P **P** **20 58 58.3 +0.6**
LYN **LuoYang** 34.01 338 *eP* **P** **20 59 02.4 +4.3**
LYN pmax pmax
comp=Z,21nm,0.6s
LYN LR LR
comp=Z,340nm,22.4s
LYN LR LR
comp=Z,380nm,20.9s
LYN LR LR
comp=Z,650nm,18.9s
KSAR **Wonju Array Be** 34.10 1 P **P** **20 58 57.4 -1.4**
KSAR **Wonju Array Be** 34.10 1 P **P** **20 58 57.4 -1.4**
TIA **Tai'an** 34.11 346 *eP* **P** **20 58 55.0 -3.9**
TIA pmax pmax
comp=Z,11nm,0.8s
TIA LR LR
comp=N,170nm,15.2s
TIA LR LR
comp=Z,320nm,20.1s
KSRS **Korea Array** 34.11 1 P **P** **20 58 58.9 0.0**
comp=Z,8.0nm,0.9s,baz=180,slow=9.6,SNR=33
KSRS PcP **PcP** **21 01 36.1 +0.3**
comp=Z,1.0nm,0.9s,baz=183,slow=3.7,SNR=2.7
comp=Z,8.0nm,0.9s
KS19 **Wonju Array Si** 34.16 1 P **P** **20 58 58.7 -0.6**
KS19 IAmb IAmb 20 59 03.7
comp=Z,15nm,0.9s
KMBL **Kambalda** 34.71 188 P **P** **20 59 04.6 +0.4**
MJAR **Matsushiro Arr** 34.76 16 P **P** **20 59 03.5 -1.1**
comp=Z,2.2nm,0.8s,baz=184,slow=9.3,SNR=11
MJAR PcP **PcP** **21 01 39.4 +1.6**
comp=Z,2.2nm,0.8s,baz=176,slow=2.7,SNR=5.5
comp=Z,2.2nm,0.8s
MAJO **Matsushiro** 34.76 16 P **P** **20 59 03.4 -1.2**
MAJO **Matsushiro** 34.76 16 P **P** **20 59 03.4 -1.2**
MAJO pmax pmax
comp=Z,7.0nm,0.9s
MJB9 **Matsu-Tunnel** 34.76 16 P **P** **20 59 04.3 -0.3**
TNCH **TengChong** 34.99 311 P **P** **20 59 07.3 +0.4**
TNCH pP sP 20 59 15.9 -3.9
TNCH sP pwP 20 59 26.7 +7.8
TNCH S **S** **21 04 37.4 +0.4**
TNCH sS sS 21 04 55.9 +4.1
TNCH pmax pmax
comp=Z,13nm,2.5s
TNCH LR LR
comp=Z,110nm,3.7s
TNCH LR LR
comp=Z,140nm,3.6s
TNCH LR LR
comp=Z,220nm,18.0s
XAN **Xi'an** 35.02 333 P **P** **20 59 06.8 -0.2**
XAN pP pwP 20 59 19.4 +0.6
XAN sP sP 20 59 24.5 +4.7
XAN pmax pmax
comp=Z,19nm,1.0s
XAN LR LR
comp=Z,230nm,15.9s
XAN LR LR
comp=Z,260nm,16.8s
XAN LR LR
comp=Z,510nm,19.0s
LCRK **Leigh Creek** 35.12 163 P **P** **20 59 08.7 +1.0**
HNR **Honiara** 35.13 111 LR LR 21 13 04.9
comp=Z,2µm,21.9s,baz=282,slow=36
CD2 **Chengdu** 35.25 324 P **P** **20 59 09.4 +0.5**
CD2 pmax pmax
comp=Z,10.0nm,0.5s
CD2 LR LR
comp=Z,340nm,19.0s
CD2 LR LR
comp=Z,200nm,16.5s
CD2 LR LR
comp=Z,390nm,16.5s
KLBR **Kellerberrin** 35.70 194 P **P** **20 59 13.1 +0.4**
HNS **HongShan** 35.87 343 ⇓P **P** **20 59 15.2 +1.1**
HNS S **S** **21 04 58.4 +8.5**
HNS pmax pmax
comp=Z,15nm,0.9s
HNS LR LR
comp=Z,390nm,19.1s
HNS LR LR
comp=Z,220nm,19.6s
HNS LR LR
comp=Z,500nm,19.9s
MUN **Mundaring** 36.45 196 P **P** **20 59 19.9 +0.7**
JMM **Marumori** 36.75 18 P **P** **20 59 21.2 -0.4**
JMM IAmb IAmb 20 59 24.5
comp=Z,32nm,1.0s
EIDS **Eidsvold** 36.75 142 P **P** **20 59 21.5 -0.3**
BBOO **Buckleboo** 36.81 167 P **P** **20 59 22.7 +0.5**
NWAO **Narrogin (SRO)** 37.10 194 P **P** **20 59 25.7 +1.1**
NWAO **Narrogin (SRO)** 37.10 194 P **P** **20 59 24.9 +0.3**
NWAO **Narrogin (SRO)** 37.10 194 P **P** **20 59 24.9 +0.3**
NWAO pmax pmax
comp=Z,306nm,1.8s
STKA **Stephens Creek** 37.53 159 P **P** **20 59 28.7 +0.4**
STKA **Stephens Creek** 37.53 159 P **P** **20 59 28.4 +0.2**
STKA **Stephens Creek** 37.53 159 P **P** **20 59 28.2 -0.1**
comp=Z,16nm,0.5s,baz=332,slow=8.6,SNR=42
STKA PcP **PcP** **21 01 47.6 +1.5**
comp=Z,5.8nm,0.6s,baz=345,slow=4.2,SNR=3.7
comp=Z,16nm,0.5s
STKA **Stephens Creek** 37.53 159 *i* P **P** **20 59 28.5 +0.2**
BJT **Baijiatuau** 37.96 346 P **P** **20 59 32.1 +0.3**
BJT IAmb IAmb 20 59 47.6
comp=Z,31nm,1.0s
BJT **Baijiatuau** 37.96 346 P **P** **20 59 32.1 +0.3**
BJT pmax pmax
comp=Z,31nm,1.0s
BJI **Beijing** 37.98 346 P **P** **20 59 32.9 +0.9**
BJI pP **sP** **20 59 46.1 +1.3**
BJI sP pwP 20 59 50.7 +7.0
BJI PP **PnPn** **21 01 01.6 +0.9**
BJI S **S** **21 05 17.5 -4.3**
BJI pmax pmax
comp=Z,15nm,1.0s
BJI pmax pmax
comp=Z,68nm,3.9s
BJI LR LR
comp=Z,54nm,17.4s
BJI LR LR
comp=Z,75nm,22.4s
BJI LR LR
comp=Z,110nm,19.9s
HTT **Hallett** 38.12 164 P **P** **20 59 35.2 +1.8**
CMSA **Cobar Meteorol** 38.84 154 P **P** **20 59 40.8 +1.4**
LZH **Lanzhou** 39.11 330 *eP* **P** **20 59 43.2 +1.4**
LZH sP pwP 21 00 02.7 +8.9
LZH pmax pmax
comp=Z,28nm,1.2s
LZH LR LR
comp=Z,280nm,17.2s
LZH LR LR
comp=Z,520nm,17.9s
LZH LR LR
comp=Z,690nm,18.2s
HHC **Hu-ho-hao-te** 40.00 342 *eP* **P** **20 59 51.3 +2.2**
HHC pP pwP 21 00 03.2 +2.3
HHC S **S** **21 05 59.5 +6.9**
HHC sS sS 21 06 09.7 +1.2
HHC pmax pmax
comp=Z,14nm,0.5s
HHC pmax pmax
comp=Z,74nm,4.8s
HHC LR LR
comp=Z,280nm,18.2s
HHC LR LR
comp=Z,140nm,12.6s
HHC LR LR
comp=Z,340nm,17.7s
BTO **Baotou** 40.29 340 *eP* **P** **20 59 55.1 +3.7**
BTO S **S** **21 06 01.1 +4.2**
BTO pmax pmax
comp=Z,21nm,0.5s
BTO pmax pmax
comp=Z,130nm,5.7s
BTO LR LR
comp=Z,340nm,12.4s
BTO LR LR
comp=Z,470nm,11.3s
BTO LR LR
comp=Z,660nm,18.2s
SHL **Shillong** 40.43 307 P **P** **20 59 51.8 -1.1**
SHL IAmb IAmb 20 59 59.7
comp=Z,26nm,0.7s
SHL **Shillong** 40.43 307 P **P** **20 59 51.8 -1.1**
SHL pmax pmax
comp=Z,26nm,0.7s
ARMA **Armidale** 40.86 147 P **P** **20 59 56.8 +0.5**
USA0B **Ussuriysk Arra** 41.08 5 P **P** **20 59 57.8 0.0**
USA0B **Ussuriysk Arra** 41.08 5 *i* P **P** **20 59 58.8 +1.1**
USRK **Ussuriysk Ar.** 41.08 5 P **P** **20 59 58.2 +0.5**
USRK **Ussuriysk Ar.** 41.08 5 P **P** **20 59 58.7 +1.0**
comp=Z,12nm,0.8s,baz=98,slow=11,SNR=3.6
comp=Z,12nm,0.8s
USRK **Ussuriysk Ar.** 41.08 5 P **P** **20 59 58.2 +0.5**
MDJ **Mudanjiang** 41.32 3 P **P** **21 00 01.5 +1.8**
MDJ pmax pmax
comp=Z,38nm,0.9s
MDJ **Mudanjiang** 41.32 3 P **P** **21 00 00.1 +0.4**
MDJ IAmb IAmb 21 00 02.7
comp=Z,30nm,0.9s
XLT **XiLinHaoTe** 41.68 348 *eP* **P** **21 00 04.3 +1.4**
XLT pP sP 21 00 16.7 +0.9
XLT S **S** **21 06 22.1 +4.6**
XLT pmax pmax
comp=Z,36nm,0.9s
H11S3 **WAKE ISLAND Hy** 41.69 66 T T 21 44 45.9
SNR=24
BNX **BinXian** 42.38 0 ⇓P **P** **21 00 11.1 +2.7**
BNX pmax pmax
comp=Z,17nm,0.8s
TEY **Ternei** 42.52 10⇑ *eP* **P** **21 00 10.8 +1.3**
TEY pmax pmax
comp=N,30nm,0.9s
TEY pmax pmax
comp=Z,40nm,0.8s
TEY pmax pmax
comp=E,10.0nm,1.0s
LSA **Lhasa** 43.01 312 P **P** **21 00 15.7 +1.3**
LSA **Lhasa** 43.01 312 P **P** **21 00 14.4 0.0**
LSA **Lhasa** 43.01 312 P **P** **21 00 14.4 0.0**
LSA pmax pmax
comp=Z,15nm,0.9s
ASAJ **Asahikawa** 43.02 16 P **P** **21 00 14.7 +1.0**
ASAJ pmax pmax
comp=Z,31nm,1.0s
JKA **Kamikawa-asahi** 43.02 16 P **P** **21 00 14.7 +1.1**
JKA IAmb IAmb 21 00 16.8
comp=Z,31nm,1.0s
CAN **Canberra** 43.50 154 P **P** **21 00 17.7 0.0**
CAN **Canberra** 43.50 154 P **P** **21 00 17.5 -0.2**
CAN IAmb IAmb 21 00 29.4
comp=Z,40nm,1.6s
CAN **Canberra** 43.50 154 P **P** **21 00 17.5 -0.2**
CAN pmax pmax
comp=Z,40nm,1.6s
GTA **Gaotai** 43.70 329 *eP* **P** **21 00 19.2 -0.2**
GTA pP pwP 21 00 31.8 +0.3
GTA PcP **PcP** **21 02 07.9 +1.8**
GTA pmax pmax
comp=Z,5.0nm,1.7s
GTA LR LR
comp=Z,180nm,22.2s
GTA LR LR
comp=Z,300nm,21.8s
GTA LR LR
comp=Z,450nm,21.5s
TOO **Toolangi** 44.03 159 P **P** **21 00 24.0 +2.0**
TOO **Toolangi** 44.03 159 P **P** **21 00 22.9 +1.0**
TOO IAmb IAmb 21 00 35.4
comp=Z,78nm,1.9s
TOO **Toolangi** 44.03 159 P **P** **21 00 22.9 +1.0**
TOO pmax pmax
comp=Z,78nm,1.9s
GEXS **Deakin Univers** 44.18 160 P **P** **21 00 23.3 +0.3**
GOMU **GeErMu** 44.28 322 P **P** **21 00 24.4 0.0**
GOMU S S 21 06 46.2 -10
GOMU pmax pmax
comp=Z,16nm,1.3s
GOMU LR LR
comp=Z,270nm,16.5s
GOMU LR LR
comp=Z,240nm,16.3s
GOMU LR LR
comp=Z,460nm,16.3s
YSS **Yuzh-Sakhalins** 45.68 15 P **P** **21 00 34.9 0.0**
YSS IAmb IAmb 21 00 37.2
comp=Z,21nm,1.0s
YSS **Yuzh-Sakhalins** 45.68 15 *eP* **P** **21 00 35.4 +0.5**
YSS *e* 21 02 24.8
YSS *eS* **S** **21 07 13.7 -1.9**
YSS pmax pmax
comp=Z,20nm,1.3s
KLR **Kul'dur** 46.05 4 *ce*P **P** **21 00 37.8 +0.1**
KLR pmax pmax
comp=Z,42nm,1.7s
ONTNC **Ouen Toro** 46.11 125 P **P** **21 00 38.3 -0.3**
PALK **Pallekele** 46.28 277 P **P** **21 00 39.5 -0.7**
PALK **Pallekele** 46.28 277 LR LR 21 22 40.3
comp=Z,259nm,19.1s,baz=205,slow=40
PALK **Pallekele** 46.28 277 P **P** **21 00 39.5 -0.7**
PALK pmax pmax
comp=Z,97nm,1.9s
HIA **Hailar** 46.33 353 P **P** **21 00 40.1 +0.1**
HIA IAmb IAmb 21 01 02.1
comp=Z,31nm,1.4s
HIA **Hailar** 46.33 353 P **P** **21 00 40.1 +0.1**
HIA pmax pmax
comp=Z,31nm,1.4s
HEH **HeiHe** 46.90 0 *eP* **P** **21 00 45.4 +1.0**
HEH pmax pmax
comp=Z,28nm,1.5s
ULN **Ulaanbaatar** 47.72 342 P **P** **21 00 50.4 -0.6**
ULN IAmb IAmb 21 00 56.5
comp=Z,13nm,0.8s
ULN **Ulaanbaatar** 47.72 342 *ce*P **P** **21 00 51.9 +0.9**
ULN pmax pmax
comp=Z,19nm,1.0s
SONM **Songino Array** 47.90 341 P **P** **21 00 52.0 -0.4**
SONM **Songino Array** 47.90 341 P **P** **21 00 52.0 -0.4**
comp=Z,4.9nm,0.9s,baz=160,slow=8.5,SNR=18
SONM PcP **PcP** **21 02 21.2 +0.6**
comp=Z,1.1nm,0.7s,baz=152,slow=1.3,SNR=2.3

comp=Z,4.9nm,0.9s
**GRNR Gornyy 48.07 8⇑** *i*P **P 21 00 55.3 +1.8**
GRNR pmax pmax
comp=Z,20nm,1.0s
**TYV Tymovskoe 49.30 13** *e*P **P 21 01 05.5 +2.6**
TYV *e*S **S 21 08 12.0 +5.0**
TYV pmax pmax
comp=Z,7.0nm,1.0s
TYV pmax pmax
comp=Z,100nm,2.3s
TYV smax smax
comp=N,100nm,5.1s
TYV smax smax
comp=E,100nm,5.1s
**HYB Hyderabad 49.57 290** *e*P **P 21 01 05.3 -0.3**
HYB *e*pP **pP 21 01 12.3 -2.9**
**CIT Chita 49.95 349** *e*P **P 21 01 10.5 +2.6**
CIT *e* 21 01 21.5
CIT *e* 21 03 00.7
CIT pmax pmax
comp=Z,71nm,2.7s
**ZEA Zeya 50.39 0** *e*P **P 21 01 12.2 +1.1**
ZEA pmax pmax
comp=Z,10.0nm,1.1s
**ZAK Zakamensk 51.13 341** *e*P **P 21 01 20.4 +3.5**
ZAK pmax pmax
comp=Z,5.0nm,1.4s
**MOY Mondy 52.98 340** *e*P **P 21 01 32.0 +1.2**
MOY pmax pmax
comp=Z,26nm,2.2s
**WMQ Urumqi 53.33 325** *e*P **P 21 01 35.2 +1.8**
WMQ sP pwP 21 01 52.2 +6.6
WMQ pmax pmax
comp=Z,20nm,0.6s
WMQ LR LR
comp=Z,300nm,14.9s
WMQ LR LR
comp=Z,200nm,21.1s
**BOD Bodaibo 55.44 352** *e*P **P 21 01 50.0 +1.7**
BOD pmax pmax
comp=Z,36nm,1.1s
**MK31 Makanchi Array 58.16 325** P **P 21 02 07.5 -0.5**
**MK31 Makanchi Array 58.16 325** *ce*P **P 21 02 07.6 -0.3**
**MKAR Makanchi Array 58.16 325** P **P 21 02 07.3 -0.6**
**MKAR Makanchi Array 58.16 325** P **P 21 02 07.8 -0.1**
comp=Z,7.4nm,0.7s,baz=120,slow=7.5,SNR=50
comp=Z,7.4nm,0.7s
**MAKZ Makanchi 58.35 325** P **P 21 02 09.2 0.0**
MAKZ IAmb IAmb 21 02 13.5
comp=Z,12nm,0.8s
**MAKZ Makanchi 58.35 325** P **P 21 02 09.2 0.0**
MAKZ pmax pmax
comp=Z,12nm,0.8s
**NIL Nilore 58.48 308** P **P 21 02 09.9 -0.5**
**NIL Nilore 58.48 308** P **P 21 02 09.9 -0.5**
NIL pmax pmax
comp=Z,30nm,1.2s
**KSH Kashi 58.63 315** P **P 21 02 12.8 +1.3**
KSH pP pwP 21 02 25.1 +1.3
KSH pmax pmax
comp=Z,5.0nm,1.0s
**YAK Yakutsk 58.74 1** P **P 21 02 12.4 +0.8**
**YAK Yakutsk 58.74 1** *c i*P **P 21 02 12.7 +1.1**
YAK *e**PP **pwP 21 02 27.9 +3.9**
YAK *e* 21 03 01.3
YAK *e* 21 04 24.4
YAK eS **S 21 10 13.6 -0.5**
YAK *e**SS sS 21 10 42.3 +13
YAK *e* 21 11 59.1
YAK eSS **SS 21 14 11.2 +3.6**
YAK pmax pmax
comp=Z,65nm,0.8s
YAK pmax pmax
comp=E,6.0nm,0.9s
YAK pmax pmax
comp=N,15nm,0.9s
YAK pmax pmax
comp=Z,66nm,3.8s
YAK pmax pmax
comp=E,24nm,3.7s
YAK smax smax
comp=N,52nm,3.3s
YAK smax smax
comp=E,15nm,1.7s
**MA2 Magadan 59.16 14** P **P 21 02 14.6 0.0**
**MA2 Magadan 59.16 14** LR LR 21 26 21.5
comp=E,61nm,21.9s,baz=209,slow=35
**MA2 Magadan 59.16 14** *ce*P **P 21 02 16.5 +1.9**
MA2 pmax pmax
comp=Z,39nm,1.7s
**AAK Ala-Archa 60.95 318** LR LR 21 31 56.4
comp=Z,158nm,21.5s,baz=96,slow=39
**LBZ Lake Benmore 61.08 146** P **P 21 02 28.6 +0.6**
**ZAA0 Zalesovo Array 61.20 333** P **P 21 02 27.9 -0.7**
ZAA0 IAmb IAmb 21 02 31.4
comp=Z,8.7nm,0.8s
**ZALV Zalesovo Beam 61.20 333** P **P 21 02 27.7 -1.0**
comp=Z,9.0nm,0.8s,baz=124,slow=5.5,SNR=23
ZALV LR LR 21 31 00.9
comp=Z,73nm,19.0s,baz=140,slow=38
comp=Z,9.0nm,0.8s
**ARSB Arslanbob 61.45 316** P **P 21 02 30.4 -0.4**
**ARSB Arslanbob 61.45 316** P **P 21 02 30.4 -0.4**
ARSB pmax pmax
comp=Z,4.0nm,1.2s
**DRK Karamyk 61.59 314** P **P 21 02 30.8 -1.2**
**DRK Karamyk 61.59 314** P **P 21 02 30.8 -1.2**
DRK pmax pmax
comp=Z,38nm,0.5s
**GVZ Greta Valley S 61.87 143** P **P 21 02 32.8 -0.6**
**URZ Urewera 61.95 137** LR LR 21 30 28.5
comp=Z,246nm,19.3s,baz=29,slow=37
**KBL Kabul 62.08 308** P **P 21 02 34.1 -1.2**
KBL IAmb IAmb 21 02 36.3
comp=Z,6.3nm,0.7s
**KBL Kabul 62.08 308** P **P 21 02 34.1 -1.2**
KBL pmax pmax
comp=Z,6.0nm,0.7s
**KURBB Kurchatov Arra 62.35 327** P **P 21 02 36.2 -0.2**
comp=Z,17nm,0.8s,baz=123,slow=6.8,SNR=92
comp=Z,17nm,0.8s
**KURK Kurchatov 62.35 328** P **P 21 02 35.7 -0.7**
**KURK Kurchatov 62.35 328** *ce*P **P 21 02 36.5 0.0**
KURK pmax pmax
comp=Z,33nm,0.8s
**SEY Seymchan 62.49 13** *e*P **P 21 02 37.8 +0.6**
SEY pmax pmax
comp=Z,20nm,1.5s
**GAR Garm 62.50 313** P **P 21 02 36.9 -1.0**
**BTK Batken 62.50 314** P **P 21 02 37.1 -0.8**
BTK IAmb IAmb 21 02 49.4
comp=Z,8.0nm,0.8s
**BTK Batken 62.50 314** P **P 21 02 37.1 -0.8**
BTK pmax pmax
comp=Z,8.0nm,0.9s
**CHGR Chuyangaron 63.24 312** P **P 21 02 42.1 -0.7**
CHGR IAmb IAmb 21 03 27.3
comp=Z,14nm,0.9s
**CHGR Chuyangaron 63.24 312** P **P 21 02 42.1 -0.7**
CHGR pmax pmax
comp=Z,14nm,0.9s
**SIMJ Simiganj 63.35 312** P **P 21 02 43.1 -0.5**
**KK31 Karatay Array 63.82 317** P **P 21 02 46.1 -0.3**
**KK31 Karatay Array 63.82 317** P **P 21 02 46.1 -0.3**
KK31 pmax pmax
comp=Z,8.0nm,1.1s
**KKAR Karatay Array 63.82 317** P **P 21 02 45.9 -0.6**
**KKAR Karatay Array 63.82 317** P **P 21 02 45.9 -0.6**
**HRA Herat 67.48 306** P **P 21 03 09.6 -0.9**
**BRVK Borovoye 68.00 327** P **P 21 03 13.0 -0.1**
BRVK IAmb IAmb 21 03 22.4
comp=Z,16nm,1.0s
**BRVK Borovoye 68.00 327** *ce*P **P 21 03 12.7 -0.4**
BRVK pmax pmax
comp=Z,8.0nm,0.8s
**TIXI Tiksi 68.38 1** P **P 21 03 15.1 0.0**
TIXI IAmb IAmb 21 03 16.8
comp=Z,22nm,1.1s
**TIXI Tiksi 68.38 1** *ce*P **P 21 03 14.9 -0.2**
TIXI pmax pmax
comp=Z,12nm,1.0s
**BILL Bilibino 70.00 15⇑** *e*P **P 21 03 27.0 +1.8**
BILL *e* 21 03 49.0
BILL *e* 21 06 03.1
BILL pmax pmax
comp=Z,4.0nm,0.9s
BILL MLR MLR
comp=Z,107nm,21.0s
**CASY Casey 70.32 187** P **P 21 03 27.5 +0.3**
CASY IAmb IAmb 21 03 29.7
comp=Z,21nm,1.4s
**NIKH Nikolski High 72.09 35** P **P 21 03 38.7 +0.5**
baz=251
**ABKAR Akbulak array 72.75 321** P **P 21 03 41.5 -0.6**
**ABKAR Akbulak array 72.75 321** P **P 21 03 41.6 -0.6**
ABKAR IAmb IAmb 21 03 43.0
comp=Z,6.7nm,0.7s
**SPIA Saint Paul Isl 72.81 30** P **P 21 03 43.0 +0.6**
baz=248
**P08K Saint George I 72.96 31** P **P 21 03 44.2 +0.9**
baz=249
**UNV Unalaska Valle 73.70 34** P **P 21 03 48.1 +0.4**
**UNV Unalaska Valle 73.70 34** P **P 21 03 48.5 +0.8**
baz=252
**AKTO Aktyubinsk 74.26 322** LR LR 21 39 09.1
comp=Z,206nm,20.5s,baz=211,slow=38
**SVE Sverdlovsk 74.57 328** *e*P **P 21 03 52.9 +0.2**
SVE pmax pmax
comp=Z,39nm,1.3s
**GAMB Gambell 74.77 24** P **P 21 03 54.9 +1.2**
baz=245
**ARU Arti 75.54 328** P **P 21 03 57.9 -0.5**
ARU IAmb IAmb 21 03 59.3
comp=Z,18nm,0.8s
**ARU Arti 75.54 328** *c i*P **P 21 03 58.3 -0.1**
ARU 21 04 09.7
ARU PPP PPP 21 08 39.4
ARU S **S 21 13 37.8 +1.1**
ARU 21 14 16.4
ARU SS **SS 21 18 25.3 -2.6**
ARU pmax pmax
comp=Z,25nm,1.0s
**ARU Arti 75.54 328** P **P 21 03 57.5 -0.9**
comp=Z,30nm,1.0s
**RAR Rarotonga 75.57 113** LR LR 21 36 51.2
comp=Z,48nm,18.1s,baz=274,slow=35
**FALS False Pass 75.72 34** P **P 21 04 00.4 +1.1**
baz=255
**M11K Mekoryuk 75.91 28** P **P 21 04 01.4 +1.0**
baz=251
**S12K Black Hills 76.68 33** P **P 21 04 05.6 +0.7**
baz=256
**TNA Tin City 76.97 23** P **P 21 04 06.8 +0.6**
baz=248
**K13K Kusilvak Mount 77.11 27** P **P 21 04 07.9 +0.8**
baz=252
**M13K Dall Lake 77.26 28** P **P 21 04 09.0 +1.0**
baz=254
**SDPT Sand Point 77.48 34** P **P 21 04 10.2 +0.9**
baz=257
**F14K Arctic Creek 77.56 23** P **P 21 04 10.4 +0.8**
baz=250
**ANM Nome 77.64 24** P **P 21 04 11.3 +1.3**
baz=251
**L14K Kuka Creek 77.84 28** P **P 21 04 11.5 +0.3**
baz=254
**J14K Nanvaranak Lak 77.84 26** P **P 21 04 12.3 +1.1**
baz=253
**CHNA Chernabura Isl 77.86 35** P **P 21 04 12.1 +0.7**
baz=258
**N14K Kuskokwak Cree 77.93 29** P **P 21 04 12.7 +0.9**
baz=255
**O14K Tigyukauivet M 77.97 30** P **P 21 04 12.7 +0.7**
baz=256
**M14K Bethel 78.02 28** P **P 21 04 13.5 +1.3**
M14K IAmb IAmb 21 04 41.1
comp=Z,26nm,1.1s
**M14K Bethel 78.02 28** P **P 21 04 12.4 +0.2**
baz=255
**F15K North Star Dit 78.30 23** P **P 21 04 14.2 +0.5**
baz=251
**G15K Niukluk 78.31 24** P **P 21 04 14.5 +0.7**
baz=252
**L15K Ungalak Mounta 78.48 27** P **P 21 04 15.7 +0.9**
baz=255
**M15K Kasigluk River 78.61 29** P **P 21 04 16.0 +0.6**
baz=256
**K15K Wolf Creek Mou 78.62 27** P **P 21 04 16.0 +0.5**
baz=255
**O15K Ungalikthiuk R 78.67 30** P **P 21 04 16.3 +0.4**
baz=257
**N15K Kwethluk River 78.77 29** P **P 21 04 17.0 +0.6**
baz=257
**CHGN Chignik 78.81 33** P **P 21 04 17.6 +0.9**
baz=259
**C16K Lisburne Hills 78.89 21** P **P 21 04 17.4 +0.5**
baz=250
**H16K Elim 78.95 24** P **P 21 04 18.3 +1.0**
baz=254
**G16K Koyuk River 79.11 24** P **P 21 04 19.1 +0.9**
baz=254
**J16K Anvik River 79.28 26** P **P 21 04 19.9 +0.7**
baz=256
**I17K Unalakleet 79.40 25** P **P 21 04 20.8 +1.1**
baz=255
**L16K Owhat River 79.42 28** P **P 21 04 20.0 +0.1**
L16K IAmb IAmb 21 04 26.7
comp=Z,13nm,1.0s
**L16K Owhat River 79.42 28** P **P 21 04 20.5 +0.5**
baz=257
**N16K Ikshlik Lake 79.48 29** P **P 21 04 20.4 +0.1**
baz=258
**M16K Timber Creek 79.51 28** P **P 21 04 21.3 +0.8**
baz=258
**D17K Noatak River 79.51 21** P **P 21 04 21.6 +1.3**
baz=252
**P16K Nushagak River 79.57 31** P **P 21 04 22.1 +1.3**
baz=259
**O16K Kokwok River B 79.63 30** P **P 21 04 21.3 +0.2**
baz=258
**RDOG Red Dog Mine 79.68 21** P **P 21 04 22.3 +1.0**
baz=253
**C17K DeLong Mountai 79.71 21** P **P 21 04 22.0 +0.6**
baz=252
**G17K Kiwalik Mounta 79.83 24** P **P 21 04 23.1 +1.0**
baz=255
**F17K Baldwin Pennin 79.84 23** P **P 21 04 22.3 +0.2**
baz=254
**J17K VAM Dome 79.98 26** P **P 21 04 23.0 0.0**
baz=257
**H17K Granite Mounta 79.99 24** P **P 21 04 24.1 +1.2**
baz=256
**L17K Donlin 80.05 27** P **P 21 04 23.2 -0.2**
baz=258
**O17K Koliganek Bris 80.16 30** P **P 21 04 24.2 +0.2**
baz=259
**K17K Iditarod 80.17 27** P **P 21 04 24.3 +0.2**
baz=258
**N17K Nushagak Hills 80.26 29** P **P 21 04 25.1 +0.6**
baz=259
**CHIR Chirikof Islan 80.27 34** P **P 21 04 25.6 +0.9**
baz=261
**M17K Holitna River 80.31 28** P **P 21 04 25.8 +1.1**
baz=259
**E18K Tukpahlearik C 80.34 22** P **P 21 04 25.4 +0.6**
baz=255
**P17K Kvichak River 80.39 31** P **P 21 04 26.7 +1.5**
baz=260
**B18K Kokolik River 80.45 20** P **P 21 04 26.9 +1.5**
baz=253
**C18K Utukok River 80.46 21** P **P 21 04 26.7 +1.2**
baz=254
**F18K Selawik 80.50 23** P **P 21 04 25.3 -0.3**
baz=256
**Q17K Contact Creek 80.51 31** P **P 21 04 26.9 +0.8**
baz=261
**H18K Honnosa River 80.68 24** P **P 21 04 26.5 -0.2**
baz=257
**G18K Tagagawik 80.72 24** P **P 21 04 27.9 +0.9**
baz=257
**L18K Granite Mounta 80.81 27** P **P 21 04 27.2 -0.2**
baz=259
**KIRV Kirov 80.83 329** *ce*P **P 21 04 27.8 +0.2**
**N18K Kilae Creek 80.92 29** P **P 21 04 28.4 +0.3**
baz=260
**A19K Wainwright 80.93 19** P **P 21 04 27.7 -0.2**
baz=254
**RAYN Ar Rayn 80.96 293** P **P 21 04 28.2 -0.8**
**RAYN Ar Rayn 80.96 293** P **P 21 04 28.3 -0.8**
RAYN pmax pmax
comp=Z,4.0nm,0.8s
**BELG Belogornoye 81.01 322** LR LR 21 41 30.6
comp=Z,28nm,19.4s,baz=141,slow=37
**BELG Belogornoye 81.01 322** *i*P **P 21 04 28.2 -0.5**
BELG pmax pmax
comp=Z,10.0nm,1.1s
**Q18K Katmai Hardscr 81.03 31** P **P 21 04 28.6 -0.3**
baz=261
**P18K Big Mountain, 81.03 30** P **P 21 04 29.0 +0.3**
baz=261
**J18K Innoko River 81.03 26** P **P 21 04 27.7 -0.9**
baz=259
**M18K Stony River 81.08 28** P **P 21 04 29.1 +0.2**
baz=260
**O18K Koktuh Hills 81.11 30** P **P 21 04 29.7 +0.5**
baz=261
**C19K Lookout Ridge 81.14 20** P **P 21 04 30.3 +1.2**
baz=256
**R18K Karluk 81.17 32** P **P 21 04 29.7 +0.3**
baz=262
**SII Sitkinak Islan 81.17 33** P **P 21 04 29.7 +0.2**
baz=262
**GCSA Galena City Sc 81.21 25** P **P 21 04 29.8 +0.3**
baz=259
**F19K Shaleruckik Mo 81.28 23** P **P 21 04 30.4 +0.5**
baz=258
**G19K Purcell Mounta 81.40 24** P **P 21 04 31.5 +0.9**
G19K IAmb IAmb 21 04 37.5
comp=Z,12nm,0.9s
**G19K Purcell Mounta 81.40 24** P **P 21 04 31.2 +0.7**
baz=258,SNR=9.3
**D19K Kuna River 81.52 21** P **P 21 04 31.6 +0.5**
baz=257,SNR=6.7
**H19K Roundabout Mou 81.54 24** P **P 21 04 32.2 +0.9**
baz=259,SNR=8.0
**J19K Poorman 81.61 26** P **P 21 04 33.1 +1.5**
J19K IAmb IAmb 21 05 01.0
comp=Z,38nm,1.7s
**J19K Poorman 81.61 26** P **P 21 04 31.6 0.0**
baz=260
**N19K Bonanza Creek 81.62 29** P **P 21 04 32.8 +0.9**
baz=262
**E19K Redstone River 81.62 22** P **P 21 04 33.5 +1.8**
baz=258,SNR=23
**L19K White Mountain 81.65 28** P **P 21 04 33.4 +1.4**
baz=261
**OHAK Old Harbor 81.75 33** P **P 21 04 33.6 +1.2**
baz=263
**Q19K Cape Douglas, 81.77 31** P **P 21 04 33.1 +0.5**
baz=262
**M19K Big River Lodg 81.82 28** P **P 21 04 34.7 +1.9**
baz=261
**GNI Garni 82.05 310** P **P 21 04 34.2 -0.5**
**GNI Garni 82.05 310** LR LR 21 46 40.0
comp=Z,33nm,19.6s,baz=86,slow=40
**GNI Garni 82.05 310** *ce*P **P 21 04 36.0 +1.3**
GNI pmax pmax
comp=Z,18nm,2.5s
**P19K Oil Pt 82.08 30** P **P 21 04 34.5 +0.2**
baz=263
**D20K Etivluk River 82.10 21** P **P 21 04 35.3 +1.1**
baz=258,SNR=9.5
**F20K Avaraart Lake 82.11 23** P **P 21 04 35.2 +1.0**
baz=260,SNR=6.7
**VOI Vohitsoka 82.13 248** P **P 21 04 34.9 -0.5**
VOI IAmb IAmb 21 04 37.4
comp=Z,19nm,1.0s
**L20K Farewell, AK 82.15 27** P **P 21 04 35.5 +1.0**
baz=262
**E20K Nigu River 82.17 21** P **P 21 04 34.8 +0.2**
baz=259,SNR=24
**H20K Anotleneega Mo 82.18 24** P **P 21 04 35.9 +1.3**
baz=260,SNR=6.7
**B20K Meade River 82.18 20** P **P 21 04 37.3 +2.8**
baz=258
**K20K Telida 82.19 27** P **P 21 04 34.9 +0.1**
baz=262
**KDAK Kodiak Island 82.19 32** P **P 21 04 35.5 +0.7**
baz=264
**I20K Naaghedeneel 82.23 25** P **P 21 04 35.3 +0.5**
baz=261
**J20K Nowinta River 82.28 26** P **P 21 04 36.0 +0.8**
baz=261,SNR=7.4
**Q20K Shuyak Island 82.38 31** P **P 21 04 35.8 +0.1**
baz=264
**M20K Styx River 82.41 28** P **P 21 04 36.7 +0.7**
baz=262,SNR=9.1
**O20K Slope Mountain 82.43 30** P **P 21 04 37.0 +0.9**
baz=263
**IMAR Indian Mountai 82.72 24** P **P 21 04 38.5 +1.1**
**N20K Mount Spurr 82.77 29** P **P 21 04 39.8 +2.0**
baz=263
**C21K Knifeblade Rid 82.84 21** P **P 21 04 40.9 +2.9**
baz=260
**VNDA Vanda 82.86 173** P **P 21 04 38.8 +0.9**
**VNDA Vanda 82.86 173** P **P 21 04 39.0 +1.1**
comp=Z,5.4nm,0.8s,baz=316,slow=6.0,SNR=32
comp=Z,5.4nm,0.8s
**VNDA Vanda 82.86 173** P **P 21 04 38.8 +0.9**
VNDA pmax pmax
comp=Z,7.0nm,1.0s
**G21K Allakaket 82.89 23** P **P 21 04 39.6 +1.3**
baz=262,SNR=5.2
**PPLA Purkeypile 82.97 27** P **P 21 04 40.0 +1.0**
baz=263
**B21K Ikpikpuk River 82.97 20** P **P 21 04 39.9 +1.2**
baz=260,SNR=7.7
**F21K Alatna River 83.00 23** P **P 21 04 40.2 +1.3**
baz=262
**E21K Killik River 83.01 21** P **P 21 04 40.7 +1.7**
baz=261
**CHUM Lake Minchumin 83.04 26** P **P 21 04 40.1 +1.0**
baz=263
**H21K Melozitna Rive 83.06 24** P **P 21 04 42.0 +2.7**
baz=262,SNR=10
**SKT Skwentna 83.17 28** P **P 21 04 40.1 +0.2**
SKT IAmb IAmb 21 04 42.1
comp=Z,18nm,1.0s
**SKT Skwentna 83.17 28** P **P 21 04 41.5 +1.6**
baz=264,SNR=6.7
**CAPN Captain Cook N 83.23 29** P **P 21 04 41.8 +1.6**
baz=264
**GEVA Gevas 83.29 308** P **P 21 04 40.6 -0.7**
GEVA IAmb IAmb 21 04 45.6
comp=Z,15nm,0.8s
**KARS Kars 83.33 310** P **P 21 04 41.4 +0.1**
**KARS Kars 83.33 310** P **P 21 04 41.4 +0.1**
KARS pmax pmax
comp=Z,66nm,1.0s
**I21K Tanana 83.34 25** P **P 21 04 42.8 +2.2**
baz=263
**BRSE Bradley Lake S 83.34 30** P **P 21 04 42.6 +1.8**
baz=265
**MAW Mawson 83.35 200** P **P 21 04 41.4 +0.8**
comp=Z,6.3nm,0.8s,baz=51,slow=7.8,SNR=9.3
comp=Z,6.3nm,0.8s
**SUA Susitna One 83.50 29** P **P 21 04 42.5 +0.8**
**SUA Susitna One 83.50 29** P **P 21 04 43.4 +1.7**
baz=265,SNR=8.1
**B22K Teshekpuk Lake 83.50 20** P **P 21 04 43.9 +2.5**
baz=261
**D22K Ayikyak River 83.54 21** P **P 21 04 42.5 +0.9**
baz=262
**F22K John River 83.54 22** P **P 21 04 43.6 +1.9**
baz=263,SNR=10
**KBZ Khabaz 83.56 313** P **P 21 04 41.7 -0.5**
comp=Z,3.6nm,0.9s,baz=143,slow=11,SNR=3.1
KBZ LR LR 21 47 14.5
comp=Z,47nm,20.9s,baz=74,slow=40
comp=Z,3.6nm,0.9s
**BPAW Bear Paw Mtn. 83.64 26** P **P 21 04 44.7 +2.4**
baz=264,SNR=6.2
**ATD Arta Tunnel 83.67 281** P **P 21 04 43.5 +0.1**
ATD IAmb IAmb 21 04 46.4
comp=Z,14nm,1.1s
**H22K Ishtalitna Cre 83.67 24** P **P 21 04 43.6 +1.2**
baz=264,SNR=7.2
**KVAR Kislovodsk Arr 83.71 314** LR LR 21 45 21.8
comp=Z,23nm,19.4s,baz=310,slow=38
**KIV Kislovodsk 83.72 314** *e*P **P 21 04 43.9 +0.7**
KIV pmax pmax
comp=Z,7.0nm,1.0s
**G22K Bettles 83.73 23** P **P 21 04 44.1 +1.5**
baz=263,SNR=5.5
**SBA Scott Base 83.76 172** P **P 21 04 43.9 +1.4**
**SBA Scott Base 83.76 172** P **P 21 04 43.9 +1.4**
SBA pmax pmax
comp=Z,69nm,0.2s
**CUT Chulitna 83.81 28** P **P 21 04 44.3 +1.2**
baz=265
**M22K Willow 83.82 28** P **P 21 04 44.6 +1.4**

baz=265
**MLY Manley 83.84 25** P **P 21 04 44.7 +1.4**
MLY IAmb IAmb 21 04 46.6
comp=Z,9.3nm,0.9s
**MLY Manley 83.84 25** P **P 21 04 44.7 +1.4**
baz=264,SNR=7.5
**RC01 Rabbit Creek A 83.95 29** P **P 21 04 44.6 +0.7**
baz=266
**SEW Seward 84.02 30** P **P 21 04 44.5 +0.3**
baz=266
**GURO Guroymak-BITLI 84.10 308** P **P 21 04 45.9 +0.5**
**D23K Nanushuk River 84.27 21** P **P 21 04 46.4 +1.1**
baz=264
**COLD Coldfoot 84.27 23** P **P 21 04 46.7 +1.3**
baz=265,SNR=15
**PMR Palmer 84.28 29** P **P 21 04 46.0 +0.5**
**PMR Palmer 84.28 29** P **P 21 04 46.0 +0.5**
baz=266,SNR=5.3
**PMR Palmer 84.28 29** P **P 21 04 46.0 +0.5**
PMR pmax pmax
comp=Z,21nm,1.0s
**G23K Bananza Creek 84.30 23** P **P 21 04 46.3 +0.7**
baz=265,SNR=20
**C23K Itkillik River 84.39 20** P **P 21 04 47.0 +1.1**
baz=264,SNR=12
**H23K Yukon River 84.41 24** P **P 21 04 46.9 +0.7**
baz=265,SNR=11
**I23K Minto, Yukon-K 84.43 25** P **P 21 04 46.4 +0.1**
baz=266,SNR=9.4
**MCK McKinley 84.52 26** P **P 21 04 46.1 -0.6**
baz=266
**NEA2 Nenana 84.52 26** P **P 21 04 47.4 +0.7**
baz=266
**RND Reindeer 84.53 27** P **P 21 04 46.8 -0.1**
RND IAmb IAmb 21 05 01.0
comp=Z,22nm,1.4s
**RND Reindeer 84.53 27** P **P 21 04 46.8 -0.1**
RND pmax pmax
comp=Z,22nm,1.4s
**E23K Chandalar 84.57 22** P **P 21 04 47.7 +0.7**
baz=265,SNR=17
**VRH Novokhopyorsk 84.58 321** ⇓ *i* P **P 21 04 47.9 +0.7**
VRH pmax pmax
comp=Z,52nm,1.2s
**KNK Knik Glacier 84.59 29** P **P 21 04 47.5 +0.4**
baz=267,SNR=6.0
**PWL Port Wells 84.62 29** P **P 21 04 47.3 0.0**
baz=267
**WAT1 Susitna Watana 84.63 27** P **P 21 04 47.5 +0.2**
baz=266
**TOLK Toolik Lake Re 84.64 21** P **P 21 04 47.7 +0.4**
TOLK IAmb IAmb 21 04 52.3
comp=Z,10nm,0.9s
**TOLK Toolik Lake Re 84.64 21** P **P 21 04 48.3 +1.0**
baz=265,SNR=8.8
**SML Sawmill 84.67 28** P **P 21 04 48.2 +0.6**
**SML Sawmill 84.67 28** P **P 21 04 47.1 -0.5**
baz=267,SNR=7.2
**PPT Papeete 84.67 108** LR LR 21 39 22.1
comp=Z,41nm,21.4s,baz=289,slow=33
**PPT2 Papeete2 84.68 108** *e* LR LR 21 31 30.9
comp=Z,149nm,26.5s
**D24K Happy Valley 84.95 21** P **P 21 04 49.0 +0.2**
baz=266,SNR=9.5
**M23K Glacier View 84.96 28** P **P 21 04 49.0 0.0**
baz=267,SNR=6.8
**WAT6 Susitna Watana 84.99 28** P **P 21 04 48.9 -0.4**
baz=267,SNR=6.3
**E24K Your Creek 85.00 22** P **P 21 04 49.2 +0.1**
baz=266
**C24K Franklin Bluff 85.04 20** P **P 21 04 48.3 -0.9**
baz=266
**P23K Montague Islan 85.04 30** P **P 21 04 49.8 +0.4**
baz=268
**CCB Clear Creek Bu 85.06 26** P **P 21 04 49.3 -0.1**
**MARD Mardin 85.09 307** P **P 21 04 50.5 +0.1**
MARD IAmb IAmb 21 04 52.8
comp=Z,7.9nm,0.6s
**H24K Noodor Dome 85.10 24** P **P 21 04 49.9 +0.2**
baz=267
**SCM Sheep Creek Mo 85.15 28** P **P 21 04 49.5 -0.6**
baz=268,SNR=5.1
**DHY Denali Highway 85.18 27** P **P 21 04 50.1 -0.2**
baz=268
**F24K Squaw Lake 85.19 23** P **P 21 04 51.5 +1.4**
baz=267,SNR=7.2
**GLI Glacier Island 85.22 29** P **P 21 04 49.8 -0.5**
baz=268
**POKR Poker Plat Res 85.25 25** P **P 21 04 49.5 -0.8**
baz=267
**G24K Hadweenzic Riv 85.31 23** P **P 21 04 51.4 +0.7**
baz=267,SNR=7.5
**HDA Harding Lake 85.42 26** P **P 21 04 51.9 +0.7**
baz=268
**ILAR Eielson Array 85.46 25** P **P 21 04 52.4 +0.9**
comp=Z,0.8nm,0.9s,baz=241,slow=7.1,SNR=8.2
comp=Z,0.8nm,0.9s
**Q23K Middleton Isla 85.56 31** P **P 21 04 52.6 +0.7**
baz=269
**VSLR Vesyoloye 85.64 313** *i* P **P 21 04 53.2 +0.4**
VSLR pmax pmax
comp=Z,60nm,1.0s
**M24K Tolsona, Glenn 85.70 28** P **P 21 04 52.6 -0.1**
baz=269
**KLU Klutina 85.81 29** P **P 21 04 53.8 +0.5**
baz=269
**D25K Kavik River 85.83 21** P **P 21 04 54.2 +0.9**
baz=268
**G25K Bearman Lake 85.85 23** P **P 21 04 54.3 +1.0**
baz=268
**SOC Sochi 85.86 313** *e* P **P 21 04 50.4 -3.5**
SOC *e* 21 08 09.2
SOC *e* PPP PPP 21 10 04.4
SOC *e* S **SKSac 21 15 12.0 -5.3**
SOC *e* SS **SS 21 21 00.0 -2.6**
SOC *e* SSS SSS 21 24 33.5
SOC pmax pmax
comp=Z,19nm,0.6s
SOC MLR MLR
comp=Z,65nm,19.0s
**EYAK Cordova Ski Ar 85.88 30** P **P 21 04 53.7 +0.2**
baz=269
**K24K Donnelly Dome 85.92 26** P **P 21 04 53.5 -0.3**
baz=269
**H25L Birch Creek 85.95 24** P **P 21 04 54.3 +0.5**
baz=269
**PAX Paxson 86.04 27** P **P 21 04 55.0 +0.5**
baz=269
**F25K Christian Rive 86.05 23** P **P 21 04 54.8 +0.4**
baz=269
**PRP Porcupine Dome 86.06 25** P **P 21 04 54.9 +0.3**
baz=269
**VORD Divnogorie 86.11 321** *e* P **P 21 04 54.1 -0.8**
VORD pmax pmax
comp=Z,30nm,0.8s
**J25K Salcha River, 86.11 26** P **P 21 04 54.4 -0.3**
baz=269
**VORR Voronezh 86.16 321** ⇓ *i* P **P 21 04 55.8 +0.7**
VORR pmax pmax
comp=Z,49nm,1.1s
**HARP HAARP 86.18 28** P **P 21 04 54.6 -0.5**
baz=270
**VSR Storozhevoye 86.19 321** *e* P **P 21 04 54.4 -0.9**
VSR pmax pmax
comp=Z,30nm,0.8s
**LPSR Galich'ya Gora 86.33 322** *e* P **P 21 04 55.1 -0.8**
LPSR pmax pmax
comp=Z,50nm,1.2s
**C26K Camden Bay 86.36 20** P **P 21 04 57.0 +1.3**
baz=269
**BMRM Bremner River 86.44 29** P **P 21 04 56.9 +0.5**
baz=270
**N25K Chitina, Valde 86.44 29** P **P 21 04 56.7 +0.3**
baz=270
**BMAR Burnt Mountain 86.46 23** P **P 21 04 58.0 +1.6**
**KAIM Kayak Island 86.54 30** P **P 21 04 56.1 -0.8**
baz=270
**F26K Sheenjek River 86.63 22** P **P 21 04 57.6 +0.5**
baz=270,SNR=5.7
**SCRK Sand Creek 86.71 26** P **P 21 04 57.8 0.0**
baz=270
**G26K Porcupine Rive 86.77 23** P **P 21 04 57.9 +0.1**
baz=270
**C27K Jago River 86.78 21** P **P 21 04 57.3 -0.6**
baz=270
**J26L Joseph Creek 86.89 26** P **P 21 04 58.9 +0.3**
baz=271

**ARPR Arapgir-MALATY 86.99 309** P **P 21 05 00.3 +0.6**
**L26K Log Cabin Wild 87.01 27** P **P 21 04 58.8 -0.3**
baz=271
**MOS Moscow 87.05 326** *e* P **P 21 04 58.7 -0.7**
MOS pmax pmax
comp=Z,35nm,1.1s
**I26K Coal Creek Min 87.05 25** P **P 21 04 59.0 -0.2**
baz=271
**CRQE Cirque 87.19 29** P **P 21 04 59.6 -0.5**
baz=272
**M26K Nabesna, AK 87.19 28** P **P 21 05 00.3 +0.3**
baz=272
**MCARA McCarthy VSAT 87.20 29** P **P 21 05 01.0 +1.0**
baz=272
**K27K Chicken 87.55 26** P **P 21 05 01.6 -0.1**
baz=272
**E27K Coleen River 87.58 22** P **P 21 05 01.5 -0.2**
baz=272
**G27K Doyon Strip 87.61 23** P **P 21 05 01.9 -0.1**
baz=272
**OBN Obninsk 87.67 325** P **P 21 05 01.4 -0.9**
**OBN Obninsk 87.67 325** LR LR 21 46 07.5
comp=Z,85nm,20.8s,baz=62,slow=37
**OBN Obninsk 87.67 325** ⇑ *e* P **P 21 05 02.7 +0.3**
OBN *e* 21 08 30.2
OBN *i* S **S 21 15 47.6 +5.7**
OBN *e* SS **SS 21 21 25.4 -2.9**
OBN pmax pmax
comp=Z,49nm,1.7s
OBN MLR MLR
comp=Z,86nm,20.0s
**I27K Kandik River 87.68 25** P **P 21 05 02.3 -0.1**
baz=273
**H27K Steamboat Moun 87.69 24** P **P 21 05 03.4 +1.0**
baz=273
**L27K Beaver Creek, 87.70 27** P **P 21 05 02.8 +0.3**
baz=272
**M27K Edge Creek, AK 87.71 28** P **P 21 05 01.9 -0.7**
baz=272
**BCAR Beaver Creek A 87.72 27** P **P 21 05 03.3 +0.7**
**D27M Malcolm River 87.76 21** P **P 21 05 02.2 -0.5**
baz=273
**MESA MESA 87.77 30** P **P 21 05 02.6 -0.4**
baz=272
**FURI Furi 87.88 279** LR LR 21 44 31.6
comp=Z,120nm,20.0s,baz=140,slow=36
**EGAK Eagle 87.92 25** P **P 21 05 02.9 -0.5**
baz=273
**GAZ Gaziantep 87.94 307** P **P 21 05 03.7 -0.5**
**CTG Chitna Glacier 88.03 29** P **P 21 05 02.8 -1.4**
baz=273
**F28M Old Crow 88.26 22** P **P 21 05 04.1 -0.9**
baz=274
**E28M Babbage River 88.31 21** P **P 21 05 04.8 -0.5**
baz=274
**I28M Miner Creek 88.39 25** P **P 21 05 05.6 -0.2**
baz=274
**YUK3 Moose Creek 88.41 28** P **P 21 05 05.0 -1.1**
baz=274
**D28M Stokes Point 88.54 21** P **P 21 05 06.3 +0.1**
baz=275
**O28M Mount Upton 88.61 29** P **P 21 05 07.9 +0.8**
baz=274
**DAWY Dawson 88.73 26** P **P 21 05 07.4 0.0**
baz=275
**YUK8 Steele Glacier 88.78 29** P **P 21 05 07.2 -0.7**
baz=274
**E29M Blow River 88.94 22** P **P 21 05 07.9 -0.2**
baz=276
**H29M Whitestone 88.97 24** P **P 21 05 07.0 -1.4**
baz=276
**G29M Pine Creek 89.04 23** P **P 21 05 08.0 -0.8**
baz=276
**PNL Peninsula 89.09 30** P **P 21 05 09.2 +0.2**
baz=275
**KIBK Kibwezi 89.10 268** P **P 21 05 09.7 -0.5**
KIBK IAmb IAmb 21 05 12.8
comp=Z,20nm,1.5s
**YUK4 Talbot Arm 89.31 29** P **P 21 05 10.5 +0.2**
baz=275
**L29M L29M 89.38 27** P **P 21 05 10.0 -0.4**
baz=276
**YUK6 Outpost Mounta 89.48 29** P **P 21 05 09.6 -1.6**
baz=276
**K29M Barlow Dome 89.57 26** P **P 21 05 10.4 -1.0**
baz=276
**EPYK Eagle Plains 89.62 24** P **P 21 05 10.6 -0.8**
baz=277
**MMAI Mount Meron Ar 89.64 303** P **P 21 05 12.3 0.0**
comp=Z,5.2nm,0.8s,baz=87,slow=7.6,SNR=8.5
MMAI LR LR 21 53 26.1
comp=Z,46nm,18.2s,baz=49,slow=41
comp=Z,5.2nm,0.8s
**G30M tAoh Zraii Nji 89.74 23** P **P 21 05 10.5 -1.5**
baz=278
**F30M Barrier River 89.82 22** P **P 21 05 12.2 -0.1**
baz=278
**KMBO Kilima Mbogo 89.83 269** P **P 21 05 13.7 -0.1**
KMBO IAmb IAmb 21 05 16.4
comp=Z,9.5nm,1.1s
**KMBO Kilima Mbogo 89.83 269** P **P 21 05 13.7 -0.1**
KMBO pmax pmax
comp=Z,10.0nm,1.1s
**I30M Mount Dempster 89.90 25** P **P 21 05 12.2 -0.7**
baz=277
**P29M Windy Craggy 89.93 30** P **P 21 05 12.7 -0.3**
baz=276
**J30M Hart River 90.00 25** P **P 21 05 12.2 -1.2**
baz=277
**N30M Aishikik Lake 90.04 29** P **P 21 05 10.6 -3.0**
baz=277
**M30M Minto, Yukon 90.05 27** P **P 21 05 11.1 -2.5**
baz=277
**EIL Elat 90.24 300** LR LR 21 51 03.4
comp=Z,68nm,19.4s,baz=68,slow=39
**P30M Million Dollar 90.26 30** P **P 21 05 13.0 -1.7**
baz=277
**G31M Satah River 90.50 23** P **P 21 05 14.3 -1.2**
baz=279
**INK Inuvik 90.55 22** P **P 21 05 14.3 -1.4**
baz=280
**BR131 Keskin Array S 90.58 310** P **P 21 05 15.9 -0.9**
BR131 IAmb IAmb 21 05 18.3
comp=Z,5.3nm,0.9s
**BR131 Keskin Array S 90.58 310** P **P 21 05 15.9 -0.9**
BR131 pmax pmax
comp=Z,5.0nm,0.9s
**BRTR Keskin Array B 90.58 310** P **P 21 05 15.8 -0.9**
**BRTR Keskin Array B 90.58 310** P **P 21 05 15.3 -1.4**
comp=Z,3.9nm,0.9s,baz=120,slow=4.4,SNR=18
BRTR LR LR 21 53 02.8
comp=Z,24nm,18.9s,baz=100,slow=40
comp=Z,3.9nm,0.9s
**BRTR Keskin Array B 90.58 310** P **P 21 05 15.8 -0.9**
**F31M Tsiigehtchic 90.62 22** P **P 21 05 17.1 +1.1**
baz=280
**ARCES ARCESS Array B 91.05 340** P **P 21 05 16.3 -1.7**
comp=Z,3.4nm,0.7s,baz=87,slow=5.0,SNR=8.7
ARCES LR LR 21 49 29.9
comp=Z,60nm,21.5s,baz=80,slow=38
comp=Z,3.4nm,0.7s
**M31M Drury Creek, Y 91.21 28** P **P 21 05 20.4 +1.5**
baz=279
**WHY Whitehorse 91.21 29** P **P 21 05 19.1 0.0**
baz=279
**FARO Faro, Yukon 91.69 28** P **P 21 05 22.2 +1.0**
baz=280
**P33M Teslin, Yukon 92.30 29** P **P 21 05 23.4 -0.7**
baz=280
**FINES FINESS Array B 92.44 332** P **P 21 05 23.9 -0.7**
comp=Z,2.6nm,0.9s,baz=58,slow=5.3,SNR=9.4
FINES LR LR 21 51 26.0
comp=Z,90nm,20.5s,baz=80,slow=38
comp=Z,2.6nm,0.9s
**AK09 Malin Array Si 92.47 321** P **P 21 05 24.2 -0.7**
**AK08 Malin Array Si 92.48 321** P **P 21 05 24.0 -1.0**
**AKASG Malin Array Be 92.49 321** P **P 21 05 24.4 -0.7**
comp=Z,3.1nm,0.8s,baz=76,slow=3.9,SNR=10
AKASG LR LR 21 50 20.0
comp=Z,27nm,19.1s,baz=68,slow=38
comp=Z,3.1nm,0.8s
**AKBB Malin Array Si 92.49 321** P **P 21 05 23.3 -1.7**
AKBB IAmb IAmb 21 05 25.4
comp=Z,5.1nm,0.9s
**AKBB Malin Array Si 92.49 321** *i* P **P 21 05 24.0 -1.0**
AKBB pmax pmax
comp=Z,4.0nm,0.9s
**AKBB Malin Array Si 92.49 321** P **P 21 05 24.0 -1.0**

**KIEV Kiev 92.50 321** P **P 21 05 23.4 -1.7**
KIEV IAmb IAmb 21 05 25.4
comp=Z,4.5nm,0.9s
**KIEV Kiev 92.50 321** ⇓ P **P 21 05 24.8 -0.3**
**KIEV Kiev 92.50 321** ⇓ P **P 21 05 24.8 -0.3**
**KIEV Kiev 92.50 321** P **P 21 05 24.1 -1.0**
comp=Z,21nm,0.9s
**MNK Minsk 92.73 325** *i* P **P 21 05 24.4 -1.6**
MNK *i* 21 09 06.1
MNK *i* PPP PPP 21 11 05.9
MNK *i* S **SKSac 21 15 55.0 -2.3**
MNK *i* PS **PS 21 17 43.0 -1.3**
MNK *i* SS **SS 21 22 44.4 +2.9**
MNK *i* SSS SSS 21 26 24.9
MNK pmax pmax
comp=Z,5.0nm,0.6s
MNK pmax pmax
comp=N,6.0nm,0.6s
MNK pmax pmax
comp=E,5.0nm,0.9s
MNK MLR MLR
comp=N,60nm,19.0s
MNK MLR MLR
comp=E,47nm,20.0s
MNK MLR MLR
comp=Z,139nm,19.0s
**QSPA South Pole Qui 93.10 180** P **P 21 05 28.8 +1.1**
QSPA IAmb IAmb 21 05 30.5
comp=Z,13nm,1.2s
**QSPA South Pole Qui 93.10 180** P **P 21 05 27.9 +0.2**
comp=Z,4.6nm,0.9s,baz=32,slow=1.0,SNR=21
comp=Z,4.6nm,0.9s
**C36M Paulatuk 93.62 20** P **P 21 05 30.8 +1.0**
baz=289
**CFR Carcaliu 94.01 316** ⇓ P **P 21 05 32.3 +0.1**
**CFR Carcaliu 94.01 316** ⇓ P **P 21 05 32.3 +0.1**
**DLBC Dease Lake 94.06 31** LR LR 21 40 58.2
comp=Z,67nm,21.3s,baz=274,slow=31
**DLBC Dease Lake 94.06 31** P **P 21 05 33.7 +1.5**
baz=283
**RNPP9 Sopachiy 94.45 322** P **P 21 05 33.4 -0.7**
**KMPD K-Podol'skiy 94.60 319** P **P 21 05 34.2 -0.6**
**TESR Tescani 94.83 317** ⇓ P **P 21 05 36.3 +0.4**
**VRI Vrincioaia 94.88 316** ⇑ P **P 21 05 37.2 +1.0**
**VRI Vrincioaia 94.88 316** ⇑ P **P 21 05 37.2 +1.0**
**VRI Vrincioaia 94.88 316** P **P 21 05 36.4 +0.2**
**PLOR Plostina 94.94 316** P **P 21 05 37.5 +1.0**
**PLOR Plostina 94.94 316** P **P 21 05 37.5 +1.0**
**TURR Turia 95.34 317** ⇓ P **P 21 05 39.2 +0.9**
**MLR Muntele Rosu 95.49 316** P **P 21 05 38.3 -0.8**
MLR IAmb IAmb 21 05 53.0
comp=Z,14nm,1.3s
**MLR Muntele Rosu 95.49 316** LR LR 21 54 37.3
comp=Z,64nm,20.5s,baz=60,slow=39
**MLR Muntele Rosu 95.49 316** ⇓ P **P 21 05 39.5 +0.4**
**MLR Muntele Rosu 95.49 316** ⇓ P **P 21 05 39.5 +0.4**
**BURAR Bucovina Array 95.59 318** P **P 21 05 39.2 -0.3**
BURAR IAmb IAmb 21 05 41.6
comp=Z,5.7nm,0.8s
**BURAR Bucovina Array 95.59 318** ⇑ P **P 21 05 40.2 +0.7**
**BUR08 Bucovina Ar. S 95.60 318** P **P 21 05 38.9 -0.7**
BUR08 IAmb IAmb 21 05 41.4
comp=Z,3.8nm,0.8s
**MBAR Mbarara 96.30 270** LR LR 21 48 06.5
comp=Z,27nm,18.0s,baz=54,slow=35
**BBB Bella Bella 96.56 37** LR LR 21 43 03.4
comp=Z,31nm,20.4s,baz=220,slow=32
**LOT Lotru 97.00 316** ⇓ P **P 21 05 46.5 +0.5**
**MARR Marisel-Cluj 97.19 318** ⇓ P Pdif 21 05 47.4 +0.5
**KOLS Kolonicke sedl 97.24 320** *i* P **P 21 05 46.8 -0.1**
**KOLS Kolonicke sedl 97.24 320** *e* PDIFF **P 21 05 46.8 -0.1**
**DRGR 97.43 318** ⇓ P Pdif 21 05 48.4 +0.5
**DRGR 97.43 318** ⇓ P Pdif 21 05 48.4 +0.5
**CRVS Cervenica-Dubn 97.77 320** *i* P Pdif 21 05 50.7 +1.4
**CRVS Cervenica-Dubn 97.77 320** *e* PDIFF Pdif 21 05 50.7 +1.4
**SIRR Siria 98.26 317** ⇓ P **P 21 05 52.0 +0.4**
**RES Resolute Bay 98.29 10** LR LR 21 51 29.8
comp=Z,22nm,21.6s,baz=330,slow=36
**RKT Rikitea 98.61 113** *e* LR LR 21 37 54.6
comp=Z,578nm,31.0s
**HFS Hagfors 98.63 332** P **P 21 05 51.4 -1.5**
comp=Z,3.7nm,1.0s,baz=33,slow=5.7,SNR=2.9
comp=Z,3.7nm,1.0s
**NB2 NORSAR Subarra 99.39 334** P **Pdif 21 05 55.2 -1.1**
comp=Z,0.7nm,0.7s,baz=66,slow=4.6
**NOA NORSAR Array B 99.39 334** P **Pdif 21 05 55.1 -1.2**
comp=Z,1.2nm,0.8s,baz=67,slow=4.5,SNR=4.8
NOA LR LR 21 55 34.1
comp=Z,58nm,20.1s,baz=60,slow=38
comp=Z,1.2nm,0.8s
**SNAA Sanae 104.77 195** Pdiff **Pdif 21 06 20.5 +0.6**
comp=Z,2.7nm,1.3s,baz=57,slow=2.3,SNR=6.5
**BOZ Bozeman (W) 108.99 39** P **PKiKP 21 10 42.5 -1.4**
baz=296
**EGMT Eagleton 109.04 36** P **PKiKP 21 10 43.5 -0.3**
baz=298
**TPNV Topopah Spring 109.07 49** P **PKiKP 21 10 43.6 -0.7**
baz=289
**GSC Goldstone, Bar 109.17 51** P **PKiKP 21 10 42.5 -2.0**
baz=288
**109C Camp Elliot, M 109.68 54** P **PKiKP 21 10 43.6 -1.7**
baz=288
**HEC Hector,Ludlow 109.69 51** P **PKiKP 21 10 43.9 -1.6**
baz=289
**PFO Pinyon Flats O 109.97 53** P **PKiKP 21 10 45.1 -1.0**
baz=288
**TPFO Pinon Flats 109.98 53** P **PKiKP 21 10 45.5 -0.5**
baz=288
**BELC Belle Mtn. Jos 110.22 52** P **PKiKP 21 10 44.0 -2.5**
baz=289
**MONP2 Monument Peak 110.23 53** P **PKiKP 21 10 45.1 -1.6**
baz=288
**GMRC Granite Mounta 110.23 51** P **PKiKP 21 10 44.5 -2.1**
baz=289
**DUG Dugway, Tooele 110.41 45** P **PKiKP 21 10 45.7 -1.1**
baz=293
**IKP In-Ko-Pah, Jac 110.55 53** P **PKiKP 21 10 46.2 -1.0**
baz=288
**RLMT Red Lodge 110.69 39** P **PKiKP 21 10 45.1 -2.1**
baz=298
**SWSC Sam W. Stewart 110.71 53** P **PKiKP 21 10 45.4 -1.9**
baz=288
**BC3 Big Chuckawall 110.76 52** P **PKiKP 21 10 45.7 -1.9**
baz=289
**IRM Iron Mountain 110.84 52** P **PKiKP 21 10 45.4 -2.2**
baz=289
**NEE2 Needles Airpor 111.05 51** P **PKiKP 21 10 45.3 -2.6**
baz=290
**GLA Glamis 111.45 53** P **PKiKP 21 10 46.5 -2.2**
baz=289
**BW06 Boulder Array 111.57 41** P **PKiKP 21 10 45.8 -3.1**
baz=296
**PDMCI Parker Dam,Lak 111.57 51** P **PKiKP 21 10 45.9 -3.0**
baz=290
**LAO LASA Array 111.79 36** P **PKiKP 21 10 45.8 -3.2**
baz=301
**DGMT Dagmar 112.02 34** P **PKiKP 21 10 45.6 -3.8**
baz=303
**214A Organ Pipe Nat 113.42 53** P **PKiKP 21 10 50.7 -1.8**
baz=290
**K22A Casper 113.60 40** P **PKiKP 21 10 50.1 -2.6**
baz=299
**O20A White River Ci 113.62 43** P **PKiKP 21 10 51.1 -1.8**
baz=296
**RSSD Black Hills 114.44 38** P **PKiKP 21 10 51.1 -3.3**
baz=302
**W18A Petrified Fore 114.65 49** P **PKiKP 21 10 52.8 -2.2**
baz=293
**MVCO Mesa Verde 114.71 46** P **PKiKP 21 10 51.9 -3.3**
baz=295
**N23A Red Feather La 114.83 42** P **PKiKP 21 10 51.8 -3.5**
baz=299
**MDND Maddock 114.90 33** P **PKiKP 21 10 51.7 -3.1**
baz=307
**TUC Tucson 114.90 52** P **PKiKP 21 10 53.6 -1.9**
baz=291
**ISCO Idaho Springs 115.57 43** P **PKiKP 21 10 53.0 -3.8**
baz=298
**S22A 4UR Ranch, Cre 115.67 45** P **PKiKP 21 10 54.3 -2.7**
baz=297
**Q24A Divide 116.28 43** P **PKPdf 21 10 55.3 -2.9**
baz=298
**AGMN Agassiz Nation 116.58 31** P **PKPdf 21 10 55.4 -2.7**
baz=311
**SDCO Great Sand Dun 116.61 45** P **PKPdf 21 10 55.9 -2.9**
baz=298

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **121A** | **Cookes Peak, D** baz=294 | **117.16** | **51** | P | **PKPdf** | **21 10 56.6** | **-3.3** |
| **ANMO** | **Albuquerque** baz=296 | **117.17** | **48** | P | **PKPdf** | **21 10 55.7** | **-4.2** |
| **SUSD** | **Miller** baz=306 | **117.29** | **35** | P | **PKPdf** | **21 10 55.6** | **-4.0** |
| **OGNE** | **Ogallala** baz=302 | **117.36** | **40** | P | **PKPdf** | **21 10 55.1** | **-4.8** |
| **T25A** | **Trinidad** baz=298 | **117.66** | **45** | P | **PKPdf** | **21 10 57.0** | **-3.7** |
| **KSCO** | **Kaye Shedlock'** baz=301 | **117.97** | **42** | P | **PKPdf** | **21 10 57.6** | **-3.6** |
| **EYMN** | **Ely** baz=315 | **118.97** | **29** | P | **PKPdf** | **21 10 59.9** | **-2.8** |
| **ECSD** | **EROS Data Cent** baz=308 | **119.06** | **35** | P | **PKPdf** | **21 10 59.5** | **-3.6** |
| **MNTX** | **Cornudas Mount** baz=295 | **119.36** | **51** | P | **PKPdf** | **21 11 00.5** | **-3.4** |
| **MSTX** | **Muleshoe** baz=298 | **120.33** | **47** | P | **PKPdf** | **21 11 01.9** | **-3.9** |
| **AMTX** | **Amarillo** baz=299 | **120.68** | **46** | P | **PKPdf** | **21 11 05.7** | **-0.8** |
| **TXAR** | **Lajitas Array** comp=Z,0.9nm,0.6s,baz=267,slow=0.7,SNR=13 | **121.70** | **53** | PKP | **PKPdf** | **21 11 09.1** | **+0.5** |
| **KSU1** | **Kansas State U** baz=306 | **121.84** | **39** | P | **PKPdf** | **21 11 07.7** | **-0.8** |
| **WMOK** | **Wichita Mounta** baz=302 | **122.81** | **45** | P | **PKPdf** | **21 11 10.2** | **-0.3** |
| **JFWS** | **Jewell Farm** baz=314 | **123.11** | **32** | P | **PKPdf** | **21 11 10.0** | **-0.8** |
| **ABTX** | **Abilene, Hawle** baz=300 | **123.27** | **47** | P | **PKPdf** | **21 11 10.8** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** comp=Z,6.2nm,0.7s,baz=43,slow=3.3,SNR=33 | **123.36** | **288** | PKP | **PKPdf** | **21 11 12.4** | **+0.4** |
| **JCT** | **Junction City** baz=298 | **124.19** | **50** | P | **PKPdf** | **21 11 12.2** | **-1.1** |
| **TUL3** | **Leonard** baz=305 | **124.22** | **42** | P | **PKPdf** | **21 11 12.6** | **-0.5** |
| **GLMI** | **Grayling** baz=321 | **124.48** | **27** | P | **PKPdf** | **21 11 12.8** | **-0.5** |
| **WHTX** | **Lake Whitney,** baz=301 | **125.19** | **47** | P | **PKPdf** | **21 11 14.5** | **-0.6** |
| **HDIL** | **Hopedale** baz=314 | **125.25** | **34** | P | **PKPdf** | **21 11 15.0** | **0.0** |
| **833A** | **Chaparral WMA,** baz=298 | **125.51** | **52** | P | **PKPdf** | **21 11 14.9** | **-0.9** |
| **CCM** | **Cathedral Cave** baz=310 | **125.80** | **37** | P | **PKPdf** | **21 11 15.4** | **-0.7** |
| **MIAR** | **Mount Ida** baz=306 | **126.48** | **42** | P | **PKPdf** | **21 11 16.7** | **-0.8** |
| **SFIN** | **Lafayette** baz=316 | **126.57** | **32** | P | **PKPdf** | **21 11 17.0** | **-0.4** |
| **O48B** | **Farmland** baz=318 | **127.68** | **31** | P | **PKPdf** | **21 11 18.7** | **-0.9** |
| **P49A** | **Miami Univ. Ec** baz=318 | **128.44** | **31** | P | **PKPdf** | **21 11 19.0** | **-2.1** |
| **WCI** | **Wyandotte Cave** baz=316 | **128.54** | **34** | P | **PKPdf** | **21 11 19.9** | **-1.4** |
| **LONY** | **Lake Ozonia** baz=332 | **128.63** | **20** | P | **PKPdf** | **21 11 19.8** | **-1.5** |
| **ACSO** | **Alum Creek Sta** baz=320 | **128.79** | **29** | P | **PKPdf** | **21 11 20.8** | **-0.9** |
| **WVT** | **Waverly** baz=313 | **129.12** | **37** | P | **PKPdf** | **21 11 20.8** | **-1.7** |
| **OXF** | **Oxford** baz=310 | **129.22** | **39** | P | **PKPdf** | **21 11 20.5** | **-2.2** |
| **O53A** | **New Philadelph** baz=322 | **129.62** | **28** | P | **PKPdf** | **21 11 22.1** | **-1.2** |
| **P52A** | **Corning** baz=321 | **129.66** | **29** | P | **PKPdf** | **21 11 22.4** | **-1.0** |
| **LBNH** | **Lisbon** baz=335 | **129.82** | **18** | P | **PKPdf** | **21 11 22.0** | **-1.6** |
| **BINY** | **Binghamton** baz=329 | **130.23** | **22** | P | **PKPdf** | **21 11 24.6** | **+0.1** |
| **MCWV** | **Mont Chateau** baz=324 | **130.73** | **27** | P | **PKPdf** | **21 11 24.7** | **-0.8** |
| **SSPA** | **Standing Stone** baz=326 | **130.79** | **25** | P | **PKPdf** | **21 11 25.0** | **-0.5** |
| **L61B** | **Northampton** baz=334 | **131.19** | **19** | P | **PKPdf** | **21 11 24.2** | **-2.1** |
| **TZTN** | **Tazewell** baz=318 | **131.27** | **33** | P | **PKPdf** | **21 11 25.7** | **-0.9** |
| **PAL** | **Palisades** baz=331 | **132.04** | **21** | P | **PKPdf** | **21 11 26.2** | **-1.6** |
| **BLA** | **Blacksburg** baz=322 | **132.39** | **30** | P | **PKPdf** | **21 11 27.6** | **-1.2** |
| **GOGA** | **Godfrey** baz=316 | **133.58** | **36** | P | **PKPdf** | **21 11 30.3** | **-0.7** |
| **TIGA** | **Tifton** baz=314 | **134.90** | **38** | P | **PKPdf** | **21 11 31.6** | **-1.9** |
| **PLCA** | **Paso Flores** comp=Z,1.9nm,0.7s,baz=212,slow=3.3,SNR=3.9 | **139.40** | **159** | PKP | **PKPdf** | **21 11 41.9** | **+0.2** |
| **TRQA** | **Tornquist** | **144.33** | **168** | PKPdf | PKPbc | 21 11 49.8 | +1.0 |
| **TRQA** | **Tornquist** | **144.33** | **168** | PKIKP | PKPbc | 21 11 49.8 | +1.0 |
| **CO01** | **Juntas del Tor** | **148.81** | **150** | | **PKiKP** | **21 12 03.8** | **0.0** |
| **CPUP** | **Villa Florida** comp=Z,1.5nm,0.8s,baz=162,slow=9.6,SNR=1.5 | **156.62** | **170** | PKP | **PKPdf** | **21 12 09.3** | **-0.4** |
| CPUP | comp=Z,2.0nm,0.7s,baz=181,slow=4.9,SNR=6.1 | | | PKPab | **PKPab** | **21 12 39.5** | **+0.9** |
| **LPAZ** | **La Paz** comp=Z,3.2nm,0.9s,baz=156,slow=4.3,SNR=6.0 | **160.22** | **132** | PKP | **PKPdf** | **21 12 16.6** | **+1.4** |
| LPAZ | comp=Z,0.8nm,0.3s,baz=220,slow=4.1,SNR=3.8 | | | PKPab | **PKPab** | **21 12 55.9** | **+0.6** |

**TAP 04 20:56:22.5, 21°66N×122°02E, h110km, ML3.0, D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LYUB** | **Lan-yu** baz=316 | **0.53** | **310** | *e*P | Pn | 20 56 38.6 | -1.0 |
| LYUB | baz=316 | | | S | Sn | 20 56 51.7 | -0.6 |
| **TWKBT** | **Hengchun** baz=289 | **1.16** | **284** | *e*P | Pn | 20 56 45.5 | +0.2 |
| **TWK1** | **Hengchun** baz=289 | **1.16** | **284** | *e*P | Pn | 20 56 46.3 | +0.9 |
| **HEN** | **Hengchun** baz=288 | **1.24** | **286** | *i* P | Pn | 20 56 46.9 | +0.7 |
| **SLIU** | **Shizi** baz=299 | **1.26** | **296** | *e*P | Pn | 20 56 45.1 | -1.4 |
| **EAST** | **Anshuo** baz=304 | **1.30** | **304** | *i* P | Pn | 20 56 47.1 | +0.1 |
| EAST | baz=304 | | | *e*S | Sn | 20 57 06.9 | +1.3 |
| **EDH** | **Donghe** baz=337 | **1.47** | **333** | P | Pn | 20 56 49.6 | +0.7 |
| **SCZT** | **Fangliau** baz=307 | **1.48** | **299** | P | Pn | 20 56 50.6 | +1.5 |
| **LONT** | **Longtian** baz=317 | **1.49** | **327** | P | Pn | 20 56 50.3 | +1.1 |
| **MASBT** | **Mashibuluo** baz=307 | **1.60** | **307** | P | Pn | 20 56 50.0 | -0.5 |
| **CHKH** | **Chenggong** baz=344 | **1.63** | **339** | P | Pn | 20 56 51.9 | +1.0 |
| **TSMG** | **Majia** baz=309 | **1.65** | **310** | *e*P | Pn | 20 56 50.6 | -0.5 |
| **FULB** | **Fuli** baz=340 | **1.68** | **337** | P | Pn | 20 56 52.6 | +1.2 |
| **ELDTW** | **Lidau** baz=329 | **1.78** | **329** | P | Pn | 20 56 53.4 | +0.5 |
| **EYUL** | **Yuli** baz=341 | **1.80** | **339** | *e*P | Pn | 20 56 54.1 | +1.1 |
| EYUL | baz=341 | | | *e*S | Sn | 20 57 19.8 | +3.6 |
| **TWF1** | **Yuli** baz=341 | **1.81** | **339** | *i* P | Pn | 20 56 54.1 | +0.9 |
| **SLGT** | **Liugui** baz=316 | **1.84** | **317** | *e*P | Pn | 20 56 53.5 | 0.0 |
| **YULB** | **Yu-li** baz=331 | **1.85** | **339** | *i* P | Pn | 20 56 53.7 | +0.1 |
| **YULB** | **Yu-li** | **1.85** | **339** | P | Pn | 20 56 53.3 | -0.3 |
| **SCST** | **Cishan** baz=311 | **1.87** | **311** | *i* P | Pn | 20 56 55.3 | +1.5 |
| **TWM1** | **Shoushan** baz=308 | **1.88** | **308** | P | Pn | 20 56 56.4 | +2.4 |
| **STYH** | **Taoyuan** baz=326 | **1.90** | **323** | *i* P | Pn | 20 56 55.2 | +1.1 |
| **HGSD** | **Ruisui** baz=347 | **1.91** | **343** | *i* P | Pn | 20 56 54.5 | +0.3 |
| **SGST** | **Jiashian** baz=307 | **1.94** | **317** | *e*P | Pn | 20 56 55.6 | +0.8 |
| **EHY** | **Hungye** baz=334 | **1.95** | **341** | *i* P | Pn | 20 56 55.4 | +0.6 |
| **WTP** | **Ta-pu** baz=311 | **2.05** | **321** | *e*P | Pn | 20 56 55.6 | -0.5 |
| **CHN1** | **Nanshi** baz=318 | **2.05** | **318** | *i* P | Pn | 20 56 57.2 | +1.0 |
| **TPUB** | **Ta-pu** baz=312 | **2.08** | **322** | P | Pn | 20 56 56.6 | +0.1 |
| **TPUB** | **Ta-pu** baz=312 | **2.08** | **322** | P | Pn | 20 56 56.0 | -0.5 |
| **SNST** | **Tainan City** baz=318 | **2.10** | **318** | *e*P | Pn | 20 56 58.5 | +1.8 |
| **WARBT** | **Fenglin Townsh** baz=336 | **2.13** | **344** | *e*P | Pn | 20 56 58.7 | +1.5 |
| **TWK** | **Hsinying** baz=310 | **2.14** | **319** | *e*P | Pn | 20 56 56.4 | -0.9 |
| **SHUL** | **Shoufeng** baz=355 | **2.16** | **349** | *e*P | Pn | 20 56 59.7 | +2.2 |
| **WCKO** | **Fanlu** baz=315 | **2.20** | **324** | *e*P | Pn | 20 56 59.8 | +1.8 |
| **VWDT** | **VWDT** baz=341 | **2.24** | **339** | *i* P | Pn | 20 56 59.1 | +0.6 |
| **WHYT** | **Xinyi Township** baz=332 | **2.30** | **332** | *e*P | Pn | 20 57 00.1 | +0.8 |
| **TSCK** | **Chigu Township** baz=310 | **2.32** | **310** | *e*P | Pn | 20 56 59.7 | +0.1 |
| **SSLB** | **Suanglung** | **2.34** | **335** | P | Pn | 20 57 01.3 | +1.5 |
| **SSLB** | **Suanglung** baz=324 | **2.34** | **335** | *i* P | Pn | 20 57 00.9 | +1.1 |
| **LXIB** | **Xiulin Townshi** baz=340 | **2.42** | **347** | *e*P | Pn | 20 57 00.4 | -0.6 |
| **WUSB** | **Renai** baz=346 | **2.47** | **340** | P | Pn | 20 57 02.0 | +0.4 |
| **CHGB** | **Renai** baz=347 | **2.52** | **342** | P | Pn | 20 57 02.6 | +0.3 |
| **WHF** | **Hehuan Shan** baz=352 | **2.57** | **344** | *i* P | Pn | 20 57 04.5 | +1.2 |
| **ETLH** | **Xiulin Townshi** baz=349 | **2.59** | **349** | *e*P | Pn | 20 57 04.3 | +1.2 |
| **WCS** | **Beigang Elemen** baz=327 | **2.60** | **337** | *e*P | Pn | 20 57 02.5 | -0.6 |
| **FUSS** | **Fushou** baz=351 | **2.68** | **345** | *e*P | Pn | 20 57 04.4 | 0.0 |
| **TWT** | **Tachien** baz=350 | **2.70** | **343** | P | Pn | 20 57 06.1 | +1.5 |
| **TDCB** | **Techi** baz=350 | **2.70** | **343** | *e*P | Pn | 20 57 05.5 | +0.8 |

*PRU **04** 21:03:52.2, 50°.14N×12°.53E, h10km, West Bohemia-kynsperk N.o.*

**WBNET 04 21:03:52.8, 50°.14N×12°.50E, h8km, Ml2.0, 2C-7D, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KVC** | **Kvetna** | **0.07** | **10** | ⇓P | Pg | 21 03 54.7 | 0.0 |
| KVC | | | | S | Sg | 21 03 56.0 | 0.0 |
| **SKC** | **Skalna** | **0.09** | **288** | ⇓P | Pg | 21 03 55.0 | 0.0 |
| SKC | | | | S | Sg | 21 03 56.6 | 0.0 |
| **NKC** | **Novy Kostel** | **0.10** | **341** | ⇓P | Pg | 21 03 55.2 | +0.1 |
| NKC | | | | S | Sg | 21 03 56.9 | +0.1 |
| **VAC** | **Vackov** | **0.12** | **320** | ⇓P | Pg | 21 03 55.6 | +0.1 |
| VAC | | | | S | Sg | 21 03 57.5 | +0.1 |
| **LACW** | **Lazy** | **0.12** | **138** | S | Sg | 21 03 57.6 | +0.2 |
| **LBCW** | **Luby** | **0.14** | **336** | ⇓P | Pg | 21 03 55.9 | +0.1 |
| LBCW | | | | S | Sg | 21 03 58.0 | +0.3 |
| **ZHC** | **Zelena Hora** | **0.14** | **240** | ⇑P | Pg | 21 03 55.8 | 0.0 |
| ZHC | | | | S | Sg | 21 03 57.8 | -0.1 |
| **KRCW** | **Kraslice** | **0.19** | **6** | ⇑P | Pg | 21 03 56.7 | 0.0 |
| KRCW | | | | S | Sg | 21 03 59.4 | 0.0 |
| **KOCW** | **Kopaniny** | **0.21** | **306** | ⇓P | Pg | 21 03 57.0 | 0.0 |
| KOCW | | | | S | Sg | 21 03 59.9 | 0.0 |
| **TRCW** | **Trojmez** | **0.28** | **306** | ⇓P | Pg | 21 03 58.3 | 0.0 |
| **HSKC** | **Hora Svate Kat** | **0.76** | **52** | *e*Pg | Pg | 21 04 06.9 | -0.5 |
| HSKC | | | | *e*Sg | Sg | 21 04 17.0 | -0.2 |
| **BRG** | **Berggiesshubel** | **1.18** | **51** | Pg | Pg | 21 04 14.8 | -0.5 |
| BRG | | | | Sg | Sg | 21 04 29.9 | -0.7 |
| BRG | comp=Z,7.5nm,0.4s | | | Amp | | 21 04 31.3 | |
| **CLL** | **Collm** | **1.21** | **15** | *i* Pg | Pb | 21 04 14.6 | -1.3 |
| CLL | | | | *i* Pg | Pg | 21 04 15.2 | -0.8 |
| CLL | comp=Z,4.0nm,0.4s | | | *i* Sg | Sg | 21 04 31.3 | -0.4 |
| CLL | | | | *ex* | x | 21 04 34.0 | |
| **KHC** | **Kasperske Hory** | **1.23** | **145** | *e*PG | Pb | 21 04 15.2 | -1.1 |
| KHC | | | | *e*SG | Sg | 21 04 31.3 | -1.1 |
| **ZVC** | **Zvikov** comp=Z,4.1nm,0.2s | **1.30** | **122** | *e*SG | Sb | 21 04 33.5 | -0.9 |
| **PRU** | **Pruhonice** | **1.33** | **96** | *e*SG | Sb | 21 04 34.3 | -0.7 |
| **GOPC** | **GO Pecny, Ondr** comp=Z,5.5nm,0.2s | **1.49** | **98** | *e*SG | Sn | 21 04 39.4 | -0.2 |
| **CKRC** | **Cesky Krumlov** comp=Z,2.8nm,0.4s | **1.77** | **138** | *e*SG | Sb | 21 04 47.4 | -0.6 |
| **UPC** | **Upice** | **2.28** | **79** | *e*SG | Sb | 21 05 03.6 | +1.0 |
| **CHVC** | **Chvalec** | **2.32** | **78** | *e*SG | Sb | 21 05 05.5 | +1.8 |
| **DPC** | **Dobruska-Polom** | **2.46** | **84** | *e*SG | Sb | 21 05 08.0 | +0.2 |
| **KRUC** | **Moravsky** | **2.76** | **112** | *e*PN | Pn | 21 04 36.5 | -0.8 |
| KRUC | | | | *e*SG | Sg | 21 05 19.2 | -2.0 |
| **VRAC** | **Vranov** | **2.79** | **106** | *e*PN | Pn | 21 04 37.2 | -0.5 |
| VRAC | | | | *e*SG | Sb | 21 05 19.4 | +2.3 |
| **MORC** | **Moravsky Berou** | **3.28** | **94** | *e*SG | Sb | 21 05 33.6 | +2.3 |

*IDC **04** 21:06:37.5±6.5, 13°.06N×121°.42E, h133km±60km, mb3.5/11, mbtmp3.9/11, Error ellipse: s-maj=35.6km s-min=23.2km az=67.0*
*NEIC **04** 21:06:50.4±1.1, 13°.8N±0°.1×121°.0E±0°.1, h203km±12km, mb4.0/16, Error ellipse: s-maj=21.3km s-min=16.5km az=114.0*

**ISC 04 21:06:49.9±0.7, 13°.76N±0°.08×121°.0E±0°.1, h200km, n39, σ0s73/38, mb3.8/18, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **8.05** | **145** | | **Pn** | **21 08 43.7** | **-0.2** |
| **KKM** | **Kota Kinabalu** | **8.98** | **212** | Pn | **Pn** | **21 08 56.4** | **+0.3** |
| **YULB** | **Yu-li** | **9.59** | **2** | Pn | **Pn** | **21 09 03.6** | **-0.1** |
| **NACB** | **Ninganchiao** | **10.38** | **3** | Pn | **Pn** | **21 09 15.9** | **+1.9** |
| **SBUM** | **Sibu** | **14.17** | **218** | | **Pn** | **21 10 03.2** | **+1.1** |
| **PHRA** | **Phrae** | **20.45** | **286** | P | **P** | **21 11 12.6** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **21.65** | **285** | P | **P** | **21 11 24.9** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** 3.6nm,0.8s,baz=100,slow=7.9,SNR=18 3.6nm,0.8s | **21.65** | **285** | P | **P** | **21 11 24.2** | **-0.6** |
| **KSRS** | **Korea Array** 0.3nm,0.2s,baz=194,slow=11,SNR=4.5 0.3nm,0.2s | **24.40** | **14** | P | **P** | **21 11 48.6** | **-1.2** |
| **SHL** | **Shillong** | **29.72** | **298** | P | **P** | **21 12 37.3** | **-0.4** |
| **WRA** | **Warramunga Arr** 0.3nm,0.7s,baz=339,slow=10,SNR=1.4 0.3nm,0.7s | **35.99** | **158** | P | P | 21 13 18.8 | -13 |
| **SONM** | **Songino Array** 1.1nm,0.6s,baz=165,slow=9.1,SNR=5.6 1.1nm,0.6s | **36.07** | **343** | P | **P** | **21 13 33.2** | **+0.8** |
| **MK31** | **Makanchi Array** | **46.13** | **323** | P | **P** | **21 14 54.3** | **0.0** |
| **MKAR** | **Makanchi Array** | **46.13** | **323** | P | **P** | **21 14 54.6** | **+0.4** |
| **MKAR** | **Makanchi Array** 1.0nm,0.7s,baz=115,slow=8.6,SNR=8.5 1.0nm,0.7s | **46.13** | **323** | P | **P** | **21 14 55.0** | **+0.7** |
| **MAKZ** | **Makanchi** comp=Z,5.0nm,1.1s | **46.32** | **323** | P | **P** | **21 14 56.2** | **+0.4** |
| MAKZ | | | | IAmb | IAmb | 21 15 00.2 | |
| **YAK** | **Yakutsk** comp=Z,9.9nm,0.9s | **48.60** | **5** | P | **P** | **21 15 13.3** | **+0.3** |
| YAK | | | | IAmb | IAmb | 21 15 14.7 | |
| **ZALV** | **Zalesovo Beam** | **49.12** | **333** | P | **P** | **21 15 16.9** | **-0.2** |
| **ZALV** | **Zalesovo Beam** comp=Z,0.7nm,0.3s,baz=116,slow=8.9,SNR=4.2 comp=Z,0.7nm,0.3s | **49.12** | **333** | P | **P** | **21 15 17.1** | **0.0** |
| **ARSB** | **Arslanbob** | **49.80** | **313** | P | **P** | **21 15 22.3** | **-0.4** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.9nm,0.5s,baz=122,slow=9.1,SNR=5.7 comp=Z,0.9nm,0.5s | **50.28** | **326** | P | **P** | **21 15 26.4** | **+0.5** |
| **KURK** | **Kurchatov** comp=Z,3.2nm,0.7s | **50.28** | **326** | P | **P** | **21 15 26.3** | **+0.4** |
| KURK | | | | IAmb | IAmb | 21 15 27.0 | |
| **BTK** | **Batken** comp=Z,1.8nm,0.6s | **50.98** | **311** | P | **P** | **21 15 31.4** | **0.0** |
| BTK | | | | IAmb | IAmb | 21 15 33.2 | |
| **GAR** | **Garm** | **51.07** | **309** | P | **P** | **21 15 32.1** | **-0.1** |
| **KK31** | **Karatay Array** | **52.11** | **314** | P | **P** | **21 15 38.9** | **-0.8** |
| **KKAR** | **Karatay Array** | **52.11** | **314** | P | **P** | **21 15 39.0** | **-0.7** |
| **BRVK** | **Borovoye** | **55.93** | **326** | P | **P** | **21 16 07.3** | **+0.2** |
| BRVK | comp=Z,2.5nm,0.9s | | | IAmb | IAmb | 21 16 08.3 | |
| **ABKAR** | **Akbulak array** | **60.85** | **319** | P | **P** | **21 16 40.6** | **-0.5** |
| ABKAR | comp=Z,2.0nm,0.6s | | | IAmb | IAmb | 21 16 41.4 | |
| **ABKAR** | **Akbulak array** | **60.85** | **319** | P | **P** | **21 16 40.7** | **-0.5** |
| **ARU** | **Arti** | **63.47** | **327** | P | **P** | **21 16 57.3** | **-1.1** |
| ARU | comp=Z,2.8nm,0.8s | | | IAmb | IAmb | 21 16 58.5 | |
| **IMAR** | **Indian Mountai** | **75.62** | **25** | P | **P** | **21 18 12.2** | **-0.3** |
| **G24K** | **Hadweenzic Riv** | **78.09** | **24** | P | **P** | **21 18 26.9** | **+0.5** |
| **BMAR** | **Burnt Mountain** | **79.11** | **23** | P | **P** | **21 18 33.4** | **+1.5** |
| **ARCES** | **ARCESS Array B** | **79.12** | **339** | P | **P** | **21 18 31.5** | **-0.3** |
| ARCES | comp=Z,4.6nm,1.1s | | | IAmb | IAmb | 21 18 49.7 | |
| **ARCES** | **ARCESS Array B** comp=Z,1.0nm,0.5s,baz=77,slow=5.4,SNR=11 comp=Z,1.0nm,0.5s | **79.12** | **339** | P | **P** | **21 18 32.1** | **+0.2** |
| **FINES** | **FINESS Array B** comp=Z,0.6nm,0.5s,baz=56,slow=6.6,SNR=14 comp=Z,0.6nm,0.5s | **80.35** | **331** | P | **P** | **21 18 38.3** | **-0.3** |
| **HFS** | **Hagfors** comp=Z,1.1nm,0.5s,baz=150,slow=3.7,SNR=13 comp=Z,1.1nm,0.5s | **86.54** | **331** | P | **P** | **21 19 09.1** | **-1.1** |
| **NB2** | **NORSAR Subarra** comp=Z,0.5nm,0.5s,baz=66,slow=4.8 | **87.32** | **333** | P | **P** | **21 19 12.9** | **-1.1** |
| **NOA** | **NORSAR Array B** comp=Z,0.6nm,0.5s,baz=69,slow=4.5,SNR=4.1 comp=Z,0.6nm,0.5s | **87.32** | **333** | P | **P** | **21 19 12.8** | **-1.2** |

**IDC 04 21:07:13.4±1.6, 3°.84N×127°.46E, h0km, mb3.6/5, mbtmp3.6/5, Error ellipse: s-maj=156.2km s-min=21.0km az=69.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** 0.5nm,0.4s,baz=342,slow=8.2,SNR=13 0.5nm,0.4s | **24.58** | **164** | P | P | 21 12 34.5 | -0.9 |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=350,slow=10,SNR=1.7 0.1nm,0.3s | **28.05** | **167** | P | P | 21 13 06.7 | 0.0 |
| **SONM** | **Songino Array** 0.9nm,0.7s,baz=142,slow=7.9,SNR=2.8 0.9nm,0.7s | **47.43** | **341** | P | P | 21 15 49.9 | 0.0 |
| **MKAR** | **Makanchi Array** 0.4nm,0.5s,baz=118,slow=7.4,SNR=6.0 0.4nm,0.5s | **57.88** | **325** | P | P | 21 17 07.4 | +0.1 |
| **KURBB** | **Kurchatov Arra** 0.4nm,0.4s,baz=126,slow=6.8,SNR=5.4 0.4nm,0.4s | **62.04** | **327** | P | P | 21 17 36.1 | +0.4 |

*IDC **04** 21:08:13.4±0.9, 2°.79N×126°.32E, h0km, mb3.9/8, mbtmp3.9/8, Error ellipse: s-maj=80.1km s-min=16.6km az=70.0*
*NEIC **04** 21:08:13.9±1.9, 3°.31N±0°.08×127°.3E±0°.1, h10km±1km, mb4.2/20, Error ellipse: s-maj=21.1km s-min=11.1km az=64.0*

**ISC 04 21:08:18.4±0.7, 3°.22N±0°.07×127°.1E±0°.1, h44km, n35, σ1s12/36, mb4.1/16, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.44** | **174** | Pn | **Pn** | **21 08 56.1** | **+0.3** |
| TNTI | | | | Sn | **Sn** | **21 09 25.5** | **+1.0** |
| **TOLI2** | **Tolitoli** | **6.67** | **252** | | **Pn** | **21 09 54.0** | **+0.1** |
| **MYLDM** | **Lahad Datu** | **8.82** | **283** | Pn | **Pn** | **21 10 25.2** | **+1.9** |
| **MTN** | **Manton Dam** | **16.45** | **166** | Pn | **Pn** | **21 12 05.8** | **-0.4** |
| **KSM** | **Kuching** | **16.89** | **264** | P | **P** | **21 12 13.1** | **-0.3** |
| KSM | comp=Z,14nm,1.2s | | | IAmb | IAmb | 21 12 21.2 | |
| **KNRA** | **Kununurra** | **18.84** | **175** | P | **Pn** | **21 12 35.3** | **-0.4** |
| **YULB** | **Yu-li** | **20.83** | **345** | P | **P** | **21 12 54.6** | **-1.8** |
| YULB | comp=Z,7.8nm,1.0s | | | IAmb | IAmb | 21 13 10.2 | |
| **TPUB** | **Ta-pu** | **20.93** | **343** | P | **P** | **21 12 55.7** | **-1.8** |
| **FITZ** | **Fitzroy Crossi** | **21.23** | **184** | P | **P** | **21 13 00.8** | **0.0** |
| **SSLB** | **Suanglung** | **21.30** | **344** | P | **P** | **21 13 00.8** | **-0.7** |
| SSLB | comp=Z,12nm,1.2s | | | IAmb | IAmb | 21 13 09.7 | |
| **YHNB** | **Yeheng** | **22.04** | **346** | P | **P** | **21 13 08.8** | **-0.6** |
| YHNB | comp=Z,10nm,1.0s | | | IAmb | IAmb | 21 13 15.5 | |
| **WB0** | **Warramunga Arr** | **23.93** | **163** | P | **P** | **21 13 28.6** | **+0.1** |
| WB0 | comp=Z,9.7nm,1.1s | | | IAmb | IAmb | 21 13 38.3 | |
| **WRA** | **Warramunga Arr** | **24.08** | **163** | P | **P** | **21 13 29.3** | **-0.7** |
| **WRA** | **Warramunga Arr** comp=Z,1.6nm,0.4s,baz=337,slow=11,SNR=14 comp=Z,1.6nm,0.4s | **24.08** | **163** | P | **P** | **21 13 30.6** | **+0.7** |
| **MBWA** | **Marble Bar** | **25.29** | **196** | P | **P** | **21 13 40.4** | **-0.4** |
| **AS31** | **Alice Springs** | **27.52** | **166** | P | **P** | **21 14 00.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **27.53** | **166** | P | **P** | **21 14 00.9** | **-0.2** |
| **ASAR** | **Alice Springs** comp=Z,0.2nm,0.3s,baz=341,slow=7.1,SNR=1.4 | **27.53** | **166** | P | **P** | **21 13 59.2** | **-1.9** |
| ASAR | comp=Z,0.2nm,0.4s,baz=345,slow=2.0,SNR=2.1 comp=Z,0.2nm,0.3s | | | PcP | **PcP** | **21 17 19.6** | **+1.0** |
| **BBOO** | **Buckleboo** | **36.82** | **167** | P | **P** | **21 15 21.6** | **-0.7** |
| **STKA** | **Stephens Creek** | **37.52** | **160** | P | **P** | **21 15 28.0** | **-0.2** |
| **STKA** | **Stephens Creek** comp=Z,1.3nm,0.5s,baz=336,slow=9.8,SNR=4.4 comp=Z,1.3nm,0.5s | **37.52** | **160** | P | **P** | **21 15 27.7** | **-0.5** |
| **SHL** | **Shillong** | **40.50** | **307** | P | **P** | **21 15 52.6** | **-0.9** |
| SHL | comp=Z,5.9nm,0.7s | | | IAmb | IAmb | 21 15 56.0 | |
| **USRK** | **Ussuriysk Ar.** comp=Z,3.8nm,1.0s,baz=198,slow=12,SNR=4.9 comp=Z,3.8nm,1.0s | **41.04** | **5** | P | P | 21 16 02.2 | +4.8 |
| **SONM** | **Songino Array** 0.2nm,0.3s,baz=166,slow=6.7,SNR=2.2 comp=Z,0.3nm,0.3s | **47.91** | **341** | P | **P** | **21 16 55.7** | **+3.3** |
| **MK31** | **Makanchi Array** | **58.20** | **325** | P | **P** | **21 18 07.0** | **-1.2** |
| MK31 | comp=Z,5.5nm,1.3s | | | IAmb | IAmb | 21 18 24.3 | |
| **MKAR** | **Makanchi Array** | **58.20** | **325** | P | **P** | **21 18 06.8** | **-1.3** |
| **MKAR** | **Makanchi Array** comp=Z,1.2nm,0.6s,baz=116,slow=7.7,SNR=8.9 comp=Z,1.2nm,0.6s | **58.20** | **325** | P | **P** | **21 18 08.6** | **+0.4** |
| **ZALV** | **Zalesovo Beam** comp=Z,0.8nm,0.5s,baz=120,slow=8.0,SNR=4.2 comp=Z,0.8nm,0.5s | **61.22** | **333** | P | **P** | **21 18 30.1** | **+1.3** |
| **KURBB** | **Kurchatov Arra** comp=Z,1.8nm,0.7s,baz=124,slow=6.7,SNR=6.4 comp=Z,1.8nm,0.7s | **62.38** | **327** | P | **P** | **21 18 37.2** | **+0.6** |
| **KURK** | **Kurchatov** | **62.38** | **327** | P | **P** | **21 18 35.9** | **-0.7** |
| **BRVK** | **Borovoye** | **68.03** | **327** | P | **P** | **21 19 11.8** | **-1.4** |
| BRVK | comp=Z,2.8nm,1.3s | | | IAmb | IAmb | 21 19 18.4 | |
| **ABKAR** | **Akbulak array** | **72.79** | **321** | P | **P** | **21 19 41.5** | **-0.9** |
| ABKAR | comp=Z,1.1nm,0.9s | | | IAmb | IAmb | 21 19 58.4 | |
| **ABKAR** | **Akbulak array** | **72.79** | **321** | P | **P** | **21 19 41.8** | **-0.6** |
| **ARU** | **Arti** | **75.58** | **328** | P | **P** | **21 19 57.5** | **-1.0** |
| ARU | comp=Z,4.4nm,1.3s | | | IAmb | IAmb | 21 20 02.8 | |
| **BMAR** | **Burnt Mountain** | **86.39** | **23** | P | **P** | **21 20 55.9** | **0.0** |

*IDC **04** 21:15:56.2±0.7, 25°.65N×141°.48E, h0km, mb3.8/11, mbtmp3.7/12, ML2.3/1, MS3.4/1, Error ellipse: s-maj=26.8km s-min=14.9km az=99.0*
*JMA **04** 21:15:58.5±0.1, 25°.6N±0°.3×14°.1E±°, h59km, MV3.8/4, IOTO ISLANDS REGION*
*NEIC **04** 21:16:00.2±1.1, 25°.6N±0°.1×141°.3E±0°.1, h14km±6km, mb4.4/14, Error ellipse: s-maj=18.9km s-min=10.7km az=132.0*

**ISC 04 21:16:01.7±0.7, 25°.65N±0°.09×141°.2E±0°.1, h35km, n44, σ1s37/30, mb4.2/20, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHH2** | **Haha-jima-NKT2** | **1.35** | **43** | *e*P | **Pn** | **21 16 23.5** | **-0.5** |
| JHH2 | | | | *e*S | **Sn** | **21 16 42.1** | **+1.3** |
| **CBIJ** | **Chichi jima** | **1.72** | **33** | P | **Pn** | **21 16 28.6** | **-0.6** |
| CBIJ | | | | S | **Sn** | **21 16 50.6** | **+0.7** |
| **JCJ** | **Chichijima** | **1.72** | **33** | | **Pn** | **21 16 28.8** | **-0.4** |
| JCJ | | | | Sn | **Sn** | **21 16 49

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KSRS | Korea Array | 16.28 | 319 | Pn | | P | 21 19 53.9 | +3.6 |
| | 0.2nm,0.3s,baz=134,slow=11,SNR=18 | | | | | | | |
| KSAR | Wonju Array Be | 16.29 | 319 | | | P | 21 19 50.3 | -0.2 |
| H11N2 | WAKE ISLAND Hy | 24.45 | 99 | T | | T | 21 46 26.1 | |
| | baz=289,slow=75,SNR=52 | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 24.45 | 99 | T | | T | 21 46 26.3 | |
| | baz=289,slow=75,SNR=27 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 24.47 | 99 | T | | T | 21 46 31.1 | |
| | baz=289,slow=75,SNR=51 | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 24.69 | 102 | T | | T | 21 46 46.9 | |
| | baz=291,slow=75,SNR=275 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 24.69 | 102 | T | | T | 21 46 47.0 | |
| | baz=291,slow=75,SNR=449 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 24.70 | 102 | T | | T | 21 46 48.1 | |
| | baz=291,slow=75,SNR=454 | | | | | | | |
| MA2 | Magadan | 34.57 | 9 | P | | P | 21 22 48.3 | +1.5 |
| ULN | Ulaanbaatar | 34.76 | 319 | P | | P | 21 22 50.3 | +1.5 |
| ULN | | | | IAmb | | IAmb | 21 22 56.6 | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| SONM | Songino Array | 35.14 | 318 | P | | P | 21 22 54.6 | +2.5 |
| SONM | Songino Array | 35.14 | 318 | P | | P | 21 22 54.2 | +2.1 |
| | comp=Z,0.8nm,0.6s,baz=132,slow=8.8,SNR=3.7 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| MTN | Manton Dam | 39.48 | 195 | P | | P | 21 23 29.4 | +0.5 |
| MTN | | | | IAmb | | IAmb | 21 23 32.1 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| CMAR | Chiang Mai Arr | 39.64 | 268 | P | | P | 21 23 33.8 | +3.4 |
| WR0 | Warramunga Arr | 45.79 | 189 | P | | P | 21 24 19.8 | -0.3 |
| WRA | Warramunga Arr | 45.80 | 189 | | | P | 21 24 19.4 | -0.8 |
| WRA | Warramunga Arr | 45.80 | 189 | P | | P | 21 24 19.8 | -0.4 |
| | comp=Z,8.1nm,0.7s,baz=8.4,slow=8.6,SNR=56 | | | | | | | |
| ASAR | Alice Springs | 49.52 | 189 | P | | P | 21 24 49.2 | +0.2 |
| | comp=Z,1.1nm,0.9s,baz=12,slow=9.9,SNR=7.7 | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | |
| MKAR | Makanchi Array | 50.69 | 311 | P | | P | 21 24 59.6 | +1.8 |
| | comp=Z,0.8nm,0.7s,baz=91,slow=5.8,SNR=2.6 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| MAKZ | Makanchi | 50.91 | 311 | P | | P | 21 25 01.6 | +2.2 |
| MAKZ | | | | IAmb | | IAmb | 21 25 20.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| KURBB | Kurchatov Array | 53.40 | 315 | P | | P | 21 25 19.9 | +2.1 |
| | comp=Z,0.9nm,0.7s,baz=94,slow=7.9,SNR=8.2 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| C19K | Lookout Ridge | 55.44 | 22 | P | | P | 21 25 34.2 | +1.8 |
| C19K | | | | IAmb | | IAmb | 21 25 40.0 | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| E19K | Redstone River | 55.77 | 24 | P | | P | 21 25 36.0 | +1.3 |
| E19K | | | | IAmb | | IAmb | 21 25 42.1 | |
| | comp=Z,8.3nm,1.5s | | | | | | | |
| J20K | Nowinta River | 56.23 | 28 | P | | P | 21 25 40.5 | +2.4 |
| J20K | | | | IAmb | | IAmb | 21 25 44.1 | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| IMAR | Indian Mountai | 56.75 | 26 | P | | P | 21 25 43.8 | +2.0 |
| G21K | Allakaket | 56.96 | 26 | P | | P | 21 25 45.4 | +2.1 |
| G21K | | | | IAmb | | IAmb | 21 25 49.2 | |
| | comp=Z,7.6nm,1.4s | | | | | | | |
| STKA | Stephens Creek | 57.20 | 180 | P | | P | 21 25 45.0 | -0.3 |
| | comp=Z,2.1nm,0.8s,baz=126,slow=14,SNR=1.9 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| D22K | Ayikyak River | 57.77 | 23 | P | | P | 21 25 50.4 | +1.5 |
| ILAR | Eielson Array | 59.42 | 28 | P | | P | 21 26 01.0 | +0.5 |
| | comp=Z,0.8nm,0.8s,baz=251,slow=5.7,SNR=7.7 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| J26L | Joseph Creek | 60.84 | 29 | P | | P | 21 26 11.9 | +1.6 |
| J26L | | | | IAmb | | IAmb | 21 26 17.3 | |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| ABKAR | Akbulak array | 65.44 | 315 | P | | P | 21 26 41.9 | +0.9 |
| ABKAR | Akbulak array | 65.44 | 315 | P | | P | 21 26 43.1 | +2.1 |
| ABKAR | | | | IAmb | | IAmb | 21 26 52.4 | |
| | comp=Z,1.8nm,1.4s | | | | | | | |
| YKA | Yellowknife Ar | 73.85 | 28 | P | | P | 21 27 32.6 | +0.1 |
| | comp=Z,1.0nm,0.8s,baz=302,slow=5.7,SNR=4.6 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| FINES | FINESS Array B | 78.83 | 334 | P | | P | 21 28 00.2 | -0.7 |
| | comp=Z,1.0nm,0.5s,baz=72,slow=4.9,SNR=13 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| NVAR | Mina Array Bea | 82.14 | 51 | P | | P | 21 28 18.4 | -1.0 |
| | comp=Z,0.3nm,0.4s,baz=289,slow=5.6,SNR=2.3 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| NOA | NORSAR Array B | 84.60 | 338 | P | | P | 21 28 30.3 | -1.1 |
| | comp=Z,0.4nm,0.7s,baz=46,slow=5.2,SNR=2.1 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| PDAR | Pinedale Array | 85.89 | 44 | P | | P | 21 28 37.2 | -1.2 |
| | comp=Z,0.1nm,0.4s,baz=260,slow=4.5,SNR=1.8 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |

*IDC* ***04*** *21:31:05.7±5.8, 9°.87N×93°.86E, h194km±54km, mb3.3/9, mbtmp3.8/10, Error ellipse: s-maj=42.0km s-min=14.8km az=54.0*

**ISC 04 21:31:06.3±0.9, 9°.9N±0°.2×93°.9E±0°.2, h200km, n16, σ0§43/10, mb3.4/9, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMAR | Chiang Mai Arr | 9.83 | 29 | P | Pn | 21 33 23.2 | -0.1 |
| | 1.1nm,0.7s,baz=227,slow=15,SNR=7.3 | | | | | | |
| H08S3 | Diego Garcia H | 27.52 | 232 | T | T | 22 03 30.1 | |
| | baz=51,slow=74 | | | | | | |
| H08S2 | Diego Garcia H | 27.53 | 232 | T | T | 22 03 27.4 | |
| | baz=51,slow=74 | | | | | | |
| H08S1 | Diego Carcia H | 27.54 | 232 | T | T | 22 03 31.9 | |
| | baz=51 | | | | | | |
| WRA | Warramunga Arr | 49.63 | 127 | P | P | 21 39 37.7 | -0.2 |
| | 0.4nm,0.7s,baz=305,slow=7.6,SNR=18 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| ASAR | Alice Springs | 51.39 | 131 | P | P | 21 39 51.2 | +0.2 |
| | 0.6nm,0.6s,baz=305,slow=7.0,SNR=13 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| H04N2 | CROZET ISLANDS | 67.32 | 210 | T | T | 22 53 45.5 | |
| | baz=45 | | | | | | |
| H04N1 | CROZET ISLANDS | 67.33 | 210 | T | T | 22 53 55.7 | |
| | baz=45 | | | | | | |
| H04N3 | CROZET ISLANDS | 67.34 | 210 | T | T | 22 53 43.9 | |
| | baz=45 | | | | | | |
| FINES | FINESS Array B | 70.84 | 332 | P | P | 21 42 00.5 | -0.5 |
| | 1.3nm,0.8s,baz=104,slow=4.6,SNR=2.1 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| ARCES | ARCESS Array B | 73.31 | 340 | P | P | 21 42 15.8 | +0.2 |
| | 2.3nm,0.9s,baz=98,slow=6.5,SNR=3.8 | | | | | | |
| | 2.3nm,0.9s | | | | | | |
| GERES | GERESS Array B | 76.19 | 318 | P | P | 21 42 32.1 | -0.6 |
| | 0.2nm,0.3s,baz=101,slow=5.1,SNR=2.4 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| BOSA | Boshof | 76.45 | 237 | P | P | 21 42 34.3 | -0.2 |
| | 3.0nm,1.1s,baz=96,slow=4.7,SNR=5.9 | | | | | | |
| | 3.0nm,1.1s | | | | | | |
| HFS | Hagfors | 76.62 | 330 | P | P | 21 42 34.4 | -0.3 |
| | 0.6nm,0.3s,baz=89,slow=5.1,SNR=14 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| EKA | Eskdalemuir Ar | 85.95 | 325 | P | P | 21 43 24.4 | +0.6 |
| | 0.3nm,0.5s,baz=90,slow=5.3,SNR=2.0 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| ESDC | Sonseca Array | 89.75 | 310 | P | P | 21 43 42.7 | +0.4 |
| | 0.1nm,0.5s,baz=68,slow=3.8,SNR=1.8 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

**CNRM 04 21:49:30.7, 31°.46N×7°.19W, h8km, ML2.9, Morocco**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TIO | Tiouine | 0.54 | 187 | P | Pg | 21 49 41.8 | +0.6 |
| TIO | Tiouine | 0.54 | 187 | S | Sb | 21 49 50.4 | 0.0 |
| OUK | Oukaimeden | 0.64 | 247 | P | Pg | 21 49 43.5 | +0.4 |
| OUK | Oukaimeden | 0.64 | 247 | S | Sg | 21 49 52.3 | +0.8 |
| OUK | Oukaimeden | 0.64 | 247 | P | Pb | 21 49 44.0 | -0.2 |
| OUK | Oukaimeden | 0.64 | 247 | P | Pb | 21 49 44.0 | -0.2 |
| OUK | Oukaimeden | 0.64 | 247 | P | Pb | 21 49 44.0 | -0.2 |
| OUK | Oukaimeden | 0.64 | 247 | P | Pb | 21 49 44.0 | -0.2 |
| OUZM | OUZ | 0.66 | 146 | P | Pg | 21 49 43.8 | +0.3 |
| OUZM | OUZ | 0.66 | 146 | S | Sb | 21 49 53.1 | -0.9 |
| OUZM | OUZ | 0.66 | 146 | P | Pb | 21 49 44.0 | -0.5 |
| OUZM | OUZ | 0.66 | 146 | P | Pb | 21 49 44.0 | -0.5 |
| OUZM | OUZ | 0.66 | 146 | P | Pb | 21 49 44.0 | -0.5 |
| OUZM | OUZ | 0.66 | 146 | P | Pb | 21 49 44.0 | -0.5 |
| TISM | Timmit | 0.69 | 68 | P | Pg | 21 49 43.7 | -0.2 |
| TISM | Timmit | 0.69 | 68 | S | Sg | 21 49 52.5 | -0.4 |
| TISM | Timmit | 0.69 | 68 | P | Pg | 21 49 44.0 | 0.0 |
| TISM | Timmit | 0.69 | 68 | P | Pg | 21 49 44.0 | 0.0 |
| TISM | Timmit | 0.69 | 68 | P | Pg | 21 49 44.0 | 0.0 |
| TISM | Timmit | 0.69 | 68 | P | Pg | 21 49 44.0 | 0.0 |
| SRHM | Skhour des Reh | 1.17 | 329 | P | Pb | 21 49 51.5 | -1.8 |
| SRHM | Skhour des Reh | 1.17 | 329 | S | Sg | 21 50 06.1 | -2.4 |
| SRHM | Skhour des Reh | 1.17 | 329 | P | Pb | 21 49 53.0 | -0.3 |
| SRHM | Skhour des Reh | 1.17 | 329 | P | Pb | 21 49 53.0 | -0.3 |
| SRHM | Skhour des Reh | 1.17 | 329 | P | Pb | 21 49 53.0 | -0.3 |
| SRHM | Skhour des Reh | 1.17 | 329 | P | Pb | 21 49 53.0 | -0.3 |
| TTIG | Tnine Tigouga, | 1.41 | 230 | P | Pb | 21 49 53.0 | -0.3 |
| TTIG | Tnine Tigouga, | 1.41 | 230 | P | Pn | 21 49 56.4 | -0.4 |
| TTIG | Tnine Tigouga, | 1.41 | 230 | S | Sb | 21 50 15.3 | -0.3 |
| TTIG | Tnine Tigouga, | 1.41 | 230 | P | Pg | 21 49 58.0 | +0.1 |
| TTIG | Tnine Tigouga, | 1.41 | 230 | P | Pg | 21 49 58.0 | +0.1 |
| TTIG | Tnine Tigouga, | 1.41 | 230 | P | Pg | 21 49 58.0 | +0.1 |
| TTIG | Tnine Tigouga, | 1.41 | 230 | P | Pg | 21 49 58.0 | +0.1 |
| AVE | Averroes | 1.84 | 354 | P | Pn | 21 50 03.5 | +1.0 |
| AVE | Averroes | 1.84 | 354 | S | Sn | 21 50 26.3 | +0.3 |
| ZGR | Zagora | 1.90 | 134 | P | Pn | 21 50 03.3 | -0.1 |
| ZGR | Zagora | 1.90 | 134 | S | Sb | 21 50 28.8 | -0.8 |
| ZGR | Zagora | 1.90 | 134 | P | Pb | 21 50 05.0 | -0.7 |
| ZGR | Zagora | 1.90 | 134 | S | Sg | 21 50 31.0 | -0.8 |
| ZGR | Zagora | 1.90 | 134 | P | Pb | 21 50 05.0 | -0.7 |
| ZGR | Zagora | 1.90 | 134 | P | Pb | 21 50 05.0 | -0.7 |
| ZGR | Zagora | 1.90 | 134 | P | Pb | 21 50 05.0 | -0.7 |
| ZGR | Zagora | 1.90 | 134 | S | Sg | 21 50 31.0 | -0.8 |
| GOLM | Goulmima | 1.92 | 82 | P | Pn | 21 50 03.6 | -0.1 |
| GOLM | Goulmima | 1.92 | 82 | S | Sn | 21 50 29.1 | +0.9 |
| ZHG | ZHG | 2.03 | 13 | P | Pb | 21 50 07.0 | -0.9 |
| ZHG | ZHG | 2.03 | 13 | S | Sn | 21 50 27.3 | -3.5 |
| ZHG | ZHG | 2.03 | 13 | P | Pb | 21 50 07.0 | -0.9 |
| ZHG | ZHG | 2.03 | 13 | P | Pb | 21 50 07.0 | -0.9 |
| ZHG | ZHG | 2.03 | 13 | P | Pb | 21 50 07.0 | -0.9 |
| ZHG | ZHG | 2.03 | 13 | P | Pb | 21 50 07.0 | -0.9 |
| EAH | EAH | 2.06 | 276 | P | Pn | 21 50 04.7 | -0.8 |
| EAH | EAH | 2.06 | 276 | S | Sb | 21 50 32.8 | -1.2 |
| CZD | Col de Zad | 2.40 | 49 | P | Pn | 21 50 10.3 | -0.2 |
| CZD | Col de Zad | 2.40 | 49 | S | Sn | 21 50 40.8 | +0.6 |
| MD31 | MD31 | 2.49 | 55 | P | Pn | 21 50 11.0 | -0.6 |
| MD31 | MD31 | 2.49 | 55 | S | Sn | 21 50 43.0 | +0.8 |
| ARF | Arif | 2.54 | 90 | P | Pn | 21 50 12.2 | 0.0 |
| ARF | Arif | 2.54 | 90 | S | Sn | 21 50 45.4 | +2.1 |
| MDT | Midelt | 2.57 | 58 | P | Pb | 21 50 15.0 | -2.0 |
| MDT | Midelt | 2.57 | 58 | S | Sb | 21 50 46.5 | -2.3 |
| MDT | Midelt | 2.57 | 58 | P | Pb | 21 50 15.0 | -2.0 |
| MDT | Midelt | 2.57 | 58 | P | Pb | 21 50 15.0 | -2.0 |
| SICH | Sidi Chahed | 3.07 | 30 | P | Pn | 21 50 20.8 | +1.4 |
| SICH | Sidi Chahed | 3.07 | 30 | S | Sn | 21 50 58.1 | +1.8 |
| AKLM | AKL | 4.13 | 42 | P | Pn | 21 50 34.1 | +0.1 |
| AKLM | AKL | 4.13 | 42 | S | Sn | 21 51 23.3 | +0.8 |
| PFVI | Vila Bisbo | 5.82 | 347 | P | Pn | 21 50 57.0 | -0.2 |
| PVAQ | Vaqueiros | 5.94 | 356 | P | Pn | 21 50 58.4 | -0.5 |

*ATH* ***04*** *21:52:53.1, 35°.90N×21°.24E, h10km±31km, ML3.0/6, Error ellipse: s-maj=31.6km s-min=3.0km az=0.0*
*IDC* ***04*** *21:52:57.4±1.5, 36°.81N×22°.20E, h0km, mb3.3/6, mbtmp3.3/9, ML2.6/2, Error ellipse: s-maj=29.5km s-min=19.9km az=30.0*

**ISC 04 21:52:52.0±1.1, 35°.89N±0°.08×21°.29E±0°.07, h10km, n21, σ1§53/20, mb3.5/5, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PYL | PYLOS | 1.07 | 20 | P | Pg | 21 53 11.9 | -0.7 |
| PYL | | | | AML | AML | 21 53 32.5 | |
| | comp=E,1116μm,0.4s | | | | | | |
| PYL | | | | AML | AML | 21 53 37.8 | |
| | comp=N,1072μm,0.5s | | | | | | |
| ITM | Ithomi | 1.39 | 22 | P | Pn | 21 53 17.7 | +0.2 |
| ITM | | | | AML | AML | 21 53 49.4 | |
| | comp=N,638μm,0.4s | | | | | | |
| ITM | | | | AML | AML | 21 54 01.6 | |
| | comp=E,714μm,0.7s | | | | | | |
| KTHA | Kythira Island | 1.48 | 75 | P | Pn | 21 53 19.7 | +0.9 |
| KTHA | | | | AML | AML | 21 53 48.3 | |
| | comp=N,739μm,0.8s | | | | | | |
| KTHA | | | | AML | AML | 21 53 53.2 | |
| | comp=E,1438μm,0.9s | | | | | | |
| VLI | Velíai | 1.57 | 58 | P | Pn | 21 53 21.2 | +1.2 |
| VLI | | | | AML | AML | 21 53 58.5 | |
| | comp=E,718μm,0.8s | | | | | | |
| VLI | | | | AML | AML | 21 53 59.6 | |
| | comp=N,866μm,1.0s | | | | | | |
| ANKY | Antikythira Is | 1.63 | 90 | P | Pn | 21 53 21.9 | +1.0 |
| LTHK | Lithakia | 1.85 | 349 | P | Pn | 21 53 23.5 | -0.4 |
| KNDR | Palaiochora Ch | 2.06 | 108 | P | Pn | 21 53 26.7 | 0.0 |
| KRND | KRANIDI | 2.11 | 45 | P | Pn | 21 53 27.9 | +0.5 |
| RLS | Riolos of Patr | 2.17 | 4 | P | Pn | 21 53 29.5 | +1.3 |
| GUR | Goura | 2.21 | 22 | P | Pn | 21 53 30.3 | +1.4 |
| IMMV | Iera Moni Meta | 2.23 | 100 | P | Pn | 21 53 29.3 | +0.2 |
| IMMV | | | | AML | AML | 21 54 12.4 | |
| | comp=E,471μm,0.7s | | | | | | |
| IMMV | | | | AML | AML | 21 54 22.3 | |
| | comp=N,576μm,1.0s | | | | | | |
| KLV | Kalavryta, Ach | 2.26 | 18 | P | Pn | 21 53 30.8 | +1.3 |
| KLV | | | | AML | AML | 21 54 26.5 | |
| | comp=E,168μm,0.9s | | | | | | |
| KLV | | | | AML | AML | 21 54 27.7 | |
| | comp=N,226μm,0.9s | | | | | | |
| IDI | Anoyia | 3.00 | 101 | Pn | Pn | 21 53 41.4 | +1.8 |
| | comp=N,12nm,0.8s,baz=325,slow=12,SNR=12 | | | | | | |
| IDI | | | | | Sn | 21 54 15.2 | -0.5 |
| | comp=N,2.9nm,0.3s,baz=307,slow=21,SNR=6.8 | | | | | | |
| VAE | Valguarnera | 5.75 | 288 | Pn | Pb | 21 54 31.9 | -0.6 |
| | comp=N,1.4nm,0.3s,baz=96,slow=17,SNR=2.2 | | | | | | |
| | comp=N,3.0nm,0.3s | | | | | | |
| MLR | Muntele Rosu | 10.22 | 19 | Pn | Pn | 21 55 11.3 | -7.5 |
| | baz=195,slow=10,SNR=1.7 | | | | | | |
| | comp=N,0.9nm,0.8s | | | | | | |
| ESDC | Sonseca Array | 20.29 | 288 | P | Pn | 21 57 38.4 | +8.4 |
| | comp=N,0.3nm,0.7s,baz=88,slow=9.3,SNR=4.2 | | | | | | |
| | comp=N,0.3nm,0.7s | | | | | | |
| HFS | Hagfors | 24.75 | 351 | P | P | 21 58 12.6 | -0.9 |
| | comp=N,1.3nm,0.7s,baz=160,slow=9.1,SNR=6.9 | | | | | | |
| | comp=N,1.3nm,0.7s | | | | | | |
| EKA | Eskdalemuir Ar | 25.66 | 327 | P | P | 21 58 26.2 | +4.4 |
| | comp=N,0.9nm,0.8s,baz=118,slow=11,SNR=2.8 | | | | | | |
| | comp=N,0.9nm,0.8s | | | | | | |
| FINES | FINESS Array B | 25.75 | 5 | P | P | 21 58 21.1 | -1.5 |
| | comp=N,1.4nm,0.8s,baz=182,slow=8.7,SNR=5.5 | | | | | | |
| | comp=N,1.4nm,0.8s | | | | | | |
| NOA | NORSAR Array B | 25.98 | 349 | P | P | 21 58 25.0 | +0.3 |
| | comp=N,0.1nm,0.5s,baz=161,slow=10,SNR=1.4 | | | | | | |
| | comp=N,0.1nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 46.01 | 57 | P | P | 22 01 13.6 | -2.0 |
| | comp=N,0.2nm,0.4s,baz=283,slow=7.9,SNR=1.8 | | | | | | |
| | comp=N,0.2nm,0.4s | | | | | | |

**NORS 04 22:06:55.7, 42°.85N×46°.50E, h3km, MPVA3.5, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DVE | Vedeno | 0.29 | 291 | *e*Pg | Pb | 22 07 03.6 | -0.2 |
| DVE | | | | *e*Sg | Sb | 22 07 09.7 | +0.6 |
| BTKR | Batakoyurt | 1.53 | 291 | *e*Pg | Pg | 22 07 27.7 | +2.8 |
| BTKR | | | | *e*Sg | Sg | 22 07 51.7 | +7.0 |
| GUDG | Gudauri | 1.54 | 256 | *e*Pg | Pg | 22 07 27.6 | +2.3 |
| GUDG | | | | *e*Sg | Sg | 22 07 52.1 | +6.9 |
| TRKR | Terskaya | 1.56 | 305 | *e*Pg | Pg | 22 07 27.2 | +1.7 |
| TRKR | | | | *e*Sg | Sg | 22 07 51.2 | +5.4 |
| LACR | Lac | 1.62 | 270 | *e*Pg | Pg | 22 07 28.4 | +1.6 |
| LACR | | | | *e*Sg | Sg | 22 07 52.2 | +4.4 |
| LACR | Lac | 1.62 | 270 | *e*Pg | Sg | 22 07 52.6 | +4.8 |

**NORS 04 22:07:20.5, 42°.94N×46°.52E, h1km, MPVA3.5, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DVE | Vedeno | 0.29 | 274 | *e*Pg | Pb | 22 07 28.2 | -0.3 |
| DVE | | | | *e*Sg | Sb | 22 07 34.2 | +0.3 |
| BTKR | Batakoyurt | 1.51 | 287 | *e*Pg | Pg | 22 07 52.6 | +3.1 |
| BTKR | | | | *e*Sg | Sn | 22 08 16.0 | +6.9 |
| TRKR | Terskaya | 1.52 | 302 | *e*Pg | Pg | 22 07 52.2 | +2.5 |
| TRKR | | | | *e*Sg | Sg | 22 08 14.5 | +5.1 |
| GUDG | Gudauri | 1.58 | 253 | *e*Pg | Pg | 22 07 53.6 | +2.8 |
| GUDG | | | | *e*Sg | Sg | 22 08 17.2 | +6.0 |
| LACR | Lac | 1.64 | 267 | *e*Sg | Sg | 22 08 16.3 | +3.2 |

*ATH* ***04*** *22:24:10.0±0.4, 40°.28N×19°.94E, h9km±2km, ML2.7/15, Manual Solution by N.Liadopoulou This location: 2020/06/16 07:47:00 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 2 km; Longitude uncertainty: 1 km*

**ISC 04 22:24:10.6±1.2, 40°.27N±0°.03×19°.92E±0°.03, h17km±10km, n35, σ1§32/44, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KASA | Kassiopi | 0.52 | 179 | P | Pg | 22 24 19.7 | -1.3 |
| KASA | | | | S | Sb | 22 24 29.7 | +1.2 |
| KEK | Kerkira | 0.56 | 190 | P | Pg | 22 24 20.7 | -1.1 |
| KEK | | | | S | Sb | 22 24 30.5 | +0.7 |
| NEST | Nestorio | 0.88 | 80 | P | Pg | 22 24 25.8 | -1.9 |
| NEST | | | | S | Sb | 22 24 38.8 | -0.1 |
| PENT | Pentalofos | 0.94 | 94 | P | Pg | 22 24 27.2 | -1.6 |
| JAN | Janina | 0.94 | 130 | P | Pg | 22 24 27.9 | -0.9 |
| JAN | | | | S | Sn | 22 24 41.9 | -0.3 |
| SCTE | Santa Cesarea | 1.13 | 261 | P | Pn | 22 24 32.7 | +1.0 |
| SCTE | | | | S | Sb | 22 24 47.2 | +1.1 |
| FNA | Florina | 1.22 | 65 | P | Pb | 22 24 32.3 | -1.1 |
| FNA | | | | S | Sn | 22 24 49.2 | 0.0 |
| KZN | Kozani | 1.42 | 88 | P | Pn | 22 24 35.6 | -0.1 |
| KZN | | | | S | Sb | 22 24 54.3 | -0.1 |
| TSLK | Tsoukalades, L | 1.55 | 158 | P | Pn | 22 24 37.5 | 0.0 |
| TSLK | | | | S | Sn | 22 24 57.6 | +0.5 |
| LKD2 | Lefkada island | 1.58 | 159 | P | Pn | 22 24 37.9 | -0.1 |
| NYDR | Nydri-Lefkada | 1.66 | 159 | P | Pn | 22 24 39.0 | 0.0 |
| EVGI | Lefkada island | 1.74 | 161 | P | Pn | 22 24 40.3 | +0.2 |
| THL | Klokotos Trika | 1.76 | 113 | P | Pn | 22 24 39.9 | -0.4 |
| FSK | Fiskardo | 1.87 | 164 | P | Pn | 22 24 41.5 | -0.3 |
| EVR | Evrytania | 1.99 | 132 | P | Pn | 22 24 44.6 | +1.0 |
| DRME | Dracevica, Mon | 2.00 | 344 | *e*Pn | Pb | 22 24 45.8 | -0.7 |
| PVO | Paravola | 2.06 | 142 | P | Pn | 22 24 44.6 | +0.1 |
| VLS | Valsamata | 2.15 | 166 | P | Pn | 22 24 45.7 | -0.1 |
| PSDA | Pessada-Kefalo | 2.21 | 166 | P | Pn | 22 24 46.8 | +0.3 |
| PDG | Podgorica | 2.22 | 347 | *e*Pn | Pn | 22 24 47.7 | +1.1 |
| STIP | Stip | 2.23 | 50 | *i* Pn | Pg | 22 24 53.7 | +0.3 |
| STIP | | | | *i* Sn | Sg | 22 25 27.2 | +4.8 |
| ANX | Ano Chora | 2.28 | 137 | P | Pn | 22 24 47.6 | +0.1 |
| EFP | Efpalio | 2.40 | 139 | P | Pn | 22 24 49.3 | +0.2 |
| HORT | Hortiatis | 2.45 | 81 | P | Pn | 22 24 50.2 | +0.3 |
| TREB | Trebinje | 2.72 | 335 | *e*Pn | Pn | 22 24 54.1 | +0.6 |
| BRY | Bratogost | 2.83 | 339 | *e*Pn | Pn | 22 24 55.4 | +0.2 |
| SJES | Sjenica | 2.99 | 1 | *e*Pn | Pb | 22 25 01.1 | -2.4 |
| STON | Ston | 3.09 | 328 | *e*Pn | Pn | 22 24 58.3 | -0.3 |
| RUDO | Rudo | 3.37 | 353 | *e*Pn | Pn | 22 25 03.4 | +0.9 |
| BBLS | Lazi&#263i | 3.62 | 354 | *e*Pn | Pb | 22 25 15.1 | +1.0 |
| A050A | Klekovaca | 4.90 | 330 | *e*Pn | Pn | 22 25 21.9 | -1.7 |
| BLY | Banja Luka | 4.91 | 337 | *e*Pn | Pn | 22 25 21.1 | -2.6 |
| A051A | Mrakovica | 5.24 | 336 | *e*Pn | Pn | 22 25 25.2 | -3.0 |
| CRES | Cresnjev | 6.45 | 331 | *e*Pn | Pn | 22 25 44.5 | -0.2 |
| CEY | Cerknica | 6.79 | 325 | *e*Pn | Pn | 22 25 48.6 | -0.9 |

*IDC* ***04*** *22:55:44.4±0.7, 4°.21S×142°.71E, h105km±6km, mb3.9/13, mbtmp4.3/15, MS3.0/3, Error ellipse: s-maj=25.8km s-min=9.9km az=90.0*
*DJA* ***04*** *22:55:44.0±0.6, 4°.S±8°×14°.3E±°, h117km±7km, M4.6/12, mB5.3/2, mb4.7/12, MLv4.6/4, Mw(mB)4.7/2*
*NEIC* ***04*** *22:55:44.9±1.5, 4°.20S±0°.08×142°.74E±0°.09, h108km±8km, mb4.6/28, Error ellipse: s-maj=12.7km s-min=11.9km az=90.0*

**ISC 04 22:55:44.5±0.6, 4°.28S±0°.05×142°.81E±0°.06, h103km±5km, h103km:pP-P, n105, σ1§31/111, mb4.5/26, 2D, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TABU | Tabubil | 1.86 | 238 | P | Pn | 22 56 18.0 | +2.5 |
| JAY | Jayapura | 2.74 | 310 | P | Pn | 22 56 25.2 | -1.7 |
| GENI | Genyem | 3.13 | 302 | P | Pn | 22 56 32.7 | +0.7 |
| GENI | Genyem | 3.13 | 302 | P | Pn | 22 56 32.1 | +0.1 |
| MANU | Manus Island | 5.06 | 64 | Pn | Pn | 22 56 58.2 | +0.1 |
| PMG | Port Moresby | 6.67 | 140 | P | Pn | 22 57 21.4 | +1.4 |
| PMG | Port Moresby | 6.67 | 140 | Pn | Pn | 22 57 20.5 | +0.5 |
| PMG | Port Moresby | 6.67 | 140 | P | Pn | 22 57 21.0 | +1.0 |
| | 31nm,0.5s,baz=342,slow=5.3,SNR=13 | | | | | | |
| PMG | | | | S | Sn | 22 58 32.1 | -2.5 |
| | 15nm,0.4s,baz=120,slow=20,SNR=1.5 | | | | | | |
| PMG | | | | LR | LR | 23 00 19.8 | |
| | comp=Z,250nm,21.1s,baz=280,slow=41 | | | | | | |
| COEN | Coen | 9.62 | 178 | Pn | Pn | 22 58 01.5 | +1.4 |
| FAKI | Fak Fak | 10.63 | 277 | P | Pn | 22 58 14.6 | +0.8 |
| FAKI | Fak Fak | 10.63 | 277 | Pn | Pn | 22 58 13.4 | -0.4 |
| FAKI | Fak Fak | 10.63 | 277 | P | Pn | 22 58 15.6 | +1.8 |
| KDU | Kakadu | 13.20 | 230 | P | Pn | 22 58 46.7 | -1.3 |
| MTSU | Mount Surprise | 13.85 | 174 | P | Pn | 22 58 58.1 | +1.7 |
| MTN | Manton Dam | 14.34 | 233 | P | Pn | 22 59 03.9 | +1.2 |
| MTN | Manton Dam | 14.34 | 233 | Pn | Pn | 22 59 01.3 | -1.5 |
| TV1H | Townsville Har | 15.39 | 166 | P | Pn | 22 59 16.7 | +0.7 |
| CTA | Charters Tower | 16.07 | 168 | P | P | 22 59 28.0 | +2.1 |
| | 0.2nm,0.6s,baz=27,slow=6.9,SNR=2.2 | | | | | | |
| CTA | | | | LR | LR | 23 05 02.7 | |
| | comp=Z,15nm,21.1s,baz=272,slow=35 | | | | | | |
| QIS | Mount Isa | 16.48 | 191 | P | P | 22 59 30.5 | 0.0 |
| WB0 | Warramunga Arr | 17.44 | 207 | | P | 22 59 39.9 | -1.3 |
| WB0 | | | | IAmb | IAmb | 22 59 44.0 | |
| | comp=Z,21nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 17.62 | 207 | P | P | 22 59 41.5 | -1.6 |
| WRA | Warramunga Arr | 17.62 | 207 | P | Pn | 22 59 43.4 | -0.2 |
| | comp=Z,14nm,0.4s,baz=28,slow=12,SNR=182 | | | | | | |
| WRA | | | | S | Sn | 23 02 53.0 | -7.1 |
| | comp=Z,6.1nm,1.0s,baz=26,slow=22,SNR=8.5 | | | | | | |
| KNR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MORW** | **Morawa** | **35.38 223** | P | **P** | **23 02 31.1** | **+0.6** |
| **MORW** | **Morawa** | **35.38 223** | P | **P** | **23 02 29.9** | **-0.6** |
| **BLDU** | **Ballidu** | **35.94 220** | P | **P** | **23 02 35.7** | **+0.5** |
| **MUN** | **Mundaring** | **37.17 219** | P | **P** | **23 02 46.4** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **40.84 354** | P | **P** | **23 03 13.8** | **-2.4** |
| | comp=Z,1.1nm,0.6s,baz=174,slow=8.2,SNR=4.9 | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | |
| **NJ2** | **Nanjing** | **42.72 329** | *e*P | **P** | **23 03 34.2** | **+2.7** |
| NJ2 | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | |
| NJ2 | | | pmax | pmax | | |
| | comp=Z,94nm,3.6s | | | | | |
| **KSRS** | **Korea Array** | **43.77 343** | P | **P** | **23 03 37.6** | **-2.3** |
| | comp=Z,2.0nm,1.0s,baz=172,slow=9.7,SNR=5.9 | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | |
| **KUZ** | **Kuaotunu** | **44.22 141** | P | **P** | **23 03 43.6** | **+0.1** |
| **KUZ** | **Kuaotunu** | **44.22 141** | P | **P** | **23 03 43.7** | **+0.2** |
| **TOZ** | **Tahuroa Road** | **44.71 143** | P | **P** | **23 03 47.5** | **0.0** |
| TOZ | | | lAmb | lAmb | 23 04 31.3 | |
| | comp=Z,24nm,1.3s | | | | | |
| **JTM** | **Tenmabayashi** | **44.88 358** | P | **P** | **23 03 46.9** | **-1.8** |
| **TKNZ** | **Takaka Hill** | **45.50 148** | P | **P** | **23 03 54.9** | **+1.2** |
| **RPZ** | **Rata Peaks** | **46.52 152** | P | **P** | **23 04 01.9** | **+0.3** |
| **SNZO** | **South Karori** | **46.64 147** | P | **P** | **23 04 02.7** | **+0.2** |
| **BFZ** | **Birch Farm** | **47.07 145** | P | **P** | **23 04 03.8** | **-2.2** |
| **ASAJ** | **Asahikawa** | **48.18 360** | P | **P** | **23 04 13.1** | **-1.2** |
| | comp=Z,4.0nm,0.3s,baz=7.0,slow=13,SNR=3.5 | | | | | |
| | comp=Z,4.0nm,0.3s | | | | | |
| **USA0B** | **Ussuriysk Arra** | **49.23 350** | P | **P** | **23 04 21.4** | **-1.0** |
| USA0B | | | lAmb | lAmb | 23 04 22.9 | |
| | comp=Z,5.4nm,0.8s | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.23 350** | P | **P** | **23 04 22.1** | **-0.3** |
| | comp=Z,4.2nm,0.6s,baz=158,slow=7.2,SNR=19 | | | | | |
| USRK | | | pP | **pP** | **23 04 47.9** | **+0.8** |
| | comp=Z,3.0nm,0.8s,baz=157,slow=10,SNR=3.4 | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | |
| **PZH** | **PanZhiHua** | **50.15 310** | P | **P** | **23 04 32.5** | **+2.6** |
| PZH | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | |
| PZH | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | |
| **HHC** | **Hu-ho-hao-te** | **53.24 331** | *e*P | **P** | **23 04 54.2** | **+1.6** |
| HHC | | | pP | pP | 23 05 17.6 | +0.1 |
| HHC | | | pmax | pmax | | |
| | comp=Z,49nm,5.5s | | | | | |
| **KLR** | **Kul'dur** | **54.16 351** | P | **P** | **23 04 58.2** | **-0.7** |
| | comp=Z,1.2nm,0.5s,baz=155,slow=4.5,SNR=3.7 | | | | | |
| KLR | | | LR | LR | 23 26 49.4 | |
| | comp=Z,23nm,18.8s,baz=218,slow=34 | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | |
| **LZH** | **Lanzhou** | **54.23 321** | *e*P | P | 23 05 08.8 | +8.8 |
| LZH | | | sP | sP | 23 05 46.6 | +10 |
| LZH | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | |
| **CASY** | **Casey** | **65.86 194** | P | **P** | **23 06 18.6** | **-0.1** |
| CASY | | | lAmb | lAmb | 23 06 19.3 | |
| | comp=Z,4.5nm,0.7s | | | | | |
| **YAK** | **Yakutsk** | **66.89 353** | P | **P** | **23 06 23.6** | **-1.7** |
| YAK | | | lAmb | lAmb | 23 06 25.4 | |
| | comp=Z,20nm,1.4s | | | | | |
| **MK31** | **Makanchi Array** | **73.54 321** | P | **P** | **23 07 05.2** | **-1.1** |
| **MKAR** | **Makanchi Array** | **73.54 321** | P | **P** | **23 07 04.9** | **-1.4** |
| **MKAR** | **Makanchi Array** | **73.54 321** | P | **P** | **23 07 05.5** | **-0.8** |
| | comp=Z,1.2nm,0.7s,baz=107,slow=7.8,SNR=8.6 | | | | | |
| MKAR | | | pP | **pP** | **23 07 32.9** | **+0.4** |
| | comp=Z,1.4nm,0.7s,baz=108,slow=7.4,SNR=5.5 | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | |
| **VNDA** | **Vanda** | **73.89 176** | P | **P** | **23 07 07.6** | **-0.2** |
| **VNDA** | **Vanda** | **73.89 176** | P | **P** | **23 07 08.0** | **+0.2** |
| | comp=Z,1.4nm,0.5s,baz=325,slow=7.1,SNR=17 | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | |
| **SBA** | **Scott Base** | **74.60 175** | P | **P** | **23 07 12.7** | **+0.9** |
| SBA | | | lAmb | lAmb | 23 07 13.6 | |
| | comp=Z,8.4nm,1.5s | | | | | |
| **ZALV** | **Zalesovo Beam** | **75.37 329** | P | **P** | **23 07 15.2** | **-1.5** |
| | comp=Z,0.6nm,0.4s,baz=126,slow=7.5,SNR=3.9 | | | | | |
| ZALV | | | pP | **pP** | **23 07 41.7** | **-1.3** |
| | comp=Z,1.0nm,0.6s,baz=129,slow=4.8,SNR=2.5 | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | |
| **KURBB** | **Kurchatov Arra** | **77.38 324** | P | **P** | **23 07 27.1** | **-1.0** |
| | comp=Z,0.4nm,0.7s,baz=100,slow=4.8,SNR=4.0 | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | |
| **ILAR** | **Eielson Array** | **85.58 24** | P | **P** | **23 08 10.9** | **-0.1** |
| | comp=Z,0.5nm,0.3s,baz=261,slow=4.7,SNR=42 | | | | | |
| ILAR | | | pP | **pP** | **23 08 36.6** | **-1.3** |
| | comp=Z,2.0nm,0.7s,baz=252,slow=4.9,SNR=6.1 | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | |
| **QSPA** | **South Pole Qui** | **85.67 180** | P | **P** | **23 08 11.2** | **-0.5** |
| QSPA | | | lAmb | lAmb | 23 08 12.4 | |
| | comp=Z,7.2nm,1.1s | | | | | |
| **QSPA** | **South Pole Qui** | **85.67 180** | P | **P** | **23 08 11.5** | **-0.1** |
| | comp=Z,6.7nm,1.1s,baz=284,slow=0.7,SNR=17 | | | | | |
| | comp=Z,6.7nm,1.1s | | | | | |
| **ELIB** | **Princess Elisa** | **94.73 196** | *d*P | **P** | **23 08 54.8** | **+0.7** |
| ELIB | | | *db*P | **pP** | **23 09 23.4** | **+2.0** |
| **DBIC** | **Dimbokro** | **147.73 276** | PKPbc | **PKPbc** | **23 15 17.6** | **-0.8** |
| | comp=Z,4.5nm,0.8s,baz=319,slow=3.9,SNR=4.6 | | | | | |
| **SIV** | **San Ignacio** | **148.95 131** | PKPbc | **PKPbc** | **23 15 21.6** | **+0.1** |
| | comp=Z,3.8nm,0.7s,baz=224,slow=1.3,SNR=22 | | | | | |

*WEL* **04** *23:03:13.7,38°S±40″×17°8E±2°7,h52km±36km,M2.3/5,ML2.8/8,MLv2.3/5,Error ellipse: s-maj=0.1km s-min=0.0km az=20.8,Off east coast of North Island*

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **HAZ** | **Te Kaha** | **0.39** | **236** | P | Pn | 23 03 23.9 | | | +0.2 |
| **RUGZ** | **Raukumara Rang** | **0.58** | **223** | P | Pn | 23 03 27.9 | | | +1.8 |
| **TWGZ** | **Tauwhareparae** | **0.66** | **194** | P | Pn | 23 03 27.2 | | | +0.2 |
| **CNGZ** | **Carnagh Statio** | **0.94** | **179** | P | Pn | 23 03 29.6 | | | -1.1 |
| **MWZ** | **Matawai** | **0.95** | **213** | P | Pn | 23 03 31.7 | | | +0.9 |
| **URZ** | **Urewera** | **1.11** | **229** | P | Pn | 23 03 34.4 | | | +1.5 |
| **RTZ** | **Ruatahuna** | **1.43** | **221** | P | Pn | 23 03 38.8 | | | +1.5 |
| **MTHZ** | **Maungataniwha** | **1.68** | **219** | P | Pn | 23 03 41.9 | | | +1.2 |
| **BKZ** | **Black Stump Fm** | **2.10** | **219** | P | Pn | 23 03 46.8 | | | +0.4 |
| **MKAZ** | **Moumakai** | **2.45** | **279** | P | Pn | 23 03 49.5 | | | -1.6 |

*RSNC* **04** *23:08:30.1±0.0,10°N±3°×7°8W±°,h20km±8km,M3.0,mB5.2,mb3.8,ML2.8,Mw(mB)4.5,Panama*

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **CAPC** | **Capurgana** | **1.38** | **149** | P | Pn | 23 08 51.1 | | | -3.2 |
| CAPC | | | | S | Sn | 23 09 10.0 | | | -2.0 |
| **BCIP** | **Isla Barro Col** | **1.86** | **249** | P | Pn | 23 08 57.2 | | | -3.7 |
| BCIP | | | | S | Sn | 23 09 18.0 | | | -5.9 |
| **LCBC** | **Los crdobas,** | **1.94** | **120** | P | Pn | 23 08 59.9 | | | -2.0 |
| LCBC | | | | S | Sn | 23 09 25.8 | | | +0.1 |
| **APAC** | **Apartado, Choc** | **2.42** | **142** | P | Pn | 23 09 07.0 | | | -1.5 |
| APAC | | | | S | Sn | 23 09 36.7 | | | -0.9 |
| **PTAC** | **Punta Ardita,** | **2.68** | **174** | P | Pn | 23 09 09.9 | | | -2.2 |
| PTAC | | | | S | Sn | 23 09 42.4 | | | -1.6 |
| **SJCC** | **San Jacinto, C** | **2.85** | **88** | P | Pn | 23 09 11.3 | | | -3.2 |
| SJCC | | | | S | Sn | 23 09 43.7 | | | -4.6 |
| **AZU** | **Azuero** | **2.97** | **227** | P | Pn | 23 09 13.2 | | | -3.0 |
| AZU | | | | S | Sn | 23 09 46.8 | | | -4.5 |
| **UREC** | **San Jos de Ur** | **3.25** | **129** | P | Pn | 23 09 16.9 | | | -3.1 |
| UREC | | | | S | Sn | 23 09 53.8 | | | -4.3 |
| **CACAO** | **El Cacao, Vera** | **3.70** | **228** | P | Pn | 23 09 24.4 | | | -1.8 |
| CACAO | | | | S | Sn | 23 10 07.0 | | | -2.3 |
| **GMAL** | **Guarumal, Vera** | **3.74** | **237** | P | Pn | 23 09 25.5 | | | -1.2 |
| GMAL | | | | S | Sn | 23 10 07.1 | | | -3.1 |
| **ARGC** | **Ariguani, Magd** | **3.77** | **89** | P | Pn | 23 09 19.6 | | | -7.5 |
| ARGC | | | | S | Sn | 23 10 07.5 | | | -3.4 |
| **ZARC** | **Zaragoza, Cauc** | **3.93** | **126** | P | Pn | 23 09 26.0 | | | -3.4 |
| ZARC | | | | S | Sn | 23 10 09.2 | | | -5.8 |
| **SMRC** | **Santa Marta, M** | **4.01** | **70** | P | Pn | 23 09 28.5 | | | -1.9 |
| SMRC | | | | S | Sn | 23 10 08.0 | | | -8.8 |
| **PRVC** | **Isla de Provid** | **4.78** | **318** | P | Pn | 23 09 39.8 | | | -1.2 |
| PRVC | | | | S | Sn | 23 10 23.4 | | | -12 |
| **PTBC** | **PUERTO BERRIO,** | **4.85** | **132** | P | Pn | 23 09 38.9 | | | -3.1 |
| PTBC | | | | S | Sn | 23 10 32.0 | | | -5.6 |
| **CRJC** | **Cerrejon, Guaj** | **5.24** | **76** | P | Pn | 23 09 42.0 | | | -5.4 |
| | 14nm,1.1s,2μm | | | | | | | | |
| CRJC | | | | S | Sn | 23 10 37.0 | | | -10 |
| | 14nm,1.1s,2μm | | | | | | | | |
| **PAMC** | **Pamplona, Colo** | **5.86** | **115** | P | Pn | 23 09 56.3 | | | 0.0 |
| PAMC | | | | S | Sn | 23 10 59.7 | | | -3.5 |
| **URIC** | **Uribia, Colomb** | **6.25** | **72** | P | Pn | 23 09 57.0 | | | -4.3 |
| | 11nm,1.1s | | | | | | | | |
| URIC | | | | S | Sn | 23 11 03.2 | | | -9.1 |
| | 11nm,1.1s | | | | | | | | |
| **RUSC** | **La Rusia** | **6.30** | **128** | P | Pn | 23 09 58.8 | | | -3.6 |
| RUSC | | | | S | Sn | 23 11 10.0 | | | -4.1 |

*NNC* **04** *23:09:09.5±3.8,42°.15N×86°.42E,h0km,mb4.0,mpv3.6,Error ellipse: s-maj=30.0km s-min=18.8km az=123.0*
*SOME* **04** *23:09:14.7,43°.23N×85°.27E,h10km*
*IDC* **04** *23:09:22.8±1.4,43°.04N×85°.29E,h0km,mb3.8/4,mbtmp3.5/7,ML2.7/3,MS3.0/1,Error ellipse: s-maj=44.2km s-min=15.7km az=64.0*

**ISC 04 23:09:24.8±1.1,43°.09N±0°.06×85°.20E±0°.06,h10km,n40,σ3°37/59,mb3.7/4,5C-5D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **KTMS** | **Ketmen** | **3.56** | **277** | *e*P | **Pn** | **23 10 22.4** | | | **+2.3** |
| | 1.4nm,0.2s | | | | | | | | |
| KTMS | | | | *e*S | **Sb** | **23 11 10.7** | | | **-0.4** |
| | 34nm,0.4s | | | | | | | | |
| **KTMS** | **Ketmen** | **3.56** | **277** | Pg | **Pn** | **23 10 22.4** | | | **+2.3** |
| | 1.4nm,0.2s | | | | | | | | |
| KTMS | | | | Lg | Lg | 23 11 11.8 | | | |
| | 34nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **4.11** | **289** | *e*P | **Pb** | **23 10 32.7** | | | **-4.6** |
| | 1.5nm,0.2s | | | | | | | | |
| DJR | | | | *e*S | **Sb** | **23 11 28.5** | | | **+1.4** |
| | 12nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **4.11** | **289** | Pg | **Pb** | **23 10 32.7** | | | **-4.6** |
| | 1.5nm,0.2s | | | | | | | | |
| DJR | | | | Lg | Lg | 23 11 28.5 | | | |
| | 12nm,0.4s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.18** | **275** | Pg | **Pb** | **23 10 35.5** | | | **-2.9** |
| | 1.7nm,0.2s | | | | | | | | |
| PDGK | | | | Lg | Lg | 23 11 32.1 | | | |
| | 17nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.18** | **275** | ⇓Pn | **Pn** | **23 10 28.9** | | | **+0.2** |
| | 1.8nm,0.5s | | | | | | | | |
| PDGK | | | | ⇑Pg | **Pg** | **23 10 46.2** | | | **+1.4** |
| | 4.5nm,0.4s | | | | | | | | |
| PDGK | | | | ⇑Sn | **Sb** | **23 11 29.9** | | | **+1.0** |
| | 40nm,0.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **4.24** | **332** | ⇓Pn | **Pn** | **23 10 32.1** | | | **+2.6** |
| | 0.9nm,0.3s,baz=150,slow=14,SNR=44 | | | | | | | | |
| MK31 | | | | Pg | Pg | 23 10 50.4 | | | +4.5 |
| | 1.4nm,0.2s,baz=148,slow=14,SNR=24 | | | | | | | | |
| MK31 | | | | ⇓Sn | **Sg** | **23 11 37.6** | | | **-3.2** |
| | 9.6nm,0.4s,baz=142,slow=29 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.24** | **332** | Pn | **Pn** | **23 10 32.4** | | | **+3.0** |
| | 0.6nm,0.3s,baz=147,slow=14,SNR=29 | | | | | | | | |
| MKAR | | | | Pg | **Pb** | **23 10 40.8** | | | **+1.4** |
| | 1.7nm,0.3s,baz=148,slow=19,SNR=14 | | | | | | | | |
| MKAR | | | | Lg | Lg | 23 11 38.1 | | | |
| | 7.8nm,0.3s,baz=142,slow=29,SNR=14 | | | | | | | | |
| | 0.7nm,0.3s | | | | | | | | |
| **MAKZ** | **Makanchi** | **4.36** | **330** | ⇓Pn | **Pn** | **23 10 34.9** | | | **+3.8** |
| | 3.8nm,1.0s | | | | | | | | |
| MAKZ | | | | ⇑Pg | **Pg** | **23 10 52.5** | | | **+4.2** |
| | 3.6nm,0.4s | | | | | | | | |
| MAKZ | | | | ⇑Sn | **Sg** | **23 11 42.0** | | | **-2.8** |
| | 10nm,0.5s | | | | | | | | |
| **ZSN** | **Zaisan** | **4.37** | **357** | *e*P | **Pn** | **23 10 33.1** | | | **+1.9** |
| ZSN | | | | *e*S | **Sb** | **23 11 28.6** | | | **-5.7** |
| **UZB** | **Uzynbulak** | **4.52** | **273** | *e*P | **Pb** | **23 10 40.2** | | | **-4.1** |
| | 2.0nm,0.2s | | | | | | | | |
| UZB | | | | *e*S | **Sb** | **23 11 41.6** | | | **+2.8** |
| | 20nm,0.6s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.77** | **277** | *e*P | **Pb** | **23 10 46.2** | | | **-2.3** |
| | 2.0nm,0.2s | | | | | | | | |
| KPKS | | | | *e*S | **Sb** | **23 11 51.2** | | | **+5.2** |
| | 32nm,0.5s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.77** | **277** | Lg | Lg | 23 11 50.1 | | | |
| | 32nm,0.5s | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.95** | **273** | *e*P | **Pb** | **23 10 48.6** | | | **-2.9** |
| | 12nm,0.8s | | | | | | | | |
| ZHN | | | | *e*S | **Sb** | **23 11 55.1** | | | **+4.0** |
| | 42nm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.95** | **273** | Lg | Lg | 23 11 55.1 | | | |
| | 42nm,0.3s | | | | | | | | |
| **SATY** | **Saty** | **4.97** | **272** | *e*P | **Pb** | **23 10 48.4** | | | **-3.6** |
| | 3.3nm,0.1s | | | | | | | | |
| SATY | | | | *e*S | **Sb** | **23 11 55.4** | | | **+3.5** |
| | 14nm,0.4s | | | | | | | | |
| **KURS** | **Kuram** | **5.14** | **277** | *e*P | **Pb** | **23 10 53.4** | | | **-1.5** |
| | 2.0nm,0.3s | | | | | | | | |
| KURS | | | | *e*S | **Sg** | **23 12 04.0** | | | **-5.9** |
| | 9.2nm,0.6s | | | | | | | | |
| **KURS** | **Kuram** | **5.14** | **277** | Pg | **Pb** | **23 10 53.7** | | | **-1.1** |
| | 2.0nm,0.3s | | | | | | | | |
| KURS | | | | Lg | Lg | 23 12 03.4 | | | |
| | 9.2nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **5.46** | **284** | *e*P | **Pb** | **23 10 59.5** | | | **-0.8** |
| | 2.3nm,0.3s | | | | | | | | |
| ARXS | | | | *e*S | **Sg** | **23 12 14.4** | | | **-5.7** |
| | 21nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **5.46** | **284** | Lg | Lg | 23 12 14.4 | | | |
| | 21nm,0.6s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.91** | **274** | *e*P | **Pb** | **23 11 05.8** | | | **-2.3** |
| | 3.0nm,0.3s | | | | | | | | |
| KOTS | | | | *e*S | **Sb** | **23 12 26.6** | | | **+7.6** |
| | 24nm,0.5s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.91** | **274** | Lg | Lg | 23 12 26.6 | | | |
| | 24nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **5.96** | **273** | *e*P | **Pb** | **23 11 09.5** | | | **+0.6** |
| | 2.2nm,0.4s | | | | | | | | |
| MDOK | | | | *e*S | **Sg** | **23 12 31.6** | | | **-4.6** |
| | 8.1nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **5.96** | **273** | ⇓Pn | **Pn** | **23 10 54.0** | | | **+0.7** |
| | 6.5nm,1.2s | | | | | | | | |
| MDOK | | | | Pg | **Pb** | **23 11 09.9** | | | **+1.0** |
| | 2.2nm,0.4s | | | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 23 12 31.0 | | | |
| | 12nm,0.7s | | | | | | | | |
| **CHKK** | **Chushkaly** | **6.02** | **280** | *e*P | **Pb** | **23 11 10.6** | | | **+0.8** |
| | 8.0nm,0.3s | | | | | | | | |
| CHKK | | | | *e*S | **Sg** | **23 12 33.0** | | | **-5.0** |
| | 8.3nm,0.3s | | | | | | | | |
| **CHKK** | **Chushkaly** | **6.02** | **280** | Pg | **Pb** | **23 11 10.8** | | | **+1.0** |
| | 8.0nm,0.3s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **6.04** | **272** | *e*P | **Pb** | **23 11 11.8** | | | **+1.4** |
| | 1.2nm,0.2s | | | | | | | | |
| TNSS | | | | *e*S | **Sg** | **23 12 35.4** | | | **-3.4** |
| | 5.2nm,0.6s | | | | | | | | |
| **KTBS** | **Karatobe** | **6.23** | **279** | *e*P | **Pb** | **23 11 14.2** | | | **+0.8** |
| | 1.0nm,0.5s | | | | | | | | |
| KTBS | | | | *e*S | **Sg** | **23 12 39.6** | | | **-5.2** |
| | 7.1nm,0.6s | | | | | | | | |
| **KTBS** | **Karatobe** | **6.23** | **279** | Pg | **Pb** | **23 11 14.7** | | | **+1.3** |
| | 1.0nm,0.5s | | | | | | | | |
| **KST** | **Kastek** | **6.76** | **273** | *e*P | **Pb** | **23 11 22.8** | | | **+0.3** |
| | 1.0nm,0.3s | | | | | | | | |
| KST | | | | *e*S | **Sg** | **23 12 54.7** | | | **-7.1** |
| | 7.7nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **6.76** | **273** | Lg | Lg | 23 12 54.7 | | | |
| | 7.7nm,0.6s | | | | | | | | |
| **KRBS** | **Karabastau** | **6.96** | **278** | *e*P | **Pb** | **23 11 24.8** | | | **-1.0** |
| | 1.0nm,0.4s | | | | | | | | |
| KRBS | | | | *e*S | **Sb** | **23 12 57.6** | | | **+8.6** |
| | 2.6nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.81** | **331** | Pn | **Pn** | **23 11 33.0** | | | **+0.9** |
| | baz=144,slow=13,SNR=4.4 | | | | | | | | |
| KURBB | | | | Sn | **Sn** | **23 13 10.5** | | | **-0.8** |
| | 0.1nm,0.3s,baz=144,slow=25,SNR=5.7 | | | | | | | | |
| KURBB | | | | Lg | Lg | 23 14 03.9 | | | |
| | baz=144,slow=32,SNR=1.6 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **10.87** | **359** | Pn | **Pn** | **23 12 01.5** | | | **+1.2** |
| | 0.3nm,0.3s,baz=181,slow=13,SNR=3.2 | | | | | | | | |
| ZALV | | | | Sn | **Sn** | **23 14 01.8** | | | **-0.1** |
| | 0.4nm,0.3s,baz=183,slow=27,SNR=5.5 | | | | | | | | |
| | 0.5nm,0.3s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **38.18** | **302** | LR | LR | 23 34 46.4 | | | |
| | comp=Z,23nm,20.2s,baz=40,slow=40 | | | | | | | | |
| **HFS** | **Hagfors** | **45.12** | **318** | P | **P** | **23 17 41.2** | | | **+0.3** |
| | 7.1nm,1.2s,baz=92,slow=7.4,SNR=8.8 | | | | | | | | |
| | 7.1nm,1.2s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **46.13** | **320** | P | **P** | **23 17 48.9** | | | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=78,slow=7.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **46.13** | **320** | P | **P** | **23 17 49.0** | | | **+0.1** |
| | comp=Z,0.4nm,0.5s,baz=80,slow=8.9,SNR=3.9 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.43** | **275** | P | **P** | **23 21 13.6** | | | **-1.2** |
| | comp=Z,0.3nm,0.7s,baz=45,slow=5.7,SNR=1.9 | | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.29** | **133** | P | **P** | **23 21 18.7** | | | **-0.8** |
| | comp=Z,0.8nm,1.1s,baz=332,slow=4.9,SNR=3.0 | | | | | | | | |
| | comp=Z,0.8nm,1.1s | | | | | | | | |

*IDC* **04** *23:20:35.1±1.3,3°.25N×127°.23E,h0km,mb3.9/9,mbtmp3.9/9,MS3.0/2,Error ellipse: s-maj=169.7km s-min=13.7km az=69.0*
*NEIC* **04** *23:20:36.4±1.6,3°.32N±0°.06×127°.1E±0°.1,h10km±1km,mb4.3/16,Error ellipse: s-maj=19.8km s-min=9.8km az=73.0*
*DJA* **04** *23:20:41.1±2.6,3°N±10°×12°7E±°,h25km±35km,M4.0/9,mb4.2/6,mB4.8/1,MLv3.8/9,Mw(mB)4.1/1*

**ISC 04 23:20:39.9±0.6,3°.28N±0°.07×127°.1E±0°.1,h35km,n39,σ1°35/41,mb4.1/16,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **TNTI** | **Ternate** | **2.51** | **173** | Pn | **Pn** | **23 21 18.4** | | | **+0.2** |
| TNTI | | | | Sn | Sn | **23 21 44.4** | | | **-3.1** |
| **TNTI** | **Ternate** | **2.51** | **173** | P | **Pn** | **23 21 20.4** | | | **+2.2** |
| **GTOI** | **Gorontalo** | **4.81** | **237** | P | **Pn** | **23 21 53.0** | | | **+3.1** |
| **SANI** | **Sanana** | **5.39** | **191** | P | **Pn** | **23 21 57.5** | | | **-0.4** |
| | 18nm,0.9s,904nm0.1nm | | | | | | | | |
| **SWI** | **Sorong** | **5.89** | **134** | P | **Pn** | **23 22 05.2** | | | **+0.6** |
| | 19nm,0.8s,0.1nm | | | | | | | | |
| **TOLI2** | **Tolitoli** | **6.62** | **251** | Pn | **Pn** | **23 22 15.1** | | | **+0.4** |
| **FAKI** | **Fak Fak** | **8.06** | **140** | | **Pn** | **23 22 35.2** | | | **+0.7** |
| **FAKI** | **Fak Fak** | **8.06** | **140** | P | **Pn** | **23 22 37.0** | | | **+2.5** |
| **KNRA** | **Kununurra** | **18.91** | **175** | | **P** | **23 24 57.7** | | | **+0.1** |
| **SSLB** | **Suanglung** | **21.23** | **344** | P | **P** | **23 25 22.3** | | | **-0.5** |
| SSLB | | | | lAmb | lAmb | 23 25 54.7 | | | |
| | comp=Z,9.8nm,1.2s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.28** | **184** | P | **P** | **23 25 22.5** | | | **-0.9** |
| **YHNB** | **Yeheng** | **21.96** | **346** | P | **P** | **23 25 29.0** | | | **-1.8** |
| YHNB | | | | lAmb | lAmb | 23 25 45.9 | | | |
| | comp=Z,24nm,1.3s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **24.01** | **163** | P | **P** | **23 25 50.9** | | | **-0.7** |
| WB0 | | | | lAmb | lAmb | 23 26 09.4 | | | |
| | comp=Z,7.2nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.16** | **163** | P | **P** | **23 25 51.5** | | | **-1.5** |
| **WRA** | **Warramunga Arr** | **24.16** | **163** | P | **P** | **23 25 52.6** | | | **-0.4** |
| | comp=Z,2.0nm,0.4s,baz=345,slow=9.0,SNR=53 | | | | | | | | |
| WRA | | | | PcP | **PcP** | **23 29 35.2** | | | **+1.7** |
| | comp=Z,0.1nm,0.4s,baz=328,slow=2.0,SNR=1.3 | | | | | | | | |
| WRA | | | | S | **S** | **23 30 10.7** | | | **+1.8** |
| | comp=Z,0.7nm,0.8s,baz=354,slow=18,SNR=3.4 | | | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **MBWA** | **Marble Bar** | **25.32** | **196** | P | **P** | **23 26 03.6** | | | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **25.68** | **196** | P | **P** | **23 26 06.6** | | | **-0.1** |
| **AS31** | **Alice Springs** | **27.60** | **166** | P | **P** | **23 26 24.5** | | | **+0.4** |
| **ASAR** | **Alice Springs** | **27.60** | **166** | P | **P** | **23 26 23.9** | | | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=349,slow=7.4,SNR=9.4 | | | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 29 42.6** | | | **+1.3** |
| | comp=Z,0.2nm,0.6s,baz=5.8,slow=1.8,SNR=4.0 | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.37** | **301** | LR | LR | 23 40 45.1 | | | |
| | comp=Z,26nm,20.8s,baz=160,slow=38 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.67** | **16** | LR | LR | 23 40 50.2 | | | |
| | comp=Z,29nm,21.3s,baz=182,slow=35 | | | | | | | | |
| **BBOO** | **Buckleboo** | **36.89** | **167** | P | **P** | **23 27 44.5** | | | **-0.8** |
| BBOO | | | | lAmb | lAmb | 23 28 22.0 | | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **STKA** | **Stephens Creek** | **37.60** | **159** | P | **P** | **23 27 49.9** | | | **-1.3** |
| **STKA** | **Stephens Creek** | **37.60** | **159** | P | **P** | **23 27 50.3** | | | **-1.0** |
| | comp=Z,1.9nm,0.5s,baz=329,slow=6.7,SNR=3.4 | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **47.83** | **341** | P | **P** | **23 29 14.6** | | | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=156,slow=7.6,SNR=1.9 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **58.11** | **325** | P | **P** | **23 30 29.9** | | | **0.0** |
| MK31 | | | | lAmb | lAmb | 23 30 41.8 | | | |
| | comp=Z,1.7nm,1.0s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.11** | **325** | P | **P** | **23 30 30.1** | | | **+0.1** |
| **MKAR** | **Makanchi Array** | **58.11** | **325** | P | **P** | **23 30 31.1** | | | **+1.1** |
| | comp=Z,0.6nm,0.5s,baz=114,slow=7.9,SNR=9.7 | | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.13** | **333** | P | **P** | **23 30 50.7** | | | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=119,slow=7.2,SNR=1.9 | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | |
| **GVZ** | **Greta Valley S** | **61.92** | **143** | P | **P** | **23 30 53.8** | | | **-2.4** |
| **KURBB** | **Kurchatov Arra** | **62.29** | **327** | P | **P** | **23 30 59.5** | | | **+1.1** |
| | comp=Z,0.9nm,0.5s,baz=126,slow=6.4,SNR=7.9 | | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | | |
| **KURK** | **Kurchatov** | **62.29** | **328** | P | **P** | **23 30 56.8** | | | **-1.7** |
| KURK | | | | lAmb | lAmb | 23 31 21.2 | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | | |
| **KKAR** | **Karatay Array** | **63.78** | **317** | P | **P** | **23 31 07.5** | | | **-1.1** |
| **ABKAR** | **Akbulak array** | **72.70** | **321** | P | **P** | **23 32 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EAG2 | | | | | S | Sg | 23 46 33.8 | -1.1 |
| EAG2 | | | | | AML | AML | 23 46 37.5 | |
| | comp=N,9536µm,0.3s | | | | | | | |
| EAG2 | | | | | AML | AML | 23 46 41.2 | |
| | comp=E,7645µm,0.4s | | | | | | | |
| **KARB** | **zmir-Karabur** | **0.41** | **132** | | P | **Pg** | **23 46 29.9** | **+0.1** |
| KARB | | | | | S | **Sg** | **23 46 36.4** | **+1.2** |
| KARB | | | | *i* | AML | AML | 23 46 37.0 | |
| | comp=E,250nm,0.3s | | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **0.52** | **9** | | Pg | **Pg** | **23 46 32.2** | **+0.3** |
| **KOCA** | **Canakkale, Ayv** | **0.57** | **9** | | P | **Pg** | **23 46 33.0** | **+0.3** |
| KOCA | | | | | S | **Sg** | **23 46 39.7** | **-0.6** |
| KOCA | | | | *i* | AML | AML | 23 46 43.0 | |
| | comp=E,406nm,0.3s | | | | | | | |
| KOCA | | | | *i* | AML | AML | 23 46 45.0 | |
| | comp=E,301nm,0.4s | | | | | | | |
| **FOCM** | **Foa** | **0.60** | **112** | | Pg | **Pb** | **23 46 34.3** | **+0.2** |
| FOCM | | | | | Sg | **Sb** | **23 46 43.6** | **+1.1** |
| **AYVA** | **Ayvalik** | **0.64** | **54** | | P | **Pg** | **23 46 33.8** | **-0.2** |
| AYVA | | | | *i* | AML | AML | 23 46 45.0 | |
| | comp=E,323nm,0.4s | | | | | | | |
| AYVA | | | | *i* | AML | AML | 23 46 46.0 | |
| | comp=E,329nm,0.3s | | | | | | | |
| **CESE** | **eme** | **0.65** | **160** | | Pg | **Pb** | **23 46 35.0** | **+0.1** |
| **DKL** | **Dikili** | **0.70** | **79** | | Pg | **Pb** | **23 46 36.0** | **+0.2** |
| **IZMD** | **zmir-Dikili-** | **0.71** | **86** | | P | **Pb** | **23 46 36.2** | **+0.2** |
| IZMD | | | | | S | **Sb** | **23 46 46.7** | **+0.9** |
| **URLA** | **Izmir** | **0.73** | **142** | | Pg | **Pb** | **23 46 36.8** | **+0.4** |
| URLA | | | | | Sg | **Sb** | **23 46 48.0** | **+1.6** |
| **URLA** | **Izmir** | **0.73** | **142** | | P | **Pb** | **23 46 36.8** | **+0.4** |
| URLA | | | | | S | **Sb** | **23 46 47.2** | **+0.8** |
| URLA | | | | *i* | AML | AML | 23 46 48.0 | |
| | comp=E,125nm,0.5s | | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **0.79** | **152** | | P | **Pb** | **23 46 37.7** | **+0.3** |
| ZEYE | | | | | S | **Sg** | **23 46 47.9** | **+0.6** |
| ZEYE | | | | *i* | AML | AML | 23 46 52.0 | |
| | comp=E,164nm,0.2s | | | | | | | |
| ZEYE | | | | *i* | AML | AML | 23 46 53.0 | |
| | comp=E,159nm,0.5s | | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.82** | **88** | | P | **Pb** | **23 46 38.2** | **+0.3** |
| ZEDA | | | | | S | **Sb** | **23 46 49.5** | **+0.5** |
| ZEDA | | | | *i* | AML | AML | 23 46 50.0 | |
| | comp=E,157nm,0.3s | | | | | | | |
| **EZNE** | **Ezine-Canakkal** | **0.86** | **18** | | Pg | **Pg** | **23 46 38.2** | **0.0** |
| **EZN** | **Ezine** | **0.92** | **15** | | Pg | **Pg** | **23 46 39.2** | **-0.1** |
| **BUHA** | **Balikesir, Bur** | **0.99** | **55** | | P | **Pg** | **23 46 40.5** | **-0.3** |
| BUHA | | | | | S | **Sg** | **23 46 52.3** | **-1.4** |
| **EFSA** | **Agios Efstrati** | **1.00** | **307** | | P | **Pb** | **23 46 41.1** | **+0.1** |
| EFSA | | | | | S | **Sb** | **23 46 54.8** | **+0.6** |
| **GMLD** | **Gumuldur** | **1.11** | **141** | | Pn | **Pg** | **23 46 42.7** | **-0.3** |
| **DGB** | **zmir** | **1.11** | **142** | | P | **Pg** | **23 46 42.1** | **-0.9** |
| DGB | | | | | S | **Sg** | **23 46 56.5** | **-1.0** |
| **LIA** | **Limnos Island** | **1.16** | **326** | | P | **Pb** | **23 46 43.8** | **+0.2** |
| LIA | | | | | AML | AML | 23 47 01.8 | |
| | comp=E,907µm,0.4s | | | | | | | |
| LIA | | | | | AML | AML | 23 47 02.6 | |
| | comp=N,868µm,0.3s | | | | | | | |
| **SOMA** | **Soma-Manisa** | **1.20** | **79** | | Pn | **Pb** | **23 46 44.0** | **-0.3** |
| **GADA** | **Gvkgeada** | **1.25** | **356** | | Pn | **Pn** | **23 46 44.1** | **-1.0** |
| **YENI** | **Yenice-Canakka** | **1.37** | **43** | | Pn | **Pn** | **23 46 46.1** | **-0.6** |
| **GELI** | **Tayfur-Gelibol** | **1.50** | **13** | | Pn | **Pn** | **23 46 47.9** | **-0.5** |
| **KYMI** | **Kymi, Euboea I** | **1.53** | **259** | | P | **Pn** | **23 46 48.6** | **-0.3** |
| **LPK** | **Lapseki** | **1.54** | **21** | | Pn | **Pn** | **23 46 47.9** | **-1.1** |
| **GCAM** | **G?zelcaml?** | **1.56** | **142** | | Pn | **Pn** | **23 46 49.4** | **+0.1** |
| **SMTH** | **Samothraki Isl** | **1.58** | **346** | | P | **Pn** | **23 46 49.4** | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **1.70** | **49** | | Pn | **Pn** | **23 46 50.8** | **-0.4** |
| **KRBG** | **Karabiga-Canak** | **1.75** | **34** | | Pn | **Pn** | **23 46 51.1** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.77** | **123** | | Pn | **Pn** | **23 46 52.1** | **-0.2** |
| **ERIK** | **Erikli-Kesan** | **1.77** | **12** | | Pn | **Pn** | **23 46 51.7** | **-0.5** |
| **ENEZ** | **Enez** | **1.80** | **3** | | Pn | **Pn** | **23 46 52.0** | **-0.5** |
| **SUSR** | **Susurluk-Balik** | **1.89** | **57** | | Pn | **Pn** | **23 46 53.5** | **-0.4** |
| **APE** | **Apeiranthos** | **1.91** | **192** | | Pn | **Pn** | **23 46 53.4** | **-0.8** |
| **APE** | **Apeiranthos** | **1.91** | **192** | | P | **Pn** | **23 46 53.3** | **-0.8** |
| **THAS** | **Thassos island** | **1.94** | **329** | | P | **Pn** | **23 46 54.0** | **-0.5** |
| **ALN** | **Alexandroupoli** | **1.96** | **0** | | Pn | **Pn** | **23 46 54.1** | **-0.6** |
| **ALN** | **Alexandroupoli** | **1.96** | **0** | | P | **Pn** | **23 46 54.5** | **-0.2** |
| ALN | | | | | AML | AML | 23 47 26.8 | |
| | comp=N,94µm,0.5s | | | | | | | |
| ALN | | | | | AML | AML | 23 47 27.1 | |
| | comp=E,46µm,0.4s | | | | | | | |
| **RKY** | **Sarkoy-Tekirda** | **1.96** | **27** | | Pn | **Pn** | **23 46 54.4** | **-0.4** |
| **EDC** | **Edincik** | **2.00** | **45** | | Pn | **Pn** | **23 46 55.1** | **-0.2** |
| **MRMT** | **Marmara Adasi** | **2.06** | **36** | | Pn | **Pn** | **23 46 55.8** | **-0.4** |
| **OUR** | **Ouranopolis** | **2.10** | **312** | | P | **Pn** | **23 46 57.4** | **+0.6** |
| **RDO** | **Rodhopi** | **2.23** | **351** | | Pn | **Pn** | **23 46 58.1** | **-0.5** |
| **RDO** | **Rodhopi** | **2.23** | **351** | | P | **Pn** | **23 46 58.8** | **+0.3** |
| **KCTX** | **Karacabey (Bur** | **2.24** | **53** | | Pn | **Pn** | **23 46 58.3** | **-0.3** |
| **UKOP** | **Uzunkopru-Edir** | **2.24** | **12** | | Pn | **Pn** | **23 46 58.2** | **-0.4** |
| **KAVA** | **Kavala** | **2.36** | **331** | | P | **Pn** | **23 47 00.3** | **0.0** |
| **HORT** | **Hortiatis** | **2.80** | **307** | | P | **Pn** | **23 47 07.1** | **+0.7** |
| **NVR** | **Nevrokopi** | **2.92** | **326** | | P | **Pn** | **23 47 09.2** | **+1.1** |

*SJA **04** 23:50:20.5±0.8, 30°66S×71°70W, h12km±2km, ML3.5, MW3.4*
*GUC **04** 23:50:22.1±0.5, 30°69S×71°68W, h36km±1km, ML3.8*

**ISC 04 23:50:20.3±1.6, 30°64S±0°02×71°68W±0°05, h8km±11km, n53, σ1°34/83, 1C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.05** | **134** | *i* P | Pg | 23 50 27.3 | +5.3 |
| CO06 | | | | *e*S | Sg | 23 50 30.8 | +7.6 |
| CO06 | | | | IAML | | 23 50 31.1 | |
| | comp=E,15µm,0.2s | | | | | | |
| **CO05** | **La Serena** | **0.81** | **28** | *e*P | **Pb** | **23 50 37.5** | **+0.8** |
| CO05 | | | | *e*S | **Sn** | **23 50 49.9** | **-0.4** |
| **CO02** | **Combarbal** | **0.81** | **134** | *e*P | **Pb** | **23 50 36.6** | **-0.1** |
| CO02 | | | | *e*S | **Sb** | **23 50 47.8** | **-0.1** |
| CO02 | | | | IAML | | 23 50 48.3 | |
| | comp=Z,2µm,0.6s | | | | | | |
| **CO02** | **Combarbal** | **0.81** | **134** | *i* P | **Pb** | **23 50 36.8** | **0.0** |
| CO02 | | | | *e*S | **Sb** | **23 50 47.7** | **-0.3** |
| CO02 | | | | IAML | | 23 50 50.9 | |
| | comp=N,6µm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **0.88** | **104** | *e*P | **Pb** | **23 50 37.9** | **+0.1** |
| CO03 | | | | *e*S | **Sb** | **23 50 49.9** | **+0.1** |
| CO03 | | | | IAML | | 23 50 50.5 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **0.88** | **104** | *e*P | **Pb** | **23 50 38.0** | **+0.1** |
| CO03 | | | | *e*S | **Sb** | **23 50 49.7** | **0.0** |
| CO03 | | | | IAML | | 23 50 50.6 | |
| | comp=N,4µm,0.5s | | | | | | |
| **GO04** | **Tololo Observa** | **0.89** | **59** | *e*P | **Pb** | **23 50 38.5** | **+0.3** |
| **GO04** | **Tololo Observa** | **0.89** | **59** | *e*P | **Pn** | **23 50 39.0** | **-0.4** |
| GO04 | | | | *e*S | **Sb** | **23 50 51.4** | **+1.1** |
| **CO01** | **Juntas del Tor** | **1.52** | **65** | *e*P | **Pb** | **23 50 48.8** | **-0.1** |
| CO01 | | | | *e*S | **Sg** | **23 51 09.6** | **+0.4** |
| CO01 | | | | IAML | | 23 51 11.1 | |
| | comp=Z,370nm,0.2s | | | | | | |
| **CO01** | **Juntas del Tor** | **1.52** | **65** | *e*P | **Pg** | **23 50 49.1** | **-0.3** |
| CO01 | | | | *e*S | **Sg** | **23 51 09.0** | **-0.1** |
| **LCO** | **Las Campanas** | **1.83** | **28** | *e*P | **Pn** | **23 50 52.8** | **+0.5** |
| LCO | | | | *e*S | **Sn** | **23 51 13.8** | **-2.1** |
| LCO | | | | IAML | | 23 51 25.0 | |
| | comp=Z,621nm,0.5s | | | | | | |
| **LCO** | **Las Campanas** | **1.83** | **28** | *i* P | **Pn** | **23 50 52.5** | **+0.2** |
| LCO | | | | *i* S | **Sn** | **23 51 16.2** | **+0.4** |
| **VA06** | **Catapilco** | **1.95** | **170** | *e*P | **Pn** | **23 50 53.6** | **-0.1** |
| VA06 | | | | *e*S | **Sn** | **23 51 17.0** | **-1.3** |
| **AROD** | **Rodeo** | **1.96** | **77** | *e*P | **Pb** | **23 50 56.9** | **+0.4** |
| AROD | | | | *e*S | **Sg** | **23 51 23.4** | **+0.1** |
| **AC05** | **El Transito** | **2.17** | **35** | *e*P | **Pn** | **23 50 58.4** | **+1.5** |
| AC05 | | | | *e*S | **Sn** | **23 51 24.8** | **+0.7** |
| AC05 | | | | IAML | | 23 51 42.2 | |
| | comp=Z,148nm,0.5s | | | | | | |
| **AC05** | **El Transito** | **2.17** | **35** | *e*P | **Pn** | **23 50 58.3** | **+1.5** |
| **ACCO** | **Cerro Coronel** | **2.25** | **89** | *e*P | **Pb** | **23 51 01.3** | **-0.2** |
| ACCO | | | | *e*S | **Sb** | **23 51 30.7** | **+1.0** |
| **DOCA** | **Reserva Natura** | **2.25** | **99** | *e*P | **Pb** | **23 51 01.0** | **-0.5** |
| DOCA | | | | *e*S | **Sn** | **23 51 26.0** | **-0.5** |
| DOCA | | | | IAML | | 23 51 41.1 | |
| | comp=Z,446nm,0.9s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.26** | **79** | *e*P | **Pb** | **23 51 01.4** | **0.0** |
| ACDV | | | | *e*S | **Sg** | **23 51 33.9** | **+1.0** |
| ACDV | | | | IAML | | 23 51 36.1 | |
| | comp=Z,114nm,0.4s | | | | | | |
| **VA03** | **San Esteban** | **2.33** | **156** | *e*P | **Pn** | **23 50 59.8** | **+0.8** |
| VA03 | | | | *e*S | **Sg** | **23 51 34.0** | **-1.1** |
| VA03 | | | | IAML | | 23 51 39.9 | |
| | comp=Z,456nm,0.4s | | | | | | |
| **VA03** | **San Esteban** | **2.33** | **156** | *e*P | **Pn** | **23 50 59.7** | **+0.6** |
| VA03 | | | | *e*S | **Sn** | **23 51 27.6** | **-0.3** |
| VA03 | | | | IAML | | 23 51 36.1 | |
| | comp=E,662nm,0.2s | | | | | | |
| **RTLS** | **Leoncito** | **2.35** | **120** | *e*P | **Pb** | **23 51 02.2** | **-0.8** |
| RTLS | | | | *e*S | **Sg** | **23 51 35.8** | **0.0** |
| RTLS | | | | IAML | | 23 51 47.8 | |
| | comp=Z,416nm,0.6s | | | | | | |
| **VA01** | **Torpederas** | **2.38** | **179** | *e*S | Sn | 23 51 12.4 | -17 |
| **ROC1** | **El Roble** | **2.40** | **167** | *e*P | **Pn** | **23 50 59.8** | **-0.4** |
| ROC1 | | | | *e*S | **Sb** | **23 51 33.3** | **-0.5** |
| **AC04** | **Llanos de Chal** | **2.48** | **12** | *e*P | **Pn** | **23 51 00.8** | **-0.3** |
| AC04 | | | | *e*S | **Sb** | **23 51 35.0** | **-0.8** |
| AC04 | | | | IAML | | 23 51 42.9 | |
| | comp=Z,126nm,0.5s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.48** | **12** | *e*P | **Pn** | **23 51 00.8** | **-0.3** |
| **PEL** | **Peldehue** | **2.64** | **162** | *e*P | **Pn** | **23 51 03.8** | **+0.5** |
| PEL | | | | *e*S | **Sn** | **23 51 34.0** | **-1.5** |
| **PEL** | **Peldehue** | **2.64** | **162** | *i* P | **Pn** | **23 51 03.6** | **+0.3** |
| PEL | | | | *i* S | **Sn** | **23 51 35.2** | **-0.3** |
| PEL | | | | IAML | | 23 51 44.2 | |
| | comp=E,319nm,0.4s | | | | | | |
| **MT02** | **Curacav** | **2.65** | **170** | *e*P | **Pn** | **23 51 03.5** | **+0.1** |
| MT02 | | | | *e*S | **Sn** | **23 51 37.7** | **+1.9** |
| MT02 | | | | IAML | | 23 51 45.4 | |
| | comp=Z,124nm,0.5s | | | | | | |
| **MT02** | **Curacav** | **2.65** | **170** | *i* S | **Sn** | **23 51 35.2** | **-0.7** |
| **ZON** | **Zonda** | **2.73** | **110** | *e*P | Pn | 23 50 52.7 | -12 |
| ZON | | | | *e*S | **Sb** | **23 51 40.8** | **-2.2** |
| ZON | | | | IAML | | 23 51 55.4 | |
| | comp=Z,100nm,0.4s | | | | | | |
| **MT10** | **Hacienda Santa** | **2.80** | **160** | *i* P | **Pn** | **23 51 05.8** | **+0.2** |
| MT10 | | | | *i* S | **Sn** | **23 51 38.9** | **-0.8** |
| **RTLL** | **Cerro Villicun** | **2.84** | **105** | *e*P | **Pn** | **23 51 08.6** | **+2.6** |
| RTLL | | | | *e*S | **Sb** | **23 51 44.1** | **-2.0** |
| **MT05** | **Renca** | **2.86** | **164** | *e*P | **Pb** | **23 51 09.7** | **-1.9** |
| MT05 | | | | *e*S | **Sb** | **23 51 47.5** | **+0.7** |
| MT05 | | | | IAML | | 23 51 56.5 | |
| | comp=Z,220nm,0.3s | | | | | | |
| **MT14** | **Cerro Cal¡n** | **2.92** | **161** | *i* S | **Sn** | **23 51 41.7** | **-0.7** |
| MT14 | | | | IAML | | 23 51 53.0 | |
| | comp=E,588nm,0.7s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **2.95** | **115** | *e*P | **Pb** | **23 51 11.6** | **-1.7** |
| **MT03** | **Universidad Ad** | **3.02** | **161** | *e*P | **Pn** | **23 51 10.2** | **+1.7** |
| MT03 | | | | *e*S | **Sn** | **23 51 46.7** | **+1.8** |
| MT03 | | | | IAML | | 23 51 59.7 | |
| | comp=Z,209nm,0.8s | | | | | | |
| **MT03** | **Universidad Ad** | **3.02** | **161** | *e*S | **Sn** | **23 51 43.8** | **-1.1** |
| MT03 | | | | IAML | | 23 51 59.8 | |
| | comp=E,455nm,0.3s | | | | | | |
| **MT04** | **Ro Olivares** | **3.06** | **155** | *e*P | **Pn** | **23 51 11.1** | **+1.9** |
| MT04 | | | | *e*S | **Sn** | **23 51 48.4** | **+2.4** |
| MT04 | | | | IAML | | 23 52 01.3 | |
| | comp=Z,92nm,0.6s | | | | | | |
| **MT04** | **Ro Olivares** | **3.06** | **155** | *e*P | **Pn** | **23 51 11.2** | **+2.0** |
| MT04 | | | | *e*S | **Sn** | **23 51 45.7** | **-0.4** |
| MT04 | | | | IAML | | 23 52 01.7 | |
| | comp=N,225nm,0.4s | | | | | | |
| **ASAL** | **Salagasta** | **3.11** | **129** | *e*P | **Pb** | **23 51 13.4** | **-2.5** |
| ASAL | | | | *e*S | **Sb** | **23 51 52.3** | **-1.8** |
| **MT08** | **Bocatoma Ro** | **3.13** | **154** | *e*P | **Pn** | **23 51 12.4** | **+2.2** |
| MT08 | | | | IAML | | 23 52 04.0 | |
| | comp=Z,140nm,0.5s | | | | | | |
| **MT09** | **Talagante** | **3.18** | **170** | *i* P | **Pn** | **23 51 10.8** | **-0.1** |
| MT09 | | | | IAML | | 23 52 02.0 | |
| | comp=N,182nm,0.4s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.21** | **134** | *e*P | **Pb** | **23 51 15.6** | **-2.1** |
| ARCO | | | | *e*S | **Sg** | **23 52 07.1** | **+3.7** |
| ARCO | | | | IAML | | 23 52 10.0 | |
| | comp=Z,109nm,0.5s | | | | | | |
| **MT12** | **Pirque** | **3.23** | **163** | *i* P | **Pn** | **23 51 11.5** | **+0.1** |
| MT12 | | | | *i* S | **Sn** | **23 51 48.8** | **-1.4** |
| MT12 | | | | IAML | | 23 52 03.8 | |
| | comp=E,255nm,0.5s | | | | | | |
| **MT01** | **Popeta** | **3.24** | **174** | *e*P | **Pn** | **23 51 12.1** | **+0.7** |
| MT01 | | | | *e*S | **Sn** | **23 51 53.0** | **+2.8** |
| MT01 | | | | IAML | | 23 52 07.3 | |
| | comp=Z,97nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **3.29** | **23** | *e*P | **Pn** | **23 51 12.8** | **+0.7** |
| **MT13** | **San Alfonso** | **3.31** | **160** | IAML | | 23 52 16.7 | |
| | comp=Z,94nm,0.8s | | | | | | |
| **MT13** | **San Alfonso** | **3.31** | **160** | *e*S | **Sn** | **23 51 51.2** | **-1.1** |
| MT13 | | | | IAML | | 23 52 13.8 | |
| | comp=E,169nm,0.3s | | | | | | |
| **LMEL** | **Las Melosas** | **3.44** | **159** | *e*S | **Sn** | **23 51 54.4** | **-1.0** |
| LMEL | | | | IAML | | 23 52 06.3 | |
| | comp=N,186nm,0.4s | | | | | | |
| **VCA** | **Vinchina** | **3.57** | **59** | *e*P | **Pb** | **23 51 21.2** | **-2.6** |
| **GO05** | **Huala** | **4.37** | **183** | *e*S | **Sb** | **23 52 34.5** | **+4.3** |
| **RFA** | **San Rafael** | **4.93** | **148** | IAML | | 23 53 13.2 | |
| | comp=Z,17nm,1.9s | | | | | | |

**Gll 04 23:59:09.3±0.3, 31°473N±0°001×35°522E±0°001, h15km, Md1.7/2, Mws1.9/8, confirmed, Dead Sea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DSI** | **Dead Sea** | **0.15** | **309** | P | Pb | 23 59 13.8 | -0.2 |
| **GHAJ** | **Ghor Haditha** | **0.17** | **167** | P | Pg | 23 59 13.8 | +0.3 |
| **GHAJ** | **Ghor Haditha** | **0.17** | **167** | S | Sb | 23 59 17.1 | -0.4 |
| **MSBI** | **Mazada** | **0.21** | **221** | P | Pg | 23 59 14.3 | +0.2 |
| **MSBI** | **Mazada** | **0.21** | **221** | S | Sb | 23 59 18.4 | -0.2 |
| **VJRH** | **Vered Jericho** | **0.36** | **348** | P | Pg | 23 59 17.0 | +0.4 |
| VJRH | | | | S | Sb | 23 59 22.5 | -0.4 |
| **YTIR** | **Yattir** | **0.36** | **253** | S | Sb | 23 59 22.8 | -0.3 |
| **YTIR** | **Yattir** | **0.36** | **253** | P | Pg | 23 59 16.9 | +0.2 |
| **UJAP** | **Al Uja** | **0.48** | **354** | P | Pg | 23 59 18.9 | 0.0 |
| **UJAP** | **Al Uja** | **0.48** | **354** | S | Sb | 23 59 25.9 | -0.4 |
| **YITV** | **Yitav** | **0.48** | **350** | P | Pg | 23 59 18.8 | 0.0 |
| YITV | | | | S | Sb | 23 59 26.1 | -0.3 |
| **AMAZ** | **Amatzia** | **0.52** | **277** | S | Sb | 23 59 27.6 | +0.1 |
| **AMAZ** | **Amatzia** | **0.52** | **277** | P | Pb | 23 59 20.0 | -0.2 |
| **HMDT** | **Nahal Hemdat** | **0.78** | **0** | S | Sb | 23 59 35.0 | 0.0 |
| **HMDT** | **Nahal Hemdat** | **0.78** | **0** | P | Pg | 23 59 24.2 | -0.2 |
| **SLTI** | **Sal'it** | **0.87** | **332** | S | Sg | 23 59 37.7 | +0.1 |
| **SLTI** | **Sal'it** | **0.87** | **332** | P | Pb | 23 59 25.5 | -0.6 |
| **ZFRI** | **Zfri** | **0.96** | **198** | S | Sg | 23 59 40.4 | -0.1 |
| **ZFRI** | **Zfri** | **0.96** | **198** | P | Pb | 23 59 27.1 | -0.6 |
| **MMLI** | **Mount Malkishu** | **0.97** | **355** | P | Pb | 23 59 27.2 | -0.6 |
| **MMLI** | **Mount Malkishu** | **0.97** | **355** | S | Sg | 23 59 40.7 | 0.0 |
| **KZIT** | **Kziot** | **1.12** | **240** | S | Sb | 23 59 45.0 | +0.3 |
| **KZIT** | **Kziot** | **1.12** | **240** | P | Pb | 23 59 29.7 | -0.6 |
| **PRNI** | **Paran** | **1.20** | **202** | S | Sb | 23 59 47.3 | +0.1 |
| **PRNI** | **Paran** | **1.20** | **202** | P | Pn | 23 59 31.0 | -0.6 |
| **OFRI** | **`Ofer** | **1.23** | **338** | P | Pn | 23 59 31.6 | -0.5 |
| **OFRI** | **`Ofer** | **1.23** | **338** | S | Sn | 23 59 48.5 | 0.0 |
| **BLGI** | **Bet Lehem HaGe** | **1.29** | **348** | S | Sn | 23 59 50.3 | +0.5 |
| **BLGI** | **Bet Lehem HaGe** | **1.29** | **348** | P | Pn | 23 59 31.9 | -0.8 |
| **RMOT** | **Ramot** | **1.38** | **5** | P | Pn | 23 59 32.7 | -1.3 |
| **HRFI** | **Mount Harif** | **1.49** | **196** | S | Sn | 23 59 54.7 | -0.1 |
| **HRFI** | **Mount Harif** | **1.49** | **196** | P | Pn | 23 59 35.0 | -0.6 |
| **KRMI** | **Paran Flat** | **1.52** | **207** | P | Pn | 23 59 35.8 | -0.1 |
| **KSHT** | **Keshet** | **1.52** | **9** | P | Pn | 23 59 35.5 | -0.6 |
| **MMA0B** | **Mount Meron ar** | **1.54** | **356** | P | Pn | 23 59 35.9 | -0.4 |
| **MMA0B** | **Mount Meron ar** | **1.54** | **356** | S | Sn | 23 59 56.5 | +0.4 |
| **MMC7** | **Mount Meron ar** | **1.55** | **356** | P | Pn | 23 59 36.2 | -0.2 |
| **MBRI** | **Mt Berech** | **1.75** | **198** | P | Pn | 23 59 38.7 | -0.5 |
| **MBRI** | **Mt Berech** | **1.75** | **198** | S | Sn | 00 00 01.0 | -0.3 |

*IDC **05** 00:15:48.7±0.9, 51°12N×179°17E, h0km, mb3.7/15, mbtmp3.7/16, ML4.2/1, MS3.3/23, Error ellipse: s-maj=28.2km s-min=17.0km az=165.0*
*AEIC **05** 00:15:52.9±2.1, 51°07N±0°07×179°1E±0°2, h20km±4km, Error ellipse: s-maj=16.6km s-min=8.0km az=119.0*
*MOS **05** 00:15:54.6±2.2, 51°20N×179°00E, h33km, mb4.5/12, Error ellipse: s-maj=13.5km s-min=9.3km az=111.3*
*NEIC **05** 00:15:54.6±1.8, 51°2N±0°2×179°1E±0°2, h32km±7km, mb4.1/36, ML3.7(AEIC), Error ellipse: s-maj=25.0km s-min=13.2km az=159.0*

**ISC 05 00:15:54.8±0.6, 51°13N±0°09×179°20E±0°04, h41km, n131, σ1°31/107, mb4.1/37, MS3.3/21, 5C, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AMKA** | **Amchitka** | **0.25** | **15** | Pg | **Pn** | **00 16 00.6** | **-2.1** |
| AMKA | | | | | **Sn** | **00 16 05.8** | **-2.4** |
| **CESW** | **Semis' Southwe** | **0.80** | **16** | | **Pn** | **00 16 09.3** | **-0.4** |
| **CERB** | **Semis' Cerberu** | **0.84** | **18** | | **Pn** | **00 16 10.4** | **+0.1** |
| **CEPE** | **Semis' Perret** | **0.88** | **19** | | **Pn** | **00 16 10.6** | **-0.2** |
| **LSSE** | **Little Sitkin** | **0.89** | **334** | | **Pn** | **00 16 10.3** | **-0.7** |
| **CEAP** | **Semis' Anvil P** | **0.90** | **15** | | **Pn** | **00 16 11.0** | **0.0** |
| **LSPA** | **Little Sitkin** | **0.91** | **335** | | **Pn** | **00 16 10.5** | **-0.7** |
| **LSNW** | **Little Sitkin** | **0.94** | **333** | | **Pn** | **00 16 10.6** | **-1.0** |
| **GANO** | **Gareloi North** | **1.43** | **60** | | **Pn** | **00 16 18.8** | **+0.5** |
| **GANE** | **Gareloi Northe** | **1.44** | **61** | | **Pn** | **00 16 18.3** | **-0.2** |
| **GAEA** | **Gareloi East** | **1.44** | **62** | | **Pn** | **00 16 18.7** | **+0.3** |
| **TANO** | **Tanaga North** | **1.85** | **64** | | **Pn** | **00 16 24.4** | **+0.4** |
| **TASE** | **Tanaga Southea** | **1.87** | **67** | | **Pn** | **00 16 24.7** | **+0.4** |
| **TAFP** | **Tanaga Falls P** | **1.92** | **65** | | **Pn** | **00 16 24.9** | **-0.2** |
| **KIMD** | **Kanaga Island** | **2.32** | **73** | | **Pn** | **00 16 30.6** | **+0.1** |
| **KIWB** | **Kanaga Island** | **2.39** | **71** | Pn | **Pn** | **00 16 32.1** | **+0.6** |
| **ADK** | **Adak** | **2.68** | **72** | Pn | **Pn** | **00 16 36.0** | **+0.6** |
| **ADK** | **Adak** | **2.68** | **72** | P | **Pn** | **00 16 36.0** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **3.03** | **71** | | **Pn** | **00 16 41.2** | **+1.0** |
| **GSMY** | **Great Sitkin M** | **3.10** | **71** | | **Pn** | **00 16 41.7** | **+0.5** |
| **GSTR** | **Great Sitkin T** | **3.11** | **70** | Pn | **Pn** | **00 16 41.0** | **-0.4** |
| **SHEM** | **Shemya Is, Ala** | **3.54** | **299** | Pn | **Pn** | **00 16 48.6** | **+1.4** |
| | 11nm,0.3s,baz=133,slow=2.1,SNR=9.6 | | | | | | |
| SHEM | | | | Sn | **Sn** | **00 17 33.4** | **+5.7** |
| | 8.4nm,0.3s,baz=287,slow=19,SNR=1.4 | | | | | | |
| SHEM | | | | LR | LR | 00 18 08.7 | |
| | comp=Z,498nm,19.8s,baz=138,slow=40 | | | | | | |
| **KOKL** | **Mount Kliuchef** | **4.27** | **71** | | **Pn** | **00 16 57.6** | **+0.2** |
| **CLES** | **Cleveland East** | **6.95** | **72** | Pn | **Pn** | **00 17 34.9** | **+0.9** |
| **NIKH** | **Nikolski High** | **7.59** | **71** | | **Pn** | **00 17 44.0** | **+1.1** |
| **CNBA** | **Chernabura Isl** | **13.29** | **66** | Pn | **Pn** | **00 18 59.0** | **-1.1** |
| **PLK4** | **Peulik 4** | **15.60** | **56** | Pn | **Pn** | **00 19 32.9** | **+1.3** |
| **M17K** | **Holitna River** | **16.45** | **42** | P | **P** | **00 19 45.2** | **+0.5** |
| M17K | | | | lAmb | lAmb | 00 20 09.8 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **SII** | **Sitkinak Islan** | **16.56** | **61** | Pn | **Pn** | **00 19 44.3** | **+0.5** |
| **N18K** | **Kilae Creek** | **16.82** | **46** | Pn | **Pn** | **00 19 46.2** | **-0.8** |
| **KDAK** | **Kodiak Island** | **17.61** | **57** | P | **Pn** | **00 19 54.7** | **-2.1** |
| | comp=Z,0.9nm,0.3s,baz=310,slow=5.1,SNR=17 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **17.61** | **57** | *i* P | **Pn** | **00 19 55.1** | **-1.7** |
| **J18K** | **Innoko River** | **17.79** | **37** | | **P** | **00 20 00.7** | **+1.2** |
| **L19K** | **White Mountain** | **17.90** | **42** | P | **Pn** | **00 20 00.3** | **-0.1** |
| L19K | | | | lAmb | lAmb | 00 20 03.0 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **BILL** | **Bilibino** | **18.10** | **344** | *i* P | **P** | **00 20 04.3** | **+1.5** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,52nm,16.0s | | | | | | |
| **MA2** | **Magadan** | **18.11** | **309** | LR | LR | 00 26 35.1 | |
| | comp=Z,101nm,19.4s,baz=114,slow=36 | | | | | | |
| **MA2** | **Magadan** | **18.11** | **309** | *i* P | **Pn** | **00 20 02.5** | **-0.5** |
| **RSO** | **Redoubt South** | **18.19** | **48** | P | **Pn** | **00 20 05.8** | **+1.8** |
| **SEY** | **Seymchan** | **18.60** | **320** | *i* P | **Pn** | **00 20 09.5** | **+0.6** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **K20K** | **Telida** | **18.77** | **39** | | **Pn** | **00 20 11.2** | **+0.3** |
| **C16K** | **Lisburne Hills** | **18.77** | **18** | P | **Pn** | **00 20 11.2** | **+0.3** |
| C16K | | | | lAmb | lAmb | 00 20 17.5 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **J20K** | **Nowinta River** | **19.14** | **37** | P | **P** | **00 20 13.8** | **-0.4** |
| **SKT** | **Skwentna** | **19.26** | **44** | P | **Pn** | **00 20 16.9** | **+0.1** |
| SKT | | | | lAmb | lAmb | 00 20 25.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **G19K** | **Purcell Mounta** | **19.26** | **30** | P | **Pn** | **00 20 16.8** | **0.0** |
| **F19K** | **Shaleruckik Mo** | **19.51** | **28** | P | **P** | **00 20 18.6** | **+0.4** |
| F19K | | | | lAmb | lAmb | 00 20 20.4 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **C18K** | **Utukok River** | **19.95** | **21** | P | **Pn** | **00 20 24.4** | **-0.7** |
| C18K | | | | lAmb | lAmb | 00 20 25.7 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **20.09** | **27** | P | **P** | **00 20 25.6** | **+1.

comp=Z,32nm,19.1s,baz=298,slow=32
**RES Resolute Bay 40.48 24** LR LR 00 42 02.4
comp=Z,33nm,20.5s,baz=10.0,slow=39
**ULN Ulaanbaatar 45.23 295** *ce*P **P 00 24 07.8 -0.1**
ULN pmax pmax
comp=Z,2.0nm,1.0s
**SONM Songino Array 45.62 296** P **P 00 24 11.9 +0.9**
comp=Z,0.6nm,0.5s,baz=53,slow=9.9,SNR=6.2
SONM LR LR 00 45 04.8
comp=Z,47nm,18.0s,baz=86,slow=38
comp=Z,0.6nm,0.5s
**TIA Tai'an 45.94 276** P **P 00 24 10.3 -3.2**
TIA pmax pmax
comp=Z,5.0nm,0.8s
**PDAR Pinedale Array 47.58 71** P **P 00 24 26.5 0.0**
**PDAR Pinedale Array 47.58 71** P **P 00 24 27.1 +0.6**
comp=Z,2.8nm,0.9s,baz=303,slow=4.1,SNR=13
comp=Z,2.8nm,0.9s
**PFO Pinyon Flats O 49.04 85** LR LR 00 40 21.6
comp=Z,33nm,21.9s,baz=73,slow=30
**ZALV Zalesovo Beam 53.28 313** LR LR 00 49 31.8
comp=Z,43nm,18.3s,baz=121,slow=38
**ANMO Albuquerque 54.38 77** LR LR 00 48 04.4
comp=Z,28nm,18.4s,baz=28,slow=36
**KURK Kurchatov 58.27 313** *ce*P **P 00 25 44.5 -0.3**
KURK pmax pmax
comp=Z,5.0nm,1.3s
**KURBB Kurchatov Arra 58.38 313** P **P 00 25 45.7 +0.1**
comp=Z,2.1nm,0.7s,baz=44,slow=6.7,SNR=16
comp=Z,2.1nm,0.7s
**MK31 Makanchi Array 59.19 307** P **P 00 25 50.4 -1.0**
MK31 IAmb IAmb 00 26 24.1
comp=Z,2.0nm,1.1s
**MK31 Makanchi Array 59.19 307** P **P 00 25 50.4 -1.0**
MK31 pmax pmax
comp=Z,2.0nm,1.1s
**MKAR Makanchi Array 59.19 307** P **P 00 25 50.6 -0.8**
**MKAR Makanchi Array 59.19 307** P **P 00 25 50.9 -0.5**
comp=Z,0.8nm,0.6s,baz=49,slow=6.2,SNR=7.5
MKAR LR LR 00 52 06.3
comp=Z,40nm,19.6s,baz=80,slow=37
comp=Z,0.8nm,0.6s
**TXAR Lajitas Array 59.94 80** P **P 00 25 57.5 +0.7**
**TXAR Lajitas Array 59.94 80** P **P 00 25 57.3 +0.5**
comp=Z,0.3nm,0.8s,baz=335,slow=8.4,SNR=2.9
comp=Z,0.3nm,0.8s
**TXAR Lajitas Array 59.94 80** P **P 00 25 57.5 +0.7**
**BRVK Borovoye 60.27 319** *ce*P **P 00 25 59.4 +0.7**
BRVK pmax pmax
comp=Z,7.0nm,1.7s
**ARU Arti 62.14 327** LR LR 00 55 43.0
comp=Z,47nm,19.4s,baz=76,slow=38
**KIRV Kirov 63.23 333** LR LR 00 56 04.3
comp=Z,20nm,19.6s,baz=50,slow=38
**FINES FINESS Array B 65.73 346** P **P 00 26 33.0 -1.7**
comp=Z,1.5nm,0.9s,baz=359,slow=5.6,SNR=3.6
comp=Z,1.5nm,0.9s
**AAK Ala-Archa 66.04 309** *i* P **P 00 26 36.9 -0.4**
AAK pmax pmax
comp=Z,1.0nm,0.8s
**AKTO Aktyubinsk 67.14 324** LR LR 00 58 52.2
comp=Z,64nm,18.8s,baz=34,slow=38
**ABKAR Akbulak array 67.36 322** P **P 00 26 45.9 +0.5**
**ABKAR Akbulak array 67.36 322** P **P 00 26 45.6 +0.3**
ABKAR IAmb IAmb 00 26 47.1
comp=Z,4.3nm,1.1s
**KKAR Karatay Array 67.61 311** P **P 00 26 47.2 +0.1**
**KKAR Karatay Array 67.61 311** P **P 00 26 47.1 +0.1**
KKAR IAmb IAmb 00 26 49.3
comp=Z,2.9nm,1.0s
**KKAR Karatay Array 67.61 311** P **P 00 26 47.2 +0.1**
**KSH Kashi 67.63 305** P **P 00 26 51.7 +4.3**
KSH pmax pmax
comp=Z,3.0nm,1.0s
**NOA NORSAR Array B 67.76 354** P **P 00 26 46.9 -0.8**
comp=Z,1.3nm,1.0s,baz=10.0,slow=6.4,SNR=3.2
NOA LR LR 00 58 03.8
comp=Z,14nm,18.8s,baz=340,slow=37
comp=Z,1.3nm,1.0s
**EKA Eskdalemuir Ar 73.88 1** P **P 00 27 24.7 -0.2**
comp=Z,0.1nm,0.3s,baz=356,slow=5.1,SNR=4.0
comp=Z,0.1nm,0.3s
**RAR Rarotonga 74.37 160** LR LR 00 50 28.1
comp=Z,65nm,21.3s,baz=317,slow=28
**AKASG Malin Array Be 75.38 341** P **P 00 27 33.1 -0.5**
comp=Z,0.3nm,0.3s,baz=23,slow=6.6,SNR=3.4
AKASG LR LR 01 04 31.8
comp=Z,30nm,19.8s,baz=46,slow=39
comp=Z,0.3nm,0.3s
**KIV Kislovodsk 78.05 329** *e*P **P 00 27 48.3 -0.7**
KIV pmax pmax
comp=Z,3.0nm,1.1s
**SHA1 Shidzhatmaz 78.26 329** *i* P **P 00 27 52.0 +1.7**
**VRAC Vranov 78.84 348** LR LR 01 04 10.2
comp=Z,11nm,19.9s,baz=66,slow=37
**GNI Garni 80.76 326** LR LR 01 09 04.5
comp=Z,34nm,18.0s,baz=50,slow=40
**WRA Warramunga Arr 80.97 222** P **P 00 28 02.9 -2.0**
comp=Z,0.5nm,0.8s,baz=32,slow=6.3,SNR=5.2
comp=Z,0.5nm,0.8s
**ASAR Alice Springs 84.47 221** P **P 00 28 23.6 +0.6**
comp=Z,0.3nm,0.8s,baz=46,slow=4.0,SNR=2.3
comp=Z,0.3nm,0.8s
**BRTR Keskin Array B 84.63 334** P **P 00 28 24.4 +0.4**
comp=Z,0.6nm,0.8s,baz=176,slow=1.6,SNR=3.6
comp=Z,0.6nm,0.8s
**H03N2 Juan Fernandez 122.30 105** T T 02 49 07.5
baz=314,slow=77,SNR=20
**H03N1 Juan Fernandez 122.31 105** T T 02 49 10.8
baz=314,slow=77,SNR=17
**H03N3 Juan Fernandez 122.31 105** T T 02 49 08.3
baz=314,slow=77,SNR=23

**IDC 05 00:28:00.2±4.3, 4°.58S×147°.51E, h0km, mb3.5/1, mbtmp3.7/2, ML4.0/1, Error ellipse: s-maj=146.3km s-min=47.7km az=106.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **19.94** | **219** | P | P | 00 32 34.5 | +0.6 |
| | 0.5nm,0.3s,baz=43,slow=11,SNR=40 2.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **23.07** | **213** | P | P | 00 33 07.2 | -0.4 |
| | 1.2nm,0.6s,baz=46,slow=7.8,SNR=24 1.2nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.20** | **286** | PKPbc | PKPbc | 00 47 39.7 | -0.8 |
| | 0.7nm,1.0s,baz=58,slow=3.9,SNR=5.2 | | | | | | |

*IDC* ***05*** *00:43:47.1±0.8, 51°.25N×179°.20E, h0km, mb3.8/16, mbtmp3.8/17, ML4.3/1, MS3.1/11, Error ellipse: s-maj=25.8km s-min=14.9km az=172.0*
*NEIC* ***05*** *00:43:51.0±1.3, 51°.06N±0°.06×179°.16E±0°.08, h25km±6km, mb4.1/49, ML3.8(AEIC), Error ellipse: s-maj=9.6km s-min=6.5km az=201.0*
*AEIC* ***05*** *00:43:50.9±1.1, 51°.06N±0°.06×179°.13E±0°.08, h20km±6km, Error ellipse: s-maj=8.8km s-min=6.4km az=206.0*

**ISC 05 00:43:52.5±0.6, 51°.12N±0°.08×179°.20E±0°.04, h41km, n119, σ1s26/109, mb4.1/34, MS3.0/9, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.27** | **14** | | Pg | **Pn** | 00 43 58.5 | -2.0 |
| AMKA | | | | | | **Sn** | 00 44 03.8 | -2.3 |
| **CESW** | **Semis' Southwe** | **0.82** | **16** | | | **Pn** | 00 44 07.2 | -0.3 |
| **CERB** | **Semis' Cerberu** | **0.86** | **18** | | | **Pn** | 00 44 08.2 | +0.1 |
| CERB | | | | | | **Sn** | 00 44 20.8 | +1.3 |
| **CEPE** | **Semis' Perret** | **0.89** | **18** | | | **Pn** | 00 44 08.4 | -0.2 |
| **LSSE** | **Little Sitkin** | **0.91** | **334** | | | **Pn** | 00 44 08.2 | -0.6 |
| **CEAP** | **Semis' Anvil P** | **0.92** | **15** | | | **Pn** | 00 44 09.0 | +0.1 |
| **LSPA** | **Little Sitkin** | **0.93** | **335** | | | **Pn** | 00 44 08.5 | -0.6 |
| LSPA | | | | | | **Sn** | 00 44 23.0 | +1.8 |
| **LSNW** | **Little Sitkin** | **0.95** | **334** | | | **Pn** | 00 44 08.6 | -0.9 |
| **GANO** | **Gareloi North** | **1.43** | **60** | | | **Pn** | 00 44 16.4 | +0.4 |
| **GAEA** | **Gareloi East** | **1.45** | **62** | | | **Pn** | 00 44 16.6 | +0.4 |
| **GANE** | **Gareloi Northe** | **1.45** | **60** | | | **Pn** | 00 44 16.4 | +0.2 |
| **TANO** | **Tanaga North** | **1.85** | **63** | | | **Pn** | 00 44 22.8 | +1.0 |
| **TASE** | **Tanaga Southea** | **1.87** | **66** | | | **Pn** | 00 44 22.4 | +0.3 |
| **TAFP** | **Tanaga Falls P** | **1.93** | **65** | | | **Pn** | 00 44 23.6 | +0.8 |
| **KIKV** | **Kanaga Island** | **2.39** | **70** | | | **Pn** | 00 44 29.8 | +0.6 |
| **KIWB** | **Kanaga Island** | **2.40** | **71** | | | **Pn** | 00 44 29.4 | +0.2 |
| **KIRH** | **Kanaga Island** | **2.44** | **70** | | | **Pn** | 00 44 31.0 | +1.1 |
| **ADK** | **Adak** | **2.69** | **72** | | | **Pn** | 00 44 33.7 | +0.6 |
| **ADK** | **Adak** | **2.69** | **72** | | | **Sn** | 00 45 05.7 | +1.3 |
| **GSCK** | **Great Sitkin C** | **3.03** | **71** | | | **Pn** | 00 44 38.5 | +0.6 |
| **GSMY** | **Great Sitkin M** | **3.10** | **71** | | | **Pn** | 00 44 39.8 | +0.9 |
| **SHEM** | **Shemya Is, Ala** | **3.55** | **299** | Pn | | **Pn** | 00 44 45.8 | +0.9 |
| | 17nm,0.3s,baz=34,slow=5.7,SNR=15 | | | | | | | |
| SHEM | | | | | Sn | **Sn** | 00 45 29.3 | +3.7 |
| | 7.6nm,0.3s,baz=285,slow=20,SNR=1.7 | | | | | | | |
| SHEM | | | | | LR | LR | 00 46 06.2 | |
| | comp=Z,322nm,19.0s,baz=130,slow=40 | | | | | | | |
| **LVA** | **Lava Point** | **9.48** | **66** | Pn | | **Pn** | 00 46 07.8 | +1.4 |
| **CNBA** | **Chernabura Isl** | **13.30** | **66** | Pn | | **Pn** | 00 46 57.2 | -1.2 |
| **N15K** | **Kwethluk River** | **14.73** | **44** | Pn | | **Pn** | 00 47 20.4 | +2.5 |
| **N17K** | **Nushagak Hills** | **16.18** | **45** | Pn | | **Pn** | 00 47 37.9 | +1.2 |
| **O18K** | **Koktuh Hills** | **16.84** | **49** | P | | **Pn** | 00 47 46.0 | +1.0 |
| O18K | | | | | IAmb | IAmb | 00 47 54.3 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **J17K** | **VABM Dome** | **16.89** | **35** | | | **P** | 00 47 47.5 | +0.4 |
| **OHAK** | **Old Harbor** | **17.15** | **58** | Pn | | **Pn** | 00 47 47.2 | -1.6 |
| OHAK | | | | | IAmb | IAmb | 00 48 26.4 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **G16K** | **Koyuk River** | **17.18** | **27** | | | **P** | 00 47 51.1 | +0.8 |
| G16K | | | | | IAmb | IAmb | 00 47 53.3 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **KDAK** | **Kodiak Island** | **17.62** | **57** | Pn | | **Pn** | 00 47 51.7 | -2.8 |
| KDAK | | | | | IAmb | IAmb | 00 48 02.9 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **KDAK** | **Kodiak Island** | **17.62** | **57** | Pn | | **Pn** | 00 47 51.3 | -3.3 |
| | comp=Z,1.0nm,0.3s,baz=327,slow=6.4,SNR=18 comp=Z,4.0nm,0.5s | | | | | | | |
| **MA2** | **Magadan** | **18.12** | **309** | LR | LR | | 00 54 42.4 | |
| | comp=Z,56nm,18.2s,baz=130,slow=36 | | | | | | | |
| **RSO** | **Redoubt South** | **18.20** | **48** | P | | **P** | 00 48 01.1 | -0.7 |
| **H18K** | **Honhosa River** | **18.23** | **31** | | | **Pn** | 00 48 02.7 | +0.7 |
| **J19K** | **Poorman** | **18.50** | **36** | P | | **P** | 00 48 04.8 | 0.0 |
| **G18K** | **Tagagawik** | **18.62** | **29** | P | | **P** | 00 48 06.5 | +0.3 |
| **SPU** | **Mount Spurr** | **18.75** | **46** | P | | **P** | 00 48 08.3 | +0.6 |
| **C16K** | **Lisburne Hills** | **18.79** | **18** | P | | **Pn** | 00 48 09.3 | +0.6 |
| C16K | | | | | IAmb | IAmb | 00 48 47.8 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **J20K** | **Nowinta River** | **19.15** | **37** | | | **P** | 00 48 12.7 | +0.7 |
| **SKT** | **Skwentna** | **19.27** | **44** | | | **P** | 00 48 14.3 | +1.0 |
| **G19K** | **Purcell Mounta** | **19.27** | **30** | | | **Pn** | 00 48 14.7 | +0.1 |
| G19K | | | | | IAmb | IAmb | 00 48 19.7 | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **19.52** | **28** | | | **P** | 00 48 16.9 | +0.9 |
| **C18K** | **Utukok River** | **19.97** | **21** | P | | **P** | 00 48 22.2 | +1.2 |
| C18K | | | | | IAmb | IAmb | 00 48 26.8 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **E19K** | **Redstone River** | **20.10** | **27** | | | **P** | 00 48 23.6 | +1.3 |
| **KTH** | **Kantishna Hill** | **20.13** | **40** | P | | **P** | 00 48 23.4 | +0.6 |
| **IMAR** | **Indian Mountai** | **20.26** | **33** | P | | **P** | 00 48 24.8 | +0.7 |
| **BPAW** | **Bear Paw Mtn.** | **20.34** | **39** | | | **P** | 00 48 25.7 | +0.7 |
| BPAW | | | | | IAmb | IAmb | 00 48 28.2 | |
| | comp=Z,9.8nm,1.2s | | | | | | | |
| **H21K** | **Melozitna Rive** | **20.41** | **34** | P | | **P** | 00 48 26.5 | +0.8 |
| H21K | | | | | IAmb | IAmb | 00 48 28.0 | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **D19K** | **Kuna River** | **20.60** | **24** | P | | **P** | 00 48 28.5 | +0.8 |
| D19K | | | | | IAmb | IAmb | 00 48 29.6 | |
| | comp=Z,8.2nm,0.7s | | | | | | | |
| **G21K** | **Allakaket** | **20.65** | **31** | P | | **P** | 00 48 28.8 | +0.5 |
| G21K | | | | | IAmb | IAmb | 00 48 30.4 | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **C19K** | **Lookout Ridge** | **20.69** | **22** | P | | **P** | 00 48 29.6 | +0.8 |
| C19K | | | | | IAmb | IAmb | 00 48 34.4 | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **RND** | **Reindeer** | **20.93** | **42** | P | | **P** | 00 48 32.7 | +1.3 |
| **F21K** | **Alatna River** | **21.07** | **30** | P | | **P** | 00 48 33.7 | +0.9 |
| **NEA2** | **Nenana** | **21.30** | **39** | P | | **P** | 00 48 35.7 | +0.4 |
| NEA2 | | | | | IAmb | IAmb | 00 48 36.6 | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **DHY** | **Denali Highway** | **21.45** | **43** | P | | **P** | 00 48 37.4 | +0.3 |
| DHY | | | | | IAmb | IAmb | 00 48 40.6 | |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **E21K** | **Killik River** | **21.68** | **27** | P | | **P** | 00 48 40.0 | +0.7 |
| E21K | | | | | IAmb | IAmb | 00 48 43.1 | |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| **MDM** | **Murphy Dome** | **21.78** | **38** | P | | **P** | 00 48 40.4 | -0.1 |
| MDM | | | | | IAmb | IAmb | 00 48 42.7 | |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| **G23K** | **Bananza Creek** | **21.93** | **33** | P | | **P** | 00 48 42.4 | +0.4 |
| G23K | | | | | IAmb | IAmb | 00 48 45.0 | |
| | comp=Z,8.6nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **22.24** | **39** | P | | **P** | 00 48 43.2 | -2.1 |
| | comp=Z,0.5nm,0.5s,baz=245,slow=9.3,SNR=11 | | | | | | | |
| ILAR | | | | | LR | LR | 00 58 11.5 | |
| | comp=Z,35nm,19.0s,baz=159,slow=39 comp=Z,0.5nm,0.5s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **22.29** | **24** | P | | **P** | 00 48 45.8 | 0.0 |
| B21K | | | | | IAmb | IAmb | 00 48 56.6 | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **D22K** | **Ayikyak River** | **22.32** | **27** | P | | **P** | 00 48 46.3 | +0.1 |
| D22K | | | | | IAmb | IAmb | 00 48 49.2 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **22.81** | **34** | P | | **P** | 00 48 51.9 | +0.5 |
| **F24K** | **Squaw Lake** | **23.05** | **32** | P | | **P** | 00 48 54.4 | +0.5 |
| **TOLK** | **Toolik Lake Re** | **23.10** | **29** | P | | **P** | 00 48 54.0 | -0.3 |
| TOLK | | | | | IAmb | IAmb | 00 48 55.0 | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| **SCRK** | **Sand Creek** | **23.17** | **42** | P | | **P** | 00 48 53.7 | -1.5 |
| **FYU** | **Fort Yukon** | **23.56** | **36** | P | | **P** | 00 48 58.5 | -0.3 |
| **BMAR** | **Burnt Mountain** | **24.15** | **34** | P | | **P** | 00 49 04.5 | +0.2 |
| **D25K** | **Kavik River** | **24.44** | **29** | P | | **P** | 00 49 07.3 | +0.3 |
| D25K | | | | | IAmb | IAmb | 00 49 21.7 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **EGAK** | **Eagle** | **24.57** | **41** | P | | **P** | 00 49 08.1 | 0.0 |
| EGAK | | | | | IAmb | IAmb | 00 49 09.4 | |
| | comp=Z,9.4nm,1.2s | | | | | | | |
| **DAWY** | **Dawson** | **25.16** | **43** | P | | **P** | 00 49 14.3 | +0.7 |
| **F28M** | **Old Crow** | **25.90** | **35** | P | | **P** | 00 49 20.7 | +0.5 |
| F28M | | | | | IAmb | IAmb | 00 49 36.3 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **30.04** | **285** | LR | | LR | 01 01 50.0 | |
| | comp=Z,15nm,20.8s,baz=78,slow=36 | | | | | | | |
| **TIXI** | **Tiksi** | **30.25** | **331** | LR | | LR | 01 02 40.0 | |
| | comp=Z,47nm,18.3s,baz=167,slow=38 | | | | | | | |
| **A36M** | **Sachs Harbour** | **31.92** | **29** | P | | **P** | 00 50 13.7 | +0.1 |
| **MJAR** | **Matsushiro Arr** | **32.50** | **259** | LR | | LR | 01 01 21.4 | |
| | comp=Z,33nm,21.4s,baz=66,slow=32 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.79** | **202** | T | | T | 01 25 27.8 | |
| | baz=9.5,slow=76,SNR=33 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.80** | **202** | T | | T | 01 25 28.8 | |
| | baz=9.5,slow=76,SNR=31 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **32.81** | **202** | T | | T | 01 25 29.5 | |
| | baz=9.5,slow=76,SNR=29 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.02** | **202** | T | | T | 01 27 03.4 | |
| | baz=19,slow=76,SNR=26 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.03** | **202** | T | | T | 01 27 04.2 | |
| | baz=19,slow=76,SNR=21 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.03** | **202** | T | | T | 01 27 04.5 | |
| | baz=19,slow=76,SNR=15 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.32** | **46** | P | | **P** | 00 50 50.9 | -0.9 |
| | comp=Z,0.5nm,0.6s,baz=282,slow=8.3,SNR=4.5 comp=Z,0.5nm,0.6s | | | | | | | |
| **CN2** | **Changchun** | **36.36** | **280** | P | | **P** | 00 50 50.3 | -2.0 |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **LON** | **Longmire** | **38.10** | **73** | P | | **P** | 00 51 08.3 | +1.2 |
| LON | | | | | IAmb | IAmb | 00 51 10.1 | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **KSRS** | **Korea Array** | **38.38** | **270** | P | | **P** | 00 51 11.8 | +2.3 |
| | comp=Z,0.5nm,0.5s,baz=85,slow=6.0,SNR=4.5 | | | | | | | |
| KSRS | | | | | LR | LR | 01 07 36.7 | |
| | comp=Z,7.9nm,18.7s,baz=30,slow=37 comp=Z,0.5nm,0.5s | | | | | | | |
| **BPMT** | **Black Pine Rid** | **43.23** | **69** | P | | **P** | 00 51 50.1 | +0.4 |
| **LYMT** | **Lyon Mountain** | **43.63** | **67** | P | | **P** | 00 51 52.9 | 0.0 |
| **HLID** | **Hailey** | **44.22** | **73** | P | | **P** | 00 51 58.0 | +0.4 |
| HLID | | | | | IAmb | IAmb | 00 51 59.1 | |
| | comp=Z,3.1nm,1.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **44.83** | **81** | P | | **P** | 00 52 04.5 | +1.9 |
| | comp=Z,0.7nm,0.8s,baz=301,slow=7.0,SNR=3.0 comp=Z,0.7nm,0.8s | | | | | | | |
| **ELK** | **Elko** | **45.34** | **77** | LR | | LR | 01 08 47.7 | |
| | comp=Z,16nm,19.1s,baz=276,slow=33 | | | | | | | |
| **SONM** | **Songino Array** | **45.63** | **296** | P | | **P** | 00 52 09.9 | +1.2 |
| | comp=Z,0.8nm,0.6s,baz=76,slow=9.1,SNR=5.1 comp=Z,0.8nm,0.6s | | | | | | | |
| **TIA** | **Tai'an** | **45.94** | **276** | P | | **P** | 00 52 08.5 | -2.7 |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **46.55** | **285** | *e*P | | **P** | 00 52 14.8 | -1.2 |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **47.15** | **76** | P | | **P** | 00 52 21.9 | +1.1 |
| **PDAR** | **Pinedale Array** | **47.58** | **71** | P | | **P** | 00 52 25.1 | +0.9 |
| | comp=Z,2.0nm,0.6s,baz=309,slow=3.1,SNR=26 comp=Z,2.0nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.29** | **313** | P | | **P** | 00 53 06.3 | -0.5 |
| | comp=Z,0.6nm,0.5s,baz=51,slow=7.2,SNR=2.8 | | | | | | | |
| ZALV | | | | PcP | | **PcP** | 00 54 13.3 | -0.6 |
| | comp=Z,0.4nm,0.5s,baz=20,slow=4.6,SNR=2.6 comp=Z,0.6nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.39** | **313** | P | | **P** | 00 53 43.5 | +0.2 |
| | comp=Z,2.7nm,0.6s,baz=46,slow=6.7,SNR=15 comp=Z,2.7nm,0.6s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.20** | **307** | P | | **P** | 00 53 48.5 | -0.6 |
| **MKAR** | **Makanchi Array** | **59.20** | **307** | P | | **P** | 00 53 48.8 | -0.4 |
| | comp=Z,1.2nm,0.5s,baz=49,slow=5.5,SNR=18 comp=Z,1.2nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **59.94** | **80** | P | | **P** | 00 53 55.5 | +1.0 |
| | comp=Z,0.3nm,0.7s,baz=308,slow=5.3,SNR=4.5 comp=Z,0.3nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **60.29** | **319** | P | | **P** | 00 53 57.1 | +0.7 |
| **PZH** | **PanZhiHua** | **62.14** | **278** | P | | **P** | 00 54 05.7 | -3.8 |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,140nm,5.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.75** | **346** | P | | **P** | 00 54 30.8 | -1.7 |
| | comp=Z,0.8nm,0.8s,baz=36,slow=7.3,SNR=1.2 | | | | | | | |
| FINES | | | | | LR | LR | 01 26 37.7 | |
| | comp=Z,14nm,18.1s,baz=13,slow=39 comp=Z,0.8nm,0.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **67.16** | **324** | P | | **P** | 00 54 42.8 | +1.0 |
| | comp=Z,4.5nm,0.5s,baz=48,slow=6.0,SNR=10 | | | | | | | |
| AKTO | | | | | LR | LR | 01 26 20.1 | |
| | comp=Z,42nm,19.6s,baz=59,slow=38 comp=Z,4.5nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **67.38** | **322** | P | | **P** | 00 54 43.6 | +0.5 |
| **ABKAR** | **Akbulak array** | **67.38** | **322** | P | | **P** | 00 54 43.5 | +0.5 |
| ABKAR | | | | | IAmb | IAmb | 00 54 44.9 | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **KKAR** | **Karatay Array** | **67.62** | **311** | P | | **P** | 00 54 45.3 | +0.5 |
| **KKAR** | **Karatay Array** | **67.62** | **311** | P | | **P** | 00 54 45.4 | +0.5 |
| KKAR | | | | | IAmb | IAmb | 00 54 46.2 | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **67.64** | **305** | P | | **P** | 00 54 49.7 | +4.6 |
| KSH | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.78** | **354** | P | | **P** | 00 54 44.6 | -0.9 |
| | comp=Z,0.7nm,0.7s,baz=0.9,slow=5.6,SNR=3.8 comp=Z,0.7nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.39** | **341** | LR | | LR | 01 31 49.3 | |
| | comp=Z,21nm,19.5s,baz=52,slow=38 | | | | | | | |
| **WRA** | **Warramunga Arr** | **80.96** | **222** | P | | **P** | 00 56 02.5 | -0.1 |
| | comp=Z,0.4nm,0.6s,baz=32,slow=6.0,SNR=6.4 comp=Z,0.4nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **84.45** | **221** | P | | **P** | 00 56 21.4 | +0.8 |
| | comp=Z,0.4nm,0.7s,baz=22,slow=4.4,SNR=4.3 comp=Z,0.4nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **84.64** | **334** | P | | **P** | 00 56 22.2 | +0.5 |
| | comp=Z,0.7nm,0.7s,baz=56,slow=2.5,SNR=4.6 comp=Z,0.7nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.97** | **357** | PKP | | **PKiKP** | 01 02 30.1 | -0.9 |
| | comp=Z,0.2nm,0.6s,baz=345,slow=2.4,SNR=1.4 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **122.29** | **105** | T | | T | 03 16 59.4 | |
| | baz=305,slow=77,SNR=20 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **122.30** | **105** | T | | T | 03 17 00.6 | |
| | baz=305,slow=77,SNR=23 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **122.31** | **105** | T | | T | 03 17 04.0 | |
| | baz=305,slow=77,SNR=24 | | | | | | | |

*DNK* ***05*** *00:59:56.1±2.6, 80°.77N×2°.08W, h40km±41km, ML1.1*
**BER 05 00:59:55.3±2.8, 80°.70N×2°.24W, h10km, mb(Pn)2.4, ML1.1** (DNK), **Confirmed Earthquake, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOR** | **Nord** | **2.41** | **299** | *i* P | Pn | 01 00 32.1 | -2.5 |
| NOR | | | | IAML | | 01 01 02.4 | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **NOR** | **Nord** | **2.41** | **299** | *i* P | Pn | 01 00 32.1 | -2.5 |
| NOR | | | | IAML | | 01 01 02.4 | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **3.08** | **118** | *e*P | Pn | 01 00 42.5 | -1.4 |
| KBS | | | | *e*S | Sn | 01 01 15.1 | -5.5 |
| KBS | | | | IAML | | 01 01 19.1 | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **3.08** | **118** | *i* P | Pn | 01 00 42.4 | -1.4 |
| KBS | | | | *i* S | Sn | 01 01 15.1 | -5.5 |
| **BRBB** | **Barentsburg B** | **3.99** | **122** | *e*P | Pn | 01 00 56.7 | +0.3 |
| BRBB | | | | *e*S | Sn | 01 01 38.8 | -4.4 |
| **DAG** | **Danmarks Havn** | **5.07** | **227** | *e* | Pn | 01 01 08.1 | -3.0 |
| | baz=43,slow=16 | | | | | | |
| DAG | | | | *i* P | Pb | 01 01 09.2 | -15 |
| DAG | | | | *i* S | Sn | 01 02 03.6 | -5.9 |
| DAG | | | | IAML | | 01 02 06.2 | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **DAG** | **Danmarks Havn** | **5.07** | **227** | *e* | Pn | 01 01 08.1 | -3.0 |
| | baz=43,slow=16 | | | | | | |
| DAG | | | | *i* P | Pb | 01 01 09.2 | -15 |
| DAG | | | | *i* S | Sn | 01 02 03.6 | -5.9 |
| DAG | | | | IAML | | 01 02 06.2 | |
| | comp=Z,1.5nm,0.4s | | | | | | |

*IDC* ***05*** *01:26:01.6±6.4, 37°.91N×75°.59E, h61km±50km, mb3.3/8, mbtmp3.6/11, ML3.2/2, MS3.0/2, Error ellipse: s-maj=52.6km s-min=27.8km az=173.0*
*SOME* ***05*** *01:26:03.1, 38°.70N×74°.67E, h10km*
*NNC* ***05*** *01:26:07.3±3.4, 38°.53N×75°.76E, h0km, mb4.1, mpv3.7, Error ellipse: s-maj=25.9km s-min=19.0km az=1.0*

**ISC 05 01:26:02.3±1.2, 38°.68N±0°.07×74°.72E±0°.06, h10km, n30, σ2s48/36, mb3.7/8, 10C-7D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **3.53** | **348** | P | | **Pg** | 01 27 09.8 | -0.1 |
| | SNR=52 | | | | | | | |
| **UCH** | **Uchtor** | **3.54** | **358** | P | | **Pg** | 01 27 08.7 | -1.5 |
| | SNR=46 | | | | | | | |
| **ULHL** | **Ulahol** | **3.74** | **18** | P | | **Pb** | 01 27 07.8 | -0.8 |
| | SNR=25 | | | | | | | |
| **AAK** | **Ala-Archa** | **3.95** | **358** | P | | **Pb** | 01 27 14.6 | +2.4 |
| | SNR=14 | | | | | | | |
| **AAK** | **Ala-Archa** | **3.95** | **358** | P | | **Pb** | 01 27 15.1 | +3.0 |
| | 14nm,0.4s,baz=161,slow=6.4,SNR=27 | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TNSS | | | | *e*S | | **Sg** | **01 28 28.5** | **-3.6** |
| | 5.1nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **4.81** | **21** | ⇓Pg | | **Pg** | **01 27 31.9** | **-2.6** |
| | 10.0nm,0.5s | | | | | | | |
| **KK31** | **Karatay Array** | **5.45** | **326** | ⇓Pn | | **Pb** | **01 27 36.0** | **-1.4** |
| | 1.1nm,0.3s,baz=129,slow=12,SNR=75 | | | | | | | |
| KK31 | | | | ⇑Sn | | **Sb** | **01 28 46.1** | **+3.2** |
| | 6.5nm,0.6s,baz=136,slow=22,SNR=9.8 | | | | | | | |
| **PDGK** | **Podgornoye** | **5.88** | **36** | ⇓Pn | | **Pn** | **01 27 30.6** | **+1.0** |
| | 8.7nm,0.5s | | | | | | | |
| PDGK | | | | ⇑Pg | | **Pb** | **01 27 46.4** | **+1.5** |
| | 10nm,0.8s | | | | | | | |
| PDGK | | | | ⇑Sn | | **Sn** | **01 28 35.7** | **-1.3** |
| | 16nm,1.0s | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 01 29 04.0 | |
| | 18nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.83** | **32** | P | | **Pn** | **01 28 25.2** | **+1.5** |
| | 0.4nm,0.3s,baz=202,slow=14,SNR=13 | | | | | | | |
| | 0.8nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.24** | **12** | P | | **Pn** | **01 29 00.2** | **+3.6** |
| | 0.1nm,0.3s,baz=187,slow=11,SNR=2.6 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.76** | **21** | P | | **Pn** | **01 29 58.0** | **+1.1** |
| | 1.7nm,0.5s,baz=219,slow=12,SNR=4.7 | | | | | | | |
| ZALV | | | | LR | | LR | 01 37 23.7 | |
| | comp=Z,22nm,18.1s,baz=88,slow=40 | | | | | | | |
| **SONM** | **Songino Array** | **24.67** | **58** | P | | P | 01 31 15.9 | -7.4 |
| | 0.9nm,0.4s,baz=251,slow=11,SNR=5.6 | | | | | | | |
| | 0.9nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **37.40** | **324** | P | | **P** | **01 33 17.1** | **+2.1** |
| | 0.6nm,0.4s,baz=115,slow=9.4,SNR=12 | | | | | | | |
| | 0.6nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.31** | **336** | P | | **P** | **01 33 41.0** | **+1.7** |
| | 1.7nm,0.9s,baz=106,slow=9.5,SNR=1.0 | | | | | | | |
| | 1.7nm,0.9s | | | | | | | |
| **KLR** | **Kul'dur** | **41.48** | **56** | LR | | LR | 01 51 05.8 | |
| | comp=Z,32nm,18.6s,baz=312,slow=36 | | | | | | | |
| **HFS** | **Hagfors** | **43.23** | **320** | P | | **P** | **01 34 05.3** | **+2.0** |
| | 1.7nm,0.8s,baz=99,slow=8.9,SNR=6.5 | | | | | | | |
| | 1.7nm,0.8s | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.46** | **322** | P | | **P** | **01 34 14.3** | **+1.0** |
| | 0.3nm,0.7s,baz=111,slow=6.2,SNR=1.2 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **ESDC** | **Sonseca Array** | **59.05** | **298** | P | | **P** | **01 36 01.4** | **-1.1** |
| | 0.1nm,0.5s,baz=62,slow=7.5,SNR=4.3 | | | | | | | |
| | 0.1nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.70** | **270** | P | | **P** | **01 37 03.5** | **-2.9** |
| | 0.2nm,0.3s,baz=52,slow=6.0,SNR=8.4 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.89** | **4** | P | | P | 01 38 00.8 | -4.5 |
| | 0.3nm,0.5s,baz=347,slow=6.3,SNR=4.3 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |

**KRSC 05 01:41:16.0±1.0, 54.13N×161.63E, *h*41km±15km, MI4.0,**
**Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MKZ** | **Mys Kozlova** | **0.43** | **8** | *e*P | | Pn | 01 41 26.7 | +0.9 |
| MKZ | | | | *e*S | | Sn | 01 41 33.7 | +1.0 |
| **KII** | **Karymskiy** | **1.29** | **267** | *e*P | | Pn | 01 41 38.9 | +1.3 |
| KII | | | | *e*S | | Sn | 01 41 55.3 | +1.7 |
| **TUMD** | **Tumrok D** | **1.29** | **327** | *e*P | | Pn | 01 41 38.2 | +0.6 |
| TUMD | | | | *e*S | | Sn | 01 41 54.1 | +0.5 |
| **SPN** | **Mys Shipunski** | **1.41** | **223** | *e*P | | Pn | 01 41 40.1 | +1.0 |
| SPN | | | | *e*S | | Sn | 01 41 57.2 | +0.7 |
| **TUMR** | **Tumrok** | **1.44** | **324** | *e*P | | Pn | 01 41 41.1 | +1.5 |
| **NLC** | **Nalytchevo** | **1.67** | **236** | *e*P | | Pn | 01 41 44.2 | +1.6 |
| NLC | | | | *e*S | | Sn | 01 42 04.4 | +1.7 |
| **KMNR** | **Kamenistaya** | **1.81** | **334** | *e*P | | Pn | 01 41 47.0 | +2.2 |
| KMNR | | | | *e*S | | Sn | 01 42 10.6 | +4.0 |
| **BZGR** | **Bezymyannyi-Gr** | **1.89** | **344** | *e*P | | Pn | 01 41 47.6 | +1.7 |
| **SMAR** | **Somma** | **1.89** | **244** | *e*P | | Pn | 01 41 48.4 | +2.4 |
| SMAR | | | | *e*S | | Sn | 01 42 11.7 | +3.0 |
| **KRER** | **Koryakskii** | **1.90** | **245** | *e*P | | Pn | 01 41 48.8 | +2.7 |
| KRER | | | | *e*S | | Sn | 01 42 12.2 | +3.3 |
| **BZMR** | **Bezymyannaya** | **1.92** | **341** | *e*P | | Pn | 01 41 48.2 | +1.9 |
| **AVH** | **Avacha** | **1.93** | **244** | *e*P | | Pn | 01 41 49.4 | +3.1 |
| AVH | | | | *e*S | | Sn | 01 42 12.9 | +3.6 |
| **KRX** | **Arik** | **1.93** | **248** | *e*P | | Pn | 01 41 48.8 | +2.4 |
| KRX | | | | *e*S | | Sn | 01 42 12.3 | +2.7 |
| **KOK** | **Koryaka** | **1.97** | **246** | *e*P | | Pn | 01 41 49.5 | +2.6 |
| **KIRR** | **Kirishev** | **1.97** | **338** | *e*P | | Pn | 01 41 49.1 | +2.1 |
| **KPT** | **Kopyto** | **2.01** | **337** | *e*P | | Pn | 01 41 49.6 | +2.2 |
| **DALK** | **Dalny** | **2.04** | **238** | *e*P | | Pn | 01 41 49.8 | +2.0 |
| **PET** | **Petropavlovsk** | **2.09** | **239** | *e*P | | Pn | 01 41 50.8 | +2.3 |
| PET | | | | *e*S | | Sn | 01 42 15.8 | +2.5 |
| **KOZ** | **Kozyrevsk** | **2.18** | **333** | *e*P | | Pn | 01 41 52.0 | +2.2 |
| **KBTR** | **Krutoberegovo** | **2.19** | **18** | *e*P | | Pn | 01 41 54.1 | +4.2 |
| **GNL** | **Ganaly** | **2.22** | **260** | *e*P | | Pn | 01 41 52.9 | +2.5 |
| **SRDR** | **Sredinnyy** | **2.45** | **334** | *e*P | | Pn | 01 41 55.1 | +1.7 |
| **ESO** | **Esso** | **2.46** | **318** | *e*P | | Pn | 01 41 55.4 | +1.7 |
| **KRMR** | **Karymshinskiy** | **2.46** | **239** | *e*P | | Pn | 01 41 56.3 | +2.7 |
| KRMR | | | | *e*S | | Sn | 01 42 26.4 | +3.9 |
| **MTVR** | **Mutnovka** | **2.65** | **233** | *e*P | | Pn | 01 41 58.6 | +2.3 |
| MTVR | | | | *e*S | | Sn | 01 42 29.8 | +2.6 |
| **GRL** | **Gorelyy** | **2.65** | **235** | *e*P | | Pn | 01 41 59.2 | +2.8 |
| **ASAK** | **Asacha** | **2.84** | **233** | *e*P | | Pn | 01 42 02.8 | +3.8 |
| **APC** | **Apacha** | **2.93** | **247** | *e*P | | Pn | 01 42 03.3 | +3.3 |
| **KDTR** | **Khodutka, Kamc** | **3.17** | **224** | *e*P | | Pn | 01 42 06.2 | +3.0 |

**IDC 05 02:01:39.4±1.8, 6.75S×129.57E, h0km, mb3.7/2,**
**mbtmp3.7/4, ML3.9/2, Error ellipse: s-maj=109.9km**
**s-min=29.6km az=69.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.91** | **161** | Pn | | Pn | 02 04 57.0 | -1.0 |
| | 0.6nm,0.3s,baz=340,slow=14,SNR=34 | | | | | | | |
| WRA | | | | Sn | | Sn | 02 07 19.5 | -14 |
| | 1.6nm,0.3s,baz=331,slow=22,SNR=9.4 | | | | | | | |
| | 0.8nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **17.33** | **167** | P | | P | 02 05 43.8 | -0.7 |
| | 0.4nm,0.3s,baz=343,slow=9.8,SNR=18 | | | | | | | |
| ASAR | | | | S | | Sn | 02 08 44.9 | -12 |
| | 1.0nm,0.6s,baz=349,slow=26,SNR=6.7 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.78** | **327** | P | | P | 02 12 39.6 | +0.4 |
| | 0.5nm,0.4s,baz=119,slow=8.2,SNR=9.3 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.07** | **329** | P | | P | 02 13 04.8 | -0.7 |
| | 0.2nm,0.3s,baz=125,slow=5.0,SNR=2.2 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |

*IDC **05** 02:07:08.6±1.1, 53.52N×164.37W, h0km, mb4.0/17, mbtmp3.9/19, ML3.3/2, Error ellipse: s-maj=29.1km s-min=16.2km az=180.0*

*NEIC **05** 02:07:09.5±1.2, 53.30N±0.04×164.20W±0.05, h10km±2km, mb3.8/16, ML3.8/8, ML3.6(AEIC), Error ellipse: s-maj=6.8km s-min=5.6km az=172.0*

*AEIC **05** 02:07:09.5±1.4, 53.28N±0.06×164.18W±0.08, h10km±6km, Error ellipse: s-maj=9.8km s-min=6.6km az=158.0*

**ISC 05 02:07:12.0±0.7, 53.37N±0.08×164.18W±0.04, h26km, n89,**
**σ1s14/87, mb4.1/24, Unimak Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WESE** | **West Dahl East** | **1.13** | **348** | | | **Pn** | **02 07 31.0** | **-1.2** |
| **AKSA** | **Akutan Strait** | **1.18** | **311** | | | **Pn** | **02 07 31.4** | **-1.4** |
| AKSA | | | | | | **Sn** | **02 07 48.5** | **+0.5** |
| **WECS** | **Westdahl Cape** | **1.22** | **343** | | | **Pn** | **02 07 32.3** | **-1.0** |
| **WEBT** | **Westdahl Beart** | **1.27** | **345** | | | **Pn** | **02 07 33.9** | **-0.2** |
| **AKLV** | **Akutan Long Va** | **1.32** | **308** | | | **Pn** | **02 07 34.0** | **-0.8** |
| AKLV | | | | | | **Sb** | **02 07 52.5** | **-0.1** |
| **SSLS** | **Shishaldin Sou** | **1.35** | **5** | | | **Pn** | **02 07 35.0** | **-0.2** |
| **AKRB** | **Akutan Reef Bi** | **1.35** | **305** | | | **Pn** | **02 07 34.6** | **-0.6** |
| AKRB | | | | | | **Sb** | **02 07 53.9** | **+0.3** |
| **LVA** | **Lava Point** | **1.35** | **306** | | | **Pn** | **02 07 34.5** | **-0.7** |
| LVA | | | | | IAML | | 02 08 06.6 | |
| | comp=E,1μm,0.6s | | | | | | | |
| **AKGG** | **Akutan Green G** | **1.36** | **308** | | | **Pn** | **02 07 34.7** | **-0.5** |
| **ISLZ** | **Isanotski Laza** | **1.39** | **11** | | | **Pn** | **02 07 35.4** | **-0.2** |
| **UNV** | **Unalaska Valle** | **1.46** | **290** | | | **Pn** | **02 07 36.0** | **-0.7** |
| **UNV** | **Unalaska Valle** | **1.46** | **290** | | | **Sb** | **02 07 55.6** | **-1.1** |
| **ISNN** | **Isanotski Nort** | **1.48** | **9** | | | **Pn** | **02 07 37.4** | **+0.4** |
| **FALS** | **False Pass** | **1.56** | **17** | | | **Pn** | **02 07 38.2** | **+0.2** |
| **MTBL** | **Makushin Table** | **1.60** | **293** | | | **Pn** | **02 07 37.9** | **-0.8** |
| **MSW** | **Makushin Switc** | **1.64** | **290** | | | **Pn** | **02 07 38.6** | **-0.6** |
| MSW | | | | | | **Sb** | **02 08 01.1** | **-0.7** |
| **MGOD** | **Makushin Gods** | **1.66** | **286** | | | **Pn** | **02 07 38.6** | **-0.8** |
| **MAPS** | **Pakushin South** | **1.70** | **286** | | | **Pn** | **02 07 39.0** | **-1.0** |
| **OKFG** | **Magazine Ridge** | **2.23** | **273** | | | **Pn** | **02 07 46.3** | **-1.0** |
| **OKTU** | **Okmok Mt. Tuli** | **2.31** | **272** | | | **Pn** | **02 07 47.6** | **-0.8** |
| **S12K** | **Black Hills** | **2.64** | **27** | | | **Pn** | **02 07 53.4** | **+0.5** |
| S12K | | | | | IAML | | 02 08 45.0 | |
| | comp=E,282nm,0.5s | | | | | | | |
| **NIKH** | **Nikolski High** | **2.84** | **264** | | | **Pn** | **02 07 54.4** | **-1.2** |
| **SDPT** | **Sand Point** | **2.94** | **46** | | | **Pn** | **02 07 56.9** | **0.0** |
| SDPT | | | | | IAML | | 02 08 33.4 | |
| | comp=E,230nm,0.6s | | | | | | | |
| **CLCO** | **Concord Point,** | **3.39** | **262** | | | **Pn** | **02 08 02.4** | **-0.8** |
| **CLES** | **Cleveland East** | **3.49** | **263** | | | **Pn** | **02 08 03.5** | **-1.0** |
| CLES | | | | | IAML | | 02 09 51.5 | |
| | comp=E,263nm,1.3s | | | | | | | |
| **O14K** | **Tigyukauivet M** | **6.12** | **14** | | | **Pn** | **02 08 41.6** | **+1.0** |
| **O16K** | **Kokwok River B** | **7.09** | **26** | | | **Pn** | **02 08 54.8** | **+0.9** |
| **N15K** | **Kwethluk River** | **7.17** | **17** | | | **Pn** | **02 08 56.7** | **+1.6** |
| **M14K** | **Bethel** | **7.50** | **8** | Pn | | **Pn** | **02 09 01.1** | **+1.6** |
| **KDAK** | **Kodiak Island** | **7.92** | **51** | Pn | | **Pn** | **02 09 05.0** | **-0.2** |
| | comp=E,0.8nm,0.3s,baz=265,slow=5.1,SNR=16 | | | | | | | |
| KDAK | | | | Sn | | **Sn** | **02 10 28.0** | **-5.9** |
| | comp=E,0.4nm,0.3s,baz=17,slow=19,SNR=1.3 | | | | | | | |
| | comp=E,2.0nm,0.3s | | | | | | | |
| **L14K** | **Kuka Creek** | **8.03** | **5** | | | **Pn** | **02 09 08.8** | **+2.0** |
| **M17K** | **Holitna River** | **8.83** | **22** | Pn | | **Pn** | **02 09 19.0** | **+1.2** |
| **K15K** | **Wolf Creek Mou** | **9.06** | **8** | Pn | | **Pn** | **02 09 22.4** | **+1.5** |
| **J17K** | **VABM Dome** | **10.40** | **13** | Pn | | **Pn** | **02 09 40.8** | **+1.5** |
| **K20K** | **Telida** | **11.31** | **24** | Pn | | **Pn** | **02 09 52.9** | **+1.1** |
| **J20K** | **Nowinta River** | **12.00** | **22** | Pn | | **Pn** | **02 10 02.0** | **+0.8** |
| **KLU** | **Klutina** | **12.72** | **43** | | | **Pn** | **02 10 09.9** | **-1.2** |
| **H21K** | **Melozitna Rive** | **13.57** | **20** | Pn | | **Pn** | **02 10 25.0** | **+2.4** |
| **G21K** | **Allakaket** | **14.19** | **18** | P | | **P** | **02 10 37.9** | **-0.3** |
| **ILAR** | **Eielson Array** | **14.41** | **31** | Pn | | **Pn** | **02 10 33.1** | **-0.9** |
| | comp=E,0.1nm,0.3s,baz=238,slow=10,SNR=2.4 | | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **14.82** | **44** | P | | **P** | **02 10 46.1** | **+0.8** |
| **SCRK** | **Sand Creek** | **14.86** | **36** | | | **P** | **02 10 44.9** | **-0.8** |
| **G23K** | **Bananza Creek** | **15.07** | **22** | P | | **P** | **02 10 48.0** | **0.0** |
| G23K | | | | | IAmb | IAmb | 02 10 56.5 | |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **J26L** | **Joseph Creek** | **15.32** | **35** | P | | **P** | **02 10 49.8** | **-1.0** |
| J26L | | | | | IAmb | IAmb | 02 11 01.7 | |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| **M29M** | **Somme Creek** | **16.30** | **46** | P | | **P** | **02 11 03.1** | **+1.4** |
| **EGAK** | **Eagle** | **16.33** | **37** | | | **Pn** | **02 10 59.3** | **+0.2** |
| **DAWY** | **Dawson** | **16.62** | **40** | | | **Pn** | **02 11 02.6** | **-0.2** |
| DAWY | | | | | IAmb | IAmb | 02 11 12.7 | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **L29M** | **L29M** | **16.70** | **44** | | | **Pn** | **02 11 04.5** | **+0.6** |
| L29M | | | | | IAmb | IAmb | 02 11 20.1 | |
| | comp=Z,7.6nm,1.0s | | | | | | | |
| **I28M** | **Miner Creek** | **17.13** | **36** | P | | **P** | **02 11 10.3** | **-0.6** |
| **K29M** | **Barlow Dome** | **17.25** | **42** | | | **Pn** | **02 11 10.9** | **0.0** |
| K29M | | | | | IAmb | IAmb | 02 11 19.8 | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **M31M** | **Drury Creek, Y** | **18.02** | **49** | P | | **P** | **02 11 21.9** | **+1.3** |
| M31M | | | | | IAmb | IAmb | 02 11 29.6 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **J30M** | **Hart River** | **18.04** | **41** | P | | **P** | **02 11 22.2** | **+1.3** |
| **I30M** | **Mount Dempster** | **18.31** | **39** | P | | **Pn** | **02 11 24.8** | **+0.9** |
| **EPYK** | **Eagle Plains** | **18.74** | **35** | P | | **P** | **02 11 28.6** | **+0.1** |
| EPYK | | | | | IAmb | IAmb | 02 11 32.3 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **G31M** | **Satah River** | **19.86** | **35** | P | | **P** | **02 11 40.6** | **0.0** |
| G31M | | | | | IAmb | IAmb | 02 11 44.4 | |
| | comp=Z,4.4nm,1.1s | | | | | | | |
| **INK** | **Inuvik** | **20.80** | **32** | P | | **P** | **02 11 51.0** | **+0.2** |
| **INK** | **Inuvik** | **20.80** | **32** | P | | **P** | **02 11 50.1** | **-0.6** |
| | comp=Z,3.8nm,0.5s,baz=244,slow=7.1,SNR=3.6 | | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | | |
| **C36M** | **Pauluk** | **24.34** | **34** | P | | **P** | **02 12 27.4** | **+0.2** |
| **A36M** | **Sachs Harbour** | **25.06** | **27** | P | | **P** | **02 12 33.5** | **-0.1** |
| **YKA** | **Yellowknife Ar** | **27.19** | **51** | P | | **P** | **02 12 51.8** | **-1.3** |
| | comp=Z,0.5nm,0.6s,baz=275,slow=9.9,SNR=4.7 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.59** | **97** | P | | **P** | **02 13 59.9** | **+1.1** |
| | comp=Z,0.8nm,0.8s,baz=291,slow=7.8,SNR=4.9 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.29** | **225** | T | | T | 02 58 25.0 | |
| | baz=26,slow=76,SNR=21 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.30** | **225** | T | | T | 02 58 25.2 | |
| | baz=26,slow=76,SNR=24 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.31** | **225** | T | | T | 02 58 29.9 | |
| | baz=26,slow=76,SNR=21 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.47** | **224** | T | | T | 02 59 17.0 | |
| | baz=25,slow=76,SNR=34 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.48** | **224** | T | | T | 02 59 21.8 | |
| | baz=25,slow=76,SNR=54 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.48** | **224** | T | | T | 02 59 21.4 | |
| | baz=25,slow=76,SNR=40 | | | | | | | |
| **KSRS** | **Korea Array** | **48.38** | **279** | P | | **P** | **02 15 51.9** | **+0.5** |
| | comp=Z,2.3nm,0.7s,baz=54,slow=7.5,SNR=10 | | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **49.63** | **94** | P | | **P** | **02 16 02.9** | **+1.7** |
| | comp=Z,0.5nm,0.5s,baz=303,slow=5.7,SNR=21 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **53.44** | **303** | P | | **P** | **02 16 28.7** | **-0.8** |
| | comp=Z,2.2nm,0.9s,baz=58,slow=6.8,SNR=8.0 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.20** | **356** | P | | **P** | **02 16 55.5** | **-0.6** |
| | comp=Z,2.3nm,0.8s,baz=12,slow=8.2,SNR=6.2 | | | | | | | |
| ARCES | | | | PcP | | **PcP** | **02 17 50.6** | **+0.3** |
| | comp=Z,1.2nm,0.8s,baz=17,slow=3.8,SNR=5.1 | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.75** | **320** | P | | **P** | **02 17 05.9** | **-1.2** |
| | comp=Z,0.6nm,0.3s,baz=64,slow=5.0,SNR=2.9 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.76** | **321** | P | | **P** | **02 17 40.2** | **-0.9** |
| | comp=Z,1.4nm,0.9s,baz=45,slow=7.0,SNR=7.8 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.24** | **355** | P | | **P** | **02 17 49.8** | **-0.8** |
| | comp=Z,1.0nm,0.5s,baz=18,slow=8.1,SNR=13 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.33** | **316** | P | | **P** | **02 17 50.4** | **-1.1** |
| | comp=Z,0.9nm,0.6s,baz=47,slow=5.3,SNR=7.6 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | **66.83** | **1** | P | | **P** | **02 18 00.4** | **-0.4** |
| | comp=Z,0.7nm,0.4s,baz=20,slow=3.1,SNR=14 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **70.53** | **11** | P | | **P** | **02 18 24.4** | **+0.4** |
| | comp=Z,1.3nm,0.7s,baz=337,slow=4.5,SNR=6.4 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.69** | **351** | P | | **P** | **02 18 53.8** | **-0.7** |
| | comp=Z,1.1nm,0.5s,baz=13,slow=5.5,SNR=7.6 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **LESA** | **Schwarzleotal** | **79.55** | **2** | *e*pP | | pP | 02 19 20.7 | -2.9 |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **79.58** | **3** | *e*PcP | | **P** | **02 19 16.7** | **+0.2** |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **79.68** | **3** | *i* PcP | | **P** | **02 19 17.6** | **+0.5** |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **79.71** | **3** | *i* PcP | | **P** | **02 19 18.5** | **+1.3** |
| | comp=Z,0.3nm,0.2s | | | | | | | |
| **FETA** | **Feichten** | **79.89** | **4** | *e*PcP | | **P** | **02 19 19.3** | **+1.1** |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **80.22** | **2** | *i* pP | | pP | 02 19 25.1 | -2.2 |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **SOKA** | **Soboth** | **80.33** | **1** | *e*PcP | | **P** | **02 19 22.1** | **+1.6** |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **OBKA** | **Obir** | **80.49** | **1** | *e*PcP | | **P** | **02 19 22.4** | **+1.1** |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **KBZ** | **Khabaz** | **80.52** | **340** | P | | **P** | **02 19 21.8** | **+0.4** |
| | comp=Z,2.2nm,0.9s,baz=36,slow=8.7,SNR=2.3 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.76** | **15** | P | | **P** | **02 19 50.1** | **+1.4** |
| | comp=Z,0.3nm,0.7s,baz=340,slow=4.5,SNR=5.9 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **86.00** | **346** | P | | **P** | **02 19 50.5** | **+0.5** |
| | comp=Z,1.6nm,0.8s,baz=26,slow=2.3,SNR=12 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |

*MOS **05** 02:16:29.3±0.9, 57.96N×153.02E, h8km, mb5.1/104, MS4.0/14, Error ellipse: s-maj=7.1km s-min=3.5km az=101.3*

*KRSC **05** 02:16:29.1±2.6, 57.95N×153.38E, h6km±50km, MI4.8*

*BJI **05** 02:16:29.1±0.0, 58.22N×153.02E, h5km, mb4.5/53, mB4.9/24, Ms4.8/56, Ms7 4.6/55*

*IDC **05** 02:16:29.4±0.4, 57.91N×152.98E, h0km, mb4.6/30, mbtmp4.5/34, ML4.4/4, MS3.9/48, Error ellipse: s-maj=10.0km s-min=8.3km az=61.0*

*NEIC **05** 02:16:31.3±1.2, 57.96N±0.07×152.9E±0.1, h10km±1km, mb5.0/518, Error ellipse: s-maj=13.1km s-min=10.6km az=245.0*

*NERS **05** 02:16:32.6, 58.04N×153.00E, h30km*

*GCMT **05** 02:16:32.3±0.4, 58.05N±0.04×152.98E±0.04, h20km±1km, MW4.8/69, Moment Tensor Solution. s19,c20; s69,c90; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr 1.07±.14; Mθθ 0.37±.09; Mφφ 1.44±.09; Mrθ -0.73±.20; Mrφ 0.40±.06; Mθφ -0.96±.16; Best double couple: M0 1.81000×10^16 NP1: ϕs 198.00000°, δ68.00000°, λ 121.00000°. NP2: ϕs 319.00000°, δ37.00000°, λ 37.00000°. Principal axes: T 1.8470, Plg55.0000°, Azm148.0000°; N -0.0750, Plg29.0000°, Azm6.0000°; P -1.7730, Plg17.0000°, Azm266.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR **05** 02:16:33.4, 58.06N×152.84E, h15km, mb5.2, Ms3.7*

**ISC 05 02:16:31.3±0.4, 58.01N±0.03×153.08E±0.03, h10km±2km,**
**h10km:pP-P, n1296, σ1s05/1217, mb5.0/454, MS4.1/68,**
**32C-41D, Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MA2** | **Magadan** | **1.98** | **323** | Pn | | **Pn** | **02 17 04.0** | **-0.8** |
| **MA2** | **Magadan** | **1.98** | **323** | *i*P | | **Pn** | **02 17 04.2** | **-0.5** |
| MA2 | | | | Pmax | | | 02 17 04.7 | |
| | 30nm,0.9s | | | | | | | |
| MA2 | | | | *e*Pg | | **Pb** | **02 17 06.8** | **-0.5** |
| MA2 | | | | Pgmax | | | 02 17 08.3 | |
| | 380nm,0.4s | | | | | | | |
| MA2 | | | | *e* | | | 02 17 11.3 | |
| MA2 | | | | *e*Sg | | **Sg** | **02 17 34.3** | **-0.4** |
| MA2 | | | | Sgmax | | | 02 17 57.1 | |
| | 1μm,0.9s | | | | | | | |
| MA2 | | | | Sgmax | | | 02 17 57.1 | |
| | 6μm,1.0s | | | | | | | |
| **MA2** | **Magadan** | **1.98** | **323** | Pn | | **Pn** | **02 17 04.9** | **+0.2** |
| | 136nm,0.3s,baz=317,slow=4.3,SNR=341 | | | | | | | |
| MA2 | | | | Pg | | **Pb** | **02 17 07.1** | **-0.1** |
| | 144nm,0.3s,baz=123,slow=9.9,SNR=180 | | | | | | | |
| MA2 | | | | LR | | LR | 02 17 24.8 | |
| | comp=Z,298nm,19.4s,baz=106,slow=27 | | | | | | | |
| MA2 | | | | Lg | | Lg | 02 17 35.1 | |
| | 378nm,0.3s,baz=212,slow=21,SNR=10 | | | | | | | |
| | 264nm,0.3s | | | | | | | |
| **MA2** | **Magadan** | **1.98** | **323** | *i* PN | | **Pn** | **02 17 04.2** | **-0.5** |
| MA2 | | | | *e* | | | 02 17 34.3 | |
| **MA2** | **Magadan** | **1.98** | **323** | P | | **Pn** | **02 17 05.0** | **+0.2** |
| **MGD** | **Magadan 1** | **2.37** | **330** | *e*P | | **Pn** | **02 17 08.7** | **-1.5** |
| MGD | | | | *e* | | | 02 17 11.1 | |
| MGD | | | | *e* | | | 02 17 12.4 | |
| MGD | | | | *e*Pg | | **Pg** | **02 17 16.2** | **-0.5** |
| | 550nm,0.3s | | | | | | | |
| MGD | | | | *e*Sg | | **Sg** | **02 17 46.1** | **-1.4** |
| MGD | | | | Sgmax | | | 02 18 01.3 | |
| | 1μm,0.7s | | | | | | | |
| MGD | | | | Sgmax | | | 02 18 01.3 | |
| | 620nm,0.8s | | | | | | | |
| **MGD** | **Magadan 1** | **2.37** | **330** | *e*PN | | **Pn** | **02 17 08.7** | **-1.5** |
| MGD | | | | *e* | | | 02 17 46.1 | |
| **TIGL** | **Tigil** | **3.00** | **92** | *e*P | | **Pn** | **02 17 17.5** | **-1.3** |
| **TLAR** | **Talaya** | **3.15** | **354** | *e*P | | **Pn** | **02 17 20.9** | **0.0** |
| TLAR | | | | Pmax | | | 02 17 22.2 | |
| | 50nm,0.4s | | | | | | | |
| TLAR | | | | *e*Pg | | **Pg** | **02 17 29.4** | **-2.1** |
| TLAR | | | | Pgmax | | | 02 17 31.0 | |
| | 1μm,0.9s | | | | | | | |
| TLAR | | | | *e*Sg | | **Sg** | **02 18 12.1** | **-0.1** |
| TLAR | | | | Sgmax | | | 02 18 31.9 | |
| | 3μm,0.8s | | | | | | | |
| TLAR | | | | Sgmax | | | 02 18 31.9 | |
| | 6μm,0.8s | | | | | | | |
| **TLAR** | **Talaya** | **3.15** | **354** | *e*PN | | **Pn** | **02 17 20.9** | **0.0** |
| **ESO** | **Esso** | **3.72** | **122** | *e*P | | **Pn** | **02 17 26.3** | **-2.5** |
| **ESO** | **Esso** | **3.72** | **122** | PN | | **Pn** | **02 17 26.2** | **-2.5** |
| **PALN** | **Palana** | **3.77** | **70** | *e*P | | **Pn** | **02 17 28.5** | **-0.9** |
| **PALN** | **Palana** | **3.77** | **70** | PN | | **Pn** | **02 17 28.4** | **-0.9** |
| **SRDR** | **Sredinnyy** | **4.00** | **112** | *e*P | | **Pn** | **02 17 31.3** | **-1.2** |
| **SRDR** | **Sredinnyy** | **4.00** | **112** | PN | | **Pn** | **02 17 31.3** | **-1.2** |
| **KPT** | **Kopyto** | **4.41** | **115

YAK eSS SnSn 02 21 59.2 +3.6
YAK pmax pmax
comp=Z,12nm,1.1s
YAK pmax pmax
comp=N,2.0nm,1.3s
YAK pmax pmax
comp=E,4.0nm,0.8s
YAK MLR MLR
comp=Z,620nm,14.0s
YAK MLR MLR
comp=N,815nm,11.0s
YAK MLR MLR
comp=E,203nm,11.0s
**YSS Yuzh-Sakhalins 12.72 214** ePN **Pn** 02 19 33.5 +1.5
YSS pmax pmax
comp=Z,20nm,0.9s
YSS MLR MLR
comp=Z,700nm,12.0s
YSS MLR MLR
comp=N,700nm,16.0s
YSS MLR MLR
comp=E,500nm,14.0s
**SHEM Shemya Is, Ala 13.05 105** LR LR 02 24 11.6
comp=E,305nm,22.0s,baz=298,slow=35
**ANDR Anadyr' 13.43 50** eP **P** 02 19 53.0 +1.9
ANDR Pmax 02 19 53.2
comp=E,100nm,0.7s
**ZEA Zeya 15.07 265** eP **Pn** 02 20 03.9 -0.1
ZEA pmax pmax
comp=Z,20nm,1.2s
ZEA MLR MLR
comp=N,300nm,14.0s
ZEA MLR MLR
comp=E,600nm,11.0s
ZEA MLR MLR
comp=Z,700nm,14.0s
**KLR Kul'dur 15.35 244** Pn **P** 02 20 12.7 +0.2
comp=Z,0.3nm,0.3s,baz=53,slow=13,SNR=11
KLR LR LR 02 26 54.2
comp=Z,865nm,18.0s,baz=46,slow=41
**KLR Kul'dur 15.35 244** ceP **Pn** 02 20 07.8 +0.1
KLR pmax pmax
comp=Z,20nm,1.7s
KLR MLR MLR
comp=Z,2µm,14.0s
**ASAJ Asahikawa 15.37 210** Pn **Pn** 02 20 08.8 +0.8
comp=Z,0.3nm,0.3s,baz=48,slow=14,SNR=3.2
**ASAJ Asahikawa 15.37 210** P **Pn** 02 20 06.2 -1.8
ASAJ pmax pmax
comp=Z,41nm,1.7s
**JKA Kamikawa-asahi 15.37 210** **Pn** 02 20 06.2 -1.7
**HEH HeiHe 16.84 254** eP **P** 02 20 29.6 +0.6
HEH pP **sP** 02 20 33.5 +0.3
HEH S **S** 02 23 43.6 -0.9
HEH pmax pmax
comp=Z,12nm,1.3s
HEH pmax pmax
comp=Z,190nm,4.9s
HEH LR LR
comp=Z,1µm,14.1s
HEH LR LR
comp=Z,1µm,13.1s
HEH LR LR
comp=Z,2µm,13.9s
**TIXI Tiksi 16.91 333** P **Pn** 02 20 28.3 +0.7
**TIXI Tiksi 16.91 333** Pn **Pn** 02 20 28.3 +0.7
comp=Z,0.3nm,0.3s,baz=139,slow=13,SNR=16
TIXI Lg Lg 02 25 28.1
comp=Z,0.3nm,0.3s,baz=82,slow=19,SNR=4.9
TIXI LR LR 02 26 18.0
comp=Z,266nm,20.2s,baz=163,slow=35
comp=Z,17nm,0.9s
**TIXI Tiksi 16.91 333** ceP **P** 02 20 28.8 -0.8
TIXI pmax pmax
comp=Z,58nm,1.7s
TIXI MLR MLR
comp=Z,670nm,12.0s
**GAMB Gambell 17.89 56** P **Pn** 02 20 39.8 -0.1
baz=268
**USA0B Ussuriysk Arra 19.03 233** P **P** 02 20 51.6 -1.5
**USA0B Ussuriysk Arra 19.03 233** *i* P **Pn** 02 20 53.9 +0.1
**USRK Ussuriysk Ar. 19.03 233** P **P** 02 20 52.0 -1.1
**USRK Ussuriysk Ar. 19.03 233** P **P** 02 20 52.9 -0.2
comp=Z,0.5nm,0.3s,baz=39,slow=12,SNR=18
USRK LR LR 02 29 08.4
comp=Z,703nm,18.3s,baz=37,slow=40
comp=Z,7.4nm,0.6s
**SPIA Saint Paul Isl 19.52 77** P **P** 02 20 58.3 -0.1
baz=288
**TNA Tin City 19.62 51** P **P** 02 20 59.8 +0.3
baz=266
**MDJ Mudanjiang 19.74 237** P **P** 02 21 01.6 +0.7
MDJ pP sP 02 21 04.7 -0.4
MDJ PP **PnPn** 02 21 22.0 +6.1
MDJ S **Sn** 02 24 50.4 +6.5
MDJ PcP **PcP** 02 25 20.7 +1.8
MDJ pmax pmax
comp=Z,15nm,1.9s
MDJ pmax pmax
comp=Z,230nm,3.8s
MDJ LR LR
comp=Z,560nm,14.6s
MDJ LR LR
comp=Z,920nm,10.4s
MDJ LR LR
comp=Z,830nm,14.3s
**MDJ Mudanjiang 19.74 237** **P** 02 20 58.8 -2.1
**BNX BinXian 19.90 243** ⇑P **P** 02 21 01.5 -1.2
BNX S **Sn** 02 24 48.7 +0.9
BNX sS **sS** 02 24 50.6 -0.4
BNX pmax pmax
comp=Z,5.0nm,1.0s
BNX pmax pmax
comp=Z,190nm,6.6s
BNX LR LR
comp=Z,1µm,13.6s
BNX LR LR
comp=Z,850nm,13.7s
BNX LR LR
comp=Z,2µm,16.2s
**P08K Saint George I 20.07 78** P **P** 02 21 04.8 +0.3
baz=290
**F14K Arctic Creek 20.28 52** P **P** 02 21 07.1 +0.4
baz=268
**BOD Bodaibo 20.56 286** eP **P** 02 21 09.4 -0.3
BOD pmax pmax
comp=Z,55nm,1.6s
**ANM Nome 20.68 54** P **P** 02 21 10.6 -0.4
baz=271
**MSHR Mys Shultsa 20.70 231** *i* P **P** 02 21 12.2 +0.9
MSHR pmax pmax
comp=Z,38nm,1.5s
MSHR MLR MLR
comp=Z,448nm,12.0s
**M11K Mekoryuk 20.75 66** P **P** 02 21 11.6 -0.2
baz=281
**C16K Lisburne Hills 20.94 44** P **P** 02 21 13.3 -0.4
baz=261
**F15K North Star Dit 20.99 51** P **P** 02 21 15.3 +1.0
**F15K North Star Dit 20.99 51** P **P** 02 21 13.5 -0.8
baz=269
**K13K Kusilvak Mount 21.22 62** P **P** 02 21 16.8 0.0
baz=278
**G15K Niukluk 21.24 53** P **P** 02 21 18.2 +1.2
baz=271
**J14K Nanvaranak Lak 21.62 59** P **P** 02 21 22.3 +1.2
**J14K Nanvaranak Lak 21.62 59** P **P** 02 21 21.3 +0.2
baz=277,SNR=5.4
**D17K Noatak River 21.72 46** P **P** 02 21 22.3 +0.2
baz=265
**C17K DeLong Mountai 21.77 43** P **P** 02 21 22.9 +0.3
baz=263
**RDOG Red Dog Mine 21.82 45** P **P** 02 21 24.1 +0.9
**RDOG Red Dog Mine 21.82 45** P **P** 02 21 22.9 -0.3
baz=264
**NIKH Nikolski High 21.93 87** P **P** 02 21 24.5 0.0
baz=298
**G16K Koyuk River 21.94 52** P **P** 02 21 25.1 +0.6
**G16K Koyuk River 21.94 52** P **P** 02 21 25.0 +0.5
baz=272,SNR=7.8
**H16K Elim 22.02 54** P **P** 02 21 25.5 +0.1
baz=274
**M13K Dall Lake 22.13 65** P **P** 02 21 26.3 -0.3
baz=283
**E17K Hotham Inlet 22.17 47** P **P** 02 21 26.9 -0.1
baz=268
**L14K Kuka Creek 22.25 63** P **P** 02 21 28.7 +0.9
baz=281
**CN2 Changchun 22.28 242** P **P** 02 21 26.8 -1.5
CN2 pP pP 02 21 31.0 -0.2
CN2 S **S** 02 25 24.6 -8.5
CN2 pmax pmax
comp=Z,20nm,1.5s
CN2 LR LR
comp=Z,700nm,14.0s
CN2 LR LR
comp=Z,1µm,14.0s
CN2 LR LR
comp=Z,1µm,14.0s
**B18K Kokolik River 22.37 41** P **P** 02 21 28.6 -0.5
baz=262
**F17K Baldwin Pennin 22.38 49** P **P** 02 21 30.2 +1.0
F17K IAmb IAmb 02 21 32.6
comp=Z,44nm,0.9s
**F17K Baldwin Pennin 22.38 49** P **P** 02 21 29.1 -0.2
baz=270,SNR=8.6
**C18K Utukok River 22.51 43** P **P** 02 21 30.8 +0.2
**C18K Utukok River 22.51 43** P **P** 02 21 30.2 -0.4
baz=265,SNR=5.3
**K15K Wolf Creek Mou 22.61 60** P **P** 02 21 32.8 +1.1
K15K IAmb IAmb 02 21 35.2
comp=Z,41nm,1.1s
**K15K Wolf Creek Mou 22.61 60** P **P** 02 21 31.8 +0.1
baz=280,SNR=9.1
**G17K Kiwalik Mounta 22.65 51** P **P** 02 21 31.5 -0.7
baz=273,SNR=17
**E18K Tukpahlearik C 22.65 46** P **P** 02 21 33.3 +1.2
**E18K Tukpahlearik C 22.65 46** P **P** 02 21 31.9 -0.2
baz=268
**M14K Bethel 22.72 64** P **P** 02 21 33.7 +0.9
M14K IAmb IAmb 02 21 36.4
comp=Z,74nm,1.4s
**M14K Bethel 22.72 64** P **P** 02 21 32.8 -0.1
baz=283
**A19K Wainwright 22.75 39** P **P** 02 21 32.8 -0.2
baz=261
**L15K Ungalak Mounta 22.75 61** P **P** 02 21 33.0 -0.1
baz=281
**I17K Unalakleet 22.76 56** P **P** 02 21 32.6 -0.7
baz=277
**UNV Unalaska Valle 22.77 83** P **P** 02 21 33.2 -0.2
baz=297,SNR=7.2
**J16K Anvik River 22.88 57** P **P** 02 21 34.3 -0.3
baz=278
**H17K Granite Mounta 23.00 53** P **P** 02 21 35.8 0.0
**H17K Granite Mounta 23.00 53** P **P** 02 21 35.5 -0.3
baz=275,SNR=9.6
**F18K Selawik 23.02 49** P **P** 02 21 35.3 -0.6
baz=271,SNR=9.7
**N14K Kuskokwak Cree 23.06 66** P **P** 02 21 36.0 -0.4
baz=285
**C19K Lookout Ridge 23.13 42** P **P** 02 21 37.5 +0.4
C19K IAmb IAmb 02 21 38.4
comp=Z,66nm,1.9s
**C19K Lookout Ridge 23.13 42** P **P** 02 21 36.3 -0.8
baz=265
**CIT Chita 23.18 272** eP **P** 02 21 37.9 +0.2
CIT *e* 02 22 00.7
**M15K Kasigluk River 23.34 64** P **P** 02 21 38.8 -0.4
baz=284
**O14K Tigyukauivet M 23.45 67** P **P** 02 21 40.0 -0.4
baz=287
**G18K Tagagawik 23.45 50** P **P** 02 21 40.8 +0.4
G18K IAmb IAmb 02 21 43.0
comp=Z,61nm,1.2s
**G18K Tagagawik 23.45 50** P **P** 02 21 40.1 -0.3
baz=274,SNR=27
**J17K VABM Dome 23.55 57** P **P** 02 21 42.2 +0.9
J17K IAmb IAmb 02 21 43.6
comp=Z,62nm,1.2s
**J17K VABM Dome 23.55 57** P **P** 02 21 41.7 +0.4
baz=279,SNR=16
**MJB9 Matsu-Tunnel 23.62 211** P **P** 02 21 41.5 -0.8
**MAJO Matsushiro 23.63 211** P **P** 02 21 40.5 -1.8
**MAJO Matsushiro 23.63 211** P **P** 02 21 40.5 -1.8
MAJO pmax pmax
comp=Z,17nm,1.2s
**MJAR Matsushiro Arr 23.63 211** P **P** 02 21 40.5 -1.8
comp=Z,6.1nm,1.1s,baz=14,slow=11,SNR=9.2
comp=Z,6.1nm,1.1s
**D19K Kuna River 23.63 44** P **P** 02 21 41.8 -0.3
**D19K Kuna River 23.63 44** P **P** 02 21 41.5 -0.6
baz=268,SNR=7.5
**H18K Honhosa River 23.63 52** P **P** 02 21 42.2 +0.1
H18K IAmb IAmb 02 21 44.8
comp=Z,82nm,2.0s
**H18K Honhosa River 23.63 52** P **P** 02 21 42.1 0.0
baz=276
**L16K Owhat River 23.68 61** P **P** 02 21 42.6 0.0
baz=282
**F19K Shaleruckik Mo 23.76 48** IAmb IAmb 02 21 44.6
comp=Z,54nm,1.2s
**F19K Shaleruckik Mo 23.76 48** P **P** 02 21 42.9 -0.4
baz=272,SNR=26
**N15K Kwethluk River 23.76 65** P **P** 02 21 43.6 +0.1
**N15K Kwethluk River 23.76 65** P **P** 02 21 43.1 -0.4
baz=286
**E19K Redstone River 23.95 46** P **P** 02 21 45.4 +0.2
E19K IAmb IAmb 02 21 46.8
comp=Z,54nm,1.1s
**E19K Redstone River 23.95 46** P **P** 02 21 45.0 -0.2
baz=271,SNR=34
**K17K Iditarod 24.01 58** P **P** 02 21 46.5 +0.7
K17K IAmb IAmb 02 21 47.9
comp=Z,37nm,1.1s
**K17K Iditarod 24.01 58** P **P** 02 21 46.2 +0.4
baz=281,SNR=12
**B20K Meade River 24.05 40** P **P** 02 21 45.8 -0.2
baz=266
**G19K Purcell Mounta 24.07 50** IAmb IAmb 02 21 47.5
comp=Z,36nm,0.9s
**G19K Purcell Mounta 24.07 50** P **P** 02 21 46.4 0.0
baz=274,SNR=19
**M16K Timber Creek 24.08 62** P **P** 02 21 47.7 +1.2
M16K IAmb IAmb 02 21 49.3
comp=Z,35nm,1.1s
**M16K Timber Creek 24.08 62** P **P** 02 21 46.6 +0.2
baz=284,SNR=5.5
**L17K Donlin 24.13 60** P **P** 02 21 47.4 +0.5
baz=282,SNR=7.1
**O15K Ungalikthiuk R 24.18 67** P **P** 02 21 47.2 -0.2
baz=288
**D20K Etivluk River 24.18 43** P **P** 02 21 47.2 -0.1
baz=269,SNR=24
**S12K Black Hills 24.30 76** P **P** 02 21 48.2 -0.3
baz=294
**GCSA Galena City Sc 24.31 53** P **P** 02 21 47.9 -0.5
baz=278
**N16K Nishlik Lake 24.31 64** P **P** 02 21 48.1 -0.6
baz=286,SNR=6.2
**E20K Nigu River 24.34 44** P **P** 02 21 48.6 -0.3
baz=270,SNR=18
**A21K Barrow 24.36 37** P **P** 02 21 49.0 0.0
baz=263
**H19K Roundabout Mou 24.39 51** P **P** 02 21 49.4 +0.1
baz=276,SNR=39
**F20K Avaraart Lake 24.56 47** P **P** 02 21 50.8 +0.1
baz=274
**J18K Innoko River 24.58 56** P **P** 02 21 51.3 +0.3
**J18K Innoko River 24.58 56** P **P** 02 21 50.3 -0.7
baz=281,SNR=16
**M17K Holitna River 24.70 61** P **P** 02 21 53.0 +0.9
M17K IAmb IAmb 02 21 55.5
comp=Z,30nm,1.2s
**M17K Holitna River 24.70 61** P **P** 02 21 52.0 -0.1
baz=284,SNR=7.4
**JGF Kuroka 24.74 212** P **P** 02 21 51.3 -1.5
**L18K Granite Mounta 24.85 59** P **P** 02 21 54.0 +0.6
L18K IAmb IAmb 02 21 55.9
comp=Z,24nm,0.9s
**L18K Granite Mounta 24.85 59** P **P** 02 21 53.7 +0.3
baz=283,SNR=13
**C21K Knifeblade Rid 24.85 42** P **P** 02 21 53.0 -0.4
baz=270,SNR=7.8
**A22K Sinclair Lake 24.86 38** P **P** 02 21 53.6 +0.2
baz=266
**O16K Kokwok River B 24.89 65** P **P** 02 21 53.9 +0.1
baz=288
**B21K Ikpikpuk River 24.92 41** P **P** 02 21 53.8 -0.1
B21K IAmb IAmb 02 21 56.5
comp=Z,38nm,0.9s
**B21K Ikpikpuk River 24.92 41** P **P** 02 21 54.0 +0.1
baz=269,SNR=26
**J19K Poorman 24.96 55** P **P** 02 21 54.5 +0.1
**J19K Poorman 24.96 55** P **P** 02 21 54.3 -0.1
baz=280
**H20K Anotleneega Mo 25.05 51** P **P** 02 21 55.6 +0.4
baz=278,SNR=25
**N17K Nushagak Hills 25.05 63** P **P** 02 21 55.7 +0.4
baz=286
**INU Inuyama 25.08 212** P **P** 02 21 53.3 -2.4
INU IAmb IAmb 02 21 59.0
comp=Z,58nm,1.7s
**P16K Nushagak River 25.12 67** P **P** 02 21 56.0 +0.1
baz=289
**E21K Killik River 25.16 44** P **P** 02 21 55.9 -0.3
baz=272
**SDPT Sand Point 25.26 76** P **P** 02 21 57.2 0.0
baz=295
**I20K Naaghedeneel 25.32 53** P **P** 02 21 57.5 -0.1
baz=279
**O17K Koliganek Bris 25.32 65** P **P** 02 21 57.4 -0.2
baz=288
**B22K Teshekpuk Lake 25.34 39** P **P** 02 21 57.9 +0.1
B22K IAmb IAmb 02 21 60.0
comp=Z,40nm,0.8s
**B22K Teshekpuk Lake 25.34 39** P **P** 02 21 57.6 -0.1
baz=269
**S14K Fog Glacier 25.35 73** P **P** 02 21 57.8 -0.2
baz=294
**F21K Alatna River 25.42 47** P **P** 02 21 58.3 -0.2
F21K IAmb IAmb 02 22 01.0
comp=Z,31nm,1.1s
**F21K Alatna River 25.42 47** P **P** 02 21 58.1 -0.4
baz=275,SNR=34
**M18K Stony River 25.43 60** P **P** 02 21 58.8 +0.2
baz=285,SNR=7.2
**IMAR Indian Mountai 25.45 50** P **P** 02 21 58.9 +0.1
**G21K Allakaket 25.48 48** P **P** 02 21 59.5 +0.4
baz=277,SNR=50
**J20K Nowinta River 25.57 54** P **P** 02 22 00.1 +0.2
baz=281,SNR=16
**D22K Ayikyak River 25.61 43** P **P** 02 22 00.7 +0.4
baz=272,SNR=12
**N18K Kilae Creek 25.62 62** P **P** 02 22 00.6 +0.1
baz=287
**L19K White Mountain 25.69 59** P **P** 02 22 01.0 -0.1
baz=284
**K20K Telida 25.77 56** P **P** 02 22 01.9 +0.1
**K20K Telida 25.77 56** P **P** 02 22 01.6 -0.1
baz=283,SNR=12
**P17K Kvichak River 25.82 66** P **P** 02 22 02.2 0.0
baz=290
**H21K Melozitna Rive 25.88 50** P **P** 02 22 03.1 +0.4
H21K IAmb IAmb 02 22 04.6
comp=Z,26nm,1.0s
**H21K Melozitna Rive 25.88 50** P **P** 02 22 02.9 +0.2
baz=279,SNR=25
**F22K John River 25.89 46** P **P** 02 22 02.7 -0.2
baz=276
**CHGN Chignik 25.92 73** P **P** 02 22 03.2 +0.1
baz=294
**CHNA Chernabura Isl 25.95 76** P **P** 02 22 02.8 -0.6
baz=296
**E22K Anaktuvuk Pass 25.98 45** P **P** 02 22 03.2 -0.5
baz=275
**M19K Big River Lodg 25.98 59** P **P** 02 22 03.3 -0.4
baz=285
**L20K Farewell, AK 26.06 58** P **P** 02 22 03.7 -0.7
baz=284,SNR=7.0
**O18K Koktuh Hills 26.20 64** P **P** 02 22 05.6 -0.1
baz=289
**G22K Bettles 26.22 47** P **P** 02 22 05.3 -0.5
baz=277
**N19K Bonanza Creek 26.24 61** P **P** 02 22 05.6 -0.6
baz=287
**C23K Itkillik River 26.31 41** P **P** 02 22 06.3 -0.2
baz=272,SNR=14
**D23K Nanushuk River 26.33 43** P **P** 02 22 06.4 -0.3
baz=274
**P18K Big Mountain, 26.34 65** P **P** 02 22 06.9 -0.1
baz=290
**KSRS Korea Array 26.35 230** P **P** 02 22 06.2 -1.0
comp=Z,4.6nm,0.8s,baz=32,slow=7.9,SNR=15
KSRS LR LR 02 32 15.4
comp=Z,256nm,20.3s,baz=30,slow=36
comp=Z,4.6nm,0.8s
**KSAR Wonju Array Be 26.38 230** P **P** 02 22 05.7 -1.8
**KSAR Wonju Array Be 26.38 230** P **P** 02 22 05.7 -1.8
**CHUM Lake Minchumin 26.42 54** P **P** 02 22 07.1 -0.5
baz=283
**Q17K Contact Creek 26.42 67** P **P** 02 22 07.7 -0.1
baz=292
**H22K Ishtalitna Cre 26.42 50** P **P** 02 22 07.0 -0.7
baz=280
**R17L Mt. Peulik Vol 26.42 69** P **P** 02 22 07.3 -0.5
baz=292
**M20K Styx River 26.56 59** P **P** 02 22 08.2 -0.8
baz=286
**COLD Coldfoot 26.69 46** P **P** 02 22 09.7 -0.3
baz=278
**PPLA Purkeypile 26.71 56** P **P** 02 22 09.7 -0.7
baz=285
**Q18K Katmai Hardscr 26.71 66** P **P** 02 22 09.9 -0.5
baz=291
**TOLK Toolik Lake Re 26.76 43** P **P** 02 22 10.1 -0.6
baz=276,SNR=6.2
**E23K Chandalar 26.80 45** P **P** 02 22 10.4 -0.8
baz=277,SNR=8.4
**G23K Bananza Creek 26.83 48** P **P** 02 22 11.3 0.0
**G23K Bananza Creek 26.83 48** P **P** 02 22 10.8 -0.6
baz=279,SNR=10
**XLT XiLinHaoTe 26.84 254** eP **P** 02 22 10.8 -0.9
XLT pP pP 02 22 14.7 -0.1
XLT sP sP 02 22 17.0 +0.9
XLT PP **PnPn** 02 22 53.8 +0.7
XLT S **S** 02 26 51.0 +3.2
XLT pmax pmax
comp=Z,8.0nm,1.0s
XLT pmax pmax
comp=Z,71nm,4.6s
XLT LR LR
comp=Z,100nm,13.2s
XLT LR LR
comp=Z,690nm,16.6s
XLT LR LR
comp=Z,1µm,14.5s
**MLY Manley 26.84 51** P **P** 02 22 11.7 +0.2
**MLY Manley 26.84 51** P **P** 02 22 11.3 -0.2
baz=282,SNR=5.7
**BPAW Bear Paw Mtn. 26.94 53** P **P** 02 22 12.4 +0.1
**BPAW Bear Paw Mtn. 26.94 53** P **P** 02 22 12.2 -0.1
baz=283,SNR=7.3
**C24K Franklin Bluff 26.98 41** P **P** 02 22 12.1 -0.5
baz=274
**D24K Happy Valley 26.98 42** P **P** 02 22 11.8 -0.8
**D24K Happy Valley 26.98 42** P **P** 02 22 12.4 -0.2
baz=275,SNR=5.8
**H23K Yukon River 27.18 49** IAmb IAmb 02 22 17.0
comp=Z,30nm,1.1s
**H23K Yukon River 27.18 49** P **P** 02 22 14.2 -0.3
baz=281,SNR=19
**SPCR Spurr Chakacha 27.18 60** P **P** 02 22 14.1 -0.5
baz=288
**N20K Mount Spurr 27.18 60** P **P** 02 22 15.0 +0.4
baz=288
**P19K Oil Pt 27.21 63** P **P** 02 22 14.9 0.0
baz=290
**E24K Your Creek 27.22 44** P **P** 02 22 14.8 -0.1
baz=278
**SKT Skwentna 27.25 58** P **P** 02 22 15.2 0.0
baz=287
**SPU Mount Spurr 27.26 60** P **P** 02 22 15.5 +0.2
**Q19K Cape Douglas, 27.27 65** P **P** 02 22 14.9 -0.4
baz=291
**I23K Minto, Yukon-K 27.39 51** P **P** 02 22 16.6 +0.3
I23K IAmb IAmb 02 22 18.1
comp=Z,23nm,1.1s
**I23K Minto, Yukon-K 27.39 51** P **P** 02 22 16.2 -0.1
baz=282,SNR=12
**R18K Karluk 27.39 68** P **P** 02 22 15.8 -0.6
baz=293
**F24K Squaw Lake 27.53 46** P **P** 02 22 17.3 -0.3
baz=279,SNR=7.6
**CHIR Chirikof Islan 27.54 72** P **P** 02 22 17.4 -0.3
baz=296
**BWN Browne 27.57 53** IAmb IAmb 02 22 54.6
comp=Z,41nm,1.0s
**NEA2 Nenana 27.64 52** P **P** 02 22 18.0 -0.6
baz=284,SNR=10

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CUT** | **Chulitna** | **27.70** | **57** | P | | **P** | | **02 22 18.8** | **-0.3** |
| | baz=287 | | | | | | | | |
| **SUA** | **Susitna One** | **27.77** | **59** | P | | **P** | | **02 22 19.6** | **-0.3** |
| **SUA** | **Susitna One** | **27.77** | **59** | P | | **P** | | **02 22 19.1** | **-0.8** |
| | baz=288 | | | | | | | | |
| **CAPN** | **Captain Cook N** | **27.81** | **60** | P | | **P** | | **02 22 19.4** | **-0.7** |
| | baz=289 | | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **27.83** | **47** | P | | **P** | | **02 22 20.4** | **+0.1** |
| | baz=281,SNR=7.1 | | | | | | | | |
| **D25K** | **Kavik River** | **27.83** | **41** | P | | **P** | | **02 22 19.4** | **-0.9** |
| | baz=277 | | | | | | | | |
| **H24K** | **Noodor Dome** | **27.84** | **49** | P | | **P** | | **02 22 20.7** | **+0.3** |
| | baz=282,SNR=14 | | | | | | | | |
| **MDM** | **Murphy Dome** | **27.90** | **51** | IAmb | | IAmb | | 02 22 22.3 | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **MCK** | **McKinley** | **27.91** | **54** | P | | **P** | | **02 22 20.7** | **-0.4** |
| | baz=285,SNR=12 | | | | | | | | |
| **SII** | **Sitkinak Islan** | **27.95** | **70** | P | | **P** | | **02 22 21.3** | **-0.2** |
| | baz=295 | | | | | | | | |
| **M22K** | **Willow** | **27.96** | **58** | P | | **P** | | **02 22 21.2** | **-0.3** |
| | baz=288 | | | | | | | | |
| **HOM** | **Homer** | **27.96** | **63** | P | | **P** | | **02 22 21.4** | **-0.1** |
| | baz=291 | | | | | | | | |
| **Q20K** | **Shuyak Island** | **27.99** | **65** | P | | **P** | | **02 22 22.2** | **+0.4** |
| | baz=293 | | | | | | | | |
| **COLA** | **College** | **28.08** | **51** | P | | **P** | | **02 22 23.4** | **+0.9** |
| COLA | | | | IAmb | | IAmb | | 02 22 24.5 | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| **COLA** | **College** | **28.08** | **51** | P | | **P** | | **02 22 22.3** | **-0.1** |
| | baz=284 | | | | | | | | |
| **COLA** | **College** | **28.08** | **51** | P | | **P** | | **02 22 23.3** | **+0.9** |
| **WRH** | **Wood River Hil** | **28.08** | **52** | IAmb | | IAmb | | 02 22 24.0 | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **OHAK** | **Old Harbor** | **28.11** | **68** | P | | **P** | | **02 22 22.8** | **0.0** |
| | baz=295 | | | | | | | | |
| **POKR** | **Poker Flat Res** | **28.19** | **51** | P | | **P** | | **02 22 23.6** | **+0.1** |
| | baz=284 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **28.23** | **67** | LR | | LR | | 02 34 13.0 | |
| | comp=Z,259nm,19.2s,baz=343,slow=38 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **28.23** | **67** | P | | **P** | | **02 22 24.5** | **+0.7** |
| | baz=294 | | | | | | | | |
| **C26K** | **Camden Bay** | **28.27** | **40** | P | | **P** | | **02 22 24.4** | **+0.3** |
| | baz=277,SNR=7.8 | | | | | | | | |
| **WAT1** | **Susitna Watana** | **28.33** | **55** | P | | **P** | | **02 22 24.5** | **-0.3** |
| | baz=287 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **28.35** | **59** | P | | **P** | | **02 22 25.3** | **+0.4** |
| | baz=290 | | | | | | | | |
| **G25K** | **Bearman Lake** | **28.35** | **47** | P | | **P** | | **02 22 25.0** | **+0.1** |
| | baz=282 | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **28.36** | **62** | P | | **P** | | **02 22 25.3** | **+0.2** |
| | baz=291 | | | | | | | | |
| **F25K** | **Christian Rive** | **28.36** | **45** | P | | **P** | | **02 22 24.9** | **-0.3** |
| | baz=281,SNR=8.5 | | | | | | | | |
| **PMR** | **Palmer** | **28.46** | **58** | P | | **P** | | **02 22 26.0** | **+0.2** |
| | baz=289 | | | | | | | | |
| **IL31** | | **28.50** | **51** | IAmb | | IAmb | | 02 22 27.6 | |
| | comp=Z,39nm,1.3s | | | | | | | | |
| **ILAR** | **Eielson Array** | **28.50** | **51** | P | | **P** | | **02 22 26.3** | **0.0** |
| **ILAR** | **Eielson Array** | **28.50** | **51** | P | | **P** | | **02 22 26.6** | **+0.3** |
| | comp=Z,12nm,1.1s,baz=279,slow=10,SNR=85 | | | | | | | | |
| ILAR | | | | LR | | LR | | 02 35 38.1 | |
| | comp=Z,281nm,18.5s,baz=260,slow=40 | | | | | | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **H25L** | **Birch Creek** | **28.57** | **48** | P | | **P** | | **02 22 27.4** | **+0.5** |
| | baz=283 | | | | | | | | |
| **HDA** | **Harding Lake** | **28.57** | **52** | P | | **P** | | **02 22 27.2** | **+0.3** |
| HDA | | | | IAmb | | IAmb | | 02 22 28.4 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **HDA** | **Harding Lake** | **28.57** | **52** | P | | **P** | | **02 22 27.4** | **+0.5** |
| | baz=286,SNR=13 | | | | | | | | |
| **C27K** | **Jago River** | **28.72** | **41** | P | | **P** | | **02 22 28.3** | **+0.1** |
| | baz=279,SNR=9.3 | | | | | | | | |
| **FYU** | **Fort Yukon** | **28.73** | **47** | P | | **P** | | **02 22 28.6** | **+0.3** |
| FYU | | | | IAmb | | IAmb | | 02 22 30.2 | |
| | comp=Z,37nm,1.3s | | | | | | | | |
| **SML** | **Sawmill** | **28.75** | **57** | P | | **P** | | **02 22 27.9** | **-0.6** |
| | baz=289,SNR=11 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **28.76** | **56** | P | | **P** | | **02 22 28.1** | **-0.7** |
| | baz=288 | | | | | | | | |
| **DHY** | **Denali Highway** | **28.77** | **55** | P | | **P** | | **02 22 28.3** | **-0.5** |
| **DHY** | **Denali Highway** | **28.77** | **55** | P | | **P** | | **02 22 28.0** | **-0.9** |
| | baz=288,SNR=7.8 | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **28.80** | **45** | P | | **P** | | **02 22 29.7** | **+0.7** |
| **KNK** | **Knik Glacier** | **28.82** | **58** | IAmb | | IAmb | | 02 22 30.2 | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **KNK** | **Knik Glacier** | **28.82** | **58** | P | | **P** | | **02 22 29.2** | **0.0** |
| | baz=290 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **28.87** | **49** | P | | **P** | | **02 22 29.9** | **+0.2** |
| PRP | | | | IAmb | | IAmb | | 02 22 31.5 | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **28.87** | **49** | P | | **P** | | **02 22 30.1** | **+0.5** |
| | baz=285,SNR=15 | | | | | | | | |
| **F26K** | **Sheenjek River** | **28.91** | **45** | P | | **P** | | **02 22 30.1** | **+0.2** |
| | baz=282,SNR=8.2 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.98** | **270** | *ce*P | | **P** | | **02 22 31.2** | **+0.3** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.7s | | | | | | | | |
| ULN | | | | MLR | | MLR | | | |
| | comp=Z,39nm,7.0s | | | | | | | | |
| **M23K** | **Glacier View** | **29.02** | **57** | P | | **P** | | **02 22 30.9** | **0.0** |
| | baz=290,SNR=5.5 | | | | | | | | |
| **PWL** | **Port Wells** | **29.07** | **59** | IAmb | | IAmb | | 02 22 32.1 | |
| | comp=Z,29nm,1.0s | | | | | | | | |
| **PWL** | **Port Wells** | **29.07** | **59** | P | | **P** | | **02 22 31.1** | **-0.2** |
| | baz=291 | | | | | | | | |
| **J25K** | **Salcha River,** | **29.17** | **51** | P | | **P** | | **02 22 32.4** | **+0.1** |
| | baz=286 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **29.19** | **57** | IAmb | | IAmb | | 02 22 33.6 | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **29.19** | **57** | P | | **P** | | **02 22 32.0** | **-0.5** |
| | baz=290,SNR=7.7 | | | | | | | | |
| **G26K** | **Porcupine Rive** | **29.21** | **46** | P | | **P** | | **02 22 32.1** | **-0.4** |
| | baz=283,SNR=6.0 | | | | | | | | |
| **K24K** | **Donnelly Dome** | **29.23** | **53** | P | | **P** | | **02 22 32.1** | **-0.8** |
| | baz=287 | | | | | | | | |
| **SONM** | **Songino Array** | **29.35** | **270** | P | | **P** | | **02 22 34.8** | **+0.7** |
| | comp=Z,2.2nm,0.7s,baz=87,slow=7.7,SNR=7.9 | | | | | | | | |
| SONM | | | | PcP | | **PcP** | | **02 25 39.6** | **-0.5** |
| | comp=Z,2.1nm,0.8s,baz=116,slow=3.4,SNR=5.4 | | | | | | | | |
| SONM | | | | LR | | LR | | 02 35 17.8 | |
| | comp=Z,865nm,18.6s,baz=90,slow=38 | | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **29.61** | **56** | P | | **P** | | **02 22 36.3** | **+0.1** |
| | baz=290 | | | | | | | | |
| **PAX** | **Paxson** | **29.63** | **54** | P | | **P** | | **02 22 35.8** | **-0.6** |
| | baz=289,SNR=6.0 | | | | | | | | |
| **GLI** | **Glacier Island** | **29.63** | **59** | P | | **P** | | **02 22 36.3** | **0.0** |
| | baz=292 | | | | | | | | |
| **D27M** | **Malcolm River** | **29.74** | **41** | P | | **P** | | **02 22 37.0** | **-0.3** |
| | baz=282 | | | | | | | | |
| **E27K** | **Coleen River** | **29.74** | **43** | P | | **P** | | **02 22 37.0** | **-0.3** |
| | baz=283 | | | | | | | | |
| **P23K** | **Montague Islan** | **29.82** | **61** | P | | **P** | | **02 22 37.5** | **-0.5** |
| | baz=293 | | | | | | | | |
| **I26K** | **Coal Creek Min** | **29.88** | **49** | P | | **P** | | **02 22 37.7** | **-0.8** |
| | baz=287 | | | | | | | | |
| **KLU** | **Klutina** | **29.94** | **57** | P | | **P** | | **02 22 39.5** | **+0.3** |
| KLU | | | | IAmb | | IAmb | | 02 23 11.1 | |
| | comp=Z,27nm,1.5s | | | | | | | | |
| **KLU** | **Klutina** | **29.94** | **57** | P | | **P** | | **02 22 38.6** | **-0.5** |
| | baz=291 | | | | | | | | |
| **SCRK** | **Sand Creek** | **29.94** | **52** | P | | **P** | | **02 22 38.7** | **-0.4** |
| | baz=288,SNR=12 | | | | | | | | |
| **J26L** | **Joseph Creek** | **29.95** | **51** | P | | **P** | | **02 22 38.7** | **-0.5** |
| | baz=288 | | | | | | | | |
| **HARP** | **HAARP** | **29.96** | **55** | P | | **P** | | **02 22 38.9** | **-0.3** |
| | baz=290 | | | | | | | | |
| **G27K** | **Doyon Strip** | **30.06** | **46** | P | | **P** | | **02 22 40.5** | **+0.5** |
| **G27K** | **Doyon Strip** | **30.06** | **46** | P | | **P** | | **02 22 39.8** | **-0.3** |
| | baz=285,SNR=8.9 | | | | | | | | |
| **H27K** | **Steamboat Moun** | **30.26** | **47** | P | | **P** | | **02 22 42.1** | **+0.1** |
| | baz=286,SNR=8.1 | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **30.37** | **59** | P | | **P** | | **02 22 42.7** | **-0.1** |
| | baz=293 | | | | | | | | |
| **E28M** | **Babbage River** | **30.39** | **42** | P | | **P** | | **02 22 42.0** | **-1.0** |
| | baz=284,SNR=6.5 | | | | | | | | |
| **I27K** | **Kandik River** | **30.41** | **48** | P | | **P** | | **02 22 43.1** | **-0.1** |
| | baz=287,SNR=26 | | | | | | | | |
| **N25K** | **Chitina, Valde** | **30.49** | **57** | P | | **P** | | **02 22 44.2** | **+0.2** |
| **N25K** | **Chitina, Valde** | **30.49** | **57** | P | | **P** | | **02 22 44.1** | **+0.2** |
| | baz=292 | | | | | | | | |
| **F28M** | **Old Crow** | **30.52** | **44** | P | | **P** | | **02 22 44.6** | **+0.5** |
| **F28M** | **Old Crow** | **30.52** | **44** | P | | **P** | | **02 22 43.9** | **-0.2** |
| | baz=285 | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **30.52** | **54** | P | | **P** | | **02 22 44.0** | **-0.3** |
| | baz=290 | | | | | | | | |
| **Q23K** | **Middleton Isla** | **30.54** | **61** | P | | **P** | | **02 22 43.5** | **-0.8** |
| | baz=294 | | | | | | | | |
| **K27K** | **Chicken** | **30.72** | **51** | P | | **P** | | **02 22 45.4** | **-0.5** |
| | baz=290 | | | | | | | | |
| **BMRM** | **Bremner River** | **30.72** | **58** | P | | **P** | | **02 22 46.0** | **0.0** |
| | baz=293 | | | | | | | | |
| **EGAK** | **Eagle** | **30.85** | **50** | IAmb | | IAmb | | 02 22 47.8 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **EGAK** | **Eagle** | **30.85** | **50** | P | | **P** | | **02 22 46.8** | **-0.2** |
| | baz=289,SNR=15 | | | | | | | | |
| **M26K** | **Nabesna, AK** | **30.90** | **55** | P | | **P** | | **02 22 47.9** | **+0.3** |
| M26K | | | | IAmb | | IAmb | | 02 22 49.7 | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **30.90** | **55** | P | | **P** | | **02 22 47.6** | **0.0** |
| | baz=291,SNR=14 | | | | | | | | |
| **GLB** | **Gilahina Butte** | **30.90** | **57** | P | | **P** | | **02 22 48.1** | **+0.5** |
| GLB | | | | IAmb | | IAmb | | 02 22 50.1 | |
| | comp=Z,51nm,1.9s | | | | | | | | |
| **E29M** | **Blow River** | **31.03** | **42** | P | | **P** | | **02 22 48.7** | **+0.1** |
| | baz=286 | | | | | | | | |
| **I28M** | **Miner Creek** | **31.12** | **48** | IAmb | | IAmb | | 02 22 51.8 | |
| | comp=Z,26nm,0.9s | | | | | | | | |
| **I28M** | **Miner Creek** | **31.12** | **48** | P | | **P** | | **02 22 49.2** | **-0.4** |
| | baz=289,SNR=24 | | | | | | | | |
| **VRDI** | **Verde Repeater** | **31.14** | **57** | IAmb | | IAmb | | 02 22 51.6 | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **31.16** | **53** | P | | **P** | | **02 22 50.0** | **+0.2** |
| L27K | | | | IAmb | | IAmb | | 02 22 51.5 | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **31.16** | **53** | P | | **P** | | **02 22 49.6** | **-0.2** |
| | baz=291,SNR=18 | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **31.17** | **53** | P | | **P** | | **02 22 50.3** | **+0.3** |
| **KAIM** | **Kayak Island** | **31.23** | **60** | P | | **P** | | **02 22 50.6** | **+0.1** |
| | baz=294 | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **31.27** | **56** | P | | **P** | | **02 22 51.8** | **+1.0** |
| MCARA | | | | IAmb | | IAmb | | 02 22 54.9 | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **31.27** | **56** | P | | **P** | | **02 22 51.0** | **+0.2** |
| | baz=293 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.36** | **255** | *e*P | | **P** | | **02 22 52.0** | **+0.1** |
| HHC | | | | pP | | sP | | 02 22 56.1 | -0.1 |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,56nm,5.2s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=Z,810nm,13.2s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=Z,940nm,14.7s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=Z,1μm,14.4s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **31.40** | **54** | P | | **P** | | **02 22 52.9** | **+0.8** |
| **M27K** | **Edge Creek, AK** | **31.40** | **54** | P | | **P** | | **02 22 52.0** | **-0.1** |
| | baz=292,SNR=7.2 | | | | | | | | |
| **G29M** | **Pine Creek** | **31.40** | **45** | P | | **P** | | **02 22 52.3** | **+0.3** |
| **G29M** | **Pine Creek** | **31.40** | **45** | P | | **P** | | **02 22 51.9** | **0.0** |
| | baz=288,SNR=6.1 | | | | | | | | |
| **H29M** | **Whitestone** | **31.49** | **46** | P | | **P** | | **02 22 53.0** | **+0.4** |
| H29M | | | | IAmb | | IAmb | | 02 22 54.1 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **H29M** | **Whitestone** | **31.49** | **46** | P | | **P** | | **02 22 53.3** | **+0.6** |
| | baz=288,SNR=7.3 | | | | | | | | |
| **CRQE** | **Cirque** | **31.49** | **58** | P | | **P** | | **02 22 52.6** | **-0.3** |
| | baz=294 | | | | | | | | |
| **BGLC** | **Bering Glacier** | **31.66** | **59** | P | | **P** | | **02 22 53.9** | **-0.3** |
| | baz=295 | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **31.80** | **48** | P | | **P** | | **02 22 55.6** | **+0.2** |
| | baz=290,SNR=6.1 | | | | | | | | |
| **DAWY** | **Dawson** | **31.81** | **50** | P | | **P** | | **02 22 55.3** | **-0.3** |
| | baz=291,SNR=12 | | | | | | | | |
| **F30M** | **Barrier River** | **32.02** | **43** | P | | **P** | | **02 22 57.3** | **0.0** |
| | baz=288,SNR=15 | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **32.06** | **44** | P | | **P** | | **02 22 57.7** | **0.0** |
| | baz=289 | | | | | | | | |
| **EPYK** | **Eagle Plains** | **32.07** | **46** | P | | **P** | | **02 22 58.0** | **+0.2** |
| EPYK | | | | IAmb | | IAmb | | 02 22 59.3 | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **32.07** | **46** | P | | **P** | | **02 22 57.8** | **-0.1** |
| | baz=290 | | | | | | | | |
| **J29N** | **Klondike Camp** | **32.15** | **49** | P | | **P** | | **02 22 58.3** | **-0.3** |
| | baz=291 | | | | | | | | |
| **TIA** | **Tai'an** | **32.18** | **243** | P | | **P** | | **02 22 58.4** | **-0.6** |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **CTG** | **Chitna Glacier** | **32.19** | **57** | P | | **P** | | **02 22 58.8** | **-0.2** |
| | baz=295,SNR=5.9 | | | | | | | | |
| **CTGM** | **Chitina Glacie** | **32.19** | **57** | P | | **P** | | **02 22 59.8** | **+0.8** |
| CTGM | | | | IAmb | | IAmb | | 02 23 01.2 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **YUK3** | **Moose Creek** | **32.24** | **55** | P | | **P** | | **02 22 59.6** | **0.0** |
| | baz=294 | | | | | | | | |
| **MESA** | **MESA** | **32.24** | **58** | P | | **P** | | **02 22 59.3** | **-0.3** |
| | baz=295 | | | | | | | | |
| **BTO** | **Baotou** | **32.33** | **256** | *e*P | | **P** | | **02 22 59.9** | **-0.5** |
| BTO | | | | pP | | **sP** | | **02 23 04.5** | **-0.3** |
| BTO | | | | sP | | **pP** | | **02 23 06.7** | **+3.2** |
| BTO | | | | S | | **S** | | **02 28 13.9** | **-0.2** |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,130nm,5.1s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,570nm,11.3s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,1μm,12.8s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,680nm,8.9s | | | | | | | | |
| **HNS** | **HongShan** | **32.40** | **247** | *e*P | | P | | 02 23 07.3 | +6.4 |
| HNS | | | | LR | | LR | | | |
| | comp=Z,960nm,15.7s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,650nm,16.7s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,1μm,15.7s | | | | | | | | |
| **I30M** | **Mount Dempster** | **32.60** | **48** | P | | **P** | | **02 23 02.8** | **+0.2** |
| | baz=291,SNR=9.5 | | | | | | | | |
| **INK** | **Inuvik** | **32.60** | **41** | IAmb | | IAmb | | 02 23 03.9 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **INK** | **Inuvik** | **32.60** | **41** | P | | **P** | | **02 23 02.4** | **0.0** |
| | comp=Z,9.9nm,1.0s,baz=287,slow=6.1,SNR=15 | | | | | | | | |
| INK | | | | LR | | LR | | 02 37 29.8 | |
| | comp=Z,227nm,18.7s,baz=281,slow=38 | | | | | | | | |
| | comp=Z,9.9nm,1.0s | | | | | | | | |
| **INK** | **Inuvik** | **32.60** | **41** | P | | **P** | | **02 23 02.6** | **+0.2** |
| | baz=289,SNR=9.9 | | | | | | | | |
| **K29M** | **Barlow Dome** | **32.66** | **50** | P | | **P** | | **02 23 03.0** | **-0.2** |
| | baz=293,SNR=6.2 | | | | | | | | |
| **L29M** | **L29M** | **32.70** | **52** | P | | **P** | | **02 23 03.9** | **+0.5** |
| **L29M** | **L29M** | **32.70** | **52** | P | | **P** | | **02 23 04.0** | **+0.6** |
| | baz=293,SNR=7.6 | | | | | | | | |
| **YUK8** | **Steele Glacier** | **32.75** | **55** | P | | **P** | | **02 23 04.0** | **-0.1** |
| | baz=295 | | | | | | | | |
| **O28M** | **Mount Upton** | **32.78** | **56** | P | | **P** | | **02 23 03.9** | **-0.4** |
| | baz=296 | | | | | | | | |
| **G31M** | **Satah River** | **32.80** | **44** | P | | **P** | | **02 23 04.0** | **-0.1** |
| | baz=290,SNR=8.5 | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **32.81** | **43** | IAmb | | IAmb | | 02 23 05.6 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **32.81** | **43** | P | | **P** | | **02 23 04.4** | **+0.2** |
| | baz=290,SNR=6.8 | | | | | | | | |
| **M29M** | **Somme Creek** | **32.83** | **53** | IAmb | | IAmb | | 02 23 07.0 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **M29M** | **Somme Creek** | **32.83** | **53** | P | | **P** | | **02 23 04.9** | **+0.3** |
| | baz=294,SNR=13 | | | | | | | | |
| **J30M** | **Hart River** | **32.86** | **49** | | | **PcP** | | **02 25 50.1** | **+1.0** |
| **J30M** | **Hart River** | **32.86** | **49** | P | | **P** | | **02 23 05.1** | **+0.2** |
| | baz=292,SNR=9.4 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **33.21** | **55** | P | | **P** | | **02 23 08.4** | **+0.4** |
| | baz=295 | | | | | | | | |
| **M30M** | **Minto, Yukon** | **33.48** | **52** | P | | **P** | | **02 23 11.2** | **+1.1** |
| **M30M** | **Minto, Yukon** | **33.48** | **52** | P | | **P** | | **02 23 10.6** | **+0.5** |
| | baz=295 | | | | | | | | |
| **YUK6** | **Outpost Mounta** | **33.51** | **55** | P | | **P** | | **02 23 10.9** | **+0.3** |
| | baz=296 | | | | | | | | |
| **PNL** | **Peninsula** | **33.62** | **58** | P | | **P** | | **02 23 11.9** | **+0.4** |
| | baz=297 | | | | | | | | |
| **O29M** | **Mount Kennedy** | **33.70** | **57** | P | | **P** | | **02 23 12.9** | **+0.6** |
| | baz=297 | | | | | | | | |
| **N30M** | **Aishikik Lake** | **33.83** | **54** | P | | **P** | | **02 23 13.5** | **+0.2** |
| | baz=296 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **34.05** | **33** | P | | **P** | | **02 23 15.3** | **+0.3** |
| A36M | | | | IAmb | | IAmb | | 02 23 16.9 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **34.05** | **33** | P | | **P** | | **02 23 15.0** | **+0.1** |
| | baz=290,SNR=5.1 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **34.38** | **54** | P | | **P** | | **02 23 19.1** | **+1.1** |
| **N31M** | **Braeburn, Yuko** | **34.38** | **54** | P | | **P** | | **02 23 18.1** | **+0.1** |
| | baz=297,SNR=10 | | | | | | | | |
| **P29M** | **Windy Craggy** | **34.39** | **57** | P | | **P** | | **02 23 18.7** | **+0.6** |
| | baz=298 | | | | | | | | |
| **P30M** | **Million Dollar** | **34.50** | **56** | P | | **P** | | **02 23 19.3** | **+0.2** |
| | baz=298,SNR=5.1 | | | | | | | | |
| **O30N** | **Mendenhall** | **34.58** | **55** | P | | **P** | | **02 23 19.9** | **+0.2** |
| | baz=298 | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **34.65** | **52** | P | | **P** | | **02 23 20.7** | **+0.4** |
| | baz=297 | | | | | | | | |
| **NJ2** | **Nanjing** | **34.83** | **237** | *e*P | | **P** | | **02 23 21.0** | **-1.1** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,740nm,14.7s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,450nm,11.8s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,950nm,16.2s | | | | | | | | |
| **FARO** | **Faro, Yukon** | **35.07** | **51** | P | | **P** | | **02 23 24.2** | **+0.3** |
| FARO | | | | IAmb | | IAmb | | 02 23 26.2 | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **FARO** | **Faro, Yukon** | **35.07** | **51** | P | | **P** | | **02 23 24.2** | **+0.3** |
| | baz=297,SNR=8.0 | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **35.08** | **57** | P | | **P** | | **02 23 24.0** | **-0.1** |
| | baz=299 | | | | | | | | |
| **WHY** | **Whitehorse** | **35.16** | **54** | P | | **P** | | **02 23 25.5** | **+0.7** |
| WHY | | | | IAmb | | IAmb | | 02 23 27.4 | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **WHY** | **Whitehorse** | **35.16** | **54** | P | | **P** | | **02 23 24.7** | **-0.1** |
| | baz=298,SNR=6.6 | | | | | | | | |
| **C36M** | **Paulatuk** | **35.41** | **37** | P | | **P** | | **02 23 27.1** | **+0.4** |
| C36M | | | | IAmb | | IAmb | | 02 23 28.1 | |
| | comp=Z,24nm,1.6s | | | | | | | | |
| **C36M** | **Paulatuk** | **35.41** | **37** | P | | **P** | | **02 23 26.3** | **-0.4** |
| | baz=294 | | | | | | | | |
| **SKAG** | **Skagway** | **35.54** | **56** | P | | **P** | | **02 23 28.9** | **+0.9** |
| SKAG | | | | IAmb | | IAmb | | 02 23 31.4 | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **SKAG** | **Skagway** | **35.54** | **56** | P | | **P** | | **02 23 28.5** | **+0.5** |
| | baz=300 | | | | | | | | |
| **N32M** | **Quiet Lake** | **35.69** | **53** | P | | **P** | | **02 23 29.6** | **+0.2** |
| | baz=299 | | | | | | | | |
| **LYN** | **LuoYang** | **35.76** | **247** | P | | **P** | | **02 23 30.3** | **+0.2** |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,23nm,0.7s | | | | | | | | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,220nm,5.2s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,1μm,14.1s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,670nm,13.4s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,1μm,14.8s | | | | | | | | |
| **S31K** | **Pelican** | **35.90** | **59** | P | | **P** | | **02 23 31.1** | **+0.1** |
| | baz=301 | | | | | | | | |
| **P32M** | **Atlin** | **36.19** | **56** | P | | **P** | | **02 23 33.8** | **+0.1** |
| | baz=300 | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **36.27** | **54** | P | | **P** | | **02 23 35.2** | **+0.9** |
| **P33M** | **Teslin, Yukon** | **36.27** | **54** | P | | **P** | | **02 23 34.6** | **+0.3** |
| | baz=300 | | | | | | | | |
| **R32K** | **Eaglecrest** | **36.51** | **58** | P | | **P** | | **02 23 37.1** | **+0.8** |
| | baz=302 | | | | | | | | |
| **SIT** | **Sitka** | **36.79** | **60** | P | | **P** | | **02 23 39.1** | **+0.5** |
| | baz=303 | | | | | | | | |
| **S32K** | **Killisnoo** | **36.91** | **59** | P | | **P** | | **02 23 40.0** | **+0.4** |
| | baz=302 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **36.93** | **294** | P | | **P** | | **02 23 38.7** | **-1.2** |
| ZAA0 | | | | | | **PcP** | | **02 26 00.3** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **36.93** | **294** | P | | **P** | | **02 23 38.6** | **-1.3** |
| ZALV | | | | | | **PcP** | | **02 26 00.2** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **36.93** | **294** | P | | **P** | | **02 23 39.8** | **-0.1** |
| | comp=Z,2.1nm,0.8s,baz=46,slow=8.5,SNR=8.4 | | | | | | | | |
| ZALV | | | | PcP | | **PcP** | | **02 26 00.0** | **-0.9** |
| | comp=Z,3.2nm,0.9s,baz=33,slow=3.5,SNR=6.0 | | | | | | | | |
| ZALV | | | | LR | | LR | | 02 40 09.2 | |
| | comp=Z,391nm,18.4s,baz=54,slow=38 | | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | | |
| **Q32M** | **Nakina River** | **37.15** | **56** | P | | **P** | | **02 23 42.3** | **+0.3** |
| | baz=302 | | | | | | | | |
| **R33M** | **Jennings River** | **37.49** | **55** | P | | **P** | | **02 23 46.2** | **+1.4** |
| R33M | | | | IAmb | | IAmb | | 02 23 47.9 | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **R33M** | **Jennings River** | **37.49** | **55** | P | | **P** | | **02 23 45.1** | **+0.3** |
| | baz=302,SNR=8.2 | | | | | | | | |
| **WHN** | **Wuhan** | **38.16** | **241** | P | | **P** | | **02 23 53.6** | **+3.1** |
| WHN | | | | LR | | LR | | | |
| | comp=Z,1μm,16.0s | | | | | | | | |
| **S34M** | **Telegraph Cree** | **38.22** | **57** | P | | **P** | | **02 23 51.8** | **+1.0** |
| **S34M** | **Telegraph Cree** | **38.22** | **57** | P | | **P** | | **02 23 51.1** | **+0.3** |
| | baz=304 | | | | | | | | |
| **DLBC** | **Dease Lake** | **38.42** | **56** | P | | **P** | | **02 23 53.5** | **+0.9** |
| DLBC | | | | IAmb | | IAmb | | 02 23 55.5 | |
| | comp=Z,38nm,1.4s | | | | | | | | |
| **DLBC** | **Dease Lake** | **38.42** | **56** | P | | **P** | | **02 23 54.6** | **+2.0** |
| | comp=Z,11nm,1.0s,baz=298,slow=9.3,SNR=13 | | | | | | | | |
| DLBC | | | | LR | | LR | | 02 41 07.6 | |
| | comp=Z,445nm,18.0s,baz=304,slow=38 | | | | | | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **DLBC** | **Dease Lake** | **38.42** | **56** | P | | **P** | | **02 23 53.1** | **+0.6** |
| | baz=304,SNR=6.5 | | | | | | | | |
| **WRGLY** | **Wrigley** | **38.54** | **46** | P | | **P** | | **02 23 53.8** | **+0.4** |
| **WRGLY** | **Wrigley** | **38.54** | **46** | P | | **P** | | **02 23 54.0** | **+0.6** |
| | baz=302 | | | | | | | | |
| **GTA** | **Gaotai** | **38.56** | **265** | *e*P | | **P** | | **02 23 54.0** | **0.0** |
| GTA | | | | pP | | sP | | 02 23 58.0 | -0.4 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,

comp=Z,3.4nm,0.9s,baz=51,slow=3.1,SNR=5.7
KURBB LR LR 02 42 51.8
comp=Z,541nm,18.3s,baz=157,slow=38
comp=Z,12nm,0.8s
**YKA Yellowknife Ar 42.29 44** P **P** **02 24 24.6 +0.2**
comp=Z,5.8nm,0.8s,baz=308,slow=8.3,SNR=21
YKA LR LR 02 44 45.3
comp=Z,116nm,18.4s,baz=304,slow=40
comp=Z,5.8nm,0.8s
**MK31 Makanchi Array 42.65 287** P **P** **02 24 26.1 -1.5**
**MK31 Makanchi Array 42.65 287** *ce*P **P** **02 24 27.9 +0.3**
**MKAR Makanchi Array 42.65 287** P **P** **02 24 26.0 -1.6**
**MKAR Makanchi Array 42.65 287** P **P** **02 24 27.4 -0.2**
comp=Z,4.0nm,1.0s,baz=61,slow=9.9,SNR=13
MKAR PcP **PcP** **02 26 17.8 -1.5**
comp=Z,1.3nm,0.7s,baz=48,slow=4.6,SNR=2.4
comp=Z,4.0nm,1.0s
**MAKZ Makanchi 42.80 287** P **P** **02 24 27.6 -1.2**
**MAKZ Makanchi 42.80 287** P **P** **02 24 28.7 -0.1**
**BBB Bella Bella 43.06 62** LR LR 02 42 47.6
comp=Z,204nm,19.1s,baz=318,slow=37
**GOMU GeErMu 43.59 266** P **P** **02 24 34.5 -1.2**
GOMU PcP **PcP** **02 26 23.0 -0.1**
GOMU pmax pmax
comp=Z,21nm,0.8s
GOMU LR LR
comp=Z,2µm,13.8s
GOMU LR LR
comp=Z,1µm,15.7s
GOMU LR LR
comp=Z,3µm,15.1s
**NEEM North Greenlan 43.96 7** *i*P **P** **02 24 38.3 +0.1**
NEEM IAmb IAmb 02 24 40.3
comp=Z,21nm,0.8s
**BRVK Borovoye 44.34 301** P **P** **02 24 39.9 -1.1**
**BRVK Borovoye 44.34 301** *ce*P **P** **02 24 41.3 +0.3**
BRVK pmax pmax
comp=Z,17nm,1.7s
**GYA Guiyang 45.24 246** P **P** **02 24 49.1 +0.4**
GYA pmax pmax
comp=Z,12nm,0.6s
GYA LR LR
comp=Z,370nm,13.4s
GYA LR LR
comp=Z,400nm,12.4s
GYA LR LR
comp=Z,640nm,17.5s
**DAG Danmarks Havn 45.37 357** P **P** **02 24 49.6 +0.6**
DAG pmax pmax
comp=Z,18nm,1.3s
**TDK Taldyqorghan 45.86 288** *e*P **P** **02 24 52.9 -0.4**
comp=Z,4.1nm,0.6s,baz=288
**TDK Taldyqorghan 45.86 288** *e*P **P** **02 24 52.9 -0.4**
TDK pmax pmax
comp=Z,4.0nm,0.6s
**SVE Sverdlovsk 46.00 310** *e*P **P** **02 24 55.3 +1.1**
SVE pmax pmax
comp=Z,19nm,1.1s
**KPKS Kokpek 46.80 286** *e*P **P** **02 25 00.7 -0.2**
baz=286
**KPKS Kokpek 46.80 286** *e*P **P** **02 25 00.6 -0.2**
**UZB Uzynbulak 46.85 285** *e*P **P** **02 25 00.9 -0.4**
baz=285
**UZB Uzynbulak 46.85 285** *e*P **P** **02 25 00.9 -0.4**
**ARU Arti 47.11 311** P **P** **02 25 02.7 -0.2**
ARU IAmb IAmb 02 25 04.2
comp=Z,19nm,1.0s
**ARU Arti 47.11 311** *c i*P **P** **02 25 03.3 +0.4**
ARU 02 26 32.8
ARU 02 26 50.2
ARU PPP PPP 02 27 40.5
ARU S **S** **02 31 57.9 +3.3**
ARU pmax pmax
comp=Z,22nm,1.0s
ARU MLR MLR
comp=Z,289nm,17.0s
**ARU Arti 47.11 311** P **P** **02 25 03.0 +0.1**
comp=Z,19nm,1.0s
**APA Apatity 47.11 333** ⇓ *i*P **P** **02 25 00.8 -1.9**
APA pmax pmax
comp=Z,8.0nm,1.2s
APA MLR MLR
comp=Z,200nm,14.0s
**ZHN Zhinishke 47.14 286** *e*P **P** **02 25 03.1 -0.4**
comp=Z,4.5nm,0.8s,baz=286
**ZHN Zhinishke 47.14 286** *e*P **P** **02 25 03.0 -0.4**
ZHN pmax pmax
comp=Z,4.0nm,0.8s
**CLRS Cowichan Lake 47.20 63** P **P** **02 25 04.2 +0.5**
CLRS IAmb IAmb 02 25 05.9
comp=Z,17nm,1.1s
**SATY Saty 47.23 286** *e*P **P** **02 25 03.9 -0.4**
comp=Z,10nm,1.0s,baz=286
**SATY Saty 47.23 286** *e*P **P** **02 25 03.8 -0.4**
SATY pmax pmax
comp=Z,10.0nm,1.0s
**ARCES ARCESS Array B 47.29 338** P **P** **02 25 04.2 +0.1**
ARCES LR LR 02 48 34.3
comp=Z,81nm,19.2s,baz=27,slow=41
comp=Z,8.1nm,1.0s
**PZH PanZhiHua 47.64 251** P **P** **02 25 07.8 +0.2**
PZH S **S** **02 32 05.2 +2.1**
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,130nm,5.7s
PZH LR LR
comp=Z,390nm,13.5s
PZH LR LR
comp=Z,320nm,12.0s
PZH LR LR
comp=Z,450nm,14.1s
**MDOK Medeo 47.85 287** *e*P **P** **02 25 08.8 -0.3**
baz=287
**MDOK Medeo 47.85 287** *e*P **P** **02 25 08.7 -0.3**
**UPNV Upernavik 47.95 11** *i*P **P** **02 25 08.7 -0.5**
UPNV IAmb IAmb 02 25 10.9
comp=Z,21nm,0.8s
**TNSS Tian-Shan 47.99 287** *e*P **P** **02 25 09.8 -0.7**
baz=287
**TNSS Tian-Shan 47.99 287** *e*P **P** **02 25 09.7 -0.7**
**BTLS Baital 48.02 291** *e*P **P** **02 25 09.5 -0.7**
baz=290
**BTLS Baital 48.02 291** *e*P **P** **02 25 09.4 -0.7**
**KMI Kunming 48.28 249** ⇑P **P** **02 25 11.6 -1.1**
KMI pmax pmax
comp=Z,9.0nm,0.7s
KMI LR LR
comp=Z,420nm,14.1s
KMI LR LR
comp=Z,430nm,15.0s
KMI LR LR
comp=Z,440nm,14.3s
**NLWA Neilton Lookou 48.33 65** P **P** **02 25 13.5 +1.0**
NLWA IAmb IAmb 02 25 15.4
comp=Z,12nm,1.1s
**SGDS Sogindy 48.87 289** *e*P **P** **02 25 16.6 -0.3**
comp=Z,11nm,1.0s,baz=289
**SGDS Sogindy 48.87 289** *e*P **P** **02 25 16.5 -0.3**
SGDS pmax pmax
comp=Z,11nm,1.0s
**KIRV Kirov 49.06 318** *ce*P **P** **02 25 19.0 +1.1**
**E03A Lebam 49.08 65** P **P** **02 25 18.9 +0.6**
**D05A Enumclaw 49.37 64** P **P** **02 25 21.7 +1.2**
D05A IAmb IAmb 02 25 23.1
comp=Z,20nm,1.0s
**SUMG Summit 49.45 5** P **P** **02 25 22.4 +1.2**
**SUMG Summit 49.45 5** P **P** **02 25 22.4 +1.2**
SUMG pmax pmax
comp=Z,30nm,1.0s
**SUMG Summit 49.45 5** *i*P **P** **02 25 22.0 +0.8**
SUMG IAmb IAmb 02 25 24.0
comp=Z,13nm,0.9s
**MSF Maaselka 49.48 333** P **P** **02 25 21.7 +0.6**
MSF pmax pmax
comp=Z,25nm,1.3s
**AAK Ala-Archa 49.53 288** P **P** **02 25 21.8 -0.2**
AAK IAmb IAmb 02 25 23.4
comp=Z,13nm,1.1s
**AAK Ala-Archa 49.53 288** *de*P **P** **02 25 22.0 0.0**
AAK pmax pmax
comp=Z,23nm,1.7s
**LON Longmire 49.77 64** P **P** **02 25 23.9 +0.2**
**LON Longmire 49.77 64** P **P** **02 25 23.9 +0.2**
LON pmax pmax
comp=Z,4.0nm,0.8s
**QIZ Qiongzhong 50.12 238** P **P** **02 25 25.2 -1.2**
QIZ S **S** **02 32 36.2 -1.6**
QIZ pmax pmax
comp=Z,12nm,1.5s
QIZ LR LR
comp=Z,240nm,12.2s
QIZ LR LR
comp=Z,400nm,14.5s
QIZ LR LR
comp=Z,300nm,13.6s
**MXC Moxie City 50.62 63** P **P** **02 25 31.0 +1.0**
**E07A Sunnyside 50.84 63** P **P** **02 25 32.4 +0.7**
E07A IAmb IAmb 02 25 33.5
comp=Z,12nm,0.9s
**NEW Newport 50.87 59** P **P** **02 25 32.2 +0.3**
**NEW Newport 50.87 59** LR LR 02 48 17.1
comp=Z,146nm,18.4s,baz=315,slow=37
**NEW Newport 50.87 59** P **P** **02 25 31.9 0.0**
baz=317
**NEW Newport 50.87 59** P **P** **02 25 32.2 +0.3**
NEW pmax pmax
comp=Z,6.0nm,1.0s
**D08A Wollman Farm, 50.92 62** P **P** **02 25 32.9 +0.6**
**H04D Lebanon 50.94 66** P **P** **02 25 33.4 +1.0**
H04D IAmb IAmb 02 25 35.0
comp=Z,14nm,0.9s
**BUCK Buck Mountain 51.06 67** P **P** **02 25 34.5 +1.0**
BUCK IAmb IAmb 02 25 36.5
comp=Z,17nm,1.1s
**KSH Kashi 51.07 284** P **P** **02 25 37.5 +3.9**
KSH sP sP 02 25 41.8 +3.7
KSH pmax pmax
comp=Z,9.0nm,1.1s
KSH LR LR
comp=Z,250nm,13.1s
KSH LR LR
comp=Z,400nm,15.5s
KSH LR LR
comp=Z,440nm,16.5s
**H04A Detroit Lake 51.09 66** P **P** **02 25 34.3 +0.7**
**HAWA Hanford 51.11 63** P **P** **02 25 34.2 +0.5**
**KKAR Karatay Array 51.18 291** P **P** **02 25 33.8 -0.5**
**KKAR Karatay Array 51.18 291** P **P** **02 25 33.9 -0.5**
**KKAR Karatay Array 51.18 291** P **P** **02 25 33.9 -0.4**
**I03D Drain, OR 51.24 68** P **P** **02 25 36.0 +1.3**
I03D IAmb IAmb 02 25 42.3
comp=Z,17nm,1.2s
**ARSB Arslanbob 51.26 288** P **P** **02 25 33.5 -1.5**
**ARSB Arslanbob 51.26 288** P **P** **02 25 33.5 -1.5**
ARSB pmax pmax
comp=Z,9.0nm,1.9s
**F07A Phinny Hill Vi 51.29 63** P **P** **02 25 35.9 +0.9**
F07A IAmb IAmb 02 25 37.0
comp=Z,16nm,0.8s
**J01E Myrtle Point 51.35 68** P **P** **02 25 35.6 +0.1**
J01E IAmb IAmb 02 25 38.6
comp=Z,28nm,1.1s
**JOF Joensuu 51.36 330** *e*P **P** **02 25 35.8 +0.5**
**G06A Carlson Farm, 51.44 64** P **P** **02 25 35.9 -0.3**
**BRLS Borolday 51.57 292** *e*P **P** **02 25 38.6 +1.3**
baz=291
**BRLS Borolday 51.57 292** *e*P **P** **02 25 38.5 +1.3**
**I04A Tendick Farm, 51.63 67** P **P** **02 25 38.4 +0.6**
**ABKAR Akbulak array 51.65 303** P **P** **02 25 36.9 -0.7**
**ABKAR Akbulak array 51.65 303** IAmb IAmb 02 25 39.5
comp=Z,9.1nm,1.5s
**E09A Wood Farm, Sta 51.68 62** P **P** **02 25 37.6 -0.3**
E09A IAmb IAmb 02 25 39.6
comp=Z,18nm,0.9s
**DBO Dodson Butte 51.72 68** P **P** **02 25 40.0 +1.6**
**I05D Terrebonne, OR 51.76 66** P **P** **02 25 39.4 +0.8**
I05D IAmb IAmb 02 25 40.4
comp=Z,11nm,0.8s
**HUMO Hull Mountain 52.24 68** P **P** **02 25 43.5 +1.2**
**L02F Cave Junction 52.30 69** P **P** **02 25 43.9 +1.2**
**PINE Pine Mountain 52.35 66** P **P** **02 25 44.4 +1.2**
PINE IAmb IAmb 02 25 45.7
comp=Z,26nm,0.9s
**KSXB Camp Six Broad 52.36 70** P **P** **02 25 44.2 +1.0**
**FFC Flin Flon 52.41 45** P **P** **02 25 44.2 +0.9**
**FFC Flin Flon 52.41 45** P **P** **02 25 44.2 +0.9**
FFC pmax pmax
comp=Z,33nm,1.0s
**F10A Beach Ranch, E 52.51 62** IAmb IAmb 02 25 46.0
comp=Z,19nm,0.8s
**J05D Fort Rock, OR 52.59 66** P **P** **02 25 45.9 +1.0**
J05D IAmb IAmb 02 25 47.5
comp=Z,25nm,0.9s
**VALR Valaam 52.76 329** *i*P **P** **02 25 47.1 +1.4**
VALR pmax pmax
comp=Z,22nm,1.3s
**ICESG Greenland Ices 52.86 6** *i*P **P** **02 25 47.1 +0.2**
ICESG IAmb IAmb 02 25 49.1
comp=Z,15nm,0.9s
**YBH Yreka Blue Hor 53.02 69** P **P** **02 25 49.2 +1.1**
**YBH Yreka Blue Hor 53.02 69** LR LR 02 45 38.0
comp=Z,155nm,21.9s,baz=312,slow=33
**YBH Yreka Blue Hor 53.02 69** P **P** **02 25 49.2 +1.1**
YBH pmax pmax
comp=Z,7.0nm,0.9s
**BTK Batken 53.29 288** P **P** **02 25 48.9 -1.2**
BTK IAmb IAmb 02 25 51.3
comp=Z,18nm,1.1s
**BTK Batken 53.29 288** P **P** **02 25 48.9 -1.2**
BTK pmax pmax
comp=Z,17nm,1.1s
**MSO Missoula 53.38 59** P **P** **02 25 51.7 +1.0**
MSO IAmb IAmb 02 25 52.6
comp=Z,12nm,0.9s
**MSO Missoula 53.38 59** P **P** **02 25 51.5 +0.8**
baz=319,SNR=6.6
**VAF Ylistaro 53.40 334** *e*P **P** **02 25 50.8 +0.4**
**VAF Ylistaro 53.40 334** P **P** **02 25 52.1 +1.7**
VAF pmax pmax
comp=Z,19nm,1.3s
**FIA1 FINESS Array S 53.95 332** P **P** **02 25 54.8 +0.4**
**FINES FINESS Array B 53.95 332** P **P** **02 25 54.6 +0.1**
comp=Z,4.8nm,0.8s,baz=28,slow=8.5,SNR=15
FINES LR LR 02 51 01.4
comp=Z,92nm,18.3s,baz=34,slow=38
comp=Z,4.8nm,0.8s
**EGMT Eagleton 54.35 55** P **P** **02 25 58.2 +0.5**
**EGMT Eagleton 54.35 55** P **P** **02 25 58.2 +0.5**
baz=320,SNR=6.8
**GAR Garm 54.35 288** P **P** **02 25 57.4 -0.4**
**BELG Belogornoye 54.40 313** *c i*P **P** **02 25 58.3 +0.4**
BELG pmax pmax
comp=Z,5.0nm,0.9s
**DY2G Dye2 54.99 9** *i*P **P** **02 26 01.6 -0.7**
DY2G IAmb IAmb 02 26 03.4
comp=Z,7.5nm,0.8s
**MFID Camas Ranch 55.09 63** P **P** **02 26 04.0 +0.9**
MFID IAmb IAmb 02 26 05.2
comp=Z,12nm,0.8s
**DLMT Dillon 55.10 59** P **P** **02 26 04.3 +1.0**
DLMT IAmb IAmb 02 26 05.6
comp=Z,26nm,1.1s
**PHRA Phrae 55.11 247** P **P** **02 26 02.6 -0.8**
**CHGR Chuyangaron 55.19 289** P **P** **02 26 03.1 -0.9**
**CHGR Chuyangaron 55.19 289** P **P** **02 26 03.1 -0.9**
CHGR pmax pmax
comp=Z,29nm,1.0s
**ORV Oroville 55.27 70** P **P** **02 26 04.8 +0.4**
**ORV Oroville 55.27 70** P **P** **02 26 04.8 +0.4**
ORV pmax pmax
comp=Z,10.0nm,1.0s
**SIMJ Simiganj 55.27 289** P **P** **02 26 04.0 -0.6**
SIMJ IAmb IAmb 02 26 05.1
comp=Z,12nm,1.0s
**MOS Moscow 55.33 322** *e*P **P** **02 26 03.0 -1.6**
MOS pmax pmax
comp=Z,33nm,1.4s
**BOZ Bozeman (W) 55.37 58** IAmb IAmb 02 26 07.5
comp=Z,16nm,1.1s
**BOZ Bozeman (W) 55.37 58** P **P** **02 26 06.0 +0.8**
baz=320,SNR=20
**CHTO Chiang Mai 55.47 249** P **P** **02 26 06.0 -0.1**
CHTO IAmb IAmb 02 26 10.3
comp=Z,22nm,1.4s
**CHTO Chiang Mai 55.47 249** P **P** **02 26 06.0 -0.1**
CHTO pmax pmax
comp=Z,23nm,1.4s
**HLID Hailey 55.64 62** P **P** **02 26 08.4 +1.2**
**HLID Hailey 55.64 62** P **P** **02 26 07.5 +0.3**
baz=320,SNR=8.1
**ARBE Arbavere 55.69 330** *e*P **P** **02 26 06.4 -0.7**
**CMAR Chiang Mai Arr 55.78 248** P **P** **02 26 07.5 -0.8**
comp=Z,1.0nm,0.3s,baz=34,slow=6.5,SNR=5.7
CMAR PcP **PcP** **02 27 07.2 0.0**
comp=Z,2.3nm,0.6s,baz=9.8,slow=4.8,SNR=7.3
CMAR LR LR 02 53 29.2
comp=Z,199nm,18.6s,baz=15,slow=40
comp=Z,1.0nm,0.3s
**AFDM Forest Hills D 55.99 70** P **P** **02 26 10.0 +0.4**
**YHL Hebgen Lake 56.14 58** P **P** **02 26 12.2 +1.3**
YHL IAmb IAmb 02 26 13.4
comp=Z,16nm,1.1s
**OBN Obninsk 56.19 322** *d i*P **P** **02 26 11.4 +0.7**
OBN *i* 02 26 18.9
OBN *i* 02 27 04.7
OBN *i* S **S** **02 34 06.3 +6.7**
OBN pmax pmax
comp=Z,17nm,1.1s
OBN MLR MLR
comp=Z,166nm,17.0s
**PAHR Pah Rah Range 56.20 68** P **P** **02 26 12.2 +0.9**
PAHR IAmb IAmb 02 26 13.5
comp=Z,19nm,1.0s
**YHB Horse Butte 56.21 59** IAmb IAmb 02 26 10.9
comp=Z,28nm,1.2s
**DGMT Dagmar 56.37 51** IAmb IAmb 02 26 14.1
comp=Z,21nm,0.9s
**DGMT Dagmar 56.37 51** P **P** **02 26 12.1 -0.1**
baz=322
**YNR Norris Junctio 56.47 58** P **P** **02 26 14.4 +1.1**
YNR IAmb IAmb 02 26 16.3
comp=Z,12nm,0.9s
**PNTR Pine Nut 56.57 69** P **P** **02 26 15.1 +1.1**
**YMP Mirror Lake Pl 56.69 58** P **P** **02 26 15.9 +1.1**
YMP IAmb IAmb 02 26 17.7
comp=Z,24nm,1.2s
**BMN Battle Mountai 56.70 66** P **P** **02 26 16.1 +1.2**
BMN IAmb IAmb 02 26 17.5
comp=Z,15nm,1.1s
**BMN Battle Mountai 56.70 66** P **P** **02 26 16.1 +1.2**
BMN pmax pmax
comp=Z,15nm,1.1s
**YPP Pitchstone Pla 56.76 59** P **P** **02 26 17.4 +2.1**
YPP IAmb IAmb 02 26 18.8
comp=Z,19nm,1.4s
**H17A Grant Village 56.77 58** P **P** **02 26 17.6 +2.3**
**H17A Grant Village 56.77 58** P **P** **02 26 15.6 +0.2**
baz=321,SNR=14
**RLMT Red Lodge 56.79 57** P **P** **02 26 15.6 +0.1**
baz=321,SNR=54
**LAO LASA Array 56.91 54** P **P** **02 26 17.1 +1.1**
baz=322,SNR=6.3
**NIL Nilore 56.95 282** P **P** **02 26 16.8 +0.3**
**NIL Nilore 56.95 282** P **P** **02 26 16.8 +0.3**
NIL pmax pmax
comp=Z,28nm,1.0s
**FLWY Flagg Ranch 56.95 59** P **P** **02 26 17.8 +1.2**
**WAKR Walker 57.10 69** IAmb IAmb 02 26 20.6
comp=Z,17nm,1.1s
**FXWY Fox Creek 57.15 59** IAmb IAmb 02 26 20.9
comp=Z,12nm,1.1s
**TPAW Teton Pass 57.30 59** IAmb IAmb 02 26 22.2
comp=Z,22nm,1.3s
**KVN Kaiserville 57.34 68** IAmb IAmb 02 26 22.1
comp=Z,21nm,1.1s
**NC303 NORSAR Array S 57.40 339** P **P** **02 26 19.8 +0.5**
NC303 IAmb IAmb 02 26 20.4
comp=Z,22nm,1.1s
**SNOW Snow King Moun 57.41 59** P **P** **02 26 21.1 +1.1**
SNOW IAmb IAmb 02 26 23.1
comp=Z,21nm,1.3s
**ELK Elko 57.42 64** IAmb IAmb 02 26 22.9
comp=Z,18nm,1.0s
**ELK Elko 57.42 64** P **P** **02 26 21.8 +1.8**
**LPSR Galich'ya Gora 57.45 319** *e*P **P** **02 26 18.8 -0.9**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**NC204 NORSAR Array S 57.47 339** IAmb IAmb 02 26 21.0
comp=Z,22nm,1.0s
**VRH Novokhopyorsk 57.58 316** *e*P **P** **02 26 20.1 -0.5**
VRH pmax pmax
comp=Z,11nm,0.5s
**NB2 NORSAR Subarra 57.60 339** P **P** **02 26 20.5 -0.3**
comp=Z,19nm,1.0s,baz=22,slow=7.4
**NB2 NORSAR Subarra 57.60 339** P **P** **02 26 20.3 -0.5**
NB2 pmax pmax
comp=Z,7.0nm,1.0s
**NOA NORSAR Array B 57.60 339** P **P** **02 26 20.4 -0.3**
comp=Z,11nm,0.9s,baz=24,slow=7.1,SNR=4.6
NOA LR LR 02 53 43.7
comp=Z,59nm,20.0s,baz=25,slow=39
comp=Z,11nm,0.9s
**NBO00 NORSAR Array S 57.69 339** IAmb IAmb 02 26 22.4
comp=Z,16nm,1.0s
**NVAR Mina Array Bea 57.72 68** P **P** **02 26 23.4 +1.3**
comp=Z,6.5nm,0.9s,baz=301,slow=6.4,SNR=33
NVAR LR LR 02 51 23.1
comp=Z,154nm,18.2s,baz=280,slow=36
comp=Z,6.5nm,0.9s
**LHV Little Huntoon 57.76 69** P **P** **02 26 23.5 +1.5**
LHV IAmb IAmb 02 26 25.4
comp=Z,25nm,1.1s
**HVU Hansel Valley 57.78 62** P **P** **02 26 23.7 +1.2**
HVU IAmb IAmb 02 26 25.3
comp=Z,22nm,1.1s
**HVU Hansel Valley 57.78 62** P **P** **02 26 23.7 +1.2**
HVU pmax pmax
comp=Z,22nm,1.1s
**NV11 Mina Array Sit 57.79 68** P **P** **02 26 23.5 +1.0**
NV11 IAmb IAmb 02 26 25.2
comp=Z,14nm,1.2s
**AHID Auburn Hatcher 57.79 60** P **P** **02 26 23.3 +0.7**
**NAO01 NORSAR Array S 57.85 339** P **P** **02 26 22.7 +0.3**
**HFS Hagfors 57.95 337** P **P** **02 26 23.0 -0.1**
comp=Z,2.4nm,0.5s,baz=33,slow=7.0,SNR=18
HFS LR LR 02 53 35.6
comp=Z,85nm,19.1s,baz=27,slow=38
comp=Z,2.4nm,0.5s
**HFS Hagfors 57.95 337** P **P** **02 26 23.0 -0.1**
**OMMB Old Mammoth Mi 58.01 69** P **P** **02 26 25.2 +1.0**
**VORR Voronezh 58.11 318** *e*P **P** **02 26 24.3 -0.1**
VORR pmax pmax
comp=Z,13nm,0.4s
**ULM Lac du Bonnet 58.24 45** IAmb IAmb 02 26 26.2
comp=Z,12nm,0.9s
**ULM Lac du Bonnet 58.24 45** P **P** **02 26 25.1 -0.2**
comp=Z,7.3nm,0.7s,baz=319,slow=7.9,SNR=8.5
ULM LR LR 02 53 02.1
comp=Z,124nm,18.3s,baz=50,slow=38
comp=Z,7.3nm,0.7s
**SPUT South Promonto 58.30 62** P **P** **02 26 27.2 +1.1**
SPUT IAmb IAmb 02 26 28.8
comp=Z,19nm,1.1s
**BGU Big Grassy Mou 58.33 63** P **P** **02 26 27.4 +1.1**
**HWUT Hardware Ranch 58.48 61** P **P** **02 26 28.4 +1.0**
**BW06 Boulder Array 58.50 59** P **P** **02 26 27.8 +0.3**
baz=322,SNR=34
**PDAR Pinedale Array 58.50 59** P **P** **02 26 28.4 +0.9**
**PDAR Pinedale Array 58.50 59** P **P** **02 26 28.6 +1.0**
comp=Z,18nm,0.9s,baz=341,slow=3.1,SNR=113
PDAR LR LR 02 52 24.4
comp=Z,60nm,18.7s,baz=325,slow=37
comp=Z,18nm,0.9s
**VSR Storozhevoye 58.50 318** *e*P **P** **02 26 24.3 -2.8**
VSR pmax pmax
comp=Z,20nm,1.4s
**TPH Tonopah 58.53 68** P **P** **02 26 29.0 +1.2**
**TPH Tonopah 58.53 68** P **P** **02 26 29.0 +1.2**
TPH pmax pmax
comp=Z,62nm,1.0s
**VORD Divnogorie 58.66 317** *e*P **P** **02 26 26.1 -2.1**
VORD pmax pmax
comp=Z,9.0nm,0.6s
**DSP Deep Springs 58.71 69** P **P** **02 26 29.6 +0.8**
DSP IAmb IAmb 02 26 31.9
comp=Z,12nm,1.1s
**MDND Maddock 58.74 49** P **P** **02 26 29.8 +0.9**
baz=324
**MZP Montezuma Peak 58.74 68** P **P** **02 26 29.6 +0.3**
**TCUT Toone Canyon 58.94 61** P **P** **02 26 31.8 +1.2**
**Q12A Willow Creek R 58.94 65** P **P** **02 26 31.8 +1.2**
**DUG Dugway, Tooele 59.00 63** P **P** **02 26 31.3 +0.3**
baz=322,SNR=34
**DUG Dugway, Tooele 59.00 63** P **P** **02 26 32.3 +1.3**
**CTU Camp Tracy 59.11 62** P **P** **02 26 32.9 +1.2**

CTU IAmb IAmb 02 26 34.1
comp=Z,13nm,0.9s
**GMN Gold Mountain 59.12 68** P **P** **02 26 32.2 +0.3**
**SPR3 Spring Creek 3 59.22 65** P **P** **02 26 34.1 +1.4**
**GRAC Grapevine Rang 59.30 69** P **P** **02 26 34.2 +1.2**
baz=322
**SMMC Simmler 59.30 72** P **P** **02 26 34.4 +1.4**
baz=322
**JLU Jordanelle 59.33 62** P **P** **02 26 34.7 +1.4**
JLU IAmb IAmb 02 26 35.9
comp=Z,14nm,1.0s
**VES Vestal, Richgr 59.35 71** P **P** **02 26 33.3 +0.1**
baz=322,SNR=5.3
**CWC Cottonwood Cre 59.38 70** P **P** **02 26 33.5 -0.1**
baz=322
**MNK Minsk 59.42 326** *e*P **P** **02 26 34.0 +0.6**
**NLU North Lily Min 59.54 63** P **P** **02 26 35.6 +0.8**
**S11A Rachel 59.59 67** P **P** **02 26 35.8 +0.7**
S11A IAmb IAmb 02 26 37.8
comp=Z,17nm,1.0s
**PABE Paberze 59.66 329** P **P** **02 26 35.4 +0.3**
**PABE Paberze 59.66 329** *e*P **P** **02 26 35.3 +0.3**
**MPU Maple Canyon 59.70 62** P **P** **02 26 37.0 +1.1**
**PKM Mcpherson Peak 59.73 72** P **P** **02 26 35.2 -0.9**
baz=322
**ISA Isabella, Lake 59.80 70** P **P** **02 26 36.5 +0.1**
baz=322
**PSUT Pine Spring 59.81 65** P **P** **02 26 37.8 +1.1**
PSUT IAmb IAmb 02 26 39.3
comp=Z,14nm,1.0s
**WCT Wildcat Mounta 59.83 68** P **P** **02 26 37.3 +0.7**
WCT IAmb IAmb 02 26 39.1
comp=Z,11nm,1.1s
**AGMN Agassiz Nation 59.84 46** IAmb IAmb 02 26 37.4
comp=Z,11nm,1.1s
**AGMN Agassiz Nation 59.84 46** P **P** **02 26 35.8 -0.7**
baz=325
**RSSD Black Hills 59.88 54** P **P** **02 26 38.1 +1.0**
**RSSD Black Hills 59.88 54** P **P** **02 26 37.0 0.0**
baz=323
**RSSD Black Hills 59.88 54** P **P** **02 26 38.1 +1.0**
RSSD pmax pmax
comp=Z,29nm,1.0s
**TPNV Topopah Spring 59.89 68** P **P** **02 26 37.9 +0.7**
baz=322,SNR=18
**K22A Casper 59.96 57** P **P** **02 26 38.2 +0.6**
baz=323,SNR=20
**FURC Furnace Creek, 59.97 69** P **P** **02 26 38.6 +1.1**
baz=322,SNR=11
**MPMC Manual Prospec 59.98 69** P **P** **02 26 38.6 +0.7**
baz=322,SNR=14
**ARVC Arvin 60.04 71** P **P** **02 26 39.4 +1.4**
baz=322
**PRN Pahroc Range 60.12 67** P **P** **02 26 39.5 +0.9**
PRN IAmb IAmb 02 26 41.4
comp=Z,17nm,1.0s
**RDMU Red Mountain 60.23 61** P **P** **02 26 40.8 +1.3**
**GWY Greenwater Val 60.28 69** IAmb IAmb 02 26 42.2
comp=Z,15nm,0.9s
**LRMC Laurel Mtn Rad 60.34 70** P **P** **02 26 40.5 +0.3**
baz=322
**TCRU Three Creeks R 60.43 64** P **P** **02 26 42.0 +1.0**
TCRU IAmb IAmb 02 28 54.0
comp=Z,7.9nm,0.5s
**TMUT Trail Mountain 60.47 63** P **P** **02 26 41.4 +0.1**
**SCZ2 Santa Cruz Isl 60.52 72** P **P** **02 26 42.2 +0.8**
baz=322
**MVU Marysvale 60.62 64** P **P** **02 26 43.0 +0.7**
**EDW2 Edwards Air Fo 60.65 71** P **P** **02 26 43.1 +0.8**
baz=322,SNR=9.5
**P18A Preston Nutter 60.66 62** P **P** **02 26 43.9 +1.3**
**SHOC Shoshone, Teco 60.70 69** P **P** **02 26 43.8 +1.2**
baz=322,SNR=6.3
**SHPR Sheep Range 60.77 67** P **P** **02 26 44.6 +1.4**
**CCUT Cedar City 60.82 65** P **P** **02 26 44.8 +1.1**
CCUT IAmb IAmb 02 26 46.2
comp=Z,13nm,0.9s
**GSC Goldstone, Bar 60.91 69** P **P** **02 26 45.3 +1.2**
baz=323,SNR=10
**SZCU Shurtz Canyon 60.92 65** P **P** **02 26 45.2 +0.9**
**DECC Green Verdugo 60.98 71** P **P** **02 26 45.2 +0.8**
baz=323
**MTPU Mount Pierson 61.00 64** P **P** **02 26 45.7 +0.7**
MTPU IAmb IAmb 02 26 48.1
comp=Z,12nm,0.9s
**RRX Edison Barstow 61.16 70** P **P** **02 26 46.8 +1.1**
baz=323
**SNCC San Nicolas Is 61.17 73** P **P** **02 26 46.7 +1.0**
baz=323
**O20A White River Ci 61.19 60** P **P** **02 26 47.0 +1.0**
baz=323,SNR=43
**SWI Sorong 61.22 205** P P 02 26 40.3 -5.9
**TUQ Turquoise Moun 61.25 69** P **P** **02 26 47.4 +1.0**
baz=323
**BFSC Mount Baldy Ra 61.33 71** P **P** **02 26 48.0 +1.0**
baz=323
**PKCU Pink Cliffs 61.42 65** P **P** **02 26 48.8 +1.0**
**FMP Fort Macarthur 61.43 72** P **P** **02 26 48.2 +0.7**
baz=323
**KNB Kanab 61.51 65** P **P** **02 26 50.4 +2.2**
**KNB Kanab 61.51 65** P **P** **02 26 50.4 +2.2**
KNB pmax pmax
comp=Z,32nm,1.3s
**HEC Hector,Ludlow 61.52 69** P **P** **02 26 48.8 +0.6**
baz=323,SNR=6.8
**CIS Catalina Islan 61.61 72** P **P** **02 26 49.3 +0.6**
baz=323
**N23A Red Feather La 61.62 58** IAmb IAmb 02 26 55.1
comp=Z,14nm,1.0s
**N23A Red Feather La 61.62 58** P **P** **02 26 49.3 +0.2**
baz=324,SNR=11
**F33A 5 Mile Ranch, 61.69 48** IAmb IAmb 02 26 50.1
comp=Z,9.4nm,0.9s
**SUSD Miller 61.76 51** P **P** **02 26 49.7 +0.1**
baz=325
**EYMN Ely 61.77 44** P **P** **02 26 48.9 -0.7**
baz=327
**HMU Henry Mountain 61.77 63** P **P** **02 26 51.2 +1.1**
**SCI2 San Clemente I 61.88 72** P **P** **02 26 51.5 +1.0**
baz=323
**GMRC Granite Mounta 61.89 69** P **P** **02 26 51.4 +0.6**
baz=323,SNR=16
**MAK Makhachkala 61.97 307** *e*P P 02 26 45.6 -5.3
MAK *e*S **S** **02 35 07.0 -7.8**
MAK *e*SS **SS** **02 39 14.9 -1.4**
MAK pmax pmax
comp=Z,306nm,1.9s
**MURC Murrieta 62.07 71** P **P** **02 26 52.6 +0.8**
baz=323
**AK21 Malin Array Si 62.30 324** P **P** **02 26 52.7 -0.3**
**AK22 Malin Array Si 62.30 324** P **P** **02 26 53.0 -0.1**
**AK04 Malin Array Si 62.30 323** P **P** **02 26 52.8 -0.3**
**AKASG Malin Array Be 62.30 323** P **P** **02 26 52.5 -0.6**
comp=Z,7.8nm,0.8s,baz=32,slow=6.9,SNR=34
AKASG LR LR 02 56 24.6
comp=Z,127nm,19.5s,baz=41,slow=38
comp=Z,7.8nm,0.8s
**AKBB Malin Array Si 62.30 323** P **P** **02 26 52.4 -0.7**
**AKBB Malin Array Si 62.30 323** *ce*P **P** **02 26 52.1 -1.0**
AKBB pmax pmax
comp=Z,12nm,1.0s
**AKBB Malin Array Si 62.30 323** P **P** **02 26 53.0 -0.1**
**KIEV Kiev 62.31 323** P **P** **02 26 53.4 +0.2**
KIEV IAmb IAmb 02 26 54.1
comp=Z,15nm,1.1s
**KIEV Kiev 62.31 323** ⇓P **P** **02 26 53.4 +0.2**
**KIEV Kiev 62.31 323** P **P** **02 26 53.3 +0.2**
**KIEV Kiev 62.31 323** P **P** **02 26 52.4 -0.8**
comp=Z,59nm,1.2s
**AK01 Malin Array Si 62.31 323** P **P** **02 26 53.2 0.0**
**AK18 Malin Array Si 62.34 323** P **P** **02 26 52.9 -0.4**
**AK20 Malin Array Si 62.34 324** P **P** **02 26 53.2 -0.1**
**AK15 Malin Array Si 62.34 323** P **P** **02 26 53.5 +0.2**
**BELC Belle Mtn. Jos 62.35 70** P **P** **02 26 54.4 +0.5**
baz=323,SNR=5.1
**AK09 Malin Array Si 62.36 323** P **P** **02 26 53.3 -0.2**
**AK12 Malin Array Si 62.38 323** P **P** **02 26 53.4 -0.2**
**AK05 Malin Array Si 62.38 323** P **P** **02 26 53.2 -0.4**
**PFO Pinyon Flats O 62.43 70** P **P** **02 26 55.4 +1.0**
PFO IAmb IAmb 02 26 56.1
comp=Z,9.1nm,0.9s
**PFO Pinyon Flats O 62.43 70** LR LR 02 54 01.4
comp=Z,81nm,18.3s,baz=278,slow=36
**PFO Pinyon Flats O 62.43 70** P **P** **02 26 54.6 +0.2**
baz=323
**PFO Pinyon Flats O 62.43 70** *i* P **P** **02 26 56.1 +1.7**
PFO pmax pmax
comp=Z,16nm,1.0s
**TPFO Pinon Flats 62.44 70** P **P** **02 26 54.8 +0.4**
baz=323
**AK07 Malin Array Si 62.44 323** P **P** **02 26 54.1 +0.1**
**W13A Hualapai Mount 62.52 67** P **P** **02 26 56.2 +1.1**
W13A IAmb IAmb 02 26 57.4
comp=Z,9.6nm,1.1s
**MI30 MI30,Zelenitsa 62.59 324** P **P** **02 26 55.1 +0.1**
**MI28 MI28,Pidlybu 62.59 324** P **P** **02 26 54.9 -0.1**
**BRIGG Briggsdale 62.61 57** P **P** **02 26 56.2 +0.7**
**IRM Iron Mountain 62.65 69** P **P** **02 26 57.1 +1.4**
baz=323,SNR=20
**ISCO Idaho Springs 62.66 58** P **P** **02 26 57.4 +1.3**
**ISCO Idaho Springs 62.66 58** P **P** **02 26 56.9 +0.9**
baz=324,SNR=12
**ISCO Idaho Springs 62.66 58** P **P** **02 26 57.4 +1.3**
ISCO pmax pmax
comp=Z,26nm,1.2s
**109C Camp Elliot, M 62.68 71** P **P** **02 26 56.2 +0.3**
baz=323
**RNPP9 Sopachiv 62.71 326** P **P** **02 26 55.6 -0.2**
**RNPP8 Varash 62.79 326** P **P** **02 26 56.5 +0.2**
**RNPP5 Staryi Chortor 62.87 326** P **P** **02 26 56.9 0.0**
**BC3 Big Chuckawall 62.90 70** P **P** **02 26 57.9 +0.4**
baz=323,SNR=6.5
**SCHQ Schefferville 62.98 25** IAmb IAmb 02 26 58.0
comp=Z,15nm,1.0s
**SCHQ Schefferville 62.98 25** P **P** **02 26 56.9 -0.8**
comp=Z,9.3nm,0.9s,baz=334,slow=6.2,SNR=7.6
SCHQ LR LR 02 56 10.2
comp=Z,55nm,19.1s,baz=284,slow=38
comp=Z,9.3nm,0.9s
**MONP2 Monument Peak 63.02 71** P **P** **02 26 59.0 +0.6**
baz=323
**PDMCI Parker Dam,Lak 63.03 68** P **P** **02 26 58.9 +0.7**
baz=324,SNR=6.9
**KVAR Kislovodsk Arr 63.15 311** LR LR 02 57 20.7
comp=Z,94nm,19.1s,baz=280,slow=39
**KIV Kislovodsk 63.15 311** P **P** **02 26 58.6 -0.4**
KIV IAmb IAmb 02 27 02.0
comp=Z,13nm,1.0s
**KIV Kislovodsk 63.15 311** ⇑P **P** **02 27 00.6 +1.6**
**KIV Kislovodsk 63.15 311** *e*P **P** **02 27 00.5 +1.5**
KIV pmax pmax
comp=Z,11nm,1.0s
KIV MLR MLR
comp=Z,89nm,17.0s
**KIV Kislovodsk 63.15 311** P **P** **02 27 00.1 +1.1**
comp=Z,11nm,0.9s
**KBZ Khabaz 63.26 310** P **P** **02 27 00.9 +1.4**
comp=Z,8.6nm,0.9s,baz=52,slow=2.4,SNR=11
comp=Z,8.6nm,0.9s
**KBZ Khabaz 63.26 310** *ce*P **P** **02 27 00.1 +0.6**
KBZ pmax pmax
comp=Z,10.0nm,1.0s
**BLYC Blythe 63.28 69** P **P** **02 27 00.5 +0.6**
**SWSC Sam W. Stewart 63.29 70** P **P** **02 27 01.0 +1.1**
baz=324
**ECSD EROS Data Cent 63.30 50** P **P** **02 26 59.8 -0.1**
baz=326,SNR=14
**OGNE Ogallala 63.32 55** P **P** **02 27 00.6 +0.5**
**OGNE Ogallala 63.32 55** P **P** **02 27 00.7 +0.5**
baz=325
**SHA1 Shidzhatmaz 63.34 311** *ce*P **P** **02 27 01.5 +1.1**
**CBX Cerro Bola 63.37 71** P **P** **02 27 01.0 +0.4**
**IKP In-Ko-Pah, Jac 63.37 71** P **P** **02 27 01.1 +0.5**
baz=324,SNR=6.9
**MVCO Mesa Verde 63.42 62** P **P** **02 27 01.7 +0.6**
MVCO IAmb IAmb 02 27 03.1
comp=Z,15nm,1.1s
**MVCO Mesa Verde 63.42 62** P **P** **02 27 01.3 +0.3**
baz=324,SNR=9.9
**LUBAR Lubar, Ukraine 63.45 324** P **P** **02 27 00.2 -0.5**
**YUH Yuha Desert 63.47 71** P **P** **02 27 01.6 +0.4**
YUH IAmb IAmb 02 27 03.1
comp=Z,12nm,0.9s
**Q24A Divide 63.54 58** P **P** **02 27 02.8 +0.8**
Q24A IAmb IAmb 02 27 04.2
comp=Z,11nm,0.9s
**Q24A Divide 63.54 58** P **P** **02 27 02.6 +0.6**
baz=324,SNR=5.3
**SPMN Marine on St. 63.56 46** IAmb IAmb 02 27 02.4
comp=Z,11nm,1.0s
**SPMN Marine on St. 63.56 46** P **P** **02 27 01.1 -0.4**
baz=327
**GLA Glamis 63.69 69** P **P** **02 27 03.4 +0.7**
**GLA Glamis 63.69 69** P **P** **02 27 03.5 +0.9**
baz=324,SNR=5.4
**GLA Glamis 63.69 69** P **P** **02 27 03.4 +0.7**
GLA pmax pmax
comp=Z,26nm,1.0s
**S22A 4UR Ranch, Cre 63.76 60** P **P** **02 27 04.3 +0.9**
**S22A 4UR Ranch, Cre 63.76 60** P **P** **02 27 04.2 +0.9**
baz=324,SNR=18
**Y14A Wickenburg 63.88 67** P **P** **02 27 05.0 +1.1**
Y14A IAmb IAmb 02 27 06.3
comp=Z,11nm,0.9s
**ESJX Sierra Juarez 63.97 71** P **P** **02 27 05.3 +0.7**
ESJX IAmb IAmb 02 27 06.9
comp=Z,14nm,1.0s
**SBUM Sibu 64.01 227** P **P** **02 27 04.2 -0.7**
SBUM IAmb IAmb 02 27 10.0
comp=Z,9.5nm,0.9s
**X16A Lo Mia Camp, P 64.26 66** P **P** **02 27 07.5 +0.9**
**SDCO Great Sand Dun 64.38 60** P **P** **02 27 07.5 +0.1**
baz=325,SNR=35
**BSEG Bad Segeberg 64.39 337** *e*P **P** **02 27 08.0 +1.2**
comp=Z,14nm,0.9s,baz=21,slow=6.3
**113A Mohawk Valley, 64.45 69** P **P** **02 27 08.5 +0.9**
113A IAmb IAmb 02 27 09.6
comp=Z,10nm,1.0s
**HORU Horodok 64.48 324** P **P** **02 27 07.6 0.0**
**W18A Petrified Fore 64.52 64** P **P** **02 27 08.8 +0.5**
W18A IAmb IAmb 02 27 10.7
comp=Z,13nm,1.0s
**W18A Petrified Fore 64.52 64** P **P** **02 27 09.1 +0.8**
baz=324
**VTX Valle De La Tr 64.55 71** P **P** **02 27 09.4 +1.1**
VTX IAmb IAmb 02 27 10.5
comp=Z,14nm,1.0s
**BGNE Belgrade 64.60 52** P **P** **02 27 08.7 +0.2**
baz=326
**KSCO Kaye Shedlock' 64.64 57** P **P** **02 27 09.2 +0.3**
baz=325
**LVV L'vov 64.67 326** *e*P **P** **02 27 09.7 +0.9**
LVV *e*S **S** **02 35 46.0 -2.4**
LVV *e* 02 37 06.4
LVV pmax pmax
comp=Z,60nm,1.3s
LVV MLR MLR
comp=Z,200nm,11.0s
LVV MLR MLR
comp=N,200nm,12.0s
LVV MLR MLR
comp=E,100nm,12.0s
**SORM Soroca 64.82 323** ⇓P **P** **02 27 10.1 +0.3**
**SORM Soroca 64.82 323** P **P** **02 27 10.0 +0.3**
**SORM Soroca 64.82 323** P **P** **02 27 09.5 -0.2**
comp=E,25nm,1.0s
**X18A Snowflake 64.89 65** P **P** **02 27 11.9 +1.2**
**RUE Ruedersdorf 64.98 334** *e*P **P** **02 27 11.5 +0.8**
comp=E,18nm,0.9s,baz=21,slow=6.3
**KMPD K-Podol'skiy 65.05 324** P **pP** **02 27 11.1 -3.4**
KMPD P **P** **02 27 10.5 -0.7**
**GORT1 Trebel 65.06 336** *e*P **P** **02 27 12.7 +1.5**
comp=E,32nm,1.3s,baz=21,slow=6.3
GORT1 *e*pP **sP** **02 27 16.8 +1.1**
baz=21,slow=6.3
**KWP Kalwaria Pacla 65.23 327** P **P** **02 27 13.1 +0.7**
**KWP Kalwaria Pacla 65.23 327** P **P** **02 27 13.1 +0.7**
KWP pmax pmax
comp=Z,62nm,1.2s
**KWP Kalwaria Pacla 65.23 327** P **P** **02 27 13.4 +1.0**
comp=Z,49nm,1.1s
**NE56 Odesa 65.25 320** P **P** **02 27 11.5 -1.0**
**MORS Morshin 65.33 326** P **P** **02 27 13.1 +0.1**
**MORS Morshin 65.33 326** P **P** **02 27 13.1 +0.1**
**T25A Trinidad 65.37 59** P **P** **02 27 13.9 +0.1**
T25A IAmb IAmb 02 27 15.4
comp=Z,19nm,1.3s
**T25A Trinidad 65.37 59** P **P** **02 27 13.9 +0.1**
baz=325,SNR=7.6
**EKA Eskdalemuir Ar 65.39 345** P **P** **02 27 13.6 +0.2**
comp=Z,9.9nm,0.9s,baz=19,slow=4.9,SNR=18
comp=Z,9.9nm,0.9s
**ESK Eskdalemuir 65.41 345** *e*P **P** **02 27 13.7 +0.2**
ESK IAmb IAmb 02 27 15.3
comp=Z,15nm,1.0s
**GNI Garni 65.46 307** P **P** **02 27 14.4 +0.1**
**GNI Garni 65.46 307** *ce*P **P** **02 27 16.0 +1.7**
GNI pmax pmax
comp=Z,22nm,1.3s
**OJC Ojcow 65.52 329** P **P** **02 27 15.2 +0.9**
**OJC Ojcow 65.52 329** P **P** **02 27 15.2 +0.9**
OJC pmax pmax
comp=Z,25nm,1.0s
**OJC Ojcow 65.52 329** P **P** **02 27 14.9 +0.6**
comp=Z,26nm,1.3s
**STNU Starunia 65.52 325** P **P** **02 27 14.2 -0.1**
**214A Organ Pipe Nat 65.58 69** P **P** **02 27 15.7 +0.7**
214A IAmb IAmb 02 27 17.2
comp=Z,14nm,1.1s
**214A Organ Pipe Nat 65.58 69** P **P** **02 27 15.5 +0.5**
baz=324
**KIS Kishinev 65.66 322** *e*P **P** **02 27 15.0 -0.2**
comp=Z,30nm,1.0s
**KIS Kishinev 65.66 322** *e*P **P** **02 27 15.0 -0.2**
KIS pmax pmax
comp=Z,30nm,1.0s
**FLTG Flechtingen 65.70 335** *e*P **P** **02 27 15.7 +0.3**
comp=Z,27nm,1.6s,baz=21,slow=6.3
**KSV Kosov 65.70 325** P **P** **02 27 15.5 0.0**
**KSV Kosov 65.70 325** P **P** **02 27 15.5 0.0**
**EDMD Edmundbyers 65.72 344** *e*P **P** **02 27 16.0 +0.6**
EDMD IAmb IAmb 02 27 17.2
comp=Z,24nm,1.0s
**RETH Rethem/Aller, 65.72 337** *e*P **P** **02 27 16.5 +1.1**
comp=Z,24nm,1.1s,baz=21,slow=6.3
**BKB Balikpapan 65.73 220** P **P** **02 27 17.6 +1.6**
**MILM Milestii Mici 65.73 322** *e*P **P** **02 27 15.0 -0.7**
comp=Z,70nm,1.8s
MILM *e*L L 02 58 48.0
MILM LRM MLR 02 59 37.0
comp=Z,200nm,12.5s
**MILM Milestii Mici 65.73 322** ⇓P **P** **02 27 16.2 +0.5**
**MILM Milestii Mici 65.73 322** *e*P **P** **02 27 15.0 -0.7**
MILM pmax pmax
comp=Z,70nm,1.8s
MILM MLR MLR
comp=Z,200nm,12.5s
**NRDL Niedersach Rie 65.79 336** *e*P **P** **02 27 16.8 +1.0**
comp=Z,18nm,1.0s,baz=21,slow=6.3
NRDL *e*pP **sP** **02 27 21.0 +0.6**
baz=21,slow=6.3
**KSP Ksiaz 65.87 332** P **P** **02 27 17.2 +0.6**
**KSP Ksiaz 65.87 332** P **P** **02 27 17.2 +0.6**
comp=Z,18nm,1.0s
**KOLS Kolonicke sedl 65.98 327** *e*P **P** **02 27 18.5 +1.2**
KOLS pmax pmax
comp=Z,8.0nm,0.9s
**KOLS Kolonicke sedl 65.98 327** *e*P **P** **02 27 18.5 +1.2**
**CBKS Cedar Bluff 66.07 55** P **P** **02 27 17.5 -0.6**
baz=326
**NIE Niedzica 66.11 328** P **P** **02 27 19.2 +1.1**
**NIE Niedzica 66.11 328** P **P** **02 27 19.2 +1.1**
comp=Z,7.7nm,1.1s
**KESW Keswick, Cumbr 66.11 345** *e*P **P** **02 27 18.3 +0.3**
KESW IAmb IAmb 02 27 19.6
comp=Z,28nm,0.9s
**OSTC Ostas 66.16 332** *e*P **P** **02 27 19.6 +1.2**
**OSTC Ostas 66.16 332** *e*P **P** **02 27 19.6 +1.2**
**CHVC Chvalec 66.17 332** *e*P **P** **02 27 19.4 +0.9**
**CHVC Chvalec 66.17 332** *e*P **P** **02 27 19.4 +0.9**
**SCIA State Center 66.20 48** P **P** **02 27 18.8 0.0**
baz=328
**ANMO Albuquerque 66.22 62** P **P** **02 27 20.1 +0.9**
ANMO IAmb IAmb 02 27 21.3
comp=Z,9.4nm,1.1s
**ANMO Albuquerque 66.22 62** LR LR 02 58 04.9
comp=Z,69nm,18.0s,baz=70,slow=38
**ANMO Albuquerque 66.22 62** P **P** **02 27 19.8 +0.5**
baz=325
**ANMO Albuquerque 66.22 62** *i* P **P** **02 27 20.6 +1.3**
ANMO pmax pmax
comp=Z,5.0nm,1.1s
**CRVS Cervenica-Dubn 66.24 327** *e*P **P** **02 27 20.7 +1.7**
**CRVS Cervenica-Dubn 66.24 327** *e*P **P** **02 27 20.7 +1.7**
**CLL Collm 66.25 334** *i* P **P** **02 27 19.4 +0.5**
comp=Z,33nm,1.1s
CLL *i* sP **sP** **02 27 23.5 +0.1**
CLL AMS AMS 02 57 00.0
comp=Z,100nm,19.9s
**CLL Collm 66.25 334** *i* P **P** **02 27 19.4 +0.5**
CLL *i* *SP **sP** **02 27 23.5 +0.1**
CLL pmax pmax
comp=Z,33nm,1.1s
**CLL Collm 66.25 334** P **P** **02 27 18.6 -0.3**
comp=Z,26nm,1.1s
**CLL Collm 66.25 334** *e*P **P** **02 27 19.3 +0.4**
comp=Z,27nm,1.0s,baz=21,slow=6.3
CLL *e*pP **sP** **02 27 23.7 +0.3**
baz=21,slow=6.3
**BUR08 Bucovina Ar. S 66.25 324** P **P** **02 27 19.2 0.0**
BUR08 IAmb IAmb 02 27 21.0
comp=Z,8.2nm,0.9s
**BURAR Bucovina Array 66.27 324** P **P** **02 27 19.1 -0.2**
BURAR IAmb IAmb 02 27 21.3
comp=Z,9.2nm,0.8s
**BURAR Bucovina Array 66.27 324** ⇓P **P** **02 27 20.4 +1.1**
**TUC Tucson 66.29 67** P **P** **02 27 21.0 +1.4**
TUC IAmb IAmb 02 27 21.9
comp=Z,14nm,1.4s
**TUC Tucson 66.29 67** P **P** **02 27 20.4 +0.8**
baz=325
**TUC Tucson 66.29 67** P **P** **02 27 21.0 +1.4**
TUC pmax pmax
comp=Z,15nm,1.4s
**OKC Ostrava-Krasne 66.31 330** P **P** **02 27 21.5 +2.1**
**DPC Dobruska-Polom 66.32 331** *e*P **P** **02 27 21.0 +1.5**
DPC *e*pP **sP** **02 27 24.6 +0.6**
**DPC Dobruska-Polom 66.32 331** *e*P **P** **02 27 21.0 +1.5**
DPC *e* 02 27 24.6
**DPC Dobruska-Polom 66.32 331** P **P** **02 27 19.7 +0.2**
comp=Z,15nm,1.2s
**VLDQ Val d'Or 66.32 34** P **P** **02 27 18.2 -1.3**
VLDQ IAmb IAmb 02 27 18.9
comp=Z,11nm,0.9s
**CLZ Clausthal 66.34 336** *e*P **P** **02 27 20.8 +1.2**
comp=Z,33nm,1.2s,baz=21,slow=6.3
**BRG Berggiesshubel 66.43 333** *i* P **P** **02 27 21.0 +0.9**
BRG Amp 02 27 22.6
comp=Z,14nm,1.2s
**BRG Berggiesshubel 66.43 333** *e*P **P** **02 27 20.6 +0.5**
comp=Z,14nm,1.2s,baz=21,slow=6.3
**KRLC Kraliky 66.45 331** *e*P **P** **02 27 21.3 +0.9**
KRLC *e*pP **sP** **02 27 25.1 +0.2**
**KRLC Kraliky 66.45 331** *e*P **P** **02 27 21.3 +0.9**
KRLC *e* 02 27 25.1
**IBBN Ibbenburen 66.46 338** *e*P **P** **02 27 21.0 +0.8**
comp=Z,28nm,1.0s,baz=21,slow=6.3
**HPK Haverah Park 66.51 344** *e*P **P** **02 27 21.3 +0.7**
HPK IAmb IAmb 02 27 22.1
comp=Z,22nm,1.1s
**MORC Moravsky Berou 66.53 330** P **P** **02 27 21.3 +0.5**
MORC IAmb IAmb 02 27 23.1
comp=Z,16nm,1.0s
**MORC Moravsky Berou 66.53 330** *e*P **P** **02 27 21.8 +1.0**
**MORC Moravsky Berou 66.53 330** ⇓P **P** **02 27 22.3 +1.4**
**MORC Moravsky Berou 66.53 330** P **P** **02 27 21.3 +0.5**
MORC pmax pmax
comp=Z,15nm,1.0s
**TRSU Trosnyk 66.53 326** P **P** **02 27 20.7 -0.1**
**LANS Liptovska Anna 66.58 329** *e*P **P** **02 27 23.0 +1.8**
LANS pmax pmax
comp=Z,13nm,1.0s
**LANS Liptovska Anna 66.58 329** *e*P **P** **02 27 23.0 +1.8**
**RICC Richard 66.69 333** *e*P **P** **02 27 23.0 +1.2**
**GTTG Gottingen 66.71 336** *e*P **P** **02 27 22.9 +1.0**
comp=Z,12nm,1.1s,baz=21,slow=6.3
**Y22D IRIS PASSCAL I 66.71 63** P **P** **02 27 22.6 +0.2**
baz=325
**BMR Baia Mare 66.75 325** ⇓P **P** **02 27 23.7 +1.4**
**BMR Baia Mare 66.75 325** P **P** **02 27 23.6 +1.4**
**WIM Isle of Man 66.75 346** *e*P **P** **02 27 22.6 +0.5**
**HSKC Hora Svate Kat 66.80 333** *e*P **P** **02 27 23.1 +0.6**
**TESR Tescani 66.80 323** ⇓P **P** **02 27 23.3 +0.7**
**MAUC Maruska 66.83 330** *e*P **P** **02 27 24.6 +1.9**
**R32A Long Quarter, 66.84 54** P **P** **02 27 23.0 0.0**
**GLMI Grayling 66.90 41** P **P** **02 27 22.4 -0.9**
baz=331

DUN6 **Lazy B Ranch** 66.92 65 P P 02 27 24.4 +0.8
LBWR **Ladybower, Pea** 67.07 344 *e*P P 02 27 24.4 +0.3
LBWR IAmb IAmb 02 27 26.0
comp=Z,35nm,1.0s
PRU **Pruhonice** 67.10 332 *e*P P 02 27 25.1 +0.7
PRU *e*pP **sP** 02 27 29.1 +0.2
PRU **Pruhonice** 67.10 332 *e*P P 02 27 25.1 +0.7
PRU *e* 02 27 29.1
GOPC **GO Pecny, Ondr** 67.11 332 *e*P P 02 27 26.1 +1.6
GOPC **GO Pecny, Ondr** 67.11 332 *e*P P 02 27 26.1 +1.6
KSU1 **Kansas State U** 67.17 52 P P 02 27 24.2 -0.9
baz=327
MOX **Moxa** 67.19 335 *e*P P 02 27 25.8 +0.8
comp=Z,16nm,1.2s,baz=21,slow=6.3
MOX *e*pP **sP** 02 27 30.2 +0.7
baz=21,slow=6.3
MOX *e*L L 02 56 13.2
comp=Z,61nm,21.7s
HYB **Hyderabad** 67.20 266 *e*P P 02 27 25.0 -0.5
TANN **Tannenbergstha** 67.20 334 *e*P P 02 27 26.0 +0.9
comp=Z,15nm,1.3s,baz=21,slow=6.3
VRAC **Vranov** 67.21 331 *e*P P 02 27 26.3 +1.2
VRAC **Vranov** 67.21 331 LR LR 02 59 54.4
comp=Z,91nm,18.1s,baz=18,slow=39
VRAC **Vranov** 67.21 331 ⇓P P 02 27 26.8 +1.7
VRAC **Vranov** 67.21 331 P P 02 27 26.8 +1.7
PLN **Plauen** 67.21 334 *e*P P 02 27 26.0 +0.9
comp=Z,18nm,1.0s,baz=21,slow=6.3
JAVC **Velka Javorina** 67.33 330 *e*P P 02 27 28.0 +2.0
VRI **Vrincioaia** 67.35 322 ⇓P P 02 27 28.0 +1.9
VRI **Vrincioaia** 67.35 322 P P 02 27 28.0 +1.9
VYHS **Vyhne** 67.35 329 *e*P P 02 27 27.3 +1.2
VYHS pmax pmax
comp=Z,14nm,1.2s
VYHS **Vyhne** 67.35 329 *e*P P 02 27 27.3 +1.2
PMG **Port Moresby** 67.36 186 P P 02 27 28.7 +2.3
comp=Z,5.7nm,0.5s,baz=248,slow=11,SNR=3.1
PMG **Port Moresby** 67.36 186 *de*P P 02 27 29.1 +2.8
PMG pmax pmax
comp=Z,26nm,1.0s
KASTN **Kahler Asten** 67.36 337 *e*P P 02 27 27.1 +1.0
comp=Z,22nm,1.1s,baz=21,slow=6.3
BUG **Bochum-Univer** 67.38 338 *e*P P 02 27 26.8 +0.8
comp=Z,27nm,1.0s,baz=21,slow=6.3
PLOR **Plostina** 67.38 322 ⇓P P 02 27 27.5 +1.2
PLOR **Plostina** 67.38 322 P P 02 27 27.5 +1.2
UBBA **Unterbreizbach** 67.39 336 *e*P P 02 27 27.0 +0.9
comp=Z,29nm,1.7s,baz=21,slow=6.3
TURR **Turia** 67.41 323 ⇓P P 02 27 28.3 +1.9
WME **Myndd Eilian** 67.44 346 *e*P P 02 27 26.6 +0.2
OZUR 67.44 323 ⇓P P 02 27 28.5 +1.8
WPS **Cemaes, Angles** 67.46 346 *e*P P 02 27 26.5 -0.1
WPS IAmb IAmb 02 27 27.4
comp=Z,12nm,1.0s
KRUC **Moravsky** 67.48 331 *e*P P 02 27 27.8 +0.9
COVR **Voineasa-Covas** 67.53 323 ⇑P P 02 27 29.2 +1.9
121A **Cookes Peak, D** 67.56 64 P P 02 27 28.5 +0.7
121A IAmb IAmb 02 27 30.4
comp=Z,16nm,1.1s
121A **Cookes Peak, D** 67.56 64 P P 02 27 27.9 +0.1
baz=326,SNR=7.7
PSZ **Piszkesteto** 67.58 328 P P 02 27 28.1 +0.5
PSZ IAmb IAmb 02 27 30.0
comp=Z,14nm,1.0s
PSZ **Piszkesteto** 67.58 328 P P 02 27 28.1 +0.5
PSZ pmax pmax
comp=Z,14nm,1.0s
BISRR **Bisoca** 67.63 322 ⇑P P 02 27 29.9 +1.9
CWF **Charnwood Fore** 67.65 343 *e*P P 02 27 28.1 +0.3
CWF IAmb IAmb 02 27 29.1
comp=Z,19nm,1.1s
TPGR **Topolog** 67.68 321 ⇓P P 02 27 29.3 +1.1
DOPR **Dopca** 67.69 323 ⇑P P 02 27 30.1 +1.9
MANZ **Manzenberg** 67.69 334 *e*P P 02 27 28.9 +0.8
comp=Z,2.2nm,1.1s,baz=21,slow=6.3
MANZ *e*pP **sP** 02 27 33.4 +0.7
baz=21,slow=6.3
ZVC **Zvikov** 67.69 332 *e*P P 02 27 29.4 +1.2
ZVC *e*pP **sP** 02 27 32.8 +0.1
SMOL **Smolenice** 67.72 330 *e*P P 02 27 30.4 +2.1
SMOL pmax pmax
comp=Z,8.0nm,1.0s
MARR **Marisel-Cluj** 67.76 325 ⇑P P 02 27 29.6 +0.9
FOEL **Foel Wylfa** 67.78 345 *e*P P 02 27 29.3 +0.6
FOEL IAmb IAmb 02 27 30.0
comp=Z,20nm,1.0s
319A **Douglas** 67.79 66 P P 02 27 28.8 -0.4
DSB **Dublin** 67.85 347 IAmb IAmb 02 27 30.7
comp=Z,9.8nm,1.0s
ROTZ **Rotzenmuhle** 67.87 334 *e*P P 02 27 30.3 +1.0
comp=Z,3.1nm,1.1s,baz=21,slow=6.3
MODS **Modra-Piesok** 67.88 330 *e*P P 02 27 31.4 +2.0
MODS pmax pmax
comp=Z,27nm,1.1s
MODS **Modra-Piesok** 67.88 330 *e*P P 02 27 31.4 +2.0
MLR **Muntele Rosu** 67.93 323 P P 02 27 30.5 +0.6
MLR IAmb IAmb 02 27 32.9
comp=Z,17nm,1.1s
MLR **Muntele Rosu** 67.93 323 LR LR 02 59 50.7
comp=Z,172nm,19.0s,baz=50,slow=38
MLR **Muntele Rosu** 67.93 323 ⇑P P 02 27 31.7 +1.8
MLR **Muntele Rosu** 67.93 323 P P 02 27 30.5 +0.6
MLR pmax pmax
comp=Z,17nm,1.1s
MLR **Muntele Rosu** 67.93 323 P P 02 27 30.8 +0.9
comp=Z,16nm,1.5s
GURO **Guroymak-BITLI** 67.94 308 P P 02 27 30.1 0.0
GURO IAmb IAmb 02 27 32.5
comp=Z,10nm,1.3s
P38A **Dawn** 68.00 50 IAmb IAmb 02 27 30.6
comp=Z,10nm,1.0s
L44A **Lake County Fo** 68.01 45 P P 02 27 29.7 -0.5
baz=330
ISR **Istrita** 68.07 322 ⇑P P 02 27 32.7 +2.0
ISR **Istrita** 68.07 322 P P 02 27 32.6 +2.0
HLM1 **Long Mynd** 68.09 344 *e*P P 02 27 31.0 +0.4
HLM1 IAmb IAmb 02 27 32.1
comp=Z,24nm,1.0s
SRO **Srobarova** 68.12 329 *e*P P 02 27 33.1 +2.3
SRO pmax pmax
comp=Z,14nm,1.0s
SRO **Srobarova** 68.12 329 *e*P P 02 27 33.1 +2.3
KHC **Kasperske Hory** 68.13 333 *e*P P 02 27 32.3 +1.3
KHC *e*pP **sP** 02 27 35.3 -0.2
KHC AMS AMS 03 01 10.0
comp=Z,100nm,11.6s
KHC **Kasperske Hory** 68.13 333 *ce*P P 02 27 31.6 +0.6
KHC pmax pmax
comp=Z,57nm,1.7s
KHC **Kasperske Hory** 68.13 333 P P 02 27 31.3 +0.3
comp=Z,15nm,1.2s
GRA1 **Grafenberg Arr** 68.17 334 P P 02 27 31.1 -0.1
GRF **Grafenberg Arr** 68.17 334 P P 02 27 31.1 -0.1
GRF pmax pmax
comp=Z,24nm,1.0s
GRF **Grafenberg Arr** 68.17 334 *e*P P 02 27 32.4 +1.2
comp=Z,27nm,1.1s,baz=21,slow=6.3
GRF *e*pP **sP** 02 27 36.7 +1.1
baz=21,slow=6.3
GRF *e*L L 02 56 53.4
comp=Z,46nm,21.8s
GRFO **Grafenberg** 68.17 334 P P 02 27 31.9 +0.7
GRFO **Grafenberg** 68.17 334 P P 02 27 31.9 +0.7
GRFO pmax pmax
comp=Z,24nm,1.0s
BUD **Budapest** 68.22 328 P P 02 27 34.4 +2.9
CKRC **Cesky Krumlov** 68.24 332 *e*P P 02 27 32.9 +1.2
CKRC **Cesky Krumlov** 68.24 332 *e*P P 02 27 32.9 +1.2
VOIR 68.27 323 ⇓P P 02 27 33.6 +1.7
VOIR 68.27 323 P P 02 27 33.6 +1.7
VOIR 68.27 323 P P 02 27 33.2 +1.3
comp=Z,12nm,1.2s
AHRW **Bad Neuenahr-A** 68.27 337 *e*P P 02 27 32.7 +1.0
comp=Z,28nm,1.1s,baz=21,slow=6.3
TNS **Taunus Mts** 68.28 336 *e*P P 02 27 32.8 +0.9
comp=Z,17nm,0.9s,baz=21,slow=6.3
WET **Wettzell** 68.29 333 *e*P P 02 27 33.1 +1.2
comp=Z,18nm,1.1s,baz=21,slow=6.3
GEC2 **GERESS Array S** 68.37 332 P P 02 27 32.4 -0.1
GEC2 IAmb IAmb 02 27 34.5
comp=Z,14nm,1.1s
GEC2 **GERESS Array S** 68.37 332 *e*P P 02 27 33.2 +0.7
comp=Z,15nm,1.1s,baz=21,slow=6.3
GERES **GERESS Array B** 68.37 332 P P 02 27 33.2 +0.7
comp=Z,3.9nm,0.9s,baz=343,slow=2.8,SNR=27
comp=Z,3.9nm,0.9s
BTNL **Ternell** 68.42 338 *d*P P 02 27 33.4 +0.7
comp=Z,12nm,1.1s
MEM **Membach** 68.42 338 *d*P P 02 27 33.3 +0.6
comp=Z,27nm,1.0s
AMTX **Amarillo** 68.47 59 P P 02 27 33.5 +0.1
AMTX IAmb IAmb 02 27 34.7
comp=Z,16nm,1.1s
AMTX **Amarillo** 68.47 59 P P 02 27 33.4 -0.1
baz=327
BSTI **Sart Tilman** 68.53 338 *d*P P 02 27 34.8 +1.4
comp=Z,10.0nm,0.9s
BSTI *d*x x 02 27 38.9
SIRR **Siria** 68.56 326 ⇑P P 02 27 34.7 +1.0
BHOU **Houvegnez** 68.66 338 *d*P P 02 27 35.3 +1.1
comp=Z,7.8nm,1.0s
CONA **Conrad Observa** 68.67 331 *i* pP P 02 27 35.7 +1.2
comp=Z,11nm,1.0s,SNR=13
SOP **Sopron** 68.71 330 P P 02 27 36.5 +1.9
MSTX **Muleshoe** 68.73 60 P P 02 27 34.7 -0.4
baz=326,SNR=5.1
BCLA **Clavier** 68.74 339 *d*P P 02 27 35.5 +0.9
comp=Z,8.0nm,1.0s
BCLA *d*PcP **PcP** 02 27 59.1 -0.3
IWEX **Carrickbyrne,** 68.75 347 *e*P P 02 27 35.3 +0.6
IWEX IAmb IAmb 02 27 36.0
comp=Z,22nm,1.2s
RONA **Rosalia, Austr** 68.76 330 *e*pP P 02 27 36.5 +1.5
comp=Z,11nm,1.1s,SNR=13
SADO **Sawa** 68.78 37 LR LR 03 01 41.9
comp=Z,58nm,19.2s,baz=353,slow=39
BGES **Gesves** 68.81 339 *d*P P 02 27 35.9 +0.8
comp=Z,8.6nm,1.0s
LMQ **La Malbaie** 68.86 30 P P 02 27 35.3 -0.2
LMQ IAmb IAmb 02 27 36.0
comp=Z,15nm,1.0s
HDIL **Hopedale** 68.89 46 P P 02 27 34.8 -1.0
baz=330
SURR **Surrey** 68.89 325 ⇓P P 02 27 36.9 +1.2
MPLH **Magyarpolny** 68.92 329 P P 02 27 36.9 +1.0
comp=Z,53nm,1.2s
BMRD **Maredsous** 68.95 339 *d*P P 02 27 37.0 +1.0
comp=Z,12nm,1.1s
RCHB **Rochefort** 69.00 338 *d*P P 02 27 37.3 +0.9
comp=Z,8.0nm,1.0s
GZR **Gura Zlata** 69.02 325 ⇑P P 02 27 37.2 +0.6
GZR **Gura Zlata** 69.02 325 P P 02 27 37.2 +0.6
GIVF **Givet** 69.13 339 *e*P P 02 27 37.3 +0.1
GIVF pmax pmax
comp=Z,20nm,1.2s
MOA **Molln** 69.15 332 *e*pP P 02 27 38.1 +0.8
comp=Z,8.1nm,1.1s,SNR=6.6
BZS **Buzias** 69.17 326 ⇑P P 02 27 38.3 +0.9
BZS **Buzias** 69.17 326 P P 02 27 38.3 +0.9
DOU **Dourbes** 69.18 339 *d*P P 02 27 37.9 +0.4
DOU *d*PcP **PcP** 02 27 59.4 -1.8
WLF **Walferdange** 69.29 338 *d*P P 02 27 37.6 -0.6
WLF **Walferdange** 69.29 338 *e*P P 02 27 39.5 +1.4
comp=Z,5.2nm,0.8s,baz=21,slow=6.3
BAIF **Baives** 69.29 339 *e*P P 02 27 38.5 +0.4
BAIF pmax pmax
comp=Z,24nm,1.1s
COPA **Copaceanca** 69.38 323 ⇓P P 02 27 39.4 +0.6
ARSA **Arzberg** 69.38 331 *i* pP P 02 27 39.9 +1.1
comp=Z,6.3nm,0.9s,SNR=7.5
MNTX **Cornudas Mount** 69.40 63 P P 02 27 39.5 +0.4
baz=326,SNR=12
BIOA **Bad Ischl, Aus** 69.45 332 *e*pP P 02 27 40.1 +0.8
comp=Z,2.9nm,1.0s
MORH **Mrgy, Hungar** 69.48 328 ⇓P P 02 27 40.2 +0.8
MORH **Mrgy, Hungar** 69.48 328 P P 02 27 39.5 +0.1
comp=Z,5.8nm,1.6s
STU **Stuttgart** 69.49 335 IAmb IAmb 02 27 41.3
comp=Z,13nm,1.0s
STU **Stuttgart** 69.49 335 P P 02 27 40.5 +1.1
STU pmax pmax
comp=Z,42nm,1.1s
STU **Stuttgart** 69.49 335 *e*P P 02 27 40.0 +0.6
comp=Z,31nm,1.0s,baz=21,slow=6.3
FUR **Furstenfeldbru** 69.58 334 *e*P P 02 27 40.8 +0.8
comp=Z,17nm,0.9s,baz=21,slow=6.3
FUR *e*pP **sP** 02 27 45.2 +0.7
baz=21,slow=6.3
HERR **Herculane** 69.59 325 ⇓P P 02 27 40.7 +0.7
RJOB **Jochberg** 69.62 333 *e*P P 02 27 41.4 +1.1
comp=Z,12nm,1.0s,baz=21,slow=6.3
D62A **Allapoint, All** 69.62 29 IAmb IAmb 02 27 41.0
comp=Z,7.1nm,0.8s
R40A **Maddies Statio** 69.66 50 IAmb IAmb 02 27 40.7
comp=Z,14nm,1.1s
OK031 **S. Brethren Rd** 69.72 54 IAmb IAmb 02 27 41.9
comp=Z,12nm,0.7s
S39A **Bolivar** 69.74 51 IAmb IAmb 02 27 41.0
comp=Z,14nm,1.2s
MNTQ **Montreal, Queb** 69.81 33 IAmb IAmb 02 27 41.9
comp=Z,21nm,1.3s
SFIN **Lafayette** 69.88 45 P P 02 27 40.9 -1.0
baz=331
MDVR **Moldovita** 69.89 325 ⇓P P 02 27 42.6 +0.6
WMOK **Wichita Mounta** 69.90 56 P P 02 27 42.5 +0.3
baz=328,SNR=33
E62A **Clayton Lake** 69.92 30 IAmb IAmb 02 27 42.7
comp=Z,12nm,1.1s
LESA **Schwarzleotal** 69.94 333 *i* pP P 02 27 43.4 +1.1
comp=Z,3.8nm,1.0s
N47A **Urbana** 69.96 44 IAmb IAmb 02 27 42.4
comp=Z,14nm,0.9s
SOKA **Soboth** 70.04 331 *e*pP P 02 27 43.9 +1.0
comp=Z,6.7nm,0.9s,SNR=7.2
PERS **Pernice** 70.06 331 *i* P P 02 27 44.1 +1.1
POST **Post** 70.07 59 P P 02 27 43.5 +0.2
BFO **Black Forest** 70.10 336 P P 02 27 43.7 +0.5
BFO IAmb IAmb 02 27 44.9
comp=Z,9.9nm,1.0s
BFO **Black Forest** 70.10 336 P P 02 27 43.7 +0.5
BFO pmax pmax
comp=Z,10.0nm,1.0s
BFO **Black Forest** 70.10 336 *e*P P 02 27 43.6 +0.5
comp=Z,9.3nm,1.0s,baz=21,slow=6.3
KBA **Koelnbreinsper** 70.10 332 *e*pP P 02 27 45.0 +1.6
comp=Z,24nm,1.1s,SNR=11
FRGS **Fruska Gora** 70.12 327 ⇓P P 02 27 44.3 +0.9
FRGS **Fruska Gora** 70.12 327 P P 02 27 43.7 +0.4
comp=Z,25nm,1.1s
BATG **Bathurst New B** 70.19 27 IAmb IAmb 02 27 45.5
comp=Z,20nm,1.2s
TUL3 **Leonard** 70.21 54 P P 02 27 43.9 -0.1
baz=328,SNR=8.4
CDF **Champ du Feu** 70.25 337 *e*P P 02 27 44.4 +0.2
CDF pmax pmax
comp=Z,16nm,1.0s
CCM **Cathedral Cave** 70.27 49 P P 02 27 43.8 -0.6
CCM IAmb IAmb 02 27 44.5
comp=Z,12nm,1.1s
CCM **Cathedral Cave** 70.27 49 P P 02 27 43.1 -1.2
baz=330
CCM **Cathedral Cave** 70.27 49 P P 02 27 43.8 -0.6
CCM pmax pmax
comp=Z,13nm,1.1s
WATA **Walderalm** 70.29 333 *e*pP P 02 27 45.4 +0.9
comp=Z,9.4nm,0.7s,SNR=7.5
BR131 **Keskin Array S** 70.30 314 P P 02 27 45.1 +0.4
BR131 IAmb IAmb 02 27 46.4
comp=Z,9.2nm,1.0s
BR131 **Keskin Array S** 70.30 314 P P 02 27 45.1 +0.4
BR131 pmax pmax
comp=Z,9.0nm,1.0s
BRTR **Keskin Array B** 70.30 314 P P 02 27 44.0 -0.7
BRTR **Keskin Array B** 70.30 314 P P 02 27 45.1 +0.4
comp=Z,4.1nm,0.9s,baz=55,slow=4.2,SNR=24
comp=Z,4.1nm,0.9s
BRTR **Keskin Array B** 70.30 314 P P 02 27 44.0 -0.7
UBR **Ueberruh** 70.31 334 *e*P P 02 27 45.2 +0.7
comp=Z,9.6nm,0.9s,baz=21,slow=6.3
UBR *e*pP **sP** 02 27 49.7 +0.6
baz=21,slow=6.3
OBKA **Obir** 70.32 331 *i* pP P 02 27 45.8 +1.2
comp=Z,18nm,0.9s,SNR=12
SN07 **Snyder 07** 70.33 59 P P 02 27 45.0 +0.2
SN07 IAmb IAmb 02 27 55.2
comp=Z,5.9nm,0.7s
LONY **Lake Ozonia** 70.33 34 IAmb IAmb 02 27 45.1
comp=Z,18nm,1.2s
LONY **Lake Ozonia** 70.33 34 P P 02 27 43.6 -1.1
baz=335,SNR=5.7
RETA **Reutte** 70.34 334 *i* pP P 02 27 45.4 +0.6
comp=Z,3.3nm,1.0s
VHRN **Van Horn** 70.34 63 P P 02 27 45.9 +0.8
VHRN IAmb IAmb 02 27 51.0
comp=Z,12nm,1.1s
WTTA **Wattenberg** 70.34 333 *e*pP P 02 27 45.9 +1.0
comp=Z,13nm,0.8s,SNR=12
U38A **Gravette** 70.36 52 IAmb IAmb 02 27 45.3
comp=Z,14nm,1.1s
PECS **Pecos** 70.39 62 P P 02 27 46.5 +1.2
PECS IAmb IAmb 02 27 47.0
comp=Z,20nm,1.3s
MOTA **Moosalm** 70.39 334 *e*pP P 02 27 45.8 +0.6
comp=Z,8.5nm,1.0s
X34A **Smith Ranch, M** 70.43 56 P P 02 27 45.9 +0.5
MYKA **Terra Mystica** 70.44 332 *i* pP P 02 27 45.8 +0.5
comp=Z,7.7nm,1.1s,SNR=5.7
ECH **Echery** 70.46 337 IAmb IAmb 02 27 47.2
comp=Z,15nm,1.0s
ECH **Echery** 70.46 337 P P 02 27 46.0 +0.6
F62A **Pittston Farm,** 70.47 30 IAmb IAmb 02 27 46.2
comp=Z,18nm,1.2s
APMT **Aspermont** 70.48 58 IAmb IAmb 02 27 46.7
comp=Z,24nm,1.6s
SQTA **Sankt Quirin** 70.49 333 *e*pP P 02 27 46.6 +0.9
comp=Z,10.0nm,0.8s,SNR=11
PTJ **Puntijarka** 70.50 330 P P 02 27 47.2 +1.4
ABTA **Abfaltersbach** 70.61 332 *e*pP P 02 27 47.1 +0.7
comp=Z,11nm,1.0s,SNR=12
PRED **Cave del Predi** 70.63 332 IAmb IAmb 02 27 48.1
comp=Z,12nm,0.9s
FVM **French Village** 70.66 49 IAmb IAmb 02 27 46.8
comp=Z,12nm,1.2s
HHAR **Hobbs** 70.68 52 IAmb IAmb 02 27 47.1
comp=Z,17nm,1.0s
O48B **Farmland** 70.70 44 IAmb IAmb 02 27 47.0
comp=Z,14nm,0.8s
O48B **Farmland** 70.70 44 P P 02 27 46.0 -1.0
baz=332,SNR=6.6
DAVA **Damuels** 70.73 334 *e*pP P 02 27 47.9 +0.7
comp=Z,7.3nm,1.1s,SNR=5.2
FETA **Feichten** 70.79 334 *i* pP P 02 27 48.6 +1.0
comp=Z,9.5nm,0.8s,SNR=9.2
HAU **Haudompre** 70.83 337 *e*P P 02 27 47.7 +0.1
HAU pmax pmax
comp=Z,19nm,1.4s
ROBS **Robic** 70.83 332 *i* P P 02 27 47.5 -0.1
WTFS **Witchita Falls** 70.86 57 IAmb IAmb 02 27 49.1
comp=Z,13nm,1.0s
ERPA **Erie** 70.87 39 P P 02 27 47.0 -1.0
baz=333
HINF **Hinteralfeld** 70.90 337 *e*P P 02 27 48.0 -0.1
HINF pmax pmax
comp=Z,19nm,1.7s
MNHN **Monahans** 70.93 61 IAmb IAmb 02 27 49.9
comp=Z,13nm,1.2s
O49A **Covington** 71.06 43 IAmb IAmb 02 27 49.4
comp=Z,17nm,1.3s
GAZ **Gaziantep** 71.11 311 P P 02 27 49.7 +0.1
N51A **Ashland** 71.12 41 IAmb IAmb 02 27 49.5
comp=Z,17nm,1.0s
VT1 **Waterbury** 71.13 33 IAmb IAmb 02 27 50.5
comp=Z,25nm,1.4s
GBRS **Gornja Briga** 71.16 330 *i* P P 02 27 50.2 +0.5
T42A **Van Buren** 71.21 50 IAmb IAmb 02 27 50.4
comp=Z,15nm,1.2s
PKME **Peaks-Kenny Pk** 71.24 30 P P 02 27 49.3 -0.9
baz=338
M53A **WI Miller and** 71.25 40 P P 02 27 49.3 -1.0
baz=333,SNR=9.5
J58A **Remsen** 71.26 35 IAmb IAmb 02 27 50.7
comp=Z,19nm,1.1s
FUORN **Ofenpass-Fuorn** 71.27 334 P P 02 27 50.5 -0.2
ABTX **Abilene, Hawle** 71.29 58 P P 02 27 50.2 -0.5
baz=328,SNR=6.1
ALPN **Alpine** 71.32 63 P P 02 27 51.4 +0.3
ALPN IAmb IAmb 02 27 52.6
comp=Z,11nm,1.0s
FLN **La Foliniere** 71.38 342 *e*P P 02 27 50.7 -0.2
FLN pmax pmax
comp=Z,14nm,1.1s
S44A **Carbondale** 71.38 48 IAmb IAmb 02 27 51.2
comp=Z,11nm,1.0s
LBNH **Lisbon** 71.45 32 P P 02 27 50.4 -1.1
baz=337
CTI **Castel Tesino** 71.48 333 IAmb IAmb 02 27 52.9
comp=Z,11nm,1.1s
P49A **Miami Univ. Ec** 71.50 44 IAmb IAmb 02 27 51.9
comp=Z,12nm,0.9s
P49A **Miami Univ. Ec** 71.50 44 P P 02 27 50.4 -1.4
baz=332
ACSO **Alum Creek Sta** 71.51 42 IAmb IAmb 02 27 52.2
comp=Z,9.5nm,0.9s
ACSO **Alum Creek Sta** 71.51 42 P P 02 27 51.0 -0.9
baz=332
X37A **Clayton** 71.51 54 P P 02 27 52.2 +0.2
X37A IAmb IAmb 02 28 12.1
comp=Z,16nm,1.5s
CLF **Chambon-Foret** 71.61 340 P P 02 27 52.4 +0.1
TUE **Stuetta** 71.62 334 P P 02 27 53.5 +0.8
comp=Z,46nm,0.9s
L56A **Greenwood** 71.65 37 IAmb IAmb 02 27 52.3
comp=Z,17nm,1.2s
PBMO **Poplar Bluff** 71.70 49 IAmb IAmb 02 27 53.4
comp=Z,14nm,1.2s
PLPT **Palo Pinto** 71.73 57 IAmb IAmb 02 27 54.2
comp=Z,20nm,1.2s
GRR **Gorron** 71.80 342 *e*P P 02 27 53.4 -0.1
GRR pmax pmax
comp=Z,15nm,1.0s
LMN **Caledonia Moun** 71.83 27 IAmb IAmb 02 27 54.6
comp=Z,15nm,0.9s
RDO **Rodhopi** 71.94 321 P P 02 27 54.3 -0.1
RDO IAmb IAmb 02 27 56.4
comp=Z,11nm,1.0s
GGN **Saint George** 72.01 29 P P 02 27 54.4 -0.4
LOR **Lormes** 72.03 339 *e*P P 02 27 54.8 -0.1
LOR pmax pmax
comp=Z,17nm,1.0s
WCI **Wyandotte Cave** 72.06 45 P P 02 27 54.9 -0.2
WCI IAmb IAmb 02 27 55.7
comp=Z,13nm,0.9s
WCI **Wyandotte Cave** 72.06 45 P P 02 27 54.2 -0.9
baz=331
WCI **Wyandotte Cave** 72.06 45 P P 02 27 54.9 -0.2
WCI pmax pmax
comp=Z,13nm,0.9s
BINY **Binghamton** 72.10 36 P P 02 27 54.4 -1.0
baz=335
O53A **New Philadelph** 72.12 41 IAmb IAmb 02 27 55.8
comp=Z,20nm,1.1s
O53A **New Philadelph** 72.12 41 P P 02 27 54.5 -1.0
baz=333,SNR=5.2
TEOL **Teolo** 72.12 332 IAmb IAmb 02 27 57.0
comp=Z,20nm,1.0s
TX31 **Lajitas Ar. Si** 72.18 63 IAmb IAmb 02 27 58.1
comp=Z,16nm,1.2s
TXAR **Lajitas Array** 72.18 63 P P 02 27 56.5 +0.3
TXAR **Lajitas Array** 72.18 63 P P 02 27 57.0 +0.9
comp=Z,5.8nm,1.0s,baz=306,slow=4.2,SNR=35
TXAR LR LR 03 01 53.6
comp=Z,63nm,19.2s,baz=272,slow=38
comp=Z,5.8nm,1.0s
TXAR **Lajitas Array** 72.18 63 P P 02 27 56.5 +0.3
CABF **La Chapelle** 72.21 337 *e*P P 02 27 56.3 +0.2
CABF pmax pmax
comp=Z,14nm,1.2s
ROSF **Rostrenen** 72.23 344 *e*P P 02 27 56.0 0.0
ROSF pmax pmax
comp=Z,19nm,1.2s
SSF **Saint Saulge** 72.30 339 *e*P P 02 27 56.4 -0.1
SSF pmax pmax
comp=Z,20nm,1.3s
MIAR **Mount Ida** 72.32 53 IAmb IAmb 02 27 58.0
comp=Z,9.9nm,1.1s
MIAR **Mount Ida** 72.32 53 P P 02 27 56.6 -0.2
baz=329,SNR=7.0
P52A **Corning** 72.34 42 P P 02 27 55.5 -1.4
baz=333
R49A **Shelbyville** 72.42 45 IAmb IAmb 02 27 58.2
comp=Z,26nm,1.6s
O54A **Avella** 72.47 40 IAmb IAmb 02 27 58.1
comp=Z,16nm,1.0s
M57A **Sunshine Farm,** 72.51 37 IAmb IAmb 02 27 58.0
comp=Z,16nm,1.0s
AVF **Avril sur Loir** 72.59 339 *e*P P 02 27 58.3 +0.1
AVF pmax pmax
comp=Z,21nm,1.0s
QUIF **Quistinic** 72.62 344 *e*P P 02 27 59.0 +0.6

QUIF pmax pmax
comp=Z,41nm,1.6s
**SMF Signal de Mont 72.63 338** *e*P **P 02 27 58.4 -0.1**
SMF pmax pmax
comp=Z,12nm,1.0s
**X40A Basin Creek Fa 72.68 52** IAmb IAmb 02 27 59.9
comp=Z,12nm,1.0s
**P53A Whipple 72.74 41** IAmb IAmb 02 27 59.6
comp=Z,14nm,1.1s
**R50A Paris 72.75 44** IAmb IAmb 02 27 60.0
comp=Z,15nm,1.2s
**PDG Podgorica 72.77 326** IAmb IAmb 02 28 00.5
comp=Z,14nm,0.9s
**PDG Podgorica 72.77 326** ⇓P **P 02 27 59.7 +0.4**
**WHTX Lake Whitney, 72.81 57** P **P 02 27 59.6 -0.1**
baz=328
**T47A Sharon Grove 72.83 47** IAmb IAmb 02 28 00.5
comp=Z,16nm,1.0s
**L61B Northampton 72.88 34** P **P 02 27 59.4 -0.6**
baz=337
**WSAR Wadi Sarin 72.89 286** LR LR 03 03 33.3
comp=Z,172nm,20.3s,baz=68,slow=39
**SSPA Standing Stone 72.90 38** P **P 02 27 59.2 -1.0**
baz=334
**BGF Bois d'Agland 72.91 339** *e*P **P 02 28 00.3 +0.2**
BGF pmax pmax
comp=Z,12nm,1.0s
**JCT Junction City 73.02 60** IAmb IAmb 02 28 02.0
comp=Z,13nm,1.1s
**JCT Junction City 73.02 60** P **P 02 28 00.5 -0.6**
baz=328
**LPL La Plagne 73.11 336** *e*P **P 02 28 02.4 +0.8**
LPL pmax pmax
comp=Z,13nm,0.8s
**MCWV Mont Chateau 73.12 40** P **P 02 28 00.7 -0.8**
baz=334
**LPG La Plagne 73.13 336** *e*P **P 02 28 02.6 +0.8**
LPG pmax pmax
comp=Z,18nm,0.9s
**HRV Adam Dziewonsk 73.15 33** P **P 02 28 00.8 -0.8**
baz=337
**ZCCA Zocca 73.24 333** P **P 02 28 02.5 +0.3**
ZCCA IAmb IAmb 02 28 05.6
comp=Z,17nm,1.0s
**WLAR White Oak Lake 73.25 53** P **P 02 28 02.1 -0.2**
WLAR IAmb IAmb 02 28 03.8
comp=Z,20nm,1.1s
**LPIG La Paz 73.28 71** LR LR 02 59 40.6
comp=Z,24nm,18.4s,baz=261,slow=35
**TCF Toulx Ste Croi 73.29 339** *e*P **P 02 28 02.6 +0.2**
TCF pmax pmax
comp=Z,15nm,1.1s
**WVT Waverly 73.30 48** P **P 02 28 02.6 0.0**
WVT IAmb IAmb 02 28 03.3
comp=Z,18nm,1.1s
**WVT Waverly 73.30 48** P **P 02 28 02.0 -0.5**
baz=331
**WVT Waverly 73.30 48** P **P 02 28 02.6 0.0**
WVT pmax pmax
comp=Z,18nm,1.1s
**Q54A Coxs Mills 73.38 41** IAmb IAmb 02 28 03.5
comp=Z,11nm,0.9s
**MFF Saint Martin d 73.41 341** *e*P **P 02 28 03.4 +0.3**
MFF pmax pmax
comp=Z,13nm,1.0s
**BNI Bardonecchia 73.57 336** P **P 02 28 04.2 0.0**
**BNI Bardonecchia 73.57 336** P **P 02 28 04.2 0.0**
BNI pmax pmax
comp=Z,5.0nm,0.9s
**MSSA Maissana 73.62 334** P **P 02 28 04.1 -0.4**
MSSA IAmb IAmb 02 28 05.8
comp=Z,14nm,1.1s
**FNA Florina 73.62 324** P **P 02 28 03.6 -0.9**
FNA IAmb IAmb 02 28 05.8
comp=Z,10nm,1.0s
**FNA Florina 73.62 324** P **P 02 28 03.6 -0.9**
FNA pmax pmax
comp=Z,10.0nm,1.0s
**T50A Nancy 73.67 45** P **P 02 28 04.1 -0.6**
T50A IAmb IAmb 02 28 05.5
comp=Z,14nm,1.1s
**U49A Red Boiling Sp 73.75 46** IAmb IAmb 02 28 06.5
comp=Z,14nm,1.1s
**435B Jarrell 73.78 58** P **P 02 28 05.4 -0.1**
baz=329
**SSB Saint Sauveur 73.80 337** P **P 02 28 04.8 -0.7**
SSB IAmb IAmb 02 28 07.4
comp=Z,34nm,1.9s
**SSB Saint Sauveur 73.80 337** P **P 02 28 04.8 -0.7**
SSB pmax pmax
comp=Z,34nm,1.9s
**PAL Palisades 73.83 35** IAmb IAmb 02 28 06.1
comp=Z,19nm,1.0s
**PAL Palisades 73.83 35** P **P 02 28 05.2 -0.4**
baz=336
**MBDF Montbardon 73.86 336** *e*P **P 02 28 06.2 +0.3**
MBDF pmax pmax
comp=Z,5.0nm,0.8s
**ORIF Oris-en-Rattie 73.87 336** *e*P **P 02 28 06.6 +0.7**
ORIF pmax pmax
comp=Z,11nm,0.8s
**CLTN Cedars of Leba 73.91 47** IAmb IAmb 02 28 06.8
comp=Z,13nm,0.9s
**FDMO Fiordimonte 73.93 331** P **P 02 28 05.5 -0.8**
FDMO IAmb IAmb 02 28 12.1
comp=Z,9.6nm,0.8s
**OSSC Osservatorio P 73.95 332** P **P 02 28 05.6 -0.7**
**KBN Korca 73.95 324** P **P 02 28 06.5 0.0**
KBN IAmb IAmb 02 28 08.3
comp=Z,16nm,1.1s
**KBN Korca 73.95 324** P **P 02 28 06.5 0.0**
KBN pmax pmax
comp=Z,16nm,1.1s
**V48A Smith Brothers 74.03 47** IAmb IAmb 02 28 07.4
comp=Z,9.9nm,0.9s
**OXF Oxford 74.07 50** P **P 02 28 06.4 -0.7**
baz=331,SNR=7.7
**NRCA Norcia 74.12 331** P **P 02 28 07.9 +0.5**
**VIVF Saint-Julien-l 74.18 337** *e*P **P 02 28 08.2 +0.5**
VIVF pmax pmax
comp=Z,17nm,1.2s
**PLAL Pickwick Lake 74.20 48** IAmb IAmb 02 28 08.2
comp=Z,13nm,0.9s
**NATX Nacogdoches 74.24 55** P **P 02 28 08.4 +0.2**
baz=329
**M65A Busby, Falmout 74.29 33** P **P 02 28 07.3 -1.0**
baz=338
**ELL Elmali 74.31 316** P **P 02 28 08.1 -0.6**
**ELL Elmali 74.31 316** P **P 02 28 08.1 -0.6**
ELL pmax pmax
comp=Z,36nm,1.0s
**CAMP Campotosto 74.32 330** P **P 02 28 08.8 +0.2**
CAMP IAmb IAmb 02 28 10.7
comp=Z,16nm,0.9s
**RJF Les Rejaudoux 74.37 340** *e*P **P 02 28 09.1 +0.4**
RJF pmax pmax
comp=Z,16nm,1.2s
**SBF Sospel 74.53 335** *e*P **P 02 28 10.9 +1.1**
SBF pmax pmax
comp=Z,15nm,1.0s
**PALK Pallekele 74.55 259** LR LR 03 06 01.5
comp=Z,101nm,19.5s,baz=173,slow=40
**TZTN Tazewell 74.57 44** IAmb IAmb 02 28 11.0
comp=Z,16nm,0.9s
**TZTN Tazewell 74.57 44** P **P 02 28 09.4 -0.6**
baz=333,SNR=6.8
**CSS Mathiatis 74.57 312** IAmb IAmb 02 28 11.3
comp=Z,14nm,1.0s
**CAF Calviac 74.63 339** *e*P **P 02 28 11.1 +0.8**
CAF pmax pmax
comp=Z,13nm,1.0s
**INTR Introdacqua 74.67 330** P **P 02 28 10.1 -0.6**
**SWET Sewanee 74.84 47** IAmb IAmb 02 28 11.7
comp=Z,18nm,0.8s
**833A Chaparral WMA, 75.04 60** P **P 02 28 12.8 0.0**
baz=328
**X48A Hartselle 75.07 48** IAmb IAmb 02 28 13.2
comp=Z,15nm,1.2s
**W50A Signal Mountai 75.09 46** IAmb IAmb 02 28 13.4
comp=Z,12nm,0.9s
**BLA Blacksburg 75.11 42** P **P 02 28 12.8 -0.4**
baz=334,SNR=7.8
**S57A Dark Hollow, R 75.13 40** IAmb IAmb 02 28 14.3
comp=Z,18nm,1.1s
**V52A Sevierville 75.17 45** IAmb IAmb 02 28 14.3
comp=Z,18nm,0.9s
**U54A Nelsons Funny 75.22 43** IAmb IAmb 02 28 14.8
comp=Z,18nm,0.9s
**LMR La Mourre 75.24 335** *e*P **P 02 28 14.0 +0.2**
LMR pmax pmax
comp=Z,10.0nm,1.0s
**CBN Corbin Frederi 75.26 39** P **P 02 28 13.4 -0.6**
baz=335
**TKL Tuckaleechee C 75.27 45** IAmb IAmb 02 28 14.7
comp=Z,11nm,1.1s
**TKL Tuckaleechee C 75.27 45** LR LR 03 03 49.8
comp=Z,59nm,21.3s,baz=330,slow=38
**R58B Mineral 75.31 39** IAmb IAmb 02 28 15.2
comp=Z,18nm,1.2s
**PAOL Paolisi 75.41 329** P **P 02 28 14.0 -0.9**
**PGF Pioggiola 75.41 333** *e*P **P 02 28 14.8 -0.2**
PGF pmax pmax
comp=Z,9.0nm,1.0s
**MMAI Mount Meron Ar 75.44 310** P **P 02 28 15.7 +0.5**
comp=Z,9.5nm,0.9s,baz=21,slow=7.2,SNR=8.8
comp=Z,9.5nm,0.9s
**FPAL Fort Paine 75.56 47** IAmb IAmb 02 28 16.1
comp=Z,15nm,1.0s
**VBMS Vicksburg 75.61 52** P **P 02 28 15.8 -0.3**
baz=331
**V53A Saluda 75.62 44** IAmb IAmb 02 28 17.1
comp=Z,25nm,1.4s
**Z47A Carrollton 75.76 49** IAmb IAmb 02 28 17.3
comp=Z,18nm,0.9s
**Y49A Blount Mountai 75.84 48** IAmb IAmb 02 28 17.6
comp=Z,9.9nm,0.8s
**U56A King 75.90 42** IAmb IAmb 02 28 18.6
comp=Z,18nm,0.9s
**V55A Taylorsville 76.04 43** IAmb IAmb 02 28 19.4
comp=Z,13nm,1.1s
**MTLF Montolieu 76.13 339** *e*P **P 02 28 19.8 +0.9**
MTLF pmax pmax
comp=Z,16nm,1.2s
**BG3 Lake Jocassee 76.17 45** IAmb IAmb 02 28 20.1
comp=Z,17nm,1.1s
**T59A Double "B" Far 76.32 40** IAmb IAmb 02 28 21.0
comp=Z,32nm,1.6s
**LRAL Lakeview Retre 76.33 49** P **P 02 28 19.6 -0.7**
baz=332,SNR=6.1
**TIP Timpagrande 76.50 326** P **P 02 28 20.6 -0.5**
**TIP Timpagrande 76.50 326** ⇓P **P 02 28 22.3 +1.2**
**TIP Timpagrande 76.50 326** P **P 02 28 21.9 +0.7**
comp=Z,18nm,1.2s
**KMSC Kings Mountain 76.63 43** IAmb IAmb 02 28 22.5
comp=Z,20nm,1.1s
**KMSC Kings Mountain 76.63 43** P **P 02 28 20.8 -1.1**
baz=334,SNR=7.4
**PAULI Pauline 76.74 44** IAmb IAmb 02 28 23.0
comp=Z,14nm,1.2s
**EPF Esparros 76.78 340** *e*P **P 02 28 22.8 +0.1**
EPF pmax pmax
comp=Z,9.0nm,1.0s
**CEST Esterni de Car 77.03 339** P **P 02 28 24.0 -0.1**
CEST IAmb IAmb 02 28 27.0
comp=Z,9.7nm,1.0s
**ETSF Etsaut 77.07 340** *e*P **P 02 28 25.2 +0.9**
ETSF pmax pmax
comp=Z,4.0nm,1.0s
**HODGE Hodges 77.10 44** IAmb IAmb 02 28 25.2
comp=Z,13nm,1.1s
**GOGA Godfrey 77.38 46** P **P 02 28 25.4 -0.6**
baz=333
**BIRD Birdtown, Kers 77.39 43** IAmb IAmb 02 28 26.9
comp=Z,15nm,1.0s
**JSC Jenkinsville 77.43 44** IAmb IAmb 02 28 26.9
comp=Z,12nm,1.0s
**CNNC Cliffs of the 77.77 41** P **P 02 28 27.4 -0.8**
baz=335
**BRAL Brewton 77.95 49** P **P 02 28 28.5 -0.8**
baz=332
**VAE Valguarnera 78.76 328** LR LR 03 08 28.8
comp=Z,90nm,18.0s,baz=140,slow=40
**NHSC New Hope 78.88 43** P **P 02 28 33.7 -0.7**
baz=334
**TIGA Tifton 79.08 47** P **P 02 28 34.5 -1.1**
baz=333,SNR=5.1
**RAYN Ar Rayn 79.14 297** P **P 02 28 35.1 -0.9**
**RAYN Ar Rayn 79.14 297** P **P 02 28 35.1 -0.9**
RAYN pmax pmax
comp=Z,8.0nm,1.0s
**WB2 Warramunga Arr 79.21 198** P **P 02 28 34.8 -1.3**
WB2 IAmb IAmb 02 28 35.2
comp=Z,22nm,1.4s
**WRA Warramunga Arr 79.21 198** P **P 02 28 34.4 -1.8**
**WRA Warramunga Arr 79.21 198** P **P 02 28 33.6 -2.6**
comp=Z,3.5nm,0.9s,baz=11,slow=5.2,SNR=9.4
WRA LR LR 03 04 47.3
comp=Z,72nm,18.1s,baz=276,slow=37
comp=Z,3.5nm,0.9s
**WRA Warramunga Arr 79.21 198** P **P 02 28 34.4 -1.8**
WRA pmax pmax
comp=Z,1.0nm,1.1s
**PVRL Vila Real 79.78 345** *e*P **P 02 28 40.3 +1.0**
comp=Z,23nm,1.4s
**PVIS Viseu 80.35 345** *e*P **P 02 28 45.8 +3.4**
**MTE Manteigas 80.61 345** IAmb IAmb 02 28 45.8
comp=Z,15nm,1.1s
**MTE Manteigas 80.61 345** *e*P **P 02 28 44.8 +1.0**
comp=Z,21nm,1.3s
**ESBB Sonseca Array 80.79 342** P **P 02 28 45.5 +0.8**
**ESDC Sonseca Array 80.79 342** P **P 02 28 45.1 +0.4**
**ESDC Sonseca Array 80.79 342** P **P 02 28 45.6 +0.8**
comp=Z,4.2nm,0.9s,baz=3.4,slow=5.6,SNR=45
ESDC LR LR 03 09 25.4
comp=Z,67nm,19.5s,baz=33,slow=39
comp=Z,4.2nm,0.9s
**PAB San Pablo 80.98 343** P **P 02 28 45.9 +0.1**
**PAB San Pablo 80.98 343** P **P 02 28 45.9 +0.1**
PAB pmax pmax
comp=Z,7.0nm,1.1s
**PCAS Casmilo, Conde 81.08 346** *e*P **P 02 28 46.0 -0.3**
comp=Z,27nm,1.3s
**PCBR Castelo Branco 81.16 345** *e*P **P 02 28 47.3 +0.7**
comp=Z,14nm,1.2s
**PSBE So Bento 81.65 346** *e*P **P 02 28 51.9 +2.6**
**KEST Kesra 81.78 331** P **P 02 28 50.1 0.0**
KEST IAmb IAmb 02 28 52.0
comp=Z,26nm,1.5s
**KEST Kesra 81.78 331** P **P 02 28 50.1 0.0**
comp=Z,11nm,1.2s,baz=310,slow=1.5,SNR=4.7
comp=Z,11nm,1.2s
**PMTG Montargil 82.02 345** *e*P **P 02 28 52.1 +0.9**
comp=Z,21nm,1.3s
**CART Cartagena 82.31 339** P **P 02 28 52.1 -0.6**
CART IAmb IAmb 02 28 54.4
comp=Z,18nm,1.2s
**EVO Evora 82.52 345** *e*P **P 02 28 54.8 +1.0**
comp=Z,14nm,0.8s
**PBAR Barrancos 82.73 344** *e*P **P 02 28 55.3 +0.4**
comp=Z,15nm,1.2s
**DWPF Disney Wildern 82.89 46** P **P 02 28 55.1 -0.8**
baz=334
**ASAR Alice Springs 82.93 198** P **P 02 28 54.2 -1.7**
comp=Z,2.2nm,0.8s,baz=12,slow=5.2,SNR=20
comp=Z,2.2nm,0.8s
**PCVE Castro Verde 83.40 345** *e*P **P 02 28 59.6 +1.2**
**PVAQ Vaqueiros 83.58 345** P **P 02 28 59.4 0.0**
PVAQ IAmb IAmb 02 29 02.6
comp=Z,19nm,1.3s
**PVAQ Vaqueiros 83.58 345** *e*P **P 02 29 01.8 +2.5**
comp=Z,31nm,1.4s
**TATN Tatouine 84.44 329** IAmb IAmb 02 29 07.5
comp=Z,9.1nm,0.8s
**CMIG Matias Romero 86.78 63** LR LR 03 07 50.9
comp=Z,32nm,21.6s,baz=0.0,slow=36
**TEIG Tepich 87.06 56** LR LR 03 11 02.9
comp=Z,55nm,21.9s,baz=334,slow=38
**MDT Midelt 87.60 341** LR LR 03 15 47.2
comp=Z,26nm,18.3s,baz=132,slow=41
**PPT2 Papeete2 88.87 127** *e*LR LR 02 57 42.5
comp=Z,97nm,26.8s
**ATD Arta Tunnel 90.70 293** LR LR 03 15 07.1
comp=Z,9.4nm,18.9s,baz=252,slow=39
**TBI Tubuai 94.04 129** *e*LR LR 03 00 08.4
comp=Z,334nm,28.2s
**FURI Furi 95.00 295** LR LR 03 17 20.2
comp=Z,74nm,18.9s,baz=20,slow=38
**TAM Tamanrasset 95.08 330** P **P 02 29 54.3 -0.2**
**TAM Tamanrasset 95.08 330** P **P 02 29 54.3 -0.2**
TAM pmax pmax
comp=Z,4.0nm,1.3s
**VNDA Vanda 135.39 177** PKP **PKPdf 02 35 49.7 +0.4**
comp=Z,0.9nm,0.8s,baz=327,slow=3.7,SNR=6.8
**CPUP Villa Florida 141.76 47** PKhKP PKPpre 02 35 56.0
comp=Z,3.6nm,1.1s,baz=351,slow=4.9,SNR=3.3
CPUP PKP **PKPdf 02 36 03.0 +0.4**
comp=Z,2.1nm,0.8s,baz=268,slow=2.8,SNR=4.4
**CPUP Villa Florida 141.76 47** PKIKP **PKPdf 02 36 03.0 +0.4**
**PLCA Paso Flores 147.47 77** **PKPbc 02 36 14.6 -0.1**
**PLCA Paso Flores 147.47 77** PKPbc **PKPdf 02 36 12.8 +0.7**
comp=Z,7.8nm,1.0s,baz=327,slow=3.2,SNR=8.7
**PLCA Paso Flores 147.47 77** PKP2 **PKPbc 02 36 14.6 -0.1**
**QSPA South Pole Qui 147.77 180** PKP **PKPdf 02 36 11.1 -0.6**
comp=Z,16nm,1.0s,baz=295,slow=1.0,SNR=24
QSPA PKPbc **PKPbc 02 36 12.8 -1.9**
comp=Z,11nm,0.8s,baz=179,slow=0.2,SNR=45
**LL02 Futaleuf 148.54 82** **PKPbc 02 36 17.0 -0.4**
**TRQA Tornquist 149.73 64** **PKPbc 02 36 20.3 -0.2**
**TRQA Tornquist 149.73 64** PKP2 **PKPbc 02 36 20.3 -0.2**
**ELIB Princess Elisa 155.57 215** *d*PKPdf **PKPdf 02 36 22.1 -1.4**
**TROLL Troll, Antarti 161.56 209** ⇑PKPab **PKPab 02 37 13.9 -1.8**
comp=Z,40nm,0.6s
TROLL ⇑PKPdf **PKPdf 02 36 32.0 +1.3**
comp=Z,62nm,1.1s
**SNAA Sanae 163.10 206** ⇑PKPab **PKPab 02 37 16.9 -5.4**
comp=Z,35nm,1.0s
SNAA ⇑PKPdf **PKPdf 02 36 32.6 +0.5**
comp=Z,33nm,1.1s
**SNAA Sanae 163.10 206** PKP **PKPdf 02 36 33.6 +1.5**
comp=Z,3.4nm,1.2s,baz=14,slow=4.2,SNR=4.5

**IDC 05 02:28:59.1±12.0, 4°.31S×148°.53E, h0km, mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=201.0km s-min=100.8km az=10.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.80** | **221** | P | P | 02 33 42.8 | +0.5 |
| | 2.1nm,0.9s,baz=46,slow=11,SNR=10 | | | | | | |
| | 2.1nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **23.86** | **215** | P | P | 02 34 14.3 | -0.2 |
| | 1.2nm,1.0s,baz=42,slow=7.4,SNR=9.1 | | | | | | |
| | 1.2nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **28.18** | **193** | P | P | 02 34 53.3 | -0.2 |
| | 1.9nm,0.7s,baz=13,slow=14,SNR=1.7 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.88** | **38** | T | T | 03 04 29.0 | |
| | baz=223,slow=76,SNR=49 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.88** | **38** | T | T | 03 04 31.3 | |
| | baz=223,slow=76,SNR=63 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.89** | **38** | T | T | 03 04 32.5 | |
| | baz=223,slow=76,SNR=60 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.93** | **36** | T | T | 03 05 48.9 | |
| | baz=221,slow=76,SNR=19 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.95** | **37** | T | T | 03 05 48.5 | |
| | baz=221,slow=76,SNR=45 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.95** | **36** | T | T | 03 05 50.7 | |
| | baz=221,slow=76,SNR=48 | | | | | | |

**CNRM 05 02:32:35.6, 31°.74N×6°.37W, h12km, ML1.9, Morocco**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TISM** | **Timmit** | **0.07** | **250** | P | Pg | 02 32 36.3 | -1.7 |
| **TISM** | **Timmit** | **0.07** | **250** | S | Sg | 02 32 38.6 | -1.2 |
| **TISM** | **Timmit** | **0.07** | **250** | S | Sg | 02 32 40.1 | +0.2 |
| **TISM** | **Timmit** | **0.07** | **250** | S | Sg | 02 32 40.1 | +0.2 |
| **OUZM** | **OUZ** | **0.90** | **202** | P | Pg | 02 32 53.0 | +0.1 |
| **OUZM** | **OUZ** | **0.90** | **202** | S | Sn | 02 33 07.5 | +0.4 |
| **TIO** | **Tiouine** | **1.12** | **224** | P | Pb | 02 32 54.6 | -2.3 |
| **TIO** | **Tiouine** | **1.12** | **224** | S | Sb | 02 33 09.8 | -1.7 |
| **OUK** | **Oukaimeden** | **1.39** | **248** | P | Pn | 02 32 59.4 | -1.7 |
| **OUK** | **Oukaimeden** | **1.39** | **248** | S | Sb | 02 33 17.7 | -1.8 |
| **OUK** | **Oukaimeden** | **1.39** | **248** | P | Pn | 02 33 00.0 | -1.1 |
| **OUK** | **Oukaimeden** | **1.39** | **248** | P | Pn | 02 33 00.0 | -1.1 |
| **SRHM** | **Skhour des Reh** | **1.49** | **300** | P | Pn | 02 33 00.2 | -2.0 |
| **SRHM** | **Skhour des Reh** | **1.49** | **300** | S | Sn | 02 33 20.5 | -1.2 |
| **ZHG** | **ZHG** | **1.71** | **352** | P | Pn | 02 33 04.0 | -1.4 |
| **ZHG** | **ZHG** | **1.71** | **352** | S | Sn | 02 33 25.2 | -2.0 |
| **ZHG** | **ZHG** | **1.71** | **352** | P | Pn | 02 33 04.0 | -1.4 |
| **ZHG** | **ZHG** | **1.71** | **352** | P | Pn | 02 33 04.0 | -1.4 |
| **ZGR** | **Zagora** | **1.74** | **158** | P | Pn | 02 33 06.1 | +0.3 |
| **ZGR** | **Zagora** | **1.74** | **158** | P | Pn | 02 33 06.1 | +0.3 |
| **ZGR** | **Zagora** | **1.74** | **158** | P | Pn | 02 33 06.1 | +0.3 |
| **MD31** | **MD31** | **1.76** | **50** | P | Pn | 02 33 04.7 | -1.3 |
| **MD31** | **MD31** | **1.76** | **50** | S | Sn | 02 33 28.6 | +0.2 |
| **MDT** | **Midelt** | **1.83** | **54** | P | Pn | 02 33 06.3 | -0.6 |
| **MDT** | **Midelt** | **1.83** | **54** | S | Sb | 02 33 31.4 | -0.6 |
| **MDT** | **Midelt** | **1.83** | **54** | P | Pn | 02 33 06.3 | -0.6 |
| **MDT** | **Midelt** | **1.83** | **54** | S | Sb | 02 33 31.4 | -0.6 |
| **MDT** | **Midelt** | **1.83** | **54** | P | Pn | 02 33 06.3 | -0.6 |
| **MDT** | **Midelt** | **1.83** | **54** | S | Sb | 02 33 31.4 | -0.6 |
| **TTIG** | **Tnine Tigouga,** | **2.14** | **237** | P | Pn | 02 33 08.9 | -2.4 |

*MOS* ***05*** *02:45:35.7±1.0, 44°.49N×146°.68E, h148km, mb4.1/1, Error ellipse: s-maj=28.6km s-min=17.3km az=135.0*
*SKHL* ***05*** *02:45:36.6±0.5, 44°.40N×146°.70E, h145km±5km, mb4.5/3, msha5.2/3*
*JMA* ***05*** *02:45:36.6±0.3, 44°N±1°×14°7E±°, h143km±2km, MV2.9/31, NEAR ETOROFU ISLAND*
*IDC* ***05*** *02:45:39.0±3.4, 44°.62N×146°.41E, h163km±33km, mb3.1/4, mbtmp3.6/6, Error ellipse: s-maj=45.1km s-min=24.6km az=111.0*

**ISC 05 02:45:36.7±0.8, 44°.47N±0°.06×146°.70E±0°.05, h143km±6km, n39, σ0s62/51, mb3.4/4, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHO** | **Shikotan** | **0.60** | **171** | *e*P | **Pn** | **02 45 57.8** | **0.0** |
| SHO | | | | AMB | AMB | 02 45 58.4 | |
| | 100nm,0.2s | | | | | | |
| SHO | | | | *e*S | **Sn** | **02 46 13.3** | **-0.5** |
| SHO | | | | A | A | 02 46 14.0 | |
| | 880nm,0.3s | | | | | | |
| SHO | | | | A | A | 02 46 14.0 | |
| | 1μm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **0.60** | **171** | *e*PN | **Pn** | **02 45 57.8** | **0.0** |
| SHO | | | | *e*S | **Sn** | **02 46 13.3** | **-0.5** |
| SHO | | | | pmax | pmax | | |
| | comp=N,53nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,43nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,101nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,889nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.74** | **235** | *e*P | **Pn** | **02 45 58.8** | **+0.1** |
| YUK | | | | AMB | AMB | 02 46 00.5 | |
| | comp=E,350nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **02 46 15.3** | **0.0** |
| YUK | | | | A | A | 02 46 21.0 | |
| | comp=E,530nm,0.5s | | | | | | |
| YUK | | | | A | A | 02 46 21.0 | |
| | comp=E,640nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.74** | **235** | *e*PN | **Pn** | **02 45 59.1** | **+0.4** |
| YUK | | | | *e*S | **Sn** | **02 46 15.3** | **0.0** |
| YUK | | | | pmax | pmax | | |
| | comp=N,171nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,245nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,231nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,380nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,305nm,0.2s | | | | | | |
| **RUSJ** | **Misakicho** | **1.10** | **251** | *e*PN | **Pn** | **02 46 01.6** | **-0.1** |
| RUSJ | | | | S | **Sn** | **02 46 20.9** | **+0.2** |
| **KUR** | **Kuril'sk** | **1.13** | **47** | *e*P | **Pn** | **02 46 02.1** | **+0.1** |
| KUR | | | | AMB | AMB | 02 46 02.5 | |
| | comp=E,120nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **02 46 21.7** | **+0.5** |
| KUR | | | | A | A | 02 46 22.0 | |
| | comp=E,120nm,0.4s | | | | | | |
| KUR | | | | A | A | 02 46 22.0 | |
| | comp=E,280nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.13** | **47** | *e*PN | **Pn** | **02 46 02.0** | **+0.1** |
| KUR | | | | *e*S | **Sn** | **02 46 21.7** | **+0.5** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,121nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,45nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,40nm,0.2s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=N,71nm,0.7s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=E,153nm,0.7s | | | | | | | |
| **JRA** | **Rausu** | **1.25** | **246** | P | **Pn** | **02 46 03.2** | **+0.2** | |
| JRA | | | | *e*S | **Sn** | **02 46 23.7** | **+0.5** | |
| **NEM2** | **Nemuro 2** | **1.30** | **213** | P | **Pn** | **02 46 03.7** | **+0.1** | |
| NEM2 | | | | *e*S | **Sn** | **02 46 23.6** | **-0.5** | |
| **NMR** | **Nemuro--Hokkai** | **1.30** | **213** | *e*P | **Pn** | **02 46 03.8** | **+0.2** | |
| NMR | | | | *e*S | **Sn** | **02 46 23.9** | **-0.2** | |
| **NMR** | **Nemuro--Hokkai** | **1.30** | **213** | *e*PN | **Pn** | **02 46 03.8** | **+0.2** | |
| NMR | | | | *e*S | **Sn** | **02 46 23.4** | **-0.7** | |
| **JNSB** | **Nemuroshibetsu** | **1.40** | **241** | *e*P | **Pn** | **02 46 05.3** | **+0.7** | |
| JNSB | | | | *e*S | **Sn** | **02 46 27.1** | **+1.2** | |
| **JNK** | **Nakash** | **1.68** | **239** | P | **Pn** | **02 46 08.3** | **+0.6** | |
| **JKHN** | **Kushirohamanak** | **1.77** | **219** | *e*P | **Pn** | **02 46 09.5** | **+0.8** | |
| **AKK** | **Akkeshi** | **1.98** | **224** | *e*P | **Pn** | **02 46 11.4** | **+0.3** | |
| AKK | | | | *e*S | **Sn** | **02 46 37.3** | **-0.1** | |
| **JAK** | **Akkeshi** | **2.06** | **225** | *i* P | **Pn** | **02 46 12.6** | **+0.4** | |
| JAK | | | | S | **Sn** | **02 46 39.2** | **-0.1** | |
| **JTKR** | **Abashiri--Toko** | **2.07** | **257** | P | **Pn** | **02 46 12.1** | **0.0** | |
| JTKR | | | | *e*S | **Sn** | **02 46 38.9** | **-0.4** | |
| **JAR** | **Ashorobuto** | **2.42** | **242** | P | **Pn** | **02 46 17.1** | **+0.6** | |
| **JMP** | **Maruseppu** | **2.44** | **260** | P | **Pn** | **02 46 16.7** | **-0.1** | |
| **JOB** | **Onbets** | **2.60** | **234** | *e*P | **Pn** | **02 46 19.4** | **+0.8** | |
| JOB | | | | *e*S | **Sn** | **02 46 50.8** | **-0.2** | |
| **JKK2** | **Kamakawa 2** | **2.91** | **260** | P | **Pn** | **02 46 23.0** | **+0.5** | |
| JKK2 | | | | S | **Sn** | **02 46 58.4** | **+0.5** | |
| **JKA** | **Kamikawa-asahi** | **2.96** | **265** | *e*P | **Pn** | **02 46 23.9** | **+0.6** | |
| **ASAJ** | **Asahikawa** | **2.97** | **265** | P | **Pn** | **02 46 23.9** | **+0.6** | |
| | comp=E,29nm,0.6s,baz=86,slow=17,SNR=27 | | | | | | | |
| **ASAJ** | **Asahikawa** | **2.97** | **265** | P | **Pn** | **02 46 23.9** | **+0.6** | |
| **JSE** | **Soyaes** | **2.98** | **281** | P | **Pn** | **02 46 22.1** | **-1.3** | |
| **JCH** | **Churui** | **3.05** | **234** | *i* P | **Pn** | **02 46 25.0** | **+0.6** | |
| JCH | | | | *e*S | **Sn** | **02 47 00.2** | **-1.1** | |
| **JWK2** | **Keihoku** | **3.52** | **286** | *e*P | **Pn** | **02 46 31.4** | **+1.0** | |
| **JNBK** | **Urakawa-nobuka** | **3.61** | **234** | P | **Pn** | **02 46 31.4** | **-0.3** | |
| **USRK** | **Ussuriysk Ar.** | **10.55** | **274** | P | **Pn** | **02 48 03.8** | **-0.1** | |
| | comp=E,28nm,0.8s,baz=96,slow=14,SNR=6.7 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.85** | **139** | T | T | 03 22 40.5 | | |
| | baz=330,slow=75,SNR=17 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.87** | **139** | T | T | 03 22 41.7 | | |
| | baz=330,slow=75,SNR=20 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.87** | **139** | T | T | 03 22 45.1 | | |
| | baz=330,slow=75,SNR=24 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.82** | **141** | T | T | 03 23 54.2 | | |
| | baz=330,slow=76,SNR=13 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.83** | **141** | T | T | 03 23 56.6 | | |
| | baz=330,slow=76,SNR=23 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.84** | **141** | T | T | 03 23 55.2 | | |
| | baz=330,slow=76,SNR=11 | | | | | | | |
| **ILAR** | **Eielson Array** | **41.10** | **37** | P | **P** | **02 53 05.8** | **-0.3** | |
| | comp=E,0.1nm,0.5s,baz=275,slow=9.7,SNR=3.1 | | | | | | | |
| | comp=E,0.1nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.08** | **193** | P | **P** | **02 56 02.6** | **+0.8** | |
| | comp=E,0.4nm,0.5s,baz=8.1,slow=6.7,SNR=7.1 | | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **68.91** | **337** | P | **P** | **02 56 23.6** | **-1.9** | |
| | comp=E,2.2nm,0.9s,baz=34,slow=10,SNR=2.3 | | | | | | | |
| | comp=E,2.2nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **82.52** | **56** | P | **P** | **02 57 44.8** | **+1.2** | |
| | comp=E,0.2nm,0.5s,baz=308,slow=4.5,SNR=2.3 | | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | | |

*FUNV* ***05*** *03:10:46.9, 10°.62N×63°.17W, h7km, MW3.4*
*TRN* ***05*** *03:10:48.7, 10°.26N×63°.05W, h95km, MD3.5, Gulf of Paria.*

**ISC 05 03:10:48.3±1.4, 10°.38N±0°.06×63°.18W±0°.04, h98km±21km, n15, σ1ş81/25, 1C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TCE** | **Chacachacare** | **1.44** | **77** | *e*P | **Pn** | **03 11 12.2** | **-1.5** |
| **PCRV** | **Puerto La Cruz** | **1.45** | **262** | *e*P | **Pn** | **03 11 13.8** | **0.0** |
| PCRV | | | | *e*S | **Sn** | **03 11 33.5** | **+0.3** |
| **PCRV** | **Puerto La Cruz** | **1.45** | **262** | *e*P | **Pn** | **03 11 15.9** | **+2.0** |
| PCRV | | | | *e*S | **Sn** | **03 11 35.3** | **+2.0** |
| **TRN** | **Trinidad (W)** | **1.76** | **81** | *e*P | **Pn** | **03 11 17.0** | **-0.8** |
| TRN | | | | *e*S | **Sn** | **03 11 38.3** | **-1.9** |
| **GRFF** | **Grenada Fort F** | **2.18** | **40** | *e*P | **Pn** | **03 11 23.1** | **-0.1** |
| GRFF | | | | *e*S | **Sn** | **03 11 50.3** | **+0.5** |
| **GRGR** | **Grenville** | **2.30** | **40** | *e*P | **Pn** | **03 11 25.0** | **+0.3** |
| GRGR | | | | *e*S | **Sn** | **03 11 52.6** | **+0.1** |
| **GRHS** | **Sauteurs** | **2.37** | **39** | *e*P | **Pn** | **03 11 26.1** | **+0.4** |
| **GRSS** | **Sisters** | **2.45** | **39** | *e*P | **Pn** | **03 11 27.4** | **+0.8** |
| GRSS | | | | *e*S | **Sn** | **03 11 55.5** | **-0.6** |
| **GCMP** | **Grenada, Carri** | **2.71** | **39** | *e*P | **Pn** | **03 11 31.5** | **+1.4** |
| **TACV** | **Tcata** | **3.80** | **267** | *e*P | **Pn** | **03 11 44.6** | **-0.1** |
| **CACV** | **CAICARA DEL OR** | **4.34** | **230** | *e*P | **Pn** | **03 11 50.2** | **-1.9** |
| CACV | | | | *e*S | **Sn** | **03 12 36.6** | **-5.0** |
| **BENV** | **Beln** | **4.37** | **265** | *e*P | **Pn** | **03 11 52.5** | **-0.1** |
| BENV | | | | *e*S | **Sn** | **03 12 40.6** | **-1.9** |
| **LUEV** | **Luepa** | **4.81** | **159** | *e*P | **Pn** | **03 12 00.5** | **+1.8** |
| LUEV | | | | *e*S | **Sn** | **03 12 56.1** | **+2.8** |
| **BAUV** | **El Baul** | **5.00** | **254** | *e*P | **Pn** | **03 12 02.1** | **+1.0** |
| BAUV | | | | *e*S | **Sn** | **03 12 57.1** | **-0.6** |
| **BAUV** | **El Baul** | **5.00** | **254** | *e*P | **Pn** | **03 12 03.5** | **+2.4** |

*ISN* ***05*** *03:36:59.9±1.3, 34°.64N×46°.26E, h20km±24km, ML2.5*
*TEH* ***05*** *03:36:59.1, 34°.65N×46°.30E, h11km, ML2.5*

**ISC 05 03:36:59.1±1.1, 34°.65N±0°.05×46°.29E±0°.04, h11km±11km, n9, σ0ş40/11, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.10** | **59** | Pg | **Pg** | **03 37 02.2** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.40** | **144** | Pg | **Pg** | **03 37 07.6** | **+0.5** |
| **KGS1** | **Ghasr-e-Shirin** | **0.59** | **256** | Pg | **Pg** | **03 37 10.9** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.62** | **210** | Pg | **Pg** | **03 37 11.2** | **+0.1** |
| **ILIN** | **Lien** | **0.62** | **64** | Pg | **Pg** | **03 37 11.4** | **+0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **121** | Pg | **Pg** | **03 37 12.9** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.12** | **79** | Pg | **Pb** | **03 37 20.7** | **-0.1** |
| **IBDR** | **Badra** | **1.56** | **191** | *e*Pg | **Pn** | **03 37 27.0** | **+0.2** |
| | baz=10.0 | | | | | | |
| IBDR | | | | *e*Sg | **Sg** | **03 37 49.0** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.76** | **296** | *e*Pn | **Pb** | **03 37 31.0** | **-0.5** |
| IKRK | | | | *e*Sn | **Sb** | **03 37 54.0** | **+0.4** |
| IKRK | | | | AML | AML | 03 38 04.6 | |
| | comp=N,10nm,0.9s | | | | | | |

**KRSC 05 03:52:27.6±1.0, 49°.36N×158°.65E, h9km±23km, Ml4.1, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.10** | **310** | *e*P | Pn | 03 53 04.2 | +1.3 |
| SKR | | | | *e*S | Sb | 03 53 31.4 | -0.6 |
| **KDTR** | **Khodutka, Kamc** | **2.48** | **352** | *e*P | Pn | 03 53 10.1 | +2.0 |
| KDTR | | | | *e*S | Sb | 03 53 41.2 | -1.6 |
| **ASAK** | **Asacha** | **3.06** | **351** | *e*P | Pb | 03 53 19.4 | -2.9 |
| **MTVR** | **Mutnovka** | **3.14** | **355** | *e*P | Pn | 03 53 19.6 | +2.3 |
| MTVR | | | | *e*S | Sn | 03 53 57.8 | +2.8 |
| **GRL** | **Gorelyy** | **3.21** | **354** | *e*P | Pn | 03 53 21.1 | +2.7 |
| GRL | | | | *e*S | Sn | 03 54 00.3 | +3.5 |
| **KRMR** | **Karymshinskiy** | **3.49** | **355** | *e*S | Sn | 03 54 06.7 | +3.3 |
| **UGLR** | **Uglovaya** | **3.85** | **2** | *e*P | Pb | 03 53 31.5 | -4.3 |
| **KOK** | **Koryaka** | **3.94** | **360** | *e*P | Pn | 03 53 31.6 | +3.4 |
| **KRX** | **Arik** | **4.00** | **0** | *e*P | Pn | 03 53 33.4 | +4.2 |
| **GNL** | **Ganaly** | **4.36** | **354** | *e*P | Pn | 03 53 38.2 | +4.0 |
| **TUMR** | **Tumrok** | **6.00** | **8** | *e*P | Pn | 03 54 00.7 | +4.1 |

*VIE* ***05*** *03:55:49.7±0.2, 46°.54N×14°.69E, h14km±2km, mb2.0/14, ml2.6/16, Error ellipse: s-maj=1.1km s-min=0.9km az=175.0 felt 3-4 ems98 at Globasnitz / Carinthia 9 km ENE of Eisenkappel*
*LJU* ***05*** *03:55:49.5, 46°.52N×14°.71E, h18km, ML2.2*
*ROM* ***05*** *03:55:50.2±0.3, 46°.54N±0°.02×14°.71E±0°.02, h10km, ML2.4/29, Error ellipse: s-maj=2.1km s-min=1.5km az=1.0*
*PRU* ***05*** *03:55:52.1, 46°.58N×14°.68E, h10km*

**ISC 05 03:55:50.4±0.8, 46°.54N±0°.01×14°.69E±0°.01, h12km±5km, n93, σ1ş13/153, 2C-15D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OBKA** | **Obir** | **0.10** | **254** | *i* Pg | **Pg** | **03 55 53.6** | **+0.2** |
| | 382nm,0.1s,SNR=2690 | | | | | | |
| OBKA | | | | *e*Sg | **Sg** | **03 55 55.6** | **0.0** |
| | 341nm,0.1s | | | | | | |
| **ZAVS** | **Zavodnje** | **0.25** | **114** | ⇓*i* Pg | **Pg** | **03 55 55.5** | **-0.2** |
| ZAVS | | | | *i* Sg | **Sg** | **03 55 58.8** | **-0.4** |
| **SOKA** | **Soboth** | **0.27** | **59** | *i* Pg | **Pg** | **03 55 56.1** | **0.0** |
| | 46nm,0.1s,SNR=393 | | | | | | |
| SOKA | | | | *e*Sg | **Sg** | **03 55 59.7** | **-0.2** |
| | 208nm,0.1s | | | | | | |
| **MOZS** | **Mozjanca** | **0.30** | **215** | ⇓*i* Pg | **Pg** | **03 55 56.5** | **0.0** |
| MOZS | | | | *i* Sg | **Sg** | **03 56 00.5** | **-0.1** |
| MOZS | | | | IAML | | 03 56 01.3 | |
| | comp=Z,191nm,0.1s | | | | | | |
| **PERS** | **Pernice** | **0.31** | **71** | ⇑*i* Pg | **Pg** | **03 55 56.5** | **-0.2** |
| PERS | | | | *i* Sg | **Sg** | **03 56 00.4** | **-0.5** |
| PERS | | | | IAML | | 03 56 01.4 | |
| | comp=Z,234nm,0.1s | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **0.43** | **179** | ⇓*i* Pg | **Pg** | **03 55 59.0** | **0.0** |
| VNDS | | | | *i* Sg | **Sg** | **03 56 04.6** | **-0.1** |
| VNDS | | | | IAML | | 03 56 05.2 | |
| | comp=Z,48nm,0.1s | | | | | | |
| **LJU** | **Ljubljana** | **0.51** | **193** | ⇓*i* Pg | **Pg** | **03 56 00.2** | **0.0** |
| LJU | | | | *i* Sg | **Sg** | **03 56 06.6** | **-0.4** |
| LJU | | | | IAML | | 03 56 07.7 | |
| | comp=Z,47nm,0.1s | | | | | | |
| **PDKS** | **Podkum** | **0.52** | **156** | ⇓*i* Pg | **Pg** | **03 56 00.6** | **+0.1** |
| PDKS | | | | IAML | | 03 56 08.6 | |
| | comp=Z,36nm,0.1s | | | | | | |
| **GORS** | **Gorjuse** | **0.53** | **246** | ⇑*i* Pg | **Pg** | **03 56 00.5** | **-0.2** |
| GORS | | | | *i* Sg | **Sg** | **03 56 08.3** | **+0.5** |
| GORS | | | | IAML | | 03 56 09.5 | |
| | comp=Z,25nm,0.1s | | | | | | |
| **CRNS** | **Crni Vrh** | **0.55** | **213** | ⇓*i* Pg | **Pg** | **03 56 01.0** | **0.0** |
| CRNS | | | | *i* Sg | **Sg** | **03 56 08.4** | **+0.1** |
| CRNS | | | | IAML | | 03 56 09.9 | |
| | comp=Z,70nm,0.1s | | | | | | |
| **GROS** | **Grobnik** | **0.56** | **97** | *i* Pg | **Pg** | **03 56 00.8** | **-0.6** |
| GROS | | | | *i* Sg | **Sg** | **03 56 08.2** | **-0.8** |
| GROS | | | | IAML | | 03 56 09.4 | |
| | comp=Z,144nm,0.1s | | | | | | |
| **GBAS** | **Gorenja Brezov** | **0.63** | **196** | ⇓*i* Pg | **Pg** | **03 56 02.2** | **-0.4** |
| GBAS | | | | *i* Sg | **Sg** | **03 56 10.2** | **-0.6** |
| GBAS | | | | IAML | | 03 56 11.8 | |
| | comp=Z,42nm,0.1s | | | | | | |
| **DOBS** | **Dobrina** | **0.66** | **125** | ⇓*i* Pg | **Pg** | **03 56 02.7** | **-0.5** |
| DOBS | | | | *i* Sg | **Sg** | **03 56 10.8** | **-1.2** |
| DOBS | | | | IAML | | 03 56 12.2 | |
| | comp=Z,40nm,0.1s | | | | | | |
| **CADS** | **Cadrg** | **0.73** | **245** | *i* Pg | **Pg** | **03 56 03.8** | **-0.7** |
| CADS | | | | *i* Sg | **Sb** | **03 56 14.8** | **-0.2** |
| CADS | | | | IAML | | 03 56 21.6 | |
| | comp=Z,47nm,0.2s | | | | | | |
| **MYKA** | **Terra Mystica** | **0.73** | **278** | *e*Pg | **Pg** | **03 56 04.0** | **-0.5** |
| | comp=Z,2.4nm,0.1s,SNR=17 | | | | | | |
| MYKA | | | | *e*Sg | **Sg** | **03 56 14.2** | **+0.1** |
| | comp=Z,42nm,0.1s | | | | | | |
| **LEGS** | **Legarje** | **0.73** | **143** | ⇓*i* Pg | **Pg** | **03 56 04.4** | **-0.1** |
| LEGS | | | | *e*Sg | **Sg** | **03 56 13.5** | **-0.6** |
| **VISS** | **Visnje** | **0.74** | **172** | ⇓*i* Pg | **Pg** | **03 56 04.5** | **-0.2** |
| VISS | | | | *i* Sg | **Sg** | **03 56 14.1** | **-0.3** |
| VISS | | | | IAML | | 03 56 18.6 | |
| | comp=Z,53nm,0.2s | | | | | | |
| **VOJS** | **Vojsko** | **0.75** | **228** | *i* Pg | **Pg** | **03 56 04.4** | **-0.6** |
| VOJS | | | | *i* Sg | **Sg** | **03 56 15.1** | **+0.3** |
| VOJS | | | | IAML | | 03 56 17.2 | |
| | comp=Z,34nm,0.1s | | | | | | |
| **CESS** | **Cesta pri Krsk** | **0.78** | **136** | ⇓*i* Pg | **Pg** | **03 56 05.3** | **-0.1** |
| CESS | | | | *i* Sg | **Sg** | **03 56 15.6** | **0.0** |
| CESS | | | | IAML | | 03 56 15.9 | |
| | comp=Z,44nm,0.1s | | | | | | |
| **JAVS** | **Javornik** | **0.78** | **214** | ⇓*i* Pg | **Pg** | **03 56 04.8** | **-0.6** |
| JAVS | | | | *i* Sg | **Sg** | **03 56 15.8** | **+0.2** |
| JAVS | | | | IAML | | 03 56 17.4 | |
| | comp=Z,17nm,0.1s | | | | | | |
| **PRED** | **Cave del Predi** | **0.78** | **264** | P | **Pg** | **03 56 05.0** | **-0.5** |
| PRED | | | | S | **Sb** | **03 56 16.4** | **-0.1** |
| **DRE** | **Drenchia** | **0.81** | **244** | P | **Pg** | **03 56 05.6** | **-0.5** |
| DRE | | | | S | **Sb** | **03 56 17.6** | **+0.3** |
| **ACOM** | **Acomizza, Ital** | **0.81** | **271** | P | **Pg** | **03 56 06.0** | **-0.2** |
| ACOM | | | | S | **Sb** | **03 56 17.6** | **+0.1** |
| ACOM | | | | AML | AML | | |
| | comp=E,558μm,0.2s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=N,442μm,1.0s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=N,442μm,1.0s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=E,550μm,0.2s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=N,426μm,1.0s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=N,227μm,0.8s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=N,353μm,0.5s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=E,415μm,0.4s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=E,452μm,0.2s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=E,559μm,0.2s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=N,421μm,0.2s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=N,430μm,0.2s | | | | | | |
| ACOM | | | | AML | AML | | |
| | comp=E,550μm,0.2s | | | | | | |
| **CEY** | **Cerknica** | **0.82** | **193** | *i* Pg | **Pg** | **03 56 05.6** | **-0.6** |
| CEY | | | | *i* Sg | **Sb** | **03 56 17.6** | **+0.1** |
| CEY | | | | IAML | | 03 56 19.6 | |
| | comp=Z,52nm,0.2s | | | | | | |
| **GOLS** | **Golise** | **0.83** | **129** | ⇓*i* Pg | **Pg** | **03 56 06.2** | **-0.3** |
| GOLS | | | | *i* Sg | **Sg** | **03 56 16.9** | **-0.5** |
| GOLS | | | | IAML | | 03 56 18.3 | |
| | comp=Z,42nm,0.1s | | | | | | |
| **ROBS** | **Robic** | **0.87** | **251** | *i* Pg | **Pb** | **03 56 06.1** | **-1.2** |
| ROBS | | | | *e*Sg | **Sg** | **03 56 18.2** | **-0.3** |
| ROBS | | | | IAML | | 03 56 26.5 | |
| | comp=Z,14nm,0.2s | | | | | | |
| **CRES** | **Cresnjev** | **0.89** | **143** | ⇓*i* Pg | **Pb** | **03 56 06.9** | **-0.7** |
| CRES | | | | *i* Sg | **Sg** | **03 56 18.4** | **-0.7** |
| CRES | | | | IAML | | 03 56 20.3 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ARSA** | **Arzberg** | **0.91** | **38** | *e*Pg | **Pb** | **03 56 07.4** | **-0.8** |
| | comp=Z,2.5nm,0.2s,SNR=19 | | | | | | |
| ARSA | | | | *e*Sg | **Sg** | **03 56 18.8** | **-1.1** |
| | comp=Z,5.2nm,0.1s | | | | | | |
| **GCIS** | **Gornji Cirnik** | **0.93** | **136** | *i* Pg | **Pg** | **03 56 08.1** | **-0.2** |
| GCIS | | | | *i* Sg | **Sb** | **03 56 20.0** | **-0.7** |
| GCIS | | | | IAML | | 03 56 22.5 | |
| | comp=Z,12nm,0.1s | | | | | | |
| **PTCC** | **Patocco-Chiusa** | **0.93** | **262** | P | **Pb** | **03 56 08.0** | **-0.5** |
| PTCC | | | | S | **Sb** | **03 56 20.7** | **-0.2** |
| PTCC | | | | AML | AML | | |
| | comp=E,88μm,0.4s | | | | | | |
| PTCC | | | | AML | AML | | |
| | comp=N,100μm,0.9s | | | | | | |
| PTCC | | | | AML | AML | | |
| | comp=E,62μm,0.3s | | | | | | |
| PTCC | | | | AML | AML | | |
| | comp=N,81μm,0.3s | | | | | | |
| PTCC | | | | AML | AML | | |
| | comp=E,88μm,0.4s | | | | | | |
| PTCC | | | | AML | AML | | |
| | comp=N,98μm,0.5s | | | | | | |
| **SABO** | **M.te Sabotino** | **0.94** | **234** | P | **Pb** | **03 56 07.8** | **-0.7** |
| SABO | | | | AML | AML | | |
| | comp=E,982μm,0.8s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=N,882μm,0.7s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=N,878μm,0.7s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=E,242μm,0.8s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=E,982μm,1.2s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=E,242μm,1.2s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=N,237μm,0.4s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=N,878μm,1.3s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=E,226μm,0.2s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=N,237μm,0.4s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=E,863μm,0.2s | | | | | | |
| SABO | | | | AML | AML | | |
| | comp=N,823μm,0.2s | | | | | | |
| **GBRS** | **Gornja Briga** | **1.01** | **175** | ⇓*i* Pg | **Pb** | **03 56 09.3** | **-0.5** |
| GBRS | | | | IAML | | 03 56 24.8 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **LOBO** | **Lobor** | **1.03** | **111** | *e*Pg | **Pb** | **03 56 09.2** | **-0.8** |
| LOBO | | | | Sg | **Sb** | **03 56 22.0** | **-1.5** |
| **KNDS** | **Knezji Dol** | **1.03** | **192** | *i* Pg | **Pb** | **03 56 09.3** | **-0.9** |
| KNDS | | | | *i* Sg | **Sb** | **03 56 23.2** | **-0.5** |
| KNDS | | | | IAML | | 03 56 27.6 | |
| | comp=Z,46nm,0.2s | | | | | | |
| **BAD** | **Bernadia** | **1.05** | **254** | P | **Pb** | **03 56 09.7** | **-0.7** |
| **PLRO** | **Paularo** | **1.06** | **271** | P | **Pb** | **03 56 10.0** | **-0.7** |
| **OZLJ** | **Ozalj** | **1.07** | **149** | *e*Pg | **Pb** | **03 56 10.5** | **-0.2** |
| OZLJ | | | | Sg | **Sb** | **03 56 24.2** | **-0.4** |
| **KBA** | **Koelnbreinsper** | **1.07** | **301** | *e*Pg | **Pb** | **03 56 10.4** | **-0.5** |
| | comp=Z,4.1nm,0.1s,SNR=11 | | | | | | |
| KBA | | | | *e*Sg | **Sb** | **03 56 24.7** | **-0.2** |
| | comp=Z,9.3nm,0.2s,SNR=7.7 | | | | | | |
| **KOGS** | **Kog** | **1.08** | **94** | AML | AML | | |
| | comp=N,1166μm,0.3s | | | | | | |
| KOGS | | | | AML | AML | | |
| | comp=E,953μm,0.6s | | | | | | |
| KOGS | | | | AML | AML | | |
| | comp=N,1166μm,0.3s | | | | | | |
| KOGS | | | | AML | AML | | |
| | comp=E,751μm,0.4s | | | | | | |
| KOGS | | | | AML | AML | | |
| | comp=N,798μm,0.2s | | | | | | |
| KOGS | | | | AML | AML | | |
| | comp=E,839μm,0.3s | | | | | | |
| **KOGS** | **Kog** | **1.08** | **94** | *i* Pg | **Pb** | **03 56 10.6** | **-0.4** |
| KOGS | | | | *i* Sg | **Sg** | **03 56 25.0** | **-0.2** |
| KOGS | | | | IAML | | 03 56 29.4 | |
| | comp=Z,21nm,0.1s | | | | | | |
| **PTJ** | **Puntijarka** | **1.09** | **125** | *e*Pg | **Pg** | **03 56 11.1** | **-0.2** |
| PTJ | | | | Sg | **Sg** | **03 56 25.0** | **-0.5** |
| **SKDS** | **Skadanscina** | **1.10** | **206** | *i* Pg | **Pb** | **03 56 10.0** | **-1.2** |
| SKDS | | | | *i* Sg | **Sb** | **03 56 25.2** | **-0.3** |
| SKDS | | | | IAML | | 03 56 27.2 | |
| | comp=Z,25nm,0.1s | | | | | | |
| **BOJS** | **Bojanci** | **1.10** | **159** | AML | AML | | |
| | comp=E,311μm,0.5s | | | | | | |
| **BOJS** | **Bojanci** | **1.10** | **159** | *i* Pg | **Pb** | **03 56 11.0** | **-0.3** |
| BOJS | | | | *i* Sg | **Sn** | **03 56 26.9** | **+0.2** |
| BOJS | | | | IAML | | 03 56 28.3 | |
| | comp=Z,14nm,0.2s | | | | | | |
| **BOO** | **Bordano** | **1.12** | **259** | P | **Pb** | **03 56 11.0** | **-0.7** |
| **ZAG** | **Zagreb** | **1.15** | **128** | *e*Pg | **Pg** | **03 56 12.8** | **+0.4** |
| ZAG | | | | Sg | **Sb** | **03 56 25.7** | **-1.2** |
| **FUSE** | **Fusea** | **1.18** | **265** | P | **Pn** | **03 56 12.3** | **-0.3** |
| **ZOU** | **Zoufplan** | **1.19** | **272** | P | **Pn** | **03 56 12.2** | **-0.7** |
| **MPRI** | **Monte Prat** | **1.22** | **257** | P | **Pn** | **03 56 12.9** | **-0.3** |
| **RIY** | **Rijeka** | **1.22** | **187** | *e*Pg | **Pb** | **03 56 13.0** | **-0.3** |
| RIY | | | | Sg | **Sn** | **03 56 29.1** | **-0.5** |
| **CLUD** | **Cludinico** | **1.25** | **267** | P | **Pn** | **03 56 13.4** | **-0.2** |
| CLUD | | | | AML | AML | | |
| | comp=E,56μm,0.7s | | | | | | |
| CLUD | | | | AML | AML | | |
| | comp=N,57μm,0.7s | | | | | | |
| CLUD | | | | AML | AML | | |
| | comp=N,73μm,0.7s | | | | | | |
| CLUD | | | | AML | AML | | |
| | comp=E,49μm,0.4s | | | | | | |
| CLUD | | | | AML | AML | | |
| | comp=N,57μm,0.7s | | | | | | |
| CLUD | | | | AML | AML | | |
| | comp=E,68μm,0.7s | | | | | | |
| **KALN** | **Kalnik** | **1.29** | **108** | *e*Pg | **Pb** | **03 56 14.1** | **-0.4** |
| KALN | | | | Sg | **Sg** | **03 56 31.1** | **-0.8** |
| **FVI** | **Forni Avoltri** | **1.32** | **273** | P | **Pb** | **03 56 15.2** | **+0.1** |
| FVI | | | | AML | AML | | |
| | comp=E,116μm,0.2s | | | | | | |
| FVI | | | | AML | AML | | |
| | comp=N,83μm,0.4s | | | | | | |
| FVI | | | | AML | AML | | |
| | comp=E,116μm,0.2s | | | | | | |
| FVI | | | | AML | AML | | |
| | comp=N,72μm,0.2s | | | | | | |
| **MOA** | **Molln** | **1.34** | **348** | *e*Pg | **Pg** | **03 56 16.2** | **0.0** |
| | comp=N,1.5nm,0.1s | | | | | | |
| MOA | | | | Sg | **Sg** | **03 56 34.7** | **+1.0** |
| | comp=N,5.9nm,0.2s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **1.36** | **328** | *i* Pg | **Pb** | **03 56 15.6** | **-0.2** |
| | comp=N,11nm,0.3s,SNR=37 | | | | | | |
| BIOA | | | | Sg | **Sg** | **03 56 33.9** | **-0.3** |
| | comp=N,10nm,0.2s | | | | | | |
| **STAL** | **STALIGIAL** | **1.40** | **259** | P | **Pb** | **03 56 16.2** | **-0.2** |
| STAL | | | | AML | AML | | |
| | comp=E,82μm,0.7s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,81μm,0.2s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,189μm,0.9s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,81μm,0.2s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,81μm,0.2s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,114μm,0.6s | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.52** | **279** | *e*Pn | **Pn** | **03 56 17.5** | **+0.1** |
| | comp=E,0.5nm,0.1s | | | | | | |
| ABTA | | | | *e*Sn | **Sb** | **03 56 37.8** | **+0.2** |
| | comp=E,8.9nm,0.3s | | | | | | |
| **SMRN** | **Sveta Marina** | **1.55** | **194** | *e*Pn | **Pb** | **03 56 18.9** | **0.0** |
| SMRN | | | | Sg | **Sg** | **03 56 40.0** | **-0.1** |
| **CIMO** | **Cimolais** | **1.57** | **263** | P | **Pb** | **03 56 19.2** | **-0.1** |
| CIMO | | | | AML | AML | | |
| | comp=E,18μm,1.4s | | | | | | |
| CIMO | | | | AML | AML | | |
| | comp=N,25μm,0.4s | | | | | | |
| CIMO | | | | AML | AML | | |
| | comp=N,32μm,0.6s | | | | | | |
| CIMO | | | | AML | AML | | |
| | comp=E,16μm,0.4s | | | | | | |
| CIMO | | | | AML | AML | | |
| | comp=E,38μm,1.3s | | | | | | |
| CIMO | | | | AML | AML | | |
| | comp=N,25μm,0.4s | | | | | | |
| **RONA** | **Rosalia, Austr** | **1.60** | **43** | *e*Pn | **Pb** | **03 56 18.9** | **-1.0** |
| | comp=N,0.6nm,0.1s | | | | | | |
| **CONA** | **Conrad Observa** | **1.60** | **29** | *e*Pn | **Pb** | **03 56 19.1** | **-0.8** |
| | comp=N,0.9nm,0.2s | | | | | | |
| **LESA** | **Schwarzleotal** | **1.64** | **304** | *e*Pg | **Pb** | **03 56 20.5** | **-0.1** |
| | comp=N,4.1nm,0.2s | | | | | | |
| LESA | | | | Sg | **Sb** | **03 56 41.3** | **+0.1** |
| | comp=N,9.4nm,0.3s | | | | | | |
| **CAE** | **Caneva** | **1.65** | **252** | P | **Pb** | **03 56 20.2** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VRAC | | | | *e*SG | **Sb** | **03 57 24.1** | **+2.3** |
| **GOPC** | **GO Pecny, Ondr** | **3.38** | **1** | *e*PG | **Pb** | **03 56 52.0** | **+1.8** |
| GOPC | | | | *e*SG | **Sg** | **03 57 39.1** | **+0.2** |
| | comp=N,5.5nm,0.4s | | | | | | |
| **DAVA** | **Damuels** | **3.38** | **285** | *i* Pn | **Pn** | **03 56 45.5** | **+2.4** |
| | comp=N,0.3nm,0.1s | | | | | | |
| **PRU** | **Pruhonice** | **3.46** | **358** | *e*SG | **Sg** | **03 57 40.3** | **-1.0** |
| | comp=N,5.8nm,0.4s | | | | | | |
| **RICI** | **Ricice** | **3.50** | **149** | *e*Pn | **Pn** | **03 56 46.7** | **+2.1** |
| RICI | | | | Sn | **Sn** | **03 57 27.3** | **+1.5** |
| **MORC** | **Moravsky Berou** | **3.76** | **29** | *e*PN | **Pn** | **03 56 48.2** | **0.0** |
| MORC | | | | *e*SG | **Sg** | **03 57 46.1** | **-5.0** |
| **KRLC** | **Kraliky** | **3.81** | **21** | *e*SG | **Sg** | **03 57 50.2** | **-2.3** |
| | comp=N,5.0nm,0.7s | | | | | | |
| **DPC** | **Dobruska-Polom** | **3.97** | **15** | *e*SG | **Sg** | **03 57 57.7** | **0.0** |
| | comp=N,6.4nm,0.9s | | | | | | |
| **LSTV** | **Lastovo** | **4.08** | **157** | *e*Pn | **Pn** | **03 56 54.1** | **+1.6** |
| LSTV | | | | Sn | **Sn** | **03 57 41.6** | **+1.5** |
| **HSKC** | **Hora Svate Kat** | **4.16** | **349** | *e*SG | **Sg** | **03 58 02.9** | **-0.9** |
| **BRG** | **Berggiesshubel** | **4.37** | **354** | Sg | **Sg** | **03 58 09.7** | **-0.8** |
| BRG | | | | Amp | | 03 58 16.5 | |
| | comp=Z,2.7nm,0.5s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **4.50** | **185** | AML | AML | | |
| | comp=E,332µm,0.7s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,288µm,0.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,237µm,0.2s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,192µm,0.2s | | | | | | |
| **CLL** | **Collm** | **4.90** | **347** | *e*Sg | **Sg** | **03 58 22.0** | **-5.7** |
| | comp=Z,7.0nm,1.1s | | | | | | |

**INMG 05 03:56:55.4±0.6, 37°33'N×8°55'W, h11km±3km, ML0.3,1C, Error ellipse: s-maj=2.0km s-min=1.9km az=141.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MORF** | **Marmelete** | **0.08** | **253** | ⇑*i*P | Pg | 03 56 57.7 | -0.3 |
| MORF | | | | *e*Sg | Sg | 03 56 59.7 | -0.1 |
| MORF | | | | A | A | 03 57 00.0 | |
| | 17nm,0.1s | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.29** | **228** | *e*Pg | Pg | 03 57 01.1 | -0.3 |
| PFVI | | | | *e*Sg | Sg | 03 57 05.3 | 0.0 |
| **PBDV** | **Barranco-do-Ve** | **0.50** | **100** | *e*Sg | Sg | 03 57 12.0 | +0.1 |
| **PVAQ** | **Vaqueiros** | **0.67** | **83** | *e*Pg | Pg | 03 57 07.8 | -0.6 |
| PVAQ | | | | *e*Sg | Sg | 03 57 16.5 | -0.7 |
| PVAQ | | | | A | A | 03 57 19.3 | |
| | 1.3nm,0.8s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **0.78** | **1** | *e*S | Sg | 03 57 20.3 | -0.5 |
| **PGAV** | **Gavieira, Arco** | **4.64** | **3** | *e*Sg | Sg | 03 59 22.0 | -2.2 |

**SFS 05 03:57:22.4, 37°80N×6°86W, h0km, ML1.5/9, ML1.5/8, MLv1.5/9, Spain**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EMIN** | **Mina Concepcio** | **0.15** | **102** | Sg | Sg | 03 57 26.6 | -0.5 |
| EMIN | | | | Pg | Sg | 03 57 24.3 | -1.0 |
| **PBAR** | **Barrancos** | **0.40** | **339** | Sg | Sg | 03 57 35.8 | +0.5 |
| PBAR | | | | Pg | Pg | 03 57 29.9 | -0.2 |
| **EGRO** | **El Granado** | **0.56** | **242** | Pg | Pg | 03 57 32.7 | -0.5 |
| EGRO | | | | Sg | Sg | 03 57 39.7 | -0.8 |
| **PVAQ** | **Vaqueiros** | **0.79** | **240** | Pg | Pg | 03 57 36.6 | -1.0 |
| PVAQ | | | | Sg | Sg | 03 57 47.4 | -0.3 |
| **PCVE** | **Castro Verde** | **0.95** | **260** | Pg | Pg | 03 57 40.1 | -0.6 |
| PCVE | | | | Sg | Sg | 03 57 53.4 | +0.3 |
| **EBAD** | **Badajoz** | **0.96** | **353** | Pg | Pg | 03 57 40.3 | -0.6 |
| EBAD | | | | Sg | Sg | 03 57 53.0 | -0.4 |
| **PBDV** | **Barranco-do-Ve** | **1.02** | **237** | Pg | Pg | 03 57 41.4 | -0.5 |
| PBDV | | | | Sg | Sg | 03 57 54.7 | -0.5 |
| **ECAB** | **El Cabril** | **1.17** | **76** | Pg | Pg | 03 57 44.1 | -0.7 |
| ECAB | | | | Sg | Sg | 03 57 59.3 | -0.7 |
| **EVO** | **Evora** | **1.17** | **309** | Pn | Pg | 03 57 44.8 | 0.0 |
| EVO | | | | Sn | Sg | 03 57 59.9 | -0.1 |
| **ESPR** | **Espera** | **1.22** | **139** | Pn | Pg | 03 57 45.5 | -0.3 |
| ESPR | | | | Sn | Sb | 03 58 03.4 | +0.6 |
| **LIJA** | **Lijar** | **1.46** | **127** | Pn | Pn | 03 57 48.7 | -1.4 |

*NIED **05** 04:09:29.4, 21°.96N×120°.95E, h18km, MW4.2, Moment Tensor Solution. s2 Moment tensor: Scale 10^15^Nm; Mrr1.28; Mθθ-1.72; Mφφ0.44; Mrθ-0.49; Mθφ-1.55; Mφr-0.68; Fault plane solution: M0 2.19000×10^15^ NP1: φs213.00000°, δ66.00000°, λ48.00000°. NP2: φs98.00000°, δ47.00000°, λ146.00000°.*

*JMA **05** 04:09:29.4±0.2, 22°.0N±0°.5×120°.1E±°, h18km±3km, MV4.3/10, TAIWAN REGION*

*IDC **05** 04:09:30.4±1.0, 22°.04N×121°.12E, h0km, mb3.8/5, mbtmp3.8/6, ML3.3/1, MS3.4/16, Error ellipse: s-maj=44.5km s-min=19.4km az=64.0*

*NEIC **05** 04:09:31.7±1.8, 22°.14N±0°.02×121°.05E±0°.08, h10km±1km, mb4.1/8, Error ellipse: s-maj=12.5km s-min=4.0km az=91.0*

*TAP **05** 04:09:33.4, 22°.17N×121°.00E, h14km, ML4.0, B*

*ASIES **05** 04:09:33.4, 22°.17N×121°.00E, h14km, ML4.0, Mw4.1, Moment Tensor Solution. Moment tensor: Scale 10^22^Nm; Mrr-0.58; Mθθ0.75; Mφφ-0.17; Mrθ1.15; Mθφ0.01; Mφr0.82; Fault plane solution: M0 1.56794×10^22^ NP1: φs238.88000°, δ79.29000°, λ-105.34000°. NP2: φs114.76000°, δ18.64000°, λ-35.57000°. Principal axes: T Plg32.5850°, Azm341.7120°; N Plg15.0690°, Azm241.8030°; P Plg53.2720°, Azm130.6510°;*

**ISC 05 04:09:32.9±0.9, 22°.15N±0°.02×121°.05E±0°.02, h18km±4km, n195, σ1°34/209, mb3.8/10, MS3.5/15, 32C-10D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMST** | **Manzhou Townsh** | **0.23** | **238** | ⇑P | **Pg** | **04 09 38.6** | **+0.2** |
| | baz=225 | | | | | | |
| SMST | | | | S | **Sg** | **04 09 41.9** | **-0.2** |
| | baz=225 | | | | | | |
| **SLIU** | **Shizi** | **0.24** | **287** | ⇓*i*P | **Pg** | **04 09 38.5** | **-0.1** |
| | baz=277 | | | | | | |
| SLIU | | | | *e*S | **Sg** | **04 09 42.0** | **-0.4** |
| | baz=277 | | | | | | |
| **TAWH** | **Dawu Township** | **0.25** | **322** | ⇓*i*P | **Pg** | **04 09 39.0** | **+0.4** |
| | baz=328 | | | | | | |
| TAWH | | | | S | **Sg** | **04 09 42.7** | **+0.2** |
| | baz=328 | | | | | | |
| **TAW** | **Tawu** | **0.26** | **326** | ⇓*i*P | **Pg** | **04 09 39.1** | **+0.4** |
| | baz=334 | | | | | | |
| TAW | | | | *i* S | **Sg** | **04 09 42.7** | **0.0** |
| | baz=334 | | | | | | |
| **TWKBT** | **Hengchun** | **0.30** | **227** | ⇑*i*P | **Pn** | **04 09 40.0** | **-2.5** |
| | baz=217 | | | | | | |
| TWKBT | | | | *i* S | **Sb** | **04 09 44.4** | **0.0** |
| | baz=217 | | | | | | |
| **EAST** | **Anshuo** | **0.30** | **321** | ⇓*i*P | **Pb** | **04 09 39.9** | **0.0** |
| | baz=328 | | | | | | |
| EAST | | | | *i* S | **Sb** | **04 09 43.9** | **-0.6** |
| | baz=328 | | | | | | |
| **TWK1** | **Hengchun** | **0.30** | **229** | ⇑*i*P | **Pn** | **04 09 40.1** | **-2.4** |
| | baz=217 | | | | | | |
| TWK1 | | | | *i* S | **Sb** | **04 09 44.4** | **-0.2** |
| | baz=217 | | | | | | |
| **HEN** | **Hengchun** | **0.32** | **244** | ⇓P | **Pn** | **04 09 40.4** | **-2.4** |
| | baz=230 | | | | | | |
| HEN | | | | *i* S | **Sb** | **04 09 45.3** | **+0.3** |
| | baz=230 | | | | | | |
| **SNW** | **Nanwan** | **0.34** | **237** | ⇑P | **Pn** | **04 09 41.1** | **-1.8** |
| | baz=223 | | | | | | |
| SNW | | | | S | **Sb** | **04 09 46.2** | **+0.7** |
| | baz=223 | | | | | | |
| **ECL** | **Taimali** | **0.46** | **349** | ⇑*i*P | **Pb** | **04 09 42.5** | **0.0** |
| | baz=357 | | | | | | |
| ECL | | | | S | **Sb** | **04 09 49.3** | **+0.3** |
| | baz=357 | | | | | | |
| **SCZT** | **Fangliau** | **0.46** | **299** | ⇓*i*P | **Pn** | **04 09 42.3** | **-2.3** |
| | baz=300 | | | | | | |
| SCZT | | | | S | **Sb** | **04 09 48.4** | **-0.6** |
| | baz=300 | | | | | | |
| **LAY** | **Lan-yu** | **0.47** | **103** | ⇓*i*P | **Pb** | **04 09 43.7** | **+0.9** |
| | baz=88 | | | | | | |
| **LYUB** | **Lan-yu** | **0.51** | **106** | ⇓*e*P | **Pb** | **04 09 43.1** | **-0.3** |
| | baz=92 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.60** | **320** | P | **Pn** | **04 09 45.2** | **-1.5** |
| | baz=330 | | | | | | |
| MASBT | | | | S | **Sb** | **04 09 52.4** | **-0.8** |
| | baz=330 | | | | | | |
| **TTN** | **Taitung** | **0.61** | **8** | *e*P | **Pn** | **04 09 45.9** | **-0.9** |
| | baz=16 | | | | | | |
| **LDUT** | **Ludao** | **0.65** | **36** | P | **Pb** | **04 09 46.3** | **+0.6** |
| | baz=28 | | | | | | |
| LDUT | | | | S | **Sb** | **04 09 55.9** | **+1.4** |
| | baz=28 | | | | | | |
| **TWGBT** | **Beinan** | **0.67** | **2** | P | **Pb** | **04 09 45.6** | **-0.5** |
| **TWGBT** | **Beinan** | **0.67** | **2** | ⇑*i*P | **Pb** | **04 09 45.5** | **-0.6** |
| | baz=7.0 | | | | | | |
| TWGBT | | | | *e*S | **Sb** | **04 09 56.3** | **+1.3** |
| | baz=7.0 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.67** | **287** | ⇑*e*P | **Pn** | **04 09 49.1** | **+1.6** |
| | baz=279 | | | | | | |
| **TWG** | **Pinlang** | **0.67** | **2** | | **Pb** | **04 09 44.9** | **-1.3** |
| TWG | | | | Sg | **Sg** | **04 09 52.4** | **-2.8** |
| **TWG** | **Pinlang** | **0.67** | **2** | ⇑*i*P | **Pb** | **04 09 45.5** | **-0.7** |
| | baz=7.0 | | | | | | |
| TWG | | | | *e*S | **Sb** | **04 09 56.1** | **+1.0** |
| | baz=7.0 | | | | | | |
| **TSMG** | **Majia** | **0.67** | **326** | ⇑P | **Pn** | **04 09 46.2** | **-1.4** |
| | baz=329 | | | | | | |
| **SSD** | **Sandimen** | **0.71** | **327** | ⇑*i*P | **Pn** | **04 09 46.9** | **-1.3** |
| | baz=337 | | | | | | |
| SSD | | | | S | **Sb** | **04 09 55.3** | **-1.0** |
| | baz=337 | | | | | | |
| **TSPT** | **Pingtung City** | **0.74** | **316** | *e*P | **Pn** | **04 09 48.3** | **-0.1** |
| | baz=317 | | | | | | |
| **LONT** | **Longtian** | **0.76** | **5** | ⇑*e*P | **Pb** | **04 09 46.9** | **-0.8** |
| | baz=11 | | | | | | |
| **SGLT** | **Jiouru** | **0.78** | **318** | *e*P | **Pn** | **04 09 49.4** | **+0.4** |
| | baz=327 | | | | | | |
| **KAU** | **Kaohsiung** | **0.81** | **302** | *e*P | **Pn** | **04 09 51.0** | **+1.6** |
| | baz=303 | | | | | | |
| **EDH** | **Donghe** | **0.85** | **16** | ⇑*e*P | **Pb** | **04 09 48.7** | **-0.5** |
| | baz=34 | | | | | | |
| **WSSB** | **Gushan** | **0.88** | **304** | ⇑*e*P | **Pn** | **04 09 51.6** | **+1.1** |
| | baz=305 | | | | | | |
| **TWM1** | **Shoushan** | **0.89** | **319** | ⇑P | **Pn** | **04 09 52.0** | **+1.4** |
| | baz=337 | | | | | | |
| **SCST** | **Cishan** | **0.90** | **325** | ⇑P | **Pn** | **04 09 51.5** | **+0.8** |
| | baz=333 | | | | | | |
| **SLGT** | **Liugui** | **0.92** | **336** | *e*P | **Pn** | **04 09 50.7** | **-0.4** |
| | baz=339 | | | | | | |
| **ECS** | **Chishang** | **0.96** | **9** | *e*P | **Pg** | **04 09 50.0** | **-1.6** |
| | baz=15 | | | | | | |
| **CHKT** | **Chengkung** | **0.99** | **17** | ⇑*i*P | **Pg** | **04 09 50.8** | **-1.5** |
| | baz=31 | | | | | | |
| CHKT | | | | S | **Sg** | **04 10 04.0** | **-1.3** |
| | baz=31 | | | | | | |
| **SGST** | **Jiashian** | **1.03** | **335** | ⇑*e*P | **Pn** | **04 09 52.3** | **-0.2** |
| | baz=352 | | | | | | |
| **ELDTW** | **Lidau** | **1.04** | **358** | *e*P | **Pn** | **04 09 53.5** | **+0.7** |
| | baz=14 | | | | | | |
| **STYT** | **Tauyuan** | **1.05** | **345** | ⇑*e*P | **Pn** | **04 09 52.8** | **-0.1** |
| | baz=355 | | | | | | |
| **STYH** | **Taoyuan** | **1.05** | **346** | *e*P | **Pn** | **04 09 52.8** | **0.0** |
| | baz=354 | | | | | | |
| **FULB** | **Fuli** | **1.07** | **12** | *e*P | **Pg** | **04 09 52.1** | **-1.6** |
| | baz=18 | | | | | | |
| **CHKH** | **Chenggong** | **1.09** | **17** | *e*P | **Pg** | **04 09 51.2** | **-2.9** |
| | baz=35 | | | | | | |
| CHKH | | | | *e*S | **Sg** | **04 10 06.3** | **-2.0** |
| | baz=35 | | | | | | |
| **CHN3** | **Shinhua** | **1.12** | **326** | *e*P | **Pn** | **04 09 55.4** | **+1.6** |
| | baz=331 | | | | | | |
| **CHN1** | **Nanshi** | **1.14** | **335** | ⇑*i*P | **Pn** | **04 09 55.3** | **+1.2** |
| | baz=340 | | | | | | |
| CHN1 | | | | S | **Sn** | **04 10 12.6** | **+3.2** |
| | baz=340 | | | | | | |
| **WTP** | **Ta-pu** | **1.17** | **340** | ⇑P | **Pn** | **04 09 55.6** | **+1.2** |
| | baz=346 | | | | | | |
| WTP | | | | *e*S | **Sn** | **04 10 13.2** | **+3.3** |
| | baz=346 | | | | | | |
| **SNST** | **Tainan City** | **1.19** | **335** | *e*P | **Pn** | **04 09 56.0** | **+1.3** |
| | baz=342 | | | | | | |
| **SSHA** | **Shanhua** | **1.21** | **325** | *e*P | **Pn** | **04 09 56.3** | **+1.3** |
| | baz=331 | | | | | | |
| **TPUB** | **Ta-pu** | **1.21** | **341** | P | **Pn** | **04 09 56.4** | **+1.3** |
| **TPUB** | **Ta-pu** | **1.21** | **341** | | **Pn** | **04 09 56.0** | **+0.9** |
| **TPUB** | **Ta-pu** | **1.21** | **341** | ⇑P | **Pn** | **04 09 56.1** | **+1.0** |
| | baz=347 | | | | | | |
| TPUB | | | | *e*S | **Sn** | **04 10 13.9** | **+2.8** |
| | baz=347 | | | | | | |
| **EYUL** | **Yuli** | **1.22** | **12** | *e*P | **Pb** | **04 09 55.0** | **-0.6** |
| | baz=18 | | | | | | |
| **ECBN** | **Changbin** | **1.22** | **17** | *e*P | **Pb** | **04 09 55.2** | **-0.3** |
| | baz=36 | | | | | | |
| **TWF1** | **Yuli** | **1.22** | **11** | *e*P | **Pn** | **04 09 55.6** | **+0.5** |
| | baz=17 | | | | | | |
| **TWK** | **Hsinying** | **1.23** | **335** | ⇑P | **Pn** | **04 09 56.1** | **+0.8** |
| | baz=343 | | | | | | |
| **YULB** | **Yu-li** | **1.26** | **10** | P | **Pn** | **04 09 55.9** | **+0.2** |
| **YULB** | **Yu-li** | **1.26** | **10** | | **Pb** | **04 09 55.6** | **-0.6** |
| **YULB** | **Yu-li** | **1.26** | **10** | *e*P | **Pg** | **04 09 55.4** | **-2.0** |
| | baz=16 | | | | | | |
| **SCLT** | **Jiali** | **1.29** | **322** | *e*P | **Pn** | **04 09 56.4** | **+0.3** |
| | baz=328 | | | | | | |
| **TSCK** | **Chigu Township** | **1.34** | **318** | *e*P | **Pn** | **04 09 57.1** | **+0.3** |
| | baz=322 | | | | | | |
| **YUS** | **Yu-Shan** | **1.34** | **356** | *e*P | **Pn** | **04 09 58.3** | **+1.0** |
| | baz=11 | | | | | | |
| **WCKO** | **Fanlu** | **1.35** | **342** | *e*P | **Pb** | **04 09 57.9** | **+0.2** |
| | baz=351 | | | | | | |
| **EHY** | **Hungye** | **1.38** | **10** | *e*P | **Pg** | **04 09 57.5** | **-2.0** |
| | baz=30 | | | | | | |
| **HGSD** | **Ruisui** | **1.38** | **14** | *e*P | **Pn** | **04 09 57.0** | **-0.4** |
| | baz=35 | | | | | | |
| **ICHU** | **Yijhu** | **1.40** | **330** | *e*P | **Pb** | **04 09 58.3** | **-0.4** |
| | baz=337 | | | | | | |
| **CHN8** | **Yiju** | **1.43** | **327** | *e*P | **Pb** | **04 09 58.1** | **-0.9** |
| | baz=334 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.55** | **353** | *e*P | **Pg** | **04 10 01.5** | **-1.5** |
| | baz=12 | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.57** | **331** | *e*P | **Pg** | **04 10 01.0** | **-2.2** |
| | baz=339 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.59** | **11** | *e*P | **Pn** | **04 10 00.6** | **+0.3** |
| | baz=34 | | | | | | |
| **WGK** | **Gukeng** | **1.60** | **344** | *e*P | **Pg** | **04 10 01.4** | **-2.3** |
| | baz=354 | | | | | | |
| **VWDT** | **VWDT** | **1.60** | **3** | *e*P | **Pg** | **04 10 02.4** | **-1.4** |
| | baz=14 | | | | | | |
| **WDLH** | **Douliu** | **1.61** | **343** | *e*P | **Pb** | **04 10 01.2** | **-0.9** |
| | baz=353 | | | | | | |
| **SSLB** | **Suanglung** | **1.64** | **357** | P | **Pg** | **04 10 02.7** | **-1.8** |
| **SSLB** | **Suanglung** | **1.64** | **357** | | **Pn** | **04 10 01.2** | **+0.3** |
| **SSLB** | **Suanglung** | **1.64** | **357** | *e*P | **Pb** | **04 10 02.1** | **-0.5** |
| | baz=14 | | | | | | |
| **WTK** | **Tuku** | **1.65** | **338** | ⇑*e*P | **Pb** | **04 10 01.7** | **-1.2** |
| | baz=347 | | | | | | |
| **WSF** | **Szhu** | **1.67** | **333** | *e*P | **Pb** | **04 10 01.7** | **-1.5** |
| | baz=339 | | | | | | |
| WSF | | | | *e*S | **Sg** | **04 10 23.9** | **-3.0** |
| | baz=339 | | | | | | |
| **WJS** | **Zhushan** | **1.69** | **350** | ⇑*e*P | **Pg** | **04 10 03.3** | **-2.3** |
| **ESL** | **Shilin** | **1.70** | **12** | *e*P | **Pn** | **04 10 02.5** | **+0.8** |
| | baz=34 | | | | | | |
| **WDGT** | **Dungji** | **1.70** | **311** | ⇑P | **Pn** | **04 10 01.1** | **-0.6** |
| | baz=315 | | | | | | |
| **SHUL** | **Shoufeng** | **1.70** | **16** | *e*P | **Pn** | **04 10 02.4** | **+0.6** |
| | baz=37 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.73** | **355** | ⇑P | **Pg** | **04 10 05.3** | **-1.0** |
| | baz=7.0 | | | | | | |
| SMLT | | | | *e*S | **Sg** | **04 10 28.6** | **-0.4** |
| | baz=7.0 | | | | | | |
| **WNT** | **Mingjian** | **1.76** | **349** | *e*P | **Pg** | **04 10 04.3** | **-2.5** |
| | baz=360 | | | | | | |
| **TYC** | **Yuchr** | **1.76** | **354** | ⇑*e*P | **Pg** | **04 10 04.5** | **-2.3** |
| | baz=342 | | | | | | |
| TYC | | | | *e*S | **Sg** | **04 10 28.4** | **-1.3** |
| | baz=342 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.79** | **16** | *e*P | **Pn** | **04 10 02.6** | **-0.3** |
| | baz=36 | | | | | | |
| **OWD** | **Renai** | **1.80** | **4** | *e*P | **Pg** | **04 10 05.6** | **-2.1** |
| | baz=21 | | | | | | |
| **VCHM** | **Qimei** | **1.83** | **306** | *e*P | **Pn** | **04 10 02.8** | **-0.7** |
| | baz=308 | | | | | | |
| **WUSB** | **Renai** | **1.84** | **2** | *e*P | **Pn** | **04 10 04.3** | **+0.6** |
| | baz=18 | | | | | | |
| WUSB | | | | *e*S | **Sg** | **04 10 30.8** | **-1.5** |
| | baz=18 | | | | | | |
| **DPDB** | **Guoxing** | **1.88** | **357** | *e*P | **Pb** | **04 10 05.9** | **-0.9** |
| | baz=7.0 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.90** | **10** | *e*P | **Pn** | **04 10 03.8** | **-0.8** |
| | baz=33 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.91** | **356** | ⇑*e*P | **Pb** | **04 10 06.2** | **-1.0** |
| | baz=7.0 | | | | | | |
| **CHGB** | **Renai** | **1.91** | **3** | *e*P | **Pb** | **04 10 07.1** | **-0.3** |
| | baz=20 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.93** | **315** | P | **Pn** | **04 10 04.2** | **-0.6** |
| | baz=320 | | | | | | |
| **PNG** | **Penghu** | **1.98** | **316** | ⇑P | **Pn** | **04 10 05.0** | **-0.5** |
| | baz=321 | | | | | | |
| **TWD** | **Chiawan** | **1.99** | **14** | *e*P | **Pn** | **04 10 05.8** | **+0.1** |
| | baz=22 | | | | | | |
| **WHF** | **Hehuan Shan** | **2.00** | **6** | *e*P | **Pb** | **04 10 08.2** | **-0.9** |
| | baz=23 | | | | | | |
| **TCU** | **Taichung** | **2.02** | **350** | *e*P | **Pb** | **04 10 08.0** | **-1.2** |
| | baz=343 | | | | | | |
| **NACB** | **Ninganchiao** | **2.08** | **14** | P | **Pn** | **04 10 07.5** | **+0.5** |
| **NACB** | **Ninganchiao** | **2.08** | **14** | | **Pn** | **04 10 06.9** | **0.0** |
| **NACB** | **Ninganchiao** | **2.08** | **14** | *e*P | **Pn** | **04 10 07.1** | **+0.1** |
| | baz=34 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **2.09** | **11** | *e*P | **Pn** | **04 10 08.1** | **+1.0** |
| | baz=32 | | | | | | |
| **FUSS** | **Fushou** | **2.10** | **5** | *e*P | **Pb** | **04 10 10.0** | **-0.7** |
| | baz=29 | | | | | | |
| **TDCB** | **Techi** | **2.10** | **3** | ⇑P | **Pb** | **04 10 09.6** | **-1.0** |
| | baz=25 | | | | | | |
| **TWT** | **Tachien** | **2.10** | **3** | *e*P | **Pb** | **04 10 10.2** | **-0.5** |
| | baz=26 | | | | | | |
| **WHP** | **Taichung City** | **2.12** | **357** | ⇑*e*P | **Pb** | **04 10 09.8** | **-1.1** |
| | baz=10.0 | | | | | | |
| WHP | | | | *e*S | **Sg** | **04 10 38.5** | **-2.8** |
| | baz=10.0 | | | | | | |
| **TWQ1** | **Liyutan** | **2.21** | **353** | *e*P | **Pb** | **04 10 10.8** | **-1.5** |
| | baz=344 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **04 10 40.4** | **+1.0** |
| | baz=344 | | | | | | |
| **NSY** | **Sanyi** | **2.28** | **353** | *e*P | **Pb** | **04 10 12.2** | **-1.3** |
| | baz=5.0 | | | | | | |
| **EOS4** | **EOS4** | **2.29** | **30** | *e*P | **Pn** | **04 10 09.4** | **0.0** |
| | baz=38 | | | | | | |
| **NNSH** | **Datong** | **2.29** | **8** | *e*P | **Pb** | **04 10 12.9** | **-1.0** |
| | baz=32 | | | | | | |
| **NNS** | **Nan Shan** | **2.30** | **7** | *e*P | **Pb** | **04 10 13.8** | **-0.2** |
| | baz=32 | | | | | | |
| **EWUT** | **Wuta** | **2.38** | **16** | *e*P | **Pn** | **04 10 12.0** | **+0.9** |
| | baz=37 | | | | | | |
| **NMLH** | **Miaoli** | **2.39** | **354** | *e*P | **Pn** | **04 10 12.7** | **+1.4** |
| | baz=348 | | | | | | |
| **LATG** | **Datong** | **2.42** | **10** | *e*P | **Pn** | **04 10 12.4** | **+0.7** |
| | baz=32 | | | | | | |
| **EOS3** | **EOS3** | **2.43** | **28** | *e*P | **Pn** | **04 10 12.1** | **+0.5** |
| | baz=35 | | | | | | |
| **NSTT** | **Nanjuang** | **2.47** | **359** | *e*P | **Pn** | **04 10 13.7** | **+1.3** |
| | baz=353 | | | | | | |
| **NFF** | **Wufeng Townshi** | **2.48** | **1** | *e*P | **Pn** | **04 10 14.2** | **+1.8** |
| | baz=15 | | | | | | |
| **NDT** | **Datong Townshi** | **2.48** | **10** | *e*P | **Pb** | **04 10 15.0** | **-2.0** |
| | baz=31 | | | | | | |
| **LIOB** | **Emei** | **2.49** | **359** | *e*P | **Pn** | **04 10 14.1** | **+1.5** |
| | baz=353 | | | | | | |
| **EOS2** | **EOS2** | **2.51** | **25** | *e*P | **Pn** | **04 10 13.0** | **+0.2** |
| | baz=32 | | | | | | |
| **ESAO** | **Su ao** | **2.53** | **17** | *e*P | **Pn** | **04 10 15.0** | **+1.9** |
| | baz=37 | | | | | | |
| **ENTT** | **Nioudou** | **2.53** | **11** | *e*P | **Pn** | **04 10 13.4** | **+0.2** |
| | baz=32 | | | | | | |
| **YHNB** | **Yeheng** | **2.53** | **7** | P | **Pn** | **04 10 14.6** | **+1.4** |
| **YHNB** | **Yeheng** | **2.53** | **7** | | **Pn** | **04 10 12.8** | **-0.4** |
| **YHNB** | **Yeheng** | **2.53** | **7** | *e*P | **Pn** | **04 10 14.0** | **+0.7** |
| | baz=2.0 | | | | | | |
| **NSK** | **Sanguang** | **2.53** | **6** | *e*P | **Pn** | **04 10 15.0** | **+1.7** |
| | baz=32 | | | | | | |
| **TWC** | **Suao** | **2.56** | **16** | *e*P | **Pn** | **04 10 14.9** | **+1.4** |
| | baz=37 | | | | | | |
| **TWE** | **Neicheng** | **2.62** | **12** | *e*P | **Pn** | **04 10 15.6** | **+1.1** |
| | baz=33 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.65** | **11** | *e*P | **Pn** | **04 10 15.2** | **+0.4** |
| | baz=33 | | | | | | |
| **NWLT** | **Wulai** | **2.65** | **9** | *e*P | **Pn** | **04 10 15.5** | **+0.6** |
| | baz=32 | | | | | | |
| **TATO** | **Taipei** | **2.84** | **8** | P | **Pn** | **04 10 19.1** | **+1.6** |
| **TATO** | **Taipei** | **2.84** | **8** | Pn | **Pn** | **04 10 17.1** | **-0.4** |
| **TATO** | **Taipei** | **2.84** | **8** | *e*P | **Pb** | **04 10 21.6** | **-1.6** |
| | baz=4.0 | | | | | | |
| **TIPB** | **Shuangxi** | **2.90** | **14** | *e*P | **Pn** | **04 10 20.5** | **+2.2** |
| | baz=24 | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.92** | **38** | P | **Pn** | **04 10 20.1** | **+1.5** |
| **YOJ** | **Yonaguni jima** | **2.92** | **38** | Pn | **Pn** | **04 10 17.3** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **2.92** | **38** | *e*P | **Pn** | **04 10 20.1** | **+1.5** |
| | baz=46 | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.98** | **17** | *e*P | **Pn** | **04 10 21.0** | **+1.7** |
| | baz=25 | | | | | | |
| **YM01** | **YM01** | **3.02** | **9** | *e*P | **Pn** | **04 10 21.1** | **+1.1** |
| | baz=33 | | | | | | |
| **SXI1** | **Grass Mountain** | **3.03** | **14** | *e*P | **Pn** | **04 10 22.2** | **+2.1** |
| | baz=26 | | | | | | |
| **HATJ** | **Hateruma jima** | **3.17** | **53** | *e*P | **Pn** | **04 10 22.8** | **+0.8** |
| HATJ | | | | *e*S | **Sn** | **04 10 59.0** | **-0.3** |
| **VWUC** | **VWUC** | **3.19** | **333** | *e*P | **Pn** | **04 10 21.9** | **-0.3** |
| | baz=345 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **3.29** | **48** | *e*P | **Pn** | **04 10 24.3** | **+0.8** |
| **KNM** | **Kinmen** | **3.30** | **314** | *e*P | **Pn** | **04 10 24.9** | **+1.1** |
| | baz=319 | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.37** | **314** | Pn | **Pn** | **04 10 23.9** | **-0.7** |
| **KNMB** | **Chin-men Tao** | **3.37** | **314** | *e*P | **Pn** | **04 10 24.1** | **-0.6** |
| | baz=321 | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.38** | **329** | *e*P | **Pn** | **04 10 23.9** | **-0.9** |
| | baz=355 | | | | | | |
| **JKRS** | **Kuro-shima** | **3.43** | **52** | *e*P | **Pn** | **04 10 26.8** | **+1.3** |
| **ZPLA** | **Ao Xicun** | **3.52** | **301** | ⇑P | **Pn** | **04 10 28.3** | **+1.5** |
| | baz=306 | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.60** | **52** | *e*P | **Pn** | **04 10 28.7** | **+0.9** |
| JIJ | | | | *e*S | **Sn** | **04 11 09.2** | **-0.8** |
| **DSXP** | **Dongshan** | **3.69** | **296** | ⇓*e*P | **Pn** | **04 10 28.5** | **-0.5** |
| | baz=299 | | | | | | |
| **MATB** | **Ma-tsu** | **4.11** | **346** | ⇓*e*P | **Pn** | **04 10 35.1** | **+0.1** |
| **JTJ** | **Tarama** | **4.17** | **53** | *e*P | **Pn** | **04 10 37.1** | **+1.3** |
| JTJ | | | | *e*S | **Sn** | **04 11 24.3** | **+0.3** |
| **VDOS** | **Pratas Island** | **4.28** | **251** | *e*P | **Pn** | **04 10 38.5** | **+1.4** |
| | baz=249 | | | | | | |
| **MHZQ** | **Yeshan** | **4.35** | **335** | *e*P | **Pn** | **04 10 38.4** | **+0.2** |
| | baz=347 | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **4.54** | **345** | *e*P | **Pn** | **04 10 41.2** | **+0.4** |
| | baz=1.0 | | | | | | |
| **JMJ** | **Miyako jima 2** | **4.71** | **55** | *e*P | **Pn** | **04 10 45.9** | **+2.7** |
| | baz=51 | | | | | | |
| **XPSS** | **Dashiqiu** | **4.83** | **351** | *e*P | **Pn** | **04 10 44.9** | **+0.2** |
| | baz=6.0 | | | |

baz=282,slow=74,SNR=42
**H11S3 WAKE ISLAND Hy 42.83 86** T T 05 03 25.6
baz=283,slow=75,SNR=186
**H11S1 WAKE ISLAND Hy 42.84 86** T T 05 03 27.0
baz=283,slow=75,SNR=174
**H11S2 WAKE ISLAND Hy 42.85 86** T T 05 03 28.1
baz=283,slow=75,SNR=158
**MA2 Magadan 42.91 22** LR LR 04 37 27.3
comp=E,36nm,18.8s,baz=220,slow=39
**KURBB Kurchatov Arra 43.60 321** P **P** **04 17 37.4 +1.3**
comp=Z,0.5nm,0.3s,baz=119,slow=8.4,SNR=6.0
comp=Z,0.5nm,0.3s
**WB0 Warramunga Arr 43.65 162** P **P** **04 17 35.2 -1.5**
WB0 IAmb IAmb 04 17 54.3
comp=Z,9.5nm,1.4s
**AAK Ala-Archa 43.67 309** LR LR 04 38 55.1
comp=Z,80nm,18.1s,baz=111,slow=40
**WRA Warramunga Arr 43.80 162** P **P** **04 17 36.8 -1.1**
**WRA Warramunga Arr 43.80 162** P **P** **04 17 36.6 -1.3**
comp=Z,1.4nm,0.8s,baz=344,slow=9.0,SNR=8.0
comp=Z,1.4nm,0.8s
**WB2 Warramunga Arr 43.80 162** P **P** **04 17 36.3 -1.6**
WB2 IAmb IAmb 04 17 47.3
comp=Z,7.1nm,1.1s
**WR0 Warramunga Ar 43.87 162** P **P** **04 17 37.0 -1.5**
WR0 IAmb IAmb 04 17 53.5
comp=Z,4.6nm,1.1s
**AS31 Alice Springs 47.22 164** P **P** **04 18 04.2 -0.8**
AS31 IAmb IAmb 04 18 14.6
comp=Z,1.0nm,0.9s
**ASAR Alice Springs 47.22 164** P **P** **04 18 05.0 0.0**
**ASAR Alice Springs 47.22 164** P **P** **04 18 04.5 -0.5**
comp=Z,0.3nm,0.4s,baz=343,slow=7.1,SNR=10
ASAR PcP **PcP** **04 19 36.8 +0.5**
comp=Z,0.5nm,0.7s,baz=338,slow=2.2,SNR=5.0
comp=Z,0.3nm,0.4s
**TIXI Tiksi 49.73 3** LR LR 04 42 03.3
comp=Z,70nm,19.3s,baz=219,slow=39
**KIRV Kirov 61.82 326** LR LR 04 49 17.8
comp=Z,47nm,19.2s,baz=110,slow=38
**KBZ Khabaz 66.66 309** LR LR 04 54 00.7
comp=Z,32nm,18.2s,baz=129,slow=40
**BMAR Burnt Mountain 71.43 24** P **P** **04 20 53.5 +1.5**
**FINES FINESS Array B 73.14 330** LR LR 04 57 10.9
comp=Z,32nm,18.7s,baz=87,slow=39
**HFS Hagfors 79.28 331** LR LR 04 59 39.4
comp=Z,31nm,20.9s,baz=74,slow=38
**NOA NORSAR Array B 79.96 332** LR LR 05 00 32.6
comp=Z,34nm,19.7s,baz=65,slow=38
**JMIC Jan Mayen 80.76 345** LR LR 05 03 17.5
comp=Z,18nm,18.9s,baz=55,slow=40

*ROM **05** 04:21:18.9±0.1,41°.846N±0°.004×15°.968E±0°.007,*
*h25km,ML2.6/58, Error ellipse: s-maj=0.7km s-min=0.3km*
*az=234.0*
**ISC 05 04:21:18.9±0.9,41°.85N±0°.02×15°.98E±0°.03,h26km±6km,**
**n60,σ0s67/77,1C-4D,Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **MSAG** | **Monte S. Angel** | **0.15** | **200** | P | **Pb** | | **04 21 24.2** | **-0.1** |
| MSAG | | | | S | **Sb** | | **04 21 27.6** | **-0.2** |
| MSAG | | | | AML | AML | | | |
| | comp=E,7295μm,0.7s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,7750μm,0.8s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=E,7290μm,0.7s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,3495μm,0.8s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=E,3080μm,0.8s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,3495μm,1.2s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,7750μm,1.2s | | | | | | | |
| **SGRT** | **San Giovanni R** | **0.20** | **241** | ↑P | **Pb** | | **04 21 24.7** | **-0.2** |
| SGRT | | | | S | **Sb** | | **04 21 28.3** | **-0.5** |
| SGRT | | | | AML | AML | | | |
| | comp=E,2645μm,0.5s | | | | | | | |
| SGRT | | | | AML | AML | | | |
| | comp=N,3355μm,0.3s | | | | | | | |
| **APRC** | **Apricena** | **0.34** | **254** | ↓P | **Pb** | | **04 21 26.5** | **-0.2** |
| APRC | | | | S | **Sb** | | **04 21 31.7** | **-0.2** |
| APRC | | | | AML | AML | | | |
| | comp=E,2655μm,0.8s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=N,1950μm,1.1s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=E,2655μm,1.2s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=N,1950μm,0.9s | | | | | | | |
| **TREM** | **Isole Tremiti** | **0.44** | **308** | ↓P | **Pb** | | **04 21 28.5** | **+0.2** |
| TREM | | | | S | **Sb** | | **04 21 35.5** | **+0.9** |
| **MELA** | **Melanico ??? S** | **0.65** | **257** | P | **Pb** | | **04 21 31.5** | **-0.2** |
| MELA | | | | S | **Sb** | | **04 21 40.8** | **+0.3** |
| MELA | | | | AML | AML | | | |
| | comp=N,1255μm,0.6s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,704μm,0.7s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,687μm,0.4s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,1255μm,0.6s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,1300μm,0.6s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,687μm,1.6s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,704μm,1.3s | | | | | | | |
| **CAPA** | **Cerignola FG** | **0.70** | **190** | ↓P | **Pb** | | **04 21 32.3** | **-0.3** |
| CAPA | | | | S | **Sb** | | **04 21 42.2** | **+0.3** |
| **MOCO** | **Biccari - m.te** | **0.78** | **232** | P | **Pb** | | **04 21 33.6** | **-0.4** |
| MOCO | | | | S | **Sn** | | **04 21 44.8** | **-0.5** |
| **CIGN** | **Sant'Elia a Pi** | **0.83** | **257** | P | **Pb** | | **04 21 34.4** | **-0.3** |
| **SGTA** | **Sant Agata di** | **0.85** | **213** | P | **Pb** | | **04 21 34.9** | **-0.2** |
| SGTA | | | | S | **Sn** | | **04 21 47.0** | **0.0** |
| SGTA | | | | AML | AML | | | |
| | comp=E,414μm,1.3s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=E,414μm,1.3s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=N,408μm,0.5s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=E,347μm,0.3s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=N,359μm,0.5s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=E,414μm,1.4s | | | | | | | |
| **GATE** | **Gambatesa** | **0.87** | **247** | P | **Pn** | | **04 21 35.7** | **+0.2** |
| GATE | | | | AML | AML | | | |
| | comp=N,150μm,0.6s | | | | | | | |
| GATE | | | | AML | AML | | | |
| | comp=N,150μm,1.4s | | | | | | | |
| GATE | | | | AML | AML | | | |
| | comp=E,143μm,1.3s | | | | | | | |
| **PALZ** | **Palazzo San Ge** | **0.91** | **181** | P | **Pb** | | **04 21 35.6** | **-0.5** |
| PALZ | | | | S | **Sn** | | **04 21 48.4** | **+0.2** |
| PALZ | | | | AML | AML | | | |
| | comp=N,548μm,0.4s | | | | | | | |
| PALZ | | | | AML | AML | | | |
| | comp=E,932μm,0.4s | | | | | | | |
| PALZ | | | | AML | AML | | | |
| | comp=N,548μm,1.6s | | | | | | | |
| **VULT** | **Monte Vulture** | **0.94** | **197** | P | **Pn** | | **04 21 36.5** | **0.0** |
| VULT | | | | S | **Sn** | | **04 21 49.5** | **+0.4** |
| VULT | | | | AML | AML | | | |
| | comp=E,498μm,0.5s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=N,748μm,1.6s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=E,538μm,0.5s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=E,498μm,0.5s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=N,718μm,1.2s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=N,748μm,1.6s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=E,538μm,0.5s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=N,718μm,0.8s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=N,748μm,0.4s | | | | | | | |
| VULT | | | | AML | AML | | | |
| | comp=E,498μm,0.5s | | | | | | | |
| **FRES** | **Fresagrandinar** | **0.98** | **278** | P | **Pn** | | **04 21 37.0** | **-0.1** |
| FRES | | | | AML | AML | | | |
| | comp=N,102μm,0.5s | | | | | | | |
| FRES | | | | AML | AML | | | |
| | comp=E,481μm,1.1s | | | | | | | |
| FRES | | | | AML | AML | | | |
| | comp=N,102μm,1.5s | | | | | | | |
| **CAFE** | **Carife** | **0.99** | **214** | ⇓P | **Pb** | | **04 21 37.5** | **0.0** |
| CAFE | | | | S | **Sn** | | **04 21 50.9** | **+0.4** |
| CAFE | | | | AML | AML | | | |
| | comp=E,242μm,1.0s | | | | | | | |
| CAFE | | | | AML | AML | | | |
| | comp=N,212μm,1.3s | | | | | | | |
| CAFE | | | | AML | AML | | | |
| | comp=E,242μm,1.0s | | | | | | | |
| CAFE | | | | AML | AML | | | |
| | comp=E,250μm,1.0s | | | | | | | |
| CAFE | | | | AML | AML | | | |
| | comp=N,128μm,0.4s | | | | | | | |
| CAFE | | | | AML | AML | | | |
| | comp=E,250μm,1.0s | | | | | | | |
| CAFE | | | | AML | AML | | | |
| | comp=N,213μm,1.3s | | | | | | | |
| CAFE | | | | AML | AML | | | |
| | comp=E,242μm,1.0s | | | | | | | |
| **AND3** | **Andretta** | **1.04** | **208** | P | **Pn** | | **04 21 37.8** | **-0.2** |
| **MRB1** | **Monte Rocchett** | **1.05** | **227** | P | **Pb** | | **04 21 38.5** | **+0.1** |
| MRB1 | | | | AML | AML | | | |
| | comp=E,116μm,0.6s | | | | | | | |
| MRB1 | | | | AML | AML | | | |
| | comp=N,179μm,0.5s | | | | | | | |
| MRB1 | | | | AML | AML | | | |
| | comp=E,116μm,1.4s | | | | | | | |
| **AMUR** | **Altamura** | **1.05** | **153** | P | **Pb** | | **04 21 38.6** | **+0.1** |
| AMUR | | | | S | **Sn** | | **04 21 53.3** | **+1.4** |
| AMUR | | | | AML | AML | | | |
| | comp=E,474μm,1.0s | | | | | | | |
| AMUR | | | | AML | AML | | | |
| | comp=N,440μm,0.2s | | | | | | | |
| AMUR | | | | AML | AML | | | |
| | comp=E,474μm,1.0s | | | | | | | |
| **SACR** | **S. Croce Del S** | **1.06** | **245** | P | **Pb** | | **04 21 38.3** | **-0.3** |
| **ACER** | **Acerenza** | **1.06** | **181** | P | **Pb** | | **04 21 38.8** | **+0.1** |
| ACER | | | | S | **Sn** | | **04 21 53.4** | **+1.2** |
| ACER | | | | AML | AML | | | |
| | comp=E,374μm,0.3s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=N,363μm,0.4s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=N,364μm,0.4s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=E,388μm,0.3s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=N,372μm,0.4s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=N,372μm,1.6s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=N,364μm,1.6s | | | | | | | |
| **TRIV** | **Trivento** | **1.07** | **266** | P | **Pb** | | **04 21 38.9** | **0.0** |
| **BSSO** | **Busso** | **1.08** | **254** | P | **Pb** | | **04 21 39.2** | **+0.1** |
| **SNAL** | **S. Angelo Dei** | **1.09** | **212** | P | **Pn** | | **04 21 38.7** | **+0.1** |
| SNAL | | | | AML | AML | | | |
| | comp=E,129μm,0.7s | | | | | | | |
| SNAL | | | | AML | AML | | | |
| | comp=N,146μm,0.8s | | | | | | | |
| SNAL | | | | AML | AML | | | |
| | comp=E,142μm,0.7s | | | | | | | |
| SNAL | | | | AML | AML | | | |
| | comp=E,128μm,0.7s | | | | | | | |
| SNAL | | | | AML | AML | | | |
| | comp=N,145μm,0.8s | | | | | | | |
| SNAL | | | | AML | AML | | | |
| | comp=N,143μm,0.7s | | | | | | | |
| **LSTV** | **Lastovo** | **1.14** | **36** | *e*Pg | **Pn** | | **04 21 39.2** | **0.0** |
| LSTV | | | | Sg | **Sn** | | **04 21 52.5** | **-1.5** |
| **MRLC** | **Muro Lucano** | **1.16** | **199** | P | **Pb** | | **04 21 40.0** | **-0.2** |
| MRLC | | | | AML | AML | | | |
| | comp=E,195μm,0.7s | | | | | | | |
| MRLC | | | | AML | AML | | | |
| | comp=N,218μm,0.3s | | | | | | | |
| **NSC3** | **Nusco** | **1.19** | **213** | P | **Pb** | | **04 21 40.4** | **-0.6** |
| **SCL3** | **Muro Lucano (S** | **1.21** | **197** | P | **Pn** | | **04 21 40.5** | **+0.3** |
| **VITU** | **Vitulano (BN)** | **1.21** | **237** | P | **Pb** | | **04 21 40.7** | **-0.6** |
| **MCRV** | **Calabrutti - M** | **1.23** | **210** | P | **Pb** | | **04 21 41.5** | **-0.1** |
| MCRV | | | | AML | AML | | | |
| | comp=N,154μm,0.2s | | | | | | | |
| MCRV | | | | AML | AML | | | |
| | comp=E,157μm,0.7s | | | | | | | |
| **COL3** | **Colliano** | **1.26** | **203** | P | **Pn** | | **04 21 41.3** | **+0.4** |
| **MIGL** | **Miglionico** | **1.29** | **164** | P | **Pb** | | **04 21 42.2** | **-0.4** |
| MIGL | | | | AML | AML | | | |
| | comp=E,560μm,0.2s | | | | | | | |
| MIGL | | | | AML | AML | | | |
| | comp=N,741μm,0.4s | | | | | | | |
| **MATE** | **Matera** | **1.32** | **155** | P | **Pb** | | **04 21 42.5** | **-0.5** |
| MATE | | | | AML | AML | | | |
| | comp=E,382μm,0.4s | | | | | | | |
| MATE | | | | AML | AML | | | |
| | comp=N,436μm,0.2s | | | | | | | |
| **NOCI** | **Noci** | **1.34** | **142** | P | **Pb** | | **04 21 42.9** | **-0.5** |
| NOCI | | | | AML | AML | | | |
| | comp=E,286μm,0.5s | | | | | | | |
| NOCI | | | | AML | AML | | | |
| | comp=N,434μm,1.6s | | | | | | | |
| **LPEL** | **Lama dei Pelig** | **1.35** | **279** | P | **Pn** | | **04 21 42.7** | **+0.5** |
| LPEL | | | | AML | AML | | | |
| | comp=E,103μm,1.4s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=N,96μm,0.2s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=E,103μm,0.6s | | | | | | | |
| **LTRZ** | **Laterza** | **1.40** | **153** | AML | AML | | | |
| | comp=N,208μm,1.6s | | | | | | | |
| LTRZ | | | | AML | AML | | | |
| | comp=N,208μm,1.6s | | | | | | | |
| LTRZ | | | | AML | AML | | | |
| | comp=E,252μm,0.4s | | | | | | | |
| LTRZ | | | | AML | AML | | | |
| | comp=N,208μm,0.4s | | | | | | | |
| **SRN3** | **Sant'Arsenio** | **1.42** | **196** | P | **Pb** | | **04 21 44.0** | **-0.8** |
| **SLCN** | **Sala Consilina** | **1.48** | **190** | P | **Pn** | | **04 21 43.7** | **-0.3** |
| **MCEL** | **Monticello** | **1.53** | **185** | P | **Pb** | | **04 21 45.6** | **-1.1** |
| MCEL | | | | AML | AML | | | |
| | comp=E,100μm,0.5s | | | | | | | |
| MCEL | | | | AML | AML | | | |
| | comp=N,108μm,0.5s | | | | | | | |
| MCEL | | | | AML | AML | | | |
| | comp=N,107μm,0.5s | | | | | | | |
| MCEL | | | | AML | AML | | | |
| | comp=E,94μm,0.2s | | | | | | | |
| MCEL | | | | AML | AML | | | |
| | comp=N,107μm,1.5s | | | | | | | |
| **MTSN** | **Montesano sull** | **1.59** | **186** | AML | AML | | | |
| | comp=N,68μm,0.3s | | | | | | | |
| MTSN | | | | AML | AML | | | |
| | comp=E,70μm,0.8s | | | | | | | |
| MTSN | | | | AML | AML | | | |
| | comp=E,70μm,1.2s | | | | | | | |
| **CMPR** | **Campora** | **1.61** | **199** | P | **Pn** | | **04 21 45.6** | **-0.2** |
| **MAKA** | **Makarska** | **1.63** | **28** | *e*Pg | **Pn** | | **04 21 46.9** | **+1.0** |
| MAKA | | | | Sn | **Sn** | | **04 22 05.7** | **-0.3** |
| **STON** | **Ston** | **1.63** | **51** | *e*Pg | **Pn** | | **04 21 47.1** | **+1.1** |
| STON | | | | Sn | **Sn** | | **04 22 05.5** | **-0.6** |
| **STON** | **Ston** | **1.63** | **51** | AML | AML | | | |
| | comp=E,23μm,1.2s | | | | | | | |
| STON | | | | AML | AML | | | |
| | comp=N,23μm,1.5s | | | | | | | |
| STON | | | | AML | AML | | | |
| | comp=N,23μm,1.5s | | | | | | | |
| STON | | | | AML | AML | | | |
| | comp=N,23μm,0.5s | | | | | | | |
| **MGR** | **Morigerati** | **1.74** | **191** | P | **Pn** | | **04 21 47.3** | **-0.1** |
| **DBRK** | **Dubrovnik** | **1.81** | **62** | *e*Pn | **Pn** | | **04 21 48.9** | **+0.5** |
| DBRK | | | | Sn | **Sn** | | **04 22 09.4** | **-1.0** |
| **ZIRJ** | **Zirje** | **1.82** | **352** | *e*Pn | **Pn** | | **04 21 48.0** | **-0.5** |
| ZIRJ | | | | Sn | **Sn** | | **04 22 10.4** | **-0.3** |
| **BULG** | **Bulgheria - Ca** | **1.83** | **195** | P | **Pn** | | **04 21 49.0** | **+0.2** |
| **RICI** | **Ricice** | **1.85** | **27** | *e*Pn | **Pn** | | **04 21 49.2** | **+0.3** |
| RICI | | | | Sn | **Sn** | | **04 22 10.9** | **-0.6** |
| **MORI** | **Morici** | **2.02** | **354** | *e*Pn | **Pn** | | **04 21 51.0** | **-0.3** |
| MORI | | | | Sn | **Sn** | | **04 22 15.2** | **-0.6** |
| **KIJV** | **Kijevo** | **2.17** | **8** | *e*Pn | **Pn** | | **04 21 54.6** | **+1.1** |
| KIJV | | | | Sn | **Sn** | | **04 22 19.4** | **-0.2** |
| **DUGI** | **Dugi Otok** | **2.24** | **343** | *e*Pn | **Pn** | | **04 21 54.1** | **-0.3** |
| DUGI | | | | Sn | **Sn** | | **04 22 20.0** | **-1.2** |
| **NRCA** | **Norcia** | **2.34** | **296** | AML | AML | | | |
| | comp=N,32μm,0.4s | | | | | | | |
| NRCA | | | | AML | AML | | | |
| | comp=E,41μm,0.1s | | | | | | | |
| **FDMO** | **Fiordimonte** | **2.45** | **300** | AML | AML | | | |
| | comp=N,18μm,0.5s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=E,19μm,1.6s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=N,18μm,1.5s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=E,19μm,0.4s | | | | | | | |
| **UDBI** | **Udbina** | **2.68** | **357** | *e*Pn | **Pn** | | **04 22 02.1** | **+1.7** |
| UDBI | | | | Sn | **Sn** | | **04 22 32.2** | **+0.1** |
| **FOSV** | **Fossato di Vic** | **2.78** | **302** | AML | AML | | | |
| | comp=E,14μm,0.7s | | | | | | | |
| FOSV | | | | AML | AML | | | |
| | comp=N,20μm,1.3s | | | | | | | |
| FOSV | | | | AML | AML | | | |
| | comp=N,20μm,0.7s | | | | | | | |
| FOSV | | | | AML | AML | | | |
| | comp=E,14μm,1.3s | | | | | | | |
| **NVLJ** | **Novalja** | **2.83** | **344** | *e*Pn | **Pn** | | **04 22 04.1** | **+1.7** |
| NVLJ | | | | Sn | **Sn** | | **04 22 34.3** | **-1.3** |
| **FRON** | **Frontone** | **2.92** | **306** | AML | AML | | | |
| | comp=E,17μm,0.7s | | | | | | | |
| FRON | | | | AML | AML | | | |
| | comp=E,17μm,1.3s | | | | | | | |
| FRON | | | | AML | AML | | | |
| | comp=N,16μm,0.8s | | | | | | | |
| **ATTE** | **AVT- Monte Tez** | **3.00** | **298** | AML | AML | | | |
| | comp=N,12μm,1.1s | | | | | | | |
| ATTE | | | | AML | AML | | | |
| | comp=E,12μm,1.6s | | | | | | | |
| ATTE | | | | AML | AML | | | |
| | comp=N,12μm,0.9s | | | | | | | |
| ATTE | | | | AML | AML | | | |
| | comp=E,12μm,0.4s | | | | | | | |
| **PLIT** | **Plitvice** | **3.04** | **355** | *e*Pn | **Pn** | | **04 22 07.3** | **+2.0** |
| PLIT | | | | Sn | **Sn** | | **04 22 40.1** | **-0.7** |
| **PIEI** | **Pieia** | **3.05** | **305** | AML | AML | | | |
| | comp=E,15μm,1.2s | | | | | | | |
| PIEI | | | | AML | AML | | | |
| | comp=E,15μm,0.8s | | | | | | | |
| PIEI | | | | AML | AML | | | |
| | comp=N,10μm,1.2s | | | | | | | |
| PIEI | | | | AML | AML | | | |
| | comp=N,10μm,0.8s | | | | | | | |
| **SMRN** | **Sveta Marina** | **3.45** | **338** | *e*Pn | **Pn** | | **04 22 11.1** | **+0.2** |
| SMRN | | | | Sn | **Sn** | | **04 22 50.2** | **-0.7** |

*DJA **05** 04:22:35.7±0.3,1°.N±3°×12°.6E±°,h10km,M4.3/10,mb4.7/4,*
*MLv4.1/10*
*IDC **05** 04:22:38.6±3.2,1°.45N×126°.40E,h59km±29km,mb3.8/12,*
*mbtmp4.1/13,ML4.1/1,MS2.8/3, Error ellipse:*
*s-maj=29.1km s-min=10.7km az=78.0*
*NEIC **05** 04:22:38.3±2.4,1°.42N±0°.09×126°.40E±0°.07,h47km±8km,*
*mb4.4/32, Error ellipse: s-maj=13.0km s-min=8.5km*
*az=205.0*
**ISC 05 04:22:37.6±0.4,1°.46N±0°.05×126°.42E±0°.06,h47km,n80,**
**σ1s28/82,mb4.4/35,MS2.7/3,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **TNTI** | **Ternate** | **1.17** | **126** | | **Pn** | | **04 22 57.8** | **+0.3** |
| **TNTI** | **Ternate** | **1.17** | **126** | P | **Pn** | | **04 22 58.1** | **+0.6** |
| TNTI | | | | S | **Sn** | | **04 23 13.5** | **+1.2** |
| **LBMI** | **Labuha** | **2.35** | **153** | P | **Pn** | | **04 23 13.9** | **+0.2** |
| **SGSI** | **Sangihe** | **2.38** | **338** | P | **Pn** | | **04 23 14.7** | **+0.5** |
| **KMSI** | **Cibinong** | **2.59** | **250** | P | **Pn** | | **04 23 17.6** | **+0.5** |
| **GTOI** | **Gorontalo** | **3.51** | **257** | P | **Pn** | | **04 23 30.4** | **+0.8** |
| **SANI** | **Sanana** | **3.51** | **187** | P | **Pn** | | **04 23 29.9** | **+0.2** |
| **LUWI** | **Luwuk** | **4.42** | **236** | | **Pn** | | **04 23 43.6** | **+1.5** |
| **NLAI** | **Namlea** | **4.72** | **172** | P | **Pn** | | **04 23 46.3** | **+0.1** |
| **TOLI2** | **Tolitoli** | **5.65** | **267** | Pn | **Pn** | | **04 23 58.0** | **-1.0** |
| **FAKI** | **Fak Fak** | **7.27** | **127** | Pn | **Pn** | | **04 24 23.0** | **+1.6** |
| **SPSI** | **Sidrap Palu** | **8.56** | **231** | P | **Pn** | | **04 24 40.4** | **+1.4** |
| | 26nm,0.4s | | | | | | | |
| **BNSI** | **Bone** | **8.59** | **227** | P | **Pn** | | **04 24 40.6** | **+1.3** |
| | 27nm,0.7s | | | | | | | |
| MYLDM | **Lahad Datu** | **8.73** | **295** | Pn | **Pn** | | **04 24 41.6** | **+0.3** |
| **KAPI** | **Kappang** | **9.26** | **226** | Pn | **Pn** | | **04 24 50.6** | **+2.1** |
| **KAPI** | **Kappang** | **9.26** | **226** | P | **Pn** | | **04 24 50.4** | **+1.8** |
| | 2.0nm,0.3s,baz=51,slow=9.7,SNR=12 | | | | | | | |
| KAPI | | | | S | **Sn** | | **04 26 31.9** | **+0.4** |
| | 4.2nm,0.7s,baz=90,slow=20,SNR=1.6 | | | | | | | |
| | 12nm,0.6s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **11.15** | **294** | Pn | **Pn** | | **04 25 16.7** | **+2.1** |
| **SOEI** | **Soe** | **11.35** | **191** | Pn | **Pn** | | **04 25 16.0** | **-1.2** |
| **SBUM** | **Sibu** | **14.23** | **274** | Pn | **Pn** | | **04 25 56.0** | **-0.4** |
| **MTN** | **Manton Dam** | **14.96** | **162** | Pn | **Pn** | | **04 26 04.3** | **-1.9** |
| **KNRA** | **Kununurra** | **17.18** | **172** | | **Pn** | | **04 26 34.0** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **19.45** | **182** | P | **P** | | **04 26 59.3** | **-1.1** |
| **TWG** | **Pinlang** | **21.86** | **347** | P | **P** | | **04 27 23.0** | **-3.4** |
| TWG | | | | IAmb | IAmb | | 04 27 27.1 | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **TPUB** | **Ta-pu** | **22.43** | **346** | P | **P** | | **04 27 30.2** | **-2.4** |
| TPUB | | | | IAmb | IAmb | | 04 27 33.4 | |
| | comp=Z,23nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **22.50** | **160** | P | **P** | | **04 27 32.4** | **-1.0** |
| WB0 | | | | IAmb | IAmb | | 04 27 35.1 | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **COEN** | **Coen** | **22.59** | **133** | P | **P** | | **04 27 34.3** | **0.0** |
| COEN | | | | IAmb | IAmb | | 04 27 49.4 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.64** | **160** | P | **P** | | **04 27 34.0** | **-0.8** |
| WRAB | | | | IAmb | IAmb | | 04 27 37.0 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.64** | **160** | P | **P** | | **04 27 33.7** | **-1.2** |
| **WRA** | **Warramunga Arr** | **22.64** | **160** | P | **P** | | **04 27 34.1** | **-0.8** |
| | comp=Z,9.6nm,0.7s,baz=334,slow=11,SNR=56 | | | | | | | |
| WRA | | | | S | **S** | | **04 31 39.4** | **-0.4** |
| | comp=Z,1.0nm,0.8s,baz=325,slow=20,SNR=5.4 | | | | | | | |
| | comp=Z,9.6nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **22.65** | **160** | P | **P** | | **04 27 34.5** | **-0.4** |
| WB2 | | | | IAmb | IAmb | | 04 27 37.0 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **22.73** | **160** | P | **P** | | **04 27 35.1** | **-0.6** |
| **SSLB** | **Suanglung** | **22.82** | **347** | P | **P** | | **04 27 35.7** | **-1.0** |
| SSLB | | | | IAmb | IAmb | | 04 27 40.6 | |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| **YHNB** | **Yeheng** | **23.58** | **348** | P | **P** | | **04 27 43.4** | **-0.9** |
| YHNB | | | | IAmb | IAmb | | 04 27 46.8 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **AS31** | **Alice Springs** | **26.01** | **164** | P | **P** | | **04 28 06.9** | **+0.5** |
| **ASAR** | **Alice Springs** | **26.02** | **164** | P | **P** | | **04 28 06.5** | **+0.1** |
| **ASAR** | **Alice Springs** | **26.02** | **164** | P | **P** | | **04 28 07.0** | **+0.5** |
| | comp=Z,1.4nm,0.5s,baz=342,slow=7.7,SNR=16 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **04 31 34.2** | **+0.3** |
| | comp=Z,0.5nm,0.5s,baz=348,slow=2.3,SNR=6.1 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **NJ2** | **Nanjing** | **31.25** | **348** | *e*P | **P** | | **04 28 56.1** | **+3.2** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **JNU** | **Nakatsue** | **31.77** | **7** | LR | LR | | 04 45 47.6 | |
| | comp=Z,14nm,18.9s,baz=158,slow=44 | | | | | | | |
| **PZH** | **PanZhiHua** | **34.39** | **319** | P | **P** | | **04 29 21.8** | **+1.2** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **35.28** | **166** | P | **P** | | **04 29 27.8** | **-0.2** |
| **KSRS** | **Korea Array** | **35.84** | **2** | P | **P** | | **04 29 33.0** | **+0.2** |
| | comp=Z,0.8nm,0.7s,baz=180,slow=9.9,SNR=5.1 | | | | | | | |
| KSRS | | | | LR | LR | | 04 44 55.5 | |
| | comp=Z,8.0nm,19.7s,baz=165,slow=37 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.14** | **158** | P | **P** | | **04 29 34.1** | **-1.4** |
| **STKA** | **Stephens Creek** | **36.14** | **158** | P | **P** | | **04 29 34.5** | **-1.0** |
| | comp=Z,2.6nm,0.6s,baz=324,slow=3.6,SNR=4.6 | | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.57** | **16** | P | **P** | | **04 29 38.9** | **-0.1** |
| | comp=Z,1.3nm,0.7s,baz=187,slow=9.6,SNR=6.8 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **JMM** | **Marumori** | **38.56** | **18** | P | **P** | | **04 29 56.6** | **+0.7** |
| **LZH** | **Lanzhou** | **40.31** | **331** | *e*P | **P** | | **04 30 12.1** | **+1.4** |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.45** | **343** | *e*P | **P** | | **04 30 21.8** | **+1.9** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,71nm,4.4s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **42.84** | **6** | P | **P** | | **04 30 31.6** | **+0.5** |
| USA0B | | | | IAmb | IAmb | | 04 30 39.0 | |

comp=Z,11nm,1.1s
**USRK Ussuriysk Ar. 42.84 6** P **P** **04 30 31.2 +0.1**
**XLT XiLinHaoTe 43.25 349** *e*P P 04 30 40.7 +6.2
XLT pP pP 04 30 50.2 +3.4
XLT sP sP 04 30 58.2 +6.1
XLT pmax pmax
comp=Z,8.0nm,1.0s
XLT pmax pmax
comp=Z,76nm,3.9s
**PALK Pallekele 45.92 279** LR LR 04 53 40.6
comp=Z,26nm,18.2s,baz=235,slow=41
**HEH HeiHe 48.62 1** *e*P **P** **04 31 17.0 +0.4**
HEH pmax pmax
comp=Z,5.0nm,0.8s
**SONM Songino Array 49.34 342** P **P** **04 31 21.6 -0.7**
comp=Z,0.9nm,0.6s,baz=166,slow=8.5,SNR=2.3
comp=Z,0.9nm,0.6s
**MK31 Makanchi Array 59.24 326** P **P** **04 32 33.6 -0.6**
MK31 IAmb IAmb 04 32 37.2
comp=Z,2.1nm,0.7s
**MKAR Makanchi Array 59.24 326** P **P** **04 32 33.2 -1.1**
**MKAR Makanchi Array 59.24 326** P **P** **04 32 34.0 -0.3**
comp=Z,2.2nm,0.5s,baz=120,slow=7.2,SNR=19
MKAR PcP **PcP** **04 33 21.2 -1.0**
comp=Z,1.2nm,0.7s,baz=119,slow=5.1,SNR=5.0
comp=Z,2.2nm,0.5s
**ZALV Zalesovo Beam 62.47 334** P **P** **04 32 54.8 -1.2**
comp=Z,0.5nm,0.4s,baz=111,slow=6.3,SNR=2.5
comp=Z,0.5nm,0.4s
**KURBB Kurchatov Arra 63.48 328** P **P** **04 33 02.1 -0.7**
comp=Z,2.1nm,0.3s,baz=125,slow=6.6,SNR=13
comp=Z,2.1nm,0.3s
**KURK Kurchatov 63.49 328** P **P** **04 33 01.8 -1.0**
**KKAR Karatay Array 64.68 318** P **P** **04 33 10.2 -0.7**
**ABKAR Akbulak array 73.71 321** P **P** **04 34 05.2 -1.4**
**VNDA Vanda 81.23 173** P **P** **04 34 48.8 +0.8**
**VNDA Vanda 81.23 173** P **P** **04 34 47.6 -0.4**
comp=Z,0.4nm,0.5s,baz=320,slow=5.3,SNR=7.3
comp=Z,0.4nm,0.5s
**C18K Utukok River 82.28 21** P **P** **04 34 55.5 +1.7**
C18K IAmb IAmb 04 35 01.6
comp=Z,3.6nm,1.1s
**H18K Honhosa River 82.49 24** P **P** **04 34 56.1 +1.1**
H18K IAmb IAmb 04 34 59.7
comp=Z,3.3nm,1.1s
**L18K Granite Mounta 82.61 27** P **P** **04 34 57.1 +1.5**
L18K IAmb IAmb 04 35 12.2
comp=Z,3.2nm,1.1s
**J18K Innoko River 82.84 26** P **P** **04 34 58.2 +1.4**
**C19K Lookout Ridge 82.96 20** P **P** **04 34 59.2 +1.8**
C19K IAmb IAmb 04 35 18.2
comp=Z,4.3nm,1.0s
**G19K Purcell Mounta 83.22 23** P **P** **04 35 00.3 +1.6**
**D19K Kuna River 83.34 21** P **P** **04 35 01.2 +1.9**
**H19K Roundabout Mou 83.35 24** P **P** **04 35 01.4 +2.1**
**E19K Redstone River 83.44 22** P **P** **04 35 02.0 +2.2**
E19K IAmb IAmb 04 35 03.2
comp=Z,4.5nm,0.8s
**J20K Nowinta River 84.08 26** P **P** **04 35 05.1 +2.0**
**IMAR Indian Mountai 84.53 24** P **P** **04 35 06.1 +0.7**
**B21K Ikpikpuk River 84.80 20** P **P** **04 35 08.0 +1.4**
B21K IAmb IAmb 04 35 09.6
comp=Z,3.6nm,0.7s
**E21K Killik River 84.83 21** P **P** **04 35 06.5 -0.4**
**ILAR Eielson Array 87.27 25** P **P** **04 35 18.0 -1.0**
comp=Z,0.1nm,0.5s,baz=234,slow=5.0,SNR=5.5
comp=Z,0.1nm,0.5s
**ARCES ARCESS Array B 92.46 340** P **P** **04 35 42.6 -0.5**
comp=Z,1.9nm,0.8s,baz=92,slow=6.2,SNR=4.9
comp=Z,1.9nm,0.8s
**FINES FINESS Array 93.67 332** P **P** **04 35 45.9 -3.0**
comp=Z,3.9nm,1.1s,baz=101,slow=3.0,SNR=1.5
**TXAR Lajitas Array 123.21 53** PKP **PKiKP** **04 41 31.2 +0.9**
comp=Z,0.2nm,0.6s,baz=199,slow=2.5,SNR=3.6

*IDC **05** 04:38:09.7±1.4, 4.°66S×106.°17W, h0km, mb3.7/7, mbtmp3.7/7, MS4.0/37, Error ellipse: s-maj=68.6km s-min=25.7km az=71.0*
*NEIC **05** 04:38:11.8±2.2, 4.°5S±0.°1×104.°88W±0.°05, h10km±1km, mb4.4/71, Error ellipse: s-maj=24.5km s-min=4.8km az=196.0*
*GCMT **05** 04:38:13.8±0.4, 4.°46S±0.°02×104.°90W±0.°02, h19km±1km, MW4.8/90, Moment Tensor Solution. s19,c22; s90,c117; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr=0.27±.10; Mθθ=0.82±.08; Mθφ=-0.55±.09; Mrθ=0.65±.18; Mφφ=1.93±.07; Mrφ=-0.57±.17; Best double couple: M=2.23500×10^16^ NP1:φs=278.00000°,δ=78.00000°,λ=-20.00000°. NP2: φs=12.00000°,δ=70.00000°,λ=-167.00000°. Principal axes: T 2.1980, Plg5.0000°, Azm326.0000°; N 0.0750, Plg66.0000°, Azm67.0000°; P -2.2720, Plg23.0000°, Azm234.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 05 04:38:11.3±0.7, 4.°6S±0.°1×104.°8W±0.°1, h13km, n130, σ1s21/86, mb4.4/42, MS4.0/36, Central East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RPN** | **Rapa Nui** | **22.86** | **190** | LR | LR | 04 49 44.6 | |
| | comp=Z,230nm,19.4s,baz=2.5,slow=31 | | | | | | |
| **CMIG** | **Matias Romero** | **23.63** | **24** | LR | LR | 04 49 09.8 | |
| | comp=Z,63nm,21.3s,baz=188,slow=27 | | | | | | |
| **H06S1** | **SOCORRO T** | **23.93** | **345** | T | T | 05 08 15.3 | |
| | SNR=7.2 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **23.97** | **346** | T | T | 05 08 12.1 | |
| | SNR=4.9 | | | | | | |
| **CCIG** | **Comitan** | **24.19** | **31** | P | **P** | **04 43 27.9** | **0.0** |
| **MTO3** | **Montecristo** | **24.27** | **39** | P | **P** | **04 43 28.4** | **-0.2** |
| MTO3 | | | | IAmb | IAmb | 04 43 33.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **MOIG** | **Morelia** | **24.34** | **8** | P | **P** | **04 43 30.0** | **+0.7** |
| **ATAH** | **Atahualpa** | **26.38** | **97** | LR | LR | 04 51 48.5 | |
| | comp=Z,339nm,18.1s,baz=272,slow=30 | | | | | | |
| **NNA** | **Nana** | **28.60** | **107** | LR | LR | 04 52 24.4 | |
| | comp=Z,369nm,20.3s,baz=279,slow=29 | | | | | | |
| **LPIG** | **La Paz** | **28.99** | **350** | LR | LR | 04 52 45.0 | |
| | comp=Z,381nm,20.6s,baz=179,slow=30 | | | | | | |
| **TEIG** | **Tepich** | **29.49** | **33** | LR | LR | 04 54 18.2 | |
| | comp=Z,343nm,20.9s,baz=222,slow=32 | | | | | | |
| **ROSC** | **El Rosal** | **31.83** | **73** | LR | LR | 04 55 05.8 | |
| | comp=Z,266nm,18.3s,baz=258,slow=31 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **32.05** | **97** | P | **P** | **04 44 38.8** | **+0.8** |
| **TXAR** | **Lajitas Array** | **33.72** | **2** | P | **P** | **04 44 52.6** | **0.0** |
| **TXAR** | **Lajitas Array** | **33.72** | **2** | P | **P** | **04 44 52.8** | **+0.2** |
| | comp=Z,0.1nm,0.6s,baz=181,slow=12,SNR=2.7 | | | | | | |
| TXAR | | | | PcP | **PcP** | **04 47 34.6** | **+2.4** |
| | comp=Z,0.3nm,0.8s,baz=90,slow=0.9,SNR=2.7 | | | | | | |
| TXAR | | | | LR | LR | 04 56 15.0 | |
| | comp=Z,144nm,20.9s,baz=180,slow=32 | | | | | | |
| | comp=Z,0.1nm,0.6s | | | | | | |
| **SAND** | **Sanderson** | **34.41** | **4** | P | **P** | **04 44 58.3** | **-0.2** |
| SAND | | | | IAmb | IAmb | 04 45 06.1 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **RKT** | **Rikitea** | **34.50** | **235** | *e*LR | LR | 04 54 11.3 | |
| | comp=Z,2μm,26.0s | | | | | | |
| **ALPN** | **Alpine** | **34.75** | **2** | P | **P** | **04 45 01.3** | **-0.3** |
| ALPN | | | | IAmb | IAmb | 04 45 09.5 | |
| | comp=Z,5.5nm,1.3s | | | | | | |
| **TBTG** | **Tabatinga, AM** | **34.78** | **91** | P | **P** | **04 45 01.3** | **-0.5** |
| **VHRN** | **Van Horn** | **35.15** | **360** | P | **P** | **04 45 04.7** | **-0.2** |
| **121A** | **Cookes Peak, D** | **37.00** | **356** | P | **P** | **04 45 19.2** | **-1.6** |
| **DUN6** | **Lazy B Ranch** | **37.13** | **354** | P | **P** | **04 45 21.2** | **-0.7** |
| **SN05** | **Snyder S** | **37.42** | **5** | P | **P** | **04 45 23.4** | **-0.8** |
| **H03N2** | **Juan Fernandez** | **37.49** | **143** | T | T | 05 25 13.6 | |
| | baz=317,slow=77,SNR=102 | | | | | | |
| **H03N1** | **Juan Fernandez** | **37.51** | **143** | T | T | 05 25 14.9 | |
| | baz=317,slow=77,SNR=108 | | | | | | |
| **H03N3** | **Juan Fernandez** | **37.51** | **143** | T | T | 05 25 14.2 | |
| | baz=317,slow=77,SNR=122 | | | | | | |
| **SN07** | **Snyder 07** | **37.63** | **5** | P | **P** | **04 45 24.8** | **-1.2** |
| SN07 | | | | IAmb | IAmb | 04 45 32.5 | |
| | comp=Z,7.9nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **37.81** | **111** | LR | LR | 04 58 13.2 | |
| | comp=Z,136nm,19.6s,baz=266,slow=31 | | | | | | |
| **BAUV** | **El Baul** | **39.01** | **70** | P | **P** | **04 45 36.2** | **-1.7** |
| BAUV | | | | IAmb | IAmb | 04 45 38.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **LVC** | **Limon Verde** | **39.05** | **121** | LR | LR | 04 57 32.3 | |
| | comp=Z,136nm,21.3s,baz=286,slow=29 | | | | | | |
| **Y14A** | **Wickenburg** | **39.07** | **349** | P | **P** | **04 45 37.4** | **-0.8** |
| **ANMO** | **Albuquerque** | **39.33** | **358** | LR | LR | 04 59 22.1 | |
| | comp=Z,58nm,21.1s,baz=272,slow=32 | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.54** | **345** | LR | LR | 04 58 23.6 | |
| | comp=Z,354nm,19.1s,baz=126,slow=31 | | | | | | |
| **SMWD** | **Samnorwood** | **39.68** | **6** | P | **P** | **04 45 42.9** | **-0.3** |
| SMWD | | | | IAmb | IAmb | 04 46 16.2 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **MIAR** | **Mount Ida** | **40.31** | **14** | P | **P** | **04 45 47.4** | **-1.0** |
| **WUAZ** | **Wupatki** | **40.34** | **352** | P | **P** | **04 45 48.6** | **-0.3** |
| **W13A** | **Hualapai Mount** | **40.37** | **348** | P | **P** | **04 45 48.1** | **-1.1** |
| **TUL3** | **Leonard** | **41.13** | **11** | P | **P** | **04 45 55.0** | **-0.2** |
| **WHAR** | **Wooly Hollow** | **41.34** | **16** | P | **P** | **04 45 58.2** | **+1.3** |
| WHAR | | | | IAmb | IAmb | 04 46 03.2 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **MVCO** | **Mesa Verde** | **41.70** | **356** | P | **P** | **04 45 59.7** | **-0.4** |
| MVCO | | | | IAmb | IAmb | 04 46 07.3 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **SHPR** | **Sheep Range** | **41.99** | **347** | P | **P** | **04 46 02.7** | **+0.3** |
| **GWY** | **Greenwater Val** | **42.03** | **346** | P | **P** | **04 46 02.6** | **-0.2** |
| **KNB** | **Kanab** | **42.03** | **350** | P | **P** | **04 46 02.5** | **-0.3** |
| **PLAL** | **Pickwick Lake** | **42.36** | **21** | P | **P** | **04 46 05.4** | **+0.1** |
| **WCT** | **Wildcat Mounta** | **42.60** | **346** | P | **P** | **04 46 07.0** | **-0.3** |
| **PRN** | **Pahroc Range** | **42.83** | **348** | P | **P** | **04 46 08.5** | **-0.8** |
| **GRAC** | **Grapevine Rang** | **42.98** | **345** | P | **P** | **04 46 10.5** | **+0.2** |
| GRAC | | | | IAmb | IAmb | 04 46 18.0 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **GMN** | **Gold Mountain** | **43.24** | **345** | P | **P** | **04 46 11.8** | **-0.8** |
| **PBMO** | **Poplar Bluff** | **43.26** | **17** | P | **P** | **04 46 11.4** | **-1.1** |
| PBMO | | | | IAmb | IAmb | 04 46 19.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **T42A** | **Van Buren** | **43.30** | **16** | P | **P** | **04 46 11.6** | **-1.2** |
| **S39A** | **Bolivar** | **43.37** | **13** | P | **P** | **04 46 12.3** | **-1.1** |
| S39A | | | | IAmb | IAmb | 04 46 23.3 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **MSU** | **Marysvale** | **43.40** | **352** | P | **P** | **04 46 14.4** | **+0.5** |
| **V48A** | **Smith Brothers** | **43.49** | **21** | P | **P** | **04 46 14.3** | **-0.1** |
| V48A | | | | IAmb | IAmb | 04 46 20.7 | |
| | comp=Z,6.2nm,1.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **43.53** | **138** | P | **P** | **04 46 16.2** | **+1.2** |
| **CGM3** | **Cape Girardeau** | **43.96** | **17** | P | **P** | **04 46 17.1** | **-1.1** |
| CGM3 | | | | IAmb | IAmb | 04 46 25.0 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **CCM** | **Cathedral Cave** | **44.23** | **15** | P | **P** | **04 46 19.8** | **-0.5** |
| CCM | | | | IAmb | IAmb | 04 46 27.0 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **P18A** | **Preston Nutter** | **44.26** | **354** | P | **P** | **04 46 21.5** | **+0.6** |
| P18A | | | | IAmb | IAmb | 04 46 41.6 | |
| | comp=Z,6.4nm,1.0s | | | | | | |
| **SIV** | **San Ignacio** | **44.39** | **108** | LR | LR | 05 02 18.7 | |
| | comp=Z,304nm,21.1s,baz=298,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **44.57** | **345** | P | **P** | **04 46 23.6** | **+0.2** |
| | comp=Z,0.5nm,0.8s,baz=169,slow=12,SNR=2.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **MPU** | **Maple Canyon** | **44.80** | **353** | P | **P** | **04 46 24.2** | **-0.9** |
| MPU | | | | IAmb | IAmb | 04 46 32.7 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **DUG** | **Dugway, Tooele** | **45.14** | **351** | P | **P** | **04 46 26.7** | **-1.1** |
| DUG | | | | IAmb | IAmb | 04 46 35.0 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **PNTR** | **Pine Nut** | **45.54** | **344** | P | **P** | **04 46 30.0** | **-1.1** |
| PNTR | | | | IAmb | IAmb | 04 46 40.5 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **45.64** | **17** | P | **P** | **04 46 30.6** | **-0.9** |
| **PPT2** | **Papeete2** | **45.69** | **250** | *e*S | **S** | **04 53 15.3** | **-0.3** |
| | comp=Z,90nm,24.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 04 59 25.9 | |
| | comp=Z,368nm,24.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 04 59 26.8 | |
| | comp=Z,197nm,24.0s | | | | | | |
| **ELK** | **Elko** | **46.09** | **349** | LR | LR | 05 03 04.8 | |
| | comp=Z,269nm,18.4s,baz=155,slow=32 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **46.14** | **107** | P | **P** | **04 46 35.6** | **-0.2** |
| PTLB | | | | IAmb | IAmb | 04 46 52.5 | |
| | comp=Z,7.7nm,1.3s | | | | | | |
| **HWUT** | **Hardware Ranch** | **46.36** | **353** | P | **P** | **04 46 37.8** | **+0.4** |
| HWUT | | | | IAmb | IAmb | 04 46 44.6 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **TBI** | **Tubuai** | **46.95** | **242** | *e*LR | LR | 04 59 57.9 | |
| | comp=Z,1μm,29.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **47.30** | **355** | P | **P** | **04 46 43.2** | **-1.7** |
| **PDAR** | **Pinedale Array** | **47.30** | **355** | P | **P** | **04 46 44.0** | **-0.8** |
| | comp=Z,0.7nm,0.6s,baz=155,slow=13,SNR=3.3 | | | | | | |
| PDAR | | | | LR | LR | 05 04 19.0 | |
| | comp=Z,104nm,18.2s,baz=166,slow=33 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **PLCA** | **Paso Flores** | **47.34** | **144** | LR | LR | 05 01 27.7 | |
| | comp=Z,397nm,21.9s,baz=332,slow=29 | | | | | | |
| **TPAW** | **Teton Pass** | **48.15** | **354** | P | **P** | **04 46 50.5** | **-1.0** |
| TPAW | | | | IAmb | IAmb | 04 46 58.6 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **FXWY** | **Fox Creek** | **48.30** | **354** | P | **P** | **04 46 53.5** | **+0.9** |
| FXWY | | | | IAmb | IAmb | 04 47 00.9 | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **RSSD** | **Black Hills** | **48.46** | **1** | P | **P** | **04 46 53.9** | **+0.1** |
| **IMW** | **Indian Meadow** | **48.55** | **354** | P | **P** | **04 46 53.0** | **-1.6** |
| **HLID** | **Hailey** | **48.68** | **351** | P | **P** | **04 46 55.0** | **-0.4** |
| HLID | | | | IAmb | IAmb | 04 47 02.7 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **FLWY** | **Flagg Ranch** | **48.71** | **354** | P | **P** | **04 46 55.6** | **-0.1** |
| **MFID** | **Camas Ranch** | **48.78** | **349** | P | **P** | **04 46 54.6** | **-1.5** |
| MFID | | | | IAmb | IAmb | 04 47 03.2 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **48.88** | **342** | LR | LR | 05 03 04.2 | |
| | comp=Z,152nm,21.3s,baz=172,slow=31 | | | | | | |
| **YPP** | **Pitchstone Pla** | **48.91** | **354** | P | **P** | **04 46 57.4** | **+0.1** |
| YPP | | | | IAmb | IAmb | 04 47 11.6 | |
| | comp=Z,4.1nm,1.2s | | | | | | |
| **YMR** | **Madison River** | **49.32** | **354** | P | **P** | **04 46 59.5** | **-0.9** |
| YMR | | | | IAmb | IAmb | 04 47 05.4 | |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **YHB** | **Horse Butte** | **49.42** | **354** | P | **P** | **04 47 01.8** | **+0.6** |
| **YHL** | **Hebgen Lake** | **49.52** | **354** | P | **P** | **04 47 01.8** | **-0.2** |
| YHL | | | | IAmb | IAmb | 04 47 09.4 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **RLMT** | **Red Lodge** | **49.62** | **356** | P | **P** | **04 47 03.2** | **+0.6** |
| RLMT | | | | IAmb | IAmb | 04 47 08.9 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **CPUP** | **Villa Florida** | **50.23** | **121** | P | P | 04 47 16.4 | +9.0 |
| | comp=Z,1.4nm,0.8s,baz=329,slow=5.9,SNR=4.1 | | | | | | |
| CPUP | | | | LR | LR | 05 04 50.6 | |
| | comp=Z,125nm,21.3s,baz=284,slow=31 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **BPMT** | **Black Pine Rid** | **51.35** | **352** | P | **P** | **04 47 14.1** | **-1.7** |
| **F10A** | **Beach Ranch, E** | **51.52** | **349** | P | **P** | **04 47 15.5** | **-1.3** |
| F10A | | | | IAmb | IAmb | 04 47 24.4 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **LYMT** | **Lyon Mountain** | **51.73** | **353** | P | **P** | **04 47 16.6** | **-2.0** |
| **DGMT** | **Dagmar** | **52.81** | **0** | P | **P** | **04 47 25.3** | **-1.0** |
| **MDP** | **Montagnes des** | **52.96** | **80** | LR | LR | 05 08 21.4 | |
| | comp=Z,108nm,18.2s,baz=360,slow=33 | | | | | | |
| **NEW** | **Newport** | **53.70** | **350** | P | **P** | **04 47 31.4** | **-1.5** |
| NEW | | | | IAmb | IAmb | 04 47 39.0 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **NEW** | **Newport** | **53.70** | **350** | LR | LR | 05 07 37.5 | |
| | comp=Z,292nm,18.1s,baz=176,slow=33 | | | | | | |
| **SADO** | **Sadowa** | **54.22** | **22** | LR | LR | 05 11 17.9 | |
| | comp=Z,97nm,18.6s,baz=224,slow=36 | | | | | | |
| **ULM** | **Lac du Bonnet** | **55.13** | **7** | P | **P** | **04 47 47.1** | **+4.0** |
| | comp=Z,4.3nm,1.0s,baz=204,slow=8.5,SNR=3.3 | | | | | | |
| ULM | | | | LR | LR | 05 10 03.9 | |
| | comp=Z,215nm,18.1s,baz=200,slow=34 | | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **BDFB** | **Brasília** | **56.81** | **106** | LR | LR | 05 10 24.9 | |
| | comp=Z,186nm,18.1s,baz=283,slow=33 | | | | | | |
| **BBB** | **Bella Bella** | **59.91** | **344** | LR | LR | 05 11 00.9 | |
| | comp=Z,86nm,18.2s,baz=146,slow=33 | | | | | | |
| **DLBC** | **Dease Lake** | **65.97** | **346** | LR | LR | 05 14 21.5 | |
| | comp=Z,123nm,20.7s,baz=218,slow=33 | | | | | | |
| **PMSA** | **Palmer Station** | **66.73** | **162** | LR | LR | 05 10 16.0 | |
| | comp=Z,401nm,20.5s,baz=284,slow=29 | | | | | | |
| **SCHQ** | **Schefferville** | **67.02** | **23** | LR | LR | 05 17 19.5 | |
| | comp=Z,95nm,20.1s,baz=218,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.29** | **355** | P | **P** | **04 49 08.9** | **+3.6** |
| | comp=Z,0.6nm,0.6s,baz=165,slow=5.8,SNR=3.7 | | | | | | |
| YKA | | | | LR | LR | 05 16 13.3 | |
| | comp=Z,84nm,20.9s,baz=178,slow=34 | | | | | | |
| **K29M** | **Barlow Dome** | **72.49** | **345** | P | **P** | **04 49 38.5** | **+1.0** |
| **BCAR** | **Beaver Creek A** | **73.01** | **343** | P | **P** | **04 49 39.6** | **-1.0** |
| **KDAK** | **Kodiak Island** | **73.02** | **335** | LR | LR | 05 14 42.7 | |
| | comp=Z,185nm,18.5s,baz=173,slow=30 | | | | | | |
| **FRB** | **Frobisher Bay** | **73.33** | **16** | LR | LR | 05 22 22.5 | |
| | comp=Z,41nm,18.4s,baz=250,slow=36 | | | | | | |
| **K27K** | **Chicken** | **73.84** | **344** | P | **P** | **04 49 45.0** | **-0.4** |
| K27K | | | | IAmb | IAmb | 04 50 08.7 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **74.18** | **345** | P | **P** | **04 49 46.3** | **-1.0** |
| EGAK | | | | IAmb | IAmb | 04 49 54.9 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **74.36** | **348** | P | **P** | **04 49 49.4** | **+1.1** |
| G31M | | | | IAmb | IAmb | 04 49 54.3 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **75.42** | **349** | LR | LR | 05 20 56.7 | |
| | comp=Z,164nm,19.1s,baz=184,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **75.78** | **343** | P | **P** | **04 49 54.9** | **-1.7** |
| **ILAR** | **Eielson Array** | **75.78** | **343** | P | **P** | **04 49 54.6** | **-1.9** |
| | comp=Z,0.7nm,0.9s,baz=155,slow=4.8,SNR=6.3 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **76.84** | **343** | P | **P** | **04 50 01.9** | **-0.7** |
| **J20K** | **Nowinta River** | **77.68** | **340** | P | **P** | **04 50 05.8** | **-1.5** |
| **H21K** | **Melozitna Rive** | **78.20** | **342** | P | **P** | **04 50 08.9** | **-1.4** |
| H21K | | | | IAmb | IAmb | 04 50 20.4 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **78.71** | **342** | P | **P** | **04 50 09.2** | **-3.8** |
| **NRS** | **Narsarsuaq** | **79.79** | **25** | P | **P** | **04 50 18.3** | **-0.7** |
| **SFJD** | **Kangerlussuaq** | **80.98** | **19** | LR | LR | 05 26 03.2 | |
| | comp=Z,62nm,20.5s,baz=246,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **85.50** | **180** | P | **P** | **04 50 48.6** | **-0.2** |
| | comp=Z,1.2nm,0.9s,baz=94,slow=3.1,SNR=2.9 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **88.23** | **323** | LR | LR | 05 21 42.6 | |
| | comp=Z,139nm,21.2s,baz=138,slow=30 | | | | | | |
| **SNAA** | **Sanae** | **89.45** | **162** | LR | LR | 05 23 58.4 | |
| | comp=Z,111nm,19.9s,baz=222,slow=31 | | | | | | |
| **BBTS** | **Babate** | **89.45** | **75** | LR | LR | 05 27 23.0 | |
| | comp=Z,33nm,18.4s,baz=148,slow=32 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **89.92** | **290** | T | T | 06 30 36.8 | |
| | baz=96,slow=74,SNR=129 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **89.94** | **290** | T | T | 06 30 37.8 | |
| | baz=96,slow=74,SNR=160 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **89.94** | **290** | T | T | 06 30 38.0 | |
| | baz=96,slow=74,SNR=88 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **90.02** | **288** | T | T | 06 30 41.1 | |
| | baz=95,slow=75,SNR=130 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **90.02** | **288** | T | T | 06 30 37.2 | |
| | baz=95,slow=75,SNR=156 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **90.03** | **288** | T | T | 06 30 41.7 | |
| | baz=95,slow=75,SNR=132 | | | | | | |
| **BORG** | **Borgarnes** | **91.30** | **25** | LR | LR | 05 31 24.4 | |
| | comp=Z,42nm,18.4s,baz=279,slow=35 | | | | | | |
| **SIMJ** | **Simiganj** | **145.59** | **9** | PKPdf | **PKPdf** | **04 57 48.2** | **-1.8** |
| **CHGR** | **Chuyangaron** | **145.62** | **8** | PKPdf | **PKPdf** | **04 57 49.2** | **-0.8** |
| **RAYN** | **Ar Rayn** | **145.70** | **54** | PKPdf | **PKPbc** | **04 57 50.6** | **-0.2** |

**IDC 05 04:43:41.4±3.7, 5.°74S×150.°15E, h0km, mb3.3/2, mbtmp3.4/2, Error ellipse: s-maj=142.5km s-min=47.7km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.88** | **226** | P | P | 04 48 24.2 | -1.1 |
| | 0.7nm,0.4s,baz=52,slow=11,SNR=13 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **23.72** | **220** | P | P | 04 48 56.3 | +0.9 |
| | 0.4nm,0.5s,baz=53,slow=8.9,SNR=4.6 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.06** | **286** | PKPbc | PKPbc | 05 03 29.4 | -0.7 |
| | 0.5nm,0.6s,baz=93,slow=4.0,SNR=8.3 | | | | | | |

*IDC **05** 04:44:34.1±0.8, 29.°92S×177.°09W, h0km, mb4.1/7, mbtmp4.1/7, MS3.7/2, Error ellipse: s-maj=27.5km s-min=17.3km az=49.0*
*NEIC **05** 04:44:40.5±1.9, 29.°85S±0.°04×177.°03W±0.°10, h35km±2km, mb4.5/17, Error ellipse: s-maj=14.0km s-min=5.9km az=88.0*

**ISC 05 04:44:38.6±0.7, 30.°09S±0.°07×177.°2W±0.°1, h24km, n49, σ1s61/49, mb4.3/15, 5C, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.03** | **324** | | **Pn** | **04 44 55.8** | **-1.7** |
| RAO | | | | | **Sn** | **04 45 10.9** | **-0.3** |
| **RAO** | **Raoul Island** | **1.03** | **324** | Pn | **Pn** | **04 44 56.0** | **-1.5** |
| | 2μm,0.3s,baz=108,slow=3.4,SNR=53 | | | | | | |
| RAO | | | | Sn | **Sn** | **04 45 11.1** | **0.0** |
| | 2μm,0.3s,baz=92,slow=23,SNR=7.2 | | | | | | |
| RAO | | | | LR | LR | 04 45 20.8 | |
| | comp=Z,2μm,21.7s,baz=154,slow=47 | | | | | | |
| **URZ** | **Urewera** | **9.40** | **208** | Pn | Pn | 04 46 48.4 | -4.1 |
| | 0.5nm,0.3s,baz=255,slow=20,SNR=1.5 | | | | | | |
| URZ | | | | Sn | **Sn** | **04 48 36.4** | **-1.1** |
| | 2.8nm,0.3s,baz=175,slow=19,SNR=13 | | | | | | |
| **RTZ** | **Ruatahuna** | **9.76** | **208** | Pn | **Pn** | **04 46 54.5** | **-3.0** |
| **BKZ** | **Black Stump Fm** | **10.43** | **208** | Pn | Pn | 04 47 02.5 | -4.1 |
| **BFZ** | **Birch Farm** | **11.83** | **205** | Pn | Pn | 04 47 20.7 | -5.1 |
| **MSVF** | **Nonsavu** | **13.03** | **340** | LR | LR | 04 51 22.1 | |
| | comp=Z,147nm,19.2s,baz=179,slow=32 | | | | | | |
| **MRNZ** | **Matariki Terra** | **13.90** | **213** | Pn | **Pn** | **04 47 53.5** | **-0.5** |
| **THZ** | **Tophouse** | **14.12** | **212** | Pn | **Pn** | **04 47 56.3** | **-0.7** |
| **RPZ** | **Rata Peaks** | **16.50** | **211** | Pn | **Pn** | **04 48 26.2** | **-2.2** |
| | 0.7nm,0.3s,baz=284,slow=4.2,SNR=1.5 | | | | | | |
| RPZ | | | | Sn | Sn | 04 51 17.5 | -13 |
| | 0.5nm,0.3s,baz=150,slow=20,SNR=1.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.69** | **295** | Pn | **P** | **04 48 34.3** | **+1.1** |
| | 0.2nm,0.3s,baz=164,slow=6.9,SNR=3.6 | | | | | | |
| DZM | | | | LR | LR | 04 53 56.4 | |
| | comp=Z,487nm,18.4s,baz=170,slow=34 | | | | | | |
| **FOZ** | **Fox Glacier** | **16.93** | **214** | Pn | **Pn** | **04 48 30.6** | **-3.2** |
| FOZ | | | | IAmb | IAmb | 04 49 03.7 | |
| | comp=Z,38nm,1.3s | | | | | | |
| **ODZ** | **Otahua Downs** | **17.73** | **209** | Pn | **Pn** | **04 48 39.6** | **-4.1** |
| **WHZ** | **Wether Hill Ro** | **19.58** | **212** | P | **P** | **04 49 04.5** | **-0.4** |
| WHZ | | | | IAmb | IAmb | 04 49 24.8 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **26.87** |

comp=Z,0.4nm,0.2s,baz=106,slow=2.0,SNR=1.0
**FINES FINESS Array B 145.08 341** PKP **PKPbc** **05 04 10.8 -1.8**
comp=Z,4.9nm,0.6s,baz=53,slow=3.6,SNR=24
**NB2 NORSAR Subarra148.54 352** PKP **PKPbc** **05 04 22.5 -0.2**
comp=Z,0.7nm,0.7s,baz=8.7,slow=2.8
**NOA NORSAR Array B148.54 352** PKPbc **PKPdf** **05 04 21.0 +1.9**
comp=Z,1.2nm,0.8s,baz=16,slow=4.5,SNR=4.1
**HFS Hagfors 149.07 349** PKPbc **PKPdf** **05 04 22.3 +2.4**
comp=Z,3.8nm,0.9s,baz=56,slow=6.1,SNR=5.7
AKASG **Malin Array Be 151.46 324** PKPbc **PKPbc** **05 04 28.2 -1.8**
comp=Z,0.7nm,0.4s,baz=48,slow=2.6,SNR=11
AKASG PKPab **pPKPbc** **05 04 38.0 +1.5**
comp=Z,6.8nm,0.7s,baz=46,slow=3.0,SNR=16
**MMAI Mount Meron Ar 152.10 284** PKPab **PKPab** **05 04 41.5 -0.4**
comp=Z,4.5nm,0.7s,baz=86,slow=4.3,SNR=5.1
**BRTR Keskin Array B 153.04 299** PKPab **PKPab** **05 04 43.1 -2.6**
comp=Z,0.9nm,0.7s,baz=142,slow=6.1,SNR=5.8
**TORD Torodi Ar. Bea 163.11 176** PKPab **PKPab** **05 05 29.4 0.0**
comp=Z,0.6nm,0.6s,baz=190,slow=5.9,SNR=3.3

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*SNET **05** 04:53:07.4±0.9, 14°.67N×91°.59W, h75$^{km}$±30$^{km}$, ML4.2*
*CATAC **05** 04:53:09.1±0.4, 14°.30N×91°.60W, h93$^{km}$±6$^{km}$, MB5.1, mb4.7, ML4.6*
*NEIC **05** 04:53:10.4±2.3, 14°.49N±0°.07×91°.38W±0°.06, h113$^{km}$±5$^{km}$, mb4.3/126, Error ellipse: s-maj=11.7km s-min=5.8km az=217.0*
*IDC **05** 04:53:12.6±0.8, 14°.68N×91°.00W, h132$^{km}$±4$^{km}$, mb3.9/13, mbtmp4.3/16, Error ellipse: s-maj=19.9km s-min=10.4km az=66.0*
*GCG **05** 04:53:12.0±0.5, 14°.45N×91°.38W, h88$^{km}$±14$^{km}$, MD4.4*
*UCR **05** 04:53:15.0±1.2, 14°.12N×90°.90W, h1$^{km}$±658$^{km}$, MW4.0*
**ISC 05 04:53:09.4±0.6, 14°.49N±0°.05×91°.42W±0°.04, h112$^{km}$±5$^{km}$, n255, σ1°.21/297, mb4.3/59, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RTAL** | **Retalhuleu** | **0.27** | **277** | Pn | | **Pn** | **04 53 24.2** | **-1.1** |
| RTAL | | | | Sn | | **Sn** | **04 53 35.4** | **-1.8** |
| **SOKI** | **Kika Raxquin** | **0.33** | **2** | *i* P | | **Pn** | **04 53 25.8** | **-0.2** |
| SOKI | | | | *i* S | | **Sn** | **04 53 38.6** | **+0.1** |
| SOKI | | | | IAML | | | 04 53 47.5 | |
| | comp=Z,17μm,1.0s | | | | | | | |
| **CHTG** | **Tecpan** | **0.50** | **57** | *i* P | | **Pn** | **04 53 26.9** | **+0.1** |
| CHTG | | | | IAML | | | 04 53 27.5 | |
| | comp=Z,35μm,1.0s | | | | | | | |
| CHTG | | | | *i* S | | **Sn** | **04 53 41.1** | **+1.3** |
| **FUG** | **Fuego 3** | **0.56** | **94** | *i* P | | **Pn** | **04 53 27.3** | **+0.3** |
| **PCG** | **Pacaya** | **0.79** | **97** | *i* P | | **Pn** | **04 53 29.7** | **+0.7** |
| **GUMI** | **Mixco** | **0.79** | **80** | *i* P | | **Pn** | **04 53 29.3** | **+0.3** |
| GUMI | | | | IAML | | | 04 53 29.8 | |
| | comp=Z,29μm,1.0s | | | | | | | |
| GUMI | | | | *i* S | | **Sn** | **04 53 44.9** | **+1.2** |
| **HUEH** | **Huehuetenango** | **0.83** | **354** | Pn | | **Pn** | **04 53 29.8** | **+0.4** |
| HUEH | | | | Sn | | **Sn** | **04 53 44.6** | **+0.3** |
| **GCG4** | **OSOP** | **0.86** | **83** | *i* P | | **Pn** | **04 53 30.1** | **+0.5** |
| GCG4 | | | | IAML | | | 04 53 30.3 | |
| | comp=Z,19μm,1.0s | | | | | | | |
| GCG4 | | | | *i* S | | **Sn** | **04 53 46.0** | **+1.2** |
| **NBG** | **Las Nubes** | **1.04** | **85** | *i* P | | **Pn** | **04 53 33.0** | **+1.5** |
| **APG** | **El Apazote** | **1.05** | **61** | P | | **Pn** | **04 53 32.2** | **+0.7** |
| | comp=Z,118nm,0.4s,baz=169,slow=9.4,SNR=6039 | | | | | | | |
| APG | | | | S | | **Sn** | **04 53 49.6** | **+1.4** |
| | comp=Z,92nm,0.5s,baz=325,slow=21,SNR=25 | | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.65** | **106** | *i* P | | **Pn** | **04 53 38.2** | **0.0** |
| SLOZ | | | | *e*S | | **Sn** | **04 54 01.4** | **+1.3** |
| **LOAL** | **Lomas de Alarc** | **1.66** | **107** | *i* P | | **Pn** | **04 53 38.5** | **+0.2** |
| LOAL | | | | IAML | | | 04 53 38.9 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| LOAL | | | | *i* S | | **Sn** | **04 54 01.7** | **+1.4** |
| **NUBE** | **Las Nubes** | **1.69** | **110** | *i* P | | **Pn** | **04 53 38.8** | **0.0** |
| **NUBE** | **Las Nubes** | **1.69** | **110** | *i* P | | **Pn** | **04 53 39.0** | **+0.2** |
| NUBE | | | | *i* S | | **Sn** | **04 54 02.4** | **+1.2** |
| NUBE | | | | IAML | | | 04 54 05.1 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **MRL** | **Marmol** | **1.78** | **70** | *i* P | | **Pn** | **04 53 41.9** | **+2.0** |
| MRL | | | | *i* S | | **Sn** | **04 54 05.3** | **+2.2** |
| **RTR** | **El Retiro** | **1.82** | **109** | *i* P | | **Pn** | **04 53 40.8** | **+0.4** |
| **SBLS** | **San Blas** | **1.86** | **110** | *i* P | | **Pn** | **04 53 41.2** | **+0.2** |
| **CEVE** | **Cerro Verde** | **1.86** | **111** | *i* P | | **Pn** | **04 53 41.3** | **+0.3** |
| CEVE | | | | *e*S | | **Sn** | **04 54 08.6** | **+3.6** |
| CEVE | | | | IAML | | | 04 54 10.6 | |
| | comp=Z,3μm,0.4s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.86** | **111** | *i* P | | **Pn** | **04 53 41.3** | **+0.3** |
| CEVE | | | | *i* S | | **Sn** | **04 54 07.4** | **+2.4** |
| CEVE | | | | IAML | | | 04 54 11.6 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **SNJE** | **San Jose** | **1.86** | **109** | *i* P | | **Pn** | **04 53 41.3** | **+0.3** |
| **UNIC** | **Universidad Ca** | **1.88** | **105** | *i* P | | **Pn** | **04 53 40.9** | **-0.2** |
| UNIC | | | | IAML | | | 04 53 42.0 | |
| | comp=Z,900nm,1.0s | | | | | | | |
| UNIC | | | | *i* S | | **Sn** | **04 54 05.8** | **+0.6** |
| **CCIG** | **Comitan** | **1.91** | **339** | | | **Pn** | **04 53 43.0** | **+1.4** |
| CCIG | | | | Sn | | **Sn** | **04 54 06.3** | **+0.3** |
| **CCIG** | **Comitan** | **1.91** | **339** | *i* P | | **Pn** | **04 53 42.1** | **+0.5** |
| CCIG | | | | *i* S | | **Sn** | **04 54 07.6** | **+1.5** |
| CCIG | | | | IAML | | | 04 54 10.7 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **MTO3** | **Montecristo** | **1.99** | **92** | | | **Pn** | **04 53 43.0** | **+0.4** |
| MTO3 | | | | Sn | | **Sn** | **04 54 05.7** | **-2.3** |
| **MTO3** | **Montecristo** | **1.99** | **92** | *i* P | | **Pn** | **04 53 43.1** | **+0.5** |
| MTO3 | | | | *e*S | | **Sn** | **04 54 09.6** | **+1.6** |
| **MTO3** | **Montecristo** | **1.99** | **92** | *i* P | | **Pn** | **04 53 43.0** | **+0.4** |
| MTO3 | | | | IAML | | | 04 53 43.4 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| MTO3 | | | | *i* S | | **Sn** | **04 54 10.1** | **+2.1** |
| **CEDA** | **San Andres** | **2.08** | **109** | *i* P | | **Pn** | **04 53 43.6** | **+0.1** |
| CEDA | | | | IAML | | | 04 54 19.0 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **CEDA** | **San Andres** | **2.08** | **109** | *i* P | | **Pn** | **04 53 43.2** | **-0.3** |
| CEDA | | | | *i* S | | **Sn** | **04 54 10.5** | **+0.9** |
| CEDA | | | | IAML | | | 04 54 31.3 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.08** | **113** | *i* P | | **Pn** | **04 53 43.8** | **+0.1** |
| JAYA | | | | IAML | | | 04 54 11.8 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.08** | **113** | *i* P | | **Pn** | **04 53 43.8** | **+0.1** |
| JAYA | | | | *i* S | | **Sn** | **04 54 10.1** | **+0.2** |
| JAYA | | | | IAML | | | 04 54 13.5 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **2.18** | **107** | *i* P | | **Pn** | **04 53 45.9** | **+1.1** |
| QUEZ | | | | *i* S | | **Sn** | **04 54 15.0** | **+3.1** |
| QUEZ | | | | IAML | | | 04 54 23.9 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **2.18** | **111** | *i* P | | **Pn** | **04 53 45.4** | **+0.5** |
| PMON | | | | IAML | | | 04 54 23.0 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **BOQS** | **Boqueron** | **2.21** | **110** | *i* P | | **Pn** | **04 53 45.8** | **+0.5** |
| **UEES** | **Universidad Ev** | **2.25** | **110** | *i* P | | **Pn** | **04 53 46.1** | **+0.4** |
| **UEES** | **Universidad Ev** | **2.25** | **110** | *i* P | | **Pn** | **04 53 46.2** | **+0.4** |
| UEES | | | | *i* S | | **Sn** | **04 54 16.4** | **+2.8** |
| UEES | | | | IAML | | | 04 54 24.8 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **LALI** | **Alcalda de L** | **2.27** | **116** | *i* P | | **Pn** | **04 53 46.2** | **+0.4** |
| **LALI** | **Alcalda de L** | **2.27** | **116** | *i* P | | **Pn** | **04 53 46.6** | **+0.7** |
| LALI | | | | *i* S | | **Sn** | **04 54 13.8** | **0.0** |
| LALI | | | | IAML | | | 04 54 18.6 | |
| | comp=Z,680nm,1.0s | | | | | | | |
| **SNET** | **Serv Nac Est T** | **2.27** | **110** | Pn | | **Pn** | **04 53 46.3** | **+0.3** |
| SNET | | | | Sn | | **Sn** | **04 54 14.7** | **+0.8** |
| **SNET** | **Serv Nac Est T** | **2.27** | **110** | *e*P | | **Pn** | **04 53 46.2** | **+0.3** |
| **SNET** | **Serv Nac Est T** | **2.27** | **110** | *i* P | | **Pn** | **04 53 46.5** | **+0.5** |
| SNET | | | | *i* S | | **Sn** | **04 54 14.6** | **+0.6** |
| SNET | | | | IAML | | | 04 54 21.4 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **UTEC** | **Universidad Te** | **2.29** | **110** | *i* P | | **Pn** | **04 53 46.6** | **+0.4** |
| UTEC | | | | IAML | | | 04 53 47.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| UTEC | | | | *i* S | | **Sn** | **04 54 15.6** | **+1.1** |
| **UDBS** | **Universidad Do** | **2.33** | **109** | *i* P | | **Pn** | **04 53 47.3** | **+0.6** |
| UDBS | | | | IAML | | | 04 53 47.6 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **LOMA** | **Loma Larga** | **2.34** | **111** | *i* P | | **Pn** | **04 53 47.1** | **+0.2** |
| **LOMA** | **Loma Larga** | **2.34** | **111** | *i* P | | **Pn** | **04 53 47.3** | **+0.4** |
| LOMA | | | | *i* S | | **Sn** | **04 54 17.6** | **+2.0** |
| LOMA | | | | IAML | | | 04 54 24.7 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **PANCS** | **Alcalda de** | **2.34** | **112** | *i* P | | **Pn** | **04 53 47.3** | **+0.4** |
| PANCS | | | | *i* S | | **Sn** | **04 54 18.0** | **+2.4** |
| PANCS | | | | IAML | | | 04 54 20.6 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **LLGN** | **La Laguna** | **2.42** | **97** | *i* P | | **Pn** | **04 53 48.5** | **+0.6** |
| LLGN | | | | IAML | | | 04 53 49.0 | |
| | comp=Z,650nm,1.0s | | | | | | | |
| **LFRS** | **El Faro** | **2.44** | **110** | *i* P | | **Pn** | **04 53 48.6** | **+0.4** |
| **COEG** | **Centro de Oper** | **2.61** | **109** | *e*P | | **Pn** | **04 53 51.1** | **+0.7** |
| COEG | | | | *e*S | | **Sn** | **04 54 25.6** | **+3.7** |
| COEG | | | | IAML | | | 04 54 27.0 | |
| | comp=Z,666nm,0.4s | | | | | | | |
| **COEG** | **Centro de Oper** | **2.61** | **109** | *i* P | | **Pn** | **04 53 51.3** | **+0.9** |
| COEG | | | | IAML | | | 04 54 36.2 | |
| | comp=Z,780nm,1.0s | | | | | | | |
| **SNVI** | **San Vicente** | **2.65** | **109** | *i* P | | **Pn** | **04 53 51.9** | **+0.9** |
| **UESV** | **Universidad de** | **2.69** | **108** | *i* P | | **Pn** | **04 53 52.0** | **+0.6** |
| UESV | | | | IAML | | | 04 53 52.4 | |
| | comp=Z,600nm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.72** | **106** | *i* P | | **Pn** | **04 53 52.6** | **+0.8** |
| **SCLA** | **Alcaldia de Sa** | **2.72** | **106** | *i* P | | **Pn** | **04 53 52.7** | **+0.8** |
| SCLA | | | | IAML | | | 04 54 04.1 | |
| | comp=Z,320nm,1.0s | | | | | | | |
| SCLA | | | | *i* S | | **Sn** | **04 54 26.1** | **+1.5** |
| **TECO** | **Alcaldia de Te** | **2.73** | **110** | *i* P | | **Pn** | **04 53 52.3** | **+0.4** |
| **PETF** | **Flores** | **2.84** | **32** | Pn | | **Pn** | **04 53 54.1** | **+0.7** |
| **PQSS** | **Presa 15 de Se** | **2.90** | **107** | *i* P | | **Pn** | **04 53 54.7** | **+0.6** |
| **PQSS** | **Presa 15 de Se** | **2.90** | **107** | *i* P | | **Pn** | **04 53 54.5** | **+0.3** |
| PQSS | | | | IAML | | | 04 54 44.8 | |
| | comp=Z,360nm,1.0s | | | | | | | |
| **TECA** | **Tecapa** | **3.00** | **109** | *e*P | | **Pn** | **04 53 56.4** | **+0.8** |
| **PACA** | **Pacayal** | **3.17** | **108** | *e*P | | **Pn** | **04 53 58.9** | **+1.0** |
| **PACA** | **Pacayal** | **3.17** | **108** | *i* P | | **Pn** | **04 53 59.5** | **+1.6** |
| PACA | | | | IAML | | | 04 54 47.7 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **CAHU** | **Cacacuatique** | **3.19** | **103** | *i* P | | **Pn** | **04 53 58.7** | **+0.5** |
| **LCY** | **Lacayo** | **3.21** | **109** | *i* P | | **Pn** | **04 53 59.7** | **+1.3** |
| **VSM** | **San Miguel** | **3.23** | **109** | *i* P | | **Pn** | **04 53 59.6** | **+0.9** |
| **BLLM** | **Bellamira** | **3.26** | **108** | *i* P | | **Pn** | **04 54 00.1** | **+1.1** |
| **JUCU** | **Jucuarįn** | **3.31** | **111** | *i* P | | **Pn** | **04 54 00.9** | **+1.1** |
| **JUCU** | **Jucuarįn** | **3.31** | **111** | *i* P | | **Pn** | **04 54 00.8** | **+1.1** |
| JUCU | | | | *i* S | | **Sn** | **04 54 40.0** | **+1.4** |
| JUCU | | | | IAML | | | 04 54 50.1 | |
| | comp=Z,440nm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **3.68** | **109** | *i* P | | **Pn** | **04 54 05.6** | **+0.9** |
| CNCH | | | | IAML | | | 04 55 06.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **4.04** | **96** | | | **Pn** | **04 54 10.1** | **+0.6** |
| **CMIG** | **Matias Romero** | **4.22** | **308** | P | | **Pn** | **04 54 11.5** | **-0.3** |
| | comp=Z,72nm,0.3s,baz=122,slow=8.2,SNR=290 | | | | | | | |
| CMIG | | | | S | | **Sn** | **04 54 57.6** | **-2.6** |
| | comp=Z,112nm,0.3s,baz=300,slow=21,SNR=9.0 | | | | | | | |
| **CRIN** | **San Cristobal** | **4.60** | **112** | *e*P | | **Pn** | **04 54 17.1** | **+0.1** |
| CRIN | | | | *e*S | | **Sn** | **04 55 08.0** | **-1.5** |
| **PKGN** | **Cerro Pekin** | **4.68** | **112** | *i* P | | **Pn** | **04 54 18.1** | **+0.1** |
| PKGN | | | | IAML | | | 04 55 15.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **ILCN** | **San Idelfonso** | **4.97** | **112** | *i* P | | **Pn** | **04 54 22.1** | **+0.3** |
| ILCN | | | | IAmb | IAmb | | 04 54 33.7 | |
| | comp=Z,41nm,0.6s | | | | | | | |
| ILCN | | | | IVmB_BB | | | 04 55 18.9 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| ILCN | | | | IAML | | | 04 55 24.6 | |
| | comp=Z,92nm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **5.00** | **113** | Pn | | **Pn** | **04 54 22.7** | **+0.4** |
| **CNGN** | **Cerro Negro** | **5.00** | **113** | *e*P | | **Pn** | **04 54 23.2** | **+0.9** |
| CNGN | | | | *e*S | | **Sn** | **04 55 15.6** | **-3.5** |
| **MACN** | **El Madrono** | **5.03** | **113** | *i* P | | **Pn** | **04 54 23.9** | **+1.1** |
| MACN | | | | IVmB_BB | | | 04 55 22.7 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| MACN | | | | IAML | | | 04 55 24.2 | |
| | comp=Z,220nm,1.0s | | | | | | | |
| **LIMN** | **Finca el Limon** | **5.11** | **106** | *i* P | | **Pn** | **04 54 25.0** | **+1.2** |
| LIMN | | | | IAML | | | 04 54 25.7 | |
| | comp=Z,140nm,1.0s | | | | | | | |
| LIMN | | | | IVmB_BB | | | 04 54 25.7 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| LIMN | | | | IAmb | IAmb | | 04 54 25.8 | |
| | comp=Z,110nm,0.7s | | | | | | | |
| **COPN** | **Copaltepe** | **5.23** | **115** | *i* P | | **Pn** | **04 54 26.4** | **+1.0** |
| COPN | | | | IAmb | IAmb | | 04 54 39.4 | |
| | comp=Z,71nm,0.6s | | | | | | | |
| COPN | | | | IAML | | | 04 55 22.4 | |
| | comp=Z,390nm,1.0s | | | | | | | |
| COPN | | | | IVmB_BB | | | 04 55 22.4 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **SAPS** | **Ciudad Sandino** | **5.40** | **115** | *i* P | | **Pn** | **04 54 28.5** | **+0.8** |
| SAPS | | | | IAmb | IAmb | | 04 54 46.6 | |
| | comp=Z,110nm,0.4s | | | | | | | |
| SAPS | | | | IVmB_BB | | | 04 55 28.0 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| SAPS | | | | IAML | | | 04 55 30.6 | |
| | comp=Z,500nm,1.0s | | | | | | | |
| **HUEN** | | **5.53** | **112** | *i* P | | **Pn** | **04 54 30.1** | **+0.6** |
| HUEN | | | | IVmB_BB | | | 04 54 44.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| HUEN | | | | IAmb | IAmb | | 04 54 45.9 | |
| | comp=Z,56nm,1.0s | | | | | | | |
| HUEN | | | | IAML | | | 04 55 57.8 | |
| | comp=Z,74nm,1.0s | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **5.95** | **109** | Pn | | **Pn** | **04 54 35.4** | **+0.3** |
| **TEIG** | **Tepich** | **6.44** | **27** | Pn | | **Pn** | **04 54 41.2** | **-0.6** |
| **TEIG** | **Tepich** | **6.44** | **27** | P | | **Pn** | **04 54 41.9** | **+0.1** |
| | comp=Z,49nm,0.3s,baz=85,slow=0.7,SNR=112 | | | | | | | |
| TEIG | | | | S | | **Sn** | **04 55 51.2** | **-2.8** |
| | comp=Z,106nm,0.8s,baz=222,slow=23,SNR=12 | | | | | | | |
| **ACON** | **Acoyapa** | **6.58** | **112** | Pn | | **Pn** | **04 54 43.7** | **+0.1** |
| **LCRUZ** | **La Cruz** | **6.58** | **120** | *e*P | | **Pn** | **04 54 44.9** | **+1.1** |
| **ALIBA** | **Liberia Airpor** | **6.92** | **123** | *e*P | | **Pn** | **04 54 50.2** | **+2.0** |
| **CUI** | **Cuipilapa** | **7.20** | **121** | *e*P | | **Pn** | **04 54 53.5** | **+1.4** |
| **TLIG** | **Tlapa** | **7.52** | **295** | Pn | | **Pn** | **04 54 57.4** | **+0.8** |
| **JTS** | **Las Juntas de** | **7.57** | **123** | | | **Pn** | **04 54 57.7** | **+0.6** |
| **JTS** | **Las Juntas de** | **7.57** | **123** | P | | **Pn** | **04 54 58.3** | **+1.2** |
| | comp=Z,8.2nm,0.3s,baz=320,slow=15,SNR=11 | | | | | | | |
| JTS | | | | S | | **Sn** | **04 56 14.3** | **-7.1** |
| | comp=Z,6.6nm,0.3s,baz=158,slow=19,SNR=1.9 | | | | | | | |
| **JTS** | **Las Juntas de** | **7.57** | **123** | *e*P | | **Pn** | **04 54 58.7** | **+1.5** |
| **LCR2** | **La Lucha 2** | **8.65** | **122** | Pn | | **Pn** | **04 55 13.1** | **+1.1** |
| **LCR2** | **La Lucha 2** | **8.65** | **122** | *e*P | | **Pn** | **04 55 13.4** | **+1.4** |
| **UNM** | **Universidad Na** | **8.85** | **304** | Pn | | **Pn** | **04 55 15.7** | **+1.0** |
| **MOIG** | **Morelia** | **10.67** | **300** | Pn | | **Pn** | **04 55 41.8** | **+2.5** |
| **ZAIG** | **Zacatecas** | **13.39** | **310** | Pn | | **Pn** | **04 56 17.1** | **+1.8** |
| **MTDJ** | **Mount Denham** | **13.83** | **73** | | | **P** | **04 56 25.5** | **0.0** |
| **HNDO** | **Hondo** | **16.64** | **335** | P | | **P** | **04 56 57.0** | **+0.5** |
| **346A** | **Big Creek Wild** | **16.91** | **6** | P | | **P** | **04 57 00.0** | **+0.5** |
| 346A | | | | IAmb | IAmb | | 04 57 08.0 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **DRIO** | **Del Rio** | **17.12** | **332** | P | | **Pn** | **04 57 03.0** | **+1.1** |
| **352A** | **Blakely** | **17.93** | **18** | P | | **Pn** | **04 57 11.7** | **+0.2** |
| 352A | | | | IAmb | IAmb | | 04 57 14.5 | |
| | comp=Z,22nm,0.7s | | | | | | | |
| **BRDY** | **Brady** | **18.11** | **339** | P | | **Pn** | **04 57 13.7** | **-0.1** |
| **HPIG** | | **18.17** | **315** | P | | **Pn** | **04 57 14.9** | **+0.1** |
| HPIG | | | | IAmb | IAmb | | 04 57 18.3 | |
| | comp=Z,9.6nm,0.9s | | | | | | | |
| **SAND** | **Sanderson** | **18.29** | **329** | P | | **Pn** | **04 57 16.7** | **+0.8** |
| **456A** | **Hilliard** | **18.32** | **27** | P | | **P** | **04 57 11.8** | **-3.2** |
| **TIGA** | **Tifton** | **18.33** | **22** | P | | **Pn** | **04 57 16.1** | **-0.3** |
| **TXAR** | **Lajitas Array** | **18.61** | **325** | P | | **Pn** | **04 57 20.8** | **+0.9** |
| **TXAR** | **Lajitas Array** | **18.61** | **325** | P | | **Pn** | **04 57 21.0** | **+1.1** |
| | comp=Z,1.7nm,0.7s,baz=152,slow=12,SNR=28 | | | | | | | |
| TXAR | | | | PcP | | **PcP** | **05 01 44.1** | **+1.4** |
| | comp=Z,0.6nm,0.8s,baz=155,slow=2.3,SNR=7.4 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **18.61** | **325** | P | | **Pn** | **04 57 20.4** | **+0.5** |
| **OZNA** | **Ozona** | **18.63** | **333** | P | | **Pn** | **04 57 20.7** | **+0.7** |
| **Z47A** | **Carrollton** | **18.87** | **9** | P | | **Pn** | **04 57 22.0** | **-0.8** |
| Z47A | | | | IAmb | IAmb | | 04 57 51.1 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **LRAL** | **Lakeview Retre** | **18.89** | **12** | P | | **Pn** | **04 57 22.6** | **-0.5** |
| LRAL | | | | IAmb | IAmb | | 04 57 27.1 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **152A** | **Waverly Hall** | **19.10** | **17** | P | | **P** | **04 57 23.7** | **+0.2** |
| 152A | | | | IAmb | IAmb | | 04 57 30.3 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **OTAV** | **Otavalo** | **19.11** | **137** | P | | **P** | **04 57 24.5** | **+0.3** |
| **OTAV** | **Otavalo** | **19.11** | **137** | *e*P | | **Pn** | **04 57 26.9** | **+0.8** |
| **TULM** | **Tulcn-Chalpat** | **19.21** | **134** | P | | **Pn** | **04 57 26.9** | **-0.5** |
| **PULU** | **Pululahua** | **19.23** | **137** | P | | **Pn** | **04 57 27.4** | **-0.2** |
| **IMBA** | **Imbabura, San** | **19.25** | **136** | P | | **Pn** | **04 57 28.5** | **+0.7** |
| **PLPT** | **Palo Pinto** | **19.29** | **342** | P | | **P** | **04 57 26.5** | **+0.9** |
| PLPT | | | | IAmb | IAmb | | 04 57 27.6 | |
| | comp=Z,5.6nm,0.6s | | | | | | | |
| **ROSC** | **El Rosal** | **19.37** | **118** | P | | **Pn** | **04 57 28.3** | **-0.9** |
| ROSC | | | | IAmb | IAmb | | 04 57 33.2 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **ALPN** | **Alpine** | **19.40** | **327** | P | | **Pn** | **04 57 29.5** | **+0.3** |
| **SGCY** | **Sterling City** | **19.48** | **335** | P | | **Pn** | **04 57 28.8** | **+1.0** |
| **ABTX** | **Abilene, Hawle** | **19.55** | **339** | P | | **Pn** | **04 57 29.9** | **-0.9** |
| ABTX | | | | IAmb | IAmb | | 04 57 30.5 | |
| | comp=Z,8.9nm,0.7s | | | | | | | |
| **154A** | **Montrose** | **19.57** | **21** | P | | **P** | **04 57 29.3** | **+0.8** |
| **MNHN** | **Monahans** | **19.73** | **330** | P | | **Pn** | **04 57 32.4** | **-0.6** |
| MNHN | | | | IAmb | IAmb | | 04 57 33.6 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **19.73** | **300** | P | | **Pn** | **04 57 32.2** | **-0.9** |
| SLBS | | | | IAmb | IAmb | | 04 57 38.4 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **SDDR** | **Presa de Saban** | **19.78** | **74** | P | | **P** | **04 57 31.9** | **+0.8** |
| SDDR | | | | IAmb | IAmb | | 04 57 52.0 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **SLOR** | **San Lorenzo -** | **19.80** | **139** | P | | **P** | **04 57 32.8** | **+1.1** |
| **Y49A** | **Blount Mountai** | **19.81** | **12** | P | | **Pn** | **04 57 32.6** | **-1.1** |
| **ANTS** | **Antisana-Sarah** | **19.84** | **138** | P | | **P** | **04 57 32.9** | **+0.6** |
| ANTS | | | | IAmb | IAmb | | 04 57 36.9 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **MIAR** | **Mount Ida** | **20.06** | **355** | P | | **P** | **04 57 34.1** | **+0.2** |
| **GOGA** | **Godfrey** | **20.17** | **20** | P | | **P** | **04 57 36.0** | **+0.9** |
| GOGA | | | | IAmb | IAmb | | 04 57 37.5 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **UALR** | **University of** | **20.21** | **358** | P | | **P** | **04 57 36.3** | **+0.8** |
| **X48A** | **Hartselle** | **20.26** | **10** | P | | **P** | **04 57 36.4** | **+0.3** |
| **X37A** | **Clayton** | **20.33** | **351** | P | | **P** | **04 57 38.0** | **+1.2** |
| **APMT** | **Aspermont** | **20.35** | **339** | P | | **P** | **04 57 37.9** | **+0.8** |
| **Y52A** | **Lilburn** | **20.41** | **18** | P | | **P** | **04 57 37.4** | **-0.2** |
| **VHRN** | **Van Horn** | **20.46** | **325** | P | | **P** | **04 57 39.7** | **+1.4** |
| **FPAL** | **Fort Paine** | **20.64** | **14** | P | | **P** | **04 57 40.8** | **+0.7** |
| FPAL | | | | IAmb | IAmb | | 04 57 42.5 | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **POST** | **Post** | **20.64** | **335** | P | | **P** | **04 57 40.1** | **-0.1** |
| POST | | | | IAmb | IAmb | | 04 57 41.3 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **20.73** | **358** | P | | **P** | **04 57 41.8** | **+0.8** |
| **X51A** | **Calhoun** | **20.85** | **15** | P | | **P** | **04 57 43.1** | **+0.8** |
| X51A | | | | IAmb | IAmb | | 04 57 50.4 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **SDV** | **Santo Domingo** | **21.09** | **103** | P | | **P** | **04 57 44.9** | **-0.5** |
| **SDV** | **Santo Domingo** | **21.09** | **103** | P | | **P** | **04 57 43.5** | **-1.8** |
| | comp=Z,15nm,0.4s,baz=328,slow=7.6,SNR=2.9 | | | | | | | |
| | comp=Z,15nm,0.4s | | | | | | | |
| **SWET** | **Sewanee** | **21.22** | **12** | P | | **P** | **04 57 46.8** | **+0.4** |
| **WMOK** | **Wichita Mounta** | **21.23** | **343** | P | | **P** | **04 57 49.3** | **+2.8** |
| **FCAR** | **Ozark Folk Cen** | **21.32** | **358** | P | | **P** | **04 57 46.8** | **-0.6** |
| **HODGE** | **Hodges** | **21.33** | **21** | P | | **P** | **04 57 46.6** | **-0.9** |
| HODGE | | | | IAmb | IAmb | | 04 57 49.9 | |
| | comp=Z,5.9nm,0.6s | | | | | | | |
| **W52A** | **Murphy** | **21.59** | **17** | P | | **P** | **04 57 51.0** | **+0.6** |
| W52A | | | | IAmb | IAmb | | 04 57 53.3 | |
| | comp=Z,7.8nm,0.7s | | | | | | | |
| **JSC** | **Jenkinsville** | **21.74** | **23** | P | | **P** | **04 57 53.3** | **+1.4** |
| **CPCT** | **Cooper Cave** | **21.77** | **15** | P | | **P** | **04 57 52.8** | **+0.6** |
| CPCT | | | | IAmb | IAmb | | 04 57 54.6 | |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| **BG3** | **Lake Jocassee** | **21.80** | **19** | P | | **P** | **04 57 53.4** | **+0.9** |
| BG3 | | | | IAmb | IAmb | | 04 57 55.2 | |
| | comp=Z,8.8nm,0.7s | | | | | | | |
| **Y57A** | **Sumter** | **21.85** | **25** | P | | **P** | **04 57 53.7** | **+0.6** |
| Y57A | | | | IAmb | IAmb | | 04 57 55.2 | |
| | comp=Z,24nm,1.0s | | | | | | | |
| **CLTN** | **Cedars of Leba** | **21.99** | **11** | P | | **P** | **04 57 54.8** | **+0.3** |
| **SMWD** | **Samnorwood** | **22.01** | **340** | P | | **P** | **04 57 57.0** | **+2.2** |
| SMWD | | | | IAmb | IAmb | | 04 58 22.0 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.17** | **17** | P | | **P** | **04 57 57.1** | **+0.8** |
| TKL | | | | IAmb | IAmb | | 04 57 58.5 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.17** | **17** | P | | **P** | **04 57 57.6** | **+1.2** |
| | comp=Z,9.0nm

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SAML** | **Samuel** | **36.42** | **128** | P | | **P** | | **05 00 02.0** | **-1.5** |
| **SAML** | **Samuel** | **36.42** | **128** | *e*P | | **P** | | **05 00 02.0** | **-1.5** |
| **G65A** | **Princeton** | **36.66** | **29** | P | | **P** | | **05 00 05.2** | **-0.1** |
| **LDAQ** | **Lac Daran** | **37.33** | **22** | P | | **P** | | **05 00 09.7** | **-1.3** |
| **LMQ** | **La Malbaie** | **37.33** | **24** | P | | **P** | | **05 00 10.4** | **-0.5** |
| LMQ | | | | | IAmb | IAmb | | 05 00 24.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | | | |
| **D62A** | **Allapoint, All** | **37.47** | **25** | P | | **P** | | **05 00 11.9** | **-0.1** |
| **LPAZ** | **La Paz** | **38.27** | **142** | P | | **P** | | **05 00 20.4** | **+0.6** |
| | comp=Z,1.1nm,0.5s,baz=344,slow=10,SNR=4.8 | | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | | |
| **HOOD** | **Mount Hood Mea** | **39.95** | **326** | P | | **P** | | **05 00 34.5** | **+1.6** |
| HOOD | | | | | IAmb | IAmb | | 05 00 37.2 | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **VILB** | **Vilhena** | **41.22** | **130** | P | | **P** | | **05 00 42.9** | **-0.7** |
| **VILB** | **Vilhena** | **41.22** | **130** | *e*P | | **P** | | **05 00 43.2** | **-0.4** |
| **SIV** | **San Ignacio** | **42.62** | **134** | P | | **P** | | **05 00 55.0** | **0.0** |
| | comp=Z,8.5nm,0.6s,baz=300,slow=8.0,SNR=55 | | | | | | | | |
| SIV | | | | | PcP | **PcP** | | **05 02 46.0** | **+0.7** |
| | comp=Z,4.0nm,0.7s,baz=314,slow=3.2,SNR=10.0 | | | | | | | | |
| | comp=Z,8.5nm,0.6s | | | | | | | | |
| **PDRB** | **Porto dos Gac** | **43.06** | **125** | *e*P | | **P** | | **05 00 56.4** | **-2.2** |
| **CLDB** | **Colider** | **43.38** | **124** | *e*P | | **P** | | **05 00 59.3** | **-1.9** |
| **PTLB** | **Pontes e Lacer** | **43.63** | **132** | *e*P | | **P** | | **05 01 02.7** | **-0.4** |
| **BBSD** | **Serra de San D** | **43.76** | **135** | *e*P | | **P** | | **05 01 03.8** | **-0.3** |
| **SCHQ** | **Schefferville** | **44.57** | **20** | P | | **P** | | **05 01 09.1** | **-1.1** |
| | comp=Z,7.3nm,0.6s,baz=216,slow=7.4,SNR=18 | | | | | | | | |
| | comp=Z,7.3nm,0.6s | | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **49.32** | **126** | *e*P | | **P** | | **05 01 46.1** | **-1.5** |
| **BDFB** | **Brasilia** | **52.31** | **123** | P | | **P** | | **05 02 09.0** | **-1.2** |
| | comp=Z,1.2nm,0.4s,baz=304,slow=11,SNR=3.7 | | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | | |
| **CPUP** | **Villa Florida** | **52.40** | **141** | P | | **P** | | **05 02 09.5** | **-1.0** |
| | comp=Z,3.2nm,0.9s,baz=327,slow=2.9,SNR=5.7 | | | | | | | | |
| CPUP | | | | | PcP | **PcP** | | **05 03 20.8** | **+0.9** |
| | comp=Z,2.0nm,1.1s,baz=315,slow=4.3,SNR=3.6 | | | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | | | |
| **IPMB** | **Ipameri, GO** | **53.44** | **126** | *e*P | | **P** | | **05 02 17.2** | **-1.2** |
| **ITQB** | **Itaqui** | **55.26** | **143** | P | | **P** | | **05 02 30.7** | **-0.5** |
| **ITAB** | **Concordia** | **56.34** | **137** | P | | **P** | | **05 02 38.1** | **-0.9** |
| **VAO** | **Valinhos** | **57.28** | **130** | P | | **P** | | **05 02 45.2** | **-0.7** |
| **M29M** | **Somme Creek** | **58.19** | **336** | P | | **P** | | **05 02 52.5** | **+0.8** |
| M29M | | | | | IAmb | IAmb | | 05 03 20.8 | |
| | comp=Z,8.6nm,1.5s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **58.56** | **142** | P | | **P** | | **05 02 53.8** | **-0.8** |
| **BCAR** | **Beaver Creek A** | **59.82** | **336** | P | | **P** | | **05 03 02.6** | **-0.3** |
| **L27K** | **Beaver Creek,** | **59.83** | **336** | P | | **P** | | **05 03 03.2** | **+0.3** |
| L27K | | | | | IAmb | IAmb | | 05 03 40.8 | |
| | comp=Z,4.3nm,1.4s | | | | | | | | |
| **INK** | **Inuvik** | **60.13** | **343** | P | | **P** | | **05 03 04.1** | **-0.7** |
| **J26L** | **Joseph Creek** | **61.22** | **337** | P | | **P** | | **05 03 13.5** | **+1.1** |
| J26L | | | | | IAmb | IAmb | | 05 03 33.5 | |
| | comp=Z,3.7nm,1.4s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **61.47** | **338** | P | | **P** | | **05 03 13.9** | **0.0** |
| I26K | | | | | IAmb | IAmb | | 05 03 15.2 | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |
| **F28M** | **Old Crow** | **61.59** | **341** | P | | **P** | | **05 03 15.1** | **+0.3** |
| F28M | | | | | IAmb | IAmb | | 05 03 46.4 | |
| | comp=Z,8.5nm,1.5s | | | | | | | | |
| **J25K** | **Salcha River,** | **61.96** | **337** | P | | **P** | | **05 03 17.8** | **+0.4** |
| J25K | | | | | IAmb | IAmb | | 05 03 29.7 | |
| | comp=Z,3.7nm,1.3s | | | | | | | | |
| **IL31** | | **62.62** | **337** | P | | **P** | | **05 03 21.2** | **-0.4** |
| IL31 | | | | | IAmb | IAmb | | 05 03 32.9 | |
| | comp=Z,4.0nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **62.62** | **337** | P | | **P** | | **05 03 20.9** | **-0.7** |
| **ILAR** | **Eielson Array** | **62.62** | **337** | P | | **P** | | **05 03 21.0** | **-0.6** |
| | comp=Z,0.3nm,0.4s,baz=105,slow=5.9,SNR=8.8 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **RND** | **Reindeer** | **62.83** | **335** | P | | **P** | | **05 03 23.0** | **-0.1** |
| RND | | | | | IAmb | IAmb | | 05 03 54.3 | |
| | comp=Z,3.1nm,1.2s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **63.03** | **340** | P | | **P** | | **05 03 24.8** | **+0.5** |
| **BPAW** | **Bear Paw Mtn.** | **63.97** | **335** | P | | **P** | | **05 03 30.4** | **-0.2** |
| BPAW | | | | | IAmb | IAmb | | 05 03 31.2 | |
| | comp=Z,5.8nm,1.5s | | | | | | | | |
| **M19K** | **Big River Lodg** | **64.70** | **332** | P | | **P** | | **05 03 35.3** | **0.0** |
| **J20K** | **Nowinta River** | **65.30** | **335** | P | | **P** | | **05 03 38.6** | **-0.5** |
| J20K | | | | | IAmb | IAmb | | 05 04 07.5 | |
| | comp=Z,7.6nm,1.5s | | | | | | | | |
| **L18K** | **Granite Mounta** | **65.83** | **332** | P | | **P** | | **05 03 42.6** | **0.0** |
| L18K | | | | | IAmb | IAmb | | 05 04 26.6 | |
| | comp=Z,7.2nm,1.4s | | | | | | | | |
| **F21K** | **Alatna River** | **66.06** | **338** | P | | **P** | | **05 03 44.8** | **+0.7** |
| F21K | | | | | IAmb | IAmb | | 05 03 46.6 | |
| | comp=Z,5.5nm,1.4s | | | | | | | | |
| **H19K** | **Roundabout Mou** | **66.65** | **336** | P | | **P** | | **05 03 47.0** | **-0.8** |
| H19K | | | | | IAmb | IAmb | | 05 04 23.7 | |
| | comp=Z,6.0nm,1.4s | | | | | | | | |
| **J16K** | **Anvik River** | **67.83** | **333** | P | | **P** | | **05 03 55.7** | **+0.4** |
| **ESK** | **Eskdalemuir** | **77.22** | **36** | P | | **P** | | **05 04 48.8** | **-2.2** |
| ESK | | | | | IAmb | IAmb | | 05 04 49.2 | |
| | comp=Z,5.7nm,0.7s | | | | | | | | |
| **EKB** | **Eskdalemuir** | **77.22** | **36** | P | | **P** | | **05 04 48.9** | **-2.2** |
| **EKA** | **Eskdalemuir Ar** | **77.24** | **36** | P | | **P** | | **05 04 49.3** | **-1.9** |
| | comp=Z,0.8nm,0.3s,baz=273,slow=5.9,SNR=12 | | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **78.97** | **52** | P | | **P** | | **05 04 58.6** | **-2.5** |
| | comp=Z,0.5nm,0.6s,baz=292,slow=4.8,SNR=7.6 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **83.45** | **29** | P | | **P** | | **05 05 26.3** | **+1.9** |
| | comp=Z,1.1nm,0.8s,baz=282,slow=10,SNR=3.3 | | | | | | | | |
| **HFS** | **Hagfors** | **84.90** | **29** | P | | **P** | | **05 05 31.0** | **-0.7** |
| **HFS** | **Hagfors** | **84.90** | **29** | P | | **P** | | **05 05 31.0** | **-0.7** |
| | comp=Z,5.7nm,1.0s,baz=318,slow=1.9,SNR=3.9 | | | | | | | | |
| | comp=Z,5.7nm,1.0s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.50** | **18** | P | | **P** | | **05 05 32.6** | **-1.9** |
| | comp=Z,0.8nm,0.7s,baz=278,slow=3.6,SNR=5.6 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **KSRS** | **Korea Array** | **116.46** | **326** | PKP | | **PKiKP** | | **05 11 41.2** | **+0.7** |
| | comp=Z,0.8nm,0.6s,baz=358,slow=2.1,SNR=3.2 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **136.06** | **256** | PKP | | **PKPdf** | | **05 12 18.9** | **+0.6** |
| | comp=Z,0.6nm,0.9s,baz=88,slow=2.8,SNR=6.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **136.36** | **251** | PKP | | **PKiKP** | | **05 12 20.1** | **-0.5** |
| | comp=Z,0.4nm,0.7s,baz=96,slow=2.1,SNR=4.4 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **145.71** | **342** | PKPbc | | **PKPdf** | | **05 12 36.0** | **+0.2** |
| | comp=Z,3.7nm,0.6s,baz=331,slow=3.0,SNR=15 | | | | | | | | |

*IDC **05** 04:57:31.2±0.6,29.89S×177.13W,h0km,mb4.2/12, mbtmp4.2/12,MS4.0/33,Error ellipse: s-maj=22.4km s-min=14.3km az=51.0*

*NEIC **05** 04:57:36.7±2.5,29.81S±0.08×177.0W±0.1, h35km±1km, mb4.7/31,Error ellipse: s-maj=19.0km s-min=9.0km az=53.0*

*GCMT **05** 04:57:37.7±0.3,29.76S±0.03×176.80W±0.02,h22km, MW5.0/89,Moment Tensor Solution. s47,c61; s89,c107; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr3.87±.21; Mθθ-0.87±.15; Mφφ-3.00±.14; Mrθ-0.08±.29; Mθφ-1.15±.09; Mφr1.88±.21; Best double couple: Mo4.12900×10^16 NP1:φs13.00000°,δ58.00000°,λ80.00000°. NP2: φs212.00000°,δ33.00000°,λ106.00000°. Principal axes: T 4.3760, Plg75.0000°, Azm255.0000°; N -0.4950, Plg9.0000°, Azm19.0000°; P -3.8810, Plg13.0000°, Azm111.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NOU **05** 04:58:42.7,33.90S×179.24E,h165km,mb4.2/9,South of Kermadec Islands*

**ISC 05 04:57:34.4±0.4,30.12S±0.04×177.19W±0.06,h24km, n188,σ1ϑ92/160,mb4.6/30,MS4.0/32,5C,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **1.06** | **323** | P | **Pn** | **04 57 52.6** | **-1.3** |
| GLKZ | | | | S | **Sn** | **04 58 08.7** | **+0.9** |
| **RAO** | **Raoul Island** | **1.07** | **324** | | **Pn** | **04 57 52.6** | **-1.3** |
| RAO | | | | Sn | **Sb** | **04 58 07.5** | **-0.4** |
| **RAO** | **Raoul Island** | **1.07** | **324** | Pn | **Pn** | **04 57 53.0** | **-0.9** |
| | 2μm,0.3s,baz=88,slow=10,SNR=54 | | | | | | |
| RAO | | | | Sn | **Sb** | **04 58 07.4** | **-0.4** |
| | 3μm,0.3s,baz=73,slow=19,SNR=12 | | | | | | |
| RAO | | | | LR | LR | 04 58 18.1 | |
| | comp=Z,9μm,20.1s,baz=138,slow=50 | | | | | | |
| **RIZ** | **Raoul Island** | **1.08** | **323** | P | **Pn** | **04 57 52.8** | **-1.3** |
| RIZ | | | | S | **Sb** | **04 58 08.2** | **0.0** |
| **HAZ** | **Te Kaha** | **8.69** | **207** | P | **Pn** | **04 59 36.8** | **-1.8** |
| HAZ | | | | S | **Sn** | **05 01 21.1** | **+5.4** |
| **PUZ** | **Puketiti** | **8.79** | **204** | S | **Sn** | **05 01 20.6** | **+2.3** |
| **RUGZ** | **Raukumara Rang** | **8.91** | **207** | P | **Pn** | **04 59 39.8** | **-1.9** |
| RUGZ | | | | S | **Sn** | **05 01 24.6** | **+3.1** |
| **TWGZ** | **Tauwhareparae** | **8.98** | **205** | S | **Sn** | **05 01 26.5** | **+3.5** |
| **TKGZ** | **Te Karaka** | **9.26** | **205** | S | **Sn** | **05 01 32.2** | **+2.4** |
| **OUZ** | **Omahuta** | **9.28** | **234** | P | Pn | 04 59 54.1 | +7.4 |
| **MWZ** | **Matawai** | **9.29** | **207** | P | **Pn** | **04 59 44.2** | **-2.7** |
| MWZ | | | | S | **Sn** | **05 01 32.2** | **+1.7** |
| **URZ** | **Urewera** | **9.39** | **209** | Pn | **Pn** | **04 59 46.6** | **-1.6** |
| | 0.7nm,0.3s,baz=3.5,slow=3.8,SNR=6.6 | | | | | | |
| URZ | | | | Sn | **Sn** | **05 01 34.5** | **+1.5** |
| | 3.4nm,0.3s,baz=288,slow=20,SNR=1.8 | | | | | | |
| **URZ** | **Urewera** | **9.39** | **209** | P | Pn | 04 59 43.7 | -4.5 |
| URZ | | | | S | **Sn** | **05 01 33.9** | **+0.9** |
| **RAGZ** | **Rawiri** | **9.47** | **207** | S | **Sn** | **05 01 36.3** | **+1.2** |
| **RIGZ** | **Rimuhau** | **9.53** | **205** | S | **Sn** | **05 01 37.6** | **+1.1** |
| **MUGZ** | **Murupara** | **9.72** | **209** | P | **Pn** | **04 59 49.7** | **-3.0** |
| MUGZ | | | | S | **Sn** | **05 01 42.1** | **+1.0** |
| **RTZ** | **Ruatahuna** | **9.75** | **208** | P | **Pn** | **04 59 50.1** | **-3.1** |
| **SNGZ** | **Shannon Statio** | **9.75** | **206** | S | **Sn** | **05 01 43.4** | **+1.5** |
| **KNZ** | **Kokohu** | **9.84** | **204** | P | Pn | 04 59 50.2 | -4.1 |
| KNZ | | | | S | **Sn** | **05 01 43.2** | **-0.8** |
| **RAHZ** | **Arahi** | **9.96** | **207** | P | **Pn** | **04 59 56.3** | **+0.2** |
| RAHZ | | | | S | **Sn** | **05 01 47.1** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **10.41** | **208** | P | **Pn** | **05 00 05.3** | **+3.0** |
| **HIZ** | **Hauiti** | **10.64** | **216** | P | **Pn** | **05 00 07.4** | **+2.0** |
| **BFZ** | **Birch Farm** | **11.82** | **205** | Pn | **Pn** | **05 00 21.8** | **+0.3** |
| **MSWZ** | **Moikau Station** | **12.83** | **206** | Pn | P | 05 00 41.5 | -4.4 |
| **MSVF** | **Nonsavu** | **13.07** | **340** | LR | LR | 05 04 05.9 | |
| | comp=Z,339nm,20.3s,baz=165,slow=31 | | | | | | |
| **TUWZ** | **Tuamarina** | **13.38** | **210** | Pn | **Pn** | **05 00 41.9** | **-0.8** |
| **QRZ** | **Quartz Range** | **13.56** | **215** | P | **Pn** | **05 00 46.1** | **+0.8** |
| **CTZ** | **Chatham Island** | **13.60** | **178** | Pn | **Pn** | **05 00 44.5** | **-1.3** |
| **THZ** | **Tophouse** | **14.11** | **212** | Pn | **Pn** | **05 00 53.8** | **+1.0** |
| **THZ** | **Tophouse** | **14.11** | **212** | P | **Pn** | **05 00 48.8** | **-4.0** |
| THZ | | | | S | **Sn** | **05 03 22.9** | **-5.7** |
| **KHZ** | **Kahutara** | **14.36** | **209** | P | **Pn** | **05 00 56.2** | **+0.1** |
| **KHZ** | **Kahutara** | **14.36** | **209** | P | **Pn** | **05 00 52.2** | **-3.9** |
| KHZ | | | | S | **Sn** | **05 03 27.7** | **-6.9** |
| **GVZ** | **Greta Valley S** | **15.02** | **209** | P | **Pn** | **05 01 03.8** | **-1.4** |
| **LTZ** | **Lake Taylor** | **15.20** | **211** | Pn | **Pn** | **05 01 06.7** | **-0.9** |
| **LTZ** | **Lake Taylor** | **15.20** | **211** | P | **Pn** | **05 01 05.0** | **-2.6** |
| LTZ | | | | S | Sn | 05 03 45.2 | -10 |
| **INZ** | **Inchbonnie** | **15.54** | **213** | P | **Pn** | **05 01 07.2** | **-4.7** |
| **OXZ** | **Oxford** | **15.74** | **210** | P | **Pn** | **05 01 12.0** | **-2.5** |
| OXZ | | | | S | Sn | 05 03 56.0 | -12 |
| **MQZ** | **McQueen's Vall** | **15.79** | **208** | P | **Pn** | **05 01 13.4** | **-1.7** |
| MQZ | | | | S | Sn | 05 03 55.8 | -14 |
| **WVZ** | **Waitaha Valley** | **16.14** | **213** | P | **Pn** | **05 01 19.8** | **+0.2** |
| **RPZ** | **Rata Peaks** | **16.48** | **211** | P | **Pn** | **05 01 24.1** | **0.0** |
| **RPZ** | **Rata Peaks** | **16.48** | **211** | Pn | **Pn** | **05 01 22.8** | **-1.2** |
| **RPZ** | **Rata Peaks** | **16.48** | **211** | Pn | **Pn** | **05 01 22.3** | **-1.7** |
| | 1.0nm,0.3s,baz=26,slow=4.2,SNR=2.0 | | | | | | |
| RPZ | | | | Sn | **Sn** | **05 04 18.2** | **-8.1** |
| | 0.5nm,0.3s,baz=323,slow=20,SNR=3.5 | | | | | | |
| **RPZ** | **Rata Peaks** | **16.48** | **211** | P | **Pn** | **05 01 24.1** | **0.0** |
| **ARCZ** | **Arundel** | **16.61** | **211** | P | **Pn** | **05 01 23.7** | **-2.0** |
| **DZM** | **Mont Dzumac** | **16.73** | **295** | *e*Pn | **P** | **05 01 31.1** | **+1.6** |
| | 128nm,1.5s | | | | | | |
| DZM | | | | *e*LR | LR | 05 05 19.4 | |
| | 2μm,25.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.73** | **295** | Pn | **Pn** | **05 01 23.3** | **-4.1** |
| DZM | | | | IAmb | IAmb | 05 01 38.6 | |
| | comp=Z,70nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.73** | **295** | Pn | **P** | **05 01 33.7** | **+4.2** |
| | comp=Z,0.3nm,0.3s,baz=118,slow=10,SNR=9.8 | | | | | | |
| DZM | | | | LR | LR | 05 06 53.1 | |
| | comp=Z,2μm,18.5s,baz=173,slow=34 | | | | | | |
| **FOZ** | **Fox Glacier** | **16.93** | **214** | P | **Pn** | **05 01 29.4** | **-0.2** |
| **TMZ** | **Tmaru** | **17.03** | **210** | P | **Pn** | **05 01 28.9** | **-2.1** |
| **ODZ** | **Otahua Downs** | **17.72** | **209** | P | **P** | **05 01 41.6** | **+1.4** |
| **ODZ** | **Otahua Downs** | **17.72** | **209** | Pn | **Pn** | **05 01 38.3** | **-1.2** |
| ODZ | | | | IAmb | IAmb | 05 01 46.7 | |
| | comp=Z,27nm,1.0s | | | | | | |
| **JCZ** | **Jackson Bay** | **17.83** | **215** | P | **Pn** | **05 01 39.9** | **-1.0** |
| **RAR** | **Rarotonga** | **18.01** | **65** | LR | LR | 05 06 44.6 | |
| | comp=Z,425nm,20.1s,baz=212,slow=31 | | | | | | |
| **MLZ** | **Mavora Lakes** | **19.10** | **213** | | **Pn** | **05 01 58.4** | **+2.0** |
| **SYZ** | **Scrubby Hill** | **19.54** | **209** | P | **Pn** | **05 02 03.9** | **+2.3** |
| **TBI** | **Tubuai** | **25.63** | **81** | *e*S | **S** | **05 07 26.9** | **-2.2** |
| | comp=Z,4μm,26.2s | | | | | | |
| TBI | | | | *e*LR | LR | 05 09 24.5 | |
| | comp=Z,3μm,26.8s | | | | | | |
| **PPT2** | **Papeete2** | **28.08** | **70** | *e*P | **P** | **05 03 24.1** | **-0.3** |
| | comp=Z,62nm,23.2s | | | | | | |
| PPT2 | | | | *e*S | **S** | **05 08 05.6** | **-2.5** |
| | comp=Z,1μm,30.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 05 10 21.8 | |
| | comp=Z,364nm,26.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 05 10 28.7 | |
| | comp=Z,504nm,25.2s | | | | | | |
| **PPT** | **Papeete** | **28.09** | **70** | LR | LR | 05 11 37.6 | |
| | comp=Z,189nm,21.3s,baz=194,slow=30 | | | | | | |
| **EIDS** | **Eidsvold** | **28.42** | **272** | P | **P** | **05 03 26.8** | **-0.6** |
| **HNR** | **Honiara** | **29.66** | **309** | LR | LR | 05 14 29.3 | |
| | comp=Z,4μm,18.3s,baz=142,slow=34 | | | | | | |
| **TOO** | **Toolangi** | **31.72** | **246** | P | **P** | **05 03 59.2** | **+2.8** |
| TOO | | | | IAmb | IAmb | 05 04 06.4 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **CTA** | **Charters Tower** | **34.45** | **278** | LR | LR | 05 17 05.4 | |
| | comp=Z,69nm,18.3s,baz=112,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **34.45** | **278** | P | **P** | **05 04 22.1** | **+1.7** |
| **STKA** | **Stephens Creek** | **35.22** | **256** | P | **P** | **05 04 28.9** | **+1.9** |
| STKA | | | | IAmb | IAmb | 05 04 30.9 | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.22** | **256** | P | **P** | **05 04 28.9** | **+1.9** |
| | comp=Z,2.8nm,0.6s,baz=97,slow=10,SNR=5.1 | | | | | | |
| STKA | | | | LR | LR | 05 17 43.0 | |
| | comp=Z,704nm,18.5s,baz=121,slow=34 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **RKT** | **Rikitea** | **38.22** | **90** | *e*LR | LR | 05 15 06.6 | |
| | comp=Z,2μm,30.5s | | | | | | |
| **RABL** | **Rabaul** | **38.77** | **306** | P | **P** | **05 04 55.9** | **-1.4** |
| **BBOO** | **Buckleboo** | **39.72** | **254** | P | **P** | **05 05 05.3** | **+0.3** |
| **TAOE** | **Nuku Hiva Isla** | **40.55** | **66** | *e*LR | LR | 05 16 12.2 | |
| | comp=Z,328nm,25.3s | | | | | | |
| **AS31** | **Alice Springs** | **43.82** | **266** | P | **P** | **05 05 39.5** | **+0.6** |
| **ASAR** | **Alice Springs** | **43.82** | **266** | P | **P** | **05 05 38.5** | **-0.3** |
| **ASAR** | **Alice Springs** | **43.82** | **266** | P | **P** | **05 05 39.0** | **+0.2** |
| | comp=Z,2.0nm,0.6s,baz=102,slow=7.7,SNR=28 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 07 25.6** | **+0.4** |
| | comp=Z,1.3nm,0.7s,baz=108,slow=3.4,SNR=4.2 | | | | | | |
| ASAR | | | | LR | LR | 05 23 33.7 | |
| | comp=Z,990nm,18.6s,baz=139,slow=36 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.61** | **272** | P | **P** | **05 05 45.4** | **+0.4** |
| WR0 | | | | IAmb | IAmb | 05 06 00.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.78** | **271** | P | **P** | **05 05 46.5** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 05 05 59.7 | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.78** | **271** | P | **P** | **05 05 47.0** | **+0.6** |
| **WRA** | **Warramunga Arr** | **44.79** | **271** | P | **P** | **05 05 46.7** | **+0.2** |
| **WRA** | **Warramunga Arr** | **44.79** | **271** | P | **P** | **05 05 46.5** | **0.0** |
| | comp=Z,3.5nm,0.6s,baz=110,slow=7.5,SNR=40 | | | | | | |
| WRA | | | | LR | LR | 05 23 32.9 | |
| | comp=Z,401nm,18.2s,baz=130,slow=35 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.81** | **272** | P | **P** | **05 05 46.9** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 05 05 59.8 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **46.80** | **255** | P | **P** | **05 06 02.9** | **+0.7** |
| **VNDA** | **Vanda** | **48.45** | **186** | P | **P** | **05 06 18.4** | **+4.0** |
| **VNDA** | **Vanda** | **48.45** | **186** | P | **P** | **05 06 16.9** | **+2.5** |
| | comp=Z,0.4nm,0.6s,baz=12,slow=7.5,SNR=5.3 | | | | | | |
| VNDA | | | | LR | LR | 05 24 52.8 | |
| | comp=Z,112nm,19.0s,baz=28,slow=34 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **51.38** | **274** | P | **P** | **05 06 36.5** | **-1.0** |
| KNRA | | | | IAmb | IAmb | 05 06 55.1 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **55.15** | **249** | LR | LR | 05 30 28.1 | |
| | comp=Z,216nm,18.1s,baz=102,slow=36 | | | | | | |
| **CASY** | **Casey** | **55.72** | **208** | P | **P** | **05 07 09.9** | **+1.3** |
| CASY | | | | IAmb | IAmb | 05 07 26.4 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **56.78** | **314** | LR | LR | 05 28 31.2 | |
| | comp=Z,97nm,20.6s,baz=172,slow=33 | | | | | | |
| **RPN** | **Rapa Nui** | **58.84** | **105** | LR | LR | 05 29 14.0 | |
| | comp=Z,106nm,18.0s,baz=259,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.99** | **180** | P | **P** | **05 07 42.0** | **+3.1** |
| QSPA | | | | IAmb | IAmb | 05 07 54.9 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **59.99** | **180** | P | **P** | **05 07 42.2** | **+3.4** |
| | comp=Z,5.8nm,1.0s,baz=23,slow=2.8,SNR=13 | | | | | | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **KAPI** | **Kappang** | **64.25** | **280** | LR | LR | 05 35 27.5 | |
| | comp=Z,116nm,20.7s,baz=120,slow=35 | | | | | | |
| **DAV** | **Davao City (W)** | **66.14** | **294** | LR | LR | 05 36 16.5 | |
| | comp=Z,70nm,19.1s,baz=178,slow=35 | | | | | | |
| **BELA** | **Belgrano 2** | **69.97** | **172** | P | **P** | **05 08 44.7** | **+1.4** |
| BELA | | | | IAmb | IAmb | 05 08 52.9 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **JOW** | **Kunigami** | **76.99** | **312** | LR | LR | 05 37 34.0 | |
| | comp=Z,87nm,21.4s,baz=118,slow=31 | | | | | | |
| **TROLL** | **Troll, Antarti** | **78.16** | **180** | ⇑P | **P** | **05 09 33.3** | **+1.9** |
| | comp=Z,240nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **78.41** | **325** | P | **P** | **05 09 32.2** | **-0.9** |
| | comp=Z,1.1nm,0.7s,baz=157,slow=4.9,SNR=4.2 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **78.42** | **178** | P | **P** | **05 09 34.3** | **+1.5** |
| SNAA | | | | IAmb | IAmb | 05 09 35.8 | |
| | comp=Z,8.9nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **78.42** | **178** | ⇑P | **P** | **05 09 34.2** | **+1.5** |
| | comp=Z,43nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **78.42** | **178** | P | **P** | **05 09 34.2** | **+1.5** |
| | comp=Z,2.8nm,1.1s,baz=253,slow=3.6,SNR=5.6 | | | | | | |
| | comp=Z,2.8nm,1.1s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **78.54** | **176** | ⇑P | **P** | **05 09 34.7** | **+1.3** |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **78.98** | **177** | ⇑P | **P** | **05 09 37.3** | **+1.6** |
| | comp=Z,4.9nm,1.3s,baz=190,slow=3.1 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **79.21** | **176** | ⇑P | **P** | **05 09 38.6** | **+1.6** |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **79.81** | **318** | LR | LR | 05 40 40.6 | |
| | comp=Z,45nm,18.6s,baz=136,slow=32 | | | | | | |
| **H03S2** | **Juan Fernandez** | **80.03** | **123** | T | T | 06 37 38.9 | |
| | baz=239,slow=74,SNR=6.0 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.05** | **123** | T | T | 06 37 37.3 | |
| | baz=239,slow=74,SNR=6.0 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.05** | **123** | T | T | 06 37 30.0 | |
| | baz=239,slow=74,SNR=7.1 | | | | | | |
| **PLCA** | **Paso Flores** | **82.19** | **133** | P | **P** | **05 09 55.8** | **+2.2** |
| | comp=Z,2.5nm,0.9s,baz=319,slow=9.3,SNR=3.0 | | | | | | |
| PLCA | | | | LR | LR | 05 37 05.6 | |
| | comp=Z,72nm,20.2s,baz=204,slow=29 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **LPIG** | **La Paz** | **83.79** | **58** | LR | LR | 05 42 40.0 | |
| | comp=Z,106nm,18.3s,baz=204,slow=32 | | | | | | |
| **KSRS** | **Korea Array** | **84.59** | **319** | P | **P** | **05 10 06.6** | **+0.9** |
| | comp=Z,1.0nm,0.8s,baz=142,slow=8.8,SNR=4.2 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.50** | **47** | LR | LR | 05 41 16.6 | |
| | comp=Z,78nm,18.9s,baz=238,slow=31 | | | | | | |
| **NJ2** | **Nanjing** | **86.59** | **310** | *e*P | **P** | **05 10 17.1** | **+1.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **87.31** | **326** | P | **P** | **05 10 20.2** | **+1.2** |
| | comp=Z,2.8nm,0.8s,baz=94,slow=5.7,SNR=6.5 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **87.38** | **38** | LR | LR | 05 41 47.3 | |
| | comp=Z,77nm,21.1s,baz=221,slow=30 | | | | | | |
| **GMN** | **Gold Mountain** | **87.42** | **44** | P | **P** | **05 10 17.9** | **-2.2** |
| GMN | | | | IAmb | IAmb | 05 10 35.7 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.56** | **42** | P | **P** | **05 10 20.9** | **+0.3** |
| | comp=Z,1.4nm,0.8s,baz=230,slow=6.3,SNR=8.3 | | | | | | |
| NVAR | | | | LR | LR | 05 44 13.1 | |
| | comp=Z,177nm,18.3s,baz=242,slow=32 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **TPH** | **Tonopah** | **87.96** | **43** | P | **P** | **05 10 21.3** | **-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FBE** | **Freiberg** | **157.77** | **342** | *e*PKPab | sPKPab | 05 18 12.9 | +3.2 |
| | baz=21,slow=4.1 | | | | | | | |
| **GTTG** | **Gottingen** | **157.94** | **348** | *e*PKPab | sPKPab | 05 18 13.1 | +2.7 |
| | baz=21,slow=4.1 | | | | | | | |
| **MLFH** | **Mildenfurth** | **158.21** | **344** | *e*PKPab | sPKPab | 05 18 14.2 | +2.6 |
| | baz=21,slow=4.1 | | | | | | | |
| **SCHF** | **Schoenfels** | **158.24** | **343** | *e*PKPab | sPKPab | 05 18 14.6 | +2.8 |
| | baz=21,slow=4.1 | | | | | | | |
| **MOX** | **Moxa** | **158.46** | **345** | *e*PKPab | sPKPab | 05 18 14.8 | +2.1 |
| | baz=21,slow=4.1 | | | | | | | |
| **TANN** | **Tannenbergstha** | **158.46** | **343** | *e*PKPab | sPKPab | 05 18 15.0 | +2.2 |
| | baz=21,slow=4.1 | | | | | | | |
| **WERD** | **Werda** | **158.47** | **343** | *e*PKPab | sPKPab | 05 18 15.8 | +3.0 |
| | baz=21,slow=4.1 | | | | | | | |
| **PLN** | **Plauen** | **158.47** | **344** | *e*PKPab | sPKPab | 05 18 15.7 | +2.9 |
| | baz=21,slow=4.1 | | | | | | | |
| **KHC** | **Kasperske Hory** | **159.32** | **340** | *e*PKPAB | **PKPab** | **05 18 07.5** | **-0.4** |
| **CONA** | **Conrad Observa** | **159.58** | **334** | *e*PKP | **PKPab** | **05 18 09.7** | **+0.5** |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **159.60** | **333** | *e*PKP | **PKPab** | **05 18 10.1** | **+0.8** |
| | comp=Z,5.4nm,1.5s | | | | | | | |
| **MOA** | **Molln** | **160.22** | **337** | *e*PKP | **PKPab** | **05 18 12.4** | **+0.5** |
| | comp=Z,3.9nm,1.6s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **160.57** | **338** | *e*PKP | **PKPab** | **05 18 13.1** | **-0.3** |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **SOKA** | **Soboth** | **160.93** | **334** | *e*PKP | **PKPab** | **05 18 15.0** | **-0.1** |
| | comp=Z,3.7nm,1.5s | | | | | | | |
| **LESA** | **Schwarzleotal** | **161.11** | **339** | *e*PKP | **PKPab** | **05 18 15.7** | **-0.2** |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| **OBKA** | **Obir** | **161.25** | **334** | *e*PKP | **PKPab** | **05 18 16.9** | **-1.4** |
| | comp=Z,2.2nm,1.1s | | | | | | | |
| **WATA** | **Walderalm** | **161.52** | **341** | *e*PKP | **PKPab** | **05 18 16.3** | **-1.4** |
| | comp=Z,5.0nm,1.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **161.57** | **341** | *e*PKP | **PKPab** | **05 18 17.5** | **-0.5** |
| | comp=Z,2.6nm,1.1s | | | | | | | |
| **RETA** | **Reutte** | **161.60** | **343** | *e*PKP | **PKPab** | **05 18 16.3** | **-1.7** |
| | comp=Z,3.9nm,1.5s | | | | | | | |
| **MOTA** | **Moosalm** | **161.64** | **342** | *e*PKP | **PKPab** | **05 18 18.2** | **-0.1** |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| **FETA** | **Feichten** | **162.04** | **342** | *e*PKP | **PKPab** | **05 18 18.6** | **-1.4** |
| | comp=Z,2.5nm,1.2s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.08** | **176** | PKP | **PKPdf** | **05 17 36.1** | **+0.6** |
| | comp=Z,1.0nm,1.1s,baz=177,slow=2.9,SNR=3.5 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **05 18 25.8** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=183,slow=3.2,SNR=6.2 | | | | | | | |

**IDC 05 05:14:33.5±2.4, 30°02'S×177°12'W, h0km, mb3.5/2, mbtmp3.5/2, Error ellipse: s-maj=55.1km s-min=30.1km az=60.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.03** | **317** | Pn | Pn | 05 14 55.7 | +0.4 |
| | 238nm,0.3s,baz=198,slow=22,SNR=7.3 | | | | | | |
| RAO | | | | Sn | Sn | 05 15 11.1 | +0.6 |
| | 906nm,0.3s,baz=70,slow=22,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **43.89** | **266** | P | P | 05 22 42.5 | +0.4 |
| | 0.3nm,0.7s,baz=102,slow=7.3,SNR=4.1 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.85** | **271** | P | P | 05 22 49.0 | -0.8 |
| | 0.5nm,0.5s,baz=111,slow=7.6,SNR=6.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **145.05** | **341** | PKPbc | PKPbc | 05 34 10.6 | -0.9 |
| | 0.9nm,0.5s,baz=33,slow=2.7,SNR=11 | | | | | | |

*NNC **05** 05:15:50.2±5.8, 39°.28N×77°.18E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=59.1km s-min=37.7km az=87.0*

**KRNET 05 05:15:54.5±0.1, 39°.25N×77°.55E, mb2.6, 9C-5D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NRN** | **Naryn** | **2.48** | **332** | ⇓*e*P | Pn | 05 16 38.1 | +1.6 |
| | baz=31 | | | | | | |
| NRN | | | | ⇓*e*S | Sb | 05 17 10.0 | -1.4 |
| | baz=31 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.48** | **4** | ⇑*e*P | Pn | 05 16 38.1 | +1.5 |
| | baz=4.0 | | | | | | |
| TARG | | | | ⇑*e*S | Sb | 05 17 10.0 | -1.5 |
| | baz=4.0 | | | | | | |
| **KDJ** | **Kajisay** | **2.89** | **355** | ⇑*e*P | Pn | 05 16 43.8 | +1.9 |
| | baz=55 | | | | | | |
| KDJ | | | | ⇑*e*S | Sn | 05 17 19.7 | +2.2 |
| | baz=55 | | | | | | |
| **PRZ** | **Przheval'sk** | **3.29** | **11** | ⇑*e*P | Pn | 05 16 49.7 | +2.2 |
| | baz=11 | | | | | | |
| PRZ | | | | ⇑*e*S | Sn | 05 17 29.8 | +2.3 |
| | baz=11 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.46** | **340** | ⇑*e*P | Pn | 05 16 51.8 | +2.0 |
| | baz=40 | | | | | | |
| BOOM | | | | ⇑*e*S | Sn | 05 17 33.7 | +2.2 |
| | baz=40 | | | | | | |
| **TNSS** | **Tian-Shan** | **3.81** | **353** | Pg | Pb | 05 16 59.6 | -3.2 |
| | 2.0nm,0.5s | | | | | | |
| TNSS | | | | Lg | Lg | 05 17 50.0 | |
| | 3.0nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **3.93** | **355** | Pg | Pb | 05 17 02.7 | -1.9 |
| | 1.7nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 05 17 52.9 | |
| | 7.9nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.95** | **339** | ⇓Pg | Pn | 05 16 57.2 | +0.6 |
| | 0.5nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 05 17 53.4 | |
| | 8.7nm,1.2s | | | | | | |
| **KNDC** | **Almaty** | **3.99** | **354** | ⇓Pg | Pn | 05 16 57.8 | +0.9 |
| | 22nm,0.5s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 05 17 55.1 | |
| | 31nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.00** | **355** | Pg | Pb | 05 17 03.4 | -2.4 |
| | 2.5nm,0.4s | | | | | | |
| KOTS | | | | Lg | Lg | 05 17 55.2 | |
| | 9.9nm,0.1s | | | | | | |
| **DGS** | **Degeres** | **4.21** | **342** | Pg | Pb | 05 17 09.1 | -0.3 |
| | 1.6nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 05 18 04.4 | |
| | 6.3nm,0.6s | | | | | | |
| **KPKS** | **Kokpek** | **4.30** | **11** | Pg | Pb | 05 17 10.8 | -0.2 |
| | 0.7nm,0.1s | | | | | | |
| KPKS | | | | Lg | Lg | 05 18 06.4 | |
| | 7.3nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.96** | **2** | Pg | Pb | 05 17 21.3 | -0.9 |
| | 1.6nm,0.3s | | | | | | |
| ARXS | | | | Lg | Lg | 05 18 25.4 | |
| | 5.6nm,0.6s | | | | | | |

*IDC **05** 05:17:51.0±1.1, 0°.74N×97°.46E, h22km±4km, mb3.9/10, mbtmp4.1/11, ML5.0/1, MS3.0/1, Error ellipse: s-maj=37.6km s-min=18.6km az=55.0*

*DJA **05** 05:17:51.6±0.9, 1°.1N±3°×97°.7E±°, h13km±3km, M4.6/12, mb4.7/4, MLv4.5/12*

*NEIC **05** 05:17:55.5±1.4, 1°.13N±0°.08×97°.38E±0°.08, h35km±1km, mb4.4/29, Error ellipse: s-maj=15.9km s-min=10.4km az=43.0*

**ISC 05 05:17:52.0±0.6, 0°.88N±0°.05×97°.31E±0°.08, h27km, n72, σ1°33/64, mb4.4/25, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **0.49** | **32** | | **Pn** | **05 18 03.3** | **-0.1** |
| **GSI** | **Gunungsitoli** | **0.49** | **32** | P | **Pn** | **05 18 03.2** | **-0.1** |
| GSI | | | | S | **Sb** | **05 18 07.3** | **-1.9** |
| **PBSI** | **Pulau Batu** | **1.34** | **134** | P | **Pn** | **05 18 13.6** | **-1.4** |
| **RPSI** | **Rantau Prapat** | **2.42** | **42** | | **Pn** | **05 18 30.2** | **+0.4** |
| **KCSI** | **Kotacane, Aceh** | **2.66** | **10** | P | **Pn** | **05 18 33.8** | **+0.6** |
| **SISI** | **Saibi** | **2.82** | **141** | P | **Pn** | **05 18 34.8** | **-0.6** |
| **PDSI** | **Padang** | **3.62** | **120** | P | **Pn** | **05 18 46.2** | **-0.1** |
| **BKNI** | **Bangkinang** | **3.77** | **98** | | **Pn** | **05 18 51.1** | **+2.7** |
| **BKNI** | **Bangkinang** | **3.77** | **98** | P | **Pn** | **05 18 47.9** | **-0.5** |
| **LHMI** | **Lhok Sumawe** | **4.33** | **355** | Pn | **Pn** | **05 18 53.7** | **-2.4** |
| **PPSI** | **Pulau Pagai** | **4.51** | **143** | P | **Pn** | **05 18 58.4** | **-0.2** |
| **IPM** | **Ipoh** | **5.15** | **46** | Pn | **Pn** | **05 19 07.6** | **+0.2** |
| **KULM** | **Kulim** | **5.50** | **37** | Pn | **Pn** | **05 19 10.8** | **-1.4** |
| **MYKOM** | **Kota Tinggi** | **6.60** | **82** | | **Pn** | **05 19 27.3** | **0.0** |
| **MNAI** | **Manna** | **7.68** | **133** | Pn | Pn | 05 19 47.0 | +4.8 |
| **UGM** | **Wanagama** | **15.81** | **124** | Pn | **P** | **05 21 34.0** | **-2.6** |
| **CMAR** | **Chiang Mai Arr** | **17.54** | **5** | Pn | **Pn** | **05 21 54.1** | **-0.6** |
| | 1.7nm,0.3s,baz=195,slow=11,SNR=12 | | | | | | |
| CMAR | | | | LR | LR | 05 29 17.2 | |
| | comp=Z,52nm,20.8s,baz=110,slow=39 | | | | | | |
| | 3.6nm,0.5s | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.55** | **74** | P | **P** | **05 22 17.4** | **-0.5** |
| KKM | | | | IAmb | IAmb | 05 22 21.8 | |
| | comp=Z,29nm,1.1s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SLVN** | **Son La** | **21.32** | **17** | P | **P** | **05 22 35.0** | **-2.0** |
| **MYLDM** | **Lahad Datu** | **21.58** | **78** | P | **P** | **05 22 39.1** | **-0.8** |
| MYLDM | | | | IAmb | IAmb | 05 22 41.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **23.47** | **89** | P | **P** | **05 22 59.8** | **+0.1** |
| TOLI2 | | | | IAmb | IAmb | 05 23 12.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **25.09** | **348** | P | **P** | **05 23 13.8** | **-1.0** |
| SHL | | | | IAmb | IAmb | 05 23 17.5 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **25.83** | **9** | P | **P** | **05 23 24.3** | **+2.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.3s | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.16** | **251** | T | T | 05 50 29.6 | |
| | baz=72,slow=76,SNR=637 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.17** | **251** | T | T | 05 50 29.8 | |
| | baz=72,slow=76,SNR=1311 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.18** | **251** | T | T | 05 50 31.0 | |
| | baz=72,slow=76,SNR=322 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **31.35** | **137** | | **P** | **05 24 09.9** | **-0.6** |
| PSA00 | | | | IAmb | IAmb | 05 24 15.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **31.35** | **137** | P | **P** | **05 24 13.2** | **+2.7** |
| PSA00 | | | | IAmb | IAmb | 05 24 17.2 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **TPUB** | **Ta-pu** | **31.76** | **44** | P | **P** | **05 24 13.0** | **-1.2** |
| **SSLB** | **Suanglung** | **32.31** | **43** | P | **P** | **05 24 18.6** | **-0.4** |
| **H01W3** | **Cape Leeuwin H** | **38.91** | **158** | T | T | 06 06 38.3 | |
| | baz=333,slow=76,SNR=47 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **38.92** | **158** | T | T | 06 06 39.2 | |
| | baz=333,slow=76,SNR=55 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **38.93** | **158** | T | T | 06 06 39.5 | |
| | baz=333,slow=76,SNR=55 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.77** | **122** | P | **P** | **05 25 37.7** | **-1.8** |
| | comp=Z,2.0nm,1.2s,baz=303,slow=8.9,SNR=6.5 | | | | | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.78** | **122** | P | **P** | **05 25 38.0** | **-1.6** |
| **HHC** | **Hu-ho-hao-te** | **41.83** | **16** | *e*P | **P** | **05 25 43.8** | **+4.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,38nm,4.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **41.95** | **122** | P | **P** | **05 25 39.7** | **-1.2** |
| **FORT** | **Forrest** | **42.96** | **140** | P | **P** | **05 25 51.1** | **+2.2** |
| **ASAR** | **Alice Springs** | **43.12** | **127** | P | **P** | **05 25 48.4** | **-2.0** |
| **ASAR** | **Alice Springs** | **43.12** | **127** | P | **P** | **05 25 48.0** | **-2.3** |
| | comp=Z,0.5nm,0.7s,baz=297,slow=7.5,SNR=7.6 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **43.12** | **127** | P | **P** | **05 25 51.9** | **+1.5** |
| **CHGR** | **Chuyangaron** | **45.59** | **329** | P | **P** | **05 26 10.3** | **+0.3** |
| CHGR | | | | IAmb | IAmb | 05 26 35.1 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **SIMJ** | **Simiganj** | **45.67** | **329** | P | **P** | **05 26 09.7** | **-1.0** |
| SIMJ | | | | IAmb | IAmb | 05 26 13.2 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **45.98** | **19** | *e*P | P | 05 26 20.3 | +7.3 |
| XLT | | | | pP | sP | 05 26 26.1 | +1.6 |
| XLT | | | | sP | pP | 05 26 33.0 | +12 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.02** | **34** | P | **P** | **05 26 13.0** | **-0.3** |
| **KSRS** | **Korea Array** | **46.05** | **34** | P | **P** | **05 26 12.8** | **-0.7** |
| | comp=Z,2.5nm,0.8s,baz=222,slow=8.1,SNR=12 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **KS19** | **Wonju Array Si** | **46.05** | **34** | | **P** | **05 26 12.8** | **-0.8** |
| KS19 | | | | IAmb | IAmb | 05 26 15.1 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **47.58** | **346** | P | **P** | **05 26 26.1** | **+0.8** |
| MK31 | | | | IAmb | IAmb | 05 26 35.3 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **47.58** | **346** | P | **P** | **05 26 25.9** | **+0.5** |
| **MKAR** | **Makanchi Array** | **47.58** | **346** | P | **P** | **05 26 26.8** | **+1.4** |
| | comp=Z,2.5nm,0.6s,baz=161,slow=8.5,SNR=24 | | | | | | |
| MKAR | | | | pP | **pP** | **05 26 33.8** | **+0.2** |
| | comp=Z,2.6nm,0.5s,baz=159,slow=9.0,SNR=17 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **47.66** | **346** | P | **P** | **05 26 27.0** | **+0.9** |
| MAKZ | | | | IAmb | IAmb | 05 26 41.3 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **48.39** | **334** | P | **P** | **05 26 31.9** | **+0.2** |
| **KKAR** | **Karatay Array** | **48.39** | **334** | P | **P** | **05 26 31.7** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **52.06** | **345** | P | **P** | **05 27 00.5** | **+1.1** |
| | comp=Z,0.9nm,0.5s,baz=164,slow=7.5,SNR=9.4 | | | | | | |
| KURBB | | | | pP | **pP** | **05 27 07.8** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=164,slow=7.1,SNR=6.4 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.98** | **31** | P | **P** | **05 27 06.3** | **0.0** |
| | comp=Z,3.5nm,0.8s,baz=237,slow=6.5,SNR=5.5 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.89** | **351** | P | **P** | **05 27 13.5** | **+0.7** |
| ZAA0 | | | | IAmb | IAmb | 05 27 21.1 | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.89** | **351** | P | **P** | **05 27 13.3** | **+0.6** |
| **ZALV** | **Zalesovo Beam** | **53.89** | **351** | P | **P** | **05 27 13.7** | **+0.9** |
| | comp=Z,3.2nm,0.4s,baz=186,slow=6.0,SNR=14 | | | | | | |
| ZALV | | | | pP | **pP** | **05 27 20.8** | **-0.3** |
| | comp=Z,2.6nm,0.4s,baz=171,slow=6.5,SNR=6.3 | | | | | | |
| | comp=Z,3.2nm,0.4s | | | | | | |
| **JMM** | **Marumori** | **54.30** | **42** | P | **P** | **05 27 16.3** | **+0.2** |
| **ABKAR** | **Akbulak array** | **57.84** | **332** | P | **P** | **05 27 41.7** | **+0.5** |
| ABKAR | | | | IAmb | IAmb | 05 27 52.5 | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **61.58** | **214** | T | T | 06 34 50.4 | |
| | baz=54,slow=75,SNR=663 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **61.59** | **214** | T | T | 06 34 51.0 | |
| | baz=54,slow=75,SNR=778 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **61.59** | **214** | T | T | 06 34 49.6 | |
| | baz=54,slow=75,SNR=1177 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **61.91** | **214** | T | T | 06 35 14.9 | |
| | baz=54,slow=75,SNR=557 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **61.92** | **214** | T | T | 06 35 14.7 | |
| | baz=54,slow=75,SNR=500 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **61.93** | **214** | T | T | 06 35 11.8 | |
| | baz=54,slow=75,SNR=380 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.41** | **312** | pP | pP | 05 29 05.7 | -0.6 |
| | comp=Z,0.9nm,0.7s,baz=94,slow=5.0,SNR=4.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **75.58** | **322** | P | **P** | **05 29 34.5** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=95,slow=4.6,SNR=4.3 | | | | | | |
| AKASG | | | | pP | **pP** | **05 29 41.6** | **-1.3** |
| | comp=Z,0.9nm,0.6s,baz=98,slow=4.0,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **77.35** | **319** | P | **P** | **05 29 45.6** | **+1.0** |
| **FINES** | **FINESS Array B** | **80.33** | **333** | P | **P** | **05 30 01.0** | **+0.5** |
| | comp=Z,2.1nm,1.0s,baz=90,slow=5.7,SNR=5.1 | | | | | | |
| FINES | | | | pP | **PcP** | **05 30 08.3** | **+0.8** |
| | comp=Z,3.0nm,1.1s,baz=123,slow=7.0,SNR=1.9 | | | | | | |
| | comp=Z,2.1nm,1.0s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.87** | **340** | P | **P** | **05 30 14.6** | **+0.8** |
| | comp=Z,1.6nm,0.9s,baz=78,slow=8.4,SNR=1.6 | | | | | | |
| ARCES | | | | pP | **pP** | **05 30 21.4** | **-1.1** |
| | comp=Z,2.0nm,0.9s,baz=111,slow=3.1,SNR=1.9 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **CPUP** | **Villa Florida** | **144.85** | **222** | PKP | **PKPdf** | **05 37 27.8** | **+0.4** |
| | comp=Z,2.3nm,0.9s,baz=63,slow=2.5,SNR=3.8 | | | | | | |

*IDC **05** 05:35:44.5±5.1, 27°.41S×66°.78W, h109km±52km, mb3.5/3, mbtmp3.8/4, Error ellipse: s-maj=81.4km s-min=24.1km az=96.0*

*SJA **05** 05:35:45.4±0.6, 27°.40S×67°.24W, h170km±7km, ML3.3, MW3.5*

**ISC 05 05:35:47.1±0.8, 27°.42S±0°.04×67°.23W±0°.04, h152km±8km, n34, σ1°82/53, mb3.8/3, Catamarca Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VCA** | **Vinchina** | **1.57** | **213** | *e*P | **Pn** | **05 36 18.3** | **+0.6** |
| VCA | | | | *e*S | **Sn** | **05 36 44.3** | **+3.0** |
| VCA | | | | IAML | | 05 36 47.1 | |
| | comp=Z,179nm,0.4s | | | | | | |
| **CYA** | **Choya** | **1.62** | **129** | *e*P | Pn | 05 36 18.6 | +0.5 |
| CYA | | | | *e*S | **Sn** | **05 36 41.6** | **-0.4** |
| **FSA** | **Cafayete** | **1.71** | **41** | *e*P | **Pn** | **05 36 19.5** | **+0.2** |
| FSA | | | | *e*S | **Sn** | **05 36 38.5** | **-5.4** |
| **ACLC** | **CERRO LA CRUZ** | **2.02** | **173** | *e*P | **Pn** | **05 36 22.9** | **+0.2** |
| ACLC | | | | *e*S | **Sn** | **05 36 49.9** | **-0.2** |
| ACLC | | | | IAML | | 05 36 50.4 | |
| | comp=Z,54nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **2.68** | **266** | *e*P | **Pn** | **05 36 29.9** | **-0.6** |
| GO03 | | | | *e*S | **Sn** | **05 37 01.6** | **-2.5** |
| **AC05** | **El Transito** | **3.04** | **242** | *e*P | **Pn** | **05 36 34.7** | **-0.4** |
| AC05 | | | | *e*S | **Sn** | **05 37 11.9** | **-0.4** |
| AC05 | | | | IAML | | 05 37 12.8 | |
| | comp=Z,56nm,0.6s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GO02** | **Mina Guanaco** | **3.09** | **316** | *e*P | **Pn** | **05 36 36.5** | **+0.5** |
| **SLA** | **San Lorenzo** | **3.10** | **30** | *e*P | **Pn** | **05 36 36.8** | **+0.9** |
| SLA | | | | *e*S | **Sn** | **05 37 16.0** | **+2.3** |
| SLA | | | | IAML | | 05 37 16.6 | |
| | comp=Z,40nm,1.3s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **3.21** | **211** | *e*P | **Pn** | **05 36 37.4** | **+0.1** |
| **AVFE** | **Valle Fertil** | **3.24** | **183** | *e*P | **Pn** | **05 36 37.4** | **-0.2** |
| AVFE | | | | *e*S | **Sn** | **05 37 15.8** | **-1.0** |
| AVFE | | | | IAML | | 05 37 19.5 | |
| | comp=Z,49nm,0.3s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.27** | **292** | *e*P | **Pn** | **05 36 36.9** | **-1.1** |
| AC01 | | | | IAML | | 05 37 23.2 | |
| | comp=Z,33nm,2.2s | | | | | | |
| **AROD** | **Rodeo** | **3.38** | **215** | *e*P | **Pn** | **05 36 39.9** | **+0.3** |
| AROD | | | | *e*S | **Sn** | **05 37 21.1** | **+0.7** |
| **LCO** | **Las Campanas** | **3.45** | **242** | *e*P | **Pn** | **05 36 39.6** | **-1.0** |
| LCO | | | | *e*S | **Sn** | **05 37 20.9** | **-1.1** |
| LCO | | | | IAML | | 05 37 22.9 | |
| | comp=Z,116nm,0.3s | | | | | | |
| **AC04** | **Llanos de Chal** | **3.50** | **256** | *e*P | **Pn** | **05 36 39.3** | **-1.5** |
| AC04 | | | | IAML | | 05 37 24.0 | |
| | comp=Z,44nm,0.5s | | | | | | |
| **ACCO** | **Cerro Coronel** | **3.55** | **207** | *e*P | **Pn** | **05 36 41.7** | **-0.1** |
| ACCO | | | | *e*S | **Sn** | **05 37 24.4** | **+0.1** |
| ACCO | | | | IAML | | 05 37 24.8 | |
| | comp=Z,70nm,0.3s | | | | | | |
| **CO01** | **Juntas del Tor** | **3.58** | **224** | *e*P | **Pn** | **05 36 42.0** | **-0.2** |
| CO01 | | | | *e*S | **Sn** | **05 37 26.7** | **+1.7** |
| **AZAP** | **Zapla** | **3.73** | **32** | *e*P | **Pn** | **05 36 44.4** | **+0.3** |
| AZAP | | | | IAML | | 05 37 56.1 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **ACHE** | **Chepes** | **3.76** | **173** | *e*P | **Pn** | **05 36 44.8** | **+0.4** |
| ACHE | | | | *e*S | **Sn** | **05 37 28.6** | **-0.5** |
| **DOCA** | **Reserva Natura** | **3.88** | **204** | *e*P | **Pn** | **05 36 45.7** | **-0.4** |
| DOCA | | | | *e*S | **Sn** | **05 37 29.9** | **-2.1** |
| DOCA | | | | IAML | | 05 37 37.6 | |
| | comp=Z,83nm,0.6s | | | | | | |
| **PB14** | **IPOC Station P** | **3.99** | **313** | *e*P | **Pn** | **05 36 47.3** | **-0.2** |
| PB14 | | | | IAML | | 05 37 44.3 | |
| | comp=Z,24nm,1.8s | | | | | | |
| **RTLL** | **Cerro Villicun** | **4.05** | **195** | *e*P | **Pn** | **05 36 47.6** | **-0.4** |
| RTLL | | | | *e*S | **Sn** | **05 37 34.1** | **-1.4** |
| **GO04** | **Tololo Observa** | **4.17** | **228** | *e*P | **Pn** | **05 36 47.6** | **-2.2** |
| GO04 | | | | *e*S | **Sn** | **05 37 37.8** | **-0.8** |
| **ZON** | **Zonda** | **4.31** | **197** | *e*P | **Pn** | **05 36 50.9** | **-0.5** |
| ZON | | | | *e*S | **Sn** | **05 37 39.9** | **-1.6** |
| ZON | | | | IAML | | 05 37 41.4 | |
| | comp=Z,25nm,0.6s | | | | | | |
| **TCA** | **Tanti** | **4.53** | **150** | *e*P | **Pn** | **05 36 54.1** | **-0.3** |
| TCA | | | | *e*S | **Sn** | **05 37 46.0** | **-0.9** |
| TCA | | | | IAML | | 05 37 47.1 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **CO03** | **El Pedregal** | **4.56** | **221** | *e*S | **Sn** | **05 37 47.0** | **-0.6** |
| CO03 | | | | IAML | | 05 37 50.0 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **4.58** | **194** | *e*P | **Pn** | **05 36 55.5** | **+0.5** |
| RTCV | | | | *e*S | **Sn** | **05 37 46.7** | **-1.2** |
| **CO02** | **Combarbal** | **5.01** | **220** | *e*S | **Sn** | **05 37 56.8** | **-1.4** |
| CO02 | | | | IAML | | 05 38 00.7 | |
| | comp=Z,29nm,1.7s | | | | | | |
| **MRA** | **San Martin** | **5.16** | **166** | *e*P | **Pn** | **05 37 02.1** | **-0.5** |
| MRA | | | | *e*S | **Sn** | **05 37 53.2** | **-8.5** |
| MRA | | | | IAML | | 05 38 00.3 | |
| | comp=Z,25nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **11.11** | **355** | P | **Pn** | **05 38 21.2** | **-1.1** |
| | comp=Z,0.6nm,0.3s,baz=165,slow=2.0,SNR=9.0 | | | | | | |
| **SNAA** | **Sanae** | **56.22** | **160** | P | **P** | **05 45 12.1** | **+1.2** |
| | comp=Z,0.9nm,0.7s,baz=275,slow=8.8,SNR=12 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **62.80** | **180** | P | **P** | **05 45 58.1** | **+1.9** |
| | comp=Z,1.2nm,0.5s,baz=246,slow=1.0,SNR=15 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.00** | **68** | P | **P** | **05 47 29.0** | **0.0** |
| | comp=Z,0.3nm,0.7s,baz=209,slow=2.6,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **146.47** | **30** | PKPbc | **PKiKP** | **05 55 11.4** | **-1.3** |
| | comp=Z,1.1nm,0.5s,baz=336,slow=3.3,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **149.22** | **43** | PKPbc | **PKiKP** | **05 55 18.9** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=300,slow=2.0,SNR=5.5 | | | | | | |

**IDC 05 05:52:04.2±7.0, 70°.01N×15°.74W, h0km, mb3.5/3, mbtmp3.6/5, ML3.1/2, MS3.0/12, Error ellipse: s-maj=134.3km s-min=40.3km az=92.0, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JMIC** | **Jan Mayen** | **2.62** | **65** | LR | LR | 05 53 38.1 | |
| | comp=Z,90nm,19.1s,baz=200,slow=36 | | | | | | |
| **BORG** | **Borgarnes** | **5.70** | **205** | LR | LR | 05 55 02.0 | |
| | comp=Z,51nm,18.1s,baz=349,slow=31 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **13.01** | **273** | LR | LR | 05 59 46.5 | |
| | comp=Z,145nm,20.5s,baz=3.0,slow=36 | | | | |

**ISC 05 06:11:52.3±0.6,51°09'N±0°08'×179°30'E±0°04,h22km±5km, n458,σ1°36/339,mb4.6/199,MS3.8/58,12C-1D,Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.28** | **1** | | **Pn** | **06 12 00.8** | **-0.3** |
| AMKA | | | | | **Sn** | **06 12 06.2** | **-0.5** |
| **GAEA** | **Gareloi East** | **1.41** | **60** | | **Pb** | **06 12 18.8** | **+1.0** |
| **TANO** | **Tanaga North** | **1.81** | **62** | | **Pb** | **06 12 24.6** | **-0.1** |
| **TASE** | **Tanaga Southea** | **1.83** | **65** | | **Pb** | **06 12 24.6** | **-0.4** |
| **TAFP** | **Tanaga Falls P** | **1.88** | **64** | | **Pb** | **06 12 25.1** | **-0.8** |
| TAFP | | | | | **Sb** | **06 12 49.4** | **+0.4** |
| **KIMD** | **Kanaga Island** | **2.27** | **72** | | **Pn** | **06 12 30.9** | **+2.4** |
| **KICM** | **Kanaga Island** | **2.34** | **68** | | **Pn** | **06 12 31.7** | **+2.3** |
| KICM | | | | | **Sb** | **06 13 01.8** | **-0.4** |
| **KIKV** | **Kanaga Island** | **2.34** | **69** | | **Pn** | **06 12 31.8** | **+2.3** |
| KIKV | | | | | **Sb** | **06 13 02.3** | **0.0** |
| **KIWB** | **Kanaga Island** | **2.35** | **70** | | **Pb** | **06 12 32.5** | **-1.3** |
| **ADK** | **Adak** | **2.63** | **71** | | **Pn** | **06 12 36.0** | **+2.6** |
| ADK | | | | | **Sb** | **06 13 08.8** | **-1.7** |
| **ADK** | **Adak** | **2.63** | **71** | P | **Pn** | **06 12 36.0** | **+2.6** |
| ADK | | | | | | 06 13 08.8 | |
| **GSTD** | **Great Sitkin T** | **3.00** | **70** | | **Pn** | **06 12 40.9** | **+2.3** |
| GSTD | | | | | **Sn** | **06 13 17.9** | **+4.1** |
| **GSMY** | **Great Sitkin M** | **3.05** | **70** | | **Pn** | **06 12 41.5** | **+2.4** |
| **GSTR** | **Great Sitkin T** | **3.06** | **69** | | **Pn** | **06 12 41.8** | **+2.4** |
| **SHEM** | **Shemya Is, Ala** | **3.61** | **299** | Pn | **Pn** | **06 12 48.2** | **+1.4** |
| | 29nm,0.3s,baz=62,slow=1.9,SNR=39 | | | | | | |
| SHEM | | | | Sn | **Sn** | **06 13 32.7** | **+4.1** |
| | 21nm,0.3s,baz=283,slow=19,SNR=1.5 | | | | | | |
| SHEM | | | | LR | LR | 06 14 08.8 | |
| | comp=Z,2µm,19.7s,baz=168,slow=40 | | | | | | |
| **KOKL** | **Mount Kliuchef** | **4.23** | **71** | | **Pn** | **06 12 58.1** | **+2.7** |
| **KOFP** | **Korovin Flat P** | **4.28** | **71** | | **Pn** | **06 12 59.0** | **+2.9** |
| **CLES** | **Cleveland East** | **6.90** | **71** | Pn | Pn | 06 13 38.0 | +6.0 |
| **NIKH** | **Nikolski High** | **7.55** | **71** | | **Pn** | **06 13 44.8** | **+3.9** |
| **OKTU** | **Okmok Mt. Tuli** | **8.11** | **69** | | **Pn** | **06 13 52.1** | **+3.5** |
| **P08K** | **Saint George I** | **8.59** | **46** | | **Pn** | **06 13 58.5** | **+3.4** |
| **MAPS** | **Pakushin South** | **8.84** | **67** | | **Pn** | **06 14 01.9** | **+3.4** |
| **UNV** | **Unalaska Valle** | **9.10** | **67** | | **Pn** | **06 14 05.3** | **+3.3** |
| **LVA** | **Lava Point** | **9.44** | **65** | Pn | **Pn** | **06 14 10.2** | **+3.4** |
| **SDPT** | **Sand Point** | **12.83** | **63** | Pn | **Pn** | **06 14 55.1** | **+1.9** |
| **PET** | **Petropavlovsk** | **12.85** | **287** | *i* P | **Pn** | **06 14 51.8** | **-1.5** |
| PET | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.1s | | | | | | |
| **CNBA** | **Chernabura Isl** | **13.25** | **65** | Pn | **Pn** | **06 14 59.5** | **+0.7** |
| **CHGN** | **Chignik** | **14.17** | **60** | Pn | **Pn** | **06 15 11.7** | **+0.3** |
| **N15K** | **Kwethluk River** | **14.71** | **44** | Pn | **Pn** | **06 15 20.5** | **+1.8** |
| **K15K** | **Wolf Creek Mou** | **15.31** | **36** | Pn | **Pn** | **06 15 28.5** | **+1.7** |
| K15K | | | | IAmb | IAmb | 06 15 35.7 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **O16K** | **Kokwok River B** | **15.35** | **48** | Pn | **Pn** | **06 15 29.1** | **+1.8** |
| O16K | | | | IAmb | IAmb | 06 15 34.6 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **PLK4** | **Peulik 4** | **15.57** | **56** | P | **Pn** | **06 15 31.5** | **+1.3** |
| PLK4 | | | | IAmb | IAmb | 06 15 56.0 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **M16K** | **Timber Creek** | **15.61** | **42** | Pn | **Pn** | **06 15 31.7** | **+1.0** |
| M16K | | | | IAmb | IAmb | 06 15 59.6 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **N17K** | **Nushagak Hills** | **16.16** | **45** | Pn | **P** | **06 15 39.8** | **-1.0** |
| **ACHA** | **Angle Creek He** | **16.25** | **54** | | **Pn** | **06 15 40.8** | **+1.8** |
| **J16K** | **Anvik River** | **16.27** | **34** | Pn | **Pn** | **06 15 40.3** | **+1.2** |
| **M17K** | **Holitna River** | **16.44** | **42** | | **P** | **06 15 43.9** | **0.0** |
| M17K | | | | IAmb | IAmb | 06 15 47.7 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **SII** | **Sitkinak Islan** | **16.52** | **60** | Pn | **Pn** | **06 15 41.6** | **-0.8** |
| **P18K** | **Big Mountain,** | **16.64** | **50** | P | **P** | **06 15 45.9** | **-0.3** |
| **K17K** | **Iditarod** | **16.77** | **37** | P | **P** | **06 15 47.2** | **-0.4** |
| K17K | | | | IAmb | IAmb | 06 15 51.5 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **N18K** | **Kilae Creek** | **16.80** | **46** | P | **P** | **06 15 48.0** | **+0.1** |
| **O18K** | **Koktuh Hills** | **16.81** | **49** | P | **P** | **06 15 48.4** | **+0.4** |
| O18K | | | | IAmb | IAmb | 06 15 55.4 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **F15K** | **North Star Dit** | **16.81** | **23** | P | **Pn** | **06 15 45.5** | **-0.4** |
| **J17K** | **VABM Dome** | **16.88** | **35** | | **P** | **06 15 49.4** | **+0.7** |
| **OHAK** | **Old Harbor** | **17.11** | **58** | IAmb | IAmb | 06 16 02.3 | |
| | comp=Z,35nm,0.9s | | | | | | |
| **L18K** | **Granite Mounta** | **17.15** | **40** | P | **P** | **06 15 53.1** | **+1.3** |
| **G16K** | **Koyuk River** | **17.17** | **27** | P | **P** | **06 15 52.0** | **+0.1** |
| G16K | | | | IAmb | IAmb | 06 15 55.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **Q19K** | **Cape Douglas,** | **17.29** | **53** | P | **P** | **06 15 53.9** | **+0.5** |
| Q19K | | | | IAmb | IAmb | 06 16 14.1 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **N19K** | **Bonanza Creek** | **17.49** | **46** | P | **P** | **06 15 56.2** | **+0.6** |
| **H17K** | **Granite Mounta** | **17.58** | **30** | | **P** | **06 15 56.2** | **-0.3** |
| **KDAK** | **Kodiak Island** | **17.58** | **57** | | **Pn** | **06 15 54.1** | **-1.5** |
| **KDAK** | **Kodiak Island** | **17.58** | **57** | P | **Pn** | **06 15 53.5** | **-2.1** |
| | comp=Z,2.8nm,0.3s,baz=318,slow=4.6,SNR=62 | | | | | | |
| KDAK | | | | Sn | **Sn** | **06 19 02.4** | **-8.2** |
| | comp=Z,0.2nm,0.3s,baz=330,slow=20,SNR=2.3 | | | | | | |
| | comp=Z,6.9nm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **17.58** | **57** | *i* P | **Pn** | **06 15 54.2** | **-1.4** |
| **ILSW** | **Iliamna Southw** | **17.83** | **49** | P | **P** | **06 16 00.9** | **+1.4** |
| **SYI** | **Shuyak Island** | **17.85** | **54** | P | **P** | **06 15 59.9** | **+0.5** |
| **L19K** | **White Mountain** | **17.89** | **42** | P | **P** | **06 16 00.8** | **+0.8** |
| **M19K** | **Big River Lodg** | **17.97** | **43** | P | **P** | **06 16 03.1** | **+2.3** |
| **BILL** | **Bilibino** | **18.16** | **344** | *e*P | **Pn** | **06 16 02.3** | **-0.3** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,26nm,1.3s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,170nm,16.0s | | | | | | |
| **RSO** | **Redoubt South** | **18.17** | **48** | P | **P** | **06 16 05.9** | **+2.7** |
| **MA2** | **Magadan** | **18.19** | **309** | LR | LR | 06 22 45.4 | |
| | comp=Z,302nm,19.4s,baz=115,slow=36 | | | | | | |
| **H18K** | **Honhosa River** | **18.22** | **31** | | **P** | **06 16 06.0** | **+2.5** |
| **F17K** | **Baldwin Pennin** | **18.26** | **25** | P | **P** | **06 16 05.5** | **+1.6** |
| **J19K** | **Poorman** | **18.49** | **36** | | **Pn** | **06 16 08.2** | **+1.6** |
| J19K | | | | IAmb | IAmb | 06 16 11.6 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **G18K** | **Tagagawik** | **18.62** | **29** | P | **Pn** | **06 16 09.9** | **+1.7** |
| G18K | | | | IAmb | IAmb | 06 16 13.0 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **CNPM** | **China Poot** | **18.64** | **52** | P | **Pn** | **06 16 09.5** | **+0.9** |
| **SEY** | **Seymchan** | **18.67** | **320** | P | **Pn** | **06 16 09.0** | **+0.1** |
| | comp=Z,0.7nm,0.3s,baz=150,slow=20,SNR=1.7 | | | | | | |
| **SEY** | **Seymchan** | **18.67** | **320** | *e*P | **Pn** | **06 16 11.7** | **+2.8** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| **SPU** | **Mount Spurr** | **18.73** | **46** | P | **Pn** | **06 16 09.8** | **+0.1** |
| SPU | | | | IAmb | IAmb | 06 16 14.0 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **K20K** | **Telida** | **18.76** | **39** | P | **Pn** | **06 16 11.2** | **+1.2** |
| **H19K** | **Roundabout Mou** | **19.08** | **32** | P | **Pn** | **06 16 13.8** | **0.0** |
| **J20K** | **Nowinta River** | **19.13** | **37** | P | **Pn** | **06 16 15.1** | **+0.6** |
| J20K | | | | IAmb | IAmb | 06 16 21.7 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **E18K** | **Tukpahlearik C** | **19.16** | **24** | IAmb | IAmb | 06 16 22.9 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **SKT** | **Skwentna** | **19.24** | **44** | IAmb | IAmb | 06 16 25.2 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **G19K** | **Purcell Mounta** | **19.26** | **30** | IAmb | IAmb | 06 16 22.0 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **I20K** | **Naaghedeneel** | **19.34** | **35** | IAmb | IAmb | 06 16 19.3 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **SUA** | **Susitna One** | **19.42** | **46** | P | **P** | **06 16 17.6** | **+0.8** |
| **F19K** | **Shaleruckik Mo** | **19.51** | **27** | IAmb | IAmb | 06 16 20.5 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **RC01** | **Rabbit Creek A** | **19.77** | **48** | P | **Pn** | **06 16 21.8** | **-0.3** |
| **M22K** | **Willow** | **19.79** | **46** | IAmb | IAmb | 06 16 28.8 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **CUT** | **Chulitna** | **19.95** | **44** | IAmb | IAmb | 06 16 44.3 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **20.09** | **27** | P | Pn | 06 16 25.7 | -0.2 |
| E19K | | | | IAmb | IAmb | 06 16 27.5 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **PMR** | **Palmer** | **20.19** | **47** | P | **P** | **06 16 25.1** | **0.0** |
| **PMR** | **Palmer** | **20.19** | **47** | P | **P** | **06 16 25.1** | **0.0** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **20.25** | **32** | P | Pn | 06 16 27.3 | -0.4 |
| **BPAW** | **Bear Paw Mtn.** | **20.32** | **39** | P | Pn | 06 16 28.1 | -0.5 |
| BPAW | | | | IAmb | IAmb | 06 16 30.0 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **PWL** | **Port Wells** | **20.37** | **49** | P | **P** | **06 16 27.8** | **+0.7** |
| PWL | | | | IAmb | IAmb | 06 16 34.9 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **20.40** | **34** | IAmb | IAmb | 06 16 30.2 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **KNK** | **Knik Glacier** | **20.45** | **47** | P | **P** | **06 16 27.4** | **-0.6** |
| KNK | | | | IAmb | IAmb | 06 16 34.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **20.62** | **46** | P | **P** | **06 16 30.4** | **+0.6** |
| SML | | | | IAmb | IAmb | 06 16 33.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **20.62** | **46** | P | **P** | **06 16 30.4** | **+0.6** |
| SML | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| **G21K** | **Allakaket** | **20.64** | **31** | IAmb | IAmb | 06 16 32.6 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **20.69** | **21** | IAmb | IAmb | 06 16 36.1 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **MLY** | **Manley** | **20.84** | **37** | IAmb | IAmb | 06 16 34.8 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **RND** | **Reindeer** | **20.91** | **42** | P | **P** | **06 16 33.3** | **+0.3** |
| **RND** | **Reindeer** | **20.91** | **42** | P | **P** | **06 16 33.3** | **+0.3** |
| RND | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **BWN** | **Browne** | **20.95** | **39** | P | **P** | **06 16 34.6** | **+1.2** |
| **GLI** | **Glacier Island** | **20.96** | **49** | P | **P** | **06 16 32.5** | **-0.9** |
| GLI | | | | IAmb | IAmb | 06 16 35.8 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **21.06** | **30** | IAmb | IAmb | 06 16 51.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.09** | **47** | P | **P** | **06 16 33.2** | **-1.6** |
| SCM | | | | IAmb | IAmb | 06 16 36.6 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.09** | **47** | P | **P** | **06 16 33.3** | **-1.6** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,21nm,0.7s | | | | | | |
| **NEA2** | **Nenana** | **21.28** | **39** | P | **P** | **06 16 37.4** | **+0.5** |
| **DHY** | **Denali Highway** | **21.43** | **43** | P | **P** | **06 16 38.8** | **+0.1** |
| DHY | | | | IAmb | IAmb | 06 16 44.1 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **21.65** | **35** | IAmb | IAmb | 06 16 45.3 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **KLU** | **Klutina** | **21.65** | **48** | P | **P** | **06 16 42.1** | **+1.2** |
| KLU | | | | IAmb | IAmb | 06 16 57.1 | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **21.68** | **46** | P | **P** | **06 16 41.6** | **+0.3** |
| **MDM** | **Murphy Dome** | **21.76** | **38** | P | **P** | **06 16 42.2** | **+0.2** |
| MDM | | | | IAmb | IAmb | 06 16 44.9 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **COLA** | **College** | **21.88** | **38** | *i* P | **P** | **06 16 44.0** | **+0.8** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | | |
| **G23K** | **Bananza Creek** | **21.91** | **33** | P | **P** | **06 16 44.8** | **+1.1** |
| **HDA** | **Harding Lake** | **22.06** | **40** | P | **P** | **06 16 46.0** | **+0.8** |
| **IL31** | | **22.22** | **39** | IAmb | IAmb | 06 17 01.4 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **22.22** | **39** | P | **P** | **06 16 45.6** | **-1.3** |
| | comp=Z,1.3nm,0.6s,baz=241,slow=8.3,SNR=21 | | | | | | |
| ILAR | | | | PcP | **PcP** | **06 20 42.2** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=277,slow=3.2,SNR=6.7 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **H24K** | **Noodor Dome** | **22.27** | **36** | P | **P** | **06 16 48.1** | **+0.6** |
| H24K | | | | IAmb | IAmb | 06 17 03.6 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **22.28** | **24** | P | **P** | **06 16 48.1** | **+0.6** |
| B21K | | | | IAmb | IAmb | 06 16 49.9 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **N25K** | **Chitina, Valde** | **22.30** | **48** | IAmb | IAmb | 06 16 56.1 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **22.32** | **27** | P | **P** | **06 16 49.2** | **+1.3** |
| **GLB** | **Gilahina Butte** | **22.64** | **49** | P | **P** | **06 16 52.0** | **+0.6** |
| GLB | | | | IAmb | IAmb | 06 16 53.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **VRDI** | **Verde Repeater** | **22.77** | **49** | P | **P** | **06 16 52.5** | **-0.5** |
| VRDI | | | | IAmb | IAmb | 06 17 08.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **22.77** | **40** | P | **P** | **06 16 52.0** | **-0.8** |
| **CRQM** | **Cirque** | **22.85** | **50** | P | **P** | **06 16 54.1** | **+0.3** |
| CRQM | | | | IAmb | IAmb | 06 17 17.2 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **TYV** | **Tymovskoe** | **22.92** | **284** | *e*P | **P** | **06 16 56.4** | **+1.9** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,3.4s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **MENT** | **Mentasta** | **22.99** | **45** | P | **P** | **06 16 55.8** | **+0.7** |
| MENT | | | | IAmb | IAmb | 06 17 18.5 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **23.03** | **38** | IAmb | IAmb | 06 16 58.1 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **23.08** | **23** | IAmb | IAmb | 06 17 01.3 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **23.09** | **29** | IAmb | IAmb | 06 16 58.4 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **J26L** | **Joseph Creek** | **23.48** | **41** | IAmb | IAmb | 06 17 00.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **23.49** | **26** | IAmb | IAmb | 06 17 03.0 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **M27K** | **Edge Creek, AK** | **23.70** | **47** | IAmb | IAmb | 06 17 03.5 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **L27K** | **Beaver Creek,** | **23.86** | **45** | IAmb | IAmb | 06 17 07.3 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **BCAR** | **Beaver Creek A** | **23.88** | **45** | P | **P** | **06 17 03.5** | **-0.4** |
| **LOGN** | **Logan Glacier** | **23.90** | **51** | P | **P** | **06 17 04.5** | **+0.3** |
| LOGN | | | | IAmb | IAmb | 06 17 11.7 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **24.14** | **34** | P | **P** | **06 17 06.7** | **+0.5** |
| **YSS** | **Yuzh-Sakhalins** | **24.15** | **275** | P | **P** | **06 17 06.9** | **+0.4** |
| YSS | | | | IAmb | IAmb | 06 17 10.0 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **24.15** | **275** | *e*P | **P** | **06 17 06.4** | **-0.1** |
| YSS | | | | *e*S | **S** | **06 21 23.3** | **+0.3** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,200nm,15.0s | | | | | | |
| **D25K** | **Kavik River** | **24.43** | **29** | P | **P** | **06 17 09.5** | **+0.6** |
| D25K | | | | IAmb | IAmb | 06 17 11.5 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **G27K** | **Doyon Strip** | **24.96** | **36** | P | **P** | **06 17 13.6** | **-0.1** |
| **DAWY** | **Dawson** | **25.13** | **43** | P | **P** | **06 17 15.7** | **+0.4** |
| DAWY | | | | IAmb | IAmb | 06 17 20.3 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **25.22** | **40** | IAmb | IAmb | 06 17 19.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **M29M** | **Somme Creek** | **25.29** | **47** | P | **P** | **06 17 16.6** | **-0.2** |
| M29M | | | | IAmb | IAmb | 06 17 23.1 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **25.48** | **33** | IAmb | IAmb | 06 17 21.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **JKA** | **Kamikava-asahi** | **25.50** | **269** | P | **P** | **06 17 18.7** | **-0.1** |
| **ASAJ** | **Asahikawa** | **25.50** | **269** | LR | LR | 06 27 16.6 | |
| | comp=Z,93nm,20.6s,baz=356,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **25.50** | **269** | P | **P** | **06 17 18.7** | **-0.1** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,35nm,0.8s | | | | | | |
| **L29M** | **L29M** | **25.53** | **46** | P | **P** | **06 17 18.6** | **-0.3** |
| **I29M** | **Ogilvie Camp,** | **25.86** | **40** | IAmb | IAmb | 06 17 28.9 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **25.88** | **35** | IAmb | IAmb | 06 17 26.1 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **K29M** | **Barlow Dome** | **25.91** | **44** | P | **P** | **06 17 22.7** | **+0.2** |
| **H29M** | **Whitestone** | **26.04** | **38** | P | **P** | **06 17 23.3** | **-0.2** |
| **G29M** | **Pine Creek** | **26.36** | **37** | P | **P** | **06 17 26.8** | **+0.4** |
| **J30M** | **Hart River** | **26.54** | **43** | P | **P** | **06 17 28.3** | **+0.2** |
| **I30M** | **Mount Dempster** | **26.63** | **41** | P | **P** | **06 17 28.8** | **-0.1** |
| **E29M** | **Blow River** | **26.84** | **34** | IAmb | IAmb | 06 17 36.1 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **M31M** | **Drury Creek, Y** | **27.16** | **48** | P | **P** | **06 17 33.5** | **-0.2** |
| **G31M** | **Satah River** | **27.80** | **38** | P | **P** | **06 17 39.2** | **-0.1** |
| **F31M** | **Tsiigehtchic** | **28.11** | **37** | P | **P** | **06 17 42.0** | **0.0** |
| **INK** | **Inuvik** | **28.38** | **35** | P | **P** | **06 17 44.1** | **-0.3** |
| INK | | | | IAmb | IAmb | 06 17 50.9 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **28.38** | **35** | P | **P** | **06 17 44.1** | **-0.3** |
| INK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **YAK** | **Yakutsk** | **28.71** | **312** | LR | LR | 06 29 05.7 | |
| | comp=Z,200nm,19.6s,baz=120,slow=36 | | | | | | |
| **YAK** | **Yakutsk** | **28.71** | **312** | *ce*P | **P** | **06 17 46.7** | **-0.7** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| **DLBC** | **Dease Lake** | **29.51** | **56** | LR | LR | 06 29 51.8 | |
| | comp=Z,162nm,21.0s,baz=284,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **30.10** | **285** | LR | LR | 06 28 60.0 | |
| | comp=Z,56nm,21.7s,baz=54,slow=34 | | | | | | |
| **KLR** | **Kul'dur** | **30.10** | **285** | *ce*P | **P** | **06 17 59.5** | **-0.4** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,27nm,1.3s | | | | | | |
| **TIXI** | **Tiksi** | **30.30** | **331** | LR | LR | 06 30 42.7 | |
| | comp=Z,200nm,19.0s,baz=154,slow=38 | | | | | | |
| **TIXI** | **Tiksi** | **30.30** | **331** | *i* P | **P** | **06 17 59.5** | **-1.9** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ZEA** | **Zeya** | **31.27** | **296** | *e*P | **P** | **06 18 09.2** | **-0.9** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,100nm,16.0s | | | | | | |
| **A36M** | **Sachs Harbour** | **31.91** | **29** | P | **P** | **06 18 15.4** | **-0.2** |
| **C36M** | **Paulatuk** | **31.93** | **34** | P | **P** | **06 18 16.0** | **+0.3** |
| C36M | | | | IAmb | IAmb | 06 18 20.6 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **BBB** | **Bella Bella** | **32.07** | **67** | LR | LR | 06 29 15.4 | |
| | comp=Z,62nm,21.8s,baz=290,slow=33 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **32.14** | **276** | P | **P** | **06 18 17.9** | **0.0** |
| USA0B | | | | IAmb | IAmb | 06 18 33.0 | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **32.14** | **276** | P | **P** | **06 18 17.9** | **0.0** |
| USA0B | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **32.14** | **276** | P | **P** | **06 18 17.7** | **-0.2** |
| | comp=Z,3.0nm,0.8s,baz=73,slow=8.8,SNR=5.4 | | | | | | |
| USRK | | | | LR | LR | 06 30 22.1 | |
| | comp=Z,82nm,21.4s,baz=49,slow=35 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **HEH** | **HeiHe** | **32.33** | **289** | *e*P | **P** | **06 18 18.5** | **-1.0** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **32.56** | **260** | P | **P** | **06 18 22.1** | **+0.4** |
| | comp=Z,2.3nm,0.9s,baz=49,slow=7.5,SNR=7.2 | | | | | | |
| MJAR | | | | LR | LR | 06 29 42.9 | |
| | comp=Z,92nm,20.0s,baz=60,slow=33 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.79** | **202** | T | T | 06 53 29.7 | |
| | baz=20,slow=75,SNR=56 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.80** | **202** | T | T | 06 53 29.7 | |
| | baz=20,slow=75,SNR=49 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **32.81** | **202** | T | T | 06 53 31.1 | |
| | baz=20,slow=75,SNR=47 | | | | | | |
| **MSHR** | **Mys Shultsa** | **33.48** | **274** | *ce*P | **P** | **06 18 30.4** | **+0.8** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **JGF** | **Kuroka** | **33.69** | **259** | P | **P** | **06 18 31.8** | **+0.3** |
| JGF | | | | IAmb | IAmb | 06 18 33.7 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **33.87** | **253** | LR | LR | 06 29 14.1 | |
| | comp=Z,4.0nm,21.5s,baz=82,slow=31 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.02** | **202** | T | T | 06 55 00.5 | |
| | baz=20,slow=76,SNR=85 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.03** | **202** | T | T | 06 55 04.6 | |
| | baz=20,slow=76,SNR=58 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.03** | **202** | T | T | 06 55 05.7 | |
| | baz=20,slow=76,SNR=30 | | | | | | |
| **BNX** | **BinXian** | **34.25** | **282** | ||P | **P** | **06 18 34.7** | **-1.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **OZB** | **Mount Ozzard** | **34.83** | **71** | P | **P** | **06 18 41.9** | **+0.5** |
| **CLRS** | **Cowichan Lake** | **35.71** | **71** | P | **P** | **06 18 48.6** | **-0.2** |
| CLRS | | | | IAmb | IAmb | 06 19 14.9 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.29** | **46** | P | **P** | **06 18 54.4** | **+0.8** |
| **YKA** | **Yellowknife Ar** | **36.29** | **46** | P | **P** | **06 18 53.5** | **-0.1** |
| | comp=Z,2.4nm,0.7s,baz=286,slow=7.4,SNR=3.5 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.29** | **46** | P | **P** | **06 18 54.4** | **+0.8** |
| **YKAB2** | **New Yellowknif** | **36.31** | **46** | P | **P** | **06 18 53.8** | **0.0** |
| **NLWA** | **Neilton Lookou** | **36.50** | **73** | P | **P** | **06 18 57.5** | **+1.8** |
| NLWA | | | | IAmb | IAmb | 06 18 59.1 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **GNW** | **Green Mountain** | **37.05** | **72** | P | **P** | **06 19 02.1** | **+1.9** |
| GNW | | | | IAmb | IAmb | 06 19 03.5 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **E03A** | **Lebam** | **37.08** | **74** | P | **P** | **06 19 02.5** | **+1.9** |
| **BOD** | **Bodaibo** | **37.19** | **306** | *e*P | **P** | **06 18 59.9** | **-1.4** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| **HIA** | **Hailar** | **37.27** | **291** | P | **P** | **06 19 01.8** | **-0.4** |
| HIA | | | | IAmb | IAmb | 06 19 02.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **HIA** | **Hailar** | **37.27** | **291** | P | **P** | **06 19 01.8** | **-0.4** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **F03A** | **Seaside** | **37.38** | **75** | P | **P** | **06 19 04.7** | **+1.5** |
| **D05A** | **Enumclaw** | **37.73** | **72** | P | **P** | **06 19 07.6** | **+1.6** |
| **G03D** | **McMinnville, O** | **37.92** | **76** | P | **P** | **06 19 09.8** | **+2.1** |
| **LON** | **Longmire** | **38.05** | **73** | P | **P** | **06 19 10.7** | **+1.9** |

**PNTR Pine Nut 43.57 81** P **P** **06 19 56.4 +1.8**
PNTR IAmb IAmb 06 19 58.6
comp=Z,12nm,0.8s
**LYMT Lyon Mountain 43.58 67** P **P** **06 19 55.1 +0.5**
**YERR Yerington 43.86 81** IAmb IAmb 06 20 07.7
comp=Z,4.3nm,0.7s
**HLID Hailey 44.17 73** P **P** **06 20 00.7 +1.3**
HLID IAmb IAmb 06 20 01.7
comp=Z,7.8nm,0.9s
**BMN Battle Mountai 44.25 78** IAmb IAmb 06 20 02.7
comp=Z,4.9nm,0.8s
**RYN Ryan 44.52 81** IAmb IAmb 06 20 10.4
comp=Z,3.8nm,0.7s
**BOZ Bozeman (W) 44.70 69** IAmb IAmb 06 20 05.2
comp=Z,5.7nm,0.8s
**LHV Little Huntoon 44.76 82** IAmb IAmb 06 20 27.8
comp=Z,9.6nm,1.1s
**NVAR Mina Array Bea 44.78 81** P **P** **06 20 05.5 +1.2**
**NVAR Mina Array Bea 44.78 81** P **P** **06 20 06.5 +2.1**
comp=Z,1.8nm,0.7s,baz=291,slow=7.2,SNR=13
NVAR LR LR 06 35 16.0
comp=Z,67nm,21.5s,baz=288,slow=31
comp=Z,1.8nm,0.7s
**ELK Elko 45.29 77** IAmb IAmb 06 20 25.7
comp=Z,4.2nm,0.8s
**ELK Elko 45.29 77** LR LR 06 36 15.6
comp=Z,59nm,19.8s,baz=298,slow=32
**ULN Ulaanbaatar 45.31 296** P **P** **06 20 07.6 -0.7**
ULN IAmb IAmb 06 20 09.6
comp=Z,6.1nm,0.8s
**ULN Ulaanbaatar 45.31 296***ce*P **P** **06 20 07.3 -1.0**
ULN pmax pmax
comp=Z,8.0nm,1.0s
**YHL Hebgen Lake 45.38 69** IAmb IAmb 06 20 10.9
comp=Z,9.5nm,0.9s
**YMR Madison River 45.61 70** IAmb IAmb 06 20 20.1
comp=Z,7.1nm,0.9s
**DSP Deep Springs 45.64 82** P **P** **06 20 12.4 +1.5**
DSP IAmb IAmb 06 20 26.9
comp=Z,6.9nm,1.2s
**SONM Songino Array 45.70 296** P **P** **06 20 09.6 -1.7**
SONM IAmb IAmb 06 20 12.4
comp=Z,3.7nm,0.8s
**SONM Songino Array 45.70 296** P **P** **06 20 11.6 +0.2**
comp=Z,3.3nm,0.6s,baz=61,slow=9.4,SNR=12
SONM PcP **PcP** **06 21 46.4 -2.6**
comp=Z,1.0nm,0.7s,baz=45,slow=4.9,SNR=2.5
SONM LR LR 06 40 56.0
comp=Z,166nm,18.1s,baz=88,slow=38
comp=Z,3.3nm,0.6s
**H17A Grant Village 45.99 70** IAmb IAmb 06 20 17.2
comp=Z,7.2nm,0.8s
**TIA Tai'an 46.01 276** P **P** **06 20 14.1 +0.3**
TIA pmax pmax
comp=Z,17nm,0.7s
**YMP Mirror Lake Pl 46.05 69** IAmb IAmb 06 20 16.4
comp=Z,5.0nm,0.9s
**IMW Indian Meadow 46.06 70** IAmb IAmb 06 20 16.7
comp=Z,5.0nm,0.9s
**ZAK Zakamensk 46.07 300***e*P **P** **06 20 14.2 -0.1**
ZAK pmax pmax
comp=Z,6.0nm,1.4s
**FLWY Flagg Ranch 46.10 70** IAmb IAmb 06 20 17.1
comp=Z,9.0nm,1.0s
**HVU Hansel Valley 46.18 74** IAmb IAmb 06 20 17.7
comp=Z,6.2nm,0.7s
**TPAW Teton Pass 46.28 71** IAmb IAmb 06 20 18.4
comp=Z,3.7nm,0.8s
**RLMT Red Lodge 46.35 68** IAmb IAmb 06 20 19.4
comp=Z,5.9nm,0.8s
**SNOW Snow King Moun 46.42 71** P **P** **06 20 18.2 +0.9**
SNOW IAmb IAmb 06 20 21.6
comp=Z,3.9nm,0.9s
**BGU Big Grassy Mou 46.53 75** IAmb IAmb 06 20 23.6
comp=Z,3.5nm,0.8s
**HHC Hu-ho-hao-te 46.61 285***e*P **P** **06 20 20.1 +1.5**
HHC pmax pmax
comp=Z,20nm,0.5s
HHC pmax pmax
comp=Z,74nm,4.3s
**AHID Auburn Hatcher 46.61 72** IAmb IAmb 06 20 24.1
comp=Z,6.6nm,0.9s
**SPR3 Spring Creek 3 46.89 78** IAmb IAmb 06 20 30.5
comp=Z,4.0nm,0.7s
**HWUT Hardware Ranch 47.02 73** IAmb IAmb 06 20 23.6
comp=Z,5.9nm,1.1s
**DUG Dugway, Tooele 47.10 76** IAmb IAmb 06 20 38.9
comp=Z,8.4nm,1.1s
**DUG Dugway, Tooele 47.10 76** P **P** **06 20 24.1 +1.6**
DUG pmax pmax
comp=Z,8.0nm,1.0s
**GWY Greenwater Val 47.19 82** IAmb IAmb 06 20 27.8
comp=Z,2.9nm,0.8s
**PSUT Pine Spring 47.47 78** IAmb IAmb 06 20 33.0
comp=Z,6.5nm,0.7s
**PDAR Pinedale Array 47.53 71** P **P** **06 20 26.7 +0.8**
**PDAR Pinedale Array 47.53 71** P **P** **06 20 26.6 +0.6**
comp=Z,9.8nm,0.7s,baz=299,slow=3.7,SNR=94
PDAR LR LR 06 37 39.3
comp=Z,43nm,21.8s,baz=308,slow=33
comp=Z,9.8nm,0.7s
**NJ2 Nanjing 47.62 271***e*P **P** **06 20 26.2 -0.2**
NJ2 pmax pmax
comp=Z,4.0nm,0.5s
**GSC Goldstone, Bar 47.67 84** IAmb IAmb 06 20 40.7
comp=Z,5.8nm,1.0s
**JLU Jordanelle 47.69 74** IAmb IAmb 06 20 32.8
comp=Z,6.0nm,0.9s
**NLU North Lily Min 47.70 75** IAmb IAmb 06 20 32.9
comp=Z,4.1nm,0.9s
**NEEM North Greenlan 47.99 13***i* P **P** **06 20 25.6 -3.5**
NEEM IAmb IAmb 06 20 29.7
comp=Z,22nm,0.7s
**TMUT Trail Mountain 48.63 76** IAmb IAmb 06 21 01.5
comp=Z,5.5nm,0.7s
**LCMT Little Creek M 48.80 79** IAmb IAmb 06 20 38.3
comp=Z,4.3nm,0.9s
**P17A Butcher Ranch, 48.80 75** IAmb IAmb 06 20 52.0
comp=Z,3.1nm,0.7s
**MTPU Mount Pierson 48.81 78** IAmb IAmb 06 20 38.8
comp=Z,3.2nm,0.8s
**Q16A Castle Valley 48.88 76** IAmb IAmb 06 20 43.8
comp=Z,3.9nm,0.8s
**PFO Pinyon Flats O 48.98 85** LR LR 06 40 10.6
comp=Z,73nm,18.0s,baz=245,slow=35
**P18A Preston Nutter 49.01 75** IAmb IAmb 06 20 41.4
comp=Z,6.0nm,0.9s
**KNB Kanab 49.06 79** IAmb IAmb 06 20 40.5
comp=Z,4.1nm,0.9s
**SRU San Rafael Swe 49.16 75** IAmb IAmb 06 20 41.7
comp=Z,5.8nm,0.8s
**RWWY Rawlins 49.58 71** IAmb IAmb 06 20 43.1
comp=Z,6.6nm,1.0s
**U15A North Rim 49.76 79** IAmb IAmb 06 21 01.5
comp=Z,7.2nm,0.8s
**LYN LuoYang 49.99 278** P **P** **06 20 45.4 +0.8**
LYN pmax pmax
comp=Z,27nm,0.8s
**KBS Kingsbay 50.02 357***ce*P **P** **06 20 43.9 -0.4**
KBS pmax pmax
comp=Z,35nm,2.5s
**ULM Lac du Bonnet 50.84 56** LR LR 06 42 21.7
comp=Z,106nm,20.9s,baz=294,slow=36
**WHN Wuhan 51.48 273** P **P** **06 20 58.9 +3.1**
**MVCO Mesa Verde 51.60 76** IAmb IAmb 06 21 22.5
comp=Z,4.2nm,0.8s
**ISCO Idaho Springs 51.70 72** IAmb IAmb 06 21 00.1
comp=Z,4.0nm,0.9s
**SSLB Suanglung 52.09 261** P **P** **06 21 00.2 -0.3**
**XAN Xi'an 52.53 280** P **P** **06 21 03.6 -0.2**
XAN pmax pmax
comp=Z,20nm,0.9s
**SDCO Great Sand Dun 53.08 73** P **P** **06 21 09.2 +1.2**
SDCO IAmb IAmb 06 21 10.5
comp=Z,7.0nm,1.1s
**ZAA0 Zalesovo Array 53.35 313** P **P** **06 21 09.2 -0.3**
**ZALV Zalesovo Beam 53.35 313** P **P** **06 21 08.5 -1.0**
comp=Z,2.2nm,0.7s,baz=48,slow=8.0,SNR=7.4
ZALV PcP **PcP** **06 22 16.7 +0.1**
comp=Z,3.2nm,0.8s,baz=33,slow=5.0,SNR=6.9
ZALV LR LR 06 45 22.0
comp=Z,98nm,18.7s,baz=59,slow=38
comp=Z,2.2nm,0.7s
**TUC Tucson 53.40 82** P **P** **06 21 11.5 +1.2**
TUC pmax pmax
comp=Z,3.0nm,1.0s
**SUMG Summit 53.85 13** P **P** **06 21 13.1 -0.3**
**SUMG Summit 53.85 13***i* P **P** **06 21 13.0 -0.3**
SUMG pmax pmax
comp=Z,11nm,0.9s
**SUMG Summit 53.85 13***i* P **P** **06 21 13.0 -0.3**
SUMG IAmb IAmb 06 21 14.5
comp=Z,6.8nm,0.9s
**LZH Lanzhou 54.31 285***e*P **P** **06 21 17.9 +1.0**
LZH pP pwP 06 21 27.8 +2.2
LZH pmax pmax
comp=Z,26nm,1.1s
**ANMO Albuquerque 54.33 77** P **P** **06 21 17.7 +0.6**
comp=Z,0.7nm,0.6s,baz=29,slow=11,SNR=3.6
ANMO LR LR 06 44 49.2
comp=Z,66nm,18.0s,baz=36,slow=36
comp=Z,0.7nm,0.6s
**GTA Gaotai 54.55 291***e*P **P** **06 21 18.8 +0.2**
GTA pP sP 06 21 27.0 -0.4
GTA pmax pmax
comp=Z,10.0nm,1.2s
GTA LR LR
comp=Z,100nm,15.3s
GTA LR LR
comp=Z,120nm,15.3s
GTA LR LR
comp=Z,150nm,17.5s
**ICESG Greenland Ices 56.75 16***i* P P 06 21 29.4 -4.8
ICESG IAmb IAmb 06 21 34.1
comp=Z,7.7nm,0.7s
**JMIC Jan Mayen 58.10 3** LR LR 06 47 19.4
comp=Z,23nm,20.8s,baz=17,slow=37
**ARCES ARCESS Array B 58.16 349** P **P** **06 21 42.2 -1.6**
comp=Z,3.5nm,1.0s,baz=35,slow=11,SNR=2.5
ARCES LR LR 06 50 09.3
comp=Z,60nm,18.1s,baz=32,slow=40
comp=Z,3.5nm,1.0s
**KURK Kurchatov 58.34 313** P **P** **06 21 45.2 0.0**
**KURK Kurchatov 58.34 313***ce*P **P** **06 21 44.9 -0.3**
KURK pmax pmax
comp=Z,24nm,1.3s
**KURBB Kurchatov Arra 58.45 313** P **P** **06 21 45.8 -0.2**
comp=Z,9.7nm,0.6s,baz=45,slow=6.7,SNR=74
KURBB PcP **PcP** **06 22 37.1 +0.7**
comp=Z,0.9nm,0.6s,baz=46,slow=5.3,SNR=5.3
comp=Z,9.7nm,0.6s
**KURBB Kurchatov Arra 58.45 313** P **P** **06 21 45.0 -1.0**
**WMQ Urumqi 58.48 302***e*P **P** **06 21 48.7 +2.3**
WMQ LR LR
WMQ comp=Z,360nm,12.1s LR LR
WMQ comp=Z,260nm,12.1s LR LR
comp=Z,180nm,19.7s
**MNHN Monahans 59.04 77** P **P** **06 21 51.2 +0.7**
MNHN IAmb IAmb 06 22 09.1
comp=Z,3.8nm,0.7s
**WMOK Wichita Mounta 59.12 72** IAmb IAmb 06 21 52.9
comp=Z,4.9nm,0.8s
**WMOK Wichita Mounta 59.12 72** P **P** **06 21 50.4 -0.6**
WMOK pmax pmax
comp=Z,8.0nm,0.9s
**MK31 Makanchi Array 59.26 307** P **P** **06 21 51.0 -0.7**
MK31 IAmb IAmb 06 21 51.8
comp=Z,4.2nm,0.7s
**MK31 Makanchi Array 59.26 307***ce*P **P** **06 21 50.6 -1.2**
**MKAR Makanchi Array 59.26 307** P **P** **06 21 51.0 -0.8**
**MKAR Makanchi Array 59.26 307** P **P** **06 21 50.9 -0.8**
comp=Z,4.1nm,0.6s,baz=50,slow=7.0,SNR=48
MKAR LR LR 06 47 57.1
comp=Z,106nm,20.2s,baz=126,slow=37
comp=Z,4.1nm,0.6s
**MKAR Makanchi Array 59.26 307** P **P** **06 21 51.0 -0.8**
**MAKZ Makanchi 59.41 308** P **P** **06 21 51.7 -1.1**
**MAKZ Makanchi 59.41 308** P **P** **06 21 51.7 -1.1**
MAKZ pmax pmax
comp=Z,7.0nm,0.8s
**LPIG La Paz 59.44 89** LR LR 06 42 22.8
comp=Z,23nm,19.3s,baz=252,slow=31
**OK031 S. Brethren Rd 59.45 70** IAmb IAmb 06 21 55.8
comp=Z,5.4nm,0.8s
**GOMU GeErMu 59.64 291** P **P** **06 21 55.0 0.0**
GOMU pmax pmax
comp=Z,14nm,0.7s
GOMU pmax pmax
comp=Z,290nm,5.2s
**TX31 Lajitas Ar. Si 59.88 80** IAmb IAmb 06 22 16.0
comp=Z,2.5nm,0.9s
**BVA0 Borovoye Array 60.32 319***i* P **P** **06 21 58.7 -0.2**
**BRVK Borovoye 60.34 319** P **P** **06 21 59.1 +0.1**
**BRVK Borovoye 60.34 319***ce*P **P** **06 21 59.5 +0.5**
BRVK pmax pmax
comp=Z,31nm,1.3s
**R40A Maddies Statio 60.50 65** IAmb IAmb 06 22 02.5
comp=Z,2.6nm,0.7s
**SCHQ Schefferville 60.96 37** P **P** **06 22 03.0 -0.3**
comp=Z,4.1nm,0.9s,baz=0.0,slow=6.1,SNR=3.1
comp=Z,4.1nm,0.9s
**SVE Sverdlovsk 61.18 327***e*P **P** **06 22 06.1 +1.4**
**CCM Cathedral Cave 61.24 64** P **P** **06 22 05.7 +0.3**
CCM IAmb IAmb 06 22 06.7
comp=Z,3.1nm,0.7s
**CCM Cathedral Cave 61.24 64** P **P** **06 22 05.7 +0.3**
CCM pmax pmax
comp=Z,3.0nm,0.7s
**MGMO Mountain Grove 61.28 66** IAmb IAmb 06 22 27.5
comp=Z,4.3nm,1.1s
**ARU Arti 62.21 327** P **P** **06 22 11.4 -0.2**
**ARU Arti 62.21 327** LR LR 06 51 53.7
comp=Z,111nm,19.7s,baz=42,slow=39
**ARU Arti 62.21 327***c i*P **P** **06 22 12.1 +0.5**
ARU 06 22 51.0
ARU 06 24 28.9
ARU S **S** **06 30 38.0 +2.4**
ARU SS **SS** **06 34 40.6 +2.8**
ARU pmax pmax
comp=Z,19nm,1.4s
**ARU Arti 62.21 327** P **P** **06 22 11.4 -0.2**
comp=Z,14nm,1.0s
**PZH PanZhiHua 62.21 278** P **P** **06 22 12.6 +0.4**
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,130nm,5.1s
**MIAR Mount Ida 62.34 69** P **P** **06 22 13.5 +0.7**
MIAR IAmb IAmb 06 22 14.0
comp=Z,6.6nm,0.9s
**MIAR Mount Ida 62.34 69** P **P** **06 22 13.5 +0.7**
MIAR pmax pmax
comp=Z,7.0nm,1.0s
**HNR Honiara 62.57 202** LR LR 06 43 17.8
comp=Z,949nm,21.5s,baz=32,slow=30
**WHAR Wooly Hollow 62.57 67** P **P** **06 22 14.1 -0.3**
WHAR IAmb IAmb 06 22 15.7
comp=Z,4.4nm,0.8s
**CGM3 Cape Girardeau 62.67 64** P **P** **06 22 15.3 +0.3**
**X40A Basin Creek Fa 62.82 68** IAmb IAmb 06 22 17.4
comp=Z,4.2nm,1.1s
**SADO Sadowa 62.95 52** LR LR 06 49 29.9
comp=Z,62nm,21.5s,baz=249,slow=36
**KIRV Kirov 63.30 333** LR LR 06 54 04.3
comp=Z,66nm,18.0s,baz=33,slow=40
**BORG Borgarnes 63.39 10** LR LR 06 51 32.8
comp=Z,32nm,19.2s,baz=345,slow=38
**P48A Milroy 63.49 59** IAmb IAmb 06 22 21.5
comp=Z,5.7nm,0.8s
**WVT Waverly 64.53 64** P **P** **06 22 27.4 +0.1**
WVT IAmb IAmb 06 22 28.8
comp=Z,3.3nm,0.6s
**WVT Waverly 64.53 64** P **P** **06 22 27.4 +0.1**
WVT pmax pmax
comp=Z,3.0nm,0.6s
**VALR Valaam 65.08 344***i* P **P** **06 22 30.5 +0.1**
VALR pmax pmax
comp=Z,21nm,0.9s
**V48A Smith Brothers 65.38 63** IAmb IAmb 06 22 52.2
comp=Z,4.7nm,0.9s
**CLTN Cedars of Leba 65.40 63** IAmb IAmb 06 22 46.6
comp=Z,4.4nm,0.8s
**U49A Red Boiling Sp 65.41 62** IAmb IAmb 06 22 52.6
comp=Z,3.3nm,0.9s
**FINES FINESS Array B 65.79 346** P **P** **06 22 33.4 -1.6**
comp=Z,2.3nm,0.8s,baz=13,slow=6.9,SNR=8.5
FINES LR LR 06 52 19.2
comp=Z,43nm,21.4s,baz=20,slow=37
comp=Z,2.3nm,0.8s
**AAK Ala-Archa 66.11 309** P **P** **06 22 37.5 -0.2**
**AAK Ala-Archa 66.11 309** LR LR 06 52 50.2
comp=Z,108nm,19.4s,baz=34,slow=37
**AAK Ala-Archa 66.11 309***ce*P **P** **06 22 37.4 -0.2**
AAK pmax pmax
comp=Z,14nm,1.3s
**X48A Hartselle 66.19 64** IAmb IAmb 06 22 56.9
comp=Z,3.2nm,0.8s
**TKL Tuckaleechee C 67.14 61** P **P** **06 22 44.5 +0.3**
comp=Z,1.7nm,0.6s,baz=260,slow=8.5,SNR=5.0
comp=Z,1.7nm,0.6s
**AKTO Aktyubinsk 67.21 324** LR LR 06 54 52.3
comp=Z,166nm,18.7s,baz=96,slow=38
**LRAL Lakeview Retre 67.24 65** P **P** **06 22 45.3 +0.5**
LRAL IAmb IAmb 06 22 45.5
comp=Z,3.4nm,0.8s
**AB31 Akbulak array 67.43 322** P **P** **06 22 45.8 +0.1**
**ABKAR Akbulak array 67.43 322** P **P** **06 22 46.0 +0.3**
**KK31 Karatay Array 67.68 311** P **P** **06 22 47.2 -0.3**
**KK31 Karatay Array 67.68 311** P **P** **06 22 47.3 -0.2**
**KKAR Karatay Array 67.68 311** P **P** **06 22 47.5 0.0**
**KKAR Karatay Array 67.68 311** P **P** **06 22 47.5 0.0**
**KSH Kashi 67.70 306** P **P** **06 22 51.7 +3.9**
KSH pP pwP 06 23 00.6 +3.8
KSH pmax pmax
comp=Z,11nm,1.0s
**NB2 NORSAR Subarra 67.81 354** P **P** **06 22 46.6 -1.4**
comp=Z,1.4nm,0.6s,baz=7.9,slow=6.5
**NB2 NORSAR Subarra 67.81 354** P **P** **06 22 46.9 -1.0**
**NOA NORSAR Array B 67.81 354** P **P** **06 22 47.0 -1.0**
comp=Z,2.2nm,0.7s,baz=8.1,slow=6.3,SNR=8.7
NOA LR LR 06 54 03.8
comp=Z,27nm,18.6s,baz=350,slow=38
comp=Z,2.2nm,0.7s
**NORES NORESS Array B 68.09 354** P **P** **06 22 51.9 +2.2**
**Y52A Lilburn 68.30 63** IAmb IAmb 06 22 53.0
comp=Z,3.2nm,0.7s
**HFS Hagfors 68.52 352** P **P** **06 22 50.9 -1.5**
comp=Z,5.1nm,0.9s,baz=325,slow=7.0,SNR=5.9
HFS LR LR 06 54 01.9
comp=Z,40nm,19.0s,baz=356,slow=37
comp=Z,5.1nm,0.9s
**SHL Shillong 68.97 285** P **P** **06 22 55.6 -0.4**
**HODGE Hodges 69.03 61** IAmb IAmb 06 22 58.1
comp=Z,3.6nm,0.6s
**BELG Belogornoye 69.12 331** LR LR 06 56 12.1
comp=Z,72nm,19.8s,baz=66,slow=39
**TAOE Nuku Hiva Isla 69.22 137***e*LR LR 06 43 59.5
comp=Z,187nm,27.4s
**OBN Obninsk 69.70 338***i* P **P** **06 22 58.3 -1.4**
OBN *i* 06 23 22.3
OBN pmax pmax
comp=Z,12nm,0.6s
OBN MLR MLR
comp=Z,167nm,18.0s
**CMAR Chiang Mai Arr 69.85 275** P **P** **06 23 01.1 -0.1**
comp=Z,2.5nm,0.5s,baz=24,slow=7.4,SNR=11
CMAR LR LR 06 53 59.8
comp=Z,16nm,20.3s,baz=75,slow=36
comp=Z,2.5nm,0.5s
**CHGR Chuyangaron 71.77 309** P **P** **06 23 13.2 +0.4**
CHGR pmax pmax
comp=Z,53nm,0.9s
**SIMJ Simiganj 71.84 309** P **P** **06 23 13.3 0.0**
**NIL Nilore 73.58 303** P **P** **06 23 24.2 +0.6**
**NIL Nilore 73.58 303** P **P** **06 23 24.2 +0.6**
NIL pmax pmax
comp=Z,28nm,1.2s
**PPT Papeete 73.61 149** LR LR 06 48 24.0
comp=Z,92nm,19.6s,baz=250,slow=30
**PPT2 Papeete2 73.64 149***e*LR LR 06 46 03.8
comp=Z,150nm,24.2s
PPT2 *e*LR LR 06 46 09.6
comp=Z,134nm,29.2s
**DZM Mont Dzumac 73.72 192***e*LR LR 06 46 09.3
comp=Z,164nm,25.4s
**DZM Mont Dzumac 73.72 192** LR LR 06 47 50.8
comp=Z,71nm,21.8s,baz=61,slow=29
**EKA Eskdalemuir Ar 73.92 1** P **P** **06 23 24.7 -0.4**
comp=Z,2.0nm,0.6s,baz=0.9,slow=5.3,SNR=8.7
comp=Z,2.0nm,0.6s
**CMIG Matias Romero 74.30 82** LR LR 06 55 32.1
comp=Z,43nm,18.7s,baz=3.0,slow=35
**RAR Rarotonga 74.31 160** LR LR 06 48 56.1
comp=Z,148nm,19.9s,baz=339,slow=30
**KBL Kabul 75.06 307** P **P** **06 23 31.8 -0.6**
**KBL Kabul 75.06 307** P **P** **06 23 31.8 -0.6**
KBL pmax pmax
comp=Z,11nm,0.7s
**AKASG Malin Array Be 75.44 341** P **P** **06 23 33.0 -1.0**
comp=Z,0.9nm,0.3s,baz=24,slow=5.6,SNR=9.5
AKASG LR LR 07 00 41.0
comp=Z,86nm,19.6s,baz=28,slow=39
comp=Z,0.9nm,0.3s
**AKASG Malin Array Be 75.44 341** P **P** **06 23 33.0 -1.0**
**AKBB Malin Array Si 75.44 341***ce*P **P** **06 23 32.6 -1.4**
AKBB pmax pmax
comp=Z,5.0nm,1.0s
**KIEV Kiev 75.45 341** P **P** **06 23 32.9 -1.1**
KIEV IAmb IAmb 06 23 33.3
comp=Z,4.0nm,0.7s
**KIEV Kiev 75.45 341** P **P** **06 23 32.9 -1.1**
KIEV pmax pmax
comp=Z,4.0nm,0.7s
**AK09 Malin Array Si 75.51 341** P **P** **06 23 33.3 -1.1**
**AK05 Malin Array Si 75.52 341** P **P** **06 23 33.2 -1.2**
AK05 IAmb IAmb 06 23 35.8
comp=Z,4.8nm,0.7s
**AK10 Malin Array Si 75.53 341** P **P** **06 23 33.7 -0.8**
**LUBAR Lubar, Ukraine 76.48 342** P **P** **06 23 38.8 -1.1**
**CLL Collm 77.31 351***e*P **P** **06 23 44.0 -0.6**
**CLL Collm 77.31 351***e*P **P** **06 23 44.0 -0.6**
**KMPD K-Podol'skiy 78.03 342** P **P** **06 23 48.1 -0.5**
KMPD P **P** **06 23 47.6 -1.0**
**KIV Kislovodsk 78.12 330***e*P **P** **06 23 49.2 -0.2**
KIV pmax pmax
comp=Z,5.0nm,1.0s
KIV MLR MLR
comp=Z,42nm,19.0s
**KBZ Khabaz 78.25 329** P **P** **06 23 50.9 +0.9**
comp=Z,2.7nm,0.7s,baz=173,slow=5.7,SNR=5.1
KBZ LR LR 07 02 45.6
comp=Z,90nm,20.2s,baz=26,slow=39
comp=Z,2.7nm,0.7s
**STNU Starunia 78.26 343** P **P** **06 23 49.2 -0.7**
**KOLS Kolonicke sedl 78.43 345***e*P **P** **06 23 53.1 +2.2**
**KOLS Kolonicke sedl 78.43 345***e*P **P** **06 23 53.1 +2.2**
**NSLU Nyzhne Selyshc 78.76 343** P **P** **06 23 53.9 +1.2**
**VRAC Vranov 78.89 349** LR LR 07 03 26.2
comp=Z,36nm,18.1s,baz=10,slow=39
**TBI Tubuai 79.07 151***e*LR LR 06 48 35.4
comp=Z,500nm,24.8s
TBI *e*LR LR 06 48 36.1
comp=Z,924nm,24.8s
**IAS Iasi 79.12 341** P **P** **06 23 51.8 -2.9**
IAS pmax pmax
comp=Z,119nm,0.6s
**BURAR Bucovina Array 79.18 342** P **P** **06 23 54.9 -0.3**
BURAR IAmb IAmb 06 23 56.1
comp=Z,5.6nm,0.7s
**BURAR Bucovina Array 79.18 342** P **P** **06 23 54.8 -0.3**
BURAR pmax pmax
comp=Z,5.0nm,0.7s
**GERES GERESS Array B 79.68 350** P **P** **06 23 57.1 -0.8**
comp=Z,0.3nm,0.5s,baz=325,slow=4.9,SNR=2.1
comp=Z,0.3nm,0.5s
**CONA Conrad Observa 80.33 349***e*P **P** **06 24 00.4 -1.0**
comp=Z,1.8nm,1.1s
**GNI Garni 80.83 326** LR LR 07 05 41.0
comp=Z,130nm,18.1s,baz=33,slow=40
**WRA Warramunga Arr 80.99 222** P **P** **06 24 04.6 -0.4**
comp=Z,2.0nm,0.7s,baz=33,slow=6.0,SNR=20
comp=Z,2.0nm,0.7s
**ARSA Arzberg 81.04 349***e*P **P** **06 24 03.7 -1.5**
comp=Z,1.8nm,1.0s
**MLR Muntele Rosu 81.07 341** LR LR 07 03 59.5
comp=Z,78nm,19.6s,baz=56,slow=39
**WATA Walderalm 81.38 352***e*P **P** **06 24 06.6 -0.5**
comp=Z,4.6nm,1.1s
**MOTA Moosalm 81.42 352***e*P **P** **06 24 06.2 -1.1**
comp=Z,5.3nm,1.4s
**WTTA Wattenberg 81.45 352***e*P **P** **06 24 07.0 -0.5**
comp=Z,3.6nm,0.8s
**KBA Koelnbreinsper 81.46 350***e*P **P** **06 24 07.6 0.0**
comp=Z,4.5nm,0.6s
**SQTA Sankt Quirin 81.53 352***e*P **P** **06 24 07.8 -0.1**
comp=Z,1.6nm,0.6s
**SOKA Soboth 81.67 349***e*P **P** **06 24 08.1 -0.5**
comp=Z,6.9nm,1.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MYKA** | **Terra Mystica** | **81.87** | **350** | *e*P | **P** | **06 24 08.7** | **-0.9** |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **OBKA** | **Obir** | **81.89** | **349** | *e*P | **P** | **06 24 09.1** | **-0.6** |
| | comp=Z,6.0nm,1.6s | | | | | | |
| **FRGS** | **Fruska Gora** | **82.50** | **346** | P | **P** | **06 24 12.9** | **+0.1** |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **RKT** | **Rikitea** | **84.13** | **138** | *e*LR | LR | 06 50 59.2 | |
| | comp=Z,597nm,29.5s | | | | | | |
| **ASAR** | **Alice Springs** | **84.48** | **221** | P | **P** | **06 24 23.3** | **+0.2** |
| **ASAR** | **Alice Springs** | **84.48** | **221** | P | **P** | **06 24 23.8** | **+0.6** |
| | comp=Z,1.5nm,0.7s,baz=24,slow=5.2,SNR=13 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **84.48** | **221** | P | **P** | **06 24 23.3** | **+0.2** |
| **BRTR** | **Keskin Array B** | **84.69** | **334** | P | **P** | **06 24 23.5** | **-0.8** |
| **BRTR** | **Keskin Array B** | **84.69** | **334** | P | **P** | **06 24 24.2** | **-0.2** |
| | comp=Z,2.5nm,0.7s,baz=76,slow=3.1,SNR=15 | | | | | | |
| BRTR | | | | LR | LR | 07 05 47.3 | |
| | comp=Z,37nm,19.5s,baz=344,slow=38 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **BR105** | **Keskin Array S** | **84.70** | **334** | P | **P** | **06 24 24.7** | **+0.3** |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **BR104** | **Keskin Array S** | **84.71** | **334** | P | **P** | **06 24 24.3** | **-0.1** |
| **JTS** | **Las Juntas de** | **85.67** | **79** | LR | LR | 07 03 59.7 | |
| | comp=Z,27nm,18.1s,baz=296,slow=36 | | | | | | |
| **URZ** | **Urewera** | **89.00** | **182** | LR | LR | 06 59 02.2 | |
| | comp=Z,65nm,19.7s,baz=15,slow=32 | | | | | | |
| **ESDC** | **Sonseca Array** | **89.56** | **3** | P | **P** | **06 24 47.0** | **-0.9** |
| | comp=Z,0.5nm,0.8s,baz=348,slow=4.3,SNR=5.8 | | | | | | |
| ESDC | | | | LR | LR | 07 06 45.1 | |
| | comp=Z,25nm,18.2s,baz=342,slow=37 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **89.76** | **281** | LR | LR | 07 12 15.6 | |
| | comp=Z,30nm,18.0s,baz=226,slow=40 | | | | | | |
| **EIL** | **Elat** | **93.65** | **329** | LR | LR | 07 14 20.7 | |
| | comp=Z,50nm,18.2s,baz=67,slow=40 | | | | | | |
| **SDV** | **Santo Domingo** | **95.44** | **69** | LR | LR | 07 10 26.2 | |
| | comp=Z,15nm,18.6s,baz=286,slow=37 | | | | | | |
| **MDT** | **Midelt** | **96.38** | **3** | LR | LR | 07 12 41.7 | |
| | comp=Z,23nm,18.1s,baz=245,slow=38 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.00** | **357** | PKP | **PKiKP** | **06 30 33.0** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=17,slow=2.1,SNR=4.5 | | | | | | |
| **H03N2** | **Juan Fernandez** | **122.23** | **105** | T | T | 08 45 02.9 | |
| | baz=317,slow=77,SNR=39 | | | | | | |
| **H03N1** | **Juan Fernandez** | **122.24** | **105** | T | T | 08 45 04.0 | |
| | baz=317,slow=77,SNR=32 | | | | | | |
| **H03N3** | **Juan Fernandez** | **122.24** | **105** | T | T | 08 45 05.0 | |
| | baz=317,slow=77,SNR=29 | | | | | | |
| **VNDA** | **Vanda** | **128.80** | **185** | PKP | **PKPdf** | **06 30 56.1** | **0.0** |
| | comp=Z,0.3nm,0.8s,baz=70,slow=3.5,SNR=1.6 | | | | | | |
| **BOSA** | **Boshof** | **150.25** | **309** | PKPbc | **PKPbc** | **06 31 41.8** | **+0.3** |
| | comp=Z,5.0nm,0.7s,baz=25,slow=3.6,SNR=13 | | | | | | |

*IDC* ***05*** *07:08:03.9±1.1,29.°30S×179.°01W,h323km±11km, mb3.1/4, mbtmp3.9/5, Error ellipse: s-maj=27.9km s-min=24.7km az=26.0*

**ISC 05 07:08:04.4±1.1,29.°7S±0.°1×179.°1W±0.°2, h315km, n8,** σ1°70/9, **mb3.2**/4, **Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.15** | **68** | P | **Pn** | **07 08 46.8** | **-0.3** |
| | 482nm,0.2s,baz=83,slow=9.9,SNR=6.8 | | | | | | |
| **URZ** | **Urewera** | **9.09** | **199** | P | **P** | **07 10 13.7** | **-1.4** |
| | 4.2nm,0.3s,baz=1.2,slow=4.3,SNR=13 | | | | | | |
| URZ | | | | S | **S** | **07 11 54.1** | **-0.6** |
| | 4.5nm,0.4s,baz=328,slow=19,SNR=1.2 | | | | | | |
| **STKA** | **Stephens Creek** | **33.69** | **256** | P | **P** | **07 14 18.5** | **+1.8** |
| | 1.0nm,0.4s,baz=108,slow=13,SNR=3.6 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **42.17** | **267** | P | **P** | **07 15 27.1** | **0.0** |
| | 0.7nm,0.5s,baz=103,slow=7.2,SNR=14 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.09** | **272** | P | **P** | **07 15 33.2** | **-1.3** |
| | 0.3nm,0.4s,baz=112,slow=7.2,SNR=8.4 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.41** | **180** | P | **P** | **07 17 42.9** | **+1.9** |
| | 0.6nm,0.6s,baz=314,slow=1.8,SNR=6.6 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **144.15** | **340** | PKP | **PKPab** | **07 26 58.5** | **-2.2** |
| | 0.8nm,0.4s,baz=56,slow=4.3,SNR=17 | | | | | | |
| **HFS** | **Hagfors** | **148.35** | **348** | PKPbc | **PKPdf** | **07 27 10.3** | **+1.1** |
| | 2.3nm,1.0s,baz=80,slow=1.6,SNR=1.6 | | | | | | |

*IDC* ***05*** *07:41:35.6±1.2,36.°41N×139.°77E,h101km±10km, mb3.6/12, mbtmp3.9/17, Error ellipse: s-maj=19.0km s-min=8.9km az=68.0*

*NIED* ***05*** *07:41:35.9,36.°41N×139.°79E,h88km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr5.60; Mθθ1.30; Mφφ-6.89; Mrθ1.49; Mθφ-2.46; Mrφ5.64; Fault plane solution: M₀8.80000×10¹⁴ NP1:φs15.00000°, δ66.00000°, λ89.00000°. NP2:φs196.00000°, δ24.00000°, λ91.00000°.*

*JMA* ***05*** *07:41:35.9±0.1,36.°4N±0.°3×139.°8E±0.°4,h88km, MV3.7/40, SOUTHERN TOCHIGI PREF*

*JMA Felt II J1 at SOUTHERN TOCHIGI PREF .*

*NEIC* ***05*** *07:41:36.6±1.2,36.°51N±0.°06×139.°73E±0.°09,h88km±9km, mb4.2/14, Error ellipse: s-maj=11.2km s-min=8.1km az=124.0*

**ISC 05 07:41:35.5±0.7,36.°43N±0.°04×139.°78E±0.°05, h94km±6km, n76,** σ0°90/83, **mb4.0**/20, **12D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAG** | **Ashikaga** | **0.26** | **269** | ⇓*i*P | **Pn** | **07 41 49.1** | **-0.1** |
| JAG | | | | ⇓S | **Sn** | **07 41 58.8** | **-0.6** |
| **JYT** | **Yasato** | **0.39** | **121** | *i* P | **Pn** | **07 41 49.8** | **-0.1** |
| JYT | | | | S | **Sn** | **07 42 00.1** | **-0.5** |
| **JKT** | **Katashina** | **0.54** | **308** | ⇓*i*P | **Pn** | **07 41 51.0** | **-0.1** |
| JKT | | | | ⇓S | **Sn** | **07 42 03.0** | **+0.2** |
| **JRY** | **Ryogami san** | **0.82** | **240** | ⇓*i*P | **Pn** | **07 41 53.9** | **+0.3** |
| JRY | | | | ⇓S | **Sn** | **07 42 07.2** | **0.0** |
| **JUON** | **Uonuma** | **0.97** | **323** | ⇓*i*P | **Pn** | **07 41 55.2** | **+0.1** |
| JUON | | | | ⇓S | **Sn** | **07 42 09.6** | **-0.2** |
| **JFY** | **Yanaizu** | **0.97** | **356** | *i* P | **Pn** | **07 41 55.4** | **+0.1** |
| JFY | | | | S | **Sn** | **07 42 10.0** | **0.0** |
| **JOTO** | **OTAMA OYAMA** | **1.21** | **21** | *i* P | **Pn** | **07 41 58.4** | **+0.4** |
| JOTO | | | | S | **Sn** | **07 42 15.4** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **1.27** | **275** | P | **Pn** | **07 41 58.7** | **0.0** |
| | 432nm,0.6s,baz=90,slow=12,SNR=1202 | | | | | | |
| MJAR | | | | S | **Sn** | **07 42 16.4** | **+0.2** |
| | 92nm,0.4s,baz=97,slow=17,SNR=5.8 | | | | | | |
| MJAR | | | | LR | LR | 07 42 42.1 | |
| | comp=Z,58nm,21.2s,baz=14,slow=52 | | | | | | |
| **MAJO** | **Matsushiro** | **1.27** | **275** | P | **Pn** | **07 41 58.8** | **+0.2** |
| **MAJO** | **Matsushiro** | **1.27** | **275** | | **Pn** | **07 41 58.9** | **+0.2** |
| **MAT** | **Matsushiro** | **1.27** | **275** | *i* P | **Pn** | **07 41 58.9** | **+0.2** |
| **MJB9** | **Matsu-Tunnel** | **1.27** | **276** | | **Pn** | **07 41 58.9** | **+0.2** |
| **JOD2** | **Odawara 2** | **1.29** | **206** | *i* P | **Pn** | **07 41 58.7** | **-0.2** |
| JOD2 | | | | S | **Sn** | **07 42 16.1** | **-0.6** |
| **JYN** | **Shimob** | **1.37** | **227** | ⇓*i*P | **Pn** | **07 42 00.6** | **+0.7** |
| JYN | | | | ⇓S | **Sn** | **07 42 19.2** | **+0.9** |
| **JNS** | **Sasagawa** | **1.43** | **345** | ⇓*i*P | **Pn** | **07 42 00.8** | **+0.2** |
| JNS | | | | ⇓S | **Sn** | **07 42 19.9** | **+0.4** |
| **JFNN** | **Fujinakano** | **1.52** | **216** | P | **Pn** | **07 42 02.5** | **+0.7** |
| JFNN | | | | S | **Sn** | **07 42 22.1** | **+0.6** |
| **JMM** | **Marumori** | **1.65** | **29** | P | **Pn** | **07 42 03.7** | **+0.4** |
| **JMM** | **Marumori** | **1.65** | **29** | | **Pn** | **07 42 03.5** | **+0.2** |
| **JSD** | **Sado** | **2.01** | **323** | P | **Pn** | **07 42 07.6** | **-0.4** |
| **JSD** | **Sado** | **2.01** | **323** | | **Pn** | **07 42 07.5** | **-0.4** |
| **JGF** | **Kuroka** | **2.13** | **248** | P | **Pn** | **07 42 10.5** | **+0.8** |
| **JGF** | **Kuroka** | **2.13** | **248** | | **Pn** | **07 42 10.4** | **+0.8** |
| **JSG** | **Sagara** | **2.18** | **217** | P | **Pn** | **07 42 11.9** | **+1.6** |
| **JSG** | **Sagara** | **2.18** | **217** | | **Pn** | **07 42 11.8** | **+1.5** |
| **INU** | **Inuyama** | **2.49** | **245** | P | **Pn** | **07 42 15.0** | **+0.7** |
| **INU** | **Inuyama** | **2.49** | **245** | | **Pn** | **07 42 14.9** | **+0.6** |
| **JHJ** | **Hachijo jima 2** | **3.30** | **180** | P | **Pn** | **07 42 25.4** | **+0.2** |
| | 169nm,0.3s,baz=331,slow=20,SNR=44 | | | | | | |
| JHJ | | | | S | **Sn** | **07 43 03.0** | **-0.6** |
| | 133nm,0.4s,baz=244,slow=23,SNR=7.3 | | | | | | |
| **JHJ2** | **Mitsune** | **3.31** | **179** | P | **Pn** | **07 42 25.7** | **+0.4** |
| **JHJ2** | **Mitsune** | **3.31** | **179** | | **Pn** | **07 42 25.2** | **-0.1** |
| **JTM** | **Tenmabayashi** | **4.46** | **13** | P | **Pn** | **07 42 40.9** | **0.0** |
| **JMN** | **Monobe** | **5.54** | **243** | P | **Pn** | **07 42 55.8** | **+0.3** |
| **JMN** | **Monobe** | **5.54** | **243** | | **Pn** | **07 42 55.8** | **+0.3** |
| **ERM** | **Erimo** | **6.16** | **24** | Pn | **Pn** | **07 43 02.2** | **-1.7** |
| **JEM** | **Erimo** | **6.16** | **24** | P | **Pn** | **07 43 03.1** | **-0.8** |
| **ASAJ** | **Asahikawa** | **7.97** | **15** | P | **Pn** | **07 43 27.9** | **-0.6** |
| | 2.3nm,0.3s,baz=204,slow=15,SNR=5.2 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **7.97** | **15** | Pn | **Pn** | **07 43 28.1** | **-0.5** |
| **JNU** | **Nakatsue** | **8.03** | **248** | Pn | **Pn** | **07 43 31.0** | **+1.5** |
| **JNU** | **Nakatsue** | **8.03** | **248** | P | **Pn** | **07 43 30.8** | **+1.3** |
| | 5.3nm,0.7s,baz=49,slow=3.9,SNR=4.3 | | | | | | |
| **KSRS** | **Korea Array** | **9.55** | **280** | P | **Pn** | **07 43 52.4** | **+2.4** |
| | 2.1nm,0.7s,baz=95,slow=14,SNR=11 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.77** | **325** | P | **Pn** | **07 43 54.0** | **+1.0** |
| | 14nm,1.1s,baz=119,slow=7.2,SNR=7.4 | | | | | | |
| **MA2** | **Magadan** | **24.23** | **14** | P | **P** | **07 46 44.0** | **+0.7** |
| **MA2** | **Magadan** | **24.23** | **14** | P | **P** | **07 46 43.8** | **+0.6** |
| | 2.9nm,0.6s,baz=200,slow=11,SNR=4.4 | | | | | | |
| | 2.9nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **27.05** | **305** | P | **P** | **07 47 06.6** | **-2.5** |
| | 0.5nm,0.4s,baz=111,slow=7.9,SNR=2.2 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.00** | **118** | T | T | 08 17 42.4 | |
| | baz=312,slow=75,SNR=15 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.01** | **118** | T | T | 08 17 42.8 | |
| | baz=312,slow=75,SNR=6.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.02** | **118** | T | T | 08 17 43.6 | |
| | baz=312,slow=75,SNR=6.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.67** | **120** | T | T | 08 18 35.6 | |
| | baz=314,slow=76,SNR=9.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.67** | **120** | T | T | 08 18 32.2 | |
| | baz=314,slow=76,SNR=7.3 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.68** | **120** | T | T | 08 18 33.4 | |
| | baz=314,slow=76,SNR=6.6 | | | | | | |
| **TIXI** | **Tiksi** | **35.74** | **354** | P | **P** | **07 48 25.7** | **+0.9** |
| **ZAA0** | **Zalesovo Array** | **41.36** | **313** | P | **P** | **07 49 12.0** | **0.0** |
| ZAA0 | | | | IAmb | IAmb | 07 49 12.1 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.36** | **313** | P | **P** | **07 49 12.1** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **41.36** | **313** | P | **P** | **07 49 11.5** | **-0.5** |
| | comp=Z,2.3nm,0.5s,baz=85,slow=8.6,SNR=8.8 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **43.33** | **302** | P | **P** | **07 49 28.5** | **+0.4** |
| **MKAR** | **Makanchi Array** | **43.33** | **302** | P | **P** | **07 49 28.5** | **+0.4** |
| **MKAR** | **Makanchi Array** | **43.33** | **302** | P | **P** | **07 49 28.1** | **0.0** |
| | comp=Z,1.4nm,0.6s,baz=90,slow=10.0,SNR=14 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **43.54** | **302** | P | **P** | **07 49 29.9** | **+0.1** |
| **KURK** | **Kurchatov** | **45.27** | **308** | P | **P** | **07 49 43.2** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **45.34** | **308** | P | **P** | **07 49 43.6** | **-0.4** |
| | comp=Z,1.6nm,0.4s,baz=86,slow=8.4,SNR=14 | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **G18K** | **Tagagawik** | **45.83** | **30** | P | **P** | **07 49 49.1** | **+1.4** |
| G18K | | | | IAmb | IAmb | 07 50 17.0 | |
| | comp=Z,3.6nm,1.2s | | | | | | |
| **C19K** | **Lookout Ridge** | **46.07** | **26** | P | **P** | **07 49 51.1** | **+1.6** |
| C19K | | | | IAmb | IAmb | 07 49 54.9 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **46.47** | **27** | P | **P** | **07 49 54.3** | **+1.6** |
| D19K | | | | IAmb | IAmb | 07 50 03.1 | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **E19K** | **Redstone River** | **46.62** | **28** | P | **P** | **07 49 55.2** | **+1.3** |
| E19K | | | | IAmb | IAmb | 07 50 10.3 | |
| | comp=Z,4.3nm,1.4s | | | | | | |
| **J19K** | **Poorman** | **46.90** | **33** | P | **P** | **07 49 57.6** | **+1.5** |
| J19K | | | | IAmb | IAmb | 07 49 59.8 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **B20K** | **Meade River** | **47.09** | **25** | P | **P** | **07 49 59.0** | **+1.6** |
| **B21K** | **Ikpikpuk River** | **47.90** | **25** | P | **P** | **07 50 05.2** | **+1.5** |
| B21K | | | | IAmb | IAmb | 07 50 29.2 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **48.49** | **27** | P | **P** | **07 50 09.9** | **+1.6** |
| D22K | | | | IAmb | IAmb | 07 50 10.6 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **50.70** | **32** | P | **P** | **07 50 25.9** | **+0.8** |
| | comp=Z,0.5nm,0.8s,baz=267,slow=6.5,SNR=6.1 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **52.29** | **300** | P | **P** | **07 50 37.6** | **+0.3** |
| **WRA** | **Warramunga Arr** | **56.30** | **186** | P | **P** | **07 51 06.1** | **-0.4** |
| | comp=Z,0.6nm,0.4s,baz=0.6,slow=7.5,SNR=19 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **57.32** | **310** | P | **P** | **07 51 13.4** | **-0.1** |
| **ASAR** | **Alice Springs** | **60.03** | **186** | P | **P** | **07 51 33.0** | **+0.5** |
| | comp=Z,0.5nm,0.8s,baz=2.1,slow=7.7,SNR=2.9 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.09** | **339** | P | **P** | **07 51 57.3** | **-1.8** |
| | comp=Z,0.4nm,0.4s,baz=64,slow=8.5,SNR=4.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **68.73** | **332** | P | **P** | **07 52 26.7** | **-2.0** |
| | comp=Z,0.7nm,0.5s,baz=58,slow=7.5,SNR=7.5 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **73.96** | **322** | P | **P** | **07 52 59.6** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=51,slow=5.7,SNR=9.0 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **74.23** | **337** | P | **P** | **07 53 01.2** | **-0.6** |
| | comp=Z,0.9nm,0.7s,baz=41,slow=5.9,SNR=2.8 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |

*NOU* ***05*** *07:44:40.4,25.°75S×178.°99W,h501km,mb4.5/53, South of Fiji Islands*

*IDC* ***05*** *07:44:47.5±1.1,26.°10S×179.°75E,h477km±10km, mb3.7/13, mbtmp4.5/16, Error ellipse: s-maj=11.9km s-min=10.8km az=137.0*

*NEIC* ***05*** *07:44:48.7±2.0,26.°15S±0.°09×179.°8E±0.°1,h482km±5km, mb4.5/132, Error ellipse: s-maj=17.7km s-min=12.8km az=71.0*

**ISC 05 07:44:49.1±0.3,26.°15S±0.°05×179.°89E±0.°06, h500km, n248,** σ1°45/226, **mb4.4**/86, **5C-1D, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **3.65** | **148** | P | **P** | **07 46 03.7** | **-1.0** |
| **RAO** | **Raoul Island** | **3.65** | **148** | P | **P** | **07 46 05.7** | **+1.0** |
| | 572nm,0.2s,baz=119,slow=23,SNR=6.3 | | | | | | |
| **MSVF** | **Nonsavu** | **8.54** | **348** | P | **P** | **07 46 49.4** | **-2.0** |
| **MSVF** | **Nonsavu** | **8.54** | **348** | P | **P** | **07 46 49.0** | **-2.4** |
| | 11nm,0.4s,baz=251,slow=22,SNR=16 | | | | | | |
| **OUZ** | **Omahuta** | **10.54** | **209** | P | **P** | **07 47 13.4** | **+1.4** |
| **KUZ** | **Kuaotunu** | **11.15** | **198** | P | **P** | **07 47 17.8** | **-0.7** |
| **KUZ** | **Kuaotunu** | **11.15** | **198** | P | **P** | **07 47 19.4** | **+0.9** |
| **WIAZ** | **Waiheke Island** | **11.36** | **200** | P | **P** | **07 47 21.9** | **+1.2** |
| **MBAZ** | **Motutapu North** | **11.41** | **201** | P | **P** | **07 47 22.6** | **+1.3** |
| **ETAZ** | **East Tamaki Re** | **11.57** | **200** | P | **P** | **07 47 24.3** | **+1.3** |
| **MKAZ** | **Moumakai** | **11.64** | **199** | P | **P** | **07 47 24.6** | **+0.9** |
| **WTAZ** | **Waiatarua** | **11.67** | **202** | P | **P** | **07 47 25.2** | **+1.2** |
| **HAZ** | **Te Kaha** | **11.71** | **188** | P | **P** | **07 47 25.6** | **-0.9** |
| HAZ | | | | S | **S** | **07 49 30.8** | **-1.7** |
| **AWAZ** | **Awhitu Peninsu** | **11.76** | **201** | P | **P** | **07 47 25.8** | **+0.8** |
| **MARNC** | **Mare, Loyalty** | **11.81** | **291** | P | **P** | **07 47 25.6** | **-0.1** |
| **PINNC** | **Pines Island,** | **11.88** | **285** | | **P** | **07 47 26.3** | **-0.1** |
| **RUGZ** | **Raukumara Rang** | **11.93** | **188** | P | **P** | **07 47 27.1** | **+0.2** |
| **TWGZ** | **Tauwhareparae** | **12.10** | **187** | P | **P** | **07 47 29.0** | **+0.3** |
| **TOZ** | **Tahuroa Road** | **12.13** | **197** | P | **P** | **07 47 29.7** | **+0.7** |
| **URZ** | **Urewera** | **12.30** | **190** | P | **P** | **07 47 28.1** | **-2.6** |
| **URZ** | **Urewera** | **12.30** | **190** | P | **P** | **07 47 27.8** | **-2.9** |
| | 13nm,0.4s,baz=321,slow=4.4,SNR=14 | | | | | | |
| URZ | | | | S | **S** | **07 49 40.3** | **-3.6** |
| | 43nm,0.7s,baz=153,slow=21,SNR=6.3 | | | | | | |
| **URZ** | **Urewera** | **12.30** | **190** | P | **P** | **07 47 27.9** | **-2.8** |
| URZ | | | | S | **S** | **07 49 39.9** | **-4.0** |
| **YATNC** | **Mamie plateau,** | **12.55** | **286** | P | **P** | **07 47 33.5** | **-0.1** |
| **LIFNC** | **LIFOU** | **12.78** | **292** | P | **P** | **07 47 35.5** | **-0.5** |
| **LIFNC** | **LIFOU** | **12.78** | **292** | P | **P** | **07 47 35.7** | **-0.3** |
| **DZM** | **Mont Dzumac** | **12.93** | **285** | P | **P** | **07 47 37.9** | **+0.1** |
| **DZM** | **Mont Dzumac** | **12.93** | **285** | P | **P** | **07 47 37.9** | **+0.1** |
| | 35nm,0.6s,baz=112,slow=9.0,SNR=51 | | | | | | |
| **HIZ** | **Hauiti** | **13.04** | **198** | P | **P** | **07 47 38.5** | **0.0** |
| **NOUC** | **Port Laguerre** | **13.04** | **285** | P | **P** | **07 47 38.8** | **0.0** |
| **BKZ** | **Black Stump Fm** | **13.29** | **192** | P | **P** | **07 47 37.6** | **-3.6** |
| **AFI** | **Afiamalu** | **14.46** | **34** | P | **P** | **07 47 49.6** | **-4.4** |
| **BFZ** | **Birch Farm** | **14.81** | **191** | P | **P** | **07 47 54.2** | **-2.9** |
| **MRZ** | **Mangatainoka R** | **14.91** | **193** | P | **P** | **07 47 55.5** | **-2.7** |
| **KOUNC** | **Koumac, New Ca** | **15.37** | **288** | P | **P** | **07 48 04.7** | **+1.4** |
| **KOUNC** | **Koumac, New Ca** | **15.37** | **288** | P | **P** | **07 48 06.0** | **+2.7** |
| **SNZO** | **South Karori** | **15.72** | **195** | P | **P** | **07 48 04.3** | **-2.3** |
| **SNZO** | **South Karori** | **15.72** | **195** | P | **P** | **07 48 05.4** | **-1.2** |
| **QRZ** | **Quartz Range** | **15.87** | **201** | P | **P** | **07 48 06.8** | **-1.4** |
| **QRZ** | **Quartz Range** | **15.87** | **201** | P | **P** | **07 48 07.2** | **-0.9** |
| **TKNZ** | **Takaka Hill** | **15.92** | **199** | P | **P** | **07 48 07.3** | **-1.5** |
| **TUWZ** | **Tuamarina** | **16.02** | **196** | P | **P** | **07 48 07.3** | **-2.4** |
| **KHZ** | **Kahutara** | **17.05** | **196** | P | **P** | **07 48 17.6** | **-2.7** |
| **INZ** | **Inchbonnie** | **17.93** | **201** | P | **P** | **07 48 27.2** | **-1.4** |
| **OXZ** | **Oxford** | **18.30** | **199** | P | **P** | **07 48 29.6** | **-2.4** |
| **RPZ** | **Rata Peaks** | **18.95** | **200** | P | **P** | **07 48 36.0** | **-1.9** |
| **RPZ** | **Rata Peaks** | **18.95** | **200** | P | **P** | **07 48 38.0** | **0.0** |
| **RPZ** | **Rata Peaks** | **18.95** | **200** | P | **P** | **07 48 36.2** | **-1.8** |
| | 16nm,0.6s,baz=42,slow=2.8,SNR=23 | | | | | | |
| **LHI** | **Lord Howe Isla** | **19.01** | **249** | P | **P** | **07 48 40.7** | **+2.0** |
| **FOZ** | **Fox Glacier** | **19.19** | **203** | P | **P** | **07 48 40.1** | **0.0** |
| **JCZ** | **Jackson Bay** | **20.03** | **204** | P | **P** | **07 48 46.1** | **-1.8** |
| **ODZ** | **Otahua Downs** | **20.27** | **199** | P | **P** | **07 48 48.2** | **-1.8** |
| **ARMA** | **Armidale** | **25.22** | **254** | P | **P** | **07 49 35.6** | **+0.9** |
| **ARMA** | **Armidale** | **25.22** | **254** | P | **P** | **07 49 35.7** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 07 49 35.9 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **25.94** | **265** | P | **P** | **07 49 40.8** | **-0.2** |
| **EIDS** | **Eidsvold** | **25.94** | **265** | P | **P** | **07 49 41.3** | **+0.3** |
| **SYDH** | **Sydney Hard Ro** | **26.31** | **246** | P | **P** | **07 49 44.5** | **+0.3** |
| **RK1H** | **Rockhampton Ha** | **26.81** | **270** | P | **P** | **07 49 48.7** | **0.0** |
| **CNB** | **Canberra Magne** | **27.70** | **243** | P | **P** | **07 49 58.0** | **+1.5** |
| **CAN** | **Canberra** | **27.99** | **243** | P | **P** | **07 49 59.7** | **+0.7** |
| **CAN** | **Canberra** | **27.99** | **243** | P | **P** | **07 50 00.1** | **+1.1** |
| CAN | | | | IAmb | IAmb | 07 50 00.6 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| **MILA** | **Mila** | **28.23** | **240** | P | **P** | **07 50 01.4** | **+0.3** |
| **GLAD** | **Gladstone** | **30.21** | **233** | P | **P** | **07 50 18.8** | **+0.6** |
| **CMSA** | **Cobar Meteorol** | **30.36** | **252** | P | **P** | **07 50 19.2** | **-0.4** |
| **TOO** | **Toolangi** | **31.20** | **240** | P | **P** | **07 50 27.4** | **+0.6** |
| **TV1H** | **Townsville Har** | **31.23** | **276** | P | **P** | **07 50 26.8** | **-0.4** |
| **CTA** | **Charters Tower** | **31.46** | **274** | P | **P** | **07 50 28.9** | **-0.3** |
| **CTAO** | **Charters Tower** | **31.46** | **274** | P | **P** | **07 50 29.1** | **-0.1** |
| **CTAO** | **Charters Tower** | **31.46** | **274** | P | **P** | **07 50 29.4** | **+0.2** |
| **QLP** | **Quilpie** | **31.89** | **261** | P | **P** | **07 50 32.9** | **+0.1** |
| **BRAT** | **Ballarat** | **32.41** | **241** | P | **P** | **07 50 37.8** | **+0.7** |
| **MTSU** | **Mount Surprise** | **33.82** | **276** | P | **P** | **07 50 49.3** | **0.0** |
| **STKA** | **Stephens Creek** | **33.85** | **251** | P | **P** | **07 50 49.1** | **-0.3** |
| **STKA** | **Stephens Creek** | **33.85** | **251** | P | **P** | **07 50 49.4** | **-0.1** |
| **STKA** | **Stephens Creek** | **33.85** | **251** | P | **P** | **07 50 49.2** | **-0.2** |
| | comp=Z,4.5nm,0.4s,baz=98,slow=12,SNR=22 | | | | | | |
| STKA | | | | ScP | **ScP** | **07 56 13.5** | **+2.3** |
| | comp=Z,3.0nm,0.6s,baz=340,slow=7.4,SNR=4.9 | | | | | | |
| | comp=Z,4.5nm,0.4s | | | | | | |
| **INKA** | **Innaminka** | **34.84** | **258** | P | **P** | **07 50 58.3** | **+0.6** |
| **PMG** | **Port Moresby** | **35.19** | **292** | P | **P** | **07 51 00.4** | **-0.4** |
| PMG | | | | IAmb | IAmb | 07 51 01.1 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **HTT** | **Hallett** | **36.11** | **248** | P | **P** | **07 51 07.8** | **-0.6** |
| **COEN** | **Coen** | **36.43** | **282** | P | **P** | **07 51 10.5** | **-0.7** |
| **COEN** | **Coen** | **36.43** | **282** | P | **P** | **07 51 11.2** | **0.0** |
| COEN | | | | IAmb | IAmb | 07 51 11.5 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **LCRK** | **Leigh Creek** | **36.80** | **253** | P | **P** | **07 51 13.7** | **-0.3** |
| **QIS** | **Mount Isa** | **37.30** | **270** | P | **P** | **07 51 17.6** | **-0.7** |
| **BBOO** | **Buckleboo** | **38.52** | **249** | P | **P** | **07 51 26.9** | **-1.2** |
| **BBOO** | **Buckleboo** | **38.52** | **249** | P | **P** | **07 51 27.1** | **-1.0** |
| BBOO | | | | IAmb | IAmb | 07 51 37.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **OOD** | **Oodnadatta** | **39.27** | **257** | P | **P** | **07 51 34.4** | **+0.1** |
| **MANU** | **Manus Island** | **39.39** | **302** | P | **P** | **07 51 34.8** | **-0.5** |
| **MULG** | **Mulgathing** | **40.39** | **253** | P | **P** | **07 51 42.1** | **-1.1** |
| **AS01** | **Alice Springs** | **41.58** | **263** | P | **P** | **07 51 52.1** | **-0.8** |
| **AS31** | **Alice Springs** | **41.62** | **263** | P | **P** | **07 51 52.8** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 07 51 53.9 | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **41.62** | **263** | P | **P** | **07 51 52.2** | **-0.9** |
| **ASAR** | **Alice Springs** | **41.62** | **263** | P | **P** | **07 51 

comp=Z,15nm,0.9s
**KRMB Red Mountain 85.06 39 P P 07 56 33.9 +2.2**
**KSXB Camp Six Broad 85.29 39 P P 07 56 34.8 +2.1**
**KBO Bosley Butte 85.34 38 P P 07 56 34.0 +1.0**
KBO IAmb IAmb 07 56 36.2
comp=Z,11nm,1.1s
**GSC Goldstone, Bar 85.52 47 IAmb IAmb 07 56 36.4**
comp=Z,6.9nm,0.9s
**GLA Glamis 85.54 50 IAmb IAmb 07 56 37.2**
comp=Z,9.1nm,0.8s
**TIA Tai'an 85.71 314 P P 07 56 39.5 +4.7**
TIA pmax pmax
comp=Z,2.0nm,0.4s
**YBH Yreka Blue Hor 85.88 39 P 07 56 37.5 +1.9**
**HATC Hat Creek Radi 86.01 41 IAmb IAmb 07 56 38.1**
comp=Z,8.4nm,0.8s
**PNTR Pine Nut 86.03 43 IAmb IAmb 07 56 38.7**
comp=Z,9.2nm,0.8s
**LHV Little Huntoon 86.20 44 IAmb IAmb 07 56 39.5**
comp=Z,7.3nm,0.9s
**214A Organ Pipe Nat 86.33 52 IAmb IAmb 07 56 40.4**
comp=Z,6.2nm,0.7s
**NVAR Mina Array Bea 86.43 44 P P 07 56 39.8 +1.3**
comp=Z,3.6nm,0.7s,baz=222,slow=8.4,SNR=32
comp=Z,3.6nm,0.7s
**PLCA Paso Flores 86.78 134 P P 07 56 42.0 +1.9**
comp=Z,3.0nm,0.6s,baz=256,slow=6.6,SNR=9.4
comp=Z,3.0nm,0.6s
**I03D Drain, OR 86.81 37 P P 07 56 41.7 +1.9**
**KVN Kaiserville 86.93 44 IAmb IAmb 07 56 42.6**
comp=Z,5.0nm,0.9s
**Y14A Wickenburg 87.30 50 IAmb IAmb 07 56 44.5**
comp=Z,3.5nm,0.7s
**SHPR Sheep Range 87.30 47 P P 07 56 44.5 +1.9**
**BUCK Buck Mountain 87.34 37 P P 07 56 44.3 +1.9**
BUCK IAmb IAmb 07 56 44.6
comp=Z,10.0nm,0.7s
**I04A Tendick Farm, 87.39 38 IAmb IAmb 07 56 44.2**
comp=Z,5.9nm,0.6s
**H04D Lebanon 87.68 37 IAmb IAmb 07 56 46.0**
comp=Z,9.2nm,0.7s
**J05D Fort Rock, OR 87.71 39 P P 07 56 46.2 +1.9**
**GYA Guiyang 87.81 301 P P 07 56 47.4 +2.3**
GYA pmax pmax
comp=Z,13nm,0.6s
**TUC Tucson 87.96 52 P P 07 56 48.3 +2.7**
TUC IAmb IAmb 07 56 49.0
comp=Z,7.4nm,0.8s
**H04A Detroit Lake 88.09 37 P P 07 56 46.8 +1.0**
H04A IAmb IAmb 07 56 47.8
comp=Z,9.0nm,0.8s
**BMN Battle Mountai 88.31 43 IAmb IAmb 07 56 50.0**
comp=Z,5.3nm,0.9s
**E03A Lebam 88.58 35 P P 07 56 50.0 +2.1**
**CNPM China Poot 88.62 14 P P 07 56 48.5 +0.6**
CNPM IAmb IAmb 07 56 49.1
comp=Z,9.0nm,0.8s
**X16A Lo Mia Camp, P 88.64 50 IAmb IAmb 07 56 51.8**
comp=Z,4.4nm,0.8s
**WVOR Wild Horse Val 88.67 41 IAmb IAmb 07 56 50.5**
comp=Z,4.5nm,0.8s
**F04A Amboy 88.77 36 P P 07 56 50.6 +1.6**
F04A IAmb IAmb 07 56 51.0
comp=Z,10.0nm,0.8s
**LCMT Little Creek M 88.85 47 IAmb IAmb 07 56 52.3**
comp=Z,5.6nm,1.1s
**NLWA Neilton Lookou 88.98 34 P P 07 56 51.4 +1.5**
NLWA IAmb IAmb 07 56 55.2
comp=Z,5.1nm,0.9s
**CCUT Cedar City 89.08 47 IAmb IAmb 07 56 53.7**
comp=Z,6.1nm,1.2s
**KNB Kanab 89.14 48 IAmb IAmb 07 56 53.8**
comp=Z,4.7nm,0.9s
**M17K Holitna River 89.15 11 P P 07 56 51.3 +1.0**
**U15A North Rim 89.16 48 IAmb IAmb 07 56 54.2**
comp=Z,6.7nm,1.0s
**SPR3 Spring Creek 3 89.27 45 P P 07 56 52.4 +0.5**
**G06A Carlson Farm, 89.29 37 P P 07 56 52.6 +1.2**
G06A IAmb IAmb 07 56 53.1
comp=Z,4.0nm,0.7s
**K15K Wolf Creek Mou 89.38 9 P P 07 56 52.2 +0.9**
**LON Longmire 89.62 36 P P 07 56 54.0 +1.1**
LON IAmb IAmb 07 56 54.5
comp=Z,3.8nm,0.7s
**GNW Green Mountain 89.62 35 P P 07 56 54.3 +1.5**
GNW IAmb IAmb 07 56 55.1
comp=Z,6.2nm,0.7s
**ELK Elko 89.71 43 IAmb IAmb 07 56 55.8**
comp=Z,4.3nm,1.1s
**PKCU Pink Cliffs 89.71 47 IAmb IAmb 07 56 57.2**
comp=Z,2.2nm,0.8s
**G08A Pilot Rock 90.25 38 P P 07 56 57.5 +1.5**
G08A IAmb IAmb 07 56 57.6
comp=Z,2.9nm,0.7s
**MFID Camas Ranch 90.91 41 IAmb IAmb 07 57 00.8**
comp=Z,3.8nm,0.8s
**NLU North Lily Min 91.25 45 IAmb IAmb 07 57 03.1**
comp=Z,2.6nm,0.8s
**Q16A Castle Valley 91.27 47 IAmb IAmb 07 57 04.0**
comp=Z,3.9nm,0.8s
**D08A Wollman Farm, 91.36 37 IAmb IAmb 07 57 02.4**
comp=Z,3.9nm,0.8s
**VHRN Van Horn 91.41 56 IAmb IAmb 07 57 04.2**
comp=Z,2.9nm,1.0s
**MPU Maple Canyon 91.57 46 IAmb IAmb 07 57 04.6**
comp=Z,3.9nm,0.8s
**F10A Beach Ranch, E 91.62 38 IAmb IAmb 07 57 04.3**
comp=Z,4.7nm,0.9s
**PZH PanZhiHua 91.67 299 P P 07 57 05.4 +2.4**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,140nm,5.4s
**TX31 Lajitas Ar. Si 91.70 58 IAmb IAmb 07 57 05.0**
comp=Z,4.2nm,1.0s
**TXAR Lajitas Array 91.70 58 P P 07 57 04.6 +1.6**
comp=Z,1.7nm,0.7s,baz=213,slow=6.7,SNR=27
comp=Z,1.7nm,0.7s
**SRU San Rafael Swe 91.80 47 IAmb IAmb 07 57 05.3**
comp=Z,4.4nm,0.7s
**P17A Butcher Ranch, 91.85 46 IAmb IAmb 07 57 06.0**
comp=Z,3.2nm,0.9s
**HHC Hu-ho-hao-te 91.94 315** *e*P **P 07 57 04.9 +1.0**
HHC pmax pmax
comp=Z,11nm,0.6s
HHC pmax pmax
comp=Z,43nm,6.0s
**B08A Colville Reser 91.94 36 IAmb IAmb 07 57 04.5**
comp=Z,2.2nm,0.6s
**ALPN Alpine 92.22 57 IAmb IAmb 07 57 07.5**
comp=Z,5.1nm,0.7s
**HWUT Hardware Ranch 92.48 44 IAmb IAmb 07 57 07.5**
comp=Z,2.5nm,0.7s
**ILAR Eielson Array 94.23 14 P P 07 57 12.7 -1.0**
comp=Z,0.5nm,0.6s,baz=219,slow=5.4,SNR=12
comp=Z,0.5nm,0.6s
**PDAR Pinedale Array 94.36 44 P P 07 57 15.3 +0.2**
comp=Z,0.4nm,0.6s,baz=186,slow=4.5,SNR=5.4
comp=Z,0.4nm,0.6s
**LZH Lanzhou 94.67 308** *e*P P 07 57 21.1 +4.5
LZH pP pP 07 59 07.8 +0.8
LZH sP sP 08 00 00.3 +3.2
LZH pmax pmax
comp=Z,23nm,1.0s
**MKAR Makanchi Array 113.59 312 PKiKP PKiKP 08 02 29.0 -1.1**
comp=Z,0.3nm,0.5s,baz=319,slow=0.2,SNR=2.8
MKAR SKP **SKPdf 08 05 20.1 +2.4**
comp=Z,0.3nm,0.5s,baz=270,slow=0.5,SNR=3.7
MKAR PKKPbc **PKKPbc 08 13 15.2 -0.6**
comp=Z,0.3nm,0.5s,baz=274,slow=3.6,SNR=4.1
**KURBB Kurchatov Arra 116.79 316 PKP PKPdf 08 02 34.9 -1.1**
comp=Z,1.2nm,1.0s,baz=107,slow=2.0,SNR=6.9
KURBB SKP **SKPdf 08 05 24.8 +1.0**
comp=Z,0.4nm,0.5s,baz=66,slow=2.3,SNR=4.6
KURBB PKKPbc **PKKPbc 08 13 00.5 -4.5**
comp=Z,0.5nm,0.2s,baz=274,slow=3.5,SNR=5.2
**ARCES ARCESS Array B 134.06 348 PKhKP PKPpre 08 03 03.3**
comp=Z,0.5nm,0.4s,baz=90,slow=1.6,SNR=4.6
ARCES PKP **PKPdf 08 03 08.1 -0.3**
comp=Z,1.3nm,0.5s,baz=64,slow=2.1,SNR=3.0
ARCES SKPbc **SKPab 08 05 53.2 -1.0**
comp=Z,3.4nm,0.6s,baz=28,slow=2.9,SNR=15
**FINES FINESS Array B 140.53 341 PKhKP PKPpre 08 03 14.0**
comp=Z,1.7nm,0.5s,baz=30,slow=3.8,SNR=20
FINES SKPbc **SKiKP 08 06 10.3 -1.3**
comp=Z,1.3nm,0.7s,baz=22,slow=2.1,SNR=3.4
**DOMB Dombas 143.59 353** *e*PKPbc PKPab 08 03 24.1 -0.4

**NC303 NORSAR Array S 144.07 351 PKPab 08 03 26.1 -0.2**
**NB2 NORSAR Subarra1 144.27 351 PKP PKPbc 08 03 26.0 -0.9**
comp=Z,4.0nm,0.4s,baz=25,slow=3.4
**NB2 NORSAR Subarra1 144.27 351 PKPab PKPbc 08 03 26.0 -0.9**
baz=25,slow=3.4
**NOA NORSAR Array B 144.27 351 PKP PKPbc 08 03 26.2 -0.7**
comp=Z,5.7nm,0.6s,baz=19,slow=2.7,SNR=28
**FOO Floro 144.39 356** *e*PKPbc **PKPdf 08 03 26.9 -0.4**
**NC602 NORSAR Array S 144.52 350** *e*PKPbc PKPbc 08 03 26.8 -0.7
**HFS Hagfors 144.72 348 PKP PKPdf 08 03 27.6 -0.4**
comp=Z,7.0nm,0.3s,baz=63,slow=3.0,SNR=152
**HYA Hoyanger 144.73 355** *e*PKPbc PKPbc 08 03 27.7 -0.5
**SUE Sulen 144.94 356** *e*PKPdf **PKPab 08 03 29.3 -0.2**
**OSL Oslo 145.40 350** *e*PKPdf **PKPbc 08 03 30.0 -0.2**
**ASK Askoy 145.48 355** *e*PKPdf **PKPbc 08 03 30.2 -0.2**
**BER Bergen 145.57 355** *e*PKPdf **PKPab 08 03 31.2 -0.8**
**KONO Kongsberg 145.84 351** *e*PKPdf **PKPbc 08 03 30.9 -0.6**
**AKASG Malin Array Be 146.78 325 PKPbc PKPbc 08 03 33.8 -0.6**
comp=Z,2.0nm,0.4s,baz=45,slow=4.0,SNR=25
AKASG pPKPbc **pPKPdf 08 05 23.8 -6.0**
comp=Z,0.9nm,0.7s,baz=45,slow=4.6,SNR=4.8
**KIEV Kiev 146.79 325 PKPbc 08 03 33.1 -1.3**
**MMAI Mount Meron Ar 148.48 291 PKPbc PKiKP 08 03 40.8 +0.1**
comp=Z,3.0nm,0.4s,baz=64,slow=5.8,SNR=6.5
**MCD Coleburn Disti 148.51 3** *e*P **PKPbc 08 03 38.2 -0.4**
**KPL Plockton 148.58 6** *e*P **PKPbc 08 03 38.7 -0.1**
**BRTR Keskin Array B 148.80 304 PKPbc PKPbc 08 03 39.8 -0.4**
comp=Z,1.2nm,0.6s,baz=132,slow=3.5,SNR=6.5
**DRUM Mains of Drumt 149.21 3** *e*P **PKPbc 08 03 40.1 -0.3**
**INVG Invergeldie, C 149.61 4** *e*P **PKPbc 08 03 41.2 -0.2**
**PGBU Glenifferbraes 150.19 5** *e*P **PKPbc 08 03 42.4 -0.3**
**ESY Stoneypath 150.20 3** *e*P **PKPbc 08 03 41.6 -1.1**
**BURAR Bucovina Array 150.74 324 PKiKP 08 03 45.6 +0.7**
**EKA Eskdalemuir Ar 150.76 4 PKP PKPdf 08 03 37.4 -0.5**
comp=Z,0.8nm,0.8s,baz=357,slow=1.4,SNR=4.0
EKA PKPbc **PKPbc 08 03 43.6 -0.4**
comp=Z,2.5nm,0.4s,baz=336,slow=2.5,SNR=57
**CLGH Cloghs, Cushen 150.76 7** *e*P **PKPbc 08 03 43.6 -0.5**
**ESK Eskdalemuir 150.77 4** *e*P **PKPbc 08 03 43.5 -0.6**
**GAL1 Galloway 151.11 6** *e*P **PKPbc 08 03 44.7 -0.2**
**EDMD Edmundbyers 151.31 2** *e*P **PKPbc 08 03 44.5 -0.8**
**OJC Ojcow 151.50 333 PKiKP 08 03 46.1 -0.1**
**KESW Keswick, Cumbr 151.50 4** *e*P **PKPbc 08 03 45.5 -0.3**
**IOMK Kirk Michael 151.72 6** *e*P **PKPbc 08 03 45.9 -0.4**
**WIM Isle of Man 151.83 6** *e*P **PKPbc 08 03 46.3 -0.3**
**WPS Cemaes, Angles 152.58 6** *e*P **PKPbc 08 03 47.3 -0.8**
**FOEL Foel Wylfa 153.19 4** *e*P **PKPbc 08 03 49.2 -0.4**
**GERES GERESS Array B 154.91 338 PKPab PKPab 08 04 11.5 +0.1**
comp=Z,0.2nm,0.4s,baz=31,slow=5.9,SNR=1.8
**ESDC Sonseca Array 166.13 13 PKPab PKPab 08 05 00.3 -0.3**
comp=Z,0.7nm,0.8s,baz=343,slow=5.0,SNR=8.4
**TORD Torodi Ar. Bea 166.96 188 PKP PKPdf 08 03 57.5 -0.3**
comp=Z,1.4nm,0.7s,baz=0.4,slow=1.8,SNR=7.3
TORD PKPab **PKPab 08 05 04.5 -0.2**
comp=Z,1.0nm,0.7s,baz=165,slow=3.2,SNR=5.7

*SKO* ***05*** *07:49:20.8, 39.˚94N×20.˚62E, h0km, ML2.5*
*ATH* ***05*** *07:49:22.7, 40.˚16N×20.˚68E, h6km±1km, ML2.9/15, Manual Solution by A.Papageorgiou This location: 2020/06/12 15:12:37 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 0 km; Longitude uncertainty: 0 km*
*THE* ***05*** *07:49:22.6, 40.˚11N×20.˚71E, h0km±1km, ML2.6/8, Error ellipse: s-maj=1.9km s-min=0.4km az=235.0*
*TIR* ***05*** *07:49:22.2, 40.˚08N×20.˚80E, h7km±2km, Ml2.8*
*BEO* ***05*** *07:49:23.0±0.8, 39.˚91N×21.˚05E, h10km±4km, ML2.5/4*
**ISC 05 07:49:22.9±1.1, 40.˚09N±0.˚01×20.˚73E±0.˚02, h4km±9km, n64, σ1§14/104, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PENT** | **Pentalofos** | **0.33** | **70** | P | **Pg** | **07 49 29.1** | **-0.2** |
| PENT | | | | S | **Sg** | **07 49 34.9** | **+1.3** |
| | 998nm,0.3s | | | | | | |
| **NEST** | **Nestorio** | **0.41** | **36** | P | **Pg** | **07 49 30.4** | **-0.4** |
| NEST | | | | S | **Sg** | **07 49 36.7** | **+0.6** |
| | 1μm,0.2s | | | | | | |
| **NEST** | **Nestorio** | **0.41** | **36** | P | **Pg** | **07 49 30.5** | **-0.2** |
| NEST | | | | S | **Sg** | **07 49 36.0** | **-0.1** |
| **JAN** | **Janina** | **0.44** | **168** | P | **Pg** | **07 49 31.0** | **-0.3** |
| JAN | | | | S | **Sb** | **07 49 38.7** | **-1.4** |
| | 4μm,0.2s | | | | | | |
| **JAN** | **Janina** | **0.44** | **168** | P | **Pb** | **07 49 32.5** | **-0.7** |
| JAN | | | | S | **Sb** | **07 49 39.5** | **-0.6** |
| **KPRO** | **Kipourio** | **0.50** | **105** | P | **Pg** | **07 49 32.1** | **-0.4** |
| KPRO | | | | S | **Sg** | **07 49 40.4** | **+1.4** |
| | 1μm,0.3s | | | | | | |
| **KPRO** | **Kipourio** | **0.50** | **105** | P | **Pb** | **07 49 33.8** | **-0.5** |
| KPRO | | | | S | **Sb** | **07 49 41.5** | **-0.4** |
| **KBN** | **Korca** | **0.54** | **4** | P | **Pg** | **07 49 32.3** | **-0.9** |
| | baz=359 | | | | | | |
| KBN | | | | S | **Sg** | **07 49 41.0** | **+0.8** |
| | baz=359 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,2.5nm,0.2s,baz=359 | | | | | | |
| **KBN** | **Korca** | **0.54** | **4** | P | **Pg** | **07 49 32.4** | **-0.9** |
| KBN | | | | S | **Sg** | **07 49 40.3** | **0.0** |
| | comp=E,660nm,0.3s | | | | | | |
| **SRN** | **Sarande** | **0.60** | **250** | P | **Pg** | **07 49 32.3** | **-2.1** |
| | baz=253 | | | | | | |
| SRN | | | | S | **Sb** | **07 49 44.1** | **-0.6** |
| | baz=253 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,2.2nm,0.3s,baz=253 | | | | | | |
| **SRN** | **Sarande** | **0.60** | **250** | P | **Pg** | **07 49 33.8** | **-0.6** |
| SRN | | | | S | **Sb** | **07 49 42.9** | **-1.8** |
| | comp=N,642nm,0.6s | | | | | | |
| **KASA** | **Kassiopi** | **0.70** | **241** | P | **Pb** | **07 49 36.3** | **-1.3** |
| KASA | | | | S | **Sb** | **07 49 46.4** | **-1.2** |
| **KEK** | **Kerkira** | **0.81** | **243** | P | **Pg** | **07 49 37.6** | **-0.8** |
| **KEK** | **Kerkira** | **0.81** | **243** | P | **Pg** | **07 49 38.2** | **-0.2** |
| KEK | | | | S | **Sb** | **07 49 49.3** | **-1.5** |
| **KZN** | **Kozani** | **0.82** | **74** | P | **Pg** | **07 49 38.0** | **-0.7** |
| KZN | | | | S | **Sb** | **07 49 50.9** | **-0.4** |
| | comp=N,498nm,0.5s | | | | | | |
| **KZN** | **Kozani** | **0.82** | **74** | P | **Pg** | **07 49 39.1** | **+0.4** |
| KZN | | | | S | **Sb** | **07 49 51.1** | **-0.2** |
| **PRGA** | **Parga** | **0.84** | **198** | P | **Pb** | **07 49 39.9** | **0.0** |
| PRGA | | | | S | **Sn** | **07 49 52.5** | **-1.7** |
| **FNA** | **Florina** | **0.85** | **35** | P | **Pg** | **07 49 36.9** | **-2.3** |
| | baz=32 | | | | | | |
| FNA | | | | S | **Sb** | **07 49 51.5** | **-0.6** |
| | baz=32 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.9nm,0.3s,baz=32 | | | | | | |
| **FNA** | **Florina** | **0.85** | **35** | P | **Pg** | **07 49 37.9** | **-1.3** |
| FNA | | | | S | **Sb** | **07 49 51.5** | **-0.6** |
| | comp=E,505nm,0.3s | | | | | | |
| **FNA** | **Florina** | **0.85** | **35** | *e*Pg | **Pg** | **07 49 38.0** | **-1.3** |
| FNA | | | | *e*Sg | **Sn** | **07 49 53.4** | **-1.3** |
| **FNA** | **Florina** | **0.85** | **35** | *i* Pg | **Pg** | **07 49 38.0** | **-1.3** |
| FNA | | | | *i* Sg | **Sn** | **07 49 53.6** | **-1.1** |
| **FNA** | **Florina** | **0.85** | **35** | P | **Pg** | **07 49 38.6** | **-0.6** |
| FNA | | | | S | **Sg** | **07 49 49.9** | **-0.4** |
| **VLO** | **Vlora** | **1.02** | **292** | P | **Pn** | **07 49 44.0** | **0.0** |
| | baz=292 | | | | | | |
| VLO | | | | S | **Sn** | **07 50 00.1** | **+1.4** |
| | baz=292 | | | | | | |
| **OHR** | **Ohrid** | **1.03** | **3** | *i* Pg | **Pg** | **07 49 42.5** | **-0.1** |
| OHR | | | | *i* Sg | **Sn** | **07 49 58.1** | **-0.9** |
| OHR | | | | *e*Lg | Lg | 07 49 59.4 | |
| | comp=E,70nm,0.5s | | | | | | |
| OHR | | | | *e*Lg | Lg | 07 50 01.9 | |
| | comp=N,73nm,0.6s | | | | | | |
| **KTI** | **Kastanea** | **1.10** | **73** | P | **Pg** | **07 49 43.8** | **-0.2** |
| **THL** | **Klokotos Trika** | **1.11** | **117** | P | **Pg** | **07 49 43.8** | **-0.4** |
| **THL** | **Klokotos Trika** | **1.11** | **117** | P | **Pb** | **07 49 44.7** | **0.0** |
| THL | | | | S | **Sn** | **07 50 01.0** | **0.0** |
| **TSLK** | **Tsoukalades, L** | **1.26** | **183** | P | **Pn** | **07 49 46.8** | **-0.4** |
| **TSLK** | **Tsoukalades, L** | **1.26** | **183** | P | **Pn** | **07 49 47.7** | **+0.5** |
| TSLK | | | | S | **Sn** | **07 50 05.7** | **+1.1** |
| **LKD2** | **Lefkada island** | **1.30** | **183** | P | **Pg** | **07 49 48.4** | **+0.7** |
| | baz=185 | | | | | | |
| LKD2 | | | | S | **Sn** | **07 50 06.3** | **+0.8** |
| | baz=185 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=E,0.8nm,0.3s,baz=185 | | | | | | |
| **LKD2** | **Lefkada island** | **1.30** | **183** | P | **Pg** | **07 49 47.5** | **-0.2** |
| **LKD2** | **Lefkada island** | **1.30** | **183** | P | **Pg** | **07 49 48.7** | **+1.0** |
| LKD2 | | | | S | **Sn** | **07 50 06.9** | **+1.3** |
| **NYDR** | **Nydri-Lefkada** | **1.37** | **181** | P | **Pg** | **07 49 49.6** | **+0.5** |
| NYDR | | | | S | **Sn** | **07 50 09.2** | **+1.9** |

**TIR Tirane 1.42 333 P Pg 07 49 51.1 +0.9**
baz=331
TIR S **Sg 07 50 11.2 +2.6**
baz=331
**TIR Tirane 1.42 333** *e*Pn **Pg 07 49 52.6 +2.4**
**EVGI Lefkada island 1.46 182 P Pg 07 49 50.4 -0.5**
**PVO Paravola 1.59 157 P Pg 07 49 53.1 -0.3**
PVO S **Sg 07 50 14.7 +0.7**
**FSK Fiskardo 1.63 185 P Pb 07 49 53.3 -0.2**
FSK S **Sg 07 50 15.7 +0.5**
**SCTE Santa Cesarea 1.74 270 P Pb 07 49 53.9 -1.4**
baz=271
SCTE S **Sg 07 50 21.2 +2.4**
baz=271
**ANX Ano Chora 1.75 148 P Pb 07 49 55.0 -0.6**
**THE Thessaloniki 1.79 72** *i* Pg **Pb 07 49 55.7 -0.5**
THE *i* Sg **Sb 07 50 19.8 +0.9**
**VAY Valandovo 1.86 48** *i* Pn **Pn 07 49 55.7 +0.2**
VAY *i* Sn **Sb 07 50 21.9 +0.8**
VAY *e*Lg Lg 07 50 24.0
comp=N,24nm,0.6s
VAY *e*Lg Lg 07 50 25.6
comp=E,22nm,0.4s
**DMLN Damoulianata-K 1.87 189 P Pb 07 49 56.3 -1.3**
**HORT Hortiatis 1.88 73 P Pn 07 49 55.7 -0.1**
**EFP Efpalio 1.89 151 P Pb 07 49 57.1 -0.8**
**VLS Valsamata 1.91 183 P Pb 07 49 56.7 -1.5**
**KNT Kendrikon 1.97 56 P Pn 07 49 56.1 -0.9**
**PSDA Pessada-Kefalo 1.97 183 P Pb 07 49 57.7 -1.6**
**KALE Kalithea 2.01 147 P Pb 07 49 58.6 -1.5**
**PUK Puka 2.06 342 P Pb 07 49 59.2 -1.6**
baz=341
PUK S **Sg 07 50 30.7 +1.8**
baz=341
**SOH Sokhos 2.13 69** *i* Pn **Pn 07 50 00.4 +1.2**
**BCI Bajram Curri 2.33 348 P Pb 07 50 04.2 -1.3**
baz=347
BCI S **Sg 07 50 37.0 -0.8**
baz=347
**BOSS Bosilegrad 2.74 28** *e*Pn **Pn 07 50 08.1 +0.4**
**BARS Barje 2.85 16** *e*Pn **Pn 07 50 09.8 +0.7**
BARS *e*Sn **Sn 07 50 43.7 -0.1**
**BARS Barje 2.85 16** *i* Pn **Pn 07 50 09.6 +0.5**
**SELS Selova 3.15 5** *e*Pn **Pn 07 50 15.0 +1.8**
**VTS Vitosha 3.15 36** *e*Pn **Pn 07 50 14.1 +0.7**
VTS *e*Sn **Sn 07 50 51.3 -0.3**
**ZAPS Zavoj 3.49 23** *e*Pn **Pn 07 50 18.6 +0.7**
**BOVS Bovan 3.62 11** *e*Pn **Pn 07 50 19.8 +0.1**
**GRUS Gruza 3.80 360** *e*Pn **Pn 07 50 24.9 +2.7**
**BLKB Belogradchik 3.82 22** *e*Pn **Pn 07 50 23.4 +0.9**
BLKB *e*Sn **Sn 07 51 06.8 -1.1**
**ZAGS Zajecar 3.89 16** *e*Pn **Pn 07 50 23.5 +0.1**
**DIVS Divibare 4.05 352** *e*Pn **Pn 07 50 29.0 +3.3**
DIVS *e*Sn **Sn 07 51 15.9 +2.4**
**FRGS Fruska Gora 5.12 353** *e*Pn **Pn 07 50 40.9 +0.6**

*JMA* ***05*** *08:16:18.0±0.2, 34˚N±3˚×13˚7E±˚, h407km, MV2.8/21, SE OFF KII PENINSULA*
*IDC* ***05*** *08:16:21.9±2.0, 33.˚57N×137.˚15E, h349km±35km, mb2.4/2, mbtmp3.1/4, Error ellipse: s-maj=65.7km s-min=30.7km az=48.0*
**ISC 05 08:16:22.6±1.1, 33.˚7N±0.˚1×137.˚16E±0.˚08, h350km, n16, σ1§46/18, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIE** | **Ise** | **0.78** | **331** | P | **Pn** | **08 17 09.5** | **+2.0** |
| **JTNC** | **Tanabenakahech** | **1.29** | **275** | *e*P | **Pn** | **08 17 11.1** | **+1.4** |
| **JWY** | **Kouya** | **1.40** | **292** | P | **Pn** | **08 17 11.8** | **+1.6** |
| **JWT** | **Wachi** | **2.14** | **318** | P | **Pn** | **08 17 15.9** | **+1.1** |
| **JOD2** | **Odawara 2** | **2.22** | **45** | *e*P | **Pn** | **08 17 17.5** | **+2.1** |
| **JAI** | **Aioi** | **2.25** | **273** | P | **Pn** | **08 17 16.9** | **+1.3** |
| **JRY** | **Ryogami san** | **2.71** | **31** | P | **Pn** | **08 17 21.3** | **+2.0** |
| **JMN** | **Monobe** | **2.73** | **271** | P | **Pn** | **08 17 20.9** | **+1.3** |
| **MJAR** | **Matsushiro Arr** | **2.95** | **17** | P | **Pn** | **08 17 21.9** | **+0.4** |
| | 3.4nm,0.5s,baz=195,slow=8.9,SNR=12 | | | | | | |
| **MAT** | **Matsushiro** | **2.96** | **17** | P | **Pn** | **08 17 22.6** | **+1.2** |
| **JAG** | **Ashikaga** | **3.30** | **34** | *e*P | **Pn** | **08 17 24.7** | **+0.1** |
| JAG | | | | S | **S** | **08 18 12.7** | **-1.8** |
| **BSO1** | **Boso 1** | **3.31** | **72** | *e*P | **Pn** | **08 17 24.4** | **+0.3** |
| BSO1 | | | | *e*S | **S** | **08 18 14.7** | **+1.0** |
| **JHS** | **Saijyo** | **3.58** | **292** | *e*P | **Pn** | **08 17 28.4** | **+1.0** |
| **KSRS** | **Korea Array** | **8.40** | **299** | P | **Pn** | **08 18 21.8** | **+0.5** |
| | 0.9nm,0.5s,baz=114,slow=12,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.03** | **305** | P | **P** | **08 23 48.7** | **-0.2** |
| | 0.2nm,0.5s,baz=81,slow=8.9,SNR=2.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.42** | **183** | P | **P** | **08 25 05.9** | **-1.7** |
| | 0.1nm,0.3s,baz=0.2,slow=7.5,SNR=1.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**KEA 05 08:21:56.2, 39.˚41N×119.˚00E, h14km, ML3.5/3, Northeastern China**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SUJ** | **Sinuiju** | **4.29** | **79** | Pg | Pg | 08 23 18.3 | 0.0 |
| SUJ | | | | Sg | Sg | 08 24 19.2 | +5.3 |
| SUJ | | | | AML | AML | | |
| | comp=N,172nm,0.5s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=E,90nm,0.5s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=Z,69nm,0.6s | | | | | | |
| **PYAG** | **Pyongyang** | **5.26** | **92** | Sg | Sg | 08 24 50.5 | +5.5 |
| **PYS** | **Pyongsong** | **5.32** | **90** | Pg | Pg | 08 23 37.9 | -0.2 |
| PYS | | | | Sg | Sg | 08 24 52.7 | +5.9 |
| PYS | | | | AML | AML | | |
| | comp=N,157nm,0.6s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=E,93nm,0.5s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=Z,45nm,0.4s | | | | | | |
| **HJU** | **Haeju** | **5.43** | **102** | Sg | Sg | 08 24 57.1 | +6.5 |
| HJU | | | | AML | AML | | |
| | comp=N,70nm,0.6s | | | | | | |
| HJU | | | | AML | AML | | |
| | comp=E,31nm,0.3s | | | | | | |
| HJU | | | | AML | AML | | |
| | comp=Z,32nm,0.4s | | | | | | |

*SCB* ***05*** *08:23:04.8±0.9, 19.˚70S×66.˚81W, h265km±10km, ML2.7/1, Error ellipse: s-maj=6.1km s-min=4.8km az=0.0*
*SJA* ***05*** *08:23:06.2±0.7, 19.˚87S×66.˚93W, h216km±9km, ML3.5, MW3.6*
**ISC 05 08:23:04.7±1.2, 19.˚85S±0.˚05×66.˚96W±0.˚06, h241km, n19, σ1§60/26, Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEO** | **Opoqueri** | **1.55** | **325** | Pg | **Pn** | **08 23 45.2** | **+2.1** |
| **MOCB** | **Mochara** | **1.87** | **139** | Pg | **Pn** | **08 23 48.5** | **+2.8** |
| **SOET** | **ToroToro** | **2.04** | **32** | Pg | **Pn** | **08 23 48.0** | **+0.8** |
| SOET | | | | Sg | **S** | **08 24 20.6** | **+0.1** |
| **AOEA** | **Aiquile** | **2.33** | **45** | Pg | **Pn** | **08 23 50.7** | **+0.8** |
| **YJA** | **Yavi** | **2.68** | **150** | *i* P | **Pn** | **08 23 54.6** | **+1.0** |
| YJA | | | | *i* S | **S** | **08 24 29.8** | **-2.4** |
| **TA02** | **Huaiquique** | **3.01** | **261** | *i* P | **Pn** | **08 23 57.7** | **+1.0** |
| TA02 | | | | *i* S | **S** | **08 24 35.4** | **-2.4** |
| TA02 | | | | IAML | | 08 24 38.9 | |
| | comp=Z,125nm,0.2s | | | | | | |
| **SOEJ** | **Jacaque** | **3.09** | **338** | Pg | **Pn** | **08 24 00.1** | **+1.9** |
| **SOTI** | **Planta Incahua** | **3.11** | **90** | Pg | **Pn** | **08 23 58.8** | **+0.9** |
| **TA01** | **Diego Aracena** | **3.11** | **256** | *i* P | **Pn** | **08 23 58.9** | **+1.1** |
| TA01 | | | | *i* S | **S** | **08 24 37.7** | **-2.0** |
| TA01 | | | | IAML | | 08 24 42.5 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **BBOE** | **La Paz, Chanca** | **3.17** | **342** | Pg | **Pn** | **08 24 01.0** | **+1.9** |
| **AP01** | **Chacalluta** | **3.52** | **294** | *i* P | **Pn** | **08 24 03.1** | **+0.7** |
| AP01 | | | | *i* S | **S** | **08 24 46.4** | **-1.7** |
| AP01 | | | | IAML | | 08 24 49.8 | |
| | comp=Z,153nm,0.2s | | | | | | |
| **BBOD** | **La Paz, Gloria** | **3.55** | **334** | Pg | **Pn** | **08 24 04.8** | **+1.4** |
| **LPAZ** | **La Paz** | **3.71** | **342** | *i* P | **Pn** | **08 24 06.1** | **+0.7** |
| LPAZ | | | | *i* S | **S** | **08 24 51.9** | **-1.4** |
| **LPAZ** | **La Paz** | **3.71** | **342** | Pg | **Pn** | **08 24 06.3** | **+0.9** |
| LPAZ | | | | Sg | **S** | **08 24 52.0** | **-1.3** |
| LPAZ | | | | IAML | | 08 24 53.3 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **PB04** | **IPOC Station P** | **3.87** | **230** | *i* P | **Pn** | **08 24 08.0** | **+1.3** |

PB04 IAML 08 24 59.7
comp=Z,129nm,0.1s
**AZAP** **Zapla** **4.70** **158** *i* P **Pn** **08 24 18.0 +1.4**
AZAP IAML 08 25 26.9
comp=Z,16nm,3.0s
**ALOL** **LOMAS DE OLMED** **4.82** **146** *i* P **Pn** **08 24 19.0 +1.0**
**SLA** **San Lorenzo** **5.04** **165** *i* P **Pn** **08 24 22.3 +1.6**
SLA IAML 08 25 28.0
comp=Z,9.1nm,2.2s
**BBSD** **Serra de San D** **6.58** **67** Pg **Pn** **08 24 38.9 -1.1**

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**IDC 05 08:42:46.9±7.6, 3°53'N×127°99'E, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=137.8km s-min=121.6km az=86.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.14** | **165** | P | P | 08 48 05.0 | +0.2 |
| | 2.2nm,0.6s,baz=345,slow=10,SNR=32 2.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **27.64** | **168** | P | P | 08 48 36.1 | -0.4 |
| | 0.3nm,0.4s,baz=352,slow=9.5,SNR=2.6 0.3nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **37.51** | **161** | P | P | 08 50 02.7 | 0.0 |
| | 1.4nm,0.4s,baz=350,slow=7.4,SNR=7.3 1.4nm,0.4s | | | | | | |

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*BJI* ***05*** *08:44:12.5±0.0, 41°.39N×142°.35E, h62km, mb4.6/53, mB4.6/14, Ms3.6/6, Ms7 3.6/8*
*MOS* ***05*** *08:44:14.8±0.9, 41°.49N×142°.00E, h55km, mb4.8/35, Error ellipse: s-maj=6.2km s-min=5.0km az=113.3*
*JMA* ***05*** *08:44:16.8±0.1, 41°.5N±0°.4×142°.6E±0°.6, h62km±1km, MD4.2/39, MW4.4/39, E OFF AOMORI PREF*
*JMA Felt II J1 at E OFF AOMORI PREF .*
*NIED* ***05*** *08:44:16.8, 41°.50N×142°.01E, h62km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr3.53; Mθθ-0.70; Mφφ-2.83; Mrθ1.12; Mθφ-0.89; Mφr3.01; Fault plane solution: Mo4.63000×10¹⁵ NP1:φs20.00000°, δ67.00000°, λ90.00000°. NP2:φs200.00000°, δ23.00000°, λ89.00000°.*
*IDC* ***05*** *08:44:17.6±0.6, 41°.49N×142°.03E, h71km±5km, mb4.2/30, mbtmp4.5/38, MS3.1/10 Error ellipse: s-maj=11.6km s-min=7.9km az=104.0*
*BGR* ***05*** *08:44:17.2, 42°.02N×142°.32E, h33km, mb4.4*
*NEIC* ***05*** *08:44:17.2±1.7, 41°.51N±0°.06×141°.99E±0°.07, h56km±6km, mb4.6/125, Error ellipse: s-maj=10.3km s-min=4.5km az=139.0*
**ISC 05 08:44:17.0±0.4, 41°.47N±0°.03×142°.08E±0°.04, h65km±3km, h65km:pP-P, n584, σ1§18/564, mb4.6/147, 21C-26D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAHD** | **Aomorihigashid** | **0.60** | **250** | ⇓*i*P | **Pn** | **08 44 30.0** | **-0.5** |
| JAHD | | | | ⇓*e*S | **Sn** | **08 44 39.5** | **-0.7** |
| **JAHD** | **Aomorihigashid** | **0.60** | **250** | A | A | 08 44 30.0 | |
| | comp=E,148nm,1.3s,comp=N,122nm,1.2s | | | | | | |
| **JARK** | **Aomorirokkasho** | **0.71** | **229** | ⇓*i*P | **Pn** | **08 44 31.0** | **-0.7** |
| JARK | | | | ⇓*e*S | **Sn** | **08 44 41.2** | **-1.3** |
| **JARK** | **Aomorirokkasho** | **0.71** | **229** | A | A | 08 44 31.0 | |
| | comp=E,29nm,0.4s,comp=N,18nm,0.9s | | | | | | |
| **JOT** | **Ohata** | **0.78** | **264** | ⇓*i*P | **Pn** | **08 44 31.6** | **-0.9** |
| JOT | | | | ⇓*e*S | **Sn** | **08 44 42.6** | **-1.4** |
| **JOT** | **Ohata** | **0.78** | **264** | A | A | 08 44 31.6 | |
| | comp=E,9.0nm,0.6s,comp=N,16nm,0.7s | | | | | | |
| **JKB** | **Kayabe** | **0.89** | **298** | ⇓P | **Pn** | **08 44 32.6** | **-1.2** |
| **JKB** | **Kayabe** | **0.89** | **298** | A | A | 08 44 32.6 | |
| | comp=E,7.0nm,5.2s,comp=N,6.0nm,2.0s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **0.95** | **32** | P | **Pn** | **08 44 34.2** | **-0.4** |
| **JNBK** | **Urakawa-nobuka** | **0.95** | **32** | A | A | 08 44 34.2 | |
| | comp=E,21nm,0.6s,comp=N,22nm,1.0s | | | | | | |
| **ERM** | **Erimo** | **0.97** | **56** | | **Pn** | **08 44 35.1** | **+0.2** |
| ERM | | | | Sn | **Sn** | **08 44 49.2** | **+1.1** |
| **ERM** | **Erimo** | **0.97** | **56** | *c* *i*P | **Pn** | **08 44 35.1** | **+0.2** |
| **JEM** | **Erimo** | **0.97** | **56** | P | **Pn** | **08 44 35.2** | **+0.3** |
| JEM | | | | *e*S | **Sn** | **08 44 48.5** | **+0.4** |
| **JEM** | **Erimo** | **0.97** | **56** | A | A | 08 44 35.2 | |
| | comp=E,10.0nm,4.0s,comp=N,6.0nm,2.4s | | | | | | |
| **JSHD** | **Hidakashinhida** | **1.03** | **17** | A | A | 08 44 34.8 | |
| | comp=E,18nm,1.5s,comp=N,17nm,1.1s | | | | | | |
| **JTM** | **Tenmabayashi** | **1.03** | **228** | | **Pn** | **08 44 35.4** | **-0.3** |
| JTM | | | | Sn | **Sn** | **08 44 48.2** | **-1.2** |
| **JTM** | **Tenmabayashi** | **1.03** | **228** | ⇓P | **Pn** | **08 44 35.4** | **-0.3** |
| JTM | | | | ⇓*e*S | **Sn** | **08 44 48.5** | **-0.9** |
| **JTM** | **Tenmabayashi** | **1.03** | **228** | A | A | 08 44 35.4 | |
| | comp=E,11nm,0.9s,comp=N,10.0nm,0.8s | | | | | | |
| **JIAM** | **Iburiatsuma** | **1.15** | **354** | P | **Pn** | **08 44 37.6** | **+0.4** |
| **JIAM** | **Iburiatsuma** | **1.15** | **354** | A | A | 08 44 37.6 | |
| | comp=E,20nm,0.5s,comp=N,21nm,0.7s | | | | | | |
| **JANG** | **Nango** | **1.18** | **201** | P | **Pn** | **08 44 37.4** | **-0.3** |
| JANG | | | | *e*S | **Sn** | **08 44 51.9** | **-1.1** |
| **JANG** | **Nango** | **1.18** | **201** | A | A | 08 44 37.4 | |
| | comp=E,9.0nm,0.5s,comp=N,9.0nm,2.0s | | | | | | |
| **JTHR** | **Tokachihiroo** | **1.22** | **48** | A | A | 08 44 38.5 | |
| | comp=E,10.0nm,0.8s,comp=N,13nm,0.5s | | | | | | |
| **JSR** | **Shiriuchi** | **1.25** | **273** | ⇓P | **Pn** | **08 44 37.8** | **-0.8** |
| **JNB** | **Noboribetsu** | **1.26** | **322** | ⇓P | **Pn** | **08 44 37.3** | **-1.3** |
| JNB | | | | ⇓S | **Sn** | **08 44 53.0** | **-1.9** |
| **JNB** | **Noboribetsu** | **1.26** | **322** | A | A | 08 44 37.3 | |
| | comp=E,4.0nm,0.5s,comp=N,6.0nm,0.7s | | | | | | |
| **JKEN** | **Kujiedanarisaw** | **1.30** | **193** | A | A | 08 44 39.3 | |
| | comp=E,30nm,0.4s,comp=N,41nm,0.3s | | | | | | |
| **JBT2** | **Biratori 2** | **1.32** | **9** | ⇓P | **Pn** | **08 44 39.6** | **+0.1** |
| **JBT2** | **Biratori 2** | **1.32** | **9** | A | A | 08 44 39.6 | |
| | comp=E,7.0nm,0.9s,comp=N,4.0nm,1.5s | | | | | | |
| **JSI2** | **Shiura 2** | **1.33** | **252** | A | A | 08 44 39.0 | |
| | comp=E,10.0nm,1.1s,comp=N,24nm,0.8s | | | | | | |
| **JYM2** | **Yakumo 2** | **1.43** | **297** | ⇓P | **Pn** | **08 44 40.5** | **-0.4** |
| **JYM2** | **Yakumo 2** | **1.43** | **297** | A | A | 08 44 40.5 | |
| | comp=E,3.0nm,0.6s,comp=N,4.0nm,1.0s | | | | | | |
| **JEW** | **Eniwo** | **1.44** | **341** | ⇓P | **Pn** | **08 44 40.9** | **-0.2** |
| **JEW** | **Eniwo** | **1.44** | **341** | A | A | 08 44 40.9 | |
| | comp=E,9.0nm,0.8s,comp=N,11nm,0.9s | | | | | | |
| **JCH** | **Churui** | **1.49** | **40** | P | **Pn** | **08 44 42.2** | **+0.6** |
| **JCH** | **Churui** | **1.49** | **40** | A | A | 08 44 42.2 | |
| | comp=E,5.0nm,2.5s,comp=N,5.0nm,2.7s | | | | | | |
| **JHHS** | **Hirosakihyakuz** | **1.54** | **238** | A | A | 08 44 42.1 | |
| | comp=E,15nm,0.5s,comp=N,14nm,0.9s | | | | | | |
| **JOMM** | **Oshimamatsumae** | **1.56** | **273** | ⇓P | **Pn** | **08 44 41.8** | **-0.8** |
| **JKZ** | **Kuzumaki** | **1.59** | **201** | A | A | 08 44 43.3 | |
| | comp=E,6.0nm,0.3s,comp=N,6.0nm,0.5s | | | | | | |
| **JAH** | **Hinai** | **1.60** | **221** | P | **Pn** | **08 44 44.5** | **+0.1** |
| **JNTW** | **Noshirotokiwa** | **1.89** | **231** | A | A | 08 44 47.0 | |
| | comp=E,12nm,4.5s,comp=N,9.0nm,1.8s | | | | | | |
| **JOB** | **Onbets** | **1.93** | **42** | A | A | 08 44 48.3 | |
| | comp=E,8.0nm,0.7s,comp=N,10.0nm,1.3s | | | | | | |
| **JAB** | **Ashibetsu** | **2.03** | **3** | A | A | 08 44 49.2 | |
| | comp=E,7.0nm,3.6s,comp=N,6.0nm,1.0s | | | | | | |
| **JAR** | **Ashorobuto** | **2.21** | **34** | A | A | 08 44 52.1 | |
| | comp=E,5.0nm,1.0s,comp=N,4.0nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **2.67** | **8** | P | **Pn** | **08 44 58.5** | **+0.8** |
| | comp=N,144nm,0.3s,baz=217,slow=11,SNR=196 | | | | | | |
| ASAJ | | | | S | **Sn** | **08 45 30.6** | **+1.8** |
| | comp=N,245nm,0.5s,baz=197,slow=19,SNR=12 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.67** | **8** | Pn | **Pn** | **08 44 58.1** | **+0.5** |
| **NMR** | **Nemuro--Hokkai** | **3.30** | **54** | ⇓*i*P | **Pn** | **08 45 04.8** | **-1.4** |
| NMR | | | | *e*S | **Sn** | **08 45 40.1** | **-4.1** |
| **RUSJ** | **Misakicho** | **3.51** | **41** | ⇓*i*P | **Pn** | **08 45 09.7** | **+0.6** |
| RUSJ | | | | *e*S | **Sn** | **08 45 50.6** | **+1.2** |
| **JMM** | **Marumori** | **3.74** | **196** | | **Pn** | **08 45 13.3** | **+1.0** |
| **YUK** | **Yuzh-Kuril'sk** | **3.78** | **46** | *d* *i*P | **Pn** | **08 45 12.7** | **-0.1** |
| YUK | | | | *i* S | **Sn** | **08 45 53.6** | **-2.4** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,969nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,259nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,3μm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,5μm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **4.24** | **54** | ⇑*i*P | **Pn** | **08 45 17.7** | **-1.4** |
| SHO | | | | *e*S | **Sn** | **08 46 02.1** | **-5.2** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,139nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,75nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,88nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| **JSD** | **Sado** | **4.52** | **222** | | **Pn** | **08 45 24.2** | **+1.2** |
| **TEY** | **Ternei** | **5.35** | **314** | ⇑*e*P | **Pn** | **08 45 33.9** | **-0.4** |
| TEY | | | | pmax | pmax | | |
| | comp=N,40nm,0.8s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=E,30nm,0.8s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.50** | **5** | Pn | **Pn** | **08 45 36.8** | **+0.5** |
| **YSS** | **Yuzh-Sakhalins** | **5.50** | **5** | *e*P | **Pn** | **08 45 36.8** | **+0.5** |
| YSS | | | | *e*S | **Sn** | **08 46 38.4** | **+0.3** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,40nm,0.7s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,30nm,1.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,30nm,1.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,100nm,4.6s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,100nm,3.1s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,200nm,14.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,200nm,13.0s | | | | | | |
| **KUR** | **Kuril'sk** | **5.65** | **46** | *e*P | **Pn** | **08 45 39.1** | **+0.8** |
| KUR | | | | *i* S | **Sn** | **08 46 41.1** | **-0.6** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,118nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,39nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,36nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,240nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,89nm,0.2s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **5.77** | **213** | Pn | **Pn** | **08 45 42.8** | **+2.7** |
| **MAJO** | **Matsushiro** | **5.78** | **213** | Pn | **Pn** | **08 45 42.0** | **+1.9** |
| **MAJO** | **Matsushiro** | **5.78** | **213** | P | **Pn** | **08 45 42.0** | **+1.9** |
| **MJAR** | **Matsushiro Arr** | **5.78** | **213** | P | **Pn** | **08 45 42.1** | **+1.9** |
| | comp=E,11nm,0.5s,baz=21,slow=16,SNR=31 | | | | | | |
| MJAR | | | | LR | LR | 08 48 18.3 | |
| | comp=E,147nm,21.2s,baz=30,slow=42 | | | | | | |
| **JGF** | **Kuroka** | **6.93** | **214** | Pn | **Pn** | **08 45 58.9** | **+2.8** |
| **INU** | **Inuyama** | **7.29** | **215** | Pn | **Pn** | **08 46 01.3** | **+0.4** |
| **VLA** | **Vladivostok** | **7.74** | **286** | ⇑*e*P | **Pn** | **08 46 07.4** | **+0.5** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **7.90** | **294** | Pn | **Pn** | **08 46 08.8** | **-0.3** |
| **USA0B** | **Ussuriysk Arra** | **7.90** | **294** | P | **Pn** | **08 46 08.8** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **7.90** | **294** | Pn | **Pn** | **08 46 08.8** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **7.90** | **294** | P | **Pn** | **08 46 06.2** | **-2.9** |
| | comp=Z,15nm,0.6s,baz=94,slow=15,SNR=24 | | | | | | |
| USRK | | | | LR | LR | 08 49 03.5 | |
| | comp=Z,228nm,21.9s,baz=146,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.90** | **294** | P | **Pn** | **08 46 08.8** | **-0.3** |
| **MSHR** | **Mys Shultsa** | **8.21** | **281** | ⇑*e*P | **Pn** | **08 46 13.4** | **+0.1** |
| **PSTR** | **Posyet** | **8.47** | **282** | ⇑*e*P | **Pn** | **08 46 17.7** | **+0.8** |
| **JHJ** | **Hachijo jima 2** | **8.54** | **193** | P | **Pn** | **08 46 15.3** | **-2.6** |
| | comp=Z,17nm,0.3s,baz=74,slow=19,SNR=1.6 | | | | | | |
| JHJ | | | | S | **Sn** | **08 47 45.8** | **-6.9** |
| | comp=Z,26nm,0.3s,baz=75,slow=22,SNR=1.3 | | | | | | |
| **JHJ2** | **Mitsune** | **8.54** | **193** | Pn | **Pn** | **08 46 16.3** | **-1.6** |
| **TYV** | **Tymovskoe** | **9.40** | **2** | *e*P | **Pn** | **08 46 33.8** | **+4.2** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,5.3s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **MDJ** | **Mudanjiang** | **9.67** | **293** | P | **Pn** | **08 46 35.9** | **+2.6** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,25nm,1.5s | | | | | | |
| **MDJ** | **Mudanjiang** | **9.67** | **293** | Pn | **Pn** | **08 46 32.2** | **-1.1** |
| **JMN** | **Monobe** | **10.10** | **223** | Pn | **Pn** | **08 46 38.6** | **-0.7** |
| **KLR** | **Kul'dur** | **10.62** | **320** | P | **Pn** | **08 46 47.1** | **+0.9** |
| | comp=Z,12nm,1.0s,baz=125,slow=15,SNR=16 | | | | | | |
| KLR | | | | LR | LR | 08 50 54.2 | |
| | comp=Z,157nm,20.9s,baz=106,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **10.62** | **320** | *c* *i*P | **Pn** | **08 46 48.2** | **+1.9** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | |
| **BNX** | **BinXian** | **11.46** | **297** | ⇓P | **Pn** | **08 46 59.6** | **+1.9** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **11.65** | **254** | P | **Pn** | **08 47 01.1** | **+0.7** |
| | comp=Z,5.0nm,0.4s,baz=70,slow=13,SNR=37 | | | | | | |
| KSRS | | | | S | **Sn** | **08 49 15.4** | **+6.6** |
| | comp=Z,12nm,0.8s,baz=69,slow=24,SNR=15 | | | | | | |
| KSRS | | | | LR | LR | 08 51 03.2 | |
| | comp=Z,99nm,21.4s,baz=65,slow=35 | | | | | | |
| **KS19** | **Wonju Array Si** | **11.68** | **255** | | **Pn** | **08 47 00.0** | **-0.7** |
| **KSAR** | **Wonju Array Be** | **11.69** | **254** | | **Pn** | **08 46 59.1** | **-1.8** |
| **KSAR** | **Wonju Array Be** | **11.69** | **254** | P | **Pn** | **08 46 59.1** | **-1.8** |
| **JNU** | **Nakatsue** | **12.20** | **230** | Pn | **Pn** | **08 47 07.0** | **-1.0** |
| **JNU** | **Nakatsue** | **12.20** | **230** | P | **Pn** | **08 47 08.3** | **+0.4** |
| | comp=Z,5.9nm,0.8s,baz=56,slow=6.6,SNR=6.8 | | | | | | |
| JNU | | | | LR | LR | 08 51 39.1 | |
| | comp=Z,77nm,21.0s,baz=46,slow=36 | | | | | | |
| **TJN** | **Taejon** | **12.54** | **251** | Pn | **Pn** | **08 47 12.2** | **-0.3** |
| **TJN** | **Taejon** | **12.54** | **251** | ⇑*e*P | **Pn** | **08 47 12.0** | **-0.5** |
| **HEH** | **HeiHe** | **13.45** | **316** | *e*P | **Pn** | **08 47 26.4** | **+1.6** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,98nm,9.4s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,95nm,11.2s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,180nm,11.6s | | | | | | |
| **JCJ** | **Chichijima** | **14.34** | **180** | P | **Pn** | **08 47 36.9** | **+0.2** |
| | comp=Z,95nm,0.8s,baz=294,slow=20,SNR=2.4 | | | | | | |
| **ZEA** | **Zeya** | **15.79** | **326** | *e*P | **Pn** | **08 47 53.9** | **-1.2** |
| ZEA | | | | pmax | pmax | | |
| | comp=N,100nm,1.1s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| **HIA** | **Hailar** | **17.48** | **304** | | **Pn** | **08 48 15.0** | **-1.2** |
| **HIA** | **Hailar** | **17.48** | **304** | P | **Pn** | **08 48 15.0** | **-1.2** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **JOW** | **Kunigami** | **18.51** | **222** | P | **P** | **08 48 27.3** | **-0.7** |
| **JOW** | **Kunigami** | **18.51** | **222** | P | **P** | **08 48 27.4** | **-0.6** |
| | comp=Z,10nm,0.7s,baz=71,slow=11,SNR=5.2 | | | | | | |
| JOW | | | | LR | LR | 08 55 58.7 | |
| | comp=Z,60nm,18.0s,baz=212,slow=38 | | | | | | |
| **MA2** | **Magadan** | **18.91** | **14** | P | **P** | **08 48 32.2** | **0.0** |
| **MA2** | **Magadan** | **18.91** | **14** | P | **P** | **08 48 31.4** | **-0.8** |
| | comp=Z,5.3nm,0.7s,baz=161,slow=18,SNR=6.6 | | | | | | |
| MA2 | | | | LR | LR | 08 56 30.2 | |
| | comp=Z,34nm,18.5s,baz=178,slow=39 | | | | | | |
| **MA2** | **Magadan** | **18.91** | **14** | *de*P | **P** | **08 48 31.9** | **-0.3** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **XLT** | **XiLinHaoTe** | **19.24** | **286** | *e*P | **P** | **08 48 34.9** | **-1.2** |
| XLT | | | | pP | pP | 08 48 49.3 | -0.4 |
| XLT | | | | sP | sP | 08 49 00.0 | +2.1 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,52nm,6.0s | | | | | | |
| **BJI** | **Beijing** | **19.66** | **274** | P | **P** | **08 48 40.8** | **+0.3** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **BJT** | **Baijiatuan** | **19.67** | **274** | P | **P** | **08 48 39.1** | **-1.5** |
| **BJT** | **Baijiatuan** | **19.67** | **274** | P | **P** | **08 48 39.1** | **-1.5** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **TIA** | **Tai'an** | **20.11** | **263** | P | **P** | **08 48 43.9** | **-1.5** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,17nm,0.5s | | | | | | |
| **NJ2** | **Nanjing** | **20.80** | **251** | *e*P | **P** | **08 48 53.2** | **+0.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **HNS** | **HongShan** | **21.49** | **268** | ⇑P | **P** | **08 48 56.5** | **-3.7** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **YAK** | **Yakutsk** | **21.89** | **344** | P | **P** | **08 49 01.4** | **-2.9** |
| YAK | | | | IAmb | IAmb | 08 49 01.8 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **21.89** | **344** | P | **P** | **08 49 01.0** | **-3.3** |
| | comp=Z,23nm,0.5s,baz=5.8,slow=5.9,SNR=4.7 | | | | | | |
| YAK | | | | S | **S** | **08 52 54.3** | **-8.0** |
| | comp=Z,9.4nm,0.5s,baz=108,slow=19,SNR=1.8 | | | | | | |
| YAK | | | | LR | LR | 08 57 57.8 | |
| | comp=Z,46nm,19.9s,baz=180,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **21.89** | **344** | *e*P | **P** | **08 49 01.2** | **-3.1** |
| YAK | | | | *e* | | 08 49 24.3 | |
| YAK | | | | *e*S | **S** | **08 52 56.8** | **-5.5** |
| YAK | | | | *e* | | 08 53 01.7 | |
| YAK | | | | *e**SS | Sn | 08 53 16.2 | +0.5 |
| YAK | | | | *e*SS | **SnSn** | **08 53 32.4** | **+0.2** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,7.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,23nm,1.4s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,15nm,1.3s | | | | | | |
| **SEY** | **Seymchan** | **22.34** | **12** | P | **P** | **08 49 07.2** | **-1.9** |
| | comp=N,3.6nm,0.5s,baz=207,slow=8.5,SNR=11 comp=N,3.6nm,0.5s | | | | | | |
| **SEY** | **Seymchan** | **22.34** | **12** | *e*P | **P** | **08 49 06.3** | **-2.9** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **22.93** | **279** | *e*P | **P** | **08 49 13.2** | **-2.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,68nm,4.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,98nm,21.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,120nm,21.6s | | | | | | |
| **YOJ** | **Yonaguni jima** | **23.23** | **229** | P | **P** | **08 49 19.8** | **+1.2** |
| **YOJ** | **Yonaguni jima** | **23.23** | **229** | P | **P** | **08 49 19.8** | **+1.2** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,48nm,1.1s | | | | | | |
| **YHNB** | **Yeheng** | **24.02** | **232** | P | **P** | **08 49 24.3** | **-1.6** |
| YHNB | | | | IAmb | IAmb | 08 49 33.1 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **LYN** | **LuoYang** | **24.26** | **263** | P | **P** | **08 49 31.6** | **+3.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **24.32** | **52** | LR | LR | 09 00 26.8 | |
| | comp=Z,17nm,19.3s,baz=306,slow=40 | | | | | | |
| **WHN** | **Wuhan** | **24.84** | **253** | P | **P** | **08 49 35.8** | **+2.5** |
| **ULN** | **Ulaanbaatar** | **25.56** | **296** | P | **P** | **08 49 39.6** | **-0.3** |
| **ULN** | **Ulaanbaatar** | **25.56** | **296** | ⇑*e*P | **P** | **08 49 39.5** | **-0.3** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **26.00** | **296** | P | **P** | **08 49 44.3** | **+0.5** |
| **SONM** | **Songino Array** | **26.00** | **296** | P | **P** | **08 49 42.4** | **-1.4** |
| | comp=Z,6.5nm,0.7s,baz=86,slow=9.0,SNR=31 comp=Z,6.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **26.00** | **296** | P | **P** | **08 49 44.3** | **+0.5** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **27.13** | **265** | P | **P** | **08 49 51.5** | **-2.5** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ZAK** | **Zakamensk** | **28.14** | **302** | *e*P | **P** | **08 50 02.3** | **-0.6** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **BILL** | **Bilibino** | **29.64** | **18** | ⇑*i*P | **P** | **08 50 13.7** | **-2.2** |
| BILL | | | | *i* | | 08 51 17.0 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **MOY** | **Mondy** | **29.66** | **304** | *e*P | **P** | **08 50 16.5** | **+0.1** |
| MOY | | | | pmax | pmax | | |
| | comp=Z,14nm,1.6s | | | | | | |
| **LZH** | **Lanzhou** | **30.12** | **272** | *e*P | **P** | **08 50 22.9** | **+2.2** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.24** | **128** | T | T | 09 21 59.3 | |
| | baz=322,slow=75,SNR=553 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.25** | **128** | T | T | 09 21 59.3 | |
| | baz=322,slow=75,SNR=553 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.26** | **128** | T | T | 09 21 58.7 | |
| | baz=322,slow=75,SNR=542 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.08** | **130** | T | T | 09 23 08.7 | |
| | baz=324,slow=74,SNR=310 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.09** | **130** | T | T | 09 23 08.7 | |
| | baz=324,slow=74,SNR=337 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.10** | **130** | T | T | 09 23 07.0 | |
| | baz=324 | | | | | | |
| **GTA** | **Gaotai** | **32.00** | **281** | *e*P | **P** | **08 50 37.2** | **0.0** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **P08K** | **Saint George I** | **34.33** | **47** | P | **P** | **08 50 54.1** | **-2.9** |
| | baz=265 | | | | | | |
| **UNV** | **Unalaska Valle** | **35.98** | **52** | P | **P** | **08 51 09.0** | **-2.3** |
| | baz=271 | | | | | | |
| **PZH** | **PanZhiHua** | **36.28** | **259** | P | **P** | **08 51 14.5** | **+0.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.3s | | | | | | |
| **M11K** | **Mekoryuk** | **36.50** | **41** | P | **P** | **08 51 12.6** | **-3.0** |
| | baz=263 | | | | | | |
| **TNA** | **Tin City** | **36.78** | **32** | P | **P** | **08 51 14.8** | **-3.1** |
| | baz=254 | | | | | | |
| **GOMU** | **GeErMu** | **36.83** | **278** | P | **P** | **08 51 19.0** | **-0.2** |
| GOMU | | | | pP | pP | 08 51 32.6 | -2.6 |
| GOMU | | | | sP | sP | 08 51 39.0 | -3.8 |
| GOMU | | | | PcP | **PcP** | **08 53 41.1** | **+1.2** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,22nm,0.7s | | | | | | |
| **F14K** | **Arctic Creek** | **37.40** | **33** | P | **P** | **08 51 20.7** | **-2.5** |
| | baz=256 | | | | | | |
| **SLVN** | **Son La** | **37.87** | **250** | P | **P** | **08 51 28.1** | **+0.3** |
| SLVN | | | | IAmb | IAmb | 08 51 31.2 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **M13K** | **Dall Lake** | **37.91** | **41** | P | **P** | **08 51 26.4** | **-1.1** |
| | baz=265 | | | | | | |
| **C16K** | **Lisburne Hills** | **38.52** | **28** | P | **P** | **08 51 31.5** | **-1.1** |
| | baz=254 | | | | | | |
| **O14K** | **Tigyukauivet M** | **38.90** | **43** | P | **P** | **08 51 34.3** | **-1.5** |
| | baz=269 | | | | | | |
| **D17K** | **Noatak River** | **39.19** | **30** | P | **P** | **08 51 37.5** | **-0.7** |
| | baz=256 | | | | | | |
| **M15K** | **Kasigluk River** | **39.24** | **41** | P | **P** | **08 51 38.3** | **-0.4** |
| | baz=267 | | | | | | |
| **C17K** | **DeLong Mountai** | **39.35** | **28** | P | **P** | **08 51 39.2** | **-0.3** |
| | baz=256 | | | | | | |
| **SDPT** | **Sand Point** | **39.42** | **49** | P | **P** | **08 51 39.5** | **-0.8** |
| | baz=274 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L17K | **Donlin** | 40.45 | 39 | P | P | 08 51 48.6 | -0.2 |
| | baz=268 | | | | | | |
| K17K | **Iditarod** | 40.47 | 38 | P | P | 08 51 49.1 | +0.2 |
| | baz=267 | | | | | | |
| A19K | **Wainwright** | 40.51 | 26 | P | P | 08 51 49.2 | +0.2 |
| | baz=256 | | | | | | |
| G18K | **Tagagawik** | 40.60 | 33 | P | P | 08 51 50.8 | +0.9 |
| G18K | | | | IAmb | IAmb | 08 51 51.6 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| G18K | **Tagagawik** | 40.60 | 33 | P | P | 08 51 50.0 | +0.1 |
| | baz=263 | | | | | | |
| H18K | **Honhosa River** | 40.63 | 34 | P | P | 08 51 51.5 | +1.2 |
| H18K | | | | IAmb | IAmb | 08 52 11.2 | |
| | comp=Z,13nm,1.4s | | | | | | |
| H18K | **Honhosa River** | 40.63 | 34 | P | P | 08 51 50.3 | 0.0 |
| | baz=264 | | | | | | |
| C19K | **Lookout Ridge** | 40.77 | 28 | P | P | 08 51 51.5 | +0.2 |
| | baz=258 | | | | | | |
| M17K | **Holitna River** | 40.84 | 40 | P | P | 08 51 52.2 | +0.2 |
| | baz=270 | | | | | | |
| N17K | **Nushagak Hills** | 40.96 | 41 | P | P | 08 51 53.2 | +0.2 |
| | baz=271 | | | | | | |
| F19K | **Shaleruckik Mo** | 41.07 | 31 | P | P | 08 51 53.5 | -0.2 |
| | baz=263 | | | | | | |
| D19K | **Kuna River** | 41.18 | 29 | P | P | 08 51 54.9 | +0.1 |
| | baz=261 | | | | | | |
| L18K | **Granite Mounta** | 41.21 | 39 | P | P | 08 51 56.6 | +1.7 |
| L18K | | | | IAmb | IAmb | 08 51 57.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| L18K | **Granite Mounta** | 41.21 | 39 | P | P | 08 51 55.7 | +0.7 |
| | baz=269 | | | | | | |
| J18K | **Innoko River** | 41.23 | 37 | P | P | 08 51 56.3 | +1.1 |
| J18K | **Innoko River** | 41.23 | 37 | P | P | 08 51 55.4 | +0.2 |
| | baz=268 | | | | | | |
| G19K | **Purcell Mounta** | 41.26 | 33 | P | P | 08 51 54.9 | -0.5 |
| | baz=264 | | | | | | |
| E19K | **Redstone River** | 41.36 | 31 | IAmb | IAmb | 08 51 57.6 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| E19K | **Redstone River** | 41.36 | 31 | P | P | 08 51 56.2 | +0.1 |
| | baz=263,SNR=7.0 | | | | | | |
| H19K | **Roundabout Mou** | 41.47 | 34 | P | P | 08 51 58.8 | +1.7 |
| H19K | | | | IAmb | IAmb | 08 51 59.1 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| H19K | **Roundabout Mou** | 41.47 | 34 | P | P | 08 51 57.7 | +0.7 |
| | baz=266,SNR=6.2 | | | | | | |
| M18K | **Stony River** | 41.62 | 40 | P | P | 08 51 58.5 | +0.2 |
| | baz=271 | | | | | | |
| J19K | **Poorman** | 41.74 | 36 | P | P | 08 52 00.7 | +1.4 |
| J19K | | | | IAmb | IAmb | 08 52 02.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| J19K | **Poorman** | 41.74 | 36 | P | P | 08 51 59.2 | -0.1 |
| | baz=268,SNR=9.7 | | | | | | |
| D20K | **Etivluk River** | 41.76 | 29 | P | P | 08 51 59.9 | +0.4 |
| | baz=262,SNR=8.3 | | | | | | |
| B20K | **Meade River** | 41.77 | 27 | IAmb | IAmb | 08 52 00.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| B20K | **Meade River** | 41.77 | 27 | P | P | 08 51 59.1 | -0.3 |
| | baz=260,SNR=8.1 | | | | | | |
| E20K | **Nigu River** | 41.85 | 29 | P | P | 08 52 00.3 | +0.1 |
| | baz=263,SNR=6.0 | | | | | | |
| F20K | **Avaraart Lake** | 41.89 | 31 | P | P | 08 52 00.6 | +0.1 |
| | baz=265 | | | | | | |
| O18K | **Koktuh Hills** | 41.97 | 42 | P | P | 08 52 01.4 | +0.2 |
| | baz=273 | | | | | | |
| P18K | **Big Mountain,** | 41.99 | 43 | P | P | 08 52 01.5 | 0.0 |
| | baz=274 | | | | | | |
| CHIR | **Chirikof Islan** | 42.11 | 48 | P | P | 08 52 02.8 | +0.4 |
| | baz=277 | | | | | | |
| A21K | **Barrow** | 42.20 | 25 | P | P | 08 52 03.1 | +0.3 |
| | baz=259 | | | | | | |
| I20K | **Naaghedeneel** | 42.26 | 35 | P | P | 08 52 03.9 | +0.4 |
| | baz=268 | | | | | | |
| PHRA | **Phrae** | 42.33 | 250 | P | P | 08 52 05.7 | +1.1 |
| MK31 | **Makanchi Array** | 42.34 | 298 | P | P | 08 52 04.6 | +0.1 |
| MK31 | | | | IAmb | IAmb | 08 52 08.6 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| MK31 | **Makanchi Array** | 42.34 | 298 | *i* P | P | 08 52 04.3 | -0.2 |
| MKAR | **Makanchi Array** | 42.34 | 298 | P | P | 08 52 04.5 | 0.0 |
| MKAR | **Makanchi Array** | 42.34 | 298 | P | P | 08 52 03.9 | -0.6 |
| | comp=Z,8.5nm,0.7s,baz=83,slow=12,SNR=39 | | | | | | |
| MKAR | | | | PcP | PcP | 08 53 57.0 | +0.2 |
| | comp=Z,0.9nm,0.4s,baz=54,slow=2.7,SNR=3.8 | | | | | | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| MKAR | **Makanchi Array** | 42.34 | 298 | P | P | 08 52 04.5 | 0.0 |
| J20K | **Nowinta River** | 42.39 | 36 | P | P | 08 52 06.4 | +1.8 |
| J20K | | | | IAmb | IAmb | 08 52 07.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| J20K | **Nowinta River** | 42.39 | 36 | P | P | 08 52 05.2 | +0.6 |
| | baz=269,SNR=14 | | | | | | |
| K20K | **Telida** | 42.42 | 37 | P | P | 08 52 07.1 | +2.2 |
| K20K | **Telida** | 42.42 | 37 | P | P | 08 52 05.2 | +0.3 |
| | baz=270 | | | | | | |
| C21K | **Knifeblade Rid** | 42.47 | 28 | P | P | 08 52 06.0 | +0.8 |
| | baz=263 | | | | | | |
| L20K | **Farewell, AK** | 42.52 | 38 | P | P | 08 52 06.1 | +0.4 |
| | baz=271 | | | | | | |
| MAKZ | **Makanchi** | 42.54 | 298 | P | P | 08 52 06.2 | +0.2 |
| MAKZ | | | | IAmb | IAmb | 08 52 10.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| MAKZ | **Makanchi** | 42.54 | 298 | P | P | 08 52 06.3 | +0.2 |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| R18K | **Karluk** | 42.55 | 45 | P | P | 08 52 06.5 | +0.5 |
| | baz=276 | | | | | | |
| B21K | **Ikpikpuk River** | 42.59 | 28 | P | P | 08 52 07.3 | +1.2 |
| B21K | | | | IAmb | IAmb | 08 52 07.4 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| B21K | **Ikpikpuk River** | 42.59 | 28 | P | P | 08 52 06.8 | +0.7 |
| | baz=263 | | | | | | |
| IMAR | **Indian Mountai** | 42.61 | 33 | P | P | 08 52 07.8 | +1.4 |
| A22K | **Sinclair Lake** | 42.66 | 25 | P | P | 08 52 07.1 | +0.4 |
| | baz=261 | | | | | | |
| G21K | **Allakaket** | 42.73 | 32 | P | P | 08 52 07.7 | +0.3 |
| | baz=267 | | | | | | |
| F21K | **Alatna River** | 42.78 | 31 | P | P | 08 52 07.6 | -0.1 |
| | baz=267 | | | | | | |
| Q19K | **Cape Douglas,** | 42.84 | 43 | P | P | 08 52 09.4 | +1.1 |
| H21K | **Melozitna Rive** | 42.99 | 33 | P | P | 08 52 09.6 | +0.2 |
| | baz=269 | | | | | | |
| CHTO | **Chiang Mai** | 43.04 | 252 | P | P | 08 52 11.8 | +1.4 |
| CHTO | | | | IAmb | IAmb | 08 52 14.9 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| CHTO | **Chiang Mai** | 43.04 | 252 | P | P | 08 52 11.8 | +1.4 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| B22K | **Teshekpuk Lake** | 43.09 | 27 | P | P | 08 52 10.5 | +0.4 |
| | baz=263 | | | | | | |
| CHUM | **Lake Minchumin** | 43.20 | 36 | P | P | 08 52 11.5 | +0.5 |
| | baz=271 | | | | | | |
| D22K | **Ayikyak River** | 43.20 | 29 | P | P | 08 52 11.7 | +0.6 |
| | baz=266 | | | | | | |
| CMAR | **Chiang Mai Arr** | 43.27 | 251 | P | P | 08 52 11.1 | -1.2 |
| | comp=Z,1.0nm,0.3s,baz=38,slow=7.5,SNR=8.2 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| F22K | **John River** | 43.30 | 31 | P | P | 08 52 12.7 | +0.8 |
| | baz=268 | | | | | | |
| I21K | **Tanana** | 43.33 | 34 | P | P | 08 52 12.6 | +0.5 |
| | baz=270 | | | | | | |
| G22K | **Bettles** | 43.54 | 32 | P | P | 08 52 14.5 | +0.7 |
| | baz=269 | | | | | | |
| H22K | **Ishtalitna Cre** | 43.58 | 33 | P | P | 08 52 14.8 | +0.6 |
| | baz=270 | | | | | | |
| SKT | **Skwentna** | 43.64 | 39 | P | P | 08 52 15.3 | +0.6 |
| | baz=274 | | | | | | |
| KURK | **Kurchatov** | 43.72 | 305 | P | P | 08 52 15.5 | 0.0 |
| KURK | **Kurchatov** | 43.72 | 305 | *c i* P | P | 08 52 15.0 | -0.5 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| BPAW | **Bear Paw Mtn.** | 43.77 | 36 | P | P | 08 52 16.9 | +1.1 |
| | baz=272 | | | | | | |
| KURBB | **Kurchatov Arra** | 43.80 | 305 | P | P | 08 52 15.3 | -0.8 |
| | comp=Z,17nm,0.5s,baz=79,slow=9.0,SNR=53 | | | | | | |
| KURBB | | | | PcP | PcP | 08 54 01.2 | -0.4 |
| | comp=Z,1.0nm,0.6s,baz=81,slow=3.7,SNR=4.4 | | | | | | |
| | comp=Z,17nm,0.5s | | | | | | |
| KURBB | **Kurchatov Arra** | 43.80 | 305 | P | P | 08 52 15.8 | -0.3 |
| MLY | **Manley** | 43.85 | 34 | P | P | 08 52 18.8 | +2.3 |
| MLY | **Manley** | 43.85 | 34 | P | P | 08 52 17.2 | +0.8 |
| | baz=271,SNR=7.8 | | | | | | |
| D23K | **Nanushuk River** | 43.92 | 29 | P | P | 08 52 18.3 | +1.4 |
| | baz=267 | | | | | | |
| C23K | **Itkillik River** | 44.00 | 27 | P | P | 08 52 18.5 | +1.0 |
| | baz=266 | | | | | | |
| COLD | **Coldfoot** | 44.06 | 31 | P | P | 08 52 18.6 | +0.7 |
| | baz=270 | | | | | | |
| G23K | **Bananza Creek** | 44.12 | 32 | P | P | 08 52 18.7 | +0.1 |
| | baz=270 | | | | | | |
| SHL | **Shillong** | 44.14 | 265 | IAmb | IAmb | 08 52 20.5 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| E23K | **Chandalar** | 44.29 | 30 | P | P | 08 52 20.3 | +0.3 |
| | baz=269,SNR=5.2 | | | | | | |
| TOLK | **Toolik Lake Re** | 44.32 | 29 | P | P | 08 52 20.4 | +0.3 |
| | baz=269 | | | | | | |
| H23K | **Yukon River** | 44.33 | 33 | P | P | 08 52 21.1 | +0.8 |
| | baz=272 | | | | | | |
| I23K | **Minto, Yukon-K** | 44.43 | 34 | P | P | 08 52 21.7 | +0.7 |
| | baz=273 | | | | | | |
| NEA2 | **Nenana** | 44.59 | 35 | P | P | 08 52 23.9 | +1.7 |
| NEA2 | | | | IAmb | IAmb | 08 52 25.0 | |
| | comp=Z,13nm,0.7s | | | | | | |
| NEA2 | **Nenana** | 44.59 | 35 | P | P | 08 52 22.7 | +0.5 |
| | baz=273,SNR=23 | | | | | | |
| D24K | **Happy Valley** | 44.60 | 28 | IAmb | IAmb | 08 52 23.9 | |
| | comp=Z,12nm,0.7s | | | | | | |
| D24K | **Happy Valley** | 44.60 | 28 | P | P | 08 52 23.2 | +0.9 |
| | baz=269,SNR=6.8 | | | | | | |
| C24K | **Franklin Bluff** | 44.66 | 28 | P | P | 08 52 23.9 | +1.2 |
| | baz=268 | | | | | | |
| MCK | **McKinley** | 44.70 | 36 | P | P | 08 52 23.8 | +0.6 |
| | baz=274 | | | | | | |
| E24K | **Your Creek** | 44.71 | 30 | P | P | 08 52 23.5 | +0.2 |
| | baz=270 | | | | | | |
| PMR | **Palmer** | 44.81 | 39 | P | P | 08 52 24.5 | +0.5 |
| | baz=276 | | | | | | |
| MDM | **Murphy Dome** | 44.92 | 34 | IAmb | IAmb | 08 52 27.3 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| F24K | **Squaw Lake** | 44.95 | 31 | P | P | 08 52 25.8 | +0.7 |
| | baz=272 | | | | | | |
| WAT1 | **Susitna Watana** | 44.95 | 37 | P | P | 08 52 26.0 | +0.8 |
| | baz=276 | | | | | | |
| H24K | **Noodor Dome** | 45.02 | 33 | IAmb | IAmb | 08 52 28.5 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| H24K | **Noodor Dome** | 45.02 | 33 | P | P | 08 52 26.7 | +1.0 |
| | baz=273,SNR=6.2 | | | | | | |
| COLA | **College** | 45.09 | 35 | P | P | 08 52 27.9 | +1.7 |
| COLA | **College** | 45.09 | 35 | P | P | 08 52 27.3 | +1.1 |
| | baz=274 | | | | | | |
| COLA | **College** | 45.09 | 35 | *d i* P | P | 08 52 27.9 | +1.7 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| G24K | **Hadweenzic Riv** | 45.14 | 32 | P | P | 08 52 27.2 | +0.6 |
| | baz=273 | | | | | | |
| KNK | **Knik Glacier** | 45.15 | 39 | IAmb | IAmb | 08 52 29.7 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| KNK | **Knik Glacier** | 45.15 | 39 | P | P | 08 52 27.3 | +0.5 |
| | baz=277 | | | | | | |
| SML | **Sawmill** | 45.16 | 39 | P | P | 08 52 28.0 | +1.1 |
| | baz=277 | | | | | | |
| POKR | **Poker Flat Res** | 45.25 | 34 | IAmb | IAmb | 08 52 30.2 | |
| | comp=Z,13nm,1.0s | | | | | | |
| POKR | **Poker Flat Res** | 45.25 | 34 | P | P | 08 52 28.8 | +1.3 |
| | baz=274 | | | | | | |
| PWL | **Pot Wells** | 45.28 | 40 | P | P | 08 52 28.1 | +0.3 |
| | baz=278 | | | | | | |
| PDGK | **Podgornoye** | 45.29 | 294 | P | P | 08 52 27.7 | -0.6 |
| M23K | **Glacier View** | 45.45 | 39 | P | P | 08 52 29.6 | +0.4 |
| | baz=277 | | | | | | |
| DHY | **Denali Highway** | 45.46 | 37 | IAmb | IAmb | 08 52 49.3 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| DHY | **Denali Highway** | 45.46 | 37 | P | P | 08 52 29.7 | +0.3 |
| | baz=276 | | | | | | |
| D25K | **Kavik River** | 45.47 | 28 | IAmb | IAmb | 08 52 30.4 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| D25K | **Kavik River** | 45.47 | 28 | P | P | 08 52 29.6 | +0.4 |
| | baz=271,SNR=8.1 | | | | | | |
| IL31 | | 45.51 | 35 | IAmb | IAmb | 08 52 32.0 | |
| | comp=Z,16nm,1.2s | | | | | | |
| ILAR | **Eielson Array** | 45.51 | 35 | P | P | 08 52 30.9 | +1.3 |
| ILAR | **Eielson Array** | 45.51 | 35 | P | P | 08 52 30.1 | +0.5 |
| | comp=Z,7.3nm,0.9s,baz=270,slow=6.3,SNR=64 | | | | | | |
| ILAR | | | | pP | pP | 08 52 48.1 | +2.4 |
| | comp=Z,4.2nm,0.9s,baz=272,slow=6.7,SNR=6.4 | | | | | | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| ILAR | **Eielson Array** | 45.51 | 35 | P | P | 08 52 30.9 | +1.3 |
| HDA | **Harding Lake** | 45.52 | 35 | P | P | 08 52 29.9 | +0.2 |
| | baz=275 | | | | | | |
| SCM | **Sheep Creek Mo** | 45.63 | 39 | IAmb | IAmb | 08 52 35.1 | |
| | comp=Z,8.6nm,0.6s | | | | | | |
| SCM | **Sheep Creek Mo** | 45.63 | 39 | P | P | 08 52 30.8 | +0.1 |
| | baz=278 | | | | | | |
| F25K | **Chistian Rive** | 45.81 | 31 | P | P | 08 52 32.3 | +0.3 |
| | baz=273 | | | | | | |
| H25L | **Birch Creek** | 45.83 | 32 | P | P | 08 52 32.9 | +0.9 |
| | baz=275 | | | | | | |
| PRP | **Porcupine Dome** | 46.01 | 34 | P | P | 08 52 34.5 | +0.8 |
| | baz=276,SNR=7.5 | | | | | | |
| K24K | **Donnelly Dome** | 46.09 | 36 | P | P | 08 52 34.9 | +0.7 |
| | baz=277 | | | | | | |
| M24K | **Tolsona, Glenn** | 46.13 | 38 | P | P | 08 52 35.4 | +0.8 |
| | baz=278 | | | | | | |
| J25K | **Salcha River,** | 46.17 | 35 | P | P | 08 52 35.3 | +0.5 |
| | baz=277 | | | | | | |
| PAX | **Paxson** | 46.34 | 37 | P | P | 08 52 36.6 | +0.4 |
| | baz=278 | | | | | | |
| F26K | **Sheenjek River** | 46.37 | 30 | P | P | 08 52 37.2 | +0.9 |
| | baz=275 | | | | | | |
| C27K | **Jago River** | 46.40 | 28 | P | P | 08 52 36.5 | 0.0 |
| | baz=273,SNR=5.6 | | | | | | |
| G26K | **Porcupine Rive** | 46.58 | 31 | P | P | 08 52 38.3 | +0.4 |
| | baz=276,SNR=5.1 | | | | | | |
| SCRK | **Sand Creek** | 46.85 | 36 | P | P | 08 52 41.3 | +1.0 |
| SCRK | | | | IAmb | IAmb | 08 53 01.3 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| SCRK | **Sand Creek** | 46.85 | 36 | P | P | 08 52 40.1 | -0.2 |
| | baz=278,SNR=6.9 | | | | | | |
| N25K | **Chitina, Valde** | 46.95 | 39 | P | P | 08 52 41.1 | +0.1 |
| | baz=280 | | | | | | |
| J26L | **Joseph Creek** | 46.96 | 35 | P | P | 08 52 40.8 | -0.2 |
| | baz=278 | | | | | | |
| I26K | **Coal Creek Min** | 47.02 | 34 | P | P | 08 52 41.8 | +0.4 |
| | baz=278 | | | | | | |
| TARG | **Taragay, Kyrgy** | 47.03 | 293 | IAmb | IAmb | 08 52 46.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| L26K | **Log Cabin Wild** | 47.28 | 37 | P | P | 08 52 43.9 | +0.4 |
| | baz=280 | | | | | | |
| G27K | **Doyon Strip** | 47.43 | 31 | P | P | 08 52 44.7 | +0.1 |
| | baz=278 | | | | | | |
| M26K | **Nabesna, AK** | 47.55 | 38 | P | P | 08 52 45.9 | +0.2 |
| | baz=281 | | | | | | |
| H27K | **Steamboat Moun** | 47.56 | 32 | P | P | 08 52 46.1 | +0.5 |
| | baz=278,SNR=5.9 | | | | | | |
| I27K | **Kandik River** | 47.62 | 33 | P | P | 08 52 46.6 | +0.5 |
| | baz=279 | | | | | | |
| K27K | **Chicken** | 47.68 | 35 | IAmb | IAmb | 08 53 10.1 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| K27K | **Chicken** | 47.68 | 35 | P | P | 08 52 47.4 | +0.9 |
| | baz=280,SNR=7.2 | | | | | | |
| L27K | **Beaver Creek,** | 47.96 | 37 | IAmb | IAmb | 08 53 13.0 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| L27K | **Beaver Creek,** | 47.96 | 37 | P | P | 08 52 49.4 | +0.6 |
| | baz=281,SNR=6.7 | | | | | | |
| BCAR | **Beaver Creek A** | 47.98 | 37 | P | P | 08 52 50.7 | +1.8 |
| F28M | **Old Crow** | 48.00 | 30 | P | P | 08 52 50.0 | +1.0 |
| | baz=278 | | | | | | |
| BVA0 | **Borovoye Array** | 48.06 | 310 | *i* P | P | 08 52 49.6 | 0.0 |
| M27K | **Edge Creek, AK** | 48.07 | 37 | P | P | 08 52 51.4 | +1.6 |
| | baz=282 | | | | | | |
| BRVK | **Borovoye** | 48.11 | 310 | P | P | 08 52 50.2 | +0.3 |
| BRVK | | | | IAmb | IAmb | 08 52 51.0 | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| BRVK | **Borovoye** | 48.11 | 310 | *d i* P | P | 08 52 50.3 | +0.3 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| I28M | **Miner Creek** | 48.33 | 33 | IAmb | IAmb | 08 52 54.7 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| I28M | **Miner Creek** | 48.33 | 33 | P | P | 08 52 52.1 | +0.4 |
| | baz=280,SNR=11 | | | | | | |
| OTUK | **Ortayu** | 48.34 | 303 | P | P | 08 52 51.7 | -0.2 |
| MESA | **MESA** | 48.51 | 40 | P | P | 08 52 53.6 | +0.4 |
| | baz=283 | | | | | | |
| E29M | **Blow River** | 48.62 | 29 | P | P | 08 52 54.1 | +0.4 |
| | baz=280 | | | | | | |
| H29M | **Whitestone** | 48.82 | 32 | IAmb | IAmb | 08 53 00.9 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| H29M | **Whitestone** | 48.82 | 32 | P | P | 08 52 56.4 | +1.1 |
| | baz=281 | | | | | | |
| DAWY | **Dawson** | 48.83 | 35 | P | P | 08 52 56.2 | +0.8 |
| | baz=282 | | | | | | |
| G29M | **Pine Creek** | 48.83 | 31 | P | P | 08 52 56.2 | +0.8 |
| | baz=281 | | | | | | |
| AAK | **Ala-Archa** | 48.95 | 295 | P | P | 08 52 56.4 | -0.4 |
| AAK | | | | IAmb | IAmb | 08 52 57.2 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| AAK | **Ala-Archa** | 48.95 | 295 | P | P | 08 52 56.4 | -0.4 |
| | comp=Z,2.6nm,0.3s,baz=120,slow=2.9,SNR=4.8 | | | | | | |
| | comp=Z,2.6nm,0.3s | | | | | | |
| AAK | **Ala-Archa** | 48.95 | 295 | *ce* P | P | 08 52 56.7 | -0.1 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| I29M | **Ogilvie Camp,** | 49.02 | 33 | IAmb | IAmb | 08 52 59.5 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| I29M | **Ogilvie Camp,** | 49.02 | 33 | P | P | 08 52 57.6 | +0.7 |
| | baz=282,SNR=6.9 | | | | | | |
| KSH | **Kashi** | 49.19 | 291 | P | P | 08 53 02.9 | +4.3 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| O28M | **Mount Upton** | 49.21 | 39 | P | P | 08 52 59.2 | +0.5 |
| | baz=284 | | | | | | |
| EPYK | **Eagle Plains** | 49.45 | 32 | P | P | 08 53 02.0 | +1.9 |
| EPYK | **Eagle Plains** | 49.45 | 32 | P | P | 08 53 00.8 | +0.7 |
| | baz=282,SNR=11 | | | | | | |
| G30M | **tAoh Zrail Nji** | 49.51 | 31 | P | P | 08 53 01.1 | +0.5 |
| | baz=282,SNR=7.1 | | | | | | |
| F30M | **Barrier River** | 49.55 | 30 | P | P | 08 53 01.0 | +0.2 |
| | baz=282,SNR=9.1 | | | | | | |
| L29M | **L29M** | 49.59 | 36 | IAmb | IAmb | 08 53 23.1 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| L29M | **L29M** | 49.59 | 36 | P | P | 08 53 01.0 | -0.3 |
| | baz=284 | | | | | | |
| K29M | **Barlow Dome** | 49.69 | 35 | IAmb | IAmb | 08 53 23.1 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| K29M | **Barlow Dome** | 49.69 | 35 | P | P | 08 53 01.5 | -0.6 |
| | baz=284 | | | | | | |
| I30M | **Mount Dempster** | 49.84 | 33 | P | P | 08 53 02.6 | -0.7 |
| | baz=284,SNR=17 | | | | | | |
| J30M | **Hart River** | 50.01 | 34 | P | P | 08 53 04.4 | -0.1 |
| | baz=284 | | | | | | |
| YUK6 | **Outpost Mounta** | 50.03 | 39 | P | P | 08 53 04.7 | -0.2 |
| | baz=286 | | | | | | |
| INK | **Inuvik** | 50.22 | 29 | P | P | 08 53 06.2 | +0.3 |
| | baz=283,SNR=12 | | | | | | |
| G31M | **Satah River** | 50.27 | 31 | P | P | 08 53 06.7 | +0.4 |
| | baz=284,SNR=7.9 | | | | | | |
| M30M | **Minto, Yukon** | 50.32 | 36 | P | P | 08 53 07.3 | +0.5 |
| | baz=285 | | | | | | |
| F31M | **Tsiigehtchic** | 50.35 | 30 | P | P | 08 53 07.2 | +0.3 |
| | baz=284,SNR=6.9 | | | | | | |
| ARSB | **Arslanbob** | 50.51 | 294 | IAmb | IAmb | 08 53 11.0 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| P30M | **Million Dollar** | 50.93 | 40 | P | P | 08 53 11.8 | +0.4 |
| | baz=287 | | | | | | |
| N31M | **Braeburn, Yuko** | 51.08 | 38 | P | P | 08 53 13.3 | +0.7 |
| | baz=287 | | | | | | |
| O30N | **Mendenhall** | 51.15 | 39 | P | P | 08 53 13.6 | +0.5 |
| | baz=287 | | | | | | |
| KK31 | **Karatay Array** | 51.45 | 297 | P | P | 08 53 15.3 | -0.2 |
| KK31 | | | | IAmb | IAmb | 08 53 15.9 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| KK31 | **Karatay Array** | 51.45 | 297 | *e* P | P | 08 53 15.0 | -0.5 |
| KKAR | **Karatay Array** | 51.45 | 297 | P | P | 08 53 15.3 | -0.2 |
| KKAR | | | | IAmb | IAmb | 08 53 15.9 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| KKAR | **Karatay Array** | 51.45 | 297 | P | P | 08 53 15.3 | -0.2 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| M31M | **Drury Creek, Y** | 51.50 | 37 | P | P | 08 53 16.3 | +0.6 |
| | baz=288 | | | | | | |
| KULM | **Kulim** | 51.58 | 237 | P | P | 08 53 17.9 | +1.1 |
| FARO | **Faro, Yukon** | 51.96 | 36 | P | P | 08 53 19.3 | +0.3 |
| | baz=288 | | | | | | |
| A36M | **Sachs Harbour** | 51.97 | 23 | P | P | 08 53 19.4 | +0.6 |
| | baz=288 | | | | | | |
| SVE | **Sverdlovsk** | 52.22 | 317 | *e* P | P | 08 53 21.6 | +0.6 |
| C36M | **Paulatuk** | 53.20 | 26 | P | P | 08 53 28.3 | +0.3 |
| | baz=291,SNR=8.1 | | | | | | |
| ARU | **Arti** | 53.44 | 317 | P | P | 08 53 29.1 | -0.8 |
| ARU | | | | IAmb | IAmb | 08 53 30.8 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| ARU | **Arti** | 53.44 | 317 | P | P | 08 53 29.8 | -0.2 |
| | comp=Z,3.2nm,0.3s,baz=84,slow=4.0,SNR=6.0 | | | | | | |
| | comp=Z,3.2nm,0.3s | | | | | | |
| ARU | **Arti** | 53.44 | 317 | *c i* P | P | 08 53 30.0 | 0.0 |
| ARU | | | | | | 08 54 35.1 | |
| ARU | | | | | | 08 55 29.5 | |
| ARU | | | | S | S | 09 01 00.8 | +3.6 |
| ARU | | | | SS | SKiKP | 09 04 40.4 | +1.1 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,12nm,1.5s | | | | | | |
| ARU | **Arti** | 53.44 | 317 | P | P | 08 53 30.2 | +0.2 |
| | comp=Z,4.2nm,0.8s | | | | | | |
| NIL | **Nilore** | 53.82 | 285 | P | P | 08 53 34.2 | +1.0 |
| NIL | **Nilore** | 53.82 | 285 | P | P | 08 53 34.2 | +1.0 |
| NIL | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| CHGR | **Chuyangaron** | 54.32 | 293 | P | P | 08 53 36.3 | -0.6 |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,32nm,0.7s | | | | | | |
| SIMJ | **Simiganj** | 54.42 | 293 | P | P | 08 53 37.5 | -0.2 |
| AB31 | **Akbulak array** | 55.54 | 308 | *i* P | P | 08 53 45.4 | 0.0 |
| ABKAR | **Akbulak array** | 55.54 | 308 | P | P | 08 53 45.4 | 0.0 |
| AKTO | **Aktyubinsk** | 56.16 | 310 | P | P | 08 53 49.3 | -0.4 |
| | comp=Z,6.1nm,0.7s,baz=70,slow=12,SNR=16 | | | | | | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| KIRV | **Kirov** | 57.06 | 321 | P | P | 08 53 56.0 | 0.0 |
| | comp=Z,22nm,0.6s,baz=40,slow=1.9,SNR=8.5 | | | | | | |
| | comp=Z,22nm,0.6s | | | | | | |
| KIRV | **Kirov** | 57.06 | 321 | *c i* P | P | 08 53 55.7 | -0.3 |
| RES | **Resolute Bay** | 58.18 | 15 | LR | LR | 09 24 03.9 | |
| | comp=Z,27nm,18.4s,slow=41 | | | | | | |
| YKA | **Yellowknife Ar** | 59.73 | 32 | P | P | 08 54 14.6 | 0.0 |
| | comp=Z,1.1nm,0.7s,baz=309,slow=6.2,SNR=3.5 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| ARCES | **ARCESS Array B** | 60.04 | 339 | P | P | 08 54 16.3 | -0.3 |
| | comp=Z,2.8nm,1.0s,baz=31,slow=5.4,SNR=6.2 | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| BELG | **Belogornoye** | 60.95 | 316 | P | P | 08 54 22.9 | -0.1 |
| | comp=Z,9.7nm,0.7s,baz=90,slow=4.0,SNR=5.7 | | | | | | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| BELG | **Belogornoye** | 60.95 | 316 | *c i* P | P | 08 54 22.7 | -0.3 |
| BELG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| CTA | **Charters Tower** | 61.37 | 176 | P | P | 08 54 27.0 | +0.9 |
| | comp=Z,0.2nm,0.9s,baz=36,slow=8.7,SNR=2.1 | | | | | | |
| CTA | **Charters Tower** | 61.37 | 176 | P | P | 08 54 27.0 | +0.9 |
| WRAB | **Tennant Creek** | 61.51 | 188 | *e* P | P | 08 54 26.3 | -0.8 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| WRA | **Warramunga Arr** | 61.52 | 188 | P | P | 08 54 26.5 | -0.7 |
| WRA | **Warramunga Arr** | 61.52 | 188 | P | P | 08 54 26.7 | -0.5 |
| | comp=Z,1.9nm,0.6s,baz=4.9,slow=6.9,SNR=37 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| WRA | **Warramunga Arr** | 61.52 | 188 | P | P | 08 54 26.5 | -0.7 |
| JOF | **Joensuu** | 62.31 | 331 | *e* P | P | 08 54 31.7 | -0.3 |
| OBN | **Obninsk** | 64.88 | 322 | *i* P | P | 08 54 47.9 | -1.1 |
| OBN | | | | *i* | | 08 55 21.6 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| KEF | **Keuruu** | 65.08 | 333 | *e* P | P | 08 54 49.8 | -0.5 |
| FIA1 | **FINESS Array S** | 65.14 | 332 | P | P | 08 54 50.5 | -0.1 |
| FINES | **FINESS Array B** | 65.14 | 332 | P | P | 08 54 50.6 | 0.0 |
| FINES | **FINESS Array B** | 65.14 | 332 | P | P | 08 54 49.8 | -0.8 |
| | comp=Z,10nm,0.7s,baz=52,slow=7.2,SN

MNK *i* *SP **PcP** 08 55 38.2 -1.3
MNK *i* 08 57 48.0
MNK *i* PPP PPP 08 59 24.9
MNK *i* S **S** **09 04 16.5 +0.3**
MNK *i* *SS **sS** **09 04 44.7 -0.8**
MNK pmax pmax
comp=N,10.0nm,0.9s
MNK pmax pmax
comp=Z,13nm,0.9s
MNK pmax pmax
comp=E,4.0nm,0.9s
MNK MLR MLR
comp=Z,88nm,17.0s
MNK MLR MLR
comp=N,169nm,17.0s
MNK MLR MLR
comp=E,106nm,17.0s
**MSO Missoula 69.20 45** P **P** **08 55 17.0 +0.3**
baz=309
**GNI Garni 69.50 306**[1] *e*P **P** **08 55 20.5 +1.7**
GNI pmax pmax
comp=Z,6.0nm,1.1s
**NC405 NORSAR Array S 70.09 337** P **P** **08 55 22.1 +0.3**
**NC303 NORSAR Array S 70.11 337** P **P** **08 55 22.1 +0.2**
NC303 lAmb lAmb 08 55 36.2
comp=Z,10nm,1.1s
**HFS Hagfors 70.27 335** P **P** **08 55 22.5 -0.4**
comp=Z,3.5nm,0.3s,baz=35,slow=5.8,SNR=36
comp=Z,3.5nm,0.3s
**NB2 NORSAR Subarra 70.30 337** P **P** **08 55 22.8 -0.4**
comp=Z,1.8nm,0.4s,baz=36,slow=6.5
**NB2 NORSAR Subarra 70.30 337** P **P** **08 55 22.6 -0.6**
**NOA NORSAR Array B 70.30 337** P **P** **08 55 22.4 -0.8**
comp=Z,3.8nm,0.7s,baz=39,slow=6.3,SNR=14
comp=Z,3.8nm,0.7s
**NORES NORESS Array B 70.45 337** P **P** **08 55 23.5 -0.5**
**UOSS Minazif 70.99 287** P **P** **08 55 28.2 +0.3**
**HLID Hailey 71.00 48** P **P** **08 55 28.1 +0.2**
baz=310
**AK03 Malin Array Si 71.10 322** P **P** **08 55 27.9 -0.2**
**AKASG Malin Array Be 71.12 322** P **P** **08 55 28.3 +0.1**
**AKASG Malin Array Be 71.12 322** P **P** **08 55 27.6 -0.7**
comp=Z,7.5nm,0.5s,baz=45,slow=6.3,SNR=51
comp=Z,7.5nm,0.5s
**AKASG Malin Array Be 71.12 322** P **P** **08 55 28.3 +0.1**
AKASG pmax pmax
comp=Z,3.0nm,0.8s
**AKBB Malin Array Si 71.12 322** P **P** **08 55 28.0 -0.2**
**AKBB Malin Array Si 71.12 322** *c* *i*P **P** **08 55 27.9 -0.3**
**AKBB Malin Array Si 71.12 322** P **P** **08 55 28.0 -0.2**
**AK23 Malin Array Si 71.12 322** P **P** **08 55 28.2 -0.1**
**AK01 Malin Array Si 71.13 322** P **P** **08 55 28.0 -0.3**
**KIEV Kiev 71.13 322** P **P** **08 55 28.0 -0.3**
KIEV lAmb lAmb 08 55 28.7
comp=Z,9.5nm,0.7s
**KIEV Kiev 71.13 322** P **P** **08 55 28.0 -0.3**
KIEV pmax pmax
comp=Z,9.0nm,0.7s
**KIEV Kiev 71.13 322** P **P** **08 55 28.0 -0.3**
comp=Z,59nm,0.7s
**AK04 Malin Array Si 71.13 322** P **P** **08 55 28.1 -0.2**
**AK22 Malin Array Si 71.15 322** P **P** **08 55 28.1 -0.3**
**AK09 Malin Array Si 71.15 322** P **P** **08 55 28.3 -0.1**
**AK08 Malin Array Si 71.15 322** P **P** **08 55 28.2 -0.2**
**AK21 Malin Array Si 71.15 322** P **P** **08 55 27.8 -0.6**
**AK02 Malin Array Si 71.16 322** P **P** **08 55 28.3 -0.2**
**AK11 Malin Array Si 71.16 322** P **P** **08 55 28.2 -0.3**
**AK15 Malin Array Si 71.17 322** P **P** **08 55 28.3 -0.2**
**AK10 Malin Array Si 71.18 322** P **P** **08 55 28.4 -0.2**
**AK18 Malin Array Si 71.18 322** P **P** **08 55 28.2 -0.4**
**AK05 Malin Array Si 71.19 322** P **P** **08 55 28.5 -0.1**
**AK20 Malin Array Si 71.19 322** P **P** **08 55 28.4 -0.3**
**AK12 Malin Array Si 71.19 322** P **P** **08 55 28.5 -0.2**
**AK19 Malin Array Si 71.20 322** P **P** **08 55 28.6 -0.1**
**AK14 Malin Array Si 71.22 322** P **P** **08 55 28.6 -0.3**
**BOZ Bozeman (W) 71.23 45** P **P** **08 55 29.6 +0.4**
**BOZ Bozeman (W) 71.23 45** P **P** **08 55 29.5 +0.4**
baz=310
**BOZ Bozeman (W) 71.23 45** P **P** **08 55 29.6 +0.4**
BOZ pmax pmax
comp=Z,3.0nm,1.1s
**AK07 Malin Array Si 71.23 322** P **P** **08 55 28.6 -0.3**
**KVN Kaiserville 71.69 54** P **P** **08 55 34.1 +2.0**
**KVN Kaiserville 71.69 54** P **P** **08 55 34.1 +2.0**
KVN pmax pmax
comp=Z,4.0nm,0.9s
**NVAR Mina Array Bea 71.95 55** P **P** **08 55 35.0 +1.2**
comp=Z,0.6nm,0.6s,baz=297,slow=5.9,SNR=5.8
NVAR pP **pP** **08 55 51.3 +0.3**
comp=Z,1.4nm,0.7s,baz=304,slow=6.4,SNR=6.9
comp=Z,0.6nm,0.6s
**MLAC Mammoth, Mammo 72.12 55** P **P** **08 55 35.6 +0.8**
baz=309
**GURO Guroymak-BITLI 72.14 306** lAmb lAmb 08 55 36.8
comp=Z,8.3nm,0.9s
**RNPP5 Staryi Chortor 72.27 324** P **P** **08 55 35.2 0.0**
**LUBAR Lubar, Ukraine 72.34 322** P **P** **08 55 34.9 -0.7**
**H17A Grant Village 72.58 46** P **P** **08 55 37.9 +0.4**
baz=311
**RLMT Red Lodge 72.79 45** P **P** **08 55 39.1 +0.5**
baz=312
**DGMT Dagmar 73.07 40** P **P** **08 55 40.7 +0.7**
baz=314
**VES Vestal, Richgr 73.09 57** P **P** **08 55 40.9 +0.6**
baz=309
**KMPD K-Podol'skiy 73.90 321** P **P** **08 55 44.9 +0.1**
KMPD P **P** **08 55 44.1 -0.7**
**TPNV Topopah Spring 74.15 55** P **P** **08 55 46.9 +0.2**
baz=310
**PD31 Pinedale Array 74.21 47** P **P** **08 55 47.8 +0.7**
**PDAR Pinedale Array 74.21 47** P **P** **08 55 46.5 -0.6**
comp=Z,1.0nm,0.8s,baz=294,slow=0.9,SNR=9.4
PDAR pP **pP** **08 56 04.4 0.0**
comp=Z,0.7nm,0.5s,baz=308,slow=2.2,SNR=5.2
comp=Z,1.0nm,0.8s
**MORS Morshin 74.67 323** P **P** **08 55 49.6 +0.3**
**MORS Morshin 74.67 323** P **P** **08 55 49.6 +0.3**
**STNU Starunia 74.70 323** P **P** **08 55 49.8 +0.3**
**BUR08 Bucovina Ar. S 75.15 321** P **P** **08 55 52.8 +0.6**
BUR08 lAmb lAmb 08 55 53.5
comp=Z,5.5nm,0.8s
**BURAR Bucovina Array 75.16 321** P **P** **08 55 53.1 +0.9**
BURAR lAmb lAmb 08 55 53.9
comp=Z,6.4nm,0.7s
**BURAR Bucovina Array 75.16 321** P **P** **08 55 52.7 +0.4**
BURAR pmax pmax
comp=Z,6.0nm,0.7s
**OJC Ojcow 75.65 326** lAmb lAmb 08 55 56.4
comp=Z,9.7nm,0.8s
**OJC Ojcow 75.65 326** P **P** **08 55 55.6 +0.7**
**OJC Ojcow 75.65 326** P **P** **08 55 55.6 +0.7**
comp=Z,15nm,0.9s
**GMRC Granite Mounta 75.92 56** P **P** **08 55 56.6 -0.3**
baz=311
**CRVS Cervenica-Dubn 75.92 324** *e*P **P** **08 55 57.1 +0.6**
CRVS pmax pmax
comp=Z,7.0nm,1.0s
**CRVS Cervenica-Dubn 75.92 324** *e*P **P** **08 55 57.1 +0.6**
**PFO Pinyon Flats O 76.18 57** P **P** **08 55 58.7 +0.4**
baz=311
**RSSD Black Hills 76.19 43** P **P** **08 55 58.9 +0.4**
baz=315
**BR131 Keskin Array S 76.31 311** P **P** **08 55 59.5 +0.5**
**BR131 Keskin Array S 76.31 311** *c* *i*P **P** **08 55 59.2 +0.2**
**BRTR Keskin Array B 76.31 311** P **P** **08 55 59.5 +0.5**
**BRTR Keskin Array B 76.31 311** P **P** **08 55 59.1 +0.1**
comp=Z,2.4nm,0.6s,baz=84,slow=4.2,SNR=14
comp=Z,2.4nm,0.6s
**BRTR Keskin Array B 76.31 311** P **P** **08 55 59.6 +0.5**
**BR104 Keskin Array S 76.32 311** P **P** **08 55 59.8 +0.7**
comp=Z,4.5nm,1.0s,comp=Z,46nm
**LANS Liptovska Anna 76.60 325** *e*P **P** **08 56 01.8 +1.4**
LANS pmax pmax
comp=Z,3.0nm,1.0s
**LANS Liptovska Anna 76.60 325** *e*P **P** **08 56 01.8 +1.4**
**MONP2 Monument Peak 76.67 58** P **P** **08 56 02.0 +0.7**
baz=311
**MORC Moravsky Berou 76.93 327** P **P** **08 56 03.4 +1.2**
MORC lAmb lAmb 08 56 03.8
comp=Z,4.9nm,0.8s
**MORC Moravsky Berou 76.93 327** *e*P **P** **08 56 02.7 +0.5**
**MORC Moravsky Berou 76.93 327** P **P** **08 56 03.4 +1.2**
MORC pmax pmax
comp=Z,5.0nm,0.8s
**FLTG Flechtingen 77.33 332** *e*P **P** **08 56 04.4 +0.1**
baz=35,slow=5.5
**VYHS Vyhne 77.37 325** *e*P **P** **08 56 05.5 +0.8**
VYHS pmax pmax
comp=Z,4.0nm,1.2s
**VYHS Vyhne 77.37 325** *e*P **P** **08 56 05.5 +0.8**
**BRG Berggiesshubel 77.50 329** *e*P **P** **08 56 05.3 0.0**
comp=Z,2.4nm,0.9s,baz=35,slow=5.5
**CLL Collm 77.51 330** lAmb lAmb 08 56 06.2
comp=Z,4.8nm,0.9s
**CLL Collm 77.51 330** *i* P **P** **08 56 05.0 -0.4**
comp=Z,5.0nm,0.9s
CLL *e*pP **pP** **08 56 23.0 +0.2**
CLL *e*sP **sP** **08 56 30.0 +0.1**
CLL *e*PP **PP** **08 59 00.0 -0.1**
**CLL Collm 77.51 330** *i* P **P** **08 56 05.0 -0.4**
CLL *e**PP **pP** **08 56 23.0 +0.2**
CLL pmax pmax
comp=Z,5.0nm,0.9s
**CLL Collm 77.51 330** *e*P **P** **08 56 05.4 0.0**
comp=Z,4.5nm,0.9s,baz=35,slow=5.5
**JAVC Velka Javorina 77.58 326** *e*P **P** **08 56 07.0 +1.1**
**VRAC Vranov 77.68 327** *e*P **P** **08 56 07.2 +0.8**
**KRUC Moravsky 77.96 327** *e*P **P** **08 56 08.6 +0.7**
**CLZ Clausthal 78.04 332** *e*P **P** **08 56 08.9 +0.5**
comp=Z,4.6nm,0.8s,baz=35,slow=5.5
**MODS Modra-Piesok 78.13 326** *e*P **P** **08 56 09.9 +1.0**
**MODS Modra-Piesok 78.13 326** *e*P **P** **08 56 09.9 +1.0**
**IBBN Ibbenburen 78.56 333** *e*P **P** **08 56 11.5 +0.4**
comp=Z,9.7nm,1.0s,baz=35,slow=5.5
**MVCO Mesa Verde 78.59 50** P **P** **08 56 13.1 +1.1**
baz=314
**MANZ Manzberg 78.91 330** *e*P **P** **08 56 13.7 +0.5**
comp=Z,0.4nm,0.8s,baz=35,slow=5.5
**KHC Kasperske Hory 79.03 328** P **P** **08 56 14.8 +0.8**
KHC lAmb lAmb 08 56 15.4
comp=Z,4.6nm,0.8s
**KHC Kasperske Hory 79.03 328** *e*P **P** **08 56 14.4 +0.5**
**KHC Kasperske Hory 79.03 328** *e*P **P** **08 56 14.4 +0.5**
**KHC Kasperske Hory 79.03 328** P **P** **08 56 14.7 +0.8**
**ROTZ Rotzenmuhle 79.05 330** *e*P **P** **08 56 14.4 +0.5**
comp=Z,0.7nm,1.0s,baz=35,slow=5.5
**RONA Rosalia, Austr 79.06 326** *e*P **P** **08 56 15.1 +1.0**
comp=Z,4.5nm,0.6s,SNR=6.2
**CONA Conrad Observa 79.07 326** *e*P **P** **08 56 14.9 +0.7**
comp=Z,1.7nm,0.7s
**EKA Eskdalemuir Ar 79.12 341** P **P** **08 56 13.9 -0.2**
comp=Z,1.6nm,0.5s,baz=30,slow=4.7,SNR=9.8
comp=Z,1.6nm,0.5s
**EKA Eskdalemuir Ar 79.12 341** P **P** **08 56 14.0 -0.2**
**EYMN Ely 79.14 33** P **P** **08 56 14.4 0.0**
baz=322
**GEC2 GERESS Array B 79.22 328** *e*P **P** **08 56 15.0 +0.1**
comp=Z,1.4nm,0.6s,baz=35,slow=5.5
**GERES GERESS Array B 79.22 328** P **P** **08 56 15.1 +0.1**
comp=Z,0.9nm,0.6s,baz=42,slow=1.6,SNR=4.7
comp=Z,0.9nm,0.6s
**WET Wettzell 79.30 329** *e*P **P** **08 56 15.9 +0.5**
comp=Z,3.0nm,0.8s,baz=35,slow=5.5
**RAYN Ar Rayn 79.47 292** P **P** **08 56 16.9 +0.3**
RAYN lAmb lAmb 08 56 17.5
comp=Z,5.9nm,0.8s
**RAYN Ar Rayn 79.47 292** P **P** **08 56 17.0 +0.3**
RAYN pmax pmax
comp=Z,6.0nm,0.8s
**GRF Grafenberg Arr 79.49 330** *e*P **P** **08 56 17.0 +0.7**
comp=Z,6.3nm,0.8s,baz=35,slow=5.5
**CSS Mathiatis 79.75 308** P **P** **08 56 18.9 +0.9**
CSS lAmb lAmb 08 56 21.2
comp=Z,14nm,1.0s
**MMAI Mount Meron Ar 79.83 305** P **P** **08 56 18.8 +0.3**
comp=Z,6.6nm,0.7s,baz=47,slow=8.5,SNR=7.5
comp=Z,6.6nm,0.7s
**SDCO Great Sand Dun 79.92 48** P **P** **08 56 19.5 +0.3**
baz=315
**ECSD EROS Data Cent 80.13 39** P **P** **08 56 20.6 +0.7**
baz=320
**BIOA Bad Ischl, Aus 80.17 328** *e*P **P** **08 56 20.8 +0.8**
comp=Z,3.5nm,0.7s
**SOKA Soboth 80.40 326** *i* P **P** **08 56 21.7 +0.3**
comp=Z,3.9nm,0.8s,SNR=7.9
**RJOB Joanneberg 80.47 328** *e*P **P** **08 56 22.7 +1.0**
comp=Z,5.7nm,0.9s,baz=35,slow=5.5
**SPMN Marine on St. 80.72 36** P **P** **08 56 23.7 +0.7**
baz=322
**OBKA Obir 80.74 326** *e*P **P** **08 56 23.3 +0.1**
comp=Z,4.4nm,0.7s,SNR=5.3
**LESA Schwarzleotal 80.77 328** *e*P **P** **08 56 23.9 +0.5**
comp=Z,1.8nm,0.6s
**KBA Koelnbreinsper 80.78 327** *e*P **P** **08 56 23.9 +0.4**
comp=Z,2.4nm,0.6s
**SCHQ Schefferville 80.93 16** P **P** **08 56 24.6 +0.6**
SCHQ lAmb lAmb 08 56 45.0
comp=Z,14nm,1.4s
**SCHQ Schefferville 80.93 16** P **P** **08 56 23.6 -0.4**
comp=Z,5.6nm,0.8s,baz=354,slow=8.3,SNR=4.4
comp=Z,5.6nm,0.8s
**T25A Trinidad 80.96 48** P **P** **08 56 25.0 +0.2**
baz=316
**MYKA Terra Mystica 81.02 327** *e*P **P** **08 56 24.4 -0.3**
comp=Z,1.6nm,0.5s
**PRED Cave del Predi 81.20 327** P **P** **08 56 25.6 0.0**
**BMRD Maredsous 81.25 334** *d*P **P** **08 56 25.9 +0.1**
comp=Z,4.8nm,1.0s
**WATA Walderalm 81.28 328** *e*P **P** **08 56 26.2 +0.1**
comp=Z,3.5nm,0.6s
**WTTA Wattenberg 81.31 328** *e*P **P** **08 56 26.7 +0.4**
comp=Z,4.3nm,1.1s
**ANMO Albuquerque 81.35 51** P **P** **08 56 26.9 +0.1**
baz=315
**MOTA Moosalm 81.45 329** *e*P **P** **08 56 27.3 +0.3**
comp=Z,8.6nm,1.1s
**RETA Reutte 81.47 329** *e*P **P** **08 56 27.4 +0.3**
comp=Z,6.1nm,0.8s
**DOU Dourbes 81.49 334** *d*P **P** **08 56 24.5 -2.5**
comp=Z,2.8nm,1.4s
**SQTA Sankt Quirin 81.51 329** *e*P **P** **08 56 27.7 +0.4**
comp=Z,1.6nm,0.4s
**BFO Black Forest 81.69 331** P **P** **08 56 28.5 +0.4**
**BFO Black Forest 81.69 331** P **P** **08 56 28.5 +0.4**
BFO pmax pmax
comp=Z,4.0nm,0.9s
**BFO Black Forest 81.69 331** *e*P **P** **08 56 29.3 +1.1**
comp=Z,3.6nm,0.8s,baz=35,slow=5.5
**STAL STALIGIAL 81.69 327** lAmb lAmb 08 56 27.7
comp=Z,4.2nm,0.6s
**PDG Podgorica 81.84 321** lAmb lAmb 08 56 30.0
comp=Z,5.5nm,0.6s
**FETA Feichten 81.86 329** *e*P **P** **08 56 29.4 +0.2**
comp=Z,2.1nm,0.6s
**DAVA Damuels 81.97 329** *e*P **P** **08 56 30.2 +0.3**
comp=Z,6.0nm,1.0s
**PLONS Plons/SG 82.36 330** *e*P **P** **08 56 32.1 +0.4**
comp=Z,5.6nm,1.1s,baz=35,slow=5.5
**FUORN Ofenpass-Fuorn 82.38 329** lAmb lAmb 08 56 33.5
comp=Z,6.5nm,0.8s
**SULZ Cheisacher 82.44 331** *e*P **P** **08 56 32.4 +0.3**
comp=Z,1.1nm,1.0s,baz=35,slow=5.5
**BALST Balsthal 82.75 331** *e*P **P** **08 56 34.0 +0.3**
comp=Z,7.1nm,0.9s,baz=35,slow=5.5
**KEK Kerkira 83.67 319** P **P** **08 56 39.1 +0.6**
**JFWS Jewell Farm 83.67 36** P **P** **08 56 38.7 +0.2**
baz=323
**AMTX Amarillo 84.12 48** P **P** **08 56 41.4 +0.4**
baz=318
**FDMO Fiordimonte 84.15 325** P **P** **08 56 41.6 +0.6**
**VLDQ Val d'Or 84.19 25** P **P** **08 56 40.6 -0.4**
VLDQ lAmb lAmb 08 56 41.5
comp=Z,12nm,1.1s
**MNTX Cornudas Mount 84.29 52** P **P** **08 56 42.9 +1.0**
baz=316
**NRCA Norcia 84.30 325** P **P** **08 56 42.5 +0.7**
**ITM Ithomi 84.52 316** P **P** **08 56 42.8 -0.1**
**BNI Bardonecchia 85.06 330** lAmb lAmb 08 56 50.5
comp=Z,4.3nm,0.9s
**WMOK Wichita Mounta 85.82 46** P **P** **08 56 50.2 +0.7**
baz=319
**TXAR Lajitas Array 87.02 53** P **P** **08 56 55.8 +0.3**
comp=Z,0.5nm,0.8s,baz=289,slow=2.8,SNR=6.0
TXAR pP **pP** **08 57 16.4 +3.2**
comp=Z,0.8nm,0.7s,baz=299,slow=3.7,SNR=6.5
comp=Z,0.5nm,0.8s
**MIAR Mount Ida 88.71 43** P **P** **08 57 03.6 +0.2**
baz=322
**P49A Miami Univ. Ec 88.83 34** P **P** **08 57 04.0 +0.1**
baz=327
**M53A WI Miller and 88.84 31** P **P** **08 57 04.0 +0.1**
baz=330
**ACSO Alum Creek Sta 88.96 33** P **P** **08 57 04.6 +0.1**
baz=328
**WCI Wyandotte Cave 89.23 36** P **P** **08 57 06.0 +0.3**
baz=326
**LBNH Lisbon 89.37 24** P **P** **08 57 06.7 +0.4**
baz=335
**O53A New Philadelph 89.66 32** P **P** **08 57 07.8 +0.1**
baz=329
**P52A Corning 89.81 33** P **P** **08 57 08.7 +0.3**
baz=329
**WVT Waverly 90.25 38** P **P** **08 57 11.1 +0.5**
baz=325
**LRAL Lakeview Retre 93.18 39** P **P** **08 57 24.8 +0.6**
baz=326
**ESDC Sonseca Array 93.53 334** P **P** **08 57 25.6 -0.1**
**ESDC Sonseca Array 93.53 334** P **P** **08 57 25.5 -0.2**
comp=Z,1.4nm,0.8s,baz=13,slow=4.9,SNR=15
comp=Z,1.4nm,0.8s
**KMSC Kings Mountain 93.97 34** P **P** **08 57 27.9 +0.1**
baz=329
**TORD Torodi Ar. Bea 114.51 317** PKP **PKiKP** **09 02 47.4 -2.6**
comp=Z,0.2nm,0.4s,baz=60,slow=3.9,SNR=1.8
**QSPA South Pole Qui 131.21 180** PKP **PKPdf** **09 03 20.0 -0.4**
comp=Z,1.1nm,0.9s,baz=16,slow=3.6,SNR=3.6
**SNAA Sanae 145.13 199** PKPbc **PKPbc** **09 03 45.4 -0.1**
comp=Z,2.8nm,0.5s,baz=182,slow=5.0,SNR=40
**SIV San Ignacio 147.69 45** PKPbc **PKPbc** **09 03 54.2 -0.4**
comp=Z,2.9nm,0.6s,baz=344,slow=3.7,SNR=19

*IDC* ***05*** *08:52:45.3±0.9, 0.2°9S×135.5°50E, h0km, mb3.8/6, mbtmp3.9/7, ML4.1/1, Error ellipse: s-maj=50.8km s-min=19.8km az=88.0*

**ISC 05 08:52:49.4±0.9, 0.3S±0.1°×135.4°4E±0.4, h26km, n8, σ0.6s2/8, mb3.9/7, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **19.55** | **183** | P | | **P** | **08 57 14.4** | **-0.9** |
| | 0.5nm,0.3s,baz=3.1,slow=11,SNR=34 | | | | | | | |
| | 2.9nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **23.27** | **184** | P | | **P** | **08 57 55.0** | **-0.1** |
| | 8.2nm,0.7s,baz=10,slow=12,SNR=67 | | | | | | | |
| | 8.2nm,0.7s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **61.92** | **26** | P | | **P** | **09 03 06.6** | **-0.1** |
| | 22nm,0.9s,baz=265,slow=2.1,SNR=4.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.31** | **323** | P | | **P** | **09 03 32.8** | **-0.4** |
| | 0.4nm,0.7s,baz=112,slow=7.9,SNR=4.2 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.90** | **325** | P | | **P** | **09 03 58.6** | **+0.4** |
| | 0.8nm,0.8s,baz=115,slow=5.9,SNR=5.5 | | | | | | | |
| | 0.8nm,0.8s | | | | | | | |
| **VNDA** | **Vanda** | **78.46** | **174** | P | | **P** | **09 04 47.8** | **+0.1** |
| | 0.4nm,0.7s,baz=348,slow=6.0,SNR=2.4 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.03** | **25** | P | | **P** | **09 05 22.2** | **-0.3** |
| | 0.5nm,0.9s,baz=251,slow=2.8,SNR=3.6 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **89.62** | **180** | P | | **P** | **09 05 45.5** | **+0.7** |
| | 0.7nm,0.7s,baz=306,slow=1.3,SNR=2.4 | | | | | | | |
| | 0.7nm,0.7s | | | | | | | |

**IDC 05 08:55:46.3±7.0, 5.2°8S×150.8°2E, h134km±48km, mb3.5/2, mbtmp3.9/3, Error ellipse: s-maj=112.4km s-min=50.8km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.47** | **221** | P | | Pn | 08 57 07.7 | +1.9 |
| | 13nm,0.7s,baz=1.9,slow=12,SNR=2.5 | | | | | | | |
| PMG | | | | S | | Sn | 08 58 06.4 | -1.5 |
| | 5.7nm,0.5s,baz=74,slow=20,SNR=1.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.67** | **226** | P | | P | 09 00 27.4 | +0.9 |
| | 2.0nm,0.5s,baz=52,slow=10.0,SNR=22 | | | | | | | |
| | 2.0nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **24.49** | **220** | P | | P | 09 00 53.3 | 0.0 |
| | 2.1nm,0.7s,baz=56,slow=9.0,SNR=18 | | | | | | | |
| | 2.1nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.56** | **287** | PKPbc | | PKPbc | 09 15 17.2 | -1.4 |
| | 0.4nm,0.6s,baz=76,slow=4.2,SNR=1.9 | | | | | | | |

*BJI* ***05*** *08:56:16.7±0.0, 2.7°3S×99.6°3E, h5km, mb5.4/91, mB5.3/64, Ms5.4/93, Ms7 5.2/89*

*IPGP* ***05*** *08:56:22.0, 2.4°4S×99.3°4E, h25km, Mw5.3, Fault plane solution: NP1:φs118.00000°, δ76.00000°, λ84.00000°. NP2:φs321.00000°, δ15.00000°, λ112.00000°.*

*MOS* ***05*** *08:56:22.9±0.9, 2.2°1S×99.5°9E, h21km, mb5.6/100, MS4.8/26, Error ellipse: s-maj=7.0km s-min=3.5km az=114.8*

*NEIC* ***05*** *08:56:23, 2.3°7S×99.4°2E, h10km*

*NEIC* ***05*** *08:56:24.8, 2.3°5S×99.4°3E, h22km*

*NEIC* ***05*** *08:56:24.8±1.3, 2.3°5S±0.0°6×99.4°3E±0.0°7, h21km±1km, mb5.5/208, Mwb5.2/40, Mww5.0/12, Error ellipse: s-maj=12.5km s-min=9.6km az=235.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr7.05; Mθθ-6.19; Mφφ-0.86; Mrθ3.33; Mθφ3.70; Mφr-4.36; Fault plane solution: M₀9.39000×10¹⁶ NP1:φs132.46000°, δ63.43000°, λ105.56000°. NP2:φs280.57000°, δ30.50000°, λ61.80000°. Principal axes: T 9.1575, Plg68.0000°, Azm73.0000°; N 0.4425, Plg14.0000°, Azm305.0000°; P -9.6001, Plg17.0000°, Azm211.0000°;*

*DJA* ***05*** *08:56:24.2±0.6, 2.2°S±2.2°×10.0°E±2.2°, h16km±4km, M5.3/91, mb5.4/91, mB5.8/47, MLv5.6/20, Mw(mB)5.3/47, MwMwp5.1/16, Mwp5.4/16*

*NEIC* ***05*** *08:56:24.8, 2.5°5S×99.4°3E, h22km, Moment Tensor Solution. Duration: ⁞s7 Moment tensor: Scale 10¹⁶Nm; Mrr4.14; Mθθ-2.41; Mφφ-1.73; Mrθ2.01; Mθφ1.92; Mφr0.17; Fault plane solution: M₀4.53000×10¹⁶ NP1: φs113.48000°, δ56.96000°, λ71.82000°. NP2: φs324.54000°, δ37.21000°, λ115.63000°. Principal axes: T 4.7839, Plg72.0000°, Azm339.0000°; N -0.5050, Plg15.0000°, Azm124.0000°; P -4.2789, Plg10.0000°, Azm216.0000°;*

*GCMT* ***05*** *08:56:24.8±0.2, 2.5°6S±0.0°2×99.3°2E±0.0°2, h23km, MW5.2/98, Moment Tensor Solution. s98,c149; s88,c114; Duration: 1s0 Moment tensor: Scale 10¹⁷Nm; Mrr0.55±.02; Mθθ-0.36±.01; Mφφ-0.18±.01; Mrθ0.52±.03; Mθφ0.26±.01; Mφr-0.50±.03; Best double couple: M₀0.90500×10¹⁷ NP1:φs132.00000°, δ71.00000°, λ94.00000°. NP2:φs299.00000°, δ19.00000°, λ78.00000°. Principal axes: T 0.9090, Plg63.0000°, Azm49.0000°; N -0.0080, Plg4.0000°, Azm311.0000°; P -0.9010, Plg26.0000°, Azm219.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR* ***05*** *08:56:25.9, 2.8°0S×99.1°4E, h30km, mb5.2, Ms4.8*

*IDC* ***05*** *08:56:27.6±1.6, 2.2°5S×99.6°2E, h43km±14km, mb4.8/33, mbtmp5.1/33, MS4.7/40, Error ellipse: s-maj=12.1km s-min=7.7km az=53.0*

**ISC 05 08:56:23.9±0.3, 2.3°8S±0.0°3×99.4°1E±0.0°4, h21km±3km, h21km:pP-P, n11131, σ1938/1163, mb5.4/306, MS4.9/104, 85C-15D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.71** | **122** | P | | **Pn** | **08 56 38.3** | **-0.4** |
| **SISI** | **Saibi** | **1.10** | **343** | P | | **Pn** | **08 56 43.6** | **-0.5** |
| **PDSI** | **Padang** | **1.80** | **36** | P | | **Pn** | **08 56 52.3** | **-1.5** |
| **PBSI** | **Pulau Batu** | **2.57** | **334** | P | | **Pn** | **08 57 04.1** | **-0.3** |
| **BKNI** | **Bangkinang** | **3.15** | **31** | | | **Pn** | **08 57 12.4** | **0.0** |
| **BKNI** | **Bangkinang** | **3.15** | **31** | P | | **Pn** | **08 57 12.2** | **-0.1** |
| **SBSI** | **Sibolga** | **3.94** | **352** | P | | **Pn** | **08 57 19.9** | **-3.4** |
| **MNAI** | **Manna** | **4.05** | **119** | P | | **Pn** | **08 57 25.2** | **+0.5** |
| **MNAI** | **Manna** | **4.05** | **119** | Pn | | **Pn** | **08 57 24.3** | **-0.4** |
| **MNAI** | **Manna** | **4.05** | **119** | P | | **Pn** | **08 57 24.7** | **0.0** |
| **GSI** | **Gunungsitoli** | **4.10** | **333** | P | | **Pn** | **08 57 24.9** | **-0.5** |
| **GSI** | **Gunungsitoli** | **4.10** | **333** | Pn | | **Pn** | **08 57 24.9** | **-0.5** |
| **GSI** | **Gunungsitoli** | **4.10** | **333** | P | | **Pn** | **08 57 24.8** | **-0.6** |
| **RPSI** | **Rantau Prapat** | **5.07** | **355** | | | **Pn** | **08 57 37.4** | **-1.3** |
| **PSI** | **Prapat** | **5.17** | **355** | P | | **Pn** | **08 57 37.4** | **-2.9** |
| **LWLI** | **Liwa** | **5.33** | **120** | P | | **Pn** | **08 57 43.0** | **+0.6** |
| **PMBI** | **Palembang** | **5.38** | **96** | P | | **Pn** | **08 57 44.1** | **+1.0** |
| **PMBI** | **Palembang** | **5.38** | **96** | Pn | | **Pn** | **08 57 42.4** | **-0.7** |
| **PMBI** | **Palembang** | **5.38** | **96** | P | | **Pn** | **08 57 42.1** | **-1.0** |
| | 477nm,1.1s,8μm4.7nm | | | | | | | |
| **SNSI** | **Sinabang, Aceh** | **5.67** | **327** | P | | **Pn** | **08 57 48.1** | **+1.1** |
| | 989nm,1.1s,11μm12μm4.5nm | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BTDF | **Bukit Timah Da** | **5.73** | **50** | P | | **Pn** | **08 57 48.4** | **+0.5** | |
| KASI | **Kota Agung** | **5.96** | **122** | P | | **Pn** | **08 57 51.4** | **+0.4** | |
| | 956nm,0.9s,7µm2.7nm | | | | | | | | |
| MYKOM | **Kota Tinggi** | **6.08** | **47** | | | **Pn** | **08 57 52.9** | **+0.3** | |
| TPRI | **Tanjung Pinang** | **6.08** | **57** | P | | **Pn** | **08 57 52.1** | **-0.5** | |
| | 785nm,0.7s,8µm12µm3.9nm | | | | | | | | |
| KCSI | **Kotacane, Aceh** | **6.09** | **344** | P | | **Pn** | **08 57 53.2** | **+0.4** | |
| | 408nm,1.1s,6µm4.1nm | | | | | | | | |
| BLSI | **Bandar Lampung** | **6.53** | **117** | P | | **Pn** | **08 57 59.0** | **+0.1** | |
| | 301nm,0.6s,5µm1.7nm | | | | | | | | |
| PPBI | **Pangkal Pinang** | **6.73** | **88** | P | | **Pn** | **08 58 01.1** | **-0.4** | |
| IPM | **Ipoh** | **7.01** | **13** | P | | **Pn** | **08 58 06.3** | **+0.9** | |
| IPM | **Ipoh** | **7.01** | **13** | Pn | | **Pn** | **08 58 05.5** | **+0.1** | |
| MLSI | **Meulaboh, Aceh** | **7.26** | **336** | P | | **Pn** | **08 58 08.8** | **0.0** | |
| | 275nm,0.9s,1.4nm | | | | | | | | |
| KULM | **Kulim** | **7.72** | **9** | Pn | | **Pn** | **08 58 14.0** | **-1.2** | |
| LHMI | **Lhok Sumawe** | **7.95** | **342** | Pn | | **Pn** | **08 58 17.1** | **-1.3** | |
| DBJI | **Dramaga** | **8.41** | **120** | P | | **Pn** | **08 58 25.0** | **+0.3** | |
| | 420nm,0.8s,10µm | | | | | | | | |
| SKJI | **Sukabumi** | **8.47** | **123** | P | | **Pn** | **08 58 25.7** | **+0.2** | |
| CNJI | **Cibinong** | **9.12** | **123** | P | | **Pn** | **08 58 33.3** | **-1.1** | |
| | 299nm,0.9s,2µm | | | | | | | | |
| LEM | **Lembang** | **9.29** | **119** | P | | **Pn** | **08 58 38.1** | **+1.1** | |
| | 501nm,0.9s,4µm | | | | | | | | |
| LEM | **Lembang** | **9.29** | **119** | P | | **Pn** | **08 58 37.8** | **+0.8** | |
| LEM | | | | pmax | pmax | | | | |
| | comp=Z,501nm,0.9s | | | | | | | | |
| BBJI | **Bungbulang** | **9.63** | **122** | P | | **Pn** | **08 58 40.1** | **-1.5** | |
| JCJI | **Jatiwangi** | **9.73** | **115** | P | | **Pn** | **08 58 43.2** | **+0.4** | |
| COCO | **West Island** | **10.07** | **195** | Pn | | Pn | 08 58 42.5 | -4.9 | |
| XMIS | **Christmas Isla** | **10.15** | **143** | Pn | | **Pn** | **08 58 47.0** | **-1.6** | |
| CMJI | **Cimerak** | **10.48** | **121** | P | | **Pn** | **08 58 50.9** | **-2.1** | |
| KPJI | **Karang Pucung** | **10.68** | **118** | P | | **Pn** | **08 58 56.3** | **+0.4** | |
| SRIT | **Nakonsritamara** | **10.91** | **1** | P | | **Pn** | **08 58 59.8** | **+0.9** | |
| SRIT | **Nakonsritamara** | **10.91** | **1** | | | **Pn** | **08 58 59.0** | **+0.1** | |
| SURA | **Surathani** | **11.48** | **1** | P | | **Pn** | **08 59 06.9** | **+0.2** | |
| KSM | **Kuching** | **11.55** | **71** | P | | **Pn** | **08 59 08.2** | **+0.4** | |
| KSM | **Kuching** | **11.55** | **71** | Pn | | **Pn** | **08 59 08.3** | **+0.6** | |
| SMRI | **Semarang** | **11.93** | **113** | P | | **Pn** | **08 59 14.6** | **+1.7** | |
| SMRI | **Semarang** | **11.93** | **113** | Pn | | **Pn** | **08 59 12.2** | **-0.8** | |
| SMRI | **Semarang** | **11.93** | **113** | P | | **Pn** | **08 59 14.2** | **+1.3** | |
| UWJI | **Ujung Watu** | **12.18** | **110** | P | | **Pn** | **08 59 17.7** | **+1.3** | |
| STKI | **Sintang** | **12.31** | **79** | P | | **Pn** | **08 59 19.8** | **+1.7** | |
| | comp=Z,81nm,0.8s,comp=Z,3µm | | | | | | | | |
| UGM | **Wanagama** | **12.35** | **117** | | | **Pn** | **08 59 17.5** | **-1.3** | |
| UGM | **Wanagama** | **12.35** | **117** | P | | **Pn** | **08 59 17.3** | **-1.5** | |
| | comp=Z,203nm,0.8s | | | | | | | | |
| NGJI | **Ngawi** | **12.99** | **113** | P | | **Pn** | **08 59 28.0** | **+0.6** | |
| | comp=Z,190nm,0.8s | | | | | | | | |
| PWJI | **Pagerwojo** | **13.55** | **115** | P | | **Pn** | **08 59 32.8** | **-2.3** | |
| | comp=Z,117nm,0.7s,comp=Z,3µm | | | | | | | | |
| SBUM | **Sibu** | **13.68** | **70** | | | **Pn** | **08 59 38.9** | **+2.1** | |
| GRJI | **Gresik** | **13.78** | **110** | P | | **Pn** | **08 59 37.6** | **-0.6** | |
| | comp=Z,206nm,1.0s | | | | | | | | |
| PBA | **Port Blair** | **15.44** | **335** | Pn | | **Pn** | **08 59 59.9** | **-0.8** | |
| MTKI | **Muara Teweh, K** | **15.55** | **85** | P | | **Pn** | **09 00 02.3** | **+0.2** | |
| | comp=Z,183nm,0.7s,comp=Z,3µm | | | | | | | | |
| JAGI | **Jajag, Banyuwa** | **15.87** | **113** | P | | **Pn** | **09 00 04.0** | **-2.2** | |
| JAGI | **Jajag, Banyuwa** | **15.87** | **113** | Pn | | **Pn** | **09 00 03.7** | **-2.6** | |
| JAGI | | | | IAmb | | IAmb | 09 00 13.4 | | |
| | comp=Z,139nm,0.5s | | | | | | | | |
| JAGI | **Jajag, Banyuwa** | **15.87** | **113** | P | | **Pn** | **09 00 03.5** | **-2.7** | |
| | comp=Z,177nm,0.6s | | | | | | | | |
| NAYO | **Nakonayok** | **16.70** | **6** | P | | **Pn** | **09 00 17.1** | **+0.3** | |
| DLV | **T Lat** | **16.85** | **32** | P | | **Pn** | **09 00 19.3** | **+0.4** | |
| DLV | **T Lat** | **16.85** | **32** | | | **Pn** | **09 00 18.6** | **-0.3** | |
| BKB | **Balikpapan** | **17.51** | **87** | P | | **P** | **09 00 28.4** | **+0.3** | |
| | comp=Z,497nm,1.3s | | | | | | | | |
| SMKI | **Samarinda** | **17.90** | **84** | P | | **P** | **09 00 32.3** | **0.0** | |
| | comp=Z,185nm,0.9s,comp=Z,9µm | | | | | | | | |
| TWSI | **Taliwang, Sumb** | **18.49** | **111** | P | | **P** | **09 00 36.8** | **-2.1** | |
| | comp=Z,81nm,0.9s | | | | | | | | |
| UBPT | **Khong Chiam** | **18.55** | **19** | P | | **P** | **09 00 37.4** | **-2.0** | |
| UBPT | **Khong Chiam** | **18.55** | **19** | P | | **P** | **09 00 38.1** | **-1.3** | |
| KKM | **Kota Kinabalu** | **18.75** | **63** | P | | **P** | **09 00 41.9** | **0.0** | |
| KKM | **Kota Kinabalu** | **18.75** | **63** | P | | **P** | **09 00 41.4** | **-0.5** | |
| KKM | | | | IAmb | | IAmb | 09 00 45.8 | | |
| | comp=Z,226nm,0.7s | | | | | | | | |
| SPSI | **Sidrap Palu** | **20.39** | **95** | P | | **P** | **09 00 58.5** | **-1.1** | |
| | comp=Z,94nm,0.8s | | | | | | | | |
| KAPI | **Kappang** | **20.47** | **98** | P | | **P** | **09 01 00.2** | **-0.3** | |
| KAPI | **Kappang** | **20.47** | **98** | P | | **P** | **09 01 00.1** | **-0.4** | |
| KAPI | | | | IAmb | | IAmb | 09 01 05.4 | | |
| | comp=Z,214nm,1.1s | | | | | | | | |
| KAPI | **Kappang** | **20.47** | **98** | P | | **P** | **09 00 58.0** | **-2.5** | |
| | comp=Z,44nm,0.7s,baz=270,slow=11,SNR=15 | | | | | | | | |
| | comp=Z,44nm,0.7s | | | | | | | | |
| KAPI | **Kappang** | **20.47** | **98** | *d* | *i*P | **P** | **09 01 01.2** | **+0.7** | |
| KAPI | | | | pmax | | pmax | | | |
| | comp=Z,245nm,1.2s | | | | | | | | |
| KAPI | | | | MLR | | MLR | | | |
| | comp=Z,3µm,17.0s | | | | | | | | |
| MYLDM | **Lahad Datu** | **20.50** | **68** | P | | **P** | **09 01 01.8** | **+1.0** | |
| MYLDM | | | | IAmb | | IAmb | 09 01 11.5 | | |
| | comp=Z,266nm,1.0s | | | | | | | | |
| NONG | **Nongkai** | **20.65** | **10** | P | | **P** | **09 00 59.9** | **-2.5** | |
| CM31 | **Chiang Mai Arr** | **20.72** | **359** | P | | **P** | **09 01 02.7** | **-0.5** | |
| CM31 | | | | IAmb | | IAmb | 09 01 09.0 | | |
| | comp=Z,170nm,1.1s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **20.72** | **359** | P | | **P** | **09 01 02.8** | **-0.3** | |
| CMAR | **Chiang Mai Arr** | **20.72** | **359** | P | | **P** | **09 01 00.3** | **-2.8** | |
| | comp=Z,38nm,0.7s,baz=187,slow=10.0,SNR=39 | | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **09 05 13.5** | **+0.8** | |
| | comp=Z,4.0nm,0.7s,baz=205,slow=3.5,SNR=5.3 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **20.72** | **359** | P | | **P** | **09 01 02.8** | **-0.3** | |
| BNSI | **Bone** | **20.76** | **96** | P | | **P** | **09 01 03.5** | **-0.1** | |
| | comp=Z,252nm,1.2s,comp=Z,3µmcomp=Z,3µm | | | | | | | | |
| PHRA | **Phrae** | **20.77** | **2** | P | | **P** | **09 01 03.5** | **-0.1** | |
| PALK | **Pallekele** | **20.99** | **297** | P | | **P** | **09 01 04.6** | **-1.6** | |
| PALK | **Pallekele** | **20.99** | **297** | P | | Pn | 09 01 07.7 | -1.1 | |
| | comp=Z,34nm,1.1s,baz=230,slow=11,SNR=4.8 | | | | | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| PALK | **Pallekele** | **20.99** | **297** | ⇑ *e* | P | **P** | **09 01 06.7** | **+0.5** | |
| PALK | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| PALK | | | | MLR | | MLR | | | |
| | comp=Z,4µm,18.0s | | | | | | | | |
| CHTO | **Chiang Mai** | **21.07** | **359** | P | | **P** | **09 01 06.1** | **-0.9** | |
| CHTO | **Chiang Mai** | **21.07** | **359** | P | | **P** | **09 01 06.1** | **-0.9** | |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,69nm,0.9s | | | | | | | | |
| BSSI | **Bau Bau, Buton** | **21.35** | **101** | P | | **P** | **09 01 08.5** | **-1.5** | |
| | comp=Z,116nm,0.8s,comp=Z,2µm | | | | | | | | |
| TOLI2 | **Tolitoli** | **21.65** | **81** | P | | **P** | **09 01 12.8** | **-0.4** | |
| TOLI2 | **Tolitoli** | **21.65** | **81** | P | | **P** | **09 01 12.6** | **-0.7** | |
| TOLI2 | | | | IAmb | | IAmb | 09 01 14.5 | | |
| | comp=Z,151nm,0.8s | | | | | | | | |
| LUWI | **Luwuk** | **23.39** | **87** | P | | **P** | **09 01 30.7** | **-1.0** | |
| LUWI | **Luwuk** | **23.39** | **87** | P | | **P** | **09 01 30.6** | **-1.0** | |
| | comp=Z,276nm,0.9s,comp=Z,3µm | | | | | | | | |
| QIZ | **Qiongzhong** | **23.62** | **25** | P | | **P** | **09 01 32.6** | **-1.2** | |
| QIZ | **Qiongzhong** | **23.62** | **25** | P | | **P** | **09 01 32.4** | **-1.4** | |
| QIZ | | | | S | | **S** | **09 05 50.8** | **+3.4** | |
| QIZ | | | | pmax | | pmax | | | |
| | comp=Z,170nm,0.9s | | | | | | | | |
| QIZ | | | | pmax | | pmax | | | |
| | comp=Z,780nm,3.7s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,3µm,16.8s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,4µm,14.3s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,4µm,16.1s | | | | | | | | |
| QIZ | **Qiongzhong** | **23.62** | **25** | P | | **P** | **09 01 32.9** | **-0.9** | |
| QIZ | | | | IAmb | | IAmb | 09 01 34.8 | | |
| | comp=Z,252nm,1.1s | | | | | | | | |
| GTOI | **Gorontalo** | **23.79** | **83** | P | | **P** | **09 01 32.8** | **-2.7** | |
| | comp=Z,85nm,1.6s | | | | | | | | |
| SLVN | **Son La** | **23.98** | **10** | P | | **P** | **09 01 36.2** | **-1.0** | |
| KMSI | **Cibinong** | **24.74** | **83** | P | | **P** | **09 01 43.2** | **-1.1** | |
| SOEI | **Soe** | **25.76** | **108** | P | | **P** | **09 01 54.8** | **+1.1** | |
| SOEI | **Soe** | **25.76** | **108** | P | | **P** | **09 01 51.3** | **-2.4** | |
| SOEI | **Soe** | **25.76** | **108** | P | | **P** | **09 01 53.6** | **-0.1** | |
| | comp=Z,82nm,0.8s | | | | | | | | |
| SANI | **Sanana** | **26.56** | **90** | P | | **P** | **09 01 59.9** | **-0.9** | |
| SANI | **Sanana** | **26.56** | **90** | P | | **P** | **09 01 58.2** | **-2.6** | |
| | comp=Z,57nm,1.7s | | | | | | | | |
| SGSI | **Sangihe** | **26.79** | **77** | P | | **P** | **09 02 02.7** | **-0.2** | |
| | comp=Z,270nm,1.0s | | | | | | | | |
| MBWA | **Marble Bar** | **27.20** | **135** | P | | **P** | **09 02 06.9** | **+0.4** | |
| TNCH | **TengChong** | **27.26** | **358** | ⇑P | | **P** | **09 02 07.8** | **+0.7** | |
| TNCH | | | | pP | | pP | 09 02 10.7 | -2.4 | |
| TNCH | | | | PP | | **PnPn** | **09 02 55.4** | **+4.2** | |
| TNCH | | | | S | | **S** | **09 06 46.5** | **+0.9** | |
| TNCH | | | | pmax | | pmax | | | |
| | comp=Z,200nm,1.0s | | | | | | | | |
| TNCH | | | | pmax | | pmax | | | |
| | comp=Z,630nm,5.4s | | | | | | | | |
| TNCH | | | | LR | | LR | | | |
| | comp=Z,4µm,13.0s | | | | | | | | |
| TNCH | | | | LR | | LR | | | |
| | comp=Z,2µm,11.4s | | | | | | | | |
| TNCH | | | | LR | | LR | | | |
| | comp=Z,5µm,16.9s | | | | | | | | |
| H08S2 | **Diego Garcia H** | **27.31** | **258** | T | | T | 09 30 46.2 | | |
| | baz=79,slow=75,SNR=3634 | | | | | | | | |
| H08S3 | **Diego Garcia H** | **27.31** | **258** | T | | T | 09 30 46.7 | | |
| | baz=79,slow=75 | | | | | | | | |
| H08S1 | **Diego Garcia H** | **27.32** | **258** | T | | T | 09 30 47.6 | | |
| | baz=79,slow=75,SNR=3120 | | | | | | | | |
| KMI | **Kunming** | **27.53** | **7** | ⇑P | | **P** | **09 02 09.5** | **-0.1** | |
| KMI | | | | PP | | **PnPn** | **09 02 59.3** | **+4.4** | |
| KMI | | | | S | | **S** | **09 06 48.9** | **-1.0** | |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,25nm,1.1s | | | | | | | | |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,310nm,5.5s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,2µm,24.8s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,4µm,16.4s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,3µm,14.1s | | | | | | | | |
| PSA00 | **Pilbara Seismi** | **27.55** | **135** | P | | **P** | **09 02 08.0** | **-1.6** | |
| DAV | **Davao City (W)** | **27.76** | **70** | LR | | LR | 09 14 36.7 | | |
| | comp=Z,3µm,18.9s,baz=232,slow=40 | | | | | | | | |
| TNTI | **Ternate** | **28.13** | **84** | P | | **P** | **09 02 13.5** | **-1.3** | |
| | comp=Z,77nm,1.5s | | | | | | | | |
| LBMI | **Labuha** | **28.14** | **87** | P | | **P** | **09 02 15.5** | **+0.6** | |
| HYB | **Hyderabad** | **28.46** | **315** | *e*P | | **P** | **09 02 19.2** | **+1.4** | |
| SZP | **Santa** | **28.69** | **46** | P | | **P** | **09 02 20.0** | **+0.3** | |
| SHL | **Shillong** | **28.73** | **346** | P | | **P** | **09 02 20.1** | **-0.1** | |
| SHL | | | | IAmb | | IAmb | 09 02 34.2 | | |
| | comp=Z,71nm,0.8s | | | | | | | | |
| SHL | **Shillong** | **28.73** | **346** | P | | **P** | **09 02 20.1** | **-0.1** | |
| SHL | | | | pmax | | pmax | | | |
| | comp=Z,71nm,0.8s | | | | | | | | |
| PZH | **PanZhiHua** | **28.81** | **4** | P | | **P** | **09 02 22.9** | **+2.1** | |
| PZH | | | | PP | | **PP** | **09 03 20.3** | **-5.8** | |
| PZH | | | | S | | **S** | **09 07 13.8** | **+4.0** | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,340nm,12.0s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,2µm,16.3s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,3µm,16.3s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,3µm,13.5s | | | | | | | | |
| GYA | **Guiyang** | **29.52** | **13** | P | | **P** | **09 02 26.5** | **-0.7** | |
| GYA | | | | S | | **S** | **09 07 18.0** | **-3.0** | |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,26nm,1.6s | | | | | | | | |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,320nm,14.4s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,7µm,15.2s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,2µm,12.1s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,8µm,15.0s | | | | | | | | |
| FITZ | **Fitzroy Crossi** | **30.09** | **123** | P | | **P** | **09 02 31.9** | **-0.3** | |
| MEEK | **Meekatharra** | **30.35** | **144** | P | | **P** | **09 02 35.0** | **+0.6** | |
| | comp=Z,32nm,1.5s,SNR=1.1 | | | | | | | | |
| MORW | **Morawa** | **30.90** | **151** | P | | **P** | **09 02 40.4** | **+1.2** | |
| | comp=Z,46nm,2.5s,SNR=1.8 | | | | | | | | |
| KNRA | **Kununurra** | **31.79** | **116** | P | | **P** | **09 02 46.1** | **-1.1** | |
| KNRA | | | | IAmb | | IAmb | 09 02 47.2 | | |
| | comp=Z,59nm,0.8s | | | | | | | | |
| KNRA | **Kununurra** | **31.79** | **116** | P | | **P** | **09 02 45.0** | **-2.2** | |
| SWI | **Sorong** | **31.87** | **88** | P | | **P** | **09 02 46.4** | **-1.6** | |
| | comp=Z,89nm,1.3s | | | | | | | | |
| SWI | **Sorong** | **31.87** | **88** | P | | **P** | **09 02 46.9** | **-1.1** | |
| SWI | | | | pmax | | pmax | | | |
| | comp=Z,87nm,1.3s | | | | | | | | |
| KNMB | **Chin-men Tao** | **32.44** | **34** | P | | **P** | **09 02 52.5** | **-0.3** | |
| DRS | **Darwin Rock St** | **32.74** | **109** | P | | **P** | **09 02 54.3** | **-1.3** | |
| TWG | **Pinlang** | **32.77** | **39** | P | | **P** | **09 02 55.4** | **-0.4** | |
| TWGBT | **Beinan** | **32.78** | **39** | P | | **P** | **09 02 56.4** | **+0.6** | |
| FAKI | **Fak Fak** | **32.81** | **92** | P | | **P** | **09 02 55.2** | **-1.0** | |
| FAKI | | | | IAmb | | IAmb | 09 03 17.1 | | |
| | comp=Z,74nm,1.3s | | | | | | | | |
| TPUB | **Ta-pu** | **32.85** | **38** | P | | **P** | **09 02 56.7** | **+0.2** | |
| LSA | **Lhasa** | **32.87** | **347** | P | | **P** | **09 02 58.0** | **+0.9** | |
| LSA | | | | IAmb | | IAmb | 09 02 59.5 | | |
| | comp=Z,65nm,0.9s | | | | | | | | |
| LSA | **Lhasa** | **32.87** | **347** | P | | **P** | **09 02 58.0** | **+0.9** | |
| LSA | | | | pmax | | pmax | | | |
| | comp=Z,65nm,0.9s | | | | | | | | |
| QZH | **Quanzhou** | **32.93** | **33** | ⇑ *i*P | | **P** | **09 02 56.4** | **-0.7** | |
| QZH | | | | PP | | **PP** | **09 04 10.3** | **-1.5** | |
| QZH | | | | S | | **S** | **09 08 17.9** | **+3.8** | |
| QZH | | | | pmax | | pmax | | | |
| | comp=Z,96nm,1.0s | | | | | | | | |
| QZH | | | | pmax | | pmax | | | |
| | comp=Z,330nm,4.9s | | | | | | | | |
| QZH | | | | LR | | LR | | | |
| | comp=Z,3µm,15.5s | | | | | | | | |
| QZH | | | | LR | | LR | | | |
| | comp=Z,4µm,16.1s | | | | | | | | |
| QZH | | | | LR | | LR | | | |
| | comp=Z,5µm,16.5s | | | | | | | | |
| CNSH | **ChangSha** | **33.05** | **22** | P | | **P** | **09 02 57.0** | **-1.1** | |
| CNSH | | | | S | | **S** | **09 08 14.4** | **-1.6** | |
| CNSH | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| CNSH | | | | LR | | LR | | | |
| | comp=Z,3µm,18.4s | | | | | | | | |
| CNSH | | | | LR | | LR | | | |
| | comp=Z,2µm,13.5s | | | | | | | | |
| CNSH | | | | LR | | LR | | | |
| | comp=Z,4µm,18.2s | | | | | | | | |
| MTN | **Manton Dam** | **33.07** | **110** | P | | **P** | **09 02 56.5** | **-2.0** | |
| MTN | **Manton Dam** | **33.07** | **110** | P | | **P** | **09 02 56.3** | **-2.2** | |
| MTN | **Manton Dam** | **33.07** | **110** | P | | **P** | **09 02 56.7** | **-1.8** | |
| | comp=Z,19nm,1.3s,SNR=3.1 | | | | | | | | |
| YULB | **Yu-li** | **33.33** | **39** | P | | **P** | **09 03 00.8** | **+0.1** | |
| YULB | **Yu-li** | **33.33** | **39** | P | | **P** | **09 03 00.8** | **+0.1** | |
| YULB | | | | IAmb | | IAmb | 09 03 02.2 | | |
| | comp=Z,68nm,0.8s | | | | | | | | |
| CD2 | **Chengdu** | **33.37** | **7** | P | | **P** | **09 03 02.0** | **+1.1** | |
| CD2 | | | | S | | **S** | **09 08 23.1** | **+2.2** | |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,320nm,4.5s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,4µm,14.0s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,4µm,14.6s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,5µm,13.3s | | | | | | | | |
| SSLB | **Suanglung** | **33.41** | **38** | P | | **P** | **09 03 01.2** | **-0.2** | |
| ENH | **Enshi** | **33.87** | **16** | P | | **P** | **09 03 03.6** | **-1.7** | |
| ENH | **Enshi** | **33.87** | **16** | IAmb | | IAmb | 09 03 04.7 | | |
| | comp=Z,39nm,0.7s | | | | | | | | |
| NACB | **Ninganchiao** | **34.09** | **38** | P | | **P** | **09 03 07.5** | **+0.3** | |
| NACB | **Ninganchiao** | **34.09** | **38** | IAmb | | IAmb | 09 03 09.2 | | |
| | comp=Z,74nm,0.8s | | | | | | | | |
| KDU | **Kakadu** | **34.29** | **109** | P | | **P** | **09 03 06.8** | **-2.3** | |
| KDU | **Kakadu** | **34.29** | **109** | P | | **P** | **09 03 06.5** | **-2.6** | |
| YHNB | **Yeheng** | **34.32** | **37** | P | | **P** | **09 03 09.5** | **+0.1** | |
| YHNB | **Yeheng** | **34.32** | **37** | IAmb | | IAmb | 09 03 10.5 | | |
| | comp=Z,77nm,0.9s | | | | | | | | |
| TATO | **Taipei** | **34.62** | **37** | P | | **P** | **09 03 11.4** | **-0.4** | |
| NWAO | **Narrogin (SRO)** | **34.68** | **153** | P | | **P** | **09 03 12.2** | **-0.1** | |
| | comp=Z,23nm,0.8s,baz=314,slow=6.3,SNR=10 | | | | | | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| H01W3 | **Cape Leeuwin H** | **35.12** | **159** | T | | T | 09 40 22.6 | | |
| | baz=335,slow=76,SNR=850 | | | | | | | | |
| H01W2 | **Cape Leeuwin H** | **35.13** | **159** | T | | T | 09 40 23.6 | | |
| | baz=335,slow=76,SNR=951 | | | | | | | | |
| H01W1 | **Cape Leeuwin H** | **35.13** | **159** | T | | T | 09 40 25.7 | | |
| | baz=335,slow=76,SNR=385 | | | | | | | | |
| YOJ | **Yonaguni jima** | **35.18** | **39** | P | | **P** | **09 03 16.5** | **-0.2** | |
| YOJ | **Yonaguni jima** | **35.18** | **39** | IAmb | | IAmb | 09 03 27.7 | | |
| | comp=Z,65nm,0.9s | | | | | | | | |
| WHN | **Wuhan** | **35.71** | **22** | ⇓P | | **P** | **09 03 20.9** | **-0.2** | |
| WHN | | | | pP | | **pP** | **09 03 27.8** | **+0.4** | |
| WHN | | | | S | | S | 09 09 07.4 | +10 | |
| WHN | | | | pmax | | pmax | | | |
| | comp=Z,86nm,0.9s | | | | | | | | |
| WHN | | | | LR | | LR | | | |
| | comp=Z,8µm,14.6s | | | | | | | | |
| WHN | | | | LR | | LR | | | |
| | comp=Z,6µm,13.6s | | | | | | | | |
| WHN | | | | LR | | LR | | | |
| | comp=Z,13µm,17.9s | | | | | | | | |
| KMBL | **Kambalda** | **35.79** | **146** | P | | **P** | **09 03 23.4** | **+1.5** | |
| | comp=Z,49nm,1.7s,SNR=1.2 | | | | | | | | |
| WRKA | **Warakurna** | **35.81** | **131** | P | | **P** | **09 03 24.1** | **+1.9** | |
| WRKA | **Warakurna** | **35.81** | **131** | P | | **P** | **09 03 23.5** | **+1.3** | |
| | comp=Z,48nm,1.4s,SNR=3.6 | | | | | | | | |
| XAN | **Xi'an** | **37.32** | **13** | ⇑P | | **P** | **09 03 33.1** | **-1.8** | |
| XAN | | | | pP | | pP | 09 03 41.0 | -0.2 | |
| XAN | | | | PcP | | **PcP** | **09 05 54.8** | **+0.8** | |
| XAN | | | | S | | **S** | **09 09 16.0** | **-5.6** | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,89nm,1.0s | | | | | | | | |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,440nm,7.6s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,9µm,14.9s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,6µm,14.0s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,13µm,15.2s | | | | | | | | |
| WB0 | **Warramunga Arr** | **38.29** | **119** | P | | **P** | **09 03 43.4** | **+0.1** | |
| WB0 | | | | IAmb | | IAmb | 09 03 45.2 | | |
| | comp=Z,84nm,0.9s | | | | | | | | |
| WRA | **Warramunga Arr** | **38.31** | **120** | P | | **P** | **09 03 43.5** | **0.0** | |
| WRA | **Warramunga Arr** | **38.31** | **120** | P | | **P** | **09 03 42.7** | **-0.8** | |
| | comp=Z,64nm,0.7s,baz=288,slow=13,SNR=183 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **09 05 58.2** | **+0.8** | |
| | comp=Z,5.9nm,0.7s,baz=296,slow=2.0,SNR=4.9 | | | | | | | | |
| WRA | | | | S | | **S** | **09 09 33.0** | **-4.0** | |
| | comp=Z,3.5nm,0.9s,baz=295,slow=16,SNR=5.7 | | | | | | | | |
| | comp=Z,64nm,0.7s | | | | | | | | |
| WRAB | **Tennant Creek** | **38.32** | **120** | P | | **P** | **09 03 43.3** | **-0.2** | |
| WRAB | | | | IAmb | | IAmb | 09 03 45.6 | | |
| | comp=Z,91nm,0.8s | | | | | | | | |
| WRAB | **Tennant Creek** | **38.32** | **120** | *de*P | | **P** | **09 03 43.9** | **+0.4** | |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,81nm,0.9s | | | | | | | | |
| WRAB | | | | MLR | | MLR | | | |
| | comp=Z,1µm,22.0s | | | | | | | | |
| WB2 | **Warramunga Arr** | **38.32** | **120** | P | | **P** | **09 03 43.5** | **-0.1** | |
| WB2 | | | | IAmb | | IAmb | 09 03 45.6 | | |
| | comp=Z,84nm,0.8s | | | | | | | | |
| WR0 | **Warramunga Arr** | **38.49** | **120** | P | | **P** | **09 03 44.9** | **-0.2** | |
| WR0 | | | | IAmb | | IAmb | 09 03 47.1 | | |
| | comp=Z,125nm,0.9s | | | | | | | | |
| LZH | **Lanzhou** | **38.50** | **6** | P | | **P** | **09 03 44.8** | **-0.1** | |
| LZH | | | | sP | | pP | 09 03 50.3 | -0.9 | |
| LZH | | | | PP | | **PP** | **09 05 18.3** | **+5.0** | |
| LZH | | | | PcP | | **PcP** | **09 05 59.8** | **+2.0** | |
| LZH | | | | sS | | sS | 09 09 51.2 | +1.4 | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,88nm,1.6s | | | | | | | | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,360nm,4.8s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,3µm,14.1s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,4µm,16.5s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,4µm,14.4s | | | | | | | | |
| GOMU | **GeErMu** | **38.62** | **354** | P | | **P** | **09 03 46.5** | **+0.3** | |
| GOMU | | | | sP | | pP | 09 03 52.8 | +0.5 | |
| GOMU | | | | PcP | | **PcP** | **09 05 59.1** | **+0.7** | |
| GOMU | | | | S | | **S** | **09 09 46.5** | **+4.6** | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,56nm,1.3s | | | | | | | | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,560nm,7.7s | | | | | | | | |
| GOMU | | | | LR | | LR | | | |
| | comp=Z,2µm,17.9s | | | | | | | | |
| GOMU | | | | LR | | LR | | | |
| | comp=Z,1µm,20.7s | | | | | | | | |
| GOMU | | | | LR | | LR | | | |
| | comp=Z,3µm,17.6s | | | | | | | | |
| LYN | **LuoYang** | **38.74** | **17** | ⇓P | | **P** | **09 03 46.6** | **-0.2** | |
| LYN | | | | sP | | pP | 09 03 53.6 | +0.5 | |
| LYN | | | | PP | | **PP** | **09 05 19.4** | **+3.7** | |
| LYN | | | | S | | **S** | **09 09 40.5** | **-2.4** | |
| LYN | | | | sS | | pS | 09 09 50.5 | +0.1 | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,230nm,0.8s | | | | | | | | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,370nm,6.7s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,5µm,13.1s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,3µm,13.1s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,4µm,13.7s | | | | | | | | |
| NJ2 | **Nanjing** | **38.90** | **27** | *e*P | | **P** | **09 03 45.1** | **-3.1** | |
| NJ2 | | | | PcP | | **PcP** | **09 05 57.3** | **-1.6** | |
| NJ2 | | | | S | | **S** | **09 09 44.4** | **-1.1** | |
| NJ2 | | | | sS | | **sS** | **09 09 54.6** | **-0.6** | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,320nm,4.5s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,2µm,17.2s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,3µm,15.7s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,2µm,13.2s | | | | | | | | |
| FORT | **Forrest** | **39.13** | **139** | P | | **P** | **09 03 52.3** | **+2.1** | |
| FORT | **Forrest** | **39.13** | **139** | P | |

TIA pmax pmax
comp=Z,330nm,3.5s
TIA LR LR
comp=Z,1μm,16.5s
TIA LR LR
comp=Z,2μm,20.1s
TIA LR LR
comp=Z,650nm,18.7s
**TABU Tabubil 41.81 95** P **P** **09 04 12.9 +0.2**
**HNS HongShan 42.05 18** ⇑P **P** **09 04 14.1 -0.1**
HNS PP **PP** **09 05 55.5 +3.7**
HNS S **S** **09 10 31.6 -0.7**
HNS pmax pmax
comp=Z,44nm,0.8s
HNS pmax pmax
comp=Z,320nm,9.0s
HNS LR LR
comp=Z,790nm,19.1s
HNS LR LR
comp=Z,2μm,17.7s
HNS LR LR
comp=Z,2μm,17.5s
**OOD Oodnadatta 42.88 130** P **P** **09 04 22.5 +1.4**
**MULG Mulgathing 42.97 134** P **P** **09 04 23.5 +1.7**
**QIS Mount Isa 43.15 118** P **P** **09 04 23.2 -0.2**
**QIS Mount Isa 43.15 118** P **P** **09 04 22.8 -0.6**
comp=Z,28nm,0.8s,SNR=4.7
**NIL Nilore 43.51 328** P **P** **09 04 25.9 -0.1**
NIL IAmb IAmb 09 04 27.2
comp=Z,92nm,0.8s
**NIL Nilore 43.51 328** P **P** **09 04 26.0 -0.1**
NIL pmax pmax
comp=Z,92nm,0.8s
**BTO Baotou 43.87 12** *e*P **P** **09 04 29.7 +0.7**
BTO pP **pP** **09 04 34.3 -1.1**
BTO sP **sP** **09 04 37.0 -0.9**
BTO PP **PP** **09 06 16.8 +5.4**
BTO S **S** **09 11 02.2 +3.0**
BTO SS **SS** **09 14 14.6 -1.4**
BTO pmax pmax
comp=Z,57nm,1.0s
BTO pmax pmax
comp=Z,370nm,4.8s
BTO LR LR
comp=Z,2μm,22.8s
BTO LR LR
comp=Z,7μm,14.9s
BTO LR LR
comp=Z,5μm,19.0s
**HHC Hu-ho-hao-te 44.44 13** *e*P **P** **09 04 33.7 +0.2**
HHC sP pP 09 04 40.2 +0.3
HHC PcP **PcP** **09 06 16.0 -1.1**
HHC S **S** **09 11 10.5 +3.0**
HHC sS pS 09 11 14.6 -0.5
HHC ScS **ScS** **09 14 29.6 -1.2**
HHC pmax pmax
comp=Z,170nm,4.0s
HHC LR LR
comp=Z,5μm,15.3s
HHC LR LR
comp=Z,2μm,18.8s
HHC LR LR
comp=Z,6μm,14.5s
**COEN Coen 44.73 107** P **P** **09 04 34.4 -1.8**
**BJT Baijiatuau 44.91 18** P **P** **09 04 37.7 +0.5**
**BJT Baijiatuau 44.91 18** P **P** **09 04 37.4 +0.2**
BJT IAmb IAmb 09 04 38.6
comp=Z,67nm,1.1s
**BJT Baijiatuau 44.91 18** P **P** **09 04 37.4 +0.2**
BJT pmax pmax
comp=Z,67nm,1.1s
**BJI Beijing 44.93 18** P **P** **09 04 37.5 +0.2**
BJI S S 09 11 23.4 +9.0
BJI pmax pmax
comp=Z,29nm,1.1s
BJI pmax pmax
comp=Z,170nm,3.6s
BJI LR LR
comp=Z,820nm,15.4s
BJI LR LR
comp=Z,620nm,15.9s
BJI LR LR
comp=Z,1μm,15.1s
**DL2 Dalian 45.91 24** P **P** **09 04 43.9 -1.2**
DL2 S **S** **09 11 27.0 -1.5**
DL2 pmax pmax
comp=Z,180nm,1.0s
DL2 pmax pmax
comp=Z,810nm,6.7s
DL2 LR LR
comp=Z,2μm,19.9s
DL2 LR LR
comp=Z,2μm,19.1s
DL2 LR LR
comp=Z,2μm,20.8s
**LCRK Leigh Creek 46.12 131** P **P** **09 04 48.8 +1.8**
**JNU Nakatsue 46.16 37** P **P** **09 04 47.3 0.0**
**JNU Nakatsue 46.16 37** P **P** **09 04 47.1 -0.1**
**JNU Nakatsue 46.16 37** LR LR 09 26 09.6
comp=Z,2μm,18.0s,baz=244,slow=39
**RER Riviere de l'E 46.41 243** P **P** **09 04 47.5 -2.1**
RER IAmb IAmb 09 05 08.9
comp=Z,91nm,1.3s
**KBL Kabul 46.50 325** P **P** **09 04 49.7 -0.5**
**KBL Kabul 46.50 325** P **P** **09 04 49.7 -0.5**
KBL pmax pmax
comp=Z,27nm,1.4s
**TJN Taejon 46.54 31** P **P** **09 04 49.9 -0.2**
**TJN Taejon 46.54 31** P **P** **09 04 49.7 -0.5**
**TJN Taejon 46.54 31** *de*P **P** **09 04 49.9 -0.2**
**MTSU Mount Surprise 46.71 113** P **P** **09 04 51.6 -0.2**
**INKA Innaminka 46.84 127** P **P** **09 04 54.5 +1.8**
**KSH Kashi 46.93 335** P **P** **09 04 52.2 -1.1**
KSH sP pP 09 04 58.7 -0.8
KSH pmax pmax
comp=Z,26nm,0.8s
KSH LR LR
comp=Z,2μm,21.3s
**WHYH Whyalla 46.98 135** P **P** **09 04 55.3 +1.7**
**INCN Inchon 47.02 30** P **P** **09 04 53.2 -0.7**
**INCN Inchon 47.02 30** P **P** **09 04 52.4 -1.5**
INCN IAmb IAmb 09 04 53.9
comp=Z,56nm,1.2s
**INCN Inchon 47.02 30** P **P** **09 04 52.4 -1.5**
INCN pmax pmax
comp=Z,56nm,1.2s
**WSAR Wadi Sarin 47.18 305** LR LR 09 23 34.5
comp=Z,919nm,21.0s,baz=134,slow=34
**WMQ Urumqi 47.19 348** ⇑P **P** **09 04 56.9 +1.7**
WMQ S **S** **09 11 43.4 -3.5**
WMQ pmax pmax
comp=Z,220nm,0.9s
WMQ pmax pmax
comp=Z,590nm,3.7s
WMQ LR LR
comp=Z,940nm,13.5s
WMQ LR LR
comp=Z,770nm,12.3s
WMQ LR LR
comp=Z,540nm,18.3s
**KSAR Wonju Array Be 47.62 31** P **P** **09 04 58.2 -0.4**
**KSAR Wonju Array Be 47.62 31** P **P** **09 04 58.2 -0.4**
**KSRS Korea Array 47.65 31** P **P** **09 04 57.6 -1.1**
comp=Z,57nm,0.9s,baz=223,slow=8.5,SNR=198
KSRS LR LR 09 26 40.3
comp=Z,765nm,18.3s,baz=220,slow=38
comp=Z,57nm,0.9s
**KS19 Wonju Array Si 47.66 31** P **P** **09 04 58.7 -0.2**
**GUMO Guam 47.79 69** LR LR 09 25 02.8
comp=Z,303nm,21.4s,baz=230,slow=36
**PYAG Pyongyang 47.84 28** P **P** **09 04 58.7 -1.5**
PYAG S **S** **09 11 55.7 -0.4**
PYAG AmB
comp=Z,319nm,1.3s
PYAG AMS AMS
comp=Z,4μm,14.0s
**PMG Port Moresby 47.97 100** P **P** **09 05 00.7 -1.0**
comp=Z,15nm,0.8s,baz=275,slow=14,SNR=3.0
PMG LR LR 09 28 53.1
comp=Z,498nm,20.9s,baz=266,slow=41
comp=Z,15nm,0.8s
**TARG Taragay, Kyrgy 48.09 338** P **P** **09 05 04.0 +1.3**
TARG IAmb IAmb 09 05 19.4
comp=Z,67nm,1.1s
**TARG Taragay, Kyrgy 48.09 338** P **P** **09 05 04.0 +1.3**
TARG pmax pmax
comp=Z,67nm,1.1s
**SUJ Sinuiju 48.12 26** P **P** **09 05 00.8 -1.6**
SUJ S **S** **09 11 58.8 -1.3**
SUJ AmB
comp=Z,148nm,1.8s
SUJ AMS AMS
comp=Z,4μm,15.1s
**HTT Hallett 48.14 134** P **P** **09 05 05.1 +2.3**
**HTT Hallett 48.14 134** P **P** **09 05 04.1 +1.3**
comp=Z,57nm,1.1s,SNR=3.2
**JMN Monobe 48.42 39** P **P** **09 05 05.6 +0.7**
**JMN Monobe 48.42 39** P **P** **09 05 04.8 -0.1**
**XLT XiLinHaoTe 48.45 16** ⇑*i*P **P** **09 05 04.2 -0.8**
XLT sP pP 09 05 11.9 +0.5
XLT PcP **PcP** **09 06 31.8 +0.7**
XLT PP **PP** **09 06 54.6 -3.2**
XLT S **S** **09 12 09.2 +4.4**
XLT ScS **ScS** **09 14 52.9 -3.9**
XLT pmax pmax
comp=Z,55nm,1.1s
XLT pmax pmax
comp=Z,220nm,6.0s
XLT LR LR
comp=Z,180nm,14.9s
XLT LR LR
comp=Z,1μm,14.0s
XLT LR LR
comp=Z,2μm,14.0s
**NRN Naryn 48.53 337** IAmb IAmb 09 05 08.2
comp=Z,70nm,1.0s
**PRZ Przheval'sk 48.53 339** P **P** **09 05 07.9 +2.1**
PRZ pmax pmax
comp=Z,104nm,1.3s
**UZB Uzynbulak 48.91 340** *e*P **P** **09 05 08.3 -0.4**
comp=Z,33nm,0.8s,baz=340
UZB *e*S **S** **09 12 12.5 +1.0**
baz=340
**UZB Uzynbulak 48.91 340** *e*P **P** **09 05 08.2 -0.4**
UZB *e*S **S** **09 12 12.5 +1.0**
UZB pmax pmax
comp=Z,33nm,0.8s
**PDGK Podgornoye 48.91 341** P **P** **09 05 10.2 +1.6**
**CTA Charters Tower 48.97 115** P **P** **09 05 09.8 +0.4**
**CTA Charters Tower 48.97 115** P **P** **09 05 08.9 -0.5**
comp=Z,3.7nm,0.8s,baz=287,slow=8.9,SNR=53
CTA LR LR 09 28 07.5
comp=Z,89nm,20.1s,baz=286,slow=39
comp=Z,3.7nm,0.8s
**CTAO Charters Tower 48.97 115** P **P** **09 05 09.7 +0.4**
**CTAO Charters Tower 48.97 115** P **P** **09 05 09.4 +0.1**
**CTAO Charters Tower 48.97 115** P **P** **09 05 09.4 +0.1**
CTAO pmax pmax
comp=Z,74nm,1.0s
**SATY Saty 49.04 340** *e*P **P** **09 05 09.5 -0.1**
comp=Z,44nm,0.8s,baz=340
SATY *e*S **S** **09 12 14.8 +1.5**
baz=340
**SATY Saty 49.04 340** *e*P **P** **09 05 09.5 -0.1**
SATY *e*S **S** **09 12 14.8 +1.5**
SATY pmax pmax
comp=Z,44nm,0.8s
**GAR Garm 49.12 330** IAmb IAmb 09 05 19.7
comp=Z,72nm,1.2s
**ZHN Zhinishke 49.12 340** *e*P **P** **09 05 09.8 -0.5**
comp=Z,23nm,0.9s,baz=340
ZHN *e*S **S** **09 12 16.1 +1.6**
baz=340
**ZHN Zhinishke 49.12 340** *e*P **P** **09 05 09.7 -0.5**
ZHN *e*S **S** **09 12 16.1 +1.6**
ZHN pmax pmax
comp=Z,23nm,0.9s
**ULHL Ulahol 49.13 337** P **P** **09 05 11.9 +1.5**
SNR=14
**OHH Osh 49.15 333** P **P** **09 05 11.7 +1.3**
OHH pmax pmax
comp=Z,46nm,1.3s
**SNY Shenyang 49.17 24** ⇑P **P** **09 05 09.1 -1.3**
SNY S **S** **09 12 23.1 +8.3**
SNY pmax pmax
comp=Z,62nm,0.9s
SNY pmax pmax
comp=Z,270nm,9.3s
SNY LR LR
comp=Z,1μm,14.0s
SNY LR LR
comp=Z,2μm,15.1s
SNY LR LR
comp=Z,2μm,15.1s
**QLP Quilpie 49.23 124** P **P** **09 05 12.7 +1.5**
**QLP Quilpie 49.23 124** P **P** **09 05 12.5 +1.2**
comp=Z,113nm,1.0s,SNR=9.9
**TV1H Townsville Har 49.26 113** P **P** **09 05 11.6 +0.1**
**KPKS Kokpek 49.30 340** *e*P **P** **09 05 11.0 -0.6**
comp=Z,33nm,1.0s,baz=340
KPKS *e*S **S** **09 12 18.5 +1.5**
baz=340
**KPKS Kokpek 49.30 340** *e*P **P** **09 05 11.0 -0.6**
KPKS *e*S **S** **09 12 18.4 +1.5**
KPKS pmax pmax
comp=Z,33nm,1.0s
**STKA Stephens Creek 49.34 131** P **P** **09 05 13.7 +1.7**
**STKA Stephens Creek 49.34 131** P **P** **09 05 13.4 +1.5**
**STKA Stephens Creek 49.34 131** P **P** **09 05 12.0 +0.1**
comp=Z,23nm,1.0s,SNR=9.7
**STKA Stephens Creek 49.34 131** P **P** **09 05 13.0 +1.0**
comp=Z,56nm,0.7s,baz=306,slow=7.8,SNR=68
comp=Z,56nm,0.7s
**STKA Stephens Creek 49.34 131** *c i*P **P** **09 05 13.5 +1.5**
**CHGR Chuyangaron 49.45 329** P **P** **09 05 13.0 +0.2**
**CHGR Chuyangaron 49.45 329** P **P** **09 05 13.0 +0.2**
CHGR pmax pmax
comp=Z,87nm,0.9s
**SIMJ Simiganj 49.53 329** P **P** **09 05 13.0 -0.4**
SIMJ IAmb IAmb 09 05 13.9
comp=Z,31nm,0.8s
**TNSS Tian-Shan 49.54 338** *e*P **P** **09 05 13.8 0.0**
baz=338
**TNSS Tian-Shan 49.54 338** *e*P **P** **09 05 13.8 0.0**
**ARLS Aral 49.57 335** P **P** **09 05 15.0 +1.2**
ARLS pmax pmax
comp=Z,100nm,1.3s
**MDOK Medeo 49.61 339** *e*P **P** **09 05 14.0 -0.1**
baz=338
MDOK *e*S **S** **09 12 23.2 +1.7**
baz=338
MDOK LR LR 09 28 35.8
comp=Z,432nm,18.0s,baz=338
**MDOK Medeo 49.61 339** *e*P **P** **09 05 13.9 -0.1**
MDOK *e*S **S** **09 12 23.1 +1.7**
MDOK MLR MLR
comp=Z,432nm,18.0s
**BTK Batken 49.70 331** P **P** **09 05 15.5 +0.9**
BTK pmax pmax
comp=Z,51nm,1.4s
**AAA Alma-Ata 49.70 338** *e*P **P** **09 05 14.4 -0.2**
comp=Z,38nm,0.9s,baz=338
AAA LR LR 09 28 37.8
baz=338
**AAA Alma-Ata 49.70 338** *e*P **P** **09 05 14.4 -0.2**
**ARSB Arslanbob 49.70 334** IAmb IAmb 09 05 25.6
comp=Z,40nm,1.1s
**UOSS Minazif 49.92 306** P **P** **09 05 17.2 +0.7**
**TKM2 Tokmak 2 49.95 337** P **P** **09 05 17.4 +0.7**
SNR=96
**KBK Karagaybulak 49.98 336** P **P** **09 05 19.1 +2.2**
SNR=15
**AML Almayashu 50.06 335** P **P** **09 05 18.7 +1.0**
SNR=32
**AAK Ala-Archa 50.15 336** P **P** **09 05 18.6 +0.5**
**AAK Ala-Archa 50.15 336** LR LR 09 29 39.7
comp=Z,2μm,20.6s,baz=168,slow=40
**AAK Ala-Archa 50.15 336** *c i*P **P** **09 05 18.7 +0.5**
AAK pmax pmax
comp=Z,64nm,2.1s
AAK MLR MLR
comp=Z,2μm,20.0s
**CHKK Chushkaly 50.23 339** *e*P **P** **09 05 18.8 +0.2**
baz=339
**CHKK Chushkaly 50.23 339** *e*P **P** **09 05 18.7 +0.2**
**FRU1 Bishkek 50.24 336** P **P** **09 05 19.6 +0.9**
FRU1 IAmb IAmb 09 05 22.0
comp=Z,93nm,1.2s
**FRU1 Bishkek 50.24 336** P **P** **09 05 19.6 +0.9**
FRU1 pmax pmax
comp=Z,93nm,1.2s
**ARXS Arharly 50.25 340** *e*P **P** **09 05 19.3 +0.5**
**CHMS Chumysh 50.35 337** P **P** **09 05 20.7 +1.2**
SNR=8.5
**SONM Songino Array 50.38 6** P **P** **09 05 20.5 +0.8**
**SONM Songino Array 50.38 6** P **P** **09 05 20.1 +0.4**
comp=Z,91nm,0.7s,baz=189,slow=8.7,SNR=387
SONM PcP **PcP** **09 06 38.6 +0.5**
comp=Z,14nm,0.7s,baz=195,slow=3.1,SNR=5.8
comp=Z,91nm,0.7s
**EKS2 Erkin-Say 50.46 336** P **P** **09 05 21.7 +1.3**
SNR=38
**ULN Ulaanbaatar 50.49 7** P **P** **09 05 21.3 +0.7**
**ULN Ulaanbaatar 50.49 7** *c i*P **P** **09 05 20.8 +0.2**
ULN pmax pmax
comp=Z,183nm,1.3s
ULN MLR MLR
comp=Z,2μm,20.0s
**ARK Arkit 50.54 333** P **P** **09 05 21.8 +0.8**
ARK pmax pmax
comp=Z,51nm,1.1s
**HRA Herat 50.56 320** P **P** **09 05 20.3 -1.1**
**JCJ Chichijima 50.57 52** LR LR 09 26 10.1
comp=Z,612nm,20.6s,baz=304,slow=35
**USP Ospenovka 50.67 337** P **P** **09 05 22.7 +0.8**
SNR=79
**TRKS Terek-Say 50.70 333** P **P** **09 05 22.7 +0.4**
TRKS pmax pmax
comp=Z,50nm,1.0s
**SGDS Sogindy 50.78 337** *e*P **P** **09 05 23.0 +0.3**
baz=337
**SGDS Sogindy 50.78 337** *e*P **P** **09 05 23.0 +0.3**
**MK31 Makanchi Array 51.24 345** P **P** **09 05 26.9 +0.7**
MK31 IAmb IAmb 09 05 28.0
comp=Z,72nm,0.8s
**MK31 Makanchi Array 51.24 345** *i*P **P** **09 05 26.3 +0.2**
MK31 pmax pmax
comp=Z,99nm,0.8s
**MKAR Makanchi Array 51.24 345** P **P** **09 05 27.0 +0.9**
**MKAR Makanchi Array 51.24 345** P **P** **09 05 26.5 +0.4**
comp=Z,75nm,0.7s,baz=150,slow=8.0,SNR=531
MKAR S **S** **09 12 43.7 0.0**
comp=Z,1.6nm,1.1s,baz=163,slow=15,SNR=5.7
comp=Z,75nm,0.7s
**MKAR Makanchi Array 51.24 345** P **P** **09 05 27.0 +0.9**
**ZSN Zaisan 51.24 347** *e*P **P** **09 05 26.5 +0.3**
comp=Z,48nm,1.0s,baz=347
ZSN *e*S **S** **09 12 45.8 +2.1**
baz=347
**ZSN Zaisan 51.24 347** *e*P **P** **09 05 26.4 +0.3**
ZSN *e*S **S** **09 12 45.7 +2.1**
ZSN pmax pmax
comp=Z,48nm,1.0s
**MAKZ Makanchi 51.34 345** P **P** **09 05 27.3 +0.5**
MAKZ IAmb IAmb 09 05 28.6
comp=Z,57nm,1.0s
**MAKZ Makanchi 51.34 345** P **P** **09 05 27.3 +0.5**
MAKZ pmax pmax
comp=Z,57nm,1.0s
**INU Inuyama 51.45 40** P **P** **09 05 27.1 -0.7**
**INU Inuyama 51.45 40** P **P** **09 05 26.8 -1.0**
**CN2 Changchun 51.57 24** P **P** **09 05 27.6 -1.0**
CN2 sP pP 09 05 34.7 -0.4
CN2 PcP **PcP** **09 06 43.6 +1.2**
CN2 S **S** **09 12 48.1 -0.2**
CN2 pmax pmax
comp=Z,170nm,1.0s
CN2 pmax pmax
comp=Z,500nm,3.0s
CN2 LR LR
comp=Z,1μm,17.0s
CN2 LR LR
comp=Z,1μm,17.0s
CN2 LR LR
comp=Z,2μm,15.0s
**JGF Kuroka 51.82 40** P **P** **09 05 30.2 -0.5**
**JGF Kuroka 51.82 40** IAmb IAmb 09 05 30.9
comp=Z,66nm,1.4s
**CHM Chimkent 52.03 332** *e*P **P** **09 05 32.4 +0.3**
baz=332
CHM LR LR 09 30 14.5
comp=Z,667nm,19.5s,baz=332
**CHM Chimkent 52.03 332** *e*P **P** **09 05 32.4 +0.3**
CHM MLR MLR
comp=Z,667nm,20.0s
**KK31 Karatay Array 52.23 333** P **P** **09 05 33.8 +0.3**
KK31 IAmb IAmb 09 05 43.8
comp=Z,84nm,1.8s
**KK31 Karatay Array 52.23 333** *i*P **P** **09 05 33.9 +0.3**
**KKAR Karatay Array 52.23 333** P **P** **09 05 33.3 -0.2**
**KKAR Karatay Array 52.23 333** P **P** **09 05 33.3 -0.2**
**CMSA Cobar Meteorol 52.33 129** P **P** **09 05 36.2 +1.7**
**CMSA Cobar Meteorol 52.33 129** P **P** **09 05 34.8 +0.3**
comp=Z,145nm,0.8s,SNR=16
**BTLS Baital 52.34 337** *e*P **P** **09 05 34.4 +0.1**
baz=337
**BTLS Baital 52.34 337** *e*P **P** **09 05 34.4 +0.1**
**BRLS Boroldaу 52.48 333** *e*P **P** **09 05 34.5 -0.9**
baz=332
**BRLS Boroldaу 52.48 333** *e*P **P** **09 05 34.5 -0.9**
**ZAK Zakamensk 52.67 3** *e*P **P** **09 05 36.8 0.0**
ZAK pmax pmax
comp=Z,16nm,1.4s
**MAJO Matsushiro 52.94 39** P **P** **09 05 37.9 -1.1**
**MAJO Matsushiro 52.94 39** P **P** **09 05 38.2 -0.8**
MAJO IAmb IAmb 09 05 39.7
comp=Z,73nm,1.2s
**MAJO Matsushiro 52.94 39** *c i*P **P** **09 05 37.2 -1.8**
MAJO pmax pmax
comp=Z,49nm,1.1s
**MJB9 Matsu-Tunnel 52.94 39** P **P** **09 05 37.9 -1.1**
MJB9 IAmb IAmb 09 05 39.7
comp=Z,71nm,1.2s
**MJAR Matsushiro Arr 52.95 39** P **P** **09 05 37.1 -1.9**
comp=Z,38nm,1.0s,baz=220,slow=7.2,SNR=80
comp=Z,38nm,1.0s
**PSTR Posyet 53.04 29** ⇓*e*P **P** **09 05 39.2 -0.3**
**MSHR Mys Shultsa 53.15 29** ⇑*e*P **P** **09 05 40.1 -0.2**
MSHR pmax pmax
comp=Z,26nm,1.2s
MSHR MLR MLR
comp=Z,617nm,15.0s
**AULRC Lightning Ridg 53.35 125** P **P** **09 05 43.9 +1.8**
**OPO Ambohidratompo 53.58 249** LR LR 09 24 47.1
comp=Z,321nm,18.1s,baz=216,slow=32
**RK1H Rockhampton Ha 53.63 117** P **P** **09 05 44.9 +0.7**
**MOY Mondy 53.87 1** *e*P **P** **09 05 45.4 -0.2**
MOY pmax pmax
comp=Z,47nm,2.8s
**JSD Sado 53.91 38** P **P** **09 05 45.8 -0.2**
**JSD Sado 53.91 38** P **P** **09 05 45.6 -0.4**
JSD IAmb IAmb 09 05 46.6
comp=Z,63nm,0.8s
**VLA Vladivostok 53.91 29** *e*P **P** **09 05 46.3 +0.4**
VLA pmax pmax
comp=Z,153nm,1.6s
VLA MLR MLR
comp=Z,878nm,15.0s
**BNX BinXian 53.96 24** ⇑P **P** **09 05 45.7 -0.5**
BNX S **S** **09 13 19.2 -1.6**
BNX pmax pmax
comp=Z,110nm,0.7s
BNX LR LR
comp=Z,2μm,16.9s
BNX LR LR
comp=Z,1μm,15.5s
BNX LR LR
comp=Z,3μm,16.7s
**MDJ Mudanjiang 53.99 26** P **P** **09 05 47.0 +0.5**
**MDJ Mudanjiang 53.99 26** P **P** **09 05 45.4 -1.1**
MDJ pP pP 09 05 47.0 -6.0
MDJ sP sP 09 05 50.0 -5.4
MDJ PcP **PcP** **09 06 44.9 -6.6**
MDJ PP **PP** **09 07 46.9 -1.2**
MDJ PcS **PcS** **09 10 47.0 -3.7**
MDJ S **S** **09 13 29.7 +8.4**
MDJ sS sS 09 13 35.6 +4.1
MDJ pmax pmax
comp=Z,35nm,1.7s
MDJ LR LR
comp=Z,2μm,16.8s
MDJ LR LR
comp=Z,2μm,16.3s
MDJ LR LR
comp=Z,3μm,18.7s
**MDJ Mudanjiang 53.99 26** P **P** **09 05 46.6 +0.1**

MDJ IAmb IAmb 09 05 47.8
comp=Z,63nm,1.2s
**HIA Hailar 54.37 16** P **P** **09 05 49.1 -0.2**
**HIA Hailar 54.37 16** P **P** **09 05 49.0 -0.2**
HIA IAmb IAmb 09 05 49.9
comp=Z,45nm,0.9s
**HIA Hailar 54.37 16** P **P** **09 05 49.0 -0.2**
HIA pmax pmax
comp=Z,45nm,0.9s
**IRK Irkutsk 54.58 4** *e*P **P** **09 05 51.0 +0.4**
IRK pmax pmax
comp=Z,88nm,2.1s
**EIDS Eidsvold 54.68 120** P **P** **09 05 53.1 +1.2**
**EIDS Eidsvold 54.68 120** P **P** **09 05 52.4 +0.5**
EIDS IAmb IAmb 09 05 54.0
comp=Z,32nm,0.9s
**EIDS Eidsvold 54.68 120** P **P** **09 05 51.6 -0.3**
comp=Z,45nm,1.6s,SNR=8.4
**USA0B Ussuriysk Arra 54.77 28** P **P** **09 05 52.5 +0.3**
**USA0B Ussuriysk Arra 54.77 28***c i*P **P** **09 05 51.5 -0.7**
**USRK Ussuriysk Ar. 54.77 28** P **P** **09 05 52.2 0.0**
**USRK Ussuriysk Ar. 54.77 28** P **P** **09 05 52.4 +0.3**
comp=Z,88nm,1.0s,baz=222,slow=6.1,SNR=98
USRK LR LR 09 32 32.9
comp=Z,1μm,18.3s,baz=217,slow=40
comp=Z,88nm,1.0s
**AUDCS Dubbo College 54.90 128** P **P** **09 05 55.4 +2.0**
**SEM Semipalatinsk 55.10 345** *e*P **P** **09 05 54.8 0.0**
comp=Z,27nm,0.8s,baz=345
SEM LR LR 09 32 05.4
comp=Z,365nm,17.9s,baz=345
**SEM Semipalatinsk 55.10 345** *e*P **P** **09 05 54.7 0.0**
SEM pmax pmax
comp=Z,27nm,0.8s
SEM MLR MLR
comp=Z,365nm,18.0s
**JMM Marumori 55.39 39** P **P** **09 05 57.0 +0.3**
**JMM Marumori 55.39 39** P **P** **09 05 55.8 -0.9**
**YNG Young 55.53 131** P **P** **09 06 00.0 +2.1**
**YNG Young 55.53 131** P **P** **09 05 58.2 +0.3**
comp=Z,228nm,1.1s,SNR=4.9
**KURBB Kurchatov Arra 55.75 344** P **P** **09 05 59.2 +0.1**
comp=Z,32nm,0.9s,baz=162,slow=7.1,SNR=163
KURBB S **S** **09 13 41.7 -3.0**
comp=Z,0.5nm,0.7s,baz=158,slow=11,SNR=2.9
comp=Z,32nm,0.9s
**KURBB Kurchatov Arra 55.75 344** P **P** **09 05 59.3 +0.2**
**KURK Kurchatov 55.81 344** P **P** **09 06 00.3 +0.8**
**KURK Kurchatov 55.81 344***c i*P **P** **09 05 59.7 +0.2**
KURK pmax pmax
comp=Z,96nm,1.0s
KURK MLR MLR
comp=Z,1μm,23.0s
**AUPHS Peel High Scho 56.29 126** P **P** **09 06 05.6 +2.2**
**CAN Canberra 56.40 132** P **P** **09 06 06.7 +2.6**
**CAN Canberra 56.40 132** P **P** **09 06 05.5 +1.4**
CAN IAmb IAmb 09 06 07.5
comp=Z,70nm,1.3s
**CAN Canberra 56.40 132** P **P** **09 06 03.9 -0.3**
comp=Z,35nm,1.0s,SNR=3.2
**CAN Canberra 56.40 132** P **P** **09 06 05.5 +1.4**
CAN pmax pmax
comp=Z,70nm,1.3s
**ARMA Armidale 56.66 125** P **P** **09 06 08.9 +2.7**
**ARMA Armidale 56.66 125** P **P** **09 06 08.5 +2.3**
ARMA IAmb IAmb 09 06 09.9
comp=Z,34nm,0.8s
**ARMA Armidale 56.66 125** P **P** **09 06 08.3 +2.1**
**CNB Canberra Magne 56.67 131** P **P** **09 06 08.2 +2.1**
**CNB Canberra Magne 56.67 131** P **P** **09 06 07.3 +1.2**
comp=Z,34nm,2.1s,SNR=3.3
**AUWSH Wavell State H 56.93 121** P **P** **09 06 09.8 +1.8**
**JTM Tenmabayashi 57.32 37** P **P** **09 06 10.3 -0.2**
**ZAA0 Zalesovo Array 57.44 350** P **P** **09 06 11.6 +0.5**
**ZALV Zalesovo Beam 57.44 350** P **P** **09 06 11.6 +0.6**
**ZALV Zalesovo Beam 57.44 350** P **P** **09 06 10.8 -0.2**
comp=Z,114nm,0.8s,baz=181,slow=5.4,SNR=346
ZALV S **S** **09 14 03.2 -3.6**
comp=Z,0.3nm,0.3s,baz=163,slow=10,SNR=4.9
comp=Z,114nm,0.8s
**ZALV Zalesovo Beam 57.44 350** P **P** **09 06 11.6 +0.6**
**HEH HeiHe 57.68 21** *e*P **P** **09 06 12.5 -0.3**
HEH pP **pP** **09 06 15.5 -3.9**
HEH S **S** **09 14 14.3 +4.1**
HEH pmax pmax
comp=Z,71nm,1.3s
HEH pmax pmax
comp=Z,410nm,8.3s
HEH LR LR
comp=Z,4μm,18.1s
HEH LR LR
comp=Z,2μm,17.0s
HEH LR LR
comp=Z,6μm,17.5s
**ATD Arta Tunnel 57.90 285** LR LR 09 27 18.7
comp=Z,31nm,20.0s,baz=106,slow=32
**RAYN Ar Rayn 58.41 299** P **P** **09 06 19.0 +0.5**
RAYN IAmb IAmb 09 06 31.5
comp=Z,67nm,1.8s
**RAYN Ar Rayn 58.41 299** P **P** **09 06 19.0 +0.5**
RAYN pmax pmax
comp=Z,67nm,1.8s
**KLR Kul'dur 58.52 24***c i*P **P** **09 06 18.5 -0.2**
KLR pmax pmax
comp=Z,85nm,1.0s
KLR MLR MLR
comp=Z,2μm,15.0s
**H04N2 CROZET ISLANDS 60.14 216** T T 10 11 55.3
baz=58,slow=75,SNR=8598
**H04N1 CROZET ISLANDS 60.15 216** T T 10 11 55.8
baz=58,slow=75,SNR=8672
**H04N3 CROZET ISLANDS 60.16 216** T T 10 11 54.5
baz=58,slow=75
**ASAJ Asahikawa 60.26 35** P **P** **09 06 30.8 -0.1**
comp=Z,18nm,0.5s,baz=245,slow=9.1,SNR=12
ASAJ LR LR 09 33 06.2
comp=Z,309nm,20.0s,baz=261,slow=37
comp=Z,18nm,0.5s
**ASAJ Asahikawa 60.26 35** P **P** **09 06 30.9 0.0**
ASAJ pmax pmax
comp=Z,52nm,1.0s
**JKA Kamikawa-asahi 60.26 35** P **P** **09 06 30.9 0.0**
JKA IAmb IAmb 09 06 59.5
comp=Z,52nm,1.0s
**BRVK Borovoye 60.41 340** P **P** **09 06 31.2 -0.4**
BRVK IAmb IAmb 09 06 32.5
comp=Z,25nm,0.9s
**BRVK Borovoye 60.41 340***c i*P **P** **09 06 31.3 -0.4**
BRVK pmax pmax
comp=Z,24nm,1.0s
BRVK MLR MLR
comp=Z,745nm,19.0s
**H04S1 CROZET ISLANDS 60.43 216** T T 10 12 13.0
baz=57,slow=76,SNR=1578
**H04S3 CROZET ISLANDS 60.44 216** T T 10 12 12.7
baz=57,slow=76,SNR=2478
**H04S2 CROZET ISLANDS 60.45 216** T T 10 12 16.1
baz=57,slow=76,SNR=1499
**ZEA Zeya 60.55 19** *e*P **P** **09 06 33.1 +0.4**
ZEA *e*S **S** **09 14 51.9 +4.6**
ZEA pmax pmax
comp=E,10.0nm,1.4s
ZEA pmax pmax
comp=N,30nm,1.5s
ZEA pmax pmax
comp=Z,40nm,1.6s
ZEA pmax pmax
comp=E,100nm,2.3s
ZEA pmax pmax
comp=N,100nm,2.2s
ZEA pmax pmax
comp=Z,200nm,2.5s
ZEA smax smax
comp=E,100nm,8.4s
ZEA smax smax
comp=N,200nm,10.6s
ZEA MLR MLR
comp=N,900nm,14.0s
ZEA MLR MLR
comp=Z,1μm,16.0s
**HNR Honiara 60.55 99** LR LR 09 33 58.0
comp=Z,3μm,21.6s,baz=257,slow=37
**BOD Bodaibo 61.15 9** *e*P **P** **09 06 36.9 +0.3**
BOD pmax pmax
comp=Z,58nm,1.7s
**FURI Furi 61.55 281** LR LR 09 30 55.0
comp=Z,502nm,18.2s,baz=104,slow=34
**GRNR Gornyy 61.66 26**⇑*i*P **P** **09 06 39.2 -1.1**
GRNR pmax pmax
comp=Z,20nm,0.9s
GRNR MLR MLR
comp=E,590nm,14.0s
GRNR MLR MLR
comp=N,1μm,15.0s
GRNR MLR MLR
comp=Z,2μm,15.0s
**AB31 Akbulak array 61.70 332***i*P **P** **09 06 40.3 -0.2**
**ABKAR Akbulak array 61.70 332** P **P** **09 06 40.6 +0.1**
**ABKAR Akbulak array 61.70 332** P **P** **09 06 40.2 -0.3**
ABKAR IAmb IAmb 09 06 41.5
comp=Z,64nm,0.9s
**YSS Yuzh-Sakhalins 62.12 32** P **P** **09 06 43.6 +0.2**
**YSS Yuzh-Sakhalins 62.12 32** P **P** **09 06 42.7 -0.7**
**YSS Yuzh-Sakhalins 62.12 32***i*P **P** **09 06 42.7 -0.7**
YSS *e* 09 08 59.7
YSS *e*S **S** **09 15 04.5 -2.9**
YSS *e*PS 09 15 17.6
YSS pmax pmax
comp=Z,400nm,5.4s
YSS pmax pmax
comp=Z,90nm,1.0s
YSS MLR MLR
comp=E,800nm,16.0s
**AKTO Aktyubinsk 63.41 332** LR LR 09 36 50.4
comp=E,439nm,21.0s,baz=178,slow=38
**CASY Casey 64.25 175** P **P** **09 06 58.2 +1.0**
**TYV Tymovskoe 64.58 29** *e*P **P** **09 07 00.6 +1.0**
TYV *e*S **S** **09 15 43.1 +5.1**
TYV pmax pmax
comp=Z,16nm,1.6s
TYV pmax pmax
comp=Z,200nm,5.7s
TYV smax smax
comp=N,200nm,9.3s
TYV smax smax
comp=E,200nm,9.3s
TYV MLR MLR
comp=Z,1μm,15.0s
TYV MLR MLR
comp=E,700nm,12.0s
**MAK Makhachkala 64.88 320** *e*P **P** **09 06 57.7 -4.0**
MAK *e* 09 09 21.7
MAK *e*S **S** **09 15 36.4 -5.6**
MAK *e*SS **SS** **09 19 47.4 -6.6**
MAK pmax pmax
comp=Z,206nm,1.3s
**GNI Garni 65.39 317** P **P** **09 07 05.5 +0.1**
GNI IAmb IAmb 09 07 43.5
comp=Z,34nm,1.0s
**GNI Garni 65.39 317** LR LR 09 36 42.5
comp=Z,271nm,21.9s,baz=112,slow=37
**GNI Garni 65.39 317**⇓*e*P **P** **09 07 05.8 +0.4**
GNI pmax pmax
comp=Z,19nm,1.1s
GNI MLR MLR
comp=Z,251nm,20.0s
**KOUNC Koumac, New Ca 65.67 111** P **P** **09 07 09.0 +1.7**
**KOUNC Koumac, New Ca 65.67 111** P **P** **09 07 07.7 +0.4**
**TRLG Trialeti 66.44 318** P **P** **09 07 12.7 +0.6**
**GURO Guroymak-BITLI 66.63 314** P **P** **09 07 13.6 +0.3**
GURO IAmb IAmb 09 07 26.5
comp=Z,64nm,1.8s
**KARS Kars 66.75 316** P **P** **09 07 13.9 -0.1**
**KARS Kars 66.75 316** P **P** **09 07 13.9 -0.1**
KARS pmax pmax
comp=Z,98nm,1.1s
**SVE Sverdlovsk 66.81 338***de*P **P** **09 07 14.2 +0.3**
SVE *e*S **S** **09 16 06.1 +1.0**
SVE pmax pmax
comp=Z,105nm,1.2s
SVE MLR MLR
comp=Z,680nm,21.0s
**ARU Arti 67.32 337** P **P** **09 07 15.2 -2.0**
ARU IAmb IAmb 09 07 26.9
comp=Z,64nm,1.2s
**ARU Arti 67.32 337** LR LR 09 39 22.6
comp=Z,674nm,20.1s,baz=125,slow=38
**ARU Arti 67.32 337***c i*P **P** **09 07 16.9 -0.3**
ARU 09 07 47.1
ARU 09 09 41.9
ARU PPP PPP 09 11 18.5
ARU S **S** **09 16 13.5 +2.2**
ARU 09 17 11.7
ARU SS **SS** **09 20 38.1 +6.7**
ARU pmax pmax
comp=Z,67nm,1.4s
ARU MLR MLR
comp=Z,677nm,20.0s
**ARU Arti 67.32 337** P **P** **09 07 16.8 -0.4**
comp=Z,44nm,1.3s,comp=Z,598nm
**NOUC Port Laguerre 67.72 113** P **P** **09 07 21.6 +1.2**
**DZM Mont Dzumac 67.85 113** P **P** **09 07 22.9 +1.6**
**DZM Mont Dzumac 67.85 113** *e*P **P** **09 07 21.3 0.0**
comp=Z,49nm,1.2s
**DZM Mont Dzumac 67.85 113** *e*LR LR 09 27 51.3
comp=Z,1μm,23.1s
**DZM Mont Dzumac 67.85 113** P **P** **09 07 20.6 -0.7**
**DZM Mont Dzumac 67.85 113** LR LR 09 39 40.0
comp=Z,607nm,18.9s,baz=281,slow=38
**ONTNC Ouen Toro 67.89 113** P **P** **09 07 20.8 -0.7**
**KBZ Khabaz 68.21 319** P **P** **09 07 23.6 +0.7**
comp=Z,18nm,0.8s,baz=136,slow=4.8,SNR=30
comp=Z,18nm,0.8s
**KBZ Khabaz 68.21 319***c i*P **P** **09 07 23.8 +0.8**
KBZ pmax pmax
comp=Z,23nm,0.9s
**YATNC Mamie plateau, 68.26 113** P **P** **09 07 25.8 +2.0**
**YAK Yakutsk 68.26 15** P **P** **09 07 22.2 -0.7**
**YAK Yakutsk 68.26 15** LR LR 09 41 00.9
comp=Z,1μm,18.8s,baz=212,slow=39
**YAK Yakutsk 68.26 15***c i*P **P** **09 07 21.9 -1.0**
YAK *e**PP **sP** **09 07 31.7 -0.4**
YAK *e* 09 09 53.6
YAK *e*PPP PPP 09 11 28.1
YAK *e*S **S** **09 16 17.7 -4.6**
YAK *e* 09 17 14.9
YAK *e*SSS SSS 09 23 50.5
YAK pmax pmax
comp=Z,72nm,0.9s
YAK pmax pmax
comp=E,22nm,1.3s
YAK pmax pmax
comp=N,25nm,1.2s
YAK pmax pmax
comp=Z,9.0nm,0.9s
YAK pmax pmax
comp=N,20nm,1.8s
YAK smax smax
comp=E,48nm,1.9s
YAK smax smax
comp=N,34nm,1.9s
YAK MLR MLR
comp=Z,2μm,15.0s
YAK MLR MLR
comp=N,1μm,14.0s
YAK MLR MLR
comp=E,695nm,14.0s
**SHA1 Shidzhatmaz 68.37 319**⇓*e*P **P** **09 07 25.6 +1.2**
**KIV Kislovodsk 68.45 320** P **P** **09 07 24.9 +0.3**
KIV IAmb IAmb 09 07 35.1
comp=Z,41nm,1.0s
**KIV Kislovodsk 68.45 320**⇑P **P** **09 07 25.4 +0.7**
**KIV Kislovodsk 68.45 320** *e*P **P** **09 07 25.4 +0.7**
KIV *e*S **S** **09 16 25.3 -0.2**
KIV pmax pmax
comp=Z,35nm,1.1s
**MBAR Mbarara 68.66 270** LR LR 09 32 17.7
comp=Z,404nm,21.5s,baz=62,slow=31
**GOF Gofitskoye 68.71 321***ce*P **P** **09 07 28.3 +2.2**
**BALJ Balqa 69.33 306** P **P** **09 07 30.4 +0.2**
BALJ IAmb IAmb 09 07 41.9
comp=Z,101nm,1.8s
**GAZ Gaziantep 69.67 311** IAmb IAmb 09 07 42.9
comp=Z,23nm,0.9s
**BELG Belogornoye 69.75 329** LR LR 09 42 32.9
comp=Z,529nm,20.4s,baz=122,slow=40
**BELG Belogornoye 69.75 329***c i*P **P** **09 07 31.9 -0.5**
BELG pmax pmax
comp=Z,9.0nm,0.9s
BELG MLR MLR
comp=Z,97nm,20.0s
**MAW Mawson 69.77 194** P **P** **09 07 35.1 +2.9**
comp=Z,3.1nm,0.6s,baz=90,slow=1.0,SNR=4.1
MAW LR LR 09 33 30.2
comp=Z,829nm,20.5s,baz=36,slow=32
comp=Z,3.1nm,0.6s
**MMAI Mount Meron Ar 69.79 306** P **P** **09 07 35.2 +2.0**
comp=Z,7.9nm,0.8s,baz=91,slow=7.2,SNR=7.2
MMAI LR LR 09 38 54.3
comp=Z,1μm,18.9s,baz=56,slow=36
comp=Z,7.9nm,0.8s
**LABN Labinsk 70.02 320** *e*P **P** **09 07 34.2 0.0**
LABN *e*S **S** **09 16 43.5 -0.2**
LABN pmax pmax
comp=Z,32nm,0.7s
**SOC Sochi 70.24 318** *e*P **P** **09 07 33.3 -2.3**
SOC *e* 09 10 08.3
SOC *e*PPP PPP 09 11 51.7
SOC *e*S **S** **09 16 45.7 -0.7**
SOC *e*SS **SS** **09 21 17.5 +0.5**
**ERBR Yeremizino-Bor 70.62 320** *e*P **P** **09 07 37.4 -0.5**
ERBR pmax pmax
comp=Z,69nm,1.2s
**BNN Bunyan 71.25 312** IAmb IAmb 09 07 43.6
comp=Z,32nm,1.0s
**LSZ Lusaka 71.26 255** P **P** **09 07 42.5 0.0**
**LSZ Lusaka 71.26 255** P **P** **09 07 42.5 0.0**
LSZ pmax pmax
comp=Z,24nm,1.2s
**MATP Matopo 71.29 249** LR LR 09 34 39.2
comp=Z,395nm,20.4s,baz=60,slow=32
**SKR Severo-Kuril's 71.52 34**⇓*e*P **P** **09 07 41.2 -2.0**
**CSS Mathiatis 71.99 308** P **P** **09 07 46.4 -0.1**
**ANN Anapa 72.23 319** *e*P **P** **09 07 46.3 -1.3**
ANN *e*S **S** **09 17 08.0 -1.4**
ANN pmax pmax
comp=Z,21nm,0.9s
**VRH Novokhopyorsk 72.31 326** *e*P **P** **09 07 47.8 -0.1**
VRH pmax pmax
comp=Z,73nm,0.8s
**KIRV Kirov 72.47 335** LR LR 09 44 08.8
comp=Z,648nm,19.4s,baz=133,slow=40
**KIRV Kirov 72.47 335***c i*P **P** **09 07 48.5 -0.2**
**BR104 Keskin Array S 73.14 313** P **P** **09 07 53.6 +0.2**
comp=Z,15nm,1.0s,comp=Z,107nm
**BR131 Keskin Array S 73.15 313** P **P** **09 07 53.3 -0.1**
**BR131 Keskin Array S 73.15 313***c i*P **P** **09 07 53.0 -0.4**
**BRTR Keskin Array B 73.15 313** P **P** **09 07 53.5 +0.1**
**BRTR Keskin Array B 73.15 313** P **P** **09 07 52.9 -0.6**
comp=Z,5.4nm,0.7s,baz=134,slow=6.6,SNR=35
BRTR LR LR 09 42 35.0
comp=Z,353nm,19.8s,baz=118,slow=38
comp=Z,5.4nm,0.7s
**BRTR Keskin Array B 73.15 313** P **P** **09 07 53.5 +0.1**
**BR105 Keskin Array S 73.16 313** P **P** **09 07 53.7 +0.2**
comp=Z,10nm,0.8s,comp=Z,92nm
**BR106 Keskin Array S 73.16 313** P **P** **09 07 53.7 +0.2**
comp=Z,13nm,0.9s,comp=Z,90nm
**VORD Divnogorie 73.57 325** *e*P **P** **09 07 53.8 -1.7**
VORD *e**SP **pP** **09 08 01.5 -0.3**
VORD pmax pmax
comp=Z,30nm,1.0s
**BZK Bozkurt 73.58 315**⇑P **P** **09 07 57.2 +1.5**
**JCZ Jackson Bay 73.60 135** P **P** **09 07 58.2 +2.2**
**MA2 Magadan 73.62 24** P **P** **09 07 56.1 +0.5**
**MA2 Magadan 73.62 24** P **P** **09 07 56.2 +0.6**
MA2 IAmb IAmb 09 08 00.6
comp=Z,43nm,0.9s
**MA2 Magadan 73.62 24** P **P** **09 07 54.6 -1.0**
comp=Z,14nm,0.7s,baz=245,slow=4.1,SNR=12
MA2 LR LR 09 43 32.8
comp=Z,789nm,18.2s,baz=238,slow=38
comp=Z,14nm,0.7s
**MA2 Magadan 73.62 24***ce*P **P** **09 07 55.8 +0.2**
MA2 pmax pmax
comp=Z,85nm,1.7s
**MA2 Magadan 73.62 24** P **P** **09 07 56.0 +0.5**
comp=Z,61nm,1.5s,comp=Z,870nm
**VSR Storozhevoye 73.75 325** *e*P **P** **09 07 54.0 -2.5**
VSR *e**SP **pP** **09 08 01.6 -1.3**
VSR pmax pmax
comp=Z,50nm,0.9s
**ANTO Ankara 73.81 313** P **P** **09 07 56.9 -0.3**
**ANTO Ankara 73.81 313** P **P** **09 07 56.9 -0.3**
ANTO pmax pmax
comp=Z,17nm,0.8s
**BR231 Keskin MP Arra 73.81 313** P **P** **09 07 57.2 -0.1**
**VORR Voronezh 73.93 326** *e*P **P** **09 07 57.4 -0.1**
VORR pmax pmax
comp=Z,58nm,0.5s
**PET Petropavlovsk 74.00 33** P **P** **09 07 57.8 -0.1**
**PET Petropavlovsk 74.00 33** P **P** **09 07 57.9 -0.1**
PET IAmb IAmb 09 07 58.8
comp=Z,72nm,1.1s
**PET Petropavlovsk 74.00 33** *e*P **P** **09 07 57.7 -0.1**
PET *e* 09 10 43.7
PET *e*S **S** **09 17 27.9 -1.2**
PET *e*PS **PnS** **09 18 08.8 +5.0**
PET *e*SS **SS** **09 22 15.5 +1.5**
PET pmax pmax
comp=Z,68nm,1.0s
PET pmax pmax
comp=Z,200nm,18.6s
PET pmax pmax
comp=Z,100nm,17.4s
**LBTB Lobatse 74.33 245** P **P** **09 08 00.7 +0.1**
**LBTB Lobatse 74.33 245** LR LR 09 36 12.5
comp=Z,980nm,19.1s,baz=81,slow=32
**LBTB Lobatse 74.33 245** P **P** **09 08 00.7 +0.1**
LBTB pmax pmax
comp=Z,23nm,1.2s
**LPSR Galich'ya Gora 74.48 327** *e*P **P** **09 07 59.4 -1.3**
LPSR *e**SP **pP** **09 08 06.7 -0.4**
LPSR pmax pmax
comp=Z,50nm,0.9s
**SIM Simferopol' 74.49 318** *e*P **P** **09 08 01.0 0.0**
SIM pmax pmax
comp=Z,35nm,1.1s
**BOSA Boshof 74.95 241** P **P** **09 08 04.1 -0.1**
BOSA IAmb IAmb 09 08 15.0
comp=Z,77nm,1.9s
**BOSA Boshof 74.95 241** P **P** **09 08 05.7 +1.5**
comp=Z,5.0nm,0.7s,baz=82,slow=4.4,SNR=12
BOSA LR LR 09 36 33.7
comp=Z,632nm,18.9s,baz=72,slow=32
comp=Z,5.0nm,0.7s
**RPZ Rata Peaks 75.13 135** P **P** **09 08 04.7 -0.1**
RPZ IAmb IAmb 09 08 18.7
comp=Z,87nm,1.6s
**RPZ Rata Peaks 75.13 135** LR LR 09 40 43.7
comp=Z,911nm,21.8s,baz=286,slow=35
**ELL Elmali 75.14 309** P **P** **09 08 06.3 +1.2**
ELL pmax pmax
comp=Z,72nm,1.6s
**INZ Inchbonnie 75.22 134** P **P** **09 08 05.9 +0.6**
**OXZ Oxford 75.76 134** IAmb IAmb 09 08 25.0
comp=Z,25nm,0.7s
**SEY Seymchan 76.20 22***c i*P **P** **09 08 10.6 +0.2**
SEY pmax pmax
comp=Z,53nm,1.3s
**TIXI Tiksi 76.33 9** P **P** **09 08 10.4 -0.5**
TIXI IAmb IAmb 09 08 21.0
comp=Z,28nm,0.8s
**TIXI Tiksi 76.33 9***c i*P **P** **09 08 09.9 -1.1**
TIXI pmax pmax
comp=Z,27nm,0.7s
**MOS Moscow 76.52 329** *e*P **P** **09 08 09.8 -2.6**
MOS *e* 09 08 20.0
MOS *e*S **S** **09 17 51.9 -5.1**
MOS pmax pmax
comp=Z,200nm,1.6s
MOS pmax pmax
comp=Z,99nm,1.4s
**OBN Obninsk 76.81 328** P **P** **09 08 14.0 0.0**
OBN IAmb IAmb 09 08 24.3
comp=Z,74nm,1.1s
**OBN Obninsk 76.81 328**⇓P **P** **09 08 13.7 -0.2**
**OBN Obninsk 76.81 328***c i*P **P** **09 08 14.4 +0.4**
OBN *i* 09 08 21.0
OBN *i* 09 11 09.0
OBN pmax pmax
comp=Z,55nm,1.1s
**KARP Karpathos 77.03 307** P **P** **09 08 15.7 -0.1**
KARP IAmb IAmb 09 08 42.3
comp=Z,65nm,1.0s
**SNZO South Karori 77.39 132** P **P** **09 08 17.9 +0.3**

**PKVZ Pokaka 77.62 130** P **P** **09 08 21.0 +2.0**
**FWVZ Far West T-bar 77.77 130** P **P** **09 08 22.0 +1.9**
**TRVZ Turoa 77.77 130** P **P** **09 08 21.6 +1.5**
**WNVZ Wahianoa 77.81 130** P **P** **09 08 22.0 +1.7**
WNVZ PcP **PcP** **09 08 29.7 -0.5**
**TPGR Topolog 78.32 317** ⇑P **P** **09 08 23.3 +0.5**
**MSVF Nonsavu 78.46 108** P **P** **09 08 25.8 +1.7**
**MSVF Nonsavu 78.46 108** P **P** **09 08 22.4 -1.7**
MSVF IAmb IAmb 09 08 26.7
comp=Z,40nm,0.9s
**MSVF Nonsavu 78.46 108***ce*P **P** **09 08 24.8 +0.7**
MSVF pmax pmax
comp=Z,43nm,1.1s
MSVF MLR MLR
comp=Z,480nm,19.0s
**BKZ Black Stump Fm 78.49 129** P **P** **09 08 25.1 +1.2**
**BKZ Black Stump Fm 78.49 129** P **P** **09 08 24.9 +1.1**
BKZ IAmb IAmb 09 08 25.6
comp=Z,42nm,0.7s
**BKZ Black Stump Fm 78.49 129** P **P** **09 08 24.8 +1.0**
BKZ PcP **sP** **09 08 32.7 -0.1**
**TLBR Topalu 78.50 316** ⇑P **P** **09 08 24.8 +1.1**
**CFR Carcaliu 78.60 317** ⇑P **P** **09 08 24.3 0.0**
**CFR Carcaliu 78.60 317** P **P** **09 08 24.2 0.0**
**MILM Milestii Mici 78.61 319** ⇑*i*P **P** **09 08 24.0 -0.2**
comp=Z,110nm,1.6s
MILM *e*S **S** **09 18 23.0 +2.9**
MILM *e*L L 09 49 14.0
MILM LRM MLR 09 51 39.0
comp=Z,300nm,21.0s
**MILM Milestii Mici 78.61 319** ⇑P **P** **09 08 24.7 +0.5**
**MILM Milestii Mici 78.61 319** P **P** **09 08 24.7 +0.5**
**HARR Harsova 78.61 316** ⇑P **P** **09 08 25.2 +0.8**
**HARR Harsova 78.61 316** P **P** **09 08 25.1 +0.8**
**KIS Kishinev 78.63 319** *e*P **P** **09 08 24.0 -0.4**
comp=Z,40nm,1.4s
**KIS Kishinev 78.63 319** *e*P **P** **09 08 24.0 -0.4**
KIS pmax pmax
comp=Z,40nm,1.4s
**MTHZ Maungataniwha 78.72 129** P **P** **09 08 26.4 +1.3**
MTHZ PcP **sP** **09 08 34.5 +0.4**
**RTZ Ruatahuna 78.81 129** P **P** **09 08 26.3 +0.6**
**URZ Urewera 78.87 128** LR LR 09 43 27.0
comp=Z,694nm,21.8s,baz=18,slow=36
**URZ Urewera 78.87 128** P **P** **09 08 26.7 +0.8**
**SUR Sutherland 79.10 238** LR LR 09 37 41.2
comp=Z,966nm,18.2s,baz=108,slow=31
**MWZ Matawai 79.20 128** P **P** **09 08 28.1 +0.3**
**SORM Soroca 79.25 320** ⇑P **P** **09 08 28.3 +0.5**
**SORM Soroca 79.25 320** P **P** **09 08 28.2 +0.5**
**SORM Soroca 79.25 320** P **P** **09 08 28.1 +0.4**
comp=Z,56nm,1.1s,comp=Z,628nm
**HAZ Te Kaha 79.35 128** P **P** **09 08 29.1 +0.6**
HAZ PcP **PcP** **09 08 36.3 -0.3**
**AK09 Malin Array Si 79.36 322** P **P** **09 08 28.5 +0.2**
**AK10 Malin Array Si 79.38 322** P **P** **09 08 28.6 +0.2**
**AK08 Malin Array Si 79.39 322** P **P** **09 08 28.5 +0.1**
**AK07 Malin Array Si 79.39 322** P **P** **09 08 28.8 +0.3**
**AK05 Malin Array Si 79.42 322** P **P** **09 08 28.9 +0.3**
**AKASG Malin Array Be 79.43 323** P **P** **09 08 28.4 -0.2**
**AKASG Malin Array Be 79.43 323** P **P** **09 08 28.1 -0.5**
comp=Z,2.3nm,0.7s,baz=88,slow=4.8,SNR=20
AKASG PP **PP** **09 11 26.5 -2.5**
comp=Z,0.4nm,0.5s,baz=104,slow=6.1,SNR=8.1
AKASG S **S** **09 18 24.7 -3.9**
comp=Z,0.2nm,0.2s,baz=103,slow=12,SNR=1.4
AKASG LR LR 09 48 35.4
comp=Z,223nm,20.1s,baz=96,slow=39
comp=Z,2.3nm,0.7s
**AKASG Malin Array Be 79.43 323** P **P** **09 08 28.4 -0.2**
AKASG pmax pmax
comp=Z,15nm,1.3s
**AKBB Malin Array Si 79.43 323***ce*P **P** **09 08 28.2 -0.4**
**AKBB Malin Array Si 79.43 323** P **P** **09 08 28.6 0.0**
**KIEV Kiev 79.43 323** P **P** **09 08 28.9 +0.2**
**KIEV Kiev 79.43 323** ⇑P **P** **09 08 28.7 0.0**
**KIEV Kiev 79.43 323** P **P** **09 08 28.9 +0.2**
KIEV pmax pmax
comp=Z,11nm,0.8s
**KIEV Kiev 79.43 323** P **P** **09 08 28.7 0.0**
comp=Z,65nm,0.8s
**AK03 Malin Array Si 79.44 323** P **P** **09 08 28.5 -0.2**
**AK11 Malin Array Si 79.45 322** P **P** **09 08 28.8 0.0**
**AK04 Malin Array Si 79.47 323** P **P** **09 08 28.7 -0.2**
**AK14 Malin Array Si 79.48 322** P **P** **09 08 29.2 +0.3**
**AK18 Malin Array Si 79.53 323** P **P** **09 08 29.1 -0.1**
**AK22 Malin Array Si 79.54 323** P **P** **09 08 29.3 +0.1**
**TWGZ Tauwhareparae 79.55 128** P **P** **09 08 30.9 +1.2**
**ELND Elena 79.63 314** ⇑P **P** **09 08 30.8 +0.8**
**ISR Istrita 79.67 317** ⇑P **P** **09 08 31.6 +1.4**
**ISR Istrita 79.67 317** P **P** **09 08 31.6 +1.4**
**VRI Vrincioaia 79.73 317** ⇑P **P** **09 08 32.1 +1.6**
**VRI Vrincioaia 79.73 317** P **P** **09 08 32.0 +1.6**
**VRI Vrincioaia 79.73 317** P **P** **09 08 32.1 +1.6**
comp=Z,37nm,0.9s,comp=Z,323nm
**PLOR5 Plostina Array 79.77 317** P **P** **09 08 32.7 +2.0**
comp=Z,47nm,1.8s,comp=Z,645nm
**PLOR Plostina 79.78 317** ⇑P **P** **09 08 31.6 +0.9**
**PLOR Plostina 79.78 317** P **P** **09 08 31.6 +0.9**
**PLOR3 Plostina Array 79.78 317** P **P** **09 08 32.0 +1.2**
comp=Z,31nm,1.3s,comp=Z,403nm
**ADZR Andozero 79.86 337** *e*P **P** **09 08 29.1 -1.6**
ADZR pmax pmax
comp=Z,54nm,1.1s
**NEHR Nehoiu 79.92 317** ⇑P **P** **09 08 32.6 +1.1**
**TESR Tescani 79.94 318** ⇑P **P** **09 08 32.9 +1.3**
**TESR Tescani 79.94 318** P **P** **09 08 32.3 +0.7**
comp=Z,85nm,1.3s,comp=Z,946nm
**COVR Voineasa-Covas 80.08 317** ⇑P **P** **09 08 32.8 +0.4**
**LUBAR Lubar, Ukraine 80.11 321** P **P** **09 08 32.7 +0.3**
**MLR Muntele Rosu 80.17 317** IAmb IAmb 09 08 43.9
comp=Z,53nm,1.0s
**MLR Muntele Rosu 80.17 317** LR LR 09 47 15.4
comp=Z,347nm,21.0s,baz=78,slow=38
**MLR Muntele Rosu 80.17 317** ⇑P **P** **09 08 34.3 +1.3**
**MLR Muntele Rosu 80.17 317** P **P** **09 08 34.3 +1.3**
**MLR Muntele Rosu 80.17 317** P **P** **09 08 33.9 +0.9**
comp=Z,54nm,1.1s,comp=Z,602nm
**TURR Turia 80.26 317** ⇑P **P** **09 08 34.1 +0.8**
**PRAR RASCA 80.43 319** ⇑P **P** **09 08 35.2 +1.0**
**KMPD K-Podol'skiy 80.58 320** P **pP** **09 08 35.0 -6.3**
KMPD P **P** **09 08 34.1 -0.8**
**DOPR Dopca 80.66 317** ⇑P **P** **09 08 36.0 +0.5**
**VOIR 80.78 317** ⇑P **P** **09 08 36.5 +0.3**
**VOIR 80.78 317** P **P** **09 08 36.4 +0.3**
**ARR Arges 81.05 316** ⇑P **P** **09 08 38.3 +0.7**
**BURAR Bucovina Array 81.16 319** P **P** **09 08 39.2 +1.0**
BURAR IAmb IAmb 09 08 49.8
comp=Z,27nm,0.8s
**BURAR Bucovina Array 81.16 319** ⇓P **P** **09 08 39.7 +1.5**
**BURAR Bucovina Array 81.16 319** P **P** **09 08 39.2 +1.0**
**BUR08 Bucovina Ar. S 81.17 319** IAmb IAmb 09 08 49.7
comp=Z,33nm,0.9s
**MNK Minsk 81.31 326** *i* P **P** **09 08 39.1 +0.4**
comp=E,7.0nm,0.9s
MNK *i* P **P** **09 08 39.1 +0.4**
comp=N,11nm,0.9s
MNK *i* P **P** **09 08 39.1 +0.4**
comp=Z,23nm,0.9s,baz=106
MNK *i* PcP **pwP** **09 08 47.1 0.0**
MNK *i* PP PP 09 11 13.6 -31
MNK *i* PPP PPP 09 13 19.0
MNK *i* S **S** **09 18 46.2 -2.0**
MNK *i* SS SS 09 24 39.0 +35
MNK *i* SSS SSS 09 27 34.4
MNK *i* LQ LQ 09 39 26.2
MNK *i* LR LR 09 44 21.9
MNK *i* LRM MLR 09 48 30.7
comp=N,332nm,18.6s
MNK *i* LRM MLR 09 49 38.4
comp=E,144nm,18.2s
MNK *i* LRM MLR 09 50 17.7
comp=Z,224nm,17.6s
**MNK Minsk 81.31 326** *i* P **P** **09 08 39.1 +0.4**
MNK *i* 09 08 47.1
MNK *i* S **S** **09 18 46.2 -2.0**
MNK *i* SSS SSS 09 27 34.4
MNK pmax pmax
comp=E,7.0nm,0.9s
MNK pmax pmax
comp=Z,23nm,0.9s
MNK pmax pmax
comp=N,11nm,0.9s
MNK MLR MLR
comp=N,332nm,19.0s
**ITM Ithomi 81.48 308** IAmb IAmb 09 08 49.4
comp=Z,79nm,1.8s
**TSUM Tsumeb 81.50 251** LR LR 09 41 15.8
comp=Z,781nm,19.0s,baz=130,slow=33
**RNPP5 Staryi Chortor 81.60 322** P **P** **09 08 40.4 +0.1**
**ARCR ARCALIA 81.61 318** ⇑P **P** **09 08 41.1 +0.6**
**VNDA Vanda 81.90 169** P **P** **09 08 43.2 +1.8**
**VNDA Vanda 81.90 169** P **P** **09 08 43.0 +1.6**
comp=Z,1.1nm,0.8s,baz=305,slow=5.9,SNR=11
VNDA LR LR 09 39 55.6
comp=Z,429nm,21.1s,baz=317,slow=32
**VALR Valaam 81.95 333***ce*P **P** **09 08 42.1 +0.2**
VALR pmax pmax
comp=Z,93nm,1.4s
VALR MLR MLR
comp=Z,380nm,18.0s
**BMR Baia Mare 82.31 319** ⇑P **P** **09 08 45.3 +1.2**
**BMR Baia Mare 82.31 319** P **P** **09 08 45.3 +1.2**
**JOF Joensuu 82.31 335** *e*P **P** **09 08 45.0 +1.2**
**GZR Gura Zlata 82.33 316** ⇓P **P** **09 08 45.0 +0.6**
**GZR Gura Zlata 82.33 316** P **P** **09 08 44.9 +0.6**
**DEV Deva 82.34 317** ⇑P **P** **09 08 46.1 +1.8**
**DEV Deva 82.34 317** P **P** **09 08 46.1 +1.8**
**MARR Marisel-Cluj 82.35 318** ⇑P **P** **09 08 45.8 +1.2**
**MORS Morshin 82.36 320** P **P** **09 08 45.6 +1.3**
**MORS Morshin 82.36 320** P **P** **09 08 45.6 +1.3**
**LVV L'vov 82.42 321** *e*P **P** **09 08 45.2 +0.5**
LVV *e*S **S** **09 18 57.2 -2.7**
LVV *e*SS **SS** **09 24 20.0 -1.0**
LVV pmax pmax
comp=Z,70nm,1.4s
**HERR Herculane 82.48 316** ⇑P **P** **09 08 46.3 +1.2**
**FNA Florina 82.50 311** P **P** **09 08 44.8 -0.6**
**FNA Florina 82.50 311** P **P** **09 08 44.8 -0.6**
FNA pmax pmax
comp=Z,12nm,1.1s
**DRGR 82.65 318** ⇑P **P** **09 08 46.9 +0.8**
**DRGR 82.65 318** P **P** **09 08 46.8 +0.8**
**BOVS Bovan 82.76 314** ⇑P **P** **09 08 46.6 0.0**
**SURR Surduc 82.85 317** ⇑P **P** **09 08 48.0 +1.0**
**LVZ Lovozero 82.94 340** P **P** **09 08 47.3 +0.3**
LVZ IAmb IAmb 09 08 48.3
comp=Z,25nm,0.7s
**LVZ Lovozero 82.94 340** *e*P **P** **09 08 47.3 +0.3**
LVZ pmax pmax
comp=Z,19nm,0.8s
**MDVR Moldovita 82.96 315** ⇑P **P** **09 08 47.7 0.0**
**SBA Scott Base 83.00 169** P **P** **09 08 47.6 +0.5**
**SBA Scott Base 83.00 169** P **P** **09 08 47.6 +0.5**
SBA pmax pmax
comp=Z,37nm,1.6s
**VSU Vasula 83.04 330***ce*P **P** **09 08 48.4 +0.8**
VSU pmax pmax
comp=Z,35nm,1.7s
**BZS Buzias 83.17 316** ⇑P **P** **09 08 49.6 +0.9**
**BZS Buzias 83.17 316** P **P** **09 08 49.6 +0.9**
**KWP Kalwaria Pacla 83.22 320** *e*P **P** **09 08 50.0 +1.2**
**SIRR Siria 83.26 317** ⇑P **P** **09 08 50.0 +0.9**
**KOLS Kolonicke sedl 83.36 320** *e*P **P** **09 08 51.8 +2.2**
KOLS *e* 09 09 00.3
KOLS pmax pmax
comp=Z,41nm,0.9s
**KOLS Kolonicke sedl 83.36 320** *e*P **P** **09 08 51.8 +2.2**
**ELIB Princess Elisa 83.44 198** *d*P **P** **09 08 52.9 +3.2**
comp=Z,16nm,0.8s
**KEK Kerkira 83.53 310** IAmb IAmb 09 09 00.9
comp=Z,37nm,1.0s
**ARBE Arbavere 83.68 330** *e*P **P** **09 08 52.2 +1.3**
**BILL Bilibino 83.72 20**⇑*i*P **P** **09 08 47.9 -3.1**
BILL *i* 09 08 53.9
BILL pmax pmax
comp=Z,22nm,1.7s
**PABE Paberze 83.75 326** *e*P **P** **09 08 52.4 +1.1**
**SUW Suwalki 83.86 325** *e*P **P** **09 08 53.1 +1.1**
**SUW Suwalki 83.86 325** P **P** **09 08 51.9 -0.1**
**SUW Suwalki 83.86 325** *e*P **P** **09 08 53.3 +1.4**
**SUW Suwalki 83.86 325** P **P** **09 08 51.9 -0.1**
SUW pmax pmax
comp=Z,93nm,1.1s
**CRVS Cervenica-Dubn 83.88 320** *e*P **P** **09 08 54.8 +2.5**
CRVS *e* 09 09 03.1
CRVS pmax pmax
comp=Z,33nm,1.2s
**CRVS Cervenica-Dubn 83.88 320** *e*P **P** **09 08 54.8 +2.5**
**FIA1 FINESS Array S 84.18 332** P **P** **09 08 54.1 +0.7**
**FINES FINESS Array B 84.18 332** P **P** **09 08 54.1 +0.7**
**FINES FINESS Array B 84.18 332** P **P** **09 08 53.4 0.0**
comp=Z,13nm,0.7s,baz=104,slow=5.2,SNR=53
comp=Z,13nm,0.7s
**MSF Maaselka 84.25 337** P **P** **09 08 55.2 +1.4**
MSF pmax pmax
comp=Z,75nm,1.2s
**PDG Podgorica 84.33 313** ⇓P **P** **09 08 55.1 +0.5**
**FRGS Fruska Gora 84.35 316** ⇑P **P** **09 08 54.8 0.0**
**MTSE Matsula 84.58 329** *e*P **P** **09 08 56.7 +1.2**
**MEF Metsahovi 84.65 331** *e*P **P** **09 08 57.4 +1.5**
**NIE Niedzica 84.72 320** *e*P **P** **09 08 59.1 +2.6**
**NIE Niedzica 84.72 320** P **P** **09 08 58.3 +1.8**
NIE pmax pmax
comp=Z,7.0nm,1.5s
**NIE Niedzica 84.72 320** P **P** **09 08 58.3 +1.8**
comp=Z,7.0nm,1.5s
**PSZ Piszkesteto 84.74 318** ⇑P **P** **09 08 57.8 +1.0**
**PSZ Piszkesteto 84.74 318** P **P** **09 08 57.7 +1.0**
**BEL Belsk 84.84 322** *e*P P 09 09 06.1 +9.1
**KEF Keuruu 84.92 333** *e*P **P** **09 08 58.3 +1.1**
**PBUR Paburge 84.98 327** *e*P **P** **09 08 58.7 +1.1**
**OJC Ojcow 85.18 321** *e*P **P** **09 09 00.2 +1.5**
**OJC Ojcow 85.18 321** IAmb IAmb 09 09 09.0
comp=Z,32nm,1.3s
**OJC Ojcow 85.18 321** P **P** **09 09 00.2 +1.5**
OJC pmax pmax
comp=Z,23nm,1.3s
**LANS Liptovska Anna 85.22 320** *e*P **P** **09 09 01.0 +2.0**
LANS pmax pmax
comp=Z,3.0nm,1.0s
**LANS Liptovska Anna 85.22 320** *e*P **P** **09 09 01.0 +2.0**
**MORH Mrgy, Hungar 85.32 317** ⇑P **P** **09 09 00.4 +0.9**
**MORH Mrgy, Hungar 85.32 317** P **P** **09 09 00.2 +0.7**
comp=Z,14nm,1.1s
**VYHS Vyhne 85.53 319** *e*P **P** **09 09 01.6 +1.0**
VYHS *e* 09 09 08.9
VYHS pmax pmax
comp=Z,17nm,1.4s
**VYHS Vyhne 85.53 319** *e*P **P** **09 09 01.6 +1.0**
**SRO Srobarova 85.77 318** *e*P **P** **09 09 03.7 +1.9**
SRO *e* 09 09 11.4
SRO pmax pmax
comp=Z,20nm,1.2s
**SRO Srobarova 85.77 318** *e*P **P** **09 09 03.7 +1.9**
**TIP Timpagrande 85.79 309** ⇑P **P** **09 09 03.2 +1.1**
**MATE Matera 86.00 311** ⇑P **P** **09 09 03.6 +0.5**
**VAF Ylistaro 86.12 334** *e*P **P** **09 09 04.8 +1.7**
**VAF Ylistaro 86.12 334** P **P** **09 09 04.8 +1.7**
VAF pmax pmax
comp=Z,58nm,1.3s
**OKC Ostrava-Krasne 86.17 320** P **P** **09 09 05.1 +1.4**
OKC pmax pmax
comp=Z,19nm,1.7s
**KEV Kevo 86.19 341** P **P** **09 09 03.9 +0.6**
KEV IAmb IAmb 09 09 05.3
comp=Z,26nm,0.8s
**KEV Kevo 86.19 341** P **P** **09 09 03.9 +0.6**
KEV pmax pmax
comp=Z,26nm,0.8s
**MPLH Magyarpolny 86.20 317** P **P** **09 09 05.2 +1.3**
comp=Z,97nm,1.5s,comp=Z,997nm
**JAVC Velka Javorina 86.34 319** *e*P **P** **09 09 06.5 +1.8**
**CEL Celeste 86.37 308** IAmb IAmb 09 09 08.0
comp=Z,24nm,1.0s
**CEL Celeste 86.37 308** P **P** **09 09 07.3 +2.3**
**MODS Modra-Piesok 86.54 319** *e*P **P** **09 09 06.9 +1.3**
MODS *e* 09 09 14.2
MODS pmax pmax
comp=Z,38nm,1.2s
**MODS Modra-Piesok 86.54 319** *e*P **P** **09 09 06.9 +1.3**
**MORC Moravsky Berou 86.55 320** *e*P **P** **09 09 06.6 +0.9**
**MORC Moravsky Berou 86.55 320** ⇑P **P** **09 09 05.9 +0.3**
**MORC Moravsky Berou 86.55 320** P **P** **09 09 05.9 +0.3**
**ZST Bratislava 86.63 318** *e*P **P** **09 09 07.4 +1.4**
ZST *e* 09 09 15.3
**ZST Bratislava 86.63 318** *e*P **P** **09 09 07.4 +1.4**
**ARCES ARCESS Array B 86.63 340** P **P** **09 09 06.6 +1.1**
ARCES IAmb IAmb 09 09 07.9
comp=Z,34nm,0.9s
**ARCES ARCESS Array B 86.63 340** P **P** **09 09 06.2 +0.7**
comp=Z,22nm,0.8s,baz=95,slow=6.1,SNR=35
comp=Z,22nm,0.8s
**AAL Aland 86.79 331** *e*P **P** **09 09 07.0 +0.6**
**NVL N'lazarevskaya 86.96 199** *e*P P 09 09 22.2 +15
NVL *e*S **S** **09 19 43.0 -1.3**
NVL pmax pmax
comp=Z,5.0nm,0.9s
NVL MLR MLR
comp=Z,323nm,16.0s
**KOGS Kog 86.99 317** *i* P **P** **09 09 08.8 +1.0**
**KRLC Kraliky 87.08 320** *e*P **P** **09 09 09.6 +1.4**
KRLC AMS AMS 09 57 40.0
comp=Z,300nm,19.3s
**KRLC Kraliky 87.08 320** *e*P **P** **09 09 09.6 +1.4**
KRLC MLR MLR
comp=Z,300nm,19.3s
**VRAC Vranov 87.10 319** *e*P **P** **09 09 09.3 +1.0**
**VRAC Vranov 87.10 319** P **P** **09 09 09.9 +1.6**
VRAC pmax pmax
comp=Z,4.0nm,1.5s
**RONA Rosalia, Austr 87.11 318** *e*P **P** **09 09 08.7 +0.3**
comp=Z,6.8nm,1.5s
**KRUC Moravsky 87.20 319** *e*P **P** **09 09 09.5 +0.7**
**KRUC Moravsky 87.20 319** P **P** **09 09 09.8 +1.0**
KRUC pmax pmax
comp=Z,7.0nm,1.7s
**DPC Dobruska-Polom 87.40 320** *e*P **P** **09 09 11.4 +1.6**
DPC *ep*P **sP** **09 09 19.8 +1.0**
DPC *e*S **S** **09 19 48.6 -0.9**
DPC AMS AMS 09 53 10.0
comp=Z,300nm,21.6s
**DPC Dobruska-Polom 87.40 320** *e*P **P** **09 09 11.4 +1.6**
DPC *e**PP **sP** **09 09 19.8 +1.0**
DPC *e* 09 19 48.6
DPC MLR MLR
comp=Z,300nm,21.6s
**CONA Conrad Observa 87.42 318** *i* P **P** **09 09 10.5 +0.5**
comp=Z,3.5nm,1.0s
**KSP Ksiaz 87.48 321** *e*P **P** **09 09 12.1 +2.0**
**KSP Ksiaz 87.48 321** P **P** **09 09 11.5 +1.4**
KSP pmax pmax
comp=Z,17nm,1.8s
**OSTC Ostas 87.50 321** *e*S **S** **09 19 50.0 -0.3**
**ARSA Arzberg 87.58 317** *e*P **P** **09 09 11.6 +0.9**
comp=Z,8.5nm,1.0s,SNR=10
**QSPA South Pole Qui 87.58 180** P **P** **09 09 11.9 +1.5**
comp=Z,1.8nm,0.5s,baz=276,slow=0.9,SNR=31
comp=Z,1.8nm,0.5s
**CHVC Chvalec 87.60 321** *e*P **P** **09 09 12.5 +1.8**
CHVC *ep*P **sP** **09 09 20.6 +0.9**
**CHVC Chvalec 87.60 321** *e*P **P** **09 09 12.5 +1.8**
CHVC *e**PP **sP** **09 09 20.6 +0.9**
**UPC Upice 87.62 321** AMS AMS 09 59 30.0
comp=Z,400nm,17.7s
**TREC Trest 87.82 319** AMS AMS 09 55 00.0
comp=Z,300nm,19.5s
**SOKA Soboth 87.85 317** *i* PcP **P** **09 09 13.0 +0.9**
comp=Z,14nm,1.1s,SNR=12
**UPP Uppsala 87.92 330** *e*P **P** **09 09 12.9 +1.0**
**LJU Ljubljana 88.14 316** *i* P **P** **09 09 14.7 +1.3**
LJU *i* pP **sP** **09 09 22.2 -0.2**
LJU *i* S **S** **09 19 55.8 -0.9**
**OBKA Obir 88.17 317** *i* PcP **PcP** **09 09 14.6 -0.7**
comp=Z,11nm,1.1s,SNR=5.5
**VIKU Vikbolandet 88.20 329** *e*P **P** **09 09 14.5 +1.2**
**INTR Introdacqua 88.23 312** IAmb IAmb 09 09 37.2
comp=Z,21nm,1.1s
**MOA Molln 88.48 318** *e*P **P** **09 09 15.3 +0.3**
comp=Z,5.0nm,1.0s,SNR=5.1
**PRU Pruhonice 88.50 320** *e*P **P** **09 09 16.1 +1.1**
PRU *e*S **S** **09 19 58.8 -1.0**
PRU AMS AMS 10 00 10.0
comp=Z,200nm,16.3s
**PRU Pruhonice 88.50 320** *e*P **P** **09 09 16.1 +1.1**
PRU *e* 09 19 58.8
PRU MLR MLR
comp=Z,200nm,16.3s
**PVCC Panska Ves 88.54 321** P **P** **09 09 17.1 +2.0**
PVCC pmax pmax
comp=Z,23nm,1.6s
**CKRC Cesky Krumlov 88.54 319** *e*P **P** **09 09 16.9 +1.7**
CKRC *ep*P **sP** **09 09 24.8 +0.5**
CKRC *e*S **S** **09 19 57.9 -2.5**
CKRC AMS AMS 09 58 10.0
comp=Z,200nm,14.7s
**CKRC Cesky Krumlov 88.54 319** *e*P **P** **09 09 16.9 +1.7**
CKRC *e**PP **sP** **09 09 24.8 +0.5**
CKRC *e* 09 19 57.9
CKRC MLR MLR
comp=Z,200nm,14.7s
**PRA Prague 88.58 320** AMS AMS 10 00 10.0
comp=Z,300nm,17.3s
**CAMP Campotosto 88.64 312** IAmb IAmb 09 09 18.1
comp=Z,32nm,1.4s
**CADS Cadrg 88.70 316** *i* P **P** **09 09 16.6 +0.6**
CADS *i* pP **pwP** **09 09 24.5 +1.9**
**GUMA Gualdo di Mace 88.74 313** IAmb IAmb 09 09 37.2
comp=Z,48nm,1.2s
**MYKA Terra Mystica 88.80 317** *i* PcP **PcP** **09 09 17.5 -0.6**
comp=Z,10nm,1.6s,SNR=5.4
**NRCA Norcia 88.88 313** IAmb IAmb 09 09 19.2
comp=Z,22nm,1.1s
**BIOA Bad Ischl, Aus 88.89 318** *e*P **P** **09 09 17.4 +0.5**
comp=Z,4.8nm,0.8s
**GEC2 GERESS Array S 88.95 319** *e*P **P** **09 09 18.4 +1.1**
comp=Z,44nm,1.5s,baz=93,slow=4.6
GEC2 *ep*P **sP** **09 09 27.3 +1.0**
baz=94,slow=4.6
**GERES GERESS Array B 88.95 319** P **P** **09 09 17.4 +0.3**
**GERES GERESS Array B 88.95 319** P **P** **09 09 18.3 +1.1**
comp=Z,3.8nm,0.8s,baz=151,slow=3.0,SNR=24
comp=Z,3.8nm,0.8s
**GERES GERESS Array B 88.95 319** P **P** **09 09 17.5 +0.3**
**BRG Berggiesshubel 88.96 321** *i* P **P** **09 09 18.9 +1.8**
BRG Amp 09 09 20.1
comp=Z,11nm,0.9s
**BRG Berggiesshubel 88.96 321** P P 09 09 26.1 +8.9
BRG Amp 09 09 27.9
comp=Z,18nm,1.1s
**BRG Berggiesshubel 88.96 321** P P 09 09 33.5 +16
BRG Amp 09 09 34.3
comp=Z,12nm,0.9s
**BRG Berggiesshubel 88.96 321** P **P** **09 09 18.1 +1.0**
BRG pmax pmax
comp=Z,16nm,1.1s
**BRG Berggiesshubel 88.96 321** *e*P **P** **09 09 18.4 +1.3**
comp=Z,46nm,1.7s,baz=93,slow=4.6
BRG *ep*P **sP** **09 09 27.3 +1.2**
baz=94,slow=4.6
**KHC Kasperske Hory 89.05 319** *e*P **P** **09 09 18.7 +1.1**
KHC *ep*P **sP** **09 09 27.5 +0.8**
KHC *e*S **S** **09 20 01.2 -4.0**
KHC AMS AMS 09 57 40.0
comp=Z,300nm,19.7s
**KHC Kasperske Hory 89.05 319***ce*P **P** **09 09 18.6 +1.0**
KHC pmax pmax
comp=Z,32nm,2.5s
**RUE Ruedersdorf 89.20 322** *e*P **P** **09 09 20.1 +1.9**
**RUE Ruedersdorf 89.20 322** *e*P **P** **09 09 19.5 +1.3**
comp=Z,90nm,1.3s,baz=93,slow=4.6
RUE *ep*P **sP** **09 09 28.4 +1.2**
baz=94,slow=4.6
**CESX Cesi 89.26 313** IAmb IAmb 09 09 31.2
comp=Z,44nm,1.8s
**HSKC Hora Svate Kat 89.27 321** AMS AMS 09 54 30.0
comp=Z,300nm,22.9s
**STAL STALIGIAL 89.42 316** IAmb IAmb 09 09 21.5
comp=Z,36nm,1.3s
**RJOB Jochberg 89.46 318** *e*P **P** **09 09 20.0 +0.3**
comp=Z,9.5nm,1.2s,baz=93,slow=4.6
RJOB *ep*P **sP** **09 09 28.9 +0.2**
baz=94,slow=4.6
**WET Wettzell 89.51 319** P **P** **09 09 21.1 +1.3**
WET pmax pmax
comp=Z,15nm,1.7s
**WET Wettzell 89.51 319** *e*P **P** **09 09 21.0 +1.2**
comp=Z,28nm,1.4s,baz=93,slow=4.6
WET *ep*P **sP** **09 09 29.9 +1.0**
baz=94,slow=4.6
**LESA Schwarzleotal 89.52 317** *i* P **P** **09 09 20.2 +0.2**

comp=Z,3.1nm,0.6s
**ABTA Abfaltersbach 89.59 317** *i* P **P** **09 09 20.5 +0.2**
comp=Z,5.8nm,0.9s,SNR=5.6
**CLL Collm 89.59 321** ⇑*i* P **P** **09 09 20.6 +0.6**
comp=Z,18nm,1.4s
CLL *i* pP **pwP** **09 09 27.9 -0.6**
comp=Z,17nm,1.2s
CLL *e*PP **PP** **09 12 51.0 -0.8**
CLL *e*SKSac **SKSac** **09 19 51.0 +1.7**
CLL *e*S **S** **09 20 11.0 +1.0**
CLL *ex* x 09 20 54.0
CLL *e*SP **SPn** **09 21 10.0 -4.2**
CLL *e*PPS PPS 09 21 39.0
CLL *e*SS SS 09 26 19.0 +13
CLL *e*SSS SSS 09 29 30.0
CLL *e*SSSS 09 33 00.0
**CLL Collm 89.59 321** ⇑*i* P **P** **09 09 20.6 +0.6**
CLL *i* *PP **pwP** **09 09 27.9 -0.6**
CLL *e* 09 19 51.0
CLL *e*S **S** **09 20 11.0 +1.0**
CLL pmax pmax
comp=Z,18nm,1.4s
**CLL Collm 89.59 321** *e*P **P** **09 09 21.0 +0.9**
comp=Z,17nm,1.3s,baz=93,slow=4.6
CLL *e*pP **sP** **09 09 29.8 +0.7**
baz=94,slow=4.6
**TANN Tannenbergstha 89.87 320** *e*P **P** **09 09 22.6 +1.2**
comp=Z,13nm,1.3s,baz=93,slow=4.6
TANN *e*pP **sP** **09 09 31.5 +1.0**
baz=94,slow=4.6
**TROLL Troll, Antarti 89.88 198** ⇑P **P** **09 09 24.3 +3.1**
comp=Z,162nm,0.7s
**HFS Hagfors 89.91 330** P **P** **09 09 22.5 +1.2**
comp=Z,5.9nm,0.7s,baz=83,slow=3.5,SNR=9.5
HFS LR LR 09 53 43.1
comp=Z,255nm,20.8s,baz=89,slow=38
comp=Z,5.9nm,0.7s
**ROTZ Rotzenmuhle 89.99 320** *e*P **P** **09 09 23.5 +1.5**
comp=Z,3.1nm,1.1s,baz=93,slow=4.6
ROTZ *e*pP **sP** **09 09 32.4 +1.4**
baz=94,slow=4.6
**MANZ Manzenberg 90.07 320** *e*P **P** **09 09 24.0 +1.7**
comp=Z,5.1nm,1.1s,baz=93,slow=4.6
MANZ *e*pP **sP** **09 09 32.9 +1.5**
baz=94,slow=4.6
**PLN Plauen 90.07 320** *e*P **P** **09 09 23.5 +1.2**
comp=Z,13nm,1.3s,baz=93,slow=4.6
PLN *e*pP **sP** **09 09 32.4 +1.0**
baz=94,slow=4.6
**CTI Castel Tesino 90.14 316** IAmb IAmb 09 09 25.5
comp=Z,29nm,1.0s
**WTTA Wattenberg 90.22 317** *i* P **P** **09 09 23.6 +0.3**
comp=Z,21nm,1.3s,SNR=8.0
**WATA Walderalm 90.26 317** *i* P **P** **09 09 23.7 +0.2**
comp=Z,11nm,1.1s,SNR=7.5
**NEUB Neuenburg 90.35 321** *e*P **P** **09 09 24.7 +1.1**
comp=Z,14nm,0.7s,baz=93,slow=4.6
NEUB *e*pP **sP** **09 09 33.5 +0.9**
baz=94,slow=4.6
**MOX Moxa 90.42 320** P **P** **09 09 25.6 +1.6**
MOX pmax pmax
comp=Z,10.0nm,1.6s
**MOX Moxa 90.42 320** *e*P **P** **09 09 25.3 +1.3**
comp=Z,22nm,1.4s,baz=93,slow=4.6
MOX *e*pP **sP** **09 09 34.2 +1.2**
baz=94,slow=4.6
MOX *e*L L 09 59 12.8
comp=Z,293nm,18.4s
**SQTA Sankt Quirin 90.51 317** *i* P **P** **09 09 24.9 +0.3**
comp=Z,9.0nm,0.7s,SNR=7.1
**FUR Furstenfeldbru 90.51 318** *e*P **P** **09 09 25.1 +0.7**
comp=Z,12nm,1.0s,baz=93,slow=4.6
FUR *e*pP **sP** **09 09 34.0 +0.5**
baz=94,slow=4.6
**MOTA Moosalm 90.58 317** *i* P **P** **09 09 25.2 +0.2**
comp=Z,11nm,0.9s
**GRA1 Grafenberg Arr 90.62 320** IAmb IAmb 09 09 27.8
comp=Z,29nm,1.2s
**GRF Grafenberg Arr 90.62 320** *e*P **P** **09 09 26.5 +1.6**
comp=Z,34nm,1.3s,baz=93,slow=4.6
GRF *e*pP **sP** **09 09 35.4 +1.4**
baz=94,slow=4.6
GRF *e*L L 09 58 07.1
comp=Z,398nm,18.9s
**GRFO Grafenberg 90.62 320** P **P** **09 09 25.3 +0.4**
GRFO IAmb IAmb 09 09 27.7
comp=Z,32nm,1.3s
**GRFO Grafenberg 90.62 320** P **P** **09 09 25.3 +0.4**
GRFO pmax pmax
comp=Z,32nm,1.3s
**GORT1 Trebel 90.74 323** *e*P **P** **09 09 26.5 +1.3**
comp=Z,17nm,1.3s,baz=93,slow=4.6
GORT1 *e*pP **sP** **09 09 35.5 +1.2**
baz=94,slow=4.6
**FLTG Flechtingen 90.75 322** *e*P **P** **09 09 25.9 +0.5**
comp=Z,6.4nm,0.9s,baz=93,slow=4.6
FLTG *e*pP **sP** **09 09 34.8 +0.3**
baz=94,slow=4.6
**RETA Reutte 90.82 317** *i* PcP **PcP** **09 09 26.6 -0.4**
comp=Z,11nm,0.8s,SNR=9.5
**FETA Feichten 90.82 317** *i* PcP **PcP** **09 09 26.8 -0.4**
comp=Z,11nm,1.1s,SNR=9.0
**NB2 NORSAR Subarra 91.19 331** P **P** **09 09 27.6 +0.2**
comp=Z,13nm,1.1s,baz=94,slow=4.8
**NB2 NORSAR Subarra 91.19 331** P **P** **09 09 27.6 +0.2**
baz=94,slow=4.8
**NOA NORSAR Array B 91.19 331** P **P** **09 09 27.6 +0.2**
comp=Z,3.9nm,0.8s,baz=94,slow=4.7,SNR=8.1
NOA LR LR 09 55 08.0
comp=Z,348nm,19.2s,baz=95,slow=39
comp=Z,3.9nm,0.8s
**CLZ Clausthal 91.26 322** *e*P **P** **09 09 29.1 +1.2**
comp=Z,14nm,1.1s,baz=93,slow=4.6
CLZ *e*pP **sP** **09 09 38.0 +1.1**
baz=94,slow=4.6
**UBR Ueberruh 91.27 317** *e*P **P** **09 09 28.8 +0.7**
comp=Z,9.3nm,1.0s,baz=93,slow=4.6
UBR *e*pP **sP** **09 09 37.6 +0.5**
baz=94,slow=4.6
**BSEG Bad Segeberg 91.37 324** *e*P **P** **09 09 29.5 +1.3**
comp=Z,21nm,1.5s,baz=93,slow=4.6
**DAVA Damuels 91.41 317** *i* PcP **PcP** **09 09 29.7 -0.1**
comp=Z,18nm,0.9s,SNR=13
**KEST Kesra 91.43 306** IAmb IAmb 09 09 41.3
comp=Z,24nm,0.9s
**KEST Kesra 91.43 306** P **P** **09 09 31.3 +2.2**
comp=Z,20nm,1.0s,baz=68,slow=1.5,SNR=14
comp=Z,20nm,1.0s
**NRDL Niedersach Rie 91.45 322** *e*P **P** **09 09 30.2 +1.7**
comp=Z,17nm,1.3s,baz=93,slow=4.6
NRDL *e*pP **sP** **09 09 39.1 +1.5**
baz=94,slow=4.6
**UBBA Unterbreizbach 91.45 321** *e*P **P** **09 09 29.9 +1.3**
comp=Z,5.8nm,1.1s,baz=93,slow=4.6
UBBA *e*pP **sP** **09 09 38.9 +1.3**
baz=94,slow=4.6
**GTTG Gottingen 91.50 321** *e*P **P** **09 09 30.2 +1.2**
comp=Z,18nm,1.0s,baz=93,slow=4.6
GTTG *e*pP **sP** **09 09 39.0 +1.0**
baz=94,slow=4.6
**SNAA Sanae 91.60 198** ⇑P **P** **09 09 31.4 +2.3**
comp=Z,12nm,0.5s
**SNAA Sanae 91.60 198** P **P** **09 09 31.4 +2.3**
comp=Z,0.8nm,0.8s,baz=134,slow=8.6,SNR=7.7
SNAA PKKPbc **PKKPdf** **09 26 47.8 -0.5**
comp=Z,0.7nm,0.9s,baz=297,slow=2.3,SNR=5.2
**SNAA Sanae 91.60 198** ⇑*e*P **P** **09 09 30.3 +1.2**
SNAA pmax pmax
comp=Z,11nm,1.3s
**GAMB Gambell 91.63 26** P **P** **09 09 28.9 -0.3**
baz=268
**KBS Kingsbay 91.83 349** *de*P **P** **09 09 30.2 +0.3**
KBS pmax pmax
comp=Z,21nm,1.1s
**RETH Rethem/Aller, 91.91 323** *e*P **P** **09 09 32.1 +1.4**
comp=Z,9.7nm,1.3s,baz=93,slow=4.6
RETH *e*pP **sP** **09 09 41.0 +1.2**
baz=94,slow=4.6
**STU Stuttgart 91.92 319** *e*P **P** **09 09 31.9 +0.9**
comp=Z,18nm,1.0s,baz=93,slow=4.6
STU *e*pP **sP** **09 09 40.8 +0.8**
baz=94,slow=4.6
**SLE Schleitheim 92.37 318** P **P** **09 09 34.3 +1.2**
SLE pmax pmax
comp=Z,6.0nm,1.1s
**TNS Taunus Mts 92.43 320** P **P** **09 09 34.7 +1.3**
TNS pmax pmax
comp=Z,16nm,1.6s
**TNS Taunus Mts 92.43 320** *e*P **P** **09 09 34.6 +1.2**
comp=Z,16nm,1.1s,baz=93,slow=4.6
TNS *e*pP **sP** **09 09 43.5 +1.1**
baz=94,slow=4.6
**KASTN Kahler Asten 92.47 321** *e*P **P** **09 09 34.6 +1.2**
comp=Z,12nm,1.1s,baz=93,slow=4.6
KASTN *e*pP **sP** **09 09 43.5 +1.0**
baz=94,slow=4.6
**BFO Black Forest 92.48 318** P **P** **09 09 33.6 0.0**
**BFO Black Forest 92.48 318** P **P** **09 09 33.6 0.0**
BFO pmax pmax
comp=Z,10.0nm,1.3s
**BFO Black Forest 92.48 318** *e*P **P** **09 09 34.2 +0.6**
comp=Z,12nm,1.4s,baz=93,slow=4.6
BFO *e*pP **sP** **09 09 43.1 +0.4**
baz=94,slow=4.6
**NIKH Nikolski High 92.94 37** P **P** **09 09 35.2 -0.3**
baz=270
**BUG Bochum--Univer 93.19 321** *e*P **P** **09 09 37.8 +1.1**
comp=Z,6.0nm,0.9s,baz=93,slow=4.6
**VNA2 Neumayer--Watz 93.21 198** ⇑P **P** **09 09 38.6 +2.2**
comp=Z,1.6nm,0.6s,baz=96,slow=4.5
**ECH Echery 93.27 318** P **P** **09 09 36.0 -1.2**
ECH pmax pmax
comp=Z,6.0nm,1.2s
**AHRW Bad Neuenahr-A 93.31 320** *e*P **P** **09 09 38.7 +1.4**
comp=Z,4.7nm,1.0s,baz=93,slow=4.6
**WLF Walferdange 93.92 319** *e*P **P** **09 09 41.4 +1.3**
comp=Z,10nm,1.3s,baz=93,slow=4.6
WLF *e*pP **sP** **09 09 50.3 +1.1**
baz=94,slow=4.6
**C16K Lisburne Hills 94.15 22** IAmb IAmb 09 09 42.7
comp=Z,18nm,1.1s
**C16K Lisburne Hills 94.15 22** P **P** **09 09 40.7 -0.1**
baz=274
**F15K North Star Dit 94.61 24** P **P** **09 09 43.0 0.0**
baz=274
**K13K Kusilvak Mount 94.89 28** P **P** **09 09 44.6 +0.2**
baz=274
**G15K Niukluk 94.93 25** P **P** **09 09 44.7 +0.3**
baz=275
**C17K DeLong Mountai 94.93 22** P **P** **09 09 44.8 +0.4**
baz=276
**D17K Noatak River 95.05 22** P **P** **09 09 45.4 +0.4**
baz=276
**RDOG Red Dog Mine 95.08 22** P **P** **09 09 45.6 +0.5**
baz=276
**B18K Kokolik River 95.32 21** P **P** **09 09 46.6 +0.5**
baz=277
**J14K Nanvaranak Lak 95.34 27** P **P** **09 09 46.6 +0.3**
baz=275
**A19K Wainwright 95.46 20** P **P** **09 09 47.1 +0.4**
baz=278
**G16K Koyuk River 95.59 25** P **P** **09 09 47.8 +0.3**
baz=276
**C18K Utukok River 95.64 21** P **P** **09 09 47.6 -0.1**
**C18K Utukok River 95.64 21** P **P** **09 09 47.8 +0.1**
baz=278
**M13K Dall Lake 95.65 30** P **P** **09 09 47.9 +0.1**
baz=275
**H16K Elim 95.73 25** P **P** **09 09 48.3 +0.2**
baz=276
**L14K Kuka Creek 95.88 29** P **P** **09 09 49.2 +0.4**
baz=276
**F17K Baldwin Pennin 95.91 23** P **P** **09 09 49.5 +0.6**
baz=278
**E18K Tukpahlearik C 96.03 22** IAmb IAmb 09 10 15.6
comp=Z,33nm,1.6s
**E18K Tukpahlearik C 96.03 22** P **P** **09 09 50.1 +0.7**
baz=278
**NOR Nord 96.06 352** P **P** **09 09 48.0 -1.3**
NOR pmax pmax
comp=Z,13nm,1.7s
**C19K Lookout Ridge 96.14 21** IAmb IAmb 09 10 16.7
comp=Z,24nm,1.1s
**C19K Lookout Ridge 96.14 21** P **P** **09 09 50.5 +0.6**
baz=279,SNR=5.8
**G17K Kiwalik Mounta 96.28 24** P **P** **09 09 50.9 +0.3**
baz=278
**M14K Bethel 96.29 29** P **P** **09 09 51.2 +0.5**
baz=276
**K15K Wolf Creek Mou 96.32 28** P **P** **09 09 51.2 +0.4**
baz=277
**L15K Ungalak Mounta 96.42 28** P **P** **09 09 51.6 +0.4**
baz=277
**I17K Unalakleet 96.49 26** P **P** **09 09 51.7 +0.2**
baz=278
**F18K Selawik 96.52 23** P **P** **09 09 52.2 +0.6**
baz=279
**J16K Anvik River 96.61 27** P **P** **09 09 52.6 +0.5**
baz=278
**H17K Granite Mounta 96.68 25** P **P** **09 09 52.9 +0.5**
baz=279
**A21K Barrow 96.71 18** P **P** **09 09 53.0 +0.6**
baz=282
**D19K Kuna River 96.78 21** P **P** **09 09 53.0 +0.1**
baz=281
**B20K Meade River 96.81 20** P **P** **09 09 53.8 +0.9**
B20K IAmb IAmb 09 10 18.7
comp=Z,31nm,1.4s
**B20K Meade River 96.81 20** P **P** **09 09 53.4 +0.5**
baz=282
**M15K Kasigluk River 96.92 29** P **P** **09 09 53.9 +0.3**
baz=279
**G18K Tagagawik 97.04 24** P Pdif 09 09 54.2 0.0
baz=280
**F19K Shaleruckik Mo 97.22 23** IAmb IAmb 09 09 55.9
comp=Z,16nm,1.1s
**F19K Shaleruckik Mo 97.22 23** P Pdif 09 09 55.1 +0.3
baz=281,SNR=6.9
**D20K Etivluk River 97.27 21** P Pdif 09 09 55.4 +0.2
baz=282,SNR=16
**J17K VABM Dome 97.28 26** P Pdif 09 09 55.7 +0.5
baz=279
**N15K Kwethluk River 97.29 30** P Pdif 09 09 55.5 +0.1
baz=278
**H18K Honhosa River 97.29 25** P Pdif 09 09 55.3 0.0
baz=280
**A22K Sinclair Lake 97.30 19** P Pdif 09 09 55.8 +0.6
baz=284,SNR=8.1
**E19K Redstone River 97.31 22** IAmb IAmb 09 10 13.5
comp=Z,20nm,1.5s
**E19K Redstone River 97.31 22** P Pdif 09 09 55.6 +0.3
baz=282,SNR=5.9
**L16K Owhat River 97.36 28** P Pdif 09 09 56.3 +0.7
baz=279
**E20K Nigu River 97.52 21** P Pdif 09 09 56.7 +0.4
baz=283,SNR=11
**G19K Purcell Mounta 97.62 24** IAmb IAmb 09 10 04.4
comp=Z,11nm,0.8s
**G19K Purcell Mounta 97.62 24** P Pdif 09 09 57.1 +0.4
baz=281,SNR=6.8
**M16K Timber Creek 97.71 29** P Pdif 09 09 57.5 +0.2
baz=279
**K17K Iditarod 97.74 27** P Pdif 09 09 57.8 +0.5
baz=280,SNR=9.4
**B21K Ikpikpuk River 97.76 20** IAmb IAmb 09 10 23.6
comp=Z,22nm,1.1s
**B21K Ikpikpuk River 97.76 20** P Pdif 09 09 57.9 +0.6
baz=284,SNR=9.0
**C21K Knifeblade Rid 97.82 20** P Pdif 09 09 58.2 +0.7
baz=284,SNR=7.7
**L17K Donlin 97.84 28** P Pdif 09 09 58.2 +0.4
baz=280
**N16K Nishlik Lake 97.89 29** P Pdif 09 09 58.4 +0.4
baz=279
**F20K Avaraart Lake 97.96 23** IAmb IAmb 09 09 59.6
comp=Z,12nm,1.1s
**F20K Avaraart Lake 97.96 23** P Pdif 09 09 58.5 +0.3
baz=283,SNR=7.4
**B22K Teshekpuk Lake 97.97 19** P Pdif 09 09 58.7 +0.5
baz=285
**H19K Roundabout Mou 98.00 24** P Pdif 09 09 59.2 +0.8
**H19K Roundabout Mou 98.00 24** P Pdif 09 09 59.0 +0.6
baz=282,SNR=15
**JMIC Jan Mayen 98.03 342** LR LR 09 59 28.3
comp=Z,224nm,20.6s,baz=64,slow=39
**TORD Torodi Ar. Bea 98.05 283** P Pdif 09 10 00.8 +1.0
comp=Z,1.2nm,1.0s,baz=72,slow=4.7,SNR=4.2
TORD LR LR 09 52 36.6
comp=Z,245nm,19.6s,baz=81,slow=34
comp=Z,1.2nm,1.0s
**E21K Killik River 98.28 21** P Pdif 09 09 59.8 +0.2
baz=285
**CHNA Chernabura Isl 98.28 35** P Pdif 09 10 00.1 +0.2
baz=278
**J18K Innoko River 98.31 26** IAmb IAmb 09 10 07.5
comp=Z,9.7nm,0.8s
**J18K Innoko River 98.31 26** P Pdif 09 09 60.0 +0.1
baz=281
**O16K Kokwok River B 98.37 30** P Pdif 09 10 00.6 +0.4
baz=280
**M17K Holitna River 98.37 28** P Pdif 09 10 00.6 +0.4
baz=280
**P16K Nushagak River 98.52 31** P Pdif 09 10 00.9 +0.1
baz=280
**DAG Danmarks Havn 98.54 348** P **P** **09 10 00.1 -0.4**
DAG pmax pmax
comp=Z,12nm,1.0s
**L18K Granite Mounta 98.57 27** IAmb IAmb 09 10 03.5
comp=Z,27nm,1.4s
**L18K Granite Mounta 98.57 27** P Pdif 09 10 01.0 0.0
baz=281
**D22K Ayikyak River 98.62 20** IAmb IAmb 09 10 27.0
comp=Z,14nm,1.2s
**D22K Ayikyak River 98.62 20** P Pdif 09 10 01.5 +0.4
baz=286
**H20K Anotleneega Mo 98.65 24** P Pdif 09 10 01.6 +0.3
baz=283
**N17K Nushagak Hills 98.65 29** P Pdif 09 10 01.7 +0.3
baz=281
**J19K Poorman 98.68 26** IAmb IAmb 09 10 03.3
comp=Z,21nm,1.2s
**J19K Poorman 98.68 26** P Pdif 09 10 01.9 +0.4
baz=282,SNR=5.6
**CHGN Chignik 98.73 33** P Pdif 09 10 01.9 +0.1
baz=279
**F21K Alatna River 98.77 22** IAmb IAmb 09 10 27.7
comp=Z,12nm,1.1s
**F21K Alatna River 98.77 22** P Pdif 09 10 02.0 +0.1
baz=285,SNR=8.2
**O17K Koliganek Bris 98.84 30** P Pdif 09 10 02.3 +0.1
baz=280
**G21K Allakaket 98.95 23** IAmb IAmb 09 10 10.4
comp=Z,17nm,0.8s
**G21K Allakaket 98.95 23** P Pdif 09 10 02.8 +0.2
baz=285,SNR=9.7
**I20K Naaghedeneel 98.98 25** P **P** **09 10 02.7 0.0**
baz=284
**IMAR Indian Mountai 98.99 23** P Pdif 09 10 03.0 +0.2
**C23K Itkillik River 99.04 19** P **Pdif** **09 10 03.2 +0.3**
baz=288
**EKA Eskdalemuir Ar 99.10 326** P **Pdif** **09 10 03.5 0.0**
comp=Z,1.0nm,0.7s,baz=108,slow=5.4,SNR=4.8
EKA PP **PP** **09 14 10.3 +4.5**
comp=Z,1.5nm,0.8s,baz=71,slow=6.4,SNR=3.9
comp=Z,1.0nm,0.7s
**M18K Stony River 99.12 28** P **Pdif** **09 10 03.7 +0.2**
baz=282
**F22K John River 99.18 22** P **Pdif** **09 10 03.8 +0.2**
baz=286
**RAR Rarotonga 99.21 112** LR LR 09 54 54.2
comp=Z,74nm,20.7s,baz=251,slow=35
**N18K Kilae Creek 99.25 29** P **Pdif** **09 10 04.6 +0.5**
baz=282
**Q16K King Salmon 99.26 31** P **Pdif** **09 10 04.4 +0.3**
baz=281
**J20K Nowinta River 99.27 25** IAmb IAmb 09 10 06.1
comp=Z,27nm,1.6s
**J20K Nowinta River 99.27 25** P **Pdif** **09 10 04.4 +0.4**
baz=284
**P17K Kvichak River 99.27 30** P **Pdif** **09 10 04.4 +0.2**
baz=281
**D23K Nanushuk River 99.29 20** P **Pdif** **09 10 04.9 +0.8**
baz=288
**L19K White Mountain 99.42 27** P **Pdif** **09 10 05.5 +0.7**
baz=283
**H21K Melozitna Rive 99.45 24** IAmb IAmb 09 10 31.4
comp=Z,15nm,1.2s
**H21K Melozitna Rive 99.45 24** P **Pdif** **09 10 05.4 +0.5**
baz=285,SNR=7.9
**K20K Telida 99.50 26** IAmb IAmb 09 10 13.7
comp=Z,12nm,0.9s
**K20K Telida 99.50 26** P **Pdif** **09 10 05.4 +0.3**
baz=284,SNR=6.2
**G22K Bettles 99.60 22** P **Pdif** **09 10 05.9 +0.4**
baz=287
**R17L Mt. Peulik Vol 99.61 32** P **Pdif** **09 10 06.0 +0.3**
baz=281
**M19K Big River Lodg 99.69 27** P **Pdif** **09 10 06.8 +0.7**
baz=283
**C24K Franklin Bluff 99.71 19** P **Pdif** **09 10 06.2 +0.3**
baz=290
**Q17K Contact Creek 99.74 31** P **Pdif** **09 10 06.4 0.0**
baz=281
**O18K Koktuh Hills 99.76 30** P **Pdif** **09 10 06.6 +0.2**
baz=282
**TOLK Toolik Lake Re 99.77 20** P **Pdif** **09 10 06.7 +0.4**
baz=289
**L20K Farewell, AK 99.79 27** P **Pdif** **09 10 06.8 +0.3**
baz=284
**P18K Big Mountain, 99.84 30** P **Pdif** **09 10 07.3 +0.5**
baz=282
**D24K Happy Valley 99.86 20** P **Pdif** **09 10 07.1 +0.5**
baz=290
**N19K Bonanza Creek 99.90 29** IAmb IAmb 09 10 08.6
comp=Z,9.3nm,0.9s
**N19K Bonanza Creek 99.90 29** P **Pdif** **09 10 07.4 +0.4**
baz=283
**I21K Tanana 99.91 24** P **Pdif** **09 10 07.5 +0.6**
baz=286
**E23K Chandalar 99.95 21** P **Pdif** **09 10 07.7 +0.5**
baz=289
**H22K Ishtalitna Cre 99.95 23** P **Pdif** **09 10 07.6 +0.5**
baz=287
**COLD Coldfoot 100.00 22** P **Pdif** **09 10 07.7 +0.5**
baz=288
**O19K Port Alsworth 100.12 29** P **Pdif** **09 10 08.1 +0.2**
baz=283
**CHUM Lake Minchumin 100.12 25** P **Pdif** **09 10 08.1 +0.3**
baz=286
**G23K Bananza Creek 100.22 22** P **Pdif** **09 10 08.9 +0.6**
baz=288
**M20K Styx River 100.28 27** P **Pdif** **09 10 09.2 +0.5**
baz=284
**E24K Your Creek 100.34 21** P **Pdif** **09 10 09.4 +0.6**
baz=290
**CHIR Chirikof Islan 100.36 34** P **Pdif** **09 10 09.4 +0.3**
baz=281
**MLY Manley 100.45 24** P **Pdif** **09 10 09.7 +0.3**
baz=287
**D25K Kavik River 100.61 19** P **Pdif** **09 10 10.5 +0.5**
baz=292
**BPAW Bear Paw Mtn. 100.62 25** P **Pdif** **09 10 10.5 +0.4**
baz=287,SNR=6.6
**H23K Yukon River 100.69 23** P **Pdif** **09 10 10.8 +0.4**
baz=288
**Q19K Cape Douglas, 100.74 30** P **Pdif** **09 10 11.0 +0.3**
baz=283
**F24K Squaw Lake 100.75 21** P **Pdif** **09 10 10.9 +0.3**
baz=290
**P19K Oil Pt 100.78 30** P **Pdif** **09 10 11.3 +0.4**
baz=284
**O20K Slope Mountain 100.97 29** P **Pdif** **09 10 12.1 +0.3**
baz=284
**I23K Minto, Yukon-K 100.97 24** P **Pdif** **09 10 12.0 +0.4**
baz=288
**SKT Skwentna 100.98 27** P **Pdif** **09 10 12.4 +0.6**
baz=286
**SII Sitkinak Islan 100.99 33** P **Pdif** **09 10 12.6 +0.7**
baz=282
**G24K Hadweenzic Riv 101.18 22** P **Pdif** **09 10 13.2 +0.6**
baz=290
**NEA2 Nenana 101.27 24** P **Pdif** **09 10 13.7 +0.7**
baz=289
**OHAK Old Harbor 101.32 32** P **Pdif** **09 10 14.0 +0.6**
baz=283
**H24K Noodor Dome 101.33 23** P **Pdif** **09 10 13.8 +0.5**
baz=290
**C27K Jago River 101.36 19** P **Pdif** **09 10 14.1 +0.9**
baz=295
**CUT Chulitna 101.43 26** P **Pdif** **09 10 13.9 +0.2**
baz=287
**Q20K Shuyak Island 101.45 30** P **Pdif** **09 10 13.8 0.0**
baz=284
**SUA Susitna One 101.49 27** P **Pdif** **09 10 14.1 -0.1**
baz=286
**F25K Christian Rive 101.52 21** P **Pdif** **09 10 14.3 +0.2**
baz=292
**HOM Homer 101.56 29** P **Pdif** **09 10 14.5 +0.2**
baz=285
**KDAK Kodiak Island 101.56 31** P **Pdif** **09 10 14.4 0.0**
baz=284
**MCK McKinley 101.60 25** P **Pdif** **09 10 14.7 +0.2**
baz=289
**G25K Bearman Lake 101.67 22** P **Pdif** **09 10 14.9 +0.2**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=292 | | | | | | | |
| H25L | Birch Creek | 101.96 | 22 | P | | Pdif | 09 10 16.2 | +0.2 |
| | baz=292 | | | | | | | |
| BRSE | Bradley Lake S | 101.97 | 29 | P | | Pdif | 09 10 16.1 | -0.1 |
| | baz=286 | | | | | | | |
| RC01 | Rabbit Creek A | 102.06 | 28 | P | | Pdif | 09 10 16.6 | 0.0 |
| | baz=287 | | | | | | | |
| ILAR | Eielson Array | 102.09 | 24 | Pdiff | | Pdif | 09 10 19.4 | +2.7 |
| | comp=Z,0.7nm,0.8s,baz=297,slow=5.4,SNR=6.6 | | | | | | | |
| ILAR | | | | PP | | PP | 09 14 25.6 | -2.6 |
| | comp=Z,1.6nm,1.0s,baz=285,slow=6.6,SNR=6.6 | | | | | | | |
| ILAR | | | | PKKPbc | | PKKPbc | 09 26 20.1 | -2.8 |
| | comp=Z,0.4nm,0.6s,baz=143,slow=2.2,SNR=8.2 | | | | | | | |
| PMR | Palmer | 102.19 | 27 | P | | Pdif | 09 10 17.2 | +0.1 |
| | baz=288 | | | | | | | |
| O22K | Cooper Landing | 102.25 | 28 | P | | Pdif | 09 10 17.3 | 0.0 |
| | baz=287 | | | | | | | |
| G26K | Porcupine Rive | 102.44 | 21 | P | | Pdif | 09 10 18.2 | +0.1 |
| | baz=294 | | | | | | | |
| DHY | Denali Highway | 102.48 | 25 | P | | Pdif | 09 10 18.3 | -0.3 |
| | baz=290 | | | | | | | |
| SML | Sawmill | 102.48 | 27 | P | | Pdif | 09 10 18.6 | +0.1 |
| | baz=289 | | | | | | | |
| WAT6 | Susitna Watana | 102.49 | 26 | P | | Pdif | 09 10 18.7 | 0.0 |
| | baz=289 | | | | | | | |
| G27K | Doyon Strip | 103.26 | 21 | P | | Pdif | 09 10 22.0 | +0.1 |
| | baz=296 | | | | | | | |
| J26L | Joseph Creek | 103.52 | 23 | P | | Pdif | 09 10 23.1 | 0.0 |
| | baz=294 | | | | | | | |
| SCRK | Sand Creek | 103.56 | 24 | P | | Pdif | 09 10 23.1 | -0.2 |
| | baz=293 | | | | | | | |
| H27K | Steamboat Moun | 103.56 | 21 | P | | Pdif | 09 10 23.4 | +0.2 |
| | baz=296 | | | | | | | |
| KLU | Klutina | 103.67 | 27 | P | | Pdif | 09 10 23.8 | 0.0 |
| | baz=291 | | | | | | | |
| EYAK | Cordova Ski Ar | 104.08 | 28 | P | | Pdif | 09 10 25.5 | -0.1 |
| | baz=291 | | | | | | | |
| Q23K | Middleton Isla | 104.19 | 29 | P | | Pdif | 09 10 26.4 | +0.3 |
| | baz=290 | | | | | | | |
| L26K | Log Cabin Wild | 104.20 | 25 | P | | Pdif | 09 10 26.2 | +0.1 |
| | baz=294 | | | | | | | |
| N25K | Chitina, Valde | 104.22 | 26 | P | | Pdif | 09 10 26.2 | -0.1 |
| | baz=292 | | | | | | | |
| K27K | Chicken | 104.31 | 24 | P | | Pdif | 09 10 26.4 | -0.1 |
| | baz=295 | | | | | | | |
| EGAK | Eagle | 104.34 | 23 | P | | Pdif | 09 10 26.4 | -0.2 |
| | baz=296 | | | | | | | |
| BMRM | Bremner River | 104.45 | 27 | P | | Pdif | 09 10 27.2 | -0.1 |
| | baz=292 | | | | | | | |
| G29M | Pine Creek | 104.48 | 20 | P | | Pdif | 09 10 27.5 | +0.3 |
| | baz=300 | | | | | | | |
| M26K | Nabesna, AK | 104.60 | 25 | P | | Pdif | 09 10 28.0 | +0.1 |
| | baz=294 | | | | | | | |
| H29M | Whitestone | 104.70 | 21 | P | | Pdif | 09 10 28.4 | +0.2 |
| | baz=299 | | | | | | | |
| L27K | Beaver Creek, | 104.82 | 24 | P | | Pdif | 09 10 29.1 | +0.2 |
| | baz=295 | | | | | | | |
| I29M | Ogilvie Camp, | 105.14 | 22 | P | | PKiKP | 09 14 45.4 | +0.8 |
| | baz=299 | | | | | | | |
| INK | Inuvik | 105.20 | 18 | P | | PKiKP | 09 14 44.9 | +0.5 |
| | baz=304 | | | | | | | |
| I30M | Mount Dempster | 105.92 | 21 | P | | PKiKP | 09 14 46.0 | 0.0 |
| | baz=301 | | | | | | | |
| YUK3 | Moose Creek | 105.95 | 25 | P | | PKiKP | 09 14 46.3 | 0.0 |
| | baz=296 | | | | | | | |
| MESA | MESA | 105.97 | 27 | P | | PKiKP | 09 14 46.3 | -0.1 |
| | baz=294 | | | | | | | |
| J30M | Hart River | 106.27 | 22 | P | | PKiKP | 09 14 47.2 | +0.4 |
| | baz=301 | | | | | | | |
| YUK4 | Talbot Arm | 106.92 | 25 | P | | PKiKP | 09 14 48.8 | +0.6 |
| | baz=298 | | | | | | | |
| N31M | Braeburn, Yuko | 108.06 | 24 | P | | PKiKP | 09 14 51.1 | +1.1 |
| | baz=300 | | | | | | | |
| TBI | Tubuai | 108.35 | 115 | *e*SS | | SS | 09 30 30.9 | +0.7 |
| | comp=Z,688nm,32.2s | | | | | | | |
| TBI | Tubuai | 108.35 | 115 | *e*LR | | LR | 09 46 34.1 | |
| | comp=Z,2μm,22.8s | | | | | | | |
| PPT2 | Papeete2 | 109.23 | 109 | *e*LR | | LR | 09 46 58.2 | |
| | comp=Z,537nm,24.2s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 09 47 02.8 | |
| | comp=Z,684nm,24.2s | | | | | | | |
| S34M | Telegraph Cree | 111.96 | 26 | P | | PKiKP | 09 14 58.1 | +0.6 |
| | baz=304 | | | | | | | |
| HOPE | Hope Point | 112.78 | 206 | *i* PKIKP | | PKiKP | 09 14 59.1 | 0.0 |
| T35M | Bob Quinn | 112.87 | 27 | P | | PKiKP | 09 15 00.0 | +0.7 |
| | baz=304 | | | | | | | |
| V35K | Ketchikan | 113.14 | 29 | P | | PKiKP | 09 15 00.5 | +0.7 |
| | baz=302 | | | | | | | |
| YKA | Yellowknife Ar | 114.91 | 17 | PKP | | PKiKP | 09 15 02.5 | -0.5 |
| | comp=Z,1.4nm,0.8s,baz=304,slow=1.4,SNR=4.3 | | | | | | | |
| TAOE | Nuku Hiva Isla | 119.60 | 102 | *e*LR | | LR | 09 51 51.2 | |
| | comp=Z,475nm,22.7s | | | | | | | |
| RKT | Rikitea | 121.30 | 119 | *e*LR | | LR | 09 52 39.4 | |
| | comp=Z,2μm,25.5s | | | | | | | |
| NEW | Newport | 124.56 | 29 | P | | PKPdf | 09 15 22.1 | +0.1 |
| | baz=314 | | | | | | | |
| SCHQ | Schefferville | 126.53 | 350 | PKP | | PKPdf | 09 15 25.1 | -0.4 |
| | comp=Z,4.9nm,0.8s,baz=39,slow=0.6,SNR=4.1 | | | | | | | |
| MSO | Missoula | 127.09 | 28 | P | | PKPdf | 09 15 27.2 | +0.2 |
| | baz=317 | | | | | | | |
| EGMT | Eagleton | 128.05 | 25 | P | | PKiKP | 09 15 29.2 | -0.2 |
| | baz=322 | | | | | | | |
| AFDM | Forest Hills D | 128.27 | 40 | PKPdf | | PKPdf | 09 15 29.1 | -0.3 |
| BOZ | Bozeman (W) | 129.09 | 28 | P | | PKPdf | 09 15 31.1 | +0.2 |
| | baz=318 | | | | | | | |
| HLID | Hailey | 129.18 | 31 | P | | PKiKP | 09 15 31.6 | -0.2 |
| | baz=314 | | | | | | | |
| DGMT | Dagmar | 129.80 | 20 | P | | PKiKP | 09 15 32.6 | -0.2 |
| | baz=329 | | | | | | | |
| NVAR | Mina Array Bea | 130.27 | 39 | PKP | | PKiKP | 09 15 34.3 | 0.0 |
| | comp=Z,2.1nm,0.7s,baz=320,slow=2.4,SNR=17 | | | | | | | |
| NVAR | | | | PP | | PP | 09 17 44.0 | -2.2 |
| | comp=Z,1.1nm,0.8s,baz=282,slow=5.4,SNR=3.7 | | | | | | | |
| NVAR | | | | SKPbc | | SKPab | 09 18 51.0 | -4.4 |
| | comp=Z,1.8nm,1.1s,baz=317,slow=3.7,SNR=1.7 | | | | | | | |
| H17A | Grant Village | 130.48 | 28 | P | | PKiKP | 09 15 34.3 | -0.3 |
| | baz=319 | | | | | | | |
| RLMT | Red Lodge | 130.53 | 27 | P | | PKiKP | 09 15 34.2 | -0.4 |
| | baz=321 | | | | | | | |
| LAO | LASA Array | 130.55 | 23 | P | | PKiKP | 09 15 34.1 | -0.3 |
| | baz=325 | | | | | | | |
| ULM | Lac du Bonnet | 130.57 | 13 | PKP | | PKiKP | 09 15 33.9 | -0.3 |
| | comp=Z,7.0nm,0.7s,baz=18,slow=1.3,SNR=9.9 | | | | | | | |
| ULM | | | | SKKS | | SKKSdf | 09 32 45.9 | -1.1 |
| | comp=Z,2.4nm,0.8s,baz=288,slow=3.2,SNR=3.3 | | | | | | | |
| VES | Vestal, Richgr | 131.26 | 42 | P | | PKiKP | 09 15 35.7 | -0.4 |
| | baz=304 | | | | | | | |
| CWC | Cottonwood Cre | 131.59 | 41 | P | | PKPdf | 09 15 36.2 | +0.3 |
| | baz=306 | | | | | | | |
| GRAC | Grapevine Rang | 131.72 | 40 | P | | PKiKP | 09 15 36.6 | -0.4 |
| | baz=307 | | | | | | | |
| ISA | Isabella, Lake | 131.77 | 42 | P | | PKPdf | 09 15 36.7 | +0.5 |
| | baz=305 | | | | | | | |
| MDND | Maddock | 131.82 | 17 | P | | PKiKP | 09 15 36.9 | +0.1 |
| | baz=334 | | | | | | | |
| MPMC | Manual Prospec | 132.20 | 41 | P | | PKiKP | 09 15 37.8 | -0.4 |
| | baz=306 | | | | | | | |
| BW06 | Boulder Array | 132.20 | 29 | P | | PKiKP | 09 15 37.6 | -0.5 |
| | baz=319 | | | | | | | |
| PDAR | Pinedale Array | 132.20 | 29 | PKPdf | | PKPdf | 09 15 36.4 | -0.6 |
| PDAR | Pinedale Array | 132.20 | 29 | PKP | | PKPdf | 09 15 37.5 | +0.5 |
| | comp=Z,1.2nm,0.7s,baz=151,slow=2.1,SNR=11 | | | | | | | |
| PDAR | | | | PP | | PP | 09 18 00.2 | +1.9 |
| | comp=Z,1.0nm,0.9s,baz=341,slow=1.9,SNR=3.5 | | | | | | | |
| FURC | Furnace Creek, | 132.36 | 40 | P | | PKiKP | 09 15 38.1 | -0.1 |
| | baz=307 | | | | | | | |
| SNCC | San Nicolas Is | 132.37 | 45 | P | | PKiKP | 09 15 38.3 | -0.1 |
| | baz=302 | | | | | | | |
| DUG | Dugway, Tooele | 132.38 | 34 | P | | PKiKP | 09 15 38.0 | -0.4 |
| | baz=314 | | | | | | | |
| LRMC | Laurel Mtn Rad | 132.40 | 42 | P | | PKiKP | 09 15 38.1 | -0.5 |
| | baz=305 | | | | | | | |
| TPNV | Topopah Spring | 132.46 | 39 | P | | PKiKP | 09 15 38.3 | -0.3 |
| | baz=308 | | | | | | | |
| EDW2 | Edwards Air Fo | 132.54 | 43 | P | | PKiKP | 09 15 38.5 | -0.3 |
| | baz=305 | | | | | | | |
| GSC | Goldstone, Bar | 133.09 | 41 | P | | PKPdf | 09 15 39.2 | +0.5 |
| | baz=306 | | | | | | | |
| RSSD | Black Hills | 133.54 | 23 | P | | PKiKP | 09 15 40.4 | -0.4 |
| | baz=327 | | | | | | | |
| BBRC | Big Bear Solar | 133.62 | 43 | P | | PKPdf | 09 15 40.2 | +0.3 |
| | baz=305 | | | | | | | |
| HEC | Hector,Ludlow | 133.68 | 42 | P | | PKiKP | 09 15 40.6 | -0.5 |
| | baz=306 | | | | | | | |
| K22A | Casper | 133.69 | 27 | P | | PKiKP | 09 15 40.5 | -0.5 |
| | baz=323 | | | | | | | |
| MURC | Murrieta | 133.81 | 44 | P | | PKPdf | 09 15 40.7 | +0.6 |
| | baz=304 | | | | | | | |
| GMRC | Granite Mounta | 134.15 | 41 | P | | PKPdf | 09 15 41.4 | +0.6 |
| | baz=307 | | | | | | | |
| PFO | Pinyon Flats O | 134.30 | 43 | P | | PKiKP | 09 15 42.0 | -0.4 |
| | baz=305 | | | | | | | |
| TPFO | Pinon Flats | 134.31 | 43 | P | | PKiKP | 09 15 42.1 | -0.4 |
| | baz=305 | | | | | | | |
| BELC | Belle Mtn. Jos | 134.39 | 42 | P | | PKiKP | 09 15 42.2 | -0.4 |
| | baz=306 | | | | | | | |
| MONP2 | Monument Peak | 134.74 | 44 | P | | PKiKP | 09 15 43.2 | -0.2 |
| | baz=305 | | | | | | | |
| O20A | White River Ci | 134.83 | 30 | P | | PKiKP | 09 15 43.3 | -0.1 |
| | baz=319 | | | | | | | |
| IRM | Iron Mountain | 134.87 | 42 | P | | PKiKP | 09 15 42.8 | -0.7 |
| | baz=307 | | | | | | | |
| BC3 | Big Chuckawall | 134.96 | 42 | P | | PKiKP | 09 15 43.1 | -0.7 |
| | baz=306 | | | | | | | |
| SUSD | Miller | 135.08 | 19 | P | | PKiKP | 09 15 43.0 | -0.5 |
| | baz=334 | | | | | | | |
| IKP | In-Ko-Pah, Jac | 135.09 | 44 | P | | PKiKP | 09 15 43.6 | -0.5 |
| | baz=305 | | | | | | | |
| SWSC | Sam W. Stewart | 135.14 | 43 | P | | PKiKP | 09 15 44.0 | 0.0 |
| | baz=305 | | | | | | | |
| N23A | Red Feather La | 135.35 | 28 | P | | PKiKP | 09 15 44.2 | -0.4 |
| | baz=323 | | | | | | | |
| PDMCI | Parker Dam,Lak | 135.44 | 41 | P | | PKiKP | 09 15 44.5 | 0.0 |
| | baz=308 | | | | | | | |
| SPMN | Marine on St. | 136.00 | 12 | P | | PKiKP | 09 15 45.4 | 0.0 |
| | baz=342 | | | | | | | |
| PLCA | Paso Flores | 136.12 | 191 | PKP | | PKPdf | 09 15 44.9 | +0.7 |
| | comp=Z,4.9nm,1.2s,baz=39,slow=6.5,SNR=2.2 | | | | | | | |
| ECSD | EROS Data Cent | 136.44 | 17 | P | | PKiKP | 09 15 46.3 | -0.1 |
| | baz=336 | | | | | | | |
| MVCO | Mesa Verde | 136.87 | 33 | P | | PKiKP | 09 15 47.3 | -0.4 |
| | baz=317 | | | | | | | |
| OGNE | Ogallala | 137.01 | 24 | P | | PKiKP | 09 15 47.4 | -0.3 |
| | baz=328 | | | | | | | |
| S22A | 4UR Ranch, Cre | 137.36 | 31 | P | | PKiKP | 09 15 48.2 | -0.6 |
| | baz=319 | | | | | | | |
| LONY | Lake Ozonia | 137.61 | 354 | P | | PKiKP | 09 15 48.7 | 0.0 |
| | baz=8.9 | | | | | | | |
| W18A | Petrified Fore | 137.65 | 36 | P | | PKiKP | 09 15 49.4 | +0.1 |
| | baz=314 | | | | | | | |
| 214A | Organ Pipe Nat | 137.76 | 42 | P | | PKiKP | 09 15 49.8 | +0.4 |
| | baz=308 | | | | | | | |
| SDCO | Great Sand Dun | 138.03 | 30 | P | | PKiKP | 09 15 49.5 | -0.7 |
| | baz=321 | | | | | | | |
| BGNE | Belgrade | 138.06 | 20 | P | | PKiKP | 09 15 49.4 | -0.3 |
| | baz=333 | | | | | | | |
| KSCO | Kaye Shedlock' | 138.37 | 26 | P | | PKiKP | 09 15 50.3 | -0.3 |
| | baz=326 | | | | | | | |
| JFWS | Jewell Farm | 138.73 | 11 | P | | PKiKP | 09 15 50.8 | -0.2 |
| | baz=345 | | | | | | | |
| TUC | Tucson | 138.87 | 40 | P | | PKiKP | 09 15 51.5 | -0.3 |
| | baz=310 | | | | | | | |
| PAL | Palisades | 141.08 | 352 | P | | PKiKP | 09 15 55.1 | -0.8 |
| | baz=11 | | | | | | | |
| M53A | WI Miller and | 141.12 | 0 | P | | PKiKP | 09 15 55.2 | -0.7 |
| | baz=360 | | | | | | | |
| SFIN | Lafayette | 141.72 | 8 | P | | PKiKP | 09 15 56.5 | -0.7 |
| | baz=350 | | | | | | | |
| AMTX | Amarillo | 142.18 | 29 | P | | PKiKP | 09 15 57.2 | -1.2 |
| | baz=324 | | | | | | | |
| ACSO | Alum Creek Sta | 142.26 | 3 | P | | PKiKP | 09 15 57.5 | -0.8 |
| | baz=356 | | | | | | | |
| O53A | New Philadelph | 142.31 | 1 | P | | PKiKP | 09 15 57.7 | -0.7 |
| | baz=359 | | | | | | | |
| MSTX | Muleshoe | 142.36 | 31 | P | | PKiKP | 09 15 58.4 | -0.5 |
| | baz=322 | | | | | | | |
| MNTX | Cornudas Mount | 142.64 | 36 | P | | PKiKP | 09 15 59.0 | -0.4 |
| | baz=316 | | | | | | | |
| P49A | Miami Univ. Ec | 142.83 | 5 | P | | PKiKP | 09 15 59.4 | -0.1 |
| | baz=353 | | | | | | | |
| BDFB | Brasília | 143.14 | 240 | PKP | | PKPdf | 09 15 56.8 | -0.9 |
| | comp=Z,3.1nm,0.8s,baz=48,slow=2.3,SNR=5.3 | | | | | | | |
| CPUP | Villa Florida | 143.66 | 217 | PKPdf | | PKPdf | 09 15 57.6 | -0.6 |
| CPUP | Villa Florida | 143.66 | 217 | PKP | | PKPdf | 09 15 57.2 | -1.0 |
| | comp=Z,3.3nm,0.7s,baz=171,slow=1.7,SNR=10 | | | | | | | |
| WCI | Wyandotte Cave | 143.95 | 8 | | | PKPbc | 09 15 56.2 | +0.1 |
| WCI | Wyandotte Cave | 143.95 | 8 | PKIKP | | PKPbc | 09 15 56.2 | +0.1 |
| HHAR | Hobbs | 144.08 | 19 | PKPdf | | PKPbc | 09 15 56.5 | -0.1 |
| R50A | Paris | 144.11 | 5 | | | PKPab | 09 15 56.4 | +0.2 |
| T42A | Van Buren | 144.19 | 14 | PKPdf | | PKPbc | 09 15 57.0 | +0.2 |
| SLBS | Sierra La Lagu | 144.57 | 51 | PKPdf | | PKPdf | 09 16 00.3 | +0.4 |
| S51A | Beattyville | 144.81 | 4 | | | PKPab | 09 15 58.7 | -0.1 |
| FCAR | Ozark Folk Cen | 144.99 | 16 | | | PKPbc | 09 15 59.5 | +0.1 |
| ABTX | Abilene, Hawle | 145.00 | 29 | P | | PKPbc | 09 15 60.0 | +0.3 |
| | baz=326,SNR=13 | | | | | | | |
| BLA | Blacksburg | 145.34 | 360 | P | | PKPbc | 09 16 00.6 | -0.1 |
| | baz=0.3 | | | | | | | |
| TXAR | Lajitas Array | 145.36 | 37 | PKPbc | | PKPdf | 09 16 01.9 | +0.7 |
| | comp=Z,50nm,0.7s,baz=289,slow=1.3,SNR=583 | | | | | | | |
| WVT | Waverly | 145.76 | 10 | | | PKPab | 09 16 02.5 | +0.2 |
| WVT | Waverly | 145.76 | 10 | P | | PKPab | 09 16 02.4 | +0.1 |
| | baz=347 | | | | | | | |
| WVT | Waverly | 145.76 | 10 | PKIKP | | PKPab | 09 16 02.5 | +0.2 |
| MIAR | Mount Ida | 145.79 | 19 | P | | PKPab | 09 16 02.4 | 0.0 |
| | baz=337,SNR=124 | | | | | | | |
| TZTN | Tazewell | 145.90 | 4 | P | | PKPbc | 09 16 02.6 | +0.2 |
| | baz=355 | | | | | | | |
| WHTX | Lake Whitney, | 146.54 | 27 | P | | PKPab | 09 16 05.0 | -0.4 |
| | baz=328 | | | | | | | |
| JCT | Junction City | 146.66 | 31 | | | PKPab | 09 16 06.2 | +0.3 |
| JCT | Junction City | 146.66 | 31 | P | | PKPab | 09 16 05.7 | -0.2 |
| | baz=323,SNR=138 | | | | | | | |
| JCT | Junction City | 146.66 | 31 | PKP2 | | PKPab | 09 16 06.2 | +0.3 |
| OXF | Oxford | 147.00 | 13 | P | | PKPbc | 09 16 05.9 | +0.3 |
| | baz=344,SNR=24 | | | | | | | |
| CNNC | Cliffs of the | 147.21 | 356 | P | | PKPbc | 09 16 06.9 | +0.7 |
| | baz=4.9 | | | | | | | |
| W57A | Gilead | 147.39 | 359 | PKPdf | | PKPdf | 09 16 04.3 | 0.0 |
| W57A | | | | PKPbc | | PKPbc | 09 16 07.5 | +0.7 |
| KMSC | Kings Mountain | 147.40 | 1 | P | | PKPab | 09 16 07.8 | -0.8 |
| | baz=359 | | | | | | | |
| 435B | Jarrell | 147.50 | 28 | P | | PKPbc | 09 16 07.6 | +0.4 |
| | baz=327 | | | | | | | |
| FPAL | Fort Paine | 147.67 | 8 | | | PKPbc | 09 16 07.5 | -0.1 |
| NATX | Nacogdoches | 147.91 | 23 | P | | PKPbc | 09 16 08.9 | +0.7 |
| | baz=333,SNR=14 | | | | | | | |
| 833A | Chaparral WMA, | 148.58 | 33 | P | | PKiKP | 09 16 11.1 | -0.6 |
| | baz=322,SNR=11 | | | | | | | |
| VBMS | Vicksburg | 148.89 | 16 | P | | PKiKP | 09 16 11.6 | -0.6 |
| | baz=341 | | | | | | | |
| LRAL | Lakeview Retre | 148.92 | 10 | P | | PKPbc | 09 16 11.2 | +0.3 |
| | baz=348 | | | | | | | |
| GOGA | Godfrey | 149.02 | 5 | P | | PKiKP | 09 16 12.0 | -0.4 |
| | baz=324 | | | | | | | |
| NHSC | New Hope | 149.44 | 359 | P | | PKiKP | 09 16 13.2 | -0.1 |
| | baz=0.8 | | | | | | | |
| KVTX | Kingsville | 150.00 | 32 | | | PKiKP | 09 16 16.4 | +1.8 |
| BRAL | Brewton | 150.73 | 11 | P | | PKiKP | 09 16 16.4 | +0.5 |
| | baz=347 | | | | | | | |
| TIGA | Tifton | 150.96 | 5 | P | | PKiKP | 09 16 16.6 | +0.1 |
| | baz=354 | | | | | | | |
| MDP | Montagnes des | 151.98 | 276 | PKPbc | | PKiKP | 09 16 20.1 | +1.1 |
| | comp=Z,8.6nm,0.9s,baz=127,slow=2.1,SNR=6.8 | | | | | | | |
| PTLB | Pontes e Lacer | 152.35 | 229 | | | PKPbc | 09 16 16.3 | -3.1 |
| PTLB | | | | PKPab | | sPKPbc | 09 16 28.6 | +0.1 |
| LVC | Limon Verde | 152.67 | 204 | PKPbc | | PKiKP | 09 16 22.6 | +1.9 |
| | comp=Z,6.3nm,0.6s,baz=248,slow=1.0,SNR=16 | | | | | | | |
| SIV | San Ignacio | 153.44 | 226 | PKP | | PKPdf | 09 16 15.2 | +0.9 |
| | comp=Z,1.9nm,1.1s,baz=264,slow=4.4,SNR=4.7 | | | | | | | |
| SIV | | | | PKPbc | | sPKPdf | 09 16 22.7 | -0.5 |
| | comp=Z,2.4nm,0.6s,baz=127,slow=4.7,SNR=18 | | | | | | | |
| DWPF | Disney Wildern | 154.41 | 2 | P | | PKPbc | 09 16 22.9 | -0.8 |
| | baz=358 | | | | | | | |
| LPAZ | La Paz | 157.73 | 213 | PKP | | PKPdf | 09 16 21.6 | +0.8 |
| | comp=Z,2.5nm,1.1s,baz=317,slow=3.6,SNR=3.9 | | | | | | | |
| LPAZ | | | | PKPab | | PKPab | 09 16 54.3 | +1.3 |
| | comp=Z,2.1nm,0.9s,baz=211,slow=5.3,SNR=4.8 | | | | | | | |

*NEIC **05** 09:12:53.7±1.9,5°.5S±0°.1×147°.5E±0°.2, h18km±11km, mb4.2/13, Error ellipse: s-maj=24.2km s-min=12.2km az=118.0*

*IDC **05** 09:12:58.8±4.2,5°.93S×147°.16E, h207km±25km, mb3.3/3, mbtmp3.9/5, Error ellipse: s-maj=51.3km s-min=24.0km az=145.0*

**ISC 05 09:12:50.7±0.9,5°.31S±0°.07×147°.4E±0°.2, h170km, n22, σ1s31/25, mb4.1/5, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MANU | Manus Island | 3.25 | 359 | Pn | Pn | 09 13 41.9 | -0.2 |
| PMG | Port Moresby | 4.08 | 184 | Pn | Pn | 09 13 54.1 | +1.6 |
| PMG | | | | Sn | Sn | 09 14 39.3 | -1.6 |
| PMG | Port Moresby | 4.08 | 184 | P | Pn | 09 13 53.9 | +1.4 |
| | 4.9nm,0.3s,baz=27,slow=11,SNR=9.3 | | | | | | |
| PMG | | | | S | Sn | 09 14 38.3 | -2.6 |
| | 25nm,0.3s,baz=253,slow=24,SNR=14 | | | | | | |
| COEN | Coen | 9.56 | 206 | Pn | Pn | 09 15 07.1 | +2.4 |
| COEN | | | | Sn | Sn | 09 16 49.4 | -1.7 |
| CTAO | Charters Tower | 14.73 | 184 | P | P | 09 16 14.8 | +2.1 |
| WB0 | Warramunga Arr | 19.17 | 220 | P | P | 09 17 00.8 | -0.7 |
| WB0 | | | | IAmb | IAmb | 09 17 02.2 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| WR0 | Warramunga Arr | 19.22 | 220 | P | P | 09 17 01.7 | -0.2 |
| WR0 | | | | IAmb | IAmb | 09 17 02.1 | |
| | comp=Z,13nm,1.1s | | | | | | |
| WRAB | Tennant Creek | 19.32 | 220 | P | P | 09 17 02.1 | -0.9 |
| WRAB | | | | IAmb | IAmb | 09 17 03.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 19.33 | 220 | P | P | 09 17 02.5 | -0.6 |
| WB2 | | | | IAmb | IAmb | 09 17 06.9 | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 19.33 | 220 | P | P | 09 17 01.2 | -2.0 |
| WRA | Warramunga Arr | 19.33 | 220 | P | P | 09 17 02.0 | -1.2 |
| | comp=Z,3.0nm,0.4s,baz=44,slow=9.8,SNR=92 | | | | | | |
| WRA | | | | S | S | 09 20 23.6 | -9.4 |
| | comp=Z,0.6nm,0.9s,baz=32,slow=24,SNR=1.6 | | | | | | |
| EIDS | Eidsvold | 20.25 | 170 | P | P | 09 17 13.3 | +0.3 |
| EIDS | | | | IAmb | IAmb | 09 17 17.8 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| KNRA | Kununurra | 21.03 | 239 | P | P | 09 17 21.1 | -0.2 |
| KNRA | | | | IAmb | IAmb | 09 17 29.6 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| KOUNC | Koumac, New Ca | 22.30 | 134 | P | P | 09 17 33.4 | -1.0 |
| AS31 | Alice Springs | 22.42 | 214 | P | P | 09 17 35.7 | +0.1 |
| ASAR | Alice Springs | 22.43 | 214 | P | P | 09 17 35.1 | -0.5 |
| | comp=Z,3.4nm,0.5s,baz=48,slow=8.1,SNR=77 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| FITZ | Fitzroy Crossi | 24.80 | 237 | P | P | 09 17 56.0 | -1.2 |
| ARMA | Armidale | 25.29 | 171 | P | P | 09 18 01.9 | +0.2 |
| CASY | Casey | 66.03 | 195 | P | P | 09 23 18.4 | -0.4 |
| CASY | | | | IAmb | IAmb | 09 23 44.9 | |
| | comp=Z,4.2nm,1.0s | | | | | | |
| VNDA | Vanda | 72.57 | 177 | P | P | 09 23 59.1 | +0.4 |
| VNDA | Vanda | 72.57 | 177 | P | P | 09 23 59.7 | +0.9 |
| | comp=Z,0.3nm,0.5s,baz=330,slow=7.9,SNR=6.6 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| QSPA | South Pole Qui | 84.65 | 180 | P | P | 09 25 05.1 | 0.0 |
| | comp=Z,0.8nm,0.8s,baz=123,slow=2.8,SNR=7.4 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |

*IDC **05** 09:14:44.1±3.7,3°.92S×101°.16E, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=178.1km s-min=27.5km az=54.0*

*DJA **05** 09:14:49.2±1.5,4°.S±7°×10°.2E±°, h15km±13km, M4.1/8, mb4.1/2, MLv4.1/8*

**ISC 05 09:14:49.4±1.3,3°.9S±0°.3×101°.3E±0°.3, h34km, n20, σ0s92/11, mb3.8/4, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PPSI | Pulau Pagai | 1.66 | 312 | P | Pb | 09 15 18.6 | -0.8 |
| MNAI | Manna | 1.77 | 106 | P | Pn | 09 15 16.6 | -1.0 |
| LWLI | Liwa | 3.02 | 112 | P | Pn | 09 15 35.3 | +0.4 |
| PDSI | Padang | 3.05 | 345 | P | Pn | 09 15 35.0 | -0.2 |
| KASI | Kota Agung | 3.62 | 117 | P | Pn | 09 15 43.9 | +0.8 |
| GSI | Gunungsitoli | 6.32 | 324 | P | Pn | 09 16 21.8 | +1.5 |
| | 16nm,1.2s | | | | | | |
| H08S2 | Diego Garcia H | 28.85 | 261 | T | T | 09 50 39.5 | |
| | baz=84,slow=74 | | | | | | |
| H08S3 | Diego Garcia H | 28.86 | 261 | T | T | 09 50 36.6 | |
| | baz=84,slow=74 | | | | | | |
| H08S1 | Diego Carcia H | 28.87 | 261 | T | T | 09 50 35.7 | |
| | baz=84 | | | | | | |
| WRA | Warramunga Arr | 35.98 | 119 | P | P | 09 21 46.9 | -0.5 |
| | 0.6nm,0.4s,baz=293,slow=8.5,SNR=16 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| ASAR | Alice Springs | 37.15 | 125 | P | P | 09 21 57.2 | -0.2 |
| | 0.9nm,0.7s,baz=297,slow=8.0,SNR=14 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| STKA | Stephens Creek | 46.98 | 131 | P | P | 09 23 18.6 | +1.2 |
| | 2.4nm,0.7s,baz=322,slow=12,SNR=3.2 | | | | | | |
| | 2.4nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 53.16 | 344 | P | P | 09 24 03.8 | -0.2 |
| | 0.2nm,0.7s,baz=152,slow=6.6,SNR=2.6 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| H04N2 | CROZET ISLANDS | 60.06 | 218 | T | T | 10 29 41.0 | |
| | baz=60,slow=75,SNR=13 | | | | | | |
| H04N1 | CROZET ISLANDS | 60.07 | 218 | T | T | 10 29 42.5 | |
| | baz=60,slow=75,SNR=9.9 | | | | | | |
| H04N3 | CROZET ISLANDS | 60.08 | 218 | T | T | 10 29 40.2 | |
| | baz=60,slow=75,SNR=13 | | | | | | |
| H04S1 | CROZET ISLANDS | 60.32 | 217 | T | T | 10 30 03.2 | |
| | baz=56 | | | | | | |
| H04S3 | CROZET ISLANDS | 60.34 | 217 | T | T | 10 30 04.3 | |
| | baz=56 | | | | | | |
| H04S2 | CROZET ISLANDS | 60.34 | 217 | T | T | 10 30 06.6 | |
| | baz=56 | | | | | | |
| TXAR | Lajitas Array | 145.37 | 40 | PKPbc | PKPab | 09 34 24.4 | -0.3 |
| | 0.1nm,0.4s,baz=246,slow=1.1,SNR=5.5 | | | | | | |

*GII **05** 09:18:60.0±0.3,33°.78N±0°.05×35°.30E±0°.02, h5km, Mws2.0, confirmed*

*GRAL **05** 09:19:00.1±0.3,33°.70N×35°.15E, h1km±5km, MD3.0*

**ISC 05 09:19:01.1±1.4,33°.74N±0°.04×35°.26E±0°.07, h12km, n23, σ0s62/26, Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BEYL | Beirut | 0.23 | 55 | *e*P | Pg | 09 19 06.2 | +0.1 |
| DQRL | Deir Qamar | 0.26 | 97 | *e*P | Pg | 09 19 06.3 | -0.3 |
| DQRL | | | | *e*S | Sg | 09 19 11.2 | +0.9 |
| BHL | Bhannes | 0.37 | 63 | *e*P | Pg | 09 19 08.4 | -0.2 |
| QRWL | Qaraoun | 0.40 | 118 | *e*P | Pg | 09 19 08.6 | -0.5 |
| QRWL | | | | *e*S | Sg | 09 19 14.8 | +0.3 |
| ZAHL | Zahle | 0.53 | 77 | *e*P | Pg | 09 19 11.5 | -0.1 |
| RCY | Rachaya | 0.54 | 116 | *e*P | Pg | 09 19 11.1 | -0.5 |
| RCY | | | | *e*S | Sg | 09 19 19.2 | +0.4 |
| NATI | Neve Ativ | 0.62 | 140 | S | Sb | 09 19 22.8 | +0.3 |
| NATI | Neve

*IDC* ***05*** *09:40:12.2±1.1,2˝32S×99˝46E,h0km,mb4.2/13, mbtmp4.2/13,Error ellipse: s-maj=38.5km s-min=15.6km az=58.0*

*NEIC* ***05*** *09:40:13.7±1.6,2˝26S±0˝08×99˝38E±0˝04,h10km±1km, mb4.5/18,Error ellipse: s-maj=13.0km s-min=6.8km az=188.0*

*DJA* ***05*** *09:40:13.4±1.2,2˝S±4˝×9˝9E±˚,h26km±13km,M4.7/13, mb4.7/5,mB5.6/2,MLv4.6/13,Mw(mB)5.2/2*

**ISC 05 09:40:16.6±0.6,2˝38S±0˝07×99˝40E±0˝08,h32km,n74, σ1§59/65,mb4.5/27,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.72** | **122** | P | **Pn** | **09 40 28.2** | **-2.3** |
| **SISI** | **Saibi** | **1.09** | **343** | P | **Pn** | **09 40 34.4** | **-1.2** |
| **PDSI** | **Padang** | **1.80** | **36** | P | **Pn** | **09 40 44.0** | **-1.5** |
| **PBSI** | **Pulau Batu** | **2.56** | **334** | P | **Pn** | **09 40 53.6** | **-2.3** |
| **BKNI** | **Bangkinang** | **3.15** | **31** | Pn | **Pn** | **09 41 02.0** | **-1.9** |
| **BKNI** | **Bangkinang** | **3.15** | **31** | P | **Pn** | **09 41 02.9** | **-1.1** |
| **MNAI** | **Manna** | **4.06** | **119** | Pn | **Pn** | **09 41 15.8** | **-0.8** |
| **MNAI** | **Manna** | **4.06** | **119** | P | **Pn** | **09 41 15.6** | **-0.9** |
| **GSI** | **Gunungsitoli** | **4.09** | **333** | Pn | **Pn** | **09 41 13.9** | **-3.0** |
| **GSI** | **Gunungsitoli** | **4.09** | **333** | P | **Pn** | **09 41 14.6** | **-2.3** |
| **RPSI** | **Rantau Prapat** | **5.06** | **355** | | **Pn** | **09 41 29.0** | **-1.2** |
| **LWLI** | **Liwa** | **5.34** | **120** | P | **Pn** | **09 41 31.8** | **-2.4** |
| **KASI** | **Kota Agung** 59nm,0.7s,0.4nm | **5.97** | **122** | P | **Pn** | **09 41 40.2** | **-2.6** |
| MYKOM | **Kota Tinggi** | **6.08** | **47** | Pn | **Pn** | **09 41 42.9** | **-1.3** |
| **TPRI** | **Tanjung Pinang** 76nm,0.6s,4μm0.5nm | **6.08** | **57** | P | **Pn** | **09 41 43.5** | **-0.8** |
| **IPM** | **Ipoh** | **7.00** | **13** | Pn | **Pn** | **09 41 55.2** | **-1.8** |
| **KULM** | **Kulim** | **7.72** | **9** | Pn | **Pn** | **09 42 03.3** | **-3.5** |
| **UGM** | **Wanagama** | **12.37** | **117** | Pn | **Pn** | **09 43 09.0** | **-1.5** |
| **KKM** | **Kota Kinabalu** | **18.76** | **63** | P | **P** | **09 44 32.4** | **-0.9** |
| KKM | comp=Z,40nm,1.2s | | | IAmb | IAmb | 09 45 00.1 | |
| MYLDM | **Lahad Datu** | **20.50** | **68** | P | **P** | **09 44 52.2** | **-0.1** |
| MYLDM | comp=Z,29nm,0.9s | | | IAmb | IAmb | 09 45 25.5 | |
| **CMAR** | **Chiang Mai Arr** comp=Z,1.5nm,0.4s,baz=186,slow=10,SNR=9.5 | **20.71** | **359** | P | **P** | **09 44 52.5** | **-1.8** |
| **SOEI** | **Soe** comp=Z,1.5nm,0.4s | **25.77** | **108** | P | **P** | **09 45 44.1** | **-0.9** |
| **H08S2** | **Diego Garcia H** baz=80,slow=75,SNR=366 | **27.30** | **258** | T | T | 10 14 37.2 | |
| **H08S3** | **Diego Garcia H** baz=80,slow=75,SNR=701 | **27.31** | **258** | T | T | 10 14 39.4 | |
| **H08S1** | **Diego Garcia H** baz=80,slow=75,SNR=206 | **27.32** | **258** | T | T | 10 14 33.9 | |
| **PZH** | **PanZhiHua** comp=Z,20nm,0.7s | **28.80** | **4** | P | **P** | **09 46 13.2** | **+1.2** |
| PZH | comp=Z,120nm,6.5s | | | pmax | pmax | | |
| **FITZ** | **Fitzroy Crossi** | **30.10** | **123** | P | **P** | **09 46 24.1** | **+0.6** |
| **KNRA** | **Kununurra** | **31.80** | **116** | P | **P** | **09 46 38.3** | **-0.2** |
| KNRA | comp=Z,8.4nm,1.1s | | | IAmb | IAmb | 09 47 05.4 | |
| **H01W3** | **Cape Leeuwin H** baz=335,slow=76,SNR=54 | **35.13** | **159** | T | T | 10 24 20.7 | |
| **H01W2** | **Cape Leeuwin H** baz=335,slow=76,SNR=57 | **35.14** | **159** | T | T | 10 24 21.7 | |
| **H01W1** | **Cape Leeuwin H** baz=335,slow=76,SNR=59 | **35.15** | **159** | T | T | 10 24 21.9 | |
| **WB0** | **Warramunga Arr** | **38.30** | **119** | P | **P** | **09 47 34.1** | **-0.5** |
| **WRA** | **Warramunga Arr** | **38.32** | **120** | P | **P** | **09 47 33.9** | **-0.8** |
| **WRA** | **Warramunga Arr** comp=Z,4.9nm,1.0s,baz=303,slow=9.0,SNR=24 | **38.32** | **120** | P | **P** | **09 47 33.8** | **-1.0** |
| WRA | comp=Z,0.6nm,1.0s,baz=307,slow=2.2,SNR=2.3 comp=Z,4.9nm,1.0s | | | PcP | **PcP** | **09 49 48.0** | **-0.4** |
| **WRAB** | **Tennant Creek** | **38.33** | **120** | P | **P** | **09 47 34.3** | **-0.5** |
| WRAB | comp=Z,4.7nm,0.6s | | | IAmb | IAmb | 09 47 38.2 | |
| **WB2** | **Warramunga Arr** | **38.34** | **120** | P | **P** | **09 47 34.2** | **-0.6** |
| WB2 | comp=Z,5.5nm,0.7s | | | IAmb | IAmb | 09 47 38.2 | |
| **LZH** | **Lanzhou** | **38.49** | **6** | *e*P | **P** | **09 47 39.4** | **+3.4** |
| LZH | | | | pP | sP | 09 47 48.2 | -0.5 |
| LZH | comp=Z,15nm,1.0s | | | pmax | pmax | | |
| **WR0** | **Warramunga Arr** | **38.51** | **120** | P | **P** | **09 47 35.9** | **-0.4** |
| WR0 | comp=Z,14nm,1.5s | | | IAmb | IAmb | 09 47 54.8 | |
| **NJ2** | **Nanjing** | **38.90** | **27** | *e*P | **P** | **09 47 40.2** | **+0.9** |
| NJ2 | comp=Z,4.0nm,0.5s | | | pmax | pmax | | |
| **ASAR** | **Alice Springs** | **39.52** | **125** | P | **P** | **09 47 45.0** | **+0.3** |
| **ASAR** | **Alice Springs** comp=Z,0.7nm,0.4s,baz=298,slow=7.5,SNR=21 | **39.52** | **125** | P | **P** | **09 47 44.6** | **-0.1** |
| ASAR | comp=Z,0.5nm,0.7s,baz=298,slow=2.0,SNR=2.7 comp=Z,0.7nm,0.4s | | | PcP | **PcP** | **09 49 54.3** | **+2.2** |
| **AS31** | **Alice Springs** | **39.52** | **125** | P | **P** | **09 47 44.6** | **-0.2** |
| **GTA** | **Gaotai** | **41.59** | **0** | *e*P | **P** | **09 48 04.8** | **+3.1** |
| GTA | comp=Z,5.0nm,1.3s | | | pmax | pmax | | |
| **HHC** | **Hu-ho-hao-te** | **44.43** | **13** | *e*P | **P** | **09 48 26.0** | **+1.3** |
| HHC | comp=Z,17nm,0.5s | | | pmax | pmax | | |
| HHC | comp=Z,100nm,6.0s | | | pmax | pmax | | |
| **JNU** | **Nakatsue** | **46.16** | **37** | P | **P** | **09 48 37.5** | **-0.9** |
| **KSRS** | **Korea Array** comp=Z,3.3nm,0.8s,baz=223,slow=8.4,SNR=11 comp=Z,3.3nm,0.8s | **47.65** | **31** | P | **P** | **09 48 49.2** | **-0.6** |
| **XLT** | **XiLinHaoTe** | **48.44** | **16** | *e*P | **P** | **09 49 00.6** | **+4.5** |
| XLT | | | | pP | pP | 09 49 06.7 | +1.1 |
| XLT | | | | sP | sP | 09 49 11.0 | +1.7 |
| XLT | comp=Z,12nm,0.7s | | | pmax | pmax | | |
| XLT | comp=Z,160nm,10.6s | | | AMB | AMB | | |
| XLT | comp=N,67nm,14.0s | | | LR | LR | | |
| XLT | comp=E,330nm,13.6s | | | LR | LR | | |
| XLT | comp=Z,710nm,14.9s | | | LR | LR | | |
| **STKA** | **Stephens Creek** | **49.35** | **131** | P | **P** | **09 49 04.2** | **+1.0** |
| **STKA** | **Stephens Creek** comp=Z,3.7nm,0.8s,baz=313,slow=14,SNR=3.5 comp=Z,3.7nm,0.8s | **49.35** | **131** | P | **P** | **09 49 03.6** | **+0.5** |
| **SONM** | **Songino Array** comp=Z,5.0nm,0.8s,baz=191,slow=8.5,SNR=17 | **50.38** | **6** | P | **P** | **09 49 10.5** | **-0.4** |
| SONM | comp=Z,0.9nm,0.6s,baz=173,slow=5.8,SNR=1.9 comp=Z,5.0nm,0.8s | | | PcP | **PcP** | **09 50 30.2** | **+1.2** |
| **MK31** | **Makanchi Array** | **51.23** | **345** | P | **P** | **09 49 17.4** | **+0.3** |
| MK31 | comp=Z,3.7nm,0.8s | | | IAmb | IAmb | 09 49 20.9 | |
| **MKAR** | **Makanchi Array** | **51.23** | **345** | P | **P** | **09 49 17.1** | **-0.1** |
| **MKAR** | **Makanchi Array** comp=Z,4.5nm,0.7s,baz=150,slow=8.0,SNR=28 comp=Z,4.5nm,0.7s | **51.23** | **345** | P | **P** | **09 49 17.6** | **+0.4** |
| **MJAR** | **Matsushiro Arr** comp=Z,0.7nm,0.3s,baz=206,slow=8.1,SNR=5.6 comp=Z,0.7nm,0.3s | **52.95** | **39** | P | **P** | **09 49 30.0** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** comp=Z,5.4nm,0.8s,baz=231,slow=9.1,SNR=7.1 comp=Z,5.4nm,0.8s | **54.77** | **28** | P | **P** | **09 49 43.7** | **+0.5** |
| KURBB | **Kurchatov Arra** comp=Z,0.7nm,0.5s,baz=163,slow=7.2,SNR=5.3 comp=Z,0.7nm,0.5s | **55.74** | **344** | P | **P** | **09 49 50.5** | **+0.4** |
| **KURK** | **Kurchatov** | **55.80** | **344** | P | **P** | **09 49 49.8** | **-0.7** |
| KURK | comp=Z,3.0nm,0.8s | | | IAmb | IAmb | 09 50 07.9 | |
| **ZAA0** | **Zalesovo Array** | **57.43** | **350** | | **P** | **09 50 01.3** | **-0.7** |
| ZAA0 | comp=Z,7.7nm,1.1s | | | IAmb | IAmb | 09 50 05.5 | |
| **ZALV** | **Zalesovo Beam** | **57.43** | **350** | | **P** | **09 50 00.7** | **-1.4** |
| **ZALV** | **Zalesovo Beam** comp=Z,5.3nm,0.8s,baz=175,slow=5.4,SNR=15 comp=Z,5.3nm,0.8s | **57.43** | **350** | P | **P** | **09 50 01.9** | **-0.2** |
| **HEH** | **HeiHe** | **57.68** | **21** | *e*P | **P** | **09 50 02.2** | **-1.7** |
| **H04N2** | **CROZET ISLANDS** baz=58,slow=75,SNR=748 | **60.14** | **216** | T | T | 10 55 49.6 | |
| **H04N1** | **CROZET ISLANDS** baz=58,slow=75,SNR=370 | **60.15** | **216** | T | T | 10 55 50.0 | |
| **H04N3** | **CROZET ISLANDS** baz=58,slow=75,SNR=841 | **60.16** | **216** | T | T | 10 55 48.7 | |
| **H04S1** | **CROZET ISLANDS** baz=57,slow=75,SNR=110 | **60.43** | **216** | T | T | 10 56 04.4 | |
| **H04S3** | **CROZET ISLANDS** baz=57,slow=75,SNR=226 | **60.45** | **216** | T | T | 10 56 05.3 | |
| **H04S2** | **CROZET ISLANDS** baz=57,slow=75,SNR=113 | **60.45** | **216** | T | T | 10 56 06.7 | |
| ABKAR | **Akbulak array** | **61.68** | **332** | P | **P** | **09 50 30.9** | **-0.6** |
| **CASY** | **Casey** | **64.26** | **175** | P | **P** | **09 50 50.2** | **+1.9** |
| CASY | comp=Z,4.6nm,1.1s | | | IAmb | IAmb | 09 50 56.8 | |
| **BRTR** | **Keskin Array B** comp=Z,0.3nm,0.6s,baz=188,slow=4.2,SNR=1.8 comp=Z,0.3nm,0.6s | **73.13** | **313** | P | **P** | **09 51 44.7** | **+0.3** |
| **FINES** | **FINESS Array B** | **84.17** | **332** | P | **P** | **09 52 41.9** | **-2.5** |
| **FINES** | **FINESS Array B** comp=Z,1.3nm,0.9s,baz=132,slow=3.9,SNR=1.5 | **84.17** | **332** | P | **P** | **09 52 42.0** | **-2.4** |
| **ARCES** | **ARCESS Array B** comp=Z,1.8nm,0.8s,baz=102,slow=5.3,SNR=2.5 comp=Z,1.8nm,0.8s | **86.62** | **340** | P | **P** | **09 52 55.8** | **-0.7** |
| **TXAR** | **Lajitas Array** comp=Z,4.3nm,0.9s,baz=318,slow=1.2,SNR=31 | **145.36** | **37** | PKPbc | **PKPdf** | **09 59 52.8** | **+0.6** |

*DJA* ***05*** *09:43:25.0±0.4,1˝S±4˝×12˝0E±˚,h10km,M4.0/9,MLv4.0/9*

*IDC* ***05*** *09:43:27.6±4.1,1˝21S×120˝40E,h50km±41km,mb3.7/7, mbtmp3.9/8,ML3.5/1,Error ellipse: s-maj=51.3km s-min=17.9km az=67.0*

**ISC 05 09:43:27.4±0.9,1˝20S±0˝07×120˝4E±0˝1,h49km,n14, σ0§83/16,mb3.8/7,Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LUWI** | **Luwuk** | **2.36** | **86** | P | **Pn** | **09 44 04.7** | **+1.0** |
| **SPSI** | **Sidrap Palu** | **2.83** | **193** | P | **Pn** | **09 44 09.7** | **-0.4** |
| **GTOI** | **Gorontalo** | **3.17** | **55** | P | **Pn** | **09 44 14.9** | **0.0** |
| **BNSI** | **Bone** | **3.20** | **186** | P | **Pn** | **09 44 14.9** | **-0.4** |
| **KAPI** | **Kappang** 3.4nm,0.3s,baz=17,slow=20,SNR=8.9 | **3.85** | **190** | P | **Pn** | **09 44 24.1** | **-0.1** |
| KAPI | 15nm,0.5s,baz=30,slow=20,SNR=3.7 17nm,0.5s | | | S | **Sn** | **09 45 08.5** | **+0.3** |
| **KMSI** | **Cibinong** | **3.98** | **64** | P | **Pn** | **09 44 24.3** | **-1.6** |
| **BSSI** | **Bau Bau, Buton** | **4.92** | **179** | P | **Pn** | **09 44 38.7** | **-0.1** |
| **WRA** | **Warramunga Arr** 1.8nm,0.8s,baz=327,slow=10.0,SNR=4.3 1.8nm,0.8s | **23.08** | **145** | P | **P** | **09 48 27.4** | **-1.7** |
| **ASAR** | **Alice Springs** 1.3nm,0.9s,baz=344,slow=15,SNR=5.6 | **25.89** | **151** | P | **P** | **09 48 55.4** | **+0.5** |
| ASAR | 0.3nm,0.5s,baz=335,slow=1.9,SNR=5.8 1.3nm,0.9s | | | PcP | **PcP** | **09 52 23.7** | **+0.5** |
| **SONM** | **Songino Array** 0.3nm,0.3s,baz=157,slow=6.8,SNR=1.9 0.3nm,0.3s | **50.34** | **348** | P | **P** | **09 52 20.2** | **+0.7** |
| **MKAR** | **Makanchi Array** 0.5nm,0.6s,baz=120,slow=8.5,SNR=3.8 0.5nm,0.6s | **58.31** | **330** | P | **P** | **09 53 16.5** | **-0.9** |
| **ZALV** | **Zalesovo Beam** 0.9nm,0.4s,baz=150,slow=7.7,SNR=7.4 0.9nm,0.4s | **62.37** | **337** | P | **P** | **09 53 45.5** | **+0.6** |
| KURBB | **Kurchatov Arra** 0.8nm,0.2s,baz=133,slow=8.4,SNR=5.4 0.8nm,0.2s | **62.73** | **331** | P | **P** | **09 53 47.3** | **-0.1** |
| **QSPA** | **South Pole Qui** 1.9nm,0.8s,baz=307,slow=5.2,SNR=9.1 1.9nm,0.8s | **88.75** | **180** | P | **P** | **09 56 15.8** | **+0.1** |

*IDC* ***05*** *09:49:22.6±1.7,2˝21S×99˝70E,h0km,mb4.1/11, mbtmp4.1/11,Error ellipse: s-maj=55.9km s-min=17.1km az=60.0*

*NEIC* ***05*** *09:49:23.4±2.9,2˝00S±0˝08×99˝37E±0˝10,h10km±1km, mb4.4/19,Error ellipse: s-maj=18.3km s-min=11.4km az=236.0*

*DJA* ***05*** *09:49:25.0±0.9,2˝S±7˝×9˝9E±˚,h28km±12km,M4.3/6, MLv4.3/6*

**ISC 05 09:49:26.7±0.6,2˝14S±0˝07×99˝6E±0˝1,h30km,n54, σ1§12/40,mb4.3/20,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.76** | **145** | P | **Pn** | **09 49 39.2** | **-2.1** |
| **SISI** | **Saibi** | **0.94** | **329** | P | **Pb** | **09 49 43.3** | **-1.1** |
| **PDSI** | **Padang** | **1.51** | **36** | P | **Pn** | **09 49 53.3** | **+1.6** |
| **BKNI** | **Bangkinang** | **2.85** | **31** | Pn | **Pn** | **09 50 07.9** | **-2.3** |
| **GSI** | **Gunungsitoli** | **3.96** | **330** | Pn | Pn | 09 50 18.4 | -7.0 |
| **GSI** | **Gunungsitoli** | **3.96** | **330** | P | **Pn** | **09 50 25.6** | **+0.2** |
| **MNAI** | **Manna** | **4.04** | **123** | Pn | **Pn** | **09 50 26.1** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** 2.5nm,0.4s,baz=190,slow=9.6,SNR=5.4 2.5nm,0.4s | **20.48** | **358** | P | Pn | 09 54 03.8 | -0.7 |
| **H08S2** | **Diego Garcia H** baz=84 | **27.52** | **258** | T | T | 10 23 42.8 | |
| **H08S3** | **Diego Garcia H** baz=84 | **27.52** | **258** | T | T | 10 23 42.5 | |
| **H08S1** | **Diego Garcia H** baz=84 | **27.54** | **258** | T | T | 10 23 44.8 | |
| **FITZ** | **Fitzroy Crossi** | **30.09** | **124** | P | **P** | **09 55 34.3** | **+0.6** |
| **KNRA** | **Kununurra** | **31.75** | **117** | P | **P** | **09 55 48.0** | **-0.5** |
| KNRA | comp=Z,6.7nm,1.1s | | | IAmb | IAmb | 09 56 21.8 | |
| **H01W3** | **Cape Leeuwin H** baz=333 | **35.29** | **159** | T | T | 10 33 22.5 | |
| **H01W2** | **Cape Leeuwin H** baz=333 | **35.30** | **159** | T | T | 10 33 23.5 | |
| **H01W1** | **Cape Leeuwin H** baz=333 | **35.30** | **159** | T | T | 10 33 20.3 | |
| **WB0** | **Warramunga Arr** | **38.27** | **120** | P | **P** | **09 56 44.2** | **-0.4** |
| WB0 | comp=Z,4.6nm,0.9s | | | IAmb | IAmb | 09 56 44.8 | |
| **WRA** | **Warramunga Arr** | **38.29** | **120** | P | **P** | **09 56 44.2** | **-0.6** |
| **WRA** | **Warramunga Arr** comp=Z,2.3nm,0.8s,baz=297,slow=9.0,SNR=10.0 comp=Z,2.3nm,0.8s | **38.29** | **120** | P | **P** | **09 56 43.4** | **-1.5** |
| **WRAB** | **Tennant Creek** | **38.30** | **120** | P | **P** | **09 56 44.8** | **-0.1** |
| WRAB | comp=Z,4.6nm,0.8s | | | IAmb | IAmb | 09 56 54.0 | |
| **WB2** | **Warramunga Arr** | **38.30** | **120** | P | **P** | **09 56 44.5** | **-0.4** |
| WB2 | comp=Z,9.7nm,1.2s | | | IAmb | IAmb | 09 56 55.1 | |
| **WR0** | **Warramunga Arr** | **38.47** | **120** | P | **P** | **09 56 46.0** | **-0.4** |
| WR0 | comp=Z,15nm,1.4s | | | IAmb | IAmb | 09 57 07.2 | |
| **ASAR** | **Alice Springs** | **39.52** | **126** | P | **P** | **09 56 54.3** | **-0.8** |
| **ASAR** | **Alice Springs** comp=Z,1.0nm,0.8s,baz=302,slow=7.8,SNR=9.2 comp=Z,1.0nm,0.8s | **39.52** | **126** | P | **P** | **09 56 54.0** | **-1.1** |
| **AS31** | **Alice Springs** | **39.52** | **126** | P | **P** | **09 56 55.7** | **+0.6** |
| **KSRS** | **Korea Array** comp=Z,2.8nm,0.9s,baz=224,slow=8.7,SNR=9.2 comp=Z,2.8nm,0.8s | **47.36** | **31** | P | **P** | **09 57 58.4** | **+0.4** |
| **STKA** | **Stephens Creek** | **49.38** | **131** | P | **P** | **09 58 14.2** | **+0.5** |
| **STKA** | **Stephens Creek** comp=Z,2.2nm,0.8s,baz=270,slow=13,SNR=2.2 comp=Z,2.2nm,0.8s | **49.38** | **131** | P | **P** | **09 58 13.9** | **+0.2** |
| **SONM** | **Songino Array** | **50.12** | **6** | P | **P** | **09 58 18.0** | **-1.2** |
| SONM | comp=Z,3.2nm,0.8s | | | IAmb | IAmb | 09 58 21.9 | |
| **SONM** | **Songino Array** comp=Z,3.5nm,0.8s,baz=189,slow=8.7,SNR=15 comp=Z,3.5nm,0.8s | **50.12** | **6** | P | **P** | **09 58 20.7** | **+1.4** |
| **MK31** | **Makanchi Array** | **51.05** | **345** | P | **P** | **09 58 24.3** | **-1.9** |
| MK31 | comp=Z,2.4nm,0.8s | | | IAmb | IAmb | 09 58 28.2 | |
| **MKAR** | **Makanchi Array** | **51.05** | **345** | P | **P** | **09 58 24.8** | **-1.3** |
| **MKAR** | **Makanchi Array** comp=Z,2.5nm,0.7s,baz=150,slow=8.3,SNR=24 comp=Z,2.5nm,0.7s | **51.05** | **345** | P | **P** | **09 58 27.2** | **+1.1** |
| **MJAR** | **Matsushiro Arr** comp=Z,1.6nm,1.0s,baz=217,slow=7.2,SNR=4.0 comp=Z,1.6nm,1.0s | **52.65** | **39** | P | **P** | **09 58 38.0** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** comp=Z,3.9nm,1.1s,baz=198,slow=5.6,SNR=4.3 comp=Z,3.9nm,1.1s | **54.48** | **28** | P | **P** | **09 58 51.6** | **+0.1** |
| KURBB | **Kurchatov Arra** comp=Z,0.8nm,0.3s,baz=158,slow=7.4,SNR=1.7 comp=Z,0.8nm,0.3s | **55.56** | **344** | P | **P** | **09 58 59.7** | **+0.5** |
| **KURK** | **Kurchatov** | **55.62** | **344** | P | **P** | **09 58 58.0** | **-1.6** |
| KURK | comp=Z,2.3nm,0.9s | | | IAmb | IAmb | 09 59 01.5 | |
| **CAN** | **Canberra** | **56.44** | **132** | P | **P** | **09 59 07.5** | **+1.6** |
| **ZAA0** | **Zalesovo Array** | **57.23** | **350** | P | **P** | **09 59 09.6** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **57.23** | **350** | P | **P** | **09 59 10.0** | **-1.0** |
| **ZALV** | **Zalesovo Beam** comp=Z,4.6nm,0.8s,baz=183,slow=5.2,SNR=15 comp=Z,4.6nm,0.8s | **57.23** | **350** | P | **P** | **09 59 11.5** | **+0.5** |
| **BRVK** | **Borovoye** | **60.23** | **340** | P | **P** | **09 59 31.3** | **-0.7** |
| BRVK | comp=Z,5.6nm,1.5s | | | IAmb | IAmb | 09 59 45.4 | |
| **H04N2** | **CROZET ISLANDS** baz=58 | **60.43** | **216** | T | T | 11 04 54.2 | |
| **H04N1** | **CROZET ISLANDS** baz=58 | **60.44** | **216** | T | T | 11 04 56.6 | |
| **H04N3** | **CROZET ISLANDS** baz=58 | **60.45** | **216** | T | T | 11 04 44.2 | |
| **H04S1** | **CROZET ISLANDS** baz=57,SNR=26 | **60.72** | **216** | T | T | 11 05 18.0 | |
| **H04S3** | **CROZET ISLANDS** baz=57,slow=75,SNR=42 | **60.74** | **216** | T | T | 11 05 18.5 | |
| **H04S2** | **CROZET ISLANDS** baz=57,slow=75,SNR=26 | **60.74** | **216** | T | T | 11 05 07.2 | |
| ABKAR | **Akbulak array** | **61.56** | **332** | P | **P** | **09 59 39.4** | **-1.6** |
| **CASY** | **Casey** | **64.48** | **175** | P | **P** | **10 00 01.8** | **+1.6** |
| CASY | comp=Z,5.7nm,1.3s | | | IAmb | IAmb | 10 00 32.2 | |
| KOUNC | **Koumac, New Ca** | **65.61** | **112** | P | **P** | **10 00 08.8** | **+0.5** |
| **VNDA** | **Vanda** | **82.11** | **169** | P | **P** | **10 01 44.7** | **+0.8** |
| **QSPA** | **South Pole Qui** | **87.82** | **180** | P | **P** | **10 02 14.1** | **+1.1** |
| QSPA | comp=Z,3.7nm,1.4s | | | IAmb | IAmb | 10 02 30.5 | |
| **TXAR** | **Lajitas Array** comp=Z,1.9nm,0.8s,baz=288,slow=0.6,SNR=25 | **145.07** | **37** | PKPbc | **PKPdf** | **10 09 02.3** | **+0.2** |

*BJI* ***05*** *09:51:23.2±0.0,2˝79S×99˝64E,h26km,mb4.8/60, mB5.1/25,Ms4.8/52,Ms7 4.7/50*

*MOS* ***05*** *09:51:24.3±1.0,2˝27S×99˝50E,h10km,mb5.1/26,Error ellipse: s-maj=11.2km s-min=7.3km az=109.0*

*DJA* ***05*** *09:51:26.2±0.8,2˝S±4˝×9˝9E±˚,h17km±6km,M5.0/17, mb5.1/14,mB5.3/6,MLv5.2/17,Mw(mB)4.7/6,MwMwp4.8/1, Mwp5.1/1*

*NEIC* ***05*** *09:51:27.2±1.6,2˝29S±0˝06×99˝47E±0˝08,h10km±1km, mb5.0/51,Error ellipse: s-maj=16.3km s-min=3.0km az=235.0*

*IDC* ***05*** *09:51:29.9±2.4,2˝28S×99˝61E,h32km±16km,mb4.4/18, mbtmp4.6/18,MS4.3/18,Error ellipse: s-maj=24.0km s-min=9.9km az=51.0*

*GCMT* ***05*** *09:51:30.2±0.4,2˝40S±0˝03×99˝16E±0˝03,h23km±1km, MW5.0/51,Moment Tensor Solution. s37,c44; s51,c62; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr2.38±.18; Mθθ-0.96±.10; Mφφ-1.42±.14; Mrθ1.17±.17; Mrφ1.00±.07; Mθ/-2.11±.26; Best double couple: M₀3.33000×10¹⁶ NP1:φs148.00000°,δ68.00000°,λ95.00000°. NP2: φs316.00000°,δ22.00000°,λ79.00000°. Principal axes: T 3.4280, Plg66.0000°, Azm66.0000°; N -0.1980, Plg4.0000°, Azm326.0000°; P -3.2320, Plg23.0000°, Azm235.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 05 09:51:28.5±0.7,2˝33S±0˝05×99˝46E±0˝05,h26km±4km, n241,σ1§58/243,mb4.9/83,MS4.5/41,14C-6D,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.69** | **128** | P | **Pb** | **09 51 42.2** | **+0.2** |
| PPSI | | | | S | **Sb** | **09 51 49.0** | **-2.2** |
| **SISI** | **Saibi** | **1.07** | **340** | P | **Pn** | **09 51 47.0** | **-0.8** |
| **PDSI** | **Padang** | **1.73** | **35** | P | **Pn** | **09 51 56.4** | **-0.5** |
| **PBSI** | **Pulau Batu** | **2.55** | **332** | P | **Pn** | **09 52 08.0** | **-0.2** |
| **BKNI** | **Bangkinang** | **3.08** | **31** | P | **Pn** | **09 52 18.7** | **+3.3** |
| **BKNI** | **Bangkinang** | **3.08** | **31** | Pn | **Pn** | **09 52 15.3** | **-0.2** |
| **BKNI** | **Bangkinang** | **3.08** | **31** | P | **Pn** | **09 52 16.5** | **+1.1** |
| **SBSI** | **Sibolga** | **3.90** | **352** | P | **Pn** | **09 52 23.1** | **-3.7** |
| **MNAI** | **Manna** | **4.03** | **120** | P | **Pn** | **09 52 29.0** | **+0.5** |
| **MNAI** | **Manna** | **4.03** | **120** | Pn | **Pn** | **09 52 28.8** | **+0.3** |
| **MNAI** | **Manna** | **4.03** | **120** | P | **Pn** | **09 52 28.3** | **-0.2** |
| **GSI** | **Gunungsitoli** | **4.08** | **332** | Pn | **Pn** | **09 52 29.1** | **-0.1** |
| **GSI** | **Gunungsitoli** | **4.08** | **332** | P | **Pn** | **09 52 28.4** | **-0.8** |
| **LWLI** | **Liwa** | **5.30** | **120** | P | **Pn** | **09 52 45.0** | **-1.2** |
| **SNSI** | **Sinabang, Aceh** 220nm,1.5s,1.1nm | **5.66** | **326** | P | **Pn** | **09 52 49.5** | **-1.5** |
| **BTDF** | **Bukit Timah Da** | **5.66** | **50** | P | **Pn** | **09 52 53.1** | **+2.1** |
| **KASI** | **Kota Agung** 239nm,0.7s,2μm1.0nm | **5.94** | **122** | P | **Pn** | **09 52 53.6** | **-1.2** |
| MYKOM | **Kota Tinggi** | **6.00** | **47** | Pn | **Pn** | **09 52 56.2** | **+0.6** |
| **TPRI** | **Tanjung Pinang** 181nm,0.5s,4μm5μm1.7nm | **6.00** | **58** | P | **Pn** | **09 52 55.4** | **-0.3** |
| **KCSI** | **Kotacane, Aceh** 76nm,0.8s,1.1nm | **6.06** | **344** | P | **Pn** | **09 52 55.5** | **-1.0** |
| **IPM** | **Ipoh** | **6.94** | **13** | P | **Pn** | **09 53 10.7** | **+2.0** |
| **IPM** | **Ipoh** | **6.94** | **13** | | **Pn** | **09 53 09.2** | **+0.5** |
| **SBJI** | **Serang** 139nm,1.4s,0.7nm | **7.64** | **120** | P | **Pn** | **09 53 16.7** | **-1.5** |
| **KULM** | **Kulim** | **7.66** | **9** | Pn | **Pn** | **09 53 17.4** | **-1.1** |
| **CNJI** | **Cibinong** 44nm,0.8s | **9.10** | **123** | P | **Pn** | **09 53 36.0** | **-2.2** |
| **LEM** | **Lembang** 85nm,0.8s | **9.27** | **119** | P | **Pn** | **09 53 39.7** | **-1.1** |
| **BBJI** | **Bungbulang** | **9.62** | **122** | P | **Pn** | **09 53 43.7** | **-1.7** |
| **CMJI** | **Cimerak** | **10.46** | **122** | P | **Pn** | **09 53 54.7** | **-2.2** |
| **KPJI** | **Karang Pucung** 89nm,0.7s | **10.66** | **118** | P | **Pn** | **09 53 59.0** | **-0.6** |
| **UGM** | **Wanagama** | **12.33** | **117** | P | **Pn** | **09 54 21.9** | **-0.6** |
| **UGM** | **Wanagama** | **12.33** | **117** | Pn | **Pn** | **09 54 20.0** | **-2.5** |
| **UGM** | **Wanagama** 174nm,1.9s | **12.33** | **117** | P | **Pn** | **09 54 20.8** | **-1.7** |
| **JAGI** | **Jajag, Banyuwa** | **15.84** | **113** | Pn | **Pn** | **09 55 06.8** | **-3.1** |
| **KKM** | **Kota Kinabalu** | **18.68** | **63** | P | **P** | **09 55 45.1** | **+0.1** |
| KKM | comp=Z,53nm,0.9s | | | IAmb | IAmb | 09 55 46.4 | |
| **KAPI** | **Kappang** | **20.42** | **98** | P | **P** | **09 56 04.3** | **+0.4** |
| **KAPI** | **Kappang** comp=Z,8.6nm,0.4s,baz=290,slow=5.1,SNR=4.6 comp=Z,8.6nm,0.4s | **20.42** | **98** | P | **P** | **09 56 01.9** | **-2.1** |
| **KAPI** | **Kappang** | **20.42** | **98** | *e*P | **P** | **09 56 04.1** | **+0.2** |
| KAPI | comp=Z,56nm,1.4s | | | pmax | pmax | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,4.4nm,0.4s,baz=186,slow=11,SNR=20 | **20.66** | **359** | P | **P** | **09 56 06.1** | **-0.4** |
| CMAR | comp=Z,1μm,18.4s,baz=205,slow=39 comp=Z,4.4nm,0.4s | | | LR | LR | 10 04 59.1 | |
| **CHTO** | **Chiang Mai** | **21.02** | **359** | P | **P** | **09 56 14.1** | **+3.7** |
| **TOLI2** | **Tolitoli** | **21.59** | **81** | P | **P** | **09 56 16.3** | **-0.2** |
| TOLI2 | comp=Z,45nm,0.9s | | | IAmb | IAmb | 09 56 26.7 | |
| **QIZ** | **Qiongzhong** | **23.55** | **25** | P | **P** | **09 56 36.5** | **-0.5** |
| QIZ | | | | S | **S** | **10 00 52.1** | **+2.3** |
| QIZ | comp=Z,37nm,1.0s | | | pmax | pmax | | |
| QIZ | comp=Z,810nm,17.7s | | | LR | LR | | |
| QIZ | comp=Z,1μm,13.5s | | | LR | LR | | |
| QIZ | comp=Z,1μm,13.2s | | | LR |

PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,190nm,7.9s
PZH LR LR
comp=Z,630nm,14.9s
PZH LR LR
comp=Z,940nm,15.5s
PZH LR LR
comp=Z,910nm,17.8s
**GYA Guiyang 29.46 13** P **P** **09 57 34.4 +3.9**
GYA pmax pmax
comp=Z,13nm,0.7s
GYA LR LR
comp=Z,2µm,15.1s
GYA LR LR
comp=Z,890nm,13.9s
GYA LR LR
comp=Z,3µm,14.0s
**FITZ Fitzroy Crossi 30.07 123** P **P** **09 57 35.8 -0.2**
**KNRA Kununurra 31.77 116** P **P** **09 57 50.0 -0.9**
KNRA IAmb IAmb 09 57 51.5
comp=Z,52nm,1.7s
**TPUB Ta-pu 32.78 38** P **P** **09 57 59.4 -0.4**
**YULB Yu-li 33.26 39** P **P** **09 58 04.4 +0.5**
YULB IAmb IAmb 09 58 05.6
comp=Z,12nm,0.8s
**SSLB Suanglung 33.34 38** P **P** **09 58 04.5 -0.1**
**NWAO Narrogin (SRO) 34.70 153** LR LR 10 11 01.9
comp=Z,1µm,21.8s,baz=305,slow=34
**H01W3 Cape Leeuwin H 35.15 159** T T 10 35 23.6
baz=335,slow=76,SNR=124
**H01W2 Cape Leeuwin H 35.16 159** T T 10 35 24.6
baz=335,slow=76,SNR=105
**H01W1 Cape Leeuwin H 35.16 159** T T 10 35 26.3
baz=335,slow=76,SNR=372
**XAN Xi'an 37.26 13** ⇑P **P** **09 58 36.8 -1.5**
XAN pP sP 09 58 50.7 +1.7
XAN pmax pmax
comp=Z,21nm,0.8s
XAN LR LR
comp=Z,3µm,14.3s
XAN LR LR
comp=Z,2µm,13.7s
XAN LR LR
comp=Z,4µm,14.6s
**WB0 Warramunga Arr 38.27 119** P **P** **09 58 46.8 -0.3**
WB0 IAmb IAmb 09 58 48.0
comp=Z,14nm,0.8s
**WRA Warramunga Arr 38.29 120** P **P** **09 58 46.9 -0.3**
**WRA Warramunga Arr 38.29 120** P **P** **09 58 46.5 -0.7**
comp=Z,9.8nm,0.8s,baz=296,slow=8.9,SNR=45
WRA PcP **PcP** **10 01 01.8 +0.7**
comp=Z,1.2nm,0.8s,baz=307,slow=2.0,SNR=3.3
WRA S **S** **10 04 37.8 -2.4**
comp=Z,2.1nm,1.1s,baz=296,slow=16,SNR=6.7
WRA LR LR 10 16 04.1
comp=Z,371nm,21.2s,baz=284,slow=39
comp=Z,9.8nm,0.8s
**WRA Warramunga Arr 38.29 120** P **P** **09 58 46.9 -0.3**
**WRAB Tennant Creek 38.30 120** P **P** **09 58 47.1 -0.2**
WRAB IAmb IAmb 09 58 48.4
comp=Z,19nm,0.8s
**WRAB Tennant Creek 38.30 120**⇑*e*P **P** **09 58 45.8 -1.4**
WRAB pmax pmax
comp=Z,22nm,0.9s
**WB2 Warramunga Arr 38.30 120** P **P** **09 58 47.1 -0.2**
WB2 IAmb IAmb 09 58 48.3
comp=Z,24nm,0.9s
**LZH Lanzhou 38.44 6** *e*P **P** **09 58 48.8 +0.5**
LZH sP sP 09 59 00.8 +1.7
LZH pmax pmax
comp=Z,24nm,1.4s
LZH LR LR
comp=Z,950nm,12.7s
LZH LR LR
comp=Z,1µm,16.1s
LZH LR LR
comp=Z,1µm,14.4s
**WR0 Warramunga Arr 38.47 120** P **P** **09 58 48.7 0.0**
WR0 IAmb IAmb 09 58 49.8
comp=Z,24nm,0.7s
**GOMU GeErMu 38.58 354** P **P** **09 58 51.1 +1.4**
GOMU pP sP 09 58 59.0 -1.6
GOMU pmax pmax
comp=Z,20nm,0.8s
GOMU LR LR
comp=Z,670nm,17.3s
GOMU LR LR
comp=Z,440nm,19.6s
GOMU LR LR
comp=Z,880nm,22.1s
**LYN LuoYang 38.67 17** P **P** **09 58 50.2 +0.1**
LYN S **S** **10 04 44.5 -0.9**
LYN SS **SnSn** **10 07 26.3 -8.6**
LYN pmax pmax
comp=Z,46nm,0.7s
LYN pmax pmax
comp=Z,250nm,7.6s
LYN LR LR
comp=Z,1µm,13.1s
LYN LR LR
comp=Z,1µm,14.1s
LYN LR LR
comp=Z,1µm,14.8s
**NJ2 Nanjing 38.83 27** *e*P **P** **09 58 54.1 +2.6**
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**SSE Sheshan 39.15 30** P **P** **09 58 54.3 +0.1**
SSE S **S** **10 04 55.1 +2.4**
SSE pmax pmax
comp=Z,12nm,0.8s
SSE pmax pmax
comp=Z,76nm,3.5s
SSE LR LR
comp=Z,380nm,12.4s
SSE LR LR
comp=Z,430nm,13.1s
**ASAR Alice Springs 39.49 125** P **P** **09 58 57.4 +0.1**
**ASAR Alice Springs 39.49 125** P **P** **09 58 57.5 +0.2**
comp=Z,6.1nm,0.7s,baz=299,slow=7.5,SNR=34
ASAR PcP **PcP** **10 01 05.8 +1.0**
comp=Z,1.2nm,0.7s,baz=301,slow=3.9,SNR=2.9
ASAR S **S** **10 04 56.7 -1.5**
comp=Z,2.0nm,1.1s,baz=296,slow=17,SNR=6.0
ASAR LR LR 10 16 43.5
comp=Z,538nm,20.8s,baz=311,slow=38
comp=Z,6.1nm,0.7s
**AS31 Alice Springs 39.50 125** P **P** **09 58 57.4 +0.1**
**GTA Gaotai 41.54 0** ⇑P **P** **09 59 14.4 +0.4**
GTA pP pP 09 59 22.4 +0.7
GTA pmax pmax
comp=Z,16nm,1.5s
GTA LR LR
comp=Z,600nm,13.8s
GTA LR LR
comp=Z,440nm,12.7s
GTA LR LR
comp=Z,690nm,15.3s
**TIA Tai'an 41.74 22** P **P** **09 59 13.3 -2.2**
TIA pmax pmax
comp=Z,5.0nm,0.9s
TIA pmax pmax
comp=Z,160nm,4.6s
TIA LR LR
comp=Z,2µm,11.5s
TIA LR LR
comp=Z,1µm,14.4s
TIA LR LR
comp=Z,3µm,14.4s
**HNS HongShan 41.99 18** ⇓P **P** **09 59 17.8 +0.3**
HNS *e*S **S** **10 05 38.6 +3.8**
HNS LR LR
comp=Z,380nm,17.5s
HNS LR LR
comp=Z,530nm,17.1s
HNS LR LR
comp=Z,590nm,18.6s
**BTO Baotou 43.81 12** *e*P **P** **09 59 33.9 +1.5**
BTO pP **pP** **09 59 40.7 +0.6**
BTO sP **sP** **09 59 43.5 +0.3**
BTO PP **PcP** **10 01 18.2 -0.5**
BTO S **S** **10 06 06.5 +4.8**
BTO SS **SS** **10 09 13.3 -5.1**
BTO pmax pmax
comp=Z,23nm,0.5s

BTO pmax pmax
comp=Z,200nm,6.1s
BTO LR LR
comp=Z,660nm,19.2s
BTO LR LR
comp=Z,2µm,15.0s
BTO LR LR
comp=Z,2µm,20.2s
**HHC Hu-ho-hao-te 44.37 13** *e*P **P** **09 59 37.7 +0.8**
HHC pmax pmax
comp=Z,9.0nm,0.6s
HHC pmax pmax
comp=Z,150nm,5.5s
HHC LR LR
comp=Z,2µm,14.9s
HHC LR LR
comp=Z,690nm,17.5s
HHC LR LR
comp=Z,2µm,14.6s
**BJT Baijiatuao 44.84 18** P **P** **09 59 40.5 0.0**
BJT IAmb IAmb 09 59 42.2
comp=Z,28nm,1.4s
**BJT Baijiatuao 44.84 18** P **P** **09 59 40.5 0.0**
BJT pmax pmax
comp=Z,28nm,1.4s
**BJI Beijing 44.86 18** P **P** **09 59 40.8 +0.1**
BJI pmax pmax
comp=Z,5.0nm,1.0s
BJI pmax pmax
comp=Z,65nm,4.3s
BJI LR LR
comp=Z,350nm,14.5s
BJI LR LR
comp=Z,200nm,16.4s
BJI LR LR
comp=Z,410nm,15.2s
**BBOO Buckleboo 45.78 136** P **P** **09 59 47.8 -0.4**
**JNU Nakatsue 46.08 37** P **P** **09 59 50.2 -0.3**
JNU IAmb IAmb 09 59 51.5
comp=Z,36nm,0.9s
**WMQ Urumqi 47.15 348**⇑*i*P **P** **10 00 00.1 +1.4**
WMQ sP sP 10 00 14.2 +4.5
WMQ pmax pmax
comp=Z,35nm,1.5s
WMQ LR LR
comp=Z,370nm,23.8s
WMQ LR LR
comp=Z,200nm,23.7s
**KSAR Wonju Array Be 47.55 31** P **P** **10 00 01.7 -0.2**
**KSAR Wonju Array Be 47.55 31** P **P** **10 00 01.7 -0.2**
**KSRS Korea Array 47.58 31** P **P** **10 00 01.5 -0.6**
comp=Z,9.4nm,0.9s,baz=226,slow=8.4,SNR=34
KSRS LR LR 10 21 43.3
comp=Z,218nm,18.4s,baz=255,slow=38
comp=Z,9.4nm,0.9s
**KS19 Wonju Array Si 47.59 31** P **P** **10 00 02.1 -0.1**
KS19 IAmb IAmb 10 00 03.1
comp=Z,20nm,1.1s
**GUMO Guam 47.73 69** LR LR 10 20 06.0
comp=Z,88nm,21.4s,baz=244,slow=36
**PMG Port Moresby 47.92 101** LR LR 10 25 01.8
comp=Z,201nm,19.1s,baz=317,slow=42
**JMN Monobe 48.35 39** P **P** **10 00 08.4 +0.2**
JMN IAmb IAmb 10 00 10.8
comp=Z,20nm,1.0s
**XLT XiLinHaoTe 48.38 16** *e*P **P** **10 00 08.3 0.0**
XLT pP pP 10 00 15.7 -0.4
XLT sP sP 10 00 17.0 -2.2
XLT PP **PP** **10 01 56.3 -4.9**
XLT S **S** **10 07 01.6 -5.7**
XLT pmax pmax
comp=Z,14nm,0.9s
XLT pmax pmax
comp=Z,110nm,14.0s
XLT LR LR
comp=Z,68nm,14.5s
XLT LR LR
comp=Z,330nm,15.3s
XLT LR LR
comp=Z,710nm,15.3s
**NRN Naryn 48.51 336** P **P** **10 00 09.8 +0.1**
NRN IAmb IAmb 10 00 58.9
comp=Z,13nm,1.1s
**NRN Naryn 48.51 336** P **P** **10 00 09.8 +0.1**
NRN pmax pmax
comp=Z,13nm,1.1s
**DRK Karamyk 48.75 331** P **P** **10 00 12.0 +0.4**
**DRK Karamyk 48.75 331** P **P** **10 00 12.0 +0.4**
DRK pmax pmax
comp=Z,84nm,1.6s
**CTA Charters Tower 48.94 115** P **P** **10 00 13.5 +0.5**
**CTAO Charters Tower 48.94 115** P **P** **10 00 13.3 +0.3**
CTAO IAmb IAmb 10 00 14.2
comp=Z,60nm,1.8s
**CTAO Charters Tower 48.94 115** P **P** **10 00 13.3 +0.3**
CTAO pmax pmax
comp=Z,60nm,1.8s
**STKA Stephens Creek 49.33 131** P **P** **10 00 17.2 +1.4**
**STKA Stephens Creek 49.33 131** P **P** **10 00 16.8 +1.0**
comp=Z,8.1nm,0.7s,baz=309,slow=8.1,SNR=18
STKA LR LR 10 22 09.6
comp=Z,539nm,21.6s,baz=289,slow=37
comp=Z,8.1nm,0.7s
**ARSB Arslanbob 49.68 334** P **P** **10 00 17.5 -0.9**
**ARSB Arslanbob 49.68 334** P **P** **10 00 17.5 -0.9**
ARSB pmax pmax
comp=Z,7.0nm,1.2s
**AAK Ala-Archa 50.12 336** LR LR 10 24 54.4
comp=Z,558nm,20.2s,baz=168,slow=40
**AAK Ala-Archa 50.12 336**⇑*e*P **P** **10 00 22.8 +1.0**
AAK pmax pmax
comp=Z,11nm,2.2s
**SONM Songino Array 50.33 6** P **P** **10 00 23.9 +0.7**
SONM IAmb IAmb 10 00 25.1
comp=Z,17nm,0.8s
**SONM Songino Array 50.33 6** P **P** **10 00 23.8 +0.6**
comp=Z,16nm,0.7s,baz=190,slow=9.3,SNR=55
SONM PcP **PcP** **10 01 42.2 +0.5**
comp=Z,2.5nm,0.7s,baz=195,slow=3.5,SNR=1.6
SONM ScP **ScP** **10 05 36.3 +0.2**
comp=Z,0.5nm,0.7s,baz=159,slow=4.3,SNR=1.9
comp=Z,16nm,0.7s
**SONM Songino Array 50.33 6** P **P** **10 00 23.9 +0.7**
SONM pmax pmax
comp=Z,17nm,0.8s
**ULN Ulaanbaatar 50.43 7** P **P** **10 00 24.2 +0.2**
ULN IAmb IAmb 10 00 25.4
comp=Z,14nm,0.8s
**ULN Ulaanbaatar 50.43 7***c i*P **P** **10 00 24.7 +0.7**
ULN pmax pmax
comp=Z,27nm,1.3s
**MK31 Makanchi Array 51.20 345** P **P** **10 00 30.4 +0.7**
MK31 IAmb IAmb 10 00 31.5
comp=Z,10nm,0.8s
**MK31 Makanchi Array 51.20 345***c i*P **P** **10 00 30.3 +0.6**
**MKAR Makanchi Array 51.20 345** P **P** **10 00 30.5 +0.8**
**MKAR Makanchi Array 51.20 345** P **P** **10 00 30.3 +0.6**
comp=Z,11nm,0.6s,baz=148,slow=8.1,SNR=71
MKAR S **S** **10 07 47.6 +1.0**
comp=Z,0.4nm,0.9s,baz=153,slow=9.7,SNR=2.6
MKAR LR LR 10 26 14.6
comp=Z,224nm,20.1s,baz=162,slow=41
comp=Z,11nm,0.6s
**MKAR Makanchi Array 51.20 345** P **P** **10 00 30.5 +0.8**
**MAKZ Makanchi 51.30 345** P **P** **10 00 31.1 +0.7**
**MAKZ Makanchi 51.30 345** P **P** **10 00 31.1 +0.7**
MAKZ pmax pmax
comp=Z,11nm,1.1s
**CN2 Changchun 51.51 24** P **P** **10 00 31.2 -0.7**
CN2 pmax pmax
comp=Z,30nm,0.9s
CN2 LR LR
comp=Z,400nm,12.0s
CN2 LR LR
comp=Z,400nm,12.0s
CN2 LR LR
comp=Z,400nm,13.0s
**KKAR Karatay Array 52.20 333** P **P** **10 00 36.8 -0.4**
**KKAR Karatay Array 52.20 333** P **P** **10 00 36.8 -0.4**
**MAJO Matsushiro 52.87 39** P **P** **10 00 41.2 -1.1**
MAJO IAmb IAmb 10 00 42.5
comp=Z,39nm,1.5s
**MAJO Matsushiro 52.87 39**⇓*e*P **P** **10 00 40.9 -1.4**
MAJO pmax pmax
comp=Z,11nm,1.1s
**MJB9 Matsu-Tunnel 52.87 39** P **P** **10 00 42.1 -0.2**

**MJAR Matsushiro Arr 52.87 39** P **P** **10 00 41.1 -1.1**
comp=Z,13nm,1.2s,baz=224,slow=7.3,SNR=20
comp=Z,13nm,1.2s
**BNX BinXian 53.89 24** ⇓P **P** **10 00 49.8 +0.2**
BNX pmax pmax
comp=Z,19nm,0.6s
**MDJ Mudanjiang 53.92 26** P **P** **10 00 48.5 -1.3**
MDJ pmax pmax
comp=Z,21nm,2.2s
**USA0B Ussuriysk Arra 54.70 28** P **P** **10 00 56.1 +0.6**
**USA0B Ussuriysk Arra 54.70 28***c i*P **P** **10 00 55.0 -0.5**
**USRK Ussuriysk Ar. 54.70 28** P **P** **10 00 56.1 +0.6**
**USRK Ussuriysk Ar. 54.70 28** P **P** **10 00 55.2 -0.3**
comp=Z,9.8nm,0.8s,baz=220,slow=6.6,SNR=22
comp=Z,9.8nm,0.8s
**USRK Ussuriysk Ar. 54.70 28** P **P** **10 00 56.1 +0.6**
**KURBB Kurchatov Arra 55.72 344** P **P** **10 01 02.7 0.0**
comp=Z,1.1nm,0.3s,baz=160,slow=6.7,SNR=15
KURBB LR LR 10 30 11.5
comp=Z,229nm,19.1s,baz=164,slow=42
comp=Z,1.1nm,0.3s
**KURK Kurchatov 55.78 344** P **P** **10 01 03.1 0.0**
KURK IAmb IAmb 10 01 20.8
comp=Z,22nm,1.1s
**KURK Kurchatov 55.78 344** P **P** **10 01 03.1 0.0**
KURK pmax pmax
comp=Z,21nm,1.1s
**ZAA0 Zalesovo Array 57.40 350** P **P** **10 01 15.1 +0.5**
ZAA0 IAmb IAmb 10 01 15.6
comp=Z,20nm,0.8s
**ZALV Zalesovo Beam 57.40 350** P **P** **10 01 14.9 +0.3**
**ZALV Zalesovo Beam 57.40 350** P **P** **10 01 14.5 -0.1**
comp=Z,14nm,0.6s,baz=186,slow=5.6,SNR=39
comp=Z,14nm,0.6s
**ZALV Zalesovo Beam 57.40 350** P **P** **10 01 14.9 +0.3**
**HEH HeiHe 57.62 21** *e*P **P** **10 01 16.1 -0.1**
HEH pmax pmax
comp=Z,14nm,1.3s
HEH LR LR
comp=Z,1µm,18.2s
HEH LR LR
comp=Z,660nm,16.7s
HEH LR LR
comp=Z,2µm,18.2s
**KLR Kul'dur 58.45 24** *e*P **P** **10 01 20.4 -1.7**
KLR pmax pmax
comp=Z,25nm,1.4s
**ASAJ Asahikawa 60.19 35** P **P** **10 01 35.1 +0.9**
ASAJ pmax pmax
comp=Z,97nm,2.0s
**JKA Kamikawa-asahi 60.19 35** P **P** **10 01 35.1 +0.9**
**H04N2 CROZET ISLANDS 60.21 216** T T 11 07 01.2
baz=58,slow=75,SNR=224
**H04N1 CROZET ISLANDS 60.22 216** T T 11 06 59.5
baz=58,slow=75,SNR=250
**H04N3 CROZET ISLANDS 60.23 216** T T 11 06 58.1
baz=58,slow=75,SNR=235
**BRVK Borovoye 60.38 340** P **P** **10 01 35.0 -0.4**
**BRVK Borovoye 60.38 340***e*P **P** **10 01 34.9 -0.4**
BRVK pmax pmax
comp=Z,7.0nm,1.7s
**ZEA Zeya 60.49 19** *e*P **P** **10 01 36.5 +0.4**
ZEA pmax pmax
comp=Z,10.0nm,0.8s
ZEA MLR MLR
comp=N,300nm,16.0s
ZEA MLR MLR
comp=Z,300nm,14.0s
**H04S1 CROZET ISLANDS 60.51 216** T T 11 07 23.3
baz=57,slow=75,SNR=669
**HNR Honiara 60.51 99** LR LR 10 29 00.7
comp=Z,1µm,20.5s,baz=247,slow=37
**H04S3 CROZET ISLANDS 60.52 216** T T 11 07 16.5
baz=57,slow=75,SNR=702
**H04S2 CROZET ISLANDS 60.52 216** T T 11 07 24.2
baz=57,slow=75,SNR=440
**FURI Furi 61.59 281** LR LR 10 25 50.4
comp=Z,142nm,18.0s,baz=138,slow=33
**ABKAR Akbulak array 61.67 332** P **P** **10 01 43.9 -0.3**
**ABKAR Akbulak array 61.67 332** P **P** **10 01 43.7 -0.5**
ABKAR IAmb IAmb 10 02 02.2
comp=Z,17nm,1.1s
**YSS Yuzh-Sakhalins 62.05 32** P **P** **10 01 46.1 -0.7**
**YSS Yuzh-Sakhalins 62.05 32** *e*P **P** **10 01 47.0 +0.3**
YSS pmax pmax
comp=Z,20nm,1.0s
YSS MLR MLR
comp=E,300nm,16.0s
**AKTO Aktyubinsk 63.39 332** LR LR 10 32 46.6
comp=E,145nm,20.3s,baz=12,slow=39
**TYV Tymovskoe 64.51 29** *e*P **P** **10 02 03.8 +0.8**
TYV *e*S **S** **10 10 43.9 +3.4**
TYV pmax pmax
comp=Z,100nm,4.5s
TYV pmax pmax
comp=Z,4.0nm,1.5s
TYV smax smax
comp=N,100nm,9.7s
TYV smax smax
comp=E,100nm,9.7s
TYV MLR MLR
comp=Z,300nm,16.0s
**SVE Sverdlovsk 66.79 338** *e*P **P** **10 02 18.3 +0.7**
SVE pmax pmax
comp=Z,17nm,1.1s
**ARU Arti 67.30 337** P **P** **10 02 20.2 -0.6**
ARU IAmb IAmb 10 02 30.4
comp=Z,24nm,1.5s
**ARU Arti 67.30 337***c i*P **P** **10 02 20.5 -0.3**
ARU 10 02 45.1
ARU 10 04 50.0
ARU S **S** **10 11 15.9 +1.6**
ARU SS **SS** **10 15 31.5 -3.0**
ARU pmax pmax
comp=Z,6.0nm,0.9s
**YAK Yakutsk 68.20 15** P **P** **10 02 26.1 -0.3**
**YAK Yakutsk 68.20 15***ce*P **P** **10 02 25.2 -1.2**
YAK pmax pmax
comp=Z,11nm,0.7s
**KBZ Khabaz 68.21 319** P **P** **10 02 26.6 -0.2**
comp=Z,2.0nm,0.6s,baz=183,slow=7.4,SNR=4.5
comp=Z,2.0nm,0.6s
**MBAR Mbarara 68.72 270** LR LR 10 29 49.2
comp=Z,117nm,18.3s,baz=90,slow=33
**SOC Sochi 70.24 318** *e*P **P** **10 02 35.2 -4.3**
SOC *e* 10 05 12.2
SOC *e*PPP PPP 10 06 54.7
SOC *e*S **S** **10 11 43.1 -6.7**
SOC *e*SS **SS** **10 16 15.9 -4.6**
SOC pmax pmax
comp=Z,27nm,0.8s
**VRH Novokhopyorsk 72.30 326** *e*P **P** **10 02 49.8 -1.9**
VRH pmax pmax
comp=Z,7.0nm,0.8s
**KIRV Kirov 72.44 335**⇓*e*P **P** **10 02 53.0 +0.6**
**BRTR Keskin Array B 73.15 313** P **P** **10 02 56.3 -1.0**
comp=Z,0.9nm,0.7s,baz=136,slow=5.9,SNR=5.6
comp=Z,0.9nm,0.7s
**BR131 Keskin Array S 73.15 313**⇓*e*P **P** **10 02 56.8 -0.5**
**MA2 Magadan 73.55 24** P **P** **10 02 59.0 -0.1**
**MA2 Magadan 73.55 24**⇑*e*P **P** **10 02 58.8 -0.2**
MA2 pmax pmax
comp=Z,17nm,1.6s
**VSR Storozhevoye 73.74 325** *e*P **P** **10 02 57.0 -3.3**
VSR pmax pmax
comp=Z,6.0nm,0.8s
**VORR Voronezh 73.91 326** *e*P **P** **10 03 01.5 +0.2**
VORR pmax pmax
comp=Z,42nm,0.4s
**LPSR Galich'ya Gora 74.47 327** *e*P **P** **10 03 03.2 -1.3**
LPSR pmax pmax
comp=Z,7.0nm,0.8s
**SEY Seymchan 76.13 22** *e*P **P** **10 03 12.6 -1.3**
SEY pmax pmax
comp=Z,18nm,1.6s
**MOS Moscow 76.50 329** *e*P **P** **10 03 14.9 -1.2**
MOS pmax pmax
comp=Z,33nm,0.7s
**VRI Vrincioaia 79.73 317** P **P** **10 03 35.2 +0.9**
**VRI Vrincioaia 79.73 317** P **P** **10 03 35.2 +0.9**
**LUBAR Lubar, Ukraine 80.10 321** P **P** **10 03 36.3 +0.1**
**MLR Muntele Rosu 80.17 317** P **P** **10 03 36.4 -0.4**
MLR IAmb IAmb 10 03 47.4
comp=Z,9.9nm,0.9s
**MLR Muntele Rosu 80.17 317** P **P** **10 03 36.4 -0.4**
MLR pmax pmax

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| KMPD | K-Podol'skiy | 80.57 | 320 | | P | | P | 10 03 39.3 | +0.6 |
| BURAR | Bucovina Array | 81.15 | 319 | | P | | P | 10 03 43.2 | +1.2 |
| BUR08 | Bucovina Ar. S | 81.17 | 319 | | P | | P | 10 03 42.5 | +0.4 |
| VNDA | Vanda | 81.94 | 169 | | P | | P | 10 03 45.7 | +0.2 |
| VNDA | Vanda | 81.94 | 169 | | P | | P | 10 03 45.7 | +0.2 |
| VNDA | | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.6s | | | | | | | | |
| KOLS | Kolonicke sedl | 83.36 | 320 | | eP | | P | 10 03 55.5 | +2.1 |
| KOLS | | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| KOLS | Kolonicke sedl | 83.36 | 320 | | eP | | P | 10 03 55.5 | +2.1 |
| ELIB | Princess Elisa | 83.50 | 198 | | dP | | P | 10 03 56.6 | +2.8 |
| | comp=Z,2.3nm,1.0s | | | | | | | | |
| FINES | FINESS Array B | 84.16 | 332 | | P | | P | 10 03 57.5 | +0.4 |
| | comp=Z,1.6nm,0.6s,baz=100,slow=5.0,SNR=9.9 | | | | | | | | |
| FINES | | | | | LR | | LR | 10 45 54.2 | |
| | comp=Z,103nm,19.9s,baz=93,slow=39 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| ARCES | ARCESS Array B | 86.60 | 340 | | P | | P | 10 04 10.1 | +0.8 |
| | comp=Z,3.7nm,0.8s,baz=72,slow=5.8,SNR=8.6 | | | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| NVL | N'lazarevskaya | 87.03 | 199 | | eP | | P | 10 04 24.3 | +13 |
| NVL | | | | | eS | | S | 10 14 48.1 | -0.2 |
| NVL | | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| NVL | | | | | MLR | | MLR | | |
| | comp=Z,142nm,17.0s | | | | | | | | |
| QSPA | South Pole Qui | 87.63 | 180 | | P | | P | 10 04 14.4 | -0.1 |
| QSPA | | | | | IAmb | | IAmb | 10 04 20.1 | |
| | comp=Z,27nm,2.0s | | | | | | | | |
| QSPA | South Pole Qui | 87.63 | 180 | | P | | P | 10 04 14.6 | +0.1 |
| | comp=Z,0.3nm,0.7s,baz=262,slow=7.1,SNR=1.2 | | | | | | | | |
| GEC2 | GERESS Array S | 88.94 | 319 | | P | | P | 10 04 18.7 | -2.3 |
| GEC2 | | | | | IAmb | | IAmb | 10 04 37.2 | |
| | comp=Z,14nm,1.6s | | | | | | | | |
| GERES | GERESS Array B | 88.94 | 319 | | P | | P | 10 04 20.4 | -0.6 |
| GERES | GERESS Array B | 88.94 | 319 | | P | | P | 10 04 22.2 | +1.1 |
| | comp=Z,0.4nm,0.6s,baz=98,slow=5.7,SNR=3.9 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| GERES | GERESS Array B | 88.94 | 319 | | P | | P | 10 04 20.4 | -0.6 |
| BRG | Berggiesshubel | 88.96 | 321 | | eP | | P | 10 04 22.5 | +1.6 |
| BRG | | | | | Amp | | | 10 04 23.7 | |
| | comp=Z,2.8nm,0.9s | | | | | | | | |
| BRG | Berggiesshubel | 88.96 | 321 | | P | | P | 10 04 30.5 | +10 |
| BRG | | | | | Amp | | | 10 04 37.1 | |
| | comp=Z,3.4nm,1.2s | | | | | | | | |
| HFS | Hagfors | 89.89 | 330 | | LR | | LR | 10 48 38.1 | |
| | comp=Z,74nm,19.7s,baz=86,slow=38 | | | | | | | | |
| CTI | Castel Tesino | 90.14 | 316 | | P | | P | 10 04 27.1 | +0.4 |
| CTI | | | | | IAmb | | IAmb | 10 04 46.9 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| CTI | Castel Tesino | 90.14 | 316 | | P | | P | 10 04 27.1 | +0.4 |
| CTI | | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| SPITS | Spitsbergen Ar | 90.85 | 348 | | P | | P | 10 04 29.2 | 0.0 |
| | comp=Z,2.8nm,0.6s,baz=83,slow=8.5,SNR=1.7 | | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| NVAR | Mina Array Bea | 130.19 | 39 | | PKP | | PKPdf | 10 10 37.0 | -0.1 |
| | comp=Z,0.4nm,0.6s,baz=280,slow=2.0,SNR=4.1 | | | | | | | | |
| PDAR | Pinedale Array | 132.12 | 29 | | PKP | | PKPdf | 10 10 41.0 | +0.3 |
| | comp=Z,0.2nm,0.5s,baz=340,slow=2.7,SNR=2.1 | | | | | | | | |
| CPUP | Villa Florida | 143.74 | 217 | | PKP | | PKPdf | 10 11 03.5 | +1.5 |
| | comp=Z,1.6nm,0.8s,baz=204,slow=18,SNR=1.3 | | | | | | | | |
| APMT | Aspermont | 144.12 | 29 | | | | PKPbc | 10 11 01.1 | +0.4 |
| T42A | Van Buren | 144.13 | 14 | | PKPdf | | PKPbc | 10 11 00.7 | +0.2 |
| MNHN | Monahans | 144.33 | 34 | | | | PKPbc | 10 11 01.5 | +0.1 |
| ALPN | Alpine | 144.55 | 36 | | PKPdf | | PKPbc | 10 11 02.3 | +0.1 |
| S57A | Dark Hollow, R | 144.71 | 358 | | | | PKPab | 10 11 01.8 | -0.4 |
| S51A | Beattyville | 144.75 | 4 | | | | PKPab | 10 11 02.2 | -0.1 |
| SGCY | Sterling City | 144.76 | 31 | | PKPdf | | PKPab | 10 11 02.3 | -0.4 |
| FCAR | Ozark Folk Cen | 144.93 | 16 | | | | PKPbc | 10 11 03.1 | +0.1 |
| X37A | Clayton | 145.06 | 22 | | | | PKPbc | 10 11 02.1 | -1.4 |
| TXAR | Lajitas Array | 145.29 | 37 | | PKPbc | | PKPdf | 10 11 05.7 | +0.8 |
| | comp=Z,9.8nm,0.7s,baz=290,slow=1.2,SNR=73 | | | | | | | | |
| T57A | Hurt | 145.48 | 358 | | | | PKPbc | 10 11 04.6 | -0.2 |
| OZNA | Ozona | 145.54 | 32 | | PKPdf | | PKPdf | 10 11 04.7 | -0.5 |
| HBAR | Harrisburg | 145.63 | 15 | | | | PKPdf | 10 11 05.1 | 0.0 |
| U49A | Red Boiling Sp | 145.64 | 7 | | PKPdf | | PKPdf | 10 11 04.2 | -0.9 |
| WVT | Waverly | 145.70 | 11 | | PKPdf | | PKPdf | 10 11 04.5 | -0.7 |
| WVT | Waverly | 145.70 | 11 | | PKIKP | | PKPdf | 10 11 04.5 | -0.7 |
| MIAR | Mount Ida | 145.72 | 19 | | PKPdf | | PKPbc | 10 11 05.4 | -0.2 |
| MIAR | Mount Ida | 145.72 | 19 | | PKIKP | | PKPbc | 10 11 05.4 | -0.2 |
| TZTN | Tazewell | 145.84 | 4 | | | | PKPdf | 10 11 05.7 | +0.2 |
| UALR | University of | 145.90 | 17 | | | | PKPdf | 10 11 05.1 | -0.5 |
| V48A | Smith Brothers | 146.25 | 9 | | | | PKPdf | 10 11 05.7 | -0.5 |
| BRDY | Brady | 146.34 | 29 | | | | PKPdf | 10 11 06.9 | +0.4 |
| V52A | Sevierville | 146.54 | 5 | | | | PKPdf | 10 11 07.0 | +0.4 |
| TKL | Tuckaleechee C | 146.71 | 5 | | PKPdf | | PKPdf | 10 11 07.3 | +0.3 |
| TKL | Tuckaleechee C | 146.71 | 5 | | PKP2 | | PKPdf | 10 11 07.3 | +0.3 |
| PLAL | Pickwick Lake | 146.77 | 11 | | PKPdf | | PKPdf | 10 11 07.2 | +0.1 |
| SWET | Sewanee | 146.90 | 8 | | | | PKPdf | 10 11 07.9 | +0.5 |

*TEH **05** 09:54:32.8,34°.72N×45°.60E,h10km±77km,ML2.9*
*ISN **05** 09:54:33.2±0.4,34°.73N×45°.60E,h17km±24km,ML2.9*
**ISC 05 09:54:33.3±1.2,34°.71N±0°.06×45°.60E±0°.05,h18km,n11,**
**σ0s.74/14,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| KGS1 | Ghasr-e-Shirin | 0.20 | 182 | Pg | | Pg | 09 54 37.3 | -1.1 |
| GLG1 | Gilan-e-Gharb | 0.65 | 156 | Pg | | Pb | 09 54 45.6 | -0.5 |
| IDHR | Dehrash | 0.65 | 90 | Pg | | Pb | 09 54 45.6 | -0.7 |
| IDHR | | | | Sg | | Sb | 09 54 55.2 | +0.1 |
| IGHG | Ghaleghazi | 0.89 | 115 | Pg | | Pb | 09 54 50.5 | +0.2 |
| ILBA | Ilam Banvizeh | 1.19 | 155 | Pg | | Pb | 09 54 55.9 | +0.5 |
| IKRK | Kirkuk | 1.24 | 304 | ePg | | Pn | 09 54 56.0 | +0.2 |
| KCHF | Cheshme Sefid, | 1.27 | 109 | Pg | | Pg | 09 54 58.1 | +0.2 |
| IBDR | Badra | 1.62 | 170 | ePn | | Pb | 09 55 03.0 | +0.4 |
| IBDR | | | | eSn | | Sg | 09 55 25.0 | -0.5 |
| IBDR | | | | AML | | AML | 09 55 31.6 | |
| | comp=N,175nm,0.6s | | | | | | | |
| IBDR | | | | AML | | AML | 09 55 34.4 | |
| | comp=E,145nm,0.5s | | | | | | | |
| SNQR | Sonqor, Kerman | 1.68 | 84 | Pg | | Pg | 09 55 04.9 | -0.8 |
| BHD | Baghdad | 1.75 | 216 | ePn | | Pb | 09 55 05.0 | 0.0 |
| BHD | | | | eSn | | Sb | 09 55 28.0 | +1.3 |
| IBZA | Bozab | 1.88 | 97 | Pn | | Pb | 09 55 08.4 | +1.1 |

**NNC 05 09:55:46.0±2.7,38°.59N×70°.40E,h0km,mb3.9,mpv3.5,**
**6C-3D,Error ellipse: s-maj=19.3km s-min=16.2km**
**az=16.0,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| KK31 | Karatay Array | 4.51 | 1 | ⇑Pn | | Pn | 09 56 55.0 | -0.6 |
| | 1.8nm,0.3s,baz=177,slow=12,SNR=129 | | | | | | | |
| KK31 | | | | ⇑Sn | | Sn | 09 57 50.7 | +1.9 |
| | 3.7nm,0.6s | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 09 58 05.5 | |
| | 6.9nm,0.6s,baz=181,slow=30,SNR=5.4 | | | | | | | |
| CHMS | Chumysh | 5.51 | 35 | ⇓Pn | | Pn | 09 57 09.3 | 0.0 |
| | 4.5nm,0.6s | | | | | | | |
| CHMS | | | | ⇑Sn | | Sn | 09 58 14.8 | +1.5 |
| | 13nm,1.1s | | | | | | | |
| CHMS | | | | ⇑Lg | | Lg | 09 58 38.8 | |
| | 10nm,0.9s | | | | | | | |
| TKM2 | Tokmak 2 | 5.86 | 41 | ⇑Pn | | Pn | 09 57 14.2 | -0.1 |
| | 2.3nm,0.5s | | | | | | | |
| TKM2 | | | | ⇓Sn | | Sn | 09 58 23.8 | +1.6 |
| | 3.4nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 09 58 49.1 | |
| | 6.3nm,0.8s | | | | | | | |

*SJA **05** 10:11:32.7±0.6,30°.48S×71°.54W,h22km±3km,ML3.5,*
*MW3.7*
*GUC **05** 10:11:36.9±0.7,30°.54S×71°.21W,h58km±2km,ML3.9*
**ISC 05 10:11:38.2±1.3,30°.50S±0°.03×71°.36W±0°.05,h44km±12km,**
**n36,σ1s.51/55,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| CO06 | Fray Jorge | 0.29 | 234 | eP | | Pn | 10 11 47.3 | +0.6 |
| CO06 | | | | i S | | Sn | 10 11 55.1 | +2.5 |
| GO04 | Tololo Observa | 0.59 | 56 | eP | | Pn | 10 11 48.9 | -1.6 |
| GO04 | | | | i S | | Sn | 10 11 58.0 | -1.2 |
| GO04 | | | | IAML | | | 10 11 59.3 | |
| | comp=E,5μm,0.3s | | | | | | | |
| CO05 | La Serena | 0.59 | 10 | eP | | Pn | 10 11 50.0 | -0.3 |
| CO05 | | | | i S | | Sn | 10 11 59.6 | +0.7 |
| CO05 | | | | IAML | | | 10 12 00.2 | |
| | comp=N,5μm,0.4s | | | | | | | |
| CO03 | El Pedregal | 0.67 | 120 | eP | | Pn | 10 11 49.2 | -2.2 |
| CO03 | | | | i S | | Sn | 10 11 58.0 | -2.9 |
| CO03 | | | | IAML | | | 10 11 58.4 | |
| | comp=E,5μm,0.2s | | | | | | | |
| CO02 | Combarbal | 0.76 | 156 | eP | | Pn | 10 11 50.8 | -1.9 |
| CO02 | | | | i S | | Sn | 10 12 01.1 | -2.1 |
| CO02 | | | | IAML | | | 10 12 01.7 | |
| | comp=N,13μm,0.2s | | | | | | | |
| CO01 | Juntas del Tor | 1.21 | 65 | eP | | Pn | 10 11 57.4 | -1.6 |
| CO01 | | | | i S | | Sn | 10 12 12.2 | -2.2 |
| LCO | Las Campanas | 1.59 | 21 | i P | | Pn | 10 12 02.7 | -1.5 |
| LCO | | | | i S | | Sn | 10 12 24.9 | +1.2 |
| LCO | | | | IAML | | | 10 12 29.6 | |
| | comp=Z,823nm,0.7s | | | | | | | |
| LCO | Las Campanas | 1.59 | 21 | eP | | Pn | 10 12 03.1 | -1.1 |
| LCO | | | | i S | | Sn | 10 12 23.3 | -0.4 |
| LCO | | | | IAML | | | 10 12 24.7 | |
| | comp=Z,4μm,0.3s | | | | | | | |
| AROD | Rodeo | 1.67 | 79 | i P | | Pn | 10 12 05.1 | -0.1 |
| ACDV | Cuesta del Vie | 1.96 | 81 | i P | | Pn | 10 12 09.7 | +0.5 |
| ACCO | Cerro Coronel | 1.98 | 93 | i P | | Pn | 10 12 10.2 | +0.6 |
| ACCO | | | | IAML | | | 10 12 44.2 | |
| | comp=Z,99nm,0.3s | | | | | | | |
| DOCA | Reserva Natura | 2.01 | 103 | i P | | Pn | 10 12 10.2 | +0.2 |
| DOCA | | | | IAML | | | 10 12 44.4 | |
| | comp=Z,619nm,0.8s | | | | | | | |
| VA06 | Catapilco | 2.05 | 179 | eP | | Pn | 10 12 09.4 | -0.8 |
| VA06 | | | | i S | | Sn | 10 12 33.3 | -1.3 |
| VA06 | | | | IAML | | | 10 12 37.9 | |
| | comp=E,974nm,0.4s | | | | | | | |
| RTLS | Leoncito | 2.19 | 127 | i P | | Pn | 10 12 12.3 | -0.1 |
| RTLS | | | | i S | | Sn | 10 12 42.5 | +4.0 |
| RTLS | | | | IAML | | | 10 12 47.4 | |
| | comp=Z,365nm,0.3s | | | | | | | |
| VA03 | San Esteban | 2.36 | 163 | i P | | Pn | 10 12 13.4 | -1.1 |
| VA03 | | | | i S | | Sn | 10 12 43.7 | +1.4 |
| VA03 | | | | IAML | | | 10 12 47.2 | |
| | comp=Z,230nm,1.4s | | | | | | | |
| ROCH | El Roble | 2.48 | 173 | eP | | Pn | 10 12 15.2 | -1.1 |
| ROCH | | | | IAML | | | 10 13 00.2 | |
| | comp=N,703nm,0.6s | | | | | | | |
| RTLL | Cerro Villicun | 2.61 | 109 | i P | | Pn | 10 12 18.7 | +0.7 |
| MT02 | Curacav | 2.75 | 176 | i P | | Pn | 10 12 18.9 | -1.1 |
| MT02 | | | | i S | | Sn | 10 12 53.0 | +1.1 |
| MT02 | | | | IAML | | | 10 13 01.3 | |
| | comp=Z,142nm,0.3s | | | | | | | |
| MT02 | Curacav | 2.75 | 176 | eP | | Pn | 10 12 18.6 | -1.3 |
| MT02 | | | | i S | | Sn | 10 12 50.4 | -1.6 |
| RTCV | Cerro Valdivia | 2.77 | 120 | i P | | Pn | 10 12 20.8 | +0.6 |
| MT10 | Hacienda Santa | 2.85 | 166 | eP | | Pn | 10 12 19.2 | -2.1 |
| MT10 | | | | IAML | | | 10 13 08.4 | |
| | comp=N,541nm,0.4s | | | | | | | |
| ASAL | Salagasta | 3.00 | 135 | i P | | Pn | 10 12 23.9 | +0.6 |
| ASAL | | | | IAML | | | 10 13 12.4 | |
| | comp=Z,43nm,0.7s | | | | | | | |
| GO03 | Copiap | 3.06 | 19 | i P | | Pn | 10 12 23.3 | -0.9 |
| MT03 | Universidad Ad | 3.07 | 167 | i P | | Pn | 10 12 23.7 | -0.6 |
| MT03 | | | | i S | | Sn | 10 13 01.4 | +1.5 |
| MT03 | | | | IAML | | | 10 13 16.0 | |
| | comp=Z,211nm,0.2s | | | | | | | |
| MT04 | Ro Olivares | 3.07 | 161 | i P | | Pn | 10 12 24.3 | -0.2 |
| MT04 | | | | i S | | Sn | 10 13 02.6 | +2.4 |
| MT04 | | | | IAML | | | 10 13 13.5 | |
| | comp=Z,129nm,0.4s | | | | | | | |
| ARCO | CERRO ARCO | 3.12 | 139 | i P | | Pn | 10 12 25.4 | +0.3 |
| ARCO | | | | IAML | | | 10 13 20.7 | |
| | comp=Z,61nm,0.6s | | | | | | | |
| MT08 | Bocatoma Ro | 3.15 | 159 | i S | | Sn | 10 13 04.2 | +2.2 |
| MT08 | | | | IAML | | | 10 13 13.5 | |
| | comp=Z,123nm,0.3s | | | | | | | |
| VCA | Vinchina | 3.26 | 58 | i P | | Pn | 10 12 28.1 | +1.0 |
| VCA | | | | i S | | Sn | 10 13 07.7 | +3.0 |
| VCA | | | | IAML | | | 10 13 19.7 | |
| | comp=Z,220nm,0.4s | | | | | | | |
| MT09 | Talagante | 3.28 | 175 | eP | | Pn | 10 12 26.0 | -1.2 |
| MT09 | | | | i S | | Sn | 10 13 03.4 | -1.6 |
| MT09 | | | | IAML | | | 10 13 13.3 | |
| | comp=N,419nm,0.1s | | | | | | | |
| MT01 | Popeta | 3.35 | 178 | i P | | Pn | 10 12 27.1 | -1.0 |
| MT01 | | | | i S | | Sn | 10 13 07.7 | +1.0 |
| MT01 | | | | IAML | | | 10 13 16.3 | |
| | comp=Z,124nm,0.7s | | | | | | | |
| AAGR | Agrelo | 3.36 | 141 | i P | | Pn | 10 12 28.9 | +0.6 |
| AAGR | | | | IAML | | | 10 13 33.1 | |
| | comp=Z,70nm,0.4s | | | | | | | |
| MT13 | San Alfonso | 3.36 | 165 | i P | | Pn | 10 12 28.1 | -0.2 |
| MT13 | | | | i S | | Sn | 10 13 08.7 | +1.7 |
| MT13 | | | | IAML | | | 10 13 23.8 | |
| | comp=Z,115nm,0.7s | | | | | | | |
| LMEL | Las Melosas | 3.48 | 164 | i P | | Pn | 10 12 29.7 | -0.3 |
| BO01 | Tunca | 3.88 | 177 | i P | | Pn | 10 12 34.4 | -1.0 |
| BO01 | | | | IAML | | | 10 13 44.7 | |
| | comp=Z,40nm,0.5s | | | | | | | |
| BO02 | Sierra Bellavi | 4.30 | 174 | i P | | Pn | 10 12 40.7 | -0.6 |
| BO02 | | | | IAML | | | 10 13 52.9 | |
| | comp=Z,99nm,0.6s | | | | | | | |
| AC01 | Pan de Azucar | 4.39 | 9 | i P | | Pn | 10 12 41.6 | -0.8 |
| AC01 | | | | IAML | | | 10 13 55.1 | |
| | comp=Z,48nm,0.4s | | | | | | | |

*IDC **05** 10:29:57.5±0.8,62°.81S×158°.21W,h0km,mb4.2/7,*
*mbtmp4.2/8,ML4.2/1,MS4.1/26,Error ellipse:*
*s-maj=28.5km s-min=21.4km az=23.0*
*NEIC **05** 10:29:59.4±2.2,62°.8S±0°.1×158°.0W±0°.2,h10km±1km,*
*mb4.8/18,Error ellipse: s-maj=21.4km s-min=14.6km*
*az=336.0*
*GCMT **05** 10:30:02.4±0.3,63°.10S±0°.02×158°.28W±0°.03,h20km±1km,*
*MW5.0/94,Moment Tensor Solution. s36,c41; s94,c126;*
*Duration: 0 Moment tensor: Scale 10^16Nm; Mrr=0.76±.17;*
*Mθθ=3.76±.17; Mϕϕ=-3.00±.13; Mre=-0.44±.25; Mθϕ=1.32±.11;*
*Mrϕ=0.67±.26; Best double couple: M0=3.74000×10^16*
*NP1:ϕs=215.00000°,δ76.00000°,λ=-172.00000°. NP2:*
*ϕs=215.00000°,δ76.00000°,λ=-172.00000°. Principal axes:*
*T 4.0290, Plg4.0000°, Azm170.0000°; N -0.5790,*
*Plg74.0000°, Azm273.0000°; P -3.4500, Plg15.0000°,*
*Azm79.0000°; nsta1 refers to body waves, cutoff=40s.*
*nsta2 refers to surface waves, cutoff=50s. Triangular*
*moment-rate function*
**ISC 05 10:29:59.0±0.6,62°.8S±0°.1×158°.1W±0°.1,h10km,n68,**
**σ0s.98/35,mb4.5/16,MS4.1/25,5C,Pacific-Antarctic**
**Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SBA | Scott Base | 18.62 | 202 | P | | Pn | 10 34 17.4 | +1.1 |
| VNDA | Vanda | 19.35 | 205 | P | | Pn | 10 34 25.9 | +0.6 |
| VNDA | Vanda | 19.35 | 205 | P | | Pn | 10 34 25.9 | +0.6 |
| | 0.6nm,0.3s,baz=70,slow=16,SNR=20 | | | | | | | |
| VNDA | | | | LR | | LR | 10 39 53.6 | |
| | comp=Z,547nm,21.1s,baz=64,slow=31 | | | | | | | |
| | 3.2nm,0.6s | | | | | | | |
| MSWZ | Moikau Station | 26.58 | 311 | P | | P | 10 35 38.8 | +1.8 |
| QSPA | South Pole Qui | 27.31 | 180 | P | | P | 10 35 45.0 | +1.4 |
| QSPA | South Pole Qui | 27.31 | 180 | P | | P | 10 35 43.7 | +0.1 |
| | 8.6nm,0.9s,baz=57,slow=4.4,SNR=28 | | | | | | | |
| QSPA | | | | LR | | LR | 10 44 37.0 | |
| | comp=Z,391nm,20.8s,baz=34,slow=32 | | | | | | | |
| | 8.6nm,0.9s | | | | | | | |
| URZ | Urewera | 28.82 | 317 | LR | | LR | 10 45 13.4 | |
| | comp=Z,338nm,18.8s,baz=250,slow=32 | | | | | | | |
| BELA | Belgrano 2 | 35.46 | 162 | P | | P | 10 36 54.4 | -0.4 |
| BELA | | | | IAmb | | IAmb | 10 36 58.0 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| PMSA | Palmer Station | 37.95 | 136 | LR | | LR | 10 49 04.6 | |
| | comp=Z,283nm,19.1s,baz=242,slow=30 | | | | | | | |
| TBI | Tubuai | 39.88 | 12 | eLR | | LR | 10 48 28.6 | |
| | comp=Z,3μm,25.2s | | | | | | | |
| RAR | Rarotonga | 41.58 | 358 | LR | | LR | 10 50 32.1 | |
| | comp=Z,237nm,19.5s,baz=213,slow=30 | | | | | | | |
| RKT | Rikitea | 42.64 | 32 | eLR | | LR | 10 49 42.3 | |
| | comp=Z,1μm,28.2s | | | | | | | |
| VNA3 | Neumayer Olymp | 44.46 | 166 | ⇑P | | P | 10 38 08.7 | -0.8 |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| SNAA | Sanae | 44.72 | 169 | P | | P | 10 38 10.9 | -0.8 |
| SNAA | | | | IAmb | | IAmb | 10 38 14.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| SNAA | Sanae | 44.72 | 169 | ⇑P | | P | 10 38 10.3 | -1.4 |
| | comp=Z,60nm,1.0s | | | | | | | |
| SNAA | Sanae | 44.72 | 169 | P | | P | 10 38 10.6 | -1.1 |
| | comp=Z,3.4nm,1.0s,baz=214,slow=6.1,SNR=8.2 | | | | | | | |
| SNAA | | | | LR | | LR | 10 55 30.0 | |
| | comp=Z,265nm,20.3s,baz=210,slow=34 | | | | | | | |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| TROLL | Troll, Antarti | 44.80 | 172 | ⇑P | | P | 10 38 12.1 | -0.4 |
| | comp=Z,132nm,1.1s | | | | | | | |
| VNA2 | Neumayer--Watz | 45.00 | 167 | ⇑P | | P | 10 38 13.3 | -0.6 |
| | comp=Z,5.1nm,0.6s,baz=200,slow=9.6 | | | | | | | |
| VNA1 | Neumayer--Stat | 45.17 | 166 | ⇑P | | P | 10 38 14.9 | -0.3 |
| | comp=Z,9.2nm,1.0s | | | | | | | |
| PPT2 | Papeete2 | 45.56 | 11 | eLR | | LR | 10 50 57.5 | |
| | comp=Z,675nm,27.5s | | | | | | | |
| PPT2 | | | | eLR | | LR | 10 51 03.3 | |
| | comp=Z,836nm,25.2s | | | | | | | |
| PPT | Papeete | 45.59 | 11 | LR | | LR | 10 52 12.7 | |
| | comp=Z,268nm,21.6s,baz=191,slow=29 | | | | | | | |
| PINNC | Pines Island, | 46.39 | 314 | P | | P | 10 38 25.5 | +0.2 |
| MAW | Mawson | 46.56 | 200 | LR | | LR | 10 56 14.4 | |
| | comp=Z,158nm,18.8s,baz=170,slow=34 | | | | | | | |
| DZM | Mont Dzumac | 47.23 | 313 | eLR | | LR | 10 51 55.8 | |
| | comp=Z,349nm,22.8s | | | | | | | |
| DZM | Mont Dzumac | 47.23 | 313 | LR | | LR | 10 54 45.0 | |
| | comp=Z,210nm,21.7s,baz=176,slow=32 | | | | | | | |
| RPN | Rapa Nui | 47.74 | 65 | LR | | LR | 10 53 50.0 | |
| | comp=Z,197nm,21.5s,baz=204,slow=30 | | | | | | | |
| MSVF | Nonsavu | 47.97 | 329 | LR | | LR | 10 57 47.0 | |
| | comp=Z,68nm,18.1s,baz=169,slow=35 | | | | | | | |
| STKA | Stephens Creek | 48.65 | 280 | LR | | LR | 10 55 00.9 | |
| | comp=Z,140nm,20.1s,baz=180,slow=31 | | | | | | | |
| PLCA | Paso Flores | 53.70 | 110 | P | | P | 10 39 21.2 | +0.4 |
| | comp=Z,2.2nm,0.9s,baz=242,slow=15,SNR=1.9 | | | | | | | |
| PLCA | | | | LR | | LR | 10 57 43.1 | |
| | comp=Z,130nm,18.4s,baz=197,slow=31 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| TAOE | Nuku Hiva Isla | 55.41 | 22 | eLR | | LR | 10 55 36.0 | |
| | comp=Z,296nm,24.1s | | | | | | | |
| H03S2 | Juan Fernandez | 55.67 | 98 | T | | T | 11 39 54.0 | |
| | baz=211,slow=74,SNR=122 | | | | | | | |
| H03S1 | Juan Fernandez | 55.68 | 98 | T | | T | 11 39 57.6 | |
| | baz=211,slow=74,SNR=128 | | | | | | | |
| H03S3 | Juan Fernandez | 55.69 | 98 | T | | T | 11 39 52.5 | |
| | baz=211,slow=74,SNR=185 | | | | | | | |
| H03N3 | Juan Fernandez | 55.99 | 98 | T | | T | 11 40 20.6 | |
| | baz=208,slow=79,SNR=48 | | | | | | | |
| H03N2 | Juan Fernandez | 56.00 | 98 | T | | T | 11 40 22.3 | |
| | baz=208,slow=79,SNR=39 | | | | | | | |
| H03N1 | Juan Fernandez | 56.01 | 98 | T | | T | 11 40 17.3 | |
| | baz=208,slow=79,SNR=28 | | | | | | | |
| H01W1 | Cape Leeuwin H | 58.61 | 254 | T | | T | 11 44 07.8 | |
| | baz=147,slow=76,SNR=7.9 | | | | | | | |
| H01W2 | Cape Leeuwin H | 58.61 | 254 | T | | T | 11 44 06.4 | |
| | baz=147,slow=76,SNR=8.8 | | | | | | | |
| H01W3 | Cape Leeuwin H | 58.62 | 254 | T | | T | 11 44 10.7 | |
| | baz=147,slow=76,SNR=8.1 | | | | | | | |
| ASAR | Alice Springs | 59.16 | 278 | P | | P | 10 39 59.2 | -0.6 |
| | comp=Z,2.3nm,1.1s,baz=146,slow=7.5,SNR=6.0 | | | | | | | |
| ASAR | | | | LR | | LR | 11 01 28.2 | |
| | comp=Z,295nm,20.7s,baz=157,slow=32 | | | | | | | |
| | comp=Z,2.3nm,1.1s | | | | | | | |
| TRQA | Tornquist | 59.58 | 114 | P | | P | 10 40 04.2 | +1.7 |
| TRQA | | | | IAmb | | IAmb | 10 40 17.7 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| MT16 | CCHEN | 59.80 | 105 | P | | P | 10 40 04.2 | +0.1 |
| WRA | Warramunga Arr | 62.20 | 281 | P | | P | 10 40 19.6 | -0.9 |
| | comp=Z,1.3nm,1.1s,baz=151,slow=5.8,SNR=4.7 | | | | | | | |
| WRA | | | | LR | | LR | 11 03 58.2 | |
| | comp=Z,157nm,19.6s,baz=210,slow=33 | | | | | | | |
| | comp=Z,1.3nm,1.1s | | | | | | | |
| PMG | Port Moresby | 66.04 | 298 | LR | | LR | 11 06 55.5 | |
| | comp=Z,190nm,18.7s,baz=198,slow=34 | | | | | | | |
| GO02 | Mina Guanaco | 67.28 | 101 | P | | P | 10 40 53.5 | -0.5 |
| PSA00 | Pilbara Seismi | 67.41 | 267 | P | | P | 10 40 53.2 | -1.3 |
| ITQB | Itaqui | 69.04 | 114 | P | | P | 10 41 03.8 | -0.8 |
| ITQB | | | | IAmb | | IAmb | 10 41 44.9 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| LVC | Limon Verde | 69.80 | 100 | LR | | LR | 11 02 59.1 | |
| | comp=Z,165nm,21.6s,baz=303,slow=28 | | | | | | | |
| CPUP | Villa Florida | 71.67 | 112 | P | | P | 10 41 20.5 | -0.2 |
| CPUP | | | | IAmb | | IAmb | 10 41 27.6 | |
| | comp=Z,9.1nm,1.4s | | | | | | | |
| CPUP | Villa Florida | 71.67 | 112 | P | | P | 10 41 20.4 | -0.3 |
| | comp=Z,1.9nm,0.7s,baz=232,slow=7.4,SNR=6.5 | | | | | | | |
| CPUP | | | | LR | | LR | 11 08 25.8 | |
| | comp=Z,70nm,20.8s,baz=238,slow=32 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| NNA | Nana | 75.44 | 88 | P | | P | 10 41 41.0 | -2.1 |
| NNA | Nana | 75.44 | 88 | LR | | LR | 11 06 14.7 | |
| | comp=Z,101nm,21.3s,baz=216,slow=29 | | | | | | | |
| LPAZ | La Paz | 75.67 | 98 | P | | P | 10 41 45.9 | +0.9 |
| LPAZ | | | | IAmb | | IAmb | 10 42 03.0 | |
| | comp=Z,8.7nm,1.3s | | | | | | | |
| LPAZ | La Paz | 75.67 | 98 | P | | P | 10 41 45.1 | +0.1 |
| | comp=Z,2.3nm,1.0s,baz=178,slow=2.0,SNR=6.2 | | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| TRCB | Terra Rica | 76.77 | 114 | P | | P | 10 41 49.8 | -0.8 |
| TRCB | | | | IAmb | | IAmb | 10 42 31.6 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| AQDB | Aquidauana | 77.52 | 110 | P | | P | 10 41 54.8 | +0.1 |
| AQDB | | | | IAmb | | IAmb | 10 42 05.0 | |
| | comp=Z,10nm,1.5s | | | | | | | |
| ATAH | Atahualpa | 79.00 | 84 | LR | | LR | 11 09 12.9 | |
| | comp=Z,78nm,19.8s,baz=168,slow=30 | | | | | | | |
| SIV | San Ignacio | 79.11 | 104 | LR | | LR | 11 12 03.8 | |
| | comp=Z,116nm,19.5s,baz=116,slow=32 | | | | | | | |
| CZSB | Cruzeiro do Su | 81.09 | 89 | P | | P | 10 42 14.8 | +0.5 |
| CZSB | | | | IAmb | | IAmb | 10 42 23.4 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| BDFB | Brasilia | 85.08 | 115 | LR | | LR | 11 17 42.8 | |
| | comp=Z,167nm,19.1s,baz=154,slow=34 | | | | | | | |
| SUR | Sutherland | 85.14 | 179 | LR | | LR | 11 16 03.7 | |
| | comp=Z,322nm,21.6s,baz=174,slow=32 | | | | | | | |
| BOSA | Boshof | 88.86 | 183 | LR | | LR | 11 18 11.4 | |

comp=Z,265nm,19.2s,baz=95,slow=37
**ADK Adak** 3.11 79 P Pn 10 38 05.2 +1.5
**ADK Adak** 3.11 79 Pn Pn 10 38 04.7 +1.0
**ADK Adak** 3.11 79 P Pn 10 38 04.7 +1.0
**GSMY Great Sitkin M** 3.52 77 Pn 10 38 10.5 +1.2
**GSTR Great Sitkin T** 3.53 77 Pn Pn 10 38 09.6 +0.2
**KOKL Mount Kliuchef** 4.69 76 Pn 10 38 27.4 +2.0
**KOFP Korovin Flat P** 4.75 77 Pn 10 38 29.4 +3.3
**CLES Cleveland East** 7.36 74 Pn Pn 10 39 04.9 +3.0
**CLCO Concord Point,** 7.46 75 Pn 10 39 06.4 +3.2
**NIKH Nikolski High** 8.00 74 P Pn 10 39 12.8 +2.1
**NIKH Nikolski High** 8.00 74 Pn 10 39 13.6 +2.9
**OKFG Magazine Ridg** 8.62 71 10 39 22.2 +3.1
**SPIA Saint Paul Isl** 8.80 45 P Pn 10 39 24.7 +3.1
**SPIA Saint Paul Isl** 8.80 45 Pn 10 39 25.1 +3.6
**UNV Unalaska Valle** 9.51 69 P Pn 10 39 32.5 +1.2
**LVA Lava Point** 9.84 68 Pn Pn 10 39 39.1 +3.3
**FALS False Pass** 11.46 65 P Pn 10 39 59.5 +1.6
**PET Petropavlovsk** 12.20 285 Pn Pn 10 40 08.7 +0.7
**S12K Black Hills** 12.39 62 Pn 10 40 13.4 +2.8
**SDPT Sand Point** 13.21 64 P Pn 10 40 21.4 -0.4
**CNBA Chernabura Isl** 13.65 67 Pn Pn 10 40 26.4 -1.3
**O14K Tigyukauivet M** 13.95 48 Pn Pn 10 40 35.3 +3.4
**L14K Kuka Creek** 14.40 39 P P 10 40 41.7 -1.8
**N15K Kwethluk River** 14.89 46 Pn 10 40 47.0 +2.8
**J14K Nanvaranak Lak** 14.95 34 Pn Pn 10 40 47.1 +2.2
**K15K Wolf Creek Mou** 15.40 37 P 10 40 54.9 +0.3
K15K IAmb IAmb 10 40 57.4
comp=Z,24nm,0.8s
**O16K Kokwok River B** 15.57 49 Pn 10 40 54.7 +1.6
O16K IAmb IAmb 10 40 58.3
comp=Z,17nm,0.8s
**M16K Timber Creek** 15.77 44 P 10 41 00.7 +1.9
**PLK4 Peulik 4** 15.88 57 P Pn 10 40 57.8 +0.7
**L16K Owhat River** 15.89 41 P Pn 10 40 58.1 +1.0
**J16K Anvik River** 16.33 35 P P 10 41 06.4 +1.5
J16K IAmb IAmb 10 41 17.3
comp=Z,30nm,1.2s
**N17K Nushagak Hills** 16.35 47 P P 10 41 06.8 +1.6
**ACHA Angle Creek He** 16.54 55 P P 10 41 08.9 +1.6
ACHA IAmb IAmb 10 41 13.6
comp=Z,14nm,0.6s
**M17K Holitna River** 16.60 44 P Pn 10 41 08.9 +1.0
M17K IAmb IAmb 10 41 30.3
comp=Z,33nm,1.0s
**SII Sitkinak Islan** 16.88 62 P Pn 10 41 08.2 -1.4
**SII Sitkinak Islan** 16.88 62 P Pn 10 41 09.3 -0.2
**K17K Iditarod** 16.88 39 P P 10 41 13.2 +2.2
**J17K VABM Dome** 16.96 36 P P 10 41 13.1 +1.3
**N18K Kilae Creek** 17.00 47 P P 10 41 13.5 +1.1
N18K IAmb IAmb 10 41 35.0
comp=Z,52nm,1.5s
**O18K Koktuh Hills** 17.04 50 P P 10 41 13.9 +1.1
O18K IAmb IAmb 10 41 16.8
comp=Z,19nm,0.7s
**L18K Granite Mounta** 17.29 42 P P 10 41 17.1 +1.6
**OHAK Old Harbor** 17.44 59 P Pn 10 41 15.0 -1.5
**OHAK Old Harbor** 17.44 59 Pn 10 41 13.6 -2.9
OHAK IAmb IAmb 10 41 29.7
comp=Z,17nm,0.5s
**Q19K Cape Douglas,** 17.56 54 P Pn 10 41 17.9 -0.2
**O19K Port Alsworth** 17.57 49 P P 10 41 19.4 +0.9
O19K IAmb IAmb 10 41 23.7
comp=Z,21nm,0.8s
**H17K Granite Mounta** 17.60 31 P P 10 41 19.9 +0.9
**N19K Bonanza Creek** 17.69 47 P 10 41 21.5 +1.4
N19K IAmb IAmb 10 41 29.1
comp=Z,14nm,0.6s
**BILL Bilibino** 17.70 345 *i* P Pn 10 41 19.6 0.0
BILL pmax pmax
comp=Z,11nm,1.0s
BILL MLR MLR
comp=Z,241nm,17.0s
**KDAK Kodiak Island** 17.90 58 P Pn 10 41 20.6 -1.5
KDAK IAmb IAmb 10 41 33.8
comp=Z,26nm,0.5s
**KDAK Kodiak Island** 17.90 58 P Pn 10 41 20.5 -1.6
comp=Z,12nm,0.4s,baz=289,slow=9.7,SNR=85
**KDAK Kodiak Island** 17.90 58⇑ *e*P Pn 10 41 21.2 -0.9
KDAK pmax pmax
comp=Z,85nm,2.5s
**P19K Oil Pt** 17.94 52 P P 10 41 23.9 +1.1
P19K IAmb IAmb 10 41 37.3
comp=Z,54nm,1.2s
**L19K White Mountain** 18.05 43 P 10 41 24.5 +0.6
**SEY Seymchan** 18.05 320⇓ *e*P Pn 10 41 26.4 +2.4
SEY pmax pmax
comp=Z,10.0nm,2.3s
**SYI Shuyak Island** 18.13 55 P 10 41 24.8 0.0
**M19K Big River Lodg** 18.14 44 P Pn 10 41 26.4 +1.3
M19K IAmb IAmb 10 41 36.0
comp=Z,14nm,0.6s
**F17K Baldwin Pennin** 18.23 27 P 10 41 26.3 +0.5
**RSO Redoubt South** 18.39 49 P Pn 10 41 29.7 +1.3
**J19K Poorman** 18.58 37 P Pn 10 41 31.0 +0.7
**G18K Tagagawik** 18.62 30 P P 10 41 31.4 +1.2
**C16K Lisburne Hills** 18.67 19 P Pn 10 41 32.2 +0.8
**M20K Styx River** 18.68 45 Pn 10 41 32.9 +1.2
M20K IAmb IAmb 10 41 42.8
comp=Z,15nm,0.6s
**K20K Telida** 18.88 40 Pn 10 41 34.6 +0.6
**CNPM China Poot** 18.90 53 P P 10 41 32.9 -0.3
CNPM IAmb IAmb 10 41 49.1
comp=Z,24nm,0.9s
**SPU Mount Spurr** 18.93 47 P Pn 10 41 35.2 +0.5
SPU IAmb IAmb 10 41 36.7
comp=Z,35nm,1.0s
**E18K Tukpahlearik C** 19.11 25 Pn 10 41 38.0 +1.3
**H19K Roundabout Mou** 19.12 33 P Pn 10 41 37.5 +0.8
**BRLK Bradley Lake** 19.12 52 P P 10 41 34.2 -1.5
BRLK IAmb IAmb 10 41 44.9
comp=Z,21nm,1.1s
**J20K Nowinta River** 19.23 38 P P 10 41 38.2 +1.4
**G19K Purcell Mounta** 19.28 31 Pn 10 41 39.3 +0.6
**SKT Skwentna** 19.42 45 P Pn 10 41 40.8 +0.3
**F19K Shaleruckik Mo** 19.51 29 P Pn 10 41 41.6 +0.2
**SUA Susitna One** 19.62 47 P P 10 41 42.0 +0.8
SUA IAmb IAmb 10 41 43.5
comp=Z,26nm,0.7s
**O22K Cooper Landing** 19.85 50 P P 10 41 43.3 -0.2
**C18K Utukok River** 19.89 22 P P 10 41 45.5 +1.5
**RC01 Rabbit Creek A** 19.99 49 P P 10 41 45.4 +0.4
RC01 IAmb IAmb 10 42 02.2
comp=Z,22nm,1.0s
**M22K Willow** 19.99 47 P P 10 41 45.2 +0.1
**F20K Avaraart Lake** 20.27 30 P P 10 41 48.8 +0.8
**IMAR Indian Mountai** 20.30 33 P P 10 41 49.4 +1.0
**PMR Palmer** 20.40 47 P P 10 41 48.4 -1.1
**PMR Palmer** 20.40 47 P P 10 41 49.0 -0.5
PMR IAmb IAmb 10 41 55.3
comp=Z,11nm,0.7s
**PMR Palmer** 20.40 47 P P 10 41 49.0 -0.5
PMR pmax pmax
comp=Z,11nm,0.7s
**BPAW Bear Paw Mtn.** 20.44 40 P P 10 41 51.9 +1.9
BPAW IAmb IAmb 10 41 54.2
comp=Z,13nm,1.0s
**H21K Melozitna Rive** 20.46 35 P P 10 41 51.7 +1.5
**I21K Tanana** 20.53 37 P P 10 41 51.9 +1.0
**D19K Kuna River** 20.54 25 P P 10 41 51.7 +0.7
D19K IAmb IAmb 10 42 16.0
comp=Z,18nm,1.2s
**GHO Glory Hole Cre** 20.54 47 P P 10 41 51.2 +0.1
GHO IAmb IAmb 10 42 08.7
comp=Z,20nm,0.9s
**PWL Port Wells** 20.60 50 P P 10 41 51.4 -0.4
**C19K Lookout Ridge** 20.61 22 P Pn 10 41 54.4 -0.1
C19K IAmb IAmb 10 42 17.0
comp=Z,24nm,1.2s
**KNK Knik Glacier** 20.67 48 P P 10 41 52.2 -0.2
**G21K Allakaket** 20.67 32 P P 10 41 52.9 +0.5
**SML Sawmill** 20.82 47 P P 10 41 53.3 -0.9
SML IAmb IAmb 10 41 59.4
comp=Z,20nm,0.7s
**SML Sawmill** 20.82 47 P P 10 41 53.3 -0.9
SML pmax pmax
comp=Z,20nm,0.7s
**MLY Manley** 20.93 38 P P 10 41 56.5 +1.2
**RND Reindeer** 21.06 43 P P 10 41 57.0 +0.3
RND IAmb IAmb 10 42 13.5
comp=Z,12nm,0.7s
**RND Reindeer** 21.06 43 P P 10 41 57.0 +0.3
RND pmax pmax
comp=Z,12nm,0.7s
**F21K Alatna River** 21.08 31 P P 10 41 58.1 +1.3
**BWN Browne** 21.08 40 P P 10 41 58.6 +1.7
**MCK McKinley** 21.14 42 P P 10 41 58.6 +1.1
**GLI Glacier Island** 21.20 50 P P 10 41 57.3 -0.9
**SCM Sheep Creek Mo** 21.29 47 P P 10 41 58.8 -0.4
**SCM Sheep Creek Mo** 21.29 47 P P 10 41 58.8 -0.4
SCM pmax pmax
comp=Z,33nm,0.6s
**NEA2 Nenana** 21.40 40 P P 10 42 00.7 +0.4
NEA2 IAmb IAmb 10 42 17.4
comp=Z,19nm,0.7s
**I23K Minto, Yukon-K** 21.51 38 P P 10 42 02.5 +1.1
I23K IAmb IAmb 10 42 22.7
comp=Z,16nm,1.2s
**DHY Denali Highway** 21.60 44 P P 10 42 02.1 -0.5
DHY IAmb IAmb 10 42 18.2
comp=Z,24nm,0.8s
**E21K Killik River** 21.65 28 P P 10 42 02.8 -0.2
**H23K Yukon River** 21.73 36 P P 10 42 05.5 +1.7
**WRH Wood River Hil** 21.75 40 P P 10 42 03.5 -0.5
**KLU Klutina** 21.87 49 P P 10 42 05.7 +0.2
KLU IAmb IAmb 10 42 13.0
comp=Z,14nm,0.7s
**MDM Murphy Dome** 21.87 39 P P 10 42 05.6 +0.2
MDM IAmb IAmb 10 42 21.2
comp=Z,10nm,0.8s
**M24K Tolsona, Glenn** 21.88 47 P P 10 42 06.4 +0.9
**CCB Clear Creek Bu** 21.93 40 P P 10 42 05.4 -0.5
**G23K Bananza Creek** 21.96 34 P P 10 42 07.2 +0.9
**COLA College** 21.99 39 P P 10 42 07.4 +0.8
**COLA College** 21.99 39⇑ *e*P P 10 42 06.3 -0.3
COLA pmax pmax
comp=Z,4.0nm,0.6s
**HDA Harding Lake** 22.19 41 P P 10 42 09.2 +0.4
HDA IAmb IAmb 10 42 10.7
comp=Z,9.1nm,0.6s
**B21K Ikpikpuk River** 22.23 25 P P 10 42 10.1 +1.0
**TYV Tymovskoe** 22.29 283 *e*P P 10 42 11.4 +1.5
TYV pmax pmax
comp=Z,5.0nm,0.8s
TYV pmax pmax
comp=Z,100nm,2.7s
**D22K Ayikyak River** 22.30 28 P P 10 42 10.6 +0.7
D22K IAmb IAmb 10 42 27.2
comp=Z,9.8nm,0.7s
**IL31 Eielson Airpor** 22.34 40 P P 10 42 10.2 0.0
**ILAR Eielson Airpor** 22.34 40 P P 10 42 10.0 -0.4
**ILAR Eielson Airpor** 22.34 40 P P 10 42 08.6 -1.8
comp=Z,1.0nm,0.5s,baz=230,slow=8.4,SNR=38
comp=Z,1.0nm,0.5s
**ILAR Eielson Airpor** 22.34 40 P P 10 42 10.0 -0.4
**H24K Noodor Dome** 22.36 37 P P 10 42 11.2 +0.6
H24K IAmb IAmb 10 42 13.3
comp=Z,23nm,1.4s
**N25K Chitina, Valde** 22.52 49 P P 10 42 12.2 -0.2
N25K IAmb IAmb 10 42 15.2
comp=Z,12nm,0.7s
**G24K Hadweenzic Riv** 22.86 35 P P 10 42 17.2 +1.3
G24K IAmb IAmb 10 42 18.3
comp=Z,14nm,0.9s
**GLB Gilahina Butte** 22.86 49 P P 10 42 15.1 -0.9
**J25K Salcha River,** 22.91 41 P P 10 42 15.1 -1.3
**VRDI Verde Repeater** 23.00 50 P P 10 42 16.8 -0.7
**F24K Squaw Lake** 23.08 33 P P 10 42 18.6 +0.5
F24K IAmb IAmb 10 42 34.9
comp=Z,8.5nm,0.8s
**TOLK Toolik Lake Re** 23.09 30 P P 10 42 18.6 +0.4
**CRQM Cirque** 23.09 51 P P 10 42 18.3 -0.2
**E24K Your Creek** 23.15 31 P P 10 42 20.0 +1.2
**MENT Mentasta** 23.18 46 P P 10 42 18.5 -0.6
MENT IAmb IAmb 10 42 46.3
comp=Z,10nm,0.8s
**MCARA McCarthy VSAT** 23.23 50 P P 10 42 19.1 -0.4
MCARA IAmb IAmb 10 42 33.0
comp=Z,19nm,0.8s
**TGL Tana Glacier** 23.25 51 P P 10 42 19.9 0.0
**SCRK Sand Creek** 23.30 43 P P 10 42 19.0 -1.4
SCRK IAmb IAmb 10 42 33.3
comp=Z,12nm,0.6s
**L26K Log Cabin Wild** 23.36 45 P P 10 42 21.1 +0.2
L26K IAmb IAmb 10 42 22.5
comp=Z,14nm,0.7s
**M26K Nabesna, AK** 23.40 47 P P 10 42 21.0 -0.3
**C23K Itkillik River** 23.46 27 P P 10 42 22.0 +0.4
**YSS Yuzh-Sakhalins** 23.55 273 P P 10 42 23.5 +0.8
YSS IAmb IAmb 10 42 26.0
comp=Z,12nm,0.9s
**YSS Yuzh-Sakhalins** 23.55 273 *e*P P 10 42 24.1 +1.4
YSS pmax pmax
comp=Z,10.0nm,1.0s
**D24K Happy Valley** 23.60 29 P P 10 42 23.2 +0.2
**J26L Joseph Creek** 23.62 42 P P 10 42 22.2 -1.2
**FYU Fort Yukon** 23.63 36 P P 10 42 23.2 -0.1
FYU IAmb IAmb 10 42 38.7
comp=Z,18nm,1.0s
**GRNC Granite Creek** 23.77 51 P P 10 42 24.5 -0.4
**M27K Edge Creek, AK** 23.91 47 P P 10 42 26.6 +0.5
M27K IAmb IAmb 10 42 28.9
comp=Z,22nm,1.0s
**CTGM Chitina Glacie** 24.00 51 P P 10 42 26.7 -0.2
**I26K Coal Creek Min** 24.01 40 P P 10 42 25.4 -1.4
**TABL Table Mountain** 24.05 52 P P 10 42 27.1 -0.4
**L27K Beaver Creek,** 24.05 46 P P 10 42 27.0 -0.2
**BCAR Beaver Creek A** 24.07 46 P P 10 42 26.7 -0.8
**K27K Chicken** 24.13 43 P P 10 42 27.7 -0.3
K27K IAmb IAmb 10 42 43.1
comp=Z,14nm,0.7s
**LOGN Logan Glacier** 24.14 51 P P 10 42 27.9 -0.3
**BMAR Burnt Mountain** 24.20 35 P P 10 42 28.6 0.0
**D25K Kavik River** 24.43 30 P P 10 42 31.1 +0.4
D25K IAmb IAmb 10 42 32.9
comp=Z,6.7nm,0.7s
**EGAK Eagle** 24.69 42 P P 10 42 32.6 -0.4
**PNL Peninsula** 24.89 54 P P 10 42 33.7 -1.2
**JKA Kamikawa-asahi** 24.94 267 P P 10 42 37.1 +1.7
**ASAJ Asahikawa** 24.94 267 P P 10 42 36.6 +1.2
comp=Z,28nm,0.8s,baz=72,slow=7.3,SNR=25
ASAJ LR LR 10 52 27.5
comp=Z,24nm,20.7s,baz=29,slow=36
comp=Z,28nm,0.8s
**ASAJ Asahikawa** 24.94 267 P P 10 42 37.1 +1.7
ASAJ pmax pmax
comp=Z,27nm,0.7s
**G27K Doyon Strip** 25.05 37 P P 10 42 36.1 -0.2
**DAWY Dawson** 25.30 44 P P 10 42 38.5 -0.1
DAWY IAmb IAmb 10 42 55.1
comp=Z,15nm,0.7s
**I28M Miner Creek** 25.35 40 P P 10 42 38.1 -1.0
I28M IAmb IAmb 10 42 39.0
comp=Z,8.9nm,0.8s
**M29M Somme Creek** 25.50 48 P P 10 42 40.0 -0.5
M29M IAmb IAmb 10 42 43.8
comp=Z,14nm,0.7s
**L29M L29M** 25.72 46 P P 10 42 42.1 -0.4
L29M IAmb IAmb 10 43 20.2
comp=Z,8.0nm,0.8s
**N30M Aishikik Lake** 26.08 50 P P 10 42 45.0 -0.7
N30M IAmb IAmb 10 42 48.9
comp=Z,14nm,1.0s
**K29M Barlow Dome** 26.08 45 P P 10 42 45.0 -0.8
K29M IAmb IAmb 10 42 52.5
comp=Z,6.6nm,0.8s
**H29M Whitestone** 26.16 39 P P 10 42 45.2 -1.1
**M30M Minto, Yukon** 26.28 48 P P 10 42 49.2 +1.7
M30M IAmb IAmb 10 42 50.9
comp=Z,7.8nm,0.7s
**J30M Hart River** 26.70 43 P P 10 42 51.3 -0.1
**N31M Braeburn, Yuko** 26.71 50 P P 10 42 51.1 -0.2
N31M IAmb IAmb 10 42 55.3
comp=Z,8.5nm,0.8s
**I30M Mount Dempster** 26.77 42 P P 10 42 51.9 -0.1
**EPYK Eagle Plains** 26.84 39 P P 10 42 51.9 -0.6
EPYK IAmb IAmb 10 43 06.6
comp=Z,9.2nm,0.8s
**M31M Drury Creek, Y** 27.38 48 P P 10 42 57.5 +0.2
**P33M Teslin, Yukon** 28.19 53 P P 10 43 04.7 +0.1
**INK Inuvik** 28.45 36 P P 10 43 05.2 -1.5
comp=Z,1.4nm,0.6s,baz=259,slow=6.0,SNR=3.8
comp=Z,1.4nm,0.6s
**R33M Jennings River** 29.20 54 P P 10 43 13.8 +0.1
R33M IAmb IAmb 10 43 15.0
comp=Z,12nm,1.3s
**KLR Kul'dur** 29.46 284 *e*P P 10 43 15.2 -0.8
KLR pmax pmax
comp=Z,21nm,0.8s
**DLBC Dease Lake** 29.81 56 P P 10 43 17.4 -1.6
comp=Z,1.8nm,0.8s,baz=196,slow=19,SNR=2.9
comp=Z,1.8nm,0.8s
**ZEA Zeya** 30.61 295 *e*P P 10 43 25.5 -0.6
ZEA pmax pmax
comp=Z,20nm,0.6s
**USA0B Ussuriysk Arra** 31.53 275⇑ *e*P P 10 43 34.5 +0.2
**USRK Ussuriysk Ar.** 31.53 275 P P 10 43 34.3 +0.1
comp=Z,4.6nm,0.7s,baz=68,slow=7.8,SNR=12
USRK LR LR 10 55 34.5
comp=Z,44nm,21.6s,baz=29,slow=35
comp=Z,4.6nm,0.7s
**HEH HeiHe** 31.68 288 *e*P P 10 43 33.4 -2.1
**C36M Paulatuk** 32.00 34 P P 10 43 37.8 -0.2
**MJAR Matsushiro Arr** 32.05 258 P P 10 43 39.3 +0.3
comp=Z,2.4nm,0.7s,baz=41,slow=7.0,SNR=8.1
MJAR LR LR 10 54 40.4
comp=Z,47nm,21.8s,baz=58,slow=32
comp=Z,2.4nm,0.7s
**H11N2 WAKE ISLAND Hy** 32.88 200 T T 11 19 02.2
baz=11,slow=76,SNR=113
**H11N3 WAKE ISLAND Hy** 32.89 200 T T 11 19 01.1
baz=11,slow=76,SNR=89
**H11N1 WAKE ISLAND Hy** 32.90 200 T T 11 19 03.9
baz=11,slow=76,SNR=95
**BNX BinXian** 33.62 281 ⇑P P 10 43 52.2 -0.3
BNX pmax pmax
comp=Z,20nm,0.6s
**H11S1 WAKE ISLAND Hy** 34.11 200 T T 11 20 31.0
baz=20,slow=76,SNR=49
**H11S3 WAKE ISLAND Hy** 34.12 200 T T 11 20 31.6
baz=20,slow=76,SNR=31
**H11S2 WAKE ISLAND Hy** 34.12 200 T T 11 20 33.0
baz=20,slow=76,SNR=27
**YKA Yellowknife Ar** 36.49 46 P P 10 44 16.1 -0.8
comp=Z,2.5nm,0.7s,baz=284,slow=7.9,SNR=6.7
comp=Z,2.5nm,0.7s
**GNW Green Mountain** 37.50 72 P P 10 44 26.3 +0.5
GNW IAmb IAmb 10 44 27.2
comp=Z,3.5nm,0.8s
**KSRS Korea Array** 37.87 269 P P 10 44 30.0 +1.1
comp=Z,4.2nm,1.0s,baz=64,slow=7.8,SNR=14
KSRS PcP PcP 10 46 45.2 +0.9
comp=Z,0.8nm,0.8s,baz=64,slow=2.8,SNR=3.2
comp=Z,4.2nm,1.0s
**LON Longmire** 38.50 73 P P 10 44 34.7 +0.4
**LON Longmire** 38.50 73 P P 10 44 34.7 +0.4
LON pmax pmax
comp=Z,2.0nm,0.7s
**JNU Nakatsue** 38.83 261 LR LR 11 00 21.9
comp=Z,33nm,21.3s,baz=220,slow=36
**TJN Taejon** 38.89 268⇑ *e*P P 10 44 38.8 +1.3
**LTY Liberty** 38.93 71 P P 10 44 37.6 -0.3
LTY IAmb IAmb 10 44 39.4
comp=Z,8.1nm,1.4s
**H04D Lebanon** 39.08 76 P P 10 44 39.8 +0.8
H04D IAmb IAmb 10 45 05.4
comp=Z,9.9nm,1.0s
**H04A Detroit Lake** 39.33 76 P P 10 44 42.2 +1.0
H04A IAmb IAmb 10 44 56.5
comp=Z,6.4nm,0.9s
**DBO Dodson Butte** 39.52 78 P P 10 44 43.5 +0.6
DBO IAmb IAmb 10 44 45.5
comp=Z,5.7nm,0.8s
**I04A Tendick Farm,** 39.67 77 P P 10 44 45.3 +1.3
I04A IAmb IAmb 10 44 59.0
comp=Z,7.7nm,0.9s
**KSXB Camp Six Broad** 39.85 81 P P 10 44 47.4 +1.8
KSXB IAmb IAmb 10 44 48.2
comp=Z,9.8nm,1.1s
**HAWA Hanford** 40.04 72 P P 10 44 47.3 +0.3
**RES Resolute Bay** 40.44 24 LR LR 11 02 25.6
comp=Z,124nm,21.9s,slow=37
**NEW Newport** 40.52 68 P P 10 44 50.5 -0.6
**NEW Newport** 40.52 68 P P 10 44 50.5 -0.6
NEW pmax pmax
comp=Z,3.0nm,0.8s
**YBH Yreka Blue Hor** 40.62 80 P P 10 44 53.4 +1.4
YBH IAmb IAmb 10 44 54.9
comp=Z,7.7nm,0.8s
**YBH Yreka Blue Hor** 40.62 80 P P 10 44 53.7 +1.7
comp=Z,8.1nm,0.9s,baz=298,slow=5.7,SNR=30
YBH LR LR 10 59 26.3
comp=Z,105nm,20.8s,baz=3.5,slow=33
comp=Z,8.1nm,0.9s
**J05D Fort Rock, OR** 40.66 77 P P 10 44 53.4 +1.0
J05D IAmb IAmb 10 45 07.9
comp=Z,9.6nm,1.1s
**HATC Hat Creek Radi** 41.92 80 P P 10 45 03.9 +1.2
**BMO Blue Mountains** 42.18 73 P P 10 45 04.6 -0.2
**BMO Blue Mountains** 42.18 73 P P 10 45 04.6 -0.2
BMO pmax pmax
comp=Z,2.0nm,0.7s
**WVOR Wild Horse Val** 42.72 76 P P 10 45 09.7 +0.5
WVOR IAmb IAmb 10 45 23.9
comp=Z,7.1nm,0.9s
**WVOR Wild Horse Val** 42.72 76 P P 10 45 09.7 +0.5
WVOR pmax pmax
comp=Z,7.0nm,1.0s
**BPMT Black Pine Rid** 43.60 69 P P 10 45 15.7 -0.8
**PAHR Pah Rah Range** 43.85 80 P P 10 45 19.3 +0.9
PAHR IAmb IAmb 10 45 20.3
comp=Z,13nm,1.1s
**LYMT Lyon Mountain** 43.99 67 P P 10 45 18.9 -0.7
**WAKR Walker** 44.55 82 P P 10 45 25.0 +0.9
WAKR IAmb IAmb 10 45 26.4
comp=Z,5.9nm,0.8s
**HLID Hailey** 44.63 73 P P 10 45 25.0 +0.4
**ULN Ulaanbaatar** 44.65 295 P P 10 45 24.8 +0.1
**ULN Ulaanbaatar** 44.65 295 *de*P P 10 45 25.0 +0.3
ULN pmax pmax
comp=Z,12nm,0.9s
**BMN Battle Mountai** 44.75 78 P P 10 45 25.4 -0.2
BMN IAmb IAmb 10 45 27.2
comp=Z,7.9nm,1.0s
**BMN Battle Mountai** 44.75 78 P P 10 45 25.4 -0.2
BMN pmax pmax
comp=Z,8.0nm,1.0s
**EGMT Eagleton** 44.88 65 P P 10 45 23.6 -2.8
EGMT IAmb IAmb 10 45 28.1
comp=Z,5.0nm,0.8s
**SONM Songino Array** 45.04 295 P P 10 45 28.3 +0.6
SONM IAmb IAmb 10 45 29.3
comp=Z,7.4nm,0.7s
**SONM Songino Array** 45.04 295 P P 10 45 28.4 +0.6
comp=Z,8.2nm,0.6s,baz=58,slow=9.2,SNR=45
SONM PcP PcP 10 47 08.0 +0.2
comp=Z,0.9nm,0.6s,baz=47,slow=1.7,SNR=2.3
SONM LR LR 11 04 31.7
comp=Z,65nm,22.0s,baz=69,slow=36
comp=Z,8.2nm,0.6s
**RYN Ryan** 45.04 81 P P 10 45 29.2 +1.3
RYN IAmb IAmb 10 45 29.8
comp=Z,7.9nm,0.9s
**KVN Kaiserville** 45.04 80 P P 10 45 28.8 +0.8
KVN IAmb IAmb 10 45 30.4
comp=Z,6.6nm,1.0s
**KVN Kaiserville** 45.04 80 P P 10 45 28.8 +0.8
KVN pmax pmax
comp=Z,7.0nm,1.0s
**BOZ Bozeman (W)** 45.12 69 P P 10 45 27.7 -0.8
BOZ IAmb IAmb 10 45 28.6
comp=Z,4.3nm,0.8s
**BOZ Bozeman (W)** 45.12 69 P P 10 45 27.7 -0.8
BOZ pmax pmax
comp=Z,4.0nm,0.9s
**NVAR Mina Array Bea** 45.30 81 P P 10 45 31.0 +1.0
comp=Z,6.3nm,0.8s,baz=298,slow=7.8,SNR=19
NVAR ScP ScP 10 50 58.1 +0.9
comp=Z,1.0nm,0.8s,baz=316,slow=5.4,SNR=5.5
comp=Z,6.3nm,0.8s
**MDPB Devils Postpil** 45.31 82 P P 10 45 30.9 +0.7
MDPB IAmb IAmb 10 45 32.5
comp=Z,7.3nm,0.9s
**TIA Tai'an** 45.40 275 P P 10 45 31.6 +1.0
TIA pmax pmax
comp=Z,8.0nm,0.6s
**ZAK Zakamensk** 45.41 300 *e*P P 10 45 30.5 -0.1
ZAK pmax pmax
comp=Z,5.0nm,1.4s
**ELK Elko** 45.77 76 P P 10 45 34.6 +0.8
ELK IAmb IAmb 10 45 48.4
comp=Z,5.7nm,1.0s
**ELK Elko** 45.77 76 P P 10 45 34.4 +0.7

comp=Z,3.2nm,0.7s,baz=302,slow=8.1,SNR=9.8
comp=Z,3.2nm,0.7s
**ELK Elko 45.77 76** P **P 10 45 34.6 +0.8**
ELK pmax pmax
comp=Z,6.0nm,1.0s
**YHL Hebgen Lake 45.81 69** P **P 10 45 33.6 -0.5**
YHL IAmb IAmb 10 45 35.0
comp=Z,5.1nm,0.8s
**HHC Hu-ho-hao-te 45.97 284** *e*P **P 10 45 37.2 +2.0**
HHC pmax pmax
comp=Z,15nm,0.6s
HHC pmax pmax
comp=Z,74nm,4.9s
**YHH Holmes Hill 46.04 69** P **P 10 45 35.1 -0.8**
**TPH Tonopah 46.19 81** P **P 10 45 37.3 +0.3**
**TPH Tonopah 46.19 81** P **P 10 45 37.3 +0.3**
TPH pmax pmax
comp=Z,38nm,0.9s
**H17A Grant Village 46.42 69** P **P 10 45 39.0 +0.2**
H17A IAmb IAmb 10 45 40.3
comp=Z,3.9nm,0.8s
**FLWY Flagg Ranch 46.53 70** P **P 10 45 40.2 +0.5**
FLWY IAmb IAmb 10 45 41.6
comp=Z,4.2nm,0.7s
**HVU Hansel Valley 46.65 74** P **P 10 45 40.7 +0.2**
HVU IAmb IAmb 10 45 42.5
comp=Z,6.3nm,1.2s
**HVU Hansel Valley 46.65 74** P **P 10 45 40.7 +0.2**
HVU pmax pmax
comp=Z,6.0nm,1.2s
**TPAW Teton Pass 46.73 71** P **P 10 45 41.1 -0.2**
**RLMT Red Lodge 46.77 68** P **P 10 45 41.3 -0.2**
RLMT IAmb IAmb 10 45 42.3
comp=Z,3.8nm,0.8s
**R11B Troy Canyon, C 47.02 79** P **P 10 45 43.8 +0.3**
R11B IAmb IAmb 10 45 44.9
comp=Z,6.1nm,1.0s
**NJ2 Nanjing 47.04 270** *e*P **P 10 45 42.8 -0.7**
NJ2 pmax pmax
comp=Z,11nm,0.5s
**DUG Dugway, Tooele 47.58 75** P **P 10 45 48.3 +0.5**
DUG IAmb IAmb 10 46 03.0
comp=Z,7.2nm,1.1s
**DUG Dugway, Tooele 47.58 75** P **P 10 45 48.3 +0.5**
DUG pmax pmax
comp=Z,7.0nm,1.1s
**PRN Pahroc Range 47.95 80** P **P 10 45 51.3 +0.7**
**PD31 Pinedale Array 47.98 71** P **P 10 45 50.8 -0.1**
PD31 IAmb IAmb 10 45 51.8
comp=Z,4.1nm,0.7s
**PDAR Pinedale Array 47.98 71** P **P 10 45 50.6 -0.3**
**PDAR Pinedale Array 47.98 71** P **P 10 45 49.9 -1.1**
comp=Z,4.9nm,0.8s,baz=308,slow=3.0,SNR=48
comp=Z,4.9nm,0.8s
**GSC Goldstone, Bar 48.21 83** P **P 10 45 52.3 -0.3**
**GSC Goldstone, Bar 48.21 83** P **P 10 45 52.3 -0.3**
GSC pmax pmax
comp=Z,9.0nm,0.9s
**TMUT Trail Mountain 49.11 75** P **P 10 46 00.9 +1.2**
TMUT IAmb IAmb 10 46 14.3
comp=Z,4.7nm,0.8s
**SPITS Spitsbergen Ar 50.21 355** P **P 10 46 06.0 -1.2**
comp=Z,2.4nm,0.5s,baz=51,slow=7.8,SNR=6.4
comp=Z,2.4nm,0.5s
**SPITS Spitsbergen Ar 50.21 355** P **P 10 46 06.1 -1.2**
SPITS pmax pmax
comp=Z,30nm,1.3s
**SPB2 Spitsbergen Ar 50.21 355** P **P 10 46 06.1 -1.1**
**U15A North Rim 50.27 79** P **P 10 46 08.9 +0.3**
**O20A White River Ci 50.37 73** P **P 10 46 08.8 -0.4**
O20A IAmb IAmb 10 46 10.6
comp=Z,3.5nm,0.6s
**WHN Wuhan 50.89 272** P **P 10 46 16.3 +3.4**
**ULM Lac du Bonnet 51.13 55** P **P 10 46 13.6 -1.0**
comp=Z,1.4nm,0.5s,baz=321,slow=11,SNR=2.1
comp=Z,1.4nm,0.5s
**ZAA0 Zalesovo Array 52.71 312** P **P 10 46 25.2 -1.0**
ZAA0 IAmb IAmb 10 46 25.6
comp=Z,3.3nm,0.6s
**ZALV Zalesovo Beam 52.71 312** P **P 10 46 25.3 -0.9**
**ZALV Zalesovo Beam 52.71 312** P **P 10 46 24.8 -1.4**
comp=Z,2.4nm,0.4s,baz=56,slow=6.2,SNR=9.4
ZALV PcP **PcP 10 47 35.8 +0.5**
comp=Z,1.2nm,0.5s,baz=6.4,slow=1.4,SNR=3.5
ZALV LR LR 11 10 31.0
comp=Z,26nm,19.5s,baz=53,slow=38
comp=Z,2.4nm,0.4s
**ZALV Zalesovo Beam 52.71 312** P **P 10 46 25.3 -0.9**
**LZH Lanzhou 53.67 284** *e*P **P 10 46 34.8 +1.1**
LZH pP sP 10 46 51.2 -1.3
LZH pmax pmax
comp=Z,26nm,1.1s
**GTA Gaotai 53.90 290** *e*P **P 10 46 35.9 +0.6**
GTA pP pP 10 46 50.8 +2.3
GTA pmax pmax
comp=Z,12nm,0.9s
**TUC Tucson 53.93 82** P **P 10 46 36.2 +0.6**
TUC pmax pmax
comp=Z,4.0nm,0.8s
**T25A Trinidad 54.59 73** P **P 10 46 40.2 -0.2**
T25A IAmb IAmb 10 47 13.9
comp=Z,6.9nm,1.1s
**ANMO Albuquerque 54.81 76** P **P 10 46 41.9 -0.1**
comp=Z,0.3nm,0.3s,baz=52,slow=7.4,SNR=4.6
comp=Z,0.3nm,0.3s
**ANMO Albuquerque 54.81 76**‖ *e*P **P 10 46 42.0 -0.1**
ANMO pmax pmax
comp=Z,1.0nm,1.1s
**319A Douglas 55.50 81** P **P 10 46 47.6 +0.6**
319A IAmb IAmb 10 46 51.6
comp=Z,6.3nm,1.0s
**121A Cookes Peak, D 55.63 79** P **P 10 46 47.7 -0.3**
121A IAmb IAmb 10 46 49.7
comp=Z,2.8nm,0.7s
**EPT El Paso 56.94 79** P **P 10 46 56.0 -1.3**
**N35A Tabor 57.22 64** P **P 10 46 58.0 -1.0**
**KURK Kurchatov 57.70 312** P **P 10 47 02.0 -0.2**
**KURK Kurchatov 57.70 312** P **P 10 47 02.8 +0.6**
**ARCES ARCESS Array B 57.74 349** P **P 10 47 01.4 -0.8**
comp=Z,2.3nm,0.8s,baz=39,slow=12,SNR=4.7
comp=Z,2.3nm,0.8s
**KURBB Kurchatov Arra 57.81 312** P **P 10 47 02.8 -0.1**
comp=Z,12nm,0.6s,baz=44,slow=6.8,SNR=38
comp=Z,12nm,0.6s
**VHRN Van Horn 58.56 79** P **P 10 47 08.4 -0.2**
VHRN IAmb IAmb 10 47 10.3
comp=Z,3.6nm,0.9s
**MK31 Makanchi Array 58.61 307** P **P 10 47 07.5 -1.2**
MK31 IAmb IAmb 10 47 08.8
comp=Z,5.3nm,0.9s
**MK31 Makanchi Array 58.61 307** *de*P **P 10 47 07.7 -1.0**
MK31 pmax pmax
comp=Z,4.0nm,0.5s
**MKAR Makanchi Array 58.61 307** P **P 10 47 07.8 -0.9**
**MKAR Makanchi Array 58.61 307** P **P 10 47 08.0 -0.7**
comp=Z,5.1nm,0.7s,baz=51,slow=6.3,SNR=51
comp=Z,5.1nm,0.7s
**MAKZ Makanchi 58.76 307** P **P 10 47 08.8 -0.9**
**MAKZ Makanchi 58.76 307** P **P 10 47 08.8 -0.9**
MAKZ pmax pmax
comp=Z,7.0nm,0.7s
**GOMU GeErMu 58.99 290** P **P 10 47 12.3 +0.4**
GOMU pmax pmax
comp=Z,14nm,0.7s
**WMOK Wichita Mounta 59.57 71** P **P 10 47 14.9 -0.6**
WMOK IAmb IAmb 10 47 16.6
comp=Z,2.2nm,0.9s
**WMOK Wichita Mounta 59.57 71** P **P 10 47 14.9 -0.6**
WMOK pmax pmax
comp=Z,2.0nm,0.9s
**BVA0 Borovoye Array 59.70 318** *i* P **P 10 47 16.0 -0.1**
**BRVK Borovoye 59.72 318** P **P 10 47 16.2 -0.1**
**BRVK Borovoye 59.72 318** *de*P **P 10 47 16.1 -0.1**
BRVK pmax pmax
comp=Z,7.0nm,0.5s
**P40A Paris 60.15 63** P **P 10 47 18.2 -1.1**
**TX31 Lajitas Ar. Si 60.39 79** P **P 10 47 20.7 -0.6**
TX31 IAmb IAmb 10 47 22.6
comp=Z,5.8nm,1.1s
**TXAR Lajitas Array 60.39 79** P **P 10 47 21.2 -0.1**
**TXAR Lajitas Array 60.39 79** P **P 10 47 21.5 +0.2**
comp=Z,3.2nm,0.9s,baz=297,slow=5.0,SNR=18
comp=Z,3.2nm,0.9s
**TXAR Lajitas Array 60.39 79** P **P 10 47 21.2 -0.1**
**SCHQ Schefferville 61.06 37** P **P 10 47 25.4 +0.1**
comp=Z,1.0nm,0.4s,baz=292,slow=5.1,SNR=5.1
comp=Z,1.0nm,0.4s
**PZH PanZhiHua 61.59 278** P **P 10 47 29.9 +0.4**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,110nm,5.5s
**ARU Arti 61.62 327** P **P 10 47 28.7 -0.4**
**ARU Arti 61.62 327** *d* P **P 10 47 29.2 +0.1**
ARU 10 48 09.3
ARU S **S 10 55 47.1 -0.1**
ARU pmax pmax
comp=Z,12nm,0.9s
**ARU Arti 61.62 327** P **P 10 47 29.4 +0.3**
comp=Z,13nm,0.7s
**FCAR Ozark Folk Cen 62.65 66** P **P 10 47 34.5 -1.8**
FCAR IAmb IAmb 10 47 35.7
comp=Z,6.3nm,1.1s
**MIAR Mount Ida 62.76 68** P **P 10 47 35.8 -1.3**
**MIAR Mount Ida 62.76 68** P **P 10 47 35.8 -1.3**
MIAR pmax pmax
comp=Z,9.0nm,1.3s
**SADO Sadowa 63.21 51** LR LR 11 15 44.6
comp=Z,120nm,19.7s,baz=346,slow=37
**FINES FINESS Array B 65.34 346** P **P 10 47 52.7 -0.8**
comp=Z,1.3nm,0.5s,baz=14,slow=6.3,SNR=15
comp=Z,1.3nm,0.5s
**AAK Ala-Archa 65.46 308** P **P 10 47 54.3 -0.5**
AAK IAmb IAmb 10 47 56.2
comp=Z,5.9nm,0.8s
**AAK Ala-Archa 65.46 308** *de*P **P 10 47 55.1 +0.2**
AAK pmax pmax
comp=Z,13nm,1.7s
**PLAL Pickwick Lake 65.60 64** P **P 10 47 53.8 -1.8**
PLAL IAmb IAmb 10 47 57.8
comp=Z,3.1nm,0.6s
**CLTN Cedars of Leba 65.77 62** P **P 10 47 54.8 -1.9**
CLTN IAmb IAmb 10 48 10.4
comp=Z,3.3nm,0.8s
**AB31 Akbulak array 66.82 321** *i* P **P 10 48 03.4 +0.2**
**ABKAR Akbulak array 66.82 321** P **P 10 48 02.7 -0.5**
**ABKAR Akbulak array 66.82 321** P **P 10 48 03.0 -0.2**
ABKAR IAmb IAmb 10 48 04.4
comp=Z,6.6nm,1.0s
**KK31 Karatay Array 67.04 311** P **P 10 48 04.4 -0.4**
**KK31 Karatay Array 67.04 311** *i* P **P 10 48 04.5 -0.3**
**KKAR Karatay Array 67.04 311** P **P 10 48 04.6 -0.2**
**KKAR Karatay Array 67.04 311** P **P 10 48 04.4 -0.4**
KKAR IAmb IAmb 10 48 05.6
comp=Z,7.1nm,0.7s
**KKAR Karatay Array 67.04 311** P **P 10 48 04.6 -0.2**
KKAR pmax pmax
comp=Z,7.0nm,0.7s
**KSH Kashi 67.04 305** P **P 10 48 08.8 +3.8**
KSH pmax pmax
comp=Z,7.0nm,0.6s
**NB2 NORSAR Subarra 67.43 353** P **P 10 48 05.5 -1.4**
comp=Z,1.5nm,0.7s,baz=8.0,slow=6.2
**NOA NORSAR Array B 67.43 353** P **P 10 48 05.7 -1.3**
comp=Z,1.4nm,0.7s,baz=9.0,slow=6.3,SNR=5.6
comp=Z,1.4nm,0.7s
**HFS Hagfors 68.12 352** P **P 10 48 09.8 -1.5**
comp=Z,1.9nm,0.5s,baz=3.8,slow=2.2,SNR=10
comp=Z,1.9nm,0.5s
**SHL Shillong 68.33 284** P **P 10 48 12.3 -1.1**
**SHL Shillong 68.33 284** P **P 10 48 13.2 -0.1**
SHL pmax pmax
comp=Z,21nm,0.8s
**BELG Belogornoye 68.56 330** *c* *i* P **P 10 48 14.4 +0.3**
BELG pmax pmax
comp=Z,4.0nm,0.9s
**OBN Obninsk 69.19 338** *i* P **P 10 48 17.5 -0.4**
OBN pmax pmax
comp=Z,5.0nm,0.8s
**CMAR Chiang Mai Arr 69.25 274** P **P 10 48 19.0 +0.1**
comp=Z,3.6nm,0.7s,baz=30,slow=7.2,SNR=18
comp=Z,3.6nm,0.7s
**CHGR Chuyangaron 71.12 309** P **P 10 48 29.9 -0.3**
**CHGR Chuyangaron 71.12 309** P **P 10 48 29.9 -0.3**
CHGR pmax pmax
comp=Z,25nm,0.9s
**SIMJ Simiganj 71.19 309** P **P 10 48 29.5 -1.2**
**EKA Eskdalemuir Ar 73.61 1** P **P 10 48 43.4 -1.2**
comp=Z,0.5nm,0.6s,baz=24,slow=5.7,SNR=2.1
comp=Z,0.5nm,0.6s
**DZM Mont Dzumac 73.91 192** LR LR 11 19 42.3
comp=Z,71nm,18.0s,baz=232,slow=34
**AK21 Malin Array Si 74.91 340** P **P 10 48 51.5 -0.7**
**AK22 Malin Array Si 74.92 340** P **P 10 48 52.2 -0.1**
**AK03 Malin Array Si 74.92 340** P **P 10 48 51.5 -0.8**
**AK04 Malin Array Si 74.94 340** P **P 10 48 52.4 0.0**
**AKASG Malin Array Be 74.94 340** P **P 10 48 51.7 -0.7**
comp=Z,4.5nm,0.4s,baz=23,slow=6.3,SNR=26
AKASG LR LR 11 25 38.9
comp=Z,45nm,20.0s,baz=46,slow=39
comp=Z,4.5nm,0.4s
**AKBB Malin Array Si 74.94 340**‖ *e*P **P 10 48 50.5 -1.9**
**AKBB Malin Array Si 74.94 340** P **P 10 48 51.7 -0.7**
**AK20 Malin Array Si 74.95 340** P **P 10 48 51.8 -0.7**
**KIEV Kiev 74.95 340** P **P 10 48 51.7 -0.8**
KIEV pmax pmax
comp=Z,10.0nm,0.5s
**KIEV Kiev 74.95 340** P **P 10 48 51.7 -0.8**
**AK01 Malin Array Si 74.96 340** P **P 10 48 51.7 -0.8**
**AK15 Malin Array Si 74.97 340** P **P 10 48 51.9 -0.7**
**AK11 Malin Array Si 74.98 340** P **P 10 48 51.9 -0.7**
**AK02 Malin Array Si 74.99 340** P **P 10 48 52.2 -0.5**
**AK09 Malin Array Si 75.01 340** P **P 10 48 52.4 -0.4**
**AK05 Malin Array Si 75.03 340** P **P 10 48 52.2 -0.7**
**AK10 Malin Array Si 75.03 340** P **P 10 48 52.5 -0.5**
**KMPD K-Podol'skiy 77.54 341** P **P 10 49 06.1 -1.1**
KMPD P **P 10 49 06.6 -0.6**
**KIV Kislovodsk 77.55 329** *e*P **P 10 49 08.6 +1.1**
KIV pmax pmax
comp=Z,9.0nm,1.1s
KIV MLR MLR
comp=Z,40nm,19.0s
**KBZ Khabaz 77.68 329** P **P 10 49 07.9 -0.2**
comp=Z,3.4nm,0.9s,baz=349,slow=5.2,SNR=6.2
KBZ LR LR 11 28 15.8
comp=Z,45nm,18.4s,baz=70,slow=39
comp=Z,3.4nm,0.9s
**KBZ Khabaz 77.68 329**‖ *e*P **P 10 49 08.7 +0.6**
KBZ pmax pmax
comp=Z,3.0nm,0.7s
**SHA1 Shidzhatmaz 77.75 329**‖ *e*P **P 10 49 09.6 +0.8**
**KOLS Kolonicke sedl 77.97 344** *e*P **P 10 49 11.3 +1.7**
**KOLS Kolonicke sedl 77.97 344** *e*P **P 10 49 11.3 +1.7**
**VYHS Vyhne 78.94 346** *e*P **P 10 49 16.4 +1.4**
**VYHS Vyhne 78.94 346** *e*P **P 10 49 16.4 +1.4**
**GNI Garni 80.24 326**‖ *e*P **P 10 49 24.3 +1.9**
GNI pmax pmax
comp=Z,5.0nm,0.9s
**WRA Warramunga Arr 80.84 221** P **P 10 49 25.5 +0.1**
comp=Z,0.8nm,0.7s,baz=34,slow=6.3,SNR=11
comp=Z,0.8nm,0.7s
**BRTR Keskin Array B 84.15 333** P **P 10 49 42.6 -0.2**
comp=Z,0.7nm,0.5s,baz=71,slow=2.7,SNR=4.8
comp=Z,0.7nm,0.5s
**ASAR Alice Springs 84.34 220** P **P 10 49 43.9 +0.2**
comp=Z,0.7nm,0.8s,baz=20,slow=5.9,SNR=9.7
comp=Z,0.7nm,0.8s
**CPUP Villa Florida 131.35 81** SKPbc **SKPbc 10 59 43.4 -0.7**
comp=Z,2.4nm,0.7s,baz=321,slow=5.4,SNR=6.4
**QSPA South Pole Qui 141.16 180** PKP **PKPdf 10 56 38.7 -1.8**
comp=Z,0.7nm,0.7s,baz=13,slow=14,SNR=1.9
**BOSA Boshof 149.60 308** PKPbc **PKPbc 10 57 00.3 -0.6**
comp=Z,1.7nm,0.5s,baz=66,slow=1.3,SNR=7.0

*BJI **05** 10:50:18.0±0.0, 9°.50S×121°.30E, h120km, mb4.7/45, mB4.8/10*
*NEIC **05** 10:50:20.4±2.4, 9°.47S±0°.07×121°.27E±0°.06, h116km±6km, mb4.9/42, Error ellipse: s-maj=9.6km s-min=9.1km az=205.0*
*DJA **05** 10:50:21.3±0.1, 10°S±2°×12°1E±°, h111km±2km, M5.1/54, mB5.5/19, mb5.1/54, MLv5.3/18, Mw(mB)5.0/19*
*IDC **05** 10:50:22.0±0.5, 9°.20S×121°.30E, h120km±4km, mb4.3/21, mbtmp4.7/22, Error ellipse: s-maj=14.4km s-min=9.6km az=65.0*
**ISC 05 10:50:21.1**±0.4, **9°.47S**±0°.04×**121°.25E**±0°.04, **h119**km±3km, **h119**km:**pP-P, n329,** σ**1s48**/360, **mb4.8**/66, **5C-2D, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BASI** | **Baing, Sumba** | **1.00** | **221** | P | | **Pn** | **10 50 43.0** | **0.0** |
| BASI | | | | S | | **Sn** | **10 50 59.5** | **0.0** |
| **MMRI** | **Maumere** | **1.28** | **50** | P | | **Pn** | **10 50 45.5** | **-0.5** |
| **MMRI** | **Maumere** | **1.28** | **50** | Pn | | **Pn** | **10 50 45.5** | **-0.5** |
| MMRI | | | | Sn | | **Sn** | **10 51 02.6** | **-2.2** |
| **MMRI** | **Maumere** | **1.28** | **50** | P | | **Pn** | **10 50 45.2** | **-0.8** |
| MMRI | | | | S | | **Sn** | **10 51 02.3** | **-2.5** |
| **BATI** | **Baumata** | **2.49** | **107** | P | | **Pn** | **10 51 01.4** | **+0.7** |
| **SOEI** | **Soe** | **2.99** | **96** | P | | **Pn** | **10 51 08.2** | **+0.9** |
| **SOEI** | **Soe** | **2.99** | **96** | Pn | | **Pn** | **10 51 07.7** | **+0.4** |
| **SOEI** | **Soe** | **2.99** | **96** | P | | **Pn** | **10 51 07.9** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **3.39** | **347** | P | | **Pn** | **10 51 12.2** | **-0.3** |
| **PLAI** | **Plampang** | **3.49** | **280** | P | | **Pn** | **10 51 15.1** | **+1.3** |
| **PLAI** | **Plampang** | **3.49** | **280** | P | | **Pn** | **10 51 14.8** | **+1.0** |
| **BBSI** | **Bau Bau** | **4.17** | **18** | P | | **Pn** | **10 51 23.7** | **+0.8** |
| **TWSI** | **Taliwang, Sumb** | **4.37** | **279** | P | | **Pn** | **10 51 26.5** | **+0.9** |
| **KAPI** | **Kappang** | **4.67** | **341** | P | | **Pn** | **10 51 30.8** | **+1.2** |
| **KAPI** | **Kappang** | **4.67** | **341** | Pn | | **Pn** | **10 51 31.0** | **+1.4** |
| **KAPI** | **Kappang** | **4.67** | **341** | P | | **Pn** | **10 51 30.5** | **+1.0** |
| | 84nm,0.4s,baz=158,slow=6.9,SNR=59 | | | | | | | |
| KAPI | | | | S | | **Sn** | **10 52 23.1** | **+0.3** |
| | 112nm,0.6s,baz=250,slow=19,SNR=4.5 | | | | | | | |
| **KAPI** | **Kappang** | **4.67** | **341** | P | | **Pn** | **10 51 31.2** | **+1.6** |
| KAPI | | | | S | | **Sn** | **10 52 25.6** | **+2.7** |
| **BNSI** | **Bone** | **5.16** | **347** | P | | **Pn** | **10 51 37.8** | **+1.6** |
| | 202nm,0.7s,2μm | | | | | | | |
| **DNP** | **Denpasar** | **6.01** | **277** | P | | **Pn** | **10 51 48.7** | **+1.0** |
| | 587nm,0.7s | | | | | | | |
| **SRBI** | **Singaraja** | **6.12** | **283** | P | | **Pn** | **10 51 48.6** | **-0.6** |
| | 143nm,0.6s,1.5nm | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.08** | **277** | P | | **Pn** | **10 51 59.8** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **7.08** | **277** | Pn | | **Pn** | **10 51 59.9** | **-2.3** |
| JAGI | | | | Sn | | **Sn** | **10 53 16.5** | **-4.7** |
| **JAGI** | **Jajag, Banyuwa** | **7.08** | **277** | P | | **Pn** | **10 51 59.8** | **-2.3** |
| **NLAI** | **Namlea** | **8.49** | **44** | P | | **Pn** | **10 52 23.1** | **+1.8** |
| **LUWI** | **Luwuk** | **8.51** | **10** | P | | **Pn** | **10 52 24.2** | **+2.7** |
| **LUWI** | **Luwuk** | **8.51** | **10** | Pn | | **Pn** | **10 52 23.6** | **+2.1** |
| **LUWI** | **Luwuk** | **8.51** | **10** | P | | **Pn** | **10 52 23.8** | **+2.3** |
| | 153nm,0.7s,2μm | | | | | | | |
| **SANI** | **Sanana** | **8.75** | **33** | P | | **Pn** | **10 52 25.8** | **+1.1** |
| **SANI** | **Sanana** | **8.75** | **33** | P | | **Pn** | **10 52 25.3** | **+0.6** |
| | 133nm,0.5s,2μm | | | | | | | |
| **GRJI** | **Gresik** | **9.04** | **286** | P | | **Pn** | **10 52 29.8** | **+1.1** |
| | 184nm,0.6s | | | | | | | |
| **BKB** | **Balikpapan** | **9.23** | **332** | P | | **Pn** | **10 52 34.2** | **+2.9** |
| | 310nm,1.6s | | | | | | | |
| **PWJI** | **Pagerwojo** | **9.45** | **278** | P | | **Pn** | **10 52 33.8** | **-0.3** |
| | 80nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.58** | **154** | P | | **Pn** | **10 52 34.2** | **-1.7** |
| **FITZ** | **Fitzroy Crossi** | **9.58** | **154** | Pn | | **Pn** | **10 52 35.0** | **-0.9** |
| **KNRA** | **Kununurra** | **9.58** | **131** | Pn | | **Pn** | **10 52 33.6** | **-2.4** |
| **KNRA** | **Kununurra** | **9.58** | **131** | P | | **Pn** | **10 52 33.8** | **-2.2** |
| | 614nm,0.6s,SNR=87 | | | | | | | |
| **DRS** | **Darwin Rock St** | **9.92** | **108** | P | | **Pn** | **10 52 38.2** | **-2.4** |
| **SAUI** | **Saumlaki** | **10.05** | **82** | P | | **Pn** | **10 52 42.0** | **-0.3** |
| **SAUI** | **Saumlaki** | **10.05** | **82** | Pn | | **Pn** | **10 52 41.4** | **-0.9** |
| **SAUI** | **Saumlaki** | **10.05** | **82** | P | | **Pn** | **10 52 42.0** | **-0.3** |
| **GTOI** | **Gorontalo** | **10.19** | **10** | P | | **Pn** | **10 52 47.9** | **+3.7** |
| **MTN** | **Manton Dam** | **10.26** | **110** | P | | **Pn** | **10 52 42.9** | **-2.3** |
| **MTN** | **Manton Dam** | **10.26** | **110** | Pn | | **Pn** | **10 52 43.5** | **-1.6** |
| **MTN** | **Manton Dam** | **10.26** | **110** | P | | **Pn** | **10 52 42.6** | **-2.6** |
| | 296nm,0.4s,SNR=46 | | | | | | | |
| **TOLI2** | **Tolitoli** | **10.52** | **357** | Pn | | **Pn** | **10 52 48.5** | **-0.2** |
| **MTKI** | **Muara Teweh, K** | **10.57** | **323** | P | | **Pn** | **10 52 51.4** | **+2.0** |
| **UGM** | **Wanagama** | **10.71** | **277** | P | | **Pn** | **10 52 50.7** | **-0.6** |
| **UGM** | **Wanagama** | **10.71** | **277** | Pn | | **Pn** | **10 52 49.8** | **-1.5** |
| **UGM** | **Wanagama** | **10.71** | **277** | P | | **Pn** | **10 52 50.6** | **-0.7** |
| | 119nm,0.6s | | | | | | | |
| **YOGI** | **Yogyakarta** | **10.95** | **278** | P | | **Pn** | **10 52 55.2** | **+0.7** |
| | 122nm,1.4s | | | | | | | |
| **SMRI** | **Semarang** | **10.96** | **282** | P | | **Pn** | **10 52 55.9** | **+1.3** |
| **SMRI** | **Semarang** | **10.96** | **282** | Pn | | **Pn** | **10 52 55.5** | **+0.8** |
| **SMRI** | **Semarang** | **10.96** | **282** | P | | **Pn** | **10 52 55.5** | **+0.8** |
| | 68nm,0.4s | | | | | | | |
| **KDU** | **Kakadu** | **11.47** | **107** | P | | **Pn** | **10 52 59.2** | **-2.2** |
| **KDU** | **Kakadu** | **11.47** | **107** | P | | **Pn** | **10 52 59.0** | **-2.4** |
| | 79nm,0.6s,SNR=10 | | | | | | | |
| **MBWA** | **Marble Bar** | **11.71** | **187** | P | | **Pn** | **10 53 02.4** | **-2.2** |
| **MBWA** | **Marble Bar** | **11.71** | **187** | Pn | | **Pn** | **10 53 02.4** | **-2.2** |
| **MBWA** | **Marble Bar** | **11.71** | **187** | P | | **Pn** | **10 53 02.1** | **-2.4** |
| | 51nm,0.6s,SNR=2.6 | | | | | | | |
| **MBWA** | **Marble Bar** | **11.71** | **187** | P | | **Pn** | **10 53 02.7** | **-1.9** |
| MBWA | | | | S | | **Sn** | **10 55 08.1** | **-5.5** |
| **PSA00** | **Pilbara Seismi** | **12.11** | **186** | P | | **Pn** | **10 53 07.8** | **-2.0** |
| **PSA00** | **Pilbara Seismi** | **12.11** | **186** | Pn | | **Pn** | **10 53 07.7** | **-2.1** |
| **PSA00** | **Pilbara Seismi** | **12.11** | **186** | | | **Pn** | **10 53 06.3** | **-3.5** |
| **PSA00** | **Pilbara Seismi** | **12.11** | **186** | P | | **Pn** | **10 53 07.2** | **-2.6** |
| | 46nm,0.5s,SNR=2.7 | | | | | | | |
| **KPJI** | **Karang Pucung** | **12.37** | **279** | P | | **Pn** | **10 53 12.8** | **-0.4** |
| | 76nm,0.5s | | | | | | | |
| **FAKI** | **Fak Fak** | **12.72** | **60** | | | **Pn** | **10 53 16.2** | **-1.6** |
| **FAKI** | **Fak Fak** | **12.72** | **60** | P | | **Pn** | **10 53 15.3** | **-2.6** |
| **SWI** | **Sorong** | **13.13** | **50** | P | | **Pn** | **10 53 23.6** | **+0.5** |
| | 107nm,0.7s,2μm | | | | | | | |
| **STKI** | **Sintang** | **13.58** | **314** | P | | **Pn** | **10 53 30.2** | **+1.3** |
| | 44nm,0.5s | | | | | | | |
| **BBJI** | **Bungbulang** | **13.60** | **277** | P | | **Pn** | **10 53 29.5** | **+0.2** |
| **LEM** | **Lembang** | **13.75** | **280** | P | | **Pn** | **10 53 29.8** | **-1.5** |
| | 70nm,0.8s | | | | | | | |
| **CNJI** | **Cibinong** | **14.13** | **278** | P | | **Pn** | **10 53 35.4** | **-0.7** |
| | 149nm,0.6s | | | | | | | |
| **DBJI** | **Dramaga** | **14.64** | **280** | P | | **P** | **10 53 44.7** | **-1.0** |
| **GIRL** | **Giralia** | **14.72** | **206** | P | | **Pn** | **10 53 44.0** | **+0.5** |
| **GIRL** | **Giralia** | **14.72** | **206** | P | | **Pn** | **10 53 44.3** | **+0.7** |
| **SKJI** | **Sukabumi** | **14.74** | **278** | P | | **P** | **10 53 45.6** | **-1.2** |
| **KKM** | **Kota Kinabalu** | **16.21** | **342** | P | | **P** | **10 54 03.3** | **+0.2** |
| **KKM** | **Kota Kinabalu** | **16.21** | **342** | P | | **Pn** | **10 54 02.0** | **-0.2** |
| **WB0** | **Warramunga Arr** | **16.32** | **130** | P | | **Pn** | **10 54 02.5** | **-1.0** |
| **WRA** | **Warramunga Arr** | **16.38** | **131** | | | **Pn** | **10 54 02.9** | **-1.4** |
| **WRA** | **Warramunga Arr** | **16.38** | **131** | P | | **Pn** | **10 54 01.4** | **-2.8** |
| | 28nm,0.4s,baz=307,slow=13,SNR=300 | | | | | | | |
| WRA | | | | S | | Sn | 10 56 51.5 | -15 |
| | 125nm,1.1s,baz=301,slow=24,SNR=22 | | | | | | | |
| **WRAB** | **Tennant Creek** | **16.38** | **131** | P | | **Pn** | **10 54 02.6** | **-1.6** |
| **WB2** | **Warramunga Arr** | **16.39** | **131** | P | | **Pn** | **10 54 03.3** | **-1.0** |
| **WR0** | **Warramunga Arr** | **16.54** | **131** | P | | **Pn** | **10 54 04.0** | **-2.2** |
| **PPBI** | **Pangkal Pinang** | **16.69** | **295** | P | | **P** | **10 54 08.9** | **+0.6** |
| | 32nm,0.5s | | | | | | | |
| **WRKA** | **Warakurna** | **16.87** | **157** | P | | **P** | **10 54 11.0** | **+0.7** |
| **WRKA** | **Warakurna** | **16.87** | **157** | P | | **P** | **10 54 10.7** | **+0.4** |
| | 46nm,0.8s,SNR=3.3 | | | | | | | |
| **KASI** | **Kota Agung** | **17.06** | **282** | P | | **Pn** | **10 54 13.3** | **+0.8** |
| | 190nm,0.8s,2μm | | | | | | | |
| **MEEK** | **Meekatharra** | **17.26** | **188** | P | | **Pn** | **10 54 16.2** | **+1.3** |
| **MEEK** | **Meekatharra** | **17.26** | **188** | P | | **Pn** | **10 54 16.2** | **+1.3** |
| | 77nm,0.7s,SNR=3.5 | | | | | | | |
| **LWLI** | **Liwa** | **17.61** | **283** | P | | **Pn** | **10 54 19.8** | **+0.5** |
| **ASPA** | **Alice Springs** | **18.59** | **141** | P | | **Pn** | **10 54 30.3** | **-0.6** |
| | 34nm,0.7s,SNR=33 | | | | | | | |
| **AS31** | **Alice Springs** | **18.59** | **141** | P | | **Pn** | **10 54 30.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **18.59** | **141** | P | | **Pn** | **10 54 30.2** | **-0.6** |
| **ASAR** | **Alice Springs** | **18.59** | **141** | P | | **Pn** | **10 54 30.4** | **-0.5** |
| | 19nm,0.7s,baz=332,slow=14,SNR=215 | | | | | | | |
| ASAR | | | | S | | **S** | **10 57 46.4** | **-8.8** |
| | 18nm,0.7s,baz=318,slow=24,SNR=8.5 | | | | | | | |
| **AS01** | **Alice Springs** | **18.62** | **141** | P | | **Pn** | **10 54 30.6** | **-0.6** |
| **MNAI** | **Manna** | **18.85** | **284** | P | | **P** | **10 54 33.0** | **+0.9** |
| **MNAI** | **Manna** | **18.85** | **284** | P | | **P** | **10 54 31.2** | **-0.9** |
| **MNAI** | **Manna** | **18.85** | **284** | P | | **P** | **10 54 31.4** | **-0.7** |
| **MMPI** | **Merauke** | **18.93** | **89** | P | | **P** | **10 54 33.7** | **+0.8** |
| **MORW** | **Morawa** | **20.10** | **193** | P | | **P** | **10 54 47.0** | **+1.5** |
| **MORW** | **Morawa** | **20.10** | **193** | P | | **Pn** | 10 54 47.0 | -1.4 |
| **MORW** | **Morawa** | **20.10** | **193** | P | | **P** | **10 54 46.3** | **+0.8** |
| | 86nm,0.9s,SNR=3.9 | | | | | | | |
| **TABU** | **Tabubil** | **20.24** | **80** | P | | **P** | **10 54 47.7** | **+0.5** |
| **JAY** | **Jayapura** | **20.54** | **72** | P | | **P** | **10 54 48.8** | **-1.6** |
| | 38nm,0.8s | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **20.63** | **302** | | | **P** | **10 54 51.6** | **+0.3** |
| **QIS** | **Mount Isa** | **20.85** | **124** | P | | **P** | **10 54 54.4** | **+0.7** |
| **QIS** | **Mount Isa** | **20.85** | **124** | P | | **P** | **10 54 54.4** | **+0.7** |
| | 62nm,0.7s,SNR=10.0 | | | | | | | |
| **BLDU** | **Ballidu** | **21.46** | **191** | P | | **P** | **10 55 00.9** | **+0.8** |
| **BLDU** | **Ballidu** | **21.46** | **191** | P | | **P** | **10 55 00.7** | **

**FORT Forrest 22.13 164** P **P** **10 55 08.0 +0.9**
**FORT Forrest 22.13 164** P **P** **10 55 07.5 +0.3**
**FORT Forrest 22.13 164** P **P** **10 55 06.9 -0.2**
73nm,0.8s,SNR=1.9
**KLBR Kellerberrin 22.25 188** P **P** **10 55 09.0 +0.6**
**KLBR Kellerberrin 22.25 188** P **P** **10 55 08.9 +0.6**
88nm,0.9s,SNR=3.7
**OOD Oodnadatta 22.75 145** P **P** **10 55 14.0 +0.7**
**MUN Mundaring 22.88 191** P **P** **10 55 15.1 +0.5**
**NWAO Narrogin (SRO) 23.64 188** P **P** **10 55 22.3 +0.8**
**NWAO Narrogin (SRO) 23.64 188** P **P** **10 55 22.4 +0.8**
**NWAO Narrogin (SRO) 23.64 188** P **P** **10 55 22.9 +1.3**
18nm,0.8s,baz=12,slow=13,SNR=9.9
18nm,0.8s
**NWAO Narrogin (SRO) 23.64 188** P **P** **10 55 22.1 +0.5**
NWAO S **S** **10 59 24.9 -2.4**
**MULG Mulgathing 23.91 152** P **P** **10 55 25.1 +1.0**
**MTSU Mount Surprise 23.98 114** P **P** **10 55 25.9 +1.1**
**IPM Ipoh 24.46 304** P **P** **10 55 31.3 +2.1**
**IPM Ipoh 24.46 304** P **P** **10 55 28.8 -0.4**
**KULM Kulim 25.23 305** P **P** **10 55 35.2 -0.9**
KULM IAmb IAmb 10 55 41.1
comp=Z,34nm,0.8s
**PMG Port Moresby 25.56 92** P **P** **10 55 40.9 +1.7**
**PMG Port Moresby 25.56 92** P **P** **10 55 41.1 +1.9**
**PMG Port Moresby 25.56 92** P **P** **10 55 39.1 -0.1**
PMG IAmb IAmb 10 56 20.1
comp=Z,83nm,1.6s
**PMG Port Moresby 25.56 92** P **P** **10 55 38.9 -0.2**
comp=Z,22nm,0.7s,baz=336,slow=6.8,SNR=7.8
comp=Z,22nm,0.7s
**INKA Innaminka 25.85 137** P **P** **10 55 42.8 +1.2**
**LCRK Leigh Creek 26.20 145** P **P** **10 55 45.8 +1.0**
**CTA Charters Tower 26.34 116** P **P** **10 55 45.9 -0.3**
comp=Z,0.4nm,0.8s,baz=284,slow=12,SNR=7.8
CTA pP **pwP** **10 56 13.8 -0.8**
comp=Z,0.5nm,0.6s,baz=295,slow=18,SNR=4.9
**BBOO Buckleboo 26.96 152** P **P** **10 55 52.5 +0.9**
**HTT Hallett 28.87 148** P **P** **10 56 10.4 +1.7**
**UBPT Khong Chiam 29.14 327** P **P** **10 56 11.7 +0.6**
**UBPT Khong Chiam 29.14 327** P **P** **10 56 11.2 +0.1**
UBPT IAmb IAmb 10 56 12.1
comp=Z,26nm,0.7s
**STKA Stephens Creek 29.21 143** P **P** **10 56 13.3 +1.7**
**STKA Stephens Creek 29.21 143** P **P** **10 56 10.2 -1.4**
comp=Z,2.7nm,0.8s,SNR=1.1
**STKA Stephens Creek 29.21 143** P **P** **10 56 12.6 +1.0**
comp=Z,7.3nm,0.5s,baz=318,slow=10,SNR=27
comp=Z,7.3nm,0.5s
**QIZ Qiongzhong 30.47 338** P **P** **10 56 24.0 +1.2**
**CMSA Cobar Meteorol 31.58 138** P **P** **10 56 34.6 +2.1**
**CMSA Cobar Meteorol 31.58 138** P **P** **10 56 34.1 +1.6**
comp=Z,13nm,1.8s,SNR=1.5
**SRDT SRDT 32.27 317** P **P** **10 56 41.2 +2.5**
**EIDS Eidsvold 32.45 123** P **P** **10 56 39.2 -1.0**
EIDS IAmb IAmb 10 57 45.8
comp=Z,26nm,1.9s
**ARPS Mount Arapiles 32.97 149** P **P** **10 56 46.7 +2.1**
**ARPS Mount Arapiles 32.97 149** P **P** **10 56 46.7 +2.1**
comp=Z,34nm,1.1s,SNR=2.7
**PHRA Phrae 34.68 323** P **P** **10 56 59.6 +0.1**
**SLVN Son La 35.03 331** P **P** **10 57 03.0 +0.3**
SLVN IAmb IAmb 10 57 04.3
comp=Z,14nm,0.8s
**YNG Young 35.07 139** P **P** **10 57 05.3 +2.4**
**YNG Young 35.07 139** P **P** **10 57 05.2 +2.3**
**ARMA Armidale 35.16 131** P **P** **10 57 06.3 +2.5**
**CM31 Chiang Mai Arr 35.42 322** P **P** **10 57 06.4 +0.5**
CM31 IAmb IAmb 10 57 07.2
comp=Z,23nm,0.8s
**CMAR Chiang Mai Arr 35.42 322** P **P** **10 57 06.3 +0.3**
**CMAR Chiang Mai Arr 35.42 322** P **P** **10 57 05.5 -0.4**
comp=Z,15nm,0.7s,baz=149,slow=6.5,SNR=77
CMAR PcP **PcP** **10 59 34.9 +1.5**
comp=Z,5.9nm,0.7s,baz=177,slow=2.8,SNR=12
CMAR ScP **ScP** **11 03 09.5 +1.1**
comp=Z,1.2nm,0.6s,baz=175,slow=2.5,SNR=7.2
comp=Z,15nm,0.7s
**TOO Toolamgi 35.51 146** P **P** **10 57 06.3 -0.3**
**CHTO Chiang Mai 35.69 322** P **P** **10 57 08.3 0.0**
**NTLH Newcastle Hard 36.50 134** P **P** **10 57 16.3 +1.2**
**MILA Mila 37.30 142** P **P** **10 57 22.5 +0.7**
**KMI Kunming 38.83 333** ⇓P **P** **10 57 36.8 +1.9**
KMI pmax pmax
comp=Z,15nm,1.2s
**PZH PanZhiHua 40.47 333** P **P** **10 57 49.5 +1.1**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,100nm,5.1s
**NJ2 Nanjing 41.35 357** *e*P **P** **10 57 57.3 +2.0**
NJ2 pmax pmax
comp=Z,5.0nm,0.6s
**CD2 Chengdu 43.52 338** P **P** **10 58 11.2 -1.8**
CD2 pmax pmax
comp=Z,20nm,0.6s
**PALK Pallekele 43.68 291** P **P** **10 58 13.5 -1.1**
**XAN Xi'an 44.82 345** P **P** **10 58 21.6 -1.8**
XAN pmax pmax
comp=Z,12nm,1.1s
**SHL Shillong 45.05 321** P **P** **10 58 24.9 -0.6**
SHL IAmb IAmb 10 58 25.5
comp=Z,32nm,0.7s
**SHL Shillong 45.05 321** P **P** **10 58 24.4 -1.1**
**DZM Mont Dzumac 45.10 112** P **P** **10 58 27.2 +1.3**
comp=Z,5.1nm,1.0s,baz=307,slow=20,SNR=2.0
comp=Z,5.1nm,1.0s
**HNS HongShan 47.02 353** ⇑P **P** **10 58 39.3 -1.2**
HNS pmax pmax
comp=Z,10.0nm,0.8s
**KSRS Korea Array 47.09 7** P **P** **10 58 41.0 -0.1**
comp=Z,1.1nm,0.7s,baz=186,slow=8.5,SNR=5.6
KSRS PcP **PcP** **11 00 11.3 +0.2**
comp=Z,2.3nm,0.8s,baz=178,slow=3.7,SNR=8.6
comp=Z,1.1nm,0.7s
**MJAR Matsushiro Arr 48.47 18** P **P** **10 58 49.5 -2.3**
comp=Z,2.2nm,0.8s,baz=186,slow=8.8,SNR=8.7
comp=Z,2.2nm,0.8s
**LSA Lhasa 48.54 324** P **P** **10 58 53.3 +0.3**
**LSA Lhasa 48.54 324** P **P** **10 58 51.1 -1.8**
**BJT Baijiatuan 49.46 355** P **P** **10 58 57.4 -1.7**
BJT IAmb IAmb 10 58 58.3
comp=Z,16nm,0.6s
**BJT Baijiatuan 49.46 355** P **P** **10 58 57.7 -1.5**
BJT pP **pP** **10 59 26.2 -0.9**
**BJI Beijing 49.48 355** P **P** **10 58 57.4 -1.9**
BJI pmax pmax
comp=Z,10.0nm,0.5s
**HHC Hu-ho-hao-te 50.86 351** *e*P **P** **10 59 12.2 +2.3**
HHC pmax pmax
comp=Z,11nm,0.6s
HHC pmax pmax
comp=Z,43nm,5.1s
**GTA Gaotai 52.55 339** *e*P **P** **10 59 22.4 -0.1**
GTA pP pP 10 59 54.4 +3.7
GTA pmax pmax
comp=Z,6.0nm,0.7s
**XLT XiLinHaoTe 53.32 355** *e*P **P** **10 59 26.7 -1.3**
XLT pP pP 10 59 56.9 +0.9
XLT sP sP 11 00 10.6 +1.5
XLT PP **PP** **11 01 26.5 -3.1**
XLT pmax pmax
comp=Z,19nm,0.6s
**USRK Ussuriysk Ar. 54.30 10** P **P** **10 59 32.6 -2.4**
comp=Z,2.2nm,0.5s,baz=183,slow=6.7,SNR=12
comp=Z,2.2nm,0.5s
**DRV Dumont d'Urvil 58.53 171** P **P** **11 00 06.8 +2.1**
DRV pP **pP** **11 00 35.1 +2.3**
**SONM Songino Array 58.55 348** P **P** **11 00 04.2 -1.1**
**SONM Songino Array 58.55 348** P **P** **11 00 03.6 -1.7**
comp=Z,6.2nm,0.6s,baz=168,slow=8.9,SNR=30
comp=Z,6.2nm,0.6s
**HEH HeiHe 59.71 5** *e*P **P** **11 00 11.4 -1.6**
HEH pmax pmax
comp=Z,9.0nm,1.1s
**WMQ Urumqi 61.16 333** *e*P **P** **11 00 22.5 -0.7**
WMQ pmax pmax
comp=Z,18nm,0.9s
**NIL Nilore 62.58 316** P **P** **11 00 31.0 -1.8**
**NIL Nilore 62.58 316** P **P** **11 00 31.6 -1.2**
**KSH Kashi 64.31 322** P **P** **11 00 43.3 -0.9**
KSH pmax pmax
comp=Z,13nm,0.8s
**TARG Taragay, Kyrgy 64.67 325** P **P** **11 00 45.7 -1.2**
**UZB Uzynbulak 64.96 327** *e*P **P** **11 00 47.3 -1.1**
baz=327
UZB *e*S **S** **11 09 20.2 -0.7**
baz=327
**ZSN Zaisan 65.23 334** *e*P **P** **11 00 48.9 -0.9**
comp=Z,7.7nm,1.0s,baz=334
**SATY Saty 65.23 327** *e*P **P** **11 00 49.1 -1.0**
baz=327
**ZHN Zhinishke 65.29 327** *e*P **P** **11 00 49.3 -1.2**
baz=327
**KPKS Kokpek 65.35 327** *e*P **P** **11 00 49.8 -1.1**
baz=327
**MK31 Makanchi Array 65.90 332** P **P** **11 00 53.3 -0.9**
MK31 IAmb IAmb 11 00 54.3
comp=Z,21nm,1.1s
**MKAR Makanchi Array 65.90 332** P **P** **11 00 53.6 -0.6**
**MKAR Makanchi Array 65.90 332** P **P** **11 00 53.3 -0.9**
comp=Z,13nm,0.6s,baz=148,slow=7.4,SNR=140
comp=Z,13nm,0.6s
**KBL Kabul 65.99 314** P **P** **11 00 54.0 -1.2**
**KBL Kabul 65.99 314** P **P** **11 00 54.1 -1.2**
SNR=6.7
**TNSS Tian-Shan 66.01 326** *e*P **P** **11 00 54.2 -1.2**
baz=326
**MDOK Medeo 66.04 326** *e*P **P** **11 00 54.2 -1.2**
baz=326
**MAKZ Makanchi 66.06 332** P **P** **11 00 53.9 -1.3**
MAKZ IAmb IAmb 11 00 55.3
comp=Z,18nm,1.2s
**MAKZ Makanchi 66.06 332** P **P** **11 00 54.0 -1.2**
**AAA Alma-Ata 66.14 326** *e*P **P** **11 00 54.7 -1.2**
comp=Z,10nm,0.5s,baz=326
**CHKK Chushkaly 66.53 327** *e*P **P** **11 00 57.2 -1.1**
baz=327
**AAK Ala-Archa 67.14 324** P **P** **11 01 01.2 -1.2**
**AAK Ala-Archa 67.14 324** P **P** **11 01 02.0 -0.3**
AAK pP **pP** **11 01 30.7 -0.5**
**ARSB Arslanbob 67.22 322** P **P** **11 01 01.2 -1.7**
**GAR Garm 67.54 319** P **P** **11 01 03.9 -1.0**
GAR IAmb IAmb 11 01 06.2
comp=Z,15nm,0.9s
**SGDS Sogindy 67.58 325** *e*P **P** **11 01 03.6 -1.3**
baz=325
**CHGR Chuyangaron 68.10 318** P **P** **11 01 07.8 -0.6**
**SIMJ Simiganj 68.20 318** P **P** **11 01 07.7 -1.4**
**SIMJ Simiganj 68.20 318** P **P** **11 01 07.5 -1.6**
**JLN Jalan Bani Buh 68.26 298** P **P** **11 01 08.5 -1.1**
**WBK Wadi Bani Khal 68.80 299** P **P** **11 01 12.4 -0.6**
**BTLS Baital 68.90 326** *e*P **P** **11 01 11.8 -1.3**
baz=326
**MHTO MHTO 69.12 297** P **P** **11 01 14.0 -0.9**
SNR=8.6
**WSAR Wadi Sarin 69.31 299** P **P** **11 01 15.7 -0.4**
**SEM Semipalatinsk 69.46 333** *e*P **P** **11 01 14.9 -1.8**
comp=Z,13nm,0.8s,baz=333
**JMDO Jabal Madar 69.47 298** P **P** **11 01 16.5 -0.6**
**SMDO Samad 69.75 299** P **P** **11 01 18.1 -0.8**
**KK31 Karatay Array 69.76 323** P **P** **11 01 18.2 -0.3**
**KKAR Karatay Array 69.76 323** P **P** **11 01 17.9 -0.5**
**KKAR Karatay Array 69.76 323** P **P** **11 01 17.6 -0.9**
KKAR IAmb IAmb 11 01 20.1
comp=Z,2.5nm,1.0s
**BIDO Bidbid 69.85 299** P **P** **11 01 18.9 -0.5**
**CHM Chimkent 69.85 322** *e*P **P** **11 01 17.5 -1.6**
baz=322
**BRLS Borolday 70.12 322** *e*P **P** **11 01 18.6 -2.1**
baz=322
**ZAA0 Zalesovo Array 70.28 338** P **P** **11 01 19.4 -2.0**
ZAA0 IAmb IAmb 11 01 20.3
comp=Z,22nm,0.8s
**ZALV Zalesovo Beam 70.28 338** P **P** **11 01 19.5 -1.9**
**ZALV Zalesovo Beam 70.28 338** P **P** **11 01 19.1 -2.3**
comp=Z,17nm,0.7s,baz=134,slow=4.2,SNR=67
comp=Z,17nm,0.7s
**KURBB Kurchatov Arra 70.39 333** P **P** **11 01 20.6 -1.4**
comp=Z,7.3nm,0.8s,baz=143,slow=5.7,SNR=50
comp=Z,7.3nm,0.8s
**KURK Kurchatov 70.41 333** P **P** **11 01 21.0 -1.2**
KURK IAmb IAmb 11 01 22.1
comp=Z,22nm,0.9s
**KURK Kurchatov 70.41 333** P **P** **11 01 21.3 -0.9**
**KURK Kurchatov 70.41 333** P **P** **11 01 20.9 -1.3**
**HOQ Hoqain 70.57 299** P **P** **11 01 23.2 -0.6**
**SOHO SOHO 71.43 299** P **P** **11 01 28.3 -0.7**
**YAK Yakutsk 71.58 4** P **P** **11 01 27.6 -1.5**
YAK IAmb IAmb 11 01 28.7
comp=Z,20nm,0.8s
**WHFO Wadi Hawf 71.95 292** P **P** **11 01 31.5 -0.8**
**UOSS Minazif 71.98 300** P **P** **11 01 30.7 -1.6**
UOSS IAmb IAmb 11 01 31.9
comp=Z,10nm,0.8s
**UOSS Minazif 71.98 300** P **P** **11 01 31.4 -0.9**
**HATD Hatta, Dubai 72.00 300** P **P** **11 01 32.1 -0.3**
**OPO Ambohidratompo 72.02 254** P **P** **11 01 34.4 +1.5**
comp=Z,6.8nm,0.7s,baz=105,slow=6.5,SNR=12
comp=Z,6.8nm,0.7s
**ASHO Ashiyiah 72.02 300** P **P** **11 01 32.0 -0.6**
**MDH Madha 72.02 300** P **P** **11 01 30.6 -1.9**
**ALNE Al Ain 72.07 299** P **P** **11 01 32.3 -0.5**
**MASF Masafi 72.16 300** P **P** **11 01 33.4 0.0**
**VOI Vohitsoka 72.17 250** P **P** **11 01 34.8 +1.1**
**ABTO Aybut 72.23 292** P **P** **11 01 33.5 -0.5**
**BANOM Banah 72.23 301** P **P** **11 01 33.6 -0.2**
**SHME Shamm 72.41 301** P **P** **11 01 33.5 -1.3**
**FAQ Al Faqa, Dubai 72.44 300** P **P** **11 01 34.5 -0.5**
**ASUD Al Ashush, Dub 72.62 299** P **P** **11 01 35.8 -0.3**
**MA2 Magadan 72.77 15** P **P** **11 01 35.5 -0.7**
MA2 IAmb IAmb 11 01 37.1
comp=Z,21nm,0.7s
**MA2 Magadan 72.77 15** P **P** **11 01 36.6 +0.4**
comp=Z,31nm,0.9s
**AJN Ajban 72.90 299** P **P** **11 01 36.5 -1.2**
**MZR Muzera 73.71 297** P **P** **11 01 42.2 -0.3**
SNR=7.1
**JRN Qarnain Island 74.86 299** P **P** **11 01 48.3 -0.8**
**BRVK Borovoye 75.83 331** P **P** **11 01 52.8 -1.3**
**BRVK Borovoye 75.83 331** P **P** **11 01 53.5 -0.6**
**TRNA Turayna 76.21 298** P **P** **11 01 56.5 -0.4**
**SMRA Abu-Samra 76.55 298** P **P** **11 01 58.4 -0.4**
**SHMA Al-Shehemyia 76.76 299** P **P** **11 01 60.0 0.0**
SNR=5.7
**SAKB Bahrain 77.17 299** P **P** **11 02 01.9 -0.3**
**ABKAR Akbulak array 79.23 324** P **P** **11 02 11.8 -1.2**
**KBD Kabd 80.50 302** P **P** **11 02 19.9 -0.5**
**QSPA South Pole Qui 80.53 180** P **P** **11 02 21.1 +1.1**
**QSPA South Pole Qui 80.53 180** P **P** **11 02 21.4 +1.4**
comp=Z,2.0nm,0.6s,baz=308,slow=1.6,SNR=24
comp=Z,2.0nm,0.6s
**RAYN Ar Rayn 80.90 296** P **P** **11 02 22.5 -0.3**
**RAYN Ar Rayn 80.90 296** P **P** **11 02 23.0 +0.3**
**TIXI Tiksi 81.10 2** P **P** **11 02 21.1 -1.5**
TIXI IAmb IAmb 11 02 21.9
comp=Z,15nm,0.8s
**ELIB Princess Elisa 83.51 198** *d*P **P** **11 02 37.8 +2.2**
comp=Z,4.6nm,0.8s
**GURO Guroymak-BITLI 87.52 310** P **P** **11 02 56.4 +0.4**
GURO IAmb IAmb 11 02 58.4
comp=Z,13nm,1.1s
**KBZ Khabaz 88.17 315** P **P** **11 02 59.2 +0.4**
comp=Z,3.6nm,0.8s,baz=146,slow=4.5,SNR=7.0
comp=Z,3.6nm,0.8s
**TROLL Troll, Antarti 89.54 196** ⇑P **P** **11 03 07.1 +2.2**
comp=Z,120nm,0.6s
**BOSA Boshof 90.73 241** P **P** **11 03 12.6 +1.3**
comp=Z,4.6nm,0.5s,baz=102,slow=4.8,SNR=22
comp=Z,4.6nm,0.5s
**SNAA Sanae 91.14 195** P **P** **11 03 14.0 +1.8**
SNAA IAmb IAmb 11 03 56.2
comp=Z,7.6nm,1.2s
**SNAA Sanae 91.14 195** ⇑P **P** **11 03 14.1 +1.9**
comp=Z,68nm,0.8s
SNAA ⇑pP **pP** **11 03 45.5 +2.9**
comp=Z,34nm,0.4s
**SNAA Sanae 91.14 195** P **P** **11 03 14.0 +1.8**
comp=Z,2.4nm,0.6s,baz=110,slow=5.5,SNR=27
SNAA pP **pP** **11 03 45.3 +2.7**
comp=Z,2.7nm,0.9s,baz=184,slow=5.0,SNR=3.6
comp=Z,2.4nm,0.6s
**MMAI Mount Meron Ar 91.64 303** P **P** **11 03 16.1 +0.8**
comp=Z,0.9nm,0.3s,baz=97,slow=6.0,SNR=5.6
comp=Z,0.9nm,0.3s
**VNA2 Neumayer--Watz 92.76 195** ⇑P **P** **11 03 22.0 +2.4**
comp=Z,1.1nm,0.4s,baz=123,slow=4.6
**BR104 Keskin Array S 94.14 309** P **P** **11 03 25.9 -0.9**
comp=Z,4.8nm,1.0s,comp=Z,44nm
**BRTR Keskin Array B 94.15 309** P **P** **11 03 25.9 -0.9**
comp=Z,3.4nm,0.9s,baz=114,slow=6.1,SNR=17
comp=Z,3.4nm,0.9s
**BR105 Keskin Array S 94.16 309** P **P** **11 03 25.9 -1.0**
comp=Z,4.5nm,1.0s
**BR106 Keskin Array S 94.16 309** P **P** **11 03 25.8 -1.1**
comp=Z,5.4nm,1.1s,comp=Z,47nm
**AK09 Malin Array Si 98.48 320** P **P** **11 03 44.9 -1.1**
**AKASG Malin Array Be 98.53 320** P **P** **11 03 44.4 -1.8**
comp=Z,1.5nm,0.6s,baz=78,slow=4.4,SNR=6.7
comp=Z,1.5nm,0.6s
**AK01 Malin Array Si 98.53 320** P **P** **11 03 44.6 -1.6**
**KIEV Kiev 98.54 320** P **P** **11 03 45.4 -0.8**
**ILAR Eielson Array 99.29 26** P **Pdif** **11 03 47.0 -2.3**
comp=Z,0.4nm,0.6s,baz=252,slow=5.4,SNR=8.8
comp=Z,0.4nm,0.6s
**FINES FINESS Array B 100.72 331** P **Pdif** **11 03 54.1 -1.6**
comp=Z,1.8nm,0.9s,baz=128,slow=2.3,SNR=3.5
FINES PKiKP **PKiKP** **11 08 21.5 +0.4**
comp=Z,1.0nm,0.5s,baz=112,slow=2.2,SNR=11
**CLL Collm 108.73 321** *e*PKiKP **PKiKP** **11 08 38.0 +1.9**
**WTTA Wattenberg 110.19 317** *e*PKiKP **PKiKP** **11 08 39.3 0.0**
comp=Z,3.4nm,0.5s
**WATA Walderalm 110.22 317** *i* PKiKP **PKiKP** **11 08 39.3 0.0**
comp=Z,1.0nm,0.4s
**MOTA Moosalm 110.54 317** *e*PKiKP **PKiKP** **11 08 40.0 +0.1**
comp=Z,1.0nm,0.5s
**RETA Reutte 110.75 317** *i* PKiKP **PKiKP** **11 08 40.4 +0.2**
comp=Z,0.7nm,0.4s
**EKA Eskdalemuir Ar 116.91 328** PKP **PKiKP** **11 08 51.7 +0.1**
comp=Z,0.4nm,0.3s,baz=35,slow=2.8,SNR=13
**NVAR Mina Array Bea 119.59 51** PKP **PKiKP** **11 08 58.9 +1.2**
comp=Z,1.1nm,0.6s,baz=242,slow=1.9,SNR=12
NVAR pPKP **pPKPdf** **11 09 29.1 +0.3**
comp=Z,0.6nm,0.7s,baz=292,slow=1.9,SNR=2.7
**TOA0 Torodi Ar. Sit 120.73 280** P **PKiKP** **11 09 01.2 +0.9**
SNR=8.1
**TORD Torodi Ar. Bea 120.73 280** PKP **PKiKP** **11 09 00.9 +0.6**
comp=Z,8.1nm,0.5s,baz=52,slow=2.1,SNR=79
TORD pPKP **pPKPdf** **11 09 32.6 +1.2**
comp=Z,1.4nm,0.5s,baz=73,slow=2.1,SNR=2.7
**ELK Elko 121.34 48** PKP **PKiKP** **11 09 01.7 +0.6**
comp=Z,1.7nm,0.5s,baz=241,slow=2.6,SNR=7.9
ELK pPKP **pPKPdf** **11 09 33.2 +1.0**
comp=Z,0.6nm,0.4s,baz=238,slow=7.8,SNR=2.7
**PFO Pinyon Flats O 122.00 56** PKP **PKiKP** **11 09 03.5 +1.0**
comp=Z,0.7nm,0.6s,baz=228,slow=2.3,SNR=1.7
**ESDC Sonseca Array 122.88 311** PKP **PKiKP** **11 09 04.2 +0.2**
comp=Z,1.8nm,0.8s,baz=13,slow=3.2,SNR=12
**PDAR Pinedale Array 124.73 44** PKP **PKiKP** **11 09 08.2 +0.5**
comp=Z,0.3nm,0.5s,baz=79,slow=0.7,SNR=5.4
**PGAV Gavieira, Arco 125.24 315** *e*PKPdf **PKiKP** **11 09 09.1 +0.5**
**PCBR Castelo Branco 125.41 313** *e*PKPdf **PKiKP** **11 09 10.0 +1.2**
**PMRV Marv??o 125.48 312** *e*PKPdf **PKiKP** **11 09 09.6 +0.6**
**PBAR Barrancos 125.62 310** *e*PKPdf **PKPdf** **11 09 08.5 -0.4**
**PBDV Barranco-do-Ve 126.57 310** *e*PKPdf **PKiKP** **11 09 12.6 +1.3**
**DBIC Dimbokro 126.61 271** PKP **PKiKP** **11 09 13.0 +1.1**
comp=Z,5.8nm,0.4s,baz=81,slow=2.1,SNR=14
**PNCL Nicolai, Gran 126.75 311** *e*PKPdf **PKiKP** **11 09 13.1 +1.6**
**PTEO Sao Teotonio 127.08 310** *e*PKPdf **PKiKP** **11 09 12.7 +0.5**
**MORF Marmelete 127.10 310** *e*PKPdf **PKiKP** **11 09 14.1 +1.8**
**ULM Lac du Bonnet 129.07 30** PKP **PKPdf** **11 09 15.0 -0.1**
comp=Z,1.4nm,0.8s,baz=300,slow=8.1,SNR=2.9
**ANMO Albuquerque 129.69 52** PKP **PKiKP** **11 09 18.7 +0.9**
comp=Z,1.4nm,0.9s,baz=302,slow=3.7,SNR=5.4
ANMO pPKP **pPKPdf** **11 09 51.0 +2.8**
comp=Z,1.3nm,0.9s,baz=268,slow=1.8,SNR=3.2
**TXAR Lajitas Array 133.61 58** PKP **PKiKP** **11 09 26.8 +1.0**
comp=Z,0.4nm,0.6s,baz=265,slow=2.3,SNR=6.4
TXAR pPKP **pPKPdf** **11 09 56.8 +1.1**
comp=Z,0.5nm,0.8s,baz=253,slow=2.7,SNR=3.6
TXAR SKP **SKPbc** **11 12 43.0 +0.5**
comp=Z,0.6nm,0.7s,baz=247,slow=1.9,SNR=6.2
**SCHQ Schefferville 134.30 7** PKP **PKiKP** **11 09 26.4 +0.1**
comp=Z,3.3nm,0.5s,baz=345,slow=1.6,SNR=4.0
SCHQ SKP **SKPbc** **11 12 44.1 +0.3**
comp=Z,7.6nm,1.0s,baz=278,slow=3.9,SNR=5.7
**CMIG Matias Romero 144.08 74** PKP **PKiKP** **11 09 45.5 -1.8**
comp=Z,3.8nm,0.9s,baz=343,slow=5.2,SNR=5.0
**CPUP Villa Florida 144.39 182** PKP **PKPdf** **11 09 44.4 +0.3**
comp=Z,3.4nm,0.9s,baz=193,slow=1.8,SNR=8.0
**TKL Tuckaleechee C 145.37 37** PKPbc **PKPdf** **11 09 45.5 0.0**
comp=Z,12nm,0.8s,baz=188,slow=2.3,SNR=30
TKL SKP **SKPbc** **11 13 13.7 -0.7**
comp=Z,5.0nm,0.7s,baz=258,slow=4.1,SNR=8.2
**LVC Limon Verde 146.60 163** PKPbc **PKPab** **11 09 51.9 +0.6**
comp=Z,5.1nm,0.6s,baz=211,slow=1.3,SNR=12
LVC pPKPbc pPKPab **11 10 23.2 +1.2**
comp=Z,5.2nm,0.6s,baz=263,slow=6.9,SNR=3.7
**APG El Apazote 148.55 77** PKPbc **PKPbc** **11 09 55.8 +0.5**
comp=Z,0.9nm,0.6s,baz=337,slow=13,SNR=12
APG pPKPbc **pPKPab** **11 10 28.7 -0.7**
comp=Z,1.0nm,0.7s,baz=259,slow=17,SNR=4.1
**TEIG Tepich 149.58 66** PKPbc **PKiKP** **11 09 58.5 0.0**
comp=Z,7.3nm,0.5s,baz=335,slow=6.4,SNR=10
**LPAZ La Paz 152.78 160** PKPbc **PKiKP** **11 10 07.8 +1.8**
comp=Z,1.4nm,0.5s,baz=181,slow=2.7,SNR=6.6
**BDFB Brasilia 152.88 203** PKPbc **PKiKP** **11 10 08.0 +2.4**
comp=Z,1.7nm,0.5s,baz=157,slow=13,SNR=3.9
**SIV San Ignacio 154.60 175** PKP **PKPdf** **11 10 03.1 +2.6**
comp=Z,0.7nm,0.7s,baz=0.5,slow=4.8,SNR=4.6
SIV PKPab **PKPab** **11 10 26.5 +2.7**
comp=Z,1.7nm,0.9s,baz=183,slow=4.6,SNR=5.0
SIV pPKPab **pPKPab** **11 10 56.0 +1.7**
comp=Z,1.2nm,0.5s,baz=186,slow=4.4,SNR=3.9

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*IDC **05** 10:58:25.3±0.7,2.85S×35.48E,h0km,mb4.0/16, mbtmp4.0/17,ML3.3/1,MS3.7/6, Error ellipse: s-maj=16.8km s-min=12.8km az=131.0*
*NEIC **05** 10:58:27.9±1.8,2.92S±0.07×35.58E±0.07,h14km±4km, mb4.5/27, Error ellipse: s-maj=10.5km s-min=8.9km az=220.0*
**ISC 05 10:58:26.9**±0.4,**2.88S**±0.04×**35.52E**±0.06,**h10**km,**n81,** σ1**9**76/**76**,**mb4.3**/40,**MS3.8**/4,**5C-1D, Tanzania**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I32KE** | **NAIROBI INFRAS** | **2.09** | **39** | | Pg | **Pn** | **10 59 02.4** | **+0.2** |
| | baz=204,slow=17 | | | | | | | |
| I32KE | | | | | Lg | Lg | 10 59 31.5 | |
| | baz=216,slow=30 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **2.46** | **45** | | | **Pn** | **10 59 06.2** | **-1.1** |
| **KIBK** | **Kibwezi** | **2.58** | **78** | | Pn | **Pn** | **10 59 07.7** | **-1.2** |
| **DODT** | **Dodoma, Tanzan** | **3.29** | **176** | *i* P | | **Pn** | **10 59 19.1** | **+0.3** |
| DODT | | | | *i* S | | **Sn** | **10 59 56.4** | **-1.7** |
| **MBAR** | **Mbarara** | **5.29** | **295** | | Pn | **Pn** | **10 59 45.3** | **-0.8** |
| | 114nm,0.3s,baz=156,slow=4.5,SNR=80 | | | | | | | |
| MBAR | | | | | Sn | **Sn** | **11 00 43.8** | **-3.5** |
| | 283nm,0.3s,baz=25,slow=22,SNR=12 | | | | | | | |
| MBAR | | | | | Lg | Lg | 11 01 09.4 | |
| | 597nm,0.3s,baz=19,slow=20,SNR=10 | | | | | | | |
| **LODK** | **Lodwar** | **6.26** | **359** | | | **Pn** | **10 59 59.2** | **-0.3** |
| **PDHT** | **Panda Hill** | **6.47** | **200** | *i* P | | **Pn** | **11 00 03.1** | **+0.7** |
| PDHT | | | | *i* S | | **Sn** | **11 01 13.1** | **-3.4** |
| **FURI** | **Furi** | **12.12** | **15** | LR | | LR | 11 06 12.2 | |
| | comp=Z,560nm,19.3s,baz=198,slow=39 | | | | | | | |
| **LSZ** | **Lusaka** | **14.28** | **210** | | Pn | **Pn** | **11 01 48.9** | **-0.5** |
| **ATD** | **Arta Tunnel** | **16.07** | **27** | | Lg | Lg | 11 06 49.9 | |
| | baz=200,slow=20,SNR=1.3 | | | | | | | |
| **MATP** | **Matopo** | **18.73** | **201** | | Pn | **P** | **11 02 44.6** | **-1.5** |
| | 0.1nm,0.3s,baz=5.3,slow=12,SNR=3.2 | | | | | | | |
| MATP | | | | | S | **Sn** | **11 06 17.4** | **+1.1** |
| | 1.3nm,0.7s,baz=237,slow=7.5,SNR=2.0 | | | | | | | |
| MATP | | | | | Lg | Lg | 11 08 09.6 | |
| | 0.2nm,0.3s,baz=90,slow=20,SNR=6.2 | | | | | | | |
| | 1.5nm,0.9s | | | | | | | |
| **OPO** | **Ambohidratompo** | **19.33** | **145** | LR | | LR | 11 09 40.3 | |
| | comp=Z,109nm,20.2s,baz=194,slow=35 | | | | | | | |
| **LBTB** | **Lobatse** | **23.99** | **203** | | P | **P** | **11 03 42.2** | **+0.2** |
| LBTB | | | | | IAmb | IAmb | 11 04 05.8 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **FOMA** | **Nahampoana Res** | **24.59** | **154** | | P | **P** | **11 03 45.3** | **-2.0** |
| FOMA | | | | | IAmb | IAmb | 11 04 25.6 | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **BOSA** | **Boshof** | **27.39** | **200** | | P | **P** | **11 04 11.7** | **-1.2** |
| BOSA | | | | | IAmb | IAmb | 11 04 25.7 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **BOSA** | **Boshof** | **27.39** | **200** | | P | **P** | **11 04 12.3** | **-0.5** |
| | comp=Z,5.3nm,0.8s,baz=26,slow=8.5,SNR=3.6 | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **GRHM** | **Grahamstown, E** | **31.43** | **195** | | P | **P** | **11 04 47.7** | **-0.8** |
| **SUR** | **Sutherland** | **32.43** | **204** | | P | **P** | **11 04 58.1** | **+0.5** |
| **TOA0** | **Torodi Ar. Sit** | **37.16** | **296** | | P | **P** | **11 05 40.1** | **+1.7** |
| **TORD** | **Torodi Ar. Bea** | **37.16** | **296** | | P | **P** | **11 05 36.6** | **-1.8** |
| | comp=Z,0.8nm,1.1s,baz=102,slow=7.1,SNR=5.3 | | | | | | | |
| | comp=Z,0.8nm,1.1s | | | | | | | |
| **KARP** | **Karpathos** | **39.02** | **349** | | P | **P** | **11 05 52.8** | **-1.1** |

**BRTR Keskin Array B 42.44 358** P **P** **11 06 22.6 +0.5**
comp=E,0.3nm,0.3s,baz=187,slow=8.2,SNR=1.8
comp=E,0.3nm,0.3s
**VAE Valguarnera 44.69 336** LR LR 11 26 26.9
comp=Z,83nm,18.7s,baz=166,slow=38
**TIP Timpagrande 45.28 339** P **P** **11 06 44.7 -0.3**
TIP IAmb IAmb 11 07 03.3
comp=Z,5.6nm,1.2s
**KEST Kesra 45.55 330** LR LR 11 28 32.3
comp=Z,115nm,19.2s,baz=306,slow=40
**PALK Pallekele 46.21 77** LR LR 11 23 40.2
comp=Z,90nm,19.7s,baz=261,slow=33
**PUK Puka 46.91 344** P **P** **11 06 58.3 +0.5**
PUK IAmb IAmb 11 07 03.6
comp=Z,3.8nm,0.8s
**BURAR Bucovina Array 51.09 351** P **P** **11 07 29.7 0.0**
**BUR08 Bucovina Ar. S 51.12 351** P **P** **11 07 30.2 +0.2**
**SIMJ Simiganj 51.61 33** P **P** **11 07 32.2 -1.6**
**MSSA Maissana 52.44 337** P **P** **11 07 40.3 +0.4**
MSSA IAmb IAmb 11 07 44.5
comp=Z,8.1nm,0.9s
**OBKA Obir 52.55 342** *eP* P 11 07 45.5 +4.8
comp=Z,5.2nm,1.3s
**SOKA Soboth 52.56 342** *eP* P 11 07 45.5 +4.8
comp=Z,3.9nm,1.1s
**ARSA Arzberg 52.93 343** *eP* **P** **11 07 47.4 +4.0**
comp=Z,1.5nm,0.7s
**CTI Castel Tesino 53.11 339** P **P** **11 07 46.0 +1.2**
CTI IAmb IAmb 11 07 52.6
comp=Z,4.0nm,1.0s
**RONA Rosalia, Austr 53.12 344** *eP* **P** **11 07 48.1 +3.4**
comp=Z,2.2nm,0.9s
**CONA Conrad Observa 53.45 344** *eP* **P** **11 07 51.5 +4.3**
comp=Z,4.7nm,1.6s
**AKASG Malin Array Be 53.65 355** P **P** **11 07 48.1 -0.4**
comp=E,0.2nm,0.4s,baz=182,slow=6.4,SNR=1.7
comp=E,0.2nm,0.4s
**MOA Molln 53.84 342** *eP* **P** **11 07 54.3 +4.2**
comp=Z,4.7nm,1.6s
**WTTA Wattenberg 54.17 340** *eP* **P** **11 07 55.2 +2.6**
comp=Z,2.1nm,1.1s
**SQTA Sankt Quirin 54.28 340** *eP* **P** **11 07 57.4 +4.0**
comp=Z,1.5nm,0.5s
**BBTS Babate 54.42 290** LR LR 11 30 59.0
comp=Z,111nm,18.6s,baz=344,slow=36
**RETA Reutte 54.66 340** *eP* **P** **11 07 59.7 +3.6**
comp=Z,1.4nm,0.7s
**DAVA Damuels 54.80 339** *eP* **P** **11 08 01.0 +3.7**
comp=Z,6.5nm,1.1s
**GEC2 GERESS Array S 54.90 343** P **P** **11 07 58.0 +0.1**
**GERES GERESS Array B 54.90 343** P **P** **11 07 58.8 +1.0**
**GERES GERESS Array B 54.90 343** P **P** **11 07 58.2 +0.3**
comp=E,0.2nm,0.3s,baz=159,slow=11,SNR=2.5
comp=E,0.2nm,0.3s
**KK31 Karatay Array 55.58 31** P **P** **11 08 03.0 +0.2**
**KKAR Karatay Array 55.58 31** P **P** **11 08 01.9 -0.9**
**ESDC Sonseca Array 55.72 324** P **P** **11 08 05.5 +1.6**
ESDC IAmb IAmb 11 08 09.3
comp=Z,3.2nm,1.1s
**ESDC Sonseca Array 55.72 324** P **P** **11 08 04.2 +0.2**
comp=Z,2.6nm,0.8s,baz=132,slow=6.7,SNR=10
comp=Z,2.6nm,0.8s
**ABKAR Akbulak array 56.08 19** P **P** **11 08 04.8 -1.4**
**SHL Shillong 61.43 59** P **P** **11 08 43.8 -0.4**
**MAKZ Makanchi 64.13 34** P **P** **11 09 01.5 -0.1**
MAKZ IAmb IAmb 11 09 02.7
comp=Z,7.4nm,1.4s
**MK31 Makanchi Array 64.30 34** P **P** **11 09 01.9 -0.7**
MK31 IAmb IAmb 11 09 03.6
comp=Z,2.3nm,1.1s
**MKAR Makanchi Array 64.30 34** P **P** **11 09 02.5 -0.1**
comp=E,1.8nm,0.9s,baz=234,slow=6.9,SNR=10
comp=E,1.8nm,0.9s
**FIA1 FINESS Array S 64.56 355** P **P** **11 09 04.8 +0.8**
**FINES FINESS Array B 64.56 355** P **P** **11 09 04.3 +0.3**
comp=E,1.8nm,0.7s,baz=156,slow=10,SNR=3.8
comp=E,1.8nm,0.7s
**KURBB Kurchatov Arra 64.75 29** P **P** **11 09 05.3 -0.1**
comp=E,2.2nm,0.9s,baz=231,slow=6.9,SNR=11
comp=E,2.2nm,0.9s
**KURK Kurchatov 64.85 29** P **P** **11 09 05.8 -0.3**
KURK IAmb IAmb 11 09 07.6
comp=E,6.3nm,1.2s
**CM31 Chiang Mai Arr 65.90 68** P **P** **11 09 13.1 -0.5**
**CMAR Chiang Mai Arr 65.90 68** P **P** **11 09 13.5 0.0**
**CMAR Chiang Mai Arr 65.90 68** P **P** **11 09 13.7 +0.1**
comp=Z,2.2nm,0.8s,baz=258,slow=7.3,SNR=8.7
comp=Z,2.2nm,0.8s
**CHTO Chiang Mai 65.97 68** P **P** **11 09 13.4 -0.7**
CHTO IAmb IAmb 11 09 20.4
comp=Z,8.3nm,1.4s
**MAW Mawson 67.29 169** P **P** **11 09 22.0 +0.5**
comp=Z,3.4nm,0.6s,baz=321,slow=6.5,SNR=3.6
comp=Z,3.4nm,0.6s
**ELIB Princess Elisa 69.40 184** *dP* **P** **11 09 38.5 +3.6**
**ZAA0 Zalesovo Array 69.84 29** P **P** **11 09 36.7 -1.0**
ZAA0 IAmb IAmb 11 09 38.4
comp=Z,4.6nm,1.1s
**ZALV Zalesovo Beam 69.84 29** P **P** **11 09 37.5 -0.2**
**ZALV Zalesovo Beam 69.84 29** P **P** **11 09 36.3 -1.4**
comp=Z,2.2nm,0.7s,baz=256,slow=5.8,SNR=8.4
comp=Z,2.2nm,0.7s
**TROLL Troll, Antarti 72.07 190** ⇑Pdiff **P** **11 09 53.0 +1.8**
comp=Z,104nm,0.8s
**ARCES ARCESS Array B 72.59 356** P **P** **11 09 54.2 +0.1**
comp=Z,2.8nm,0.9s,baz=159,slow=7.7,SNR=2.5
comp=Z,2.8nm,0.9s
**SNAA Sanae 72.83 192** ⇑Pdiff **P** **11 09 58.3 +2.7**
comp=Z,14nm,1.0s
**VNA2 Neumayer--Watz 73.28 194** ⇑Pdiff **P** **11 10 00.6 +2.5**
comp=Z,1.8nm,0.8s,baz=29,slow=4.4
**VNA1 Neumayer--Stat 73.29 194** ⇑Pdiff **P** **11 10 01.9 +3.6**
comp=Z,5.9nm,1.0s
**VNA3 Neumayer Olymp 74.04 194** ⇑Pdiff **P** **11 10 04.6 +2.0**
comp=Z,1.9nm,0.8s
**SONM Songino Array 79.43 40** P **P** **11 10 33.9 +0.2**
comp=E,0.5nm,0.4s,baz=261,slow=5.4,SNR=4.3
comp=Z,0.5nm,0.4s
**QSPA South Pole Qui 87.16 180** P **P** **11 11 12.6 -0.6**
QSPA IAmb IAmb 11 11 21.4
comp=Z,4.6nm,1.1s
**QSPA South Pole Qui 87.16 180** P **P** **11 11 14.5 +1.3**
comp=Z,1.4nm,1.1s,baz=198,slow=3.2,SNR=2.8
comp=Z,1.4nm,1.1s
**WRA Warramunga Arr 97.31 110** P **P** **11 12 00.6 -0.6**
comp=Z,0.5nm,0.8s,baz=270,slow=3.4,SNR=4.6
comp=Z,0.5nm,0.8s
**TXAR Lajitas Array 133.19 308** PKP **PKPdf** **11 17 44.1 +0.2**
comp=Z,0.1nm,0.7s,baz=84,slow=2.8,SNR=2.2
**NVAR Mina Array Bea 137.30 329** PKP **PKPdf** **11 17 51.6 +0.1**
comp=Z,0.3nm,0.6s,baz=23,slow=2.9,SNR=3.9

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*NEIC **05** 11:04:26.0±2.4, 7.°58N±0.°04×73.°69W±0.°09, h215km±12km, mb4.3/10, Error ellipse: s-maj=14.5km s-min=4.1km az=68.0*
*IDC **05** 11:04:29.6±2.7, 7.°26N×73.°55W, h139km±25km, mbtmp4.3/4, Error ellipse: s-maj=76.7km s-min=8.0km az=131.0*
*RSNC **05** 11:04:33.7±0.0, 7.°N±1.°×7.°3W±.°, h145km±3km, M3.6, mb4.0, mB4.6, ML3.4, Mw(mB)3.8*

**ISC 05 11:04:30.9±0.8, 6.°86N±0.°03×73.°13W±0.°04, h152km±7km, n61, σ1§73/96, mb4.4/5, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAMC** | **Pamplona, Colo** | **0.64** | **42** | P | **Pn** | **11 04 55.5** | **+1.7** |
| PAMC | | | | S | **Sn** | **11 05 12.7** | **+1.4** |
| **RUSC** | **La Rusia** | **0.96** | **177** | P | **Pn** | **11 04 56.5** | **+0.4** |
| RUSC | | | | S | **Sn** | **11 05 15.3** | **+0.1** |
| **PTBC** | **PUERTO BERRIO,** | **1.35** | **257** | P | **Pn** | **11 04 59.0** | **-0.1** |
| PTBC | | | | S | **Sn** | **11 05 20.5** | **-0.2** |
| **OCAC** | **Ocana** | **1.39** | **352** | P | **Pn** | **11 05 00.7** | **+1.1** |
| OCAC | | | | S | **Sn** | **11 05 22.5** | **+0.8** |
| **TAMC** | **Tame, Arauca** | **1.39** | **107** | P | **Pn** | **11 05 00.8** | **+1.3** |
| TAMC | | | | S | **Sn** | **11 05 22.7** | **+1.3** |
| **SPBC** | **San Pablo de B** | **1.52** | **218** | P | **Pn** | **11 05 01.8** | **+0.9** |
| SPBC | | | | S | **Sn** | **11 05 24.1** | **+0.2** |
| **ZARC** | **Zaragoza, Cauc** | **1.83** | **290** | P | **Pn** | **11 05 05.0** | **+0.9** |
| ZARC | | | | S | **Sn** | **11 05 31.0** | **+1.3** |
| **NORC** | **Norcasia** | **2.15** | **234** | P | **Pn** | **11 05 08.4** | **+0.4** |
| NORC | | | | S | **Sn** | **11 05 35.4** | **-1.1** |
| **CHIC** | **Chingaza** | **2.29** | **195** | P | **Pn** | **11 05 10.8** | **+0.8** |
| CHIC | | | | S | **Sn** | **11 05 40.2** | **+0.1** |
| **ROSC** | **El Rosal** | **2.33** | **211** | Pn | **Pn** | **11 05 12.8** | **+2.5** |
| **ROSC** | **El Rosal** | **2.33** | **211** | P | **Pn** | **11 05 12.7** | **+2.4** |
| | 76nm,0.3s,baz=0.0,slow=20,SNR=125 | | | | | | |
| ROSC | | | | S | **Sn** | **11 05 42.7** | **+1.9** |
| | 304nm,0.3s,baz=90,slow=21,SNR=14 | | | | | | |
| **ROSC** | **El Rosal** | **2.33** | **211** | P | **Pn** | **11 05 12.3** | **+1.9** |
| ROSC | | | | S | **Sn** | **11 05 40.7** | **-0.1** |
| **UREC** | **San Jos de Ur** | **2.54** | **291** | P | **Pn** | **11 05 12.9** | **+0.3** |
| UREC | | | | S | **Sn** | **11 05 43.5** | **-1.4** |
| **VILC** | **Villavicencio,** | **2.78** | **192** | P | **Pn** | **11 05 16.6** | **+0.9** |
| VILC | | | | S | **Sn** | **11 05 50.1** | **-0.3** |
| **PTGC** | **Puerto Gaitan,** | **2.82** | **159** | P | **Pn** | **11 05 15.9** | **-0.2** |
| PTGC | | | | S | **Sn** | **11 05 49.1** | **-1.9** |
| **RECRC** | **Villamaria, Ca** | **2.90** | **230** | P | **Pn** | **11 05 20.6** | **+3.0** |
| RECRC | | | | S | **Sn** | **11 05 55.0** | **+1.3** |
| **DBBC** | **Dabeiba** | **3.06** | **273** | P | **Pn** | **11 05 20.4** | **+1.2** |
| DBBC | | | | S | **Sn** | **11 05 56.1** | **-0.4** |
| **ARGC** | **Ariguani, Magd** | **3.18** | **340** | P | **Pn** | **11 05 23.4** | **+2.8** |
| ARGC | | | | S | **Sn** | **11 06 02.1** | **+2.9** |
| **SDV** | **Santo Domingo** | **3.19** | **51** | | **Pn** | **11 05 21.7** | **+0.7** |
| **SDV** | **Santo Domingo** | **3.19** | **51** | P | **Pn** | **11 05 22.4** | **+1.5** |
| | 103nm,0.3s,baz=232,slow=9.7,SNR=20 | | | | | | |
| SDV | | | | S | **Sn** | **11 06 00.4** | **+0.7** |
| | 165nm,0.5s,baz=253,slow=23,SNR=20 | | | | | | |
| **SDV** | **Santo Domingo** | **3.19** | **51** | P | **Pn** | **11 05 22.2** | **+1.2** |
| SDV | | | | S | **Sn** | **11 05 59.5** | **-0.2** |
| **ANIL** | **Santa Ana** | **3.26** | **224** | P | **Pn** | **11 05 23.6** | **+1.7** |
| ANIL | | | | S | **Sn** | **11 06 02.6** | **+1.2** |
| **APAC** | **Apartado, Choc** | **3.58** | **287** | P | **Pn** | **11 05 26.8** | **+1.1** |
| APAC | | | | S | **Sn** | **11 06 07.6** | **-0.6** |
| **PRAC** | **Prado** | **3.58** | **209** | P | **Pn** | **11 05 26.5** | **+0.7** |
| PRAC | | | | S | **Sn** | **11 06 07.8** | **-0.6** |
| **ORTC** | **Ortega, Tolima** | **3.60** | **216** | P | **Pn** | **11 05 27.2** | **+1.1** |
| ORTC | | | | S | **Sn** | **11 06 07.9** | **-1.1** |
| **SJCC** | **San Jacinto, C** | **3.64** | **326** | P | **Pn** | **11 05 26.7** | **+0.1** |
| SJCC | | | | S | **Sn** | **11 06 08.2** | **-1.6** |
| **PLMC** | **San Jos del P** | **3.69** | **238** | P | **Pn** | **11 05 28.7** | **+1.5** |
| PLMC | | | | S | **Sn** | **11 06 10.5** | **-0.4** |
| **LCBC** | **Los crdobas,** | **3.77** | **302** | P | **Pn** | **11 05 29.4** | **+1.2** |
| LCBC | | | | S | **Sn** | **11 06 10.6** | **-2.2** |
| **URMC** | **La Uribe, Meta** | **3.79** | **199** | P | **Pn** | **11 05 29.8** | **+1.2** |
| URMC | | | | S | **Sn** | **11 06 14.6** | **+1.1** |
| **CRJC** | **Cerrejon, Guaj** | **4.15** | **3** | P | **Pn** | **11 05 33.0** | **-0.2** |
| CRJC | | | | S | **Sn** | **11 06 19.9** | **-1.8** |
| **YOTC** | **Yotoco, Valle** | **4.29** | **228** | P | **Pn** | **11 05 35.6** | **+0.5** |
| YOTC | | | | S | **Sn** | **11 06 23.8** | **-1.2** |
| **GUVC** | **San Jose del G** | **4.31** | **173** | P | **Pn** | **11 05 35.6** | **+0.3** |
| GUVC | | | | S | **Sn** | **11 06 23.7** | **-1.8** |
| **SMRC** | **Santa Marta, M** | **4.42** | **346** | P | **Pn** | **11 05 37.5** | **+0.8** |
| **CAPC** | **Capurgana** | **4.54** | **293** | P | **Pn** | **11 05 38.2** | **-0.1** |
| CAPC | | | | S | **Sn** | **11 06 29.2** | **-1.6** |
| **PIZC** | **Pizarro, Choco** | **4.61** | **246** | P | **Pn** | **11 05 42.6** | **+3.4** |
| PIZC | | | | S | **Sn** | **11 06 30.0** | **-2.4** |
| **PTAC** | **Punta Ardita,** | **4.65** | **274** | P | **Pn** | **11 05 40.7** | **+0.9** |
| **URIC** | **Uribia, Colomb** | **4.95** | **13** | P | **Pn** | **11 05 43.2** | **-0.4** |
| URIC | | | | S | **Sn** | **11 06 39.4** | **-1.0** |
| **MALC** | **Bahia Malaga** | **5.05** | **236** | P | **Pn** | **11 05 47.9** | **+2.9** |
| **JAMC** | **Jamundi, Valle** | **5.05** | **224** | P | **Pn** | **11 05 45.6** | **+0.3** |
| JAMC | | | | S | **Sn** | **11 06 44.8** | **+1.5** |
| **GARC** | **Garzon, Huila** | **5.20** | **207** | P | **Pn** | **11 05 47.0** | **-0.3** |
| GARC | | | | S | **Sn** | **11 06 44.0** | **-2.9** |
| **BAUV** | **El Baul** | **5.45** | **67** | | **Pn** | **11 05 48.9** | **-1.4** |
| **POPC** | **Popayan, Colom** | **5.55** | **220** | P | **Pn** | **11 05 50.1** | **-1.8** |
| POPC | | | | S | **Sn** | **11 06 53.5** | **-1.7** |
| **FLOC** | **Florencia** | **5.81** | **206** | P | **Pn** | **11 05 56.2** | **+1.1** |
| | 19nm,1.0s,476nm | | | | | | |
| FLOC | | | | S | **Sn** | **11 07 00.4** | **-0.7** |
| | 19nm,1.0s,476nm | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.32** | **221** | P | **Pn** | **11 06 03.5** | **+1.4** |
| BBAC | | | | S | **Sn** | **11 07 11.4** | **-2.0** |
| **BCIP** | **Isla Barro Col** | **7.03** | **290** | P | **Pn** | **11 06 10.2** | **-1.1** |
| BCIP | | | | S | **Sn** | **11 07 27.0** | **-3.2** |
| **OTAV** | **Otavalo** | **8.45** | **219** | Pn | **Pn** | **11 06 29.1** | **-1.6** |
| **ANTS** | **Antisana-Sarah** | **8.87** | **215** | Pn | **Pn** | **11 06 35.0** | **-1.4** |
| **PCRV** | **Puerto La Cruz** | **9.03** | **68** | P | **Pn** | **11 06 39.6** | **+1.6** |
| | 3.1nm,0.3s,baz=298,slow=3.0,SNR=15 | | | | | | |
| PCRV | | | | S | **Sn** | **11 08 12.9** | **-5.4** |
| | 4.2nm,0.8s,baz=170,slow=15,SNR=1.4 | | | | | | |
| **ATAH** | **Atahualpa** | **14.86** | **201** | P | **Pn** | **11 07 54.6** | **+0.7** |
| | 5.4nm,1.0s,baz=15,slow=16,SNR=2.3 | | | | | | |
| **ETMB** | **Extrema** | **17.94** | **157** | P | **P** | **11 08 29.2** | **-0.2** |
| **SAML** | **Samuel** | **18.57** | **148** | P | **P** | **11 08 36.1** | **-0.2** |
| **VILB** | **Vilhena** | **23.50** | **147** | P | **P** | **11 09 24.2** | **-3.0** |
| VILB | | | | IAmb | IAmb | 11 09 30.9 | |
| | comp=Z,5.9nm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **27.15** | **173** | P | **P** | **11 09 56.3** | **-3.9** |
| **GOGA** | **Godfrey** | **28.11** | **341** | P | P | 11 09 50.4 | -18 |
| GOGA | | | | IAmb | IAmb | 11 09 51.8 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **JSC** | **Jenkinsville** | **28.31** | **346** | P | P | 11 09 52.5 | -18 |
| JSC | | | | IAmb | IAmb | 11 09 53.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **HODGE** | **Hodges** | **28.52** | **344** | P | P | 11 09 51.8 | -20 |
| **BDFB** | **Brasilia** | **33.44** | **132** | P | P | 11 10 51.3 | -4.5 |
| BDFB | | | | IAmb | IAmb | 11 10 55.9 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **73.74** | **78** | P | P | 11 15 37.3 | -12 |
| TOA0 | | | | IAmb | IAmb | 11 16 06.1 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **122.29** | **20** | PKP | **PKPdf** | **11 23 07.7** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=336,slow=2.7,SNR=2.2 | | | | | | |
| **ASAR** | **Alice Springs** | **149.12** | **234** | PKPbc | **PKPdf** | **11 24 01.6** | **+3.7** |
| | comp=Z,0.4nm,0.5s,baz=118,slow=3.5,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.34** | **241** | PKPbc | **PKPdf** | **11 24 04.9** | **+5.0** |
| | comp=Z,0.3nm,0.4s,baz=109,slow=2.5,SNR=5.3 | | | | | | |

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*ATH **05** 11:05:06.6, 34.°83N×23.°93E, h16km±1km, ML2.7/2, Error ellipse: s-maj=4.0km s-min=1.4km az=214.0*
*IDC **05** 11:05:07.7±6.5, 34.°58N×23.°88E, h56km±46km, mb3.4/6, mbtmp3.6/10, ML3.5/4, MS2.9/1, Error ellipse: s-maj=71.0km s-min=21.7km az=4.0*

**ISC 05 11:05:05.9±1.3, 34.°75N±0.°10×23.°95E±0.°08, h29km, n23, σ1§37/26, mb3.6/6, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GVD** | **Gavdhos** | **0.15** | **51** | P | **Pb** | **11 05 09.7** | **-1.8** |
| **GVD** | **Gavdhos** | **0.15** | **51** | P | **Pb** | **11 05 10.0** | **-1.5** |
| GVD | | | | S | **Sb** | **11 05 13.7** | **-1.6** |
| GVD | | | | AML | AML | 11 05 22.5 | |
| | comp=N,5804μm,0.3s | | | | | | |
| GVD | | | | AML | AML | 11 05 25.7 | |
| | comp=E,6561μm,0.4s | | | | | | |
| **KNDR** | **Palaiochora Ch** | **0.53** | **336** | P | **Pb** | **11 05 16.1** | **-0.8** |
| KNDR | | | | S | **Sb** | **11 05 22.4** | **-1.8** |
| KNDR | | | | AML | AML | 11 05 44.9 | |
| | comp=N,2521μm,0.5s | | | | | | |
| KNDR | | | | AML | AML | 11 05 47.6 | |
| | comp=E,2818μm,0.6s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.71** | **2** | P | **Pb** | **11 05 18.8** | **-1.1** |
| **IMMV** | **Iera Moni Meta** | **0.71** | **2** | P | **Pb** | **11 05 18.7** | **-1.2** |
| IMMV | | | | S | **Sb** | **11 05 27.6** | **-1.7** |
| **TMBK** | **Timbaki Herakl** | **0.75** | **64** | P | **Pn** | **11 05 21.6** | **+1.1** |
| **RODP** | **Rodopos** | **0.83** | **349** | P | **Pb** | **11 05 23.3** | **+1.5** |
| **IDI** | **Anoyia** | **0.94** | **55** | P | **Pn** | **11 05 23.6** | **+0.3** |
| **IDI** | **Anoyia** | **0.94** | **55** | P | **Pn** | **11 05 23.5** | **+0.3** |
| **ANKY** | **Antikythira Is** | **1.24** | **335** | P | **Pn** | **11 05 27.9** | **+0.6** |
| **ANKY** | **Antikythira Is** | **1.24** | **335** | P | **Pn** | **11 05 27.4** | **+0.1** |
| ANKY | | | | S | **Sn** | **11 05 42.1** | **-0.9** |
| **KTHA** | **Kythira Island** | **1.67** | **335** | P | **Pn** | **11 05 34.6** | **+1.3** |
| **BRTR** | **Keskin Array B** | **9.18** | **54** | P | **Pn** | **11 07 19.4** | **+2.8** |
| | comp=E,0.1nm,0.3s,baz=243,slow=14,SNR=4.1 | | | | | | |
| | comp=E,0.9nm,0.8s | | | | | | |
| **MLR** | **Muntele Rosu** | **10.84** | **7** | LR | LR | 11 12 54.2 | |
| | comp=E,53nm,18.7s,baz=287,slow=42 | | | | | | |
| **GERES** | **GERESS Array B** | **16.00** | **335** | P | **Pn** | **11 08 50.8** | **+1.9** |
| | comp=E,0.2nm,0.3s,baz=166,slow=12,SNR=3.1 | | | | | | |
| | comp=E,0.6nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **16.40** | **12** | P | **P** | **11 08 56.7** | **+0.3** |
| | comp=E,0.4nm,0.3s,baz=212,slow=10,SNR=2.8 | | | | | | |
| | comp=E,0.1nm,0.3s | | | | | | |
| **KBZ** | **Khabaz** | **17.17** | **53** | P | **P** | **11 09 06.0** | **+1.0** |
| | comp=E,0.1nm,0.3s,baz=225,slow=7.1,SNR=3.0 | | | | | | |
| | comp=E,2.3nm,0.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **22.72** | **291** | P | **P** | **11 10 04.3** | **-1.2** |
| | comp=E,0.5nm,1.0s,baz=76,slow=11,SNR=2.0 | | | | | | |
| | comp=E,0.5nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **26.27** | **348** | P | **P** | **11 10 37.6** | **-0.8** |
| | comp=E,2.1nm,0.7s,baz=146,slow=11,SNR=6.1 | | | | | | |
| | comp=E,2.1nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **27.82** | **326** | P | **P** | **11 10 54.1** | **+1.7** |
| | comp=E,0.3nm,0.5s,baz=125,slow=8.1,SNR=2.1 | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.15** | **51** | P | **P** | **11 12 55.2** | **-0.4** |
| | comp=E,0.3nm,0.3s,baz=275,slow=8.3,SNR=7.6 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.83** | **56** | P | **P** | **11 13 17.9** | **+0.5** |
| | comp=E,1.0nm,0.5s,baz=280,slow=6.7,SNR=12 | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.01** | **46** | P | **P** | **11 13 25.4** | **-1.1** |
| | comp=E,0.4nm,0.3s,baz=289,slow=8.9,SNR=2.1 | | | | | | |
| | comp=E,0.4nm,0.3s | | | | | | |

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*IDC **05** 11:14:43.4±0.7, 1.°82S×99.°70E, h0km, mb4.2/18, mbtmp4.2/18, MS3.3/1, Error ellipse: s-maj=30.3km s-min=13.7km az=56.0*
*DJA **05** 11:14:46.2±0.3, 2.°S±3.°×10.°0E±.°, h10km, M4.6/15, mb4.6/7, MLv4.7/15*
*NEIC **05** 11:14:50.0±1.5, 1.°66S±0.°07×99.°97E±0.°09, h37km±7km, mb4.5/31, Error ellipse: s-maj=13.2km s-min=9.4km az=61.0*

**ISC 05 11:14:45.5±0.4, 1.°75S±0.°05×99.°86E±0.°05, h10km, n86, σ1§14/76, mb4.4/33, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SISI** | **Saibi** | **0.88** | **299** | P | **Pg** | **11 15 01.7** | **-0.6** |
| **PPSI** | **Pulau Pagai** | **1.02** | **171** | P | **Pn** | **11 15 06.2** | **+0.4** |
| **PDSI** | **Padang** | **1.03** | **36** | P | **Pg** | **11 15 06.3** | **+1.0** |
| **PBSI** | **Pulau Batu** | **2.31** | **317** | P | **Pn** | **11 15 23.6** | **0.0** |
| **BKNI** | **Bangkinang** | **2.38** | **30** | Pn | **Pn** | **11 15 21.6** | **-2.9** |
| **BKNI** | **Bangkinang** | **2.38** | **30** | P | **Pn** | **11 15 25.0** | **+0.4** |
| **GSI** | **Gunungsitoli** | **3.80** | **323** | | **Pn** | **11 15 46.0** | **+2.0** |
| **GSI** | **Gunungsitoli** | **3.80** | **323** | P | **Pn** | **11 15 45.7** | **+1.6** |
| **MNAI** | **Manna** | **4.04** | **130** | Pn | **Pn** | **11 15 48.6** | **+1.2** |
| **MNAI** | **Manna** | **4.04** | **130** | P | **Pn** | **11 15 48.8** | **+1.4** |
| **LWLI** | **Liwa** | **5.30** | **128** | P | **Pn** | **11 16 05.5** | **+0.6** |
| **KASI** | **Kota Agung** | **5.96** | **129** | P | **Pn** | **11 16 14.6** | **+0.8** |
| | 60nm,0.8s,0.3nm | | | | | | |
| **IPM** | **Ipoh** | **6.30** | **11** | Pn | **Pn** | **11 16 19.3** | **+0.8** |
| **KULM** | **Kulim** | **7.04** | **6** | Pn | **Pn** | **11 16 28.1** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **20.10** | **357** | P | **P** | **11 19 21.0** | **+1.4** |
| | 1.1nm,0.6s,baz=184,slow=9.6,SNR=7.3 | | | | | | |
| CMAR | | | | LR | LR | 11 26 29.0 | |
| | comp=Z,87nm,20.3s,baz=185,slow=35 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **20.12** | **100** | P | Pn | 11 19 22.6 | +0.9 |
| | 11nm,0.9s,baz=187,slow=4.9,SNR=3.7 | | | | | | |
| | 11nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **21.11** | **82** | P | **P** | **11 19 30.1** | **-0.5** |
| TOLI2 | | | | IAmb | IAmb | 11 19 32.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.88** | **257** | T | T | 11 49 14.1 | |
| | baz=80,slow=75,SNR=16 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.89** | **257** | T | T | 11 49 13.3 | |
| | baz=80,slow=75,SNR=38 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.90** | **257** | T | T | 11 49 14.8 | |
| | baz=80,slow=75,SNR=16 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.07** | **124** | P | **P** | **11 20 54.6** | **-0.6** |
| **KNRA** | **Kununurra** | **31.68** | **118** | P | **P** | **11 21 07.9** | **-1.5** |
| KNRA | | | | IAmb | IAmb | 11 21 08.3 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| **LSA** | **Lhasa** | **32.36** | **346** | P | **P** | **11 21 16.6** | **+0.8** |
| **H01W3** | **Cape Leeuwin H** | **35.55** | **160** | T | T | 11 59 35.5 | |
| | baz=335 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **35.56** | **160** | T | T | 11 59 35.5 | |
| | baz=335 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **35.56** | **160** | T | T | 11 59 36.0 | |
| | baz=335 | | | | | | |
| **LYN** | **LuoYang** | **38.00** | **17** | P | **P** | **11 22 07.9** | **+4.1** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **38.22** | **120** | P | **P** | **11 22 05.2** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 11 22 06.1 | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **38.24** | **121** | P | **P** | **11 22 05.3** | **-0.8** |
| **WRA** | **Warramunga Arr** | **38.24** | **121** | P | **P** | **11 22 05.3** | **-0.8** |
| | comp=Z,4.2nm,0.5s,baz=303,slow=9.0,SNR=100 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 24 20.1** | **-0.4** |
| | comp=Z,0.2nm,0.4s,baz=307,slow=5.2,SNR=1.3 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **38.25** | **121** | P | **P** | **11 22 05.2** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 11 22 06.3 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **38.25** | **121** | P | **P** | **11 22 05.7** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 11 22 06.6 | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **38.42** | **121** | P | **P** | **11 22 06.6** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 11 22 08.0 | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **39.51** | **126** | P | **P** | **11 22 16.8** | **0.0** |
| **ASAR** | **Alice Springs** | **39.51** | **126** | P | **P** | **11 22 16.5** | **-0.2** |
| | comp=Z,3.7nm,0.7s,baz=302,slow=7.9,SNR=74 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 24 24.6** | **+0.2** |
| | comp=Z,1.0nm,0.8s,baz=312,slow=3.7,SNR=5.1 | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **COEN** | **Coen** | **44.50** | **108** | P | **P** | **11 22 54.4** | **-3.1** |
| COEN | | | | IAmb | IAmb | 11 23 10.0 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **KSH** | **Kashi** | **46.55** | **334** | P | **P** | **11 23 15.1** | **+1.5** |
| **KSRS** | **Korea Array** | **46.88** | **31** | P | **P** | **11 23 15.5** | **-0.6** |
| | comp=Z,1.1nm,0.8s,baz=216,slow=8.4,SNR=4.3 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **KS19** | **Wonju Array Si** | **46.89** | **31** | P | **P** | **11 23 13.6** | **-2.5** |
| KS19 | | | | IAmb | IAmb | 11 23 30.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **XLT** | **XiLinHaoTe** | **47.72** | **16** | *eP* | **P** | **11 23 24.9** | **+2.3** |
| XLT | | | | pP | pwP | 11 23 29.7

**BRTR Keskin Array B 73.05 312** P **P** **11 26 13.5 -2.6**
comp=Z,0.3nm,0.3s,baz=122,slow=10,SNR=2.1
comp=Z,0.3nm,0.3s
**BOSA Boshof 75.65 241** P **P** **11 26 30.9 -0.6**
BOSA IAmb IAmb 11 26 40.7
comp=Z,17nm,1.4s
**BURAR Bucovina Array 80.98 319** P **P** **11 27 00.4 -0.1**
**BUR08 Bucovina Ar. S 81.00 319** P **P** **11 27 00.7 +0.1**
BUR08 IAmb IAmb 11 27 10.9
comp=Z,4.0nm,1.1s
**VNDA Vanda 82.43 169** P **P** **11 27 07.6 +0.1**
VNDA IAmb IAmb 11 27 30.6
comp=Z,3.4nm,1.4s
**FIA1 FINESS Array S 83.83 332** P **P** **11 27 14.0 -1.0**
**FINES FINESS Array B 83.83 332** P **P** **11 27 14.4 -0.6**
**FINES FINESS Array B 83.83 332** P **P** **11 27 14.8 -0.1**
comp=Z,1.0nm,0.5s,baz=122,slow=5.0,SNR=13
comp=Z,1.0nm,0.5s
**ARCES ARCESS Array B 86.19 340** P **P** **11 27 25.7 -1.1**
**ARCES ARCESS Array B 86.19 340** P **P** **11 27 26.7 -0.1**
comp=Z,0.6nm,0.5s,baz=90,slow=4.9,SNR=6.2
comp=Z,0.6nm,0.5s
**QSPA South Pole Qui 88.21 180** P **P** **11 27 37.2 +0.5**
QSPA IAmb IAmb 11 27 38.2
comp=Z,1.6nm,0.8s
**QSPA South Pole Qui 88.21 180** P **P** **11 27 37.2 +0.5**
comp=Z,0.7nm,0.6s,baz=278,slow=0.8,SNR=9.3
comp=Z,0.7nm,0.6s
**CLL Collm 89.38 321** *i* P **P** **11 27 41.9 -0.5**
**HFS Hagfors 89.59 330** P **P** **11 27 43.8 +0.7**
comp=Z,2.6nm,0.9s,baz=81,slow=4.5,SNR=1.5
comp=Z,2.6nm,0.9s
**SPITS Spitsbergen Ar 90.36 348** P **P** **11 27 48.1 +1.6**
comp=Z,0.8nm,0.4s,baz=97,slow=5.8,SNR=4.8
comp=Z,0.8nm,0.4s
**SNAA Sanae 92.33 198** P **P** **11 27 56.2 +0.4**
SNAA IAmb IAmb 11 28 33.9
comp=Z,2.6nm,1.3s
**CPUP Villa Florida 144.43 217** PKP **PKPab** **11 34 21.2 +0.2**
comp=Z,3.7nm,0.7s,baz=104,slow=3.6,SNR=7.5
**TXAR Lajitas Array 144.59 37** PKPbc **PKPab** **11 34 22.0 +0.3**
comp=Z,1.3nm,0.6s,baz=272,slow=1.1,SNR=27
**TKL Tuckaleechee C 146.10 5** PKPbc **PKPdf** **11 34 24.9 -0.6**
comp=Z,1.7nm,0.7s,baz=322,slow=5.7,SNR=2.6

*NEIC **05** 11:27:07.1±1.8, 18.80N±0.09×145.3E±0.2, h219km±7km, mb4.3/23, Error ellipse: s-maj=25.9km s-min=13.5km az=84.0*
*IDC **05** 11:27:12.7±19.0, 18.86N×145.18E, h282km±195km, mb3.2/7, mbtmp3.8/7, Error ellipse: s-maj=39.9km s-min=27.2km az=66.0*
**ISC 05 11:27:05.5±0.7, 18.83N±0.08×145.3E±0.2, h214km, n36, σ1°90/36, mb4.2/19, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **5.22** | **185** | S | **S** | **11 29 24.4** | **0.0** |
| | 30nm,0.3s,baz=204,slow=12,SNR=1.3 | | | | | | |
| **JOW** | **Kunigami** | **17.58** | **300** | P | **P** | **11 30 56.4** | **+0.5** |
| JOW | | | | IAmb | IAmb | 11 31 02.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **COEN** | **Coen** | **32.64** | **184** | P | **P** | **11 33 17.6** | **+0.1** |
| COEN | | | | IAmb | IAmb | 11 33 39.9 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **34.43** | **205** | P | **P** | **11 33 33.4** | **+0.5** |
| MTN | | | | IAmb | IAmb | 11 33 54.2 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **KNRA** | **Kununurra** | **37.95** | **206** | P | **P** | **11 34 04.1** | **+1.3** |
| KNRA | | | | IAmb | IAmb | 11 34 08.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **39.82** | **196** | P | **P** | **11 34 18.7** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 11 34 20.0 | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **39.96** | **196** | P | **P** | **11 34 20.3** | **+0.9** |
| **WRAB** | **Tennant Creek** | **39.99** | **196** | P | **P** | **11 34 20.7** | **+1.1** |
| **WB2** | **Warramunga Arr** | **39.99** | **196** | P | **P** | **11 34 21.1** | **+1.4** |
| WB2 | | | | IAmb | IAmb | 11 34 21.6 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.00** | **196** | P | **P** | **11 34 20.9** | **+1.1** |
| **WRA** | **Warramunga Arr** | **40.00** | **196** | P | **P** | **11 34 20.7** | **+1.0** |
| | comp=Z,8.4nm,0.7s,baz=18,slow=9.0,SNR=114 | | | | | | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.47** | **209** | P | **P** | **11 34 33.0** | **+1.4** |
| **AS31** | **Alice Springs** | **43.67** | **195** | P | **P** | **11 34 50.5** | **+1.1** |
| **ASAR** | **Alice Springs** | **43.67** | **195** | P | **P** | **11 34 50.1** | **+0.7** |
| | comp=Z,0.7nm,0.5s,baz=16,slow=6.7,SNR=21 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MBWA** | **Marble Bar** | **46.97** | **213** | P | **P** | **11 35 15.8** | **+0.6** |
| MBWA | | | | IAmb | IAmb | 11 35 52.1 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **47.25** | **213** | P | **P** | **11 35 17.6** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 11 36 00.1 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.10** | **314** | P | **P** | **11 36 36.9** | **+0.3** |
| **MKAR** | **Makanchi Array** | **58.10** | **314** | P | **P** | **11 36 37.3** | **+0.6** |
| | comp=Z,0.2nm,0.5s,baz=83,slow=7.6,SNR=3.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **58.31** | **314** | P | **P** | **11 36 36.3** | **-1.8** |
| **KURBB** | **Kurchatov Arra** | **60.97** | **318** | P | **P** | **11 36 55.2** | **-0.8** |
| | comp=Z,0.3nm,0.4s,baz=93,slow=7.8,SNR=4.1 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **61.26** | **24** | P | **P** | **11 36 56.7** | **-1.1** |
| **B20K** | **Meade River** | **61.58** | **19** | P | **P** | **11 37 01.1** | **+1.4** |
| **D22K** | **Ayikyak River** | **62.61** | **21** | P | **P** | **11 37 08.2** | **+1.5** |
| D22K | | | | IAmb | IAmb | 11 37 29.2 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **62.76** | **26** | P | **P** | **11 37 09.0** | **+1.3** |
| I23K | | | | IAmb | IAmb | 11 37 21.1 | |
| | comp=Z,6.8nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **63.70** | **26** | P | **P** | **11 37 13.7** | **-0.2** |
| | comp=Z,0.1nm,0.4s,baz=259,slow=6.0,SNR=4.2 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **64.66** | **154** | P | **P** | **11 37 19.8** | **-0.7** |
| **D25K** | **Kavik River** | **64.91** | **21** | P | **P** | **11 37 22.5** | **+0.7** |
| D25K | | | | IAmb | IAmb | 11 37 35.2 | |
| | comp=Z,4.3nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **65.15** | **24** | P | **P** | **11 37 24.3** | **+0.9** |
| **KKAR** | **Karatay Array** | **66.39** | **310** | P | **P** | **11 37 32.3** | **+0.6** |
| **L29M** | **L29M** | **67.31** | **29** | P | **P** | **11 37 38.2** | **+1.0** |
| **G31M** | **Satah River** | **69.09** | **25** | P | **P** | **11 37 48.3** | **+0.3** |
| G31M | | | | IAmb | IAmb | 11 37 57.8 | |
| | comp=Z,5.9nm,1.5s | | | | | | |
| **C36M** | **Paulatuk** | **72.77** | **22** | P | **P** | **11 38 10.5** | **+0.4** |
| C36M | | | | IAmb | IAmb | 11 38 16.4 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.98** | **317** | P | **P** | **11 38 11.6** | **-0.1** |
| **MCQ** | **Macquarie Isla** | **73.96** | **172** | P | **P** | **11 38 15.3** | **-1.7** |
| **NVAR** | **Mina Array Bea** | **83.36** | **52** | P | **P** | **11 39 10.2** | **+1.0** |
| | comp=Z,0.4nm,0.5s,baz=266,slow=6.5,SNR=5.4 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **86.61** | **335** | P | **P** | **11 39 23.3** | **-1.2** |
| | comp=Z,1.2nm,0.7s,baz=52,slow=4.4,SNR=9.7 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |

*BJI **05** 11:46:34.5±0.0, 8.34S×116.45E, h30km, mb6.0/92, mB6.8/89, Ms6.9/99, Ms7 6.8/98*
*IPGP **05** 11:46:34.0, 8.27S×116.46E, h18km, Mw6.9, Fault plane solution: NP1:φs260.00000°, δ65.00000°, λ92.00000°. NP2:φs75.00000°, δ25.00000°, λ85.00000°.*
*MOS **05** 11:46:36.5±1.1, 8.23S×116.39E, h45km, mb6.6/69, MS6.7/45, Error ellipse: s-maj=6.1km s-min=4.1km az=115.4*
*IDC **05** 11:46:37.0±1.7, 8.21S×116.37E, h34km±12km, mb5.4/37, mbtmp5.6/38, ML4.9/1, MS6.5/56, Error ellipse: s-maj=12.8km s-min=8.5km az=62.0*
*DJA **05** 11:46:37.3±0.1, 8°S±1′×11°6E±°, h32km±1km, M6.8/143, mb6.4/143, mB6.9/138, MLv7.0/29, Mw6.8/146, Mw(mB)6.8/138, MwMwp6.7/131, Mwp6.5/131*
*NEIC **05** 11:46:37.8, 8.29S×116.45E, h31km*
*NEIC **05** 11:46:38.2, 8.46S×116.54E, h30km, Moment Tensor Solution. Duration: 31s1 Moment tensor: Scale 10^19Nm; Mrr2.42; Mθθ-2.52; Mφφ0.11; Mrθ-1.99; Mθφ0.18; Mrφ0.11; Fault plane solution: M0 3.18000×10^19 NP1: φs273.43000°, δ64.41000°, λ89.58000°. NP2:φs94.40000°, δ25.59000°, λ90.87000°. Principal axes: T 3.1176, Plg71.0000°, Azm183.0000°; N 0.1210, Plg0.0000°, Azm274.0000°; P -3.2386, Plg19.0000°, Azm4.0000°;*
*NEIC **05** 11:46:38.6±2.1, 8.26S±0.06×116.44E±0.05, h34km±1km, mb6.5/185, Ms_20 6.6/803, Mwb6.7/65, Mww6.9/83 Error ellipse: s-maj=10.2km s-min=8.6km az=169.0, Moment Tensor Solution. Moment tensor: Scale 10^19Nm; Mrr0.73; Mθθ-1.15; Mφφ0.42; Mrθ-0.86; Mθφ-0.07; Mrφ-0.10; Fault plane solution: M0 1.33000×10^19 NP1: φs263.39000°, δ66.38000°, λ85.69000°. NP2:φs94.04000°, δ23.98000°, λ99.75000°. Principal axes: T 1.0740, Plg68.0000°, Azm165.0000°; N 0.4155, Plg4.0000°, Azm265.0000°; P -1.4895, Plg21.0000°, Azm357.0000°;*
*NEIC **05** 11:46:38.2, 8.26S×116.44E, h30km*
*GCMT **05** 11:46:44.6±0.0, 8.33S×116.24E, h18km, MW6.9/171, Moment Tensor Solution. s169,c452; s171,c838; Duration: 7s2 Moment tensor: Scale 10^19Nm; Mrr2.05±.01; Mθθ-2.14±.01; Mφφ0.08±.01; Mrθ-2.42±.03; Mθφ-0.04±.00; Mrφ-0.41±.02; Best double couple: M0 3.22700×10^19 NP1:φs262.00000°, δ70.00000°, λ85.00000°. NP2:φs96.00000°, δ21.00000°, λ103.00000°. Principal axes: T 3.1960, Plg65.0000°, Azm165.0000°; N 0.0610, Plg4.0000°, Azm264.0000°; P -3.2580, Plg25.0000°, Azm356.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
**ISC 05 11:46:36.4±0.2, 8.36S±0.02×116.41E±0.02, h32km±1km, h32km:pP-P, n2578, σ2s02/2944, mb6.3/266, MS6.6/523, 146C-63D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.59** | **129** | P | **Pb** | **11 46 46.7** | **-1.8** |
| TWSI | | | | S | **Sb** | **11 46 54.8** | **-2.0** |
| **SRBI** | **Singaraja** | **1.22** | **283** | P | **Pb** | **11 46 58.3** | **-0.7** |
| **DNP** | **Denpasar** | **1.23** | **255** | P | **Pb** | **11 46 59.1** | **-0.1** |
| **DNP** | **Denpasar** | **1.23** | **255** | P | **Pb** | **11 46 59.0** | **-0.1** |
| **PLAI** | **Plampang** | **1.43** | **109** | P | **Pn** | **11 46 59.9** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.24** | **267** | P | **Pb** | **11 47 14.5** | **-1.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.24** | **267** | Pn | **Pn** | **11 47 12.5** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.24** | **267** | ⇑P | **Pn** | **11 47 12.4** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.24** | **267** | P | **Pn** | **11 47 12.3** | **+1.0** |
| **GRJI** | **Gresik** | **4.16** | **290** | P | **Pn** | **11 47 38.8** | **+1.1** |
| **BWJI** | **Bawean** | **4.49** | **304** | P | **Pn** | **11 47 43.2** | **+1.0** |
| **BASI** | **Baing, Sumba** | **4.50** | **114** | P | **Pn** | **11 47 43.8** | **+1.3** |
| **PWJI** | **Pagerwojo** | **4.58** | **274** | P | **Pn** | **11 47 45.1** | **+1.6** |
| **BSSI** | **Bau Bau, Buton** | **4.61** | **62** | P | **Pn** | **11 47 42.8** | **-1.1** |
| **KAPI** | **Kappang** | **4.70** | **45** | P | **Pn** | **11 47 46.3** | **+1.1** |
| **KAPI** | **Kappang** | **4.70** | **45** | Pn | **Pn** | **11 47 43.6** | **-1.6** |
| | 56nm,0.3s,baz=224,slow=13,SNR=76 | | | | | | |
| KAPI | | | | Sn | **Sn** | **11 48 36.1** | **-2.5** |
| | 691nm,0.3s,baz=74,slow=19,SNR=6.5 | | | | | | |
| KAPI | | | | ScS | **ScS** | **12 02 06.8** | **+0.2** |
| | 19nm,0.5s,baz=249,slow=20,SNR=4.1 | | | | | | |
| | 299nm,0.3s | | | | | | |
| **KAPI** | **Kappang** | **4.70** | **45** | P | **Pn** | **11 47 44.0** | **-1.1** |
| KAPI | | | | S | **Sn** | **11 48 33.1** | **-5.4** |
| **NGJI** | **Ngawi** | **5.00** | **281** | P | Pn | **11 47 54.2** | **+4.8** |
| **BNSI** | **Bone** | **5.38** | **43** | P | **Pn** | **11 47 55.4** | **+0.8** |
| | 8μm,0.9s,162nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.50** | **38** | P | **Pn** | **11 47 55.5** | **-0.7** |
| | 4μm,0.8s,86nm | | | | | | |
| **MMRI** | **Maumere** | **5.77** | **93** | P | **Pn** | **11 48 01.2** | **+1.3** |
| **MMRI** | **Maumere** | **5.77** | **93** | Pn | **Pn** | **11 47 58.9** | **-1.0** |
| **MMRI** | **Maumere** | **5.77** | **93** | ⇑P | **Pn** | **11 47 59.2** | **-0.7** |
| **MMRI** | **Maumere** | **5.77** | **93** | P | **Pn** | **11 47 59.7** | **-0.2** |
| **UGM** | **Wanagama** | **5.85** | **274** | P | **Pn** | **11 48 04.2** | **+3.2** |
| **UGM** | **Wanagama** | **5.85** | **274** | Pn | **Pn** | **11 48 03.3** | **+2.3** |
| **UGM** | **Wanagama** | **5.85** | **274** | P | **Pn** | **11 48 03.4** | **+2.3** |
| **SMRI** | **Semarang** | **6.06** | **282** | P | **Pn** | **11 48 07.8** | **+3.9** |
| **SMRI** | **Semarang** | **6.06** | **282** | Pn | **Pn** | **11 48 06.7** | **+2.8** |
| **SMRI** | **Semarang** | **6.06** | **282** | ⇑P | **Pn** | **11 48 06.7** | **+2.8** |
| **SMRI** | **Semarang** | **6.06** | **282** | P | **Pn** | **11 48 07.4** | **+3.5** |
| **YOGI** | **Yogyakarta** | **6.08** | **275** | P | **Pn** | **11 48 06.9** | **+2.7** |
| **BBSI** | **Bau Bau** | **6.75** | **65** | P | **Pn** | **11 48 16.1** | **+2.7** |
| | 4μm,1.0s,82μm509μm29nm | | | | | | |
| **BKB** | **Balikpapan** | **7.07** | **4** | P | Pn | 11 48 23.8 | +6.0 |
| **BKB** | **Balikpapan** | **7.07** | **4** | Pn | **Pn** | **11 48 20.6** | **+2.7** |
| **BKB** | **Balikpapan** | **7.07** | **4** | P | **Pn** | **11 48 20.5** | **+2.7** |
| | 2μm,0.8s | | | | | | |
| **BATI** | **Baumata** | **7.39** | **105** | P | **Pn** | **11 48 23.6** | **+1.4** |
| **KPJI** | **Karang Pucung** | **7.48** | **277** | P | **Pn** | **11 48 26.4** | **+2.9** |
| | 4μm,0.7s,126μm56nm | | | | | | |
| **MTKI** | **Mu'tareh, K** | **7.53** | **348** | P | **Pn** | **11 48 24.4** | **+0.3** |
| | 4μm,0.8s,66nm | | | | | | |
| **SOEI** | **Soe** | **7.88** | **101** | P | **Pn** | **11 48 29.9** | **+0.9** |
| **SOEI** | **Soe** | **7.88** | **101** | Pn | **Pn** | **11 48 29.7** | **+0.7** |
| **SOEI** | **Soe** | **7.88** | **101** | P | **Pn** | **11 48 28.2** | **-0.8** |
| **SOEI** | **Soe** | **7.88** | **101** | ⇑P | **Pn** | **11 48 29.8** | **+0.7** |
| **SOEI** | **Soe** | **7.88** | **101** | P | **Pn** | **11 48 30.0** | **+0.9** |
| **SMKI** | **Samarinda** | **7.90** | **6** | P | **Pn** | **11 48 29.6** | **+0.3** |
| **CMJI** | **Cimerak** | **7.91** | **274** | P | **Pn** | **11 48 30.8** | **+1.5** |
| | 6μm,1.2s,73μm682μm35nm | | | | | | |
| **JCJI** | **Jatiwangi** | **8.29** | **282** | P | Pn | 11 48 39.6 | +5.1 |
| | 4μm,0.8s,147μm977μm | | | | | | |
| **BBJI** | **Bungbulang** | **8.73** | **275** | P | **Pn** | **11 48 43.4** | **+2.8** |
| **LEM** | **Lembang** | **8.85** | **279** | P | **Pn** | **11 48 46.8** | **+4.4** |
| LEM | | | | pmax | pmax | | |
| | comp=Z,3μm,0.9s | | | | | | |
| **CNJI** | **Cibinong** | **9.26** | **276** | P | **Pn** | **11 48 51.5** | **+3.7** |
| | comp=Z,2μm,0.8s,comp=Z,223μm | | | | | | |
| **LUWI** | **Luwuk** | **9.64** | **41** | P | **Pn** | **11 48 54.7** | **+1.6** |
| **LUWI** | **Luwuk** | **9.64** | **41** | Pn | **Pn** | **11 48 51.9** | **-1.2** |
| **LUWI** | **Luwuk** | **9.64** | **41** | P | **Pn** | **11 48 51.6** | **-1.5** |
| **LUWI** | **Luwuk** | **9.64** | **41** | P | **Pn** | **11 48 54.4** | **+1.3** |
| | comp=Z,1μm,1.1s,comp=Z,30μmcomp=Z,732μm | | | | | | |
| **STKI** | **Sintang** | **9.71** | **329** | P | **Pn** | **11 48 56.8** | **+2.8** |
| | comp=Z,1μm,0.8s,comp=Z,93μm | | | | | | |
| **DBJI** | **Dramaga** | **9.75** | **280** | P | **Pn** | **11 48 59.1** | **+4.5** |
| **SKJI** | **Sukabumi** | **9.86** | **277** | P | **Pn** | **11 48 59.3** | **+3.2** |
| **TNG** | **Tangerang** | **9.93** | **282** | P | **Pn** | **11 48 59.0** | **+2.0** |
| | comp=Z,3μm,1.0s,comp=Z,59μmcomp=Z,398μm | | | | | | |
| TNG | | | | P | **Pn** | **11 48 59.1** | **+2.0** |
| | comp=Z,4μm,1.0s,comp=Z,90μmcomp=Z,690μm | | | | | | |
| **TOLI2** | **Tolitoli** | **10.37** | **25** | P | **Pn** | **11 49 05.6** | **+2.5** |
| **TOLI2** | **Tolitoli** | **10.37** | **25** | Pn | **Pn** | **11 49 04.1** | **+1.0** |
| **SBJI** | **Serang** | **10.44** | **282** | P | **Pn** | **11 49 08.6** | **+4.5** |
| | comp=Z,4μm,1.5s,comp=Z,69μm | | | | | | |
| **XMI** | **Christmas Isla** | **10.78** | **258** | P | **Pn** | **11 49 11.1** | **+2.4** |
| **XMI** | **Christmas Isla** | **10.78** | **258** | ⇑P | **Pn** | **11 49 07.1** | **-1.6** |
| **XMIS** | **Christmas Isla** | **10.82** | **258** | P | **Pn** | **11 49 09.3** | **0.0** |
| **XMIS** | **Christmas Isla** | **10.82** | **258** | | | **11 49 06.9** | **-2.4** |
| **GTOI** | **Gorontalo** | **11.10** | **37** | P | **Pn** | **11 49 15.0** | **+2.0** |
| **SANI** | **Sanana** | **11.41** | **57** | P | **Pn** | **11 49 19.0** | **+1.7** |
| **SANI** | **Sanana** | **11.41** | **57** | P | **Pn** | **11 49 16.9** | **-0.4** |
| **SANI** | **Sanana** | **11.41** | **57** | ⇓P | **Pn** | **11 49 16.0** | **-1.4** |
| **SANI** | **Sanana** | **11.41** | **57** | P | **Pn** | **11 49 16.9** | **-0.4** |
| | comp=Z,1μm,1.4s,comp=Z,30μmcomp=Z,246μm | | | | | | |
| **BLSI** | **Bandar Lampung** | **11.48** | **284** | P | **Pn** | **11 49 21.1** | **+2.8** |
| | comp=Z,1μm,1.0s,comp=Z,52μmcomp=Z,518μm | | | | | | |
| **KSM** | **Kuching** | **11.51** | **328** | P | **Pn** | **11 49 22.6** | **+3.9** |
| **KSM** | **Kuching** | **11.51** | **328** | | **Pn** | **11 49 19.0** | **+0.3** |
| **KSM** | **Kuching** | **11.51** | **328** | ⇓P | **Pn** | **11 49 19.0** | **+0.3** |
| **SBUM** | **Sibu** | **11.53** | **339** | Pn | **Pn** | **11 49 19.3** | **+0.4** |
| **SBUM** | **Sibu** | **11.53** | **339** | ⇓P | **Pn** | **11 49 19.6** | **+0.7** |
| **KMSI** | **Cibinong** | **11.65** | **41** | P | **Pn** | **11 49 22.3** | **+1.7** |
| | comp=Z,2μm,1.5s,comp=Z,50μmcomp=Z,687μm | | | | | | |
| **NLAI** | **Namlea** | **11.79** | **65** | P | **Pn** | **11 49 25.0** | **+2.5** |
| **PPBI** | **Pangkal Pinang** | **11.94** | **300** | P | **Pn** | **11 49 27.7** | **+3.1** |
| | comp=Z,2μm,1.3s,comp=Z,50μmcomp=Z,495μm | | | | | | |
| **KASI** | **Kota Agung** | **12.16** | **283** | P | **Pn** | **11 49 29.0** | **+1.4** |
| | comp=Z,3μm,0.9s,comp=Z,55μmcomp=Z,502μm | | | | | | |
| **LWLI** | **Liwa** | **12.71** | **284** | P | **Pn** | **11 49 37.1** | **+1.9** |
| **PMBI** | **Palembang** | **12.78** | **294** | P | **Pn** | **11 49 40.5** | **+4.5** |
| **PMBI** | **Palembang** | **12.78** | **294** | Pn | **Pn** | **11 49 37.3** | **+1.3** |
| **PMBI** | **Palembang** | **12.78** | **294** | P | **Pn** | **11 49 39.9** | **+3.9** |
| | comp=Z,4μm,1.0s,comp=Z,67μmcomp=Z,462μm | | | | | | |
| **MBWA** | **Marble Bar** | **13.12** | **166** | P | **Pn** | **11 49 40.7** | **0.0** |
| **MBWA** | **Marble Bar** | **13.12** | **166** | Pn | **Pn** | **11 49 37.7** | **-3.0** |
| **MBWA** | **Marble Bar** | **13.12** | **166** | P | **Pn** | **11 49 38.0** | **-2.7** |
| | comp=Z,804μm,SNR=299 | | | | | | |
| **MBWA** | **Marble Bar** | **13.12** | **166** | ⇓P | **Pn** | **11 49 37.6** | **-3.1** |
| **MBWA** | **Marble Bar** | **13.12** | **166** | P | **Pn** | **11 49 39.3** | **-1.4** |
| MBWA | | | | P | **Pn** | **11 49 39.3** | **-1.4** |
| MBWA | | | | P | **Pn** | **11 49 39.3** | **-1.4** |
| MBWA | | | | S | **Sn** | **11 51 58.2** | **-7.4** |
| MBWA | | | | S | **Sn** | **11 51 58.2** | **-7.4** |
| MBWA | | | | S | **Sn** | **11 51 58.2** | **-7.4** |
| **FITZ** | **Fitzroy Crossi** | **13.20** | **138** | Pn | **Pn** | **11 49 39.6** | **-2.1** |
| **MSAI** | **Masohi** | **13.41** | **69** | P | **Pn** | **11 49 48.0** | **+3.3** |
| | comp=Z,735nm,0.9s,comp=Z,153μm | | | | | | |
| **LBMI** | **Labuha** | **13.45** | **56** | P | **Pn** | **11 49 46.1** | **+0.9** |
| | comp=Z,2μm,1.4s,comp=Z,28μmcomp=Z,141μm | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.54** | **166** | P | **Pn** | **11 49 44.6** | **-1.9** |
| **PSA00** | **Pilbara Seismi** | **13.54** | **166** | Pn | **Pn** | **11 49 43.7** | **-2.8** |
| **PSA00** | **Pilbara Seismi** | **13.54** | **166** | | **Pn** | **11 49 44.4** | **-2.1** |
| **PSA00** | **Pilbara Seismi** | **13.54** | **166** | P | **Pn** | **11 49 44.7** | **-1.7** |
| | comp=Z,2μm,0.8s,SNR=123 | | | | | | |
| **MYLDM** | **Lahad Datu** | **13.61** | **9** | | **Pn** | **11 49 49.5** | **+2.1** |
| **MYLDM** | **Lahad Datu** | **13.61** | **9** | ⇓P | **Pn** | **11 49 49.0** | **+1.5** |
| **MNAI** | **Manna** | **13.95** | **286** | P | **P** | **11 49 56.2** | **-3.5** |
| **MNAI** | **Manna** | **13.95** | **286** | | **Pn** | **11 49 52.4** | **+0.3** |
| **MNAI** | **Manna** | **13.95** | **286** | ⇑P | **Pn** | **11 49 52.7** | **+0.6** |
| **MNAI** | **Manna** | **13.95** | **286** | P | **Pn** | **11 49 53.8** | **+1.7** |
| | comp=Z,3μm,1.4s,comp=Z,94μmcomp=Z,434μm | | | | | | |
| **KNRA** | **Kununurra** | **14.09** | **122** | Pn | **Pn** | **11 49 51.2** | **-2.8** |
| **KNRA** | **Kununurra** | **14.09** | **122** | P | **Pn** | **11 49 51.8** | **-2.2** |
| | comp=Z,2μm,1.0s,SNR=344 | | | | | | |
| **TNTI** | **Ternate** | **14.20** | **51** | P | **Pn** | **11 49 57.6** | **+2.2** |
| **TNTI** | **Ternate** | **14.20** | **51** | | **Pn** | **11 49 57.3** | **+1.9** |
| **TNTI** | **Ternate** | **14.20** | **51** | ⇓P | **Pn** | **11 49 54.5** | **-0.9** |
| **TNTI** | **Ternate** | **14.20** | **51** | P | **Pn** | **11 49 54.1** | **-1.3** |
| **KKM** | **Kota Kinabalu** | **14.31** | **359** | P | **Pn** | **11 49 59.2** | **+2.1** |
| **KKM** | **Kota Kinabalu** | **14.31** | **359** | | **Pn** | **11 49 57.1** | **0.0** |
| **KKM** | **Kota Kinabalu** | **14.31** | **359** | ⇓P | **Pn** | **11 49 57.6** | **+0.5** |
| **GIRL** | **Giralia** | **14.35** | **188** | P | **Pn** | **11 49 57.5** | **0.0** |
| **GIRL** | **Giralia** | **14.35** | **188** | Pn | **Pn** | **11 49 56.1** | **-1.4** |
| **JAMBI** | **JAMBI** | **14.37** | **297** | P | **P** | **11 50 01.1** | **-3.2** |
| | comp=Z,2μm,1.3s,comp=Z,46μmcomp=Z,311μm | | | | | | |
| **SAUI** | **Saumlaki** | **14.74** | **90** | P | **Pn** | **11 50 03.0** | **+0.2** |
| **SAUI** | **Saumlaki** | **14.74** | **90** | Pn | Pn | 11 49 57.8 | -5.0 |
| **SAUI** | **Saumlaki** | **14.74** | **90** | ⇑P | **Pn** | **11 49 59.8** | **-3.0** |
| **SAUI** | **Saumlaki** | **14.74** | **90** | P | **Pn** | **11 49 58.5** | **-4.3** |
| | comp=Z,3μm,1.1s,comp=Z,46μmcomp=Z,148μm | | | | | | |
| **DRS** | **Darwin Rock St** | **14.81** | **107** | P | **Pn** | **11 50 01.7** | **-2.0** |
| **TPRI** | **Tanjung Pinang** | **15.01** | **307** | P | **Pn** | **11 50 07.2** | **+0.7** |
| | comp=Z,1μm,1.3s,comp=Z,39μmcomp=Z,426μm | | | | | | |
| **MTN** | **Manton Dam** | **15.14** | **108** | P | **Pn** | **11 50 05.5** | **-2.6** |
| **MTN** | **Manton Dam** | **15.14** | **108** | Pn | **Pn** | **11 50 01.3** | **-6.8** |
| **MTN** | **Manton Dam** | **15.14** | **108** | P | **Pn** | **11 50 04.9** | **-3.2** |
| | comp=Z,319μm,SNR=155 | | | | | | |
| **BTDF** | **Bukit Timah Da** | **15.88** | **307** | P | **P** | **11 50 20.3** | **-0.9** |
| **MYKOM** | **Kota Tinggi** | **16.08** | **308** | P | **Pn** | **11 50 21.1** | **+0.8** |
| **MYKOM** | **Kota Tinggi** | **16.08** | **308** | ⇓P | **Pn** | **11 50 21.4** | **+1.0** |
| **KDU** | **Kakadu** | **16.36** | **107** | P | **Pn** | **11 50 21.6** | **-2.3** |
| **KDU** | **Kakadu** | **16.36** | **107** | P | **Pn** | **11 50 20.0** | **-3.9** |
| | comp=Z,236μm,SNR=143 | | | | | | |
| **KDU** | **Kakadu** | **16.36** | **107** | ⇑P | **Pn** | **11 50 19.8** | **-4.2** |
| **SWI** | **Sorong** | **16.56** | **64** | P | **Pn** | **11 50 27.2** | **+0.8** |
| | comp=Z,3μm,1.0s,comp=Z,43μmcomp=Z,169μm | | | | | | |
| **SWI** | **Sorong** | **16.56** | **64** | P | **P** | **11 50 27.9** | **-0.8** |
| SWI | | | | pmax | pmax | | |
| | comp=Z,3μm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **16.66** | **72** | P | **Pn** | **11 50 27.4** | **-0.3** |
| **FAKI** | **Fak Fak** | **16.66** | **72** | | **Pn** | **11 50 25.9** | **-1.8** |
| **FAKI** | **Fak Fak** | **16.66** | **72** | ⇑P | **Pn** | **11 50 26.0** | **-1.7** |
| **FAKI** | **Fak Fak** | **16.66** | **72** | P | **Pn** | **11 50 25.8** | **-1.9** |
| | comp=Z,2μm,0.8s,comp=Z,43μmcomp=Z,149μm | | | | | | |
| **PPSI** | **Pulau Pagai** | **17.24** | **288** | P | **P** | **11 50 35.8** | **-0.5** |
| | comp=Z,3μm,1.6s,comp=Z,76μmcomp=Z,164μm | | | | | | |
| **PDSI** | **Padang** | **17.53** | **294** | P | **Pn** | **11 50 37.1** | **-1.5** |
| | comp=Z,1μm,1.3s,comp=Z,51μmcomp=Z,234μm | | | | | | |
| **BKNI** | **Bangkinang** | **17.59** | **299** | P | **P** | **11 50 43.0** | **+2.9** |
| **BKNI** | **Bangkinang** | **17.59** | **299** | P | **P** | **11 50 41.6** | **+1.6** |
| BKNI | | | | S | **S** | **11 54 03.9** | **+2.6** |
| **BKNI** | **Bangkinang** | **17.59** | **299** | ⇓P | **P** | **11 50 42.6** | **+2.5** |
| **BKNI** | **Bangkinang** | **17.59** | **299** | P | **P** | **11 50 41.7** | **+1.6** |
| | comp=Z,3μm,1.6s,comp=Z,106μmcomp=Z,248μm | | | | | | |
| **KMPI** | **Kaimana, Papua** | **17.82** | **76** | P | **Pn** | **11 50 38.6** | **-3.5** |
| | comp

ASAR PcP **PcP** **11 55 26.9 -0.4**
comp=Z,51nm,0.8s,baz=334,slow=1.2,SNR=2.7
ASAR S **S** **11 55 42.3 +1.2**
comp=Z,118nm,1.0s,baz=312,slow=24,SNR=1.9
ASAR LR LR 12 00 29.7
comp=Z,99µm,21.1s,baz=305,slow=37
ASAR ScS **ScS** **12 02 49.7 +1.2**
comp=Z,11nm,1.0s,baz=229,slow=20,SNR=2.6
**AS31 Alice Springs 22.63 134** P **P** **11 51 35.4 +0.4**
**AS01 Alice Springs 22.67 134** P **P** **11 51 36.0 +0.7**
**SNSI Sinabang, Aceh 22.71 297** P **P** **11 51 36.6 +0.8**
comp=Z,2µm,1.4s,comp=Z,64µmcomp=Z,148µm
**KLBR Kellerberrin 23.15 177** P **P** **11 51 41.6 +1.4**
**KMBL Kambalda 23.45 168** P **P** **11 51 43.5 +0.3**
**KMBL Kambalda 23.45 168** P **P** **11 51 43.5 +0.3**
comp=Z,2µm,1.7s,SNR=63
**MTKN Mount Kenneth 23.46 181** P **P** **11 51 46.4 +3.2**
**MTKN Mount Kenneth 23.46 181** P **P** **11 51 46.1 +2.8**
comp=Z,3µm,0.9s,SNR=30
**MUN Mundaring 23.50 180** P **P** **11 51 44.7 +1.1**
**MUN Mundaring 23.50 180** P **P** **11 51 44.8 +1.2**
comp=Z,1µm,1.5s,SNR=45
**MUN Mundaring 23.50 180** P **P** **11 51 44.8 +1.2**
**MLSI Meulaboh, Aceh 23.57 301** P **P** **11 51 44.6 +0.1**
comp=Z,1µm,1.8s
**LHMI Lhok Sumawe 23.65 304** P **P** **11 51 49.2 +4.0**
**LHMI Lhok Sumawe 23.65 304** P **P** **11 51 46.2 +1.1**
**LHMI Lhok Sumawe 23.65 304** ⇑P **P** **11 51 46.3 +1.1**
**LHMI Lhok Sumawe 23.65 304** P **P** **11 51 45.8 +0.6**
**MMPI Merauke 23.71 92** P **P** **11 51 43.7 -2.1**
comp=Z,3µm,1.9s,comp=Z,53µmcomp=Z,94µm
**SRIT Nakonsritamara 23.76 315** P **P** **11 51 51.4 +5.2**
**SRIT Nakonsritamara 23.76 315** P **P** **11 51 48.8 +2.6**
SRIT IAmb IAmb 11 51 58.9
comp=Z,3µm,1.2s
**SURA Surathani 24.14 316** P **P** **11 51 55.5 +5.7**
**GENI Genyem 24.32 78** P **P** **11 51 53.2 +1.7**
**GENI Genyem 24.32 78** P **P** **11 51 49.3 -2.2**
comp=Z,2µm,2.5s,comp=Z,39µmcomp=Z,89µm
**NWAO Narrogin (SRO) 24.46 178** P **P** **11 51 54.5 +2.0**
**NWAO Narrogin (SRO) 24.46 178** P **P** **11 51 54.8 +2.2**
**NWAO Narrogin (SRO) 24.46 178** P **P** **11 51 52.8 +0.2**
NWAO IAmb IAmb 11 52 25.8
comp=Z,2µm,0.9s
**NWAO Narrogin (SRO) 24.46 178** IAMs_20 IAMs_20 12 01 26.7
comp=Z,113µm,19.0s
**NWAO Narrogin (SRO) 24.46 178** P **P** **11 51 54.5 +2.0**
NWAO P **P** **11 51 54.5 +2.0**
NWAO P **P** **11 51 54.5 +2.0**
NWAO S **S** **11 56 16.5 +5.8**
NWAO S **S** **11 56 16.5 +5.8**
NWAO S **S** **11 56 16.5 +5.8**
**NWAO Narrogin (SRO) 24.46 178** P **P** **11 51 52.8 +0.2**
NWAO pmax pmax
comp=Z,2µm,1.0s
NWAO MLR MLR
comp=Z,113µm,19.0s
**AUHAR St Anne's Scho 24.61 181** P **P** **11 51 56.5 +2.6**
**FORT Forrest 24.82 156** P **P** **11 51 57.4 +1.6**
**FORT Forrest 24.82 156** P **P** **11 51 56.7 +0.9**
FORT IAmb IAmb 11 52 10.3
comp=Z,2µm,0.7s
**FORT Forrest 24.82 156** P **P** **11 51 54.2 -1.6**
comp=Z,2µm,0.7s,SNR=56
**FORT Forrest 24.82 156** ⇑P **P** **11 51 56.7 +0.9**
**TABU Tabubil 24.82 84** P **P** **11 51 56.3 +0.1**
**JAY Jayapura 24.86 78** P **P** **11 51 53.4 -3.1**
comp=Z,873nm,0.9s
**QIS Mount Isa 25.48 121** P **P** **11 52 02.4 +0.4**
**QIS Mount Isa 25.48 121** P **P** **11 52 00.2 -1.7**
comp=Z,2µm,1.6s,SNR=381
**UBPT Khong Chiam 25.87 335** P **P** **11 52 09.7 +4.2**
**UBPT Khong Chiam 25.87 335** ⇓P **P** **11 52 07.4 +1.9**
**SZP Santa 26.06 9** P **P** **11 52 10.6 +3.5**
**SZP Santa 26.06 9** ⇓P **P** **11 52 07.1 0.0**
**RKGY Rocky Gully 26.13 179** P **P** **11 52 10.0 +2.3**
**RKGY Rocky Gully 26.13 179** P **P** **11 52 09.7 +2.0**
comp=Z,2µm,1.0s,SNR=24
**H01W3 Cape Leeuwin H 26.48 184** P **P** **11 52 10.8 +0.2**
**H01W1 Cape Leeuwin H 26.49 184** P **P** **11 52 10.8 +0.2**
**H01W2 Cape Leeuwin H 26.49 184** P **P** **11 52 10.9 +0.2**
**AUALB St Joseph's Co 26.55 177** P **P** **11 52 14.3 +2.9**
**OOD Oodnadatta 26.56 139** P **P** **11 52 12.3 +0.7**
**COEN Coen 26.82 104** P **P** **11 52 14.9 +0.7**
**COEN Coen 26.82 104** P **P** **11 52 14.1 -0.1**
COEN IAmb IAmb 11 52 28.1
comp=Z,2µm,0.9s
**COEN Coen 26.82 104** P **P** **11 52 14.1 -0.1**
comp=Z,78µm,SNR=39
**COEN Coen 26.82 104** ⇑P **P** **11 52 14.3 +0.1**
**NAYO Nakonayok 27.05 326** P **P** **11 52 21.0 +4.8**
**CMBY CAMPBELL BAY 27.12 304** *e*P **P** **11 52 22.6 +5.7**
**MULG Mulgathing 27.36 145** P **P** **11 52 19.9 +1.1**
**QIZ Qiongzhong 27.98 347** P **P** **11 52 28.3 +3.9**
**QIZ Qiongzhong 27.98 347** P **P** **11 52 25.7 +1.3**
QIZ S **S** **11 57 09.3 +2.6**
QIZ pmax pmax
comp=Z,190nm,2.0s
QIZ pmax pmax
comp=Z,9µm,7.7s
QIZ LR LR
comp=Z,136µm,14.5s
QIZ LR LR
comp=Z,119µm,17.0s
QIZ LR LR
comp=Z,123µm,19.2s
**QIZ Qiongzhong 27.98 347** P **P** **11 52 25.9 +1.5**
**SRDT SRDT 28.34 323** P **P** **11 52 32.4 +4.6**
**MTSU Mount Surprise 28.80 113** P **P** **11 52 33.2 +1.3**
**AUCSH Cairns State H 29.85 109** P **P** **11 52 44.0 +2.9**
**LCRK Leigh Creek 29.98 140** P **P** **11 52 43.3 +1.2**
**INKA Innaminka 30.00 133** P **P** **11 52 43.8 +1.4**
**BBOO Buckleboo 30.38 146** P **P** **11 52 46.5 +0.8**
**BBOO Buckleboo 30.38 146** P **P** **11 52 46.4 +0.8**
BBOO IAmb IAmb 11 53 07.9
comp=Z,795nm,1.0s
**BBOO Buckleboo 30.38 146** P **P** **11 52 46.0 +0.3**
comp=Z,120µm,SNR=19
**PMG Port Moresby 30.39 94** P **P** **11 52 47.7 +1.7**
**PMG Port Moresby 30.39 94** P **P** **11 52 47.6 +1.6**
**PMG Port Moresby 30.39 94** P **P** **11 52 44.4 -1.6**
**PMG Port Moresby 30.39 94** ⇑P **P** **11 52 44.5 -1.6**
**PMG Port Moresby 30.39 94** P **P** **11 52 44.6 -1.3**
comp=Z,36nm,0.8s,baz=307,slow=4.8,SNR=13
PMG LR LR 12 07 37.0
comp=Z,55µm,18.4s,baz=258,slow=41
comp=Z,36nm,0.8s
**PMG Port Moresby 30.39 94***c i*P **P** **11 52 44.3 -1.6**
PMG pmax pmax
comp=Z,464nm,1.2s
PMG MLR MLR
comp=Z,64µm,16.0s
**PMG Port Moresby 30.39 94** P **P** **11 52 44.6 -1.3**
**HKPS Hong Kong Po S 30.53 356** P **P** **11 52 49.8 +2.7**
**HKPS Hong Kong Po S 30.53 356** P **P** **11 52 46.6 -0.5**
**HKC Hong Kong Obse 30.55 356** ⇑P **P** **11 52 48.0 +0.8**
**PBA Port Blair 30.82 310** ⇑P **P** **11 52 49.5 -0.2**
**PBA Port Blair 30.82 310** P P 11 52 43.0 -6.7
PBA S **S** **11 57 51.5 +0.1**
**PHRA Phrae 31.10 329** P **P** **11 52 55.0 +2.8**
**CTA Charters Tower 31.12 115** P **P** **11 52 53.0 +0.5**
comp=Z,28nm,1.2s,baz=289,slow=9.5,SNR=78
CTA S **S** **11 57 58.5 +2.2**
comp=Z,6.2nm,1.0s,baz=19,slow=1.1,SNR=2.3
CTA ScP **ScP** **11 59 29.7 +1.5**
comp=Z,2.0nm,0.9s,baz=259,slow=5.8,SNR=0.9
CTA LR LR 12 07 01.4
comp=Z,5µm,18.5s,baz=282,slow=39
comp=Z,28nm,1.2s
**CTA Charters Tower 31.12 115** P **P** **11 52 53.0 +0.5**
**CTAO Charters Tower 31.12 115** P **P** **11 52 53.2 +0.8**
**CTAO Charters Tower 31.12 115** P **P** **11 52 52.8 +0.3**
CTAO IAmb IAmb 11 53 10.4
comp=Z,544nm,1.0s
**CTAO Charters Tower 31.12 115** ⇑P **P** **11 52 53.3 +0.8**
**CTAO Charters Tower 31.12 115** P **P** **11 52 52.8 +0.3**
CTAO pmax pmax
comp=Z,544nm,1.0s
CTAO MLR MLR
comp=Z,62µm,20.0s
**CTAO Charters Tower 31.12 115** P **P** **11 52 53.3 +0.8**
**TWGBT Beinan 31.32 8** P **P** **11 52 58.8 +4.8**
**TV1H Townsville Har 31.37 113** P **P** **11 52 56.1 +1.5**
**WHYH Whyalla 31.40 144** P **P** **11 52 56.1 +1.4**

**TPUB Ta-pu 31.74 7** P **P** **11 53 00.1 +2.4**
**TPUB Ta-pu 31.74 7** P **P** **11 52 58.6 +0.9**
**CM31 Chiang Mai Arr 31.74 327** P **P** **11 53 00.7 +2.9**
CM31 IAmb IAmb 11 53 10.8
comp=Z,856nm,1.2s
**CMAR Chiang Mai Arr 31.74 327** P **P** **11 52 59.8 +2.0**
**CMAR Chiang Mai Arr 31.74 327** P **P** **11 52 58.2 +0.4**
comp=Z,45nm,1.0s,baz=153,slow=6.2,SNR=108
CMAR S **S** **11 58 05.8 0.0**
comp=Z,2.3nm,0.8s,baz=270,slow=32,SNR=1.0
CMAR ScP **ScP** **11 59 31.6 +1.4**
comp=Z,6.8nm,0.9s,baz=179,slow=3.6,SNR=2.4
CMAR PKiKP **PKiKP** **12 03 18.4 +0.3**
comp=Z,1.7nm,0.9s,baz=210,slow=3.1,SNR=2.2
CMAR LR LR 12 06 59.0
comp=Z,263µm,18.7s,baz=145,slow=39
comp=Z,45nm,1.0s
**CMAR Chiang Mai Arr 31.74 327** P **P** **11 52 59.8 +2.0**
**PTPS Port Pirie 31.74 144** P **P** **11 52 59.3 +1.6**
**YULB Yu-li 31.92 9** P **P** **11 53 00.1 +0.8**
**QLP Quilpie 32.01 128** P **P** **11 53 01.6 +1.5**
**QLP Quilpie 32.01 128** P **P** **11 53 01.3 +1.2**
comp=Z,2µm,1.4s,SNR=148
**QLP Quilpie 32.01 128** ⇑P **P** **11 53 01.6 +1.5**
**AUAYR Ayr State High 32.02 114** P **P** **11 53 01.7 +1.4**
**CHTO Chiang Mai 32.03 328** P **P** **11 53 02.5 +2.2**
CHTO IAmb IAmb 11 53 11.2
comp=Z,872nm,1.5s
**CHTO Chiang Mai 32.03 328** P **P** **11 53 02.6 +2.2**
CHTO pmax pmax
comp=Z,872nm,1.5s
CHTO MLR MLR
comp=Z,279µm,22.0s
**SSLB Suanglung 32.26 8** P **P** **11 53 03.8 +1.5**
**SSLB Suanglung 32.26 8** P **P** **11 53 02.6 +0.2**
**HTT Hallett 32.47 143** P **P** **11 53 05.2 +1.0**
**HTT Hallett 32.47 143** ⇑P **P** **11 53 05.4 +1.3**
**HTT Hallett 32.47 143** P **P** **11 53 04.3 +0.1**
**KNMB Chin-men Tao 32.68 3** IAMs_20 IAMs_20 12 08 23.9
comp=Z,78µm,21.0s
**NACB Ninganchiao 32.73 9** P **P** **11 53 09.0 +2.6**
**NACB Ninganchiao 32.73 9** P **P** **11 53 05.4 -1.0**
NACB IAmb IAmb 11 53 47.3
comp=Z,1µm,1.6s
**STKA Stephens Creek 33.09 138** P **P** **11 53 10.7 +1.2**
**STKA Stephens Creek 33.09 138** P **P** **11 53 10.4 +0.8**
**STKA Stephens Creek 33.09 138** P **P** **11 53 10.2 +0.6**
comp=Z,156nm,1.4s,SNR=72
**STKA Stephens Creek 33.09 138** P **P** **11 53 10.6 +1.0**
comp=Z,307nm,0.8s,baz=309,slow=9.5,SNR=304
STKA S **S** **11 58 28.3 +1.5**
comp=Z,40nm,0.8s,baz=57,slow=10,SNR=1.2
STKA LR LR 12 08 23.0
comp=Z,118µm,18.6s,baz=307,slow=39
comp=Z,307nm,0.8s
**STKA Stephens Creek 33.09 138***c i*P **P** **11 53 10.8 +1.2**
**QZH Quanzhou 33.17 4**⇓*i*P **P** **11 53 10.5 +0.3**
QZH PP **PP** **11 54 26.2 +0.5**
QZH S **S** **11 58 26.6 -1.3**
QZH pmax pmax
comp=Z,190nm,1.4s
QZH pmax pmax
comp=Z,10µm,7.6s
QZH LR LR
comp=Z,64µm,17.2s
QZH LR LR
comp=Z,51µm,17.2s
QZH LR LR
comp=Z,99µm,18.5s
**YHNB Yeheng 33.19 8** P **P** **11 53 13.3 +2.8**
**YOJ Yonaguni jima 33.25 11** P P 11 53 15.8 +4.9
**GHSS Government Hou 33.36 146** P **P** **11 53 13.6 +1.8**
**TATO Taipei 33.50 8** P **P** **11 53 16.3 +3.2**
**TATO Taipei 33.50 8** P **P** **11 53 13.2 +0.1**
TATO IAmb IAmb 11 53 37.6
comp=Z,1µm,1.1s
**TATO Taipei 33.50 8** P **P** **11 53 12.8 -0.3**
TATO P **P** **11 53 12.8 -0.3**
TATO S **S** **11 58 36.4 +3.3**
TATO S **S** **11 58 36.4 +3.3**
**TATO Taipei 33.50 8** P **P** **11 53 12.5 -0.6**
**GULI GuiLin 33.97 350** ⇓P **P** **11 53 20.1 +2.9**
GULI S **S** **11 58 40.9 +0.7**
GULI pmax pmax
comp=Z,60nm,2.9s
GULI LR LR
comp=Z,94µm,22.2s
GULI LR LR
comp=Z,88µm,19.0s
GULI LR LR
comp=Z,133µm,17.3s
**KAVG Kavieng 34.70 82** P **P** **11 53 26.1 +2.4**
**RMQ Roma 35.58 124** P **P** **11 53 32.9 +1.7**
**RMQ Roma 35.58 124** P **P** **11 53 33.2 +2.0**
comp=Z,145nm,1.7s,SNR=7.4
**GUMO Guam 35.69 53** P **P** **11 53 35.1 +2.9**
**GUMO Guam 35.69 53** P **P** **11 53 32.4 +0.2**
**GUMO Guam 35.69 53** ⇓P **P** **11 53 35.2 +3.0**
**GUMO Guam 35.69 53** P **P** **11 53 32.4 +0.2**
GUMO pmax pmax
comp=Z,2µm,1.3s
GUMO MLR MLR
comp=Z,18µm,22.0s
**CMSA Cobar Meteorol 35.69 134** P **P** **11 53 33.4 +1.3**
**CMSA Cobar Meteorol 35.69 134** P **P** **11 53 33.4 +1.3**
comp=Z,75µm,SNR=16
**RABL Rabaul 35.77 86** P **P** **11 53 32.1 -0.9**
**KMI Kunming 35.85 339** ⇓P **P** **11 53 37.0 +3.3**
KMI PP **PnPn** **11 54 50.4 -4.1**
KMI S **S** **11 59 12.9 +3.2**
KMI pmax pmax
comp=Z,550nm,1.5s
KMI pmax pmax
comp=Z,14µm,4.7s
KMI LR LR
comp=Z,51µm,16.6s
KMI LR LR
comp=Z,218µm,17.6s
KMI LR LR
comp=Z,100µm,19.0s
**GYA Guiyang 35.88 345** P **P** **11 53 35.9 +2.0**
GYA pP pP 11 53 45.0 +1.8
GYA S **S** **11 59 11.8 +1.8**
GYA ScS **ScS** **12 03 50.8 +0.5**
GYA pmax pmax
comp=Z,33nm,1.1s
GYA pmax pmax
comp=Z,12µm,8.4s
GYA LR LR
comp=Z,161µm,18.4s
GYA LR LR
comp=Z,128µm,16.7s
GYA LR LR
comp=Z,236µm,18.7s
**RK1H Rockhampton Ha 35.90 119** P **P** **11 53 34.9 +0.9**
**AULRC Lightning Ridg 36.28 129** P **P** **11 53 38.7 +1.5**
**CNSH ChangSha 36.48 355** P **P** **11 53 40.4 +1.6**
CNSH S **S** **11 59 23.8 +4.9**
CNSH LR LR
comp=Z,78µm,13.7s
CNSH LR LR
comp=Z,81µm,14.9s
CNSH LR LR
comp=Z,104µm,14.1s
**ARPS Mount Arapiles 36.52 145** P **P** **11 53 40.5 +1.5**
**ARPS Mount Arapiles 36.52 145** P **P** **11 53 40.2 +1.2**
comp=Z,606nm,1.0s,SNR=48
**GD1S Gladstone Soft 36.63 119** P **P** **11 53 41.4 +1.2**
**JOW Kunigami 36.83 18** P **P** **11 53 44.3 +2.5**
**JOW Kunigami 36.83 18** P **P** **11 53 42.2 +0.4**
JOW IAMs_20 IAMs_20 12 10 35.7
comp=Z,52µm,21.0s
**JOW Kunigami 36.83 18** ⇓P **P** **11 53 42.0 +0.3**
**JOW Kunigami 36.83 18** P **P** **11 53 41.6 -0.1**
comp=Z,62nm,1.1s,baz=213,slow=6.0,SNR=19
JOW PP **PP** **11 55 05.5 -0.7**
comp=Z,64nm,1.0s,baz=212,slow=8.7,SNR=1.1
JOW S **S** **11 59 21.2 -3.0**
comp=Z,24nm,1.2s,baz=100,slow=10.0,SNR=1.5
comp=Z,62nm,1.1s
**JOW Kunigami 36.83 18** P **P** **11 53 43.5 +1.7**
**JMZ Minamidaito 2 36.91 23** P **P** **11 53 44.3 +1.9**
**JMZ Minamidaito 2 36.91 23** P **P** **11 53 43.8 +1.4**
JMZ IAMs_20 IAMs_20 12 09 27.6
comp=Z,142µm,18.0s

**EIDS Eidsvold 37.08 121** P **P** **11 53 45.5 +1.5**
**EIDS Eidsvold 37.08 121** P **P** **11 53 44.5 +0.5**
**EIDS Eidsvold 37.08 121** P **P** **11 53 44.8 +0.8**
comp=Z,260nm,1.2s,SNR=48
**EIDS Eidsvold 37.08 121** ⇑P **P** **11 53 44.8 +0.8**
**PZH PanZhiHua 37.47 338** P **P** **11 53 49.8 +2.4**
PZH PP **PnPn** **11 55 16.3 +2.1**
PZH S **S** **11 59 38.0 +3.8**
PZH pmax pmax
comp=Z,580nm,1.6s
PZH pmax pmax
comp=Z,15µm,7.3s
PZH LR LR
comp=Z,96µm,18.0s
PZH LR LR
comp=Z,141µm,16.3s
PZH LR LR
comp=Z,152µm,19.4s
**TNCH TengChong 37.49 333** ⇓P **P** **11 53 51.3 +3.6**
TNCH pP pP 11 53 54.5 -2.5
TNCH sP sP 11 53 56.7 -4.5
TNCH PP **PnPn** **11 55 19.0 +4.4**
TNCH S **S** **11 59 40.1 +5.4**
TNCH pmax pmax
comp=Z,2µm,1.6s
TNCH pmax pmax
comp=Z,16µm,4.4s
TNCH LR LR
comp=Z,96µm,13.2s
TNCH LR LR
comp=Z,110µm,12.7s
TNCH LR LR
comp=Z,223µm,15.6s
**AUHPC Hawkesdale P12 37.73 146** P **P** **11 53 50.8 +1.5**
**AUMAG Moama Anglican 37.80 141** P **P** **11 53 51.0 +1.0**
**AUDCS Dubbo College 38.17 133** P **P** **11 53 54.6 +1.4**
**BRAT Ballarat 38.26 144** P **P** **11 53 55.7 +1.9**
**HALK Hakmana 38.41 291** ⇑P **P** **11 53 55.4 0.0**
**JAM Amami Oshima 38.72 19** P **P** **11 53 57.6 0.0**
**WHN Wuhan 38.73 357** ⇓P **P** **11 53 59.0 +1.2**
WHN sP **pP** **11 54 06.8 -0.3**
WHN S **S** **11 59 49.6 -3.3**
WHN pmax pmax
comp=Z,33µm,6.3s
WHN LR LR
comp=Z,192µm,13.6s
WHN LR LR
comp=Z,162µm,18.6s
WHN LR LR
comp=Z,334µm,17.6s
**PALK Pallekele 38.84 293** P **P** **11 53 59.4 +0.4**
**PALK Pallekele 38.84 293** ⇑P **P** **11 53 58.9 -0.2**
**PALK Pallekele 38.84 293** LR LR 12 11 13.5
comp=Z,155µm,20.2s,baz=222,slow=38
**PALK Pallekele 38.84 293** P **P** **11 53 58.2 -0.8**
PALK P **P** **11 53 58.2 -0.8**
PALK P **P** **11 53 58.2 -0.8**
PALK S **S** **11 59 50.8 -4.4**
PALK S **S** **11 59 50.8 -4.4**
PALK S **S** **11 59 50.8 -4.4**
**PALK Pallekele 38.84 293***c i*P **P** **11 53 57.7 -1.3**
PALK pmax pmax
comp=Z,470nm,1.1s
PALK MLR MLR
comp=Z,190µm,19.0s
**PALK Pallekele 38.84 293** P **P** **11 53 58.9 -0.2**
**GEXS Deakin Univers 38.91 144** P **P** **11 54 01.4 +2.1**
**ENH Enshi 38.98 350** P **P** **11 54 02.9 +2.9**
**ENH Enshi 38.98 350** P **P** **11 54 00.2 +0.3**
ENH IAmb IAmb 11 54 19.0
comp=Z,1µm,1.2s
ENH IAMs_20 IAMs_20 12 11 30.0
comp=Z,87µm,21.0s
**ENH Enshi 38.98 350** P **P** **11 54 00.9 +1.0**
**MLBS Spotswood, Mel 39.02 143** P **P** **11 54 02.0 +1.8**
**YNG Young 39.12 136** P **P** **11 54 02.6 +1.5**
**TOO Toolangi 39.21 142** P **P** **11 54 03.3 +1.5**
**TOO Toolangi 39.21 142** P **P** **11 54 03.0 +1.2**
TOO IAmb IAmb 11 54 26.2
comp=Z,700nm,1.2s
**TOO Toolangi 39.21 142** P **P** **11 54 04.1 +2.3**
comp=Z,490nm,1.1s,SNR=27
**TOO Toolangi 39.21 142** ⇑P **P** **11 54 04.3 +2.5**
**TOO Toolangi 39.21 142** P **P** **11 54 03.0 +1.2**
TOO pmax pmax
comp=Z,700nm,1.2s
**AUPHS Peel High Scho 39.29 130** P **P** **11 54 04.3 +1.7**
**MALK Mahakanadarawa 39.43 294** P **P** **11 54 02.1 -1.8**
MALK S **S** **12 00 00.5 -3.5**
**MALK Mahakanadarawa 39.43 294** ⇑P **P** **11 54 03.3 -0.6**
**AUWSH Wavell State H 39.45 123** P **P** **11 54 06.2 +2.3**
**SSE Sheshan 39.50 6** P **P** **11 54 06.7 +2.5**
SSE S **S** **12 00 08.8 +4.3**
SSE pmax pmax
comp=Z,59nm,1.7s
SSE pmax pmax
comp=Z,7µm,5.8s
**ARMA Armidale 39.55 129** P **P** **11 54 06.5 +1.6**
**ARMA Armidale 39.55 129** P **P** **11 54 06.4 +1.6**
ARMA IAmb IAmb 11 54 19.7
comp=Z,1µm,1.4s
**ARMA Armidale 39.55 129** ⇑P **P** **11 54 07.5 +2.6**
**IMP Imphal 39.60 327** *e*P **P** **11 54 06.6 +1.3**
IMP IAmb IAmb 11 54 15.3
comp=Z,2µm,1.8s
**CAN Canberra 40.10 137** P **P** **11 54 10.7 +1.4**
**CAN Canberra 40.10 137** P **P** **11 54 10.3 +1.0**
CAN IAMs_20 IAMs_20 12 11 20.8
comp=Z,73µm,20.0s
**CAN Canberra 40.10 137** P **P** **11 54 10.8 +1.5**
comp=Z,432nm,1.8s,SNR=43
**CAN Canberra 40.10 137** ⇑P **P** **11 54 11.0 +1.7**
**CAN Canberra 40.10 137** P **P** **11 54 10.3 +1.0**
CAN pmax pmax
comp=Z,708nm,1.3s
CAN MLR MLR
comp=Z,72µm,20.0s
**CAN Canberra 40.10 137** P **P** **11 54 11.2 +1.9**
CAN pP **pP** **11 54 20.4 +1.3**
**GC1S Gold Coast 1 S 40.12 124** P **P** **11 54 11.2 +1.7**
**KOHI KOHIMA 40.23 328** *e*P **P** **11 54 11.6 +1.0**
KOHI IAmb IAmb 11 54 20.5
comp=Z,3µm,1.3s
**NJ2 Nanjing 40.25 3**⇓*i*P **P** **11 54 08.9 -1.5**
NJ2 PP **PnPn** **11 55 50.9 +3.6**
NJ2 S **S** **12 00 18.9 +3.2**
NJ2 pmax pmax
comp=Z,550nm,1.6s
NJ2 pmax pmax
comp=Z,10µm,4.0s
NJ2 LR LR
comp=Z,52µm,15.3s
NJ2 LR LR
comp=Z,42µm,14.3s
NJ2 LR LR
comp=Z,80µm,17.6s
**CNB Canberra Magne 40.34 137** P **P** **11 54 12.7 +1.4**
**AGT Agartala 40.39 323** *e*P **P** **11 54 14.9 +3.1**
**SYDH Sydney Hard Ro 40.48 134** P **P** **11 54 14.5 +2.1**
**MOKO MOKOCHONG 40.51 329** *e*P **P** **11 54 15.0 +2.1**
MOKO IAmb IAmb 11 54 24.6
comp=Z,3µm,1.2s
**AUSSC Sale College, 40.51 142** P **P** **11 54 14.3 +1.7**
**LKP Lekhapani 40.70 331** *e*P **P** **11 54 16.4 +2.2**
LKP IAmb IAmb 11 54 30.9
comp=Z,2µm,0.7s
**NTLH Newcastle Hard 40.75 132** P **P** **11 54 16.3 +1.7**
**RIV Riverview 40.81 133** P **P** **11 54 16.6 +1.5**
**RIV Riverview 40.81 133** P **P** **11 54 17.4 +2.3**
comp=Z,900nm,1.3s,SNR=28
**RIV Riverview 40.81 133** ⇑P **P** **11 54 17.6 +2.6**
**RIV Riverview 40.81 133** ⇑P **P** **11 54 17.7 +2.6**
**CD2 Chengdu 40.89 343** P **P** **11 54 17.2 +1.4**
CD2 S **S** **12 00 28.9 +3.5**
CD2 pmax pmax
comp=Z,460nm,1.6s
CD2 pmax pmax
comp=Z,16µm,4.5s
CD2 LR LR
comp=Z,143µm,19.0s
CD2 LR LR
comp=Z,114µm,15.9s
CD2 LR LR
comp=Z,155µm,16.5s

**WOLH Wollongong Har 40.90 134** P **P** **11 54 17.5 +1.6**
**JORH JORHAT 40.99 329** *e*P **P** **11 54 18.7 +2.1**
JORH IAmb IAmb 11 54 26.7
comp=Z,3μm,1.3s
**AUUHS Ulladulla High 41.12 136** P **P** **11 54 20.0 +2.3**
**MILA Mila 41.19 139** P **P** **11 54 20.4 +2.1**
**MILA Mila 41.19 139** ⇑P **P** **11 54 19.9 +1.6**
**DIBR DIBRUGARH 41.26 330** *e*P P 11 54 25.0 +6.1
DIBR IAmb IAmb 11 54 28.9
comp=Z,9μm,2.1s
**SHL Shillong 41.32 325** P **P** **11 54 21.1 +1.5**
SHL IAmb IAmb 11 54 38.6
comp=Z,2μm,1.5s
SHL IAMs_20 IAMs_20 12 14 15.0
comp=Z,129μm,21.0s
**SHL Shillong 41.32 325** *e*P **P** **11 54 21.2 +1.7**
**SHL Shillong 41.32 325** P **P** **11 54 21.1 +1.5**
SNR=349
**SHL Shillong 41.32 325** P **P** **11 54 21.1 +1.5**
SHL pmax pmax
comp=Z,2μm,1.5s
SHL MLR MLR
comp=Z,129μm,21.0s
**TEZP TEZPUR 41.65 327** *e*P **P** **11 54 23.2 +1.2**
TEZP IAmb IAmb 11 54 31.9
comp=Z,1μm,1.5s
**VIS Vishakhapatnam 41.71 309** *e*P **P** **11 54 23.2 +0.5**
VIS IAmb IAmb 11 54 36.1
comp=Z,496nm,1.2s
**MDRS Chennai 41.76 300** *e*P **P** **11 54 23.5 +0.3**
MDRS IAmb IAmb 11 54 31.4
comp=Z,694nm,1.2s
**ZIRO ZIRO 41.84 329** *e*P **P** **11 54 25.2 +1.4**
ZIRO IAmb IAmb 11 54 34.0
comp=Z,2μm,1.5s
**JSU Suzuyama 41.86 18** P **P** **11 54 23.6 -0.1**
**CORO Coronation Par 42.72 146** P **P** **11 54 32.0 +1.4**
**TRD Trivandrum 42.74 292** *e*P **P** **11 54 31.3 +0.2**
TRD IAmb IAmb 11 54 40.6
comp=Z,246nm,0.9s
**XAN Xi'an 42.76 351** ⇓P **P** **11 54 31.4 +0.3**
XAN S **S** **12 00 56.9 +3.9**
XAN sS sS 12 01 06.3 -1.9
XAN pmax pmax
comp=Z,290nm,2.1s
XAN pmax pmax
comp=Z,15μm,8.6s
XAN LR LR
comp=Z,229μm,16.5s
XAN LR LR
comp=Z,93μm,17.5s
XAN LR LR
comp=Z,356μm,16.2s
**LYN LuoYang 42.84 355** P **P** **11 54 33.4 +1.8**
LYN sP sP 11 54 46.8 +1.6
LYN S **S** **12 00 57.3 +3.2**
LYN sS sS 12 01 14.0 +4.8
LYN pmax pmax
comp=Z,300nm,1.7s
LYN pmax pmax
comp=Z,16μm,9.3s
LYN LR LR
comp=Z,95μm,19.3s
LYN LR LR
comp=Z,87μm,18.0s
LYN LR LR
comp=Z,108μm,20.6s
**GLAD Gladstone 42.91 144** P **P** **11 54 34.4 +2.2**
**TAWA Tawang 42.92 327** IAmb IAmb 11 55 49.5
comp=Z,321nm,0.9s
**KOD Kodaikanal 42.95 295** *e*P **P** **11 54 32.4 -0.8**
KOD IAmb IAmb 11 54 49.6
comp=Z,1μm,2.1s
**HNR Honiara 43.00 95** P **P** **11 54 33.5 +0.2**
**HNR Honiara 43.00 95** P **P** **11 54 33.3 0.0**
**HNR Honiara 43.00 95** ⇑P **P** **11 54 32.7 -0.7**
**HNR Honiara 43.00 95** LR LR 12 13 41.4
comp=Z,159μm,19.3s,baz=264,slow=38
**HNR Honiara 43.00 95** P **P** **11 54 33.3 0.0**
HNR pmax pmax
comp=Z,4μm,1.0s
**HNR Honiara 43.00 95** P **P** **11 54 32.6 -0.7**
HNR pP **pP** **11 54 42.4 -0.8**
**VJD Vijayawada 43.16 305** IAmb IAmb 11 53 58.3
comp=Z,588nm,1.1s
**JCJ Chichijima 43.20 34** P **P** **11 54 37.7 +3.0**
**JCJ Chichijima 43.20 34** LR LR 12 11 41.7
comp=Z,21μm,21.7s,baz=218,slow=35
**MOO Moorlands 43.41 147** P **P** **11 54 38.8 +2.6**
**H08S2 Diego Garcia H 43.48 268** P **P** **11 54 37.3 +0.4**
baz=56,slow=10,SNR=15
**JNU Nakatsue 43.49 18** P **P** **11 54 38.7 +1.7**
**JNU Nakatsue 43.49 18** P **P** **11 54 37.9 +0.9**
JNU IAMs_20 IAMs_20 12 15 32.1
comp=Z,40μm,20.0s
**JNU Nakatsue 43.49 18** ⇓P **P** **11 54 36.6 -0.3**
**JNU Nakatsue 43.49 18** P **P** **11 54 36.4 -0.6**
comp=Z,57nm,0.9s,baz=183,slow=5.0,SNR=23
JNU S **S** **12 01 01.1 -2.6**
comp=Z,14nm,0.9s,baz=134,slow=6.1,SNR=2.5
JNU LR LR 12 15 43.4
comp=Z,31μm,20.0s,baz=183,slow=40
comp=Z,57nm,0.9s
**JNU Nakatsue 43.49 18** P **P** **11 54 36.0 -0.9**
**H08S3 Diego Garcia H 43.49 268** P **P** **11 54 37.4 +0.4**
baz=56,slow=10,SNR=14
**H08S1 Diego Garcia H 43.50 268** P **P** **11 54 37.5 +0.4**
baz=56,slow=10,SNR=13
**DGAR Diego Garcia 43.54 268** P **P** **11 54 40.0 +2.3**
**DGAR Diego Garcia 43.54 268** IAMs_20 IAMs_20 12 12 07.9
comp=Z,73μm,20.0s
**DGAR Diego Garcia 43.54 268** ⇑P **P** **11 54 39.3 +1.7**
**DGAR Diego Garcia 43.54 268** P P 11 54 32.7 -4.9
DGAR P P 11 54 32.7 -4.9
DGAR S **S** **12 01 02.6 -2.4**
DGAR S **S** **12 01 02.6 -2.4**
**DGAR Diego Garcia 43.54 268** *c*e P **P** **11 54 38.4 +0.7**
DGAR pmax pmax
comp=Z,2μm,1.7s
DGAR MLR MLR
comp=Z,69μm,19.0s
**SHBG Sahibganj 43.56 321** *e*P **P** **11 54 40.1 +2.5**
**BOK Bokaro 43.72 318** *e*P **P** **11 54 39.9 +1.0**
BOK IAmb IAmb 11 55 07.4
comp=Z,501nm,1.4s
**TAU Tasmania Unive 43.80 147** P **P** **11 54 41.1 +1.8**
**TAU Tasmania Unive 43.80 147** P **P** **11 54 41.1 +1.8**
TAU pmax pmax
comp=Z,523nm,1.4s
**TAU Tasmania Unive 43.80 147** P **P** **11 54 41.3 +2.0**
**JHSG JHARSUGUGA 43.84 314** *e*P **P** **11 54 40.8 +0.9**
**AUTAR Taroona High S 43.84 147** P **P** **11 54 41.5 +1.9**
**KAAM Kaadhehdhoo 44.15 279** P **P** **11 54 44.3 +1.7**
KAAM IAMs_20 IAMs_20 12 12 57.8
comp=Z,111μm,20.0s
**KAAM Kaadhehdhoo 44.15 279** ⇓P **P** **11 54 44.2 +1.7**
**KAAM Kaadhehdhoo 44.15 279** P **P** **11 54 44.6 +2.0**
SNR=19
**TIA Tai'an 44.34 1** P **P** **11 54 43.6 -0.1**
TIA pP **pP** **11 54 51.4 -1.8**
TIA sP **sP** **11 54 57.0 -0.3**
TIA PP **PP** **11 56 32.5 +4.9**
TIA S **S** **12 01 15.3 -0.7**
TIA sS **sS** **12 01 35.6 +4.4**
TIA pmax pmax
comp=Z,170nm,1.3s
TIA pmax pmax
comp=Z,1μm,4.5s
TIA LR LR
comp=Z,49μm,22.3s
TIA LR LR
comp=Z,39μm,17.2s
TIA LR LR
comp=Z,88μm,22.3s
**JTU Tsushima 44.39 15** P **P** **11 54 45.8 +1.7**
**JTU Tsushima 44.39 15** ⇓P **P** **11 54 44.6 +0.5**
**GTK Tadong 44.54 324** *e*P **P** **11 54 47.6 +2.0**
GTK IAmb IAmb 11 54 60.0
comp=Z,2μm,1.3s
**LSA Lhasa 44.98 328** P **P** **11 54 51.7 +2.2**
LSA pmax pmax
comp=Z,61nm,1.5s
LSA LR LR
comp=Z,50μm,22.1s
LSA LR LR
comp=Z,80μm,25.5s
LSA LR LR
comp=Z,122μm,23.4s
**LSA Lhasa 44.98 328** P **P** **11 54 50.9 +1.4**
LSA IAmb IAmb 11 55 00.5
comp=Z,1μm,1.5s
LSA IAMs_20 IAMs_20 12 15 00.8
comp=Z,105μm,22.0s
**LSA Lhasa 44.98 328** P **P** **11 54 50.0 +0.5**
**LSA Lhasa 44.98 328** P **P** **11 54 50.9 +1.4**
LSA pmax pmax
comp=Z,1μm,1.5s
LSA MLR MLR
comp=Z,105μm,22.0s
**LSA Lhasa 44.98 328** P **P** **11 54 51.1 +1.6**
**JMN Monobe 45.03 21** P **P** **11 54 51.7 +2.4**
**JMN Monobe 45.03 21** ⇓P **P** **11 54 50.1 +0.8**
**JMN Monobe 45.03 21** P **P** **11 54 50.0 +0.8**
**BLSP Bilaspur 45.25 313** *e*P **P** **11 54 50.6 -0.6**
**HYB Hyderabad 45.34 305** *e*P **P** **11 54 50.9 -1.1**
HYB IVmB_BB 11 54 59.3
comp=Z,7μm,3.4s
HYB *e*pP **pP** **11 55 03.3 +1.6**
HYB *e*PP **PP** **11 56 40.0 +1.5**
HYB *e*ScP **ScP** **12 00 22.3 +0.3**
HYB *e*PcS **PcS** **12 00 26.2 +0.6**
HYB *e*S **S** **12 01 31.9 +0.8**
HYB IVMs_BB IVMs_BB 12 13 56.1
comp=Z,33μm,20.6s
**HNS HongShan 45.55 358** ⇓P **P** **11 54 53.5 +0.2**
HNS S **S** **12 01 32.6 -0.8**
HNS pmax pmax
comp=Z,470nm,1.7s
HNS pmax pmax
comp=Z,11μm,9.3s
HNS LR LR
comp=Z,122μm,17.5s
HNS LR LR
comp=Z,39μm,19.1s
HNS LR LR
comp=Z,110μm,16.2s
**HMDM Hanimaadhoo 45.65 288** P **P** **11 54 55.2 +0.7**
HMDM IAmb IAmb 11 55 03.7
comp=Z,1μm,1.2s
HMDM IAMs_20 IAMs_20 12 13 39.0
comp=Z,115μm,21.0s
**HMDM Hanimaadhoo 45.65 288** ⇑P **P** **11 54 55.5 +1.0**
**HMDM Hanimaadhoo 45.65 288** P **P** **11 54 56.2 +1.7**
SNR=18
**AIS Amsterdam Isla 45.68 224** IAMs_20 IAMs_20 12 12 09.0
comp=Z,55μm,19.0s
**TJN Taejon 45.68 12** P **P** **11 54 57.8 +3.5**
**TJN Taejon 45.68 12** IAMs_20 IAMs_20 12 15 56.9
comp=Z,74μm,20.0s
**TJN Taejon 45.68 12** *d* iP **P** **11 54 53.5 -0.8**
**LZH Lanzhou 45.77 346** P **P** **11 54 57.5 +2.2**
LZH pP sP 11 55 10.2 +1.3
LZH S **S** **12 01 31.3 -5.7**
LZH sS sS 12 01 54.6 +2.4
LZH pmax pmax
comp=Z,950nm,1.4s
LZH pmax pmax
comp=Z,16μm,6.3s
LZH LR LR
comp=Z,151μm,17.5s
LZH LR LR
comp=Z,129μm,19.6s
LZH LR LR
comp=Z,163μm,16.8s
**LHI Lord Howe Isla 45.84 126** P **P** **11 54 57.1 +1.3**
LHI IAmb IAmb 11 55 22.9
comp=Z,1μm,1.4s
**TIY Taiyuan 45.98 356** ⇓P **P** **11 54 57.8 +1.0**
TIY pP **sP** **11 55 09.0 -1.5**
TIY PP **PP** **11 56 46.8 +1.7**
TIY S **S** **12 01 41.8 +2.0**
TIY sS **sS** **12 01 56.8 +1.7**
TIY pmax pmax
comp=Z,120nm,1.9s
TIY pmax pmax
comp=Z,8μm,7.7s
TIY LR LR
comp=Z,50μm,23.5s
TIY LR LR
comp=Z,40μm,17.7s
TIY LR LR
comp=Z,50μm,21.2s
**EVN Everest 46.07 323** ⇑P **P** **11 54 58.9 +0.5**
**INCN Inchon 46.60 11** P **P** **11 55 02.8 +1.2**
**INCN Inchon 46.60 11** P **P** **11 55 01.5 -0.1**
INCN P **P** **11 55 01.5 -0.1**
INCN S **S** **12 01 52.4 +3.8**
INCN S **S** **12 01 52.4 +3.8**
**KSAR Wonju Array Be 46.81 13** P **P** **11 55 04.0 +0.8**
**KSAR Wonju Array Be 46.81 13** P **P** **11 55 04.0 +0.8**
**KSRS Korea Array 46.83 13** P **P** **11 55 03.8 +0.4**
comp=Z,97nm,1.0s,baz=192,slow=7.7,SNR=135
KSRS S **S** **12 01 48.8 -3.0**
comp=Z,1.6nm,1.0s,baz=37,slow=50,SNR=1.3
KSRS PKPPKP **P'P'df** **12 26 25.8 +4.2**
comp=Z,2.5nm,1.0s,baz=21,slow=2.3,SNR=4.8
comp=Z,97nm,1.0s
**JHJ Hachijo jima 2 46.87 27** LR LR 12 13 21.3
comp=Z,25μm,21.3s,baz=231,slow=34
**KS19 Wonju Array Si 46.87 12** P **P** **11 55 04.8 +1.1**
KS19 IAmb IAmb 11 55 29.4
comp=Z,679nm,1.1s
**JHJ2 Mitsune 46.88 27** P **P** **11 55 07.3 +3.5**
**JHJ2 Mitsune 46.88 27** ⇓P **P** **11 55 04.0 +0.2**
**JWT Wachi 46.97 21** P **P** **11 55 05.1 +0.6**
**HJU Haeju 46.98 10** P **P** **11 55 05.1 +0.6**
HJU S **S** **12 01 55.5 +1.6**
HJU AmB
comp=Z,3μm,1.9s
HJU AMS AMS
comp=Z,27μm,12.7s
**NGP Nagpur 46.98 309** *e*P **P** **11 55 04.4 -0.5**
NGP IAmb IAmb 11 55 17.4
comp=Z,1μm,1.3s
**DL2 Dalian 47.27 6** P **P** **11 55 05.3 -1.5**
DL2 S **S** **12 01 58.9 +0.8**
DL2 SS **SS** **12 05 23.2 -2.8**
DL2 pmax pmax
comp=Z,760nm,1.3s
DL2 pmax pmax
comp=Z,17μm,7.9s
DL2 LR LR
comp=Z,34μm,13.3s
DL2 LR LR
comp=Z,52μm,17.1s
DL2 LR LR
comp=Z,78μm,17.5s
**ALBI Allahabad 47.49 316** *e*P **P** **11 55 08.6 -0.2**
ALBI IAmb IAmb 11 55 28.2
comp=Z,311nm,1.0s
**JSG Sagara 47.51 24** P **P** **11 55 12.0 +3.3**
**JSG Sagara 47.51 24** ⇑P **P** **11 55 05.0 -3.7**
**INU Inuyama 47.63 23** P **P** **11 55 10.9 +1.3**
**INU Inuyama 47.63 23** P **P** **11 55 10.2 +0.6**
INU IAmb IAmb 11 55 35.8
comp=Z,541nm,1.2s
**INU Inuyama 47.63 23** ⇑P **P** **11 55 10.5 +0.9**
**INU Inuyama 47.63 23** P **P** **11 55 10.5 +0.9**
**KOUNC Koumac, New Ca 47.74 110** P **P** **11 55 12.5 +1.6**
**KOUNC Koumac, New Ca 47.74 110** P **P** **11 55 11.5 +0.7**
KOUNC IAmb IAmb 11 55 30.3
comp=Z,796nm,1.2s
**KOUNC Koumac, New Ca 47.74 110** ⇑P **P** **11 55 12.3 +1.4**
**PYAG Pyongyang 47.96 10** P **P** **11 55 12.8 +0.6**
PYAG S **S** **12 02 10.2 +2.3**
PYAG AmB
comp=Z,5μm,3.0s
PYAG AMS AMS
comp=Z,35μm,14.8s
**JGF Kuroka 47.98 23** P **P** **11 55 13.3 +0.9**
**JGF Kuroka 47.98 23** P **P** **11 55 12.7 +0.3**
**JGF Kuroka 47.98 23** ⇑P **P** **11 55 12.7 +0.3**
**JGF Kuroka 47.98 23** P **P** **11 55 13.1 +0.7**
**BJT Baijiatuan 48.14 360** P **P** **11 55 14.9 +1.4**
**BJT Baijiatuan 48.14 360** P **P** **11 55 13.6 +0.1**
BJT IAmb IAmb 11 55 27.6
comp=Z,564nm,1.1s
**BJT Baijiatuan 48.14 360** P **P** **11 55 13.6 +0.1**
BJT pmax pmax
comp=Z,564nm,1.1s
**BJT Baijiatuan 48.14 360** P **P** **11 55 14.2 +0.8**
**BJI Beijing 48.16 360** P **P** **11 55 14.0 +0.4**
BJI S **S** **12 02 12.9 +2.3**
BJI pmax pmax
comp=Z,82nm,2.0s
BJI pmax pmax
comp=Z,5μm,6.7s
BJI LR LR
comp=Z,30μm,24.5s
BJI LR LR
comp=Z,18μm,19.3s
BJI LR LR
comp=Z,43μm,24.0s
**AKL Akola 48.31 307** *e*P **P** **11 55 14.8 -0.4**
AKL IAmb IAmb 11 55 27.4
comp=Z,225nm,0.9s
**JGN Niukaw 48.51 23** P **P** **11 55 16.7 +0.2**
**GOMU GeErMu 48.76 337** P **P** **11 55 20.1 +1.3**
GOMU pP sP 11 55 30.7 -1.8
GOMU sP pP 11 55 34.8 +6.5
GOMU PcP **PcP** **11 56 45.1 +1.6**
GOMU PP **PP** **11 57 14.8 +2.5**
GOMU S **S** **12 02 23.1 +3.1**
GOMU sS sS 12 02 40.0 +4.2
GOMU pmax pmax
comp=Z,460nm,1.8s
GOMU pmax pmax
comp=Z,17μm,5.5s
GOMU LR LR
comp=Z,239μm,20.6s
GOMU LR LR
comp=Z,146μm,19.2s
GOMU LR LR
comp=Z,358μm,22.9s
**SUJ Sinuiju 48.80 8** P **P** **11 55 18.5 0.0**
SUJ S **S** **12 02 21.6 +2.0**
SUJ AmB
comp=Z,5μm,2.6s
SUJ AMS AMS
comp=Z,46μm,14.0s
**KAD Karad 48.91 302** *e*P **P** **11 55 21.0 +1.1**
KAD IAmb IAmb 11 55 28.5
comp=Z,168nm,1.0s
**BTO Baotou 49.08 354** *e*P **P** **11 55 23.4 +2.5**
BTO pP **sP** **11 55 33.4 -1.1**
BTO sP **pP** **11 55 36.8 +6.4**
BTO PP **PP** **11 57 17.0 +2.2**
BTO S **S** **12 02 31.0 +7.2**
BTO pmax pmax
comp=Z,230nm,1.5s
BTO pmax pmax
comp=Z,10μm,7.1s
BTO LR LR
comp=Z,78μm,15.3s
BTO LR LR
comp=Z,98μm,20.6s
BTO LR LR
comp=Z,127μm,20.2s
**MAJO Matsushiro 49.14 23** P **P** **11 55 21.9 +0.6**
**MAJO Matsushiro 49.14 23** P **P** **11 55 21.3 -0.1**
**MAJO Matsushiro 49.14 23** ⇑P **P** **11 55 21.2 -0.1**
**MAJO Matsushiro 49.14 23** *c* iP **P** **11 55 21.0 -0.3**
MAJO pmax pmax
comp=Z,2μm,1.9s
**MAJO Matsushiro 49.14 23** P **P** **11 55 21.2 -0.1**
**MAT Matsushiro 49.14 23** P **P** **11 55 20.6 -0.7**
**MJAR Matsushiro Arr 49.14 23** P **P** **11 55 21.2 -0.1**
comp=Z,151nm,1.0s,baz=196,slow=6.9,SNR=119
MJAR ScP **ScP** **12 00 37.4 -0.1**
comp=Z,9.6nm,1.2s,baz=239,slow=3.9,SNR=2.1
MJAR S **S** **12 02 22.2 -2.3**
comp=Z,7.3nm,1.2s,baz=210,slow=2.6,SNR=2.2
MJAR LR LR 12 19 24.2
comp=Z,17μm,18.0s,baz=213,slow=40
MJAR PKPPKP **P'P'df** **12 26 21.2 +2.0**
comp=Z,0.5nm,0.4s,baz=357,slow=5.2,SNR=4.3
comp=Z,151nm,1.0s
**MJB9 Matsu-Tunnel 49.14 23** P **P** **11 55 22.4 +1.1**
**HHC Hu-ho-hao-te 49.17 355** ⇑*i*P **P** **11 55 23.0 +1.4**
HHC pP pP 11 55 33.1 +2.0
HHC PP **PP** **11 57 17.5 +1.8**
HHC S **S** **12 02 26.1 +1.0**
HHC sS sS 12 02 43.1 +2.7
HHC pmax pmax
comp=Z,120nm,1.4s
HHC pmax pmax
comp=Z,9μm,6.1s
HHC LR LR
comp=Z,70μm,16.5s
HHC LR LR
comp=Z,55μm,12.9s
HHC LR LR
comp=Z,65μm,16.7s
**NRDN NARMADA NAGAR 49.30 310** *e*P **P** **11 55 23.8 +1.0**
NRDN IAmb IAmb 11 55 36.5
comp=Z,400nm,1.2s
**BHPL Bhopal 49.40 310** *e*P **P** **11 55 22.0 -1.6**
BHPL IAmb IAmb 11 55 35.6
comp=Z,594nm,1.4s
**POO Poona 49.77 303** *e*P **P** **11 55 28.1 +1.7**
**NOUC Port Laguerre 49.81 112** P **P** **11 55 28.4 +1.7**
**NOUC Port Laguerre 49.81 112** P **P** **11 55 28.3 +1.5**
**JHNI Jhansi 49.89 313** *e*P **P** **11 55 25.3 -1.9**
JHNI IAmb IAmb 11 55 38.6
comp=Z,335nm,0.6s
**DZM Mont Dzumac 49.94 112** P **P** **11 55 29.7 +1.9**
**DZM Mont Dzumac 49.94 112** *e*P **P** **11 55 27.0 -0.8**
comp=Z,1μm,1.3s
**DZM Mont Dzumac 49.94 112** *e*PP **PP** **11 57 23.1 +0.2**
comp=Z,9μm,25.5s
DZM *e*S **S** **12 02 40.8 +4.2**
comp=Z,42μm,38.0s
DZM *e*SS **SS** **12 06 10.6 +0.8**
comp=Z,30μm,27.4s
DZM *e*LQ LQ 12 07 37.2
comp=Z,132μm,39.4s
DZM *e*LR LR 12 09 53.5
comp=Z,43μm,22.7s
**DZM Mont Dzumac 49.94 112** P **P** **11 55 28.3 +0.5**
DZM IAmb IAmb 11 55 40.8
comp=Z,740nm,1.3s
DZM IAMs_20 IAMs_20 12 18 17.7
comp=Z,50μm,19.0s
**DZM Mont Dzumac 49.94 112** ⇑P **P** **11 55 29.4 +1.5**
**DZM Mont Dzumac 49.94 112** LR LR 12 18 19.8
comp=Z,35μm,18.5s,baz=282,slow=38
**DZM Mont Dzumac 49.94 112** P **P** **11 55 29.7 +1.9**
DZM pP **pP** **11 55 38.4 +0.7**
**GTA Gaotai 49.96 343** ⇑P **P** **11 55 30.0 +2.3**
GTA S **S** **12 02 42.8 +6.5**
GTA pmax pmax
comp=Z,150nm,2.0s
GTA pmax pmax
comp=Z,16μm,5.2s
GTA LR LR
comp=Z,69μm,19.3s
GTA LR LR
comp=Z,79μm,20.7s
GTA LR LR
comp=Z,100μm,19.6s
**ONTNC Ouen Toro 49.98 112** P **P** **11 55 29.8 +1.8**
**ONTNC Ouen Toro 49.98 112** P **P** **11 55 28.9 +0.9**
**ONTNC Ouen Toro 49.98 112** ⇑P **P** **11 55 29.5 +1.5**
**GUNA GUNA 50.28 312** *e*P **P** **11 55 29.5 -0.7**
GUNA IAmb IAmb 11 55 42.1
comp=Z,370nm,1.1s
**YATNC Mamie plateau, 50.35 112** P **P** **11 55 33.2 +2.4**
**SNY Shenyang 50.38 7** ⇓P **P** **11 55 30.0 -0.5**
SNY sP **sP** **11 55 43.2 -1.1**
SNY PP **PP** **11 57 31.6 +5.2**
SNY S **S** **12 02 33.0 -8.6**
SNY pmax pmax
comp=Z,410nm,1.3s
SNY pmax pmax
comp=Z,8μm,6.8s
SNY LR LR
comp=Z,45μm,18.9s
SNY LR LR
comp=Z,27μm,18.7s
SNY LR LR
comp=Z,65μm,18.1s
**JSD Sado 50.46 22** P **P** **11 55 32.9 +1.6**
**JSD Sado 50.46 22** P **P** **11 55 31.8 +0.6**
**JSD Sado 50.46 22** ⇑P **P** **11 55 31.9 +0.6**
**JSD Sado 50.46 22** P **P** **11 55 31.3 0.0**

LIFNC **LIFOU** 50.52 110 P **P** **11 55 33.8 +1.7**
LIFNC **LIFOU** 50.52 110 P **P** **11 55 33.5 +1.4**
PINNC **Pines Island,** 50.93 112 P **P** **11 55 36.8 +1.6**
PINNC **Pines Island,** 50.93 112 P **P** **11 55 36.6 +1.5**
PINNC IAmb IAmb 11 56 05.1
comp=Z,691nm,1.3s
PINNC IAMs_20 IAMs_20 12 16 28.0
comp=Z,47µm,21.0s
**DVP Devils Point** 51.15 106 P **P** **11 55 39.6 +2.7**
**LGTI Lohaghat** 51.24 319 *e*P **P** **11 55 36.5 -0.8**
**JMM Marumori** 51.32 25 P **P** **11 55 39.2 +1.5**
**JMM Marumori** 51.32 25 P **P** **11 55 38.4 +0.6**
**JMM Marumori** 51.32 25 ⇑P **P** **11 55 38.1 +0.4**
**JMM Marumori** 51.32 25 P **P** **11 55 37.0 -0.8**
**PTH Pithoragarh** 51.33 319 *e*P **P** **11 55 35.8 -2.4**
MARNC **Mare, Loyalty** 51.33 111 P **P** **11 55 39.9 +1.7**
MARNC **Mare, Loyalty** 51.33 111 ⇑P **P** **11 55 39.5 +1.4**
**RTV Rentapao** 51.38 106 P **P** **11 55 40.9 +2.3**
**JYA Atsumi** 51.51 23 P **P** **11 55 40.5 +1.3**
**XLT XiLinHaoTe** 52.02 360 ⇓*i*P **P** **11 55 43.4 +0.4**
XLT sP sP 11 55 56.9 +0.2
XLT PcP **PcP** **11 56 57.6 +2.6**
XLT S **S** **12 03 02.8 -1.7**
XLT sS sS 12 03 24.1 +3.7
XLT ScS **ScS** **12 05 27.6 -3.2**
XLT pmax pmax
comp=Z,300nm,1.5s
XLT pmax pmax
comp=Z,12µm,6.3s
XLT LR LR
comp=Z,44µm,17.0s
XLT LR LR
comp=Z,106µm,16.6s
**PSTR Posyet** 52.44 13*d i*P **P** **11 55 47.5 +1.5**
**MSHR Mys Shultsa** 52.46 14*ce*P **P** **11 55 47.4 +1.3**
MSHR pmax pmax
comp=Z,480nm,1.5s
MSHR MLR MLR
comp=Z,12µm,21.0s
ROCAM **Rodrigues Isla** 52.49 252 P **P** **11 55 49.4 +2.5**
ROCAM IAMs_20 IAMs_20 12 14 07.6
comp=Z,73µm,21.0s
ROCAM **Rodrigues Isla** 52.49 252 ⇑P **P** **11 55 49.9 +3.0**
**NFK Norfolk Island** 52.49 120 P **P** **11 55 49.2 +2.4**
**NFK Norfolk Island** 52.49 120 P **P** **11 55 48.5 +1.7**
comp=Z,48µm,SNR=24
**NFK Norfolk Island** 52.49 120 ⇑P **P** **11 55 49.0 +2.2**
**CN2 Changchun** 52.56 8 P **P** **11 55 47.0 +0.1**
CN2 sP sP 11 56 00.5 -0.1
CN2 S **S** **12 03 09.3 -2.4**
CN2 pmax pmax
comp=Z,130nm,1.2s
CN2 pmax pmax
comp=Z,7µm,7.0s
CN2 LR LR
comp=Z,28µm,19.0s
CN2 LR LR
comp=Z,35µm,19.0s
CN2 LR LR
comp=Z,44µm,19.0s
**NDI New Delhi** 52.79 316 *e*P **P** **11 55 46.9 -2.0**
**NPLP NPLP New Delhi** 52.79 316 *e*P **P** **11 55 48.9 0.0**
**JOM Ohasama** 52.89 24 P **P** **11 55 50.1 +0.7**
**KUDL Kundal** 52.96 315 *e*P **P** **11 55 47.8 -2.3**
KUDL IAmb IAmb 11 55 59.3
comp=Z,158nm,0.8s
**VLA Vladivostok** 53.14 14 *e*P **P** **11 55 52.5 +1.3**
VLA pmax pmax
comp=Z,1µm,1.7s
**DDI Dehra Dun** 53.25 318 *e*P **P** **11 55 53.5 +1.2**
**AJM Ajmer** 53.32 312 *e*P **P** **11 55 51.0 -1.9**
AJM IAmb IAmb 11 56 04.4
comp=Z,283nm,1.3s
**KLP Kalpa** 53.90 319 *e*P **P** **11 55 56.7 -0.7**
KLP IAmb IAmb 11 56 16.7
comp=Z,454nm,1.0s
**JTM Tenmabayashi** 53.93 23 P **P** **11 55 59.7 +2.7**
**JTM Tenmabayashi** 53.93 23 P **P** **11 55 57.5 +0.5**
JTM IAMs_20 IAMs_20 12 22 40.4
comp=Z,32µm,19.0s
**JTM Tenmabayashi** 53.93 23 ⇑P **P** **11 55 57.7 +0.7**
**MDJ Mudanjiang** 54.06 12 P **P** **11 55 59.6 +1.7**
**MDJ Mudanjiang** 54.06 12 P **P** **11 55 58.7 +0.8**
MDJ PcP **PcP** **11 57 02.1 -0.5**
MDJ S **S** **12 03 33.8 +1.7**
MDJ sS sS 12 03 49.9 +1.8
MDJ pmax pmax
comp=Z,130nm,1.9s
MDJ pmax pmax
comp=Z,11µm,7.4s
MDJ LR LR
comp=Z,20µm,18.2s
MDJ LR LR
comp=Z,12µm,21.5s
**MDJ Mudanjiang** 54.06 12 P **P** **11 55 58.5 +0.6**
MDJ IAMs_20 IAMs_20 12 23 10.8
comp=Z,31µm,21.0s
**MDJ Mudanjiang** 54.06 12 P **P** **11 55 58.6 +0.6**
**USA0B Ussuriysk Arra** 54.18 14 P **P** **11 55 59.8 +1.0**
**USA0B Ussuriysk Arra** 54.18 14 P **P** **11 55 59.8 +1.0**
USA0B pmax pmax
comp=Z,2µm,1.5s
**USRK Ussuriysk Ar.** 54.18 14 P **P** **11 55 59.4 +0.6**
**USRK Ussuriysk Ar.** 54.18 14 P **P** **11 55 59.7 +0.9**
comp=Z,109nm,0.7s,baz=194,slow=7.0,SNR=85
USRK S **S** **12 03 34.6 +0.9**
comp=Z,0.7nm,0.7s,baz=67,slow=44,SNR=1.0
USRK PKPPKP **P'P'df** **12 26 15.3 +3.7**
comp=Z,1.8nm,0.8s,baz=105,slow=2.4,SNR=2.0
USRK PKP2bc **P'P'bc** **12 26 28.2 +2.1**
comp=Z,5.7nm,0.9s,baz=286,slow=2.1,SNR=6.6
comp=Z,109nm,0.7s
**HNLY HANLEY** 54.27 321 *e*P **P** **11 56 00.5 +0.2**
**SMLA Simla** 54.35 318 *e*P **P** **11 55 59.0 -1.3**
**JOT Ohata** 54.43 23 P **P** **11 56 01.6 +1.0**
**BNX BinXian** 54.75 9 ⇑P **P** **11 56 03.1 +0.2**
BNX pP **pP** **11 56 08.3 -4.2**
BNX sP **sP** **11 56 13.0 -3.7**
BNX S **S** **12 03 42.4 +1.0**
BNX sS **sS** **12 03 57.0 -0.3**
BNX SS **SS** **12 07 26.0 +0.9**
BNX pmax pmax
comp=Z,170nm,1.7s
BNX pmax pmax
comp=Z,10µm,6.9s
BNX LR LR
comp=Z,22µm,16.8s
BNX LR LR
comp=Z,40µm,15.6s
BNX LR LR
comp=Z,35µm,19.3s
**BHK Bhakra** 55.03 318 *e*P **P** **11 56 04.7 -0.6**
BHK IAmb IAmb 11 56 23.0
comp=Z,366nm,1.1s
**JSH Shimam** 55.16 21 P **P** **11 56 06.4 +0.6**
**BKNR BIKANER** 55.19 313 *e*P **P** **11 56 05.5 -0.9**
**BHUJ Bhuj** 55.48 306 *e*P **P** **11 56 09.8 +1.2**
**DHRM DHARAMSHALA** 55.63 319 *e*P **P** **11 56 08.9 -1.0**
DHRM IAmb IAmb 11 56 19.2
comp=Z,389nm,0.9s
**ERM Erimo** 55.80 24 P **P** **11 56 12.5 +2.0**
**ERM Erimo** 55.80 24 P **P** **11 56 11.0 +0.5**
**ERM Erimo** 55.80 24 IAMs_20 IAMs_20 12 21 29.8
comp=Z,34µm,21.0s
**ERM Erimo** 55.80 24*c i*P **P** **11 56 10.8 +0.3**
ERM pmax pmax
comp=Z,1µm,1.2s
ERM MLR MLR
comp=Z,33µm,21.0s
**ERM Erimo** 55.80 24 P **P** **11 56 11.2 +0.7**
ERM pP **pP** **11 56 20.0 -0.1**
**JEM Erimo** 55.80 24 P **P** **11 56 12.7 +2.2**
**JEM Erimo** 55.80 24 IAMs_20 IAMs_20 12 21 32.3
comp=Z,37µm,21.0s
**JEW Eniwo** 55.84 22 P **P** **11 56 12.0 +1.2**
**THN Thein Dam** 56.13 318 *e*P **P** **11 56 12.3 -0.8**
THN IAmb IAmb 11 56 21.3
comp=Z,853nm,1.1s
**PAF Port-aux-Franc** 56.14 215 IAMs_20 IAMs_20 12 13 34.3
comp=Z,66µm,20.0s
**TEY Ternei** 56.18 17⇑*e*P **P** **11 56 13.9 +0.7**
TEY *e*S **S** **12 03 59.7 -0.7**
TEY pmax pmax
comp=Z,110nm,1.4s
TEY pmax pmax
comp=E,20nm,1.5s
TEY pmax pmax
comp=N,40nm,1.4s
TEY smax smax
comp=E,11µm,8.1s
TEY smax smax
comp=N,14µm,6.8s
**JASL Jaisalmer** 56.35 310 *e*P **P** **11 56 16.6 +1.8**
**ULN Ulaanbaatar** 56.59 352 P **P** **11 56 16.9 +0.6**
ULN IAmb IAmb 11 56 38.2
comp=Z,642nm,1.2s
**ULN Ulaanbaatar** 56.59 352 IAMs_20 IAMs_20 12 25 13.0
comp=Z,65µm,20.0s
**ULN Ulaanbaatar** 56.59 352 P **P** **11 56 16.5 +0.2**
ULN P **P** **11 56 16.5 +0.2**
ULN P **P** **11 56 16.5 +0.2**
ULN S **S** **12 04 08.1 +1.9**
ULN S **S** **12 04 08.1 +1.9**
ULN S **S** **12 04 08.1 +1.9**
**ULN Ulaanbaatar** 56.59 352 P **P** **11 56 16.9 +0.6**
ULN pmax pmax
comp=Z,641nm,1.2s
ULN MLR MLR
comp=Z,65µm,20.0s
**ULN Ulaanbaatar** 56.59 352 P **P** **11 56 17.5 +1.2**
**SONM Songino Array** 56.65 352 P **P** **11 56 17.4 +0.7**
SONM IAmb IAmb 11 56 26.3
comp=Z,1µm,1.4s
**SONM Songino Array** 56.65 352 P **P** **11 56 17.6 +0.9**
comp=Z,53nm,0.7s,baz=172,slow=7.8,SNR=178
SONM S **S** **12 04 06.7 -0.2**
comp=Z,1.1nm,0.6s,baz=122,slow=44,SNR=1.7
SONM LR LR 12 24 20.9
comp=Z,65µm,18.1s,baz=192,slow=40
SONM PKPPKP **P'P'df** **12 26 10.7 +2.6**
comp=Z,6.1nm,1.2s,baz=336,slow=1.4,SNR=5.4
comp=Z,53nm,0.7s
**JMU Jammu** 56.84 318 *e*P **P** **11 56 20.1 +2.0**
**H11N1 WAKE ISLAND Hy** 56.99 60 P **P** **11 56 19.0 -0.2**
baz=227,slow=12,SNR=4.4
**H11N2 WAKE ISLAND Hy** 57.00 60 P **P** **11 56 19.1 -0.2**
baz=227,slow=12,SNR=4.2
**H11N3 WAKE ISLAND Hy** 57.01 60 P **P** **11 56 19.1 -0.2**
baz=227,slow=12,SNR=7.6
**PYZ Puysegur Point** 57.08 140 P **P** **11 56 21.6 +1.9**
**PYZ Puysegur Point** 57.08 140 P **P** **11 56 21.8 +2.1**
PYZ IAmb IAmb 11 56 45.3
comp=Z,634nm,1.0s
PYZ IAMs_20 IAMs_20 12 20 22.4
comp=Z,69µm,20.0s
**DCZ Deep Cove** 57.09 140 P **P** **11 56 21.6 +1.9**
DCZ IAmb IAmb 11 56 33.7
comp=Z,994nm,1.3s
DCZ IAMs_20 IAMs_20 12 20 16.6
comp=Z,60µm,20.0s
**MCQ Macquarie Isla** 57.14 152 P **P** **11 56 22.3 +2.4**
**MCQ Macquarie Isla** 57.14 152 P **P** **11 56 22.1 +2.2**
MCQ IAmb IAmb 11 56 34.1
comp=Z,758nm,1.0s
**MCQ Macquarie Isla** 57.14 152 P **P** **11 56 22.1 +2.2**
comp=Z,870nm,1.3s,SNR=9.8
**MCQ Macquarie Isla** 57.14 152 ⇑P **P** **11 56 22.6 +2.7**
**MCQ Macquarie Isla** 57.14 152 P **P** **11 56 22.1 +2.2**
MCQ pmax pmax
comp=Z,758nm,1.0s
**TARA Tarawa** 57.15 83 P **P** **11 56 21.0 +0.3**
TARA IAmb IAmb 11 56 46.4
comp=Z,399nm,1.1s
**ASAJ Asahikawa** 57.36 22 LR LR 12 23 13.6
comp=Z,18µm,20.2s,baz=222,slow=38
**ASAJ Asahikawa** 57.36 22 P **P** **11 56 22.2 +0.6**
ASAJ pmax pmax
comp=Z,2µm,1.5s
ASAJ MLR MLR
comp=Z,23µm,21.0s
**ASAJ Asahikawa** 57.36 22 P **P** **11 56 22.1 +0.6**
**JKA Kamikawa-asahi** 57.36 22 P **P** **11 56 22.2 +0.6**
**HIA Hailar** 57.46 3 P **P** **11 56 23.4 +1.2**
**HIA Hailar** 57.46 3 P **P** **11 56 22.9 +0.6**
HIA IAmb IAmb 11 56 42.9
comp=Z,1µm,2.0s
**HIA Hailar** 57.46 3 IAMs_20 IAMs_20 12 24 34.9
comp=Z,34µm,19.0s
**HIA Hailar** 57.46 3 P **P** **11 56 22.9 +0.6**
HIA pmax pmax
comp=Z,1µm,2.0s
HIA MLR MLR
comp=Z,34µm,19.0s
**JMP Maruseppu** 57.56 23 P **P** **11 56 23.0 0.0**
**JCZ Jackson Bay** 57.62 137 P **P** **11 56 25.4 +1.7**
**MLZ Mavora Lakes** 57.67 139 P **P** **11 56 25.7 +1.7**
MLZ IAmb IAmb 11 56 41.6
comp=Z,422nm,0.9s
MLZ IAMs_20 IAMs_20 12 24 59.1
comp=Z,48µm,18.0s
**WHZ Wether Hill Ro** 57.77 140 P **P** **11 56 26.2 +1.6**
WHZ IAmb IAmb 11 56 37.8
comp=Z,745nm,1.2s
**CASY Casey** 57.97 183 P **P** **11 56 26.7 +1.1**
CASY IAmb IAmb 11 56 43.8
comp=Z,647nm,1.1s
**CASY Casey** 57.97 183 IAMs_20 IAMs_20 12 15 44.4
comp=Z,76µm,22.0s
**CASY Casey** 57.97 183 P **P** **11 56 26.9 +1.3**
CASY pP **pP** **11 56 36.0 +0.2**
**WKZ Wanaka** 58.05 138 P **P** **11 56 27.8 +1.1**
**WMQ Urumqi** 58.10 336 ⇑P **P** **11 56 27.5 +0.6**
WMQ S **S** **12 04 27.4 +1.4**
WMQ SS **SS** **12 08 20.6 +2.6**
WMQ pmax pmax
comp=Z,290nm,1.3s
WMQ pmax pmax
comp=Z,13µm,4.5s
WMQ LR LR
comp=Z,80µm,18.9s
WMQ LR LR
comp=Z,85µm,24.3s
WMQ LR LR
comp=Z,53µm,23.3s
**FOZ Fox Glacier** 58.12 137 P **P** **11 56 28.1 +1.1**
FOZ IAMs_20 IAMs_20 12 23 46.7
comp=Z,71µm,18.0s
**JWK2 Keihoku** 58.14 21 P **P** **11 56 27.9 +0.8**
**NIL Nilore** 58.51 318 P **P** **11 56 27.9 -2.1**
NIL IAmb IAmb 11 57 15.1
comp=Z,366nm,1.1s
**NIL Nilore** 58.51 318 P **P** **11 56 29.1 -0.8**
NIL P **P** **11 56 29.1 -0.8**
**NIL Nilore** 58.51 318 P **P** **11 56 27.9 -2.1**
NIL pmax pmax
comp=Z,366nm,1.2s
NIL MLR MLR
comp=Z,118µm,18.0s
**OUZ Omahuta** 58.53 126 IAMs_20 IAMs_20 12 22 32.7
comp=Z,56µm,20.0s
**OUZ Omahuta** 58.53 126 ⇑P **P** **11 56 32.7 +2.6**
**YUK Yuzh-Kuril'sk** 58.57 25*c i*P **P** **11 56 30.1 0.0**
YUK *e* 11 57 17.7
YUK *e* 11 58 40.0
YUK *i*S **S** **12 04 32.2 +0.2**
YUK *e* 12 06 18.8
YUK pmax pmax
comp=Z,3µm,1.7s
YUK pmax pmax
comp=Z,2µm,1.2s
YUK pmax pmax
comp=E,334nm,0.9s
YUK pmax pmax
comp=N,1µm,1.1s
**LBZ Lake Benmore** 58.67 137 P **P** **11 56 31.8 +0.9**
LBZ IAmb IAmb 11 56 43.4
comp=Z,899nm,1.5s
**SYZ Scrubby Hill** 58.79 140 P **P** **11 56 33.6 +2.0**
**KLR Kul'dur** 58.91 12 LR LR 12 26 48.3
comp=Z,18µm,18.0s,baz=226,slow=41
**KLR Kul'dur** 58.91 12 *e*P **P** **11 56 30.0 -2.3**
KLR pmax pmax
comp=Z,505nm,1.8s
**DSZ Denniston Nort** 58.91 134 P **P** **11 56 33.9 +1.2**
**INZ Inchbonnie** 58.96 135 P **P** **11 56 34.0 +1.0**
INZ IAmb IAmb 11 56 44.7
comp=Z,908nm,1.3s
**RPZ Rata Peaks** 59.02 136 P **P** **11 56 34.8 +1.4**
**RPZ Rata Peaks** 59.02 136 LR LR 12 24 28.9
comp=Z,66µm,18.1s,baz=282,slow=38
**HEH HeiHe** 59.15 8 *e*P **P** **11 56 34.4 +0.4**
HEH S **S** **12 04 40.8 +1.5**
HEH SS **SS** **12 08 36.3 +2.1**
HEH pmax pmax
comp=Z,360nm,1.4s
HEH pmax pmax
comp=Z,18µm,6.6s
HEH LR LR
comp=Z,46µm,21.0s
HEH LR LR
comp=Z,52µm,18.8s
HEH LR LR
comp=Z,56µm,18.9s
**QRZ Quartz Range** 59.15 133 P **P** **11 56 36.6 +2.3**
**QRZ Quartz Range** 59.15 133 P **P** **11 56 36.2 +1.9**
**ODZ Otahua Downs** 59.21 138 P **P** **11 56 36.6 +2.0**
**ODZ Otahua Downs** 59.21 138 P **P** **11 56 35.6 +1.0**
ODZ IAmb IAmb 11 56 55.4
comp=Z,372nm,1.3s
**ODZ Otahua Downs** 59.21 138 ⇑P **P** **11 56 35.6 +1.0**
**MRNZ Matariki Terra** 59.49 133 P **P** **11 56 38.0 +1.4**
**TKNZ Takaka Hill** 59.53 133 P **P** **11 56 38.4 +1.5**
**LTZ Lake Taylor** 59.56 135 P **P** **11 56 38.2 +1.0**
LTZ IAmb IAmb 11 56 56.4
comp=Z,502nm,1.4s
**OXZ Oxford** 59.57 136 P **P** **11 56 37.8 +0.6**
OXZ IAmb IAmb 11 56 50.0
comp=Z,402nm,1.0s
**ZAK Zakamensk** 59.61 350 *e*P **P** **11 56 38.0 +0.7**
ZAK pmax pmax
comp=Z,369nm,1.9s
**THZ Tophouse** 59.70 134 P **P** **11 56 39.2 +1.0**
THZ IAmb IAmb 11 56 58.6
comp=Z,636nm,1.0s
**RER Riviere de l'E** 59.72 250 P **P** **11 56 41.4 +2.7**
**RER Riviere de l'E** 59.72 250 ⇑P **P** **11 56 41.1 +2.5**
**RER Riviere de l'E** 59.72 250 P **P** **11 56 42.4 +3.8**
SNR=27
**RER Riviere de l'E** 59.72 250 P **P** **11 56 41.7 +3.0**
**KHEZ Kahui Hut** 59.83 131 P **P** **11 56 41.0 +1.9**
**YSS Yuzh-Sakhalins** 59.85 21 P **P** **11 56 39.8 +0.9**
**YSS Yuzh-Sakhalins** 59.85 21 P **P** **11 56 40.1 +1.1**
**YSS Yuzh-Sakhalins** 59.85 21 ⇑P **P** **11 56 39.3 +0.4**
**YSS Yuzh-Sakhalins** 59.85 21*c i*P **P** **11 56 40.0 +1.1**
YSS *e* 11 58 49.0
YSS *e*S **S** **12 04 48.0 -0.4**
YSS *e*SP **SPn** **12 04 58.7 -0.9**
YSS *e*SS **SS** **12 08 48.4 +3.1**
YSS pmax pmax
comp=Z,760nm,1.3s
YSS pmax pmax
comp=N,320nm,1.1s
YSS pmax pmax
comp=E,230nm,1.3s
YSS pmax pmax
comp=Z,12µm,6.5s
YSS pmax pmax
comp=N,4µm,6.0s
YSS pmax pmax
comp=E,4µm,6.9s
YSS smax smax
comp=N,4µm,6.9s
YSS smax smax
comp=E,10µm,8.1s
**YSS Yuzh-Sakhalins** 59.85 21 P **P** **11 56 39.6 +0.7**
**NNZ Nelson** 59.88 133 P **P** **11 56 40.2 +0.9**
NNZ IAmb IAmb 11 56 51.9
comp=Z,772nm,1.4s
NNZ IAMs_20 IAMs_20 12 23 04.5
comp=Z,70µm,20.0s
**AMCZ Amberley** 59.95 135 P **P** **11 56 40.5 +0.7**
**MQZ McQueen's Vall** 60.12 136 P **P** **11 56 42.6 +1.8**
MQZ IAMs_20 IAMs_20 12 25 12.7
comp=Z,60µm,18.0s
**GVZ Greta Valley S** 60.15 135 P **P** **11 56 42.3 +1.1**
**CIT Chita** 60.19 358 *e*P **P** **11 56 42.6 +1.4**
CIT *e* 11 56 57.8
CIT *e* 11 57 02.7
CIT *e* 11 57 22.9
CIT *e* 11 58 53.1
CIT *e*S **S** **12 04 56.8 +4.1**
CIT pmax pmax
comp=Z,2µm,4.0s
**HIZ Hauiti** 60.27 130 P **P** **11 56 44.1 +2.1**
HIZ IAMs_20 IAMs_20 12 22 46.8
comp=Z,59µm,20.0s
**KHZ Kahutara** 60.34 134 P **P** **11 56 44.5 +2.1**
**KHZ Kahutara** 60.34 134 P **P** **11 56 43.8 +1.3**
KHZ IAMs_20 IAMs_20 12 22 46.6
comp=Z,73µm,21.0s
**KHZ Kahutara** 60.34 134 ⇑P **P** **11 56 43.5 +1.0**
**TUWZ Tuamarina** 60.35 133 P **P** **11 56 43.9 +1.4**
**BSWZ Blackbirch Sta** 60.38 133 P **P** **11 56 43.4 +0.6**
**KUR Kuril'sk** 60.38 25 *e*P **P** **11 56 42.4 -0.1**
KUR *i*S **S** **12 04 56.8 +1.5**
KUR *e*SS **SS** **12 08 58.0 +4.4**
KUR pmax pmax
comp=Z,15µm,8.2s
KUR pmax pmax
comp=E,6µm,6.4s
KUR pmax pmax
comp=N,4µm,6.1s
KUR pmax pmax
comp=N,2µm,1.4s
KUR pmax pmax
comp=Z,3µm,1.4s
KUR pmax pmax
comp=E,533nm,1.0s
KUR MLR MLR
comp=Z,18µm,23.0s
KUR MLR MLR
comp=E,9µm,19.0s
KUR MLR MLR
comp=N,4µm,23.0s
**DRV Dumont d'Urvil** 60.41 169 P **P** **11 56 44.2 +1.7**
DRV pP **pP** **11 56 53.3 +0.4**
**TCW Tory Channel** 60.53 133 P **P** **11 56 44.5 +0.8**
**KUZ Kuaotunu** 60.54 128 P **P** **11 56 46.3 +2.4**
**MSVF Nonsavu** 60.54 106 P **P** **11 56 46.0 +1.6**
**MSVF Nonsavu** 60.54 106 P **P** **11 56 44.6 +0.2**
MSVF IAmb IAmb 11 57 08.6
comp=Z,503nm,1.2s
**MSVF Nonsavu** 60.54 106*c i*P **P** **11 56 45.7 +1.3**
MSVF pmax pmax
comp=Z,478nm,1.1s
MSVF MLR MLR
comp=Z,19µm,17.0s
**MSVF Nonsavu** 60.54 106 P **P** **11 56 45.2 +0.9**
**TOZ Tahuroa Road** 60.59 129 P **P** **11 56 46.5 +2.3**
TOZ IAMs_20 IAMs_20 12 23 52.1
comp=Z,52µm,20.0s
**KSH Kashi** 60.59 325 P **P** **11 56 42.4 -1.9**
KSH pP pP 11 56 53.3 -1.1
KSH PP **PP** **11 58 55.4 -2.9**
KSH S S 12 04 48.4 -10
KSH pmax pmax
comp=Z,42nm,1.2s
KSH pmax pmax
comp=Z,4µm,5.2s
KSH LR LR
comp=Z,51µm,30.6s
KSH LR LR
comp=Z,57µm,28.6s
KSH LR LR
comp=Z,86µm,32.0s
**MSEY Mahe Island** 60.60 269 P **P** **11 56 45.6 +0.8**
MSEY IAmb IAmb 11 56 60.0
comp=Z,488nm,1.6s
**MSEY Mahe Island** 60.60 269 IAMs_20 IAMs_20 12 21 10.2
comp=Z,57µm,20.0s
**MSEY Mahe Island** 60.60 269 *i* P **P** **11 56 45.2 +0.4**
SNR=17
**MSEY Mahe Island** 60.60 269 P **P** **11 56 46.0 +1.1**
MSEY P **P** **11 56 46.0 +1.1**
MSEY P **P** **11 56 46.0 +1.1**
MSEY S **S** **12 05 02.7 +3.2**
MSEY S **S** **12 05 02.7 +3.2**
MSEY S **S** **12 05 02.7 +3.2**
**CMWZ Cape Campbell** 60.63 133 P **P** **11 56 45.7 +1.2**
**SNZO South Karori** 60.87 133 P **P** **11 56 47.3 +1.2**
**SNZO South Karori** 60.87 133 P **P** **11 56 46.5 +0.5**
**SNZO South Karori** 60.87 133 P **P** **11 56 46.6 +0.6**
**BHW Baring Head** 61.02 133 P **P** **11 56 47.6 +0.6**

BHW IAmb IAmb 11 56 59.7
comp=Z,477nm,1.1s
BHW IAMs_20 IAMs_20 12 23 50.5
comp=Z,47µm,20.0s
**TARG Taragay, Kyrgy 61.12 328** P **P** **11 56 48.2 0.0**
TARG IAmb IAmb 11 57 41.7
comp=Z,561nm,1.4s
**TARG Taragay, Kyrgy 61.12 328** P **P** **11 56 48.2 0.0**
TARG pmax pmax
comp=Z,561nm,1.4s
TARG MLR MLR
comp=Z,76µm,19.0s
**MOY Mondy 61.25 349** *e*P **P** **11 56 49.5 +1.0**
MOY pmax pmax
comp=Z,1µm,3.1s
**IRK Irkutsk 61.26 352** *e*P **P** **11 56 48.9 +0.5**
IRK *e* 12 05 10.0
IRK pmax pmax
comp=Z,2µm,1.9s
**MSWZ Moikau Station 61.29 133** P **P** **11 56 49.4 +0.4**
**SHLS Shalkode 61.30 330**⇑ *i*P **P** **11 56 47.5 -1.6**
comp=Z,477nm,1.2s,baz=330
SHLS *e*S **S** **12 05 06.4 -1.1**
baz=330
**SHLS Shalkode 61.30 330** *c i*P **P** **11 56 47.4 -1.6**
SHLS *e*S **S** **12 05 06.3 -1.1**
SHLS pmax pmax
comp=Z,477nm,1.2s
**PLWZ Palliser 61.34 133** P **P** **11 56 50.1 +0.8**
**MRZ Mangatainoka R 61.34 132** P **P** **11 56 49.9 +0.6**
MRZ IAmb IAmb 11 57 02.3
comp=Z,575nm,1.0s
MRZ IAMs_20 IAMs_20 12 23 48.1
comp=Z,69µm,20.0s
**PRZ Przheval'sk 61.35 329** P **P** **11 56 50.1 +0.6**
PRZ IAmb IAmb 11 57 25.2
comp=Z,535nm,1.2s
PRZ IAMs_20 IAMs_20 12 27 38.1
comp=Z,58µm,19.0s
**PRZ Przheval'sk 61.35 329** P **P** **11 56 50.1 +0.6**
PRZ pmax pmax
comp=Z,535nm,1.2s
PRZ MLR MLR
comp=Z,58µm,19.0s
**GRNR Gornyy 61.39 14**⇑ *i*P **P** **11 56 50.7 +1.3**
GRNR *e*S **S** **12 05 16.4 +8.3**
GRNR pmax pmax
comp=E,8.0nm,0.9s
GRNR pmax pmax
comp=N,30nm,1.2s
GRNR pmax pmax
comp=Z,60nm,1.2s
**PDGK Podgornoye 61.41 330** P **P** **11 56 49.1 -0.7**
**UGL Uglegorsk 61.47 19**⇑ *i*P **P** **11 56 51.0 +1.2**
UGL *e*S **S** **12 05 07.7 -1.3**
UGL *e*SS **SS** **12 09 12.0 +1.5**
UGL pmax pmax
comp=Z,17µm,7.3s
UGL pmax pmax
comp=Z,2µm,1.3s
UGL MLR MLR
comp=N,4µm,15.0s
**UZB Uzynbulak 61.51 330**⇑ *i*P **P** **11 56 50.1 -0.4**
comp=N,397nm,1.5s,baz=330
UZB *e*S **S** **12 05 11.8 +1.6**
baz=330
**UZB Uzynbulak 61.51 330** *c i*P **P** **11 56 50.1 -0.4**
UZB *e*S **S** **12 05 11.8 +1.6**
UZB pmax pmax
comp=Z,397nm,1.5s
**BKZ Black Stump Fm 61.67 130** P **P** **11 56 53.6 +2.0**
**BKZ Black Stump Fm 61.67 130** P **P** **11 56 52.4 +0.7**
BKZ IAMs_20 IAMs_20 12 27 14.7
comp=Z,63µm,19.0s
**SATY Saty 61.76 329**⇑ *i*P **P** **11 56 51.8 -0.5**
comp=Z,636nm,1.5s,baz=329
SATY *e*S **S** **12 05 15.0 +1.7**
baz=329
**SATY Saty 61.76 329** *c i*P **P** **11 56 51.7 -0.5**
SATY *e*S **S** **12 05 15.0 +1.7**
SATY pmax pmax
comp=Z,636nm,1.5s
**BFZ Birch Farm 61.84 132** P **P** **11 56 54.8 +2.1**
**BFZ Birch Farm 61.84 132** P **P** **11 56 53.3 +0.6**
BFZ IAmb IAmb 11 57 12.7
comp=Z,499nm,1.0s
**KBL Kabul 61.86 316** P **P** **11 56 51.5 -1.6**
**KBL Kabul 61.86 316** P **P** **11 56 51.3 -1.8**
SNR=55
KBL P **P** **11 56 51.3 -1.8**
SNR=55
KBL P **P** **11 56 51.3 -1.8**
SNR=55
KBL S **S** **12 05 17.9 +2.9**
KBL S **S** **12 05 17.9 +2.9**
KBL S **S** **12 05 17.9 +2.9**
**KBL Kabul 61.86 316** P **P** **11 56 51.5 -1.6**
KBL pmax pmax
comp=Z,202nm,1.0s
**NRN Naryn 61.88 326** P **P** **11 56 52.7 -0.6**
**NRN Naryn 61.88 326** P **P** **11 56 52.7 -0.6**
NRN pmax pmax
comp=Z,138nm,1.0s
NRN MLR MLR
comp=Z,97µm,22.0s
**KPKS Kokpek 61.92 330**⇑ *i*P **P** **11 56 52.8 -0.4**
comp=Z,536nm,1.4s,baz=330
KPKS *e*S **S** **12 05 16.9 +1.7**
baz=330
**KPKS Kokpek 61.92 330** *c i*P **P** **11 56 52.7 -0.4**
KPKS *e*S **S** **12 05 16.8 +1.7**
KPKS pmax pmax
comp=Z,536nm,1.4s
**RTZ Ruatahuna 61.92 129** P **P** **11 56 54.2 +0.9**
RTZ IAMs_20 IAMs_20 12 23 51.4
comp=Z,65µm,20.0s
**URZ Urewera 61.94 129**⇑P **P** **11 56 53.6 +0.2**
**URZ Urewera 61.94 129** LR LR 12 26 02.0
comp=Z,59µm,18.7s,baz=10,slow=38
**FUNA Funafuti 62.04 95** P **P** **11 56 56.5 +2.1**
**FUNA Funafuti 62.04 95** P **P** **11 56 54.4 0.0**
**ZSN Zaisan 62.21 336**⇑ *i*P **P** **11 56 55.1 +0.1**
comp=Z,643nm,1.7s,baz=336
ZSN *e*S **S** **12 05 21.1 +2.5**
baz=336
**ZSN Zaisan 62.21 336** *c i*P **P** **11 56 55.0 +0.1**
ZSN *e*S **S** **12 05 21.0 +2.5**
ZSN pmax pmax
comp=Z,643nm,1.7s
**TNSS Tian-Shan 62.49 328** *e*P **P** **11 56 56.8 -0.6**
baz=328
**TNSS Tian-Shan 62.49 328** *e*P **P** **11 56 56.8 -0.6**
**MDOK Medeo 62.53 328** *e*P **P** **11 56 57.0 -0.4**
baz=328
MDOK *e*S **S** **12 05 24.3 +1.3**
baz=328
MDOK LR LR 12 26 36.2
comp=Z,29µm,15.9s,baz=328
**MDOK Medeo 62.53 328** P **P** **11 56 57.0 -0.4**
**ZEA Zeya 62.54 7** *e*P **P** **11 56 57.7 +0.7**
ZEA *e*S **S** **12 05 24.2 +1.8**
ZEA *e*SS **SS** **12 09 24.5 -2.7**
ZEA pmax pmax
comp=E,700nm,3.9s
ZEA pmax pmax
comp=N,4µm,5.2s
ZEA pmax pmax
comp=Z,6µm,5.9s
ZEA pmax pmax
comp=E,270nm,1.3s
ZEA pmax pmax
comp=N,560nm,1.4s
ZEA pmax pmax
comp=Z,1µm,1.4s
ZEA smax smax
comp=E,6µm,14.8s
ZEA smax smax
comp=N,10µm,9.3s
**KNDC Almaty 62.61 328** P **P** **11 56 58.2 +0.4**
**AAA Alma-Ata 62.63 328** *e*P **P** **11 56 57.7 -0.2**
comp=N,653nm,1.6s,baz=328
AAA LR LR 12 26 34.5
comp=N,44µm,14.5s,baz=328
**AAA Alma-Ata 62.63 328** *e*P **P** **11 56 57.6 -0.3**
AAA pmax pmax
comp=Z,653nm,1.6s

**MXZ Matakaoa Point 62.73 128** P **P** **11 57 01.1 +2.4**
**MXZ Matakaoa Point 62.73 128** P **P** **11 56 59.2 +0.6**
MXZ IAMs_20 IAMs_20 12 25 24.9
comp=Z,50µm,19.0s
**MK31 Makanchi Array 62.75 334** P **P** **11 56 58.8 +0.2**
MK31 IAmb IAmb 11 57 18.6
comp=Z,755nm,1.6s
**MK31 Makanchi Array 62.75 334** *c i*P **P** **11 56 58.0 -0.6**
**MKAR Makanchi Array 62.75 334** P **P** **11 56 58.8 +0.2**
**MKAR Makanchi Array 62.75 334** P **P** **11 56 59.0 +0.4**
comp=Z,293nm,1.2s,baz=138,slow=7.5,SNR=90
MKAR PP **PP** **11 59 18.3 +1.3**
comp=Z,14nm,0.7s,baz=127,slow=9.6,SNR=0.8
MKAR S **S** **12 05 21.9 -3.6**
comp=Z,4.5nm,1.0s,baz=250,slow=3.0,SNR=1.8
MKAR PKP2bc **P'P'bc** **12 26 08.3 +1.7**
comp=Z,6.7nm,0.9s,baz=289,slow=3.3,SNR=10
MKAR LR LR 12 29 06.1
comp=Z,37µm,18.4s,baz=158,slow=41
comp=Z,293nm,1.2s
**MKAR Makanchi Array 62.75 334** P **P** **11 56 59.0 +0.4**
**ARXS Arharly 62.88 330** *e*P **P** **11 56 58.0 -1.6**
**MAKZ Makanchi 62.90 334** P **P** **11 56 58.9 -0.7**
MAKZ IAmb IAmb 11 57 19.5
comp=Z,394nm,1.4s
**MAKZ Makanchi 62.90 334** P **P** **11 56 58.9 -0.7**
MAKZ pmax pmax
comp=Z,394nm,1.4s
MAKZ MLR MLR
comp=Z,69µm,19.0s
**MAKZ Makanchi 62.90 334** P **P** **11 56 59.2 -0.4**
**DRK Karamyk 63.02 322** P **P** **11 57 00.3 -0.6**
DRK IAmb IAmb 11 57 33.9
comp=Z,436nm,1.1s
**DRK Karamyk 63.02 322** P **P** **11 57 00.3 -0.6**
DRK pmax pmax
comp=Z,436nm,1.1s
DRK MLR MLR
comp=Z,183µm,20.0s
**CHKK Chushkaly 63.05 329** *e*P **P** **11 57 00.4 -0.3**
baz=329
**CHKK Chushkaly 63.05 329** *e*P **P** **11 57 00.3 -0.3**
**TKM2 Tokmak 2 63.12 327** P **P** **11 57 00.7 -0.7**
SNR=36
**TKM2 Tokmak 2 63.12 327** P **P** **11 57 00.4 -1.0**
**TYV Tymovskoe 63.21 18** *e*P **P** **11 57 03.2 +1.7**
TYV *e*S **S** **12 05 36.9 +6.0**
TYV pmax pmax
comp=Z,262nm,1.6s
TYV pmax pmax
comp=Z,8µm,6.8s
TYV smax smax
comp=N,24nm,3.3s
TYV smax smax
comp=E,33nm,3.3s
TYV smax smax
comp=N,10µm,8.3s
TYV smax smax
comp=E,13µm,8.3s
**KBK Karagaybulak 63.29 327** P **P** **11 57 03.1 +0.6**
SNR=26
**NGCH Negor - Chabah 63.36 304** P **P** **11 57 03.3 +0.3**
NGCH S **S** **12 05 29.8 -3.8**
**ARSB Arslanbob 63.50 325** P **P** **11 57 03.4 -0.5**
ARSB IAmb IAmb 11 57 25.5
comp=Z,400nm,1.4s
ARSB IAMs_20 IAMs_20 12 29 23.9
comp=Z,22µm,21.0s
**ARSB Arslanbob 63.50 325** P **P** **11 57 03.4 -0.5**
ARSB pmax pmax
comp=Z,400nm,1.4s
ARSB MLR MLR
comp=Z,22µm,21.0s
**AAK Ala-Arcka 63.52 327** P **P** **11 57 01.0 -3.0**
SNR=19
**AAK Ala-Arcka 63.52 327** P **P** **11 57 04.3 +0.3**
AAK IAmb IAmb 11 57 30.7
comp=Z,423nm,1.1s
**AAK Ala-Arcka 63.52 327** *i* P **P** **11 57 03.3 -0.7**
SNR=27
**AAK Ala-Arcka 63.52 327** P **P** **11 57 04.0 0.0**
comp=Z,62nm,1.2s,baz=132,slow=5.4,SNR=44
AAK PP **PP** **11 59 26.5 +2.4**
comp=Z,17nm,0.6s,baz=142,slow=14,SNR=1.0
AAK S **S** **12 05 33.2 -2.3**
comp=Z,2.6nm,0.4s,baz=16,slow=21,SNR=1.8
AAK LR LR 12 28 57.9
comp=Z,98µm,20.2s,baz=142,slow=40
comp=Z,62nm,1.2s
**AAK Ala-Arcka 63.52 327** P **P** **11 57 03.6 -0.4**
AAK P **P** **11 57 03.6 -0.4**
AAK P **P** **11 57 03.6 -0.4**
AAK S **S** **12 05 34.9 -0.6**
AAK S **S** **12 05 34.9 -0.6**
AAK S **S** **12 05 34.9 -0.6**
**AAK Ala-Arcka 63.52 327** *c i*P **P** **11 57 03.2 -0.8**
AAK pmax pmax
comp=Z,469nm,1.1s
AAK MLR MLR
comp=Z,95µm,20.0s
**AAK Ala-Arcka 63.52 327** P **P** **11 57 03.8 -0.2**
**JLN Jalan Bani Buh 63.55 300** P **P** **11 57 03.0 -1.3**
SNR=25
JLN P **P** **11 57 03.0 -1.3**
SNR=25
JLN P **P** **11 57 03.0 -1.3**
SNR=25
JLN S **S** **12 05 33.1 -3.0**
JLN S **S** **12 05 33.1 -3.0**
JLN S **S** **12 05 33.1 -3.0**
**AML Almayashu 63.63 326** P **P** **11 57 05.2 +0.3**
SNR=17
**CHMS Chumysh 63.63 327** P P 11 57 10.4 +5.9
SNR=6.7
**GAR Garm 63.63 321** P **P** **11 57 03.4 -1.3**
**EKS2 Erkin-Say 63.93 326** P **P** **11 57 06.3 -0.4**
SNR=45
**USP Ospenovka 63.95 327** P **P** **11 57 05.8 -0.8**
SNR=22
**BTK Batken 63.97 322** P **P** **11 57 06.0 -0.8**
BTK IAmb IAmb 11 57 28.1
comp=Z,630nm,1.3s
**BTK Batken 63.97 322** P **P** **11 57 06.1 -0.8**
BTK pmax pmax
comp=Z,630nm,1.3s
**SGDS Sogindy 64.00 327** *e*P **P** **11 57 06.4 -0.6**
baz=327
**SGDS Sogindy 64.00 327** *e*P **P** **11 57 06.3 -0.7**
**WBK Wadi Bani Khal 64.10 300** P **P** **11 57 07.0 -1.0**
SNR=23
WBK P **P** **11 57 07.0 -1.0**
SNR=23
WBK S **S** **12 05 41.0 -2.1**
WBK S **S** **12 05 41.0 -2.1**
**CHGR Chuyangaron 64.15 320** P **P** **11 57 06.0 -2.1**
CHGR IAmb IAmb 11 57 54.2
comp=Z,845nm,1.2s
**CHGR Chuyangaron 64.15 320** P **P** **11 57 06.0 -2.1**
CHGR pmax pmax
comp=Z,845nm,1.2s
**SIMJ Simiganj 64.25 320** P **P** **11 57 06.4 -2.4**
**MHTO MHTO 64.38 298** P **P** **11 57 08.1 -1.7**
SNR=34
MHTO P **P** **11 57 08.1 -1.7**
SNR=34
MHTO S **S** **12 05 41.7 -4.8**
MHTO S **S** **12 05 41.7 -4.8**
**DQM DQM 64.39 297** P **P** **11 57 08.9 -1.0**
SNR=16
DQM P **P** **11 57 08.9 -1.0**
SNR=16
DQM P **P** **11 57 08.9 -1.0**
SNR=16
DQM S **S** **12 05 45.5 -1.2**
DQM S **S** **12 05 45.5 -1.2**
DQM S **S** **12 05 45.5 -1.2**
**WSAR Wadi Sarin 64.62 301** P **P** **11 57 11.1 -0.4**
comp=Z,69nm,1.0s,baz=120,slow=6.1,SNR=23
WSAR S **S** **12 05 46.5 -3.0**
comp=Z,8.0nm,1.1s,baz=319,slow=16,SNR=1.7
WSAR LR LR 12 25 29.0
comp=Z,74µm,21.0s,baz=138,slow=36
comp=Z,69nm,1.0s
**WSAR Wadi Sarin 64.62 301** P **P** **11 57 10.3 -1.1**
SNR=40
WSAR S **S** **12 05 47.0 -2.5**

**NKL Nikolayevsk 64.66 16** *e*P **P** **11 57 09.3 -1.7**
NKL *e*S **S** **12 05 48.7 0.0**
NKL pmax pmax
comp=N,618nm,1.4s
NKL pmax pmax
comp=Z,2µm,1.6s
NKL pmax pmax
comp=E,2µm,5.3s
NKL smax smax
comp=E,2µm,5.3s
NKL smax smax
comp=N,7µm,5.9s
NKL MLR MLR
comp=E,59µm,21.0s
NKL MLR MLR
comp=N,47µm,17.0s
NKL MLR MLR
comp=Z,73µm,19.0s
**RAO Raoul Island 64.75 118** IAMs_20 IAMs_20 12 28 49.9
comp=Z,33µm,18.0s
**JMDO Jabal Madar 64.75 299** P **P** **11 57 11.3 -1.0**
SNR=24
JMDO P **P** **11 57 11.3 -1.0**
SNR=24
JMDO P **P** **11 57 11.3 -1.0**
SNR=24
JMDO S **S** **12 05 51.0 -0.1**
JMDO S **S** **12 05 51.0 -0.1**
JMDO S **S** **12 05 51.0 -0.1**
**SMDO Samad 65.05 300** P **P** **11 57 13.2 -1.1**
SNR=27
SMDO P **P** **11 57 13.2 -1.1**
SNR=27
SMDO P **P** **11 57 13.2 -1.1**
SNR=27
SMDO S **S** **12 05 51.9 -3.0**
SMDO S **S** **12 05 51.9 -3.0**
SMDO S **S** **12 05 51.9 -3.0**
**BIDO Bidbid 65.16 301** P **P** **11 57 14.1 -0.8**
SNR=57
BIDO P **P** **11 57 14.1 -0.8**
SNR=57
BIDO S **S** **12 05 54.2 -1.8**
BIDO S **S** **12 05 54.2 -1.8**
**SBV Sambava 65.33 259**⇑P **P** **11 57 16.8 +0.7**
**SBV Sambava 65.33 259** P **P** **11 57 17.4 +1.2**
SNR=15
**BTLS Baital 65.39 328** *e*P **P** **11 57 15.3 -0.6**
baz=328
**BTLS Baital 65.39 328** *e*P **P** **11 57 15.3 -0.6**
**SHAO Shalim 65.47 294** P **P** **11 57 15.7 -1.4**
**SHAO Shalim 65.47 294** P **P** **11 57 16.4 -0.6**
SHAO P **P** **11 57 16.4 -0.6**
SHAO P **P** **11 57 16.4 -0.6**
SHAO S **S** **12 05 57.4 -2.7**
SHAO S **S** **12 05 57.4 -2.7**
SHAO S **S** **12 05 57.4 -2.7**
**HOQ Hoqain 65.88 300** P **P** **11 57 18.7 -0.8**
SNR=34
HOQ P **P** **11 57 18.7 -0.8**
SNR=34
HOQ P **P** **11 57 18.7 -0.8**
SNR=34
HOQ S **S** **12 06 03.6 -1.3**
HOQ S **S** **12 06 03.6 -1.3**
HOQ S **S** **12 06 03.6 -1.3**
**BOD Bodaibo 65.98 359** *e*P **P** **11 57 19.5 0.0**
BOD pmax pmax
comp=Z,2µm,1.6s
**DMTO DMTO 65.99 294** P **P** **11 57 20.0 -0.4**
DMTO P **P** **11 57 20.0 -0.4**
DMTO S **S** **12 06 03.5 -2.9**
DMTO S **S** **12 06 03.5 -2.9**
**KK31 Karatay Array 66.05 325** P **P** **11 57 18.8 -1.5**
KK31 pP **pP** **11 57 27.3 -3.1**
**KK31 Karatay Array 66.05 325** *i* P **P** **11 57 19.0 -1.3**
**KKAR Karatay Array 66.05 325** P **P** **11 57 18.6 -1.7**
KKAR pP **pP** **11 57 27.0 -3.4**
**KKAR Karatay Array 66.05 325** P **P** **11 57 19.6 -0.7**
KKAR IAmb IAmb 11 57 47.3
comp=Z,116nm,0.9s
**CHM Chimkent 66.09 324** *e*P **P** **11 57 19.7 -0.8**
baz=324
CHM LR LR 12 28 53.5
comp=Z,30µm,16.4s,baz=324
**CHM Chimkent 66.09 324** *e*P **P** **11 57 19.7 -0.8**
CHM MLR MLR
comp=Z,30µm,16.0s
**JASK Jask - Hormozg 66.27 303** P **P** **11 57 21.9 -0.1**
SNR=10
JASK S **S** **12 06 06.9 -2.6**
**BRLS Boroldaу 66.39 324**⇑ *i*P **P** **11 57 21.2 -1.3**
baz=324
**BRLS Boroldaу 66.39 324** *c i*P **P** **11 57 21.1 -1.3**
**SEM Semipalatinsk 66.41 336**⇑ *i*P **P** **11 57 21.9 -0.8**
comp=Z,519nm,1.8s,baz=336
**SEM Semipalatinsk 66.41 336** *c i*P **P** **11 57 21.8 -0.8**
SEM pmax pmax
comp=Z,519nm,1.8s
**ARQ Araqi 66.46 300** P **P** **11 57 21.9 -1.4**
SNR=26
ARQ P **P** **11 57 21.9 -1.4**
SNR=26
ARQ P **P** **11 57 21.9 -1.4**
SNR=26
ARQ S **S** **12 06 11.7 -0.3**
ARQ S **S** **12 06 11.7 -0.3**
ARQ S **S** **12 06 11.7 -0.3**
**H04N2 CROZET ISLANDS 66.50 223** P **P** **11 57 25.3 +2.4**
baz=81,slow=5.8,SNR=24
H04N2 T T 13 09 24.9
baz=76,slow=75,SNR=352
**H04N1 CROZET ISLANDS 66.52 223** P **P** **11 57 25.3 +2.3**
baz=81,slow=5.8,SNR=19
H04N1 T T 13 09 28.5
baz=76,slow=75,SNR=356
**H04N3 CROZET ISLANDS 66.52 223** P **P** **11 57 25.2 +2.2**
baz=81,slow=5.8,SNR=19
H04N3 T T 13 09 24.0
baz=76,slow=75,SNR=321
**CRZF Crozet Islands 66.52 223** P **P** **11 57 25.0 +1.7**
CRZF IAmb IAmb 11 57 35.0
comp=Z,478nm,1.0s
CRZF IAMs_20 IAMs_20 12 23 34.0
comp=Z,41µm,19.0s
**HRA Herat 66.56 313** P **P** **11 57 21.7 -2.3**
HRA pP **pP** **11 57 33.8 -0.3**
**H04S1 CROZET ISLANDS 66.58 222** P **P** **11 57 26.5 +3.1**
baz=83,slow=6.3,SNR=7.2
**H04S2 CROZET ISLANDS 66.59 222** P **P** **11 57 26.6 +3.1**
baz=83,slow=6.3,SNR=12
**H04S3 CROZET ISLANDS 66.59 222** P **P** **11 57 26.5 +3.0**
baz=83,slow=6.3,SNR=18
**RBK Rabkut 66.61 293** P **P** **11 57 23.3 -1.0**
SNR=14
RBK P **P** **11 57 23.3 -1.0**
SNR=14
RBK P **P** **11 57 23.3 -1.0**
SNR=14
RBK S **S** **12 06 12.2 -1.8**
RBK S **S** **12 06 12.2 -1.8**
RBK S **S** **12 06 12.2 -1.8**
**SOHO SOHO 66.74 301** *i* P **P** **11 57 23.3 -1.7**
SNR=44
**SOHO SOHO 66.74 301** P **P** **11 57 23.8 -1.2**
SOHO P **P** **11 57 23.8 -1.2**
SOHO P **P** **11 57 23.8 -1.2**
SOHO S **S** **12 06 12.7 -2.6**
SOHO S **S** **12 06 12.7 -2.6**
SOHO S **S** **12 06 12.7 -2.6**
**CCD Concordia, Ant 66.82 178** P **P** **11 57 27.5 +2.3**
CCD pP **pP** **11 57 36.7 +1.1**
**DOK Doka 67.01 294** P **P** **11 57 24.8 -2.0**
SNR=9.7
DOK P **P** **11 57 24.8 -2.0**
SNR=9.7
DOK S **S** **12 06 15.9 -2.8**
DOK S **S** **12 06 15.9 -2.8**
**WHFO Wadi Hawf 67.12 293** P **P** **11 57 26.0 -1.6**
WHFO P **P** **11 57 26.0 -1.6**
WHFO P **P** **11 57 26.0 -1.6**
WHFO S **S** **12 06 15.1 -5.1**
WHFO S **S** **12 06 15.1 -5.1**
WHFO S **S** **12 06 15.1 -5.1**
**KURBB Kurchatov Arra 67.29 335** P **P** **11 57 27.1 -0.8**

comp=Z,95nm,1.2s,baz=146,slow=5.7,SNR=77
KURBB PP **PP** **11 59 57.4 +0.8**
comp=Z,39nm,1.1s,baz=140,slow=9.4,SNR=4.7
KURBB S **S** **12 06 16.7 -4.2**
comp=Z,0.9nm,0.3s,baz=315,slow=57,SNR=1.9
KURBB PKPPKP **P'P'df** **12 25 52.0 +0.3**
comp=Z,8.3nm,1.1s,baz=319,slow=2.7,SNR=6.0
KURBB LR LR 12 31 03.7
comp=Z,49µm,18.4s,baz=145,slow=40
comp=Z,95nm,1.2s
**UOSS Minazif 67.31 301** P **P** **11 57 26.7 -2.0**
UOSS IAmb IAmb 11 58 12.7
comp=Z,716nm,1.7s
**UOSS Minazif 67.31 301** IAMs_20 IAMs_20 12 28 30.4
comp=Z,35µm,22.0s
**UOSS Minazif 67.31 301** *i* P **P** **11 57 27.1 -1.6**
SNR=15
**UOSS Minazif 67.31 301** P **P** **11 57 27.0 -1.6**
UOSS S **S** **12 06 18.7 -3.5**
**UOSS Minazif 67.31 301** P **P** **11 57 26.7 -2.0**
UOSS pP **pP** **11 57 36.0 -2.6**
**KURK Kurchatov 67.32 335** P **P** **11 57 27.4 -0.7**
KURK IAmb IAmb 11 57 48.3
comp=Z,464nm,1.2s
**KURK Kurchatov 67.32 335** P **P** **11 57 28.3 +0.2**
KURK P **P** **11 57 28.3 +0.2**
KURK P **P** **11 57 28.3 +0.2**
KURK S **S** **12 06 22.2 +1.0**
KURK S **S** **12 06 22.2 +1.0**
KURK S **S** **12 06 22.2 +1.0**
**KURK Kurchatov 67.32 335** P **P** **11 57 27.4 -0.7**
KURK pmax pmax
comp=Z,464nm,1.2s
KURK MLR MLR
comp=Z,61µm,19.0s
**KURK Kurchatov 67.32 335** P **P** **11 57 27.6 -0.6**
**HATD Hatta, Dubai 67.33 301** *i* P **P** **11 57 27.5 -1.3**
SNR=23
**HATD Hatta, Dubai 67.33 301** P **P** **11 57 28.0 -0.8**
SNR=57
HATD P **P** **11 57 28.0 -0.8**
SNR=57
HATD P **P** **11 57 28.0 -0.8**
SNR=57
HATD S **S** **12 06 18.8 -3.6**
HATD S **S** **12 06 18.8 -3.6**
HATD S **S** **12 06 18.8 -3.6**
**ASHO Ashiyiah 67.34 301** *i* P **P** **11 57 27.7 -1.2**
SNR=29
**ASHO Ashiyiah 67.34 301** P **P** **11 57 28.0 -0.9**
SNR=49
ASHO P **P** **11 57 28.0 -0.9**
SNR=49
ASHO S **S** **12 06 19.7 -3.0**
ASHO S **S** **12 06 19.7 -3.0**
**MDH Madha 67.36 302** *i* P **P** **11 57 25.7 -3.3**
SNR=27
**MDH Madha 67.36 302** P **P** **11 57 27.1 -1.8**
SNR=15
MDH P **P** **11 57 27.1 -1.8**
SNR=15
MDH P **P** **11 57 27.1 -1.8**
SNR=15
MDH S **S** **12 06 19.4 -3.3**
MDH S **S** **12 06 19.4 -3.3**
MDH S **S** **12 06 19.4 -3.3**
**ALNE Al Ain 67.38 300** *i* P **P** **11 57 27.9 -1.2**
SNR=33
**ALNE Al Ain 67.38 300** P **P** **11 57 28.5 -0.7**
SNR=33
ALNE P **P** **11 57 28.5 -0.7**
SNR=33
ALNE P **P** **11 57 28.5 -0.7**
SNR=33
ALNE S **S** **12 06 19.9 -3.2**
ALNE S **S** **12 06 19.9 -3.2**
ALNE S **S** **12 06 19.9 -3.2**
**ABTO Aybut 67.39 293** P **P** **11 57 28.5 -0.9**
SNR=28
ABTO P **P** **11 57 28.5 -0.9**
SNR=28
ABTO P **P** **11 57 28.5 -0.9**
SNR=28
ABTO S **S** **12 06 21.1 -2.3**
ABTO S **S** **12 06 21.1 -2.3**
ABTO S **S** **12 06 21.1 -2.3**
**MSFE Esma-Masafi 67.50 302** *i* P **P** **11 57 28.3 -1.6**
SNR=11
**MASF Masafi 67.51 302** P **P** **11 57 29.2 -0.7**
SNR=35
MASF P **P** **11 57 29.2 -0.7**
SNR=35
MASF P **P** **11 57 29.2 -0.7**
SNR=35
MASF S **S** **12 06 21.5 -3.1**
MASF S **S** **12 06 21.5 -3.1**
MASF S **S** **12 06 21.5 -3.1**
**ZAA0 Zalesovo Array 67.56 340** P **P** **11 57 28.0 -1.6**
ZAA0 IAmb IAmb 11 57 45.6
comp=Z,373nm,1.1s
**ZALV Zalesovo Beam 67.56 340** P **P** **11 57 28.2 -1.4**
**ZALV Zalesovo Beam 67.56 340** P **P** **11 57 28.7 -0.9**
comp=Z,48nm,0.6s,baz=147,slow=5.1,SNR=71
ZALV PP **PP** **12 00 00.0 +1.0**
comp=Z,49nm,1.1s,baz=128,slow=6.9,SNR=1.1
ZALV S **S** **12 06 19.5 -4.6**
comp=Z,2.4nm,0.8s,baz=234,slow=7.1,SNR=1.2
ZALV PKPPKP **P'P'df** **12 25 52.9 +1.9**
comp=Z,8.9nm,1.0s,baz=335,slow=2.5,SNR=12
ZALV LR LR 12 30 42.2
comp=Z,34µm,18.2s,baz=161,slow=39
comp=Z,48nm,0.6s
**CTZ Chatham Island 67.66 134** P **P** **11 57 32.9 +2.4**
**CTZ Chatham Island 67.66 134** P **P** **11 57 32.1 +1.6**
CTZ IAmb IAmb 11 57 44.3
comp=Z,768nm,1.6s
**ABPO Ambohimpanom 67.70 253** P **P** **11 57 31.7 +0.2**
ABPO IAmb IAmb 11 57 55.7
comp=Z,360nm,1.2s
**ABPO Ambohimpanom 67.70 253** IAMs_20 IAMs_20 12 23 19.5
comp=Z,36µm,20.0s
**ABPO Ambohimpanom 67.70 253** P **P** **11 57 31.7 +0.2**
ABPO pmax pmax
comp=Z,360nm,1.3s
**ABPO Ambohimpanom 67.70 253** P **P** **11 57 32.7 +1.3**
ABPO pP **pP** **11 57 42.3 +0.7**
**FAQ Al Faqa, Dubai 67.76 301** *i* P **P** **11 57 29.8 -1.7**
SNR=32
**FAQ Al Faqa, Dubai 67.76 301** P **P** **11 57 30.5 -1.0**
SNR=43
FAQ P **P** **11 57 30.5 -1.0**
SNR=43
FAQ P **P** **11 57 30.5 -1.0**
SNR=43
FAQ S **S** **12 06 23.9 -3.7**
FAQ S **S** **12 06 23.9 -3.7**
FAQ S **S** **12 06 23.9 -3.7**
**SHME Shamm 67.77 302** *i* P **P** **11 57 29.9 -1.6**
SNR=17
**SHME Shamm 67.77 302** P **P** **11 57 30.7 -0.8**
SNR=27
SHME P **P** **11 57 30.7 -0.8**
SNR=27
SHME S **S** **12 06 23.6 -4.1**
SHME S **S** **12 06 23.6 -4.1**
**NAZ Nazwa, Dubai 67.79 301** *i* P **P** **11 57 29.7 -2.0**
SNR=32
**NAZ Nazwa, Dubai 67.79 301** P **P** **11 57 30.8 -0.8**
SNR=20
NAZ P **P** **11 57 30.8 -0.8**
SNR=20
NAZ P **P** **11 57 30.8 -0.8**
SNR=20
NAZ S **S** **12 06 24.9 -3.0**
NAZ S **S** **12 06 24.9 -3.0**
NAZ S **S** **12 06 24.9 -3.0**
**FOMA Nahampoana Res 67.91 247** P **P** **11 57 34.1 +1.7**
FOMA IAmb IAmb 11 57 43.4
comp=Z,989nm,1.4s
**FOMA Nahampoana Res 67.91 247** P **P** **11 57 35.5 +3.0**
SNR=20
FOMA S **S** **12 06 28.7 -0.7**
**ASUD Al Ashush, Dub 67.94 301** *i* P **P** **11 57 31.5 -1.1**
SNR=18
**ASUD Al Ashush, Dub 67.94 301** P **P** **11 57 32.2 -0.4**
SNR=19
ASUD P **P** **11 57 32.2 -0.4**
SNR=19
ASUD P **P** **11 57 32.2 -0.4**
SNR=19
ASUD S **S** **12 06 28.2 -1.5**
ASUD S **S** **12 06 28.2 -1.5**
ASUD S **S** **12 06 28.2 -1.5**
**UMQ Umm Al-Quwin 67.98 302** *i* P **P** **11 57 31.5 -1.3**
SNR=11
**UMQ Umm Al-Quwin 67.98 302** P **P** **11 57 32.6 -0.2**
SNR=8.7
UMQ S **S** **12 06 28.9 -1.3**
**VOI Vohitsoka 68.06 250** P **P** **11 57 34.7 +1.0**
VOI pP **pP** **11 57 44.2 +0.5**
VOI IAmb IAmb 11 57 48.9
comp=Z,505nm,1.1s
VOI IAMs_20 IAMs_20 12 21 22.1
comp=Z,51µm,22.0s
**VOI Vohitsoka 68.06 250** P **P** **11 57 35.7 +2.0**
SNR=29
**SKR Severo-Kuril's 68.11 26** *eP* **P** **11 57 33.5 +0.4**
SKR *e* 11 58 06.3
SKR *ePPP* PPP 12 00 08.3
SKR *eSS* SS 12 10 49.5 -4.4
SKR *eSSS* SSS 12 13 44.3
SKR pmax pmax
comp=Z,3µm,6.7s
SKR pmax pmax
comp=Z,423nm,1.4s
SKR MLR MLR
comp=Z,11µm,22.0s
**AJN Ajban 68.21 301** *i* P **P** **11 57 32.1 -2.2**
SNR=21
**AJN Ajban 68.21 301** P **P** **11 57 32.3 -2.0**
SNR=12
AJN P **P** **11 57 32.3 -2.0**
SNR=12
AJN P **P** **11 57 32.3 -2.0**
SNR=12
AJN S **S** **12 06 29.9 -3.1**
AJN S **S** **12 06 29.9 -3.1**
AJN S **S** **12 06 29.9 -3.1**
**OTUK Ortayu 68.42 330** P **P** **11 57 34.1 -1.1**
**MAW Mawson 68.97 199** P **P** **11 57 40.4 +2.1**
comp=Z,144nm,1.0s,baz=52,slow=7.5,SNR=87
MAW S **S** **12 06 41.5 +0.9**
comp=Z,4.2nm,0.9s,baz=255,slow=12,SNR=1.5
MAW LR LR 12 21 40.6
comp=Z,46µm,21.5s,baz=56,slow=30
MAW PKPPKP **P'P'df** **12 25 49.1 -2.8**
comp=Z,20nm,1.2s,baz=235,slow=4.0,SNR=5.4
comp=Z,144nm,1.0s
**MZR Muzera 68.98 298** *i* P **P** **11 57 38.0 -1.2**
SNR=36
**MZR Muzera 68.98 298** P **P** **11 57 38.2 -1.0**
SNR=28
MZR P **P** **11 57 38.2 -1.0**
SNR=28
MZR S **S** **12 06 39.8 -2.4**
MZR S **S** **12 06 39.8 -2.4**
**JRN Qarnain Island 70.16 300** P **P** **11 57 44.8 -1.6**
SNR=13
JRN P **P** **11 57 44.8 -1.6**
SNR=13
JRN S **S** **12 06 48.7 -7.3**
JRN S **S** **12 06 48.7 -7.3**
**AFI Afiamalu 70.46 102** P **P** **11 57 49.8 +1.3**
**AFI Afiamalu 70.46 102** P **P** **11 57 49.8 +1.3**
AFI pmax pmax
comp=Z,298nm,1.1s
AFI MLR MLR
comp=Z,8µm,20.0s
**PET Petropavlovsk 70.89 25** P **P** **11 57 51.3 +1.1**
**PET Petropavlovsk 70.89 25** P **P** **11 57 50.9 +0.7**
PET IAmb IAmb 11 58 21.8
comp=Z,965nm,1.5s
**PET Petropavlovsk 70.89 25**[1] *eP* **P** **11 57 51.0 +0.7**
PET *e* 12 00 29.7
PET *eS* **S** **12 07 05.4 +2.0**
PET *eSS* **SS** **12 11 37.0 +0.3**
PET pmax pmax
comp=Z,4µm,10.1s
PET pmax pmax
comp=Z,7µm,12.2s
PET pmax pmax
comp=Z,293nm,1.5s
PET smax smax
comp=E,15µm,14.0s
PET smax smax
comp=N,4µm,10.0s
PET smax smax
comp=E,16µm,10.8s
PET smax smax
comp=N,6µm,8.8s
PET MLR MLR
comp=Z,12µm,19.0s
**PET Petropavlovsk 70.89 25** P **P** **11 57 51.4 +1.2**
comp=Z,420nm,1.5s,comp=Z,9µm
**YAK Yakutsk 70.94 7** P **P** **11 57 50.0 -0.4**
YAK pP **pP** **11 57 58.6 -1.9**
**YAK Yakutsk 70.94 7** IAMs_20 IAMs_20 12 34 22.1
comp=Z,24µm,18.0s
**YAK Yakutsk 70.94 7** LR LR 12 31 30.2
comp=Z,17µm,21.2s,baz=208,slow=38
**YAK Yakutsk 70.94 7***c i*P **P** **11 57 49.9 -0.4**
YAK *e**PP **pP** **11 58 00.6 0.0**
YAK *e* 11 58 12.3
YAK *eS* **S** **12 07 01.5 -2.0**
YAK *e* 12 07 31.2
YAK pmax pmax
comp=Z,587nm,1.5s
YAK pmax pmax
comp=N,407nm,1.6s
YAK pmax pmax
comp=E,130nm,1.3s
YAK smax smax
comp=E,5µm,7.3s
YAK smax smax
comp=N,11µm,8.6s
**TRNA Turayna 71.50 299** P **P** **11 57 53.1 -1.4**
SNR=19
TRNA S **S** **12 07 04.8 -6.8**
**SMRA Abu-Samra 71.84 299** P **P** **11 57 56.0 -0.6**
SNR=33
SMRA S **S** **12 07 09.2 -6.3**
**NIUE Niue 71.93 107** P **P** **11 57 59.6 +2.3**
**SHMA Al-Shehemyia 72.07 301** P **P** **11 57 56.5 -1.5**
SNR=17
SHMA S **S** **12 07 11.8 -6.4**
**SAKB Bahrain 72.48 301** P **P** **11 57 59.1 -1.3**
SAKB S **S** **12 07 16.5 -6.2**
**BVA0 Borovoye Array 72.55 333** *i* P **P** **11 57 58.9 -1.4**
**BRVK Borovoye 72.62 333** P **P** **11 57 59.7 -0.9**
**BRVK Borovoye 72.62 333** P **P** **11 58 00.1 -0.6**
BRVK P **P** **11 58 00.1 -0.6**
BRVK S **S** **12 07 21.5 -1.8**
BRVK S **S** **12 07 21.5 -1.8**
**BRVK Borovoye 72.62 333** P **P** **11 57 59.7 -0.9**
BRVK pmax pmax
comp=Z,418nm,1.4s
BRVK MLR MLR
comp=Z,77µm,20.0s
**VNDA Vanda 73.02 171** P **P** **11 58 04.7 +2.0**
VNDA IAmb IAmb 11 58 16.8
comp=Z,431nm,1.1s
**VNDA Vanda 73.02 171** P **P** **11 58 04.7 +2.0**
comp=Z,103nm,0.8s,baz=313,slow=6.1,SNR=381
VNDA S **SKiKP** **12 07 30.8 -2.3**
comp=Z,1.8nm,1.0s,baz=134,slow=16,SNR=1.2
VNDA PKP2ab 12 25 35.0
comp=Z,2.8nm,1.2s,baz=32,slow=0.5,SNR=3.7
VNDA LR LR 12 28 26.8
comp=Z,36µm,19.6s,baz=328,slow=34
comp=Z,103nm,0.8s
**VNDA Vanda 73.02 171** P **P** **11 58 04.7 +2.0**
VNDA pmax pmax
comp=Z,431nm,1.1s
**MA2 Magadan 73.06 17** P **P** **11 58 04.3 +1.2**
**MA2 Magadan 73.06 17** P **P** **11 58 03.5 +0.3**
MA2 IAmb IAmb 11 58 11.1
comp=Z,709nm,1.5s
MA2 IAMs_20 IAMs_20 12 33 21.4
comp=Z,25µm,21.0s
**MA2 Magadan 73.06 17***c i*P **P** **11 58 03.6 +0.5**
MA2 pmax pmax
comp=Z,480nm,1.5s
MA2 MLR MLR
comp=Z,21µm,20.0s
**MA2 Magadan 73.06 17** P **P** **11 58 03.7 +0.6**
comp=Z,372nm,1.9s,comp=Z,14µm
**SBA Scott Base 74.04 170** P **P** **11 58 11.5 +2.8**
SBA pP **pP** **11 58 19.4 +0.2**
SBA IAmb IAmb 11 58 21.8
comp=Z,2µm,1.9s
**SBA Scott Base 74.04 170** IAMs_20 IAMs_20 12 30 13.8
comp=Z,41µm,20.0s
**SBA Scott Base 74.04 170** P **P** **11 58 11.5 +2.8**
SBA *PP **pP** **11 58 19.4 +0.2**
SBA MLR MLR
comp=Z,41µm,20.0s
**AB31 Akbulak array 75.58 326** *i* P **P** **11 58 17.0 -1.1**
**ABKAR Akbulak array 75.58 326** P **P** **11 58 16.5 -1.5**
**ABKAR Akbulak array 75.58 326** P **P** **11 58 16.7 -1.4**
ABKAR IAmb IAmb 11 58 45.6
comp=Z,203nm,1.0s
**ATD Arta Tunnel 75.78 284** P **P** **11 58 20.5 +0.5**
ATD IAmb IAmb 11 58 30.4
comp=Z,436nm,1.2s
**ATD Arta Tunnel 75.78 284** LR LR 12 30 50.0
comp=Z,442nm,18.1s,baz=90,slow=35
**ATD Arta Tunnel 75.78 284** P **P** **11 58 21.5 +1.5**
SNR=42
ATD S **S** **12 07 59.4 -1.0**
**ATD Arta Tunnel 75.78 284** *eP* **P** **11 58 20.6 +0.7**
ATD *eS* **S** **12 08 01.7 +1.3**
**KBD Kabd 75.88 303** P **P** **11 58 18.9 -1.2**
KBD S **S** **12 07 54.2 -6.7**
**RAYN Ar Rayn 76.13 297** P **P** **11 58 20.3 -1.5**
**RAYN Ar Rayn 76.13 297** *i* P **P** **11 58 19.8 -2.0**
SNR=60
**RAYN Ar Rayn 76.13 297** P **P** **11 58 21.2 -0.6**
RAYN S **S** **12 07 57.9 -6.0**
**RAYN Ar Rayn 76.13 297** P **P** **11 58 20.3 -1.5**
RAYN pmax pmax
comp=Z,168nm,0.9s
**SEY Seymchan 76.24 16** LR LR 12 34 34.0
comp=Z,9µm,20.5s,baz=240,slow=38
**SEY Seymchan 76.24 16***ceP* **P** **11 58 21.6 +0.1**
SEY pmax pmax
comp=Z,503nm,1.6s
**AKTO Aktyubinsk 77.26 326** P **P** **11 58 26.8 -0.8**
comp=Z,64nm,0.9s,baz=119,slow=4.7,SNR=69
AKTO S **S** **12 08 16.1 +0.9**
comp=Z,3.1nm,0.8s,baz=285,slow=15,SNR=1.9
AKTO LR LR 12 38 15.6
comp=Z,71µm,19.0s,baz=138,slow=40
comp=Z,64nm,0.9s
**SHEM Shemya Is, Ala 78.05 32** LR LR 12 36 51.5
comp=Z,3µm,18.1s,baz=240,slow=39
**KIBK Kibwezi 78.16 269** P **P** **11 58 34.2 +0.7**
KIBK IAMs_20 IAMs_20 12 30 02.4
comp=Z,47µm,21.0s
**KIBK Kibwezi 78.16 269** P **P** **11 58 33.4 -0.1**
**KIBK Kibwezi 78.16 269** P **P** **11 58 34.7 +1.2**
SNR=57
KIBK S **S** **12 08 23.1 -3.5**
**KMBO Kilima Mbogo 79.11 270** P **P** **11 58 39.2 +0.3**
**KMBO Kilima Mbogo 79.11 270** IAMs_20 IAMs_20 12 27 47.7
comp=Z,43µm,22.0s
**KMBO Kilima Mbogo 79.11 270** *i* P **P** **11 58 39.3 +0.3**
SNR=31
**KMBO Kilima Mbogo 79.11 270** P **P** **11 58 40.5 +1.5**
KMBO P **P** **11 58 40.5 +1.5**
KMBO S **S** **12 08 37.4 +0.3**
KMBO S **S** **12 08 37.4 +0.3**
**KMBO Kilima Mbogo 79.11 270** *eP* **P** **11 58 39.9 +1.0**
**KMBO Kilima Mbogo 79.11 270** P **P** **11 58 39.2 +0.3**
KMBO pmax pmax
comp=Z,280nm,1.3s
**FURI Furi 79.31 281** P **P** **11 58 41.9 +1.9**
**FURI Furi 79.31 281** LR LR 12 29 53.5
comp=Z,55µm,21.9s,baz=98,slow=33
**FURI Furi 79.31 281** *eP* **P** **11 58 42.1 +2.1**
FURI *eS* **S** **12 08 41.0 +1.8**
FURI IAMs_20 IAMs_20 12 29 23.6
comp=Z,64µm,22.7s
**SVE Sverdlovsk 79.32 332***d i*P **P** **11 58 37.6 -1.2**
SVE *eS* **S** **12 08 33.2 -3.8**
SVE *eSS* **SS** **12 13 44.7 0.0**
SVE pmax pmax
comp=Z,305nm,1.1s
**ARU Arti 80.07 331** P **P** **11 58 41.9 -1.0**
**ARU Arti 80.07 331** P **P** **11 58 41.8 -1.0**
comp=Z,42nm,1.0s,baz=122,slow=3.4,SNR=28
ARU S **S** **12 08 40.9 -4.1**
comp=Z,1.8nm,0.4s,baz=278,slow=22,SNR=1.5
ARU LR LR 12 39 18.9
comp=Z,46µm,19.7s,baz=124,slow=40
comp=Z,42nm,1.0s
**ARU Arti 80.07 331***c i*P **P** **11 58 41.7 -1.2**
ARU S **S** **12 08 47.0 +2.0**
ARU pmax pmax
comp=Z,108nm,1.4s
**TIXI Tiksi 80.27 4** P **P** **11 58 42.5 -1.1**
**TIXI Tiksi 80.27 4** IAMs_20 IAMs_20 12 40 58.4
comp=Z,42µm,19.0s
**TIXI Tiksi 80.27 4** LR LR 12 38 16.9
comp=Z,31µm,19.4s,baz=226,slow=39
**TIXI Tiksi 80.27 4***c i*P **P** **11 58 41.6 -2.0**
TIXI pmax pmax
comp=Z,419nm,1.2s
**MAK Makhachkala 80.60 316***d i*P **P** **11 58 44.6 -1.4**
MAK *e* 12 01 49.2
MAK *ePPP* PPP 12 03 38.6
MAK *eS* **S** **12 08 46.9 -4.2**
MAK *eSS* **SS** **12 14 07.8 +3.4**
MAK pmax pmax
comp=Z,468nm,2.1s
MAK MLR MLR
comp=N,55µm,19.0s
MAK MLR MLR
comp=Z,63µm,19.0s
MAK MLR MLR
comp=E,57µm,19.0s
**RAR Rarotonga 81.29 110** P **P** **11 58 52.4 +2.2**
**RAR Rarotonga 81.29 110** LR LR 12 32 50.5
comp=E,4µm,22.0s,baz=258,slow=34
**POGA Pongola 81.53 244** P **P** **11 58 52.8 +1.4**
POGA IAmb IAmb 11 59 10.2
comp=Z,486nm,0.8s
POGA IAMs_20 IAMs_20 12 29 50.9
comp=Z,31µm,20.0s
**GNI Garni 81.62 313** P **P** **11 58 51.3 -0.5**
**GNI Garni 81.62 313** IAMs_20 IAMs_20 12 39 26.4
comp=Z,39µm,21.0s
**GNI Garni 81.62 313** P **P** **11 58 50.3 -1.5**
**GNI Garni 81.62 313** P **P** **11 58 50.0 -1.7**
comp=Z,5.4nm,0.3s,baz=226,slow=1.6,SNR=11
GNI LR LR 12 40 07.7
comp=Z,36µm,19.8s,baz=110,slow=39
comp=Z,5.4nm,0.3s
**GNI Garni 81.62 313** P **P** **11 58 51.8 +0.1**
GNI P **P** **11 58 51.8 +0.1**
GNI S **S** **12 09 00.1 -2.1**
GNI S **S** **12 09 00.1 -2.1**
**GNI Garni 81.62 313***ceP* **P** **11 58 51.1 -0.7**
GNI pmax pmax
comp=Z,239nm,1.2s
GNI MLR MLR
comp=Z,39µm,20.0s
**GNI Garni 81.62 313** P **P** **11 58 51.4 -0.4**
comp=Z,127nm,1.4s,comp=Z,5µm
**QSPA South Pole Qui 81.63 180** P **P** **11 58 52.2 +0.9**
QSPA IAmb IAmb 11 59 09.1
comp=Z,554nm,1.1s
**QSPA South Pole Qui 81.63 180** P **P** **11 58 52.7 +1.4**
comp=Z,172nm,1.0s,baz=316,slow=1.9,SNR=236
QSPA S **S** **12 09 05.6 +4.3**
comp=Z,8.4nm,1.0s,baz=197,slow=18,SNR=2.7
QSPA PKKPbc **PKKPbc** **12 17 26.9 0.0**
comp=Z,4.4nm,1.0s,baz=238,slow=1.7,SNR=3.9
QSPA PKPPKP **P'P'df** **12 25 28.1 -1.5**
comp=Z,6.9nm,1.1s,baz=206,slow=1.5,SNR=7.5
QSPA LR LR 12 31 17.8
comp=Z,67µm,21.6s,baz=328,slow=33
comp=Z,172nm,1.0s
**LODK Lodwar 81.66 275** P **P** **11 58 53.1 +0.7**
LODK IAMs_20 IAMs_20 12 32 51.0
comp=Z,33µm,21.0s
**LODK Lodwar 81.66 275** P **P** **11 58 53.4 +1.0**
SNR=73

LODK S **S** **12 09 06.1 +2.7**
**LODK Lodwar 81.66 275** *e*P **P** **11 58 53.2 +0.7**
LODK *e*S **S** **12 09 06.2 +2.8**
**PDHT Panda Hill 82.03 262** *i* P **P** **11 58 55.8 +1.3**
**KZRT Kazreti 82.26 314** P **P** **11 58 54.8 -0.1**
**TRLG Trialeti 82.52 314** P **P** **11 58 56.1 -0.3**
**ADK Adak 82.69 35** P **P** **11 59 01.2 +4.4**
**ADK Adak 82.69 35** P **P** **11 58 56.8 0.0**
**ADK Adak 82.69 35** P **P** **11 58 56.8 0.0**
ADK pmax pmax
comp=Z,358nm,1.5s
**KARS Kars 82.98 313** P **P** **11 58 59.1 +0.3**
**KARS Kars 82.98 313** P **P** **11 58 59.1 +0.3**
KARS pmax pmax
comp=Z,1μm,1.1s
**ELIB Princess Elisa 83.06 198** *d*P **P** **11 59 01.2 +2.5**
comp=Z,297nm,1.1s
**GURO Guroymak-BITLI 83.15 310** P **P** **11 58 59.9 +0.2**
GURO IAMs_20 IAMs_20 12 39 53.1
comp=Z,26μm,22.0s
**BILL Bilibino 83.91 17** P **P** **11 59 01.9 -0.9**
BILL IAMs_20 IAMs_20 12 43 40.0
comp=Z,18μm,19.0s
**BILL Bilibino 83.91 17***c i*P **P** **11 59 01.7 -1.1**
BILL *i* 12 02 14.1
BILL pmax pmax
comp=Z,145nm,1.3s
**BELG Belogornoye 83.96 325** P **P** **11 59 01.1 -2.2**
comp=Z,142nm,1.1s,baz=325,slow=1.7,SNR=25
BELG PP **PP** **12 02 20.5 +3.1**
comp=Z,57nm,1.0s,baz=91,slow=13,SNR=1.2
BELG S **SKSac** **12 09 19.1 -5.0**
comp=Z,5.4nm,0.4s,baz=15,slow=6.7,SNR=1.7
BELG LR LR 12 41 14.2
comp=Z,32μm,19.4s,baz=107,slow=39
comp=Z,142nm,1.1s
**BELG Belogornoye 83.96 325***c i*P **P** **11 59 01.7 -1.6**
BELG pmax pmax
comp=Z,158nm,1.2s
**KBZ Khabaz 84.03 316** P **P** **11 59 02.3 -1.6**
comp=Z,30nm,1.2s,baz=86,slow=3.9,SNR=20
KBZ S **SKSac** **12 09 20.3 -4.6**
comp=Z,3.2nm,1.0s,baz=234,slow=3.1,SNR=1.6
KBZ PKKPbc **PKKPbc** **12 17 20.7 +0.5**
comp=Z,8.3nm,0.9s,baz=253,slow=1.1,SNR=8.9
KBZ PKPPKP **P'P'df** **12 25 25.5 +1.9**
comp=Z,1.4nm,0.8s,baz=64,slow=15,SNR=2.2
KBZ LR LR 12 42 28.7
comp=Z,22μm,18.9s,baz=110,slow=40
comp=Z,30nm,1.2s
**KBZ Khabaz 84.03 316***c i*P **P** **11 59 03.1 -0.8**
**SHA1 Shidzhatmaz 84.20 316***c i*P **P** **11 59 04.2 -0.9**
**KIV Kislovodsk 84.24 316** P **P** **11 59 04.0 -1.2**
KIV IAmb IAmb 11 59 57.5
comp=Z,575nm,1.8s
**KIV Kislovodsk 84.24 316** *i* P **P** **11 59 04.5 -0.7**
SNR=28
**KIV Kislovodsk 84.24 316** P **P** **11 59 05.0 -0.2**
KIV P **P** **11 59 05.0 -0.2**
KIV S **SKSac** **12 09 25.0 -1.6**
KIV S **SKSac** **12 09 25.0 -1.6**
**KIV Kislovodsk 84.24 316** ⇑P **P** **11 59 03.9 -1.2**
**KIV Kislovodsk 84.24 316** *e*P **P** **11 59 03.6 -1.6**
KIV *e* 12 02 18.1
KIV *e* 12 09 26.1
KIV *e*SSS SSS 12 18 28.8
KIV pmax pmax
comp=Z,955nm,4.9s
KIV pmax pmax
comp=Z,37nm,1.0s
**KIV Kislovodsk 84.24 316** P **P** **11 59 04.3 -0.9**
comp=Z,69nm,1.3s,comp=Z,3μm
**BCA Borcka 84.27 313** ⇓P **P** **11 59 04.2 -1.1**
**GOF Gofitskoye 84.33 317***c i*P **P** **11 59 04.0 -1.5**
GOF *e*S **S** **12 09 33.2 +4.0**
**MATP Matopo 85.19 250** LR LR 12 33 50.7
comp=Z,14μm,20.0s,baz=94,slow=33
**KIRV Kirov 85.44 331** P **P** **11 59 10.0 -0.7**
comp=Z,62nm,1.2s,baz=106,slow=4.5,SNR=23
KIRV S **SKSac** **12 09 29.8 -3.6**
comp=Z,5.1nm,0.6s,baz=331,slow=16,SNR=1.9
KIRV LR LR 12 43 12.8
comp=Z,82μm,20.2s,baz=124,slow=40
comp=Z,62nm,1.2s
**KIRV Kirov 85.44 331***c i*P **P** **11 59 08.7 -2.0**
**GRHM Grahamstown, E 85.50 237** P **P** **11 59 13.5 +1.7**
GRHM IAmb IAmb 11 59 46.3
comp=Z,453nm,1.0s
GRHM IAMs_20 IAMs_20 12 28 54.9
comp=Z,36μm,21.0s
**ASF Jabal al Asfar 85.63 303** P **P** **11 59 12.8 +0.3**
comp=Z,58nm,1.2s,baz=31,slow=0.0,SNR=40
ASF LR LR 12 42 11.0
comp=Z,33μm,18.1s,baz=156,slow=39
comp=Z,58nm,1.2s
**MBAR Mbarara 85.63 270** P **P** **11 59 12.9 -0.1**
MBAR IAmb IAmb 11 59 26.1
comp=Z,349nm,1.2s
**MBAR Mbarara 85.63 270** IAMs_20 IAMs_20 12 34 22.5
comp=Z,34μm,20.0s
**MBAR Mbarara 85.63 270** LR LR 12 33 55.7
comp=Z,30μm,19.5s,baz=82,slow=33
**MBAR Mbarara 85.63 270** P **P** **11 59 13.8 +0.9**
MBAR P **P** **11 59 13.8 +0.9**
MBAR S **SKSac** **12 09 39.5 +2.5**
MBAR S **SKSac** **12 09 39.5 +2.5**
**MBAR Mbarara 85.63 270** *e*P **P** **11 59 13.5 +0.5**
MBAR *e*S **SKSac** **12 09 40.3 +3.4**
**MBAR Mbarara 85.63 270***ce*P **P** **11 59 13.7 +0.8**
MBAR pmax pmax
comp=Z,450nm,2.5s
**LABN Labinsk 85.79 316** *e*P **P** **11 59 12.6 -0.2**
LABN *e*S **S** **12 09 44.1 +0.4**
LABN pmax pmax
comp=Z,284nm,1.2s
**MREMI Moremi 85.89 248** *i* P **P** **11 59 16.4 +2.5**
**VSLR Vesyoloye 85.95 315***ce*P **P** **11 59 11.9 -1.7**
VSLR pmax pmax
comp=Z,674nm,1.1s
**ARPR Arapgir-MALATY 86.08 310** P **P** **11 59 14.5 -0.1**
ARPR IAmb IAmb 11 59 59.7
comp=Z,686nm,1.3s
ARPR IAMs_20 IAMs_20 12 42 00.6
comp=Z,36μm,22.0s
**LSZ Lusaka 86.14 255** P **P** **11 59 16.1 +0.8**
LSZ IAmb IAmb 11 59 34.3
comp=Z,401nm,1.1s
**LSZ Lusaka 86.14 255** P **P** **11 59 16.6 +1.3**
LSZ P **P** **11 59 16.6 +1.3**
LSZ S **SKSac** **12 09 40.0 +0.1**
LSZ S **SKSac** **12 09 40.0 +0.1**
**LSZ Lusaka 86.14 255** P **P** **11 59 16.1 +0.8**
LSZ pmax pmax
comp=Z,401nm,1.1s
**BROLN Tlhalogang 86.18 249** *i* P **P** **11 59 16.5 +1.0**
**SOC Sochi 86.20 315** *e*P **P** **11 59 11.7 -3.2**
SOC *e* 12 02 34.7
SOC *e*S **SKSac** **12 09 36.7 -2.1**
SOC *e*SS **SS** **12 15 24.1 -3.2**
SOC pmax pmax
comp=Z,124nm,1.0s
**ERBR Yeremizino-Bor 86.25 317** *e*P **P** **11 59 14.7 -0.3**
ERBR *e*S **S** **12 09 49.3 +1.2**
ERBR pmax pmax
comp=Z,482nm,1.6s
**XMAS Kiritimati 86.48 87** P **P** **11 59 19.2 +2.3**
**XMAS Kiritimati 86.48 87** P **P** **11 59 18.0 +1.1**
XMAS IAmb IAmb 11 59 30.2
comp=Z,508nm,1.2s
**GHAJ Ghor Haditha 86.56 302** P **P** **11 59 16.7 -0.1**
**BALJ Balqa 86.66 303** P **P** **11 59 17.6 +0.2**
BALJ IAmb IAmb 11 59 52.0
comp=Z,651nm,1.4s
**EIL Elat 86.75 300** P **P** **11 59 17.7 -0.1**
comp=Z,84nm,1.1s,baz=86,slow=3.4,SNR=25
EIL S **SKSac** **12 09 41.0 -1.8**
comp=Z,5.3nm,1.0s,baz=79,slow=22,SNR=1.1
EIL LR LR 12 40 40.1
comp=Z,48μm,19.1s,baz=104,slow=37
comp=Z,84nm,1.1s
**HWQ Hawqa 86.86 305** *e*P **P** **11 59 17.2 -1.2**
**CLES Cleveland East 86.92 36** IAMs_20 IAMs_20 12 35 51.6
comp=Z,15μm,22.0s
**NVL N'lazarevskaya 86.92 199** *e*P **P** **11 59 18.7 +0.8**
NVL *e*PPP PPP 12 04 42.1
NVL *e*S **SKSac** **12 09 33.2 -9.1**
NVL *e*SS **SS** **12 15 35.3 -0.6**
NVL pmax pmax
comp=Z,260nm,1.2s
NVL MLR MLR
comp=Z,20μm,17.0s
**VRH Novokhopyorsk 87.02 323** *e*P **P** **11 59 17.0 -1.6**
VRH *e* 12 02 48.6
VRH *e*S **SKSac** **12 09 37.1 -6.4**
VRH pmax pmax
comp=Z,390nm,1.8s
VRH smax smax
comp=E,16μm,17.9s
**BHL Bhannes 87.02 305** *e*P **P** **11 59 17.8 -1.5**
**MMAI Mount Meron Ar 87.04 304** P **P** **11 59 19.4 0.0**
comp=E,64nm,1.1s,baz=96,slow=5.5,SNR=16
MMAI S **SKSac** **12 09 43.5 -1.2**
comp=E,0.4nm,0.3s,baz=328,slow=42,SNR=1.4
MMAI LR LR 12 43 01.6
comp=E,58μm,19.4s,baz=54,slow=39
comp=E,64nm,1.1s
**BOSA Boshof 87.06 242** P **P** **11 59 20.8 +1.2**
BOSA IAmb IAmb 11 59 42.4
comp=Z,559nm,1.1s
**BOSA Boshof 87.06 242** P **P** **11 59 19.8 +0.1**
comp=Z,104nm,0.9s,baz=99,slow=4.7,SNR=77
BOSA S **SKSac** **12 09 44.6 -0.6**
comp=Z,1.1nm,0.8s,baz=97,slow=21,SNR=0.8
BOSA LR LR 12 33 55.7
comp=Z,39μm,19.1s,baz=100,slow=33
comp=Z,104nm,0.9s
**BOSA Boshof 87.06 242** P **P** **11 59 20.8 +1.2**
BOSA pmax pmax
comp=Z,559nm,1.1s
**LBTB Lobatse 87.25 245** P **P** **11 59 21.6 +1.0**
LBTB IAmb IAmb 11 59 43.4
comp=Z,316nm,1.0s
**LBTB Lobatse 87.25 245** LR LR 12 31 39.1
comp=Z,31μm,21.6s,baz=98,slow=31
**LBTB Lobatse 87.25 245** P **P** **11 59 21.6 +1.0**
LBTB pmax pmax
comp=Z,316nm,1.0s
**SOOWA Sowa 87.29 250** *i* P **P** **11 59 23.5 +2.6**
**NIKH Nikolski High 87.56 36** P **P** **11 59 20.0 -1.2**
baz=253
**MAKGR Makgori 87.85 244** *i* P **P** **11 59 26.1 +2.6**
**BNN Bunyan 87.92 310** P **P** **11 59 22.8 -0.7**
**SPIA Saint Paul Isl 88.09 31** P **P** **11 59 22.9 -0.7**
baz=252
**ANN Anapa 88.10 316** *e*P **P** **11 59 21.3 -2.7**
ANN *e* 12 02 49.9
ANN *e*S **SKSac** **12 09 46.0 -4.3**
ANN pmax pmax
comp=Z,287nm,1.6s
**P08K Saint George I 88.27 32** P **P** **11 59 23.9 -0.6**
baz=252
**VORD Divnogorie 88.42 322** *e*P **P** **11 59 23.4 -2.0**
VORD *e* 12 02 51.4
VORD pmax pmax
comp=Z,200nm,1.5s
**VSR Storozhevoye 88.56 322** *e*P **P** **11 59 24.1 -1.9**
VSR *e* 12 02 51.4
VSR *e*S SKSac 12 09 41.9 -11
VSR pmax pmax
comp=Z,290nm,1.6s
VSR smax smax
comp=E,17μm,18.6s
**VORR Voronezh 88.66 323** *e*P **P** **11 59 24.7 -1.8**
VORR *e* 12 02 56.2
VORR *e*S **SKSac** **12 09 42.9 -10**
VORR pmax pmax
comp=Z,340nm,1.5s
**SKOMA Sekoma 88.82 246** *i* P **P** **11 59 25.6 -2.4**
**PHDHD Phuduhudu 88.90 250** *i* P **P** **11 59 31.0 +2.5**
**KIP Kipapa 88.93 68** P **P** **11 59 30.7 +2.3**
**KIP Kipapa 88.93 68**⇑*e*P **P** **11 59 27.3 -1.1**
KIP pmax pmax
comp=Z,118nm,1.4s
KIP MLR MLR
comp=Z,2μm,19.0s
**DIKM Dikmen 88.95 312** ⇑P **P** **11 59 26.7 -1.4**
**LPSR Galich'ya Gora 89.07 323** *e*P **P** **11 59 26.2 -2.2**
LPSR *e* 12 02 53.3
LPSR *e*S **SKSac** **12 09 52.4 -3.4**
LPSR pmax pmax
comp=Z,110nm,0.9s
LPSR smax smax
comp=E,17μm,19.6s
**CSS Mathiatis 89.11 305** P **P** **11 59 27.3 -1.8**
CSS IAmb IAmb 12 00 19.1
comp=Z,166nm,1.0s
**UNV Unalaska Valle 89.16 35** P **P** **11 59 32.5 +3.8**
**UNV Unalaska Valle 89.16 35** P **P** **11 59 28.0 -0.7**
baz=255
**TROLL Troll, Antarti 89.27 197** ⇑P **P** **11 59 31.8 +2.6**
comp=Z,9μm,0.8s
TROLL ⇓SKSac **SKSac** **12 09 57.9 +1.1**
comp=Z,243nm,0.9s
**CKGRV CKGRV 89.43 249** *i* P **P** **11 59 32.9 +1.9**
**GAMB Gambell 89.58 25** P **P** **11 59 30.4 -0.1**
baz=250
**PHPEN Phepeng 89.64 244** *i* P **P** **11 59 31.8 -0.1**
**BR131 Keskin Array S 89.77 310** P **P** **11 59 30.9 -1.3**
BR131 IAmb IAmb 12 00 24.4
comp=Z,473nm,1.9s
**BR131 Keskin Array S 89.77 310** P **P** **11 59 31.0 -1.2**
SNR=51
BR131 P **P** **11 59 31.0 -1.2**
SNR=51
BR131 S **SKSac** **12 09 59.4 -1.5**
BR131 S **SKSac** **12 09 59.4 -1.5**
**BR131 Keskin Array S 89.77 310***c i*P **P** **11 59 30.6 -1.6**
**BRTR Keskin Array B 89.77 310** P **P** **11 59 30.2 -2.0**
**BRTR Keskin Array B 89.77 310** P **P** **11 59 29.9 -2.4**
comp=Z,18nm,1.0s,baz=118,slow=4.6,SNR=29
BRTR S **SKSac** **12 09 56.8 -4.1**
comp=Z,1.1nm,0.8s,baz=78,slow=1.6,SNR=1.4
BRTR PKKPbc **PKKPbc** **12 17 05.7 -0.7**
comp=Z,2.6nm,0.9s,baz=208,slow=3.5,SNR=4.6
BRTR PKPPKP **P'P'df** **12 25 14.1 +0.3**
comp=Z,0.5nm,0.7s,baz=278,slow=1.0,SNR=2.1
BRTR LR LR 12 44 40.7
comp=Z,26μm,20.2s,baz=120,slow=39
comp=Z,18nm,1.0s
**BRTR Keskin Array B 89.77 310** P **P** **11 59 30.2 -2.0**
**BR105 Keskin Array S 89.78 310** P **P** **11 59 31.3 -1.0**
comp=Z,74nm,1.1s,comp=Z,659nm
**BR106 Keskin Array S 89.79 310** P **P** **11 59 31.4 -0.9**
comp=Z,69nm,1.1s,comp=Z,635nm
**BZK Bozkurt 89.93 312** ⇑P **P** **11 59 31.3 -1.4**
**SUR Sutherland 90.27 237** LR LR 12 34 08.6
comp=Z,35μm,21.6s,baz=108,slow=32
**SUR Sutherland 90.27 237** P **P** **11 59 36.4 +1.6**
SUR P **P** **11 59 36.4 +1.6**
**SIM Simferopol' 90.43 315***j i*P **P** **11 59 33.5 -1.5**
SIM *e*S **S** **12 10 27.0 -0.8**
SIM pmax pmax
comp=Z,110nm,1.1s
**ANTO Ankara 90.44 310** IAMs_20 IAMs_20 12 44 08.9
comp=Z,23μm,21.0s
**ANTO Ankara 90.44 310** P **P** **11 59 34.6 -0.6**
ANTO S **SKSac** **12 10 02.0 -2.6**
**ANTO Ankara 90.44 310** ⇑P **P** **11 59 33.6 -1.6**
**ANTO Ankara 90.44 310** ⇑P **P** **11 59 33.6 -1.6**
**TBI Tubuai 90.49 114** *e*P **P** **11 59 38.0 +2.3**
comp=Z,17μm,33.2s
**TBI Tubuai 90.49 114** *e*P **P** **11 59 38.9 +3.2**
comp=Z,572nm,1.3s
**TBI Tubuai 90.49 114** *e*PP **PP** **12 03 08.8 -1.8**
comp=Z,11μm,31.2s
TBI *e*S **S** **12 10 31.0 +1.8**
comp=Z,6μm,25.4s
TBI *e*S **ScS** **12 10 34.2 +1.3**
comp=Z,32μm,29.2s
TBI *e*SS **SS** **12 16 21.2 -9.1**
comp=Z,81μm,37.0s
TBI *e*LQ LQ 12 24 41.8
comp=Z,253μm,40.0s
TBI *e*LR LR 12 28 32.1
comp=Z,23μm,21.6s
TBI *e*LR LR 12 28 33.7
comp=Z,78μm,22.0s
TBI *e*LR LR 12 28 36.6
comp=Z,22μm,22.5s
**MOS Moscow 90.59 326** *e*P **P** **11 59 31.3 -4.1**
MOS *e* 12 03 10.8
MOS *e* 12 09 59.4
MOS *e*S **S** **12 10 22.2 -6.5**
MOS *e*PS **PS** **12 11 35.2 -4.8**
MOS pmax pmax
comp=Z,500nm,2.2s
MOS pmax pmax
comp=Z,188nm,1.8s
**SNAA Sanae 90.91 196** ⇑P **P** **11 59 39.1 +2.3**
comp=Z,58μm,2.4s
SNAA ⇑SKSac **SKSac** **12 10 06.6 +0.4**
comp=Z,2μm,2.1s
**SNAA Sanae 90.91 196** P **P** **11 59 38.5 +1.6**
comp=Z,106nm,0.8s,baz=115,slow=3.2,SNR=337
SNAA PP **PP** **12 03 11.6 -1.0**
comp=Z,42nm,1.1s,baz=123,slow=5.1,SNR=2.8
SNAA S **SKSac** **12 10 04.2 -2.0**
comp=Z,1.6nm,1.0s,baz=239,slow=20,SNR=0.7
SNAA PKKPbc **PKKPbc** **12 17 03.7 -0.5**
comp=Z,7.6nm,1.1s,baz=286,slow=7.5,SNR=3.4
SNAA PKPPKP **P'P'df** **12 25 09.9 -2.4**
comp=Z,2.8nm,1.0s,baz=285,slow=4.4,SNR=6.1
SNAA LR LR 12 34 37.3
comp=Z,71μm,21.6s,baz=102,slow=32
comp=Z,106nm,0.8s
**SNAA Sanae 90.91 196***ce*P **P** **11 59 38.9 +2.1**
SNAA pmax pmax
comp=Z,686nm,2.5s
**POHA Pohakuloa 90.97 70** P **P** **11 59 40.7 +2.4**
**OBN Obninsk 91.03 326** P **P** **11 59 35.2 -2.2**
comp=Z,15nm,0.5s,baz=89,slow=4.4,SNR=9.3
OBN PP **PP** **12 03 09.4 -4.8**
comp=Z,9.8nm,0.4s,baz=345,slow=21,SNR=1.1
OBN S **SKSac** **12 10 03.0 -4.0**
comp=Z,16nm,0.4s,baz=138,slow=22,SNR=1.7
OBN LR LR 12 48 00.4
comp=Z,50μm,18.2s,baz=101,slow=40
comp=Z,15nm,0.5s
**OBN Obninsk 91.03 326***c i*P **P** **11 59 35.3 -2.2**
OBN *i* 12 03 17.0
OBN *i*S **SKSac** **12 10 00.6 -6.4**
OBN *i* 12 59 46.8
OBN *i* 12 59 57.2
OBN pmax pmax
comp=Z,316nm,1.2s
**OBN Obninsk 91.03 326** P **P** **11 59 36.6 -0.9**
comp=Z,152nm,1.4s,comp=Z,3μm
**M11K Mekoryuk 91.03 29** P **P** **11 59 37.3 0.0**
baz=255
**FALS False Pass 91.16 35** P **P** **11 59 41.5 +3.4**
**FALS False Pass 91.16 35** P **P** **11 59 37.0 -1.0**
baz=257
**PAE Paea 91.28 108** *e*PKP1 P 11 59 48.8 +9.3
comp=Z,99nm,1.2s
**PAE Paea 91.28 108** *e*S **S** **12 10 33.5 -3.1**
comp=Z,853nm,23.1s
**PAE Paea 91.28 108** *e*LR LR 12 28 54.9
comp=Z,2μm,23.4s
**PPT2 Papeete2 91.30 108** *e*PKP1 **P** **11 59 37.8 -1.9**
comp=Z,5μm,31.5s
**PPT2 Papeete2 91.30 108** *e*P **P** **11 59 43.0 +3.3**
comp=Z,356nm,1.3s
**PPT2 Papeete2 91.30 108** *e*PP **PP** **12 03 18.4 +1.2**
comp=Z,4μm,31.8s
PPT2 *e*S **S** **12 10 34.0 -3.0**
comp=Z,960nm,22.6s
PPT2 *e*S **ScS** **12 10 37.1 -2.8**
comp=Z,5μm,25.2s
PPT2 *e*SS **SS** **12 16 47.3 +4.9**
comp=Z,11μm,33.0s
PPT2 *e*LQ LQ 12 25 08.2
comp=Z,101μm,41.0s
PPT2 *e*LR LR 12 28 52.8
comp=Z,11μm,25.8s
PPT2 *e*LR LR 12 28 55.9
comp=Z,4μm,23.4s
PPT2 *e*LR LR 12 28 59.6
comp=Z,14μm,24.2s
**PPT Papeete 91.30 108** P **P** **11 59 41.0 +1.4**
comp=Z,141nm,1.0s,baz=322,slow=3.0,SNR=7.3
PPT LR LR 12 38 04.5
comp=Z,3μm,21.6s,baz=258,slow=34
comp=Z,141nm,1.0s
**PPTF Pamatai, Papee 91.31 108** P **P** **11 59 43.3 +3.6**
**TVO Taravao 91.57 108** *e*PKP1 **P** **11 59 44.7 +3.8**
comp=Z,0.1nm,0.9s
**TNA Tin City 91.69 24** P **P** **11 59 40.1 -0.2**
baz=254
**S12K Black Hills 92.09 34** P **P** **11 59 41.0 -1.4**
baz=258
**K13K Kusilvak Mount 92.15 28** P **P** **11 59 42.7 +0.2**
baz=256
**ADZR Andozero 92.27 334** *e*P **P** **11 59 41.9 -1.1**
ADZR pmax pmax
comp=Z,86nm,1.4s
**F14K Arctic Creek 92.30 24** P **P** **11 59 43.1 -0.1**
baz=255
**M13K Dall Lake 92.42 29** P **P** **11 59 44.0 +0.3**
baz=257
**ANM Nome 92.47 25** P **P** **11 59 43.4 -0.5**
baz=256
**VNA2 Neumayer--Watz 92.55 196** ⇑P **P** **11 59 46.5 +2.2**
comp=Z,226nm,0.9s,baz=121,slow=4.0
VNA2 ⇑SKSac **SKSac** **12 10 14.9 -0.5**
comp=Z,2613μm,0.0s,baz=199,slow=11
**J14K Nanavaranak Lak 92.83 27** P **P** **11 59 45.2 -0.4**
baz=257
**SDPT Sand Point 92.91 35** P **P** **11 59 49.9 +3.7**
**SDPT Sand Point 92.91 35** P **P** **11 59 44.7 -1.4**
baz=260
**L14K Kuka Creek 92.93 28** P **P** **11 59 45.2 -0.9**
baz=258
**VNA1 Neumayer--Stat 92.95 196** ⇑P **P** **11 59 49.0 +2.8**
comp=Z,2μm,2.2s
**VNA3 Neumayer Olymp 92.97 195** ⇑P **P** **11 59 48.1 +1.8**
comp=Z,149nm,0.9s
VNA3 ⇓SKSac **SKSac** **12 10 17.1 -0.6**
comp=Z,201μm,0.0s
**F15K North Star Dit 93.04 24** P **P** **11 59 46.1 -0.5**
baz=256
**G15K Niukluk 93.12 25** P **P** **11 59 46.3 -0.6**
baz=257
**N14K Kuskokwak Cree 93.13 30** P **P** **11 59 46.5 -0.6**
baz=259
**M14K Bethel 93.16 29** P **P** **11 59 46.6 -0.6**
baz=259
**O14K Tigyukauivet M 93.21 31** P **P** **11 59 47.1 -0.4**
baz=259
**PMOR Pomariorio Ree 93.31 106** *e*P **P** **11 59 51.0 +2.1**
comp=Z,455nm,1.4s
**PMOR Pomariorio Ree 93.31 106** *e*PP PP 12 03 18.1 -15
comp=Z,1μm,22.2s
PMOR *e*S **S** **12 10 53.8 -1.0**
comp=Z,7μm,24.5s
**PMOR Pomariorio Ree 93.31 106** *e*LR LR 12 29 51.8
comp=Z,12μm,22.7s
**CHNA Chernabura Isl 93.32 35** P **P** **11 59 48.1 0.0**
baz=260
**C16K Lisburne Hills 93.38 21** P **P** **11 59 47.9 -0.2**
baz=256,SNR=23
**ARG Arkhangelos 93.50 306** IAMs_20 IAMs_20 12 45 32.6
comp=Z,22μm,21.0s
**ARG Arkhangelos 93.50 306** P **P** **11 59 48.4 -1.0**
**VAH Vaihoa 93.52 106** *e*P **P** **11 59 51.3 +1.4**
comp=Z,369nm,1.3s
**VAH Vaihoa 93.52 106** *e*PP **PP** **12 03 30.9 -3.8**
comp=Z,8μm,36.2s
VAH *e*S **S** **12 10 52.0 -4.7**
comp=Z,7μm,24.1s
**VAH Vaihoa 93.52 106** *e*LR LR 12 29 55.0
comp=Z,14μm,22.3s
**L15K Ungalak Mounta 93.56 28** P **P** **11 59 48.4 -0.6**
baz=259
**K15K Wolf Creek Mou 93.66 28** P **P** **11 59 49.2 -0.3**
baz=259
**M15K Kasigluk River 93.76 29** P **P** **11 59 49.5 -0.5**
baz=260
**H16K Elim 93.80 25** P **P** **11 59 49.8 -0.3**
baz=259
**G16K Koyuk River 93.90 25** P **P** **11 59 50.7 +0.2**
baz=259
**O15K Ungalikthiuk R 93.93 31** P **P** **11 59 50.5 -0.3**
baz=260
**N15K Kwethluk River 93.96 30** P **P** **11 59 50.7 -0.2**
baz=260
**D17K Noatak River 94.08 22** P **P** **11 59 51.7 +0.4**
baz=258,SNR=27
**C17K DeLong Mountai 94.21 21** P **P** **11 59 51.9 0.0**
baz=258,SNR=13

RDOG **Red Dog Mine** 94.22 22 P P 11 59 52.3 +0.3
baz=258
J16K **Anvik River** 94.26 27 P P 11 59 52.6 +0.3
baz=260
I17K **Unalakleet** 94.32 26 P P 11 59 53.0 +0.5
baz=260
MILM **Milestii Mici** 94.40 317 eP P 11 59 50.0 -3.3
comp=Z,700nm,4.2s
MILM **Milestii Mici** 94.40 317 ePS PS 12 12 15.0 -7.6
MILM eL L 12 36 33.0
MILM LRM MLR 12 48 10.0
comp=Z,15µm,18.0s
MILM **Milestii Mici** 94.40 317 eP P 11 59 50.0 -3.3
MILM i 12 10 22.0
MILM eS S 12 10 58.0 -5.2
MILM ePS PS 12 12 15.0 -7.6
MILM pmax pmax
comp=Z,700nm,4.2s
KIS **Kishinev** 94.41 317 eP P 11 59 50.0 -3.3
comp=Z,500nm,6.9s
KIS eSKS SKSac 12 10 24.0 -2.2
KIS eSKKS SKKSac 12 10 37.0 -11
KIS eS S 12 10 59.0 -4.3
KIS **Kishinev** 94.41 317 ePS PS 12 12 16.0 -6.7
KIS eL L 12 36 24.0
KIS LQM 12 43 20.0
comp=Z,8µm,24.5s
KIS LRM MLR 12 48 08.0
comp=Z,7µm,19.0s
KIS **Kishinev** 94.41 317 eP P 11 59 50.0 -3.3
KIS e 12 10 24.0
KIS eS S 12 10 59.0 -4.3
KIS ePS PS 12 12 16.0 -6.7
KIS pmax pmax
comp=Z,500nm,6.9s
TPGR **Topolog** 94.41 315 ⇑P P 11 59 51.5 -1.9
PSN **Preselentsi** 94.46 313 i P P 11 59 53.0 -0.6
L16K **Owhat River** 94.51 28 P P 11 59 53.2 -0.2
baz=261
F17K **Baldwin Pennin** 94.55 24 P P 11 59 53.2 -0.3
baz=260
AK09 **Malin Array Si** 94.58 320 P P 11 59 52.3 -1.7
AK10 **Malin Array Si** 94.59 320 P P 11 59 52.2 -1.8
AK08 **Malin Array Si** 94.60 320 P P 11 59 52.3 -1.7
AK07 **Malin Array Si** 94.62 320 P P 11 59 52.4 -1.8
G17K **Kiwalik Mounta** 94.62 25 P P 11 59 53.9 0.0
baz=260
AKASG **Malin Array Be** 94.63 320 P P 11 59 51.5 -2.7
AKASG **Malin Array Be** 94.63 320 P P 11 59 52.0 -2.2
comp=Z,6.1nm,0.9s,baz=82,slow=4.4,SNR=16
AKASG PP PP 12 03 42.6 0.0
comp=Z,2.5nm,0.6s,baz=75,slow=6.0,SNR=1.8
AKASG S SKSac 12 10 23.0 -4.2
comp=Z,0.3nm,0.5s,baz=360,slow=34,SNR=1.2
AKASG PKKPbc PKKPdf 12 16 52.9 -0.9
comp=Z,1.1nm,0.6s,baz=275,slow=3.8,SNR=4.9
AKASG PKPPKP P'P'df 12 25 03.7 +0.1
comp=Z,0.1nm,0.2s,baz=299,slow=1.9,SNR=1.3
AKASG LR LR 12 48 29.3
comp=Z,16µm,20.8s,baz=86,slow=39
comp=Z,6.1nm,0.9s
AKASG **Malin Array Be** 94.63 320 P P 11 59 52.0 -2.2
AKBB **Malin Array Si** 94.63 320 eP P 11 59 52.2 -2.0
AKBB **Malin Array Si** 94.63 320 P P 11 59 52.4 -1.8
AK02 **Malin Array Si** 94.63 320 P P 11 59 52.2 -2.0
KIEV **Kiev** 94.64 320 IAMs_20 IAMs_20 12 48 37.7
comp=Z,33µm,21.0s
KIEV **Kiev** 94.64 320 ⇑P P 11 59 51.8 -2.4
KIEV **Kiev** 94.64 320 ⇑P P 11 59 51.8 -2.4
KIEV **Kiev** 94.64 320 P P 11 59 52.3 -1.9
comp=Z,107nm,1.7s,comp=Z,6µm
M16K **Timber Creek** 94.65 29 P P 11 59 54.2 +0.1
baz=261
N16K **Nishlik Lake** 94.66 30 P P 11 59 53.9 -0.3
baz=261
AK18 **Malin Array Si** 94.73 320 P P 11 59 52.7 -1.9
AK19 **Malin Array Si** 94.76 320 P P 11 59 52.9 -1.9
AK20 **Malin Array Si** 94.77 320 P P 11 59 52.8 -2.0
H17K **Granite Mounta** 94.83 25 P P 11 59 54.7 -0.1
baz=261
P16K **Nushagak River** 94.84 31 P P 11 59 54.4 -0.6
baz=262
O16K **Kokwok River B** 94.87 31 P P 11 59 54.7 -0.4
baz=262
SORM **Soroca** 94.87 318 ⇑P P 11 59 53.9 -1.4
SORM **Soroca** 94.87 318 ⇑P P 11 59 53.9 -1.4
B18K **Kokolik River** 94.88 21 P P 11 59 55.5 +0.6
baz=259,SNR=7.6
PRD **Provadia** 94.93 313 i P P 11 59 53.5 -2.2
J17K **VABM Dome** 94.95 27 P P 11 59 55.4 -0.1
baz=261
C18K **Utukok River** 94.96 21 P P 11 59 55.5 +0.1
baz=260,SNR=26
E18K **Tukpahlearik C** 94.97 23 P P 11 59 55.6 +0.2
baz=260
APA **Apatity** 95.00 338 ⇓i P P 12 00 02.9 +7.4
APA i 12 03 42.0
APA i 12 10 25.0
APA i PS PS 12 17 26.0 -7.2
APA i SS SS
APA pmax pmax
comp=Z,13nm,0.8s
L17K **Donlin** 95.13 28 P P 11 59 56.6 +0.4
baz=262
JOF **Joensuu** 95.15 333 eP P 11 59 54.7 -1.6
F18K **Selawik** 95.20 24 P P 11 59 56.2 -0.3
baz=261,SNR=5.3
K17K **Iditarod** 95.21 27 P P 11 59 56.2 -0.4
baz=262,SNR=6.9
A19K **Wainwright** 95.27 20 P P 11 59 57.3 +0.6
baz=260
O17K **Koliganek Bris** 95.39 30 P P 11 59 57.2 -0.2
baz=263
M17K **Holitna River** 95.43 29 P P 11 59 58.0 +0.3
baz=263
N17K **Nushagak Hills** 95.44 30 P P 11 59 57.9 +0.2
baz=263
LUBAR **Lubar, Ukraine** 95.47 320 P P 11 59 56.1 -2.0
Q16K **King Salmon** 95.48 32 P P 11 59 56.7 -1.2
baz=263
JMB **Yambol** 95.49 312 i P P 11 59 58.2 -0.2
G18K **Tagagawik** 95.50 24 P P 11 59 56.9 -1.0
baz=262,SNR=6.6
R17L **Mt. Peulik Vol** 95.51 33 P P 11 59 57.6 -0.5
baz=263
H18K **Honhosa River** 95.52 25 P P 11 59 57.9 -0.1
baz=262
TSUM **Tsumeb** 95.53 250 IAMs_20 IAMs_20 12 35 08.7
comp=Z,29µm,22.0s
TSUM **Tsumeb** 95.53 250 LR LR 12 42 20.7
comp=Z,11µm,18.1s,baz=94,slow=35
C19K **Lookout Ridge** 95.61 21 P P 11 59 59.0 +0.7
baz=261
P17K **Kvichak River** 95.66 31 P P 11 59 57.8 -0.9
baz=263
ALN **Alexandroupoli** 95.68 310 IAMs_20 IAMs_20 12 51 07.7
comp=Z,25µm,19.0s
ALN **Alexandroupoli** 95.68 310 P P 11 59 57.4 -1.9
CHIR **Chirikof Islan** 95.71 35 P P 11 59 58.0 -1.0
baz=264
VRI **Vrincioaia** 95.71 315 ⇓P P 11 59 57.5 -1.9
VRI **Vrincioaia** 95.71 315 ⇓P P 11 59 57.5 -1.9
VRI **Vrincioaia** 95.71 315 P P 11 59 58.2 -1.1
PLOR **Plostina** 95.77 315 ⇓P P 11 59 57.8 -1.8
PLOR **Plostina** 95.77 315 ⇓P P 11 59 57.8 -1.8
Q17K **Contact Creek** 95.83 32 P P 11 59 58.1 -1.5
baz=264
TESR **Tescani** 95.84 316 ⇓P P 11 59 58.0 -1.8
L18K **Granite Mounta** 95.89 28 P P 11 59 59.5 -0.2
baz=263
MNK **Minsk** 95.89 324 i P P 12 00 00.1 +0.2
MNK i 12 03 51.8
MNK i PPP PPP 12 05 54.2
MNK i 12 10 29.2
MNK i 12 12 40.8
MNK i SSS SSS 12 21 32.6
MNK pmax pmax
comp=N,14nm,0.9s
MNK pmax pmax
comp=E,6.0nm,1.0s
MNK pmax pmax
comp=Z,35nm,0.9s
MNK MLR MLR
comp=N,33µm,19.0s
NEHR **Nehoiu** 95.97 315 ⇓P P 11 59 59.2 -1.3

F19K **Shaleruckik Mo** 95.98 23 P P 11 59 59.7 -0.2
baz=263
SZH **Strazhitsa** 95.98 313 i P P 11 59 59.5 -1.1
IDI **Anoyia** 96.00 305 P P 12 00 02.2 +1.3
IDI **Anoyia** 96.00 305 P P 11 59 58.8 -2.2
comp=N,15nm,1.1s,baz=243,slow=12,SNR=2.1
IDI PP PP 12 03 53.7 -0.1
comp=N,19nm,1.1s,baz=26,slow=13,SNR=2.1
IDI LR LR 12 47 40.6
comp=N,15µm,21.8s,baz=83,slow=38
comp=N,15nm,1.1s
J18K **Innoko River** 96.02 27 P P 11 59 59.6 -0.7
baz=264
ELND **Elena** 96.02 312 ⇓P P 11 59 58.6 -2.2
D19K **Kuna River** 96.06 22 IAMs_20 IAMs_20 12 50 43.3
comp=Z,12µm,22.0s
D19K **Kuna River** 96.06 22 P P 11 59 60.0 -0.4
baz=263
COVR **Voineasa-Covas** 96.08 315 ⇑P P 11 59 58.9 -2.1
GCSA **Galena City Sc** 96.09 26 P P 12 00 00.5 0.0
baz=264
RDO **Rodhopi** 96.09 311 IAMs_20 IAMs_20 12 51 31.6
comp=Z,17µm,19.0s
N18K **Kilae Creek** 96.10 30 P P 12 00 00.3 -0.5
baz=264
G19K **Purcell Mounta** 96.17 24 P P 12 00 00.8 -0.1
baz=263,SNR=16
KMPD **K-Podol'skiy** 96.17 318 P PcP 11 59 59.5 -1.9
KMPD P P 11 59 59.1 -2.2
M18K **Stony River** 96.21 29 P P 12 00 01.3 +0.1
baz=264
MLR **Muntele Rosu** 96.22 315 P P 12 00 00.0 -1.8
comp=Z,2.6nm,0.5s,baz=125,slow=2.0,SNR=8.6
MLR PP PP 12 03 55.1 -0.2
comp=Z,38nm,1.1s,baz=73,slow=7.7,SNR=3.2
MLR S SKSac 12 10 33.6 -2.7
comp=Z,1.5nm,0.4s,baz=205,slow=18,SNR=1.7
MLR LR LR 12 50 07.4
comp=Z,48µm,19.8s,baz=89,slow=40
comp=Z,2.6nm,0.5s
MLR **Muntele Rosu** 96.22 315 ⇑P P 11 59 59.8 -2.0
E19K **Redstone River** 96.26 23 P P 12 00 01.4 +0.1
baz=263
SVW2 **Sparrevohn** 96.29 29 P P 12 00 05.2 +3.6
P18K **Big Mountain,** 96.29 31 P P 12 00 00.1 -1.6
baz=264
Q18K **Katmai Hardscr** 96.33 32 P P 12 00 00.6 -1.3
baz=264
O18K **Koktuh Hills** 96.35 31 P P 12 00 01.1 -0.8
baz=264
H19K **Roundabout Mou** 96.36 25 P P 12 00 01.4 -0.3
baz=264,SNR=15
R18K **Karluk** 96.53 33 P P 12 00 01.6 -1.1
baz=265
J19K **Poorman** 96.56 26 P P 12 00 02.3 -0.5
baz=264,SNR=9.2
B20K **Meade River** 96.57 20 IAMs_20 IAMs_20 12 52 14.6
comp=Z,13µm,20.0s
B20K **Meade River** 96.57 20 P P 12 00 03.0 +0.4
baz=264
SII **Sitkinak Islan** 96.58 34 P P 12 00 06.1 +3.1
SII **Sitkinak Islan** 96.58 34 IAMs_20 IAMs_20 12 40 50.0
comp=Z,12µm,22.0s
SII **Sitkinak Islan** 96.58 34 P P 12 00 02.4 -0.6
baz=265
D20K **Etiluk River** 96.63 22 P P 12 00 03.1 +0.2
baz=264
DOPR **Dopca** 96.65 315 ⇓P P 12 00 01.8 -1.8
L19K **White Mountain** 96.74 28 P P 12 00 03.7 +0.1
baz=265
E20K **Nigu River** 96.74 22 P P 12 00 03.4 -0.1
baz=264
RZN **Rozhen** 96.74 311 i P P 12 00 03.4 -0.9
PLD **Plovdiv** 96.78 312 i P P 12 00 02.1 -2.1
RNPP5 **Staryi Chortor** 96.78 321 P P 12 00 02.1 -1.9
RNPP9 **Sopachiv** 96.79 321 P P 12 00 02.7 -1.3
N19K **Bonanza Creek** 96.80 30 P P 12 00 03.8 -0.2
baz=265
VADS **Vadso** 96.80 340 eP P 12 00 01.0 -2.6
VADS IVmB_BB 12 00 03.7
comp=Z,951nm,2.6s
VADS epP pP 12 00 14.3 +0.2
VADS eSKSac SKSac 12 10 33.4 -4.5
VADS eSS SS 12 18 01.3 +2.8
VADS IVMs_BB IVMs_BB 12 51 09.3
comp=Z,15µm,18.4s
F20K **Avaraart Lake** 96.80 23 P P 12 00 03.5 -0.3
baz=265,SNR=5.8
O19K **Port Alsworth** 96.83 30 P P 12 00 03.4 -0.5
baz=265
VOIR 96.84 315 ⇑P P 12 00 02.5 -2.1
VOIR 96.84 315 ⇑P P 12 00 02.5 -2.1
A21K **Barrow** 96.89 19 P P 12 00 04.8 +0.8
baz=264
BURAR **Bucovina Array** 96.91 317 P P 12 00 03.3 -1.6
BURAR **Bucovina Array** 96.91 317 ⇑P P 12 00 02.5 -2.3
BURAR **Bucovina Array** 96.91 317 P P 12 00 03.3 -1.6
BURAR pmax pmax
comp=Z,24nm,0.9s
M19K **Big River Lodg** 96.93 28 P P 12 00 04.9 +0.4
baz=265
ISAL **Salakas** 96.99 325 eP P 12 00 03.4 -1.5
H20K **Anotleneega Mo** 97.01 25 P Pdif 12 00 04.8 0.0
baz=265
Q19K **Cape Douglas,** 97.07 32 P P 12 00 03.8 -1.4
baz=266
KSV **Kosov** 97.07 318 P P 12 00 03.0 -2.4
KSV **Kosov** 97.07 318 P P 12 00 03.0 -2.4
I20K **Naaghedeneel** 97.12 26 P P 12 00 05.0 -0.2
baz=266
OHAK **Old Harbor** 97.13 33 P Pdif 12 00 09.8 +4.3
OHAK **Old Harbor** 97.13 33 P P 12 00 04.9 -0.5
baz=266
ARR **Arges** 97.13 315 ⇑P P 12 00 03.8 -2.1
K20K **Telida** 97.19 27 P P 12 00 05.5 -0.1
baz=266
L20K **Farewell, AK** 97.22 28 P P 12 00 05.6 -0.1
baz=266
J20K **Nowinta River** 97.22 26 P P 12 00 05.7 0.0
baz=266,SNR=7.6
PGB **Panagyurishte** 97.23 312 i P P 12 00 03.8 -2.5
C21K **Knifeblade Rid** 97.33 21 P Pdif 12 00 06.5 +0.3
baz=266
P19K **Oil Pt** 97.33 31 P P 12 00 05.3 -1.0
baz=266
ARBE **Arbavere** 97.35 329 eP P 12 00 05.1 -1.3
A22K **Sinclair Lake** 97.39 19 P Pdif 12 00 06.8 +0.4
baz=266
B21K **Ikpikpuk River** 97.42 21 P P 12 00 06.4 -0.1
baz=266,SNR=16
FINES **FINESS Array B** 97.44 331 P P 12 00 05.4 -1.3
FINES **FINESS Array B** 97.44 331 P P 12 00 04.9 -1.8
comp=Z,9.3nm,1.0s,baz=54,slow=4.9,SNR=11
FINES PP PP 12 04 01.4 -2.6
comp=Z,35nm,1.3s,baz=137,slow=9.6,SNR=2.2
FINES PKiKP PKiKP 12 04 41.7 +0.3
comp=Z,20nm,1.1s,baz=111,slow=6.1,SNR=2.2
FINES PKKPbc PKKPbc 12 16 45.4 -1.4
comp=Z,2.9nm,0.9s,baz=321,slow=2.4,SNR=3.5
FINES LR LR 12 51 37.1
comp=Z,36µm,18.7s,baz=102,slow=40
comp=Z,9.3nm,1.0s
FINES **FINESS Array B** 97.44 331 P P 12 00 05.4 -1.3
IMAR **Indian Mountai** 97.51 24 P P 12 00 06.2 -0.7
M20K **Styx River** 97.53 29 P P 12 00 06.9 -0.4
baz=266
KDAK **Kodiak Island** 97.54 33 IAMs_20 IAMs_20 12 45 00.4
comp=Z,11µm,22.0s
KDAK **Kodiak Island** 97.54 33 LR LR 12 41 53.2
comp=Z,7µm,21.7s,baz=286,slow=34
KDAK **Kodiak Island** 97.54 33 P P 12 00 07.0 -0.3
baz=266
E21K **Killik River** 97.57 22 IAMs_20 IAMs_20 12 52 40.4
comp=Z,14µm,20.0s
E21K **Killik River** 97.57 22 P P 12 00 07.2 0.0
baz=267
MPEP **Malo Peshtene** 97.61 313 i P P 12 00 07.2 -0.8
G21K **Allakaket** 97.64 24 P Pdif 12 00 07.8 +0.1
baz=267
O20K **Slope Mountain** 97.66 30 P Pdif 12 00 08.0 0.0
baz=267
F21K **Alatna River** 97.69 23 P P 12 00 07.3 -0.5
baz=267
Q20K **Shuyak Island** 97.69 32 P P 12 00 07.1 -0.9
baz=267
LVV **L'vov** 97.86 319 eP P 12 00 07.2 -1.7
LVV e 12 04 02.8
LVV e 12 10 43.3
LVV eS S 12 11 27.3 -5.6
LVV eSS SS 12 18 11.2 -3.3
LVV pmax pmax
comp=Z,200nm,1.8s
VALD **Valchedram** 97.86 313 eP P 12 00 09.0 0.0
B22K **Teshekpuk Lake** 97.87 20 IAMs_20 IAMs_20 12 49 03.1
comp=Z,13µm,22.0s
B22K **Teshekpuk Lake** 97.87 20 P P 12 00 08.2 -0.3
baz=267
H21K **Melozitna Rive** 97.88 25 P P 12 00 08.5 -0.2
baz=267,SNR=9.9
MORS **Morshin** 97.90 319 P P 12 00 07.8 -1.3
MORS **Morshin** 97.90 319 P P 12 00 07.8 -1.3
N20K **Mount Spurr** 97.93 29 P P 12 00 07.6 -1.4
baz=267
VTS **Vitosha** 97.93 312 i P P 12 00 06.4 -3.2
CHUM **Lake Minchumin** 98.01 27 P P 12 00 09.0 -0.2
baz=268
KEF **Keuruu** 98.05 332 eP P 12 00 08.5 -1.0
D22K **Ayikyak River** 98.07 21 IAMs_20 IAMs_20 12 51 09.3
comp=Z,10µm,21.0s
D22K **Ayikyak River** 98.07 21 P Pdif 12 00 09.9 +0.4
baz=268
ARCES **ARCESS Array B** 98.09 339 P Pdif 12 00 10.9 +1.4
ARCES **ARCESS Array B** 98.09 339 P Pdif 12 00 09.8 +0.3
comp=Z,4.6nm,0.9s,baz=232,slow=13,SNR=7.5
ARCES PP PP 12 04 10.2 +1.4
comp=Z,4.2nm,0.9s,baz=16,slow=23,SNR=1.8
ARCES PKKPbc PKKPbc 12 16 45.2 -0.1
comp=Z,1.7nm,0.7s,baz=242,slow=2.6,SNR=3.8
ARCES LR LR 12 52 12.1
comp=Z,65µm,18.1s,baz=110,slow=40
comp=Z,4.6nm,0.9s
ARCES **ARCESS Array B** 98.09 339 P Pdif 12 00 10.9 +1.3
ARCES pmax pmax
comp=Z,89nm,1.3s
HOM **Homer** 98.14 31 P Pdif 12 00 10.2 +0.2
baz=267
MEF **Metsahovi** 98.20 330 eP P 12 00 08.5 -1.7
I21K **Tanana** 98.20 25 P Pdif 12 00 10.3 +0.1
baz=268
F22K **John River** 98.20 23 P Pdif 12 00 10.4 +0.2
baz=268,SNR=7.9
PABE **Paberze** 98.21 325 IAMs_20 IAMs_20 12 49 01.1
comp=Z,35µm,21.0s
PABE **Paberze** 98.21 325 eP P 12 00 08.7 -1.6
VSVD **Vaisvydziai** 98.26 325 eP P 12 00 08.5 -2.0
MARR **Marisel-Cluj** 98.28 316 ⇑P P 12 00 09.3 -1.7
SKT **Skwentna** 98.29 28 P P 12 00 10.5 -0.1
baz=268
DEV **Deva** 98.38 315 P Pdif 12 00 14.5 +3.1
HOPEN **Hopen** 98.40 346 ePdif Pdif 12 00 10.8 +0.1
HOPEN IVmBBB 12 00 15.4
comp=Z,2µm,3.0s
HOPEN ePP PP 12 04 13.4 +2.4
HOPEN eSKSac SKSac 12 10 45.4 -0.6
HOPEN eSP SP 12 13 02.8 +2.4
HOPEN eSS SS 12 18 17.7 -3.2
HOPEN IVMs_BB IVMs_BB 12 52 40.2
comp=Z,27µm,21.4s
MTSE **Matsula** 98.43 328 eP P 12 00 09.9 -1.4
G22K **Bettles** 98.45 23 Pdiff P 12 00 10.8 -0.4
baz=269
H22K **Ishtalitna Cre** 98.48 25 Pdiff P 12 00 11.4 0.0
baz=269
ITM **Ithomi** 98.56 306 IAMs_20 IAMs_20 12 52 44.0
comp=Z,16µm,20.0s
DRGR 98.56 316 ⇓P P 12 00 10.4 -1.8
DRGR 98.56 316 ⇓P P 12 00 10.4 -1.8
BRSE **Bradley Lake S** 98.60 31 Pdiff P 12 00 10.8 -1.2
baz=268
BPAW **Bear Paw Mtn.** 98.60 26 Pdiff P 12 00 11.4 -0.5
baz=269
SUW **Suwalki** 98.60 323 eP P 12 00 09.2 -2.9
SUW ePP PP 12 03 54.1 -19
SUW eS SKSac 12 10 44.6 -3.2
SUW eSS SS 12 18 27.6 +2.9
SUW eL L 12 45 05.3
comp=Z,49µm,29.1s
SUW **Suwalki** 98.60 323 eP P 12 00 10.2 -2.0
SUA **Susitna One** 98.64 29 Pdiff P 12 00 11.1 -1.2
baz=268
KWP **Kalwaria Pacla** 98.70 319 eP P 12 00 10.9 -1.8
KWP ePP PP 12 04 16.1 +2.0
KWP eS SKSac 12 10 46.5 -2.1
KWP eSS SS 12 18 26.6 +0.1
KWP eL L 12 42 48.6
comp=Z,26µm,30.9s
KWP **Kalwaria Pacla** 98.70 319 IAMs_20 IAMs_20 12 51 54.5
comp=Z,21µm,19.0s
MLY **Manley** 98.72 25 Pdiff P 12 00 12.2 -0.3
baz=269
HAMF **Hammerfest** 98.74 340 ePdif P 12 00 10.1 -2.2
HAMF IVmBBB 12 00 13.1
comp=Z,1µm,3.1s
HAMF ePP PP 12 04 14.5 +0.8
HAMF eSKSac SKSac 12 10 45.0 -2.8
HAMF ePS PS 12 13 10.3 +1.3
HAMF eSS SS 12 18 28.9 +3.1
HAMF IVMs_BB IVMs_BB 12 52 20.4
comp=Z,16µm,18.5s
D23K **Nanushuk River** 98.79 21 Pdiff Pdif 12 00 12.9 +0.2
baz=270
C23K **Itkillik River** 98.82 21 IAMs_20 IAMs_20 12 53 02.1
comp=Z,13µm,21.0s
C23K **Itkillik River** 98.82 21 Pdiff Pdif 12 00 13.0 +0.2
baz=270
CUT **Chulitna** 98.89 28 Pdiff P 12 00 11.8 -1.4
baz=269
KTK1 **Kautokeino** 98.89 339 ePdif P 12 00 13.0 -0.1
KTK1 IVmB_BB 12 00 19.6
comp=Z,706nm,7.1s
KTK1 ePP PP 12 04 16.4 +1.5
KTK1 eSKSac SKSac 12 10 45.0 -3.7
KTK1 eSP SP 12 13 09.2 +3.2
KTK1 eSS SS 12 18 32.5 +4.5
KTK1 IVMs_BB IVMs_BB 12 52 41.9
comp=Z,19µm,16.3s
SURR **Surduc** 98.92 315 ⇑P P 12 00 12.0 -1.7
M22K **Willow** 98.95 29 Pdiff P 12 00 12.0 -1.5
baz=269
KOLS **Kolonicke sedl** 98.96 318 ⇑iP P 12 00 12.6 -1.3
KOLS e 12 10 49.4
KOLS **Kolonicke sedl** 98.96 318 ePDIFF P 12 00 12.5 -1.3
COLD **Coldfoot** 98.97 23 Pdiff P 12 00 13.5 0.0
baz=270
G23K **Bananza Creek** 99.03 24 IAMs_20 IAMs_20 12 52 46.1
comp=Z,11µm,22.0s
G23K **Bananza Creek** 99.03 24 Pdiff Pdif 12 00 14.0 +0.2
baz=270
VAF **Ylistaro** 99.09 333 eP Pdif 12 00 09.8 -4.2
BOVS **Bovan** 99.11 313 ⇑P Pdif 12 00 11.8 -2.8
O22K **Cooper Landing** 99.12 30 Pdiff Pdif 12 00 13.4 -0.9
baz=269
RC01 **Rabbit Creek A** 99.12 29 Pdiff Pdif 12 00 13.1 -1.2
baz=269
MDVR **Moldovita** 99.16 314 ⇓P Pdif 12 00 13.1 -1.8
E23K **Chandalar** 99.19 22 Pdiff Pdif 12 00 14.4 -0.2
baz=271
TOLK **Toolik Lake Re** 99.20 22 IAMs_20 IAMs_20 12 54 24.1
comp=Z,15µm,20.0s
TOLK **Toolik Lake Re** 99.20 22 Pdiff Pdif 12 00 14.5 0.0
baz=271
H23K **Yukon River** 99.23 25 Pdiff Pdif 12 00 14.8 +0.1
baz=270
SEW **Seward** 99.25 30 Pdiff Pdif 12 00 14.2 -0.7
baz=269
SIRR **Siria** 99.26 316 ⇓P Pdif 12 00 13.3 -2.0
I23K **Minto, Yukon-K** 99.31 25 Pdiff Pdif 12 00 14.7 -0.3
baz=270
PMR **Palmer** 99.42 29 P Pdif 12 00 18.3 +2.7
PMR **Palmer** 99.42 29 Pdiff Pdif 12 00 14.6 -1.0
baz=270
NEA2 **Nenana** 99.44 26 Pdiff Pdif 12 00 14.9 -0.8
baz=270
D24K **Happy Valley** 99.46 21 IAMs_20 IAMs_20 12 54 02.0
comp=Z,14µm,19.0s
D24K **Happy Valley** 99.46 21 Pdiff Pdif 12 00 15.8 +0.2
baz=272
C24K **Franklin Bluff** 99.49 21 Pdiff Pdif 12 00 15.6 -0.2
baz=272
CRVS **Cervenica-Dubn** 99.49 318 ⇑iP Pdif 12 00 14.7 -1.6
CRVS e 12 04 18.8
CRVS **Cervenica-Dubn** 99.49 318 ePP PP 12 04 18.8 -1.3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CRVS | Cervenica-Dubn | 99.49 | 318 | ePDIFF | Pdif | 12 00 14.7 | -1.6 | | |
| MCK | McKinley | 99.50 | 27 | Pdiff | Pdif | 12 00 14.7 | -1.3 | | |
| | baz=270 | | | | | | | | |
| E24K | Your Creek | 99.61 | 22 | IAMs_20 | IAMs_20 | 12 54 47.3 | | | |
| | comp=Z,16µm,20.0s | | | | | | | | |
| E24K | Your Creek | 99.61 | 22 | Pdiff | Pdif | 12 00 16.1 | -0.3 | | |
| | baz=272 | | | | | | | | |
| KBN | Korca | 99.64 | 310 | IAMs_20 | IAMs_20 | 12 49 09.4 | | | |
| | comp=Z,21µm,22.0s | | | | | | | | |
| WAT1 | Susitna Watana | 99.69 | 28 | Pdiff | Pdif | 12 00 15.4 | -1.5 | | |
| | baz=271 | | | | | | | | |
| KNK | Knik Glacier | 99.74 | 29 | Pdiff | Pdif | 12 00 16.5 | -0.6 | | |
| | baz=270 | | | | | | | | |
| SML | Sawmill | 99.80 | 29 | Pdiff | Pdif | 12 00 16.2 | -1.2 | | |
| | baz=271 | | | | | | | | |
| PWL | Port Wells | 99.81 | 30 | Pdiff | Pdif | 12 00 16.4 | -1.0 | | |
| | baz=270 | | | | | | | | |
| F24K | Squaw Lake | 99.86 | 23 | Pdiff | Pdif | 12 00 17.1 | -0.4 | | |
| | baz=272 | | | | | | | | |
| H24K | Noodor Dome | 99.92 | 25 | Pdiff | Pdif | 12 00 17.8 | 0.0 | | |
| | baz=272 | | | | | | | | |
| COLA | College | 99.95 | 26 | P | Pdif | 12 00 18.9 | +1.0 | | |
| COLA | College | 99.95 | 26 | Pdiff | Pdif | 12 00 16.4 | -1.5 | | |
| | baz=272 | | | | | | | | |
| COLA | College | 99.95 | 26 | P | Pdif | 12 00 16.1 | -1.8 | | |
| BEL | Belsk | 99.99 | 321 | eP | Pdif | 12 00 14.8 | -3.6 | | |
| BEL | | | | eSS | SS | 12 18 41.1 | -3.1 | | |
| BEL | | | | eL | L | 12 49 12.1 | | | |
| | comp=Z,174µm,25.1s | | | | | | | | |
| BJO1 | Bjornoya | 99.99 | 344 | ePdif | Pdif | 12 00 17.9 | 0.0 | | |
| BJO1 | | | | IVmB_BB | | 12 00 24.9 | | | |
| | comp=Z,2µm,4.0s | | | | | | | | |
| BJO1 | | | | ePP | PP | 12 04 23.6 | +0.5 | | |
| BJO1 | | | | eSKSac | SKSac | 12 10 53.1 | -0.8 | | |
| BJO1 | | | | ePS | PS | 12 13 24.4 | +2.0 | | |
| BJO1 | | | | eSS | SS | 12 18 49.8 | +6.7 | | |
| BJO1 | | | | IVMs_BB | IVMs_BB | 12 54 09.1 | | | |
| | comp=Z,11µm,19.9s | | | | | | | | |
| G24K | Hadweenzic Riv | 100.05 | 24 | Pdiff | Pdif | 12 00 17.6 | -0.8 | | |
| | baz=272 | | | | | | | | |
| WAT6 | Susitna Watana | 100.06 | 28 | Pdiff | Pdif | 12 00 17.6 | -1.1 | | |
| | baz=271 | | | | | | | | |
| M23K | Glacier View | 100.09 | 29 | Pdiff | Pdif | 12 00 17.4 | -1.2 | | |
| | baz=271 | | | | | | | | |
| POKR | Poker Plat Res | 100.12 | 25 | Pdiff | Pdif | 12 00 17.2 | -1.5 | | |
| | baz=272 | | | | | | | | |
| SPA0 | Spitsbergen Ar | 100.19 | 348 | ePdif | Pdif | 12 00 17.0 | -1.8 | | |
| SPA0 | | | | IVmBBB | | 12 00 19.0 | | | |
| | comp=Z,810nm,3.0s | | | | | | | | |
| SPA0 | | | | ePP | PP | 12 04 27.3 | +2.6 | | |
| SPA0 | | | | eSP | SP | 12 13 21.2 | +1.5 | | |
| SPA0 | | | | eSS | SS | 12 18 46.1 | +0.3 | | |
| SPA0 | | | | IVMs_BB | IVMs_BB | 12 56 20.1 | | | |
| | comp=Z,22µm,18.6s | | | | | | | | |
| SPITS | Spitsbergen Ar | 100.19 | 348 | P | Pdif | 12 00 17.6 | -1.2 | | |
| | comp=Z,25nm,0.9s,baz=120,slow=28,SNR=5.1 | | | | | | | | |
| SPITS | | | | PP | PP | 12 04 24.3 | -0.4 | | |
| | comp=Z,32nm,1.2s,baz=151,slow=46,SNR=2.8 | | | | | | | | |
| DHY | Denali Highway | 100.22 | 27 | Pdiff | Pdif | 12 00 18.4 | -0.9 | | |
| | baz=272 | | | | | | | | |
| NIE | Niedzica | 100.27 | 319 | eP | Pdif | 12 00 18.7 | -1.1 | | |
| NIE | | | | ePP | PP | 12 04 38.4 | +12 | | |
| NIE | | | | eS | SKSac | 12 10 56.4 | +0.1 | | |
| NIE | | | | eSS | SS | 12 18 42.6 | -5.8 | | |
| NIE | | | | eL | L | 12 47 28.3 | | | |
| | comp=Z,14µm,27.3s | | | | | | | | |
| NIE | Niedzica | 100.27 | 319 | P | Pdif | 12 00 22.7 | +3.0 | | |
| SCM | Sheep Creek Mo | 100.28 | 29 | Pdiff | Pdif | 12 00 18.5 | -1.1 | | |
| | baz=272 | | | | | | | | |
| P23K | Montague Islan | 100.28 | 31 | Pdiff | Pdif | 12 00 19.0 | -0.5 | | |
| | baz=271 | | | | | | | | |
| D25K | Kavik River | 100.32 | 21 | Pdiff | Pdif | 12 00 19.1 | -0.4 | | |
| | baz=274 | | | | | | | | |
| HDA | Harding Lake | 100.36 | 26 | Pdiff | Pdif | 12 00 17.8 | -2.0 | | |
| | baz=272 | | | | | | | | |
| KEK | Kerkira | 100.36 | 309 | IAMs_20 | IAMs_20 | 12 52 54.6 | | | |
| | comp=Z,13µm,21.0s | | | | | | | | |
| ILAR | Eielson Array | 100.37 | 26 | | Pdif | 12 00 17.1 | -2.7 | | |
| ILAR | Eielson Array | 100.37 | 26 | P | Pdif | 12 00 18.4 | -1.4 | | |
| | comp=Z,1.1nm,0.7s,baz=278,slow=4.3,SNR=22 | | | | | | | | |
| ILAR | | | | PP | PP | 12 04 26.2 | 0.0 | | |
| | comp=Z,4.7nm,1.0s,baz=294,slow=6.2,SNR=6.7 | | | | | | | | |
| ILAR | | | | PKPPKP | P'P'df | 12 24 54.8 | +2.8 | | |
| | comp=Z,2.3nm,1.2s,baz=106,slow=1.6,SNR=4.8 | | | | | | | | |
| TIR | Tirane | 100.37 | 310 | IAMs_20 | IAMs_20 | 12 53 10.7 | | | |
| | comp=Z,28µm,21.0s | | | | | | | | |
| PUK | Puka | 100.38 | 311 | IAMs_20 | IAMs_20 | 12 49 43.6 | | | |
| | comp=Z,23µm,22.0s | | | | | | | | |
| TRO | Tromso | 100.40 | 339 | ePdif | Pdif | 12 00 19.0 | -0.8 | | |
| TRO | | | | IVmB_BB | | 12 00 38.6 | | | |
| | comp=Z,1µm,2.7s | | | | | | | | |
| TRO | | | | ePP | PP | 12 04 24.7 | -1.6 | | |
| TRO | | | | eSKSac | SKSac | 12 10 48.6 | -7.4 | | |
| TRO | | | | eSP | SP | 12 13 24.2 | +2.1 | | |
| TRO | | | | eSS | SS | 12 18 48.5 | -0.5 | | |
| TRO | | | | IVMs_BB | IVMs_BB | 12 48 21.9 | | | |
| | comp=Z,20µm,23.2s | | | | | | | | |
| GLI | Glacier Island | 100.41 | 30 | Pdiff | Pdif | 12 00 18.8 | -1.2 | | |
| | baz=272 | | | | | | | | |
| PSZ | Piszkesteto | 100.51 | 317 | IAMs_20 | IAMs_20 | 12 52 08.8 | | | |
| | comp=Z,28µm,22.0s | | | | | | | | |
| PSZ | Piszkesteto | 100.51 | 317 | ⇑P | Pdif | 12 00 18.7 | -2.2 | | |
| PSZ | Piszkesteto | 100.51 | 317 | ⇑P | Pdif | 12 00 18.7 | -2.2 | | |
| HSPB | Hornsund (broa | 100.55 | 347 | ePP | PP | 12 04 30.5 | +3.2 | | |
| HSPB | | | | eSS | SS | 12 19 29.6 | +39 | | |
| G25K | Bearman Lake | 100.59 | 24 | Pdiff | Pdif | 12 00 20.8 | +0.1 | | |
| | baz=274 | | | | | | | | |
| OJC | Ojcow | 100.60 | 320 | eL | L | 12 44 44.9 | | | |
| | comp=Z,36µm,30.2s | | | | | | | | |
| OJC | Ojcow | 100.60 | 320 | P | Pdif | 12 00 24.0 | +2.8 | | |
| OJC | Ojcow | 100.60 | 320 | eP | Pdif | 12 00 18.7 | -2.5 | | |
| OJC | Ojcow | 100.60 | 320 | ePP | PP | 12 04 30.2 | +1.7 | | |
| OJC | Ojcow | 100.60 | 320 | eS | Sdif | 12 11 53.6 | -2.4 | | |
| OJC | Ojcow | 100.60 | 320 | eSS | SS | 12 18 46.5 | -6.4 | | |
| F25K | Christian Rive | 100.71 | 23 | Pdiff | Pdif | 12 00 22.1 | +0.7 | | |
| | baz=274 | | | | | | | | |
| H25L | Birch Creek | 100.73 | 24 | Pdiff | Pdif | 12 00 21.2 | -0.2 | | |
| | baz=274 | | | | | | | | |
| C26K | Camden Bay | 100.79 | 20 | Pdiff | Pdif | 12 00 22.4 | +0.9 | | |
| | baz=275 | | | | | | | | |
| M24K | Tolsona, Glenn | 100.81 | 28 | Pdiff | Pdif | 12 00 21.5 | -0.4 | | |
| | baz=273 | | | | | | | | |
| Q23K | Middleton Isla | 100.83 | 31 | Pdiff | Pdif | 12 00 20.8 | -1.1 | | |
| | baz=272 | | | | | | | | |
| PDG | Podgorica | 100.86 | 312 | IAMs_20 | IAMs_20 | 12 54 09.3 | | | |
| | comp=Z,16µm,20.0s | | | | | | | | |
| PDG | Podgorica | 100.86 | 312 | ⇑P | Pdif | 12 00 20.3 | -2.2 | | |
| K24K | Donnelly Dome | 100.90 | 27 | Pdiff | Pdif | 12 00 21.6 | -0.7 | | |
| | baz=273 | | | | | | | | |
| PRP | Porcupine Dome | 100.90 | 25 | Pdiff | Pdif | 12 00 21.0 | -1.3 | | |
| | baz=274 | | | | | | | | |
| KBS | Kingsbay | 100.93 | 349 | ePdif | Pdif | 12 00 23.8 | +1.8 | | |
| KBS | | | | IVmB_BB | | 12 00 41.0 | | | |
| | comp=Z,799nm,5.7s | | | | | | | | |
| KBS | | | | ePP | PP | 12 04 32.0 | +1.9 | | |
| KBS | | | | eSKSac | SKSac | 12 10 59.7 | +1.3 | | |
| KBS | | | | eSP | SP | 12 13 30.6 | +3.1 | | |
| KBS | | | | eSS | SS | 12 19 01.1 | +5.1 | | |
| KBS | | | | IVMs_BB | IVMs_BB | 12 49 26.4 | | | |
| | comp=Z,11µm,22.3s | | | | | | | | |
| FYU | Fort Yukon | 100.95 | 24 | IAMs_20 | IAMs_20 | 12 54 13.5 | | | |
| | comp=Z,15µm,21.0s | | | | | | | | |
| KLU | Klutina | 100.96 | 29 | Pdiff | Pdif | 12 00 21.5 | -1.1 | | |
| | baz=273 | | | | | | | | |
| J25K | Salcha River, | 101.03 | 26 | Pdiff | Pdif | 12 00 21.0 | -1.8 | | |
| | baz=274 | | | | | | | | |
| EYAK | Cordova Ski Ar | 101.09 | 30 | P | Pdif | 12 00 25.1 | +2.1 | | |
| EYAK | Cordova Ski Ar | 101.09 | 30 | Pdiff | Pdif | 12 00 22.6 | -0.4 | | |
| | baz=273 | | | | | | | | |
| PAX | Paxson | 101.09 | 27 | Pdiff | Pdif | 12 00 22.8 | -0.4 | | |
| | baz=273 | | | | | | | | |
| BMAR | Burnt Mountain | 101.13 | 23 | | Pdif | 12 00 23.3 | +0.1 | | |
| VYHS | Vyhne | 101.22 | 318 | i P | Pdif | 12 00 25.0 | +1.0 | | |
| VYHS | Vyhne | 101.22 | 318 | ePDIFF | Pdif | 12 00 25.0 | +1.0 | | |
| VYHS | | | | ePP | PKiKP | 12 04 44.6 | -4.0 | | |
| C27K | Jago River | 101.23 | 21 | Pdiff | Pdif | 12 00 24.0 | +0.4 | | |
| | baz=276 | | | | | | | | |
| HARP | HAARP | 101.27 | 28 | Pdiff | Pdif | 12 00 23.7 | -0.2 | | |
| | baz=274 | | | | | | | | |
| F26K | Sheenjek River | 101.27 | 23 | Pdiff | Pdif | 12 00 24.3 | +0.5 | | |
| | baz=276 | | | | | | | | |
| MORH | Mrgy, Hungar | 101.35 | 315 | ⇑P | Pdif | 12 00 22.6 | -1.9 | | |
| SCTE | Santa Cesarea | 101.40 | 309 | IAMs_20 | IAMs_20 | 12 51 12.9 | | | |
| | comp=Z,12µm,20.0s | | | | | | | | |
| G26K | Porcupine Rive | 101.49 | 23 | Pdiff | Pdif | 12 00 25.1 | +0.4 | | |
| | baz=276 | | | | | | | | |
| SRO | Srobarova | 101.58 | 317 | ePP | PKiKP | 12 04 42.1 | -7.1 | | |
| N25K | Chitina, Valde | 101.58 | 29 | Pdiff | Pdif | 12 00 25.2 | -0.2 | | |
| | baz=274 | | | | | | | | |
| BMRM | Bremner River | 101.62 | 29 | Pdiff | Pdif | 12 00 25.0 | -0.5 | | |
| | baz=274 | | | | | | | | |
| OKC | Ostrava-Krasne | 101.67 | 319 | ePDIFF | Pdif | 12 00 24.0 | -1.9 | | |
| OKC | | | | AMS | AMS | 12 52 20.0 | | | |
| | comp=Z,34µm,20.2s | | | | | | | | |
| OKC | Ostrava-Krasne | 101.67 | 319 | eP | Pdif | 12 00 24.0 | -1.9 | | |
| OKC | | | | MLR | MLR | | | | |
| | comp=Z,34µm,20.2s | | | | | | | | |
| SCRK | Sand Creek | 101.68 | 26 | Pdiff | Pdif | 12 00 25.2 | -0.7 | | |
| | baz=275 | | | | | | | | |
| KAIM | Kayak Island | 101.78 | 31 | Pdiff | Pdif | 12 00 26.0 | -0.2 | | |
| | baz=274 | | | | | | | | |
| J26L | Joseph Creek | 101.82 | 26 | IAMs_20 | IAMs_20 | 12 54 19.7 | | | |
| | comp=Z,10µm,22.0s | | | | | | | | |
| J26L | Joseph Creek | 101.82 | 26 | Pdiff | Pdif | 12 00 25.9 | -0.5 | | |
| | baz=276 | | | | | | | | |
| TAOE | Nuku Hiva Isla | 101.84 | 101 | eP | Pdif | 12 00 04.2 | -23 | | |
| | comp=Z,1µm,27.6s | | | | | | | | |
| TAOE | Nuku Hiva Isla | 101.84 | 101 | ePP | PP | 12 04 33.8 | -5.0 | | |
| | comp=Z,2µm,34.0s | | | | | | | | |
| TAOE | | | | eS | Sdif | 12 12 04.3 | -3.7 | | |
| | comp=Z,4µm,27.6s | | | | | | | | |
| TAOE | | | | eSS | SS | 12 19 09.7 | -2.2 | | |
| | comp=Z,13µm,31.1s | | | | | | | | |
| TAOE | Nuku Hiva Isla | 101.84 | 101 | eLQ | LQ | 12 29 23.2 | | | |
| | comp=Z,20µm,33.7s | | | | | | | | |
| TAOE | | | | eLR | LR | 12 33 44.7 | | | |
| | comp=Z,14µm,23.2s | | | | | | | | |
| TAOE | Nuku Hiva Isla | 101.84 | 101 | IAMs_20 | IAMs_20 | 12 52 09.9 | | | |
| | comp=Z,11µm,19.0s | | | | | | | | |
| MAUC | Maruska | 101.88 | 319 | ePKKP | PKKPbc | 12 16 34.8 | +1.0 | | |
| MENT | Mentasta | 101.89 | 27 | P | Pdif | 12 00 29.7 | +3.0 | | |
| STEI | Steigen | 101.90 | 338 | ePdif | Pdif | 12 00 25.3 | -1.2 | | |
| STEI | | | | IVmB_BB | | 12 00 48.4 | | | |
| | comp=Z,1µm,3.4s | | | | | | | | |
| STEI | | | | ePP | PP | 12 04 39.1 | +1.4 | | |
| STEI | | | | eSKSac | SKSac | 12 10 58.9 | -4.4 | | |
| STEI | | | | eSP | SP | 12 13 40.4 | +2.2 | | |
| STEI | | | | eSS | SS | 12 19 10.7 | +0.8 | | |
| STEI | | | | IVMs_BB | IVMs_BB | 12 53 05.4 | | | |
| | comp=Z,19µm,17.9s | | | | | | | | |
| I26K | Coal Creek Min | 101.91 | 25 | IAMs_20 | IAMs_20 | 12 55 58.1 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | |
| I26K | Coal Creek Min | 101.91 | 25 | Pdiff | Pdif | 12 00 26.0 | -0.6 | | |
| | baz=276 | | | | | | | | |
| FAUS | Fauske | 101.95 | 337 | ePdif | Pdif | 12 00 26.9 | +0.2 | | |
| FAUS | | | | IVmB_BB | | 12 00 45.9 | | | |
| | comp=Z,769nm,5.2s | | | | | | | | |
| FAUS | | | | ePP | PP | 12 04 37.3 | -0.8 | | |
| FAUS | | | | eSKSac | SKSac | 12 11 00.4 | -3.2 | | |
| FAUS | | | | eSP | SP | 12 13 40.7 | +1.9 | | |
| FAUS | | | | IVMs_BB | IVMs_BB | 12 51 56.3 | | | |
| | comp=Z,23µm,20.6s | | | | | | | | |
| L26K | Log Cabin Wild | 102.05 | 27 | Pdiff | Pdif | 12 00 27.3 | -0.1 | | |
| | baz=275 | | | | | | | | |
| MORC | Moravsky Berou | 102.06 | 319 | ⇑P | Pdif | 12 00 24.7 | -3.0 | | |
| MORC | Moravsky Berou | 102.06 | 319 | ⇑P | Pdif | 12 00 24.7 | -3.0 | | |
| E27K | Coleen River | 102.17 | 22 | Pdiff | Pdif | 12 00 27.9 | +0.1 | | |
| | baz=278 | | | | | | | | |
| D27M | Malcolm River | 102.24 | 21 | Pdiff | Pdif | 12 00 27.9 | -0.3 | | |
| | baz=279 | | | | | | | | |
| MODS | Modra-Piesok | 102.27 | 318 | i P | Pdif | 12 00 27.0 | -1.6 | | |
| MODS | | | | e | | 12 04 45.7 | | | |
| MODS | Modra-Piesok | 102.27 | 318 | ePDIFF | Pdif | 12 00 27.0 | -1.6 | | |
| MODS | | | | e | | 12 04 02.9 | | | |
| MODS | | | | ePP | PP | 12 04 45.7 | +4.6 | | |
| MODS | | | | e | | 12 16 32.6 | | | |
| M26K | Nabesna, AK | 102.27 | 28 | Pdiff | Pdif | 12 00 28.4 | 0.0 | | |
| | baz=276 | | | | | | | | |
| G27K | Doyon Strip | 102.34 | 23 | Pdiff | Pdif | 12 00 29.3 | +0.7 | | |
| | baz=275 | | | | | | | | |
| MCARA | McCarthy VSAT | 102.36 | 29 | Pdiff | Pdif | 12 00 28.7 | 0.0 | | |
| | baz=275 | | | | | | | | |
| CRQE | Cirque | 102.38 | 30 | Pdiff | Pdif | 12 00 28.5 | -0.5 | | |
| | baz=275 | | | | | | | | |
| ZST | Bratislava | 102.39 | 317 | ePP | PKiKP | 12 04 47.9 | -2.8 | | |
| ZST | | | | ePP | PP | 12 04 54.9 | +13 | | |
| H27K | Steamboat Moun | 102.47 | 24 | Pdiff | Pdif | 12 00 29.4 | +0.3 | | |
| | baz=278 | | | | | | | | |
| LOF | Lofoten | 102.51 | 338 | ePdif | Pdif | 12 00 28.2 | -1.0 | | |
| LOF | | | | IVmB_BB | | 12 00 35.3 | | | |
| | comp=Z,768nm,3.9s | | | | | | | | |
| LOF | | | | ePP | PP | 12 04 38.4 | -3.8 | | |
| LOF | | | | eSKSac | SKSac | 12 11 03.4 | -2.8 | | |
| LOF | | | | eSP | SP | 12 13 47.6 | +3.0 | | |
| LOF | | | | eSS | SS | 12 19 30.9 | +13 | | |
| LOF | | | | IVMs_BB | IVMs_BB | 12 54 01.3 | | | |
| | comp=Z,13µm,17.9s | | | | | | | | |
| K27K | Chicken | 102.51 | 26 | Pdiff | Pdif | 12 00 29.8 | +0.4 | | |
| | baz=277 | | | | | | | | |
| I27K | Kandik River | 102.51 | 25 | Pdiff | Pdif | 12 00 29.7 | +0.3 | | |
| | baz=278 | | | | | | | | |
| KRLC | Kraliky | 102.54 | 319 | ePDIFF | Pdif | 12 00 27.6 | -2.3 | | |
| KRLC | | | | AMS | AMS | 12 52 50.0 | | | |
| | comp=Z,35µm,20.9s | | | | | | | | |
| KRLC | Kraliky | 102.54 | 319 | eP | Pdif | 12 00 27.6 | -2.3 | | |
| KRLC | | | | MLR | MLR | | | | |
| | comp=Z,35µm,20.9s | | | | | | | | |
| VRAC | Vranov | 102.69 | 319 | P | Pdif | 12 00 29.4 | -1.1 | | |
| | comp=Z,0.8nm,0.4s,baz=99,slow=10.0,SNR=4.1 | | | | | | | | |
| VRAC | | | | PP | PP | 12 04 43.9 | -0.3 | | |
| | comp=Z,1.2nm,0.3s,baz=45,slow=8.3,SNR=4.4 | | | | | | | | |
| TIP | Timpagrande | 102.70 | 308 | IAMs_20 | IAMs_20 | 12 54 47.6 | | | |
| | comp=Z,17µm,22.0s | | | | | | | | |
| L27K | Beaver Creek, | 102.74 | 27 | Pdiff | Pdif | 12 00 30.7 | +0.3 | | |
| | baz=277 | | | | | | | | |
| BCAR | Beaver Creek A | 102.76 | 27 | | Pdif | 12 00 30.5 | -0.1 | | |
| M27K | Edge Creek, AK | 102.80 | 28 | Pdiff | Pdif | 12 00 30.8 | -0.1 | | |
| | baz=276 | | | | | | | | |
| EGAK | Eagle | 102.81 | 25 | Pdiff | Pdif | 12 00 30.6 | 0.0 | | |
| | baz=278 | | | | | | | | |
| KSP | Ksiaz | 102.82 | 320 | eP | Pdif | 12 00 29.5 | -1.6 | | |
| KSP | | | | eS | Sdif | 12 12 14.7 | +0.2 | | |
| KSP | | | | eSS | SS | 12 19 16.0 | -7.6 | | |
| KSP | | | | eL | L | 12 52 50.2 | | | |
| | comp=Z,41µm,22.5s | | | | | | | | |
| DPC | Dobruska-Polom | 102.83 | 320 | ePDIFF | Pdif | 12 00 27.7 | -3.4 | | |
| DPC | | | | AMS | AMS | 12 55 10.0 | | | |
| | comp=Z,34µm,18.4s | | | | | | | | |
| DPC | Dobruska-Polom | 102.83 | 320 | eP | Pdif | 12 00 27.7 | -3.4 | | |
| DPC | | | | MLR | MLR | | | | |
| | comp=Z,34µm,18.4s | | | | | | | | |
| E28M | Babbage River | 102.86 | 21 | IAMs_20 | IAMs_20 | 12 55 09.9 | | | |
| | comp=Z,15µm,22.0s | | | | | | | | |
| E28M | Babbage River | 102.86 | 21 | Pdiff | Pdif | 12 00 30.9 | +0.1 | | |
| | baz=280 | | | | | | | | |
| OSTC | Ostas | 102.89 | 320 | ePDIFF | Pdif | 12 00 29.2 | -2.2 | | |
| OSTC | | | | AMS | AMS | 12 54 20.0 | | | |
| | comp=Z,41µm,19.6s | | | | | | | | |
| OSTC | Ostas | 102.89 | 320 | eP | Pdif | 12 00 29.2 | -2.2 | | |
| OSTC | | | | MLR | MLR | | | | |
| | comp=Z,41µm,19.6s | | | | | | | | |
| F28M | Old Crow | 102.90 | 22 | IAMs_20 | IAMs_20 | 12 56 05.1 | | | |
| | comp=Z,11µm,20.0s | | | | | | | | |
| F28M | Old Crow | 102.90 | 22 | Pdiff | Pdif | 12 00 31.3 | +0.2 | | |
| | baz=280 | | | | | | | | |
| RONA | Rosalia, Austr | 102.94 | 317 | ePdif | Pdif | 12 00 32.9 | +1.2 | | |
| | comp=Z,6.1nm,1.8s | | | | | | | | |
| RONA | | | | ePKKP | PKKPbc | 12 16 30.4 | -0.3 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | | |
| CHVC | Chvalec | 102.99 | 320 | ePDIFF | Pdif | 12 00 32.0 | +0.2 | | |
| CHVC | | | | AMS | AMS | 12 54 20.0 | | | |
| | comp=Z,42µm,19.5s | | | | | | | | |
| CHVC | Chvalec | 102.99 | 320 | eP | Pdif | 12 00 32.0 | +0.2 | | |
| CHVC | | | | MLR | MLR | | | | |
| | comp=Z,42µm,19.5s | | | | | | | | |
| STOK | Stokkvaagen | 102.99 | 336 | ePdif | Pdif | 12 00 32.0 | +0.6 | | |
| STOK | | | | ePP | PP | 12 04 48.4 | +2.6 | | |
| STOK | | | | eSKSac | SKSac | 12 11 06.7 | -1.8 | | |
| STOK | | | | eSP | SP | 12 13 51.5 | +1.8 | | |
| STOK | | | | eSS | SS | 12 19 29.8 | +5.0 | | |
| STOK | | | | IVMs_BB | IVMs_BB | 12 53 34.8 | | | |
| | comp=Z,23µm,17.9s | | | | | | | | |
| MESA | MESA | 103.00 | 30 | Pdiff | Pdif | 12 00 32.0 | +0.2 | | |
| | baz=276 | | | | | | | | |
| KOGS | Kog | 103.01 | 316 | i Pdiff | Pdif | 12 00 30.5 | -1.5 | | |
| KOGS | | | | e | | 12 03 55.9 | | | |
| KOGS | | | | i PP | PP | 12 04 44.5 | -2.2 | | |
| KOGS | | | | i SKSac | SKSac | 12 11 07.7 | -1.8 | | |
| KOGS | | | | eSS | SS | 12 19 24.8 | -1.6 | | |
| KOGS | | | | e | | 12 24 32.4 | | | |
| KOGS | | | | e | | 12 28 23.7 | | | |
| UPC | Upice | 103.02 | 320 | ePDIFF | Pdif | 12 00 28.4 | -3.5 | | |
| UPC | | | | AMS | AMS | 12 54 30.0 | | | |
| | comp=Z,42µm,19.7s | | | | | | | | |
| UPC | Upice | 103.02 | 320 | eP | Pdif | 12 00 28.4 | -3.5 | | |
| UPC | | | | MLR | MLR | | | | |
| | comp=Z,42µm,19.7s | | | | | | | | |
| CTG | Chitna Glacier | 103.21 | 29 | Pdiff | Pdif | 12 00 32.7 | 0.0 | | |
| | baz=277 | | | | | | | | |
| CONA | Conrad Observa | 103.23 | 317 | ePdiff | Pdif | 12 00 32.1 | -0.9 | | |
| | comp=Z,3.2nm,1.4s | | | | | | | | |
| CONA | | | | ePKKP | PKKPbc | 12 16 29.6 | -0.3 | | |
| | comp=Z,6.7nm,0.7s,SNR=6.2 | | | | | | | | |
| I28M | Miner Creek | 103.23 | 25 | IAMs_20 | IAMs_20 | 12 56 15.7 | | | |
| | comp=Z,14µm,20.0s | | | | | | | | |
| I28M | Miner Creek | 103.23 | 25 | Pdiff | Pdif | 12 00 32.8 | +0.1 | | |
| | baz=279 | | | | | | | | |
| TREC | Trest | 103.42 | 319 | AMS | AMS | 12 53 20.0 | | | |
| | comp=Z,44µm,20.4s | | | | | | | | |
| CUC | Castrocucco | 103.43 | 309 | IAMs_20 | IAMs_20 | 12 55 55.8 | | | |
| | comp=Z,17µm,20.0s | | | | | | | | |
| ARSA | Arzberg | 103.48 | 317 | ePdiff | Pdif | 12 00 33.7 | -0.3 | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| ARSA | | | | ePKKP | PKKPbc | 12 16 28.7 | -0.3 | | |
| | comp=Z,6.3nm,1.1s | | | | | | | | |
| E29M | Blow River | 103.49 | 22 | IAMs_20 | IAMs_20 | 12 56 14.6 | | | |
| | comp=Z,11µm,22.0s | | | | | | | | |
| E29M | Blow River | 103.49 | 22 | Pdiff | Pdif | 12 00 34.0 | +0.4 | | |
| | baz=282 | | | | | | | | |
| YUK3 | Moose Creek | 103.53 | 28 | Pdiff | Pdif | 12 00 34.5 | +0.3 | | |
| | baz=278 | | | | | | | | |
| HFS | Hagfors | 103.54 | 330 | Pdiff | Pdif | 12 00 33.9 | -0.1 | | |
| | comp=Z,8.7nm,1.1s,baz=191,slow=7.1,SNR=5.1 | | | | | | | | |
| HFS | | | | PKiKP | PKiKP | 12 04 52.9 | +0.4 | | |
| | comp=Z,14nm,1.0s,baz=48,slow=2.1,SNR=4.0 | | | | | | | | |
| HFS | | | | PKKPbc | PKKPbc | 12 16 29.9 | +0.7 | | |
| | comp=Z,2.7nm,0.8s,baz=194,slow=5.5,SNR=4.4 | | | | | | | | |
| RKT | Rikitea | 103.55 | 116 | eP | Pdif | 12 00 41.1 | +6.2 | | |
| | comp=Z,7µm,34.0s | | | | | | | | |
| RKT | Rikitea | 103.55 | 116 | ePP | PP | 12 04 52.2 | +1.0 | | |
| | comp=Z,11µm,35.0s | | | | | | | | |
| RKT | | | | eS | Sdif | 12 12 17.5 | -4.3 | | |
| | comp=Z,34µm,33.8s | | | | | | | | |
| RKT | | | | eSS | SS | 12 19 39.4 | +4.7 | | |
| | comp=Z,51µm,35.0s | | | | | | | | |
| RKT | Rikitea | 103.55 | 116 | eLQ | LQ | 12 30 13.2 | | | |
| | comp=Z,173µm,41.2s | | | | | | | | |
| RKT | | | | eLR | LR | 12 34 33.5 | | | |
| | comp=Z,21µm,21.5s | | | | | | | | |
| RKT | | | | eLR | LR | 12 34 38.8 | | | |
| | comp=Z,82µm,22.5s | | | | | | | | |
| DAWY | Dawson | 103.68 | 26 | Pdiff | Pdif | 12 00 34.7 | +0.1 | | |
| | baz=279 | | | | | | | | |
| NSS | Namsos | 103.71 | 334 | IVmB_BB | | 12 01 07.2 | | | |
| | comp=Z,1µm,3.4s | | | | | | | | |
| NSS | | | | eSKSac | SKSac | 12 11 11.9 | -0.1 | | |
| NSS | | | | IVMs_BB | IVMs_BB | 12 52 45.1 | | | |
| | comp=Z,14µm,21.6s | | | | | | | | |
| H29M | Whitestone | 103.73 | 24 | Pdiff | Pdif | 12 00 34.9 | +0.1 | | |
| | baz=281 | | | | | | | | |
| G29M | Pine Creek | 103.74 | 23 | IAMs_20 | IAMs_20 | 12 57 38.1 | | | |
| | comp=Z,11µm,19.0s | | | | | | | | |
| G29M | Pine Creek | 103.74 | 23 | Pdiff | Pdif | 12 00 34.6 | -0.2 | | |
| | baz=281 | | | | | | | | |
| PERS | Pernice | 103.78 | 316 | ePdiff | Pdif | 12 00 33.5 | -2.0 | | |
| PERS | | | | ePKKPbc | PKKPbc | 12 16 27.6 | -0.6 | | |
| O28M | Mount Upton | 103.79 | 29 | Pdiff | Pdif | 12 00 34.7 | -0.8 | | |
| | baz=278 | | | | | | | | |
| GOPC | GO Pecny, Ondr | 103.84 | 319 | ePDIFF | Pdif | 12 00 33.2 | -2.4 | | |
| GOPC | | | | AMS | AMS | 12 55 00.0 | | | |
| | comp=Z,35µm,20.1s | | | | | | | | |
| GOPC | GO Pecny, Ondr | 103.84 | 319 | eP | Pdif | 12 00 33.2 | -2.4 | | |
| GOPC | | | | MLR | MLR | | | | |
| | comp=Z,35µm,20.1s | | | | | | | | |
| SOKA | Soboth | 103.84 | 316 | Pdiff | Pdif | 12 00 37.3 | +1.5 | | |
| | comp=Z,2.7nm,1.1s | | | | | | | | |
| SOKA | | | | ePKKP | PKKPbc | 12 16 26.6 | -1.4 | | |
| | comp=Z,9.3nm,1.6s | | | | | | | | |
| I29M | Ogilvie Camp, | 103.92 | 25 | Pdiff | Pdif | 12 00 35.0 | -0.6 | | |
| | baz=280 | | | | | | | | |
| YUK8 | Steele Glacier | 103.93 | 29 | Pdiff | Pdif | 12 00 35.9 | -0.2 | | |
| | baz=278 | | | | | | | | |
| PVCC | Panska Ves | 103.94 | 320 | ePKKP | PKKPbc | 12 16 28.3 | +0.6 | | |
| PVCC | | | | AMS | AMS | 12 54 50.0 | | | |
| | comp=Z,33µm,20.4s | | | | | | | | |
| PRU | Pruhonice | 103.99 | 319 | ePDIFF | Pdif | 12 00 34.5 | -1.7 | | |
| PRU | | | | AMS | AMS | 12 54 50.0 | | | |
| | comp=Z,40µm,20.1s | | | | | | | | |
| PRU | Pruhonice | 103.99 | 319 | eP | Pdif | 12 00 34.5 | -1.7 | | |
| PRU | | | | MLR | MLR | | | | |
| | comp=Z,40µm,20.1s | | | | | | | | |
| PRA | Prague | 104.05 | 319 | ePDIFF | Pdif | 12 00 34.5 | -2.0 | | |
| PRA | | | | AMS | AMS | 12 55 00.0 | | | |
| | comp=Z,42µm,19.9s | | | | | | | | |
| PRA | Prague | 104.05 | 319 | eP | Pdif | 12 00 34.5 | -2.0 | | |
| PRA | | | | MLR | MLR | | | | |
| | comp=Z,42µm,19.9s | | | | | | | | |
| J29N | Klondike Camp | 104.12 | 26 | Pdiff | Pdif | 12 00 35.9 | -0.7 | | |
| | baz=280 | | | | | | | | |
| OBKA | Obir | 104.18 | 316 | ePdiff | Pdif | 12 00 39.4 | +2.1 | | |
| | comp=Z,2.5nm,1.0s | | | | | | | | |
| OBKA | | | | ePKKP | PKKPbc | 12 16 26.3 | -0.7 | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| CKRC | Cesky Krumlov | 104.22 | 318 | ePDIFF | Pdif | 12 00 35.1 | -2.2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PAOL** | **Paolisi** | **104.37** | **310** | | IAMs_20 | IAMs_20 | 12 55 37.5 | | | |
| | comp=Z,19µm,20.0s | | | | | | | | | |
| **L29M** | **L29M** | **104.39** | **27** | Pdiff | **Pdif** | **Pdif** | **12 00 37.7** | **-0.1** | | |
| | baz=280 | | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **104.42** | **23** | Pdiff | **Pdif** | **Pdif** | **12 00 36.9** | **-0.9** | | |
| | baz=283 | | | | | | | | | |
| **F30M** | **Barrier River** | **104.44** | **22** | Pdiff | **Pdif** | **Pdif** | **12 00 37.3** | **-0.6** | | |
| | baz=283 | | | | | | | | | |
| **YUK4** | **Talbot Arm** | **104.45** | **29** | Pdiff | **Pdif** | **Pdif** | **12 00 38.1** | **-0.2** | | |
| | baz=279 | | | | | | | | | |
| **WDD** | **Wied Dalam** | **104.47** | **305** | | IAMs_20 | IAMs_20 | 12 56 51.8 | | | |
| | comp=Z,14µm,18.0s | | | | | | | | | |
| **NC602** | **NORSAR Array S** | **104.51** | **331** | | *e*Pdif | **Pdif** | **12 00 39.7** | **+1.4** | | |
| NC602 | | | | | IVmBBB | | 12 00 42.1 | | | |
| | comp=Z,502nm,2.2s | | | | | | | | | |
| NC602 | | | | | *e*PP | **PP** | **12 04 59.0** | **+1.5** | | |
| NC602 | | | | | *e*SKSac | **SKSac** | **12 11 13.3** | **-2.5** | | |
| NC602 | | | | | *e*SP | **SP** | **12 14 06.4** | **+0.3** | | |
| NC602 | | | | | *e*SS | **SS** | **12 19 45.7** | **-0.5** | | |
| NC602 | | | | | IVMs_BB | IVMs_BB | 12 53 12.9 | | | |
| | comp=Z,15µm,19.8s | | | | | | | | | |
| **K29M** | **Barlow Dome** | **104.53** | **26** | | IAMs_20 | IAMs_20 | 12 57 37.2 | | | |
| | comp=Z,11µm,22.0s | | | | | | | | | |
| **K29M** | **Barlow Dome** | **104.53** | **26** | Pdiff | **Pdif** | **Pdif** | **12 00 38.8** | **+0.3** | | |
| | baz=281 | | | | | | | | | |
| **GEC2** | **GERESS Array S** | **104.61** | **318** | | *e*Pdiff | **Pdif** | **12 00 37.9** | **-1.3** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| GEC2 | | | | | *e*PP | **PKiKP** | **12 04 53.1** | **-1.9** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| GEC2 | | | | | *e*SKSac | **SKSac** | **12 11 14.4** | **-2.7** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| GEC2 | | | | | *e*SS | **SS** | **12 19 46.4** | **-2.1** | | |
| | baz=95,slow=14 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **104.61** | **318** | | | **Pdif** | **12 00 38.5** | **-0.7** | | |
| **GERES** | **GERESS Array B** | **104.61** | **318** | Pdiff | | **Pdif** | **12 00 39.2** | **0.0** | | |
| | comp=Z,1.1nm,0.8s,baz=147,slow=2.7,SNR=4.5 | | | | | | | | | |
| GERES | | | | | PKiKP | **PKiKP** | **12 04 55.3** | **+0.4** | | |
| | comp=Z,4.0nm,0.8s,baz=180,slow=1.7,SNR=3.2 | | | | | | | | | |
| GERES | | | | | PKKPbc | **PKKPbc** | **12 16 25.9** | **+0.1** | | |
| | comp=Z,4.9nm,0.8s,baz=254,slow=5.0,SNR=9.4 | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **104.62** | **331** | | PP | **PP** | **12 04 57.9** | **-0.4** | | |
| | comp=Z,1µm,3.3s,baz=81,slow=7.9 | | | | | | | | | |
| NB2 | | | | | PKKP | **PKKPbc** | **12 16 23.1** | **-3.0** | | |
| | comp=Z,11nm,1.2s,baz=261,slow=1.9 | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **104.62** | **331** | | PP | **PP** | **12 04 57.9** | **-0.4** | | |
| | baz=81,slow=7.9 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **104.62** | **331** | Pdiff | | **Pdif** | **12 00 36.9** | **-1.9** | | |
| | comp=Z,1.4nm,1.1s,baz=79,slow=4.5,SNR=2.3 | | | | | | | | | |
| NOA | | | | | PKiKP | **PKiKP** | **12 04 54.0** | **-0.5** | | |
| | comp=Z,4.0nm,0.9s,baz=76,slow=4.2,SNR=3.9 | | | | | | | | | |
| NOA | | | | | PKKPbc | **PKKPbc** | **12 16 24.8** | **-1.3** | | |
| | comp=Z,2.3nm,1.0s,baz=62,slow=2.6,SNR=3.9 | | | | | | | | | |
| **O29M** | **Mount Kennedy** | **104.65** | **30** | Pdiff | | **Pdif** | **12 00 38.8** | **-0.3** | | |
| | baz=279 | | | | | | | | | |
| **YUK6** | **Outpost Mounta** | **104.65** | **29** | Pdiff | | **Pdif** | **12 00 39.1** | **-0.1** | | |
| | baz=279 | | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **104.65** | **320** | | *e*PDIFF | **Pdif** | **12 00 36.9** | **-2.3** | | |
| HSKC | | | | | AMS | AMS | 12 56 50.0 | | | |
| | comp=Z,28µm,20.2s | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **104.67** | **319** | | IAMs_20 | IAMs_20 | 12 54 34.6 | | | |
| | comp=Z,31µm,21.0s | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **104.67** | **319** | | *e*PDIFF | **Pdif** | **12 00 36.9** | **-2.5** | | |
| KHC | | | | | *ex* | x | 12 04 04.5 | | | |
| KHC | | | | | *e*SKS | **SKSac** | **12 11 16.4** | **-0.8** | | |
| KHC | | | | | *e*PKKP | **PKKPbc** | **12 16 25.6** | **+0.1** | | |
| KHC | | | | | AMS | AMS | 12 54 10.0 | | | |
| | comp=Z,33µm,20.8s | | | | | | | | | |
| **TBLU** | **Trondheim** | **104.68** | **333** | | *e*PP | **PKiKP** | **12 04 56.2** | **+1.8** | | |
| TBLU | | | | | *e*SKSac | **SKSac** | **12 11 17.9** | **+1.4** | | |
| TBLU | | | | | IVMs_BB | IVMs_BB | 12 55 56.8 | | | |
| | comp=Z,17µm,18.4s | | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **104.73** | **317** | | *e*Pdiff | **Pdif** | **12 00 40.6** | **+1.0** | | |
| | comp=Z,2.4nm,0.8s | | | | | | | | | |
| BIOA | | | | | *e*PKKP | **PKKPbc** | **12 16 25.1** | **-0.2** | | |
| | comp=Z,7.2nm,0.7s | | | | | | | | | |
| **I30M** | **Mount Dempster** | **104.74** | **25** | | IAMs_20 | IAMs_20 | 12 55 57.6 | | | |
| | comp=Z,11µm,21.0s | | | | | | | | | |
| **I30M** | **Mount Dempster** | **104.74** | **25** | Pdiff | | **Pdif** | **12 00 39.5** | **+0.1** | | |
| | baz=282 | | | | | | | | | |
| **CADS** | **Cadrg** | **104.76** | **316** | | *e*Pdiff | **Pdif** | **12 00 37.4** | **-2.4** | | |
| CADS | | | | | *e*PKKPbc | **PKKPbc** | **12 16 24.9** | **-0.2** | | |
| **MYKA** | **Terra Mystica** | **104.80** | **316** | | *e*Pdiff | **Pdif** | **12 00 37.5** | **-2.5** | | |
| | comp=Z,3.1nm,1.1s | | | | | | | | | |
| MYKA | | | | | *e*PKKP | **PKKPbc** | **12 16 24.8** | **-0.3** | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| **INTR** | **Introdacqua** | **104.84** | **311** | | IAMs_20 | IAMs_20 | 12 52 46.7 | | | |
| | comp=Z,16µm,22.0s | | | | | | | | | |
| **CLL** | **Collm** | **104.86** | **321** | | IAMs_20 | IAMs_20 | 12 54 09.3 | | | |
| | comp=Z,29µm,20.0s | | | | | | | | | |
| **CLL** | **Collm** | **104.86** | **321** | | *e*P | **Pdif** | **12 00 42.0** | **+1.9** | | |
| CLL | | | | | *e* | | 12 05 01.0 | | | |
| CLL | | | | | *e*S | **Sdif** | **12 12 32.0** | **+0.5** | | |
| CLL | | | | | *e* | | 12 20 07.0 | | | |
| CLL | | | | | pmax | pmax | | | | |
| | comp=Z,15nm,1.6s | | | | | | | | | |
| **CLL** | **Collm** | **104.86** | **321** | | *e*Pdiff | **Pdif** | **12 00 38.8** | **-1.3** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| CLL | | | | | *e*PP | **PKiKP** | **12 04 56.8** | **+1.6** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| CLL | | | | | *e*SKSac | **SKSac** | **12 11 13.1** | **-4.8** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **SABO** | **M.te Sabotino** | **104.87** | **315** | | IAMs_20 | IAMs_20 | 12 56 55.7 | | | |
| | comp=Z,16µm,20.0s | | | | | | | | | |
| **J30M** | **Hart River** | **104.89** | **25** | Pdiff | | **Pdif** | **12 00 40.0** | **-0.1** | | |
| | baz=282 | | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **104.97** | **316** | | *e*PKKP | **PKKPbc** | **12 16 24.5** | **-0.2** | | |
| | comp=Z,5.5nm,0.7s | | | | | | | | | |
| **OSL** | **Oslo** | **105.04** | **330** | | *e*Pdif | **Pdif** | **12 00 42.5** | **+1.8** | | |
| OSL | | | | | IVmB_BB | | 12 00 54.8 | | | |
| | comp=Z,1µm,4.4s | | | | | | | | | |
| OSL | | | | | *e*PP | **PP** | **12 05 04.3** | **+2.9** | | |
| OSL | | | | | *e*SKSac | **SKSac** | **12 11 18.7** | **+0.5** | | |
| OSL | | | | | *e*SP | **SP** | **12 14 13.7** | **+2.1** | | |
| OSL | | | | | *e*SS | **SS** | **12 19 56.8** | **+3.4** | | |
| OSL | | | | | IVMs_BB | IVMs_BB | 12 54 02.6 | | | |
| | comp=Z,21µm,19.2s | | | | | | | | | |
| **INK** | **Inuvik** | **105.09** | **21** | | IAMs_20 | IAMs_20 | 12 57 16.0 | | | |
| | comp=Z,12µm,21.0s | | | | | | | | | |
| **INK** | **Inuvik** | **105.09** | **21** | Pdiff | | **Pdif** | **12 00 41.3** | **+0.7** | | |
| | baz=286 | | | | | | | | | |
| **M30M** | **Minto, Yukon** | **105.10** | **27** | Pdiff | | **Pdif** | **12 00 41.9** | **+1.0** | | |
| | baz=281 | | | | | | | | | |
| **WET** | **Wettzell** | **105.13** | **319** | | *e*Pdiff | **Pdif** | **12 00 40.3** | **-1.1** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| WET | | | | | *e*PP | **PKiKP** | **12 04 58.4** | **+2.6** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| WET | | | | | *e*SKSac | **SKSac** | **12 11 16.6** | **-2.7** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **N30M** | **Aishikik Lake** | **105.17** | **28** | | IAMs_20 | IAMs_20 | 12 57 34.6 | | | |
| | comp=Z,9µm,19.0s | | | | | | | | | |
| **N30M** | **Aishikik Lake** | **105.17** | **28** | Pdiff | | **Pdif** | **12 00 41.9** | **+0.6** | | |
| | baz=281 | | | | | | | | | |
| **P29M** | **Windy Craggy** | **105.17** | **30** | Pdiff | | **Pdif** | **12 00 41.8** | **+0.5** | | |
| | baz=280 | | | | | | | | | |
| **G31M** | **Satah River** | **105.18** | **23** | Pdiff | | **Pdif** | **12 00 40.8** | **-0.3** | | |
| | baz=285 | | | | | | | | | |
| **GUMA** | **Gualdo di Mace** | **105.21** | **312** | | IAMs_20 | IAMs_20 | 12 53 31.5 | | | |
| | comp=Z,26µm,22.0s | | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **105.24** | **22** | Pdiff | | **Pdif** | **12 00 41.6** | **+0.2** | | |
| | baz=285 | | | | | | | | | |
| **TANN** | **Tannenbergstha** | **105.29** | **320** | | *e*Pdiff | **Pdif** | **12 00 41.2** | **-0.9** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| TANN | | | | | *e*PP | **PP** | **12 05 00.2** | **-3.4** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| TANN | | | | | *e*SKSac | **SKSac** | **12 11 17.4** | **-2.6** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **RJOB** | **Jochberg** | **105.30** | **317** | | *e*Pdiff | **Pdif** | **12 00 40.7** | **-1.5** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| RJOB | | | | | *e*PP | **PKiKP** | **12 04 59.4** | **+3.2** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| RJOB | | | | | *e*SKSac | **SKSac** | **12 11 16.1** | **-4.0** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **FDMO** | **Fiordimonte** | **105.39** | **312** | | IAMs_20 | IAMs_20 | 12 56 57.7 | | | |
| | comp=Z,24µm,22.0s | | | | | | | | | |
| **LESA** | **Schwarzleotal** | **105.40** | **317** | | *e*Pdiff | **Pdif** | **12 00 37.5** | **-5.2** | | |
| | comp=Z,5.6nm,1.4s | | | | | | | | | |
| LESA | | | | | *e*PKKP | **PKKPbc** | **12 16 22.3** | **-1.0** | | |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| **DOMB** | **Dombas** | **105.45** | **332** | | *e*Pdif | **Pdif** | **12 00 42.1** | **-0.4** | | |
| DOMB | | | | | IVmB_BB | | 12 00 50.2 | | | |
| | comp=Z,682nm,4.1s | | | | | | | | | |
| DOMB | | | | | *e*PP | **PP** | **12 05 02.8** | **-1.6** | | |
| DOMB | | | | | *e*SKSac | **SKSac** | **12 11 23.8** | **+3.6** | | |
| DOMB | | | | | *e*SP | **SP** | **12 14 16.8** | **+1.0** | | |
| DOMB | | | | | *e*SS | **SS** | **12 20 00.0** | **+0.9** | | |
| DOMB | | | | | IVMs_BB | IVMs_BB | 12 53 05.1 | | | |
| | comp=Z,13µm,18.0s | | | | | | | | | |
| **STAL** | **STALIGIAL** | **105.47** | **316** | | IAMs_20 | IAMs_20 | 12 55 44.2 | | | |
| | comp=Z,19µm,21.0s | | | | | | | | | |
| **PLN** | **Plauen** | **105.47** | **320** | | *e*Pdiff | **Pdif** | **12 00 41.5** | **-1.3** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| PLN | | | | | *e*PP | **PP** | **12 05 01.2** | **-3.7** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| PLN | | | | | *e*SKSac | **SKSac** | **12 11 17.1** | **-3.6** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **P30M** | **Million Dollar** | **105.48** | **30** | Pdiff | | **Pdif** | **12 00 43.4** | **+0.7** | | |
| | baz=280 | | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **105.51** | **319** | | *e*Pdiff | **Pdif** | **12 00 42.3** | **-0.8** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| ROTZ | | | | | *e*PP | **PP** | **12 05 01.8** | **-3.4** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| ROTZ | | | | | *e*SKSac | **SKSac** | **12 11 19.2** | **-1.7** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| ROTZ | | | | | *e*SS | **SS** | **12 19 55.9** | **-4.6** | | |
| | baz=95,slow=14 | | | | | | | | | |
| **MANZ** | **Manzenberg** | **105.56** | **320** | | *e*Pdiff | **Pdif** | **12 00 42.4** | **-0.8** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| MANZ | | | | | *e*PP | **PP** | **12 05 02.2** | **-3.3** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| MANZ | | | | | *e*SKSac | **SKSac** | **12 11 19.7** | **-1.5** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **105.57** | **316** | | *e*Pdiff | **Pdif** | **12 00 43.9** | **+0.4** | | |
| | comp=Z,3.1nm,1.3s | | | | | | | | | |
| ABTA | | | | | *e*PKKP | **PKKPbc** | **12 16 22.5** | **-0.3** | | |
| | comp=Z,18nm,1.2s | | | | | | | | | |
| **NEUB** | **Neuenburg** | **105.64** | **321** | | *e*Pdiff | **Pdif** | **12 00 42.1** | **-1.4** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| NEUB | | | | | *e*PP | **PP** | **12 05 02.5** | **-3.6** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| NEUB | | | | | *e*SKSac | **SKSac** | **12 11 18.7** | **-2.6** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **KONO** | **Kongsberg** | **105.65** | **330** | | *e*Pdif | **Pdif** | **12 00 44.7** | **+1.3** | | |
| KONO | | | | | IVmBBB | | 12 00 53.0 | | | |
| | comp=Z,669nm,3.3s | | | | | | | | | |
| KONO | | | | | *e*PP | **PP** | **12 05 06.3** | **+0.4** | | |
| KONO | | | | | *e*SKSac | **SKSac** | **12 11 18.7** | **-2.4** | | |
| KONO | | | | | *e*SP | **SP** | **12 14 17.7** | **-0.3** | | |
| KONO | | | | | *e*SS | **SKKPbc** | **12 20 05.8** | **+1.5** | | |
| KONO | | | | | IVMs_BB | IVMs_BB | 12 54 30.4 | | | |
| | comp=Z,21µm,21.0s | | | | | | | | | |
| **GORT1** | **Trebel** | **105.72** | **323** | | *e*Pdiff | **Pdif** | **12 00 42.6** | **-1.2** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| GORT1 | | | | | *e*PP | **PP** | **12 05 03.9** | **-2.7** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| **O30N** | **Mendenhall** | **105.78** | **29** | Pdiff | | **Pdif** | **12 00 44.5** | **+0.5** | | |
| | baz=281 | | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **105.78** | **28** | Pdiff | | **Pdif** | **12 00 44.7** | **+0.7** | | |
| | baz=282 | | | | | | | | | |
| **CESX** | **Cesi** | **105.79** | **312** | | IAMs_20 | IAMs_20 | 12 58 09.1 | | | |
| | comp=Z,24µm,18.0s | | | | | | | | | |
| **MOX** | **Moxa** | **105.80** | **320** | | *e*Pdiff | **Pdif** | **12 00 43.3** | **-1.0** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| MOX | | | | | *e*PP | **PP** | **12 05 03.8** | **-3.6** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| MOX | | | | | *e*SKSac | **SKSac** | **12 11 20.1** | **-2.0** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| MOX | | | | | *e*L | L | 12 56 40.0 | | | |
| | comp=Z,25µm,18.6s | | | | | | | | | |
| **FLTG** | **Flechtingen** | **105.84** | **322** | | *e*Pdiff | **Pdif** | **12 00 42.7** | **-1.7** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| FLTG | | | | | *e*SKSac | **SKSac** | **12 11 20.1** | **-2.1** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **105.89** | **30** | Pdiff | | **Pdif** | **12 00 45.2** | **+0.7** | | |
| | baz=281 | | | | | | | | | |
| **MOL** | **Molde** | **106.03** | **333** | | *e*SKSac | **SKSac** | **12 11 22.2** | **-0.3** | | |
| MOL | | | | | *e*SP | **SP** | **12 14 24.0** | **+2.2** | | |
| MOL | | | | | IVMs_BB | IVMs_BB | 12 55 54.7 | | | |
| | comp=Z,14µm,18.1s | | | | | | | | | |
| **WTTA** | **Wattenberg** | **106.12** | **317** | | *e*Pdiff | **Pdif** | **12 00 42.8** | **-3.3** | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | | |
| WTTA | | | | | *e*PKKP | **PKKPbc** | **12 16 18.8** | **-2.4** | | |
| | comp=Z,17nm,1.2s | | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **106.16** | **319** | | *e*Pdiff | **Pdif** | **12 00 45.1** | **-0.8** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| GRF | | | | | *e*PP | **PP** | **12 05 06.3** | **-3.7** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| GRF | | | | | *e*SKSac | **SKSac** | **12 11 22.4** | **-1.4** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| GRF | | | | | *e*SS | **SS** | **12 20 09.8** | **+0.5** | | |
| | baz=95,slow=14 | | | | | | | | | |
| GRF | | | | | *e*L | L | 12 55 12.0 | | | |
| | comp=Z,31µm,19.6s | | | | | | | | | |
| **WATA** | **Walderalm** | **106.16** | **317** | | *e*Pdiff | **Pdif** | **12 00 42.7** | **-3.4** | | |
| | comp=Z,2.9nm,0.8s | | | | | | | | | |
| WATA | | | | | *e*PKKP | **PKKPbc** | **12 16 20.7** | **-0.4** | | |
| | comp=Z,20nm,1.5s | | | | | | | | | |
| **BSEG** | **Bad Segeberg** | **106.19** | **324** | | *e*Pdiff | **Pdif** | **12 00 45.1** | **-0.7** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| BSEG | | | | | *e*PP | **PP** | **12 05 08.3** | **-1.6** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| BSEG | | | | | *e*SKSac | **SKSac** | **12 11 23.0** | **-0.6** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **ASSE** | **Asse, Remlinge** | **106.21** | **322** | | *e*SKSac | **SKSac** | **12 11 20.1** | **-3.6** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **CTI** | **Castel Tesino** | **106.22** | **315** | | IAMs_20 | IAMs_20 | 12 55 56.7 | | | |
| | comp=Z,30µm,21.0s | | | | | | | | | |
| **S31K** | **Pelican** | **106.23** | **32** | Pdiff | | **Pdif** | **12 00 46.3** | **+0.3** | | |
| | baz=280 | | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **106.27** | **27** | | IAMs_20 | IAMs_20 | 12 58 30.3 | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **106.27** | **27** | Pdiff | | **Pdif** | **12 00 46.8** | **+0.6** | | |
| | baz=283 | | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **106.28** | **318** | | *e*Pdiff | **Pdif** | **12 00 45.1** | **-1.4** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| FUR | | | | | *e*PP | **PP** | **12 05 05.2** | **-5.8** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| FUR | | | | | *e*SKSac | **SKSac** | **12 11 20.4** | **-4.1** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| FUR | | | | | *e*SS | **SKKPbc** | **12 20 06.6** | **+4.5** | | |
| | baz=95,slow=14 | | | | | | | | | |
| **WHY** | **Whitehorse** | **106.38** | **29** | | IAMs_20 | IAMs_20 | 12 57 32.3 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **WHY** | **Whitehorse** | **106.38** | **29** | Pdiff | | **Pdif** | **12 00 47.1** | **+0.3** | | |
| | baz=282 | | | | | | | | | |
| **R31K** | **City Hall, Gus** | **106.41** | **31** | Pdiff | | **Pdif** | **12 00 47.9** | **+1.2** | | |
| | baz=281 | | | | | | | | | |
| **SKAG** | **Skagway** | **106.41** | **30** | Pdiff | | **Pdif** | **12 00 47.9** | **+1.2** | | |
| | baz=282 | | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **106.42** | **317** | | *e*Pdiff | **Pdif** | **12 00 45.2** | **-2.0** | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | | |
| SQTA | | | | | *e*PKKP | **PKKPbc** | **12 16 19.7** | **-0.5** | | |
| | comp=Z,13nm,1.1s | | | | | | | | | |
| **CLZ** | **Clausthal** | **106.44** | **322** | | *e*Pdiff | **Pdif** | **12 00 46.2** | **-0.9** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| CLZ | | | | | *e*PP | **PP** | **12 05 09.9** | **-2.1** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| CLZ | | | | | *e*SKSac | **SKSac** | **12 11 24.2** | **-0.8** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **A36M** | **Sachs Harbour** | **106.47** | **17** | | IAMs_20 | IAMs_20 | 12 59 21.9 | | | |
| | comp=Z,15µm,21.0s | | | | | | | | | |
| **A36M** | **Sachs Harbour** | **106.47** | **17** | Pdiff | | **Pdif** | **12 00 47.1** | **+0.4** | | |
| | baz=295 | | | | | | | | | |
| **HOMB** | **Homborsund** | **106.47** | **328** | | *e*Pdif | **Pdif** | **12 00 46.7** | **-0.3** | | |
| HOMB | | | | | IVmB_BB | | 12 01 07.7 | | | |
| | comp=Z,931nm,3.1s | | | | | | | | | |
| HOMB | | | | | *e*PP | **PP** | **12 05 12.4** | **+0.5** | | |
| HOMB | | | | | *e*SKSac | **SKSac** | **12 11 27.2** | **+2.6** | | |
| HOMB | | | | | *e*SP | **SP** | **12 14 27.3** | **+1.0** | | |
| HOMB | | | | | *e*SS | **SS** | **12 20 13.3** | **+0.4** | | |
| HOMB | | | | | IVMs_BB | IVMs_BB | 12 56 45.0 | | | |
| | comp=Z,15µm,18.2s | | | | | | | | | |
| **MOTA** | **Moosalm** | **106.47** | **317** | | *e*Pdiff | **Pdif** | **12 00 46.8** | **-0.8** | | |
| | comp=Z,6.3nm,1.3s | | | | | | | | | |
| MOTA | | | | | *e*PKKP | **PKKPbc** | **12 16 18.1** | **-2.0** | | |
| | comp=Z,25nm,2.2s | | | | | | | | | |
| **NRDL** | **Niedersach Rie** | **106.51** | **322** | | *e*Pdiff | **Pdif** | **12 00 46.4** | **-0.9** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| NRDL | | | | | *e*PP | **PP** | **12 05 09.6** | **-2.8** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| NRDL | | | | | *e*SKSac | **SKSac** | **12 11 24.2** | **-0.8** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **RETA** | **Reutte** | **106.69** | **317** | | *e*Pdiff | **Pdif** | **12 00 44.2** | **-4.2** | | |
| | comp=Z,2.2nm,0.8s | | | | | | | | | |
| RETA | | | | | *e*PKKP | **PKKPbc** | **12 16 18.5** | **-0.8** | | |
| | comp=Z,11nm,1.4s | | | | | | | | | |
| **OSSC** | **Osservatorio P** | **106.71** | **313** | | IAMs_20 | IAMs_20 | 12 57 11.9 | | | |
| | comp=Z,21µm,21.0s | | | | | | | | | |
| **GTTG** | **Gottingen** | **106.73** | **321** | | *e*Pdiff | **Pdif** | **12 00 47.2** | **-1.1** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| GTTG | | | | | *e*PP | **PP** | **12 05 10.5** | **-3.6** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| GTTG | | | | | *e*SKSac | **SKSac** | **12 11 25.3** | **-0.9** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **FARO** | **Faro, Yukon** | **106.74** | **27** | | IAMs_20 | IAMs_20 | 12 59 01.6 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| **FARO** | **Faro, Yukon** | **106.74** | **27** | Pdiff | | **Pdif** | **12 00 48.1** | **-0.2** | | |
| | baz=284 | | | | | | | | | |
| **FETA** | **Feichten** | **106.76** | **317** | | *e*Pdiff | **Pdif** | **12 00 46.0** | **-2.8** | | |
| | comp=Z,4.8nm,1.9s | | | | | | | | | |
| FETA | | | | | *e*PKKP | **PKKPbc** | **12 16 19.4** | **+0.2** | | |
| | comp=Z,16nm,1.2s,SNR=7.8 | | | | | | | | | |
| **UBBA** | **Unterbreizbach** | **106.80** | **321** | | *e*Pdiff | **Pdif** | **12 00 47.7** | **-0.8** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| UBBA | | | | | *e*PP | **PP** | **12 05 10.6** | **-3.9** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| UBBA | | | | | *e*SKSac | **SKSac** | **12 11 25.5** | **-0.8** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| **ZCCA** | **Zocca** | **106.83** | **314** | | IAMs_20 | IAMs_20 | 12 57 30.2 | | | |
| | comp=Z,23µm,21.0s | | | | | | | | | |
| **SIT** | **Sitka** | **106.88** | **33** | Pdiff | | **Pdif** | **12 00 49.1** | **+0.2** | | |
| | baz=281 | | | | | | | | | |
| **RETH** | **Rethem/Aller,** | **106.93** | **323** | | *e*Pdiff | **Pdif** | **12 00 48.1** | **-1.1** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| RETH | | | | | *e*PP | **PP** | **12 05 12.4** | **-3.1** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| **HYA** | **Hoyanger** | **106.99** | **332** | | *e*Pdif | **Pdif** | **12 00 48.0** | **-1.2** | | |
| HYA | | | | | IVmBBB | | 12 00 52.5 | | | |
| | comp=Z,733nm,2.7s | | | | | | | | | |
| HYA | | | | | *e*PP | **PP** | **12 05 16.3** | **+0.7** | | |
| HYA | | | | | *e*SKSac | **SKSac** | **12 11 25.4** | **-1.4** | | |
| HYA | | | | | *e*SP | **SP** | **12 14 33.5** | **+1.9** | | |
| HYA | | | | | *e*SS | **SS** | **12 20 21.0** | **+1.2** | | |
| HYA | | | | | IVMs_BB | IVMs_BB | 12 44 22.1 | | | |
| | comp=Z,13µm,41.3s | | | | | | | | | |
| **PMSA** | **Palmer Station** | **107.07** | **180** | | IAMs_20 | IAMs_20 | 12 49 50.4 | | | |
| | comp=Z,27µm,19.0s | | | | | | | | | |
| **R32K** | **Eaglecrest** | **107.07** | **31** | Pdiff | | **Pdif** | **12 00 50.0** | **+0.3** | | |
| | baz=282 | | | | | | | | | |
| **ODD1** | **Odda** | **107.07** | **330** | | *e*Pdif | **Pdif** | **12 00 48.7** | **-1.1** | | |
| ODD1 | | | | | *e*PP | **PP** | **12 05 18.3** | **+1.9** | | |
| ODD1 | | | | | *e*SKSac | **SKSac** | **12 11 26.5** | **-0.9** | | |
| ODD1 | | | | | *e*SP | **SP** | **12 14 33.8** | **+1.2** | | |
| ODD1 | | | | | *e*SS | **SS** | **12 20 25.2** | **+4.0** | | |
| ODD1 | | | | | IVMs_BB | IVMs_BB | 12 47 45.0 | | | |
| | comp=Z,12µm,33.0s | | | | | | | | | |
| **UBR** | **Ueberruh** | **107.11** | **317** | | *e*Pdiff | **Pdif** | **12 00 48.9** | **-1.3** | | |
| | baz=84,slow=4.5 | | | | | | | | | |
| UBR | | | | | *e*PP | **PP** | **12 05 11.0** | **-6.2** | | |
| | baz=88,slow=7.2 | | | | | | | | | |
| UBR | | | | | *e*SKSac | **SKSac** | **12 11 24.9** | **-3.3** | | |
| | baz=86,slow=4.8 | | | | | | | | | |
| UBR | | | | | *e*SS | **SKKPbc** | **12 20 10.1** | **+10** | | |
| | baz=95,slow=14 | | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **107.12** | **316** | | IAMs_20 | IAMs_20 | 12 56 29.5 | | | |
| | comp=Z,19µm,21.0s | | | | | | | | | |
| **N32M** | **Quiet Lake** | **107.12** | **28** | Pdiff | | **Pdif** | **12 00 50.8** | **+0.8** | | |
| | baz=284 | | | | | | | | | |
| **P32M** | **Atlin** | **107.19** | **30** | Pdiff | | **Pdif** | **12 00 52.6** | **+2.3** | | |
| | baz=283 | | | | | | | | | |
| **S32K** | **Killisnoo** | **107.20** | **32** | Pdiff | | **Pdif** | **12 00 52.3** | **+2.0** | | |
| | baz=282 | | | | | | | | | |
| **PTCN** | **Pitcairn Islan** | **107.27** | **119** | | IAMs_20 | IAMs_20 | 12 46 34.8 | | | |
| | comp=Z,17µm,21.0s | | | | | | | | | |
| **BLS5** | **Blasjo** | **107.27** | **330** | | *e*Pdif | **Pdif** | **12 00 51.1** | **+0.5** | | |
| BLS5 | | | | | IVmB_BB | | 12 01 15.7 | | | |
| | comp=Z,1µm,3.4s | | | | | | | | | |
| BLS5 | | | | | *e*PP | **PP** | **12 05 19.4** | **+1.6** | | |
| BLS5 | | | | | *e*SKSac | **SKSac** | **12 11 28.1** | **-0.1** | | |
| B

baz=88,slow=7.2
BUG eSKSac **SKSac** **12 11 31.9 -1.5**
baz=86,slow=4.8
BUG eSS **SS** **12 20 43.3 +3.7**
baz=95,slow=14
**R33M Jennings River** 108.59 30 Pdiff **Pdif** **12 00 58.3 +1.6**
baz=286
**KEST Kesra** 108.68 305 Pdiff **Pdif** **12 00 57.1 -0.4**
comp=Z,1.2nm,0.5s,baz=22,slow=5.2,SNR=2.0
KEST PKiKP **PKiKP** **12 05 02.8 -0.1**
comp=Z,7.1nm,1.0s,baz=117,slow=4.5,SNR=2.0
KEST PKKPbc **PKKPbc** **12 16 13.0 +0.4**
comp=Z,8.8nm,0.9s,baz=302,slow=3.3,SNR=5.5
**AHRW Bad Neuenahr-A** 108.68 321 ePdiff **Pdif** **12 00 56.4 -0.7**
baz=84,slow=4.5
AHRW eePP **PP** **12 05 24.3 -4.1**
baz=88,slow=7.2
AHRW eSKSac **SKSac** **12 11 34.7 +0.1**
baz=86,slow=4.8
AHRW eSS **SS** **12 20 47.0 +3.6**
baz=95,slow=14
**JMIC Jan Mayen** 108.79 344 ePdif **Pdif** **12 00 55.8 -1.4**
JMIC eePP **PP** **12 05 28.1 -0.4**
JMIC eSKSac **SKSac** **12 11 38.9 +4.7**
JMIC eSP **SP** **12 14 50.8 +1.3**
JMIC eSS **SS** **12 20 46.5 +2.8**
JMIC IVMs_BB IVMs_BB 12 52 47.9
comp=Z,7µm,21.9s
**JMI Jan Mayen** 108.89 343 ePdif **Pdif** **12 00 59.0 +1.5**
JMI eePP **PP** **12 05 30.9 +1.8**
JMI eSKSac **SKSac** **12 11 34.3 -0.4**
JMI eSP **SP** **12 14 54.0 +3.5**
JMI IVMs_BB IVMs_BB 12 52 50.5
comp=Z,7µm,21.6s
**S34M Telegraph Cree** 108.90 31 Pdiff **Pdif** **12 00 59.0 +1.1**
baz=285
**BTNL Ternell** 109.27 321 dPP **PP** **12 05 32.6 -0.1**
**V35K Ketchikan** 109.28 34 Pdiff **Pdif** **12 00 59.9 +0.3**
baz=284
**DLBC Dease Lake** 109.32 31 IAMs_20 IAMs_20 12 43 47.3
comp=Z,10µm,22.0s
**DLBC Dease Lake** 109.32 31 Pdiff **Pdif** **12 01 00.4 +0.5**
baz=286
**WLF Walferdange** 109.42 320 dPKiKP **PKiKP** **12 05 04.0 +0.3**
**WLF Walferdange** 109.42 320 ePdiff **Pdif** **12 00 59.8 -0.6**
baz=84,slow=4.5
WLF eePP **PP** **12 05 29.6 -4.2**
baz=88,slow=7.2
WLF eSKSac **SKSac** **12 11 35.8 -2.1**
baz=86,slow=4.8
WLF eSS **SS** **12 20 52.8 -0.6**
baz=95,slow=14
**T35M Bob Quinn** 109.60 32 Pdiff **Pdif** **12 01 02.1 +1.0**
baz=285
**BCLA Clavier** 109.82 321 dPP **PP** **12 05 40.1 +3.5**
**RCHB Rochefort** 109.92 320 dPP **PP** **12 05 38.9 +1.6**
RCHB dSKiKP SKiKP 12 07 58.1 -40
**U35K Hyder** 110.00 33 Pdiff **Pdif** **12 01 03.0 +0.2**
baz=285
**BMRD Maredsous** 110.18 321 dPP PP 12 05 48.2 +9.0
**NEEM North Greenlan** 110.63 357 *i* P **PKiKP** **12 05 07.0 +1.3**
NEEM IAmb IAmb 12 05 15.9
comp=Z,19nm,0.9s
**WRGLY Wrigley** 110.72 25 IAMs_20 IAMs_20 13 00 22.7
comp=Z,11µm,22.0s
**WRGLY Wrigley** 110.72 25 Pdiff **Pdif** **12 01 06.6 +0.7**
baz=294
**LIRD Liard River Hi** 110.96 29 Pdiff **Pdif** **12 01 08.6 +1.6**
baz=290
**SSB Saint Sauveur** 111.26 315 IAMs_20 IAMs_20 12 57 22.1
comp=Z,12µm,20.0s
**TOAD Toad River Com** 111.57 29 Pdiff **Pdif** **12 01 09.9 +0.1**
baz=291
**KOTAN Kotaneelee Air** 111.67 28 Pdiff **Pdif** **12 01 11.0 +0.9**
baz=292
**TULEG Thule** 111.80 1 IAMs_20 IAMs_20 13 02 26.6
comp=Z,17µm,20.0s
**ELMS Elmsett, Ipswi** 112.07 323 eP PKiKP 12 04 43.1 -25
ELMS IAMs_20 IAMs_20 13 02 12.3
comp=Z,31µm,18.2s
**ELSH Elham, Standar** 112.23 322 eP PKiKP 12 04 43.4 -25
ELSH IAMs_20 IAMs_20 13 00 05.3
comp=Z,30µm,20.7s
**TAM Tamanrasset** 112.41 291 IAMs_20 IAMs_20 12 59 30.1
comp=Z,19µm,20.0s
**GDLE Glaisdale, N Y** 112.45 326 eP PKiKP 12 04 46.4 -23
**DRUM Mains of Drumt** 112.53 329 eP PKiKP 12 04 45.1 -24
DRUM IAMs_20 IAMs_20 13 00 34.5
comp=Z,38µm,20.5s
**BIGH Upper Bighouse** 112.66 331 eP **PP** **12 05 49.6 -7.1**
BIGH IAMs_20 IAMs_20 12 58 26.3
comp=Z,61µm,20.2s
**HMNX Herstmonceux** 112.79 322 eP PKiKP 12 04 46.1 -24
**EDMD Edmundbyers** 112.95 326 eP PKiKP 12 04 47.5 -23
EDMD IAMs_20 IAMs_20 12 59 02.5
comp=Z,33µm,19.8s
**HPK Haverah Park** 113.04 325 eP PKiKP 12 04 49.2 -21
**EDI Edinburgh** 113.24 328 eP PKiKP 12 04 46.5 -24
EDI IAMs_20 IAMs_20 13 00 32.2
comp=Z,33µm,19.0s
**CWF Charnwood Fore** 113.24 324 eP PKiKP 12 04 48.5 -22
CWF IAMs_20 IAMs_20 12 59 09.2
comp=Z,39µm,19.7s
**EKA Eskdalemuir Ar** 113.43 327 PKiKP **PKiKP** **12 05 10.0 -1.1**
comp=Z,4.7nm,1.0s,baz=2.7,slow=2.1,SNR=6.1
EKA PP **PP** **12 05 59.2 -3.0**
comp=Z,4.4nm,1.0s,baz=72,slow=8.3,SNR=4.2
EKA PKKPbc **PKKPbc** **12 15 57.4 -0.2**
comp=Z,4.7nm,0.8s,baz=248,slow=3.8,SNR=12
**EKA Eskdalemuir Ar** 113.43 327 *i* PKiKP **PKiKP** **12 05 10.0 -1.1**
**ESK Eskdalemuir** 113.46 327 eP PKiKP 12 04 33.8 -37
ESK IAMs_20 IAMs_20 13 00 21.4
comp=Z,30µm,18.8s
**INVG Invergeldie, C** 113.50 329 eP PKiKP 12 05 02.3 -8.9
**PGBU Glenifferbraes** 113.96 328 eP PKiKP 12 04 51.9 -20
PGBU IAMs_20 IAMs_20 13 03 20.8
comp=Z,28µm,18.5s
**KPL Plockton** 113.97 330 eP **PKiKP** **12 05 06.7 -5.4**
**STRD Stroud** 114.03 323 eP PKPdf 12 04 51.4 -21
STRD IAMs_20 IAMs_20 12 53 21.6
comp=Z,38µm,25.2s
**SUMG Summit** 114.06 352 *i* P **PKiKP** **12 05 15.2 +2.9**
**TRIS Tristan da Cun** 114.11 223 IAMs_20 IAMs_20 12 41 58.8
comp=Z,14µm,21.0s
**HLM1 Long Mynd** 114.22 324 eP PKPdf 12 04 53.9 -19
HLM1 IAMs_20 IAMs_20 12 59 47.6
comp=Z,42µm,19.6s
**FOEL Foel Wylfa** 114.28 325 eP PKPdf 12 04 43.8 -29
FOEL IAMs_20 IAMs_20 13 01 02.7
comp=Z,47µm,20.6s
**MONM Monmouth** 114.39 324 eP PKPdf 12 04 53.2 -20
MONM IAMs_20 IAMs_20 12 53 29.4
comp=Z,40µm,27.5s
**GAL1 Galloway** 114.43 327 eP PKPdf 12 04 53.8 -19
GAL1 IAMs_20 IAMs_20 12 59 53.7
comp=Z,38µm,21.5s
**IOMK Kirk Michael** 114.57 326 eP PKiKP 12 04 55.6 -18
**YKA Yellowknife Ar** 114.64 23 Pdiff **Pdif** **12 01 22.5 -0.8**
comp=Z,0.3nm,0.4s,baz=306,slow=4.0,SNR=1.4
YKA PKP **PKiKP** **12 05 12.5 -0.7**
comp=Z,9.2nm,0.9s,baz=309,slow=1.9,SNR=14
YKA PP **PP** **12 06 07.5 -3.0**
comp=Z,8.6nm,0.8s,baz=304,slow=1.8,SNR=1.5
YKA PKKPbc **PKKPbc** **12 15 50.5 -3.2**
comp=Z,3.6nm,0.8s,baz=104,slow=3.4,SNR=3.8
**CLGH Cloghs, Cushen** 115.09 328 eP **PKiKP** **12 05 08.6 -5.7**
CLGH IAMs_20 IAMs_20 13 01 05.8
comp=Z,32µm,20.5s
**UPNV Upernavik** 115.47 358 *i* P **PKPdf** **12 05 15.2 +0.7**
**DYA Yadsworthy** 115.52 322 eP PKiKP 12 05 06.8 -8.4
DYA IAMs_20 IAMs_20 13 01 48.6
comp=Z,26µm,19.7s
**ILTH Belurgan, Co L** 115.62 327 PKP **PKPdf** **12 05 19.3 +4.0**
**ILTH Belurgan, Co L** 115.62 327 eP PKiKP 12 05 00.3 -15
**HTL Hartland** 115.66 323 eP PKiKP 12 05 00.3 -15
**SJPF Ste Jean** 115.75 314 ePKIKP **PKPdf** **12 05 16.9 +0.9**
SJPF pmax pmax
comp=Z,50nm,1.6s
**ROSF Rostrenen** 115.76 320 ePKIKP **PKPdf** **12 05 16.7 +0.9**
ROSF pmax pmax
comp=Z,17nm,1.0s
**QUIF Quistinic** 115.81 319 ePKIKP **PKPdf** **12 05 17.0 +1.1**
QUIF pmax pmax
comp=Z,46nm,1.6s
**TOA0 Torodi Ar. Sit** 115.83 281 **PKPdf** **12 05 14.9 -1.9**
**TORD Torodi Ar. Bea** 115.83 281 **PKPdf** **12 05 15.0 -1.8**
**TORD Torodi Ar. Bea** 115.83 281 PKP **PKPdf** **12 05 16.0 -0.9**
comp=Z,26nm,0.8s,baz=39,slow=2.2,SNR=30
TORD PP **PP** **12 06 16.2 -4.4**
comp=Z,8.1nm,0.8s,baz=105,slow=1.0,SNR=1.1
TORD PKKPbc **PKKPbc** **12 15 48.0 -0.3**
comp=Z,2.0nm,0.7s,baz=292,slow=2.2,SNR=7.0
**DSB Dublin** 115.95 326 PKP **PKPdf** **12 05 16.7 +0.7**
**DSB Dublin** 115.95 326 **PKPdf** **12 05 16.3 +0.3**
DSB IAMs_20 IAMs_20 12 59 36.0
comp=Z,29µm,22.0s
**DSB Dublin** 115.95 326 eP PKiKP 12 05 03.0 -13
**NLWA Neilton Lookou** 116.06 41 **PKiKP** **12 05 16.5 0.0**
**ECHE Chera** 116.32 310 PKP **PKPdf** **12 05 17.2 0.0**
**CCA1 Carnmenellis** 116.38 322 eP PKPdf 12 05 03.9 -13
CCA1 IAMs_20 IAMs_20 13 04 54.3
comp=Z,29µm,18.8s
**IWEX Carrickbyrne,** 116.50 325 PKP **PKiKP** **12 05 21.7 +4.6**
**IWEX Carrickbyrne,** 116.50 325 eP PKPdf 12 05 04.9 -12
**E03A Lebam** 116.50 42 **PKiKP** **12 05 17.6 +0.4**
**GNW Green Mountain** 116.68 41 PKPdf **PKiKP** **12 05 17.9 +0.3**
**F03A Seaside** 116.68 43 **PKPdf** **12 05 17.1 -0.6**
**CART Cartagena** 116.72 308 **PKPdf** **12 05 17.7 -0.2**
CART IAMs_20 IAMs_20 13 03 14.8
comp=Z,16µm,20.0s
**CART Cartagena** 116.72 308 PKP **PKPdf** **12 05 16.9 -1.0**
**EMUR La Murta** 116.86 308 PKP **PKPdf** **12 05 16.8 -1.5**
**ETOB Tobarra** 116.95 309 PKP **PKiKP** **12 05 18.8 +0.3**
**F04D Rainier, OR** 117.01 42 PKPdf **PKiKP** **12 05 18.8 +0.5**
**J01E Myrtle Point** 117.18 46 **PKPdf** **12 05 18.4 -0.2**
**KBO Bosley Butte** 117.20 47 **PKiKP** **12 05 19.6 +0.6**
**COR Corvallis** 117.23 44 IAMs_20 IAMs_20 12 51 44.8
comp=Z,9µm,21.0s
**D05A Enumclaw** 117.34 41 **PKiKP** **12 05 19.0 +0.1**
**F04A Amboy** 117.44 42 **PKiKP** **12 05 19.4 +0.3**
**I03D Drain, OR** 117.44 45 **PKiKP** **12 05 19.4 +0.2**
**K02D Willamette Mer** 117.48 46 **PKPdf** **12 05 19.0 -0.4**
**KSXB Camp Six Broad** 117.55 47 **PKiKP** **12 05 20.2 +0.6**
**BUCK Buck Mountain** 117.56 44 **PKiKP** **12 05 19.6 +0.1**
**LON Longmire** 117.59 41 **PKPdf** **12 05 19.1 -0.4**
**LON Longmire** 117.59 41 PKIKP **PKPdf** **12 05 19.1 -0.4**
**KRMB Red Mountain** 117.60 47 **PKiKP** **12 05 19.9 +0.1**
**H04D Lebanon** 117.64 44 **PKiKP** **12 05 19.8 +0.2**
**DBO Dodson Butte** 117.67 46 **PKiKP** **12 05 20.5 +0.7**
**L02F Cave Junction** 117.70 47 **PKiKP** **12 05 19.9 +0.1**
**KMPM Mount Pierce** 117.71 49 **PKiKP** **12 05 20.1 +0.2**
KMPM IAMs_20 IAMs_20 12 51 48.8
comp=Z,10µm,22.0s
**ENIJ Nijar** 117.78 307 PKP **PKPdf** **12 05 17.8 -2.3**
**SHEL Horse Pasture** 117.85 247 IAMs_20 IAMs_20 12 51 38.8
comp=Z,22µm,20.0s
**UCM Universidad Co** 117.87 311 PKP **PKPdf** **12 05 19.9 -0.3**
**KHMM Horse Mountain** 117.89 48 **PKiKP** **12 05 20.7 +0.3**
**H04A Detroit Lake** 117.97 44 **PKPdf** **12 05 19.5 -0.7**
**HUMO Hull Mountain** 118.01 46 **PKiKP** **12 05 20.6 +0.2**
**KMRM Mail Ridge** 118.06 49 IAMs_20 IAMs_20 12 51 58.2
comp=Z,13µm,22.0s
**I04A Tendick Farm,** 118.07 45 **PKPdf** **12 05 20.3 -0.2**
**PNT Penticton** 118.10 38 PKIKP **PKiKP** **12 05 26.9 +6.5**
**LTY Liberty** 118.17 40 **PKPdf** **12 05 20.4 -0.2**
**YBH Yreka Blue Hor** 118.42 47 **PKPdf** **12 05 21.2 0.0**
**YBH Yreka Blue Hor** 118.42 47 PKP **PKPdf** **12 05 20.4 -0.9**
comp=Z,2.9nm,0.8s,baz=118,slow=3.8,SNR=7.1
**YBH Yreka Blue Hor** 118.42 47 PKIKP **PKPdf** **12 05 21.2 0.0**
**ESBB Sonseca Array** 118.56 311 **PKPdf** **12 05 21.4 -0.2**
**ESDC Sonseca Array** 118.56 311 PKP **PKPdf** **12 05 20.7 -0.8**
comp=Z,9.9nm,0.9s,baz=28,slow=2.5,SNR=27
ESDC PP **PP** **12 06 38.4 -0.5**
comp=Z,5.8nm,0.9s,baz=82,slow=2.0,SNR=4.7
ESDC PKKPbc **PKKPbc** **12 15 39.9 +0.6**
comp=Z,3.8nm,1.1s,baz=267,slow=5.0,SNR=9.2
**B08A Colville Reser** 118.63 39 **PKPdf** **12 05 20.7 -0.7**
**MXC Moxie City** 118.64 41 **PKPdf** **12 05 21.2 -0.2**
**I05D Terrebonne, OR** 118.65 44 **PKPdf** **12 05 21.3 -0.3**
**O02D Mt. Diablo Mer** 118.75 49 **PKiKP** **12 05 22.1 +0.1**
O02D IAMs_20 IAMs_20 12 51 59.8
comp=Z,17µm,22.0s
**G06A Carlson Farm,** 118.85 43 **PKiKP** **12 05 22.1 +0.1**
**PAB San Pablo** 118.88 311 **PKPdf** **12 05 22.1 -0.1**
**PAB San Pablo** 118.88 311 IAMs_20 IAMs_20 13 01 57.7
comp=Z,15µm,22.0s
**PAB San Pablo** 118.88 311 PKIKP **PKPdf** **12 05 22.1 -0.1**
**J05D Fort Rock, OR** 119.04 45 **PKPdf** **12 05 22.4 -0.1**
**PINE Pine Mountain** 119.09 44 **PKPdf** **12 05 22.4 -0.2**
**F07A Phinny Hill Vi** 119.11 42 **PKiKP** **12 05 22.8 +0.4**
**MCCM Marconi Confer** 119.16 51 IAMs_20 IAMs_20 13 06 42.8
comp=Z,8µm,20.0s
**D08A Wollman Farm,** 119.36 40 **PKiKP** **12 05 22.8 0.0**
**C09A Chrisman Ranch** 119.49 39 **PKPdf** **12 05 22.6 -0.4**
**HATC Hat Creek Radi** 119.57 48 **PKPdf** **12 05 23.2 -0.2**
**MG05 Puerto Natales** 119.71 174 **PKiKP** **12 05 23.9 +0.5**
**ORV Oroville** 119.87 49 **PKPdf** **12 05 23.2 -0.8**
**ORV Oroville** 119.87 49 PKIKP **PKPdf** **12 05 23.2 -0.8**
**G08A Pilot Rock** 119.95 42 **PKPdf** **12 05 23.8 -0.4**
**EFI East Falkland** 120.02 184 IAMs_20 IAMs_20 12 53 39.9
comp=Z,25µm,21.0s
**NEW Newport** 120.03 38 **PKiKP** **12 05 24.2 0.0**
**NEW Newport** 120.03 38 PKiKP **PKPdf** **12 05 23.7 -0.4**
baz=293
**NEW Newport** 120.03 38 PKIKP **PKiKP** **12 05 24.2 0.0**
**PBRG Braganca** 120.04 314 ePKPdf **PKPdf** **12 05 23.7 -0.6**
**PBRG Braganca** 120.04 314 ePP **PP** **12 06 44.0 -5.0**
**E09A Wood Farm, Sta** 120.05 41 **PKPdf** **12 05 23.7 -0.4**
**GO09 Cerro Castillo** 120.13 174 **PKiKP** **12 05 24.5 +0.2**
**MVO Moncorvo** 120.43 313 ePKPdf **PKPdf** **12 05 25.1 0.0**
**MVO Moncorvo** 120.43 313 ePP **PP** **12 06 51.8 +0.1**
**MVO Moncorvo** 120.43 313 eSS SS 12 23 20.2 +1.6
**MVO Moncorvo** 120.43 313 eLQ LQ 12 38 56.8
MVO eLR LR 12 45 26.1
comp=Z,17µm,22.0s
**MDT Midelt** 120.49 303 PKKPbc PKKPbc 12 15 32.9 +0.8
comp=Z,11nm,1.1s,baz=277,slow=2.8,SNR=9.3
**DY2G Dye2** 120.77 352 *i* P **PKPdf** **12 05 24.8 -0.4**
**SFJD Kangerlussuaq** 120.79 354 **PKiKP** **12 05 25.2 +0.2**
**SFJD Kangerlussuaq** 120.79 354 PKIKP **PKiKP** **12 05 25.2 +0.2**
**SFJD Kangerlussuaq** 120.79 354 *i* P **PKiKP** **12 05 26.5 +1.5**
**F10A Beach Ranch, E** 120.84 41 **PKPdf** **12 05 25.7 -0.1**
**PVRL Vila Real** 120.89 313 ePKPdf **PKPdf** **12 05 26.0 0.0**
**PVRL Vila Real** 120.89 313 ePP **PP** **12 06 54.1 -0.7**
**POLO Lamas de Olo** 120.92 313 ePKPdf **PKPdf** **12 05 25.8 -0.3**
**POLO Lamas de Olo** 120.92 313 ePP **PP** **12 06 56.2 +1.1**
**PCAB Cabril** 120.98 314 ePKPdf **PKPdf** **12 05 26.0 -0.1**
**MTE Manteigas** 121.02 312 **PKPdf** **12 05 25.9 -0.3**
MTE IAMs_20 IAMs_20 13 07 16.2
comp=Z,20µm,20.0s
**MTE Manteigas** 121.02 312 ePKPdf **PKPdf** **12 05 26.3 0.0**
**MTE Manteigas** 121.02 312 ePP PP 12 06 41.3 -14
**MTE Manteigas** 121.02 312 eSS SS 12 23 26.3 0.0
**MTE Manteigas** 121.02 312 eLQ LQ 12 39 00.5
MTE eLR LR 12 45 44.4
comp=Z,18µm,20.0s
**SFS San Fernando** 121.03 308 IAMs_20 IAMs_20 13 08 40.1
comp=Z,19µm,20.0s
**MPK Martis Peak** 121.03 49 **PKiKP** **12 05 27.1 +0.4**
MPK IAMs_20 IAMs_20 12 53 33.1
comp=Z,7µm,21.0s
**EMB Emerald Bay** 121.07 49 **PKiKP** **12 05 26.9 +0.1**
**PGAV Gavieira, Arco** 121.08 314 ePKPdf **PKPdf** **12 05 26.1 -0.3**
**PGAV Gavieira, Arco** 121.08 314 ePP PP 12 06 38.3 -18
**PGAV Gavieira, Arco** 121.08 314 eSS SS 12 23 32.3 +5.4
**PGAV Gavieira, Arco** 121.08 314 eLQ LQ 12 37 18.6
PGAV eLR LR 12 45 57.8
comp=Z,16µm,18.0s
**CMB Columbia Colle** 121.10 51 **PKPdf** **12 05 26.1 -0.4**
**CMB Columbia Colle** 121.10 51 PKIKP **PKPdf** **12 05 26.1 -0.4**
**WVOR Wild Horse Val** 121.12 45 **PKPdf** **12 05 26.0 -0.5**
WVOR IAMs_20 IAMs_20 13 06 53.9
comp=Z,8µm,21.0s
**WVOR Wild Horse Val** 121.12 45 PKIKP **PKPdf** **12 05 26.0 -0.5**
**PCBR Castelo Branco** 121.13 312 ePKPdf **PKiKP** **12 05 26.7 +0.2**
**PMRV Marv??o** 121.18 311 ePKPdf **PKPdf** **12 05 26.1 -0.5**
**PMRV Marv??o** 121.18 311 ePP **PP** **12 07 00.3 +3.4**
**PMRV Marv??o** 121.18 311 eSS SS 12 23 27.5 -0.8
**PMRV Marv??o** 121.18 311 eLQ LQ 12 38 53.8
PMRV eLR LR 12 45 47.5
comp=Z,14µm,20.0s
**PVIS Viseu** 121.19 313 ePKPdf **PKPdf** **12 05 26.0 -0.6**
**PVIS Viseu** 121.19 313 ePP **PP** **12 06 57.5 +0.6**
**BMO Blue Mountains** 121.20 42 **PKPdf** **12 05 25.6 -1.0**
**BMO Blue Mountains** 121.20 42 PKIKP **PKPdf** **12 05 25.6 -1.0**
**PMPB Monarch Peak** 121.22 53 IAMs_20 IAMs_20 12 58 49.5
comp=Z,9µm,20.0s
**PBAR Barrancos** 121.25 310 ePKPdf **PKPdf** **12 05 26.6 -0.1**
**PBAR Barrancos** 121.25 310 ePP **PP** **12 07 00.5 +3.1**
**PAHR Pah Rah Range** 121.40 48 **PKPdf** **12 05 27.0 -0.1**
**PNTR Pine Nut** 121.41 49 **PKPdf** **12 05 26.9 -0.4**
**WAKR Walker** 121.69 50 **PKiKP** **12 05 28.1 +0.1**
**YERR Yerington** 121.71 49 **PKPdf** **12 05 26.8 -1.0**
**COI Coimbra** 121.71 312 **PKiKP** **12 05 27.6 0.0**
COI IAMs_20 IAMs_20 13 07 13.5
comp=Z,22µm,20.0s
**COI Coimbra** 121.71 312 ePKPdf **PKiKP** **12 05 28.3 +0.7**
**COI Coimbra** 121.71 312 ePP **PP** **12 07 02.3 +1.9**
**COI Coimbra** 121.71 312 PKIKP **PKiKP** **12 05 27.6 0.0**
**DBIC Dimbokro** 121.79 273 PKP **PKPdf** **12 05 27.8 -0.6**
comp=Z,39nm,0.8s,baz=92,slow=2.4,SNR=22
DBIC PP **PP** **12 06 57.4 -4.6**
comp=Z,12nm,0.8s,baz=90,slow=7.8,SNR=1.2
DBIC PKKPab **PKKPab** **12 15 27.9 +0.4**
comp=Z,13nm,0.9s,baz=248,slow=3.2,SNR=7.2
**PCAS Casmilo, Conde** 121.82 312 ePKPdf **PKPdf** **12 05 27.6 -0.1**
**PCAS Casmilo, Conde** 121.82 312 ePP **PP** **12 06 59.8 -1.4**
**EVO Evora** 121.90 310 ePKPdf **PKPdf** **12 05 28.0 +0.1**
**EVO Evora** 121.90 310 ePP **PP** **12 07 06.1 +4.4**
**PMTG Montargil** 121.91 311 ePKPdf **PKPdf** **12 05 27.2 -0.7**
**PMTG Montargil** 121.91 311 ePP **PP** **12 06 58.6 -3.2**
**PBEJ Beja** 121.92 310 ePKPdf **PKiKP** **12 05 28.5 +0.4**
**PBEJ Beja** 121.92 310 ePP **PP** **12 07 04.3 +2.4**
**PVAQ Vaqueiros** 121.97 309 PKPdf **PKPdf** **12 05 28.0 -0.1**
PVAQ IAMs_20 IAMs_20 13 06 52.8
comp=Z,18µm,20.0s
**PVAQ Vaqueiros** 121.97 309 ePKPdf **PKPdf** **12 05 28.0 -0.1**
**PVAQ Vaqueiros** 121.97 309 ePP **PP** **12 07 05.4 +3.1**
**PVAQ Vaqueiros** 121.97 309 eSS SS 12 23 39.3 +0.8
**PVAQ Vaqueiros** 121.97 309 eLQ LQ 12 39 16.4
PVAQ eLR LR 12 45 48.1
comp=Z,22µm,20.0s
**SMMC Simmler** 122.06 54 PKiKP **PKiKP** **12 05 28.6 0.0**
baz=284
**PCVE Castro Verde** 122.16 309 ePKPdf **PKPdf** **12 05 28.5 0.0**
**PCVE Castro Verde** 122.16 309 ePP **PP** **12 07 08.1 +4.5**
**PBDV Barranco-do-Ve** 122.18 309 ePKPdf **PKPdf** **12 05 28.5 0.0**
**PBDV Barranco-do-Ve** 122.18 309 ePP **PP** **12 07 07.8 +4.1**
**PSBE So Bento** 122.20 312 ePKPdf **PKPdf** **12 05 28.3 -0.2**
**PSBE So Bento** 122.20 312 ePP **PP** **12 07 02.9 -0.9**
**MDPB Devils Postpil** 122.20 51 **PKiKP** **12 05 29.3 +0.2**
**MESJ Messejana** 122.24 310 **PKPdf** **12 05 28.4 -0.2**
MESJ IAMs_20 IAMs_20 13 03 56.9
comp=Z,17µm,22.0s
**MESJ Messejana** 122.24 310 ePKPdf **PKPdf** **12 05 28.4 -0.2**
**MESJ Messejana** 122.24 310 ePP **PP** **12 07 08.1 +4.0**
**MESJ Messejana** 122.24 310 ePKPdf **PKPdf** **12 05 28.3 -0.3**
MESJ ePP **PP** **12 07 03.8 -0.3**
MESJ IAMs_20 IAMs_20 13 04 00.8
comp=Z,15µm,20.0s
**MESJ Messejana** 122.24 310 PKIKP **PKPdf** **12 05 28.5 -0.2**
**OMMB Old Mammoth Mi** 122.27 51 **PKPdf** **12 05 28.8 -0.3**
**VOG Valley Oaks Go** 122.31 52 PKiKP **PKPdf** **12 05 28.8 0.0**
baz=285
**PKM Mcpherson Peak** 122.31 54 PKiKP **PKiKP** **12 05 29.5 +0.3**
baz=283
**RYN Ryan** 122.35 49 **PKiKP** **12 05 29.4 +0.2**
**MLAC Mammoth, Mammt** 122.39 51 PKiKP **PKiKP** **12 05 29.5 +0.1**
baz=286
**PNCL Nicolau / Gran** 122.40 310 ePKPdf **PKPdf** **12 05 28.8 -0.1**
**PNCL Nicolau / Gran** 122.40 310 ePP **PP** **12 07 06.7 +1.5**
**LHV Little Humtoon** 122.47 50 **PKiKP** **12 05 29.4 -0.2**
**SBC Santa Barbara** 122.49 54 PKiKP **PKPdf** **12 05 29.1 0.0**
baz=283
**KVN Kaiserville** 122.54 49 **PKiKP** **12 05 29.9 +0.4**
**KVN Kaiserville** 122.54 49 PKIKP **PKiKP** **12 05 30.0 +0.4**
**NVAR Mina Array Bea** 122.57 50 **PKiKP** **12 05 30.2 +0.5**
**NVAR Mina Array Bea** 122.57 50 PKP **PKPdf** **12 05 29.1 -0.4**
comp=Z,10nm,0.7s,baz=253,slow=2.1,SNR=37
NVAR PP **PP** **12 07 04.0 -2.6**
comp=Z,6.7nm,1.0s,baz=283,slow=0.9,SNR=0.7
NVAR PKKPbc **PKKPbc** **12 15 24.5 0.0**
comp=Z,3.5nm,0.8s,baz=131,slow=4.4,SNR=8.0
**MSO Missoula** 122.58 39 **PKPdf** **12 05 28.6 -0.5**
MSO IAMs_20 IAMs_20 13 10 23.0
comp=Z,12µm,22.0s
**MSO Missoula** 122.58 39 PKiKP **PKPdf** **12 05 28.3 -0.8**
baz=295
**BCW Bitter Crk WRg** 122.62 54 **PKiKP** **12 05 30.6 +0.9**
BCW IAMs_20 IAMs_20 13 07 27.6
comp=Z,8µm,21.0s
**SCZ2 Santa Cruz Isl** 122.65 55 PKiKP **PKPdf** **12 05 29.6 0.0**
baz=283
**VES Vestal, Richgr** 122.66 53 PKiKP **PKPdf** **12 05 29.3 -0.2**
baz=284
**NV11 Mina Array Sit** 122.68 49 **PKiKP** **12 05 30.0 +0.1**
**LIS Lisbon** 122.70 311 ePKPdf **PKPdf** **12 05 29.1 -0.3**
LIS ePP **PP** **12 07 06.9 -0.2**
LIS IAMs_20 IAMs_20 13 01 38.3
comp=E,29µm,26.4s
**LIS Lisbon** 122.70 311 ePKIKP **PKPdf** **12 05 29.1 -0.3**
LIS *e* 12 07 06.9
**AVE Averroes** 122.70 304 **PKiKP** **12 05 29.8 0.0**
**PTEO Sao Teotonio** 122.71 309 ePKPdf **PKPdf** **12 05 29.4 -0.1**
**MFID Camas Ranch** 122.72 43 **PKiKP** **12 05 29.9 +0.2**
**MORF Marmelete** 122.72 309 ePKPdf **PKPdf** **12 05 29.5 -0.1**
**MORF Marmelete** 122.72 309 ePP **PP** **12 07 10.2 +2.8**
**MORF Marmelete** 122.72 309 ePKPdf **PKPdf** **12 05 29.1 -0.5**
MORF ePP **PP** **12 07 07.0 -0.4**
MORF IAMs_20 IAMs_20 13 07 25.4
comp=Z,25µm,20.9s
**MORF Marmelete** 122.72 309 ePKIKP **PKPdf** **12 05 29.1 -0.5**
MORF *e* 12 07 07.0
**BMN Battle Mountai** 122.76 47 **PKiKP** **12 05 30.0 +0.1**
**BMN Battle Mountai** 122.76 47 PKIKP **PKiKP** **12 05 30.0 +0.1**
**PFVI Vila Bisbo** 122.90 309 **PKiKP** **12 05 30.4 +0.3**
PFVI IAMs_20 IAMs_20 13 07 39.3
comp=Z,23µm,21.0s
**PFVI Vila Bisbo** 122.90 309 ePKPdf **PKPdf** **12 05 29.8 -0.1**
**PFVI Vila Bisbo** 122.90 309 ePP **PP** **12 07 12.1 +3.5**
**SNCC San Nicolas Is** 122.91 56 IAMs_20 IAMs_20 13 00 24.6
comp=Z,8µm,21.0s
**SNCC San Nicolas Is** 122.91 56 PKiKP **PKPdf** **12 05 29.9 -0.2**
baz=283
**TIN Tinemaha, Big** 123.01 51 PKiKP **PKPdf** **12 05 30.3 +0.1**
baz=286
**ARVC Arvin** 123.03 53 PKiKP **PKiKP** **12 05 30.6 +0.1**
baz=284
**BPMT Black Pine Rid** 123.06 39 **PKPdf** **12 05 29.9 -0.4**
**OVMT Ovando** 123.06 38 **PKPdf** **12 05 29.4 -0.7**
**DSP Deep Springs** 123.12 51 **PKiKP** **12 05 30.7 +0.2**
**ISA Isabella, Lake** 123.18 53 **PKiKP** **12 05 30.8 0.0**
ISA IAMs_20 IAMs_20 13 00 00.5
comp=Z,13µm,22.0s
**ISA Isabella, Lake** 123.18 53 PKiKP **PKiKP** **12 05 30.8 0.0**
baz=285
**ISA Isabella, Lake** 123.18 53 PKIKP **PKiKP** **12 05 30.8 0.0**
ISA MLR MLR
comp=Z,13µm,22.0s
**OSI Osito Audit: C** 123.24 54 PKiKP **PKiKP** **12 05 30.9 -0.1**
baz=284
**CWC Cottonwood Cre** 123.29 52 PKiKP **PKiKP** **12 05 31.2 0.0**
baz=286
**MZP Montezuma Peak** 123.47 50 **PKiKP** **12 05 32.1 +0.6**
**TPH Tonopah** 123.49 50 **PKPdf** **12 05 31.1 -0.2**
**TPH Tonopah** 123.49 50 PKIKP **PKPdf** **12 05 31.1 -0.2**
**LYMT Lyon Mountain** 123.54 38 **PKPdf** **12 05 30.5 -0.6**
**HLID Hailey** 123.61 43 **PKiKP** **12 05 32.0 +0.5**
**HLID Hailey** 123.61 43 PKiKP **PKiKP** **12 05 31.9 +0.3**
baz=293
**DECC Green Verdugo** 123.64 54 PKiKP **PKPdf** **12 05 31.6 +0.1**
baz=284
**CCAC Calif City Air** 123.67 53 IAMs_20 IAMs_20 13 02 22.6
comp=Z,9µm,21.0s
**GMN Gold Mountain** 123.68 51 **PKiKP** **12 05 31.9 -0.1**
**GRAC Grapevine Rang** 123.69 51 **PKiKP** **12 05 32.1 +0.4**
**GRAC Grapevine Rang** 123.69 51 PKiKP **PKiKP** **12 05 31.8 +0.1**
baz=286
**EDW2 Edwards Air Fo** 123.76 54 PKiKP **PKiKP** **12 05 32.1 +0.1**
baz=285
**CIS Catalina Islan** 123.78 55 PKiKP **PKPdf** **12 05 31.8 0.0**
baz=284
**PASC Pasadena Art C** 123.78 54 **PKiKP** **12 05 32.2 +0.3**
**PASC Pasadena Art C** 123.78 54 IAMs_20 IAMs_20 13 00 58.6
comp=Z,12µm,22.0s
**FMP Fort Macarthur** 123.80 55 PKiKP **PKPdf** **12 05 30.8 -0.9**
baz=284
**MPMC Manual Prospec** 123.85 52 PKiKP **PKiKP** **12 05 32.4 +0.1**
baz=286
**LRMC Laurel Mtn Rad** 123.86 53 PKiKP **PKiKP** **12 05 32.2 0.0**
baz=285

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ELK** | **Elko** | **124.08** | **46** | | | **PKiKP** | **12 05 32.7** | **0.0** | |
| ELK | | | | IAMs_20 | | IAMs_20 | 13 01 32.5 | | |
| | comp=Z,9µm,22.0s | | | | | | | | |
| **ELK** | **Elko** | **124.08** | **46** | PKiKP | | **PKiKP** | **12 05 32.7** | **0.0** | |
| ELK | | | | MLR | | MLR | | | |
| | comp=Z,9µm,22.0s | | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **124.19** | **54** | PKiKP | | **PKPdf** | **12 05 32.5** | **-0.2** | |
| | baz=284 | | | | | | | | |
| **FURC** | **Furnace Creek,** | **124.23** | **51** | PKiKP | | **PKiKP** | **12 05 33.1** | **+0.4** | |
| | baz=287 | | | | | | | | |
| **GWY** | **Greenwater Val** | **124.46** | **52** | | | **PKiKP** | **12 05 33.4** | **-0.1** | |
| GWY | | | | IAMs_20 | | IAMs_20 | 13 09 19.1 | | |
| | comp=Z,7µm,21.0s | | | | | | | | |
| **ELS** | **Elsinore Mount** | **124.52** | **55** | IAMs_20 | | IAMs_20 | 13 01 08.2 | | |
| | comp=Z,10µm,21.0s | | | | | | | | |
| **EGMT** | **Eagleton** | **124.55** | **36** | | | **PKPdf** | **12 05 32.4** | **-0.4** | |
| **EGMT** | **Eagleton** | **124.55** | **36** | PKiKP | | **PKPdf** | **12 05 32.8** | **-0.1** | |
| | baz=300 | | | | | | | | |
| **RRX** | **Edison Barstow** | **124.56** | **53** | PKiKP | | **PKiKP** | **12 05 33.5** | **0.0** | |
| | baz=285 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **124.56** | **51** | PKiKP | | **PKiKP** | **12 05 33.6** | **-0.1** | |
| | baz=287 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **124.57** | **39** | | | **PKPdf** | **12 05 32.8** | **-0.3** | |
| **BOZ** | **Bozeman (W)** | **124.57** | **39** | PKiKP | | **PKiKP** | **12 05 33.3** | **-0.1** | |
| | baz=297 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **124.57** | **39** | PKIKP | | **PKPdf** | **12 05 32.8** | **-0.3** | |
| **FFC** | **Flin Flon** | **124.58** | **26** | | | **PKPdf** | **12 05 32.5** | **-0.1** | |
| **FFC** | **Flin Flon** | **124.58** | **26** | IAMs_20 | | IAMs_20 | 13 09 06.6 | | |
| | comp=Z,16µm,22.0s | | | | | | | | |
| **FFC** | **Flin Flon** | **124.58** | **26** | PKiKP | | **PKPdf** | **12 05 32.5** | **-0.1** | |
| **FCC** | **Fort Churchill** | **124.58** | **19** | IAMs_20 | | IAMs_20 | 13 10 48.1 | | |
| | comp=Z,11µm,19.0s | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **124.59** | **53** | | | **PKiKP** | **12 05 33.9** | **+0.3** | |
| **GSC** | **Goldstone, Bar** | **124.59** | **53** | PKiKP | | **PKiKP** | **12 05 34.1** | **+0.4** | |
| | baz=286 | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **124.59** | **53** | PKIKP | | **PKiKP** | **12 05 33.9** | **+0.3** | |
| **FRB** | **Frobisher Bay** | **124.60** | **3** | PKP | | **PKiKP** | **12 05 33.1** | **+0.5** | |
| | comp=Z,21nm,1.0s,baz=303,slow=6.5,SNR=2.7 | | | | | | | | |
| FRB | | | | PP | | **PP** | **12 07 16.3** | **-2.2** | |
| | comp=Z,23nm,0.9s,baz=186,slow=8.7,SNR=1.6 | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **124.63** | **49** | PKiKP | | **PKiKP** | **12 05 33.9** | **+0.2** | |
| | baz=289 | | | | | | | | |
| **MURC** | **Murrieta** | **124.72** | **55** | PKiKP | | **PKiKP** | **12 05 33.8** | **-0.1** | |
| | baz=284 | | | | | | | | |
| **BBRC** | **Big Bear Solar** | **124.78** | **54** | PKiKP | | **PKPdf** | **12 05 34.0** | **+0.1** | |
| | baz=285 | | | | | | | | |
| **SHOC** | **Shoshone, Teco** | **124.84** | **52** | PKiKP | | **PKiKP** | **12 05 34.5** | **+0.5** | |
| | baz=287 | | | | | | | | |
| **Q12A** | **Willow Creek R** | **124.96** | **48** | | | **PKiKP** | **12 05 34.6** | **+0.3** | |
| **109C** | **Camp Elliot, M** | **124.97** | **56** | | | **PKiKP** | **12 05 34.4** | **0.0** | |
| 109C | | | | IAMs_20 | | IAMs_20 | 13 11 36.1 | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **109C** | **Camp Elliot, M** | **124.97** | **56** | PKiKP | | **PKPdf** | **12 05 34.1** | **+0.1** | |
| | baz=284 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **125.09** | **53** | PKiKP | | **PKiKP** | **12 05 34.8** | **+0.2** | |
| | baz=286 | | | | | | | | |
| **YHL** | **Hebgen Lake** | **125.18** | **40** | | | **PKiKP** | **12 05 34.8** | **0.0** | |
| **TUQ** | **Turquoise Moun** | **125.25** | **52** | PKiKP | | **PKiKP** | **12 05 35.2** | **+0.2** | |
| | baz=287 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **125.31** | **55** | | | **PKiKP** | **12 05 35.1** | **0.0** | |
| **PFO** | **Pinyon Flats O** | **125.31** | **55** | IAMs_20 | | IAMs_20 | 13 04 05.2 | | |
| | comp=Z,9µm,19.0s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **125.31** | **55** | PKiKP | | **PKiKP** | **12 05 35.0** | **-0.1** | |
| | baz=285 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **125.31** | **55** | ⇑*i* PKiKP | | **PKPdf** | **12 05 34.9** | **+0.1** | |
| PFO | | | | MLR | | MLR | | | |
| | comp=Z,12µm,19.0s | | | | | | | | |
| **TPFO** | **Pinon Flats** | **125.32** | **55** | PKiKP | | **PKiKP** | **12 05 35.2** | **0.0** | |
| | baz=285 | | | | | | | | |
| **SPR3** | **Spring Creek 3** | **125.34** | **48** | | | **PKPdf** | **12 05 34.7** | **-0.2** | |
| SPR3 | | | | IAMs_20 | | IAMs_20 | 12 55 51.1 | | |
| | comp=Z,7µm,20.0s | | | | | | | | |
| **YMR** | **Madison River** | **125.40** | **40** | | | **PKiKP** | **12 05 35.4** | **+0.2** | |
| **HVU** | **Hansel Valley** | **125.42** | **44** | | | **PKiKP** | **12 05 35.2** | **0.0** | |
| **HVU** | **Hansel Valley** | **125.42** | **44** | PKIKP | | **PKiKP** | **12 05 35.2** | **0.0** | |
| **YHH** | **Holmes Hill** | **125.42** | **40** | | | **PKiKP** | **12 05 35.2** | **-0.1** | |
| **CBX** | **Cerro Bola** | **125.47** | **56** | | | **PKiKP** | **12 05 35.7** | **+0.2** | |
| **MONP2** | **Monument Peak** | **125.52** | **55** | PKiKP | | **PKiKP** | **12 05 36.1** | **+0.4** | |
| | baz=284 | | | | | | | | |
| **SHPR** | **Sheep Range** | **125.53** | **51** | | | **PKiKP** | **12 05 36.2** | **+0.7** | |
| **YNM** | **Yellowstone No** | **125.54** | **40** | IAMs_20 | | IAMs_20 | 13 06 59.5 | | |
| | comp=Z,8µm,20.0s | | | | | | | | |
| **YNR** | **Norris Junctio** | **125.54** | **40** | | | **PKiKP** | **12 05 36.5** | **+1.1** | |
| **BGU** | **Big Grassy Mou** | **125.58** | **45** | | | **PKiKP** | **12 05 35.8** | **+0.3** | |
| BGU | | | | IAMs_20 | | IAMs_20 | 12 57 29.0 | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **125.58** | **54** | PKiKP | | **PKiKP** | **12 05 36.1** | **+0.4** | |
| | baz=286 | | | | | | | | |
| **NRS** | **Narsarsuaq** | **125.61** | **349** | | | **PKPdf** | **12 05 34.1** | **-0.2** | |
| **NRS** | **Narsarsuaq** | **125.61** | **349** | PKIKP | | **PKPdf** | **12 05 34.1** | **-0.2** | |
| **NRS** | **Narsarsuaq** | **125.61** | **349** | *i P* | | **PKPdf** | **12 05 34.0** | **-0.2** | |
| **GMRC** | **Granite Mounta** | **125.64** | **53** | PKiKP | | **PKiKP** | **12 05 36.2** | **+0.4** | |
| | baz=286 | | | | | | | | |
| **IMW** | **Indian Meadow** | **125.76** | **41** | | | **PKPdf** | **12 05 35.6** | **+0.1** | |
| **COYC** | **Coyhaique** | **125.77** | **173** | | | **PKiKP** | **12 05 35.6** | **0.0** | |
| **COYC** | **Coyhaique** | **125.77** | **173** | IAMs_20 | | IAMs_20 | 12 59 34.7 | | |
| | comp=Z,13µm,20.0s | | | | | | | | |
| **H17A** | **Grant Village** | **125.78** | **40** | IAMs_20 | | IAMs_20 | 13 09 10.6 | | |
| | comp=Z,15µm,22.0s | | | | | | | | |
| **H17A** | **Grant Village** | **125.78** | **40** | PKiKP | | **PKiKP** | **12 05 36.5** | **+0.6** | |
| | baz=297 | | | | | | | | |
| **FXWY** | **Fox Creek** | **125.82** | **41** | | | **PKPdf** | **12 05 35.8** | **+0.1** | |
| **IKP** | **In-Ko-Pah, Jac** | **125.84** | **56** | PKiKP | | **PKiKP** | **12 05 36.3** | **+0.1** | |
| | baz=284 | | | | | | | | |
| **PSUT** | **Pine Spring** | **125.85** | **48** | | | **PKiKP** | **12 05 36.4** | **+0.2** | |
| PSUT | | | | IAMs_20 | | IAMs_20 | 12 56 51.6 | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **RMX** | **La Rumorosa** | **125.88** | **56** | IAMs_20 | | IAMs_20 | 12 58 55.5 | | |
| | comp=Z,8µm,20.0s | | | | | | | | |
| **YMP** | **Mirror Lake Pl** | **125.89** | **40** | | | **PKiKP** | **12 05 36.5** | **+0.3** | |
| **TPAW** | **Teton Pass** | **125.94** | **41** | | | **PKPdf** | **12 05 35.1** | **-0.8** | |
| **YUH** | **Yuha Desert** | **125.99** | **56** | | | **PKiKP** | **12 05 36.7** | **+0.4** | |
| YUH | | | | IAMs_20 | | IAMs_20 | 12 59 08.2 | | |
| | comp=Z,8µm,21.0s | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **126.01** | **46** | | | **PKiKP** | **12 05 36.3** | **-0.1** | |
| DUG | | | | IAMs_20 | | IAMs_20 | 13 09 53.4 | | |
| | comp=Z,7µm,21.0s | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **126.01** | **46** | PKiKP | | **PKPdf** | **12 05 36.2** | **+0.2** | |
| | baz=292 | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **126.01** | **46** | PKiKP | | **PKiKP** | **12 05 36.3** | **-0.1** | |
| **SWSC** | **Sam W. Stewart** | **126.02** | **55** | PKiKP | | **PKiKP** | **12 05 36.6** | **+0.2** | |
| | baz=285 | | | | | | | | |
| **IVI** | **Ivigtut** | **126.03** | **351** | | | **PKPdf** | **12 05 34.7** | **-0.4** | |
| **REDW** | **Red Top Meadow** | **126.06** | **42** | | | **PKPdf** | **12 05 36.0** | **-0.1** | |
| **SNOW** | **Snow King Moun** | **126.08** | **41** | | | **PKiKP** | **12 05 36.4** | **-0.1** | |
| **BC3** | **Big Chuckawall** | **126.11** | **54** | PKiKP | | **PKiKP** | **12 05 37.0** | **+0.2** | |
| | baz=286 | | | | | | | | |
| **ESJX** | **Sierra Juarez** | **126.13** | **56** | | | **PKiKP** | **12 05 37.4** | **+0.5** | |
| ESJX | | | | IAMs_20 | | IAMs_20 | 13 05 05.9 | | |
| | comp=Z,8µm,21.0s | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **126.15** | **42** | | | **PKPdf** | **12 05 36.4** | **+0.1** | |
| AHID | | | | IAMs_20 | | IAMs_20 | 13 04 05.8 | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **IRM** | **Iron Mountain** | **126.22** | **54** | PKiKP | | **PKiKP** | **12 05 37.2** | **+0.4** | |
| | baz=286 | | | | | | | | |
| **RLMT** | **Red Lodge** | **126.26** | **39** | | | **PKiKP** | **12 05 37.2** | **+0.3** | |
| **RLMT** | **Red Lodge** | **126.26** | **39** | PKiKP | | **PKiKP** | **12 05 36.7** | **-0.1** | |
| | baz=299 | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **126.32** | **44** | | | **PKPdf** | **12 05 36.3** | **-0.3** | |
| **NEE2** | **Needles Airpor** | **126.46** | **53** | PKiKP | | **PKiKP** | **12 05 37.1** | **-0.2** | |
| | baz=287 | | | | | | | | |
| **CCUT** | **Cedar City** | **126.55** | **49** | | | **PKiKP** | **12 05 38.5** | **+0.9** | |
| CCUT | | | | IAMs_20 | | IAMs_20 | 12 54 57.3 | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **TCUT** | **Toone Canyon** | **126.63** | **44** | | | **PKiKP** | **12 05 37.8** | **+0.1** | |
| **GLA** | **Glamis** | **126.78** | **55** | IAMs_20 | | IAMs_20 | 13 02 15.9 | | |
| | comp=Z,7µm,20.0s | | | | | | | | |
| **GLA** | **Glamis** | **126.78** | **55** | PKiKP | | **PKiKP** | **12 05 37.9** | **-0.1** | |
| | baz=286 | | | | | | | | |
| **JLU** | **Jordanelle** | **126.81** | **45** | | | **PKiKP** | **12 05 38.1** | **0.0** | |
| **LCMT** | **Little Creek M** | **126.82** | **50** | | | **PKiKP** | **12 05 38.5** | **+0.4** | |
| **BLYC** | **Blythe** | **126.83** | **54** | | | **PKiKP** | **12 05 38.3** | **+0.3** | |
| **TCRU** | **Three Creeks R** | **126.86** | **48** | IAMs_20 | | IAMs_20 | 13 12 26.1 | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **W13A** | **Hualapai Mount** | **126.94** | **52** | | | **PKiKP** | **12 05 38.7** | **+0.2** | |
| W13A | | | | IAMs_20 | | IAMs_20 | 13 02 19.9 | | |
| | comp=Z,9µm,21.0s | | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **126.98** | **53** | PKiKP | | **PKiKP** | **12 05 38.1** | **-0.2** | |
| | baz=287 | | | | | | | | |
| **MVU** | **Marysvale** | **127.07** | **48** | | | **PKiKP** | **12 05 39.5** | **+0.8** | |
| **BW06** | **Boulder Array** | **127.17** | **42** | PKiKP | | **PKPdf** | **12 05 38.0** | **-0.3** | |
| | baz=297 | | | | | | | | |
| **PD31** | **Pinedale Array** | **127.17** | **42** | | | **PKPdf** | **12 05 38.3** | **+0.1** | |
| **PDAR** | **Pinedale Array** | **127.17** | **42** | | | **PKPdf** | **12 05 37.9** | **-0.3** | |
| **PDAR** | **Pinedale Array** | **127.17** | **42** | PKP | | **PKPdf** | **12 05 38.0** | **-0.2** | |
| | comp=Z,3.3nm,0.8s,baz=252,slow=0.9,SNR=16 | | | | | | | | |
| PDAR | | | | PP | | **PP** | **12 07 35.6** | **-1.5** | |
| | comp=Z,3.7nm,0.9s,baz=129,slow=1.9,SNR=1.3 | | | | | | | | |
| PDAR | | | | SKKPbc | | SKKPbc | 12 18 56.0 | -1.0 | |
| | comp=Z,3.1nm,0.9s,baz=104,slow=4.9,SNR=3.5 | | | | | | | | |
| PDAR | | | | SKKP | | **SKKPdf** | **12 19 25.8** | **-0.4** | |
| | comp=Z,13nm,1.1s,baz=129,slow=5.9,SNR=4.4 | | | | | | | | |
| **LAO** | **LASA Array** | **127.30** | **36** | | | **PKPdf** | **12 05 38.1** | **0.0** | |
| LAO | | | | IAMs_20 | | IAMs_20 | 13 12 16.3 | | |
| | comp=Z,9µm,21.0s | | | | | | | | |
| **LAO** | **LASA Array** | **127.30** | **36** | PKiKP | | **PKiKP** | **12 05 38.5** | **-0.1** | |
| | baz=303 | | | | | | | | |
| **DGMT** | **Dagmar** | **127.43** | **33** | | | **PKPdf** | **12 05 38.0** | **-0.3** | |
| **DGMT** | **Dagmar** | **127.43** | **33** | IAMs_20 | | IAMs_20 | 13 13 41.5 | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **DGMT** | **Dagmar** | **127.43** | **33** | PKiKP | | **PKPdf** | **12 05 38.0** | **-0.3** | |
| | baz=306 | | | | | | | | |
| **113A** | **Mohawk Valley,** | **127.71** | **55** | | | **PKiKP** | **12 05 40.0** | **+0.2** | |
| 113A | | | | IAMs_20 | | IAMs_20 | 12 55 04.7 | | |
| | comp=Z,7µm,22.0s | | | | | | | | |
| **U15A** | **North Rim** | **127.74** | **50** | | | **PKiKP** | **12 05 40.4** | **+0.3** | |
| **Y14A** | **Wickenburg** | **127.98** | **53** | | | **PKPdf** | **12 05 40.1** | **+0.3** | |
| Y14A | | | | IAMs_20 | | IAMs_20 | 13 06 13.7 | | |
| | comp=Z,8µm,19.0s | | | | | | | | |
| **RDMU** | **Red Mountain** | **128.12** | **44** | IAMs_20 | | IAMs_20 | 13 11 09.3 | | |
| | comp=Z,7µm,21.0s | | | | | | | | |
| **LL02** | **Futaleuf** | **128.15** | **172** | | | **PKiKP** | **12 05 40.5** | **+0.1** | |
| **ASCN** | **Ascension** | **128.34** | **253** | IAMs_20 | | IAMs_20 | 12 59 11.1 | | |
| | comp=Z,12µm,20.0s | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **128.71** | **56** | | | **PKiKP** | **12 05 42.5** | **+0.6** | |
| 214A | | | | IAMs_20 | | IAMs_20 | 13 05 46.3 | | |
| | comp=Z,7µm,22.0s | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **128.71** | **56** | PKiKP | | **PKiKP** | **12 05 41.6** | **-0.3** | |
| | baz=286 | | | | | | | | |
| **LL01** | **San Ignacio de** | **128.86** | **172** | | | **PKiKP** | **12 05 42.8** | **+0.9** | |
| **X16A** | **Lo Mia Camp, P** | **129.06** | **52** | | | **PKiKP** | **12 05 42.6** | **-0.1** | |
| X16A | | | | IAMs_20 | | IAMs_20 | 13 04 23.2 | | |
| | comp=Z,10µm,20.0s | | | | | | | | |
| **K22A** | **Casper** | **129.20** | **40** | IAMs_20 | | IAMs_20 | 13 10 03.2 | | |
| | comp=Z,7µm,21.0s | | | | | | | | |
| **K22A** | **Casper** | **129.20** | **40** | PKiKP | | **PKPdf** | **12 05 41.5** | **-0.5** | |
| | baz=300 | | | | | | | | |
| **O20A** | **White River Ci** | **129.23** | **44** | PKiKP | | **PKPdf** | **12 05 42.4** | **+0.2** | |
| | baz=296 | | | | | | | | |
| **PMPST** | **Porto Santo, M** | **129.97** | **306** | *e*PKPdf | | **PKPdf** | **12 05 43.5** | **0.0** | |
| **PMPST** | **Porto Santo, M** | **129.97** | **306** | *e*PP | | **PP** | **12 07 56.4** | **+0.8** | |
| **PMPS** | **Porto Santo** | **129.98** | **306** | *e*PKPdf | | **PKPdf** | **12 05 43.0** | **-0.5** | |
| **RSSD** | **Black Hills** | **129.98** | **38** | IAMs_20 | | IAMs_20 | 13 12 29.6 | | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **RSSD** | **Black Hills** | **129.98** | **38** | PKiKP | | **PKPdf** | **12 05 43.2** | **-0.3** | |
| | baz=303 | | | | | | | | |
| **W18A** | **Petrified Fore** | **130.14** | **51** | | | **PKiKP** | **12 05 44.9** | **0.0** | |
| **W18A** | **Petrified Fore** | **130.14** | **51** | PKiKP | | **PKiKP** | **12 05 45.0** | **0.0** | |
| | baz=291 | | | | | | | | |
| **X18A** | **Snowflake** | **130.19** | **51** | | | **PKiKP** | **12 05 45.4** | **+0.4** | |
| **MDND** | **Maddock** | **130.23** | **31** | IAMs_20 | | IAMs_20 | 13 14 23.5 | | |
| | comp=Z,8µm,21.0s | | | | | | | | |
| **MDND** | **Maddock** | **130.23** | **31** | PKiKP | | **PKiKP** | **12 05 44.7** | **+0.2** | |
| | baz=310 | | | | | | | | |
| **TUC** | **Tucson** | **130.25** | **54** | IAMs_20 | | IAMs_20 | 13 01 50.0 | | |
| | comp=Z,8µm,21.0s | | | | | | | | |
| **TUC** | **Tucson** | **130.25** | **54** | PKiKP | | **PKiKP** | **12 05 44.7** | **-0.3** | |
| | baz=288 | | | | | | | | |
| **MVCO** | **Mesa Verde** | **130.28** | **48** | PKiKP | | **PKiKP** | **12 05 45.0** | **-0.2** | |
| | baz=294 | | | | | | | | |
| **LL04** | **Puerto Octay** | **130.30** | **171** | | | **PKiKP** | **12 05 45.2** | **+0.4** | |
| **SRIG** | **Santa Rosalia** | **130.36** | **61** | IAMs_20 | | IAMs_20 | 13 13 22.5 | | |
| | comp=Z,9µm,19.0s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **130.38** | **27** | | | **PKPdf** | **12 05 43.8** | **0.0** | |
| **ULM** | **Lac du Bonnet** | **130.38** | **27** | PKP | | **PKPdf** | **12 05 42.5** | **-1.2** | |
| | comp=Z,16nm,1.0s,baz=9.5,slow=1.3,SNR=10.0 | | | | | | | | |
| ULM | | | | PP | | **PP** | **12 07 57.5** | **+0.3** | |
| | comp=Z,13nm,1.0s,baz=316,slow=8.5,SNR=1.7 | | | | | | | | |
| ULM | | | | SKPbc | | **SKPab** | **12 09 03.3** | **-1.4** | |
| | comp=Z,4.8nm,0.6s,baz=329,slow=7.5,SNR=1.0 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **130.38** | **27** | PKIKP | | **PKPdf** | **12 05 43.8** | **0.0** | |
| **N23A** | **Red Feather La** | **130.43** | **42** | | | **PKPdf** | **12 05 45.0** | **+0.4** | |
| N23A | | | | IAMs_20 | | IAMs_20 | 13 06 40.1 | | |
| | comp=Z,7µm,22.0s | | | | | | | | |
| **N23A** | **Red Feather La** | **130.43** | **42** | PKiKP | | **PKPdf** | **12 05 44.5** | **0.0** | |
| | baz=299 | | | | | | | | |
| **E28A** | **Huff** | **130.47** | **33** | | | **PKPdf** | **12 05 44.3** | **+0.2** | |
| E28A | | | | IAMs_20 | | IAMs_20 | 13 14 51.9 | | |
| | comp=Z,13µm,22.0s | | | | | | | | |
| **PMAR** | **Madeira** | **130.54** | **306** | *e*PKPdf | | **PKPdf** | **12 05 45.2** | **+0.3** | |
| **PMAR** | **Madeira** | **130.54** | **306** | *e*PP | | **PP** | **12 07 56.6** | **-3.0** | |
| **FUL** | **Funchal** | **130.55** | **306** | *e*PKPdf | | **PKPdf** | **12 05 44.0** | **-0.6** | |
| **FUL** | **Funchal** | **130.55** | **306** | *e*PP | | **PP** | **12 07 54.6** | **-4.8** | |
| **PLCA** | **Paso Flores** | **130.73** | **173** | | | **PKiKP** | **12 05 46.9** | **+1.1** | |
| **PLCA** | **Paso Flores** | **130.73** | **173** | PKP | | **PKPdf** | **12 05 44.9** | **0.0** | |
| | comp=Z,45nm,1.3s,baz=202,slow=1.7,SNR=12 | | | | | | | | |
| PLCA | | | | PP | | **PP** | **12 08 01.8** | **+2.8** | |
| | comp=Z,10nm,1.0s,baz=247,slow=14,SNR=1.6 | | | | | | | | |
| PLCA | | | | SKPbc | | **SKPab** | **12 09 06.7** | **0.0** | |
| | comp=Z,26nm,1.2s,baz=177,slow=2.1,SNR=2.0 | | | | | | | | |
| **PLCA** | **Paso Flores** | **130.73** | **173** | PKIKP | | **PKiKP** | **12 05 46.9** | **+1.1** | |
| **PLCA** | **Paso Flores** | **130.73** | **173** | *e*P | | **PKPdf** | **12 05 40.9** | **-4.0** | |
| **PMOZ** | **Porto Moniz, M** | **130.74** | **306** | *e*PKPdf | | **PKiKP** | **12 05 46.5** | **+0.5** | |
| **PMOZ** | **Porto Moniz, M** | **130.74** | **306** | *e*PP | | **PP** | **12 08 01.4** | **+0.7** | |
| **PMOZ** | **Porto Moniz, M** | **130.74** | **306** | *e*SS | | SS | 12 25 32.8 | +4.3 | |
| **PMOZ** | **Porto Moniz, M** | **130.74** | **306** | *e*LQ | | LQ | 12 41 37.0 | | |
| **PMOZ** | **Porto Moniz, M** | **130.74** | **306** | *e*LR | | LR | 12 51 42.3 | | |
| | comp=Z,16µm,22.0s | | | | | | | | |
| **ISCO** | **Idaho Springs** | **131.18** | **43** | | | **PKiKP** | **12 05 47.0** | **0.0** | |
| ISCO | | | | IAMs_20 | | IAMs_20 | 13 11 39.9 | | |
| | comp=Z,9µm,21.0s | | | | | | | | |
| **ISCO** | **Idaho Springs** | **131.18** | **43** | PKiKP | | **PKPdf** | **12 05 46.4** | **+0.3** | |
| | baz=298 | | | | | | | | |
| **ISCO** | **Idaho Springs** | **131.18** | **43** | PKIKP | | **PKiKP** | **12 05 47.0** | **0.0** | |
| **S22A** | **4UR Ranch, Cre** | **131.26** | **46** | IAMs_20 | | IAMs_20 | 12 58 06.5 | | |
| | comp=Z,9µm,22.0s | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **131.26** | **46** | PKiKP | | **PKiKP** | **12 05 46.9** | **-0.3** | |
| | baz=296 | | | | | | | | |
| **DUN6** | **Lazy B Ranch** | **131.53** | **54** | | | **PKiKP** | **12 05 47.9** | **+0.3** | |
| DUN6 | | | | IAMs_20 | | IAMs_20 | 13 02 52.7 | | |
| | comp=Z,19µm,20.0s | | | | | | | | |
| **319A** | **Douglas** | **131.76** | **55** | IAMs_20 | | IAMs_20 | 13 02 04.9 | | |
| | comp=Z,8µm,21.0s | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **131.78** | **29** | IAMs_20 | | IAMs_20 | 13 16 05.1 | | |
| | comp=Z,15µm,22.0s | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **131.78** | **29** | PKiKP | | **PKiKP** | **12 05 47.5** | **0.0** | |
| | baz=315 | | | | | | | | |
| **Q24A** | **Divide** | **131.89** | **44** | PKiKP | | **PKPdf** | **12 05 47.6** | **+0.1** | |
| | baz=298 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **132.21** | **46** | | | **PKiKP** | **12 05 49.2** | **+0.1** | |
| SDCO | | | | IAMs_20 | | IAMs_20 | 13 15 22.5 | | |
| | comp=Z,9µm,21.0s | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **132.21** | **46** | PKiKP | | **PKiKP** | **12 05 48.7** | **-0.4** | |
| | baz=297 | | | | | | | | |
| **121A** | **Cookes Peak, D** | **132.58** | **53** | IAMs_20 | | IAMs_20 | 13 07 18.3 | | |
| | comp=Z,9µm,21.0s | | | | | | | | |
| **121A** | **Cookes Peak, D** | **132.58** | **53** | PKiKP | | **PKiKP** | **12 05 49.5** | **-0.3** | |
| | baz=291 | | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **132.69** | **51** | IAMs_20 | | IAMs_20 | 13 06 35.9 | | |
| | comp=Z,10µm,21.0s | | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **132.69** | **51** | PKiKP | | **PKPdf** | **12 05 49.2** | **+0.4** | |
| | baz=293 | | | | | | | | |
| **ANMO** | **Albuquerque** | **132.70** | **50** | | | **PKiKP** | **12 05 49.7** | **-0.3** | |
| **ANMO** | **Albuquerque** | **132.70** | **50** | PKiKP | | **PKPdf** | **12 05 49.4** | **+0.5** | |
| | baz=294 | | | | | | | | |
| **ANMO** | **Albuquerque** | **132.70** | **50** | ⇑*i* PKiKP | | **PKiKP** | **12 05 49.9** | **-0.1** | |
| **SUSD** | **Miller** | **132.75** | **34** | IAMs_20 | | IAMs_20 | 13 15 06.5 | | |
| | comp=Z,17µm,22.0s | | | | | | | | |
| **SUSD** | **Miller** | **132.75** | **34** | PKiKP | | **PKPdf** | **12 05 47.8** | **-0.7** | |
| | baz=309 | | | | | | | | |
| **H06N1** | **SOCORRO T-PHAS** | **132.90** | **72** | PKP | | **PKPdf** | **12 05 49.7** | **+0.3** | |
| **H06S1** | **SOCORRO T** | **132.94** | **72** | PKP | | **PKiKP** | **12 05 50.9** | **+0.2** | |
| **OGNE** | **Ogallala** | **132.95** | **40** | IAMs_20 | | IAMs_20 | 13 13 41.5 | | |
| | comp=Z,9µm,20.0s | | | | | | | | |
| **OGNE** | **Ogallala** | **132.95** | **40** | PKiKP | | **PKPdf** | **12 05 48.5** | **-0.6** | |
| | baz=303 | | | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **132.96** | **72** | PKP | | **PKPdf** | **12 05 49.3** | **-0.3** | |
| **T25A** | **Trinidad** | **133.25** | **46** | IAMs_20 | | IAMs_20 | 13 17 20.2 | | |
| | comp=Z,7µm,22.0s | | | | | | | | |
| **T25A** | **Trinidad** | **133.25** | **46** | PKiKP | | **PKPdf** | **12 05 50.1** | **+0.2** | |
| | baz=298 | | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **133.26** | **31** | IAMs_20 | | IAMs_20 | 13 14 52.8 | | |
| | comp=Z,19µm,22.0s | | | | | | | | |
| **K30B** | **Basset** | **133.45** | **37** | | | **PKiKP** | **12 05 50.6** | **-0.5** | |
| **KSCO** | **Kaye Shedlock'** | **133.58** | **43** | IAMs_20 | | IAMs_20 | 13 17 28.4 | | |
| | comp=Z,9µm,20.0s | | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **133.58** | **43** | PKiKP | | **PKPdf** | **12 05 49.8** | **-0.5** | |
| | baz=301 | | | | | | | | |
| **SCHQ** | **Schefferville** | **133.58** | **3** | | | **PKPdf** | **12 05 50.3** | **+0.6** | |
| **SCHQ** | **Schefferville** | **133.58** | **3** | PKP | | **PKPdf** | **12 05 48.9** | **-0.8** | |
| | comp=Z,13nm,0.9s,baz=34,slow=1.8,SNR=10 | | | | | | | | |
| SCHQ | | | | PP | | **PP** | **12 08 17.6** | **+0.2** | |
| | comp=Z,52nm,1.3s,baz=17,slow=6.6,SNR=6.0 | | | | | | | | |
| SCHQ | | | | SKPbc | | **SKPbc** | **12 09 11.8** | **-4.3** | |
| | comp=Z,14nm,0.9s,baz=4.3,slow=6.2,SNR=1.5 | | | | | | | | |
| **EPT** | **El Paso** | **133.86** | **54** | | | **PKPdf** | **12 05 51.7** | **+0.6** | |
| EPT | | | | IAMs_20 | | IAMs_20 | 13 14 02.3 | | |
| | comp=Z,9µm,21.0s | | | | | | | | |
| **EYMN** | **Ely** | **134.01** | **26** | IAMs_20 | | IAMs_20 | 13 14 09.1 | | |
| | comp=Z,18µm,22.0s | | | | | | | | |
| **EYMN** | **Ely** | **134.01** | **26** | PKiKP | | **PKPdf** | **12 05 50.6** | **-0.2** | |
| | baz=320 | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **134.50** | **34** | | | **PKPdf** | **12 05 51.3** | **-0.5** | |
| **ECSD** | **EROS Data Cent** | **134.50** | **34** | IAMs_20 | | IAMs_20 | 13 17 01.7 | | |
| | comp=Z,13µm,21.0s | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **134.50** | **34** | PKiKP | | **PKPdf** | **12 05 51.2** | **-0.6** | |
| | baz=311 | | | | | | | | |
| **BART** | **Pico Bartolome** | **134.62** | **316** | *e*PKP | | **PKPdf** | **12 05 52.0** | **-0.3** | |
| **BI02** | **San Fabin de** | **134.63** | **171** | | | **PKiKP** | **12 05 53.7** | **-0.1** | |
| **MNTX** | **Cornudas Mount** | **134.78** | **53** | PKiKP | | **PKPdf** | **12 05 53.0** | **+0.3** | |
| | baz=292 | | | | | | | | |
| **CMLA** | **Cha da Macela** | **134.87** | **316** | IAMs_20 | | IAMs_20 | 13 13 57.2 | | |
| | comp=Z,14µm,20.0s | | | | | | | | |
| **PSMN** | **Pico do Norte,** | **134.94** | **315** | *e*PKP | | **PKiKP** | **12 05 53.7** | **-0.6** | |
| **PSET** | **Sete Cidades** | **134.98** | **317** | *e*PKP | | **PKiKP** | **12 05 54.9** | **+0.6** | |
| **PSMA** | **Santa Maria** | **134.99** | **315** | *e*PKP | | **PKiKP** | **12 05 54.2** | **-0.1** | |
| **E38A** | **The Farm, Brul** | **135.01** | **27** | | | **PKPdf** | **12 05 53.3** | **+0.6** | |
| E38A | | | | IAMs_20 | | IAMs_20 | 13 14 58.4 | | |
| | comp=Z,17µm,22.

baz=305
**P40A Paris** 139.85 35 IAMs_20 IAMs_20 13 18 25.5
comp=Z,11µm,22.0s
**ZAIG Zacatecas** 139.96 64 IAMs_20 IAMs_20 13 17 54.2
comp=Z,7µm,20.0s
**ZON Zonda** 140.02 173 **PKPdf** **12 06 02.7 +0.3**
**ZON Zonda** 140.02 173 PKIKP **PKPdf** **12 06 02.7 +0.3**
**CO02 Combarbal** 140.02 170 **PKPdf** **12 06 02.5 0.0**
**L44A Lake County Fo** 140.07 28 IAMs_20 IAMs_20 13 17 01.6
comp=Z,13µm,22.0s
**L44A Lake County Fo** 140.07 28 PKiKP **PKiKP** **12 06 04.7 +0.2**
baz=321
**FW07 Weatherford** 140.15 48 IAMs_20 IAMs_20 13 20 50.0
comp=Z,14µm,21.0s
**FW06 Azle** 140.18 47 IAMs_20 IAMs_20 13 20 28.8
comp=Z,14µm,22.0s
**Z35A Perchaven, San** 140.22 46 IAMs_20 IAMs_20 13 21 24.8
comp=Z,11µm,22.0s
**S39A Bolivar** 140.32 38 IAMs_20 IAMs_20 13 20 07.2
comp=Z,21µm,22.0s
**SACV Santiago Islan** 140.35 283 IAMs_20 IAMs_20 13 06 20.7
comp=Z,16µm,21.0s
**PSAL Palomas, Salto** 140.36 188 *eP* **PKPdf** **12 05 59.2 -3.7**
**HQIL Hanson Quary C** 140.39 29 IAMs_20 IAMs_20 13 15 44.1
comp=Z,11µm,21.0s
**U38A Gravette** 140.43 40 IAMs_20 IAMs_20 13 21 04.5
comp=Z,11µm,21.0s
**LMQ La Malbaie** 140.53 7 IAMs_20 IAMs_20 13 19 33.4
comp=Z,18µm,20.0s
**R40A Maddies Statio** 140.56 36 IAMs_20 IAMs_20 13 17 41.4
comp=Z,11µm,21.0s
**J47A Sunmer** 140.59 25 **PKPdf** **12 06 02.6 -0.4**
J47A IAMs_20 IAMs_20 13 16 37.0
comp=Z,20µm,22.0s
**HDIL Hopedale** 140.61 31 IAMs_20 IAMs_20 13 17 25.3
comp=Z,20µm,22.0s
**HDIL Hopedale** 140.61 31 PKiKP **PKiKP** **12 06 05.3 -0.4**
baz=318
**M44A Midewin, Midew** 140.62 29 IAMs_20 IAMs_20 13 18 36.1
comp=Z,10µm,22.0s
**RODS Rosario do Sul** 140.68 191 *eP* **PKPdf** **12 05 59.6 -4.0**
**WHTX Lake Whitney,** 140.74 48 IAMs_20 IAMs_20 13 14 07.9
comp=Z,7µm,21.0s
**I49A Point Hope** 140.79 22 IAMs_20 IAMs_20 13 19 51.0
comp=Z,16µm,20.0s
**HHAR Hobbs** 140.81 40 IAMs_20 IAMs_20 13 20 36.6
comp=Z,10µm,21.0s
**X37A Clayton** 140.86 44 IAMs_20 IAMs_20 13 21 35.2
comp=Z,11µm,22.0s
**833A Chaparral WMA,** 140.87 55 IAMs_20 IAMs_20 13 15 58.0
comp=Z,10µm,22.0s
**TRQ Mont Tremblant** 141.12 12 IAMs_20 IAMs_20 13 21 47.2
comp=Z,18µm,21.0s
**D62A Allapoint, All** 141.14 6 IAMs_20 IAMs_20 13 17 48.4
comp=Z,19µm,21.0s
**P43A Skaggs, Pawnee** 141.16 33 IAMs_20 IAMs_20 13 19 59.9
comp=Z,9µm,21.0s
**SADO Sadowa** 141.30 18 PP **PP** **12 09 04.8 -0.8**
comp=Z,13nm,1.0s,baz=259,slow=11,SNR=1.3
**MGMO Mountain Grove** 141.30 38 **PKPdf** **12 06 03.4 -1.1**
MGMO IAMs_20 IAMs_20 13 19 57.3
comp=Z,11µm,21.0s
**CCM Cathedral Cave** 141.31 36 IAMs_20 IAMs_20 13 21 47.3
comp=Z,12µm,22.0s
**CCM Cathedral Cave** 141.31 36 PKiKP **PKiKP** **12 06 07.8 +0.6**
baz=319
**SLM Saint Louis** 141.49 34 IAMs_20 IAMs_20 13 21 41.7
comp=Z,13µm,21.0s
**ITQB Itaqui** 141.60 190 **PKPdf** **12 06 03.9 -1.3**
**ITQB Itaqui** 141.60 190 *eP* **PKPdf** **12 06 00.7 -4.6**
**ALGR Alto Alegre (B** 141.68 195 *eP* **PKPdf** **12 06 01.4 -4.2**
**FVM French Village** 141.83 35 IAMs_20 IAMs_20 13 22 02.1
comp=Z,9µm,20.0s
**AAM Ann Arbor** 141.85 24 **PKPdf** **12 06 05.3 0.0**
**AAM Ann Arbor** 141.85 24 PKiKP **PKiKP** **12 06 08.4 +0.2**
baz=327
**AAM Ann Arbor** 141.85 24 PKIKP **PKPdf** **12 06 05.3 0.0**
**SFIN Lafayette** 141.85 30 **PKPdf** **12 06 04.8 -0.5**
**SFIN Lafayette** 141.85 30 PKiKP **PKiKP** **12 06 08.1 -0.1**
baz=320
**K50A Casco** 141.86 23 IAMs_20 IAMs_20 13 20 28.4
comp=Z,15µm,21.0s
**Z38A Mt. Pleasant** 141.86 45 IAMs_20 IAMs_20 13 23 03.1
comp=Z,13µm,20.0s
**MOIG Morelia** 141.91 69 IAMs_20 IAMs_20 13 17 08.8
comp=Z,11µm,22.0s
**237A Washetta, Mont** 141.95 47 IAMs_20 IAMs_20 13 21 28.6
comp=Z,18µm,22.0s
**Q44A Meyer Farm, Va** 141.97 33 **PKPdf** **12 06 05.7 +0.1**
Q44A IAMs_20 IAMs_20 13 18 14.2
comp=Z,20µm,22.0s
**DELO Deloro Mine** 141.97 16 IAMs_20 IAMs_20 13 20 33.9
comp=Z,19µm,22.0s
**MNTQ Montreal, Queb** 142.00 11 IAMs_20 IAMs_20 13 17 21.3
comp=Z,18µm,22.0s
**MIAR Mount Ida** 142.09 42 IAMs_20 IAMs_20 13 21 40.8
comp=Z,13µm,22.0s
**MIAR Mount Ida** 142.09 42 PKiKP **PKiKP** **12 06 09.2 +0.2**
baz=307
**T42A Van Buren** 142.09 37 IAMs_20 IAMs_20 13 23 39.1
comp=Z,11µm,22.0s
**FCAR Ozark Folk Cen** 142.20 39 IAMs_20 IAMs_20 13 23 47.3
comp=Z,16µm,21.0s
**LCO Las Campanas** 142.22 170 IAMs_20 IAMs_20 13 06 18.1
comp=Z,19µm,21.0s
**P46A Rosedale** 142.38 30 **PKPdf** **12 06 05.6 -0.7**
P46A IAMs_20 IAMs_20 13 21 35.8
comp=Z,19µm,21.0s
**WHAR Wooly Hollow** 142.48 40 IAMs_20 IAMs_20 13 16 22.7
comp=Z,9µm,22.0s
**F63A Nahmakanta, Br** 142.49 6 IAMs_20 IAMs_20 13 18 56.3
comp=Z,19µm,22.0s
**OLIL Olney** 142.58 32 IAMs_20 IAMs_20 13 18 55.4
comp=Z,16µm,22.0s
**X40A Basin Creek Fa** 142.62 42 IAMs_20 IAMs_20 13 22 04.6
comp=Z,11µm,22.0s
**LONY Lake Ozonia** 142.64 13 IAMs_20 IAMs_20 13 16 14.3
comp=Z,18µm,22.0s
**LONY Lake Ozonia** 142.64 13 PKiKP **PKiKP** **12 06 10.0 +0.3**
baz=342
**PBMO Poplar Bluff** 142.65 37 IAMs_20 IAMs_20 13 20 36.9
comp=Z,14µm,22.0s
**PECO Prince Edward** 142.68 16 IAMs_20 IAMs_20 13 21 39.7
comp=Z,19µm,22.0s
**S44A Carbondale** 142.70 35 IAMs_20 IAMs_20 13 24 01.8
comp=Z,13µm,19.0s
**CGM3 Cape Girardeau** 142.75 35 IAMs_20 IAMs_20 13 20 13.2
comp=Z,8µm,21.0s
**UALR University of** 142.76 41 IAMs_20 IAMs_20 13 21 21.3
comp=Z,15µm,20.0s
**O48B Farmland** 142.87 28 IAMs_20 IAMs_20 13 20 01.5
comp=Z,18µm,22.0s
**O48B Farmland** 142.87 28 PKiKP **PKiKP** **12 06 10.3 0.0**
baz=323
**NATX Nacogdoches** 142.90 47 IAMs_20 IAMs_20 13 22 52.9
comp=Z,10µm,21.0s
**NATX Nacogdoches** 142.90 47 PKiKP **PKiKP** **12 06 10.2 -0.4**
baz=302
**PKME Peaks-Kenny Pk** 142.91 7 **PKPdf** **12 06 07.2 +0.1**
**PKME Peaks-Kenny Pk** 142.91 7 PKiKP **PKiKP** **12 06 10.6 +0.4**
baz=351
**WLAR White Oak Lake** 142.91 43 IAMs_20 IAMs_20 13 22 30.5
comp=Z,13µm,21.0s
**ITAB Concordia** 142.91 197 IAMs_20 IAMs_20 13 01 21.7
comp=Z,19µm,21.0s
**ITAB Concordia** 142.91 197 *eP* **PKPdf** **12 06 02.8 -4.9**
**HKT Hockley** 142.95 50 **PKPdf** **12 06 05.4 -2.1**
HKT IAMs_20 IAMs_20 13 24 17.3
comp=Z,10µm,21.0s
**HKT Hockley** 142.95 50 PKIKP **PKPdf** **12 06 05.4 -2.1**
**CAM01 Campos-RJ** 143.08 215 *eP* PKPab 12 06 03.2 -0.2
**PARMO Parma** 143.13 36 IAMs_20 IAMs_20 13 21 09.5
comp=Z,10µm,22.0s
**CRSM Crissiumal (Br** 143.18 194 *eP* PKPab 12 06 02.8 -0.9
**GGN Saint George** 143.27 4 **PKPdf** **12 06 07.6 -0.1**
**DUB01 Friburgo-RJ** 143.28 214 *eP* PKPab 12 06 04.4 +0.1
**VT1 Waterbury** 143.29 11 **PKPdf** **12 06 08.5 +0.7**
**J56A Wolcott** 143.33 16 **PKPdf** **12 06 08.9 +1.0**
J56A IAMs_20 IAMs_20 13 22 06.8
comp=Z,19µm,21.0s
**H62A Milan** 143.33 9 **PKPdf** **12 06 08.8 +0.9**
**HBAR Harrisburg** 143.33 38 IAMs_20 IAMs_20 13 23 34.1
comp=Z,12µm,22.0s
**PVMO Portageville** 143.33 36 IAMs_20 IAMs_20 13 21 27.9
comp=Z,13µm,22.0s
**NCB Newcomb** 143.33 13 IAMs_20 IAMs_20 13 16 32.7
comp=Z,17µm,22.0s

**Z41A Richland Creek** 143.37 43 IAMs_20 IAMs_20 13 22 54.7
comp=Z,13µm,22.0s
**P48A Milroy** 143.37 29 IAMs_20 IAMs_20 13 20 23.0
comp=Z,19µm,21.0s
**USIN University of** 143.37 33 IAMs_20 IAMs_20 13 22 35.5
comp=Z,18µm,21.0s
**ERPA Erie** 143.40 21 PKiKP **PKiKP** **12 06 11.8 +0.4**
baz=332
**PEBM Pemiscott Bayo** 143.44 37 IAMs_20 IAMs_20 13 22 31.8
comp=Z,11µm,21.0s
**GNAR Gosnell** 143.45 37 IAMs_20 IAMs_20 13 24 44.0
comp=Z,12µm,21.0s
**ALF01 Guarapari-ES** 143.47 218 *eP* PKPab 12 06 04.9 -0.1
**MAN01 Angra dos Reis** 143.50 211 *eP* PKPab 12 06 05.5 +0.4
**HICK Hickman** 143.52 36 IAMs_20 IAMs_20 13 20 56.7
comp=Z,9µm,19.0s
**MMNY Mt. Morris Dam** 143.52 18 IAMs_20 IAMs_20 13 20 28.1
comp=Z,6µm,22.0s
**LBNH Lisbon** 143.53 10 PKiKP **PKiKP** **12 06 12.7 +1.1**
baz=346
**N51A Ashland** 143.53 24 IAMs_20 IAMs_20 13 21 43.8
comp=Z,17µm,21.0s
**WVNY West Valley, N** 143.60 19 IAMs_20 IAMs_20 13 22 45.2
comp=Z,19µm,21.0s
**P49A Miami Univ. Ec** 143.65 28 IAMs_20 IAMs_20 13 22 27.2
comp=Z,15µm,20.0s
**P49A Miami Univ. Ec** 143.65 28 PKiKP **PKiKP** **12 06 12.7 +0.7**
baz=323
**CCAR Cane Creek** 143.66 42 IAMs_20 IAMs_20 13 14 35.2
comp=Z,9µm,22.0s
**LNXT Lenox** 143.67 37 IAMs_20 IAMs_20 13 21 26.8
comp=Z,15µm,20.0s
**GO03 Copiap** 143.68 170 **PKPdf** **12 06 08.1 -1.0**
**M53A WI Miller and** 143.74 22 PKiKP **PKiKP** **12 06 13.3 +1.2**
baz=331
**J59A Piesco** 143.75 13 IAMs_20 IAMs_20 13 22 26.8
comp=Z,17µm,22.0s
**UNM Universidad Na** 143.84 69 **PKPdf** **12 06 09.5 -0.3**
UNM IAMs_20 IAMs_20 13 14 52.6
comp=Z,9µm,22.0s
**UNM Universidad Na** 143.84 69 PKIKP **PKPdf** **12 06 09.5 -0.3**
**PET01 Itanhaem-SP** 143.85 206 *eP* PKPab 12 06 05.2 -1.2
**ACSO Alum Creek Sta** 143.85 26 PKiKP **PKiKP** **12 06 13.7 +1.3**
baz=326
**HAL Halifax** 143.86 0 **PKPdf** **12 06 09.5 +0.7**
**HAL Halifax** 143.86 0 PKIKP **PKPdf** **12 06 09.5 +0.7**
**UTMT University of** 143.87 36 IAMs_20 IAMs_20 13 20 02.8
comp=Z,15µm,22.0s
**HALT Halls** 143.89 37 IAMs_20 IAMs_20 13 21 21.6
comp=Z,12µm,20.0s
**AC06 Mina Casimiro** 143.89 170 PKPbc 12 06 08.2 +1.1
**WCI Wyandotte Cave** 143.89 31 IAMs_20 IAMs_20 13 21 15.1
comp=Z,18µm,21.0s
**WCI Wyandotte Cave** 143.89 31 PKiKP **PKiKP** **12 06 13.5 +0.9**
baz=320
**K57A Scipio Center** 143.93 16 IAMs_20 IAMs_20 13 24 21.6
comp=Z,16µm,20.0s
**HDBT Hernando Brdge** 143.96 38 IAMs_20 IAMs_20 13 16 56.8
comp=Z,8µm,22.0s
**MET Memphis--Engin** 144.06 38 IAMs_20 IAMs_20 13 17 22.4
comp=Z,11µm,22.0s
**L56A Greenwood** 144.17 18 **PKPab** **12 06 06.5 -0.6**
**N53A Lisbon** 144.23 23 **PKPab** **12 06 06.5 -0.9**
**RIB01 Linhares ES** 144.24 220 *eP* **PKPab** **12 06 06.2 -1.8**
**J61A Chester** 144.28 11 **PKPab** **12 06 07.1 -0.3**
**T47A Sharon Grove** 144.39 33 **PKPab** **12 06 07.2 -0.9**
**R49A Shelbyville** 144.41 30 **PKPab** **12 06 07.3 -0.8**
R49A IAMs_20 IAMs_20 13 23 32.6
comp=Z,19µm,21.0s
**O52A Adamsville** 144.43 24 **PKPab** **12 06 07.1 -1.0**
**441A DeRidder** 144.51 47 **PKPab** **12 06 08.3 -0.4**
441A IAMs_20 IAMs_20 13 21 31.4
comp=Z,9µm,20.0s
**SPB Sao Paulo** 144.53 206 **PKPdf** **12 06 10.6 0.0**
SPB IAMs_20 IAMs_20 13 04 53.3
comp=Z,17µm,20.0s
**SPB Sao Paulo** 144.53 206 *eP* **PKPab** **12 06 06.2 -2.7**
**O53A New Philadelph** 144.56 24 **PKPab** **12 06 07.7 -0.9**
**O53A New Philadelph** 144.56 24 PKiKP **PKiKP** **12 06 14.4 +0.6**
baz=329
**BINY Binghamton** 144.57 16 **PKPab** **12 06 08.1 -0.5**
**BINY Binghamton** 144.57 16 PKiKP **PKiKP** **12 06 14.3 +0.5**
baz=339
**WVT Waverly** 144.61 35 **PKPab** **12 06 07.9 -1.0**
**WVT Waverly** 144.61 35 IAMs_20 IAMs_20 13 25 17.5
comp=Z,17µm,21.0s
**WVT Waverly** 144.61 35 PKiKP **PKiKP** **12 06 14.6 +0.5**
baz=316
**WVT Waverly** 144.61 35 PKIKP **PKPab** **12 06 07.9 -1.0**
**143A Socs Landing,** 144.64 43 **PKPab** **12 06 09.2 +0.1**
143A IAMs_20 IAMs_20 13 24 20.4
comp=Z,16µm,22.0s
**P52A Corning** 144.71 25 **PKPab** **12 06 07.7 -1.5**
P52A IAMs_20 IAMs_20 13 25 28.1
comp=Z,18µm,21.0s
**P52A Corning** 144.71 25 PKiKP **PKiKP** **12 06 14.5 +0.3**
baz=327
**TLIG Tlapa** 144.76 71 PKPbc 12 06 10.4 +0.2
TLIG IAMs_20 IAMs_20 13 19 37.3
comp=Z,8µm,20.0s
**OXF Oxford** 144.79 39 **PKPab** **12 06 08.5 -1.1**
OXF IAMs_20 IAMs_20 13 20 35.6
comp=Z,13µm,21.0s
**OXF Oxford** 144.79 39 PKiKP **PKiKP** **12 06 13.6 -0.8**
baz=312
**OXF Oxford** 144.79 39 PKIKP **PKPab** **12 06 08.5 -1.1**
**L59A Walton** 144.82 15 **PKPab** **12 06 08.7 -0.9**
**R50A Paris** 144.83 29 **PKPab** **12 06 08.3 -1.4**
R50A IAMs_20 IAMs_20 13 24 43.5
comp=Z,17µm,21.0s
**VAO Valinhos** 144.84 207 *eP* **PKPab** **12 06 07.0 -3.2**
**O54A Avella** 144.95 23 **PKPab** **12 06 09.0 -1.0**
**CPUP Villa Florida** 144.98 190 PKPbc **PKPdf** **12 06 11.4 +0.1**
comp=Z,579nm,0.9s,baz=168,slow=2.7,SNR=460
CPUP PP **PP** **12 09 29.2 +1.6**
comp=Z,19nm,0.9s,baz=128,slow=7.3,SNR=1.3
**K62A Royalston** 145.00 11 **PKPab** **12 06 10.1 0.0**
**M57A Sunshine Farm,** 145.03 18 **PKPbc** **12 06 09.2 -1.1**
M57A IAMs_20 IAMs_20 13 20 54.0
comp=Z,19µm,22.0s
**L61B Northampton** 145.12 12 **PKPbc** **12 06 09.5 -1.0**
**L61B Northampton** 145.12 12 PKiKP **PKiKP** **12 06 15.2 +0.3**
baz=344
**Y45A Yeager Farm, C** 145.13 40 **PKPbc** **12 06 10.3 -0.5**
**NAN01 Guarapari, ES** 145.14 222 *eP* **PKPbc** **12 06 07.2 -4.1**
**P53A Whipple** 145.14 24 **PKPbc** **12 06 09.7 -1.0**
**SJMB Sao Joao De Ma** 145.19 219 *eP* **PKPbc** **12 06 07.4 -4.0**
**Q52A Bidwell** 145.21 26 **PKPbc** **12 06 09.5 -1.4**
**KSPA Keystone Colle** 145.22 16 **PKPbc** **12 06 09.9 -1.0**
KSPA IAMs_20 IAMs_20 13 23 28.9
comp=Z,15µm,21.0s
**PTGB Pitanga** 145.25 199 *eP* **PKPbc** **12 06 07.2 -4.4**
**PLAL Pickwick Lake** 145.27 37 **PKPbc** **12 06 09.5 -1.7**
PLAL IAMs_20 IAMs_20 13 20 55.3
comp=Z,10µm,21.0s
**HRV Adam Dziewonsk** 145.28 10 PKiKP **PKiKP** **12 06 15.6 +0.4**
baz=346
**SSPA Standing Stone** 145.43 19 **PKPbc** **12 06 10.4 -1.2**
**SSPA Standing Stone** 145.43 19 PKiKP **PKiKP** **12 06 16.3 +0.7**
baz=335
**WES Weston** 145.43 10 **PKPbc** **12 06 11.2 -0.3**
**WES Weston** 145.43 10 PKIKP **PKPbc** **12 06 11.2 -0.3**
**U49A Red Boiling Sp** 145.46 32 **PKPbc** **12 06 10.8 -1.0**
**V48A Smith Brothers** 145.46 34 **PKPbc** **12 06 10.3 -1.5**
**BSCB Bom Sucesso** 145.46 212 *eP* **PKPbc** **12 06 07.8 -4.5**
**CLTN Cedars of Leba** 145.47 34 **PKPdf** **12 06 10.9 -0.9**
CLTN IAMs_20 IAMs_20 13 22 28.2
comp=Z,16µm,20.0s
**BCX Boston College** 145.51 10 **PKPdf** **12 06 11.4 -0.3**
BCX IAMs_20 IAMs_20 13 21 01.2
comp=Z,17µm,22.0s
**VBMS Vicksburg** 145.53 43 IAMs_20 IAMs_20 13 22 24.9
comp=Z,13µm,22.0s
**VBMS Vicksburg** 145.53 43 PKiKP **PKiKP** **12 06 17.2 +1.1**
baz=308
**T50A Nancy** 145.56 31 **PKPdf** **12 06 10.8 -1.2**
**RCLB Rio Claro- Sao** 145.60 207 *eP* **PKPdf** **12 06 07.8 -4.8**
**MCWV Mont Chateau** 145.60 22 **PKPdf** **12 06 11.4 -0.6**
**MCWV Mont Chateau** 145.60 22 PKiKP **PKiKP** **12 06 16.7 +0.7**
baz=331
**N58A Sunbury** 145.61 18 **PKPdf** **12 06 10.9 -1.0**
N58A IAMs_20 IAMs_20 13 20 07.3
comp=Z,18µm,22.0s
**FRTB Fartura** 145.63 203 *eP* **PKPdf** **12 06 07.8 -4.8**
**KSCT Kent School, K** 145.64 13 **PKPdf** **12 06 11.2 -0.7**

**S51A Beattyville** 145.69 29 **PKPdf** **12 06 11.1 -1.1**
**Q54A Coxs Mills** 145.80 24 **PKPdf** **12 06 11.8 -0.6**
**GUA01 Guaratinga, BA** 145.82 224 *eP* **PKPdf** **12 06 08.0 -5.0**
**UCCT U. Connecticut** 145.84 12 **PKPdf** **12 06 11.8 -0.5**
**L64A Middleborough** 145.95 10 **PKPdf** **12 06 12.5 0.0**
**ODNJ Ogdensburg** 145.98 15 **PKPdf** **12 06 12.3 -0.2**
**TRNY Table Rock, Ra** 146.01 14 **PKPdf** **12 06 12.5 -0.1**
**LDASE Londrina, Braz** 146.16 201 *eP* **PKPdf** **12 06 08.9 -4.6**
**PAL Palisades** 146.22 14 **PKPdf** **12 06 13.4 +0.4**
**PAL Palisades** 146.22 14 PKiKP **PKiKP** **12 06 18.2 +1.0**
baz=342
**PAL Palisades** 146.22 14 PKP2 **PKPdf** **12 06 13.4 +0.4**
**M63A Gales Ferry** 146.25 11 **PKPdf** **12 06 12.5 -0.4**
**X48A Hartselle** 146.25 36 **PKPdf** **12 06 11.9 -1.3**
X48A IAMs_20 IAMs_20 13 23 51.1
comp=Z,19µm,22.0s
**SWET Sewanee** 146.34 34 **PKPdf** **12 06 12.4 -1.0**
SWET IAMs_20 IAMs_20 13 23 45.1
comp=Z,16µm,21.0s
**M65A Busby, Falmout** 146.35 10 PKiKP **PKiKP** **12 06 18.6 +1.2**
baz=347
**BRNJ Basking Ridge** 146.36 15 **PKPbc** **12 06 14.2 -0.2**
**Q56A Snyder Ridge,** 146.39 22 **PKPdf** **12 06 13.2 -0.2**
**N62A Caumsett State** 146.40 14 **PKPdf** **12 06 13.6 +0.4**
N62A IAMs_20 IAMs_20 13 25 29.8
comp=Z,14µm,21.0s
**CPNY Central Park** 146.41 14 **PKPbc** **12 06 14.0 -0.5**
**P57A Homestead Farm** 146.42 20 **PKPdf** **12 06 12.7 -0.6**
**CMC01 Camacan, BA** 146.47 225 *eP* **PKPdf** **12 06 09.7 -4.4**
**MVL Millersville** 146.50 18 **PKPdf** **12 06 13.7 +0.3**
**PB14 IPOC Station P** 146.54 169 **PKPbc** **12 06 15.5 -0.4**
**TZTN Tazewell** 146.58 30 **PKPdf** **12 06 13.4 -0.3**
**TZTN Tazewell** 146.58 30 PKiKP **PKiKP** **12 06 19.1 +0.9**
baz=322
**S54A Dingess, Beckl** 146.60 26 **PKPdf** **12 06 13.5 -0.3**
**R55A Marlinton** 146.69 24 **PKPdf** **12 06 13.7 -0.2**
**W50A Signal Mountai** 146.69 34 **PKPdf** **12 06 13.8 -0.2**
W50A IAMs_20 IAMs_20 13 20 15.4
comp=Z,17µm,22.0s
**346A Big Creek Wild** 146.75 43 **PKPdf** **12 06 14.2 +0.1**
346A IAMs_20 IAMs_20 13 24 21.1
comp=Z,10µm,22.0s
**WUPA West Chester U** 146.78 17 **PKPdf** **12 06 13.6 -0.3**
WUPA IAMs_20 IAMs_20 13 24 52.1
comp=Z,12µm,21.0s
**SDMD Soldier's Deli** 146.88 19 **PKPdf** **12 06 14.2 +0.1**
SDMD IAMs_20 IAMs_20 13 24 49.9
comp=Z,8µm,20.0s
**CPCT Cooper Cave** 146.93 32 **PKPdf** **12 06 14.1 -0.3**
CPCT IAMs_20 IAMs_20 13 27 06.5
comp=Z,18µm,21.0s
**FPAL Fort Paine** 147.01 35 **PKPdf** **12 06 14.1 -0.4**
**DIAM Diamantina, MG** 147.01 216 *eP* **PKPdf** **12 06 10.3 -4.9**
**Y49A Blount Mountai** 147.04 36 **PKPdf** **12 06 14.2 -0.3**
**V52A Sevierville** 147.10 31 **PKPdf** **12 06 14.5 -0.2**
**TKL Tuckaleechee C** 147.16 31 **PKPdf** **12 06 14.4 -0.3**
**TKL Tuckaleechee C** 147.16 31 PKPbc **PKPdf** **12 06 14.3 -0.4**
comp=Z,39nm,0.8s,baz=324,slow=2.4,SNR=60
**BB19B Bebedouro** 147.22 207 *eP* **PKPdf** **12 06 10.6 -4.7**
**TRCB Terra Rica** 147.23 199 **PKPdf** **12 06 14.9 -0.3**
**TRCB Terra Rica** 147.23 199 *eP* **PKPdf** **12 06 10.5 -4.8**
**P61A Hammonton** 147.25 16 **PKPdf** **12 06 15.5 +0.8**
**LRAL Lakeview Retre** 147.26 38 **PKPdf** **12 06 14.4 -0.6**
**LRAL Lakeview Retre** 147.26 38 PKiKP **PKiKP** **12 06 20.2 +0.6**
baz=314
**PAPY Pozo Azul** 147.33 189 *eP* **PKPdf** **12 06 10.2 -5.1**
**X51A Calhoun** 147.41 34 **PKPdf** **12 06 15.3 +0.2**
**U54A Nelsons Funny** 147.42 28 **PKPdf** **12 06 15.0 -0.2**
**NBAN Anadia - AL** 147.43 237 *eP* **PKPdf** **12 06 12.7 -3.1**
**BLA Blacksburg** 147.47 25 **PKPdf** **12 06 15.0 -0.3**
**BLA Blacksburg** 147.47 25 PKiKP **PKiKP** **12 06 20.7 +0.7**
baz=328
**BLA Blacksburg** 147.47 25 PKIKP **PKPdf** **12 06 15.0 -0.3**
**W52A Murphy** 147.51 32 **PKPdf** **12 06 15.1 -0.3**
**S57A Dark Hollow, R** 147.60 23 **PKPdf** **12 06 15.3 -0.1**
**GDU01 Guandu, BA** 147.60 228 *eP* **PKPdf** **12 06 11.6 -4.4**
**V53A Saluda** 147.63 30 **PKPdf** **12 06 15.1 -0.5**
**CBN Corbin Frederi** 147.79 21 **PKPdf** **12 06 15.5 -0.1**
CBN IAMs_20 IAMs_20 13 21 38.1
comp=Z,16µm,21.0s
**CBN Corbin Frederi** 147.79 21 PKiKP **PKPab** **12 06 21.6 +0.7**
baz=334
**R58B Mineral** 147.82 21 **PKPdf** **12 06 15.3 -0.5**
**PCMB Pacaembu** 147.85 202 *eP* **PKPdf** **12 06 11.4 -4.9**
**NBLA Lagarto - SE** 147.93 234 *eP* **PKPdf** **12 06 12.2 -4.4**
**NBCA Caruaru-PE** 147.96 240 *eP* **PKPdf** **12 06 12.5 -4.2**
**T57A Hurt** 148.14 24 **PKPdf** **12 06 15.3 -1.0**
**CMIG Matias Romero** 148.30 71 PKPbc **PKPdf** **12 06 18.2 +1.1**
comp=Z,31nm,0.6s,baz=299,slow=2.8,SNR=34
**250A Grady** 148.44 39 IAMs_20 IAMs_20 13 28 03.2
comp=Z,18µm,21.0s
**KMSC Kings Mountain** 148.78 29 **PKPdf** **12 06 16.8 -0.6**
**LVC Limon Verde** 148.78 170 IAMs_20 IAMs_20 13 08 44.8
comp=Z,15µm,22.0s
**LVC Limon Verde** 148.78 170 *eP* **PKPdf** **12 06 12.7 -5.6**
**RCBR Riachuelo** 149.00 244 PKPbc **PKPbc** **12 06 21.5 -0.9**
comp=Z,20nm,0.9s,baz=63,slow=5.3,SNR=12
**RCBR Riachuelo** 149.00 244 *eP* **PKPdf** **12 06 14.3 -4.1**
**ITRB Iturama** 149.22 205 *eP* **PKPdf** **12 06 14.9 -3.7**
**V58A Windy Hill, Pi** 149.23 25 **PKPdf** **12 06 17.5 -0.6**
V58A PKPbc **PKPdf** **12 06 23.1 -0.5**
V58A **pKPdf** **12 06 28.2 -1.1**
**W57A Gilead** 149.39 27 **PKPdf** **12 06 17.7 -0.6**
W57A PKPbc **PKiKP** **12 06 23.5 -0.4**
**BIRD Birdtown, Kers** 149.59 28 **PKPdf** **12 06 18.5 -0.2**
**MURT Porto Murtinho** 149.59 191 *eP* **PKPdf** **12 06 14.2 -4.9**
**Y57A Sumter** 150.14 29 **PKPdf** **12 06 19.3 -0.2**
**X58A Rowland** 150.18 27 **PKPdf** **12 06 19.0 -0.6**
**CNNC Cliffs of the** 150.21 24 **PKPdf** **12 06 19.9 +0.2**
**CNNC Cliffs of the** 150.21 24 PKiKP **PKPbc** **12 06 25.2 +0.4**
baz=331
**AQDB Aquidauana** 150.31 195 *eP* **PKPdf** **12 06 14.7 -5.6**
**TIGA Tifton** 150.43 36 PKiKP **PKiKP** **12 06 26.0 -0.1**
baz=317
**TA02 Huaiquique** 150.83 167 **PKPdf** **12 06 21.8 +0.7**
**NHSC New Hope** 150.98 30 PKiKP **PKPbc** **12 06 26.9 +0.2**
baz=325
**CCIG Comitan** 151.05 71 IAMs_20 IAMs_20 13 13 16.8
comp=Z,10µm,22.0s
**BDFB Brasilia** 151.60 213 PKP **PKPdf** **12 06 23.1 +0.6**
comp=Z,24nm,0.8s,baz=102,slow=1.8,SNR=28
**NBCL Cascavel-CE** 151.84 245 *eP* **PKPdf** **12 06 19.7 -3.1**
**456A Hilliard** 151.86 35 **PKPdf** **12 06 22.2 -0.1**
456A PKPbc **PKiKP** **12 06 29.1 0.0**
456A IAMs_20 IAMs_20 13 30 06.6
comp=Z,17µm,22.0s
**PAYG Puerto Ayora** 151.92 107 IAMs_20 IAMs_20 13 22 28.0
comp=Z,10µm,20.0s
**SDBA SAO DESIDERIO** 152.24 222 *eP* **PKPdf** **12 06 19.9 -3.5**
**APG El Apazote** 152.88 73 PKP **PKPdf** **12 06 24.6 +0.1**
comp=Z,2.3nm,0.8s,baz=293,slow=6.1,SNR=18
**TEIG Tepich** 153.37 61 IAMs_20 IAMs_20 13 24 50.2
comp=Z,6µm,20.0s
**TEIG Tepich** 153.37 61 PKP **PKPdf** **12 06 24.9 +0.1**
comp=Z,8.4nm,0.7s,baz=7.2,slow=3.4,SNR=5.1
**ARAG Araguaiana, MT** 153.39 206 *eP* **PKPdf** **12 06 20.4 -4.6**
**MTO3 Montecristo** 154.04 74 IAMs_20 IAMs_20 13 19 08.5
comp=Z,8µm,22.0s
**SNET Serv Nac Est T** 154.29 76 IAMs_20 IAMs_20 13 30 11.2
comp=Z,10µm,21.0s
**BBSD Serra de San D** 154.44 187 *eP* **PKPdf** **12 06 21.4 -5.1**
**SALV Santo Antonio** 154.66 198 *eP* **PKPdf** **12 06 23.1 -3.7**
**LPAZ La Paz** 155.10 170 PKP **PKPdf** **12 06 29.3 +1.1**
comp=Z,21nm,0.9s,baz=54,slow=1.1,SNR=57
LPAZ PKPab **PKPab** **12 06 54.1 +1.7**
comp=Z,97nm,0.8s,baz=143,slow=3.5,SNR=23
**LPAZ La Paz** 155.10 170 *eP* **PKPdf** **12 06 21.8 -6.3**
**SIV San Ignacio** 155.68 186 PKP **PKPdf** **12 06 29.0 +0.8**
comp=Z,24nm,0.8s,baz=184,slow=1.2,SNR=52
SIV PKPab **PKPab** **12 06 55.8 +1.6**
comp=Z,96nm,0.8s,baz=170,slow=3.4,SNR=18
SIV PP **PP** **12 10 30.5 +1.2**
comp=Z,14nm,0.8s,baz=171,slow=2.1,SNR=2.1
**NNA Nana** 155.87 147 PKP **PKPdf** **12 06 29.8 +1.3**
comp=Z,19nm,0.8s,baz=226,slow=1.9,SNR=5.0
NNA PKPab **PKPab** **12 06 56.7 +1.5**
comp=Z,86nm,1.1s,baz=265,slow=7.7,SNR=5.2
**PTLB Pontes e Lacer** 155.94 191 **PKPdf** **12 06 28.3 -0.2**
PTLB PKPab **PKPab** **12 06 57.3 +2.0**
**PTLB Pontes e Lacer** 155.94 191 *eP* **PKPdf** **12 06 25.9 -2.6**
**BBSR BB Station** 156.09 2 IAMs_20 IAMs_20 13 27 29.2
comp=Z,12µm,21.0s
**TGUH Tegucigalpa,Un** 156.10 74 IAMs_20 IAMs_20 13 30 33.9
comp=Z,5µm,20.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **156.54** | **77** | | IAMs_20 | IAMs_20 | 13 31 23.9 | | |
| | comp=Z,10µm,22.0s | | | | | | | | |
| **CAMR** | **Camarioca** | **157.53** | **47** | | IAMs_20 | IAMs_20 | 13 34 33.3 | | |
| | comp=Z,29µm,21.0s | | | | | | | | |
| **ACON** | **Acoyapa** | **158.46** | **79** | | IAMs_20 | IAMs_20 | 13 32 56.8 | | |
| | comp=Z,10µm,20.0s | | | | | | | | |
| **VILB** | **Vilhena** | **158.56** | **189** | *eP* | | **PKPdf** | **12 06 26.4** | **-5.5** | |
| **ATAH** | **Atahualpa** | **158.67** | **136** | PKP | | **PKPdf** | **12 06 33.9** | **+1.3** | |
| | comp=Z,35nm,0.9s,baz=328,slow=1.5,SNR=29 | | | | | | | | |
| ATAH | | | | PP | | **PP** | **12 10 47.0** | **-0.4** | |
| | comp=Z,12nm,1.2s,baz=346,slow=8.4,SNR=1.1 | | | | | | | | |
| **JTS** | **Las Juntas de** | **158.83** | **83** | | | **PKPdf** | **12 06 31.5** | **-0.8** | |
| JTS | | | | PKPab | | **PKPab** | **12 07 09.3** | **+1.1** | |
| **JTS** | **Las Juntas de** | **158.83** | **83** | | IAMs_20 | IAMs_20 | 13 24 49.0 | | |
| | comp=Z,12µm,22.0s | | | | | | | | |
| **JTS** | **Las Juntas de** | **158.83** | **83** | PKP | | **PKPdf** | **12 06 31.4** | **-0.8** | |
| | comp=Z,19nm,0.8s,baz=347,slow=2.5,SNR=11 | | | | | | | | |
| JTS | | | | PKPab | | **PKPab** | **12 07 08.7** | **+0.5** | |
| | comp=Z,61nm,1.1s,baz=298,slow=2.6,SNR=2.0 | | | | | | | | |
| JTS | | | | PP | | **PP** | **12 10 48.1** | **-1.1** | |
| | comp=Z,17nm,1.1s,baz=300,slow=6.0,SNR=2.8 | | | | | | | | |
| **ESPN** | **Las Esperanzas** | **159.27** | **78** | | | **PKPdf** | **12 06 31.8** | **-0.9** | |
| ESPN | | | | | IAMs_20 | IAMs_20 | 13 30 56.3 | | |
| | comp=Z,13µm,22.0s | | | | | | | | |
| **CLDB** | **Colider** | **159.38** | **202** | *eP* | | **PKPdf** | **12 06 27.8** | **-5.0** | |
| **HDC** | **Heredia** | **159.67** | **84** | | IAMs_20 | IAMs_20 | 13 35 00.4 | | |
| | comp=Z,11µm,20.0s | | | | | | | | |
| **HDC** | **Heredia** | **159.67** | **84** | *eP* | | **PKPdf** | **12 06 27.6** | **-5.7** | |
| **TMAB** | **Tom-Au,PA,Br** | **161.23** | **236** | *eP* | | **PKPdf** | **12 06 30.4** | **-4.5** | |
| **CZSB** | **Cruzeiro do Su** | **161.61** | **150** | *eP* | | **PKPdf** | **12 06 29.0** | **-6.3** | |
| **ETMB** | **Extrema** | **161.75** | **172** | | | **PKPdf** | **12 06 35.4** | **-0.1** | |
| ETMB | | | | PKPab | | **PKPab** | **12 07 21.5** | **+1.0** | |
| **ETMB** | **Extrema** | **161.75** | **172** | *eP* | | **PKPdf** | **12 06 29.8** | **-5.6** | |
| **NPGB** | **Novo Progresso** | **162.63** | **208** | *eP* | | **PKPdf** | **12 06 31.5** | **-4.8** | |
| **SAML** | **Samuel** | **162.80** | **181** | | | **PKPdf** | **12 06 36.4** | **-0.1** | |
| SAML | | | | PKPab | | **PKPab** | **12 07 26.0** | **+0.9** | |
| **SAML** | **Samuel** | **162.80** | **181** | PKP2 | | **PKPab** | **12 07 26.0** | **+0.9** | |
| SAML | | | | | | | 13 06 36.4 | | |
| **SAML** | **Samuel** | **162.80** | **181** | *eP* | | **PKPdf** | **12 06 31.7** | **-4.8** | |
| **OTAV** | **Otavalo** | **163.13** | **118** | *eP* | | **PKPdf** | **12 06 33.9** | **-3.6** | |
| **MTDJ** | **Mount Denham** | **163.27** | **53** | | | **PKPdf** | **12 06 36.2** | **-0.7** | |
| **ITTB** | **Itaituba** | **165.13** | **212** | *eP* | | **PKPdf** | **12 06 33.6** | **-5.0** | |
| **TBTG** | **Tabatinga, AM** | **166.03** | **153** | *eP* | | **PKPdf** | **12 06 33.8** | **-5.6** | |
| **SDDR** | **Presa de Saban** | **167.07** | **35** | | | **PKPdf** | **12 06 40.1** | **0.0** | |
| **MACA** | **Manacapuru-AM** | **168.19** | **194** | PKPdf | | **PKPdf** | **12 06 40.6** | **-0.4** | |
| MACA | | | | | | **PKPab** | **12 07 49.1** | **+0.3** | |
| **MACA** | **Manacapuru-AM** | **168.19** | **194** | *eP* | | **PKPdf** | **12 06 36.0** | **-5.0** | |
| **MDP** | **Montagnes des** | **168.66** | **254** | PKP | | **PKPdf** | **12 06 41.2** | **-0.1** | |
| | comp=Z,27nm,1.0s,baz=323,slow=0.8,SNR=12 | | | | | | | | |
| MDP | | | | PP | | **PP** | **12 11 38.8** | **-1.9** | |
| | comp=Z,11nm,0.9s,baz=207,slow=16,SNR=1.6 | | | | | | | | |
| **ROSC** | **El Rosal** | **168.78** | **108** | PKP | | **PKPdf** | **12 06 41.9** | **0.0** | |
| | comp=Z,21nm,0.8s,baz=44,slow=1.8,SNR=42 | | | | | | | | |
| ROSC | | | | PKPab | | **PKPab** | **12 07 53.7** | **+1.3** | |
| | comp=Z,63nm,0.9s,baz=188,slow=14,SNR=4.8 | | | | | | | | |
| ROSC | | | | PP | | **PP** | **12 11 40.6** | **-1.2** | |
| | comp=Z,7.2nm,0.5s,baz=87,slow=19,SNR=1.6 | | | | | | | | |
| **AOPR** | **Arecibo Observ** | **169.61** | **17** | *eP* | | **PKPdf** | **12 06 39.4** | **-2.4** | |
| **PRSN** | **Puerto Rico Se** | **169.61** | **19** | | | **PKPdf** | **12 06 40.3** | **-1.4** | |
| **ANWB** | **Willy Bob** | **170.59** | **349** | *eP* | | **PKPdf** | **12 06 41.2** | **-1.1** | |
| **ANBD** | **Bethesda, Anti** | **171.19** | **349** | *eP* | | **PKPdf** | **12 06 41.7** | **-0.9** | |
| **MBFL** | **Flemmings, Mon** | **171.56** | **351** | *eP* | | **PKPdf** | **12 06 40.7** | **-2.1** | |
| **H05N1** | **Guadeloupe/Mar** | **171.72** | **343** | PKP | | **PKPdf** | **12 06 41.5** | **-1.4** | |
| | SNR=5.0 | | | | | | | | |
| **TBG** | **Guadaloupe-3** | **172.32** | **346** | *eP* | | **PKPdf** | **12 06 43.1** | **-0.1** | |
| **SDV** | **Santo Domingo** | **173.01** | **85** | | | **PKPdf** | **12 06 42.9** | **-0.9** | |
| SDV | | | | PKPab | | **PKPab** | **12 08 12.5** | **+1.6** | |
| **SDV** | **Santo Domingo** | **173.01** | **85** | PKP | | **PKPdf** | **12 06 42.6** | **-1.2** | |
| | comp=Z,17nm,0.4s,baz=173,slow=1.1,SNR=16 | | | | | | | | |
| SDV | | | | PKPab | | **PKPab** | **12 08 11.8** | **+0.9** | |
| | comp=Z,19nm,0.4s,baz=211,slow=2.4,SNR=3.8 | | | | | | | | |
| SDV | | | | PP | | **PP** | **12 12 00.2** | **-2.7** | |
| | comp=Z,14nm,0.5s,baz=42,slow=4.5,SNR=2.0 | | | | | | | | |
| **SDV** | **Santo Domingo** | **173.01** | **85** | *eP* | | **PKPdf** | **12 06 38.8** | **-5.0** | |
| **ILAM** | **Ilet Lapin Mar** | **173.09** | **338** | *eP* | | **PKPdf** | **12 06 41.9** | **-1.6** | |
| **SVN** | **Savane Anatole** | **173.14** | **340** | *eP* | | **PKPdf** | **12 06 43.0** | **-0.6** | |
| **BOAV** | **Boa Vista** | **173.33** | **207** | | | **PKPdf** | **12 06 43.4** | **-0.4** | |
| BOAV | | | | PKPab | | **PKPab** | **12 08 13.3** | **+1.6** | |
| **BOAV** | **Boa Vista** | **173.33** | **207** | *eP* | | **PKPdf** | **12 06 38.8** | **-4.9** | |
| **H05S1** | **Guadeloupe/Mar** | **173.40** | **336** | PKP | | **PKPdf** | **12 06 42.6** | **-1.1** | |
| **BIM** | **Bigot** | **173.41** | **338** | *eP* | | **PKPdf** | **12 06 42.8** | **-0.9** | |
| **BBGH** | **Gun Hill** | **173.82** | **321** | *eP* | | **PKPdf** | **12 06 44.6** | **+0.8** | |
| **SVB** | **Belmont** | **174.61** | **335** | *eP* | | **PKPdf** | **12 06 42.9** | **-1.2** | |
| **GCMP** | **Grenada, Carri** | **175.38** | **333** | *eP* | | **PKPdf** | **12 06 42.0** | **-2.3** | |
| **BAUV** | **El Baul** | **175.56** | **82** | | | **PKPdf** | **12 06 42.9** | **-1.5** | |
| BAUV | | | | PKPab | | **PKPab** | **12 08 21.5** | **-0.5** | |
| **BAUV** | **El Baul** | **175.56** | **82** | *eP* | | **PKPdf** | **12 06 43.1** | **-1.3** | |
| **GRSS** | **Sisters** | **175.63** | **334** | *eP* | | **PKPdf** | **12 06 41.9** | **-2.5** | |
| **GRHS** | **Sauteurs** | **175.71** | **334** | *eP* | | **PKPdf** | **12 06 41.3** | **-3.1** | |
| **GRW** | **Mount Saint Ca** | **175.78** | **333** | *eP* | | **PKPdf** | **12 06 42.2** | **-2.4** | |
| **GRGR** | **Grenville** | **175.80** | **333** | *eP* | | **PKPdf** | **12 06 41.8** | **-2.6** | |
| **TRN** | **Trinidad (W)** | **176.87** | **317** | *eP* | | **PKPdf** | **12 06 44.7** | **0.0** | |
| **PCRV** | **Puerto La Cruz** | **177.92** | **30** | PKP | | **PKPdf** | **12 06 43.2** | **-1.7** | |
| | comp=Z,10nm,1.1s,baz=351,slow=9.6,SNR=7.7 | | | | | | | | |
| PCRV | | | | PP | | **PP** | **12 12 25.5** | **+1.2** | |
| | comp=Z,7.3nm,1.0s,baz=34,slow=22,SNR=1.8 | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **177.92** | **30** | *eP* | | **PKPdf** | **12 06 41.8** | **-3.1** | |

*IDC **05** 12:03:20.5±0.6,8°.31S×115°.96E,h0km,mb4.4/15, mbtmp4.4/16,ML4.5/1,Error ellipse: s-maj=23.3km s-min=13.4km az=81.0*
*DJA **05** 12:03:23.9±0.3,8°.5S±5°×11°.6E±°,h10km,M5.0/12,mb5.0/2, MLv5.1/12*
*NEIC **05** 12:03:24.2±1.8,8°.36S±0°.09×116°.02E±0°.03,h18km±4km, mb5.1/29,Error ellipse: s-maj=12.8km s-min=4.2km az=179.0*

**ISC 05 12:03:22.4±0.4,8°28S±0°.06×116°06E±0°.04,h10km,n82, σ1§11/84,mb4.8/27,2C,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **0.86** | **283** | P | | **Pg** | **12 03 39.7** | **+0.7** |
| SRBI | | | | S | | **Sg** | **12 03 51.7** | **+1.4** |
| **TWSI** | **Taliwang, Sumb** | **0.93** | **119** | P | | **Pg** | **12 03 41.8** | **+1.5** |
| **DNP** | **Denpasar** | **0.93** | **245** | P | | **Pb** | **12 03 41.6** | **+1.0** |
| **PLAI** | **Plampang** | **1.78** | **108** | P | | **Pn** | **12 03 55.1** | **+1.9** |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **264** | P | | **Pn** | **12 03 54.7** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **264** | | | **Pn** | **12 03 54.1** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **264** | P | | **Pn** | **12 03 54.5** | **-0.4** |
| **GRJI** | **Gresik** | **3.80** | **291** | P | | **Pn** | **12 04 22.3** | **+1.2** |
| **PWJI** | **Pagerwojo** | **4.22** | **273** | P | | **Pn** | **12 04 27.6** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.88** | **64** | P | | **Pn** | **12 04 37.4** | **+1.5** |
| **KAPI** | **Kappang** | **4.89** | **49** | P | | **Pn** | **12 04 37.9** | **+1.8** |
| **KAPI** | **Kappang** | **4.89** | **49** | | | **Pn** | **12 04 37.3** | **+1.2** |
| **KAPI** | **Kappang** | **4.89** | **49** | Pn | | **Pn** | **12 04 37.5** | **+1.5** |
| | 19nm,0.3s,baz=147,slow=5.4,SNR=14 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **12 05 32.1** | **-0.8** |
| | 17nm,0.3s,baz=222,slow=21,SNR=8.3 | | | | | | | |
| | 61nm,0.3s | | | | | | | |
| **UGM** | **Wanagama** | **5.50** | **273** | P | | **Pn** | **12 04 46.2** | **+1.8** |
| **UGM** | **Wanagama** | **5.50** | **273** | Pn | | **Pn** | **12 04 45.8** | **+1.3** |
| **UGM** | **Wanagama** | **5.50** | **273** | P | | **Pn** | **12 04 45.4** | **+1.0** |
| | 287nm,1.7s | | | | | | | |
| **BNSI** | **Bone** | **5.57** | **46** | P | | **Pn** | **12 04 47.5** | **+2.1** |
| **MMRI** | **Maumere** | **6.12** | **94** | Pn | | **Pn** | **12 04 54.0** | **+1.0** |
| **SOEI** | **Soe** | **8.23** | **101** | Pn | | **Pn** | **12 05 19.9** | **-2.2** |
| **BBJI** | **Bungbulang** | **8.37** | **275** | P | | **Pn** | **12 05 26.4** | **+2.4** |
| **MBWA** | **Marble Bar** | **13.28** | **165** | Pn | | **Pn** | **12 06 29.3** | **-1.8** |
| **FITZ** | **Fitzroy Crossi** | **13.49** | **137** | Pn | | **Pn** | **12 06 34.3** | **+0.3** |
| **MTN** | **Manton Dam** | **15.49** | **108** | Pn | | **Pn** | **12 06 59.8** | **-1.4** |
| **FAKI** | **Fak Fak** | **16.96** | **73** | P | | **Pn** | **12 07 22.0** | **+2.0** |
| **FAKI** | **Fak Fak** | **16.96** | **73** | P | | **Pn** | **12 07 21.1** | **+1.1** |
| **WRKA** | **Warakurna** | **20.34** | **146** | P | | **P** | **12 08 00.6** | **+1.5** |
| **WB0** | **Warramunga Arr** | **21.11** | **125** | P | | **P** | **12 08 07.1** | **-0.2** |
| WB0 | | | | IAmb | | IAmb | 12 08 11.2 | |
| | comp=Z,47nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.15** | **125** | P | | **P** | **12 08 07.5** | **-0.3** |
| | comp=Z,13nm,0.7s,baz=298,slow=12,SNR=19 | | | | | | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **21.16** | **125** | P | | **P** | **12 08 07.5** | **-0.4** |
| WRAB | | | | IAmb | | IAmb | 12 08 11.5 | |
| | comp=Z,89nm,1.3s | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.16** | **125** | P | | **P** | **12 08 06.8** | **-1.1** |
| WB2 | | | | IAmb | | IAmb | 12 08 11.4 | |
| | comp=Z,115nm,1.4s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.32** | **125** | P | | **P** | **12 08 10.1** | **+0.4** |
| WR0 | | | | IAmb | | IAmb | 12 08 14.2 | |
| | comp=Z,45nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **22.94** | **134** | P | | **P** | **12 08 26.8** | **-0.2** |
| **ASAR** | **Alice Springs** | **22.94** | **134** | P | | **P** | **12 08 26.8** | **-0.2** |
| **ASAR** | **Alice Springs** | **22.94** | **134** | P | | **P** | **12 08 26.5** | **-0.5** |
| | comp=Z,8.0nm,0.5s,baz=311,slow=9.6,SNR=23 | | | | | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **AS01** | **Alice Springs** | **22.97** | **134** | P | | **P** | **12 08 27.6** | **+0.3** |
| **QIS** | **Mount Isa** | **25.82** | **121** | P | | **P** | **12 08 55.6** | **+1.5** |
| **COEN** | **Coen** | **27.18** | **104** | P | | **P** | **12 09 07.9** | **+1.5** |
| **BBOO** | **Buckleboo** | **30.64** | **146** | P | | **P** | **12 09 36.5** | **-0.5** |
| BBOO | | | | IAmb | | IAmb | 12 09 57.7 | |
| | comp=Z,112nm,1.5s | | | | | | | |
| **CTAO** | **Charters Tower** | **31.47** | **115** | P | | **P** | **12 09 44.1** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **31.49** | **328** | P | | **P** | **12 09 43.5** | **-1.1** |
| | comp=Z,1.0nm,0.9s,baz=163,slow=7.5,SNR=1.9 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **33.39** | **138** | P | | **P** | **12 10 03.1** | **+1.9** |
| **STKA** | **Stephens Creek** | **33.39** | **138** | P | | **P** | **12 10 01.5** | **+0.4** |
| | comp=Z,8.3nm,1.1s,baz=312,slow=10,SNR=4.6 | | | | | | | |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **TOO** | **Toolangi** | **39.48** | **142** | P | | **P** | **12 10 54.2** | **+1.0** |
| TOO | | | | IAmb | | IAmb | 12 12 07.1 | |
| | comp=Z,142nm,1.9s | | | | | | | |
| **ARMA** | **Armidale** | **39.87** | **128** | P | | **P** | **12 10 57.1** | **+0.5** |
| ARMA | | | | IAmb | | IAmb | 12 12 09.8 | |
| | comp=Z,107nm,1.9s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.81** | **13** | P | | **P** | **12 11 54.4** | **+2.1** |
| **KSRS** | **Korea Array** | **46.83** | **13** | P | | **P** | **12 11 52.3** | **-0.2** |
| | comp=Z,3.1nm,1.0s,baz=190,slow=7.4,SNR=7.7 | | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.20** | **24** | P | | **P** | **12 12 11.2** | **+0.3** |
| | comp=Z,2.8nm,0.9s,baz=204,slow=7.2,SNR=7.8 | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | |
| **JTM** | **Tennabayashi** | **53.99** | **23** | P | | **P** | **12 12 47.0** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **14** | P | | **P** | **12 12 49.1** | **+1.1** |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **14** | P | | **P** | **12 12 48.4** | **+0.4** |
| | comp=Z,2.7nm,0.7s,baz=206,slow=6.2,SNR=5.4 | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.47** | **353** | P | | **P** | **12 13 04.9** | **+0.3** |
| ULN | | | | IAmb | | IAmb | 12 13 09.3 | |
| | comp=Z,23nm,1.9s | | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | | **P** | **12 13 05.3** | **+0.3** |
| **SONM** | **Songino Array** | **56.52** | **352** | P | | **P** | **12 13 05.1** | **+0.1** |
| | comp=Z,4.3nm,0.7s,baz=170,slow=7.9,SNR=15 | | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.42** | **22** | P | | **P** | **12 13 11.7** | **+0.4** |
| JKA | | | | IAmb | | IAmb | 12 13 17.5 | |
| | comp=Z,54nm,1.8s | | | | | | | |
| **CASY** | **Casey** | **58.04** | **183** | P | | **P** | **12 13 14.7** | **-0.5** |
| **MRNZ** | **Matariki Terra** | **59.79** | **133** | P | | **P** | **12 13 29.0** | **+1.0** |
| **OXZ** | **Oxford** | **59.87** | **136** | P | | **P** | **12 13 29.1** | **+0.6** |
| OXZ | | | | IAmb | | IAmb | 12 15 23.5 | |
| | comp=Z,69nm,1.7s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **61.98** | **130** | P | | **P** | **12 13 43.9** | **+0.9** |
| **MKAR** | **Makanchi Array** | **62.53** | **335** | P | | **P** | **12 13 46.0** | **-0.4** |
| **MKAR** | **Makanchi Array** | **62.53** | **335** | P | | **P** | **12 13 46.7** | **+0.4** |
| | comp=Z,0.6nm,0.5s,baz=148,slow=6.9,SNR=6.1 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **DRK** | **Karamyk** | **62.75** | **323** | P | | **P** | **12 13 46.9** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **67.37** | **341** | P | | **P** | **12 14 15.4** | **-2.2** |
| | comp=Z,1.5nm,0.7s,baz=163,slow=4.4,SNR=4.0 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **MAW** | **Mawson** | **68.94** | **199** | P | | **P** | **12 14 27.1** | **-0.2** |
| | comp=Z,9.4nm,0.8s,baz=93,slow=15,SNR=6.6 | | | | | | | |
| | comp=Z,9.4nm,0.8s | | | | | | | |
| **NIUE** | **Niue** | **72.28** | **107** | P | | **P** | **12 14 48.1** | **-0.6** |
| **VNDA** | **Vanda** | **73.16** | **171** | P | | **P** | **12 14 53.1** | **+0.3** |
| **VNDA** | **Vanda** | **73.16** | **171** | P | | **P** | **12 14 53.1** | **+0.3** |
| | comp=Z,2.4nm,0.6s,baz=298,slow=6.2,SNR=11 | | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **SBA** | **Scott Base** | **74.18** | **170** | P | | **P** | **12 15 00.2** | **+1.4** |
| SBA | | | | IAmb | | IAmb | 12 15 46.7 | |
| | comp=Z,26nm,1.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **75.32** | **326** | P | | **P** | **12 15 04.4** | **-1.4** |
| **POGA** | **Pongola** | **81.26** | **244** | P | | **P** | **12 15 39.4** | **+0.1** |
| **QSPA** | **South Pole Qui** | **81.71** | **180** | P | | **P** | **12 15 41.2** | **+0.1** |
| QSPA | | | | IAmb | | IAmb | 12 17 33.2 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.71** | **180** | P | | **P** | **12 15 40.3** | **-0.8** |
| | comp=Z,6.3nm,1.0s,baz=321,slow=2.6,SNR=6.9 | | | | | | | |
| | comp=Z,6.3nm,1.0s | | | | | | | |
| **GRHM** | **Grahamstown, E** | **85.26** | **237** | P | | **P** | **12 16 00.3** | **+0.4** |
| **BOSA** | **Boshof** | **86.79** | **242** | P | | **P** | **12 16 07.2** | **-0.5** |
| BOSA | | | | IAmb | | IAmb | 12 16 08.8 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **BOSA** | **Boshof** | **86.79** | **242** | P | | **P** | **12 16 07.0** | **-0.6** |
| | comp=Z,9.3nm,0.8s,baz=99,slow=4.5,SNR=15 | | | | | | | |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| **LBTB** | **Lobatse** | **86.97** | **245** | P | | **P** | **12 16 07.4** | **-1.2** |
| LBTB | | | | IAmb | | IAmb | 12 16 09.9 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.24** | **197** | ⇑P | | **P** | **12 16 19.3** | **+0.8** |
| | comp=Z,99nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.89** | **196** | P | | **P** | **12 16 26.3** | **+0.2** |
| SNAA | | | | IAmb | | IAmb | 12 17 18.1 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **90.89** | **196** | ⇑P | | **P** | **12 16 25.2** | **-0.9** |
| | comp=Z,21nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **90.89** | **196** | P | | **P** | **12 16 26.3** | **+0.2** |
| | comp=Z,3.0nm,1.0s,baz=200,slow=3.9,SNR=9.8 | | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |

**ROM 05 11:57:37.3±0.1,43°130N±0°.004×13°172E±0°.005, h15km,ML0.9/12,2D,Error ellipse: s-maj=0.4km s-min=0.1km az=239.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PF6** | **Pievefavera** | **0.02** | **40** | P | | Pg | 11 57 39.9 | -0.1 |
| PF6 | | | | S | | Sg | 11 57 41.8 | +0.1 |
| **CSP1** | **Cessapalombo** | **0.04** | **148** | P | | Pg | 11 57 40.2 | 0.0 |
| CSP1 | | | | S | | Sg | 11 57 42.4 | +0.3 |
| **FDMO** | **Fiordimonte** | **0.11** | **213** | P | | Pg | 11 57 40.9 | +0.2 |
| FDMO | | | | S | | Sb | 11 57 43.7 | -0.2 |
| FDMO | | | | AML | | AML | | |
| | comp=E,41µm,0.9s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=N,44µm,0.1s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=E,41µm,1.1s | | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.14** | **119** | ⇓P | | Pg | 11 57 41.3 | +0.3 |
| GUMA | | | | S | | Sb | 11 57 44.5 | -0.1 |
| GUMA | | | | AML | | AML | | |
| | comp=E,176µm,0.5s | | | | | | | |
| GUMA | | | | AML | | AML | | |
| | comp=N,155µm,0.1s | | | | | | | |
| GUMA | | | | AML | | AML | | |
| | comp=E,176µm,1.5s | | | | | | | |
| **MML1** | **Montelago di S** | **0.15** | **264** | P | | Pg | 11 57 41.3 | +0.1 |
| MML1 | | | | S | | Sb | 11 57 44.8 | -0.1 |
| **EL6** | **Elcito** | **0.20** | **346** | P | | Pb | 11 57 42.6 | -0.3 |
| EL6 | | | | S | | Sb | 11 57 46.2 | -0.4 |
| **SNTG** | **Esanatoglia** | **0.21** | **307** | P | | Pg | 11 57 42.2 | 0.0 |
| SNTG | | | | S | | Sb | 11 57 46.1 | -0.5 |
| **CESI** | **CESI - Serrava** | **0.23** | **237** | P | | Pb | 11 57 42.9 | -0.4 |
| CESI | | | | S | | Sb | 11 57 47.1 | -0.2 |
| CESI | | | | AML | | AML | | |
| | comp=E,34µm,0.1s | | | | | | | |
| CESI | | | | AML | | AML | | |
| | comp=N,42µm,0.8s | | | | | | | |
| **CING** | **Cingoli** | **0.25** | **4** | P | | Pg | 11 57 42.9 | +0.2 |
| CING | | | | S | | Sg | 11 57 47.0 | +0.7 |
| CING | | | | AML | | AML | | |
| | comp=E,24µm,1.0s | | | | | | | |
| CING | | | | AML | | AML | | |
| | comp=N,25µm,1.3s | | | | | | | |
| CING | | | | AML | | AML | | |
| | comp=N,25µm,0.7s | | | | | | | |
| CING | | | | AML | | AML | | |
| | comp=E,24µm,1.0s | | | | | | | |
| **MF5** | **Montefalcone A** | **0.26** | **124** | ⇓P | | Pg | 11 57 43.2 | +0.4 |
| MF5 | | | | S | | Sb | 11 57 48.1 | +0.1 |
| **MMO1** | **Montemonaco** | **0.26** | **154** | P | | Pg | 11 57 42.9 | 0.0 |
| MMO1 | | | | S | | Sg | 11 57 47.2 | +0.5 |
| **NRCA** | **Norcia** | **0.30** | **188** | P | | Pg | 11 57 43.6 | 0.0 |
| NRCA | | | | S | | Sb | 11 57 48.7 | -0.5 |
| NRCA | | | | AML | | AML | | |
| | comp=E,34µm,0.9s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,30µm,0.4s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=E,34µm,1.1s | | | | | | | |
| **ASSB** | **Assisi San Ben** | **0.39** | **257** | P | | Pg | 11 57 45.4 | +0.3 |
| ASSB | | | | S | | Sb | 11 57 51.4 | -0.4 |
| ASSB | | | | AML | | AML | | |
| | comp=N,21µm,1.2s | | | | | | | |
| ASSB | | | | AML | | AML | | |
| | comp=E,18µm,1.5s | | | | | | | |
| ASSB | | | | AML | | AML | | |
| | comp=E,18µm,0.5s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CPUP** | **Villa Florida** | **145.00** | **190** | PKP | | **PKPab** | **12 22 59.5** | **-0.5** | |
| | comp=Z,5.1nm,0.8s,baz=169,slow=2.9,SNR=8.0 | | | | | | | | |
| **BDFB** | **Brasilia** | **151.47** | **214** | PKPbc | | **PKPbc** | **12 23 16.9** | **-0.9** | |
| | comp=Z,1.3nm,0.6s,baz=139,slow=11,SNR=1.5 | | | | | | | | |
| **LPAZ** | **La Paz** | **155.24** | **170** | PKPab | | **PKPab** | **12 23 40.5** | **-1.9** | |
| | comp=Z,1.6nm,0.7s,baz=193,slow=3.7,SNR=4.3 | | | | | | | | |

*IDC **05** 12:07:00.3±1.6,8°.37S×116°.03E,h0km,mb3.7/4, mbtmp3.8/5,ML3.3/1,Error ellipse: s-maj=52.9km s-min=24.0km az=55.0*
*NEIC **05** 12:07:04.5±1.7,8°.51S±0°.06×116°.20E±0°.06,h24km±5km, mb4.5/14,Error ellipse: s-maj=9.9km s-min=7.4km az=223.0*
*DJA **05** 12:07:05.2±1.4,8°.5S±10°×11°.6E±°,h24km±17km,M4.5/8, mb4.7/1,MLv4.5/8*

**ISC 05 12:07:02.2±0.5,8°39S±0°.06×116°18E±0°.04,h10km,n39, σ1§45/41,mb4.4/7,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.78** | **116** | P | | **Pn** | **12 07 20.7** | **+1.4** |
| TWSI | | | | S | | **Sn** | **12 07 33.4** | **+2.4** |
| **DNP** | **Denpasar** | **1.00** | **253** | P | | **Pb** | **12 07 23.8** | **+2.2** |
| **SRBI** | **Singaraja** | **1.00** | **288** | P | | **Pg** | **12 07 23.2** | **+1.7** |
| **PLAI** | **Plampang** | **1.64** | **105** | P | | **Pn** | **12 07 33.1** | **+2.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.00** | **268** | Pn | | **Pn** | **12 07 37.0** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.00** | **268** | P | | **Pn** | **12 07 37.5** | **+1.4** |
| **GRJI** | **Gresik** | **3.95** | **292** | P | | **Pn** | **12 08 03.6** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.83** | **63** | P | | **Pn** | **12 08 16.3** | **+1.3** |
| **KAPI** | **Kappang** | **4.88** | **47** | Pn | | **Pn** | **12 08 17.3** | **+1.5** |
| **KAPI** | **Kappang** | **4.88** | **47** | P | | **Pn** | **12 08 16.2** | **+0.4** |
| | 1.2nm,0.3s,baz=180,slow=6.1,SNR=1.0 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **12 09 10.3** | **-2.2** |
| | 10nm,0.3s,baz=327,slow=15,SNR=9.5 | | | | | | | |
| | 9.9nm,0.5s | | | | | | | |
| **UGM** | **Wanagama** | **5.62** | **274** | P | | **Pn** | **12 08 27.2** | **+1.3** |
| **SOEI** | **Soe** | **8.10** | **100** | Pn | | **Pn** | **12 09 00.4** | **+0.3** |
| **MBWA** | **Marble Bar** | **13.15** | **165** | Pn | | **Pn** | **12 10 07.7** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **13.33** | **137** | Pn | | **Pn** | **12 10 08.4** | **-3.2** |
| **PSA00** | **Pilbara Seismi** | **13.57** | **165** | Pn | | **Pn** | **12 10 15.5** | **+0.6** |
| **GIRL** | **Giralia** | **14.29** | **187** | Pn | | **Pn** | **12 10 22.3** | **-2.5** |
| **FAKI** | **Fak Fak** | **16.89** | **72** | P | | **Pn** | **12 10 59.7** | **+0.8** |
| FAKI | | | | IAmb | | IAmb | 12 11 32.9 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **MORW** | **Morawa** | **20.57** | **180** | P | | **P** | **12 11 40.5** | **-0.8** |
| MORW | | | | IAmb | | IAmb | 12 12 11.2 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **GSI** | **Gunungsitoli** | **20.90** | **297** | P | | **P** | **12 11 47.2** | **+2.2** |
| GSI | | | | IAmb | | IAmb | 12 12 15.2 | |
| | comp=Z,32nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.95** | **125** | P | | **P** | **12 11 45.9** | **+0.3** |
| WB0

comp=Z,1.6nm,0.7s,baz=176,slow=9.6,SNR=5.4
comp=Z,1.6nm,0.7s
**MKAR Makanchi Array 62.59 335** P **P** **12 19 04.1 0.0**
comp=Z,1.7nm,1.0s,baz=159,slow=6.3,SNR=3.4
comp=Z,1.7nm,1.0s
**VNDA Vanda 73.08 171** P **P** **12 20 10.5 +0.8**
**ABKAR Akbulak array 75.37 326** P **P** **12 20 22.3 -1.2**
ABKAR IAmb IAmb 12 20 51.9
comp=Z,2.7nm,1.2s
**QSPA South Pole Qui 81.62 180** P **P** **12 20 56.0 -2.0**
QSPA IAmb IAmb 12 21 28.8
comp=Z,5.0nm,1.2s
**QSPA South Pole Qui 81.62 180** P **P** **12 20 60.0 +2.1**
comp=Z,1.5nm,1.0s,baz=351,slow=3.5,SNR=1.6
comp=Z,1.5nm,1.0s
**BOSA Boshof 86.72 242** P **P** **12 21 24.8 +0.1**
**BOSA Boshof 86.72 242** P **P** **12 21 25.1 +0.4**
comp=Z,2.6nm,0.9s,baz=89,slow=6.9,SNR=5.2
comp=Z,2.6nm,0.9s
**SNAA Sanae 90.80 196** P **P** **12 21 43.3 +0.3**
**SNAA Sanae 90.80 196** P **P** **12 21 43.8 +0.8**
comp=Z,1.2nm,0.9s,baz=175,slow=11,SNR=3.1
comp=Z,1.2nm,0.9s
**CPUP Villa Florida 144.91 190** PKP PKPbc 12 28 17.5 +0.5
comp=Z,2.6nm,0.8s,baz=201,slow=2.7,SNR=3.7

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**IDC 05 12:09:11.7±6.4, 8°84S×115°29E, h0km, mb3.8/3, mbtmp3.9/3, Error ellipse: s-maj=276.3km s-min=30.3km az=56.0, Bali region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.48** | **123** | P | P | 12 14 01.1 | -1.0 |
| | 1.2nm,0.4s,baz=301,slow=12,SNR=1.7 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **23.12** | **132** | P | | 12 14 20.2 | +0.6 |
| | 2.6nm,0.7s,baz=307,slow=9.0,SNR=2.1 | | | | | | |
| | 2.6nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.97** | **353** | P | P | 12 18 59.1 | +0.1 |
| | 1.4nm,0.8s,baz=164,slow=6.1,SNR=4.0 | | | | | | |
| | 1.4nm,0.8s | | | | | | |

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*IDC **05** 12:18:00.8±0.7, 8°.19S×116°.08E, h0km, mb4.3/11, mbtmp4.3/12, ML4.1/1, Error ellipse: s-maj=24.3km s-min=16.1km az=72.0*
*DJA **05** 12:18:03.0±0.3, 8°.5S±5°×11°.6E±°, h10km, M4.9/13, mb5.1/3, MLv4.8/13*
*NEIC **05** 12:18:06.8±2.7, 8°.35S±0°.08×116°.17E±0°.06, h29km±4km, mb4.6/28, Error ellipse: s-maj=11.4km s-min=8.4km az=178.0*

**ISC 05 12:18:06.6±0.4, 8°.29S±0°.06×116°.14E±0°.04, h35km, n70, σ1§48/70, mb4.5/24, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.86** | **121** | P | **Pn** | **12 18 21.2** | **-1.0** |
| **SRBI** | **Singaraja** | **0.94** | **282** | P | **Pn** | **12 18 20.1** | **-3.2** |
| SRBI | | | | S | **Sn** | 12 18 33.9 | -1.6 |
| **DNP** | **Denpasar** | **1.00** | **247** | P | **Pn** | **12 18 23.8** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **1.98** | **265** | | **Pn** | **12 18 36.1** | **-1.5** |
| **JAGI** | **Jajag, Banyuwa** | **1.98** | **265** | P | **Pn** | **12 18 35.8** | **-1.8** |
| **GRJI** | **Gresik** | **3.88** | **290** | P | **Pn** | **12 19 03.1** | **-0.6** |
| **BWJI** | **Bawean** | **4.22** | **305** | P | **Pn** | **12 19 05.7** | **-2.8** |
| **PWJI** | **Pagerwojo** | **4.30** | **273** | P | **Pn** | **12 19 08.4** | **-1.2** |
| **BSSI** | **Bau Bau, Buton** | **4.81** | **64** | P | **Pn** | **12 19 16.0** | **-0.6** |
| **KAPI** | **Kappang** | **4.84** | **48** | Pn | **Pn** | **12 19 16.1** | **-0.9** |
| **KAPI** | **Kappang** | **4.84** | **48** | Pn | **Pn** | **12 19 16.4** | **-0.6** |
| | 7.8nm,0.3s,baz=246,slow=2.9,SNR=7.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **12 20 10.9** | **-1.1** |
| | 22nm,0.3s,baz=142,slow=22,SNR=8.6 | | | | | | |
| | 41nm,0.4s | | | | | | |
| **BNSI** | **Bone** | **5.52** | **46** | P | **Pn** | **12 19 23.4** | **-2.9** |
| | 104nm,0.6s | | | | | | |
| **UGM** | **Wanagama** | **5.58** | **273** | Pn | **Pn** | **12 19 29.7** | **+2.5** |
| **UGM** | **Wanagama** | **5.58** | **273** | P | **Pn** | **12 19 26.7** | **-0.4** |
| **SMRI** | **Semarang** | **5.78** | **282** | Pn | **Pn** | **12 19 32.6** | **+2.6** |
| **MMRI** | **Maumere** | **6.04** | **94** | Pn | **Pn** | **12 19 31.7** | **-1.8** |
| **MBWA** | **Marble Bar** | **13.26** | **165** | Pn | **Pn** | **12 21 09.9** | **-2.5** |
| **FITZ** | **Fitzroy Crossi** | **13.43** | **137** | Pn | **Pn** | **12 21 13.6** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **13.68** | **165** | Pn | **Pn** | **12 21 17.4** | **-0.8** |
| **KNRA** | **Kununurra** | **14.36** | **122** | Pn | **Pn** | **12 21 26.1** | **-1.3** |
| **GIRL** | **Giralia** | **14.39** | **187** | | **Pn** | **12 21 25.9** | **-1.9** |
| **MTN** | **Manton Dam** | **15.41** | **108** | Pn | **Pn** | **12 21 40.9** | **-0.7** |
| **FAKI** | **Fak Fak** | **16.89** | **72** | Pn | **Pn** | **12 22 00.0** | **-0.4** |
| **MORW** | **Morawa** | **20.67** | **180** | P | Pn | 12 22 46.2 | +0.2 |
| MORW | | | | IAmb | IAmb | 12 22 49.6 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.04** | **125** | P | **P** | **12 22 47.8** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 12 22 48.3 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.08** | **125** | P | **P** | **12 22 47.2** | **-0.9** |
| | comp=Z,13nm,0.8s,baz=301,slow=12,SNR=16 | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.09** | **125** | P | **P** | **12 22 47.8** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 12 22 49.5 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.09** | **125** | | **P** | **12 22 47.6** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 12 22 49.5 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.25** | **125** | P | **P** | **12 22 49.7** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 12 22 50.8 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **22.88** | **134** | P | **P** | **12 23 07.5** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.88** | **134** | P | **P** | **12 23 07.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.88** | **134** | P | **P** | **12 23 06.8** | **-0.5** |
| | comp=Z,6.2nm,0.6s,baz=311,slow=9.3,SNR=14 | | | | | | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.54** | **178** | P | **P** | **12 23 24.1** | **+1.1** |
| **NWAO** | **Narrogin (SRO)** | **24.54** | **178** | P | **P** | **12 23 22.8** | **-0.2** |
| | comp=Z,10nm,0.8s,baz=342,slow=8.5,SNR=1.9 | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| **COEN** | **Coen** | **27.10** | **104** | P | **P** | **12 23 46.6** | **+0.2** |
| COEN | | | | IAmb | IAmb | 12 23 48.1 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **31.40** | **115** | P | **P** | **12 24 24.5** | **0.0** |
| CTAO | | | | IAmb | IAmb | 12 24 41.5 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.53** | **328** | P | **P** | **12 24 26.9** | **+1.2** |
| | comp=Z,0.9nm,0.7s,baz=158,slow=7.4,SNR=2.5 | | | | | | |
| **CHTO** | **Chiang Mai** | **31.83** | **328** | P | **P** | **12 24 31.5** | **+3.2** |
| CHTO | | | | IAmb | IAmb | 12 24 45.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **YULB** | **Yu-li** | **31.89** | **9** | P | **P** | **12 24 31.7** | **+2.9** |
| **STKA** | **Stephens Creek** | **33.33** | **138** | P | **P** | **12 24 42.1** | **+0.8** |
| **STKA** | **Stephens Creek** | **33.33** | **138** | P | **P** | **12 24 42.2** | **+0.8** |
| | comp=Z,2.4nm,0.6s,baz=323,slow=11,SNR=5.2 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **39.80** | **128** | P | **P** | **12 25 38.3** | **+1.6** |
| **CAN** | **Canberra** | **40.33** | **137** | P | **P** | **12 25 42.5** | **+1.5** |
| **JMN** | **Monobe** | **45.05** | **21** | P | **P** | **12 26 21.2** | **+1.9** |
| **LZH** | **Lanzhou** | **45.63** | **346** | *eP* | P | 12 26 27.9 | +4.0 |
| LZH | | | | pP | sP | 12 26 38.9 | +1.0 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,24nm,1.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.18** | **24** | P | **P** | **12 26 49.9** | **-1.4** |
| | comp=Z,2.2nm,0.6s,baz=197,slow=9.0,SNR=8.0 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **ONTNC** | **Ouen Toro** | **50.26** | **112** | P | **P** | **12 26 59.2** | **-0.6** |
| **USA0B** | **Ussuriysk Arra** | **54.18** | **14** | P | **P** | **12 27 29.9** | **+1.4** |
| USA0B | | | | IAmb | IAmb | 12 27 39.3 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.18** | **14** | P | **P** | **12 27 28.8** | **+0.3** |
| **SONM** | **Songino Array** | **56.54** | **352** | P | **P** | **12 27 46.4** | **+0.8** |
| SONM | | | | IAmb | IAmb | 12 27 46.9 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **352** | P | **P** | **12 27 45.9** | **+0.2** |
| | comp=Z,3.7nm,0.7s,baz=171,slow=9.2,SNR=6.3 | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.40** | **22** | P | **P** | **12 27 52.5** | **+1.0** |
| **CASY** | **Casey** | **58.03** | **183** | P | **P** | **12 27 55.5** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **61.92** | **130** | P | **P** | **12 28 23.9** | **+0.9** |
| **MK31** | **Makanchi Array** | **62.57** | **334** | P | **P** | **12 28 25.3** | **-1.8** |
| MK31 | | | | IAmb | IAmb | 12 28 46.0 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.57** | **334** | P | **P** | **12 28 25.7** | **-1.4** |
| **MKAR** | **Makanchi Array** | **62.57** | **334** | P | **P** | **12 28 25.6** | **-1.5** |
| | comp=Z,0.6nm,0.5s,baz=151,slow=7.2,SNR=4.9 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **65.83** | **325** | P | **P** | **12 28 48.9** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **67.11** | **335** | P | **P** | **12 28 54.2** | **-2.3** |
| | comp=Z,0.4nm,0.3s,baz=141,slow=7.1,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.41** | **341** | P | **P** | **12 28 56.1** | **-2.2** |
| | comp=Z,1.7nm,0.6s,baz=144,slow=5.2,SNR=3.1 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **72.43** | **333** | P | **P** | **12 29 32.0** | **+2.8** |
| BRVK | | | | IAmb | IAmb | 12 29 56.3 | |
| | comp=Z,8.2nm,1.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.37** | **326** | P | **P** | **12 29 44.3** | **-2.3** |
| **POGA** | **Pongola** | **81.32** | **244** | P | **P** | **12 30 20.4** | **+0.3** |
| **QSPA** | **South Pole Qui** | **81.70** | **180** | P | **P** | **12 30 21.2** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 12 30 36.1 | |
| | comp=Z,8.7nm,1.3s | | | | | | |
| **BOSA** | **Boshof** | **86.86** | **242** | P | **P** | **12 30 48.5** | **+0.2** |
| | comp=Z,3.2nm,0.6s,baz=126,slow=4.5,SNR=11 | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **196** | P | **P** | **12 31 06.4** | **-0.1** |
| SNAA | | | | IAmb | IAmb | 12 31 09.3 | |
| | comp=Z,4.8nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **196** | P | **P** | **12 31 07.3** | **+0.9** |
| | comp=Z,0.6nm,0.4s,baz=243,slow=2.3,SNR=3.0 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.55** | **281** | PKP | **PKPdf** | **12 36 44.1** | **-1.9** |
| | comp=Z,0.2nm,0.5s,baz=355,slow=2.0,SNR=1.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.73** | **49** | PKP | **PKPdf** | **12 36 59.1** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=224,slow=2.5,SNR=3.1 | | | | | | |
| **LPAZ** | **La Paz** | **155.22** | **170** | PKPab | **PKPab** | **12 38 23.4** | **+0.8** |
| | comp=Z,0.8nm,0.6s,baz=198,slow=4.5,SNR=4.1 | | | | | | |

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*IDC **05** 12:21:34.4±0.8, 8°.21S×116°.23E, h0km, mb4.0/9, mbtmp4.1/10, ML3.6/1, Error ellipse: s-maj=32.5km s-min=17.9km az=75.0*
*DJA **05** 12:21:36.6±0.9, 8°.5S±10°×11°.6E±°, h11km±9km, M4.5/9, mb4.9/1, MLv4.3/9*
*NEIC **05** 12:21:40.1±2.8, 8°.22S±0°.06×116°.29E±0°.06, h35km±6km, mb4.4/13, Error ellipse: s-maj=11.4km s-min=3.8km az=136.0*

**ISC 05 12:21:39.3±0.6, 8°.22S±0°.07×116°.25E±0°.06, h35km, n43, σ1§15/43, mb4.2/12, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.81** | **130** | P | **Pn** | **12 21 53.2** | **-1.0** |
| **SRBI** | **Singaraja** | **1.04** | **277** | P | **Pn** | **12 21 56.0** | **-1.3** |
| **DNP** | **Denpasar** | **1.13** | **246** | P | **Pn** | **12 21 57.8** | **-0.7** |
| **PLAI** | **Plampang** | **1.62** | **112** | P | **Pn** | **12 22 05.9** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.09** | **263** | Pn | **Pn** | **12 22 10.7** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.09** | **263** | P | **Pn** | **12 22 10.9** | **-1.0** |
| **GRJI** | **Gresik** | **3.96** | **289** | P | **Pn** | **12 22 36.7** | **-0.8** |
| **PWJI** | **Pagerwojo** | **4.41** | **272** | P | **Pn** | **12 22 43.0** | **-0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.69** | **64** | P | **Pn** | **12 22 47.2** | **-0.4** |
| **KAPI** | **Kappang** | **4.72** | **48** | Pn | **Pn** | **12 22 47.0** | **-0.9** |
| **KAPI** | **Kappang** | **4.72** | **48** | Pn | **Pn** | **12 22 47.7** | **-0.3** |
| | 2.9nm,0.3s,baz=233,slow=5.1,SNR=1.1 | | | | | | |
| KAPI | | | | Sn | **Sn** | **12 23 40.3** | **-1.2** |
| | 10.0nm,0.3s,baz=31,slow=22,SNR=8.7 | | | | | | |
| | 5.9nm,0.3s | | | | | | |
| **UGM** | **Wanagama** | **5.68** | **273** | Pn | **Pn** | **12 23 04.9** | **+3.6** |
| **UGM** | **Wanagama** | **5.68** | **273** | P | **Pn** | **12 23 00.5** | **-0.8** |
| **SOEI** | **Soe** | **8.06** | **102** | Pn | **Pn** | **12 23 33.6** | **-0.5** |
| **MBWA** | **Marble Bar** | **13.29** | **166** | Pn | **Pn** | **12 24 44.8** | **-0.8** |
| **GIRL** | **Giralia** | **14.47** | **187** | Pn | **Pn** | **12 24 59.4** | **-2.2** |
| **MTN** | **Manton Dam** | **15.33** | **109** | Pn | **Pn** | **12 25 10.8** | **-2.4** |
| **WB0** | **Warramunga Arr** | **20.99** | **125** | P | **P** | **12 26 19.7** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 12 26 20.8 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.03** | **126** | P | **P** | **12 26 20.2** | **-0.1** |
| **WRA** | **Warramunga Arr** | **21.03** | **126** | P | **P** | **12 26 19.4** | **-0.8** |
| | comp=Z,8.9nm,0.6s,baz=300,slow=12,SNR=32 | | | | | | |
| | comp=Z,8.9nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.04** | **125** | P | **P** | **12 26 20.1** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 12 26 21.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.04** | **126** | P | **P** | **12 26 20.5** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 12 26 21.2 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.20** | **125** | P | **P** | **12 26 22.3** | **+0.2** |
| **AS31** | **Alice Springs** | **22.85** | **134** | P | **P** | **12 26 39.6** | **-0.1** |
| **ASAR** | **Alice Springs** | **22.85** | **134** | P | **P** | **12 26 39.5** | **-0.2** |
| | comp=Z,5.1nm,0.7s,baz=307,slow=8.9,SNR=15 | | | | | | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **25.01** | **155** | P | **P** | **12 27 01.0** | **+1.0** |
| **COEN** | **Coen** | **27.01** | **105** | P | **P** | **12 27 19.1** | **+0.8** |
| COEN | | | | IAmb | IAmb | 12 27 20.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.07** | **23** | P | **P** | **12 30 23.4** | **+0.2** |
| | comp=Z,1.4nm,0.8s,baz=192,slow=9.6,SNR=6.2 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.49** | **352** | P | **P** | **12 31 19.3** | **+1.4** |
| **SONM** | **Songino Array** | **56.49** | **352** | P | **P** | **12 31 19.2** | **+1.2** |
| | comp=Z,2.6nm,0.7s,baz=173,slow=8.9,SNR=8.7 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.56** | **334** | P | **P** | **12 31 58.2** | **-1.5** |
| **MKAR** | **Makanchi Array** | **62.56** | **334** | P | **P** | **12 31 59.3** | **-0.4** |
| | comp=Z,0.4nm,0.7s,baz=154,slow=7.9,SNR=2.4 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **BTK** | **Batken** | **63.76** | **322** | P | **P** | **12 32 08.8** | **+0.9** |
| **ZALV** | **Zalesovo Beam** | **67.38** | **340** | P | **P** | **12 32 29.9** | **-0.9** |
| | comp=Z,0.4nm,0.3s,baz=142,slow=4.9,SNR=2.6 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **VNDA** | **Vanda** | **73.18** | **171** | P | **P** | **12 33 06.9** | **+0.8** |
| VNDA | | | | IAmb | IAmb | 12 33 43.3 | |
| | comp=Z,3.5nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **73.18** | **171** | P | **P** | **12 33 07.5** | **+1.5** |
| | comp=Z,0.7nm,0.5s,baz=300,slow=7.2,SNR=1.3 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.77** | **180** | P | **P** | **12 33 54.0** | **-0.4** |
| QSPA | | | | IAmb | IAmb | 12 34 17.5 | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.77** | **180** | P | **P** | **12 33 53.7** | **-0.7** |
| | comp=Z,2.4nm,1.1s,baz=275,slow=0.9,SNR=3.1 | | | | | | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **91.00** | **196** | P | **P** | **12 34 40.3** | **+0.7** |
| SNAA | | | | IAmb | IAmb | 12 35 09.5 | |
| | comp=Z,3.7nm,1.5s | | | | | | |
| **SNAA** | **Sanae** | **91.00** | **196** | P | **P** | **12 34 40.7** | **+1.1** |
| | comp=Z,1.7nm,1.2s,baz=195,slow=20,SNR=6.2 | | | | | | |
| | comp=Z,1.7nm,1.2s | | | | | | |
| **ST9N** | **ST9** | **98.12** | **249** | *i* P | P | 12 35 04.0 | -9.3 |
| ST9N | | | | IAML | | 12 35 05.8 | |
| | comp=Z,139nm,0.1s | | | | | | |
| **CPUP** | **Villa Florida** | **145.09** | **190** | PKPbc | **PKPdf** | **12 41 13.4** | **-0.5** |
| | comp=Z,0.9nm,0.4s,baz=190,slow=1.9,SNR=4.3 | | | | | | |
| **LPAZ** | **La Paz** | **155.26** | **170** | PKPab | **PKPab** | **12 41 57.1** | **+1.6** |
| | comp=Z,1.0nm,0.8s,baz=203,slow=3.3,SNR=6.7 | | | | | | |

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*NEIC **05** 12:24:07.3±2.6, 8°.5S±0°.1×116°.06E±0°.06, h10km±1km, mb4.1/8, Error ellipse: s-maj=17.8km s-min=9.5km az=359.0*
*IDC **05** 12:24:26.2±1.6, 10°.34S×116°.92E, h0km, mb4.0/6, mbtmp4.0/7, ML4.2/1, Error ellipse: s-maj=129.9km s-min=20.1km az=49.0*

**ISC 05 12:24:06.5±0.7, 8°.46S±0°.10×116°.05E±0°.07, h10km, n21, σ1§18/21, mb4.2/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAGI** | **Jajag, Banyuwa** | **1.88** | **270** | Pn | **Pn** | **12 24 40.5** | **+1.8** |
| JAGI | | | | Sn | **Sn** | **12 25 04.3** | **+1.8** |
| **KAPI** | **Kappang** | **5.02** | **47** | Pn | **Pn** | **12 25 23.9** | **+2.0** |
| **MMRI** | **Maumere** | **6.12** | **92** | Pn | **Pn** | **12 25 37.8** | **+0.8** |
| **SOEI** | **Soe** | **8.21** | **100** | Pn | **Pn** | **12 26 07.3** | **+1.4** |
| **FITZ** | **Fitzroy Crossi** | **13.37** | **137** | Pn | **Pn** | **12 27 15.5** | **-0.9** |
| **GIRL** | **Giralia** | **14.21** | **187** | Pn | **Pn** | **12 27 27.9** | **0.0** |
| **KNRA** | **Kununurra** | **14.34** | **121** | Pn | **Pn** | **12 27 29.7** | **-0.1** |
| **WB0** | **Warramunga Arr** | **21.01** | **124** | P | **P** | **12 28 50.6** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 12 29 13.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.06** | **125** | P | **P** | **12 28 50.7** | **-0.2** |
| **WRA** | **Warramunga Arr** | **21.06** | **125** | P | **P** | **12 28 51.9** | **+1.0** |
| | comp=Z,0.7nm,0.3s,baz=301,slow=12,SNR=13 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.23** | **125** | P | **P** | **12 28 53.2** | **+0.4** |
| WR0 | | | | IAmb | IAmb | 12 28 55.4 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **22.82** | **134** | P | **P** | **12 29 09.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **22.82** | **134** | P | **P** | **12 29 10.6** | **+0.8** |
| **ASAR** | **Alice Springs** | **22.82** | **134** | P | **P** | **12 29 10.4** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=310,slow=8.8,SNR=4.2 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **COEN** | **Coen** | **27.15** | **104** | P | **P** | **12 29 50.2** | **0.0** |
| **STKA** | **Stephens Creek** | **33.26** | **138** | P | P | 12 30 49.6 | +5.5 |
| | comp=Z,3.3nm,0.9s,baz=307,slow=5.1,SNR=3.0 | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **62.69** | **335** | P | **P** | **12 34 30.5** | **-1.0** |
| MK31 | | | | IAmb | IAmb | 12 35 07.0 | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.69** | **335** | P | **P** | **12 34 29.4** | **-2.1** |
| **VNDA** | **Vanda** | **72.98** | **171** | P | **P** | **12 35 36.3** | **+0.4** |
| VNDA | | | | IAmb | IAmb | 12 36 04.1 | |
| | comp=Z,1.6nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.46** | **326** | P | **P** | **12 35 48.9** | **-1.9** |
| **SNAA** | **Sanae** | **90.72** | **196** | | **P** | **12 37 09.2** | **-0.2** |

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*DJA **05** 12:24:53.3±0.8, 9°.S±8°×11°.0E±°, h10km, M4.5/12, MLv4.5/12*

**ISC 05 12:24:52.1±2.0, 9°.4S±0°.2×110°.33E±0°.08, h10km, n18, σ1§58/13, mb4.2/4, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UGM** | **Wanagama** | **1.52** | **7** | P | **Pn** | **12 25 18.3** | **-1.0** |
| **YOGI** | **Yogyakarta** | **1.60** | **359** | P | **Pn** | **12 25 19.5** | **-1.0** |
| **PWJI** | **Pagerwojo** | **2.02** | **46** | P | **Pn** | **12 25 26.9** | **+0.7** |
| **NGJI** | **Ngawi** | **2.33** | **29** | P | **Pn** | **12 25 32.4** | **+1.9** |
| **SMRI** | **Semarang** | **2.37** | **3** | P | **Pn** | **12 25 32.9** | **+1.9** |
| **CMJI** | **Cimerak** | **2.47** | **311** | P | **Pn** | **12 25 32.9** | **+0.4** |
| **KPJI** | **Karang Pucung** | **2.50** | **326** | P | **Pn** | **12 25 35.2** | **+2.4** |
| **GRJI** | **Gresik** | **3.28** | **41** | P | **Pn** | **12 25 44.2** | **+0.6** |
| **CNJI** | **Cibinong** | **3.80** | **303** | P | **Pn** | **12 25 51.5** | **+0.8** |
| **BWJI** | **Bawean** | **4.24** | **33** | P | **Pn** | **12 25 58.0** | **+1.3** |
| **MKAR** | **Makanchi Array** | **61.31** | **338** | P | **P** | **12 35 06.2** | **-1.6** |
| | 1.7nm,0.5s,baz=152,slow=7.3,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.31** | **338** | | | | |
| | 1.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.88** | **338** | P | **P** | **12 35 36.0** | **-1.8** |
| | 0.5nm,0.3s,baz=136,slow=4.7,SNR=1.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.88** | **338** | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.73** | **344** | P | P | 12 35 37.0 | -6.2 |
| | 0.7nm,0.4s,baz=150,slow=5.8,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.73** | **344** | | | | |
| | 0.7nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **85.89** | **311** | P | **P** | **12 37 33.5** | **+0.8** |
| | 0.8nm,0.7s,baz=99,slow=4.5,SNR=4.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **85.89** | **311** | | | | |
| | 0.8nm,0.7s | | | | | | |

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*IDC **05** 12:24:58.8±0.6, 8°.17S×116°.49E, h0km, mb4.2/11, mbtmp4.2/12, ML4.1/1, Error ellipse: s-maj=30.4km s-min=15.4km az=69.0*
*DJA **05** 12:25:02.3±1.0, 8°.S±14°×11°.6E±°, h12km±8km, M4.4/7, MLv4.4/7*
*NEIC **05** 12:25:03.4±1.6, 8°.28S±0°.08×116°.26E±0°.09, h32km±4km, mb4.6/22, Error ellipse: s-maj=12.6km s-min=11.6km az=124.0*

**ISC 05 12:25:00.6±0.5, 8°.23S±0°.06×116°.35E±0°.05, h10km, n56, σ1§16/56, mb4.5/15, 2C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.73** | **134** | P | **Pg** | **12 25 14.9** | **+0.1** |
| TWSI | | | | S | **Sg** | **12 25 24.6** | **+0.3** |
| **SRBI** | **Singaraja** | **1.13** | **277** | P | **Pn** | **12 25 24.4** | **+1.9** |
| **DNP** | **Denpasar** | **1.21** | **248** | P | **Pb** | **12 25 24.7** | **+1.1** |
| **PLAI** | **Plampang** | **1.53** | **113** | P | **Pn** | **12 25 28.0** | **0.0** |
| PLAI | | | | S | **Sn** | **12 25 48.1** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.19** | **264** | P | **Pn** | **12 25 38.2** | **+1.2** |
| **KAPI** | **Kappang** | **4.65** | **47** | Pn | **Pn** | **12 26 11.0** | **0.0** |
| **KAPI** | **Kappang** | **4.65** | **47** | Pn | Pn | 12 26 09.5 | -1.4 |
| | 10nm,0.3s,baz=226,slow=4.4,SNR=5.7 | | | | | | |
| KAPI | | | | Sn | Sn | 12 27 00.6 | -4.4 |
| | 26nm,0.3s,baz=359,slow=20,SNR=11 | | | | | | |
| | 22nm,0.4s | | | | | | |
| **MMRI** | **Maumere** | **5.84** | **94** | | **Pn** | **12 26 31.2** | **+3.9** |
| **SOEI** | **Soe** | **7.97** | **102** | Pn | **Pn** | **12 26 58.3** | **+1.6** |
| **TOLI2** | **Tolitoli** | **10.28** | **26** | Pn | **Pn** | **12 27 30.2** | **+2.0** |
| **MBWA** | **Marble Bar** | **13.26** | **166** | Pn | **Pn** | **12 28 07.1** | **-2.0** |
| **FITZ** | **Fitzroy Crossi** | **13.34** | **138** | Pn | **Pn** | **12 28 09.8** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **166** | Pn | **Pn** | **12 28 14.4** | **-0.5** |
| **KNRA** | **Kununurra** | **14.22** | **123** | Pn | **Pn** | **12 28 23.7** | **+1.5** |
| **MTN** | **Manton Dam** | **15.24** | **109** | Pn | Pn | 12 28 32.2 | -3.8 |
| **FAKI** | **Fak Fak** | **16.68** | **72** | Pn | **Pn** | **

comp=Z,2.1nm,0.6s
**TORD Torodi Ar. Bea 115.74 281** PKP **PKPdf 12 43 42.8 -1.6**
comp=Z,0.5nm,0.6s,baz=53,slow=2.4,SNR=3.2
**CPUP Villa Florida 145.10 190** PKPbc **PKPbc 12 44 38.6 +0.1**
comp=Z,6.1nm,0.9s,baz=198,slow=7.0,SNR=7.6
**BDFB Brasilia 151.67 213** PKPbc **PKPbc 12 44 56.1 -0.4**
comp=Z,1.3nm,0.4s,baz=152,slow=2.4,SNR=3.4
**LPAZ La Paz 155.24 170** PKPab **PKPab 12 45 19.8 -0.8**
comp=Z,2.2nm,0.7s,baz=182,slow=3.1,SNR=7.6

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*NEIC **05** 12:27:10.7±1.2,8.2°S±0.09°×116.47°E±0.05,h4km±5km, mb4.3/15,Error ellipse: s-maj=12.9km s-min=7.2km az=170.0*
*IDC **05** 12:27:10.4±0.8,8.21°S×116.45E,h0km,mb4.0/8, mbtmp4.0/9,Error ellipse: s-maj=36.8km s-min=19.8km az=70.0*
*DJA **05** 12:27:12.5±0.4,8.7°S±7°×11.6E±°,h10km,M4.6/8,mb4.9/1, MLv4.5/8*
**ISC 05 12:27:11.4±0.5,8.21S±0.06×116.49E±0.04,h10km,n49, σ0§80/51,mb4.2/10,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.66** | **144** | P | | **Pn** | **12 27 25.8** | **-0.9** |
| **SRBI** | **Singaraja** | **1.27** | **275** | P | | **Pg** | **12 27 35.2** | **-0.5** |
| SRBI | | | | S | | **Sn** | **12 27 51.6** | **-0.7** |
| **DNP** | **Denpasar** | **1.35** | **250** | P | | **Pg** | **12 27 38.2** | **+0.8** |
| **PLAI** | **Plampang** | **1.42** | **116** | P | | **Pg** | **12 27 39.4** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.33** | **263** | Pn | | **Pn** | **12 27 49.1** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.33** | **263** | P | | **Pn** | **12 27 50.1** | **+0.4** |
| **GRJI** | **Gresik** | **4.18** | **288** | P | | **Pn** | **12 28 15.8** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.47** | **63** | P | | **Pn** | **12 28 20.2** | **+1.0** |
| **KAPI** | **Kappang** | **4.54** | **46** | Pn | | **Pn** | **12 28 19.4** | **-0.7** |
| **KAPI** | **Kappang** | **4.54** | **46** | Pn | | **Pn** | **12 28 21.4** | **+1.3** |
| | 52nm,0.8s,baz=188,slow=7.1,SNR=0.7 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **12 29 12.5** | **-0.4** |
| | 10nm,0.3s,baz=225,slow=20,SNR=1.5 | | | | | | | |
| **PWJI** | **Pagerwojo** | **4.64** | **272** | P | | **Pn** | **12 28 22.0** | **+0.4** |
| **MMRI** | **Maumere** | **5.70** | **95** | Pn | | **Pn** | **12 28 35.8** | **-0.4** |
| **UGM** | **Wanagama** | **5.91** | **272** | Pn | | **Pn** | **12 28 38.3** | **-0.9** |
| **UGM** | **Wanagama** | **5.91** | **272** | P | | **Pn** | **12 28 40.4** | **+1.3** |
| **SMRI** | **Semarang** | **6.10** | **280** | Pn | | **Pn** | **12 28 41.0** | **-0.7** |
| **MBWA** | **Marble Bar** | **13.25** | **167** | Pn | | **Pn** | **12 30 19.7** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **13.26** | **139** | Pn | | **Pn** | **12 30 21.0** | **+1.2** |
| **PSA00** | **Pilbara Seismi** | **13.68** | **167** | Pn | | **Pn** | **12 30 24.7** | **-0.8** |
| **KNRA** | **Kununurra** | **14.11** | **123** | Pn | | **Pn** | **12 30 30.7** | **-0.8** |
| **GIRL** | **Giralia** | **14.52** | **188** | Pn | | **Pn** | **12 30 35.6** | **-1.4** |
| **FAKI** | **Fak Fak** | **16.54** | **72** | Pn | | **Pn** | **12 31 01.9** | **-1.7** |
| FAKI | | | | IAmb | | IAmb | 12 31 36.5 | |
| | comp=Z,47nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.80** | **125** | P | | **P** | **12 31 52.7** | **-0.4** |
| WB0 | | | | IAmb | | IAmb | 12 32 21.5 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.85** | **126** | P | | **P** | **12 31 53.4** | **-0.2** |
| **WRA** | **Warramunga Arr** | **20.85** | **126** | P | | **P** | **12 31 53.7** | **+0.1** |
| | comp=Z,6.0nm,0.7s,baz=300,slow=12,SNR=7.4 | | | | | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.86** | **126** | P | | **P** | **12 31 54.2** | **+0.6** |
| WRAB | | | | IAmb | | IAmb | 12 31 58.9 | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.86** | **126** | P | | **P** | **12 31 53.5** | **-0.2** |
| WB2 | | | | IAmb | | IAmb | 12 31 55.0 | |
| | comp=Z,9.7nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.02** | **126** | P | | **P** | **12 31 55.7** | **+0.3** |
| WR0 | | | | IAmb | | IAmb | 12 32 01.0 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **22.69** | **135** | P | | **P** | **12 32 11.8** | **-1.6** |
| **ASAR** | **Alice Springs** | **22.69** | **135** | P | | **P** | **12 32 12.8** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.69** | **135** | P | | **P** | **12 32 14.3** | **+1.0** |
| | comp=Z,2.5nm,0.6s,baz=307,slow=9.3,SNR=4.3 | | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **24.93** | **156** | P | | **P** | **12 32 34.8** | **0.0** |
| **COEN** | **Coen** | **26.79** | **105** | P | | **P** | **12 32 51.5** | **-0.4** |
| COEN | | | | IAmb | | IAmb | 12 33 01.9 | |
| | comp=Z,8.8nm,1.0s | | | | | | | |
| **CTAO** | **Charters Tower** | **31.12** | **115** | P | | **P** | **12 33 30.4** | **0.0** |
| CTAO | | | | IAmb | | IAmb | 12 33 32.8 | |
| | comp=Z,5.4nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.02** | **14** | P | | **P** | **12 36 35.8** | **+0.1** |
| **SONM** | **Songino Array** | **56.51** | **352** | P | | **P** | **12 36 53.9** | **0.0** |
| **SONM** | **Songino Array** | **56.51** | **352** | P | | **P** | **12 36 54.7** | **+0.9** |
| | comp=Z,0.9nm,0.7s,baz=168,slow=6.5,SNR=2.4 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **CASY** | **Casey** | **58.13** | **183** | P | | **P** | **12 37 05.3** | **+0.4** |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | | **P** | **12 37 36.1** | **0.0** |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | | **P** | **12 37 37.0** | **+0.9** |
| | comp=Z,0.9nm,0.6s,baz=148,slow=7.0,SNR=4.6 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.44** | **340** | P | | **P** | **12 38 06.7** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **67.44** | **340** | P | | **P** | **12 38 07.0** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=145,slow=5.3,SNR=3.4 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **VNDA** | **Vanda** | **73.16** | **171** | P | | **P** | **12 38 42.0** | **+0.2** |
| VNDA | | | | IAmb | | IAmb | 12 39 21.3 | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **VNDA** | **Vanda** | **73.16** | **171** | P | | **P** | **12 38 43.0** | **+1.2** |
| | comp=Z,0.5nm,0.5s,baz=288,slow=8.0,SNR=2.7 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.78** | **180** | P | | **P** | **12 39 30.0** | **-0.4** |
| **QSPA** | **South Pole Qui** | **81.78** | **180** | P | | **P** | **12 39 30.1** | **-0.4** |
| | comp=Z,1.4nm,0.9s,baz=78,slow=12,SNR=1.8 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **91.08** | **196** | P | | **P** | **12 40 16.4** | **+0.5** |
| SNAA | | | | IAmb | | IAmb | 12 40 32.4 | |
| | comp=Z,2.6nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **91.08** | **196** | P | | **P** | **12 40 17.2** | **+1.3** |
| | comp=Z,0.9nm,0.6s,baz=218,slow=6.1,SNR=6.8 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **CPUP** | **Villa Florida** | **145.15** | **190** | PKPbc | | **PKPbc** | **12 46 48.5** | **-1.0** |
| | comp=Z,1.1nm,0.6s,baz=170,slow=5.2,SNR=3.3 | | | | | | | |
| **LPAZ** | **La Paz** | **155.24** | **169** | PKPab | | **PKPab** | **12 47 32.8** | **+1.4** |
| | comp=Z,1.3nm,0.7s,baz=176,slow=2.3,SNR=3.9 | | | | | | | |

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*CATAC **05** 12:29:19.8±0.7,13.92N×91.55W,h9km±4km,ML3.7*
*SNET **05** 12:29:21.2±0.9,14.12N×91.40W,h8km±9km,ML3.7*
*GCG **05** 12:29:21.6±0.3,13.95N×91.57W,h19km±3km,MD3.5*
**ISC 05 12:29:17.4±2.4,13.84N±0.08×91.60W±0.08,h3km±12km, n25,σ0§92/42,Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **FUG** | **Fuego 3** | **0.95** | **50** | *i* P | | **Pn** | **12 29 37.8** | **-0.1** |
| **SOKI** | **Kika Raxquin** | **1.00** | **11** | *i* P | | **Pg** | **12 29 36.4** | **-0.2** |
| SOKI | | | | *i* S | | **Sg** | **12 29 48.9** | **-0.6** |
| SOKI | | | | IAML | | | 12 29 52.6 | |
| | comp=Z,840nm,1.0s | | | | | | | |
| **CHTG** | **Tecpan** | **1.09** | **33** | *i* P | | **Pg** | **12 29 38.7** | **+0.3** |
| CHTG | | | | *i* S | | **Sg** | **12 29 53.0** | **+0.3** |
| CHTG | | | | IAML | | | 12 29 55.6 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| **PCG** | **Pacaya** | **1.11** | **60** | *i* P | | **Pn** | **12 29 40.9** | **+0.8** |
| PCG | | | | *i* S | | **Sb** | **12 29 54.4** | **+0.1** |
| **GUMI** | **Mixco** | **1.24** | **50** | *i* P | | **Pg** | **12 29 41.5** | **+0.3** |
| GUMI | | | | *i* S | | **Sg** | **12 29 57.9** | **+0.6** |
| GUMI | | | | IAML | | | 12 30 00.0 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **GCG4** | **OSOP** | **1.27** | **54** | *i* P | | **Pg** | **12 29 42.2** | **+0.4** |
| GCG4 | | | | *i* S | | **Sb** | **12 29 59.3** | **+0.2** |
| GCG4 | | | | IAML | | | 12 30 01.9 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **NBG** | **Las Nubes** | **1.42** | **58** | *i* P | | **Pg** | **12 29 46.0** | **+1.3** |
| NBG | | | | *i* S | | **Sn** | **12 30 05.1** | **+1.2** |
| **NUBE** | **Las Nubes** | **1.76** | **88** | *e*P | | **Pn** | **12 29 49.2** | **+0.2** |
| NUBE | | | | *e*S | | **Sn** | **12 30 11.1** | **-1.0** |
| **NUBE** | **Las Nubes** | **1.76** | **88** | *i* P | | **Pb** | **12 29 49.6** | **-0.9** |
| NUBE | | | | *i* S | | **Sn** | **12 30 11.3** | **-0.8** |
| NUBE | | | | IAML | | | 12 30 16.1 | |
| | comp=Z,500nm,1.0s | | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.77** | **85** | *i* P | | **Pb** | **12 29 49.8** | **-0.8** |
| LOAL | | | | IAML | | | 12 30 02.4 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| LOAL | | | | *i* S | | **Sb** | **12 30 12.8** | **-0.4** |
| **CEVE** | **Cerro Verde** | **1.92** | **90** | *e*P | | **Pb** | **12 29 52.1** | **-1.1** |
| CEVE | | | | *e*S | | **Sb** | **12 30 16.2** | **-1.5** |
| CEVE | | | | IAML | | | 12 30 19.3 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.92** | **90** | *i* P | | **Pb** | **12 29 52.5** | **-0.7** |
| CEVE | | | | *i* S | | **Sb** | **12 30 16.1** | **-1.5** |
| CEVE | | | | IAML | | | 12 30 19.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **UNIC** | **Universidad Ca** | **1.99** | **86** | *i* P | | **Pb** | **12 29 53.1** | **-1.3** |
| UNIC | | | | *i* S | | **Sb** | **12 30 18.7** | **-1.0** |
| UNIC | | | | IAML | | | 12 30 21.5 | |
| | comp=Z,270nm,1.0s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.09** | **95** | *e*P | | **Pn** | **12 29 54.2** | **+0.7** |
| JAYA | | | | *e*S | | **Sn** | **12 30 19.7** | **-0.6** |
| JAYA | | | | IAML | | | 12 30 22.8 | |
| | comp=Z,939nm,0.3s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.09** | **95** | *i* P | | **Pn** | **12 29 54.0** | **+0.4** |
| JAYA | | | | IAML | | | 12 30 22.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **2.22** | **93** | *e*P | | **Pn** | **12 29 56.1** | **+0.8** |
| **PMON** | **Piamonte** | **2.22** | **93** | *i* P | | **Pb** | **12 29 57.0** | **-1.3** |
| PMON | | | | *i* S | | **Sn** | **12 30 23.3** | **0.0** |
| PMON | | | | IAML | | | 12 30 31.5 | |
| | comp=Z,820nm,1.0s | | | | | | | |
| **MTO3** | **Montecristo** | **2.24** | **75** | *e*P | | **Pn** | **12 29 55.5** | **-0.1** |
| **MTO3** | **Montecristo** | **2.24** | **75** | *i* P | | **Pn** | **12 29 55.6** | **-0.1** |
| MTO3 | | | | IAML | | | 12 30 27.8 | |
| | comp=Z,92nm,1.0s | | | | | | | |
| **BOQS** | **Boqueron** | **2.25** | **92** | *e*P | | **Pn** | **12 29 56.7** | **+0.9** |
| **LFRS** | **El Faro** | **2.47** | **95** | *e*P | | **Pn** | **12 29 59.6** | **+0.9** |
| **CCIG** | **Comitan** | **2.49** | **348** | *i* P | | **Pn** | **12 29 59.8** | **+0.8** |
| CCIG | | | | *i* S | | **Sn** | **12 30 30.4** | **+0.3** |
| CCIG | | | | IAML | | | 12 30 36.6 | |
| | comp=Z,150nm,1.0s | | | | | | | |
| **COEG** | **Centro de Oper** | **2.65** | **94** | *e*P | | **Pn** | **12 30 02.8** | **+1.7** |
| COEG | | | | *e*S | | **Sn** | **12 30 34.6** | **+0.8** |
| COEG | | | | IAML | | | 12 30 39.9 | |
| | comp=Z,120nm,0.4s | | | | | | | |
| **COEG** | **Centro de Oper** | **2.65** | **94** | *i* S | | **Sn** | **12 30 35.1** | **+1.3** |
| **PQSS** | **Presa 15 de Se** | **2.96** | **94** | *i* P | | **Pn** | **12 30 07.1** | **+1.8** |
| PQSS | | | | *i* S | | **Sn** | **12 30 42.6** | **+1.2** |
| PQSS | | | | IAML | | | 12 30 46.2 | |
| | comp=Z,59nm,1.0s | | | | | | | |

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*IDC **05** 12:35:15.8±0.9,8.27S×115.97E,h0km,mb4.0/10, mbtmp4.1/11,ML4.2/1,Error ellipse: s-maj=29.3km s-min=19.5km az=71.0*
*DJA **05** 12:35:18.6±0.3,8.5°S±5°×11.6E±°,h10km,M4.7/11,mb5.0/2, MLv4.6/11*
*NEIC **05** 12:35:19.7±1.6,8.30S±0.09°×116.03E±0.07,h16km±5km, mb4.2/15,Error ellipse: s-maj=13.3km s-min=9.9km az=168.0*
**ISC 05 12:35:18.0±0.5,8.29S±0.06×116.05E±0.04,h10km,n48, σ1§04/52,mb4.2/18,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **0.85** | **284** | P | | **Pg** | **12 35 34.7** | **+0.3** |
| SRBI | | | | S | | **Sg** | **12 35 46.8** | **+1.3** |
| **DNP** | **Denpasar** | **0.91** | **245** | P | | **Pg** | **12 35 36.1** | **+0.5** |
| **TWSI** | **Taliwang, Sumb** | **0.94** | **118** | P | | **Pg** | **12 35 37.0** | **+0.9** |
| **PLAI** | **Plampang** | **1.79** | **107** | P | | **Pn** | **12 35 50.3** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **1.88** | **264** | | | **Pn** | **12 35 50.2** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.88** | **264** | P | | **Pn** | **12 35 49.9** | **-0.4** |
| **GRJI** | **Gresik** | **3.79** | **291** | P | | **Pn** | **12 36 17.0** | **+0.5** |
| **PWJI** | **Pagerwojo** | **4.21** | **273** | P | | **Pn** | **12 36 22.9** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.90** | **64** | P | | **Pn** | **12 36 31.9** | **+0.1** |
| **KAPI** | **Kappang** | **4.91** | **49** | | | **Pn** | **12 36 32.9** | **+0.9** |
| **KAPI** | **Kappang** | **4.91** | **49** | Pn | | **Pn** | **12 36 32.3** | **+0.3** |
| | 10nm,0.3s,baz=214,slow=2.4,SNR=22 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **12 37 28.4** | **-0.6** |
| | 3.3nm,0.3s,baz=319,slow=20,SNR=2.4 | | | | | | | |
| | 43nm,0.2s | | | | | | | |
| **UGM** | **Wanagama** | **5.48** | **274** | Pn | | **Pn** | **12 36 41.2** | **+1.4** |
| **UGM** | **Wanagama** | **5.48** | **274** | P | | **Pn** | **12 36 40.4** | **+0.6** |
| | 207nm,1.2s | | | | | | | |
| **MBWA** | **Marble Bar** | **13.28** | **165** | Pn | | **Pn** | **12 38 25.5** | **-1.2** |
| **FITZ** | **Fitzroy Crossi** | **13.49** | **137** | Pn | | **Pn** | **12 38 30.6** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **13.70** | **165** | Pn | | **Pn** | **12 38 33.2** | **+0.7** |
| **GIRL** | **Giralia** | **14.38** | **187** | Pn | | **Pn** | **12 38 40.1** | **-1.6** |
| **KNRA** | **Kununurra** | **14.44** | **122** | Pn | | **Pn** | **12 38 41.5** | **-1.1** |
| **MTN** | **Manton Dam** | **15.50** | **108** | Pn | | **Pn** | **12 38 54.9** | **-2.0** |
| MTN | | | | IAmb | | IAmb | 12 39 21.4 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.11** | **125** | P | | **P** | **12 40 02.5** | **-0.5** |
| WB0 | | | | IAmb | | IAmb | 12 40 44.1 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.16** | **125** | P | | **P** | **12 40 02.8** | **-0.7** |
| **WRA** | **Warramunga Arr** | **21.16** | **125** | P | | **P** | **12 40 03.2** | **-0.3** |
| | comp=Z,3.0nm,0.8s,baz=302,slow=12,SNR=12 | | | | | | | |
| WRA | | | | S | | **S** | **12 43 55.7** | **-3.4** |
| | comp=Z,0.9nm,1.0s,baz=296,slow=22,SNR=3.0 | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **21.16** | **125** | P | | **P** | **12 40 03.8** | **+0.2** |
| WRAB | | | | IAmb | | IAmb | 12 40 14.3 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.17** | **125** | P | | **P** | **12 40 04.2** | **+0.6** |
| WB2 | | | | IAmb | | IAmb | 12 40 27.4 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.33** | **125** | P | | **P** | **12 40 05.3** | **-0.1** |
| WR0 | | | | IAmb | | IAmb | 12 40 15.2 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **AS31** | **Alice Springs** | **22.94** | **134** | P | | **P** | **12 40 22.2** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.94** | **134** | P | | **P** | **12 40 22.4** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.94** | **134** | P | | **P** | **12 40 22.0** | **-0.6** |
| | comp=Z,2.0nm,0.6s,baz=310,slow=9.4,SNR=11 | | | | | | | |
| ASAR | | | | S | | **S** | **12 44 31.6** | **-1.4** |
| | comp=Z,0.8nm,1.1s,baz=326,slow=14,SNR=2.2 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **33.39** | **138** | P | | **P** | **12 41 57.1** | **+0.2** |
| **KSRS** | **Korea Array** | **46.84** | **13** | P | | **P** | **12 43 48.9** | **+0.7** |
| | comp=Z,2.5nm,1.0s,baz=186,slow=9.0,SNR=8.5 | | | | | | | |
| | comp=Z,2.5nm,1.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.22** | **24** | P | | **P** | **12 44 05.8** | **-0.9** |
| | comp=Z,2.6nm,1.0s,baz=194,slow=7.9,SNR=7.0 | | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.20** | **14** | P | | **P** | **12 44 44.6** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **54.20** | **14** | P | | **P** | **12 44 42.5** | **-1.2** |
| | comp=Z,1.2nm,0.7s,baz=197,slow=4.5,SNR=2.0 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **56.53** | **352** | P | | **P** | **12 45 01.2** | **+0.5** |
| SONM | | | | IAmb | | IAmb | 12 45 01.8 | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **56.53** | **352** | P | | **P** | **12 44 59.9** | **-0.7** |
| | comp=Z,3.7nm,1.0s,baz=172,slow=8.5,SNR=12 | | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| **HEH** | **HeiHe** | **59.14** | **8** | *e*P | | **P** | **12 45 18.8** | **+0.1** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **KHZ** | **Kahutara** | **60.65** | **134** | P | | **P** | **12 45 29.9** | **+0.5** |
| **MKAR** | **Makanchi Array** | **62.53** | **335** | P | | **P** | **12 45 41.2** | **-0.8** |
| **MKAR** | **Makanchi Array** | **62.53** | **335** | P | | **P** | **12 45 40.5** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=153,slow=8.3,SNR=4.0 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.38** | **341** | P | | **P** | **12 46 12.9** | **-0.4** |
| ZAA0 | | | | IAmb | | IAmb | 12 46 32.4 | |
| | comp=Z,3.4nm,1.2s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.38** | **341** | P | | **P** | **12 46 13.1** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **67.38** | **341** | P | | **P** | **12 46 11.2** | **-2.1** |
| | comp=Z,0.4nm,0.4s,baz=150,slow=5.0,SNR=2.3 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **YAK** | **Yakutsk** | **70.91** | **7** | P | | **P** | **12 46 35.9** | **+0.8** |
| **VNDA** | **Vanda** | **73.15** | **171** | P | | **P** | **12 46 49.3** | **+0.9** |
| VNDA | | | | IAmb | | IAmb | 12 46 50.9 | |
| | comp=Z,2.2nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.70** | **180** | P | | **P** | **12 47 38.5** | **+1.9** |
| QSPA | | | | IAmb | | IAmb | 12 47 55.3 | |
| | comp=Z,5.3nm,1.3s | | | | | | | |
| **BOSA** | **Boshof** | **86.78** | **242** | P | | **P** | **12 48 02.6** | **-0.6** |
| | comp=Z,7.8nm,1.2s,baz=89,slow=5.9,SNR=3.9 | | | | | | | |
| | comp=Z,7.8nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **90.88** | **196** | P | | **P** | **12 48 22.2** | **+0.5** |
| **SNAA** | **Sanae** | **90.88** | **196** | P | | **P** | **12 48 22.4** | **+0.8** |
| | comp=Z,0.8nm,1.0s,baz=201,slow=14,SNR=1.9 | | | | | | | |
| | comp=Z,0.8nm,1.0s | | | | | | | |

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*IDC **05** 12:40:05.5±2.7,8.32S×116.29E,h0km,mb3.3/3, mbtmp3.4/4,Error ellipse: s-maj=68.5km s-min=29.3km az=63.0*
*DJA **05** 12:40:08.8±0.5,8.5°S±22°×11.6E±°,h10km,M3.5/5, MLv3.5/5*
**ISC 05 12:40:07.4±0.9,8.14S±0.08×116.27E±0.04,h10km,n8, σ1§39/11,mb3.3/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.85** | **134** | P | | **Pg** | **12 40 23.7** | **-0.1** |
| **SRBI** | **Singaraja** | **1.04** | **273** | P | | **Pg** | **12 40 27.8** | **+0.3** |
| SRBI | | | | S | | **Sb** | **12 40 42.0** | **+0.7** |
| **PLAI** | **Plampang** | **1.64** | **115** | P | | **Pn** | **12 40 37.5** | **+1.1** |
| PLAI | | | | S | | **Sn** | **12 40 58.9** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.12** | **261** | P | | **Pn** | **12 40 42.7** | **-0.2** |
| **KAPI** | **Kappang** | **4.65** | **48** | Pn | | **Pn** | **12 41 18.6** | **+0.8** |
| | 2.4nm,0.3s,baz=307,slow=20,SNR=1.2 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **12 42 10.4** | **-1.5** |
| | 1.6nm,0.3s,baz=5.7,slow=23,SNR=1.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.07** | **126** | P | | **P** | **12 44 49.9** | **-2.1** |
| | 0.5nm,0.5s,baz=302,slow=12,SNR=3.6 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.89** | **134** | P | | **P** | **12 45 09.6** | **-1.9** |
| | 0.9nm,0.9s,baz=311,slow=9.1,SNR=3.6 | | | | | | | |
| | 0.9nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **56.41** | **352** | P | | **P** | **12 49 50.1** | **+0.9** |
| | 0.8nm,0.7s,baz=170,slow=8.1,SNR=3.6 | | | | | | | |
| | 0.8nm,0.7s | | | | | | | |

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*IDC **05** 12:42:28.2±0.4,8.30S×116.08E,h0km,mb4.6/22, mbtmp4.6/23,ML4.3/1,Error ellipse: s-maj=19.0km s-min=9.8km az=85.0*
*DJA **05** 12:42:31.9±0.2,8.5°S±4°×11.6E±°,h10km,M5.1/19, mb5.2/11,MLv5.0/19*
*NEIC **05** 12:42:31.4±2.7,8.32S±0.08×116.16E±0.06,h14km±5km, mb4.9/32,Error ellipse: s-maj=11.5km s-min=8.9km az=177.0*
**ISC 05 12:42:30.7±0.3,8.33S±0.04×116.21E±0.04,h10km,n158, σ1§45/163,mb4.8/52,4C-4D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.78** | **122** | P | | **Pg** | **12 42 46.6** | **+0.9** |
| **SRBI** | **Singaraja** | **1.02** | **284** | P | | **Pb** | **12 42 50.6** | **+0.2** |
| SRBI | | | | S | | **Sn** | **12 43 04.9** | **-0.5** |
| **DNP** | **Denpasar** | **1.05** | **251** | P | | **Pn** | **12 42 52.4** | **+0.9** |
| **PLAI** | **Plampang** | **1.62** | **108** | P | | **Pn** | **12 43 01.2** | **+1.8** |
| **PLAI** | **Plampang** | **1.62** | **108** | P | | **Pn** | **12 43 01.0** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.04** | **266** | P | | **Pn** | **12 43 05.6** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.04** | **266** | | | **Pn** | **12 43 04.8** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.04** | **266** | P | | **Pn** | **12 43 05.4** | **+0.2** |
| **GRJI** | **Gresik** | **3.96** | **291** | P | | **Pn** | **12 43 32.6** | **+1.1** |
| **BWJI** | **Bawean** | **4.30** | **305** | P | | **Pn** | **12 43 36.7** | **+0.5** |
| **PWJI** | **Pagerwojo** | **4.37** | **274** | P | | **Pn** | **12 43 38.1** | **+0.9** |
| **BASI** | **Baing, Sumba** | **4.70** | **114** | P | | **Pn** | **12 43 43.4** | **+1.7** |
| **BSSI** | **Bau Bau, Buton** | **4.77** | **63** | P | | **Pn** | **12 43 42.9** | **+0.3** |
| **KAPI** | **Kappang** | **4.82** | **47** | | | **Pn** | **12 43 43.2** | **-0.1** |
| **KAPI** | **Kappang** | **4.82** | **47** | Pn | | **Pn** | **12 43 43.4** | **+0.1** |
| | 13nm,0.3s,baz=199,slow=6.9,SNR=12 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **12 44 37.1** | **-2.1** |
| | 33nm,0.3s,baz=236,slow=22,SNR=12 | | | | | | | |
| | 54nm,0.4s | | | | | | | |
| **BNSI** | **Bone** | **5.50** | **45** | P | | **Pn** | **12 43 53.6** | **+0.9** |
| | 182nm,0.6s,2.0nm | | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.59** | **39** | P | | **Pn** | **12 43 54.4** | **+0.4** |
| **UGM** | **Wanagama** | **5.65** | **274** | P | | **Pn** | **12 43 56.4** | **+1.6** |
| **UGM** | **Wanagama** | **5.65** | **274** | Pn | | **Pn** | **12 43 56.0** | **+1.3** |
| **UGM** | **Wanagama** | **5.65** | **274** | P | | **Pn** | **12 43 55.9** | **+1.1** |
| | 366nm,1.0s | | | | | | | |
| **MMRI** | **Maumere** | **5.97** | **93** | P | | **Pn** | **12 43 59.8** | **+0.6** |
| **MMRI** | **Maumere** | **5.97** | **93** | Pn | | **Pn** | **12 43 59.8** | **+0.6** |
| **MMRI** | **Maumere** | **5.97** | **93** | P | | **Pn** | **12 43 59.6** | **+0.4** |
| **BBSI** | **Bau Bau** | **6.91** | **66** | P | | **Pn** | **12 44 12.6** | **+0.4** |
| | 104nm,0.8s,0.4nm | | | | | | | |
| **BATI** | **Baumata** | **7.59** | **105** | P | | **Pn** | **12 44 23.8** | **+2.3** |
| | 128nm,0.6s,0.5nm | | | | | | | |
| **CMJI** | **Cimerak** | **7.71** | **273** | P | | **Pn** | **12 44 24.2** | **+1.2** |
| | 87nm,1.1s,0.5nm | | | | | | | |
| **SOEI** | **Soe** | **8.08** | **101** | P | | **Pn** | **12 44 30.0** | **+1.7** |
| **SOEI** | **Soe** | **8.08** | **101** | Pn | | **Pn** | **12 44 30.4** | **+2.1** |
| **SOEI** | **Soe** | **8.08** | **101** | P | | **Pn** | **12 44 30.4** | **+2.1** |
| | 193nm,0.9s | | | | | | | |
| **BBJI** | **Bungbulang** | **8.53** | **275** | P | | **Pn** | **12 44 35.4** | **+1.0** |
| **

comp=Z,8.0nm,0.5s
**CNB Canberra Magne 40.50 136 P P 12 50 11.3 +1.2**
**CD2 Chengdu 40.80 344 P P 12 50 13.4 +0.9**
CD2 pmax pmax
comp=Z,30nm,0.6s
**SHL Shillong 41.18 326 P P 12 50 16.6 +0.8**
SHL IAmb IAmb 12 50 17.5
comp=Z,14nm,0.8s
**XAN Xi'an 42.70 351 ⇓P P 12 50 29.6 +1.6**
XAN pmax pmax
comp=Z,24nm,1.3s
**JNU Nakatsue 43.52 18 P P 12 50 34.4 -0.2**
comp=Z,5.6nm,0.9s,baz=216,slow=8.7,SNR=2.0
comp=Z,5.6nm,0.9s
**TIA Tai'an 44.31 1 P P 12 50 41.1 +0.2**
TIA pmax pmax
comp=Z,16nm,0.7s
**LZH Lanzhou 45.69 346** *e*P **P 12 50 54.4 +2.4**
LZH pP sP 12 51 03.0 +6.6
LZH pmax pmax
comp=Z,22nm,1.0s
**KSAR Wonju Array Be 46.82 13 P P 12 51 02.1 +1.4**
**KSRS Korea Array 46.84 13 P P 12 51 01.1 +0.3**
comp=Z,9.0nm,1.0s,baz=192,slow=8.1,SNR=27
comp=Z,9.0nm,1.0s
**JHJ Hachijo jima 2 46.93 27 P P 12 51 00.6 -1.1**
comp=Z,48nm,0.7s,baz=270,slow=20,SNR=2.7
comp=Z,48nm,0.7s
**GOMU GeErMu 48.65 337 P P 12 51 16.0 +0.6**
GOMU pmax pmax
comp=Z,8.0nm,0.8s
**HHC Hu-ho-hao-te 49.12 355** *e*P **P 12 51 22.8 +4.2**
HHC pmax pmax
comp=Z,7.0nm,0.5s
**MAJO Matsushiro 49.18 23 P P 12 51 16.4 -2.7**
**MJAR Matsushiro Arr 49.18 23 P P 12 51 18.1 -1.0**
comp=Z,11nm,0.8s,baz=198,slow=8.4,SNR=23
comp=Z,11nm,0.8s
**MJB9 Matsu-Tunnel 49.19 23 P P 12 51 17.3 -1.8**
**GTA Gaotai 49.87 343 ⇓P P 12 51 26.7 +2.3**
GTA pmax pmax
comp=Z,17nm,1.3s
**JMM Marumori 51.37 25 P P 12 51 36.2 +0.6**
**XLT XiLinHaoTe 51.98 360** *e*P **P 12 51 40.9 +0.7**
XLT sP sP 12 51 55.6 +11
XLT pmax pmax
comp=Z,11nm,0.8s
**CN2 Changchun 52.56 8 P P 12 51 42.8 -1.5**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**JTM Tenmabayashi 53.97 23 P P 12 51 55.1 +0.3**
**USA0B Ussuriysk Arra 54.20 14 P P 12 51 56.5 +0.1**
USA0B IAmb IAmb 12 51 57.8
comp=Z,24nm,1.2s
**USRK Ussuriysk Ar. 54.20 14 P P 12 51 56.6 +0.2**
**USRK Ussuriysk Ar. 54.20 14 P P 12 51 55.9 -0.5**
comp=Z,4.6nm,0.5s,baz=202,slow=6.8,SNR=15
comp=Z,4.6nm,0.5s
**BNX BinXian 54.75 10 ⇓P P 12 52 00.1 -0.3**
BNX pmax pmax
comp=Z,11nm,1.3s
**ULN Ulaanbaatar 56.53 353 P P 12 52 13.7 +0.3**
ULN IAmb IAmb 12 52 14.7
comp=Z,11nm,1.1s
**SONM Songino Array 56.59 352 P P 12 52 13.4 -0.3**
SONM IAmb IAmb 12 52 15.1
comp=Z,16nm,1.1s
**SONM Songino Array 56.59 352 P P 12 52 13.5 -0.3**
comp=Z,9.9nm,0.9s,baz=170,slow=8.4,SNR=36
comp=Z,9.9nm,0.9s
**ASAJ Asahikawa 57.41 22 P P 12 52 19.0 -0.4**
comp=Z,22nm,0.8s,baz=240,slow=13,SNR=18
comp=Z,22nm,0.8s
**JKA Kamikawa-asahi 57.41 22 P P 12 52 20.0 +0.6**
**JCZ Jackson Bay 57.78 137 P P 12 52 23.8 +1.5**
**WMQ Urumqi 57.99 336** *e*P **P 12 52 25.6 +2.0**
**KLR Kul'dur 58.91 12 P P 12 52 29.4 -0.5**
comp=Z,4.8nm,0.8s,baz=213,slow=3.2,SNR=13
comp=Z,4.8nm,0.8s
**HEH HeiHe 59.15 8** *e*P **P 12 52 31.5 0.0**
HEH pmax pmax
comp=Z,46nm,1.4s
**THZ Tophouse 59.87 134 P P 12 52 38.2 +1.4**
**YSS Yuzh-Sakhalins 59.89 21 P P 12 52 36.8 +0.2**
**BKZ Black Stump Fm 61.84 130 P P 12 52 51.3 +1.0**
**MK31 Makanchi Array 62.64 334 P P 12 52 54.0 -1.3**
**MKAR Makanchi Array 62.64 334 P P 12 52 53.9 -1.5**
**MKAR Makanchi Array 62.64 334 P P 12 52 54.1 -1.3**
comp=Z,2.1nm,0.6s,baz=150,slow=7.7,SNR=19
comp=Z,2.1nm,0.6s
**KURBB Kurchatov Arra 67.17 335 P P 12 53 22.9 -1.9**
comp=Z,1.3nm,0.7s,baz=145,slow=5.8,SNR=6.3
comp=Z,1.3nm,0.7s
**KURK Kurchatov 67.21 335 P P 12 53 23.7 -1.3**
**ZAA0 Zalesovo Array 67.46 341 P P 12 53 24.6 -1.9**
ZAA0 IAmb IAmb 12 53 25.3
comp=Z,5.1nm,0.7s
**ZALV Zalesovo Beam 67.46 341 P P 12 53 24.4 -2.2**
comp=Z,4.9nm,0.6s,baz=146,slow=5.0,SNR=19
comp=Z,4.9nm,0.6s
**MAW Mawson 68.94 199 P P 12 53 35.8 +0.2**
comp=Z,8.2nm,0.8s,baz=37,slow=8.7,SNR=6.3
comp=Z,8.2nm,0.8s
**VNDA Vanda 73.08 171 P P 12 54 01.4 +0.8**
**VNDA Vanda 73.08 171 P P 12 54 00.8 +0.1**
comp=Z,1.8nm,0.4s,baz=318,slow=6.4,SNR=29
comp=Z,1.8nm,0.4s
**SBA Scott Base 74.11 170 P P 12 54 08.2 +1.5**
SBA IAmb IAmb 12 55 08.3
comp=Z,13nm,1.6s
**ABKAR Akbulak array 75.44 326 P P 12 54 12.5 -2.4**
**ABKAR Akbulak array 75.44 326 P P 12 54 12.4 -2.4**
ABKAR IAmb IAmb 12 54 13.5
comp=Z,5.0nm,0.8s
**KMBO Kilima Mbogo 78.91 270 P P 12 54 33.4 -2.0**
**QSPA South Pole Qui 81.66 180 P P 12 54 49.2 +0.1**
QSPA IAmb IAmb 12 54 57.2
comp=Z,7.9nm,1.1s
**QSPA South Pole Qui 81.66 180 P P 12 54 48.6 -0.5**
comp=Z,3.7nm,0.8s,baz=1.2,slow=1.7,SNR=16
comp=Z,3.7nm,0.8s
**KBZ Khabaz 83.86 316 P P 12 54 59.3 -1.4**
comp=Z,1.6nm,0.8s,baz=225,slow=7.1,SNR=3.8
comp=Z,1.6nm,0.8s
**BOSA Boshof 86.90 242 P P 12 55 14.6 -1.9**
comp=Z,4.6nm,0.8s,baz=102,slow=3.9,SNR=5.0
comp=Z,4.6nm,0.8s
**TROLL Troll, Antarti 89.24 197 ⇑P P 12 55 27.7 +0.9**
comp=Z,142nm,0.5s
**BRTR Keskin Array B 89.60 310 P P 12 55 26.6 -2.4**
comp=Z,1.0nm,0.8s,baz=150,slow=5.3,SNR=5.3
comp=Z,1.0nm,0.8s
**SNAA Sanae 90.89 196 P 12 55 34.9 +0.5**
SNAA IAmb IAmb 12 58 56.5
comp=Z,19nm,2.0s
**SNAA Sanae 90.89 196 ⇑P P 12 55 35.1 +0.7**
comp=Z,51nm,0.7s
**SNAA Sanae 90.89 196 P P 12 55 34.4 +0.1**
comp=Z,1.9nm,0.5s,baz=168,slow=6.1,SNR=24
comp=Z,1.9nm,0.5s
**BELA Belgrano 2 92.41 186 P P 12 55 41.3 +0.1**
BELA IAmb IAmb 12 55 42.2
comp=Z,4.2nm,0.8s
**VNA2 Neumayer--Watz 92.53 196 ⇑P P 12 55 42.0 +0.1**
comp=Z,3.3nm,0.6s,baz=135,slow=3.1
**VNA3 Neumayer Olymp 92.95 195 ⇑P P 12 55 43.2 -0.6**
comp=Z,2.6nm,0.7s
**ILAR Eielson Array 100.43 26 P Pdif 12 56 14.8 -2.9**
comp=Z,0.3nm,0.7s,baz=250,slow=5.1,SNR=5.4
**CLL Collm 104.71 321** *e*PP **PKiKP 13 00 56.0 +3.4**
**TORD Torodi Ar. Bea 115.63 281 PKP PKPdf 13 01 11.9 -2.3**
comp=Z,0.7nm,0.5s,baz=76,slow=2.8,SNR=8.5
**ESDC Sonseca Array 118.39 311 PKP PKPdf 13 01 17.1 -1.9**
comp=Z,0.2nm,0.5s,baz=9.7,slow=3.3,SNR=2.1
**NVAR Mina Array Bea 122.70 49 PKP PKPdf 13 01 25.9 -1.6**
comp=Z,1.1nm,0.7s,baz=240,slow=2.3,SNR=12
**PDAR Pinedale Array 127.28 42 PKP PKPdf 13 01 34.8 -1.4**
comp=Z,0.3nm,0.5s,baz=104,slow=1.9,SNR=4.5
**CPUP Villa Florida 144.98 190 PKP PKPab 13 02 08.0 -0.2**
comp=Z,14nm,0.8s,baz=166,slow=2.8,SNR=26
**BDFB Brasilia 151.52 213 PKPbc PKPbc 13 02 25.0 -1.3**
comp=Z,2.2nm,0.6s,baz=159,slow=5.8,SNR=4.3
**LPAZ La Paz 155.17 170 PKPab PKPab 13 02 50.3 -0.1**
comp=Z,5.7nm,0.7s,baz=196,slow=5.2,SNR=19

*MOS* ***05*** *12:49:52.8±1.1, 8°.20S×116°.06E, h36km, mb5.4/58, Error ellipse: s-maj=7.1km s-min=4.7km az=105.9*

*IDC* ***05*** *12:49:53.5±2.0, 8°.27S×116°.11E, h30km±13km, mb5.0/23, mbtmp5.1/24, ML4.5/1, Error ellipse: s-maj=14.7km s-min=8.7km az=76.0*

*DJA* ***05*** *12:49:53.1±0.3, 8°.5±1°×11°.6E±°, h17km±2km, M5.6/106, mB5.9/19, mb5.5/106, MLv5.8/27, Mw(mB)5.5/19*

*BJI* ***05*** *12:49:54.0±0.0, 8°.40S×116°.20E, h40km, mb5.2/83, Ms5.7/4, Ms7 5.4/4*

*NEIC* ***05*** *12:49:55.2±2.3, 8°.36S±0°.06×116°.14E±0°.05, h31km±3km, mb5.5/121, Ms_20 5.8/44, Error ellipse: s-maj=9.2km s-min=7.6km az=173.0*

**ISC 05 12:49:55.2±0.4, 8°.35S±0°.03×116°.18E±0°.04, h41km±3km, h41km:pP-P, n952, σ1°.9944/963, mb5.3/172, MS5.8/34, 31C-15D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.80** | **119** | P | **Pn** | **12 50 07.7** | **-2.3** |
| TWSI | | | | S | **Sn** | **12 50 19.3** | **-1.4** |
| **SRBI** | **Singaraja** | **0.99** | **285** | P | **Pn** | **12 50 10.6** | **-2.0** |
| **DNP** | **Denpasar** | **1.01** | **251** | P | **Pn** | **12 50 11.6** | **-1.2** |
| **DNP** | **Denpasar** | **1.01** | **251** | P | **Pn** | **12 50 11.9** | **-0.9** |
| **PLAI** | **Plampang** | **1.65** | **107** | P | **Pn** | **12 50 22.1** | **+0.3** |
| **PLAI** | **Plampang** | **1.65** | **107** | P | **Pn** | **12 50 22.0** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.00** | **266** | P | **Pn** | **12 50 28.8** | **+2.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.00** | **266** | Pn | **Pn** | **12 50 25.1** | **-1.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.00** | **266** | P | **Pn** | **12 50 25.2** | **-1.4** |
| **GRJI** | **Gresik** | **3.93** | **291** | P | **Pn** | **12 50 52.4** | **-0.6** |
| **PWJI** | **Pagerwojo** | **4.34** | **274** | P | **Pn** | **12 50 57.3** | **-1.3** |
| **BASI** | **Baing, Sumba** | **4.73** | **113** | P | **Pn** | **12 51 04.2** | **+0.2** |
| **NGJI** | **Ngawi** | **4.77** | **281** | P | **Pn** | **12 51 05.0** | **+0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.81** | **63** | P | **Pn** | **12 51 03.7** | **-1.4** |
| **KAPI** | **Kappang** | **4.86** | **47** | Pn | **Pn** | **12 51 04.7** | **-1.0** |
| **KAPI** | **Kappang** | **4.86** | **47** | Pn | **Pn** | **12 51 03.7** | **-2.1** |
| | 22nm,0.3s,baz=236,slow=3.9,SNR=28 | | | | | | |
| KAPI | | | | Sn | **Sn** | **12 51 57.0** | **-3.8** |
| | 99nm,0.3s,baz=315,slow=16,SNR=4.6 | | | | | | |
| | 268nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **4.86** | **47** | *de*P | **Pn** | **12 51 04.1** | **-1.7** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,442nm,1.1s | | | | | | |
| **BKSI** | **Bulukumba** | **4.94** | **53** | P | **Pn** | **12 51 05.5** | **-1.4** |
| | comp=Z,711nm,0.6s,comp=Z,8μmcomp=Z,5.0nm | | | | | | |
| **BNSI** | **Bone** | **5.54** | **45** | P | **Pn** | **12 51 15.5** | **+0.4** |
| | comp=Z,501nm,0.6s,comp=Z,12μmcomp=Z,5.7nm | | | | | | |
| **UGM** | **Wanagama** | **5.61** | **274** | P | **Pn** | **12 51 17.8** | **+1.6** |
| **UGM** | **Wanagama** | **5.61** | **274** | Pn | **Pn** | **12 51 16.8** | **+0.6** |
| **UGM** | **Wanagama** | **5.61** | **274** | P | **Pn** | **12 51 15.6** | **-0.6** |
| **SPSI** | **Sidrap Palu** | **5.63** | **40** | P | **Pn** | **12 51 15.2** | **-1.2** |
| | comp=Z,366nm,1.0s,comp=Z,6μmcomp=Z,3.1nm | | | | | | |
| **SMRI** | **Semarang** | **5.83** | **282** | P | **Pn** | **12 51 20.6** | **+1.5** |
| **SMRI** | **Semarang** | **5.83** | **282** | | **Pn** | **12 51 19.1** | **0.0** |
| **SMRI** | **Semarang** | **5.83** | **282** | P | **Pn** | **12 51 18.8** | **-0.3** |
| | comp=Z,715nm,0.8s,comp=Z,16μmcomp=Z,6.1nm | | | | | | |
| **YOGI** | **Yogyakarta** | **5.85** | **275** | P | **Pn** | **12 51 18.3** | **-1.1** |
| | comp=Z,351nm,0.8s,comp=Z,8μmcomp=Z,8.9nm | | | | | | |
| **MMRI** | **Maumere** | **6.00** | **93** | P | **Pn** | **12 51 20.8** | **-0.7** |
| **MMRI** | **Maumere** | **6.00** | **93** | Pn | **Pn** | **12 51 20.6** | **-1.0** |
| **MMRI** | **Maumere** | **6.00** | **93** | P | **Pn** | **12 51 20.9** | **-0.6** |
| **TTSI** | **Tana Toraja** | **6.40** | **35** | P | **Pn** | **12 51 28.8** | **+1.1** |
| **BBSI** | **Bau Bau** | **6.96** | **66** | P | **Pn** | **12 51 35.5** | **+0.9** |
| | comp=Z,253nm,0.9s,comp=Z,1.5nm | | | | | | |
| **BKB** | **Balikpapan** | **7.08** | **6** | | **Pn** | **12 51 40.4** | **+4.1** |
| **BKB** | **Balikpapan** | **7.08** | **6** | P | **Pn** | **12 51 39.4** | **+3.1** |
| | comp=Z,174nm,1.1s | | | | | | |
| **KPJI** | **Karang Pucung** | **7.25** | **278** | P | **Pn** | **12 51 38.5** | **-0.1** |
| | comp=Z,547nm,0.9s,comp=Z,2.6nm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.47** | **350** | P | **Pn** | **12 51 40.7** | **-1.0** |
| | comp=Z,289nm,0.7s,comp=Z,2.1nm | | | | | | |
| **BATI** | **Baumata** | **7.62** | **105** | P | **Pn** | **12 51 43.9** | **+0.2** |
| | comp=Z,360nm,0.6s,comp=Z,2.0nm | | | | | | |
| **CMJI** | **Cimerak** | **7.67** | **274** | P | **Pn** | **12 51 42.5** | **-1.9** |
| | comp=Z,336nm,0.6s,comp=Z,2.4nm | | | | | | |
| **JCJI** | **Jatiwangi** | **8.05** | **283** | P | **Pn** | **12 51 49.7** | **0.0** |
| | comp=Z,293nm,0.8s,comp=Z,10μmcomp=Z,2.7nm | | | | | | |
| **SOEI** | **Soe** | **8.11** | **101** | P | **Pn** | **12 51 51.8** | **+1.1** |
| **SOEI** | **Soe** | **8.11** | **101** | Pn | **Pn** | **12 51 51.6** | **+1.1** |
| **SOEI** | **Soe** | **8.11** | **101** | P | **Pn** | **12 51 51.7** | **+1.1** |
| **BBJI** | **Bungbulang** | **8.49** | **275** | P | **Pn** | **12 51 58.5** | **+2.8** |
| **CNJI** | **Cibinong** | **9.02** | **276** | P | **Pn** | **12 52 04.5** | **+1.6** |
| | comp=Z,200nm,0.7s | | | | | | |
| **DBJI** | **Dramaga** | **9.51** | **280** | P | **Pn** | **12 52 09.7** | **0.0** |
| | comp=Z,363nm,1.0s | | | | | | |
| **STKI** | **Sintang** | **9.58** | **331** | P | **Pn** | **12 52 10.5** | **-0.1** |
| | comp=Z,223nm,0.9s | | | | | | |
| **SKJI** | **Sukabumi** | **9.63** | **277** | P | **Pn** | **12 52 11.6** | **+0.3** |
| **TOLI2** | **Tolitoli** | **10.46** | **26** | P | **Pn** | **12 52 25.6** | **+2.9** |
| **TOLI2** | **Tolitoli** | **10.46** | **26** | Pn | **Pn** | **12 52 24.3** | **+1.7** |
| **XMI** | **Christmas Isla** | **10.55** | **258** | P | **Pn** | **12 52 28.0** | **+4.0** |
| **XMIS** | **Christmas Isla** | **10.60** | **258** | P | **Pn** | **12 52 27.0** | **+2.4** |
| **XMIS** | **Christmas Isla** | **10.60** | **258** | | **Pn** | **12 52 24.8** | **+0.3** |
| **GTOI** | **Gorontalo** | **11.23** | **38** | P | **Pn** | **12 52 36.0** | **+2.8** |
| **KSM** | **Kuching** | **11.38** | **329** | P | **Pn** | **12 52 37.3** | **+2.1** |
| **KSM** | **Kuching** | **11.38** | **329** | Pn | **Pn** | **12 52 36.0** | **+0.8** |
| **SBUM** | **Sibu** | **11.43** | **340** | | **Pn** | **12 52 37.0** | **+1.0** |
| **SANI** | **Sanana** | **11.60** | **58** | P | **Pn** | **12 52 40.6** | **+2.3** |
| **SANI** | **Sanana** | **11.60** | **58** | P | **Pn** | **12 52 41.0** | **+2.7** |
| | comp=Z,187nm,1.2s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **11.73** | **301** | P | **Pn** | **12 52 39.3** | **-0.8** |
| | comp=Z,88nm,1.2s | | | | | | |
| **KASI** | **Kota Agung** | **11.93** | **283** | P | **Pn** | **12 52 42.6** | **-0.2** |
| | comp=Z,184nm,1.1s | | | | | | |
| **NLAI** | **Namlea** | **11.99** | **66** | P | **Pn** | **12 52 45.3** | **+1.6** |
| | comp=Z,114nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **13.19** | **165** | P | **Pn** | **12 52 57.4** | **-2.6** |
| **MBWA** | **Marble Bar** | **13.19** | **165** | Pn | **Pn** | **12 52 56.8** | **-3.2** |
| **MBWA** | **Marble Bar** | **13.19** | **165** | P | Pn | **12 52 55.5** | **-4.5** |
| **FITZ** | **Fitzroy Crossi** | **13.37** | **137** | P | **Pn** | **12 53 01.1** | **-1.3** |
| **FITZ** | **Fitzroy Crossi** | **13.37** | **137** | | **Pn** | **12 53 00.2** | **-2.2** |
| **PSAD1** | **Pilbara Seismi** | **13.50** | **165** | P | **Pn** | **12 53 00.7** | **-3.6** |
| | comp=Z,377nm,0.9s,SNR=15 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.62** | **165** | P | **Pn** | **12 53 03.0** | **-2.8** |
| **PSA00** | **Pilbara Seismi** | **13.62** | **165** | | **Pn** | **12 53 02.9** | **-3.0** |
| **PSA00** | **Pilbara Seismi** | **13.62** | **165** | | **Pn** | **12 53 02.4** | **-3.4** |
| **PSA00** | **Pilbara Seismi** | **13.62** | **165** | P | **Pn** | **12 53 03.1** | **-2.7** |
| | comp=Z,32nm,SNR=32 | | | | | | |
| **MSAI** | **Masohi** | **13.62** | **69** | P | **Pn** | **12 53 08.0** | **+2.0** |
| | comp=Z,102nm,0.8s | | | | | | |
| **LBMI** | **Labuha** | **13.64** | **56** | P | **Pn** | **12 53 08.1** | **+1.9** |
| | comp=Z,126nm,0.8s,comp=Z,5μm | | | | | | |
| **MYLDM** | **Lahad Datu** | **13.64** | **10** | | **Pn** | **12 53 10.0** | **+3.9** |
| **MNAI** | **Manna** | **13.72** | **286** | P | **Pn** | **12 53 08.1** | **+0.8** |
| | comp=Z,443nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **14.30** | **122** | Pn | **Pn** | **12 53 13.0** | **-2.1** |
| **KNRA** | **Kununurra** | **14.30** | **122** | P | **Pn** | **12 53 13.0** | **-2.1** |
| | comp=Z,189nm,0.8s,SNR=18 | | | | | | |
| **GIRL** | **Giralia** | **14.34** | **187** | P | **Pn** | **12 53 13.2** | **-2.4** |
| **GIRL** | **Giralia** | **14.34** | **187** | Pn | **Pn** | **12 53 13.0** | **-2.5** |
| **TNTI** | **Ternate** | **14.37** | **51** | P | **Pn** | **12 53 17.2** | **+1.1** |
| **TNTI** | **Ternate** | **14.37** | **51** | P | **Pn** | **12 53 17.3** | **+1.1** |
| | comp=Z,115nm,1.2s | | | | | | |
| **TPRI** | **Tanjung Pinang** | **14.82** | **308** | P | **Pn** | **12 53 24.0** | **+1.9** |
| | comp=Z,108nm,1.4s | | | | | | |
| **SAUI** | **Saumlaki** | **14.98** | **90** | Pn | **Pn** | **12 53 21.9** | **-2.3** |
| SAUI | | | | IAmb | IAmb | 12 53 30.3 | |
| | comp=Z,262nm,0.7s | | | | | | |
| **SAUI** | **Saumlaki** | **14.98** | **90** | P | **Pn** | **12 53 25.8** | **+1.6** |
| | comp=Z,369nm,0.8s | | | | | | |
| **DRS** | **Darwin Rock St** | **15.04** | **107** | P | **Pn** | **12 53 23.1** | **-1.9** |
| **MTN** | **Manton Dam** | **15.36** | **108** | P | **Pn** | **12 53 26.8** | **-2.5** |
| **MTN** | **Manton Dam** | **15.36** | **108** | Pn | **Pn** | **12 53 26.8** | **-2.5** |
| **MTN** | **Manton Dam** | **15.36** | **108** | P | **Pn** | **12 53 26.0** | **-3.2** |
| **BTDF** | **Bukit Timah Da** | **15.68** | **307** | P | **P** | **12 53 39.0** | **+2.1** |
| **KDU** | **Kakadu** | **16.59** | **106** | P | **Pn** | **12 53 42.1** | **-2.9** |
| **KDU** | **Kakadu** | **16.59** | **106** | P | **Pn** | **12 53 41.5** | **-3.4** |
| **SWI** | **Sorong** | **16.77** | **64** | P | **P** | **12 53 48.4** | **-0.5** |
| | comp=Z,224nm,0.9s | | | | | | |
| **SWI** | **Sorong** | **16.77** | **64** | P | **P** | **12 53 48.7** | **-0.2** |
| SWI | | | | pmax | pmax | | |
| | comp=Z,224nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **16.88** | **72** | P | **Pn** | **12 53 48.1** | **-0.5** |
| **FAKI** | **Fak Fak** | **16.88** | **72** | Pn | **Pn** | **12 53 47.5** | **-1.1** |
| **FAKI** | **Fak Fak** | **16.88** | **72** | P | **Pn** | **12 53 47.2** | **-1.4** |
| | comp=Z,216nm,1.3s | | | | | | |
| **PDSI** | **Padang** | **17.31** | **294** | P | **Pn** | **12 53 53.7** | **-0.2** |
| | comp=Z,72nm,0.6s | | | | | | |
| **BKNI** | **Bangkinang** | **17.37** | **299** | P | **P** | **12 53 59.0** | **+3.3** |
| **BKNI** | **Bangkinang** | **17.37** | **299** | | **Pn** | **12 53 55.2** | **+0.5** |
| BKNI | | | | IAmb | IAmb | 12 54 04.1 | |
| | comp=Z,199nm,0.9s | | | | | | |
| **BKNI** | **Bangkinang** | **17.37** | **299** | P | **P** | **12 53 56.0** | **+0.3** |
| | comp=Z,241nm,1.0s | | | | | | |
| **MEEK** | **Meekatharra** | **18.34** | **173** | P | **Pn** | **12 54 07.3** | **+0.8** |





**MEEK Meekatharra 18.34 173 P P 12 54 05.3 -0.9**
comp=Z,529nm,0.9s,SNR=20
**IPM Ipoh 19.77 310 P P 12 54 22.9 +0.9**
**IPM Ipoh 19.77 310 Pn 12 54 24.0 +0.2**
**WRKA Warakurna 20.23 147 P P 12 54 27.9 +0.9**
**WRKA Warakurna 20.23 147 P P 12 54 28.2 +1.2**
comp=Z,541nm,0.8s,SNR=27
**KULM Kulim 20.57 311 P Pn 12 54 32.8 -0.4**
**MORW Morawa 20.61 180 P Pn 12 54 36.4 +1.1**
**MORW Morawa 20.61 180 Pn 12 54 32.8 -0.7**
MORW IAmb IAmb 12 54 37.4
comp=Z,376nm,1.1s
**MORW Morawa 20.61 180 P P 12 54 32.1 +1.0**
comp=Z,350nm,0.9s,SNR=16
**GSI Gunungsitoli 20.88 297 P Pn 12 54 38.0 +1.3**
**GSI Gunungsitoli 20.88 297 P Pn 12 54 37.2 +0.5**
**GSI Gunungsitoli 20.88 297 P Pn 12 54 36.2 -0.5**
**WB0 Warramunga Arr 20.98 125 P P 12 54 34.9 -0.2**
**WRA Warramunga Arr 21.02 125 P P 12 54 35.0 -0.7**
**WRA Warramunga Arr 21.02 125 P P 12 54 34.9 -0.7**
comp=Z,230nm,0.5s,baz=301,slow=12,SNR=461
WRA S **S** **12 58 26.9 -0.7**
comp=Z,18nm,1.0s,baz=288,slow=22,SNR=4.5
WRA ScP **ScP** **13 02 15.3 -0.2**
comp=Z,7.1nm,0.9s,baz=298,slow=2.5,SNR=4.3
**WRA Warramunga Arr 21.02 125** *e*P **P 12 54 33.0 -2.6**
WRA pmax pmax
comp=Z,230nm,0.5s
**WRAB Tennant Creek 21.03 125 P P 12 54 35.6 -0.1**
**WRAB Tennant Creek 21.03 125** *c i*P **P 12 54 35.5 -0.1**
WRAB pmax pmax
comp=Z,264nm,0.9s
**WB2 Warramunga Arr 21.03 125 P P 12 54 35.5 -0.2**
WB2 IAmb IAmb 12 54 36.5
comp=Z,296nm,0.9s
**WR0 Warramunga Arr 21.19 125 P P 12 54 37.4 0.0**
**DLV T Lat 21.56 339 P P 12 54 45.0 +3.5**
**DLV T Lat 21.56 339 P P 12 54 43.4 +1.8**
DLV IAmb IAmb 12 54 58.6
comp=Z,188nm,1.2s
**BLDU Ballidu 22.16 179 P P 12 54 48.8 +1.1**
**BLDU Ballidu 22.16 179 P P 12 54 47.4 -0.2**
comp=Z,349nm,1.0s,SNR=13
**SNSI Sinabang, Aceh 22.49 298 P P 12 54 52.7 +1.3**
comp=Z,241nm,1.1s
**ASPA Alice Springs 22.81 134 P P 12 54 54.5 -0.2**
comp=Z,74nm,0.8s,SNR=44
**AS31 Alice Springs 22.81 134 P P 12 54 54.5 -0.2**
**ASAR Alice Springs 22.81 134 P P 12 54 54.6 -0.2**
comp=Z,175nm,0.8s,baz=308,slow=8.5,SNR=282
ASAR PcP **PcP** **12 58 44.9 -0.3**
comp=Z,8.4nm,0.8s,baz=310,slow=1.7,SNR=5.2
ASAR S **S** **12 59 03.8 +2.4**
comp=Z,19nm,1.0s,baz=304,slow=22,SNR=4.0
ASAR ScP **ScP** **13 02 21.9 +1.9**
comp=Z,7.7nm,0.9s,baz=343,slow=2.9,SNR=4.1
comp=Z,175nm,0.8s
**AS01 Alice Springs 22.84 134 P P 12 54 55.5 +0.4**
**KLBR Kellerberrin 23.17 177 P P 12 54 59.1 +0.8**
**KLBR Kellerberrin 23.17 177 P P 12 54 58.1 -0.2**
comp=Z,318nm,0.8s,SNR=14
**MLSI Meulaboh, Aceh 23.36 302 P P 12 55 00.9 +0.6**
comp=Z,99nm,0.5s
**LHMI Lhok Sumawe 23.44 304 P P 12 55 02.2 +1.2**
**LHMI Lhok Sumawe 23.44 304 P P 12 55 02.3 +1.2**
comp=Z,335nm,1.1s
**MTKN Mount Kenneth 23.47 181 P P 12 55 04.8 +3.7**
**KMBL Kambalda 23.51 168 P P 12 55 01.3 -0.3**
**KMBL Kambalda 23.51 168 P P 12 55 01.5 -0.1**
comp=Z,298nm,1.6s,SNR=9.5
**MUN Mundaring 23.51 180 P P 12 55 02.7 +1.1**
**MUN Mundaring 23.51 180 P P 12 55 01.5 -0.1**
comp=Z,195nm,0.9s,SNR=5.8
**SRIT Nakonsritamara 23.58 315 P P 12 55 06.2 +3.8**
**SRIT Nakonsritamara 23.58 315 P P 12 55 04.4 +2.0**
SRIT IAmb IAmb 12 55 07.6
comp=Z,284nm,1.6s
**SURA Surathani 23.97 316 P P 12 55 08.9 +2.9**
**NWAO Narrogin (SRO) 24.48 178 P P 12 55 11.6 +1.1**
**NWAO Narrogin (SRO) 24.48 178 P P 12 55 10.8 +0.3**
**NWAO Narrogin (SRO) 24.48 178 P P 12 55 10.3 -0.2**
comp=Z,209nm,0.8s,baz=347,slow=10,SNR=32
NWAO S **S** **12 59 31.9 +3.8**
comp=Z,37nm,0.9s,baz=36,slow=11,SNR=1.9
comp=Z,209nm,0.8s
**NWAO Narrogin (SRO) 24.48 178 P P 12 55 10.8 +0.3**
NWAO pmax pmax
comp=Z,231nm,0.8s
**GENI Genyem 24.55 78 P P 12 55 12.0 +0.6**
**GENI Genyem 24.55 78 P P 12 55 10.7 -0.7**
comp=Z,153nm,0.9s,comp=Z,5μm
**FORT Forrest 24.93 155 P P 12 55 15.8 +1.2**
**FORT Forrest 24.93 155 P P 12 55 15.5 +0.9**
**FORT Forrest 24.93 155 P P 12 55 14.5 -0.1**
comp=Z,378nm,1.0s,SNR=8.2
**TABU Tabubil 25.05 85 P P 12 55 15.1 -0.9**
**JAY Jayapura 25.09 78 P P 12 55 16.1 -0.2**
comp=Z,57nm,0.8s
**JAY Jayapura 25.09 78 P P 12 55 16.5 +0.2**
JAY pmax pmax
comp=Z,56nm,0.8s
**QIS Mount Isa 25.69 121 P P 12 55 22.4 +0.7**
**QIS Mount Isa 25.69 121 P P 12 55 21.7 +0.1**
comp=Z,94nm,1.2s,SNR=8.7
**UBPT Khong Chiam 25.76 336 P P 12 55 25.6 +3.3**
**RKGY Rocky Gully 26.15 178 P P 12 55 27.3 +1.7**
**RKGY Rocky Gully 26.15 178 P P 12 55 27.2 +1.6**
comp=Z,352nm,0.9s,SNR=6.6
**OOD Oodnadatta 26.72 139 P P 12 55 31.5 +0.6**
**COEN Coen 27.06 104 P P 12 55 34.3 +0.2**
**COEN Coen 27.06 104 P P 12 55 33.8 -0.3**
COEN IAmb IAmb 12 55 35.4
comp=Z,149nm,0.9s
**COEN Coen 27.06 104 P P 12 55 33.8 -0.3**
comp=Z,193nm,1.2s,SNR=14
**MULG Mulgathing 27.50 145 P P 12 55 38.6 +0.7**
**QIZ Qiongzhong 27.91 347 P P 12 55 45.0 +3.4**
**QIZ Qiongzhong 27.91 347 P P 12 55 44.4 +2.8**
QIZ S **S** **13 00 29.0 +6.3**
QIZ pmax pmax
comp=Z,24nm,1.5s
**QIZ Qiongzhong 27.91 347 P P 12 55 44.0 +2.3**
**SRDT SRDT 28.19 323 P P 12 55 47.5 +3.3**
**MTSU Mount Surprise 29.03 112 P P 12 55 52.7 +1.0**
**LCRK Leigh Creek 30.14 140 P P 12 56 02.2 +0.9**
**INKA Innaminka 30.18 133 P P 12 56 02.5 +0.8**
**BBOO Buckleboo 30.52 146 P P 12 56 05.3 +0.6**
**BBOO Buckleboo 30.52 146 P P 12 56 05.2 +0.4**
BBOO IAmb IAmb 12 56 06.0
comp=Z,97nm,1.0s
**BBOO Buckleboo 30.52 146 P P 12 56 04.9 +0.2**
comp=Z,106nm,0.9s,SNR=3.1
**PMG Port Moresby 30.63 94 P P 12 56 04.6 -1.2**
comp=Z,24nm,0.9s,baz=289,slow=3.5,SNR=4.6
comp=Z,24nm,0.9s
**PMG Port Moresby 30.63 94** ⇓*e*P **P 12 56 05.4 -0.4**
PMG pmax pmax
comp=Z,29nm,1.7s
**PMG Port Moresby 30.63 94 P P 

TPUB IAmb IAmb 12 56 19.9
comp=Z,36nm,1.0s
**SLVN Son La 31.86 338 P 12 56 19.7 +3.0**
**PTPS Port Pirie 31.89 144 P P 12 56 18.2 +1.4**
**CHTO Chiang Mai 31.89 328 P P 12 56 18.4 +1.5**
**CHTO Chiang Mai 31.89 328 P P 12 56 18.4 +1.5**
CHTO pmax pmax
comp=Z,42nm,1.5s
**YULB Yu-li 31.94 9 P P 12 56 20.6 +3.3**
**YULB Yu-li 31.94 9 P P 12 56 18.8 +1.5**
**QLP Quilpie 32.20 128 P P 12 56 20.6 +1.0**
**QLP Quilpie 32.20 128 P P 12 56 20.4 +0.8**
comp=Z,268nm,0.9s,SNR=17
**AUAYR Ayr State High 32.24 114 P P 12 56 21.2 +1.2**
**SSLB Suanglung 32.28 8 P P** 12 56 25.0 +4.8
**SSLB Suanglung 32.28 8 P P 12 56 22.3 +2.0**
SSLB IAmb IAmb 12 56 56.6
comp=Z,32nm,0.9s
**HTT Hallett 32.62 143 P P 12 56 23.3 0.0**
**HTT Hallett 32.62 143 P P 12 56 23.8 +0.5**
comp=Z,76nm,1.3s,SNR=3.4
**NACB Ninganchiao 32.76 9 P P 12 56 28.9 +4.5**
**NACB Ninganchiao 32.76 9 P P 12 56 26.1 +1.7**
NACB IAmb IAmb 12 56 43.9
comp=Z,44nm,0.9s
**YHNB Yeheng 33.21 9 P P 12 56 31.7 +3.3**
**YHNB Yeheng 33.21 9 P P 12 56 28.8 +0.3**
YHNB IAmb IAmb 12 56 40.1
comp=Z,56nm,0.9s
**STKA Stephens Creek 33.26 138 P P 12 56 29.5 +0.7**
**STKA Stephens Creek 33.26 138 P P 12 56 29.3 +0.5**
**STKA Stephens Creek 33.26 138 P P 12 56 29.4 +0.5**
comp=Z,14nm,1.3s,SNR=5.5
**STKA Stephens Creek 33.26 138 P P 12 56 28.7 -0.1**
comp=Z,25nm,0.7s,baz=318,slow=9.7,SNR=26
STKA PcP **PcP 12 59 10.1 -0.5**
comp=Z,30nm,0.8s,baz=331,slow=3.1,SNR=3.5
comp=Z,25nm,0.7s
**STKA Stephens Creek 33.26 138** *e*P **P 12 56 29.4 +0.7**
STKA pmax pmax
comp=Z,25nm,0.7s
**TATO Taipei 33.52 9 P P 12 56 34.0 +2.9**
**TATO Taipei 33.52 9 P P 12 56 32.4 +1.3**
**TATO Taipei 33.52 9 P P 12 56 33.2 +2.1**
TATO pP **pP 12 56 42.2 +0.3**
**KMI Kunming 35.75 339** ⇑P **P 12 56 55.1 +4.5**
KMI pmax pmax
comp=Z,34nm,1.3s
**GYA Guiyang 35.81 345 P P 12 56 52.8 +1.8**
GYA pmax pmax
comp=Z,21nm,0.7s
**CMSA Cobar Meteorol 35.87 134 P P 12 56 52.4 +1.0**
**CMSA Cobar Meteorol 35.87 134 P P 12 56 52.0 +0.6**
comp=Z,62nm,1.3s,SNR=6.3
**RABL Rabaul 36.00 86 P P 12 56 52.8 +0.1**
RABL IAmb IAmb 12 56 53.5
comp=Z,46nm,1.1s
**RK1H Rockhampton Ha 36.11 118 P P 12 56 54.2 +0.7**
**AULRC Lightning Ridg 36.47 129 P P 12 56 58.2 +1.7**
**ARPS Mount Arapiles 36.66 144 P P 12 56 59.6 +1.6**
**ARPS Mount Arapiles 36.66 144 P P 12 56 58.3 +0.3**
comp=Z,90nm,1.0s,SNR=7.2
**JOW Kunigami 36.89 18 P P 12 56 59.1 -1.0**
comp=Z,11nm,1.0s,baz=171,slow=9.8,SNR=2.6
comp=Z,11nm,1.0s
**EIDS Eidsvold 37.29 121 P P 12 57 04.3 +0.8**
**EIDS Eidsvold 37.29 121 P P 12 57 04.7 +1.2**
**EIDS Eidsvold 37.29 121 P P 12 57 04.0 +0.5**
comp=Z,27nm,1.0s,SNR=3.0
**PZH PanZhiHua 37.37 338 P P 12 57 08.5 +4.2**
PZH pmax pmax
comp=Z,30nm,1.2s
**TNCH TengChong 37.37 333** ⇑P P 12 57 09.3 +4.9
TNCH pP pP 12 57 12.8 -2.5
TNCH pmax pmax
comp=Z,56nm,0.8s
**AUMAG Moama Anglican 37.96 141 P P 12 57 10.7 +1.6**
**AUDCS Dubbo College 38.35 133 P P 12 57 14.2 +1.8**
**BRAT Ballarat 38.41 143 P P 12 57 14.0 +1.2**
**WHN Wuhan 38.71 357 P P 12 57 18.9 +3.6**
WHN pmax pmax
comp=Z,52nm,0.7s
**ENH Enshi 38.93 351 P P 12 57 20.7 +3.4**
**ENH Enshi 38.93 351 P P 12 57 18.2 +0.9**
ENH IAmb IAmb 12 57 27.8
comp=Z,67nm,0.9s
**ENH Enshi 38.93 351 P P 12 57 19.4 +2.1**
**GEXS Deakin Univers 39.06 144 P P 12 57 21.1 +2.8**
**MLBS Spotswood, Mel 39.17 143 P P 12 57 21.4 +2.2**
**YNG Young 39.29 136 P P 12 57 22.0 +1.7**
**YNG Young 39.29 136 P P 12 57 20.9 +0.6**
comp=Z,554nm,0.9s,SNR=9.3
**TOO Toolangi 39.36 142 P P 12 57 23.1 +2.2**
**TOO Toolangi 39.36 142 P P 12 57 22.5 +1.6**
TOO IAmb IAmb 12 57 24.1
comp=Z,83nm,0.9s
**TOO Toolangi 39.36 142 P P 12 57 21.2 +0.3**
comp=Z,94nm,1.0s,SNR=6.5
**TOO Toolangi 39.36 142 P P 12 57 22.5 +1.6**
TOO pmax pmax
comp=Z,83nm,1.0s
**AUPHS Peel High Scho 39.48 130 P P 12 57 23.9 +2.0**
**AUWSH Wavell State H 39.66 123 P P 12 57 24.2 +0.8**
**ARMA Armidale 39.74 128 P P 12 57 25.3 +1.1**
**ARMA Armidale 39.74 128 P P 12 57 25.9 +1.7**
ARMA IAmb IAmb 12 57 27.3
comp=Z,48nm,0.8s
**ARMA Armidale 39.74 128 P P 12 57 25.0 +0.8**
comp=Z,79nm,1.1s,SNR=5.1
**NJ2 Nanjing 40.25 4** *e*P **P 12 57 27.1 -1.1**
NJ2 pmax pmax
comp=Z,39nm,0.9s
**CAN Canberra 40.27 137 P P 12 57 29.8 +1.3**
**CAN Canberra 40.27 137 P P 12 57 29.8 +1.3**
CAN IAmb IAmb 12 57 32.3
comp=Z,52nm,0.9s
**CAN Canberra 40.27 137 P P 12 57 29.0 +0.5**
comp=Z,68nm,0.9s,SNR=5.8
**CAN Canberra 40.27 137 P P 12 57 29.8 +1.3**
CAN pmax pmax
comp=Z,53nm,0.9s
**CAN Canberra 40.27 137 P P 12 57 29.7 +1.3**
CAN PcP **PcP 12 59 31.7 0.0**
**GC1S Gold Coast 1 S 40.33 124 P P 12 57 30.7 +1.8**
**CNB Canberra Magne 40.51 136 P P 12 57 31.9 +1.4**
**CNB Canberra Magne 40.51 136 P P 12 57 31.1 +0.6**
comp=Z,56nm,1.0s,SNR=3.2
**CD2 Chengdu 40.81 344 P P 12 57 33.8 +0.9**
CD2 pmax pmax
comp=Z,80nm,0.8s
**NTLH Newcastle Hard 40.93 132 P P 12 57 35.2 +1.3**
**RIV Riverview 40.99 133 P P 12 57 37.0 +2.7**
**RIV Riverview 40.99 133 P P 12 57 35.6 +1.2**
comp=Z,144nm,0.9s,SNR=3.6
**WOLH Wollongong Har 41.08 134 P P 12 57 37.0 +1.9**
**SHL Shillong 41.17 326 P P 12 57 36.4 +0.3**
SHL IAmb IAmb 12 57 53.0
comp=Z,53nm,0.8s
**SHL Shillong 41.17 326 P P 12 57 36.4 +0.3**
SHL pmax pmax
comp=Z,53nm,0.8s
**AUUHS Ulladulla High 41.30 136 P P 12 57 37.9 +1.1**
**XAN Xi'an 42.71 351** ⇑P **P 12 57 48.9 +0.5**
XAN S **S 13 04 12.3 +3.0**
XAN pmax pmax
comp=Z,70nm,1.1s
**LYN LuoYang 42.81 355 P P 12 57 51.1 +2.0**
LYN pmax pmax
comp=Z,39nm,0.8s
**HNR Honiara 43.24 95 P P 12 57 52.8 -0.1**
**HNR Honiara 43.24 95 P P 12 57 52.9 -0.1**
**HNR Honiara 43.24 95 P P 12 57 52.9 -0.1**
**HNR Honiara 43.24 95 P P 12 57 52.6 -0.3**
HNR PcP **PcP 12 59 41.9 0.0**
**JCJ Chichijima 43.33 35 P P 12 57 50.0 -3.4**
comp=Z,122nm,0.7s,baz=284,slow=21,SNR=4.2
**JNU Nakatsue 43.55 18 P P 12 57 57.1 +1.9**
**JNU Nakatsue 43.55 18 P P 12 57 55.7 +0.5**
**JNU Nakatsue 43.55 18 P P 12 57 55.6 +0.4**
comp=Z,14nm,0.8s,baz=119,slow=2.6,SNR=11
comp=Z,14nm,0.8s
**TIA Tai'an 44.33 1 P P 12 58 01.4 +0.1**
TIA pmax pmax
comp=Z,18nm,0.7s

**LSA Lhasa 44.84 329 P P 12 58 08.4 +2.3**
**JMN Monobe 45.10 21 P P 12 58 09.9 +2.3**
**JMN Monobe 45.10 21 P P 12 58 08.9 +1.3**
JMN IAmb IAmb 12 58 34.8
comp=Z,63nm,1.1s
**HYB Hyderabad 45.14 305** *e*P **P 12 58 06.9 -1.3**
HYB *ep*P **pP 12 58 17.9 -1.4**
HYB *e*PP **PP 12 59 55.1 +0.8**
HYB *e*ScP **ScP 13 03 38.9 +1.1**
HYB *e*S **S 13 04 46.3 +1.2**
HYB *e*ScS **ScS 13 08 03.2 +0.8**
**HNS HongShan 45.53 358** ⇑P **P 12 58 11.3 +0.5**
HNS pmax pmax
comp=Z,19nm,1.2s
**LZH Lanzhou 45.70 346** ⇑P **P 12 58 14.4 +2.0**
LZH pP pP 12 58 23.7 +0.2
LZH pmax pmax
comp=Z,73nm,1.6s
**TJN Taejon 45.72 13**⇓*e*P **P 12 58 13.7 +1.4**
**KSAR Wonju Array Be 46.85 13 P P 12 58 22.5 +1.3**
**KSAR Wonju Array Be 46.85 13 P P 12 58 22.5 +1.3**
**KSRS Korea Array 46.87 13 P P 12 58 21.9 +0.5**
comp=Z,21nm,0.9s,baz=191,slow=8.4,SNR=46
comp=Z,21nm,0.9s
**KSRS Korea Array 46.87 13** *e*P **P 12 58 22.4 +1.0**
KSRS pmax pmax
comp=Z,20nm,0.9s
**KS19 Wonju Array Si 46.91 13 P P 12 58 22.3 +0.6**
KS19 IAmb IAmb 12 58 25.8
comp=Z,26nm,1.0s
**DL2 Dalian 47.28 6 P P 12 58 25.4 +0.8**
DL2 pmax pmax
comp=Z,53nm,1.1s
**INU Inuyama 47.71 23 P P 12 58 30.0 +2.0**
**INU Inuyama 47.71 23 P P 12 58 28.4 +0.3**
INU IAmb IAmb 12 58 30.8
comp=Z,39nm,1.0s
**INU Inuyama 47.71 23 P P 12 58 28.2 +0.3**
**KOUNC Koumac, New Ca 47.97 110 P P 12 58 32.1 +1.8**
**KOUNC Koumac, New Ca 47.97 110 P P 12 58 31.0 +0.7**
KOUNC IAmb IAmb 12 58 33.8
comp=Z,53nm,1.1s
**JGF Kuroka 48.06 23 P P 12 58 33.1 +2.3**
**JGF Kuroka 48.06 23 P P 12 58 31.0 +0.3**
JGF IAmb IAmb 12 58 39.5
comp=Z,29nm,0.8s
**BJT Baijiatuan 48.12 360 P P 12 58 34.4 +3.3**
**BJT Baijiatuan 48.12 360 P P 12 58 31.7 +0.6**
BJT IAmb IAmb 12 58 33.1
comp=Z,42nm,1.2s
**BJT Baijiatuan 48.12 360 P P 12 58 31.7 +0.6**
BJT pmax pmax
comp=Z,42nm,1.2s
**BJT Baijiatuan 48.12 360 P P 12 58 32.2 +1.2**
**BJI Beijing 48.15 0 P P 12 58 31.8 +0.6**
BJI sP **sP 12 58 46.8 -0.3**
BJI pmax pmax
comp=Z,16nm,1.1s
**GOMU GeErMu 48.65 337 P P 12 58 36.7 +1.0**
GOMU pP pP 12 58 46.3 -0.9
GOMU sP sP 12 58 52.3 +0.4
GOMU pmax pmax
comp=Z,30nm,1.0s
**BTO Baotou 49.04 354** *e*P **P 12 58 39.9 +1.6**
BTO pP **pP 12 58 51.0 +1.5**
BTO sP **sP 12 58 57.1 +3.0**
BTO PP **PP 13 00 27.8 -4.4**
BTO S **S 13 05 43.7 +3.5**
BTO pmax pmax
comp=Z,110nm,1.0s
BTO LR LR
comp=Z,4μm,13.3s
BTO LR LR
comp=Z,6μm,15.3s
BTO LR LR
comp=Z,7μm,18.2s
**HHC Hu-ho-hao-te 49.14 355** *e*P **P 12 58 39.7 +0.7**
HHC pmax pmax
comp=Z,15nm,0.6s
**MAJO Matsushiro 49.22 24 P P 12 58 41.0 +1.4**
**MAJO Matsushiro 49.22 24 P P 12 58 39.9 +0.3**
MAJO IAmb IAmb 12 58 46.5
comp=Z,71nm,1.1s
**MAJO Matsushiro 49.22 24***de*P **P 12 58 39.6 0.0**
MAJO pmax pmax
comp=Z,58nm,1.3s
**MJAR Matsushiro Arr 49.22 24 P P 12 58 39.4 -0.2**
comp=Z,33nm,0.9s,baz=196,slow=7.3,SNR=62
comp=Z,33nm,0.9s
**MJB9 Matsu-Tunnel 49.22 24 P P 12 58 40.4 +0.7**
MJB9 IAmb IAmb 12 58 47.5
comp=Z,72nm,1.1s
**MJA0 Matsu Arr-Jizo 49.23 24** *e*P **P 12 58 39.8 0.0**
MJA0 pmax pmax
comp=Z,34nm,0.9s
**GTA Gaotai 49.88 343 P P 12 58 46.1 +1.3**
GTA pmax pmax
comp=Z,19nm,1.3s
**NOUC Port Laguerre 50.04 112 P P 12 58 47.7 +1.6**
**NOUC Port Laguerre 50.04 112 P P 12 58 47.0 +0.9**
NOUC sP **pP 12 59 01.4 +3.3**
**DZM Mont Dzumac 50.16 112 P P 12 58 49.4 +2.2**
**DZM Mont Dzumac 50.16 112 P P 12 58 48.2 +1.0**
DZM IAmb IAmb 12 58 49.9
comp=Z,79nm,1.4s
**DZM Mont Dzumac 50.16 112 P P 12 58 48.4 +1.2**
DZM sP **sP 12 59 03.0 -1.2**
**ONTNC Ouen Toro 50.20 112 P P 12 58 48.8 +1.4**
**SNY Shenyang 50.39 7** ⇑P **P 12 58 48.4 0.0**
SNY pmax pmax
comp=Z,56nm,1.0s
**YATNC Mamie plateau, 50.57 112 P P 12 58 52.9 +2.7**
**JMM Marumori 51.41 25 P P 12 58 58.7 +2.6**
**JMM Marumori 51.41 25 P P 12 58 56.7 +0.6**
**XLT XiLinHaoTe 52.00 360** *e*P **P 12 59 01.1 +0.5**
XLT sP sP 12 59 18.9 +1.9
XLT pmax pmax
comp=Z,42nm,1.1s
**PSTR Posyet 52.48 14**⇓*e*P **P 12 59 04.9 +0.9**
**MSHR Mys Shultsa 52.50 14**⇓*e*P **P 12 59 04.9 +0.8**
MSHR pmax pmax
comp=Z,32nm,1.3s
**CN2 Changchun 52.58 8 P P 12 59 04.5 -0.2**
CN2 pmax pmax
comp=Z,40nm,1.0s
**VLA Vladivostok 53.18 14**⇓*e*P **P 12 59 10.1 +0.9**
VLA pmax pmax
comp=Z,40nm,1.1s
**MDJ Mudanjiang 54.09 12 P P 12 59 17.1 +1.3**
**MDJ Mudanjiang 54.09 12 P P 12 59 16.4 +0.6**
MDJ pmax pmax
comp=Z,95nm,1.0s
**MDJ Mudanjiang 54.09 12 P P 12 59 15.9 +0.1**
MDJ IAmb IAmb 12 59 17.6
comp=Z,70nm,0.9s
**MDJ Mudanjiang 54.09 12 P P 12 59 16.3 +0.4**
**USA0B Ussuriysk Arra 54.23 14 P P 12 59 17.1 +0.3**
USA0B IAmb IAmb 12 59 20.0
comp=Z,46nm,1.0s
**USA0B Ussuriysk Arra 54.23 14**⇓*e*P **P 12 59 17.5 +0.7**
**USRK Ussuriysk Ar. 54.23 14** P **P 12 59 16.9 +0.2**
comp=Z,27nm,0.8s,baz=187,slow=7.3,SNR=44
comp=Z,27nm,0.8s
**USRK Ussuriysk Ar. 54.23 14** P **P 12 59 17.0 +0.2**
**BNX BinXian 54.78 10** ⇑P **P 12 59 20.5 -0.3**
BNX pmax pmax
comp=Z,30nm,1.6s
**ERM Erimo 55.88 24 P P 12 59 31.8 +3.0**
**ERM Erimo 55.88 24 P P 12 59 29.4 +0.7**
ERM IAmb IAmb 12 59 30.9
comp=Z,62nm,0.9s
**ERM Erimo 55.88 24***de*P **P 12 59 29.6 +0.8**
ERM pmax pmax
comp=Z,68nm,1.0s
**JEM Erimo 55.88 24 P P 12 59 31.3 +2.5**
**TEY Ternei 56.24 17** *e*P **P 12 59 31.3 0.0**
**ULN Ulaanbaatar 56.55 353 P P 12 59 34.0 +0.3**
ULN IAmb IAmb 12 59 35.0
comp=Z,26nm,1.1s
**ULN Ulaanbaatar 56.55 353***ce*P **P 12 59 33.9 +0.3**
ULN pmax pmax
comp=Z,20nm,1.0s
**ULN Ulaanbaatar 56.55 353 P P 12 59 34.0 +0.3**
**SONM Songino Array 56.60 352 P P 12 59 33.8 -0.3**
comp=Z,28nm,0.9s,baz=171,slow=8.2,SNR=100
comp=Z,28nm,0.9s
**SONM Songino Array 56.60 352** *e*P **P 12 59 34.2 +0.2**
SONM pmax pmax
comp=Z,28nm,0.9s
**PYZ Puysegur Point 57.24 140 P P 12 59 40.2 +1.6**
**DCZ Deep Cove 57.25 139 P P 12 59 40.0 +1.5**
DCZ IAmb IAmb 12 59 41.4
comp=Z,77nm,1.1s
**MCQ Macquarie Isla 57.26 152 P P 12 59 40.2 +1.8**
**MCQ Macquarie Isla 57.26 152 P P 12 59 40.2 +1.8**
MCQ pmax pmax
comp=Z,141nm,1.0s
**ASAJ Asahikawa 57.44 22 P P 12 59 39.9 0.0**
comp=Z,52nm,0.9s,baz=262,slow=28,SNR=36
comp=Z,52nm,0.9s
**ASAJ Asahikawa 57.44 22 P P 12 59 40.3 +0.5**
ASAJ pmax pmax
comp=Z,69nm,0.9s
**JKA Kamikawa-asahi 57.44 22 P P 12 59 40.3 +0.5**
JKA IAmb IAmb 12 59 41.3
comp=Z,69nm,0.9s
**HIA Hailar 57.46 3**⇓*e*P **P 12 59 39.7 -0.2**
HIA pmax pmax
comp=Z,31nm,1.8s
**JCZ Jackson Bay 57.79 137 P P 12 59 44.6 +2.1**
**MLZ Mavora Lakes 57.84 139 P P 12 59 43.7 +1.0**
MLZ IAmb IAmb 12 59 45.2
comp=Z,54nm,0.9s
**WHZ Wether Hill Ro 57.93 140 P P 12 59 43.8 +0.4**
WHZ IAmb IAmb 12 59 45.6
comp=Z,63nm,1.0s
**CASY Casey 57.97 183 P P 12 59 43.8 +0.5**
**CASY Casey 57.97 183 P P 12 59 43.7 +0.4**
CASY pP **pP 12 59 53.6 -1.6**
CASY PcP **PcP 13 00 35.9 +0.9**
**WMQ Urumqi 57.99 336** *e*P **P 12 59 44.4 +0.6**
WMQ sP sP 13 00 00.4 +0.3
WMQ pmax pmax
comp=Z,24nm,0.7s
**WKZ Wanaka 58.22 138 P P 12 59 46.2 +0.7**
WKZ IAmb IAmb 12 59 57.1
comp=Z,54nm,0.9s
**LBZ Lake Benmore 58.84 137 P P 12 59 49.9 +0.1**
LBZ IAmb IAmb 12 59 51.4
comp=Z,40nm,1.0s
**KLR Kul'dur 58.94 12 P P 12 59 49.9 -0.3**
comp=Z,11nm,0.9s,baz=218,slow=5.0,SNR=19
comp=Z,11nm,0.9s
**KLR Kul'dur 58.94 12**⇑*e*P **P 12 59 49.6 -0.6**
KLR pmax pmax
comp=Z,49nm,1.7s
**DSZ Denniston Nort 59.09 134 P P 12 59 52.5 +0.9**
**INZ Inchbonnie 59.14 135 P P 12 59 52.4 +0.6**
INZ IAmb IAmb 12 59 53.5
comp=Z,53nm,0.9s
**HEH HeiHe 59.17 8** *e*P **P 12 59 51.7 -0.1**
HEH pmax pmax
comp=Z,97nm,1.1s
**RPZ Rata Peaks 59.19 136 P P 12 59 53.0 +0.8**
**QRZ Quartz Range 59.34 133 P P 12 59 54.4 +1.2**
**RER Riviere de l'E 59.50 250 P P 12 59 56.3 +1.5**
**ZAK Zakamensk 59.55 350** *e*P **P 12 59 54.0 -0.6**
ZAK pmax pmax
comp=Z,20nm,1.4s
**OXZ Oxford 59.74 136 P P 12 59 55.9 -0.1**
OXZ IAmb IAmb 12 59 57.3
comp=Z,37nm,0.8s
**THZ Tophouse 59.88 134 P P 12 59 58.2 +1.1**
**YSS Yuzh-Sakhalins 59.92 21 P P 12 59 58.1 +1.1**
**YSS Yuzh-Sakhalins 59.92 21 P P 12 59 57.3 +0.3**
**YSS Yuzh-Sakhalins 59.92 21***ce*P **P 12 59 57.1 +0.1**
YSS pmax pmax
comp=Z,71nm,1.1s
**YSS Yuzh-Sakhalins 59.92 21 P P 12 59 57.4 +0.3**
**CIT Chita 60.17 358** *e*P **P 12 59 59.8 +1.1**
CIT *e* 13 00 11.0
**MQZ McQueen's Vall 60.29 136 P P 12 59 59.3 +0.6**
**KSH Kashi 60.45 325 P P 12 59 59.4 -1.6**
KSH sP sP 13 00 16.0 -1.1
KSH pmax pmax
comp=Z,10.0nm,0.9s
**DRV Dumont d'Urvil 60.47 169 P P 13 00 01.6 +1.1**
**TUWZ Tuamarina 60.53 133 P P 13 00 02.4 +1.0**
**MSVF Nonsavu 60.77 106 P P 13 00 06.1 +2.5**
**MSVF Nonsavu 60.77 106 P P 13 00 03.2 -0.3**
MSVF IAmb IAmb 13 00 21.9
comp=Z,52nm,1.1s
**MSVF Nonsavu 60.77 106**⇑*e*P **P 13 00 04.4 +0.8**
MSVF pmax pmax
comp=Z,35nm,1.0s
**MSVF Nonsavu 60.77 106 P P 13 00 04.8 +1.2**
MSVF sP **sP 13 00 20.3 -0.1**
**SHLS Shalkode 61.17 330** *e*P **P 13 00 03.5 -2.3**
comp=Z,8.9nm,1.0s,baz=330
**SHLS Shalkode 61.17 330** *e*P **P 13 00 03.5 -2.3**
SHLS pmax pmax
comp=Z,9.0nm,1.0s
**MOY Mondy 61.19 349** *e*P **P 13 00 06.1 +0.3**
MOY pmax pmax
comp=Z,62nm,2.1s
**BHW Baring Head 61.20 133 P P 13 00 05.9 -0.1**
BHW IAmb IAmb 13 00 07.1
comp=Z,37nm,0.9s
**IRK Irkutsk 61.21 352** *e*P **P 13 00 05.0 -0.8**
IRK pmax pmax
comp=Z,68nm,2.2s
**PDGK Podgornoye 61.29 330 P P 13 00 05.3 -1.3**
**UZB Uzynbulak 61.38 330** *e*P **P 13 00 06.1 -1.2**
baz=330
**UZB Uzynbulak 61.38 330** *e*P **P 13 00 06.1 -1.2**
**MRZ Mangatainoka R 61.52 132 P P 13 00 08.4 +0.1**
**UGL Uglegorsk 61.53 19** *e*P **P 13 00 09.3 +1.4**
UGL pmax pmax
comp=Z,130nm,0.9s
**SATY Saty 61.63 329** *e*P **P 13 00 07.8 -1.2**
baz=329
**SATY Saty 61.63 329** *e*P **P 13 00 07.7 -1.2**
**ZHN Zhinishke 61.69 329** *e*P **P 13 00 08.1 -1.2**
baz=330
**ZHN Zhinishke 61.69 329** *e*P **P 13 00 08.1 -1.2**
**NRN Naryn 61.74 327 P P 13 00 08.7 -1.3**
**NRN Naryn 61.74 327 P P 13 00 08.7 -1.3**
NRN pmax pmax
comp=Z,18nm,1.2s
**KPKS Kokpek 61.78 330** *e*P **P 13 00 08.5 -1.4**
comp=Z,8.9nm,1.0s,baz=330
**KPKS Kokpek 61.78 330** *e*P **P 13 00 08.5 -1.4**
KPKS pmax pmax
comp=Z,9.0nm,1.0s
**BKZ Black Stump Fm 61.86 130 P P 13 00 11.7 +1.1**
**BKZ Black Stump Fm 61.86 130 P P 13 00 11.0 +0.4**
**ZSN Zaisan 62.10 336** *e*P **P 13 00 10.7 -1.2**
baz=337
ZSN *e*S **S 13 08 34.2 +0.1**
baz=337
**ZSN Zaisan 62.10 336** *e*P **P 13 00 10.7 -1.2**
ZSN *e*S **S 13 08 34.2 +0.1**
**RTZ Ruatahuna 62.11 129 P P 13 00 12.9 +0.6**
**TNSS Tian-Shan 62.36 328** *e*P **P 13 00 12.6 -1.6**
baz=328
**TNSS Tian-Shan 62.36 328** *e*P **P 13 00 12.6 -1.6**
**MDOK Medeo 62.40 329** *e*P **P 13 00 12.7 -1.4**
baz=329
**MDOK Medeo 62.40 329** *e*P **P 13 00 12.7 -1.4**
**AAA Alma-Ata 62.50 329** *e*P **P 13 00 13.4 -1.3**
comp=Z,8.2nm,0.8s,baz=329
**AAA Alma-Ata 62.50 329** *e*P **P 13 00 13.3 -1.3**
AAA pmax pmax
comp=Z,8.0nm,0.8s
**ZEA Zeya 62.56 7** *e*P **P 13 00 14.8 +0.1**
ZEA pmax pmax
comp=N,30nm,1.1s
ZEA pmax pmax
comp=Z,60nm,1.0s
**MK31 Makanchi Array 62.64 334** P **P 13 00 14.2 -1.3**
**MK31 Makanchi Array 62.64 334***c* *i*P **P 13 00 14.1 -1.4**
**MKAR Makanchi Array 62.64 334** P **P 13 00 14.2 -1.3**
comp=Z,5.5nm,0.7s,baz=146,slow=7.3,SNR=51
MKAR PKP2bc **P'P'bc 13 29 26.0 +1.3**
comp=Z,0.6nm,0.9s,baz=294,slow=3.9,SNR=3.7
comp=Z,5.5nm,0.7s
**MKAR Makanchi Array 62.64 334** *e*P **P 13 00 14.2 -1.3**
MKAR pmax pmax
comp=Z,7.0nm,0.8s

MAKZ **Makanchi** 62.78 334 P **P** 13 00 15.4 -1.1
MAKZ **Makanchi** 62.78 334 P **P** 13 00 15.4 -1.1
MAKZ pmax pmax
comp=Z,19nm,1.6s
TYV **Tymovskoe** 63.27 18 *e*P **P** 13 00 20.8 +1.2
TYV pmax pmax
comp=Z,10.0nm,1.3s
ARSB **Arslanbob** 63.35 325 P **P** 13 00 19.4 -1.1
ARSB **Arslanbob** 63.35 325 P **P** 13 00 19.4 -1.1
ARSB pmax pmax
comp=Z,13nm,1.0s
AAK **Ala-Archa** 63.38 327 P **P** 13 00 20.0 -0.7
AAK IAmb IAmb 13 00 39.6
comp=Z,28nm,1.0s
AAK **Ala-Archa** 63.38 327 P **P** 13 00 20.1 -0.7
AAK **Ala-Archa** 63.38 327⇓ *e*P **P** 13 00 19.9 -0.7
AAK pmax pmax
comp=Z,7.0nm,0.8s
GAR **Garm** 63.48 321 P **P** 13 00 19.9 -1.4
BTK **Batken** 63.82 323 P **P** 13 00 21.9 -1.6
BTK IAmb IAmb 13 00 42.4
comp=Z,37nm,1.2s
BTK **Batken** 63.82 323 P **P** 13 00 21.9 -1.6
BTK pmax pmax
comp=Z,37nm,1.2s
SGDS **Sogindy** 63.86 327 *e*P **P** 13 00 22.4 -1.3
baz=328
SGDS **Sogindy** 63.86 327 *e*P **P** 13 00 22.4 -1.3
CHGR **Chuyangaron** 63.99 320 P **P** 13 00 22.6 -2.1
CHGR IAmb IAmb 13 00 42.1
comp=Z,34nm,1.0s
CHGR **Chuyangaron** 63.99 320 P **P** 13 00 22.6 -2.1
CHGR pmax pmax
comp=Z,34nm,1.0s
SIMJ **Simiganj** 64.09 320 P **P** 13 00 22.8 -2.6
BTLS **Baital** 65.25 328 *e*P **P** 13 00 31.9 -0.9
baz=328
BTLS **Baital** 65.25 328 *e*P **P** 13 00 31.8 -0.9
KK31 **Karatay Array** 65.90 325 P **P** 13 00 34.8 -2.2
KK31 **Karatay Array** 65.90 325 P **P** 13 00 34.8 -2.2
KK31 pmax pmax
comp=Z,8.0nm,1.0s
KKAR **Karatay Array** 65.90 325 P **P** 13 00 34.6 -2.4
KKAR **Karatay Array** 65.90 325 P **P** 13 00 34.6 -2.4
CHM **Chimkent** 65.94 324 *e*P **P** 13 00 35.7 -1.5
baz=324
CHM **Chimkent** 65.94 324 *e*P **P** 13 00 35.7 -1.5
BRLS **Boroldaу** 66.24 325 *e*P **P** 13 00 36.6 -2.5
baz=324
BRLS **Boroldaу** 66.24 325 *e*P **P** 13 00 36.6 -2.5
SEM **Semipalatinsk** 66.31 336 *e*P **P** 13 00 37.6 -2.0
baz=336
SEM **Semipalatinsk** 66.31 336 *e*P **P** 13 00 37.6 -2.0
H04N2 **CROZET ISLANDS** 66.35 223 T T 14 12 33.8
baz=76,slow=75
H04N1 **CROZET ISLANDS** 66.36 223 T T 14 12 34.8
baz=76,slow=75
H04N3 **CROZET ISLANDS** 66.36 223 T T 14 12 32.7
baz=76,slow=75
SOHO **SOHO** 66.53 301 P **P** 13 00 38.4 -2.9
CCD **Concordia, Ant** 66.84 178 P **P** 13 00 44.4 +1.5
UOSS **Minazif** 67.11 301 P **P** 13 00 42.1 -2.9
ASHO **Ashiyiah** 67.13 301 P **P** 13 00 43.5 -1.8
MDH **Madha** 67.16 302 P **P** 13 00 43.3 -2.0
KURBB **Kurchatov Arra** 67.18 335 P **P** 13 00 43.0 -1.9
comp=Z,3.8nm,0.9s,baz=144,slow=5.8,SNR=34
comp=Z,3.8nm,0.9s
KURK **Kurchatov** 67.21 335 P **P** 13 00 43.5 -1.6
KURK **Kurchatov** 67.21 335⇑ *e*P **P** 13 00 43.6 -1.5
KURK pmax pmax
comp=Z,14nm,1.2s
KURK **Kurchatov** 67.21 335 P **P** 13 00 43.5 -1.6
KURK PcP **PcP** 13 01 10.6 -2.2
MSFE **Esma-Masafi** 67.30 302 P **P** 13 00 42.2 -4.0
ZAA0 **Zalesovo Array** 67.47 341 P **P** 13 00 44.5 -2.1
ZALV **Zalesovo Beam** 67.47 341 P **P** 13 00 44.3 -2.3
ZALV **Zalesovo Beam** 67.47 341 P **P** 13 00 44.6 -2.0
comp=Z,12nm,0.7s,baz=147,slow=4.8,SNR=41
ZALV PKPPKP **P'P'df** 13 29 10.7 +1.9
comp=Z,0.6nm,0.5s,baz=17,slow=6.2,SNR=3.9
comp=Z,12nm,0.7s
ABPO **Ambohimpanom** 67.48 253 P **P** 13 00 45.8 -1.9
ABPO IAmb IAmb 13 00 49.4
comp=Z,30nm,1.1s
ABPO **Ambohimpanom** 67.48 253 P **P** 13 00 45.8 -1.9
ABPO pmax pmax
comp=Z,30nm,1.1s
ABPO **Ambohimpanom** 67.48 253 P **P** 13 00 47.9 +0.2
FAQ **Al Faqa, Dubai** 67.55 301 P **P** 13 00 45.8 -2.0
SHME **Shamm** 67.56 303 P **P** 13 00 45.3 -2.6
ASUD **Al Ashush, Dub** 67.73 301 P **P** 13 00 44.4 -4.5
VOI **Vohitsoka** 67.84 250 P **P** 13 00 50.0 +0.1
VOI IAmb IAmb 13 00 51.6
comp=Z,42nm,0.9s
OTUK **Ortayu** 68.30 330 P **P** 13 00 50.5 -1.5
MZR **Muzera** 68.76 299 P **P** 13 00 52.0 -3.4
MAW **Mawson** 68.91 199 P **P** 13 00 56.8 +1.2
comp=Z,86nm,0.8s,baz=60,slow=6.7,SNR=61
comp=Z,86nm,0.8s
YAK **Yakutsk** 70.95 7 P **P** 13 01 07.3 -0.7
YAK IAmb IAmb 13 01 09.2
comp=Z,48nm,0.9s
YAK **Yakutsk** 70.95 7 *e*P **P** 13 01 06.8 -1.2
YAK *e*S **S** 13 10 18.3 -2.3
YAK *e**SS **SKiKP** 13 10 51.4 +4.6
YAK pmax pmax
comp=Z,42nm,0.9s
YAK smax smax
comp=N,1μm,10.9s
YAK smax smax
comp=E,2μm,13.8s
YAK **Yakutsk** 70.95 7 P **P** 13 01 07.2 -0.9
PET **Petropavlovsk** 70.98 26⇑ *e*P **P** 13 01 08.2 -0.2
PET pmax pmax
comp=Z,34nm,1.7s
BVA0 **Borovoye Array** 72.43 333 *i* P **P** 13 01 15.7 -1.5
BRVK **Borovoye** 72.50 333⇑ *e*P **P** 13 01 15.7 -1.9
BRVK pmax pmax
comp=Z,17nm,1.3s
VNDA **Vanda** 73.07 171 P **P** 13 01 21.6 +0.9
VNDA IAmb IAmb 13 01 23.2
comp=Z,47nm,1.0s
VNDA **Vanda** 73.07 171 P **P** 13 01 21.9 +1.3
comp=Z,32nm,0.9s,baz=315,slow=5.9,SNR=97
comp=Z,32nm,0.9s
MA2 **Magadan** 73.12 18 P **P** 13 01 21.3 +0.2
MA2 **Magadan** 73.12 18⇓ *e*P **P** 13 01 21.3 +0.2
MA2 pmax pmax
comp=Z,21nm,1.0s
MA2 **Magadan** 73.12 18 P **P** 13 01 20.9 -0.2
comp=Z,24nm,1.5s
SBA **Scott Base** 74.09 170 P **P** 13 01 28.8 +2.2
SBA IAmb IAmb 13 01 40.7
comp=Z,27nm,0.9s
SBA **Scott Base** 74.09 170 P **P** 13 01 28.8 +2.2
SBA pmax pmax
comp=Z,27nm,0.9s
AB31 **Akbulak array** 75.44 326 *i* P **P** 13 01 32.4 -2.4
ABKAR **Akbulak array** 75.44 326 P **P** 13 01 32.7 -2.1
ABKAR IAmb IAmb 13 01 53.6
comp=Z,29nm,1.1s
ABKAR **Akbulak array** 75.44 326 P **P** 13 01 32.5 -2.3
ATD **Arta Tunnel** 75.55 284 P **P** 13 01 36.5 +0.2
ATD IAmb IAmb 13 01 37.6
comp=Z,40nm,1.0s
RAYN **Ar Rayn** 75.91 297 P **P** 13 01 36.1 -2.1
RAYN **Ar Rayn** 75.91 297 P **P** 13 01 36.2 -2.0
RAYN **Ar Rayn** 75.91 297 P **P** 13 01 36.1 -2.1
RAYN pmax pmax
comp=Z,20nm,0.9s
SEY **Seymchan** 76.29 16⇑ *e*P **P** 13 01 38.9 -0.5
SEY pmax pmax
comp=Z,24nm,1.0s
KIBK **Kibwezi** 77.92 269 P **P** 13 01 49.1 -0.6
KIBK IAmb IAmb 13 01 50.9
comp=Z,35nm,1.0s
KMBO **Kilima Mbogo** 78.88 270 P **P** 13 01 55.3 0.0
KMBO **Kilima Mbogo** 78.88 270 P P 13 01 48.6 -6.6
KMBO **Kilima Mbogo** 78.88 270 P **P** 13 01 55.3 0.0
KMBO pmax pmax
comp=Z,24nm,1.1s
FURI **Furi** 79.08 281 P **P** 13 01 57.7 +1.3
FURI IAmb IAmb 13 01 59.4
comp=Z,75nm,1.0s
SVE **Sverdlovsk** 79.20 333 *e*P **P** 13 01 53.9 -1.9
SVE pmax pmax
comp=Z,29nm,1.3s
ARU **Arti** 79.95 332 P **P** 13 01 57.9 -1.9
ARU **Arti** 79.95 332 *c i* P **P** 13 01 58.1 -1.7
ARU S **S** 13 12 00.6 +0.1
ARU pmax pmax
comp=Z,20nm,1.4s
TIXI **Tiksi** 80.27 4⇑ *e*P **P** 13 01 59.1 -2.1
TIXI pmax pmax
comp=Z,12nm,0.8s
POGA **Pongola** 81.33 244 P **P** 13 02 07.8 -0.1
QSPA **South Pole Qui** 81.64 180 P **P** 13 02 09.5 +0.5
QSPA IAmb IAmb 13 02 12.6
comp=Z,65nm,1.0s
QSPA **South Pole Qui** 81.64 180 P **P** 13 02 09.0 0.0
comp=Z,65nm,1.0s,baz=308,slow=1.4,SNR=76
comp=Z,65nm,1.0s
ELIB **Princess Elisa** 83.00 198 *d*P **P** 13 02 17.6 +1.6
comp=Z,30nm,1.1s
BELG **Belogornoye** 83.81 325⇑ *e*P **P** 13 02 17.6 -2.6
BELG pmax pmax
comp=Z,4.0nm,0.9s
KBZ **Khabaz** 83.86 316 P **P** 13 02 19.2 -1.4
comp=Z,4.3nm,0.9s,baz=168,slow=2.4,SNR=7.0
comp=Z,4.3nm,0.9s
BILL **Bilibino** 83.97 17⇓ *i* P **P** 13 02 18.7 -2.0
BILL *i* 13 02 25.0
BILL pmax pmax
comp=Z,9.0nm,1.3s
SHA1 **Shidzhatmaz** 84.02 316⇑ *e*P **P** 13 02 20.8 -1.0
KIV **Kislovodsk** 84.07 316 *e*P **P** 13 02 18.9 -3.0
KIV pmax pmax
comp=Z,5.0nm,1.1s
GRHM **Grahamstown, E** 85.31 237 P **P** 13 02 29.0 +0.5
KIRV **Kirov** 85.32 331 *d*e P **P** 13 02 25.6 -2.0
MBAR **Mbarara** 85.40 270 *c*e P **P** 13 02 28.8 -0.6
MBAR pmax pmax
comp=Z,42nm,1.5s
VSLR **Vesyoloye** 85.77 315⇑ *e*P **P** 13 02 29.1 -1.2
VSLR pmax pmax
comp=Z,32nm,0.9s
LSZ **Lusaka** 85.91 255 P **P** 13 02 31.8 0.0
LSZ **Lusaka** 85.91 255 P **P** 13 02 31.8 0.0
LSZ pmax pmax
comp=Z,50nm,0.9s
MMAI **Mount Meron Ar** 86.84 304 P **P** 13 02 35.5 -0.4
comp=Z,4.7nm,0.7s,baz=82,slow=7.7,SNR=6.3
comp=Z,4.7nm,0.7s
NVL **N'lazarevskaya** 86.85 199 *e*P **P** 13 02 36.9 +1.8
NVL pmax pmax
comp=Z,19nm,0.9s
BOSA **Boshof** 86.86 242 P **P** 13 02 36.8 +0.5
BOSA **Boshof** 86.86 242 P **P** 13 02 36.4 +0.2
comp=Z,42nm,0.9s,baz=100,slow=4.2,SNR=53
comp=Z,42nm,0.9s
BOSA **Boshof** 86.86 242 P **P** 13 02 36.8 +0.5
BOSA pmax pmax
comp=Z,45nm,0.9s
VRH **Novokhopyorsk** 86.86 323 *e*P **P** 13 02 32.5 -3.0
VRH pmax pmax
comp=Z,25nm,0.7s
LBTB **Lobatse** 87.04 245 P **P** 13 02 37.8 +0.6
LBTB **Lobatse** 87.04 245 P **P** 13 02 37.8 +0.6
LBTB pmax pmax
comp=Z,57nm,1.0s
VORD **Divnogorie** 88.27 322 *e*P **P** 13 02 37.8 -4.4
VORD pmax pmax
comp=Z,10.0nm,0.9s
VSR **Storozhevoye** 88.41 322 *e*P P 13 02 38.1 -4.8
VSR pmax pmax
comp=Z,20nm,1.0s
VORR **Voronezh** 88.50 323 *e*P **P** 13 02 41.3 -2.0
VORR pmax pmax
comp=Z,23nm,0.4s
LPSR **Galich'ya Gora** 88.92 323 *e*P **P** 13 02 41.7 -3.5
LPSR pmax pmax
comp=Z,10.0nm,1.0s
TROLL **Troll, Antarti** 89.21 197 ⇑P **P** 13 02 48.2 +1.6
comp=Z,761nm,0.6s
BR131 **Keskin Array S** 89.58 310 P **P** 13 02 47.1 -1.8
BR131 **Keskin Array S** 89.58 310 *d*e P **P** 13 02 46.9 -2.0
BRTR **Keskin Array B** 89.58 310 P **P** 13 02 47.1 -1.8
BRTR **Keskin Array B** 89.58 310 P **P** 13 02 47.0 -2.0
comp=Z,4.3nm,0.9s,baz=123,slow=6.1,SNR=22
BRTR PKKPbc **PKKPbc** 13 20 23.4 -1.1
comp=Z,0.8nm,0.9s,baz=316,slow=10,SNR=3.6
comp=Z,4.3nm,0.9s
BR105 **Keskin Array S** 89.60 310 P **P** 13 02 47.1 -1.9
comp=Z,9.9nm,1.1s,comp=Z,69nm
BR106 **Keskin Array S** 89.60 310 P **P** 13 02 47.1 -1.9
comp=Z,7.1nm,1.1s,comp=Z,76nm
SNAA **Sanae** 90.86 196 P **P** 13 02 55.4 +1.3
SNAA IAmb IAmb 13 03 03.7
comp=Z,27nm,0.9s
SNAA **Sanae** 90.86 196 ⇑P **P** 13 02 55.6 +1.5
comp=Z,295nm,0.7s
SNAA **Sanae** 90.86 196 P **P** 13 02 54.5 +0.3
comp=Z,22nm,1.0s,baz=137,slow=4.5,SNR=39
comp=Z,22nm,1.0s
SNAA **Sanae** 90.86 196⇑ *e*P **P** 13 02 55.5 +1.3
SNAA pmax pmax
comp=Z,27nm,1.2s
OBN **Obninsk** 90.89 326 *i* P **P** 13 02 55.5 +1.1
OBN pmax pmax
comp=Z,5.0nm,1.0s
VNA2 **Neumayer--Watz** 92.50 196 ⇑P **P** 13 03 03.0 +1.3
comp=Z,13nm,0.6s,baz=127,slow=3.8
VNA1 **Neumayer--Stat** 92.90 196 ⇑P **P** 13 03 04.9 +1.5
comp=Z,19nm,1.2s
VNA3 **Neumayer Olymp** 92.92 195 ⇑P **P** 13 03 04.6 +0.9
comp=Z,8.5nm,0.7s
SDPT **Sand Point** 93.03 35 P **P** 13 03 02.6 -1.7
baz=260
F15K **North Star Dit** 93.12 24 P **P** 13 03 03.8 -0.7
baz=257
C16K **Lisburne Hills** 93.46 21 P **P** 13 03 05.7 -0.3
baz=256
L15K **Ungalak Mounta** 93.66 28 P **P** 13 03 07.0 -0.1
baz=259
G16K **Koyuk River** 93.99 25 P **P** 13 03 08.1 -0.4
baz=259
O15K **Ungalikthiuk R** 94.04 31 P **P** 13 03 08.3 -0.6
baz=261
N15K **Kwethluk River** 94.07 30 P **P** 13 03 08.6 -0.4
baz=260
D17K **Noatak River** 94.16 22 P **P** 13 03 09.1 -0.1
baz=258
C17K **DeLong Mountai** 94.28 21 P **P** 13 03 09.4 -0.5
baz=258
J16K **Anvik River** 94.35 27 P **P** 13 03 10.5 +0.2
baz=260
I17K **Unalakleet** 94.42 26 P **P** 13 03 10.3 -0.2
baz=260
AKASG **Malin Array Be** 94.47 320 P **P** 13 03 06.3 -4.7
comp=Z,1.6nm,0.8s,baz=85,slow=3.2,SNR=5.4
L16K **Owhat River** 94.61 28 P **P** 13 03 11.5 +0.1
baz=261
F17K **Baldwin Pennin** 94.63 24 P **P** 13 03 11.4 0.0
baz=260
G17K **Kiwalik Mounta** 94.71 25 P **P** 13 03 11.8 0.0
baz=262
M16K **Timber Creek** 94.75 29 P **P** 13 03 11.6 -0.6
baz=262
N16K **Nishlik Lake** 94.77 30 P **P** 13 03 12.0 -0.3
baz=262
H17K **Granite Mounta** 94.92 25 P **P** 13 03 12.8 0.0
baz=261
O16K **Kokwok River B** 94.98 31 P **P** 13 03 12.0 -1.1
baz=262
C18K **Utuk River** 95.03 21 P **P** 13 03 12.7 -0.6
baz=260
E18K **Tukpahlearik C** 95.05 23 P **P** 13 03 13.4 0.0
baz=261
J17K **VABM Dome** 95.05 27 P **P** 13 03 12.9 -0.5
baz=262
L17K **Donlin** 95.23 28 P **P** 13 03 13.9 -0.3
baz=262
F18K **Selawik** 95.29 24 P **P** 13 03 13.8 -0.6
baz=261
K17K **Iditarod** 95.30 27 P **P** 13 03 14.0 -0.7
baz=262
A19K **Wainwright** 95.34 20 P **P** 13 03 14.9 +0.3
baz=260
M17K **Holitna River** 95.53 29 P **P** 13 03 15.3 -0.4
baz=263
N17K **Nushagak Hills** 95.55 30 P **P** 13 03 15.2 -0.6
baz=263
R17L **Mt. Peulik Vol** 95.63 33 P **P** 13 03 15.0 -1.3
baz=263
C19K **Lookout Ridge** 95.68 21 P **P** 13 03 16.2 -0.1
baz=262
L18K **Granite Mounta** 95.99 28 P **P** 13 03 17.6 -0.1
baz=264
F19K **Shaleruckik Mo** 96.06 23 P **P** 13 03 17.2 -0.7
baz=263
J18K **Innoko River** 96.11 27 P **P** 13 03 17.8 -0.5
baz=264
D19K **Kuna River** 96.13 22 P **P** 13 03 17.8 -0.5
baz=263
N18K **Kilae Creek** 96.20 30 P **P** 13 03 17.7 -1.1
baz=264
G19K **Purcell Mounta** 96.25 24 P **P** 13 03 18.4 -0.4
baz=264
M18K **Stony River** 96.32 29 P **P** 13 03 18.3 -1.0
baz=264
E19K **Redstone River** 96.34 23 P **P** 13 03 19.2 -0.1
baz=264
H19K **Roundabout Mou** 96.45 25 P **P** 13 03 19.7 -0.1
baz=264
O18K **Koktuh Hills** 96.46 31 IAMs_20 IAMs_20 13 35 24.7
comp=Z,4μm,21.0s
B20K **Meade River** 96.64 20 P **P** 13 03 20.4 -0.1
baz=264
R18K **Karluk** 96.64 33 P **P** 13 03 18.9 -1.8
baz=265
J19K **Poorman** 96.65 26 P **P** 13 03 19.5 -1.2
baz=265
SII **Sitkinak Islan** 96.70 34 P **P** 13 03 19.9 -1.2
baz=265
D20K **Etivluk River** 96.70 22 P **P** 13 03 20.1 -0.8
baz=264
E20K **Nigu River** 96.81 22 P **P** 13 03 21.1 -0.4
baz=265
L19K **White Mountain** 96.84 28 P **P** 13 03 21.2 -0.5
baz=265
F20K **Avaraart Lake** 96.88 23 P **P** 13 03 21.5 -0.2
baz=265
N19K **Bonanza Creek** 96.90 30 P **P** 13 03 21.1 -0.9
baz=265
M19K **Big River Lodg** 97.03 28 P **P** 13 03 21.8 -0.7
baz=266
H20K **Anofleneega Mo** 97.09 25 P **P** 13 03 21.8 -1.0
baz=266
I20K **Naaghedeneel** 97.21 26 P **P** 13 03 22.7 -0.5
baz=266
OHAK **Old Harbor** 97.24 33 P **P** 13 03 23.0 -0.5
baz=266
K20K **Telida** 97.29 27 P **P** 13 03 23.3 -0.3
baz=266
J20K **Nowinta River** 97.31 26 P **P** 13 03 23.2 -0.5
baz=266
L20K **Farewell, AK** 97.31 28 P **P** 13 03 23.0 -0.8
baz=266
C21K **Knifeblade Rid** 97.40 21 P **P** 13 03 23.3 -0.7
baz=266
P19K **Oil Pt** 97.44 31 P **P** 13 03 23.5 -0.9
baz=266
A22K **Sinclair Lake** 97.46 19 P **P** 13 03 23.8 -0.4
baz=266
B21K **Ikpikpuk River** 97.49 21 P **P** 13 03 23.7 -0.6
baz=266
M20K **Styx River** 97.63 29 P **P** 13 03 24.0 -1.3
baz=267
E21K **Killik River** 97.65 22 P **P** 13 03 24.9 -0.3
baz=267
KDAK **Kodiak Island** 97.66 33 P **P** 13 03 24.3 -1.1
baz=267
G21K **Allakaket** 97.72 24 P **P** 13 03 25.3 -0.2
baz=267
F21K **Alatna River** 97.77 23 P **P** 13 03 25.7 -0.1
baz=267
O20K **Slope Mountain** 97.77 30 P **P** 13 03 25.3 -0.6
baz=267
Q20K **Shuyak Island** 97.81 32 P **P** 13 03 25.7 -0.3
baz=267
B22K **Teshekpuk Lake** 97.94 20 P **P** 13 03 26.1 -0.3
baz=268
H21K **Melozitna Rive** 97.97 25 P **P** 13 03 26.2 -0.5
baz=268
D22K **Ayikyak River** 98.14 21 P **P** 13 03 27.1 -0.3
baz=268
F22K **John River** 98.28 23 P **P** 13 03 27.9 -0.1
baz=268
I21K **Tanana** 98.29 25 P **P** 13 03 27.5 -0.6
baz=268
SKT **Skwentna** 98.39 28 P **P** 13 03 28.3 -0.3
baz=268
CAPN **Captain Cook N** 98.53 30 P **P** 13 03 28.7 -0.5
baz=268
G22K **Bettles** 98.53 23 P **P** 13 03 28.6 -0.5
baz=269
H22K **Ishtalitna Cre** 98.56 25 P **P** 13 03 29.2 -0.2
baz=269
BPAW **Bear Paw Mtn.** 98.69 26 P **P** 13 03 29.3 -0.7
baz=269
MLY **Manley** 98.81 25 P **P** 13 03 30.3 -0.2
baz=269
D23K **Nanushuk River** 98.87 21 P **P** 13 03 30.5 -0.1
baz=270
COLD **Coldfoot** 99.05 23 P **Pdif** 13 03 31.1 -0.4
baz=270
G23K **Bananza Creek** 99.12 24 P **Pdif** 13 03 31.6 -0.2
baz=270
O22K **Cooper Landing** 99.23 30 P **Pdif** 13 03 32.0 -0.4
baz=269
E23K **Chandalar** 99.26 22 P **Pdif** 13 03 32.8 +0.3
baz=271
H23K **Yukon River** 99.32 25 P **Pdif** 13 03 31.7 -1.0
baz=270
SEW **Seward** 99.36 30 P **Pdif** 13 03 31.7 -1.3
baz=270
I23K **Minto, Yukon-K** 99.40 25 P **Pdif** 13 03 31.7 -1.3
baz=270
PMR **Palmer** 99.52 29 P **Pdif** 13 03 32.7 -0.9
baz=270
NEA2 **Nenana** 99.53 26 P **Pdif** 13 03 32.2 -1.5
baz=271
MCK **McKinley** 99.60 27 P **Pdif** 13 03 32.8 -1.2
baz=271
WAT1 **Susitna Watana** 99.78 28 P **Pdif** 13 03 33.8 -1.1
baz=271
KNK **Knik Glacier** 99.84 29 P **Pdif** 13 03 33.5 -1.7
baz=271
SML **Sawmill** 99.90 29 P **Pdif** 13 03 33.8 -1.6
baz=271
PWL **Port Wells** 99.91 30 P **Pdif** 13 03 34.1 -1.3
baz=271
F24K **Squaw Lake** 99.94 23 P **Pdif** 13 03 34.7 -0.8
baz=272
H24K **Noodor Dome** 100.00 25 P **Pdif** 13 03 35.3 -0.5
baz=272
G24K **Hadweenzic Riv** 100.13 24 P **Pdif** 13 03 35.5 -0.8
baz=272
WAT6 **Susitna Watana** 100.16 28 P **Pdif** 13 03 36.1 -0.6
baz=272
POKR **Poker Plat Res** 100.21 25 IAMs_20 IAMs_20 13 58 05.6
comp=Z,3μm,21.0s
DHY **Denali Highway** 100.31 27 IAMs_20 IAMs_20 13 36 43.4
comp=Z,3μm,21.0s
SCM **Sheep Creek Mo** 100.38 29 P **Pdif** 13 03 37.9 +0.3
baz=272
ILAR **Eielson Array** 100.46 26 P **Pdif** 13 03 35.3 -2.5
comp=Z,0.5nm,0.7s,baz=244,slow=5.1,SNR=7.6
ILAR PP **PP** 13 07 41.8 -2.9
comp=Z,0.9nm,1.0s,baz=263,slow=7.7,SNR=5.3
ILAR PKKPbc **PKKPbc** 13 19 53.2 -2.8
comp=Z,0.8nm,1.0s,baz=90,slow=0.9,SNR=4.5
ILAR PKKP **PKKPdf** 13 20 00.0 -1.1
comp=Z,0.5nm,0.8s,baz=125,slow=0.7,SNR=4.2
G25K **Bearman Lake** 100.67 24 P **Pdif** 13 03 38.8 +0.2
baz=274
H25L **Birch Creek** 100.82 24 P **Pdif** 13 03 39.1 -0.2
baz=274
M24K **Tolsona, Glenn** 100.91 28 IAMs_20 IAMs_20 13 50 56.2
comp=Z,3μm,21.0s
J25K **Salcha River,** 101.12 26 IAMs_20 IAMs_20 13 36 01.6
comp=Z,3μm,20.0s
PAX **Paxson** 101.19 27 P **Pdif** 13 03 40.4 -0.8
baz=274
EYAK **Cordova Ski Ar** 101.19 30 P **Pdif** 13 03 40.7 -0.4
baz=273
F26K **Sheenjek River** 101.35 23 P **Pdif** 13 03 41.7 0.0
baz=276
HARP **HAARP** 101.37 28 P **Pdif** 13 03 41.3 -0.6
baz=274

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OKC | Ostrava-Krasne | 101.50 | 319 | AMS | AMS | 14 07 40.0 | | |
| | comp=Z,2µm,18.8s | | | | | | | |
| G26K | Porcupine Rive | 101.57 | 23 | P | Pdif | 13 03 41.9 | -0.8 | |
| | baz=276 | | | | | | | |
| SCRK | Sand Creek | 101.77 | 26 | IAMs_20 | IAMs_20 | 13 58 46.9 | | |
| | comp=Z,5µm,22.0s | | | | | | | |
| SCRK | Sand Creek | 101.77 | 26 | P | Pdif | 13 03 42.8 | -1.0 | |
| | baz=275 | | | | | | | |
| J26L | Joseph Creek | 101.91 | 26 | IAMs_20 | IAMs_20 | 13 40 41.4 | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| J26L | Joseph Creek | 101.91 | 26 | P | Pdif | 13 03 43.6 | -0.8 | |
| | baz=276 | | | | | | | |
| I26K | Coal Creek Min | 102.00 | 25 | P | Pdif | 13 03 44.0 | -0.6 | |
| | baz=276 | | | | | | | |
| GLB | Gilahina Butte | 102.08 | 29 | IAMs_20 | IAMs_20 | 13 54 32.1 | | |
| | comp=Z,3µm,21.0s | | | | | | | |
| L26K | Log Cabin Wild | 102.15 | 27 | IAMs_20 | IAMs_20 | 13 36 43.9 | | |
| | comp=Z,3µm,21.0s | | | | | | | |
| VRDI | Verde Repeater | 102.27 | 29 | IAMs_20 | IAMs_20 | 13 59 16.1 | | |
| | comp=Z,4µm,22.0s | | | | | | | |
| D27M | Malcolm River | 102.31 | 21 | IAMs_20 | IAMs_20 | 13 38 05.8 | | |
| | comp=Z,3µm,21.0s | | | | | | | |
| M26K | Nabesna, AK | 102.37 | 28 | IAMs_20 | IAMs_20 | 13 53 04.8 | | |
| | comp=Z,3µm,22.0s | | | | | | | |
| M26K | Nabesna, AK | 102.37 | 28 | P | Pdif | 13 03 45.6 | -0.8 | |
| | baz=276 | | | | | | | |
| G27K | Doyon Strip | 102.42 | 23 | P | Pdif | 13 03 46.0 | -0.5 | |
| | baz=278 | | | | | | | |
| BGLC | Bering Glacier | 102.44 | 30 | P | Pdif | 13 03 46.1 | -0.6 | |
| | baz=275 | | | | | | | |
| MCARA | McCarthy VSAT | 102.46 | 29 | P | Pdif | 13 03 46.1 | -0.6 | |
| | baz=276 | | | | | | | |
| CRQE | Cirque | 102.48 | 30 | P | Pdif | 13 03 46.3 | -0.8 | |
| | baz=275 | | | | | | | |
| H27K | Steamboat Moun | 102.55 | 24 | P | Pdif | 13 03 46.8 | -0.3 | |
| | baz=278 | | | | | | | |
| I27K | Kandik River | 102.60 | 25 | P | Pdif | 13 03 47.8 | +0.4 | |
| | baz=278 | | | | | | | |
| K27K | Chicken | 102.61 | 26 | IAMs_20 | IAMs_20 | 13 58 21.9 | | |
| | comp=Z,3µm,21.0s | | | | | | | |
| K27K | Chicken | 102.61 | 26 | P | Pdif | 13 03 47.6 | +0.2 | |
| | baz=277 | | | | | | | |
| L27K | Beaver Creek, | 102.83 | 27 | P | Pdif | 13 03 48.6 | +0.2 | |
| | baz=277 | | | | | | | |
| ISLE | Juniper Island | 102.87 | 30 | IAMs_20 | IAMs_20 | 13 53 33.1 | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| M27K | Edge Creek, AK | 102.89 | 28 | P | Pdif | 13 03 48.9 | 0.0 | |
| | baz=277 | | | | | | | |
| EGAK | Eagle | 102.90 | 25 | P | Pdif | 13 03 48.5 | -0.2 | |
| | baz=278 | | | | | | | |
| E28M | Babbage River | 102.93 | 21 | P | Pdif | 13 03 48.6 | -0.2 | |
| | baz=280 | | | | | | | |
| F28M | Old Crow | 102.98 | 22 | IAMs_20 | IAMs_20 | 13 36 49.6 | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| TREC | Trest | 103.25 | 319 | AMS | AMS | 14 06 10.0 | | |
| | comp=Z,3µm,19.9s | | | | | | | |
| CTG | Chitna Glacier | 103.31 | 29 | P | Pdif | 13 03 50.0 | -0.7 | |
| | baz=277 | | | | | | | |
| I28M | Miner Creek | 103.31 | 25 | IAMs_20 | IAMs_20 | 13 57 58.5 | | |
| | comp=Z,5µm,22.0s | | | | | | | |
| I28M | Miner Creek | 103.31 | 25 | P | Pdif | 13 03 49.8 | -0.8 | |
| | baz=279 | | | | | | | |
| YUK3 | Moose Creek | 103.63 | 28 | P | Pdif | 13 03 51.7 | -0.6 | |
| | baz=278 | | | | | | | |
| GOPC | GO Pecny, Ondr | 103.67 | 319 | AMS | AMS | 14 08 20.0 | | |
| | comp=Z,2µm,19.4s | | | | | | | |
| DAWY | Dawson | 103.77 | 26 | P | Pdif | 13 03 52.0 | -0.5 | |
| | baz=279 | | | | | | | |
| PVCC | Panska Ves | 103.78 | 320 | AMS | AMS | 14 08 40.0 | | |
| | comp=Z,2µm,18.8s | | | | | | | |
| H29M | Whitestone | 103.82 | 24 | P | Pdif | 13 03 52.5 | -0.2 | |
| | baz=281 | | | | | | | |
| G29M | Pine Creek | 103.82 | 23 | P | Pdif | 13 03 53.2 | +0.5 | |
| | baz=281 | | | | | | | |
| PRU | Pruhonice | 103.83 | 319 | AMS | AMS | 14 08 10.0 | | |
| | comp=Z,2µm,21.2s | | | | | | | |
| PRA | Prague | 103.89 | 319 | AMS | AMS | 14 03 50.0 | | |
| | comp=Z,2µm,20.0s | | | | | | | |
| O28M | Mount Upton | 103.90 | 29 | P | Pdif | 13 03 53.8 | +0.2 | |
| | baz=278 | | | | | | | |
| I29M | Ogilvie Camp, | 104.00 | 25 | IAMs_20 | IAMs_20 | 13 56 23.7 | | |
| | comp=Z,4µm,22.0s | | | | | | | |
| CKRC | Cesky Krumlov | 104.05 | 318 | AMS | AMS | 14 03 40.0 | | |
| | comp=Z,3µm,20.6s | | | | | | | |
| RICC | Richard | 104.07 | 320 | AMS | AMS | 14 08 20.0 | | |
| | comp=Z,3µm,17.9s | | | | | | | |
| EPYK | Eagle Plains | 104.44 | 23 | P | Pdif | 13 03 55.7 | +0.2 | |
| | baz=282 | | | | | | | |
| PNL | Peninsula | 104.44 | 31 | P | Pdif | 13 03 55.6 | 0.0 | |
| | baz=278 | | | | | | | |
| M29M | Somme Creek | 104.45 | 28 | P | Pdif | 13 03 55.5 | -0.2 | |
| | baz=280 | | | | | | | |
| L29M | L29M | 104.49 | 27 | IAMs_20 | IAMs_20 | 13 51 03.8 | | |
| | comp=Z,4µm,21.0s | | | | | | | |
| L29M | L29M | 104.49 | 27 | P | Pdif | 13 03 55.7 | -0.1 | |
| | baz=280 | | | | | | | |
| HSKC | Hora Svate Kat | 104.49 | 320 | AMS | AMS | 14 07 40.0 | | |
| | comp=Z,3µm,19.0s | | | | | | | |
| G30M | tAoh Zraii Nji | 104.50 | 23 | P | Pdif | 13 03 55.5 | -0.3 | |
| | baz=283 | | | | | | | |
| KHC | Kasperske Hory | 104.51 | 319 | AMS | AMS | 14 03 10.0 | | |
| | comp=Z,3µm,20.1s | | | | | | | |
| K29M | Barlow Dome | 104.62 | 26 | P | Pdif | 13 03 56.4 | -0.1 | |
| | baz=281 | | | | | | | |
| CLL | Collm | 104.70 | 321 | *e*PKiKP | PKiKP | 13 08 13.0 | +0.6 | |
| CLL | | | | *e*PP | PP | 13 08 19.0 | +2.2 | |
| CLL | | | | AMS | AMS | 14 03 00.0 | | |
| | comp=Z,3µm,19.5s | | | | | | | |
| I30M | Mount Dempster | 104.82 | 25 | P | Pdif | 13 03 56.8 | -0.5 | |
| | baz=282 | | | | | | | |
| J30M | Hart River | 104.98 | 25 | IAMs_20 | IAMs_20 | 13 55 49.7 | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| J30M | Hart River | 104.98 | 25 | P | PKiKP | 13 08 12.5 | -0.2 | |
| | baz=282 | | | | | | | |
| INK | Inuvik | 105.16 | 21 | P | PKiKP | 13 08 13.0 | +0.3 | |
| | baz=286 | | | | | | | |
| M30M | Minto, Yukon | 105.19 | 27 | P | PKiKP | 13 08 13.4 | +0.4 | |
| | baz=281 | | | | | | | |
| G31M | Satah River | 105.26 | 23 | P | PKiKP | 13 08 13.6 | +0.6 | |
| | baz=285 | | | | | | | |
| N30M | Aishikik Lake | 105.27 | 28 | P | PKiKP | 13 08 13.5 | +0.2 | |
| | baz=281 | | | | | | | |
| F31M | Tsiigehtchic | 105.32 | 22 | IAMs_20 | IAMs_20 | 13 37 41.3 | | |
| | comp=Z,4µm,22.0s | | | | | | | |
| SKAG | Skagway | 106.52 | 30 | P | PKiKP | 13 08 15.7 | +0.2 | |
| | baz=282 | | | | | | | |
| P32M | Atlin | 107.29 | 30 | P | PKiKP | 13 08 17.7 | +0.7 | |
| | baz=283 | | | | | | | |
| C36M | Paulatuk | 108.00 | 19 | IAMs_20 | IAMs_20 | 13 56 51.1 | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| C36M | Paulatuk | 108.00 | 19 | P | PKiKP | 13 08 19.0 | +1.0 | |
| | baz=295 | | | | | | | |
| Q32M | Nakina River | 108.17 | 30 | P | PKiKP | 13 08 19.1 | +0.2 | |
| | baz=284 | | | | | | | |
| RCHB | Rochefort | 109.75 | 320 | *d*Lg | Lg | 12 40 54.2 | | |
| TAM | Tamanrasset | 112.19 | 291 | IAMs_20 | IAMs_20 | 14 03 25.2 | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| EKA | Eskdalemuir Ar | 113.29 | 327 | PKKPbc | PKKPbc | 13 19 13.8 | -1.8 | |
| | comp=Z,0.9nm,0.7s,baz=255,slow=2.8,SNR=4.5 | | | | | | | |
| YKA | Yellowknife Ar | 114.72 | 23 | PKP | PKiKP | 13 08 28.3 | -2.6 | |
| | comp=Z,2.1nm,0.8s,baz=303,slow=1.3,SNR=4.6 | | | | | | | |
| YKA | Yellowknife Ar | 114.72 | 23 | *e*PKiKP | PKiKP | 13 08 29.2 | -1.7 | |
| YKA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| TORD | Torodi Ar. Bea | 115.60 | 281 | PKP | PKPdf | 13 08 31.6 | -2.3 | |
| | comp=Z,2.0nm,0.7s,baz=62,slow=2.3,SNR=15 | | | | | | | |
| GNW | Green Mountain | 116.83 | 41 | | PKPdf | 13 08 34.2 | -1.2 | |
| H04D | Lebanon | 117.79 | 44 | PKPdf | PKPdf | 13 08 36.7 | -0.6 | |
| HUMO | Hull Mountain | 118.17 | 46 | | PKPdf | 13 08 37.5 | -0.8 | |
| I04A | Tendick Farm, | 118.23 | 45 | | PKPdf | 13 08 37.1 | -1.2 | |
| PNT | Penticton | 118.24 | 38 | PKiKP | PKiKP | 13 08 44.5 | +6.3 | |
| ESDC | Sonseca Array | 118.37 | 311 | PKP | PKPdf | 13 08 36.5 | -2.2 | |
| | comp=Z,0.9nm,0.9s,baz=20,slow=2.8,SNR=9.9 | | | | | | | |
| ESDC | | | | PKKPbc | PKKPbc | 13 18 58.1 | +0.6 | |
| | comp=Z,1.4nm,1.2s,baz=260,slow=3.9,SNR=9.2 | | | | | | | |
| J05D | Fort Rock, OR | 119.19 | 45 | PKPdf | PKPdf | 13 08 39.5 | -0.8 | |
| PINE | Pine Mountain | 119.25 | 44 | PKPdf | PKPdf | 13 08 39.9 | -0.5 | |
| G08A | Pilot Rock | 120.10 | 42 | | PKPdf | 13 08 41.1 | -0.9 | |
| NEW | Newport | 120.17 | 38 | PKPdf | PKPdf | 13 08 41.7 | -0.2 | |
| NEW | Newport | 120.17 | 38 | P | PKPdf | 13 08 41.8 | -0.1 | |
| | baz=294 | | | | | | | |
| NEW | Newport | 120.17 | 38 | PKiKP | PKPdf | 13 08 41.7 | -0.2 | |
| F10A | Beach Ranch, E | 120.98 | 41 | PKPdf | PKPdf | 13 08 42.9 | -0.7 | |
| WVOR | Wild Horse Val | 121.27 | 45 | | PKPdf | 13 08 43.9 | -0.4 | |
| WVOR | Wild Horse Val | 121.27 | 45 | PKiKP | PKPdf | 13 08 43.9 | -0.4 | |
| BMO | Blue Mountains | 121.35 | 42 | | PKPdf | 13 08 42.7 | -1.6 | |
| BMO | Blue Mountains | 121.35 | 42 | PKiKP | PKPdf | 13 08 42.7 | -1.6 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PAHR | Pah Rah Range | 121.57 | 48 | | PKPdf | 13 08 44.3 | -0.7 | |
| PNTR | Pine Nut | 121.58 | 49 | PKPdf | PKPdf | 13 08 44.5 | -0.7 | |
| SMMC | Simmler | 122.25 | 53 | P | PKPdf | 13 08 46.3 | 0.0 | |
| | baz=284 | | | | | | | |
| PKM | Mcpherson Peak | 122.49 | 54 | P | PKPdf | 13 08 46.8 | -0.2 | |
| | baz=284 | | | | | | | |
| SBC | Santa Barbara | 122.67 | 54 | P | PKPdf | 13 08 47.0 | -0.1 | |
| | baz=283 | | | | | | | |
| MSO | Missoula | 122.72 | 39 | P | PKPdf | 13 08 46.1 | -0.8 | |
| | baz=296 | | | | | | | |
| NVAR | Mina Array Bea | 122.74 | 49 | PKP | PKPdf | 13 08 46.6 | -0.8 | |
| | comp=Z,2.9nm,0.7s,baz=251,slow=1.8,SNR=32 | | | | | | | |
| NVAR | | | | PKKPbc | PKKPab | 13 18 40.6 | +0.2 | |
| | comp=Z,0.3nm,0.7s,baz=120,slow=5.3,SNR=2.8 | | | | | | | |
| ARVC | Arvin | 123.22 | 53 | P | PKPdf | 13 08 47.4 | -0.7 | |
| | baz=284 | | | | | | | |
| ISA | Isabella, Lake | 123.36 | 53 | P | PKPdf | 13 08 47.5 | -1.0 | |
| | baz=285 | | | | | | | |
| CWC | Cottonwood Cre | 123.47 | 52 | P | PKPdf | 13 08 47.7 | -1.0 | |
| | baz=286 | | | | | | | |
| HLID | Hailey | 123.76 | 42 | P | PKPdf | 13 08 48.8 | -0.3 | |
| | baz=293 | | | | | | | |
| DECC | Green Verdugo | 123.83 | 54 | P | PKPdf | 13 08 49.3 | 0.0 | |
| | baz=284 | | | | | | | |
| GRAC | Grapevine Rang | 123.86 | 51 | P | PKPdf | 13 08 49.4 | 0.0 | |
| | baz=287 | | | | | | | |
| EDW2 | Edwards Air Fo | 123.94 | 53 | P | PKPdf | 13 08 49.7 | +0.1 | |
| | baz=285,SNR=6.5 | | | | | | | |
| SCI2 | San Clemente I | 123.95 | 56 | P | PKPdf | 13 08 49.0 | -0.6 | |
| | baz=283 | | | | | | | |
| CIS | Catalina Islan | 123.96 | 55 | P | PKPdf | 13 08 49.1 | -0.5 | |
| | baz=284 | | | | | | | |
| FMP | Fort Macarthur | 123.99 | 55 | P | PKPdf | 13 08 49.1 | -0.5 | |
| | baz=284 | | | | | | | |
| MPMC | Manual Prospec | 124.03 | 52 | P | PKPdf | 13 08 49.5 | -0.4 | |
| | baz=286 | | | | | | | |
| LRMC | Lamel Mtn Rad | 124.03 | 53 | P | PKPdf | 13 08 49.4 | -0.5 | |
| | baz=285 | | | | | | | |
| BFSC | Mount Baldy Ra | 124.37 | 54 | P | PKPdf | 13 08 49.7 | -0.8 | |
| | baz=285 | | | | | | | |
| FURC | Furnace Creek, | 124.40 | 51 | P | PKiKP | 13 08 50.4 | -0.1 | |
| | baz=287 | | | | | | | |
| EGMT | Eagleton | 124.68 | 36 | P | PKPdf | 13 08 50.1 | -0.6 | |
| | baz=300 | | | | | | | |
| BOZ | Bozeman (W) | 124.71 | 39 | P | PKPdf | 13 08 50.5 | -0.4 | |
| | baz=297 | | | | | | | |
| TPNV | Topopah Spring | 124.73 | 51 | P | PKPdf | 13 08 50.7 | -0.5 | |
| | baz=288 | | | | | | | |
| GSC | Goldstone, Bar | 124.77 | 53 | P | PKPdf | 13 08 51.0 | -0.2 | |
| | baz=286 | | | | | | | |
| R11B | Troy Canyon, C | 124.80 | 49 | | PKPdf | 13 08 50.8 | -0.5 | |
| R11B | Troy Canyon, C | 124.80 | 49 | P | PKPdf | 13 08 50.9 | -0.4 | |
| | baz=289 | | | | | | | |
| MURC | Murrieta | 124.91 | 55 | P | PKPdf | 13 08 51.1 | -0.3 | |
| | baz=284 | | | | | | | |
| BBRC | Big Bear Solar | 124.96 | 54 | P | PKPdf | 13 08 51.5 | -0.3 | |
| | baz=285 | | | | | | | |
| SHOC | Shoshone, Teco | 125.02 | 52 | P | PKiKP | 13 08 52.0 | +0.1 | |
| | baz=287 | | | | | | | |
| 109C | Camp Elliot, M | 125.15 | 56 | P | PKiKP | 13 08 52.1 | -0.1 | |
| | baz=284 | | | | | | | |
| HEC | Hector,Ludlow | 125.27 | 53 | P | PKiKP | 13 08 52.5 | 0.0 | |
| | baz=286 | | | | | | | |
| YHL | Hebgen Lake | 125.32 | 40 | PKPdf | PKPdf | 13 08 52.0 | -0.2 | |
| TUQ | Turquoise Moun | 125.43 | 52 | P | PKPdf | 13 08 52.6 | +0.1 | |
| | baz=287 | | | | | | | |
| PFO | Pinyon Flats O | 125.50 | 55 | PKPdf | PKPdf | 13 08 51.5 | -1.1 | |
| PFO | Pinyon Flats O | 125.50 | 55 | P | PKiKP | 13 08 53.0 | -0.1 | |
| | baz=285,SNR=5.2 | | | | | | | |
| PFO | Pinyon Flats O | 125.50 | 55 | PKiKP | PKPdf | 13 08 51.6 | -1.1 | |
| PRN | Pahroc Range | 125.50 | 50 | PKPdf | PKiKP | 13 08 53.0 | +0.1 | |
| TPFO | Pinon Flats | 125.50 | 55 | P | PKiKP | 13 08 53.0 | -0.1 | |
| | baz=285,SNR=6.0 | | | | | | | |
| MONP2 | Monument Peak | 125.71 | 55 | P | PKPdf | 13 08 53.4 | +0.1 | |
| | baz=285,SNR=5.4 | | | | | | | |
| BELC | Belle Mtn. Jos | 125.77 | 54 | P | PKiKP | 13 08 53.7 | +0.1 | |
| | baz=286,SNR=6.2 | | | | | | | |
| GMRC | Granite Mounta | 125.82 | 53 | P | PKiKP | 13 08 53.6 | 0.0 | |
| | baz=286,SNR=7.0 | | | | | | | |
| H17A | Grant Village | 125.92 | 40 | P | PKiKP | 13 08 53.9 | +0.1 | |
| | baz=297 | | | | | | | |
| FXWY | Fox Creek | 125.97 | 41 | | PKPdf | 13 08 52.7 | -0.7 | |
| IKP | In-Ko-Pah, Jac | 126.03 | 56 | P | PKPdf | 13 08 53.5 | -0.2 | |
| | baz=285 | | | | | | | |
| TPAW | Teton Pass | 126.08 | 41 | | PKPdf | 13 08 52.2 | -1.5 | |
| DUG | Dugway, Tooele | 126.17 | 46 | PKPdf | PKPdf | 13 08 52.8 | -1.0 | |
| DUG | Dugway, Tooele | 126.17 | 46 | P | PKPdf | 13 08 54.0 | +0.2 | |
| | baz=292 | | | | | | | |
| DUG | Dugway, Tooele | 126.17 | 46 | PKiKP | PKPdf | 13 08 52.8 | -1.0 | |
| V12A | Nelson | 126.18 | 52 | | PKPdf | 13 08 53.9 | 0.0 | |
| SWSC | Sam W. Stewart | 126.20 | 55 | P | PKiKP | 13 08 54.7 | +0.4 | |
| | baz=285 | | | | | | | |
| REDW | Red Top Meadow | 126.20 | 41 | | PKPdf | 13 08 53.3 | -0.6 | |
| BC3 | Big Chuckawall | 126.29 | 54 | P | PKiKP | 13 08 54.7 | +0.1 | |
| | baz=286,SNR=6.2 | | | | | | | |
| RLMT | Red Lodge | 126.40 | 39 | P | PKPdf | 13 08 54.2 | 0.0 | |
| | baz=296 | | | | | | | |
| IRM | Iron Mountain | 126.40 | 54 | P | PKiKP | 13 08 54.9 | +0.2 | |
| | baz=286,SNR=5.2 | | | | | | | |
| GLA | Glamis | 126.96 | 55 | P | PKiKP | 13 08 55.7 | -0.2 | |
| | baz=286 | | | | | | | |
| PDMCI | Parker Dam,Lak | 127.16 | 53 | P | PKPdf | 13 08 55.5 | -0.2 | |
| | baz=287 | | | | | | | |
| BW06 | Boulder Array | 127.32 | 42 | P | PKPdf | 13 08 55.7 | -0.3 | |
| | baz=297 | | | | | | | |
| PDAR | Pinedale Array | 127.32 | 42 | PKP | PKPdf | 13 08 54.8 | -1.2 | |
| | comp=Z,1.3nm,0.8s,baz=174,slow=1.5,SNR=13 | | | | | | | |
| LAO | LASA Array | 127.42 | 36 | P | PKPdf | 13 08 56.0 | +0.1 | |
| | baz=303 | | | | | | | |
| DGMT | Dagmar | 127.55 | 33 | P | PKPdf | 13 08 56.1 | 0.0 | |
| | baz=306 | | | | | | | |
| 214A | Organ Pipe Nat | 128.90 | 56 | P | PKPdf | 13 08 58.3 | -0.9 | |
| | baz=286 | | | | | | | |
| K22A | Casper | 129.34 | 40 | P | PKPdf | 13 08 59.5 | -0.3 | |
| | baz=300 | | | | | | | |
| O20A | White River Ci | 129.38 | 44 | P | PKPdf | 13 09 00.0 | 0.0 | |
| | baz=296 | | | | | | | |
| RSSD | Black Hills | 130.12 | 37 | P | PKPdf | 13 09 01.2 | -0.1 | |
| | baz=304 | | | | | | | |
| W18A | Petrified Fore | 130.32 | 51 | P | PKPdf | 13 09 01.6 | -0.3 | |
| | baz=291 | | | | | | | |
| MDND | Maddock | 130.34 | 31 | P | PKPdf | 13 09 01.0 | -0.4 | |
| | baz=311 | | | | | | | |
| TUC | Tucson | 130.44 | 54 | P | PKPdf | 13 09 02.1 | 0.0 | |
| | baz=288 | | | | | | | |
| MVCO | Mesa Verde | 130.44 | 48 | P | PKPdf | 13 09 02.3 | +0.1 | |
| | baz=294 | | | | | | | |
| ULM | Lac du Bonnet | 130.47 | 27 | SKPbc | SKPab | 13 12 20.4 | -1.4 | |
| | comp=Z,9.4nm,1.0s,baz=230,slow=2.6,SNR=5.0 | | | | | | | |
| N23A | Red Feather La | 130.58 | 42 | P | PKPdf | 13 09 02.2 | -0.2 | |
| | baz=299 | | | | | | | |
| PLCA | Paso Flores | 130.77 | 173 | PKP | PKPdf | 13 09 02.8 | +0.2 | |
| | comp=Z,5.6nm,1.1s,baz=185,slow=1.1,SNR=4.6 | | | | | | | |
| S22A | TNR Ranch, Cre | 131.42 | 46 | P | PKPdf | 13 09 04.3 | +0.2 | |
| | baz=296 | | | | | | | |
| 319A | Douglas | 131.95 | 55 | PKPdf | PKiKP | 13 09 05.6 | -0.4 | |
| 121A | Cookes Peak, D | 132.76 | 53 | P | PKPdf | 13 09 06.5 | -0.1 | |
| | baz=291 | | | | | | | |
| Y22D | IRIS PASSCAL I | 132.86 | 51 | P | PKiKP | 13 09 07.4 | -0.5 | |
| | baz=293 | | | | | | | |
| ANMO | Albuquerque | 132.87 | 49 | PKPdf | PKPdf | 13 09 07.1 | +0.3 | |
| ANMO | Albuquerque | 132.87 | 49 | P | PKPdf | 13 09 07.2 | +0.4 | |
| | baz=294 | | | | | | | |
| ANMO | Albuquerque | 132.87 | 49 | PKiKP | PKPdf | 13 09 07.1 | +0.4 | |
| SUSD | Miller | 132.87 | 34 | P | PKiKP | 13 09 07.3 | -0.1 | |
| | baz=309 | | | | | | | |
| OGNE | Ogallala | 133.09 | 40 | P | PKPdf | 13 09 06.6 | -0.3 | |
| | baz=303 | | | | | | | |
| T25A | Trinidad | 133.41 | 46 | P | PKPdf | 13 09 08.0 | +0.2 | |
| | baz=298 | | | | | | | |
| SCHQ | Schefferville | 133.58 | 2 | PKP | PKPdf | 13 09 06.5 | -0.8 | |
| | comp=Z,1.9nm,0.6s,baz=262,slow=8.9,SNR=2.2 | | | | | | | |
| SCHQ | | | | SKPbc | SKPbc | 13 12 31.8 | -1.0 | |
| | comp=Z,5.0nm,0.9s,baz=39,slow=5.8,SNR=3.3 | | | | | | | |
| EYMN | Ely | 134.10 | 26 | P | PKPdf | 13 09 08.8 | +0.3 | |
| | baz=320 | | | | | | | |
| ECSD | EROS Data Cent | 134.62 | 33 | PKPdf | PKPdf | 13 09 07.1 | -2.4 | |
| ECSD | EROS Data Cent | 134.62 | 33 | P | PKPdf | 13 09 09.4 | -0.1 | |
| | baz=311 | | | | | | | |
| RTBA | Rita Blanca | 134.93 | 46 | | PKPdf | 13 09 10.9 | +0.4 | |
| MNTX | Cornudas Mount | 134.96 | 53 | P | PKPdf | 13 09 10.6 | 0.0 | |
| | baz=292,SNR=7.7 | | | | | | | |
| BGNE | Belgrade | 135.22 | 37 | P | PKPdf | 13 09 10.5 | -0.3 | |
| | baz=308 | | | | | | | |
| SPMN | Marine on St. | 135.55 | 29 | P | PKPdf | 13 09 11.3 | +0.1 | |
| | baz=317 | | | | | | | |
| CBKS | Cedar Bluff | 135.74 | 41 | P | PKPdf | 13 09 12.3 | +0.4 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=304 | | | | | | | |
| MSTX | Muleshoe | 136.04 | 49 | P | PKPdf | 13 09 12.9 | +0.2 | |
| | baz=296 | | | | | | | |
| I37A | Lemond, Waseca | 136.12 | 31 | | PKPdf | 13 09 12.1 | -0.2 | |
| TXAR | Lajitas Array | 137.20 | 55 | PKhKP | PKPpre | 13 09 02.5 | | |
| | comp=Z,0.9nm,0.8s,baz=258,slow=3.5,SNR=11 | | | | | | | |
| TXAR | | | | SKPbc | SKPbc | 13 12 44.9 | -0.1 | |
| | comp=Z,1.9nm,1.0s,baz=302,slow=4.1,SNR=6.5 | | | | | | | |
| KSU1 | Kansas State U | 137.56 | 39 | P | PKPdf | 13 09 15.4 | +0.3 | |
| | baz=308 | | | | | | | |
| JFWS | Jewell Farm | 138.49 | 30 | P | PKPdf | 13 09 17.1 | +0.3 | |
| | baz=318 | | | | | | | |
| WMOK | Wichita Mounta | 138.57 | 45 | P | PKPdf | 13 09 17.3 | +0.1 | |
| | baz=301 | | | | | | | |
| ABTX | Abilene, Hawle | 138.98 | 49 | P | PKPdf | 13 09 18.0 | 0.0 | |
| | baz=298 | | | | | | | |
| JCT | Junction City | 139.83 | 52 | P | PKPdf | 13 09 19.2 | -0.4 | |
| | baz=296 | | | | | | | |
| TUL3 | Leonard | 139.97 | 42 | P | PKPdf | 13 09 19.9 | +0.3 | |
| | baz=306 | | | | | | | |
| HHAR | Hobbs | 140.95 | 40 | PKPdf | PKPdf | 13 09 20.5 | -1.0 | |
| P49A | Miami Univ. Ec | 143.75 | 28 | P | PKPdf | 13 09 25.6 | -0.7 | |
| | baz=324 | | | | | | | |
| N53A | Lisbon | 144.31 | 22 | PKPdf | PKPab | 13 09 24.1 | -1.1 | |
| T47A | Sharon Grove | 144.51 | 33 | | PKPab | 13 09 24.6 | -1.4 | |
| O52A | Adamsville | 144.51 | 24 | PKPdf | PKPab | 13 09 24.2 | -1.8 | |
| R49A | Shelbyville | 144.51 | 30 | | PKPab | 13 09 24.6 | -1.4 | |
| BINY | Binghamton | 144.62 | 16 | P | PKPab | 13 09 25.2 | -1.1 | |
| | baz=339,SNR=7.3 | | | | | | | |
| O53A | New Philadelph | 144.65 | 23 | PKPdf | PKPab | 13 09 24.6 | -1.8 | |
| O53A | New Philadelph | 144.65 | 23 | P | PKPab | 13 09 25.1 | -1.4 | |
| | baz=329 | | | | | | | |
| WVT | Waverly | 144.74 | 35 | | PKPab | 13 09 25.7 | -1.2 | |
| WVT | Waverly | 144.74 | 35 | P | PKPab | 13 09 26.1 | -0.8 | |
| | baz=316 | | | | | | | |
| WVT | Waverly | 144.74 | 35 | PKIKP | PKPab | 13 09 25.7 | -1.2 | |
| VAO | Valinhos | 144.74 | 208 | PKPdf | PKPbc | 13 09 27.8 | +0.3 | |
| 143A | Socs Landing, | 144.79 | 43 | | PKPab | 13 09 26.9 | -0.4 | |
| P52A | Corning | 144.80 | 25 | | PKPab | 13 09 24.9 | -2.1 | |
| P52A | Corning | 144.80 | 25 | P | PKPab | 13 09 25.5 | -1.6 | |
| | baz=328 | | | | | | | |
| L59A | Walton | 144.87 | 15 | PKPdf | PKPab | 13 09 25.1 | -2.2 | |
| OXF | Oxford | 144.92 | 38 | | PKPab | 13 09 25.8 | -1.8 | |
| OXF | Oxford | 144.92 | 38 | P | PKPab | 13 09 26.3 | -1.3 | |
| | baz=312,SNR=38 | | | | | | | |
| OXF | Oxford | 144.92 | 38 | PKIKP | PKPab | 13 09 25.8 | -1.8 | |
| R50A | Paris | 144.93 | 29 | | PKPab | 13 09 25.6 | -2.0 | |
| CPUP | Villa Florida | 144.96 | 190 | | PKPbc | 13 09 28.3 | +0.3 | |
| CPUP | Villa Florida | 144.96 | 190 | PKPbc | PKPbc | 13 09 28.2 | +0.2 | |
| | comp=Z,75nm,0.9s,baz=164,slow=2.5,SNR=97 | | | | | | | |
| CPUP | Villa Florida | 144.96 | 190 | PKIKP | PKPbc | 13 09 28.3 | +0.3 | |
| O54A | Avella | 145.03 | 22 | | PKPbc | 13 09 25.9 | -1.9 | |
| M57A | Sunshine Farm, | 145.09 | 18 | | PKPbc | 13 09 26.4 | -1.7 | |
| L61B | Northampton | 145.15 | 12 | P | PKPbc | 13 09 26.9 | -1.3 | |
| | baz=345 | | | | | | | |
| P53A | Whipple | 145.23 | 24 | | PKPbc | 13 09 27.1 | -1.4 | |
| Y45A | Yeager Farm, C | 145.27 | 39 | | PKPbc | 13 09 27.8 | -1.0 | |
| KSPA | Keystone Colle | 145.28 | 16 | | PKPbc | 13 09 27.4 | -1.2 | |
| HRV | Adam Dziewonsk | 145.30 | 10 | | PKPbc | 13 09 27.0 | -1.6 | |
| HRV | Adam Dziewonsk | 145.30 | 10 | P | PKPbc | 13 09 27.5 | -1.1 | |
| | baz=347 | | | | | | | |
| HRV | Adam Dziewonsk | 145.30 | 10 | PKIKP | PKPbc | 13 09 27.0 | -1.6 | |
| Q52A | Bidwell | 145.30 | 26 | | PKPbc | 13 09 26.0 | -2.8 | |
| PLAL | Pickwick Lake | 145.40 | 36 | | PKPbc | 13 09 26.7 | -2.5 | |
| SSPA | Standing Stone | 145.50 | 19 | PKPdf | PKPdf | 13 09 27.3 | -1.9 | |
| SSPA | Standing Stone | 145.50 | 19 | P | PKPdf | 13 09 28.4 | -0.9 | |
| | baz=335 | | | | | | | |
| U49A | Red Boiling Sp | 145.57 | 32 | | PKPdf | 13 09 28.2 | -1.4 | |
| V48A | Smith Brothers | 145.58 | 34 | | PKPdf | 13 09 27.1 | -2.5 | |
| CLTN | Cedars of Leba | 145.59 | 33 | PKPdf | PKPdf | 13 09 27.5 | -2.1 | |
| T50A | Nancy | 145.67 | 31 | | PKPdf | 13 09 27.6 | -2.1 | |
| N58A | Sunbury | 145.67 | 17 | | PKPdf | 13 09 27.4 | -2.1 | |
| KSCT | Kent School, K | 145.68 | 13 | | PKPdf | 13 09 27.9 | -1.7 | |
| MCWV | Mont Chateau | 145.68 | 22 | | PKPdf | 13 09 28.9 | -0.8 | |
| MCWV | Mont Chateau | 145.68 | 22 | P | PKPdf | 13 09 28.9 | -0.8 | |
| | baz=331,SNR=14 | | | | | | | |
| VBMS | Vicksburg | 145.68 | 42 | | PKPdf | 13 09 29.8 | 0.0 | |
| VBMS | Vicksburg | 145.68 | 42 | P | PKPbc | 13 09 30.1 | 0.0 | |
| | baz=308 | | | | | | | |
| S51A | Beattyville | 145.79 | 29 | | PKPdf | 13 09 27.9 | -2.0 | |
| UCCT | U. Connecticut | 145.87 | 11 | | PKPdf | 13 09 28.4 | -1.5 | |
| Q54A | Coxs Mills | 145.88 | 24 | | PKPdf | 13 09 29.3 | -0.7 | |
| ODNJ | Ogdensburg | 146.02 | 15 | | PKPdf | 13 09 28.9 | -1.3 | |
| TRNY | Table Rock, Ra | 146.06 | 14 | | PKPdf | 13 09 29.6 | -0.6 | |
| GO02 | Mina Guanaco | 146.22 | 171 | | PKPbc | 13 09 32.0 | -0.4 | |
| PAL | Palisades | 146.27 | 14 | PKPdf | PKPdf | 13 09 29.7 | -0.8 | |
| PAL | Palisades | 146.27 | 14 | P | PKPdf | 13 09 31.0 | +0.5 | |
| | baz=342 | | | | | | | |
| PAL | Palisades |

| | | | | | | |
|---|---|---|---|---|---|---|
| SAML | | | PKPab | **PKPab** | **13 10 43.5 +0.9** | |
| **SAML** | **Samuel** | **162.80 182** | PKP2 | **PKPab** | **13 10 43.5 +0.9** | |
| SAML | | | | | 14 09 52.4 | |
| **CHIV** | **Chivirico** | **163.20 45** | PKPdf | **PKPdf** | **13 09 53.9 -0.3** | |
| CHIV | | | | **PKPab** | **13 10 43.8 -0.7** | |
| **BOAV** | **Boa Vista** | **173.23 209** | PKPdf | **PKPdf** | **13 09 58.9 -2.3** | |
| BOAV | | | PKPab | **PKPab** | **13 11 30.0 +1.2** | |

*IDC **05** 12:58:01.3±2.7,8˚34S×116˚11E,h0km,mb3.7/3, mbtmp3.8/4,ML3.9/1,Error ellipse: s-maj=68.3km s-min=29.2km az=63.0*
*NEIC **05** 12:58:03.2±1.9,8˚30S±0˚10×116˚20E±0˚04,h10km±1km, mb4.9/15,Error ellipse: s-maj=16.4km s-min=7.2km az=358.0*
*DJA **05** 12:58:04.1±0.8,8˚S±9˚×11˚6E±˚,h15km±9km,M4.1/6, MLv4.1/6*
**ISC 05 12:58:02.2**±0.6,**8˚26S**±0˚07×**116˚24E**±0˚04,**h10**km,**n30,** σ1ᵍ**59**/33,**mb4.6**/9,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.80** | **127** | P | **Pn** | **12 58 20.4** | **+0.9** |
| TWSI | | | | S | **Sn** | **12 58 32.1** | **+0.6** |
| **SRBI** | **Singaraja** | **1.03** | **279** | P | **Pn** | **12 58 23.0** | **+0.3** |
| SRBI | | | | S | **Sn** | **12 58 37.4** | **+0.2** |
| **DNP** | **Denpasar** | **1.10** | **248** | P | **Pn** | **12 58 24.8** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.08** | **264** | | **Pn** | **12 58 37.4** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.08** | **264** | P | **Pn** | **12 58 38.0** | **+0.8** |
| **PWJI** | **Pagerwojo** | **4.40** | **273** | P | **Pn** | **12 59 09.8** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.71** | **64** | P | **Pn** | **12 59 14.6** | **+1.2** |
| **KAPI** | **Kappang** | **4.75** | **48** | Pn | **Pn** | **12 59 17.4** | **+3.5** |
| **KAPI** | **Kappang** | **4.75** | **48** | Pn | **Pn** | **12 59 15.4** | **+1.5** |
| | 4.4nm,0.3s,baz=210,slow=16,SNR=2.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | **13 00 08.2** | **-0.8** |
| | 2.3nm,0.3s,baz=60,slow=20,SNR=1.4 | | | | | | |
| | 10nm,0.3s | | | | | | |
| **UGM** | **Wanagama** | **5.67** | **273** | Pn | **Pn** | **12 59 30.4** | **+3.8** |
| **MBWA** | **Marble Bar** | **13.26** | **166** | Pn | **Pn** | **13 01 10.8** | **0.0** |
| **GIRL** | **Giralia** | **14.44** | **187** | Pn | **Pn** | **13 01 26.1** | **-0.6** |
| **WB0** | **Warramunga Arr** | **20.98** | **125** | P | **P** | **13 02 46.6** | **+0.8** |
| WB0 | | | | IAmb | IAmb | 13 02 56.5 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.02** | **125** | P | **P** | **13 02 47.7** | **+1.4** |
| **WRA** | **Warramunga Arr** | **21.02** | **125** | P | **P** | **13 02 47.7** | **+1.4** |
| | comp=Z,1.9nm,0.3s,baz=299,slow=12,SNR=21 | | | | | | |
| | comp=Z,1.9nm,0.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.03** | **125** | P | **P** | **13 02 47.2** | **+0.9** |
| **WB2** | **Warramunga Arr** | **21.03** | **125** | P | **P** | **13 02 47.4** | **+1.0** |
| WB2 | | | | IAmb | IAmb | 13 03 00.2 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.20** | **125** | P | **P** | **13 02 48.9** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 13 02 50.4 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **22.83** | **134** | P | **P** | **13 03 06.0** | **+0.3** |
| | comp=Z,1.7nm,0.7s,baz=307,slow=8.6,SNR=1.7 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **TAU** | **Tasmania Unive** | **43.98** | **147** | P | **P** | **13 06 10.0** | **+0.3** |
| TAU | | | | IAmb | IAmb | 13 07 30.1 | |
| | comp=Z,106nm,1.5s | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **13 07 46.4** | **+1.6** |
| | comp=Z,0.5nm,0.6s,baz=160,slow=5.8,SNR=2.0 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **TOZ** | **Tahuroa Road** | **60.79** | **129** | P | **P** | **13 08 14.8** | **+0.1** |
| **MKAR** | **Makanchi Array** | **62.58** | **334** | P | **P** | **13 08 28.4** | **+1.9** |
| **MAKZ** | **Makanchi** | **62.73** | **334** | P | **P** | **13 08 26.8** | **-0.7** |
| **RAO** | **Raoul Island** | **64.95** | **118** | P | **P** | **13 08 40.2** | **-2.4** |
| **VOI** | **Vohitsoka** | **67.94** | **250** | P | **P** | **13 09 01.3** | **-0.7** |
| VOI | | | | IAmb | IAmb | 13 10 34.3 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **73.15** | **171** | P | **P** | **13 09 33.0** | **+0.4** |
| VNDA | | | | IAmb | IAmb | 13 11 20.2 | |
| | comp=Z,13nm,1.9s | | | | | | |
| **SBA** | **Scott Base** | **74.17** | **170** | P | **P** | **13 09 36.0** | **-2.6** |
| SBA | | | | IAmb | IAmb | 13 10 21.1 | |
| | comp=Z,25nm,1.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.40** | **326** | P | **P** | **13 09 42.7** | **-3.4** |
| **BR231** | **Keskin MP Arra** | **90.25** | **310** | P | **P** | **13 11 05.3** | **+1.7** |

*IDC **05** 13:07:32.5±0.5,8˚18S×116˚50E,h0km,mb4.3/15, mbtmp4.3/16,ML4.3/1,Error ellipse: s-maj=22.9km s-min=12.6km az=79.0*
*NEIC **05** 13:07:34.5±1.4,8˚22S±0˚08×116˚46E±0˚02,h12km±5km, mb4.7/30,Error ellipse: s-maj=11.4km s-min=3.2km az=179.0*
*DJA **05** 13:07:35.1±0.2,8˚S±3˚×11˚6E±˚,h10km,M5.0/19, mb5.1/12,mB5.4/2,MLv5.0/19,Mw(mB)4.8/2*
**ISC 05 13:07:34.1**±0.3,**8˚22S**±0˚04×**116˚48E**±0˚04,**h10**km,**n119,** σ1ᵍ**12**/119,**mb4.6**/42,**5C**,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.65** | **142** | P | **Pg** | **13 07 47.5** | **+0.7** |
| **SRBI** | **Singaraja** | **1.26** | **276** | P | **Pb** | **13 07 58.0** | **0.0** |
| **DNP** | **Denpasar** | **1.34** | **250** | P | **Pg** | **13 07 59.7** | **-0.1** |
| **PLAI** | **Plampang** | **1.42** | **115** | P | **Pb** | **13 08 01.3** | **+0.6** |
| **PLAI** | **Plampang** | **1.42** | **115** | P | **Pb** | **13 08 01.3** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.32** | **264** | P | **Pn** | **13 08 12.9** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.32** | **264** | | **Pn** | **13 08 11.7** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.32** | **264** | P | **Pn** | **13 08 12.7** | **+0.4** |
| **GRJI** | **Gresik** | **4.17** | **288** | P | **Pn** | **13 08 38.7** | **+0.9** |
| **BSSI** | **Bau Bau, Buton** | **4.48** | **63** | P | **Pn** | **13 08 41.4** | **-0.7** |
| **BASI** | **Baing, Sumba** | **4.51** | **116** | P | **Pn** | **13 08 44.4** | **+1.9** |
| **KAPI** | **Kappang** | **4.55** | **46** | Pn | **Pn** | **13 08 42.7** | **-0.3** |
| **KAPI** | **Kappang** | **4.55** | **46** | Pn | **Pn** | **13 08 42.8** | **-0.2** |
| | 14nm,0.3s,baz=201,slow=6.0,SNR=15 | | | | | | |
| KAPI | | | | Sn | **Sn** | **13 09 33.9** | **-2.1** |
| | 26nm,0.3s,baz=100,slow=22,SNR=4.7 | | | | | | |
| | 48nm,0.4s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.63** | **272** | P | **Pn** | **13 08 45.2** | **+1.0** |
| **BNSI** | **Bone** | **5.23** | **44** | P | **Pn** | **13 08 53.5** | **+1.1** |
| **SPSI** | **Sidrap Palu** | **5.34** | **38** | P | **Pn** | **13 08 54.1** | **+0.1** |
| | 121nm,0.9s,3μm0.8nm | | | | | | |
| **MMRI** | **Maumere** | **5.71** | **95** | P | **Pn** | **13 09 00.4** | **+1.4** |
| | 281nm,0.7s | | | | | | |
| **MMRI** | **Maumere** | **5.71** | **95** | Pn | **Pn** | **13 08 58.7** | **-0.4** |
| **MMRI** | **Maumere** | **5.71** | **95** | P | **Pn** | **13 09 00.8** | **+1.8** |
| | 283nm,0.7s,1.2nm | | | | | | |
| **UGM** | **Wanagama** | **5.91** | **273** | P | **Pn** | **13 09 03.2** | **+1.5** |
| | 356nm,0.9s | | | | | | |
| **UGM** | **Wanagama** | **5.91** | **273** | | **Pn** | **13 09 01.4** | **-0.3** |
| **UGM** | **Wanagama** | **5.91** | **273** | P | **Pn** | **13 09 03.0** | **+1.3** |
| **BATI** | **Baumata** | **7.36** | **106** | P | **Pn** | **13 09 23.8** | **+2.0** |
| | 122nm,0.7s,0.4nm | | | | | | |
| **KPJI** | **Karang Pucung** | **7.53** | **276** | P | **Pn** | **13 09 25.3** | **+1.3** |
| **SOEI** | **Soe** | **7.84** | **102** | P | **Pn** | **13 09 29.7** | **+1.2** |
| | 107nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **7.84** | **102** | Pn | **Pn** | **13 09 27.2** | **-1.3** |
| **SOEI** | **Soe** | **7.84** | **102** | P | **Pn** | **13 09 30.2** | **+1.7** |
| | 107nm,1.1s | | | | | | |
| **CMJI** | **Cimerak** | **7.96** | **273** | P | **Pn** | **13 09 30.9** | **+0.9** |
| | 107nm,1.2s | | | | | | |
| **BBJI** | **Bungbulang** | **8.78** | **274** | P | **Pn** | **13 09 42.9** | **+1.6** |
| | 31nm,1.0s | | | | | | |
| **CNJI** | **Cibinong** | **9.31** | **275** | P | **Pn** | **13 09 49.3** | **+0.9** |
| | 34nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **13.24** | **167** | P | **Pn** | **13 10 41.8** | **-0.5** |
| | 26nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **13.24** | **167** | Pn | **Pn** | **13 10 40.5** | **-1.8** |
| **FITZ** | **Fitzroy Crossi** | **13.26** | **139** | Pn | **Pn** | **13 10 40.8** | **-1.8** |
| **PSA00** | **Pilbara Seismi** | **13.67** | **167** | P | **Pn** | **13 10 48.1** | **0.0** |
| | 25nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.67** | **167** | Pn | **Pn** | **13 10 45.2** | **-2.9** |
| **KNRA** | **Kununurra** | **14.12** | **123** | Pn | **Pn** | **13 10 53.4** | **-0.8** |
| **GIRL** | **Giralia** | **14.51** | **188** | Pn | **Pn** | **13 10 57.5** | **-2.1** |
| **MTN** | **Manton Dam** | **15.12** | **109** | P | **Pn** | **13 11 07.8** | **-0.1** |
| | 24nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **15.12** | **109** | Pn | **Pn** | **13 11 05.0** | **-2.9** |
| **KDU** | **Kakadu** | **16.34** | **107** | P | **Pn** | **13 11 24.7** | **+0.9** |
| | 18nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **16.55** | **72** | P | **Pn** | **13 11 27.6** | **+1.1** |
| | 24nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **16.55** | **72** | Pn | **Pn** | **13 11 26.1** | **-0.4** |
| **WRKA** | **Warakurna** | **20.17** | **147** | P | **P** | **13 12 09.3** | **+0.4** |
| | 42nm,0.9s | | | | | | |
| **KULM** | **Kulim** | **20.72** | **310** | P | **P** | **13 12 13.6** | **-1.3** |
| **MORW** | **Morawa** | **20.75** | **181** | P | **P** | **13 12 15.5** | **+0.4** |
| | 24nm,2.7s | | | | | | |
| **MORW** | **Morawa** | **20.75** | **181** | P | **P** | **13 12 15.1** | **+0.1** |
| MORW | | | | IAmb | IAmb | 13 12 30.0 | |
| | comp=Z,42nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.81** | **125** | P | **P** | **13 12 15.3** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 13 12 23.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.85** | **126** | P | **P** | **13 12 15.8** | **-0.6** |
| **WRA** | **Warramunga Arr** | **20.85** | **126** | P | **P** | **13 12 16.1** | **-0.2** |
| | comp=Z,19nm,0.9s,baz=300,slow=12,SNR=56 | | | | | | |
| WRA | | | | S | **S** | **13 16 06.3** | **-2.8** |
| | comp=Z,1.6nm,0.8s,baz=290,slow=24,SNR=3.1 | | | | | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.86** | **126** | P | **P** | **13 12 16.1** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 13 12 20.8 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.86** | **126** | P | **P** | **13 12 16.1** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 13 12 20.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.02** | **126** | P | **P** | **13 12 18.0** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 13 12 24.4 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **22.69** | **135** | P | **P** | **13 12 35.8** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.69** | **135** | P | **P** | **13 12 35.9** | **-0.1** |
| | comp=Z,10nm,0.8s,baz=310,slow=8.3,SNR=40 | | | | | | |
| ASAR | | | | S | **S** | **13 16 44.8** | **+0.2** |
| | comp=Z,3.5nm,1.0s,baz=326,slow=24,SNR=6.0 | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **22.72** | **135** | P | **P** | **13 12 36.7** | **+0.3** |
| | comp=Z,28nm,0.9s | | | | | | |
| **MUN** | **Mundaring** | **23.64** | **181** | P | **P** | **13 12 46.4** | **+0.8** |
| | comp=Z,46nm,1.2s | | | | | | |
| **GENI** | **Genyem** | **24.23** | **78** | P | **P** | **13 12 51.9** | **+0.5** |
| | comp=Z,32nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **24.92** | **156** | P | **P** | **13 12 57.8** | **+0.3** |
| | comp=Z,43nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **24.92** | **156** | P | **P** | **13 12 58.3** | **+0.8** |
| **QIS** | **Mount Isa** | **25.50** | **121** | P | **P** | **13 13 03.9** | **+1.1** |
| | comp=Z,14nm,1.0s | | | | | | |
| **OOD** | **Oodnadatta** | **26.62** | **139** | P | **P** | **13 13 13.7** | **+0.8** |
| | comp=Z,36nm,0.9s | | | | | | |
| **COEN** | **Coen** | **26.80** | **105** | P | **P** | **13 13 12.7** | **-2.0** |
| COEN | | | | IAmb | IAmb | 13 13 21.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MULG** | **Mulgathing** | **27.44** | **145** | P | **P** | **13 13 20.6** | **+0.3** |
| | comp=Z,31nm,2.9s | | | | | | |
| **MTSU** | **Mount Surprise** | **28.80** | **113** | P | **P** | **13 13 33.7** | **+1.1** |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **31.13** | **115** | P | **P** | **13 13 53.8** | **+0.6** |
| CTAO | | | | IAmb | IAmb | 13 14 07.0 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.65** | **327** | P | **P** | **13 13 58.5** | **+0.7** |
| | comp=Z,6.6nm,0.4s,baz=148,slow=5.3,SNR=1.6 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **HTT** | **Hallett** | **32.55** | **144** | P | **P** | **13 14 06.1** | **+0.5** |
| **STKA** | **Stephens Creek** | **33.16** | **139** | P | **P** | **13 14 10.0** | **-0.9** |
| | comp=Z,2.8nm,0.5s,baz=294,slow=11,SNR=4.8 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **JMZ** | **Minamidaito 2** | **36.75** | **23** | P | **P** | **13 14 41.8** | **-0.1** |
| **PZH** | **PanZhiHua** | **37.36** | **338** | P | **P** | **13 14 49.9** | **+2.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **NJ2** | **Nanjing** | **40.11** | **3** | *e*P | **P** | **13 15 12.7** | **+2.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **CD2** | **Chengdu** | **40.77** | **343** | P | **P** | **13 15 16.8** | **+1.2** |
| CD2 | | | | pP | sP | 13 15 25.0 | +5.0 |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **XAN** | **Xi'an** | **42.63** | **351** | P | **P** | **13 15 31.2** | **+0.4** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **46.68** | **13** | P | **P** | **13 16 02.4** | **-0.6** |
| | comp=Z,2.1nm,1.1s,baz=198,slow=7.9,SNR=5.1 | | | | | | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **INU** | **Inuyama** | **47.47** | **23** | P | **P** | **13 16 08.9** | **-0.4** |
| INU | | | | IAmb | IAmb | 13 16 22.6 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **47.73** | **110** | P | **P** | **13 16 11.0** | **-0.6** |
| KOUNC | | | | IAmb | IAmb | 13 16 17.4 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **48.98** | **23** | P | **P** | **13 16 20.6** | **-0.4** |
| MAJO | | | | IAmb | IAmb | 13 16 33.7 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.98** | **23** | P | **P** | **13 16 20.5** | **-0.4** |
| | comp=Z,2.2nm,0.7s,baz=198,slow=8.1,SNR=9.6 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.03** | **355** | *e*P | **P** | **13 16 23.6** | **+2.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,360nm,9.5s | | | | | | |
| **GTA** | **Gaotai** | **49.84** | **343** | *e*P | **P** | **13 16 29.9** | **+2.3** |
| GTA | | | | pP | sP | 13 16 35.5 | +3.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.03** | **14** | P | **P** | **13 16 58.8** | **+0.2** |
| | comp=Z,2.8nm,0.5s,baz=188,slow=6.8,SNR=9.7 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **13 17 16.6** | **-0.1** |
| SONM | | | | IAmb | IAmb | 13 17 24.5 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **13 17 17.1** | **+0.4** |
| | comp=Z,2.2nm,0.7s,baz=176,slow=8.0,SNR=7.7 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.20** | **22** | P | **P** | **13 17 22.0** | **+0.6** |
| **CASY** | **Casey** | **58.12** | **183** | P | **P** | **13 17 27.5** | **0.0** |
| CASY | | | | IAmb | IAmb | 13 17 28.1 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **LBZ** | **Lake Benmore** | **58.73** | **137** | P | **P** | **13 17 32.0** | **-0.2** |
| **HEH** | **HeiHe** | **59.00** | **8** | *e*P | **P** | **13 17 34.3** | **+0.4** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **BKZ** | **Black Stump Fm** | **61.71** | **130** | P | **P** | **13 17 52.7** | **-0.1** |
| **MK31** | **Makanchi Array** | **62.65** | **334** | P | **P** | **13 17 57.9** | **-1.0** |
| MK31 | | | | IAmb | IAmb | 13 18 05.1 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | **P** | **13 17 57.7** | **-1.2** |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | **P** | **13 17 58.1** | **-0.7** |
| | comp=Z,2.8nm,0.7s,baz=147,slow=6.1,SNR=24 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.65** | **223** | T | T | 14 31 19.7 | |
| | baz=79 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.67** | **223** | T | T | 14 30 54.5 | |
| | baz=79 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.67** | **223** | T | T | 14 31 02.3 | |
| | baz=79 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.19** | **335** | P | **P** | **13 18 27.7** | **-0.5** |
| | comp=Z,0.6nm,0.5s,baz=142,slow=5.7,SNR=8.5 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.45** | **340** | P | **P** | **13 18 29.3** | **-0.6** |
| ZAA0 | | | | IAmb | IAmb | 13 18 35.1 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.45** | **340** | P | **P** | **13 18 29.2** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **67.45** | **340** | P | **P** | **13 18 29.5** | **-0.3** |
| | comp=Z,2.0nm,0.5s,baz=139,slow=4.0,SNR=12 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **69.13** | **199** | P | **P** | **13 18 40.6** | **+0.4** |
| | comp=Z,6.4nm,0.8s,baz=18,slow=9.6,SNR=5.1 | | | | | | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **73.15** | **171** | P | **P** | **13 19 05.1** | **+0.6** |
| **VNDA** | **Vanda** | **73.15** | **171** | P | **P** | **13 19 05.0** | **+0.6** |
| | comp=Z,1.6nm,0.9s,baz=311,slow=4.9,SNR=10.0 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **SBA** | **Scott Base** | **74.17** | **170** | P | **P** | **13 19 11.2** | **+0.8** |
| **ABKAR** | **Akbulak array** | **75.50** | **326** | P | **P** | **13 19 16.7** | **-1.9** |
| **QSPA** | **South Pole Qui** | **81.77** | **180** | P | **P** | **13 19 53.9** | **+0.8** |
| | comp=Z,5.7nm,1.0s,baz=307,slow=1.6,SNR=4.5 | | | | | | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **CLES** | **Cleveland East** | **86.76** | **36** | P | **P** | **13 20 17.1** | **-1.3** |
| **TROLL** | **Troll, Antarti** | **89.42** | **196** | ⇑P | **P** | **13 20 32.3** | **+1.3** |
| | comp=Z,280nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **91.07** | **196** | P | **P** | **13 20 37.2** | **-1.4** |
| SNAA | | | | IAmb | IAmb | 13 20 40.6 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **91.07** | **196** | ⇑P | **P** | **13 20 37.4** | **-1.2** |
| | comp=Z,103nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **91.07** | **196** | P | **P** | **13 20 39.8** | **+1.2** |
| | comp=Z,5.3nm,0.8s,baz=130,slow=3.8,SNR=12 | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **92.55** | **186** | P | **P** | **13 20 45.2** | **-0.1** |
| BELA | | | | IAmb | IAmb | 13 20 46.4 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.71** | **196** | ⇑P | **P** | **13 20 47.0** | **+0.9** |
| | comp=Z,5.1nm,0.7s,baz=119,slow=3.8 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **93.11** | **196** | ⇑P | **P** | **13 20 48.9** | **+0.9** |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.13** | **195** | ⇑P | **P** | **13 20 48.4** | **+0.3** |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.87** | **281** | PKP | **PKPdf** | **13 26 16.4** | **-1.7** |
| | comp=Z,0.7nm,0.5s,baz=82,slow=3.1,SNR=4.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **118.51** | **311** | PKP | **PKPdf** | **13 26 21.3** | **-1.3** |
| | comp=Z,0.3nm,1.0s,baz=107,slow=1.2,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **136.88** | **55** | PKP | **PKPdf** | **13 26 58.2** | **+0.3** |
| | comp=Z,0.2nm,0.8s,baz=242,slow=1.9,SNR=2.1 | | | | | | |
| **CPUP** | **Villa Florida** | **145.14** | **190** | PKPbc | **PKPbc** | **13 27 11.1** | **-1.0** |
| | comp=Z,12nm,1.0s,baz=169,slow=4.5,SNR=14 | | | | | | |
| **BDFB** | **Brasilia** | **151.75** | **213** | PKPbc | **PKPbc** | **13 27 29.7** | **-0.6** |
| | comp=Z,2.5nm,0.5s,baz=140,slow=7.9,SNR=4.6 | | | | | | |
| **LPAZ** | **La Paz** | **155.23** | **169** | PKPab | **PKPab** | **13 27 54.5** | **+0.4** |
| | comp=Z,3.8nm,0.7s,baz=190,slow=1.3,SNR=11 | | | | | | |

*IDC **05** 13:12:10.4±0.5,8˚23S×116˚23E,h0km,mb4.3/16, mbtmp4.3/17,ML4.3/1,Error ellipse: s-maj=17.5km s-min=9.9km az=59.0*
*DJA **05** 13:12:13.2±0.5,8˚S±5˚×11˚6E±˚,h11km±5km,M4.9/7, mb5.2/2,MLv4.7/7*
*NEIC **05** 13:12:13.3±1.7,8˚40S±0˚08×116˚13E±0˚02,h13km±4km, mb4.8/26,Error ellipse: s-maj=11.5km s-min=1.5km az=171.0*
**ISC 05 13:12:12.1**±0.3,**8˚33S**±0˚05×**116˚17E**±0˚04,**h10**km,**n112,** σ1ᵍ**31**/116,**mb4.7**/42,**2C-1D**,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.81** | **120** | P | **Pg** | **13 12 29.0** | **+1.2** |
| TWSI | | | | S | **Sb** | **13 12 40.4** | **+1.1** |
| **SRBI** | **Singaraja** | **0.98** | **284** | P | **Pg** | **13 12 31.7** | **+0.7** |
| SRBI | | | | S | **Sn** | **13 12 45.8** | **-0.1** |
| **DNP** | **Denpasar** | **1.01** | **250** | P | **Pn** | **13 12 34.0** | **+1.6** |
| **PLAI** | **Plampang** | **1.66** | **108** | P | **Pn** | **13 12 42.8** | **+1.5** |
| PLAI | | | | S | **Sn** | **13 13 03.5** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.01** | **266** | Pn | **Pn** | **13 12 45.5** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.01** | **266** | P | **Pn** | **13 12 46.4** | **+0.3** |
| **BASI** | **Baing, Sumba** | **4.74** | **114** | P | **Pn** | **13 13 23.8** | **+0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.80** | **63** | P | **Pn** | **13 13 24.5** | **0.0** |
| **KAPI** | **Kappang** | **4.84** | **47** | Pn | **Pn** | **13 13 24.9** | **-0.2** |
| **KAPI** | **Kappang** | **4.84** | **47** | Pn | **Pn** | **13 13 24.3** | **-0.8** |
| | 13nm,0.3s,baz=219,slow=6.5,SNR=8.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **13 14 19.2** | **-2.0** |
| | 35nm,0.3s,baz=225,slow=19,SNR=11 | | | | | | |
| | 30nm,0.4s | | | | | | |
| **BKSI** | **Bulukumba** | **4.93** | **53** | P | **Pn** | **13 13 27.0** | **+0.8** |
| **UGM** | **Wanagama** | **5.61** | **274** | Pn | **Pn** | **13 13 35.8** | **+0.2** |
| **UGM** | **Wanagama** | **5.61** | **274** | P | **Pn** | **13 13 37.4** | **+1.7** |
| | 173nm,0.9s | | | | | | |
| **MMRI** | **Maumere** | **6.01** | **93** | Pn | **Pn** | **13 13 41.5** | **+0.4** |
| **MMRI** | **Maumere** | **6.01** | **93** | P | **Pn** | **13 13 41.1** | **0.0** |
| **SOEI** | **Soe** | **8.12** | **101** | Pn | **Pn** | **13 14 11.4** | **+1.2** |
| **TOLI2** | **Tolitoli** | **10.44** | **26** | Pn | **Pn** | **13 14 44.5** | **+2.5** |
| **MBWA** | **Marble Bar** | **13.21** | **165** | Pn | **Pn** | **13 15 18.4** | **-1.5** |
| **MBWA** | **Marble Bar** | **13.21** | **165** | P | **Pn** | **13 15 18.5** | **-1.5** |
| | 82nm,0.7s,SNR=4.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.38** | **137** | Pn | **Pn** | **13 15 21.4** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **165** | Pn | **Pn** | **13 15 23.6** | **-2.1** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **165** | P | **Pn** | **13 15 24.3** | **-1.4** |
| | 32nm,0.8s,SNR=1.5 | | | | | | |
| **KNRA** | **Kununurra** | **14.31** | **122** | Pn | **Pn** | **13 15 34.5** | **-0.5** |
| **KNRA** | **Kununurra** | **14.31** | **122** | P | **Pn** | **13 15 34.8** | **-0.2** |
| | 35nm,1.1s,SNR=2.8 | | | | | | |
| **GIRL** | **Giralia** | **14.36** | **187** | Pn | **Pn** | **13 15 34.5** | **-1.0** |
| **MTN** | **Manton Dam** | **15.37** | **108** | Pn | **Pn** | **13 15 46.9** | **-2.4** |
| MTN | | | | IAmb | IAmb | 13 15 49.5 | |
| | comp=Z,58nm,1.6s | | | | | | |
| **MTN** | **Manton Dam** | **15.37** | **108** | P | **Pn** | **13 15 47.1** | **-2.2** |
| | comp=Z,23nm,0.5s,SNR=2.3 | | | | | | |
| **KDU** | **Kakadu** | **16.60** | **107** | P | **Pn** | **13 16 03.2** | **-1.9** |
| **FAKI** | **Fak Fak** | **16.87** | **72** | Pn | **Pn** | **13 16 06.1** | **-2.4** |
| **MEEK** | **Meekatharra** | **18.36** | **173** | P | **P** | **13 16 28.1** | **+1.1** |
| | comp=Z,38nm,0.7s,SNR=1.4 | | | | | | |
| **WRKA** | **Warakurna** | **20.25

comp=Z,3.0nm,0.7s,baz=172,slow=9.7,SNR=13
comp=Z,3.0nm,0.7s
**JKA Kamikawa-asahi 57.42 22** P **P** **13 22 01.5 +0.6**
**MLZ Mavora Lakes 57.85 139** P **P** **13 22 03.7 -0.4**
**CASY Casey 58.00 183** P **P** **13 22 04.3 -0.4**
CASY IAmb IAmb 13 22 06.1
comp=Z,7.0nm,0.8s
**HEH HeiHe 59.15 8** *eP* **P** **13 22 13.2 +0.3**
HEH pmax pmax
comp=Z,12nm,1.7s
**KSH Kashi 60.43 325** P **P** **13 22 24.9 +2.8**
KSH pmax pmax
comp=Z,4.0nm,0.5s
**BKZ Black Stump Fm 61.87 130** P **P** **13 22 32.4 +0.5**
**MKAR Makanchi Array 62.62 334** P **P** **13 22 34.8 -1.8**
comp=Z,0.4nm,0.5s,baz=149,slow=5.9,SNR=5.8
comp=Z,0.4nm,0.5s
**H04N2 CROZET ISLANDS 66.36 223** T T 14 35 00.9
baz=70
**H04N1 CROZET ISLANDS 66.38 223** T T 14 34 59.5
baz=70
**H04N3 CROZET ISLANDS 66.38 223** T T 14 34 57.8
baz=70
**KURBB Kurchatov Arra 67.16 335** P **P** **13 23 04.3 -1.8**
comp=Z,0.6nm,0.7s,baz=142,slow=5.4,SNR=6.4
comp=Z,0.6nm,0.7s
**ZALV Zalesovo Beam 67.45 341** P **P** **13 23 06.6 -1.3**
**ZALV Zalesovo Beam 67.45 341** P **P** **13 23 05.9 -1.9**
comp=Z,1.2nm,0.5s,baz=153,slow=3.1,SNR=5.1
comp=Z,1.2nm,0.5s
**MAW Mawson 68.93 199** P **P** **13 23 18.4 +1.4**
comp=Z,7.3nm,0.8s,baz=51,slow=7.2,SNR=6.1
comp=Z,7.3nm,0.8s
**VNDA Vanda 73.09 171** P **P** **13 23 43.1 +0.9**
VNDA IAmb IAmb 13 23 50.4
comp=Z,6.1nm,1.1s
**VNDA Vanda 73.09 171** P **P** **13 23 43.4 +1.3**
comp=Z,2.9nm,0.8s,baz=295,slow=5.7,SNR=9.7
comp=Z,2.9nm,0.8s
**SBA Scott Base 74.11 170** P **P** **13 23 49.1 +1.0**
SBA IAmb IAmb 13 23 58.7
comp=Z,5.9nm,1.1s
**ABKAR Akbulak array 75.42 326** P **P** **13 23 53.9 -2.2**
**QSPA South Pole Qui 81.67 180** P **P** **13 24 30.5 0.0**
comp=Z,4.5nm,0.9s,baz=219,slow=0.8,SNR=7.8
comp=Z,4.5nm,0.9s
**BOSA Boshof 86.87 242** P **P** **13 24 57.2 -0.5**
comp=Z,3.5nm,0.9s,baz=81,slow=5.3,SNR=3.2
comp=Z,3.5nm,0.9s
**LBTB Lobatse 87.05 245** P **P** **13 24 59.2 +0.5**
**TROLL Troll, Antarti 89.23 197** ⇑P **P** **13 25 09.2 +1.0**
comp=Z,62nm,0.6s
**BRTR Keskin Array B 89.57 310** P **P** **13 25 08.3 -2.0**
comp=Z,0.6nm,0.9s,baz=134,slow=6.2,SNR=2.8
comp=Z,0.6nm,0.9s
**SNAA Sanae 90.88 196** P **P** **13 25 16.3 +0.5**
SNAA IAmb IAmb 13 25 31.1
comp=Z,8.1nm,1.3s
**SNAA Sanae 90.88 196** ⇓P **P** **13 25 16.8 +1.0**
comp=Z,38nm,0.6s
**SNAA Sanae 90.88 196** P **P** **13 25 16.6 +0.9**
comp=Z,1.6nm,0.9s,baz=175,slow=5.9,SNR=6.4
comp=Z,1.6nm,0.9s
**BELA Belgrano 2 92.41 186** P **P** **13 25 22.5 -0.1**
BELA IAmb IAmb 13 25 50.0
comp=Z,21nm,2.0s
**TORD Torodi Ar. Bea 115.59 281** PKP **PKPdf** **13 30 54.3 -1.3**
comp=Z,0.2nm,0.5s,baz=101,slow=2.9,SNR=1.5
**NVAR Mina Array Bea 122.73 49** PKP **PKPdf** **13 31 08.2 -0.8**
comp=Z,0.4nm,0.7s,baz=287,slow=1.2,SNR=4.0
**HLID Hailey 123.75 42** **PKPdf** **13 31 10.2 -0.6**
**PDAR Pinedale Array 127.30 42** PKP **PKPdf** **13 31 18.0 +0.4**
comp=Z,0.2nm,0.7s,baz=320,slow=8.3,SNR=1.7
**TXAR Lajitas Array 137.19 55** PKP **PKPdf** **13 31 35.9 -0.7**
comp=Z,0.2nm,0.7s,baz=205,slow=0.8,SNR=1.8
**WVT Waverly 144.72 35** **PKPab** **13 31 46.6 -1.8**
**OXF Oxford 144.91 38** **PKPab** **13 31 47.9 -1.3**
**CPUP Villa Florida 144.98 190** PKPbc **PKPab** **13 31 49.8 +0.2**
comp=Z,7.8nm,0.9s,baz=148,slow=3.5,SNR=11
**U49A Red Boiling Sp 145.56 32** **PKPdf** **13 31 49.8 -1.4**
**CLTN Cedars of Leba 145.57 33** **PKPdf** **13 31 50.1 -1.1**
**TKL Tuckaleechee C 147.25 31** PKPdf **PKPdf** **13 31 53.4 -0.7**
**LRAL Lakeview Retre 147.38 38** PKPdf **PKPdf** **13 31 53.5 -0.9**
**BDFB Brasilia 151.50 213** PKP **PKPdf** **13 32 00.8 -0.7**
comp=Z,0.5nm,0.3s,baz=86,slow=12,SNR=1.3
BDFB PKPbc **PKPbc** **13 32 08.1 +0.4**
comp=Z,1.2nm,0.5s,baz=188,slow=13,SNR=1.9
**LPAZ La Paz 155.18 170** PKP **PKPdf** **13 32 07.2 -0.2**
comp=Z,1.1nm,0.9s,baz=332,slow=7.3,SNR=2.2
LPAZ PKPab **PKPab** **13 32 31.9 0.0**
comp=Z,4.1nm,0.8s,baz=186,slow=6.3,SNR=12

*NEIC **05** 13:12:13.2±0.4, 56.3S±0.1×26.7W±0.1, h80km±9km, mb4.5/12, Error ellipse: s-maj=20.0km s-min=5.1km az=199.0*
*IDC **05** 13:12:14.9±0.7, 56.27S×26.77W, h99km±6km, mb4.1/6, mbtmp4.3/7, Error ellipse: s-maj=25.7km s-min=16.1km az=87.0*
**ISC 05 13:12:14.5±0.6, 56.14S±0.09×26.8W±0.1, h100km, n37, σ1§68/33, mb4.4/8, 9C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **5.86** | **284** | Pn | **Pn** | **13 13 38.2** | **-0.5** |
| **VNA1** | **Neumayer--Stat** | **16.63** | **158** | ⇑P | **P** | **13 16 03.2** | **+1.4** |
| | comp=Z,43nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.83** | **161** | ⇑P | **P** | **13 16 03.3** | **-0.8** |
| | comp=Z,5.7nm,0.3s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.83** | **161** | ⇑P | **P** | **13 16 05.6** | **+1.5** |
| | comp=Z,3.0nm,0.2s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **17.02** | **158** | ⇑P | **P** | **13 16 05.6** | **-0.6** |
| | comp=Z,6.7nm,0.6s,baz=312,slow=12 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **17.02** | **158** | ⇑P | **P** | **13 16 08.5** | **+2.4** |
| | comp=Z,4.7nm,0.2s,baz=328,slow=13 | | | | | | |
| **SNAA** | **Sanae** | **18.57** | **156** | P | **P** | **13 16 21.9** | **-1.3** |
| SNAA | | | | IAmb | IAmb | 13 16 30.1 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **18.57** | **156** | ⇑P | **P** | **13 16 22.0** | **-1.2** |
| | comp=Z,129nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **18.57** | **156** | ⇑P | **Pn** | **13 16 29.4** | **+4.8** |
| | comp=Z,23nm,0.2s | | | | | | |
| **SNAA** | **Sanae** | **18.57** | **156** | P | **P** | **13 16 22.2** | **-0.9** |
| | comp=Z,3.2nm,0.5s,baz=302,slow=9.0,SNR=26 | | | | | | |
| **PMSA** | **Palmer Station** | **20.02** | **229** | P | Pn | 13 16 39.6 | -1.9 |
| PMSA | | | | IAmb | IAmb | 13 16 46.4 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **20.06** | **154** | ⇑P | **P** | **13 16 38.3** | **-1.2** |
| | comp=Z,459nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **20.06** | **154** | ⇑P | Pn | 13 16 50.2 | +8.0 |
| | comp=Z,97nm,0.2s | | | | | | |
| **SMAI** | **San Martin Ant** | **21.85** | **221** | P | **P** | **13 16 58.4** | **0.0** |
| **BELA** | **Belgrano 2** | **22.00** | **184** | P | **P** | **13 16 57.4** | **-2.7** |
| BELA | | | | IAmb | IAmb | 13 17 01.4 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.11** | **180** | P | **P** | **13 18 48.7** | **-0.6** |
| **QSPA** | **South Pole Qui** | **34.11** | **180** | P | **P** | **13 18 48.6** | **-0.6** |
| | comp=Z,3.7nm,0.5s,baz=167,slow=16,SNR=36 | | | | | | |
| QSPA | | | | pP | **pP** | **13 19 11.2** | **-0.3** |
| | comp=Z,2.0nm,0.6s,baz=212,slow=5.3,SNR=2.6 | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **45.54** | **300** | P | **P** | **13 20 25.2** | **+0.7** |
| LVC | | | | IAmb | IAmb | 13 20 48.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **45.77** | **75** | P | **P** | **13 20 26.1** | **+0.2** |
| **BOSA** | **Boshof** | **45.77** | **75** | P | **P** | **13 20 26.6** | **+0.7** |
| | comp=Z,5.8nm,1.0s,baz=153,slow=2.3,SNR=3.6 | | | | | | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **46.01** | **184** | P | **P** | **13 20 27.8** | **+0.7** |
| SBA | | | | IAmb | IAmb | 13 20 29.9 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **46.49** | **183** | P | **P** | **13 20 30.7** | **-0.2** |
| VNDA | | | | IAmb | IAmb | 13 20 33.4 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **46.49** | **183** | P | **P** | **13 20 30.8** | **0.0** |
| | comp=Z,4.3nm,0.6s,baz=185,slow=6.8,SNR=18 | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **48.02** | **16** | T | T | 14 13 26.2 | |
| | baz=31,slow=74,SNR=11 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **48.02** | **16** | T | T | 14 13 16.4 | |
| | baz=189,slow=74,SNR=8.2 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **49.14** | **16** | T | T | 14 15 01.0 | |
| | baz=192 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **49.14** | **16** | T | T | 14 14 41.9 | |
| | baz=192 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **49.16** | **16** | T | T | 14 14 55.1 | |
| | baz=192 | | | | | | |
| **LPAZ** | **La Paz** | **50.62** | **305** | P | **P** | **13 21 05.0** | **+1.2** |
| **LPAZ** | **La Paz** | **50.62** | **305** | P | **P** | **13 21 05.0** | **+1.2** |
| | comp=Z,1.0nm,0.3s,baz=80,slow=5.2,SNR=5.6 | | | | | | |
| LPAZ | | | | pP | **pP** | **13 21 29.8** | **+2.5** |
| | comp=Z,1.2nm,0.4s,baz=248,slow=3.6,SNR=2.8 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **CASY** | **Casey** | **53.75** | **160** | P | **P** | **13 21 25.6** | **-0.1** |
| **TOA0** | **Torodi Ar. Sit** | **73.02** | **29** | P | **P** | **13 23 34.4** | **+1.2** |
| **TORD** | **Torodi Ar. Bea** | **73.02** | **29** | P | **P** | **13 23 34.5** | **+1.3** |
| | comp=Z,1.4nm,0.6s,baz=202,slow=6.1,SNR=13 | | | | | | |
| TORD | | | | pP | **pwP** | **13 24 01.1** | **-4.0** |
| | comp=Z,2.4nm,0.7s,baz=194,slow=4.8,SNR=4.6 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **98.83** | **162** | P | Pdif | 13 25 44.3 | +1.2 |
| | comp=Z,0.7nm,0.8s,baz=184,slow=3.5,SNR=3.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **150.35** | **311** | PKPbc | **PKiKP** | **13 31 52.5** | **-0.7** |
| | comp=Z,0.8nm,0.8s,baz=149,slow=4.6,SNR=10 | | | | | | |
| ILAR | | | | pPKPbc | **pPKPbc** | **13 32 18.0** | **-1.0** |
| | comp=Z,1.3nm,0.9s,baz=125,slow=1.4,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **150.50** | **86** | PKPbc | **PKiKP** | **13 31 53.5** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=298,slow=3.1,SNR=2.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **157.92** | **146** | PKPab | **PKPab** | **13 32 29.9** | **-2.3** |
| | comp=Z,0.9nm,0.8s,baz=165,slow=5.2,SNR=4.1 | | | | | | |

*IDC **05** 13:30:06.5±2.1, 8.05S×114.78E, h0km, mb3.5/3, mbtmp3.6/4, ML3.4/1, Error ellipse: s-maj=59.4km s-min=27.7km az=51.0*
*DJA **05** 13:30:21.4±0.6, 8°S±7°×11°6E±°, h10km, M3.6/6, MLv3.6/6*
**ISC 05 13:30:21.6±1.2, 8.3S±0.1×116.24E±0.05, h10km, n8, σ0§72/10, mb3.4/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.78** | **125** | P | **Pg** | **13 30 36.6** | **-0.1** |
| TWSI | | | | S | **Sg** | **13 30 47.5** | **+0.6** |
| **DNP** | **Denpasar** | **1.09** | **249** | P | **Pb** | **13 30 43.2** | **+0.6** |
| DNP | | | | S | **Sn** | **13 30 58.9** | **+0.8** |
| **PLAI** | **Plampang** | **1.61** | **110** | P | **Pn** | **13 30 50.3** | **+0.1** |
| PLAI | | | | S | **Sg** | **13 31 12.6** | **-1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.07** | **265** | P | **Pn** | **13 30 55.7** | **-0.8** |
| **KAPI** | **Kappang** | **4.77** | **47** | Pn | **Pn** | **13 31 33.8** | **+0.2** |
| | 1.1nm,0.3s,baz=221,slow=20,SNR=1.4 | | | | | | |
| | 3.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.01** | **125** | P | **P** | **13 35 04.9** | **-0.6** |
| | 1.4nm,0.7s,baz=301,slow=12,SNR=40 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.81** | **134** | P | **P** | **13 35 24.4** | **-0.4** |
| | 0.9nm,0.7s,baz=305,slow=9.0,SNR=8.9 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.61** | **334** | P | P | 13 40 27.0 | -19 |
| | 0.6nm,1.0s,baz=140,slow=7.4,SNR=2.6 | | | | | | |
| | 0.6nm,1.0s | | | | | | |

*SDD **05** 13:41:19.4±1.8, 19.99N×70.71W, h25km±29km, MD3.2, ML2.3, MW3.5*
*OSPL **05** 13:41:19.7±2.5, 20.01N×70.88W, h0km±15km, ML2.3*
**ISC 05 13:41:18.6±1.5, 19.96N±0.04×70.7W±0.1, h27km±14km, n7, σ0§40/13, 1C-6D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SC01** | **Santiago de lo** | **0.53** | **180** | ⇓*e*Pg | **Pb** | **13 41 29.5** | **+0.1** |
| SC01 | | | | ⇓*e*Sg | **Sn** | **13 41 38.8** | **+0.3** |
| SC01 | | | | IAML | | 13 41 46.4 | |
| | comp=N,68nm,0.2s | | | | | | |
| **SC01** | **Santiago de lo** | **0.53** | **180** | *i* P | **Pb** | **13 41 29.7** | **+0.2** |
| SC01 | | | | *e*S | **Sn** | **13 41 38.9** | **+0.3** |
| SC01 | | | | IAML | | 13 41 56.6 | |
| | comp=Z,54nm,0.9s | | | | | | |
| **MCDR** | **Montecristi** | **0.88** | **266** | ⇓*e*Sg | **Sb** | **13 41 46.6** | **0.0** |
| **SDDR** | **Presa de Saban** | **1.11** | **209** | ⇓*e*Pg | **Pn** | **13 41 37.9** | **-0.5** |
| SDDR | | | | ⇓*e*Sg | **Sn** | **13 41 53.3** | **+0.4** |
| SDDR | | | | IAML | | 13 41 54.5 | |
| | comp=N,68nm,1.1s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.11** | **209** | *i* P | **Pn** | **13 41 38.0** | **-0.5** |
| SDDR | | | | *e*S | **Sn** | **13 41 53.4** | **+0.5** |
| SDDR | | | | IAML | | 13 41 56.0 | |
| | comp=Z,57nm,0.3s | | | | | | |
| **GRTK** | **Grand Turk** | **1.59** | **346** | ⇓*e*Pg | **Pn** | **13 41 44.9** | **-0.2** |
| GRTK | | | | ⇑*e*Sg | **Sn** | **13 42 05.0** | **+0.3** |
| GRTK | | | | IAML | | 13 42 07.4 | |
| | comp=N,97nm,0.7s | | | | | | |
| **GRTK** | **Grand Turk** | **1.59** | **346** | *i* P | **Pn** | **13 41 44.9** | **-0.2** |
| GRTK | | | | IAML | | 13 42 06.7 | |
| | comp=Z,53nm,1.4s | | | | | | |
| GRTK | | | | *e*S | **Sb** | **13 42 06.8** | **-0.2** |

**IDC 05 13:45:01.8±4.3, 4.80S×132.22E, h0km, mb3.2/1, mbtmp3.1/3, ML2.9/2, Error ellipse: s-maj=267.3km s-min=33.8km az=74.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **15.19** | **172** | Pn | Pn | 13 48 37.0 | -0.8 |
| | baz=355,slow=13,SNR=1.9 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **18.83** | **175** | P | P | 13 49 23.4 | 0.0 |
| | 0.1nm,0.3s,baz=358,slow=9.6,SNR=3.4 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.64** | **325** | P | P | 13 56 00.8 | +0.1 |
| | 0.2nm,0.7s,baz=133,slow=8.1,SNR=1.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

**DJA 05 13:45:21.2±0.6, 8°S±5°×11°6E±°, h11km±6km, M4.1/7, mb4.1/2, MLv4.1/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.83** | **117** | P | Pg | 13 45 37.0 | -0.3 |
| **SRBI** | **Singaraja** | **0.95** | **287** | P | Pg | 13 45 39.3 | -0.2 |
| SRBI | | | | S | Sb | 13 45 52.8 | +0.6 |
| **DNP** | **Denpasar** | **0.96** | **251** | P | Pb | 13 45 40.0 | +0.1 |
| **PLAI** | **Plampang** | **1.69** | **106** | P | Pn | 13 45 51.5 | +0.8 |
| **JAGI** | **Jajag, Banyuwa** | **1.96** | **267** | P | Pn | 13 45 53.6 | -0.8 |
| **BSSI** | **Bau Bau, Buton** | **4.85** | **63** | P | Pn | 13 46 33.2 | -1.0 |
| **BNSI** | **Bone** | **5.58** | **45** | P | Pn | 13 46 43.7 | -0.5 |
| | 19nm,0.8s,0.2nm | | | | | | |

*IDC **05** 13:51:12.9±3.3, 9.11S×115.06E, h0km, mb3.4/4, mbtmp3.4/4, Error ellipse: s-maj=164.2km s-min=23.8km az=51.0*
*DJA **05** 13:51:18.7±0.9, 8°S±15°×11°6E±°, h10km, M3.7/6, MLv3.7/6*
**ISC 05 13:51:18.5±0.9, 8.2S±0.1×116.27E±0.06, h10km, n10, σ0§72/12, mb3.4/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.83** | **133** | P | **Pg** | **13 51 34.7** | **+0.2** |
| **SRBI** | **Singaraja** | **1.05** | **275** | P | **Pg** | **13 51 38.9** | **+0.2** |
| SRBI | | | | S | **Sn** | **13 51 53.7** | **-0.3** |
| **DNP** | **Denpasar** | **1.16** | **244** | P | **Pn** | **13 51 41.5** | **+0.7** |
| **PLAI** | **Plampang** | **1.63** | **114** | P | **Pn** | **13 51 47.4** | **+0.1** |
| PLAI | | | | S | **Sb** | **13 52 09.7** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.12** | **262** | P | **Pn** | **13 51 53.7** | **-0.3** |
| **PWJI** | **Pagerwojo** | **4.42** | **272** | P | **Pn** | **13 52 26.1** | **+0.4** |
| **WRA** | **Warramunga Arr** | **21.05** | **126** | P | **P** | **13 56 02.0** | **-0.8** |
| | 1.0nm,0.7s,baz=300,slow=12,SNR=11 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.87** | **134** | P | **P** | **13 56 21.4** | **-0.9** |
| | 0.6nm,0.6s,baz=306,slow=8.6,SNR=12 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.44** | **352** | P | **P** | **14 01 01.7** | **+1.1** |
| | 0.3nm,0.4s,baz=168,slow=7.4,SNR=2.0 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.52** | **334** | P | **P** | **14 01 41.5** | **-0.9** |
| | 0.3nm,0.9s,baz=145,slow=5.3,SNR=2.1 | | | | | | |
| | 0.3nm,0.9s | | | | | | |

*TEH **05** 13:58:12.0, 34.65N×46.26E, h10km±23km, ML2.8*
*ISN **05** 13:58:12.6±1.0, 34.69N×46.24E, h19km±26km, ML2.9*
**ISC 05 13:58:12.2±1.0, 34.65N±0.04×46.25E±0.03, h10km±8km, n14, σ0§47/21, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.12** | **67** | Pg | **Pg** | **13 58 15.2** | **-0.1** |
| IDHR | | | | Sg | **Sg** | **13 58 17.6** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.41** | **141** | Pg | **Pg** | **13 58 20.6** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.57** | **255** | Pg | **Pg** | **13 58 23.6** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **208** | Pg | **Pg** | **13 58 23.7** | **-0.3** |
| GLG1 | | | | Sg | **Sb** | **13 58 33.7** | **+0.1** |
| **ILIN** | **Lien** | **0.64** | **65** | Pg | **Pg** | **13 58 24.3** | **-0.4** |
| ILIN | | | | Sg | **Sb** | **13 58 34.8** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.75** | **120** | Pg | **Pg** | **13 58 26.1** | **-0.6** |
| KCHF | | | | Sg | **Sb** | **13 58 38.1** | **+0.3** |
| **ILBA** | **Ilam Banvizeh** | **1.03** | **182** | Pg | **Pb** | **13 58 31.5** | **-0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.15** | **79** | Pg | **Pn** | **13 58 34.3** | **-0.2** |
| **IBZA** | **Bozab** | **1.34** | **97** | Pg | **Pb** | **13 58 37.7** | **+0.2** |
| **IBDR** | **Badra** | **1.56** | **190** | *e*Pg | **Pb** | **13 58 41.0** | **-0.1** |
| IBDR | | | | *e*Sg | **Sg** | **13 59 02.0** | **-0.4** |
| **IKFM** | **Kafar-mosalman** | **1.74** | **130** | Pg | **Pb** | **13 58 44.6** | **+0.6** |
| **IKRK** | **Kirkuk** | **1.74** | **296** | *e*Pn | **Pb** | **13 58 44.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sb** | **13 59 05.5** | **-0.5** |
| IKRK | | | | AML | AML | 13 59 14.6 | |
| | comp=E,118nm,0.1s | | | | | | |
| IKRK | | | | AML | AML | 13 59 14.6 | |
| | comp=N,195nm,0.5s | | | | | | |
| **HSAM** | **Samen** | **1.99** | **102** | Pn | **Pb** | **13 58 48.7** | **+0.2** |
| **BHD** | **Baghdad** | **2.08** | **229** | *e*Pn | **Pn** | **13 58 48.0** | **+1.0** |
| BHD | | | | *e*Sn | **Sb** | **13 59 15.0** | **-0.8** |

*ISN **05** 13:59:21.6±0.6, 34.74N×45.52E, h6km±14km, ML3.6*
*IDC **05** 13:59:24.1±2.1, 34.50N×45.50E, h0km, mb3.6/7, mbtmp3.6/7, Error ellipse: s-maj=43.0km s-min=28.2km az=161.0*
*TEH **05** 13:59:25.2, 34.64N×45.70E, h6km±62km, ML3.4*
**ISC 05 13:59:25.6±0.6, 34.64N±0.03×45.57E±0.04, h10km, n43, σ1§55/45, mb3.7/15, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KGS1** | **Ghasr-e-Shirin** | **0.13** | **174** | Pg | **Pg** | **13 59 29.1** | **+0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.59** | **152** | Pg | **Pb** | **13 59 37.1** | **-1.0** |
| **IDHR** | **Dehrash** | **0.67** | **84** | Pg | **Pb** | **13 59 37.2** | **-2.4** |
| **IGHG** | **Ghaleghazi** | **0.88** | **110** | Pg | **Pn** | **13 59 41.9** | **-2.3** |
| **ILBA** | **Ilam Banvizeh** | **1.14** | **152** | Pg | **Pn** | **13 59 47.5** | **-0.1** |
| **ILIN** | **Lien** | **1.18** | **76** | Pg | **Pn** | **13 59 46.7** | **-1.7** |
| **KCHF** | **Cheshme Sefid,** | **1.27** | **106** | Pg | **Pn** | **13 59 48.8** | **-0.7** |
| **IKRK** | **Kirkuk** | **1.27** | **307** | *e*Pg | **Pn** | **13 59 46.0** | **-3.4** |
| IKRK | | | | *e*Sg | **Sb** | **14 00 03.0** | **-2.9** |
| IKRK | | | | AML | AML | 14 00 14.7 | |
| | comp=N,2μm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 14 00 15.5 | |
| | comp=E,1μm,0.3s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.51** | **357** | Pg | **Pg** | **13 59 55.6** | **+1.0** |
| **IBDR** | **Badra** | **1.55** | **169** | *e*Pn | **Pn** | **13 59 53.0** | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | **14 00 16.0** | **+0.6** |
| **BHD** | **Baghdad** | **1.68** | **216** | *e*Pn | **Pn** | **13 59 54.0** | **-1.1** |
| BHD | | | | *e*Sn | **Sn** | **14 00 18.0** | **+1.3** |
| **SNQR** | **Sonqor, Kerman** | **1.71** | **82** | Pg | **Pg** | **13 59 56.8** | **-1.6** |
| **IBZA** | **Bozab** | **1.90** | **94** | Pg | **Pg** | **14 00 00.0** | **-1.9** |
| **MAHB** | **Mahabad** | **2.13** | **3** | Pn | **Pb** | **14 00 04.3** | **0.0** |
| **IKFM** | **Kafar-mosalman** | **2.19** | **120** | Pn | **Pb** | **14 00 04.3** | **-1.0** |
| **HSAM** | **Samen** | **2.54** | **99** | Pn | **Pb** | **14 00 08.5** | **-2.9** |
| **IHSH** | **Hashtrud** | **3.00** | **27** | Pn | **Pn** | **14 00 15.0** | **+1.5** |
| **IAZR** | **Azarshahr** | **3.06** | **6** | Pn | **Pn** | **14 00 17.8** | **-2.4** |
| **ISRB** | **Sarab** | **3.60** | **27** | Pn | **Pn** | **14 00 23.7** | **+2.0** |
| **IPIR** | **Pirpir** | **4.84** | **112** | Pn | **Pn** | **14 00 39.4** | **+0.5** |
| **JHBN** | **Jahan bin** | **4.89** | **118** | Pn | **Pn** | **14 00 40.4** | **+1.0** |
| **IVRN** | **Varamin** | **5.08** | **84** | Pn | **Pn** | **14 00 43.6** | **+1.8** |
| **ZNGN** | **Zangian** | **5.08** | **118** | Pn | **Pn** | **14 00 43.4** | **+1.3** |
| **IKLH** | **Kolahrood** | **5.16** | **103** | Pn | **Pn** | **14 00 44.1** | **+1.0** |
| **ISFB** | **Sefidab** | **5.51** | **91** | Pn | **Pn** | **14 00 48.6** | **+0.8** |
| **IZEF** | **Zefreh** | **5.89** | **105** | Pn | **Pn** | **14 00 54.9** | **+1.7** |
| **IRAM** | **Ramesheh** | **6.36** | **114** | Pn | **Pn** | **14 01 00.9** | **+1.3** |
| **AKASG** | **Malin Array Be** | **19.98** | **328** | P | Pn | 14 03 59.7 | 0.0 |
| | comp=E,0.2nm,0.2s,baz=138,slow=9.1,SNR=3.0 | | | | | | |
| | comp=E,0.2nm,0.2s | | | | | | |
| **ARSA** | **Arzberg** | **25.79** | **308** | *e*pP | **P** | **14 04 58.5** | **+1.9** |
| | comp=E,2.3nm,1.2s | | | | | | |
| **CONA** | **Conrad Observa** | **25.80** | **310** | *e*pP | **P** | **14 04 58.5** | **+1.8** |
| | comp=E,2.1nm,0.8s | | | | | | |
| **SOKA** | **Soboth** | **25.94** | **307** | *e*pP | **P** | **14 04 59.5** | **+1.5** |
| | comp=E,1.7nm,0.9s | | | | | | |
| **MOA** | **Molln** | **26.79** | **309** | *e*pP | **P** | **14 05 07.5** | **+1.8** |
| | comp=E,1.9nm,0.6s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **27.14** | **308** | *e*P | **P** | **14 05 09.9** | **+1.0** |
| | comp=E,1.0nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **27.16** | **307** | *e*P | **P** | **14 05 10.1** | **+0.9** |
| | comp=E,1.4nm,0.5s | | | | | | |
| **LESA** | **Schwarzleotal** | **27.69** | **307** | *e*pP | **P** | **14 05 13.4** | **-0.4** |
| | comp=E,0.3nm,0.3s | | | | | | |
| **WATA** | **Walderalm** | **28.39** | **307** | *e*pP | **P** | **14 05 21.5** | **+1.3** |
| | comp=E,0.3nm,0.2s | | | | | | |
| **FETA** | **Feichten** | **28.88** | **306** | *i* pP | **P** | **14 05 24.9** | **+0.4** |
| | comp=E,0.6nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **29.58** | **341** | P | **P** | **14 05 30.5** | **+0.1** |
| | comp=E,0.9nm,0.6s,baz=148,slow=8.2,SNR=4.9 | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **30.09** | **55** | P | **P** | **14 05 36.6** | **+1.5** |
| | comp=E,0.4nm,0.4s,baz=252,slow=8.2,SNR=8.4 | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **32.83** | **331** | P | **P** | **14 05 59.9** | **+0.9** |
| | comp=E,2.1nm,0.5s,baz=132,slow=8.0,SNR=18 | | | | | | |
| | comp=E,2.1nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **34.36** | **331** | P | **P** | **14 06 12.8** | **+0.5** |
| | comp=E,0.4nm,0.6s,baz=124,slow=9.2,SNR=1.9 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.40** | **292** | P | **P** | **14 06 56.4** | **+0.9** |
| | comp=E,0.4nm,0.8s,baz=66,slow=7.9,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1.8nm,0.6s,baz=300,slow=12,SNR=3.9<br>1.8nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs**<br>0.8nm,0.6s,baz=308,slow=9.2,SNR=5.1<br>0.8nm,0.6s | **22.70** | **135** | P | P | 14 06 39.7 | 0.0 |
| **MKAR** | **Makanchi Array**<br>0.1nm,0.4s,baz=126,slow=7.3,SNR=1.5<br>0.1nm,0.4s | **62.63** | **334** | P | P | 14 12 02.4 | -0.1 |

*IDC **05** 14:10:37.8±0.6,8°15S×116°48E,h0km,mb3.9/14, mbtmp3.9/15,ML3.6/1,Error ellipse: s-maj=26.1km s-min=14.2km az=74.0*
*NEIC **05** 14:10:38.2±2.3,8°15S±0°09×116°47E±0°03,h10km±1km, mb4.1/13,Error ellipse: s-maj=15.3km s-min=5.4km az=351.0*
*DJA **05** 14:10:40.3±0.4,8°S±6°×11°6E±°,h10km,M4.4/9,mb4.8/2, MLv4.2/9*

**ISC 05 14:10:38.9±0.5,8°16S±0°06×116°45E±0°04,h10km,n66, σ1§22/67,mb3.9/14,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.71** | **144** | P | **Pn** | **14 10 54.4** | **-0.7** |
| **SRBI** | **Singaraja** | **1.23** | **273** | P | **Pn** | **14 11 01.6** | **-0.6** |
| **DNP** | **Denpasar** | **1.33** | **247** | P | **Pg** | **14 11 04.7** | **+0.2** |
| DNP | | | | S | **Sg** | **14 11 23.9** | **+2.0** |
| **PLAI** | **Plampang** | **1.47** | **117** | P | **Pg** | **14 11 07.5** | **+0.4** |
| **PLAI** | **Plampang** | **1.47** | **117** | P | **Pn** | **14 11 07.5** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.30** | **262** | P | **Pn** | **14 11 17.2** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.30** | **262** | | **Pn** | **14 11 16.3** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.30** | **262** | P | **Pn** | **14 11 16.3** | **-0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.48** | **64** | P | **Pn** | **14 11 48.0** | **+1.1** |
| **KAPI** | **Kappang** | **4.53** | **47** | Pn | **Pn** | **14 11 45.7** | **-1.9** |
| **KAPI** | **Kappang**<br>2.9nm,0.3s,baz=180,slow=14,SNR=2.5 | **4.53** | **47** | Pn | **Pn** | **14 11 47.5** | **-0.1** |
| KAPI | | | | Sn | **Sn** | **14 12 41.3** | **+1.0** |
| | 6.4nm,0.3s,baz=36,slow=22,SNR=7.3<br>6.0nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.61** | **271** | P | **Pn** | **14 11 50.2** | **+1.5** |
| **MMRI** | **Maumere** | **5.74** | **95** | Pn | **Pn** | **14 12 02.0** | **-2.3** |
| **UGM** | **Wanagama** | **5.88** | **272** | P | **Pn** | **14 12 09.8** | **+3.6** |
| **UGM** | **Wanagama** | **5.88** | **272** | Pn | **Pn** | **14 12 04.9** | **-1.3** |
| **UGM** | **Wanagama**<br>195nm,1.6s | **5.88** | **272** | P | **Pn** | **14 12 08.1** | **+1.9** |
| **SOEI** | **Soe** | **7.88** | **102** | Pn | **Pn** | **14 12 33.9** | **+0.1** |
| **SOEI** | **Soe** | **7.88** | **102** | P | **Pn** | **14 12 36.4** | **+2.6** |
| **XMIS** | **Christmas Isla** | **10.91** | **257** | Pn | **Pn** | **14 13 15.0** | **-0.2** |
| **MBWA** | **Marble Bar** | **13.30** | **167** | P | **Pn** | **14 13 46.4** | **-1.6** |
| **MBWA** | **Marble Bar** | **13.30** | **167** | | **Pn** | **14 13 45.9** | **-2.1** |
| **FITZ** | **Fitzroy Crossi** | **13.32** | **139** | Pn | **Pn** | **14 13 47.3** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **13.73** | **167** | P | **Pn** | **14 13 53.4** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **13.73** | **167** | Pn | **Pn** | **14 13 52.9** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **13.73** | **167** | Pn | **Pn** | **14 13 52.6** | **-1.2** |
| **KNRA** | **Kununurra** | **14.17** | **323** | Pn | **Pn** | **14 13 58.7** | **-1.1** |
| **GIRL** | **Giralia** | **14.56** | **188** | P | **Pn** | **14 14 04.1** | **-1.0** |
| **GIRL** | **Giralia** | **14.56** | **188** | Pn | **Pn** | **14 14 02.3** | **-2.8** |
| **MTN** | **Manton Dam** | **15.16** | **109** | Pn | **Pn** | **14 14 11.8** | **-1.5** |
| MTN | | | | IAmb | IAmb | 14 14 33.7 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **MEEK** | **Meekatharra** | **18.49** | **174** | P | **Pn** | **14 14 56.8** | **+1.4** |
| **WRKA** | **Warakurna** | **20.23** | **147** | P | Pn | 14 15 16.0 | -0.4 |
| **KULM** | **Kulim** | **20.66** | **310** | P | **P** | **14 15 17.6** | **-1.6** |
| **WB0** | **Warramunga Arr** | **20.86** | **125** | | **P** | **14 15 21.7** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 14 15 26.7 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.91** | **126** | Pn | **P** | **14 15 22.0** | **+0.3** |
| **WRA** | **Warramunga Arr**<br>comp=Z,4.3nm,0.5s,baz=300,slow=12,SNR=44<br>comp=Z,4.3nm,0.5s | **20.91** | **126** | P | **P** | **14 15 22.2** | **+0.4** |
| **WRAB** | **Tennant Creek** | **20.91** | **126** | Pn | **P** | **14 15 22.0** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 14 15 26.3 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.92** | **126** | | **P** | **14 15 21.9** | **0.0** |
| WB2 | | | | IAmb | IAmb | 14 15 31.0 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **GSI** | **Gunungsitoli** | **21.04** | **296** | | **P** | **14 15 20.3** | **-2.9** |
| **WR0** | **Warramunga Arr** | **21.08** | **126** | | **P** | **14 15 23.5** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 14 15 36.1 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **BLDU** | **Ballidu** | **22.34** | **179** | P | **P** | **14 15 37.3** | **+0.2** |
| **AS31** | **Alice Springs** | **22.75** | **135** | P | **P** | **14 15 41.2** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.75** | **135** | P | **P** | **14 15 41.5** | **0.0** |
| **ASAR** | **Alice Springs**<br>comp=Z,3.0nm,0.8s,baz=314,slow=10.0,SNR=22<br>comp=Z,3.0nm,0.8s | **22.75** | **135** | P | **P** | **14 15 41.9** | **+0.4** |
| **AS01** | **Alice Springs** | **22.78** | **135** | P | **P** | **14 15 42.5** | **+0.7** |
| **NWAO** | **Narrogin (SRO)**<br>comp=Z,6.6nm,0.8s,baz=342,slow=14,SNR=1.1<br>comp=Z,6.6nm,0.8s | **24.66** | **178** | P | **P** | **14 16 01.3** | **+1.4** |
| **OOD** | **Oodnadatta** | **26.68** | **139** | P | **P** | **14 16 19.9** | **+1.6** |
| **COEN** | **Coen** | **26.84** | **105** | P | **P** | **14 16 20.7** | **+0.8** |
| **CMAR** | **Chiang Mai Arr**<br>comp=Z,0.4nm,0.3s,baz=74,slow=5.1,SNR=1.4<br>comp=Z,0.4nm,0.3s | **31.59** | **327** | P | **P** | **14 17 02.3** | **+0.2** |
| **STKA** | **Stephens Creek**<br>comp=Z,1.7nm,0.6s,baz=340,slow=12,SNR=3.9<br>comp=Z,1.7nm,0.6s | **33.22** | **139** | P | **P** | **14 17 15.8** | **-0.4** |
| **MJAR** | **Matsushiro Arr**<br>comp=Z,0.6nm,0.7s,baz=193,slow=10.0,SNR=1.4<br>comp=Z,0.6nm,0.7s | **48.94** | **23** | P | **P** | **14 19 25.6** | **+0.2** |
| **USRK** | **Ussuriysk Ar.**<br>comp=Z,0.8nm,0.6s,baz=195,slow=8.9,SNR=2.0<br>comp=Z,0.8nm,0.6s | **53.98** | **14** | P | **P** | **14 20 03.3** | **+0.2** |
| **SONM** | **Songino Array** | **56.46** | **352** | P | **P** | **14 20 19.2** | **-1.8** |
| SONM | | | | IAmb | IAmb | 14 20 28.6 | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **SONM** | **Songino Array**<br>comp=Z,0.4nm,0.4s,baz=149,slow=6.7,SNR=3.1<br>comp=Z,0.4nm,0.4s | **56.46** | **352** | P | **P** | **14 20 21.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **62.59** | **334** | P | **P** | **14 21 03.2** | **-0.1** |
| **MKAR** | **Makanchi Array**<br>comp=Z,0.7nm,0.7s,baz=146,slow=7.3,SNR=7.2<br>comp=Z,0.7nm,0.7s | **62.59** | **334** | P | **P** | **14 21 04.3** | **+1.0** |
| **KURBB** | **Kurchatov Arra**<br>comp=Z,0.2nm,0.4s,baz=114,slow=4.6,SNR=2.0<br>comp=Z,0.2nm,0.4s | **67.12** | **335** | P | **P** | **14 21 33.2** | **+0.5** |
| **ZALV** | **Zalesovo Beam**<br>comp=Z,0.6nm,0.5s,baz=151,slow=3.4,SNR=2.4<br>comp=Z,0.6nm,0.5s | **67.39** | **340** | P | **P** | **14 21 34.4** | **+0.1** |
| **VNDA** | **Vanda** | **73.21** | **171** | P | **P** | **14 22 10.3** | **+0.6** |
| **VNDA** | **Vanda**<br>comp=Z,0.5nm,0.7s,baz=282,slow=6.6,SNR=4.6<br>comp=Z,0.5nm,0.7s | **73.21** | **171** | P | **P** | **14 22 10.3** | **+0.6** |
| **AMKA** | **Amchitka** | **80.02** | **34** | P | **P** | **14 22 47.6** | **-0.9** |
| **QSPA** | **South Pole Qui** | **81.83** | **180** | P | **P** | **14 22 58.8** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 14 22 59.7 | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui**<br>comp=Z,2.4nm,1.0s,baz=40,slow=1.3,SNR=5.3<br>comp=Z,2.4nm,1.0s | **81.83** | **180** | P | **P** | **14 22 58.7** | **+0.5** |
| **SNAA** | **Sanae**<br>comp=Z,0.9nm,0.8s,baz=122,slow=4.0,SNR=3.7<br>comp=Z,0.9nm,0.8s | **91.11** | **196** | P | **P** | **14 23 44.5** | **+0.8** |
| **TORD** | **Torodi Ar. Bea**<br>comp=Z,0.5nm,1.0s,baz=138,slow=2.1,SNR=1.9 | **115.83** | **281** | PKP | **PKiKP** | **14 29 23.0** | **+0.1** |
| **CPUP** | **Villa Florida**<br>comp=Z,0.8nm,0.6s,baz=140,slow=6.5,SNR=2.8 | **145.19** | **190** | PKPbc | **PKPbc** | **14 30 16.0** | **-1.2** |
| **LPAZ** | **La Paz**<br>comp=Z,1.4nm,0.7s,baz=170,slow=6.1,SNR=4.6 | **155.29** | **169** | PKPab | **PKPab** | **14 30 59.1** | **-0.1** |

*IDC **05** 14:20:09.8±2.6,8°27S×116°34E,h0km,mb3.6/6, mbtmp3.6/6,Error ellipse: s-maj=159.7km s-min=21.5km az=52.0*
*DJA **05** 14:20:12.7±0.3,8°S±6°×11°6E±°,h10km,M4.2/6,mb4.5/1, MLv4.0/6*

**ISC 05 14:20:12.1±0.8,8°15S±0°09×116°51E±0°05,h10km,n13, σ0§98/14,mb3.8/5,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.69** | **148** | P | **Pg** | **14 20 25.1** | **-0.4** |
| **SRBI** | **Singaraja** | **1.28** | **273** | P | **Pn** | **14 20 35.0** | **-1.1** |
| SRBI | | | | S | **Sb** | **14 20 52.8** | **-0.1** |
| **PLAI** | **Plampang** | **1.43** | **118** | P | **Pb** | **14 20 39.5** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **262** | P | **Pn** | **14 20 51.6** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.43** | **64** | P | **Pn** | **14 21 18.9** | **-0.5** |
| **PWJI** | **Pagerwojo** | **4.66** | **271** | P | **Pn** | **14 21 24.0** | **+1.4** |
| **BNSI** | **Bone** | **5.16** | **44** | P | **Pn** | **14 21 31.0** | **+1.5** |
| **WRA** | **Warramunga Arr**<br>1.3nm,0.9s,baz=302,slow=12,SNR=4.8<br>1.3nm,0.9s | **20.87** | **126** | P | **P** | **14 24 53.3** | **-1.2** |
| **ASAR** | **Alice Springs** | **22.72** | **135** | P | **P** | **14 25 14.6** | **+0.2** |
| | 1.9nm,0.7s,baz=311,slow=9.6,SNR=11<br>1.9nm,0.7s | | | | | | |
| **SONM** | **Songino Array**<br>0.9nm,0.7s,baz=180,slow=5.8,SNR=4.6<br>0.9nm,0.7s | **56.45** | **352** | P | **P** | **14 29 54.9** | **+0.7** |
| **MKAR** | **Makanchi Array**<br>0.5nm,0.7s,baz=150,slow=8.4,SNR=5.1<br>0.5nm,0.7s | **62.60** | **334** | P | **P** | **14 30 36.3** | **-0.2** |
| **KURBB** | **Kurchatov Arra**<br>0.2nm,0.5s,baz=149,slow=5.9,SNR=2.2<br>0.2nm,0.5s | **67.14** | **335** | P | **P** | **14 31 04.9** | **-1.1** |
| **ZALV** | **Zalesovo Beam**<br>0.9nm,0.6s,baz=148,slow=5.7,SNR=2.8<br>0.9nm,0.6s | **67.39** | **340** | P | **P** | **14 31 07.0** | **-0.5** |

*IDC **05** 14:21:04.2±1.6,8°19S×116°40E,h0km,mb3.5/6, mbtmp3.6/7,ML4.1/1,Error ellipse: s-maj=55.6km s-min=23.4km az=50.0*

**ISC 05 14:21:09.4±1.5,8°2S±0°2×116°5E±0°2,h35km,n7,σ0§38/7, mb3.8/5,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang**<br>9.1nm,0.3s,baz=221,slow=20,SNR=3.8<br>24nm,0.4s | **4.50** | **46** | Pn | **Pn** | **14 22 15.2** | **+0.1** |
| **WRA** | **Warramunga Arr**<br>0.9nm,0.7s,baz=298,slow=12,SNR=2.2<br>0.9nm,0.7s | **20.87** | **126** | P | **P** | **14 25 48.3** | **-0.4** |
| **ASAR** | **Alice Springs**<br>0.9nm,0.6s,baz=312,slow=9.7,SNR=1.8<br>0.9nm,0.6s | **22.71** | **135** | P | **P** | **14 26 08.8** | **+0.3** |
| **SONM** | **Songino Array**<br>0.7nm,0.7s,baz=169,slow=8.7,SNR=3.7<br>0.7nm,0.7s | **56.46** | **352** | P | **P** | **14 30 47.5** | **-0.4** |
| **MKAR** | **Makanchi Array**<br>0.5nm,0.7s,baz=152,slow=5.5,SNR=4.1<br>0.5nm,0.7s | **62.61** | **334** | P | **P** | **14 31 30.5** | **+0.3** |
| **KURBB** | **Kurchatov Arra**<br>0.4nm,0.8s,baz=126,slow=5.6,SNR=1.4<br>0.4nm,0.8s | **67.14** | **335** | P | **P** | **14 31 59.8** | **+0.3** |
| **ZALV** | **Zalesovo Beam**<br>0.3nm,0.3s,baz=165,slow=6.0,SNR=2.3<br>0.3nm,0.3s | **67.40** | **340** | P | **P** | **14 32 01.2** | **0.0** |

*IDC **05** 14:22:56.8±1.1,4°55S×133°35E,h0km,mb3.7/4, mbtmp3.8/7,ML3.7/3,Error ellipse: s-maj=62.6km s-min=22.1km az=69.0*
*DJA **05** 14:22:58.3±1.2,4°S±4°×13°4E±°,h17km±11km,M4.5/11, mb4.6/7,mB4.9/3,MLv4.4/11,Mw(mB)4.2/3*
*NEIC **05** 14:23:01.1±1.9,4°52S±0°07×133°4E±0°1,h32km±7km, mb4.4/13,Error ellipse: s-maj=18.8km s-min=10.0km az=83.0*

**ISC 05 14:22:58.9±0.6,4°44S±0°06×133°53E±0°08,h21km,n45, σ1§31/43,mb4.1/7,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMPI** | **Kaimana, Papua** | **0.79** | **13** | P | **Pb** | **14 23 12.8** | **-1.2** |
| **FAKI** | **Fak Fak** | **1.98** | **320** | P | **Pn** | **14 23 32.0** | **+0.8** |
| **FAKI** | **Fak Fak** | **1.98** | **320** | | **Pn** | **14 23 31.8** | **+0.6** |
| **FAKI** | **Fak Fak** | **1.98** | **320** | P | **Pn** | **14 23 31.5** | **+0.3** |
| **SAUI** | **Saumlaki** | **4.16** | **212** | Pn | **Pn** | **14 24 00.2** | **-1.1** |
| **SAUI** | **Saumlaki** | **4.16** | **212** | P | **Pn** | **14 24 03.5** | **+2.2** |
| **SWI** | **Sorong** | **4.21** | **327** | P | **Pn** | **14 24 02.1** | **+0.1** |
| **MSAI** | **Masohi** | **4.72** | **283** | P | **Pn** | **14 24 10.5** | **+1.5** |
| **NLAI** | **Namlea**<br>27nm,0.6s,0.1nm | **6.53** | **280** | P | Pn | 14 24 37.0 | +3.2 |
| **GENI** | **Genyem** | **6.87** | **75** | P | **Pn** | **14 24 39.1** | **+0.6** |
| **JAY** | **Jayapura** | **7.41** | **75** | P | **Pn** | **14 24 44.3** | **-1.7** |
| **TABU** | **Tabubil** | **7.71** | **96** | P | **Pn** | **14 24 49.3** | **-0.8** |
| **SANI** | **Sanana** | **7.90** | **287** | P | **Pn** | **14 24 53.1** | **+0.5** |
| **KDU** | **Kakadu** | **8.26** | **187** | P | **Pn** | **14 24 57.1** | **-0.6** |
| **DRS** | **Darwin Rock St** | **8.36** | **198** | P | **Pn** | **14 24 59.8** | **+0.8** |
| **MTN** | **Manton Dam** | **8.68** | **196** | P | **Pn** | **14 25 03.5** | **+0.1** |
| **MTN** | **Manton Dam** | **8.68** | **196** | Pn | **Pn** | **14 25 02.8** | **-0.6** |
| **KNRA** | **Kununurra** | **12.11** | **202** | | **Pn** | **14 25 49.0** | **-1.5** |
| **COEN** | **Coen** | **13.41** | **135** | Pn | Pn | 14 26 04.1 | -4.2 |
| **WB0** | **Warramunga Arr** | **15.26** | **177** | Pn | **Pn** | **14 26 30.6** | **-2.7** |
| **WRAB** | **Tennant Creek** | **15.42** | **177** | Pn | **Pn** | **14 26 34.3** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 14 26 52.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr**<br>comp=Z,0.5nm,0.3s,baz=358,slow=13,SNR=11<br>comp=Z,3.3nm,0.7s | **15.43** | **177** | Pn | **Pn** | **14 26 33.4** | **-2.2** |
| **WB2** | **Warramunga Arr** | **15.43** | **177** | Pn | **Pn** | **14 26 33.5** | **-2.1** |
| WB2 | | | | IAmb | IAmb | 14 26 52.9 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.46** | **176** | Pn | **Pn** | **14 26 34.5** | **-1.4** |
| WR0 | | | | IAmb | IAmb | 14 26 48.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.62** | **209** | Pn | **Pn** | **14 26 35.5** | **-2.4** |
| **MTSU** | **Mount Surprise** | **17.22** | **143** | P | **Pn** | **14 26 59.0** | **+0.6** |
| **AS31** | **Alice Springs** | **19.12** | **179** | P | **P** | **14 27 20.1** | **-0.6** |
| **AS01** | **Alice Springs** | **19.12** | **179** | P | **Pn** | **14 27 22.2** | **+0.5** |
| **ASAR** | **Alice Springs**<br>comp=Z,0.6nm,0.3s,baz=3.0,slow=11,SNR=35<br>comp=Z,11nm,0.7s | **19.12** | **179** | P | **Pn** | **14 27 21.1** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **19.67** | **257** | P | **P** | **14 27 24.4** | **-2.4** |
| **CTA** | **Charters Tower**<br>baz=320,slow=9.9,SNR=11<br>comp=Z,0.8nm,0.8s | **19.89** | **143** | P | **P** | **14 27 29.9** | **+0.7** |
| **CTAO** | **Charters Tower** | **19.89** | **143** | P | **P** | **14 27 29.9** | **+0.7** |
| **CTAO** | **Charters Tower** | **19.89** | **143** | P | **P** | **14 27 29.3** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 14 27 33.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.60** | **217** | P | **P** | **14 27 46.2** | **-1.4** |
| PSA00 | | | | IAmb | IAmb | 14 27 58.1 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **24.29** | **156** | P | **P** | **14 28 16.0** | **+1.0** |
| **MK31** | **Makanchi Array** | **68.10** | **325** | P | **P** | **14 33 58.0** | **+0.7** |
| **MKAR** | **Makanchi Array** | **68.10** | **325** | P | **P** | **14 33 58.2** | **+0.9** |
| **MKAR** | **Makanchi Array**<br>comp=Z,0.8nm,0.5s,baz=119,slow=7.8,SNR=11<br>comp=Z,0.8nm,0.5s | **68.10** | **325** | P | **P** | **14 33 58.4** | **+1.1** |
| **ZALV** | **Zalesovo Beam**<br>comp=Z,0.2nm,0.3s,baz=139,slow=6.8,SNR=1.4<br>comp=Z,0.2nm,0.3s | **70.92** | **332** | P | **P** | **14 34 16.3** | **+1.8** |
| **KURBB** | **Kurchatov Arra**<br>comp=Z,0.3nm,0.5s,baz=127,slow=5.9,SNR=2.6<br>comp=Z,0.3nm,0.5s | **72.24** | **327** | P | **P** | **14 34 23.2** | **+0.7** |
| **ABKAR** | **Akbulak array** | **82.73** | **321** | P | **P** | **14 35 21.5** | **+0.3** |
| **QSPA** | **South Pole Qui** | **85.52** | **180** | P | **P** | **14 35 36.5** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 14 35 54.1 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **88.60** | **24** | P | **P** | **14 35 51.0** | **+1.0** |
| I23K | | | | IAmb | IAmb | 14 35 58.6 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| **H24K** | **Noodor Dome** | **89.36** | **24** | P | **P** | **14 35 53.7** | **0.0** |
| **ILAR** | **Eielson Array**<br>comp=Z,0.2nm,0.5s,baz=256,slow=4.1,SNR=4.8<br>comp=Z,0.2nm,0.5s | **89.55** | **25** | P | **P** | **14 35 57.0** | **+2.5** |

*IDC **05** 14:24:36.5±0.6,8°24S×116°24E,h0km,mb4.1/14, mbtmp4.1/15,ML3.5/1,Error ellipse: s-maj=27.3km s-min=13.9km az=74.0*
*DJA **05** 14:24:39.2±0.3,8°S±5°×11°6E±°,h10km,M4.6/13,mb4.7/3, mB5.0/1,MLv4.5/13,Mw(mB)4.2/1*
*NEIC **05** 14:24:40.5±2.1,8°30S±0°08×116°22E±0°06,h24km±5km, mb4.6/15,Error ellipse: s-maj=12.2km s-min=8.7km az=192.0*

**ISC 05 14:24:38.2±0.5,8°23S±0°06×116°27E±0°04,h10km,n54, σ1§14/56,mb4.3/20,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.79** | **130** | P | **Pg** | **14 24 54.4** | **+0.9** |
| **SRBI** | **Singaraja** | **1.05** | **278** | P | **Pg** | **14 24 58.7** | **+0.2** |
| SRBI | | | | S | **Sb** | **14 25 13.9** | **+1.5** |
| **DNP** | **Denpasar** | **1.14** | **247** | P | **Pg** | **14 25 00.8** | **+0.8** |
| **PLAI** | **Plampang** | **1.61** | **112** | P | **Pn** | **14 25 08.0** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **263** | | **Pn** | **14 25 13.5** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **263** | P | **Pn** | **14 25 13.6** | **+0.1** |
| **GRJI** | **Gresik** | **3.98** | **289** | P | **Pn** | **14 25 40.5** | **+1.3** |
| **PWJI** | **Pagerwojo** | **4.42** | **272** | P | **Pn** | **14 25 46.6** | **+1.2** |
| **BSSI** | **Bau Bau, Buton** | **4.68** | **64** | P | **Pn** | **14 25 49.0** | **+0.1** |
| **BASI** | **Baing, Sumba** | **4.69** | **115** | P | **Pn** | **14 25 50.4** | **+1.3** |
| **KAPI** | **Kappang** | **4.71** | **48** | Pn | **Pn** | **14 25 50.3** | **+0.9** |
| **KAPI** | **Kappang**<br>2.2nm,0.3s,baz=255,slow=11,SNR=1.4 | **4.71** | **48** | Pn | **Pn** | **14 25 48.8** | **-0.5** |
| KAPI | | | | Sn | **Sn** | **14 26 42.3** | **-1.8** |
| | 12nm,0.3s,baz=204,slow=20,SNR=9.4<br>6.4nm,0.3s | | | | | | |
| **BNSI** | **Bone**<br>37nm,0.6s,1μm0.5nm | **5.39** | **45** | P | **Pn** | **14 25 59.8** | **+1.1** |
| **UGM** | **Wanagama** | **5.70** | **273** | Pn | **Pn** | **14 26 04.1** | **+1.2** |
| **UGM** | **Wanagama** | **5.70** | **273** | P | **Pn** | **14 26 04.1** | **+1.2** |
| **SOEI** | **Soe** | **8.05** | **101** | Pn | **Pn** | **14 26 37.5** | **+2.1** |
| **MBWA** | **Marble Bar** | **13.28** | **166** | Pn | **Pn** | **14 27 46.0** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **13.39** | **138** | Pn | **Pn** | **14 27 47.0** | **-1.5** |
| **GIRL** | **Giralia** | **14.46** | **188** | Pn | **Pn** | **14 28 01.1** | **-2.1** |
| **WB0** | **Warramunga Arr** | **20.97** | **125** | P | **P** | **14 29 20.5** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 14 29 22.3 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr**<br>comp=Z,1.5nm,0.8s,baz=300,slow=12,SNR=22<br>comp=Z,1.5nm,0.8s | **21.02** | **126** | P | **P** | **14 29 22.0** | **-0.2** |
| **WRAB** | **Tennant Creek** | **21.02** | **125** | P | **P** | **14 29 21.8** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 14 29 23.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.03** | **126** | P | **P** | **14 29 21.7** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 14 29 22.7 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.19** | **125** | P | **P** | **14 29 23.8** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 14 29 24.9 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **22.83** | **134** | P | **P** | **14 29 40.9** | **-0.8** |
| **ASAR** | **Alice Springs**<br>comp=Z,8.0nm,0.8s,baz=308,slow=8.8,SNR=20<br>comp=Z,8.0nm,0.8s | **22.83** | **134** | P | **P** | **14 29 41.5** | **-0.2** |
| **FORT** | **Forrest** | **25.00** | **155** | P | **P** | **14 30 02.6** | **+0.4** |
| **COEN** | **Coen** | **27.00** | **105** | P | **P** | **14 30 20.8** | **+0.1** |
| COEN | | | | IAmb | IAmb | 14 30 21.7 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr**<br>comp=Z,0.7nm,0.3s,baz=145,slow=6.5,SNR=2.1<br>comp=Z,0.7nm,0.3s | **31.55** | **327** | P | **P** | **14 31 01.9** | **+0.9** |
| **STKA** | **Stephens Creek** | **33.29** | **138** | P | **P** | **14 31 15.1** | **-1.0** |
| **STKA** | **Stephens Creek**<br>comp=Z,2.0nm,0.7s,baz=314,slow=15,SNR=1.9<br>comp=Z,2.0nm,0.7s | **33.29** | **138** | P | **P** | **14 31 15.9** | **-0.2** |
| **KSRS** | **Korea Array**<br>comp=Z,1.4nm,0.9s,baz=199,slow=7.9,SNR=5.1<br>comp=Z,1.4nm,0.9s | **46.73** | **13** | P | **P** | **14 33 07.4** | **-0.1** |
| **MJAR** | **Matsushiro Arr**<br>comp=Z,1.2nm,0.7s,baz=191,slow=9.0,SNR=7.0<br>comp=Z,1.2nm,0.7s | **49.07** | **23** | P | **P** | **14 33 25.5** | **-0.3** |
| **USRK** | **Ussuriysk Ar.**<br>comp=Z,1.3nm,0.6s,baz=202,slow=7.0,SNR=4.3<br>comp=Z,1.3nm,0.6s | **54.09** | **14** | P | **P** | **14 34 03.3** | **+0.2** |
| **SONM** | **Songino Array** | **56.50** | **352** | P | **P** | **14 34 21.5** | **+0.9** |
| SONM | | | | IAmb | IAmb | 14 34 28.0 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **SONM** | **Songino Array**<br>comp=Z,2.5nm,0.6s,baz=174,slow=9.3,SNR=14<br>comp=Z,2.5nm,0.6s | **56.50** | **352** | P | **P** | **14 34 21.4** | **+0.7** |
| **JKA** | **Kamikawa-asahi** | **57.29** | **22** | P | **P** | **14 34 27.1** | **+1.0** |
| **MLZ** | **Mavora Lakes** | **57.87** | **139** | P | **P** | **14 34 30.6** | **+0.3** |
| MLZ | | | | IAmb | IAmb | 14 34 51.3 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **LBZ** | **Lake Benmore** | **58.86** | **137** | P | **P** | **14 34 37.1** | **-0.2** |
| **MKAR** | **Makanchi Array** | **62.57** | **334** | P | **P** | **14 35 01.5** | **-0.9** |
| **MKAR** | **Makanchi Array**<br>comp=Z,0.5nm,0.6s,baz=155,slow=6.2,SNR=2.0<br>comp=Z,0.5nm,0.6s | **62.57** | **334** | P | **P** | **14 35 01.9** | **-0.5** |
| **BTK** | **Batken** | **63.78** | **322** | P | **P** | **14 35 09.7** | **-0.9** |
| BTK | | | | IAmb | IAmb | 14 35 14.7 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra**<br>comp=Z,0.6nm,0.2s,baz=144,slow=6.6,SNR=6.4<br>comp=Z,0.6nm,0.2s | **67.11** | **335** | P | **P** | **14 35 31.5** | **-0.3** |
| **ZALV** | **Zalesovo Beam**<br>comp=Z,1.2nm,0.5s,baz=134,slow=4.3,SNR=3.8<br>comp=Z,1.2nm,0.5s | **67.39** | **340** | P | **P** | **14 35 32.6** | **-0.9** |
| **VNDA** | **Vanda** | **73.17** | **171** | P | **P** | **14 36 09.1** | **+0.3** |
| **VNDA** | **Vanda**<br>comp=Z,0.8nm,0.6s,baz=314,slow=7.6,SNR=8.4<br>comp=Z,0.8nm,0.6s | **73.17** | **171** | P | **P** | **14 36 09.3** | **+0.6** |
| **QSPA** | **South Pole Qui** | **81.76** | **180** | P | **P** | **14 36 55.4** | **-1.7** |
| QSPA | | | | IAmb | IAmb | 14 37 12.2 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui**<br>comp=Z,2.1nm,1.0s,baz=270,slow=3.1,SNR=3.3<br>comp=Z,2.1nm,1.0s | **81.76** | **180** | P | **P** | **14 36 56.7** | **-0.4** |
| **SNAA** | **Sanae**<br>comp=Z,0.7nm,0.5s,baz=181,slow=8.8,SNR=7.4<br>comp=Z,0.7nm,0.5s | **91.00** | **196** | P | **P** | **14 37 43.0** | **+0.6** |
| **TORD** | **Torodi Ar. Bea**<br>comp=Z,0.2nm,0.4s,baz=38,slow=2.0,SNR=1.9 | **115.66** | **281** | PKP | **PKPdf** | **14 43 20.4** | **-1.4** |
| **TXAR** | **Lajitas Array**<br>comp=Z,0.1nm,0.5s,baz=331,slow=3.3,SNR=1.6 | **137.06** | **55** | PKP | **PKPdf** | **14

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MTN | | | | IAmb | IAmb | 14 46 11.7 | | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **FAKI** | **Fak Fak** | **16.52** | **72** | Pn | **Pn** | **14 46 08.1** | **+0.4** | |
| FAKI | | | | IAmb | IAmb | 14 46 36.9 | | |
| | comp=Z,51nm,1.5s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.78** | **125** | P | **P** | **14 46 56.4** | **-0.7** | |
| WB0 | | | | IAmb | IAmb | 14 47 24.4 | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.83** | **126** | P | **P** | **14 46 57.1** | **-0.6** | |
| **WRA** | **Warramunga Arr** | **20.83** | **126** | P | **P** | **14 46 57.6** | **0.0** | |
| | comp=Z,3.8nm,0.6s,baz=299,slow=12,SNR=30 | | | | | | | |
| WRA | | | | S | **S** | **14 50 46.4** | **-3.8** | |
| | comp=Z,2.2nm,0.8s,baz=302,slow=12,SNR=2.7 | | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.83** | **126** | P | **P** | **14 46 57.7** | **0.0** | |
| **WB2** | **Warramunga Arr** | **20.84** | **126** | P | **P** | **14 46 57.5** | **-0.3** | |
| WB2 | | | | IAmb | IAmb | 14 47 12.0 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.00** | **126** | P | **P** | **14 46 59.5** | **0.0** | |
| WR0 | | | | IAmb | IAmb | 14 47 13.9 | | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **22.67** | **135** | P | **P** | **14 47 17.2** | **-0.2** | |
| **ASAR** | **Alice Springs** | **22.67** | **135** | P | **P** | **14 47 17.4** | **-0.1** | |
| **ASAR** | **Alice Springs** | **22.67** | **135** | P | **P** | **14 47 17.5** | **+0.1** | |
| | comp=Z,4.0nm,0.8s,baz=311,slow=9.2,SNR=39 | | | | | | | |
| ASAR | | | | S | **S** | **14 51 27.0** | **+1.2** | |
| | comp=Z,1.6nm,0.8s,baz=316,slow=23,SNR=4.1 | | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **26.77** | **105** | P | **P** | **14 47 56.2** | **+0.2** | |
| COEN | | | | IAmb | IAmb | 14 48 07.8 | | |
| | comp=Z,9.7nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.67** | **327** | P | **P** | **14 48 38.8** | **-0.7** | |
| | comp=Z,1.4nm,0.9s,baz=146,slow=6.3,SNR=5.4 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **RABL** | **Rabaul** | **35.66** | **86** | P | **P** | **14 49 14.9** | **+0.6** | |
| **TOO** | **Toolangi** | **39.27** | **143** | P | **P** | **14 49 45.3** | **+0.6** | |
| TOO | | | | IAmb | IAmb | 14 49 52.9 | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **CD2** | **Chengdu** | **40.78** | **343** | P | **P** | **14 50 00.3** | **+3.0** | |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **SHL** | **Shillong** | **41.25** | **325** | P | **P** | **14 50 01.8** | **+0.3** | |
| **TIA** | **Tai'an** | **44.19** | **1** | P | **P** | **14 50 27.3** | **+2.4** | |
| TIA | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.8s | | | | | | | |
| **KSRS** | **Korea Array** | **46.67** | **13** | P | **P** | **14 50 43.8** | **-0.7** | |
| | comp=Z,1.2nm,0.9s,baz=186,slow=8.2,SNR=6.0 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.96** | **23** | P | **P** | **14 51 01.7** | **-0.7** | |
| | comp=Z,1.1nm,0.8s,baz=192,slow=7.3,SNR=4.8 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.03** | **355** | *e*P | **P** | **14 51 02.4** | **-0.5** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.6s | | | | | | | |
| **GTA** | **Gaotai** | **49.85** | **343** | *e*P | **P** | **14 51 11.0** | **+1.7** | |
| GTA | | | | sP | sP | 14 51 26.1 | +12 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.02** | **14** | P | **P** | **14 51 39.6** | **-0.5** | |
| | comp=Z,2.9nm,0.8s,baz=180,slow=1.9,SNR=5.7 | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **14 51 58.1** | **-0.2** | |
| | comp=Z,1.5nm,0.8s,baz=168,slow=8.7,SNR=6.6 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **HEH** | **HeiHe** | **58.99** | **8** | *e*P | **P** | **14 52 15.6** | **+0.2** | |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **61.69** | **130** | P | **P** | **14 52 33.8** | **-0.5** | |
| **MK31** | **Makanchi Array** | **62.66** | **334** | P | **P** | **14 52 40.5** | **0.0** | |
| MK31 | | | | IAmb | IAmb | 14 52 42.4 | | |
| | comp=Z,1.7nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.66** | **334** | P | **P** | **14 52 40.1** | **-0.5** | |
| | comp=Z,1.8nm,0.8s,baz=141,slow=7.8,SNR=15 | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.19** | **335** | P | **P** | **14 53 09.5** | **-0.4** | |
| | comp=Z,0.5nm,0.5s,baz=145,slow=6.4,SNR=6.3 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.45** | **340** | P | **P** | **14 53 10.8** | **-0.7** | |
| **ZALV** | **Zalesovo Beam** | **67.45** | **340** | P | **P** | **14 53 10.4** | **-1.1** | |
| | comp=Z,1.9nm,0.8s,baz=153,slow=3.3,SNR=8.2 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **VNDA** | **Vanda** | **73.15** | **171** | P | **P** | **14 53 48.8** | **+2.7** | |
| | comp=Z,0.9nm,0.8s,baz=338,slow=4.9,SNR=3.6 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **ABKAR** | **Akbulak array** | **75.52** | **326** | P | **P** | **14 53 58.9** | **-1.4** | |
| **QSPA** | **South Pole Qui** | **81.78** | **180** | P | **P** | **14 54 35.0** | **+0.3** | |
| | comp=Z,2.3nm,1.0s,baz=153,slow=5.6,SNR=4.2 | | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.44** | **196** | ⇓P | **P** | **14 55 14.0** | **+1.3** | |
| | comp=Z,8.8nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **91.08** | **196** | ⇓P | **P** | **14 55 21.4** | **+1.1** | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **91.08** | **196** | P | **P** | **14 55 20.7** | **+0.4** | |
| | comp=Z,1.4nm,1.0s,baz=225,slow=7.1,SNR=3.9 | | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.90** | **281** | PKP | **PKPdf** | **15 00 58.7** | **-1.1** | |
| | comp=Z,0.3nm,0.7s,baz=43,slow=3.5,SNR=1.7 | | | | | | | |
| **CPUP** | **Villa Florida** | **145.15** | **190** | PKPbc | **PKPdf** | **15 01 53.8** | **-0.6** | |
| | comp=Z,9.0nm,0.9s,baz=124,slow=3.9,SNR=3.0 | | | | | | | |

*IDC **05** 14:45:33.4±1.2,8.33S×116.02E,h0km,mb3.9/8, mbtmp3.9/9,ML3.7/1, Error ellipse: s-maj=38.3km s-min=20.2km az=63.0*
*DJA **05** 14:45:36.4±0.4,8.7S±7.7×11.6E±.,h10km,M4.2/7,MLv4.2/7*
*NEIC **05** 14:45:37.5±1.5,8.35S±0.08×116.09E±0.06,h21km±6km, mb4.5/14, Error ellipse: s-maj=11.9km s-min=8.7km az=188.0*

**ISC 05 14:45:35.2**±0.5,**8.26S**±0.06×**116.15E**±0.04,**h10**km,**n45,** σ1**9**15/44,**mb4.3**/16,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.86** | **123** | P | **Pg** | **14 45 52.7** | **+0.7** |
| **SRBI** | **Singaraja** | **0.94** | **281** | P | **Pg** | **14 45 54.0** | **+0.6** |
| **DNP** | **Denpasar** | **1.01** | **246** | P | **Pn** | **14 45 57.5** | **+1.9** |
| DNP | | | | S | **Sn** | **14 46 11.7** | **+1.8** |
| **PLAI** | **Plampang** | **1.71** | **109** | P | **Pn** | **14 46 06.7** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **1.99** | **264** | | **Pn** | **14 46 08.6** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **1.99** | **264** | P | **Pn** | **14 46 09.4** | **+0.5** |
| **GRJI** | **Gresik** | **3.88** | **290** | P | **Pn** | **14 46 35.4** | **+0.5** |
| **PWJI** | **Pagerwojo** | **4.31** | **273** | P | **Pn** | **14 46 42.7** | **+1.8** |
| **KAPI** | **Kappang** | **4.82** | **48** | Pn | **Pn** | **14 46 48.5** | **+0.6** |
| **KAPI** | **Kappang** | **4.82** | **48** | Pn | **Pn** | **14 46 48.3** | **+0.4** |
| | 3.1nm,0.3s,baz=210,slow=20,SNR=1.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | **14 47 42.7** | **-1.2** |
| | 3.8nm,0.3s,baz=202,slow=19,SNR=1.8 | | | | | | |
| | 11nm,0.4s | | | | | | |
| **SMRI** | **Semarang** | **5.78** | **282** | Pn | **Pn** | **14 47 01.6** | **+0.4** |
| **SOEI** | **Soe** | **8.16** | **101** | Pn | **Pn** | **14 47 35.2** | **+1.3** |
| **LUWI** | **Luwuk** | **9.75** | **43** | Pn | **Pn** | **14 47 58.3** | **+2.7** |
| **MBWA** | **Marble Bar** | **13.28** | **165** | Pn | **Pn** | **14 48 43.6** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **13.45** | **138** | Pn | **Pn** | **14 48 46.7** | **+0.4** |
| **MNAI** | **Manna** | **13.67** | **286** | Pn | **Pn** | **14 48 49.9** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **13.70** | **165** | Pn | **Pn** | **14 48 49.2** | **-0.6** |
| **GIRL** | **Giralia** | **14.41** | **187** | Pn | **Pn** | **14 48 57.5** | **-2.0** |
| **KULM** | **Kulim** | **20.50** | **311** | P | **P** | **14 50 13.2** | **-0.5** |
| **WB0** | **Warramunga Arr** | **21.05** | **125** | P | **P** | **14 50 19.3** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 14 50 20.1 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.09** | **125** | P | **P** | **14 50 19.5** | **-0.6** |
| **WRA** | **Warramunga Arr** | **21.09** | **125** | P | **P** | **14 50 20.1** | **0.0** |
| | comp=Z,8.8nm,0.6s,baz=301,slow=12,SNR=36 | | | | | | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.10** | **125** | P | **P** | **14 50 19.7** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 14 50 20.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.10** | **125** | P | **P** | **14 50 19.8** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 14 50 20.7 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.26** | **125** | P | **P** | **14 50 21.8** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 14 50 22.6 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **22.89** | **134** | P | **P** | **14 50 38.0** | **-1.3** |
| **ASAR** | **Alice Springs** | **22.89** | **134** | P | **P** | **14 50 36.8** | **-2.6** |
| **ASAR** | **Alice Springs** | **22.89** | **134** | P | **P** | **14 50 39.1** | **-0.2** |
| | comp=Z,5.3nm,0.8s,baz=309,slow=8.7,SNR=16 | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.56** | **178** | P | **P** | **14 50 55.1** | **-0.3** |
| **COEN** | **Coen** | **27.10** | **104** | P | **P** | **14 51 18.8** | **+0.2** |
| COEN | | | | IAmb | IAmb | 14 51 23.5 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **30.61** | **146** | P | **P** | **14 51 49.5** | **-0.1** |
| **TOO** | **Toolangi** | **39.45** | **142** | P | **P** | **14 53 04.0** | **-1.8** |
| TOO | | | | IAmb | IAmb | 14 53 20.8 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **KSRS** | **Korea Array** | **46.80** | **13** | P | **P** | **14 54 06.6** | **+1.5** |
| | comp=Z,0.7nm,0.8s,baz=160,slow=9.4,SNR=5.5 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.15** | **24** | P | **P** | **14 54 24.0** | **+0.6** |
| | comp=Z,0.9nm,0.7s,baz=205,slow=8.3,SNR=3.3 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **14 55 18.5** | **+0.7** |
| | comp=Z,1.1nm,0.7s,baz=168,slow=9.4,SNR=4.9 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MLZ** | **Mavora Lakes** | **57.92** | **139** | P | **P** | **14 55 28.5** | **+0.8** |
| **CASY** | **Casey** | **58.06** | **183** | P | **P** | **14 55 28.6** | **+0.3** |
| CASY | | | | IAmb | IAmb | 14 55 52.0 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.55** | **334** | P | **P** | **14 55 58.3** | **-1.0** |
| | comp=Z,0.3nm,0.6s,baz=142,slow=6.4,SNR=4.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.39** | **223** | T | T | 16 08 43.2 | |
| | baz=85,slow=75,SNR=4.7 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.41** | **223** | T | T | 16 08 35.7 | |
| | baz=85,slow=75,SNR=4.0 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.41** | **223** | T | T | 16 08 27.9 | |
| | baz=85,slow=75,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.38** | **341** | P | **P** | **14 56 29.1** | **-1.5** |
| | comp=Z,0.7nm,0.5s,baz=144,slow=12,SNR=2.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **73.16** | **171** | P | **P** | **14 57 06.2** | **+0.5** |
| VNDA | | | | IAmb | IAmb | 14 57 19.5 | |
| | comp=Z,4.9nm,1.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.36** | **326** | P | **P** | **14 57 17.1** | **-1.8** |
| **SNAA** | **Sanae** | **90.93** | **196** | P | **P** | **14 58 39.5** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=143,slow=15,SNR=1.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |

*NEIC **05** 14:51:41.0±2.3,8.06S±0.06×116.57E±0.05,h10km±2km, mb4.1/7, Error ellipse: s-maj=12.8km s-min=4.0km az=216.0*
*IDC **05** 14:51:40.6±1.1,8.05S×116.63E,h0km,mb3.7/7, mbtmp3.8/8,ML3.7/1, Error ellipse: s-maj=32.5km s-min=20.6km az=55.0*
*DJA **05** 14:51:41.7±0.4,8.7S±6.7×11.6E±.,h10km,M4.3/8,MLv4.3/8*

**ISC 05 14:51:41.0**±0.6,**8.10S**±0.06×**116.50E**±0.05,**h10**km,**n35,** σ1**9**29/38,**mb3.7**/8,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.74** | **149** | P | **Pb** | **14 51 56.4** | **+0.4** |
| **SRBI** | **Singaraja** | **1.27** | **271** | P | **Pn** | **14 52 04.3** | **-0.6** |
| SRBI | | | | S | **Sb** | **14 52 20.3** | **-1.2** |
| **DNP** | **Denpasar** | **1.40** | **246** | P | **Pn** | **14 52 04.9** | **-1.7** |
| **PLAI** | **Plampang** | **1.46** | **120** | P | **Pg** | **14 52 09.5** | **+0.5** |
| PLAI | | | | S | **Sg** | **14 52 29.4** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **261** | Pn | **Pn** | **14 52 18.7** | **-1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **261** | P | **Pn** | **14 52 19.2** | **-0.5** |
| **GRJI** | **Gresik** | **4.16** | **286** | P | **Pn** | **14 52 43.5** | **-1.1** |
| **BSSI** | **Bau Bau, Buton** | **4.42** | **64** | P | **Pn** | **14 52 49.8** | **+1.6** |
| **KAPI** | **Kappang** | **4.46** | **47** | Pn | **Pn** | **14 52 46.6** | **-2.1** |
| **KAPI** | **Kappang** | **4.46** | **47** | Pn | **Pn** | **14 52 47.7** | **-1.0** |
| | 4.1nm,0.3s,baz=213,slow=4.8,SNR=9.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | **14 53 40.2** | **-0.5** |
| | 4.9nm,0.3s,baz=208,slow=16,SNR=2.9 | | | | | | |
| | 8.8nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.65** | **271** | P | **Pn** | **14 52 50.9** | **-0.5** |
| **UGM** | **Wanagama** | **5.92** | **271** | Pn | **Pn** | **14 53 11.0** | **+2.1** |
| **TOLI2** | **Tolitoli** | **10.10** | **25** | Pn | **Pn** | **14 54 04.2** | **-2.1** |
| **XMIS** | **Christmas Isla** | **10.96** | **257** | Pn | **Pn** | **14 54 18.1** | **+0.1** |
| **FITZ** | **Fitzroy Crossi** | **13.33** | **139** | Pn | **Pn** | **14 54 50.0** | **-0.5** |
| **MBWA** | **Marble Bar** | **13.35** | **167** | Pn | **Pn** | **14 54 49.5** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **13.77** | **167** | Pn | **Pn** | **14 54 55.5** | **-1.0** |
| **KNRA** | **Kununurra** | **14.16** | **123** | Pn | **Pn** | **14 55 01.3** | **-0.5** |
| **GIRL** | **Giralia** | **14.62** | **188** | Pn | **Pn** | **14 55 05.4** | **-2.7** |
| **MTN** | **Manton Dam** | **15.14** | **109** | Pn | **Pn** | **14 55 12.8** | **-2.4** |
| **WB0** | **Warramunga Arr** | **20.86** | **126** | P | **P** | **14 56 23.5** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 14 56 28.5 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.90** | **126** | P | **P** | **14 56 23.5** | **-0.4** |
| **WRA** | **Warramunga Arr** | **20.90** | **126** | P | **P** | **14 56 24.4** | **+0.5** |
| | comp=Z,4.0nm,0.5s,baz=299,slow=12,SNR=20 | | | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.91** | **126** | P | **P** | **14 56 24.0** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 14 56 41.0 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.91** | **126** | P | **P** | **14 56 23.2** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 14 56 25.0 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.07** | **126** | P | **P** | **14 56 26.1** | **+0.4** |
| WR0 | | | | IAmb | IAmb | 14 56 31.6 | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **22.75** | **135** | P | **P** | **14 56 43.0** | **-0.7** |
| AS31 | | | | IAmb | IAmb | 14 56 44.7 | |
| | comp=Z,1.7nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **22.75** | **135** | P | **P** | **14 56 44.0** | **+0.4** |
| | comp=Z,1.2nm,0.6s,baz=310,slow=9.7,SNR=9.8 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.57** | **327** | P | **P** | **14 58 05.4** | **+1.4** |
| | comp=Z,0.2nm,0.3s,baz=147,slow=8.5,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **56.41** | **352** | P | **P** | **15 01 23.2** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=169,slow=8.2,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.56** | **334** | P | **P** | **15 02 06.0** | **+0.8** |
| **MKAR** | **Makanchi Array** | **62.56** | **334** | P | **P** | **15 02 06.3** | **+1.2** |
| | comp=Z,0.3nm,0.5s,baz=134,slow=6.2,SNR=3.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.42** | **326** | P | **P** | **15 03 23.1** | **-1.9** |
| **BRTR** | **Keskin Array B** | **89.67** | **310** | P | **P** | **15 04 42.0** | **+2.3** |
| | comp=Z,1.2nm,1.2s,baz=75,slow=7.6,SNR=2.5 | | | | | | |
| | comp=Z,1.2nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **91.18** | **196** | P | **P** | **15 04 47.1** | **+1.0** |
| | comp=Z,0.6nm,0.8s,baz=45,slow=2.9,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |

*IDC **05** 14:52:58.5±0.5,8.29S×116.19E,h0km,mb4.1/18, mbtmp4.1/19,ML3.9/1,MS4.5/4, Error ellipse: s-maj=21.0km s-min=13.1km az=79.0*
*DJA **05** 14:53:01.0±0.4,8.5S±6.1×11.6E±.,h10km,M4.5/7,MLv4.5/7*
*NEIC **05** 14:53:02.3±1.5,8.16S±0.09×116.20E±0.05,h28km±5km, mb4.6/23, Error ellipse: s-maj=13.0km s-min=7.2km az=174.0*

**ISC 05 14:52:59.6**±0.4,**8.27S**±0.05×**116.19E**±0.05,**h10**km,**n92,** σ1**9**40/94,**mb4.3**/27,**MS4.5**/4,**2C,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.83** | **124** | P | **Pb** | **14 53 16.2** | **0.0** |
| **SRBI** | **Singaraja** | **0.98** | **281** | P | **Pn** | **14 53 19.7** | **+0.3** |
| **DNP** | **Denpasar** | **1.05** | **247** | P | **Pn** | **14 53 21.6** | **+1.2** |
| DNP | | | | S | **Sn** | **14 53 36.5** | **+1.4** |
| **PLAI** | **Plampang** | **1.67** | **110** | P | **Pb** | **14 53 31.0** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.02** | **264** | Pn | **Pn** | **14 53 34.0** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.02** | **264** | P | **Pn** | **14 53 34.0** | **+0.2** |
| **GRJI** | **Gresik** | **3.91** | **290** | P | **Pn** | **14 54 01.2** | **+1.4** |
| **BSSI** | **Bau Bau, Buton** | **4.76** | **64** | P | **Pn** | **14 54 13.1** | **+1.6** |
| **KAPI** | **Kappang** | **4.79** | **48** | Pn | **Pn** | **14 54 09.7** | **-2.2** |
| **KAPI** | **Kappang** | **4.79** | **48** | Pn | **Pn** | **14 54 13.6** | **+1.7** |
| | 4.6nm,0.3s,baz=199,slow=5.7,SNR=6.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **14 55 07.9** | **+0.3** |
| | 24nm,0.3s,baz=81,slow=23,SNR=13 | | | | | | |
| | 52nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **5.62** | **273** | Pn | **Pn** | **14 54 20.7** | **-2.6** |
| **MMRI** | **Maumere** | **6.00** | **94** | P | **Pn** | **14 54 29.7** | **+1.2** |
| **MMRI** | **Maumere** | **6.00** | **94** | Pn | **Pn** | **14 54 29.2** | **+0.7** |
| **SOEI** | **Soe** | **8.12** | **101** | P | **Pn** | **14 54 58.8** | **+1.1** |
| **SOEI** | **Soe** | **8.12** | **101** | Pn | **Pn** | **14 54 59.3** | **+1.6** |
| **XMIS** | **Christmas Isla** | **10.62** | **257** | Pn | **Pn** | **14 55 31.4** | **-0.6** |
| **MBWA** | **Marble Bar** | **13.27** | **165** | P | **Pn** | **14 56 07.2** | **-1.0** |
| **MBWA** | **Marble Bar** | **13.27** | **165** | | **Pn** | **14 56 05.0** | **-3.2** |
| **FITZ** | **Fitzroy Crossi** | **13.42** | **138** | Pn | **Pn** | **14 56 08.6** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **165** | P | **Pn** | **14 56 13.4** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **165** | Pn | **Pn** | **14 56 10.8** | **-3.2** |
| **KNRA** | **Kununurra** | **14.33** | **122** | Pn | **Pn** | **14 56 21.7** | **-1.1** |
| **GIRL** | **Giralia** | **14.42** | **187** | P | **Pn** | **14 56 23.0** | **-0.9** |
| **GIRL** | **Giralia** | **14.42** | **187** | Pn | **Pn** | **14 56 21.5** | **-2.4** |
| **MTN** | **Manton Dam** | **15.38** | **108** | P | **Pn** | **14 56 37.8** | **+0.9** |
| **MTN** | **Manton Dam** | **15.38** | **108** | Pn | **Pn** | **14 56 35.2** | **-1.6** |
| MTN | | | | IAmb | IAmb | 14 56 51.3 | |
| | comp=Z,10nm,0.4s | | | | | | |
| **KDU** | **Kakadu** | **16.60** | **107** | P | **Pn** | **14 56 53.3** | **+0.6** |
| **FAKI** | **Fak Fak** | **16.84** | **73** | P | **P** | **14 56 57.3** | **-0.5** |
| **FAKI** | **Fak Fak** | **16.84** | **73** | P | **Pn** | **14 56 56.3** | **+0.6** |
| FAKI | | | | IAmb | IAmb | 14 57 03.3 | |
| | comp=Z,48nm,1.4s | | | | | | |
| **MEEK** | **Meekatharra** | **18.42** | **173** | P | **P** | **14 57 15.7** | **+0.5** |
| **WRKA** | **Warakurna** | **20.29** | **147** | P | **P** | **14 57 36.8** | **+1.1** |
| **MORW** | **Morawa** | **20.69** | **180** | P | **P** | **14 57 40.5** | **+0.5** |
| **MORW** | **Morawa** | **20.69** | **180** | | **P** | **14 57 41.3** | **+1.3** |
| MORW | | | | IAmb | IAmb | 14 58 04.3 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.01** | **125** | P | **P** | **14 57 43.4** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 14 57 44.3 | |
| | comp=Z,20nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.06** | **125** | P | **P** | **14 57 43.9** | **-0.2** |
| **WRA** | **Warramunga Arr** | **21.06** | **125** | P | **P** | **14 57 44.4** | **+0.3** |
| | comp=Z,7.2nm,0.3s,baz=301,slow=12,SNR=76 | | | | | | |
| WRA | | | | S | **S** | **15 01 33.4** | **-5.3** |
| | comp=Z,0.5nm,0.5s,baz=299,slow=23,SNR=2.7 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 01 50.1** | **-0.9** |
| | comp=Z,1.1nm,0.7s,baz=318,slow=1.3,SNR=3.3 | | | | | | |
| WRA | | | | LR | LR | 15 06 23.6 | |
| | comp=Z,2μm,21.4s,baz=166,slow=38 | | | | | | |
| | comp=Z,7.2nm,0.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.06** | **125** | P | **P** | **14 57 44.3** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 14 57 44.9 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.07** | **125** | P | **P** | **14 57 44.2** | **0.0** |
| WB2 | | | | IAmb | IAmb | 14 57 44.9 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.23** | **125** | P | **P** | **14 57 46.2** | **+0.3** |
| **BLDU** | **Ballidu** | **22.24** | **179** | P | **P** | **14 57 56.7** | **0.0** |
| **AS31** | **Alice Springs** | **22.86** | **134** | P | **P** | **14 58 03.4** | **0.0** |
| **ASAR** | **Alice Springs** | **22.86** | **134** | P | **P** | **14 58 03.5** | **+0.2** |
| | comp=Z,7.1nm,0.7s,baz=308,slow=9.1,SNR=34 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 01 53.9** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=307,slow=1.2,SNR=5.2 | | | | | | |
| ASAR | | | | S | **S** | **15 02 19.2** | **+6.1** |
| | comp=Z,0.7nm,0.7s,baz=308,slow=22,SNR=4.2 | | | | | | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **AS01** | **Alice Springs** | **22.89** | **134** | P | **P** | **14 58 04.3** | **+0.6** |
| **KLBR** | **Kellerberrin** | **23.25** | **177** | P | **P** | **14 58 08.1** | **+0.8** |
| **KMBL** | **Kambalda** | **23.59** | **168** | P | **P** | **14 58 11.7** | **+1.0** |
| **MUN** | **Mundaring** | **23.59** | **180** | P | **P** | **14 58 11.4** | **+0.7** |
| **NWAO** | **Narrogin (SRO)** | **24.56** | **178** | P | **P** | **14 58 19.3** | **-0.5** |
| **FORT** | **Forrest** | **25.00** | **155** | P | **P** | **14 58 24.6** | **+0.9** |
| **FORT** | **Forrest** | **25.00** | **155** | P | **P** | **14 58 24.1** | **+0.5** |
| FORT | | | | IAmb | IAmb | 14 58 58.5 | |
| | comp=Z,39nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **25.72** | **121** | P | **P** | **14 58 31.2** | **+0.8** |
| **OOD** | **Oodnadatta** | **26.77** | **139** | P | **P** | **14 58 40.1** | **+0.3** |
| **COEN** | **Coen** | **27.07** | **104** | P | **P** | **14 58 43.5** | **+0.9** |
| **COEN** | **Coen** | **27.07** | **104** | P | **P** | **14 58 43.3** | **+0.7** |
| COEN | | | | IAmb | IAmb | 14 58 45.6 | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **MULG** | **Mulgathing** | **27.56** | **145** | P | **P** | **14 58 47.9** | **+1.0** |
| **BBOO** | **Buckleboo** | **30.58** | **146** | P | **P** | **14 59 13.7** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **31.54** | **327** | P | **P** | **14 59 23.6** | **+1.3** |
| | comp=Z,0.3nm,0.3s,baz=147,slow=7.9,SNR=1.4 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **33.32** | **138** | P | **P** | **14 59 38.0** | **+0.2** |
| | comp=Z,1.8nm,0.5s,baz=318,slow=8.1,SNR=6.0 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **TOO** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PWJI** | **Pagerwojo** | **4.20** | **274** | P | | **Pn** | **15 12 33.3** | **+1.1** |
| **BASI** | **Baing, Sumba** | **4.86** | **113** | P | | **Pn** | **15 12 44.8** | **+3.5** |
| **BSSI** | **Bau Bau, Buton** | **4.93** | **64** | P | | **Pn** | **15 12 42.0** | **-0.3** |
| **KAPI** | **Kappang** | **4.95** | **48** | Pn | | **Pn** | **15 12 42.8** | **+0.2** |
| | 7.0nm,0.3s,baz=181,slow=7.0,SNR=7.0 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **15 13 37.6** | **-2.3** |
| | 7.4nm,0.3s,baz=243,slow=18,SNR=4.2 | | | | | | | |
| | 17nm,0.3s | | | | | | | |
| **UGM** | **Wanagama** | **5.47** | **274** | Pn | | **Pn** | **15 12 50.1** | **+0.3** |
| **UGM** | **Wanagama** | **5.47** | **274** | P | | **Pn** | **15 12 50.3** | **+0.6** |
| | 172nm,1.4s | | | | | | | |
| **BNSI** | **Bone** | **5.63** | **46** | P | | **Pn** | **15 12 52.0** | **+0.2** |
| | 27nm,0.5s,1μm0.4nm | | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.71** | **41** | P | | Pn | 15 12 51.2 | -1.8 |
| | 18nm,1.0s | | | | | | | |
| **KPJI** | **Karang Pucung** | **7.11** | **278** | P | | **Pn** | **15 13 12.8** | **+0.6** |
| **MBWA** | **Marble Bar** | **13.24** | **165** | Pn | | **Pn** | **15 14 34.1** | **-2.2** |
| **FITZ** | **Fitzroy Crossi** | **13.47** | **137** | Pn | | **Pn** | **15 14 36.8** | **-2.6** |
| **PSA00** | **Pilbara Seismi** | **13.67** | **165** | Pn | | **Pn** | **15 14 40.0** | **-2.1** |
| **GIRL** | **Giralia** | **14.33** | **187** | Pn | | **Pn** | **15 14 49.5** | **-1.7** |
| **KNRA** | **Kununurra** | **14.43** | **122** | Pn | | **Pn** | **15 14 49.7** | **-2.8** |
| **FAKI** | **Fak Fak** | **17.01** | **72** | P | | **Pn** | **15 15 27.0** | **+0.7** |
| FAKI | | | | IAmb | | IAmb | 15 15 52.2 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **KULM** | **Kulim** | **20.46** | **311** | | | **P** | **15 16 05.6** | **-0.4** |
| KULM | | | | IAmb | | IAmb | 15 16 44.1 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.10** | **125** | P | | **P** | **15 16 12.3** | **-0.7** |
| WB0 | | | | IAmb | | IAmb | 15 16 23.1 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.15** | **125** | P | | **P** | **15 16 12.4** | **-1.0** |
| **WRA** | **Warramunga Arr** | **21.15** | **125** | P | | **P** | **15 16 13.0** | **-0.5** |
| | comp=Z,4.1nm,0.8s,baz=299,slow=12,SNR=40 | | | | | | | |
| WRA | | | | S | | **S** | **15 20 06.8** | **-2.2** |
| | comp=Z,1.1nm,0.5s,baz=296,slow=30,SNR=3.0 | | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.16** | **125** | P | | **P** | **15 16 13.3** | **-0.3** |
| WB2 | | | | IAmb | | IAmb | 15 16 33.1 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.32** | **125** | P | | **P** | **15 16 15.1** | **-0.3** |
| **AS31** | **Alice Springs** | **22.93** | **134** | P | | **P** | **15 16 31.3** | **-1.3** |
| **ASAR** | **Alice Springs** | **22.93** | **134** | P | | **P** | **15 16 31.1** | **-1.4** |
| **ASAR** | **Alice Springs** | **22.93** | **134** | P | | **P** | **15 16 32.2** | **-0.3** |
| | comp=Z,3.3nm,0.7s,baz=307,slow=8.6,SNR=47 | | | | | | | |
| ASAR | | | | S | | **S** | **15 20 42.6** | **-0.1** |
| | comp=Z,0.9nm,0.8s,baz=320,slow=25,SNR=4.1 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **30.77** | **94** | P | | P | 15 17 41.1 | -3.0 |
| **STKA** | **Stephens Creek** | **33.37** | **138** | P | | **P** | **15 18 05.8** | **-0.9** |
| | comp=Z,2.2nm,0.7s,baz=14,slow=18,SNR=2.2 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **37.30** | **339** | P | | **P** | **15 18 43.2** | **+2.5** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **46.89** | **13** | P | | **P** | **15 19 57.8** | **-0.8** |
| | comp=Z,0.5nm,0.8s,baz=189,slow=7.7,SNR=1.3 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.26** | **24** | P | | **P** | **15 20 15.5** | **-1.6** |
| | comp=Z,1.3nm,0.9s,baz=194,slow=7.9,SNR=2.9 | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **GTA** | **Gaotai** | **49.83** | **344** | *e*P | | **P** | **15 20 25.5** | **+4.0** |
| GTA | | | | sP | | sP | 15 20 38.9 | +13 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **51.99** | **0** | *e*P | | **P** | **15 20 40.4** | **+2.8** |
| XLT | | | | pP | | sP | 15 20 44.5 | +2.7 |
| XLT | | | | sP | | pP | 15 20 47.4 | +6.8 |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **56.57** | **352** | P | | **P** | **15 21 10.3** | **-0.7** |
| | comp=Z,1.5nm,0.8s,baz=173,slow=8.9,SNR=7.3 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **HEH** | **HeiHe** | **59.18** | **8** | *e*P | | **P** | **15 21 28.7** | **-0.4** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **KSH** | **Kashi** | **60.35** | **325** | P | | **P** | **15 21 41.6** | **+4.0** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.56** | **335** | P | | **P** | **15 21 51.3** | **-0.9** |
| | comp=Z,0.1nm,0.4s,baz=135,slow=7.6,SNR=1.9 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.26** | **223** | T | | T | 16 34 18.2 | |
| | baz=76 | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.28** | **223** | T | | T | 16 34 08.2 | |
| | baz=76 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.28** | **223** | T | | T | 16 34 08.0 | |
| | baz=76 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.41** | **341** | P | | **P** | **15 22 22.2** | **-1.4** |
| | comp=Z,0.3nm,0.5s,baz=119,slow=5.1,SNR=1.2 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **VNDA** | **Vanda** | **73.11** | **171** | P | | **P** | **15 22 57.8** | **-0.4** |
| | comp=Z,1.0nm,0.8s,baz=279,slow=10.0,SNR=2.3 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.66** | **180** | P | | **P** | **15 23 46.2** | **-0.2** |
| | comp=Z,2.1nm,1.0s,baz=253,slow=2.0,SNR=3.7 | | | | | | | |
| | comp=Z,2.1nm,1.0s | | | | | | | |
| **SNAA** | **Sanae** | **90.83** | **196** | P | | **P** | **15 24 31.2** | **-0.3** |
| | comp=Z,0.9nm,0.9s,baz=76,slow=4.2,SNR=3.1 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |
| **CPUP** | **Villa Florida** | **144.94** | **190** | PKP | | **PKPab** | **15 31 05.1** | **-0.4** |
| | comp=Z,1.2nm,0.8s,baz=206,slow=6.7,SNR=3.8 | | | | | | | |

**RSNC 05 15:14:18.3±0.0,7°N±1°×7°3W±°,h141km±2km,M3.1,mb3.8, mB5.0,ML3.1,Mw(mB)4.4,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.23** | **196** | P | Pn | 15 14 37.1 | -0.8 |
| BARC | | | | S | Sn | 15 14 52.1 | -0.6 |
| **PAMC** | **Pamplona, Colo** | **0.67** | **38** | P | Pn | 15 14 39.9 | -0.3 |
| PAMC | | | | S | Sn | 15 14 57.2 | +0.3 |
| **RUSC** | **La Rusia** | **0.91** | **178** | P | Pn | 15 14 41.0 | -1.1 |
| RUSC | | | | S | Sn | 15 14 59.6 | -0.5 |
| **PTBC** | **PUERTO BERRIO,** | **1.35** | **259** | P | Pn | 15 14 43.8 | -1.9 |
| PTBC | | | | S | Sn | 15 15 05.0 | -1.5 |
| **TAMC** | **Tame, Arauca** | **1.37** | **106** | P | Pn | 15 14 45.4 | -0.5 |
| TAMC | | | | S | Sn | 15 15 05.4 | -1.5 |
| **OCAC** | **Ocana** | **1.43** | **352** | P | Pn | 15 14 45.9 | -0.8 |
| OCAC | | | | S | Sn | 15 15 07.8 | -0.5 |
| **SPBC** | **San Pablo de B** | **1.49** | **219** | P | Pn | 15 14 46.0 | -1.2 |
| SPBC | | | | S | Sn | 15 15 08.1 | -1.1 |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **292** | P | Pn | 15 14 49.6 | -1.6 |
| ZARC | | | | S | Sn | 15 15 15.0 | -1.4 |
| **NORC** | **Norcasia** | **2.13** | **235** | P | Pn | 15 14 53.0 | -1.6 |
| NORC | | | | S | Sn | 15 15 20.7 | -1.7 |
| **CHIC** | **Chingaza** | **2.25** | **196** | P | Pn | 15 14 55.0 | -1.4 |
| CHIC | | | | S | Sn | 15 15 25.3 | -0.2 |
| **ROSC** | **El Rosal** | **2.29** | **211** | P | Pn | 15 14 56.8 | 0.0 |
| ROSC | | | | S | Sn | 15 15 29.0 | +2.6 |
| **CVER** | **Cruz Verde, Cu** | **2.46** | **203** | P | Pn | 15 14 58.4 | -0.6 |
| CVER | | | | S | Sn | 15 15 30.3 | 0.0 |
| **UREC** | **San Jos de Ur** | **2.57** | **291** | P | Pn | 15 14 56.9 | -3.0 |
| UREC | | | | S | Sn | 15 15 28.4 | -3.5 |
| **VILC** | **Villavicencio,** | **2.74** | **192** | P | Pn | 15 15 00.6 | -1.6 |
| VILC | | | | S | Sn | 15 15 34.5 | -1.5 |
| **PTGC** | **Puerto Gaitan,** | **2.77** | **159** | P | Pn | 15 15 00.1 | -2.4 |
| PTGC | | | | S | Sn | 15 15 33.1 | -3.5 |
| **RECRC** | **Villamaria, Ca** | **2.88** | **231** | P | Pn | 15 15 05.9 | +1.5 |
| RECRC | | | | S | Sn | 15 15 41.5 | +1.7 |
| **CBOC** | **Ciudad Bolivar** | **3.02** | **252** | P | Pn | 15 15 04.7 | -1.1 |
| CBOC | | | | S | Sn | 15 15 40.9 | -1.6 |
| **DBBC** | **Dabeiba** | **3.07** | **274** | P | Pn | 15 15 04.4 | -2.0 |
| DBBC | | | | S | Sn | 15 15 40.1 | -3.4 |
| **SDV** | **Santo Domingo** | **3.21** | **50** | P | Pn | 15 15 06.6 | -1.7 |
| SDV | | | | S | Sn | 15 15 43.9 | -3.0 |
| **ARGC** | **Ariguani, Magd** | **3.23** | **340** | P | Pn | 15 15 07.7 | -0.6 |
| ARGC | | | | S | Sn | 15 15 46.4 | -0.5 |
| **ANIL** | **Santa Ana** | **3.24** | **225** | P | Pn | 15 15 08.7 | 0.0 |
| ANIL | | | | S | Sn | 15 15 47.6 | +0.1 |
| **PRAC** | **Prado** | **3.54** | **210** | P | Pn | 15 15 10.6 | -1.8 |
| PRAC | | | | S | Sn | 15 15 52.6 | -1.7 |
| **ORTC** | **Ortega, Tolima** | **3.58** | **216** | P | Pn | 15 15 11.2 | -1.6 |
| ORTC | | | | S | Sn | 15 15 54.5 | -0.6 |
| **APAC** | **Apartado, Choc** | **3.60** | **288** | P | Pn | 15 15 11.0 | -2.1 |
| APAC | | | | S | Sn | 15 15 53.0 | -2.5 |
| **PLMC** | **San Jos del P** | **3.67** | **239** | P | Pn | 15 15 12.5 | -1.6 |
| PLMC | | | | S | Sn | 15 15 55.1 | -2.3 |
| **SJCC** | **San Jacinto, C** | **3.68** | **327** | P | Pn | 15 15 11.6 | -2.6 |
| SJCC | | | | S | Sn | 15 15 52.3 | -5.3 |
| **URMC** | **La Uribe, Meta** | **3.75** | **200** | P | Pn | 15 15 13.8 | -1.4 |
| URMC | | | | S | Sn | 15 15 58.1 | -1.3 |
| **LCBC** | **Los crdobas,** | **3.81** | **303** | P | Pn | 15 15 13.8 | -2.0 |
| LCBC | | | | S | Sn | 15 15 59.6 | -0.8 |
| **CRJC** | **Cerrejon, Guaj** | **4.19** | **3** | P | Pn | 15 15 17.3 | -3.6 |
| CRJC | | | | S | Sn | 15 16 05.5 | -4.1 |
| **GUVC** | **San Jose del G** | **4.26** | **173** | P | Pn | 15 15 20.2 | -1.7 |
| GUVC | | | | S | Sn | 15 16 08.3 | -3.0 |
| **YOTC** | **Yotoco, Valle** | **4.26** | **229** | P | Pn | 15 15 19.7 | -2.3 |
| YOTC | | | | S | Sn | 15 16 13.3 | +1.9 |
| **SMRC** | **Santa Marta, M** | **4.46** | **346** | P | Pn | 15 15 22.1 | -2.4 |
| SMRC | | | | S | Sn | 15 16 10.4 | -5.5 |
| **PTAC** | **Punta Ardita,** | **4.67** | **274** | P | Pn | 15 15 22.5 | -4.7 |
| PTAC | | | | S | Sn | 15 16 17.9 | -2.8 |
| **BETC** | **Betania** | **4.71** | **210** | P | Pn | 15 15 24.4 | -3.4 |
| **URIC** | **Uribia, Colomb** | **4.99** | **13** | P | Pn | 15 15 27.5 | -3.9 |
| URIC | | | | S | Sn | 15 16 23.6 | -4.8 |
| **JAMC** | **Jamundi, Valle** | **5.03** | **225** | P | Pn | 15 15 30.2 | -2.0 |
| | 8.8nm,0.6s | | | | | | |
| JAMC | | | | S | Sn | 15 16 27.5 | -2.2 |
| | 8.8nm,0.6s | | | | | | |
| **MALC** | **Bahia Malaga** | **5.03** | **237** | P | Pn | 15 15 32.3 | +0.3 |
| MALC | | | | S | Sn | 15 16 30.6 | +1.1 |
| **GARC** | **Garzon, Huila** | **5.17** | **207** | P | Pn | 15 15 31.2 | -2.9 |
| GARC | | | | S | Sn | 15 16 27.6 | -5.5 |
| **POPC** | **Popayan, Colom** | **5.53** | **220** | P | Pn | 15 15 36.9 | -2.0 |
| | 8.4nm,1.1s | | | | | | |
| POPC | | | | S | Sn | 15 16 41.5 | -0.2 |
| | 8.4nm,1.1s | | | | | | |
| **FLOC** | **Florencia** | **5.77** | **206** | P | Pn | 15 15 39.7 | -2.3 |
| | 21nm,1.1s | | | | | | |
| FLOC | | | | S | Sn | 15 16 44.8 | -2.5 |
| | 21nm,1.1s | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.29** | **221** | P | Pn | 15 15 48.2 | -0.8 |
| BBAC | | | | S | Sn | 15 16 56.4 | -3.5 |
| **GR1C** | **Gorgona, Isla** | **6.29** | **233** | P | Pn | 15 15 44.9 | -4.0 |
| **MTDJ** | **Mount Denham** | **12.14** | **340** | P | Pn | 15 17 07.1 | +0.3 |
| MTDJ | | | | S | Sn | 15 19 09.1 | -12 |

*IDC **05** 15:16:38.3±1.6,8˚23S×116˚67E,h0km,mb3.5/4, mbtmp3.6/5,ML3.4/1,Error ellipse: s-maj=28.1km s-min=23.7km az=88.0*
*DJA **05** 15:16:39.9±0.4,8˚S±8˚×11˚6E±˚,h10km,M3.9/7,MLv3.9/7*
**ISC 05 15:16:39.3±0.8,8˚21S±0.07×116˚52E±0.04,h10km,n11, σ1°08/14,mb3.6/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.64** | **146** | P | **Pg** | **15 16 50.9** | **-0.7** |
| **SRBI** | **Singaraja** | **1.30** | **275** | P | **Pb** | **15 17 04.2** | **+0.4** |
| SRBI | | | | S | **Sb** | **15 17 20.5** | **-0.1** |
| **PLAI** | **Plampang** | **1.39** | **116** | P | **Pn** | **15 17 05.4** | **+0.7** |
| PLAI | | | | S | **Sg** | **15 17 24.6** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.36** | **264** | P | **Pn** | **15 17 17.0** | **-1.1** |
| **BSSI** | **Bau Bau, Buton** | **4.44** | **63** | P | **Pn** | **15 17 47.3** | **+0.6** |
| **KAPI** | **Kappang** | **4.51** | **46** | Pn | **Pn** | **15 17 47.5** | **-0.2** |
| | 2.0nm,0.3s,baz=218,slow=5.9,SNR=1.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 18 38.4** | **-1.9** |
| | 6.0nm,0.3s,baz=217,slow=13,SNR=2.8 | | | | | | |
| KAPI | | | | Lg | Lg | 15 18 59.8 | |
| | 5.3nm,0.3s,baz=221,slow=22,SNR=5.6 | | | | | | |
| | 6.0nm,0.2s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.67** | **272** | P | **Pn** | **15 17 50.7** | **+0.8** |
| **WRA** | **Warramunga Arr** | **20.82** | **126** | P | **P** | **15 21 20.1** | **-1.1** |
| | 2.1nm,0.8s,baz=302,slow=12,SNR=5.3 | | | | | | |
| | 2.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.66** | **135** | P | **P** | **15 21 40.4** | **-0.6** |
| | 0.9nm,0.6s,baz=314,slow=9.5,SNR=2.5 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.51** | **352** | P | **P** | **15 26 21.5** | **-0.3** |
| | 0.5nm,0.7s,baz=172,slow=8.2,SNR=2.5 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.66** | **334** | P | **P** | **15 27 06.1** | **+2.0** |
| | 0.3nm,0.7s,baz=135,slow=6.5,SNR=2.9 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC **05** 15:18:26.1±2.8,8˚51S×115˚99E,h0km,mb3.4/6, mbtmp3.5/6,Error ellipse: s-maj=165.5km s-min=23.4km az=51.0*
*DJA **05** 15:18:30.8±0.5,8˚S±11˚×11˚6E±˚,h10km,M3.6/7, MLv3.6/7*
**ISC 05 15:18:29.2±0.9,8˚1S±0.1×116˚49E±0.06,h10km,n11, σ0°64/12,mb3.7/5,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.71** | **147** | P | **Pg** | **15 18 42.4** | **-0.5** |
| **SRBI** | **Singaraja** | **1.27** | **272** | P | **Pn** | **15 18 53.2** | **+0.2** |
| SRBI | | | | S | **Sn** | **15 19 11.1** | **+1.0** |
| **DNP** | **Denpasar** | **1.38** | **247** | P | **Pg** | **15 18 55.4** | **-0.2** |
| **PLAI** | **Plampang** | **1.44** | **118** | P | **Pn** | **15 18 56.5** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.34** | **262** | P | **Pn** | **15 19 08.1** | **+0.4** |
| **WRA** | **Warramunga Arr** | **20.89** | **126** | P | **P** | **15 23 11.2** | **-0.6** |
| | 0.8nm,0.8s,baz=298,slow=12,SNR=2.4 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.73** | **135** | P | **P** | **15 23 31.6** | **-0.1** |
| | 0.5nm,0.6s,baz=307,slow=8.8,SNR=1.5 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.44** | **352** | P | **P** | **15 28 11.3** | **+0.1** |
| | 0.6nm,0.7s,baz=175,slow=5.2,SNR=3.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.59** | **334** | P | **P** | **15 28 53.0** | **-0.6** |
| | 0.5nm,0.7s,baz=158,slow=7.6,SNR=5.1 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.12** | **335** | P | **P** | **15 29 22.7** | **-0.3** |
| | 0.1nm,0.4s,baz=141,slow=6.5,SNR=1.7 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.38** | **340** | P | **P** | **15 29 24.3** | **-0.3** |
| | 0.5nm,0.4s,baz=131,slow=4.4,SNR=2.3 | | | | | | |
| | 0.5nm,0.4s | | | | | | |

*IDC **05** 15:21:41.4±1.4,8˚28S×116˚70E,h0km,mb3.6/4, mbtmp3.7/5,ML3.9/1,Error ellipse: s-maj=37.6km s-min=23.7km az=63.0*
*NEIC **05** 15:21:42.7±1.9,8˚37S±0.09×116˚62E±0.08,h10km±1km, mb4.0/4,Error ellipse: s-maj=19.4km s-min=6.5km az=37.0*
*DJA **05** 15:21:43.1±0.7,9˚S±18˚×11˚6E±˚,h10km,M3.7/5, MLv3.7/5*
**ISC 05 15:21:42.1±0.7,8˚33S±0.06×116˚62E±0.06,h10km,n20, σ1°09/23,mb3.7/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.48** | **148** | P | **Pb** | **15 21 52.8** | **+0.1** |
| TWSI | | | | S | **Sb** | **15 21 59.6** | **-0.2** |
| **PLAI** | **Plampang** | **1.25** | **114** | P | **Pg** | **15 22 07.7** | **+1.7** |
| **SRBI** | **Singaraja** | **1.41** | **280** | P | **Pn** | **15 22 07.1** | **-0.8** |
| SRBI | | | | S | **Sn** | **15 22 25.8** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.45** | **267** | Pn | **Pn** | **15 22 21.9** | **-0.2** |
| **BASI** | **Baing, Sumba** | **4.33** | **116** | P | **Pn** | **15 22 49.4** | **+1.3** |
| **KAPI** | **Kappang** | **4.53** | **44** | Pn | **Pn** | **15 22 51.4** | **+0.6** |
| | 5.9nm,0.3s,baz=198,slow=16,SNR=2.1 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 23 42.2** | **-1.3** |
| | 3.1nm,0.3s,baz=177,slow=18,SNR=1.7 | | | | | | |
| | 14nm,0.3s | | | | | | |
| **UGM** | **Wanagama** | **6.05** | **273** | Pn | **Pn** | **15 23 14.1** | **+2.4** |
| **SOEI** | **Soe** | **7.69** | **101** | Pn | **Pn** | **15 23 34.6** | **+0.3** |
| **MBWA** | **Marble Bar** | **13.11** | **167** | Pn | **Pn** | **15 24 46.2** | **-2.2** |
| **KNRA** | **Kununurra** | **13.94** | **123** | Pn | **Pn** | **15 25 00.0** | **+0.2** |
| **MTN** | **Manton Dam** | **14.95** | **109** | Pn | **Pn** | **15 25 11.9** | **-1.7** |
| **WB0** | **Warramunga Arr** | **20.63** | **125** | P | **P** | **15 26 21.5** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 15 26 23.0 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.68** | **126** | P | **P** | **15 26 22.6** | **+0.3** |
| | comp=Z,2.7nm,0.7s,baz=302,slow=12,SNR=11 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.68** | **126** | P | **P** | **15 26 22.7** | **+0.2** |
| **WR0** | **Warramunga Arr** | **20.85** | **126** | P | **P** | **15 26 24.7** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 15 26 29.5 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **15 26 42.6** | **+0.5** |
| | comp=Z,2.8nm,0.9s,baz=321,slow=9.5,SNR=9.0 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.10** | **14** | P | **P** | **15 31 06.2** | **-0.9** |
| **SONM** | **Songino Array** | **56.65** | **352** | P | **P** | **15 31 26.1** | **+0.5** |
| | comp=Z,0.5nm,0.7s,baz=165,slow=6.0,SNR=2.4 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.81** | **334** | P | **P** | **15 32 08.7** | **+0.8** |
| | comp=Z,0.2nm,0.5s,baz=158,slow=7.7,SNR=2.6 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **CPUP** | **Villa Florida** | **145.05** | **190** | PKPbc | **PKPab** | **15 41 19.9** | **+0.1** |
| | comp=Z,1.3nm,0.6s,baz=192,slow=2.3,SNR=3.7 | | | | | | |

*IDC **05** 15:26:49.4±0.6,8˚27S×116˚43E,h0km,mb4.0/15, mbtmp4.0/16,ML4.0/1,Error ellipse: s-maj=26.8km s-min=14.0km az=71.0*
*NEIC **05** 15:26:52.9±1.6,8˚26S±0.09×116˚47E±0.04,h21km±6km, mb4.3/14,Error ellipse: s-maj=12.5km s-min=5.2km az=166.0*
*DJA **05** 15:26:52.1±0.2,8˚S±5˚×11˚6E±˚,h10km,M4.6/14,mb4.7/6, mB5.0/1,MLv4.6/14,Mw(mB)4.3/1*
**ISC 05 15:26:51.1±0.4,8˚27S±0.05×116˚48E±0.06,h10km,n74, σ1°36/75,mb4.2/19,2C,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.61** | **140** | P | **Pg** | **15 27 03.7** | **+0.7** |
| **SRBI** | **Singaraja** | **1.27** | **278** | P | **Pn** | **15 27 15.0** | **0.0** |
| **DNP** | **Denpasar** | **1.32** | **252** | P | **Pn** | **15 27 17.0** | **+1.3** |
| **PLAI** | **Plampang** | **1.39** | **113** | P | **Pn** | **15 27 18.2** | **+1.5** |
| **PLAI** | **Plampang** | **1.39** | **113** | P | **Pn** | **15 27 17.3** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.31** | **265** | P | **Pn** | **15 27 29.7** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.31** | **265** | Pn | **Pn** | **15 27 29.2** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.31** | **265** | P | **Pn** | **15 27 29.3** | **-0.1** |
| **GRJI** | **Gresik** | **4.19** | **288** | P | **Pn** | **15 27 56.1** | **+0.9** |
| **BASI** | **Baing, Sumba** | **4.48** | **116** | P | **Pn** | **15 27 59.9** | **+0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.50** | **62** | P | **Pn** | **15 27 59.3** | **-0.2** |
| **KAPI** | **Kappang** | **4.58** | **45** | Pn | **Pn** | **15 27 59.8** | **-0.8** |
| **KAPI** | **Kappang** | **4.58** | **45** | Pn | **Pn** | **15 28 00.2** | **-0.4** |
| | 7.1nm,0.3s,baz=203,slow=7.7,SNR=10 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 28 51.2** | **-2.7** |
| | 22nm,0.3s,baz=220,slow=22,SNR=8.1 | | | | | | |
| | 14nm,0.2s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.64** | **273** | P | **Pn** | **15 28 00.4** | **-0.9** |
| **BNSI** | **Bone** | **5.27** | **43** | P | **Pn** | **15 28 11.0** | **+1.0** |
| | 79nm,0.8s,1μm0.7nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.38** | **38** | P | **Pn** | **15 28 12.3** | **+0.7** |
| **MMRI** | **Maumere** | **5.70** | **94** | P | **Pn** | **15 28 20.2** | **+4.2** |
| **MMRI** | **Maumere** | **5.70** | **94** | Pn | **Pn** | **15 28 16.2** | **+0.2** |
| **MMRI** | **Maumere** | **5.70** | **94** | P | **Pn** | **15 28 19.3** | **+3.3** |
| | 89nm,0.8s,0.4nm | | | | | | |
| **UGM** | **Wanagama** | **5.91** | **273** | P | **Pn** | **15 28 20.1** | **+1.2** |
| **UGM** | **Wanagama** | **5.91** | **273** | Pn | **Pn** | **15 28 18.7** | **-0.2** |
| **UGM** | **Wanagama** | **5.91** | **273** | P | **Pn** | **15 28 20.3** | **+1.4** |
| **SOEI** | **Soe** | **7.83** | **101** | P | **Pn** | **15 28 48.9** | **+3.6** |
| **SOEI** | **Soe** | **7.83** | **101** | Pn | **Pn** | **15 28 45.3** | **0.0** |
| **SOEI** | **Soe** | **7.83** | **101** | P | **Pn** | **15 28 45.7** | **+0.4** |
| **KSM** | **Kuching** | **11.47** | **327** | P | **Pn** | **15 29 38.1** | **+2.9** |
| **MBWA** | **Marble Bar** | **13.19** | **167** | P | **Pn** | **15 29 57.0** | **-1.6** |
| **MBWA** | **Marble Bar** | **13.19** | **167** | Pn | **Pn** | **15 29 56.6** | **-2.0** |
| **FITZ** | **Fitzroy Crossi** | **13.22** | **139** | Pn | **Pn** | **15 29 57.6** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **13.62** | **167** | P | **Pn** | **15 30 03.9** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **13.62** | **167** | Pn | **Pn** | **15 30 02.6** | **-1.8** |
| **KNRA** | **Kununurra** | **14.08** | **123** | Pn | **Pn** | **15 30 09.9** | **-0.9** |
| **GIRL** | **Giralia** | **14.45** | **188** | P | **Pn** | **15 30 15.4** | **-0.5** |
| **GIRL** | **Giralia** | **14.45** | **188** | Pn | **Pn** | **15 30 13.9** | **-2.0** |
| **MTN** | **Manton Dam** | **15.10** | **109** | Pn | **Pn** | **15 30 22.6** | **-2.1** |
| MTN | | | | IAmb | IAmb | 15 30 55.1 | |
| | comp=Z,8.4nm,0.5s | | | | | | |
| **FAKI** | **Fak Fak** | **16.56** | **72** | Pn | **Pn** | **15 30 43.9** | **+0.2** |
| FAKI | | | | IAmb | IAmb | 15 31 12.2 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.77** | **125** | P | **P** | **15 31 32.1** | **-0.4** |
| **WRA** | **Warramunga Arr** | **20.82** | **126** | P | **P** | **15 31 32.8** | **-0.2** |
| | comp=Z,6.3nm,0.7s,baz=300,slow=12,SNR=39 | | | | | | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.82** | **126** | P | **P** | **15 31 32.8** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 15 31 37.6 | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.83** | **126** | P | **P** | **15 31 32.7** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 15 31 37.2 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.99** | **126** | P | **P** | **15 31 34.6** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 15 31 43.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.65** | **135** | P | **P** | **15 31 52.5** | **-0.1** |
| **ASAR** | **Alice Springs** | **22.65** | **135** | P | **P** | **15 31 52.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.65** | **135** | P | **P** | **15 31 52.6** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.87 | 136 | P | Pg | 15 34 18.0 | -0.6 |
| SRBI | Singaraja | 1.05 | 272 | P | Pb | 15 34 22.6 | +0.5 |
| SRBI | | | | S | Sn | 15 34 36.9 | -0.4 |
| DNP | Denpasar | 1.19 | 242 | P | Pg | 15 34 24.3 | -0.5 |
| PLAI | Plampang | 1.65 | 116 | P | Pn | 15 34 31.7 | +0.8 |
| PLAI | | | | S | Sb | 15 34 53.9 | +0.6 |
| JAGI | Jajag, Banyuwa | 2.13 | 260 | P | Pn | 15 34 36.9 | -0.6 |
| PWJI | Pagerwojo | 4.42 | 271 | P | Pn | 15 35 09.6 | +0.5 |
| BSSI | Bau Bau, Buton | 4.62 | 65 | P | Pn | 15 35 13.4 | +1.6 |
| KAPI | Kappang | 4.63 | 49 | Pn | Pn | 15 35 13.0 | +1.1 |
| | 0.9nm,0.3s,baz=225,slow=8.6,SNR=1.5 | | | | | | |
| KAPI | | | | Sn | Sn | 15 36 01.4 | -4.4 |
| | 2.7nm,0.3s,baz=252,slow=22,SNR=2.0 | | | | | | |
| | 3.1nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 21.08 | 126 | P | P | 15 38 46.0 | -0.6 |
| | 2.6nm,0.8s,baz=300,slow=12,SNR=38 | | | | | | |
| | 2.6nm,0.8s | | | | | | |
| ASAR | Alice Springs | 22.91 | 134 | P | P | 15 39 05.4 | -0.7 |
| | 0.9nm,0.7s,baz=308,slow=9.3,SNR=8.7 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| SONM | Songino Array | 56.39 | 352 | P | P | 15 43 45.5 | +2.0 |
| | 0.7nm,0.6s,baz=170,slow=9.0,SNR=4.4 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 62.47 | 334 | P | P | 15 44 25.0 | -0.4 |
| | 0.2nm,0.5s,baz=123,slow=5.3,SNR=2.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC* ***05*** *15:49:01.8±3.4,8˚.15S×116˚.44E, h0km, mb3.4/4, mbtmp3.5/4, Error ellipse: s-maj=191.9km s-min=24.5km az=53.0*
*DJA* ***05*** *15:49:04.1±0.4,8˚.3S±12˚×11˚.6E±˚, h10km, M3.6/7, MLv3.6/7*

**ISC 05 15:49:03.2±0.9, 8˚.2S±0˚.1×116˚.44E±0˚.06, h10km, n10, σ0.65/12, mb3.5/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.68 | 140 | P | Pg | 15 49 15.7 | -0.6 |
| SRBI | Singaraja | 1.22 | 276 | P | Pn | 15 49 25.6 | -0.7 |
| SRBI | | | | S | Sb | 15 49 42.9 | +0.7 |
| DNP | Denpasar | 1.30 | 249 | P | Pn | 15 49 26.8 | -0.6 |
| PLAI | Plampang | 1.45 | 115 | P | Pn | 15 49 29.8 | +0.3 |
| PLAI | | | | S | Sb | 15 49 49.3 | +0.4 |
| JAGI | Jajag, Banyuwa | 2.28 | 264 | P | Pn | 15 49 41.6 | +0.7 |
| PWJI | Pagerwojo | 4.59 | 272 | P | Pn | 15 50 13.5 | +0.7 |
| WRA | Warramunga Arr | 20.88 | 126 | P | P | 15 53 45.9 | +0.1 |
| | 0.7nm,0.5s,baz=301,slow=12,SNR=4.7 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| ASAR | Alice Springs | 22.71 | 135 | P | P | 15 54 06.2 | +0.8 |
| | 1.1nm,0.7s,baz=312,slow=10,SNR=7.8 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| SONM | Songino Array | 56.52 | 352 | P | P | 15 58 45.5 | -0.2 |
| | 0.6nm,0.7s,baz=183,slow=5.2,SNR=3.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 62.64 | 334 | P | P | 15 59 27.5 | -0.4 |
| | 0.2nm,0.5s,baz=140,slow=7.6,SNR=2.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC* ***05*** *16:29:54.0±1.3,8˚.32S×116˚.08E, h0km, mb3.7/7, mbtmp3.8/8, ML4.1/1, Error ellipse: s-maj=41.2km s-min=20.7km az=67.0*
*DJA* ***05*** *16:29:56.6±0.4,8˚.5S±8˚×11˚.6E±˚, h10km, M3.8/6, MLv3.8/6*
*NEIC* ***05*** *16:29:58.6±1.7,8˚.3S±0˚.1×116˚.16E±0˚.07, h24km±3km, mb4.2/9, Error ellipse: s-maj=16.6km s-min=10.1km az=166.0*

**ISC 05 16:29:56.0±0.6, 8˚.24S±0˚.06×116˚.23E±0˚.04, h10km, n30, σ1.23/33, mb4.0/11, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.81 | 128 | P | Pg | 16 30 12.8 | +1.1 |
| SRBI | Singaraja | 1.02 | 278 | P | Pg | 16 30 16.0 | +0.3 |
| SRBI | | | | S | Sb | 16 30 30.3 | +1.0 |
| DNP | Denpasar | 1.10 | 247 | P | Pn | 16 30 19.6 | +2.0 |
| DNP | | | | S | Sn | 16 30 35.8 | +2.9 |
| PLAI | Plampang | 1.64 | 111 | P | Pn | 16 30 26.5 | +1.6 |
| JAGI | Jajag, Banyuwa | 2.07 | 263 | Pn | Pn | 16 30 31.0 | +0.1 |
| JAGI | Jajag, Banyuwa | 2.07 | 263 | P | Pn | 16 30 30.7 | -0.2 |
| BSSI | Bau Bau, Buton | 4.71 | 64 | P | Pn | 16 31 06.5 | -0.7 |
| KAPI | Kappang | 4.74 | 48 | Pn | Pn | 16 31 08.6 | +0.9 |
| KAPI | Kappang | 4.74 | 48 | Pn | Pn | 16 31 08.4 | +0.8 |
| | 6.8nm,0.3s,baz=131,slow=21,SNR=2.2 | | | | | | |
| KAPI | | | | Sn | Sn | 16 32 00.7 | -1.9 |
| | 3.4nm,0.3s,baz=140,slow=22,SNR=4.3 | | | | | | |
| | 14nm,0.3s | | | | | | |
| UGM | Wanagama | 5.66 | 273 | Pn | Pn | 16 31 18.0 | -2.3 |
| MBWA | Marble Bar | 13.28 | 166 | Pn | Pn | 16 33 03.5 | -1.3 |
| GIRL | Giralia | 14.45 | 187 | Pn | Pn | 16 33 17.8 | -3.0 |
| WB0 | Warramunga Arr | 20.99 | 125 | P | P | 16 34 39.9 | +0.1 |
| WB0 | | | | IAmb | IAmb | 16 34 40.7 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 21.04 | 125 | P | P | 16 34 40.1 | -0.2 |
| WRA | Warramunga Arr | 21.04 | 125 | P | P | 16 34 40.4 | +0.1 |
| | comp=Z,3.3nm,0.8s,baz=300,slow=12,SNR=25 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| WB2 | Warramunga Arr | 21.05 | 125 | P | P | 16 34 40.3 | -0.1 |
| WB2 | | | | IAmb | IAmb | 16 34 41.3 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| WR0 | Warramunga Arr | 21.21 | 125 | P | P | 16 34 42.5 | +0.4 |
| WR0 | | | | IAmb | IAmb | 16 34 43.1 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| AS31 | Alice Springs | 22.85 | 134 | P | P | 16 34 59.7 | 0.0 |
| ASAR | Alice Springs | 22.85 | 134 | P | P | 16 34 59.7 | 0.0 |
| ASAR | Alice Springs | 22.85 | 134 | P | P | 16 35 00.1 | +0.3 |
| | comp=Z,1.8nm,0.7s,baz=310,slow=8.8,SNR=22 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| COEN | Coen | 27.03 | 105 | P | P | 16 35 39.4 | +0.7 |
| COEN | | | | IAmb | IAmb | 16 35 40.4 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| MAJO | Matsushiro | 49.09 | 23 | P | P | 16 38 43.1 | -0.7 |
| MJAR | Matsushiro Arr | 49.09 | 24 | P | P | 16 38 44.0 | +0.3 |
| | comp=Z,0.8nm,0.6s,baz=198,slow=8.8,SNR=2.5 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| MJB9 | Matsu-Tunnel | 49.09 | 23 | P | P | 16 38 43.9 | +0.2 |
| USA0B | Ussuriysk Arra | 54.10 | 14 | P | P | 16 39 22.1 | +1.0 |
| USA0B | | | | IAmb | IAmb | 16 39 26.4 | |
| | comp=Z,12nm,1.5s | | | | | | |
| USRK | Ussuriysk Ar. | 54.10 | 14 | P | P | 16 39 22.1 | +1.1 |
| USRK | Ussuriysk Ar. | 54.10 | 14 | P | P | 16 39 21.9 | +0.8 |
| | comp=Z,1.1nm,0.8s,baz=187,slow=5.8,SNR=3.3 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| SONM | Songino Array | 56.50 | 352 | P | P | 16 39 38.9 | +0.4 |
| | comp=Z,0.7nm,0.7s,baz=159,slow=7.4,SNR=5.8 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 62.56 | 334 | P | P | 16 40 19.4 | -0.9 |
| | comp=Z,0.2nm,0.7s,baz=126,slow=8.6,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 81.75 | 180 | P | P | 16 42 14.0 | -0.9 |
| | comp=Z,3.0nm,1.3s,baz=12,slow=5.4,SNR=2.5 | | | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | |

*IDC* ***05*** *16:40:07.6±1.7,8˚.00S×116˚.01E, h0km, mb3.4/4, mbtmp3.5/5, ML3.6/1, Error ellipse: s-maj=41.9km s-min=23.5km az=56.0*
*DJA* ***05*** *16:40:13.5±0.4,8˚.5S±6˚×11˚.6E±˚, h10km, M3.7/7, MLv3.7/7*

**ISC 05 16:40:13.9±0.9, 8˚.10S±0˚.07×116˚.23E±0˚.04, h35km, n11, σ2.27/15, mb3.4/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.91 | 134 | P | Pn | 16 40 29.0 | -1.3 |
| TWSI | | | | S | Sn | 16 40 41.2 | -1.0 |
| SRBI | Singaraja | 1.00 | 271 | P | Pn | 16 40 32.0 | +0.5 |
| SRBI | | | | S | Sn | 16 40 45.7 | +1.3 |
| DNP | Denpasar | 1.16 | 240 | P | Pn | 16 40 34.8 | +1.2 |
| DNP | | | | S | Sn | 16 40 51.8 | +3.6 |
| PLAI | Plampang | 1.70 | 115 | P | Pn | 16 40 43.4 | +2.3 |
| JAGI | Jajag, Banyuwa | 2.08 | 260 | P | Pn | 16 40 46.6 | +0.2 |
| KAPI | Kappang | 4.65 | 49 | Pn | Pn | 16 41 20.0 | -1.7 |
| | 2.7nm,0.3s,baz=167,slow=16,SNR=2.0 | | | | | | |
| KAPI | | | | Sn | Sn | 16 42 18.7 | +4.1 |
| | 4.2nm,0.3s,baz=186,slow=19,SNR=2.3 | | | | | | |
| | 6.2nm,0.3s | | | | | | |
| BSSI | Bau Bau, Buton | 4.66 | 66 | P | Pn | 16 41 24.7 | +2.9 |
| WRA | Warramunga Arr | 21.13 | 126 | P | P | 16 44 56.8 | +0.9 |
| | 1.9nm,0.3s,baz=304,slow=12,SNR=26 | | | | | | |
| | 1.9nm,0.3s | | | | | | |
| ASAR | Alice Springs | 22.95 | 134 | P | P | 16 45 15.9 | +0.5 |
| | 1.3nm,0.6s,baz=310,slow=8.8,SNR=19 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| SONM | Songino Array | 56.36 | 352 | P | P | 16 49 49.8 | -1.9 |
| | 0.1nm,0.3s,baz=164,slow=6.9,SNR=1.9 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 62.44 | 334 | P | P | 16 50 31.3 | -2.3 |
| | 0.1nm,0.5s,baz=134,slow=7.0,SNR=1.7 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

*IDC* ***05*** *16:49:38.7±0.4,8˚.15S×116˚.19E, h0km, mb4.5/21, mbtmp4.6/22, ML4.4/1, MS4.0/43, Error ellipse: s-maj=15.8km s-min=9.7km az=82.0*
*NEIC* ***05*** *16:49:41.6±2.0,8˚.27S±0˚.07×116˚.24E±0˚.06, h10km±1km, mb5.0/65, Error ellipse: s-maj=11.5km s-min=9.7km az=176.0*
*MOS* ***05*** *16:49:42.5±1.1,8˚.18S×116˚.25E, h34km, mb5.1/34, Error ellipse: s-maj=8.9km s-min=6.4km az=105.8*
*DJA* ***05*** *16:49:42.0±0.1,8˚.5S±2˚×11˚.6E±˚, h10km, M4.9/47, mb5.0/47, mB5.4/23, MLv5.2/20, Mw(mB)4.8/23, MwMwp5.7/1, Mwp5.8/1*

**ISC 05 16:49:44.8±0.3, 8˚.33S±0˚.04×116˚.26E±0˚.04, h35km, h36km:pP-P, n324, σ2.12/318, mb4.9/89, MS4.2/60, 15C-12D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.73 | 123 | P | Pn | 16 49 57.5 | -1.2 |
| SRBI | Singaraja | 1.07 | 283 | P | Pn | 16 50 00.9 | -2.4 |
| DNP | Denpasar | 1.09 | 252 | P | Pn | 16 50 02.3 | -1.4 |
| DNP | Denpasar | 1.09 | 252 | P | Pn | 16 50 02.7 | -1.0 |
| PLAI | Plampang | 1.58 | 108 | P | Pn | 16 50 11.3 | +1.0 |
| PLAI | Plampang | 1.58 | 108 | P | Pn | 16 50 10.9 | +0.6 |
| JAGI | Jajag, Banyuwa | 2.09 | 266 | Pn | Pn | 16 50 15.5 | -1.9 |
| JAGI | Jajag, Banyuwa | 2.09 | 266 | P | Pn | 16 50 15.3 | -2.1 |
| GRJI | Gresik | 4.00 | 290 | P | Pn | 16 50 42.9 | -0.8 |
| PWJI | Pagerwojo | 4.42 | 274 | P | Pn | 16 50 48.9 | -0.6 |
| BASI | Baing, Sumba | 4.66 | 114 | P | Pn | 16 50 52.0 | -0.7 |
| BSSI | Bau Bau, Buton | 4.73 | 63 | P | Pn | 16 50 51.9 | -1.8 |
| KAPI | Kappang | 4.78 | 47 | P | Pn | 16 50 54.1 | -0.4 |
| KAPI | Kappang | 4.78 | 47 | Pn | Pn | 16 50 51.7 | -2.8 |
| KAPI | Kappang | 4.78 | 47 | Pn | Pn | 16 50 52.3 | -2.2 |
| | 16nm,0.3s,baz=222,slow=9.9,SNR=13 | | | | | | |
| KAPI | | | | Sn | Sn | 16 51 45.6 | -3.1 |
| | 28nm,0.3s,baz=248,slow=18,SNR=5.5 | | | | | | |
| KAPI | | | | Lg | Lg | 16 52 07.3 | |
| | 34nm,0.3s,baz=246,slow=20,SNR=4.3 | | | | | | |
| KAPI | | | | LR | LR | 16 53 11.7 | |
| | comp=Z,4μm,18.1s,baz=222,slow=45 | | | | | | |
| | 40nm,0.3s | | | | | | |
| KAPI | Kappang | 4.78 | 47 | *d* iP | Pn | 16 50 52.1 | -2.4 |
| NGJI | Ngawi | 4.85 | 281 | P | Pn | 16 50 57.5 | +2.1 |
| BNSI | Bone | 5.46 | 45 | P | Pn | 16 51 03.0 | -0.8 |
| SPSI | Sidrap Palu | 5.57 | 39 | P | Pn | 16 51 02.4 | -2.8 |
| | 256nm,0.9s,8μm1.9nm | | | | | | |
| UGM | Wanagama | 5.70 | 274 | P | Pn | 16 51 10.5 | +3.5 |
| UGM | Wanagama | 5.70 | 274 | Pn | Pn | 16 51 06.0 | -1.0 |
| UGM | Wanagama | 5.70 | 274 | P | Pn | 16 51 06.7 | -0.3 |
| | 461nm,1.1s,3.3nm | | | | | | |
| SMRI | Semarang | 5.91 | 282 | P | Pn | 16 51 13.8 | +3.9 |
| SMRI | Semarang | 5.91 | 282 | | Pn | 16 51 11.5 | +1.6 |
| SMRI | Semarang | 5.91 | 282 | P | Pn | 16 51 08.6 | -1.3 |
| | 184nm,0.9s,1.6nm | | | | | | |
| MMRI | Maumere | 5.92 | 93 | P | Pn | 16 51 11.0 | +0.9 |
| MMRI | Maumere | 5.92 | 93 | Pn | Pn | 16 51 08.4 | -1.6 |
| MMRI | Maumere | 5.92 | 93 | P | Pn | 16 51 09.1 | -1.0 |
| BBSI | Bau Bau | 6.87 | 66 | P | Pn | 16 51 22.9 | -0.3 |
| | 197nm,1.0s,2μm0.6nm | | | | | | |
| BKB | Balikpapan | 7.05 | 5 | Pn | Pn | 16 51 28.0 | +2.3 |
| BKB | Balikpapan | 7.05 | 5 | P | Pn | 16 51 27.8 | +2.1 |
| | 360nm,1.3s | | | | | | |
| KPJI | Karang Pucung | 7.33 | 277 | P | Pn | 16 51 29.8 | +0.3 |
| | 93nm,1.2s,0.5nm | | | | | | |
| MTKI | Muara Teweh, K | 7.47 | 349 | P | Pn | 16 51 29.6 | -1.7 |
| | 149nm,0.8s,3μm1.1nm | | | | | | |
| BATI | Baumata | 7.54 | 105 | P | Pn | 16 51 32.0 | -0.4 |
| | 165nm,0.6s,2μm0.6nm | | | | | | |
| SOEI | Soe | 8.03 | 101 | P | Pn | 16 51 40.1 | +0.9 |
| SOEI | Soe | 8.03 | 101 | Pn | Pn | 16 51 39.7 | +0.5 |
| SOEI | Soe | 8.03 | 101 | P | Pn | 16 51 39.5 | +0.3 |
| BBJI | Bungbulang | 8.57 | 275 | P | Pn | 16 51 49.4 | +2.8 |
| CNJI | Cibinong | 9.10 | 276 | P | Pn | 16 51 54.7 | +0.9 |
| | 65nm,1.2s | | | | | | |
| MPSI | Mapaga | 9.34 | 23 | P | Pn | 16 51 55.9 | -1.2 |
| STKI | Sintang | 9.61 | 330 | P | Pn | 16 51 59.0 | -1.7 |
| | 39nm,0.7s | | | | | | |
| TOLI2 | Tolitoli | 10.41 | 26 | P | Pn | 16 52 13.4 | +1.7 |
| TOLI2 | Tolitoli | 10.41 | 26 | Pn | Pn | 16 52 10.8 | -0.9 |
| GTOI | Gorontalo | 11.16 | 37 | P | Pn | 16 52 22.5 | +0.5 |
| SBUM | Sibu | 11.44 | 339 | | Pn | 16 52 24.0 | -1.8 |
| SANI | Sanana | 11.52 | 58 | P | Pn | 16 52 27.8 | +0.9 |
| SANI | Sanana | 11.52 | 58 | P | Pn | 16 52 28.0 | +1.1 |
| | 45nm,0.9s | | | | | | |
| PPBI | Pangkal Pinang | 11.79 | 301 | P | Pn | 16 52 33.1 | +2.4 |
| NLAI | Namlea | 11.91 | 65 | P | Pn | 16 52 35.1 | +2.8 |
| | 39nm,1.0s,906nm | | | | | | |
| KASI | Kota Agung | 12.01 | 283 | P | Pn | 16 52 33.5 | -0.1 |
| | 86nm,1.3s | | | | | | |
| MBWA | Marble Bar | 13.19 | 166 | P | Pn | 16 52 48.5 | -1.2 |
| MBWA | Marble Bar | 13.19 | 166 | Pn | Pn | 16 52 47.2 | -2.5 |
| FITZ | Fitzroy Crossi | 13.32 | 138 | P | Pn | 16 52 50.8 | -0.7 |
| FITZ | Fitzroy Crossi | 13.32 | 138 | Pn | Pn | 16 52 50.0 | -1.5 |
| PSA00 | Pilbara Seismi | 13.61 | 166 | P | Pn | 16 52 54.5 | -1.0 |
| PSA00 | Pilbara Seismi | 13.61 | 166 | | Pn | 16 52 53.5 | -2.0 |
| MNAI | Manna | 13.80 | 286 | Pn | Pn | 16 52 58.5 | +0.4 |
| KNRA | Kununurra | 14.24 | 122 | Pn | Pn | 16 53 03.0 | -1.1 |
| GIRL | Giralia | 14.36 | 188 | Pn | Pn | 16 53 04.0 | -1.7 |
| TPRI | Tanjung Pinang | 14.88 | 308 | P | P | 16 53 15.3 | -2.7 |
| | 67nm,1.6s,2μm | | | | | | |
| DRS | Darwin Rock St | 14.96 | 107 | P | Pn | 16 53 13.2 | -0.7 |
| MTN | Manton Dam | 15.29 | 108 | P | Pn | 16 53 16.0 | -2.2 |
| MTN | Manton Dam | 15.29 | 108 | | Pn | 16 53 14.6 | -3.6 |
| BTDF | Bukit Timah Da | 15.74 | 307 | P | P | 16 53 30.0 | +2.4 |
| MYKOM | Kota Tinggi | 15.95 | 309 | | Pn | 16 53 26.9 | +0.2 |
| KDU | Kakadu | 16.52 | 107 | P | Pn | 16 53 32.1 | -1.8 |
| SWI | Sorong | 16.68 | 64 | P | P | 16 53 37.2 | -0.9 |
| | 83nm,1.2s,890nm | | | | | | |
| SWI | Sorong | 16.68 | 64 | P | P | 16 53 38.1 | 0.0 |
| SWI | | | | pmax | pmax | | |
| | comp=Z,83nm,1.2s | | | | | | |
| FAKI | Fak Fak | 16.79 | 72 | P | Pn | 16 53 36.9 | -0.5 |
| FAKI | Fak Fak | 16.79 | 72 | | Pn | 16 53 35.5 | -2.0 |
| FAKI | Fak Fak | 16.79 | 72 | P | Pn | 16 53 36.3 | -1.1 |
| | comp=Z,69nm,1.4s,comp=Z,1μm | | | | | | |
| PDSI | Padang | 17.38 | 294 | P | Pn | 16 53 44.1 | -0.7 |
| | comp=Z,57nm,1.3s | | | | | | |
| BKNI | Bangkinang | 17.44 | 299 | P | P | 16 53 50.1 | +3.6 |
| BKNI | Bangkinang | 17.44 | 299 | P | P | 16 53 48.3 | +1.8 |
| | comp=Z,151nm,1.2s,comp=Z,1μm | | | | | | |
| DAV | Davao City (W) | 17.90 | 32 | LR | LR | 17 02 09.0 | |
| | comp=Z,566nm,19.5s,baz=209,slow=42 | | | | | | |
| MEEK | Meekatharra | 18.34 | 173 | P | Pn | 16 53 58.3 | +1.7 |
| IPM | Ipoh | 19.82 | 309 | P | Pn | 16 54 15.6 | +1.2 |
| IPM | Ipoh | 19.82 | 309 | P | Pn | 16 54 13.8 | -0.6 |
| WRKA | Warakurna | 20.20 | 147 | P | Pn | 16 54 18.3 | -0.5 |
| KULM | Kulim | 20.63 | 310 | P | P | 16 54 20.4 | -1.0 |
| KULM | | | | IAmb | IAmb | 16 54 29.9 | |
| | comp=Z,72nm,1.3s | | | | | | |
| MORW | Morawa | 20.63 | 181 | P | Pn | 16 54 25.9 | +2.1 |
| MORW | Morawa | 20.63 | 181 | P | P | 16 54 22.2 | +0.8 |
| MORW | | | | IAmb | IAmb | 16 54 27.1 | |
| | comp=Z,44nm,0.9s | | | | | | |
| WB0 | Warramunga Arr | 20.92 | 125 | P | P | 16 54 24.4 | -0.1 |
| WB0 | | | | IAmb | IAmb | 16 54 25.5 | |
| | comp=Z,65nm,0.7s | | | | | | |
| GSI | Gunungsitoli | 20.94 | 296 | P | Pn | 16 54 30.6 | +3.0 |
| GSI | Gunungsitoli | 20.94 | 296 | P | P | 16 54 25.7 | +0.8 |
| GSI | Gunungsitoli | 20.94 | 296 | P | Pn | 16 54 27.5 | -0.1 |
| | comp=Z,101nm,1.5s | | | | | | |
| WRA | Warramunga Arr | 20.96 | 125 | P | P | 16 54 24.9 | -0.1 |
| WRA | Warramunga Arr | 20.96 | 125 | P | P | 16 54 25.0 | -0.1 |
| | comp=Z,51nm,0.7s,baz=301,slow=12,SNR=448 | | | | | | |
| WRA | | | | S | S | 16 58 16.2 | -0.7 |
| | comp=Z,2.7nm,0.7s,baz=295,slow=21,SNR=3.9 | | | | | | |
| WRA | | | | ScP | ScP | 17 02 06.9 | +0.7 |
| | comp=Z,0.9nm,0.9s,baz=295,slow=2.0,SNR=1.7 | | | | | | |
| WRA | | | | LR | LR | 17 02 28.3 | |
| | comp=Z,424nm,20.6s,baz=267,slow=36 | | | | | | |
| | comp=Z,51nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 20.96 | 125 | P | P | 16 54 24.9 | -0.1 |
| WRAB | Tennant Creek | 20.97 | 125 | P | P | 16 54 25.3 | +0.2 |
| WRAB | | | | IAmb | IAmb | 16 54 26.2 | |
| | comp=Z,66nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 20.97 | 125 | *ce* P | P | 16 54 25.0 | -0.1 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,48nm,0.8s | | | | | | |
| WB2 | Warramunga Arr | 20.97 | 125 | P | P | 16 54 25.4 | +0.2 |
| WB2 | | | | IAmb | IAmb | 16 54 26.2 | |
| | comp=Z,61nm,0.7s | | | | | | |
| WR0 | Warramunga Arr | 21.13 | 125 | P | P | 16 54 27.0 | +0.1 |
| WR0 | | | | IAmb | IAmb | 16 54 31.2 | |
| | comp=Z,82nm,0.8s | | | | | | |
| DLV | T Lat | 21.57 | 339 | P | P | 16 54 35.9 | +4.1 |
| KCSI | Kotacane, Aceh | 21.88 | 302 | P | P | 16 54 34.9 | 0.0 |
| | comp=Z,37nm,0.6s,comp=Z,3μm | | | | | | |
| BLDU | Balldu | 22.17 | 179 | P | P | 16 54 39.0 | +1.1 |
| AS31 | Alice Springs | 22.76 | 134 | P | P | 16 54 44.2 | -0.1 |
| ASAR | Alice Springs | 22.76 | 134 | P | P | 16 54 44.1 | -0.3 |
| ASAR | Alice Springs | 22.76 | 134 | P | P | 16 54 44.7 | +0.3 |
| | comp=Z,27nm,0.7s,baz=310,slow=8.6,SNR=282 | | | | | | |
| ASAR | | | | PcP | PcP | 16 58 34.8 | -0.7 |
| | comp=Z,0.6nm,0.6s,baz=303,slow=2.0,SNR=1.2 | | | | | | |
| ASAR | | | | S | S | 16 58 53.8 | +2.7 |
| | comp=Z,7.0nm,1.1s,baz=319,slow=22,SNR=5.9 | | | | | | |
| | comp=Z,27nm,0.7s | | | | | | |
| ASAR | Alice Springs | 22.76 | 134 | P | P | 16 54 44.1 | -0.3 |
| AS01 | Alice Springs | 22.80 | 134 | P | P | 16 54 45.2 | +0.5 |
| KLBR | Kellerberrin | 23.18 | 177 | P | P | 16 54 50.6 | +2.1 |
| KMBL | Kambalda | 23.51 | 168 | P | P | 16 54 52.0 | +0.2 |
| SRIT | Nakonsritamara | 23.63 | 315 | P | P | 16 54 57.6 | +4.6 |
| SRIT | Nakonsritamara | 23.63 | 315 | P | P | 16 54 53.2 | +0.2 |
| SURA | Surathani | 24.01 | 316 | P | P | 16 55 00.7 | +4.1 |
| GENI | Genyem | 24.46 | 78 | P | P | 16 55 02.7 | +1.9 |
| NWAO | Narrogin (SRO) | 24.49 | 178 | P | P | 16 55 02.1 | +1.3 |
| NWAO | Narrogin (SRO) | 24.49 | 178 | P | P | 16 55 00.8 | 0.0 |
| NWAO | | | | IAmb | IAmb | 16 55 28.8 | |
| | comp=Z,44nm,0.9s | | | | | | |
| NWAO | Narrogin (SRO) | 24.49 | 178 | P | P | 16 55 01.6 | +0.7 |
| | comp=Z,27nm,0.8s,baz=347,slow=9.4,SNR=6.8 | | | | | | |
| NWAO | | | | S | S | 16 59 27.1 | +8.1 |
| | comp=Z,8.8nm,0.9s,baz=76,slow=8.4,SNR=1.5 | | | | | | |
| NWAO | | | | LR | LR | 17 04 25.0 | |
| | comp=Z,347nm,21.0s,baz=335,slow=36 | | | | | | |
| | comp=Z,27nm,0.8s | | | | | | |
| NWAO | Narrogin (SRO) | 24.49 | 178 | P | P | 16 55 00.8 | 0.0 |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,44nm,1.0s | | | | | | |
| TABU | Tabubil | 24.97 | 85 | P | P | 16 55 07.5 | +2.0 |
| QIS | Mount Isa | 25.62 | 121 | P | P | 16 55 10.6 | -0.7 |
| UBPT | Khong Chiam | 25.78 | 335 | P | P | 16 55 16.5 | +3.8 |
| OOD | Oodnadatta | 26.68 | 139 | P | P | 16 55 21.3 | +0.6 |
| COEN | Coen | 26.98 | 104 | P | P | 16 55 24.0 | +0.4 |
| COEN | Coen | 26.98 | 104 | P | P | 16 55 23.4 | -0.1 |
| MULG | Mulgathing | 27.47 | 145 | P | P | 16 55 28.7 | +0.9 |
| QIZ | Qiongzhong | 27.91 | 347 | P | P | 16 55 35.5 | +3.7 |
| QIZ | Qiongzhong | 27.91 | 347 | P | P | 16 55 33.6 | +1.8 |
| QIZ | | | | S | S | 17 00 17.0 | +3.6 |
| QIZ | | | | LR | LR | | |
| | comp=Z,480nm,14.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,280nm,16.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,330nm,14.5s | | | | | | |
| MTSU | Mount Surprise | 28.96 | 113 | P | P | 16 55 43.8 | +2.5 |
| INKA | Innaminka | 30.13 | 133 | P | P | 16 55 54.0 | +2.5 |
| BBOO | Buckleboo | 30.49 | 146 | P | P | 16 55 54.9 | +0.3 |
| PMG | Port Moresby | 30.54 | 94 | LR | LR | 17 10 47.9 | |
| | comp=Z,219nm,19.1s,baz=261,slow=41 | | | | | | |
| PMG | Port Moresby | 30.54 | 94 | *e* P | P | 16 55 58.1 | +2.8 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| PHRA | Phrae | 31.00 | 329 | P | P | 16 55 59.6 | +0.4 |
| CTA | Charters Tower | 31.27 | 115 | P | P | 16 56 02.1 | +0.4 |
| | comp=Z,0.7nm,0.9s,baz=278,slow=7.7,SNR=11 | | | | | | |
| CTA | | | | LR | LR | 17 10 57.9 | |
| | comp=Z,45nm,19.4s,baz=289,slow=41 | | | | | | |
| CTAO | Charters Tower | 31.27 | 115 | P | P | 16 56 02.9 | +1.2 |
| CTAO | Charters Tower | 31.27 | 115 | P | P | 16 56 01.8 | +0.1 |
| CTAO | | | | IAmb | IAmb | 16 56 12.2 | |
| | comp=Z,32nm,1.6s | | | | | | |
| CTAO | Charters Tower | 31.27 | 115 | P | P | 16 56 01.8 | +0.1 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,32nm,1.6s | | | | | | |
| CMAR | Chiang Mai Arr | 31.63 | 327 | P | P | 16 56 05.2 | +0.3 |
| CMAR | Chiang Mai Arr | 31.63 | 327 | P | P | 16 56 03.9 | -0.9 |
| | comp=Z,3.8nm,0.9s,baz=153,slow=6.6,SNR=20 | | | | | | |
| CMAR | | | | LR | LR | 17 10 34.6 | |
| | comp=Z,321nm,19.4s,baz=160,slow=40 | | | | | | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| CHTO | Chiang Mai | 31.93 | 328 | P | P | 16 56 07.8 | +0.4 |
| CHTO | Chiang Mai | 31.93 | 328 | P | P | 16 56 07.8 | +0.4 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| QLP | Quilpie | 32.15 | 128 | P | P | 16 56 11.6 | +2.3 |
| SSLB | Suanglung | 32.25 | 8 | P | P | 16 56 14.6 | +4.4 |
| HTT | Hallett | 32.59 | 143 | P | P | 16 56 14.9 | +1.8 |
| STKA | Stephens Creek | 33.22 | 138 | P | P | 16 56 21.0 | +2.4 |
| STKA | Stephens Creek | 33.22 | 138 | P | P | 16 56 18.9 | +0.3 |
| STKA | Stephens Creek | 33.22 | 138 | P | P | 16 56 19.0 | +0.3 |
| | comp=Z,5.6nm,0.8s,baz=302,slow=9.5,SNR=9.8 | | | | | | |
| STKA | | | | LR | LR | 17 09 39.9 | |
| | comp=Z,258nm,21.1s,baz=308,slow=36 | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| STKA | Stephens Creek | 33.22 | 138 | *ii* P | P | 16 56 19.7 | +1.1 |
| KMI | Kunming | 35.77 | 339 | P | P | 16 56 43.5 | +2.5 |
| KMI | | | | S | S | 17 02 23.4 | +7.2 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| KMI |

WHN S S 17 03 10.2 +10
WHN LR LR
comp=Z,960nm,17.3s
**ENH Enshi 38.93 351** P **P** **16 57 11.5 +4.0**
**YNG Young 39.24 136** P **P** **16 57 11.3 +1.2**
**AUPHS Peel High Scho 39.42 130** P **P** **16 57 14.2 +2.5**
**AUWSH Wavell State H 39.59 123** P **P** **16 57 15.6 +2.5**
**ARMA Armidale 39.68 128** P **P** **16 57 16.6 +2.6**
**CAN Canberra 40.22 137** P **P** **16 57 19.2 +1.0**
CAN IAmb IAmb 16 57 34.4
comp=Z,46nm,1.6s
**CAN Canberra 40.22 137** P **P** **16 57 19.3 +1.0**
CAN pmax pmax
comp=Z,45nm,1.6s
**NJ2 Nanjing 40.23 3** *e*P **P** **16 57 20.9 +2.7**
NJ2 pmax pmax
comp=Z,7.0nm,0.7s
NJ2 pmax pmax
comp=Z,100nm,5.0s
**CD2 Chengdu 40.82 343** P **P** **16 57 22.7 -0.5**
CD2 S **S** **17 03 34.8 +2.8**
CD2 pmax pmax
comp=Z,20nm,0.7s
CD2 pmax pmax
comp=Z,160nm,3.9s
CD2 LR LR
comp=Z,300nm,13.3s
CD2 LR LR
comp=Z,320nm,12.7s
CD2 LR LR
comp=Z,360nm,15.9s
**SHL Shillong 41.21 326** P **P** **16 57 26.2 -0.4**
SHL IAmb IAmb 16 57 34.2
comp=Z,23nm,0.9s
**SHL Shillong 41.21 326** P **P** **16 57 26.2 -0.4**
SHL pmax pmax
comp=Z,23nm,0.9s
**XAN Xi'an 42.71 351** ⇑P **P** **16 57 42.7 +4.1**
XAN pmax pmax
comp=Z,12nm,1.2s
XAN LR LR
comp=Z,380nm,15.5s
XAN LR LR
comp=Z,330nm,15.2s
XAN LR LR
comp=Z,720nm,16.5s
**LYN LuoYang 42.80 355** *e*P **P** **16 57 42.5 +3.2**
LYN pmax pmax
comp=Z,22nm,1.1s
**HNR Honiara 43.16 95** LR LR 17 17 45.3
comp=Z,2μm,19.4s,baz=269,slow=39
**JNU Nakatsue 43.51 18** P **P** **16 57 43.9 -1.2**
**TIA Tai'an 44.31 1** P **P** **16 57 50.2 -1.2**
TIA pmax pmax
comp=Z,13nm,1.0s
**JMN Monobe 45.05 21** P **P** **16 58 01.3 +3.9**
**JMN Monobe 45.05 21** P **P** **16 57 56.1 -1.4**
JMN IAmb IAmb 16 58 04.0
comp=Z,27nm,1.2s
**HYB Hyderabad 45.20 305** *e*P **P** **16 57 58.2 -0.6**
**HNS HongShan 45.51 358** ⇑P **P** **16 58 00.3 -0.6**
HNS S S 17 04 49.3 +8.8
HNS pmax pmax
comp=Z,16nm,1.4s
HNS LR LR
comp=Z,270nm,17.7s
HNS LR LR
comp=Z,230nm,15.7s
HNS LR LR
comp=Z,340nm,18.6s
**TJN Taejon 45.68 13**⇓*e*P **P** **16 58 01.1 -1.2**
**LZH Lanzhou 45.70 346** *e*P **P** **16 58 06.0 +3.3**
LZH pP pP 16 58 14.1 +1.1
LZH S **S** **17 04 47.1 +3.4**
LZH sS sS 17 05 04.3 +3.4
LZH pmax pmax
comp=Z,24nm,1.2s
LZH LR LR
comp=Z,320nm,15.8s
LZH LR LR
comp=Z,290nm,17.5s
LZH LR LR
comp=Z,380nm,14.4s
**KSAR Wonju Array Be 46.82 13** P **P** **16 58 10.4 -0.7**
**KSAR Wonju Array Be 46.82 13** P **P** **16 58 10.5 -0.7**
**KSRS Korea Array 46.84 13** P **P** **16 58 10.2 -1.1**
comp=Z,3.5nm,0.9s,baz=187,slow=6.4,SNR=9.4
KSRS LR LR 17 19 37.1
comp=Z,60nm,21.7s,baz=190,slow=38
comp=Z,3.5nm,0.9s
**KS19 Wonju Array Si 46.87 13** P **P** **16 58 10.7 -0.9**
**JHJ Hachijo jima 2 46.91 27** LR LR 17 17 17.1
comp=Z,119nm,19.3s,baz=132,slow=35
**INU Inuyama 47.66 23** P **P** **16 58 21.4 +3.6**
**INU Inuyama 47.66 23** P **P** **16 58 17.1 -0.7**
INU IAmb IAmb 16 58 30.3
comp=Z,12nm,0.9s
**JGF Kuroka 48.01 23** P **P** **16 58 19.1 -1.5**
JGF IAmb IAmb 16 58 22.4
comp=Z,14nm,0.9s
**BJT Baijiatuau 48.11 360** P **P** **16 58 25.1 +3.9**
**GOMU GeErMu 48.67 337** P **P** **16 58 26.3 +0.2**
GOMU pP pP 16 58 35.9 -0.5
GOMU sP sP 16 58 40.8 +0.3
GOMU PcP **PcP** **16 59 53.9 +2.8**
GOMU S **S** **17 05 30.0 +3.6**
GOMU pmax pmax
comp=Z,13nm,1.3s
GOMU LR LR
comp=Z,550nm,17.0s
GOMU LR LR
comp=Z,380nm,16.1s
GOMU LR LR
comp=Z,510nm,21.2s
**BTO Baotou 49.03 354** *e*P **P** **16 58 32.1 +3.6**
BTO pP **pP** **16 58 39.5 +0.7**
BTO sP **sP** **16 58 42.9 0.0**
BTO PP **PP** **17 00 19.6 -2.8**
BTO S **S** **17 05 38.2 +7.4**
BTO pmax pmax
comp=Z,26nm,0.5s
BTO pmax pmax
comp=Z,120nm,4.7s
BTO LR LR
comp=Z,330nm,10.8s
BTO LR LR
comp=Z,280nm,12.8s
BTO LR LR
comp=Z,390nm,13.7s
**HHC Hu-ho-hao-te 49.13 355** *e*P **P** **16 58 33.4 +4.2**
HHC S **S** **17 05 38.3 +6.1**
HHC sS sS 17 05 54.1 +4.6
HHC ScS **ScS** **17 08 13.6 -5.2**
HHC pmax pmax
comp=Z,10.0nm,0.5s
HHC pmax pmax
comp=Z,94nm,3.6s
HHC LR LR
comp=Z,180nm,15.7s
HHC LR LR
comp=Z,160nm,15.7s
HHC LR LR
comp=Z,200nm,16.2s
**MAJO Matsushiro 49.17 23** P **P** **16 58 27.9 -1.6**
MAJO IAmb IAmb 16 58 36.4
comp=Z,22nm,0.9s
**MAJO Matsushiro 49.17 23***d i*P **P** **16 58 27.5 -2.0**
MAJO pmax pmax
comp=Z,35nm,1.8s
**MJAR Matsushiro Arr 49.17 23** P **P** **16 58 27.4 -2.1**
comp=Z,12nm,0.8s,baz=197,slow=7.5,SNR=46
MJAR LR LR 17 21 00.5
comp=Z,83nm,18.0s,baz=206,slow=38
comp=Z,12nm,0.8s
**MJB9 Matsu-Tunnel 49.17 23** P **P** **16 58 28.7 -0.8**
MJB9 IAmb IAmb 16 58 37.4
comp=Z,20nm,0.9s
**GTA Gaotai 49.89 343** P **P** **16 58 34.9 -0.2**
GTA pP pP 16 58 45.0 -0.4
GTA sP sP 16 58 49.6 +0.1
GTA S **S** **17 05 39.1 -3.9**
GTA sS sS 17 05 57.7 -2.6
GTA pmax pmax
comp=Z,6.0nm,1.6s
GTA LR LR
comp=Z,150nm,16.4s
GTA LR LR
comp=Z,170nm,17.4s
GTA LR LR
comp=Z,190nm,17.4s
**DZM Mont Dzumac 50.09 112** *e*LR LR 17 12 56.0
comp=Z,207nm,22.7s
**SNY Shenyang 50.36 7** ⇑P **P** **16 58 37.0 -1.4**
SNY pmax pmax
comp=Z,9.0nm,0.8s
**JSD Sado 50.49 23** P **P** **16 58 39.5 0.0**
**JMM Marumori 51.35 25** P **P** **16 58 49.9 +3.9**
**CN2 Changchun 52.55 8** P **P** **16 58 53.8 -1.0**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 LR LR
comp=Z,200nm,16.0s
CN2 LR LR
comp=Z,200nm,16.0s
CN2 LR LR
comp=Z,200nm,17.0s
**MDJ Mudanjiang 54.06 12** P **P** **16 59 05.2 -0.7**
MDJ pmax pmax
comp=Z,19nm,1.0s
**MDJ Mudanjiang 54.06 12** IAmb IAmb 16 59 14.0
comp=Z,18nm,0.9s
**USA0B Ussuriysk Arra 54.19 14** P **P** **16 59 05.4 -1.4**
USA0B IAmb IAmb 16 59 11.1
comp=Z,15nm,0.9s
**USA0B Ussuriysk Arra 54.19 14***c i*P **P** **16 59 06.1 -0.7**
**USRK Ussuriysk Ar. 54.19 14** P **P** **16 59 05.2 -1.6**
**USRK Ussuriysk Ar. 54.19 14** P **P** **16 59 05.7 -1.2**
comp=Z,11nm,0.8s,baz=192,slow=7.2,SNR=30
comp=Z,11nm,0.8s
**USRK Ussuriysk Ar. 54.19 14** P **P** **16 59 05.2 -1.6**
**BNX BinXian 54.75 10** ⇓P **P** **16 59 08.8 -2.0**
BNX pmax pmax
comp=Z,8.0nm,0.9s
**ULN Ulaanbaatar 56.54 353** P **P** **16 59 22.5 -1.4**
ULN IAmb IAmb 16 59 30.0
comp=Z,13nm,0.9s
**ULN Ulaanbaatar 56.54 353***de*P **P** **16 59 23.0 -0.9**
ULN pmax pmax
comp=Z,17nm,1.7s
**SONM Songino Array 56.60 352** P **P** **16 59 23.2 -1.1**
SONM IAmb IAmb 16 59 30.3
comp=Z,18nm,1.0s
**SONM Songino Array 56.60 352** P **P** **16 59 23.6 -0.7**
comp=Z,10nm,0.7s,baz=172,slow=8.8,SNR=60
SONM LR LR 17 27 26.4
comp=Z,150nm,18.4s,baz=196,slow=40
comp=Z,10nm,0.7s
**SONM Songino Array 56.60 352** P **P** **16 59 23.2 -1.1**
SONM pmax pmax
comp=Z,18nm,1.0s
**ASAJ Asahikawa 57.39 22** LR LR 17 24 46.4
comp=Z,39nm,21.5s,baz=192,slow=37
**ASAJ Asahikawa 57.39 22** P **P** **16 59 30.7 +0.9**
**JCZ Jackson Bay 57.74 137** P **P** **16 59 35.5 +3.0**
**MLZ Mavora Lakes 57.79 139** P **P** **16 59 34.0 +1.3**
MLZ IAmb IAmb 16 59 38.5
comp=Z,21nm,1.0s
**CASY Casey 57.99 183** P **P** **16 59 33.7 0.0**
CASY IAmb IAmb 16 59 35.2
comp=Z,9.6nm,0.8s
**WMQ Urumqi 58.01 336** *e*P **P** **16 59 33.0 -1.2**
WMQ pmax pmax
comp=Z,26nm,0.7s
WMQ LR LR
comp=Z,250nm,19.5s
WMQ LR LR
comp=Z,220nm,22.9s
**KLR Kul'dur 58.91 12** LR LR 17 26 46.4
comp=Z,58nm,21.3s,baz=193,slow=38
**KLR Kul'dur 58.91 12**⇓*e*P **P** **16 59 38.6 -1.7**
KLR pmax pmax
comp=Z,15nm,1.7s
**HEH HeiHe 59.15 8** *e*P **P** **16 59 41.0 -0.9**
HEH pP **pP** **16 59 51.8 -0.7**
HEH sP **sP** **16 59 55.5 -1.1**
HEH PcP **PcP** **17 00 27.8 -2.4**
HEH S **S** **17 07 47.5 +0.7**
HEH pmax pmax
comp=Z,18nm,1.0s
HEH LR LR
comp=Z,180nm,17.7s
HEH LR LR
comp=Z,160nm,15.7s
HEH LR LR
comp=Z,190nm,20.1s
**RPZ Rata Peaks 59.15 136** P **P** **16 59 42.8 +0.6**
**RPZ Rata Peaks 59.15 136** LR LR 17 27 40.6
comp=Z,208nm,18.1s,baz=286,slow=38
**ZAK Zakamensk 59.55 350** *e*P **P** **16 59 43.3 -1.6**
ZAK pmax pmax
comp=Z,10.0nm,1.4s
**YSS Yuzh-Sakhalins 59.88 21** P **P** **16 59 49.6 +2.6**
**YSS Yuzh-Sakhalins 59.88 21** P **P** **16 59 46.2 -0.8**
**YSS Yuzh-Sakhalins 59.88 21** *e*P **P** **16 59 47.1 +0.1**
YSS *e*S **S** **17 07 54.4 -2.0**
YSS *e*PS **PnS** **17 08 05.0 -7.6**
YSS pmax pmax
comp=Z,40nm,1.4s
**CIT Chita 60.16 358** *e*P P 16 59 53.6 +4.7
CIT *e* 16 59 59.7
CIT *e* 17 00 31.8
CIT pmax pmax
comp=Z,48nm,1.4s
**KSH Kashi 60.48 325** P **P** **16 59 53.8 +2.3**
KSH pP pP 17 00 01.6 -0.4
KSH pmax pmax
comp=Z,3.0nm,1.0s
**MSVF Nonsavu 60.70 106** LR LR 17 26 33.9
comp=Z,154nm,18.4s,baz=183,slow=36
**MOY Mondy 61.19 349** *e*P **P** **16 59 55.3 -0.7**
MOY pmax pmax
comp=Z,34nm,1.9s
**URZ Urewera 62.08 129** LR LR 17 29 20.2
comp=Z,267nm,18.4s,baz=26,slow=38
**ZEA Zeya 62.53 7** *e*P **P** **17 00 04.8 -0.1**
ZEA pmax pmax
comp=E,10.0nm,1.0s
ZEA pmax pmax
comp=N,30nm,1.3s
ZEA pmax pmax
comp=Z,50nm,1.4s
**MK31 Makanchi Array 62.66 334** IAmb IAmb 17 00 26.0
comp=Z,7.8nm,1.1s
**MK31 Makanchi Array 62.66 334**⇑*e*P **P** **17 00 04.6 -1.3**
**MKAR Makanchi Array 62.66 334** P **P** **17 00 03.5 -2.5**
**MKAR Makanchi Array 62.66 334** P **P** **17 00 04.4 -1.5**
comp=Z,1.9nm,0.7s,baz=149,slow=7.3,SNR=19
MKAR LR LR 17 29 47.3
comp=Z,81nm,21.3s,baz=157,slow=39
comp=Z,1.9nm,0.7s
**MAKZ Makanchi 62.81 334** P **P** **17 00 06.0 -0.9**
**MAKZ Makanchi 62.81 334** P **P** **17 00 06.0 -0.9**
MAKZ pmax pmax
comp=Z,5.0nm,1.1s
**TYV Tymovskoe 63.23 18** *e*P **P** **17 00 10.5 +0.9**
TYV *e*S **S** **17 08 41.3 +2.5**
TYV pmax pmax
comp=Z,6.0nm,1.2s
TYV pmax pmax
comp=Z,200nm,4.1s
TYV smax smax
comp=N,100nm,8.7s
TYV smax smax
comp=E,100nm,8.7s
**ARSB Arslanbob 63.39 325** IAmb IAmb 17 00 27.2
comp=Z,10nm,1.6s
**AAK Ala-Archa 63.42 327** P **P** **17 00 10.9 -0.3**
AAK IAmb IAmb 17 00 35.3
comp=Z,8.9nm,0.9s
**AAK Ala-Archa 63.42 327** LR LR 17 32 33.7
comp=Z,168nm,18.9s,baz=140,slow=41
**AAK Ala-Archa 63.42 327**⇑*e*P **P** **17 00 11.2 0.0**
AAK pmax pmax
comp=Z,3.0nm,1.0s
**WSAR Wadi Sarin 64.48 301** LR LR 17 28 45.8
comp=Z,133nm,20.1s,baz=150,slow=36
**BOD Bodaibo 65.95 359** *e*P **P** **17 00 26.2 -1.0**
BOD pmax pmax
comp=Z,27nm,1.8s
**KURBB Kurchatov Arra 67.20 335** P **P** **17 00 33.1 -2.2**
comp=Z,2.1nm,0.8s,baz=142,slow=5.6,SNR=18
KURBB LR LR 17 32 31.3
comp=Z,194nm,21.0s,baz=162,slow=38
comp=Z,2.1nm,0.8s
**KURK Kurchatov 67.23 335** P **P** **17 00 33.8 -1.7**
KURK IAmb IAmb 17 00 59.9
comp=Z,10nm,1.1s
**KURK Kurchatov 67.23 335**⇓*e*P **P** **17 00 35.0 -0.5**
KURK pmax pmax
comp=Z,10.0nm,1.3s
**ZAA0 Zalesovo Array 67.48 341** IAmb IAmb 17 00 40.6
comp=Z,11nm,0.9s
**ZALV Zalesovo Beam 67.48 341** P **P** **17 00 34.6 -2.5**
**ZALV Zalesovo Beam 67.48 341** P **P** **17 00 34.9 -2.2**
comp=Z,3.5nm,0.7s,baz=155,slow=4.0,SNR=13
ZALV LR LR 17 33 28.1
comp=Z,84nm,18.9s,baz=162,slow=39
comp=Z,3.5nm,0.7s
**ABPO Ambohimpanom 67.56 253** *i* P **P** **17 00 38.6 0.0**
**MAW Mawson 68.95 199** P **P** **17 00 46.8 +0.7**
comp=Z,8.0nm,0.8s,baz=5.7,slow=3.4,SNR=5.5
comp=Z,8.0nm,0.8s
**YAK Yakutsk 70.92 7** P **P** **17 00 56.7 -1.4**
**YAK Yakutsk 70.92 7***d i*P **P** **17 00 56.7 -1.4**
YAK pmax pmax
comp=Z,25nm,1.0s
**BRVK Borovoye 72.52 333**⇑*e*P **P** **17 01 07.8 -0.2**
BRVK pmax pmax
comp=Z,6.0nm,1.3s
**VNDA Vanda 73.07 171** P **P** **17 01 11.7 +0.7**
**VNDA Vanda 73.07 171** P **P** **17 01 11.5 +0.5**
comp=Z,5.3nm,0.9s,baz=309,slow=6.0,SNR=26
VNDA LR LR 17 30 41.5
comp=Z,170nm,21.2s,baz=316,slow=34
comp=Z,5.3nm,0.9s
**MA2 Magadan 73.08 18** LR LR 17 37 19.4
comp=Z,40nm,19.3s,baz=142,slow=39
**MA2 Magadan 73.08 18***de*P **P** **17 01 12.5 +1.3**
MA2 pmax pmax
comp=Z,12nm,1.3s
**SBA Scott Base 74.09 170** P **P** **17 01 17.8 +0.9**
SBA IAmb IAmb 17 01 24.8
comp=Z,13nm,1.3s
**SBA Scott Base 74.09 170** P **P** **17 01 17.8 +0.9**
SBA pmax pmax
comp=Z,13nm,1.3s
**ABKAR Akbulak array 75.47 326** P **P** **17 01 22.6 -2.8**
**RAYN Ar Rayn 75.98 297** P **P** **17 01 26.3 -2.6**
**RAYN Ar Rayn 75.98 297** P **P** **17 01 26.3 -2.6**
RAYN pmax pmax
comp=Z,6.0nm,1.0s
**SEY Seymchan 76.25 16** *e*P **P** **17 01 28.9 -0.6**
SEY pmax pmax
comp=Z,14nm,1.6s
**AKTO Aktyubinsk 77.15 326** P **P** **17 01 32.0 -2.9**
comp=Z,3.0nm,0.8s,baz=106,slow=3.7,SNR=6.8
AKTO LR LR 17 41 20.4
comp=Z,115nm,18.0s,baz=163,slow=40
comp=Z,3.0nm,0.8s
**SHEM Shemya Is, Ala 78.11 32** LR LR 17 33 52.3
comp=Z,23nm,20.1s,baz=98,slow=34
**KMBO Kilima Mbogo 78.96 270** P **P** **17 01 45.0 -1.0**
**KMBO Kilima Mbogo 78.96 270** P **P** **17 01 45.0 -1.0**
KMBO pmax pmax
comp=Z,5.0nm,1.0s
**SVE Sverdlovsk 79.23 332** *e*P **P** **17 01 45.4 -0.8**
**ARU Arti 79.97 332** P **P** **17 01 47.1 -3.2**
comp=Z,2.6nm,0.8s,baz=191,slow=5.2,SNR=1.8
ARU LR LR 17 41 32.0
comp=Z,110nm,20.9s,baz=118,slow=39
comp=Z,2.6nm,0.8s
**ARU Arti 79.97 332***d i*P **P** **17 01 50.5 +0.2**
ARU 17 04 45.4
ARU S **S** **17 11 51.9 +0.3**
ARU SS **SS** **17 16 59.8 -2.3**
ARU pmax pmax
comp=Z,5.0nm,1.1s
**QSPA South Pole Qui 81.66 180** P **P** **17 01 59.7 +0.3**
QSPA IAmb IAmb 17 02 09.1
comp=Z,22nm,1.2s
**QSPA South Pole Qui 81.66 180** P **P** **17 01 59.2 -0.1**
comp=Z,5.0nm,0.9s,baz=281,slow=1.3,SNR=17
QSPA LR LR 17 34 10.5
comp=Z,127nm,21.9s,baz=350,slow=33
comp=Z,5.0nm,0.9s
**KBZ Khabaz 83.90 316** LR LR 17 45 14.5
comp=Z,59nm,20.0s,baz=110,slow=40
**KBZ Khabaz 83.90 316**⇑*e*P **P** **17 02 08.9 -2.3**
KBZ pmax pmax
comp=Z,4.0nm,1.3s
**KVAR Kislovodsk Arr 84.11 316** LR LR 17 45 31.9
comp=Z,31nm,19.3s,baz=10,slow=40
**KIV Kislovodsk 84.12 316** *e*P **P** **17 02 09.0 -3.5**
KIV pmax pmax
comp=Z,4.0nm,1.1s
**KIRV Kirov 85.34 331** LR LR 17 46 07.6
comp=Z,140nm,20.1s,baz=128,slow=40
**MBAR Mbarara 85.48 270** P **P** **17 02 19.4 -0.7**
**MBAR Mbarara 85.48 270**⇑*e*P **P** **17 02 20.3 +0.2**
MBAR pmax pmax
comp=Z,13nm,1.4s
**LSZ Lusaka 86.00 255** P **P** **17 02 21.7 -0.9**
**LSZ Lusaka 86.00 255** P **P** **17 02 21.7 -0.9**
LSZ pmax pmax
comp=Z,24nm,1.5s
**SOC Sochi 86.08 315** *e*P **P** **17 02 19.2 -2.9**
SOC *e* 17 05 41.3
SOC *e*PPP PPP 17 07 31.7
SOC *e*S **SKSac** **17 12 41.8 -3.8**
SOC *e*SS **SS** **17 18 38.5 +5.4**
SOC *e*SSS SSS 17 22 02.9
SOC pmax pmax
comp=Z,12nm,0.7s
**EIL Elat 86.60 300** LR LR 17 43 55.4
comp=Z,97nm,18.8s,baz=67,slow=38
**VRH Novokhopyorsk 86.90 323** *e*P **P** **17 02 24.0 -2.0**
VRH pmax pmax
comp=Z,10.0nm,0.4s
**MMAI Mount Meron Ar 86.90 304** P **P** **17 02 24.8 -1.8**
comp=Z,0.4nm,0.3s,baz=149,slow=3.4,SNR=1.3
comp=Z,0.4nm,0.3s
**BOSA Boshof 86.94 242** P **P** **17 02 26.8 -0.2**
comp=Z,6.2nm,1.0s,baz=100,slow=2.1,SNR=7.6
BOSA LR LR 17 37 12.2
comp=Z,103nm,18.1s,baz=72,slow=33
comp=Z,6.2nm,1.0s
**LBTB Lobatse 87.13 245** LR LR 17 34 37.1
comp=Z,65nm,21.0s,baz=118,slow=31
**VORD Divnogorie 88.31 322** *e*P **P** **17 02 32.1 -0.6**
VORD pmax pmax
comp=Z,10.0nm,0.6s
**VSR Storozhevoye 88.45 322** *e*P **P** **17 02 30.6 -2.8**
VSR pmax pmax
comp=Z,10.0nm,0.9s
**LPSR Galich'ya Gora 88.95 323** *e*P **P** **17 02 32.3 -3.4**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**KIP Kipapa 89.06 68**⇓*e*P **P** **17 02 36.5 -0.5**
KIP pmax pmax
comp=Z,25nm,1.1s
**TROLL Troll, Antarti 89.25 197** ⇑P **P** **17 02 38.0 +0.9**
comp=Z,135nm,0.7s
**BR131 Keskin Array S 89.64 310**⇑*e*P **P** **17 02 40.1 +0.6**
**BRTR Keskin Array B 89.64 310** P **P** **17 02 36.6 -2.9**
comp=Z,1.2nm,0.9s,baz=117,slow=5.0,SNR=5.0
BRTR LR LR 17 47 37.1
comp=Z,53nm,19.8s,baz=127,slow=39
comp=Z,1.2nm,0.9s
**SUR Sutherland 90.16 237** LR LR 17 37 27.7
comp=Z,71nm,20.6s,baz=134,slow=32
**SNAA Sanae 90.90 196** IAmb IAmb 17 02 59.7
comp=Z,6.8nm,1.1s
**SNAA Sanae 90.90 196** ⇑P **P** **17 02 44.6 -0.1**
comp=Z,71nm,0.8s
**SNAA Sanae 90.90 196** P **P** **17 02 45.2 +0.6**
comp=Z,2.4nm,0.8s,baz=117,slow=4.8,SNR=11
SNAA LR LR 17 39 47.7
comp=Z,118nm,18.8s,baz=40,slow=33
comp=Z,2.4nm,0.8s
**PPT2 Papeete2 91.45 108** *e*LR LR 17 32 04.6
comp=Z,82nm,25.2s
**BELA Belgrano 2 92.41 186** IAmb IAmb 17 02 58.3
comp=Z,6.9nm,0.9s
**AKASG Malin Array Be 94.51 320** LR LR 17 51 06.1
comp=Z,48nm,21.5s,baz=80,slow=39
**FINES FINESS Array B 97.34 331** LR LR 17 54 43.6
comp=Z,74nm,18.5s,baz=100,slow=40
**KDAK Kodiak Island 97.60 33** LR LR 17 41 47.1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,29nm,20.9s,baz=252,slow=32 | | | | | | | | |
| ARCES | **ARCESS Array B** | **98.01** | **339** | LR | LR | 17 54 38.8 | | | |
| | comp=Z,103nm,18.1s,baz=94,slow=40 | | | | | | | | |
| ILAR | **Eielson Array** | **100.41** | **26** | PP | **PP** | **17 07 30.1** | **-4.4** | | |
| | comp=Z,0.5nm,1.0s,baz=284,slow=8.6,SNR=4.9 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | **115.68** | **281** | PKP | **PKPdf** | **17 08 22.4** | **-2.1** | | |
| | comp=Z,0.6nm,0.7s,baz=69,slow=4.6,SNR=4.5 | | | | | | | | |
| ESDC | **Sonseca Array** | **118.42** | **311** | PKP | **PKPdf** | **17 08 26.8** | **-2.4** | | |
| | comp=Z,0.7nm,1.0s,baz=52,slow=2.1,SNR=1.9 | | | | | | | | |
| NVAR | **Mina Array Bea** | **122.67** | **49** | PKP | **PKPdf** | **17 08 37.5** | **-0.1** | | |
| | comp=Z,0.9nm,0.7s,baz=259,slow=1.5,SNR=8.3 | | | | | | | | |
| HLID | **Hailey** | **123.69** | **43** | PKPdf | **PKPdf** | **17 08 38.9** | **-0.5** | | |
| REDW | **Red Top Meadow** | **126.13** | **41** | | **PKPdf** | **17 08 42.6** | **-1.5** | | |
| PDAR | **Pinedale Array** | **127.25** | **42** | PKP | **PKPdf** | **17 08 44.8** | **-1.5** | | |
| | comp=Z,0.7nm,1.0s,baz=258,slow=3.5,SNR=4.4 | | | | | | | | |
| TXAR | **Lajitas Array** | **137.12** | **55** | PKP | **PKPdf** | **17 09 03.6** | **-1.5** | | |
| | comp=Z,0.2nm,0.7s,baz=309,slow=2.3,SNR=2.2 | | | | | | | | |
| TXAR | | | | SKPbc | **SKPbc** | **17 12 35.7** | **-0.1** | | |
| | comp=Z,0.6nm,0.9s,baz=349,slow=1.3,SNR=4.2 | | | | | | | | |
| VAO | **Valinhos** | **144.80** | **207** | *eP* | **PKPdf** | **17 09 18.8** | **-0.3** | | |
| OXF | **Oxford** | **144.86** | **38** | | **PKPab** | **17 09 15.6** | **-2.2** | | |
| OXF | **Oxford** | **144.86** | **38** | PKIKP | **PKPab** | **17 09 15.6** | **-2.2** | | |
| CPUP | **Villa Florida** | **144.99** | **190** | PKPbc | **PKPab** | **17 09 18.3** | **-0.1** | | |
| | comp=Z,9.9nm,1.0s,baz=159,slow=3.6,SNR=11 | | | | | | | | |
| BSCB | **Bom Sucesso** | **145.41** | **212** | *eP* | **PKPbc** | **17 09 19.3** | **-0.8** | | |
| SSPA | **Standing Stone** | **145.45** | **19** | | **PKPbc** | **17 09 16.9** | **-2.6** | | |
| N58A | **Sunbury** | **145.63** | **18** | | **PKPdf** | **17 09 17.8** | **-2.1** | | |
| IPMB | **Ipameri, GO** | **149.69** | **210** | *eP* | **PKPdf** | **17 09 26.4** | **-0.9** | | |
| BDFB | **Brasilia** | **151.54** | **213** | PKPbc | **PKPbc** | **17 09 35.9** | **-0.5** | | |
| | comp=Z,2.4nm,0.7s,baz=223,slow=1.1,SNR=6.4 | | | | | | | | |
| BDFB | | | | PKPab | **pPKPdf** | **17 09 43.1** | **+1.2** | | |
| | comp=Z,3.0nm,0.6s,baz=144,slow=7.2,SNR=5.2 | | | | | | | | |
| LPAZ | **La Paz** | **155.16** | **170** | PKPab | **PKPab** | **17 10 01.3** | **+0.7** | | |
| | comp=Z,7.0nm,0.7s,baz=193,slow=3.7,SNR=23 | | | | | | | | |
| OTAV | **Otavalo** | **163.28** | **118** | *eP* | **PKPdf** | **17 09 44.8** | **-0.7** | | |

*FUNV **05** 16:52:07.9, 10′.97N×70′.89W, h2km, MW3.3*
*RSNC **05** 16:52:09.3±0.0, 11′N±1′×7′1W±′, h0km±3km, M2.7, mb3.7, mB4.5, ML2.7, Mw(mB)3.7*

**ISC 05 16:52:07.3±2.2, 10°.93N±0°.04×70°.89W±0°.03, h8km±17km, n27, σ1°85/53, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| URIC | **Uribia, Colomb** | **1.32** | **305** | P | **Pn** | **16 52 31.3** | **-0.8** |
| URIC | | | | S | **Sg** | **16 52 49.6** | **-0.2** |
| AUA1 | **Aruba** | **1.79** | **29** | P | **Pn** | **16 52 37.6** | **-0.9** |
| AUA1 | | | | S | **Sb** | **16 53 02.2** | **-0.7** |
| MCQV | **Machiques** | **1.84** | **242** | *eP* | **Pn** | **16 52 40.0** | **+0.8** |
| MCQV | | | | *eS* | **Sb** | **16 53 04.5** | **+0.1** |
| TEPV | **Terepaima** | **1.93** | **120** | *eP* | **Pn** | **16 52 41.0** | **+0.4** |
| TEPV | | | | *eS* | **Sn** | **16 53 06.1** | **+1.1** |
| CRJC | **Cerrejon, Guaj** | **1.96** | **273** | P | **Pn** | **16 52 40.9** | **0.0** |
| CRJC | | | | S | **Sn** | **16 53 06.1** | **+0.4** |
| JACV | **Jacura** | **2.03** | **85** | *eP* | **Pn** | **16 52 42.5** | **+0.7** |
| JACV | | | | *eS* | **Sn** | **16 53 08.3** | **+0.8** |
| SDV | **Santo Domingo** | **2.05** | **173** | P | **Pb** | **16 52 45.2** | **+0.3** |
| SDV | | | | S | **Sn** | **16 53 10.3** | **+2.1** |
| SOCV | **Socops** | **2.63** | **179** | *eP* | **Pn** | **16 52 51.2** | **+1.0** |
| SOCV | | | | *eS* | **Sn** | **16 53 22.9** | **+0.5** |
| MAPV | **Macapo** | **2.63** | **114** | *eP* | **Pn** | **16 52 50.6** | **+0.4** |
| MAPV | | | | *eS* | **Sn** | **16 53 22.9** | **+0.5** |
| TURV | **Turiamo** | **3.04** | **99** | *eP* | **Pn** | **16 52 55.8** | **+0.1** |
| TURV | | | | *eS* | **Sn** | **16 53 31.3** | **-1.0** |
| SMRC | **Santa Marta, M** | **3.28** | **274** | P | **Pn** | **16 53 01.4** | **+2.4** |
| SMRC | | | | S | **Sn** | **16 53 41.0** | **+2.7** |
| CAPV | **Capacho** | **3.36** | **205** | *eP* | **Pn** | **16 53 01.0** | **+0.7** |
| CAPV | | | | *eS* | **Sn** | **16 53 40.0** | **-0.5** |
| BENV | **Beln** | **3.38** | **106** | *eP* | **Pn** | **16 53 01.4** | **+0.9** |
| BENV | | | | *eS* | **Sn** | **16 53 40.2** | **-0.7** |
| BAUV | **El Baul** | **3.44** | **125** | *eP* | **Pn** | **16 53 01.5** | **+0.3** |
| BAUV | | | | *eS* | **Sn** | **16 53 41.2** | **-1.0** |
| ARGC | **Ariguani, Magd** | **3.47** | **252** | P | **Pn** | **16 53 02.0** | **+0.4** |
| ARGC | | | | S | **Sb** | **16 53 49.2** | **-2.1** |
| OCAC | **Ocana** | **3.59** | **222** | P | **Pn** | **16 53 03.5** | **0.0** |
| OCAC | | | | S | **Sn** | **16 53 48.9** | **+2.7** |
| TACV | **Tcata** | **3.88** | **101** | *eP* | **Pn** | **16 53 07.6** | **+0.2** |
| TACV | | | | *eS* | **Sn** | **16 53 52.0** | **-1.3** |
| PAMC | **Pamplona, Colo** | **3.99** | **207** | P | **Pn** | **16 53 09.2** | **-0.1** |
| PAMC | | | | S | **Sn** | **16 53 53.9** | **-2.7** |
| SJCC | **San Jacinto, C** | **4.34** | **257** | P | **Pn** | **16 53 15.1** | **+1.4** |
| SJCC | | | | S | **Sn** | **16 54 06.9** | **+2.3** |
| BARC | **Barichara** | **4.87** | **208** | P | **Pn** | **16 53 21.3** | **+0.1** |
| BARC | | | | S | **Sn** | **16 54 17.6** | **-0.3** |
| ZARC | **Zaragoza, Cauc** | **5.20** | **229** | P | **Pn** | **16 53 25.1** | **-0.3** |
| ZARC | | | | S | **Sn** | **16 54 22.5** | **-3.2** |
| CACV | **CAICARA DEL OR** | **5.45** | **128** | *eP* | Pn | 16 53 34.3 | +5.4 |
| CACV | | | | *eS* | **Sn** | **16 54 39.1** | **+7.3** |
| RUSC | **La Rusia** | **5.46** | **204** | P | **Pn** | **16 53 29.3** | **-0.1** |
| RUSC | | | | S | **Sn** | **16 54 30.0** | **-2.7** |
| UREC | **San Jos de Ur** | **5.56** | **236** | P | **Pn** | **16 53 31.9** | **+1.4** |
| | 4.7nm,0.4s | | | | | | |
| UREC | | | | S | **Sn** | **16 54 35.3** | **+0.6** |
| | 4.7nm,0.4s | | | | | | |
| SPBC | **San Pablo de B** | **6.12** | **211** | P | **Pn** | **16 53 40.2** | **+2.0** |
| | 4.0nm,0.6s | | | | | | |
| SPBC | | | | S | **Sn** | **16 54 46.6** | **-1.9** |
| | 4.0nm,0.6s | | | | | | |
| PCRV | **Puerto La Cruz** | **6.20** | **96** | *eP* | **Pn** | **16 53 39.3** | **+0.1** |
| PCRV | | | | *eS* | **Sn** | **16 54 46.9** | **-3.5** |
| NORC | **Norcasia** | **6.63** | **217** | P | **Pn** | **16 53 45.4** | **+0.2** |
| NORC | | | | S | **Sn** | **16 54 56.8** | **-4.3** |

*ISK **05** 16:54:23.4, 37′.20N×35′.99E, h9km, ML2.5/22*
*AFAD **05** 16:54:24.8±0.0, 37′.19N×36′.10E, h7km±2km, ML2.7*

**ISC 05 16:54:23.8±1.0, 37°.20N±0°.02×36°.02E±0°.02, h12km±9km, n37, σ0°75/57, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CEYT | **Ceyhan** | **0.28** | **229** | Pg | **Pg** | **16 54 29.6** | **-0.1** |
| KOZT | **Kozan** | **0.32** | **332** | Pg | **Pg** | **16 54 30.2** | **-0.1** |
| KOZT | | | | Sg | **Sg** | **16 54 35.6** | **+0.9** |
| ANDN | **Andirin** | **0.46** | **34** | P | **Pg** | **16 54 32.9** | **-0.1** |
| ANDN | | | | S | **Sg** | **16 54 39.6** | **+0.4** |
| KAMA | **Osmaniye** | **0.52** | **91** | P | **Pg** | **16 54 33.9** | **-0.1** |
| KAMA | | | | S | **Sb** | **16 54 42.9** | **+0.3** |
| HASA | **Hatay-Hassa-Ha** | **0.58** | **140** | P | **Pg** | **16 54 35.2** | **0.0** |
| HASA | | | | S | **Sg** | **16 54 43.2** | **+0.2** |
| HASA | | | | *i* AML | AML | 16 54 48.0 | |
| | comp=N,434nm,0.3s | | | | | | |
| HASA | | | | *i* AML | AML | 16 54 48.0 | |
| | comp=E,455nm,0.3s | | | | | | |
| HCB | **Kahramanmara** | **0.73** | **78** | P | **Pg** | **16 54 38.0** | **+0.1** |
| HCB | | | | S | **Sg** | **16 54 47.2** | **-0.3** |
| KHMR | **Kahramanmara** | **0.73** | **78** | P | **Pg** | **16 54 37.6** | **-0.3** |
| KHMR | | | | P | **Pb** | **16 54 38.2** | **-0.4** |
| KHMR | | | | S | **Sg** | **16 54 47.3** | **-0.2** |
| KHMR | | | | S | **Sb** | **16 54 47.4** | **-1.0** |
| KARA | **Karaisali** | **0.77** | **275** | Pg | **Pg** | **16 54 37.5** | **-1.2** |
| SAIM | **ADANA** | **0.78** | **4** | P | **Pg** | **16 54 36.8** | **-2.1** |
| SAIM | | | | S | **Sb** | **16 54 51.4** | **+1.4** |
| SAIM | | | | *i* AML | AML | 16 54 55.0 | |
| | comp=N,347nm,0.3s | | | | | | |
| SAIM | | | | *i* AML | AML | 16 54 55.0 | |
| | comp=E,278nm,0.5s | | | | | | |
| TAHT | **Tahtakopru-Hat** | **0.83** | **171** | Pg | **Pg** | **16 54 39.9** | **0.0** |
| TAHT | | | | Sg | **Sb** | **16 54 51.9** | **+0.5** |
| KAHM | **Kahramanmaras,** | **0.84** | **67** | P | **Pg** | **16 54 39.6** | **-0.5** |
| KAHM | | | | S | **Sg** | **16 54 50.5** | **-0.4** |
| KHMN | **Narli-Kahraman** | **0.93** | **78** | Pg | **Pg** | **16 54 42.0** | **0.0** |
| CMRD | **Camardi-Nigde** | **0.94** | **300** | Pg | **Pg** | **16 54 40.3** | **-1.7** |
| CMRD | | | | Sg | **Sg** | **16 54 54.7** | **+0.5** |
| KUZU | **Kuzuini** | **0.95** | **116** | P | **Pb** | **16 54 42.6** | **+0.3** |
| KUZU | | | | S | **Sb** | **16 54 55.8** | **+1.0** |
| KUZU | | | | *i* AML | AML | 16 54 56.0 | |
| | comp=E,554nm,0.4s | | | | | | |
| KUZU | | | | *i* AML | AML | 16 54 57.0 | |
| | comp=N,717nm,0.4s | | | | | | |
| KUZU | | | | *i* AML | AML | 16 55 00.0 | |
| | comp=Z,323nm,0.5s | | | | | | |
| GAZ | **Gaziantep** | **0.95** | **91** | Pg | **Pb** | **16 54 42.5** | **+0.1** |
| RHAN | **Hatay/Reyhanl** | **1.05** | **153** | P | **Pg** | **16 54 43.5** | **-0.5** |
| RHAN | | | | S | **Sg** | **16 54 56.7** | **-1.0** |
| RHAN | | | | *i* AML | AML | 16 55 00.0 | |
| | comp=N,168nm,0.4s | | | | | | |
| GZT | **Gaziantep** | **1.25** | **82** | P | **Pb** | **16 54 46.8** | **-0.6** |
| GZT | | | | S | **Sg** | **16 55 02.3** | **-1.7** |
| GZT | | | | *i* AML | AML | 16 55 04.0 | |
| | comp=N,128nm,0.4s | | | | | | |
| SARI | **SarD1z-Kayseri** | **1.25** | **15** | Pn | **Pb** | **16 54 47.7** | **+0.2** |
| NZIP | **Nizip/Gaziante** | **1.33** | **96** | P | **Pg** | **16 54 49.2** | **-0.3** |
| NZIP | | | | S | **Sb** | **16 55 05.8** | **-0.2** |
| NZIP | | | | *i* AML | AML | 16 55 12.0 | |
| | comp=N,123nm,0.5s | | | | | | |
| NZIP | | | | *i* AML | AML | 16 55 14.0 | |
| | comp=E,122nm,0.7s | | | | | | |
| ELBS | **KAHRAMANMARAS** | **1.43** | **38** | P | **Pg** | **16 54 51.8** | **+0.4** |
| ELBS | | | | S | **Sb** | **16 55 09.0** | **+0.2** |
| ELBS | | | | *i* AML | AML | 16 55 15.0 | |
| | comp=E,131nm,0.4s | | | | | | |
| ELBS | | | | *i* AML | AML | 16 55 16.0 | |
| | comp=N,126nm,0.4s | | | | | | |
| ELBS | | | | *i* AML | AML | 16 55 20.0 | |
| | comp=Z,92nm,0.9s | | | | | | |
| NIG | **Nigde** | **1.44** | **310** | Pn | **Pn** | **16 54 50.2** | **+0.2** |
| AKCA | **Adyaman/G¶l** | **1.46** | **65** | P | **Pn** | **16 54 49.3** | **-0.8** |
| AKCA | | | | S | **Sg** | **16 55 10.7** | **-0.1** |
| AKCA | | | | *i* AML | AML | 16 55 25.0 | |
| | comp=N,88nm,0.6s | | | | | | |
| BNN | **Bunyan** | **1.66** | **355** | Pn | **Pn** | **16 54 53.5** | **+0.6** |
| KIZK | **Mersin** | **1.66** | **245** | Pn | **Pn** | **16 54 53.2** | **+0.3** |
| DARE | **Darende-Malaty** | **1.80** | **40** | Pn | **Pn** | **16 54 55.4** | **+0.6** |
| ATAB | **Bozova** | **1.84** | **81** | P | **Pb** | **16 54 57.7** | **+0.3** |
| ATAB | | | | S | **Sn** | **16 55 17.5** | **-1.0** |
| ATAB | | | | *i* AML | AML | 16 55 24.0 | |
| | comp=N,114nm,0.3s | | | | | | |
| ATAB | | | | *i* AML | AML | 16 55 24.0 | |
| | comp=E,130nm,0.4s | | | | | | |
| ATAB | | | | *i* AML | AML | 16 55 25.0 | |
| | comp=Z,70nm,0.5s | | | | | | |
| AKCD | **Akcadag** | **1.87** | **53** | P | **Pn** | **16 54 57.0** | **+1.2** |
| AKCD | | | | S | **Sb** | **16 55 22.2** | **+0.8** |
| AKCD | | | | *i* AML | AML | 16 55 30.0 | |
| | comp=N,134nm,0.7s | | | | | | |
| AKCD | | | | *i* AML | AML | 16 55 32.0 | |
| | comp=Z,64nm,0.5s | | | | | | |
| AKCD | | | | *i* AML | AML | 16 55 33.0 | |
| | comp=E,99nm,0.5s | | | | | | |
| SILI | **Silifke-Mersin** | **1.87** | **244** | Pn | **Pn** | **16 54 56.3** | **+0.6** |
| YESY | **Yesilyurt** | **1.90** | **289** | Pn | **Pn** | **16 54 56.7** | **+0.5** |
| KEBE | **Keben-Mersin** | **1.99** | **249** | Pn | **Pn** | **16 54 58.4** | **+0.9** |
| IKL | **Isikli** | **2.10** | **244** | Pn | **Pn** | **16 54 59.5** | **+0.6** |
| KRMN | **Karaman** | **2.20** | **270** | Pn | **Pn** | **16 55 00.8** | **+0.5** |
| SULT | **Sultanhani-AKS** | **2.22** | **297** | Pn | **Pn** | **16 55 01.1** | **+0.5** |
| AKKU | **Akkuyu-Mersin** | **2.24** | **243** | Pn | **Pn** | **16 55 01.4** | **+0.7** |
| YOZ | **Yozgat** | **2.50** | **348** | Pn | **Pn** | **16 55 05.3** | **+0.8** |
| TEKE | **Tekeli-Mersin** | **2.56** | **247** | Pn | **Pn** | **16 55 05.4** | **+0.2** |
| SVSK | **Karacayir** | **2.82** | **16** | Pn | **Pn** | **16 55 10.0** | **+1.2** |

**JMA 05 16:59:51.0±0.1, 24°.3N±0°.3×123°.8E±0°.3, h17km±1km, MV0.7/8, NEAR ISHIGAKIJIMA ISLAND, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| IRIF | **Iriomote-Funau** | **0.08** | **338** | *i* P | Pg | 16 59 54.2 | 0.0 |
| HATJ | **Hateruma jima** | **0.20** | **170** | P | Pg | 16 59 55.6 | -0.2 |
| HATJ | | | | *eS* | Sg | 16 59 59.1 | +0.1 |
| JKRS | **Kuro-shima** | **0.22** | **95** | *i* P | Pg | 16 59 56.1 | 0.0 |
| JKRS | | | | *eS* | Sb | 17 00 00.1 | -0.3 |
| JIJ | **Ishigaki jima** | **0.36** | **73** | P | Pg | 16 59 58.2 | -0.2 |
| JIJ | | | | *eS* | Sg | 17 00 03.2 | -0.3 |
| JISG | **Ishigakijimahi** | **0.60** | **56** | *eP* | Pg | 17 00 02.5 | -0.2 |
| JISG | | | | *eS* | Sg | 17 00 10.6 | -0.1 |
| JTJ | **Tarama** | **0.94** | **66** | *eP* | Pg | 17 00 09.0 | -0.1 |
| JTJ | | | | *eS* | Sg | 17 00 21.7 | +0.3 |

**TAP 05 17:00:16.8, 24°.65N×121°.76E, h75km, ML1.9, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWC | **Suao** | **0.09** | **118** | *eP* | Pn | 17 00 28.2 | +0.6 |
| | baz=127 | | | | | | |
| TWC | | | | *eS* | Sn | 17 00 36.5 | +0.9 |
| | baz=127 | | | | | | |
| ESAO | **Su ao** | **0.11** | **136** | *eP* | Pn | 17 00 28.0 | +0.4 |
| | baz=145 | | | | | | |
| ESAO | | | | *eS* | Sn | 17 00 36.6 | +1.0 |
| | baz=145 | | | | | | |
| TWE | **Neicheng** | **0.11** | **309** | *eP* | Pn | 17 00 28.2 | +0.6 |
| | baz=294 | | | | | | |
| TWE | | | | *eS* | Sn | 17 00 36.9 | +1.2 |
| | baz=294 | | | | | | |
| ENTT | **Nioudou** | **0.18** | **266** | P | Pn | 17 00 28.3 | +0.4 |
| | baz=278 | | | | | | |
| ENTT | | | | S | Sn | 17 00 36.0 | -0.1 |
| | baz=278 | | | | | | |
| FUSB | **Fushanzhiwuyua** | **0.19** | **304** | *eP* | Pn | 17 00 28.1 | +0.1 |
| | baz=304 | | | | | | |
| FUSB | | | | *eS* | Sn | 17 00 36.4 | +0.1 |
| | baz=304 | | | | | | |
| EWUT | **Wuta** | **0.21** | **176** | *eP* | Pn | 17 00 28.6 | +0.6 |
| | baz=182 | | | | | | |
| EWUT | | | | *eS* | Sn | 17 00 36.8 | +0.6 |
| | baz=182 | | | | | | |
| NDT | **Datong Townshi** | **0.23** | **258** | *eP* | Pn | 17 00 28.4 | +0.2 |
| | baz=269 | | | | | | |
| NDT | | | | *eS* | Sn | 17 00 36.7 | +0.2 |
| | baz=269 | | | | | | |
| LATG | **Datong** | **0.24** | **242** | *eP* | Pn | 17 00 28.8 | +0.4 |
| | baz=250 | | | | | | |
| LATG | | | | *eS* | Sn | 17 00 37.1 | +0.3 |
| | baz=250 | | | | | | |
| NWLT | **Wulai** | **0.27** | **298** | *eP* | Pn | 17 00 28.0 | -0.3 |
| | baz=297 | | | | | | |
| NWLT | | | | *eS* | Sn | 17 00 36.5 | -0.4 |
| | baz=297 | | | | | | |
| TIPB | **Shuangxi** | **0.32** | **10** | *eP* | Pn | 17 00 28.8 | +0.1 |
| TIPB | | | | *eS* | Sn | 17 00 37.6 | +0.1 |
| YHNB | **Yeheng** | **0.35** | **273** | *eP* | Pn | 17 00 28.9 | -0.1 |
| | baz=281 | | | | | | |
| YHNB | | | | *eS* | Sn | 17 00 37.4 | -0.5 |
| | baz=281 | | | | | | |
| NSK | **Sanguang** | **0.37** | **274** | *eP* | Pn | 17 00 28.9 | -0.2 |
| | baz=280 | | | | | | |
| NSK | | | | *eS* | Sn | 17 00 37.8 | -0.3 |
| | baz=280 | | | | | | |
| TWB1 | **Santiao Chiao** | **0.41** | **30** | *eP* | Pn | 17 00 29.1 | -0.2 |
| | baz=40 | | | | | | |
| TWB1 | | | | *eS* | Sn | 17 00 38.1 | -0.4 |
| | baz=40 | | | | | | |
| NNSB | **Datong** | **0.41** | **237** | P | Pn | 17 00 29.8 | +0.4 |
| | baz=243 | | | | | | |
| NNSB | | | | *eS* | Sn | 17 00 39.1 | +0.3 |
| | baz=243 | | | | | | |
| NNS | **Nan Shan** | **0.41** | **239** | *eP* | Pn | 17 00 29.6 | +0.2 |
| | baz=244 | | | | | | |
| NNS | | | | *eS* | Sn | 17 00 39.0 | +0.2 |
| | baz=244 | | | | | | |
| NACB | **Ninganchiao** | **0.50** | **198** | *eP* | Pn | 17 00 30.5 | +0.4 |
| | baz=206 | | | | | | |
| NACB | | | | *eS* | Sn | 17 00 39.1 | -0.7 |
| | baz=206 | | | | | | |
| ETLH | **Xiulin Townshi** | **0.51** | **210** | *eP* | Pn | 17 00 30.1 | -0.1 |
| | baz=205 | | | | | | |
| ETLH | | | | *eS* | Sn | 17 00 39.7 | -0.5 |
| | baz=205 | | | | | | |
| YM01 | **YM01** | **0.52** | **341** | *eP* | Pn | 17 00 30.3 | 0.0 |
| | baz=333 | | | | | | |
| YM01 | | | | *eS* | Sn | 17 00 40.3 | 0.0 |
| | baz=333 | | | | | | |
| NFF | **Wufeng Townshi** | **0.59** | **268** | *eP* | Pn | 17 00 31.1 | +0.1 |
| | baz=276 | | | | | | |
| NFF | | | | *eS* | Sn | 17 00 41.0 | -0.4 |
| | baz=276 | | | | | | |
| FUSS | **Fushou** | **0.62** | **230** | *eS* | Sn | 17 00 43.1 | +0.7 |
| | baz=225 | | | | | | |
| TWT | **Tachien** | **0.67** | **234** | *eP* | Pn | 17 00 32.6 | +0.7 |
| | baz=227 | | | | | | |
| TWT | | | | *eS* | Sn | 17 00 44.6 | +1.6 |
| | baz=227 | | | | | | |
| WHF | **Hehuan Shan** | **0.68** | **222** | *eP* | Pn | 17 00 33.5 | +1.2 |
| | baz=215 | | | | | | |
| WHF | | | | *eS* | Sn | 17 00 44.5 | +0.8 |
| | baz=215 | | | | | | |
| LIOB | **Emei** | **0.68** | **270** | *eP* | Pn | 17 00 32.1 | +0.3 |
| | baz=268 | | | | | | |
| LIOB | | | | *eS* | Sn | 17 00 43.5 | +0.5 |
| | baz=268 | | | | | | |
| TDCB | **Techi** | **0.68** | **234** | *eP* | Pn | 17 00 33.1 | +1.1 |
| | baz=228 | | | | | | |
| TDCB | | | | *eS* | Sn | 17 00 43.6 | +0.4 |
| | baz=228 | | | | | | |
| CHGB | **Renai** | **0.80** | **222** | *eP* | Pn | 17 00 34.9 | +1.5 |
| | baz=215 | | | | | | |
| CHGB | | | | *eS* | Sn | 17 00 46.4 | +0.8 |
| | baz=215 | | | | | | |
| WHP | **Taichung City** | **0.83** | **244** | *eP* | Pn | 17 00 34.6 | +1.0 |
| | baz=253 | | | | | | |
| WHP | | | | *eS* | Sn | 17 00 47.2 | +1.0 |
| | baz=253 | | | | | | |
| WARBT | **Fenglin Townsh** | **0.99** | **200** | *eP* | Pn | 17 00 34.8 | -0.7 |
| | baz=205 | | | | | | |
| WARBT | | | | *eS* | Sn | 17 00 48.2 | -1.2 |
| | baz=205 | | | | | | |
| VWDT | **VWDT** | **1.06** | **212** | *eP* | Pn | 17 00 37.4 | +1.2 |
| | baz=207 | | | | | | |
| VWDT | | | | *eS* | Sn | 17 00 51.6 | +0.8 |
| | baz=207 | | | | | | |
| SSLB | **Suanglung** | **1.13** | **221** | *eP* | Pn | 17 00 38.0 | +0.7 |
| | baz=229 | | | | | | |
| SSLB | | | | *eS* | Sn | 17 00 53.9 | +1.3 |
| | baz=229 | | | | | | |

**DJA 05 17:09:38.1±1.2, 9°S±7°×112°2E±°, h65km±19km, M3.1/6, MLv3.1/6, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MMRI | **Maumere** | **0.52** | **335** | P | Pn | 17 09 52.2 | +1.5 |
| MMRI | | | | S | Sn | 17 10 02.8 | +2.9 |
| BATI | **Baumata** | **1.61** | **133** | P | Pn | 17 10 03.8 | -0.7 |
| SOEI | **Soe** | **1.90** | **110** | P | Pn | 17 10 09.0 | +0.6 |

*IDC **05** 17:09:53.0±0.9, 8°.28S×116°.61E, h0km, mb3.7/7, mbtmp3.7/8, ML3.1/1, Error ellipse: s-maj=28.3km s-min=21.5km az=66.0*
*DJA **05** 17:09:56.6±0.3, 8°S±4°×117°E±°, h10km, M4.0/9, mb3.9/1, MLv4.1/9*

**ISC 05 17:09:55.0±0.7, 8°.28S±0°.06×116°.59E±0°.03, h10km, n18, σ1°24/23, mb3.7/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | **0.54** | **148** | P | **Pg** | **17 10 06.1** | **+0.5** |
| TWSI | | | | S | **Sg** | **17 10 12.9** | **+0.2** |
| PLAI | **Plampang** | **1.29** | **115** | P | **Pg** | **17 10 20.1** | **+0.9** |
| PLAI | | | | S | **Sg** | **17 10 37.9** | **+1.1** |
| PLAI | **Plampang** | **1.29** | **115** | P | **Pn** | **17 10 20.3** | **+1.1** |
| SRBI | **Singaraja** | **1.38** | **278** | P | **Pn** | **17 10 21.0** | **+0.7** |
| SRBI | | | | S | **Sb** | **17 10 39.3** | **+0.8** |
| DNP | **Denpasar** | **1.42** | **254** | P | **Pn** | **17 10 22.2** | **+1.3** |
| DNP | | | | S | **Sg** | **17 10 43.3** | **+2.5** |
| JAGI | **Jajag, Banyuwa** | **2.42** | **265** | P | **Pn** | **17 10 34.1** | **-0.6** |
| BSSI | **Bau Bau, Buton** | **4.41** | **62** | P | **Pn** | **17 11 03.3** | **+1.1** |
| KAPI | **Kappang** | **4.51** | **44** | Pn | **Pn** | **17 11 04.2** | **+0.6** |
| | 1.0nm,0.3s,baz=205,slow=6.4,SNR=8.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **17 11 55.3** | **-0.9** |
| | 1.2nm,0.3s,baz=245,slow=19,SNR=2.5 | | | | | | |
| | 3.0nm,0.2s | | | | | | |
| PWJI | **Pagerwojo** | **4.74** | **273** | P | **Pn** | **17 11 06.9** | **+0.2** |
| BNSI | **Bone** | **5.20** | **42** | P | **Pn** | **17 11 16.1** | **+3.1** |
| WRA | **Warramunga Arr** | **20.73** | **126** | P | **P** | **17 14 34.2** | **-1.7** |
| | 2.4nm,0.8s,baz=299,slow=12,SNR=22 | | | | | | |
| | 2.4nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | **22.57** | **135** | P | **P** | **17 14 54.6** | **-1.1** |
| | 0.9nm,0.6s,baz=317,slow=9.9,SNR=17 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| MKAR | **Makanchi Array** | **62.75** | **334** | P | **P** | **17 20 20.2** | **-0.3** |
| | 0.4nm,0.7s,baz=138,slow=7.5,SNR=4.1 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| KURBB | **Kurchatov Arra** | **67.29** | **335** | P | **P** | **17 20 49.0** | **-0.9** |
| | 0.2nm,0.7s,baz=146,slow=6.7,SNR=1.6 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| VNDA | **Vanda** | **73.07** | **171** | P | **P** | **17 21 24.9** | **-0.1** |
| | 0.7nm,0.8s,baz=309,slow=6.5,SNR=5.2 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| BOSA | **Boshof** | **87.25** | **242** | P | **P** | **17 22 41.8** | **-0.8** |
| | 1.8nm,0.7s,baz=80,slow=2.9,SNR=5.3 | | | | | | |
| | 1.8nm,0.7s | | | | | | |
| SNAA | **Sanae** | **91.04** | **196** | P | **P** | **17 22 59.2** | **-0.3** |
| | 0.8nm,0.9s,baz=58,slow=3.6,SNR=2.7 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| CPUP | **Villa Florida** | **145.09** | **190** | PKPbc | **PKPab** | **17 29 33.0** | **0.0** |
| | 3.9nm,0.8s,baz=164,slow=4.2,SNR=7.2 | | | | | | |

*IDC **05** 17:11:04.4±1.5, 8°.27S×116°.36E, h0km, mb3.6/6, mbtmp3.7/7, ML3.8/1, Error ellipse: s-maj=54.2km s-min=21.5km az=51.0*
*DJA **05** 17:11:08.7±0.4, 8°S±10°×11°6E±°, h10km, M4.0/5, MLv4.0/5*

**ISC 05 17:11:06.8±0.8, 8°.13S±0°.07×116°.48E±0°.05, h10km, n11, σ1°02/14, mb3.7/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | **0.73** | **147** | P | **Pg** | **17 11 20.2** | **-0.7** |
| SRBI | **Singaraja** | **1.25** | **272** | P | **Pn** | **17 11 29.4** | **-1.0** |
| SRBI | | | | S | **Sb** | **17 11 47.3** | **+0.6** |
| DNP | **Denpasar** | **1.37** | **246** | P | **Pg** | **17 11 34.0** | **+0.9** |
| PLAI | **Plampang** | **1.46** | **119** | P | **Pn** | **17 11 34.2** | **+0.9** |
| PLAI | | | | S | **Sn** | **17 11 53.8** | **+1.2** |
| KAPI | **Kappang** | **4.49** | **47** | Pn | **Pn** | **17 12 15.8** | **+0.9** |
| | 4.1nm,0.3s,baz=229,slow=20,SNR=5.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **17 13 06.1** | **-1.1** |
| | 5.4nm,0.3s,baz=227,slow=23,SNR=1.8 | | | | | | |
| | 11nm,0.3s | | | | | | |
| WRA | **Warramunga Arr** | **20.91** | **126** | P | **P** | **17 15 48.5** | **-1.2** |
| | 2.9nm,0.6s,baz=301,slow=12,SNR=11 | | | | | | |
| | 2.9nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | **22.75** | **135** | P | **P** | **17 16 08.6** | **-0.9** |
| | 1.2nm,0.5s,baz=309,slow=9.4,SNR=6.5 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| SONM | **Songino Array** | **56.43** | **352** | P | **P** | **17 20 49.8** | **+1.0** |
| | 0.3nm,0.4s,baz=152,slow=6.5,SNR=2.3 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| MKAR | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1.1nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **57.09** | **22** | LR | LR | 18 08 10.2 | |
| | comp=Z,17nm,18.1s,baz=119,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.55** | **334** | P | **P** | **17 41 03.7** | **-0.1** |
| | 0.4nm,0.8s,baz=157,slow=6.6,SNR=2.9 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.34** | **340** | P | **P** | **17 41 33.7** | **-1.1** |
| | 0.4nm,0.4s,baz=183,slow=2.9,SNR=1.8 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **73.26** | **171** | P | **P** | **17 42 10.3** | **-0.5** |
| | 0.3nm,0.3s,baz=307,slow=6.0,SNR=2.7 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **91.18** | **196** | P | **P** | **17 43 44.2** | **-0.6** |
| | 0.8nm,0.8s,baz=138,slow=12,SNR=2.0 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.86** | **281** | PKP | **PKPdf** | **17 49 21.2** | **-2.5** |
| | 0.1nm,0.3s,baz=83,slow=4.5,SNR=2.1 | | | | | | |

*IDC **05** 17:42:32.4±0.8,8˚.31S×116˚.13E,h0km,mb3.9/12, mbtmp3.9/13,ML4.3/1,Error ellipse: s-maj=25.0km s-min=11.3km az=53.0*

*NEIC **05** 17:42:35.0±1.1,8˚.41S±0˚.09×116˚.03E±0˚.06,h10km±1km, mb4.3/12,Error ellipse: s-maj=15.1km s-min=10.5km az=8.0*

*DJA **05** 17:42:35.1±0.5,8˚S±4˚×11˚6E±˚,h10km±5km,M4.6/13, mb4.7/7,mB5.3/1,MLv4.5/13,Mw(mB)4.7/1*

**ISC 05 17:42:34.3±0.5,8˚.34S±0˚.06×116˚.07E±0˚.04,h10km,n60, σ1°28/64,mb4.1/17,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **0.89** | **287** | P | **Pg** | **17 42 51.0** | **-0.4** |
| SRBI | | | | S | **Sg** | **17 43 03.1** | **+0.1** |
| **TWSI** | **Taliwang, Sumb** | **0.89** | **116** | P | **Pn** | **17 42 53.5** | **+0.5** |
| TWSI | | | | S | **Sn** | **17 43 06.4** | **+0.4** |
| **DNP** | **Denpasar** | **0.92** | **248** | P | **Pn** | **17 42 53.6** | **+0.3** |
| DNP | | | | S | **Sn** | **17 43 06.6** | **+0.1** |
| **PLAI** | **Plampang** | **1.75** | **106** | P | **Pb** | **17 43 07.3** | **+0.7** |
| **PLAI** | **Plampang** | **1.75** | **106** | P | **Pb** | **17 43 06.7** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **266** | P | **Pn** | **17 43 06.2** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **266** | | **Pn** | **17 43 06.0** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **266** | P | **Pn** | **17 43 06.4** | **-0.5** |
| **PWJI** | **Pagerwojo** | **4.24** | **274** | P | **Pn** | **17 43 39.1** | **+0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.90** | **64** | P | **Pn** | **17 43 47.7** | **-0.4** |
| **KAPI** | **Kappang** | **4.93** | **48** | | **Pn** | **17 43 48.6** | **+0.1** |
| **KAPI** | **Kappang** | **4.93** | **48** | Pn | **Pn** | **17 43 47.6** | **-0.9** |
| | 12nm,0.3s,baz=219,slow=9.1,SNR=25 | | | | | | |
| KAPI | | | | Sn | **Sn** | **17 44 41.8** | **-3.8** |
| | 3.4nm,0.3s,baz=319,slow=20,SNR=6.0 | | | | | | |
| | 28nm,0.3s | | | | | | |
| **UGM** | **Wanagama** | **5.51** | **274** | P | **Pn** | **17 43 57.3** | **+0.8** |
| **UGM** | **Wanagama** | **5.51** | **274** | Pn | **Pn** | **17 43 57.1** | **+0.6** |
| **UGM** | **Wanagama** | **5.51** | **274** | P | **Pn** | **17 43 56.9** | **+0.4** |
| | 185nm,1.5s | | | | | | |
| **BNSI** | **Bone** | **5.60** | **46** | P | **Pn** | **17 43 59.7** | **+1.9** |
| | 51nm,0.5s,0.3nm | | | | | | |
| **MMRI** | **Maumere** | **6.11** | **93** | P | **Pn** | **17 44 08.3** | **+3.6** |
| **MMRI** | **Maumere** | **6.11** | **93** | Pn | **Pn** | **17 44 05.5** | **+0.8** |
| **MMRI** | **Maumere** | **6.11** | **93** | P | **Pn** | **17 44 04.6** | **-0.1** |
| | 92nm,1.0s,0.4nm | | | | | | |
| **BATI** | **Baumata** | **7.72** | **104** | P | **Pn** | **17 44 27.9** | **+1.0** |
| | 54nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **8.22** | **100** | P | **Pn** | **17 44 35.9** | **+2.1** |
| **SOEI** | **Soe** | **8.22** | **100** | P | Pn | 17 44 42.4 | +8.6 |
| **BBJI** | **Bungbulang** | **8.39** | **275** | P | **Pn** | **17 44 35.9** | **-0.2** |
| **MBWA** | **Marble Bar** | **13.22** | **165** | P | **Pn** | **17 45 40.9** | **-1.4** |
| **MBWA** | **Marble Bar** | **13.22** | **165** | Pn | **Pn** | **17 45 40.4** | **-1.9** |
| **FITZ** | **Fitzroy Crossi** | **13.44** | **137** | Pn | **Pn** | **17 45 45.0** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **13.65** | **165** | P | **Pn** | **17 45 46.9** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **13.65** | **165** | Pn | Pn | 17 45 41.6 | -6.5 |
| **GIRL** | **Giralia** | **14.33** | **187** | P | **Pn** | **17 45 56.1** | **-1.3** |
| **GIRL** | **Giralia** | **14.33** | **187** | Pn | **Pn** | **17 45 55.5** | **-1.9** |
| **KNRA** | **Kununurra** | **14.39** | **122** | Pn | **Pn** | **17 45 58.3** | **+0.1** |
| **MTN** | **Manton Dam** | **15.46** | **108** | P | **Pn** | **17 46 15.1** | **+2.4** |
| **MTN** | **Manton Dam** | **15.46** | **108** | P | **P** | **17 46 16.4** | **-0.8** |
| MTN | | | | IAmb | IAmb | 17 46 20.4 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **FAKI** | **Fak Fak** | **16.97** | **72** | P | **P** | **17 46 34.7** | **+0.7** |
| FAKI | | | | IAmb | IAmb | 17 46 52.5 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **KULM** | **Kulim** | **20.49** | **311** | P | **P** | **17 47 12.3** | **-0.3** |
| KULM | | | | IAmb | IAmb | 17 47 16.9 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.07** | **125** | P | **P** | **17 47 18.9** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 17 47 22.8 | |
| | comp=Z,8.6nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.11** | **125** | P | **P** | **17 47 19.3** | **-0.1** |
| **WRA** | **Warramunga Arr** | **21.11** | **125** | P | **P** | **17 47 19.7** | **+0.3** |
| | comp=Z,5.5nm,0.7s,baz=301,slow=12,SNR=58 | | | | | | |
| WRA | | | | S | **S** | **17 51 13.7** | **-0.8** |
| | comp=Z,1.4nm,0.8s,baz=298,slow=23,SNR=5.9 | | | | | | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.12** | **125** | P | **P** | **17 47 19.7** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 17 47 43.0 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.28** | **125** | P | **P** | **17 47 21.4** | **+0.2** |
| **AS31** | **Alice Springs** | **22.89** | **134** | P | **P** | **17 47 38.4** | **-0.1** |
| **ASAR** | **Alice Springs** | **22.89** | **134** | P | **P** | **17 47 38.7** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.89** | **134** | P | **P** | **17 47 38.5** | **0.0** |
| | comp=Z,2.7nm,0.5s,baz=312,slow=9.7,SNR=91 | | | | | | |
| ASAR | | | | S | **S** | **17 51 50.6** | **+2.1** |
| | comp=Z,0.2nm,0.6s,baz=312,slow=21,SNR=1.6 | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | |
| **COEN** | **Coen** | **27.16** | **104** | P | **P** | **17 48 17.6** | **-0.6** |
| COEN | | | | IAmb | IAmb | 17 48 43.1 | |
| | comp=Z,8.9nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **33.34** | **138** | P | **P** | **17 49 12.2** | **-0.4** |
| | comp=Z,3.5nm,1.0s,baz=308,slow=12,SNR=2.2 | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **37.33** | **339** | P | **P** | **17 49 51.0** | **+3.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.25** | **24** | P | **P** | **17 51 22.2** | **-1.1** |
| | comp=Z,1.9nm,0.8s,baz=201,slow=8.4,SNR=6.9 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.24** | **14** | P | **P** | **17 51 59.6** | **-0.8** |
| | comp=Z,1.2nm,0.6s,baz=190,slow=7.4,SNR=4.7 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.58** | **352** | P | **P** | **17 52 17.1** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=171,slow=9.4,SNR=6.8 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **CASY** | **Casey** | **57.98** | **183** | P | **P** | **17 52 26.4** | **-0.4** |
| **HEH** | **HeiHe** | **59.18** | **8** | eP | **P** | **17 52 34.8** | **-0.6** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **60.38** | **325** | P | **P** | **17 52 47.5** | **+3.4** |
| **MKAR** | **Makanchi Array** | **62.59** | **335** | P | **P** | **17 52 57.9** | **-0.8** |
| | comp=Z,0.2nm,0.5s,baz=153,slow=8.7,SNR=3.9 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.13** | **335** | P | **P** | **17 53 28.7** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=134,slow=2.7,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.43** | **341** | P | **P** | **17 53 28.7** | **-1.2** |
| | comp=Z,0.4nm,0.5s,baz=146,slow=8.1,SNR=2.2 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **73.10** | **171** | P | **P** | **17 54 04.9** | **+0.5** |
| **VNDA** | **Vanda** | **73.10** | **171** | P | **P** | **17 54 04.6** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=328,slow=6.3,SNR=4.1 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.65** | **180** | P | **P** | **17 54 53.0** | **+0.3** |
| **QSPA** | **South Pole Qui** | **81.65** | **180** | P | **P** | **17 54 52.8** | **+0.1** |
| | comp=Z,1.5nm,1.0s,baz=18,slow=4.5,SNR=2.6 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **BOSA** | **Boshof** | **86.77** | **242** | P | **P** | **17 55 18.7** | **-0.8** |
| | comp=Z,1.3nm,0.6s,baz=94,slow=4.7,SNR=6.0 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |

**IDC 05 18:00:18.6±6.5,3˚.57S×150˚.23E,h75km±57km,mb3.1/3, mbtmp3.5/5,ML2.0/2,MS2.3/1,Error ellipse: s-maj=92.4km s-min=40.7km az=106.0,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.55** | **208** | P | Pn | 18 01 52.3 | 0.0 |
| | 0.6nm,0.3s,baz=45,slow=7.1,SNR=3.2 | | | | | | |
| | 16nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **16.87** | **193** | P | P | 18 04 10.9 | 0.0 |
| | baz=19,slow=11,SNR=3.7 | | | | | | |
| CTA | | | | LR | LR | 18 11 01.1 | |
| | comp=Z,10nm,18.5s,baz=223,slow=38 | | | | | | |
| | 0.5nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.47** | **222** | P | P | 18 05 11.7 | -0.2 |
| | 0.7nm,0.6s,baz=50,slow=10,SNR=6.9 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **25.45** | **217** | P | P | 18 05 39.7 | 0.0 |
| | 0.4nm,0.6s,baz=55,slow=8.4,SNR=7.1 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **77.72** | **319** | P | P | 18 12 06.8 | -0.6 |
| | 0.4nm,0.7s,baz=95,slow=6.4,SNR=4.0 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.49** | **289** | PKPbc | PKPbc | 18 19 55.2 | +0.1 |
| | 0.1nm,0.4s,baz=62,slow=3.9,SNR=1.7 | | | | | | |

**TAP 05 18:17:31.1,22˚.85N×120˚.06E,h25km,ML1.8,D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAI1** | **Yung-k'ang** | **0.24** | **40** | eP | Pb | 18 17 37.8 | +0.5 |
| | baz=41 | | | | | | |
| TAI1 | | | | eS | Sb | 18 17 43.1 | +1.6 |
| | baz=41 | | | | | | |
| **WSSB** | **Gushan** | **0.28** | **139** | eP | Pb | 18 17 38.6 | +0.7 |
| | baz=144 | | | | | | |
| WSSB | | | | eS | Sb | 18 17 43.6 | +1.1 |
| | baz=144 | | | | | | |
| **TSCK** | **Chigu Township** | **0.29** | **4** | eP | Pb | 18 17 38.1 | 0.0 |
| | baz=360 | | | | | | |
| TSCK | | | | eS | Sn | 18 17 44.7 | -0.7 |
| | baz=360 | | | | | | |
| **TWM1** | **Shoushan** | **0.34** | **95** | P | Pb | 18 17 39.2 | +0.5 |
| | baz=99 | | | | | | |
| TWM1 | | | | S | Sn | 18 17 46.5 | 0.0 |
| | baz=99 | | | | | | |
| **CHN3** | **Shinhua** | **0.36** | **52** | eP | Pn | 18 17 39.9 | -0.8 |
| | baz=44 | | | | | | |
| **SCST** | **Cishan** | **0.40** | **85** | eP | Pn | 18 17 40.7 | -0.6 |
| | baz=85 | | | | | | |
| SCST | | | | eS | Sn | 18 17 48.3 | +0.3 |
| | baz=85 | | | | | | |
| **CHN1** | **Nanshi** | **0.54** | **52** | eS | Sn | 18 17 52.5 | +0.9 |
| | baz=52 | | | | | | |
| **SNST** | **Tainan City** | **0.54** | **48** | eP | Pn | 18 17 43.4 | +0.1 |
| | baz=48 | | | | | | |
| SNST | | | | eS | Sn | 18 17 52.6 | +1.0 |
| | baz=48 | | | | | | |
| **TSMG** | **Majia** | **0.56** | **105** | eP | Pb | 18 17 42.5 | +0.2 |
| | baz=105 | | | | | | |
| TSMG | | | | eS | Sn | 18 17 51.6 | -0.3 |
| | baz=105 | | | | | | |
| **TWK** | **Hsinying** | **0.57** | **44** | eP | Pn | 18 17 44.0 | +0.3 |
| | baz=45 | | | | | | |
| TWK | | | | eS | Sn | 18 17 54.2 | +1.8 |
| | baz=45 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.58** | **114** | eP | Pn | 18 17 43.3 | -0.5 |
| | baz=103 | | | | | | |
| MASBT | | | | eS | Sn | 18 17 52.2 | -0.3 |
| | baz=103 | | | | | | |
| **TPUB** | **Ta-pu** | **0.69** | **50** | eS | Sn | 18 17 55.2 | 0.0 |
| | baz=50 | | | | | | |
| **SCZT** | **Fangliau** | **0.70** | **133** | eP | Pn | 18 17 45.9 | +0.4 |
| | baz=133 | | | | | | |
| SCZT | | | | eS | Sn | 18 17 56.5 | +1.0 |
| | baz=133 | | | | | | |
| **WCKO** | **Fanlu** | **0.77** | **41** | eP | Pn | 18 17 46.5 | +0.1 |
| | baz=41 | | | | | | |
| WCKO | | | | eS | Sn | 18 17 57.5 | +0.3 |
| | baz=41 | | | | | | |
| **LONT** | **Longtian** | **0.99** | **87** | eP | Pb | 18 17 49.7 | +0.2 |
| | baz=87 | | | | | | |
| LONT | | | | eS | Sn | 18 18 03.6 | +1.0 |
| | baz=87 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.11** | **41** | eP | Pb | 18 17 51.8 | +0.1 |
| | baz=41 | | | | | | |
| WHYT | | | | eS | Sb | 18 18 07.1 | +1.3 |
| | baz=41 | | | | | | |

**TAP 05 18:17:36.8,23˚.02N×120˚.69E,h5km,ML1.0,C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLGT** | **Liugui** | **0.05** | **238** | P | Pg | 18 17 38.5 | +0.4 |
| | baz=236 | | | | | | |
| SLGT | | | | S | Sg | 18 17 39.7 | +0.7 |
| | baz=236 | | | | | | |
| **SGST** | **Jiashian** | **0.12** | **303** | eP | Pg | 18 17 39.8 | +0.5 |
| | baz=305 | | | | | | |
| SGST | | | | eS | Sg | 18 17 42.2 | +1.3 |
| | baz=305 | | | | | | |
| **STYH** | **Taoyuan** | **0.17** | **28** | P | Pg | 18 17 40.9 | +0.6 |
| | baz=37 | | | | | | |
| STYH | | | | S | Sg | 18 17 43.7 | +1.2 |
| | baz=37 | | | | | | |
| **CHN1** | **Nanshi** | **0.22** | **318** | eP | Pg | 18 17 43.1 | +1.9 |
| | baz=320 | | | | | | |
| CHN1 | | | | eS | Sg | 18 17 47.0 | +2.8 |
| | baz=320 | | | | | | |
| **CHN1** | **Nanshi** | **0.22** | **318** | eP | Pg | 18 17 43.1 | +1.9 |
| | baz=52 | | | | | | |
| **WTP** | **Ta-pu** | **0.24** | **343** | eP | Pg | 18 17 42.4 | +0.9 |
| | baz=352 | | | | | | |
| WTP | | | | eS | Sg | 18 17 46.8 | +2.2 |
| | baz=352 | | | | | | |
| **TPUB** | **Ta-pu** | **0.29** | **349** | eP | Pb | 18 17 43.7 | -0.8 |
| TPUB | | | | eS | Sb | 18 17 48.8 | -0.9 |
| **TPUB** | **Ta-pu** | **0.29** | **349** | eP | Pb | 18 17 43.7 | -0.8 |
| | baz=50 | | | | | | |

*DNK **05** 18:24:08.3±0.6,81˚.17N×4˚.82W,h4km±26km,ML2.0*
*KOLA **05** 18:24:09.8,81˚.61N×1˚.28E,h0km,ML2.5,Error ellipse: s-maj=109.8km s-min=36.3km az=40.0,Arctic Ocean*
*FCIAR **05** 18:24:12.0,81˚.22N×1˚.54E,h10km,station SPA0 has station magnitude of 3.00 station HOPEN has station magnitude of 5.60 station ZFI2 has station magnitude of 3.00 station OMEGA has station magnitude of 2.90*

**ISC 05 18:24:05.1±1.8,81˚.12N±0˚.10×3˚.95W±0˚.08,h10km,n12, σ2°72/7,North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NOR** | **Nord** | **1.98** | **290** | *i* P | **Pn** | **18 24 40.0** | **+1.4** |
| NOR | | | | *i* S | **Sb** | **18 25 04.2** | **-1.6** |
| NOR | | | | IAML | | 18 25 10.5 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **KBS** | **Kingsbay** | **3.52** | **121** | P | Pn | 18 24 58.5 | -1.3 |
| KBS | | | | S | Sn | 18 25 34.9 | -6.5 |
| **KBS** | **Kingsbay** | **3.52** | **121** | eP | Pn | 18 24 58.6 | -1.2 |
| KBS | | | | eS | Sn | 18 25 35.1 | -6.3 |
| **BRBB** | **Barentsburg B** | **4.45** | **124** | P | **Pn** | **18 25 13.1** | **+0.5** |
| **SPA0** | **Spitsbergen Ar** | **4.68** | **119** | eP | Pn | 18 25 15.2 | -0.4 |
| | comp=Z,13nm,1.8s | | | | | | |
| SPA0 | | | | eS | Sn | 18 26 03.9 | -5.9 |
| | comp=Z,17nm,1.2s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **4.68** | **119** | P | Pn | 18 25 14.7 | -0.9 |
| **DAG** | **Danmarks Havn** | **5.18** | **220** | *i* P | **Pn** | **18 25 25.0** | **+2.5** |
| DAG | | | | *i* S | **Sn** | **18 26 21.7** | **-0.5** |
| DAG | | | | IAML | | 18 26 32.5 | |
| | comp=Z,5.5nm,0.0s | | | | | | |
| **HSPB** | **Hornsund (broa** | **5.51** | **128** | P | Pn | 18 25 26.9 | -0.2 |
| **HOPEN** | **Hopen** | **7.18** | **115** | eP | Pn | 18 25 47.9 | -1.9 |
| HOPEN | | | | eS | Sn | 18 27 03.1 | -8.2 |
| | comp=Z,2μm,0.0s | | | | | | |
| **DBG** | **Daneborg** | **7.62** | **215** | *i* P | **Pn** | **18 25 58.0** | **+2.0** |
| DBG | | | | *i* S | **Sn** | **18 27 18.5** | **-3.7** |
| DBG | | | | IAML | | 18 27 30.2 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **ZFI2** | **Zemlya Franca-** | **7.90** | **67** | eP | Pn | 18 25 56.1 | -3.6 |
| | comp=Z,3.0nm,0.3s | | | | | | |
| ZFI2 | | | | S | Sn | 18 27 17.6 | -11 |
| | comp=Z,3.7nm,0.3s | | | | | | |
| **OMEGA** | **Omega** | **7.92** | **67** | eP | Pn | 18 25 56.6 | -3.4 |
| | comp=Z,21nm,1.9s | | | | | | |
| OMEGA | | | | eS | Sn | 18 27 16.9 | -13 |
| | comp=Z,3.2nm,0.3s | | | | | | |

**TAP 05 18:31:08.7,24˚.85N×122˚.04E,h93km±1km,ML1.9,B, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.09** | **265** | eP | Pn | 18 31 22.2 | +0.5 |
| | baz=262 | | | | | | |
| EGS | | | | eS | Sn | 18 31 32.9 | +1.4 |
| | baz=262 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.16** | **345** | eP | Pn | 18 31 22.2 | +0.2 |
| | baz=347 | | | | | | |
| **TIPB** | **Shuangxi** | **0.22** | **302** | P | Pn | 18 31 22.5 | +0.3 |
| | baz=301 | | | | | | |
| TIPB | | | | eS | Sn | 18 31 32.0 | -0.2 |
| | baz=301 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.28** | **329** | eP | Pn | 18 31 22.1 | -0.5 |
| | baz=328 | | | | | | |
| **TWC** | **Suao** | **0.30** | **215** | P | Pn | 18 31 22.5 | 0.0 |
| | baz=213 | | | | | | |
| TWC | | | | S | Sn | 18 31 32.1 | -0.5 |
| | baz=213 | | | | | | |
| **ESAO** | **Su ao** | **0.33** | **212** | eP | Pn | 18 31 22.7 | 0.0 |
| | baz=212 | | | | | | |
| ESAO | | | | eS | Sn | 18 31 32.7 | -0.2 |
| | baz=212 | | | | | | |
| **TWE** | **Neicheng** | **0.36** | **249** | eP | Pn | 18 31 22.9 | +0.1 |
| | baz=247 | | | | | | |
| TWE | | | | eS | Sn | 18 31 33.9 | +0.7 |
| | baz=247 | | | | | | |
| **NDS** | **Dongshan** | **0.36** | **233** | eP | Pn | 18 31 23.5 | +0.6 |
| | baz=232 | | | | | | |
| NDS | | | | eS | Sn | 18 31 34.6 | +1.3 |
| | baz=232 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.42** | **257** | P | Pn | 18 31 23.6 | +0.3 |
| | baz=257 | | | | | | |
| FUSB | | | | S | Sn | 18 31 34.7 | +0.6 |
| | baz=257 | | | | | | |
| **TWA** | **Mucha** | **0.43** | **287** | eP | Pn | 18 31 22.9 | -0.3 |
| | baz=287 | | | | | | |
| TWA | | | | eS | Sn | 18 31 34.0 | -0.1 |
| | baz=287 | | | | | | |
| **EOS2** | **EOS2** | **0.47** | **157** | eP | Pn | 18 31 24.0 | +0.6 |
| | baz=157 | | | | | | |
| EOS2 | | | | eS | Sn | 18 31 35.1 | +0.8 |
| | baz=157 | | | | | | |
| **EWUT** | **Wuta** | **0.47** | **210** | eP | Pn | 18 31 23.9 | +0.3 |
| | baz=209 | | | | | | |
| EWUT | | | | eS | Sn | 18 31 35.2 | +0.7 |
| | baz=209 | | | | | | |
| **ENTT** | **Nioudou** | **0.48** | **244** | eP | Pn | 18 31 24.2 | +0.6 |
| | baz=242 | | | | | | |
| ENTT | | | | eS | Sn | 18 31 35.6 | +0.9 |
| | baz=242 | | | | | | |
| **NWLT** | **Wulai** | **0.49** | **261** | eP | Pn | 18 31 24.0 | +0.3 |
| | baz=261 | | | | | | |
| NWLT | | | | eS | Sn | 18 31 35.0 | +0.1 |
| | baz=261 | | | | | | |
| **YM01** | **YM01** | **0.51** | **305** | eP | Pn | 18 31 23.9 | 0.0 |
| | baz=304 | | | | | | |
| YM01 | | | | S | Sn | 18 31 35.1 | -0.1 |
| | baz=304 | | | | | | |
| **NDT** | **Datong Townshi** | **0.54** | **242** | eP | Pn | 18 31 24.9 | +0.8 |
| | baz=242 | | | | | | |
| NDT | | | | eS | Sn | 18 31 36.6 | +1.1 |
| | baz=242 | | | | | | |
| **LATG** | **Datong** | **0.56** | **236** | P | Pn | 18 31 25.3 | +0.9 |
| | baz=235 | | | | | | |
| LATG | | | | eS | Sn | 18 31 36.6 | +0.6 |
| | baz=235 | | | | | | |
| **EOS3** | **EOS3** | **0.62** | **155** | eP | Pn | 18 31 25.1 | +0.6 |
| | baz=155 | | | | | | |
| **YHNB** | **Yeheng** | **0.63** | **253** | P | Pn | 18 31 25.4 | +0.4 |
| | baz=253 | | | | | | |
| YHNB | | | | S | Sn | 18 31 37.0 | 0.0 |
| | baz=253 | | | | | | |
| **NSK** | **Sanguang** | **0.64** | **254** | P | Pn | 18 31 25.2 | +0.2 |
| | baz=253 | | | | | | |
| NSK | | | | S | Sn | 18 31 37.2 | 0.0 |
| | baz=253 | | | | | | |
| **NNSB** | **Datong** | **0.73** | **235** | P | Pn | 18 31 26.6 | +0.6 |
| | baz=234 | | | | | | |
| NNSB | | | | eS | Sn | 18 31 39.3 | +0.5 |
| | baz=234 | | | | | | |
| **NACB** | **Ninganchiao** | **0.79** | **211** | eP | Pn | 18 31 26.6 | +0.3 |
| | baz=210 | | | | | | |
| NACB | | | | eS | Sn | 18 31 39.1 | -0.4 |
| | baz=210 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.82** | **218** | eP | Pn | 18 31 26.7 | -0.1 |
| | baz=218 | | | | | | |
| ETLH | | | | eS | Sn | 18 31 39.8 | -0.5 |
| | baz=218 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.86** | **255** | eP | Pn | 18 31 26.9 | -0.3 |
| | baz=255 | | | | | | |
| NFF | | | | eS | Sn | 18 31 40.7 | -0.3 |
| | baz=255 | | | | | | |
| **TWD** | **Chiawan** | **0.87** | **208** | eP | Pn | 18 31 27.0 | -0.2 |
| | baz=207 | | | | | | |
| TWD | | | | eS | Sn | 18 31 40.0 | -1.0 |
| | baz=207 | | | | | | |
| **FUSS** | **Fushou** | **0.94** | **230** | P | Pn | 18 31 28.7 | +0.4 |
| | baz=230 | | | | | | |
| FUSS | | | | eS | Sn | 18 31 43.0 | +0.2 |
| | baz=230 | | | | | | |
| **LIOB** | **Emei** | **0.95** | **258** | P | Pn | 18 31 28.4 | +0.3 |
| | baz=257 | | | | | | |
| LIOB | | | | S | Sn | 18 31 43.2 | +0.6 |
| | baz=257 | | | | | | |
| **NSTT** | **Nanjuang** | **0.97** | **257** | eP | Pn | 18 31 28.9 | +0.7 |
| | baz=256 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.97** | **113** | eP | Pn | 18 31 28.3 | 0.0 |
| | baz=113 | | | | | | |
| YOJ | | | | eS | Sn | 18 31 41.6 | -1.3 |
| | baz=113 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.99** | **225** | eP | Pn | 18 31 29.5 | +0.4 |
| | baz=224 | | | | | | |
| WHF | | | | eS | Sn | 18 31 44.1 | -0.1 |
| | baz=224 | | | | | | |
| **TDCB** | **Techi** | **1.00** | **233** | eP | Pn | 18 31 29.3 | +0.5 |
| | baz=233 | | | | | | |
| TDCB | | | | eS | Sn | 18 31 43.8 | 0.0 |
| | baz=233 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.00** | **215** | eP | Pn | 18 31 29.2 | +0.3 |
| | baz=214 | | | | | | |
| **CHGB** | **Renai** | **1.11** | **225** | eP | Pn | 18 31 30.1 | -0.1 |
| | baz=224 | | | | | | |
| CHGB | | | | S | Sn | 18 31 46.2 | 0.0 |
| | baz=224 | | | | | | |
| **SHUL** | **Shoufeng** | **1.15** | **202** | eP | Pn | 18 31 30.6 | +0.3 |
| | baz=202 | | | | | | |
| SHUL | | | | eS | Sn | 18 31 46.5 | 0.0 |
| | baz=202 | | | | | | |
| **WHP** | **Taichung City** | **1.15** | **240** | eP | Pn | 18 31 30.8 | +0.4 |
| | baz=239 | | | | | | |
| **ESL** | **Shilin** | **1.17** | **208** | eP | Pn | 18 31 29.5 | -1.2 |
| | baz=207 | | | | | | |
| **OWD** | **Renai** | **1.19** | **221** | eP | Pn | 18 31 31.9 | +1.0 |
| | baz=221 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.28** | **208** | eP | Pn | 18 31 31.1 | -0.8 |
| | baz=207 | | | | | | |
| WARBT | | | | eS | Sn | 18 31 47.1 | -2.3 |
| | baz=207 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.29** | **232** | eP | Pn | 18 31 32.8 | +0.8 |
| | baz=232 | | | | | | |
| **VWDT** | **VWDT** | **1.36** | **217** | eP | Pn | 18 31 34.3 | +1.4 |
| | baz=216 | | | | | | |
| VWDT | | | | eS | Sn | 18 31 52.1 | +0.9 |
| | baz=216 | | | | | | |
| **SSLB** | **Suanglung** | **1.45** | **223** | eP | Pn | 18 31 34.6 | +0.6 |
| | baz=222 | | | | | | |
| **YULB** | **Yu-li** | **1.60** | **205** | eP | Pn | 18 31 37.0 | +1.1 |
| | baz=204 | | | | | | |
| **TWF1** | **Yuli** | **1.64** | **204** | eP | Pn | 18 31 37.9 | +1.5 |
| | baz=204 | | | | | | |

**JMA 05 18:31:28.1±0.3,25˚N±1˚×123˚.6E±0˚.4,h16km,MV2.1/10, NW OFF ISHIGAKIJIMA IS,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.65** | **169** | eP | Pg | 18 31 40.8 | -0.1 |
| IRIF | | | | eS | Sg | 18 31 48.6 | -1.0 |
| **YOJ** | **Yonaguni jima** | **0.74** | **226** | eP | Pg | 18 31 42.2 | -0.4 |
| YOJ | | | | eS | Sg | 18 31 50.5 

*Southeast of Loyalty Islands*
*IDC **05** 18:32:46.6±1.0,21.°92S×169.°09E,h0km,mb3.7/6, mbtmp3.8/8,ML4.4/2,MS3.3/5,Error ellipse: s-maj=37.5km s-min=18.6km az=163.0*
**ISC 05 18:32:48.6**±0.8,**21.°76S**±0.°09×**169.°06E**±0.°07,**h10**km,**n23,** σ0°**94**/22,**mb3.7**/8,**MS3.5**/3,**Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | **1.00** | **286** | P | **Pg** | **18 33 07.4** | **-0.4** |
| PINNC | **Pines Island,** | **1.72** | **240** | P | **Pn** | **18 33 17.9** | **-0.7** |
| LIFNC | **LIFOU** | **1.96** | **300** | P | **Pn** | **18 33 20.5** | **-1.4** |
| YATNC | **Mamie plateau,** | **2.04** | **261** | P | **Pn** | **18 33 22.3** | **-0.7** |
| DZM | **Mont Dzumac** | **2.45** | **262** | P | **Pn** | **18 33 28.0** | **-0.7** |
| DZM | **Mont Dzumac** | **2.45** | **262** | Pn | **Pn** | **18 33 28.6** | **-0.1** |
| | 16nm,0.3s,baz=124,slow=15,SNR=134 | | | | | | |
| DZM | | | | Sn | **Sn** | **18 33 59.7** | **+0.9** |
| | 42nm,0.3s,baz=107,slow=20,SNR=5.2 | | | | | | |
| | 56nm,0.3s | | | | | | |
| ONTNC | **Ouen Toro** | **2.48** | **257** | P | **Pn** | **18 33 28.6** | **-0.5** |
| NOUC | **Port Laguerre** | **2.58** | **262** | P | **Pn** | **18 33 30.0** | **-0.5** |
| RTV | **Rentapao** | **3.99** | **351** | P | **Pn** | **18 33 49.0** | **-0.9** |
| KOUNC | **Koumac, New Ca** | **4.62** | **284** | P | **Pn** | **18 33 59.0** | **+0.5** |
| MSVF | **Nonsavu** | **9.37** | **66** | Pn | **Pn** | **18 35 04.4** | **+0.5** |
| | 0.3nm,0.3s,baz=270,slow=18,SNR=2.5 | | | | | | |
| MSVF | | | | LR | LR | 18 38 03.1 | |
| | comp=Z,229nm,20.5s,baz=223,slow=34 | | | | | | |
| | 6.0nm,0.8s | | | | | | |
| URZ | **Urewera** | **17.85** | **159** | LR | LR | 18 42 03.6 | |
| | comp=Z,145nm,18.9s,baz=26,slow=32 | | | | | | |
| CTA | **Charters Tower** | **21.36** | **270** | P | **P** | **18 37 37.0** | **+0.6** |
| | 0.2nm,0.9s,baz=94,slow=14,SNR=1.8 | | | | | | |
| CTA | | | | LR | LR | 18 45 16.3 | |
| | comp=Z,8.5nm,18.1s,baz=134,slow=35 | | | | | | |
| STKA | **Stephens Creek** | **26.43** | **242** | LR | LR | 18 47 57.0 | |
| | comp=Z,130nm,19.0s,baz=198,slow=34 | | | | | | |
| ASAR | **Alice Springs** | **32.44** | **260** | P | **P** | **18 39 18.8** | **-0.4** |
| | 0.6nm,0.8s,baz=97,slow=10.0,SNR=9.9 | | | | | | |
| ASAR | | | | LR | LR | 18 51 34.3 | |
| | comp=Z,101nm,18.1s,baz=142,slow=35 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| WRA | **Warramunga Arr** | **32.46** | **267** | P | **P** | **18 39 17.8** | **-1.6** |
| | 0.3nm,0.6s,baz=95,slow=8.0,SNR=6.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| MJAR | **Matsushiro Arr** | **64.90** | **333** | P | **P** | **18 43 30.5** | **+2.2** |
| | 0.4nm,0.6s,baz=177,slow=7.8,SNR=2.4 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| QSPA | **South Pole Qui** | **68.31** | **180** | P | **P** | **18 43 49.4** | **-0.4** |
| | 1.7nm,1.1s,baz=333,slow=4.6,SNR=2.7 | | | | | | |
| | 1.7nm,1.1s | | | | | | |
| SONM | **Songino Array** | **89.13** | **323** | P | **P** | **18 45 45.0** | **+0.6** |
| | 0.2nm,0.5s,baz=157,slow=7.8,SNR=1.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| NVAR | **Mina Array Bea** | **90.59** | **49** | P | **P** | **18 45 51.0** | **-0.6** |
| | 0.7nm,0.7s,baz=233,slow=8.5,SNR=5.1 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| DLBC | **Dease Lake** | **94.35** | **27** | P | **P** | **18 46 08.1** | **-0.1** |
| | 12nm,0.8s,baz=236,slow=14,SNR=26 | | | | | | |
| EKA | **Eskdalemuir Ar** | **145.97** | **352** | PKPbc | **PKPdf** | **18 52 26.3** | **-1.2** |
| | 0.5nm,0.6s,baz=352,slow=1.7,SNR=4.5 | | | | | | |
| GERES | **GERESS Array B** | **146.60** | **330** | PKPbc | **PKPdf** | **18 52 29.4** | **+0.4** |
| | 0.2nm,0.3s,baz=82,slow=2.1,SNR=1.8 | | | | | | |

*IDC **05** 18:36:46.7±1.4,8.°20S×116.°25E,h0km,mb3.7/9, mbtmp3.7/10,ML3.8/1,Error ellipse: s-maj=44.2km s-min=20.8km az=50.0*
*DJA **05** 18:36:51.8±0.4,8.°5±7.°1×11.°6E±.°,h10km,M4.1/5,MLv4.1/5*
**ISC 05 18:36:49.6**±0.7,**8.°06S**±0.°08×**116.°49E**±0.°06,**h10**km,**n15,** σ1°**48**/17,**mb3.9**/8,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | **0.78** | **150** | P | **Pg** | **18 37 04.2** | **-0.4** |
| SRBI | **Singaraja** | **1.27** | **269** | P | **Pg** | **18 37 15.3** | **+1.4** |
| SRBI | | | | S | **Sb** | **18 37 30.2** | **+0.3** |
| PLAI | **Plampang** | **1.48** | **121** | P | **Pn** | **18 37 18.2** | **+1.9** |
| PLAI | | | | S | **Sn** | **18 37 37.8** | **+2.0** |
| BSSI | **Bau Bau, Buton** | **4.40** | **65** | P | **Pn** | **18 37 58.1** | **+1.6** |
| KAPI | **Kappang** | **4.43** | **47** | Pn | **Pn** | **18 37 59.2** | **+2.3** |
| | 4.2nm,0.3s,baz=73,slow=17,SNR=2.4 | | | | | | |
| | 14nm,0.4s | | | | | | |
| WRA | **Warramunga Arr** | **20.94** | **126** | P | **P** | **18 41 32.9** | **+0.2** |
| | 1.9nm,0.5s,baz=301,slow=12,SNR=8.6 | | | | | | |
| | 1.9nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | **22.79** | **135** | P | **P** | **18 41 52.2** | **-0.4** |
| | 1.5nm,0.7s,baz=310,slow=9.5,SNR=3.2 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| CMAR | **Chiang Mai Arr** | **31.53** | **327** | P | **P** | **18 43 10.5** | **-1.7** |
| | 0.2nm,0.4s,baz=154,slow=7.0,SNR=1.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| MJAR | **Matsushiro Arr** | **48.83** | **23** | P | **P** | **18 45 34.6** | **-0.6** |
| | 0.8nm,0.7s,baz=186,slow=7.3,SNR=4.1 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| USRK | **Ussuriysk Ar.** | **53.87** | **14** | P | **P** | **18 46 13.1** | **+0.2** |
| | 1.5nm,0.7s,baz=158,slow=6.2,SNR=4.4 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| SONM | **Songino Array** | **56.36** | **352** | P | **P** | **18 46 31.5** | **+0.5** |
| | 1.1nm,0.8s,baz=175,slow=7.2,SNR=7.0 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| MKAR | **Makanchi Array** | **62.51** | **334** | P | **P** | **18 47 12.2** | **-1.2** |
| | 0.6nm,0.6s,baz=165,slow=6.0,SNR=8.1 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| KURBB | **Kurchatov Arra** | **67.05** | **335** | P | **P** | **18 47 41.9** | **-1.0** |
| | 0.2nm,0.6s,baz=139,slow=7.2,SNR=2.4 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| ZALV | **Zalesovo Beam** | **67.30** | **340** | P | **P** | **18 47 43.9** | **-0.5** |
| | 1.0nm,0.7s,baz=134,slow=4.3,SNR=4.8 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| YKA | **Yellowknife Ar** | **114.34** | **23** | PKP | **PKiKP** | **18 55 26.6** | **-2.6** |
| | 1.4nm,0.7s,baz=281,slow=2.1,SNR=4.0 | | | | | | |

*IDC **05** 18:41:10.6±0.7,8.°21S×116.°17E,h0km,mb4.0/12, mbtmp4.0/13,ML3.8/1,Error ellipse: s-maj=29.6km s-min=15.0km az=70.0*
*NEIC **05** 18:41:11.5±1.3,8.°2S±0.°1×115.°99E±0.°10,h10km±1km, mb4.3/11,Error ellipse: s-maj=18.4km s-min=15.9km az=3.0*
*DJA **05** 18:41:13.1±0.3,8.°5S±5.°1×11.°6E±.°,h10km,M4.3/9,MLv4.3/9*
**ISC 05 18:41:11.5**±0.5,**8.°14S**±0.°05×**116.°16E**±0.°03,**h10**km,**n54,** σ2**06**/56,**mb4.2**/16,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | **0.93** | **130** | P | **Pg** | **18 41 29.6** | **+0.1** |
| TWSI | | | | S | **Sg** | **18 41 42.0** | **+0.3** |
| SRBI | **Singaraja** | **0.94** | **273** | P | **Pn** | **18 41 32.2** | **+1.4** |
| DNP | **Denpasar** | **1.08** | **240** | P | **Pn** | **18 41 34.9** | **+2.2** |
| DNP | | | | S | **Sn** | **18 41 51.5** | **+3.8** |
| PLAI | **Plampang** | **1.74** | **113** | P | **Pn** | **18 41 42.5** | **+0.6** |
| PLAI | | | | S | **Sn** | **18 42 04.4** | **+0.2** |
| JAGI | **Jajag, Banyuwa** | **2.01** | **260** | | **Pg** | **18 41 47.1** | **-3.0** |
| JAGI | **Jajag, Banyuwa** | **2.01** | **260** | P | **Pg** | **18 41 47.2** | **-3.0** |
| PWJI | **Pagerwojo** | **4.37** | **270** | P | Pn | 18 42 20.0 | +2.8 |
| KAPI | **Kappang** | **4.73** | **49** | Pn | **Pn** | **18 42 23.1** | **+0.1** |
| | 4.2nm,0.3s,baz=197,slow=7.3,SNR=2.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 43 16.3** | **-1.8** |
| | 6.8nm,0.3s,baz=321,slow=23,SNR=3.8 | | | | | | |
| | 11nm,0.4s | | | | | | |
| BSSI | **Bau Bau, Buton** | **4.74** | **66** | P | **Pn** | **18 42 23.7** | **+0.6** |
| BASI | **Baing, Sumba** | **4.83** | **116** | P | **Pn** | **18 42 23.3** | **-1.1** |
| MMRI | **Maumere** | **6.04** | **95** | P | Pn | 18 42 46.4 | +5.4 |
| MMRI | **Maumere** | **6.04** | **95** | Pn | **Pn** | **18 42 43.9** | **+2.9** |
| MBWA | **Marble Bar** | **13.40** | **165** | P | **Pn** | **18 44 19.6** | **-2.3** |
| MBWA | **Marble Bar** | **13.40** | **165** | | **Pn** | **18 44 20.6** | **-1.2** |
| FITZ | **Fitzroy Crossi** | **13.53** | **138** | Pn | **Pn** | **18 44 23.2** | **-0.5** |
| PSA00 | **Pilbara Seismi** | **13.82** | **165** | P | **Pn** | **18 44 26.3** | **-1.4** |
| PSA00 | **Pilbara Seismi** | **13.82** | **165** | Pn | **Pn** | **18 44 25.3** | **-2.4** |
| KNRA | **Kununurra** | **14.43** | **122** | Pn | **Pn** | **18 44 34.4** | **-1.5** |
| GIRL | **Giralia** | **14.54** | **187** | Pn | **Pn** | **18 44 35.4** | **-2.1** |
| MTN | **Manton Dam** | **15.45** | **109** | Pn | **Pn** | **18 44 47.4** | **-2.3** |
| MTN | | | | IAmb | IAmb | 18 45 04.6 | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| WRKA | **Warakurna** | **20.41** | **147** | P | **P** | **18 45 47.5** | **-1.5** |
| GSI | **Gunungsitoli** | **20.77** | **296** | P | **P** | **18 45 50.9** | **-2.0** |
| WB0 | **Warramunga Arr** | **21.11** | **125** | P | **P** | **18 45 56.0** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 18 45 59.6 | |
| | comp=Z,17nm,1.1s | | | | | | |
| WRA | **Warramunga Arr** | **21.16** | **126** | P | **P** | **18 45 56.7** | **-0.4** |
| WRA | **Warramunga Arr** | **21.16** | **126** | P | **P** | **18 45 56.6** | **-0.4** |
| | comp=Z,8.4nm,0.7s,baz=300,slow=12,SNR=42 | | | | | | |
| WRA | | | | S | **S** | **18 49 48.0** | **-4.6** |
| | comp=Z,0.7nm,0.7s,baz=289,slow=24,SNR=1.9 | | | | | | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| WB2 | **Warramunga Arr** | **21.17** | **126** | P | **P** | **18 45 56.8** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 18 46 01.2 | |
| | comp=Z,10nm,0.8s | | | | | | |
| WR0 | **Warramunga Arr** | **21.33** | **125** | P | **P** | **18 45 58.6** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 18 46 03.1 | |
| | comp=Z,20nm,0.9s | | | | | | |
| AS31 | **Alice Springs** | **22.97** | **134** | P | **P** | **18 46 16.3** | **-0.2** |
| ASAR | **Alice Springs** | **22.97** | **134** | P | **P** | **18 46 18.5** | **+2.1** |
| ASAR | **Alice Springs** | **22.97** | **134** | P | **P** | **18 46 16.2** | **-0.3** |
| | comp=Z,1.9nm,0.5s,baz=305,slow=8.8,SNR=19 | | | | | | |
| ASAR | | | | S | **S** | **18 50 28.4** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=312,slow=25,SNR=3.3 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| AS01 | **Alice Springs** | **23.00** | **134** | P | **P** | **18 46 16.3** | **-0.5** |
| QIS | **Mount Isa** | **25.81** | **121** | P | **P** | **18 46 48.4** | **+5.2** |
| OOD | **Oodnadatta** | **26.89** | **139** | P | **P** | **18 46 58.1** | **+5.3** |
| COEN | **Coen** | **27.13** | **105** | P | **P** | **18 46 55.7** | **+0.6** |
| MULG | **Mulgathing** | **27.68** | **145** | P | **P** | **18 47 05.2** | **+5.3** |
| MTSU | **Mount Surprise** | **29.12** | **113** | P | P | 18 47 20.1 | +7.1 |
| LCRK | **Leigh Creek** | **30.31** | **140** | P | P | 18 47 29.7 | +6.4 |
| CMAR | **Chiang Mai Arr** | **31.42** | **327** | P | **P** | **18 47 35.4** | **+2.2** |
| | comp=Z,0.6nm,0.4s,baz=160,slow=7.6,SNR=5.6 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| KSRS | **Korea Array** | **46.67** | **13** | P | **P** | **18 49 41.3** | **+0.9** |
| | comp=Z,2.1nm,1.1s,baz=196,slow=9.8,SNR=5.1 | | | | | | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| MJAR | **Matsushiro Arr** | **49.03** | **24** | P | **P** | **18 49 59.8** | **+1.0** |
| | comp=Z,2.6nm,0.7s,baz=197,slow=8.7,SNR=12 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| USRK | **Ussuriysk Ar.** | **54.03** | **14** | P | **P** | **18 50 37.8** | **+1.8** |
| | comp=Z,2.9nm,0.7s,baz=194,slow=7.4,SNR=8.4 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| SONM | **Songino Array** | **56.40** | **352** | P | **P** | **18 50 55.4** | **+2.2** |
| | comp=Z,2.9nm,0.6s,baz=171,slow=8.6,SNR=24 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| MKAR | **Makanchi Array** | **62.44** | **334** | P | **P** | **18 51 35.4** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=154,slow=7.7,SNR=7.9 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| KURBB | **Kurchatov Arra** | **66.98** | **335** | P | **P** | **18 52 04.6** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=148,slow=5.7,SNR=6.1 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| ZALV | **Zalesovo Beam** | **67.27** | **341** | P | **P** | **18 52 06.4** | **+0.2** |
| | comp=Z,1.0nm,0.5s,baz=161,slow=4.2,SNR=6.3 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| VNDA | **Vanda** | **73.28** | **171** | P | **P** | **18 52 43.6** | **+0.9** |
| VNDA | | | | IAmb | IAmb | 18 52 47.6 | |
| | comp=Z,1.8nm,1.4s | | | | | | |
| VNDA | **Vanda** | **73.28** | **171** | P | **P** | **18 52 43.2** | **+0.5** |
| | comp=Z,0.7nm,0.8s,baz=276,slow=4.3,SNR=4.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| ABKAR | **Akbulak array** | **75.26** | **326** | P | **P** | **18 52 53.7** | **-1.0** |
| KMBO | **Kilima Mbogo** | **78.86** | **270** | P | **P** | **18 53 12.9** | **-3.1** |
| KMBO | | | | IAmb | IAmb | 18 53 17.4 | |
| | comp=Z,3.2nm,1.2s | | | | | | |
| QSPA | **South Pole Qui** | **81.85** | **180** | P | **P** | **18 53 30.6** | **-0.4** |
| QSPA | | | | IAmb | IAmb | 18 53 31.9 | |
| | comp=Z,3.3nm,1.2s | | | | | | |
| QSPA | **South Pole Qui** | **81.85** | **180** | P | **P** | **18 53 30.5** | **-0.4** |
| | comp=Z,1.2nm,0.9s,baz=246,slow=7.1,SNR=2.7 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| TXAR | **Lajitas Array** | **137.10** | **55** | PKP | **PKPdf** | **19 00 36.2** | **+0.4** |
| | comp=Z,0.1nm,0.6s,baz=169,slow=1.8,SNR=2.1 | | | | | | |
| CPUP | **Villa Florida** | **145.16** | **190** | PKPbc | **PKPdf** | **19 00 50.0** | **-0.2** |
| | comp=Z,1.2nm,0.7s,baz=136,slow=3.1,SNR=2.6 | | | | | | |
| LPAZ | **La Paz** | **155.36** | **170** | PKPab | **PKPab** | **19 01 33.2** | **+1.1** |
| | comp=Z,1.4nm,0.6s,baz=239,slow=2.9,SNR=6.5 | | | | | | |

**DJA 05 18:46:34.7**±0.9,**8.°S**±8.°×**11.°6E**±.°,**h10**km,**M4.3**/3,**MLv4.3**/3, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SRBI | **Singaraja** | **0.90** | **272** | P | Pg | 18 46 52.1 | +0.1 |
| SRBI | | | | S | Sb | 18 47 04.6 | +0.1 |
| TWSI | **Taliwang, Sumb** | **0.97** | **129** | P | Pg | 18 46 52.3 | -1.1 |
| TWSI | | | | S | Sn | 18 47 07.7 | -0.6 |
| DNP | **Denpasar** | **1.06** | **238** | P | Pn | 18 46 55.7 | +0.1 |
| DNP | | | | S | Sg | 18 47 08.9 | +0.1 |

*IDC **05** 18:47:15.0±0.7,8.°11S×116.°30E,h0km,mb4.0/11, mbtmp4.0/12,ML3.7/1,MS3.3/4,Error ellipse: s-maj=26.9km s-min=14.8km az=71.0*
*NEIC **05** 18:47:18.5±2.3,8.°5S±0.°1×116.°25E±0.°07,h10km±2km, mb4.2/10,Error ellipse: s-maj=19.9km s-min=9.6km az=17.0*
**ISC 05 18:47:17.0**±0.6,**8.°31S**±0.°07×**116.°28E**±0.°07,**h10**km,**n53,** σ1°**74**/48,**mb4.2**/11,**MS3.5**/3,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JAGI | **Jajag, Banyuwa** | **2.11** | **266** | Pn | **Pn** | **18 47 51.7** | **-0.7** |
| KAPI | **Kappang** | **4.76** | **47** | P | **Pn** | **18 48 33.0** | **+4.2** |
| KAPI | **Kappang** | **4.76** | **47** | Pn | Pn | 18 48 25.3 | -3.5 |
| | 3.7nm,0.3s,baz=188,slow=19,SNR=1.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 49 21.0** | **-3.1** |
| | 15nm,0.3s,baz=243,slow=20,SNR=7.8 | | | | | | |
| KAPI | | | | LR | LR | 18 50 47.4 | |
| | comp=Z,355nm,19.1s,baz=216,slow=46 | | | | | | |
| | 8.4nm,0.3s | | | | | | |
| UGM | **Wanagama** | **5.71** | **274** | Pn | **Pn** | **18 48 44.7** | **+2.7** |
| MMRI | **Maumere** | **5.90** | **94** | P | **Pn** | **18 48 48.4** | **+3.9** |
| MMRI | **Maumere** | **5.90** | **94** | Pn | **Pn** | **18 48 45.5** | **+1.0** |
| SOEI | **Soe** | **8.02** | **101** | P | **Pn** | **18 49 17.0** | **+3.3** |
| SOEI | **Soe** | **8.02** | **101** | Pn | **Pn** | **18 49 15.4** | **+1.7** |
| MBWA | **Marble Bar** | **13.20** | **166** | P | **Pn** | **18 50 24.8** | **+0.2** |
| MBWA | **Marble Bar** | **13.20** | **166** | Pn | **Pn** | **18 50 23.1** | **-1.5** |
| FITZ | **Fitzroy Crossi** | **13.32** | **138** | Pn | **Pn** | **18 50 25.1** | **-1.2** |
| PSA00 | **Pilbara Seismi** | **13.62** | **166** | P | **Pn** | **18 50 30.9** | **+0.5** |
| PSA00 | **Pilbara Seismi** | **13.62** | **166** | Pn | **Pn** | **18 50 30.5** | **+0.1** |
| KNRA | **Kununurra** | **14.23** | **122** | Pn | **Pn** | **18 50 38.7** | **0.0** |
| GIRL | **Giralia** | **14.38** | **188** | P | **Pn** | **18 50 40.8** | **0.0** |
| GIRL | **Giralia** | **14.38** | **188** | Pn | **Pn** | **18 50 39.9** | **-0.9** |
| MTN | **Manton Dam** | **15.28** | **108** | | **Pn** | **18 50 50.5** | **-2.4** |
| MTN | | | | IAmb | IAmb | 18 51 13.4 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| FAKI | **Fak Fak** | **16.77** | **72** | P | **Pn** | **18 51 15.5** | **+3.4** |
| FAKI | **Fak Fak** | **16.77** | **72** | Pn | **Pn** | **18 51 12.9** | **+0.8** |
| FAKI | | | | IAmb | IAmb | 18 51 42.8 | |
| | comp=Z,29nm,1.3s | | | | | | |
| MEEK | **Meekatharra** | **18.36** | **173** | P | **P** | **18 51 33.6** | **+1.7** |
| WRKA | **Warakurna** | **20.20** | **147** | P | Pn | 18 51 54.2 | +0.2 |
| MORW | **Morawa** | **20.65** | **181** | P | Pn | 18 51 58.8 | -0.4 |
| MORW | **Morawa** | **20.65** | **181** | P | **P** | **18 51 55.3** | **-1.6** |
| WB0 | **Warramunga Arr** | **20.91** | **125** | P | **P** | **18 51 58.3** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 18 52 24.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| WRA | **Warramunga Arr** | **20.96** | **125** | P | **P** | **18 52 00.5** | **+0.1** |
| WRA | **Warramunga Arr** | **20.96** | **125** | P | **P** | **18 52 00.7** | **+0.3** |
| | comp=Z,10nm,0.8s,baz=300,slow=12,SNR=42 | | | | | | |
| WRA | | | | S | **S** | **18 55 51.1** | **-3.0** |
| | comp=Z,0.7nm,1.0s,baz=292,slow=23,SNR=2.8 | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| WB2 | **Warramunga Arr** | **20.97** | **125** | P | **P** | **18 51 60.0** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 18 52 05.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| WR0 | **Warramunga Arr** | **21.13** | **125** | P | **P** | **18 52 03.0** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 18 52 07.6 | |
| | comp=Z,23nm,0.9s | | | | | | |
| BLDU | **Ballidu** | **22.19** | **179** | P | **P** | **18 52 13.6** | **+0.1** |
| AS31 | **Alice Springs** | **22.76** | **134** | P | **P** | **18 52 20.0** | **+0.3** |
| ASAR | **Alice Springs** | **22.76** | **134** | P | **P** | **18 52 20.2** | **+0.5** |
| | comp=Z,5.8nm,0.8s,baz=309,slow=8.7,SNR=39 | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| AS01 | **Alice Springs** | **22.80** | **134** | P | **P** | **18 52 21.0** | **+0.9** |
| FORT | **Forrest** | **24.92** | **155** | P | **P** | **18 52 42.2** | **+1.9** |
| QIS | **Mount Isa** | **25.61** | **121** | P | **P** | **18 52 48.7** | **+1.9** |
| OOD | **Oodnadatta** | **26.68** | **139** | P | **P** | **18 52 57.0** | **+0.6** |
| COEN | **Coen** | **26.96** | **104** | P | **P** | **18 53 00.2** | **+1.1** |
| COEN | **Coen** | **26.96** | **104** | | **P** | **18 53 00.0** | **+0.9** |
| MULG | **Mulgathing** | **27.47** | **145** | P | **P** | **18 53 04.8** | **+1.3** |
| CMAR | **Chiang Mai Arr** | **31.63** | **327** | P | **P** | **18 53 40.5** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=150,slow=6.1,SNR=4.7 | | | | | | |
| CMAR | | | | LR | LR | 19 07 21.0 | |
| | comp=Z,39nm,18.3s,baz=165,slow=38 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| STKA | **Stephens Creek** | **33.22** | **138** | P | **P** | **18 53 52.4** | **-1.9** |
| STKA | | | | IAmb | IAmb | 18 53 54.4 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| STKA | **Stephens Creek** | **33.22** | **138** | P | **P** | **18 53 55.5** | **+1.2** |
| | comp=Z,1.4nm,0.4s,baz=320,slow=8.2,SNR=4.7 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| MJAR | **Matsushiro Arr** | **49.14** | **23** | P | P | 18 56 03.2 | -1.9 |
| | comp=Z,1.9nm,0.8s,baz=196,slow=7.3,SNR=8.0 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| USRK | **Ussuriysk Ar.** | **54.17** | **14** | P | **P** | **18 56 40.9** | **-1.5** |
| | comp=Z,2.4nm,0.7s,baz=212,slow=6.8,SNR=6.7 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| SONM | **Songino Array** | **56.58** | **352** | P | **P** | **18 56 59.1** | **-0.9** |
| | comp=Z,1.7nm,0.7s,baz=169,slow=8.1,SNR=14 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| MKAR | **Makanchi Array** | **62.65** | **334** | P | P | 18 57 38.5 | -3.2 |
| | comp=Z,0.5nm,0.7s,baz=140,slow=5.9,SNR=6.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| ZALV | **Zalesovo Beam** | **67.47** | **340** | P | **P** | **18 58 10.9** | **-2.0** |
| | comp=Z,0.6nm,0.5s,baz=120,slow=5.2,SNR=2.6 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| VNDA | **Vanda** | **73.09** | **171** | P | **P** | **18 58 48.1** | **+1.1** |
| | comp=Z,0.9nm,0.7s,baz=301,slow=8.2,SNR=4.9 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| QSPA | **South Pole Qui** | **81.68** | **180** | P | **P** | **18 59 35.9** | **+0.4** |
| | comp=Z,2.2nm,1.1s,baz=33,slow=8.1,SNR=2.9 | | | | | | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| LBTB | **Lobatse** | **87.15** | **245** | LR | LR | 19 32 08.7 | |
| | comp=Z,17nm,19.4s,baz=176,slow=31 | | | | | | |
| ARCES | **ARCESS Array B** | **98.00** | **339** | LR | LR | 19 50 18.5 | |
| | comp=Z,17nm,18.4s,baz=67,slow=39 | | | | | | |
| TORD | **Torodi Ar. Bea** | **115.69** | **281** | PKP | **PKPdf** | **19 05 58.7** | **-2.0** |
| | comp=Z,0.1nm,0.3s,baz=139,slow=4.4,SNR=1.8 | | | | | | |
| CPUP | **Villa Florida** | **145.01** | **190** | PKPbc | **PKPab** | **19 06 54.4** | **-0.3** |
| | comp=Z,3.1nm,1.0s,baz=104,slow=2.4,SNR=4.9 | | | | | | |
| LPAZ | **La Paz** | **155.17** | **170** | PKPab | **PKPab** | **19 07 37.7** | **+1.0** |
| | comp=Z,1.2nm,0.5s,baz=162,slow=6.2,SNR=6.0 | | | | | | |

*IDC **05** 18:48:06.8±1.2,44.°97N×106.°80W,h0km,mbtmp3.4/2, ML2.1/1,Error ellipse: s-maj=60.7km s-min=8.7km az=136.0*
*NEIC **05** 18:48:07.5±2.6,45.°09N±0.°05×106.°72W±0.°06,h0km, ML2.9/34,Error ellipse: s-maj=8.3km s-min=7.1km az=143.0*
**ISC 05 18:48:08.3**±1.3,**45.°13N**±0.°06×**106.°66W**±0.°06,**h0**km,**n22,** σ1°**11**/20,**Montana**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LAO | **LASA Array** | **1.59** | **11** | | **Pb** | **18 48 38.3** | **-0.3** |
| RLMT | **Red Lodge** | **1.84** | **271** | | **Pn** | **18 48 40.2** | **-1.3** |
| RLMT | | | | IAML | | 18 49 11.4 | |
| | 77nm,0.9s | | | | | | |
| RSSD | **Black Hills** | **2.13** | **117** | IAML | | 18 49 23.0 | |
| | 68nm,0.8s | | | | | | |
| RSSD | **Black Hills** | **2.13** | **117** | | **Pn** | **18 48 46.1** | **+0.7** |
| K22A | **Casper** | **2.48** | **178** | | **Pn** | **18 48 48.9** | **-1.3** |
| YHH | **Holmes Hill** | **2.99** | **265** | | **Pn** | **18 48 58.1** | **+0.8** |
| FLWY | **Flagg Ranch** | **3.07** | **251** | | **Pn** | **18 48 59.5** | **+1.2** |
| FLWY | | | | IAML | | 18 50 12.2 | |
| | 40nm,1.4s | | | | | | |
| PD31 | **Pinedale Array** | **3.15** | **223** | | **Pn** | **18 48 58.7** | **-0.8** |
| PDAR | **Pinedale Array** | **3.15** | **223** | | **Pn** | **18 48 59.4** | **-0.1** |
| PDAR | **Pinedale Array** | **3.15** | **223** | Pn | **Pn** | **18 48 58.6** | **-0.8** |
| | 3.5nm,0.3s,baz=54,slow=17,SNR=112 | | | | | | |
| PDAR | | | | Lg | Lg | 18 49 38.5 | |
| | 2.5nm,0.3s,baz=45,slow=32,SNR=17 | | | | | | |
| LOHW | **Long Hollow** | **3.21** | **243** | | **Pn** | **18 49 01.1** | **+0.9** |
| YHL | **Hebgen Lake** | **3.22** | **267** | | **Pn** | **18 49 01.5** | **+1.0** |
| YHL | | | | IAML | | 18 49 57.3 | |
| | comp=E,37nm,1.2s | | | | | | |
| YHB | **Horse Butte** | **3.24** | **265** | | **Pn** | **18 48 59.8** | **-0.9** |
| YHB | | | | IAML | | 18 49 46.2 | |
| | comp=N,26nm,1.1s | | | | | | |
| YHB | | | | IAML | | 18 49 46.8 | |
| | comp=E,20nm,1.1s | | | | | | |
| IMW | **Indian Meadow** | **3.30** | **250** | | **Pn** | **18 49 02.4** | **+0.9** |
| IMW | | | | IAML | | 18 50 00.9 | |
| | comp=E,25nm,0.8s | | | | | | |
| IMW | | | | IAML | | 18 50 06.1 | |
| | comp=E,23nm,0.7s | | | | | | |
| SNOW | **Snow King Moun** | **3.38** | **242** | Pn | **Pn** | **18 49 01.8** | **-0.8** |
| SNOW | | | | IAML | | 18 50 05.8 | |
| | comp=E,25nm,1.2s | | | | | | |
| SNOW | | | | IAML | | 18 50 13.4 | |
| | comp=E,30nm,1.5s | | | | | | |
| RWWY | **Rawlins** | **3.46** | **187** | | **Pn** | **18 49 03.4** | **-0.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MT02 | | | | | IAmb | IAmb | 18 52 30.0 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **CLDB** | **Colider** | **17.63** | **75** | *eP* | **Pn** | | **18 52 31.8** | **+0.6** |
| **MT09** | **Talagante** | **17.78** | **174** | | **Pn** | | **18 52 33.7** | **+0.6** |
| **MT01** | **Popeta** | **17.84** | **175** | P | **Pn** | | **18 52 34.4** | **+0.7** |
| **CPUP** | **Villa Florida** | **17.95** | **127** | P | **Pn** | | **18 52 35.1** | **+0.2** |
| | comp=Z,1.5nm,0.8s,baz=297,slow=8.2,SNR=3.4 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **18.11** | **196** | T | T | | 19 11 12.6 | |
| | baz=18,slow=74,SNR=765 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **18.11** | **196** | T | T | | 19 11 08.1 | |
| | baz=18,slow=74,SNR=739 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **18.12** | **196** | T | T | | 19 11 10.4 | |
| | baz=18,slow=74,SNR=802 | | | | | | | |
| **BO02** | **Sierra Bellavi** | **18.81** | **174** | P | **P** | | **18 52 44.3** | **+0.3** |
| BO02 | | | | | IAmb | IAmb | 18 53 24.3 | |
| | comp=Z,28nm,1.5s | | | | | | | |
| **NPGB** | **Novo Progresso** | **19.57** | **65** | *eP* | **P** | | **18 52 51.5** | **-0.8** |
| **ITQB** | **Itaqui** | **20.37** | **135** | *eP* | Pn | | 18 53 03.1 | -0.6 |
| **TRCB** | **Terra Rica** | **20.48** | **112** | P | **P** | | **18 53 02.3** | **+0.2** |
| **TRCB** | **Terra Rica** | **20.48** | **112** | *eP* | **P** | | **18 53 02.2** | **0.0** |
| **ARAG** | **Araguaiana, MT** | **20.53** | **92** | *eP* | **P** | | **18 53 01.8** | **-0.9** |
| **PSAL** | **Palomas, Salto** | **20.64** | **139** | *eP* | **P** | | **18 53 05.3** | **+1.6** |
| **ITTB** | **Itaituba** | **20.66** | **58** | *eP* | **P** | | **18 53 03.1** | **-1.1** |
| **ROSC** | **El Rosal** | **20.77** | **357** | P | Pn | | 18 53 09.1 | +0.3 |
| | comp=Z,15nm,0.6s,baz=166,slow=19,SNR=8.0 | | | | | | | |
| ROSC | | | | | LR | LR | 19 01 13.5 | |
| | comp=Z,83nm,21.7s,baz=58,slow=36 | | | | | | | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **CRSM** | **Crissiumal (Br** | **21.06** | **126** | *eP* | **P** | | **18 53 09.6** | **+1.2** |
| **PCMB** | **Pacaembu** | **21.44** | **108** | *eP* | **P** | | **18 53 13.4** | **+1.0** |
| **PTGB** | **Pitanga** | **21.55** | **117** | *eP* | **P** | | **18 53 13.7** | **0.0** |
| **SNDB** | **Serra Nova Dou** | **21.58** | **82** | *eP* | **P** | | **18 53 13.6** | **-0.4** |
| **LDASE** | **Londrina, Braz** | **21.98** | **113** | *eP* | **P** | | **18 53 17.9** | **-0.4** |
| **ITRB** | **Iturama** | **21.99** | **103** | *eP* | **P** | | **18 53 18.0** | **-0.4** |
| **BOAV** | **Boa Vista** | **22.16** | **35** | P | **P** | | **18 53 20.1** | **0.0** |
| **BOAV** | **Boa Vista** | **22.16** | **35** | *eP* | **P** | | **18 53 20.2** | **+0.1** |
| **ITAB** | **Concordia** | **22.46** | **123** | P | **P** | | **18 53 23.2** | **-0.1** |
| ITAB | | | | | IAmb | IAmb | 18 53 24.9 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **ALGR** | **Alto Alegre (B** | **22.48** | **128** | *eP* | **P** | | **18 53 24.8** | **+1.1** |
| **CPSB** | **Cacapava Do Su** | **23.03** | **132** | *eP* | **P** | | **18 53 30.3** | **+1.2** |
| **FRTB** | **Fartura** | **23.35** | **112** | *eP* | **P** | | **18 53 33.7** | **+1.4** |
| **BB19B** | **Bebedouro** | **23.86** | **106** | *eP* | **P** | | **18 53 37.8** | **+0.9** |
| **IPMB** | **Ipameri, GO** | **23.92** | **98** | *eP* | **P** | | **18 53 37.3** | **-0.1** |
| **BDFB** | **Brasilia** | **24.18** | **93** | P | **P** | | **18 53 39.8** | **0.0** |
| **BDFB** | **Brasilia** | **24.18** | **93** | P | **P** | | **18 53 39.5** | **-0.4** |
| | comp=Z,3.8nm,0.4s,baz=257,slow=9.1,SNR=9.9 | | | | | | | |
| | comp=Z,3.8nm,0.4s | | | | | | | |
| **PLCA** | **Paso Flores** | **24.72** | **175** | P | **P** | | **18 53 45.4** | **+0.9** |
| **PLCA** | **Paso Flores** | **24.72** | **175** | P | **P** | | **18 53 45.4** | **+0.9** |
| | comp=Z,2.6nm,0.7s,baz=350,slow=9.9,SNR=9.4 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **PLCA** | **Paso Flores** | **24.72** | **175** | *eP* | **P** | | **18 53 46.1** | **+1.6** |
| **PRPB** | **Paraupebas** | **24.87** | **69** | *eP* | **P** | | **18 53 46.5** | **+0.4** |
| **RCLB** | **Rio Claro- Sao** | **24.99** | **109** | *eP* | **P** | | **18 53 48.4** | **+1.3** |
| **SPB** | **Sao Paulo** | **25.31** | **111** | *eP* | **P** | | **18 53 51.7** | **+1.7** |
| **PMNB** | **Patos De Minas** | **25.62** | **99** | *eP* | **P** | | **18 53 53.2** | **+0.3** |
| **SMTB** | **Santa Maria do** | **25.94** | **77** | *eP* | **P** | | **18 53 56.0** | **+0.3** |
| **MCPB** | **Macapa, AP** | **25.99** | **55** | *eP* | **P** | | **18 53 56.4** | **+0.3** |
| **JANB** | **Januaria** | **27.79** | **92** | *eP* | **P** | | **18 54 12.4** | **0.0** |
| **DIAM** | **Diamantina, MG** | **28.24** | **99** | *eP* | **P** | | **18 54 17.0** | **+0.5** |
| **MDP** | **Montagnes des** | **29.20** | **46** | LR | LR | | 19 05 54.5 | |
| | comp=Z,43nm,18.7s,baz=169,slow=36 | | | | | | | |
| **GUA01** | **Guaratinga, BA** | **31.99** | **96** | *eP* | **P** | | **18 54 50.1** | **+0.6** |
| **NBPB** | **Pedra_Branca-C** | **34.52** | **76** | *eP* | **P** | | **18 55 11.4** | **-0.2** |
| **FPAL** | **Fort Paine** | **51.66** | **347** | P | **P** | | **18 57 29.5** | **+0.1** |
| **X48A** | **Hartselle** | **51.91** | **345** | P | **P** | | **18 57 30.9** | **-0.2** |
| **T59A** | **Double "B" Far** | **52.88** | **356** | P | **P** | | **18 57 37.5** | **-0.7** |
| **TXAR** | **Lajitas Array** | **53.87** | **327** | P | **P** | | **18 57 46.4** | **+0.5** |
| | comp=Z,0.4nm,0.5s,baz=156,slow=8.1,SNR=18 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **T25A** | **Trinidad** | **60.53** | **332** | P | **P** | | **18 58 32.2** | **-0.6** |
| T25A | | | | | IAmb | IAmb | 18 58 34.3 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **SADO** | **Sadowa** | **60.75** | **355** | LR | LR | | 19 29 30.9 | |
| | comp=Z,30nm,18.5s,baz=329,slow=40 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **61.53** | **331** | P | **P** | | **18 58 40.7** | **+1.1** |
| **CCUT** | **Cedar City** | **65.35** | **326** | | IAmb | IAmb | 18 59 07.5 | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **65.41** | **329** | P | **P** | | **18 59 05.2** | **+0.1** |
| **WCT** | **Wildcat Mounta** | **66.64** | **323** | P | **P** | | **18 59 13.6** | **+0.8** |
| WCT | | | | | IAmb | IAmb | 18 59 15.4 | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **67.01** | **328** | IAmb | IAmb | | 18 59 17.4 | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **R11B** | **Troy Canyon, C** | **67.14** | **325** | P | **P** | | **18 59 17.2** | **+1.0** |
| R11B | | | | | IAmb | IAmb | 18 59 18.2 | |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **67.40** | **332** | P | **P** | | **18 59 19.0** | **+1.3** |
| | comp=Z,0.3nm,0.5s,baz=145,slow=6.5,SNR=3.1 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **HVU** | **Hansel Valley** | **68.17** | **329** | | IAmb | IAmb | 18 59 23.8 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **68.73** | **161** | P | **P** | | **18 59 26.5** | **+1.0** |
| SNAA | | | | | IAmb | IAmb | 18 59 50.0 | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **68.73** | **161** | ⇑P | **P** | | **18 59 26.4** | **+0.9** |
| | comp=Z,36nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **68.73** | **161** | P | **P** | | **18 59 26.2** | **+0.7** |
| | comp=Z,1.5nm,0.6s,baz=281,slow=9.3,SNR=7.8 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **68.73** | **323** | P | **P** | | **18 59 26.3** | **+0.1** |
| | comp=Z,0.8nm,0.6s,baz=164,slow=7.9,SNR=6.7 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **68.96** | **345** | P | **P** | | **18 59 25.7** | **-1.3** |
| **ULM** | **Lac du Bonnet** | **68.96** | **345** | P | **P** | | **18 59 26.2** | **-0.8** |
| | comp=Z,2.4nm,0.4s,baz=170,slow=7.5,SNR=5.9 | | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| **PAHR** | **Pah Rah Range** | **70.21** | **324** | P | **P** | | **18 59 36.2** | **+1.0** |
| **TROLL** | **Troll, Antarti** | **70.44** | **161** | ⇑P | **P** | | **18 59 36.1** | **0.0** |
| | comp=Z,39nm,0.8s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **71.66** | **326** | P | **P** | | **18 59 42.6** | **-1.3** |
| WVOR | | | | | IAmb | IAmb | 18 59 48.9 | |
| | comp=Z,5.2nm,1.4s | | | | | | | |
| **I07A** | **Izee** | **73.26** | **327** | P | **P** | | **18 59 53.6** | **+0.3** |
| **YBH** | **Yreka Blue Hor** | **73.45** | **324** | P | **P** | | **18 59 54.1** | **-0.4** |
| **KHMM** | **Horse Mountain** | **73.49** | **322** | P | **P** | | **18 59 54.9** | **+0.1** |
| KHMM | | | | | IAmb | IAmb | 18 59 56.4 | |
| | comp=Z,8.3nm,1.3s | | | | | | | |
| **PINE** | **Pine Mountain** | **73.82** | **326** | P | **P** | | **18 59 55.5** | **-1.3** |
| PINE | | | | | IAmb | IAmb | 18 59 59.3 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **KRMB** | **Red Mountain** | **74.00** | **323** | P | **P** | | **18 59 57.1** | **-0.6** |
| KRMB | | | | | IAmb | IAmb | 19 00 00.2 | |
| | comp=Z,4.3nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.13** | **180** | P | **P** | | **18 59 59.4** | **+1.2** |
| QSPA | | | | | IAmb | IAmb | 19 00 33.1 | |
| | comp=Z,4.8nm,1.2s | | | | | | | |
| **I04A** | **Tendick Farm,** | **74.62** | **325** | P | **P** | | **19 00 01.2** | **0.0** |
| **DBO** | **Dodson Butte** | **74.64** | **324** | P | **P** | | **19 00 02.0** | **+0.7** |
| DBO | | | | | IAmb | IAmb | 19 00 03.1 | |
| | comp=Z,4.4nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.46** | **73** | P | **P** | | **19 00 28.6** | **-0.3** |
| | comp=Z,5.7nm,0.8s,baz=267,slow=4.0,SNR=26 | | | | | | | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **ESDC** | **Sonseca Array** | **84.88** | **46** | P | **P** | | **19 00 58.0** | **+1.2** |
| | comp=Z,1.6nm,0.7s,baz=257,slow=5.2,SNR=19 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **22.97** | **283** | T | T | | 21 22 49.1 | |
| | baz=98,slow=75,SNR=4.9 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **22.98** | **283** | T | T | | 21 22 48.0 | |
| | baz=98,slow=75,SNR=6.2 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **22.99** | **283** | T | T | | 21 22 48.8 | |
| | baz=98,slow=75,SNR=5.2 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **23.01** | **282** | T | T | | 21 22 50.7 | |
| | baz=99,slow=75,SNR=20 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **23.02** | **282** | T | T | | 21 22 50.1 | |
| | baz=99,slow=75,SNR=23 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **23.03** | **282** | T | T | | 21 22 51.8 | |
| | baz=99,slow=75,SNR=18 | | | | | | | |
| **WRA** | **Warramunga Arr** | **25.19** | **218** | PKP | | **PKPdf** | **19 07 42.0** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=116,slow=2.2,SNR=2.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **138.44** | **20** | PKP | | **PKPdf** | **19 07 46.5** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=268,slow=3.6,SNR=1.9 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **144.76** | **328** | PKP | PKPbc | | 19 07 57.9 | +0.5 |
| | comp=Z,1.0nm,0.6s,baz=21,slow=4.6,SNR=4.2 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **145.48** | **312** | PKPbc | | **PKPdf** | **19 07 59.5** | **-0.3** |
| | comp=Z,2.5nm,0.8s,baz=45,slow=1.4,SNR=8.6 | | | | | | | |
| **SONM** | **Songino Array** | **148.28** | **1** | PKPbc | | **PKiKP** | **19 08 08.8** | **-0.6** |
| | comp=Z,1.5nm,0.7s,baz=346,slow=1.7,SNR=11 | | | | | | | |
| **KSRS** | **Korea Array** | **151.67** | **323** | PKPbc | | **PKPbc** | **19 08 16.1** | **0.0** |
| | comp=Z,1.5nm,0.7s,baz=336,slow=2.2,SNR=5.8 | | | | | | | |

*IDC **05** 18:57:09.4s3.2,8˚.27S×116˚.14E,h0km, mb3.6/4,*
*mbtmp3.6/4,Error ellipse: s-maj=176.8km s-min=23.5km az=53.0*

*DJA **05** 18:57:12.0±0.4,8˚S±6˚×11˚6E±˚,h10km,M3.9/7,MLv3.9/7*

**ISC 05 18:57:11.4±0.8,8˚.17S±0˚.09×116˚.19E±0˚.04,h10km,n10, σ0s.93/14,mb3.7/4,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.89** | **129** | P | **Pg** | **18 57 27.6** | **-1.0** |
| **SRBI** | **Singaraja** | **0.97** | **275** | P | **Pg** | **18 57 30.2** | **+0.2** |
| SRBI | | | | S | **Sn** | **18 57 45.4** | **+0.5** |
| **DNP** | **Denpasar** | **1.09** | **242** | P | **Pb** | **18 57 31.8** | **-0.6** |
| DNP | | | | S | **Sn** | **18 57 49.5** | **+1.6** |
| **PLAI** | **Plampang** | **1.70** | **113** | P | **Pn** | **18 57 42.6** | **+1.4** |
| PLAI | | | | S | **Sb** | **18 58 05.6** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.04** | **261** | P | **Pn** | **18 57 45.3** | **-0.5** |
| JAGI | | | | S | **Sn** | **18 58 11.4** | **+0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.72** | **65** | P | **Pn** | **18 58 22.5** | **-0.2** |
| **WRA** | **Warramunga Arr** | **21.12** | **126** | P | **P** | **19 01 55.7** | **-0.8** |
| | 5.9nm,0.8s,baz=301,slow=12,SNR=31 | | | | | | |
| | 5.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.93** | **134** | P | **P** | **19 02 15.0** | **-0.9** |
| | 3.0nm,0.8s,baz=310,slow=9.7,SNR=26 | | | | | | |
| | 3.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.43** | **352** | P | **P** | **19 06 53.7** | **+0.4** |
| | 0.2nm,0.4s,baz=172,slow=8.5,SNR=3.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.48** | **334** | P | **P** | **19 07 34.9** | **-0.1** |
| | 0.1nm,0.5s,baz=134,slow=8.3,SNR=2.2 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

*DJA **05** 19:20:03.5±0.7,8˚S±11˚×11˚6E±˚,h17km±10km, M3.7/6, MLv3.7/6*

*IDC **05** 19:20:04.9±3.4,8˚.30S×116˚.82E,h0km, mb3.2/3, mbtmp3.3/3,Error ellipse: s-maj=257.3km s-min=28.2km az=50.0*

**ISC 05 19:20:03.5±0.9,8˚.7S±0˚.2×116˚.11E±0˚.06,h10km,n9, σ1s.24/12,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.77** | **97** | P | **Pb** | **19 20 18.5** | **-0.4** |
| TWSI | | | | S | **Sg** | **19 20 28.2** | **-0.1** |
| **DNP** | **Denpasar** | **0.89** | **268** | P | **Pn** | **19 20 23.0** | **+0.9** |
| **SRBI** | **Singaraja** | **1.05** | **302** | P | **Pg** | **19 20 22.3** | **-1.4** |
| SRBI | | | | S | **Sb** | **19 20 36.9** | **-0.7** |
| **PLAI** | **Plampang** | **1.65** | **96** | P | **Pn** | **19 20 32.5** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.95** | **275** | P | **Pn** | **19 20 35.7** | **-1.0** |
| JAGI | | | | S | **Sn** | **19 21 01.1** | **-0.1** |
| **PWJI** | **Pagerwojo** | **4.31** | **278** | P | **Pn** | **19 21 09.6** | **+0.4** |
| **WRA** | **Warramunga Arr** | **20.90** | **124** | P | **P** | **19 24 45.5** | **-0.8** |
| | 0.8nm,0.7s,baz=299,slow=12,SNR=12 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.65** | **133** | P | **P** | **19 25 04.8** | **-0.3** |
| | 0.4nm,0.5s,baz=313,slow=9.7,SNR=15 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.88** | **335** | P | **P** | **19 30 32.7** | **+2.9** |
| | 0.1nm,0.3s,baz=151,slow=6.3,SNR=2.5 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*ISK **05** 19:20:58.8,36˚.05N×22˚.78E,h8km,ML3.3/14*

*THE **05** 19:20:59.1,36˚.05N×22˚.80E,h1km±1km,ML3.0/6,Error ellipse: s-maj=1.8km s-min=0.6km az=225.0*

*ATH **05** 19:20:59.6,36˚.03N×22˚.81E,h6km±1km,ML3.3/11,Error ellipse: s-maj=2.3km s-min=0.9km az=64.0*

*TIR **05** 19:21:03.8,36˚.36N×21˚.68E,h11km±22km,Ml2.9*

*IDC **05** 19:21:04.9±5.4,35˚.89N×22˚.88E,h70km±44km,mb3.4/7, mbtmp3.6/9,ML3.1/2,Error ellipse: s-maj=59.6km s-min=21.0km az=5.0*

**ISC 05 19:20:58.8±1.2,36.02N±0˚.03×22˚.75E±0˚.04,h9km±8km, n65,σ1s31/94,mb3.8/7,Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTHA** | **Kythira Island** | **0.35** | **47** | Pg | **Pg** | **19 21 05.4** | **-0.3** |
| KTHA | | | | Sg | **Sg** | **19 21 10.0** | **-0.4** |
| **KTHA** | **Kythira Island** | **0.35** | **47** | P | **Pg** | **19 21 05.4** | **-0.3** |
| KTHA | | | | S | **Sg** | **19 21 09.5** | **-0.9** |
| | 7μm,0.2s | | | | | | |
| **KTHA** | **Kythira Island** | **0.35** | **47** | P | **Pg** | **19 21 05.5** | **-0.3** |
| KTHA | | | | S | **Sg** | **19 21 09.5** | **-0.9** |
| KTHA | comp=N,9122μm,0.2s | | | AML | AML | 19 21 10.6 | |
| KTHA | comp=E,19025μm,0.2s | | | AML | AML | 19 21 10.9 | |
| **ANKY** | **Antikythira Is** | **0.48** | **108** | P | **Pg** | **19 21 08.0** | **-0.1** |
| ANKY | | | | S | **Sg** | **19 21 14.4** | **+0.1** |
| | comp=E,9μm,0.3s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.48** | **108** | P | **Pg** | **19 21 07.9** | **-0.2** |
| ANKY | | | | S | **Sg** | **19 21 14.0** | **-0.3** |
| ANKY | comp=E,26297μm,0.4s | | | AML | AML | 19 21 16.6 | |
| ANKY | comp=N,11138μm,0.3s | | | AML | AML | 19 21 16.6 | |
| **MNVA** | **Monemvasia** | **0.71** | **19** | P | **Pb** | **19 21 13.3** | **0.0** |
| MNVA | | | | S | **Sg** | **19 21 21.5** | **-0.2** |
| **VLI** | **Veliai** | **0.72** | **12** | P | **Pg** | **19 21 12.2** | **-0.4** |
| VLI | | | | S | **Sg** | **19 21 21.9** | **-0.1** |
| | comp=N,1μm,0.2s | | | | | | |
| **VLI** | **Veliai** | **0.72** | **12** | P | **Pg** | **19 21 12.4** | **-0.3** |
| VLI | | | | S | **Sg** | **19 21 22.0** | **0.0** |
| VLI | comp=N,2286μm,0.2s | | | AML | AML | 19 21 23.5 | |
| VLI | comp=E,2798μm,0.3s | | | AML | AML | 19 21 23.5 | |
| **RODP** | **Rodopos** | **0.94** | **119** | Pg | **Pb** | **19 21 17.8** | **+0.5** |
| RODP | | | | Sg | **Sb** | **19 21 30.6** | **+0.7** |
| **RODP** | **Rodopos** | **0.94** | **119** | P | **Pg** | **19 21 16.7** | **-0.2** |
| RODP | | | | S | **Sb** | **19 21 30.0** | **+0.1** |
| | comp=E,1μm,0.5s | | | | | | |
| **KNDR** | **Palaiochora Ch** | **1.09** | **135** | Pg | **Pg** | **19 21 18.8** | **-1.0** |
| KNDR | | | | Sg | **Sb** | **19 21 34.9** | **+0.7** |
| **KNDR** | **Palaiochora Ch** | **1.09** | **135** | P | **Pg** | **19 21 18.5** | **-1.3** |
| KNDR | | | | S | **Sg** | **19 21 33.9** | **-0.2** |
| KNDR | comp=E,5618μm,0.3s | | | AML | AML | 19 21 36.2 | |
| KNDR | comp=N,3604μm,0.4s | | | AML | AML | 19 21 45.2 | |
| **IMMV** | **Iera Moni Meta** | **1.15** | **119** | Pn | **Pg** | **19 21 20.1** | **-0.8** |
| IMMV | | | | Sn | **Sn** | **19 21 37.3** | **+0.4** |
| **IMMV** | **Iera Moni Meta** | **1.15** | **119** | P | **Pg** | **19 21 20.1** | **-0.8** |
| IMMV | | | | S | **Sb** | **19 21 36.1** | **+0.3** |
| **IMMV** | **Iera Moni Meta** | **1.15** | **119** | P | **Pg** | **19 21 19.8** | **-1.0** |
| IMMV | | | | S | **Sg** | **19 21 35.4** | **-0.4** |
| IMMV | comp=E,5325μm,0.5s | | | AML | AML | 19 21 39.9 | |
| IMMV | comp=N,5521μm,0.6s | | | AML | AML | 19 21 40.2 | |
| **CHAN** | **Chania** | **1.17** | **115** | P | **Pg** | **19 21 20.8** | **-0.4** |
| CHAN | | | | S | **Sg** | **19 21 35.8** | **-0.6** |
| CHAN | comp=N,7467μm,0.7s | | | AML | AML | 19 21 39.2 | |
| CHAN | comp=E,7232μm,0.3s | | | AML | AML | 19 21 42.0 | |
| **PYL** | **PYLOS** | **1.19** | **318** | P | **Pb** | **19 21 20.9** | **-0.7** |
| **PYL** | **PYLOS** | **1.19** | **318** | P | **Pb** | **19 21 21.2** | **-0.4** |
| PYL | | | | S | **Sn** | **19 21 39.6** | **+1.6** |
| PYL | comp=E,1071μm,0.3s | | | AML | AML | 19 21 41.3 | |
| PYL | comp=N,1276μm,0.4s | | | AML | AML | 19 21 41.9 | |
| **ITM** | **Ithomi** | **1.33** | **331** | Pn | **Pn** | **19 21 24.1** | **+0.5** |
| **ITM** | **Ithomi** | **1.33** | **331** | P | **Pn** | **19 21 23.9** | **+0.3** |
| ITM | | | | S | **Sg** | **19 21 43.5** | **+1.8** |
| | comp=N,380nm,0.7s | | | | | | |
| **ITM** | **Ithomi** | **1.33** | **331** | P | **Pn** | **19 21 24.2** | **+0.5** |
| ITM | | | | S | **Sg** | **19 21 42.6** | **+0.8** |
| ITM | comp=E,1016μm,0.5s | | | AML | AML | 19 21 48.3 | |
| ITM | comp=N,749μm,0.6s | | | AML | AML | 19 21 49.5 | |
| **KRND** | **KRANIDI** | **1.40** | **13** | P | **Pn** | **19 21 24.6** | **+0.1** |
| KRND | | | | S | **Sg** | **19 21 44.1** | **+0.2** |
| | comp=N,728nm,0.4s | | | | | | |
| **KRND** | **KRANIDI** | **1.40** | **13** | P | **Pn** | **19 21 24.8** | **+0.3** |
| KRND | | | | S | **Sg** | **19 21 43.7** | **-0.1** |
| KRND | comp=E,1569μm,0.3s | | | AML | AML | 19 21 46.2 | |
| KRND | comp=N,1428μm,0.4s | | | AML | AML | 19 21 51.9 | |
| **YDRA** | **Hydra** | **1.45** | **23** | P | **Pn** | **19 21 24.3** | **-0.9** |
| YDRA | | | | S | **Sb** | **19 21 42.4** | **-2.1** |
| **MHLO** | **Agia Marina, M** | **1.50** | **63** | P | **Pn** | **19 21 24.8** | **-1.0** |
| **MHLO** | **Agia Marina, M** | **1.50** | **63** | P | **Pn** | **19 21 25.0** | **-0.9** |
| MHLO | | | | S | **Sn** | **19 21 43.9** | **-1.6** |
| MHLO | comp=E,3981μm,0.5s | | | AML | AML | 19 21 52.8 | |
| MHLO | comp=N,3478μm,0.5s | | | AML | AML | 19 21 53.2 | |
| **GVD** | **Gavdhos** | **1.61** | **137** | Pn | **Pn** | **19 21 28.4** | **+1.1** |
| **GVD** | **Gavdhos** | **1.61** | **137** | P | **Pn** | **19 21 27.1** | **-0.2** |
| **IDI** | **Anoyia** | **1.89** | **112** | Pn | **Pn** | **19 21 32.1** | **+0.8** |
| **IDI** | **Anoyia** | **1.89** | **112** | P | **Pn** | **19 21 31.8** | **+0.5** |
| **IDI** | **Anoyia** | **1.89** | **112** | P | **Pn** | **19 21 31.9** | **+0.5** |
| IDI | | | | S | **Sn** | **19 21 53.3** | **-2.0** |
| IDI | comp=N,784μm,0.5s | | | AML | AML | 19 22 02.1 | |
| IDI | comp=E,991μm,0.7s | | | AML | AML | 19 22 03.5 | |
| **GUR** | **Goura** | **1.94** | **351** | P | **Pn** | **19 21 33.0** | **+0.9** |
| **VLY** | **Voula,Athens** | **2.02** | **24** | P | **Pn** | **19 21 32.7** | **-0.3** |
| **VLY** | **Voula,Athens** | **2.02** | **24** | P | **Pn** | **19 21 32.4** | **-0.6** |
| **KLV** | **Kalavryta, Ach** | **2.08** | **347** | P | **Pn** | **19 21 34.6** | **+0.7** |
| **THR5** | **Thira Island,** | **2.14** | **79** | P | **Pn** | **19 21 34.3** | **-0.4** |
| **THR6** | **Thira Island,** | **2.17** | **80** | P | **Pn** | **19 21 35.4** | **+0.2** |
| **SNT5** | **Nea Kammeni, S** | **2.18** | **79** | P | **Pn** | **19 21 34.9** | **-0.3** |
| **THR3** | **Thira Island,** | **2.18** | **79** | P | **Pn** | **19 21 35.9** | **+0.7** |
| **SANT** | **Santorini** | **2.22** | **80** | Pn | **Pn** | **19 21 36.4** | **+0.5** |
| **SANT** | **Santorini** | **2.22** | **80** | P | **Pn** | **19 21 34.5** | **-1.3** |
| **LTHK** | **Lithakia** | **2.28** | **318** | P | **Pn** | **19 21 37.6** | **+1.0** |
| **RLS** | **Riolos of Patr** | **2.28** | **334** | P | **Pn** | **19 21 37.4** | **+0.8** |
| **APE** | **Apeiranthos** | **2.48** | **64** | Pn | **Pn** | **19 21 39.9** | **+0.6** |
| **ZKR** | **Zakros** | **2.97** | **107** | Pn | **Pn** | **19 21 47.4** | **+1.3** |
| **LKD2** | **Lefkada island** | **3.23** | **330** | P | **Pn** | **19 21 49.5** | **-0.2** |
| | baz=342 | | | | | | |
| **CHOS** | **Chios island** | **3.55** | **47** | Pn | **Pn** | **19 21 54.9** | **+0.8** |
| **KARP** | **Karpathos** | **3.62** | **96** | Pn | **Pn** | **19 21 56.7** | **+1.6** |
| **BODT** | **Bodrum** | **3.82** | **73** | Pn | **Pn** | **19 21 58.8** | **+1.0** |
| **DAT** | **Datca** | **3.96** | **78** | Pn | **Pn** | **19 22 01.4** | **+1.5** |
| **SRN** | **Sarande** | **4.42** | **331** | P | **Pn** | **19 22 06.7** | **+0.6** |
| | baz=340 | | | | | | |
| SRN | | | | S | **Sn** | **19 22 54.7** | **-2.9** |
| | baz=340 | | | | | | |
| **FNA** | **Florina** | **4.88** | **348** | P | **Pn** | **19 22 15.0** | **+2.6** |
| | baz=358 | | | | | | |
| FNA | | | | S | **Sn** | **19 23 10.8** | **+1.8** |
| | baz=358 | | | | | | |
| FNA | comp=E,0.0nm,0.4s,baz=358 | | | AMP | | | |
| **SCTE** | **Santa Cesarea** | **5.27** | **321** | P | **Pn** | **19 22 17.9** | **+0.3** |
| | baz=327 | | | | | | |
| SCTE | | | | S | **Sn** | **19 23 12.5** | **-6.0** |
| | baz=327 | | | | | | |
| SCTE | comp=N,0.0nm,0.3s,baz=327 | | | AMP | | | |
| **PUK** | **Puka** | **6.41** | **341** | P | **Pn** | **19 22 34.9** | **+1.5** |
| | baz=347 | | | | | | |
| PUK | | | | S | **Sn** | **19 23 47.6** | **+0.8** |
| | baz=347 | | | | | | |
| **NOCI** | **Noci** | **6.53** | **319** | P | **Pn** | **19 22 35.6** | **+0.6** |
| | baz=323 | | | | | | |
| NOCI | | | | S | **Sn** | **19 23 44.6** | **-4.9** |
| | baz=323 | | | | | | |
| NOCI | comp=E,0.1nm,0.3s,baz=323 | | | AMP | | | |
| **SGRT** | **San Giovanni R** | **7.91** | **318** | P | **Pn** | **19 22 54.9** | **+0.8** |
| | baz=322 | | | | | | |
| **BRTR** | **Keskin Array B** | **9.37** | **63** | P | **Pn** | **19 23 17.3** | **+3.1** |
| | baz=238,slow=13,SNR=2.6 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **15.40** | **16** | P | **Pn** | **19 24 38.3** | **+2.2** |
| | comp=E,0.4nm,0.3s,baz=210,slow=10.0,SNR=1.6 | | | | | | |
| | comp=E,0.1nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **21.38** | **288** | P | **P** | **19 25 47.7** | **+1.1** |
| | comp=E,0.7nm,0.9s,baz=90,slow=11,SNR=6.1 | | | | | | |
| | comp=E,0.7nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **24.83** | **349** | P | **P** | **19 26 21.3** | **+0.2** |
| | comp=E,1.7nm,0.6s,baz=153,slow=9.7,SNR=6.7 | | | | | | |
| | comp=E,1.7nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **25.54** | **4** | P | **P** | **19 26 28.1** | **+0.7** |
| | comp=E,2.0nm,0.9s,baz=165,slow=11,SNR=1.6 | | | | | | |
| | comp=E,2.0nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **26.21** | **326** | P | **P** | **19 26 35.4** | **+1.7** |
| | comp=E,1.0nm,0.6s,baz=130,slow=

comp=Z,2.1nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARMA** | **Armidale** | **40.70** | **142** | P | **P** | **19 40 02.4** | **+1.8** |
| ARMA | | | | IAmb | IAmb | 19 40 31.3 | |

comp=Z,16nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CAN** | **Canberra** | **42.84** | **149** | P | **P** | **19 40 19.7** | **+1.9** |
| CAN | | | | IAmb | IAmb | 19 40 28.1 | |

comp=Z,22nm,1.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **USRK** | **Ussuriysk Ar.** | **43.93** | **8** | P | **P** | **19 40 26.3** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** | **43.93** | **8** | P | **P** | **19 40 26.1** | **-0.1** |

comp=Z,0.5nm,0.4s,baz=194,slow=5.6,SNR=5.2
comp=Z,0.5nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **49.35** | **345** | P | **P** | **19 41 07.3** | **-0.9** |
| **SONM** | **Songino Array** | **49.35** | **345** | P | **P** | **19 41 07.3** | **-0.9** |

comp=Z,0.6nm,0.6s,baz=169,slow=8.0,SNR=3.8
comp=Z,0.6nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **58.48** | **328** | P | **P** | **19 42 13.1** | **-0.8** |

comp=Z,0.5nm,0.3s,baz=127,slow=8.2,SNR=18
comp=Z,0.5nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **62.05** | **335** | P | **P** | **19 42 37.7** | **-0.1** |

comp=Z,0.4nm,0.5s,baz=132,slow=6.3,SNR=2.0
comp=Z,0.4nm,0.5s

---

*IDC **05** 19:43:47.8±1.9,8.°29S×116.°16E,h0km,mb3.2/4, mbtmp3.3/5,ML2.8/1,Error ellipse: s-maj=59.3km s-min=24.4km az=54.0*
*DJA **05** 19:43:50.6±0.7,8.°3S±7.°×11.°6E±.°,h10km,M3.8/5,MLv3.8/5*
**ISC 05 19:43:50.5±0.8,8.°11S±0.°07×116.°26E±0.°04,h10km,n10, σ1s21/14,mb3.3/4,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.87** | **135** | P | **Pg** | **19 44 07.3** | **0.0** |
| TWSI | | | | S | **Sg** | **19 44 19.3** | **+0.6** |
| **SRBI** | **Singaraja** | **1.04** | **271** | P | **Pg** | **19 44 10.5** | **+0.1** |
| SRBI | | | | S | **Sg** | **19 44 24.0** | **0.0** |
| **DNP** | **Denpasar** | **1.18** | **242** | P | **Pg** | **19 44 15.5** | **+2.3** |
| DNP | | | | S | **Sg** | **19 44 29.3** | **+0.7** |
| **PLAI** | **Plampang** | **1.66** | **115** | P | **Pn** | **19 44 19.7** | **+0.1** |
| PLAI | | | | S | **Sb** | **19 44 42.7** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.12** | **260** | P | **Pn** | **19 44 24.6** | **-1.4** |
| **KAPI** | **Kappang** | **4.64** | **49** | Pn | **Pn** | **19 45 01.6** | **+1.0** |

0.4nm,0.3s,baz=190,slow=11,SNR=2.0
3.6nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.09** | **126** | P | **P** | **19 48 34.7** | **-0.6** |

0.5nm,0.3s,baz=300,slow=12,SNR=17
0.5nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **22.91** | **134** | P | **P** | **19 48 52.4** | **-2.5** |

0.3nm,0.6s,baz=312,slow=9.4,SNR=4.7
0.3nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **56.38** | **352** | P | **P** | **19 53 32.4** | **+0.4** |

0.3nm,0.5s,baz=170,slow=8.8,SNR=3.1
0.3nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **62.46** | **334** | P | **P** | **19 54 13.5** | **-0.5** |

0.2nm,0.8s,baz=123,slow=5.3,SNR=1.8
0.2nm,0.8s

---

*IDC **05** 19:44:52.8±1.9,8.°39S×116.°08E,h0km,mb3.6/4, mbtmp3.7/5,ML3.7/1,MS2.7/1,Error ellipse: s-maj=56.2km s-min=23.6km az=55.0*
*NEIC **05** 19:44:55.3±2.0,8.°43S±0.°09×116.°21E±0.°06,h10km±2km, mb4.4/8,Error ellipse: s-maj=15.9km s-min=8.8km az=348.0*
*DJA **05** 19:44:55.9±0.4,8.°3S±8.°×11.°6E±.°,h10km,M4.1/4,MLv4.1/4*
**ISC 05 19:44:54.6±0.7,8.°35S±0.°07×116.°22E±0.°05,h10km,n39, σ1s51/39,mb3.7/4,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.76** | **121** | P | **Pn** | **19 45 11.2** | **-0.2** |
| **SRBI** | **Singaraja** | **1.03** | **285** | P | **Pb** | **19 45 15.5** | **+0.9** |
| **DNP** | **Denpasar** | **1.05** | **252** | P | **Pn** | **19 45 17.7** | **+2.2** |
| **PLAI** | **Plampang** | **1.61** | **107** | P | **Pb** | **19 45 24.5** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **266** | P | **Pn** | **19 45 30.4** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **266** | Pn | **Pn** | **19 45 30.3** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **266** | P | **Pn** | **19 45 30.3** | **+1.1** |
| **PWJI** | **Pagerwojo** | **4.39** | **274** | P | Pn | 19 45 54.4 | -6.9 |
| **BSSI** | **Bau Bau, Buton** | **4.77** | **63** | P | **Pn** | **19 46 06.9** | **+0.3** |
| **KAPI** | **Kappang** | **4.82** | **47** | P | **Pn** | **19 46 06.8** | **-0.5** |
| **KAPI** | **Kappang** | **4.82** | **47** | Pn | **Pn** | **19 46 07.5** | **+0.2** |
| **KAPI** | **Kappang** | **4.82** | **47** | Pn | **Pn** | **19 46 08.3** | **+1.0** |

3.0nm,0.3s,baz=225,slow=14,SNR=9.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KAPI | | | | Sn | **Sn** | **19 47 01.3** | **-2.0** |

5.0nm,0.3s,baz=198,slow=20,SNR=5.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KAPI | | | | LR | LR | 19 48 09.0 | |

comp=Z,85nm,21.6s,baz=204,slow=40
8.0nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **5.66** | **274** | Pn | **Pn** | **19 46 20.0** | **+1.1** |
| **MMRI** | **Maumere** | **5.96** | **93** | Pn | **Pn** | **19 46 23.0** | **+0.1** |
| **BKB** | **Balikpapan** | **7.07** | **5** | Pn | **Pn** | **19 46 41.8** | **+3.5** |
| **SOEI** | **Soe** | **8.07** | **101** | P | **Pn** | **19 46 55.7** | **+3.7** |
| **SOEI** | **Soe** | **8.07** | **101** | Pn | **Pn** | **19 46 54.8** | **+2.8** |
| **XMIS** | **Christmas Isla** | **10.64** | **258** | P | **Pn** | **19 47 23.2** | **-4.1** |
| **MBWA** | **Marble Bar** | **13.18** | **165** | P | **Pn** | **19 48 03.2** | **+1.3** |
| **MBWA** | **Marble Bar** | **13.18** | **165** | Pn | **Pn** | **19 48 00.8** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** | **13.33** | **138** | Pn | **Pn** | **19 48 03.5** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **13.60** | **166** | P | **Pn** | **19 48 08.4** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **13.60** | **166** | Pn | **Pn** | **19 48 06.3** | **-1.4** |
| **KNRA** | **Kununurra** | **14.26** | **122** | Pn | **Pn** | **19 48 17.8** | **+1.1** |
| **GIRL** | **Giralia** | **14.34** | **187** | P | **Pn** | **19 48 17.1** | **-0.7** |
| **GIRL** | **Giralia** | **14.34** | **187** | Pn | **Pn** | **19 48 16.9** | **-1.0** |
| **MTN** | **Manton Dam** | **15.32** | **108** | Pn | **Pn** | **19 48 30.1** | **-0.9** |
| MTN | | | | IAmb | IAmb | 19 48 50.8 | |

comp=Z,16nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WB0** | **Warramunga Arr** | **20.94** | **125** | P | **P** | **19 49 38.2** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 19 49 38.9 | |

comp=Z,8.7nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.98** | **125** | P | **P** | **19 49 37.5** | **-0.8** |
| **WRA** | **Warramunga Arr** | **20.98** | **125** | P | **P** | **19 49 38.7** | **+0.4** |

comp=Z,5.0nm,0.5s,baz=301,slow=12,SNR=66
comp=Z,5.0nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WB2** | **Warramunga Arr** | **20.99** | **125** | P | **P** | **19 49 38.6** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 19 49 48.9 | |

comp=Z,17nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WR0** | **Warramunga Arr** | **21.15** | **125** | P | **P** | **19 49 40.8** | **+0.7** |
| WR0 | | | | IAmb | IAmb | 19 49 41.5 | |

comp=Z,13nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **22.78** | **134** | P | **P** | **19 49 56.7** | **-0.8** |
| **ASAR** | **Alice Springs** | **22.78** | **134** | P | **P** | **19 49 56.8** | **-0.7** |
| **ASAR** | **Alice Springs** | **22.78** | **134** | P | **P** | **19 49 58.0** | **+0.4** |

comp=Z,2.8nm,0.7s,baz=309,slow=8.9,SNR=17
comp=Z,2.8nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NWAO** | **Narrogin (SRO)** | **24.48** | **178** | P | **P** | **19 50 12.5** | **-1.4** |
| **FORT** | **Forrest** | **24.91** | **155** | P | **P** | **19 50 18.1** | **+0.3** |
| **SONM** | **Songino Array** | **56.61** | **352** | P | **P** | **19 54 38.2** | **+0.4** |

comp=Z,0.3nm,0.6s,baz=168,slow=8.8,SNR=2.0
comp=Z,0.3nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **62.66** | **334** | P | **P** | **19 55 18.8** | **-0.7** |

comp=Z,0.1nm,0.5s,baz=142,slow=7.8,SNR=2.0
comp=Z,0.1nm,0.5s

---

**IDC 05 19:45:39.1±1.9,8.°07S×116.°33E,h0km,mb3.6/4, mbtmp3.7/5,ML3.7/1,Error ellipse: s-maj=57.2km s-min=24.3km az=55.0,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.56** | **48** | Pn | Pn | 19 46 49.2 | -0.2 |

3.4nm,0.3s,baz=223,slow=15,SNR=4.8
12nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.05** | **126** | P | P | 19 50 23.9 | -1.1 |

1.3nm,0.6s,baz=300,slow=12,SNR=1.9
1.3nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **22.89** | **135** | P | P | 19 50 45.3 | +0.7 |

2.7nm,0.8s,baz=310,slow=9.0,SNR=8.3
2.7nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **56.35** | **352** | P | P | 19 55 22.7 | +0.6 |

0.8nm,0.9s,baz=166,slow=8.3,SNR=4.5
0.8nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **62.46** | **334** | P | P | 19 56 03.5 | -0.7 |

0.4nm,0.7s,baz=131,slow=5.9,SNR=3.0
0.4nm,0.7s

---

**IDC 05 19:47:45.8±7.8,19.°75S×172.°68W,h0km,mb3.5/3, mbtmp3.5/3,Error ellipse: s-maj=330.7km s-min=43.6km az=142.0,Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **49.55** | **255** | P | P | 19 56 37.6 | -1.2 |

0.2nm,0.5s,baz=87,slow=6.8,SNR=5.5
0.2nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **49.65** | **260** | P | P | 19 56 40.5 | +0.8 |

0.4nm,0.4s,baz=99,slow=8.3,SNR=8.3
0.4nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **86.56** | **11** | P | P | 20 00 30.3 | 0.0 |

0.7nm,1.1s,baz=202,slow=6.8,SNR=2.7
0.7nm,1.1s

---

**IDC 05 19:58:59.4±1.2,3.°64N×124.°82E,h0km,mb3.3/4, mbtmp3.5/5,ML4.5/1,Error ellipse: s-maj=62.5km s-min=19.8km az=77.0,Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **3.49** | **12** | Pn | Pn | 19 59 55.5 | +0.5 |

46nm,0.3s,baz=204,slow=20,SNR=2.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DAV | | | | Sn | Sn | 20 00 37.5 | +0.4 |

44nm,0.3s,baz=205,slow=12,SNR=1.7
155nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **25.23** | **159** | P | P | 20 04 27.2 | 0.0 |

0.5nm,1.0s,baz=333,slow=11,SNR=5.3
0.5nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **28.55** | **162** | P | P | 20 04 56.9 | -0.2 |

0.3nm,0.8s,baz=351,slow=6.9,SNR=4.9
0.3nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **46.80** | **343** | P | P | 20 07 29.0 | -2.0 |

0.2nm,0.4s,baz=156,slow=7.9,SNR=2.5
0.2nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **56.56** | **326** | P | P | 20 08 45.1 | +1.3 |

0.3nm,0.4s,baz=120,slow=8.3,SNR=6.9
0.3nm,0.4s

---

**NEIC 05 20:17:39.7±1.4,32.°88N±0.°03×100.°90W±0.°04,h5km±2km, mb_Lg2.4/35,ML2.9/6,Error ellipse: s-maj=7.4km s-min=3.9km az=46.0,Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SN05** | **Snyder 5** | **0.02** | **99** | Pg | Pg | 20 17 40.4 | -0.4 |
| SN05 | | | | IAML | | 20 17 41.5 | |

47µm,0.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SN05 | | | | IAML | | 20 17 41.6 | |

11µm,0.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SN07** | **Snyder 07** | **0.21** | **3** | | Pg | 20 17 44.0 | +0.1 |
| SN07 | | | | IAML | | 20 17 47.6 | |

719nm,0.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **POST** | **Post** | **0.53** | **290** | | Pg | 20 17 49.4 | -0.6 |
| **DKNS** | **Dickens** | **0.78** | **359** | | Pg | 20 17 54.4 | -0.4 |
| **APMT** | **Aspermont** | **0.79** | **56** | | Pg | 20 17 54.6 | -0.3 |
| **ABTX** | **Abilene, Hawle** | **1.09** | **103** | | Pg | 20 17 59.8 | -0.9 |
| ABTX | | | | IAML | | 20 18 19.7 | |

comp=N,479nm,0.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ODSA** | **Odessa** | **1.58** | **242** | | Pn | 20 18 08.2 | -0.4 |
| **MSTX** | **Muleshoe** | **1.90** | **305** | | Pn | 20 18 13.3 | +0.4 |
| **OZNA** | **Ozona** | **1.96** | **186** | Pn | Pn | 20 18 13.6 | -0.1 |
| **AMTX** | **Amarillo** | **2.10** | **342** | | Pn | 20 18 15.2 | -0.4 |
| **PLPT** | **Palo Pinto** | **2.18** | **91** | Pn | Pn | 20 18 16.8 | +0.1 |
| PLPT | | | | IAmb_Lg | | 20 18 52.8 | |

comp=Z,19nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MNHN** | **Monahans** | **2.20** | **226** | Pn | Pn | 20 18 16.4 | -0.6 |
| **BRDY** | **Brady** | **2.27** | **134** | | Pn | 20 18 18.4 | +0.5 |
| BRDY | | | | IAmb_Lg | | 20 18 53.0 | |

comp=Z,21nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FW03** | **Perrin-Whitt E** | **2.39** | **85** | IAmb_Lg | | 20 18 56.0 | |

comp=Z,18nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WMOK** | **Wichita Mounta** | **2.56** | **43** | | Pn | 20 18 22.4 | +0.5 |
| **FW06** | **Azle** | **2.82** | **87** | IAmb_Lg | | 20 19 11.6 | |

comp=Z,14nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FW13** | **Cleburne** | **2.98** | **99** | IAmb_Lg | | 20 19 22.8 | |

comp=Z,10nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WHTX** | **Lake Whitney,** | **3.05** | **106** | | Pn | 20 18 28.9 | +0.3 |
| **X34A** | **Smith Ranch, M** | **3.08** | **55** | IAmb_Lg | | 20 19 23.4 | |

comp=Z,13nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LOOK** | **Love County** | **3.31** | **69** | IAmb_Lg | | 20 19 32.9 | |

comp=Z,14nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DRIO** | **Del Rio** | **3.46** | **176** | IAmb_Lg | | 20 19 38.4 | |

comp=Z,13nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HNDO** | **Hondo** | **3.62** | **157** | | Pn | 20 18 36.9 | +0.5 |
| HNDO | | | | IAmb_Lg | | 20 19 38.3 | |

comp=Z,14nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RTBA** | **Rita Blanca** | **3.86** | **337** | IAmb_Lg | | 20 19 47.7 | |

comp=Z,8.0nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VHRN** | **Van Horn** | **4.05** | **240** | Pn | Pn | 20 18 43.3 | +0.7 |
| **833A** | **Chaparral WMA,** | **4.73** | **164** | IAmb_Lg | | 20 20 14.2 | |

comp=Z,8.7nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **X37A** | **Clayton** | **4.92** | **68** | IAmb_Lg | | 20 20 19.5 | |

comp=Z,6.8nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ANMO** | **Albuquerque** | **5.05** | **296** | IAmb_Lg | | 20 20 18.7 | |

comp=Z,5.1nm,0.8s

---

*IDC **05** 20:18:28.8±1.3,24.°51N×122.°52E,h0km,mb3.6/6, mbtmp3.6/7,ML2.9/1,MS3.1/8,Error ellipse: s-maj=67.7km s-min=20.7km az=67.0*
*JMA **05** 20:18:28.5±0.2,25.°0N±0.°9×123.°6E±0.°3,h19km,MV2.9/10, NW OFF ISHIGAKIJIMA IS*
**ISC 05 20:18:28.5±1.6,24.°94N±0.°06×123.°58E±0.°04,h9km±11km, n20,σ0s68/22,mb3.6/6,MS3.0/6,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.61** | **167** | P | **Pb** | **20 18 41.6** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.70** | **228** | P | **Pb** | **20 18 43.0** | **+0.1** |
| YOJ | | | | *eS* | **Sb** | **20 18 52.7** | **0.0** |
| **JISG** | **Ishigakijimahi** | **0.75** | **118** | P | **Pg** | **20 18 43.1** | **+0.1** |
| JISG | | | | *eS* | **Sb** | **20 18 53.6** | **-0.4** |
| **JYNG** | **Yonagunijimaku** | **0.76** | **230** | P | **Pb** | **20 18 43.6** | **-0.2** |
| JYNG | | | | *eS* | **Sb** | **20 18 54.1** | **-0.1** |
| **JIJ** | **Ishigaki jima** | **0.77** | **138** | P | **Pg** | **20 18 43.3** | **0.0** |
| JIJ | | | | *eS* | **Sb** | **20 18 54.1** | **-0.3** |
| **JKRS** | **Kuro-shima** | **0.80** | **151** | P | **Pb** | **20 18 44.5** | **-0.1** |
| JKRS | | | | *eS* | **Sb** | **20 18 55.6** | **+0.2** |
| **HATJ** | **Hateruma jima** | **0.90** | **167** | P | **Pb** | **20 18 46.5** | **+0.3** |
| HATJ | | | | S | **Sn** | **20 19 00.0** | **-0.4** |
| **JTJ** | **Tarama** | **1.06** | **106** | P | **Pg** | **20 18 48.3** | **-0.6** |
| JTJ | | | | *eS* | **Sg** | **20 19 02.8** | **+0.1** |
| **KSRS** | **Korea Array** | **13.02** | **16** | Pn | **P** | **20 21 45.0** | **+0.9** |

0.1nm,0.3s,baz=195,slow=12,SNR=8.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KSRS | | | | LR | LR | 20 28 03.1 | |

comp=Z,39nm,18.5s,baz=200,slow=42
2.4nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **17.87** | **174** | LR | LR | 20 29 39.9 | |

comp=Z,29nm,18.9s,baz=352,slow=38

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **23.01** | **115** | LR | LR | 20 34 33.1 | |

comp=Z,20nm,18.1s,baz=257,slow=41

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KLR** | **Kulr** | **25.08** | **13** | LR | LR | 20 34 01.0 | |

comp=Z,31nm,18.7s,baz=186,slow=36

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **26.60** | **334** | P | **P** | **20 24 08.4** | **+1.3** |

0.4nm,0.6s,baz=137,slow=8.0,SNR=3.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SONM | | | | LR | LR | 20 35 28.6 | |

comp=Z,32nm,18.1s,baz=189,slow=38
0.4nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **39.35** | **314** | P | **P** | **20 25 57.4** | **-0.8** |

1.6nm,0.8s,baz=101,slow=10,SNR=12
1.6nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **40.83** | **326** | P | **P** | **20 26 08.8** | **-1.5** |

0.9nm,0.7s,baz=114,slow=6.6,SNR=4.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ZALV | | | | LR | LR | 20 44 32.4 | |

comp=Z,22nm,18.7s,baz=98,slow=38
0.9nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **42.97** | **319** | P | **P** | **20 26 27.0** | **-0.8** |

0.4nm,0.2s,baz=110,slow=8.4,SNR=4.1
0.4nm,0.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.82** | **166** | P | **P** | **20 26 50.4** | **-0.5** |

0.4nm,0.7s,baz=348,slow=8.9,SNR=3.4
0.4nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TIXI** | **Tiksi** | **46.84** | **2** | LR | LR | 20 49 27.6 | |

comp=Z,42nm,18.1s,baz=196,slow=39

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **49.34** | **167** | P | **P** | **20 27 19.3** | **+1.0** |

0.3nm,0.9s,baz=346,slow=7.6,SNR=1.6
0.3nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KIRV** | **Kirov** | **60.86** | **325** | LR | LR | 20 57 27.8 | |

comp=Z,40nm,19.2s,baz=217,slow=38

---

**RSNC 05 20:18:37.5±0.0,7.°1N±1.°×7.°3W±.°,h143km±3km,M2.2,ML2.2, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.24** | **190** | P | Pn | 20 18 56.4 | -1.0 |
| BARC | | | | S | Sn | 20 19 11.5 | -0.9 |
| **PAMC** | **Pamplona, Colo** | **0.67** | **41** | P | Pn | 20 18 59.3 | -0.3 |
| PAMC | | | | S | Sn | 20 19 16.0 | -0.4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RUSC** | **La Rusia** | **0.93** | **177** | P | Pn | 20 19 00.6 | -1.0 |
| RUSC | | | | S | Sn | 20 19 19.1 | -0.8 |
| **PTBC** | **PUERTO BERRIO,** | **1.34** | **258** | P | Pn | 20 19 03.1 | -1.8 |
| PTBC | | | | S | Sn | 20 19 24.3 | -1.4 |
| **TAMC** | **Tame, Arauca** | **1.40** | **106** | P | Pn | 20 19 04.9 | -0.6 |
| TAMC | | | | S | Sn | 20 19 25.3 | -1.5 |
| **OCAC** | **Ocana** | **1.41** | **353** | P | Pn | 20 19 04.4 | -1.4 |
| OCAC | | | | S | Sn | 20 19 27.7 | +0.3 |
| **SPBC** | **San Pablo de B** | **1.49** | **218** | P | Pn | 20 19 05.5 | -1.1 |
| SPBC | | | | S | Sn | 20 19 28.8 | 0.0 |
| **ZARC** | **Zaragoza, Cauc** | **1.83** | **291** | P | Pn | 20 19 08.4 | -1.8 |
| ZARC | | | | S | Sn | 20 19 35.6 | +0.3 |
| **ZARC** | **Zaragoza, Cauc** | **1.83** | **291** | P | Pn | 20 19 08.4 | -1.8 |
| **NORC** | **Norcasia** | **2.13** | **234** | P | Pn | 20 19 12.6 | -1.2 |
| NORC | | | | S | Sn | 20 19 40.0 | -1.7 |
| **CHIC** | **Chingaza** | **2.26** | **195** | P | Pn | 20 19 15.1 | -0.7 |
| CHIC | | | | S | Sn | 20 19 45.0 | -0.2 |
| **ROSC** | **El Rosal** | **2.30** | **211** | P | Pn | 20 19 16.2 | 0.0 |
| ROSC | | | | S | Sn | 20 19 47.8 | +1.9 |
| **UREC** | **San Jos de Ur** | **2.54** | **291** | P | Pn | 20 19 18.1 | -0.8 |
| UREC | | | | S | Sn | 20 19 47.5 | -3.2 |
| **UREC** | **San Jos de Ur** | **2.54** | **291** | S | Pn | 20 19 18.5 | -0.4 |
| **VILC** | **Villavicencio,** | **2.76** | **192** | P | Pn | 20 19 18.7 | -3.0 |
| VILC | | | | S | Sn | 20 19 55.2 | -0.5 |
| **CBOC** | **Ciudad Bolivar** | **3.01** | **252** | P | Pn | 20 19 23.3 | -1.6 |
| CBOC | | | | S | Sn | 20 20 02.0 | +0.5 |
| **ARGC** | **Ariguani, Magd** | **3.20** | **340** | P | Pn | 20 19 26.4 | -0.8 |
| ARGC | | | | S | Sn | 20 20 05.2 | -0.5 |
| **ANIL** | **Santa Ana** | **3.24** | **224** | P | Pn | 20 19 28.3 | +0.4 |
| ANIL | | | | S | Sn | 20 20 09.8 | +2.9 |
| **PRAC** | **Prado** | **3.55** | **209** | P | Pn | 20 19 31.0 | -0.8 |
| PRAC | | | | S | Sn | 20 20 13.1 | -0.7 |
| **APAC** | **Apartado, Choc** | **3.57** | **288** | P | Pn | 20 19 23.6 | -8.4 |
| APAC | | | | S | Sn | 20 20 13.3 | -0.9 |
| **ORTC** | **Ortega, Tolima** | **3.58** | **216** | P | Pn | 20 19 31.3 | -0.9 |
| ORTC | | | | S | Sn | 20 20 14.9 | +0.4 |
| **SJCC** | **San Jacinto, C** | **3.66** | **327** | P | Pn | 20 19 30.7 | -2.4 |
| SJCC | | | | S | Sn | 20 20 11.9 | -4.4 |
| **CRJC** | **Cerrejon, Guaj** | **4.17** | **3** | P | Pn | 20 19 36.6 | -3.3 |
| CRJC | | | | S | Sn | 20 20 26.3 | -2.2 |

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**RSNC 05 20:18:42.8±0.0,7.°1N±4.°×7.°6W±.°,h3km±6km,M1.6,ML1.6, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DBBC** | **Dabeiba** | **0.22** | **350** | P | Pg | 20 18 46.1 | -1.0 |
| DBBC | | | | S | Sg | 20 18 50.1 | +0.1 |
| **CBOC** | **Ciudad Bolivar** | **0.94** | **170** | P | Pg | 20 18 59.4 | -1.5 |
| CBOC | | | | S | Sg | 20 19 12.8 | -0.4 |
| **UREC** | **San Jos de Ur** | **1.14** | **34** | P | Pg | 20 19 03.1 | -1.5 |
| **APAC** | **Apartado, Choc** | **1.17** | **340** | P | Pg | 20 19 04.2 | -1.0 |
| APAC | | | | S | Sn | 20 19 25.4 | +2.9 |
| **ZARC** | **Zaragoza, Cauc** | **1.47** | **62** | S | Sg | 20 19 35.0 | +4.8 |

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*IDC **05** 20:27:06.8±1.9,8.°06S×116.°29E,h0km,mb3.2/3, mbtmp3.4/4,ML3.6/1,Error ellipse: s-maj=29.8km s-min=24.6km az=101.0*
*DJA **05** 20:27:09.6±0.8,8.°5S±10.°×11.°6E±.°,h15km±9km,M3.4/7, MLv3.4/7*
**ISC 05 20:27:11.1±1.0,8.°17S±0.°09×116.°23E±0.°04,h35km,n10, σ1s07/12,mb3.3/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.86** | **131** | P | **Pn** | **20 27 25.8** | **-0.9** |
| **SRBI** | **Singaraja** | **1.01** | **275** | P | **Pn** | **20 27 28.9** | **0.0** |
| SRBI | | | | S | **Sn** | **20 27 42.6** | **+0.7** |
| **DNP** | **Denpasar** | **1.13** | **243** | P | **Pn** | **20 27 28.8** | **-1.7** |
| **PLAI** | **Plampang** | **1.66** | **113** | P | **Pn** | **20 27 38.7** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.08** | **262** | P | **Pn** | **20 27 43.6** | **0.0** |
| **BSSI** | **Bau Bau, Buton** | **4.68** | **65** | P | **Pn** | **20 28 20.0** | **+0.6** |
| **KAPI** | **Kappang** | **4.69** | **48** | Pn | **Pn** | **20 28 18.8** | **-0.8** |

2.6nm,0.3s,baz=173,slow=18,SNR=2.1

| | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| H04A | | | | IAML | | 20 33 35.5 | | |
| | comp=E,14nm,0.4s | | | | | | | |
| **J05D** | **Fort Rock, OR** | **3.91** | **75** | IAML | | 20 33 47.4 | | |
| | comp=N,11nm,3.7s | | | | | | | |
| J05D | | | | IAML | | 20 34 21.3 | | |
| | comp=E,12nm,4.4s | | | | | | | |
| **PINE** | **Pine Mountain** | **4.24** | **69** | IAML | | 20 33 52.8 | | |
| | comp=N,8.1nm,4.0s | | | | | | | |
| PINE | | | | IAML | | 20 34 30.9 | | |
| | comp=E,8.6nm,4.0s | | | | | | | |
| **F04A** | **Amboy** | **4.54** | **38** | | Pn | 20 32 55.5 | +0.4 | |
| **E03A** | **Lebam** | **4.61** | **25** | Pn | Pn | 20 32 55.0 | -1.0 | |
| **G06A** | **Carlson Farm,** | **5.04** | **54** | IAML | | 20 34 56.6 | | |
| | comp=N,5.8nm,4.7s | | | | | | | |
| **NLWA** | **Neilton Lookou** | **5.29** | **19** | Pn | Pn | 20 33 04.6 | -0.8 | |
| **LON** | **Longmire** | **5.44** | **36** | | Pn | 20 33 08.5 | +1.0 | |
| **PNTR** | **Pine Nut** | **6.16** | **120** | Pn | Pn | 20 33 19.4 | +1.9 | |
| **LTY** | **Liberty** | **6.33** | **38** | Pn | Pn | 20 33 19.9 | +0.1 | |
| **YERR** | **Yerington** | **6.45** | **120** | Pn | Pn | 20 33 21.1 | -0.4 | |
| **PGC** | **Sidney** | **6.57** | **17** | Pn | Pn | 20 33 22.7 | -0.2 | |
| **MDPB** | **Devils Postpil** | **7.39** | **128** | Pn | Pn | 20 33 32.3 | -2.1 | |
| **DSP** | **Deep Springs** | **8.22** | **125** | Pn | Pn | 20 33 46.9 | +1.3 | |

*IDC* ***05*** *20:35:09.9±1.2,8˝.26S×116˝.12E, h0km, mb3.8/8, mbtmp3.8/9, ML3.7/1, Error ellipse: s-maj=24.7km s-min=20.2km az=51.0*

*DJA* ***05*** *20:35:13.6±0.3,8˝S±4˝×11˝6E±˝, h10km, M4.3/9, mb4.3/2, MLv4.3/9*

**ISC 05 20:35:12.5**±0.6,**8˝24S**±0˝.06×**116˝23E**±0˝.03,**h10**km,**n26,** σ1⁶**64**/31,**mb4.0**/8,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.81** | **128** | P | **Pg** | **20 35 28.7** | **+0.6** |
| TWSI | | | | S | **Sg** | **20 35 39.4** | **+0.7** |
| **SRBI** | **Singaraja** | **1.02** | **279** | P | **Pg** | **20 35 32.5** | **+0.3** |
| SRBI | | | | S | **Sg** | **20 35 46.5** | **+1.0** |
| **DNP** | **Denpasar** | **1.10** | **247** | P | **Pb** | **20 35 34.4** | **+0.8** |
| DNP | | | | S | **Sn** | **20 35 49.4** | **+0.1** |
| **PLAI** | **Plampang** | **1.63** | **111** | P | **Pb** | **20 35 43.3** | **+0.6** |
| PLAI | | | | S | **Sb** | **20 36 04.4** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.07** | **264** | P | **Pn** | **20 35 47.0** | **-0.4** |
| **PWJI** | **Pagerwojo** | **4.39** | **273** | P | **Pn** | **20 36 20.0** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.71** | **64** | P | **Pn** | **20 36 24.7** | **+1.0** |
| **KAPI** | **Kappang** | **4.74** | **48** | Pn | **Pn** | **20 36 24.3** | **+0.2** |
| | 3.3nm,0.3s,baz=186,slow=4.2,SNR=6.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 37 19.5** | **+0.3** |
| | 4.8nm,0.3s,baz=258,slow=17,SNR=4.0 | | | | | | |
| KAPI | | | | Lg | Lg | 20 37 42.4 | |
| | 4.2nm,0.3s,baz=205,slow=21,SNR=3.7 | | | | | | |
| | 6.6nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.42** | **45** | P | **Pn** | **20 36 35.9** | **+2.5** |
| | 38nm,0.5s,0.3nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.51** | **40** | P | **Pn** | **20 36 35.7** | **+1.0** |
| **UGM** | **Wanagama** | **5.66** | **273** | P | **Pn** | **20 36 40.0** | **+3.2** |
| **MMRI** | **Maumere** | **5.95** | **94** | P | **Pn** | **20 36 44.2** | **+3.5** |
| **BBJI** | **Bungbulang** | **8.54** | **275** | P | **Pn** | **20 37 18.8** | **+2.4** |
| **MBWA** | **Marble Bar** | **13.28** | **166** | P | **Pn** | **20 38 18.7** | **-2.5** |
| **FITZ** | **Fitzroy Crossi** | **13.40** | **138** | P | **Pn** | **20 38 22.1** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **13.70** | **166** | P | **Pn** | **20 38 24.9** | **-2.1** |
| **GIRL** | **Giralia** | **14.45** | **187** | P | **Pn** | **20 38 34.9** | **-2.3** |
| **KDU** | **Kakadu** | **16.57** | **107** | P | **Pn** | **20 39 05.5** | **+0.4** |
| **WRA** | **Warramunga Arr** | **21.04** | **125** | P | **P** | **20 39 56.4** | **-0.3** |
| | 1.1nm,0.4s,baz=301,slow=12,SNR=41 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.84** | **134** | P | **P** | **20 40 15.6** | **-0.5** |
| | 2.8nm,0.8s,baz=306,slow=9.0,SNR=13 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.10** | **23** | P | **P** | **20 44 00.5** | **+0.2** |
| | 2.9nm,0.9s,baz=189,slow=7.9,SNR=8.7 | | | | | | |
| | 2.9nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.11** | **14** | P | **P** | **20 44 37.6** | **+0.1** |
| | 1.3nm,0.6s,baz=175,slow=5.7,SNR=4.4 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.51** | **352** | P | **P** | **20 44 54.5** | **-0.5** |
| | 1.5nm,0.8s,baz=168,slow=7.7,SNR=8.4 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.57** | **334** | P | **P** | **20 45 36.2** | **-0.5** |
| | 0.4nm,0.5s,baz=154,slow=6.5,SNR=9.0 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.11** | **335** | P | **P** | **20 46 03.1** | **-3.1** |
| | 0.3nm,0.7s,baz=345,slow=40,SNR=1.1 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.39** | **341** | P | **P** | **20 46 05.3** | **-2.6** |
| | 0.7nm,0.5s,baz=144,slow=5.8,SNR=2.8 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

*IDC* ***05*** *20:37:07.6±1.2,8˝.18S×116˝.14E, h0km, mb3.8/7, mbtmp3.8/7, Error ellipse: s-maj=55.2km s-min=20.1km az=62.0*

*NEIC* ***05*** *20:37:10.9±1.6,8˝.4S±0˝.2×116˝.21E±0˝.08, h10km±2km, mb4.5/12, Error ellipse: s-maj=30.7km s-min=7.6km az=22.0*

*DJA* ***05*** *20:37:10.3±0.6,8˝S±8˝×11˝6E±˝, h10km, M4.1/6, MLv4.1/6*

**ISC 05 20:37:09.3**±0.6,**8˝23S**±0˝.09×**116˝25E**±0˝.05,**h10**km,**n30,** σ0⁸**86**/32,**mb4.1**/11,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.80** | **129** | P | **Pb** | **20 37 26.2** | **+0.9** |
| **SRBI** | **Singaraja** | **1.04** | **278** | P | **Pg** | **20 37 29.5** | **+0.2** |
| SRBI | | | | S | **Sg** | **20 37 43.1** | **+0.3** |
| **DNP** | **Denpasar** | **1.12** | **247** | P | **Pn** | **20 37 32.0** | **+1.0** |
| DNP | | | | S | **Sn** | **20 37 47.4** | **+0.9** |
| **PLAI** | **Plampang** | **1.62** | **111** | P | **Pb** | **20 37 40.5** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.09** | **263** | P | **Pn** | **20 37 44.3** | **-0.1** |
| **MBWA** | **Marble Bar** | **13.28** | **166** | Pn | **Pn** | **20 40 17.3** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **13.40** | **138** | Pn | **Pn** | **20 40 19.6** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **13.71** | **166** | Pn | **Pn** | **20 40 22.7** | **-1.2** |
| **KNRA** | **Kununurra** | **14.30** | **122** | Pn | **Pn** | **20 40 30.7** | **-1.2** |
| **GIRL** | **Giralia** | **14.46** | **187** | Pn | **Pn** | **20 40 32.0** | **-2.1** |
| **MTN** | **Manton Dam** | **15.33** | **109** | Pn | **Pn** | **20 40 46.1** | **+0.2** |
| **WB0** | **Warramunga Arr** | **20.98** | **125** | P | **P** | **20 41 53.6** | **+0.7** |
| WB0 | | | | IAmb | IAmb | 20 41 54.1 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.03** | **126** | P | **P** | **20 41 53.5** | **+0.1** |
| **WRA** | **Warramunga Arr** | **21.03** | **126** | P | **P** | **20 41 54.1** | **+0.7** |
| | comp=Z,7.6nm,0.5s,baz=300,slow=12,SNR=46 | | | | | | |
| | comp=Z,7.6nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.03** | **125** | P | **P** | **20 41 54.4** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 20 41 54.7 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.04** | **125** | P | **P** | **20 41 54.3** | **+0.8** |
| WB2 | | | | IAmb | IAmb | 20 41 54.7 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.20** | **125** | P | **P** | **20 41 56.0** | **+0.7** |
| WR0 | | | | IAmb | IAmb | 20 41 56.7 | |
| | comp=Z,20nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **22.84** | **134** | P | **P** | **20 42 13.5** | **+0.7** |
| **ASAR** | **Alice Springs** | **22.84** | **134** | P | **P** | **20 42 13.0** | **+0.2** |
| **ASAR** | **Alice Springs** | **22.84** | **134** | P | **P** | **20 42 13.4** | **+0.6** |
| | comp=Z,4.6nm,0.7s,baz=308,slow=8.5,SNR=15 | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **25.00** | **155** | P | **P** | **20 42 33.7** | **+0.3** |
| **COEN** | **Coen** | **27.01** | **105** | P | **P** | **20 42 51.9** | **0.0** |
| COEN | | | | IAmb | IAmb | 20 43 00.5 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **40.30** | **137** | P | **P** | **20 44 46.3** | **-0.7** |
| **KAAM** | **Kaadhehdhoo** | **43.97** | **279** | P | **P** | **20 45 17.3** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **49.08** | **23** | P | **P** | **20 45 57.8** | **+0.9** |
| | comp=Z,0.8nm,0.6s,baz=204,slow=7.6,SNR=2.3 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.50** | **352** | P | **P** | **20 46 50.6** | **-1.1** |
| | comp=Z,0.5nm,0.5s,baz=172,slow=8.2,SNR=3.0 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.57** | **334** | P | **P** | **20 47 32.9** | **-0.6** |
| | comp=Z,0.3nm,0.8s,baz=149,slow=6.5,SNR=1.8 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.39** | **340** | P | **P** | **20 48 03.5** | **-1.2** |
| | comp=Z,0.3nm,0.4s,baz=133,slow=6.3,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **73.17** | **171** | P | **P** | **20 48 40.2** | **+0.4** |
| VNDA | | | | IAmb | IAmb | 20 48 57.0 | |
| | comp=Z,4.8nm,1.5s | | | | | | |
| **VNDA** | **Vanda** | **73.17** | **171** | P | **P** | **20 48 40.7** | **+0.9** |
| | comp=Z,0.6nm,0.5s,baz=299,slow=8.4,SNR=5.4 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |

*IDC* ***05*** *20:41:24.8±0.5,8˝.21S×116˝.19E, h0km, mb4.2/15, mbtmp4.3/16, ML4.1/1, MS3.7/46, Error ellipse: s-maj=19.8km s-min=12.7km az=82.0*

*DJA* ***05*** *20:41:26.9±0.3,8˝S±4˝×11˝6E±˝, h10km, M4.9/13, mb4.9/6, mB5.3/4, MLv5.0/13, Mw(mB)4.7/4*

*NEIC* ***05*** *20:41:27.1±2.1,8˝.26S±0˝.08×116˝.22E±0˝.06, h10km±1km, mb4.6/21, Error ellipse: s-maj=14.1km s-min=10.3km az=175.0*

*GCMT* ***05*** *20:41:29.1±0.4,8˝.27S±0˝.03×116˝.08E±0˝.05, h28km, MW5.0/69, Moment Tensor Solution. s16,c17; s69,c90; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.57±.26; $M_{\theta\theta}$-2.86±.15; $M_{\phi\phi}$-0.70±.15; $M_{r\theta}$-0.87±.20; $M_{\theta\phi}$0.01±.09; $M_{\phi r}$~0.26±.27; Best double couple: $M_o$3.33900×$10^{16}$ NP1:$\phi_s$266.00000°,δ53.00000°,λ.86.00000°. NP2: $\phi_s$93.00000°,δ38.00000°,λ.95.00000°. Principal axes: T 3.7010, Plg82.0000°, Azm156.0000°; N -0.7210, Plg3.0000°, Azm269.0000°; P -2.9760, Plg8.0000°, Azm359.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 05 20:41:27.2**±0.3,**8˝33S**±0˝.05×**116˝27E**±0˝.04,**h10**km,**n152,** σ1⁶**62**/126,**mb4.4**/27,**MS3.8**/54,**4C,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.73** | **124** | P | **Pg** | **20 41 40.3** | **-1.1** |
| **SRBI** | **Singaraja** | **1.07** | **283** | P | **Pg** | **20 41 46.3** | **-1.5** |
| SRBI | | | | S | **Sb** | **20 42 00.8** | **-1.1** |
| **DNP** | **Denpasar** | **1.10** | **252** | P | **Pn** | **20 41 48.9** | **+0.2** |
| **PLAI** | **Plampang** | **1.57** | **108** | P | **Pn** | **20 41 56.2** | **+0.9** |
| **PLAI** | **Plampang** | **1.57** | **108** | P | **Pn** | **20 41 56.1** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **266** | | **Pn** | **20 42 01.1** | **-1.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **266** | P | **Pn** | **20 42 01.3** | **-1.1** |
| **GRJI** | **Gresik** | **4.01** | **290** | P | **Pn** | **20 42 28.3** | **-0.4** |
| **PWJI** | **Pagerwojo** | **4.43** | **274** | P | **Pn** | **20 42 33.7** | **-0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.72** | **63** | P | **Pn** | **20 42 37.3** | **-1.3** |
| **KAPI** | **Kappang** | **4.78** | **47** | | **Pn** | **20 42 38.4** | **-1.0** |
| **KAPI** | **Kappang** | **4.78** | **47** | Pn | **Pn** | **20 42 38.0** | **-1.3** |
| | 7.8nm,0.3s,baz=204,slow=4.4,SNR=5.2 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 43 31.2** | **-3.6** |
| | 12nm,0.3s,baz=206,slow=16,SNR=4.8 | | | | | | |
| KAPI | | | | Lg | Lg | 20 43 52.9 | |
| | 27nm,0.3s,baz=187,slow=21,SNR=6.6 | | | | | | |
| KAPI | | | | LR | LR | 20 44 57.7 | |
| | comp=Z,1μm,19.0s,baz=225,slow=45 | | | | | | |
| | 18nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.46** | **45** | P | **Pn** | **20 42 47.8** | **-0.9** |
| | 113nm,1.1s,4μm1.7nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.56** | **39** | P | **Pn** | **20 42 47.4** | **-2.7** |
| | 80nm,0.9s,3μm1.1nm | | | | | | |
| **UGM** | **Wanagama** | **5.70** | **274** | P | **Pn** | **20 42 52.8** | **+0.7** |
| **UGM** | **Wanagama** | **5.70** | **274** | Pn | **Pn** | **20 42 53.0** | **+0.9** |
| **UGM** | **Wanagama** | **5.70** | **274** | P | **Pn** | **20 42 51.7** | **-0.4** |
| **MMRI** | **Maumere** | **5.92** | **93** | P | **Pn** | **20 42 55.9** | **+0.9** |
| **MMRI** | **Maumere** | **5.92** | **93** | Pn | **Pn** | **20 42 57.2** | **+2.2** |
| **MMRI** | **Maumere** | **5.92** | **93** | P | **Pb** | **20 43 12.6** | **+2.1** |
| **BBSI** | **Bau Bau** | **6.87** | **66** | P | **Pn** | **20 43 09.2** | **+1.1** |
| **MTKI** | **Muara Teweh, K** | **7.46** | **349** | P | **Pn** | **20 43 14.5** | **-1.8** |
| | 54nm,0.8s,2μm0.5nm | | | | | | |
| **BATI** | **Baumata** | **7.54** | **105** | P | **Pn** | **20 43 18.1** | **+0.8** |
| **SOEI** | **Soe** | **8.03** | **101** | P | Pb | 20 43 41.0 | -5.6 |
| **BBJI** | **Bungbulang** | **8.58** | **275** | P | **Pn** | **20 43 35.1** | **+3.5** |
| **MBWA** | **Marble Bar** | **13.19** | **166** | P | **Pn** | **20 44 34.7** | **0.0** |
| **MBWA** | **Marble Bar** | **13.19** | **166** | Pn | **Pn** | **20 44 33.4** | **-1.3** |
| **FITZ** | **Fitzroy Crossi** | **13.32** | **138** | P | **Pn** | **20 44 36.5** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **13.32** | **138** | Pn | **Pn** | **20 44 35.3** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.61** | **166** | P | **Pn** | **20 44 40.8** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **13.61** | **166** | Pn | **Pn** | **20 44 39.8** | **-0.7** |
| **KNRA** | **Kununurra** | **14.23** | **122** | Pn | **Pn** | **20 44 48.4** | **-0.7** |
| **GIRL** | **Giralia** | **14.37** | **188** | P | **Pn** | **20 44 51.4** | **+0.6** |
| **GIRL** | **Giralia** | **14.37** | **188** | Pn | **Pn** | **20 44 49.5** | **-1.4** |
| **MTN** | **Manton Dam** | **15.29** | **108** | P | **Pn** | **20 45 03.1** | **-0.2** |
| **MTN** | **Manton Dam** | **15.29** | **108** | Pn | **Pn** | **20 45 01.4** | **-1.9** |
| **KDU** | **Kakadu** | **16.51** | **107** | P | **Pn** | **20 45 18.2** | **-0.9** |
| **FAKI** | **Fak Fak** | **16.79** | **72** | P | **Pn** | **20 45 23.1** | **+0.5** |
| **BKNI** | **Bangkinang** | **17.44** | **299** | P | **P** | **20 45 33.6** | **+1.5** |
| **DAV** | **Davao City (W)** | **17.89** | **32** | LR | LR | 20 53 55.2 | |
| | comp=Z,283nm,20.1s,baz=210,slow=42 | | | | | | |
| **MEEK** | **Meekatharra** | **18.35** | **173** | P | **Pn** | **20 45 42.8** | **+0.8** |
| **WRKA** | **Warakurna** | **20.20** | **147** | P | **P** | **20 46 03.9** | **+1.6** |
| **MORW** | **Morawa** | **20.63** | **181** | P | Pn | 20 46 09.4 | +0.1 |
| **WB0** | **Warramunga Arr** | **20.91** | **125** | P | **P** | **20 46 10.1** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 20 46 11.2 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **GSI** | **Gunungsitoli** | **20.95** | **296** | | **P** | **20 46 10.0** | **-0.5** |
| GSI | | | | IAmb | IAmb | 20 46 21.8 | |
| | comp=Z,35nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.96** | **125** | P | **P** | **20 46 10.0** | **-0.7** |
| **WRA** | **Warramunga Arr** | **20.96** | **125** | P | **P** | **20 46 10.8** | **+0.1** |
| | comp=Z,17nm,0.6s,baz=300,slow=12,SNR=153 | | | | | | |
| WRA | | | | S | **S** | **20 50 01.4** | **-3.0** |
| | comp=Z,1.2nm,0.8s,baz=292,slow=23,SNR=2.9 | | | | | | |
| WRA | | | | LR | LR | 20 54 12.6 | |
| | comp=Z,240nm,19.1s,baz=8.5,slow=36 | | | | | | |
| | comp=Z,17nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.96** | **125** | P | **P** | **20 46 10.5** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 20 46 12.3 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.97** | **125** | P | **P** | **20 46 10.8** | **0.0** |
| WB2 | | | | IAmb | IAmb | 20 46 11.9 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.13** | **125** | P | **P** | **20 46 12.5** | **0.0** |
| **BLDU** | **Ballidu** | **22.18** | **179** | P | **P** | **20 46 24.6** | **+1.0** |
| **AS31** | **Alice Springs** | **22.76** | **134** | P | **P** | **20 46 29.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.76** | **134** | P | **P** | **20 46 29.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.76** | **134** | P | **P** | **20 46 30.2** | **+0.2** |
| | comp=Z,9.5nm,0.6s,baz=309,slow=8.8,SNR=85 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 50 20.8** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=305,slow=1.7,SNR=2.3 | | | | | | |
| ASAR | | | | S | **S** | **20 50 38.7** | **-0.4** |
| | comp=Z,1.1nm,0.9s,baz=313,slow=22,SNR=2.2 | | | | | | |
| ASAR | | | | LR | LR | 20 55 10.5 | |
| | comp=Z,89nm,20.5s,baz=295,slow=36 | | | | | | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **22.79** | **134** | P | **P** | **20 46 30.8** | **+0.5** |
| **KLBR** | **Kellerberrin** | **23.19** | **177** | P | **P** | **20 46 35.3** | **+1.0** |
| **KMBL** | **Kambalda** | **23.51** | **168** | P | **P** | **20 46 39.3** | **+1.8** |
| **MUN** | **Mundaring** | **23.53** | **180** | P | **P** | **20 46 39.5** | **+1.8** |
| **NWAO** | **Narrogin (SRO)** | **24.50** | **178** | P | **P** | **20 46 47.2** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **24.50** | **178** | P | **P** | **20 46 47.4** | **+0.7** |
| **NWAO** | **Narrogin (SRO)** | **24.50** | **178** | LR | LR | 20 55 26.0 | |
| | comp=Z,192nm,21.2s,baz=343,slow=34 | | | | | | |
| **FORT** | **Forrest** | **24.91** | **155** | P | **P** | **20 46 51.5** | **+1.0** |
| **FORT** | **Forrest** | **24.91** | **155** | P | **P** | **20 46 50.3** | **-0.2** |
| **QIS** | **Mount Isa** | **25.62** | **121** | P | **P** | **20 46 59.2** | **+2.1** |
| **OOD** | **Oodnadatta** | **26.68** | **139** | P | **P** | **20 47 06.9** | **+0.3** |
| **COEN** | **Coen** | **26.98** | **104** | P | **P** | **20 47 10.1** | **+0.7** |
| **COEN** | **Coen** | **26.98** | **104** | P | **P** | **20 47 09.8** | **+0.3** |
| **MULG** | **Mulgathing** | **27.47** | **145** | P | **P** | **20 47 14.4** | **+0.7** |
| **QIZ** | **Qiongzhong** | **27.91** | **347** | P | **P** | **20 47 18.4** | **+0.7** |
| QIZ | | | | S | **S** | **20 52 02.3** | **+0.7** |
| QIZ | | | | LR | LR | | |
| | comp=Z,220nm,15.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,140nm,13.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,210nm,16.3s | | | | | | |
| **LCRK** | **Leigh Creek** | **30.10** | **140** | P | **P** | **20 47 37.5** | **+0.4** |
| **INKA** | **Innaminka** | **30.13** | **133** | P | **P** | **20 47 39.6** | **+2.2** |
| **CTA** | **Charters Tower** | **31.27** | **115** | LR | LR | 21 02 42.7 | |
| | comp=Z,23nm,18.2s,baz=270,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.63** | **327** | P | **P** | **20 47 50.2** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **31.63** | **327** | P | **P** | **20 47 49.3** | **-1.4** |
| | comp=Z,1.5nm,1.0s,baz=144,slow=9.1,SNR=2.8 | | | | | | |
| CMAR | | | | LR | LR | 21 02 20.9 | |
| | comp=Z,168nm,19.8s,baz=150,slow=40 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **HTT** | **Hallett** | **32.59** | **143** | P | **P** | **20 48 00.3** | **+1.2** |
| **STKA** | **Stephens Creek** | **33.22** | **138** | P | **P** | **20 48 05.5** | **+1.0** |
| **STKA** | **Stephens Creek** | **33.22** | **138** | P | **P** | **20 48 04.8** | **+0.3** |
| **STKA** | **Stephens Creek** | **33.22** | **138** | P | **P** | **20 48 05.5** | **+1.0** |
| | comp=Z,2.2nm,0.4s,baz=309,slow=7.9,SNR=7.9 | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **KMI** | **Kunming** | **35.77** | **339** | ⇑P | P | 20 48 31.5 | +4.6 |
| KMI | | | | S | **S** | **20 54 07.9** | **+3.5** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,210nm,13.1s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,110nm,22.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,200nm,13.3s | | | | | | |
| **GUMO** | **Guam** | **35.79** | **53** | P | **P** | **20 48 28.9** | **+2.0** |
| **GYA** | **Guiyang** | **35.81** | **345** | P | P | 20 48 32.7 | +5.5 |
| GYA | | | | S | **S** | **20 54 10.8** | **+5.9** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,79nm,5.0s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,240nm,18.4s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,170nm,18.2s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,320nm,17.2s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.82** | **134** | P | **P** | **20 48 29.5** | **+2.4** |
| **ARPS** | **Mount Arapiles** | **36.63** | **144** | P | **P** | **20 48 35.5** | **+1.6** |
| **JOW** | **Kunigami** | **36.84** | **18** | LR | LR | 21 04 53.9 | |
| | comp=Z,74nm,21.3s,baz=219,slow=38 | | | | | | |
| **PZH** | **PanZhiHua** | **37.38** | **338** | P | **P** | **20 48 41.5** | **+0.9** |
| PZH | | | | S | **S** | **20 54 30.1** | **+1.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.8s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,150nm,17.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,190nm,16.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,140nm,16.2s | | | | | | |
| **PALK** | **Pallekele** | **38.69** | **293** | LR | LR | 21 06 05.3 | |
| | comp=Z,120nm,19.8s,baz=220,slow=38 | | | | | | |
| **TOO** | **Toolangi** | **39.32** | **142** | P | **P** | **20 48 56.8** | **+0.1** |
| TOO | | | | IAmb | IAmb | 20 49 30.1 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **NJ2** | **Nanjing** | **40.23** | **3** | *e*P | **P** | **20 49 06.3** | **+2.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **CD2** | **Chengdu** | **40.82** | **343** | P | **P** | **20 49 11.3** | **+2.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,190nm,12.1s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,160nm,14.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,170nm,13.3s | | | | | | |
| **HNR** | **Honiara** | **43.15** | **95** | LR | LR | 21 10 00.0 | |
| | comp=Z,992nm,19.2s,baz=235,slow=40 | | | | | | |
| **JNU** | **Nakatsue** | **43.50** | **18** | LR | LR | 21 10 24.9 | |
| | comp=Z,45nm,20.0s,baz=176,slow=40 | | | | | | |
| **TIA** | **Tai'an** | **44.31** | **1** | P | **P** | **20 49 40.9** | **+3.5** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **HNS** | **HongShan** | **45.51** | **358** | *e*P | **P** | **20 49 45.5** | **-1.4** |
| HNS | | | | S | **S** | **20 56 34.7** | **+5.8** |
| HNS | | | | LR | LR | | |
| | comp=Z,160nm,16.7s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,160nm,17.5s | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.81** | **13** | P | **P** | **20 49 56.0** | **-1.2** |
| **KSRS** | **Korea Array** | **46.83** | **13** | P | **P** | **20 49 55.4** | **-2.0** |
| | comp=Z,1.6nm,0.8s,baz=193,slow=8.2,SNR=3.5 | | | | | | |
| KSRS | | | | LR | LR | 21 11 55.0 | |
| | comp=Z,46nm,20.7s,baz=195,slow=39 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **46.90** | **27** | LR | LR | 21 07 01.7 | |
| | comp=Z,52nm,22.0s,baz=57,slow=33 | | | | | | |
| **GOMU** | **GeErMu** | **48.67** | **337** | P | **P** | **20 50 12.7** | **+0.6** |
| GOMU | | | | S | **S** | **20 57 15.8** | **+1.0** |
| GOMU | | | | LR | LR | | |
| | comp=Z,260nm,14.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,180nm,15.7s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,380nm,19.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.12** | **355** | *e*P | **P** | **20 50 18.2** | **+3.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,96nm,5.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.16** | **23** | P | **P** | **20 50 14.3** | **-1.2** |
| | comp=Z,3.0nm,0.6s,baz=204,slow=7.6,SNR=5.4 | | | | | | |
| MJAR | | | | LR | LR | 21 13 04.4 | |
| | comp=Z,53nm,18.1s,baz=186,slow=39 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **GTA** | **Gaotai** | **49.89** | **343** | *e*P | **P** | **20 50 22.6** | **+1.5** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,90nm,17.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,120nm,16.4s | | | | | | |
| GTA | | | | LR | LR | | |
| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **81.66** | **180** | P | **P** | **20 53 45.2** | **-0.5** |
| QSPA | | | | IAmb | IAmb | 20 53 54.7 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.66** | **180** | P | **P** | **20 53 45.7** | **0.0** |
| QSPA | comp=Z,2.1nm,0.7s,baz=326,slow=1.3,SNR=12 | | | LR | LR | 21 28 37.9 | |
| | comp=Z,49nm,19.1s,baz=19,slow=35 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **BELG** | **Belogornoye** | **83.85** | **325** | LR | LR | 21 35 56.4 | |
| | comp=Z,36nm,19.2s,baz=112,slow=39 | | | | | | |
| **KIRV** | **Kirov** | **85.34** | **331** | LR | LR | 21 37 11.3 | |
| | comp=Z,70nm,20.0s,baz=132,slow=39 | | | | | | |
| **MBAR** | **Mbarara** | **85.49** | **270** | LR | LR | 21 28 41.3 | |
| | comp=Z,48nm,18.8s,baz=108,slow=33 | | | | | | |
| **EIL** | **Elat** | **86.61** | **300** | LR | LR | 21 35 22.7 | |
| | comp=Z,40nm,19.9s,baz=68,slow=37 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **86.90** | **304** | LR | LR | 21 37 53.7 | |
| | comp=Z,57nm,19.1s,baz=60,slow=39 | | | | | | |
| **BOSA** | **Boshof** | **86.95** | **242** | P | **P** | **20 54 12.8** | **-0.5** |
| **BOSA** | **Boshof** | **86.95** | **242** | P | **P** | **20 54 12.2** | **-1.1** |
| | comp=Z,2.0nm,0.8s,baz=147,slow=5.4,SNR=6.0 | | | | | | |
| BOSA | | | | LR | LR | 21 28 30.7 | |
| | comp=Z,40nm,19.2s,baz=119,slow=32 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **87.13** | **245** | LR | LR | 21 26 00.5 | |
| | comp=Z,45nm,21.8s,baz=126,slow=31 | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.26** | **197** | ⇑P | **P** | **20 54 24.0** | **+0.6** |
| | comp=Z,53nm,0.5s | | | | | | |
| **SUR** | **Sutherland** | **90.17** | **237** | LR | LR | 21 29 03.1 | |
| | comp=Z,40nm,21.4s,baz=130,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **90.90** | **196** | ⇑P | **P** | **20 54 31.1** | **+0.1** |
| | comp=Z,21nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.90** | **196** | P | **P** | **20 54 30.1** | **-0.9** |
| | comp=Z,0.8nm,0.4s,baz=198,slow=8.0,SNR=8.5 | | | | | | |
| SNAA | | | | LR | LR | 21 28 53.4 | |
| | comp=Z,77nm,21.9s,baz=50,slow=31 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **PPT2** | **Papeete2** | **91.44** | **108** | *e*LR | LR | 21 23 49.7 | |
| | comp=Z,37nm,21.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 21 24 00.3 | |
| | comp=Z,94nm,25.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **94.51** | **320** | LR | LR | 21 43 12.4 | |
| | comp=Z,24nm,21.6s,baz=64,slow=39 | | | | | | |
| **TSUM** | **Tsumeb** | **95.40** | **250** | LR | LR | 21 33 01.0 | |
| | comp=Z,31nm,18.3s,baz=108,slow=32 | | | | | | |
| **FINES** | **FINESS Array B** | **97.34** | **331** | LR | LR | 21 46 37.3 | |
| | comp=Z,38nm,18.5s,baz=88,slow=40 | | | | | | |
| **KDAK** | **Kodiak Island** | **97.59** | **33** | LR | LR | 21 37 30.7 | |
| | comp=Z,20nm,21.1s,baz=251,slow=34 | | | | | | |
| **ARCES** | **ARCESS Array B** | **98.01** | **339** | LR | LR | 21 47 12.6 | |
| | comp=Z,52nm,18.4s,baz=70,slow=40 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.68** | **281** | PKP | **PKPdf** | **21 00 08.0** | **-2.9** |
| | comp=Z,0.3nm,0.5s,baz=49,slow=2.2,SNR=5.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.66** | **49** | PKP | **PKPdf** | **21 00 21.3** | **-2.7** |
| | comp=Z,0.4nm,0.7s,baz=248,slow=2.9,SNR=2.3 | | | | | | |
| **CPUP** | **Villa Florida** | **144.99** | **190** | PKPbc | **PKPbc** | **21 01 03.7** | **-1.1** |
| | comp=Z,1.8nm,0.4s,baz=220,slow=1.4,SNR=12 | | | | | | |
| **BDFB** | **Brasilia** | **151.54** | **213** | PKPbc | **PKPbc** | **21 01 21.9** | **-1.1** |
| | comp=Z,1.1nm,0.5s,baz=142,slow=3.2,SNR=4.9 | | | | | | |
| **LPAZ** | **La Paz** | **155.16** | **170** | PKPab | **PKPab** | **21 01 47.6** | **+0.7** |
| | comp=Z,3.5nm,0.5s,baz=154,slow=2.2,SNR=22 | | | | | | |

*IDC **05** 20:49:03.8±1.1,8.°19S×116.°37E, h0km, mb3.6/6, mbtmp3.7/7, ML3.9/1, Error ellipse: s-maj=25.0km s-min=19.9km az=81.0*
*DJA **05** 20:49:06.1±1.1,8.°5S×9.°1W±.°, h22km±12km, M3.9/6, MLv3.9/6*
**ISC 05 20:49:04.9**±0.7,**8.°12S**±0.°07×**116.°24E**±0.°04,**h10**km,**n14,**
σ1§**06**/18,**mb3.7/6,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.88** | **134** | P | **Pg** | **20 49 21.7** | **-0.2** |
| TWSI | | | | S | **Sb** | **20 49 34.4** | **+0.2** |
| **SRBI** | **Singaraja** | **1.02** | **272** | P | **Pg** | **20 49 24.0** | **-0.5** |
| SRBI | | | | S | **Sb** | **20 49 39.0** | **+0.9** |
| **DNP** | **Denpasar** | **1.16** | **241** | P | **Pb** | **20 49 27.2** | **+0.2** |
| **PLAI** | **Plampang** | **1.67** | **115** | P | **Pn** | **20 49 34.7** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **260** | P | **Pn** | **20 49 39.1** | **-1.0** |
| JAGI | | | | S | **Sn** | **20 50 04.8** | **-1.5** |
| **GRJI** | **Gresik** | **3.92** | **288** | P | **Pn** | **20 50 04.8** | **-0.3** |
| **PWJI** | **Pagerwojo** | **4.39** | **271** | P | **Pn** | **20 50 11.4** | **-0.3** |
| **KAPI** | **Kappang** | **4.66** | **49** | Pn | **Pn** | **20 50 14.0** | **-1.3** |
| | 5.6nm,0.3s,baz=204,slow=14,SNR=2.1 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 51 08.2** | **-1.3** |
| | baz=187,slow=23 | | | | | | |
| KAPI | | | | Lg | Lg | 20 51 30.9 | |
| | 6.6nm,0.3s,baz=253,slow=19,SNR=6.4 | | | | | | |
| | 11nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.10** | **126** | P | **P** | **20 53 49.0** | **-0.9** |
| | 2.5nm,0.5s,baz=300,slow=12,SNR=33 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.92** | **134** | P | **P** | **20 54 08.4** | **-0.9** |
| | 1.2nm,0.5s,baz=308,slow=8.6,SNR=20 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **56.39** | **352** | P | **P** | **20 58 47.9** | **+1.4** |
| | 0.5nm,0.5s,baz=165,slow=5.5,SNR=3.9 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.46** | **334** | P | **P** | **20 59 29.0** | **+0.5** |
| | 0.1nm,0.5s,baz=142,slow=7.2,SNR=1.9 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.28** | **340** | P | **P** | **21 00 01.8** | **+2.2** |
| | 0.4nm,0.4s,baz=145,slow=6.7,SNR=1.8 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **73.28** | **171** | P | **P** | **21 00 35.6** | **-0.4** |
| | 0.2nm,0.6s,baz=275,slow=6.2,SNR=2.2 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **05** 20:58:10.3±1.0,6.°56S×130.°76E, h0km, mb3.8/5, mbtmp3.9/7, ML4.2/2, Error ellipse: s-maj=96.1km s-min=19.2km az=64.0*
*DJA **05** 20:58:24.7±0.6,7.°5±4.°×13.°0E±.°, h153km±23km, M4.5/7, mB4.6/1, mb4.4/6, MLv4.6/7, Mw(mB)3.8/1*
**ISC 05 20:58:25.6**±0.7,**7.°15S**±0.°07×**129.°86E**±0.°09,**h150**km,**n24,**
σ2§**46**/25,**mb3.5/5,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.65** | **120** | P | **Pn** | **20 58 57.8** | **+1.1** |
| **SAUI** | **Saumlaki** | **1.65** | **120** | P | **Pn** | **20 58 57.4** | **+0.7** |
| **FAKI** | **Fak Fak** | **4.83** | **30** | P | **Pn** | **20 59 35.0** | **-1.8** |
| **FAKI** | **Fak Fak** | **4.83** | **30** | P | **Pn** | **20 59 35.0** | **-1.8** |
| **DRS** | **Darwin Rock St** | **5.34** | **169** | P | **Pn** | **20 59 44.9** | **+1.3** |
| **MTN** | **Manton Dam** | **5.79** | **168** | P | **Pn** | **20 59 50.7** | **+1.2** |
| **KDU** | **Kakadu** | **6.07** | **155** | P | **Pn** | **20 59 54.3** | **+1.1** |
| **SOEI** | **Soe** | **6.11** | **245** | P | **Pn** | **20 59 52.7** | **-1.1** |
| **SOEI** | **Soe** | **6.11** | **245** | P | **Pn** | **20 59 51.8** | **-2.0** |
| | 60nm,1.2s,0.5nm | | | | | | |
| **SWI** | **Sorong** | **6.40** | **13** | P | **Pn** | **20 59 55.2** | **-2.5** |
| | 29nm,0.7s,668nm0.2nm | | | | | | |
| **BATI** | **Baumata** | **6.84** | **243** | P | **Pn** | **21 00 01.8** | **-1.7** |
| **BBSI** | **Bau Bau** | **7.43** | **282** | P | **Pn** | **21 00 10.1** | **-1.3** |
| **WRA** | **Warramunga Arr** | **13.44** | **162** | Pn | **Pn** | **21 01 28.7** | **-1.7** |
| | 1.2nm,0.3s,baz=350,slow=14,SNR=44 | | | | | | |
| WRA | | | | Sn | Sn | 21 03 49.2 | -10 |
| | 2.9nm,0.3s,baz=331,slow=23,SNR=8.2 | | | | | | |
| | 2.2nm,0.3s | | | | | | |
| **COEN** | **Coen** | **14.73** | **118** | P | **P** | **21 01 49.2** | **+0.3** |
| **QIS** | **Mount Isa** | **16.33** | **146** | P | **P** | **21 02 09.6** | **+3.0** |
| **ASAR** | **Alice Springs** | **16.87** | **167** | P | **Pn** | **21 02 15.0** | **+2.0** |
| | 0.6nm,0.3s,baz=351,slow=13,SNR=30 | | | | | | |
| ASAR | | | | S | **S** | **21 05 14.5** | **-6.2** |
| | 6.1nm,0.8s,baz=343,slow=23,SNR=14 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.30** | **213** | P | **Pn** | **21 02 19.2** | **+1.1** |
| **WRKA** | **Warakurna** | **17.85** | **185** | P | **Pn** | **21 02 26.2** | **+1.5** |
| **CTA** | **Charters Tower** | **20.45** | **131** | P | **P** | **21 02 46.6** | **-4.8** |
| | 0.2nm,0.8s,baz=338,slow=18,SNR=2.1 | | | | | | |
| **STKA** | **Stephens Creek** | **26.93** | **158** | P | **P** | **21 03 53.8** | **+0.9** |
| | 3.1nm,1.0s,baz=0.0,slow=11,SNR=1.3 | | | | | | |
| | 3.1nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **58.54** | **342** | P | **P** | **21 08 08.6** | **+2.2** |
| | 0.4nm,0.6s,baz=164,slow=6.0,SNR=1.8 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.28** | **327** | P | **P** | **21 09 13.3** | **+3.0** |
| | 1.0nm,0.5s,baz=118,slow=6.9,SNR=20 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.66** | **334** | P | **P** | **21 09 32.3** | **+1.6** |
| | 0.3nm,0.4s,baz=138,slow=4.8,SNR=1.9 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.57** | **329** | P | **P** | **21 09 38.4** | **+2.2** |
| | 0.3nm,0.5s,baz=128,slow=4.8,SNR=6.0 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*IDC **05** 21:11:15.8±1.5,4.°30N×82.°62W, h0km, mb3.4/3, mbtmp3.8/5, ML2.6/1, MS3.1/13, Error ellipse: s-maj=56.4km s-min=21.9km az=52.0*
*NEIC **05** 21:11:16.1±1.6,4.°30N±0.°09×82.°6W±0.°1, h10km±2km, mb4.3/5, Error ellipse: s-maj=23.9km s-min=3.0km az=230.0*
*RSNC **05** 21:11:16.5±0.4,4.°N±3.°×8.°3W±.°, h0km, M4.0, mb4.5, mB4.7, ML3.3, Mw(mB)4.0*
*UCR **05** 21:11:24.0±1.1,4.°79N×82.°74W, h35km±999km, MW3.6*
**ISC 05 21:11:15.8**±0.7,**4.°19N**±0.°05×**82.°67W**±0.°06,**h14**km,**n73,**
σ2§**29**/75,**mb3.7/3,MS3.1/7,South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AZU** | **Azuero** | **4.30** | **33** | P | **Pn** | **21 12 21.2** | **+0.4** |
| AZU | | | | S | **Sn** | **21 13 06.7** | **-4.1** |
| **AZU** | **Azuero** | **4.30** | **33** | *e*P | **Pn** | **21 12 21.2** | **+0.4** |
| AZU | | | | *e*S | **Sn** | **21 13 05.8** | **-4.9** |
| **BRU2** | **Volcan** | **4.58** | **360** | P | **Pn** | **21 12 23.4** | **-1.3** |
| **BRU2** | **Volcan** | **4.58** | **360** | *e*P | **Pn** | **21 12 23.5** | **-1.3** |
| **TUMC** | **Tumaco** | **4.58** | **121** | P | **Pb** | **21 12 34.3** | **-1.7** |
| TUMC | | | | S | **Sn** | **21 13 17.2** | **-0.6** |
| **GR1C** | **Gorgona, Isla** | **4.64** | **105** | P | **Pn** | **21 12 25.7** | **+0.2** |
| GR1C | | | | S | **Sn** | **21 13 15.6** | **-3.7** |
| **DRK0** | **Durika** | **5.07** | **354** | *e*P | **Pn** | **21 12 29.9** | **-1.7** |
| **MALC** | **Bahia Malaga** | **5.32** | **92** | P | **Pn** | **21 12 37.5** | **+2.6** |
| MALC | | | | S | **Sn** | **21 13 35.7** | **-0.3** |
| **PIZC** | **Pizarro, Choco** | **5.34** | **82** | P | **Pn** | **21 12 37.1** | **+1.9** |
| | 239nm,0.9s | | | | | | |
| **PAC1** | **Pacto, Paraso** | **5.49** | **135** | P | **Pn** | **21 12 37.4** | **0.0** |
| PAC1 | | | | S | **Sn** | **21 13 37.8** | **-2.7** |
| **ABE2** | **San Pablo** | **5.65** | **346** | *e*P | **Pn** | **21 12 38.3** | **-1.3** |
| **LCR2** | **La Lucha 2** | **5.67** | **347** | P | **Pn** | **21 12 38.5** | **-1.4** |
| **LCR2** | **La Lucha 2** | **5.67** | **347** | *e*P | **Pn** | **21 12 38.3** | **-1.6** |
| **BCIP** | **Isla Barro Col** | **5.69** | **29** | Pn | **Pn** | **21 12 39.0** | **-0.9** |
| **OTAV** | **Otavalo** | **5.76** | **133** | P | **Pn** | **21 12 41.8** | **+0.5** |
| **OTAV** | **Otavalo** | **5.76** | **133** | P | **Pn** | **21 12 42.1** | **+0.8** |
| | 7.7nm,0.6s | | | | | | |
| OTAV | | | | S | **Sn** | **21 13 42.8** | **-4.6** |
| | 7.7nm,0.6s | | | | | | |
| **BBAC** | **Balboa, Cauca** | **5.82** | **112** | P | **Pn** | **21 12 43.5** | **+1.5** |
| BBAC | | | | S | **Sn** | **21 13 47.4** | **-1.3** |
| **RAFA** | **San Farael, Vo** | **5.84** | **349** | *e*P | **Pn** | **21 12 41.5** | **-0.9** |
| **VTCV** | **VTCV, Calle Va** | **5.85** | **350** | *e*P | **Pn** | **21 12 41.5** | **-0.9** |
| **PULU** | **Pululahua** | **5.87** | **135** | | **Pn** | **21 12 44.2** | **+1.4** |
| **VICA** | **Volcano Irazu** | **5.88** | **349** | *e*P | **Pn** | **21 12 38.8** | **-4.1** |
| **VTLA** | **Turrialba Volc** | **5.88** | **349** | *e*P | **Pn** | **21 12 42.9** | **0.0** |
| **IMBA** | **Imbabura, San** | **5.92** | **131** | Pn | **Pn** | **21 12 44.3** | **+0.8** |
| **HDC** | **Heredia** | **5.95** | **346** | | **Pn** | **21 12 41.8** | **-1.8** |
| **PPLP** | **Puerto Lopez** | **6.00** | **162** | P | **Pn** | **21 12 44.4** | **+0.1** |
| | 12nm,0.6s,319nm | | | | | | |
| PPLP | | | | S | **Sn** | **21 13 51.0** | **-1.9** |
| | 12nm,0.6s,319nm | | | | | | |
| **JAMC** | **Jamundi, Valle** | **6.06** | **99** | P | **Pn** | **21 12 46.7** | **+1.5** |
| | 17nm,0.7s,670nm | | | | | | |
| JAMC | | | | S | **Sn** | **21 13 49.6** | **-4.9** |
| | 17nm,0.7s,670nm | | | | | | |
| **GCUF** | **Volcan Galeras** | **6.08** | **119** | P | **Pn** | **21 12 48.7** | **+3.0** |
| GCUF | | | | S | **Sn** | **21 13 52.2** | **-3.1** |
| **POPC** | **Popayan, Colom** | **6.20** | **105** | P | **Pn** | **21 12 50.2** | **+3.0** |
| | 9.4nm,0.5s | | | | | | |
| POPC | | | | S | **Sn** | **21 14 00.7** | **+2.7** |
| | 9.4nm,0.5s | | | | | | |
| **CRUC** | **La Cruz** | **6.27** | **114** | P | **Pn** | **21 12 52.0** | **+3.7** |
| CRUC | | | | S | **Sn** | **21 14 01.1** | **+1.1** |
| **YOTC** | **Yotoco, Valle** | **6.31** | **92** | P | **Pn** | **21 12 50.1** | **+1.5** |
| | 14nm,0.5s,462nm | | | | | | |
| YOTC | | | | S | **Sn** | **21 14 00.2** | **-0.4** |
| | 14nm,0.5s,462nm | | | | | | |
| **PLMC** | **San Jos del P** | **6.40** | **83** | P | **Pn** | **21 12 51.4** | **+1.6** |
| | 140nm,0.6s,6μm | | | | | | |
| PLMC | | | | S | **Sn** | **21 14 02.0** | **-0.8** |
| | 140nm,0.6s,6μm | | | | | | |
| **SLOR** | **San Lorenzo -** | **6.42** | **139** | | **Pn** | **21 12 52.7** | **+2.3** |
| **ANTS** | **Antisana-Sarah** | **6.47** | **136** | | **Pn** | **21 12 50.3** | **-0.9** |
| **JTS** | **Las Juntas de** | **6.47** | **340** | | **Pn** | **21 12 49.3** | **-1.4** |
| **JTS** | **Las Juntas de** | **6.47** | **340** | Pn | **Pn** | **21 12 49.1** | **-1.6** |
| | 32nm,0.4s,baz=85,slow=6.9,SNR=48 | | | | | | |
| JTS | | | | Sn | **Sn** | **21 14 03.1** | **-1.4** |
| | 0.8nm,0.3s,baz=24,slow=20,SNR=1.5 | | | | | | |
| **JTS** | **Las Juntas de** | **6.47** | **340** | P | **Pn** | **21 12 50.1** | **-0.6** |
| JTS | | | | S | **Sn** | **21 14 01.1** | **-3.4** |
| **JTS** | **Las Juntas de** | **6.47** | **340** | *e*P | **Pn** | **21 12 49.4** | **-1.3** |
| **CUI** | **Cuipilapa** | **6.89** | **339** | *e*P | **Pn** | **21 12 56.3** | **-0.2** |
| **ANIL** | **Santa Ana** | **7.25** | **87** | P | **Pn** | **21 13 06.1** | **+4.5** |
| **ORTC** | **Ortega, Tolima** | **7.41** | **92** | P | **Pn** | **21 13 07.9** | **+4.3** |
| ORTC | | | | S | **Sn** | **21 14 28.9** | **+1.4** |
| **NORC** | **Norcasia** | **7.89** | **80** | P | **Pn** | **21 13 14.7** | **+4.5** |
| **ACON** | **Acoyapa** | **8.12** | **342** | Pn | **Pn** | **21 13 12.2** | **-1.1** |
| **ESPN** | **Las Esperanzas** | **8.12** | **349** | Pn | **Pn** | **21 13 12.9** | **-0.4** |
| **ROSC** | **El Rosal** | **8.35** | **85** | Pn | **Pn** | **21 13 19.2** | **+2.4** |
| | 1.7nm,0.3s,baz=293,slow=18,SNR=2.1 | | | | | | |
| | 5.4nm,0.4s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **8.50** | **74** | P | **Pn** | **21 13 22.9** | **+4.3** |
| **MCRA** | **Macar, Loja** | **8.92** | **162** | P | **Pn** | **21 13 25.9** | **+1.5** |
| **SJCC** | **San Jacinto, C** | **9.35** | **52** | S | **Pn** | **21 13 34.2** | **+4.0** |
| **BARC** | **Barichara** | **9.74** | **75** | S | Pn | 21 13 40.7 | +4.9 |
| **ATAH** | **Atahualpa** | **12.03** | **159** | LR | LR | 21 18 34.0 | |
| | comp=Z,249nm,19.5s,baz=339,slow=36 | | | | | | |
| **SDV** | **Santo Domingo** | **12.83** | **68** | LR | LR | 21 19 12.0 | |
| | comp=Z,77nm,19.3s,baz=253,slow=37 | | | | | | |
| **APG** | **El Apazote** | **13.21** | **325** | LR | LR | 21 18 36.0 | |
| | comp=Z,12nm,21.6s,baz=109,slow=34 | | | | | | |
| **BAUV** | **El Baul** | **15.27** | **71** | | **Pn** | **21 14 49.9** | **-1.2** |
| AOPR | | | | IAmb | IAmb | 21 14 53.8 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **TEIG** | **Tepich** | **16.85** | **342** | LR | LR | 21 20 50.5 | |
| | comp=Z,48nm,20.8s,baz=29,slow=34 | | | | | | |
| **NNA** | **Nana** | **17.08** | **160** | LR | LR | 21 21 26.3 | |
| | comp=Z,43nm,19.0s,baz=318,slow=36 | | | | | | |
| **CMIG** | **Matias Romero** | **17.55** | **318** | LR | LR | 21 20 49.2 | |
| | comp=Z,79nm,19.3s,baz=188,slow=33 | | | | | | |
| **AOPR** | **Arecibo Observ** | **20.98** | **47** | P | **P** | **21 15 57.7** | **-1.1** |
| AOPR | | | | IAmb | IAmb | 21 16 02.5 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **ETMB** | **Extrema** | **21.50** | **130** | P | **P** | **21 16 05.3** | **+0.9** |
| **LPAZ** | **La Paz** | **24.91** | **145** | P | **P** | **21 16 41.2** | **+1.9** |
| LPAZ | | | | IAmb | IAmb | 21 16 55.9 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| **LPAZ** | **La Paz** | **24.91** | **145** | P | **P** | **21 16 41.0** | **+1.7** |
| | comp=Z,1.1nm,0.7s,baz=342,slow=13,SNR=5.0 | | | | | | |
| LPAZ | | | | LR | LR | 21 27 42.9 | |
| | comp=Z,54nm,19.4s,baz=322,slow=40 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **553A** | **Crawfordville** | **25.91** | **356** | P | **P** | **21 16 48.6** | **+1.1** |
| **SIV** | **San Ignacio** | **29.30** | **134** | LR | LR | 21 29 18.8 | |
| | comp=Z,91nm,19.5s,baz=17,slow=37 | | | | | | |
| **LVC** | **Limon Verde** | **29.84** | **154** | LR | LR | 21 27 53.1 | |
| | comp=Z,31nm,19.2s,baz=304,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **31.96** | **324** | P | **P** | **21 17 43.9** | **+2.3** |
| | comp=Z,0.2nm,0.7s,baz=148,slow=8.6,SNR=4.1 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **LPIG** | **La Paz** | **33.19** | **309** | LR | LR | 21 28 22.5 | |
| | comp=Z,31nm,19.1s,baz=226,slow=31 | | | | | | |
| **H03N2** | **Juan Fernandez** | **37.59** | **175** | T | T | 21 58 28.3 | |
| | baz=354,slow=76,SNR=18 | | | | | | |
| **H03N1** | **Juan Fernandez** | **37.59** | **175** | T | T | 21 58 28.0 | |
| | baz=354,slow=76,SNR=19 | | | | | | |
| **H03N3** | **Juan Fernandez** | **37.61** | **175** | T | T | 21 58 26.8 | |
| | baz=354,slow=76,SNR=25 | | | | | | |
| **ANMO** | **Albuquerque** | **37.71** | **327** | LR | LR | 21 34 30.4 | |
| | comp=Z,24nm,21.9s,baz=247,slow=37 | | | | | | |
| **BDFB** | **Brasilia** | **39.55** | **121** | LR | LR | 21 35 40.7 | |
| | comp=Z,53nm,19.2s,baz=45,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **47.04** | **321** | P | **P** | **21 19 49.3** | **+2.0** |
| | comp=Z,0.6nm,0.9s,baz=121,slow=8.3,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **51.71** | **322** | LR | LR | 21 42 44.8 | |
| | comp=Z,29nm,19.2s,baz=274,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **139.76** | **238** | PKP | **PKiKP** | **21 30 48.2** | **+1.4** |
| | comp=Z,0.2nm,0.7s,baz=100,slow=2.3,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **140.71** | **243** | PKP | **PKiKP** | **21 30 48.7** | **0.0** |
| | comp=Z,0.4nm,0.8s,baz=101,slow=2.2,SNR=2.4 | | | | | | |

*CRAAG **05** 21:17:25.3,35.°96N×6.°56E, Ml3.2, Algerie 09km SW Ain-M"lila*
*IDC **05** 21:17:25.1±1.9,35.°89N×6.°60E, h0km, mb3.2/2, mbtmp3.3/4, ML3.5/2, Error ellipse: s-maj=39.0km s-min=23.7km az=170.0*
**ISC 05 21:17:26.2**±0.8,**35.°93N**±0.°05×**6.°59E**±0.°05,**h9**km,**n13,**
σ0§**42**/15,**Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CASM** | **Ain Smara** | **0.34** | **346** | P | **Pg** | **21 17 32.8** | **-0.3** |
| **CTGD** | **Timgad** | **0.40** | **187** | P | **Pb** | **21 17 35.4** | **-0.1** |
| **COAT** | **Oued Athmania** | **0.40** | **321** | P | **Pg** | **21 17 33.9** | **-0.1** |
| **CJSR** | **Ain Djasser** | **0.53** | **263** | P | **Pg** | **21 17 36.7** | **+0.2** |
| **CBHR** | **Beni Haroun da** | **0.69** | **338** | P | **Pg** | **21 17 39.6** | **0.0** |
| **ABSA** | **Djebel Ababsia** | **0.80** | **64** | P | **Pb** | **21 17 42.3** | **0.0** |
| **CAEH** | **'Ain El Ouahch** | **0.88** | **14** | P | **Pb** | **21 17 43.6** | **-0.1** |
| CAEH | | | | P | **Pg** | **21 17 43.7** | **+0.5** |
| **CMAH** | **Djebel Manchou** | **0.97** | **44** | P | **Pb** | **21 17 45.2** | **0.0** |
| **SET** | **Setif** | **1.00** | **286** | P | **Pn** | **21 17 47.0** | **+0.4** |
| **KEST** | **Kesra** | **2.25** | **94** | Pn | **Pn** | **21 18 03.2** | **-0.4** |
| | 10nm,0.3s,baz=252,slow=3.3,SNR=129 | | | | | | |
| KEST | | | | Sn | **Sn** | **21 18 31.1** | **-0.5** |
| | 1.8nm,0.3s,baz=300,slow=14,SNR=4.3 | | | | | | |
| | 52nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **9.15** | **297** | Pn | **Pn** | **21 19 38.1** | **-0.3** |
| | 0.2nm,0.3s,baz=110,slow=13,SNR=18 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **21.67** | **72** | P | **P** | **21 22 18.2** | **+0.9** |
| | 0.7nm,0.8s,baz=250,slow=10,SNR=4.3 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **23.11** | **192** | P | **P** | **21 22 32.4** | **-0.1** |
| | 0.6nm,0.5s,baz=17,slow=11,SNR=7.8 | | | | | | |
| | 0.6nm,0.5s | | | | | | |

*IDC **05** 21:17:38.0±0.9,8.°23S×116.°27E, h0km, mb3.9/7, mbtmp4.0/8, ML3.9/1, MS3.0/2, Error ellipse: s-maj=24.6km s-min=17.0km az=93.0*
*DJA **05** 21:17:40.2±0.7,8.°5±6.°×11.°6E±.°, h11km±7km, M4.3/7, mb4.5/1, MLv4.1/7*
*NEIC **05** 21:17:40.9±1.3,8.°45S±0.°08×116.°16E±0.°05, h10km±1km, mb4.4/19, Error ellipse: s-maj=14.0km s-min=6.1km az=338.0*
**ISC 05 21:17:39.9**±0.4,**8.°28S**±0.°06×**116.°22E**±0.°03,**h10**km,**n63,**
σ1§**45**/64,**mb4.2**/14,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.80** | **125** | P | **Pb** | **21 17 56.5** | **+0.6** |
| **SRBI** | **Singaraja** | **1.02** | **281** | P | **Pg** | **21 17 59.3** | **-0.2** |
| SRBI | | | | S | **Sb** | **21 18 13.7** | **+0.7** |
| **DNP** | **Denpasar** | **1.07** | **249** | P | **Pn** | **21 18 01.2** | **+0.2** |
| **PLAI** | **Plampang** | **1.63** | **109** | P | **Pn** | **21 18 09.4** | **+0.7** |
| PLAI | | | | S | **Sn** | **21 18 31.4** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **265** | | **Pn** | **21 18 14.4** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **265** | P | **Pn** | **21 18 13.8** | **-0.7** |
| **PWJI** | **Pagerwojo** | **4.38** | **273** | P | **Pn** | **21 18 47.2** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.74** | **64** | P | **Pn** | **21 18 50.9** | **-0.6** |
| **KAPI** | **Kappang** | **4.78** | **47** | Pn | **Pn** | **21 18 55.6** | **+3.5** |
| **KAPI** | **Kappang** | **4.78** | **47** | Pn | **Pn** | **21 18 51.7** | **-0.4** |
| | 4.9nm,0.3s,baz=204,slow=20,SNR=6.6 | | | | | | |
| KAPI | | | | Pg | **Pg** | **21 19 12.4** | **+0.9** |
| | 4.0nm,0.3s,baz=218,slow=13,SNR=5.0 | | | | | | |
| KAPI | | | | Sn | **Sn** | **21 19 44.3** | **-3.3** |
| | 3.3nm,0.3s,baz=246,slow=20,SNR=6.1 | | | | | | |
| KAPI | | | | Lg | Lg | 21 20 07.2 | |
| | 3.8nm,0.3s,baz=252,slow=22,SNR=5.9 | | | | | | |
| KAPI | | | | LR | LR | 21 20 58.2 | |
| | comp=Z,117nm,18.6s,baz=236,slow=42 | | | | | | |
| | 14nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.46** | **45** | P | **Pn** | **21 19 00.8** | **-0.6** |
| **UGM** | **Wanagama** | **5.65** | **273** | P | **Pn** | **21 19 08.6** | **+4.5** |
| **UGM** | **Wanagama** | **5.65** | **273** | Pn | **Pn** | **21 19 05.2** | **+1.1** |
| **MBWA** | **Marble Bar** | **13.24** | **166** | P | **Pn** | **21 20 46.9** | **-1.2** |
| **MBWA** | **Marble Bar** | **13.24** | **166** | Pn | **Pn** | **21 20 46.4** | **-1.8** |
| **FITZ** | **Fitzroy Crossi** | **13.38** | **138** | Pn | **Pn** | **21 20 48.9** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **13.67** | **166** | P | **Pn** | **21 20 54.2** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **13.67** | **166** | Pn | **Pn

*$M_{rr}$6.45; $M_{\theta\theta}$-5.08; $M_{\phi\phi}$-1.37; $M_{r\theta}$5.44; $M_{r\phi}$-4.16; $M_{\theta r}$-1.76; Fault plane solution: $M_0$9.17000×$10^{14}$ NP1:$\phi_s$84.00000°, δ65.00000°, λ118.00000°. NP2:$\phi_s$213.00000°, δ37.00000°, λ45.00000°.*

*ASIES* ***05*** *21:30:22.7,24.6′60N×122.7′65E,h97km,ML4.7,Mw3.9, Moment Tensor Solution. Moment tensor: Scale $10^{22}$Nm; $M_{rr}$1.04; $M_{\theta\theta}$-0.57; $M_{\phi\phi}$0.07; $M_{r\theta}$0.27; $M_{r\phi}$-0.28; $M_{\theta r}$-0.10; Fault plane solution: $M_0$0.93100×$10^{22}$ NP1:$\phi_s$80.52000°, δ53.26000°, λ103.89000°. NP2:$\phi_s$238.06000°, δ38.93000°, λ72.17000°. Principal axes: T Plg76.6680°, Azm37.9390°; N Plg11.0930°, Azm252.1080°; P Plg7.3010°, Azm160.6680°;*

*TAP* ***05*** *21:30:22.7,24.6′60N×122.7′65E,h97km,ML4.7,B*

*NEIC* ***05*** *21:30:22.3±1.3,24.5′59N±0.6′06×122.6′67E±0.6′05,h97km±4km, mb4.1/47,Mwr3.9/16,Error ellipse: s-maj=9.1km s-min=6.8km az=184.0,Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.87; $M_{\theta\theta}$-0.75; $M_{\phi\phi}$-0.12; $M_{r\theta}$0.27; $M_{\theta\phi}$-0.53; $M_{\theta r}$-0.17; Fault plane solution: $M_0$1.02000×$10^{15}$ NP1:$\phi_s$221.96000°, δ43.63000°, λ61.91000°. NP2:$\phi_s$78.37000°, δ52.50000°, λ114.18000°. Principal axes: T 0.9764, Plg70.0000°, Azm48.0000°; N 0.0823, Plg19.0000°, Azm243.0000°; P -1.0587, Plg5.0000°, Azm151.0000°;*

*NEIC* ***05*** *21:30:22.3,24.5′59N×122.7′67E,h97km*

*JMA* ***05*** *21:30:22.7±0.1,25°N±1.1′×122.1′6E±0.6′4,h97km±1km, MV4.0/19,NW OFF ISHIGAKIJIMA IS*

**ISC 05 21:30:22.0±0.6,24.5′57N±0.6′03×122.6′65E±0.6′02,h99km±4km, n262,σ1ϕ07/391,mb4.0/37,57C-10D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.29** | **114** | *i* P | **Pn** | **21 30 37.1** | **+0.8** |
| JYNG | | | | S | **Sn** | **21 30 47.6** | **+0.5** |
| **JYNG** | **Yonagunijimaku** | **0.29** | **114** | A | A | 21 30 37.1 | |
| | comp=E,9.0nm,0.7s,comp=N,8.0nm,0.6s | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.34** | **108** | P | **Pn** | **21 30 37.1** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **0.34** | **108** | | **Pn** | **21 30 37.2** | **+0.6** |
| YOJ | | | | Sn | **Sn** | **21 30 47.0** | **-0.5** |
| **YOJ** | **Yonaguni jima** | **0.34** | **108** | ⇑*i*P | **Pn** | **21 30 37.3** | **+0.8** |
| | baz=116 | | | | | | |
| YOJ | | | | *i* S | **Sn** | **21 30 48.1** | **+0.6** |
| | baz=116 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.34** | **108** | *i* P | **Pn** | **21 30 37.4** | **+0.8** |
| YOJ | | | | S | **Sn** | **21 30 47.8** | **+0.2** |
| **EOS2** | **EOS2** | **0.41** | **249** | ⇑*i*P | **Pn** | **21 30 38.0** | **+1.2** |
| | baz=255 | | | | | | |
| EOS2 | | | | *e*S | **Sn** | **21 30 49.8** | **+1.8** |
| | baz=255 | | | | | | |
| **EOS3** | **EOS3** | **0.42** | **227** | ⇑*i*P | **Pn** | **21 30 38.2** | **+1.4** |
| | baz=231 | | | | | | |
| **EOS4** | **EOS4** | **0.54** | **215** | *e*P | **Pn** | **21 30 38.4** | **+0.9** |
| | baz=222 | | | | | | |
| **EGS** | | **0.71** | **293** | ⇑P | **Pn** | **21 30 40.1** | **+0.8** |
| | baz=281 | | | | | | |
| EGS | | | | *e*S | **Sn** | **21 30 51.6** | **-0.8** |
| | baz=281 | | | | | | |
| **TWC** | **Suao** | **0.73** | **273** | ⇑*i*P | **Pn** | **21 30 40.0** | **+0.5** |
| | baz=273 | | | | | | |
| TWC | | | | *i* S | **Sn** | **21 30 52.2** | **-0.6** |
| | baz=273 | | | | | | |
| **ESAO** | **Su ao** | **0.74** | **271** | ⇑P | **Pn** | **21 30 40.1** | **+0.5** |
| | baz=270 | | | | | | |
| ESAO | | | | S | **Sn** | **21 30 52.5** | **-0.3** |
| | baz=270 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.75** | **306** | ⇑*i*P | **Pn** | **21 30 40.4** | **+0.7** |
| | baz=302 | | | | | | |
| TWB1 | | | | *i* S | **Sn** | **21 30 52.5** | **-0.4** |
| | baz=302 | | | | | | |
| **NTC** | **Toucheng** | **0.80** | **291** | *e*P | **Pn** | **21 30 41.2** | **+1.0** |
| | baz=283 | | | | | | |
| NTC | | | | *e*S | **Sn** | **21 30 54.6** | **+0.7** |
| | baz=283 | | | | | | |
| **EWUT** | **Wuta** | **0.81** | **261** | ⇑P | **Pn** | **21 30 40.8** | **+0.5** |
| | baz=255 | | | | | | |
| EWUT | | | | S | **Sn** | **21 30 54.6** | **+0.6** |
| | baz=255 | | | | | | |
| **ILA** | **Ilan** | **0.85** | **283** | *e*P | **Pn** | **21 30 41.5** | **+0.9** |
| | baz=276 | | | | | | |
| ILA | | | | S | **Sn** | **21 30 55.0** | **+0.3** |
| | baz=276 | | | | | | |
| **TIPB** | **Shuangxi** | **0.85** | **298** | ⇑*i*P | **Pn** | **21 30 41.6** | **+0.8** |
| | baz=294 | | | | | | |
| TIPB | | | | *i* S | **Sn** | **21 30 54.4** | **-0.5** |
| | baz=294 | | | | | | |
| **NDS** | **Dongshan** | **0.86** | **274** | P | **Pn** | **21 30 41.6** | **+0.8** |
| | baz=275 | | | | | | |
| NDS | | | | *e*S | **Sn** | **21 30 54.6** | **-0.3** |
| | baz=275 | | | | | | |
| **EAHA** | **Aohua** | **0.87** | **254** | ⇑P | **Pn** | **21 30 41.6** | **+0.8** |
| | baz=247 | | | | | | |
| EAHA | | | | *e*S | **Sn** | **21 30 55.8** | **+0.7** |
| | baz=247 | | | | | | |
| **EHP** | **Heping Village** | **0.87** | **253** | *e*P | **Pn** | **21 30 41.8** | **+0.9** |
| | baz=245 | | | | | | |
| EHP | | | | *e*S | **Sn** | **21 30 55.8** | **+0.6** |
| | baz=245 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.88** | **307** | ⇑*i*P | **Pn** | **21 30 42.1** | **+1.0** |
| | baz=297 | | | | | | |
| SXI1 | | | | *e*S | **Sn** | **21 30 55.5** | **0.0** |
| | baz=297 | | | | | | |
| **TWE** | **Neicheng** | **0.91** | **280** | ⇑*i*P | **Pn** | **21 30 42.2** | **+0.9** |
| | baz=275 | | | | | | |
| TWE | | | | S | **Sn** | **21 30 55.6** | **-0.3** |
| | baz=275 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.94** | **302** | ⇑P | **Pn** | **21 30 42.8** | **+1.1** |
| | baz=293 | | | | | | |
| NWF | | | | S | **Sn** | **21 30 56.9** | **+0.3** |
| | baz=293 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.94** | **302** | ⇑P | **Pn** | **21 30 42.8** | **+1.2** |
| | baz=295 | | | | | | |
| WFSB | | | | S | **Sn** | **21 30 56.9** | **+0.5** |
| | baz=295 | | | | | | |
| **TNOU** | **National Taiwa** | **0.99** | **306** | P | **Pn** | **21 30 43.1** | **+0.9** |
| | baz=304 | | | | | | |
| TNOU | | | | S | **Sn** | **21 30 57.4** | **+0.1** |
| | baz=304 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.99** | **281** | ⇑*i*P | **Pn** | **21 30 43.3** | **+1.0** |
| | baz=286 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **21 30 57.1** | **-0.4** |
| | baz=286 | | | | | | |
| **ENTT** | **Nioudou** | **0.99** | **274** | ⇑*i*P | **Pn** | **21 30 43.4** | **+1.1** |
| | baz=269 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **21 30 58.1** | **+0.6** |
| | baz=269 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.01** | **103** | *i* P | **Pn** | **21 30 43.3** | **+1.0** |
| IRIF | | | | S | **Sn** | **21 30 58.2** | **+0.5** |
| **ETL** | **Fush Village** | **1.03** | **247** | ⇑P | **Pn** | **21 30 42.8** | **+0.2** |
| | baz=245 | | | | | | |
| **LATG** | **Datong** | **1.03** | **268** | ⇑*i*P | **Pn** | **21 30 43.7** | **+1.0** |
| | baz=266 | | | | | | |
| LATG | | | | *e*S | **Sn** | **21 30 58.3** | **0.0** |
| | baz=266 | | | | | | |
| **NDT** | **Datong Townshi** | **1.04** | **272** | ⇑*i*P | **Pn** | **21 30 44.1** | **+1.4** |
| | baz=265 | | | | | | |
| **NACB** | **Ninganchiao** | **1.04** | **248** | P | **Pn** | **21 30 42.9** | **+0.1** |
| **NACB** | **Ninganchiao** | **1.04** | **248** | | **Pn** | **21 30 42.9** | **+0.1** |
| NACB | | | | Sn | **Sn** | **21 30 58.0** | **-0.5** |
| **NACB** | **Ninganchiao** | **1.04** | **248** | ⇑*i*P | **Pn** | **21 30 42.9** | **+0.1** |
| | baz=240 | | | | | | |
| NACB | | | | S | **Sn** | **21 30 57.5** | **-1.0** |
| | baz=240 | | | | | | |
| **TWA** | **Mucha** | **1.05** | **293** | ⇑*i*P | **Pn** | **21 30 43.9** | **+1.0** |
| | baz=284 | | | | | | |
| TWA | | | | S | **Sn** | **21 30 58.2** | **-0.5** |
| | baz=284 | | | | | | |
| **NWLT** | **Wulai** | **1.07** | **281** | ⇑P | **Pn** | **21 30 44.1** | **+1.0** |
| | baz=287 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **21 30 58.7** | **-0.3** |
| | baz=287 | | | | | | |
| **TWD** | **Chiawan** | **1.08** | **243** | ⇑*i*P | **Pn** | **21 30 43.5** | **+0.4** |
| | baz=235 | | | | | | |
| TWD | | | | *i* S | **Sn** | **21 30 58.8** | **-0.4** |
| | baz=235 | | | | | | |
| **HWA** | **Hwalien** | **1.12** | **239** | ⇑*i*P | **Pn** | **21 30 44.4** | **+0.8** |
| | baz=236 | | | | | | |
| HWA | | | | S | **Sn** | **21 31 01.1** | **+1.1** |
| | baz=236 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.13** | **252** | ⇑*i*P | **Pn** | **21 30 44.4** | **+0.6** |
| | baz=249 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **21 30 59.9** | **-0.4** |
| | baz=249 | | | | | | |
| **TATO** | **Taipei** | **1.13** | **291** | P | **Pn** | **21 30 44.8** | **+1.0** |
| **TATO** | **Taipei** | **1.13** | **291** | | **Pn** | **21 30 44.6** | **+0.8** |
| TATO | | | | Sn | **Sn** | **21 30 59.4** | **-0.8** |
| **TATO** | **Taipei** | **1.13** | **291** | P | **Pn** | **21 30 45.4** | **+0.7** |
| | baz=281 | | | | | | |
| TATO | | | | S | **Sn** | **21 30 59.1** | **-1.1** |
| | baz=281 | | | | | | |
| **YM01** | **YM01** | **1.14** | **300** | ⇓*i*P | **Pn** | **21 30 44.9** | **+1.0** |
| | baz=290 | | | | | | |
| YM01 | | | | S | **Sn** | **21 31 00.1** | **-0.3** |
| | baz=290 | | | | | | |
| **TAP** | **Taipei** | **1.14** | **294** | *e*P | **Pn** | **21 30 44.7** | **+0.8** |
| | baz=284 | | | | | | |
| TAP | | | | S | **Sn** | **21 30 60.0** | **-0.4** |
| | baz=284 | | | | | | |
| **NNSB** | **Datong** | **1.17** | **263** | ⇑*i*P | **Pn** | **21 30 45.0** | **+0.7** |
| | baz=254 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **21 31 00.4** | **-0.7** |
| | baz=254 | | | | | | |
| **NNSH** | **Datong** | **1.17** | **263** | *e*P | **Pn** | **21 30 45.0** | **+0.8** |
| | baz=254 | | | | | | |
| NNSH | | | | *e*S | **Sn** | **21 31 01.2** | **+0.1** |
| | baz=254 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.17** | **116** | P | **Pn** | **21 30 45.4** | **+1.3** |
| HATJ | | | | S | **Sn** | **21 31 02.0** | **+1.1** |
| **YHNB** | **Yeheng** | **1.17** | **275** | P | **Pn** | **21 30 45.4** | **+1.2** |
| **YHNB** | **Yeheng** | **1.17** | **275** | Pn | **Pn** | **21 30 45.1** | **+0.8** |
| YHNB | | | | Sn | **Sn** | **21 31 00.8** | **-0.2** |
| **YHNB** | **Yeheng** | **1.17** | **275** | ⇑*i*P | **Pn** | **21 30 45.5** | **+1.2** |
| | baz=273 | | | | | | |
| YHNB | | | | S | **Sn** | **21 31 00.9** | **-0.2** |
| | baz=273 | | | | | | |
| **NNS** | **Nan Shan** | **1.18** | **264** | ⇑*i*P | **Pn** | **21 30 45.1** | **+0.7** |
| | baz=256 | | | | | | |
| **BACT** | **New Taipei Cit** | **1.18** | **291** | *e*P | **Pn** | **21 30 45.3** | **+1.0** |
| | baz=283 | | | | | | |
| **NSK** | **Sanguang** | **1.19** | **275** | ⇑*i*P | **Pn** | **21 30 45.6** | **+1.2** |
| | baz=267 | | | | | | |
| NSK | | | | S | **Sn** | **21 31 01.2** | **-0.2** |
| | baz=267 | | | | | | |
| **TWY** | **Chenhua** | **1.19** | **306** | ⇓P | **Pn** | **21 30 45.8** | **+1.4** |
| | baz=305 | | | | | | |
| TWY | | | | S | **Sn** | **21 31 01.9** | **+0.6** |
| | baz=305 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.19** | **234** | ⇑*i*P | **Pn** | **21 30 45.0** | **+0.5** |
| | baz=233 | | | | | | |
| TEYL | | | | *e*S | **Sn** | **21 31 01.4** | **0.0** |
| | baz=233 | | | | | | |
| **ANP** | **Anpu** | **1.20** | **301** | *e*P | **Pn** | **21 30 45.2** | **+0.5** |
| | baz=291 | | | | | | |
| **NSM** | **Shimen** | **1.20** | **307** | *e*P | **Pn** | **21 30 45.6** | **+1.1** |
| | baz=305 | | | | | | |
| NSM | | | | *e*S | **Sn** | **21 31 02.7** | **+1.1** |
| | baz=305 | | | | | | |
| **ETM** | **Tongmen** | **1.22** | **241** | ⇑*i*P | **Pn** | **21 30 45.1** | **+0.4** |
| | baz=234 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.24** | **295** | ⇓P | **Pn** | **21 30 46.1** | **+1.1** |
| | baz=288 | | | | | | |
| TWS1 | | | | S | **Sn** | **21 31 02.2** | **-0.3** |
| | baz=288 | | | | | | |
| **NTST** | **Danshui** | **1.24** | **299** | *e*P | **Pn** | **21 30 45.9** | **+0.9** |
| | baz=290 | | | | | | |
| NTST | | | | *e*S | **Sn** | **21 31 02.8** | **+0.3** |
| | baz=290 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.26** | **244** | ⇑*i*P | **Pn** | **21 30 45.6** | **+0.2** |
| | baz=242 | | | | | | |
| LXIB | | | | *e*S | **Sn** | **21 31 02.2** | **-0.8** |
| | baz=242 | | | | | | |
| **SHUL** | **Shoufeng** | **1.27** | **232** | ⇑*i*P | **Pn** | **21 30 45.9** | **+0.6** |
| | baz=237 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **21 31 02.8** | **-0.1** |
| | baz=237 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.28** | **105** | *i* P | **Pn** | **21 30 46.7** | **+1.3** |
| JKRS | | | | S | **Sn** | **21 31 04.2** | **+1.0** |
| **NTY** | **Taoyuan** | **1.30** | **289** | *e*P | **Pn** | **21 30 46.9** | **+1.1** |
| | baz=283 | | | | | | |
| NTY | | | | *e*S | **Sn** | **21 31 04.6** | **+0.8** |
| | baz=283 | | | | | | |
| **FUSS** | **Fushou** | **1.33** | **256** | ⇑*i*P | **Pn** | **21 30 47.2** | **+0.9** |
| | baz=250 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **21 31 03.6** | **-1.1** |
| | baz=250 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.34** | **252** | P | **Pn** | **21 30 47.4** | **+0.9** |
| | baz=250 | | | | | | |
| WHF | | | | *e*S | **Sn** | **21 31 04.3** | **-0.9** |
| | baz=250 | | | | | | |
| **ESL** | **Shilin** | **1.35** | **236** | ⇑*i*P | **Pn** | **21 30 46.5** | **+0.2** |
| | baz=234 | | | | | | |
| ESL | | | | *e*S | **Sn** | **21 31 03.5** | **-1.1** |
| | baz=234 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.37** | **98** | *i* P | **Pn** | **21 30 47.4** | **+0.8** |
| JIJ | | | | S | **Sn** | **21 31 05.2** | **-0.1** |
| **TWT** | **Tachien** | **1.38** | **257** | ⇑*i*P | **Pn** | **21 30 48.5** | **+1.6** |
| | baz=255 | | | | | | |
| TWT | | | | *e*S | **Sn** | **21 31 05.9** | **+0.1** |
| | baz=255 | | | | | | |
| **NCU** | **National Centr** | **1.39** | **287** | *e*P | **Pn** | **21 30 46.1** | **-0.7** |
| | baz=285 | | | | | | |
| **NCUH** | **Zhongli** | **1.39** | **287** | *e*P | **Pn** | **21 30 48.1** | **+1.2** |
| | baz=277 | | | | | | |
| NCUH | | | | *e*S | **Sn** | **21 31 06.4** | **+0.7** |
| | baz=277 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.40** | **273** | ⇑P | **Pn** | **21 30 48.2** | **+1.3** |
| | baz=271 | | | | | | |
| NFF | | | | *e*S | **Sn** | **21 31 06.3** | **+0.3** |
| | baz=271 | | | | | | |
| **TDCB** | **Techi** | **1.40** | **257** | ⇑*i*P | **Pn** | **21 30 48.4** | **+1.4** |
| | baz=255 | | | | | | |
| TDCB | | | | S | **Sn** | **21 31 05.8** | **-0.3** |
| | baz=255 | | | | | | |
| **NJD** | **Zhudong** | **1.44** | **277** | *e*P | **Pn** | **21 30 48.7** | **+1.4** |
| | baz=275 | | | | | | |
| **EGFH** | **Guangfu** | **1.44** | **232** | *e*P | **Pn** | **21 30 47.9** | **+0.5** |
| | baz=230 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.44** | **234** | ⇑*i*P | **Pn** | **21 30 47.5** | **+0.1** |
| | baz=232 | | | | | | |
| WARBT | | | | *e*S | **Sn** | **21 31 05.5** | **-1.1** |
| | baz=232 | | | | | | |
| **CHGB** | **Renai** | **1.44** | **250** | ⇑*i*P | **Pn** | **21 30 48.8** | **+1.1** |
| | baz=241 | | | | | | |
| CHGB | | | | S | **Sn** | **21 31 07.0** | **-0.1** |
| | baz=241 | | | | | | |
| **OWD** | **Renai** | **1.48** | **246** | ⇑*i*P | **Pn** | **21 30 49.0** | **+0.9** |
| | baz=239 | | | | | | |
| **LIOB** | **Emei** | **1.49** | **273** | ⇑P | **Pn** | **21 30 49.2** | **+1.2** |
| | baz=271 | | | | | | |
| LIOB | | | | *e*S | **Sn** | **21 31 08.9** | **+1.0** |
| | baz=271 | | | | | | |
| **HSN1** | **Hsinchu** | **1.50** | **278** | *e*P | **Pn** | **21 30 49.3** | **+1.1** |
| | baz=276 | | | | | | |
| HSN1 | | | | *e*S | **Sn** | **21 31 08.8** | **+0.8** |
| | baz=276 | | | | | | |
| **NSTT** | **Nanjuang** | **1.51** | **273** | *e*P | **Pn** | **21 30 49.3** | **+1.1** |
| | baz=271 | | | | | | |
| NSTT | | | | S | **Sn** | **21 31 08.5** | **+0.4** |
| | baz=271 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.51** | **89** | *i* P | **Pn** | **21 30 49.1** | **+0.9** |
| JISG | | | | S | **Sn** | **21 31 08.4** | **+0.3** |
| **NHW** | **Xinwu Township** | **1.52** | **287** | *e*P | **Pn** | **21 30 49.4** | **+1.0** |
| | baz=291 | | | | | | |
| NHW | | | | *e*S | **Sn** | **21 31 09.7** | **+1.1** |
| | baz=291 | | | | | | |
| **SBCB** | **Hsinchu** | **1.53** | **279** | *e*P | **Pn** | **21 30 50.0** | **+1.5** |
| | baz=277 | | | | | | |
| SBCB | | | | S | **Sn** | **21 31 09.3** | **+0.5** |
| | baz=277 | | | | | | |
| **HSN** | **Hsinchu** | **1.55** | **279** | *e*P | **Pn** | **21 30 49.6** | **+0.9** |
| | baz=278 | | | | | | |
| HSN | | | | *e*S | **Sn** | **21 31 08.7** | **-0.4** |
| | baz=278 | | | | | | |
| **HGSD** | **Ruisui** | **1.56** | **227** | ⇑*i*P | **Pn** | **21 30 49.3** | **+0.4** |
| | baz=223 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **21 31 08.6** | **-0.6** |
| | baz=223 | | | | | | |
| **WHP** | **Taichung City** | **1.58** | **260** | ⇑P | **Pn** | **21 30 51.4** | **+2.1** |
| | baz=256 | | | | | | |
| WHP | | | | S | **Sn** | **21 31 11.4** | **+1.4** |
| | baz=256 | | | | | | |
| **VWDT** | **VWDT** | **1.60** | **240** | ⇑*i*P | **Pn** | **21 30 50.6** | **+1.2** |
| | baz=232 | | | | | | |
| VWDT | | | | S | **Sn** | **21 31 10.1** | **-0.2** |
| | baz=232 | | | | | | |
| **EHYH** | **Wanrong** | **1.61** | **228** | *e*P | **Pn** | **21 30 49.8** | **+0.3** |
| | baz=235 | | | | | | |
| **EHY** | **Hungye** | **1.61** | **229** | ⇑P | **Pn** | **21 30 49.7** | **+0.1** |
| | baz=227 | | | | | | |
| EHY | | | | *e*S | **Sn** | **21 31 08.9** | **-1.7** |
| | baz=227 | | | | | | |
| **WPL** | **Puli Township** | **1.65** | **251** | P | **Pn** | **21 30 51.5** | **+1.6** |
| | baz=247 | | | | | | |
| WPL | | | | S | **Sn** | **21 31 12.4** | **+1.1** |
| | baz=247 | | | | | | |
| **ECBN** | **Changbin** | **1.66** | **222** | P | **Pn** | **21 30 50.8** | **+0.6** |
| | baz=214 | | | | | | |
| ECBN | | | | S | **Sn** | **21 31 11.3** | **-0.4** |
| | baz=214 | | | | | | |
| **DPDB** | **Guoxing** | **1.67** | **252** | *e*P | **Pn** | **21 30 52.1** | **+1.8** |
| | baz=256 | | | | | | |
| DPDB | | | | *e*S | **Sn** | **21 31 12.7** | **+0.9** |
| | baz=256 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.67** | **253** | *e*P | **Pn** | **21 30 52.5** | **+2.2** |
| | baz=257 | | | | | | |
| **NMLH** | **Miaoli** | **1.70** | **269** | *e*P | **Pn** | **21 30 52.4** | **+1.8** |
| | baz=259 | | | | | | |
| NMLH | | | | *e*S | **Sn** | **21 31 12.9** | **+0.5** |
| | baz=259 | | | | | | |
| **YULB** | **Yu-li** | **1.71** | **227** | P | **Pn** | **21 30 51.0** | **+0.2** |
| **YULB** | **Yu-li** | **1.71** | **227** | Pn | **Pn** | **21 30 50.8** | **+0.1** |
| **YULB** | **Yu-li** | **1.71** | **227** | ⇑P | **Pn** | **21 30 51.0** | **+0.2** |
| | baz=232 | | | | | | |
| YULB | | | | *e*S | **Sn** | **21 31 10.9** | **-1.8** |
| | baz=232 | | | | | | |
| **EYUL** | **Yuli** | **1.73** | **225** | *e*P | **Pn** | **21 30 51.8** | **+0.8** |
| | baz=232 | | | | | | |
| EYUL | | | | *e*S | **Sn** | **21 31 13.8** | **+0.8** |
| | baz=232 | | | | | | |
| **TWQ1** | **Liyutan** | **1.73** | **263** | *e*P | **Pn** | **21 30 52.3** | **+1.3** |
| | baz=261 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **21 31 13.5** | **+0.4** |
| | baz=261 | | | | | | |
| **NSY** | **Sanyi** | **1.73** | **265** | *e*P | **Pn** | **21 30 52.5** | **+1.5** |
| | baz=263 | | | | | | |
| NSY | | | | *e*S | **Sn** | **21 31 14.8** | **+1.6** |
| | baz=263 | | | | | | |
| **TWF1** | **Yuli** | **1.74** | **226** | ⇑*i*P | **Pn** | **21 30 51.5** | **+0.3** |
| | baz=232 | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **21 31 12.7** | **-0.6** |
| | baz=232 | | | | | | |
| **SSLB** | **Suanglung** | **1.74** | **244** | P | **Pn** | **21 30 52.2** | **+1.0** |
| **SSLB** | **Suanglung** | **1.74** | **244** | | **Pn** | **21 30 51.9** | **+0.8** |
| **SSLB** | **Suanglung** | **1.74** | **244** | ⇑P | **Pn** | **21 30 52.1** | **+0.9** |
| | baz=238 | | | | | | |
| SSLB | | | | S | **Sn** | **21 31 13.3** | **-0.1** |
| | baz=238 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.74** | **247** | *e*P | **Pn** | **21 30 51.1** | **-0.2** |
| | baz=240 | | | | | | |
| **TYC** | **Yuchr** | **1.77** | **248** | ⇑*e*P | **Pn** | **21 30 53.0** | **+1.5** |
| | baz=240 | | | | | | |
| TYC | | | | S | **Sn** | **21 31 15.2** | **+1.2** |
| | baz=240 | | | | | | |
| **CHKH** | **Chenggong** | **1.79** | **220** | *e*P | **Pn** | **21 30 52.1** | **+0.3** |
| | baz=215 | | | | | | |
| CHKH | | | | *e*S | **Sn** | **21 31 13.1** | **-1.5** |
| | baz=215 | | | | | | |
| **FULB** | **Fuli** | **1.85** | **223** | *e*P | **Pn** | **21 30 53.2** | **+0.6** |
| | baz=214 | | | | | | |
| FULB | | | | *e*S | **Sn** | **21 31 15.4** | **-0.5** |
| | baz=214 | | | | | | |
| **WDJ** | **Dajia District** | **1.85** | **264** | *e*P | **Pn** | **21 30 53.9** | **+1.3** |
| | baz=262 | | | | | | |
| WDJ | | | | *e*S | **Sn** | **21 31 16.8** | **+1.0** |
| | baz=262 | | | | | | |
| **TCU** | **Taichung** | **1.85** | **257** | *e*P | **Pn** | **21 30 54.2** | **+1.6** |
| | baz=256 | | | | | | |
| **WWF** | **Wufeng** | **1.86** | **254** | *e*P | **Pn** | **21 30 54.2** | **+1.5** |
| | baz=263 | | | | | | |
| WWF | | | | *e*S | **Sn** | **21 31 17.3** | **+1.2** |
| | baz=263 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.86** | **242** | ⇑*e*P | **Pn** | **21 30 54.3** | **+1.6** |
| | baz=239 | | | | | | |
| WHYT | | | | S | **Sn** | **21 31 17.3** | **+1.1** |
| | baz=239 | | | | | | |
| **JTJ** | **Tarama** | **1.86** | **87** | P | **Pn** | **21 30 53.9** | **+1.2** |
| JTJ | | | | S | **Sn** | **21 31 17.2** | **+1.0** |
| **CHKT** | **Chengkung** | **1.88** | **219** | P | **Pn** | **21 30 52.9** | **0.0** |
| | baz=213 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **21 31 14.5** | **-2.1** |
| | baz=213 | | | | | | |
| **YUS** | **Yu-Shan** | **1.89** | **236** | *e*P | **Pn** | **21 30 54.8** | **+1.3** |
| | baz=234 | | | | | | |
| **WJS** | **Zhushan** | **1.91** | **247** | *e*P | **Pn** | **21 30 55.3** | **+2.0** |
| | baz=239 | | | | | | |
| WJS | | | | *e*S | **Sn** | **21 31 19.5** | **+2.2** |
| | baz=239 | | | | | | |
| **WNT1** | **Nantou City** | **1.92** | **250** | *e*P | **Pn** | **21 30 55.0** | **+1.6** |
| | baz=259 | | | | | | |
| **WNT** | **Mingjian** | **1.93** | **249** | *e*P | **Pn** | **21 30 55.4** | **+1.8** |
| | baz=248 | | | | | | |
| WNT | | | | *e*S | **Sn** | **21 31 20.0** | **+2.4** |
| | baz=248 | | | | | | |
| **EHD** | **Haiduan** | **1.94** | **223** | *e*P | **Pn** | **21 30 53.7** | **0.0** |
| | baz=229 | | | | | | |
| EHD | | | | *e*S | **Sn** | **21 31 17.0** | **-1.0** |
| | baz=229 | | | | | | |
| **ECS** | **Chishang** | **1.97** | **222** | *e*P | **Pn** | **21 30 54.7** | **+0.6** |
| | baz=229 | | | | | | |
| ECS | | | | *e*S | **Sn** | **21 31 18.1** | **-0.6** |
| | baz=229 | | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.99** | **253** | *e*P | **Pn** | **21 30 55.5** | **+1.2** |
| | baz=260 | | | | | | |
| **EDH** | **Donghe** | **2.02** | **218** | ⇑P | **Pn** | **21 30 54.8** | **+0.1** |
| | baz=212 | | | | | | |
| EDH | | | | *e*S | **Sn** | **21 31 18.3** | **-1.4** |
| | baz=212 | | | | | | |
| **ELDTW** | **Lidau** | **2.03** | **228** | ⇑P | **Pn** | **21 30 55.4** | **+0.3** |
| | baz=226 | | | | | | |
| **CHN5** | **Tsauling** | **2.05** | **242** | P | **Pn** | **21 30 57.0** | **+1.8** |
| | baz=233 | | | | | | |
| CHN5 | | | | S | **Sn** | **21 31 23.5** | **+2.9** |
| | baz=233 | | | | | | |
| **WDLH** | **Douliu** | **2.12** | **246** | *e*P | **Pn** | **21 30 57.6** | **+1.5** |
| | baz=255 | | | | | | |
| **LONT** | **Longtian** | **2.17** | **220** | *e*P | **Pn** | **21 30 56.6** | **0.0** |
| | baz=218 | | | | | | |
| LONT | | | | *e*S | **Sn** | **21 31 22.2** | **-1.1** |
| | baz=218 | | | | | | |
| **LDUT** | **Ludao** | **2.18** | **210** | *e*P | **Pn** | **21 30 56.9** | **0.0** |
| | baz=205 | | | | | | |
| LDUT | | | | *e*S | **Sn** | **21 31 21.6** | **-1.8** |
| | baz=205 | | | | | | |
| **WCKO** | **Fanlu** | **2.19** | **239** | ⇑P | **Pn** | **21 30 58.9** | **+2.0** |
| | baz=237 | | | | | | |
| WCKO | | | | S | **Sn** | **21 31 25.2** | **+1.5** |
| | baz=237 | | | | | | |
| **STYH** | **Taoyuan** | **2.21** | **231** | ⇑P | **Pn** | **21 30 58.8** | **+1.5** |
| | baz=228 | | | | | | |
| STYH | | | | *e*S | **Sn** | **21 31 24.9** | **+0.6** |
| | baz=228 | | | | | | |
| **STYT** | **Tauyuan** | **2.23** | **231** | ⇑*i*P | **Pn** | **21 30 59.2** | **+1.6** |
| | baz=229 | | | | | | |
| STYT | | | | *e*S | **Sn** | **21 31 25.8** | **+1.0** |
| | baz=229 | | | | | | |
| **TPUB** | **Ta-pu** | **2.24** | **236** | P | **Pn** | **21 30 59.6** | **+1.9** |
| **TPUB** | **Ta-pu** | **2.24** | **236** | | **Pn** | **21 30 58.6** | **+0.9** |
| **TPUB** | **Ta-pu** | **2.24** | **236** | ⇑P | **Pn** | **21 30 59.4** | **+1.7** |
| | baz=234 | | | | | | |
| TPUB | | | | *e*S | **Sn** | **21 31 25.5** | **+0.5** |
| | baz=234 | | | | | | |
| **CHN2** | **Minshiung** | **2.25** | **243** | *e*P | **Pn** | **21 31 00.2** | **+2.5** |
| | baz=252 | | | | | | |
| CHN2 | | | | *e*S | **Sn** | **21 31 27.8** | **+2.8** |
| | baz=252 | | | | | | |
| **WTK** | **Tuku** | **2.25** | **247** | *e*P | **Pn** | **21 30 58.6** | **+0.9** |
| | baz=246 | | | | | | |
| WTK | | | | *e*S | **Sn** | **21 31 27.0** | **+1.9** |
| | baz=246 | | | | | | |
| **TWGBT** | **Beinan** | **2.26** | **220** | P | **Pn** | **21 30 58.3** | **+0.3** |
| **TWGBT** | **Beinan** | **2.26** | **220** | *e*P | **Pn** | **21 30 58.0** | **+0.1** |
| | baz=218 | | | | | | |
| TWGBT | | | | *e*S | **Sn** | **21 31 23.9** | **-1.6** |
| | baz=218 | | | | | | |
| **TWG** | **Pinlang** | **2.27** | **220** | Pn | **Pn** | **21 30 57.8** | **-0.2** |
| **

baz=235
**JIKM Ikemajima 2.38 81** *eP* **Pn 21 31 00.9 +1.4**
JIKM S **Sn 21 31 28.8 +0.5**
**CHN1 Nanshi 2.39 235** *eP* **Pn 21 31 01.5 +1.9**
baz=233
CHN1 *eS* **Sn 21 31 29.6 +1.2**
baz=233
**SNST Tainan City 2.39 236** *eP* **Pn 21 31 01.7 +2.1**
baz=235
**SGST Jiashian 2.41 232** *eP* **Pn 21 31 00.8 +1.0**
baz=240
SGST *eS* **Sn 21 31 29.5 +0.7**
baz=240
**WSF Szhu 2.41 248** *eP* **Pn 21 31 00.9 +1.1**
baz=254
WSF *eS* **Sn 21 31 29.7 +0.9**
baz=254
**JMJ Miyako jima 2 2.41 84** P **Pn 21 31 01.9 +2.0**
**JMJ Miyako jima 2 2.41 84** ⇓P **Pn 21 31 01.6 +1.7**
baz=86
JMJ S **Sn 21 31 29.3 +0.4**
baz=86
**SLGT Liugui 2.42 230** *eP* **Pn 21 31 02.6 +2.7**
baz=238
SLGT *eS* **Sn 21 31 31.4 +2.2**
baz=238
**JMJ2 Miyako jima3 2.44 85** P **Pn 21 31 01.7 +1.5**
JMJ2 S **Sn 21 31 29.9 +0.4**
**WSL Shuilin Townsh 2.45 245** *eP* **Pn 21 31 01.6 +1.2**
baz=253
**ICHU Yijhu 2.48 241** *eP* **Pn 21 31 02.0 +1.2**
baz=240
**ECL Taimali 2.51 219** *eP* **Pn 21 31 00.9 -0.2**
baz=216
ECL *eS* **Sn 21 31 29.7 -1.5**
baz=216
**JOGS Gusukube 2.51 85** *eP* **Pn 21 31 02.7 +1.5**
JOGS S **Sn 21 31 31.9 +0.7**
**CHN8 Yiju 2.55 242** *eP* **Pn 21 31 02.9 +1.3**
baz=250
CHN8 *eS* **Sn 21 31 32.8 +0.7**
baz=250
**SCST Cishan 2.59 230** *eP* **Pn 21 31 05.0 +2.7**
baz=238
**SSD Sandimen 2.59 226** *eP* **Pn 21 31 04.0 +1.6**
baz=223
SSD *eS* **Sn 21 31 34.5 +1.3**
baz=223
**TSMG Majia 2.62 225** *eP* **Pn 21 31 05.2 +2.7**
baz=223
TSMG *eS* **Sn 21 31 36.2 +2.4**
baz=223
**TWM1 Shoushan 2.69 230** *eP* **Pn 21 31 06.7 +3.2**
baz=238
**MASBT Mashibuluo 2.69 224** *eP* **Pn 21 31 05.3 +1.7**
baz=234
MASBT *eS* **Sn 21 31 38.3 +2.7**
baz=234
**LAY Lan-yu 2.72 202** *eP* **Pn 21 31 03.8 -0.2**
baz=196
**TAW Tawu 2.73 217** *eP* **Pn 21 31 04.0 -0.1**
baz=219
**EAST Anshuo 2.74 218** *eP* **Pn 21 31 04.5 +0.2**
baz=216
**LYUB Lan-yu 2.74 201** *eP* **Pn 21 31 03.6 -0.6**
baz=200
**SCZT Fangliau 2.88 221** *eP* **Pn 21 31 09.2 +3.1**
baz=214
**SLIU Shizi 2.90 216** *eP* **Pn 21 31 07.0 +0.7**
baz=215
**MATB Ma-tsu 2.91 303**⇓*eP* **Pn 21 31 06.6 +0.1**
baz=302
**MSUT Lienchiang 2.94 303** *eP* **Pn 21 31 07.3 +0.4**
baz=302
**VWUC VWUC 2.94 279** ⇓P **Pn 21 31 07.2 +0.3**
baz=278
**PNG Penghu 3.00 251** *eP* **Pn 21 31 07.7 0.0**
baz=250
**PHUB P'eng-hu 3.01 250** *eP* **Pn 21 31 07.9 +0.1**
baz=249
**WDGT Dungji 3.04 245** *eP* **Pn 21 31 09.0 +0.9**
baz=244
**HEN Hengchun 3.10 215** *eP* **Pn 21 31 09.1 0.0**
baz=207
**TWKBT Hengchun 3.12 213** *eP* **Pn 21 31 09.9 +0.7**
baz=212
**TWK1 Hengchun 3.12 213** *eP* **Pn 21 31 10.3 +1.0**
baz=211
TWK1 *eS* **Sn 21 31 44.9 -0.9**
baz=211
**XPSS Dashiqiu 3.23 317**⇓*eP* **Pn 21 31 11.0 +0.2**
baz=307
**PTMZ Houxiangcun 3.25 279** *eP* **Pn 21 31 11.2 +0.3**
baz=278
**VCHM Qimei 3.25 246** *eP* **Pn 21 31 11.3 +0.3**
baz=236
VCHM *eS* **Sn 21 31 46.8 -2.1**
baz=236
**LYJJ Jianjiangzhen 3.27 308**⇓*eP* **Pn 21 31 11.5 +0.2**
baz=306
**MHZQ Yeshan 3.62 296**⇓*eP* **Pn 21 31 15.9 0.0**
baz=294
**KNM Kinmen 3.85 269** *eP* **Pn 21 31 21.4 +2.4**
baz=268
**KNMB Chin-men Tao 3.89 269** Pn **Pn 21 31 19.1 -0.5**
**KNMB Chin-men Tao 3.89 269** *eP* **Pn 21 31 19.6 0.0**
baz=268
**ZPLA Ao Xicun 4.52 263**⇓*eP* **Pn 21 31 30.6 +2.5**
baz=261
ZPLA *eS* **Sn 21 32 18.6 -1.0**
baz=261
**SXFK Yanhouchang 4.88 293** *eP* **Pn 21 31 33.3 +0.2**
baz=292
**JOW Kunigami 5.55 65** P **Pn 21 31 41.4 -0.6**
**JOW Kunigami 5.55 65** P **Pn 21 31 41.5 -0.6**
comp=N,22nm,0.2s,baz=169,slow=28,SNR=114
JOW S **Sn 21 32 42.1 -2.4**
comp=N,15nm,0.3s,baz=99,slow=22,SNR=6.4
**JOW Kunigami 5.55 65** *eP* **Pn 21 31 41.5 -0.6**
baz=68
**JMZ Minamidaito 2 7.86 79** Pn **Pn 21 32 13.3 -0.3**
**KSRS Korea Array 13.61 18** P **P 21 33 34.5 -1.8**
comp=N,6.3nm,0.7s,baz=201,slow=12,SNR=19
**KS19 Wonju Array Si 13.64 18** **Pn 21 33 30.6 -0.6**
**USRK Ussuriysk Ar. 21.02 19** P **P 21 34 57.5 0.0**
**USRK Ussuriysk Ar. 21.02 19** P **P 21 34 57.3 -0.2**
comp=N,3.4nm,0.8s,baz=196,slow=9.9,SNR=6.5
comp=N,3.4nm,0.8s
**SONM Songino Array 26.56 335** P **P 21 35 50.2 -0.5**
**SONM Songino Array 26.56 335** P **P 21 35 49.8 -0.8**
comp=N,1.4nm,0.7s,baz=155,slow=10,SNR=8.2
comp=N,1.4nm,0.7s
**MK31 Makanchi Array 39.00 315** P **P 21 37 38.6 -0.1**
**MKAR Makanchi Array 39.00 315** P **P 21 37 38.2 -0.6**
**MKAR Makanchi Array 39.00 315** P **P 21 37 38.4 -0.4**
comp=N,0.3nm,0.4s,baz=106,slow=8.5,SNR=7.7
comp=N,0.3nm,0.4s
**MAKZ Makanchi 39.21 315** P **P 21 37 40.5 0.0**
**KNRA Kununurra 40.44 171** P **P 21 37 50.9 0.0**
**ZALV Zalesovo Beam 40.66 326** P **P 21 37 50.5 -1.8**
comp=N,1.1nm,0.5s,baz=121,slow=6.1,SNR=5.5
comp=N,1.1nm,0.5s
**FITZ Fitzroy Crossi 42.51 176** P **P 21 38 07.8 +0.1**
**KURK Kurchatov 42.66 319** P **P 21 38 08.1 -0.5**
**KURBB Kurchatov Arra 42.69 319** P **P 21 38 08.2 -0.7**
comp=N,0.5nm,0.6s,baz=108,slow=11,SNR=7.9
KURBB PcP **PcP 21 39 57.9 -1.0**
comp=N,0.3nm,0.3s,baz=111,slow=4.1,SNR=5.0
comp=N,0.5nm,0.6s
**COEN Coen 43.22 150** P **P 21 38 14.4 +0.9**
**WB0 Warramunga Arr 45.53 164** P **P 21 38 32.1 +0.2**
WB0 IAmb IAmb 21 38 34.0
comp=Z,8.1nm,1.4s
**WRA Warramunga Arr 45.68 165** P **P 21 38 33.5 +0.5**
comp=Z,1.1nm,0.6s,baz=347,slow=8.6,SNR=12
WRA PcP **PcP 21 40 09.3 -0.3**
comp=Z,0.3nm,0.5s,baz=347,slow=3.5,SNR=1.1
comp=Z,1.1nm,0.6s
**WB2 Warramunga Arr 45.69 165** P **P 21 38 33.8 +0.7**
WB2 IAmb IAmb 21 38 35.0
comp=Z,3.3nm,1.0s
**WR0 Warramunga Arr 45.75 164** P **P 21 38 34.2 +0.6**
WR0 IAmb IAmb 21 38 40.4
comp=Z,4.2nm,1.2s
**ASAR Alice Springs 49.18 166** P **P 21 39 01.0 +0.9**
comp=Z,0.7nm,0.8s,baz=344,slow=9.2,SNR=7.1
ASAR PcP **PcP 21 40 22.0 0.0**
comp=Z,0.3nm,0.6s,baz=341,slow=3.7,SNR=4.5
comp=Z,0.7nm,0.8s
**ABKAR Akbulak array 54.13 314** P **P 21 39 36.8 0.0**
**ABKAR Akbulak array 54.13 314** P **P 21 39 36.6 -0.1**
ABKAR IAmb IAmb 21 39 37.1
comp=Z,0.9nm,0.6s
**ARU Arti 55.61 323** P **P 21 39 46.4 -0.9**
ARU IAmb IAmb 21 39 46.9
comp=Z,1.8nm,1.1s
**E18K Tukpahlearik C 62.48 25** P **P 21 40 35.1 +0.6**
E18K IAmb IAmb 21 40 41.0
comp=Z,5.8nm,1.2s
**C19K Lookout Ridge 62.92 23** P **P 21 40 38.2 +0.7**
C19K IAmb IAmb 21 40 42.0
comp=Z,3.9nm,1.3s
**D19K Kuna River 63.44 24** P **P 21 40 41.5 +0.6**
D19K IAmb IAmb 21 40 49.5
comp=Z,2.5nm,1.1s
**B20K Meade River 63.79 22** P **P 21 40 43.5 +0.3**
B20K IAmb IAmb 21 40 49.0
comp=Z,6.9nm,1.3s
**E21K Killik River 64.97 24** P **P 21 40 50.9 0.0**
E21K IAmb IAmb 21 40 57.5
comp=Z,2.1nm,1.2s
**J20K Nowinta River 65.23 29** P **P 21 40 53.7 +1.1**
**G21K Allakaket 65.29 26** P **P 21 40 52.8 -0.2**
G21K IAmb IAmb 21 40 55.3
comp=Z,4.1nm,1.3s
**H21K Melozitna Rive 65.66 27** P **P 21 40 56.4 +1.1**
H21K IAmb IAmb 21 40 57.0
comp=Z,3.2nm,1.2s
**C23K Itkillik River 66.06 22** P **P 21 40 58.8 +0.9**
C23K IAmb IAmb 21 41 01.3
comp=Z,3.2nm,1.1s
**SKT Skwentna 66.68 31** P **P 21 41 02.4 +0.4**
SKT IAmb IAmb 21 41 03.3
comp=Z,3.0nm,1.2s
**KDAK Kodiak Island 66.81 35** P **P 21 41 02.9 0.0**
**G24K Hadweenzic Riv 67.65 25** P **P 21 41 08.3 +0.2**
G24K IAmb IAmb 21 41 13.7
comp=Z,3.0nm,1.2s
**RND Reindeer 67.66 29** P **P 21 41 08.2 0.0**
**RC01 Rabbit Creek A 67.67 32** P **P 21 41 08.5 +0.2**
**IL31 68.25 27** P **P 21 41 12.1 +0.4**
**ILAR Eielson Array 68.25 27** P **P 21 41 12.1 +0.3**
**ILAR Eielson Array 68.25 27** P **P 21 41 13.0 +1.2**
comp=Z,0.2nm,0.5s,baz=293,slow=7.2,SNR=4.5
comp=Z,0.2nm,0.5s
**BMAR Burnt Mountain 68.62 24** P **P 21 41 14.7 +0.6**
**D27M Malcolm River 69.50 22** P **P 21 41 20.1 +0.6**
**I26K Coal Creek Min 69.68 27** P **P 21 41 20.5 -0.1**
I26K IAmb IAmb 21 41 22.9
comp=Z,2.1nm,1.2s
**ARCES ARCESS Array B 69.68 338** P **P 21 41 20.7 +0.1**
comp=Z,1.4nm,0.7s,baz=72,slow=4.0,SNR=4.3
comp=Z,1.4nm,0.7s
**J26L Joseph Creek 69.71 27** P **P 21 41 20.8 -0.2**
J26L IAmb IAmb 21 41 21.4
comp=Z,2.5nm,1.3s
**E28M Babbage River 70.17 23** P **P 21 41 23.8 +0.2**
E28M IAmb IAmb 21 41 29.8
comp=Z,5.1nm,1.4s
**GLB Gilahina Butte 70.39 31** P **P 21 41 24.8 -0.3**
GLB IAmb IAmb 21 41 34.0
comp=Z,2.9nm,1.1s
**I28M Miner Creek 70.94 26** P **P 21 41 28.4 0.0**
**M27K Edge Creek, AK 71.02 29** P **P 21 41 28.9 -0.1**
**G29M Pine Creek 71.23 24** P **P 21 41 30.6 +0.5**
G29M IAmb IAmb 21 41 33.9
comp=Z,5.0nm,1.2s
**FIA1 FINESS Array S 71.79 330** P **P 21 41 32.9 -0.5**
**FINES FINESS Array B 71.79 330** P **P 21 41 32.7 -0.8**
**FINES FINESS Array B 71.79 330** P **P 21 41 32.9 -0.5**
comp=Z,0.8nm,0.3s,baz=55,slow=5.4,SNR=15
comp=Z,0.8nm,0.3s
**I30M Mount Dempster 72.42 26** P **P 21 41 37.1 -0.3**
**M29M Somme Creek 72.50 29** P **P 21 41 38.5 +0.6**
M29M IAmb IAmb 21 41 43.4
comp=Z,1.9nm,1.1s
**J30M Hart River 72.67 26** P **P 21 41 39.4 +0.5**
**M30M Minto, Yukon 73.18 28** P **P 21 41 42.7 +0.9**
M30M IAmb IAmb 21 41 44.0
comp=Z,3.8nm,1.4s
**M31M Drury Creek, Y 74.36 28** P **P 21 41 48.7 0.0**
M31M IAmb IAmb 21 41 50.4
comp=Z,4.4nm,1.4s
**HFS Hagfors 77.88 331** P **P 21 42 08.0 -0.6**
comp=Z,1.4nm,0.8s,baz=75,slow=7.8,SNR=6.6
comp=Z,1.4nm,0.8s
**NC405 NORSAR Array S 78.26 332** P **P 21 42 09.6 -1.1**
**NB201 NORSAR Array S 78.47 332** P **P 21 42 10.7 -1.2**
NB201 IAmb IAmb 21 42 11.4
comp=Z,11nm,1.1s
**NOA NORSAR Array B 78.51 332** P **P 21 42 10.9 -1.2**
comp=Z,0.5nm,0.6s,baz=55,slow=5.3,SNR=2.3
comp=Z,0.5nm,0.6s
**NC204 NORSAR Array S 78.58 333** P **P 21 42 11.2 -1.3**
NC204 IAmb IAmb 21 42 14.6
comp=Z,14nm,1.3s
**MXZ Matakaoa Point 80.95 138** P **P 21 42 24.9 -0.6**
**CLL Collm 82.55 323** *i* P **P 21 42 36.0 +2.2**
**B08A Colville Reser 88.69 36** P **P 21 43 05.1 +0.8**
**MXC Moxie City 89.21 38** P **P 21 43 07.8 +1.0**
**D08A Wollman Farm, 89.69 37** P **P 21 43 09.7 +0.7**
**BAUV El Baul 145.09 19** **PKPbc 21 49 47.8 -0.5**

*SJA **05** 21:35:18.9±0.7, 34.°68S×71.°79W, h67km±3km, ML4.1, MW4.1*
*NEIC **05** 21:35:21.4, 34.°59S×71.°76W, h39km*
*GUC **05** 21:35:21.8±0.7, 34.°59S×71.°70W, h41km±1km, ML4.1*
*NEIC **05** 21:35:21.5±1.2, 34.°60S±0.°02×71.°76W±0.°05, h42km±7km, mb4.7/19, Mwr4.2/28, ML4.1(GUC), Error ellipse: s-maj=5.9km s-min=2.4km az=63.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.92; $M_{\theta\theta}$0.11; $M_{\phi\phi}$-1.03; $M_{r\theta}$0.18; $M_{r\phi}$-0.77; $M_{\theta\phi}$-1.90; Fault plane solution: $M_o$2.2800×$10^{15}$ NP1:$\phi_s$57.63000°, $\delta$24.37000°, $\lambda$146.30000°. NP2:$\phi_s$178.91000°, $\delta$76.76000°, $\lambda$69.35000°. Principal axes: T 2.2356, Plg54.0000°, Azm64.0000°; N 0.0938, Plg20.0000°, Azm184.0000°; P -2.3294, Plg29.0000°, Azm285.0000°;*
*IDC **05** 21:35:22.7±2.9, 34.°57S×71.°50W, h54km±26km, mb3.7/6, mbtmp4.0/10, ML4.0/4, MS3.1/5 Error ellipse: s-maj=35.7km s-min=17.5km az=91.0*
*VAO **05** 21:35:27.6±0.7, 34.°87S×71.°62W, h134km, mb4.1*
**ISC 05 21:35:20.7**±0.6, **34.°63S**±0.°03×**71.°76W**±0.°03, **h41**km±6km, **n154**, **σ1$88**/189, **mb4.4**/12, **21C-2D**, **Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **BO03** | **Pichilemu** | **0.21** | **309** | ⇑*iP* | | **Pn** | **21 35 29.6** | **+1.4** |
| BO03 | | | | *i* S | | **Sn** | **21 35 35.1** | **+1.7** |
| BO03 | | | | IAML | | | 21 35 36.1 | |
| | comp=E,22μm,0.4s | | | | | | | |
| **GO05** | **Huala** | **0.40** | **200** | | | **Pn** | **21 35 31.3** | **+1.1** |
| GO05 | | | | | | **Sn** | **21 35 38.2** | **+1.2** |
| **GO05** | **Huala** | **0.40** | **200** | *eP* | | **Pn** | **21 35 31.3** | **+1.1** |
| GO05 | | | | *eS* | | **Sn** | **21 35 39.4** | **+2.5** |
| GO05 | | | | IAML | | | 21 35 39.8 | |
| | comp=Z,9μm,0.5s | | | | | | | |
| **GO05** | **Huala** | **0.40** | **200** | *i* P | | **Pn** | **21 35 31.4** | **+1.1** |
| GO05 | | | | *i* S | | **Sn** | **21 35 39.0** | **+2.1** |
| GO05 | | | | IAML | | | 21 35 40.9 | |
| | comp=N,20μm,0.1s | | | | | | | |
| **BO01** | **Tunca** | **0.61** | **67** | | | **Pn** | **21 35 33.0** | **+0.1** |
| BO01 | | | | | Sn | **Sn** | **21 35 41.4** | **-0.2** |
| **BO01** | **Tunca** | **0.61** | **67** | *eP* | | **Pn** | **21 35 32.8** | **-0.1** |
| BO01 | | | | *eS* | | **Sn** | **21 35 41.5** | **-0.2** |
| BO01 | | | | *eS* | | **Sn** | **21 35 41.5** | **-0.1** |
| BO01 | | | | IAML | | | 21 35 41.9 | |
| | comp=Z,8μm,0.6s | | | | | | | |
| **BO01** | **Tunca** | **0.61** | **67** | ⇓*iP* | | **Pn** | **21 35 33.0** | **+0.1** |
| BO01 | | | | *i* S | | **Sn** | **21 35 40.8** | **-0.8** |
| BO01 | | | | IAML | | | 21 35 42.1 | |
| | comp=N,8μm,0.1s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **0.82** | **101** | | | **Pn** | **21 35 36.5** | **+0.6** |
| BO02 | | | | | Sn | **Sn** | **21 35 47.5** | **+0.5** |
| **BO02** | **Sierra Bellavi** | **0.82** | **101** | *eP* | | **Pn** | **21 35 36.2** | **+0.3** |
| BO02 | | | | *eS* | | **Sn** | **21 35 49.5** | **+2.5** |
| BO02 | | | | IAML | | | 21 35 51.8 | |
| | comp=Z,11μm,0.5s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **0.82** | **101** | ⇓*iP* | | **Pn** | **21 35 36.4** | **+0.6** |
| BO02 | | | | *i* S | | **Sn** | **21 35 47.1** | **+0.2** |
| BO02 | | | | IAML | | | 21 35 49.2 | |
| | comp=N,24μm,0.3s | | | | | | | |
| **MT01** | **Popeta** | **0.88** | **29** | | | **Pn** | **21 35 36.7** | **+0.2** |
| MT01 | | | | | Sn | **Sn** | **21 35 47.6** | **-0.5** |
| **MT01** | **Popeta** | **0.88** | **29** | *eP* | | **Pn** | **21 35 36.5** | **0.0** |
| MT01 | | | | *eS* | | **Sn** | **21 35 51.4** | **+3.3** |
| MT01 | | | | IAML | | | 21 35 52.7 | |
| | comp=Z,4μm,0.1s | | | | | | | |
| **MT01** | **Popeta** | **0.88** | **29** | ⇑*iP* | | **Pn** | **21 35 36.5** | **0.0** |
| MT01 | | | | *i* S | | **Sn** | **21 35 47.3** | **-0.8** |
| MT01 | | | | IAML | | | 21 35 49.5 | |
| | comp=E,9μm,0.2s | | | | | | | |
| **VA05** | **Santo Domingo** | **0.98** | **7** | | | **Pn** | **21 35 37.8** | **-0.1** |
| VA05 | | | | | Sn | **Sn** | **21 35 49.8** | **-0.8** |
| **VA05** | **Santo Domingo** | **0.98** | **7** | ⇑*iP* | | **Pn** | **21 35 37.6** | **-0.3** |
| VA05 | | | | *i* S | | **Sn** | **21 35 49.8** | **-0.8** |
| VA05 | | | | IAML | | | 21 35 53.8 | |
| | comp=E,9μm,0.6s | | | | | | | |
| **MT09** | **Talagante** | **1.07** | **37** | | | **Pn** | **21 35 39.7** | **+0.4** |
| **MT09** | **Talagante** | **1.07** | **37** | ⇑*iP* | | **Pn** | **21 35 39.7** | **+0.4** |
| MT09 | | | | *i* S | | **Sn** | **21 35 53.2** | **+0.2** |
| MT09 | | | | IAML | | | 21 35 56.0 | |
| | comp=N,17μm,0.4s | | | | | | | |
| **BO04** | **La Punta** | **1.15** | **56** | | | **Pn** | **21 35 40.9** | **+0.6** |
| **BO04** | **La Punta** | **1.15** | **56** | ⇑*iP* | | **Pn** | **21 35 40.8** | **+0.4** |
| BO04 | | | | *i* S | | **Sn** | **21 35 55.2** | **+0.3** |
| BO04 | | | | IAML | | | 21 35 56.7 | |
| | comp=N,10μm,0.4s | | | | | | | |
| **ML02** | **Panimavida** | **1.16** | **166** | Pn | | **Pn** | **21 35 42.1** | **+1.7** |
| **ML02** | **Panimavida** | **1.16** | **166** | *eP* | | **Pn** | **21 35 36.5** | **-3.9** |
| ML02 | | | | *eP* | | **Pn** | **21 35 41.5** | **+1.0** |
| ML02 | | | | *eS* | | **Sn** | **21 35 53.7** | **-1.4** |
| ML02 | | | | IAML | | | 21 36 00.0 | |
| | comp=Z,3μm,0.6s | | | | | | | |
| **ML02** | **Panimavida** | **1.16** | **166** | *i* P | | **Pn** | **21 35 42.2** | **+1.7** |
| ML02 | | | | IAML | | | 21 36 00.5 | |
| | comp=E,6μm,0.3s | | | | | | | |
| **MT12** | **Pirque** | **1.35** | **49** | *i* P | | **Pn** | **21 35 43.5** | **+0.5** |
| MT12 | | | | *i* S | | **Sn** | **21 36 00.1** | **+0.3** |
| **MT02** | **Curacav** | **1.46** | **21** | | | **Pn** | **21 35 45.1** | **+0.5** |
| **MT02** | **Curacav** | **1.46** | **21** | *eP* | | **Pn** | **21 35 45.1** | **+0.5** |
| MT02 | | | | *eS* | | **Sn** | **21 36 05.0** | **+2.5** |
| MT02 | | | | IAML | | | 21 36 07.8 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| **MT02** | **Curacav** | **1.46** | **21** | ⇑*iP* | | **Pn** | **21 35 45.1** | **+0.5** |
| MT02 | | | | *i* S | | **Sn** | **21 36 03.3** | **+0.7** |
| **MT15** | **Las Vizcachas** | **1.47** | **46** | ⇑*iP* | | **Pn** | **21 35 45.2** | **+0.5** |
| MT15 | | | | *i* S | | **Sn** | **21 36 03.8** | **+1.1** |
| MT15 | | | | IAML | | | 21 36 06.8 | |
| | comp=E,9μm,0.3s | | | | | | | |
| **MT05** | **Renca** | **1.50** | **35** | | | **Pn** | **21 35 47.0** | **+1.8** |
| **MT05** | **Renca** | **1.50** | **35** | *eP* | | **Pn** | **21 35 47.7** | **+2.5** |
| MT05 | | | | *eS* | | **Sn** | **21 36 07.7** | **+4.1** |
| MT05 | | | | IAML | | | 21 36 10.1 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **MT05** | **Renca** | **1.50** | **35** | ⇑*iP* | | **Pn** | **21 35 47.6** | **+2.5** |
| MT05 | | | | *i* S | | **Sn** | **21 36 05.6** | **+2.1** |
| MT05 | | | | IAML | | | 21 36 09.1 | |
| | comp=E,3μm,0.4s | | | | | | | |
| **LMEL** | **Las Melosas** | **1.51** | **59** | | | **Pn** | **21 35 46.1** | **+0.8** |
| **LMEL** | **Las Melosas** | **1.51** | **59** | *eP* | | **Pn** | **21 35 46.0** | **+0.6** |
| LMEL | | | | *eS* | | **Sn** | **21 36 06.1** | **+2.1** |
| LMEL | | | | IAML | | | 21 36 07.3 | |
| | comp=Z,3μm,0.4s | | | | | | | |
| **LMEL** | **Las Melosas** | **1.51** | **59** | ⇑*iP* | | **Pn** | **21 35 46.0** | **+0.6** |
| LMEL | | | | IAML | | | 21 36 09.2 | |
| | comp=N,9μm,0.1s | | | | | | | |
| **MT13** | **San Alfonso** | **1.51** | **54** | Pn | | **Pn** | **21 35 46.0** | **+0.6** |
| **MT13** | **San Alfonso** | **1.51** | **54** | *eP* | | **Pn** | **21 35 46.0** | **+0.6** |
| MT13 | | | | *eS* | | **Sn** | **21 36 06.3** | **+2.4** |
| MT13 | | | | IAML | | | 21 36 12.6 | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **MT13** | **San Alfonso** | **1.51** | **54** | ⇑*iP* | | **Pn** | **21 35 46.0** | **+0.6** |
| MT13 | | | | *i* S | | **Sn** | **21 36 04.6** | **+0.7** |
| MT13 | | | | IAML | | | 21 36 07.0 | |
| | comp=E,3μm,0.5s | | | | | | | |
| **MT03** | **Universidad Ad** | **1.54** | **43** | | | **Pn** | **21 35 46.4** | **+0.7** |
| **MT03** | **Universidad Ad** | **1.54** | **43** | *eP* | | **Pn** | **21 35 46.5** | **+0.7** |
| MT03 | | | | *eS* | | **Sn** | **21 36 07.1** | **+2.6** |
| **MT03** | **Universidad Ad** | **1.54** | **43** | ⇑*iP* | | **Pn** | **21 35 46.2** | **+0.4** |
| MT03 | | | | *i* S | | **Sn** | **21 36 06.7** | **+2.2** |
| **MT16** | **CCHEN** | **1.58** | **41** | | | **Pn** | **21 35 47.0** | **+0.7** |
| **MT16** | **CCHEN** | **1.58** | **41** | *i* P | | **Pn** | **21 35 46.9** | **+0.7** |
| MT16 | | | | *i* S | | **Sn** | **21 36 06.3** | **+0.8** |
| MT16 | | | | IAML | | | 21 36 12.5 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **1.60** | **40** | *i* P | | **Pn** | **21 35 47.4** | **+0.9** |
| MT14 | | | | *i* S | | **Sn** | **21 36 06.9** | **+0.9** |
| MT14 | | | | IAML | | | 21 36 12.9 | |
| | comp=N,7μm,0.6s | | | | | | | |
| **VA01** | **Torpederas** | **1.61** | **3** | | | **Pn** | **21 35 47.1** | **+0.6** |
| **VA01** | **Torpederas** | **1.61** | **3** | *eP* | | **Pn** | **21 35 47.3** | **+0.8** |
| VA01 | | | | IAML | | | 21 36 14.6 | |
| | comp=Z,911nm,0.4s | | | | | | | |
| **VA01** | **Torpederas** | **1.61** | **3** | *i* P | | **Pn** | **21 35 47.2** | **+0.6** |
| **MT10** | **Hacienda Santa** | **1.69** | **37** | ⇑*iP* | | **Pn** | **21 35 48.8** | **+0.8** |
| MT10 | | | | *i* S | | **Sn** | **21 36 10.3** | **+1.9** |
| MT10 | | | | IAML | | | 21 36 13.7 | |
| | comp=E,6μm,0.5s | | | | | | | |
| **PEL** | **Peldehue** | **1.73** | **31** | | | **Pn** | **21 35 49.2** | **+0.9** |
| **PEL** | **Peldehue** | **1.73** | **31** | *eP* | | **Pn** | **21 35 49.3** | **+0.9** |
| PEL | | | | *eS* | | **Sn** | **21 36 13.5** | **+4.3** |
| PEL | | | | *eS* | | **Sn** | **21 36 15.7** | **+6.5** |
| PEL | | | | IAML | | | 21 36 17.7 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **PEL** | **Peldehue** | **1.73** | **31** | ⇑*iP* | | **Pn** | **21 35 49.3** | **+0.9** |
| **ROC1** | **El Roble** | **1.77** | **21** | *eP* | | **Pn** | **21 35 49.9** | **+0.9** |
| ROC1 | | | | *eS* | | **Sn** | **21 36 17.1** | **+6.8** |
| **ROCH** | **El Roble** | **1.77** | **21** | ⇑*iP* | | **Pn** | **21 35 50.0** | **+0.9** |
| ROCH | | | | *i* S | | **Sn** | **21 36 12.6** | **+2.1** |
| ROCH | | | | IAML | | | 21 36 16.9 | |
| | comp=N,4μm,0.5s | | | | | | | |
| **FCH** | **Farellones** | **1.79** | **44** | ⇑*iP* | | **Pn** | **21 35 49.9** | **+0.6** |
| FCH | | | | *i* S | | **Sn** | **21 36 12.1** | **+1.2** |
| FCH | | | | IAML | | | 21 36 15.1 | |
| | comp=N,3μm,0.3s | | | | | | | |
| **MT04** | **Ro Olivares** | **1.82** | **48** | *eP* | | **Pn** | **21 35 50.7** | **+1.0** |
| MT04 | | | | *eP* | | **Pn** | **21 35 50.7** | **+1.0** |
| MT04 | | | | *eS* | | **Sn** | **21 36 13.8** | **+2.1** |
| **MT04** | **Ro Olivares** | **1.82** | **48** | ⇑*iP* | | **Pn** | **21 35 50.6** | **+0.8** |
| MT04 | | | | *i* S | | **Sn** | **21 36 12.8** | **+1.1** |
| MT04 | | | | IAML | | | 21 36 16.2 | |
| | comp=N,2μm,0.4s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.87** | **51** | | | **Pn** | **21 35 51.5** | **+1.1** |
| **MT08** | **Bocatoma Ro** | **1.87** | **51** | *eP* | | **Pn** | **21 35 51.4** | **+1.0** |
| MT08 | | | | *eS* | | **Sn** | **21 36 17.2** | **+4.2** |
| MT08 | | | | IAML | | | 21 36 18.9 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.87** | **51** | ⇑*iP* | | **Pn** | **21 35 51.7** | **+1.3** |
| MT08 | | | | *i* S | | **Sn** | **21 36 14.0** | **+1.1** |
| MT08 | | | | IAML | | | 21 36 20.3 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **BI02** | **San Fabín de** | **2.07** | **169** | Pn | | **Pn** | **21 35 54.7** | **+1.8** |
| **VA06** | **Catapilco** | **2.10** | **11** | | | **Pn** | **21 35 53.9** | **+0.6** |
| **VA06** | **Catapilco** | **2.10** | **11** | ⇑*iP* | | **Pn** | **21 35 53.9** | **+0.6** |
| **VA03** | **San Esteban** | **2.12** | **29** | | | **Pn** | **21 35 54.5** | **+0.8** |
| **VA03** | **San Esteban** | **2.12** | **29** | *eP* | | **Pn** | **21 35 54.6** | **+0.9** |
| VA03 | | | | *eS* | | **Sn** | **21 36 18.6** | **-0.2** |
| VA03 | | | | IAML | | | 21 36 26.1 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **VA03** | **San Esteban** | **2.12** | **29** | ⇑*iP* | | **Pn** | **21 35 54.6** | **+0.8** |
| **EDS3** | **Malargue** | **2.24** | **121** | *eP* | | **Pn** | **21 35 55.5** | **+0.1** |
| **RFA** | **San Rafael** | **2.72** | **94** | *eP* | | **Pn** | **21 36 04.3** | **+2.4** |
| RFA | | | | *eS* | | Sn | 21 36 45.0 | +11 |
| **AAGR** | **Agrelo** | **2.89** | **59** | *eP* | | **Pn** | **21 36 07.5** | **+3.2** |
| **AVIZ** | **Vizcacheras** | **2.93** | **68** | *eP* | | Pn | 21 35 50.7 | -14 |
| **ARCO** | **CERRO ARCO** | **2.96** | **54** | *eP* | | Pn | 21 35 47.8 | -17 |
| ARCO | | | | IAML | | | 21 36 13.4 | |
| | comp=Z,385nm,0.6s | | | | | | | |
| **ASAL** | **Salagasta** | **3.18** | **51** | *eP* | | **Pn** | **21 36 12.1** | **+3.8** |
| ASAL | | | | *eS* | | **Sn** | **21 36 53.0** | **+8.0** |
| **CO02** | **Combarbal** | **3.48** | **11** | | | **Pn** | **21 36 12.8** | **+0.4** |
| **CO02** | **Combarbal** | **3.48** | **11** | *eP* | | **Pn** | **21 36 12.8** | **+0.4** |
| CO02 | | | | *eS* | | **Sn** | **21 36 57.3** | **+4.9** |
| CO02 | | | | IAML | | | 21 37 11.8 | |
| | comp=Z,632nm,0.5s | | | | | | | |
| **RTLS** | **Leoncito** | **3.50** | **37** | *eP* | | **Pn** | **21 36 15.7** | **+2.9** |
| RTLS | | | | *eS* | | **Sn** | **21 37 02.0** | **+8.9** |
| RTLS | | | | IAML | | | 21 37 11.9 | |
| | comp=Z,676nm,0.5s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **3.86** | **45** | *eP* | | **Pn** | **21 36 21.1** | **+3.5** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RTCV | | | | *e*S | | Sn | 21 37 14.8 | +13 |
| **CO03** | **El Pedregal** | **3.89** | **14** | Pn | | **Pn** | **21 36 18.5** | **+0.5** |
| **CO03** | **El Pedregal** | **3.89** | **14** | *e*P | | **Pn** | **21 36 19.1** | **+1.1** |
| CO03 | | | | *e*S | | **Sn** | **21 37 04.4** | **+1.9** |
| **CO06** | **Fray Jorge** | **3.95** | **2** | | | **Pn** | **21 36 18.2** | **-0.6** |
| **ZON** | **Zonda** | **4.02** | **41** | Pn | | **Pn** | **21 36 20.1** | **+0.3** |
| **DOCA** | **Reserva Natura** | **4.31** | **32** | *e*P | | **Pn** | **21 36 25.6** | **+1.6** |
| DOCA | | | | *e*S | | **Sn** | **21 37 15.5** | **+2.3** |
| **GO04** | **Tololo Observa** | **4.52** | **11** | | | **Pn** | **21 36 27.1** | **+0.2** |
| **GO04** | **Tololo Observa** | **4.52** | **11** | *e*P | | **Pn** | **21 36 27.9** | **+1.1** |
| GO04 | | | | IAML | | | 21 37 45.1 | |
| | comp=Z,426nm,0.5s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **4.63** | **30** | *e*P | | **Pn** | **21 36 29.9** | **+1.4** |
| **CO05** | **La Serena** | **4.72** | **6** | Pn | | **Pn** | **21 36 28.9** | **-0.5** |
| **CO01** | **Juntas del Tor** | **4.85** | **17** | | | **Pn** | **21 36 31.5** | **+0.1** |
| **GO06** | **Curarrehue** | **4.95** | **177** | | | **Pn** | **21 36 35.2** | **+2.6** |
| **LR03** | **Panguipulli** | **5.01** | **185** | | | **Pn** | **21 36 32.8** | **-0.5** |
| **LR05** | **Currie** | **5.59** | **182** | Pn | | **Pn** | **21 36 42.7** | **+1.4** |
| **LCO** | **Las Campanas** | **5.68** | **9** | | | **Pn** | **21 36 42.5** | **-0.2** |
| **AC05** | **El Transito** | **5.92** | **13** | | | **Pn** | **21 36 45.8** | **-0.1** |
| **VA04** | **Juan Fernndez** | **5.94** | **278** | Pn | | **Pn** | **21 36 47.2** | **+1.0** |
| **H03S1** | **Juan Fernandez** | **5.97** | **276** | T | | T | 21 42 43.4 | |
| | baz=98,slow=76,SNR=2570 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **5.98** | **276** | T | | T | 21 42 44.8 | |
| | baz=98,slow=76,SNR=3272 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **5.99** | **276** | T | | T | 21 42 43.9 | |
| | baz=98,slow=76,SNR=3128 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **6.05** | **279** | T | | T | 21 42 55.2 | |
| | baz=101,slow=78,SNR=89 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.06** | **279** | T | | T | 21 42 55.0 | |
| | baz=101,slow=78,SNR=84 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.07** | **279** | T | | T | 21 42 57.8 | |
| | baz=101,slow=78,SNR=97 | | | | | | | |
| **PLCA** | **Paso Flores** | **6.17** | **171** | P | | **Pn** | **21 36 52.0** | **+2.7** |
| | comp=Z,1.6nm,0.3s,baz=338,slow=11,SNR=38 | | | | | | | |
| PLCA | | | | LR | | LR | 21 39 20.2 | |
| | comp=Z,93nm,19.9s,baz=340,slow=38 | | | | | | | |
| | comp=Z,4.5nm,0.4s | | | | | | | |
| **PLCA** | **Paso Flores** | **6.17** | **171** | *e*P | | **Pn** | **21 36 52.8** | **+3.6** |
| **AC04** | **Llanos de Chal** | **6.43** | **5** | Pn | | **Pn** | **21 36 52.2** | **-0.7** |
| **GO03** | **Copiap** | **7.14** | **11** | Pn | | **Pn** | **21 37 01.2** | **-1.4** |
| **AC06** | **Mina Casimiro** | **7.35** | **10** | | | **Pn** | **21 37 03.9** | **-1.6** |
| **LL01** | **San Ignacio de** | **7.75** | **184** | Pn | | **Pn** | **21 37 13.6** | **+2.7** |
| **AC01** | **Pan de Azucar** | **8.52** | **7** | Pn | | **Pn** | **21 37 17.4** | **-4.1** |
| **LL02** | **Futaleuf** | **8.55** | **180** | Pn | | **Pn** | **21 37 22.2** | **+0.4** |
| **TRQA** | **Tornquist** | **8.60** | **116** | Pn | | **Pn** | **21 37 24.1** | **+1.5** |
| **LVC** | **Limon Verde** | **12.24** | **13** | P | | **Pn** | **21 38 12.2** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=309,slow=11,SNR=1.7 | | | | | | | |
| LVC | | | | LR | | LR | 21 43 20.5 | |
| | comp=Z,74nm,19.8s,baz=211,slow=39 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **LVC** | **Limon Verde** | **12.24** | **13** | *e*P | | **P** | **21 38 20.1** | **-4.2** |
| **PB09** | **IPOC Station P** | **12.98** | **10** | Pn | | **Pn** | **21 38 22.3** | **-0.4** |
| **RODS** | **Rosario do Sul** | **14.62** | **78** | *e*P | | **P** | **21 38 47.9** | **-2.4** |
| **CPUP** | **Villa Florida** | **14.93** | **60** | P | | **Pn** | **21 38 47.6** | **-1.3** |
| | comp=Z,0.1nm,0.3s,baz=70,slow=13,SNR=1.7 | | | | | | | |
| CPUP | | | | LR | | LR | 21 44 33.0 | |
| | comp=Z,53nm,20.4s,baz=234,slow=37 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **MURT** | **Porto Murtinho** | **17.94** | **48** | *e*P | | **Pn** | **21 39 26.6** | **-0.4** |
| **LPAZ** | **La Paz** | **18.56** | **11** | | | **P** | **21 39 34.1** | **-0.6** |
| **LPAZ** | **La Paz** | **18.56** | **11** | P | | **Pn** | **21 39 35.0** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=179,slow=7.8,SNR=21 | | | | | | | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **LPAZ** | **La Paz** | **18.56** | **11** | *e*P | | **Pn** | **21 39 37.4** | **+2.2** |
| **EFI** | **East Falkland** | **19.69** | **154** | P | | **Pn** | **21 39 48.0** | **+0.2** |
| EFI | | | | IAmb | | IAmb | 21 40 01.2 | |
| | comp=Z,60nm,1.5s | | | | | | | |
| **AQDB** | **Aquidauana** | **20.00** | **49** | P | | **P** | **21 39 49.7** | **-0.1** |
| AQDB | | | | IAmb | | IAmb | 21 39 50.1 | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **SIV** | **San Ignacio** | **20.90** | **30** | P | | **P** | **21 39 58.6** | **-1.0** |
| | comp=Z,10nm,0.7s,baz=208,slow=9.8,SNR=50 | | | | | | | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **PCMB** | **Pacaembu** | **22.20** | **60** | *e*P | | **P** | **21 40 14.0** | **+0.4** |
| **PTLB** | **Pontes e Lacer** | **22.22** | **34** | *e*P | | **P** | **21 40 14.0** | **+0.2** |
| **SALV** | **Santo Antonio** | **23.58** | **42** | *e*P | | **P** | **21 40 27.0** | **-0.7** |
| **ETMB** | **Extrema** | **25.22** | **13** | P | | **P** | **21 40 43.2** | **+0.6** |
| ETMB | | | | IAmb | | IAmb | 21 40 45.6 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **ETMB** | **Extrema** | **25.22** | **13** | *e*P | | **P** | **21 40 43.0** | **+0.4** |
| **PDRB** | **Porto dos Gac** | **26.69** | **34** | *e*P | | **P** | **21 40 55.2** | **-0.8** |
| **SAML** | **Samuel** | **26.75** | **19** | P | | **P** | **21 40 56.0** | **-0.5** |
| **BDFB** | **Brasilia** | **28.51** | **54** | P | | **P** | **21 41 11.7** | **-0.7** |
| **BDFB** | **Brasilia** | **28.51** | **54** | LR | | LR | 21 53 27.3 | |
| | comp=Z,64nm,18.8s,baz=329,slow=38 | | | | | | | |
| **HOPE** | **Hope Point** | **31.46** | **140** | P | | **P** | **21 41 38.6** | **+0.6** |
| **MACA** | **Manacapuru-AM** | **32.96** | **21** | P | | **P** | **21 41 50.7** | **-0.8** |
| MACA | | | | IAmb | | IAmb | 21 42 08.0 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **BOAV** | **Boa Vista** | **38.32** | **18** | P | | **P** | **21 42 35.5** | **-2.0** |
| **ROSC** | **El Rosal** | **39.33** | **356** | P | | **P** | **21 42 46.9** | **+0.5** |
| **RCBR** | **Riachuelo** | **43.78** | **57** | LR | | LR | 22 03 07.4 | |
| | comp=Z,23nm,19.2s,baz=155,slow=38 | | | | | | | |
| **SNAA** | **Sanae** | **50.91** | **158** | P | | **P** | **21 44 17.8** | **+0.5** |
| SNAA | | | | IAmb | | IAmb | 21 44 33.7 | |
| | comp=Z,6.6nm,1.5s | | | | | | | |
| **SNAA** | **Sanae** | **50.91** | **158** | ⇑P | | **P** | **21 44 16.0** | **-1.3** |
| **SNAA** | **Sanae** | **50.91** | **158** | P | | **P** | **21 44 17.8** | **+0.5** |
| | comp=Z,0.7nm,0.8s,baz=211,slow=4.9,SNR=2.1 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **RTAL** | **Retalhuleu** | **52.43** | **335** | P | | **P** | **21 44 31.0** | **+1.8** |
| **OBIP** | **Obispado Ponce** | **52.61** | **6** | P | | **P** | **21 44 30.1** | **-0.3** |
| **TROLL** | **Troll, Antarti** | **52.62** | **158** | ⇑P | | **P** | **21 44 30.8** | **+0.6** |
| | comp=Z,52nm,0.6s | | | | | | | |
| **CELP** | **Cerrillos** | **52.65** | **6** | P | | **P** | **21 44 30.2** | **-0.5** |
| CELP | | | | IAmb | | IAmb | 21 44 31.6 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **55.61** | **180** | P | | **P** | **21 44 53.9** | **+1.9** |
| QSPA | | | | IAmb | | IAmb | 21 45 07.3 | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **55.61** | **180** | P | | **P** | **21 44 53.5** | **+1.5** |
| | comp=Z,1.6nm,0.9s,baz=254,slow=4.6,SNR=3.3 | | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **70.40** | **331** | P | | **P** | **21 46 31.6** | **+1.1** |
| | comp=Z,0.3nm,0.4s,baz=157,slow=8.2,SNR=7.7 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **V48A** | **Smith Brothers** | **71.41** | **347** | P | | **P** | **21 46 36.7** | **+0.3** |
| V48A | | | | IAmb | | IAmb | 21 46 37.3 | |
| | comp=Z,6.9nm,0.6s | | | | | | | |
| **WVT** | **Waverly** | **71.98** | **346** | P | | **P** | **21 46 40.2** | **+0.4** |
| WVT | | | | IAmb | | IAmb | 21 46 40.5 | |
| | comp=Z,6.2nm,0.6s | | | | | | | |
| **BOSA** | **Boshof** | **79.58** | **117** | P | | **P** | **21 47 23.2** | **-0.6** |
| | comp=Z,2.4nm,0.7s,baz=208,slow=4.3,SNR=6.6 | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **SMCO** | **Snowmass** | **80.34** | **333** | P | | **P** | **21 47 28.0** | **+0.2** |
| SMCO | | | | IAmb | | IAmb | 21 47 32.0 | |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| **PV10** | **Paradox Valley** | **80.45** | **331** | P | | **P** | **21 47 27.9** | **-0.3** |
| PV10 | | | | IAmb | | IAmb | 21 47 28.3 | |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.21** | **70** | P | | **P** | **21 47 47.5** | **-0.6** |
| | comp=Z,1.7nm,0.7s,baz=290,slow=3.1,SNR=9.9 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **120.32** | **209** | PKP | | **PKPdf** | **21 54 07.1** | **-0.8** |
| | comp=Z,0.1nm,0.4s,baz=152,slow=1.5,SNR=1.0 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.99** | **269** | T | | T | 00 12 56.7 | |
| | baz=119,slow=75,SNR=5.4 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.00** | **269** | T | | T | 00 12 49.3 | |
| | baz=119,slow=75,SNR=6.9 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.00** | **269** | T | | T | 00 12 49.1 | |
| | baz=119,slow=75,SNR=4.3 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.42** | **270** | T | | T | 00 13 25.9 | |
| | baz=120 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.43** | **270** | T | | T | 00 13 24.8 | |
| | baz=120,slow=74 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.43** | **270** | T | | T | 00 13 26.9 | |
| | baz=120,slow=74 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **153.16** | **44** | PKPbc | | **PKPbc** | **21 55 12.7** | **-0.7** |
| | comp=Z,0.3nm,0.7s,baz=302,slow=2.4,SNR=6.7 | | | | | | | |
| KURBB | | | | PKPab | | **pPKPbc** | **21 55 26.1** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=301,slow=2.8,SNR=8.1 | | | | | | | |

*SOME **05** 21:36:38.8, 42.12N×76.76E, h20km*
*NNC **05** 21:36:39.9±0.4, 42.22N×76.76E, h0km, mb3.6, mpv3.7,*
*Error ellipse: s-maj=2.7km s-min=1.6km az=163.0*
*KRNET **05** 21:36:39.2±0.1, 42.17N×76.78E, h17km, mb3.5*
*KNET **05** 21:36:41.5±0.5, 42.27N×76.64E, h12km±2km, ml2.6, Error ellipse: s-maj=4.2km s-min=2.8km az=51.0*
**ISC 05 21:36:37.3**±1.2, **42.12N**±0.03×**76.77E**±0.01, **h1**km±10km, **n92**, σ0=**0.93**/172, **49C-22D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KDJ** | **Kajisay** | **0.31** | **87** | ⇓*i*P | | **Pb** | **21 36 45.4** | **-0.3** |
| | baz=99 | | | | | | | |
| KDJ | | | | ⇓*i*S | | **Sb** | **21 36 49.8** | **-1.5** |
| | baz=99 | | | | | | | |
| **ULHL** | **Ulahol** | **0.41** | **288** | ⇓P | | **Pb** | **21 36 47.7** | **+0.1** |
| ULHL | | | | ⇓S | | **Sb** | **21 36 53.3** | **-1.1** |
| **ULHL** | **Ulahol** | **0.41** | **288** | ⇑*i*P | | **Pb** | **21 36 47.4** | **-0.1** |
| | baz=80 | | | | | | | |
| ULHL | | | | ⇑*i*S | | **Sb** | **21 36 53.4** | **-1.0** |
| | baz=80 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **0.72** | **302** | ⇑*e*P | | **Pb** | **21 36 52.5** | **-0.2** |
| | baz=97 | | | | | | | |
| BOOM | | | | ⇑*e*S | | **Sg** | **21 37 02.2** | **+1.8** |
| | baz=97 | | | | | | | |
| **NRN** | **Naryn** | **0.89** | **220** | ⇑*i*P | | **Pn** | **21 36 57.1** | **-0.2** |
| | baz=19 | | | | | | | |
| NRN | | | | ⇑*i*S | | **Sn** | **21 37 10.4** | **-0.6** |
| | baz=19 | | | | | | | |
| **IZV** | **Izvestkoviy** | **0.93** | **353** | *e*P | | **Pg** | **21 36 55.4** | **+0.3** |
| | 0.2nm,0.1s | | | | | | | |
| IZV | | | | *e*S | | **Sg** | **21 37 07.4** | **+0.3** |
| | 70nm,0.2s | | | | | | | |
| **IZV** | **Izvestkoviy** | **0.93** | **353** | P | | **Pg** | **21 36 55.4** | **+0.3** |
| | 0.2nm,0.1s | | | | | | | |
| IZV | | | | S | | **Sg** | **21 37 07.4** | **+0.3** |
| | 70nm,0.2s | | | | | | | |
| **IZV** | **Izvestkoviy** | **0.93** | **353** | *e*P | | **Pg** | **21 36 55.4** | **+0.3** |
| | baz=52 | | | | | | | |
| IZV | | | | *e*S | | **Sg** | **21 37 07.4** | **+0.3** |
| | baz=52 | | | | | | | |
| **TNSS** | **Tian-Shan** | **0.93** | **8** | *e*P | | **Pb** | **21 36 55.8** | **-0.7** |
| | 21nm,0.1s | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **21 37 07.8** | **+0.6** |
| | 60nm,0.2s | | | | | | | |
| **TNSS** | **Tian-Shan** | **0.93** | **8** | P | | **Pb** | **21 36 55.8** | **-0.7** |
| | 21nm,0.1s | | | | | | | |
| TNSS | | | | S | | **Sg** | **21 37 07.2** | **0.0** |
| | 37nm,0.2s | | | | | | | |
| **TNSS** | **Tian-Shan** | **0.93** | **8** | P | | **Pb** | **21 36 56.2** | **-0.2** |
| | 25nm,0.1s | | | | | | | |
| TNSS | | | | S | | **Sg** | **21 37 08.2** | **+0.9** |
| | 165nm,0.1s | | | | | | | |
| **TNSS** | **Tian-Shan** | **0.93** | **8** | *e*P | | **Pb** | **21 36 55.8** | **-0.7** |
| | baz=8.0 | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **21 37 07.8** | **+0.6** |
| | baz=8.0 | | | | | | | |
| **MTBS** | **Maitube** | **1.04** | **346** | *e*P | | **Pg** | **21 36 57.5** | **+0.2** |
| | 27nm,0.2s | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **21 37 10.9** | **+0.1** |
| | 115nm,0.3s | | | | | | | |
| **MTBS** | **Maitube** | **1.04** | **346** | P | | **Pg** | **21 36 57.5** | **+0.2** |
| | 27nm,0.2s | | | | | | | |
| MTBS | | | | S | | **Sg** | **21 37 10.9** | **+0.1** |
| | 115nm,0.3s | | | | | | | |
| **MTBS** | **Maitube** | **1.04** | **346** | *e*P | | **Pg** | **21 36 57.5** | **+0.2** |
| | baz=45 | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **21 37 11.0** | **+0.1** |
| | baz=45 | | | | | | | |
| **MDOK** | **Medeo** | **1.07** | **11** | *e*P | | **Pg** | **21 36 57.7** | **0.0** |
| | 20nm,0.1s | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **21 37 11.4** | **-0.3** |
| | 82nm,0.4s | | | | | | | |
| **MDOK** | **Medeo** | **1.07** | **11** | Pg | | **Pg** | **21 36 57.7** | **0.0** |
| | 20nm,0.1s | | | | | | | |
| MDOK | | | | ⇑P | | **Pb** | **21 36 58.1** | **-0.5** |
| | 5.7nm,0.2s | | | | | | | |
| MDOK | | | | ⇑S | | **Sg** | **21 37 11.1** | **-0.5** |
| | 46nm,0.3s | | | | | | | |
| MDOK | | | | Lg | | Lg | 21 37 11.4 | |
| | 82nm,0.4s | | | | | | | |
| **MDOK** | **Medeo** | **1.07** | **11** | *e*P | | **Pg** | **21 36 57.7** | **0.0** |
| | baz=11 | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **21 37 11.3** | **-0.3** |
| | baz=11 | | | | | | | |
| **KASK** | **Kaskelen** | **1.10** | **355** | ⇑P | | **Pn** | **21 36 59.3** | **-0.7** |
| KASK | | | | ⇑S | | **Sb** | **21 37 13.8** | **-0.4** |
| **KNDC** | **Almaty** | **1.11** | **7** | ⇑P | | **Pn** | **21 36 59.6** | **-0.4** |
| | 21nm,0.3s | | | | | | | |
| KNDC | | | | ⇓S | | **Sg** | **21 37 13.6** | **+0.6** |
| | 125nm,0.3s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.15** | **13** | *e*P | | **Pb** | **21 36 59.8** | **-0.1** |
| | 64nm,0.1s | | | | | | | |
| KOTS | | | | *e*S | | **Sb** | **21 37 15.1** | **-0.4** |
| | 292nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.15** | **13** | P | | **Pb** | **21 36 59.8** | **-0.1** |
| | 64nm,0.1s | | | | | | | |
| KOTS | | | | P | | **Pb** | **21 36 59.9** | **-0.1** |
| | 64nm,0.1s | | | | | | | |
| KOTS | | | | S | | **Sb** | **21 37 15.1** | **-0.4** |
| | 292nm,0.2s | | | | | | | |
| KOTS | | | | S | | **Sb** | **21 37 15.1** | **-0.4** |
| | 292nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.15** | **13** | *e*P | | **Pb** | **21 36 59.8** | **-0.1** |
| | baz=13 | | | | | | | |
| KOTS | | | | *e*S | | **Sb** | **21 37 15.0** | **-0.4** |
| | baz=13 | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.18** | **313** | ⇑P | | **Pn** | **21 37 00.9** | **-0.3** |
| | 45nm,0.2s,SNR=203 | | | | | | | |
| TKM2 | | | | ⇓S | | **Sg** | **21 37 16.0** | **+0.7** |
| | 168nm,0.1s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.18** | **313** | ⇑P | | **Pn** | **21 37 00.9** | **-0.3** |
| | 6.0nm,0.2s | | | | | | | |
| TKM2 | | | | ⇑S | | **Sg** | **21 37 16.3** | **+1.0** |
| | 56nm,0.3s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.18** | **313** | ⇓*i*P | | **Pn** | **21 37 00.8** | **-0.3** |
| | baz=11 | | | | | | | |
| TKM2 | | | | ⇓*i*S | | **Sg** | **21 37 16.3** | **+1.0** |
| | baz=11 | | | | | | | |
| **PRZ** | **Przheval'sk** | **1.26** | **73** | ⇑*i*P | | **Pn** | **21 37 02.5** | **+0.2** |
| | baz=74 | | | | | | | |
| PRZ | | | | ⇑*i*S | | **Sn** | **21 37 19.2** | **-0.8** |
| | baz=74 | | | | | | | |
| **DGS** | **Degeres** | **1.34** | **327** | *e*P | | **Pn** | **21 37 03.0** | **-0.3** |
| | 11nm,0.1s | | | | | | | |
| DGS | | | | *e*S | | **Sb** | **21 37 20.7** | **-0.5** |
| | 61nm,0.2s | | | | | | | |
| **DGS** | **Degeres** | **1.34** | **327** | P | | **Pn** | **21 37 03.0** | **-0.3** |
| | 11nm,0.1s | | | | | | | |
| DGS | | | | P | | **Pg** | **21 37 03.5** | **+0.5** |
| | 11nm,0.1s | | | | | | | |
| DGS | | | | S | | **Sb** | **21 37 20.6** | **-0.5** |
| | 62nm,0.3s | | | | | | | |
| DGS | | | | S | | **Sb** | **21 37 20.7** | **-0.5** |
| | 61nm,0.2s | | | | | | | |
| **DGS** | **Degeres** | **1.34** | **327** | *e*P | | **Pn** | **21 37 03.0** | **-0.3** |
| | baz=25 | | | | | | | |
| DGS | | | | *e*S | | **Sb** | **21 37 20.6** | **-0.5** |
| | baz=25 | | | | | | | |
| **KBK** | **Karagaybulak** | **1.45** | **292** | ⇓P | | **Pg** | **21 37 06.3** | **+1.2** |
| | 28nm,0.1s,SNR=16 | | | | | | | |
| KBK | | | | ⇑S | | **Sg** | **21 37 25.5** | **+1.5** |
| | 91nm,0.2s | | | | | | | |
| **KBK** | **Karagaybulak** | **1.45** | **292** | ⇓*i*P | | **Pg** | **21 37 05.9** | **+0.7** |
| | baz=90 | | | | | | | |
| KBK | | | | ⇓*i*S | | **Sg** | **21 37 25.3** | **+1.3** |
| | baz=90 | | | | | | | |
| **SATY** | **Saty** | **1.53** | **52** | *e*P | | **Pg** | **21 37 06.8** | **+0.1** |
| | 85nm,0.1s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **21 37 27.2** | **+0.6** |
| | 362nm,0.1s | | | | | | | |
| **SATY** | **Saty** | **1.53** | **52** | P | | **Pg** | **21 37 06.8** | **+0.1** |
| | 85nm,0.1s | | | | | | | |
| SATY | | | | S | | **Sg** | **21 37 27.7** | **+1.2** |
| | 362nm,0.1s | | | | | | | |
| **SATY** | **Saty** | **1.53** | **52** | *e*P | | **Pg** | **21 37 06.8** | **+0.1** |
| | baz=53 | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **21 37 27.2** | **+0.6** |
| | baz=53 | | | | | | | |
| **KTBS** | **Karatobe** | **1.60** | **358** | *e*P | | **Pb** | **21 37 07.5** | **-0.1** |
| | 7.7nm,0.1s | | | | | | | |
| KTBS | | | | *e*S | | **Sb** | **21 37 28.0** | **-0.2** |
| | 36nm,0.1s | | | | | | | |
| **KTBS** | **Karatobe** | **1.60** | **358** | P | | **Pb** | **21 37 07.4** | **-0.1** |
| | 7.7nm,0.1s | | | | | | | |
| KTBS | | | | S | | **Sb** | **21 37 28.0** | **-0.2** |
| | 36nm,0.1s | | | | | | | |
| **KTBS** | **Karatobe** | **1.60** | **358** | *e*P | | **Pb** | **21 37 07.5** | **-0.1** |
| | baz=57 | | | | | | | |
| KTBS | | | | *e*S | | **Sb** | **21 37 28.1** | **-0.2** |
| | baz=57 | | | | | | | |
| **ZHN** | **Zhinishke** | **1.62** | **49** | *e*P | | **Pg** | **21 37 08.2** | **-0.1** |
| | 81nm,0.2s | | | | | | | |
| ZHN | | | | *e*S | | **Sg** | **21 37 29.3** | **0.0** |
| | 278nm,0.2s | | | | | | | |
| **ZHN** | **Zhinishke** | **1.62** | **49** | *e*P | | **Pg** | **21 37 08.2** | **-0.1** |
| | baz=50 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ZHN | | | | *e*S | | **Sg** | **21 37 29.3** | **0.0** |
| | baz=50 | | | | | | | |
| **UCH** | **Uchtor** | **1.68** | **275** | ⇑P | | **Pg** | **21 37 10.5** | **+1.0** |
| | 2.9nm,0.1s | | | | | | | |
| **UCH** | **Uchtor** | **1.68** | **275** | ⇑*i*P | | **Pg** | **21 37 10.2** | **+0.7** |
| | baz=73 | | | | | | | |
| UCH | | | | ⇑*i*S | | **Sg** | **21 37 32.8** | **+1.5** |
| | baz=73 | | | | | | | |
| **KURS** | **Kuram** | **1.71** | **36** | *e*P | | **Pg** | **21 37 09.8** | **-0.4** |
| | 19nm,0.3s | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **21 37 32.0** | **-0.4** |
| | 44nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **1.71** | **36** | P | | **Pg** | **21 37 09.8** | **-0.4** |
| | 19nm,0.3s | | | | | | | |
| KURS | | | | S | | **Sg** | **21 37 32.0** | **-0.4** |
| | 44nm,0.4s | | | | | | | |
| **KURS** | **Kuram** | **1.71** | **36** | *e*P | | **Pg** | **21 37 09.8** | **-0.4** |
| | baz=37 | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **21 37 32.0** | **-0.4** |
| | baz=37 | | | | | | | |
| **FRU1** | **Bishkek** | **1.73** | **294** | ⇑*i*P | | **Pg** | **21 37 11.0** | **+0.6** |
| | baz=93 | | | | | | | |
| FRU1 | | | | ⇑*i*S | | **Sg** | **21 37 34.1** | **+1.3** |
| | baz=93 | | | | | | | |
| **CHMS** | **Chumysh** | **1.73** | **301** | ⇓P | | **Pg** | **21 37 10.6** | **0.0** |
| | 14nm,0.2s,SNR=22 | | | | | | | |
| CHMS | | | | ⇑S | | **Sg** | **21 37 33.6** | **+0.6** |
| | 48nm,0.2s | | | | | | | |
| **CHMS** | **Chumysh** | **1.73** | **301** | ⇑P | | **Pb** | **21 37 10.3** | **+0.4** |
| | 7.7nm,0.5s | | | | | | | |
| CHMS | | | | ⇑S | | **Sg** | **21 37 33.1** | **+0.1** |
| | 15nm,0.3s | | | | | | | |
| **CHMS** | **Chumysh** | **1.73** | **301** | ⇑*i*P | | **Pg** | **21 37 10.5** | **0.0** |
| | baz=99 | | | | | | | |
| CHMS | | | | ⇑*i*S | | **Sg** | **21 37 33.4** | **+0.5** |
| | baz=99 | | | | | | | |
| **CHKK** | **Chushkaly** | **1.74** | **5** | *e*P | | **Pb** | **21 37 09.9** | **-0.2** |
| | 20nm,0.1s | | | | | | | |
| CHKK | | | | *e*S | | **Sb** | **21 37 32.6** | **+0.1** |
| | 233nm,0.2s | | | | | | | |
| **CHKK** | **Chushkaly** | **1.74** | **5** | P | | **Pb** | **21 37 09.9** | **-0.2** |
| | 20nm,0.1s | | | | | | | |
| CHKK | | | | S | | **Sb** | **21 37 32.6** | **+0.1** |
| | 233nm,0.2s | | | | | | | |
| **CHKK** | **Chushkaly** | **1.74** | **5** | *e*P | | **Pb** | **21 37 09.9** | **-0.2** |
| | baz=5.0 | | | | | | | |
| CHKK | | | | *e*S | | **Sb** | **21 37 32.6** | **+0.1** |
| | baz=5.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.76** | **288** | ⇓P | | **Pg** | **21 37 11.8** | **+0.6** |
| | 11nm,0.1s,SNR=14 | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **21 37 34.8** | **+0.8** |
| | 43nm,0.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **1.76** | **288** | P | | **Pg** | **21 37 11.8** | **+0.6** |
| | 4.9nm,0.3s | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **21 37 34.1** | **+0.1** |
| | 21nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **1.76** | **288** | ⇑*i*P | | **Pg** | **21 37 11.4** | **+0.3** |
| | baz=86 | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sg** | **21 37 34.8** | **+0.8** |
| | baz=86 | | | | | | | |
| **KRBS** | **Karabastau** | **1.77** | **333** | *e*P | | **Pb** | **21 37 11.0** | **+0.4** |
| | 19nm,0.1s | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **21 37 34.2** | **0.0** |
| | 1.5nm,0.3s | | | | | | | |
| **KRBS** | **Karabastau** | **1.77** | **333** | P | | **Pb** | **21 37 11.0** | **+0.4** |
| | 19nm,0.1s | | | | | | | |
| KRBS | | | | S | | **Sg** | **21 37 34.2** | **0.0** |
| | 1.5nm,0.3s | | | | | | | |
| **KRBS** | **Karabastau** | **1.77** | **333** | *e*P | | **Pb** | **21 37 11.0** | **+0.4** |
| | baz=32 | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **21 37 34.2** | **0.0** |
| | baz=32 | | | | | | | |
| **ARLS** | **Aral** | **1.84** | **263** | ⇓*i*P | | **Pg** | **21 37 13.0** | **+0.4** |
| | baz=61 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sg** | **21 37 37.5** | **+1.0** |
| | baz=61 | | | | | | | |
| **KPKS** | **Kokpek** | **1.95** | **46** | *e*P | | **Pb** | **21 37 13.7** | **0.0** |
| | 90nm,0.2s | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | **21 37 38.8** | **+0.2** |
| | 221nm,0.2s | | | | | | | |
| **KPKS** | **Kokpek** | **1.95** | **46** | P | | **Pb** | **21 37 13.7** | **0.0** |
| | 90nm,0.2s | | | | | | | |
| KPKS | | | | P | | **Pg** | **21 37 13.8** | **-0.9** |
| | 117nm,0.1s | | | | | | | |
| KPKS | | | | S | | **Sb** | **21 37 38.7** | **+0.2** |
| | 217nm,0.3s | | | | | | | |
| KPKS | | | | S | | **Sb** | **21 37 38.8** | **+0.2** |
| | 221nm,0.2s | | | | | | | |
| **KPKS** | **Kokpek** | **1.95** | **46** | *e*P | | **Pb** | **21 37 13.7** | **0.0** |
| | baz=47 | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | **21 37 38.8** | **+0.2** |
| | baz=47 | | | | | | | |
| **UZB** | **Uzynbulak** | **1.96** | **57** | *e*P | | **Pg** | **21 37 13.9** | **-0.9** |
| | 52nm,0.3s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **21 37 39.1** | **-1.0** |
| | 152nm,0.2s | | | | | | | |
| **UZB** | **Uzynbulak** | **1.96** | **57** | *e*P | | **Pg** | **21 37 13.9** | **-0.9** |
| | baz=59 | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **21 37 39.1** | **-1.0** |
| | baz=59 | | | | | | | |
| **USP** | **Ospenovka** | **2.03** | **305** | ⇑P | | **Pg** | **21 37 15.8** | **-0.4** |
| | 30nm,0.2s,SNR=38 | | | | | | | |
| USP | | | | ⇓

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 4.4nm,0.1s | | | | | | | |
| KTMS | | | | | Lg | Lg | 21 38 09.1 | |
| | 16nm,0.3s | | | | | | | |
| **DJR** | **Jarkent** | **3.13** | **44** | *e*P | | **Pb** | **21 37 33.7** | **0.0** |
| | 4.8nm,0.4s | | | | | | | |
| DJR | | | | *e*S | | **Sb** | **21 38 13.6** | **+1.2** |
| | 58nm,0.4s | | | | | | | |
| **DJR** | **Jarkent** | **3.13** | **44** | Pg | | **Pb** | **21 37 33.7** | **0.0** |
| | 4.8nm,0.4s | | | | | | | |
| DJR | | | | | Lg | Lg | 21 38 13.6 | |
| | 58nm,0.4s | | | | | | | |
| **MNAS** | **Manas** | **3.19** | **278** | ⇑*i*P | | **Pb** | **21 37 31.5** | **-3.3** |
| | baz=77 | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sn** | **21 38 09.5** | **+2.2** |
| | baz=77 | | | | | | | |
| **KK31** | **Karatay Array** | **4.72** | **284** | ⇑Pg | | **Pg** | **21 38 05.7** | **-2.1** |
| | 2.8nm,0.6s,baz=92,slow=15,SNR=17 | | | | | | | |
| KK31 | | | | ⇑Lg | | Lg | 21 39 06.8 | |
| | 15nm,0.8s,baz=95,slow=29 | | | | | | | |
| **KKAR** | **Karatay Array** | **4.72** | **284** | ⇑*i*P | | **Pn** | **21 37 52.7** | **+3.1** |
| | baz=83 | | | | | | | |
| KKAR | | | | ⇑*i*S | | **Sn** | **21 38 46.1** | **+1.1** |
| | baz=83 | | | | | | | |
| **MAKZ** | **Makanchi** | **5.99** | **37** | Pg | | **Pg** | **21 38 28.8** | **-3.2** |
| | 2.8nm,0.9s | | | | | | | |
| MAKZ | | | | | Lg | Lg | 21 39 46.3 | |
| | 3.3nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **6.12** | **38** | ⇑Pg | | Pb | 21 38 29.3 | +4.6 |
| | 0.4nm,0.4s,baz=211,slow=15,SNR=4.8 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 21 39 49.6 | |
| | 1.9nm,0.5s | | | | | | | |
| **OTUK** | **Ortayu** | **6.88** | **334** | ⇓Lg | | Lg | 21 40 13.7 | |
| | 5.5nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.60** | **8** | ⇑Lg | | Lg | 21 41 08.0 | |
| | 5.1nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **8.70** | **8** | ⇓Lg | | Lg | 21 41 11.7 | |
| | 6.8nm,1.1s | | | | | | | |

*IDC **05** 21:42:03.9±1.9,8°.20S×116°.50E,h0km,mb3.3/3,*
*mbtmp3.4/4,ML3.6/1,Error ellipse: s-maj=30.7km*
*s-min=24.5km az=102.0*
*DJA **05** 21:42:06.2±1.1,8°.3S±13°×11°.7E±°,h48km±64km,M4.0/4,*
*MLv4.0/4*
**ISC 05 21:42:05.4±0.9,8°.12S±0°.08×116°.48E±0°.03,h10km,n8,**
**σ0§99/11,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **1.25** | **271** | P | **Pg** | **21 42 28.5** | **-0.9** |
| SRBI | | | | S | **Sg** | **21 42 45.2** | **-0.5** |
| **DNP** | **Denpasar** | **1.37** | **246** | P | **Pg** | **21 42 31.7** | **0.0** |
| DNP | | | | S | **Sg** | **21 42 51.7** | **+2.1** |
| **PLAI** | **Plampang** | **1.47** | **119** | P | **Pg** | **21 42 33.0** | **-0.6** |
| PLAI | | | | S | **Sg** | **21 42 52.9** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.33** | **261** | P | **Pn** | **21 42 43.2** | **-0.6** |
| **KAPI** | **Kappang** | **4.48** | **47** | Pn | **Pn** | **21 43 13.8** | **+0.4** |
| | 2.9nm,0.3s,baz=224,slow=20,SNR=2.0 | | | | | | |
| KAPI | | | | Sn | **Sn** | **21 44 05.8** | **+0.2** |
| | 3.8nm,0.3s,baz=244,slow=16,SNR=4.5 | | | | | | |
| KAPI | | | | Lg | Lg | 21 44 28.4 | |
| | 2.7nm,0.3s,baz=198,slow=20,SNR=4.3 | | | | | | |
| | 6.5nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.91** | **126** | P | Pn | 21 46 47.5 | -3.3 |
| | 0.9nm,0.6s,baz=300,slow=12,SNR=11 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.76** | **135** | P | **P** | **21 47 07.2** | **-0.8** |
| | 0.7nm,0.8s,baz=311,slow=9.9,SNR=3.4 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.56** | **334** | P | **P** | **21 52 30.2** | **+0.7** |
| | 0.4nm,0.9s,baz=132,slow=6.0,SNR=2.7 | | | | | | |
| | 0.4nm,0.9s | | | | | | |

**IDC 05 21:44:06.9±2.6,5°.82S×151°.63E,h0km,mb3.3/3,**
**mbtmp3.4/3,Error ellipse: s-maj=193.1km**
**s-min=30.6km az=126.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.90** | **229** | P | P | 21 49 02.3 | +0.5 |
| | 0.5nm,0.8s,baz=54,slow=9.4,SNR=2.5 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **24.61** | **222** | P | P | 21 49 28.9 | -0.4 |
| | 0.8nm,0.7s,baz=54,slow=8.8,SNR=7.7 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **83.54** | **22** | P | P | 21 56 36.5 | -0.1 |
| | 0.4nm,0.7s,baz=256,slow=5.4,SNR=5.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.49** | **286** | PKPbc | PKPbc | 22 03 58.9 | -0.3 |
| | 0.1nm,0.4s,baz=70,slow=3.0,SNR=1.9 | | | | | | |

*ISN **05** 21:44:25.5±1.5,34°.78N×46°.43E,h18km±28km,ML3.0*
*TEH **05** 21:44:26.3,34°.77N×46°.34E,h11km±8km,ML2.9*
**ISC 05 21:44:26.5±1.1,34°.75N±0°.05×46°.36E±0°.04,h12km±7km,**
**n11,σ0§70/15,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.06** | **153** | Pg | **Pg** | **21 44 29.2** | **0.0** |
| IDHR | | | | Sg | **Sg** | **21 44 31.2** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.46** | **157** | Pg | **Pb** | **21 44 36.3** | **-0.3** |
| **ILIN** | **Lien** | **0.53** | **71** | Pg | **Pb** | **21 44 37.1** | **-0.7** |
| **KGS1** | **Ghasr-e-Shirin** | **0.68** | **249** | Pg | **Pg** | **21 44 39.6** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.73** | **210** | Pg | **Pb** | **21 44 40.9** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.74** | **130** | Pg | **Pb** | **21 44 41.0** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **1.13** | **186** | Pg | **Pg** | **21 44 48.3** | **0.0** |
| **IBZA** | **Bozab** | **1.27** | **102** | Pg | **Pg** | **21 44 51.4** | **+0.4** |
| **IBDR** | **Badra** | **1.67** | **192** | *e*Pg | **Pb** | **21 44 57.0** | **-0.2** |
| IBDR | | | | *e*Sg | **Sb** | **21 45 18.0** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.78** | **292** | *e*Pn | **Pn** | **21 44 57.0** | **0.0** |
| IKRK | | | | *e*Sn | **Sb** | **21 45 22.0** | **+0.8** |
| IKRK | | | | AML | AML | 21 45 26.4 | |
| | comp=E,214nm,0.7s | | | | | | |
| IKRK | | | | AML | AML | 21 45 29.9 | |
| | comp=N,127nm,0.3s | | | | | | |
| **BHD** | **Baghdad** | **2.21** | **229** | *e*Pn | **Pn** | **21 45 04.0** | **+1.1** |
| BHD | | | | *e*Sn | **Sb** | **21 45 32.0** | **-1.6** |

*IDC **05** 21:55:36.6±1.4,8°.08S×116°.39E,h0km,mb3.6/5,*
*mbtmp3.6/6,ML3.4/1,MS4.0/1,Error ellipse: s-maj=26.1km*
*s-min=21.9km az=61.0*
*DJA **05** 21:55:52.4±6.2,8°.5±22°×11°.5E±6°.5,h22km±38km,M3.0/4,*
*MLv3.0/4*
**ISC 05 21:55:37.8±0.8,8°.1S±0°.1×116°.34E±0°.05,h10km,n12,**
**σ1§12/12,mb3.6/5,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **1.11** | **271** | P | **Pb** | **21 55 58.4** | **-0.7** |
| **DNP** | **Denpasar** | **1.25** | **243** | P | **Pg** | **21 56 03.0** | **+1.1** |
| **PLAI** | **Plampang** | **1.59** | **117** | P | **Pg** | **21 56 08.1** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.19** | **260** | P | **Pn** | **21 56 13.0** | **-1.3** |
| **BSSI** | **Bau Bau, Buton** | **4.56** | **65** | P | **Pn** | **21 56 48.3** | **+1.5** |
| **KAPI** | **Kappang** | **4.57** | **48** | Pn | **Pn** | **21 56 44.9** | **-2.1** |
| | 1.8nm,0.3s,baz=225,slow=5.7,SNR=2.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **21 57 40.7** | **+0.4** |
| | 4.5nm,0.3s,baz=217,slow=20,SNR=1.9 | | | | | | |
| KAPI | | | | Lg | Lg | 21 58 01.4 | |
| | 1.3nm,0.3s,baz=225,slow=20,SNR=1.3 | | | | | | |
| | 17nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.03** | **126** | P | **P** | **22 00 21.8** | **-0.2** |
| | 1.7nm,0.6s,baz=302,slow=10,SNR=13 | | | | | | |
| | 1.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.87** | **135** | P | **P** | **22 00 41.8** | **+0.1** |
| | 1.5nm,0.8s,baz=311,slow=9.1,SNR=9.9 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.38** | **352** | P | **P** | **22 05 19.8** | **+0.4** |
| | 0.8nm,0.7s,baz=169,slow=8.1,SNR=4.1 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **RPZ** | **Rata Peaks** | **59.26** | **136** | LR | LR | 22 31 52.5 | |
| | comp=Z,123nm,18.6s,baz=136,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.49** | **334** | P | **P** | **22 06 01.7** | **+0.3** |
| | 0.2nm,0.5s,baz=138,slow=7.3,SNR=2.2 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.29** | **340** | P | **P** | **22 06 33.2** | **+0.7** |
| | 0.4nm,0.4s,baz=152,slow=6.5,SNR=2.4 | | | | | | |
| | 0.4nm,0.4s | | | | | | |

**TRN 05 21:55:47.2,15°.18N×60°.96W,h137km,MD3.6,**
**South-east of Dominica.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVN** | **Savane Anatole** | **0.40** | **211** | *e*P | Pn | 21 56 07.7 | +1.1 |
| SVN | | | | *e*S | Sn | 21 56 22.1 | +0.7 |
| **BAMF** | **Morne Balai** | **0.41** | **207** | *e*P | Pn | 21 56 07.9 | +1.1 |
| **ILAM** | **Ilet Lapin Mar** | **0.42** | **168** | *e*P | Pn | 21 56 07.9 | +1.2 |
| ILAM | | | | *e*S | Sn | 21 56 22.7 | +1.3 |
| **CXM** | **Morne La Croix** | **0.42** | **209** | *e*P | Pn | 21 56 08.1 | +1.2 |
| **GBMF** | **Grand Be** | **0.43** | **207** | *e*P | Pn | 21 56 07.8 | +0.9 |
| **PCM** | **Pelee Case Pet** | **0.44** | **214** | *e*P | Pn | 21 56 07.6 | +0.8 |
| **PCM** | **Pelee Case Pet** | **0.44** | **214** | *e*P | Pn | 21 56 07.9 | +1.0 |
| **PML** | **Morne Lenard** | **0.46** | **208** | *e*P | Pn | 21 56 07.8 | +0.9 |
| **FDF** | **Fort de France** | **0.48** | **202** | *e*P | Pn | 21 56 08.0 | +0.9 |
| **LPMF** | **Morne Lapointe** | **0.61** | **181** | *e*P | Pn | 21 56 08.0 | +0.2 |
| **MVM** | **Montagne Vaucl** | **0.63** | **174** | *e*P | Pn | 21 56 08.5 | +0.6 |
| **TRMF** | **Trois Ilets** | **0.65** | **188** | *e*P | Pn | 21 56 09.0 | +0.9 |
| **BIM** | **Bigot** | **0.67** | **189** | *e*P | Pn | 21 56 08.8 | +0.6 |
| BIM | | | | *e*S | Sn | 21 56 25.8 | +1.6 |
| **MPOM** | **Morne Pois Mar** | **0.74** | **172** | *e*P | Pn | 21 56 09.2 | +0.5 |
| **TDBA** | **Terre de Bas,** | **0.93** | **315** | *e*P | Pn | 21 56 11.6 | +1.4 |
| **TBG** | **Guadaloupe-3** | **0.94** | **315** | *e*P | Pn | 21 56 11.5 | +1.3 |
| **SLB** | **Belfond** | **1.35** | **183** | *e*P | Pn | 21 56 16.1 | +1.8 |
| SLB | | | | *e*S | Sn | 21 56 37.1 | +2.1 |
| **ABD** | **La Joyeuse, An** | **1.38** | **338** | *e*P | Pn | 21 56 16.3 | +1.8 |
| **SVB** | **Belmont** | **1.92** | **189** | *e*P | Pn | 21 56 21.6 | +0.9 |
| **ANBD** | **Bethesda, Anti** | **2.01** | **337** | *e*P | Pn | 21 56 22.9 | +1.2 |
| ANBD | | | | *e*S | Sn | 21 56 48.5 | +0.4 |
| **SVT** | **Saint Vincent** | **2.02** | **188** | *e*P | Pn | 21 56 22.6 | +0.7 |
| SVT | | | | *e*S | Sn | 21 56 49.2 | +0.7 |
| **ANWB** | **Willy Bob** | **2.59** | **342** | *e*P | Pn | 21 56 29.8 | +0.9 |
| ANWB | | | | *e*S | Sn | 21 57 01.1 | 0.0 |

*UPP **05** 22:21:07.6±0.3,67°.09N×20°.67E,h0km,ML1.6,Unknown*
*IDC **05** 22:21:11.2±1.1,67°.23N×21°.39E,h0km,mbtmp2.8/3,*
*ML1.9/3,Error ellipse: s-maj=19.8km s-min=7.6km*
*az=117.0*
**ISC 05 22:21:10.2±1.3,67°.26N±0°.10×20°.61E±0°.05,h10km,n10,**
**σ1§79/8,Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DUNU** | **Dundret** | **0.14** | **186** | P | Pg | 22 21 08.6 | -4.8 |
| **MASU** | **Masugnsbyn** | **0.58** | **69** | P | **Pg** | **22 21 19.4** | **-2.0** |
| **KUA** | **Kurravaara** | **0.71** | **352** | P | **Pb** | **22 21 24.9** | **+0.2** |
| **SALU** | **Saltoluokta** | **0.82** | **280** | *e*P | **Pn** | **22 21 27.1** | **-0.8** |
| **SALU** | **Saltoluokta** | **0.82** | **280** | P | **Pg** | **22 21 24.8** | **-1.2** |
| **LANU** | **Lannavaara** | **0.95** | **33** | P | **Pg** | **22 21 28.2** | **-0.4** |
| **HEF** | **Hetta** | **1.64** | **44** | *e*P | **Pn** | **22 21 38.4** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **2.92** | **36** | Pn | **Pn** | **22 21 58.6** | **+1.9** |
| | 0.2nm,0.3s,baz=217,slow=16,SNR=10 | | | | | | |
| ARCES | | | | Lg | Lg | 22 22 36.5 | |
| | 0.9nm,0.3s,baz=210,slow=21,SNR=13 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **6.30** | **155** | Pn | Pn | 22 22 44.8 | +1.7 |
| | 0.1nm,0.3s,baz=343,slow=14,SNR=4.0 | | | | | | |
| FINES | | | | Lg | Lg | 22 24 23.4 | |
| | 0.3nm,0.3s,baz=341,slow=28,SNR=4.0 | | | | | | |
| | 3.1nm,1.0s | | | | | | |
| **NOA** | **NORSAR Array B** | **7.46** | **218** | Pn | Pn | 22 23 01.1 | +2.1 |
| | baz=35,slow=14,SNR=1.3 | | | | | | |
| NOA | | | | Sn | **Sn** | **22 24 26.0** | **+2.4** |
| | baz=38,slow=21,SNR=1.3 | | | | | | |
| NOA | | | | Lg | Lg | 22 25 08.6 | |
| | baz=45,slow=24,SNR=3.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*TEH **05** 22:34:21.9,34°.41N×45°.81E,h6km±36km,ML3.1*
*IDC **05** 22:34:22.4±1.9,34°.52N×45°.75E,h0km,mb3.7/9,*
*mbtmp3.7/9,MS2.9/2,Error ellipse: s-maj=44.0km*
*s-min=21.9km az=168.0*
*ISN **05** 22:34:23.1±0.8,34°.46N×45°.76E,h24km±11km,ML3.3*
**ISC 05 22:34:22.7±1.4,34°.40N±0°.03×45°.76E±0°.03,h5km±10km,**
**n48,σ1§35/50,mb3.5/8,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KGS1** | **Ghasr-e-Shirin** | **0.17** | **307** | Pg | **Pg** | **22 34 27.2** | **+1.0** |
| **GLG1** | **Gilan-e-Gharb** | **0.31** | **156** | Pg | **Pg** | **22 34 29.2** | **+0.4** |
| **IDHR** | **Dehrash** | **0.60** | **60** | Pg | **Pg** | **22 34 33.3** | **-0.9** |
| **IGHG** | **Ghaleghazi** | **0.68** | **96** | Pg | **Pg** | **22 34 35.7** | **0.0** |
| **ILBA** | **Ilam Banvizeh** | **0.86** | **154** | Pg | **Pg** | **22 34 39.1** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **1.07** | **96** | Pg | **Pg** | **22 34 42.8** | **-0.4** |
| **ILIN** | **Lien** | **1.12** | **62** | Pg | **Pb** | **22 34 43.8** | **-0.8** |
| **IBDR** | **Badra** | **1.30** | **174** | *e*Pg | **Pn** | **22 34 48.0** | **+0.7** |
| IBDR | | | | *e*Sg | **Sb** | **22 35 05.0** | **+0.6** |
| IBDR | | | | AML | AML | 22 35 11.4 | |
| | comp=E,855nm,0.2s | | | | | | |
| IBDR | | | | AML | AML | 22 35 13.2 | |
| | comp=N,348nm,0.4s | | | | | | |
| **IKRK** | **Kirkuk** | **1.53** | **311** | *e*Pg | **Pn** | **22 34 50.0** | **-0.6** |
| IKRK | | | | *e*Sg | **Sn** | **22 35 10.0** | **-0.9** |
| **BHD** | **Baghdad** | **1.61** | **226** | *e*Pn | **Pn** | **22 34 52.0** | **+0.4** |
| BHD | | | | *e*Sn | **Sn** | **22 35 14.0** | **+1.3** |
| **SNGR** | **Sonqor, Kerman** | **1.61** | **73** | Pg | **Pb** | **22 34 55.7** | **-0.4** |
| **IBZA** | **Bozab** | **1.74** | **87** | Pg | **Pg** | **22 34 55.7** | **-0.4** |
| **SDS1** | **Sardasht. Az.** | **1.76** | **353** | Pg | **Pg** | **22 34 55.8** | **-0.5** |
| **IKFM** | **Kafar-mosalman** | **1.94** | **116** | Pn | **Pn** | **22 34 57.7** | **+1.4** |
| **MAHB** | **Mahabad** | **2.36** | **359** | Pn | **Pb** | **22 35 03.5** | **-2.2** |
| **HSAM** | **Samen** | **2.36** | **94** | Pn | **Pb** | **22 35 03.9** | **-1.9** |
| **IHSH** | **Hashtrud** | **3.15** | **22** | Pn | **Pn** | **22 35 14.9** | **+1.7** |
| **IAZR** | **Azarshahr** | **3.27** | **3** | Pn | **Pn** | **22 35 17.0** | **+2.2** |
| **QABG** | **Abgarm-Qazvin** | **3.40** | **66** | Pn | **Pn** | **22 35 17.9** | **+1.4** |
| **IRAZ** | **Razeghan** | **3.57** | **73** | Pn | **Pn** | **22 35 20.4** | **+1.5** |
| **ISRB** | **Sarab** | **3.75** | **24** | Pn | **Pn** | **22 35 23.3** | **+1.9** |
| **ISHB** | **Shabestar** | **3.88** | **358** | Pn | **Pn** | **22 35 25.0** | **+2.0** |
| **IHRS** | **Heris** | **4.04** | **14** | Pn | **Pn** | **22 35 27.5** | **+2.1** |
| **IMRD** | **Marand** | **4.30** | **359** | Pn | **Pn** | **22 35 31.9** | **+3.0** |
| **IQOM** | **Qom** | **4.40** | **83** | Pn | **Pn** | **22 35 31.6** | **+1.2** |
| **LHJ2** | **Lahijan - Gila** | **4.46** | **51** | Pn | **Pn** | **22 35 33.3** | **+2.5** |
| **IPIR** | **Pirpir** | **4.62** | **110** | Pn | **Pn** | **22 35 34.6** | **+1.3** |
| **JHBN** | **Jahan bin** | **4.64** | **116** | Pn | **Pn** | **22 35 34.2** | **+0.5** |
| **GRMI** | **Germi** | **4.72** | **21** | Pn | **Pn** | **22 35 36.6** | **+2.0** |
| **QAMS** | **Qamsar** | **4.73** | **96** | Pn | **Pn** | **22 35 36.1** | **+1.3** |
| **ZNGN** | **Zangian** | **4.84** | **117** | Pn | **Pn** | **22 35 37.0** | **+0.6** |
| **IKLH** | **Kolahrood** | **4.96** | **101** | Pn | **Pn** | **22 35 39.1** | **+1.0** |
| **MAKU** | **Maku** | **5.02** | **350** | Pn | **Pn** | **22 35 41.3** | **+2.6** |
| **KRSH** | **Karshahi** | **5.30** | **93** | Pn | **Pn** | **22 35 44.0** | **+1.4** |
| **ISFB** | **Sefidab** | **5.36** | **89** | Pn | **Pn** | **22 35 43.7** | **+0.4** |
| **IZEF** | **Zefreh** | **5.68** | **103** | Pn | **Pn** | **22 35 49.1** | **+1.2** |
| **KLNJ** | **Kolanjah** | **5.97** | **123** | Pn | **Pn** | **22 35 53.2** | **+1.2** |
| **IRAM** | **Ramesheh** | **6.13** | **113** | Pn | **Pn** | **22 35 55.7** | **+1.6** |
| **EIL** | **Elat** | **10.31** | **246** | LR | LR | 22 41 31.3 | |
| | comp=N,42nm,18.5s,baz=70,slow=41 | | | | | | |
| **AKASG** | **Malin Array Be** | **20.26** | **329** | P | **P** | **22 38 59.3** | **+0.5** |
| | comp=N,1.4nm,0.6s,baz=144,slow=9.7,SNR=2.9 | | | | | | |
| AKASG | | | | LR | LR | 22 48 25.0 | |
| | comp=N,45nm,18.1s,baz=202,slow=42 | | | | | | |
| | comp=N,1.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.79** | **46** | P | **P** | **22 40 21.3** | **0.0** |
| | comp=N,0.5nm,0.5s,baz=252,slow=8.8,SNR=4.3 | | | | | | |
| | comp=N,0.5nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **29.85** | **341** | P | **P** | **22 40 29.8** | **-0.8** |
| | comp=N,1.9nm,0.9s,baz=144,slow=12,SNR=5.0 | | | | | | |
| | comp=N,1.9nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **30.10** | **55** | P | **P** | **22 40 33.0** | **0.0** |
| | comp=N,0.2nm,0.5s,baz=254,slow=12,SNR=5.6 | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **33.11** | **331** | P | **P** | **22 40 58.7** | **-0.6** |
| | comp=N,1.5nm,0.5s,baz=119,slow=8.4,SNR=16 | | | | | | |
| | comp=N,1.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.58** | **42** | P | **P** | **22 41 02.9** | **-0.5** |
| | comp=N,0.8nm,0.6s,baz=251,slow=4.5,SNR=2.5 | | | | | | |
| | comp=N,0.8nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.46** | **317** | P | **P** | **22 41 52.9** | **-0.7** |
| | comp=N,0.3nm,0.4s,baz=100,slow=9.4,SNR=2.0 | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.63** | **293** | P | **P** | **22 41 55.1** | **-0.1** |
| | comp=N,0.6nm,0.9s,baz=71,slow=7.9,SNR=5.5 | | | | | | |
| | comp=N,0.6nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.10** | **253** | P | **P** | **22 42 40.8** | **+0.9** |
| | comp=N,0.3nm,0.6s,baz=86,slow=5.8,SNR=3.0 | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | |

**ROM 05 22:43:32.3±0.1,41°.141N±0°.003×15°.274E±0°.005,**
**h21km,ML2.0/52,9C-1D,Error ellipse: s-maj=0.4km**
**s-min=0.0km az=66.0,Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SGTA** | **Sant Agata di** | **0.07** | **95** | ⇓P | Pb | 22 43 36.2 | -0.1 |
| SGTA | | | | | S | Sb | 22 43 38.9 | 0.0 |
| SGTA | | | | | AML | AML | | |
| | comp=E,3455μm,0.9s | | | | | | | |
| SGTA | | | | | AML | AML | | |
| | comp=E,3450μm,0.9s | | | | | | | |
| SGTA | | | | | AML | AML | | |
| | comp=E,3645μm,0.9s | | | | | | | |
| SGTA | | | | | AML | AML | | |
| | comp=N,1970μm,0.6s | | | | | | | |
| SGTA | | | | | AML | AML | | |
| | comp=N,2145μm,0.6s | | | | | | | |
| **CAFE** | **Carife** | **0.12** | **194** | ⇑P | Pb | 22 43 36.8 | -2.0 |
| CAFE | | | | | S | Sb | 22 43 39.9 | -3.5 |
| CAFE | | | | | AML | AML | | |
| | comp=N,1134μm,1.0s | | | | | | | |
| CAFE | | | | | AML | AML | | |
| | comp=N,1115μm,1.0s | | | | | | | |
| CAFE | | | | | AML | AML | | |
| | comp=E,2680μm,0.3s | | | | | | | |
| CAFE | | | | | AML | AML | | |
| | comp=E,2570μm,0.3s | | | | | | | |
| CAFE | | | | | AML | AML | | |
| | comp=N,1134μm,1.0s | | | | | | | |
| **BIOG** | **Biogem** | **0.12** | **299** | P | Pb | 22 43 37.1 | -1.5 |
| BIOG | | | | | S | Sb | 22 43 39.9 | -3.3 |
| BIOG | | | | | AML | AML | | |
| | comp=E,602μm,0.5s | | | | | | | |
| BIOG | | | | | AML | AML | | |
| | comp=N,677μm,1.6s | | | | | | | |
| BIOG | | | | | AML | AML | | |
| | comp=E,712μm,0.5s | | | | | | | |
| BIOG | | | | | AML | AML | | |
| | comp=N,674μm,0.7s | | | | | | | |
| BIOG | | | | | AML | AML | | |
| | comp=N,676μm,1.6s | | | | | | | |
| BIOG | | | | | AML | AML | | |
| | comp=E,713μm,0.5s | | | | | | | |
| BIOG | | | | | AML | AML | | |
| | comp=N,676μm,0.4s | | | | | | | |
| BIOG | | | | | AML | AML | | |
| | comp=E,713μm,1.5s | | | | | | | |
| **RSF3** | **Rocca San Feli** | **0.19** | **203** | ⇑P | Pb | 22 43 37.4 | -0.9 |
| RSF3 | | | | | S | Sb | 22 43 41.0 | -1.4 |
| **AND3** | **Andretta** | **0.21** | **168** | ⇑P | Pb | 22 43 38.3 | 0.0 |
| AND3 | | | | | S | Sb | 22 43 42.2 | -0.3 |
| **SNAL** | **S. Angelo Dei** | **0.22** | **193** | ⇑P | Pb | 22 43 38.0 | -0.3 |
| SNAL | | | | | S | Sb | 22 43 42.1 | -0.4 |
| SNAL | | | | | AML | AML | | |
| | comp=N,416μm,0.3s | | | | | | | |
| SNAL | | | | | AML | AML | | |
| | comp=E,987μm,0.3s | | | | | | | |
| SNAL | | | | | AML | AML | | |
| | comp=N,386μm,1.0s | | | | | | | |
| SNAL | | | | | AML | AML | | |
| | comp=E,896μm,0.3s | | | | | | | |
| SNAL | | | | | AML | AML | | |
| | comp=N,386μm,1.0s | | | | | | | |
| **MRB1** | **Monte Rocchett** | **0.23** | **267** | ⇑P | Pb | 22 43 38.4 | +0.1 |
| MRB1 | | | | | S | Sb | 22 43 42.6 | +0.1 |
| MRB1 | | | | | AML | AML | | |
| | comp=E,397μm,1.5s | | | | | | | |
| MRB1 | | | | | AML | AML | | |
| | comp=N,626μm,0.9s | | | | | | | |
| MRB1 | | | | | AML | AML | | |
| | comp=E,396μm,1.5s | | | | | | | |
| MRB1 | | | | | AML | AML | | |
| | comp=N,626μm,0.9s | | | | | | | |
| MRB1 | | | | | AML | AML | | |
| | comp=N,626μm,1.1s | | | | | | | |
| MRB1 | | | | | AML | AML | | |
| | comp=N,690μm,0.5s | | | | | | | |
| MRB1 | | | | | AML | AML | | |
| | comp=E,378μm,0.4s | | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.24** | **339** | ⇑P | Pb | 22 43 38.6 | +0.1 |
| MOCO | | | | | S | Sb | 22 43 43.0 | +0.2 |
| MOCO | | | | | AML | AML | | |
| | comp=E,132μm,0.3s | | | | | | | |
| MOCO | | | | | AML | AML | | |
| | comp=E,114μm,0.5s | | | | | | | |
| MOCO | | | | | AML | AML | | |
| | comp=N,104μm,0.4s | | | | | | | |
| MOCO | | | | | AML | AML | | |
| | comp=N,112μm,0.4s | | | | | | | |
| MOCO | | | | | AML | AML | | |
| | comp=E,132μm,1.7s | | | | | | | |
| **LIO3** | **Lioni** | **0.25** | **196** | P | Pb | 22 43 38.4 | -0.1 |
| **MTMR** | **Montemarano** | **0.30** | **223** | ⇑P | Pb | 22 43 39.0 | 0.0 |
| MTMR | | | | | S | Sb | 22 43 44.0 | +0.3 |
| MTMR | | | | | AML | AML | | |
| | comp=N,250μm,0.3s | | | | | | | |
| MTMR | | | | | AML | AML | | |
| | comp=E,198μm,0.5s | | | | | | | |
| MTMR | | | | | AML | AML | | |
| | comp=N,250μm,0.9s | | | | | | | |
| **NSC3** | **Nusco** | **0.32** | **201** | ⇑P | Pb | 22 43 39.4 | +0.1 |
| NSC3 | | | | | S | Sb | 22 43 44.2 | +0.1 |
| **VULT** | **Monte Vulture** | **0.32** | **126** | P | Pb | 22 43 39.7 | +0.4 |
| VULT | | | | | S | Sb | 22 43 44.3 | +0.2 |
| VULT | | | | | AML | AML | | |
| | comp=N,512μm,0.3s | | | | | | | |
| VULT | | | | | AML | AML | | |
| | comp=E,460μm,0.2s | | | | | | | |
| VULT | | | | | AML | AML | | |
| | comp=N,478μm,0.3s | | | | | | | |
| VULT | | | | | AML | AML | | |
| | comp=E,426μm,0.2s | | | | | | | |
| VULT | | | | | AML | AML | | |
| | comp=N,512μm,0.3s | | | | | | | |
| **PSB1** | **Pescosannita** | **0.36** | **283** | ⇑P | Pb | 22 43 40.0 | +0.2 |
| PSB1 | | | | | S | Sb | 22 43 45.9 | +0.9 |
| **MCRV** | **Calabrutti - M** | **0.37** | **193** | P | Pb | 22 43 40.0 | 0.0 |
| MCRV | | | | | S | Sb | 22 43 45.5 | +0.2 |
| **SNR3** | **Senerchia** | **0.41** | **189** | P | Pb | 22 43 40.9 | +0.2 |
| **CAPA** | **Cerignola FG** | **0.41** | **87** | P | Pb | 22 43 40.5 | -0.2 |
| CAPA | | | | | S | Sb | 22 43 47.1 | +0.7 |
| **MRLC** | **Muro Lucano** | **0.42** | **157** | P | Pb | 22 43 41.2 | +0.3 |
| MRLC | | | | | S | Sb | 22 43 47.7 | +1.0 |
| **GATE** | **Gambatesa** | **0.46** | **324** | P | Pb | 22 43 41.7 | 0.0 |
| **VITU** | **Vitulano (BN)** | **0.49** | **275** | P | Pb | 22 43 42.1 | -0.1 |
| VITU | | | | | S

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACER | | | | AML | AML | | |
| | comp=N,132μm,0.6s | | | | | | |
| ACER | | | | AML | AML | | |
| | comp=E,88μm,1.6s | | | | | | |
| ACER | | | | AML | AML | | |
| | comp=E,136μm,1.2s | | | | | | |
| ACER | | | | AML | AML | | |
| | comp=N,142μm,1.1s | | | | | | |
| **APRC** | **Apricena** | **0.65** | **18** | P | Pb | 22 43 44.9 | -0.1 |
| APRC | | | | S | Sb | 22 43 53.9 | +0.2 |
| APRC | | | | AML | AML | | |
| | comp=N,182μm,0.9s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,136μm,0.3s | | | | | | |
| **SGRT** | **San Giovanni R** | **0.71** | **30** | P | Pb | 22 43 45.8 | -0.2 |
| SGRT | | | | S | Sb | 22 43 55.8 | +0.5 |
| SGRT | | | | AML | AML | | |
| | comp=N,238μm,1.1s | | | | | | |
| SGRT | | | | AML | AML | | |
| | comp=E,380μm,0.2s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.74** | **40** | P | Pb | 22 43 45.9 | -0.6 |
| **VAGA** | **Valle Agricola** | **0.83** | **290** | P | Pb | 22 43 48.2 | +0.2 |
| VAGA | | | | AML | AML | | |
| | comp=N,71μm,0.7s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,75μm,0.7s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,36μm,0.5s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **1.22** | **318** | AML | AML | | |
| | comp=N,30μm,1.0s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,30μm,1.0s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,33μm,0.5s | | | | | | |

**TIR 05 22:43:42.0, 41°.70N×16°.30E, h22km±5km, MI1.9, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGRT** | **San Giovanni R** | **0.42** | **278** | P | Pb | 22 43 47.1 | -3.6 |
| | baz=279 | | | | | | |
| SGRT | | | | S | Sb | 22 43 57.2 | +0.5 |
| | baz=279 | | | | | | |
| SGRT | | | | AMP | | | |
| | comp=N,0.7nm,0.1s,baz=279 | | | | | | |
| **NOCI** | **Noci** | **1.08** | **147** | P | Pn | 22 44 01.2 | -0.5 |
| | baz=147 | | | | | | |
| NOCI | | | | S | Sn | 22 44 18.4 | +2.5 |
| | baz=147 | | | | | | |
| NOCI | | | | AMP | | | |
| | comp=E,0.1nm,0.2s,baz=147 | | | | | | |
| **SCTE** | **Santa Cesarea** | **2.31** | **134** | P | Pb | 22 44 23.4 | +0.5 |
| | baz=133 | | | | | | |
| SCTE | | | | S | Sb | 22 44 52.5 | +1.5 |
| | baz=133 | | | | | | |
| **PUK** | **Puka** | **2.71** | **81** | P | Pb | 22 44 28.4 | -1.4 |
| | baz=81 | | | | | | |

*NIED* ***05*** *22:46:45.7, 25°.03N×123°.60E, h18km, MW4.1, Moment Tensor Solution. s2 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-0.96; $M_{\theta\theta}$0.94; $M_{\phi\phi}$0.02; $M_{r\theta}$-1.04; $M_{\theta\phi}$0.36; $M_{\phi r}$-0.41; Fault plane solution: $M_0$1.51000×$10^{15}$ NP1:$\phi_s$69.00000°, δ69.00000°, λ-92.00000°. NP2:$\phi_s$254.00000°, δ21.00000°, λ-86.00000°.*

*JMA* ***05*** *22:46:45.7±0.3, 25°.0N±0°.9×123°.6E±0°.3, h18km±4km, MV3.5/12, NW OFF ISHIGAKIJIMA IS*

*IDC* ***05*** *22:47:09.2±5.0, 25°.26N×123°.87E, h240km±55km, mb3.2/11, mbtmp3.8/12, MS3.1/3, Error ellipse: s-maj=24.3km s-min=14.1km az=70.0*

**ISC 05 22:46:48.2±0.7, 24°.91N±0°.06×123°.63E±0°.05, h32km, n24,** σ1°.79**/25, mb3.8/10, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.58** | **171** | P | **Pb** | **22 46 59.0** | **-1.0** |
| **JISG** | **Ishigakijimahi** | **0.70** | **117** | P | **Pb** | **22 47 00.4** | **-1.6** |
| **JIJ** | **Ishigaki jima** | **0.72** | **139** | *eP* | **Pb** | **22 47 00.8** | **-1.5** |
| JIJ | | | | *eS* | **Sn** | **22 47 11.3** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **0.72** | **232** | P | **Pn** | **22 47 00.3** | **-1.9** |
| **JKRS** | **Kuro-shima** | **0.75** | **152** | *eP* | **Pb** | **22 47 01.9** | **-1.0** |
| **JYNG** | **Yonagunijimaku** | **0.77** | **234** | P | **Pn** | **22 47 01.0** | **-1.9** |
| **HATJ** | **Hateruma jima** | **0.86** | **169** | P | **Pb** | **22 47 03.9** | **-0.9** |
| HATJ | | | | *eS* | **Sb** | **22 47 16.8** | **+0.7** |
| **JTJ** | **Tarama** | **1.01** | **105** | *eP* | **Pb** | **22 47 05.6** | **-1.7** |
| JTJ | | | | *eS* | **Sb** | **22 47 19.8** | **-0.4** |
| **JIRB** | **Irabujima** | **1.41** | **93** | *eP* | **Pn** | **22 47 11.0** | **-0.6** |
| **JIKM** | **Ikemajima** | **1.47** | **89** | *eP* | **Pn** | **22 47 12.5** | **0.0** |
| **KSRS** | **Korea Array** | **13.03** | **15** | P | **P** | **22 50 02.5** | **+1.3** |
| | 6.3nm,0.9s,baz=193,slow=12,SNR=12 | | | | | | |
| **JCJ** | **Chichijima** | **16.82** | **79** | LR | LR | 22 56 16.4 | |
| | comp=Z,94nm,20.3s,baz=118,slow=33 | | | | | | |
| **DAV** | **Davao City (W)** | **17.84** | **174** | LR | LR | 22 57 26.3 | |
| | comp=Z,79nm,20.9s,baz=338,slow=34 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **20.42** | **17** | P | **P** | **22 51 23.6** | **+1.0** |
| | 3.2nm,1.0s,baz=188,slow=12,SNR=5.3 | | | | | | |
| | 3.2nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.80** | **259** | P | **P** | **22 52 03.9** | **+5.5** |
| | 0.5nm,0.3s,baz=60,slow=7.1,SNR=6.0 | | | | | | |
| CMAR | | | | LR | LR | 23 01 44.6 | |
| | comp=Z,19nm,18.8s,baz=210,slow=36 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **KLR** | **Kul'dur** | **25.10** | **13** | P | **P** | **22 52 09.2** | **-0.7** |
| | 3.7nm,0.9s,baz=218,slow=8.0,SNR=7.0 | | | | | | |
| | 3.7nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **26.64** | **334** | P | **P** | **22 52 23.9** | **-0.2** |
| | 0.9nm,0.8s,baz=141,slow=6.7,SNR=5.0 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **39.40** | **314** | P | **P** | **22 54 14.4** | **-0.6** |
| | 2.4nm,0.9s,baz=101,slow=12,SNR=11 | | | | | | |
| | 2.4nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.88** | **326** | P | **P** | **22 54 24.8** | **-2.3** |
| | 1.3nm,0.6s,baz=99,slow=9.2,SNR=6.5 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.01** | **319** | P | **P** | **22 54 43.3** | **-1.3** |
| | 0.6nm,0.2s,baz=107,slow=9.2,SNR=6.1 | | | | | | |
| | 0.6nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.78** | **166** | P | **P** | **22 55 08.4** | **+1.3** |
| | 0.8nm,0.8s,baz=347,slow=8.7,SNR=5.3 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **49.30** | **168** | P | **P** | **22 55 36.7** | **+2.3** |
| | 0.3nm,0.5s,baz=351,slow=9.1,SNR=5.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **KBZ** | **Khabaz** | **66.76** | **309** | P | **P** | **22 57 36.7** | **+0.2** |
| | 1.4nm,0.8s,baz=96,slow=7.0,SNR=4.4 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.53** | **307** | P | **P** | **22 58 22.4** | **-1.8** |
| | 0.6nm,0.9s,baz=58,slow=3.1,SNR=3.8 | | | | | | |
| | 0.6nm,0.9s | | | | | | |

*IDC* ***05*** *22:50:03.8±0.5, 40°.16N×143°.54E, h0km, mb4.5/23, mbtmp4.5/29, ML3.8/6, MS3.5/25, Error ellipse: s-maj=15.7km s-min=12.3km az=102.0*

*NIED* ***05*** *22:50:05.1, 40°.24N×143°.52E, h11km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-3.61; $M_{\theta\theta}$1.31; $M_{\phi\phi}$2.30; $M_{r\theta}$-1.48; $M_{\theta\phi}$1.83; $M_{\phi r}$-0.58; Fault plane solution: $M_0$3.99000×$10^{15}$ NP1:$\phi_s$49.00000°, δ56.00000°, λ-77.00000°. NP2:$\phi_s$206.00000°, δ36.00000°, λ-109.00000°.*

*JMA* ***05*** *22:50:05.1±0.3, 40°.2N±0°.5×143°.5E±0°.7, h11km±2km, MD4.6/39, MW4.4/39, FAR E OFF SANRIKU*

*JMA Felt I J1 at FAR E OFF SANRIKU .*

*BJI* ***05*** *22:50:06.7±0.0, 40°.13N×143°.30E, h19km, mb4.7/58, mB4.9/15, Ms4.1/27, Ms7 3.9/25*

*MOS* ***05*** *22:50:06.4±1.0, 40°.23N×143°.44E, h23km, mb5.0/73, Error ellipse: s-maj=6.4km s-min=3.8km az=112.0*

*NEIC* ***05*** *22:50:08.1±0.8, 40°.23N±0°.04×143°.4E±0°.1, h18km±4km, mb4.7/191, Error ellipse: s-maj=13.3km s-min=5.8km az=100.0*

*BGR* ***05*** *22:50:14.9, 41°.03N×143°.82E, h33km, mb4.8*

**ISC 05 22:50:06.1±0.6, 40°.17N±0°.05×143°.56E±0°.05, h15km±2km, h14km:pP-P, n821,** σ0**.97/751, mb4.8/251, MS3.8/37, 12C-36D, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTH** | **Tanohata** | **1.32** | **261** | P | **Pn** | **22 50 29.1** | **-0.9** |
| JTH | | | | S | **Sn** | **22 50 46.3** | **-1.0** |
| **JTH** | **Tanohata** | **1.32** | **261** | A | A | 22 50 29.1 | |
| | comp=E,7.0nm,1.8s,comp=N,5.0nm,6.0s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JKEN** | **Kujiedanarisaw** | **1.42** | **272** | P | **Pn** | **22 50 30.1** | **-1.3** |
| JKEN | | | | *eS* | **Sn** | **22 50 48.1** | **-1.6** |
| **JKEN** | **Kujiedanarisaw** | **1.42** | **272** | A | A | 22 50 30.1 | |
| | comp=E,18nm,0.9s,comp=N,17nm,0.9s | | | | | | |
| **MIYJ** | **Miyakonagasawa** | **1.46** | **247** | P | **Pn** | **22 50 31.4** | **-0.5** |
| MIYJ | | | | *eS* | **Sn** | **22 50 51.0** | **+0.2** |
| **JANG** | **Nango** | **1.57** | **278** | P | **Pn** | **22 50 32.6** | **-0.9** |
| **JANG** | **Nango** | **1.57** | **278** | A | A | 22 50 32.6 | |
| | comp=E,4.0nm,3.2s,comp=N,6.0nm,1.3s | | | | | | |
| **JKZ** | **Kuzumaki** | **1.72** | **265** | A | A | 22 50 35.1 | |
| | comp=E,7.0nm,0.6s,comp=N,8.0nm,0.5s | | | | | | |
| **OFUJ** | **Ofunato** | **1.82** | **234** | A | A | 22 50 37.1 | |
| | comp=E,4.0nm,0.8s,comp=N,5.0nm,0.6s | | | | | | |
| **JARK** | **Aomorirokkasho** | **1.87** | **297** | A | A | 22 50 36.8 | |
| | comp=E,10.0nm,0.5s,comp=N,12nm,0.5s | | | | | | |
| **ERM** | **Erimo** | **1.87** | **351** | | **Pn** | **22 50 36.9** | **-0.7** |
| ERM | | | | Sn | **Sn** | **22 50 59.7** | **-1.2** |
| **ERM** | **Erimo** | **1.87** | **351** | *eP* | **Pn** | **22 50 36.3** | **-1.3** |
| **JEM** | **Erimo** | **1.87** | **351** | *eP* | **Pn** | **22 50 36.5** | **-1.1** |
| **JOM** | **Ohasama** | **1.88** | **249** | P | **Pn** | **22 50 38.0** | **+0.3** |
| **JOM** | **Ohasama** | **1.88** | **249** | A | A | 22 50 38.0 | |
| | comp=E,10.0nm,0.3s,comp=N,8.0nm,0.8s | | | | | | |
| **JTM** | **Tenmabayashi** | **2.00** | **289** | Pn | **Pn** | **22 50 39.3** | **0.0** |
| **JTM** | **Tenmabayashi** | **2.00** | **289** | P | **Pn** | **22 50 39.2** | **0.0** |
| **JTM** | **Tenmabayashi** | **2.00** | **289** | A | A | 22 50 39.2 | |
| | comp=E,11nm,0.6s,comp=N,8.0nm,1.8s | | | | | | |
| **JAHD** | **Aomorihigashid** | **2.01** | **304** | A | A | 22 50 38.8 | |
| | comp=E,19nm,0.7s,comp=N,17nm,1.1s | | | | | | |
| **JSZI** | **Iwateshizukuis** | **2.05** | **259** | A | A | 22 50 40.0 | |
| | comp=E,22nm,1.3s,comp=N,24nm,1.9s | | | | | | |
| **JMK** | **Ichinoseki** | **2.18** | **237** | P | **Pn** | **22 50 42.2** | **+0.4** |
| **JNBK** | **Urakawa-nobuka** | **2.19** | **344** | P | **Pn** | **22 50 41.9** | **-0.1** |
| **JAH** | **Hinai** | **2.24** | **271** | P | **Pn** | **22 50 43.2** | **+0.5** |
| JAH | | | | *eS* | **Sn** | **22 51 10.8** | **+0.8** |
| **JAH** | **Hinai** | **2.24** | **271** | A | A | 22 50 43.2 | |
| | comp=E,13nm,1.1s,comp=N,9.0nm,3.2s | | | | | | |
| **JOT** | **Ohata** | **2.26** | **303** | P | **Pn** | **22 50 42.6** | **-0.3** |
| **JOT** | **Ohata** | **2.26** | **303** | A | A | 22 50 42.6 | |
| | comp=E,5.0nm,1.6s,comp=N,6.0nm,0.6s | | | | | | |
| **JRG** | **Rokugo** | **2.38** | **252** | A | A | 22 50 45.0 | |
| | comp=E,9.0nm,0.6s,comp=N,10.0nm,1.8s | | | | | | |
| **JCH** | **Churui** | **2.45** | **357** | P | **Pn** | **22 50 44.6** | **-1.0** |
| JCH | | | | *eS* | **Sn** | **22 51 13.9** | **-1.3** |
| **JHHS** | **Hirosakihyakuz** | **2.49** | **282** | A | A | 22 50 46.0 | |
| | comp=E,12nm,2.9s,comp=N,17nm,3.7s | | | | | | |
| **JSI2** | **Shiura 2** | **2.55** | **291** | A | A | 22 50 46.9 | |
| | comp=E,11nm,0.7s,comp=N,15nm,0.8s | | | | | | |
| **JKB** | **Kayabe** | **2.57** | **313** | A | A | 22 50 46.8 | |
| | comp=E,7.0nm,4.0s,comp=N,4.0nm,1.3s | | | | | | |
| **JOFO** | **Osakifurukawao** | **2.58** | **233** | A | A | 22 50 48.1 | |
| | comp=E,24nm,4.6s,comp=N,28nm,4.3s | | | | | | |
| **JNTW** | **Noshirotokiwa** | **2.60** | **273** | A | A | 22 50 47.8 | |
| | comp=E,22nm,2.7s,comp=N,28nm,2.6s | | | | | | |
| **JYW** | **Yuwa** | **2.65** | **257** | A | A | 22 50 48.8 | |
| | comp=E,16nm,2.1s,comp=N,13nm,0.7s | | | | | | |
| **JOB** | **Onbets** | **2.74** | **4** | A | A | 22 50 49.3 | |
| | comp=E,4.0nm,4.1s,comp=N,4.0nm,3.5s | | | | | | |
| **JSR** | **Shiriuchi** | **2.74** | **301** | A | A | 22 50 49.4 | |
| | comp=E,6.0nm,4.1s,comp=N,7.0nm,1.2s | | | | | | |
| **JIAM** | **Iburiatsuma** | **2.74** | **334** | A | A | 22 50 49.1 | |
| | comp=E,10.0nm,0.9s,comp=N,11nm,1.5s | | | | | | |
| **JIW** | **Iwasaki** | **2.74** | **280** | A | A | 22 50 49.8 | |
| | comp=E,7.0nm,1.6s,comp=N,7.0nm,1.6s | | | | | | |
| **JYK** | **Kaneyama** | **2.77** | **244** | P | **Pn** | **22 50 50.7** | **+0.7** |
| **JYK** | **Kaneyama** | **2.77** | **244** | A | A | 22 50 50.7 | |
| | comp=E,4.0nm,1.7s,comp=N,4.0nm,5.2s | | | | | | |
| **JOU** | **Okura** | **2.88** | **232** | A | A | 22 50 52.5 | |
| | comp=E,6.0nm,2.2s,comp=N,4.0nm,3.3s | | | | | | |
| **JAK** | **Akkeshi** | **2.95** | **16** | P | **Pn** | **22 50 51.5** | **-0.9** |
| **JEW** | **Eniwo** | **3.10** | **330** | A | A | 22 50 54.4 | |
| | comp=E,8.0nm,2.3s,comp=N,7.0nm,2.6s | | | | | | |
| **JMM** | **Marumori** | **3.15** | **224** | | **Pn** | **22 50 54.8** | **-0.4** |
| **JYS** | **Shirataka** | **3.34** | **235** | A | A | 22 50 59.0 | |
| | comp=E,8.0nm,1.3s,comp=N,6.0nm,2.8s | | | | | | |
| **JYA** | **Atsumi** | **3.37** | **243** | A | A | 22 50 59.3 | |
| | comp=E,10.0nm,1.1s,comp=N,8.0nm,0.9s | | | | | | |
| **JOG3** | **Oga3** | **3.44** | **267** | A | A | 22 50 52.0 | |
| | comp=E,6.0nm,3.4s,comp=N,4.0nm,2.4s | | | | | | |
| **JAB** | **Ashibetsu** | **3.48** | **344** | A | A | 22 50 59.8 | |
| | comp=E,4.0nm,2.3s,comp=N,4.0nm,2.4s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **3.59** | **26** | *i* P | **Pn** | **22 50 59.6** | **-1.6** |
| NMR | | | | *eS* | **Sn** | **22 51 39.4** | **-3.9** |
| **JKA** | **Kamikawa-asahi** | **4.01** | **350** | | **Pn** | **22 51 07.4** | **+0.4** |
| **ASAJ** | **Asahikawa** | **4.01** | **350** | Pn | **Pn** | **22 51 07.2** | **+0.2** |
| | comp=N,8.5nm,0.3s,baz=200,slow=11,SNR=22 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **22 51 55.2** | **+1.5** |
| | comp=N,7.0nm,0.3s,baz=233,slow=31,SNR=6.2 | | | | | | |
| ASAJ | | | | LR | LR | 22 53 07.4 | |
| | comp=N,360nm,18.5s,baz=146,slow=46 | | | | | | |
| | comp=N,18nm,0.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **4.01** | **350** | P | **Pn** | **22 51 07.4** | **+0.4** |
| **RUSJ** | **Misakicho** | **4.13** | **17** | *eP* | **Pn** | **22 51 07.9** | **-0.7** |
| RUSJ | | | | *eS* | **Sn** | **22 51 56.4** | **-0.2** |
| **YUK** | **Yuzh-Kuril'sk** | **4.23** | **23** | *c iP* | **Pn** | **22 51 08.9** | **-1.1** |
| YUK | | | | *eS* | **Sn** | **22 51 56.7** | **-2.3** |
| YUK | | | | pmax | pmax | | |
| | comp=N,206nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,715nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,106nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,863nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,632nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **4.43** | **32** | *eP* | **Pn** | **22 51 11.0** | **-1.8** |
| SHO | | | | *eS* | **Sn** | **22 51 59.2** | **-4.9** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,147nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,69nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,55nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,274nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,336nm,0.3s | | | | | | |
| **JSD** | **Sado** | **4.64** | **244** | | **Pn** | **22 51 16.6** | **+1.0** |
| **MAJO** | **Matsushiro** | **5.55** | **231** | Pn | **Pn** | **22 51 29.4** | **+1.3** |
| **MAJO** | **Matsushiro** | **5.55** | **231** | *d iP* | **Pn** | **22 51 29.5** | **+1.3** |
| **MJAR** | **Matsushiro Arr** | **5.55** | **231** | Pn | **Pn** | **22 51 28.7** | **+0.6** |
| | comp=E,1.5nm,0.3s,baz=40,slow=12,SNR=93 | | | | | | |
| | comp=E,41nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **5.55** | **231** | Pn | **Pn** | **22 51 30.5** | **+2.3** |
| **KUR** | **Kuril'sk** | **5.97** | **31** | *eP* | **Pn** | **22 51 33.5** | **-0.5** |
| KUR | | | | *eS* | **Sn** | **22 52 39.4** | **-2.7** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,160nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,72nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,63nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,269nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,133nm,0.3s | | | | | | |
| **JGF** | **Kuroka** | **6.69** | **229** | | **Pn** | **22 51 45.3** | **+1.4** |
| **YSS** | **Yuzh-Sakhalins** | **6.81** | **355** | | **Pn** | **22 51 46.1** | **+0.7** |
| **YSS** | **Yuzh-Sakhalins** | **6.81** | **355** | *eP* | **Pn** | **22 51 46.3** | **+0.9** |
| YSS | | | | *eS* | **Sn** | **22 53 00.7** | **-1.9** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,600nm,16.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,500nm,16.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,500nm,14.0s | | | | | | |
| **INU** | **Inuyama** | **7.07** | **229** | | **Pn** | **22 51 49.6** | **+0.6** |
| **TEY** | **Ternei** | **7.07** | **316** | *eP* | **Pn** | **22 51 50.7** | **+1.7** |
| **JHJ** | **Hachijo jima 2** | **7.66** | **204** | Pn | **Pn** | **22 51 55.4** | **-1.7** |
| | comp=N,24nm,0.3s,baz=346,slow=23,SNR=12 | | | | | | |
| JHJ | | | | Sn | Sn | 22 53 13.0 | -11 |
| | comp=N,14nm,0.3s,baz=28,slow=16,SNR=1.6 | | | | | | |
| | comp=N,71nm,0.3s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **9.48** | **299** | Pn | **Pn** | **22 52 24.3** | **+2.2** |
| **USA0B** | **Ussuriysk Arra** | **9.48** | **299** | *de*P | **Pn** | **22 52 23.9** | **+1.8** |
| **USRK** | **Ussuriysk Ar.** | **9.48** | **299** | Pn | **Pn** | **22 52 23.3** | **+1.2** |
| **USRK** | **Ussuriysk Ar.** | **9.48** | **299** | Pn | **Pn** | **22 52 24.4** | **+2.3** |
| | comp=N,1.1nm,0.3s,baz=100,slow=13,SNR=43 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.48** | **299** | P | **Pn** | **22 52 23.3** | **+1.2** |
| **MSHR** | **Mys Shultsa** | **9.63** | **289** | *eP* | **Pn** | **22 52 23.3** | **-0.8** |
| **PSTR** | **Posyet** | **9.90** | **289** | *eP* | **Pn** | **22 52 30.2** | **+2.4** |
| **JMN** | **Monobe** | **10.06** | **233** | | **Pn** | **22 52 30.7** | **+0.6** |
| **TYV** | **Tymovskoe** | **10.71** | **357** | *eP* | **Pn** | **22 52 40.9** | **+2.0** |
| TYV | | | | *eS* | **Sn** | **22 54 43.7** | **+5.2** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,100nm,5.7s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,100nm,5.7s | | | | | | |
| TYV | | | | MLR | MLR | | |
| | comp=Z,300nm,14.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **11.24** | **298** | P | **Pn** | **22 52 48.2** | **+2.0** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,290nm,5.1s | | | | | | |
| **MDJ** | **Mudanjiang** | **11.24** | **298** | Pn | **Pn** | **22 52 44.1** | **-2.1** |
| **KLR** | **Kul'dur** | **12.34** | **321** | Pn | **Pn** | **22 53 01.2** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=132,slow=9.7,SNR=7.7 | | | | | | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **12.34** | **321** | *eP* | **Pn** | **22 53 01.7** | **+0.5** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **JNU** | **Nakatsue** | **12.37** | **239** | Pn | **Pn** | **22 53 02.1** | **+0.4** |
| **JNU** | **Nakatsue** | **12.37** | **239** | Pn | **Pn** | **22 53 01.6** | **0.0** |
| | comp=Z,0.6nm,0.3s,baz=67,slow=2.4,SNR=9.2 | | | | | | |
| JNU | | | | LR | LR | 22 57 45.5 | |
| | comp=Z,115nm,20.9s,baz=48,slow=37 | | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **12.49** | **262** | Pn | **Pn** | **22 53 02.5** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=78,slow=17,SNR=1.1 | | | | | | |
| **BNX** | **BinXian** | **13.07** | **301** | P | **Pn** | **22 53 11.6** | **+0.4** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TJN** | **Taejon** | **13.27** | **259** | *eP* | **Pn** | **22 53 14.3** | **+0.3** |
| **CN2** | **Changchun** | **13.95** | **291** | P | **Pn** | **22 53 24.3** | **+1.1** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,12.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,12.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,11.0s | | | | | | |
| **ZEA** | **Zeya** | **17.49** | **326** | *eP* | **Pn** | **22 54 06.7** | **-2.6** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=N,200nm,14.0s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,200nm,13.0s | | | | | | |
| **HIA** | **Hailar** | **19.15** | **306** | *eP* | **P** | **22 54 28.4** | **-0.3** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **MA2** | **Magadan** | **19.95** | **11** | P | **P** | **22 54 37.4** | **0.0** |
| | comp=Z,8.8nm,0.6s,baz=197,slow=8.2,SNR=6.6 | | | | | | |
| MA2 | | | | LR | LR | 23 02 57.6 | |
| | comp=Z,54nm,19.7s,baz=194,slow=39 | | | | | | |
| **MA2** | **Magadan** | **19.95** | **11** | *ceP* | **Pn** | **22 54 38.9** | **-0.2** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **20.71** | **289** | *eP* | Pn | 22 54 47.8 | -0.4 |
| XLT | | | | sP | pwP | 22 54 58.3 | +6.5 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,31nm,4.2s | | | | | | |
| **BJT** | **Baijiatuau** | **20.93** | **278** | P | **P** | **22 54 45.8** | **-2.4** |
| **BJT** | **Baijiatuau** | **20.93** | **278** | P | **P** | **22 54 45.8** | **-2.4** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **TIA** | **Tai'an** | **21.12** | **268** | P | **P** | **22 54 48.0** | **-2.3** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **NJ2** | **Nanjing** | **21.49** | **256** | *eP* | **P** | **22 54 55.1** | **+0.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **HNS** | **HongShan** | **22.62** | **272** | P | **P** | **22 55 07.7** | **+1.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **23.40** | **10** | *eP* | **P** | **22 55 13.8** | **-0.4** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,41nm,1.3s | | | | | | |
| **YAK** | **Yakutsk** | **23.46** | **344** | P | **P** | **22 55 12.9** | **-1.8** |
| **YAK** | **Yakutsk** | **23.46** | **344** | P | **P** | **22 55 12.9** | **-1.8** |
| | comp=Z,42nm,0.7s,baz=148,slow=14,SNR=12 | | | | | | |
| YAK | | | | LR | LR | 23 05 04.0 | |
| | comp=Z,115nm,18.5s,baz=141,slow=38 | | | | | | |
| | comp=Z,42nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **23.46** | **344** | *eP* | **P** | **22 55 13.3** | **-1.4** |
| YAK | | | | *e**PP | **sP** | **22 55 19.7** | **-0.3** |
| YAK | | | | *eS* | **S** | **22 59 22.3** | **-5.1** |
| YAK | | | | *e**SS | **sS** | **22 59 34.2** | **+0.4** |
| YAK | | | | *e*SSS | SSS | 23 00 11.9 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,43nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,7.0nm,0.9s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,48nm,2.3s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,78nm,2.5s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,80nm,14.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,154nm,14.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,55nm,12.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **24.27** | **282** | *eP* | **P** | **22 55 22.5** | **-0.3** |
| HHC | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=E,43nm,4.2s | | | | | | |
| **YULB** | **Yu-li** | **25.15** | **235** | P | **P** | **22 55 29.2** | **-1.5** |
| **LYN** | **LuoYang** | **25.26** | **267** | P | **P** | **22 55 32.4** | **+0.7** |
| LYN | | | | pmax | pmax | | |
| | comp=E,25nm,1.0s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,260nm,15.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,250nm,15.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,490nm,13.1s | | | | | | |
| **WHN** | **Wuhan** | **25.59** | **257** | P | **P** | **22 55 35.1** | **+0.5** |
| WHN | | | | pmax | pmax | | |
| | comp=E,60nm,0.8s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,680nm,11.3s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,620nm,14.0s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,510nm,13.6s | | | | | | |
| **BOD** | **

comp=Z,20nm,0.9s
**H11S1 WAKE ISLAND Hy 29.39 131** T T 23 27 02.5
baz=323,slow=76,SNR=82
**H11S3 WAKE ISLAND Hy 29.39 131** T T 23 27 10.6
baz=323,slow=76,SNR=73
**H11S2 WAKE ISLAND Hy 29.40 131** T T 23 26 59.8
baz=323,slow=76,SNR=51
**ZAK Zakamensk 29.79 304** *e*P **P** **22 56 11.8 -0.5**
ZAK pmax pmax
comp=Z,4.0nm,1.1s
**BILL Bilibino 30.55 17** *i* P **P** **22 56 19.3 +0.7**
BILL *i* 22 56 25.6
BILL *i* 22 56 33.1
BILL pmax pmax
comp=Z,15nm,1.0s
BILL MLR MLR
comp=Z,43nm,18.0s
**LZH Lanzhou 31.32 275** *e*P **P** **22 56 27.0 +1.0**
LZH sP pwP 22 56 34.5 +2.3
LZH pmax pmax
comp=Z,10.0nm,1.2s
**GTA Gaotai 33.37 283** P **P** **22 56 44.4 +0.5**
GTA pP pP 22 56 47.4 -0.5
GTA PcP **PcP** **22 59 27.0 +1.6**
GTA pmax pmax
comp=Z,13nm,1.6s
GTA LR LR
comp=Z,70nm,15.3s
GTA LR LR
comp=Z,90nm,15.3s
GTA LR LR
comp=Z,75nm,14.9s
**CD2 Chengdu 33.44 267** P **P** **22 56 44.2 -0.3**
CD2 pmax pmax
comp=Z,10.0nm,0.5s
**GYA Guiyang 33.48 257** P **P** **22 56 44.5 -0.4**
GYA sP pwP 22 56 52.5 +1.5
GYA pmax pmax
comp=Z,35nm,0.8s
GYA LR LR
comp=Z,190nm,14.9s
**QIZ Qiongzhong 35.78 244** P **P** **22 57 05.7 +0.9**
QIZ S **S** **23 02 41.8 +0.2**
QIZ LR LR
comp=Z,150nm,18.1s
QIZ LR LR
comp=Z,130nm,14.2s
QIZ LR LR
comp=Z,150nm,12.8s
**DAV Davao City (W) 36.68 211** LR LR 23 12 42.7
comp=Z,40nm,18.7s,baz=39,slow=37
**M11K Mekoryuk 36.77 40** P **P** **22 57 13.1 +0.3**
baz=260
**KMI Kunming 37.16 259** ⇓P **P** **22 57 16.9 +0.2**
KMI pmax pmax
comp=Z,16nm,1.2s
KMI LR LR
comp=Z,210nm,17.8s
KMI LR LR
comp=Z,140nm,15.6s
KMI LR LR
comp=Z,200nm,13.5s
**PZH PanZhiHua 37.16 262** P **P** **22 57 16.6 0.0**
PZH pmax pmax
comp=Z,30nm,0.8s
PZH pmax pmax
comp=Z,100nm,5.1s
**F14K Arctic Creek 37.91 31** P **P** **22 57 23.0 +0.6**
baz=253
**ANM Nome 38.05 33** P **P** **22 57 24.1 +0.5**
baz=255
**GOMU GeErMu 38.14 280** P **P** **22 57 25.6 +0.5**
GOMU pP pwP 22 57 32.0 +0.7
GOMU PcP **PcP** **22 59 41.6 +1.8**
GOMU pmax pmax
comp=Z,51nm,0.8s
GOMU pmax pmax
comp=Z,200nm,4.6s
**L14K Kuka Creek 38.62 39** P **P** **22 57 28.5 +0.1**
baz=262
**F15K North Star Dit 38.65 31** P **P** **22 57 29.9 +1.3**
baz=255
**O14K Tigyukauivet M 39.10 42** P **P** **22 57 33.3 +0.9**
baz=266
**C16K Lisburne Hills 39.15 27** P **P** **22 57 33.7 +1.0**
baz=251
**L15K Ungalak Mounta 39.23 38** P **P** **22 57 34.5 +1.0**
baz=263
**K15K Wolf Creek Mou 39.30 37** P **P** **22 57 35.1 +1.0**
baz=262
**H16K Elim 39.39 33** P **P** **22 57 36.1 +1.4**
baz=258
**SDPT Sand Point 39.44 48** P **P** **22 57 36.6 +1.3**
baz=271
**G16K Koyuk River 39.50 32** P **P** **22 57 36.5 +0.8**
baz=257
**M15K Kasigluk River 39.51 40** P **P** **22 57 36.9 +1.1**
baz=265
**D17K Noatak River 39.79 29** P **P** **22 57 39.5 +1.4**
baz=254
**J16K Anvik River 39.86 36** P **P** **22 57 39.5 +0.7**
baz=262
**I17K Unalakleet 39.91 35** P **P** **22 57 40.6 +1.5**
baz=261
**CHNA Chernabura Isl 39.96 49** P **P** **22 57 41.0 +1.3**
baz=273
**C17K DeLong Mountai 39.98 27** P **P** **22 57 40.9 +1.2**
baz=253
**F17K Baldwin Pennin 40.17 31** P **P** **22 57 42.6 +1.4**
baz=257
**L16K Owhat River 40.19 38** P **P** **22 57 42.7 +1.2**
baz=265
**G17K Kiwalik Mounta 40.22 32** P **P** **22 57 42.4 +0.7**
baz=259
**M16K Timber Creek 40.38 39** P **P** **22 57 44.1 +1.0**
baz=266
**H17K Granite Mounta 40.42 33** P **P** **22 57 43.8 +0.4**
baz=260
**N16K Nishlik Lake 40.44 40** P **P** **22 57 44.1 +0.4**
baz=267
**J17K VABM Dome 40.56 36** P **P** **22 57 45.6 +1.0**
baz=263
**E18K Tukpahlearik C 40.64 29** P **P** **22 57 46.6 +1.4**
baz=257
**B18K Kokolik River 40.71 26** P **P** **22 57 47.2 +1.4**
baz=253
**C18K Utukok River 40.73 27** P **P** **22 57 45.9 0.0**
**C18K Utukok River 40.73 27** P **P** **22 57 46.5 +0.6**
baz=255
**O16K Kokwok River B 40.74 42** P **P** **22 57 47.2 +1.2**
baz=268
**L17K Donlin 40.78 38** P **P** **22 57 46.9 +0.5**
baz=265
**F18K Selawik 40.83 31** P **P** **22 57 48.4 +1.7**
baz=259
**K17K Iditarod 40.84 37** P **P** **22 57 47.5 +0.7**
baz=264
**WMQ Urumqi 41.01 294** *e*P **P** **22 57 51.1 +2.5**
WMQ LR LR
comp=Z,140nm,13.9s
WMQ LR LR
comp=Z,170nm,14.7s
WMQ LR LR
comp=Z,47nm,13.9s
**G18K Tagagawik 41.10 32** P **P** **22 57 50.3 +1.3**
**G18K Tagagawik 41.10 32** P **P** **22 57 50.6 +1.6**
baz=260
**H18K Honhosa River 41.10 33** P **P** **22 57 50.2 +1.1**
baz=262
**ZAA0 Zalesovo Array 41.12 310** P **P** **22 57 48.7 -0.6**
**ZALV Zalesovo Beam 41.12 310** P **P** **22 57 49.1 -0.2**
comp=Z,5.8nm,0.6s,baz=91,slow=7.7,SNR=26
ZALV PcP **PcP** **22 59 49.2 +0.7**
comp=Z,6.1nm,0.8s,baz=77,slow=3.2,SNR=6.6
comp=Z,5.8nm,0.6s
**M17K Holitna River 41.14 39** P **P** **22 57 50.0 +0.7**
baz=267
**A19K Wainwright 41.20 25** P **P** **22 57 49.6 -0.1**
baz=253
**N17K Nushagak Hills 41.22 40** P **P** **22 57 49.7 -0.4**
baz=268
**O17K Koliganek Bris 41.25 41** P **P** **22 57 50.7 +0.5**
baz=269
**C19K Lookout Ridge 41.41 27** P **P** **22 57 51.5 0.0**
baz=256
**L18K Granite Mounta 41.54 38** P **P** **22 57 53.1 +0.4**
baz=267

**P17K Kvichak River 41.58 42** P **P** **22 57 53.5 +0.6**
baz=270
**F19K Shaleruckik Mo 41.61 31** P **P** **22 57 52.8 -0.3**
baz=260
**G19K Purcell Mounta 41.77 32** P **P** **22 57 54.7 +0.2**
baz=262
**D19K Kuna River 41.79 28** P **P** **22 57 55.6 +0.9**
D19K IAmb IAmb 22 57 57.5
comp=Z,16nm,1.1s
**D19K Kuna River 41.79 28** P **P** **22 57 55.1 +0.4**
baz=258,SNR=5.5
**N18K Kilae Creek 41.87 40** P **P** **22 57 55.4 0.0**
baz=269
**Q17K Contact Creek 41.88 44** P **P** **22 57 55.3 -0.3**
baz=272
**M18K Stony River 41.92 39** P **P** **22 57 56.3 +0.5**
baz=268
**E19K Redstone River 41.92 30** P **P** **22 57 57.5 +1.8**
E19K IAmb IAmb 22 57 58.4
comp=Z,13nm,0.9s
**E19K Redstone River 41.92 30** P **P** **22 57 56.4 +0.7**
baz=260,SNR=10
**H19K Roundabout Mou 41.95 33** P **P** **22 57 57.4 +1.5**
H19K IAmb IAmb 22 57 58.6
comp=Z,12nm,0.8s
**H19K Roundabout Mou 41.95 33** P **P** **22 57 56.8 +0.9**
baz=263,SNR=5.7
**ZSN Zaisan 42.09 300** *e*P **P** **22 57 57.5 +0.1**
baz=300
**ZSN Zaisan 42.09 300** *e*P **P** **22 57 57.4 +0.1**
**J19K Poorman 42.15 35** P **P** **22 57 58.9 +1.3**
J19K IAmb IAmb 22 57 59.8
comp=Z,11nm,1.0s
**J19K Poorman 42.15 35** P **P** **22 57 58.1 +0.5**
baz=266,SNR=5.2
**P18K Big Mountain, 42.20 42** P **P** **22 57 58.9 +0.8**
baz=271
**O18K Koktuh Hills 42.20 41** P **P** **22 57 59.0 +0.9**
baz=271
**Q18K Katmai Hardscr 42.33 43** P **P** **22 57 59.3 0.0**
baz=272
**D20K Etivluk River 42.37 28** P **P** **22 58 00.2 +0.8**
baz=260,SNR=9.2
**L19K White Mountain 42.40 38** P **P** **22 58 00.1 +0.4**
baz=268
**F20K Avaraart Lake 42.44 30** P **P** **22 58 00.7 +0.8**
baz=262
**B20K Meade River 42.45 26** P **P** **22 58 01.1 +1.2**
B20K IAmb IAmb 22 58 06.2
comp=Z,12nm,0.8s
**B20K Meade River 42.45 26** P **P** **22 58 00.0 +0.2**
baz=258,SNR=5.8
**E20K Nigu River 42.45 29** P **P** **22 58 00.5 +0.5**
baz=260,SNR=11
**N19K Bonanza Creek 42.56 40** P **P** **22 58 01.7 +0.6**
baz=270
**H20K Anofleneega Mo 42.60 33** P **P** **22 58 01.6 +0.4**
baz=265
**M19K Big River Lodg 42.61 38** P **P** **22 58 02.1 +0.7**
baz=269
**R18K Karluk 42.68 45** P **P** **22 58 02.8 +0.9**
baz=274
**K20K Telida 42.80 36** P **P** **22 58 03.2 +0.3**
baz=268
**J20K Nowinta River 42.81 35** P **P** **22 58 04.5 +1.6**
**J20K Nowinta River 42.81 35** P **P** **22 58 04.3 +1.3**
baz=267
**L20K Farewell, AK 42.86 37** P **P** **22 58 03.9 +0.5**
baz=269
**Q19K Cape Douglas, 43.03 43** P **P** **22 58 04.9 +0.1**
baz=273
**C21K Knifeblade Rid 43.10 27** P **P** **22 58 06.6 +1.3**
baz=261,SNR=6.4
**IMAR Indian Mountai 43.10 32** P **P** **22 58 06.8 +1.5**
**M20K Styx River 43.21 38** P **P** **22 58 07.6 +1.3**
baz=270
**P19K Oil Pt 43.21 41** P **P** **22 58 07.7 +1.5**
baz=272
**B21K Ikpikpuk River 43.24 27** P **P** **22 58 07.7 +1.3**
B21K IAmb IAmb 22 58 20.4
comp=Z,11nm,1.0s
**B21K Ikpikpuk River 43.24 27** P **P** **22 58 08.2 +1.9**
baz=260,SNR=5.2
**G21K Allakaket 43.25 31** P **P** **22 58 07.8 +1.3**
G21K IAmb IAmb 22 58 15.8
comp=Z,13nm,1.2s
**G21K Allakaket 43.25 31** P **P** **22 58 07.7 +1.2**
baz=265
**E21K Killik River 43.29 29** P **P** **22 58 08.1 +1.2**
E21K IAmb IAmb 22 58 09.0
comp=Z,9.5nm,0.8s
**E21K Killik River 43.29 29** P **P** **22 58 07.5 +0.7**
baz=262
**F21K Alatna River 43.33 30** P **P** **22 58 08.8 +1.7**
**F21K Alatna River 43.33 30** P **P** **22 58 08.3 +1.2**
baz=264
**OHAK Old Harbor 43.34 45** P **P** **22 58 07.3 +0.1**
baz=275
**A22K Sinclair Lake 43.37 25** P **P** **22 58 08.0 +0.6**
baz=259
**RSO Redoubt South 43.42 40** P **P** **22 58 08.8 +0.7**
**H21K Melozitna Rive 43.47 33** P **P** **22 58 09.1 +0.8**
baz=266
**N20K Mount Spurr 43.66 39** P **P** **22 58 10.5 +0.5**
baz=272
**KDAK Kodiak Island 43.66 44** LR LR 23 17 05.9
comp=Z,15nm,19.9s,baz=123,slow=37
**KDAK Kodiak Island 43.66 44** P **P** **22 58 11.3 +1.4**
baz=275
**Q20K Shuyak Island 43.70 43** P **P** **22 58 10.3 +0.1**
baz=274
**CHTO Chiang Mai 43.73 254** P **P** **22 58 11.2 +0.3**
**CHTO Chiang Mai 43.73 254** P **P** **22 58 11.2 +0.3**
CHTO pmax pmax
comp=Z,8.0nm,1.1s
**B22K Teshekpuk Lake 43.76 26** P **P** **22 58 11.5 +1.0**
baz=261
**D22K Ayikyak River 43.81 28** P **P** **22 58 12.3 +1.3**
D22K IAmb IAmb 22 58 13.7
comp=Z,16nm,0.9s
**D22K Ayikyak River 43.81 28** P **P** **22 58 11.7 +0.7**
baz=263,SNR=9.7
**F22K John River 43.86 30** P **P** **22 58 12.0 +0.6**
baz=265
**CMAR Chiang Mai Arr 43.95 254** P **P** **22 58 12.0 -0.7**
comp=Z,2.1nm,0.6s,baz=46,slow=7.1,SNR=9.9
CMAR PcP **PcP** **22 59 59.0 +0.5**
comp=Z,0.7nm,0.3s,baz=17,slow=2.2,SNR=5.0
comp=Z,2.1nm,0.6s
**MK31 Makanchi Array 43.95 300** P **P** **22 58 12.4 0.0**
**MK31 Makanchi Array 43.95 300** *d* P **P** **22 58 12.1 -0.3**
MK31 pmax pmax
comp=Z,8.0nm,0.7s
**MKAR Makanchi Array 43.95 300** P **P** **22 58 12.6 +0.1**
**MKAR Makanchi Array 43.95 300** P **P** **22 58 12.4 -0.1**
comp=Z,4.9nm,0.8s,baz=84,slow=9.6,SNR=39
MKAR PcP **PcP** **22 59 57.5 -0.7**
comp=Z,1.0nm,0.8s,baz=106,slow=3.1,SNR=2.2
MKAR LR LR 23 16 21.6
comp=Z,49nm,18.7s,baz=169,slow=36
comp=Z,4.9nm,0.8s
**MKAR Makanchi Array 43.95 300** P **P** **22 58 12.6 +0.1**
**SKT Skwentna 43.96 38** P **P** **22 58 12.8 +0.4**
baz=272
**HOM Homer 44.01 41** P **P** **22 58 13.1 +0.4**
baz=274
**H22K Ishtalitna Cre 44.07 32** P **P** **22 58 13.7 +0.6**
baz=268
**G22K Bettles 44.07 31** P **P** **22 58 13.8 +0.7**
baz=266
**MAKZ Makanchi 44.16 300** P **P** **22 58 14.2 +0.1**
MAKZ IAmb IAmb 22 58 15.3
comp=Z,14nm,1.1s
**MAKZ Makanchi 44.16 300** P **P** **22 58 14.2 +0.1**
MAKZ pmax pmax
comp=Z,14nm,1.2s
**BPAW Bear Paw Mtn. 44.19 35** P **P** **22 58 14.5 +0.3**
baz=270
**CAPN Captain Cook N 44.19 40** P **P** **22 58 13.9 -0.2**
baz=273
**MLY Manley 44.31 34** P **P** **22 58 14.7 -0.4**
baz=269
**SUA Susitna One 44.35 39** P **P** **22 58 16.3 +0.7**
baz=273
**SEM Semipalatinsk 44.44 305** *e*P **P** **22 58 15.9 -0.7**
comp=Z,5.9nm,0.8s,baz=305
**SEM Semipalatinsk 44.44 305** *e*P **P** **22 58 15.8 -0.7**
SEM pmax pmax
comp=Z,6.0nm,0.8s
**D23K Nanushuk River 44.54 28** P **P** **22 58 17.3 +0.5**
baz=265
**COLD Coldfoot 44.60 30** P **P** **22 58 18.4 +1.0**
baz=267
**C23K Itkillik River 44.65 27** P **P** **22 58 18.2 +0.6**
**C23K Itkillik River 44.65 27** P **P** **22 58 17.7 +0.1**
baz=264,SNR=15
**G23K Bananza Creek 44.65 31** P **P** **22 58 19.2 +1.4**
**G23K Bananza Creek 44.65 31** P **P** **22 58 17.9 +0.1**
baz=268
**H23K Yukon River 44.82 33** P **P** **22 58 20.7 +1.6**
H23K IAmb IAmb 22 58 22.2
comp=Z,14nm,1.1s
**H23K Yukon River 44.82 33** P **P** **22 58 19.3 +0.2**
baz=269,SNR=6.7
**BWN Browne 44.86 35** P **P** **22 58 21.3 +1.9**
**RC01 Rabbit Creek A 44.86 39** P **P** **22 58 19.8 +0.3**
baz=274
**E23K Chandalar 44.87 29** P **P** **22 58 20.3 +0.7**
baz=267,SNR=10
**I23K Minto, Yukon-K 44.89 33** P **P** **22 58 21.3 +1.6**
I23K IAmb IAmb 22 58 37.0
comp=Z,12nm,1.4s
**I23K Minto, Yukon-K 44.89 33** P **P** **22 58 20.3 +0.6**
baz=270
**TOLK Toolik Lake Re 44.92 28** P **P** **22 58 21.3 +1.4**
TOLK IAmb IAmb 22 58 22.4
comp=Z,5.8nm,0.8s
**TOLK Toolik Lake Re 44.92 28** P **P** **22 58 21.2 +1.4**
baz=266
**NEA2 Nenana 45.02 34** P **P** **22 58 22.3 +1.6**
NEA2 IAmb IAmb 22 58 23.1
comp=Z,17nm,1.4s
**NEA2 Nenana 45.02 34** P **P** **22 58 21.4 +0.7**
baz=271
**SEW Seward 45.08 41** P **P** **22 58 22.4 +1.2**
baz=275
**MCK McKinley 45.10 35** P **P** **22 58 22.1 +0.7**
baz=272
**PMR Palmer 45.12 39** P **P** **22 58 21.5 0.0**
baz=274
**RND Reindeer 45.15 36** P **P** **22 58 23.3 +1.4**
RND IAmb IAmb 22 58 36.0
comp=Z,8.3nm,0.9s
**RND Reindeer 45.15 36** P **P** **22 58 23.3 +1.4**
RND pmax pmax
comp=Z,8.0nm,0.9s
**D24K Happy Valley 45.22 28** P **P** **22 58 23.9 +1.7**
**D24K Happy Valley 45.22 28** P **P** **22 58 22.6 +0.4**
baz=267,SNR=6.8
**E24K Your Creek 45.29 29** P **P** **22 58 24.4 +1.4**
E24K IAmb IAmb 22 58 25.8
comp=Z,11nm,0.8s
**E24K Your Creek 45.29 29** P **P** **22 58 23.7 +0.8**
baz=268,SNR=13
**C24K Franklin Bluff 45.30 27** P **P** **22 58 23.2 +0.4**
baz=266
**WAT1 Susitna Watana 45.32 37** P **P** **22 58 24.0 +0.8**
baz=273
**MDM Murphy Dome 45.38 34** P **P** **22 58 25.3 +1.8**
MDM IAmb IAmb 22 58 26.1
comp=Z,17nm,1.3s
**KURK Kurchatov 45.39 306** P **P** **22 58 24.0 +0.2**
**KURK Kurchatov 45.39 306** *d* iP **P** **22 58 23.4 -0.4**
KURK pmax pmax
comp=Z,30nm,0.9s
**KNK Knik Glacier 45.46 39** P **P** **22 58 24.6 +0.4**
baz=275
**KURBB Kurchatov Arra 45.46 306** P **P** **22 58 24.4 +0.1**
comp=Z,30nm,0.7s,baz=80,slow=8.7,SNR=119
KURBB PcP **PcP** **23 00 03.1 -0.1**
comp=Z,0.4nm,0.3s,baz=91,slow=3.7,SNR=2.9
comp=Z,30nm,0.7s
**SML Sawmill 45.48 38** P **P** **22 58 25.0 +0.5**
baz=274
**F24K Squaw Lake 45.51 30** P **P** **22 58 25.5 +1.0**
baz=269
**H24K Noodor Dome 45.51 32** P **P** **22 58 25.2 +0.6**
baz=271
**COLA College 45.54 34** ⇑ *i* P **P** **22 58 26.2 +1.4**
COLA pmax pmax
comp=Z,6.0nm,1.1s
**PWL Port Wells 45.56 39** P **P** **22 58 25.7 +0.6**
baz=275
**CCB Clear Creek Bu 45.57 34** P **P** **22 58 26.6 +1.6**
**G24K Hadweenzic Riv 45.66 31** P **P** **22 58 27.5 +1.7**
G24K IAmb IAmb 22 58 35.6
comp=Z,9.4nm,1.1s
**G24K Hadweenzic Riv 45.66 31** P **P** **22 58 26.7 +0.9**
baz=270,SNR=5.8
**WAT6 Susitna Watana 45.70 37** P **P** **22 58 27.3 +0.9**
baz=274
**POKR Poker Plat Res 45.71 33** P **P** **22 58 27.3 +1.1**
**POKR Poker Plat Res 45.71 33** P **P** **22 58 26.8 +0.6**
baz=272,SNR=7.0
**M23K Glacier View 45.77 38** P **P** **22 58 26.7 -0.1**
baz=275
**DHY Denali Highway 45.84 36** P **P** **22 58 27.6 +0.2**
baz=274
**HDA Harding Lake 45.95 34** P **P** **22 58 28.4 +0.3**
baz=273
**IL31 45.96 34** P **P** **22 58 28.6 +0.6**
IL31 IAmb IAmb 22 58 29.7
comp=Z,7.8nm,0.9s
**ILAR Eielson Array 45.96 34** P **P** **22 58 29.1 +1.1**
**ILAR Eielson Array 45.96 34** P **P** **22 58 28.4 +0.3**
comp=Z,4.1nm,0.8s,baz=263,slow=6.3,SNR=47
comp=Z,4.1nm,0.8s
**ILAR Eielson Array 45.96 34** P **P** **22 58 29.2 +1.1**
**SCM Sheep Creek Mo 45.96 38** P **P** **22 58 27.9 -0.4**
baz=275
**D25K Kavik River 46.10 28** P **P** **22 58 30.3 +1.1**
D25K IAmb IAmb 22 58 31.6
comp=Z,10nm,0.7s
**D25K Kavik River 46.10 28** P **P** **22 58 29.2 -0.1**
baz=269,SNR=16
**P23K Montague Islan 46.11 41** P **P** **22 58 30.2 +0.8**
baz=277
**GLI Glacier Island 46.16 39** P **P** **22 58 29.5 -0.3**
baz=276
**G25K Bearman Lake 46.21 31** P **P** **22 58 29.7 -0.3**
baz=272
**H25L Birch Creek 46.34 32** P **P** **22 58 30.6 -0.5**
baz=272
**F25K Christian Rive 46.37 30** P **P** **22 58 30.9 -0.5**
baz=271
**M24K Tolsona, Glenn 46.47 38** P **P** **22 58 32.5 +0.2**
baz=276
**K24K Donnelly Dome 46.50 35** P **P** **22 58 32.3 -0.1**
baz=275
**J25K Salcha River, 46.62 34** P **P** **22 58 33.2 -0.2**
**J25K Salcha River, 46.62 34** P **P** **22 58 33.5 +0.1**
baz=274
**C26K Camden Bay 46.62 27** P **P** **22 58 34.2 +0.9**
baz=270,SNR=7.5
**KLU Klutina 46.66 38** P **P** **22 58 34.0 +0.2**
baz=277
**PAX Paxson 46.71 36** P **P** **22 58 34.4 +0.2**
baz=276
**Q23K Middleton Isla 46.72 41** P **P** **22 58 33.6 -0.5**
baz=278
**BMAR Burnt Mountain 46.78 30** P **P** **22 58 35.9 +1.3**
**PDGK Podgornoye 46.85 296** *i* P **P** **22 58 35.1 -0.5**
PDGK pmax pmax
comp=Z,6.0nm,0.8s
**EYAK Cordova Ski Ar 46.86 40** P **P** **22 58 35.6 +0.4**
baz=278
**HARP HAARP 46.92 37** P **P** **22 58 36.6 +0.9**
baz=276
**SHLS Shalkode 46.93 296** *e*P **P** **22 58 33.7 -2.5**
baz=296
**SHLS Shalkode 46.93 296** *e*P **P** **22 58 33.7 -2.5**
**F26K Sheenjek River 46.94 30** P **P** **22 58 36.7 +0.9**
baz=272,SNR=14
**C27K Jago River 47.04 27** P **P** **22 58 36.7 +0.2**
baz=271,SNR=11
**TDK Taldyqorghan 47.06 298** *e*P **P** **22 58 36.9 -0.1**
baz=298
**TDK Taldyqorghan 47.06 298** *e*P **P** **22 58 36.9 -0.1**
**G26K Porcupine Rive 47.12 31** P **P** **22 58 38.0 +0.9**
baz=273,SNR=5.4
**UZB Uzynbulak 47.24 296** *e*P **P** **22 58 38.4 -0.3**
comp=Z,3.9nm,0.8s,baz=296
**UZB Uzynbulak 47.24 296** *e*P **P** **22 58 38.3 -0.4**
UZB pmax pmax

comp=Z,4.0nm,0.8s
**SCRK Sand Creek 47.27 35** P **P** **22 58 39.4 +0.8**
SCRK IAmb IAmb 22 58 40.1
comp=Z,7.9nm,0.8s
**SCRK Sand Creek 47.27 35** P **P** **22 58 38.7 +0.1**
baz=276,SNR=9.3
**N25K Chitina, Valde 47.27 38** P **P** **22 58 39.1 +0.5**
baz=278
**BMRM Bremner River 47.36 39** P **P** **22 58 39.9 +0.6**
baz=278
**KPKS Kokpek 47.36 296** *e*P **P** **22 58 39.5 0.0**
baz=296
**KPKS Kokpek 47.36 296** *e*P **P** **22 58 39.5 0.0**
**J26L Joseph Creek 47.40 34** P **P** **22 58 40.4 +0.8**
baz=276
**I26K Coal Creek Min 47.50 33** P **P** **22 58 40.8 +0.6**
baz=276
**MENT Mentasta 47.51 36** P **P** **22 58 41.9 +1.6**
MENT IAmb IAmb 22 58 45.9
comp=Z,9.1nm,1.1s
**KAIM Kayak Island 47.61 40** P **P** **22 58 41.9 +0.8**
baz=279
**ZHN Zhinishke 47.63 296** *e*P **P** **22 58 41.7 -0.1**
comp=Z,4.7nm,0.9s,baz=296
**ZHN Zhinishke 47.63 296** *e*P **P** **22 58 41.6 -0.1**
ZHN pmax pmax
comp=Z,5.0nm,0.9s
**SATY Saty 47.69 296** *e*P **P** **22 58 42.2 0.0**
comp=Z,4.6nm,0.8s,baz=296
**SATY Saty 47.69 296** *e*P **P** **22 58 42.2 0.0**
SATY pmax pmax
comp=Z,5.0nm,0.8s
**E27K Coleen River 47.87 29** P **P** **22 58 44.6 +1.5**
E27K IAmb IAmb 22 58 46.0
comp=Z,5.2nm,0.8s
**E27K Coleen River 47.87 29** P **P** **22 58 43.5 +0.4**
baz=274
**M26K Nabesna, AK 47.91 37** P **P** **22 58 45.3 +1.8**
M26K IAmb IAmb 22 58 46.4
comp=Z,8.4nm,1.1s
**M26K Nabesna, AK 47.91 37** P **P** **22 58 44.4 +0.8**
baz=278,SNR=5.1
**G27K Doyon Strip 47.96 31** P **P** **22 58 44.5 +0.7**
baz=275
**D27M Malcolm River 48.03 28** IAmb IAmb 22 58 47.1
comp=Z,8.1nm,1.0s
**D27M Malcolm River 48.03 28** P **P** **22 58 45.1 +0.7**
baz=274
**MCARA McCarthy VSAT 48.05 38** P **P** **22 58 46.0 +1.5**
baz=279
**H27K Steamboat Moun 48.07 32** P **P** **22 58 45.6 +0.9**
baz=276
**K27K Chicken 48.10 35** IAmb IAmb 22 58 56.5
comp=Z,7.8nm,1.1s
**K27K Chicken 48.10 35** P **P** **22 58 45.8 +0.9**
baz=278
**I27K Kandik River 48.11 33** P **P** **22 58 46.3 +1.3**
baz=277
**CRQE Cirque 48.12 39** P **P** **22 58 45.8 +0.5**
baz=280
**L27K Beaver Creek, 48.35 36** IAmb IAmb 22 58 49.6
comp=Z,9.4nm,1.1s
**L27K Beaver Creek, 48.35 36** P **P** **22 58 47.9 +1.1**
baz=279,SNR=12
**BCAR Beaver Creek A 48.37 36** P **P** **22 58 48.5 +1.5**
**CHKK Chushkaly 48.39 297** *e*P **P** **22 58 47.4 0.0**
baz=297
**CHKK Chushkaly 48.39 297** *e*P **P** **22 58 47.4 0.0**
**EGAK Eagle 48.40 34** IAmb IAmb 22 58 50.5
comp=Z,8.9nm,1.2s
**EGAK Eagle 48.40 34** P **P** **22 58 48.4 +1.3**
baz=278
**M27K Edge Creek, AK 48.44 37** IAmb IAmb 22 58 50.2
comp=Z,6.1nm,0.9s
**M27K Edge Creek, AK 48.44 37** P **P** **22 58 48.7 +1.1**
baz=279,SNR=5.2
**F28M Old Crow 48.57 30** IAmb IAmb 22 58 51.5
comp=Z,5.9nm,1.0s
**F28M Old Crow 48.57 30** P **P** **22 58 49.3 +0.8**
baz=276,SNR=6.1
**TARG Taragay, Kyrgy 48.58 294** IAmb IAmb 22 59 07.4
comp=Z,9.1nm,0.7s
**MDOK Medeo 48.59 297** *e*P **P** **22 58 49.0 -0.1**
baz=296
**MDOK Medeo 48.59 297** *e*P **P** **22 58 49.0 -0.1**
**E28M Babbage River 48.59 28** IAmb IAmb 22 58 51.6
comp=Z,12nm,1.1s
**E28M Babbage River 48.59 28** P **P** **22 58 49.7 +1.0**
baz=276,SNR=5.4
**AAA Alma-Ata 48.66 297** *e*P **P** **22 58 49.5 -0.1**
comp=Z,6.0nm,0.5s,baz=296
**AAA Alma-Ata 48.66 297** *e*P **P** **22 58 49.5 -0.1**
AAA pmax pmax
comp=Z,6.0nm,0.5s
**TNSS Tian-Shan 48.70 296** *e*P **P** **22 58 50.0 -0.3**
baz=296
**TNSS Tian-Shan 48.70 296** *e*P **P** **22 58 50.0 -0.3**
**MESA MESA 48.78 40** P **P** **22 58 51.2 +0.8**
baz=281
**D28M Stokes Point 48.81 27** P **P** **22 58 51.1 +0.9**
baz=276
**I28M Miner Creek 48.82 33** IAmb IAmb 22 58 53.0
comp=Z,4.8nm,0.8s
**I28M Miner Creek 48.82 33** P **P** **22 58 50.8 +0.3**
baz=278,SNR=6.2
**CTG Chitna Glacier 48.93 39** P **P** **22 58 52.0 +0.5**
baz=281
**YUK3 Moose Creek 49.20 38** P **P** **22 58 53.9 +0.3**
baz=281
**E29M Blow River 49.22 29** P **P** **22 58 53.7 +0.3**
baz=277,SNR=8.7
**DAWY Dawson 49.27 34** P **P** **22 58 54.6 +0.7**
baz=280
**H29M Whitestone 49.34 32** P **P** **22 58 55.4 +1.0**
H29M **pP** **22 58 57.0 -1.2**
H29M IAmb IAmb 22 59 15.1
comp=Z,19nm,1.5s
**H29M Whitestone 49.34 32** P **P** **22 58 55.2 +0.8**
baz=279
**G29M Pine Creek 49.38 31** IAmb IAmb 22 58 58.0
comp=Z,11nm,1.1s
**G29M Pine Creek 49.38 31** P **P** **22 58 55.1 +0.4**
baz=279,SNR=6.0
**I29M Ogilvie Camp, 49.51 33** IAmb IAmb 22 58 58.1
comp=Z,9.8nm,0.9s
**I29M Ogilvie Camp, 49.51 33** P **P** **22 58 56.4 +0.7**
baz=280,SNR=9.7
**YUK8 Steele Glacier 49.62 38** P **P** **22 58 57.1 +0.2**
baz=282
**TKM2 Tokmak 2 49.67 297** P **P** **22 58 57.8 +0.3**
SNR=26
**J29N Klondike Camp 49.70 34** P **P** **22 58 58.2 +0.9**
baz=280
**BRVK Borovoye 49.81 311** P **P** **22 58 57.8 -0.2**
BRVK IAmb IAmb 22 58 59.6
comp=Z,11nm,0.8s
**BRVK Borovoye 49.81 311** *de*P **P** **22 58 58.0 -0.1**
BRVK pmax pmax
comp=Z,14nm,1.0s
**BTLS Baital 49.96 300** *e*P **P** **22 58 59.7 +0.3**
baz=300
**BTLS Baital 49.96 300** *e*P **P** **22 58 59.7 +0.3**
**EPYK Eagle Plains 49.98 31** P **P** **22 58 59.9 +0.6**
baz=280,SNR=8.7
**M29M Somme Creek 49.98 36** P **P** **22 58 59.6 +0.2**
baz=282
**L29M L29M 50.00 36** IAmb IAmb 22 59 02.8
comp=Z,12nm,1.1s
**L29M L29M 50.00 36** P **P** **22 59 00.4 +0.9**
baz=282,SNR=10
**OTUK Ortayu 50.00 304** *i* P **P** **22 58 59.5 -0.2**
**G30M tAoh Zraii Nji 50.06 30** P **P** **22 59 00.1 +0.1**
baz=280,SNR=6.9
**K29M Barlow Dome 50.12 35** IAmb IAmb 22 59 03.3
comp=Z,8.4nm,0.8s
**K29M Barlow Dome 50.12 35** P **P** **22 59 01.1 +0.6**
baz=282,SNR=9.0
**F30M Barrier River 50.12 30** P **P** **22 59 00.8 +0.5**
baz=280,SNR=5.0
**YUK4 Talbot Arm 50.13 38** P **P** **22 59 00.8 +0.1**
baz=283
**SGDS Sogindy 50.14 298** *e*P **P** **22 59 00.9 0.0**
baz=298
**SGDS Sogindy 50.14 298** *e*P **P** **22 59 00.8 0.0**
**PNL Peninsula 50.15 40** P **P** **22 59 00.5 -0.1**
baz=284
**KBK Karagaybulak 50.21 297** P **P** **22 59 02.0 +0.5**
SNR=16
**USP Ospenovka 50.29 298** P **P** **22 59 02.2 +0.2**
SNR=8.5
**I30M Mount Dempster 50.33 33** P **P** **22 59 02.6 +0.6**
baz=281,SNR=18
**YUK6 Outpost Mounta 50.36 38** P **P** **22 59 02.4 0.0**
baz=283
**O29M Mount Kennedy 50.40 39** P **P** **22 59 02.7 0.0**
baz=284
**J30M Hart River 50.48 33** P **P** **22 59 03.2 0.0**
baz=282,SNR=5.2
**AAK Ala-Archa 50.53 297** P **P** **22 59 04.1 +0.1**
**AAK Ala-Archa 50.53 297** LR LR 23 21 12.5
comp=Z,61nm,19.9s,baz=96,slow=37
**AAK Ala-Archa 50.53 297** *de*P **P** **22 59 04.0 +0.1**
AAK pmax pmax
comp=Z,2.0nm,0.7s
**M30M Minto, Yukon 50.71 36** IAmb IAmb 22 59 07.9
comp=Z,6.9nm,1.0s
**M30M Minto, Yukon 50.71 36** P **P** **22 59 04.9 0.0**
baz=283
**G31M Satah River 50.83 30** P **P** **22 59 06.1 +0.5**
baz=282,SNR=5.1
**INK Inuvik 50.83 28** IAmb IAmb 22 59 07.7
comp=Z,7.3nm,0.8s
**INK Inuvik 50.83 28** P **P** **22 59 06.0 +0.3**
baz=281,SNR=7.1
**INK Inuvik 50.83 28** P **P** **22 59 07.3 +1.7**
INK pmax pmax
comp=Z,13nm,1.8s
**N30M Aishikik Lake 50.84 38** P **P** **22 59 06.0 +0.2**
baz=284
**F31M Tsiigehtchic 50.93 30** IAmb IAmb 22 59 08.6
comp=Z,8.5nm,1.1s
**F31M Tsiigehtchic 50.93 30** P **P** **22 59 06.9 +0.6**
baz=282
**P29M Wiy Craggy 50.98 40** IAmb IAmb 22 59 10.2
comp=Z,13nm,1.1s
**P29M Windy Craggy 50.98 40** P **P** **22 59 07.3 +0.4**
baz=285
**EKS2 Erkin-Say 51.01 297** P **P** **22 59 07.7 +0.2**
SNR=11
**P30M Million Dollar 51.23 39** P **P** **22 59 08.8 0.0**
baz=285
**AML Almayashu 51.27 296** P **P** **22 59 10.4 +0.6**
SNR=8.7
**N31M Braeburn, Yuko 51.44 37** IAmb IAmb 22 59 13.4
comp=Z,11nm,0.8s
**N31M Braeburn, Yuko 51.44 37** P **P** **22 59 10.3 0.0**
baz=285
**O30N Mendenhall 51.48 38** P **P** **22 59 10.7 +0.1**
baz=285
**PLBC Pleasant Camp 51.70 40** P **P** **22 59 12.7 +0.5**
baz=286
**M31M Drury Creek, Y 51.89 36** IAmb IAmb 22 59 16.3
comp=Z,5.8nm,0.8s
**M31M Drury Creek, Y 51.89 36** P **P** **22 59 14.1 +0.4**
baz=285,SNR=7.5
**WHY Whitehorse 52.08 38** P **P** **22 59 15.4 +0.2**
baz=286
**S31K Pelican 52.19 42** P **P** **22 59 15.2 -0.7**
baz=287
**FARO Faro, Yukon 52.35 36** IAmb IAmb 22 59 19.6
comp=Z,4.4nm,0.7s
**FARO Faro, Yukon 52.35 36** P **P** **22 59 16.6 -0.5**
baz=286,SNR=7.8
**A36M Sachs Harbour 52.73 23** P **P** **22 59 18.7 -0.9**
baz=286
**SIT Sitka 52.93 43** P **P** **22 59 20.7 -0.7**
baz=288
**P32M Atlin 52.95 39** P **P** **22 59 21.1 -0.5**
baz=288
**R32K Eaglecrest 52.96 41** P **P** **22 59 21.4 -0.2**
baz=288
**KKAR Karatay Array 53.05 299** P **P** **22 59 22.2 -0.4**
**KKAR Karatay Array 53.05 299** IAmb IAmb 22 59 22.8
comp=Z,4.2nm,0.8s
**KKAR Karatay Array 53.05 299** P **P** **22 59 22.2 -0.4**
**P33M Teslin, Yukon 53.19 38** IAmb IAmb 22 59 26.2
comp=Z,7.9nm,1.1s
**P33M Teslin, Yukon 53.19 38** P **P** **22 59 23.1 -0.3**
baz=288,SNR=6.3
**BRLS Borolday 53.53 299** *e*P **P** **22 59 27.2 +1.1**
baz=299
**BRLS Borolday 53.53 299** *e*P **P** **22 59 27.2 +1.1**
**Q32M Nakina River 53.86 40** P **P** **22 59 28.0 -0.5**
baz=289
**C36M Paulatuk 53.88 26** IAmb IAmb 22 59 29.6
comp=Z,7.7nm,0.8s
**C36M Paulatuk 53.88 26** P **P** **22 59 28.4 +0.2**
baz=289,SNR=5.9
**SVE Sverdlovsk 53.94 318** *ce*P **P** **22 59 29.5 +0.7**
SVE pmax pmax
comp=Z,23nm,1.1s
SVE MLR MLR
comp=Z,242nm,14.0s
**CHM Chimkent 53.98 298** *e*P **P** **22 59 29.3 -0.2**
comp=Z,3.3nm,0.5s,baz=298
**CHM Chimkent 53.98 298** *e*P **P** **22 59 29.2 -0.2**
CHM pmax pmax
comp=Z,3.0nm,0.5s
**R33M Jennings River 54.34 39** P **P** **22 59 31.8 -0.1**
baz=290
**U33K Whale Pass 54.40 43** P **P** **22 59 32.5 +0.4**
baz=291
**CRAG Craig 54.63 44** P **P** **22 59 34.1 +0.2**
baz=291
**GAR Garm 54.91 294** IAmb IAmb 23 00 02.3
comp=Z,7.9nm,0.8s
**DLBC Dease Lake 55.14 40** P **P** **22 59 37.3 -0.3**
baz=291
**ARU Arti 55.15 318** P **P** **22 59 37.8 +0.1**
**ARU Arti 55.15 318** *c i* P **P** **22 59 38.3 +0.6**
ARU 23 00 37.5
ARU 23 01 38.8
ARU S **S** **23 07 21.5 +1.6**
ARU SS **SS** **23 11 02.0 -1.4**
ARU pmax pmax
comp=Z,33nm,1.5s
ARU MLR MLR
comp=Z,137nm,14.0s
**ARU Arti 55.15 318** P **P** **22 59 38.1 +0.4**
comp=Z,20nm,1.5s
**NIL Nilore 55.27 287** P **P** **22 59 38.4 -0.4**
**NIL Nilore 55.27 287** P **P** **22 59 38.4 -0.4**
NIL pmax pmax
comp=Z,30nm,0.9s
**V35K Ketchikan 55.48 44** P **P** **22 59 39.7 -0.2**
baz=292
**T35M Bob Quinn 55.56 41** P **P** **22 59 41.1 +0.5**
baz=292
**CHGR Chuyangaron 55.87 294** P **P** **22 59 43.3 +0.1**
CHGR pmax pmax
comp=Z,43nm,1.1s
**SIMJ Simiganj 55.98 294** P **P** **22 59 43.8 -0.2**
**AB31 Akbulak array 57.23 309** *i* P **P** **22 59 53.0 +0.4**
AB31 pmax pmax
comp=Z,5.0nm,0.6s
**ABKAR Akbulak array 57.23 309** P **P** **22 59 53.0 +0.4**
**ABKAR Akbulak array 57.23 309** IAmb IAmb 22 59 53.8
comp=Z,27nm,1.5s
**TOAD Toad River Com 57.28 38** P **P** **22 59 53.1 +0.2**
baz=294
**SPITS Spitsbergen Ar 57.78 349** LR LR 23 25 50.5
comp=Z,28nm,19.7s,baz=39,slow=37
**AKTO Aktyubinsk 57.85 311** LR LR 23 24 13.5
comp=Z,28nm,18.9s,baz=254,slow=35
**KBL Kabul 57.89 290** P **P** **22 59 57.2 -0.5**
KBL IAmb IAmb 22 59 58.7
comp=Z,13nm,0.9s
**KBL Kabul 57.89 290** P **P** **22 59 57.2 -0.5**
KBL pmax pmax
comp=Z,13nm,1.0s
**KIRV Kirov 58.78 322** LR LR 23 25 52.9
comp=Z,81nm,18.2s,baz=86,slow=36
**KIRV Kirov 58.78 322** *de*P **P** **23 00 03.4 +0.1**
**WB0 Warramunga Arr 60.23 190** P **P** **23 00 14.5 +0.8**
WB0 IAmb IAmb 23 00 43.0
comp=Z,12nm,1.2s
**YKA Yellowknife Ar 60.26 32** P **P** **23 00 13.8 +0.4**
comp=Z,2.7nm,0.9s,baz=303,slow=7.2,SNR=5.3
comp=Z,2.7nm,0.9s
**WRAB Tennant Creek 60.40 190** *je*P **P** **23 00 15.1 +0.2**
WRAB pmax pmax
comp=Z,8.0nm,0.9s
**WR0 Warramunga Arr 60.40 190** P **P** **23 00 14.9 0.0**
WR0 IAmb IAmb 23 00 28.7
comp=Z,8.3nm,1.1s
**WRA Warramunga Arr 60.41 190** P **P** **23 00 14.5 -0.4**
**WRA Warramunga Arr 60.41 190** P **P** **23 00 14.6 -0.4**
comp=Z,2.3nm,0.6s,baz=7.8,slow=6.9,SNR=38
WRA PcP **PcP** **23 01 00.2 +0.4**
comp=Z,2.4nm,0.8s,baz=2.8,slow=7.0,SNR=4.7
comp=Z,2.3nm,0.6s
**HILA High Level 61.23 36** P **P** **23 00 20.5 +0.4**
**ARCES ARCESS Array B 61.66 339** P **P** **23 00 22.7 -0.2**
comp=Z,3.8nm,0.9s,baz=44,slow=11,SNR=3.7
ARCES LR LR 23 32 07.1
comp=Z,60nm,18.4s,baz=78,slow=41
comp=Z,3.8nm,0.9s
**NEEM North Greenlan 62.31 4** *e*P **P** **23 00 28.2 +0.7**
**BELG Belogornoye 62.66 317** LR LR 23 30 39.4
comp=Z,90nm,18.1s,baz=54,slow=39
**BELG Belogornoye 62.66 317** *d i* P **P** **23 00 30.1 +0.3**
BELG pmax pmax
comp=Z,5.0nm,0.9s
**DAG Danmarks Havn 62.79 355** P **P** **23 00 30.6 +0.2**
DAG pmax pmax
comp=Z,13nm,1.0s
**DAG Danmarks Havn 62.79 355** *i* P **P** **23 00 30.0 -0.4**
DAG IAmb IAmb 23 00 31.7
comp=Z,10.0nm,0.9s
**HRA Herat 62.81 293** P **P** **23 00 31.3 -0.2**
HRA IAmb IAmb 23 00 32.9
comp=Z,6.9nm,1.0s
**JOF Joensuu 63.99 332** *e*P **P** **23 00 39.0 +0.5**
**ASAR Alice Springs 64.14 190** P **P** **23 00 40.1 +0.2**
comp=Z,1.3nm,0.7s,baz=11,slow=5.6,SNR=16
comp=Z,1.3nm,0.7s
**I03D Drain, OR 65.65 53** P **P** **23 00 51.1 +1.5**
I03D IAmb IAmb 23 00 52.6
comp=Z,6.7nm,0.9s
**I04A Tendick Farm, 66.17 52** IAmb IAmb 23 00 55.4
comp=Z,5.6nm,0.8s
**VRH Novokhopyorsk 66.39 318** *e*P **P** **23 00 52.2 -2.0**
VRH pmax pmax
comp=Z,10.0nm,1.0s
**OBN Obninsk 66.59 323** LR LR 23 30 56.2
comp=Z,53nm,18.0s,baz=314,slow=37
**OBN Obninsk 66.59 323** *i* P **P** **23 00 54.6 -0.8**
OBN *i* 23 03 21.9
OBN pmax pmax
comp=Z,14nm,1.0s
OBN MLR MLR
comp=Z,82nm,15.0s
**NEW Newport 66.73 46** P **P** **23 00 56.5 0.0**
baz=305
**KEF Keuruu 66.75 333** *e*P **P** **23 00 56.2 -0.2**
**FINES FINESS Array B 66.82 332** P **P** **23 00 57.0 +0.2**
comp=Z,11nm,0.8s,baz=49,slow=8.6,SNR=27
FINES LR LR 23 32 33.7
comp=Z,110nm,20.0s,baz=43,slow=38
comp=Z,11nm,0.8s
**FINES FINESS Array B 66.82 332** P **P** **23 00 57.0 +0.2**
**KHMM Horse Mountain 66.96 55** P **P** **23 00 58.2 -0.1**
**LPSR Galich'ya Gora 66.98 320** *e*P **P** **23 00 56.0 -1.9**
LPSR pmax pmax
comp=Z,10.0nm,1.0s
**J05D Fort Rock, OR 67.16 52** IAmb IAmb 23 01 02.4
comp=Z,6.5nm,1.0s
**VORR Voronezh 67.39 319** *e*P **P** **23 00 59.0 -1.6**
VORR pmax pmax
comp=Z,30nm,0.5s
**SUMG Summit 67.55 1** P **P** **23 01 02.5 +0.7**
**SUMG Summit 67.55 1** P **P** **23 01 02.5 +0.7**
SUMG pmax pmax
comp=Z,11nm,0.8s
**SUMG Summit 67.55 1** *i* P **P** **23 01 02.0 +0.2**
**VSR Storozhevoye 67.68 319** *e*P **P** **23 01 00.6 -1.8**
VSR pmax pmax
comp=Z,10.0nm,1.2s
**VORD Divnogorie 67.77 319** *e*P **P** **23 01 01.9 -1.1**
VORD pmax pmax
comp=Z,7.0nm,0.8s
**O02D Mt. Diablo Mer 67.95 56** IAmb IAmb 23 01 07.4
comp=Z,3.8nm,0.8s
**BMO Blue Mountains 68.59 49** IAmb IAmb 23 01 10.6
comp=Z,3.9nm,0.9s
**VSU Vasula 68.60 330** *de*P **P** **23 01 09.0 +0.9**
VSU pmax pmax
comp=Z,31nm,1.7s
**J08A Circle Bar Ran 68.77 51** IAmb IAmb 23 01 12.2
comp=Z,6.6nm,1.0s
**GOF Gofitskoye 69.26 312** *ce*P **P** **23 01 13.2 +0.8**
**MSO Missoula 69.32 46** P **P** **23 01 13.0 +0.1**
baz=307
**MTSE Matsula 69.53 331** *e*P **P** **23 01 14.9 +1.1**
**KIV Kislovodsk 70.12 311** P **P** **23 01 18.7 +0.8**
**KIV Kislovodsk 70.12 311** *e*P **P** **23 01 18.1 +0.2**
KIV pmax pmax
comp=Z,36nm,1.1s
KIV MLR MLR
comp=Z,52nm,18.0s
**KIV Kislovodsk 70.12 311** P **P** **23 01 19.4 +1.5**
comp=Z,34nm,1.0s,comp=Z,261nm
**KBZ Khabaz 70.13 311** P **P** **23 01 18.4 +0.6**
comp=Z,11nm,0.8s,baz=66,slow=4.0,SNR=28
comp=Z,11nm,0.8s
**KBZ Khabaz 70.13 311** *d i* P **P** **23 01 18.1 +0.3**
KBZ pmax pmax
comp=Z,13nm,0.9s
**SHA1 Shidzhatmaz 70.27 311** *de*P **P** **23 01 19.6 +0.6**
**PAHR Pah Rah Range 70.36 54** IAmb IAmb 23 01 21.8
comp=Z,5.5nm,1.1s
**ISAL Salakas 70.83 328** *e*P **P** **23 01 22.9 +1.0**
**MNK Minsk 70.84 326** *i* P **P** **23 01 23.2 +1.3**
MNK *i* 23 01 43.6
MNK *i* 23 04 00.0
MNK *i* PPP PPP 23 05 42.6
MNK *i* S **S** **23 10 37.8 +1.6**
MNK *i* SS **SS** **23 15 11.2 +3.5**
MNK pmax pmax
comp=E,5.0nm,0.9s
MNK pmax pmax
comp=Z,37nm,0.9s
MNK pmax pmax
comp=N,15nm,0.9s
MNK MLR MLR
comp=Z,44nm,16.0s
MNK MLR MLR
comp=N,94nm,18.0s
MNK MLR MLR
comp=E,42nm,17.0s
**YERR Yerington 70.87 55** IAmb IAmb 23 01 25.1
comp=Z,7.0nm,0.9s
**DLMT Dillon 70.95 46** IAmb IAmb 23 01 25.1
comp=Z,8.1nm,0.9s
**HLID Hailey 71.03 49** P **P** **23 01 23.6 0.0**
baz=308
**ICESG Greenland Ices 71.03 1** *i* P **P** **23 01 22.4 -1.0**
**GNI Garni 71.18 307** *de*P **P** **23 01 25.8 +1.3**
GNI pmax pmax
comp=Z,10.0nm,1.3s
**GNI Garni 71.18 307** P **P** **23 01 25.8 +1.3**
comp=Z,10nm,1.6s
**BMN Battle Mountai 71.26 53** IAmb IAmb 23 01 27.5
comp=Z,4.7nm,0.9s
**BOZ Bozeman (W) 71.34 46** IAmb IAmb 23 01 27.4
comp=Z,6.1nm,0.7s
**BOZ Bozeman (W) 71.34 46** P **P** **23 01 25.6 +0.3**
baz=309
**KVN Kaiserville 71.55 54** IAmb IAmb 23 01 29.8
comp=Z,6.6nm,1.1s
**PABE Paberze 71.75 329** *e*P **P** **23 01 28.3 +0.9**
**LHV Little Huntoon 71.77 55** IAmb IAmb 23 01 31.0
comp=Z,8.0nm,0.9s
**NVAR Mina Array Bea 71.79 55** P **P** **23 01 29.4 +1.2**
**NVAR Mina Array Bea 71.79 55** P **P** **23 01 29.3 +1.0**
comp=Z,1.7nm,0.6s,baz=287,slow=6.9,SNR=16
comp=Z,1.7nm,0.6s
**HFS Hagfors 71.92 336** P **P** **23 01 28.7 +0.4**
comp=Z,9.2nm,0.9s,baz=38,slow=8.2,SNR=13
HFS LR LR 23 36 22.3
comp=Z,63nm,19.5s,baz=39,slow=39
comp=Z,9.2nm,0.9s
**NB2 NORSAR Subarra 71.94 338** P **P** **23 01 28.6 +0.1**
comp=Z,9.1nm,0.8s,baz=35,slow=6.2
**NB2 NORSAR Subarra 71.94 338** P **P** **23 01 28.9 +0.4**
**NOA NORSAR Array B 71.94 338** P **P** **23 01 28.7 +0.2**
comp=Z,7.2nm,0.9s,baz=37,slow=6.0,SNR=18
NOA LR LR 23 36 34.9
comp=Z,38nm,21.5s,baz=50,slow=39
comp=Z,7.2nm,0.9s
**YHL Hebgen Lake 72.05 46** IAmb IAmb 23 01 49.6

comp=Z,7.0nm,0.8s
**SFJD Kangerlussuaq 72.61 6** LR LR 23 37 08.1
comp=Z,22nm,18.8s,baz=287,slow=39
**DSP Deep Springs 72.64 56** IAmb IAmb 23 01 36.0
comp=Z,5.2nm,1.0s
**TIN Tinemaha, Big 72.67 56** P **P** **23 01 34.0 +0.5**
baz=308
**H17A Grant Village 72.68 46** P **P** **23 01 33.7 +0.1**
baz=310
**AK03 Malin Array Si 72.82 323** P **P** **23 01 34.3 +0.4**
**AKASG Malin Array Be 72.84 323** P **P** **23 01 34.5 +0.5**
AKASG IAmb IAmb 23 01 35.3
comp=Z,7.5nm,0.9s
**AKASG Malin Array Be 72.84 323** P **P** **23 01 34.1 +0.1**
comp=Z,7.2nm,0.7s,baz=45,slow=5.8,SNR=23
AKASG LR LR 23 36 14.0
comp=Z,29nm,19.6s,baz=49,slow=38
comp=Z,7.2nm,0.7s
**AKASG Malin Array Be 72.84 323** P **P** **23 01 34.5 +0.5**
AKASG pmax pmax
comp=Z,8.0nm,1.0s
**AKBB Malin Array Si 72.84 323** *de*P **P** **23 01 33.8 -0.2**
**AKBB Malin Array Si 72.84 323** P **P** **23 01 34.2 +0.2**
**AK01 Malin Array Si 72.85 323** P **P** **23 01 34.1 0.0**
**KIEV Kiev 72.85 323** P **P** **23 01 34.1 0.0**
**KIEV Kiev 72.85 323** P **P** **23 01 34.1 0.0**
KIEV pmax pmax
comp=Z,13nm,0.9s
**KIEV Kiev 72.85 323** P **P** **23 01 34.2 +0.1**
comp=Z,74nm,0.9s
**AK04 Malin Array Si 72.85 323** P **P** **23 01 34.1 0.0**
**VES Vestal, Richgr 72.85 57** P **P** **23 01 35.0 +0.6**
baz=308
**AK22 Malin Array Si 72.87 323** P **P** **23 01 34.4 +0.2**
**AK09 Malin Array Si 72.87 323** P **P** **23 01 34.4 +0.2**
**AK21 Malin Array Si 72.87 323** P **P** **23 01 34.4 +0.2**
**AK02 Malin Array Si 72.88 323** P **P** **23 01 34.4 +0.2**
**AK11 Malin Array Si 72.88 323** P **P** **23 01 34.4 +0.1**
**AK10 Malin Array Si 72.89 323** P **P** **23 01 34.5 +0.1**
**AK18 Malin Array Si 72.90 323** P **P** **23 01 34.7 +0.3**
**AK05 Malin Array Si 72.90 323** P **P** **23 01 34.8 +0.4**
**AK20 Malin Array Si 72.91 323** P **P** **23 01 34.8 +0.4**
**AK19 Malin Array Si 72.92 323** P **P** **23 01 34.9 +0.4**
**AK07 Malin Array Si 72.95 323** P **P** **23 01 34.9 +0.2**
**HVU Hansel Valley 73.08 49** IAmb IAmb 23 01 38.2
comp=Z,4.3nm,0.8s
**CWC Cottonwood Cre 73.14 56** P **P** **23 01 36.9 +0.6**
baz=308
**SUW Suwalki 73.14 328** *e*P **P** **23 01 36.8 +1.0**
**SUW Suwalki 73.14 328** *e*P **P** **23 01 36.9 +1.2**
**GRAC Grapevine Rang 73.25 56** P **P** **23 01 37.3 +0.5**
baz=308
**DGMT Dagmar 73.35 40** P **P** **23 01 37.6 +0.4**
baz=312
**ISA Isabella, Lake 73.36 57** P **P** **23 01 37.1 -0.3**
baz=308
**DY2G Dye2 73.42 4** *e*P **P** **23 01 37.4 -0.1**
**ARVC Arvin 73.45 58** P **P** **23 01 38.3 +0.3**
baz=308
**R11B Troy Canyon, C 73.53 54** P **P** **23 01 38.1 -0.5**
baz=308
**MPMC Manual Prospec 73.75 56** P **P** **23 01 39.5 -0.5**
baz=308
**GURO Guroymak-BITLI 73.81 307** IAmb IAmb 23 01 42.6
comp=Z,9.9nm,0.9s
**RNPP9 Sopachiv 73.86 325** P **P** **23 01 40.9 +0.9**
**FURC Furnace Creek, 73.89 56** P **P** **23 01 41.0 +0.5**
baz=308
**RNPP8 Varash 73.92 325** P **P** **23 01 41.0 +0.6**
**TPNV Topopah Spring 73.98 55** P **P** **23 01 41.6 +0.4**
baz=308
**RNPP5 Staryi Chortor 73.99 325** P **P** **23 01 41.6 +0.8**
**DUG Dugway, Tooele 74.06 51** P **P** **23 01 41.7 +0.1**
baz=309
**DUG Dugway, Tooele 74.06 51** P **P** **23 01 43.3 +1.7**
DUG pmax pmax
comp=Z,6.0nm,1.0s
**LUBAR Lubar, Ukraine 74.06 323** P **P** **23 01 41.1 -0.1**
**EDW2 Edwards Air Fo 74.14 58** P **P** **23 01 42.3 +0.2**
baz=308
**GWY Greenwater Val 74.19 56** IAmb IAmb 23 01 44.6
comp=Z,4.6nm,0.8s
**SHOC Shoshone, Teco 74.62 56** P **P** **23 01 44.9 +0.1**
baz=309
**GSC Goldstone, Bar 74.65 57** P **P** **23 01 45.4 +0.4**
baz=309
**SORM Soroca 75.02 321** P **P** **23 01 46.8 0.0**
**SORM Soroca 75.02 321** P **P** **23 01 46.8 0.0**
comp=Z,11nm,1.0s
**TUQ Turquoise Moun 75.13 56** P **P** **23 01 48.3 +0.4**
baz=309
**HEC Hector,Ludlow 75.25 57** P **P** **23 01 48.7 +0.1**
baz=309
**KMPD K-Podol'skiy 75.62 322** P **P** **23 01 49.5 -0.8**
**GMRC Granite Mounta 75.71 57** P **P** **23 01 51.3 +0.1**
baz=309
**LCMT Little Creek M 75.81 53** IAmb IAmb 23 02 01.3
comp=Z,7.7nm,1.3s
**PFO Pinyon Flats O 75.93 58** P **P** **23 01 52.4 -0.1**
baz=309
**TPFO Pinon Flats 75.94 58** P **P** **23 01 52.5 0.0**
baz=309
**BELC Belle Mtn. Jos 75.98 57** P **P** **23 01 52.9 +0.1**
baz=309
**MDND Maddock 76.00 38** P **P** **23 01 53.2 +0.6**
baz=315
**MONP2 Monument Peak 76.40 58** P **P** **23 01 55.8 +0.5**
baz=309
**IRM Iron Mountain 76.43 57** P **P** **23 01 55.8 +0.5**
baz=310
**KWP Kalwaria Pacla 76.55 325** *e*P **P** **23 01 57.2 +1.6**
**KWP Kalwaria Pacla 76.55 325** P **P** **23 01 56.9 +1.3**
**KWP Kalwaria Pacla 76.55 325** P **P** **23 01 56.9 +1.3**
comp=Z,30nm,0.9s
**BC3 Big Chuckawall 76.55 57** P **P** **23 01 56.4 +0.3**
baz=310
**SHIU Shidnytsya 76.56 324** P **P** **23 01 57.4 +1.7**
**IKP In-Ko-Pah, Jac 76.76 58** P **P** **23 01 57.9 +0.8**
baz=309
**O20A White River Ci 76.76 48** P **P** **23 01 57.4 +0.2**
baz=312
**SWSC Sam W. Stewart 76.78 58** P **P** **23 01 57.7 +0.5**
baz=310
**BUR08 Bucovina Ar. S 76.86 322** IAmb IAmb 23 01 59.3
comp=Z,8.4nm,0.8s
**BURAR Bucovina Array 76.88 322** P **P** **23 01 58.2 +0.6**
BURAR IAmb IAmb 23 01 59.6
comp=Z,10nm,0.8s
**PDMCI Parker Dam,Lak 76.98 56** P **P** **23 01 59.3 +1.1**
baz=310
**KOLS Kolonicke sedl 77.25 325** *e*P **P** **23 02 00.6 +1.0**
KOLS pmax pmax
comp=Z,8.0nm,0.9s
**KOLS Kolonicke sedl 77.25 325** *e*P **P** **23 02 00.6 +1.0**
**GLA Glamis 77.34 57** P **P** **23 02 01.2 +0.8**
baz=310
**OJC Ojcow 77.36 327** *e*P **P** **23 02 01.5 +1.3**
**OJC Ojcow 77.36 327** P **P** **23 02 00.8 +0.7**
**OJC Ojcow 77.36 327** P **P** **23 02 00.8 +0.7**
**VRI Vrincioaia 77.41 320** P **P** **23 02 00.4 -0.1**
VRI pmax pmax
comp=Z,3.0nm,1.7s
**AGMN Agassiz Nation 77.41 36** P **P** **23 02 01.2 +0.7**
baz=318
**GAZ Gaziantep 77.63 308** IAmb IAmb 23 02 04.4
comp=Z,9.3nm,0.9s
**CRVS Cervenica-Dubn 77.64 325** *e*P **P** **23 02 02.9 +1.2**
CRVS pmax pmax
comp=Z,8.0nm,0.9s
**CRVS Cervenica-Dubn 77.64 325** *e*P **P** **23 02 02.9 +1.2**
**NIE Niedzica 77.75 326** *e*P **P** **23 02 04.7 +2.3**
**NIE Niedzica 77.75 326** P **P** **23 02 04.5 +2.1**
NIE pmax pmax
comp=Z,5.0nm,1.3s
**RUE Ruedersdorf 77.97 331** *e*P **P** **23 02 04.2 +0.8**
comp=Z,17nm,0.9s,baz=34,slow=5.4
**BSEG Bad Segeberg 78.01 334** *e*P **P** **23 02 04.5 +0.9**
comp=Z,15nm,0.9s,baz=34,slow=5.4
**BR131 Keskin Array S 78.01 312** *de*P **P** **23 02 04.2 0.0**
**BRTR Keskin Array B 78.01 312** P **P** **23 02 03.0 -1.2**
**BRTR Keskin Array B 78.01 312** P **P** **23 02 04.4 +0.2**
comp=Z,2.1nm,1.0s,baz=52,slow=4.8,SNR=9.7
BRTR PP **PP** **23 04 55.7 -4.1**
comp=Z,0.2nm,0.7s,baz=52,slow=9.3,SNR=2.5
BRTR PKKPbc **PKKPbc** **23 21 02.3 -0.5**
comp=Z,0.1nm,0.4s,baz=322,slow=9.1,SNR=3.1

comp=Z,2.1nm,1.0s
**MLR Muntele Rosu 78.06 320** LR LR 23 38 13.3
comp=Z,49nm,20.0s,baz=110,slow=37
**KSP Ksiaz 78.30 329** *e*P **P** **23 02 06.6 +1.3**
**LANS Liptovska Anna 78.31 326** *e*P **P** **23 02 07.3 +1.8**
LANS pmax pmax
comp=Z,6.0nm,1.0s
**LANS Liptovska Anna 78.31 326** *e*P **P** **23 02 07.3 +1.8**
**GORT1 Trebel 78.44 333** *e*P **P** **23 02 07.1 +1.1**
comp=Z,20nm,1.2s,baz=34,slow=5.4
**ISCO Idaho Springs 78.48 47** P **P** **23 02 07.5 +0.6**
baz=313
**MVCO Mesa Verde 78.56 51** P **P** **23 02 07.4 0.0**
baz=312
**MORC Moravsky Berou 78.63 328** *e*P **P** **23 02 08.3 +1.0**
**DRGR 78.65 323** P **P** **23 02 08.6 +1.2**
DRGR pmax pmax
comp=Z,4.0nm,1.4s
**DPC Dobruska-Polom 78.68 329** *e*P **P** **23 02 08.9 +1.4**
**DPC Dobruska-Polom 78.68 329** *e*P **P** **23 02 08.9 +1.4**
**FLTG Flechtingen 79.01 332** *e*P **P** **23 02 09.3 +0.1**
comp=Z,13nm,0.8s,baz=34,slow=5.4
**PSZ Piszkesteto 79.06 325** IAmb IAmb 23 02 12.0
comp=Z,11nm,0.9s
**VYHS Vyhne 79.08 326** *e*P **P** **23 02 11.0 +1.3**
VYHS pmax pmax
comp=Z,8.0nm,1.0s
**VYHS Vyhne 79.08 326** *e*P **P** **23 02 11.0 +1.3**
**BRG Berggiesshubel 79.19 330** *i* P **P** **23 02 10.8 +0.6**
BRG Amp 23 02 12.6
comp=Z,5.3nm,0.9s
**BRG Berggiesshubel 79.19 330** *e*P **P** **23 02 10.8 +0.6**
comp=Z,5.3nm,1.0s,baz=34,slow=5.4
**CLL Collm 79.20 331** ⇓ *i*P **P** **23 02 10.5 +0.2**
comp=Z,16nm,0.9s
CLL *i* pP **sP** **23 02 16.5 +0.6**
CLL *e*sP **PcP** **23 02 19.0 +0.4**
CLL *e*PP **PP** **23 05 10.0 +1.0**
CLL AMS AMS 23 39 00.0
comp=Z,100nm,20.4s
**CLL Collm 79.20 331** ⇓ *i*P **P** **23 02 10.5 +0.2**
CLL *i* *PP **sP** **23 02 16.5 +0.6**
CLL pmax pmax
comp=Z,16nm,0.9s
**CLL Collm 79.20 331** *e*P **P** **23 02 10.5 +0.2**
comp=Z,14nm,0.8s,baz=34,slow=5.4
**PVCC Panska Ves 79.23 330** *e*P **P** **23 02 11.7 +1.3**
**PVCC Panska Ves 79.23 330** *e*P **P** **23 02 11.7 +1.3**
**NRDL Niedersach Rie 79.27 333** *e*P **P** **23 02 11.1 +0.6**
comp=Z,4.8nm,0.9s,baz=34,slow=5.4
**JAVC Velka Javorina 79.29 327** *e*P **P** **23 02 12.8 +1.9**
**Q24A Divide 79.31 48** P **P** **23 02 11.6 +0.1**
baz=314
**RETH Rethem/Aller, 79.32 334** *e*P **P** **23 02 11.6 +0.7**
comp=Z,10nm,1.1s,baz=34,slow=5.4
**VRAC Vranov 79.39 328** *e*P **P** **23 02 12.5 +1.1**
**VRAC Vranov 79.39 328** LR LR 23 41 02.5
comp=Z,38nm,19.8s,baz=52,slow=38
**RICC Richard 79.40 330** *e*P **P** **23 02 12.9 +1.5**
**HSKC Hora Svate Kat 79.60 330** *e*P **P** **23 02 13.8 +1.3**
**EYMN Ely 79.60 34** P **P** **23 02 12.8 +0.3**
baz=320
**KRUC Moravsky 79.66 328** *e*P **P** **23 02 13.8 +1.0**
**SMOL Smolenice 79.66 327** *e*P **P** **23 02 14.8 +1.9**
SMOL pmax pmax
comp=Z,6.0nm,0.8s
**PRU Pruhonice 79.67 329** *e*P **P** **23 02 14.3 +1.4**
**PRU Pruhonice 79.67 329** *e*P **P** **23 02 14.3 +1.4**
**CLZ Clausthal 79.71 333** *e*P **P** **23 02 14.0 +0.9**
comp=Z,11nm,0.9s,baz=34,slow=5.4
**NEUB Neuenburg 79.73 332** *e*P **P** **23 02 13.6 +0.5**
comp=Z,11nm,0.8s,baz=34,slow=5.4
**SRO Srobarova 79.83 326** *e*P **P** **23 02 15.2 +1.4**
SRO pmax pmax
comp=Z,17nm,0.9s
**SRO Srobarova 79.83 326** *e*P **P** **23 02 15.2 +1.4**
**MODS Modra-Piesok 79.83 327** *e*P **P** **23 02 15.5 +1.7**
MODS pmax pmax
comp=Z,22nm,1.1s
**MODS Modra-Piesok 79.83 327** *e*P **P** **23 02 15.5 +1.7**
**TREC Trest 79.84 328** *e*P **P** **23 02 15.0 +1.1**
**TREC Trest 79.84 328** *e*P **P** **23 02 15.0 +1.1**
**GTTG Gottingen 80.10 333** *e*P **P** **23 02 15.9 +0.7**
comp=Z,10nm,0.8s,baz=34,slow=5.4
**PLN Plauen 80.18 331** *e*P **P** **23 02 16.1 +0.5**
comp=Z,4.0nm,0.9s,baz=34,slow=5.4
**IBBN Ibnburen 80.22 334** *e*P **P** **23 02 16.2 +0.5**
comp=Z,17nm,0.9s,baz=34,slow=5.4
**ZVC Zvikov 80.24 329** *e*P **P** **23 02 17.0 +1.0**
**MOX Moxa 80.25 331** *e*P **P** **23 02 16.6 +0.6**
comp=Z,6.0nm,1.0s,baz=34,slow=5.4
**ECSD EROS Data Cent 80.43 40** P **P** **23 02 17.8 +0.7**
baz=318
**MANZ Manzenberg 80.60 331** *e*P **P** **23 02 18.6 +0.6**
comp=Z,1.3nm,0.9s,baz=34,slow=5.4
**CKRC Cesky Krumlov 80.69 329** *e*P **P** **23 02 18.5 +0.1**
**CKRC Cesky Krumlov 80.69 329** *e*P **P** **23 02 18.5 +0.1**
**EKA Eskdalemuir Ar 80.72 341** P **P** **23 02 18.9 +0.5**
comp=Z,3.3nm,0.8s,baz=12,slow=5.0,SNR=10.0
comp=Z,3.3nm,0.8s
**KHC Kasperske Hory 80.73 329** IAmb IAmb 23 02 20.7
comp=Z,10nm,0.8s
**KHC Kasperske Hory 80.73 329** *e*P **P** **23 02 19.8 +1.1**
KHC AMS AMS 23 42 40.0
comp=Z,100nm,19.6s
**KHC Kasperske Hory 80.73 329** *d i*P **P** **23 02 19.3 +0.6**
KHC pmax pmax
comp=Z,31nm,1.0s
**ROTZ Rotzenmuhle 80.74 330** *e*P **P** **23 02 19.6 +1.0**
comp=Z,1.8nm,0.9s,baz=34,slow=5.4
**CONA Conrad Observa 80.77 327** *e*P **P** **23 02 20.3 +1.3**
comp=Z,3.1nm,0.7s,SNR=9.4
**RONA Rosalia, Austr 80.77 327** *e*P **P** **23 02 20.3 +1.4**
comp=Z,10nm,0.9s,SNR=15
**GEC2 GERESS Array S 80.91 329** *e*P **P** **23 02 20.1 +0.4**
comp=Z,5.2nm,1.0s,baz=34,slow=5.4
**GERES GERESS Array B 80.91 329** P **P** **23 02 19.9 +0.2**
**GERES GERESS Array B 80.91 329** P **P** **23 02 19.8 +0.1**
comp=Z,3.0nm,0.8s,baz=345,slow=1.5,SNR=15
comp=Z,3.0nm,0.8s
**KASTN Kahler Asten 80.93 333** *e*P **P** **23 02 20.2 +0.5**
comp=Z,5.2nm,0.9s,baz=34,slow=5.4
**WET Wettzell 80.99 330** *e*P **P** **23 02 21.0 +1.0**
comp=Z,8.1nm,1.0s,baz=34,slow=5.4
**RAYN Ar Rayn 81.00 293** P **P** **23 02 20.5 0.0**
**RAYN Ar Rayn 81.00 293** P **P** **23 02 20.5 0.0**
RAYN pmax pmax
comp=Z,3.0nm,0.7s
**BUG Bochum--Univer 81.12 334** *e*P **P** **23 02 20.9 +0.4**
comp=Z,11nm,1.1s,baz=34,slow=5.4
**GRF Grafenberg Arr 81.17 331** *e*P **P** **23 02 22.4 +1.4**
comp=Z,22nm,0.9s,baz=34,slow=5.4
**GRFO Grafenberg 81.17 331** P **P** **23 02 21.5 +0.5**
**GRFO Grafenberg 81.17 331** P **P** **23 02 21.5 +0.5**
GRFO pmax pmax
comp=Z,20nm,0.9s
**ANMO Albuquerque 81.30 51** P **P** **23 02 22.8 +0.6**
**ANMO Albuquerque 81.30 51** P **P** **23 02 22.7 +0.5**
baz=313
**ANMO Albuquerque 81.30 51** P **P** **23 02 22.8 +0.6**
ANMO pmax pmax
comp=Z,4.0nm,1.2s
**BGNE Belgrade 81.36 42** P **P** **23 02 22.8 +0.6**
baz=317
**RDO Rodhopi 81.41 318** IAmb IAmb 23 02 24.3
comp=Z,7.5nm,1.1s
**ARSA Arzberg 81.45 327** *e*P **P** **23 02 23.4 +0.9**
comp=Z,3.1nm,0.7s
**MOA Molln 81.49 328** *i* P **P** **23 02 23.4 +0.7**
comp=Z,0.6nm,0.3s
**MMAI Mount Meron Ar 81.50 306** P **P** **23 02 23.3 +0.2**
comp=Z,7.3nm,1.0s,baz=46,slow=3.6,SNR=7.7
comp=Z,7.3nm,1.0s
**TNS Taunus Mts 81.74 333** *e*P **P** **23 02 24.5 +0.5**
comp=Z,8.8nm,1.1s,baz=34,slow=5.4
**BIOA Bad Ischl, Aus 81.86 328** *e*P **P** **23 02 25.6 +0.9**
comp=Z,3.9nm,0.6s,SNR=8.6
**AHRW Bad Neuenahr-A 81.94 334** *e*P **P** **23 02 25.6 +0.6**
comp=Z,7.0nm,1.0s,baz=34,slow=5.4
**PERS Pernice 82.11 327** *i* P **P** **23 02 26.6 +0.6**
**SOKA Soboth 82.11 327** *i* P **P** **23 02 26.7 +0.6**
comp=Z,6.8nm,0.8s,SNR=18
**121A Cookes Peak, D 82.14 54** P **P** **23 02 27.0 +0.4**
baz=313
**RJOB Jochberg 82.16 329** *e*P **P** **23 02 27.3 +1.0**
comp=Z,11nm,0.9s,baz=34,slow=5.4

**BTNL Ternell 82.22 334** *d*P **P** **23 02 27.1 +0.6**
comp=Z,5.7nm,1.1s
**MEM Membach 82.24 334** *d*P **P** **23 02 27.4 +0.9**
comp=Z,6.7nm,0.9s
MEM *d*pP **pwP** **23 02 34.1 +0.6**
**FUR Furstenfeldbru 82.41 330** *e*P **P** **23 02 28.3 +0.8**
comp=Z,17nm,0.8s,baz=34,slow=5.4
**CBKS Cedar Bluff 82.41 45** P **P** **23 02 27.8 0.0**
baz=316
**OBKA Obir 82.44 327** *i* P **P** **23 02 28.1 +0.3**
comp=Z,5.7nm,0.8s
**BHOU Houvegnez 82.46 334** *d*P **P** **23 02 28.5 +0.8**
comp=Z,4.0nm,1.2s
**LESA Schwarzleotal 82.47 329** *i* P **P** **23 02 28.7 +0.8**
comp=Z,9.8nm,1.0s
**KBA Koelnbreinsper 82.48 328** *i* P **P** **23 02 28.7 +0.6**
comp=Z,12nm,1.0s,SNR=12
**BCLA Clavier 82.64 335** *d*P **P** **23 02 29.0 +0.4**
comp=Z,6.1nm,1.0s
**STU Stuttgart 82.68 332** *e*P **P** **23 02 29.4 +0.5**
comp=Z,44nm,1.1s,baz=34,slow=5.4
**MYKA Terra Mystica 82.72 328** *i* P **P** **23 02 29.2 0.0**
comp=Z,5.9nm,0.9s
**BGES Gesves 82.74 335** *d*P **P** **23 02 29.2 0.0**
comp=Z,5.8nm,1.0s
BGES *d*pP **pwP** **23 02 37.0 +0.9**
**RCHB Rochefort 82.89 334** *d*P **P** **23 02 30.2 +0.3**
comp=Z,5.4nm,1.0s
**PRED Cave del Predi 82.90 328** IAmb IAmb 23 02 30.8
comp=Z,5.7nm,0.8s
**BMRD Maredsous 82.92 335** *d*P **P** **23 02 30.4 +0.3**
comp=Z,10nm,0.9s
**BOJS Bojanci 82.95 326** *i* P **P** **23 02 30.6 +0.2**
**WATA Walderalm 82.97 329** *i* P **P** **23 02 31.1 +0.5**
comp=Z,7.4nm,1.1s,SNR=6.1
**WTTA Wattenberg 83.01 329** *i* P **P** **23 02 31.5 +0.6**
comp=Z,6.9nm,0.9s
**GIVF Givet 83.07 335** *e*P **P** **23 02 30.7 -0.2**
GIVF pmax pmax
comp=Z,5.0nm,0.9s
**ABTA Abfaltersbach 83.08 329** *i* P **P** **23 02 30.7 -0.5**
comp=Z,5.8nm,1.1s
**CEY Cerknica 83.11 327** *i* P **P** **23 02 31.1 -0.1**
**MOTA Moosalm 83.15 330** *i* P **P** **23 02 32.2 +0.6**
comp=Z,12nm,1.0s
**DOU Dourbes 83.15 335** *d*P **P** **23 02 31.5 +0.2**
comp=Z,3.4nm,1.0s
**RETA Reutte 83.16 330** *i* P **P** **23 02 32.3 +0.8**
comp=Z,8.5nm,0.8s,SNR=7.8
**SQTA Sankt Quirin 83.21 330** *i* P **P** **23 02 32.5 +0.7**
comp=Z,9.2nm,1.0s,SNR=5.2
**SABO M.te Sabotino 83.26 327** IAmb IAmb 23 02 32.5
comp=Z,9.9nm,1.1s
**BAIF Baives 83.31 335** *e*P **P** **23 02 32.0 -0.1**
BAIF pmax pmax
comp=Z,5.0nm,1.0s
**BFO Black Forest 83.37 332** P **P** **23 02 32.9 +0.4**
BFO IAmb IAmb 23 02 34.1
comp=Z,5.3nm,0.8s
**BFO Black Forest 83.37 332** P **P** **23 02 32.9 +0.4**
BFO pmax pmax
comp=Z,5.0nm,0.8s
**BFO Black Forest 83.37 332** *e*P **P** **23 02 33.0 +0.4**
comp=Z,5.7nm,0.8s,baz=34,slow=5.4
**SCIA State Center 83.45 39** P **P** **23 02 33.3 +0.3**
baz=320
**PUK Puka 83.55 321** IAmb IAmb 23 03 02.5
comp=Z,12nm,1.4s
**FETA Feichten 83.56 330** *i* P **P** **23 02 34.4 +0.7**
comp=Z,8.4nm,1.0s,SNR=9.0
**DAVA Damuels 83.66 330** *i* P **P** **23 02 34.9 +0.6**
comp=Z,6.7nm,0.9s,SNR=6.2
**CDF Champ du Feu 83.68 332** *e*P **P** **23 02 34.2 0.0**
CDF pmax pmax
comp=Z,10.0nm,1.0s
**CTI Castel Tesino 84.00 329** IAmb IAmb 23 02 36.3
comp=Z,9.6nm,1.2s
**MSTX Muleshoe 84.17 50** P **P** **23 02 38.1 +1.1**
baz=315
**MNTX Cornudas Mount 84.19 53** P **P** **23 02 38.0 +1.0**
baz=314
**HAU Haudompre 84.35 333** *e*P **P** **23 02 38.2 +0.7**
HAU pmax pmax
comp=Z,7.0nm,0.9s
**VHRN Van Horn 85.07 54** IAmb IAmb 23 02 43.7
comp=Z,5.2nm,1.1s
**CABF La Chapelle 85.63 332** *e*P **P** **23 02 45.1 +1.0**
CABF pmax pmax
comp=Z,9.0nm,1.2s
**LOR Lormes 85.84 334** *e*P **P** **23 02 45.0 0.0**
LOR pmax pmax
comp=Z,20nm,1.0s
**WMOK Wichita Mounta 85.90 47** P **P** **23 02 46.2 +0.6**
baz=317
**FLN La Foliniere 85.91 337** *e*P **P** **23 02 45.3 0.0**
FLN pmax pmax
comp=Z,9.0nm,1.0s
**INTR Introdacqua 86.33 325** IAmb IAmb 23 02 49.5
comp=Z,3.6nm,0.9s
**LPL La Plagne 86.33 331** *e*P **P** **23 02 48.0 +0.3**
LPL pmax pmax
comp=Z,9.0nm,0.8s
**LPG La Plagne 86.34 331** *e*P **P** **23 02 48.2 +0.3**
LPG pmax pmax
comp=Z,15nm,1.0s
**GRR Gorron 86.36 337** *e*P **P** **23 02 47.8 +0.3**
GRR pmax pmax
comp=Z,22nm,1.1s
**HDIL Hopedale 86.36 37** P **P** **23 02 47.7 0.0**
baz=322
**SMF Signal de Mont 86.39 333** *e*P **P** **23 02 47.9 +0.2**
SMF pmax pmax
comp=Z,19nm,1.0s
**S39A Bolivar 86.62 42** IAmb IAmb 23 02 50.0
comp=Z,3.3nm,0.9s
**TUL3 Leonard 86.67 44** P **P** **23 02 50.2 +0.9**
baz=319
**BNI Bardonecchia 86.75 331** IAmb IAmb 23 02 51.3
comp=Z,4.4nm,0.9s
**BGF Bois d'Agland 86.80 334** *e*P **P** **23 02 50.6 +0.8**
BGF pmax pmax
comp=Z,3.0nm,0.8s
**TX31 Lajitas Ar. Si 86.90 54** IAmb IAmb 23 02 52.1
comp=Z,4.0nm,1.1s
**TXAR Lajitas Array 86.90 54** P **P** **23 02 51.7 +1.1**
**TXAR Lajitas Array 86.90 54** P **P** **23 02 50.5 -0.2**
comp=Z,1.7nm,0.8s,baz=268,slow=3.4,SNR=19
comp=Z,1.7nm,0.8s
**TXAR Lajitas Array 86.90 54** P **P** **23 02 51.7 +1.1**
**ABTX Abilene, Hawle 86.95 49** P **P** **23 02 51.4 +0.6**
baz=317
**MBDF Montbardon 86.99 331** *e*P **P** **23 02 50.4 -0.5**
MBDF pmax pmax
comp=Z,4.0nm,0.9s
**ORIF Oris-en-Rattie 87.16 331** *e*P **P** **23 02 52.6 +1.0**
ORIF pmax pmax
comp=Z,8.0nm,1.0s
**TCF Toulx Ste Croi 87.25 334** *e*P **P** **23 02 52.4 +0.4**
TCF pmax pmax
comp=Z,11nm,1.0s
**SSB Saint Sauveur 87.33 332** IAmb IAmb 23 02 54.1
comp=Z,5.5nm,0.9s
**CCM Cathedral Cave 87.38 40** P **P** **23 02 53.5 +0.8**
CCM IAmb IAmb 23 02 54.0
comp=Z,6.8nm,0.9s
**CCM Cathedral Cave 87.38 40** P **P** **23 02 52.9 +0.2**
baz=321
**CCM Cathedral Cave 87.38 40** P **P** **23 02 53.5 +0.8**
CCM pmax pmax
comp=Z,7.0nm,0.9s
**MGMO Mountain Grove 87.56 41** IAmb IAmb 23 02 54.5
comp=Z,3.0nm,0.8s
**VIVF Saint-Julien-l 87.65 332** *e*P **P** **23 02 54.2 +0.3**
VIVF pmax pmax
comp=Z,5.0nm,1.0s
**RJF Les Rejaudoux 88.35 334** *e*P **P** **23 02 57.8 +0.6**
RJF pmax pmax
comp=Z,8.0nm,0.9s
**JCT Junction City 88.42 51** P **P** **23 02 57.9 +0.1**
baz=317
**CAF Calviac 88.50 334** *e*P **P** **23 02 58.9 +0.9**
CAF pmax pmax
comp=Z,17nm,1.1s
**WHTX Lake Whitney, 88.67 48** P **P** **23 02 59.9 +0.9**
baz=318
**MIAR Mount Ida 88.89 44** P **P** **23 03 00.4 +0.5**
baz=320

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MTLF** | **Montolieu** | **89.84** | **333** | *e*P | | **P** | **23** | **03** | **04.7** | **+0.5** |
| MTLF | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **89.98** | **23** | P | | **P** | **23** | **04** | **04.9** | **+0.1** |
| | baz=336 | | | | | | | | | |
| **EPF** | **Esparros** | **90.75** | **334** | *e*P | | **P** | **23** | **09** | **09.4** | **+0.8** |
| EPF | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | | | |
| **SSPA** | **Standing Stone** | **91.17** | **30** | P | | **P** | **23** | **03** | **10.9** | **+0.4** |
| | baz=330 | | | | | | | | | |
| **ETSF** | **Etsaut** | **91.17** | **334** | *e*P | | **P** | **23** | **03** | **11.1** | **+0.6** |
| **MCWV** | **Mont Chateau** | **91.22** | **32** | P | | **P** | **23** | **03** | **12.0** | **+1.3** |
| | baz=328 | | | | | | | | | |
| **BLA** | **Blacksburg** | **93.06** | **34** | P | | **P** | **23** | **03** | **20.6** | **+1.2** |
| | baz=328 | | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **93.46** | **41** | P | | **P** | **23** | **03** | **22.8** | **+1.6** |
| | baz=324 | | | | | | | | | |
| **KEST** | **Kesra** | **93.51** | **324** | LR | | LR | 23 | 50 | 53.0 | |
| | comp=Z,70nm,18.2s,baz=228,slow=39 | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **95.18** | **335** | P | | **P** | **23** | **03** | **28.9** | **-0.2** |
| | comp=Z,1.0nm,0.8s,baz=23,slow=4.9,SNR=9.9 | | | | | | | | | |
| ESDC | | | | LR | | LR | 23 | 50 | 25.4 | |
| | comp=Z,47nm,19.8s,baz=38,slow=38 | | | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.22** | **318** | PKP | | **PKPdf** | **23** | **08** | **48.7** | **-0.7** |
| | comp=Z,0.7nm,0.9s,baz=318,slow=1.9,SNR=3.3 | | | | | | | | | |
| TORD | | | | PP | | **PP** | **23** | **09** | **52.9** | **-1.0** |
| | comp=Z,0.9nm,0.9s,baz=24,slow=9.2,SNR=4.0 | | | | | | | | | |
| **LPAZ** | **La Paz** | **143.64** | **58** | PKP | | PKPbc | 23 | 09 | 39.3 | +0.3 |
| | comp=Z,0.9nm,0.6s,baz=312,slow=5.1,SNR=4.2 | | | | | | | | | |
| **SNAA** | **Sanae** | **144.24** | **197** | PKP | | **PKPab** | **23** | **09** | **38.3** | **+0.2** |
| | comp=Z,5.6nm,0.7s,baz=178,slow=4.1,SNR=28 | | | | | | | | | |
| **BDFB** | **Brasilia** | **153.56** | **26** | PKPbc | | **PKPbc** | **23** | **10** | **03.7** | **-1.0** |
| | comp=Z,2.3nm,0.8s,baz=251,slow=6.3,SNR=4.2 | | | | | | | | | |

**IDC 05 23:10:31.2±1.6, 16°.64S×176°.91E, h0$^{km}$, mb3.5/3, mbtmp3.5/3, MS3.5/11, Error ellipse: s-maj=42.6km s-min=21.2km az=28.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **1.54** | **135** | Pn | Pn | 23 11 00.3 | +0.3 |
| | 647nm,0.3s,baz=298,slow=11,SNR=1831 | | | | | | |
| MSVF | | | | Sn | Sb | 23 11 21.7 | +0.9 |
| | 152nm,0.3s,baz=240,slow=20,SNR=3.0 | | | | | | |
| MSVF | | | | LR | LR | 23 11 34.5 | |
| | comp=Z,1μm,19.9s,baz=1.4,slow=41 | | | | | | |
| **DZM** | **Mont Dzumac** | **11.26** | **240** | LR | LR | 23 16 54.4 | |
| | comp=Z,428nm,21.5s,baz=52,slow=34 | | | | | | |
| **URZ** | **Urewera** | **21.54** | **180** | LR | LR | 23 22 18.4 | |
| | comp=Z,109nm,19.9s,baz=31,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **22.51** | **105** | LR | LR | 23 23 58.8 | |
| | comp=Z,76nm,18.1s,baz=292,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **29.27** | **259** | LR | LR | 23 25 50.2 | |
| | comp=Z,14nm,18.4s,baz=116,slow=31 | | | | | | |
| **PMG** | **Port Moresby** | **29.83** | **280** | LR | LR | 23 26 19.5 | |
| | comp=Z,134nm,18.1s,baz=18,slow=32 | | | | | | |
| **PPT** | **Papeete** | **32.02** | **97** | LR | LR | 23 26 47.7 | |
| | comp=Z,34nm,19.3s,baz=258,slow=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.48** | **259** | P | P | 23 18 11.7 | -0.4 |
| | 0.6nm,0.7s,baz=92,slow=9.1,SNR=7.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **40.85** | **253** | P | P | 23 18 15.4 | +0.2 |
| | 0.5nm,0.7s,baz=82,slow=8.6,SNR=6.6 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **55.87** | **241** | LR | LR | 23 42 26.6 | |
| | comp=Z,160nm,19.9s,baz=78,slow=34 | | | | | | |
| **RPN** | **Rapa Nui** | **68.41** | **113** | LR | LR | 23 43 45.0 | |
| | comp=Z,40nm,22.0s,baz=262,slow=29 | | | | | | |
| **QSPA** | **South Pole Qui** | **73.41** | **180** | LR | LR | 23 49 04.8 | |
| | comp=Z,37nm,19.9s,baz=48,slow=32 | | | | | | |
| **KDAK** | **Kodiak Island** | **78.34** | **16** | LR | LR | 23 48 19.0 | |
| | comp=Z,28nm,21.2s,baz=246,slow=29 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **84.25** | **291** | LR | LR | 23 59 35.5 | |
| | comp=Z,23nm,20.2s,baz=130,slow=35 | | | | | | |
| **ILAR** | **Eielson Array** | **85.73** | **15** | P | P | 23 23 11.7 | 0.0 |
| | 0.3nm,0.8s,baz=226,slow=7.4,SNR=2.3 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

**JMA 05 23:13:55.7±0.3, 25°.N±1°.×123°.6E±1°.0, h17$^{km}$, MV1.4/6, NW OFF ISHIGAKIJIMA IS, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.67** | **173** | P | Pg | 23 14 08.4 | -0.5 |
| IRIF | | | | *e*S | Sg | 23 14 17.9 | 0.0 |
| **JISG** | **Ishigakijimahi** | **0.74** | **124** | P | Pb | 23 14 09.9 | -0.3 |
| **JIJ** | **Ishigaki jima** | **0.79** | **144** | *e*S | Sb | 23 14 20.8 | -0.6 |
| **JKRS** | **Kuro-shima** | **0.84** | **156** | P | Pb | 23 14 11.6 | -0.2 |
| JKRS | | | | *e*S | Sb | 23 14 21.8 | -0.9 |
| **HATJ** | **Hateruma jima** | **0.96** | **171** | P | Pb | 23 14 13.4 | -0.5 |
| HATJ | | | | *e*S | Sb | 23 14 26.2 | 0.0 |

**TAP 05 23:14:50.8, 24°.50N×121°.81E, h20$^{km}$±1$^{km}$, ML1.5, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EWUT** | **Wuta** | **0.06** | **206** | P | Pg | 23 14 55.0 | +0.7 |
| | baz=206 | | | | | | |
| EWUT | | | | S | Sg | 23 14 57.6 | +0.9 |
| | baz=206 | | | | | | |
| **ESAO** | **Su ao** | **0.09** | **24** | P | Pg | 23 14 55.2 | +0.6 |
| | baz=23 | | | | | | |
| ESAO | | | | S | Sg | 23 14 57.9 | +0.7 |
| | baz=23 | | | | | | |
| **TWC** | **Suao** | **0.12** | **19** | *i* P | Pg | 23 14 55.4 | +0.4 |
| | baz=23 | | | | | | |
| TWC | | | | *i* S | Sg | 23 14 58.4 | +0.6 |
| | baz=23 | | | | | | |
| **NDS** | **Dongshan** | **0.16** | **330** | *e*P | Pg | 23 14 56.3 | +0.9 |
| | baz=329 | | | | | | |
| NDS | | | | S | Sg | 23 14 59.9 | +1.4 |
| | baz=329 | | | | | | |
| **EAHA** | **Aohua** | **0.18** | **200** | *e*P | Pg | 23 14 55.8 | +0.2 |
| | baz=199 | | | | | | |
| **LATG** | **Datong** | **0.26** | **279** | P | Pg | 23 14 57.6 | +0.7 |
| | baz=279 | | | | | | |
| LATG | | | | S | Sg | 23 15 02.0 | +1.0 |
| | baz=279 | | | | | | |
| **TWE** | **Neicheng** | **0.26** | **331** | *e*P | Pg | 23 14 57.5 | +0.7 |
| | baz=333 | | | | | | |
| **ENTT** | **Nioudou** | **0.26** | **304** | P | Pg | 23 14 57.7 | +0.9 |
| | baz=304 | | | | | | |
| ENTT | | | | *e*S | Sg | 23 15 01.8 | +0.7 |
| | baz=304 | | | | | | |
| **NDT** | **Datong Townshi** | **0.29** | **292** | *e*P | Pg | 23 14 58.1 | +0.9 |
| | baz=291 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.33** | **323** | P | Pb | 23 14 58.8 | +0.7 |
| | baz=323 | | | | | | |
| FUSB | | | | S | Sb | 23 15 04.0 | +1.0 |
| | baz=323 | | | | | | |
| **EGS** | | **0.37** | **18** | *e*P | Pn | 23 14 59.9 | -1.1 |
| | baz=20 | | | | | | |
| **NACB** | **Ninganchiao** | **0.37** | **211** | *e*P | Pg | 23 14 58.4 | -0.3 |
| | baz=210 | | | | | | |
| NACB | | | | *e*S | Sb | 23 15 04.3 | +0.1 |
| | baz=210 | | | | | | |
| **NNSB** | **Datong** | **0.39** | **260** | P | Pb | 23 14 59.5 | +0.3 |
| | baz=260 | | | | | | |
| NNSB | | | | S | Sb | 23 15 05.2 | +0.4 |
| | baz=260 | | | | | | |
| **NWLT** | **Wulai** | **0.39** | **316** | *e*P | Pb | 23 14 59.8 | +0.7 |
| | baz=315 | | | | | | |
| NWLT | | | | *e*S | Sb | 23 15 05.5 | +0.7 |
| | baz=315 | | | | | | |
| **EOS2** | **EOS2** | **0.40** | **101** | *e*P | Pb | 23 14 59.5 | +0.4 |
| | baz=100 | | | | | | |
| EOS2 | | | | *e*S | Sb | 23 15 05.5 | +0.7 |
| | baz=100 | | | | | | |
| **NNS** | **Nan Shan** | **0.40** | **262** | *e*P | Pb | 23 14 59.9 | +0.6 |
| | baz=261 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.41** | **226** | *e*P | Pg | 23 14 59.3 | -0.1 |
| | baz=225 | | | | | | |
| **YHNB** | **Yeheng** | **0.43** | **294** | P | Pb | 23 15 00.5 | +0.7 |
| | baz=294 | | | | | | |
| YHNB | | | | S | Sb | 23 15 06.7 | +0.8 |
| | baz=294 | | | | | | |
| **NSK** | **Sanguang** | **0.45** | **294** | P | Pb | 23 15 00.6 | +0.6 |
| | baz=294 | | | | | | |
| NSK | | | | *e*S | Sb | 23 15 07.0 | +0.7 |
| | baz=294 | | | | | | |
| **TIPB** | **Shuangxi** | **0.47** | **2** | *e*P | Pg | 23 15 01.0 | +0.4 |
| | baz=2.0 | | | | | | |
| TIPB | | | | *e*S | Sb | 23 15 07.4 | +0.2 |
| | baz=2.0 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.60** | **6** | *e*P | Pn | 23 15 03.6 | -0.7 |
| | baz=6.0 | | | | | | |

*IDC* ***05*** *23:22:10.3±0.6, 20°.31N×120°.66E, h0$^{km}$, mb4.3/20, mbtmp4.3/23, ML3.5/3, MS3.5/28, Error ellipse: s-maj=20.6km s-min=13.2km az=72.0*

*BGR* ***05*** *23:22:12.1, 19°.29N×122°.01E, h34$^{km}$±3$^{km}$, mb4.8*

*NEIC* ***05*** *23:22:17.7, 20°.09N×120°.47E, h14$^{km}$, Moment Tensor Solution. Duration: 1s1 Moment tensor: Scale 10$^{16}$Nm; Mrr=1.25; Mθθ 0.30; Mφφ 0.95; Mrθ 0.22; Mrφ=0.27; Mθr=0.17; Fault plane solution: M0 1.18000×10$^{16}$ NP1: φs=333.81000°, δ51.08000°, λ=97.32000°. NP2: φs=165.37000°, δ39.49000°, λ=81.03000°. Principal axes: T 1.0763, Plg6.0000°, Azm69.0000°; N 0.2123, Plg6.0000°, Azm338.0000°; P -1.2886, Plg82.0000°, Azm204.0000°;*

*GCMT* ***05*** *23:22:17.7±0.4, 20°.08N±0°.05×120°.26E±0°.03, h18$^{km}$±1$^{km}$, MW4.8/84, Moment Tensor Solution. s17,c18; s84,c109; Duration: 0 Moment tensor: Scale 10$^{16}$Nm; Mrr=2.12±.16; Mθθ 0.69±.08; Mφφ 1.44±.10; Mrθ -0.14±.29; Mrφ -0.14±.05; Mθr 0.11±.23; Best double couple: M0 1.80000×10$^{16}$ NP1:φs 167.00000°, δ47.00000°, λ=93.00000°. NP2: φs 352.00000°, δ43.00000°, λ=86.00000°. Principal axes: T 1.4700, Plg2.0000°, Azm260.0000°; N 0.6690, Plg3.0000°, Azm169.0000°; P -2.1300, Plg87.0000°, Azm29.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***05*** *23:22:17.7±1.2, 20°.59N±0°.09×120°.15E±0°.09, h10$^{km}$±1$^{km}$, mb4.9/138, Mww4.6/12 Error ellipse: s-maj=16.2km s-min=11.8km az=144.0*

*NEIC* ***05*** *23:22:17.7, 20°.59N×120°.15E, h14$^{km}$*

*BJI* ***05*** *23:22:20.5±0.0, 20°.56N×120°.11E, h28$^{km}$, mb4.4/52, mB4.6/22, ML3.9/4, Ms4.2/56, Ms7 4.0/53*

**ISC 05 23:22:16.1±0.5, 20°.45N±0°.06×120°.34E±0°.05, h10$^{km}$, n651, σ1$^{s}$37/640, mb4.8/138, MS3.6/36, 40C-14D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWGBT** | **Beinan** | **2.45** | **16** | P | **Pn** | **23 22 58.6** | **+2.4** |
| **TWG** | **Pinlang** | **2.45** | **16** | | **Pn** | **23 22 56.7** | **+0.6** |
| **TPUB** | **Ta-pu** | **2.85** | **5** | P | **Pn** | **23 23 03.1** | **+1.5** |
| **TPUB** | **Ta-pu** | **2.85** | **5** | | **Pn** | **23 23 01.4** | **-0.2** |
| **YULB** | **Yu-li** | **3.06** | **17** | P | **Pn** | **23 23 07.2** | **+2.7** |
| **YULB** | **Yu-li** | **3.06** | **17** | | **Pn** | **23 23 05.4** | **+0.9** |
| **SSLB** | **Suanglung** | **3.37** | **10** | P | **Pn** | **23 23 10.5** | **+1.7** |
| **SSLB** | **Suanglung** | **3.37** | **10** | | **Pn** | **23 23 09.4** | **+0.7** |
| **NACB** | **Ninganchiao** | **3.88** | **17** | P | **Pn** | **23 23 19.0** | **+3.2** |
| **NACB** | **Ninganchiao** | **3.88** | **17** | | **Pn** | **23 23 16.7** | **+0.9** |
| **YHNB** | **Yeheng** | **4.31** | **13** | P | **Pn** | **23 23 25.5** | **+3.8** |
| **YHNB** | **Yeheng** | **4.31** | **13** | | **Pn** | **23 23 22.3** | **+0.6** |
| **KNMB** | **Chin-men Tao** | **4.38** | **336** | | **Pn** | **23 23 20.1** | **-2.6** |
| **TATO** | **Taipei** | **4.62** | **13** | | **Pn** | **23 23 26.2** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **4.69** | **31** | Pn | **Pn** | **23 23 28.4** | **+1.5** |
| **QZH** | **Quanzhou** | **4.75** | **341** | Pn | **Pn** | **23 23 28.8** | **+1.1** |
| QZH | | | | Sn | **Sn** | **23 24 24.1** | **+1.2** |
| QZH | | | | smax | smax | | |
| | comp=N,48nm,0.5s | | | | | | |
| QZH | | | | smax | smax | | |
| | comp=E,100nm,0.6s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=N,1μm,14.8s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=E,1μm,12.0s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,1μm,12.7s | | | | | | |
| **HKPS** | **Hong Kong Po S** | **6.05** | **289** | | **Pn** | **23 23 44.0** | **-1.7** |
| **MCO** | **Taipa Grande** | **6.54** | **286** | P | **Pn** | **23 23 51.0** | **-1.3** |
| **JOW** | **Kunigami** | **9.65** | **47** | | **Pn** | **23 24 34.7** | **-0.5** |
| **JOW** | **Kunigami** | **9.65** | **47** | Pn | Pn | 23 24 30.6 | -4.5 |
| | 0.5nm,0.3s,baz=62,slow=24,SNR=1.8 | | | | | | |
| JOW | | | | Sn | **Sn** | **23 26 17.8** | **-5.9** |
| | 1.5nm,0.3s,baz=198,slow=19,SNR=2.5 | | | | | | |
| | 4.4nm,0.2s | | | | | | |
| **QIZ** | **Qiongzhong** | **9.98** | **264** | P | **Pn** | **23 24 39.8** | **+0.1** |
| QIZ | | | | S | **Sn** | **23 26 31.4** | **-0.4** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=N,650nm,12.0s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,740nm,12.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,1μm,12.8s | | | | | | |
| **WHN** | **Wuhan** | **11.41** | **333** | P | Pn | 23 25 04.5 | +5.4 |
| **NJ2** | **Nanjing** | **11.63** | **354** | *e*P | **Pn** | **23 25 01.5** | **-0.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **GYA** | **Guiyang** | **13.89** | **298** | P | **Pn** | **23 25 34.2** | **+0.9** |
| GYA | | | | S | **Sn** | **23 28 06.7** | **-1.0** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,99nm,8.6s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=N,390nm,11.6s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,930nm,11.7s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,1μm,12.2s | | | | | | |
| **DAV** | **Davao City (W)** | **14.24** | **158** | LR | LR | 23 31 43.4 | |
| | comp=Z,348nm,19.9s,baz=341,slow=41 | | | | | | |
| **MYLDM** | **Lahad Datu** | **15.29** | **187** | | **Pn** | **23 25 55.4** | **+3.3** |
| MYLDM | | | | IAmb | IAmb | 23 26 08.1 | |
| | comp=Z,40nm,1.0s | | | | | | |
| **LYN** | **LuoYang** | **15.67** | **335** | P | **P** | **23 26 05.7** | **+4.6** |
| LYN | | | | S | **S** | **23 29 04.1** | **-1.9** |
| LYN | | | | sS | sS | 23 29 09.0 | 0.0 |
| LYN | | | | SS | SnSn | 23 29 21.0 | +17 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,36nm,0.8s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,120nm,3.9s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=N,480nm,13.1s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,370nm,14.1s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,720nm,12.0s | | | | | | |
| **JNU** | **Nakatsue** | **15.73** | **34** | | **Pn** | **23 25 59.2** | **+1.4** |
| **JNU** | **Nakatsue** | **15.73** | **34** | Pn | **Pn** | **23 25 53.5** | **-4.3** |
| | comp=Z,0.2nm,0.3s,baz=214,slow=11,SNR=2.6 | | | | | | |
| JNU | | | | LR | LR | 23 32 49.9 | |
| | comp=Z,78nm,19.7s,baz=188,slow=41 | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **TIA** | **Tai'an** | **15.95** | **351** | P | **P** | **23 26 08.4** | **+4.2** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=Z,97nm,4.0s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=N,340nm,10.8s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,100nm,11.5s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,370nm,7.9s | | | | | | |
| **KMI** | **Kunming** | **16.88** | **289** | ⇓P | **Pn** | **23 26 11.7** | **-1.0** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,270nm,8.7s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,610nm,13.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,600nm,13.2s | | | | | | |
| **XAN** | **Xi'an** | **16.90** | **326** | ⇑P | **P** | **23 26 18.4** | **+3.6** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,670nm,13.3s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,670nm,14.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,12.7s | | | | | | |
| **HNS** | **HongShan** | **17.58** | **345** | ⇑P | **P** | **23 26 23.6** | **+1.3** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| HNS | | | | pmax | pmax | | |
| | comp=Z,200nm,4.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,300nm,11.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,360nm,12.2s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,420nm,12.8s | | | | | | |
| **JMN** | **Monobe** | **17.87** | **39** | P | **Pn** | **23 26 26.1** | **+1.3** |
| **PZH** | **PanZhiHua** | **18.08** | **293** | P | **P** | **23 26 28.7** | **+0.7** |
| PZH | | | | S | **Sn** | **23 29 45.8** | **-3.8** |
| PZH | | | | SS | **SnSn** | **23 30 05.5** | **+2.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,5.9s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,330nm,13.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,480nm,12.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,370nm,11.2s | | | | | | |
| **KSAR** | **Wonju Array Be** | **18.16** | **20** | P | **Pn** | **23 26 28.1** | **-0.2** |
| **KSRS** | **Korea Array** | **18.18** | **20** | P | **Pn** | **23 26 23.6** | **-5.0** |
| | comp=Z,0.2nm,0.3s,baz=172,slow=4.1,SNR=1.8 | | | | | | |
| KSRS | | | | LR | LR | 23 34 27.4 | |
| | comp=Z,74nm,19.7s,baz=200,slow=40 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **CD2** | **Chengdu** | **18.19** | **308** | P | **P** | **23 26 30.6** | **+1.5** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,90nm,3.5s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,710nm,8.8s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,570nm,10.2s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,620nm,12.7s | | | | | | |
| **BJT** | **Baijiatuan** | **19.83** | **351** | | **P** | **23 26 46.1** | **-0.8** |
| **BJI** | **Beijing** | **19.85** | **351** | P | **Pn** | **23 26 51.2** | **+2.5** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **GTOI** | **Gorontalo** | **19.87** | **172** | P | P | 23 26 41.2 | -6.3 |
| | comp=Z,18nm,1.1s | | | | | | |
| **MRSI** | **Marisa** | **19.91** | **175** | P | **P** | **23 26 45.2** | **-2.8** |
| | comp=Z,41nm,1.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **20.22** | **269** | | **P** | **23 26 50.2** | **-1.2** |
| **CMAR** | **Chiang Mai Arr** | **20.27** | **268** | P | **P** | **23 26 51.1** | **-0.8** |
| | comp=Z,3.2nm,0.8s,baz=78,slow=8.4,SNR=12 | | | | | | |
| CMAR | | | | LR | LR | 23 34 54.9 | |
| | comp=Z,164nm,18.9s,baz=80,slow=37 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **TNCH** | **TengChong** | **20.62** | **287** | P | Pn | 23 27 00.6 | +2.4 |
| TNCH | | | | S | Sn | 23 30 46.9 | -4.2 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,210nm,2.8s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,350nm,11.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,580nm,13.8s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,730nm,12.7s | | | | | | |
| **INU** | **Inuyama** | **20.87** | **41** | P | **P** | **23 26 59.4** | **+1.1** |
| INU | | | | IAmb | IAmb | 23 27 12.2 | |
| | comp=Z,27nm,0.6s | | | | | | |
| **JCJ** | **Chichijima** | **21.04** | **68** | LR | LR | 23 33 15.0 | |
| | comp=Z,191nm,21.9s,baz=88,slow=32 | | | | | | |
| **JGF** | **Kuroka** | **21.25** | **41** | P | **P** | **23 27 03.0** | **+0.6** |
| **LZH** | **Lanzhou** | **21.25** | **321** | *e*P | **P** | **23 27 06.1** | **+3.5** |
| LZH | | | | sP | pwP | 23 27 12.8 | +3.6 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,37nm,1.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,340nm,11.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,440nm,12.4s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,480nm,12.0s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **21.41** | **50** | LR | LR | 23 33 39.4 | |
| | comp=Z,75nm,19.6s,baz=196,slow=32 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **21.66** | **342** | *e*P | **P** | **23 27 10.7** | **+3.8** |
| HHC | | | | pP | pwP | 23 27 15.7 | +2.1 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,93nm,5.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,430nm,12.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,250nm,10.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,420nm,13.2s | | | | | | |
| **MAJO** | **Matsushiro** | **22.38** | **40** | P | **P** | **23 27 15.4** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **22.38** | **40** | P | **P** | **23 27 13.4** | **-1.2** |
| | comp=Z,1.0nm,0.3s,baz=240,slow=9.8,SNR=2.0 | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **22.38** | **40** | | **P** | **23 27 15.1** | **+0.5** |
| **XLT** | **XiLinHaoTe** | **23.65** | **352** | *e*P | **P** | **23 27 29.5** | **+1.9** |
| XLT | | | | pP | pwP | 23 27 34.7 | +0.2 |
| XLT | | | | sP | sP | 23 27 40.5 | +10 |
| XLT | | | | S | **S** | **23 31 41.7** | **-0.7** |
| XLT | | | | sS | sS | 23 31 52.3 | +6.7 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,140nm,5.3s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,240nm,17.0s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,160nm,11.5s | | | | | | |
| **CN2** | **Changchun** | **23.67** | **9** | P | **P** | **23 27 29.4** | **+1.7** |
| CN2 | | | | S | **S** | **23 31 40.1** | **-2.4** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,200nm,12.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,300nm,12.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,200nm,12.0s | | | | | | |
| **GUMO** | **Guam** | **24.41** | **102** | LR | LR | 23 34 50.7 | |
| | comp=Z,126nm,21.1s,baz=256,slow=32 | | | | | | |
| **NLAI** | **Namlea** | **24.46** | **164** | P | P | 23 27 29.7 | -5.7 |
| | comp=Z,63nm,0.9s | | | | | | |
| **MDJ** | **Mudanjiang** | **25.29** | **16** | P | **P** | **23 27 42.1** | **-0.5** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.6s | | | | | | |
| **KAPI** | **Kappang** | **25.31** | **181** | P | P | 23 27 38.0 | -5.1 |
| | comp=Z,3.7nm,0.3s,baz=31,slow=8.7,SNR=2.1 | | | | | | |
| KAPI | | | | LR | LR | 23 38 59.5 | |
| | comp=Z,91nm,19.0s,baz=314,slow=40 | | | | | | |
| | comp=Z,3.7nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **25.59** | **20** | P | **P** | **23 27 42.1** | **-3.2** |
| | comp=Z,0.7nm,0.6s,baz=201,slow=12,SNR=1.4 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **GTA** | **Gaotai** | **25.84** | **321** | *e*P | **P** | **23 27 50.1** | **+2.2** |
| GTA | | | | pP | pwP | 23 27 55.2 | +0.3 |
| GTA | | | | sP | sP | 23 27 59.5 | +9.0 |
| GTA | | | | sS | sS | 23 32 29.0 | +8.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,120nm,13.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,200nm,14.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,250nm,13.1s | | | | | | |
| **BNX** | **BinXian** | **25.88** | **11** | ⇑P | **P** | **23 27 50.7** | **+2.7** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **GOMU** | **GeErMu** | **27.29** | **311** | P | **P** | **23 28 00.6** | **-0.6** |
| GOMU | | | | S | **S** | **23 32 38.1** | **-2.9** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,270nm,5.2s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,800nm,15.1s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,280nm,14.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,490nm,14.5s | | | | | | |
| **LSA** | **Lhasa** | **27.93** | **295** | P | **P** | **23 28 09.5** | **+2.3** |
| **ULN** | **Ulaanbaatar** | **29.39** | **342** | P | **P** | **23 28 18.6** | **-1.0** |
| **SONM** | **Songino Array** | **29.56** | **341** | P | **P** | **23 28 21.2** | **+0.2** |
| **SONM** | **Songino Array** | **29.56** | **341** | P | **P** | **23 28 19.9** | **-1.2** |

comp=Z,5.2nm,1.0s,baz=164,slow=11,SNR=22
SONM LR LR 23 40 39.9
comp=Z,79nm,20.9s,baz=159,slow=37
comp=Z,5.2nm,1.0s
**ASAJ Asahikawa 30.00 33** LR LR 23 41 18.9
comp=Z,69nm,20.9s,baz=194,slow=38
**KLR Kul'dur 30.13 15** LR LR 23 42 13.2
comp=Z,102nm,18.6s,baz=193,slow=40
**WMQ Urumqi 35.78 318** *e*P **P 23 29 16.9 +1.4**
WMQ LR LR
comp=Z,180nm,13.5s
WMQ LR LR
comp=Z,190nm,11.3s
WMQ LR LR
comp=Z,81nm,12.3s
**PMG Port Moresby 39.71 136** LR LR 23 44 15.0
comp=Z,48nm,19.7s,baz=198,slow=34
**MK31 Makanchi Array 40.56 319** P **P 23 29 55.6 0.0**
**MKAR Makanchi Array 40.56 319** P **P 23 29 56.6 +1.0**
**MKAR Makanchi Array 40.56 319** P **P 23 29 53.6 -2.0**
comp=Z,3.5nm,0.7s,baz=115,slow=9.6,SNR=37
MKAR LR LR 23 46 47.3
comp=Z,40nm,19.2s,baz=158,slow=36
comp=Z,3.5nm,0.7s
**MAKZ Makanchi 40.75 319** P **P 23 29 57.7 +0.5**
**PRZ Przheval'sk 41.43 312** P **P 23 30 03.1 0.0**
PRZ IAmb IAmb 23 30 17.4
comp=Z,17nm,1.0s
**KSH Kashi 42.38 307** P **P 23 30 14.9 +4.1**
KSH sP pwP 23 30 24.4 +6.5
KSH pmax pmax
comp=Z,6.0nm,0.9s
KSH LR LR
comp=Z,120nm,13.4s
KSH LR LR
comp=Z,160nm,12.4s
KSH LR LR
comp=Z,210nm,10.3s
**WRA Warramunga Arr 42.42 160** P P 23 30 04.6 -6.6
comp=Z,7.8nm,0.9s,baz=342,slow=8.9,SNR=27
comp=Z,7.8nm,0.9s
**NRN Naryn 42.83 309** P **P 23 30 15.3 +0.6**
NRN IAmb IAmb 23 30 28.1
comp=Z,29nm,0.9s
**ZAA0 Zalesovo Array 43.00 330** P **P 23 30 15.7 +0.2**
**ZALV Zalesovo Beam 43.00 330** P **P 23 30 15.4 -0.1**
**ZALV Zalesovo Beam 43.00 330** P **P 23 30 14.4 -1.1**
comp=Z,5.1nm,0.9s,baz=115,slow=7.0,SNR=18
ZALV LR LR 23 48 06.2
comp=Z,56nm,18.1s,baz=116,slow=36
comp=Z,5.1nm,0.9s
**NIL Nilore 43.60 298** P **P 23 30 20.7 +0.1**
**H11N1 WAKE ISLAND Hy 43.62 83** T T 00 17 00.4
baz=278,slow=75,SNR=4.5
**H11N2 WAKE ISLAND Hy 43.62 83** T T 00 17 04.5
baz=278,slow=75,SNR=4.4
**H11N3 WAKE ISLAND Hy 43.63 83** T T 00 17 06.4
baz=278,slow=75,SNR=5.4
**H11S3 WAKE ISLAND Hy 43.63 84** T T 00 17 03.2
baz=280,slow=75,SNR=9.6
**H11S1 WAKE ISLAND Hy 43.64 84** T T 00 17 03.8
baz=280,slow=75,SNR=10
**H11S2 WAKE ISLAND Hy 43.65 84** T T 00 17 04.5
baz=280,slow=75,SNR=7.5
**AAK Ala-Archa 44.23 311** LR LR 23 49 13.2
comp=Z,111nm,21.0s,baz=120,slow=36
**KURK Kurchatov 44.51 323** P **P 23 30 27.9 +0.3**
KURK IAmb IAmb 23 30 41.0
comp=Z,17nm,0.8s
**KURBB Kurchatov Arra 44.52 323** P **P 23 30 27.7 0.0**
comp=Z,11nm,0.8s,baz=122,slow=8.1,SNR=55
comp=Z,11nm,0.8s
**ARSB Arslanbob 45.01 308** P **P 23 30 31.9 -0.2**
**ASAR Alice Springs 45.80 163** P P 23 30 32.9 -5.4
comp=Z,4.5nm,0.7s,baz=342,slow=6.8,SNR=42
comp=Z,4.5nm,0.7s
**BTK Batken 46.38 306** P **P 23 30 42.8 0.0**
**GAR Garm 46.59 305** P **P 23 30 45.2 +0.7**
**KBL Kabul 47.15 299** P **P 23 30 49.8 +0.7**
KBL IAmb IAmb 23 31 01.7
comp=Z,11nm,1.0s
**KK31 Karatay Array 47.19 310** P **P 23 30 49.6 +0.6**
KK31 IAmb IAmb 23 31 02.1
comp=Z,11nm,0.9s
**KKAR Karatay Array 47.19 310** P **P 23 30 49.5 +0.5**
**KKAR Karatay Array 47.19 310** P **P 23 30 49.4 +0.5**
KKAR IAmb IAmb 23 31 02.1
comp=Z,11nm,0.9s
**CHGR Chuyangaron 47.44 304** P **P 23 30 50.6 -0.5**
**SIMJ Simiganj 47.56 304** P **P 23 30 50.7 -1.4**
**HNR Honiara 48.99 124** LR LR 23 48 01.2
comp=Z,1μm,22.0s,baz=318,slow=32
**HRA Herat 52.76 298** P **P 23 31 30.9 -0.8**
**ABKAR Akbulak array 55.53 316** P **P 23 31 51.6 +0.2**
ABKAR IAmb IAmb 23 32 03.7
comp=Z,8.7nm,1.1s
**STKA Stephens Creek 55.88 158** P P 23 31 48.9 -5.2
comp=Z,1.8nm,0.5s,baz=323,slow=9.8,SNR=4.0
comp=Z,1.8nm,0.5s
**AKTO Aktyubinsk 56.93 317** LR LR 23 56 11.1
comp=Z,51nm,20.1s,baz=229,slow=36
**WSAR Wadi Sarin 56.97 285** LR LR 23 58 39.6
comp=Z,44nm,19.5s,baz=81,slow=38
**ARU Arti 57.64 325** P **P 23 32 06.8 +0.4**
**DZM Mont Dzumac 61.75 131** *e*LR LR 23 51 05.2
comp=Z,163nm,22.4s
**DZM Mont Dzumac 61.75 131** LR LR 23 55 00.2
comp=Z,100nm,20.9s,baz=263,slow=32
**SPIA Saint Paul Isl 61.91 35** P **P 23 32 36.9 +1.3**
baz=265
**NIKH Nikolski High 62.41 40** P **P 23 32 40.0 +0.9**
baz=268
**UNV Unalaska Valle 63.84 39** P **P 23 32 49.8 +1.2**
baz=269
**TNA Tin City 64.02 26** P **P 23 32 50.0 +0.5**
baz=262
**M11K Mekoryuk 64.27 32** P **P 23 32 51.6 +0.3**
baz=266
**F14K Arctic Creek 64.66 26** P **P 23 32 54.8 +1.0**
baz=264
**C16K Lisburne Hills 65.37 23** **P 23 32 59.3 +1.0**
**C16K Lisburne Hills 65.37 23** P **P 23 32 58.7 +0.4**
baz=264
**G15K Niukluk 65.58 27** P **P 23 33 00.3 +0.6**
baz=266
**J14K Nanvaranak Lak 65.67 29** P **P 23 33 00.6 +0.3**
baz=268
**M13K Dall Lake 65.69 32** P **P 23 33 01.6 +1.1**
baz=269
**L14K Kuka Creek 66.03 31** **P 23 33 03.4 +0.7**
**L14K Kuka Creek 66.03 31** P **P 23 33 03.4 +0.7**
baz=269
**D17K Noatak River 66.16 24** P **P 23 33 04.4 +0.9**
baz=266
**C17K DeLong Mountai 66.19 23** P **P 23 33 04.1 +0.5**
baz=266
**RDOG Red Dog Mine 66.26 24** P **P 23 33 05.0 +0.9**
baz=266
**GNI Garni 66.30 306** **P 23 33 04.6 -0.5**
GNI IAmb IAmb 23 33 23.7
comp=Z,8.8nm,0.9s
**GNI Garni 66.30 306** LR LR 00 06 02.9
comp=Z,34nm,19.3s,baz=96,slow=40
**G16K Koyuk River 66.31 26** P **P 23 33 05.1 +0.6**
baz=268
**H16K Elim 66.33 27** P **P 23 33 04.9 +0.3**
baz=268
**S12K Black Hills 66.40 37** P **P 23 33 05.6 +0.4**
baz=272
**N14K Kuskokwak Cree 66.52 32** P **P 23 33 05.9 +0.1**
baz=271
**K15K Wolf Creek Mou 66.59 30** P **P 23 33 07.0 +0.7**
baz=270
**L15K Ungalak Mounta 66.61 31** P **P 23 33 07.1 +0.7**
baz=270
**O14K Tigyukauivet M 66.74 33** P **P 23 33 07.2 0.0**
baz=271
**B18K Kokolik River 66.75 22** P **P 23 33 07.8 +0.6**
baz=266
**F17K Baldwin Pennin 66.81 25** P **P 23 33 07.7 +0.1**
baz=268
**C18K Utukok River 66.93 23** P **P 23 33 09.9 +1.4**
**C18K Utukok River 66.93 23** P **P 23 33 08.1 -0.3**
baz=267
**I17K Unalakleet 66.99 28** P **P 23 33 09.1 +0.3**
baz=270
**M15K Kasigluk River 67.00 32** P **P 23 33 09.1 +0.1**
baz=271
**J16K Anvik River 67.03 29** P **P 23 33 08.3 -0.7**
baz=270
**G17K Kiwalik Mounta 67.03 26** P **P 23 33 08.8 -0.3**
baz=269
**A19K Wainwright 67.06 21** P **P 23 33 08.0 -1.1**
baz=267
**E18K Tukpahlearik C 67.10 24** P **P 23 33 09.1 -0.3**
baz=268
**KBZ Khabaz 67.22 310** P **P 23 33 09.3 -1.3**
comp=Z,6.4nm,0.9s,baz=124,slow=3.9,SNR=12
KBZ LR LR 00 06 25.3
comp=Z,39nm,18.5s,baz=78,slow=39
comp=Z,6.4nm,0.9s
**N15K Kwethluk River 67.31 32** P **P 23 33 11.3 +0.3**
baz=272
**SDPT Sand Point 67.32 37** P **P 23 33 11.7 +0.7**
baz=274
**H17K Granite Mounta 67.33 27** P **P 23 33 11.2 +0.2**
baz=270
**KIV Kislovodsk 67.35 310** P **P 23 33 12.0 +0.4**
**KIV Kislovodsk 67.35 310** ⇑P **P 23 33 12.4 +0.8**
**F18K Selawik 67.45 25** P **P 23 33 12.5 +0.9**
baz=270
**KARS Kars 67.50 307** P **P 23 33 12.7 0.0**
**C19K Lookout Ridge 67.53 22** P **P 23 33 12.9 +0.7**
C19K IAmb IAmb 23 33 26.1
comp=Z,11nm,1.0s
**C19K Lookout Ridge 67.53 22** P **P 23 33 12.9 +0.7**
baz=269
**L16K Owhat River 67.57 31** P **P 23 33 13.9 +1.3**
baz=272
**J17K VABM Dome 67.71 29** P **P 23 33 14.1 +0.6**
baz=271
**M16K Timber Creek 67.84 31** P **P 23 33 15.8 +1.6**
baz=272
**G18K Tagagawik 67.86 26** **P 23 33 15.1 +0.8**
G18K IAmb IAmb 23 33 26.1
comp=Z,13nm,1.1s
**G18K Tagagawik 67.86 26** P **P 23 33 15.6 +1.3**
baz=271
**CHNA Chernabura Isl 67.86 38** P **P 23 33 16.3 +1.8**
baz=274
**N16K Nishlik Lake 67.96 32** P **P 23 33 16.3 +1.2**
baz=273
**H18K Honhosa River 67.99 27** P **P 23 33 16.0 +0.8**
baz=271
**D19K Kuna River 68.06 23** P **P 23 33 16.7 +1.2**
**D19K Kuna River 68.06 23** P **P 23 33 16.7 +1.2**
baz=270
**K17K Iditarod 68.09 29** P **P 23 33 16.9 +1.1**
**K17K Iditarod 68.09 29** P **P 23 33 16.8 +1.0**
baz=272
**L17K Donlin 68.11 30** P **P 23 33 16.9 +1.0**
baz=273
**MSVF Nonsavu 68.15 120** LR LR 00 01 21.1
comp=Z,54nm,18.7s,baz=183,slow=35
**F19K Shaleruckik Mo 68.20 25** P **P 23 33 17.3 +1.0**
baz=271
**O16K Kokwok River B 68.35 33** P **P 23 33 18.4 +0.9**
baz=274
**B20K Meade River 68.39 22** P **P 23 33 19.1 +1.5**
**B20K Meade River 68.39 22** P **P 23 33 19.0 +1.5**
baz=270,SNR=5.7
**E19K Redstone River 68.40 24** P **P 23 33 18.0 +0.3**
**E19K Redstone River 68.40 24** P **P 23 33 18.7 +1.0**
baz=272
**CHGN Chignik 68.41 36** P **P 23 33 19.5 +1.6**
baz=275
**P16K Nushagak River 68.44 33** P **P 23 33 19.6 +1.6**
baz=274
**G19K Purcell Mounta 68.49 26** P **P 23 33 19.4 +1.1**
G19K IAmb IAmb 23 33 31.3
comp=Z,12nm,1.0s
**G19K Purcell Mounta 68.49 26** P **P 23 33 19.8 +1.6**
baz=272
**M17K Holitna River 68.56 31** P **P 23 33 19.7 +1.0**
baz=274
**D20K Etivluk River 68.60 23** P **P 23 33 20.1 +1.2**
baz=272,SNR=6.6
**GURO Guroymak-BITLI 68.61 304** P **P 23 33 19.8 0.0**
GURO IAmb IAmb 23 33 32.4
comp=Z,8.5nm,0.9s
**GCSA Galena City Sc 68.63 27** P **P 23 33 20.4 +1.3**
baz=273
**RAYN Ar Rayn 68.71 288** P **P 23 33 19.9 -0.5**
**N17K Nushagak Hills 68.74 32** P **P 23 33 21.5 +1.7**
baz=274
**J18K Innoko River 68.77 29** P **P 23 33 21.3 +1.3**
baz=274
**E20K Nigu River 68.77 23** P **P 23 33 21.4 +1.4**
baz=272,SNR=6.6
**H19K Roundabout Mou 68.78 26** P **P 23 33 21.8 +1.7**
**H19K Roundabout Mou 68.78 26** P **P 23 33 21.0 +0.9**
baz=273
**O17K Koliganek Bris 68.84 33** P **P 23 33 21.5 +1.0**
baz=275
**L18K Granite Mounta 68.86 30** P **P 23 33 22.3 +1.6**
baz=274
**F20K Avaraart Lake 69.00 25** P **P 23 33 22.1 +0.7**
F20K IAmb IAmb 23 33 34.2
comp=Z,8.3nm,0.9s
**F20K Avaraart Lake 69.00 25** P **P 23 33 22.7 +1.3**
baz=273
**A22K Sinclair Lake 69.11 20** P **P 23 33 23.2 +1.2**
baz=272
**P17K Kvichak River 69.22 33** P **P 23 33 23.2 +0.4**
baz=275
**J19K Poorman 69.22 28** **P 23 33 24.7 +1.8**
J19K IAmb IAmb 23 33 36.2
comp=Z,8.9nm,1.1s
**J19K Poorman 69.22 28** P **P 23 33 24.1 +1.3**
baz=274
**C21K Knifeblade Rid 69.25 22** P **P 23 33 24.1 +1.2**
baz=273
**B21K Ikpikpuk River 69.29 22** P **P 23 33 24.8 +1.7**
**B21K Ikpikpuk River 69.29 22** P **P 23 33 24.0 +0.9**
baz=273
**M18K Stony River 69.33 31** P **P 23 33 24.8 +1.3**
baz=275
**N18K Kilae Creek 69.36 32** P **P 23 33 24.6 +0.8**
baz=275
**R17L Mt. Peulik Vol 69.41 35** P **P 23 33 25.8 +1.7**
baz=276
**H20K Arneneeega Mo 69.43 26** P **P 23 33 25.0 +0.9**
baz=274
**E21K Killik River 69.58 23** P **P 23 33 26.5 +1.5**
baz=274
**Q17K Contact Creek 69.60 34** P **P 23 33 26.9 +1.5**
baz=276
**B22K Teshekpuk Lake 69.66 21** P **P 23 33 27.3 +1.9**
baz=274
**I20K Naaghedeneel 69.66 27** P **P 23 33 26.9 +1.4**
baz=275
**L19K White Mountain 69.72 30** **P 23 33 27.2 +1.2**
L19K IAmb IAmb 23 33 38.7
comp=Z,15nm,1.1s
**L19K White Mountain 69.72 30** P **P 23 33 27.4 +1.4**
baz=276
**O18K Koktuh Hills 69.78 32** **P 23 33 27.2 +0.9**
O18K IAmb IAmb 23 33 38.3
comp=Z,12nm,1.0s
**O18K Koktuh Hills 69.78 32** P **P 23 33 28.5 +2.1**
baz=276
**P18K Big Mountain, 69.82 33** P **P 23 33 28.5 +1.9**
baz=276
**J20K Nowinta River 69.86 28** **P 23 33 27.3 +0.6**
J20K IAmb IAmb 23 33 39.8
comp=Z,8.2nm,0.8s
**J20K Nowinta River 69.86 28** P **P 23 33 28.0 +1.3**
baz=276
**F21K Alatna River 69.86 24** P **P 23 33 28.2 +1.4**
baz=275
**G21K Allakaket 69.91 25** P **P 23 33 28.3 +1.2**
**G21K Allakaket 69.91 25** P **P 23 33 28.3 +1.2**
baz=275,SNR=5.7
**M19K Big River Lodg 69.97 30** P **P 23 33 29.4 +1.9**
baz=276
**K20K Telida 69.97 29** P **P 23 33 28.7 +1.2**
K20K IAmb IAmb 23 33 48.0
comp=Z,7.8nm,1.0s
**K20K Telida 69.97 29** P **P 23 33 28.7 +1.2**
baz=276
**Q18K Katmai Hardscr 70.01 34** P **P 23 33 29.7 +1.8**
baz=277
**CHIR Chirikof Islan 70.02 37** P **P 23 33 29.7 +1.9**
baz=277
**D22K Ayikyak River 70.02 23** P **P 23 33 28.5 +0.8**
baz=275
**N19K Bonanza Creek 70.04 31** P **P 23 33 28.5 +0.5**
baz=276
**L20K Farewell, AK 70.14 30** P **P 23 33 30.2 +1.6**
baz=276
**H21K Melozitna River 70.28 26** P **P 23 33 30.9 +1.5**
**H21K Melozitna River 70.28 26** P **P 23 33 30.3 +1.0**
baz=276,SNR=5.9
**F22K John River 70.34 24** P **P 23 33 30.9 +1.2**
baz=276
**R18K Karluk 70.44 35** P **P 23 33 31.4 +1.0**
baz=278
**M20K Styx River 70.56 30** **P 23 33 32.8 +1.6**
M20K IAmb IAmb 23 33 51.6
comp=Z,9.9nm,1.1s
**M20K Styx River 70.56 30** P **P 23 33 32.6 +1.4**
baz=277
**C23K Itkillik River 70.66 22** P **P 23 33 33.2 +1.6**
C23K IAmb IAmb 23 33 44.3
comp=Z,6.7nm,0.8s
**C23K Itkillik River 70.66 22** P **P 23 33 33.1 +1.6**
baz=277
**G22K Bettles 70.66 25** P **P 23 33 32.4 +0.8**
baz=277
**Q19K Cape Douglas, 70.68 33** P **P 23 33 33.1 +1.2**
baz=278
**SII Sitkinak Islan 70.72 36** P **P 23 33 33.5 +1.3**
baz=278
**D23K Nanushuk River 70.73 22** P **P 23 33 33.2 +1.2**
baz=277,SNR=6.4
**P19K Oil Pt 70.80 32** P **P 23 33 33.7 +1.0**
baz=278
**H22K Ishtalitna Cre 70.84 26** P **P 23 33 34.3 +1.5**
baz=277,SNR=5.6
**O20K Slope Mountain 71.04 32** P **P 23 33 35.5 +1.3**
baz=278
**N20K Mount Spurr 71.09 31** P **P 23 33 35.6 +1.2**
baz=278
**OHAK Old Harbor 71.11 35** P **P 23 33 35.3 +0.8**
baz=279
**COLD Coldfoot 71.13 24** P **P 23 33 35.3 +0.9**
baz=278
**TOLK Toolik Lake Re 71.17 23** P **P 23 33 35.8 +1.0**
TOLK IAmb IAmb 23 33 46.8
comp=Z,9.1nm,0.9s
**TOLK Toolik Lake Re 71.17 23** P **P 23 33 35.7 +0.9**
baz=278
**MLY Manley 71.22 27** P **P 23 33 35.7 +0.6**
baz=278
**E23K Chandalar 71.24 23** P **P 23 33 36.0 +0.7**
baz=278,SNR=6.0
**G23K Bananza Creek 71.27 25** P **P 23 33 36.8 +1.4**
G23K IAmb IAmb 23 33 47.7
comp=Z,15nm,1.1s
**G23K Bananza Creek 71.27 25** P **P 23 33 36.8 +1.4**
baz=278,SNR=6.5
**SKT Skwentna 71.30 30** P **P 23 33 36.4 +0.8**
SKT IAmb IAmb 23 33 46.8
comp=Z,7.8nm,1.1s
**SKT Skwentna 71.30 30** P **P 23 33 36.8 +1.2**
baz=279
**D24K Happy Valley 71.37 22** P **P 23 33 36.8 +0.8**
**D24K Happy Valley 71.37 22** P **P 23 33 37.1 +1.2**
baz=279
**KDAK Kodiak Island 71.40 34** P **P 23 33 37.3 +1.0**
baz=279
**H23K Yukon River 71.59 26** P **P 23 33 39.1 +1.7**
**H23K Yukon River 71.59 26** P **P 23 33 37.8 +0.5**
baz=279,SNR=5.2
**E24K Your Creek 71.66 23** P **P 23 33 38.9 +1.1**
**E24K Your Creek 71.66 23** P **P 23 33 38.8 +1.1**
baz=279,SNR=5.4
**SUA Susitna One 71.75 30** P **P 23 33 39.4 +0.9**
baz=279
**I23K Minto, Yukon-K 71.78 26** P **P 23 33 39.8 +1.4**
I23K IAmb IAmb 23 33 51.6
comp=Z,16nm,1.1s
**I23K Minto, Yukon-K 71.78 26** P **P 23 33 39.4 +1.0**
baz=279,SNR=5.2
**F24K Squaw Lake 71.97 24** P **P 23 33 40.6 +1.0**
F24K IAmb IAmb 23 33 52.9
comp=Z,13nm,0.8s
**F24K Squaw Lake 71.97 24** P **P 23 33 40.7 +1.1**
baz=280,SNR=6.3
**NEA2 Nenana 71.99 27** P **P 23 33 41.0 +1.3**
baz=280,SNR=5.6
**BRSE Bradley Lake S 72.03 32** P **P 23 33 41.3 +1.2**
baz=280
**MCK McKinley 72.19 28** P **P 23 33 41.8 +0.8**
baz=280
**D25K Kavik River 72.20 22** P **P 23 33 42.1 +1.1**
D25K IAmb IAmb 23 33 54.3
comp=Z,12nm,0.8s
**D25K Kavik River 72.20 22** P **P 23 33 41.7 +0.7**
baz=281
**H24K Noodor Dome 72.27 26** P **P 23 33 42.8 +1.3**
H24K IAmb IAmb 23 33 54.8
comp=Z,6.2nm,0.8s
**H24K Noodor Dome 72.27 26** P **P 23 33 42.9 +1.4**
baz=280
**G24K Hadweenzic Riv 72.27 25** P **P 23 33 42.6 +1.2**
G24K IAmb IAmb 23 33 54.8
comp=Z,15nm,0.9s
**G24K Hadweenzic Riv 72.27 25** P **P 23 33 42.5 +1.1**
baz=281,SNR=5.8
**MDM Murphy Dome 72.28 27** P **P 23 33 42.5 +1.0**
**RND Reindeer 72.29 28** P **P 23 33 42.4 +0.7**
**PMR Palmer 72.49 30** P **P 23 33 44.1 +1.4**
baz=281
**CCB Clear Creek Bu 72.52 27** P **P 23 33 43.8 +1.0**
**WAT1 Susitna Watana 72.53 29** P **P 23 33 44.4 +1.4**
baz=281
**POKR Poker Plat Res 72.58 26** P **P 23 33 44.1 +0.8**
baz=281
**C26K Camden Bay 72.59 21** P **P 23 33 44.4 +1.2**
baz=282
**GAZ Gaziantep 72.62 304** P **P 23 33 44.1 0.0**
GAZ IAmb IAmb 23 33 46.2
comp=Z,16nm,1.1s
**ARCES ARCESS Array B 72.70 338** P **P 23 33 41.8 -2.1**
comp=Z,3.1nm,0.9s,baz=130,slow=4.9,SNR=2.4
comp=Z,3.1nm,0.9s
**G25K Bearman Lake 72.80 24** P **P 23 33 45.9 +1.4**
baz=282,SNR=5.6
**F25K Christian Rive 72.81 24** P **P 23 33 45.7 +1.1**
baz=282,SNR=5.6
**SML Sawmill 72.82 30** P **P 23 33 46.3 +1.5**
baz=281
**KNK Knik Glacier 72.84 30** P **P 23 33 46.4 +1.5**
baz=281
**ILAR Eielson Array 72.88 27** P P 23 33 41.1 -3.9
comp=Z,0.4nm,0.6s,baz=262,slow=4.4,SNR=6.4
**HDA Harding Lake 72.93 27** P **P 23 33 45.7 +0.4**
HDA IAmb IAmb 23 33 55.5
comp=Z,12nm,1.1s
**HDA Harding Lake 72.93 27** P **P 23 33 46.8 +1.5**
baz=282
**WAT6 Susitna Watana 72.94 29** P **P 23 33 47.2 +1.6**
baz=282,SNR=5.4
**PWL Port Wells 73.00 31** P **P 23 33 47.5 +1.7**
baz=282
**DHY Denali Highway 73.01 28** P **P 23 33 47.3 +1.3**
**DHY Denali Highway 73.01 28** P **P 23 33 47.4 +1.4**
baz=282
**H25L Birch Creek 73.01 25** P **P 23 33 47.2 +1.4**
baz=282
**C27K Jago River 73.06 21** P **P 23 33 47.7 +1.7**
baz=283
**BMAR Burnt Mountain 73.24 24** P **P 23 33 48.1 +0.9**
**SCM Sheep Creek Mo 73.28 30** P **P 23 33 49.7 +2.1**
baz=282
**PRP Porcupine Dome 73.29 26** P **P 23 33 49.3 +1.7**
baz=283
**BNN Bunyan 73.30 306** **P 23 33 47.4 -0.8**
**F26K Sheenjek River 73.34 23** P **P 23 33 49.9 +2.1**
baz=283
**J25K Salcha River, 73.55 27** **P 23 33 50.2 +1.2**
**J25K Salcha River, 73.55 27** P **P 23 33 51.2 +2.1**
baz=283
**K24K Donnelly Dome 73.56 27** P **P 23 33 51.2 +2.1**
baz=283
**GLI Glacier Island 73.59 31** P **P 23 33 50.9 +1.6**
baz=283
**P23K Montague Islan 73.64 32** P **P 23 33 50.8 +1.3**
baz=283
**G26K Porcupine Rive 73.65 24** P **P 23 33 50.7 +1.2**

baz=284,SNR=5.9
**M24K Tolsona, Glenn** 73.76 29 P P 23 33 51.3 +1.0
baz=283
**PAX Paxson** 73.88 28 P P 23 33 52.4 +1.3
baz=284
**KLU Klutina** 74.01 30 P P 23 33 53.4 +1.6
baz=284
**D27M Malcolm River** 74.10 21 P P 23 33 53.1 +0.9
D27M IAmb IAmb 23 34 05.0
comp=Z,11nm,1.0s
**D27M Malcolm River** 74.10 21 P P 23 33 52.8 +0.6
baz=286,SNR=5.2
**E27K Coleen River** 74.16 23 P P 23 33 53.9 +1.4
E27K IAmb IAmb 23 34 05.3
comp=Z,15nm,1.1s
**E27K Coleen River** 74.16 23 P P 23 33 53.1 +0.6
baz=285
**FINES FINESS Array B** 74.27 330 P P 23 33 49.8 -3.4
comp=Z,3.4nm,0.8s,baz=83,slow=6.0,SNR=7.6
comp=Z,3.4nm,0.8s
**SCRK Sand Creek** 74.29 27 P P 23 33 55.1 +1.6
**SCRK Sand Creek** 74.29 27 P P 23 33 54.1 +0.7
baz=284,SNR=5.2
**I26K Coal Creek Min** 74.30 26 P P 23 33 55.2 +1.8
baz=285
**EYAK Cordova Ski Ar** 74.31 31 P P 23 33 55.8 +2.3
baz=284
**J26L Joseph Creek** 74.33 27 P P 23 33 53.6 -0.1
J26L IAmb IAmb 23 34 10.4
comp=Z,9.4nm,1.0s
**J26L Joseph Creek** 74.33 27 P P 23 33 55.8 +2.0
baz=285
**G27K Doyon Strip** 74.50 24 P P 23 33 55.4 +0.9
**G27K Doyon Strip** 74.50 24 P P 23 33 56.0 +1.4
baz=286
**N25K Chitina, Valde** 74.60 30 P 23 33 56.2 +0.9
N25K IAmb IAmb 23 34 07.4
comp=Z,8.4nm,1.1s
**N25K Chitina, Valde** 74.60 30 P P 23 33 56.7 +1.4
baz=285
**H27K Steamboat Moun** 74.71 25 P P 23 33 57.4 +1.6
baz=286
**BMRM Bremner River** 74.76 30 P P 23 33 57.7 +1.5
baz=285
**BR131 Keskin Array S** 74.77 307 P 23 33 56.1 -0.6
**BRTR Keskin Array B** 74.77 307 P P 23 33 55.9 -0.9
**BRTR Keskin Array B** 74.77 307 P P 23 33 53.4 -3.4
comp=Z,1.3nm,0.9s,baz=123,slow=9.0,SNR=11
BRTR LR LR 00 10 39.3
comp=Z,29nm,19.5s,baz=116,slow=39
comp=Z,1.3nm,0.9s
**E28M Babbage River** 74.77 22 P P 23 33 57.6 +1.5
E28M IAmb IAmb 23 34 09.2
comp=Z,10.0nm,1.1s
**E28M Babbage River** 74.77 22 P P 23 33 57.7 +1.7
baz=287
**L26K Log Cabin Wild** 74.80 28 P P 23 33 57.9 +1.5
baz=285
**D28M Stokes Point** 74.83 21 P P 23 33 57.8 +1.5
baz=288
**I27K Kandik River** 74.84 25 P P 23 33 58.3 +1.7
baz=286
**F28M Old Crow** 74.94 23 P P 23 33 58.5 +1.5
F28M IAmb IAmb 23 34 10.1
comp=Z,17nm,0.9s
**F28M Old Crow** 74.94 23 P P 23 33 57.8 +0.7
baz=287,SNR=5.6
**GLB Gilahina Butte** 75.01 30 P 23 33 58.5 +0.9
GLB IAmb IAmb 23 34 09.6
comp=Z,16nm,1.1s
**MMAI Mount Meron Ar** 75.05 300 LR LR 00 10 01.5
comp=Z,28nm,18.5s,baz=57,slow=38
**K27K Chicken** 75.09 27 P P 23 33 59.2 +1.3
baz=286
**M26K Nabesna, AK** 75.13 29 P P 23 33 56.5 -1.8
M26K IAmb IAmb 23 34 10.8
comp=Z,11nm,1.0s
**M26K Nabesna, AK** 75.13 29 P P 23 33 59.5 +1.2
baz=286
**AKASG Malin Array Be** 75.14 319 P P 23 33 56.1 -2.3
comp=Z,0.8nm,0.6s,baz=68,slow=5.3,SNR=5.3
comp=Z,0.8nm,0.6s
**EGAK Eagle** 75.26 26 P P 23 34 00.3 +1.3
EGAK IAmb IAmb 23 34 11.1
comp=Z,12nm,1.1s
**EGAK Eagle** 75.26 26 P P 23 34 00.4 +1.5
baz=287,SNR=6.2
**MCARA McCarthy VSAT** 75.39 30 P P 23 34 00.6 +0.8
baz=286
**E29M Blow River** 75.42 22 P 23 34 01.8 +2.0
**E29M Blow River** 75.42 22 P P 23 34 01.4 +1.7
baz=289
**L27K Beaver Creek,** 75.46 28 P P 23 34 01.3 +1.1
baz=287,SNR=5.5
**BCAR Beaver Creek A** 75.48 28 P P 23 34 02.0 +1.7
**CRQE Cirque** 75.53 30 P P 23 34 02.4 +1.7
baz=286
**I28M Miner Creek** 75.56 25 P P 23 34 02.4 +1.6
I28M IAmb IAmb 23 34 12.8
comp=Z,13nm,1.1s
**I28M Miner Creek** 75.56 25 P P 23 34 01.4 +0.7
baz=288,SNR=5.2
**BGLC Bering Glacier** 75.61 31 P P 23 34 01.8 +0.8
baz=286
**M27K Edge Creek, AK** 75.64 28 P P 23 34 02.0 +0.6
baz=287
**G29M Pine Creek** 75.84 23 P P 23 34 03.7 +1.4
**G29M Pine Creek** 75.84 23 P P 23 34 03.0 +0.7
baz=289,SNR=5.7
**H29M Whitestone** 75.93 24 P P 23 34 04.2 +1.5
H29M IAmb IAmb 23 34 15.6
comp=Z,16nm,1.0s
**H29M Whitestone** 75.93 24 P P 23 34 03.2 +0.4
baz=289,SNR=6.6
**DAWY Dawson** 76.20 26 P P 23 34 05.1 +0.7
DAWY IAmb IAmb 23 34 17.0
comp=Z,18nm,1.1s
**DAWY Dawson** 76.20 26 P P 23 34 04.3 -0.1
baz=288,SNR=5.4
**CSS Mathiatis** 76.21 302 P 23 34 04.6 -0.4
CSS IAmb IAmb 23 34 16.3
comp=Z,16nm,1.0s
**MESA MESA** 76.23 31 P P 23 34 05.1 +0.3
baz=287
**I29M Ogilvie Camp,** 76.23 25 P P 23 34 05.2 +0.7
baz=289
**CTG Chitna Glacier** 76.29 30 P P 23 34 04.6 -0.5
baz=288
**CTGM Chitina Glacie** 76.29 30 P P 23 34 05.3 +0.2
CTGM IAmb IAmb 23 34 17.5
comp=Z,8.8nm,0.7s
**EIL Elat** 76.31 297 LR LR 00 12 02.8
comp=Z,28nm,18.2s,baz=67,slow=39
**SORM Soroca** 76.34 316 ⇓P P 23 34 05.1 -0.3
**F30M Barrier River** 76.42 22 P P 23 34 06.2 +0.6
baz=291
**G30M tAoh Zraii Nji** 76.49 23 P P 23 34 06.1 +0.1
**G30M tAoh Zraii Nji** 76.49 23 P P 23 34 06.1 +0.1
baz=290,SNR=5.5
**EPYK Eagle Plains** 76.51 24 P P 23 34 07.0 +0.9
baz=290
**J29N Klondike Camp** 76.57 26 P P 23 34 07.1 +0.6
baz=289
**O28M Mount Upton** 76.88 30 P P 23 34 10.0 +1.4
baz=288
**JURR Jurilovca** 76.89 313 ⇑P P 23 34 09.7 +1.2
**YUK8 Steele Glacier** 76.92 29 P P 23 34 09.7 +0.9
baz=289
**INK Inuvik** 76.96 22 P P 23 34 09.3 +0.8
INK IAmb IAmb 23 34 20.8
comp=Z,13nm,1.1s
**INK Inuvik** 76.96 22 P P 23 34 08.4 -0.1
baz=293
**I30M Mount Dempster** 77.04 25 P P 23 34 10.0 +0.8
I30M IAmb IAmb 23 34 21.7
comp=Z,13nm,1.0s
**I30M Mount Dempster** 77.04 25 P P 23 34 08.4 -0.9
baz=291,SNR=6.3
**L29M L29M** 77.05 27 P P 23 34 10.5 +1.3
L29M IAmb IAmb 23 34 22.2
comp=Z,11nm,0.9s
**L29M L29M** 77.05 27 P P 23 34 09.5 +0.3
baz=290
**K29M Barlow Dome** 77.06 26 P 23 34 09.1 -0.2
**K29M Barlow Dome** 77.06 26 P P 23 34 09.3 -0.1
baz=290
**PINM Pinnacle** 77.07 30 P P 23 34 10.5 +1.1
baz=289
**M29M Somme Creek** 77.13 28 P P 23 34 11.7 +1.9
M29M IAmb IAmb 23 34 23.1
comp=Z,8.1nm,0.9s
**M29M Somme Creek** 77.13 28 P P 23 34 10.2 +0.4
baz=290,SNR=5.8
**TPGR Topolog** 77.18 313 ⇑P P 23 34 11.1 +0.8
**F31M Tsiigehtchic** 77.22 22 P P 23 34 10.8 +0.8
F31M IAmb IAmb 23 34 22.0
comp=Z,13nm,0.8s
**F31M Tsiigehtchic** 77.22 22 P P 23 34 10.1 +0.1
baz=293
**G31M Satah River** 77.22 23 P 23 34 10.5 +0.5
G31M IAmb IAmb 23 34 20.6
comp=Z,6.4nm,0.8s
**G31M Satah River** 77.22 23 P P 23 34 10.3 +0.3
baz=292
**CFR Carcaliu** 77.28 314 ⇑P P 23 34 11.4 +0.7
**J30M Hart River** 77.29 26 P P 23 34 11.5 +0.9
**J30M Hart River** 77.29 26 P P 23 34 10.6 -0.1
baz=291
**YUK4 Talbot Arm** 77.41 29 P P 23 34 11.9 +0.4
baz=290
**HARR Harsova** 77.56 313 ⇑P P 23 34 13.2 +0.9
**YUK6 Outpost Mounta** 77.67 29 P P 23 34 13.5 +0.5
baz=290
**M30M Minto, Yukon** 77.81 28 P P 23 34 14.4 +0.9
baz=291
**ICOR Ion Corvin** 77.81 313 ⇑P P 23 34 14.9 +1.1
**TESR Tescani** 77.90 315 ⇑P P 23 34 14.7 +0.4
**A36M Sachs Harbour** 77.90 17 P P 23 34 14.9 +1.1
baz=299
**VRI Vrincioaia** 78.04 315 ⇑P P 23 34 16.0 +0.9
**N30M Aishikik Lake** 78.07 29 P P 23 34 15.6 +0.6
baz=291
**PLOR Plostina** 78.09 315 ⇑P P 23 34 16.3 +1.0
**BISRR Bisoca** 78.14 314 ⇑P P 23 34 15.7 0.0
**ELL Elmali** 78.39 305 P P 23 34 16.4 -0.9
**P29M Windy Craggy** 78.42 30 P P 23 34 17.6 +0.7
baz=291
**NEHR Nehoiu** 78.46 314 ⇑P P 23 34 18.8 +1.4
**TURR Turia** 78.46 315 ⇑P P 23 34 18.7 +1.3
**BURAR Bucovina Array** 78.51 317 P P 23 34 17.5 -0.2
**BURAR Bucovina Array** 78.51 317 ⇑P P 23 34 18.1 +0.4
**BUR08 Bucovina Ar. S** 78.51 317 P P 23 34 17.6 -0.1
**OZUR** 78.60 315 ⇓P P 23 34 18.9 +0.8
**P30M Million Dollar** 78.61 30 P P 23 34 18.7 +0.7
baz=291
**N31M Braeburn, Yuko** 78.65 28 P P 23 34 19.2 +1.1
baz=292
**MLR Muntele Rosu** 78.67 314 P P 23 34 18.8 +0.1
MLR IAmb IAmb 23 34 31.0
comp=Z,10nm,0.9s
**MLR Muntele Rosu** 78.67 314 ⇑P P 23 34 19.7 +1.0
**O30N Mendenhall** 78.78 29 P P 23 34 19.6 +0.7
baz=292
**DOPR Dopca** 78.90 315 ⇑P P 23 34 20.5 +0.7
**M31M Drury Creek, Y** 78.99 27 P P 23 34 20.3 +0.4
baz=293
**PLBC Pleasant Camp** 79.14 30 P P 23 34 21.6 +0.8
baz=292
**ARCR ARCALIA** 79.23 316 ⇑P P 23 34 22.8 +1.2
**WHY Whitehorse** 79.37 29 P 23 34 23.2 +1.1
**WHY Whitehorse** 79.37 29 P P 23 34 23.0 +0.8
baz=293
**FARO Faro, Yukon** 79.42 27 P P 23 34 23.1 +0.7
baz=294
**KWP Kalwaria Pacla** 79.46 319 *e*P P 23 34 24.0 +1.2
**KWP Kalwaria Pacla** 79.46 319 P P 23 34 22.3 -0.4
KWP IAmb IAmb 23 34 35.1
comp=Z,12nm,0.8s
**C36M Paulatuk** 79.57 19 P P 23 34 24.0 +1.1
C36M IAmb IAmb 23 34 35.4
comp=Z,8.2nm,0.7s
**C36M Paulatuk** 79.57 19 P P 23 34 23.7 +0.8
baz=301
**ARR Arges** 79.59 315 ⇑P P 23 34 24.5 +0.8
**HUMR Humele** 79.62 314 ⇑P P 23 34 23.9 +0.1
**DAG Danmarks Havn** 79.92 351 *i* P P 23 34 24.0 -0.7
**KOLS Kolonicke sedl** 79.96 318 *e*P P 23 34 26.5 +1.0
**N32M Quiet Lake** 79.98 28 P P 23 34 26.3 +0.9
baz=294
**LOT Lotru** 80.14 315 ⇓P P 23 34 27.5 +0.8
**MARR Marisel-Cluj** 80.17 316 ⇑P P 23 34 27.8 +1.0
**RDO Rodhopi** 80.30 310 P P 23 34 27.2 -0.3
**P32M Atlin** 80.33 30 P P 23 34 27.9 +0.6
baz=294
**DRGR** 80.39 316 ⇑P P 23 34 28.9 +0.9
**HFS Hagfors** 80.43 331 P P 23 34 24.2 -3.5
comp=Z,2.3nm,0.9s,baz=104,slow=6.3,SNR=7.5
comp=Z,2.3nm,0.9s
**CRVS Cervenica-Dubn** 80.47 319 *e*P P 23 34 29.9 +1.6
CRVS *e* 23 34 39.7
**P33M Teslin, Yukon** 80.49 29 P 23 34 29.6 +1.4
**P33M Teslin, Yukon** 80.49 29 P P 23 34 29.1 +0.9
baz=295
**DEV Deva** 80.57 315 ⇑P P 23 34 30.1 +1.2
**S32K Kilisnoo** 80.77 32 P P 23 34 30.9 +1.3
baz=294
**GZR Gura Zlata** 80.82 315 ⇑P P 23 34 30.8 +0.5
**NIE Niedzica** 81.01 319 *e*P P 23 34 33.4 +2.2
**OJC Ojcow** 81.02 320 *e*P P 23 34 31.8 +0.7
**OJC Ojcow** 81.02 320 P P 23 34 30.7 -0.5
OJC IAmb IAmb 23 34 43.8
comp=Z,13nm,1.1s
**SURR Surduc** 81.13 315 ⇓P P 23 34 32.4 +0.6
**NB2 NORSAR Subarra** 81.14 332 P P 23 34 31.3 -0.4
comp=Z,11nm,1.2s,baz=60,slow=5.1
**NOA NORSAR Array B** 81.14 332 P P 23 34 28.6 -3.1
comp=Z,3.0nm,1.0s,baz=63,slow=5.1,SNR=4.4
comp=Z,3.0nm,1.0s
**SIRR Siria** 81.25 316 ⇑P P 23 34 33.4 +0.8
**Q32M Nakina River** 81.27 30 P P 23 34 33.5 +0.9
baz=295
**BZS Buzias** 81.51 315 ⇑P P 23 34 33.6 -0.2
**R33M Jennings River** 81.68 29 P P 23 34 35.2 +0.5
baz=296
**MDVR Moldovita** 81.74 315 ⇑P P 23 34 35.8 +0.7
**PSZ Piszkesteto** 81.80 318 P 23 34 35.0 -0.4
**BOVS Bovan** 82.14 314 ⇓P P 23 34 37.2 0.0
**VYHS Vyhne** 82.24 319 *e*P P 23 34 38.5 +0.8
VYHS *e* 23 34 48.6
**CRAG Craig** 82.33 33 P P 23 34 38.1 +0.2
baz=295
**MORC Moravsky Berou** 82.54 320 *e*P P 23 34 40.1 +0.9
**JAVC Velka Javorina** 82.82 320 *e*P P 23 34 42.7 +2.0
**KSP Ksiaz** 82.86 322 *e*P P 23 34 41.9 +1.1
**FRGS Fruska Gora** 82.86 315 ⇓*i*P P 23 34 41.0 0.0
**FRGS Fruska Gora** 82.86 315 ⇑P P 23 34 41.5 +0.6
**WRGLY Wrigley** 82.98 24 P P 23 34 41.5 +0.3
baz=302
**DPC Dobruska-Polom** 83.04 321 *e*P P 23 34 42.9 +1.1
**T35M Bob Quinn** 83.11 31 P P 23 34 42.8 +0.8
baz=297
**MORH Mrgy, Hungar** 83.22 317 ⇑P P 23 34 43.2 +0.4
**VRAC Vranov** 83.29 320 *e*P P 23 34 44.3 +1.2
**VRAC Vranov** 83.29 320 ⇑P P 23 34 44.3 +1.2
**FNA Florina** 83.39 311 P P 23 34 42.2 -1.6
FNA IAmb IAmb 23 34 59.1
comp=Z,6.4nm,0.8s
**SJES Sjenica** 83.45 314 ⇓*i*P P 23 34 44.5 +0.3
**KRUC Moravsky** 83.51 320 *e*P P 23 34 45.1 +0.9
**RUE Ruedersdorf** 83.61 324 *e*P P 23 34 45.7 +1.1
comp=Z,15nm,0.6s,baz=62,slow=4.7
**BBLS Lazi&#263i** 83.61 314 ⇓*i*P P 23 34 45.4 +0.4
**HAPS Han Pijesak,BI** 83.83 315 *e*P P 23 34 46.2 +0.1
**KMBO Kilima Mbogo** 83.91 267 P 23 34 46.0 -1.2
**TREC Trest** 83.96 320 *e*P P 23 34 47.9 +1.3
**PUK Puka** 83.97 313 P P 23 34 46.5 -0.3
**RONA Rosalia, Austr** 84.12 319 *e*P P 23 34 47.6 +0.2
comp=Z,3.2nm,0.8s
**BRG Berggiesshubel** 84.20 322 *i* P P 23 34 48.4 +0.7
BRG Amp 23 34 49.3
comp=Z,10nm,1.0s
**BRG Berggiesshubel** 84.20 322 *e*P P 23 34 48.5 +0.7
comp=Z,1.0nm,1.0s,baz=62,slow=4.7
BRG *e*pP *pwP* 23 34 58.7 +3.8
**PRU Pruhonice** 84.23 321 *e*P P 23 34 48.7 +0.8
**TIR Tirane** 84.24 312 P P 23 34 47.9 -0.2
**PDG Podgorica** 84.26 313 P P 23 34 47.5 -0.6
PDG IAmb IAmb 23 34 59.1
comp=Z,8.4nm,0.8s
**PDG Podgorica** 84.26 313 ⇓*i*P P 23 34 47.7 -0.5
**PDG Podgorica** 84.26 313 ⇑P P 23 34 48.3 +0.1
**ITM Ithomi** 84.29 307 P 23 34 46.2 -2.3
**CONA Conrad Observa** 84.29 319 *e*P P 23 34 48.8 +0.4
comp=Z,4.0nm,1.0s
**DRME Dracevica, Mon** 84.40 313 ⇑*i*P P 23 34 49.1 +0.2
**CLL Collm** 84.55 323 P P 23 34 49.2 -0.3
CLL IAmb IAmb 23 35 01.2
comp=Z,12nm,1.0s
**CLL Collm** 84.55 323 ⇓*i*P P 23 34 49.5 +0.1
comp=Z,14nm,1.1s
CLL *i* x x 23 34 59.6
comp=Z,13nm,1.1s
CLL *e*PP PP 23 38 07.0 +2.6
CLL *e*(PPPP) 23 41 27.0
CLL AMS AMS 00 13 00.0
comp=Z,100nm,18.2s
**CLL Collm** 84.55 323 *e*P P 23 34 49.8 +0.4
comp=Z,10nm,0.9s,baz=62,slow=4.7
CLL *e*pP *pwP* 23 34 59.9 +3.2
**BRY Bratogost** 84.56 314 ⇑*i*P P 23 34 49.8 -0.1
**ZVC Zvikov** 84.67 321 *e*P P 23 34 50.4 +0.3
ZVC *ex* x 23 35 01.1
**GORT1 Trebel** 84.73 325 *e*P P 23 34 51.5 +1.2
comp=Z,24nm,1.2s,baz=62,slow=4.7
GORT1 *e*pP *pwP* 23 35 01.0 +3.6
**BLY Banja Luka** 84.74 316 ⇑*i*P P 23 34 50.3 -0.3
**ARSA Arzberg** 84.78 319 *e*P P 23 34 50.7 0.0
comp=Z,5.0nm,0.8s
**A051A Mrakovica** 84.81 316 ⇓*i*P P 23 34 50.8 -0.2
**BSEG Bad Segeberg** 84.82 326 *e*P P 23 34 51.7 +1.0
comp=Z,8.4nm,1.0s,baz=62,slow=4.7
BSEG *e*pP *pwP* 23 35 01.9 +4.0
**CKRC Cesky Krumlov** 84.86 320 *e*P P 23 34 52.0 +0.9
**MGRS Mrkonjic Grad** 84.94 316 ⇑*i*P P 23 34 52.1 +0.5
**FLTG Flechtingen** 85.07 324 *e*P P 23 34 52.3 +0.3
comp=Z,6.3nm,1.1s,baz=62,slow=4.7
FLTG *e*pP *pwP* 23 35 02.1 +2.9
**STON Ston** 85.14 314 ⇑*i*P P 23 34 52.1 -0.5
**KHC Kasperske Hory** 85.16 321 *e*P P 23 34 53.5 +0.8
KHC *ex* x 23 35 03.1
**GEC2 GERESS Array S** 85.21 321 P P 23 34 53.0 +0.1
GEC2 IAmb IAmb 23 35 04.4
comp=Z,7.8nm,0.9s
**GEC2 GERESS Array S** 85.21 321 *e*P P 23 34 53.4 +0.4
comp=Z,7.1nm,0.9s,baz=62,slow=4.7
GEC2 *e*pP *pwP* 23 35 03.8 +3.6
**GERES GERESS Array B** 85.21 321 P P 23 34 53.1 +0.1
**GERES GERESS Array B** 85.21 321 P P 23 34 49.5 -3.5
comp=Z,4.5nm,0.8s,baz=70,slow=1.6,SNR=20
comp=Z,4.5nm,0.8s
**TANN Tannenbergstha** 85.25 322 *e*P P 23 34 53.6 +0.5
comp=Z,5.6nm,1.1s,baz=62,slow=4.7
**A050A Klekovaca** 85.27 316 ⇑*i*P P 23 34 54.0 +0.6
**NEUB Neuenburg** 85.28 323 *e*P P 23 34 53.7 +0.6
comp=Z,15nm,1.2s,baz=62,slow=4.7
NEUB *e*pP *pwP* 23 35 03.7 +3.3
**MOA Molln** 85.30 320 *e*P P 23 34 54.0 +0.7
comp=Z,8.6nm,1.1s
**SOKA Soboth** 85.33 318 *e*P P 23 34 53.5 -0.1
comp=Z,6.0nm,0.7s,SNR=12
**PLN Plauen** 85.39 322 *e*P P 23 34 54.3 +0.6
comp=Z,4.1nm,1.0s,baz=62,slow=4.7
PLN *e*pP *pwP* 23 35 04.7 +3.8
**CRES Cresnjev** 85.42 317 ⇓*i*P P 23 34 54.0 0.0
**WET Wettzell** 85.57 321 *e*P P 23 34 55.6 +0.9
comp=Z,8.2nm,1.5s,baz=62,slow=4.7
**NRDL Niedersach Rie** 85.61 325 *e*P P 23 34 55.8 +1.1
comp=Z,22nm,1.7s,baz=62,slow=4.7
NRDL *e*pP *pwP* 23 35 05.5 +3.6
**MOX Moxa** 85.63 323 *e*P P 23 34 55.5 +0.6
comp=Z,10nm,1.4s,baz=62,slow=4.7
MOX *e*pP *pwP* 23 35 05.5 +3.4
**MANZ Manzenberg** 85.64 322 *e*P P 23 34 55.9 +0.9
comp=Z,1.7nm,1.2s,baz=62,slow=4.7
MANZ *e*pP *pwP* 23 35 05.8 +3.6
**BOJS Bojanci** 85.68 317 ⇑*i*P P 23 34 55.1 -0.2
**ROTZ Rotzenmuhle** 85.69 322 *e*P P 23 34 56.1 +0.9
comp=Z,1.6nm,1.0s,baz=62,slow=4.7
ROTZ *e*pP *pwP* 23 35 05.9 +3.4
**OBKA Obir** 85.70 318 *i* P P 23 34 55.4 -0.1
comp=Z,5.1nm,1.0s
**BIOA Bad Ischl, Aus** 85.75 320 *e*P P 23 34 55.8 +0.2
comp=Z,1.6nm,0.7s
**CLZ Clausthal** 85.77 324 *e*P P 23 34 56.6 +1.0
comp=Z,12nm,1.4s,baz=62,slow=4.7
CLZ *e*pP *pwP* 23 35 06.4 +3.5
**RETH Rethem/Aller,** 85.89 325 *e*P P 23 34 56.9 +0.8
comp=Z,8.2nm,1.3s,baz=62,slow=4.7
RETH *e*pP *pwP* 23 35 06.8 +3.5
**CEY Cerknica** 86.11 318 ⇓*i*P P 23 34 57.2 -0.2
**SUMG Summit** 86.11 354 P P 23 34 57.9 +0.5
SUMG IAmb IAmb 23 35 14.0
comp=Z,6.1nm,0.9s
**GTTG Gottingen** 86.13 324 *e*P P 23 34 58.2 +0.8
comp=Z,3.6nm,0.6s,baz=62,slow=4.7
GTTG *e*pP *pwP* 23 35 08.9 +4.3
**KBA Koelnbreinsper** 86.20 319 *e*P P 23 34 57.6 -0.4
comp=Z,4.3nm,1.1s,SNR=4.8
**RJOB Jochberg** 86.24 320 *e*P P 23 34 58.5 +0.4
comp=Z,2.7nm,0.8s,baz=62,slow=4.7
**GRF Grafenberg Arr** 86.29 322 *e*P P 23 34 59.8 +1.6
comp=Z,7.3nm,1.3s,baz=62,slow=4.7
**SKDS Skadanscina** 86.45 317 ⇑*i*P P 23 34 58.0 -1.1
**UBBA Unterbreizbach** 86.45 323 *e*P P 23 34 59.7 +0.9
comp=Z,9.2nm,1.5s,baz=62,slow=4.7
**YKA Yellowknife Ar** 86.70 22 P P 23 34 54.6 -5.3
comp=Z,1.2nm,0.8s,baz=315,slow=3.9,SNR=3.0
comp=Z,1.2nm,0.8s
**ABTA Abfaltersbach** 86.86 319 *e*P P 23 35 00.0 -1.1
comp=Z,4.5nm,1.0s,SNR=5.5
**STAL STALIGIAL** 86.95 319 P P 23 35 00.7 -0.8
STAL IAmb IAmb 23 35 12.4
comp=Z,7.8nm,1.0s
**IBBN Ibbenburen** 86.96 325 *e*P P 23 35 00.9 -0.5
baz=62,slow=4.7
IBBN *e*pP *pwP* 23 35 11.9 +3.3
**FUR Furstenfeldbru** 86.96 321 *e*P P 23 35 02.5 +1.0
comp=Z,11nm,1.0s,baz=62,slow=4.7
**KASTN Kahler Asten** 87.15 324 *e*P P 23 35 01.7 -0.7
comp=Z,1.6nm,0.7s,baz=62,slow=4.7
**WTTA Wattenberg** 87.16 320 *i* P P 23 35 02.4 -0.3
comp=Z,3.6nm,0.6s
**WATA Walderalm** 87.16 320 *e*P P 23 35 02.1 -0.6
comp=Z,1.8nm,0.6s
**TIP Timpagrande** 87.28 311 P 23 35 02.9 -0.5
TIP IAmb IAmb 23 35 14.6
comp=Z,5.8nm,1.1s
**SQTA Sankt Quirin** 87.44 320 *e*P P 23 35 03.4 -0.7
comp=Z,3.2nm,0.7s
**MOTA Moosalm** 87.44 320 *e*P P 23 35 03.2 -0.9
comp=Z,2.3nm,0.8s
**TNS Taunus Mts** 87.61 323 *e*P P 23 35 04.7 0.0
comp=Z,1.4nm,0.7s,baz=62,slow=4.7
**BUG Bochum--Univer** 87.65 325 *e*P P 23 35 05.0 +0.2
comp=Z,4.9nm,1.1s,baz=62,slow=4.7
BUG *e*pP *pwP* 23 35 15.4 +3.4
**CTI Castel Tesino** 87.71 319 P P 23 35 05.1 -0.2
**FETA Feichten** 87.82 320 *e*P P 23 35 05.2 -0.7
comp=Z,3.0nm,0.9s
**UBR Ueberruh** 87.88 321 *e*P P 23 35 06.1 +0.1
comp=Z,5.6nm,1.0s,baz=62,slow=4.7
UBR *e*pP *pwP* 23 35 16.3 +3.0
**FDMO Fiordimonte** 88.15 316 P P 23 35 07.1 -0.3
FDMO IAmb IAmb 23 35 09.8
comp=Z,6.3nm,1.0s
**DAVA Damuels** 88.20 320 *e*P P 23 35 07.5 -0.2
comp=Z,2.0nm,0.8s
**AHRW Bad Neuenahr-A** 88.21 324 *e*P P 23 35 07.9 +0.5
comp=Z,5.2nm,1.1s,baz=62,slow=4.7
**CEL Celeste** 88.28 310 P P 23 35 07.3 -0.8
**FUORN Ofenpass-Fuorn** 88.29 320 P P 23 35 07.8 -0.5
FUORN IAmb IAmb 23 35 20.1
comp=Z,4.5nm,0.7s
**RAR Rarotonga** 88.36 113 LR LR 00 12 16.8
comp=Z,50nm,20.2s,baz=277,slow=34
**BFO Black Forest** 88.61 322 *e*P P 23 35 09.2 -0.2
comp=Z,2.5nm,0.9s,baz=62,slow=4.7
**ZCCA Zocca** 88.91 317 P P 23 35 11.1 +0.1
**TUE Stuetta** 88.92 320 P P 23 35 10.6 -0.6
TUE IAmb IAmb 23 35 22.3
comp=Z,4.7nm,0.9s
**WLF Walferdange** 89.17 324 P 23 35 11.9 -0.1
**WLF Walferdange** 89.17 324 *e*P P 23 35 12.7 +0.7
comp=Z,6.2nm,0.8s,baz=62,slow=4.7
WLF *e*pP *pwP* 23 35 23.0 +3.8
**MBAR Mbarara** 89.83 269 LR LR 00 14 30.9
comp=Z,17nm,21.0s,baz=66,slow=35

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SENIN | Lac Senin/Sane | 90.20 | 320 | P | | P | | 23 35 16.6 | -0.6 |
| EKA | Eskdalemuir Ar | 90.61 | 332 | P | | P | | 23 35 15.2 | -3.5 |
| | comp=Z,0.8nm,0.6s,baz=27,slow=31,SNR=3.1 comp=Z,0.8nm,0.6s | | | | | | | | |
| BNI | Bardonecchia | 91.24 | 320 | P | | P | | 23 35 21.9 | 0.0 |
| BNI | | | | IAmb | | IAmb | | 23 35 39.6 | |
| | comp=Z,7.7nm,1.1s | | | | | | | | |
| SFJD | Kangerlussuaq | 92.55 | 356 | LR | | LR | | 00 21 10.0 | |
| | comp=Z,21nm,18.2s,baz=347,slow=38 | | | | | | | | |
| PINE | Pine Mountain | 94.98 | 40 | P | | P | | 23 35 39.7 | +0.4 |
| PINE | | | | IAmb | | IAmb | | 23 35 45.3 | |
| | comp=Z,4.3nm,1.1s | | | | | | | | |
| PPT | Papeete | 96.06 | 106 | LR | | LR | | 00 15 44.5 | |
| | comp=Z,15nm,19.3s,baz=302,slow=34 | | | | | | | | |
| PPT2 | Papeete2 | 96.07 | 106 | eLR | | LR | | 00 06 44.6 | |
| | comp=Z,105nm,27.0s | | | | | | | | |
| EGMT | Eagleton | 98.42 | 31 | P | | P | | 23 35 54.6 | 0.0 |
| | baz=314 | | | | | | | | |
| HLID | Hailey | 98.91 | 37 | P | | P | | 23 35 57.1 | 0.0 |
| | baz=310 | | | | | | | | |
| BOZ | Bozeman (W) | 99.11 | 34 | P | | Pdif | | 23 35 57.6 | -0.2 |
| | baz=312 | | | | | | | | |
| MLAC | Mammoth, Mammo | 99.81 | 44 | P | | Pdif | | 23 36 01.1 | -0.2 |
| | baz=306 | | | | | | | | |
| VOG | Valley Oaks Go | 100.20 | 45 | P | | Pdif | | 23 36 03.1 | +0.4 |
| | baz=305 | | | | | | | | |
| SMMC | Simmler | 100.35 | 46 | P | | Pdif | | 23 36 03.5 | 0.0 |
| | baz=304 | | | | | | | | |
| RLMT | Red Lodge | 100.66 | 33 | P | | Pdif | | 23 36 04.8 | -0.1 |
| | baz=314 | | | | | | | | |
| DGMT | Dagmar | 100.69 | 28 | P | | Pdif | | 23 36 04.0 | -0.7 |
| | baz=318 | | | | | | | | |
| PKM | Mcpherson Peak | 100.71 | 47 | P | | Pdif | | 23 36 05.2 | -0.1 |
| | baz=304 | | | | | | | | |
| SBC | Santa Barbara | 101.03 | 47 | P | | Pdif | | 23 36 06.8 | +0.4 |
| | baz=304 | | | | | | | | |
| LAO | LASA Array | 101.06 | 31 | P | | Pdif | | 23 36 06.1 | -0.4 |
| | baz=316 | | | | | | | | |
| GRAC | Grapevine Rang | 101.13 | 44 | P | | Pdif | | 23 36 06.8 | -0.1 |
| | baz=306 | | | | | | | | |
| ISA | Isabella, Lake | 101.17 | 45 | P | | Pdif | | 23 36 07.0 | -0.2 |
| | baz=306 | | | | | | | | |
| ARVC | Arvin | 101.24 | 46 | P | | Pdif | | 23 36 07.8 | +0.4 |
| | baz=305 | | | | | | | | |
| SCZ2 | Santa Cruz Isl | 101.33 | 47 | P | | Pdif | | 23 36 07.9 | 0.0 |
| | baz=304 | | | | | | | | |
| R11B | Troy Canyon, C | 101.45 | 42 | P | | Pdif | | 23 36 08.4 | -0.1 |
| | baz=308 | | | | | | | | |
| MPMC | Manual Prospec | 101.60 | 44 | P | | Pdif | | 23 36 09.7 | +0.5 |
| | baz=306 | | | | | | | | |
| OSI | Osito Audit: C | 101.61 | 46 | P | | Pdif | | 23 36 09.7 | +0.6 |
| | baz=305 | | | | | | | | |
| FURC | Furnace Creek, | 101.77 | 44 | P | | Pdif | | 23 36 10.7 | +1.0 |
| | baz=307 | | | | | | | | |
| SNCC | San Nicolas Is | 101.83 | 48 | P | | Pdif | | 23 36 09.8 | -0.3 |
| | baz=304 | | | | | | | | |
| TPNV | Topopah Spring | 101.87 | 43 | P | | Pdif | | 23 36 10.2 | -0.2 |
| | baz=307 | | | | | | | | |
| EDW2 | Edwards Air Fo | 101.95 | 46 | P | | Pdif | | 23 36 10.9 | +0.3 |
| | baz=306 | | | | | | | | |
| DUG | Dugway, Tooele | 101.97 | 39 | P | | Pdif | | 23 36 11.0 | +0.3 |
| | baz=310 | | | | | | | | |
| DECC | Green Verdugo | 102.08 | 46 | P | | Pdif | | 23 36 11.5 | +0.3 |
| | baz=305 | | | | | | | | |
| BW06 | Boulder Array | 102.11 | 35 | P | | Pdif | | 23 36 11.5 | +0.1 |
| | baz=313 | | | | | | | | |
| FMP | Fort Macarthur | 102.41 | 47 | P | | Pdif | | 23 36 12.6 | 0.0 |
| | baz=305 | | | | | | | | |
| SHOC | Shoshone, Teco | 102.48 | 44 | P | | Pdif | | 23 36 12.2 | -0.8 |
| | baz=307 | | | | | | | | |
| GSC | Goldstone, Bar | 102.49 | 45 | P | | Pdif | | 23 36 12.9 | -0.2 |
| | baz=307 | | | | | | | | |
| BFSC | Mount Baldy Ra | 102.54 | 46 | P | | Pdif | | 23 36 13.2 | -0.2 |
| | baz=306 | | | | | | | | |
| SCI2 | San Clemente I | 102.66 | 48 | P | | Pdif | | 23 36 13.8 | 0.0 |
| | baz=305 | | | | | | | | |
| TUQ | Turquoise Moun | 102.99 | 44 | P | | Pdif | | 23 36 14.9 | -0.5 |
| | baz=307 | | | | | | | | |
| BBRC | Big Bear Solar | 103.03 | 46 | P | | Pdif | | 23 36 15.4 | -0.2 |
| | baz=306 | | | | | | | | |
| HEC | Hector,Ludlow | 103.08 | 45 | P | | Pdif | | 23 36 16.0 | +0.3 |
| | baz=307 | | | | | | | | |
| MDND | Maddock | 103.15 | 26 | P | | Pdif | | 23 36 14.8 | -0.8 |
| | baz=322 | | | | | | | | |
| MURC | Murrieta | 103.23 | 46 | P | | Pdif | | 23 36 17.1 | +0.8 |
| | baz=306 | | | | | | | | |
| GMRC | Granite Mounta | 103.55 | 45 | P | | Pdif | | 23 36 18.0 | +0.1 |
| | baz=307 | | | | | | | | |
| 109C | Camp Elliot, M | 103.70 | 47 | P | | Pdif | | 23 36 19.7 | +1.3 |
| | baz=306 | | | | | | | | |
| PFO | Pinyon Flats O | 103.72 | 46 | P | | Pdif | | 23 36 19.5 | +0.9 |
| | baz=306 | | | | | | | | |
| TPFO | Pinon Flats | 103.72 | 46 | P | | Pdif | | 23 36 19.0 | +0.4 |
| | baz=306 | | | | | | | | |
| BELC | Belle Mtn. Jos | 103.80 | 45 | P | | Pdif | | 23 36 19.3 | +0.3 |
| | baz=307 | | | | | | | | |
| K22A | Casper | 103.80 | 34 | P | | Pdif | | 23 36 18.9 | 0.0 |
| | baz=316 | | | | | | | | |
| RSSD | Black Hills | 103.99 | 31 | P | | Pdif | | 23 36 19.9 | +0.1 |
| | baz=318 | | | | | | | | |
| MONP2 | Monument Peak | 104.17 | 47 | P | | Pdif | | 23 36 21.0 | +0.3 |
| | baz=306 | | | | | | | | |
| NEE2 | Needles Airpor | 104.25 | 44 | P | | Pdif | | 23 36 22.0 | +1.2 |
| | baz=308 | | | | | | | | |
| IRM | Iron Mountain | 104.27 | 45 | P | | Pdif | | 23 36 21.7 | +0.8 |
| | baz=308 | | | | | | | | |
| AGMN | Agassiz Nation | 104.28 | 24 | P | | Pdif | | 23 36 20.8 | +0.2 |
| | baz=325 | | | | | | | | |
| BC3 | Big Chuckawall | 104.37 | 45 | P | | Pdif | | 23 36 22.1 | +0.6 |
| | baz=307 | | | | | | | | |
| IKP | In-Ko-Pah, Jac | 104.52 | 47 | P | | Pdif | | 23 36 22.6 | +0.4 |
| | baz=306 | | | | | | | | |
| SWSC | Sam W. Stewart | 104.56 | 46 | P | | Pdif | | 23 36 22.5 | +0.3 |
| | baz=307 | | | | | | | | |
| O20A | White River Ci | 104.63 | 36 | P | | Pdif | | 23 36 22.3 | -0.3 |
| | baz=314 | | | | | | | | |
| PDMCI | Parker Dam,Lak | 104.84 | 44 | P | | Pdif | | 23 36 23.4 | 0.0 |
| | baz=308 | | | | | | | | |
| GLA | Glamis | 105.15 | 46 | P | | Pdif | | 23 36 25.4 | +0.5 |
| | baz=308 | | | | | | | | |
| N23A | Red Feather La | 105.35 | 35 | P | | PKiKP | | 23 40 39.5 | -0.3 |
| | baz=316 | | | | | | | | |
| SUSD | Miller | 106.11 | 28 | P | | PKiKP | | 23 40 41.2 | +0.4 |
| | baz=322 | | | | | | | | |
| EYMN | Ely | 106.17 | 22 | P | | PKiKP | | 23 40 41.1 | +0.3 |
| | baz=329 | | | | | | | | |
| ISCO | Idaho Springs | 106.31 | 35 | P | | PKiKP | | 23 40 42.0 | +0.3 |
| | baz=316 | | | | | | | | |
| MVCO | Mesa Verde | 106.47 | 39 | P | | PKiKP | | 23 40 42.1 | +0.1 |
| | baz=313 | | | | | | | | |
| W18A | Petrified Fore | 107.12 | 41 | P | | PKiKP | | 23 40 42.8 | -0.3 |
| | baz=312 | | | | | | | | |
| Q24A | Divide | 107.16 | 36 | P | | PKiKP | | 23 40 43.1 | -0.1 |
| | baz=316 | | | | | | | | |
| 214A | Organ Pipe Nat | 107.16 | 45 | P | | PKiKP | | 23 40 42.4 | -0.7 |
| | baz=309 | | | | | | | | |
| SDCO | Great Sand Dun | 107.83 | 37 | P | | PKiKP | | 23 40 44.2 | -0.4 |
| | baz=315 | | | | | | | | |
| TUC | Tucson | 108.28 | 44 | P | | PKiKP | | 23 40 44.4 | -0.8 |
| | baz=310 | | | | | | | | |
| T25A | Trinidad | 108.87 | 36 | P | | PKiKP | | 23 40 45.7 | -0.7 |
| | baz=316 | | | | | | | | |
| ANMO | Albuquerque | 109.23 | 39 | P | | PKiKP | | 23 40 46.3 | -0.8 |
| | baz=314 | | | | | | | | |
| 121A | Cookes Peak, D | 110.05 | 42 | P | | PKiKP | | 23 40 48.4 | -0.3 |
| | baz=312 | | | | | | | | |
| SCIA | State Center | 110.62 | 26 | P | | PKiKP | | 23 40 49.1 | -0.1 |
| | baz=327 | | | | | | | | |
| RKT | Rikitea | 110.77 | 108 | eLR | | LR | | 00 13 37.7 | |
| | comp=Z,365nm,28.2s | | | | | | | | |
| JFWS | Jewell Farm | 110.94 | 24 | P | | PKiKP | | 23 40 50.0 | +0.2 |
| | baz=330 | | | | | | | | |
| KSU1 | Kansas State U | 111.40 | 30 | P | | PKiKP | | 23 40 49.4 | -1.4 |
| | baz=323 | | | | | | | | |
| TXAR | Lajitas Array | 114.81 | 42 | PKP | | PKiKP | | 23 40 51.3 | -6.5 |
| | comp=Z,0.1nm,0.6s,baz=312,slow=9.5,SNR=1.7 | | | | | | | | |
| ABTX | Abilene, Hawle | 114.83 | 37 | P | | PKiKP | | 23 40 56.8 | -0.8 |
| | baz=319 | | | | | | | | |
| P49A | Miami Univ. Ec | 115.89 | 21 | P | | PKiKP | | 23 40 58.3 | -1.1 |
| | baz=334 | | | | | | | | |
| L61B | Northampton | 116.27 | 11 | P | | PKiKP | | 23 40 59.5 | -0.6 |
| | baz=347 | | | | | | | | |
| P52A | Corning | 116.65 | 19 | P | | PKPdf | | 23 40 59.7 | -1.2 |
| | baz=337 | | | | | | | | |
| SSPA | Standing Stone | 116.90 | 15 | P | | PKPdf | | 23 40 59.5 | -1.8 |
| | baz=341 | | | | | | | | |
| MCWV | Mont Chateau | 117.30 | 17 | P | | PKPdf | | 23 40 59.7 | -2.4 |
| | baz=339 | | | | | | | | |
| 833A | Chaparral WMA, | 118.15 | 40 | P | | PKPdf | | 23 41 03.2 | -0.9 |
| | baz=318 | | | | | | | | |
| TZTN | Tazewell | 118.98 | 22 | P | | PKPdf | | 23 41 05.4 | -0.1 |
| | baz=335 | | | | | | | | |

**VAO 05 23:28:55.6±0.7, 13.76°S×71.44°W, h93km, mb4.1, Central Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 4.07 | 129 | eP | Pn | 23 29 55.8 | -0.5 |
| CZSB | Cruzeiro do Su | 6.12 | 348 | eP | Pn | 23 30 23.0 | -0.5 |
| ETMB | Extrema | 6.45 | 53 | eP | Pn | 23 30 28.1 | +0.2 |
| LVC | Limon Verde | 9.13 | 165 | eP | Pn | 23 31 05.0 | +0.2 |
| SAML | Samuel | 9.40 | 60 | eP | Pn | 23 31 08.0 | -0.3 |
| VILB | Vilhena | 10.97 | 87 | eP | Pn | 23 31 28.2 | -1.5 |
| BBSD | Serra de San D | 10.98 | 109 | eP | Pn | 23 31 29.7 | -0.2 |
| PTLB | Pontes e Lacer | 12.03 | 100 | eP | Pn | 23 31 43.4 | -0.5 |
| PDRB | Porto dos Gac | 14.51 | 83 | eP | Pn | 23 32 17.0 | +0.5 |
| MACA | Manacapuru-AM | 14.96 | 46 | eP | Pn | 23 32 22.9 | +0.6 |
| SALV | Santo Antonio | 15.38 | 100 | eP | Pn | 23 32 27.5 | 0.0 |
| ITTB | Itaituba | 18.09 | 60 | eP | P | 23 32 59.4 | -0.7 |

**IDC 05 23:41:30.8±5.9, 10.42°S×118.02°E, h0km, mb3.3/2, mbtmp3.5/3, ML3.6/1, MS3.2/1, Error ellipse: s-maj=260.7km s-min=31.9km az=54.0, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 18.36 | 123 | P | Pn | 23 45 46.5 | -0.6 |
| | 0.2nm,0.3s,baz=300,slow=12,SNR=17 0.9nm,0.5s | | | | | | |
| ASAR | Alice Springs | 20.08 | 133 | P | P | 23 46 06.5 | +0.5 |
| | 0.7nm,0.8s,baz=304,slow=8.8,SNR=2.2 0.7nm,0.8s | | | | | | |
| PALK | Pallekele | 41.10 | 294 | LR | LR | 00 07 03.0 | |
| | comp=Z,28nm,18.9s,baz=222,slow=37 | | | | | | |
| SONM | Songino Array | 58.91 | 351 | P | P | 23 51 31.7 | -0.1 |
| | 0.5nm,0.8s,baz=185,slow=5.2,SNR=2.7 0.5nm,0.8s | | | | | | |

*BJI **05** 23:42:28.6±0.0, 24.97°N×123.42°E, h10km, mb4.4/18, mB4.5/6, ML4.0/3, Ms4.0/13, Ms7 3.8/11*
*NIED **05** 23:42:29.2, 25.02°N×123.60°E, h16km, MW4.3, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr-2.46; Mθθ2.35; Mφφ0.11; Mrθ-1.84; Mθφ0.63; Mφr-0.48; Fault plane solution: M0 3.13000×10¹⁵ NP1:φs 75.00000°, δ64.00000°, λ-90.00000°. NP2:φs 255.00000°, δ26.00000°, λ-90.00000°.*
*JMA **05** 23:42:29.2±0.2, 25.0°N×123.6°E±0.3, h16km, MD4.3/11, MV4.0/11, NW OFF ISHIGAKIJIMA IS*
*NEIC **05** 23:42:29.1±0.9, 25.01°N±0.0°×123.58°E±0.06, h10km±1km, mb4.2/7, Error ellipse: s-maj=12.5km s-min=7.4km az=328.0*
*IDC **05** 23:42:37.9±3.1, 25.20°N×123.92°E, h109km±33km, mb3.5/11, mbtmp3.9/13, MS3.5/27, Error ellipse: s-maj=25.8km s-min=14.1km az=73.0*

**ISC 05 23:42:29.2±1.4, 25.01°N±0.05°×123.60°E±0.03, h16km±10km, n77, σ1s24/56, mb4.1/18, MS3.6/25, 1C, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IRIF | Iriomote-Funau | 0.68 | 170 | P | Pg | 23 42 42.4 | -0.2 |
| IRIF | | | | eS | Sb | 23 42 52.0 | +0.1 |
| IRIF | Iriomote-Funau | 0.68 | 170 | A | A | 23 42 42.4 | |
| | comp=E,26nm,1.5s,comp=N,25nm,0.9s | | | | | | |
| YOJ | Yonaguni jima | 0.76 | 224 | Pg | Pb | 23 42 43.5 | -0.6 |
| YOJ | Yonaguni jima | 0.76 | 224 | P | Pb | 23 42 43.8 | -0.3 |
| YOJ | | | | eS | Sg | 23 42 53.5 | -0.7 |
| YOJ | Yonaguni jima | 0.76 | 224 | A | A | 23 42 43.8 | |
| | comp=E,13nm,2.5s,comp=N,11nm,4.5s | | | | | | |
| JISG | Ishigakijimahi | 0.77 | 123 | P | Pb | 23 42 44.0 | -0.3 |
| JISG | | | | eS | Sg | 23 42 53.8 | -0.6 |
| JISG | Ishigakijimahi | 0.77 | 123 | A | A | 23 42 44.0 | |
| | comp=E,25nm,0.7s,comp=N,21nm,0.7s | | | | | | |
| JIJ | Ishigaki jima | 0.81 | 142 | P | Pb | 23 42 44.2 | -0.7 |
| JIJ | | | | S | Sb | 23 42 54.8 | -0.9 |
| JIJ | Ishigaki jima | 0.81 | 142 | A | A | 23 42 44.2 | |
| | comp=E,9.0nm,1.0s,comp=N,10.0nm,1.4s | | | | | | |
| JYNG | Yonagunijimaku | 0.81 | 227 | P | Pb | 23 42 44.6 | -0.3 |
| JYNG | | | | eS | Sb | 23 42 55.2 | -0.5 |
| JYNG | Yonagunijimaku | 0.81 | 227 | A | A | 23 42 44.6 | |
| | comp=E,9.0nm,4.0s,comp=N,11nm,1.2s | | | | | | |
| JKRS | Kuro-shima | 0.86 | 154 | P | Pb | 23 42 45.3 | -0.3 |
| JKRS | | | | eS | Sb | 23 42 56.8 | -0.1 |
| JKRS | Kuro-shima | 0.86 | 154 | A | A | 23 42 45.3 | |
| | comp=E,28nm,0.9s,comp=N,47nm,3.6s | | | | | | |
| HATJ | Hateruma jima | 0.97 | 169 | P | Pb | 23 42 47.2 | -0.3 |
| HATJ | | | | S | Sg | 23 43 01.0 | +0.4 |
| HATJ | Hateruma jima | 0.97 | 169 | A | A | 23 42 47.2 | |
| | comp=E,25nm,1.9s,comp=N,25nm,4.2s | | | | | | |
| JTJ | Tarama | 1.07 | 110 | P | Pb | 23 42 49.1 | -0.2 |
| JTJ | | | | eS | Sg | 23 43 03.6 | -0.3 |
| JTJ | Tarama | 1.07 | 110 | A | A | 23 42 49.1 | |
| | comp=E,26nm,1.0s,comp=N,17nm,1.3s | | | | | | |
| JIKM | Ikemajima | 1.50 | 93 | eP | Pb | 23 42 56.2 | -0.4 |
| JMJ2 | Miyako jima3 | 1.59 | 99 | A | A | 23 42 57.2 | |
| | comp=E,8.0nm,4.5s,comp=N,8.0nm,5.9s | | | | | | |
| TATO | Taipei | 1.92 | 269 | | Pn | 23 43 02.0 | +0.9 |
| NACB | Ninganchiao | 2.00 | 246 | | Pn | 23 43 03.6 | +1.2 |
| YHNB | Yeheng | 2.05 | 261 | | Pn | 23 43 03.2 | +0.2 |
| YULB | Yu-li | 2.65 | 233 | | Pn | 23 43 11.8 | +0.6 |
| SSLB | Suanglung | 2.70 | 244 | | Pn | 23 43 13.7 | +1.7 |
| TWG | Pinlang | 3.18 | 227 | | Pn | 23 43 19.5 | +1.0 |
| TPUB | Ta-pu | 3.20 | 238 | | Pn | 23 43 19.7 | +0.9 |
| JOW | Kunigami | 4.58 | 66 | | Pn | 23 43 38.6 | +0.7 |
| JOW | Kunigami | 4.58 | 66 | P | Pn | 23 43 39.7 | +1.8 |
| | comp=N,21nm,0.7s,baz=260,slow=13,SNR=8.2 | | | | | | |
| JNU | Nakatsue | 10.29 | 37 | P | Pn | 23 44 58.8 | +2.6 |
| | comp=N,3.7nm,0.9s,baz=138,slow=15,SNR=2.4 | | | | | | |
| JNU | | | | LR | LR | 23 49 23.3 | |
| | comp=N,124nm,18.4s,baz=213,slow=41 | | | | | | |
| KSRS | Korea Array | 12.94 | 16 | P | P | 23 45 40.6 | -2.4 |
| | comp=N,4.8nm,1.0s,baz=194,slow=11,SNR=5.5 | | | | | | |
| KSRS | | | | LR | LR | 23 50 35.3 | |
| | comp=N,133nm,20.9s,baz=200,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 17.00 | 44 | LR | LR | 23 53 34.7 | |
| | comp=N,61nm,18.3s,baz=228,slow=39 | | | | | | |
| DAV | Davao City (W) | 17.94 | 174 | LR | LR | 23 53 09.5 | |
| | comp=N,157nm,21.8s,baz=332,slow=35 | | | | | | |
| HHC | Hu-ho-hao-te | 18.72 | 330 | eP | P | 23 46 46.0 | -1.2 |
| HHC | | | | pP | sP | 23 46 53.1 | +0.2 |
| HHC | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=N,100nm,4.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,240nm,14.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,270nm,13.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,230nm,16.8s | | | | | | |
| CN2 | Changchun | 18.81 | 4 | P | Pn | 23 46 49.6 | +1.1 |
| CN2 | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.5s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=N,400nm,14.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=N,300nm,14.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=N,500nm,15.0s | | | | | | |
| PZH | PanZhiHua | 19.74 | 279 | P | Pn | 23 47 02.2 | +2.2 |
| PZH | | | | S | S | 23 50 39.9 | -0.8 |
| PZH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=N,120nm,5.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=N,190nm,11.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=N,180nm,10.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=N,200nm,10.0s | | | | | | |
| LZH | Lanzhou | 20.24 | 308 | eP | Pn | 23 47 08.8 | +2.9 |
| LZH | | | | sP | pwP | 23 47 15.0 | +4.4 |
| LZH | | | | pmax | pmax | | |
| | comp=N,26nm,0.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,330nm,15.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,230nm,15.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,280nm,16.8s | | | | | | |
| USRK | Ussuriysk Ar. | 20.33 | 18 | P | P | 23 47 03.7 | -0.9 |
| | comp=N,6.4nm,1.0s,baz=202,slow=8.1,SNR=6.8 | | | | | | |
| USRK | | | | LR | LR | 23 54 49.7 | |
| | comp=N,90nm,18.6s,baz=193,slow=36 comp=N,6.4nm,1.0s | | | | | | |
| BNX | BinXian | 20.91 | 7 | ⇑P | Pn | 23 47 13.8 | +0.4 |
| BNX | | | | pmax | pmax | | |
| | comp=N,22nm,1.1s | | | | | | |
| GUMO | Guam | 23.03 | 116 | LR | LR | 23 54 28.6 | |
| | comp=N,31nm,21.3s,baz=281,slow=31 | | | | | | |
| CMAR | Chiang Mai Arr | 23.79 | 259 | P | P | 23 47 43.2 | +1.9 |
| | comp=N,0.8nm,0.3s,baz=21,slow=18,SNR=1.5 comp=N,0.8nm,0.3s | | | | | | |
| ASAJ | Asahikawa | 24.55 | 34 | LR | LR | 23 56 55.0 | |
| | comp=N,72nm,18.6s,baz=198,slow=35 | | | | | | |
| KLR | Kul'dur | 25.00 | 13 | LR | LR | 23 57 52.7 | |
| | comp=N,122nm,18.9s,baz=218,slow=37 | | | | | | |
| HEH | HeiHe | 25.37 | 6 | eP | P | 23 47 57.2 | +1.7 |
| HEH | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.1s | | | | | | |
| ULN | Ulaanbaatar | 26.30 | 334 | P | P | 23 48 03.9 | -0.2 |
| ULN | | | | IAmb | IAmb | 23 48 23.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| SONM | Songino Array | 26.54 | 334 | P | P | 23 48 05.0 | -1.3 |
| | comp=Z,0.7nm,0.5s,baz=150,slow=10,SNR=7.0 | | | | | | |
| SONM | | | | LR | LR | 23 59 22.2 | |
| | comp=Z,118nm,20.6s,baz=130,slow=38 comp=Z,0.7nm,0.5s | | | | | | |
| KAPI | Kappang | 30.08 | 188 | P | P | 23 48 38.1 | +0.2 |
| | comp=Z,15nm,0.5s,baz=37,slow=7.0,SNR=1.8 | | | | | | |
| KAPI | | | | LR | LR | 00 00 37.5 | |
| | comp=Z,66nm,20.4s,baz=290,slow=36 | | | | | | |
| GSI | Gunungsitoli | 34.45 | 231 | P | P | 23 49 17.0 | +0.7 |
| WMQ | Urumqi | 34.71 | 312 | eP | P | 23 49 21.1 | +2.7 |
| WMQ | | | | LR | LR | | |
| | comp=Z,140nm,11.7s | | | | | | |
| YAK | Yakutsk | 37.24 | 5 | LR | LR | 00 07 22.3 | |
| | comp=Z,77nm,19.4s,baz=188,slow=40 | | | | | | |
| MK31 | Makanchi Array | 39.31 | 314 | P | P | 23 49 57.5 | 0.0 |
| MKAR | Makanchi Array | 39.31 | 314 | P | P | 23 49 57.4 | 0.0 |
| MKAR | Makanchi Array | 39.31 | 314 | P | P | 23 49 56.9 | -0.5 |
| | comp=Z,3.5nm,0.9s,baz=106,slow=9.7,SNR=26 | | | | | | |
| MKAR | | | | LR | LR | 00 07 33.5 | |
| | comp=Z,116nm,18.2s,baz=72,slow=38 comp=Z,3.5nm,0.9s | | | | | | |
| MA2 | Magadan | 39.40 | 21 | LR | LR | 00 07 24.1 | |
| | comp=Z,78nm,18.1s,baz=247,slow=38 | | | | | | |
| MAKZ | Makanchi | 39.52 | 314 | P | P | 23 49 59.0 | -0.1 |
| MAKZ | | | | IAmb | IAmb | 23 50 07.6 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 40.78 | 325 | P | P | 23 50 09.2 | -0.3 |
| ZALV | Zalesovo Beam | 40.78 | 325 | P | P | 23 50 07.7 | -1.8 |
| | comp=Z,2.2nm,0.7s,baz=108,slow=9.5,SNR=10 | | | | | | |
| ZALV | | | | LR | LR | 00 08 15.8 | |
| | comp=Z,82nm,19.3s,baz=110,slow=38 comp=Z,2.2nm,0.7s | | | | | | |
| PMG | Port Moresby | 41.20 | 143 | LR | LR | 00 04 33.2 | |
| | comp=Z,36nm,21.8s,baz=243,slow=32 | | | | | | |
| KSH | Kashi | 42.31 | 302 | P | P | 23 50 26.6 | +4.2 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| KURK | Kurchatov | 42.90 | 319 | P | P | 23 50 26.8 | 0.0 |
| KURK | | | | IAmb | IAmb | 23 50 28.5 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| KURBB | Kurchatov Arra | 42.92 | 319 | P | P | 23 50 26.2 | -0.9 |
| | comp=Z,3.7nm,1.0s,baz=110,slow=8.3,SNR=9.7 comp=Z,3.7nm,1.0s | | | | | | |
| AAK | Ala-Archa | 43.77 | 306 | LR | LR | 00 09 18.6 | |
| | comp=Z,62nm,19.9s,baz=104,slow=36 | | | | | | |
| WRA | Warramunga Arr | 45.89 | 166 | P | P | 23 50 51.0 | -0.1 |
| | comp=Z,1.8nm,0.9s,baz=346,slow=8.7,SNR=9.1 comp=Z,1.8nm,0.9s | | | | | | |
| TIXI | Tiksi | 46.77 | 2 | LR | LR | 00 13 20.6 | |
| | comp=Z,151nm,18.2s,baz=194,slow=40 | | | | | | |
| AS31 | Alice Springs | 49.41 | 168 | P | P | 23 51 18.6 | +0.2 |
| AS31 | | | | IAmb | IAmb | 23 51 43.1 | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| ASAR | Alice Springs | 49.41 | 168 | P | P | 23 51 17.9 | -0.5 |
| | comp=Z,0.6nm,0.7s,baz=348,slow=6.7,SNR=4.3 | | | | | | |
| ASAR | | | | LR | LR | 00 12 54.7 | |
| | comp=Z,23nm,21.2s,baz=194,slow=37 comp=Z,0.6nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 54.45 | 314 | P | P | 23 51 55.8 | +0.1 |
| ABKAR | | | | IAmb | IAmb | 23 52 04.6 | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| ARU | Arti | 55.78 | 322 | LR | LR | 00 16 51.7 | |
| | comp=Z,65nm,20.7s,baz=101,slow=37 | | | | | | |
| KIRV | Kirov | 60.81 | 325 | LR | LR | 00 21 28.2 | |
| | comp=Z,145nm,18.1s,baz=94,slow=38 | | | | | | |
| GNI | Garni | 66.14 | 305 | LR | LR | 00 25 23.4 | |
| | comp=Z,31nm,19.7s,baz=102,slow=39 | | | | | | |
| ILAR | Eielson Array | 67.47 | 28 | P | P | 23 53 18.6 | -5.4 |
| | comp=Z,0.5nm,1.1s,baz=194,slow=8.7,SNR=4.5 comp=Z,0.5nm,1.1s | | | | | | |
| SPITS | Spitsbergen Ar | 69.14 | 348 | LR | LR | 00 27 06.5 | |
| | comp=Z,39nm,20.4s,baz=76,slow=39 | | | | | | |
| INK | Inuvik | 71.63 | 22 | LR | LR | 00 27 03.1 | |
| | comp=Z,15nm,18.9s,baz=327,slow=37 | | | | | | |
| FINES | FINESS Array B | 71.84 | 330 | P | P | 23 53 49.4 | -1.6 |
| | comp=Z,2.4nm,0.9s,baz=350,slow=9.7,SNR=4.4 | | | | | | |
| FINES | | | | LR | LR | 00 28 25.1 | |
| | comp=Z,78nm,18.4s,baz=61,slow=38 comp=Z,2.4nm,0.9s | | | | | | |
| BRTR | Keskin Array B | 74.45 | 307 | P | P | 23 54 05.0 | -2.0 |
| | comp=Z,0.4nm,0.8s,baz=70,slow=11,SNR=2.4 comp=Z,0.4nm,0.8s | | | | | | |
| HFS | Hagfors | 77.91 | 331 | LR | LR | 00 32 14.7 | |
| | comp=Z,86nm,18.6s,baz=58,slow=38 | | | | | | |
| NOA | NORSAR Array B | 78.51 | 333 | LR | LR | 00 32 55.2 | |
| | comp=Z,55nm,18.9s,baz=60,slow=38 | | | | | | |
| JMIC | Jan Mayen | 78.59 | 346 | LR | LR | 00 34 15.7 | |
| | comp=Z,28nm,18.8s,baz=44,slow=40 | | | | | | |

*DJA **05** 23:46:31.5±0.5, 9.3°S±14.1°×117.7°E±, h10km, M4.3/6, MLv4.3/6*
*IDC **05** 23:46:35.1±1.9, 8.35°S×115.90°E, h0km, mb3.6/4, mbtmp3.7/5, ML3.8/1, MS2.9/2, Error ellipse: s-maj=59.3km s-min=24.4km az=54.0*

**ISC 05 23:46:32.1±1.1, 8.36°S±0.1°×116.66°E±0.08, h10km, n11, σ1s94/9, mb3.5/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PLAI | Plampang | 1.14 | 104 | P | Pb | 23 46 52.5 | -1.3 |
| DNP | Denpasar | 1.44 | 265 | P | Pn | 23 46 58.0 | -0.3 |
| DNP | | | | S | Sn | 23 47 15.9 | -1.4 |
| SRBI | Singaraja | 1.51 | 288 | P | Pn | 23 46 57.5 | -1.7 |
| JAGI | Jajag, Banyuwa | 2.48 | 272 | P | Pn | 23 47 12.3 | -0.3 |
| GRJI | Gresik | 4.45 | 291 | P | Pn | 23 47 39.1 | -0.6 |
| KAPI | Kappang | 4.66 | 41 | Pn | Pb | 23 47 52.2 | -1.8 |
| | 3.5nm,0.3s,baz=200,slow=12,SNR=1.9 | | | | | | |
| KAPI | | | | LR | LR | 23 50 04.9 | |
| | comp=Z,133nm,19.1s,baz=226,slow=41 9.1nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 20.51 | 125 | P | Pn | 23 51 22.7 | +10 |
| | 6.0nm,0.8s,baz=303,slow=12,SNR=38 6.0nm,0.8s | | | | | | |
| ASAR | Alice Springs | 22.33 | 134 | P | P | 23 51 42.1 | +12 |
| | 3.0nm,

SRBI S Sn 00 01 23.6 +0.2
DNP **Denpasar** 1.21 240 P Pg 00 01 12.0 +0.7
DNP S Sn 00 01 28.4 +0.9
PLAI **Plampang** 1.68 117 P Pn 00 01 17.7 +0.2
PLAI S Sn 00 01 39.9 +0.8
JAGI **Jajag, Banyuwa** 2.13 259 P Pn 00 01 23.4 -0.3
BSSI **Bau Bau, Buton** 4.61 66 P Pn 00 01 58.4 +0.5
WRA **Warramunga Arr** 21.11 126 P P 00 05 31.8 -1.4
2.4nm,0.7s,baz=301,slow=12,SNR=24
2.4nm,0.7s
ASAR **Alice Springs** 22.94 135 P P 00 05 51.2 -1.5
1.1nm,0.7s,baz=307,slow=8.6,SNR=16
1.1nm,0.7s
MKAR **Makanchi Array** 62.42 334 P P 00 11 17.4 +6.1
0.2nm,0.7s,baz=130,slow=6.4,SNR=2.0
0.2nm,0.7s

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**IDC 06 00:19:20.2±3.4, 3°63S×150°84E, h0km, mb3.5/3, mbtmp3.3/4, Error ellipse: s-maj=111.3km s-min=32.1km az=103.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CTA | **Charters Tower** | **16.96** | **195** | Pn | P | 00 23 21.1 | 0.0 |
| | 0.1nm,0.7s,baz=27,slow=11,SNR=3.4 | | | | | | |
| WRA | **Warramunga Arr** | **22.84** | **223** | P | P | 00 24 24.4 | -0.8 |
| | 1.3nm,0.6s,baz=50,slow=10,SNR=7.1 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | **25.78** | **218** | P | P | 00 24 53.1 | +0.1 |
| | 0.4nm,0.6s,baz=56,slow=8.5,SNR=8.5 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| MKAR | **Makanchi Array** | **78.17** | **319** | P | P | 00 31 21.7 | +0.1 |
| | 0.2nm,0.6s,baz=111,slow=7.9,SNR=2.8 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| TORD | **Torodi Ar. Bea** | **148.08** | **289** | PKPbc | PKPbc | 00 39 08.3 | -0.7 |
| | 1.1nm,1.1s,baz=100,slow=1.9,SNR=3.2 | | | | | | |

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**IDC 06 00:25:42.1±5.2, 3°70S×150°76E, h0km, mb3.4/4, mbtmp3.4/4, MS3.0/1, Error ellipse: s-maj=169.7km s-min=32.2km az=105.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | **Port Moresby** | **6.71** | **212** | LR | LR | 00 29 30.2 | |
| | comp=Z,123nm,18.6s,baz=345,slow=34 | | | | | | |
| WRA | **Warramunga Arr** | **22.74** | **223** | P | P | 00 30 45.1 | -0.9 |
| | 0.7nm,0.8s,baz=49,slow=10,SNR=3.6 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | **25.68** | **218** | P | P | 00 31 14.8 | +0.8 |
| | 0.2nm,0.5s,baz=56,slow=8.5,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| MKAR | **Makanchi Array** | **78.17** | **319** | P | P | 00 37 44.1 | +0.6 |
| | 0.4nm,0.7s,baz=95,slow=7.2,SNR=4.0 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| ZALV | **Zalesovo Beam** | **79.12** | **327** | P | P | 00 37 47.9 | -0.6 |
| | 0.5nm,0.5s,baz=98,slow=7.4,SNR=2.1 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

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*BJI **06** 00:28:08.6±0.0, 9°.15S×116°.82E, h10km, mb4.9/80, mB5.2/46, Ms4.9/83, Ms7 4.7/78*
*NEIC **06** 00:28:18, 8°.37S×116°.31E, h22km*
*NEIC **06** 00:28:18.0±1.5, 8°.37S±0°.06×116°.31E±0°.05, h10km±1km, mb5.3/96, Mww5.3/18, Error ellipse: s-maj=11.0km s-min=9.1km az=182.0*
*NEIC **06** 00:28:18, 8°.47S×116°.31E, h22km, Moment Tensor Solution. Duration: 2s2 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$5.87; $M_{\theta\theta}$-8.44; $M_{\phi\phi}$2.57; $M_{r\theta}$-6.76; $M_{\theta\phi}$1.45; $M_{\phi r}$0.01; Fault plane solution: $M_0$9.93000×$10^{16}$ NP1: $\phi_s$270.40000°, $\delta$66.76000°, $\lambda$82.60000°. NP2: $\phi_s$108.62000°, $\delta$24.33000°, $\lambda$106.69000°. Principal axes: T 8.6012, Plg67.0000°, Azm167.0000°; N 2.6561, Plg7.0000°, Azm273.0000°; P -11.2572, Plg21.0000°, Azm6.0000°;*
*MOS **06** 00:28:19.1±1.1, 8°.22S×116°.32E, h38km, mb5.2/55 Error ellipse: s-maj=7.6km s-min=5.1km az=107.9*
*DJA **06** 00:28:19.6±0.3, 8°.5S±2°×11°.6E±°, h17km±2km, M5.2/79, mb5.1/79, mB5.7/32, MLv5.5/21, Mw(mB)5.2/32, MwMwp5.0/8, Mwp5.3/8*
*IDC **06** 00:28:20.5±2.0, 8°.15S×116°.32E, h33km±13km, mb4.5/19, mbtmp4.7/20, ML4.4/1, MS4.4/60, Error ellipse: s-maj=14.7km s-min=10.0km az=67.0*
*GCMT **06** 00:28:20.0±0.1, 8°.27S±0°.01×116°.33E±0°.01, h16km, MW5.3/121, Moment Tensor Solution. s91,c132; s121,c218; Duration: 1s1 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$0.39±.01; $M_{\theta\theta}$-0.77±.01; $M_{\phi\phi}$0.37±.01; $M_{r\theta}$-0.78±.05; $M_{\theta\phi}$0.03±.01; $M_{\phi r}$-0.24±.04; Best double couple: $M_0$1.02300×$10^{17}$ NP1:$\phi_s$250.00000°, $\delta$75.00000°, $\lambda$69.00000°. NP2:$\phi_s$126.00000°, $\delta$26.00000°, $\lambda$143.00000°. Principal axes: T 0.8870, Plg55.0000°, Azm134.0000°; N 0.2720, Plg20.0000°, Azm256.0000°; P -1.1590, Plg27.0000°, Azm356.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 06 00:28:19.0±0.6, 8°.40S±0°.03×116°.34E±0°.03, h23km±3km, n510, σ2s19/536, mb5.1/144, MS4.5/93, 20C-17D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | **Taliwang, Sumb** | **0.64** | **122** | P | P | 00 28 33.0 | +0.4 |
| TWSI | | | | S | Sb | 00 28 44.4 | +4.5 |
| DNP | **Denpasar** | **1.15** | **256** | P | Pn | 00 28 40.1 | +0.4 |
| DNP | **Denpasar** | **1.15** | **256** | P | Pn | 00 28 40.4 | +0.7 |
| SRBI | **Singaraja** | **1.16** | **285** | P | Pn | 00 28 37.8 | -2.0 |
| SRBI | | | | S | Sn | 00 28 52.9 | -2.0 |
| PLAI | **Plampang** | **1.49** | **107** | P | Pn | 00 28 46.2 | +1.9 |
| JAGI | **Jajag, Banyuwa** | **2.16** | **268** | Pn | Pn | 00 28 53.2 | -0.5 |
| JAGI | **Jajag, Banyuwa** | **2.16** | **268** | P | Pn | 00 28 52.9 | -0.8 |
| GRJI | **Gresik** | **4.10** | **291** | P | Pn | 00 29 19.3 | -1.0 |
| PWJI | **Pagerwojo** | **4.50** | **274** | P | Pn | 00 29 25.8 | 0.0 |
| BASI | **Baing, Sumba** | **4.56** | **114** | P | Pn | 00 29 27.1 | +0.5 |
| BSSI | **Bau Bau, Buton** | **4.69** | **62** | P | Pn | 00 29 27.7 | -0.7 |
| KAPI | **Kappang** | **4.77** | **45** | P | Pn | 00 29 28.6 | -1.0 |
| KAPI | **Kappang** | **4.77** | **45** | Pn | Pn | 00 29 29.2 | -0.4 |
| KAPI | **Kappang** | **4.77** | **45** | Pn | Pn | 00 29 27.9 | -1.7 |
| | 18nm,0.3s,baz=196,slow=3.2,SNR=60 | | | | | | |
| KAPI | | | | Sn | Sn | 00 30 20.8 | -3.4 |
| | 55nm,0.3s,baz=198,slow=19,SNR=4.1 | | | | | | |
| KAPI | | | | Lg | Lg | 00 30 44.0 | |
| | 62nm,0.3s,baz=74,slow=22,SNR=4.5 | | | | | | |
| KAPI | | | | LR | LR | 00 31 47.6 | |
| | comp=Z,7μm,19.3s,baz=206,slow=45 | | | | | | |
| | 50nm,0.4s | | | | | | |
| KAPI | **Kappang** | **4.77** | **45** | *c iP* | Pn | 00 29 27.9 | -1.7 |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,72nm,0.9s | | | | | | |
| NGJI | **Ngawi** | **4.94** | **282** | P | Pn | 00 29 31.9 | +0.1 |
| BNSI | **Bone** | **5.46** | **44** | P | Pn | 00 29 39.2 | +0.2 |
| | comp=Z,453nm,1.0s,comp=Z,8μm | | | | | | |
| SPSI | **Sidrap Palu** | **5.57** | **38** | P | Pn | 00 29 43.4 | +2.9 |
| | comp=Z,384nm,1.4s,comp=Z,9μmcomp=Z,9μmcomp=Z,3.5nm | | | | | | |
| UGM | **Wanagama** | **5.78** | **274** | P | Pn | 00 29 44.1 | +0.7 |
| UGM | **Wanagama** | **5.78** | **274** | Pn | Pn | 00 29 43.3 | -0.1 |
| UGM | **Wanagama** | **5.78** | **274** | P | Pn | 00 29 43.0 | -0.4 |
| MMRI | **Maumere** | **5.84** | **93** | P | Pn | 00 29 45.3 | +1.0 |
| MMRI | **Maumere** | **5.84** | **93** | Pn | Pn | 00 29 45.2 | +0.9 |
| MMRI | **Maumere** | **5.84** | **93** | P | Pn | 00 29 45.0 | +0.7 |
| SMRI | **Semarang** | **6.00** | **282** | P | Pn | 00 29 51.3 | +4.9 |
| SMRI | **Semarang** | **6.00** | **282** | P | Pn | 00 29 46.4 | 0.0 |
| SMRI | **Semarang** | **6.00** | **282** | P | Pn | 00 29 47.0 | +0.6 |
| | comp=Z,278nm,1.1s,comp=Z,9μmcomp=Z,3.7nm | | | | | | |
| BBSI | **Bau Bau** | **6.83** | **65** | P | Pn | 00 30 01.8 | +4.0 |
| | comp=Z,306nm,0.9s,comp=Z,3μmcomp=Z,1.3nm | | | | | | |
| BKB | **Balikpapan** | **7.11** | **5** | | Pn | 00 30 04.7 | +3.0 |
| KPJI | **Karang Pucung** | **7.41** | **278** | P | Pn | 00 30 07.5 | +1.6 |
| | comp=Z,148nm,0.7s,comp=Z,4μmcomp=Z,1.0nm | | | | | | |
| BATI | **Baumata** | **7.45** | **105** | P | Pn | 00 30 08.6 | +2.2 |
| MTKI | **Muara Teweh, K** | **7.54** | **349** | P | Pn | 00 30 06.3 | -1.4 |
| | comp=Z,255nm,0.8s | | | | | | |
| CMJI | **Cimerak** | **7.83** | **274** | P | Pn | 00 30 12.0 | +0.3 |
| | comp=Z,136nm,1.3s,comp=Z,0.8nm | | | | | | |
| SOEI | **Soe** | **7.95** | **100** | P | Pn | 00 30 15.0 | +1.7 |
| SOEI | **Soe** | **7.95** | **100** | Pn | Pn | 00 30 14.1 | +0.8 |
| SOEI | **Soe** | **7.95** | **100** | P | Pn | 00 30 15.1 | +1.7 |
| BBJI | **Bungbulang** | **8.65** | **276** | P | Pn | 00 30 27.6 | +4.6 |
| SKJI | **Sukabumi** | **9.79** | **277** | P | Pn | 00 30 42.1 | +3.6 |
| TOLI2 | **Tolitoli** | **10.43** | **25** | P | Pn | 00 30 51.6 | +4.3 |
| TOLI2 | **Tolitoli** | **10.43** | **25** | Pn | Pn | 00 30 48.1 | +0.8 |
| SANI | **Sanana** | **11.49** | **57** | P | Pn | 00 31 05.4 | +3.6 |
| SANI | **Sanana** | **11.49** | **57** | P | Pn | 00 31 06.4 | +4.6 |
| | comp=Z,92nm,1.3s,comp=Z,4μm | | | | | | |
| KSM | **Kuching** | **11.50** | **328** | P | Pn | 00 31 04.8 | +2.9 |
| SBUM | **Sibu** | **11.53** | **339** | | Pn | 00 31 02.8 | +0.5 |
| PPBI | **Pangkal Pinang** | **11.89** | **301** | P | Pn | 00 31 08.1 | +0.8 |
| | comp=Z,34nm,0.6s | | | | | | |
| KASI | **Kota Agung** | **12.10** | **283** | P | Pn | 00 31 12.1 | +2.0 |
| | comp=Z,123nm,1.3s | | | | | | |
| MBWA | **Marble Bar** | **13.10** | **166** | P | Pn | 00 31 24.4 | +0.6 |
| MBWA | **Marble Bar** | **13.10** | **166** | P | Pn | 00 31 24.2 | +0.4 |
| | comp=Z,96nm,0.7s,SNR=3.9 | | | | | | |
| MBWA | | | | S | Sn | 00 33 42.9 | -6.0 |
| FITZ | **Fitzroy Crossi** | **13.22** | **138** | P | Pn | 00 31 25.8 | +0.4 |
| FITZ | **Fitzroy Crossi** | **13.22** | **138** | Pn | Pn | 00 31 24.9 | -0.5 |
| PSAD1 | **Pilbara Seismi** | **13.41** | **166** | P | Pn | 00 31 26.7 | -1.4 |
| PSAD1 | | | | S | Sn | 00 33 50.0 | -6.5 |
| PSA00 | **Pilbara Seismi** | **13.53** | **166** | P | Pn | 00 31 32.5 | +2.9 |
| PSA00 | **Pilbara Seismi** | **13.53** | **166** | Pn | Pn | 00 31 29.0 | -0.6 |
| PSA00 | **Pilbara Seismi** | **13.53** | **166** | P | Pn | 00 31 30.2 | +0.6 |
| | comp=Z,57nm,0.2s,SNR=2.4 | | | | | | |
| PSA00 | | | | S | Sn | 00 33 53.0 | -6.4 |
| PSAC2 | **Pilbara Seismi** | **13.53** | **166** | P | Pn | 00 31 30.0 | +0.3 |
| | comp=Z,80nm,0.9s,SNR=3.4 | | | | | | |
| PSAC2 | | | | S | Sn | 00 33 53.0 | -6.5 |
| PSAD3 | **Pilbara Seismi** | **13.58** | **166** | P | Pn | 00 31 30.5 | +0.2 |
| | comp=Z,84nm,0.9s,SNR=3.2 | | | | | | |
| PSAD3 | | | | S | Sn | 00 33 55.2 | -5.5 |
| MYLDM | **Lahad Datu** | **13.66** | **9** | | Pn | 00 31 30.3 | -1.1 |
| KNRA | **Kununurra** | **14.14** | **122** | P | Pn | 00 31 37.5 | -0.4 |
| KNRA | | | | S | Sn | 00 34 16.0 | +1.7 |
| TNTI | **Ternate** | **14.28** | **51** | P | Pn | 00 31 42.0 | +2.1 |
| | comp=Z,55nm,1.0s,comp=Z,1μm | | | | | | |
| GIRL | **Giralia** | **14.31** | **188** | | Pn | 00 31 40.2 | -0.1 |
| DRS | **Darwin Rock St** | **14.87** | **107** | P | Pn | 00 31 47.8 | -0.2 |
| | comp=Z,79nm,1.0s | | | | | | |
| MTN | **Manton Dam** | **15.20** | **108** | P | Pn | 00 31 53.2 | +0.9 |
| MTN | **Manton Dam** | **15.20** | **108** | Pn | Pn | 00 31 50.7 | -1.7 |
| MTN | | | | IAmb | IAmb | 00 31 59.0 | |
| | comp=Z,132nm,1.5s | | | | | | |
| MTN | **Manton Dam** | **15.20** | **108** | P | Pn | 00 31 47.7 | -4.7 |
| MTN | | | | S | Sn | 00 34 40.2 | +0.1 |
| BTDF | **Bukit Timah Da** | **15.84** | **307** | P | P | 00 32 06.7 | +2.4 |
| KDU | **Kakadu** | **16.42** | **106** | P | Pn | 00 32 07.4 | -0.8 |
| KDU | **Kakadu** | **16.42** | **106** | P | Pn | 00 32 06.0 | -2.1 |
| KDU | | | | S | Sn | 00 35 02.1 | -7.8 |
| SWI | **Sorong** | **16.64** | **64** | P | Pn | 00 32 12.8 | +1.9 |
| | comp=Z,211nm,2.0s,comp=Z,3μm | | | | | | |
| SWI | **Sorong** | **16.64** | **64** | P | Pn | 00 32 12.8 | +1.9 |
| SWI | | | | pmax | pmax | | |
| | comp=Z,209nm,1.9s | | | | | | |
| FAKI | **Fak Fak** | **16.74** | **72** | P | Pn | 00 32 11.1 | -1.1 |
| FAKI | **Fak Fak** | **16.74** | **72** | P | Pn | 00 32 10.7 | -1.5 |
| FAKI | **Fak Fak** | **16.74** | **72** | P | Pn | 00 32 11.7 | -0.5 |
| | comp=Z,113nm,0.7s,comp=Z,2μm | | | | | | |
| PDSI | **Padang** | **17.47** | **294** | P | Pn | 00 32 22.3 | +0.9 |
| BKNI | **Bangkinang** | **17.54** | **299** | P | P | 00 32 27.6 | +4.5 |
| BKNI | **Bangkinang** | **17.54** | **299** | | Pn | 00 32 21.5 | -0.7 |
| BKNI | | | | IAmb | IAmb | 00 32 27.5 | |
| | comp=Z,318nm,1.3s | | | | | | |
| BKNI | **Bangkinang** | **17.54** | **299** | P | P | 00 32 24.0 | +0.9 |
| | comp=Z,186nm,0.8s,comp=Z,4μm | | | | | | |
| DAV | **Davao City (W)** | **17.91** | **31** | LR | LR | 00 40 46.9 | |
| | comp=Z,2μm,19.5s,baz=206,slow=42 | | | | | | |
| MEEK | **Meekatharra** | **18.27** | **173** | P | Pn | 00 32 34.3 | +3.1 |
| MEEK | **Meekatharra** | **18.27** | **173** | P | Pn | 00 32 33.0 | +1.9 |
| | comp=Z,95nm,1.2s,SNR=4.0 | | | | | | |
| MEEK | | | | S | Sn | 00 35 45.7 | -9.0 |
| IPM | **Ipoh** | **19.92** | **309** | P | P | 00 32 50.4 | +1.0 |
| IPM | **Ipoh** | **19.92** | **309** | P | P | 00 32 48.8 | -0.6 |
| WRKA | **Warakurna** | **20.10** | **147** | P | Pn | 00 32 53.0 | -0.2 |
| WRKA | **Warakurna** | **20.10** | **147** | P | Pn | 00 32 54.0 | +0.8 |
| | comp=Z,272nm,1.2s,SNR=19 | | | | | | |
| WRKA | | | | S | S | 00 36 30.6 | -5.6 |
| MORW | **Morawa** | **20.57** | **181** | P | Pn | 00 32 59.2 | +0.7 |
| MORW | **Morawa** | **20.57** | **181** | P | P | 00 32 57.1 | +0.9 |
| MORW | | | | IAmb | IAmb | 00 33 03.9 | |
| | comp=Z,114nm,1.1s | | | | | | |
| MORW | **Morawa** | **20.57** | **181** | P | Pn | 00 33 00.3 | +1.8 |
| | comp=Z,123nm,1.2s,SNR=5.7 | | | | | | |
| MORW | | | | S | S | 00 36 38.3 | -7.0 |
| KULM | **Kulim** | **20.73** | **310** | P | P | 00 32 57.6 | -0.5 |
| KULM | | | | IAmb | IAmb | 00 33 06.5 | |
| | comp=Z,121nm,1.4s | | | | | | |
| WB0 | **Warramunga Arr** | **20.82** | **125** | P | P | 00 32 59.0 | -0.1 |
| WB0 | | | | IAmb | IAmb | 00 33 01.2 | |
| | comp=Z,319nm,1.3s | | | | | | |
| WRA | **Warramunga Arr** | **20.86** | **125** | P | P | 00 32 59.8 | +0.2 |
| WRA | **Warramunga Arr** | **20.86** | **125** | P | P | 00 33 00.6 | +1.0 |
| | comp=Z,111nm,0.7s,baz=299,slow=12,SNR=424 | | | | | | |
| WRA | | | | S | S | 00 36 44.8 | -6.6 |
| | comp=Z,7.2nm,1.0s,baz=293,slow=24,SNR=3.8 | | | | | | |
| WRA | | | | ScP | ScP | 00 40 42.2 | -1.1 |
| | comp=Z,9.0nm,0.8s,baz=306,slow=2.5,SNR=7.6 | | | | | | |
| WRA | | | | LR | LR | 00 41 12.1 | |
| | comp=Z,1μm,21.9s,baz=296,slow=37 | | | | | | |
| WRAB | **Tennant Creek** | **20.87** | **125** | P | P | 00 32 59.9 | +0.3 |
| WRAB | | | | IAmb | IAmb | 00 33 01.9 | |
| | comp=Z,174nm,0.9s | | | | | | |
| WRAB | **Tennant Creek** | **20.87** | **125** | *c iP* | P | 00 33 00.4 | +0.8 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,177nm,1.0s | | | | | | |
| WB2 | **Warramunga Arr** | **20.87** | **125** | P | P | 00 33 00.0 | +0.3 |
| WB2 | | | | IAmb | IAmb | 00 33 01.9 | |
| | comp=Z,180nm,1.0s | | | | | | |
| WR0 | **Warramunga Arr** | **21.03** | **125** | P | P | 00 33 01.1 | -0.4 |
| GSI | **Gunungsitoli** | **21.04** | **296** | P | P | 00 33 06.7 | +5.2 |
| GSI | **Gunungsitoli** | **21.04** | **296** | P | P | 00 33 02.8 | +1.3 |
| GSI | | | | IAmb | IAmb | 00 33 09.2 | |
| | comp=Z,259nm,1.9s | | | | | | |
| GSI | **Gunungsitoli** | **21.04** | **296** | P | P | 00 33 04.5 | +3.0 |
| | comp=Z,76nm,1.3s,comp=Z,5μm | | | | | | |
| DLV | **T Lat** | **21.66** | **339** | P | P | 00 33 09.7 | +1.3 |
| DLV | **T Lat** | **21.66** | **339** | P | P | 00 33 08.7 | +0.3 |
| KCSI | **Kotacane, Aceh** | **21.98** | **302** | P | P | 00 33 14.5 | +2.9 |
| | comp=Z,132nm,1.3s | | | | | | |
| BLDU | **Ballidu** | **22.11** | **179** | P | P | 00 33 15.4 | +2.6 |
| BLDU | **Ballidu** | **22.11** | **179** | P | P | 00 33 15.5 | +2.7 |
| | comp=Z,5.9nm,SNR=5.9 | | | | | | |
| BLDU | | | | S | S | 00 37 13.5 | -2.0 |
| SNSI | **Sinabang, Aceh** | **22.66** | **297** | P | P | 00 33 20.4 | +1.5 |
| | comp=Z,195nm,1.1s | | | | | | |
| ASPA | **Alice Springs** | **22.66** | **134** | P | P | 00 33 21.0 | +2.1 |
| | comp=Z,24nm,0.9s,SNR=24 | | | | | | |
| AS31 | **Alice Springs** | **22.66** | **134** | P | P | 00 33 19.5 | +0.6 |
| ASAR | **Alice Springs** | **22.66** | **134** | P | P | 00 33 19.3 | +0.4 |
| ASAR | **Alice Springs** | **22.66** | **134** | P | P | 00 33 20.1 | +1.1 |
| | comp=Z,87nm,0.9s,baz=308,slow=8.4,SNR=307 | | | | | | |
| ASAR | | | | PcP | PcP | 00 37 09.2 | -2.1 |
| | comp=Z,2.1nm,0.6s,baz=299,slow=1.9,SNR=2.7 | | | | | | |
| ASAR | | | | S | S | 00 37 29.9 | +3.9 |
| | comp=Z,5.2nm,1.0s,baz=299,slow=22,SNR=3.0 | | | | | | |
| ASAR | | | | LR | LR | 00 43 56.3 | |
| | comp=Z,794nm,18.1s,baz=302,slow=41 | | | | | | |
| | comp=Z,87nm,0.9s | | | | | | |
| AS01 | **Alice Springs** | **22.70** | **134** | P | P | 00 33 21.2 | +1.9 |
| KLBR | **Kellerberrin** | **23.12** | **177** | P | P | 00 33 25.6 | +2.1 |
| KLBR | **Kellerberrin** | **23.12** | **177** | P | P | 00 33 25.8 | +2.3 |
| | comp=Z,111nm,1.3s,SNR=5.5 | | | | | | |
| KLBR | | | | S | S | 00 37 38.3 | +4.7 |
| KMBL | **Kambalda** | **23.43** | **168** | P | P | 00 33 27.7 | +1.0 |
| KMBL | **Kambalda** | **23.43** | **168** | P | P | 00 33 28.1 | +1.5 |
| | comp=Z,72nm,1.0s,SNR=2.5 | | | | | | |
| KMBL | | | | S | S | 00 37 44.5 | +5.7 |
| MUN | **Mundaring** | **23.46** | **180** | P | P | 00 33 28.3 | +1.3 |
| MLSI | **Meulaboh, Aceh** | **23.53** | **302** | P | P | 00 33 27.5 | -0.2 |
| | comp=Z,70nm,0.6s | | | | | | |
| LHMI | **Lhok Sumawe** | **23.60** | **304** | P | P | 00 33 29.7 | +1.2 |
| | comp=Z,256nm,1.1s | | | | | | |
| SRIT | **Nakonsritamara** | **23.73** | **315** | P | P | 00 33 31.0 | +1.4 |
| SRIT | **Nakonsritamara** | **23.73** | **315** | P | P | 00 33 30.1 | +0.5 |
| SRIT | | | | IAmb | IAmb | 00 33 34.4 | |
| | comp=Z,143nm,1.2s | | | | | | |
| SURA | **Surathani** | **24.11** | **316** | P | P | 00 33 35.4 | +2.1 |
| GENI | **Genyem** | **24.40** | **78** | P | P | 00 33 40.3 | +4.3 |
| GENI | **Genyem** | **24.40** | **78** | P | P | 00 33 35.7 | -0.3 |
| | comp=Z,98nm,1.7s,comp=Z,3μm | | | | | | |
| NWAO | **Narrogin (SRO)** | **24.42** | **178** | P | P | 00 33 39.2 | +3.2 |
| NWAO | **Narrogin (SRO)** | **24.42** | **178** | P | P | 00 33 36.5 | +0.5 |
| NWAO | | | | IAmb | IAmb | 00 34 02.8 | |
| | comp=Z,186nm,1.4s | | | | | | |
| NWAO | **Narrogin (SRO)** | **24.42** | **178** | LR | LR | 00 42 27.3 | |
| | comp=Z,911nm,21.7s,baz=334,slow=34 | | | | | | |
| NWAO | **Narrogin (SRO)** | **24.42** | **178** | P | P | 00 33 36.5 | +0.5 |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,186nm,1.5s | | | | | | |
| FORT | **Forrest** | **24.82** | **155** | P | P | 00 33 44.7 | +5.1 |
| FORT | **Forrest** | **24.82** | **155** | P | P | 00 33 40.5 | +0.9 |
| FORT | **Forrest** | **24.82** | **155** | P | P | 00 33 41.8 | +2.3 |
| | comp=Z,168nm,1.4s,SNR=4.8 | | | | | | |
| FORT | | | | S | S | 00 38 09.9 | +8.9 |
| TABU | **Tabubil** | **24.90** | **84** | P | P | 00 33 42.4 | +1.8 |
| JAY | **Jayapura** | **24.94** | **78** | P | P | 00 33 43.3 | +2.4 |
| QIS | **Mount Isa** | **25.52** | **121** | P | P | 00 33 47.0 | +0.9 |
| QIS | **Mount Isa** | **25.52** | **121** | P | P | 00 33 47.8 | +1.7 |
| | comp=Z,78nm,1.0s,SNR=18 | | | | | | |
| UBPT | **Khong Chiam** | **25.87** | **335** | P | P | 00 33 52.3 | +3.1 |
| UBPT | **Khong Chiam** | **25.87** | **335** | P | P | 00 33 49.4 | +0.2 |
| OOD | **Oodnadatta** | **26.58** | **139** | P | P | 00 33 57.4 | +1.8 |
| COEN | **Coen** | **26.89** | **104** | P | P | 00 33 59.4 | +0.9 |
| COEN | **Coen** | **26.89** | **104** | P | P | 00 33 59.0 | +0.5 |
| COEN | **Coen** | **26.89** | **104** | P | P | 00 33 59.6 | +1.1 |
| | comp=Z,326nm,0.9s,SNR=44 | | | | | | |
| MULG | **Mulgathing** | **27.37** | **145** | P | P | 00 34 05.9 | +3.2 |
| QIZ | **Qiongzhong** | **28.00** | **347** | P | P | 00 34 09.4 | +1.1 |
| QIZ | **Qiongzhong** | **28.00** | **347** | P | P | 00 34 10.2 | +1.9 |
| QIZ | | | | S | S | 00 38 56.4 | +4.9 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,15nm,1.4s | | | | | | |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,250nm,9.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,860nm,13.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,480nm,15.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,660nm,12.4s | | | | | | |
| QIZ | **Qiongzhong** | **28.00** | **347** | P | P | 00 34 08.5 | +0.2 |
| MTSU | **Mount Surprise** | **28.86** | **112** | P | P | 00 34 18.2 | +2.0 |
| LCRK | **Leigh Creek** | **30.00** | **140** | P | P | 00 34 28.0 | +1.9 |
| INKA | **Innaminka** | **30.03** | **133** | P | P | 00 34 31.3 | +4.9 |
| PHRA | **Phrae** | **31.09** | **329** | P | P | 00 34 36.2 | +0.3 |
| CTA | **Charters Tower** | **31.18** | **115** | P | P | 00 34 38.1 | +1.5 |
| | comp=Z,1.5nm,1.1s,baz=287,slow=9.5,SNR=14 | | | | | | |
| CTA | | | | ScP | ScP | 00 41 11.6 | -1.7 |
| | comp=Z,0.9nm,1.0s,baz=231,slow=1.3,SNR=6.3 | | | | | | |
| CTA | | | | LR | LR | 00 48 42.5 | |
| | comp=Z,116nm,20.5s,baz=288,slow=39 | | | | | | |
| | comp=Z,1.5nm,1.1s | | | | | | |
| CTAO | **Charters Tower** | **31.18** | **115** | P | P | 00 34 39.0 | +2.4 |
| CTAO | **Charters Tower** | **31.18** | **115** | P | P | 00 34 37.5 | +0.9 |
| CTAO | | | | IAmb | IAmb | 00 34 39.8 | |
| | comp=Z,72nm,1.4s | | | | | | |
| CTAO | **Charters Tower** | **31.18** | **115** | P | P | 00 34 37.5 | +0.9 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,72nm,1.5s | | | | | | |
| TV1H | **Townsville Har** | **31.43** | **113** | P | P | 00 34 40.9 | +2.1 |
| CMAR | **Chiang Mai Arr** | **31.73** | **327** | P | P | 00 34 41.5 | 0.0 |
| CMAR | **Chiang Mai Arr** | **31.73** | **327** | P | P | 00 34 42.6 | +1.2 |
| | comp=Z,23nm,1.1s,baz=154,slow=7.1,SNR=54 | | | | | | |
| CMAR | | | | LR | LR | 00 49 21.8 | |
| | comp=Z,2μm,18.7s,baz=150,slow=40 | | | | | | |
| CMAR | **Chiang Mai Arr** | **31.73** | **327** | P | P | 00 34 41.5 | 0.0 |
| TPUB | **Ta-pu** | **31.78** | **8** | P | P | 00 34 46.2 | +4.4 |
| CHTO | **Chiang Mai** | **32.02** | **328** | P | P | 00 34 44.5 | +0.5 |
| CHTO | **Chiang Mai** | **32.02** | **328** | P | P | 00 34 44.5 | +0.5 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| QLP | **Quilpie** | **32.05** | **128** | P | P | 00 34 47.8 | +3.6 |
| QLP | **Quilpie** | **32.05** | **128** | P | P | 00 34 47.9 | +3.8 |
| | comp=Z,155nm,1.4s,SNR=15 | | | | | | |
| QLP | | | | S | S | 00 39 55.4 | +0.4 |
| SSLB | **Suanglung** | **32.30** | **8** | P | P | 00 34 47.4 | +1.0 |
| HTT | **Hallett** | **32.49** | **143** | P | P | 00 34 50.6 | +2.5 |
| | comp=Z,53nm,1.4s | | | | | | |
| HTT | **Hallett** | **32.49** | **143** | P | P | 00 34 49.8 | +1.8 |
| | comp=Z,53nm,1.4s,SNR=2.7 | | | | | | |
| STKA | **Stephens Creek** | **33.12** | **138** | P | P | 00 34 55.8 | +2.3 |
| STKA | **Stephens Creek** | **33.12** | **138** | P | P | 00 34 54.5 | +0.9 |
| STKA | **Stephens Creek** | **33.12** | **138** | P | P | 00 34 55.3 | +1.8 |
| | comp=Z,10nm,1.2s,SNR=3.6 | | | | | | |
| STKA | **Stephens Creek** | **33.12** | **138** | P | P | 00 34 55.0 | +1.4 |
| | comp=Z,24nm,0.8s,baz=312,slow=9.7,SNR=19 | | | | | | |
| STKA | | | | LR | LR | 00 48 12.6 | |
| | comp=Z,721nm,21.5s,baz=305,slow=36 | | | | | | |
| | comp=Z,24nm,0.8s | | | | | | |
| QZH | **Quanzhou** | **33.21** | **4** | *eP* | P | 00 34 56.8 | +2.5 |
| QZH | | | | S | S | 00 40 13.5 | +0.5 |
| QZH | | | | LR | LR | | |
| | comp=Z,740nm,15.5s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,500nm,16.2s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,910nm,15.5s | | | | | | |
| YHNB | **Yeheng** | **33.23** | **8** | P | P | 00 34 59.5 | +4.9 |
| GULI | **GuiLin** | **33.99** | **350** | P | P | 00 35 02.8 | +1.7 |
| GULI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| GULI | | | | pmax | pmax | | |
| | comp=Z,220nm,4.6s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,620nm,21.2s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,600nm,17.2s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,800nm,20.1s | | | | | | |
| CMSA | **Cobar Meteorol** | **35.72** | **134** | P | P | 00 35 18.6 | +2.5 |
| CMSA | **Cobar Meteorol** | **35.72** | **134** | P | P | 00 35 18.2 | +2.1 |
| | comp=Z,56nm,1.5s,SNR=6.7 | | | | | | |
| GUMO | **Guam** | **35.77** | **53** | LR | LR | 00 49 17.7 | |
| | comp=Z,310nm,21.6s,baz=219,slow=35 | |

comp=Z,880nm,19.1s
**TNCH TengChong 37.49 333** P **P** **00 35 32.0 +0.6**
TNCH PP **PnPn** **00 36 59.8 +1.8**
TNCH S **S** **00 41 21.3 +2.1**
TNCH pmax pmax
comp=Z,59nm,0.6s
TNCH LR LR
comp=Z,690nm,14.7s
TNCH LR LR
comp=Z,900nm,15.0s
TNCH LR LR
comp=Z,1μm,13.9s
**AUDCS Dubbo College 38.20 133** P **P** **00 35 40.1 +2.9**
**WHN Wuhan 38.76 357** ⇑P **P** **00 35 42.0 +0.2**
WHN pP **pP** **00 35 45.9 -2.9**
WHN S **S** **00 41 39.6 +1.6**
WHN pmax pmax
comp=Z,72nm,1.0s
WHN pmax pmax
comp=Z,330nm,3.2s
WHN LR LR
comp=Z,2μm,16.6s
WHN LR LR
comp=Z,1μm,14.2s
WHN LR LR
comp=Z,3μm,16.8s
**PALK Pallekele 38.78 293** LR LR 00 52 48.3
comp=Z,858nm,20.9s,baz=221,slow=38
**ENH Enshi 39.01 351** P **P** **00 35 47.2 +3.3**
**YNG Young 39.14 136** P **P** **00 35 47.0 +1.9**
**YNG Young 39.14 136** P **P** **00 35 47.6 +2.5**
comp=Z,294nm,1.5s,SNR=5.6
**TOO Toolangi 39.23 142** P **P** **00 35 49.6 +3.9**
**TOO Toolangi 39.23 142** P **P** **00 35 45.7 -0.1**
TOO IAmb IAmb 00 35 50.0
comp=Z,81nm,1.1s
**TOO Toolangi 39.23 142** P **P** **00 35 49.2 +3.4**
comp=Z,75nm,2.6s,SNR=4.5
**TOO Toolangi 39.23 142** P **P** **00 35 45.7 -0.1**
TOO pmax pmax
comp=Z,81nm,1.1s
**SSE Sheshan 39.54 7** P **P** **00 35 51.0 +2.7**
SSE S **S** **00 41 50.6 +0.9**
SSE pmax pmax
comp=Z,12nm,0.8s
SSE pmax pmax
comp=Z,140nm,4.5s
SSE LR LR
comp=Z,170nm,14.5s
SSE LR LR
comp=Z,170nm,15.6s
**ARMA Armidale 39.58 128** P **P** **00 35 52.9 +4.0**
**ARMA Armidale 39.58 128** P **P** **00 35 48.8 -0.1**
**ARMA Armidale 39.58 128** P **P** **00 35 52.3 +3.3**
comp=Z,46nm,1.6s,SNR=4.1
**CAN Canberra 40.12 137** P **P** **00 35 56.2 +2.9**
**CAN Canberra 40.12 137** P **P** **00 35 52.8 -0.5**
CAN IAmb IAmb 00 35 56.9
comp=Z,77nm,1.3s
**CAN Canberra 40.12 137** P **P** **00 35 56.0 +2.8**
comp=Z,56nm,1.6s,SNR=3.0
**CAN Canberra 40.12 137** P **P** **00 35 52.8 -0.5**
CAN pmax pmax
comp=Z,77nm,1.3s
**NJ2 Nanjing 40.29 3** ⇓P **P** **00 35 51.4 -3.1**
NJ2 pP pP 00 35 55.4 -6.2
NJ2 sP sP 00 35 58.0 -7.1
NJ2 S **S** **00 42 05.1 +4.2**
NJ2 sS **pS** **00 42 10.5 +1.7**
NJ2 pmax pmax
comp=Z,10.0nm,0.9s
NJ2 pmax pmax
comp=Z,210nm,4.5s
NJ2 LR LR
comp=Z,390nm,20.8s
NJ2 LR LR
comp=Z,370nm,20.8s
NJ2 LR LR
comp=Z,840nm,16.6s
**CNB Canberra Magne 40.37 137** P **P** **00 35 57.5 +2.2**
**CNB Canberra Magne 40.37 137** P **P** **00 35 57.4 +2.2**
comp=Z,36nm,1.3s,SNR=2.3
**CD2 Chengdu 40.90 343** P **P** **00 35 59.4 -0.3**
CD2 S **S** **00 42 12.8 +2.6**
CD2 pmax pmax
comp=Z,40nm,0.9s
CD2 pmax pmax
comp=Z,320nm,2.6s
CD2 LR LR
comp=Z,870nm,12.4s
CD2 LR LR
comp=Z,870nm,12.4s
**SHL Shillong 41.30 325** IAmb IAmb 00 36 04.0
comp=Z,49nm,1.0s
**XAN Xi'an 42.79 351** ⇓P **P** **00 36 13.7 -1.3**
XAN pP pP 00 36 17.8 -4.3
XAN S **S** **00 42 39.1 +1.1**
XAN pmax pmax
comp=Z,13nm,1.5s
XAN pmax pmax
comp=Z,260nm,10.4s
XAN LR LR
comp=Z,1μm,16.8s
XAN LR LR
comp=Z,770nm,20.6s
XAN LR LR
comp=Z,2μm,16.5s
**LYN LuoYang 42.87 355** P **P** **00 36 14.9 -0.7**
LYN pP pP 00 36 18.9 -3.8
LYN PP **PcP** **00 38 03.1 -3.3**
LYN S **S** **00 42 41.0 +1.9**
LYN pmax pmax
comp=Z,32nm,1.7s
LYN pmax pmax
comp=Z,300nm,8.8s
LYN LR LR
comp=Z,820nm,14.3s
LYN LR LR
comp=Z,770nm,17.5s
LYN LR LR
comp=Z,870nm,19.0s
**HNR Honiara 43.08 95** P **P** **00 36 18.6 +0.9**
**HNR Honiara 43.08 95** P **P** **00 36 16.9 -0.8**
**HNR Honiara 43.08 95** LR LR 00 56 19.9
comp=Z,7μm,19.0s,baz=278,slow=39
**HNR Honiara 43.08 95** P **P** **00 36 16.9 -0.8**
**JCJ Chichijima 43.27 35** LR LR 00 53 03.5
comp=Z,216nm,20.8s,baz=124,slow=34
**JNU Nakatsue 43.55 18** LR LR 00 56 03.6
comp=Z,245nm,21.7s,baz=188,slow=38
**TIA Tai'an 44.38 1** P **P** **00 36 26.7 -1.1**
TIA S **S** **00 43 02.2 +1.1**
TIA pmax pmax
comp=Z,23nm,0.9s
TIA pmax pmax
comp=Z,180nm,5.9s
TIA LR LR
comp=Z,400nm,17.6s
TIA LR LR
comp=Z,490nm,19.6s
TIA LR LR
comp=Z,1μm,18.6s
**LSA Lhasa 44.97 328** P **P** **00 36 34.5 +1.3**
LSA pmax pmax
comp=Z,22nm,1.1s
LSA LR LR
comp=Z,430nm,25.2s
LSA LR LR
comp=Z,290nm,20.1s
LSA LR LR
comp=Z,780nm,20.8s
**LSA Lhasa 44.97 328** P **P** **00 36 34.0 +0.8**
LSA IAmb IAmb 00 36 42.3
comp=Z,18nm,0.7s
**LSA Lhasa 44.97 328** P **P** **00 36 34.0 +0.8**
LSA pmax pmax
comp=Z,18nm,0.7s
**JMN Monobe 45.09 21** P **P** **00 36 36.2 +2.7**
**JMN Monobe 45.09 21** P **P** **00 36 33.7 +0.2**
JMN IAmb IAmb 00 36 50.7
comp=Z,29nm,1.0s
**HYB Hyderabad 45.30 305** *e*P **P** **00 36 35.6 +0.1**
HYB *e*pP pP 00 36 38.7 -4.2
HYB *e*PcP **PcP** **00 38 15.4 +0.3**
**HNS HongShan 45.58 358** ⇑P **P** **00 36 36.7 -0.6**
HNS S **S** **00 43 14.2 -4.2**
HNS pmax pmax
comp=Z,14nm,1.1s
HNS LR LR
comp=Z,750nm,17.1s
HNS LR LR
comp=Z,350nm,17.4s
HNS LR LR
comp=Z,650nm,22.4s
**LZH Lanzhou 45.78 346** *e*P P 00 36 43.8 +4.6
LZH sP pP 00 36 50.3 +4.1
LZH SS SS 00 46 50.6 +4.0
LZH pmax pmax
comp=Z,50nm,1.4s
LZH LR LR
comp=Z,830nm,19.2s
LZH LR LR
comp=Z,790nm,18.9s
LZH LR LR
comp=Z,990nm,16.1s
**KSAR Wonju Array Be 46.86 13** P **P** **00 36 47.1 -0.3**
**KSAR Wonju Array Be 46.86 13** P **P** **00 36 47.1 -0.3**
**KSRS Korea Array 46.88 13** P **P** **00 36 47.2 -0.3**
comp=Z,4.1nm,0.8s,baz=193,slow=7.2,SNR=9.1
KSRS LR LR 00 58 34.5
comp=Z,279nm,21.2s,baz=190,slow=39
comp=Z,4.1nm,0.8s
**JHJ Hachijo jima 2 46.93 27** LR LR 00 55 08.2
comp=Z,267nm,21.8s,baz=276,slow=34
**DL2 Dalian 47.32 6** P **P** **00 36 47.4 -3.5**
DL2 S **S** **00 43 40.2 -3.1**
**KOUNC Koumac, New Ca 47.80 110** P **P** **00 36 58.4 +3.3**
**KOUNC Koumac, New Ca 47.80 110** P **P** **00 36 54.8 -0.3**
**JGF Kuroka 48.04 23** P **P** **00 36 55.9 -0.8**
JGF IAmb IAmb 00 37 16.0
comp=Z,20nm,1.2s
**BJT Baijiatuau 48.17 360** P **P** **00 36 58.0 +0.5**
**BJT Baijiatuau 48.17 360** P **P** **00 36 57.5 -0.1**
BJT IAmb IAmb 00 37 10.5
comp=Z,26nm,1.4s
**BJT Baijiatuau 48.17 360** P **P** **00 36 57.5 -0.1**
BJT pmax pmax
comp=Z,26nm,1.4s
**BJI Beijing 48.19 360** P **P** **00 36 56.5 -1.2**
BJI S **S** **00 43 52.6 -3.1**
BJI pmax pmax
comp=Z,6.0nm,1.1s
BJI LR LR
comp=Z,260nm,20.7s
BJI LR LR
comp=Z,160nm,19.0s
BJI LR LR
comp=Z,320nm,20.4s
**GOMU GeErMu 48.76 337** P **P** **00 37 03.4 +0.8**
GOMU S **S** **00 44 08.1 +3.5**
GOMU pmax pmax
comp=Z,30nm,1.1s
GOMU LR LR
comp=Z,1μm,19.8s
GOMU LR LR
comp=Z,1μm,19.4s
GOMU LR LR
comp=Z,2μm,19.6s
**BTO Baotou 49.10 354** *e*P **P** **00 37 04.7 -0.2**
BTO pP **pP** **00 37 10.3 -1.6**
BTO sP sP 00 37 11.5 -3.4
BTO S **S** **00 44 09.8 +1.0**
BTO pmax pmax
comp=Z,21nm,0.8s
BTO pmax pmax
comp=Z,210nm,4.1s
BTO LR LR
comp=Z,1μm,20.1s
BTO LR LR
comp=Z,970nm,19.1s
BTO LR LR
comp=Z,2μm,19.8s
**MAJO Matsushiro 49.20 23** P **P** **00 37 07.6 +2.1**
**MAJO Matsushiro 49.20 23** P **P** **00 37 04.7 -0.8**
MAJO IAmb IAmb 00 37 22.7
comp=Z,95nm,1.6s
**MAJO Matsushiro 49.20 23**⇑ *e*P **P** **00 37 04.3 -1.2**
MAJO pmax pmax
comp=Z,22nm,0.9s
**MJAR Matsushiro Arr 49.20 23** P **P** **00 37 04.7 -0.9**
comp=Z,8.7nm,0.7s,baz=197,slow=8.1,SNR=16
MJAR LR LR 01 00 11.7
comp=Z,252nm,18.1s,baz=216,slow=39
comp=Z,8.7nm,0.7s
**HHC Hu-ho-hao-te 49.20 355** *e*P **P** **00 37 03.0 -2.6**
HHC sP pP 00 37 12.5 -0.2
HHC S **S** **00 44 05.1 -5.0**
HHC SS **SS** **00 47 41.9 0.0**
HHC pmax pmax
comp=Z,7.0nm,0.6s
HHC pmax pmax
comp=Z,110nm,3.7s
HHC LR LR
comp=Z,430nm,17.7s
HHC LR LR
comp=Z,290nm,18.8s
HHC LR LR
comp=Z,370nm,18.4s
**MJB9 Matsu-Tunnel 49.20 23** P **P** **00 37 05.5 0.0**
MJB9 IAmb IAmb 00 37 23.7
comp=Z,93nm,1.6s
**NOUC Port Laguerre 49.87 112** P **P** **00 37 12.8 +1.8**
**GTA Gaotai 49.98 343** *e*P **P** **00 37 11.9 +0.3**
GTA S **S** **00 44 23.0 +1.9**
GTA SS **SS** **00 48 02.7 +8.2**
GTA pmax pmax
comp=Z,12nm,1.5s
GTA pmax pmax
comp=Z,310nm,6.9s
GTA LR LR
comp=Z,450nm,20.4s
GTA LR LR
comp=Z,650nm,20.0s
GTA LR LR
comp=Z,490nm,21.4s
**DZM Mont Dzumac 50.00 112** P **P** **00 37 16.0 +4.0**
**DZM Mont Dzumac 50.00 112** *e*P **P** **00 37 12.7 +0.7**
comp=Z,105nm,1.3s
DZM *e*S **S** **00 44 21.4 -0.6**
comp=Z,210nm,32.8s
DZM *e*SS **SS** **00 47 59.2 +4.0**
comp=Z,347nm,24.3s
DZM *e*LR LR 00 51 25.2
comp=Z,857nm,22.6s
**DZM Mont Dzumac 50.00 112** P **P** **00 37 12.4 +0.4**
DZM IAmb IAmb 00 37 15.5
comp=Z,67nm,1.3s
**DZM Mont Dzumac 50.00 112** P **P** **00 37 13.7 +1.7**
comp=Z,31nm,1.1s,baz=285,slow=5.9,SNR=13
DZM LR LR 01 00 42.0
comp=Z,759nm,18.1s,baz=289,slow=39
comp=Z,31nm,1.1s
**ONTNC Ouen Toro 50.04 112** P **P** **00 37 14.4 +2.2**
**ONTNC Ouen Toro 50.04 112** P **P** **00 37 13.2 +1.0**
**YATNC Mamie plateau, 50.41 112** P **P** **00 37 17.4 +2.4**
**JMM Marumori 51.38 25** P **P** **00 37 25.0 +3.0**
**XLT XiLinHaoTe 52.05 360** *e*P **P** **00 37 26.2 -0.8**
XLT pP pP 00 37 30.5 -3.7
XLT sP sP 00 37 32.6 -5.1
XLT S **S** **00 44 46.5 -3.1**
XLT pmax pmax
comp=Z,12nm,1.0s
XLT LR LR
comp=Z,44nm,20.4s
XLT LR LR
comp=Z,260nm,14.2s
XLT LR LR
comp=Z,510nm,21.2s
**PSTR Posyet 52.49 13**⇑ *e*P **P** **00 37 29.6 -0.6**
**MSHR Mys Shultsa 52.51 14**⇓ *e*P **P** **00 37 30.6 +0.3**
MSHR pmax pmax
comp=Z,11nm,1.0s
**CN2 Changchun 52.60 8** *e*P **P** **00 37 32.8 +1.8**
CN2 *e*S **S** **00 44 52.1 -4.9**
CN2 SS **SS** **00 48 37.5 +1.7**
CN2 pmax pmax
comp=Z,10.0nm,0.4s
CN2 pmax pmax
comp=Z,100nm,5.0s
CN2 LR LR
comp=Z,400nm,14.0s
CN2 LR LR
comp=Z,300nm,14.0s
CN2 LR LR
comp=Z,400nm,16.1s
**VLA Vladivostok 53.19 14**⇓ *e*P **P** **00 37 35.7 +0.4**
VLA pmax pmax
comp=Z,22nm,0.8s
**MDJ Mudanjiang 54.11 12** P **P** **00 37 41.6 -0.5**
MDJ PcP **PcP** **00 38 47.5 +0.8**
MDJ ScP **ScP** **00 42 45.2 +1.6**
MDJ S **S** **00 45 16.9 -0.5**
MDJ ScS **ScS** **00 47 32.0 +1.9**
MDJ pmax pmax
comp=Z,40nm,1.0s
MDJ LR LR
comp=Z,340nm,17.2s
MDJ LR LR
comp=Z,230nm,20.6s
MDJ LR LR
comp=Z,470nm,22.7s
**MDJ Mudanjiang 54.11 12** P **P** **00 37 42.0 -0.1**
MDJ IAmb IAmb 00 37 43.0
comp=Z,27nm,0.8s
**USA0B Ussuriysk Arra 54.23 14** P **P** **00 37 41.9 -1.1**
USA0B IAmb IAmb 00 37 43.6
comp=Z,21nm,0.9s
**USA0B Ussuriysk Arra 54.23 14** *ce*P **P** **00 37 42.7 -0.3**
**USRK Ussuriysk Ar. 54.23 14** P **P** **00 37 42.5 -0.5**
**USRK Ussuriysk Ar. 54.23 14** P **P** **00 37 42.3 -0.7**
comp=Z,13nm,0.8s,baz=193,slow=7.2,SNR=25
USRK LR LR 01 02 48.8
comp=Z,207nm,21.2s,baz=190,slow=38
comp=Z,13nm,0.8s
**USRK Ussuriysk Ar. 54.23 14** P **P** **00 37 42.5 -0.5**
**BNX BinXian 54.80 9** ⇑P **P** **00 37 45.9 -1.1**
BNX pP **pP** **00 37 51.9 -2.4**
BNX S **S** **00 45 26.6 0.0**
BNX pmax pmax
comp=Z,12nm,1.5s
BNX pmax pmax
comp=Z,220nm,5.3s
BNX LR LR
comp=Z,340nm,19.4s
BNX LR LR
comp=Z,160nm,16.0s
BNX LR LR
comp=Z,360nm,19.9s
**ULN Ulaanbaatar 56.62 353** P **P** **00 37 59.9 -0.4**
ULN IAmb IAmb 00 38 06.5
comp=Z,75nm,1.7s
**ULN Ulaanbaatar 56.62 353** *c i*P **P** **00 37 59.8 -0.4**
ULN pmax pmax
comp=Z,28nm,1.7s
**SONM Songino Array 56.67 352** P **P** **00 37 59.4 -1.2**
SONM IAmb IAmb 00 38 07.5
comp=Z,21nm,0.8s
**SONM Songino Array 56.67 352** P **P** **00 38 00.2 -0.5**
comp=Z,10nm,0.8s,baz=172,slow=9.3,SNR=67
SONM LR LR 01 04 43.7
comp=Z,362nm,20.0s,baz=180,slow=39
comp=Z,10nm,0.8s
**DCZ Deep Cove 57.11 139** P **P** **00 38 04.6 +0.9**
DCZ IAmb IAmb 00 38 07.5
comp=Z,63nm,1.2s
**ASAJ Asahikawa 57.42 22** LR LR 01 03 59.0
comp=Z,163nm,20.8s,baz=170,slow=37
**ASAJ Asahikawa 57.42 22** P **P** **00 38 05.7 -0.1**
ASAJ pmax pmax
comp=Z,103nm,1.5s
**JKA Kamikawa-asahi 57.42 22** P **P** **00 38 05.7 -0.1**
**HIA Hailar 57.49 3** P P 00 38 11.7 +5.4
**HIA Hailar 57.49 3**⇓ *e*P **P** **00 38 05.9 -0.4**
HIA pmax pmax
comp=Z,12nm,1.2s
**JCZ Jackson Bay 57.64 137** P **P** **00 38 11.1 +3.5**
**MLZ Mavora Lakes 57.70 139** P **P** **00 38 09.0 +1.1**
MLZ IAmb IAmb 00 38 11.2
comp=Z,40nm,0.9s
**WHZ Wether Hill Ro 57.79 140** P **P** **00 38 09.8 +1.3**
WHZ IAmb IAmb 00 38 11.7
comp=Z,47nm,1.1s
**CASY Casey 57.93 183** P **P** **00 38 10.4 +1.3**
CASY IAmb IAmb 00 38 11.5
comp=Z,26nm,1.2s
**WKZ Wanaka 58.08 138** P **P** **00 38 11.7 +1.1**
**WMQ Urumqi 58.10 336** *e*P **P** **00 38 11.4 +0.7**
WMQ S **S** **00 46 11.3 +0.6**
WMQ pmax pmax
comp=Z,24nm,0.7s
WMQ LR LR
comp=Z,470nm,22.5s
WMQ LR LR
comp=Z,610nm,20.5s
WMQ LR LR
comp=Z,640nm,24.0s
**YUK Yuzh-Kuril'sk 58.64 25**⇓ *e*P **P** **00 38 14.2 -0.1**
**LBZ Lake Benmore 58.69 137** P **P** **00 38 16.2 +1.4**
LBZ IAmb IAmb 00 38 17.4
comp=Z,57nm,1.3s
**DSZ Denniston Nort 58.94 134** P **P** **00 38 18.5 +1.8**
**KLR Kul'dur 58.95 12** LR LR 01 08 54.9
comp=Z,202nm,18.8s,baz=214,slow=42
**KLR Kul'dur 58.95 12** *ce*P **P** **00 38 15.6 -0.9**
KLR pmax pmax
comp=Z,6.0nm,1.0s
**INZ Inchbonnie 58.99 135** P **P** **00 38 17.8 +0.8**
**RPZ Rata Peaks 59.05 136** P **P** **00 38 18.6 +1.2**
**QRZ Quartz Range 59.19 133** P **P** **00 38 19.2 +0.9**
**HEH HeiHe 59.20 8** *e*P **P** **00 38 17.6 -0.5**
HEH pP pP 00 38 21.4 -4.0
HEH S **S** **00 46 22.7 -1.8**
HEH SS **SS** **00 50 24.5 +5.1**
HEH pmax pmax
comp=Z,32nm,1.2s
HEH LR LR
comp=Z,370nm,17.0s
HEH LR LR
comp=Z,230nm,17.2s
HEH LR LR
comp=Z,420nm,20.9s
**OXZ Oxford 59.60 136** P **P** **00 38 19.6 -1.6**
OXZ IAmb IAmb 00 38 23.2
comp=Z,38nm,1.0s
**ZAK Zakamensk 59.63 350** *e*P **P** **00 38 21.2 -0.1**
ZAK pmax pmax
comp=Z,19nm,1.4s
**THZ Tophouse 59.73 134** P **P** **00 38 23.0 +0.8**
**YSS Yuzh-Sakhalins 59.91 21** P **P** **00 38 26.8 +3.7**
**YSS Yuzh-Sakhalins 59.91 21** P **P** **00 38 23.8 +0.7**
**YSS Yuzh-Sakhalins 59.91 21** *de*P **P** **00 38 23.2 +0.1**
YSS *e*S **S** **00 46 31.6 -2.2**
YSS pmax pmax
comp=Z,50nm,1.2s
YSS pmax pmax
comp=Z,200nm,5.3s
YSS smax smax
comp=N,100nm,5.2s
YSS smax smax
comp=E,300nm,6.7s
**MQZ McQueen's Vall 60.14 136** P **P** **00 38 26.3 +1.4**
**CIT Chita 60.22 358** *e*P **P** **00 38 28.2 +2.9**
CIT *e* 00 38 40.4
CIT *e* 00 39 04.2
CIT pmax pmax
comp=Z,57nm,2.2s
**KSH Kashi 60.58 325** P **P** **00 38 27.9 -0.2**
KSH pP pP 00 38 32.6 -3.0
KSH pmax pmax
comp=Z,5.0nm,1.0s
KSH LR LR
comp=Z,420nm,17.2s
KSH LR LR
comp=Z,330nm,21.3s
KSH LR LR
comp=Z,390nm,22.7s
**MSVF Nonsavu 60.61 106** P **P** **00 38 28.9 +0.3**
**MSVF Nonsavu 60.61 106** LR LR 01 06 07.7
comp=Z,275nm,18.0s,baz=219,slow=37
**MSVF Nonsavu 60.61 106** P **P** **00 38 28.9 +0.3**
**TOZ Tahuroa Road 60.62 129** P **P** **00 38 29.0 +0.7**
**SNZO South Karori 60.90 133** P **P** **00 38 30.4 +0.4**
**MOY Mondy 61.27 349** *e*P **P** **00 38 32.1 -0.3**
MOY pmax pmax
comp=Z,60nm,2.0s
**SHLS Shalkode 61.30 330** *e*P **P** **00 38 30.2 -2.7**
comp=Z,14nm,1.2s,baz=330

**SHLS Shalkode 61.30 330** *e*P **P 00 38 30.1 -2.7**
SHLS pmax pmax
comp=Z,14nm,1.2s
**MRZ Mangatainoka R 61.37 132** P **P 00 38 33.9 +0.6**
**PDGK Podgornoye 61.41 330** P **P 00 38 33.6 0.0**
**GRNR Gornyy 61.45 14**⇑*i*P **P 00 38 31.1 -2.4**
GRNR pmax pmax
comp=Z,2.0nm,1.1s
**UZB Uzynbulak 61.51 330** *e*P **P 00 38 32.9 -1.5**
comp=Z,8.2nm,1.2s,baz=330
**UZB Uzynbulak 61.51 330** *e*P **P 00 38 32.8 -1.5**
UZB pmax pmax
comp=Z,8.0nm,1.2s
**BKZ Black Stump Fm 61.70 130** P **P 00 38 36.4 +0.8**
**SATY Saty 61.75 329** *e*P **P 00 38 34.6 -1.4**
comp=Z,8.6nm,1.1s,baz=329
**SATY Saty 61.75 329** *e*P **P 00 38 34.5 -1.4**
SATY pmax pmax
comp=Z,9.0nm,1.1s
**NRN Naryn 61.87 327** P **P 00 38 36.9 -0.1**
**NRN Naryn 61.87 327** P **P 00 38 36.9 -0.1**
NRN pmax pmax
comp=Z,13nm,1.2s
**KPKS Kokpek 61.91 330** *e*P **P 00 38 35.5 -1.5**
comp=Z,14nm,1.1s,baz=330
**KPKS Kokpek 61.91 330** *e*P **P 00 38 35.4 -1.5**
KPKS pmax pmax
comp=Z,14nm,1.1s
**RTZ Ruatahuna 61.95 129** P **P 00 38 38.1 +0.7**
**URZ Urewera 61.98 129** LR LR 01 07 35.9
comp=Z,626nm,18.2s,baz=19,slow=38
**ZSN Zaisan 62.21 336** *e*P **P 00 38 37.5 -1.4**
comp=Z,20nm,1.2s,baz=336
**ZSN Zaisan 62.21 336** *e*P **P 00 38 37.4 -1.4**
ZSN pmax pmax
comp=Z,20nm,1.2s
**MDOK Medeo 62.52 329** *e*P **P 00 38 39.6 -1.5**
baz=328
**MDOK Medeo 62.52 329** *e*P **P 00 38 39.6 -1.5**
**ZEA Zeya 62.58 7** *e*P **P 00 38 44.1 +3.0**
ZEA pmax pmax
comp=Z,100nm,1.7s
ZEA pmax pmax
comp=N,30nm,1.4s
ZEA pmax pmax
comp=Z,60nm,1.4s
**AAA Alma-Ata 62.62 328** *e*P **P 00 38 40.0 -1.8**
baz=328
**AAA Alma-Ata 62.62 328** *e*P **P 00 38 39.9 -1.8**
**MK31 Makanchi Array 62.75 334** P **P 00 38 41.4 -1.1**
**MK31 Makanchi Array 62.75 334***de*P **P 00 38 40.8 -1.6**
MK31 pmax pmax
comp=Z,15nm,0.9s
**MKAR Makanchi Array 62.75 334** P **P 00 38 41.5 -0.9**
**MKAR Makanchi Array 62.75 334** P **P 00 38 41.1 -1.3**
comp=Z,8.0nm,0.8s,baz=144,slow=6.2,SNR=44
MKAR LR LR 01 08 59.7
comp=Z,284nm,18.8s,baz=152,slow=39
comp=Z,8.0nm,0.8s
**MKAR Makanchi Array 62.75 334** P **P 00 38 41.5 -0.9**
**MAKZ Makanchi 62.90 334** P **P 00 38 42.9 -0.5**
MAKZ IAmb IAmb 00 38 59.1
comp=Z,23nm,1.6s
**MAKZ Makanchi 62.90 334** P **P 00 38 42.9 -0.5**
MAKZ pmax pmax
comp=Z,23nm,1.6s
**CHKK Chushkaly 63.04 329** *e*P **P 00 38 42.8 -1.7**
baz=329
**CHKK Chushkaly 63.04 329** *e*P **P 00 38 42.7 -1.7**
**TYV Tymovskoe 63.27 18** *e*P **P 00 38 46.0 +0.3**
TYV *e*S **S 00 47 20.1 +3.8**
TYV pmax pmax
comp=Z,100nm,4.6s
TYV pmax pmax
comp=Z,10.0nm,1.1s
TYV smax smax
comp=N,200nm,6.4s
TYV smax smax
comp=E,300nm,6.4s
**ARSB Arslanbob 63.49 325** P **P 00 38 47.8 +0.2**
**ARSB Arslanbob 63.49 325** P **P 00 38 47.8 +0.2**
ARSB pmax pmax
comp=Z,15nm,1.4s
**AAK Ala-Archa 63.51 327** P **P 00 38 48.4 +0.6**
AAK IAmb IAmb 00 39 04.8
comp=Z,22nm,1.1s
**AAK Ala-Archa 63.51 327** LR LR 01 11 20.6
comp=Z,390nm,18.4s,baz=138,slow=41
**AAK Ala-Archa 63.51 327***de*P **P 00 38 48.5 +0.8**
AAK pmax pmax
comp=Z,6.0nm,1.1s
**GAR Garm 63.61 321** P **P 00 38 48.5 +0.1**
**BTK Batken 63.95 322** P **P 00 38 51.7 +1.1**
**BTK Batken 63.95 322** P **P 00 38 51.7 +1.1**
BTK pmax pmax
comp=Z,63nm,1.6s
**SIMJ Simiganj 64.23 320** P **P 00 38 52.5 0.0**
**WSAR Wadi Sarin 64.58 301** LR LR 01 07 24.4
comp=Z,438nm,20.2s,baz=138,slow=36
**BTLS Baital 65.38 328** *e*P **P 00 38 58.6 -1.1**
baz=328
**BTLS Baital 65.38 328** *e*P **P 00 38 58.6 -1.1**
**BOD Bodaibo 66.01 359** *e*P **P 00 39 02.2 -1.3**
BOD pmax pmax
comp=Z,60nm,1.5s
**CHM Chimkent 66.07 324** *e*P **P 00 39 03.1 -1.1**
comp=Z,12nm,1.0s,baz=324
**CHM Chimkent 66.07 324** *e*P **P 00 39 03.1 -1.1**
CHM pmax pmax
comp=Z,12nm,1.0s
**BRLS Boroldaу 66.37 325** *e*P **P 00 39 04.5 -1.8**
comp=Z,5.2nm,1.0s,baz=324
**BRLS Boroldaу 66.37 325** *e*P **P 00 39 04.4 -1.8**
BRLS pmax pmax
comp=Z,5.0nm,1.0s
**SEM Semipalatinsk 66.41 336** *e*P **P 00 39 05.2 -1.3**
comp=Z,12nm,1.2s,baz=336
**SEM Semipalatinsk 66.41 336** *e*P **P 00 39 05.2 -1.3**
SEM pmax pmax
comp=Z,12nm,1.2s
**H04N2 CROZET ISLANDS 66.42 223** T T 01 51 07.2
baz=76,slow=75,SNR=7.8
**H04N1 CROZET ISLANDS 66.44 223** T T 01 51 07.2
baz=76,slow=75,SNR=10
**H04N3 CROZET ISLANDS 66.44 223** T T 01 51 06.1
baz=76,slow=75,SNR=7.8
**KURBB Kurchatov Arra 67.29 335** P **P 00 39 09.8 -2.0**
comp=Z,3.7nm,1.1s,baz=145,slow=6.7,SNR=15
KURBB PP **PP 00 41 34.1 -6.3**
comp=Z,1.1nm,0.9s,baz=137,slow=8.3,SNR=2.7
KURBB LR LR 01 11 10.1
comp=Z,469nm,21.9s,baz=147,slow=38
comp=Z,3.7nm,1.1s
**KURK Kurchatov 67.32 335** P **P 00 39 11.9 0.0**
KURK IAmb IAmb 00 39 28.8
comp=Z,30nm,1.2s
**KURK Kurchatov 67.32 335***ce*P **P 00 39 12.0 0.0**
KURK pmax pmax
comp=Z,28nm,1.7s
**ZALV Zalesovo Beam 67.57 340** P **P 00 39 11.2 -2.2**
**ZALV Zalesovo Beam 67.57 340** P **P 00 39 11.4 -2.0**
comp=Z,9.2nm,0.8s,baz=134,slow=4.3,SNR=34
ZALV LR LR 01 11 36.8
comp=Z,208nm,19.6s,baz=158,slow=39
comp=Z,9.2nm,0.8s
**OTUK Ortayu 68.42 330** P **P 00 39 20.1 +1.1**
**MAW Mawson 68.92 199** P **P 00 39 23.6 +1.8**
comp=Z,21nm,1.0s,baz=50,slow=8.0,SNR=14
MAW LR LR 01 05 06.0
comp=Z,209nm,18.5s,baz=49,slow=32
comp=Z,21nm,1.0s
**PET Petropavlovsk 70.95 25** *e*P **P 00 39 32.9 -1.6**
PET *e*S **S 00 48 47.9 -0.9**
PET *e*PS **PnS 00 49 11.8 -6.8**
PET *e*SS **SS 00 53 16.1 -6.1**
PET pmax pmax
comp=Z,100nm,8.5s
PET pmax pmax
comp=Z,23nm,1.0s
PET MLR MLR
comp=Z,100nm,20.0s
**YAK Yakutsk 70.98 7** *e*P **P 00 39 32.4 -2.0**
YAK *e* 00 39 52.5
YAK *e* 00 42 07.9
YAK *e*PPP PPP 00 43 51.4
YAK *e*S **S 00 48 46.1 -2.7**
YAK *e* 00 49 33.1
YAK *e*SS **SS 00 53 20.3 -2.0**
YAK pmax pmax
comp=Z,31nm,0.9s
YAK pmax pmax
comp=N,10.0nm,0.9s
YAK pmax pmax
comp=E,5.0nm,1.8s
YAK pmax pmax
comp=Z,174nm,7.7s
YAK pmax pmax
comp=N,117nm,8.1s
YAK pmax pmax
comp=E,99nm,7.7s
YAK smax smax
comp=N,195nm,3.8s
YAK smax smax
comp=E,61nm,3.0s
**BVA0 Borovoye Array 72.55 333** *i*P **P 00 39 41.9 -2.2**
**BRVK Borovoye 72.62 333** P **P 00 39 43.9 -0.6**
**BRVK Borovoye 72.62 333** P **P 00 39 43.9 -0.6**
BRVK pmax pmax
comp=Z,16nm,1.2s
**VNDA Vanda 73.00 171** P **P 00 39 47.6 +1.2**
VNDA IAmb IAmb 00 39 49.6
comp=Z,29nm,1.2s
**VNDA Vanda 73.00 171** P **P 00 39 48.3 +1.8**
comp=Z,13nm,1.0s,baz=312,slow=5.9,SNR=47
VNDA LR LR 01 08 43.6
comp=Z,336nm,21.6s,baz=324,slow=33
comp=Z,13nm,1.0s
**MA2 Magadan 73.11 18** LR LR 01 15 26.3
comp=Z,123nm,19.5s,baz=240,slow=39
**MA2 Magadan 73.11 18***de*P **P 00 39 47.7 +0.4**
MA2 pmax pmax
comp=Z,3.0nm,0.8s
**SBA Scott Base 74.02 170** P **P 00 39 54.2 +1.8**
SBA IAmb IAmb 00 39 56.6
comp=Z,66nm,1.9s
**SBA Scott Base 74.02 170** P **P 00 39 54.2 +1.8**
SBA pmax pmax
comp=Z,66nm,1.9s
**AB31 Akbulak array 75.57 326** *i*P **P 00 39 59.4 -2.4**
**ABKAR Akbulak array 75.57 326** P **P 00 39 59.7 -2.2**
**ABKAR Akbulak array 75.57 326** IAmb IAmb 00 40 05.2
comp=Z,10nm,0.9s
**RAYN Ar Rayn 76.08 297** P **P 00 40 03.6 -1.7**
**RAYN Ar Rayn 76.08 297** P **P 00 40 03.7 -1.7**
RAYN pmax pmax
comp=Z,8.0nm,1.0s
**SEY Seymchan 76.29 16**⇓*e*P **P 00 40 05.1 -0.5**
SEY pmax pmax
comp=Z,15nm,1.3s
**AKTO Aktyubinsk 77.25 326** LR LR 01 18 31.5
comp=Z,465nm,21.9s,baz=70,slow=39
**KIBK Kibwezi 78.08 269** P **P 00 40 15.6 -1.3**
**SHEM Shemya Is, Ala 78.12 32** LR LR 01 10 23.8
comp=Z,113nm,21.9s,baz=221,slow=32
**KMBO Kilima Mbogo 79.04 270** P **P 00 40 21.7 -0.7**
**KMBO Kilima Mbogo 79.04 270** P **P 00 40 21.7 -0.7**
KMBO pmax pmax
comp=Z,7.0nm,1.1s
**FURI Furi 79.24 281** LR LR 01 14 11.9
comp=Z,397nm,18.9s,baz=108,slow=35
**SVE Sverdlovsk 79.32 332** *e*P **P 00 40 20.2 -2.4**
SVE pmax pmax
comp=Z,31nm,1.4s
**ARU Arti 80.07 332** P **P 00 40 26.9 +0.2**
ARU IAmb IAmb 00 40 44.7
comp=Z,38nm,1.5s
**ARU Arti 80.07 332** LR LR 01 20 11.0
comp=Z,268nm,19.1s,baz=123,slow=39
**ARU Arti 80.07 332***di*P **P 00 40 24.6 -2.1**
ARU 00 43 21.8
ARU S **S 00 50 29.0 -0.7**
ARU pmax pmax
comp=Z,14nm,2.0s
ARU MLR MLR
comp=Z,284nm,20.0s
**TIXI Tiksi 80.31 4** LR LR 01 19 08.9
comp=Z,309nm,21.2s,baz=202,slow=38
**TIXI Tiksi 80.31 4**⇓*e*P **P 00 40 27.1 -0.6**
TIXI pmax pmax
comp=Z,16nm,1.0s
**MAK Makhachkala 80.58 316** *e*P **P 00 40 26.9 -2.8**
MAK *e* 00 43 28.4
MAK *e*PPP PPP 00 45 26.6
MAK *e*S **S 00 50 32.1 -3.4**
MAK *e*SS **SS 00 55 44.6 -3.9**
MAK *e*SSS SSS 00 59 13.0
MAK pmax pmax
comp=Z,26nm,1.1s
MAK MLR MLR
comp=Z,485nm,20.0s
**RAR Rarotonga 81.35 110** LR LR 01 18 00.1
comp=Z,71nm,19.9s,baz=270,slow=37
**LODK Lodwar 81.59 275** P **P 00 40 35.8 -0.1**
**GNI Garni 81.59 313** LR LR 01 21 42.2
comp=Z,200nm,19.4s,baz=106,slow=39
**QSPA South Pole Qui 81.59 180** P **P 00 40 35.5 +0.6**
QSPA IAmb IAmb 00 40 37.6
comp=Z,47nm,1.2s
**QSPA South Pole Qui 81.59 180** P **P 00 40 36.6 +1.7**
comp=Z,21nm,1.0s,baz=324,slow=2.4,SNR=31
QSPA LR LR 01 12 57.2
comp=Z,284nm,21.8s,baz=340,slow=33
comp=Z,21nm,1.0s
**ELIB Princess Elisa 83.01 198** *d*P **P 00 40 44.1 +1.8**
comp=Z,9.6nm,1.3s
**GURO Guroymak-BITLI 83.12 311** P **P 00 40 42.8 -0.6**
**BELG Belogornoye 83.94 325** LR LR 01 25 04.4
comp=Z,185nm,19.0s,baz=136,slow=41
**BILL Bilibino 83.97 17**⇓*i*P **P 00 40 48.2 +1.2**
BILL S **SKSac 00 51 04.0 -4.4**
BILL *e* 00 52 25.5
BILL pmax pmax
comp=Z,2.0nm,1.3s
BILL MLR MLR
comp=Z,139nm,20.0s
**KBZ Khabaz 84.00 316** P **P 00 40 46.0 -1.7**
comp=Z,1.2nm,0.8s,baz=173,slow=8.1,SNR=2.3
KBZ LR LR 01 24 11.7
comp=Z,136nm,18.6s,baz=108,slow=40
comp=Z,1.2nm,0.8s
**KBZ Khabaz 84.00 316**⇓*e*P **P 00 40 45.8 -1.8**
KBZ pmax pmax
comp=Z,5.0nm,1.3s
**KVAR Kislovodsk Arr 84.21 316** LR LR 01 24 19.7
comp=Z,98nm,20.4s,baz=154,slow=40
**KIV Kislovodsk 84.22 316** *e*P **P 00 40 47.6 -1.3**
KIV *e* 00 51 10.0
KIV pmax pmax
comp=Z,4.0nm,1.1s
**GOF Gofitskoye 84.31 317***ce*P **P 00 40 50.2 +1.0**
**KIRV Kirov 85.44 331** LR LR 01 23 10.0
comp=Z,429nm,21.5s,baz=122,slow=39
**KIRV Kirov 85.44 331**⇓*e*P **P 00 40 56.8 +2.3**
**MBAR Mbarara 85.56 270** P **P 00 40 55.5 -0.9**
**MBAR Mbarara 85.56 270** LR LR 01 15 52.9
comp=Z,171nm,19.3s,baz=70,slow=33
**MBAR Mbarara 85.56 270**⇑*e*P **P 00 40 55.3 -1.1**
MBAR pmax pmax
comp=Z,10.0nm,1.4s
**LSZ Lusaka 86.05 255** P **P 00 40 58.0 -0.8**
LSZ IAmb IAmb 00 41 11.6
comp=Z,17nm,1.2s
**LSZ Lusaka 86.05 255** P **P 00 40 58.0 -0.8**
LSZ pmax pmax
comp=Z,17nm,1.2s
**SOC Sochi 86.17 315** *e*P **P 00 40 56.4 -2.2**
SOC *e* 00 44 20.1
SOC *e*PPP PPP 00 46 18.6
SOC *e*S **SKSac 00 51 23.7 +0.2**
SOC *e*SS **SS 00 57 13.8 +2.3**
SOC pmax pmax
comp=Z,17nm,0.9s
SOC MLR MLR
comp=Z,191nm,18.0s
**EIL Elat 86.70 300** LR LR 01 22 16.1
comp=Z,268nm,20.1s,baz=80,slow=37
**BOSA Boshof 86.98 242** P **P 00 41 03.0 -0.1**
BOSA IAmb IAmb 00 41 17.6
comp=Z,37nm,1.4s
**BOSA Boshof 86.98 242** P **P 00 41 03.7 +0.6**
comp=Z,4.8nm,0.9s,baz=145,slow=3.6,SNR=6.7
BOSA LR LR 01 16 20.0
comp=Z,376nm,18.5s,baz=107,slow=33
comp=Z,4.8nm,0.9s
**VRH Novokhopyorsk 87.00 323** *e*P **P 00 41 00.1 -2.3**
VRH pmax pmax
comp=Z,7.0nm,0.6s
**MMAI Mount Meron Ar 87.00 304** P **P 00 41 02.7 -0.3**
comp=Z,0.4nm,0.3s,baz=125,slow=4.4,SNR=6.1
MMAI LR LR 01 24 37.0
comp=Z,264nm,19.7s,baz=55,slow=39
comp=Z,0.4nm,0.3s
**LBTB Lobatse 87.17 245** P **P 00 41 03.8 -0.3**
LBTB IAmb IAmb 00 41 11.1
comp=Z,11nm,0.8s
**LBTB Lobatse 87.17 245** LR LR 01 13 25.9
comp=Z,186nm,21.3s,baz=98,slow=31
**LBTB Lobatse 87.17 245** P **P 00 41 03.8 -0.3**
LBTB pmax pmax
comp=Z,11nm,0.9s
**BNN Bunyan 87.88 310** P **P 00 41 07.1 0.0**
BNN IAmb IAmb 00 41 34.4
comp=Z,23nm,1.1s
**VORD Divnogorie 88.40 322** *e*P **P 00 41 05.3 -3.9**
VORD pmax pmax
comp=Z,10.0nm,1.2s
**VSR Storozhevoye 88.55 322** *e*P **P 00 41 05.7 -4.1**
VSR pmax pmax
comp=Z,10.0nm,1.1s
**VORR Voronezh 88.64 323** *e*P **P 00 41 07.5 -2.8**
VORR pmax pmax
comp=Z,26nm,0.5s
**LPSR Galich'ya Gora 89.05 323** *e*P P 00 41 07.5 -4.7
LPSR pmax pmax
comp=Z,8.0nm,1.1s
**TROLL Troll, Antarti 89.21 197**⇑P **P 00 41 14.7 +1.9**
comp=Z,385nm,0.9s
**BRTR Keskin Array B 89.73 310** P **P 00 41 15.5 -0.4**
**BRTR Keskin Array B 89.73 310** P **P 00 41 13.3 -2.6**
comp=Z,1.2nm,0.8s,baz=155,slow=4.8,SNR=3.2
BRTR LR LR 01 26 05.0
comp=Z,140nm,20.7s,baz=122,slow=39
comp=Z,1.2nm,0.8s
**BRTR Keskin Array B 89.73 310** P **P 00 41 15.5 -0.4**
**SUR Sutherland 90.19 237** LR LR 01 15 42.0
comp=Z,234nm,21.6s,baz=112,slow=32
**TBI Tubuai 90.54 114** *e*LR LR 01 10 18.4
comp=Z,2µm,25.8s
TBI *e*LR LR 01 10 19.4
comp=Z,2µm,26.5s
**SNAA Sanae 90.86 196** P **P 00 41 21.2 +0.7**
SNAA IAmb IAmb 00 41 23.4
comp=Z,26nm,1.2s
**SNAA Sanae 90.86 196**⇑P **P 00 41 22.4 +1.9**
comp=Z,207nm,0.9s
**SNAA Sanae 90.86 196** P **P 00 41 21.8 +1.4**
comp=Z,14nm,1.0s,baz=89,slow=3.1,SNR=16
SNAA LR LR 01 18 22.9
comp=Z,275nm,18.1s,baz=58,slow=33
comp=Z,14nm,1.0s
**OBN Obninsk 91.02 326** LR LR 01 29 26.3
comp=Z,301nm,18.6s,baz=155,slow=40
**PPT2 Papeete2 91.36 108** *e*S **S 00 52 20.1 -2.2**
comp=Z,118nm,23.0s
**PPT2 Papeete2 91.36 108** *e*LR LR 01 10 41.4
comp=Z,276nm,23.8s
PPT2 *e*LR LR 01 10 45.7
comp=Z,258nm,28.0s
**PPT Papeete 91.36 108** LR LR 01 18 11.3
comp=Z,128nm,21.7s,baz=240,slow=33
**BELA Belgrano 2 92.35 186** P **P 00 41 27.1 -0.1**
BELA IAmb IAmb 00 41 29.3
comp=Z,23nm,1.0s
**VNA2 Neumayer--Watz 92.50 196**⇑P **P 00 41 29.5 +1.5**
comp=Z,9.1nm,1.0s,baz=104,slow=3.8
**VNA1 Neumayer--Stat 92.89 196**⇑P **P 00 41 31.5 +1.8**
comp=Z,10nm,1.1s
**VNA3 Neumayer Olymp 92.92 195**⇑P **P 00 41 31.4 +1.5**
comp=Z,6.8nm,1.0s
**AKASG Malin Array Be 94.60 320** LR LR 01 30 02.1
comp=Z,98nm,21.2s,baz=80,slow=39
**H17K Granite Mounta 94.90 25** P **P 00 41 38.7 -0.3**
H17K IAmb IAmb 00 41 44.3
comp=Z,24nm,1.4s
**TSUM Tsumeb 95.44 250** LR LR 01 18 24.4
comp=Z,192nm,21.7s,baz=138,slow=31
**F19K Shaleruckik Mo 96.04 23** P **P 00 41 41.6 -2.6**
F19K IAmb IAmb 00 41 43.1
comp=Z,27nm,1.8s
**MLR Muntele Rosu 96.19 315** LR LR 01 31 43.3
comp=Z,266nm,19.9s,baz=80,slow=40
**FINES FINESS Array B 97.43 331** LR LR 01 33 11.2
comp=Z,324nm,18.8s,baz=99,slow=40
**KDAK Kodiak Island 97.61 33** LR LR 01 20 54.3
comp=Z,58nm,21.9s,baz=271,slow=32
**ARCES ARCESS Array B 98.10 339** LR LR 01 33 56.3
comp=Z,442nm,18.1s,baz=96,slow=40
**BWN Browne 99.33 26** P **Pdif 00 42 00.1 +1.0**
**SPITS Spitsbergen Ar 100.21 348** LR LR 01 33 51.6
comp=Z,180nm,18.8s,baz=62,slow=39
**ILAR Eielson Array 100.43 26** P **Pdif 00 42 02.4 -1.6**
comp=Z,0.2nm,0.8s,baz=266,slow=4.4,SNR=1.7
**TAOE Nuku Hiva Isla 101.91 101** *e*LR LR 01 15 24.3
comp=Z,245nm,25.3s
**RKT Rikitea 103.61 116** *e*LR LR 01 16 17.0
comp=Z,1µm,23.2s
**YKA Yellowknife Ar 114.70 23** PKP **PKiKP 00 46 54.8 -2.5**
comp=Z,1.7nm,0.9s,baz=310,slow=2.1,SNR=3.9
**TORD Torodi Ar. Bea 115.76 281** PKP **PKPdf 00 46 59.1 -1.5**
comp=Z,1.3nm,0.6s,baz=72,slow=2.6,SNR=7.8
**HUMO Hull Mountain 118.09 46** PKPdf **PKPdf 00 47 03.5 -1.0**
**ESDC Sonseca Array 118.52 311** PKP **PKPdf 00 47 04.3 -1.1**
comp=Z,0.4nm,0.5s,baz=20,slow=2.8,SNR=7.3
**J05D Fort Rock, OR 119.11 45 PKPdf 00 47 05.6 -1.0**
**PINE Pine Mountain 119.17 44 PKPdf 00 47 06.5 -0.2**
**NVAR Mina Array Bea 122.65 50** PKP **PKPdf 00 47 13.2 -0.4**
comp=Z,1.3nm,0.7s,baz=272,slow=1.7,SNR=9.2
**MSO Missoula 122.66 39** PKPdf **PKPdf 00 47 11.8 -1.4**
**HVU Hansel Valley 125.50 44 PKPdf 00 47 19.0 +0.1**
**HVU Hansel Valley 125.50 44** PKiKP **PKPdf 00 47 19.0 +0.1**
**SHPR Sheep Range 125.61 51** PKPdf **PKiKP 00 47 19.7 0.0**
**V12A Nelson 126.08 52** PKPdf **PKiKP 00 47 20.8 +0.3**
**W13A Hualapai Mount 127.02 52** PKPdf **PKPdf 00 47 22.2 +0.1**
**PDAR Pinedale Array 127.25 42** PKP **PKPdf 00 47 21.2 -1.1**
comp=Z,0.6nm,0.8s,baz=207,slow=1.0,SNR=8.0
**LAO LASA Array 127.37 36** PKPdf **PKPdf 00 47 22.6 +0.4**
**RSSD Black Hills 130.06 38 PKPdf 00 47 27.3 -0.3**
**RSSD Black Hills 130.06 38** PKiKP **PKPdf 00 47 27.3 -0.3**
**PLCA Paso Flores 130.71 173** SKPab **SKPab 00 50 52.3 +0.8**
comp=Z,3.9nm,0.9s,baz=212,slow=6.4,SNR=6.0
**TRQA Tornquist 133.76 182** *e*P **PKPdf 00 47 35.4 +0.8**
**TXAR Lajitas Array 137.09 56** PKhKP PKPpre 00 47 30.7
comp=Z,0.5nm,1.0s,baz=258,slow=3.7,SNR=3.4
TXAR PKP **PKPdf 00 47 39.0 -2.0**
comp=Z,0.3nm,0.5s,baz=203,slow=2.2,SNR=7.4
TXAR SKPbc **SKPbc 00 51 10.0 -3.0**
comp=Z,0.5nm,0.9s,baz=183,slow=1.8,SNR=5.1
**S39A Bolivar 140.39 38** PKPdf **PKPdf 00 47 45.0 -1.7**
**U38A Gravette 140.50 40** PKPdf **PKPdf 00 47 45.5 -1.5**
**R40A Maddies Statio 140.63 36** PKPdf **PKPdf 00 47 47.1 -0.1**
**N47A Urbana 142.19 28** PKPpre 00 47 42.0
N47A PKPdf **PKPdf 00 47 49.4 -0.4**
**HKT Hockley 143.03 50** PKPdf PKPbc 00 47 49.7 +1.3
**HKT Hockley 143.03 50** PKiKP PKPbc 00 47 49.7 +1.3
**WCI Wyandotte Cave 143.96 31** PKPpre 00 47 49.0
**WCI Wyandotte Cave 143.96 31** PKiKP PKPab 00 47 49.0 -1.3
**WVT Waverly 144.68 35 PKPab 00 47 51.2 -1.9**
**WVT Waverly 144.68 35** PKiKP **PKPab 00 47 51.2 -1.9**
**VAO Valinhos 144.77 207** PKPdf **PKPdf 00 47 55.5 +0.4**
**CPUP Villa Florida 144.94 190** PKPbc **PKPdf 00 47 55.1 -0.1**
comp=Z,32nm,0.9s,baz=156,slow=3.4,SNR=44
**CPUP Villa Florida 144.94 190** PKiKP **PKPdf 00 47 55.2 0.0**
**O54A Avella 145.01 23 PKPab 00 47 52.7 -1.5**
**HRV Adam Dziewonsk 145.32 10 PKPbc 00 47 53.8 -1.3**
**HRV Adam Dziewonsk 145.32 10** PKiKP **PKPbc 00 47 53.8 -1.3**
**SSPA Standing Stone 145.49 19** PKPdf **PKPdf 00 47 54.1 -1.6**
**PAL Palisades 146.27 14 PKPdf 00 47 56.6 -0.3**
**PAL Palisades 146.27 14** PKP2 **PKPdf 00 47 56.6 -0.3**
**TKL Tuckaleechee C 147.22 31** PKPbc **PKPdf 00 47 57.4 -1.3**
comp=Z,7.7nm,0.8s,baz=0.7,slow=1.5,SNR=13
**LVC Limon Verde 148.76 171 PKiKP 00 48 07.7 +0.3**
**LVC Limon Verde 148.76 171** PKP2 **PKiKP 00 48 07.7 +0.3**
**154A Montrose 149.91 34** PKPdf **PKPdf 00 48 03.4 +0.2**
**AQDB Aquidauana 150.26 195 PKPbc 00 48 09.4 +0.1**
**BDFB Brasilia 151.53 213 PKPbc 00 48 12.7 +0.3**
**BDFB Brasilia 151.53 213** PKP **PKPdf 00 48 05.8 -0.5**
comp=Z,0.7nm,0.4s,baz=184,slow=3.9,SNR=3.6
BDFB PKPbc **PKPbc 00 48 11.5 -1.0**

comp=Z,4.6nm,0.7s,baz=140,slow=5.5,SNR=7.4
**LPAZ La Paz 155.08 170** PKP **PKPdf 00 48 13.0 +0.9**
comp=Z,1.6nm,0.9s,baz=263,slow=4.5,SNR=5.2
LPAZ PKPab sPKPbc 00 48 38.9 +7.2
comp=Z,11nm,0.7s,baz=190,slow=3.5,SNR=26
**ETMB Extrema 161.73 172** PKPab **PKPab 00 49 05.4 +1.1**
**BOAV Boa Vista 173.27 208** PKPab **PKPab 00 49 56.8 +1.5**

*CATAC **06** 00:29:10.8±0.6, 13°.11N×91°.05W, h13km±7km, ML3.7*
*SNET **06** 00:29:11.4±0.9, 13°.30N×91°.06W, h17km±6km, ML3.6*
*GCG **06** 00:29:23.7±0.4, 14°.01N×90°.96W, h50km, MD3.8*
**ISC 06 00:29:10.2±2.6, 13°.2N±0°.1×91°.06W±0°.08, h9km±13km, n49, σ0s54/70, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FUG** | **Fuego 3** | **1.24** | **10** | *i* P | **Pg** | **00 29 34.9** | **+1.0** |
| **NUBE** | **Las Nubes** | **1.41** | **61** | *e*P | **Pn** | **00 29 35.2** | **-1.1** |
| NUBE | | | | *e*S | **Sb** | **00 29 54.4** | **-0.7** |
| **NUBE** | **Las Nubes** | **1.41** | **61** | *i* P | **Pb** | **00 29 36.8** | **-0.1** |
| NUBE | | | | *i* S | **Sg** | **00 29 56.4** | **+0.7** |
| NUBE | | | | IAML | | 00 30 03.0 | |
| | comp=Z,310nm,1.0s | | | | | | |
| **GCG4** | **OSOP** | **1.45** | **20** | *i* P | **Pg** | **00 29 38.2** | **+0.2** |
| GCG4 | | | | IAML | | 00 30 28.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.46** | **58** | *i* P | **Pb** | **00 29 37.3** | **-0.3** |
| LOAL | | | | IAML | | 00 30 01.7 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **GUMI** | **Mixco** | **1.47** | **17** | *i* P | **Pg** | **00 29 38.8** | **+0.4** |
| GUMI | | | | IAML | | 00 29 59.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.47** | **57** | *e*P | **Pn** | **00 29 37.0** | **-0.1** |
| SLOZ | | | | *e*S | **Sb** | **00 29 55.8** | **-0.9** |
| **CEVE** | **Cerro Verde** | **1.52** | **66** | *e*P | **Pn** | **00 29 37.4** | **-0.4** |
| CEVE | | | | IAML | | 00 30 05.4 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.52** | **66** | *i* P | **Pb** | **00 29 38.6** | **-0.1** |
| CEVE | | | | *i* S | **Sg** | **00 29 58.8** | **-0.2** |
| CEVE | | | | IAML | | 00 30 05.1 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.52** | **27** | *i* P | **Pg** | **00 29 39.8** | **+0.4** |
| **SBLS** | **San Blas** | **1.52** | **66** | *e*P | **Pn** | **00 29 37.7** | **-0.2** |
| **RTR** | **El Retiro** | **1.53** | **64** | *e*P | **Pn** | **00 29 37.8** | **-0.1** |
| **CHTG** | **Tecpan** | **1.53** | **3** | *i* P | **Pg** | **00 29 39.0** | **-0.7** |
| CHTG | | | | *i* S | **Sg** | **00 30 00.7** | **+1.1** |
| CHTG | | | | IAML | | 00 30 10.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **SNJE** | **San Jose** | **1.55** | **65** | *e*P | **Pn** | **00 29 37.7** | **-0.5** |
| **JAYA** | **Jayaque - finc** | **1.62** | **74** | *e*P | **Pn** | **00 29 38.5** | **-0.6** |
| JAYA | | | | IAML | | 00 30 03.0 | |
| | comp=Z,545nm,0.3s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.62** | **74** | *i* P | **Pn** | **00 29 38.9** | **-0.3** |
| JAYA | | | | *i* S | **Sb** | **00 30 00.9** | **-0.2** |
| JAYA | | | | IAML | | 00 30 03.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.63** | **348** | *i* P | **Pg** | **00 29 41.0** | **-0.4** |
| SOKI | | | | IAML | | 00 30 11.6 | |
| | comp=Z,690nm,1.0s | | | | | | |
| **UNIC** | **Universidad Ca** | **1.65** | **63** | *e*P | **Pn** | **00 29 39.4** | **0.0** |
| **UNIC** | **Universidad Ca** | **1.65** | **63** | *i* P | **Pn** | **00 29 39.5** | **0.0** |
| UNIC | | | | IAML | | 00 29 50.7 | |
| | comp=Z,230nm,1.0s | | | | | | |
| UNIC | | | | *i* S | **Sg** | **00 30 02.2** | **-1.0** |
| **LALI** | **Alcalda de L** | **1.71** | **81** | *i* P | **Pn** | **00 29 40.5** | **+0.3** |
| LALI | | | | *i* S | **Sb** | **00 30 03.2** | **-0.2** |
| LALI | | | | IAML | | 00 30 25.3 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **1.71** | **70** | *i* P | **Pn** | **00 29 41.1** | **+0.7** |
| CEDA | | | | *i* S | **Sb** | **00 30 04.3** | **+0.6** |
| CEDA | | | | IAML | | 00 30 12.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **1.76** | **74** | *e*P | **Pn** | **00 29 40.8** | **-0.3** |
| **PMON** | **Piamonte** | **1.76** | **74** | *i* P | **Pn** | **00 29 41.0** | **-0.1** |
| PMON | | | | *i* S | **Sb** | **00 30 05.1** | **0.0** |
| PMON | | | | IAML | | 00 30 16.0 | |
| | comp=Z,640nm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **1.79** | **75** | IAML | | 00 29 39.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| ITCA | | | | *i* P | **Pn** | **00 29 41.4** | **0.0** |
| ITCA | | | | *i* S | **Sb** | **00 30 05.6** | **-0.2** |
| **SNET** | **Serv Nac Est T** | **1.83** | **75** | *i* P | **Pn** | **00 29 42.0** | **0.0** |
| SNET | | | | IAML | | 00 30 13.8 | |
| | comp=Z,840nm,1.0s | | | | | | |
| **UEES** | **Universidad Ev** | **1.83** | **74** | *i* P | **Pn** | **00 29 42.5** | **+0.5** |
| UEES | | | | IAML | | 00 30 25.9 | |
| | comp=Z,290nm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **1.84** | **70** | *i* P | **Pn** | **00 29 42.0** | **0.0** |
| QUEZ | | | | *i* S | **Sb** | **00 30 06.7** | **-0.5** |
| QUEZ | | | | IAML | | 00 30 16.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **UTEC** | **Universidad Te** | **1.86** | **75** | *i* P | **Pn** | **00 29 42.9** | **+0.5** |
| UTEC | | | | IAML | | 00 29 51.7 | |
| | comp=Z,500nm,1.0s | | | | | | |
| **PANCS** | **Alcalda de** | **1.87** | **78** | *i* P | **Pn** | **00 29 42.5** | **+0.1** |
| PANCS | | | | *i* S | **Sb** | **00 30 07.4** | **-0.6** |
| PANCS | | | | IAML | | 00 30 14.0 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **1.88** | **77** | *e*P | **Pn** | **00 29 43.1** | **+0.4** |
| LOMA | | | | *e*S | **Sb** | **00 30 07.4** | **-1.1** |
| **LOMA** | **Loma Larga** | **1.88** | **77** | *i* P | **Pn** | **00 29 42.6** | **-0.1** |
| LOMA | | | | IAML | | 00 30 16.3 | |
| | comp=Z,390nm,1.0s | | | | | | |
| **IGN** | **Direccin Gen** | **1.90** | **75** | *i* P | **Pn** | **00 29 43.6** | **+0.7** |
| IGN | | | | IAML | | 00 29 48.3 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **1.91** | **75** | *i* P | **Pn** | **00 29 43.6** | **+0.5** |
| UDBS | | | | *i* S | **Sb** | **00 30 08.6** | **-0.8** |
| UDBS | | | | IAML | | 00 30 22.3 | |
| | comp=Z,390nm,1.0s | | | | | | |
| **LFRS** | **El Faro** | **1.98** | **78** | *e*P | **Pn** | **00 29 44.5** | **+0.5** |
| **MTO3** | **Montecristo** | **2.02** | **54** | *e*P | **Pn** | **00 29 45.4** | **+0.6** |
| **MTO3** | **Montecristo** | **2.02** | **54** | *i* P | **Pn** | **00 29 45.3** | **+0.6** |
| MTO3 | | | | IAML | | 00 29 47.2 | |
| | comp=Z,290nm,1.0s | | | | | | |
| MTO3 | | | | *i* S | **Sb** | **00 30 12.1** | **-0.5** |
| **COEG** | **Centro de Oper** | **2.15** | **79** | *e*P | **Pn** | **00 29 46.4** | **0.0** |
| COEG | | | | *e*S | **Sn** | **00 30 13.8** | **+0.5** |
| **COEG** | **Centro de Oper** | **2.15** | **79** | *i* P | **Pn** | **00 29 46.4** | **0.0** |
| COEG | | | | IAML | | 00 30 18.7 | |
| | comp=Z,300nm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **2.24** | **82** | *i* P | **Pn** | **00 29 48.5** | **+1.0** |
| TECO | | | | IAML | | 00 30 38.8 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **2.25** | **79** | *i* P | **Pn** | **00 29 48.1** | **+0.5** |
| UESV | | | | IAML | | 00 30 26.9 | |
| | comp=Z,310nm,1.0s | | | | | | |
| **LLGN** | **La Laguna** | **2.25** | **65** | *i* P | **Pn** | **00 29 48.1** | **+0.3** |
| LLGN | | | | IAML | | 00 30 48.4 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **MRL** | **Marmol** | **2.28** | **36** | *i* P | **Pb** | **00 29 51.0** | **-0.7** |
| **SCLA** | **Alcaldia de Sa** | **2.31** | **78** | *i* P | **Pn** | **00 29 49.5** | **+0.9** |
| SCLA | | | | IAML | | 00 30 42.9 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **2.46** | **80** | *i* P | **Pn** | **00 29 51.0** | **+0.4** |
| PQSS | | | | IAML | | 00 29 54.1 | |
| | comp=Z,180nm,1.0s | | | | | | |
| PQSS | | | | *i* S | **Sn** | **00 30 21.5** | **+0.7** |
| **PACA** | **Pacayal** | **2.67** | **84** | *e*P | **Pn** | **00 29 54.2** | **+0.6** |
| **PACA** | **Pacayal** | **2.67** | **84** | *i* P | **Pn** | **00 29 54.0** | **+0.4** |
| PACA | | | | *i* S | **Sn** | **00 30 26.6** | **+0.4** |
| PACA | | | | IAML | | 00 30 46.3 | |
| | comp=Z,990nm,1.0s | | | | | | |
| **RANC** | **El Ranchito** | **2.70** | **85** | *i* P | **Pn** | **00 29 54.4** | **+0.4** |
| RANC | | | | *i* S | **Sn** | **00 30 27.3** | **+0.3** |
| RANC | | | | IAML | | 00 32 04.6 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **JUCU** | **Jucuarįn** | **2.73** | **89** | *i* P | **Pn** | **00 29 54.4** | **0.0** |
| JUCU | | | | *i* S | **Sn** | **00 30 28.1** | **+0.5** |
| JUCU | | | | IAML | | 00 30 43.7 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **4.57** | **91** | *i* P | **Pn** | **00 30 19.4** | **-0.3** |
| LIMN | | | | IAML | | 00 30 28.8 | |
| | comp=Z,38nm,1.0s | | | | | | |

*IDC **06** 00:34:58.1±0.9, 8°.30S×116°.47E, h0km, mb3.9/8, mbtmp3.9/9, ML3.6/1, Error ellipse: s-maj=24.2km s-min=17.9km az=81.0*
*DJA **06** 00:34:59.3±0.9, 8°.5S±16°×11°.6E±°, h12km±7km, M4.1/7, MLv4.1/7*
**ISC 06 00:34:58.9±0.7, 8°.25S±0°.09×116°.30E±0°.04, h10km, n15, σ1s47/18, mb3.9/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.76** | **130** | P | **Pb** | **00 35 14.3** | **+0.1** |
| **SRBI** | **Singaraja** | **1.08** | **279** | P | **Pn** | **00 35 19.2** | **-0.9** |
| SRBI | | | | S | **Sn** | **00 35 33.7** | **-1.5** |
| **DNP** | **Denpasar** | **1.15** | **248** | P | **Pb** | **00 35 20.1** | **-0.8** |
| **PLAI** | **Plampang** | **1.57** | **112** | P | **Pb** | **00 35 27.3** | **-0.8** |
| PLAI | | | | S | **Sb** | **00 35 48.4** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.13** | **264** | P | **Pn** | **00 35 33.9** | **-0.7** |
| **PWJI** | **Pagerwojo** | **4.45** | **273** | P | **Pn** | **00 36 06.5** | **0.0** |
| **KAPI** | **Kappang** | **4.70** | **47** | Pn | **Pn** | **00 36 09.1** | **-0.8** |
| | 3.0nm,0.3s,baz=229,slow=9.3,SNR=1.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **00 37 02.4** | **-2.2** |
| | 9.8nm,0.3s,baz=11,slow=23,SNR=4.7 | | | | | | |
| KAPI | | | | Lg | Lg | 00 37 23.7 | |
| | 4.5nm,0.3s,baz=221,slow=20,SNR=2.3 | | | | | | |
| | 8.4nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.98** | **126** | P | **P** | **00 39 41.9** | **-0.6** |
| | 8.6nm,0.8s,baz=301,slow=12,SNR=8.5 | | | | | | |
| | 8.6nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.80** | **134** | P | **P** | **00 40 01.9** | **0.0** |
| | 6.2nm,0.8s,baz=307,slow=8.9,SNR=9.1 | | | | | | |
| | 6.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **00 44 42.0** | **+0.6** |
| | 1.7nm,0.7s,baz=170,slow=9.8,SNR=9.2 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.60** | **334** | P | **P** | **00 45 23.6** | **+0.3** |
| | 0.5nm,0.7s,baz=126,slow=7.3,SNR=4.1 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.14** | **335** | P | **P** | **00 45 56.0** | **+3.3** |
| | 0.1nm,0.4s,baz=155,slow=5.5,SNR=2.5 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.42** | **340** | P | **P** | **00 45 57.6** | **+3.2** |
| | 0.4nm,0.5s,baz=147,slow=8.6,SNR=1.8 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **73.15** | **171** | P | **P** | **00 46 28.6** | **-0.7** |
| | 0.4nm,0.7s,baz=309,slow=9.6,SNR=2.4 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.74** | **180** | P | **P** | **00 47 17.8** | **+0.1** |
| | 3.0nm,1.1s,baz=129,slow=0.5,SNR=3.6 | | | | | | |
| | 3.0nm,1.1s | | | | | | |

*IDC **06** 01:10:24.3±0.9, 52°.63N×173°.13E, h0km, mb3.8/11, mbtmp3.8/11, Error ellipse: s-maj=25.9km s-min=15.4km az=174.0*
*MOS **06** 01:10:27.3±1.2, 52°.62N×173°.14E, h32km, mb4.3/3, Error ellipse: s-maj=15.5km s-min=12.7km az=170.2*
*NEIC **06** 01:10:30.5±1.7, 52°.3N±0°.2×173°.3E±0°.1, h59km±17km, mb3.9/36, Error ellipse: s-maj=33.4km s-min=12.6km az=186.0*
**ISC 06 01:10:28.4±0.7, 52°.5N±0°.1×173°.13E±0°.05, h31km, n77, σ1s45/71, mb3.9/22, Near Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHEM** | **Shemya Is, Ala** | **0.62** | **70** | Pn | **Pb** | **01 10 39.6** | **-1.3** |
| | 3μm,0.3s,baz=134,slow=2.4,SNR=2847 | | | | | | |
| SHEM | | | | Sn | **Sb** | **01 10 48.0** | **-1.4** |
| | baz=150,slow=20 | | | | | | |
| **AMKA** | **Amchitka** | **3.99** | **104** | | **Pn** | **01 11 27.7** | **+0.4** |
| **KIWB** | **Kanaga Island** | **6.02** | **93** | Pn | **Pn** | **01 11 55.2** | **0.0** |
| **ADK** | **Adak** | **6.29** | **92** | Pn | **Pn** | **01 11 58.5** | **-0.5** |
| **ADK** | **Adak** | **6.29** | **92** | P | **Pn** | **01 11 58.5** | **-0.5** |
| **SPN** | **Mys Shipunski** | **7.97** | **279** | P | **Pn** | **01 12 23.9** | **+2.0** |
| **PET** | **Petropavlovsk** | **8.79** | **279** | Pn | **Pn** | **01 12 36.2** | **+2.9** |
| **PET** | **Petropavlovsk** | **8.79** | **279** | P | **Pn** | **01 12 36.2** | **+2.9** |
| **MTVR** | **Mutnovka** | **9.12** | **276** | P | **Pn** | **01 12 38.6** | **+0.7** |
| MTVR | | | | S | **Sn** | **01 14 14.5** | **-5.0** |
| **GRL** | **Gorelyy** | **9.18** | **276** | P | **Pn** | **01 12 40.9** | **+2.2** |
| **KDTR** | **Khodutka, Kamc** | **9.28** | **272** | P | **Pn** | **01 12 40.3** | **+0.3** |
| KDTR | | | | S | **Sn** | **01 14 17.4** | **-5.8** |
| **ASAK** | **Asacha** | **9.30** | **275** | P | **Pn** | **01 12 42.2** | **+1.8** |
| **S12K** | **Black Hills** | **14.86** | **68** | Pn | **Pn** | **01 13 55.3** | **-0.8** |
| **K13K** | **Kusilvak Mount** | **15.20** | **43** | Pn | **Pn** | **01 14 01.3** | **+0.8** |
| K13K | | | | IAmb | IAmb | 01 14 09.1 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **L14K** | **Kuka Creek** | **15.79** | **47** | | **P** | **01 14 10.1** | **-1.6** |
| L14K | | | | IAmb | IAmb | 01 14 13.7 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **16.68** | **44** | | **P** | **01 14 23.0** | **+1.4** |
| K15K | | | | IAmb | IAmb | 01 14 30.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **J16K** | **Anvik River** | **17.48** | **42** | | **P** | **01 14 32.2** | **+1.7** |
| J16K | | | | IAmb | IAmb | 01 15 03.7 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **M17K** | **Holitna River** | **18.19** | **49** | P | **P** | **01 14 40.0** | **+1.7** |
| **CHIR** | **Chirikof Islan** | **18.50** | **67** | P | **P** | **01 14 40.1** | **-1.6** |
| **H18K** | **Honhosa River** | **19.20** | **38** | P | **Pn** | **01 14 50.2** | **-0.2** |
| H18K | | | | IAmb | IAmb | 01 14 51.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **G18K** | **Tagagawik** | **19.45** | **36** | P | **Pn** | **01 14 53.5** | **+0.1** |
| **OHAK** | **Old Harbor** | **19.75** | **63** | P | **P** | **01 14 54.8** | **-0.6** |
| **J19K** | **Poorman** | **19.81** | **42** | P | **Pn** | **01 14 57.2** | **-0.5** |
| J19K | | | | IAmb | IAmb | 01 15 08.6 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **20.13** | **61** | P | **P** | **01 14 59.3** | **-0.2** |
| **KDAK** | **Kodiak Island** | **20.13** | **61** | P | Pn | 01 15 00.7 | -0.8 |
| | comp=Z,2.0nm,0.3s,baz=283,slow=4.8,SNR=16 | | | | | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **C18K** | **Utukok River** | **20.23** | **27** | P | **P** | **01 15 01.2** | **+0.6** |
| C18K | | | | IAmb | IAmb | 01 15 14.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **M20K** | **Styx River** | **20.30** | **49** | P | **P** | **01 15 01.4** | **-0.1** |
| **J20K** | **Nowinta River** | **20.48** | **43** | P | Pn | 01 15 04.5 | -1.1 |
| J20K | | | | IAmb | IAmb | 01 15 14.5 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **20.74** | **33** | P | **P** | **01 15 06.7** | **+0.6** |
| E19K | | | | IAmb | IAmb | 01 15 14.4 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| **CNPM** | **China Poot** | **20.90** | **56** | P | **P** | **01 15 07.7** | **-0.2** |
| **C19K** | **Lookout Ridge** | **20.97** | **27** | P | Pn | 01 15 10.6 | -0.7 |
| C19K | | | | IAmb | IAmb | 01 15 26.1 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **21.03** | **30** | P | **P** | **01 15 11.0** | **+1.7** |
| D19K | | | | IAmb | IAmb | 01 15 17.9 | |
| | comp=Z,5.4nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **21.29** | **38** | P | **P** | **01 15 12.4** | **+0.4** |
| **H21K** | **Melozitna Rive** | **21.53** | **39** | P | **P** | **01 15 16.3** | **+1.7** |
| H21K | | | | IAmb | IAmb | 01 15 18.7 | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **G21K** | **Allakaket** | **21.60** | **37** | P | **P** | **01 15 15.5** | **+0.3** |
| **F21K** | **Alatna River** | **21.90** | **35** | P | **P** | **01 15 20.5** | **+1.9** |
| **B20K** | **Meade River** | **22.20** | **27** | P | **P** | **01 15 22.8** | **+1.1** |
| B20K | | | | IAmb | IAmb | 01 15 30.2 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **22.54** | **51** | P | **P** | **01 15 26.4** | **+1.0** |
| **SML** | **Sawmill** | **22.54** | **51** | P | **P** | **01 15 26.4** | **+1.0** |
| SML | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| **B21K** | **Ikpikpuk River** | **22.71** | **29** | P | **P** | **01 15 28.4** | **+1.3** |
| **I23K** | **Minto, Yukon-K** | **22.73** | **42** | P | **P** | **01 15 27.4** | **0.0** |
| I23K | | | | IAmb | IAmb | 01 15 39.7 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **23.01** | **51** | P | **P** | **01 15 29.9** | **-0.6** |
| SCM | | | | IAmb | IAmb | 01 16 10.0 | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **23.01** | **51** | P | **P** | **01 15 29.9** | **-0.6** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **MDM** | **Murphy Dome** | **23.15** | **43** | P | **P** | **01 15 32.6** | **+0.9** |
| **CCB** | **Clear Creek Bu** | **23.25** | **43** | P | **P** | **01 15 32.6** | **-0.1** |
| **ILAR** | **Eielson Array** | **23.67** | **43** | P | **P** | **01 15 36.9** | **+0.1** |
| | comp=Z,0.6nm,0.8s,baz=250,slow=7.7,SNR=7.7 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **24.02** | **30** | P | **P** | **01 15 39.6** | **-0.4** |
| **GLB** | **Gilahina Butte** | **24.66** | **52** | P | **P** | **01 15 46.1** | **+0.1** |
| GLB | | | | IAmb | IAmb | 01 15 55.5 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **SCRK** | **Sand Creek** | **24.78** | **46** | P | **P** | **01 15 46.1** | **-1.0** |
| **D25K** | **Kavik River** | **25.17** | **33** | P | **P** | **01 15 50.5** | **-0.1** |
| D25K | | | | IAmb | IAmb | 01 16 09.2 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **25.21** | **38** | P | **P** | **01 15 51.7** | **+0.8** |
| **M27K** | **Edge Creek, AK** | **25.61** | **50** | P | **P** | **01 15 55.0** | **+0.3** |
| **BCAR** | **Beaver Creek A** | **25.68** | **48** | P | **P** | **01 15 56.3** | **+1.1** |
| **E27K** | **Coleen River** | **26.50** | **37** | P | **P** | **01 16 02.8** | **+0.2** |
| E27K | | | | IAmb | IAmb | 01 16 34.4 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **I28M** | **Miner Creek** | **26.68** | **43** | P | **P** | **01 16 05.0** | **+0.7** |
| **INK** | **Inuvik** | **29.48** | **37** | P | **P** | **01 16 28.4** | **-0.7** |
| **INK** | **Inuvik** | **29.48** | **37** | P | **P** | **01 16 28.4** | **-0.7** |
| INK | | | | pmax | pmax | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.09** | **191** | T | T | 01 52 23.0 | |
| | baz=6.1,slow=76,SNR=289 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.10** | **191** | T | T | 01 52 23.3 | |
| | baz=6.1,slow=76,SNR=386 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.11** | **191** | T | T | 01 52 21.6 | |
| | baz=6.1,slow=76,SNR=411 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.32** | **191** | T | T | 01 53 55.5 | |
| | baz=6.0,slow=76,SNR=120 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.33** | **191** | T | T | 01 53 57.3 | |
| | baz=6.0,slow=76,SNR=74 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.34** | **191** | T | T | 01 53 53.8 | |
| | baz=6.0,slow=76,SNR=45 | | | | | | |
| **PDAR** | **Pinedale Array** | **50.62** | **68** | P | **P** | **01 19 24.5** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=318,slow=2.9,SNR=4.3 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **54.51** | **309** | P | **P** | **01 19 53.9** | **+1.1** |
| **KURBB** | **Kurchatov Arra** | **54.62** | **309** | P | **P** | **01 19 53.9** | **+0.3** |
| | comp=Z,1.2nm,0.2s,baz=52,slow=7.7,SNR=3.2 | | | | | | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.32** | **303** | P | **P** | **01 19 58.5** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=25,slow=7.9,SNR=3.2 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **63.39** | **343** | P | **P** | **01 20 54.1** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=35,slow=7.0,SNR=5.2 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **65.87** | **350** | P | **P** | **01 21 10.3** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=357,slow=5.8,SNR=4.6 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **66.48** | **349** | P | **P** | **01 21 13.6** | **-0.8** |
| | comp=Z,5.1nm,1.1s,baz=72,slow=4.7,SNR=5.5 | | | | | | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **72.46** | **358** | P | **P** | **01 21 52.1** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=358,slow=5.5,SNR=3.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **KBA** | **Koelnbreinsper** | **79.28** | **346** | *i* P | **P** | **01 22 32.2** | **+1.6** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **SOKA** | **Soboth** | **79.41** | **345** | *i* P | **P** | **01 22 32.6** | **+1.4** |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **79.65** | **345** | *i* P | **P** | **01 22 33.8** | **+1.3** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.65** | **217** | P | **P** | **01 22 33.9** | **+1.3** |
| | comp=Z,1.0nm,0.7s,baz=26,slow=6.6,SNR=7.4 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **83.22** | **216** | P | **P** | **01 22 53.0** | **+1.5** |
| | comp=Z,0.5nm,0.6s,baz=33,slow=5.9,SNR=3.9 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **83.22** | **216** | P | **P** | **01 22 53.0** | **+1.5** |

**NEIC 06 01:19:45.1±0.8, 32°.70N±0°.01×97°.30W±0°.01, h5km, mb_Lg2.3/28, ML2.1/18, Error ellipse: s-maj=1.9km s-min=1.8km az=84.0, Central Texas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FW14** | **Alvarado** | **0.31** | **163** | Pg | Pg | 01 19 50.5 | -0.6 |
| FW14 | | | | Sg | Sg | 01 19 55.3 | +0.2 |
| **FW06** | **Azle** | **0.35** | **322** | Pg | Pg | 01 19 51.6 | -0.3 |
| FW06 | | | | Sg | Sg | 01 19 56.0 | -0.5 |
| FW06 | | | | IAML | | 01 20 03.9 | |
| | 184nm,0.6s | | | | | | |
| **FW13** | **Cleburne** | **0.36** | **198** | Pg | Pg | 01 19 51.4 | -0.6 |
| FW13 | | | | Sg | Sg | 01 19 57.3 | +0.5 |
| FW13 | | | | IAML | | 01 19 59.2 | |
| | 185nm,0.2s | | | | | | |
| FW13 | | | | IAML | | 01 20 00.0 | |
| | 182nm,0.6s | | | | | | |
| **FW16** | **Waxahatchie** | **0.40** | **122** | Pg | Pg | 01 19 52.5 | -0.4 |
| FW16 | | | | Sg | Sg | 01 19 58.6 | +0.5 |
| FW16 | | | | IAML | | 01 20 01.3 | |
| | 182nm,0.6s | | | | | | |
| FW16 | | | | IAML | | 01 20 01.7 | |
| | 204nm,0.9s | | | | | | |
| **FW07** | **Weatherford** | **0.41** | **271** | Pg | Pg | 01 19 52.5 | -0.4 |
| FW07 | | | | Sg | Sg | 01 19 58.5 | +0.2 |
| FW07 | | | | IAML | | 01 20 01.6 | |
| | 221nm,0.2s | | | | | | |
| FW07 | | | | IAML | | 01 20 06.3 | |
| | 232nm,0.1s | | | | | | |
| **Z35A** | **Perchaven, San** | **0.64** | **4** | Pg | Pg | 01 19 56.6 | -0.7 |
| Z35A | | | | Sg | Sg | 01 20 05.2 | -0.4 |
| Z35A | | | | IAML | | 01 20 13.0 | |
| | comp=E,78nm,0.6s | | | | | | |
| **WHTX** | **Lake Whitney,** | **0.71** | **191** | Pg | Pg | 01 19 57.4 | -1.3 |
| WHTX | | | | Sg | Sg | 01 20 07.3 | -0.7 |
| **FW03** | **Perrin-Whitt E** | **0.73** | **298** | Pg | Pg | 01 19 58.7 | -0.3 |
| FW03 | | | | Sg | Sg | 01 20 08.3 | -0.2 |
| FW03 | | | | IAML | | 01 20 15.0 | |
| | comp=E,128nm,0.3s | | | | | | |
| FW03 | | | | IAML | | 01 20 16.6 | |
| | comp=E,129nm,0.2s | | | | | | |
| **PLPT** | **Palo Pinto** | **0.86** | **278** | Pg | Pg | 01 20 00.8 | -0.8 |
| PLPT | | | | Sg | Sg | 01 20 12.6 | -0.2 |
| **TREL** | **Terrell** | **1.02** | **88** | Pg | Pg | 01 20 03.5 | -1.2 |
| TREL | | | | IAmb_Lg | | 01 20 17.0 | |
| | comp=Z,19nm,1.0s | | | | | | |
| TREL | | | | Sg | Sg | 01 20 17.8 | -0.2 |
| **LOOK** | **Love County** | **1.30** | **4** | Pg | Pn | 01 20 09.1 | -0.8 |
| **237A** | **Washetta, Mont** | **1.44** | **118** | | Pn | 01 20 11.0 | -0.8 |
| **WTFS** | **Wit

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=262 | | | | | | | |
| **EOS3** | **EOS3** | **0.71** | **207** | P | | **Pg** | **01 25 15.7** | **+0.3** |
| | baz=207 | | | | | | | |
| EOS3 | | | | S | | **Sb** | **01 25 26.4** | **+0.6** |
| | baz=207 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.74** | **284** | *e*P | | **Pg** | **01 25 16.4** | **+0.1** |
| | baz=282 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.77** | **274** | *e*P | | **Pg** | **01 25 16.9** | **+0.1** |
| | baz=273 | | | | | | | |
| **TWC** | **Suao** | **0.81** | **248** | *e*P | | **Pg** | **01 25 17.1** | **-0.3** |
| | baz=247 | | | | | | | |
| TWC | | | | *e*S | | **Sg** | **01 25 27.1** | **-0.9** |
| | baz=247 | | | | | | | |
| **ESAO** | **Su ao** | **0.83** | **246** | *e*P | | **Pg** | **01 25 17.8** | **0.0** |
| | baz=245 | | | | | | | |
| **EOS4** | **EOS4** | **0.86** | **202** | *e*P | | **Pg** | **01 25 18.2** | **-0.1** |
| | baz=202 | | | | | | | |
| EOS4 | | | | *e*S | | **Sg** | **01 25 29.6** | **+0.1** |
| | baz=202 | | | | | | | |
| **NDS** | **Dongshan** | **0.92** | **252** | *e*P | | **Pg** | **01 25 19.9** | **+0.4** |
| | baz=251 | | | | | | | |
| **TWE** | **Neicheng** | **0.94** | **258** | *e*P | | **Pb** | **01 25 20.4** | **+0.3** |
| | baz=257 | | | | | | | |
| **EWUT** | **Wuta** | **0.94** | **240** | *e*P | | **Pb** | **01 25 19.6** | **-0.6** |
| | baz=239 | | | | | | | |
| EWUT | | | | *e*S | | **Sg** | **01 25 32.4** | **+0.2** |
| | baz=239 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.00** | **261** | *e*P | | **Pn** | **01 25 22.1** | **+0.2** |
| | baz=260 | | | | | | | |
| **YM01** | **YM01** | **1.03** | **283** | *e*P | | **Pg** | **01 25 22.4** | **+0.8** |
| | baz=281 | | | | | | | |
| **ENTT** | **Nioudou** | **1.04** | **255** | *e*P | | **Pb** | **01 25 21.9** | **-0.1** |
| | baz=254 | | | | | | | |
| **NWLT** | **Wulai** | **1.07** | **263** | *e*P | | **Pb** | **01 25 21.9** | **-0.6** |
| | baz=261 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.10** | **254** | *e*P | | **Pb** | **01 25 21.9** | **-1.0** |
| | baz=253 | | | | | | | |
| **LATG** | **Datong** | **1.11** | **250** | *e*P | | **Pb** | **01 25 22.8** | **-0.4** |
| | baz=249 | | | | | | | |
| **YHNB** | **Yeheng** | **1.20** | **258** | *e*P | | **Pn** | **01 25 24.4** | **-0.4** |
| | baz=257 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.23** | **233** | P | | **Pn** | **01 25 24.6** | **-0.5** |
| | baz=232 | | | | | | | |
| NACB | | | | *e*S | | **Sb** | **01 25 39.9** | **-1.1** |
| | baz=232 | | | | | | | |
| **NNSB** | **Datong** | **1.27** | **248** | *e*P | | **Pn** | **01 25 25.1** | **-0.6** |
| | baz=247 | | | | | | | |
| NNSB | | | | *e*S | | **Sn** | **01 25 43.1** | **+0.2** |
| | baz=247 | | | | | | | |
| **NNS** | **Nan Shan** | **1.27** | **248** | *e*P | | **Pn** | **01 25 25.7** | **0.0** |
| | baz=247 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **01 25 43.3** | **+0.3** |
| | baz=247 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.29** | **237** | *e*P | | **Pn** | **01 25 25.6** | **-0.4** |
| | baz=236 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.44** | **259** | *e*P | | **Pg** | **01 25 29.9** | **+0.3** |
| | baz=258 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.45** | **232** | *e*P | | **Pn** | **01 25 28.5** | **+0.2** |
| | baz=232 | | | | | | | |
| **FUSS** | **Fushou** | **1.46** | **243** | *e*P | | **Pn** | **01 25 28.5** | **0.0** |
| | baz=242 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.50** | **239** | *e*P | | **Pn** | **01 25 29.6** | **+0.5** |
| | baz=238 | | | | | | | |
| **LIOB** | **Emei** | **1.53** | **260** | *e*P | | **Pn** | **01 25 29.6** | **+0.4** |
| | baz=259 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.55** | **260** | *e*P | | **Pn** | **01 25 30.3** | **+0.9** |
| | baz=258 | | | | | | | |
| **CHGB** | **Renai** | **1.61** | **238** | *e*P | | **Pb** | **01 25 31.8** | **0.0** |
| | baz=237 | | | | | | | |
| **WHP** | **Taichung City** | **1.70** | **248** | *e*P | | **Pb** | **01 25 33.2** | **0.0** |
| | baz=247 | | | | | | | |
| **SSLB** | **Suanglung** | **1.93** | **235** | *e*P | | **Pn** | **01 25 33.9** | **-0.8** |
| | baz=234 | | | | | | | |
| **TYC** | **Yuchr** | **1.94** | **239** | *e*P | | **Pn** | **01 25 36.1** | **+1.3** |
| | baz=238 | | | | | | | |
| **FULB** | **Fuli** | **2.12** | **217** | *e*P | | **Pn** | **01 25 37.1** | **-0.3** |
| | baz=216 | | | | | | | |
| **EDH** | **Donghe** | **2.31** | **213** | *e*P | | **Pn** | **01 25 40.1** | **+0.3** |
| | baz=213 | | | | | | | |

*IDC **06** 01:27:17.5±5.4, 37°.23N×71°.85E, h120km±43km, mb3.2/6, mbtmp3.6/10, Error ellipse: s-maj=56.3km s-min=29.8km az=147.0*
*NNC **06** 01:27:21.4±3.0, 37°.64N×71°.39E, h172km±50km, mb2.9, mpv3.7, Error ellipse: s-maj=30.6km s-min=14.8km az=16.0*

**ISC 06 01:27:23.4±1.3, 37°.7N±0°.1×71°.48E±0°.09, h150km, n25, σ1§40/30, mb3.2/5, 4C-1D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **4.72** | **20** | P | **Pn** | **01 28 32.8** | **-0.6** |
| | SNR=58 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.24** | **19** | P | **Pn** | **01 28 40.8** | **+0.8** |
| | SNR=8.8 | | | | | | |
| **AAK** | **Ala-Archa** | **5.42** | **24** | P | **Pn** | **01 28 41.8** | **-0.7** |
| | SNR=9.4 | | | | | | |
| **AAK** | **Ala-Archa** | **5.42** | **24** | P | **Pn** | **01 28 41.7** | **-0.8** |
| | 7.7nm,0.3s,baz=200,slow=5.4,SNR=12 | | | | | | |
| AAK | | | | S | **Sn** | **01 29 45.0** | **+0.7** |
| | 11nm,0.6s,baz=320,slow=22,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **5.42** | **24** | P | **Pn** | **01 28 42.1** | **-0.4** |
| | 4.4nm,0.4s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **01 29 45.5** | **+1.2** |
| | 12nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **5.42** | **352** | P | **Pn** | **01 28 42.0** | **-0.3** |
| | 1.9nm,0.3s,baz=183,slow=14,SNR=64 | | | | | | |
| KK31 | | | | S | **Sn** | **01 29 45.4** | **+1.3** |
| | 8.2nm,0.5s,baz=176,slow=18,SNR=9.9 | | | | | | |
| **USP** | **Ospenovka** | **5.99** | **22** | P | **Pn** | **01 28 49.5** | **-0.5** |
| | SNR=7.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.07** | **30** | P | **Pn** | **01 28 50.6** | **-0.5** |
| | SNR=6.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.07** | **30** | ⇓P | **Pn** | **01 28 50.5** | **-0.6** |
| | 3.4nm,0.7s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **01 30 02.2** | **+2.4** |
| | 5.2nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **6.76** | **27** | P | **Pn** | **01 28 58.9** | **-1.3** |
| | 1.9nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **7.17** | **32** | P | **Pn** | **01 29 04.7** | **-0.9** |
| | 1.9nm,0.5s | | | | | | |
| **BTLS** | **Baital** | **7.56** | **14** | Pg | **Pn** | **01 29 10.4** | **-0.4** |
| | 3.2nm,0.4s | | | | | | |
| BTLS | | | | Lg | Lg | 01 30 34.8 | |
| | 2.6nm,0.8s | | | | | | |
| **PDGK** | **Podgornoye** | **8.28** | **45** | P | **Pn** | **01 29 20.3** | **-0.2** |
| | 2.1nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **12.08** | **38** | P | **Pn** | **01 30 09.3** | **-1.3** |
| | 1.2nm,0.8s,baz=208,slow=13,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.08** | **38** | P | **Pn** | **01 30 09.0** | **-1.6** |
| | 0.6nm,0.7s,baz=210,slow=14,SNR=6.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.84** | **19** | P | **P** | **01 30 35.8** | **-0.8** |
| | 0.4nm,0.6s,baz=202,slow=9.7,SNR=4.3 | | | | | | |
| **AB31** | **Akbulak array** | **14.23** | **328** | ⇑P | **Pn** | **01 30 37.1** | **-0.8** |
| | 2.4nm,0.7s,baz=136,slow=14,SNR=42 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **01 33 12.3** | **-3.3** |
| | 2.5nm,0.5s,baz=130,slow=26,SNR=13 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.94** | **327** | P | **P** | **01 31 01.9** | **+2.2** |
| | 1.3nm,0.3s,baz=136,slow=12,SNR=6.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.64** | **25** | P | **Pn** | **01 31 30.4** | **-1.1** |
| | 1.0nm,0.4s,baz=214,slow=9.6,SNR=5.2 | | | | | | |
| **GNI** | **Garni** | **20.92** | **285** | P | **P** | **01 31 55.8** | **+1.6** |
| | 4.1nm,0.6s,baz=318,slow=17,SNR=3.7 | | | | | | |
| | 4.1nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **29.45** | **286** | P | **P** | **01 33 13.8** | **+0.7** |
| | 0.3nm,0.7s,baz=142,slow=4.7,SNR=3.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **42.35** | **321** | P | **P** | **01 35 04.1** | **+1.8** |
| | 1.3nm,0.4s,baz=96,slow=11,SNR=12 | | | | | | |
| | 1.3nm,0.4s | | | | | | |
| **NOA** | **NORSAR Array B** | **43.64** | **322** | P | **P** | **01 35 14.2** | **+1.5** |
| | 0.2nm,0.4s,baz=96,slow=7.3,SNR=1.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **57.23** | **297** | P | **P** | **01 36 55.9** | **+0.8** |
| | 0.2nm,0.5s,baz=69,slow=6.6,SNR=5.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.13** | **268** | P | **P** | **01 37 52.5** | **-2.4** |
| | 0.1nm,0.4s,baz=38,slow=6.7,SNR=1.7 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **06** 01:53:42.6±0.6, 8°.21S×116°.23E, h0km, mb4.3/13, mbtmp4.3/14, ML3.7/1, MS3.4/15, Error ellipse: s-maj=19.9km s-min=13.8km az=87.0*
*DJA **06** 01:53:45.4±0.3, 8°S±5°×11°E±°, h10km, M4.5/10, MLv4.5/10*
*NEIC **06** 01:53:45.2±2.0, 8°.24S±0°.08×116°.31E±0°.06, h13km±4km, mb4.7/27, Error ellipse: s-maj=11.7km s-min=9.1km az=174.0*

**ISC 06 01:53:44.3±0.4, 8°.26S±0°.05×116°.32E±0°.04, h10km, n98, σ1§18/92, mb4.5/22, MS3.4/14, 3C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.73** | **130** | P | **Pn** | **01 54 00.7** | **0.0** |
| TWSI | | | | S | **Sn** | **01 54 11.8** | **-0.1** |
| **SRBI** | **Singaraja** | **1.11** | **279** | P | **Pb** | **01 54 05.4** | **-0.2** |
| SRBI | | | | S | **Sb** | **01 54 20.1** | **0.0** |
| **PLAI** | **Plampang** | **1.55** | **111** | P | **Pb** | **01 54 13.0** | **-0.1** |
| **PLAI** | **Plampang** | **1.55** | **111** | P | **Pb** | **01 54 13.9** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.15** | **264** | P | **Pn** | **01 54 20.5** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.15** | **264** | Pn | **Pn** | **01 54 20.0** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.15** | **264** | P | **Pn** | **01 54 20.4** | **+0.2** |
| **GRJI** | **Gresik** | **4.03** | **289** | P | **Pn** | **01 54 46.0** | **-0.1** |
| **PWJI** | **Pagerwojo** | **4.48** | **273** | P | **Pn** | **01 54 54.0** | **+1.8** |
| **BASI** | **Baing, Sumba** | **4.63** | **115** | P | **Pn** | **01 54 55.1** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.64** | **63** | P | **Pn** | **01 54 53.6** | **-0.9** |
| **KAPI** | **Kappang** | **4.69** | **47** | P | Pn | 01 54 49.7 | -5.5 |
| **KAPI** | **Kappang** | **4.69** | **47** | Pn | **Pn** | **01 54 54.9** | **-0.3** |
| **KAPI** | **Kappang** | **4.69** | **47** | Pn | **Pn** | **01 54 55.6** | **+0.4** |
| | 3.1nm,0.3s,baz=218,slow=5.8,SNR=15 | | | | | | |
| KAPI | | | | Sn | **Sn** | **01 55 48.9** | **-0.9** |
| | 22nm,0.3s,baz=89,slow=23,SNR=12 | | | | | | |
| KAPI | | | | Lg | Lg | 01 56 12.1 | |
| | 7.9nm,0.3s,baz=229,slow=21,SNR=3.6 | | | | | | |
| KAPI | | | | LR | LR | 01 57 15.4 | |
| | comp=Z,318nm,21.8s,baz=260,slow=45 | | | | | | |
| | 11nm,0.3s | | | | | | |
| **UGM** | **Wanagama** | **5.75** | **273** | Pn | **Pn** | **01 55 09.8** | **+0.1** |
| **MMRI** | **Maumere** | **5.87** | **94** | Pn | **Pn** | **01 55 11.5** | **+0.1** |
| **MBWA** | **Marble Bar** | **13.24** | **166** | P | **Pn** | **01 56 53.0** | **+0.6** |
| **MBWA** | **Marble Bar** | **13.24** | **166** | Pn | **Pn** | **01 56 51.3** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** | **13.33** | **138** | Pn | **Pn** | **01 56 52.5** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **166** | P | **Pn** | **01 56 58.4** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **166** | Pn | **Pn** | **01 56 57.8** | **-0.4** |
| **KNRA** | **Kununurra** | **14.22** | **122** | | **Pn** | **01 57 03.4** | **-2.5** |
| **GIRL** | **Giralia** | **14.44** | **188** | P | **Pn** | **01 57 09.2** | **+0.3** |
| **GIRL** | **Giralia** | **14.44** | **188** | Pn | **Pn** | **01 57 06.9** | **-2.0** |
| **MTN** | **Manton Dam** | **15.26** | **109** | Pn | **Pn** | **01 57 17.7** | **-2.3** |
| **MEEK** | **Meekatharra** | **18.41** | **173** | P | **Pn** | **01 58 01.3** | **+1.6** |
| **WRKA** | **Warakurna** | **20.22** | **147** | P | **P** | **01 58 20.9** | **+1.2** |
| | 38nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **20.70** | **181** | P | **P** | **01 58 25.1** | **+0.4** |
| MORW | | | | IAmb | IAmb | 01 58 42.8 | |
| | comp=Z,39nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.91** | **125** | P | **P** | **01 58 27.4** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 01 58 28.5 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.96** | **126** | P | **P** | **01 58 27.4** | **-0.2** |
| **WRA** | **Warramunga Arr** | **20.96** | **126** | P | **P** | **01 58 28.1** | **+0.4** |
| | comp=Z,24nm,0.8s,baz=301,slow=12,SNR=100 | | | | | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.96** | **126** | P | **P** | **01 58 27.6** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 01 58 29.2 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.97** | **126** | P | **P** | **01 58 27.7** | **0.0** |
| WB2 | | | | IAmb | IAmb | 01 58 29.2 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.13** | **125** | | **P** | **01 58 30.2** | **+0.7** |
| WR0 | | | | IAmb | IAmb | 01 58 31.0 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.77** | **134** | P | **P** | **01 58 48.0** | **+0.8** |
| **ASAR** | **Alice Springs** | **22.77** | **134** | P | **P** | **01 58 47.6** | **+0.5** |
| | comp=Z,15nm,0.8s,baz=307,slow=8.6,SNR=79 | | | | | | |
| ASAR | | | | LR | LR | 02 09 15.4 | |
| | comp=Z,52nm,20.4s,baz=276,slow=41 | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.77** | **134** | P | **P** | **01 58 46.4** | **-0.7** |
| **AS01** | **Alice Springs** | **22.80** | **134** | P | **P** | **01 58 47.9** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **24.56** | **178** | LR | LR | 02 09 15.2 | |
| | comp=Z,90nm,18.5s,baz=344,slow=38 | | | | | | |
| **FORT** | **Forrest** | **24.95** | **155** | P | **P** | **01 59 09.4** | **+1.5** |
| | comp=Z,41nm,1.7s | | | | | | |
| **FORT** | **Forrest** | **24.95** | **155** | P | **P** | **01 59 08.4** | **+0.5** |
| **QIS** | **Mount Isa** | **25.61** | **121** | P | **P** | **01 59 13.7** | **-0.4** |
| **COEN** | **Coen** | **26.94** | **105** | P | **P** | **01 59 26.4** | **+0.2** |
| **BBOO** | **Buckleboo** | **30.52** | **146** | P | **P** | **01 59 58.5** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **31.61** | **327** | P | **P** | **02 00 08.6** | **+1.0** |
| **CMAR** | **Chiang Mai Arr** | **31.61** | **327** | LR | LR | 02 14 02.1 | |
| | comp=Z,81nm,18.4s,baz=155,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **33.23** | **138** | P | **P** | **02 00 23.1** | **+1.4** |
| **STKA** | **Stephens Creek** | **33.23** | **138** | P | **P** | **02 00 22.4** | **+0.7** |
| | comp=Z,3.4nm,0.7s,baz=299,slow=10,SNR=5.0 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **PALK** | **Pallekele** | **38.72** | **293** | LR | LR | 02 19 08.0 | |
| | comp=Z,54nm,19.0s,baz=219,slow=40 | | | | | | |
| **JNU** | **Nakatsue** | **43.42** | **18** | LR | LR | 02 21 40.9 | |
| | comp=Z,21nm,20.1s,baz=210,slow=39 | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.73** | **13** | P | **P** | **02 02 13.9** | **+0.3** |
| **KSRS** | **Korea Array** | **46.76** | **13** | P | **P** | **02 02 17.4** | **+3.6** |
| | comp=Z,1.4nm,0.7s,baz=198,slow=7.8,SNR=3.2 | | | | | | |
| KSRS | | | | LR | LR | 02 23 50.8 | |
| | comp=Z,24nm,20.2s,baz=205,slow=39 | | | | | | |
| **BTO** | **Baotou** | **48.97** | **354** | *e*P | **P** | **02 02 32.1** | **+1.0** |
| BTO | | | | pP | **sP** | **02 02 39.7** | **+4.4** |
| BTO | | | | sP | pP | 02 02 44.8 | +11 |
| BTO | | | | PP | **PP** | **02 04 27.1** | **+2.4** |
| BTO | | | | S | **S** | **02 09 36.0** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **49.08** | **23** | P | **P** | **02 02 32.1** | **+0.2** |
| | comp=Z,1.2nm,0.3s,baz=203,slow=8.8,SNR=6.0 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **JTM** | **Tenmabayashi** | **53.87** | **23** | P | **P** | **02 03 08.5** | **+0.8** |
| **MDJ** | **Mudanjiang** | **53.98** | **12** | P | **P** | **02 03 08.8** | **+0.4** |
| MDJ | | | | IAmb | IAmb | 02 03 10.3 | |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.11** | **14** | P | **P** | **02 03 09.9** | **+0.6** |
| | comp=Z,3.5nm,0.7s,baz=195,slow=8.9,SNR=9.9 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.48** | **353** | P | **P** | **02 03 27.0** | **+0.4** |
| ULN | | | | IAmb | IAmb | 02 03 28.3 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **352** | P | **P** | **02 03 26.4** | **-0.6** |
| SONM | | | | IAmb | IAmb | 02 03 28.8 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **352** | P | **P** | **02 03 27.8** | **+0.8** |
| | comp=Z,4.4nm,0.7s,baz=172,slow=8.9,SNR=25 | | | | | | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **57.30** | **22** | LR | LR | 02 29 25.0 | |
| | comp=Z,22nm,20.7s,baz=212,slow=37 | | | | | | |
| **HIA** | **Hailar** | **57.36** | **3** | P | **P** | **02 03 33.4** | **+0.8** |
| HIA | | | | IAmb | IAmb | 02 03 51.9 | |
| | comp=Z,6.6nm,0.6s | | | | | | |
| **MLZ** | **Mavora Lakes** | **57.81** | **139** | P | **P** | **02 03 36.6** | **+0.5** |
| **LBZ** | **Lake Benmore** | **58.80** | **137** | P | **P** | **02 03 43.3** | **+0.3** |
| **KLR** | **Kul'dur** | **58.83** | **12** | LR | LR | 02 30 56.8 | |
| | comp=Z,32nm,20.2s,baz=260,slow=38 | | | | | | |
| **HEH** | **HeiHe** | **59.07** | **8** | *e*P | **P** | **02 03 45.2** | **+0.7** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **BKZ** | **Black Stump Fm** | **61.80** | **130** | P | **P** | **02 04 04.0** | **+0.3** |
| **MK31** | **Makanchi Array** | **62.62** | **334** | P | **P** | **02 04 07.9** | **-1.0** |
| **MKAR** | **Makanchi Array** | **62.62** | **334** | P | **P** | **02 04 07.9** | **-1.0** |
| **MKAR** | **Makanchi Array** | **62.62** | **334** | P | **P** | **02 04 08.5** | **-0.4** |
| | comp=Z,0.6nm,0.6s,baz=141,slow=7.7,SNR=7.2 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **63.39** | **327** | LR | LR | 02 34 59.1 | |
| | comp=Z,35nm,18.1s,baz=126,slow=39 | | | | | | |
| **WSAR** | **Wadi Sarin** | **64.49** | **301** | LR | LR | 02 33 00.8 | |
| | comp=Z,41nm,20.1s,baz=104,slow=37 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.16** | **335** | P | **P** | **02 04 36.4** | **-1.9** |
| | comp=Z,0.8nm,0.3s,baz=141,slow=6.0,SNR=5.1 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.44** | **340** | P | **P** | **02 04 38.2** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **67.44** | **340** | P | **P** | **02 04 38.3** | **-1.6** |
| **ZALV** | **Zalesovo Beam** | **67.44** | **340** | P | **P** | **02 04 38.1** | **-1.8** |
| | comp=Z,1.1nm,0.7s,baz=170,slow=9.0,SNR=4.9 | | | | | | |
| ZALV | | | | LR | LR | 02 37 26.3 | |
| | comp=Z,21nm,19.0s,baz=118,slow=39 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **73.13** | **171** | P | **P** | **02 05 14.8** | **+0.2** |
| VNDA | | | | IAmb | IAmb | 02 05 22.3 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **73.13** | **171** | P | **P** | **02 05 15.4** | **+0.9** |
| | comp=Z,1.2nm,0.8s,baz=299,slow=3.6,SNR=9.2 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.45** | **326** | P | **P** | **02 05 26.2** | **-2.3** |
| **ABKAR** | **Akbulak array** | **75.45** | **326** | P | **P** | **02 05 26.5** | **-2.0** |
| ABKAR | | | | IAmb | IAmb | 02 05 37.9 | |
| | comp=Z,4.9nm,1.4s | | | | | | |
| **GNI** | **Garni** | **81.48** | **313** | LR | LR | 02 46 39.5 | |
| | comp=Z,20nm,19.3s,baz=98,slow=39 | | | | | | |
| **QSPA** | **South Pole Qui** | **81.73** | **180** | P | **P** | **02 06 03.0** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 02 06 06.4 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.73** | **180** | P | **P** | **02 06 03.1** | **+0.1** |
| | comp=Z,2.7nm,0.8s,baz=275,slow=3.1,SNR=7.8 | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **87.03** | **242** | P | **P** | **02 06 30.4** | **-0.3** |
| BOSA | | | | IAmb | IAmb | 02 06 55.5 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **87.03** | **242** | P | **P** | **02 06 30.3** | **-0.4** |
| | comp=Z,1.9nm,0.8s,baz=146,slow=3.6,SNR=3.0 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.33** | **197** | ⇑P | **P** | **02 06 42.1** | **+1.3** |
| | comp=Z,57nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.98** | **196** | ⇑P | **P** | **02 06 49.3** | **+0.9** |
| | comp=Z,15nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.98** | **196** | P | **P** | **02 06 49.5** | **+1.1** |
| | comp=Z,0.9nm,0.6s,baz=156,slow=24,SNR=6.0 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **BELA** | **Belgrano 2** | **92.49** | **186** | P | **P** | **02 06 54.7** | **-0.5** |
| BELA | | | | IAmb | IAmb | 02 06 57.0 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.62** | **196** | ⇑P | **P** | **02 06 54.7** | **-1.3** |
| | comp=Z,5.1nm,0.7s,baz=47,slow=3.2 | | | | | | |
| **FINES** | **FINESS Array B** | **97.31** | **331** | LR | LR | 02 58 17.6 | |
| | comp=Z,35nm,18.5s,baz=236,slow=40 | | | | | | |
| **ARCES** | **ARCESS Array B** | **97.97** | **339** | LR | LR | 02 59 13.7 | |
| | comp=Z,18nm,19.5s,baz=246,slow=40 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.72** | **281** | PKP | **PKPdf** | **02 12 26.3** | **-1.8** |
| | comp=Z,0.5nm,1.0s,baz=39,slow=3.9,SNR=2.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.58** | **49** | PKP | **PKPdf** | **02 12 39.1** | **-1.8** |
| | comp=Z,0.2nm,0.5s,baz=336,slow=3.1,SNR=4.1 | | | | | | |
| **CPUP** | **Villa Florida** | **145.07** | **190** | PKPbc | **PKPab** | **02 13 22.4** | **+0.3** |
| | comp=Z,8.1nm,1.1s,baz=181,slow=3.9,SNR=10 | | | | | | |
| **CLTN** | **Cedars of Leba** | **145.44** | **33** | PKPbc | **PKPbc** | **02 13 21.7** | **-1.4** |
| **T50A** | **Nancy** | **145.52** | **31** | | **PKPdf** | **02 13 21.5** | **-1.8** |
| **BDFB** | **Brasília** | **151.63** | **213** | PKPbc | **PKPbc** | **02 13 39.7** | **-0.4** |
| | comp=Z,2.2nm,0.8s,baz=135,slow=3.6,SNR=4.2 | | | | | | |

*MOS **06** 02:08:10.2±0.8, 37°.43N×135°.08E, h395km, mb4.0/7, Error ellipse: s-maj=11.4km s-min=7.1km az=111.7*
*NIED **06** 02:08:10.3, 37°.39N×135°.04E, h396km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=0.17; $M_{\theta\theta}$=0.90; $M_{\phi\phi}$=-0.73; $M_{r\theta}$=0.04; $M_{r\phi}$=0.66; $M_{\theta\phi}$=0.59; Fault plane solution: $M_0$1.22000×$10^{15}$ NP1: $\phi_s$=332.00000°, $\delta$79.00000°, $\lambda$=-28.00000°. NP2:$\phi_s$=68.00000°, $\delta$63.00000°, $\lambda$=-168.00000°.*
*JMA **06** 02:08:10.3±0.2, 37°.4N±0°.9×135°.0E±1°.0, h396km±2km, MV3.6/37, SEA OF JAPAN*
*IDC **06** 02:08:11.3±0.9, 37°.40N×134°.96E, h385km±10km, mb3.2/17, mbtmp4.1/24, Error ellipse: s-maj=12.4km s-min=11.1km az=79.0*

**ISC 06 02:08:11.1±0.5, 37°.43N±0°.05×135°.05E±0°.05, h378km, n86, σ1§71/102, mb3.6/23, 7C-9D, Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHG** | **Hegura jima** | **1.54** | **74** | P | **Pn** | **02 09 03.7** | **+1.6** |
| **JKG** | **Kaga** | **1.54** | **138** | *e*P | **Pn** | **02 09 03.3** | **+1.1** |
| **JOI** | **OKI** | **1.84** | **232** | P | **Pn** | **02 09 05.0** | **+1.0** |
| **JSZ** | **Suzu** | **1.84** | **89** | P | **Pn** | **02 09 05.5** | **+1.6** |
| **JWT** | **Wachi** | **2.16** | **172** | P | **Pn** | **02 09 07.0** | **+0.9** |
| JWT | | | | S | **S** | **02 09 50.8** | **+0.3** |
| **JYTA** | **Yamagatataniai** | **2.28** | **143** | P | **Pn** | **02 09 07.7** | **+0.8** |
| JYTA | | | | S | **S** | **02 09 51.6** | **-0.4** |
| **JGF** | **Kuroka** | **2.60** | **134** | P | **Pn** | **02 09 09.7** | **+0.3** |
| **INU** | **Inuyama** | **2.61** | **142** | P | **Pn** | **02 09 10.3** | **+0.8** |
| **JSD** | **Sado** | **2.62** | **76** | *e*P | **Pn** | **02 09 10.1** | **+0.8** |
| JSD | | | | *e*S | **S** | **02 09 57.0** | **+0.6** |
| **MAJO** | **Matsushiro** | **2.68** | **108** | P | **Pn** | **02 09 10.7** | **+0.8** |
| **MAJO** | **Matsushiro** | **2.68** | **108** | *d* iP | **Pn** | **02 09 10.8** | **+0.8** |
| **MAT** | **Matsushiro** | **2.68** | **108** | P | **Pn** | **02 09 10.8** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **2.68** | **108** | P | **Pn** | **02 09 11.3** | **+1.4** |
| | 163nm,0.7s,baz=286,slow=9.1,SNR=289 | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **2.71** | **108** | *e*P | **Pn** | **02 09 11.3** | **+1.1** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,172nm,0.7s | | | | | | |
| **JHS** | **Saijyo** | **2.89** | **213** | P | **Pn** | **02 09 12.2** | **+0.4** |
| JHS | | | | *e*S | **S** | **02 10 00.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BILL | | | | S | **S** | **02 19 43.0** | **+7.5** |
| BILL | | | | SS | **SS** | **02 22 23.0** | **-4.7** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,17nm,1.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.78** | **249** | P | **P** | **02 14 43.8** | **-0.7** |
| | comp=Z,2.2nm,0.2s,baz=36,slow=7.8,SNR=4.2 | | | | | | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **37.89** | **312** | P | **P** | **02 14 52.2** | **-1.0** |
| | comp=Z,1.1nm,0.3s,baz=108,slow=7.0,SNR=6.1 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **39.58** | **301⇓** | *e*P | **P** | **02 15 05.9** | **-1.3** |
| **MKAR** | **Makanchi Array** | **39.58** | **301** | P | **P** | **02 15 06.4** | **-0.8** |
| | comp=Z,0.9nm,0.5s,baz=88,slow=10,SNR=17 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **41.67** | **307** | *de*P | **P** | **02 15 22.4** | **-1.5** |
| **KURBB** | **Kurchatov Arra** | **41.73** | **307** | P | **P** | **02 15 23.4** | **-1.1** |
| | comp=Z,1.2nm,0.4s,baz=88,slow=8.6,SNR=12 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **43.07** | **298** | *e*P | **P** | **02 15 34.2** | **-1.2** |
| **BTLS** | **Baital** | **45.54** | **300** | *e*P | **P** | **02 15 52.8** | **-1.7** |
| BTLS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **KSH** | **Kashi** | **45.57** | **292** | P | **P** | **02 15 58.6** | **+3.6** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **45.80** | **296⇓** | *e*P | **P** | **02 15 56.5** | **-0.3** |
| **BRVK** | **Borovoye** | **46.58** | **311⇑** | *e*P | **P** | **02 16 01.6** | **-0.8** |
| **BRLS** | **Borolday** | **48.99** | **298** | *e*P | **P** | **02 16 21.5** | **+0.6** |
| **ILAR** | **Eielson Array** | **51.87** | **32** | P | **P** | **02 16 42.0** | **+0.1** |
| | comp=Z,1.0nm,0.6s,baz=265,slow=6.1,SNR=21 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **51.87** | **32** | *e*P | **P** | **02 16 42.5** | **+0.7** |
| **ARU** | **Arti** | **52.66** | **317** | *c i*P | **P** | **02 16 46.7** | **-0.9** |
| ARU | | | | | | 02 17 48.7 | |
| ARU | | | | *PP | **pP** | **02 18 04.8** | **+0.4** |
| ARU | | | | | | 02 18 47.1 | |
| ARU | | | | SS | **SKiKP** | **02 27 27.4** | **+3.0** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KIRV** | **Kirov** | **56.82** | **321⇑** | *e*P | **P** | **02 17 18.0** | **+1.0** |
| **WRA** | **Warramunga Arr** | **57.07** | **181** | P | **P** | **02 17 18.3** | **-0.9** |
| | comp=Z,0.8nm,0.4s,baz=355,slow=7.6,SNR=20 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **60.78** | **181** | P | **P** | **02 17 43.6** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=2.0,slow=6.0,SNR=5.4 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **66.02** | **330** | P | **P** | **02 18 17.3** | **-0.6** |
| | comp=Z,1.4nm,0.6s,baz=116,slow=4.4,SNR=6.9 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **66.02** | **330** | *e*P | **P** | **02 18 16.2** | **-1.7** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **66.72** | **308** | P | **P** | **02 18 22.6** | **0.0** |
| | comp=Z,1.6nm,0.8s,baz=74,slow=3.7,SNR=5.0 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **66.72** | **308⇓** | *e*P | **P** | **02 18 22.8** | **+0.2** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **KIV** | **Kislovodsk** | **66.74** | **308** | *e*P | **P** | **02 18 23.0** | **+0.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **70.79** | **320** | P | **P** | **02 18 46.2** | **-1.1** |
| | comp=Z,0.7nm,0.4s,baz=50,slow=6.1,SNR=6.2 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **71.54** | **333** | P | **P** | **02 18 51.0** | **-0.5** |
| | comp=Z,8.5nm,1.2s,baz=43,slow=6.7,SNR=9.0 | | | | | | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **NOA** | **NORSAR Array B** | **71.76** | **335** | P | **P** | **02 18 52.2** | **-0.7** |
| | comp=Z,0.4nm,0.7s,baz=52,slow=7.9,SNR=3.7 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.70** | **308** | P | **P** | **02 19 10.4** | **-0.1** |
| | comp=Z,0.3nm,0.6s,baz=180,slow=0.9,SNR=3.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.72** | **50** | P | **P** | **02 19 33.9** | **+1.0** |
| | comp=Z,0.4nm,0.6s,baz=281,slow=5.7,SNR=4.6 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **80.90** | **42** | P | **P** | **02 19 43.9** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=349,slow=3.0,SNR=4.5 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **93.78** | **48** | P | **P** | **02 20 47.7** | **+1.3** |
| | comp=Z,0.3nm,0.8s,baz=298,slow=2.7,SNR=3.9 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |

**ISU 06 02:21:04.0, 40˚.92N×73˚.36E, h23km, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANR** | **Andizhan** | **0.78** | **258** | P | Pb | 02 21 19.2 | +0.3 |
| ANR | | | | S | Sn | 02 21 30.3 | -0.3 |
| **FRG** | **Fergana** | **1.32** | **246** | P | Pb | 02 21 28.5 | +0.4 |
| FRG | | | | S | Sb | 02 21 47.4 | +2.8 |
| **CHMI** | **Chimion** | **1.54** | **246** | P | Pb | 02 21 32.5 | +0.6 |
| CHMI | | | | S | Sb | 02 21 54.0 | +2.9 |

*SOME **06** 02:21:39.1, 41˚.08N×72˚.33E, h10km*
*NNC **06** 02:21:43.0±5.3, 41˚.01N×72˚.26E, h0km, mb2.6, mpv2.3,*
*Error ellipse: s-maj=46.9km s-min=14.2km az=6.0*

**KRNET 06 02:21:38.0±0.1, 40˚.95N×72˚.34E, h20km, mb2.0, 12C-13D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** | **0.55** | **141⇑** | *e*P | Pb | 02 21 48.6 | -0.3 |
| | baz=41 | | | | | | |
| OHH | | | | ⇑*e*S | Sb | 02 21 56.2 | -0.2 |
| | baz=41 | | | | | | |
| **ARSB** | **Arslanbob** | **0.61** | **52⇓** | *e*P | Pb | 02 21 49.9 | -0.3 |
| | baz=52 | | | | | | |
| ARSB | | | | ⇓*e*S | Sb | 02 21 58.4 | -0.1 |
| | baz=52 | | | | | | |
| **ARK** | **Arkit** | **0.89** | **342⇓** | *e*P | Pb | 02 21 54.8 | -0.1 |
| | baz=42 | | | | | | |
| ARK | | | | ⇓*e*S | Sb | 02 22 07.0 | +0.6 |
| | baz=42 | | | | | | |
| **TRKS** | **Terek-Say** | **1.07** | **303⇓** | *e*P | Pb | 02 21 57.0 | -1.0 |
| | baz=1.0 | | | | | | |
| TRKS | | | | ⇓*e*S | Sb | 02 22 10.8 | -0.8 |
| | baz=1.0 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.29** | **136⇓** | *e*P | Pb | 02 22 01.9 | +0.2 |
| | baz=36 | | | | | | |
| SFK | | | | ⇓*i*S | Sb | 02 22 19.2 | +1.2 |
| | baz=36 | | | | | | |
| **BTK** | **Batken** | **1.46** | **233⇑** | *e*P | Pb | 02 22 04.9 | +0.3 |
| | baz=33 | | | | | | |
| BTK | | | | ⇑*i*S | Sb | 02 22 24.1 | +1.4 |
| | baz=33 | | | | | | |
| **DRK** | **Karamyk** | **1.52** | **196⇑** | *e*P | Pb | 02 22 06.0 | +0.2 |
| | baz=96 | | | | | | |
| DRK | | | | ⇑*e*S | Sb | 02 22 26.0 | +1.2 |
| | baz=96 | | | | | | |
| **MNAS** | **Manas** | **1.54** | **5⇑** | *e*P | Pb | 02 22 06.2 | +0.2 |
| | baz=5.0 | | | | | | |
| MNAS | | | | ⇑*i*S | Sb | 02 22 26.6 | +1.5 |
| | baz=5.0 | | | | | | |
| **AML** | **Almayashu** | **1.56** | **40⇑** | *i*P | Pb | 02 22 06.7 | +0.3 |
| | baz=40 | | | | | | |
| AML | | | | ⇑*i*S | Sb | 02 22 27.4 | +1.5 |
| | baz=40 | | | | | | |
| **ARLS** | **Aral** | **1.75** | **58⇓** | *e*P | Pb | 02 22 09.6 | +0.1 |
| | baz=58 | | | | | | |
| ARLS | | | | ⇓*i*S | Sb | 02 22 32.6 | +1.5 |
| | baz=58 | | | | | | |
| **MRKS** | **Merke** | **1.91** | **20** | *e*P | Pb | 02 22 13.8 | +1.5 |
| | 2.7nm,0.3s | | | | | | |
| MRKS | | | | *e*S | Sb | 02 22 38.7 | +2.9 |
| | 16nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **2.33** | **43** | ⇓Sn | Sb | 02 22 52.0 | +4.1 |
| | 4.8nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **2.55** | **328** | Pn | Pb | 02 22 24.0 | +1.0 |
| | 0.3nm,0.3s,baz=151,slow=15,SNR=9.3 | | | | | | |
| KK31 | | | | Sn | Sb | 02 22 56.5 | +2.7 |
| | 1.1nm,0.3s,baz=159,slow=28,SNR=7.0 | | | | | | |
| **BRLS** | **Borolday** | **2.79** | **319** | *e*P | Pb | 02 22 28.2 | +1.0 |
| | 1.4nm,0.1s | | | | | | |
| BRLS | | | | *e*S | Sb | 02 23 03.1 | +2.2 |
| | 3.9nm,0.2s | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.10** | **59⇑** | *e*P | Pn | 02 22 28.3 | +2.3 |
| | baz=59 | | | | | | |
| BOOM | | | | ⇑*e*S | Sn | 02 23 05.3 | +2.7 |
| | baz=59 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.13** | **50** | ⇓Pn | Pb | 02 22 34.4 | +1.3 |
| | 0.8nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Sn | Sb | 02 23 14.5 | +3.7 |
| | 2.1nm,0.6s | | | | | | |

*LDG **06** 02:26:10.6±0.1, 41˚.86N×2˚.81E, h10km, Ml2.4/19, Error ellipse: s-maj=2.6km s-min=1.9km az=145.0*
*STR **06** 02:26:11.6±1.2, 42˚.N±6˚×˚±˚, h7km, MLv2.2/7, Error ellipse: s-maj=0.0km s-min=0.0km az=142.5, preliminary*
*MDD **06** 02:26:11.7±0.3, 41˚.86N×2˚.75E, h11km, mb_Lg2.5/17, Error ellipse: s-maj=2.8km s-min=1.8km az=120.0*
*MRB **06** 02:26:11.2±0.5, 41˚.85N×2˚.77E, h4km±4km, ML2.0/21, Error ellipse: s-maj=1.9km s-min=1.2km az=121.0*

**ISC 06 02:26:09.8±1.0, 41˚.80N±0˚.02×2˚.86E±0˚.02, h17km±3km, n74, σ2s04/142, 2D, Spain**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCAS** | **Cassa de la Se** | **0.09** | **23** | P | **Pg** | **02 26 13.6** | **+0.3** |
| CCAS | | | | S | **Sg** | **02 26 15.3** | **-0.2** |
| **CFON** | **Fontmartina** | **0.32** | **263** | P | **Pg** | **02 26 16.3** | **-0.3** |
| CFON | | | | S | **Sg** | **02 26 20.3** | **-1.0** |
| | 421nm,0.1s | | | | | | |
| **CBEU** | **Beuda** | **0.47** | **343** | P | **Pg** | **02 26 19.2** | **-0.1** |
| CBEU | | | | S | **Sg** | **02 26 25.3** | **-0.6** |
| | 83nm,0.1s | | | | | | |
| **CPAL** | **Palau Saverder** | **0.56** | **24** | P | **Pg** | **02 26 21.3** | **+0.4** |
| CPAL | | | | S | **Sg** | **02 26 28.7** | **+0.3** |
| | 30nm,0.1s | | | | | | |
| **CORI** | **Orista** | **0.63** | **286** | P | **Pg** | **02 26 21.6** | **-0.6** |
| CORI | | | | S | **Sg** | **02 26 29.2** | **-1.4** |
| | 108nm,0.2s | | | | | | |
| **EJON** | **La Jonquera** | **0.65** | **2** | ⇓Pg | **Pg** | **02 26 22.6** | **0.0** |
| EJON | | | | Sg | **Sg** | **02 26 30.6** | **-0.6** |
| **EJON** | **La Jonquera** | **0.65** | **2** | ⇓Pg | **Pg** | **02 26 22.6** | **0.0** |
| EJON | | | | Sg | **Sg** | **02 26 30.6** | **-0.6** |
| EJON | | | | *i* Vmb_Lg | | 02 26 33.4 | |
| **SJAF** | **Saint Jean de** | **0.68** | **1** | P | **Pg** | **02 26 23.2** | **0.0** |
| SJAF | | | | S | **Sg** | **02 26 31.9** | **-0.3** |
| | 60nm,0.2s | | | | | | |
| **SJAF** | **Saint Jean de** | **0.68** | **1** | Pg | **Pg** | **02 26 23.1** | **0.0** |
| SJAF | | | | Sg | **Sg** | **02 26 32.0** | **-0.3** |
| **CBRU** | **Bruguera** | **0.70** | **314** | P | **Pg** | **02 26 23.0** | **-0.6** |
| CBRU | | | | S | **Sg** | **02 26 31.5** | **-1.3** |
| | 28nm,0.1s | | | | | | |
| **FILF** | **Fillols** | **0.79** | **344** | P | **Pg** | **02 26 25.3** | **+0.1** |
| FILF | | | | S | **Sb** | **02 26 36.0** | **+0.5** |
| | 76nm,0.3s | | | | | | |
| **FILF** | **Fillols** | **0.79** | **344** | Pg | **Pg** | **02 26 25.2** | **0.0** |
| FILF | | | | Sg | **Sg** | **02 26 35.3** | **-0.3** |
| **VALC** | **Valcebollere** | **0.84** | **314** | P | **Pg** | **02 26 25.5** | **-0.7** |
| VALC | | | | S | **Sg** | **02 26 36.1** | **-1.2** |
| | 76nm,0.2s | | | | | | |
| **VALC** | **Valcebollere** | **0.84** | **314** | Pg | **Pg** | **02 26 25.4** | **-0.8** |
| VALC | | | | Sg | **Sg** | **02 26 36.1** | **-1.2** |
| **CGAR** | **Garraf** | **0.87** | **235** | P | **Pg** | **02 26 26.7** | **0.0** |
| CGAR | | | | S | **Sg** | **02 26 38.4** | **+0.1** |
| | 13nm,0.2s | | | | | | |
| **CLLI** | **Llivia** | **0.94** | **316** | P | **Pg** | **02 26 27.2** | **-0.9** |
| CLLI | | | | S | **Sg** | **02 26 39.1** | **-1.5** |
| | 12nm,0.1s | | | | | | |
| **EMIR** | **Miracle** | **1.00** | **277** | P | **Pg** | **02 26 28.8** | **-0.4** |
| EMIR | | | | S | **Sg** | **02 26 41.4** | **-1.0** |
| | 56nm,0.1s | | | | | | |
| **EMIR** | **Miracle** | **1.00** | **277** | Pg | **Pg** | **02 26 28.7** | **-0.6** |
| EMIR | | | | Sg | **Sg** | **02 26 41.0** | **-1.4** |
| EMIR | | | | *i* Vmb_Lg | | 02 26 42.2 | |
| **CARF** | **Carcanieres** | **1.07** | **329** | P | **Pg** | **02 26 30.3** | **-0.3** |
| CARF | | | | S | **Sg** | **02 26 43.6** | **-1.0** |
| | 17nm,0.3s | | | | | | |
| **CARF** | **Carcanieres** | **1.07** | **329** | Pg | **Pg** | **02 26 29.7** | **-0.8** |
| CARF | | | | Sg | **Sg** | **02 26 43.3** | **-1.3** |
| **ARBS** | **La Rabassa** | **1.17** | **304** | P | **Pg** | **02 26 31.4** | **-1.0** |
| ARBS | | | | S | **Sg** | **02 26 46.6** | **-1.2** |
| | 32nm,0.3s | | | | | | |
| **PAND** | **Andorre** | **1.21** | **307** | P | **Pg** | **02 26 32.5** | **-0.7** |
| PAND | | | | S | **Sg** | **02 26 47.7** | **-1.4** |
| | 24nm,0.2s | | | | | | |
| **PAND** | **Andorre** | **1.21** | **307** | Pg | **Pg** | **02 26 32.1** | **-1.2** |
| PAND | | | | Sg | **Sg** | **02 26 47.7** | **-1.4** |
| **CORG** | **Organya** | **1.23** | **291** | P | **Pg** | **02 26 32.4** | **-1.1** |
| CORG | | | | S | **Sg** | **02 26 47.9** | **-1.6** |
| | 22nm,0.4s | | | | | | |
| **CLAF** | **Gruissan** | **1.34** | **7** | P | **Pn** | **02 26 35.0** | **+1.2** |
| CLAF | | | | S | **Sg** | **02 26 52.4** | **-0.8** |
| | 14nm,0.2s | | | | | | |
| **CLAF** | **Gruissan** | **1.34** | **7** | Pn | **Pn** | **02 26 33.1** | **-0.6** |
| CLAF | | | | Pg | **Pn** | **02 26 35.0** | **+1.2** |
| CLAF | | | | Sg | **Sg** | **02 26 52.1** | **-1.1** |
| **GENF** | **Genat** | **1.40** | **317** | P | **Pn** | **02 26 35.5** | **+1.0** |
| GENF | | | | S | **Sg** | **02 26 53.5** | **-1.4** |
| | 8.6nm,0.2s | | | | | | |
| **CSOR** | **Sort** | **1.41** | **295** | P | **Pn** | **02 26 35.4** | **+0.7** |
| CSOR | | | | S | **Sg** | **02 26 53.4** | **-1.8** |
| | 25nm,0.3s | | | | | | |
| **EPOB** | **Poblet** | **1.41** | **252** | P | **Pn** | **02 26 35.5** | **+0.7** |
| EPOB | | | | S | **Sg** | **02 26 53.7** | **-1.6** |
| | 17nm,0.2s | | | | | | |
| **EPOB** | **Poblet** | **1.41** | **252** | Pg | **Pn** | **02 26 35.3** | **+0.6** |
| EPOB | | | | Sg | **Sg** | **02 26 53.3** | **-2.0** |
| EPOB | | | | *i* Vmb_Lg | | 02 26 54.7 | |
| **CEST** | **Esterri de Car** | **1.43** | **304** | P | **Pn** | **02 26 35.8** | **+0.7** |
| CEST | | | | S | **Sg** | **02 26 54.1** | **-2.0** |
| | 14nm,0.1s | | | | | | |
| **SALF** | **Salau** | **1.56** | **308** | Pn | **Pn** | **02 26 37.7** | **+0.9** |
| SALF | | | | Sn | **Sn** | **02 26 58.0** | **+1.2** |
| **CAVN** | **Les Avellanes** | **1.58** | **274** | P | **Pn** | **02 26 38.5** | **+1.5** |
| CAVN | | | | S | **Sn** | **02 26 58.4** | **+1.3** |
| **MTLF** | **Montolieu** | **1.61** | **343** | *e*Pn | **Pn** | **02 26 36.9** | **-0.5** |
| **MTLF** | **Montolieu** | **1.61** | **343** | *e*Pn | **Pn** | **02 26 37.0** | **-0.5** |
| **MTLF** | **Montolieu** | **1.61** | **343** | *e*Pg | **Pn** | **02 26 38.8** | **+1.4** |
| MTLF | | | | *e*Sg | **Sn** | **02 26 58.9** | **+1.1** |
| | 9.0nm,0.2s | | | | | | |
| **MTLF** | **Montolieu** | **1.61** | **343** | Pn | **Pn** | **02 26 37.2** | **-0.3** |
| MTLF | | | | Pg | **Pn** | **02 26 38.8** | **+1.4** |
| **MTLF** | **Montolieu** | **1.61** | **343** | Sn | **Sn** | **02 26 59.4** | **+1.6** |
| **CTRE** | **Tremp** | **1.64** | **289** | P | **Pn** | **02 26 39.6** | **+1.6** |
| CTRE | | | | S | **Sn** | **02 27 00.4** | **+1.8** |
| | 9.6nm,0.3s | | | | | | |
| **MLS** | **Moulis** | **1.74** | **312** | Pn | **Pn** | **02 26 41.0** | **+1.8** |
| MLS | | | | Sn | **Sn** | **02 27 03.4** | **+2.3** |
| **ETOS** | **Mallorca** | **2.03** | **181** | Sn | **Sn** | **02 27 05.8** | **-2.5** |
| **ERTA** | **Horta de San J** | **2.08** | **247** | Pn | **Pn** | **02 26 44.8** | **+0.9** |
| ERTA | | | | Pg | **Pb** | **02 26 48.7** | **+1.6** |
| ERTA | | | | Sn | **Sn** | **02 27 09.9** | **+0.4** |
| ERTA | | | | Sg | **Sb** | **02 27 15.4** | **+2.8** |
| ERTA | | | | *i* Vmb_Lg | | 02 27 18.0 | |
| **ECHI** | **Chisagues Biel** | **2.16** | **294** | Pn | **Pn** | **02 26 45.5** | **+0.4** |
| ECHI | | | | Pg | **Pb** | **02 26 48.7** | **+0.2** |
| ECHI | | | | Sn | **Sn** | **02 27 10.9** | **-0.6** |
| ECHI | | | | Sg | **Sb** | **02 27 15.5** | **+0.5** |
| ECHI | | | | *i* Vmb_Lg | | 02 27 18.5 | |
| **ECHI** | **Chisagues Biel** | **2.16** | **294** | Pn | **Pn** | **02 26 45.5** | **+0.4** |
| ECHI | | | | Pg | **Pb** | **02 26 49.5** | **+1.0** |
| **EPF** | **Esparros** | **2.23** | **304** | *e*P | **Pn** | **02 26 47.8** | **+1.8** |
| **EPF** | **Esparros** | **2.23** | **304** | *e*Pg | **Pb** | **02 26 50.3** | **+0.6** |
| EPF | | | | *e*Sg | **Sb** | **02 27 16.6** | **-0.5** |
| | 5.6nm,0.2s | | | | | | |
| **LASF** | **Ste Croix** | **2.39** | **18** | *e*Pn | **Pn** | **02 26 47.1** | **-1.0** |
| **LASF** | **Ste Croix** | **2.39** | **18** | *e*P | **Pn** | **02 26 49.4** | **+1.3** |
| LASF | | | | *e*Sn | **Sn** | **02 27 13.8** | **-3.2** |
| LASF | | | | *e*Sg | **Sb** | **02 27 24.8** | **+3.3** |
| | 2.2nm,0.2s | | | | | | |
| **ESAC** | **San Caprasio** | **2.49** | **269** | Pn | **Pn** | **02 26 51.8** | **+2.2** |
| ESAC | | | | Sn | **Sn** | **02 27 21.9** | **+2.3** |
| ESAC | | | | *i* Vmb_Lg | | 02 27 28.4 | |
| **ECOL** | **Islas Columbre** | **2.52** | **222** | Sn | **Sn** | **02 27 18.6** | **-1.5** |
| **ETSF** | **Etsaut** | **2.76** | **295** | *e*Pg | **Pb** | **02 26 59.3** | **+0.6** |
| ETSF | | | | *e*Sg | **Sb** | **02 27 32.6** | **+0.4** |
| | 4.8nm,0.2s | | | | | | |
| **EMOS** | **Mosqueruela** | **2.90** | **241** | Pg | **Pb** | **02 27 04.2** | **+3.1** |
| EMOS | | | | Sn | **Sn** | **02 27 30.8** | **+0.9** |
| EMOS | | | | Sg | **Sg** | **02 27 41.6** | **-1.3** |
| **SMRF** | **Simiane la Rot** | **2.95** | **42** | *e*Pn | **Pn** | **02 26 54.4** | **-1.5** |
| **SMRF** | **Simiane la Rot** | **2.95** | **42** | *e*Pg | **Pb** | **02 27 06.0** | **+4.1** |
| SMRF | | | | *e*Sg | **Sb** | **02 27 43.5** | **+5.8** |
| | 1.0nm,0.3s | | | | | | |
| **EIBI** | **Ibiza** | **3.00** | **203** | Pn | **Pn** | **02 26 56.8** | **+0.1** |
| EIBI | | | | Sn | **Sn** | **02 27 28.9** | **-3.3** |
| EIBI | | | | *i* Vmb_Lg | | 02 27 32.4 | |
| **LMR** | **La Mourre** | **3.10** | **59** | *e*Pn | **Pn** | **02 26 58.0** | **+0.1** |
| LMR | | | | *e*Sn | **Sn** | **02 27 32.7** | **-1.8** |
| | 0.7nm,0.3s | | | | | | |
| **CAF** | **Calviac** | **3.17** | **350** | *e*Pn | **Pn** | **02 26 58.4** | **-0.6** |
| **CAF** | **Calviac** | **3.17** | **350** | *e*P | **Pn** | **02 27 00.1** | **+1.1** |
| **CAF** | **Calviac** | **3.17** | **350** | *e*Pg | **Pb** | **02 27 07.2** | **+1.5** |
| CAF | | | | *e*Sn | **Sn** | **02 27 31.7** | **-4.7** |
| CAF | | | | *e*Sg | **Sg** | **02 27 48.6** | **-3.2** |
| | 2.4nm,0.2s | | | | | | |
| **EORO** | **Oroz-Betelu** | **3.28** | **291** | Pg | **Pb** | **02 27 10.4** | **+2.9** |
| EORO | | | | Sg | **Sg** | **02 27 51.0** | **-4.0** |
| EORO | | | | *i* Vmb_Lg | | 02 27 57.3 | |
| **SJPF** | **Ste Jean** | **3.29** | **295** | *e*P | **Pn** | **02 27 02.4** | **+1.8** |
| **SJPF** | **Ste Jean** | **3.29** | **295** | *e*Pg | **Pb** | **02 27 09.1** | **+1.4** |
| SJPF | | | | *e*Sg | **Sb** | **02 27 49.4** | **+1.9** |
| | 2.7nm,0.2s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **3.33** | **23** | *e*Pn | **Pn** | **02 27 00.5** | **-0.6** |
| VIVF | | | | *e*Sn | **Sn** | **02 27 36.1** | **-4.1** |
| VIVF | | | | *e*Sg | **Sb** | **02 27 54.4** | **+5.9** |
| | 1.4nm,0.2s | | | | | | |
| **LFF** | **La Frestale** | **3.50** | **334** | *e*Pn | **Pn** | **02 27 01.4** | **-1.9** |
| **LFF** | **La Frestale** | **3.50** | **334** | *e*Pg | **Pb** | **02 27 13.3** | **+2.1** |
| LFF | | | | *e*Sg | **Sb** | **02 27 57.8** | **+4.5** |
| | 3.3nm,0.3s | | | | | | |
| **RJF** | **Les Rejaudoux** | **3.63** | **345** | *e*Pg | **Pb** | **02 27 16.6** | **+3.1** |
| RJF | | | | *e*Sg | **Sb** | **02 28 02.1** | **+4.8** |
| | 1.8nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **3.81** | **34** | *e*Pn | **Pn** | **02 27 06.5** | **-1.3** |
| **ETOR** | **Torete** | **3.83** | **257** | Pg | **Pb** | **02 27 20.1** | **+3.1** |
| ETOR | | | | Sg | **Sg** | **02 28 10.0** | **-2.7** |
| ETOR | | | | *i* Vmb_Lg | | 02 28 20.3 | |
| **SBF** | **Sospel** | **3.94** | **57** | *e*Pn | **Pn** | **02 27 09.2** | **-0.4** |
| SBF | | | | *e*Sn | **Sn** | **02 27 52.7** | **-2.8** |
| | 0.5nm,0.2s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **4.51** | **354** | *e*Pg | **Pg** | **02 27 33.5** | **-2.6** |
| TCF | | | | *e*Sg | **Sg** | **02 28 30.3** | **-4.2** |
| | 1.6nm,0.3s | | | | | | |
| **PGF** | **Pioggiola** | **4.62** | **79** | *e*Pn | **Pn** | **02 27 18.4** | **-0.6** |
| PGF | | | | *e*Sn | **Sn** | **02 28 09.5** | **-2.8** |
| | 0.5nm,0.2s | | | | | | |
| **BGF** | **Bois d'Agland** | **4.75** | **360** | *e*Pg | **Pb** | **02 27 35.9** | **+3.3** |
| BGF | | | | *e*Sg | **Sg** | **02 28 38.1** | **-4.2** |
| | 2.8nm,0.3s | | | | | | |
| **SMF** | **Signal de Mont** | **4.89** | **8** | *e*Sg | **Sg** | **02 28 42.1** | **-4.7** |
| | 0.9nm,0.3s | | | | | | |
| **AVF** | **Avril sur Loir** | **5.00** | **4** | *e*Sg | **Sb** | **02 28 44.2** | **+7.6** |
| | 0.4nm,0.2s | | | | | | |

**IDC 06 02:29:06.2±1.6, 49˚.66S×122˚.64E, h0km, mb3.9/4, mbtmp3.9/4, MS3.4/2, Error ellipse: s-maj=178.9km s-min=21.8km az=107.0, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W1** | **Cape Leeuwin H** | **16.02** | **334** | T | T | 02 49 28.5 | |
| | baz=154,slow=71,SNR=18 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **16.02** | **334** | T | T | 02 49 24.5 | |
| | baz=154,slow=71,SNR=11 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **16.04** | **334** | T | T | 02 49 26.3 | |
| | baz=154,slow=71,SNR=11 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **17.20** | **344** | LR | LR | 02 38 56.0 | |
| | comp=Z,121nm,18.2s,baz=254,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **27.41** | **23** | P | P | 02 34 53.5 | 0.0 |
| | 2.5nm,0.9s,baz=197,slow=8.1,SNR=13 | | | | | | |
| | 2.5nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.09** | **22** | P | P | 02 35 25.9 | -0.2 |
| | 1.2nm,1.0s,baz=192,slow=10,SNR=3.5 | | | | | | |
| | 1.2nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **40.46** | **180** | P | P | 02 36 45.9 | -0.3 |
| | 1.2nm,0.8s,baz=325,slow=2.1,SNR=3.9 | | | | | | |
| QSPA | | | | LR | LR | 02 52 34.5 | |
| | comp=Z,56nm,20.4s,baz=294,slow=35 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **53.01** | **199** | P | P | 02 38 24.2 | 0.0 |
| | 1.7nm,0.8s,baz=137,slow=8.8,SNR=7.1 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **146.76** | **45** | PKPbc | PKPbc | 02 48 48.4 | -0.5 |
| | 0.3nm,0.6s,baz=285,slow=2.4,SNR=5.1 | | | | | | |

*IDC **06** 02:34:29.0±1.3, 8˚.25S×116˚.29E, h0km, mb3.7/4, mbtmp3.7/5, ML3.1/1, Error ellipse: s-maj=27.8km s-min=22.8km az=77.0*
*DJA **06** 02:34:31.6±0.8, 8˚S±6˚×11˚6E±˚, h15km±9km, M4.0/9, mb4.2/1, MLv3.9/9*

**ISC 06 02:34:30.7±0.7, 8˚.20S±0˚.07×116˚.32E±0˚.04, h10km, n14, σ0s92/17, mb3.9/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.77** | **134** | P | **Pb** | **02 34 46.4** | **+0.1** |
| TWSI | | | | S | **Sb** | **02 34 57.2** | **+0.3** |
| **SRBI** | **Singaraja** | **1.10** | **276** | P | **Pb** | **02 34 51.6** | **-0.2** |
| SRBI | | | | S | **Sb** | **02 35 06.4** | **+0.2** |
| **DNP** | **Denpasar** | **1.19** | **246** | P | **Pg** | **02 34 54.8** | **+1.2** |
| **IGBI** | **Denpasar** | **1.31** | **242** | P | **Pb** | **02 34 55.7** | **+0.3** |
| **PLAI** | **Plampang** | **1.57** | **113** | P | **Pb** | **02 34 59.6** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.16** | **263** | P | **Pn** | **02 35 05.6** | **-1.2** |
| **BSSI** | **Bau Bau, Buton** | **4.62** | **64** | P | **Pn** | **02 35 40.6** | **0.0** |
| **KAPI** | **Kappang** | **4.65** | **47** | Pn | **Pn** | **02 35 41.4** | **+0.3** |
| | 0.9nm,0.3s,baz=45,slow=20,SNR=1.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **02 36 33.8** | **-1.4** |
| | 5.1nm,0.3s,baz=217,slow=23,SNR=8.9 | | | | | | |
| KAPI | | | | Lg | Lg | 02 36 57.4 | |
| | 2.1nm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SRBI** | **Singaraja** | **0.84** | **280** | P | **Pb** | **03 15 37.8** | **+0.1** |
| SRBI | | | | S | **Sb** | **03 15 49.2** | **+0.1** |
| **DNP** | **Denpasar** | **0.94** | **242** | P | **Pn** | **03 15 40.5** | **+0.3** |
| DNP | | | | S | **Sn** | **03 15 54.9** | **+1.1** |
| **TWSI** | **Taliwang, Sumb** | **0.96** | **121** | P | **Pn** | **03 15 40.2** | **-0.3** |
| TWSI | | | | S | **Sn** | **03 15 54.3** | **+0.1** |
| **IGBI** | **Denpasar** | **1.07** | **237** | P | **Pg** | **03 15 41.2** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **263** | P | **Pn** | **03 15 53.0** | **-0.4** |
| JAGI | | | | S | **Sn** | **03 16 16.0** | **-1.3** |
| **WRA** | **Warramunga Arr** | **21.18** | **125** | P | **P** | **03 20 06.9** | **+0.1** |
| | 1.6nm,0.6s,baz=300,slow=12,SNR=22 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.98** | **134** | P | **P** | **03 20 25.6** | **-0.4** |
| | 1.5nm,0.6s,baz=312,slow=9.3,SNR=25 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.44** | **328** | LR | LR | 03 36 21.8 | |
| | comp=Z,29nm,18.3s,baz=170,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **56.48** | **352** | P | **P** | **03 25 03.8** | **+0.6** |
| | 0.2nm,0.3s,baz=187,slow=7.3,SNR=2.7 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC **06** 03:33:45.4±1.3,8˚.18S×116˚.18E, h0km, mb3.5/5, mbtmp3.6/6, ML3.5/1, Error ellipse: s-maj=27.8km s-min=21.7km az=81.0*
*DJA **06** 03:33:47.4±0.3,8˚S±4˚×11˚6E±˚, h10km, M4.3/10, mb4.9/1, MLv4.0/10*
**ISC 06 03:33:45.8±3.1, 8˚.11S±0˚.08×116˚.24E±0˚.06, h1km±22km, n15, σ0°71/20, mb3.6/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.89** | **135** | P | **Pb** | **03 34 04.5** | **+0.4** |
| TWSI | | | | S | **Sb** | **03 34 16.1** | **-0.5** |
| **SRBI** | **Singaraja** | **1.01** | **271** | P | **Pn** | **03 34 06.5** | **-0.7** |
| SRBI | | | | S | **Sn** | **03 34 20.6** | **-1.5** |
| **DNP** | **Denpasar** | **1.16** | **241** | P | **Pn** | **03 34 09.3** | **+0.1** |
| DNP | | | | S | **Sn** | **03 34 26.4** | **+0.6** |
| **IGBI** | **Denpasar** | **1.29** | **237** | P | **Pn** | **03 34 11.1** | **+0.1** |
| IGBI | | | | S | **Sn** | **03 34 29.5** | **+0.6** |
| **PLAI** | **Plampang** | **1.68** | **115** | P | **Pb** | **03 34 17.4** | **-0.2** |
| PLAI | | | | S | **Sg** | **03 34 39.9** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **260** | P | **Pn** | **03 34 21.6** | **-0.5** |
| **PWJI** | **Pagerwojo** | **4.39** | **271** | P | **Pn** | **03 34 53.7** | **0.0** |
| **BSSI** | **Bau Bau, Buton** | **4.65** | **65** | P | **Pn** | **03 34 57.6** | **+0.4** |
| **KAPI** | **Kappang** | **4.65** | **49** | Pn | **Pn** | **03 34 58.2** | **+1.0** |
| | 2.1nm,0.3s,baz=148,slow=9.5,SNR=2.3 | | | | | | |
| KAPI | | | | Lg | Lg | 03 36 15.1 | |
| | 1.9nm,0.3s,baz=162,slow=21,SNR=3.6 | | | | | | |
| | 5.0nm,0.2s | | | | | | |
| **UGM** | **Wanagama** | **5.66** | **272** | P | **Pn** | **03 35 11.9** | **+0.7** |
| **WRA** | **Warramunga Arr** | **21.11** | **126** | P | **P** | **03 38 31.5** | **-0.6** |
| | 2.3nm,0.7s,baz=300,slow=12,SNR=44 | | | | | | |
| | 2.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.93** | **134** | P | **P** | **03 38 51.0** | **-0.7** |
| | 1.4nm,0.8s,baz=306,slow=8.5,SNR=16 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.38** | **352** | P | **P** | **03 43 30.0** | **+1.2** |
| | 0.6nm,0.8s,baz=165,slow=6.0,SNR=2.3 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.45** | **334** | P | **P** | **03 44 10.4** | **-0.3** |
| | 0.4nm,0.8s,baz=149,slow=9.4,SNR=2.8 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **73.30** | **171** | P | **P** | **03 45 18.2** | **-0.3** |
| | 0.3nm,0.6s,baz=311,slow=5.6,SNR=2.2 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*NEIC **06** 03:40:23.8±1.1,35˚.04N±0˚.01×97˚.58W±0˚.02, h5km±1km, Error ellipse: s-maj=2.9km s-min=2.7km az=129.0*
**TUL 06 03:40:24.3±1.2, 35˚.05N±0˚.01×97˚.59W±0.02, h4km±5km, ML2.9, mb_Lg3.0/107(NEIC), ML3.0/41(NEIC), Error ellipse: s-maj=2.2km s-min=1.6km az=130.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FNO** | **Franklin** | **0.26** | **37** | | P | 03 40 29.7 | +0.4 |
| FNO | | | | | Sg | 03 40 34.1 | +1.4 |
| FNO | | | | IAML | | 03 40 37.5 | |
| | comp=E,3µm,0.6s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.38** | **19** | Pg | Pg | 03 40 31.9 | +0.3 |
| OKCSW | | | | Sg | Sg | 03 40 36.4 | -0.1 |
| OKCSW | | | | IAML | | 03 40 41.0 | |
| | comp=E,1µm,0.6s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.49** | **204** | | Pg | 03 40 34.2 | +0.5 |
| X34A | | | | Sg | Sg | 03 40 41.5 | +1.4 |
| X34A | | | | IAML | | 03 40 42.8 | |
| | comp=N,782nm,0.6s | | | | | | |
| **ADOK** | **Arcadia Dam** | **0.63** | **16** | Pg | Pg | 03 40 36.7 | +0.3 |
| **OK029** | **Liberty Lake** | **0.75** | **8** | Pg | Pg | 03 40 38.8 | +0.1 |
| OK029 | | | | Sg | Sg | 03 40 49.4 | +0.9 |
| OK029 | | | | IAML | | 03 40 57.0 | |
| | comp=N,375nm,0.4s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.03** | **253** | Pg | Pg | 03 40 42.9 | -1.1 |
| WMOK | | | | Sg | Sg | 03 40 57.1 | -0.3 |
| **CSTR** | **Hydro, Custer** | **1.08** | **304** | Pg | Pg | 03 40 44.9 | -0.1 |
| **OK031** | **S. Brethren Rd** | **1.09** | **34** | Pg | Pg | 03 40 44.3 | -0.8 |
| **LOOK** | **Love County** | **1.11** | **162** | Pg | Pg | 03 40 44.9 | -0.7 |
| LOOK | | | | IAML | | 03 41 10.6 | |
| | comp=E,232nm,0.8s | | | | | | |
| LOOK | | | | IAML | | 03 41 13.3 | |
| | comp=N,208nm,0.7s | | | | | | |
| **OK052** | **Battle Ridge R** | **1.14** | **34** | Pg | Pg | 03 40 45.3 | -0.8 |
| **DEOK** | **Depew** | **1.19** | **48** | | Pg | 03 40 46.1 | -1.0 |
| DEOK | | | | IAML | | 03 41 07.3 | |
| | comp=N,360nm,0.2s | | | | | | |
| DEOK | | | | IAML | | 03 41 07.4 | |
| | comp=E,450nm,0.2s | | | | | | |
| **QUOK** | **Quay** | **1.33** | **32** | | Pn | 03 40 48.6 | -1.0 |
| **OK048** | **Pawnee Station** | **1.46** | **21** | Pg | Pn | 03 40 50.8 | -0.7 |
| **WTFS** | **Witchita Falls** | **1.47** | **210** | Pg | Pn | 03 40 50.9 | -0.6 |
| **CROK** | **Carrier** | **1.49** | **348** | | Pn | 03 40 51.4 | -0.4 |
| **OK051** | **E0350 and S346** | **1.57** | **23** | | Pn | 03 40 52.8 | -0.2 |
| **TUL3** | **Leonard** | **1.70** | **59** | | Pn | 03 40 54.4 | -0.3 |
| **OK038** | **West end E0370** | **1.71** | **327** | | Pn | 03 40 55.2 | +0.4 |
| **BLOK** | **Blackwell** | **1.73** | **10** | | Pn | 03 40 54.9 | -0.3 |
| **Z35A** | **Perchaven, San** | **1.74** | **171** | | Pn | 03 40 54.6 | -0.6 |
| **U32A** | **Winter Ranch,** | **1.75** | **319** | Pn | Pn | 03 40 55.7 | +0.2 |
| **ELIS** | **Ellis County** | **1.80** | **305** | Pn | Pn | 03 40 56.3 | +0.1 |
| **GC02** | **Grant County #** | **1.81** | **353** | | Pn | 03 40 56.7 | +0.5 |
| **OK032** | **Salt Plains WL** | **1.82** | **344** | Pn | Pn | 03 40 56.8 | +0.4 |
| OK032 | | | | IAmb_Lg | | 03 41 24.4 | |
| | comp=Z,69nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **1.88** | **104** | Pn | Pn | 03 40 57.5 | +0.3 |
| X37A | | | | IAmb_Lg | | 03 41 25.7 | |
| | comp=Z,94nm,1.0s | | | | | | |
| **NOKA** | **Waynoka** | **1.92** | **326** | Pn | Pn | 03 40 57.7 | -0.1 |
| **KAN14** | **Manchester OK** | **1.93** | **351** | Pn | Pn | 03 40 58.4 | +0.5 |
| **KAN13** | **South Haven SW** | **1.96** | **3** | Pn | Pn | 03 40 58.7 | +0.4 |
| KAN13 | | | | IAmb_Lg | | 03 41 27.2 | |
| | comp=Z,65nm,0.8s | | | | | | |
| **KAN17** | **Caldwell West** | **1.99** | **356** | Pn | Pn | 03 40 59.6 | +0.9 |
| **FW03** | **Perrin-Whitt E** | **2.04** | **191** | | Pn | 03 40 59.7 | +0.2 |
| FW03 | | | | IAmb_Lg | | 03 41 30.2 | |
| | comp=Z,68nm,0.7s | | | | | | |
| **T35A** | **Sooner Cattle** | **2.06** | **25** | | Pn | 03 40 59.9 | +0.3 |
| **KAN09** | **Caldwell North** | **2.08** | **359** | Pn | Pn | 03 41 00.5 | +0.5 |
| **KAN01** | **Argonia South** | **2.10** | **356** | Pn | Pn | 03 41 01.1 | +0.8 |
| KAN01 | | | | IAmb_Lg | | 03 41 32.8 | |
| | comp=Z,51nm,0.7s | | | | | | |
| **SMWD** | **Samnorwood** | **2.18** | **272** | | Pn | 03 41 01.9 | +0.6 |
| SMWD | | | | IAmb_Lg | | 03 41 33.1 | |
| | comp=Z,52nm,0.8s | | | | | | |
| **KS21** | **Milan North St** | **2.23** | **358** | Pn | Pn | 03 41 01.5 | -0.6 |
| **PLPT** | **Palo Pinto** | **2.31** | **195** | | Pn | 03 41 04.0 | +0.8 |
| **RLO** | **Rose Lookout** | **2.37** | **61** | | Pn | 03 41 04.4 | +0.5 |
| RLO | | | | IAmb_Lg | | 03 41 37.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **FW16** | **Waxahatchie** | **2.63** | **167** | Pn | Pn | 03 41 07.7 | +0.3 |
| FW16 | | | | IAmb_Lg | | 03 41 48.8 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **TREL** | **Terrell** | **2.63** | **151** | Pn | Pn | 03 41 08.5 | +1.0 |
| TREL | | | | IAmb_Lg | | 03 41 52.7 | |
| | comp=Z,59nm,0.8s | | | | | | |
| **APMT** | **Aspermont** | **2.71** | **231** | Pn | Pn | 03 41 09.7 | +1.0 |
| **Z38A** | **Mt. Pleasant** | **2.80** | **129** | | Pn | 03 41 09.1 | -0.8 |
| Z38A | | | | IAmb_Lg | | 03 41 55.6 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **2.95** | **61** | | Pn | 03 41 12.2 | +0.3 |
| **WHTX** | **Lake Whitney,** | **3.05** | **178** | | Pn | 03 41 13.3 | 0.0 |
| **DKNS** | **Dickens** | **3.09** | **244** | | Pn | 03 41 14.5 | +0.7 |
| DKNS | | | | IAmb_Lg | | 03 42 06.1 | |
| | comp=Z,52nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.21** | **66** | Pn | Pn | 03 41 15.8 | +0.2 |
| HHAR | | | | IAmb_Lg | | 03 42 11.0 | |
| | comp=Z,44nm,1.0s | | | | | | |
| **MIAR** | **Mount Ida** | **3.34** | **98** | Pn | Pn | 03 41 18.3 | +1.1 |
| MIAR | | | | IAmb_Lg | | 03 42 19.0 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.37** | **268** | | Pn | 03 41 18.2 | +0.5 |
| AMTX | | | | IAmb_Lg | | 03 42 19.9 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **3.37** | **235** | | Pn | 03 41 18.1 | +0.4 |
| **237A** | **Washetta, Mont** | **3.38** | **153** | Pn | Pn | 03 41 18.3 | +0.4 |
| 237A | | | | IAmb_Lg | | 03 42 20.3 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **3.48** | **345** | Pn | Pn | 03 41 19.6 | +0.3 |
| **SN05** | **Snyder 5** | **3.49** | **233** | IAmb_Lg | | 03 42 22.4 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **POST** | **Post** | **3.80** | **240** | | Pn | 03 41 23.5 | -0.2 |
| **BRDY** | **Brady** | **3.94** | **198** | Pn | Pn | 03 41 25.0 | -0.5 |
| BRDY | | | | IAmb_Lg | | 03 42 31.2 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **WLAR** | **White Oak Lake** | **3.94** | **109** | Pn | Pn | 03 41 25.4 | -0.2 |
| WLAR | | | | IAmb_Lg | | 03 42 38.6 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.95** | **97** | Pn | Pn | 03 41 25.4 | -0.3 |
| X40A | | | | IAmb_Lg | | 03 42 37.6 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **4.12** | **11** | Pn | Pn | 03 41 27.4 | -0.6 |
| KSU1 | | | | IAmb_Lg | | 03 42 44.5 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **4.13** | **336** | IAmb_Lg | | 03 42 44.8 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **4.26** | **180** | IAmb_Lg | | 03 42 46.9 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **SGCY** | **Sterling City** | **4.30** | **224** | Pn | Pn | 03 41 30.5 | -0.1 |
| SGCY | | | | IAmb_Lg | | 03 42 41.5 | |
| | comp=Z,27nm,1.0s | | | | | | |
| **UALR** | **University of** | **4.32** | **92** | Pn | Pn | 03 41 31.1 | +0.4 |
| UALR | | | | IAmb_Lg | | 03 42 47.8 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.35** | **85** | Pn | Pn | 03 41 31.2 | +0.1 |
| WHAR | | | | IAmb_Lg | | 03 42 48.8 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **Z41A** | **Richland Creek** | **4.35** | **113** | IAmb_Lg | | 03 42 51.2 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.41** | **290** | Pn | Pn | 03 41 32.0 | -0.2 |
| **MSTX** | **Muleshoe** | **4.41** | **257** | Pn | Pn | 03 41 32.1 | 0.0 |
| MSTX | | | | IAmb_Lg | | 03 42 48.0 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.54** | **78** | Pn | Pn | 03 41 33.1 | -0.6 |
| FCAR | | | | IAmb_Lg | | 03 43 01.0 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.79** | **62** | Pn | Pn | 03 41 37.6 | +0.4 |
| MGMO | | | | IAmb_Lg | | 03 43 07.3 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **4.92** | **203** | Pn | Pn | 03 41 39.4 | +0.3 |
| **OZNA** | **Ozona** | **5.08** | **217** | Pn | Pn | 03 41 41.0 | -0.2 |
| **MLDN** | **Muldoon** | **5.27** | **175** | IAmb_Lg | | 03 43 24.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **5.36** | **51** | Pn | Pn | 03 41 44.6 | -0.4 |
| R40A | | | | IAmb_Lg | | 03 43 23.4 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **T42A** | **Van Buren** | **5.62** | **68** | Pn | Pn | 03 41 47.8 | -0.8 |
| T42A | | | | IAmb_Lg | | 03 43 25.2 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.64** | **316** | Pn | Pn | 03 41 48.9 | -0.2 |
| **HNDO** | **Hondo** | **5.69** | **195** | Pn | Pn | 03 41 47.0 | -2.6 |
| **MNHN** | **Monahans** | **5.70** | **231** | Pn | Pn | 03 41 48.7 | -1.1 |
| MNHN | | | | IAmb_Lg | | 03 43 28.1 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.90** | **293** | IAmb_Lg | | 03 43 37.1 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.92** | **58** | Pn | Pn | 03 41 49.6 | -3.1 |
| CCM | | | | IAmb_Lg | | 03 43 35.2 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **DRIO** | **Del Rio** | **6.17** | **205** | IAmb_Lg | | 03 43 56.8 | |
| | comp=Z,21nm,1.0s | | | | | | |
| **BGNE** | **Belgrade** | **6.36** | **356** | IAmb_Lg | | 03 43 54.4 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **SAND** | **Sanderson** | **6.36** | **218** | Pn | Pn | 03 41 58.5 | -0.4 |
| SAND | | | | IAmb_Lg | | 03 43 59.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **PECS** | **Pecos** | **6.42** | **237** | Pn | Pn | 03 41 58.8 | -0.8 |
| **Y45A** | **Yeager Farm, C** | **6.75** | **98** | IAmb_Lg | | 03 44 09.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **6.75** | **92** | Pn | Pn | 03 42 03.7 | -0.4 |
| **CGM3** | **Cape Girardeau** | **6.79** | **68** | IAmb_Lg | | 03 44 15.1 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **OGNE** | **Ogallala** | **6.85** | **331** | IAmb_Lg | | 03 44 12.7 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **ALPN** | **Alpine** | **6.91** | **229** | Pn | Pn | 03 42 05.3 | -1.2 |
| ALPN | | | | IAmb_Lg | | 03 44 18.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.92** | **295** | Pn | Pn | 03 42 06.6 | -0.2 |
| **Q24A** | **Divide** | **7.20** | **305** | IAmb_Lg | | 03 44 10.8 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **S44A** | **Carbondale** | **7.22** | **66** | IAmb_Lg | | 03 44 20.0 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **VHRN** | **Van Horn** | **7.53** | **238** | Pn | Pn | 03 42 14.4 | -0.6 |
| VHRN | | | | IAmb_Lg | | 03 44 34.4 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **7.67** | **318** | IAmb_Lg | | 03 44 30.3 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **7.68** | **224** | Pn | Pn | 03 42 17.7 | +0.7 |
| **PLAL** | **Pickwick Lake** | **7.80** | **88** | Pn | Pn | 03 42 17.9 | -0.7 |
| **USIN** | **University of** | **8.50** | **67** | IAmb_Lg | | 03 45 04.6 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **L40A** | **Anamosa** | **8.59** | **34** | Pn | Pn | 03 42 28.1 | -1.3 |
| **ECSD** | **EROS Data Cent** | **8.70** | **5** | Pn | Pn | 03 42 29.2 | -1.7 |
| **N23A** | **Red Feather La** | **8.80** | **314** | IAmb_Lg | | 03 45 03.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **L42A** | **Oliver, Polo** | **9.31** | **39** | Pn | Pn | 03 42 37.6 | -1.5 |

**IDC 06 03:43:08.6±8.8, 18˚.37S×178˚.16W, h563km±34km, mb3.0/3, mbtmp3.9/5, Error ellipse: s-maj=272.4km s-min=33.9km az=141.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.66** | **279** | P | P | 03 44 28.9 | -0.3 |
| | 4.6nm,0.5s,baz=255,slow=23,SNR=4.2 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.92** | **253** | P | P | 03 46 18.6 | +1.5 |
| | 5.5nm,0.8s,baz=186,slow=4.8,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.79** | **260** | P | P | 03 50 32.3 | -0.8 |
| | 0.5nm,0.6s,baz=98,slow=6.9,SNR=18 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.90** | **255** | P | P | 03 50 34.2 | +0.3 |
| | 5.8nm,0.6s,baz=89,slow=8.2,SNR=104 | | | | | | |
| | 5.8nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.28** | **13** | P | P | 03 54 50.8 | +0.1 |
| | 0.3nm,0.8s,baz=227,slow=5.3,SNR=2.3 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

*IDC **06** 03:48:44.7±1.3,8˚.27S×116˚.84E, h0km, mb3.6/4, mbtmp3.7/5, ML3.3/1, Error ellipse: s-maj=27.1km s-min=20.9km az=93.0*
*DJA **06** 03:48:45.5±0.3,8˚S±3˚×11˚7E±˚, h10km, M4.0/8, MLv4.0/8*
**ISC 06 03:48:45.6±0.8, 8˚.23S±0˚.06×116˚.72E±0˚.05, h10km, n13, σ1°07/16, mb3.7/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.53** | **162** | P | **Pg** | **03 48 55.8** | **-0.1** |
| TWSI | | | | S | **Sg** | **03 49 03.1** | **+0.2** |
| **PLAI** | **Plampang** | **1.20** | **120** | P | **Pg** | **03 49 08.6** | **-0.1** |
| PLAI | | | | S | **Sn** | **03 49 25.3** | **+0.4** |
| **SRBI** | **Singaraja** | **1.50** | **275** | P | **Pn** | **03 49 12.6** | **0.0** |
| **DNP** | **Denpasar** | **1.56** | **253** | P | **Pn** | **03 49 12.8** | **-0.6** |
| **IGBI** | **Denpasar** | **1.66** | **249** | P | **Pn** | **03 49 14.6** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.55** | **264** | P | **Pn** | **03 49 25.5** | **-1.6** |
| **BSSI** | **Bau Bau, Buton** | **4.28** | **61** | P | **Pn** | **03 49 50.6** | **-0.2** |
| **KAPI** | **Kappang** | **4.39** | **43** | Pn | **Pn** | **03 49 51.7** | **-0.7** |
| | 1.6nm,0.3s,baz=237,slow=10.0,SNR=7.1 | | | | | | |
| KAPI | | | | Sn | **Sn** | **03 50 42.2** | **-1.5** |
| | 2.4nm,0.3s,baz=46,slow=8.7,SNR=3.6 | | | | | | |
| KAPI | | | | Lg | Lg | 03 51 02.8 | |
| | 1.6nm,0.3s,baz=53,slow=20,SNR=1.7 | | | | | | |
| | 7.0nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.65** | **126** | P | **P** | **03 53 24.9** | **-0.8** |
| | 1.5nm,0.7s,baz=302,slow=12,SNR=18 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **03 53 45.0** | **-0.7** |
| | 2.5nm,0.8s,baz=311,slow=9.7,SNR=20 | | | | | | |
| | 2.5nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.56** | **352** | P | **P** | **03 58 31.3** | **+2.8** |
| | 0.8nm,0.6s,baz=169,slow=8.8,SNR=4.0 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.77** | **334** | P | **P** | **03 59 10.7** | **-0.5** |
| | 0.3nm,0.7s,baz=134,slow=4.2,SNR=2.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **CPUP** | **Villa Florida** | **145.16** | **189** | PKPbc | **PKPbc** | **04 08 23.6** | **-0.1** |
| | 2.2nm,0.7s,baz=170,slow=4.8,SNR=7.1 | | | | | | |

*VIE **06** 03:50:50.0±1.4,51˚.56N×16˚.42E, h0km, mb2.1/1, ml2.6/1, Error ellipse: s-maj=10.6km s-min=8.0km az=83.0, Suspected Mining induced.*
*IPEC **06** 03:50:51.0±0.2,51˚.55N×16˚.21E, h1km, ML2.0/4, Error ellipse: s-maj=1.6km s-min=1.0km az=32.0*
*PRU **06** 03:50:54.3,51˚.44N×16˚.10E, h0km*
**ISC 06 03:50:51.8±1.3, 51˚.49N±0˚.06×16˚.14E±0˚.03, h0km, n22, σ0°93/40, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.66** | **171** | *e*Pg | **Pg** | **03 51 05.0** | **+0.6** |
| KSP | | | | *e*Sg | **Sg** | **03 51 13.9** | **+1.1** |
| **CHVC** | **Chvalec** | **0.90** | **183** | *e*PG | **Pb** | **03 51 09.9** | **-0.5** |
| CHVC | | | | *e*SG | **Sb** | **03 51 22.1** | **-0.9** |
| | comp=Z,24nm,0.4s | | | | | | |
| **OSTC** | **Ostas** | **0.94** | **177** | *e*PG | **Pb** | **03 51 10.6** | **-0.3** |
| OSTC | | | | *e*SG | **Sb** | **03 51 23.1** | **-0.8** |
| | comp=Z,22nm,0.2s | | | | | | |
| **UPC** | **Upice** | **0.99** | **185** | *e*PG | **Pb** | **03 51 11.1** | **-0.7** |
| UPC | | | | *e*SG | **Sb** | **03 51 24.4** | **-0.9** |
| | comp=Z,50nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.15** | **174** | *e*PG | **Pg** | **03 51 13.9** | **+0.1** |
| DPC | | | | *e*SG | **Sb** | **03 51 29.3** | **-0.7** |
| | comp=Z,16nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.38** | **226** | *e*PG | **Pb** | **03 51 18.7** | **+0.2** |
| PVCC | | | | *e*SG | **Sb** | **03 51 36.8** | **+0.1** |
| | comp=Z,67nm,0.2s | | | | | | |
| **KRLC** | **Kraliky** | **1.47** | **164** | *e*SG | **Sn** | **03 51 39.3** | **-0.4** |
| | comp=Z,20nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.51** | **247** | Pg | **Pg** | **03 51 20.9** | **+0.1** |
| BRG | | | | Sg | **Sn** | **03 51 41.1** | **+0.5** |
| BRG | | | | Amp | | 03 51 42.9 | |
| | comp=Z,22nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.81** | **215** | *e*SG | **Sg** | **03 51 51.1** | **+1.1** |
| | comp=Z,17nm,0.4s | | | | | | |
| **HSKC** | **Hora Svate Kat** | **1.92** | **244** | *e*PG | **Pb** | **03 51 27.4** | **-0.3** |
| HSKC | | | | *e*SG | **Sb** | **03 51 52.7** | **+0.4** |
| | comp=Z,12nm,0.2s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.93** | **152** | *e*Pn | **Pn** | **03 51 25.6** | **-0.4** |
| | baz=335 | | | | | | |
| MORC | | | | *e*Sg | **Sb** | **03 51 52.7** | **0.0** |
| | comp=Z,13nm,0.3s,baz=335 | | | | | | |
| **CLL** | **Collm** | **1.97** | **266** | *i* Pg | **Pb** | **03 51 28.5** | **-0.1** |
| CLL | | | | *i* x | x | 03 51 31.7 | |
| CLL | | | | *e*Sg | **Sg** | **03 51 55.0** | **-0.1** |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **2.20** | **172** | *e*Pn | **Pn** | **03 51 29.5** | **-0.2** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sg** | **03 52 01.5** | **-1.1** |
| | comp=Z,6.9nm,0.2s,baz=354 | | | | | | |
| **KRUC** | **Moravsky** | **2.44** | **176** | *e*Sg | **Sg** | **03 52 09.4** | **-0.6** |
| | comp=Z,7.2nm,0.3s,baz=357 | | | | | | |
| **OJC** | **Ojcow** | **2.65** | **117** | *e*Pg | **Pg** | **03 51 42.0** | **-0.6** |
| OJC | | | | *e*Sg | **Sg** | **03 52 16.7** | **-0.1** |
| **JAVC** | **Velka Javorina** | **2.81** | **159** | *e*Pn | **Pn** | **03 51 37.6** | **-0.5** |
| | baz=341 | | | | | | |
| **JAVC** | **Velka Javorina** | **2.81** | **159** | *e*PN | **Pn** | **03 51 37.7** | **-0.4** |
| **KHC** | **Kasperske Hory** | **2.87** | **216** | *e*PN | **Pn** | **03 51 39.0** | **+0.1** |
| KHC | | | | *e*PG | **Pb** | **03 51 44.7** | **+0.7** |
| KHC | | | | *e*SN | **Sn** | **03 52 13.4** | **-0.8** |
| KHC | | | | *e*SG | **Sg** | **03 52 23.2** | **-0.9** |
| | comp=Z,4.3nm,0.3s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **2.92** | **204** | *e*SG | **Sg** | **03 52 24.6** | **-1.0** |
| **LANS** | **Liptovska Anna** | **3.17** | **136** | *e*PN | **Pn** | **03 51 43.2** | **+0.2** |
| LANS | | | | *e*PG | **Pg** | **03 51 55.0** | **+2.5** |
| LANS | | | | *e*SG | **Sg** | **03 52 32.4** | **-1.2** |
| **MODS** | **Modra-Piesok** | **3.21** | **166** | *e*SG | **Sg** | **03 52 37.9** | **+3.2** |
| **CONA** | **Conrad Observa** | **3.57** | **183** | *i* Pn | **Pn** | **03 51 47.7** | **-0.9** |
| | comp=Z,0.5nm,0.2s | | | | | | |
| CONA | | | | *i* Sn | **Sn** | **03 52 32.4** | **+1.0** |
| | comp=Z,2.7nm,0.3s | | | | | | |

*JMA **06** 03:52:21.1±0.2,25˚.0N±1˚.0×123˚.6E±0˚.3, h17km, MV3.2/11, NW OFF ISHIGAKIJIMA IS*
*IDC **06** 03:52:48.0±10.0,25˚.27N×124˚.04E, h277km±122km, mb3.0/6, mbtmp3.7/8, MS2.9/1, Error ellipse: s-maj=70.4km s-min=17.2km az=60.0*
**ISC 06 03:52:21.7±0.8, 24˚.92N±0˚.06×123˚.60E±0˚.04, h10km, n16, σ0°60/20, mb3.7/6, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.59** | **169** | P | **Pb** | **03 52 34.4** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.70** | **230** | P | **Pb** | **03 52 35.7** | **-0.3** |
| YOJ | | | | S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMLA** | **Cha da Macela** | **1.17** | **305** | *e*P | Pn | 03 54 02.6 | -4.7 |
| CMLA | | | | *e*S | Sb | 03 54 16.3 | -6.0 |
| CMLA | | | | A | A | 03 54 20.4 | |
| | 1µm,0.3s | | | | | | |
| **PRIG** | **Ribeira Grande** | **1.20** | **307** | *e*P | Pn | 03 54 03.6 | -4.1 |
| PRIG | | | | *e*S | Sb | 03 54 16.6 | -6.6 |
| PRIG | | | | A | A | 03 54 19.6 | |
| | 510nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **1.25** | **301** | *e*P | Pn | 03 54 03.5 | -4.9 |
| PDA | | | | *e*S | Sb | 03 54 18.0 | -6.7 |
| PDA | | | | A | A | 03 54 19.4 | |
| | 166nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **1.33** | **303** | *e*P | Pn | 03 54 05.1 | -4.5 |
| PSET | | | | *e*S | Sn | 03 54 20.3 | -6.7 |
| PSET | | | | A | A | 03 54 24.1 | |
| | 305nm,0.3s | | | | | | |
| **PSCM** | **Serra do Cume** | **2.73** | **307** | *e*P | Pn | 03 54 25.0 | -3.8 |
| PSCM | | | | *e*S | Sn | 03 54 54.1 | -7.5 |
| PSCM | | | | A | A | 03 54 59.8 | |
| | 289nm,0.2s | | | | | | |
| **PAGU** | **Agualva, Azore** | **2.81** | **307** | *e*P | Pn | 03 54 26.1 | -3.8 |
| PAGU | | | | *e*S | Sn | 03 54 56.2 | -7.3 |
| PAGU | | | | A | A | 03 54 58.6 | |
| | 261nm,0.2s | | | | | | |
| **PSBA** | **Serra de Santa** | **2.90** | **306** | *e*P | Pn | 03 54 27.4 | -3.8 |
| PSBA | | | | *e*S | Sn | 03 54 59.0 | -6.8 |
| PSBA | | | | A | A | 03 55 02.5 | |
| | 96nm,0.5s | | | | | | |
| **PID** | **Ribeirinha** | **3.30** | **295** | *e*P | Pn | 03 54 33.0 | -3.6 |
| PID | | | | *e*S | Sn | 03 55 08.2 | -7.4 |
| PID | | | | A | A | 03 55 12.2 | |
| | 41nm,0.3s | | | | | | |
| **PMAN** | **Manadas** | **3.35** | **298** | *e*P | Pn | 03 54 33.7 | -3.7 |
| PMAN | | | | *e*S | Sn | 03 55 09.6 | -7.3 |
| PMAN | | | | A | A | 03 55 12.5 | |
| | 27nm,0.2s | | | | | | |
| **PPNO** | **Prainha do Nor** | **3.41** | **295** | *e*P | Pn | 03 54 34.4 | -3.8 |
| PPNO | | | | *e*S | Sn | 03 55 10.9 | -7.6 |
| PPNO | | | | A | A | 03 55 13.2 | |
| | 33nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **3.50** | **299** | *e*P | Pn | 03 54 35.9 | -3.5 |
| ROSA | | | | *e*S | Sn | 03 55 12.7 | -7.8 |
| ROSA | | | | A | A | 03 55 16.3 | |
| | 16nm,0.3s | | | | | | |
| **PICO** | **Pico** | **3.54** | **294** | *e*P | Pn | 03 54 36.6 | -3.4 |
| PICO | | | | *e*S | Sn | 03 55 14.0 | -7.7 |
| PICO | | | | A | A | 03 55 17.6 | |
| | 43nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **3.57** | **294** | *e*P | Pn | 03 54 36.6 | -3.8 |
| PCAN | | | | *e*S | Sn | 03 55 13.7 | -8.6 |
| PCAN | | | | A | A | 03 55 20.8 | |
| | 30nm,0.2s | | | | | | |
| **HOR** | **Horta** | **3.70** | **294** | *e*P | Pn | 03 54 38.6 | -3.5 |
| HOR | | | | *e*S | Sn | 03 55 17.1 | -8.3 |
| HOR | | | | A | A | 03 55 20.6 | |
| | 47nm,0.3s | | | | | | |
| **CALA** | **Caldeira** | **3.77** | **294** | *e*P | Pn | 03 54 39.7 | -3.5 |
| CALA | | | | *e*S | Sn | 03 55 19.2 | -8.2 |
| CALA | | | | A | A | 03 55 23.2 | |
| | 60nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **3.79** | **295** | *e*P | Pn | 03 54 39.6 | -3.8 |
| PCED | | | | *e*S | Sn | 03 55 19.5 | -8.2 |
| PCED | | | | A | A | 03 55 22.7 | |
| | 23nm,0.5s | | | | | | |

*JMA* ***06*** *04:02:09.3±0.2,25˚.0N±0˚.9×123˚.6E±0˚.3, h20km, MV3.8/10, NW OFF ISHIGAKIJIMA IS*
*NIED* ***06*** *04:02:09.3, 25˚.01N×123˚.60E, h20km, MW4.4, Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁵Nm; Mrr~3.31; Mθθ 3.15; Mϕϕ 0.16; Mrθ~2.90; Mθϕ 0.92; Mϕr~0.56; Fault plane solution: Mo 4.47000×10¹⁵ NP1:ϕs 77.00000°, δ 66.00000°, λ -87.00000°. NP2:ϕs 251.00000°, δ 24.00000°, λ -96.00000°.*
*BJI* ***06*** *04:02:11.8±0.0,24˚.95N×123˚.97E, h35km, mb4.2/8, ML4.0/1, Ms7 3.9/1*
*NEIC* ***06*** *04:02:12.6±1.7,24˚.84N±0˚.03×123˚.46E±0˚.07, h33km±6km, mb4.3/12, Error ellipse: s-maj=9.5km s-min=4.1km az=106.0*
*IDC* ***06*** *04:02:14.7±8.6,25˚.07N×123˚.59E, h52km±91km, mb3.7/9, mbtmp4.0/11, ML3.0/2, MS3.6/29, Error ellipse: s-maj=67.2km s-min=17.0km az=64.0*

**ISC 06 04:02:09.2±1.5,24˚.97N±0˚.06×123˚.55E±0˚.03, h13km±10km, n70, σ0 95/51, mb4.2/15, MS3.6/26, 1C, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.65** | **166** | P | **Pg** | **04 02 22.4** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **0.71** | **224** | Pn | **Pg** | **04 02 23.6** | **+0.7** |
| YOJ | | | | Sn | **Sg** | **04 02 30.1** | **-2.0** |
| **YOJ** | **Yonaguni jima** | **0.71** | **224** | P | **Pb** | **04 02 23.8** | **+0.4** |
| YOJ | | | | S | **Sb** | **04 02 33.6** | **+0.7** |
| **JYNG** | **Yonagunijimaku** | **0.76** | **227** | P | **Pb** | **04 02 24.4** | **+0.2** |
| JYNG | | | | *e*S | **Sg** | **04 02 35.3** | **+1.5** |
| **JISG** | **Ishigakijimahi** | **0.79** | **119** | P | **Pb** | **04 02 23.8** | **-0.9** |
| **JIJ** | **Ishigaki jima** | **0.81** | **138** | P | **Pb** | **04 02 24.2** | **-0.9** |
| JIJ | | | | S | **Sb** | **04 02 34.8** | **-1.1** |
| **JKRS** | **Kuro-shima** | **0.84** | **150** | P | **Pb** | **04 02 25.3** | **-0.3** |
| JKRS | | | | S | **Sb** | **04 02 36.7** | **-0.2** |
| **HATJ** | **Hateruma jima** | **0.94** | **166** | P | **Pb** | **04 02 27.2** | **-0.1** |
| **JTJ** | **Tarama** | **1.10** | **107** | P | **Pb** | **04 02 29.1** | **-0.9** |
| JTJ | | | | *e*S | **Sb** | **04 02 43.3** | **-0.9** |
| **TATO** | **Taipei** | **1.87** | **271** | Pn | **Pn** | **04 02 41.4** | **+0.4** |
| **NACB** | **Ninganchiao** | **1.95** | **246** | Pn | **Pn** | **04 02 43.3** | **+1.3** |
| **YHNB** | **Yeheng** | **2.00** | **262** | Pn | **Pn** | **04 02 42.5** | **-0.3** |
| **YULB** | **Yu-li** | **2.59** | **233** | Pn | **Pn** | **04 02 50.0** | **-0.8** |
| **SSLB** | **Suanglung** | **2.65** | **244** | Pn | **Pn** | **04 02 52.8** | **+1.2** |
| **TWG** | **Pinlang** | **3.12** | **227** | Pn | **Pn** | **04 02 58.2** | **+0.1** |
| **TPUB** | **Ta-pu** | **3.14** | **239** | Pn | **Pb** | **04 03 02.4** | **-2.6** |
| **JOW** | **Kunigami** | **4.64** | **65** | Pn | **Pn** | **04 03 20.0** | **+1.0** |
| **JOW** | **Kunigami** | **4.64** | **65** | P | **Pn** | **04 03 20.8** | **+1.8** |
| | 1.3nm,0.3s,baz=256,slow=10,SNR=5.4 | | | | | | |
| | 22nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **10.34** | **37** | LR | LR | 04 09 03.1 | |
| | comp=Z,211nm,18.1s,baz=212,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **12.99** | **16** | P | **P** | **04 05 21.8** | **-2.2** |
| | 7.7nm,1.1s,baz=189,slow=9.4,SNR=3.0 | | | | | | |
| KSRS | | | | LR | LR | 04 11 03.9 | |
| | comp=Z,222nm,18.4s,baz=205,slow=41 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.06** | **44** | P | **P** | **04 06 09.8** | **+0.6** |
| | 0.1nm,0.3s,baz=232,slow=11,SNR=2.6 | | | | | | |
| MJAR | | | | LR | LR | 04 13 24.2 | |
| | comp=Z,94nm,19.7s,baz=206,slow=40 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **DAV** | **Davao City (W)** | **17.91** | **173** | LR | LR | 04 12 50.4 | |
| | comp=Z,231nm,21.5s,baz=346,slow=35 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **20.38** | **18** | P | **P** | **04 06 45.7** | **+0.1** |
| | 5.5nm,1.0s,baz=190,slow=9.5,SNR=7.9 | | | | | | |
| USRK | | | | LR | LR | 04 14 19.9 | |
| | comp=Z,97nm,19.9s,baz=194,slow=36 | | | | | | |
| | 5.5nm,1.0s | | | | | | |
| **BNX** | **BinXian** | **20.95** | **8** | ⇑P | Pn | 04 06 53.8 | -0.6 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **23.05** | **115** | LR | LR | 04 14 20.5 | |
| | comp=Z,35nm,20.1s,baz=257,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.74** | **259** | LR | LR | 04 16 35.7 | |
| | comp=Z,43nm,18.8s,baz=305,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **24.61** | **34** | LR | LR | 04 16 34.7 | |
| | comp=Z,78nm,19.7s,baz=174,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **25.05** | **13** | LR | LR | 04 17 42.3 | |
| | comp=Z,162nm,19.3s,baz=224,slow=37 | | | | | | |
| **HEH** | **HeiHe** | **25.42** | **6** | *e*P | **P** | **04 07 37.1** | **+0.8** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **26.55** | **334** | P | **P** | **04 07 47.1** | **+0.3** |
| | 0.9nm,0.7s,baz=142,slow=7.5,SNR=4.5 | | | | | | |
| SONM | | | | LR | LR | 04 19 10.9 | |
| | comp=Z,196nm,18.3s,baz=75,slow=38 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **30.03** | **188** | LR | LR | 04 20 24.7 | |
| | comp=Z,81nm,18.6s,baz=288,slow=36 | | | | | | |
| **YAK** | **Yakutsk** | **37.28** | **5** | LR | LR | 04 26 44.4 | |
| | comp=Z,97nm,18.7s,baz=190,slow=40 | | | | | | |
| **MK31** | **Makanchi Array** | **39.30** | **314** | P | **P** | **04 09 38.4** | **+0.5** |
| **MKAR** | **Makanchi Array** | **39.30** | **314** | P | **P** | **04 09 37.7** | **-0.1** |
| **MKAR** | **Makanchi Array** | **39.30** | **314** | P | **P** | **04 09 38.6** | **+0.7** |
| | 4.6nm,0.9s,baz=105,slow=9.7,SNR=25 | | | | | | |
| | 4.6nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **39.45** | **21** | LR | LR | 04 27 04.2 | |
| | comp=Z,96nm,18.1s,baz=244,slow=38 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **40.16** | **132** | P | **P** | **04 09 45.2** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **40.79** | **326** | P | **P** | **04 09 49.6** | **-0.4** |
| | 2.8nm,0.8s,baz=117,slow=8.6,SNR=7.5 | | | | | | |
| ZALV | | | | LR | LR | 04 27 56.0 | |
| | comp=Z,162nm,18.1s,baz=130,slow=38 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **41.20** | **143** | LR | LR | 04 24 34.7 | |
| | comp=Z,66nm,21.9s,baz=266,slow=32 | | | | | | |
| **KURK** | **Kurchatov** | **42.90** | **319** | P | **P** | **04 10 07.6** | **+0.3** |
| KURK | | | | IAmb | IAmb | 04 10 09.1 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.92** | **319** | P | **P** | **04 10 07.7** | **+0.2** |
| | comp=Z,3.2nm,1.0s,baz=110,slow=8.8,SNR=13 | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.70** | **166** | P | **P** | **04 10 29.1** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 04 10 53.0 | |
| | comp=Z,7.6nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.86** | **166** | P | **P** | **04 10 31.3** | **0.0** |
| **WRA** | **Warramunga Arr** | **45.86** | **166** | P | **P** | **04 10 32.6** | **+1.3** |
| | comp=Z,1.6nm,0.9s,baz=348,slow=8.8,SNR=7.6 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.86** | **166** | P | **P** | **04 10 31.1** | **-0.3** |
| **WR0** | **Warramunga Arr** | **45.92** | **166** | P | **P** | **04 10 32.0** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 04 10 41.1 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **TIXI** | **Tiksi** | **46.81** | **2** | LR | LR | 04 33 00.6 | |
| | comp=Z,222nm,18.6s,baz=188,slow=40 | | | | | | |
| **ASAR** | **Alice Springs** | **49.38** | **167** | P | **P** | **04 10 59.7** | **+1.1** |
| | comp=Z,0.5nm,0.5s,baz=355,slow=13,SNR=5.4 | | | | | | |
| ASAR | | | | LR | LR | 04 34 47.5 | |
| | comp=Z,35nm,19.5s,baz=176,slow=40 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **CTA** | **Charters Tower** | **49.94** | **152** | LR | LR | 04 34 04.5 | |
| | comp=Z,4.7nm,18.0s,baz=296,slow=38 | | | | | | |
| **ABKAR** | **Akbulak array** | **54.44** | **314** | P | **P** | **04 11 35.4** | **-0.8** |
| **AKTO** | **Aktyubinsk** | **55.73** | **315** | LR | LR | 04 37 35.6 | |
| | comp=Z,59nm,18.2s,baz=144,slow=38 | | | | | | |
| **KIRV** | **Kirov** | **60.82** | **325** | LR | LR | 04 41 08.0 | |
| | comp=Z,213nm,18.1s,baz=69,slow=38 | | | | | | |
| **DZM** | **Mont Dzumac** | **62.62** | **135** | LR | LR | 04 36 30.4 | |
| | comp=Z,43nm,19.1s,baz=298,slow=33 | | | | | | |
| **BWN** | **Browne** | **66.53** | **28** | P | **P** | **04 12 58.1** | **-0.3** |
| **KBZ** | **Khabaz** | **66.67** | **309** | P | **P** | **04 13 00.2** | **+0.5** |
| | comp=Z,1.4nm,0.6s,baz=142,slow=4.2,SNR=4.9 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **67.92** | **25** | P | **P** | **04 13 06.6** | **-0.7** |
| **SPITS** | **Spitsbergen Ar** | **69.17** | **348** | LR | LR | 04 47 57.4 | |
| | comp=Z,68nm,18.4s,baz=360,slow=40 | | | | | | |
| **ARCES** | **ARCESS Array B** | **69.61** | **338** | LR | LR | 04 48 24.5 | |
| | comp=Z,23nm,18.2s,baz=78,slow=40 | | | | | | |
| **K27K** | **Chicken** | **69.73** | **28** | P | **P** | **04 13 19.6** | **+1.0** |
| K27K | | | | IAmb | IAmb | 04 13 59.3 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **M26K** | **Nabesna, AK** | **69.75** | **30** | P | **P** | **04 13 19.3** | **+0.4** |
| M26K | | | | IAmb | IAmb | 04 13 26.1 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **BCAR** | **Beaver Creek A** | **70.11** | **29** | P | **P** | **04 13 21.7** | **+0.7** |
| **M29M** | **Somme Creek** | **71.76** | **29** | P | **P** | **04 13 32.3** | **+1.2** |
| M29M | | | | IAmb | IAmb | 04 13 33.3 | |
| | comp=Z,3.3nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **71.85** | **330** | LR | LR | 04 48 24.1 | |
| | comp=Z,153nm,18.0s,baz=76,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.44** | **307** | P | **P** | **04 13 47.1** | **-0.3** |
| | comp=Z,1.0nm,1.0s,baz=123,slow=4.6,SNR=5.1 | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **77.93** | **331** | LR | LR | 04 52 03.6 | |
| | comp=Z,148nm,18.1s,baz=60,slow=38 | | | | | | |
| **JMIC** | **Jan Mayen** | **78.62** | **346** | LR | LR | 04 54 15.3 | |
| | comp=Z,31nm,18.2s,baz=23,slow=40 | | | | | | |
| **BORG** | **Borgarnes** | **86.51** | **346** | LR | LR | 04 57 17.1 | |
| | comp=Z,30nm,19.5s,baz=342,slow=38 | | | | | | |
| **FRB** | **Frobisher Bay** | **91.07** | **5** | LR | LR | 04 56 45.1 | |
| | comp=Z,25nm,21.6s,baz=358,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.38** | **44** | LR | LR | 04 56 11.2 | |
| | comp=Z,18nm,21.2s,baz=271,slow=34 | | | | | | |
| **SCHQ** | **Schefferville** | **100.03** | **6** | LR | LR | 05 04 19.9 | |
| | comp=Z,36nm,19.9s,baz=309,slow=37 | | | | | | |

**DJA 06 04:06:52.1±0.6, 8˚S±6˚×11˚6E±˚, h11km±9km, M3.7/7, mb4.0/1, MLv3.5/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRBI** | **Singaraja** | **0.91** | **277** | P | Pg | 04 07 09.3 | -0.4 |
| SRBI | | | | S | Sb | 04 07 22.2 | 0.0 |
| **TWSI** | **Taliwang, Sumb** | **0.92** | **126** | P | Pb | 04 07 10.2 | +0.1 |
| TWSI | | | | S | Sb | 04 07 22.7 | +0.3 |
| **DNP** | **Denpasar** | **1.03** | **242** | P | Pb | 04 07 12.0 | 0.0 |
| **IGBI** | **Denpasar** | **1.16** | **237** | P | Pb | 04 07 13.7 | -0.4 |
| **JAGI** | **Jajag, Banyuwa** | **1.98** | **262** | P | Pn | 04 07 25.2 | -0.4 |
| **BSSI** | **Bau Bau, Buton** | **4.78** | **65** | P | Pn | 04 08 03.3 | -0.8 |
| **BNSI** | **Bone** | **5.46** | **47** | P | Pn | 04 08 14.2 | +0.8 |

*IDC* ***06*** *04:14:57.4±1.7,37˚.90S×73˚.50W, h0km, mb3.7/3, mbtmp3.7/4, ML3.4/1, MS3.0/4, Error ellipse: s-maj=88.2km s-min=29.8km az=62.0*
*NEIC* ***06*** *04:14:59.1±1.6,37˚.91S±0˚.04×73˚.7W±0˚.1, h15km±5km, mb4.2/3, Mwr3.7/23, ML4.3(GUC), Error ellipse: s-maj=11.7km s-min=6.6km az=94.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr~1.89; Mθθ-0.87; Mϕϕ 2.76; Mrθ~0.87; Mθϕ~0.24; Mϕr~4.46; Fault plane solution: Mo 5.16000×10¹⁴ NP1:ϕs 10.66000°, δ 77.06000°, λ -80.27000°. NP2:ϕs 153.22000°, δ 16.14000°, λ -126.33000°. Principal axes: T 5.4710, Plg31.0000°, Azm93.0000°; N -0.6877, Plg9.0000°, Azm188.0000°; P -4.7833, Plg57.0000°, Azm293.0000°;*
*NEIC* ***06*** *04:15:00.3, 37˚.91S×73˚.63W, h26km*
*GUC* ***06*** *04:15:01.3±0.7, 37˚.96S×73˚.63W, h32km±2km, ML4.3*

**ISC 06 04:14:58.8±1.7, 37˚.89S±0˚.03×73˚.75W±0˚.05, h16km±12km, n81, σ1 19/92, mb3.8/5, 4C-3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BI04** | **Isla Mocha** | **0.53** | **192** | *i*P | **Pb** | **04 15 10.7** | **+0.9** |
| BI04 | | | | *i* S | **Sb** | **04 15 18.1** | **+0.9** |
| BI04 | | | | IAML | | 04 15 19.9 | |
| | comp=N,51µm,0.2s | | | | | | |
| **LC02** | **Puerto Saavedr** | **0.94** | **163** | | **Pg** | **04 15 16.7** | **-0.4** |
| **LC02** | **Puerto Saavedr** | **0.94** | **163** | *e*P | **Pb** | **04 15 16.2** | **-0.5** |
| LC02 | | | | *e*S | **Sb** | **04 15 27.6** | **-1.5** |
| **LR02** | **Universidad Au** | **1.95** | **169** | *e*P | **Pn** | **04 15 30.9** | **-0.3** |
| LR02 | | | | IAML | | 04 16 06.2 | |
| | comp=N,6µm,0.7s | | | | | | |
| **LR04** | **Corral** | **2.00** | **173** | Pn | **Pn** | **04 15 31.0** | **-0.9** |
| **LR04** | **Corral** | **2.00** | **173** | *e*P | **Pn** | **04 15 31.1** | **-0.9** |
| LR04 | | | | *e*S | **Sn** | **04 15 56.5** | **-0.2** |
| LR04 | | | | IAML | | 04 16 06.3 | |
| | comp=E,4µm,0.3s | | | | | | |
| **LR03** | **Panguipulli** | **2.06** | **148** | Pn | **Pn** | **04 15 32.3** | **-0.4** |
| **LR03** | **Panguipulli** | **2.06** | **148** | *e*P | **Pn** | **04 15 32.9** | **+0.2** |
| LR03 | | | | *e*S | **Sn** | **04 15 57.0** | **-1.0** |
| LR03 | | | | IAML | | 04 16 05.2 | |
| | comp=N,4µm,0.4s | | | | | | |
| **BI02** | **San Fabin de** | **2.32** | **59** | Pn | **Pn** | **04 15 36.4** | **0.0** |
| **GO06** | **Curarrehue** | **2.45** | **134** | Pn | **Pn** | **04 15 38.7** | **+0.4** |
| **GO06** | **Curarrehue** | **2.45** | **134** | *e*P | **Pn** | **04 15 38.5** | **+0.2** |
| GO06 | | | | *i* S | **Sn** | **04 16 06.8** | **-1.2** |
| **LR05** | **Currie** | **2.70** | **150** | Pn | **Pn** | **04 15 42.1** | **+0.5** |
| **LR05** | **Currie** | **2.70** | **150** | *e*P | **Pn** | **04 15 42.4** | **+0.9** |
| LR05 | | | | *e*S | **Sn** | **04 16 12.8** | **-1.1** |
| LR05 | | | | IAML | | 04 16 30.1 | |
| | comp=E,1µm,0.5s | | | | | | |
| **ML02** | **Panimavida** | **2.83** | **42** | Pn | **Pn** | **04 15 43.9** | **+0.6** |
| **ML02** | **Panimavida** | **2.83** | **42** | *e*P | **Pn** | **04 15 44.2** | **+0.9** |
| ML02 | | | | IAML | | 04 16 38.9 | |
| | comp=N,1µm,0.6s | | | | | | |
| **LL04** | **Puerto Octay** | **3.19** | **161** | Pn | **Pn** | **04 15 47.6** | **-0.7** |
| **GO05** | **Huala** | **3.23** | **28** | Pn | **Pn** | **04 15 49.6** | **+0.8** |
| **GO05** | **Huala** | **3.23** | **28** | *e*P | **Pn** | **04 15 49.5** | **+0.6** |
| GO05 | | | | *e*S | **Sn** | **04 16 29.4** | **+2.5** |
| GO05 | | | | IAML | | 04 16 48.6 | |
| | comp=E,314nm,0.4s | | | | | | |
| **LL05** | **Los Muermos** | **3.52** | **177** | Pn | **Pn** | **04 15 52.5** | **-0.2** |
| **BO03** | **Pichilemu** | **3.68** | **24** | *i*P | **Pn** | **04 15 55.6** | **+0.6** |
| **PLCA** | **Paso Flores** | **3.77** | **140** | Pn | **Pn** | **04 15 57.9** | **+1.5** |
| **PLCA** | **Paso Flores** | **3.77** | **140** | Pn | **Pn** | **04 15 57.0** | **+0.7** |
| | comp=E,0.8nm,0.3s,baz=313,slow=12,SNR=15 | | | | | | |
| PLCA | | | | Sn | **Sb** | **04 16 51.4** | **+1.0** |
| | comp=E,6.9nm,0.3s,baz=226,slow=22,SNR=6.6 | | | | | | |
| PLCA | | | | LR | LR | 04 17 06.8 | |
| | comp=E,57nm,18.3s,baz=306,slow=36 | | | | | | |
| | comp=E,2.4nm,0.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **3.91** | **39** | Pn | **Pn** | **04 15 58.7** | **+0.5** |
| **BO02** | **Sierra Bellavi** | **3.91** | **39** | *e*P | **Pn** | **04 15 59.0** | **+0.7** |
| **BO01** | **Tunca** | **4.10** | **32** | Pn | **Pn** | **04 16 01.2** | **+0.4** |
| **BO01** | **Tunca** | **4.10** | **32** | ⇑*e*P | **Pn** | **04 16 01.4** | **+0.6** |
| **LL06** | **Loncomilla** | **4.32** | **179** | Pn | **Pn** | **04 16 04.7** | **+0.9** |
| **MT01** | **Popeta** | **4.50** | **27** | Pn | **Pn** | **04 16 06.3** | **0.0** |
| **MT01** | **Popeta** | **4.50** | **27** | ⇓*e*P | **Pn** | **04 16 06.5** | **+0.2** |
| **VA04** | **Santo Domingo** | **4.57** | **23** | Pn | **Pn** | **04 16 08.6** | **-0.6** |
| **BO04** | **La Punta** | **4.65** | **34** | Pn | **Pn** | **04 16 08.4** | **-0.1** |
| **BO04** | **La Punta** | **4.65** | **34** | ⇑*i*P | **Pn** | **04 16 08.7** | **+0.3** |
| BO04 | | | | *i* S | **Sn** | **04 17 00.3** | **-1.8** |
| **MT09** | **Talagante** | **4.68** | **29** | Pn | **Pn** | **04 16 08.4** | **-0.5** |
| **LL07** | **Hotel Espejo d** | **4.94** | **178** | Pn | **Pn** | **04 16 12.5** | **+0.2** |
| **LMEL** | **Las Melosas** | **4.95** | **37** | Pn | **Pn** | **04 16 13.0** | **+0.3** |
| **LMEL** | **Las Melosas** | **4.95** | **37** | ⇓*e*P | **Pn** | **04 16 13.8** | **+1.1** |
| **MT13** | **San Alfonso** | **5.00** | **35** | Pn | **Pn** | **04 16 12.9** | **-0.4** |
| **MT13** | **San Alfonso** | **5.00** | **35** | *e*P | **Pn** | **04 16 14.6** | **+1.2** |
| MT13 | | | | *e*S | **Sn** | **04 17 11.7** | **+0.9** |
| **MT15** | **Las Vizcachas** | **5.03** | **33** | *e*P | **Pn** | **04 16 14.1** | **+0.4** |
| **MT02** | **Curacav** | **5.09** | **25** | Pn | **Pn** | **04 16 14.1** | **-0.3** |
| **MT02** | **Curacav** | **5.09** | **25** | *e*P | **Pn** | **04 16 14.3** | **-0.1** |
| **MT05** | **Renca** | **5.11** | **30** | Pn | **Pn** | **04 16 16.1** | **+1.3** |
| **MT03** | **Universidad Ad** | **5.12** | **32** | Pn | **Pn** | **04 16 14.8** | **-0.1** |
| **MT16** | **CCHEN** | **5.17** | **31** | Pn | **Pn** | **04 16 15.7** | **+0.2** |
| **MT14** | **Cerro Cal¡n** | **5.19** | **31** | *e*P | **Pn** | **04 16 16.2** | **+0.4** |
| **GO07** | **Milladeo Hill,** | **5.22** | **179** | Pn | **Pn** | **04 16 17.3** | **+1.2** |
| **FCH** | **Farellones** | **5.35** | **33** | *e*P | **Pn** | **04 16 18.6** | **+0.2** |
| FCH | | | | *i* S | **Sn** | **04 17 19.1** | **-0.7** |
| **PEL** | **Peldehue** | **5.35** | **29** | Pn | **Pn** | **04 16 17.8** | **-0.3** |
| **MT08** | **Bocatoma Ro** | **5.37** | **35** | Pn | **Pn** | **04 16 18.6** | **0.0** |
| **VA06** | **Catapilco** | **5.68** | **21** | Pn | **Pn** | **04 16 22.1** | **-0.4** |
| **VA03** | **San Esteban** | **5.74** | **28** | Pn | **Pn** | **04 16 22.9** | **-0.5** |
| **H03S1** | **Juan Fernandez** | **5.82** | **312** | Pn | **Pn** | **04 16 26.5** | **+2.3** |
| H03S1 | | | | T | T | 04 22 23.7 | |
| | baz=134,slow=75,SNR=1755 | | | | | | |
| **H03S3** | **Juan Fernandez** | **5.83** | **313** | Pn | **Pn** | **04 16 26.7** | **+2.3** |
| H03S3 | | | | T | T | 04 22 24.3 | |
| | baz=134,slow=75,SNR=1713 | | | | | | |
| **H03S2** | **Juan Fernandez** | **5.83** | **312** | Pn | **Pn** | **04 16 26.6** | **+2.2** |
| H03S2 | | | | T | T | 04 22 21.9 | |
| | baz=134,slow=75,SNR=1534 | | | | | | |
| **VA04** | **Juan Fernndez** | **5.92** | **314** | Pn | **Pn** | **04 16 27.9** | **+2.1** |
| **H03N3** | **Juan Fernandez** | **6.11** | **315** | Pn | **Pn** | **04 16 31.5** | **+3.3** |
| H03N3 | | | | Sn | **Sn** | **04 17 35.6** | **-2.1** |
| **H03N1** | **Juan Fernandez** | **6.11** | **315** | Pn | **Pn** | **04 16 31.1** | **+2.8** |
| H03N1 | | | | Sn | **Sn** | **04 17 34.8** | **-2.9** |
| **H03N2** | **Juan Fernandez** | **6.13** | **315** | Pn | **Pn** | **04 16 31.2** | **+2.8** |
| H03N2 | | | | Sn | **Sn** | **04 17 35.7** | **-2.3** |
| **CO02** | **Combarbal** | **7.04** | **20** | Pn | **Pn** | **04 16 41.5** | **+0.1** |
| **CO06** | **Fray Jorge** | **7.41** | **14** | Pn | **Pn** | **04 16 45.1** | **-1.2** |
| **CO03** | **El Pedregal** | **7.47** | **21** | Pn | **Pn** | **04 16 47.2** | **0.0** |
| **GO04** | **Tololo Observa** | **8.08** | **18** | Pn | **Pn** | **04 16 56.1** | **+0.4** |
| **CO05** | **La Serena** | **8.22** | **15** | Pn | **Pn** | **04 16 57.1** | **-0.3** |
| **CO01** | **Juntas del Tor** | **8.46** | **22** | Pn | **Pn** | **04 17 01.1** | **+0.2** |
| **LCO** | **Las Campanas** | **9.21** | **17** | Pn | **Pn** | **04 17 10.5** | **-0.8** |
| **TRQA** | **Tornquist** | **9.29** | **95** | Pn | **Pn** | **04 17 11.9** | **-0.2** |
| **AY03** | **Cochrane** | **9.39** | **175** | Pn | **Pn** | **04 17 14.9** | **-1.4** |
| **AC05** | **El Transito** | **9.48** | **19** | Pn | **Pn** | **04 17 14.3** | **-0.6** |
| **AC04** | **Llanos de Chal** | **9.91** | **14** | Pn | **Pn** | **04 17 19.1** | **-1.6** |
| **GO03** | **Copiap** | **10.68** | **17** | Pn | **Pn** | **04 17 30.4** | **-0.8** |
| **AC06** | **Mina Casimiro** | **10.88** | **16** | Pn | **Pn** | **04 17 32.0** | **-1.9** |
| **GO02** | **Mina Guanaco** | **13.17** | **17** | Pn | **Pn** | **04 18 04.3** | **-1.2** |
| **CPUP** | **Villa Florida** | **18.03** | **55** | LR | LR | 04 26 40.1 | |
| | comp=E,62nm,19.0s,baz=234,slow=39 | | | | | | |
| **ITAB** | **Concordia** | **21.04** | **66** | P | **P** | **04 19 40.6** | **-1.4** |
| ITAB | | | | IAmb | IAmb | 04 20 04.8 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **ETMB** | **Extrema** | **28.76** | **16** | P | **P** | **04 20 55.2** | **-0.5** |
| ETMB | | | | IAmb | IAmb | 04 20 58.4 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **BDFB** | **Brasilia** | **31.73** | **53** | LR | LR | 04 35 43.2 | |
| | comp=Z,34nm,18.8s,baz=174,slow=39 | | | | | | |
| **SNAA** | **Sanae** | **48.54** | **156** | P | **P** | **04 23 40.9** | **+0.1** |
| SNAA | | | | IAmb | IAmb | 04 23 54.2 | |
| | comp=Z,5.9nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **48.54** | **156** | P | **P**

comp=Z,24nm,0.1s
**PCAQ Pointe Carleto 6.50 325** PN **Pn** **04 21 23.3 +2.5**
PCAQ SN **Sn** **04 22 35.0 +0.1**
PCAQ Trac 04 22 36.6
comp=Z,29nm,0.1s
**BATG Bathurst New B 6.75 297** Pn **Pn** **04 21 26.5 +2.2**
BATG Sn **Sn** **04 22 38.2 -3.0**
**HSNB Heath Steele M 6.75 297** PN **Pn** **04 21 26.9 +2.6**
HSNB SN **Sn** **04 22 40.1 -1.1**
HSNB Trac 04 22 42.6
comp=Z,17nm,0.1s
**GGN Saint George 6.87 278** Pn **Pn** **04 21 27.8 +2.0**
GGN Sn **Sn** **04 22 40.0 -4.0**
**GGN Saint George 6.87 278** PN **Pn** **04 21 28.4 +2.5**
GGN SN **Sn** **04 22 42.2 -1.9**
GGN Trac 04 22 46.4
comp=Z,17nm,0.1s
**BJBQ Baie Johan-Bee 6.90 329** PN **Pn** **04 21 28.6 +2.5**
BJBQ SN **Sn** **04 22 43.9 -0.7**
BJBQ Trac 04 22 45.9
comp=Z,14nm,0.1s
**PMAQ Port Menier 7.18 320** PN **Pn** **04 21 32.7 +2.6**
PMAQ SN **Sn** **04 22 50.6 -1.0**
PMAQ Trac 04 23 01.5
comp=Z,7.4nm,0.1s
**MCNB McAdam 7.23 282** PN **Pn** **04 21 33.0 +2.2**
MCNB SN **Sn** **04 22 51.3 -1.7**
MCNB Trac 04 22 53.8
comp=Z,5.6nm,0.1s
**EMMW East Machias 7.31 275** Pn **Pn** **04 21 33.0 +1.1**
**G65A Princeton 7.38 279** Pn **Pn** **04 21 34.4 +1.5**
**PQI Presque Isle 7.87 290** **Pn** **04 21 41.0 +1.4**
**F64A Sherman 7.98 284** Pn **Pn** **04 21 42.3 +1.3**
**F63A Nahmakanta, Br 8.49 282** Pn **Pn** **04 21 49.1 +1.0**
**ICQ Pointe Anglais 8.49 310** Pn **Pn** **04 21 49.0 +1.0**
**ICQ Pointe Anglais 8.49 310** PN **Pn** **04 21 50.1 +2.1**
ICQ SN **Sn** **04 23 21.5 -2.3**
ICQ Trac 04 23 23.8
comp=Z,16nm,0.2s
**SMQ Clarke City 8.59 315** PN **Pn** **04 21 50.9 +1.4**
SMQ SN **Sn** **04 23 23.6 -2.7**
SMQ Trac 04 23 31.1
comp=Z,10nm,0.2s
**PKME Peaks-Kenny Pk 8.61 279** Pn **Pn** **04 21 50.3 +0.7**
**PKME Peaks-Kenny Pk 8.61 279** PN **Pn** **04 21 51.4 +1.8**
PKME SN **Sn** **04 23 23.8 -2.9**
PKME Trac 04 23 25.8
comp=Z,21nm,0.3s
**D62A Allapoint, All 8.65 291** Pn **Pn** **04 21 51.2 +1.0**
**CNQ Baie Comeau 8.83 307** PN **Pn** **04 21 54.9 +2.2**
CNQ SN **Sn** **04 23 30.0 -2.2**
CNQ Trac 04 23 38.6
comp=Z,8.8nm,0.2s
**BACQ Baie-Comeau 8.88 306** PN **Pn** **04 21 55.0 +1.6**
BACQ SN **Sn** **04 23 31.1 -2.2**
BACQ Trac 04 23 35.3
comp=Z,6.2nm,0.1s
**E62A Clayton Lake 8.88 288** Pn **Pn** **04 21 54.5 +1.1**
**WVL Waterville 8.89 275** Pn **Pn** **04 21 54.8 +1.3**
**F62A Pittston Farm, 9.10 283** Pn **Pn** **04 21 57.6 +1.1**
**CACQ Cacouna 9.17 296** PN **Pn** **04 21 58.7 +1.3**
CACQ SN **Sn** **04 23 37.7 -2.9**
CACQ Trac 04 23 41.7
comp=Z,13nm,0.2s
**FORQ Forestville 9.21 302** PN **Pn** **04 21 59.4 +1.5**
FORQ SN **Sn** **04 23 37.8 -3.6**
FORQ Trac 04 23 44.9
comp=Z,4.8nm,0.1s
**A21 Saint Andre 9.22 295** PN **Pn** **04 21 59.8 +1.7**
A21 SN **Sn** **04 23 38.9 -3.0**
A21 Trac 04 23 42.6
comp=Z,10.0nm,0.1s
**LESQ Les-Escoumins 9.23 299** PN **Pn** **04 21 59.9 +1.7**
LESQ SN **Sn** **04 23 39.2 -3.0**
LESQ Trac 04 23 47.3
comp=Z,4.3nm,0.1s
**BSCQ Baie-Sainte-Ca 9.36 297** PN **Pn** **04 22 01.1 +1.1**
BSCQ SN **Sn** **04 23 41.6 -3.6**
BSCQ Trac 04 23 46.9
comp=Z,8.8nm,0.2s
**A16 Riviere Ouelle 9.37 293** Pn **Pn** **04 22 01.6 +1.4**
A16 SN **Sn** **04 23 42.4 -3.2**
A16 Trac 04 23 45.7
comp=Z,11nm,0.2s
**A64 Saint Simeon 9.39 295** PN **Pn** **04 22 02.0 +1.6**
A64 SN **Sn** **04 23 42.7 -3.3**
A64 Trac 04 23 48.5
comp=Z,6.7nm,0.2s
**G62A West of Eustis 9.48 279** Pn **Pn** **04 22 02.1 +0.4**
**I63A Otisfield 9.60 272** Pn **Pn** **04 22 04.9 +1.6**
**LMQ La Malbaie 9.60 293** Pn **Pn** **04 22 04.1 +0.7**
**LMQ La Malbaie 9.60 293** PN **Pn** **04 22 04.3 +1.0**
LMQ SN **Sn** **04 23 48.0 -3.3**
LMQ Trac 04 23 51.4
comp=Z,5.7nm,0.1s
**A54 Misere 9.64 292** PN **Pn** **04 22 05.9 +2.1**
A54 SN **Sn** **04 23 48.6 -3.5**
A54 Trac 04 23 53.8
comp=Z,6.9nm,0.1s
**H62A Milan 9.95 275** Pn **Pn** **04 22 07.5 -0.6**
**BCLQ Boischatel 10.05 289** PN **Pn** **04 22 11.7 +2.3**
BCLQ SN **Sn** **04 23 58.2 -3.9**
BCLQ Trac 04 24 02.7
comp=Z,5.3nm,0.2s
**I62A Tamworth 10.16 271** Pn **Pn** **04 22 11.5 +0.5**
**LDAQ Lac Daran 10.30 294** **Pn** **04 22 13.0 0.0**
**WES Weston 10.48 263** Pn **Pn** **04 22 14.9 -0.4**
**LBNH Lisbon 10.54 274** Pn **Pn** **04 22 16.5 +0.4**
**HRV Adam Dziewonsk 10.61 264** Pn **Pn** **04 22 17.1 -0.1**
**K62A Royalston 11.05 266** Pn **Pn** **04 22 22.2 -0.9**
**J61A Chester 11.12 269** Pn **Pn** **04 22 24.3 +0.1**
**UCCT U. Connecticut 11.30 261** Pn **Pn** **04 22 24.5 -2.1**
**SCHQ Schefferville 12.03 332** Pn **Pn** **04 22 35.3 -1.3**
**SCHQ Schefferville 12.03 332** Pn **Pn** **04 22 34.8 -1.7**
0.6nm,0.3s,baz=146,slow=15,SNR=8.2
SCHQ Sn **Sn** **04 24 43.5 -7.3**
0.6nm,0.3s,baz=60,slow=20,SNR=2.1
1.3nm,0.3s
**NCB Newcomb 12.21 273** Pn **Pn** **04 22 39.7 +0.7**
**TRQ Mont Tremblant 12.31 284** Pn **Pn** **04 22 40.3 -0.2**
**LONY Lake Ozonia 12.39 277** Pn **Pn** **04 22 41.1 -0.4**
**SADO Sadowa 15.60 279** LR LR 04 29 20.2
comp=Z,23nm,21.6s,baz=94,slow=36
**TZTN Tazewell 21.48 257** P **P** **04 24 37.0 +3.2**
TZTN IAmb IAmb 04 25 17.8
comp=Z,7.7nm,1.4s
**CCM Cathedral Cave 26.24 268** P **P** **04 25 21.9 +1.7**
CCM IAmb IAmb 04 25 32.9
comp=Z,1.9nm,0.7s
**ULM Lac du Bonnet 26.57 296** LR LR 04 36 57.2
comp=Z,37nm,18.0s,baz=1.5,slow=39
**WHAR Wooly Hollow 28.26 263** P **P** **04 25 38.4 +0.1**
**H05N1 Guadeloupe/Mar 28.31 188** T T 04 54 57.0
SNR=14
**KAN09 Caldwell North 31.20 271** P **P** **04 26 02.7 -1.7**
**PDAR Pinedale Array 37.38 286** P **P** **04 26 59.9 +1.7**
comp=Z,0.2nm,0.6s,baz=76,slow=7.5,SNR=2.7
comp=Z,0.2nm,0.6s
**NVAR Mina Array Bea 45.23 284** P **P** **04 28 04.3 +1.6**
comp=Z,0.2nm,0.5s,baz=64,slow=7.1,SNR=2.1
comp=Z,0.2nm,0.5s
**ARCES ARCESS Array B 46.68 29** P **P** **04 28 13.4 0.0**
comp=Z,2.1nm,0.7s,baz=297,slow=6.7,SNR=3.8
comp=Z,2.1nm,0.7s
**TORD Torodi Ar. Bea 58.82 103** P **P** **04 29 41.8 -2.1**
comp=Z,0.7nm,0.6s,baz=317,slow=7.4,SNR=6.7
comp=Z,0.7nm,0.6s
**LPAZ La Paz 61.34 192** P **P** **04 30 01.6 0.0**
comp=Z,0.5nm,0.3s,baz=27,slow=6.4,SNR=3.0
comp=Z,0.5nm,0.3s
**H10N2 ASCENSION HYDR 64.79 132** T T 05 40 31.8
baz=327,slow=75,SNR=9.2
**H10N3 ASCENSION HYDR 64.79 132** T T 05 40 32.4
baz=327,slow=75,SNR=7.2
**H10N1 ASCENSION HYDR 64.81 132** T T 05 40 33.3
baz=327,slow=75,SNR=14
**H10S3 ASCENSION HYDR 65.64 133** T T 05 41 29.9
baz=326,slow=74,SNR=3.0
**H10S2 ASCENSION HYDR 65.65 133** T T 05 41 30.6
baz=254,slow=74,SNR=4.9
**MKAR Makanchi Array 82.30 27** LR LR 05 06 50.4
comp=Z,272nm,18.8s,baz=144,slow=34

*ASRS **06** 04:28:45.6±0.4,51°N±3°×8°3E±°, h10km,MLh3.0/8,Error ellipse: s-maj=5.6km s-min=2.8km az=164.9,confirmed*
*NNC **06** 04:28:51.7±2.3,50°89N×82°33E,h0km,mb3.0,mpv2.6, Error ellipse: s-maj=26.2km s-min=10.2km az=37.0, Suspected Mining explosion.*
**ISC 06 04:28:48.8±0.9,51°10N±0°07×82°49E±0°03,h0km,n14,**
**σ1§66/21,10C,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **UKR** | **Ust'-Kan** | **1.45** | **96** | | Pg | | **Pn** | **04 29 16.1** | **-0.3** |
| UKR | | | | | Sg | | **Sg** | **04 29 31.2** | **-4.2** |
| **ELDR** | **Elanda** | **2.27** | **86** | | Pg | | **Pn** | **04 29 29.0** | **+1.4** |
| ELDR | | | | | Sg | | **Sb** | **04 30 00.1** | **+0.9** |
| **KURK** | **Kurchatov** | **2.48** | **263** | ⇑ | Pn | | **Pn** | **04 29 31.1** | **+0.7** |
| | 1.3nm,1.0s | | | | | | | | |
| KURK | | | | ⇑ | Pg | | **Pg** | **04 29 35.7** | **-0.6** |
| | 6.2nm,1.0s | | | | | | | | |
| KURK | | | | ⇑ | Lg | | Lg | 04 30 07.2 | |
| | 16nm,0.5s | | | | | | | | |
| **KURK** | **Kurchatov** | **2.48** | **263** | | Pg | | **Pb** | **04 29 33.9** | **-0.4** |
| KURK | | | | | Sg | | **Sb** | **04 30 05.3** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **2.56** | **261** | ⇑ | Pn | | **Pn** | **04 29 31.9** | **+0.4** |
| | 1.0nm,0.4s | | | | | | | | |
| KURBB | | | | ⇑ | Pg | | **Pb** | **04 29 36.2** | **+0.7** |
| | 2.5nm,0.3s | | | | | | | | |
| KURBB | | | | ⇑ | Lg | | Lg | 04 30 08.7 | |
| | 37nm,0.6s | | | | | | | | |
| **YALR** | **Yailyu, Altay** | **3.27** | **76** | | Sg | | **Sg** | **04 30 34.8** | **+0.8** |
| **AKAR** | **Aktash** | **3.35** | **101** | | Pg | | **Pb** | **04 29 50.6** | **+1.4** |
| AKAR | | | | | Sg | | **Sb** | **04 30 31.4** | **+0.9** |
| **DGZ** | **Jazzator, Alta** | **3.46** | **112** | | Pg | | **Pb** | **04 29 50.7** | **-0.3** |
| DGZ | | | | | Sg | | **Sg** | **04 30 37.3** | **-2.5** |
| **ULGR** | **Ulagan, Altay** | **3.50** | **96** | | Sg | | **Sg** | **04 30 38.4** | **-2.7** |
| **CUR** | **Chagan-Uzun** | **3.87** | **103** | | Pg | | **Pb** | **04 29 59.4** | **+1.5** |
| **MAKZ** | **Makanchi** | **4.31** | **185** | ⇑ | Pn | | **Pn** | **04 29 56.2** | **+0.6** |
| | 1.4nm,0.6s | | | | | | | | |
| MAKZ | | | | ⇑ | Lg | | Lg | 04 30 58.5 | |
| | 5.6nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **4.31** | **185** | | Sg | | **Sb** | **04 30 58.1** | **+0.1** |
| **MK31** | **Makanchi Array** | **4.31** | **182** | ⇑ | Pn | | **Pn** | **04 29 56.4** | **+0.7** |
| | 0.2nm,0.2s,baz=12,slow=13,SNR=14 | | | | | | | | |
| MK31 | | | | ⇑ | Lg | | Lg | 04 31 01.0 | |
| | 4.9nm,0.5s,baz=10.0,slow=29,SNR=8.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.31** | **182** | | Sg | | **Sb** | **04 31 00.8** | **+2.7** |

*JMA **06** 04:34:40.4±0.2,33°N±2°×13°8E±°, h361km,MV2.8/31, FAR S OFF TOKAI DISTRICT*
*IDC **06** 04:34:44.0±1.1,33°14N×137°92E,h340km±13km,mb2.9/5, mbtmp3.7/8,Error ellipse: s-maj=26.3km s-min=16.3km az=61.0*
**ISC 06 04:34:43.9±1.0,33°21N±0°09×137°87E±0°08,h341km,n26,**
**σ1§05/30,mb2.9/5,Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TTO3** | **TONANKAI O.B.S** | **0.76** | **329** | *eP* | | | **Pn** | **04 35 28.0** | **+0.5** |
| **TTO4** | **TONANKAI O.B.S** | **0.84** | **341** | *eP* | | | **Pn** | **04 35 27.8** | **+0.1** |
| **TTO2** | **TONANKAI O.B.S** | **0.87** | **307** | P | | | **Pn** | **04 35 28.1** | **+0.3** |
| TTO2 | | | | *eS* | | | **S** | **04 36 04.0** | **+1.1** |
| **TTO1** | **TONANKAI O.B.S** | **0.99** | **295** | P | | | **Pn** | **04 35 28.2** | **0.0** |
| **TTO5** | **TONANKAI O.B.S** | **1.04** | **353** | *eP* | | | **Pn** | **04 35 28.8** | **+0.2** |
| **JIE** | **Ise** | **1.52** | **321** | P | | | **Pn** | **04 35 30.9** | **-0.2** |
| **JHJ** | **Hachijo jima 2** | **1.61** | **93** | P | | | **Pn** | **04 35 31.4** | **-0.4** |
| | 34nm,0.3s,baz=74,slow=23,SNR=6.5 | | | | | | | | |
| **JTNC** | **Tanabenakahech** | **1.98** | **288** | P | | | **Pn** | **04 35 33.4** | **-0.8** |
| **JWY** | **Kouya** | **2.15** | **299** | P | | | **Pn** | **04 35 35.2** | **-0.2** |
| **JOD2** | **Odawara 2** | **2.28** | **26** | *eP* | | | **Pn** | **04 35 36.6** | **+0.2** |
| JOD2 | | | | *eS* | | | **S** | **04 36 18.6** | **+0.1** |
| **JYTA** | **Yamagatataniai** | **2.55** | **339** | *eP* | | | **Pn** | **04 35 38.6** | **0.0** |
| **JWT** | **Wachi** | **2.90** | **316** | P | | | **Pn** | **04 35 41.5** | **-0.2** |
| **JAI** | **Aioi** | **2.91** | **282** | P | | | **Pn** | **04 35 41.1** | **-0.7** |
| **JRY** | **Ryogami san** | **2.92** | **17** | *eP* | | | **Pn** | **04 35 42.1** | **+0.3** |
| JRY | | | | *eS* | | | **S** | **04 36 27.5** | **-0.9** |
| **MJAR** | **Matsushiro Arr** | **3.33** | **5** | P | | | **Pn** | **04 35 46.4** | **+0.8** |
| | 1.2nm,0.3s,baz=232,slow=14,SNR=4.3 | | | | | | | | |
| **JMN** | **Monobe** | **3.37** | **280** | *eP* | | | **Pn** | **04 35 45.7** | **-0.4** |
| **JAG** | **Ashikaga** | **3.46** | **22** | *eP* | | | **Pn** | **04 35 45.8** | **-1.1** |
| JAG | | | | *eS* | | | **S** | **04 36 33.5** | **-4.0** |
| **JTO** | **Tosashimizu** | **4.27** | **267** | P | | | **Pn** | **04 35 54.5** | **-0.7** |
| **JHS** | **Saijyo** | **4.33** | **296** | *eP* | | | **Pn** | **04 35 55.8** | **+0.1** |
| **KSRS** | **Korea Array** | **9.16** | **300** | P | | | **P** | **04 36 52.8** | **-1.5** |
| | 2.5nm,0.7s,baz=113,slow=12,SNR=7.9 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.89** | **339** | P | | | **P** | **04 37 25.8** | **+1.3** |
| | 5.1nm,0.7s,baz=174,slow=7.1,SNR=9.1 | | | | | | | | |
| **SONM** | **Songino Array** | **27.80** | **311** | P | | | **P** | **04 40 04.4** | **+1.7** |
| | 1.5nm,0.7s,baz=124,slow=9.7,SNR=8.0 | | | | | | | | |
| | 1.5nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.80** | **305** | P | | | **P** | **04 42 17.4** | **+0.3** |
| | 0.3nm,0.5s,baz=84,slow=9.5,SNR=6.9 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.16** | **311** | P | | | **P** | **04 42 35.2** | **-0.1** |
| | 0.9nm,0.5s,baz=89,slow=8.5,SNR=13 | | | | | | | | |
| | 0.9nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **52.96** | **184** | P | | | **P** | **04 43 26.3** | **-0.2** |
| | 0.1nm,0.3s,baz=0.0,slow=7.6,SNR=8.6 | | | | | | | | |
| | 0.1nm,0.3s | | | | | | | | |
| **ILAR** | **Eielson Array** | **54.26** | **31** | P | | | **P** | **04 43 35.6** | **+0.3** |
| | 0.4nm,0.8s,baz=249,slow=6.1,SNR=4.8 | | | | | | | | |
| | 0.4nm,0.8s | | | | | | | | |

*NEIC **06** 04:35:31.3±0.4,36°211N±0°004×97°56W±0°01,h8km±5km, Error ellipse: s-maj=1.5km s-min=0.7km az=93.0*
**TUL 06 04:35:31.2±0.5,36°212N±0°005×97°56W±0°01,h4km±3km,**
**ML2.5,mb_Lg2.5/59(NEIC),ML2.7/69(NEIC),Error**
**ellipse: s-maj=1.3km s-min=0.8km az=97.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OK029** | **Liberty Lake** | **0.42** | **169** | | Pg | | Pg | 04 35 39.7 | +0.4 |
| OK029 | | | | | Sg | | Sg | 04 35 45.6 | +0.8 |
| **CROK** | **Carrier** | **0.45** | **310** | | Pg | | Pg | 04 35 40.2 | +0.3 |
| CROK | | | | | Sg | | Sg | 04 35 46.7 | +0.8 |
| **OK048** | **Pawnee Station** | **0.53** | **67** | | Pg | | Pg | 04 35 41.8 | +0.3 |
| OK048 | | | | | Sg | | Sg | 04 35 48.8 | +0.4 |
| **ADOK** | **Arcadia Dam** | **0.58** | **165** | | Pg | | Pg | 04 35 42.7 | +0.4 |
| **BLOK** | **Blackwell** | **0.61** | **26** | | | | Pg | 04 35 43.3 | +0.3 |
| BLOK | | | | | Sg | | Sg | 04 35 51.6 | +0.6 |
| BLOK | | | | | IAML | | | 04 35 52.0 | |
| | comp=E,654nm,0.3s | | | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.63** | **114** | | | | Pg | 04 35 43.7 | +0.3 |
| OK031 | | | | | Sg | | Sg | 04 35 52.0 | +0.4 |
| OK031 | | | | | IAML | | | 04 35 54.5 | |
| | comp=E,333nm,0.4s | | | | | | | | |
| OK031 | | | | | IAML | | | 04 35 54.8 | |
| | comp=E,599nm,0.4s | | | | | | | | |
| **OK052** | **Battle Ridge R** | **0.65** | **109** | | Pg | | Pg | 04 35 43.8 | +0.2 |
| OK052 | | | | | Sg | | Sg | 04 35 52.7 | +0.7 |
| OK052 | | | | | IAML | | | 04 35 55.3 | |
| | comp=E,402nm,0.2s | | | | | | | | |
| **OK051** | **E0350 and S346** | **0.65** | **63** | | Pg | | Pg | 04 35 43.6 | -0.1 |
| OK051 | | | | | Sg | | Sg | 04 35 52.8 | +0.7 |
| OK051 | | | | | IAML | | | 04 35 59.1 | |
| | comp=E,389nm,0.2s | | | | | | | | |
| OK051 | | | | | IAML | | | 04 35 59.6 | |
| | comp=E,611nm,0.2s | | | | | | | | |
| **GC02** | **Grant County #** | **0.68** | **339** | | Pg | | Pg | 04 35 44.4 | 0.0 |
| **QUOK** | **Quay** | **0.69** | **93** | | Pg | | Pg | 04 35 44.6 | +0.2 |
| QUOK | | | | | Sg | | Sg | 04 35 53.8 | +0.5 |
| QUOK | | | | | IAML | | | 04 35 56.1 | |
| | comp=N,290nm,0.3s | | | | | | | | |
| QUOK | | | | | IAML | | | 04 35 57.8 | |
| | comp=E,284nm,0.2s | | | | | | | | |
| **OK032** | **Salt Plains WL** | **0.79** | **318** | | | | Pg | 04 35 46.1 | -0.3 |
| OK032 | | | | | Sg | | Sg | 04 35 56.3 | -0.4 |
| OK032 | | | | | IAML | | | 04 36 07.2 | |
| | comp=E,363nm,0.2s | | | | | | | | |
| **KAN13** | **South Haven SW** | **0.80** | **4** | | Pg | | Pg | 04 35 46.4 | -0.2 |
| KAN13 | | | | | IAML | | | 04 36 00.2 | |
| | comp=E,465nm,0.3s | | | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.81** | **173** | | | | Pg | 04 35 46.8 | +0.1 |
| OKCSW | | | | | IAML | | | 04 36 09.6 | |
| | comp=E,326nm,0.7s | | | | | | | | |
| OKCSW | | | | | IAML | | | 04 36 11.5 | |
| | comp=N,240nm,0.7s | | | | | | | | |
| **KAN14** | **Manchester OK** | **0.81** | **336** | | | | Pg | 04 35 46.7 | -0.1 |
| KAN14 | | | | | IAML | | | 04 35 59.9 | |
| | comp=E,388nm,0.1s | | | | | | | | |
| KAN14 | | | | | IAML | | | 04 36 03.1 | |
| | comp=N,271nm,0.1s | | | | | | | | |
| **KAN17** | **Caldwell West** | **0.85** | **349** | | | | Pg | 04 35 47.4 | -0.1 |
| KAN17 | | | | | IAML | | | 04 36 04.4 | |
| | comp=E,297nm,0.3s | | | | | | | | |
| **KAN09** | **Caldwell North** | **0.92** | **357** | | Pg | | Pg | 04 35 48.6 | -0.3 |
| **DEOK** | **Depew** | **0.93** | **113** | | Pg | | Pg | 04 35 48.8 | -0.3 |
| DEOK | | | | | IAML | | | 04 36 02.8 | |
| | comp=E,168nm,0.2s | | | | | | | | |
| DEOK | | | | | IAML | | | 04 36 04.1 | |
| | comp=N,338nm,0.3s | | | | | | | | |
| **KAN01** | **Argonia South** | **0.95** | **350** | | Pg | | Pg | 04 35 49.1 | -0.4 |
| KAN01 | | | | | IAML | | | 04 36 04.7 | |
| | comp=E,206nm,0.6s | | | | | | | | |
| KAN01 | | | | | IAML | | | 04 36 08.3 | |
| | comp=N,212nm,0.1s | | | | | | | | |
| **FNO** | **Franklin** | **0.96** | **172** | | Pg | | Pg | 04 35 49.2 | -0.4 |
| **OK038** | **West end E0370** | **0.99** | **286** | | | | Pg | 04 35 49.9 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **1.07** | **342** | | | | Pg | 04 35 51.5 | -0.2 |
| KAN08 | | | | | IAML | | | 04 36 10.0 | |
| | comp=N,162nm,0.1s | | | | | | | | |
| KAN08 | | | | | IAML | | | 04 36 10.6 | |
| | comp=E,130nm,0.2s | | | | | | | | |
| **KS21** | **Milan North St** | **1.08** | **355** | | IAML | | | 04 36 11.6 | |
| | comp=E,216nm,0.1s | | | | | | | | |
| KS21 | | | | | IAML | | | 04 36 12.1 | |
| | comp=E,252nm,0.2s | | | | | | | | |
| **KS21** | **Milan North St** | **1.08** | **355** | | Pg | | Pg | 04 35 51.4 | -0.5 |
| **CSTR** | **Hydro, Custer** | **1.08** | **239** | | Pg | | Pg | 04 35 51.3 | -0.6 |
| **T35A** | **Sooner Cattle** | **1.09** | **50** | | Pg | | Pg | 04 35 51.8 | -0.4 |
| T35A | | | | | IAML | | | 04 36 11.6 | |
| | comp=E,220nm,0.4s | | | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.14** | **342** | | Pg | | Pg | 04 35 52.5 | -0.6 |
| **U32A** | **Winter Ranch,** | **1.18** | **279** | | Pg | | Pg | 04 35 53.1 | -0.7 |
| U32A | | | | | IAML | | | 04 36 15.4 | |
| | comp=E,169nm,0.2s | | | | | | | | |
| U32A | | | | | IAML | | | 04 36 33.2 | |
| | comp=N,212nm,0.8s | | | | | | | | |
| **NOKA** | **Waynoka** | **1.19** | **291** | | Pg | | Pg | 04 35 53.1 | -0.9 |
| **TUL3** | **Leonard** | **1.46** | **101** | | | | Pn | 04 35 57.6 | -0.7 |
| **ELIS** | **Ellis County** | **1.52** | **265** | | | | Pn | 04 35 58.7 | -0.4 |
| **WMOK** | **Wichita Mounta** | **1.78** | **215** | | Pn | | Pn | 04 36 02.5 | -0.2 |
| **RLO** | **Rose Lookout** | **2.05** | **91** | | Pn | | Pn | 04 36 06.9 | +0.5 |
| **LOOK** | **Love County** | **2.23** | **172** | | Pn | | Pn | 04 36 09.1 | +0.2 |
| **R32A** | **Long Quarter,** | **2.39** | **338** | | Pn | | Pn | 04 36 11.2 | 0.0 |
| **X37A** | **Clayton** | **2.41** | **132** | | Pn | | Pn | 04 36 11.7 | +0.3 |
| **SMWD** | **Samnorwood** | **2.45** | **244** | | Pn | | Pn | 04 36 12.3 | +0.3 |
| SMWD | | | | | IAmb_Lg | | | 04 36 49.6 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **WTFS** | **Witchita Falls** | **2.55** | **197** | | Pn | | Pn | 04 36 13.2 | -0.1 |
| **U38A** | **Gravette** | **2.57** | **84** | | Pn | | Pn | 04 36 13.5 | 0.0 |
| **HHAR** | **Hobbs** | **2.92** | **88** | | Pn | | Pn | 04 36 19.3 | +0.9 |
| **KSU1** | **Kansas State U** | **2.98** | **14** | | | | Pn | 04 36 19.9 | +0.6 |
| **CBKS** | **Cedar Bluff** | **3.12** | **327** | | Pn | | Pn | 04 36 21.7 | +0.4 |
| **PLPT** | **Palo Pinto** | **3.45** | **191** | | Pn | | Pn | 04 36 26.3 | +0.6 |
| **APMT** | **Aspermont** | **3.57** | **217** | | Pn | | Pn | 04 36 26.8 | -0.6 |
| **AMTX** | **Amarillo** | **3.62** | **250** | | Pn | | Pn | 04 36 26.4 | -1.6 |
| AMTX | | | | | IAmb_Lg | | | 04 37 28.5 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.63** | **144** | | Pn | | Pn | 04 36 28.0 | -0.1 |
| Z38A | | | | | IAmb_Lg | | | 04 37 34.9 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **MIAR** | **Mount Ida** | **3.65** | **116** | | Pn | | Pn | 04 36 29.2 | +0.7 |
| MIAR | | | | | IAmb_Lg | | | 04 37 36.7 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **S39A** | **Bolivar** | **3.70** | **65** | | | | Pn | 04 36 29.5 | +0.4 |
| S39A | | | | | IAmb_Lg | | | 04 37 30.4 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **DKNS** | **Dickens** | **3.76** | **228** | | | | Pn | 04 36 29.8 | -0.1 |
| DKNS | | | | | IAmb_Lg | | | 04 37 39.9 | |
| | comp=Z,8.9nm,0.8s | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.97** | **206** | | IAmb_Lg | | | 04 37 41.5 | |
| | comp=Z,8.6nm,0.7s | | | | | | | | |
| **RTBA** | **Rita Blanca** | **4.19** | **275** | | Pn | | Pn | 04 36 35.8 | -0.2 |
| **X40A** | **Basin Creek Fa** | **4.22** | **113** | | Pn | | Pn | 04 36 36.7 | +0.4 |
| X40A | | | | | IAmb_Lg | | | 04 37 46.8 | |
| | comp=Z,9.6nm,0.8s | | | | | | | | |
| **SN05** | **Snyder 5** | **4.31** | **221** | | IAmb_Lg | | | 04 37 55.4 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.35** | **76** | | Pn | | Pn | 04 36 38.9 | +0.8 |
| MGMO | | | | | IAmb_Lg | | | 04 37 50.6 | |
| | comp=Z,9.1nm,0.8s | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.38** | **101** | | Pn | | Pn | 04 36 40.1 | +1.6 |
| WHAR | | | | | IAmb_Lg | | | 04 38 00.1 | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.41** | **93** | | Pn | | Pn | 04 36 39.0 | +0.1 |
| **WLAR** | **White Oak Lake** | **4.43** | **123** | | IAmb_Lg | | | 04 38 03.4 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **UALR** | **University of** | **4.49** | **107** | | Pn | | Pn | 04 36 39.9 | 0.0 |
| **P38A** | **Dawn** | **4.66** | **42** | | IAmb_Lg | | | 04 37 58.4 | |
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| **R40A** | **Maddies Statio** | **4.70** | **62** | | Pn | | Pn | 04 36 42.3 | -0.6 |
| **KSCO** | **Kaye Shedlock'** | **4.90** | **306** | | Pn | | Pn | 04 36 47.4 | +1.6 |
| KSCO | | | | | IAmb_Lg | | | 04 38 07.0 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **BRDY** | **Brady** | **5.06** | **194** | | Pn | | Pn | 04 36 48.2 | +0.3 |
| **T42A** | **Van Buren** | **5.26** | **79** | | Pn | | Pn | 04 36 51.5 | +1.0 |
| T42A | | | | | IAmb_Lg | | | 04 38 30.4 | |
| | comp=Z,6.2nm,0.8s | | | | | | | | |
| **CCAR** | **Cane Creek** | **5.27** | **114** | | IAmb_Lg | | | 04 38 30.7 | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.37** | **68** | | Pn | | Pn | 04 36 52.8 | +0.8 |
| CCM | | | | | IAmb_Lg | | | 04 38 27.5 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **P40A** | **Paris** | **5.47** | **51** | | Pn | | Pn | 04 36 53.0 | -0.4 |
| P40A | | | | | IAmb_Lg | | | 04 38 30.6 | |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| **T25A** | **Trinidad** | **5.59** | **282** | | IAmb_Lg | | | 04 38 39.5 | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.77** | **82** | | IAmb_Lg | | | 04 38 40.4 | |
| | comp=Z,9.5nm,0.8s | | | | | | | | |
| **FVM** | **French Village** | **5.97** | **71** | | IAmb_Lg | | | 04 38 42.0 | |
| | comp=Z,7.3nm,0.7s | | | | | | | | |
| **143A** | **Socs Landing,** | **6.17** | **123** | | IAmb_Lg | | | 04 38 52.8 | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| **PARMO** | **Parma** | **6.31** | **84** | | IAmb_Lg | | | 04 39 05.0 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **S44A** | **Carbondale** | **6.81** | **75** | | IAmb_Lg | | | 04 39 12.5 | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **HNDO** | **Hondo** | **6.82** | **193** | | IAmb_Lg | | | 04 39 15.3 | |
| | comp=Z,9.6nm,1.1s | | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.21** | **59** | | IAmb_Lg | | | 04 39 26.8 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **L40A** | **Anamosa** | **7.64** | **38** | | IAmb_Lg | | | 04 39 37.5 | |
| | comp=Z,9.7nm,1.0s | | | | | | | | |
| **PHWY** | **Pilot Hill** | **8.00** | **312** | | IAmb_Lg | | | 04 39 51.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | | | |
| **N23A** | **Red Feather La** | **8.06** | **308** | | IAmb_Lg | | | 04 

CMBY **CAMPBELL BAY** 2.20 102 *eP* **Pn** **04 36 26.3 +1.6**
CMBY *eS* **Sn** **04 36 51.3 +0.4**
CMBY IAML 04 36 55.1
comp=E,2µm,0.3s
CMBY IAML 04 36 56.8
comp=N,30µm,0.3s
**PBA Port Blair** 4.27 13 Pn **Pn** **04 36 53.0 -0.1**
**PBA Port Blair** 4.27 13 *eP* **Pn** **04 36 51.9 -1.2**
PBA *eP* **Pn** **04 36 52.0 -1.2**
PBA *eS* **Sn** **04 37 39.0 -3.1**
PBA *eS* **Sn** **04 37 39.5 -2.7**
PBA IAML 04 37 43.2
comp=N,1µm,0.4s
PBA IAML 04 37 43.2
comp=N,1µm,0.6s
PBA IAML 04 37 45.0
comp=E,2µm,0.5s
PBA IAML 04 37 45.0
comp=E,1µm,0.6s
**MLSI Meulaboh, Aceh** 5.61 124 P **Pn** **04 37 10.4 -1.2**
comp=E,414nm,0.4s,comp=E,10µmcomp=E,11nm
MLSI S **Sn** **04 38 10.8 -4.4**
comp=E,414nm,0.4s,comp=E,10µmcomp=E,11nm
**LHMI Lhok Sumawe** 5.62 113 Pn **Pn** **04 37 11.1 -0.6**
**LHMI Lhok Sumawe** 5.62 113 P **Pn** **04 37 10.9 -0.8**
comp=E,349nm,0.9s,comp=E,4.0nm
**SNSI Sinabang, Aceh** 6.78 138 P **Pn** **04 37 24.5 -3.1**
comp=E,270nm,1.2s,comp=E,7.2nm
**KCSI Kotacane, Aceh** 7.16 123 P **Pn** **04 37 33.1 +0.3**
comp=E,139nm,0.5s,comp=E,7µmcomp=E,2.3nm
**SRIT Nakonsritamara** 7.85 81 **Pn** **04 37 42.8 +0.5**
**GSI Gunungsitoli** 8.43 136 Pn **Pn** **04 37 47.6 -2.8**
**GSI Gunungsitoli** 8.43 136 P **Pn** **04 37 46.8 -3.6**
comp=E,73nm,0.8s
**KULM Kulim** 9.10 103 Pn **Pn** **04 37 58.3 -1.2**
**IPM Ipoh** 9.68 107 **Pn** **04 38 06.7 -0.9**
**PBSI Pulau Batu** 9.91 139 P **Pn** **04 38 07.9 -2.7**
comp=E,162nm,0.6s
**PALK Pallekele** 10.97 270 Pn **Pn** **04 38 23.7 -1.5**
comp=E,70nm,0.3s,baz=183,slow=13,SNR=102
PALK Sn Sn 04 40 12.3 -15
comp=E,38nm,0.3s,baz=183,slow=14,SNR=14
PALK LR LR 04 42 24.7
comp=E,733nm,19.4s,baz=189,slow=36
**PALK Pallekele** 10.97 270 P **Pn** **04 38 24.7 -0.5**
PALK pmax pmax
comp=Z,389nm,0.5s
**SISI Saibi** 11.39 140 P **Pn** **04 38 28.9 -2.0**
comp=Z,136nm,0.9s
**PDSI Padang** 12.03 133 P **Pn** **04 38 38.0 -1.7**
**MDRS Chennai** 12.62 297 *eP* **Pn** **04 38 47.0 -0.6**
MDRS *eP* **Pn** **04 38 47.1 -0.6**
MDRS IAmb IAmb 04 39 06.9
comp=Z,96nm,0.8s
MDRS *eS* Sn 04 40 50.0 -17
MDRS *eS* Sn 04 40 50.5 -17
**CM31 Chiang Mai Arr** 12.97 32 **Pn** **04 38 53.0 +0.5**
**CMAR Chiang Mai Arr** 12.97 32 Pn **Pn** **04 38 52.7 +0.1**
**CMAR Chiang Mai Arr** 12.97 32 Pn **Pn** **04 38 53.0 +0.4**
comp=Z,1.9nm,0.3s,baz=225,slow=14,SNR=76
comp=Z,35nm,0.8s
**CMAR Chiang Mai Arr** 12.97 32 P **Pn** **04 38 53.0 +0.4**
**VIS Vishakhapatnam** 13.09 322 *eP* **Pn** **04 38 51.7 -2.5**
VIS *eP* **Pn** **04 38 52.6 -1.6**
VIS IAmb IAmb 04 38 53.8
comp=Z,49nm,0.7s
VIS IAmb IAmb 04 39 02.0
comp=Z,90nm,0.5s
VIS *eS* Sn 04 41 02.5 -16
VIS *eS* Sn 04 41 02.8 -16
**CHTO Chiang Mai** 13.27 31 Pn **Pn** **04 38 56.2 -0.4**
**CHTO Chiang Mai** 13.27 31 P **Pn** **04 38 56.2 -0.4**
**PHRA Phrae** 13.72 36 Pn **Pn** **04 39 03.7 +0.9**
**RAGD RAYAGADA** 14.22 326 *eP* **Pn** **04 39 06.7 -2.9**
RAGD *eP* P 04 39 06.9 -10
**KOD Kodaikanal** 14.38 282 *eP* **Pn** **04 39 10.2 -2.0**
KOD *eP* P 04 39 10.3 -8.6
KOD IAML 04 39 22.4
comp=Z,60nm,0.7s
**TRD Trivandrum** 14.69 275 *eP* **Pn** **04 39 14.0 -2.0**
TRD *eP* P 04 39 15.5 -6.5
TRD IAmb IAmb 04 39 17.3
comp=Z,76nm,0.7s
TRD *ex* x 04 41 36.2
TRD *eS* Sn 04 41 40.0 -18
**UBPT Khong Chiam** 15.52 59 Pn **Pn** **04 39 26.0 -0.9**
UBPT IAmb IAmb 04 39 32.8
comp=Z,71nm,0.6s
**HYB Hyderabad** 16.24 309 *eP* **P** **04 39 40.0 +0.8**
**BOK Bokaro** 17.18 342 *eP* **Pn** **04 39 47.7 -0.5**
BOK *eP* **Pn** **04 39 47.7 -0.5**
BOK IAmb IAmb 04 39 52.7
comp=Z,80nm,0.7s
BOK IAmb IAmb 04 39 52.7
comp=Z,82nm,0.8s
BOK *eS* Sn 04 42 40.4 -18
BOK *ex* x 04 42 43.4
**PPBI Pangkal Pinang** 17.24 123 P **P** **04 39 53.2 +2.9**
**BLSP Bilaspur** 17.28 329 *eP* **Pn** **04 39 49.2 -0.2**
**IMP Imphal** 17.39 7 *eP* **Pn** **04 39 49.6 -1.2**
**SHL Shillong** 18.00 0 Pn **Pn** **04 39 56.7 -1.7**
SHL IAmb IAmb 04 40 02.1
comp=Z,118nm,1.2s
**SHL Shillong** 18.00 0 *eP* **Pn** **04 39 58.1 -0.3**
SHL IAmb IAmb 04 40 11.8
comp=Z,103nm,1.2s
SHL *ex* Sn 04 43 03.9 -15
SHL *ex* Sn 04 43 05.3 -13
**SHL Shillong** 18.00 0 P **Pn** **04 39 56.7 -1.7**
SHL pmax pmax
comp=Z,118nm,1.2s
**SHBG Sahibganj** 18.08 348 *eP* **P** **04 39 59.9 +0.5**
**SLVN Son La** 18.10 39 P **Pn** **04 39 59.0 -0.6**
**KOHI KOHIMA** 18.29 7 *eP* **P** **04 40 00.6 -1.3**
KOHI IAmb IAmb 04 40 05.0
comp=Z,234nm,0.8s
**NGP Nagpur** 18.33 319 *eP* **Pn** **04 40 03.1 +0.8**
**TNCH TengChong** 18.62 20 P **Pn** **04 40 06.4 +0.4**
TNCH S **Sn** **04 43 33.1 -0.5**
TNCH pmax pmax
comp=Z,120nm,1.1s
TNCH pmax pmax
comp=Z,230nm,4.1s
TNCH LR LR
comp=Z,480nm,17.9s
TNCH LR LR
comp=Z,560nm,17.4s
TNCH LR LR
comp=Z,1µm,19.7s
**MOKO MOKOCHONG** 18.93 8 *eP* **P** **04 40 08.0 -1.0**
MOKO IAmb IAmb 04 40 22.4
comp=Z,254nm,1.0s
**TEZP TEZPUR** 19.07 3 *eP* **P** **04 40 09.5 -0.8**
**KSM Kuching** 19.42 107 P **P** **04 40 13.4 -0.9**
**ITAN ITANAGAR** 19.66 5 *eP* **P** **04 40 17.5 +0.7**
**GTK Tadong** 19.97 352 *eP* **Pn** **04 40 22.1 0.0**
GTK IAmb IAmb 04 40 23.8
comp=Z,210nm,0.7s
**ALBI Allahabad** 20.13 333 *eP* Pn 04 40 23.2 -0.6
ALBI *eP* **P** **04 40 23.3 +1.4**
**KMI Kunming** 20.45 30 ⇑P Pn 04 40 27.7 -0.2
KMI PP **PnPn** **04 40 51.9 +8.5**
KMI S **S** **04 44 13.6 0.0**
KMI pmax pmax
comp=Z,56nm,0.9s
KMI LR LR
comp=Z,930nm,20.7s
KMI LR LR
comp=Z,700nm,15.7s
KMI LR LR
comp=Z,600nm,22.9s
**POO Poona** 20.60 304 *eS* S 04 43 58.5 -18
**NRDN NARMADA NAGAR** 20.67 319 *eP* Pn 04 40 30.5 +0.3
**BHPL Bhopal** 20.87 320 *eP* Pn 04 40 34.7 +2.1
BHPL IAmb IAmb 04 40 40.8
comp=Z,49nm,1.1s
BHPL IAmb IAmb 04 40 42.4
comp=Z,27nm,1.2s
BHPL *ex* **S** **04 44 15.1 -6.5**
**SBUM Sibu** 20.98 103 P **P** **04 40 30.2 -1.0**
**QIZ Qiongzhong** 21.00 55 P **P** **04 40 31.6 +0.2**
QIZ S Sn 04 44 27.6 -3.1
QIZ pmax pmax
comp=Z,40nm,1.1s
QIZ pmax pmax
comp=Z,280nm,3.5s
QIZ LR LR
comp=Z,1µm,14.7s
QIZ LR LR
comp=Z,570nm,16.6s
QIZ LR LR
comp=Z,670nm,14.3s
**QIZ Qiongzhong** 21.00 55 P **P** **04 40 30.2 -1.2**
QIZ IAmb IAmb 04 40 47.8
comp=Z,67nm,0.9s
**PZH PanZhiHua** 21.18 25 P **P** **04 40 34.3 +0.9**
PZH pP **pP** **04 40 37.6 -2.2**
PZH S **S** **04 44 27.4 -0.4**
PZH pmax pmax
comp=Z,50nm,0.9s
PZH pmax pmax
comp=Z,240nm,3.5s
PZH LR LR
comp=Z,550nm,19.6s
PZH LR LR
comp=Z,560nm,18.1s
PZH LR LR
comp=Z,720nm,22.0s
**JHNI Jhansi** 21.90 326 IAmb IAmb 04 40 42.2
comp=Z,62nm,0.8s
**LSA Lhasa** 22.12 359 P **P** **04 40 45.2 +1.3**
LSA S **S** **04 44 40.8 -5.9**
LSA LR LR
comp=Z,600nm,18.0s
LSA LR LR
comp=Z,550nm,20.5s
LSA LR LR
comp=Z,710nm,22.3s
**LSA Lhasa** 22.12 359 P **P** **04 40 43.3 -0.6**
LSA IAmb IAmb 04 40 48.7
comp=Z,77nm,0.8s
**LSA Lhasa** 22.12 359 P **P** **04 40 43.3 -0.6**
LSA pmax pmax
comp=Z,77nm,0.8s
**GYA Guiyang** 23.62 35 P **P** **04 40 59.5 +0.5**
GYA S **S** **04 45 09.9 -2.1**
GYA pmax pmax
comp=Z,40nm,1.3s
GYA pmax pmax
comp=Z,250nm,4.3s
GYA LR LR
comp=Z,590nm,16.2s
GYA LR LR
comp=Z,570nm,14.7s
GYA LR LR
comp=Z,890nm,15.5s
**DGAR Diego Garcia** 24.27 233‖ *eP* **P** **04 41 05.3 +0.3**
**H08S3 Diego Garcia H** 24.38 232 T T 05 07 35.3
baz=53,slow=74,SNR=156
**H08S2 Diego Garcia H** 24.38 232 T T 05 07 34.1
baz=53,SNR=108
**H08S1 Diego Garcia H** 24.39 232 T T 05 07 34.5
baz=53,slow=74,SNR=21
**GULI GuiLin** 25.10 43 ⇑P **P** **04 41 14.1 +1.6**
GULI S **S** **04 45 36.9 +1.3**
GULI pmax pmax
comp=Z,30nm,1.0s
GULI pmax pmax
comp=Z,240nm,4.0s
GULI LR LR
comp=Z,510nm,23.6s
GULI LR LR
comp=Z,350nm,23.0s
GULI LR LR
comp=Z,430nm,17.5s
**CD2 Chengdu** 25.89 24 P **P** **04 41 19.8 +0.2**
CD2 S **S** **04 45 55.6 +7.5**
CD2 pmax pmax
comp=Z,20nm,0.6s
CD2 pmax pmax
comp=Z,120nm,4.7s
CD2 LR LR
comp=Z,720nm,18.6s
CD2 LR LR
comp=Z,790nm,15.3s
CD2 LR LR
comp=Z,420nm,21.8s
**MYLDM Lahad Datu** 26.67 93 P **P** **04 41 26.7 -0.2**
**ENH Enshi** 28.13 34 P **P** **04 41 38.2 -1.6**
ENH IAmb IAmb 04 42 18.5
comp=Z,56nm,1.3s
**CNSH ChangSha** 28.73 42 P **P** **04 41 46.3 +1.2**
CNSH S **S** **04 46 34.4 +1.6**
CNSH pmax pmax
comp=Z,8.0nm,0.6s
CNSH LR LR
comp=Z,300nm,14.3s
CNSH LR LR
comp=Z,380nm,16.8s
CNSH LR LR
comp=Z,460nm,16.8s
**GOMU GeErMu** 28.73 5 P **P** **04 41 46.4 +0.9**
GOMU S **S** **04 46 42.0 +8.5**
GOMU LR LR
comp=Z,350nm,18.6s
GOMU LR LR
comp=Z,440nm,18.2s
GOMU LR LR
comp=Z,620nm,18.2s
**LZH Lanzhou** 30.56 19 *eP* **P** **04 42 02.1 +0.7**
LZH sP pP 04 42 09.4 +1.1
LZH S **S** **04 46 58.8 -2.9**
LZH pmax pmax
comp=Z,28nm,1.2s
LZH LR LR
comp=Z,800nm,18.3s
LZH LR LR
comp=Z,860nm,19.6s
LZH LR LR
comp=Z,1µm,20.0s
**KAPI Kappang** 30.56 113 LR LR 04 55 55.7
comp=Z,493nm,18.1s,baz=292,slow=39
**KAPI Kappang** 30.56 113⇑ *eP* **P** **04 41 59.8 -1.7**
KAPI pmax pmax
comp=Z,7.0nm,0.7s
**XAN Xi'an** 30.83 29 ⇑P **P** **04 42 02.4 -1.3**
XAN S **S** **04 47 05.5 -0.3**
XAN pmax pmax
comp=Z,12nm,1.0s
XAN pmax pmax
comp=Z,110nm,4.7s
XAN LR LR
comp=Z,1µm,23.4s
XAN LR LR
comp=Z,720nm,20.6s
XAN LR LR
comp=Z,960nm,15.8s
**NIL Nilore** 31.17 329 P **P** **04 42 07.3 +0.5**
NIL pmax pmax
comp=Z,88nm,0.6s
**WHN Wuhan** 31.23 40 P **P** **04 42 07.6 +0.4**
WHN S **S** **04 47 11.8 -0.2**
WHN LR LR
comp=Z,2µm,16.1s
WHN LR LR
comp=Z,960nm,13.1s
WHN LR LR
comp=Z,2µm,16.9s
**GTA Gaotai** 32.62 12 *eP* **P** **04 42 21.0 +1.5**
GTA pP pwP 04 42 32.5 +0.9
GTA S **S** **04 47 33.3 -0.5**
GTA pmax pmax
comp=Z,48nm,0.9s
GTA LR LR
comp=Z,260nm,19.6s
GTA LR LR
comp=Z,250nm,18.2s
GTA LR LR
comp=Z,190nm,18.5s
**LYN LuoYang** 33.02 32 *eP* **P** **04 42 24.5 +1.6**
LYN sP sP 04 42 32.0 -0.6
LYN S **S** **04 47 38.9 -1.0**
LYN pmax pmax
comp=Z,15nm,0.5s
LYN LR LR
comp=Z,1µm,17.5s
LYN LR LR
comp=Z,690nm,14.7s
LYN LR LR
comp=Z,2µm,16.5s
**DAV Davao City (W)** 33.55 88 LR LR 04 58 25.2
comp=Z,533nm,18.7s,baz=353,slow=40
**KBL Kabul** 34.11 325 P **P** **04 42 33.0 +0.3**
KBL IAmb IAmb 04 42 46.8
comp=Z,17nm,1.1s
**KBL Kabul** 34.11 325 P **P** **04 42 33.0 +0.3**
KBL pmax pmax
comp=Z,17nm,1.1s
**KSH Kashi** 34.92 338 P **P** **04 42 39.0 -0.5**
KSH pP pP 04 42 44.0 -2.5
KSH pmax pmax
comp=Z,16nm,0.9s
KSH LR LR
comp=Z,700nm,21.6s
KSH LR LR
comp=Z,440nm,17.9s
KSH LR LR
comp=Z,740nm,21.3s
**NJ2 Nanjing** 35.13 42 *eP* **P** **04 42 41.2 -0.1**
NJ2 pP **pP** **04 42 45.6 -2.5**
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
NJ2 LR LR
comp=Z,260nm,15.2s
NJ2 LR LR
comp=Z,370nm,15.2s
NJ2 LR LR
comp=Z,530nm,16.6s
**SSE Sheshan** 36.17 46 P **P** **04 42 50.9 +0.7**
SSE S **S** **04 48 30.2 +1.6**
SSE pmax pmax
comp=Z,9.0nm,0.6s
SSE pmax pmax
comp=Z,41nm,4.2s
SSE LR LR
comp=Z,110nm,22.7s
SSE LR LR
comp=Z,290nm,15.4s
**TARG Taragay, Kyrgy** 36.30 342 P **P** **04 42 52.5 +0.9**
TARG IAmb IAmb 04 42 54.5
comp=Z,18nm,0.8s
**TARG Taragay, Kyrgy** 36.30 342 P **P** **04 42 52.6 +0.9**
TARG pmax pmax
comp=Z,18nm,0.8s
**HNS HongShan** 36.36 32 ⇑P **P** **04 42 52.4 +0.7**
HNS S **S** **04 48 30.1 -1.2**
HNS pmax pmax
comp=Z,11nm,0.8s
HNS LR LR
comp=Z,380nm,15.7s
HNS LR LR
comp=Z,380nm,15.7s
HNS LR LR
comp=Z,560nm,16.9s
**WMQ Urumqi** 36.39 355 *eP* **P** **04 42 53.8 +1.8**
WMQ sP pwP 04 43 03.9 0.0
WMQ S **S** **04 48 33.3 +1.6**
WMQ pmax pmax
comp=Z,27nm,1.1s
WMQ LR LR
comp=Z,450nm,22.1s
WMQ LR LR
comp=Z,440nm,17.3s
WMQ LR LR
comp=Z,430nm,24.0s
**DRK Karamyk** 36.57 334 P **P** **04 42 54.8 +0.9**
**DRK Karamyk** 36.57 334 P **P** **04 42 54.8 +0.9**
DRK pmax pmax
comp=Z,57nm,0.7s
**NRN Naryn** 36.61 340 P **P** **04 42 54.9 +0.7**
NRN IAmb IAmb 04 42 56.6
comp=Z,17nm,0.8s
**NRN Naryn** 36.61 340 P **P** **04 42 54.9 +0.7**
NRN pmax pmax
comp=Z,17nm,0.8s
**BTO Baotou** 36.81 23 *eP* **P** **04 42 55.8 +0.2**
BTO pP **pP** **04 43 00.0 -2.6**
BTO sP **sP** **04 43 06.0 +0.6**
BTO PP **PnPn** **04 44 27.3 +7.4**
BTO S **S** **04 48 41.6 +3.3**
BTO SS **SnSn** **04 51 03.5 -7.5**
BTO pmax pmax
comp=Z,36nm,0.7s
BTO LR LR
comp=Z,410nm,12.3s
BTO LR LR
comp=Z,570nm,19.7s
BTO LR LR
comp=Z,690nm,23.7s
**PRZ Przheval'sk** 36.82 343 P **P** **04 42 57.7 +1.9**
**PRZ Przheval'sk** 36.82 343 P **P** **04 42 57.7 +1.9**
PRZ pmax pmax
comp=Z,102nm,1.4s
**GAR Garm** 36.86 332 P **P** **04 42 55.7 -0.5**
GAR IAmb IAmb 04 42 57.4
comp=Z,34nm,0.7s
**CHGR Chuyangaron** 37.15 330 P **P** **04 42 57.9 -0.7**
**CHGR Chuyangaron** 37.15 330 P **P** **04 42 58.3 -0.3**
CHGR pmax pmax
comp=Z,82nm,0.7s
**SHLS Shalkode** 37.16 345 *eP* **P** **04 42 58.4 -0.3**
comp=Z,20nm,1.0s,baz=346
**SHLS Shalkode** 37.16 345 *eP* **P** **04 42 58.3 -0.3**
SHLS pmax pmax
comp=Z,20nm,1.0s
**SIMJ Simiganj** 37.22 330 P **P** **04 42 58.8 -0.5**
SIMJ IAmb IAmb 04 43 00.2
comp=Z,22nm,0.7s
**ULHL Ulahol** 37.26 341 P **P** **04 43 00.8 +1.2**
SNR=8.4
**UZB Uzynbulak** 37.26 345 *eP* **P** **04 43 00.0 +0.5**
comp=Z,16nm,0.8s,baz=345
**UZB Uzynbulak** 37.26 345 *eP* **P** **04 43 00.0 +0.5**
UZB pmax pmax
comp=Z,16nm,0.8s
**SATY Saty** 37.35 344 *eP* **P** **04 43 00.8 +0.5**
comp=Z,17nm,0.8s,baz=344
SATY *eS* **S** **04 48 50.0 +3.5**
baz=344
**SATY Saty** 37.35 344 *eP* **P** **04 43 00.7 +0.5**
SATY *eS* **S** **04 48 50.0 +3.5**
SATY pmax pmax
comp=Z,17nm,0.8s
**ZHN Zhinishke** 37.44 344 *eP* **P** **04 43 01.6 +0.5**
baz=344
**ZHN Zhinishke** 37.44 344 *eP* **P** **04 43 01.5 +0.5**
**BTK Batken** 37.48 333 P **P** **04 43 02.2 +0.9**
**BTK Batken** 37.48 333 P **P** **04 43 02.2 +0.9**
BTK pmax pmax
comp=Z,67nm,1.0s
**BOOM Boomskoye usch** 37.57 341 P **P** **04 43 03.4 +1.2**
BOOM IAmb IAmb 04 43 04.4
comp=Z,22nm,0.7s
**BOOM Boomskoye usch** 37.57 341 P **P** **04 43 03.4 +1.2**
BOOM pmax pmax
comp=Z,22nm,0.7s
**ARSB Arslanbob** 37.62 337 P **P** **04 43 03.3 +0.7**
ARSB IAmb IAmb 04 43 05.3
comp=Z,12nm,0.7s
**ARSB Arslanbob** 37.62 337 P **P** **04 43 03.3 +0.7**
ARSB pmax pmax
comp=Z,12nm,0.7s
**HHC Hu-ho-hao-te** 37.64 25 *eP* **P** **04 43 03.5 +0.8**
HHC sP sP 04 43 13.7 +1.2
HHC S **S** **04 48 51.2 +0.2**
HHC sS sS 04 49 01.8 -0.6
HHC SS **SnSn** **04 51 28.1 -3.0**
HHC pmax pmax
comp=Z,9.0nm,0.7s
HHC pmax pmax
comp=Z,100nm,4.4s
HHC LR LR
comp=Z,170nm,16.9s
HHC LR LR
comp=Z,420nm,17.6s
HHC LR LR
comp=Z,320nm,16.6s
**KPKS Kokpek** 37.65 344 *eP* **P** **04 43 03.2 +0.5**
comp=Z,13nm,0.7s,baz=344
**KPKS Kokpek** 37.65 344 *eP* **P** **04 43 03.2 +0.5**
KPKS pmax pmax
comp=Z,13nm,0.7s
**TNSS Tian-Shan** 37.75 342 *eP* **P** **04 43 04.3 +0.3**
baz=342
**TNSS Tian-Shan** 37.75 342 *eP* **P** **04 43 04.2 +0.3**
**MDOK Medeo** 37.83 342 *eP* **P** **04 43 04.9 +0.5**

baz=342
**MDOK Medeo 37.83 342** *e*P **P** **04 43 04.9 +0.5**
**AAA Alma-Ata 37.92 342** *e*P **P** **04 43 05.8 +0.8**
comp=Z,9.4nm,0.4s,baz=342
**AAA Alma-Ata 37.92 342** *e*P **P** **04 43 05.7 +0.8**
AAA pmax pmax
comp=Z,9.0nm,0.4s
**AML Almayashu 38.04 338** P **P** **04 43 08.4 +2.0**
SNR=5.9
**KBK Karagaybulak 38.05 340** P **P** **04 43 08.2 +2.0**
SNR=6.3
**TKM2 Tokmak 2 38.07 341** P **P** **04 43 07.6 +1.1**
SNR=26
**TKM2 Tokmak 2 38.07 341** *i* P **P** **04 43 06.9 +0.4**
TKM2 pmax pmax
comp=Z,15nm,0.6s
**HRA Herat 38.16 319** P **P** **04 43 07.8 +0.5**
**AAK Ala-Archa 38.20 339** P **P** **04 43 09.1 +1.6**
SNR=9.7
**AAK Ala-Archa 38.20 339** P **P** **04 43 08.8 +1.3**
AAK IAmb IAmb 04 43 10.5
comp=Z,35nm,1.1s
**AAK Ala-Archa 38.20 339** LR LR 05 01 52.5
comp=Z,308nm,20.3s,baz=156,slow=41
**AAK Ala-Archa 38.20 339***de*P **P** **04 43 08.7 +1.3**
AAK pmax pmax
comp=Z,38nm,1.1s
**FRU1 Bishkek 38.30 340** P **P** **04 43 09.8 +1.6**
**FRU1 Bishkek 38.30 340** P **P** **04 43 09.8 +1.6**
FRU1 pmax pmax
comp=Z,43nm,0.4s
**EKS2 Erkin-Say 38.47 339** P **P** **04 43 11.6 +1.8**
SNR=20
**CHKK Chushkaly 38.48 343** *e*P **P** **04 43 10.2 +0.5**
baz=343
**CHKK Chushkaly 38.48 343** *e*P **P** **04 43 10.1 +0.5**
**USP Ospenovka 38.75 340** P **P** **04 43 13.0 +1.1**
SNR=29
**SGDS Sogindy 38.87 340** *e*P **P** **04 43 13.1 +0.1**
baz=340
**SGDS Sogindy 38.87 340** *e*P **P** **04 43 13.0 +0.1**
**TDK Taldyqorghan 39.15 345** *e*P **P** **04 43 16.3 +1.0**
comp=Z,8.2nm,0.5s,baz=345
**TDK Taldyqorghan 39.15 345** *e*P **P** **04 43 16.2 +1.0**
TDK pmax pmax
comp=Z,8.0nm,0.5s
**JOW Kunigami 39.64 56** P **P** **04 43 21.5 +1.9**
comp=Z,7.2nm,0.5s,baz=260,slow=12,SNR=4.7
JOW LR LR 05 01 31.8
comp=Z,192nm,18.5s,baz=290,slow=39
comp=Z,7.2nm,0.5s
**MK31 Makanchi Array 40.02 350** P **P** **04 43 22.5 +0.1**
MK31 IAmb IAmb 04 43 24.3
comp=Z,18nm,0.8s
**MK31 Makanchi Array 40.02 350***d i* P **P** **04 43 22.6 +0.1**
MK31 pmax pmax
comp=Z,25nm,0.8s
**MKAR Makanchi Array 40.02 350** P **P** **04 43 22.2 -0.2**
**MKAR Makanchi Array 40.02 350** P **P** **04 43 23.8 +1.3**
comp=Z,17nm,0.7s,baz=168,slow=8.3,SNR=137
MKAR pP **sP** **04 43 33.0 +0.7**
comp=Z,17nm,0.5s,baz=168,slow=8.5,SNR=27
comp=Z,17nm,0.7s
**MAKZ Makanchi 40.09 350** P **P** **04 43 23.2 +0.2**
**MAKZ Makanchi 40.09 350** P **P** **04 43 23.2 +0.2**
MAKZ pmax pmax
comp=Z,15nm,0.9s
**KK31 Karatay Array 40.11 336** P **P** **04 43 23.7 +0.4**
KK31 IAmb IAmb 04 43 25.3
comp=Z,18nm,0.8s
**KK31 Karatay Array 40.11 336** *e*P **P** **04 43 24.1 +0.8**
**KKAR Karatay Array 40.11 336** P **P** **04 43 23.6 +0.3**
KKAR IAmb IAmb 04 43 25.3
comp=Z,18nm,0.8s
**KKAR Karatay Array 40.11 336** P **P** **04 43 23.6 +0.3**
KKAR pmax pmax
comp=Z,18nm,0.8s
**ZSN Zaisan 40.27 353** *e*P **P** **04 43 25.4 +0.8**
baz=353
**ZSN Zaisan 40.27 353** *e*P **P** **04 43 25.3 +0.8**
**BRLS Borolday 40.33 335** *e*P **P** **04 43 24.3 -0.9**
baz=335
**BRLS Borolday 40.33 335** *e*P **P** **04 43 24.2 -0.9**
**BTLS Baital 40.47 341** *e*P **P** **04 43 26.8 +0.6**
baz=341
**BTLS Baital 40.47 341** *e*P **P** **04 43 26.8 +0.6**
**DL2 Dalian 41.27 36** *e*P **P** **04 43 33.4 +0.6**
DL2 S **S** **04 49 44.6 -0.6**
DL2 pmax pmax
comp=Z,21nm,0.9s
DL2 pmax pmax
comp=Z,220nm,5.5s
DL2 LR LR
comp=Z,340nm,20.2s
DL2 LR LR
comp=Z,470nm,23.3s
DL2 LR LR
comp=Z,460nm,16.9s
**FITZ Fitzroy Crossi 42.00 128** P **P** **04 43 38.6 -0.5**
**XLT XiLinHaoTe 42.06 26** *e*P **P** **04 43 40.5 +1.1**
XLT sP pP 04 43 46.5 +0.1
XLT pmax pmax
comp=Z,11nm,1.0s
XLT LR LR
comp=Z,26nm,16.7s
XLT LR LR
comp=Z,180nm,13.7s
XLT LR LR
comp=Z,270nm,14.2s
**SONM Songino Array 42.11 15** P **P** **04 43 40.1 +0.3**
SONM IAmb IAmb 04 43 51.7
comp=Z,23nm,0.8s
**SONM Songino Array 42.11 15** P **P** **04 43 41.3 +1.5**
comp=Z,17nm,0.8s,baz=197,slow=8.7,SNR=62
SONM pP **sP** **04 43 50.9 +1.2**
comp=Z,19nm,0.7s,baz=196,slow=8.8,SNR=17
SONM LR LR 05 03 53.4
comp=Z,549nm,20.9s,baz=194,slow=40
comp=Z,17nm,0.8s
**ULN Ulaanbaatar 42.31 15** P **P** **04 43 41.3 -0.1**
**ULN Ulaanbaatar 42.31 15***d i* P **P** **04 43 42.2 +0.7**
ULN pmax pmax
comp=Z,11nm,0.8s
**ZAK Zakamensk 43.84 11** *e*P **P** **04 43 54.4 +0.6**
ZAK pmax pmax
comp=Z,10.0nm,1.4s
**SEM Semipalatinsk 43.87 349** *e*P **P** **04 43 54.5 +0.4**
comp=Z,20nm,0.9s,baz=349
**SEM Semipalatinsk 43.87 349** *e*P **P** **04 43 54.5 +0.4**
SEM pmax pmax
comp=Z,20nm,0.9s
**MTN Manton Dam 44.02 117** P **P** **04 43 54.8 -0.8**
MTN IAmb IAmb 04 44 07.6
comp=Z,46nm,1.4s
**JNU Nakatsue 44.29 49** LR LR 05 04 32.8
comp=Z,190nm,18.9s,baz=226,slow=39
**KSRS Korea Array 44.34 42** P **P** **04 43 58.0 +0.3**
comp=Z,1.0nm,0.5s,baz=242,slow=7.7,SNR=2.1
KSRS LR LR 05 03 42.6
comp=Z,224nm,19.7s,baz=230,slow=38
comp=Z,1.0nm,0.5s
**KURBB Kurchatov Arra 44.41 348** P **P** **04 43 59.2 +1.1**
comp=Z,19nm,0.8s,baz=170,slow=7.2,SNR=144
KURBB pP **sP** **04 44 08.9 +0.8**
comp=Z,20nm,0.6s,baz=170,slow=7.1,SNR=26
KURBB LR LR 05 06 07.9
comp=Z,346nm,20.6s,baz=181,slow=41
comp=Z,19nm,0.8s
**KURK Kurchatov 44.48 348** P **P** **04 43 58.3 -0.4**
**KURK Kurchatov 44.48 348***c i* P **P** **04 43 58.2 -0.4**
KURK pmax pmax
comp=Z,36nm,1.1s
**CN2 Changchun 46.65 34** *e*P **P** **04 44 16.4 +0.4**
CN2 *e*S **S** **04 50 56.9 -6.8**
CN2 SS **SS** **04 54 25.0 -5.1**
CN2 pmax pmax
comp=Z,10.0nm,0.4s
CN2 pmax pmax
comp=Z,100nm,6.0s
CN2 LR LR
comp=Z,200nm,15.0s
CN2 LR LR
comp=Z,200nm,15.0s
CN2 LR LR
comp=Z,100nm,12.0s
**ZAA0 Zalesovo Array 46.69 354** P **P** **04 44 16.2 +0.1**
**ZALV Zalesovo Beam 46.69 354** P **P** **04 44 16.1 0.0**
**ZALV Zalesovo Beam 46.69 354** P **P** **04 44 17.4 +1.3**
comp=Z,29nm,0.8s,baz=166,slow=8.8,SNR=73
ZALV pP **sP** **04 44 27.2 +1.3**
comp=Z,53nm,0.9s,baz=169,slow=7.8,SNR=16
ZALV LR LR 05 06 03.0
comp=Z,253nm,20.6s,baz=186,slow=39
comp=Z,29nm,0.8s
**RAYN Ar Rayn 47.11 295** P **P** **04 44 19.6 -0.4**
RAYN IAmb IAmb 04 44 33.4
comp=Z,16nm,1.0s
**RAYN Ar Rayn 47.11 295** P **P** **04 44 19.6 -0.4**
RAYN pmax pmax
comp=Z,16nm,1.0s
**H01W3 Cape Leeuwin H 47.13 155** T T 05 35 01.3
baz=331,slow=76,SNR=3.3
**H01W2 Cape Leeuwin H 47.14 155** T T 05 35 01.1
baz=331,slow=76,SNR=2.6
**H01W1 Cape Leeuwin H 47.15 155** T T 05 34 57.1
baz=331,slow=76,SNR=3.2
**HIA Hailar 47.84 24** P **P** **04 44 25.2 -0.1**
HIA IAmb IAmb 04 44 38.8
comp=Z,17nm,1.1s
**HIA Hailar 47.84 24**⇑*e*P **P** **04 44 25.6 +0.3**
HIA pmax pmax
comp=Z,15nm,1.2s
**ATD Arta Tunnel 48.36 279** LR LR 05 00 27.1
comp=Z,5.9nm,21.5s,baz=194,slow=31
**BVA0 Borovoye Array 48.65 343** *i* P **P** **04 44 31.0 -0.4**
**BRVK Borovoye 48.71 343** P **P** **04 44 32.2 +0.3**
BRVK IAmb IAmb 04 44 42.8
comp=Z,17nm,0.8s
**BRVK Borovoye 48.71 343***de*P **P** **04 44 31.5 -0.3**
BRVK pmax pmax
comp=Z,12nm,1.1s
**BNX BinXian 48.97 33** ⇑P **P** **04 44 34.6 +0.7**
BNX pmax pmax
comp=Z,6.0nm,1.0s
**MDJ Mudanjiang 49.48 35** P **P** **04 44 39.1 +1.2**
MDJ pmax pmax
comp=Z,6.0nm,1.2s
MDJ LR LR
comp=Z,290nm,18.9s
MDJ LR LR
comp=Z,180nm,18.9s
MDJ LR LR
comp=Z,250nm,21.6s
**AB31 Akbulak array 49.49 333** *e*P **P** **04 44 38.4 +0.6**
**ABKAR Akbulak array 49.49 333** P **P** **04 44 37.7 -0.1**
ABKAR IAmb IAmb 04 44 39.8
comp=Z,19nm,1.1s
**WB0 Warramunga Arr 49.94 124** P **P** **04 44 42.1 +0.3**
WB0 IAmb IAmb 04 45 01.1
comp=Z,20nm,1.2s
**WRA Warramunga Arr 49.98 124** P **P** **04 44 41.5 -0.5**
**WRA Warramunga Arr 49.98 124** P **P** **04 44 42.5 +0.4**
comp=Z,11nm,1.1s,baz=305,slow=9.1,SNR=22
WRA LR LR 05 07 20.1
comp=Z,231nm,20.0s,baz=308,slow=38
comp=Z,11nm,1.1s
**WRAB Tennant Creek 49.98 124** P **P** **04 44 41.6 -0.4**
WRAB IAmb IAmb 04 45 06.8
comp=Z,16nm,1.1s
**WRAB Tennant Creek 49.98 124**⇑*e*P **P** **04 44 41.9 -0.2**
WRAB pmax pmax
comp=Z,19nm,1.0s
**WB2 Warramunga Arr 49.98 124** P **P** **04 44 41.9 -0.2**
WB2 IAmb IAmb 04 44 44.0
comp=Z,24nm,1.2s
**WR0 Warramunga Arr 50.15 124** P **P** **04 44 43.4 +0.1**
WR0 IAmb IAmb 04 44 55.8
comp=Z,27nm,1.2s
**USRK Ussuriysk Ar. 50.64 37** P **P** **04 44 46.4 -0.3**
**USRK Ussuriysk Ar. 50.64 37** LR LR 05 08 19.0
comp=Z,158nm,18.5s,baz=230,slow=38
**USRK Ussuriysk Ar. 50.64 37** P **P** **04 44 46.4 -0.3**
**JHJ Hachijo jima 2 51.19 53** LR LR 05 07 24.9
comp=Z,157nm,19.9s,baz=311,slow=37
**MJAR Matsushiro Arr 51.19 49** LR LR 05 07 43.8
comp=Z,186nm,19.7s,baz=248,slow=37
**AKTO Aktyubinsk 51.20 333** LR LR 05 08 37.5
comp=Z,176nm,20.9s,baz=187,slow=38
**AS31 Alice Springs 51.49 128** P **P** **04 44 50.8 -2.7**
**ASAR Alice Springs 51.49 128** P **P** **04 44 52.2 -1.3**
**ASAR Alice Springs 51.49 128** P **P** **04 44 53.8 +0.3**
comp=Z,8.8nm,0.8s,baz=308,slow=7.4,SNR=46
ASAR pP **sP** **04 45 04.2 +0.7**
comp=Z,2.9nm,0.4s,baz=301,slow=8.0,SNR=6.4
ASAR LR LR 05 07 29.2
comp=Z,221nm,21.7s,baz=307,slow=37
comp=Z,8.8nm,0.8s
**JCJ Chichijima 51.56 61** LR LR 05 04 36.2
comp=Z,185nm,21.8s,baz=259,slow=33
**HEH HeiHe 51.96 28** *e*P **P** **04 44 55.9 -0.6**
HEH pmax pmax
comp=Z,7.0nm,0.6s
**MAK Makhachkala 52.48 320** *e*P P 04 44 55.6 -4.8
MAK *e* 04 46 56.2
MAK *e*PPP PPP 04 47 58.4
MAK *e*S **S** **04 52 19.7 -5.5**
MAK *e*SS **SS** **04 56 01.3 -2.2**
MAK *e*SSS SSS 04 57 47.2
MAK pmax pmax
comp=Z,27nm,0.3s
MAK MLR MLR
comp=Z,215nm,16.0s
**GUMO Guam 52.49 79** LR LR 05 07 05.7
comp=Z,95nm,19.5s,baz=259,slow=36
**FURI Furi 52.52 275** LR LR 05 04 47.7
comp=Z,256nm,20.4s,baz=85,slow=33
**GNI Garni 53.05 315** LR LR 05 10 53.4
comp=Z,177nm,21.4s,baz=107,slow=40
**GNI Garni 53.05 315***ce*P **P** **04 45 06.4 +1.4**
GNI pmax pmax
comp=Z,9.0nm,1.0s
**BOD Bodaibo 53.11 15** *e*P **P** **04 45 05.5 +0.6**
BOD pmax pmax
comp=Z,46nm,0.9s
**KLR Kul'dur 53.45 32** P **P** **04 45 07.4 -0.2**
comp=Z,1.4nm,0.8s,baz=254,slow=3.3,SNR=3.7
comp=Z,1.4nm,0.8s
**KLR Kul'dur 53.45 32**⇓*e*P **P** **04 45 08.3 +0.8**
KLR pmax pmax
comp=Z,10.0nm,1.7s
**ZEA Zeya 54.30 25**⇑*e*P **P** **04 45 14.3 +0.6**
**GURO Guroymak-BITLI 54.35 313** P **P** **04 45 14.0 -0.5**
**KARS Kars 54.40 315** P **P** **04 45 15.3 +0.5**
**KARS Kars 54.40 315** P **P** **04 45 15.3 +0.5**
KARS pmax pmax
comp=Z,46nm,0.4s
**SVE Sverdlovsk 54.93 340** *e*P **P** **04 45 18.9 +0.7**
SVE pmax pmax
comp=Z,66nm,0.9s
**KMBO Kilima Mbogo 55.03 263** P **P** **04 45 20.6 +0.7**
**KMBO Kilima Mbogo 55.03 263** P **P** **04 45 20.6 +0.7**
KMBO pmax pmax
comp=Z,11nm,1.1s
**ARU Arti 55.37 338** P **P** **04 45 21.5 +0.1**
ARU IAmb IAmb 04 45 22.7
comp=Z,25nm,1.2s
**ARU Arti 55.37 338** LR LR 05 10 26.3
comp=Z,328nm,21.1s,baz=140,slow=38
**ARU Arti 55.37 338***c i* P **P** **04 45 22.0 +0.7**
ARU 04 46 21.8
ARU 04 47 23.0
ARU S **S** **04 53 08.7 +4.8**
ARU SS **SS** **04 56 51.3 +2.7**
ARU pmax pmax
comp=Z,25nm,1.2s
ARU MLR MLR
comp=Z,386nm,21.0s
**ARU Arti 55.37 338** P **P** **04 45 21.8 +0.5**
comp=Z,18nm,0.9s
**KBZ Khabaz 55.81 319** P **P** **04 45 24.9 +0.1**
comp=Z,4.9nm,0.9s,baz=135,slow=7.3,SNR=10
comp=Z,4.9nm,0.9s
**KBZ Khabaz 55.81 319**⇑*e*P **P** **04 45 25.0 +0.2**
KBZ pmax pmax
comp=Z,10.0nm,1.1s
**SHA1 Shidzhatmaz 55.98 319**⇑*e*P **P** **04 45 27.1 +0.8**
**KIV Kislovodsk 56.05 319** P **P** **04 45 26.1 -0.5**
KIV IAmb IAmb 04 45 37.6
comp=Z,15nm,0.9s
**KIV Kislovodsk 56.05 319** *e*P **P** **04 45 24.8 -1.8**
KIV pmax pmax
comp=Z,15nm,1.1s
**KIV Kislovodsk 56.05 319** P **P** **04 45 27.2 +0.6**
comp=Z,15nm,0.8s
**ASAJ Asahikawa 57.28 42** LR LR 05 10 42.3
comp=Z,91nm,21.4s,baz=163,slow=36
**BELG Belogornoye 57.44 330** LR LR 05 13 34.9
comp=Z,343nm,20.6s,baz=137,slow=39
**BELG Belogornoye 57.44 330***d i* P **P** **04 45 35.6 -0.5**
BELG pmax pmax
comp=Z,3.0nm,1.0s
**EIL Elat 57.58 300** LR LR 05 13 09.3
comp=Z,208nm,18.2s,baz=68,slow=39
**PMG Port Moresby 57.68 106** P **P** **04 45 37.5 -1.0**
PMG IAmb IAmb 04 45 40.4
comp=Z,19nm,0.8s
**PMG Port Moresby 57.68 106** P **P** **04 45 38.8 +0.3**
comp=Z,8.2nm,0.3s,baz=287,slow=11,SNR=4.4
PMG LR LR 05 15 58.3
comp=Z,159nm,18.3s,baz=313,slow=42
comp=Z,8.2nm,0.3s
**MMAI Mount Meron Ar 57.88 304** P **P** **04 45 42.5 +2.7**
comp=Z,2.6nm,0.6s,baz=113,slow=11,SNR=5.3
MMAI pP **pwP** **04 45 52.0 -0.3**
comp=Z,4.7nm,0.7s,baz=103,slow=10,SNR=4.6
MMAI LR LR 05 15 02.6
comp=Z,142nm,18.0s,baz=50,slow=41
**YSS Yuzh-Sakhalins 58.56 39** *e*P **P** **04 45 45.1 +1.0**
YSS pmax pmax
comp=Z,20nm,1.3s
**VRH Novokhopyorsk 59.93 326** *e*P **P** **04 45 52.8 -0.7**
VRH pmax pmax
comp=Z,9.0nm,0.6s
**CSS Mathiatis 59.99 306** P **P** **04 45 55.0 +0.6**
CSS IAmb IAmb 04 46 11.3
comp=Z,10nm,0.8s
**CTA Charters Tower 60.19 118** P **P** **04 45 57.4 +1.6**
comp=Z,0.3nm,0.7s,baz=276,slow=9.5,SNR=4.5
CTA LR LR 05 16 08.9
comp=Z,11nm,18.2s,baz=284,slow=40
**CTAO Charters Tower 60.19 118** P **P** **04 45 54.9 -0.9**
**CTAO Charters Tower 60.19 118** P **P** **04 45 54.9 -0.9**
CTAO pmax pmax
comp=Z,128nm,1.8s
**KIRV Kirov 60.40 336** LR LR 05 13 13.6
comp=Z,221nm,21.9s,baz=140,slow=37
**KIRV Kirov 60.40 336***de*P **P** **04 45 56.3 -0.3**
**BR104 Keskin Array S 60.91 311** P **P** **04 46 00.4 -0.2**
comp=Z,6.5nm,0.8s,comp=Z,45nm
**BR131 Keskin Array S 60.91 311** P **P** **04 46 00.7 0.0**
**BR131 Keskin Array S 60.91 311***c i* P **P** **04 46 00.3 -0.4**
**BRTR Keskin Array B 60.91 311** P **P** **04 45 59.6 -1.1**
**BRTR Keskin Array B 60.91 311** P **P** **04 46 00.5 -0.2**
comp=Z,3.3nm,0.8s,baz=123,slow=7.4,SNR=21
comp=Z,3.3nm,0.8s
**BR105 Keskin Array S 60.93 311** P **P** **04 46 00.5 -0.3**
comp=Z,7.6nm,0.8s,comp=Z,55nm
**BR106 Keskin Array S 60.93 311** P **P** **04 46 00.6 -0.2**
comp=Z,8.4nm,0.8s,comp=Z,52nm
**YAK Yakutsk 61.14 19** LR LR 05 15 23.0
comp=Z,309nm,19.4s,baz=222,slow=39
**YAK Yakutsk 61.14 19**⇑*e*P **P** **04 46 02.4 +0.8**
YAK pmax pmax
comp=Z,18nm,0.9s
**VSR Storozhevoye 61.36 325** *e*P **P** **04 45 59.9 -3.4**
VSR pmax pmax
comp=Z,5.0nm,0.9s
**VORR Voronezh 61.54 326** *e*P **P** **04 46 04.1 -0.4**
VORR pmax pmax
comp=Z,66nm,0.4s
**STKA Stephens Creek 61.56 132** P **P** **04 46 06.1 +1.1**
comp=Z,4.1nm,0.8s,baz=341,slow=7.0,SNR=4.4
STKA LR LR 05 15 45.7
comp=Z,174nm,19.9s,baz=304,slow=39
comp=Z,4.1nm,0.8s
**ANTO Ankara 61.58 311** P **P** **04 46 04.7 -0.4**
**ANTO Ankara 61.58 311** P **P** **04 46 04.7 -0.4**
ANTO pmax pmax
comp=Z,12nm,0.5s
**LPSR Galich'ya Gora 62.11 327** *e*P **P** **04 46 04.3 -4.0**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**ELL Elmali 63.08 307** P **P** **04 46 15.0 -0.3**
**ELL Elmali 63.08 307** P **P** **04 46 15.0 -0.3**
ELL pmax pmax
comp=Z,110nm,0.8s
**H04N2 CROZET ISLANDS 64.18 210** T T 05 55 05.2
baz=47,slow=75,SNR=74
**H04N1 CROZET ISLANDS 64.19 210** T T 05 55 04.6
baz=47,slow=75,SNR=78
**H04N3 CROZET ISLANDS 64.20 210** T T 05 55 03.5
baz=47,slow=75,SNR=76
**MOS Moscow 64.21 329** *e*P **P** **04 46 20.6 -1.6**
MOS *e* 04 46 30.4
**OBN Obninsk 64.47 328** LR LR 05 18 08.9
comp=Z,284nm,19.5s,baz=154,slow=39
**H04S1 CROZET ISLANDS 64.61 209** T T 05 55 31.1
baz=46,slow=74,SNR=9.5
**H04S3 CROZET ISLANDS 64.62 209** T T 05 55 25.8
baz=46,slow=74,SNR=42
**H04S2 CROZET ISLANDS 64.63 209** T T 05 55 28.1
baz=46,SNR=17
**KARP Karpathos 65.06 306** P **P** **04 46 28.9 +0.7**
**CFR Carcaliu 66.24 316**⇑P **P** **04 46 35.9 +0.3**
**CFR Carcaliu 66.24 316**⇑P **P** **04 46 35.9 +0.3**
**SORM Soroca 66.84 319** P **P** **04 46 38.7 -0.7**
**SORM Soroca 66.84 319** P **P** **04 46 38.7 -0.7**
comp=Z,13nm,0.7s
**AK09 Malin Array Si 66.95 322** P **P** **04 46 39.3 -0.7**
**AK10 Malin Array Si 66.97 322** P **P** **04 46 39.4 -0.7**
**AK08 Malin Array Si 66.98 322** P **P** **04 46 39.3 -0.8**
**AK07 Malin Array Si 66.98 322** P **P** **04 46 39.3 -0.9**
**AK05 Malin Array Si 67.00 322** P **P** **04 46 39.5 -0.8**
**AK02 Malin Array Si 67.01 322** P **P** **04 46 39.5 -0.9**
**AKASG Malin Array Be 67.02 322** P **P** **04 46 39.6 -0.8**
comp=Z,0.3nm,0.3s,baz=87,slow=5.2,SNR=5.7
AKASG pP **sP** **04 46 49.4 -1.1**
comp=Z,3.2nm,0.8s,baz=91,slow=5.0,SNR=3.8
AKASG LR LR 05 20 01.2
comp=Z,183nm,21.1s,baz=110,slow=40
comp=Z,0.3nm,0.3s
**AKBB Malin Array Si 67.02 322** P **P** **04 46 39.2 -1.2**
**AKBB Malin Array Si 67.02 322**⇓*e*P **P** **04 46 39.7 -0.7**
**AKBB Malin Array Si 67.02 322** P **P** **04 46 39.5 -0.9**
**AK01 Malin Array Si 67.02 322** P **P** **04 46 39.4 -1.0**
**KIEV Kiev 67.02 322** P **P** **04 46 38.5 -2.0**
**KIEV Kiev 67.02 322** P **P** **04 46 39.0 -1.4**
KIEV pmax pmax
comp=Z,4.0nm,0.9s
**KIEV Kiev 67.02 322** P **P** **04 46 39.5 -0.9**
comp=Z,20nm,0.8s
**AK12 Malin Array Si 67.04 322** P **P** **04 46 39.7 -0.9**
**AK11 Malin Array Si 67.04 322** P **P** **04 46 39.7 -0.9**
**AK04 Malin Array Si 67.06 322** P **P** **04 46 39.6 -1.1**
**AK14 Malin Array Si 67.06 322** P **P** **04 46 39.7 -1.0**
**AK18 Malin Array Si 67.12 322** P **P** **04 46 40.0 -1.0**
**AK22 Malin Array Si 67.13 322** P **P** **04 46 40.0 -1.1**
**AK21 Malin Array Si 67.15 322** P **P** **04 46 40.2 -1.0**
**AK19 Malin Array Si 67.15 322** P **P** **04 46 40.2 -1.1**
**AK20 Malin Array Si 67.16 322** P **P** **04 46 40.2 -1.1**
**TOO Toolangi 67.19 136** P **P** **04 46 41.2 -0.6**
**TOO Toolangi 67.19 136** P **P** **04 46 41.2 -0.6**
TOO pmax pmax
comp=Z,28nm,1.2s
**VRI Vrincioaia 67.36 317**⇑P **P** **04 46 43.9 +1.1**
**VRI Vrincioaia 67.36 317**⇑P **P** **04 46 43.9 +1.1**
**VRI Vrincioaia 67.36 317** P **P** **04 46 43.5 +0.7**
comp=Z,21nm,0.8s,comp=Z,156nm
**PLOR5 Plostina Array 67.40 317** P **P** **04 46 43.8 +0.8**
comp=Z,44nm,0.7s
**PLOR Plostina 67.41 317**⇓P **P** **04 46 44.6 +1.5**
**PLOR Plostina 67.41 317**⇓P **P** **04 46 44.6 +1.5**
**PLOR3 Plostina Array 67.42 317** P **P** **04 46 43.9 +0.8**
comp=Z,32nm,0.7s
**TESR Tescani 67.57 317**⇑P **P** **04 46 44.6 +0.6**
**TESR Tescani 67.57 317** P **P** **04 46 44.4 +0.4**
comp=Z,34nm,0.8s
**LUBAR Lubar, Ukraine 67.70 321** P **P** **04 46 43.5 -1.2**
**MLR Muntele Rosu 67.82 316** P **P** **04 46 46.3 +0.6**
MLR IAmb IAmb 04 46 57.7
comp=Z,18nm,0.9s
**MLR Muntele Rosu 67.82 316**⇓P **P** **04 46 47.0 +1.2**
**MLR Muntele Rosu 67.82 316**⇓P **P** **04 46 47.0 +1.2**
**MLR Muntele Rosu 67.82 316** P **P** **04 46 46.0 +0.2**
comp=Z,21nm,0.9s
**TIXI Tiksi 68.10 12** P **P** **04 46 45.7 -1.2**
**TIXI Tiksi 68.10 12** P **P** **04 46 47.4 +0.5**

comp=Z,40nm,0.7s,baz=288,slow=1.3,SNR=8.1
TIXI pP **sP** **04 46 57.8 +0.8**
comp=Z,49nm,0.7s,baz=44,slow=0.7,SNR=8.7
TIXI LR LR 05 19 56.0
comp=Z,222nm,19.8s,baz=210,slow=39
**TIXI Tiksi 68.10 12** *d* *i*P **P** **04 46 47.1 +0.2**
TIXI pmax pmax
comp=Z,42nm,0.9s
**KMPD K-Podol'skiy 68.17 319** P **pP** **04 46 47.8 -7.3**
KMPD P **P** **04 46 47.6 -0.2**
**MA2 Magadan 68.22 28** LR LR 05 21 43.0
comp=Z,102nm,18.2s,baz=246,slow=40
**MA2 Magadan 68.22 28**⇑ *e*P **P** **04 46 48.2 +0.3**
MA2 pmax pmax
comp=Z,8.0nm,0.9s
**DOPR Dopca 68.30 317** ⇓P **P** **04 46 49.7 +1.0**
**VOIR 68.42 316** ⇑P **P** **04 46 49.9 +0.4**
**VOIR 68.42 316** ⇑P **P** **04 46 49.9 +0.4**
**VOIR 68.42 316** P **P** **04 46 49.4 -0.1**
comp=Z,7.4nm,0.7s
**BURAR Bucovina Array 68.77 318** P **P** **04 46 51.3 -0.3**
**BURAR Bucovina Array 68.77 318** ⇑P **P** **04 46 52.6 +0.9**
**BURAR Bucovina Array 68.77 318** P **P** **04 46 52.0 +0.4**
BURAR pmax pmax
comp=Z,4.0nm,0.7s
**BUR08 Bucovina Ar. S 68.78 318** P **P** **04 46 51.4 -0.4**
**MNK Minsk 68.93 326** *i*P **P** **04 46 54.1 +1.8**
MNK *i* 04 47 17.0
MNK *i* 04 49 25.9
MNK *i* PPP PPP 04 51 06.6
MNK *i* S **S** **04 55 59.6 +4.6**
MNK *i* SSS SSS 05 03 17.6
MNK pmax pmax
comp=E,6.0nm,0.7s
MNK pmax pmax
comp=Z,8.0nm,0.5s
MNK pmax pmax
comp=N,7.0nm,0.8s
MNK MLR MLR
comp=N,179nm,21.0s
MNK MLR MLR
comp=Z,175nm,20.0s
MNK MLR MLR
comp=E,78nm,21.0s
**RNPP5 Staryi Chortor 69.19 322** P **P** **04 46 53.1 -0.9**
**RNPP9 Sopachiv 69.23 322** P **P** **04 46 54.9 +0.6**
**LIT Litokhoron 69.38 310** P **P** **04 46 54.7 -0.8**
**LIT Litokhoron 69.38 310** P **P** **04 46 54.7 -0.8**
LIT pmax pmax
comp=Z,23nm,0.7s
**ITM Ithomi 69.47 307** P **P** **04 46 55.1 -1.0**
**STNU Starunia 69.47 319** P **P** **04 46 55.8 -0.1**
**MORS Morshin 69.95 320** P **P** **04 46 58.8 0.0**
**MORS Morshin 69.95 320** P **P** **04 46 58.8 0.0**
**MARR Marisel-Cluj 69.98 317** ⇑P **P** **04 46 59.6 +0.5**
**LVV L'vov 70.01 320** *e*P **P** **04 46 57.6 -1.6**
**MEZ Mezhgor'ye 70.07 319** P **P** **04 46 59.8 +0.2**
**HERR Herculane 70.15 315** ⇑P **P** **04 47 00.6 +0.4**
**JOF Joensuu 70.20 335** *e*P **P** **04 47 00.1 0.0**
**SEY Seymchan 70.29 25**⇓ *e*P **P** **04 47 00.8 +0.2**
SEY pmax pmax
comp=Z,8.0nm,1.7s
**FNA Florina 70.32 311** P **P** **04 46 59.7 -1.6**
**FNA Florina 70.32 311** P **P** **04 46 59.7 -1.6**
FNA pmax pmax
comp=Z,6.0nm,0.7s
**BOVS Bovan 70.46 314** ⇑P **P** **04 47 01.8 -0.2**
**MDVR Moldovita 70.63 315** ⇓P **P** **04 47 03.1 0.0**
**KWP Kalwaria Pacla 70.81 320** P **P** **04 47 04.3 +0.2**
KWP IAmb IAmb 04 47 15.6
comp=Z,10nm,0.9s
**KWP Kalwaria Pacla 70.81 320** P **P** **04 47 04.3 +0.2**
KWP pmax pmax
comp=Z,11nm,0.9s
**KWP Kalwaria Pacla 70.81 320** P **P** **04 47 04.1 0.0**
comp=Z,17nm,1.0s
**APA Apatity 71.40 340**⇓ *i*P P 04 47 15.4 +8.1
APA *i* 04 47 31.0
APA pmax pmax
comp=Z,15nm,0.9s
**SUW Suwalki 71.46 325** P **P** **04 47 06.6 -1.3**
**SUW Suwalki 71.46 325** *e*P **P** **04 47 07.7 -0.2**
**SUW Suwalki 71.46 325** P **P** **04 47 06.6 -1.3**
SUW pmax pmax
comp=Z,44nm,0.9s
**PUK Puka 71.58 312** P **P** **04 47 07.3 -1.7**
PUK IAmb IAmb 04 47 21.9
comp=Z,9.6nm,0.7s
**FIA1 FINESS Array S 71.97 333** P **P** **04 47 11.9 +1.1**
**FINES FINESS Array B 71.97 333** P **P** **04 47 11.1 +0.3**
**FINES FINESS Array B 71.97 333** P **P** **04 47 10.7 -0.1**
comp=Z,7.0nm,0.7s,baz=76,slow=5.9,SNR=13
FINES pP **sP** **04 47 20.9 -0.1**
comp=Z,16nm,0.8s,baz=104,slow=8.0,SNR=14
FINES LR LR 05 22 21.5
comp=Z,203nm,19.8s,baz=115,slow=39
comp=Z,7.0nm,0.7s
**FINES FINESS Array B 71.97 333** P **P** **04 47 11.1 +0.3**
**LBTB Lobatse 71.98 241** LR LR 05 15 57.3
comp=Z,128nm,18.2s,baz=77,slow=34
**PDG Podgorica 72.09 312** P **P** **04 47 11.0 -0.9**
**KEF Keuruu 72.74 333** *e*P **P** **04 47 15.7 +0.3**
**OJC Ojcow 72.77 320** P **P** **04 47 15.0 -0.8**
OJC IAmb IAmb 04 47 26.8
comp=Z,12nm,0.9s
**OJC Ojcow 72.77 320** P **P** **04 47 15.0 -0.8**
OJC pmax pmax
comp=Z,12nm,0.9s
**OJC Ojcow 72.77 320** P **P** **04 47 15.8 0.0**
comp=Z,16nm,0.9s
**MORH Mrgy, Hungar 72.97 316** ⇑P **P** **04 47 17.4 +0.4**
**MORH Mrgy, Hungar 72.97 316** P **P** **04 47 17.2 +0.1**
comp=Z,5.2nm,2.2s
**BOSA Boshof 73.37 237** P **P** **04 47 19.5 -0.4**
comp=Z,1.6nm,0.5s,baz=80,slow=4.9,SNR=9.1
BOSA pP **sP** **04 47 29.0 -1.2**
comp=Z,3.8nm,0.8s,baz=131,slow=6.5,SNR=3.1
BOSA LR LR 05 14 28.0
comp=Z,87nm,21.6s,baz=46,slow=32
comp=Z,1.6nm,0.5s
**TIP Timpagrande 73.70 309** P **P** **04 47 22.1 +0.5**
**TIP Timpagrande 73.70 309** P **P** **04 47 21.6 0.0**
comp=Z,8.0nm,1.2s
**MPLH Magyarpolny 73.83 317** P **P** **04 47 22.3 +0.1**
**JAVC Velka Javorina 73.95 319** *e*P **P** **04 47 24.0 +1.1**
**VAF Ylistaro 73.96 334** *e*P **P** **04 47 22.8 +0.2**
**MORC Moravsky Berou 74.15 320** P **P** **04 47 24.3 +0.3**
**MORC Moravsky Berou 74.15 320** *e*P **P** **04 47 24.5 +0.5**
**MORC Moravsky Berou 74.15 320** P **P** **04 47 24.3 +0.3**
MORC pmax pmax
comp=Z,7.0nm,1.0s
**MODS Modra-Piesok 74.15 318** *e*P **P** **04 47 24.6 +0.6**
**MODS Modra-Piesok 74.15 318** *e*P **P** **04 47 24.6 +0.6**
**CEL Celeste 74.32 308** P **P** **04 47 26.4 +1.1**
CEL IAmb IAmb 04 47 56.4
comp=Z,19nm,1.0s
**KRLC Kraliky 74.67 320** *e*P **P** **04 47 28.0 +0.9**
KRLC *e*pP **sP** **04 47 37.8 +0.5**
**KRLC Kraliky 74.67 320** *e*P **P** **04 47 28.0 +0.9**
KRLC *e* 04 47 37.8
**VRAC Vranov 74.70 319** *e*P **P** **04 47 27.6 +0.4**
**VRAC Vranov 74.70 319** LR LR 05 26 01.0
comp=Z,102nm,18.8s,baz=97,slow=40
**RONA Rosalia, Austr 74.73 317** *i*P **P** **04 47 29.0 +1.6**
comp=Z,1.8nm,0.5s
**KRUC Moravsky 74.81 319** *e*P **P** **04 47 28.1 +0.3**
**ARCES ARCESS Array B 74.85 341** P **P** **04 47 27.5 -0.2**
comp=Z,2.9nm,0.8s,baz=106,slow=5.7,SNR=2.7
ARCES pP **sP** **04 47 37.9 0.0**
comp=Z,6.0nm,0.9s,baz=100,slow=3.0,SNR=4.8
ARCES LR LR 05 23 55.0
comp=Z,284nm,21.9s,baz=110,slow=38
comp=Z,2.9nm,0.8s
**DPC Dobruska-Polom 75.00 320** *e*P **P** **04 47 29.8 +0.9**
DPC *e*pP **sP** **04 47 39.7 +0.6**
DPC AMS AMS 05 26 40.0
comp=Z,100nm,19.1s
**DPC Dobruska-Polom 75.00 320** *e*P **P** **04 47 29.8 +0.9**
DPC *e* 04 47 39.7
DPC MLR MLR
comp=Z,100nm,19.1s
**CONA Conrad Observa 75.05 318** *i*P **P** **04 47 30.2 +0.9**
comp=Z,3.0nm,1.0s
**OSTC Ostas 75.09 320** AMS AMS 05 26 40.0
comp=Z,100nm,19.5s
**ARSA Arzberg 75.21 317** *i*P **P** **04 47 30.3 +0.1**
comp=Z,7.2nm,1.2s
**UPC Upice 75.21 320** AMS AMS 05 26 30.0
comp=Z,100nm,21.5s
**VAE Valguarnera 75.46 307** LR LR 05 26 47.0
comp=Z,75nm,18.5s,baz=124,slow=40
**SOKA Soboth 75.50 316** *i*P **P** **04 47 32.6 +0.7**
comp=Z,10nm,1.3s
**OBKA Obir 75.82 316** *e*P **P** **04 47 34.7 +0.9**
comp=Z,6.6nm,1.4s
**GOPC GO Pecny, Ondr 75.94 320** AMS AMS 05 27 30.0
comp=Z,200nm,20.0s
**PRU Pruhonice 76.10 320** AMS AMS 05 27 20.0
comp=Z,100nm,20.4s
**MOA Molln 76.11 317** *i*P **P** **04 47 35.5 +0.2**
comp=Z,5.8nm,1.4s
**PVCC Panska Ves 76.13 320** AMS AMS 05 25 30.0
comp=Z,100nm,15.0s
**CKRC Cesky Krumlov 76.15 318** AMS AMS 05 25 10.0
comp=Z,100nm,20.4s
**ZVC Zvikov 76.28 319** *e*P **P** **04 47 37.3 +1.1**
ZVC *ex* x 04 47 47.0
ZVC AMS AMS 05 25 40.0
comp=Z,100nm,21.2s
**MYKA Terra Mystica 76.45 316** *i*P **P** **04 47 38.1 +0.7**
comp=Z,2.9nm,0.6s
**PRED Cave del Predi 76.49 316** P **P** **04 47 37.7 +0.1**
PRED IAmb IAmb 04 47 50.8
comp=Z,36nm,1.9s
**BIOA Bad Ischl, Aus 76.52 317** *e*P **P** **04 47 38.0 +0.4**
comp=Z,5.7nm,1.0s
**BRG Berggiesshubel 76.56 320** *e*P **P** **04 47 38.8 +1.0**
BRG Amp 04 47 39.5
comp=Z,3.7nm,0.8s
**BRG Berggiesshubel 76.56 320** *e*P **P** **04 47 38.3 +0.5**
comp=Z,7.5nm,0.8s,baz=94,slow=5.4
BRG *es*P **sP** **04 47 48.6 +0.6**
comp=Z,7.5nm,0.8s
**GEC2 GERESS Array S 76.56 318** P **P** **04 47 38.0 +0.1**
GEC2 IAmb IAmb 04 47 49.3
comp=Z,10nm,0.9s
**GEC2 GERESS Array S 76.56 318** *e*P **P** **04 47 38.5 +0.6**
comp=Z,11nm,0.9s,baz=94,slow=5.4
GEC2 *es*P **sP** **04 47 48.5 +0.4**
comp=Z,11nm,0.9s
**GERES GERESS Array B 76.56 318** P **P** **04 47 37.8 -0.2**
**GERES GERESS Array B 76.56 318** P **P** **04 47 38.8 +0.8**
comp=Z,4.1nm,0.9s,baz=127,slow=3.5,SNR=14
GERES pP **sP** **04 47 48.9 +0.7**
comp=Z,6.4nm,0.8s,baz=131,slow=3.7,SNR=14
comp=Z,4.1nm,0.9s
**NRCA Norcia 76.64 312** P **P** **04 47 38.4 -0.1**
**KHC Kasperske Hory 76.66 319** P **P** **04 47 38.6 +0.2**
**KHC Kasperske Hory 76.66 319** *e*P **P** **04 47 39.3 +0.9**
KHC AMS AMS 05 25 50.0
comp=Z,200nm,16.7s
**KHC Kasperske Hory 76.66 319** *e*P **P** **04 47 39.3 +0.9**
KHC MLR MLR
comp=Z,200nm,16.7s
**KBA Koelnbreinsper 76.68 317** *e*P **P** **04 47 38.9 +0.1**
comp=Z,3.0nm,1.0s
**RUE Ruedersdorf 76.79 322** *es*P sP 04 47 49.8 +0.5
comp=Z,30nm,0.8s
**HSKC Hora Svate Kat 76.86 320** *e*P **P** **04 47 40.9 +1.4**
HSKC *ep*P **sP** **04 47 49.6 -0.1**
HSKC AMS AMS 05 26 00.0
comp=Z,200nm,19.9s
**STAL STALIGIAL 77.07 316** P **P** **04 47 39.4 -1.4**
STAL IAmb IAmb 04 48 10.2
comp=Z,16nm,1.3s
**RJOB Jochberg 77.09 317** *e*P **P** **04 47 41.0 +0.1**
comp=Z,6.0nm,0.8s,baz=94,slow=5.4
RJOB *es*P **sP** **04 47 51.0 -0.2**
comp=Z,6.0nm,0.8s
**WET Wettzell 77.12 319** *e*P **P** **04 47 41.6 +0.6**
comp=Z,8.5nm,1.0s,baz=94,slow=5.4
WET *es*P **sP** **04 47 51.4 +0.2**
comp=Z,8.5nm,1.0s
**LESA Schwarzleotal 77.15 317** *i*P **P** **04 47 41.2 -0.1**
comp=Z,7.3nm,1.4s
**CLL Collm 77.18 321** P **P** **04 47 41.4 +0.2**
**CLL Collm 77.18 321** *i*P **P** **04 47 41.8 +0.5**
CLL *i*pP **sP** **04 47 51.2 -0.3**
comp=Z,12nm,1.1s
CLL *e*SS SS 05 02 36.0 +9.3
**CLL Collm 77.18 321** *i*P **P** **04 47 41.6 +0.3**
CLL pmax pmax
comp=Z,12nm,1.1s
**CLL Collm 77.18 321** *es*P sP 04 47 51.6 +0.1
comp=Z,12nm,1.1s
**ABTA Abfaltersbach 77.23 316** *i*P **P** **04 47 41.6 -0.2**
comp=Z,3.2nm,0.9s
**TANN Tannenbergstha 77.46 320** *e*P **P** **04 47 43.7 +0.8**
comp=Z,5.5nm,1.1s,baz=94,slow=5.4
TANN *es*P **PcP** **04 47 53.1 -0.2**
comp=Z,5.5nm,1.1s
**ROTZ Rotzenmuhle 77.59 319** *e*P **P** **04 47 44.5 +0.9**
comp=Z,2.8nm,0.9s,baz=94,slow=5.4
ROTZ *es*P **sP** **04 47 54.5 +0.6**
comp=Z,2.8nm,0.9s
**HFS Hagfors 77.62 330** P **P** **04 47 43.5 0.0**
comp=Z,2.9nm,0.7s,baz=96,slow=7.6,SNR=11
HFS pP **PcP** **04 47 53.7 0.0**
comp=Z,10nm,0.9s,baz=104,slow=6.3,SNR=6.2
HFS LR LR 05 26 01.6
comp=Z,265nm,19.7s,baz=96,slow=39
comp=Z,2.9nm,0.7s
**PLN Plauen 77.66 320** *es*P sP 04 47 54.7 +0.5
comp=Z,8.1nm,0.9s
**MANZ Manzenberg 77.67 319** *e*P **P** **04 47 44.9 +0.8**
comp=Z,4.5nm,1.0s,baz=94,slow=5.4
MANZ *es*P **sP** **04 47 54.9 +0.6**
comp=Z,4.5nm,1.0s
**MAW Mawson 77.67 191** P **P** **04 47 44.2 +0.6**
comp=Z,0.7nm,0.3s,baz=204,slow=20,SNR=1.3
comp=Z,0.7nm,0.3s
**TSUM Tsumeb 77.68 249** LR LR 05 19 03.2
comp=Z,92nm,20.2s,baz=66,slow=33
**CTI Castel Tesino 77.80 315** P **P** **04 47 45.4 +0.4**
CTI IAmb IAmb 04 47 56.2
comp=Z,12nm,0.9s
**CTI Castel Tesino 77.80 315** P **P** **04 47 45.4 +0.4**
CTI pmax pmax
comp=Z,13nm,0.9s
**WTTA Wattenberg 77.85 317** *i*P **P** **04 47 45.0 -0.4**
comp=Z,7.4nm,0.8s
**WATA Wilderalm 77.90 317** *e*P **P** **04 47 45.4 -0.2**
comp=Z,5.5nm,0.9s
**NEUB Neuenburg 77.94 321** *e*P **P** **04 47 46.2 +0.7**
comp=Z,11nm,0.7s,baz=94,slow=5.4
NEUB *es*P **sP** **04 47 56.0 +0.3**
comp=Z,11nm,0.7s
**MOX Moxa 78.02 320** *e*P **P** **04 47 46.6 +0.6**
comp=Z,8.5nm,1.1s,baz=94,slow=5.4
MOX *es*P **sP** **04 47 56.5 +0.2**
comp=Z,8.5nm,1.1s
MOX *e*L L 05 25 48.8
comp=Z,127nm,20.9s
**SQTA Sankt Quirin 78.14 317** *i*P **P** **04 47 47.0 +0.1**
comp=Z,3.9nm,0.5s
**SUR Sutherland 78.16 235** LR LR 05 14 50.6
comp=Z,146nm,20.5s,baz=90,slow=30
**MOTA Moosalm 78.22 317** *i*P **P** **04 47 46.9 -0.4**
comp=Z,9.2nm,1.0s
**GRA1 Grafenberg Arr 78.22 319** P **P** **04 47 46.4 -0.8**
GRA1 IAmb IAmb 04 47 59.1
comp=Z,19nm,0.8s
**GRF Grafenberg Arr 78.22 319** P **P** **04 47 46.4 -0.8**
GRF pmax pmax
comp=Z,19nm,0.8s
**GRF Grafenberg Arr 78.22 319** *es*P **sP** **04 47 57.6 +0.2**
comp=Z,19nm,0.8s
GRF *e*L L 05 31 55.1
comp=Z,123nm,19.3s
**GRFO Grafenberg 78.23 319** P **P** **04 47 46.0 -1.1**
GRFO IAmb IAmb 04 47 59.0
comp=Z,18nm,0.9s
**GRFO Grafenberg 78.23 319** P **P** **04 47 46.0 -1.1**
GRFO pmax pmax
comp=Z,18nm,0.9s
**ZCCA Zocca 78.23 314** P **P** **04 47 47.0 -0.4**
ZCCA IAmb IAmb 04 47 60.0
comp=Z,20nm,0.9s
**FLTG Flechtingen 78.34 322** *es*P sP 04 47 57.6 -0.3
comp=Z,4.9nm,0.9s
**RETA Reutte 78.45 317** *i*P **P** **04 47 48.7 +0.1**
comp=Z,16nm,1.5s
**FETA Feichten 78.47 316** *i*P **P** **04 47 48.9 +0.2**
comp=Z,4.8nm,1.0s
**NC602 NORSAR Array S 78.74 330** P **P** **04 47 49.6 -0.1**
NC602 IAmb IAmb 04 48 00.9
comp=Z,18nm,0.9s
**DZM Mont Dzumac 78.77 114** *e*LR LR 05 12 08.4
comp=Z,284nm,25.6s
**DZM Mont Dzumac 78.77 114** LR LR 05 27 39.0
comp=Z,106nm,18.1s,baz=270,slow=39
**FUORN Ofenpass-Fuorn 78.78 316** P **P** **04 47 50.8 +0.2**
**CLZ Clausthal 78.85 321** *e*P **P** **04 47 51.1 +0.5**
comp=Z,12nm,0.8s,baz=94,slow=5.4
CLZ *es*P **sP** **04 48 01.0 +0.1**
comp=Z,12nm,0.8s
**UBR Ueberruh 78.90 317** *e*P **P** **04 47 50.8 -0.2**
comp=Z,12nm,0.8s,baz=94,slow=5.4
UBR *es*P **sP** **04 48 01.1 -0.2**
comp=Z,12nm,0.8s
**NB2 NORSAR Subarra 78.93 331** P **P** **04 47 49.8 -1.0**
comp=Z,8.1nm,0.9s,baz=96,slow=5.1
**NOA NORSAR Array B 78.93 331** P **P** **04 47 50.6 -0.2**
comp=Z,2.0nm,0.8s,baz=95,slow=5.8,SNR=5.9
NOA pP **sP** **04 48 00.6 -0.5**
comp=Z,6.4nm,0.8s,baz=95,slow=5.4,SNR=15
NOA LR LR 05 25 23.8
comp=Z,217nm,21.7s,baz=100,slow=38
comp=Z,2.0nm,0.8s
**BSEG Bad Segeberg 78.97 323** *e*P **P** **04 47 51.9 +0.8**
comp=Z,16nm,1.0s,baz=94,slow=5.4
BSEG *es*P **sP** **04 48 01.5 +0.2**
comp=Z,16nm,1.0s
**NRDL Niedersach Rie 79.03 322** *e*P **P** **04 47 52.1 +0.7**
comp=Z,11nm,1.2s,baz=94,slow=5.4
**DAVA Damuels 79.05 317** *i*P **P** **04 47 52.8 +0.8**
comp=Z,14nm,1.1s
**GTTG Gottingen 79.09 321** *es*P sP 04 48 02.1 0.0
comp=Z,15nm,0.9s
**TUE Stuetta 79.41 316** P **P** **04 47 53.2 -0.8**
TUE IAmb IAmb 04 48 08.2
comp=Z,12nm,1.0s
**SHEM Shemya Is, Ala 79.46 38** LR LR 05 23 33.2
comp=Z,71nm,21.9s,baz=292,slow=36
**KEST Kesra 79.54 305** P **P** **04 47 55.1 +0.4**
comp=Z,1.4nm,0.7s,baz=68,slow=6.8,SNR=2.2
KEST LR LR 05 30 54.3
comp=Z,35nm,18.1s,baz=260,slow=42
comp=Z,1.4nm,0.7s
**SPITS Spitsbergen Ar 79.75 348** P **P** **04 47 55.6 +0.6**
comp=Z,6.9nm,0.8s,baz=127,slow=9.6,SNR=2.8
SPITS LR LR 05 29 25.2
comp=Z,192nm,19.7s,baz=88,slow=40
comp=Z,6.9nm,0.8s
**TNS Taunus Mts 80.03 320** *es*P sP 04 48 07.8 +0.5
comp=Z,8.5nm,0.8s
**KASTN Kahler Asten 80.06 321** *e*P **P** **04 47 57.8 +0.6**
comp=Z,7.8nm,1.0s,baz=94,slow=5.4
KASTN *es*P **sP** **04 48 07.7 +0.3**
comp=Z,7.8nm,1.0s
**BFO Black Forest 80.10 318** P **P** **04 47 57.2 -0.3**
**BFO Black Forest 80.10 318** P **P** **04 47 57.2 -0.3**
BFO pmax pmax
comp=Z,7.0nm,0.9s
**BFO Black Forest 80.10 318** *e*P **P** **04 47 57.4 -0.1**
comp=Z,7.4nm,0.9s,baz=94,slow=5.4
BFO *es*P **sP** **04 48 08.1 +0.3**
comp=Z,7.4nm,0.9s
**BUG Bochum--Univer 80.78 321** *es*P sP 04 48 12.0 +0.8
comp=Z,12nm,0.8s
**SENIN Lac Senin/Sane 80.83 316** P **P** **04 48 02.0 +0.3**
**BNI Bardonecchia 81.29 314** P **P** **04 48 03.5 -0.6**
**BNI Bardonecchia 81.29 314** P **P** **04 48 03.5 -0.6**
BNI pmax pmax
comp=Z,9.0nm,0.9s
**WLF Walferdange 81.52 319** *e*P **P** **04 48 05.7 +0.7**
comp=Z,15nm,1.1s,baz=94,slow=5.4
WLF *es*P **sP** **04 48 16.0 +0.7**
comp=Z,15nm,1.1s
**BCLA Clavier 82.04 320** *d*PcP **PcP** **04 48 14.2 +1.1**
**DOU Dourbes 82.51 320** *dx* x 04 48 20.6
**SSB Saint Sauveur 82.79 315** P **P** **04 48 11.9 +0.1**
SSB IAmb IAmb 04 48 23.3
comp=Z,8.9nm,0.9s
**SSB Saint Sauveur 82.79 315** P **P** **04 48 11.9 +0.1**
SSB pmax pmax
comp=Z,9.0nm,0.9s
**TAM Tamanrasset 83.69 292** P **P** **04 48 15.9 -1.1**
TAM IAmb IAmb 04 48 32.2
comp=Z,8.0nm,1.0s
**TAM Tamanrasset 83.69 292** P **P** **04 48 15.9 -1.1**
TAM pmax pmax
comp=Z,8.0nm,1.0s
**JMIC Jan Mayen 86.33 341** LR LR 05 29 34.2
comp=Z,71nm,21.3s,baz=87,slow=37
**EKA Eskdalemuir Ar 86.71 325** P **P** **04 48 31.3 0.0**
comp=Z,1.5nm,0.7s,baz=96,slow=5.1,SNR=5.3
EKA pP **sP** **04 48 42.0 +0.4**
comp=Z,9.8nm,0.7s,baz=94,slow=5.3,SNR=16
comp=Z,1.5nm,0.7s
**DAG Danmarks Havn 87.36 348** *i*P **P** **04 48 38.0 +4.0**
**TORD Torodi Ar. Bea 88.39 283** P **P** **04 48 41.5 +1.3**
comp=Z,0.6nm,0.9s,baz=68,slow=3.9,SNR=3.0
TORD LR LR 05 26 45.7
comp=Z,103nm,20.2s,baz=106,slow=35
comp=Z,0.6nm,0.9s
**MSVF Nonsavu 88.74 108** LR LR 05 33 11.2
comp=Z,78nm,18.1s,baz=182,slow=39
**C18K Utukok River 89.22 20** P **P** **04 48 43.3 +0.3**
C18K IAmb IAmb 04 48 55.9
comp=Z,9.3nm,1.1s
**ESDC Sonseca Array 89.67 310** P **P** **04 48 45.9 +0.1**
**ESDC Sonseca Array 89.67 310** P **P** **04 48 46.5 +0.7**
comp=Z,1.2nm,1.0s,baz=47,slow=4.0,SNR=6.9
ESDC pP **sP** **04 48 57.1 +1.0**
comp=Z,3.1nm,1.0s,baz=53,slow=4.0,SNR=8.9
ESDC LR LR 05 32 39.2
comp=Z,71nm,20.3s,baz=64,slow=38
comp=Z,1.2nm,1.0s
**E18K Tukpahlearik C 89.83 22** P **P** **04 48 46.6 +0.8**
E18K IAmb IAmb 04 49 13.0
comp=Z,15nm,1.2s
**URZ Urewera 90.94 128** LR LR 05 31 17.7
comp=Z,86nm,19.7s,baz=14,slow=37
**E19K Redstone River 91.03 21** P **P** **04 48 52.1 +0.7**
**F19K Shaleruckik Mo 91.07 22** P **P** **04 48 52.3 +0.7**
**MDT Midelt 91.31 303** LR LR 05 37 27.4
comp=Z,91nm,18.2s,baz=108,slow=40
**G19K Purcell Mounta 91.58 22** P **P** **04 48 54.1 +0.1**
G19K IAmb IAmb 04 49 11.5
comp=Z,8.0nm,0.9s
**D22K Ayikyak River 91.99 19** P **P** **04 48 56.6 +0.7**
D22K IAmb IAmb 04 49 25.1
comp=Z,12nm,1.4s
**BORG Borgarnes 92.88 337** LR LR 05 32 19.5
comp=Z,99nm,21.7s,baz=56,slow=36
**VNDA Vanda 93.01 168** LR LR 05 26 55.1
comp=Z,86nm,18.0s,baz=308,slow=33
**D25K Kavik River 93.74 18** P **P** **04 49 04.2 +0.1**
D25K IAmb IAmb 04 49 16.6
comp=Z,9.3nm,0.9s
**DBIC Dimbokro 95.66 277** LR LR 05 31 32.1
comp=Z,135nm,19.1s,baz=62,slow=35
**ILAR Eielson Array 96.00 22** pP **pP** **04 49 25.4 +3.5**
comp=Z,0.5nm,0.7s,baz=305,slow=4.0,SNR=6.3
ILAR PP **PP** **04 53 02.6 -3.9**
comp=Z,0.5nm,0.8s,baz=298,slow=7.4,SNR=5.4
ILAR LR LR 05 34 32.4
comp=Z,147nm,21.5s,baz=278,slow=37
**TROLL Troll, Antarti 96.81 198** ⇑Pdiff **P** **04 49 17.4 -0.6**
comp=Z,22nm,0.5s
**KDAK Kodiak Island 96.95 29** LR LR 05 37 15.6
comp=Z,104nm,20.1s,baz=316,slow=38
**QSPA South Pole Qui 97.37 180** LR LR 05 29 08.0
comp=Z,85nm,19.1s,baz=303,slow=33
**INK Inuvik 98.02 15** pP **pP** **04 49 34.2 +3.3**
comp=Z,2.2nm,1.0s,baz=325,slow=6.1,SNR=4.1
INK LR LR 05 40 50.0
comp=Z,80nm,19.4s,baz=327,slow=40
**SNAA Sanae 98.49 199** ⇑Pdiff Pdif 04 49 25.6 +0.1
comp=Z,11nm,0.6s
**VNA1 Neumayer--Stat 100.33 199** ⇑Pdiff **Pdif** **04 49 33.6 +0.1**
comp=Z,2.0nm,0.4s
**VNA3 Neumayer Olymp 100.70 199** ⇑Pdiff **Pdif** **04 49 34.9 -0.4**
comp=Z,3.1nm,0.6s
**TBI Tubuai 119.32 112** *e*LR LR 05 30 58.6
comp=Z,737nm,27.2s
**PPT2 Papeete2 119.50 106** *e*LR LR 05 31 00.7
comp=Z,84nm,24.0s

PPT2 eLR LR 05 31 04.5
comp=Z,113nm,27.5s
**PDAR Pinedale Array 126.36 19** PKP **PKiKP 04 54 52.0 +0.7**
comp=Z,0.3nm,0.7s,baz=116,slow=2.1,SNR=2.8
PDAR pPKP **sPKPdf 04 55 03.6 +2.3**
comp=Z,1.7nm,1.0s,baz=330,slow=2.4,SNR=4.9
**NVAR Mina Array Bea 126.45 29** PKP **PKiKP 04 54 53.8 +2.2**
comp=Z,0.8nm,0.9s,baz=316,slow=2.5,SNR=3.4
**TAOE Nuku Hiva Isla 128.63 95** eLR LR 05 35 19.4
comp=Z,100nm,24.1s
**RKT Rikitea 132.54 115** eLR LR 05 37 06.7
comp=Z,803nm,32.5s
**TXAR Lajitas Array 140.51 21** PKP **PKPdf 04 55 18.6 +1.1**
comp=Z,0.2nm,0.6s,baz=18,slow=3.8,SNR=2.7
**CPUP Villa Florida 145.13 234** PKPbc **PKPdf 04 55 25.8 +0.1**
comp=Z,3.9nm,0.7s,baz=108,slow=3.5,SNR=7.1
CPUP pPKPbc **sPKPdf 04 55 37.0 +0.9**
comp=Z,10nm,0.9s,baz=84,slow=3.1,SNR=13
**BOAV Boa Vista 150.66 288** PKPbc **PKPbc 04 55 40.9 +0.3**
**LPAZ La Paz 158.47 244** PKPab **PKPab 04 56 21.4 0.0**
comp=Z,1.2nm,0.8s,baz=97,slow=3.0,SNR=4.6

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*NEIC **06** 04:36:49.6±1.9,24.5°S±0.1°×180.0°W±0.1°,h490km±8km, mb4.5/100,Error ellipse: s-maj=17.0km s-min=16.1km az=137.0*
*IDC **06** 04:36:53.5±1.6,24.25°S×179.85°E,h540km±18km, mb3.6/16,mbtmp4.5/18,Error ellipse: s-maj=14.6km s-min=12.6km az=106.0*
**ISC 06 04:36:51.4±0.4,24.48S±0.06°×179.89E±0.08°,h517km, n144,σt̄69/136,mb4.4/63,3C-1D,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **5.14** | **158** | P | **P** | **04 38 16.9** | **-3.5** |
| **MSVF** | **Nonsavu** | **6.93** | **345** | P | **P** | **04 38 36.9** | **-0.8** |
| | 40nm,0.6s,baz=234,slow=1.7,SNR=46 | | | | | | |
| **PINNC** | **Pines Island,** | **11.57** | **277** | P | **P** | **04 39 28.2** | **+2.7** |
| **LIFNC** | **LIFOU** | **12.25** | **285** | P | **P** | **04 39 32.8** | **+0.2** |
| **ONTNC** | **Ouen Toro** | **12.53** | **277** | P | **P** | **04 39 33.6** | **-2.0** |
| **DZM** | **Mont Dzumac** | **12.59** | **278** | P | **P** | **04 39 37.9** | **+1.6** |
| **DZM** | **Mont Dzumac** | **12.59** | **278** | P | **P** | **04 39 38.3** | **+2.0** |
| | 28nm,0.7s,baz=88,slow=14,SNR=25 | | | | | | |
| **AFI** | **Afiamalu** | **13.13** | **38** | P | P | 04 39 36.3 | -5.7 |
| **RUGZ** | **Raukumara Rang** | **13.58** | **187** | P | **S** | **04 42 13.6** | **+3.0** |
| **PUZ** | **Puketiti** | **13.62** | **185** | P | **S** | **04 42 15.4** | **+4.1** |
| **TWGZ** | **Tauwhareparae** | **13.75** | **186** | P | **S** | **04 42 17.2** | **+3.3** |
| **URZ** | **Urewera** | **13.94** | **189** | P | **P** | **04 39 50.2** | **+0.1** |
| | 11nm,0.5s,baz=334,slow=3.5,SNR=16 | | | | | | |
| URZ | | | | S | **S** | **04 42 14.0** | **-3.4** |
| | 13nm,0.5s,baz=84,slow=18,SNR=2.8 | | | | | | |
| **URZ** | **Urewera** | **13.94** | **189** | P | **S** | **04 42 14.4** | **-3.0** |
| **MWZ** | **Matawai** | **13.96** | **188** | P | **S** | **04 42 22.0** | **+4.1** |
| **HLRZ** | **Highlands Stat** | **14.06** | **192** | P | **S** | **04 42 16.8** | **-3.0** |
| **HRRZ** | **Handcock Road** | **14.20** | **192** | P | **S** | **04 42 26.0** | **+3.4** |
| **RIGZ** | **Rimuhau** | **14.30** | **187** | P | **S** | **04 42 26.4** | **+2.1** |
| **RTZ** | **Ruatahuna** | **14.31** | **189** | P | **P** | **04 39 53.8** | **-0.2** |
| **MTHZ** | **Maungataniwha** | **14.56** | **190** | P | **S** | **04 42 31.7** | **+2.3** |
| **RAHZ** | **Arahi** | **14.59** | **189** | P | **S** | **04 42 31.3** | **+1.4** |
| **WHHZ** | **Waihua** | **14.73** | **188** | P | **S** | **04 42 33.4** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **14.92** | **190** | P | **S** | **04 42 33.7** | **-2.7** |
| **KWHZ** | **Kaweka Forest** | **15.19** | **190** | P | **S** | **04 42 40.0** | **-1.3** |
| **WNVZ** | **Wahianoa** | **15.24** | **193** | P | **S** | **04 42 40.4** | **-2.1** |
| **KRHZ** | **Kereru** | **15.41** | **190** | P | **S** | **04 42 46.6** | **+1.2** |
| **MRZ** | **Mangatainoka R** | **16.54** | **192** | P | **S** | **04 43 04.8** | **-0.6** |
| **DUWZ** | **D'Urville Isla** | **17.03** | **196** | P | **S** | **04 43 15.2** | **+1.5** |
| **QRZ** | **Quartz Range** | **17.43** | **199** | P | **P** | **04 40 25.4** | **-0.1** |
| **DSZ** | **Denniston Nort** | **18.49** | **199** | P | **P** | **04 40 34.1** | **-1.1** |
| **MQZ** | **McQueen's Vall** | **20.08** | **195** | P | **P** | **04 40 49.0** | **-0.6** |
| **RPZ** | **Rata Peaks** | **20.51** | **199** | P | **P** | **04 40 58.3** | **+4.7** |
| | 8.7nm,0.5s,baz=345,slow=7.3,SNR=3.7 | | | | | | |
| | 8.7nm,0.5s | | | | | | |
| **PYZ** | **Puysegur Point** | **24.11** | **203** | P | **S** | **04 44 57.7** | **-9.0** |
| **ARMA** | **Armidale** | **25.73** | **250** | P | **P** | **04 41 42.4** | **+1.8** |
| **EIDS** | **Eidsvold** | **26.12** | **262** | P | **P** | **04 41 44.5** | **+0.6** |
| EIDS | | | | IAmb | IAmb | 04 41 46.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **31.39** | **271** | P | **P** | **04 42 30.8** | **+0.9** |
| | comp=Z,1.7nm,0.3s,baz=100,slow=10.0,SNR=43 | | | | | | |
| CTA | | | | S | S | 04 46 46.2 | -15 |
| | comp=Z,2.0nm,0.8s,baz=28,slow=21,SNR=7.0 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **CTAO** | **Charters Tower** | **31.39** | **271** | P | **P** | **04 42 30.6** | **+0.8** |
| **STKA** | **Stephens Creek** | **34.42** | **249** | P | **P** | **04 42 55.6** | **+0.1** |
| **STKA** | **Stephens Creek** | **34.42** | **249** | P | **P** | **04 42 56.4** | **+1.0** |
| | comp=Z,4.3nm,0.6s,baz=91,slow=8.5,SNR=8.4 | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **PMG** | **Port Moresby** | **34.60** | **290** | P | **P** | **04 42 56.9** | **-0.1** |
| | comp=Z,29nm,0.7s,baz=99,slow=5.9,SNR=7.6 | | | | | | |
| | comp=Z,29nm,0.7s | | | | | | |
| **COEN** | **Coen** | **36.12** | **280** | P | **P** | **04 43 10.0** | **+0.3** |
| COEN | | | | IAmb | IAmb | 04 43 11.9 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **BBOO** | **Buckleboo** | **39.13** | **248** | P | **P** | **04 43 33.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **41.85** | **261** | P | **P** | **04 43 55.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **41.85** | **261** | P | **P** | **04 43 56.2** | **+0.1** |
| | comp=Z,4.8nm,0.6s,baz=92,slow=6.5,SNR=62 | | | | | | |
| ASAR | | | | ScP | **ScP** | **04 48 39.5** | **-1.5** |
| | comp=Z,2.0nm,1.0s,baz=91,slow=5.0,SNR=5.4 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.09** | **267** | P | **P** | **04 43 57.1** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 04 43 57.9 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.26** | **267** | P | **P** | **04 43 58.8** | **-0.6** |
| **WRAB** | **Tennant Creek** | **42.27** | **267** | P | **P** | **04 43 58.8** | **-0.6** |
| **WB0** | **Warramunga Arr** | **42.27** | **267** | P | **P** | **04 43 58.4** | **-1.0** |
| **WRA** | **Warramunga Arr** | **42.27** | **267** | P | **P** | **04 43 58.9** | **-0.6** |
| **WRA** | **Warramunga Arr** | **42.27** | **267** | P | **P** | **04 43 59.1** | **-0.4** |
| | comp=Z,10nm,0.4s,baz=98,slow=8.4,SNR=364 | | | | | | |
| WRA | | | | ScP | **ScP** | **04 48 44.2** | **+1.4** |
| | comp=Z,6.2nm,0.9s,baz=102,slow=4.2,SNR=12 | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **46.02** | **250** | P | **P** | **04 44 27.3** | **-1.0** |
| **MTN** | **Manton Dam** | **47.41** | **275** | P | **P** | **04 44 37.3** | **-1.6** |
| MTN | | | | IAmb | IAmb | 04 45 10.5 | |
| | comp=Z,30nm,1.5s | | | | | | |
| **KNRA** | **Kununurra** | **48.59** | **270** | P | **P** | **04 44 47.6** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **50.69** | **266** | P | **P** | **04 45 03.4** | **+0.1** |
| **VNDA** | **Vanda** | **53.80** | **185** | P | **P** | **04 45 26.2** | **+1.6** |
| **VNDA** | **Vanda** | **53.80** | **185** | P | **P** | **04 45 26.8** | **+2.1** |
| | comp=Z,0.4nm,0.5s,baz=355,slow=6.4,SNR=4.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **MBWA** | **Marble Bar** | **55.18** | **260** | P | **P** | **04 45 34.5** | **-0.8** |
| MBWA | | | | IAmb | IAmb | 04 45 57.2 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **56.59** | **250** | P | **P** | **04 45 44.7** | **-0.3** |
| MORW | | | | IAmb | IAmb | 04 46 01.8 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.61** | **180** | P | **P** | **04 46 45.0** | **+1.2** |
| QSPA | | | | IAmb | IAmb | 04 46 46.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.61** | **180** | P | **P** | **04 46 45.3** | **+1.6** |
| | comp=Z,11nm,1.0s,baz=18,slow=1.8,SNR=26 | | | | | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.32** | **326** | P | **P** | **04 47 23.2** | **-1.2** |
| | comp=Z,1.8nm,0.6s,baz=170,slow=7.0,SNR=4.0 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **SMAI** | **San Martin Ant** | **75.60** | **159** | P | **P** | **04 47 43.9** | **+1.4** |
| SMAI | | | | IAmb | IAmb | 04 47 45.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **BELA** | **Belgrano 2** | **75.87** | **173** | P | **P** | **04 47 44.1** | **+0.1** |
| **MAW** | **Mawson** | **77.17** | **200** | P | **P** | **04 47 52.5** | **+1.3** |
| | comp=Z,5.0nm,0.7s,baz=81,slow=1.0,SNR=5.4 | | | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **MG05** | **Puerto Natales** | **81.32** | **143** | P | **P** | **04 48 14.2** | **+0.7** |
| **ELIB** | **Princess Elisa** | **82.48** | **187** | *dP* | **P** | **04 48 19.7** | **+0.5** |
| | comp=Z,2.5nm,0.0s | | | | | | |
| **VTX** | **Valle De La Tr** | **82.87** | **51** | P | **P** | **04 48 22.2** | **+0.4** |
| **KMPM** | **Mount Pierce** | **82.93** | **40** | P | **P** | **04 48 21.8** | **-0.1** |
| **ESJX** | **Sierra Juarez** | **83.10** | **50** | P | **P** | **04 48 23.2** | **+0.1** |
| **SLBS** | **Sierra La Lagu** | **83.17** | **60** | P | **P** | **04 48 23.8** | **+0.4** |
| SLBS | | | | IAmb | IAmb | 04 48 25.0 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **KHMM** | **Horse Mountain** | **83.45** | **39** | P | **P** | **04 48 24.9** | **+0.4** |
| KHMM | | | | IAmb | IAmb | 04 48 25.8 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **ISA** | **Isabella, Lake** | **83.49** | **46** | P | **P** | **04 48 25.6** | **+0.9** |
| ISA | | | | IAmb | IAmb | 04 48 26.0 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **83.56** | **40** | P | **P** | **04 48 26.0** | **+1.0** |
| O02D | | | | IAmb | IAmb | 04 48 26.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **TROLL** | **Troll, Antarti** | **83.75** | **181** | ⇑P | **P** | **04 48 25.8** | **+0.2** |
| | comp=Z,256nm,0.3s | | | | | | |
| **KRMB** | **Red Mountain** | **83.77** | **39** | P | **P** | **04 48 26.8** | **+0.7** |
| KRMB | | | | IAmb | IAmb | 04 48 27.9 | |
| | comp=Z,8.2nm,1.0s | | | | | | |
| **KSXB** | **Camp Six Broad** | **83.99** | **39** | P | **P** | **04 48 26.9** | **-0.2** |
| **SNAA** | **Sanae** | **84.09** | **179** | P | **P** | **04 48 26.3** | **-0.9** |
| **SNAA** | **Sanae** | **84.09** | **179** | ⇑P | **P** | **04 48 26.9** | **-0.3** |
| | comp=Z,26nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **84.09** | **179** | P | **P** | **04 48 26.9** | **-0.3** |
| | comp=Z,1.3nm,0.7s,baz=196,slow=14,SNR=6.1 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **84.30** | **177** | ⇑P | **P** | **04 48 28.0** | **-0.2** |
| | comp=Z,3.4nm,0.3s | | | | | | |
| **GLA** | **Glamis** | **84.47** | **50** | P | **P** | **04 48 30.6** | **+0.9** |
| GLA | | | | IAmb | IAmb | 04 48 31.5 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **COYC** | **Coyhaique** | **84.53** | **138** | P | **P** | **04 48 30.8** | **+1.0** |
| COYC | | | | IAmb | IAmb | 04 48 32.1 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **84.59** | **39** | P | **P** | **04 48 30.5** | **+0.4** |
| **PNTR** | **Pine Nut** | **84.82** | **43** | P | **P** | **04 48 31.1** | **-0.3** |
| PNTR | | | | IAmb | IAmb | 04 48 32.5 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **J01E** | **Myrtle Point** | **84.82** | **38** | P | **P** | **04 48 30.7** | **-0.3** |
| J01E | | | | IAmb | IAmb | 04 48 32.5 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **DSP** | **Deep Springs** | **84.82** | **45** | P | **P** | **04 48 31.1** | **0.0** |
| **GWY** | **Greenwater Val** | **84.99** | **47** | P | **P** | **04 48 32.0** | **-0.2** |
| **GRAC** | **Grapevine Rang** | **85.00** | **46** | P | **P** | **04 48 32.6** | **+0.5** |
| GRAC | | | | IAmb | IAmb | 04 48 33.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **HUMO** | **Hull Mountain** | **85.01** | **39** | P | **P** | **04 48 32.1** | **+0.1** |
| HUMO | | | | IAmb | IAmb | 04 48 33.9 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| **113A** | **Mohawk Valley,** | **85.06** | **51** | P | **P** | **04 48 33.0** | **+0.5** |
| 113A | | | | IAmb | IAmb | 04 48 34.1 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **BLYC** | **Blythe** | **85.07** | **50** | P | **P** | **04 48 32.6** | **+0.1** |
| BLYC | | | | IAmb | IAmb | 04 48 34.1 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.23** | **44** | P | **P** | **04 48 32.9** | **-0.6** |
| **NVAR** | **Mina Array Bea** | **85.23** | **44** | P | **P** | **04 48 33.5** | **+0.1** |
| | comp=Z,2.0nm,0.8s,baz=224,slow=8.5,SNR=16 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **GMN** | **Gold Mountain** | **85.24** | **45** | P | **P** | **04 48 31.8** | **-1.8** |
| **214A** | **Organ Pipe Nat** | **85.30** | **52** | P | **P** | **04 48 34.0** | **+0.3** |
| 214A | | | | IAmb | IAmb | 04 48 35.0 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **NV11** | **Mina Array Sit** | **85.33** | **44** | P | **P** | **04 48 32.5** | **-1.3** |
| **TPH** | **Tonopah** | **85.72** | **45** | P | **P** | **04 48 34.8** | **-1.0** |
| **KVN** | **Kaiserville** | **85.73** | **44** | P | **P** | **04 48 34.8** | **-1.0** |
| **LL02** | **Futaleuf** | **85.86** | **136** | P | **P** | **04 48 37.1** | **+0.8** |
| LL02 | | | | IAmb | IAmb | 04 48 37.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **SHPR** | **Sheep Range** | **86.17** | **47** | P | **P** | **04 48 37.7** | **-0.2** |
| **J05D** | **Fort Rock, OR** | **86.42** | **39** | P | **P** | **04 48 40.2** | **+1.3** |
| J05D | | | | IAmb | IAmb | 04 48 40.4 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **PRN** | **Pahroc Range** | **86.75** | **46** | P | **P** | **04 48 41.3** | **+0.7** |
| PRN | | | | IAmb | IAmb | 04 48 42.1 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **H04A** | **Detroit Lake** | **86.77** | **37** | P | **P** | **04 48 40.0** | **-0.3** |
| H04A | | | | IAmb | IAmb | 04 48 41.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **PINE** | **Pine Mountain** | **86.90** | **39** | P | **P** | **04 48 40.8** | **-0.4** |
| PINE | | | | IAmb | IAmb | 04 48 42.8 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **WVOR** | **Wild Horse Val** | **87.41** | **41** | P | **P** | **04 48 43.6** | **0.0** |
| WVOR | | | | IAmb | IAmb | 04 48 44.9 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **LCMT** | **Little Creek M** | **87.73** | **47** | P | **P** | **04 48 44.9** | **-0.4** |
| **I07A** | **Izee** | **87.90** | **39** | P | **P** | **04 48 45.9** | **+0.1** |
| I07A | | | | IAmb | IAmb | 04 48 47.2 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **PLCA** | **Paso Flores** | **87.93** | **134** | P | **P** | **04 48 47.1** | **+0.9** |
| | comp=Z,2.0nm,0.8s,baz=112,slow=1.8,SNR=3.7 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KNB** | **Kanab** | **88.02** | **48** | P | **P** | **04 48 46.8** | **+0.2** |
| **J08A** | **Circle Bar Ran** | **88.06** | **40** | IAmb | IAmb | 04 48 47.8 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **U15A** | **North Rim** | **88.06** | **48** | P | **P** | **04 48 47.6** | **+0.6** |
| U15A | | | | IAmb | IAmb | 04 48 48.6 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **HPIG** | | **88.14** | **59** | P | **P** | **04 48 46.8** | **-0.6** |
| HPIG | | | | IAmb | IAmb | 04 48 48.5 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **SZCU** | **Shurtz Canyon** | **88.15** | **47** | P | **P** | **04 48 48.1** | **+0.9** |
| SZCU | | | | IAmb | IAmb | 04 48 49.6 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| **GNW** | **Green Mountain** | **88.26** | **35** | P | **P** | **04 48 47.3** | **0.0** |
| GNW | | | | IAmb | IAmb | 04 48 48.5 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **DUN6** | **Lazy B Ranch** | **88.30** | **53** | P | **P** | **04 48 48.3** | **+0.3** |
| **PKCU** | **Pink Cliffs** | **88.59** | **47** | IAmb | IAmb | 04 48 51.5 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **X18A** | **Snowflake** | **88.69** | **51** | IAmb | IAmb | 04 48 51.2 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **MTPU** | **Mount Pierson** | **89.00** | **47** | P | **P** | **04 48 52.0** | **+0.6** |
| MTPU | | | | IAmb | IAmb | 04 48 53.4 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **MVU** | **Marysvale** | **89.22** | **47** | IAmb | IAmb | 04 48 53.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **HAWA** | **Hanford** | **89.29** | **37** | IAmb | IAmb | 04 48 52.8 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **MFID** | **Camas Ranch** | **89.66** | **41** | IAmb | IAmb | 04 48 55.0 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **TMUT** | **Trail Mountain** | **90.31** | **46** | P | **P** | **04 48 57.8** | **+0.4** |
| **MPU** | **Maple Canyon** | **90.41** | **46** | IAmb | IAmb | 04 48 58.9 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **VHRN** | **Van Horn** | **90.49** | **56** | IAmb | IAmb | 04 48 59.6 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **HVU** | **Hansel Valley** | **90.62** | **44** | P | **P** | **04 48 58.5** | **-0.1** |
| HVU | | | | IAmb | IAmb | 04 48 59.5 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **SRU** | **San Rafael Swe** | **90.66** | **47** | IAmb | IAmb | 04 48 59.8 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **CTU** | **Camp Tracy** | **90.69** | **45** | IAmb | IAmb | 04 48 59.7 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **P17A** | **Butcher Ranch,** | **90.71** | **46** | IAmb | IAmb | 04 49 00.3 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **90.82** | **58** | P | **P** | **04 48 59.5** | **-0.2** |
| TX31 | | | | IAmb | IAmb | 04 49 01.2 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.82** | **58** | P | **P** | **04 48 59.8** | **0.0** |
| **TXAR** | **Lajitas Array** | **90.82** | **58** | P | **P** | **04 49 00.4** | **+0.7** |
| | comp=Z,4.2nm,0.8s,baz=214,slow=6.6,SNR=53 | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **91.39** | **52** | P | **P** | **04 49 01.8** | **-0.5** |
| **H19K** | **Roundabout Mou** | **91.55** | **10** | P | **P** | **04 49 02.7** | **+0.7** |
| **S22A** | **4UR Ranch, Cre** | **92.48** | **49** | IAmb | IAmb | 04 49 08.5 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **92.61** | **14** | P | **P** | **04 49 05.6** | **-1.4** |
| | comp=Z,0.8nm,1.0s,baz=212,slow=5.4,SNR=5.4 | | | | | | |
| | comp=Z,0.8nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **93.17** | **44** | P | **P** | **04 49 09.8** | **-0.6** |
| | comp=Z,0.9nm,0.7s,baz=199,slow=3.8,SNR=10.0 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **DRIO** | **Del Rio** | **93.23** | **59** | P | **P** | **04 49 10.8** | **+0.1** |
| **FINES** | **FINESS Array B** | **138.96** | **341** | SKPbc | **SKPbc** | **04 58 04.5** | **0.0** |
| | comp=Z,4.6nm,0.8s,baz=106,slow=4.5,SNR=8.2 | | | | | | |
| **HFS** | **Hagfors** | **143.09** | **349** | PKP | PKPab | 04 55 22.2 | -1.1 |
| | comp=Z,2.8nm,0.4s,baz=51,slow=3.8,SNR=32 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.40** | **327** | PKPbc | **PKPdf** | **04 55 30.1** | **+0.1** |
| | comp=Z,0.4nm,0.3s,baz=43,slow=3.8,SNR=4.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.85** | **306** | PKPbc | **PKPbc** | **04 55 37.8** | **-0.6** |
| | comp=Z,1.0nm,0.8s,baz=134,slow=3.6,SNR=5.0 | | | | | | |
| BRTR | | | | pPKPbc | **pPKPab** | **04 57 43.0** | **+4.3** |
| | comp=Z,1.4nm,0.9s,baz=126,slow=2.8,SNR=5.8 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.85** | **294** | PKPbc | **PKPbc** | **04 55 38.1** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=76,slow=6.1,SNR=3.7 | | | | | | |
| MMAI | | | | pPKPbc | **pPKPab** | **04 57 44.4** | **+5.8** |
| | comp=Z,0.6nm,0.3s,baz=15,slow=6.0,SNR=4.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **149.10** | **3** | PKPbc | **PKPbc** | **04 55 39.0** | **-1.8** |
| | comp=Z,2.3nm,0.7s,baz=340,slow=2.7,SNR=8.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **164.50** | **11** | PKPab | **PKPab** | **04 56 53.0** | **-1.1** |
| | comp=Z,0.9nm,1.0s,baz=354,slow=1.3,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.60** | **189** | PKP | **PKPdf** | **04 55 57.2** | **-2.3** |
| | comp=Z,1.1nm,1.1s,baz=346,slow=1.4,SNR=4.0 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **04 57 11.9** | **-0.8** |
| | comp=Z,1.6nm,0.9s,baz=172,slow=2.0,SNR=7.3 | | | | | | |

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*TAP **06** 04:38:53.7,22.95N×120.53E,h15km,ML3.8,B*
*JMA **06** 04:38:53.1±0.2,23.0N±0.3×120.5E±0.6,h0km,MV4.0/15, TAIWAN REGION*
*ASIES **06** 04:38:53.7,22.95N×120.53E,h15km,ML3.8,Mw3.6, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm;*
*$M_{rr}$-0.02; $M_{\theta\theta}$0.18; $M_{\phi\phi}$-0.16; $M_{r\theta}$0.20; $M_{\theta\phi}$0.68; $M_{\phi r}$-3.53; Fault plane solution: $M_0$3.60242×$10^{21}$ NP1: $\phi_s$177.69000°,$\delta$89.25000°,$\lambda$100.57000°. NP2: $\phi_s$271.72000°,$\delta$10.59000°,$\lambda$4.10000°. Principal axes: T Plg44.7770°, Azm98.2120°; N Plg10.5630°, Azm357.5490°; P Plg43.2960°, Azm257.4300°;*
**ISC 06 04:38:53.9±0.8,22.96N±0.01°×120.52E±0.01°,h16km±1km, n128,σt̄96/227,1C-2D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SCST** | **Cishan** | **0.07** | **201** | *eP* | **Pg** | **04 38 57.8** | **+0.8** |
| | baz=210 | | | | | | |
| SCST | | | | S | **Sg** | **04 39 00.8** | **+1.7** |
| | baz=210 | | | | | | |
| **SLGT** | **Liugui** | **0.12** | **72** | *iP* | **Pb** | **04 38 58.1** | **+0.3** |
| | baz=77 | | | | | | |
| SLGT | | | | S | **Sb** | **04 39 01.6** | **+1.2** |
| | baz=77 | | | | | | |
| **SGST** | **Jiashian** | **0.14** | **24** | *iP* | **Pg** | **04 38 57.8** | **0.0** |
| | baz=22 | | | | | | |
| SGST | | | | *i* S | **Sb** | **04 39 01.6** | **+0.6** |
| | baz=22 | | | | | | |
| **TWM1** | **Shoushan** | **0.16** | **215** | *eP* | **Pb** | **04 38 59.1** | **+0.5** |
| | baz=218 | | | | | | |
| TWM1 | | | | *eS* | **Sb** | **04 39 04.7** | **+3.1** |
| | baz=218 | | | | | | |
| **CHN3** | **Shinhua** | **0.19** | **309** | *eP* | **Pb** | **04 39 00.6** | **+1.6** |
| | baz=315 | | | | | | |
| CHN3 | | | | *eS* | **Sb** | **04 39 06.4** | **+4.0** |
| | baz=315 | | | | | | |
| **CHN1** | **Nanshi** | **0.23** | **1** | *eP* | **Pb** | **04 39 00.3** | **+0.7** |
| | baz=4.0 | | | | | | |
| CHN1 | | | | *eS* | **Sb** | **04 39 04.7** | **+1.1** |
| | baz=4.0 | | | | | | |
| **SGLT** | **Jiouru** | **0.23** | **187** | *eP* | **Pb** | **04 39 00.6** | **+0.8** |
| | baz=183 | | | | | | |
| SGLT | | | | *eS* | **Sb** | **04 39 05.0** | **+1.4** |
| | baz=183 | | | | | | |
| **SNST** | **Tainan City** | **0.26** | **355** | *eP* | **Pb** | **04 39 01.1** | **+0.8** |
| | baz=352 | | | | | | |
| SNST | | | | S | **Sb** | **04 39 05.4** | **+0.8** |
| | baz=352 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.27** | **221** | *eP* | **Pn** | **04 39 01.8** | **-1.3** |
| | baz=223 | | | | | | |
| SNJT | | | | *i* S | **Sn** | **04 39 08.3** | **-0.6** |
| | baz=223 | | | | | | |
| **TSMG** | **Majia** | **0.27** | **156** | *eP* | **Pb** | **04 39 00.1** | **-0.3** |
| | baz=152 | | | | | | |
| TSMG | | | | *i* S | **Sb** | **04 39 04.6** | **-0.2** |
| | baz=152 | | | | | | |
| **SSHA** | **Shanhua** | **0.28** | **310** | *eP* | **Pn** | **04 39 02.3** | **-1.1** |
| | baz=318 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.28** | **287** | *eP* | **Pb** | **04 39 01.7** | **+1.1** |
| | baz=288 | | | | | | |
| **WTP** | **Ta-pu** | **0.30** | **16** | *eP* | **Pb** | **04 39 01.3** | **+0.4** |
| | baz=15 | | | | | | |
| WTP | | | | *eS* | **Sb** | **04 39 07.0** | **+1.3** |
| | baz=15 | | | | | | |
| **TWK** | **Hsinying** | **0.31** | **354** | P | **Pb** | **04 39 01.6** | **+0.5** |
| | baz=6.0 | | | | | | |
| TWK | | | | *eS* | **Sb** | **04 39 07.0** | **+1.0** |
| | baz=6.0 | | | | | | |
| **STYH** | **Taoyuan** | **0.32** | **47** | P | **Pb** | **04 39 01.5** | **+0.3** |
| | baz=45 | | | | | | |
| STYH | | | | S | **Sb** | **04 39 07.0** | **+0.9** |
| | baz=45 | | | | | | |
| **TPUB** | **Ta-pu** | **0.36** | **16** | P | **Pb** | **04 39 01.8** | **-0.1** |
| | baz=14 | | | | | | |
| TPUB | | | | S | **Sb** | **04 39 07.9** | **+0.6** |
| | baz=14 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.36** | **164** | ⇑*iP* | **Pb** | **04 39 01.7** | **-0.2** |
| | baz=160 | | | | | | |
| MASBT | | | | S | **Sb** | **04 39 07.2** | **-0.1** |
| | baz=160 | | | | | | |
| **SCLT** | **Jiali** | **0.37** | **306** | *eP* | **Pb** | **04 39 03.0** | **+0.9** |
| | baz=306 | | | | | | |
| SCLT | | | | *eS* | **Sb** | **04 39 09.8** | **+2.1** |
| | baz=306 | | | | | | |
| **WSSB** | **Gushan** | **0.40** | **218** | *eP* | **Pn** | **04 39 03.9** | **-1.1** |
| | baz=233 | | | | | | |
| WSSB | | | | *eS* | **Sn** | **04 39 12.5** | **+0.4** |
| | baz=233 | | | | | | |
| **ICHU** | **Yijhu** | **0.46** | **331** | *eP* | **Pb** | **04 39 04.6** | **+1.0** |
| | baz=329 | | | | | | |
| ICHU | | | | *i* S | **Sn** | **04

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | baz=337 | | | | | | | | | |
| **WTK** | **Tuku** | **0.74** | **350** | *e*P | | **Pn** | **04 39 09.1** | **-0.6** |
| | baz=349 | | | | | | | | | |
| WTK | | | | *i* S | | **Sn** | **04 39 21.0** | **+0.5** |
| | baz=349 | | | | | | | | | |
| **FULB** | **Fuli** | **0.75** | **71** | *i* P | | **Pn** | **04 39 09.5** | **-0.4** |
| | baz=70 | | | | | | | | | |
| FULB | | | | *e*S | | **Sn** | **04 39 20.4** | **-0.5** |
| | baz=70 | | | | | | | | | |
| **SLIU** | **Shizi** | **0.78** | **161** | *i* P | | **Pb** | **04 39 09.3** | **+0.2** |
| | baz=155 | | | | | | | | | |
| SLIU | | | | *i* S | | **Sn** | **04 39 21.3** | **-0.3** |
| | baz=155 | | | | | | | | | |
| **CHKT** | **Chengkung** | **0.79** | **79** | *e*P | | **Pn** | **04 39 09.9** | **-0.4** |
| | baz=79 | | | | | | | | | |
| CHKT | | | | *e*S | | **Sn** | **04 39 22.0** | **+0.2** |
| | baz=79 | | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.80** | **22** | P | | **Pb** | **04 39 09.8** | **+0.4** |
| | baz=31 | | | | | | | | | |
| WHYT | | | | *e*S | | **Sn** | **04 39 22.0** | **-0.1** |
| | baz=31 | | | | | | | | | |
| **TWF1** | **Yuli** | **0.81** | **61** | *i* P | | **Pb** | **04 39 09.9** | **+0.2** |
| | baz=60 | | | | | | | | | |
| TWF1 | | | | *i* S | | **Sb** | **04 39 20.9** | **+0.5** |
| | baz=60 | | | | | | | | | |
| **EYUL** | **Yuli** | **0.83** | **62** | *i* P | | **Pb** | **04 39 10.2** | **+0.3** |
| | baz=61 | | | | | | | | | |
| EYUL | | | | S | | **Sb** | **04 39 21.5** | **+0.7** |
| | baz=61 | | | | | | | | | |
| **YULB** | **Yu-li** | **0.83** | **58** | *i* P | | **Pb** | **04 39 10.2** | **+0.2** |
| | baz=58 | | | | | | | | | |
| YULB | | | | *e*S | | **Sb** | **04 39 21.4** | **+0.3** |
| | baz=58 | | | | | | | | | |
| **CHKH** | **Chenggong** | **0.84** | **74** | *e*P | | **Pn** | **04 39 10.6** | **-0.4** |
| | baz=66 | | | | | | | | | |
| CHKH | | | | *e*S | | **Sn** | **04 39 23.2** | **+0.2** |
| | baz=66 | | | | | | | | | |
| **WDGT** | **Dungji** | **0.85** | **291** | *i* P | | **Pb** | **04 39 10.0** | **-0.2** |
| | baz=293 | | | | | | | | | |
| WDGT | | | | *i* S | | **Sg** | **04 39 21.8** | **+0.1** |
| | baz=293 | | | | | | | | | |
| **WJS** | **Zhushan** | **0.88** | **12** | *i* P | | **Pn** | **04 39 12.0** | **+0.3** |
| | baz=356 | | | | | | | | | |
| WJS | | | | *i* S | | **Sn** | **04 39 24.9** | **+0.8** |
| | baz=356 | | | | | | | | | |
| **EHY** | **Hungye** | **0.92** | **53** | P | | **Pg** | **04 39 11.6** | **-0.1** |
| | baz=59 | | | | | | | | | |
| EHY | | | | S | | **Sg** | **04 39 24.0** | **+0.2** |
| | baz=59 | | | | | | | | | |
| **LDUT** | **Ludao** | **0.92** | **108** | *e*P | | **Pg** | **04 39 11.3** | **-0.4** |
| | baz=106 | | | | | | | | | |
| LDUT | | | | *e*S | | **Sn** | **04 39 24.7** | **-0.3** |
| | baz=106 | | | | | | | | | |
| **SSLB** | **Suanglung** | **0.92** | **25** | *e*P | | **Pb** | **04 39 11.3** | **-0.1** |
| | baz=24 | | | | | | | | | |
| SSLB | | | | *e*S | | **Sg** | **04 39 23.7** | **-0.1** |
| | baz=24 | | | | | | | | | |
| **ECBN** | **Changbin** | **0.93** | **67** | P | | **Pn** | **04 39 12.5** | **+0.2** |
| | baz=66 | | | | | | | | | |
| **EHYH** | **Wanrong** | **0.93** | **55** | *e*P | | **Pn** | **04 39 12.0** | **-0.2** |
| | baz=60 | | | | | | | | | |
| EHYH | | | | *e*S | | **Sn** | **04 39 24.7** | **-0.5** |
| | baz=60 | | | | | | | | | |
| **WNT** | **Mingjian** | **0.93** | **9** | *e*P | | **Pn** | **04 39 12.4** | **+0.1** |
| | baz=8.0 | | | | | | | | | |
| WNT | | | | *i* S | | **Sn** | **04 39 26.1** | **+0.8** |
| | baz=8.0 | | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.93** | **346** | *e*P | | **Pb** | **04 39 10.5** | **-1.2** |
| | baz=345 | | | | | | | | | |
| WTCT | | | | *i* S | | **Sn** | **04 39 25.3** | **-0.1** |
| | baz=345 | | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.97** | **163** | *e*P | | **Pn** | **04 39 13.6** | **+0.7** |
| | baz=163 | | | | | | | | | |
| SMST | | | | S | | **Sn** | **04 39 27.7** | **+1.3** |
| | baz=163 | | | | | | | | | |
| **VWDT** | **VWDT** | **0.98** | **35** | *e*P | | **Pn** | **04 39 13.1** | **+0.2** |
| | baz=41 | | | | | | | | | |
| **HGSD** | **Ruisui** | **0.98** | **57** | *e*P | | **Pn** | **04 39 13.5** | **+0.5** |
| | baz=52 | | | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **04 39 26.8** | **+0.1** |
| | baz=52 | | | | | | | | | |
| **TYC** | **Yuchr** | **0.99** | **18** | P | | **Pn** | **04 39 13.5** | **+0.4** |
| | baz=17 | | | | | | | | | |
| TYC | | | | *i* S | | **Sn** | **04 39 28.3** | **+1.5** |
| | baz=17 | | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.04** | **303** | *e*P | | **Pb** | **04 39 12.3** | **-1.1** |
| | baz=314 | | | | | | | | | |
| PHUB | | | | *i* S | | **Sb** | **04 39 26.4** | **-0.4** |
| | baz=314 | | | | | | | | | |
| **VCHM** | **Qimei** | **1.04** | **284** | *e*P | | **Pb** | **04 39 12.6** | **-0.9** |
| | baz=297 | | | | | | | | | |
| VCHM | | | | *e*S | | **Sb** | **04 39 26.7** | **-0.2** |
| | baz=297 | | | | | | | | | |
| **TWK1** | **Hengchun** | **1.04** | **165** | *e*P | | **Pg** | **04 39 13.8** | **-0.3** |
| | baz=165 | | | | | | | | | |
| TWK1 | | | | *e*S | | **Sn** | **04 39 29.2** | **+1.2** |
| | baz=165 | | | | | | | | | |
| **TWKBT** | **Hengchun** | **1.05** | **165** | *e*P | | **Pg** | **04 39 14.0** | **-0.1** |
| | baz=165 | | | | | | | | | |
| TWKBT | | | | *e*S | | **Sn** | **04 39 28.9** | **+0.8** |
| | baz=165 | | | | | | | | | |
| **PNG** | **Penghu** | **1.08** | **305** | *e*P | | **Pb** | **04 39 13.2** | **-0.9** |
| | baz=304 | | | | | | | | | |
| PNG | | | | S | | **Sb** | **04 39 27.8** | **-0.3** |
| | baz=304 | | | | | | | | | |
| **EGFH** | **Guangfu** | **1.09** | **49** | *e*P | | **Pg** | **04 39 14.8** | **-0.2** |
| | baz=48 | | | | | | | | | |
| EGFH | | | | *e*S | | **Sg** | **04 39 29.1** | **-0.3** |
| | baz=48 | | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.10** | **46** | P | | **Pg** | **04 39 14.9** | **-0.2** |
| | baz=45 | | | | | | | | | |
| WARBT | | | | *e*S | | **Sn** | **04 39 29.9** | **+0.4** |
| | baz=45 | | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.15** | **18** | P | | **Pg** | **04 39 15.8** | **-0.4** |
| | baz=17 | | | | | | | | | |
| WCS | | | | *e*S | | **Sg** | **04 39 32.3** | **+1.1** |
| | baz=17 | | | | | | | | | |
| **OWD** | **Renai** | **1.16** | **31** | *e*P | | **Pg** | **04 39 16.1** | **-0.2** |
| | baz=18 | | | | | | | | | |
| OWD | | | | *e*S | | **Sg** | **04 39 32.5** | **+0.9** |
| | baz=18 | | | | | | | | | |
| **TCU** | **Taichung** | **1.19** | **7** | *e*P | | **Pg** | **04 39 17.4** | **+0.4** |
| | baz=6.0 | | | | | | | | | |
| TCU | | | | *e*S | | **Sg** | **04 39 32.9** | **+0.3** |
| | baz=6.0 | | | | | | | | | |
| **ESL** | **Shilin** | **1.20** | **44** | P | | **Pg** | **04 39 16.6** | **-0.4** |
| | baz=43 | | | | | | | | | |
| ESL | | | | S | | **Sg** | **04 39 33.2** | **+0.6** |
| | baz=43 | | | | | | | | | |
| **CHGB** | **Renai** | **1.25** | **28** | *i* P | | **Pg** | **04 39 17.8** | **-0.3** |
| | baz=27 | | | | | | | | | |
| CHGB | | | | *i* S | | **Sg** | **04 39 35.4** | **+1.0** |
| | baz=27 | | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.26** | **49** | P | | **Pg** | **04 39 18.5** | **+0.2** |
| | baz=39 | | | | | | | | | |
| SHUL | | | | *e*S | | **Sg** | **04 39 36.7** | **+1.9** |
| | baz=39 | | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.34** | **37** | *i* P | | **Pg** | **04 39 19.5** | **-0.2** |
| | baz=36 | | | | | | | | | |
| LXIB | | | | *i* S | | **Sg** | **04 39 38.5** | **+1.3** |
| | baz=36 | | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.34** | **47** | *e*P | | **Pg** | **04 39 20.6** | **+0.9** |
| | baz=29 | | | | | | | | | |
| **ETM** | **Tongmen** | **1.34** | **41** | *e*P | | **Pg** | **04 39 19.2** | **-0.6** |
| | baz=40 | | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.36** | **30** | *e*P | | **Pg** | **04 39 19.7** | **-0.5** |
| | baz=13 | | | | | | | | | |
| WHF | | | | S | | **Sg** | **04 39 38.7** | **+0.6** |
| | baz=13 | | | | | | | | | |
| **LYUB** | **Lan-yu** | **1.37** | **134** | *e*P | | **Pn** | **04 39 16.4** | **-1.8** |
| | baz=132 | | | | | | | | | |
| **WHP** | **Taichung City** | **1.37** | **16** | P | | **Pb** | **04 39 19.5** | **+0.3** |
| | baz=15 | | | | | | | | | |
| WHP | | | | S | | **Sg** | **04 39 38.0** | **-0.3** |
| | baz=15 | | | | | | | | | |
| **TDCB** | **Techi** | **1.42** | **24** | *e*P | | **Pb** | **04 39 19.9** | **-0.2** |
| | baz=23 | | | | | | | | | |
| TDCB | | | | S | | **Sg** | **04 39 39.1** | **-0.6** |
| | baz=23 | | | | | | | | | |
| **HWA** | **Hwalien** | **1.42** | **44** | *e*P | | **Pb** | **04 39 20.2** | **+0.2** |
| | baz=43 | | | | | | | | | |
| **TWT** | **Tachien** | **1.42** | **25** | *e*P | | **Pb** | **04 39 20.5** | **+0.4** |
| | baz=24 | | | | | | | | | |
| **FUSS** | **Fushou** | **1.45** | **27** | *e*P | | **Pb** | **04 39 20.6** | **0.0** |
| | baz=26 | | | | | | | | | |
| FUSS | | | | *e*S | | **Sg** | **04 39 40.5** | **-0.2** |
| | baz=26 | | | | | | | | | |
| **NSY** | **Sanyi** | **1.47** | **8** | *e*P | | **Pb** | **04 39 21.0** | **+0.2** |
| | baz=7.0 | | | | | | | | | |
| NSY | | | | *e*S | | **Sg** | **04 39 40.5** | **-0.9** |
| | baz=7.0 | | | | | | | | | |
| **TWD** | **Chiawan** | **1.49** | **41** | *e*P | | **Pb** | **04 39 21.6** | **+0.4** |
| | baz=40 | | | | | | | | | |
| TWD | | | | *e*S | | **Sg** | **04 39 41.2** | **-0.8** |
| | baz=40 | | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.52** | **35** | *i* P | | **Pb** | **04 39 22.2** | **+0.4** |
| | baz=34 | | | | | | | | | |
| ETLH | | | | *i* S | | **Sg** | **04 39 43.3** | **+0.2** |
| | baz=34 | | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.56** | **39** | *e*P | | **Pb** | **04 39 22.3** | **-0.1** |
| | baz=37 | | | | | | | | | |
| NACB | | | | S | | **Sg** | **04 39 43.4** | **-0.8** |
| | baz=37 | | | | | | | | | |
| **NNSB** | **Datong** | **1.66** | **28** | P | | **Pb** | **04 39 24.1** | **-0.2** |
| | baz=27 | | | | | | | | | |
| NNSB | | | | *e*S | | **Sg** | **04 39 46.2** | **-1.4** |
| | baz=27 | | | | | | | | | |
| **NNS** | **Nan Shan** | **1.67** | **28** | *e*P | | **Pb** | **04 39 24.6** | **+0.3** |
| | baz=27 | | | | | | | | | |
| NNS | | | | *e*S | | **Sg** | **04 39 46.5** | **-1.3** |
| | baz=27 | | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.72** | **15** | *e*P | | **Pn** | **04 39 24.1** | **+0.9** |
| | baz=13 | | | | | | | | | |
| NSTT | | | | *e*S | | **Sb** | **04 39 47.0** | **+0.4** |
| | baz=13 | | | | | | | | | |
| **LIOB** | **Emei** | **1.74** | **15** | *e*P | | **Pn** | **04 39 23.2** | **-0.3** |
| | baz=14 | | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.75** | **18** | *e*P | | **Pb** | **04 39 25.4** | **-0.3** |
| | baz=1.0 | | | | | | | | | |
| NFF | | | | *e*S | | **Sb** | **04 39 48.6** | **+1.0** |
| | baz=1.0 | | | | | | | | | |
| **LATG** | **Datong** | **1.82** | **30** | *e*P | | **Pb** | **04 39 26.1** | **-0.8** |
| | baz=29 | | | | | | | | | |
| LATG | | | | S | | **Sb** | **04 39 50.7** | **+1.1** |
| | baz=29 | | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.87** | **29** | *e*P | | **Pb** | **04 39 27.0** | **-0.7** |
| | baz=27 | | | | | | | | | |
| NDT | | | | *i* S | | **Sb** | **04 39 51.9** | **+0.9** |
| | baz=27 | | | | | | | | | |
| **EWUT** | **Wuta** | **1.88** | **38** | *e*P | | **Pb** | **04 39 27.2** | **-0.6** |
| | baz=36 | | | | | | | | | |
| EWUT | | | | *e*S | | **Sb** | **04 39 51.9** | **+0.9** |
| | baz=36 | | | | | | | | | |
| **YHNB** | **Yeheng** | **1.88** | **24** | *e*P | | **Pn** | **04 39 26.0** | **+0.6** |
| | baz=6.0 | | | | | | | | | |
| YHNB | | | | *e*S | | **Sb** | **04 39 50.4** | **-0.7** |
| | baz=6.0 | | | | | | | | | |
| **ENTT** | **Nioudou** | **1.93** | **29** | *e*P | | **Pb** | **04 39 28.8** | **+0.1** |
| | baz=28 | | | | | | | | | |
| ENTT | | | | *e*S | | **Sb** | **04 39 53.0** | **+0.4** |
| | baz=28 | | | | | | | | | |
| **NDS** | **Dongshan** | **2.00** | **33** | *e*P | | **Pb** | **04 39 29.7** | **-0.2** |
| | baz=50 | | | | | | | | | |
| **EOS4** | **EOS4** | **2.01** | **55** | *e*P | | **Pn** | **04 39 28.0** | **+1.1** |
| | baz=53 | | | | | | | | | |
| **ESAO** | **Su ao** | **2.02** | **37** | *e*P | | **Pb** | **04 39 29.2** | **-1.0** |
| | baz=35 | | | | | | | | | |
| ESAO | | | | *e*S | | **Sb** | **04 39 54.9** | **-0.1** |
| | baz=35 | | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.04** | **28** | *e*P | | **Pb** | **04 39 29.8** | **-0.8** |
| | baz=12 | | | | | | | | | |
| **TWC** | **Suao** | **2.04** | **36** | *e*P | | **Pb** | **04 39 30.0** | **-0.7** |
| | baz=35 | | | | | | | | | |
| TWC | | | | *e*S | | **Sb** | **04 39 57.2** | **+1.3** |
| | baz=35 | | | | | | | | | |
| **TWE** | **Neicheng** | **2.04** | **31** | *e*P | | **Pb** | **04 39 30.9** | **+0.3** |
| | baz=30 | | | | | | | | | |
| TWE | | | | *e*S | | **Sg** | **04 39 57.8** | **-2.0** |
| | baz=30 | | | | | | | | | |
| **EOS3** | **EOS3** | **2.11** | **51** | *e*P | | **Pb** | **04 39 30.0** | **-1.7** |
| | baz=48 | | | | | | | | | |
| **EOS2** | **EOS2** | **2.14** | **47** | *e*P | | **Pb** | **04 39 30.9** | **-1.3** |
| | baz=60 | | | | | | | | | |
| **VWUC** | **VWUC** | **2.25** | **334** | *e*P | | **Pn** | **04 39 30.7** | **+0.2** |
| | baz=336 | | | | | | | | | |
| **EGS** | | **2.28** | **34** | *e*P | | **Pb** | **04 39 34.0** | **-0.6** |
| | baz=34 | | | | | | | | | |
| **TIPB** | **Shuangxi** | **2.33** | **30** | *e*P | | **Pb** | **04 39 34.6** | **-1.0** |
| | baz=13 | | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.44** | **329** | *e*P | | **Pn** | **04 39 31.6** | **-1.5** |
| | baz=345 | | | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.46** | **30** | *e*P | | **Pn** | **04 39 35.0** | **+1.6** |
| | baz=14 | | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.47** | **308** | *e*P | | **Pn** | **04 39 32.5** | **-0.9** |
| | baz=308 | | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.67** | **56** | P | | **Pn** | **04 39 38.2** | **+2.0** |
| JYNG | | | | S | | **Sn** | **04 40 10.7** | **+2.4** |
| **ZPLA** | **Ao Xicun** | **2.73** | **291** | *e*P | | **Pn** | **04 39 38.5** | **+1.5** |
| | baz=293 | | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.73** | **56** | *e*P | | **Pn** | **04 39 38.7** | **+1.7** |
| | baz=55 | | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.73** | **56** | P | | **Pn** | **04 39 39.2** | **+2.2** |
| YOJ | | | | S | | **Sn** | **04 40 12.2** | **+2.5** |
| **HATJ** | **Hateruma jima** | **3.21** | **69** | P | | **Pn** | **04 39 44.8** | **+1.2** |
| HATJ | | | | *e*S | | **Sn** | **04 40 21.8** | **+0.3** |
| **MATB** | **Ma-tsu** | **3.22** | **351** | *e*P | | **Pn** | **04 39 42.8** | **-1.1** |
| | baz=353 | | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **3.25** | **64** | P | | **Pn** | **04 39 45.9** | **+1.8** |
| IRIF | | | | *e*S | | **Sn** | **04 40 25.0** | **+2.6** |
| **MHZQ** | **Yeshan** | **3.41** | **337** | *e*P | | **Pn** | **04 39 47.8** | **+1.4** |
| | baz=339 | | | | | | | | | |
| **JKRS** | **Kuro-shima** | **3.44** | **68** | P | | **Pn** | **04 39 49.2** | **+2.4** |
| JKRS | | | | *e*S | | **Sn** | **04 40 29.3** | **+2.0** |
| **JIJ** | **Ishigaki jima** | **3.60** | **66** | P | | **Pn** | **04 39 50.2** | **+1.1** |
| JIJ | | | | *e*S | | **Sn** | **04 40 31.3** | **+0.1** |
| **LYJJ** | **Jianjiangzhen** | **3.65** | **349** | *e*P | | **Pn** | **04 39 48.7** | **-0.9** |
| | baz=352 | | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.83** | **64** | P | | **Pn** | **04 39 53.3** | **+1.1** |
| JISG | | | | S | | **Sn** | **04 40 37.5** | **+0.6** |
| **JTJ** | **Tarama** | **4.18** | **66** | *e*P | | **Pn** | **04 39 58.9** | **+1.9** |
| JTJ | | | | *e*S | | **Sn** | **04 40 47.4** | **+1.9** |

**IDC 06 05:00:19.5±3.5, 53.57N×87.85E, h0km, mbtmp2.9/2, ML2.7/2, Error ellipse: s-maj=35.7km s-min=22.4km az=79.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.84** | **283** | I | I | 05 12 10.0 | |
| | 0.1nm,0.7s,baz=99,slow=319,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.84** | **283** | Pn | Pn | 05 00 51.9 | -0.4 |
| | 3.3nm,0.3s,baz=103,slow=16,SNR=32 | | | | | | |
| ZALV | | | | Sn | Sb | 05 01 17.0 | -0.6 |
| | 1.4nm,0.3s,baz=108,slow=26,SNR=3.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.46** | **247** | Pn | Pn | 05 01 56.5 | +0.7 |
| | 0.1nm,0.3s,baz=65,slow=15,SNR=5.0 | | | | | | |
| KURBB | | | | Lg | Lg | 05 03 43.6 | |
| | 0.1nm,0.3s,baz=69,slow=36,SNR=2.2 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.66** | **210** | Pn | Pn | 05 02 13.6 | +1.3 |
| | 0.2nm,0.3s,baz=26,slow=14,SNR=4.7 | | | | | | |
| MKAR | | | | Lg | Lg | 05 04 21.7 | |
| | 0.1nm,0.3s,baz=32,slow=28,SNR=2.0 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**IDC 06 05:04:53.9±3.6, 5.96S×150.35E, h0km, mb3.4/2, mbtmp3.5/2, Error ellipse: s-maj=129.3km s-min=48.4km az=117.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.87** | **227** | P | P | 05 09 37.4 | -0.4 |
| | 2.1nm,0.8s,baz=52,slow=11,SNR=18 | | | | | | |
| | 2.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **23.68** | **220** | P | P | 05 10 07.4 | -0.1 |
| | 0.8nm,0.9s,baz=56,slow=8.9,SNR=6.6 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.30** | **285** | PKPbc | PKPbc | 05 24 42.9 | -0.4 |
| | 0.4nm,0.6s,baz=64,slow=5.1,SNR=4.5 | | | | | | |

*GII **06** 05:18:02.6±0.4, 35.325N×0.003×31.287E±0.001, h40km, mB4.1/3, Md3.9/2, Mws4.0, confirmed*
*NAO **06** 05:18:51.6, 35.17N×33.45E, h33km, mb3.7*
*ISK **06** 05:18:58.4, 35.46N×31.45E, h5km, ML4.2/44*
*AFAD **06** 05:19:00.7±0.0, 35.55N×31.54E, h21km±1km, MW4.0*
*MOS **06** 05:19:01.9±1.2, 35.45N×31.34E, h58km, mb4.2/36, Error ellipse: s-maj=6.2km s-min=3.7km az=108.0*
*NIC **06** 05:19:01.0, 35.74N×31.37E, h54km±35km, Ml3.8/8*
*HLW **06** 05:19:01.7, 35.42N×31.25E, h28km±22km, Md4.6, Ml4.3*
*IDC **06** 05:19:01.1±2.9, 35.56N×31.30E, h33km±24km, mb4.0/17, mbtmp4.2/25, ML4.0/7, MS3.1/3, Error ellipse:*
*s-maj=14.0km s-min=13.0km az=174.0*
*NEIC **06** 05:19:01.8±2.6, 35.36N±0.06×31.37E±0.05, h41km±7km, mb4.3/96, Error ellipse: s-maj=8.2km s-min=6.0km az=193.0*
*MED_RC **06** 05:19:02.0±0.7, 35.39N×31.35E, h35km, MW4.3/11, Moment Tensor Solution. Mantle waves: s11,c12; Duration: 1s0 Moment tensor: Scale 10^15 Nm; Mrr-2.61±.88; Mθθ0.68±.50; Mϕϕ1.93±.47; Mrθ1.25±.36; Mθϕ-2.80±.30; Mϕr-1.41±.29; Best double couple: M○3.88000×10^15 NP1:ϕs318.00000°, δ60.00000°, λ-94.00000°. NP2:ϕs146.00000°, δ31.00000°, λ-84.00000°. Principal axes: T 4.6600, Plg15.0000°, Azm51.0000°; N -1.5600, Plg3.0000°, Azm320.0000°; P -3.1000, Plg75.0000°, Azm218.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*
*MCSM **06** 05:19:02.5±0.4, 35°N±4°×3°1E±°, h55km±6km, mb4.1, mB4.6, MLv4.1, Mw(mB)3.8*

**ISC 06 05:19:02.5±0.8, 35.41N±0.03×31.37E±0.02, h49km±8km, n467, σ1s41/518, mb4.2/82, 9C-7D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKMS** | **Akamas** | **0.88** | **116** | P | **Pn** | **05 19 17.3** | **-1.4** |
| AKMS | | | | S | **Sn** | **05 19 34.8** | **+4.2** |
| AKMS | | | | AML | AML | 05 19 40.4 | |
| | 8.2nm,0.6s | | | | | | |
| AKMS | | | | AML | AML | 05 19 41.7 | |
| | 6.1nm,0.4s | | | | | | |
| **ALFC** | **Alefka** | **1.04** | **104** | P | **Pn** | **05 19 19.2** | **-1.6** |
| ALFC | | | | S | **Sn** | **05 19 37.9** | **+3.6** |
| ALFC | | | | AML | AML | 05 19 41.2 | |
| | 8.1nm,0.6s | | | | | | |
| ALFC | | | | AML | AML | 05 19 43.0 | |
| | 7.1nm,0.8s | | | | | | |
| **GAZI** | **Gazipasa** | **1.12** | **43** | Pg | **Pn** | **05 19 19.3** | **-2.7** |
| **GAZI** | **Gazipasa** | **1.12** | **43** | P | **Pn** | **05 19 19.2** | **-2.7** |
| GAZI | | | | S | **Sn** | **05 19 28.9** | **-7.4** |
| GAZI | | | | *i* AML | AML | 05 19 37.0 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **NATA** | **Nata** | **1.17** | **122** | P | **Pn** | **05 19 22.8** | **+0.3** |
| NATA | | | | S | **Sn** | **05 19 43.0** | **+5.6** |
| NATA | | | | AML | AML | 05 19 51.6 | |
| | 23nm,0.8s | | | | | | |
| NATA | | | | AML | AML | 05 19 53.6 | |
| | 25nm,0.6s | | | | | | |
| **AKUM** | **Antalya-Kumluc** | **1.23** | **318** | P | **Pn** | **05 19 23.9** | **+0.6** |
| AKUM | | | | S | **Sn** | **05 19 42.4** | **+3.5** |
| AKUM | | | | *i* AML | AML | 05 19 48.0 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **LEF** | **Lefka** | **1.28** | **103** | Pn | **Pn** | **05 19 22.3** | **-1.7** |
| LEF | | | | Sn | **Sn** | **05 19 39.8** | **-0.2** |
| **LEF** | **Lefka** | **1.28** | **103** | P | **Pn** | **05 19 22.6** | **-1.4** |
| LEF | | | | S | **Sn** | **05 19 39.3** | **-0.5** |
| **TROD** | **Troodos** | **1.31** | **110** | P | **Pn** | **05 19 24.5** | **-0.1** |
| TROD | | | | S | **Sn** | **05 19 43.7** | **+2.6** |
| TROD | | | | AML | AML | 05 19 55.4 | |
| | 3.6nm,0.6s | | | | | | |
| TROD | | | | AML | AML | 05 19 58.2 | |
| | 4.8nm,1.0s | | | | | | |
| **ANTB** | **Antalya** | **1.59** | **339** | Pn | **Pn** | **05 19 28.6** | **+0.3** |
| ANTB | | | | Sn | **Sn** | **05 19 50.5** | **+2.8** |
| **TEKE** | **Tekeli-Mersin** | **1.60** | **62** | Pn | **Pn** | **05 19 27.2** | **-1.1** |
| TEKE | | | | Sn | **Sn** | **05 19 48.8** | **+1.0** |
| **AKAS** | **Kas** | **1.65** | **300** | Pn | **Pn** | **05 19 29.9** | **+0.7** |
| **AKAS** | **Kas** | **1.65** | **300** | P | **Pn** | **05 19 29.9** | **+0.7** |
| AKAS | | | | S | Sn | 05 19 59.1 | +10 |
| **ASGA** | **Asgata** | **1.66** | **112** | P | **Pn** | **05 19 29.5** | **+0.2** |
| ASGA | | | | S | **Sn** | **05 19 54.2** | **+4.8** |
| ASGA | | | | AML | AML | 05 20 02.4 | |
| | 5.5nm,0.7s | | | | | | |
| ASGA | | | | AML | AML | 05 20 08.1 | |
| | 5.1nm,0.7s | | | | | | |
| **CSS** | **Mathiatis** | **1.67** | **105** | Pn | **Pn** | **05 19 29.1** | **-0.2** |
| CSS | | | | Sn | **Sn** | **05 19 51.6** | **+2.0** |
| **CSS** | **Mathiatis** | **1.67** | **105** | | **Pn** | **05 19 29.4** | **0.0** |
| CSS | | | | Sn | **Sn** | **05 19 48.5** | **-1.1** |
| **CSS** | **Mathiatis** | **1.67** | **105** | P | **Pn** | **05 19 30.2** | **+0.9** |
| **CSS** | **Mathiatis** | **1.67** | **105** | P | **Pn** | **05 19 28.9** | **-0.4** |
| **CSS** | **Mathiatis** | **1.67** | **105** | P | **Pn** | **05 19 29.7** | **+0.3** |
| **CSS** | **Mathiatis** | **1.67** | **105** | P | **Pn** | **05 19 29.4** | **0.0** |
| CSS | | | | S | **Sn** | **05 19 52.1** | **+2.6** |
| CSS | | | | AML | AML | 05 20 02.1 | |
| | 2.5nm,0.6s | | | | | | |
| CSS | | | | AML | AML | 05 20 02.9 | |
| | 1.9nm,1.1s | | | | | | |
| **ATHAL** | **Athalassa** | **1.68** | **99** | P | **Pn** | **05 19 30.2** | **+0.7** |
| ATHAL | | | | S | **Sn** | **05 19 52.1** | **+2.2** |
| ATHAL | | | | AML | AML | 05 20 14.7 | |
| | 4.4nm,0.6s | | | | | | |
| ATHAL | | | | AML | AML | 05 20 14.8 | |
| | 5.3nm,0.7s | | | | | | |
| **AKIN** | **Akıncılar- Kıb** | **1.76** | **102** | Pn | **Pn** | **05 19 30.5** | **-0.1** |
| **ELL** | **Elmali** | **1.78** | **319** | Pn | **Pn** | **05 19 31.6** | **+0.6** |
| **ELL** | **Elmali** | **1.78** | **319** | Pn | **Pn** | **05 19 32.0** | **+1.1** |
| ELL | | | | Sn | **Sn** | **05 19 51.6** | **-0.9** |
| **ELL** | **Elmali** | **1.78** | **319** | P | **Pn** | **05 19 32.1** | **+1.1** |
| ELL | | | | | | 05 19 51.6 | |
| **ELL** | **Elmali** | **1.78** | **319** | P | **Pn** | **05 19 33.1** | **+2.1** |
| ELL | | | | S | Sn | 05 20 04.8 | +12 |
| **KORT** | **Korkueli** | **1.79** | **333** | Pn | **Pn** | **05 19 31.3** | **+0.2** |
| **KORT** | **Korkueli** | **1.79** | **333** | P | **Pn** | **05 19 31.5** | **+0.4** |
| KORT | | | | S | **Sn** | **05 19 57.9** | **+5.2** |
| KORT | | | | *i* AML | AML | 05 20 09.0 | |
| | comp=Z,614nm,0.6s | | | | | | |
| **HDMB** | **Hadim** | **1.79** | **30** | Pn | **Pn** | **05 19 30.4** | **-0.8** |
| **YORU** | **Yoruktepe-Mers** | **1.81** | **65** | Pn | **Pn** | **05 19 30.8** | **-0.5** |
| **OREN** | **Orenkoy-Mersin** | **1.88** | **64** | Pn | **Pn** | **05 19 31.8** | **-0.3** |
| **MVOU** | **Mavrovouni** | **1.90** | **101** | P | **Pn** | **05 19 31.5** | **-0.9** |
| MVOU | | | | S | **Sn** | **05 19 59.5** | **+4.4** |
| MVOU | | | | AML | AML | 05 20 12.0 | |
| | 3.3nm,1.2s | | | | | | |
| MVOU | | | | AML | AML | 05 20 14.3 | |
| | 2.7nm,0.7s | | | | | | |
| **AKK1** | **Akkuyu-Mersin** | **1.91** | **67** | Pn | **Pn** | **05 19 32.3** | **-0.3** |
| **AKKU** | **Akkuyu-Mersin** | **1.92** | **67** | Pn | **Pn** | **05 19 32.2** | **-0.6** |
| **GULN** | **MERSIN_Gulnar** | **1.93** | **66** | P | **Pn** | **05 19 32.0** | **-0.9** |
| GULN | | | | S | **Sn** | **05 19 52.5** | **-3.4** |
| GULN | | | | *i* AML | AML | 05 20 01.0 | |
| | comp=Z,700nm,0.9s | | | | | | |
| **TEVE** | **Tevekalti-Mers** | **1.97** | **58** | Pn | **Pn** | **05 19 32.5** | **-1.0** |
| **YESI** | **Yesilovacik-Me** | **2.01** | **66** | Pn | **Pn** | **05 19 33.4** | **-0.5** |
| **IZZE** | **Mula-Seydike** | **2.02** | **301** | P | **Pn** | **05 19 33.9** | **-0.2** |
| IZZE | | | | S | **Sn** | **05 19 57.1** | **-1.0** |
| **BUCA** | **Burdur, Bucak-** | **2.02** | **341** | P | **Pn** | **05 19 34.6** | **+0.4** |
| BUCA | | | | S | **Sn** | **05 20 01.7** | **+3.4** |
| BUCA | | | | *i* AML | AML | 05 20 12.0 | |
| | comp=Z,526nm,0.6s

CAEL *i* AML AML 05 20 38.0
comp=Z,1µm,0.9s

**KMER Konya-Meram** 2.48 19 P Pn 05 19 41.8 +1.2
KMER S Sn 05 20 09.7 -0.1
KMER *i* AML AML 05 20 27.0
comp=Z,428nm,0.8s

**KIZK Mersin** 2.49 64 Pn Pn 05 19 40.6 +0.1
**KIZK Mersin** 2.49 64 P Pn 05 19 40.7 +0.1
KIZK S Sn 05 20 10.3 +0.6
KIZK *i* AML AML 05 20 18.0
comp=Z,630nm,0.6s

**BRDR BURDUR-Merkez** 2.51 336 P Pn 05 19 42.8 +1.9
BRDR S Sn 05 20 13.0 +2.6
BRDR *i* AML AML 05 20 27.0
comp=Z,195nm,1.0s

**APMY Acipayam-Deniz** 2.65 322 Pn Pn 05 19 43.7 +0.9
**KONT Konya--Tatoy** 2.65 17 Pn Pn 05 19 43.2 +0.4
**KONT Konya--Tatoy** 2.65 17 P Pn 05 19 43.7 +0.9
KONT S Sn 05 20 14.5 +0.7
KONT *i* AML AML 05 20 31.0
comp=Z,437nm,0.8s

**DOGA KONYA_Doganhis** 2.70 5 P Pn 05 19 43.9 +0.3
DOGA S Sn 05 20 14.1 -1.0
DOGA *i* AML AML 05 20 27.0
comp=Z,498nm,0.7s

**INCE Denizli-Bozkur** 2.71 328 P Pn 05 19 44.9 +1.2
INCE S Sn 05 20 15.0 -0.3
INCE *i* AML AML 05 20 38.0
comp=Z,201nm,0.9s

**BASM Basmaki-Afyon** 2.72 337 Pn Pn 05 19 44.6 +0.8
**ARG Arkhangelos** 2.75 288 Pn 05 19 43.8 -0.4
ARG Sn Sn 05 20 13.3 -2.9
**ARG Arkhangelos** 2.75 288 P Pn 05 19 43.5 -0.7
**ARG Arkhangelos** 2.75 288 P Pn 05 19 43.8 -0.4
ARG 05 20 13.4
**ARG Arkhangelos** 2.75 288 P Pn 05 19 43.7 -0.4
ARG S Sn 05 20 13.3 -2.9
**YVAC Isparta, Yalva** 2.85 358 P Pn 05 19 46.3 +0.6
YVAC S Sn 05 20 18.4 -0.5
YVAC *i* AML AML 05 20 25.0
comp=Z,277nm,0.7s

**LADK Ladik-KONYA** 2.90 16 Pn Pn 05 19 46.9 +0.7
**AFYN Afyon-Dinar-K** 2.94 347 P Pn 05 19 47.3 +0.5
AFYN S Sn 05 20 20.5 -0.4
AFYN *i* AML AML 05 20 30.0
comp=Z,388nm,1.0s

**KERG Konya-Eregli** 2.99 47 P Pn 05 19 48.3 +0.8
KERG S Sn 05 20 20.4 -1.8
KERG *i* AML AML 05 20 33.0
comp=Z,558nm,0.5s

**YESY Yesilyurt** 3.04 38 Pn Pn 05 19 48.5 +0.3
**ALIN Konya, Altinte** 3.12 22 P Pn 05 19 50.7 +1.4
ALIN S Sn 05 20 25.9 +0.4
ALIN *i* AML AML 05 20 53.0
comp=Z,139nm,1.5s

**KDHN Kadinhani** 3.16 11 P Pn 05 19 49.6 -0.2
KDHN S Sn 05 20 21.5 -4.9
KDHN *i* AML AML 05 20 31.0
comp=Z,133nm,0.5s

**SHUT Suhut-Afyon** 3.20 348 Pn Pn 05 19 51.3 +0.8
**UCKU Afyonkarahisar** 3.22 1 P Pn 05 19 51.8 +1.2
UCKU S Sn 05 20 26.6 -1.2
UCKU *i* AML AML 05 20 35.0
comp=Z,117nm,0.5s

**SULT Sultanhani-AKS** 3.27 31 Pn Pn 05 19 51.8 +0.4
**GULE Gulek** 3.33 55 P Pn 05 19 54.7 +2.5
GULE S Sn 05 20 33.0 +2.5
GULE *i* AML AML 05 20 47.0
comp=Z,630nm,0.8s

**DAT Datca** 3.34 294 P Pn 05 19 51.9 -0.4
DAT S Sn 05 20 29.4 -1.4
**CHBY Cihanbeyli** 3.39 21 Pn Pn 05 19 53.7 +0.7
**KARP Karpathos** 3.44 273 Pn Pn 05 19 53.9 +0.3
KARP Sn Sn 05 20 33.4 +0.4
**KARP Karpathos** 3.44 273 P Pn 05 19 53.3 -0.3
KARP S Sn 05 20 32.5 -0.6
**KARP Karpathos** 3.44 273 P Pn 05 19 53.6 0.0
**KARP Karpathos** 3.44 273 P Pn 05 19 53.7 +0.1
**KARP Karpathos** 3.44 273 P Pn 05 19 53.9 +0.3
KARP S Sn 05 20 33.7 +0.6
**CBEY Konya-Cihanbey** 3.46 19 P Pn 05 19 56.1 +2.1
CBEY S Sn 05 20 33.0 -0.8
CBEY *i* AML AML 05 20 40.0
comp=Z,172nm,0.4s

**KIZT Kizilcal** 3.48 7 Pn Pn 05 19 55.2 +0.9
**KARA Karaisali** 3.50 57 Pn Pn 05 19 55.2 +0.8
**NISR Nisiros** 3.64 290 P Pn 05 19 55.2 -1.1
**BODT Bodrum** 3.67 298 P Pn 05 19 56.2 -0.6
**CMRD Camardi-Nigde** 3.68 51 Pn Pn 05 19 57.6 +0.6
**BSIR Belisirma, Guz** 3.69 39 P Pn 05 19 59.1 +2.0
BSIR S Sn 05 20 51.8 +12
BSIR *i* AML AML 05 21 05.0
comp=Z,142nm,0.9s

**NIDE Nigde/Merkez-G** 3.76 46 P Pn 05 19 59.4 +1.2
NIDE S Sn 05 20 41.5 +0.2
NIDE *i* AML AML 05 20 59.0
comp=Z,133nm,0.9s

**KULA Kula-Manisa** 3.78 326 P Pn 05 19 57.5 -0.8
KULA S Sn 05 20 40.9 -0.7
**KULU Kulu** 3.85 19 Pn Pn 05 20 00.1 +0.8
**DQRL Deir Qamar** 3.86 115 *e*P Pn 05 20 00.2 +0.7
**CEYT Ceyhan** 3.88 64 Pn Pn 05 20 00.3 +0.6
**HNTI Hanita** 3.92 125 P Pn 05 20 00.6 +0.4
**HWQ Hawqa** 3.93 105 *e*P Pn 05 20 00.8 +0.4
**QRWL Qaraoun** 4.02 116 *e*P Pn 05 20 01.9 +0.2
**YAYX Yaylak** 4.02 28 Pn Pn 05 20 02.5 +0.8
**TAHT Tahtakopru-Hat** 4.03 75 Pn Pn 05 20 02.4 +0.8
**BEIL Beino** 4.05 101 *e*P Pn 05 20 01.7 -0.3
**MMA0 Mount Meron ar** 4.11 124 P Pn 05 20 02.8 -0.1
**MMA0B Mount Meron ar** 4.11 124 S Sn 05 20 50.1 +0.4
**MMA0B Mount Meron ar** 4.11 124 P Pn 05 20 02.9 0.0
**MMAI Mount Meron Ar** 4.11 124 Pn Pn 05 20 02.7 -0.2
29nm,0.3s,baz=310,slow=12,SNR=47
MMAI Sn Sn 05 20 49.0 -0.7
baz=353,slow=11
35nm,0.4s
**KOZT Kozan** 4.14 59 Pn Pn 05 20 03.7 +0.4
**RCY Rachaya** 4.16 116 *e*P Pn 05 20 03.2 -0.4
**NATI Neve Ativ** 4.20 119 P Pn 05 20 03.8 -0.2
**NATI Neve Ativ** 4.20 119 P Pn 05 20 04.6 +0.6
**ZKR Zakros** 4.23 267 P Pn 05 20 04.1 -0.3
**KSHT Keshet** 4.41 122 P Pn 05 20 07.5 +0.6
**KSHT Keshet** 4.41 122 S Sn 05 20 57.8 +0.8
**SHMJ Saham** 4.53 125 P Pn 05 20 09.0 +0.5
**BR231 Keskin MP Arra** 4.56 14 Pn Pn 05 20 10.2 +1.2
**ANTO Ankara** 4.59 14 Pn 05 20 10.5 +1.0
**ANTO Ankara** 4.59 14 P Pn 05 20 10.5 +1.0
**ANTO Ankara** 4.59 14 P Pn 05 20 10.3 +0.9
**BR104 Keskin Array S** 4.65 22 P Pn 05 20 10.9 +0.6
**BR105 Keskin Array S** 4.65 22 P Pn 05 20 10.9 +0.5
**QRNJ Al-Qirein** 4.65 130 P Pn 05 20 11.1 +0.9
**BRTR Keskin Array B** 4.67 22 Pn 05 20 11.4 +0.8
**BRTR Keskin Array B** 4.67 22 Pn Pn 05 20 11.1 +0.5
5.4nm,0.3s,baz=192,slow=14,SNR=64
BRTR Sn Sn 05 21 06.6 +3.1
5.2nm,0.3s,baz=215,slow=27,SNR=8.4
BRTR LR LR 05 22 15.6
comp=Z,341nm,18.6s,baz=174,slow=43
9.9nm,0.4s
**BRTR Keskin Array B** 4.67 22 P Pn 05 20 11.4 +0.8
**BR131 Keskin Array S** 4.67 22 Pn 05 20 11.2 +0.6
**BR131 Keskin Array S** 4.67 22 *d* iP Pn 05 20 11.1 +0.5
**BR106 Keskin Array S** 4.67 22 P Pn 05 20 10.7 +0.1
**HMDT Nahal Hemdat** 4.68 131 P Pn 05 20 11.5 +0.9
**HMDT Nahal Hemdat** 4.68 131 P Pn 05 20 11.4 +0.8
**UJAP Al Uja** 4.85 134 P Pn 05 20 12.8 +0.8
**BALJ Balqa** 4.86 132 Pn 05 20 13.3 +0.1
**THR8 Santorini-Mono** 4.88 283 P Pn 05 20 12.5 -0.9
**SANT Santorini** 4.89 283 Pn Pn 05 20 14.3 +0.8
**SANT Santorini** 4.89 283 P Pn 05 20 13.6 0.0
**THR2 Thira island,** 4.92 284 P Pn 05 20 13.4 -0.6
**THR6 Thira Island,** 4.94 283 P Pn 05 20 13.6 -0.5
**THR3 Thira Island,** 4.95 283 P Pn 05 20 13.7 -0.5
**CMBO Columbo, Santo** 4.95 284 P Pn 05 20 13.6 -0.7
**BNN Bunyan** 4.96 45 Pn 05 20 15.8 +1.2
**DB3 El Dabaa** 4.96 209 P Pn 05 20 15.2 +0.8
baz=209
DB3 S Sn 05 21 07.9 -2.6
baz=209
**THR9 Santorini-Faro** 4.97 283 P Pn 05 20 14.1 -0.5
**THR5 Thira Island,** 4.99 283 P Pn 05 20 14.4 -0.4
**APE Apeiranthos** 5.00 291 P Pn 05 20 14.9 -0.1

**APE Apeiranthos** 5.00 291 *e*P Pn 05 20 14.7 -0.4
**APE Apeiranthos** 5.00 291 P Pn 05 20 14.6 -0.4
**GAZ Gaziantep** 5.04 68 Pn 05 20 15.9 +0.4
**MDUB Mudurnu** 5.05 359 Pn 05 20 17.6 +1.8
**DSI Dead Sea** 5.09 138 P Pn 05 20 18.2 +1.9
**DSI Dead Sea** 5.09 138 P Pn 05 20 17.2 +0.9
**YTIR Yattir** 5.11 141 S Sn 05 21 14.8 +0.4
**YTIR Yattir** 5.11 141 P Pn 05 20 16.6 0.0
**KZIT Kziot** 5.16 150 P Pn 05 20 17.6 +0.4
**CHOS Chios island** 5.19 306 P Pn 05 20 17.2 -0.5
**MSBI Mazada** 5.28 140 P Pn 05 20 20.2 +1.4
**IDI Anoyia** 5.30 271 Pn Pn 05 20 18.7 -0.4
**IDI Anoyia** 5.30 271 P Pn 05 20 18.4 -0.7
**IDI Anoyia** 5.30 271 Pn Pn 05 20 18.3 -0.9
20nm,0.3s,baz=61,slow=16,SNR=46
IDI Sn Sn 05 21 12.5 -6.4
34nm,0.3s,baz=295,slow=19,SNR=15
**MATC Matruh** 5.33 222 P Pn 05 20 19.5 -0.1
baz=221
**GHAJ Ghor Haditha** 5.40 138 Pn Pn 05 20 17.4 -3.0
**LISJ El Lisan** 5.40 139 P Pn 05 20 22.6 +2.2
**KOT Kottamia** 5.48 176 P Pn 05 20 22.9 +1.2
baz=174
KOT S Sn 05 21 21.2 -2.3
baz=174
**HMYD Mayadein** 5.62 185 P Pn 05 20 24.9 +1.3
baz=184
**ASF Jabal al Asfar** 5.62 124 Pn Pn 05 20 24.7 +1.1
0.7nm,0.3s,baz=204,slow=0.2,SNR=5.7
ASF Sn Sn 05 21 29.3 +2.3
1.5nm,0.3s,baz=29,slow=0.0,SNR=5.9
3.1nm,0.4s
**SWQJ Swaqa** 5.72 135 P Pn 05 20 25.6 +0.6
**HNAT Natroun** 5.80 186 P Pn 05 20 27.1 +1.2
baz=186
**PRNI Paran** 5.90 148 P Pn 05 20 28.2 +0.8
**PRNI Paran** 5.90 148 P Pn 05 20 27.6 +0.2
**KRMI Paran Flat** 5.99 151 P Pn 05 20 28.3 -0.3
**GVD Gavdhos** 5.99 267 P Pn 05 20 28.7 +0.1
**IMMV Iera Moni Meta** 6.03 273 P Pn 05 20 29.0 -0.1
**HRFI Mount Harif** 6.19 149 S Sn 05 21 39.6 -1.2
**HRFI Mount Harif** 6.19 149 P Pn 05 20 31.3 0.0
**RODP Rodopos** 6.21 274 P Pn 05 20 31.6 0.0
**MBRI Mt Berech** 6.35 151 P Pn 05 20 33.9 +0.3
**MBRI Mt Berech** 6.35 151 P Pn 05 20 34.0 +0.3
**MBRI Mt Berech** 6.35 151 S Sn 05 21 45.0 +0.2
**SLUM Salum** 6.46 234 P Pn 05 20 34.6 -0.5
baz=234
**AQBJ Aqaba** 6.46 150 P Pn 05 20 36.0 +0.9
**EIL Elat** 6.47 151 Pn Pn 05 20 35.6 +0.4
1.9nm,0.3s,baz=332,slow=8.2,SNR=25
EIL Sn Sn 05 21 46.1 -1.7
1.3nm,0.3s,baz=75,slow=17,SNR=1.8
37nm,0.8s
**EIL Elat** 6.47 151 P Pn 05 20 35.1 -0.2
**EIL Elat** 6.47 151 S Sn 05 21 46.9 -1.0
**EIL Elat** 6.47 151 P Pn 05 20 35.2 -0.1
**ANKY Antikythira Is** 6.58 276 P Pn 05 20 36.3 -0.4
**ARPR Arapgir-MALATY** 6.66 54 Pn 05 20 37.1 -0.8
**NBNS Bani Suef** 6.77 181 P Pn 05 20 39.7 +0.4
baz=179
**ALN Alexandroupoli** 6.90 324 Pn Pn 05 20 41.0 0.0
**ALN Alexandroupoli** 6.90 324 P Pn 05 20 41.0 0.0
**HKAT Jabal Katrina** 7.22 161 P Pn 05 20 47.0 +1.3
baz=160
**RDO Rodhopi** 7.33 323 Pn Pn 05 20 47.0 0.0
**ITM Ithomi** 7.83 286 Pn Pn 05 20 53.6 -0.1
**SWA2** 7.93 221 P Pn 05 20 55.5 +0.4
baz=221
**HFRF Wahat Farafira** 8.64 198 P Pn 05 21 04.8 -0.1
baz=198
**LKD2 Lefkada island** 9.20 295 P Pn 05 21 13.2 +0.7
**TIRR Tirgusor** 9.31 347 Pn Pn 05 21 14.5 +0.5
**TIRR Tirgusor** 9.31 347 P Pn 05 21 14.5 +0.5
**FNA Florina** 9.53 307 Pn Pn 05 21 18.9 +1.8
**FNA Florina** 9.53 307 P Pn 05 21 18.9 +1.8
**SIM Simferopol'** 9.75 12 *e*P Pn 05 21 23.8 +3.7
SIM pmax pmax
comp=Z,27nm,1.0s
**HDK1 Dakhla** 9.98 190 P Pn 05 21 23.8 +0.5
baz=190
**KEK Kerkira** 10.14 298 Pn Pn 05 21 25.3 0.0
**MLR Muntele Rosu** 10.88 339 Pn Pn 05 21 34.8 -0.8
**MLR Muntele Rosu** 10.88 339 Pn Pn 05 21 32.1 -3.5
comp=Z,0.1nm,0.3s,baz=259,slow=10,SNR=1.8
comp=Z,0.9nm,0.4s
**MLR Muntele Rosu** 10.88 339 P Pn 05 21 34.8 -0.8
**PLOR5 Plostina Array** 11.02 343 P Pn 05 21 38.8 +1.4
comp=Z,14nm,1.7s
**VRI Vrincioaia** 11.02 343 P Pn 05 21 38.8 +1.4
**VRI Vrincioaia** 11.02 343 P Pn 05 21 38.8 +1.4
comp=Z,9.4nm,1.7s,comp=Z,242nm
**PLOR3 Plostina Array** 11.03 342 P Pn 05 21 39.0 +1.4
comp=Z,17nm,1.8s
**VOIR** 11.11 336 P Pn 05 21 42.5 +3.8
VOIR pmax pmax
comp=Z,4.0nm,1.3s
**PUK Puka** 11.14 310 Pn Pn 05 21 38.2 -0.9
**SCTE Santa Cesarea** 11.22 298 Pn 05 21 38.8 -1.4
**GNI Garni** 11.59 62 Pn Pn 05 21 43.5 -1.9
**GNI Garni** 11.59 62 LR LR 05 27 01.5
comp=Z,58nm,20.8s,baz=264,slow=42
**GNI Garni** 11.59 62 *e*P Pn 05 21 45.2 -0.1
GNI pmax pmax
comp=Z,6.0nm,1.1s
**SHA1 Shidzhatmaz** 12.03 43 *e*P Pn 05 21 52.6 +1.2
**KBZ Khabaz** 12.16 43 Pn P 05 21 59.1 -5.1
comp=Z,0.1nm,0.3s,baz=190,slow=7.1,SNR=5.5
KBZ LR LR 05 27 37.7
comp=Z,68nm,19.6s,baz=240,slow=43
**KBZ Khabaz** 12.16 43 *e*P Pn 05 21 56.8 +3.9
**KIV Kislovodsk** 12.19 42 *e*P Pn 05 21 53.0 -0.4
KIV pmax pmax
comp=Z,7.0nm,1.0s
**TIP Timpagrande** 12.23 292 Pn Pn 05 21 50.4 -3.6
**CEL Celeste** 12.72 287 Pn 05 21 56.5 -4.2
**CUC Castrocucco** 13.13 295 Pn Pn 05 22 03.7 -2.7
**SGRT San Giovanni R** 13.76 302 Pn Pn 05 22 13.2 -1.7
**RAFF Raffo Rosso** 13.83 282 Pn Pn 05 22 13.0 -2.8
**KOLS Kolonicke sedl** 15.08 336 *e*P P 05 22 38.2 +1.5
**KOLS Kolonicke sedl** 15.08 336 *e*P P 05 22 38.1 +1.4
**INTR Introdacqua** 15.13 301 Pn Pn 05 22 32.1 -1.0
INTR lAmb lAmb 05 22 40.3
comp=Z,5.3nm,0.5s
**PSZ Piszkesteto** 15.13 329 Pn Pn 05 22 32.4 -0.6
**PSZ Piszkesteto** 15.13 329 P Pn 05 22 32.4 -0.6
PSZ pmax pmax
comp=Z,4.0nm,0.9s
**AK07 Malin Array Si** 15.21 355 P Pn 05 22 35.0 +1.0
**AK10 Malin Array Si** 15.26 355 P Pn 05 22 35.6 +1.1
**AK09 Malin Array Si** 15.27 355 P Pn 05 22 35.8 +1.1
**AK05 Malin Array Si** 15.28 355 P Pn 05 22 35.9 +1.0
**AK13 Malin Array Si** 15.29 354 P Pn 05 22 36.0 +1.1
**AK08 Malin Array Si** 15.29 355 P Pn 05 22 36.1 +1.1
**AK14 Malin Array Si** 15.30 355 P Pn 05 22 36.2 +1.1
**AK12 Malin Array Si** 15.31 355 P Pn 05 22 36.3 +1.1
**AK02 Malin Array Si** 15.32 355 P Pn 05 22 36.4 +1.1
**AK11 Malin Array Si** 15.34 355 P Pn 05 22 36.7 +1.1
**AK01 Malin Array Si** 15.35 355 P Pn 05 22 36.8 +1.0
**KIEV Kiev** 15.36 355 Pn Pn 05 22 36.0 +0.2
KIEV lAmb lAmb 05 22 52.6
comp=Z,7.5nm,0.7s
**KIEV Kiev** 15.36 355 P Pn 05 22 36.0 +0.2
KIEV pmax pmax
comp=Z,7.0nm,0.7s
**KIEV Kiev** 15.36 355 P Pn 05 22 36.9 +1.1
comp=Z,42nm,0.9s
**AKASG Malin Array Be** 15.36 355 Pn P 05 22 39.2 -0.5
comp=Z,2.0nm,0.3s,baz=179,slow=9.8,SNR=8.9
**AKBB Malin Array Si** 15.36 355 Pn 05 22 36.0 +0.1
AKBB lAmb lAmb 05 22 52.6
comp=Z,8.5nm,0.8s
**AKBB Malin Array Si** 15.36 355 *e*P P 05 22 38.9 -0.8
**AKBB Malin Array Si** 15.36 355 P Pn 05 22 36.9 +1.0
**AK03 Malin Array Si** 15.39 355 P Pn 05 22 37.3 +1.1
**AK04 Malin Array Si** 15.39 355 P Pn 05 22 37.3 +1.1
**KWP Kalwaria Pacla** 15.56 339 Pn Pn 05 22 37.3 -1.2
KWP lAmb lAmb 05 22 58.9
comp=Z,22nm,1.3s
**KWP Kalwaria Pacla** 15.56 339 P Pn 05 22 37.3 -1.2
KWP pmax pmax
comp=Z,22nm,1.3s
**KWP Kalwaria Pacla** 15.56 339 P Pn 05 22 39.5 +1.0
comp=Z,8.4nm,1.1s

**CAMP Campotosto** 15.66 302 Pn Pn 05 22 38.1 -1.9
**NRCA Norcia** 15.97 303 Pn 05 22 42.7 -1.1
**FDMO Fiordimonte** 16.06 304 Pn 05 22 42.9 -2.2
**LANS Liptovska Anna** 16.28 331 *e*P P 05 22 51.8 +1.8
**LANS Liptovska Anna** 16.28 331 *e*P P 05 22 51.8 +1.8
**VORD Divnogorie** 16.57 18 *e*P P 05 22 52.0 -1.1
VORD pmax pmax
comp=Z,6.0nm,0.9s
**MODS Modra-Piesok** 16.63 325 *e*P P 05 22 54.3 +0.4
**MODS Modra-Piesok** 16.63 325 *e*P P 05 22 54.3 +0.4
**RONA Rosalia, Austr** 16.64 322 *i* Pn P 05 22 52.9 -1.1
comp=Z,6.8nm,1.4s
**SOKA Soboth** 16.65 317 *i* Pn P 05 22 54.6 +0.4
comp=Z,1.9nm,0.7s
**ARSA Arzberg** 16.74 320 *i* Pn P 05 22 55.5 +0.4
comp=Z,1.9nm,0.5s
**VSR Storozhevoye** 16.77 17 *e*P Pn 05 22 52.7 -1.0
VSR pmax pmax
comp=Z,5.0nm,1.0s
**OBKA Obir** 16.82 316 *i* Pn P 05 22 56.3 +0.2
comp=Z,4.3nm,0.8s
**CONA Conrad Observa** 17.01 322 *e*Pn P 05 22 57.4 -0.7
comp=Z,1.8nm,1.0s
**RAYN Ar Rayn** 17.06 130 Pn Pn 05 22 54.1 -3.6
**RAYN Ar Rayn** 17.06 130 P Pn 05 22 54.1 -3.6
RAYN pmax pmax
comp=Z,9.0nm,1.5s
**SABO M.te Sabotino** 17.08 314 Pn 05 22 57.5 -0.2
SABO lAmb lAmb 05 22 58.5
comp=Z,6.3nm,0.9s
**PRED Cave del Predi** 17.35 315 Pn 05 23 00.7 -0.4
**MYKA Terra Mystica** 17.41 315 *i* Pn P 05 23 02.3 -0.2
comp=Z,2.5nm,0.5s
**VRH Novokhopyorsk** 17.46 22 *e*P P 05 23 03.7 +0.7
VRH pmax pmax
comp=Z,10.0nm,1.0s
**TATN Tataouine** 17.51 267 Pn Pn 05 23 00.9 -2.2
TATN lAmb lAmb 05 23 07.4
comp=Z,13nm,0.9s
**MORC Moravsky Berou** 17.55 329 Pn Pn 05 23 02.1 -1.5
**MORC Moravsky Berou** 17.55 329 P Pn 05 23 02.1 -1.5
MORC pmax pmax
comp=Z,5.0nm,1.2s
**STAL STALIGIAL** 17.75 313 Pn 05 23 05.4 -0.6
**MOA Molln** 17.78 320 *i* Pn P 05 23 07.9 +1.3
comp=Z,2.2nm,0.5s
**KBA Koelnbreinsper** 17.83 316 *i* Pn P 05 23 08.4 +1.1
comp=Z,5.1nm,0.7s
**KEST Kesra** 17.92 277 P Pn 05 23 06.3 -1.9
**KEST Kesra** 17.92 277 Pn Pn 05 23 06.7 -1.5
comp=Z,0.5nm,0.3s,baz=357,slow=4.2,SNR=5.2
comp=Z,6.0nm,0.8s
**VSL Villasalto** 17.92 290 Pn 05 23 06.8 -1.3
**TEOL Teolo** 17.96 310 Pn 05 23 08.0 -0.5
**ZCCA Zocca** 17.98 306 Pn 05 23 07.3 -1.5
**LPSR Galich'ya Gora** 18.00 15 *e*P Pn 05 23 07.6 -1.4
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**ABTA Abfaltersbach** 18.12 314 *i* Pn P 05 23 10.5 0.0
comp=Z,2.6nm,0.6s
**CTI Castel Tesino** 18.29 312 P P 05 23 11.0 -1.3
**CTI Castel Tesino** 18.29 312 P P 05 23 11.0 -1.3
CTI pmax pmax
comp=Z,4.0nm,0.7s
**LESA Schwarzleotal** 18.40 316 *i* Pn Pn 05 23 14.7 +0.8
comp=Z,1.9nm,0.6s
**GEC2 GERESS Array S** 18.70 321 P P 05 23 16.3 -0.5
**GERES GERESS Array B** 18.70 321 P Pn 05 23 16.8 -0.7
**GERES GERESS Array B** 18.70 321 Pn Pn 05 23 17.1 -0.4
comp=Z,1.0nm,0.3s,baz=159,slow=9.4,SNR=11
comp=Z,1.1nm,0.3s
**ZVC Zvikov** 18.84 323 *e*P Pn 05 23 23.8 +4.7
**WTTA Wattenberg** 18.91 315 *e*Pn Pn 05 23 20.5 +0.3
comp=Z,13nm,1.2s
**KHC Kasperske Hory** 18.94 322 P P 05 23 19.4 0.0
KHC lAmb lAmb 05 23 20.7
comp=Z,13nm,1.0s
**KHC Kasperske Hory** 18.94 322 *e*P Pn 05 23 20.1 -0.3
**KHC Kasperske Hory** 18.94 322 *e*P Pn 05 23 20.1 -0.3
**KHC Kasperske Hory** 18.94 322 P Pn 05 23 19.7 -0.7
comp=Z,15nm,0.8s
**WATA Walderalm** 18.98 315 *i* Pn Pn 05 23 20.2 -0.8
comp=Z,7.6nm,0.7s
**SQTA Sankt Quirin** 19.13 314 *i* Pn Pn 05 23 22.6 -0.2
comp=Z,15nm,1.0s
**MOTA Moosalm** 19.26 314 *i* Pn Pn 05 23 23.4 -0.9
comp=Z,12nm,0.9s
**WET Wettzell** 19.31 321 P Pn 05 23 23.7 -1.1
WET pmax pmax
comp=Z,18nm,1.0s
**FETA Feichten** 19.32 313 *i* Pn Pn 05 23 24.4 -0.6
comp=Z,14nm,1.1s
**FUORN Ofenpass-Fuorn** 19.40 312 P Pn 05 23 25.6 -0.6
**RETA Reutte** 19.53 314 *i* Pn P 05 23 25.7 -0.1
comp=Z,11nm,1.0s
**TUE Stuetta** 19.90 310 P P 05 23 29.8 -0.3
**BRG Berggiesshubel** 19.93 326 *e*P Pn 05 23 36.1 +4.0
BRG Amp 05 23 36.6
comp=Z,3.6nm,0.7s
**DAVA Damuels** 19.95 313 *i* Pn P 05 23 30.8 +0.2
comp=Z,16nm,0.5s
**SBF Sospel** 20.22 302 *e*P P 05 23 33.7 +0.3
SBF pmax pmax
comp=Z,7.0nm,0.8s
**GRA1 Grafenberg Arr** 20.50 320 P P 05 23 36.0 -0.2
GRA1 lAmb lAmb 05 23 45.8
comp=Z,12nm,0.7s
**GRF Grafenberg Arr** 20.50 320 P P 05 23 36.1 -0.2
GRF pmax pmax
comp=Z,12nm,0.7s
**BELG Belogornoye** 20.54 29 P P 05 23 35.5 -1.2
comp=Z,11nm,0.4s;baz=35,slow=20,SNR=10
comp=Z,11nm,0.4s
**BELG Belogornoye** 20.54 29 *de*P Pn 05 23 38.7 -0.6
BELG pmax pmax
comp=Z,2.0nm,0.9s
**CLL Collm** 20.66 326 P P 05 23 36.3 -1.7
**CLL Collm** 20.66 326 *i* P P 05 23 37.9 -0.1
comp=Z,4.0nm,0.5s
**CLL Collm** 20.66 326 *i* P P 05 23 37.9 -0.1
CLL pmax pmax
comp=Z,4.0nm,0.5s
**MOX Moxa** 20.89 323 P P 05 23 40.9 +0.5
MOX pmax pmax
comp=Z,13nm,0.7s
**MBDF Montbardon** 20.93 304 *e*P Pn 05 23 42.8 -1.4
MBDF pmax pmax
comp=Z,6.0nm,0.7s
**SLE Schleitheim** 21.01 313 P P 05 23 40.2 -1.6
SLE pmax pmax
comp=Z,8.0nm,1.0s
**BNI Bardonecchia** 21.10 305 P P 05 23 42.8 -0.1
**BNI Bardonecchia** 21.10 305 P P 05 23 42.8 -0.1
BNI pmax pmax
comp=Z,4.0nm,0.9s
**SENIN Lac Senin/Sane** 21.15 308 P P 05 23 42.8 -0.7
**LPG La Plagne** 21.19 306 *e*P P 05 23 47.7 +3.6
LPG pmax pmax
comp=Z,4.0nm,0.7s
**LPL La Plagne** 21.21 306 *e*P P 05 23 46.4 +2.2
LPL pmax pmax
comp=Z,5.0nm,0.8s
**BFO Black Forest** 21.37 314 P P 05 23 44.5 -1.2
**BFO Black Forest** 21.37 314 P P 05 23 44.5 -1.2
BFO pmax pmax
comp=Z,4.0nm,0.8s
**ORIF Oris-en-Rattie** 21.59 304 *e*P P 05 23 49.4 +1.2
ORIF pmax pmax
comp=Z,6.0nm,0.9s
**ECH Echery** 22.01 313 P P 05 23 51.4 -1.1
ECH lAmb lAmb 05 23 52.7
comp=Z,7.3nm,0.8s
**ECH Echery** 22.01 313 P P 05 23 51.4 -1.1
ECH pmax pmax
comp=Z,7.0nm,0.8s
**HINF Hinteralfeld** 22.02 312 *e*P P 05 23 51.6 -1.1
HINF pmax pmax
comp=Z,3.0nm,0.7s
**CDF Champ du Feu** 22.03 314 *e*P P 05 23 52.7 -0.1
CDF pmax pmax
comp=Z,1.0nm,0.4s
**VIVF Saint-Julien-l** 22.40 303 *e*P P 05 23 56.5 -0.3
VIVF pmax pmax
comp=Z,5.0nm,1.0s
**HAU Haudompre** 22.41 312 *e*P P 05 23 55.3 -1.5

HAU pmax pmax
comp=Z,8.0nm,0.6s
**VSU Vasula 23.26 354⇑** *eP* **P 05 24 06.2 +0.8**
VSU pmax pmax
comp=Z,9.0nm,1.1s
**WLF Walferdange 23.27 316** P **P**
WLF IAmb IAmb 05 24 24.1
comp=Z,6.2nm,0.9s
**WLF Walferdange 23.27 316** P **P 05 24 04.2 -1.4**
WLF pmax pmax
comp=Z,6.0nm,0.9s
**SMF Signal de Mont 23.48 307** *eP* **P 05 24 07.2 -0.5**
SMF pmax pmax
comp=Z,6.0nm,1.0s
**LOR Lormes 23.68 308** *eP* **P 05 24 08.2 -1.4**
LOR pmax pmax
comp=Z,6.0nm,1.1s
**MTLF Montolieu 23.80 298** P **P 05 24 10.7 0.0**
MTLF pmax pmax
comp=Z,11nm,1.0s
**SSF Saint Saulge 23.84 308** *eP* **P 05 24 09.8 -1.2**
SSF pmax pmax
comp=Z,7.0nm,1.0s
**BGES Gesves 24.21 316** *d*P **P 05 24 14.4 0.0**
**CAF Calviac 24.21 302** *eP* **P 05 24 15.9 +1.4**
CAF pmax pmax
comp=Z,4.0nm,0.9s
**GIVF Givet 24.23 315** *eP* **P 05 24 13.2 -1.4**
GIVF pmax pmax
comp=Z,5.0nm,0.6s
**DOU Dourbes 24.36 315** *d*P **P 05 24 15.0 -0.7**
comp=Z,3.9nm,0.8s
**CEST Esterri de Car 24.39 296** P **P 05 24 15.8 -0.4**
CEST IAmb IAmb 05 24 26.4
comp=Z,4.5nm,1.0s
**BAIF Baives 24.57 315** *eP* **P 05 24 16.6 -1.0**
BAIF pmax pmax
comp=Z,7.0nm,0.8s
**ABKAR Akbulak array 25.07 48** P **P 05 24 21.9 -0.3**
**ETSF Etsaut 25.75 297** *eP* **P 05 24 28.8 +0.3**
ETSF pmax pmax
comp=Z,2.0nm,0.4s
**TAM Tamanrasset 25.76 248** P **P 05 24 32.1 +3.2**
TAM pmax pmax
comp=Z,9.0nm,1.1s
**KIRV Kirov 26.08 22***de*P **P 05 24 31.3 +0.1**
**MFF Saint Martin d 26.11 305** *eP* **P 05 24 33.2 +1.6**
MFF pmax pmax
comp=Z,3.0nm,0.8s
**SJPF Ste Jean 26.26 297** *eP* **P 05 24 34.8 +1.7**
SJPF pmax pmax
comp=Z,2.0nm,0.6s
**FINES FINESS Array B 26.27 354** P **P 05 24 32.0 -0.9**
**FINES FINESS Array B 26.27 354** P **P 05 24 31.1 -1.8**
comp=Z,2.8nm,0.6s,baz=154,slow=12,SNR=17
comp=Z,2.8nm,0.6s
**FINES FINESS Array B 26.27 354** P **P 05 24 32.0 -0.9**
**FIA1 FINESS Array S 26.27 354** P **P 05 24 33.0 +0.1**
**HFS Hagfors 27.26 341** P **P 05 24 40.6 -1.3**
comp=Z,1.4nm,0.4s,baz=134,slow=8.4,SNR=12
comp=Z,1.4nm,0.4s
**ARU Arti 27.96 33***c iP* **P 05 24 47.5 -0.6**
ARU 05 25 36.9
ARU S **S 05 29 30.5 +2.0**
ARU SS **SnSn 05 30 47.7 +1.5**
ARU pmax pmax
comp=Z,5.0nm,1.2s
**ESBB Sonseca Array 28.22 289** P **P 05 24 51.6 +0.9**
ESBB IAmb IAmb 05 25 24.2
comp=Z,5.3nm,1.2s
**ESDC Sonseca Array 28.22 289** P **P 05 24 51.5 +0.7**
comp=Z,1.8nm,0.7s,baz=80,slow=9.3,SNR=18
comp=Z,1.8nm,0.7s
**NC602 NORSAR Array S 28.36 339** P **P 05 24 52.6 +1.0**
NC602 IAmb IAmb 05 25 19.1
comp=Z,19nm,1.4s
**NORES NORESS Array B 28.36 339** P **P 05 24 54.0 +2.4**
**NC405 NORSAR Array S 28.62 340** P **P 05 24 56.4 +2.4**
NC405 IAmb IAmb 05 25 34.0
comp=Z,16nm,1.5s
**NAO01 NORSAR Array S 28.64 339** P **P 05 24 55.5 +1.4**
**NB2 NORSAR Subarra 28.70 340** P **P 05 24 52.6 -2.1**
comp=Z,0.5nm,0.5s,baz=141,slow=9.3
**NOA NORSAR Array B 28.70 340** P **P 05 24 53.0 -1.7**
comp=Z,0.5nm,0.5s,baz=141,slow=9.3,SNR=2.8
comp=Z,0.5nm,0.5s
**NBO00 NORSAR Array S 28.82 339** P **P 05 24 54.7 -1.1**
NBO00 IAmb IAmb 05 25 10.2
comp=Z,13nm,1.1s
**EKA Eskdalemuir Ar 30.91 321** P **P 05 25 12.4 -1.9**
comp=Z,0.5nm,0.3s,baz=121,slow=9.9,SNR=11
comp=Z,0.5nm,0.3s
**KK31 Karatay Array 31.05 64** P **P 05 25 15.1 -0.6**
KK31 IAmb IAmb 05 25 22.5
comp=Z,2.4nm,0.8s
**KK31 Karatay Array 31.05 64** P **P 05 25 15.1 -0.6**
KK31 pmax pmax
comp=Z,2.0nm,0.8s
**KKAR Karatay Array 31.05 64** P **P 05 25 15.0 -0.7**
**KKAR Karatay Array 31.05 64** P **P 05 25 15.0 -0.7**
**BRVK Borovoye 32.48 45⇑** *eP* **P 05 25 28.2 +0.1**
BRVK pmax pmax
comp=Z,1.0nm,0.8s
**ARCES ARCESS Array B 34.33 356** P **P 05 25 42.8 -1.2**
**ARCES ARCESS Array B 34.33 356** P **P 05 25 42.2 -1.8**
comp=Z,0.7nm,0.3s,baz=174,slow=9.3,SNR=13
comp=Z,0.7nm,0.3s
**ARCES ARCESS Array B 34.33 356** P **P 05 25 42.8 -1.2**
ARCES pmax pmax
comp=Z,13nm,1.5s
**TOA0 Torodi Ar. Sit 34.74 238** P **P 05 25 48.1 0.0**
TOA0 IAmb IAmb 05 26 24.7
comp=Z,7.6nm,1.4s
**TORD Torodi Ar. Bea 34.74 238** P **P 05 25 47.2 -0.9**
TORD IAmb IAmb 05 25 50.7
comp=Z,1.8nm,0.8s
**TORD Torodi Ar. Bea 34.74 238** P **P 05 25 49.2 +1.1**
comp=Z,2.7nm,0.8s,baz=38,slow=9.2,SNR=16
comp=Z,2.7nm,0.8s
**NRN Naryn 35.18 66** P **P 05 25 53.2 +1.1**
NRN IAmb IAmb 05 25 58.4
comp=Z,2.7nm,0.9s
**NRN Naryn 35.18 66** P **P 05 25 53.2 +1.1**
NRN pmax pmax
comp=Z,3.0nm,0.9s
**KSH Kashi 35.37 70** P **P 05 25 50.0 -3.5**
**KURBB Kurchatov Arra 37.02 51** P **P 05 26 07.2 0.0**
comp=Z,1.7nm,0.8s,baz=270,slow=8.5,SNR=4.3
KURBB PP **PnPn 05 27 34.5 +1.6**
comp=Z,1.5nm,0.7s,baz=270,slow=11,SNR=6.7
comp=Z,1.7nm,0.8s
**KURK Kurchatov 37.08 51⇑** *eP* **P 05 26 09.7 +1.9**
KURK pmax pmax
comp=Z,2.0nm,0.9s
**MAKZ Makanchi 39.17 57** P **P 05 26 26.3 +0.8**
MAKZ IAmb IAmb 05 26 28.4
comp=Z,4.1nm,1.1s
**MAKZ Makanchi 39.17 57** P **P 05 26 26.3 +0.8**
MAKZ pmax pmax
comp=Z,4.0nm,1.1s
**MK31 Makanchi Array 39.38 57** P **P 05 26 28.1 +0.8**
MK31 IAmb IAmb 05 26 32.6
comp=Z,4.2nm,1.0s
**MK31 Makanchi Array 39.38 57***c iP* **P 05 26 27.5 +0.2**
**MKAR Makanchi Array 39.38 57** P **P 05 26 27.6 +0.3**
comp=Z,3.9nm,0.7s,baz=278,slow=6.7,SNR=31
comp=Z,3.9nm,0.7s
**MKAR Makanchi Array 39.38 57** P **P 05 26 27.7 +0.4**
**ZAA0 Zalesovo Array 41.16 46** P **P 05 26 43.3 +1.5**
ZAA0 IAmb IAmb 05 27 12.8
comp=Z,9.2nm,0.9s
**ZALV Zalesovo Beam 41.16 46** P **P 05 26 42.3 +0.5**
**ZALV Zalesovo Beam 41.16 46** P **P 05 26 42.3 +0.5**
**SPB2 Spitsbergen Ar 43.35 356** P **P 05 27 00.2 +0.9**
**SPITS Spitsbergen Ar 43.35 356** P **P 05 26 58.4 -0.9**
comp=Z,0.9nm,0.4s,baz=138,slow=11,SNR=6.9
comp=Z,0.9nm,0.4s
**DBIC Dimbokro 43.85 238** P **P 05 27 04.1 0.0**
DBIC IAmb IAmb 05 27 11.9
comp=Z,11nm,1.1s
**DBIC Dimbokro 43.85 238** P **P 05 27 03.2 -0.9**
comp=Z,3.4nm,0.6s,baz=31,slow=8.5,SNR=6.0
comp=Z,3.4nm,0.6s
**DBIC Dimbokro 43.85 238** P **P 05 27 04.1 0.0**
DBIC pmax pmax
comp=Z,11nm,1.2s
**SUMG Summit 50.58 339** P **P 05 27 56.4 +0.1**
**SUMG Summit 50.58 339** P **P 05 27 56.4 +0.1**
SUMG pmax pmax
comp=Z,14nm,1.4s
**KAAM Kaadhehdhoo 52.01 123** P **P 05 28 05.7 -1.5**
**SONM Songino Array 55.36 52** P **P 05 28 30.4 -1.1**
SONM IAmb IAmb 05 28 49.1
comp=Z,3.1nm,1.4s
**SONM Songino Array 55.36 52** P **P 05 28 32.1 +0.6**
comp=Z,1.1nm,0.5s,baz=284,slow=8.1,SNR=5.1
comp=Z,1.1nm,0.5s
**ULN Ulaanbaatar 55.77 52⇓** *eP* **P 05 28 35.1 +0.6**
ULN pmax pmax
comp=Z,6.0nm,1.7s
**HHC Hu-ho-hao-te 61.22 59** *eP* **P 05 29 12.3 -0.2**
HHC sP sP 05 29 30.0 -0.7
HHC pmax pmax
comp=Z,8.0nm,0.5s
HHC pmax pmax
comp=Z,58nm,5.2s
**SCHQ Schefferville 66.23 321** P **P 05 29 43.3 -1.8**
comp=Z,1.4nm,0.6s,baz=23,slow=7.7,SNR=1.5
comp=Z,1.4nm,0.6s
**GBN Guysborough 67.64 310** P **P 05 29 54.6 +0.4**
**SUR Sutherland 68.16 190** P **P 05 29 57.0 -0.7**
**HAL Halifax 69.30 311** P **P 05 30 05.2 +0.7**
**HAL Halifax 69.30 311** P **P 05 30 05.2 +0.7**
HAL pmax pmax
comp=Z,29nm,1.4s
**LMN Caledonia Moun 69.44 312** P **P 05 30 05.7 +0.3**
**BATG Bathurst New B 69.48 314** P **P 05 30 06.1 +0.4**
**PQI Presque Isle 70.94 314** P **P 05 30 14.9 +0.3**
**GGN Saint George 71.05 312** P **P 05 30 14.9 -0.3**
**D62A Allapoint, All 71.33 315** P **P 05 30 17.8 +0.9**
**USA0B Ussuriysk Arra 72.99 48** P **P 05 30 25.6 -1.3**
USA0B IAmb IAmb 05 30 38.2
comp=Z,4.9nm,0.8s
**USA0B Ussuriysk Arra 72.99 48** P **P 05 30 25.6 -1.3**
USA0B pmax pmax
comp=Z,5.0nm,0.9s
**USRK Ussuriysk Ar. 72.99 48** P **P 05 30 26.5 -0.4**
**USRK Ussuriysk Ar. 72.99 48** P **P 05 30 26.3 -0.6**
comp=Z,2.4nm,0.7s,baz=278,slow=6.9,SNR=5.3
comp=Z,2.4nm,0.7s
**USRK Ussuriysk Ar. 72.99 48** P **P 05 30 26.5 -0.4**
**C36M Paulatuk 73.99 351** P **P 05 30 32.2 -0.1**
**C23K Itkillik River 75.05 1** P **P 05 30 39.9 +1.4**
C23K IAmb IAmb 05 30 48.9
comp=Z,3.4nm,1.1s
**B21K Ikpikpuk River 75.18 2** P **P 05 30 39.6 +0.4**
B21K IAmb IAmb 05 30 57.0
comp=Z,8.3nm,1.4s
**D22K Ayikyak River 75.97 2** P **P 05 30 44.9 +1.0**
D22K IAmb IAmb 05 31 22.9
comp=Z,5.1nm,1.4s
**E29M Blow River 76.20 356** P **P 05 30 46.0 +0.9**
E29M IAmb IAmb 05 30 49.3
comp=Z,3.8nm,1.2s
**F31M Tsiigehtchic 76.84 354** P **P 05 30 48.4 -0.3**
F31M IAmb IAmb 05 31 02.4
comp=Z,2.2nm,0.8s
**E19K Redstone River 77.24 3** P **P 05 30 52.0 +1.0**
E19K IAmb IAmb 05 30 57.9
comp=Z,3.3nm,0.8s
**F24K Squaw Lake 77.39 360** P **P 05 30 51.9 +0.1**
F24K IAmb IAmb 05 31 13.4
comp=Z,2.4nm,1.0s
**G31M Satah River 77.40 354** P **P 05 30 51.7 -0.1**
G31M IAmb IAmb 05 31 17.8
comp=Z,4.3nm,1.3s
**BMAR Burnt Mountain 77.43 358** P **P 05 30 52.7 +0.6**
**F21K Alatna River 77.62 2** P **P 05 30 53.5 +0.3**
F21K IAmb IAmb 05 31 07.3
comp=Z,3.3nm,1.1s
**G27K Doyon Strip 77.96 357** P **P 05 30 56.0 +0.9**
G27K IAmb IAmb 05 31 18.8
comp=Z,1.9nm,1.1s
**G21K Allakaket 78.33 2** P **P 05 30 58.6 +1.6**
G21K IAmb IAmb 05 31 28.7
comp=Z,3.5nm,1.1s
**H29M Whitestone 78.38 356** P **P 05 30 56.6 -0.8**
H29M IAmb IAmb 05 31 01.0
comp=Z,4.1nm,1.2s
**G19K Purcell Mounta 78.56 3** P **P 05 30 58.3 0.0**
G19K IAmb IAmb 05 31 32.2
comp=Z,6.8nm,1.5s
**IMAR Indian Mountai 78.85 2** P **P 05 31 00.5 +0.6**
**H23K Yukon River 79.09 0** P **P 05 31 02.9 +1.6**
H23K IAmb IAmb 05 31 22.7
comp=Z,4.6nm,1.4s
**H19K Roundabout Mou 79.20 3** P **P 05 31 01.7 -0.1**
H19K IAmb IAmb 05 31 21.0
comp=Z,7.5nm,1.4s
**H21K Melozitna Rive 79.20 2** P **P 05 31 02.0 +0.1**
H21K IAmb IAmb 05 31 36.5
comp=Z,2.7nm,1.1s
**I30M Mount Dempster 79.24 355** P **P 05 31 02.4 +0.1**
I30M IAmb IAmb 05 31 17.4
comp=Z,2.3nm,1.0s
**I28M Miner Creek 79.24 356** P **P 05 31 02.0 -0.1**
**J30M Hart River 79.87 355** P **P 05 31 06.5 +0.8**
J30M IAmb IAmb 05 31 07.0
comp=Z,2.7nm,0.8s
**EGAK Eagle 79.97 357** P **P 05 31 06.7 +0.7**
**DAWY Dawson 80.58 356** P **P 05 31 10.9 +1.5**
DAWY IAmb IAmb 05 31 33.0
comp=Z,4.0nm,1.3s
**K29M Barlow Dome 80.69 355** P **P 05 31 11.6 +1.5**
**J19K Poorman 80.77 3** P **P 05 31 11.7 +1.3**
J19K IAmb IAmb 05 31 32.4
comp=Z,7.0nm,1.3s
**BCAR Beaver Creek A 81.71 357** P **P 05 31 16.5 +1.1**
**DHY Denali Highway 81.84 359** P **P 05 31 16.3 0.0**
DHY IAmb IAmb 05 31 20.4
comp=Z,5.0nm,1.4s
**M29M Somme Creek 82.14 355** P **P 05 31 18.2 +0.4**
M29M IAmb IAmb 05 31 53.9
comp=Z,3.0nm,1.1s
**SKT Skwentna 82.92 1** P **P 05 31 21.8 +0.1**
**T57A Hurt 83.38 311** P **P 05 31 25.8 +1.3**
**R33M Jennings River 84.41 351** P **P 05 31 31.0 +1.4**
R33M IAmb IAmb 05 31 31.6
comp=Z,4.0nm,0.9s
**V52A Sevierville 86.78 312** P **P 05 31 42.8 +1.2**
**TKL Tuckaleechee C 87.01 312** P **P 05 31 43.9 +1.1**
**TKL Tuckaleechee C 87.01 312** P **P 05 31 43.5 +0.8**
comp=Z,2.9nm,0.6s,baz=101,slow=5.3,SNR=9.4
comp=Z,2.9nm,0.6s
**TKL Tuckaleechee C 87.01 312** P **P 05 31 43.9 +1.1**
TKL pmax pmax
comp=Z,4.0nm,0.8s
**U49A Red Boiling Sp 87.62 314** P **P 05 31 46.2 +0.6**
**WVT Waverly 89.08 315** P **P 05 31 51.9 -0.7**
WVT IAmb IAmb 05 31 52.1
comp=Z,2.4nm,0.8s
**WVT Waverly 89.08 315** P **P 05 31 51.9 -0.7**
WVT pmax pmax
comp=Z,2.0nm,0.9s
**LAO LASA Array 89.81 332** P **P 05 31 57.2 +1.3**
**NEW Newport 92.07 340** P **P 05 32 06.4 +0.1**
NEW IAmb IAmb 05 32 09.9
comp=Z,1.5nm,0.8s
**NEW Newport 92.07 340** P **P 05 32 06.6 +0.3**
comp=Z,1.5nm,0.6s,baz=355,slow=3.9,SNR=5.0
comp=Z,1.5nm,0.6s
**BPMT Black Pine Rid 92.58 336** P **P 05 32 09.2 +0.2**
**QSPA South Pole Qui 125.26 180** PKP **PKPdf 05 37 56.9 +0.1**
comp=Z,0.3nm,0.4s,baz=264,slow=2.1,SNR=5.1

*IDC **06** 05:32:39.7±3.9, 53.56N×87.93E, h0km, mbtmp3.2/2, ML2.9/2, Error ellipse: s-maj=42.7km s-min=18.6km az=84.0*
*NNC **06** 05:32:40.2±1.7, 53.49N×87.77E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=14.9km s-min=8.9km az=70.0, Suspected Mining explosion.*
**ISC 06 05:32:39.9±3.3, 53.6N±0.1×87.8E±0.2, h0km, n8, σ0s98/12, 5C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.79** | **283** | I | I | 05 44 40.0 | |
| | 0.1nm,0.8s,baz=98,slow=320,SNR=8.0 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.79** | **283** | ⇓Pn | **Pn** | **05 33 12.2** | **+0.2** |
| | 1.5nm,0.9s | | | | | | |
| ZAA0 | | | | ⇓Sn | **Sg** | **05 33 37.6** | **+0.2** |
| | 7.8nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.79** | **283** | Pn | **Pb** | **05 33 12.8** | **-0.7** |
| | 3.2nm,0.3s,baz=98,slow=13,SNR=32 | | | | | | |
| ZALV | | | | Sn | **Sb** | **05 33 36.9** | **+0.4** |
| | 5.5nm,0.3s,baz=104,slow=24,SNR=19 | | | | | | |
| **KURK** | **Kurchatov** | **6.32** | **247** | ⇑Pn | **Pn** | **05 34 15.0** | **+0.7** |
| | 2.0nm,0.8s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 05 35 59.9 | |
| | 6.6nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.42** | **246** | Pn | **Pn** | **05 34 17.2** | **+1.6** |
| | 0.3nm,0.3s,baz=64,slow=15,SNR=14 | | | | | | |
| | 1.9nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.42** | **246** | ⇑Pn | **Pn** | **05 34 16.5** | **+0.9** |
| | 2.6nm,0.5s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **05 35 28.7** | **-0.8** |
| | 5.7nm,0.5s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 05 36 05.3 | |
| | 10nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **7.65** | **210** | ⇓Pn | **Pn** | **05 34 32.2** | **-0.4** |
| | 0.4nm,0.5s,baz=29,slow=12,SNR=5.1 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **05 35 58.9** | **-1.1** |
| | 1.3nm,0.7s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 05 36 39.6 | |
| | 1.4nm,0.6s,baz=27,slow=26,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.65** | **210** | Pn | **Pn** | **05 34 34.0** | **+1.4** |
| | 0.2nm,0.3s,baz=27,slow=12,SNR=4.7 | | | | | | |
| MKAR | | | | Sn | **Sn** | **05 35 59.9** | **-0.1** |
| | 0.2nm,0.3s,baz=32,slow=30,SNR=4.3 | | | | | | |
| MKAR | | | | Lg | Lg | 05 36 41.7 | |
| | 0.1nm,0.3s,baz=36,slow=32,SNR=3.5 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*DJA **06** 05:44:21.6±0.4, 2°N±2°×12°7E±°, h117km±5km, M4.4/15, mb4.5/6, mB5.1/2, MLv4.4/15, Mw(mB)4.4/2*
*NEIC **06** 05:44:23.1±1.5, 1.52N±0.09×127.29E±0.03, h129km±6km, mb4.5/49, Error ellipse: s-maj=13.1km s-min=3.1km az=196.0*
*IDC **06** 05:44:24.8±5.3, 1.45N×127.33E, h148km±51km, mb3.9/9, mbtmp4.4/10, Error ellipse: s-maj=50.2km s-min=12.8km az=67.0*
**ISC 06 05:44:22.6±0.4, 1.52N±0.05×127.27E±0.06, h128km, n88, σ1s29/94, mb4.5/36, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.75** | **172** | | **Pn** | **05 44 43.2** | **+0.1** |
| **TNTI** | **Ternate** | **0.75** | **172** | P | **Pn** | **05 44 43.0** | **-0.2** |
| **LBMI** | **Labuha** | **2.16** | **174** | P | **Pn** | **05 44 57.4** | **-1.0** |
| LBMI | | | | S | **Sn** | **05 45 27.0** | **+1.1** |
| **SGSI** | **Sangihe** | **2.77** | **321** | P | **Pn** | **05 45 03.9** | **-2.2** |
| SGSI | | | | S | **Sn** | **05 45 36.0** | **-3.7** |
| **KMSI** | **Cibinong** | **3.42** | **254** | P | **Pn** | **05 45 14.4** | **-0.2** |
| KMSI | | | | S | **Sn** | **05 45 54.0** | **-0.9** |
| **SANI** | **Sanana** | **3.77** | **200** | P | **Pn** | **05 45 17.8** | **-1.5** |
| **GTOI** | **Gorontalo** | **4.35** | **258** | P | **Pn** | **05 45 27.9** | **+1.0** |
| **SWI** | **Sorong** | **4.64** | **121** | P | **Pn** | **05 45 30.7** | **-0.1** |
| **NLAI** | **Namlea** | **4.73** | **182** | P | **Pn** | **05 45 32.2** | **+0.1** |
| **LUWI** | **Luwuk** | **5.17** | **241** | Pn | **Pn** | **05 45 38.1** | **+0.2** |
| **LUWI** | **Luwuk** | **5.17** | **241** | P | **Pn** | **05 45 38.0** | **+0.1** |
| | 60nm,0.8s,1.5nm | | | | | | |
| **MRSI** | **Marisa** | **5.43** | **259** | P | **Pn** | **05 45 39.6** | **-1.8** |
| | 72nm,0.5s,1μm0.4nm | | | | | | |
| **TOLI2** | **Tolitoli** | **6.50** | **266** | | **Pn** | **05 45 55.1** | **-0.7** |
| **FAKI** | **Fak Fak** | **6.65** | **132** | P | **Pn** | **05 45 57.8** | **-0.1** |
| **BNSI** | **Bone** | **9.26** | **231** | P | **Pn** | **05 46 32.4** | **-0.7** |
| | 27nm,0.8s | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.27** | **234** | P | **Pn** | **05 46 33.3** | **+0.2** |
| **KAPI** | **Kappang** | **9.93** | **229** | Pn | **Pn** | **05 46 41.6** | **-0.4** |
| **KAPI** | **Kappang** | **9.93** | **229** | P | **Pn** | **05 46 44.4** | **+2.4** |
| | 14nm,0.3s,baz=65,slow=21,SNR=5.1 | | | | | | |
| **MTN** | **Manton Dam** | **14.78** | **165** | Pn | **Pn** | **05 47 44.1** | **-1.2** |
| **SBUM** | **Sibu** | **15.07** | **274** | Pn | **Pn** | **05 47 47.9** | **-1.1** |
| **KNRA** | **Kununurra** | **17.15** | **175** | P | **P** | **05 48 14.0** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **19.56** | **185** | P | **P** | **05 48 40.6** | **+0.1** |
| **COEN** | **Coen** | **22.02** | **135** | P | **P** | **05 49 06.8** | **-0.1** |
| **WB0** | **Warramunga Arr** | **22.28** | **162** | P | **P** | **05 49 08.7** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 05 49 15.6 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.42** | **162** | P | **P** | **05 49 10.1** | **-0.8** |
| WRAB | | | | IAmb | IAmb | 05 49 17.4 | |
| | comp=Z,26nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.43** | **162** | P | **P** | **05 49 09.1** | **-1.9** |
| **WRA** | **Warramunga Arr** | **22.43** | **162** | P | **P** | **05 49 10.1** | **-0.9** |
| | comp=Z,9.5nm,0.4s,baz=340,slow=11,SNR=149 | | | | | | |
| | comp=Z,9.5nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.43** | **162** | P | **P** | **05 49 10.2** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 05 49 17.4 | |
| | comp=Z,30nm,0.6s | | | | | | |
| **YULB** | **Yu-li** | **22.50** | **346** | P | **P** | **05 49 09.4** | **-2.2** |
| YULB | | | | IAmb | IAmb | 05 49 15.3 | |
| | comp=Z,6.4nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.51** | **162** | P | **P** | **05 49 10.7** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 05 49 11.4 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **TPUB** | **Ta-pu** | **22.59** | **344** | P | **P** | **05 49 12.1** | **-0.4** |
| TPUB | | | | IAmb | IAmb | 05 49 13.6 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **22.96** | **345** | P | **P** | **05 49 15.8** | **-0.3** |
| SSLB | | | | IAmb | IAmb | 05 49 18.7 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **YOJ** | **Yonaguni jima** | **23.18** | **350** | P | **P** | **05 49 17.2** | **-0.8** |
| YOJ | | | | IAmb | IAmb | 05 49 31.0 | |
| | comp=Z,47nm,1.5s | | | | | | |
| **MBWA** | **Marble Bar** | **23.72** | **198** | P | **P** | **05 49 22.5** | **-0.5** |
| MBWA | | | | IAmb | IAmb | 05 49 50.2 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **24.07** | **197** | P | **P** | **05 49 26.2** | **0.0** |
| PSA00 | | | | IAmb | IAmb | 05 49 29.6 | |
| | comp=Z,30nm,1.5s | | | | | | |
| **QIZ** | **Qiongzhong** | **24.38** | **317** | P | **P** | **05 49 31.8** | **+2.8** |
| QIZ | | | | pP | **pP** | **05 49 50.2** | **-5.1** |
| QIZ | | | | S | **S** | **05 53 44.7** | **+5.2** |
| QIZ | | | | LR | LR | | |
| | comp=N,220nm,15.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,150nm,16.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,130nm,21.1s | | | | | | |
| **UBPT** | **Khong Chiam** | **25.49** | **304** | P | **P** | **05 49 38.4** | **-0.8** |
| UBPT | | | | IAmb | IAmb | 05 49 41.3 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **25.85** | **166** | P | **P** | **05 49 42.1** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 05 49 46.9 | |
| | comp=Z,3.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **25.85** | **166** | P | **P** | **05 49 41.9** | **-0.6** |
| | comp=Z,3.6nm,0.4s,baz=351,slow=7.4,SNR=57 | | | | | | |
| | comp=Z,3.6nm,0.4s | | | | | | |
| **GSI** | **Gunungsitoli** | **29.68** | **270** | P | **P** | **05 50 16.2** | **-0.5** |
| **LHMI** | **Lhok Sumawe** | **30.49** | **278** | P | **P** | **05 50 23.9** | **+0.2** |
| **NJ2** | **Nanjing** | **31.39** | **346** | *eP* | **P** | **05 50 33.0** | **+1.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,100nm,5.0s | | | | | | |
| **PHRA** | **Phrae** | **31.43** | **304** | P | **P** | **05 50 32.8** | **+0.8** |
| **MORW** | **Morawa** | **32.26** | **199** | P | **P** | **05 50 38.8** | **-0.3** |
| MORW | | | | IAmb | IAmb | 05 51 09.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **PZH** | **PanZhiHua** | **34.91** | **318** | P | **P** | **05 51 04.2** | **+1.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,130nm,5.1s | | | | | | |
| **BBOO** | **Buckleboo** | **35.14** | **167** | P | **P** | **05 51 03.7** | **-0.3** |
| **EIDS** | **Eidsvold** | **35.30** | **141** | P | **P** | **05 51 05.8** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 05 51 09.9 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **35.55** | **195** | P | **P** | **05 51 08.3** | **+0.8** |
| **KSRS** | **Korea Array** | **35.76** | **1** | P | **P** | **05 51 10.1** | **+0.9** |
| | comp=Z,1.0nm,0.5s,baz=169,slow=11,SNR=2.8 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.89** | **159** | P | **P** | **05 51 10.5** | **+0.1** |
| **STKA** | **Stephens Creek** | **35.89** | **159** | P | **P** | **05 51 10.4** | **+0.1** |
| | comp=Z,4.3nm,0.5s,baz=347,slow=8.1,SNR=8.5 | | | | | | |
| | comp=Z,4.3nm,0.5s | | | | | | |
| **ARMA** | **Armidale** | **39.34** | **146** | P | **P** | **05 51 39.6** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 05 51 41.8 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.65** | **342** | *eP* | **P** | **05 52 00.4** | **+1.9** |
| HHC | | | | PP | **PP** | **05 53 40.0** | **+2.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HHC | | | | pmax | pmax | | | |
| | comp=Z,46nm,5.5s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=N,76nm,17.6s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=E,100nm,18.2s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,120nm,17.7s | | | | | | | |
| **CAN** | **Canberra** | **41.91** | **153** | P | **P** | **05 51 59.7** | **-0.9** | |
| CAN | | | | IAmb | IAmb | 05 52 20.1 | | |
| | comp=Z,35nm,1.4s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **49.37** | **342** | P | **P** | **05 53 00.1** | **+0.9** | |
| ULN | | | | IAmb | IAmb | 05 53 00.2 | | |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **49.55** | **342** | P | **P** | **05 53 00.6** | **+0.1** | |
| **SONM** | **Songino Array** | **49.55** | **342** | P | **P** | **05 53 01.1** | **+0.5** | |
| | comp=Z,0.9nm,0.6s,baz=164,slow=11,SNR=3.8 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **LBZ** | **Lake Benmore** | **59.57** | **146** | P | **P** | **05 54 13.1** | **+0.3** | |
| **THZ** | **Tophouse** | **59.64** | **142** | P | **P** | **05 54 13.0** | **-0.4** | |
| **MK31** | **Makanchi Array** | **59.67** | **326** | P | **P** | **05 54 13.9** | **+0.5** | |
| MK31 | | | | IAmb | IAmb | 05 54 14.6 | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.67** | **326** | P | **P** | **05 54 13.6** | **+0.1** | |
| **MKAR** | **Makanchi Array** | **59.67** | **326** | P | **P** | **05 54 14.1** | **+0.6** | |
| | comp=Z,2.8nm,0.4s,baz=122,slow=8.5,SNR=37 | | | | | | | |
| | comp=Z,2.8nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **59.85** | **326** | P | **P** | **05 54 15.1** | **+0.3** | |
| MAKZ | | | | IAmb | IAmb | 05 54 15.7 | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **TUWZ** | **Tuamarina** | **60.10** | **141** | P | **P** | **05 54 15.5** | **-1.0** | |
| **TCW** | **Tory Channel** | **60.20** | **141** | P | **P** | **05 54 16.3** | **-0.8** | |
| **BKZ** | **Black Stump Fm** | **60.60** | **137** | P | **P** | **05 54 19.8** | **-0.2** | |
| **RTZ** | **Ruatahuna** | **60.66** | **137** | P | **P** | **05 54 20.3** | **-0.1** | |
| **BHW** | **Baring Head** | **60.68** | **140** | P | **P** | **05 54 19.2** | **-1.2** | |
| **ZALV** | **Zalesovo Beam** | **62.79** | **333** | P | **P** | **05 54 35.7** | **+1.4** | |
| | comp=Z,1.0nm,0.3s,baz=126,slow=7.3,SNR=3.8 | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.88** | **328** | P | **P** | **05 54 41.8** | **+0.2** | |
| | comp=Z,3.0nm,0.4s,baz=125,slow=6.3,SNR=23 | | | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **63.88** | **328** | P | **P** | **05 54 41.5** | **0.0** | |
| KURK | | | | IAmb | IAmb | 05 54 42.2 | | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **65.21** | **318** | P | **P** | **05 54 50.7** | **+0.3** | |
| **KKAR** | **Karatay Array** | **65.21** | **318** | P | **P** | **05 54 50.6** | **+0.2** | |
| **ADK** | **Adak** | **68.48** | **34** | P | **P** | **05 55 09.3** | **-1.6** | |
| **CASY** | **Casey** | **68.70** | **187** | P | **P** | **05 55 12.3** | **+0.4** | |
| **BRVK** | **Borovoye** | **69.53** | **327** | P | **P** | **05 55 17.7** | **+0.3** | |
| **ABKAR** | **Akbulak array** | **74.19** | **321** | P | **P** | **05 55 45.2** | **-0.1** | |
| **VNDA** | **Vanda** | **81.18** | **173** | P | **P** | **05 56 23.2** | **-0.3** | |
| **VNDA** | **Vanda** | **81.18** | **173** | P | **P** | **05 56 23.2** | **-0.3** | |
| | comp=Z,0.6nm,0.5s,baz=313,slow=7.7,SNR=9.1 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **J18K** | **Innoko River** | **82.41** | **26** | P | **P** | **05 56 30.1** | **-0.2** | |
| J18K | | | | IAmb | IAmb | 05 57 12.4 | | |
| | comp=Z,6.7nm,1.4s | | | | | | | |
| **G19K** | **Purcell Mounta** | **82.83** | **23** | P | **P** | **05 56 33.9** | **+1.6** | |
| **H19K** | **Roundabout Mou** | **82.95** | **24** | P | **P** | **05 56 33.9** | **+1.0** | |
| H19K | | | | IAmb | IAmb | 05 57 10.1 | | |
| | comp=Z,8.7nm,1.4s | | | | | | | |
| **D19K** | **Kuna River** | **82.98** | **21** | P | **P** | **05 56 33.7** | **+0.6** | |
| D19K | | | | IAmb | IAmb | 05 56 41.9 | | |
| | comp=Z,6.3nm,1.5s | | | | | | | |
| **C23K** | **Itkillik River** | **85.86** | **20** | P | **P** | **05 56 46.0** | **-1.5** | |
| **BMAR** | **Burnt Mountain** | **87.89** | **23** | P | **P** | **05 56 56.2** | **-1.3** | |
| **FARO** | **Faro, Yukon** | **93.04** | **28** | P | **P** | **05 57 20.8** | **-0.8** | |
| FARO | | | | IAmb | IAmb | 05 57 37.4 | | |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **WISH** | **Wishkah** | **101.69** | **41** | Pdif | **Pdif** | **05 58 00.7** | **-0.1** | |
| **BFO** | **Black Forest** | **107.65** | **322** | Pdif | **Pdif** | **05 58 27.7** | **+0.3** | |

*IDC* ***06*** *05:48:19.9±0.6,2.67N×125.47E,h0km,mb4.3/15, mbtmp4.3/15,MS3.4/26,Error ellipse: s-maj=47.6km s-min=13.9km az=72.0*

*DJA* ***06*** *05:48:24.5±0.9,3.3N×12.6E±°,h23km±10km,M4.7/16, mb4.8/11,mB5.3/7,MLv4.7/16,Mw(mB)4.7/7*

*NEIC* ***06*** *05:48:25.2±2.2,3.0N±0.06×126.40E±0.08,h35km±2km, mb4.7/56,Error ellipse: s-maj=14.1km s-min=8.9km az=248.0*

**ISC 06 05:48:25.0±0.4,3.12N±0.05×126.49E±0.06,h35km,n131, σ1ᵗ65/112,mb4.6/46,MS3.5/28,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.11** | **301** | P | **Pn** | **05 48 43.1** | **-1.0** |
| SGSI | | | | S | **Sn** | **05 48 56.6** | **-1.7** |
| **TNTI** | **Ternate** | **2.49** | **159** | | **Pn** | **05 49 05.2** | **+2.1** |
| **TNTI** | **Ternate** | **2.49** | **159** | P | **Pn** | **05 49 05.0** | **+2.0** |
| **KMSI** | **Cibinong** | **3.56** | **225** | P | **Pn** | **05 49 20.2** | **+2.4** |
| KMSI | | | | S | **Sn** | **05 50 02.1** | **+3.5** |
| **LBMI** | **Labuha** | **3.86** | **165** | P | **Pn** | **05 49 24.2** | **+2.2** |
| **DAV** | **Davao City (W)** | **4.03** | **347** | Pn | **Pn** | **05 49 24.7** | **+0.4** |
| **DAV** | **Davao City (W)** | **4.03** | **347** | LR | LR | 05 51 33.8 | |
| | comp=Z,543nm,19.1s,baz=74,slow=44 | | | | | | |
| **GTOI** | **Gorontalo** | **4.26** | **235** | P | **Pn** | **05 49 28.6** | **+1.1** |
| **SANI** | **Sanana** | **5.16** | **186** | P | **Pn** | **05 49 39.1** | **-0.7** |
| **MRSI** | **Marisa** | **5.25** | **240** | P | **Pn** | **05 49 41.7** | **+0.7** |
| **LUWI** | **Luwuk** | **5.56** | **222** | Pn | **Pn** | **05 49 43.2** | **-2.1** |
| **LUWI** | **Luwuk** | **5.56** | **222** | P | **Pn** | **05 49 47.2** | **+1.9** |
| **TOLI2** | **Tolitoli** | **6.04** | **251** | | **Pn** | **05 49 52.0** | **+0.1** |
| **SWI** | **Sorong** | **6.19** | **130** | P | **Pn** | **05 49 57.2** | **+3.2** |
| | 47nm,1.1s,0.2nm | | | | | | |
| **NLAI** | **Namlea** | **6.34** | **174** | P | **Pn** | **05 49 57.4** | **+1.3** |
| | 57nm,0.7s,2μm0.4nm | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.23** | **285** | | **Pn** | **05 50 23.3** | **+1.3** |
| **FAKI** | **Fak Fak** | **8.31** | **136** | Pn | **Pn** | **05 50 24.6** | **+1.4** |
| **SPSI** | **Sidrap Palu** | **9.72** | **224** | P | **Pn** | **05 50 44.1** | **+1.6** |
| **BNSI** | **Bone** | **9.82** | **221** | P | **Pn** | **05 50 44.9** | **+1.1** |
| | 24nm,1.1s | | | | | | |
| **SOEI** | **Soe** | **12.98** | **190** | Pn | **Pn** | **05 51 25.0** | **-2.1** |
| **SBUM** | **Sibu** | **14.27** | **268** | Pn | **Pn** | **05 51 43.0** | **-1.7** |
| **GENI** | **Genyem** | **14.80** | **112** | P | **P** | **05 51 55.5** | **-1.9** |
| **JAY** | **Jayapura** | **15.27** | **111** | P | **P** | **05 52 00.8** | **-1.9** |
| **KSM** | **Kuching** | **16.25** | **265** | Pn | **Pn** | **05 52 08.9** | **-1.9** |
| KSM | | | | IAmb | IAmb | 05 52 18.7 | |
| | comp=Z,80nm,1.5s | | | | | | |
| **MTN** | **Manton Dam** | **16.51** | **164** | | **Pn** | **05 52 12.2** | **-1.9** |
| MTN | | | | IAmb | IAmb | 05 52 16.7 | |
| | comp=Z,22nm,0.4s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.85** | **227** | Pn | **Pn** | **05 52 15.8** | **-2.5** |
| JAGI | | | | IAmb | IAmb | 05 52 26.5 | |
| | comp=Z,96nm,1.5s | | | | | | |
| **KNRA** | **Kununurra** | **18.81** | **173** | P | **P** | **05 52 41.1** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 05 52 41.7 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **YULB** | **Yu-li** | **20.77** | **346** | P | **P** | **05 53 01.1** | **-2.1** |
| **TPUB** | **Ta-pu** | **20.85** | **345** | P | **P** | **05 53 01.1** | **-2.9** |
| **GUMO** | **Guam** | **20.93** | **59** | LR | LR | 06 01 21.5 | |
| | comp=Z,51nm,19.4s,baz=262,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.10** | **182** | P | **P** | **05 53 05.8** | **-0.9** |
| **SSLB** | **Suanglung** | **21.24** | **346** | P | **P** | **05 53 06.2** | **-2.0** |
| **QIZ** | **Qiongzhong** | **22.70** | **315** | P | **P** | **05 53 25.6** | **+1.8** |
| QIZ | | | | S | **S** | **05 57 32.1** | **+2.0** |
| QIZ | | | | LR | LR | | |
| | comp=N,87nm,16.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,88nm,14.4s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,99nm,12.1s | | | | | | |
| **JOW** | **Kunigami** | **23.64** | **4** | P | **P** | **05 53 32.3** | **-1.0** |
| JOW | | | | IAmb | IAmb | 05 53 44.6 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **JOW** | **Kunigami** | **23.64** | **4** | LR | LR | 06 05 02.9 | |
| | comp=Z,58nm,18.4s,baz=140,slow=42 | | | | | | |
| **COEN** | **Coen** | **23.70** | **136** | P | **P** | **05 53 31.5** | **-2.3** |
| **WB0** | **Warramunga Arr** | **24.03** | **161** | | **P** | **05 53 34.9** | **-2.0** |
| WB0 | | | | IAmb | IAmb | 05 53 43.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **24.06** | **121** | P | **P** | **05 53 35.8** | **-1.5** |
| PMG | | | | IAmb | IAmb | 05 54 20.1 | |
| | comp=Z,39nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.17** | **162** | P | **P** | **05 53 37.0** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 05 53 39.5 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.18** | **162** | | **P** | **05 53 36.2** | **-2.1** |
| **WRA** | **Warramunga Arr** | **24.18** | **162** | P | **P** | **05 53 37.0** | **-1.3** |
| | comp=Z,6.3nm,0.4s,baz=338,slow=10,SNR=66 | | | | | | |
| WRA | | | | LR | LR | 06 04 04.1 | |
| | comp=Z,108nm,20.7s,baz=46,slow=39 | | | | | | |
| | comp=Z,6.3nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.18** | **162** | | **P** | **05 53 37.0** | **-1.4** |
| WB2 | | | | IAmb | IAmb | 05 53 39.5 | |
| | comp=Z,33nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.26** | **161** | P | **P** | **05 53 38.2** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 05 53 40.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **25.02** | **195** | P | **P** | **05 53 45.5** | **-0.4** |
| MBWA | | | | IAmb | IAmb | 05 53 47.1 | |
| | comp=Z,52nm,1.2s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.38** | **195** | P | **P** | **05 53 50.3** | **+1.1** |
| **AS31** | **Alice Springs** | **27.58** | **165** | | **P** | **05 54 08.8** | **-0.3** |
| **ASAR** | **Alice Springs** | **27.58** | **165** | P | **P** | **05 54 08.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **27.58** | **165** | P | **P** | **05 54 08.6** | **-0.5** |
| | comp=Z,2.8nm,0.3s,baz=342,slow=10,SNR=32 | | | | | | |
| | comp=Z,2.8nm,0.3s | | | | | | |
| **WHN** | **Wuhan** | **29.60** | **338** | P | **P** | **05 54 31.1** | **+4.2** |
| **NJ2** | **Nanjing** | **29.67** | **347** | *eP* | **P** | **05 54 30.2** | **+2.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,79nm,4.0s | | | | | | |
| **CTAO** | **Charters Tower** | **30.14** | **141** | P | **P** | **05 54 31.9** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **30.98** | **301** | P | **P** | **05 54 37.2** | **-2.1** |
| | comp=Z,0.8nm,0.3s,baz=109,slow=8.1,SNR=1.4 | | | | | | |
| CMAR | | | | LR | LR | 06 08 05.7 | |
| | comp=Z,27nm,18.3s,baz=100,slow=39 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **32.34** | **21** | LR | LR | 06 12 59.2 | |
| | comp=Z,29nm,18.0s,baz=78,slow=45 | | | | | | |
| **PZH** | **PanZhiHua** | **33.22** | **317** | P | **P** | **05 55 01.9** | **+2.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.9s | | | | | | |
| **MORW** | **Morawa** | **33.53** | **197** | P | **P** | **05 55 02.0** | **+0.5** |
| **FORT** | **Forrest** | **33.74** | **178** | P | **P** | **05 55 02.5** | **-0.8** |
| **KSRS** | **Korea Array** | **34.20** | **2** | P | P | 05 55 13.0 | +5.8 |
| | comp=Z,2.0nm,0.8s,baz=182,slow=8.3,SNR=4.1 | | | | | | |
| KSRS | | | | LR | LR | 06 09 33.6 | |
| | comp=Z,52nm,21.8s,baz=175,slow=37 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **35.59** | **111** | LR | LR | 06 10 21.5 | |
| | comp=Z,884nm,21.8s,baz=331,slow=36 | | | | | | |
| **BBOO** | **Buckleboo** | **36.86** | **167** | P | **P** | **05 55 30.3** | **+0.1** |
| **NWAO** | **Narrogin (SRO)** | **36.90** | **193** | P | **P** | **05 55 31.6** | **+1.0** |
| **EIDS** | **Eidsvold** | **37.02** | **141** | P | **P** | **05 55 30.8** | **-0.8** |
| EIDS | | | | IAmb | IAmb | 05 55 32.4 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **37.65** | **159** | P | **P** | **05 55 36.1** | **-0.7** |
| **STKA** | **Stephens Creek** | **37.65** | **159** | P | **P** | **05 55 34.8** | **-2.1** |
| | comp=Z,2.7nm,0.3s,baz=311,slow=9.3,SNR=7.2 | | | | | | |
| STKA | | | | LR | LR | 06 11 01.3 | |
| | comp=Z,74nm,18.9s,baz=15,slow=36 | | | | | | |
| | comp=Z,2.7nm,0.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **39.91** | **342** | *eP* | **P** | **05 55 59.8** | **+4.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,90nm,5.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,70nm,17.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,100nm,18.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,100nm,18.3s | | | | | | |
| **ARMA** | **Armidale** | **41.09** | **146** | P | **P** | **05 56 06.0** | **+0.2** |
| ARMA | | | | IAmb | IAmb | 05 56 10.1 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **41.20** | **6** | P | **P** | **05 56 07.8** | **+1.5** |
| **USRK** | **Ussuriysk Ar.** | **41.20** | **6** | P | **P** | **05 56 06.7** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **41.20** | **6** | P | **P** | **05 56 10.9** | **+4.6** |
| | comp=Z,1.2nm,0.6s,baz=214,slow=4.9,SNR=7.9 | | | | | | |
| USRK | | | | LR | LR | 06 11 30.5 | |
| | comp=Z,47nm,21.7s,baz=174,slow=33 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **MDJ** | **Mudanjiang** | **41.42** | **3** | P | P | 05 56 14.6 | +6.5 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **XLT** | **XiLinHaoTe** | **41.65** | **349** | *eP* | **P** | **05 56 10.8** | **+0.7** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ASAJ** | **Asahikawa** | **43.24** | **17** | LR | LR | 06 12 17.2 | |
| | comp=Z,36nm,21.5s,baz=202,slow=33 | | | | | | |
| **PALK** | **Palikekele** | **45.77** | **277** | LR | LR | 06 17 30.4 | |
| | comp=Z,65nm,19.5s,baz=204,slow=39 | | | | | | |
| **KLR** | **Kul'dur** | **46.16** | **5** | LR | LR | 06 17 53.7 | |
| | comp=Z,17nm,19.8s,baz=160,slow=38 | | | | | | |
| **HEH** | **HeiHe** | **46.98** | **1** | *eP* | P | 05 57 00.5 | +8.0 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **47.63** | **342** | P | **P** | **05 56 58.3** | **+0.5** |
| **SONM** | **Songino Array** | **47.80** | **342** | P | **P** | **05 57 00.1** | **+0.9** |
| **SONM** | **Songino Array** | **47.80** | **342** | P | **P** | **05 57 00.3** | **+1.1** |
| | comp=Z,1.0nm,0.6s,baz=161,slow=8.9,SNR=5.0 | | | | | | |
| SONM | | | | LR | LR | 06 18 40.6 | |
| | comp=Z,61nm,19.0s,baz=155,slow=38 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **MSVF** | **Nonsavu** | **54.88** | **114** | LR | LR | 06 21 19.0 | |
| | comp=Z,80nm,18.4s,baz=163,slow=36 | | | | | | |
| **MK31** | **Makanchi Array** | **57.92** | **326** | P | **P** | **05 58 12.7** | **-1.1** |
| **MKAR** | **Makanchi Array** | **57.92** | **326** | P | **P** | **05 58 11.4** | **-2.3** |
| **MKAR** | **Makanchi Array** | **57.92** | **326** | P | **P** | **05 58 12.8** | **-0.9** |
| | comp=Z,0.6nm,0.3s,baz=118,slow=7.1,SNR=12 | | | | | | |
| MKAR | | | | PcP | **PcP** | **05 59 05.8** | **0.0** |
| | comp=Z,1.0nm,0.4s,baz=142,slow=3.7,SNR=11 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **KSH** | **Kashi** | **58.31** | **315** | P | **P** | **05 58 19.2** | **+2.4** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **58.83** | **2** | LR | LR | 06 25 25.7 | |
| | comp=Z,32nm,19.5s,baz=161,slow=38 | | | | | | |
| **MA2** | **Magadan** | **59.35** | **14** | LR | LR | 06 23 10.4 | |
| | comp=Z,26nm,20.9s,baz=246,slow=35 | | | | | | |
| **AAK** | **Ala-Archa** | **60.65** | **318** | LR | LR | 06 26 45.5 | |
| | comp=Z,65nm,21.0s,baz=106,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.02** | **333** | P | **P** | **05 58 34.2** | **-0.8** |
| | comp=Z,1.5nm,0.7s,baz=125,slow=7.4,SNR=4.0 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **LBZ** | **Lake Benmore** | **61.31** | **146** | P | **P** | **05 58 37.5** | **+0.3** |
| **KHZ** | **Kahutara** | **62.12** | **142** | P | **P** | **05 58 42.9** | **+0.4** |
| **KURBB** | **Kurchatov Arra** | **62.12** | **328** | P | **P** | **05 58 40.1** | **-2.3** |
| | comp=Z,0.9nm,0.4s,baz=125,slow=6.9,SNR=5.0 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **62.13** | **328** | P | **P** | **05 58 40.8** | **-1.7** |
| KURK | | | | IAmb | IAmb | 05 59 01.3 | |
| | comp=Z,5.3nm,1.0s | | | | | | |
| **GAR** | **Garm** | **62.16** | **313** | P | **P** | **05 58 41.4** | **-1.7** |
| GAR | | | | IAmb | IAmb | 05 58 45.1 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **BKZ** | **Black Stump Fm** | **62.29** | **138** | P | **P** | **05 58 43.5** | **-0.3** |
| **BHW** | **Baring Head** | **62.40** | **141** | P | **P** | **05 58 43.0** | **-1.4** |
| **SHEM** | **Shemya Is, Ala** | **63.11** | **30** | LR | LR | 06 23 11.0 | |
| | comp=Z,15nm,20.3s,baz=140,slow=33 | | | | | | |
| **TIXI** | **Tiksi** | **68.46** | **1** | LR | LR | 06 32 03.4 | |
| | comp=Z,25nm,20.1s,baz=184,slow=38 | | | | | | |
| **CASY** | **Casey** | **70.18** | **187** | P | **P** | **05 59 34.0** | **+0.2** |
| CASY | | | | IAmb | IAmb | 05 59 52.6 | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.47** | **321** | P | **P** | **05 59 46.8** | **-1.3** |
| **AKTO** | **Aktyubinsk** | **73.99** | **322** | P | **P** | **05 59 55.9** | **-1.1** |
| | comp=Z,1.1nm,0.3s,baz=38,slow=3.5,SNR=4.5 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **L18K** | **Granite Mounta** | **81.12** | **27** | P | **P** | **06 00 37.0** | **+0.4** |
| L18K | | | | IAmb | IAmb | 06 00 59.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **81.40** | **20** | P | **P** | **06 00 38.8** | **+0.8** |
| C19K | | | | IAmb | IAmb | 06 01 03.1 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **G19K** | **Purcell Mounta** | **81.68** | **24** | P | **P** | **06 00 38.8** | **-0.7** |
| G19K | | | | IAmb | IAmb | 06 01 04.6 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **GNI** | **Garni** | **81.69** | **310** | LR | LR | 06 43 33.0 | |
| | comp=Z,17nm,18.0s,baz=156,slow=41 | | | | | | |
| **D19K** | **Kuna River** | **81.78** | **21** | P | **P** | **06 00 41.5** | **+1.5** |
| D19K | | | | IAmb | IAmb | 06 01 05.0 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **H19K** | **Roundabout Mou** | **81.82** | **24** | P | **P** | **06 00 41.7** | **+1.5** |
| H19K | | | | IAmb | IAmb | 06 00 59.6 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **81.89** | **22** | P | **P** | **06 00 41.1** | **+0.5** |
| E19K | | | | IAmb | IAmb | 06 01 04.8 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **82.53** | **32** | P | **P** | **06 00 45.1** | **+1.0** |
| **KDAK** | **Kodiak Island** | **82.53** | **32** | LR | LR | 06 31 42.6 | |
| | comp=Z,45nm,21.7s,baz=243,slow=31 | | | | | | |
| **VNDA** | **Vanda** | **82.85** | **173** | P | **P** | **06 00 45.7** | **+0.3** |
| **VNDA** | **Vanda** | **82.85** | **173** | P | **P** | **06 00 45.7** | **+0.3** |
| | comp=Z,0.8nm,0.6s,baz=314,slow=7.1,SNR=6.7 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **IMAR** | **Indian Mountai** | **83.00** | **24** | P | **P** | **06 00 48.5** | **+2.1** |
| **B21K** | **Ikpikpuk River** | **83.23** | **20** | P | **P** | **06 00 47.2** | **-0.2** |
| B21K | | | | IAmb | IAmb | 06 01 08.6 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **SKT** | **Skwentna** | **83.49** | **28** | P | **P** | **06 00 49.5** | **+0.4** |
| SKT | | | | IAmb | IAmb | 06 01 33.1 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **G23K** | **Bananza Creek** | **84.57** | **23** | P | **P** | **06 00 54.4** | **-0.1** |
| G23K | | | | IAmb | IAmb | 06 01 18.9 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **BWN** | **Browne** | **84.61** | **26** | P | **P** | **06 00 55.0** | **+0.4** |
| **C23K** | **Itkillik River** | **84.64** | **20** | P | **P** | **06 00 55.9** | **+1.2** |
| **H23K** | **Yukon River** | **84.70** | **24** | P | **P** | **06 00 55.0** | **-0.1** |
| H23K | | | | IAmb | IAmb | 06 01 17.0 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **ILAR** | **Eielson Array** | **85.76** | **25** | P | **P** | **06 01 04.5** | **+4.2** |
| | comp=Z,0.6nm,0.9s,baz=251,slow=5.1,SNR=5.3 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **86.73** | **23** | P | **P** | **06 01 05.6** | **+0.4** |
| **FURI** | **Furi** | **87.37** | **279** | LR | LR | 06 38 17.6 | |
| | comp=Z,26nm,22.0s,baz=63,slow=35 | | | | | | |
| **F28M** | **Old Crow** | **88.53** | **22** | P | **P** | **06 01 13.8** | **0.0** |
| F28M | | | | IAmb | IAmb | 06 01 36.6 | |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **90.94** | **340** | P | **P** | **06 01 24.1** | **-0.9** |
| **ARCES** | **ARCESS Array B** | **90.94** | **340** | P | **P** | **06 01 25.3** | **+0.3** |
| | comp=Z,3.1nm,1.0s,baz=92,slow=6.1,SNR=5.0 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **92.22** | **321** | LR | LR | 06 48 33.9 | |
| | comp=Z,12nm,18.0s,baz=24,slow=39 | | | | | | |
| **FIA1** | **FINESS Array S** | **92.25** | **332** | P | **P** | **06 01 31.0** | **-0.2** |
| **FINES** | **FINESS Array B** | **92.26** | **332** | P | **P** | **06 01 30.9** | **-0.3** |
| **FINES** | **FINESS Array B** | **92.26** | **332** | P | **P** | **06 01 30.6** | **-0.6** |
| | comp=Z,2.8nm,0.9s,baz=112,slow=11,SNR=3.0 | | | | | | |
| FINES | | | | LR | LR | 06 46 24.2 | |
| | comp=Z,28nm,20.1s,baz=20,slow=38 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **DLBC** | **Dease Lake** | **94.39** | **31** | LR | LR | 06 42 13.1 | |
| | comp=Z,29nm,20.2s,baz=262,slow=34 | | | | | | |
| **HFS** | **Hagfors** | **98.45** | **332** | P | **P** | **06 01 58.8** | **-0.7** |
| | comp=Z,1.9nm,0.9s,baz=116,slow=6.7,SNR=1.5 | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **99.23** | **334** | LR | LR | 06 53 04.8 | |
| | comp=Z,14nm,18.1s,baz=55,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **122.16** | **52** | PKP | **PKiKP** | **06 07 18.7** | **+1.6** |
| | comp=Z,0.1nm,0.3s,baz=357,slow=3.6,SNR=1.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.88** | **288** | PKP | **PKPdf** | **06 07 18.2** | **-0.3** |
| | comp=Z,0.3nm,0.4s,baz=74,slow=5.1,SNR=3.6 | | | | | | |

**IDC 06 05:54:54.1±3.4,54.43N×87.02E,h0km,mbtmp2.9/2, ML2.6/2,Error ellipse: s-maj=31.1km s-min=19.9km az=52.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.38** | **250** | I | I | 06 03 10.0 | |
| | baz=68,slow=313,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.38** | **250** | Pg | Pg | 05 55 19.2 | -1.3 |
| | 0.9nm,0.3s,baz=71,slow=17,SNR=8.7 | | | | | | |
| ZALV | | | | Lg | Lg | 05 55 38.6 | |
| | 1.8nm,0.3s,baz=71,slow=25,SNR=6.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.43** | **237** | Pn | Pn | 05 56 30.1 | +0.2 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=8.8 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.22** | **203** | Pn | Pn | 05 56 56.2 | +1.8 |
| | 0.1nm,0.3s,baz=20,slow=22,SNR=2.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

**INMG 06 05:56:38.3±1.2,41.66N×8.46W,h5km,ML1.0,2C,Error ellipse: s-maj=6.2km s-min=2.2km az=93.0,Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCAB** | **Cabril** | **0.33** | **81** | *i*Pg | Pg | 05 56 44.5 | -0.1 |
| PCAB | | | | *e*Sg | Sg | 05 56 49.0 | +0.1 |
| PCAB | | | | A | A | 05 56 49.8 | |
| | 11nm,0.2s | | | | | | |
| **PCAB** | **Cabril** | **0.33** | **81** | *e*S | Sb | 05 56 53.5 | +1.3 |
| PCAB | | | | A | A | 05 56 54.2 | |
| | 6.2nm,0.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.34** | **25** | *i*Pg | Pg | 05 56 44.4 | -0.4 |
| PGAV | | | | *e*Sg | Sg | 05 56 48.8 | -0.5 |
| PGAV | | | | A | A | 05 56 49.7 | |
| | 6.3nm,0.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.34** | **25** | *e*P | Pb | 05 56 47.7 | +0.9 |
| PGAV | | | | *e*S | Sb | 05 56 53.7 | +1.1 |
| PGAV | | | | A

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.33** | **25** | *e*Pg | Pn | 06 12 55.0 | -1.1 |
| PGAV | | | | *e*Sg | Sb | 06 12 59.7 | +1.1 |
| PGAV | | | | A | A | 06 13 00.1 | |
| | 6.6nm,0.4s | | | | | | |
| **POLO** | **Lamas de Olo** | **0.58** | **120** | *e*Pg | Pg | 06 12 54.9 | -0.5 |
| POLO | | | | *e*Sg | Sg | 06 13 02.6 | -0.3 |
| POLO | | | | A | A | 06 13 04.2 | |
| | 1.9nm,0.3s | | | | | | |
| **POLO** | **Lamas de Olo** | **0.58** | **120** | *e*Pg | Pn | 06 12 58.7 | -0.8 |
| POLO | | | | *e*Sg | Sb | 06 13 06.9 | +1.2 |
| **PVRL** | **Vila Real** | **0.68** | **125** | *e*P | Pg | 06 12 57.2 | -0.2 |
| PVRL | | | | *e*S | Sg | 06 13 05.4 | -0.8 |
| PVRL | | | | A | A | 06 13 07.8 | |
| | 12nm,0.1s | | | | | | |
| **PVRL** | **Vila Real** | **0.68** | **125** | *e*S | Sb | 06 13 09.7 | +1.0 |
| PVRL | | | | A | A | 06 13 10.1 | |
| | 13nm,0.1s | | | | | | |
| **PVIS** | **Viseu** | **1.04** | **156** | *e*P | Pg | 06 13 03.4 | -0.8 |
| PVIS | | | | *e*S | Sg | 06 13 17.4 | -0.3 |
| **MVO** | **Moncorvo** | **1.19** | **115** | *e*S | Sg | 06 13 21.3 | -1.1 |
| MVO | | | | A | A | 06 13 22.2 | |
| | 5.2nm,0.3s | | | | | | |
| **MVO** | **Moncorvo** | **1.19** | **115** | *e*S | Sn | 06 13 25.7 | +1.2 |
| **PBRG** | **Braganca** | **1.29** | **83** | *e*P | Pg | 06 13 07.5 | -1.6 |
| PBRG | | | | *e*S | Sg | 06 13 25.0 | -0.8 |
| PBRG | | | | A | A | 06 13 26.2 | |
| | 3.2nm,0.3s | | | | | | |
| **MTE** | **Manteigas** | **1.44** | **151** | *e*S | Sb | 06 13 29.5 | -1.1 |
| MTE | | | | A | A | 06 13 33.4 | |
| | 7.4nm,0.2s | | | | | | |

*INMG **06** 06:13:05.1±1.4, 41°.66N×8°.48W, h5km±3km, ML2.2, Error ellipse: s-maj=3.2km s-min=1.5km az=88.0*
*MDD **06** 06:13:05.3±0.8, 41°.68N×8°.45W, h16km±20km, mb_Lg3.0/3, Error ellipse: s-maj=7.3km s-min=3.5km az=54.0*
**ISC 06 06:13:04.4±1.0, 41°.68N±0°.02×8°.51W±0°.03, h14km±8km, n26, σ1°17/45, 4C-1D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.34** | **32** | ↑*e*Pg | | **Pg** | **06 13 11.4** | **0.0** |
| PGAV | | | | A | | A | 06 13 16.9 | |
| | 102nm,0.1s | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.34** | **32** | *e*Pg | | **Pn** | **06 13 16.0** | **+1.0** |
| PGAV | | | | *e*Sg | | **Sn** | **06 13 21.0** | **-0.7** |
| PGAV | | | | A | | A | 06 13 21.8 | |
| | 39nm,0.2s | | | | | | | |
| **PCAB** | **Cabril** | **0.36** | **84** | ↑*e*Pg | | **Pg** | **06 13 11.6** | **-0.2** |
| **PCAB** | **Cabril** | **0.36** | **84** | *e*Pg | | **Pn** | **06 13 16.2** | **+1.0** |
| PCAB | | | | *e*Sg | | **Sn** | **06 13 20.9** | **-1.3** |
| PCAB | | | | A | | A | 06 13 21.5 | |
| | 81nm,0.1s | | | | | | | |
| **ELOB** | **Lobios** | **0.39** | **60** | Pg | | **Pg** | **06 13 12.1** | **-0.2** |
| ELOB | | | | Sg | | **Sg** | **06 13 17.5** | **-0.2** |
| ELOB | | | | *i* Vmb_Lg | | | 06 13 17.9 | |
| **EZAM** | **Zamans** | **0.49** | **344** | Pg | | **Pg** | **06 13 14.5** | **+0.4** |
| EZAM | | | | Sg | | **Sg** | **06 13 21.5** | **+0.8** |
| EZAM | | | | *i* Vmb_Lg | | | 06 13 22.8 | |
| **POLO** | **Lamas de Olo** | **0.62** | **119** | *e*Pg | | **Pg** | **06 13 16.2** | **-0.3** |
| POLO | | | | *e*Sg | | **Sg** | **06 13 23.6** | **-1.1** |
| POLO | | | | A | | A | 06 13 24.9 | |
| | 15nm,0.4s | | | | | | | |
| **POLO** | **Lamas de Olo** | **0.62** | **119** | *e*Pg | | **Pn** | **06 13 19.7** | **+0.9** |
| POLO | | | | *e*Sg | | **Sn** | **06 13 28.3** | **-0.2** |
| POLO | | | | A | | A | 06 13 28.3 | |
| | 8.0nm,0.2s | | | | | | | |
| **PVRL** | **Vila Real** | **0.72** | **123** | ↑*e*P | | **Pg** | **06 13 17.9** | **-0.5** |
| PVRL | | | | *e*S | | **Sg** | **06 13 27.1** | **-0.8** |
| PVRL | | | | A | | A | 06 13 28.2 | |
| | 58nm,0.1s | | | | | | | |
| **PVRL** | **Vila Real** | **0.72** | **123** | *e*P | | **Pn** | **06 13 21.5** | **+1.4** |
| **PVIS** | **Viseu** | **1.07** | **154** | *e*P | | **Pg** | **06 13 24.8** | **-0.2** |
| PVIS | | | | *e*S | | **Sg** | **06 13 38.6** | **-0.3** |
| PVIS | | | | A | | A | 06 13 39.9 | |
| | 42nm,0.1s | | | | | | | |
| **PVIS** | **Viseu** | **1.07** | **154** | *e*P | | **Pg** | **06 13 29.0** | **+4.0** |
| **EAGO** | **Agolada(Pontev** | **1.17** | **15** | Pg | | **Pg** | **06 13 26.8** | **-0.1** |
| EAGO | | | | Sg | | **Sb** | **06 13 41.0** | **-0.4** |
| **MVO** | **Moncorvo** | **1.23** | **114** | *e*P | | **Pb** | **06 13 27.1** | **-0.2** |
| MVO | | | | *e*S | | **Sb** | **06 13 42.4** | **-0.6** |
| MVO | | | | A | | A | 06 13 43.5 | |
| | 36nm,0.1s | | | | | | | |
| **MVO** | **Moncorvo** | **1.23** | **114** | *e*P | | **Pg** | **06 13 31.4** | **+3.4** |
| **EMAZ** | **Mazaricos** | **1.32** | **345** | Pg | | **Pb** | **06 13 29.3** | **+0.4** |
| EMAZ | | | | Sg | | **Sg** | **06 13 47.0** | **+0.1** |
| **PBRG** | **Braganca** | **1.33** | **84** | ↓*e*P | | **Pb** | **06 13 29.2** | **+0.1** |
| PBRG | | | | *e*S | | **Sn** | **06 13 46.2** | **+0.1** |
| PBRG | | | | A | | A | 06 13 47.4 | |
| | 15nm,0.4s | | | | | | | |
| **ECAL** | **Calabor** | **1.35** | **78** | Pg | | **Pn** | **06 13 28.6** | **-0.2** |
| ECAL | | | | Sg | | **Sn** | **06 13 45.6** | **-1.0** |
| **COI** | **Coimbra** | **1.47** | **177** | *e*Pn | | **Pn** | **06 13 30.3** | **0.0** |
| COI | | | | *e*Sg | | **Sg** | **06 13 51.5** | **-0.2** |
| **MTE** | **Manteigas** | **1.47** | **150** | *e*Pg | | **Pb** | **06 13 31.8** | **+0.3** |
| MTE | | | | *e*Sg | | **Sg** | **06 13 50.5** | **-1.3** |
| **MTE** | **Manteigas** | **1.47** | **150** | *e*P | | **Pg** | **06 13 35.5** | **+2.9** |
| **PCAS** | **Casmilo, Conde** | **1.62** | **180** | ↑*e*Pg | | **Pg** | **06 13 34.7** | **-0.8** |
| PCAS | | | | *e*Sg | | **Sg** | **06 13 56.0** | **-0.6** |
| **PSBE** | **So Bento** | **2.17** | **186** | *e*Sg | | **Sg** | **06 14 13.3** | **-0.8** |
| **PMRV** | **Marv??o** | **2.40** | **159** | *e*Sn | | **Sn** | **06 14 11.3** | **-1.1** |
| PMRV | | | | *e*Sg | | **Sg** | **06 14 20.6** | **-1.0** |
| **PMTG** | **Montargil** | **2.61** | **175** | *e*Pn | | **Pn** | **06 13 46.4** | **+0.3** |
| PMTG | | | | *e*Sn | | **Sn** | **06 14 16.0** | **-1.6** |
| PMTG | | | | *e*Sg | | **Sg** | **06 14 27.9** | **-0.4** |
| **PMAFR** | **Mafra** | **2.78** | **192** | *e*Pn | | **Pn** | **06 13 48.5** | **+0.1** |

*IGIL **06** 06:13:31.2, 41°.66N×8°.46W, h7km, ML2.8*
*INMG **06** 06:13:31.4±1.0, 41°.66N×8°.48W, h8km±1km, ML3.0, Error ellipse: s-maj=2.3km s-min=1.0km az=97.0*
*LDG **06** 06:13:31.3±0.4, 41°.68N×8°.48W, h2km, Ml3.2/13, Error ellipse: s-maj=8.1km s-min=4.7km az=83.0*
*SFS **06** 06:13:31.6, 41°.67N×8°.67W, h20km, ML4.0/12, ML4.0/12, MLv3.9/12*
**ISC 06 06:13:30.9±1.0, 41°.74N±0°.03×8°.44W±0°.05, h27km±7km, n63, σ2°23/100, 4C-4D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.26** | **29** | ↑*e*Pg | | **Pb** | **06 13 37.7** | **0.0** |
| PGAV | | | | *e*Sg | | **Sb** | **06 13 43.0** | **+0.7** |
| **PCAB** | **Cabril** | **0.31** | **95** | ↑*i*Pg | | **Pb** | **06 13 37.8** | **-0.5** |
| PCAB | | | | *e*Sg | | **Sb** | **06 13 42.3** | **-1.0** |
| PCAB | | | | A | | A | 06 13 42.6 | |
| | 984nm,0.1s | | | | | | | |
| **POLO** | **Lamas de Olo** | **0.60** | **127** | ↓*e*Pg | | **Pb** | **06 13 42.3** | **-0.7** |
| POLO | | | | *e*Sg | | **Sb** | **06 13 49.8** | **-1.4** |
| **PVRL** | **Vila Real** | **0.71** | **130** | ↓*e*P | | **Pb** | **06 13 44.1** | **-0.7** |
| PVRL | | | | *e*S | | **Sb** | **06 13 53.5** | **-0.7** |
| **PVIS** | **Viseu** | **1.10** | **158** | ↑*e*P | | **Pb** | **06 13 50.4** | **-1.0** |
| PVIS | | | | *e*S | | **Sn** | **06 14 04.8** | **-0.1** |
| **MVO** | **Moncorvo** | **1.20** | **118** | ↓*e*P | | **Pb** | **06 13 53.2** | **+0.1** |
| MVO | | | | *e*S | | **Sb** | **06 14 08.7** | **+0.4** |
| **PBRG** | **Braganca** | **1.27** | **86** | ↓*e*P | | **Pb** | **06 13 54.8** | **+0.6** |
| PBRG | | | | *e*S | | **Sb** | **06 14 12.2** | **+2.0** |
| **PBRG** | **Braganca** | **1.27** | **86** | *e*S | | Sb | 06 14 12.6 | -2.0 |
| **ECAL** | **Calabor** | **1.28** | **80** | Pn | | **Pb** | **06 13 55.9** | **+1.4** |
| ECAL | | | | Sn | | **Sb** | **06 14 13.9** | **+3.3** |
| **MTE** | **Manteigas** | **1.50** | **153** | *e*Pg | | **Pb** | **06 13 57.8** | **-0.3** |
| MTE | | | | *e*Sg | | **Sb** | **06 14 16.8** | **+0.1** |
| **MTE** | **Manteigas** | **1.50** | **153** | *e*Pn | | Pn | 06 13 57.8 | -1.7 |
| **COI** | **Coimbra** | **1.53** | **179** | *e*Sg | | **Sb** | **06 14 17.9** | **+0.4** |
| **PCAS** | **Casmilo, Conde** | **1.69** | **182** | *e*Pg | | **Pb** | **06 14 00.9** | **-0.4** |
| PCAS | | | | *e*Sg | | **Sb** | **06 14 22.9** | **+0.9** |
| **PCBR** | **Castelo Branco** | **2.03** | **159** | *e*Pg | | **Pb** | **06 14 07.2** | **+0.1** |
| PCBR | | | | *e*Sg | | **Sb** | **06 14 34.1** | **+2.1** |
| **PSBE** | **So Bento** | **2.24** | **187** | *e*Pn | | **Pn** | **06 14 06.3** | **+0.1** |
| PSBE | | | | *e*Sn | | **Sn** | **06 14 32.4** | **-0.6** |
| PSBE | | | | *e*Sg | | **Sb** | **06 14 40.6** | **+2.6** |
| **PMRV** | **Marv??o** | **2.44** | **161** | *e*Pn | | **Pn** | **06 14 09.8** | **+0.8** |
| PMRV | | | | *e*Sg | | **Sb** | **06 14 47.0** | **+3.2** |
| **PMTG** | **Montargil** | **2.67** | **176** | ↑*e*Pn | | **Pn** | **06 14 12.6** | **+0.4** |
| PMTG | | | | *e*Sg | | **Sb** | **06 14 52.7** | **+2.3** |
| **PMAFR** | **Mafra** | **2.85** | **193** | *e*Pn | | **Pn** | **06 14 14.5** | **-0.2** |
| PMAFR | | | | *e*Sg | | **Sb** | **06 14 59.9** | **+4.2** |
| **PMAFR** | **Mafra** | **2.85** | **193** | Pn | | **Pn** | **06 14 14.3** | **-0.4** |
| **EBAD** | **Badajoz** | **3.17** | **159** | Pn | | **Pn** | **06 14 19.2** | **+0.1** |
| **EVO** | **Evora** | **3.22** | **174** | *e*Pn | | **Pn** | **06 14 20.1** | **+0.4** |
| EVO | | | | *e*Sn | | **Sn** | **06 14 56.9** | **-0.2** |
| EVO | | | | *e*Sg | | **Sb** | **06 15 11.6** | **+5.5** |
| **EVO** | **Evora** | **3.22** | **174** | *e*Pn | | **Pn** | **06 14 20.0** | **+0.4** |
| EVO | | | | Sn | | **Sn** | **06 14 55.1** | **-2.1** |
| **PNCL** | **Nicolau / Gran** | **3.62** | **181** | *e*Pn | | **Pn** | **06 14 25.4** | **+0.2** |
| PNCL | | | | *e*Sn | | **Sn** | **06 15 06.1** | **-1.0** |
| PNCL | | | | *e*Sg | | **Sb** | **06 15 25.0** | **+7.3** |
| **PNCL** | **Nicolau / Gran** | **3.62** | **181** | Pn | | **Pn** | **06 14 25.1** | **-0.1** |
| PNCL | | | | Sn | | **Sn** | **06 15 04.1** | **-2.9** |
| **PBAR** | **Barrancos** | **3.72** | **163** | *e*Pn | | **Pn** | **06 14 26.7** | **+0.2** |
| PBAR | | | | *e*Sn | | **Sn** | **06 15 08.6** | **-0.8** |
| **PBAR** | **Barrancos** | **3.72** | **163** | Pn | | **Pn** | **06 14 26.8** | **+0.2** |
| PBAR | | | | Sn | | **Sn** | **06 15 06.9** | **-2.5** |
| **PBEJ** | **Beja** | **3.73** | **173** | *e*Sg | | **Sb** | **06 15 28.2** | **+7.3** |
| **MESJ** | **Messejana** | **3.90** | **177** | *e*Pn | | **Pn** | **06 14 28.8** | **-0.2** |
| MESJ | | | | *e*Sn | | **Sn** | **06 15 13.9** | **0.0** |
| MESJ | | | | *e*Sg | | Sb | 06 15 34.5 | +8.8 |
| **MESJ** | **Messejana** | **3.90** | **177** | *e*P | | **Pn** | **06 14 28.7** | **-0.4** |
| MESJ | | | | *e*S | | **Sn** | **06 15 10.8** | **-3.1** |
| MESJ | | | | IAML | | | 06 15 18.6 | |
| | comp=N,24nm,0.7s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.11** | **176** | *e*Pn | | **Pn** | **06 14 31.7** | **-0.3** |
| **PCVE** | **Castro Verde** | **4.11** | **176** | Pn | | **Pn** | **06 14 32.1** | **+0.1** |
| **EMIN** | **Mina Concepcio** | **4.19** | **161** | Pn | | **Pn** | **06 14 31.9** | **-1.2** |
| EMIN | | | | Sn | | **Sn** | **06 15 18.6** | **-2.5** |
| **PTEO** | **Sao Teotonio** | **4.19** | **183** | *e*Pn | | **Pn** | **06 14 32.7** | **-0.4** |
| PTEO | | | | *e*Sg | | Sb | 06 15 42.2 | +8.1 |
| **EGRO** | **El Granado** | **4.26** | **170** | Pn | | **Pn** | **06 14 34.7** | **+0.7** |
| EGRO | | | | Sn | | **Sn** | **06 15 19.7** | **-3.2** |
| **ECAB** | **El Cabril** | **4.33** | **147** | Pn | | **Pn** | **06 14 36.6** | **+1.6** |
| ECAB | | | | Sn | | **Sn** | **06 15 23.2** | **-1.5** |
| **PVAQ** | **Vaqueiros** | **4.36** | **172** | *e*Pn | | **Pn** | **06 14 35.2** | **-0.2** |
| PVAQ | | | | *e*Sn | | **Sn** | **06 15 24.7** | **-0.7** |
| PVAQ | | | | *e*Sg | | Sb | 06 15 47.7 | +8.6 |
| **PVAQ** | **Vaqueiros** | **4.36** | **172** | Pn | | **Pn** | **06 14 34.8** | **-0.7** |
| PVAQ | | | | Sn | | **Sn** | **06 15 22.2** | **-3.2** |
| **MORF** | **Marmelete** | **4.43** | **182** | *e*Pn | | **Pn** | **06 14 35.9** | **-0.5** |
| MORF | | | | *e*Sn | | **Sn** | **06 15 25.8** | **-1.3** |
| MORF | | | | *e*Sg | | Sb | 06 15 49.0 | +8.0 |
| **MORF** | **Marmelete** | **4.43** | **182** | *e*P | | **Pn** | **06 14 35.8** | **-0.5** |
| MORF | | | | *e*S | | **Sn** | **06 15 23.2** | **-3.9** |
| MORF | | | | IAML | | | 06 15 29.6 | |
| | comp=N,17nm,0.3s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **4.51** | **175** | *e*Pn | | **Pn** | **06 14 38.2** | **+0.8** |
| PBDV | | | | *e*Sn | | **Sn** | **06 15 27.7** | **-1.2** |
| PBDV | | | | *e*Sg | | Sb | 06 15 52.2 | +9.0 |
| **PBDV** | **Barranco-do-Ve** | **4.51** | **175** | Pn | | **Pn** | **06 14 37.7** | **+0.2** |
| PBDV | | | | Sn | | **Sn** | **06 15 25.2** | **-3.7** |
| **PFVI** | **Vila Bisbo** | **4.61** | **184** | *e*Pn | | **Pn** | **06 14 38.7** | **-0.1** |
| PFVI | | | | *e*Sn | | **Sn** | **06 15 29.8** | **-1.6** |
| **PFVI** | **Vila Bisbo** | **4.61** | **184** | Pn | | **Pn** | **06 14 38.2** | **-0.6** |
| PFVI | | | | Sn | | **Sn** | **06 15 26.4** | **-5.0** |
| **EADA** | **Adamuz** | **4.64** | **139** | Pn | | **Pn** | **06 14 39.9** | **+0.7** |
| EADA | | | | Sn | | **Sn** | **06 15 32.7** | **+0.5** |
| **SJPF** | **Ste Jean** | **5.51** | **73** | *e*Pn | | **Pn** | **06 14 53.9** | **+2.7** |
| SJPF | | | | *e*Sn | | **Sn** | **06 15 56.2** | **+2.6** |
| | comp=N,1.9nm,0.2s | | | | | | | |
| SJPF | | | | *e*Sg | | Sb | 06 16 25.6 | +14 |
| | comp=N,7.7nm,0.5s | | | | | | | |
| **ETSF** | **Etsaut** | **5.95** | **76** | *e*Pn | | **Pn** | **06 14 59.9** | **+2.6** |
| **ETSF** | **Etsaut** | **5.95** | **76** | *e*P | | Pn | 06 15 03.5 | +6.2 |
| ETSF | | | | *e*Sn | | **Sn** | **06 16 06.1** | **+1.5** |
| | comp=N,5.9nm,0.4s | | | | | | | |
| **EPF** | **Esparros** | **6.62** | **76** | *e*Pn | | **Pn** | **06 15 07.9** | **+1.4** |
| **EPF** | **Esparros** | **6.62** | **76** | *e*P | | Pn | 06 15 12.8 | +6.3 |
| EPF | | | | *e*Sn | | **Sn** | **06 16 23.1** | **+1.9** |
| | comp=N,5.8nm,0.5s | | | | | | | |
| EPF | | | | *e*Sg | | Sb | 06 16 59.4 | +15 |
| | comp=N,7.4nm,0.6s | | | | | | | |
| **QUIF** | **Quistinic** | **7.22** | **29** | *e*Pn | | **Pn** | **06 15 17.4** | **+2.8** |
| QUIF | | | | *e*Sn | | **Sn** | **06 16 33.6** | **-2.1** |
| | comp=N,5.1nm,0.4s | | | | | | | |
| **ROSF** | **Rostrenen** | **7.54** | **27** | *e*Pn | | **Pn** | **06 15 18.8** | **-0.2** |
| ROSF | | | | *e*Sn | | **Sn** | **06 16 40.0** | **-3.5** |
| | comp=N,2.1nm,0.3s | | | | | | | |
| **MFF** | **Saint Martin d** | **7.69** | **48** | *e*Pn | | **Pn** | **06 15 23.5** | **+2.5** |
| MFF | | | | *e*Sn | | **Sn** | **06 16 45.1** | **-2.1** |
| | comp=N,7.5nm,0.7s | | | | | | | |
| **MTLF** | **Montolieu** | **8.03** | **75** | *e*Pn | | **Pn** | **06 15 27.5** | **+1.8** |
| **MTLF** | **Montolieu** | **8.03** | **75** | *e*P | | Pn | 06 15 32.6 | +6.9 |
| **MTLF** | **Montolieu** | **8.03** | **75** | *e*Pg | | Pb | 06 16 01.3 | +12 |
| **RJF** | **Les Rejaudoux** | **8.06** | **60** | *e*P | | Pn | 06 15 32.7 | +6.5 |
| RJF | | | | *e*Sn | | **Sn** | **06 16 52.5** | **-3.9** |
| | comp=N,1.9nm,0.4s | | | | | | | |
| **CAF** | **Calviac** | **8.29** | **64** | *e*P | | Pn | 06 15 35.5 | +6.2 |
| **GRR** | **Gorron** | **8.54** | **36** | *e*Pn | | **Pn** | **06 15 36.0** | **+3.3** |
| GRR | | | | *e*Sn | | **Sn** | **06 17 03.8** | **-4.2** |
| | comp=N,12nm,0.9s | | | | | | | |
| **LDF** | **La Druitiere** | **9.02** | **38** | *e*Pn | | **Pn** | **06 15 42.2** | **+2.9** |
| LDF | | | | *e*Sn | | **Sn** | **06 17 15.7** | **-4.2** |
| | comp=N,3.0nm,0.5s | | | | | | | |
| **LASF** | **Ste Croix** | **9.32** | **71** | *e*Pn | | **Pn** | **06 15 45.6** | **+2.2** |
| **LASF** | **Ste Croix** | **9.32** | **71** | *e*P | | Pn | 06 15 51.1 | +7.7 |
| **VIVF** | **Saint-Julien-l** | **10.05** | **68** | *e*Pn | | **Pn** | **06 15 54.9** | **+1.4** |
| **VIVF** | **Saint-Julien-l** | **10.05** | **68** | *e*P | | Pn | 06 16 01.1 | +7.6 |

*INMG **06** 06:13:33.0±1.5, 41°.66N×8°.47W, h8km±3km, ML3.2, Error ellipse: s-maj=4.0km s-min=1.9km az=96.0*
*MDD **06** 06:13:34.1±0.3, 41°.77N×8°.55W, h0km, mb_Lg3.5/26, Error ellipse: s-maj=3.2km s-min=2.0km az=99.0*
**ISC 06 06:13:31.6±1.2, 41°.67N±0°.02×8°.54W±0°.03, h3km±10km, n49, σ1°35/75, 2C-2D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.35** | **34** | ↑*e*Pg | | **Pg** | **06 13 39.1** | **+0.6** |
| PGAV | | | | *e*Sg | | **Sg** | **06 13 43.6** | **+0.5** |
| PGAV | | | | A | | A | 06 13 44.6 | |
| | 2µm,0.5s | | | | | | | |
| **PCAB** | **Cabril** | **0.38** | **84** | ↑*e*Pg | | **Pg** | **06 13 39.3** | **+0.3** |
| PCAB | | | | *i* Sg | | **Sg** | **06 13 43.9** | **-0.1** |
| PCAB | | | | A | | A | 06 13 44.7 | |
| | 2µm,0.4s | | | | | | | |
| **ELOB** | **Lobios** | **0.41** | **61** | Pg | | **Pg** | **06 13 38.2** | **-1.2** |
| ELOB | | | | Sg | | **Sg** | **06 13 45.3** | **+0.6** |
| **EZAM** | **Zamans** | **0.49** | **346** | Pg | | **Pg** | **06 13 41.2** | **+0.1** |
| EZAM | | | | Sg | | **Sg** | **06 13 48.1** | **+0.6** |
| EZAM | | | | *i* Vmb_Lg | | | 06 13 50.3 | |
| **POLO** | **Lamas de Olo** | **0.63** | **118** | *e*Pg | | **Pg** | **06 13 43.8** | **+0.1** |
| POLO | | | | *e*Sg | | **Sg** | **06 13 51.3** | **-0.6** |
| POLO | | | | A | | A | 06 13 53.9 | |
| | 213nm,0.8s | | | | | | | |
| **PVRL** | **Vila Real** | **0.73** | **122** | ↓*e*P | | **Pg** | **06 13 45.6** | **0.0** |
| PVRL | | | | A | | A | 06 13 56.3 | |
| | 532nm,0.2s | | | | | | | |
| **PVIS** | **Viseu** | **1.07** | **153** | *e*P | | **Pg** | **06 13 51.7** | **-0.4** |
| PVIS | | | | *e*S | | **Sg** | **06 14 05.7** | **-0.2** |
| **EAGO** | **Agolada(Pontev** | **1.18** | **16** | Pg | | **Pg** | **06 13 54.2** | **-0.1** |
| EAGO | | | | Sg | | **Sg** | **06 14 09.6** | **+0.1** |
| **MVO** | **Moncorvo** | **1.24** | **114** | ↓*e*P | | **Pg** | **06 13 54.8** | **-0.6** |
| MVO | | | | *e*S | | **Sg** | **06 14 10.0** | **-1.5** |
| **EMAZ** | **Mazaricos** | **1.32** | **346** | Pg | | **Pn** | **06 13 56.4** | **-0.6** |
| EMAZ | | | | Sg | | **Sb** | **06 14 12.7** | **-1.6** |
| EMAZ | | | | *i* Vmb_Lg | | | 06 14 18.9 | |
| **PBRG** | **Braganca** | **1.35** | **84** | *e*P | | **Pn** | **06 13 56.6** | **-0.8** |
| PBRG | | | | A | | A | 06 14 15.3 | |
| | 246nm,0.6s | | | | | | | |
| **ECAL** | **Calabor** | **1.37** | **78** | Pg | | **Pg** | **06 13 58.7** | **+0.8** |
| ECAL | | | | Sg | | **Sn** | **06 14 16.1** | **-0.4** |
| ECAL | | | | *i* Vmb_Lg | | | 06 14 18.4 | |
| **COI** | **Coimbra** | **1.46** | **176** | *e*Pg | | **Pb** | **06 14 00.1** | **+0.7** |
| COI | | | | *e*Sg | | **Sb** | **06 14 18.9** | **+0.5** |
| COI | | | | A | | A | 06 14 22.4 | |
| | 496nm,0.4s | | | | | | | |
| **MTE** | **Manteigas** | **1.47** | **149** | *e*Sn | | **Sn** | **06 14 17.4** | **-1.5** |
| MTE | | | | A | | A | 06 14 19.7 | |
| | 243nm,0.4s | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **1.62** | **179** | *e*Pg | | **Pn** | **06 14 01.6** | **+0.6** |
| PCAS | | | | A | | A | 06 14 29.2 | |
| | 192nm,0.5s | | | | | | | |
| **EPON** | **Pontenova** | **1.95** | **31** | Pn | | **Pn** | **06 14 05.9** | **+0.3** |
| EPON | | | | Sn | | **Sn** | **06 14 30.4** | **-0.1** |
| EPON | | | | *i* Vmb_Lg | | | 06 14 34.9 | |
| **PCBR** | **Castelo Branco** | **2.00** | **156** | *e*Pg | | **Pb** | **06 14 09.0** | **+0.5** |
| PCBR | | | | A | | A | 06 14 36.5 | |
| | 113nm,0.5s | | | | | | | |
| **EJUZ** | **Juzbado, Salam** | **2.08** | **105** | Pn | | **Pn** | **06 14 08.3** | **+1.0** |
| EJUZ | | | | Sn | | **Sb** | **06 14 35.0** | **-1.2** |
| **PSBE** | **So Bento** | **2.16** | **185** | *e*Pg | | **Pb** | **06 14 12.6** | **+1.2** |
| PSBE | | | | A | | A | 06 14 51.0 | |
| | 107nm,0.6s | | | | | | | |
| **PMRV** | **Marv??o** | **2.40** | **158** | *e*Pg | | **Pb** | **06 14 16.7** | **+1.2** |
| PMRV | | | | A | | A | 06 14 58.1 | |
| | 84nm,0.4s | | | | | | | |
| **EPLA** | **Plasencia** | **2.46** | **130** | Pn | | **Pn** | **06 14 12.8** | **+0.2** |
| EPLA | | | | Sn | | **Sb** | **06 14 45.9** | **-1.2** |
| EPLA | | | | *i* Vmb_Lg | | | 06 14 49.8 | |
| **PMTG** | **Montargil** | **2.61** | **175** | *e*Pg | | **Pb** | **06 14 20.3** | **+1.3** |
| PMTG | | | | A | | A | 06 15 01.6 | |
| | 43nm,0.6s | | | | | | | |
| **PMAFR** | **Mafra** | **2.77** | **192** | *e*Pn | | **Pn** | **06 14 16.1** | **-0.8** |
| **EARI** | **Arriondas** | **2.95** | **55** | Pn | | **Pn** | **06 14 19.5** | **+0.2** |
| EARI | | | | Sn | | **Sn** | **06 14 55.7** | **+0.4** |
| **EBAD** | **Badajoz** | **3.14** | **158** | Pn | | **Pn** | **06 14 24.0** | **+2.2** |
| EBAD | | | | Sn | | **Sb** | **06 15 03.6** | **-3.0** |
| EBAD | | | | *i* Vmb_Lg | | | 06 15 10.1 | |
| **EVO** | **Evora** | **3.16** | **173** | *e*Pn | | **Pn** | **06 14 21.6** | **-0.6** |
| **GUD** | **Guadarrama** | **3.46** | **106** | Pn | | **Pn** | **06 14 25.5** | **-1.0** |
| GUD | | | | Sn | | **Sn** | **06 15 10.3** | **+2.2** |
| GUD | | | | *i* Vmb_Lg | | | 06 15 21.0 | |
| **PNCL** | **Nicolau / Gran** | **3.55** | **180** | *e*Pn | | **Pn** | **06 14 27.0** | **-0.6** |
| **PBAR** | **Barrancos** | **3.68** | **161** | *e*Pn | | **Pn** | **06 14 28.6** | **-0.7** |
| **PBEJ** | **Beja** | **3.68** | **172** | *e*Pn | | **Pn** | **06 14 28.5** | **-0.8** |
| **PAB** | **San Pablo** | **3.83** | **122** | Pn | | **Pn** | **06 14 33.7** | **+2.2** |
| PAB | | | | Sn | | **Sn** | **06 15 19.3** | **+2.2** |
| PAB | | | | *i* Vmb_Lg | | | 06 15 36.2 | |
| **MESJ** | **Messejana** | **3.83** | **176** | *e*Pn | | **Pn** | **06 14 30.5** | **-1.0** |
| **ESDC** | **Sonseca Array** | **4.01** | **118** | Pn | | **Pn** | **06 14 35.7** | **+1.8** |
| ESDC | | | | *i* Vmb_Lg | | | 06 15 39.8 | |
| **PCVE** | **Castro Verde** | **4.05** | **174** | *e*Pn | | **Pn** | **06 14 33.8** | **-0.7** |
| **ELAN** | **Lanestosa** | **4.08** | **66** | Pn | | **Pn** | **06 14 36.1** | **+1.1** |
| ELAN | | | | *i* Vmb_Lg | | | 06 15 51.5 | |
| **EMIN** | **Mina Concepcio** | **4.15** | **159** | Sn | | **Sn** | **06 15 25.6** | **+0.7** |
| **EGRO** | **El Granado** | **4.21** | **169** | Pn | | **Pn** | **06 14 38.4** | **+1.7** |
| EGRO | | | | Sn | | **Sn** | **06 15 28.4** | **+2.0** |
| EGRO | | | | *i* Vmb_Lg | | | 06 15 48.9 | |
| **PVAQ** | **Vaqueiros** | **4.31** | **171** | *e*Pn | | **Pn** | **06 14 36.8** | **-1.2** |
| **ECAB** | **El Cabril** | **4.32** | **145** | Pn | | **Pn** | **06 14 40.1** | **+1.9** |
| ECAB | | | | Sn | | **Sn** | **06 15 30.8** | **+1.7** |
| ECAB | | | | *i* Vmb_Lg | | | 06 15 54.2 | |
| **MORF** | **Marmelete** | **4.36** | **181** | *e*Pn | | **Pn** | **06 14 38.3** | **-0.5** |
| **PBDV** | **Barranco-do-Ve** | **4.45** | **174** | *e*Pn | | **Pn** | **06 14 39.3** | **-0.6** |
| **PFVI** | **Vila Bisbo** | **4.54** | **183** | *e*Pn | | **Pn** | **06 14 40.8** | **-0.3** |
| **PSIM** | **Granatula de C** | **4.63** | **126** | Pn | | **Pn** | **06 14 44.1** | **+1.5** |
| PSIM | | | | Sn | | **Sn** | **06 15 37.5** | **+0.6** |
| **EADA** | **Adamuz** | **4.64** | **138** | Pn | | **Pn** | **06 14 44.1** | **+1.5** |
| EADA | | | | Sn | | **Sn** | **06 15 38.9** | **+2.0** |
| EADA | | | | *i* Vmb_Lg | | | 06 16 07.1 | |
| **ETOR** | **Torete** | **4.96** | **98** | Pn | | **Pn** | **06 14 49.3** | **+2.3** |
| ETOR | | | | Pg | | **Pg** | **06 15 03.3** | **-3.3** |
| ETOR | | | | Sn | | **Sn** | **06 15 45.0** | **0.0** |
| ETOR | | | | *i* Vmb_Lg | | | 06 16 12.5 | |
| **EORO** | **Oroz-Betelu** | **5.50** | **75** | Pn | | **Pn** | **06 14 55.8** | **+1.4** |
| EORO | | | | *i* Vmb_Lg | | | 06 16 35.0 | |
| **EVIV** | **Cofrentes, Val** | **6.14** | **111** | Pn | | **Pn** | **06 15 05.0** | **+1.7** |
| EVIV | | | | Sn | | **Sn** | **06 16 12.2** | **-1.8** |
| **ETOB** | **Tobarra** | **6.15** | **117** | Pn | | **Pn** | **06 15 05.7** | **+2.4** |
| **ECHI** | **Chisagues Biel** | **6.56** | **78** | Pn | | **Pn** | **06 15 09.6** | **+0.5** |
| ECHI | | | | Sn | | **Sn** | **06 16 20.8** | **-3.7** |

**INMG 06 06:15:10.7±1.1, 41°.67N×8°.46W, h3km±4km, ML1.6, 2C, Error ellipse: s-maj=4.6km s-min=2.2km az=80.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WB0 | | | | | IAmb | IAmb | 06 31 21.0 | |
| | comp=Z,6.4nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.57** | **124** | P | **P** | | **06 31 09.1** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=302,slow=9.7,SNR=15 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **46.58** | **124** | P | **P** | | **06 31 09.9** | **-0.5** |
| WB2 | | | | | IAmb | IAmb | 06 31 27.9 | |
| | comp=Z,5.1nm,1.4s | | | | | | | |
| **WR0** | **Warramunga Arr** | **46.74** | **124** | P | **P** | | **06 31 11.2** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **46.92** | **346** | P | **P** | | **06 31 13.6** | **+1.1** |
| | comp=Z,2.1nm,0.6s,baz=167,slow=7.2,SNR=14 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **46.98** | **346** | P | **P** | | **06 31 14.2** | **+1.2** |
| **ASAR** | **Alice Springs** | **48.09** | **129** | P | **P** | | **06 31 20.9** | **-1.2** |
| | comp=Z,0.4nm,0.6s,baz=303,slow=8.1,SNR=6.7 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.93** | **352** | P | **P** | | **06 31 28.4** | **+0.4** |
| | comp=Z,1.1nm,0.2s,baz=188,slow=7.3,SNR=5.3 | | | | | | | |
| | comp=Z,1.1nm,0.2s | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **63.96** | **212** | T | T | | 07 43 11.4 | |
| | baz=49,slow=75,SNR=26 | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **63.97** | **212** | T | T | | 07 43 11.6 | |
| | baz=49,slow=75,SNR=20 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **63.98** | **212** | T | T | | 07 43 10.2 | |
| | baz=49,slow=75,SNR=27 | | | | | | | |

**INMG 06 06:25:09.2±0.9, 41°.67N×8°.46W, h5km±3km, ML0.9, 2C, Error ellipse: s-maj=4.5km s-min=1.8km az=76.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCAB** | **Cabril** | **0.32** | **83** | *e*Pg | Pg | 06 25 15.3 | -0.2 |
| PCAB | | | | *e*Sg | Sg | 06 25 19.8 | 0.0 |
| PCAB | | | | A | A | 06 25 20.0 | |
| | 14nm,0.1s | | | | | | |
| **PCAB** | **Cabril** | **0.32** | **83** | *e*Sg | Sb | 06 25 24.4 | +1.3 |
| PCAB | | | | A | A | 06 25 25.2 | |
| | 6.2nm,0.1s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.32** | **25** | *e*Pg | Pg | 06 25 15.1 | -0.4 |
| PGAV | | | | *e*Sg | Sg | 06 25 19.5 | -0.3 |
| **PGAV** | **Gavieira, Arco** | **0.32** | **25** | *e*Pg | Pn | 06 25 20.4 | -0.3 |
| PGAV | | | | *e*Sg | Sb | 06 25 24.4 | +1.2 |
| PGAV | | | | A | A | 06 25 24.7 | |
| | 2.9nm,0.5s | | | | | | |
| **POLO** | **Lamas de Olo** | **0.58** | **121** | *e*Pg | Pg | 06 25 19.8 | -0.6 |
| POLO | | | | *e*Sg | Sg | 06 25 27.8 | -0.1 |
| POLO | | | | A | A | 06 25 30.6 | |
| | 1.1nm,0.2s | | | | | | |
| **POLO** | **Lamas de Olo** | **0.58** | **121** | *e*Pg | Pn | 06 25 24.3 | +0.1 |
| POLO | | | | *e*Sg | Sb | 06 25 31.4 | +0.9 |
| **PVRL** | **Vila Real** | **0.68** | **125** | *e*S | Sg | 06 25 31.3 | +0.1 |
| PVRL | | | | A | A | 06 25 32.2 | |
| | 5.9nm,0.1s | | | | | | |
| **PVRL** | **Vila Real** | **0.68** | **125** | *e*P | Pn | 06 25 26.6 | +1.0 |
| PVRL | | | | *e*S | Sn | 06 25 35.2 | -1.5 |
| **PVIS** | **Viseu** | **1.05** | **156** | *e*P | Pg | 06 25 28.1 | -1.2 |
| PVIS | | | | *e*S | Sg | 06 25 42.3 | -0.5 |
| **MVO** | **Moncorvo** | **1.19** | **115** | *e*S | Sg | 06 25 46.2 | -1.2 |
| MVO | | | | A | A | 06 25 47.5 | |
| | 2.0nm,0.3s | | | | | | |
| **PBRG** | **Braganca** | **1.29** | **84** | *e*S | Sg | 06 25 50.2 | -0.5 |
| PBRG | | | | A | A | 06 25 51.1 | |
| | 1.6nm,0.2s | | | | | | |

**INMG 06 06:25:37.7±1.4, 41°.67N×8°.47W, h6km±5km, ML1.0, 2C, Error ellipse: s-maj=7.9km s-min=2.8km az=85.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.33** | **27** | *i*Pg | Pg | 06 25 44.0 | -0.2 |
| PGAV | | | | *e*Sg | Sg | 06 25 48.4 | -0.2 |
| PGAV | | | | A | A | 06 25 49.3 | |
| | 7.0nm,0.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.33** | **27** | *e*Pg | Pn | 06 25 49.1 | -0.2 |
| PGAV | | | | *e*Sg | Sb | 06 25 53.3 | +1.5 |
| PGAV | | | | A | A | 06 25 54.2 | |
| | 2.7nm,0.1s | | | | | | |
| **PCAB** | **Cabril** | **0.34** | **83** | *i*Pg | Pg | 06 25 44.1 | -0.1 |
| PCAB | | | | *e*Sg | Sg | 06 25 48.6 | -0.1 |
| PCAB | | | | A | A | 06 25 49.3 | |
| | 10.0nm,0.3s | | | | | | |
| **PCAB** | **Cabril** | **0.34** | **83** | *e*Pg | Pn | 06 25 49.1 | -0.1 |
| PCAB | | | | *e*Sg | Sb | 06 25 53.5 | +1.7 |
| PCAB | | | | A | A | 06 25 53.9 | |
| | 6.5nm,0.1s | | | | | | |
| **POLO** | **Lamas de Olo** | **0.59** | **120** | *e*Pg | Pg | 06 25 48.6 | -0.4 |
| POLO | | | | *e*Sg | Sg | 06 25 56.1 | -0.6 |
| POLO | | | | A | A | 06 25 57.8 | |
| | 0.9nm,0.4s | | | | | | |
| **POLO** | **Lamas de Olo** | **0.59** | **120** | *e*Sg | Sb | 06 26 00.4 | +1.3 |
| **PVRL** | **Vila Real** | **0.69** | **124** | *e*S | Sg | 06 26 00.2 | +0.3 |
| **PVRL** | **Vila Real** | **0.69** | **124** | *e*S | Sn | 06 26 04.2 | -1.0 |
| **PVIS** | **Viseu** | **1.05** | **155** | *e*P | Pg | 06 25 56.3 | -1.5 |
| PVIS | | | | *e*S | Sg | 06 26 11.4 | +0.1 |
| PVIS | | | | A | A | 06 26 13.7 | |
| | 3.9nm,0.3s | | | | | | |
| **MVO** | **Moncorvo** | **1.20** | **114** | *e*S | Sg | 06 26 14.9 | -1.2 |
| MVO | | | | A | A | 06 26 17.4 | |
| | 1.5nm,0.2s | | | | | | |
| **PBRG** | **Braganca** | **1.30** | **83** | *e*P | Pn | 06 26 01.1 | -1.4 |
| PBRG | | | | *e*S | Sg | 06 26 18.5 | -1.0 |
| PBRG | | | | A | A | 06 26 23.6 | |
| | 1.6nm,0.2s | | | | | | |
| **MTE** | **Manteigas** | **1.45** | **151** | *e*Sg | Sb | 06 26 23.3 | -0.6 |

*MDD **06** 06:29:29.3±0.7, 41°.66N×8°.44W, h6km±5km, mb_Lg2.3/6, Error ellipse: s-maj=5.4km s-min=3.1km az=63.0*

**INMG 06 06:29:30.0±1.4, 41°.66N×8°.48W, h5km±3km, ML1.7, 4C-2D, Error ellipse: s-maj=3.5km s-min=1.5km az=87.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCAB** | **Cabril** | **0.34** | **81** | *i*Pg | Pg | 06 29 36.6 | 0.0 |
| PCAB | | | | *e*Sg | Sg | 06 29 41.0 | -0.1 |
| PCAB | | | | A | A | 06 29 41.3 | |
| | 71nm,0.1s | | | | | | |
| **PCAB** | **Cabril** | **0.34** | **81** | *e*Pg | Pn | 06 29 40.2 | -1.5 |
| PCAB | | | | *e*Sg | Sb | 06 29 45.4 | +1.0 |
| PCAB | | | | A | A | 06 29 45.8 | |
| | 28nm,0.3s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.34** | **26** | *i*Pg | Pg | 06 29 36.4 | -0.3 |
| PGAV | | | | *e*Sg | Sg | 06 29 40.8 | -0.5 |
| PGAV | | | | A | A | 06 29 41.7 | |
| | 63nm,0.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.34** | **26** | *e*Pg | Pb | 06 29 40.0 | +1.2 |
| PGAV | | | | *e*Sg | Sb | 06 29 45.5 | +0.9 |
| PGAV | | | | A | A | 06 29 46.6 | |
| | 14nm,0.3s | | | | | | |
| **ELOB** | **Lobios** | **0.38** | **56** | Pg | Pg | 06 29 37.0 | -0.3 |
| ELOB | | | | Sg | Sg | 06 29 42.2 | -0.1 |
| ELOB | | | | *i* Vmb_Lg | | 06 29 42.8 | |
| **EZAM** | **Zamans** | **0.52** | **342** | Pg | Pg | 06 29 39.2 | -0.8 |
| EZAM | | | | Sg | Sg | 06 29 46.5 | -0.2 |
| EZAM | | | | *i* Vmb_Lg | | 06 29 47.3 | |
| **POLO** | **Lamas de Olo** | **0.58** | **119** | *e*Pg | Pg | 06 29 41.0 | -0.2 |
| POLO | | | | *e*Sg | Sg | 06 29 48.4 | -0.4 |
| POLO | | | | A | A | 06 29 49.9 | |
| | 6.9nm,0.1s | | | | | | |
| **POLO** | **Lamas de Olo** | **0.58** | **119** | *e*Pg | Pn | 06 29 44.6 | -0.5 |
| **PVRL** | **Vila Real** | **0.69** | **123** | *e*P | Pg | 06 29 42.8 | -0.4 |
| PVRL | | | | *e*S | Sg | 06 29 51.9 | -0.2 |
| PVRL | | | | A | A | 06 29 53.0 | |
| | 26nm,0.1s | | | | | | |
| **PVRL** | **Vila Real** | **0.69** | **123** | *e*P | Pn | 06 29 46.4 | -0.1 |
| **PVIS** | **Viseu** | **1.04** | **155** | *e*P | Pg | 06 29 49.2 | -0.7 |
| PVIS | | | | *e*S | Sg | 06 30 03.5 | +0.2 |
| PVIS | | | | A | A | 06 30 04.6 | |
| | 19nm,0.3s | | | | | | |
| **PVIS** | **Viseu** | **1.04** | **155** | *e*S | Sn | 06 30 06.3 | +0.1 |
| **EAGO** | **Agolada(Pontev** | **1.18** | **14** | Pg | Pg | 06 29 51.2 | -1.4 |
| EAGO | | | | Sg | Sg | 06 30 06.4 | -1.6 |
| EAGO | | | | *i* Vmb_Lg | | 06 30 07.1 | |
| **MVO** | **Moncorvo** | **1.19** | **114** | *e*P | Pg | 06 29 52.0 | -0.9 |
| MVO | | | | *e*S | Sg | 06 30 07.4 | -1.0 |
| MVO | | | | A | A | 06 30 08.2 | |
| | 14nm,0.1s | | | | | | |
| **MVO** | **Moncorvo** | **1.19** | **114** | *e*S | Sn | 06 30 10.9 | +0.8 |
| MVO | | | | A | A | 06 30 12.3 | |
| | 13nm,0.5s | | | | | | |
| **PBRG** | **Braganca** | **1.31** | **83** | *e*P | Pn | 06 29 53.9 | -1.1 |
| PBRG | | | | *e*S | Sg | 06 30 10.8 | -1.2 |
| PBRG | | | | A | A | 06 30 12.3 | |
| | 8.1nm,0.3s | | | | | | |
| **ECAL** | **Calabor** | **1.33** | **77** | Pg | Pn | 06 29 53.2 | -2.2 |
| ECAL | | | | Sg | Sg | 06 30 10.4 | -2.4 |
| ECAL | | | | *i* Vmb_Lg | | 06 30 14.0 | |
| **EMAZ** | **Mazaricos** | **1.34** | **344** | Pg | Pn | 06 29 53.2 | -2.4 |
| EMAZ | | | | Sg | Sg | 06 30 12.1 | -1.1 |
| EMAZ | | | | *i* Vmb_Lg | | 06 30 13.9 | |
| **MTE** | **Manteigas** | **1.44** | **150** | *e*Pn | Pn | 06 29 54.3 | -2.5 |
| **MTE** | **Manteigas** | **1.44** | **150** | *e*Pg | Pn | 06 29 56.6 | -0.2 |
| MTE | | | | *e*Sg | Sb | 06 30 15.5 | -0.5 |
| MTE | | | | A | A | 06 30 17.0 | |
| | 11nm,0.4s | | | | | | |
| **COI** | **Coimbra** | **1.45** | **178** | *e*Pn | Pn | 06 29 54.8 | -2.1 |
| COI | | | | *e*Sg | Sg | 06 30 16.6 | +0.1 |
| COI | | | | A | A | 06 30 19.5 | |
| | 14nm,0.6s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **1.60** | **181** | *e*Pg | Pn | 06 29 59.1 | +0.1 |
| PCAS | | | | A | A | 06 30 21.2 | |
| | 5.3nm,0.8s | | | | | | |
| PCAS | | | | *e*Sg | Sg | 06 30 21.3 | -0.1 |
| **EPON** | **Pontenova** | **1.94** | **30** | Pn | Pn | 06 30 00.9 | -2.8 |
| EPON | | | | Pg | Pb | 06 30 05.2 | -0.7 |
| EPON | | | | Sn | Sn | 06 30 25.0 | -3.4 |
| EPON | | | | Sg | Sb | 06 30 28.9 | -1.4 |
| EPON | | | | *i* Vmb_Lg | | 06 30 31.1 | |
| **PCBR** | **Castelo Branco** | **1.97** | **157** | *e*Pg | Pb | 06 30 06.2 | -0.1 |
| PCBR | | | | *e*Sg | Sb | 06 30 32.0 | +0.9 |
| PCBR | | | | A | A | 06 30 33.7 | |
| | 4.0nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **2.37** | **159** | *e*Pg | Pb | 06 30 13.3 | 0.0 |
| PMRV | | | | *e*Sg | Sg | 06 30 45.6 | -0.6 |
| PMRV | | | | A | A | 06 30 55.2 | |
| | 2.2nm,0.3s | | | | | | |
| **PMTG** | **Montargil** | **2.59** | **176** | *e*Sg | Sg | 06 30 52.1 | -1.1 |
| PMTG | | | | A | A | 06 30 54.9 | |
| | 1.6nm,0.5s | | | | | | |

*IDC **06** 06:39:31.3±1.8, 0°.49N×123°.89E, h0km, mb3.4/3, mbtmp3.5/3, MS2.3/1, Error ellipse: s-maj=184.7km s-min=26.3km az=62.0*
*DJA **06** 06:39:47.7±0.6, 0°S±3°×12°3E±°, h128km±7km, M3.6/7, MLv3.6/7*

**ISC 06 06:39:46.9±1.1, 0°.14S±0°.10×123°.41E±0°.08, h157km, n8, σ2°83/10, mb3.5/3, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.91** | **39** | P | **Pn** | **06 40 11.3** | **-0.3** |
| **LUWI** | **Luwuk** | **1.10** | **216** | P | **Pn** | **06 40 12.8** | **-0.4** |
| LUWI | | | | S | **Sn** | **06 40 31.5** | **-1.9** |
| **MRSI** | **Marisa** | **1.59** | **293** | P | **Pn** | **06 40 16.9** | **-1.1** |
| MRSI | | | | S | **Sn** | **06 40 38.6** | **-3.2** |
| **SANI** | **Sanana** | **3.20** | **126** | P | **Pn** | **06 40 35.9** | **-1.2** |
| SANI | | | | S | **Sn** | **06 41 12.0** | **-4.0** |
| **WRA** | **Warramunga Arr** | **22.40** | **152** | P | **P** | **06 44 35.6** | **+2.9** |
| | 1.3nm,0.5s,baz=332,slow=10,SNR=33 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **25.51** | **157** | P | **P** | **06 45 04.7** | **+3.7** |
| | 0.2nm,0.5s,baz=344,slow=12,SNR=5.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **CTA** | **Charters Tower** | **29.89** | **133** | LR | LR | 07 00 41.2 | |
| | comp=Z,4.8nm,18.3s,baz=220,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.95** | **328** | P | **P** | **06 49 30.8** | **+1.0** |
| | 0.3nm,0.5s,baz=136,slow=7.6,SNR=4.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*INMG **06** 06:42:14.5±1.2, 41°.66N×8°.48W, h4km±3km, ML1.8, Error ellipse: s-maj=3.6km s-min=1.8km az=76.0*
*MDD **06** 06:42:14.4±0.8, 41°.66N×8°.48W, h12km±1km, mb_Lg2.5/6, Error ellipse: s-maj=5.9km s-min=3.1km az=64.0*

**ISC 06 06:42:14.1±1.2, 41°.67N±0°.03×8°.48W±0°.04, h11km±9km, n17, σ0°93/31, 2C-1D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.33** | **28** | *e*Pg | **Pg** | **06 42 20.9** | **+0.1** |
| PGAV | | | | *e*Sg | **Sg** | **06 42 25.3** | **0.0** |
| PGAV | | | | A | A | 06 42 25.7 | |
| | 55nm,0.3s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.33** | **28** | *e*S | **Sb** | **06 42 30.3** | **+2.8** |
| **PCAB** | **Cabril** | **0.34** | **83** | *e*Pg | **Pg** | **06 42 21.1** | **+0.2** |
| PCAB | | | | *e*Sg | **Sg** | **06 42 25.5** | **0.0** |
| PCAB | | | | A | A | 06 42 25.6 | |
| | 166nm,0.1s | | | | | | |
| **PCAB** | **Cabril** | **0.34** | **83** | *e*S | **Sb** | **06 42 30.1** | **+2.4** |
| **ELOB** | **Lobios** | **0.37** | **58** | Pg | **Pg** | **06 42 21.4** | **0.0** |
| ELOB | | | | Sg | **Sg** | **06 42 26.8** | **+0.4** |
| ELOB | | | | *i* Vmb_Lg | | 06 42 27.2 | |
| **EZAM** | **Zamans** | **0.50** | **342** | Pg | **Pg** | **06 42 23.7** | **-0.2** |
| EZAM | | | | Sg | **Sg** | **06 42 30.7** | **+0.1** |
| EZAM | | | | *i* Vmb_Lg | | 06 42 32.1 | |
| **POLO** | **Lamas de Olo** | **0.60** | **120** | *e*Pg | **Pg** | **06 42 25.5** | **-0.1** |
| POLO | | | | *e*Sg | **Sg** | **06 42 33.5** | **0.0** |
| POLO | | | | A | A | 06 42 34.4 | |
| | 7.3nm,0.1s | | | | | | |
| **PVRL** | **Vila Real** | **0.70** | **124** | *e*P | **Pg** | **06 42 27.4** | **-0.2** |
| PVRL | | | | A | A | 06 42 36.3 | |
| | 24nm,0.3s | | | | | | |
| PVRL | | | | *e*S | **Sg** | **06 42 36.6** | **-0.1** |
| **PVIS** | **Viseu** | **1.05** | **155** | *e*P | **Pg** | **06 42 33.7** | **-0.6** |
| PVIS | | | | *e*S | **Sg** | **06 42 48.1** | **+0.1** |
| **EAGO** | **Agolada(Pontev** | **1.17** | **14** | Pg | **Pg** | **06 42 35.9** | **-0.6** |
| EAGO | | | | Sg | **Sg** | **06 42 50.6** | **-1.1** |
| EAGO | | | | *i* Vmb_Lg | | 06 42 52.3 | |
| **MVO** | **Moncorvo** | **1.20** | **114** | *e*P | **Pg** | **06 42 36.6** | **-0.6** |
| MVO | | | | *e*S | **Sg** | **06 42 51.9** | **-0.9** |
| MVO | | | | A | A | 06 42 52.8 | |
| | 19nm,0.2s | | | | | | |
| **PBRG** | **Braganca** | **1.31** | **84** | *e*P | **Pn** | **06 42 37.6** | **-0.8** |
| PBRG | | | | *e*S | **Sb** | **06 42 55.5** | **-0.1** |
| **EMAZ** | **Mazaricos** | **1.33** | **344** | Pg | **Pn** | **06 42 38.5** | **-0.1** |
| EMAZ | | | | Sg | **Sb** | **06 42 56.1** | **0.0** |
| EMAZ | | | | *i* Vmb_Lg | | 06 42 58.1 | |
| **ECAL** | **Calabor** | **1.33** | **78** | Pg | **Pn** | **06 42 38.3** | **-0.4** |
| ECAL | | | | Sg | **Sb** | **06 42 55.5** | **-0.7** |
| ECAL | | | | *i* Vmb_Lg | | 06 42 57.7 | |
| **MTE** | **Manteigas** | **1.46** | **151** | *e*Pg | **Pn** | **06 42 41.1** | **+0.7** |
| MTE | | | | *e*Sg | **Sn** | **06 43 00.0** | **+0.5** |
| MTE | | | | A | A | 06 43 00.5 | |
| | 10.0nm,0.4s | | | | | | |
| **EPON** | **Pontenova** | **1.93** | **30** | Sn | **Sn** | **06 43 09.7** | **-1.3** |
| EPON | | | | Sg | **Sb** | **06 43 14.9** | **+1.6** |
| **EJUZ** | **Juzbado, Salam** | **2.04** | **106** | Sg | **Sb** | **06 43 16.6** | **+0.2** |

*MDD **06** 06:45:35.5±1.3, 41°.69N×8°.46W, h12km±2km, mb_Lg2.2/4, Error ellipse: s-maj=9.8km s-min=5.0km az=47.0*

**INMG 06 06:45:33.6±1.1, 41°.68N×8°.43W, h5km, ML0.8, 4C-1D, Error ellipse: s-maj=8.1km s-min=2.6km az=91.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCAB** | **Cabril** | **0.30** | **85** | *e*Pg | Pg | 06 45 38.9 | -0.6 |
| PCAB | | | | *e*Sg | Sg | 06 45 43.4 | -0.2 |
| PCAB | | | | A | A | 06 45 43.5 | |
| | 13nm,0.1s | | | | | | |
| **PCAB** | **Cabril** | **0.30** | **85** | *i*Pg | Pb | 06 45 41.5 | -0.1 |
| PCAB | | | | *e*Sg | Sb | 06 45 46.0 | -0.9 |
| PCAB | | | | A | A | 06 45 46.0 | |
| | 63nm,0.3s | | | | | | |
| **PCAB** | **Cabril** | **0.30** | **85** | *e*S | Sb | 06 45 50.5 | +3.6 |
| **PGAV** | **Gavieira, Arco** | **0.31** | **23** | *e*Pg | Pg | 06 45 38.7 | -0.9 |
| PGAV | | | | *e*Sg | Sg | 06 45 44.0 | +0.3 |
| PGAV | | | | A | A | 06 45 44.4 | |
| | 9.2nm,0.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.31** | **23** | *e*Pg | Pb | 06 45 41.3 | -0.4 |
| PGAV | | | | *e*Sg | Sb | 06 45 45.8 | -1.3 |
| PGAV | | | | A | A | 06 45 46.5 | |
| | 34nm,0.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.31** | **23** | *e*S | Sb | 06 45 50.7 | +3.6 |
| **ELOB** | **Lobios** | **0.33** | **56** | Pg | Pb | 06 45 41.8 | -0.3 |
| ELOB | | | | Sg | Sb | 06 45 47.3 | -0.5 |
| ELOB | | | | *i* Vmb_Lg | | 06 45 47.6 | |
| **EZAM** | **Zamans** | **0.51** | **337** | Pg | Pb | 06 45 44.2 | -0.8 |
| EZAM | | | | *i* Vmb_Lg | | 06 45 45.2 | |
| EZAM | | | | Sg | Sg | 06 45 51.2 | +1.3 |
| **POLO** | **Lamas de Olo** | **0.57** | **123** | *e*Pg | Pg | 06 45 43.7 | -0.9 |
| **POLO** | **Lamas de Olo** | **0.57** | **123** | *e*Pg | Pb | 06 45 45.9 | -0.2 |
| POLO | | | | *e*Sg | Sb | 06 45 53.6 | -1.0 |
| POLO | | | | A | A | 06 45 56.8 | |
| | 5.4nm,0.2s | | | | | | |
| **PVRL** | **Vila Real** | **0.68** | **127** | *e*P | Pg | 06 45 46.4 | -0.2 |
| **PVRL** | **Vila Real** | **0.68** | **127** | *e*P | Pb | 06 45 48.1 | +0.2 |
| PVRL | | | | *e*S | Sb | 06 45 56.9 | -0.7 |
| PVRL | | | | A | A | 06 45 58.9 | |
| | 18nm,0.2s | | | | | | |
| **PVIS** | **Viseu** | **1.05** | **157** | *e*P | Pg | 06 45 52.8 | -0.9 |
| PVIS | | | | *e*S | Sg | 06 46 07.0 | -0.3 |
| **PVIS** | **Viseu** | **1.05** | **157** | *e*P | Pb | 06 45 54.1 | -0.2 |
| PVIS | | | | *e*S | Sb | 06 46 08.8 | +0.5 |
| PVIS | | | | A | A | 06 46 10.5 | |
| | 15nm,0.2s | | | | | | |
| **EAGO** | **Agolada(Pontev** | **1.15** | **13** | Pg | Pn | 06 45 56.3 | -0.1 |
| EAGO | | | | Sg | Sb | 06 46 11.4 | +0.2 |
| EAGO | | | | *i* Vmb_Lg | | 06 46 12.8 | |
| **MVO** | **Moncorvo** | **1.18** | **116** | *e*P | Pn | 06 45 56.9 | +0.1 |
| MVO | | | | *e*S | Sb | 06 46 12.3 | +0.3 |
| MVO | | | | A | A | 06 46 13.2 | |
| | 9.1nm,0.3s | | | | | | |
| **PBRG** | **Braganca** | **1.27** | **84** | *e*P | Pn | 06 45 58.1 | 0.0 |
| PBRG | | | | *e*S | Sn | 06 46 16.4 | +0.8 |
| PBRG | | | | A | A | 06 46 17.2 | |
| | 6.9nm,0.2s | | | | | | |
| **ECAL** | **Calabor** | **1.29** | **78** | Pg | Pb | 06 45 58.8 | +0.3 |
| ECAL | | | | Sg | Sn | 06 46 16.8 | +0.7 |
| ECAL | | | | *i* Vmb_Lg | | 06 46 20.4 | |
| **MTE** | **Manteigas** | **1.45** | **152** | *e*Pg | Pg | 06 46 01.6 | +0.3 |
| MTE | | | | *e*Sg | Sg | 06 46 21.0 | +0.9 |
| MTE | | | | A | A | 06 46 28.9 | |
| | 5.2nm,0.4s | | | | | | |
| **COI** | **Coimbra** | **1.47** | **179** | *e*Sg | Sb | 06 46 20.7 | +0.2 |
| **PCAS** | **Casmilo, Conde** | **1.63** | **182** | *e*Sg | Sg | 06 46 25.9 | 0.0 |
| PCAS | | | | A | A | 06 46 26.6 | |
| | 5.5nm,0.5s | | | | | | |
| **PMRV** | **Marv??o** | **2.39** | **160** | *e*Sg | Sg | 06 46 48.7 | -1.6 |
| PMRV | | | | A | A | 06 46 51.0 | |
| | 1.2nm,0.3s | | | | | | |
| **PMTG** | **Montargil** | **2.62** | **176** | *e*Sg | Sb | 06 46 55.0 | +1.6 |

*IDC **06** 07:01:25.0±2.3, 11°.09S×123°.07E, h0km, mb3.8/2, mbtmp3.5/4, ML2.8/2, Error ellipse: s-maj=208.2km s-min=32.3km az=51.0*
*DJA **06** 07:01:32.5±2.0, 10°S±19°×12°4E±1°0, h10km, M3.2/4, MLv3.2/4*

**ISC 06 07:01:25.3±0.9, 10°.6S±0°.1×124°.3E±0°.1, h10km, n6, σ1°97/9, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.73** | **302** | P | **Pn** | **07 01 41.5** | **-0.2** |
| BATI | | | | S | **Sb** | **07 01 50.1** | **-0.1** |
| **SOEI** | **Soe** | **0.83** | **358** | P | **Pg** | **07 01 41.6** | **+0.2** |
| **WRA** | **Warramunga Arr** | **13.42** | **135** | Pn | **P** | **07 04 42.6** | **-2.9** |
| | baz=307,slow=14,SNR=1.9 | | | | | | |
| WRA | | | | Sn | **Sn** | **07 07 07.5** | **+2.1** |
| | 0.2nm,0.3s,baz=221,slow=10,SNR=5.6 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **15.91** | **146** | Pn | **P** | **07 05 16.1** | **+2.9** |
| | 0.1nm,0.3s,baz=316,slow=11,SNR=5.6 | | | | | | |
| ASAR | | | | Sn | **Sn** | **07 08 04.8** | **-1.2** |
| | 0.1nm,0.3s,baz=320,slow=23,SNR=4.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.33** | **330** | P | **P** | **07 12 27.5** | **+0.7** |
| | 0.8nm,0.5s,baz=135,slow=7.0,SNR=8.4 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.78** | **331** | P | **P** | **07 12 53.8** | **0.0** |
| | 0.3nm,0.5s,baz=142,slow=5.6,SNR=2.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*IDC **06** 07:24:08.8±3.3, 8°.17S×116°.31E, h0km, mb3.2/3, mbtmp3.4/4, ML3.2/1, Error ellipse: s-maj=62.7km s-min=41.6km az=120.0*
*DJA **06** 07:24:13.4±0.8, 8°S±14°×11°6E±°, h10km, M3.3/5, MLv3.3/5*

**ISC 06 07:24:11.5±0.9, 8°.13S±0°.08×116°.50E±0°.04, h10km, n9, σ0°87/12, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.71** | **148** | P | **Pg** | **07 24 25.6** | **+0.2** |
| **SRBI** | **Singaraja** | **1.27** | **272** | P | **Pg** | **07 24 35.9** | **-0.1** |
| SRBI | | | | S | **Sg** | **07 24 54.0** | **+1.5** |
| **PLAI** | **Plampang** | **1.44** | **119** | P | **Pg** | **07 24 38.9** | **-0.4** |
| PLAI | | | | S | **Sg** | **07 24 59.5** | **+1.4** |
| **IGBI** | **Denpasar** | **1.50** | **243** | P | **Pg** | **07 24 40.5** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.34** | **262** | P | **Pn** | **07 24 49.9** | **-0.3** |
| **KAPI** | **Kappang** | **4.48** | **46** | Pn | **Pn** | **07 25 20.2** | **+0.7** |
| | 1.1nm,0.3s,baz=183,slow=21,SNR=1.5 | | | | | | |
| KAPI | | | | Sn | **Sn** | **07 26 11.2** | **-0.5** |
| | 1.8nm,0.3s,baz=243,slow=22,SNR=2.2 | | | | | | |
| | 3.0nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.89** | **126** | P | **P** | **07 28 54.1** | **-0.1** |
| | 0.4nm,0.5s,baz=301,slow=12,SNR=7.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.74** | **135** | P | **P** | **07 29 14.2** | **+0.1** |
| | 0.4nm,0.6s,baz=312,slow=9.9,SNR=6.9 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **VNDA** | **Vanda** | **73.23** | **171** | P | **P** | **07 35 41.2** | **-1.2** |
| | 0.3nm,0.5s,baz=310,slow=3.9,SNR=5.7 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**AUST 06 07:40:14.8±0.3, 25°.54S×129°.85E, h10km, mb4.0/6, Mjma4.7/8, ML3.4/5, MLv4.2/5, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0, Northern Territory**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRKA** | **Warakurna** | **1.49** | **289** | P | Pn | 07 40 40.9 | -0.9 |
| | 0.5nm,SNR=7.9 | | | | | | |
| WRKA | | | | S | Sn | 07 41 01.0 | -0.3 |
| **ASPA** | **Alice Springs** | **4.13** | **64** | P | Pn | 07 41 19.4 | +1.3 |
| | SNR=9.5 | | | | | | |
| ASPA | | | | S | Sn | 07 42 06.1 | -0.5 |
| **FORT** | **Forrest** | **5.45** | **196** | P | Pn | 07 41 37.4 | +1.2 |
| | 0.1nm,SNR=1.6 | | | | | | |
| FORT | | | | S | Sn | 07 42 38.8 | -0.2 |
| **OOD** | **Oodnadatta** | **5.69** | **115** | P | Pn | 07 41 40.7 | +1.3 |
| | 0.1nm,SNR=1.1 | | | | | | |
| OOD | | | | S | Sn | 07 42 45.6 | +0.8 |
| **MULG** | **Mulgathing** | **6.02** | **143** | P | Pn | 07 41 44.9 | +0.9 |
| | 0.1nm,SNR=1.4 | | | | | | |
| MULG | | | | S | Sn | 07 42 54.2 | +1.3 |
| **LCRK** | **Leigh Creek** | **8.87** | **125** | P | Pn | 07 42 22.1 | -1.0 |
| | 0.1nm,SNR=1.6 | | | | | | |
| **BBOO** | **Buckleboo** | **9.05** | **145** | P | Pn | 07 42 24.2 | -1.5 |
| **KNRA** | **

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA 1.89 281** | | | I | I | 08 06 20.0 | |
| | baz=97,slow=319,SNR=6.7 | | | | | | |
| **ZALV** | **Zalesovo Beam 1.89 281** | | | Pg | Pn | 07 54 42.5 | +0.2 |
| | 0.8nm,0.3s,baz=95,slow=16,SNR=4.4 | | | | | | |
| ZALV | | | | Lg | Lg | 07 55 08.9 | |
| | 1.2nm,0.3s,baz=99,slow=26,SNR=8.2 | | | | | | |
| **KURBB** | **Kurchatov Arra 6.54 246** | | | Pn | Pn | 07 55 47.3 | +1.3 |
| | baz=64,slow=15,SNR=3.3 | | | | | | |
| KURBB | | | | Sn | Sn | 07 57 00.1 | -1.1 |
| | baz=74,slow=28,SNR=2.0 | | | | | | |
| KURBB | | | | Lg | Lg | 07 57 36.3 | |
| | baz=61,slow=33,SNR=4.6 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array 7.74 210** | | | Pn | Pn | 07 56 03.6 | +1.1 |
| | 0.1nm,0.3s,baz=30,slow=12,SNR=3.0 | | | | | | |
| MKAR | | | | Lg | Lg | 07 58 12.7 | |
| | 0.1nm,0.3s,baz=29,slow=33,SNR=3.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

**IDC 06 07:59:13.7±2.4, 53°58N×86°96E, h0km, mbtmp2.6/2, ML2.4/2, Error ellipse: s-maj=22.2km s-min=13.1km az=78.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA 1.32 287** | | | I | I | 08 07 50.0 | |
| | baz=104,slow=317,SNR=7.3 | | | | | | |
| **ZALV** | **Zalesovo Beam 1.32 287** | | | Pg | Pg | 07 59 36.9 | -2.1 |
| | 1.1nm,0.3s,baz=103,slow=18,SNR=26 | | | | | | |
| ZALV | | | | Lg | Lg | 07 59 56.1 | |
| | 1.7nm,0.3s,baz=106,slow=29,SNR=8.5 | | | | | | |
| **KURBB** | **Kurchatov Arra 5.98 244** | | | Pn | Pn | 08 00 44.9 | +1.6 |
| | baz=63,slow=14,SNR=6.5 | | | | | | |
| KURBB | | | | Sn | Sn | 08 01 51.7 | -0.7 |
| | baz=38,slow=34,SNR=1.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array 7.42 206** | | | Pn | Pn | 08 01 04.9 | +1.7 |
| | 0.2nm,0.3s,baz=26,slow=14,SNR=6.9 | | | | | | |
| MKAR | | | | Sn | Sn | 08 02 26.8 | -1.3 |
| | 0.1nm,0.3s,baz=23,slow=27,SNR=3.4 | | | | | | |
| MKAR | | | | Lg | Lg | 08 03 05.2 | |
| | baz=26,slow=28,SNR=1.7 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

**IDC 06 08:10:22.4±3.1, 53°61N×87°88E, h0km, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=26.3km s-min=16.2km az=67.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA 1.85 282** | | | I | I | 08 22 10.0 | |
| | 0.1nm,1.0s,baz=99,slow=319,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam 1.85 282** | | | Pn | Pn | 08 10 54.9 | -0.4 |
| | 1.2nm,0.3s,baz=97,slow=15,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 08 11 20.8 | |
| | 1.6nm,0.3s,baz=99,slow=28,SNR=9.4 | | | | | | |
| **KURBB** | **Kurchatov Arra 6.48 246** | | | Pn | Pn | 08 11 59.5 | +0.5 |
| | 0.1nm,0.3s,baz=64,slow=15,SNR=5.4 | | | | | | |
| KURBB | | | | Lg | Lg | 08 13 47.3 | |
| | baz=64,slow=30,SNR=1.5 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array 7.70 210** | | | Pn | Pn | 08 12 17.0 | +1.3 |
| | 0.1nm,0.3s,baz=27,slow=13,SNR=3.0 | | | | | | |
| MKAR | | | | Sn | Sn | 08 13 44.2 | +0.6 |
| | 0.1nm,0.3s,baz=31,slow=29,SNR=3.1 | | | | | | |
| MKAR | | | | Lg | Lg | 08 14 24.4 | |
| | baz=28,slow=29,SNR=2.1 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*IDC **06** 08:23:02.4±0.8, 4°.53S×134°.92E, h0km, mb4.0/9, mbtmp4.2/12, ML3.5/2, MS3.3/19, Error ellipse: s-maj=40.9km s-min=16.5km az=69.0*
*NEIC **06** 08:23:06.5±2.3, 4°.40S±0°.05×134°.90E±0°.07, h35km±1km, mb4.6/23, Error ellipse: s-maj=13.3km s-min=7.8km az=111.0*
*DJA **06** 08:23:07.0±0.3, 4°.3S±5°×13°.5E±°, h57km±24km, M4.7/10, mb5.0/9, mB5.2/6, MLv4.7/10, Mw(mB)4.5/6*
**ISC 06 08:23:04.2±0.4, 4°.47S±0°.06×134°.86E±0°.06, h16km, n99, σ1§87/86, mb4.6/20, MS3.3/17, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMPI** | **Kaimana, Papua 1.40 305** | | | P | **Pg** | **08 23 30.0** | **-1.2** |
| **FAKI** | **Fak Fak 3.02 301** | | | P | **Pn** | **08 23 50.9** | **-0.5** |
| **FAKI** | **Fak Fak 3.02 301** | | | | **Pn** | **08 23 51.2** | **-0.2** |
| **FAKI** | **Fak Fak 3.02 301** | | | P | **Pn** | **08 23 50.9** | **-0.5** |
| **SAUI** | **Saumlaki 4.96 225** | | | Pn | **Pn** | **08 24 19.6** | **+1.5** |
| **SWI** | **Sorong 5.08 315** | | | P | **Pn** | **08 24 19.8** | **+0.1** |
| | 97nm,0.9s,2µm0.6nm | | | | | | |
| **GENI** | **Genyem 5.62 71** | | | P | Pn | 08 24 31.0 | +3.8 |
| **GENI** | **Genyem 5.62 71** | | | P | **Pn** | **08 24 28.1** | **+0.9** |
| | 120nm,0.6s,3µm0.6nm | | | | | | |
| **MSAI** | **Masohi 6.02 281** | | | P | **Pn** | **08 24 33.8** | **+1.2** |
| | 82nm,0.8s,1µm0.4nm | | | | | | |
| **JAY** | **Jayapura 6.16 72** | | | P | **Pn** | **08 24 35.3** | **+0.8** |
| **TABU** | **Tabubil 6.39 97** | | | P | **Pn** | **08 24 40.9** | **+3.0** |
| **KDU** | **Kakadu 8.49 196** | | | P | **Pn** | **08 25 08.9** | **+2.3** |
| **KDU** | **Kakadu 8.49 196** | | | P | **Pn** | **08 25 09.1** | **+2.4** |
| | 83nm,0.5s,SNR=13 | | | | | | |
| **DRS** | **Darwin Rock St 8.82 206** | | | P | **Pn** | **08 25 13.9** | **+2.8** |
| **MTN** | **Manton Dam 9.09 204** | | | P | **Pn** | **08 25 17.4** | **+2.5** |
| **MTN** | **Manton Dam 9.09 204** | | | Pn | **Pn** | **08 25 17.4** | **+2.5** |
| **MTN** | **Manton Dam 9.09 204** | | | P | **Pn** | **08 25 17.5** | **+2.7** |
| | 175nm,0.4s,SNR=14 | | | | | | |
| **TNTI** | **Ternate 9.12 305** | | | Pn | **Pn** | **08 25 16.4** | **+1.2** |
| **SOEI** | **Soe 11.74 243** | | | P | **Pn** | **08 25 52.0** | **+0.7** |
| **SOEI** | **Soe 11.74 243** | | | Pn | **Pn** | **08 25 52.2** | **+0.9** |
| **SOEI** | **Soe 11.74 243** | | | P | **Pn** | **08 25 51.6** | **+0.3** |
| | 151nm,0.8s,1µm | | | | | | |
| **COEN** | **Coen 12.49 140** | | | Pn | **Pn** | **08 26 01.1** | **-0.4** |
| **COEN** | **Coen 12.49 140** | | | P | **Pn** | **08 26 00.8** | **-0.7** |
| **KNRA** | **Kununurra 12.64 208** | | | Pn | **Pn** | **08 26 03.9** | **+0.4** |
| **KNRA** | **Kununurra 12.64 208** | | | P | **Pn** | **08 26 03.9** | **+0.4** |
| | 263nm,0.6s,SNR=25 | | | | | | |
| **PMG** | **Port Moresby 13.16 113** | | | P | **P** | **08 26 16.4** | **-4.2** |
| **PMG** | **Port Moresby 13.16 113** | | | P | **P** | **08 26 16.7** | **-3.9** |
| **PMG** | **Port Moresby 13.16 113** | | | Pn | **Pn** | **08 26 10.4** | **-0.1** |
| **PMG** | **Port Moresby 13.16 113** | | | Pn | **Pn** | **08 26 10.2** | **-0.3** |
| | 1.5nm,0.3s,baz=297,slow=11,SNR=2.9 | | | | | | |
| PMG | | | | LR | LR | 08 31 55.3 | |
| | comp=Z,165nm,20.2s,baz=336,slow=41 | | | | | | |
| | 13nm,0.7s | | | | | | |
| **MMRI** | **Maumere 13.20 251** | | | Pn | **Pn** | **08 26 10.6** | **-0.5** |
| **WB0** | **Warramunga Arr 15.21 182** | | | Pn | **Pn** | **08 26 36.2** | **-2.2** |
| WB0 | | | | IAmb | IAmb | 08 26 50.1 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek 15.38 182** | | | | **Pn** | **08 26 38.3** | **-2.3** |
| WRAB | | | | IAmb | IAmb | 08 26 52.0 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr 15.38 182** | | | Pn | **Pn** | **08 26 38.4** | **-2.4** |
| WB2 | | | | IAmb | IAmb | 08 26 52.7 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr 15.38 182** | | | | **Pn** | **08 26 37.8** | **-3.0** |
| **WRA** | **Warramunga Arr 15.38 182** | | | Pn | **Pn** | **08 26 38.3** | **-2.5** |
| | comp=Z,0.7nm,0.3s,baz=4.2,slow=13,SNR=22 | | | | | | |
| WRA | | | | Sn | Sn | 08 29 21.6 | -9.4 |
| | comp=Z,2.1nm,0.3s,baz=356,slow=23,SNR=7.2 | | | | | | |
| WRA | | | | LR | LR | 08 33 09.2 | |
| | comp=Z,175nm,19.7s,baz=356,slow=40 | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr 15.40 181** | | | Pn | **Pn** | **08 26 38.3** | **-2.7** |
| WR0 | | | | IAmb | IAmb | 08 26 52.2 | |
| | comp=Z,41nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi 16.27 213** | | | Pn | **Pn** | **08 26 50.3** | **-1.8** |
| **QIS** | **Mount Isa 16.64 164** | | | P | **P** | **08 27 00.5** | **+1.2** |
| **QIS** | **Mount Isa 16.64 164** | | | P | **Pn** | **08 26 55.8** | **-1.1** |
| **TV1H** | **Townsville Har 18.76 143** | | | P | **Pn** | **08 27 27.0** | **+3.9** |
| **CTA** | **Charters Tower 19.08 145** | | | P | **Pn** | **08 27 30.7** | **+3.6** |
| **CTA** | **Charters Tower 19.08 145** | | | P | **Pn** | **08 27 29.7** | **+2.6** |
| | comp=Z,0.8nm,0.5s,baz=324,slow=11,SNR=30 | | | | | | |
| CTA | | | | S | Sn | 08 30 48.4 | -12 |
| | comp=Z,0.2nm,1.0s,baz=313,slow=9.4,SNR=1.8 | | | | | | |
| CTA | | | | LR | LR | 08 35 52.7 | |
| | comp=Z,13nm,20.4s,baz=320,slow=40 | | | | | | |
| **CTAO** | **Charters Tower 19.08 145** | | | P | **P** | **08 27 26.6** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 08 27 36.8 | |
| | comp=Z,54nm,1.5s | | | | | | |
| **AS01** | **Alice Springs 19.10 183** | | | P | **Pn** | **08 27 28.6** | **+1.3** |
| **AS31** | **Alice Springs 19.10 183** | | | P | **P** | **08 27 24.7** | **-1.8** |
| **ASAR** | **Alice Springs 19.10 183** | | | P | **P** | **08 27 26.6** | **+0.1** |
| **ASAR** | **Alice Springs 19.10 183** | | | P | **P** | **08 27 27.2** | **+0.8** |
| | comp=Z,16nm,0.5s,baz=5.1,slow=10,SNR=172 | | | | | | |
| ASAR | | | | S | Sn | 08 30 48.7 | -12 |
| | comp=Z,2.2nm,0.7s,baz=4.2,slow=29,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 08 35 23.9 | |
| | comp=Z,223nm,18.3s,baz=4.5,slow=39 | | | | | | |
| **ASPA** | **Alice Springs 19.10 183** | | | P | **P** | **08 27 25.8** | **-0.7** |
| | comp=Z,19nm,0.6s,SNR=21 | | | | | | |
| **GUMO** | **Guam 20.51 29** | | | LR | LR | 08 34 57.1 | |
| | comp=Z,47nm,19.6s,baz=235,slow=35 | | | | | | |
| **WRKA** | **Warakurna 21.40 196** | | | P | **P** | **08 27 54.0** | **+2.6** |
| **WRKA** | **Warakurna 21.40 196** | | | P | **P** | **08 27 53.7** | **+2.3** |
| **MBWA** | **Marble Bar 22.16 220** | | | | **P** | **08 28 00.3** | **+0.8** |
| MBWA | | | | IAmb | IAmb | 08 28 19.1 | |
| | comp=Z,53nm,1.4s | | | | | | |
| **PSAC2** | **Pilbara Seismi 22.34 219** | | | P | **P** | **08 28 03.9** | **+2.3** |
| **PSA00** | **Pilbara Seismi 22.38 219** | | | P | **P** | **08 28 03.0** | **+1.0** |
| PSA00 | | | | IAmb | IAmb | 08 28 04.8 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **QLP** | **Quilpie 23.75 159** | | | P | **P** | **08 28 19.2** | **+3.3** |
| **INKA** | **Innaminka 23.81 167** | | | P | **P** | **08 28 20.5** | **+4.0** |
| **HNR** | **Honiara 25.38 103** | | | LR | LR | 08 39 35.0 | |
| | comp=Z,2µm,19.1s,baz=12,slow=39 | | | | | | |
| **FORT** | **Forrest 26.94 193** | | | P | **P** | **08 28 44.3** | **-0.6** |
| **STKA** | **Stephens Creek 27.99 168** | | | P | **P** | **08 28 52.9** | **-1.4** |
| **STKA** | **Stephens Creek 27.99 168** | | | P | **P** | **08 28 55.2** | **+0.9** |
| | comp=Z,1.6nm,0.6s,baz=342,slow=8.7,SNR=3.8 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo 28.21 178** | | | P | **P** | **08 28 54.2** | **-2.2** |
| **SSLB** | **Suanglung 31.19 335** | | | P | **P** | **08 29 21.1** | **-1.8** |
| SSLB | | | | IAmb | IAmb | 08 29 24.1 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **JOW** | **Kunigami 31.77 349** | | | LR | LR | 08 41 25.0 | |
| | comp=Z,51nm,19.9s,baz=333,slow=35 | | | | | | |
| **JCJ** | **Chichijima 32.17 12** | | | P | **P** | **08 29 29.3** | **-2.1** |
| **NWAO** | **Narrogin (SRO) 32.75 208** | | | LR | LR | 08 45 20.9 | |
| | comp=Z,139nm,19.6s,baz=220,slow=41 | | | | | | |
| **UBPT** | **Khong Chiam 35.10 305** | | | P | **P** | **08 29 54.6** | **-2.5** |
| UBPT | | | | IAmb | IAmb | 08 30 06.3 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **JNU** | **Nakatsue 37.58 355** | | | LR | LR | 08 46 45.3 | |
| | comp=Z,21nm,19.2s,baz=150,slow=38 | | | | | | |
| **JHJ** | **Hachijo jima 2 37.68 7** | | | LR | LR | 08 45 22.3 | |
| | comp=Z,78nm,18.4s,baz=128,slow=36 | | | | | | |
| **NJ2** | **Nanjing 39.38 338** | | | *e*P | **P** | **08 30 35.4** | **+2.2** |
| NJ2 | | | | sP | **sP** | **08 30 42.7** | **+2.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,98nm,5.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr 42.09 304** | | | P | **P** | **08 30 56.1** | **+0.2** |
| | comp=Z,1.2nm,0.3s,baz=130,slow=6.7,SNR=7.2 | | | | | | |
| CMAR | | | | LR | LR | 08 48 21.1 | |
| | comp=Z,13nm,21.2s,baz=135,slow=36 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **KSRS** | **Korea Array 42.21 352** | | | LR | LR | 08 47 12.0 | |
| | comp=Z,20nm,20.6s,baz=185,slow=34 | | | | | | |
| **PZH** | **PanZhiHua 44.44 316** | | | P | **P** | **08 31 15.1** | **+0.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,5.5s | | | | | | |
| **USRK** | **Ussuriysk Ar. 48.52 357** | | | LR | LR | 08 49 56.7 | |
| | comp=Z,37nm,21.3s,baz=160,slow=33 | | | | | | |
| **HHC** | **Hu-ho-hao-te 49.89 337** | | | *e*P | **P** | **08 32 00.4** | **+3.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,40nm,4.8s | | | | | | |
| **KLR** | **Kul'dur 53.55 357** | | | LR | LR | 08 53 59.1 | |
| | comp=Z,19nm,19.7s,baz=178,slow=35 | | | | | | |
| **SONM** | **Songino Array 57.77 338** | | | P | **P** | **08 32 55.6** | **+0.9** |
| | comp=Z,0.5nm,0.4s,baz=145,slow=5.3,SNR=3.2 | | | | | | |
| SONM | | | | LR | LR | 08 57 15.0 | |
| | comp=Z,24nm,20.7s,baz=276,slow=36 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **WMQ** | **Urumqi 64.07 324** | | | *e*P | **P** | **08 33 38.5** | **+0.9** |
| WMQ | | | | LR | LR | | |
| | comp=N,610nm,23.8s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,430nm,23.8s | | | | | | |
| **SHEM** | **Shemya Is, Ala 65.92 25** | | | LR | LR | 08 57 41.6 | |
| | comp=E,28nm,21.9s,baz=294,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array 68.89 324** | | | P | **P** | **08 34 10.2** | **+1.9** |
| | comp=E,1.4nm,0.8s,baz=123,slow=7.6,SNR=8.5 | | | | | | |
| | comp=E,1.4nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam 71.58 331** | | | P | **P** | **08 34 26.9** | **+2.4** |
| | comp=E,1.8nm,0.7s,baz=108,slow=7.2,SNR=3.6 | | | | | | |
| | comp=E,1.8nm,0.7s | | | | | | |
| **KURK** | **Kurchatov 73.00 326** | | | P | **P** | **08 34 31.8** | **-1.3** |
| **KURBB** | **Kurchatov Arra 73.00 326** | | | P | **P** | **08 34 35.2** | **+2.1** |
| | comp=E,0.9nm,0.8s,baz=124,slow=5.0,SNR=5.2 | | | | | | |
| | comp=E,0.9nm,0.8s | | | | | | |
| **VNDA** | **Vanda 74.40 174** | | | P | **P** | **08 34 40.3** | **-0.6** |
| **VNDA** | **Vanda 74.40 174** | | | P | **P** | **08 34 40.1** | **-0.8** |
| | comp=E,0.8nm,0.7s,baz=336,slow=5.1,SNR=7.7 | | | | | | |
| | comp=E,0.8nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array 74.73 317** | | | P | **P** | **08 34 42.9** | **-0.6** |
| **PPT** | **Papeete 74.91 107** | | | LR | LR | 09 04 09.7 | |
| | comp=E,18nm,21.2s,baz=199,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui 85.48 180** | | | P | **P** | **08 35 41.6** | **+0.4** |
| | comp=E,1.7nm,0.9s,baz=214,slow=3.1,SNR=2.3 | | | | | | |
| QSPA | | | | LR | LR | 09 13 47.3 | |
| | comp=E,67nm,20.4s,baz=14,slow=36 | | | | | | |
| | comp=E,1.7nm,0.9s | | | | | | |
| **GLI** | **Glacier Island 88.08 29** | | | P | **P** | **08 35 52.2** | **-1.6** |
| **CCB** | **Clear Creek Bu 88.62 25** | | | P | **P** | **08 35 56.1** | **-0.1** |
| CCB | | | | IAmb | IAmb | 08 35 58.9 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **IL31** | | | **89.03 25** | P | **P** | **08 35 58.5** | **+0.4** |
| IL31 | | | | IAmb | IAmb | 08 36 15.7 | |
| | comp=Z,4.9nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array 89.03 25** | | | P | **P** | **08 35 58.1** | **0.0** |
| **ILAR** | **Eielson Array 89.03 25** | | | P | **P** | **08 35 57.4** | **-0.8** |
| | comp=Z,0.5nm,0.7s,baz=273,slow=4.7,SNR=6.6 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **MENT** | **Mentasta 90.05 27** | | | P | **P** | **08 36 03.0** | **-0.1** |
| MENT | | | | IAmb | IAmb | 08 36 21.2 | |
| | comp=Z,4.7nm,1.2s | | | | | | |
| **ISLE** | **Juniper Island 90.33 29** | | | P | **P** | **08 36 04.1** | **-0.4** |
| ISLE | | | | IAmb | IAmb | 08 36 08.2 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain 90.48 22** | | | P | **P** | **08 36 03.5** | **-1.5** |
| **KIRV** | **Kirov 91.40 329** | | | LR | LR | 09 19 39.2 | |
| | comp=Z,15nm,20.4s,baz=107,slow=37 | | | | | | |
| **BBB** | **Bella Bella 97.83 38** | | | LR | LR | 09 12 19.4 | |
| | comp=Z,13nm,21.4s,baz=256,slow=30 | | | | | | |
| **CPUP** | **Villa Florida 147.18 160** | | | PKPbc | **PKPab** | **08 42 48.7** | **-0.3** |
| | comp=Z,3.0nm,1.2s,baz=253,slow=2.8,SNR=3.4 | | | | | | |
| **LPAZ** | **La Paz 149.30 133** | | | PKPbc | **PKiKP** | **08 42 55.2** | **-0.1** |
| | comp=Z,1.0nm,0.8s,baz=198,slow=3.2,SNR=2.0 | | | | | | |

**IDC 06 08:45:15.1±6.8, 47°94N×80°55E, h0km, 1C-1D, Error ellipse: s-maj=45.9km s-min=42.3km az=138.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array 1.65 133** | | | ⇑Pn | Pn | 08 45 45.7 | +0.4 |
| | 0.1nm,0.2s,baz=311,slow=12,SNR=15 | | | | | | |
| MK31 | | | | ⇓Sn | Sg | 08 46 12.2 | +4.1 |
| | 0.1nm,0.2s,baz=313,slow=27,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array 1.65 133** | | | Pg | Pn | 08 45 45.4 | 0.0 |
| | 0.4nm,0.3s,baz=316,slow=16,SNR=18 | | | | | | |
| MKAR | | | | Lg | Lg | 08 46 07.0 | |
| | 0.2nm,0.3s,baz=316,slow=27,SNR=4.5 | | | | | | |
| **I46RU** | **ZALESOVO INFRA 6.59 23** | | | I | I | 09 27 00.8 | |
| | baz=207,slow=320,SNR=2.8 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF 14.92 288** | | | I | I | 10 07 10.0 | |
| | baz=91,slow=314,SNR=1.2 | | | | | | |

*IDC **06** 08:54:44.6±2.1, 63°.02N×149°.06W, h66km±17km, mb3.6/4, mbtmp3.8/8, MS3.0/4, Error ellipse: s-maj=24.3km s-min=16.0km az=114.0*
*AEIC **06** 08:54:45.8±1.2, 62°.94N±0°.03×148°.79W±0°.06, h65km±3km, ML3.4, mb4.0/4(NEIC), ML3.6/218(NEIC), Mwr3.6/22(NEIC), Error ellipse: s-maj=4.2km s-min=3.4km az=49.0*
*NEIC **06** 08:54:45.9±1.4, 62°.950N±0°.009×148°.79W±0°.07, h71km±4km, Error ellipse: s-maj=4.6km s-min=1.4km az=88.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.50; $M_{\theta\theta}$0.48; $M_{\phi\phi}$-0.98; $M_{r\theta}$3.20; $M_{\theta\phi}$0.83; $M_{\phi r}$-0.94; Fault plane solution: $M_o$3.54000×$10^{14}$ NP1: $\phi_s$109.93000°, $\delta$86.71000°, $\lambda$71.52000°. NP2:$\phi_s$10.19000°, $\delta$18.76000°, $\lambda$169.73000°. Principal axes: T 3.6951, Plg45.0000°, Azm1.0000°; N -0.3290, Plg18.0000°, Azm111.0000°; P -3.3661, Plg39.0000°, Azm217.0000°;*
*NEIC **06** 08:54:46.5, 62°.96N×148°.77W, h58km*
**ISC 06 08:54:45.0±0.7, 62°95N±0°.03×148°82W±0°.03, h73km±5km, n264, σ1§30/290, mb3.8/5, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WAT7** | **Susitna Watana 0.12 186** | | | | **Pn** | **08 54 56.0** | **+0.2** |
| WAT7 | | | | | **Sn** | **08 55 03.7** | **0.0** |
| **WAT1** | **Susitna Watana 0.17 135** | | | | **Pn** | **08 54 56.0** | **+0.1** |
| WAT1 | | | | | **Sn** | **08 55 03.9** | **0.0** |
| **RND** | **Reindeer 0.45 358** | | | | **Pn** | **08 54 58.5** | **+0.7** |
| RND | | | | Sn | **Sn** | **08 55 08.1** | **+1.0** |
| RND | | | | IAML | | 08 55 08.6 | |
| | comp=E,3µm,0.3s | | | | | | |
| RND | | | | IAML | | 08 55 10.7 | |
| | comp=N,1µm,0.3s | | | | | | |
| **WAT6** | **Susitna Watana 0.62 127** | | | | **Pn** | **08 54 59.3** | **-0.2** |
| WAT6 | | | | | **Sn** | **08 55 09.3** | **-0.8** |
| **DHY** | **Denali Highway 0.67 79** | | | | **Pn** | **08 55 00.1** | **+0.2** |
| DHY | | | | Sn | **Sn** | **08 55 11.1** | **+0.1** |
| DHY | | | | IAML | | 08 55 12.1 | |
| | comp=N,2µm,0.5s | | | | | | |
| DHY | | | | IAML | | 08 55 13.1 | |
| | comp=E,2µm,0.5s | | | | | | |
| **MCK** | **McKinley 0.78 356** | | | | **Pn** | **08 55 02.2** | **+1.1** |
| **MCK** | **McKinley 0.78 356** | | | | **Sn** | **08 55 14.0** | **+1.0** |
| **CUT** | **Chulitna 0.87 231** | | | | **Pn** | **08 55 02.5** | **+0.6** |
| CUT | | | | Sn | **Sn** | **08 55 15.2** | **+0.6** |
| **SML** | **Sawmill 1.17 169** | | | | **Pn** | **08 55 06.0** | **+0.1** |
| SML | | | | Sn | **Sn** | **08 55 22.1** | **+0.6** |
| SML | | | | IAML | | 08 55 25.3 | |
| | comp=E,2µm,0.9s | | | | | | |
| SML | | | | IAML | | 08 55 25.7 | |
| | comp=N,1µm,0.4s | | | | | | |
| **GHO** | **Glory Hole Cre 1.19 182** | | | | **Pn** | **08 55 06.4** | **+0.4** |
| GHO | | | | | **Sn** | **08 55 21.7** | **-0.1** |
| GHO | | | | IAML | | 08 55 25.3 | |
| | comp=E,1µm,0.5s | | | | | | |
| GHO | | | | IAML | | 08 55 27.5 | |
| | comp=N,1µm,0.5s | | | | | | |
| **BWN** | **Browne 1.26 347** | | | | **Pn** | **08 55 07.7** | **+0.8** |
| BWN | | | | IAML | | 08 55 27.2 | |
| | comp=N,839nm,0.4s | | | | | | |
| BWN | | | | IAML | | 08 55 30.5 | |
| | comp=E,914nm,0.8s | | | | | | |
| **M23K** | **Glacier View 1.27 156** | | | | **Pn** | **08 55 07.0** | **-0.1** |
| **SCM** | **Sheep Creek Mo 1.32 148** | | | | **Pn** | **08 55 08.0** | **+0.3** |
| SCM | | | | Sn | **Sn** | **08 55 27.9** | **+3.0** |
| **M22K** | **Willow 1.35 207** | | | | **Pn** | **08 55 08.5** | **+0.5** |
| M22K | | | | Sn | **Sn** | **08 55 26.1** | **+0.8** |
| **PMR** | **Palmer 1.38 186** | | | P | **Pn** | **08 55 09.0** | **+0.6** |
| **PMR** | **Palmer 1.38 186** | | | Pn | **Pn** | **08 55 08.8** | **+0.5** |
| PMR | | | | Sn | **Sn** | **08 55 26.6** | **+0.6** |
| PMR | | | | IAML | | 08 55 28.2 | |
| | comp=E,721nm,0.4s | | | | | | |
| PMR | | | | IAML | | 08 55 29.3 | |
| | comp=N,596nm,0.5s | | | | | | |
| **M24K** | **Tolsona, Glenn 1.49 124** | | | | **Pn** | **08 55 11.4** | **+1.4** |
| M24K | | | | Sn | **Sn** | **08 55 32.2** | **+3.4** |
| **BPAW** | **Bear Paw Mtn. 1.51 321** | | | | **Pn** | **08 55 10.9** | **+0.8** |
| BPAW | | | | Sn | **Sn** | **08 55 29.0** | **-0.1** |
| **PAX** | **Paxson 1.53 88** | | | | **Pn** | **08 55 11.7** | **+1.2** |
| **KNK** | **Knik Glacier 1.56 174** | | | | **Pn** | **08 55 11.7** | **+0.9** |
| KNK | | | | Sn | **Sn** | **08 55 31.7** | **+1.4** |
| **WRH** | **Wood River Hil 1.56 12** | | | | **Pn** | **08 55 11.4** | **+0.7** |
| WRH | | | | Sn | **Sn** | **08 55 30.2** | **0.0** |
| WRH | | | | IAML | | 08 55 31.0 | |
| | comp=N,486nm,0.5s | | | | | | |
| WRH | | | | IAML | | 08 55 31.0 | |
| | comp=E,333nm,0.4s | | | | | | |
| **SKT** | **Skwentna 1.59 233** | | | Pn | **Pn** | **08 55 11.8** | **+0.5** |
| SKT | | | | Sn | **Sn** | **08 55 32.1** | **+0.9** |
| **K24K** | **Donnelly Dome 1.61 57** | | | | **Pn** | **08 55 13.5** | **+1.9** |
| **NEA2** | **Nenana 1.65 356** | | | | **Pn** | **08 55 12.6** | **+0.6** |
| NEA2 | | | | Sn | **Sn** | **08 55 31.9** | **-0.5** |
| NEA2 | | | | IAML | | 08 55 33.3 | |
| | comp=N,940nm,0.4s | | | | | | |
| **HDA** | **Harding Lake 1.68 29** | | | | **Pn** | **08 55 13.2** | **+0.7** |
| HDA | | | | Sn | **Sn** | **08 55 32.8** | **-0.4** |
| HDA | | | | IAML | | 08 55 33.8 | |
| | comp=E,847nm,0.3s | | | | | | |
| HDA | | | | IAML | | 08 55 33.9 | |
| | comp=N,872nm,0.5s | | | | | | |
| **SUA** | **Susitna One 1.75 212** | | | | **Pn** | **08 55 14.8** | **+1.4** |
| SUA | | | | Sn | **Sn** | **08 55 35.1** | **+0.1** |
| SUA | | | | IAML | | 08 55 41.9 | |
| | comp=N,730nm,0.6s | | | | | | |
| SUA | | | | IAML | | 08 55 44.0 | |
| | comp=E,700nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu 1.76 14** | | | Pn | **Pn** | **08 55 13.9** | **+0.5** |
| CCB | | | | Sn | **Sn** | **08 55 34.4** | **-0.6** |
| CCB | | | | IAML | | 08 55 39.8 | |
| | comp=E,288nm,0.5s | | | | | | |
| **HARP** | **HAARP 1.78 107** | | | | **Pn** | **08 55 15.5** | **+1.8** |
| HARP | | | | | **Sn** | **08 55 36.0** | **+0.5** |
| **RC01** | **Rabbit Creek A 1.92 193** | | | Pn | **Pn** | **08 55 17.6** | **+2.0** |
| RC01 | | | | Sn | **Sn** | **08 55 40.7** | **+1.8** |
| **FIS** | **Fire Island 1.93 201** | | | Pn | **Pn** | **08 55 16.5** | **+0.8** |
| **COLA** | **College 1.98 12** | | | P | **Pn** | **08 55 17.0** | **+0.7** |
| **KLU** | **Klutina 2.00 136** | | | | **Pn** | **08 55 17.2** | **+0.5** |
| KLU | | | | IAML | | 08 55 45.5 | |
| | comp=E,483nm,0.4s | | | | | | |
| KLU | | | | IAML | | 08 55 48.4 | |
| | comp=N,534nm,0.4s | | | | | | |
| **IL31** | **2.02 24** | | | | **Pn** | **08 55 17.5** | **+0.6** |
| **ILAR** | **Eielson Array 2.02 24** | | | P | **Pn** | **08 55 17.4** | **+0.5** |
| | comp=N,86nm,0.3s,baz=206,slow=14,SNR=1333 | | | | | | |

WASW Wrangell South 2.39 113 Pn Pn 08 55 23.8 +1.6
SCRK Sand Creek 2.40 63 Pn Pn 08 55 23.5 +1.3
SCRK IAML 08 55 53.3
comp=N,151nm,0.9s
SCRK IAML 08 56 09.7
comp=E,168nm,0.7s
K20K Telida 2.42 282 Pn Pn 08 55 23.2 +0.9
K20K Sn 08 55 51.2 +0.3
L26K Log Cabin Wild 2.50 86 Pn 08 55 25.2 +1.8
L26K IAML 08 56 11.0
comp=E,475nm,0.4s
O22K Cooper Landing 2.52 190 Pn Pn 08 55 24.6 +1.0
SLKM Skilak Lake 2.54 196 Pn 08 55 25.2 +1.2
J20K Nowinta River 2.68 300 Pn Pn 08 55 26.9 +1.1
M26K Nabesna, AK 2.74 99 Pn Pn 08 55 26.0 -0.7
M26K IAML 08 56 12.0
comp=N,198nm,0.4s
M26K IAML 08 56 15.2
comp=E,266nm,0.5s
HIN Hinchinbrook I 2.79 156 Pn 08 55 27.4 0.0
GLB Gilahina Butte 2.80 121 Pn Pn 08 55 28.5 +1.0
GLB IAML 08 56 10.4
comp=N,134nm,0.6s
GLB IAML 08 56 13.4
comp=E,132nm,0.5s
M19K Big River Lodg 2.80 250 Pn 08 55 28.2 +0.7
M19K IAML 08 56 08.4
comp=E,173nm,0.3s
M19K IAML 08 56 09.1
comp=N,169nm,0.4s
J26L Joseph Creek 2.81 54 Pn Pn 08 55 29.0 +1.4
BMRM Bremner River 2.82 133 Pn 08 55 28.1 +0.4
EYAK Cordova Ski Ar 2.82 147 P Pn 08 55 28.3 +0.6
EYAK Cordova Ski Ar 2.82 147 Pn 08 55 27.9 +0.2
SEW Seward 2.88 186 Pn 08 55 28.9 +0.5
L19K White Mountain 2.90 257 Pn Pn 08 55 29.6 +0.8
L19K IAML 08 56 05.5
comp=N,198nm,0.8s
L19K IAML 08 56 06.5
comp=E,183nm,0.4s
H23K Yukon River 2.90 354 Pn 08 55 29.9 +1.1
H23K IAML 08 56 04.6
comp=N,110nm,0.6s
H24K Noodor Dome 2.92 8 Pn Pn 08 55 30.2 +1.0
RDT Redoubt 2.93 217 Pn 08 55 30.7 +1.3
PRP Porcupine Dome 2.95 28 Pn Pn 08 55 30.6 +1.0
PRP IAML 08 56 05.1
comp=N,176nm,0.8s
PRP IAML 08 56 07.2
comp=E,165nm,0.6s
P23K Montague Islan 3.04 166 Pn 08 55 31.3 +0.5
VRDI Verde Repeater 3.06 122 Pn Pn 08 55 31.9 +0.7
VRDI IAML 08 56 17.3
comp=E,107nm,0.8s
VRDI IAML 08 56 17.4
comp=N,154nm,0.7s
GOAT Goat Mountain 3.08 139 Pn 08 55 31.6 +0.3
I20K Naaghedeneel 3.11 309 Pn 08 55 32.9 +1.3
I20K IAML 08 56 08.7
comp=N,278nm,0.5s
I20K IAML 08 56 35.2
comp=E,230nm,0.7s
RSO Redoubt South 3.12 219 Pn Pn 08 55 32.3 +0.3
RDWB Redoubt West 3.13 220 Pn 08 55 33.5 +1.4
MCARA McCarthy VSAT 3.14 118 Pn Pn 08 55 33.4 +1.3
MCARA IAML 08 56 22.8
comp=N,182nm,0.7s
MCARA IAML 08 56 23.8
comp=E,162nm,1.0s
H22K Ishtalitna Cre 3.15 341 Pn 08 55 33.8 +1.5
RED Redoubt Volcan 3.17 218 Pn 08 55 34.2 +1.7
L27K Beaver Creek, 3.19 85 Pn Pn 08 55 33.2 +0.4
BCAR Beaver Creek A 3.21 85 Pn Pn 08 55 33.4 +0.4
K27K Chicken 3.21 67 Pn 08 55 34.3 +1.3
K27K IAML 08 56 12.7
comp=E,130nm,0.7s
K27K IAML 08 56 14.4
comp=N,148nm,0.7s
H21K Melozitna Rive 3.22 329 Pn 08 55 34.2 +1.0
H21K IAML 08 56 09.7
comp=E,87nm,0.5s
J19K Poorman 3.23 292 Pn Pn 08 55 34.3 +1.1
RAGM Ragged Mountai 3.25 141 Pn 08 55 33.7 +0.2
M27K Edge Creek, AK 3.26 97 Pn 08 55 34.5 +0.7
M27K IAML 08 56 29.1
comp=N,77nm,0.7s
BRLK Bradley Lake 3.35 198 Pn Pn 08 55 36.3 +1.3
BRLK IAML 08 56 27.5
comp=E,218nm,0.8s
BRSE Bradley Lake S 3.35 197 Pn 08 55 35.9 +0.9
HMT Hamilton 3.41 138 Pn 08 55 35.9 +0.1
O20K Slope Mountain 3.41 214 Pn 08 55 37.4 +1.6
I26K Coal Creek Min 3.43 44 Pn 08 55 37.1 +1.1
N19K Bonanza Creek 3.44 234 Pn 08 55 36.9 +0.7
N19K IAML 08 56 26.3
comp=N,113nm,0.8s
N19K IAML 08 56 35.9
comp=E,75nm,0.6s
CRQM Cirque 3.48 127 Pn 08 55 37.3 +0.4
CRQM IAML 08 56 29.9
comp=E,183nm,1.0s
IVE Iliamna Volcan 3.57 216 Pn 08 55 39.3 +1.3
H25L Birch Creek 3.57 20 Pn 08 55 39.3 +1.4
HOM Homer 3.58 204 Pn 08 55 39.6 +1.6
NICHA Nichawak Mount 3.58 137 Pn 08 55 38.4 +0.3
M18K Stony River 3.59 249 Pn 08 55 39.1 +0.9
TGL Tana Glacier 3.59 125 Pn 08 55 38.5 +0.1
TGL IAML 08 56 35.6
comp=N,191nm,0.8s
J18K Innoko River 3.61 282 Pn Pn 08 55 39.7 +1.2
ILSW Iliamna Southw 3.63 217 Pn 08 55 39.8 +0.9
ILSW IAML 08 56 31.8
comp=N,81nm,0.8s
ILSW IAML 08 56 34.6
comp=E,111nm,0.7s
CNPM China Poot 3.63 200 Pn Pn 08 55 40.0 +1.2
KHIT Khitrov Hills 3.66 131 Pn 08 55 39.7 +0.4
KIAG Kiagna River 3.67 121 Pn 08 55 39.5 +0.1
H20K Anotleneega Mo 3.67 317 Pn 08 55 40.5 +1.2
SVW2 Sparrevohn 3.69 243 P Pn 08 55 40.5 +0.9
SVW2 Sparrevohn 3.69 243 Pn 08 55 40.1 +0.6
KAIM Kayak Island 3.70 143 Pn 08 55 39.6 -0.1
KAIM IAML 08 56 31.1
comp=E,86nm,3.3s
KAIM IAML 08 56 47.2
comp=N,107nm,0.7s
L18K Granite Mounta 3.71 262 Pn 08 55 40.4 +0.5
IMAR Indian Mountai 3.71 327 Pn 08 55 40.9 +1.1
Q23K Middleton Isla 3.73 160 Pn Pn 08 55 40.9 +0.8
Q23K IAML 08 56 42.8
comp=E,174nm,0.9s
Q23K IAML 08 56 43.0
comp=N,169nm,1.9s
GRIN Grindle Hills 3.75 133 Pn 08 55 41.7 +1.2
WAX Waxell Ridge 3.79 129 Pn 08 55 41.1 0.0
G24K Hadweenzic Riv 3.81 8 Pn 08 55 41.9 +0.8
G23K Bananza Creek 3.81 353 Pn Pn 08 55 42.4 +1.2
O19K Port Alsworth 3.82 226 Pn Pn 08 55 42.3 +1.0
O19K IAML 08 56 43.3
comp=N,166nm,0.5s
EGAK Eagle 3.85 58 Pn 08 55 42.8 +1.1
EGAK IAML 08 56 47.8
comp=N,134nm,0.7s
EGAK IAML 08 56 48.0
comp=N,117nm,0.6s
ISLE Juniper Island 3.88 125 Pn Pn 08 55 42.7 +0.5
ISLE IAML 08 56 39.5
comp=E,150nm,0.4s
P19K Oil Pt 3.94 215 Pn 08 55 44.5 +1.6
FYU Fort Yukon 3.94 21 Pn Pn 08 55 44.1 +1.2
FYU IAML 08 56 31.8
comp=E,110nm,0.8s
FYU IAML 08 56 40.9
comp=N,73nm,0.7s
BARK Barkley Ridge 3.95 127 Pn 08 55 43.5 +0.3
SNH Sunshine Point 3.99 132 Pn 08 55 45.0 +1.2
SNH IAML 08 56 50.1
comp=E,114nm,1.0s
SNH IAML 08 56 52.7
comp=N,93nm,1.0s
G25K Bearman Lake 4.00 16 Pn 08 55 44.9 +1.2
GRNC Granite Creek 4.02 120 Pn Pn 08 55 44.7 +0.4
GRNC IAML 08 56 54.3
comp=N,70nm,0.7s

N18K Kilae Creek 4.05 239 Pn Pn 08 55 45.3 +0.7
N18K IAML 08 56 56.5
comp=N,43nm,1.0s
G21K Allakaket 4.10 333 Pn 08 55 46.8 +1.7
G21K IAML 08 56 34.2
comp=E,39nm,0.9s
G21K IAML 08 56 35.6
comp=N,42nm,0.6s
I27K Kandik River 4.11 47 Pn 08 55 46.5 +1.2
H19K Roundabout Mou 4.21 311 Pn Pn 08 55 47.9 +1.2
LOGN Logan Glacier 4.27 117 Pn 08 55 46.5 -1.1
LOGN IAML 08 56 57.7
comp=N,40nm,0.9s
LOGN IAML 08 57 04.9
comp=E,37nm,1.0s
MESA MESA 4.30 127 Pn 08 55 49.2 +1.0
MESA IAML 08 56 55.1
comp=E,112nm,0.5s
M17K Holitna River 4.33 253 Pn 08 55 49.0 +0.7
M17K IAML 08 56 41.1
comp=E,75nm,0.7s
M17K IAML 08 56 41.1
comp=N,74nm,0.4s
COLD Coldfoot 4.33 353 Pn 08 55 49.4 +1.1
K17K Iditarod 4.35 271 Pn Pn 08 55 49.8 +1.2
K17K IAML 08 56 40.0
comp=N,29nm,1.5s
K17K IAML 08 57 23.4
comp=E,32nm,0.8s
DAWY Dawson 4.37 71 Pn 08 55 49.8 +1.0
O18K Koktuh Hills 4.37 227 Pn 08 55 49.3 +0.4
O18K IAML 08 57 13.7
comp=E,32nm,1.1s
O18K IAML 08 57 19.8
comp=N,38nm,0.8s
TABL Table Mountain 4.44 121 Pn Pn 08 55 50.0 0.0
TABL IAML 08 57 03.1
comp=E,34nm,1.2s
TABL IAML 08 57 03.5
comp=N,46nm,0.9s
L17K Donlin 4.46 264 Pn 08 55 50.5 +0.4
G26K Porcupine Rive 4.55 26 Pn 08 55 52.0 +0.9
H27K Steamboat Moun 4.55 40 Pn 08 55 52.0 +0.8
F24K Squaw Lake 4.60 4 Pn Pn 08 55 53.4 +1.4
F24K IAML 08 56 45.3
comp=E,25nm,0.8s
I28M Miner Creek 4.62 53 Pn Pn 08 55 53.9 +1.6
N17K Nushagak Hills 4.66 242 Pn Pn 08 55 53.9 +1.1
N17K IAML 08 57 17.8
comp=E,32nm,0.7s
N17K IAML 08 57 23.1
comp=N,32nm,1.0s
J17K VABM Dome 4.67 280 Pn Pn 08 55 54.4 +1.5
Q19K Cape Douglas, 4.67 212 Pn 08 55 53.9 +0.9
SYI Shuyak Island 4.70 203 Pn Pn 08 55 54.3 +1.1
SYI IAML 08 57 04.8
comp=N,73nm,0.5s
SYI IAML 08 57 05.3
comp=E,72nm,0.5s
F21K Alatna River 4.72 337 Pn Pn 08 55 55.3 +1.8
F21K IAML 08 56 48.4
comp=N,40nm,0.7s
H18K Honhosa River 4.74 302 Pn 08 55 55.3 +1.5
F22K John River 4.79 344 Pn 08 55 56.8 +2.3
G19K Purcell Mounta 4.79 316 Pn 08 55 55.8 +1.3
M29M Somme Creek 4.80 92 Pn Pn 08 55 55.9 +1.1
M29M IAML 08 57 41.0
comp=N,23nm,0.8s
BMAR Burnt Mountain 4.83 20 Pn Pn 08 55 56.2 +1.0
F25K Christian Rive 4.85 15 Pn 08 55 56.3 +1.0
L29M L29M 4.87 83 Pn Pn 08 55 56.9 +1.2
L29M IAML 08 57 23.6
comp=E,67nm,0.6s
L29M IAML 08 57 25.5
comp=N,72nm,0.4s
G27K Doyon Strip 4.93 35 Pn 08 55 57.1 +0.7
PCA Pinnacle 5.00 121 Pn 08 55 57.5 +0.1
F20K Avaraart Lake 5.05 328 Pn Pn 08 55 59.9 +2.0
O17K Koliganek Bris 5.10 235 Pn 08 56 00.3 +1.5
L16K Owhat River 5.12 261 Pn 08 55 59.9 +0.8
E23K Chandalar 5.14 357 Pn 08 56 01.2 +1.9
E24K Your Creek 5.14 1 Pn Pn 08 56 01.2 +1.8
E24K IAML 08 56 59.2
comp=N,25nm,0.9s
F26K Sheenjek River 5.15 20 Pn 08 56 00.5 +1.1
M16K Timber Creek 5.16 252 Pn 08 56 00.1 +0.6
M16K IAML 08 56 59.1
comp=N,22nm,0.8s
M16K IAML 08 57 14.6
comp=E,19nm,2.1s
G18K Tagagawik 5.18 309 Pn Pn 08 56 01.6 +1.8
I29M Ogilvie Camp, 5.20 58 Pn 08 56 01.5 +1.4
I29M IAML 08 57 01.2
comp=E,43nm,0.6s
I29M IAML 08 57 01.4
comp=N,38nm,0.4s
KAHC Katmai Hardscr 5.28 218 Pn 08 56 02.0 +0.8
H17K Granite Mounta 5.28 297 Pn 08 56 03.0 +1.8
BCPM Bancas Point 5.33 120 Pn Pn 08 56 02.2 +0.2
BCPM IAML 08 57 27.4
comp=E,46nm,0.7s
BCPM IAML 08 57 35.9
comp=N,34nm,1.2s
N16K Nishlik Lake 5.34 247 Pn 08 56 03.0 +0.9
E22K Anaktuvuk Pass 5.35 348 Pn Pn 08 56 03.5 +1.3
J16K Anvik River 5.36 279 Pn Pn 08 56 03.4 +1.1
J16K IAML 08 57 46.3
comp=N,15nm,3.1s
I17K Unalakleet 5.42 285 Pn 08 56 05.1 +2.1
F19K Shaleruckik Mo 5.45 320 Pn Pn 08 56 04.9 +1.4
KDAK Kodiak Island 5.51 201 P Pn 08 56 03.9 -0.5
comp=N,3.0nm,0.2s,baz=44,slow=14,SNR=66
KDAK S Sn 08 57 01.2 -5.2
comp=N,6.3nm,0.4s,baz=139,slow=20,SNR=7.4
KDAK LR LR 08 57 51.1
comp=N,25nm,19.4s,baz=130,slow=34
M30M Minto, Yukon 5.54 89 Pn 08 56 06.3 +1.5
H29M Whitestone 5.56 49 Pn 08 56 06.5 +1.4
O16K Kokwok River B 5.60 237 Pn Pn 08 56 06.8 +1.2
PNL Peninsula 5.61 122 P Pn 08 56 06.9 +1.2
PNL Peninsula 5.61 122 Pn 08 56 05.3 -0.4
KCE Katmai Mt Cerb 5.67 216 Pn 08 56 08.2 +1.6
N30M Aishikik Lake 5.69 100 Pn Pn 08 56 08.1 +1.1
TOLK Toolik Lake Re 5.72 357 Pn 08 56 09.9 +2.6
ACHA Angle Creek He 5.74 217 Pn 08 56 07.9 +0.4
E19K Redstone River 5.74 326 Pn 08 56 09.4 +2.0
G17K Kiwalik Mounta 5.76 302 Pn 08 56 09.5 +1.8
J30M Hart River 5.77 68 Pn 08 56 10.3 +2.2
ANCK Angle Creek 5.79 218 Pn 08 56 09.0 +0.7
CNTC Contact Creek 5.85 220 Pn 08 56 09.9 +0.8
F18K Selawik 5.90 313 Pn 08 56 11.3 +1.7
K15K Wolf Creek Mou 5.90 269 Pn Pn 08 56 11.3 +1.6
E21K Killik River 5.91 341 Pn Pn 08 56 12.2 +2.5
I30M Mount Dempster 5.91 62 Pn Pn 08 56 11.5 +1.6
F28M Old Crow 5.99 35 Pn Pn 08 56 12.0 +1.0
L15K Ungalak Mounta 6.04 263 Pn 08 56 12.1 +0.4
E27K Coleen River 6.04 27 Pn Pn 08 56 12.3 +0.7
G29M Pine Creek 6.07 44 Pn Pn 08 56 12.9 +1.0
N15K Kwethluk River 6.07 248 Pn 08 56 13.2 +1.2
D22K Ayikyak River 6.16 347 Pn 08 56 14.6 +1.5
OHAK Old Harbor 6.17 203 Pn 08 56 12.6 -0.8
EPYK Eagle Plains 6.22 51 Pn Pn 08 56 14.8 +0.7
D24K Happy Valley 6.23 360 Pn 08 56 16.3 +2.2
N31M Braeburn, Yuko 6.27 98 Pn Pn 08 56 15.7 +0.9
P29M Windy Craggy 6.29 117 Pn 08 56 16.5 +1.4
P30M Million Dollar 6.34 111 Pn 08 56 16.2 +0.5
F17K Baiwin Pennin 6.37 309 Pn Pn 08 56 18.2 +2.1
G16K Koyuk River 6.40 298 Pn Pn 08 56 17.5 +1.1
O30N Mendenhall 6.41 104 Pn Pn 08 56 17.8 +1.1
D25K Kavik River 6.47 8 Pn 08 56 19.7 +2.2
PLK4 Peulik 4 6.52 218 Pn 08 56 18.9 +0.7
O15K Ungalikthiuk R 6.54 240 Pn 08 56 20.2 +1.7
E18K Tukpahlearik C 6.68 317 Pn Pn 08 56 23.0 +2.7
C21K Knifeblade Rid 6.68 341 Pn 08 56 22.1 +1.8
L14K Kuka Creek 6.69 262 Pn 08 56 22.3 +1.8
G30M tAoh Zraii Nji 6.70 47 Pn Pn 08 56 21.7 +1.2
M31M Drury Creek, Y 6.71 90 Pn 08 56 23.0 +2.2
J14K Nanvaranak Lak 6.75 275 Pn 08 56 22.3 +1.1
D19K Kuna River 6.75 330 Pn Pn 08 56 23.4 +2.2
C24K Franklin Bluff 6.80 0 Pn 08 56 23.2 +1.4
E28M Babbage River 6.83 30 Pn 08 56 23.0 +0.6
N14K Kuskokwak Cree 6.87 250 Pn 08 56 24.3 +1.4
E17K Hotham Inlet 6.88 313 Pn 08 56 24.9 +1.8

C23K Itkillik River 6.95 355 Pn 08 56 26.2 +2.3
SII Sitkinak Islan 6.96 205 P Pn 08 56 26.0 +1.8
SII Sitkinak Islan 6.96 205 Pn Pn 08 56 26.6 +2.4
WHY Whitehorse 6.99 103 Pn Pn 08 56 23.9 -0.8
E29M Blow River 7.07 35 Pn Pn 08 56 26.7 +1.1
O14K Tigyukauivet M 7.08 244 Pn Pn 08 56 27.4 +1.6
B21K Ikpikpuk River 7.09 343 Pn Pn 08 56 27.3 +1.5
FARO Faro, Yukon 7.18 89 Pn 08 56 27.3 +0.1
G31M Satah River 7.34 51 Pn Pn 08 56 29.6 +0.3
K13K Kusilvak Mount 7.42 269 Pn 08 56 30.0 -0.4
C19K Lookout Ridge 7.56 329 Pn Pn 08 56 31.1 -1.2
N32M Quiet Lake 7.61 97 Pn Pn 08 56 29.4 -3.7
C18K Utukok River 7.64 324 Pn Pn 08 56 33.4 0.0
F31M Tsiigehtchic 7.76 48 Pn 08 56 32.8 -2.3
B20K Meade River 7.82 338 Pn Pn 08 56 34.8 -1.0
P32M Atlin 8.02 108 Pn Pn 08 56 35.2 -3.4
INK Inuvik 8.28 43 Pn Pn 08 56 43.1 +1.0
INK Inuvik 8.28 43 P Pn 08 56 43.4 +1.3
comp=N,1.6nm,0.5s,baz=234,slow=15,SNR=10
INK S Sn 08 58 11.4 -2.4
comp=N,1.7nm,0.3s,baz=226,slow=8.8,SNR=4.3
SIT Sitka 8.97 125 P Pn 08 56 52.9 +1.4
CNBA Chernabura Isl 9.86 219 Pn Pn 08 57 01.0 -2.8
C36M Paulatuk 11.81 47 Pn Pn 08 57 29.4 -0.7
YKA Yellowknife Ar 15.58 76 P Pn 08 58 21.8 +1.8
comp=N,0.4nm,0.5s,baz=288,slow=14,SNR=2.2
LON Longmire 22.21 124 P P 08 59 33.1 -2.1
LON IAmb IAmb 08 59 47.0
comp=Z,1.8nm,1.1s
LYMT Lyon Mountain 25.89 111 P P 09 00 10.9 +1.0
PFO Pinyon Flats O 35.68 130 LR LR 09 18 03.9
comp=Z,50nm,18.2s,baz=230,slow=39
TX31 Lajitas Ar. Si 44.36 118 P P 09 02 46.3 -1.6
TXAR Lajitas Array 44.36 118 LR LR 09 22 21.1
comp=Z,19nm,20.3s,baz=278,slow=37
NC204 NORSAR Array S 55.13 12 P P 09 04 09.8 +0.6
HFS Hagfors 56.51 10 LR LR 09 28 45.9
comp=Z,27nm,21.3s,baz=61,slow=36
EKA Eskdalemuir Ar 59.05 22 P P 09 04 37.2 +0.4
comp=Z,2.0nm,0.5s,baz=329,slow=5.4,SNR=11
comp=Z,2.0nm,0.5s
KURBB Kurchatov Arra 60.77 328 P P 09 04 47.5 -1.1
comp=Z,0.2nm,0.3s,baz=28,slow=7.2,SNR=1.8
comp=Z,0.2nm,0.3s
MKAR Makanchi Array 63.32 323 P P 09 05 05.1 -0.7
MKAR Makanchi Array 63.32 323 P P 09 05 04.7 -1.1
comp=Z,0.5nm,0.5s,baz=47,slow=7.0,SNR=5.0
comp=Z,0.5nm,0.5s
ABKAR Akbulak array 65.84 340 P P 09 05 22.2 +0.1
ESDC Sonseca Array 73.92 28 P P 09 06 12.6 +0.7
comp=Z,0.8nm,0.6s,baz=346,slow=5.0,SNR=6.7
comp=Z,0.8nm,0.6s
BOSA Boshof 145.44 9 PKPbc PKPdf 09 14 13.4 -0.7
comp=Z,1.0nm,0.4s,baz=25,slow=1.9,SNR=6.0

*ATH **06** 08:55:43.4, 38°.02N ± 20°.76E, h16 km ± 1 km, ML3.5/14, Error ellipse: s-maj=1.8km s-min=0.7km az=244.0*
*THE **06** 08:55:43.3, 38°.02N ± 20°.78E, h14 km, ML3.7/8, Error ellipse: s-maj=0.7km s-min=0.3km az=247.0*

**ISC 06 08:55:43.1 ± 0.8, 38°.02N ± 0°.03 × 20°.77E ± 0°.03, h18 km ± 5 km, n62, σ 0°.73/87, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| RTZL | Ratzakli, Kefa | 0.05 | 360 | P | Pg | | 08 55 46.1 | -0.3 |
| RTZL | | | | S | Sg | | 08 55 48.3 | -0.3 |
| PSDA | Pessadus-Kefalo | 0.17 | 302 | P | Pg | | 08 55 47.6 | 0.0 |
| PSDA | | | | S | Sg | | 08 55 50.9 | +0.2 |
| PSDA | Pessadus-Kefalo | 0.17 | 302 | P | Pg | | 08 55 47.6 | 0.0 |
| PSDA | | | | S | Sg | | 08 55 51.1 | +0.4 |
| VLS | Valsamata | 0.21 | 317 | P | Pg | | 08 55 48.2 | 0.0 |
| VLS | | | | S | Sg | | 08 55 52.0 | +0.3 |
| | 45μm,0.1s | | | | | | | |
| VLS | Valsamata | 0.21 | 317 | P | Pg | | 08 55 48.2 | 0.0 |
| VLS | | | | S | Sg | | 08 55 52.0 | +0.3 |
| VLS | | | | AML | AML | | 08 55 52.5 | |
| VLS | | | | AML | AML | | 08 55 52.7 | |
| | comp=E,77495μm,0.2s | | | | | | | |
| SMHA | Samh | 0.25 | 337 | P | Pg | | 08 55 48.6 | -0.2 |
| SMHA | | | | S | Sg | | 08 55 53.2 | +0.5 |
| SMHA | | | | AML | AML | | 08 55 53.4 | |
| SMHA | | | | AML | AML | | 08 55 54.3 | |
| LTHK | Lithakia | 0.32 | 171 | P | Pg | | 08 55 49.5 | -0.4 |
| LTHK | | | | S | Sg | | 08 55 54.6 | +0.1 |
| | comp=E,33μm,0.2s | | | | | | | |
| LTHK | Lithakia | 0.32 | 171 | P | Pg | | 08 55 49.5 | -0.4 |
| LTHK | | | | S | Sg | | 08 55 54.7 | +0.1 |
| LTHK | | | | AML | AML | | 08 55 55.0 | |
| | comp=E,46000μm,0.2s | | | | | | | |
| LTHK | | | | AML | AML | | 08 55 55.1 | |
| | comp=N,79744μm,0.3s | | | | | | | |
| LXRA | Lixouri, Kepha | 0.32 | 304 | P | Pg | | 08 55 50.2 | +0.3 |
| LXRA | | | | AML | AML | | 08 55 56.4 | |
| LXRA | | | | AML | AML | | 08 55 56.5 | |
| DMLN | Damoulianata-K | 0.38 | 305 | P | Pg | | 08 55 51.0 | 0.0 |
| DMLN | | | | S | Sg | | 08 55 57.0 | +0.6 |
| | comp=N,18μm,0.2s | | | | | | | |
| DMLN | Damoulianata-K | 0.38 | 305 | P | Pg | | 08 55 51.0 | 0.0 |
| DMLN | | | | S | Sg | | 08 55 56.8 | +0.3 |
| FSK | Fiskardo | 0.47 | 339 | P | Pg | | 08 55 52.1 | -0.4 |
| FSK | | | | S | Sg | | 08 55 59.6 | +0.7 |
| | comp=N,17μm,0.1s | | | | | | | |
| FSK | Fiskardo | 0.47 | 339 | P | Pg | | 08 55 52.1 | -0.4 |
| FSK | | | | S | Sg | | 08 55 59.5 | +0.6 |
| FSK | | | | AML | AML | | 08 56 01.4 | |
| | comp=N,25494μm,0.2s | | | | | | | |
| FSK | | | | AML | AML | | 08 56 01.8 | |
| | comp=E,40716μm,0.1s | | | | | | | |
| RLS | Riolos of Patr | 0.55 | 86 | P | Pg | | 08 55 53.9 | -0.2 |
| RLS | | | | S | Sb | | 08 56 02.0 | +0.2 |
| RLS | Riolos of Patr | 0.55 | 86 | P | Pg | | 08 55 53.9 | -0.2 |
| RLS | | | | S | Sb | | 08 56 02.2 | +0.4 |
| RLS | | | | AML | AML | | 08 56 03.9 | |
| | comp=E,4644μm,0.3s | | | | | | | |
| RLS | | | | AML | AML | | 08 56 03.9 | |
| | comp=N,8274μm,0.3s | | | | | | | |
| EVGI | Lefkada island | 0.60 | 351 | P | Pg | | 08 55 54.7 | -0.4 |
| EVGI | | | | S | Sb | | 08 56 04.3 | +0.9 |
| | comp=N,12μm,0.1s | | | | | | | |
| EVGI | Lefkada island | 0.60 | 351 | P | Pg | | 08 55 54.7 | -0.4 |
| EVGI | | | | S | Sb | | 08 56 04.4 | +1.1 |
| NYDR | Nydri-Lefkada | 0.69 | 355 | P | Pg | | 08 55 56.0 | -0.7 |
| NYDR | | | | S | Sb | | 08 56 07.1 | +1.2 |
| NYDR | Nydri-Lefkada | 0.69 | 355 | P | Pg | | 08 55 56.1 | -0.7 |
| DRO | Drossia | 0.74 | 95 | P | Pg | | 08 55 57.3 | -0.4 |
| DRO | | | | S | Sg | | 08 56 07.8 | +0.2 |
| | comp=N,4μm,0.3s | | | | | | | |
| DRO | Drossia | 0.74 | 95 | P | Pg | | 08 55 57.4 | -0.4 |
| DRO | | | | AML | AML | | 08 56 11.3 | |
| | comp=N,7946μm,0.3s | | | | | | | |
| DRO | | | | AML | AML | | 08 56 12.1 | |
| | comp=E,9297μm,0.3s | | | | | | | |
| LKD2 | Lefkada island | 0.77 | 353 | P | Pg | | 08 55 57.5 | -0.7 |
| LKD2 | | | | S | Sb | | 08 56 09.7 | +1.5 |
| | comp=E,3μm,0.2s | | | | | | | |
| LKD2 | Lefkada island | 0.77 | 353 | P | Pg | | 08 55 57.5 | -0.7 |
| LKD2 | | | | S | Sg | | 08 56 08.8 | +0.3 |
| LKD2 | | | | AML | AML | | 08 56 16.1 | |
| | comp=E,4930μm,0.4s | | | | | | | |
| LKD2 | | | | AML | AML | | 08 56 18.7 | |
| | comp=N,5075μm,0.3s | | | | | | | |
| TSLK | Tsoukalades, L | 0.81 | 354 | P | Pg | | 08 55 58.2 | -0.7 |
| TSLK | | | | S | Sb | | 08 56 10.8 | +1.6 |
| | comp=N,3μm,0.4s | | | | | | | |
| TSLK | Tsoukalades, L | 0.81 | 354 | P | Pg | | 08 55 58.3 | -0.5 |
| PVO | Paravola | 0.84 | 45 | P | Pb | | 08 55 59.4 | +0.2 |
| PVO | Paravola | 0.84 | 45 | P | Pb | | 08 55 59.5 | +0.4 |
| UPR | University Cam | 0.84 | 72 | P | Pb | | 08 55 59.2 | 0.0 |
| EFP | Efpalio | 0.98 | 65 | P | Pb | | 08 56 01.2 | -0.4 |
| EFP | | | | S | Sn | | 08 56 16.0 | +0.6 |
| EFP | Efpalio | 0.98 | 65 | P | Pb | | 08 56 01.3 | -0.3 |
| EFP | | | | AML | AML | | 08 56 22.0 | |
| | comp=E,1123μm,0.4s | | | | | | | |
| EFP | | | | AML | AML | | 08 56 24.1 | |
| | comp=N,2823μm,0.4s | | | | | | | |
| ANX | Ano Chora | 1.07 | 57 | P | Pb | | 08 56 02.8 | -0.3 |
| ANX | Ano Chora | 1.07 | 57 | P | Pb | | 08 56 02.8 | -0.3 |
| ANX | | | | AML | AML | | 08 56 31.4 | |
| | comp=E,1903μm,0.4s | | | | | | | |
| ANX | | | | AML | AML | | 08 56 35.8 | |
| | comp=N,1691μm,0.9s | | | | | | | |
| ALIK | Aliki, Aigiali | 1.08 | 77 | P | Pb | | 08 56 03.1 | -0.2 |
| KLV | Kalavryta, Ach | 1.09 | 88 | P | Pb | | 08 56 03.1 | -0.4 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KLV | | | | | S | **Sn** | **08 56 19.2** | **+1.0** |
| **KLV** | **Kalavryta, Ach** | **1.09** | **88** | | P | **Pb** | **08 56 03.1** | **-0.4** |
| KLV | | | | | AML | AML | 08 56 30.4 | |
| | comp=N,1106μm,0.4s | | | | | | | |
| KLV | | | | | AML | AML | 08 56 31.1 | |
| | comp=E,685μm,0.4s | | | | | | | |
| **KALE** | **Kalithea** | **1.14** | **71** | | P | **Pb** | **08 56 03.8** | **-0.5** |
| **KALE** | **Kalithea** | **1.14** | **71** | | P | **Pb** | **08 56 03.9** | **-0.4** |
| KALE | | | | | AML | AML | 08 56 27.7 | |
| | comp=N,1530μm,0.3s | | | | | | | |
| KALE | | | | | AML | AML | 08 56 33.3 | |
| | comp=E,1638μm,0.5s | | | | | | | |
| **EVR** | **Evrytania** | **1.21** | **42** | | P | **Pn** | **08 56 05.5** | **+0.3** |
| EVR | | | | | S | **Sb** | **08 56 21.6** | **+0.7** |
| **EVR** | **Evrytania** | **1.21** | **42** | | P | **Pn** | **08 56 05.8** | **+0.6** |
| EVR | | | | | AML | AML | 08 56 30.6 | |
| | comp=E,1229μm,0.7s | | | | | | | |
| EVR | | | | | AML | AML | 08 56 35.4 | |
| | comp=N,996μm,0.5s | | | | | | | |
| **GUR** | **Goura** | **1.24** | **93** | | P | **Pn** | **08 56 05.5** | **-0.2** |
| **GUR** | **Goura** | **1.24** | **93** | | P | **Pn** | **08 56 05.8** | **+0.1** |
| GUR | | | | | AML | AML | 08 56 35.9 | |
| | comp=E,3215μm,0.4s | | | | | | | |
| GUR | | | | | AML | AML | 08 56 38.0 | |
| | comp=N,2840μm,0.5s | | | | | | | |
| **ITM** | **Ithomi** | **1.25** | **132** | | P | **Pn** | **08 56 05.5** | **-0.1** |
| **ITM** | **Ithomi** | **1.25** | **132** | | P | **Pn** | **08 56 05.6** | **-0.1** |
| **PYL** | **PYLOS** | **1.36** | **145** | | P | **Pn** | **08 56 07.0** | **-0.3** |
| **PYL** | **PYLOS** | **1.36** | **145** | | P | **Pn** | **08 56 07.2** | **-0.1** |
| **KEK** | **Kerkira** | **1.85** | **336** | | P | **Pn** | **08 56 14.8** | **+0.8** |
| **SRN** | **Sarande** | **1.95** | **342** | | P | **Pn** | **08 56 15.3** | **0.0** |
| **OHR** | **Ohrid** | **3.08** | **0** | *i* | Pn | **Pb** | **08 56 35.6** | **-1.9** |
| OHR | | | | *i* | Sn | **Sb** | **08 57 12.0** | **-2.9** |
| **DRME** | **Dracevica, Mon** | **4.33** | **344** | *e* | Pn | **Pn** | **08 56 49.1** | **+1.0** |
| **PDG** | **Podgorica** | **4.55** | **346** | *e* | Pn | **Pn** | **08 56 51.9** | **+0.8** |
| **TREB** | **Trebinje** | **5.04** | **339** | *e* | Pn | **Pn** | **08 56 57.4** | **-0.4** |
| **BRY** | **Bratogost** | **5.16** | **341** | *e* | Pn | **Pn** | **08 56 58.4** | **-1.2** |
| **UPM** | **Unac-Piva** | **5.37** | **345** | *e* | Pn | **Pn** | **08 57 00.4** | **-2.1** |
| **STON** | **Ston** | **5.38** | **335** | *e* | Pn | **Pn** | **08 57 02.0** | **-0.4** |
| **RUDO** | **Rudo** | **5.69** | **350** | *e* | Pn | **Pn** | **08 57 06.7** | **0.0** |
| **HAPS** | **Han Pijesak,Bl** | **6.21** | **348** | *e* | Pn | **Pn** | **08 57 13.7** | **-0.3** |
| **A050A** | **Klekovaca** | **7.20** | **335** | *e* | Pn | **Pn** | **08 57 27.8** | **+0.3** |
| **A051A** | **Mrakovica** | **7.56** | **339** | *e* | Pn | **Pn** | **08 57 31.3** | **-1.2** |
| **BOJS** | **Bojanci** | **8.54** | **333** | *e* | Pn | **Pn** | **08 57 46.2** | **+0.4** |
| **CRES** | **Cresnjev** | **8.74** | **335** | *e* | Pn | **Pn** | **08 57 48.6** | **0.0** |
| **CEY** | **Cerknica** | **9.04** | **330** | *e* | Pn | **Pn** | **08 57 53.0** | **+0.2** |
| **SKDS** | **Skadanscina** | **9.05** | **328** | *e* | Pn | **Pn** | **08 57 51.2** | **-1.7** |

*NNC **06** 09:00:20.1±3.2,54.°60N×86.°62E,h0km,mb2.8,mpv2.7, Error ellipse: s-maj=87.9km s-min=18.4km az=154.0, Suspected Mining explosion.*
*IDC **06** 09:00:25.7±2.5,54.°08N×86.°52E,h0km,mbtmp3.1/2, ML3.0/2,Error ellipse: s-maj=20.8km s-min=12.5km az=57.0*

**ISC 06 09:00:25.5±4.7,54.°1N±0.°2×86.°5E±0.°2,h0km,n7,σ1§20/8, 3C-2D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.01** | **260** | I | I | I | 09 07 05.2 | |
| | baz=84,slow=314,SNR=11 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.01** | **260** | ⇑P | | **Pg** | **09 00 43.3** | **-1.5** |
| | 0.2nm,0.4s | | | | | | | |
| ZAA0 | | | | ⇓S | | **Sb** | **09 01 00.6** | **+1.1** |
| | 5.9nm,1.2s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.01** | **260** | Pg | | **Pg** | **09 00 43.8** | **-1.0** |
| | 1.2nm,0.3s,baz=85,slow=17,SNR=12 | | | | | | | |
| ZALV | | | | Lg | | Lg | 09 00 59.6 | |
| | 2.3nm,0.3s,baz=78,slow=30,SNR=11 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.01** | **237** | Pn | | **Pn** | **09 01 56.6** | **+1.0** |
| | 0.2nm,0.3s,baz=57,slow=14,SNR=7.6 | | | | | | | |
| KURBB | | | | Lg | | Lg | 09 03 34.2 | |
| | 0.1nm,0.3s,baz=65,slow=36,SNR=1.9 | | | | | | | |
| | 0.9nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.01** | **237** | ⇓Pn | | **Pn** | **09 01 56.6** | **+1.0** |
| | 1.0nm,0.3s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 09 03 43.5 | |
| | 7.0nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **7.82** | **202** | ⇑Pn | | **Pn** | **09 02 21.1** | **+0.6** |
| | 0.7nm,0.7s,baz=23,slow=13,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.82** | **202** | Pn | | **Pn** | **09 02 21.0** | **+0.5** |
| | 0.4nm,0.3s,baz=24,slow=14,SNR=13 | | | | | | | |
| MKAR | | | | Sn | | **Sn** | **09 03 49.1** | **-0.5** |
| | 0.1nm,0.3s,baz=20,slow=16,SNR=2.6 | | | | | | | |
| MKAR | | | | Lg | | Lg | 09 04 32.7 | |
| | 0.1nm,0.3s,baz=24,slow=33,SNR=3.7 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |

**ISC 06 09:09:12.2±2.7,57.°7N±0.°2×18.°7E±0.°2,h5km±10km,n4, σ0§63/8,Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GOTU** | **Gotland** | **0.06** | **240** | P | | **Pg** | **09 09 13.4** | **-0.1** |
| GOTU | | | | S | | **Sg** | **09 09 14.6** | **+0.1** |
| **BYXU** | **Byxelkrok** | **0.99** | **245** | P | | **Pg** | **09 09 30.9** | **-0.2** |
| BYXU | | | | S | | **Sg** | **09 09 44.9** | **+1.0** |
| **OSKU** | **Oskarshamn** | **1.48** | **250** | P | | **Pn** | **09 09 39.2** | **-0.2** |
| OSKU | | | | S | | **Sg** | **09 09 59.6** | **0.0** |
| **NRTU** | **Norrtaelje** | **1.97** | **360** | P | | **Pn** | **09 09 46.6** | **+0.5** |
| NRTU | | | | S | | **Sb** | **09 10 12.7** | **-0.6** |

*NEIC **06** 09:13:01.8±1.3,23.°4S±0.°1×179.°6W±0.°1,h555km±12km, mb4.4/25, Error ellipse: s-maj=20.6km s-min=18.5km az=141.0*
*IDC **06** 09:13:03.1±2.1,23.°56S×179.°97E,h535km±34km,mb3.0/4, mbtmp4.0/7,Error ellipse: s-maj=50.7km s-min=24.0km az=45.0*

**ISC 06 09:13:01.7±0.8,23.°45S±0.°09×179.°7W±0.°1,h550km,n39, σ1§16/40,mb4.3/14,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **6.08** | **339** | P | | **P** | **09 14 42.0** | **+0.7** |
| **MSVF** | **Nonsavu** | **6.08** | **339** | P | | **P** | **09 14 41.8** | **+0.4** |
| | 10.0nm,0.5s,baz=215,slow=18,SNR=24 | | | | | | | |
| **PINNC** | **Pines Island,** | **11.91** | **271** | P | | **P** | **09 15 39.9** | **+0.6** |
| **AFI** | **Afiamalu** | **12.07** | **40** | P | | **P** | **09 15 40.1** | **-1.1** |
| **DZM** | **Mont Dzumac** | **12.90** | **273** | P | | **P** | **09 15 50.5** | **+0.7** |
| **DZM** | **Mont Dzumac** | **12.90** | **273** | P | | **P** | **09 15 49.2** | **-0.5** |
| | 1.8nm,0.5s,baz=90,slow=20,SNR=2.6 | | | | | | | |
| **URZ** | **Urewera** | **15.02** | **190** | P | | **P** | **09 16 09.6** | **-1.6** |
| | 3.4nm,0.3s,baz=348,slow=3.1,SNR=8.9 | | | | | | | |
| URZ | | | | S | | **S** | **09 18 44.1** | **-3.0** |
| | 17nm,1.1s,baz=267,slow=5.2,SNR=2.0 | | | | | | | |
| **RTZ** | **Ruatahuna** | **15.39** | **190** | P | | **P** | **09 16 14.7** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **16.00** | **191** | P | | **P** | **09 16 18.6** | **-2.6** |
| BKZ | | | | IAmb | | IAmb | 09 16 26.9 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **MRZ** | **Mangatainoka R** | **17.62** | **192** | P | | **P** | **09 16 34.5** | **-1.5** |
| **TUWZ** | **Tuamarina** | **18.71** | **195** | P | | **P** | **09 16 46.5** | **+0.6** |
| **LTZ** | **Lake Taylor** | **20.41** | **197** | P | | **P** | **09 17 01.6** | **+0.2** |
| LTZ | | | | IAmb | | IAmb | 09 17 13.6 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **24.54** | **201** | P | | **P** | **09 17 39.5** | **+1.3** |
| WHZ | | | | IAmb | | IAmb | 09 18 03.5 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **EIDS** | **Eidsvold** | **26.70** | **260** | P | | **P** | **09 17 57.6** | **+0.1** |
| EIDS | | | | IAmb | | IAmb | 09 18 40.3 | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **CAN** | **Canberra** | **29.64** | **239** | P | | **P** | **09 18 24.3** | **+1.2** |
| **CTAO** | **Charters Tower** | **31.79** | **269** | P | | **P** | **09 18 42.0** | **+0.3** |
| CTAO | | | | IAmb | | IAmb | 09 18 42.5 | |
| | comp=Z,9.4nm,0.5s | | | | | | | |
| **TOO** | **Toolangi** | **32.96** | **237** | P | | **P** | **09 18 52.3** | **+0.9** |
| **COEN** | **Coen** | **36.36** | **278** | P | | **P** | **09 19 19.7** | **-0.3** |
| **BBOO** | **Buckleboo** | **39.91** | **246** | P | | **P** | **09 19 48.3** | **-0.3** |
| **AS31** | **Alice Springs** | **42.42** | **260** | P | | **P** | **09 20 08.2** | **-0.6** |
| **ASAR** | **Alice Springs** | **42.42** | **260** | P | | **P** | **09 20 08.1** | **-0.7** |
| **ASAR** | **Alice Springs** | **42.42** | **260** | P | | **P** | **09 20 08.4** | **-0.3** |
| | comp=Z,3.1nm,0.8s,baz=102,slow=6.9,SNR=28 | | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **42.57** | **266** | P | | **P** | **09 20 08.7** | **-1.2** |
| WR0 | | | | IAmb | | IAmb | 09 20 48.7 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **42.74** | **266** | P | | **P** | **09 20 09.9** | **-1.4** |
| **WB0** | **Warramunga Arr** | **42.75** | **266** | P | | **P** | **09 20 10.3** | **-1.0** |
| WB0 | | | | IAmb | | IAmb | 09 20 51.9 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **42.75** | **266** | P | | **P** | **09 20 10.2** | **-1.0** |
| **WRA** | **Warramunga Arr** | **42.76** | **266** | P | | **P** | **09 20 10.5** | **-0.9** |
| **WRA** | **Warramunga Arr** | **42.76** | **266** | P | | **P** | **09 20 10.2** | **-1.2** |
| | comp=Z,2.9nm,0.6s,baz=95,slow=8.5,SNR=43 | | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **46.77** | **249** | P | | **P** | **09 20 41.5** | **-0.5** |
| FORT | | | | IAmb | | IAmb | 09 21 08.5 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **MTN** | **Manton Dam** | **47.74** | **274** | P | | **P** | **09 20 47.6** | **-1.9** |
| MTN | | | | IAmb | | IAmb | 09 21 28.4 | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **49.01** | **269** | P | | **P** | **09 20 58.5** | **-0.4** |
| KNRA | | | | IAmb | | IAmb | 09 21 41.0 | |
| | comp=Z,31nm,1.5s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.18** | **265** | P | | **P** | **09 21 14.4** | **-0.3** |
| **VNDA** | **Vanda** | **54.85** | **185** | P | | **P** | **09 21 41.8** | **+1.9** |
| | comp=Z,0.4nm,0.7s,baz=20,slow=7.8,SNR=2.4 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **MBWA** | **Marble Bar** | **55.76** | **260** | P | | **P** | **09 21 46.3** | **-0.9** |
| MBWA | | | | IAmb | | IAmb | 09 21 56.1 | |
| | comp=Z,34nm,1.5s | | | | | | | |
| **MORW** | **Morawa** | **57.33** | **250** | P | | **P** | **09 21 57.5** | **-0.3** |
| MORW | | | | IAmb | | IAmb | 09 22 36.7 | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **GIRL** | **Giralia** | **60.33** | **256** | P | | **P** | **09 22 18.0** | **0.0** |
| **QSPA** | **South Pole Qui** | **66.63** | **180** | P | | **P** | **09 22 58.6** | **+0.9** |
| **QSPA** | **South Pole Qui** | **66.63** | **180** | P | | **P** | **09 22 59.6** | **+1.9** |
| | comp=Z,0.5nm,0.5s,baz=135,slow=1.4,SNR=1.6 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **RSO** | **Redoubt South** | **86.44** | **13** | P | | **P** | **09 24 46.0** | **0.0** |

**TRN 06 09:27:57.0,16.°38N×60.°91W,h29km,MD3.6,East of Guadeloupe.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MAGL** | **Barre de l'ile** | **0.56** | **220** | *eP* | | Pn | 09 28 10.2 | +1.1 |
| **ABD** | **La Joyeuse, An** | **0.57** | **279** | *eP* | | Pn | 09 28 10.1 | +1.0 |
| **CBE** | **Ff, Capester** | **0.74** | **245** | *eP* | | Pn | 09 28 13.3 | +1.8 |
| **TDBA** | **Terre de Bas,** | **0.88** | **233** | *eP* | | Pb | 09 28 15.3 | +1.7 |
| **TBG** | **Guadaloupe-3** | **0.89** | **234** | *eP* | | Pb | 09 28 15.7 | +1.9 |
| TBG | | | | *eS* | | Sn | 09 28 27.7 | +2.3 |
| **ANBD** | **Bethesda, Anti** | **1.06** | **309** | *eP* | | Pb | 09 28 17.1 | +0.4 |
| ANBD | | | | *eS* | | Sb | 09 28 31.2 | +1.1 |
| **MBFL** | **Flemmings, Mon** | **1.30** | **286** | *eP* | | Pb | 09 28 20.9 | 0.0 |
| MBFL | | | | *eS* | | Sb | 09 28 39.0 | +1.8 |
| **ANWB** | **Willy Bob** | **1.53** | **327** | *e* | | Pn | 09 28 18.4 | -4.0 |
| **ANWB** | **Willy Bob** | **1.53** | **327** | *eP* | | Pb | 09 28 23.8 | -0.9 |
| ANWB | | | | *eS* | | Sb | 09 28 44.1 | +0.4 |
| **SVN** | **Savane Anatole** | **1.55** | **189** | *eP* | | Pb | 09 28 25.5 | +0.4 |
| SVN | | | | *eS* | | Sb | 09 28 44.4 | 0.0 |
| **BAMF** | **Morne Balai** | **1.58** | **189** | *eP* | | Pn | 09 28 24.0 | +0.9 |
| **PCM** | **Pelee Case Pet** | **1.59** | **191** | *eP* | | Pn | 09 28 24.4 | +1.2 |
| **PCM** | **Pelee Case Pet** | **1.59** | **191** | *eP* | | Pb | 09 28 24.9 | -0.8 |
| **GBMF** | **Grand Be** | **1.60** | **189** | *eP* | | Pn | 09 28 24.1 | +0.8 |
| **ILAM** | **Ilet Lapin Mar** | **1.60** | **179** | *eP* | | Pb | 09 28 24.8 | -1.1 |
| ILAM | | | | *eS* | | Sb | 09 28 45.4 | -0.2 |
| **PML** | **Morne Lenard** | **1.61** | **190** | *eP* | | Pn | 09 28 24.1 | +0.6 |
| **LPMF** | **Morne Lapointe** | **1.80** | **182** | *eP* | | Pn | 09 28 26.9 | +0.9 |
| **MVM** | **Montagne Vaucl** | **1.82** | **180** | *eP* | | Pn | 09 28 27.8 | +1.4 |
| **BIM** | **Bigot** | **1.86** | **185** | *eP* | | Pb | 09 28 29.6 | -0.8 |
| BIM | | | | *eS* | | Sb | 09 28 52.1 | -1.2 |
| **MPOM** | **Morne Pois Mar** | **1.93** | **179** | *eP* | | Pn | 09 28 29.1 | +1.3 |

**IDC 06 09:29:50.2±4.5,29.°15N×142.°35E,h127km±41km,mb3.3/5, mbtmp3.6/6,Error ellipse: s-maj=38.4km s-min=24.0km az=86.0,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **8.15** | **336** | P | | Pn | 09 31 45.7 | 0.0 |
| | 1.5nm,0.5s,baz=161,slow=12,SNR=5.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.41** | **190** | P | | P | 09 38 26.8 | -0.5 |
| | 0.6nm,0.5s,baz=8.4,slow=7.9,SNR=14 | | | | | | | |
| WRA | | | | PcP | | PcP | 09 39 48.9 | +1.2 |
| | 0.2nm,0.5s,baz=7.5,slow=4.1,SNR=1.8 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.73** | **313** | P | | P | 09 38 44.2 | -0.1 |
| | 0.6nm,0.5s,baz=92,slow=6.1,SNR=8.0 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.14** | **52** | P | | P | 09 41 40.9 | -0.4 |
| | 0.2nm,0.6s,baz=292,slow=5.7,SNR=2.3 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **84.72** | **313** | P | | P | 09 42 09.9 | -0.4 |
| | 0.6nm,0.8s,baz=43,slow=6.5,SNR=2.1 | | | | | | | |
| | 0.6nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **94.26** | **53** | P | | P | 09 42 55.6 | +0.1 |
| | 0.1nm,0.6s,baz=297,slow=4.0,SNR=2.3 | | | | | | | |
| | 0.1nm,0.6s | | | | | | | |

**IDC 06 09:35:58.1±2.6,53.°70N×86.°99E,h0km,mbtmp2.7/2, ML2.6/2,Error ellipse: s-maj=23.5km s-min=15.7km az=70.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.31** | **282** | I | | I | 09 44 00.0 | |
| | baz=100,slow=313,SNR=2.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.31** | **282** | Pg | | Pg | 09 36 21.3 | -1.9 |
| | 1.1nm,0.3s,baz=101,slow=12,SNR=16 | | | | | | | |
| ZALV | | | | Lg | | Lg | 09 36 39.4 | |
| | 1.2nm,0.3s,baz=104,slow=29,SNR=6.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.05** | **243** | Pn | | Pn | 09 37 30.7 | +1.9 |
| | 0.1nm,0.3s,baz=61,slow=14,SNR=5.7 | | | | | | | |
| KURBB | | | | Sn | | Sn | 09 38 38.9 | +0.2 |
| | baz=60,slow=31,SNR=1.4 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.54** | **205** | Pn | | Pn | 09 37 50.0 | +0.7 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=6.4 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |

*NNC **06** 09:52:37.5±1.0,54.°45N×87.°65E,h0km,mb3.5,mpv3.2, Error ellipse: s-maj=9.7km s-min=6.1km az=6.0, Suspected Mining explosion.*
*IDC **06** 09:52:43.3±2.7,54.°29N×87.°26E,h0km,mbtmp3.5/2, ML3.1/2,Error ellipse: s-maj=22.8km s-min=17.0km az=51.0*

**ISC 06 09:52:37.0±3.9,54.°5N±0.°2×87.°6E±0.°2,h0km,n8,σ1§03/9, 7C-2D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.71** | **253** | I | | I | 10 01 30.0 | |
| | baz=78,slow=312,SNR=8.9 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.71** | **253** | ⇓P | | **Pg** | **09 53 08.7** | **-1.0** |
| | 1.1nm,0.5s | | | | | | | |
| ZAA0 | | | | ⇑S | | **Sg** | **09 53 32.1** | **+0.4** |
| | 2.9nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.71** | **253** | Pg | | **Pg** | **09 53 08.9** | **-0.7** |
| | 4.0nm,0.3s,baz=72,slow=17,SNR=21 | | | | | | | |
| ZALV | | | | Lg | | Lg | 09 53 30.2 | |
| | 2.9nm,0.3s,baz=76,slow=29,SNR=7.6 | | | | | | | |
| **KURK** | **Kurchatov** | **6.63** | **239** | ⇑Pn | | **Pn** | **09 54 16.3** | **+0.7** |
| | 2.4nm,0.7s | | | | | | | |
| KURK | | | | ⇑Lg | | Lg | 09 56 08.6 | |
| | 3.7nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.74** | **239** | Pn | | Pn | 09 54 20.4 | +3.4 |
| | 0.3nm,0.3s,baz=57,slow=14,SNR=15 | | | | | | | |
| KURBB | | | | | | **Sn** | **09 55 34.4** | **0.0** |
| | baz=57,slow=31,SNR=1.5 | | | | | | | |
| KURBB | | | | Lg | | Lg | 09 56 09.8 | |
| | 0.1nm,0.3s,baz=56,slow=30,SNR=3.6 | | | | | | | |
| | 3.1nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.74** | **239** | ⇑Pn | | **Pn** | **09 54 17.9** | **+0.9** |
| | 3.3nm,0.5s | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | 09 56 12.5 | |
| | 6.4nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **8.40** | **206** | ⇑Pn | | **Pn** | **09 54 40.0** | **+0.1** |
| | 0.7nm,0.5s,baz=28,slow=14,SNR=17 | | | | | | | |
| MK31 | | | | ⇑Sn | | **Sn** | **09 56 16.8** | **+1.4** |
| | 0.4nm,0.5s,baz=25,slow=15,SNR=4.4 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 09 57 05.2 | |
| | 1.0nm,0.6s,baz=29,slow=14,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.40** | **206** | Pn | | Pn | 09 54 44.1 | +4.2 |
| | 0.5nm,0.3s,baz=27,slow=14,SNR=14 | | | | | | | |
| MKAR | | | | Sn | | **Sn** | **09 56 14.1** | **-1.3** |
| | 0.2nm,0.3s,baz=19,slow=27,SNR=4.7 | | | | | | | |
| MKAR | | | | Lg | | Lg | 09 57 02.1 | |
| | 0.1nm,0.3s,baz=21,slow=28,SNR=3.2 | | | | | | | |
| | 0.8nm,0.4s | | | | | | | |

*ISK **06** 09:58:23.9,38.°44N×44.°37E,h7km,ML2.9/5*

*AZER **06** 09:58:23.5,38.°19N×44.°40E,h3km,ml2.7*
*AFAD **06** 09:58:26.3±0.0,38.°31N×44.°32E,h9km±5km,ML2.2*
*TEH **06** 09:58:27.6,38.°38N×44.°36E,h6km±81km,ML2.7*

**ISC 06 09:58:27.3±1.0,38.°33N±0.°02×44.°25E±0.°02,h14km±9km, n35,σ2§24/59,Turkey-Iran border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OZAP** | **Van, Ozalp-Mer** | **0.39** | **329** | P | | **Pg** | **09 58 33.9** | **-1.4** |
| OZAP | | | | S | | **Sb** | **09 58 42.4** | **+0.3** |
| OZAP | | | | *i* | AML | AML | 09 58 47.0 | |
| | comp=Z,259nm,0.5s | | | | | | | |
| **TVAN** | **Van** | **0.69** | **287** | P | | **Pg** | **09 58 39.7** | **-1.1** |
| TVAN | | | | S | | **Sn** | **09 58 51.8** | **-1.6** |
| TVAN | | | | *i* | AML | AML | 09 59 02.0 | |
| | comp=Z,142nm,0.5s | | | | | | | |
| **VANB** | **Van** | **0.72** | **292** | Pg | | **Pg** | **09 58 39.5** | **-2.0** |
| VANB | | | | Sg | | **Sg** | **09 58 50.1** | **-0.9** |
| **YOVA** | **Hakkari_Yksek** | **0.74** | **177** | P | | **Pg** | **09 58 41.3** | **-0.5** |
| YOVA | | | | S | | **Sg** | **09 58 51.7** | **+0.1** |
| YOVA | | | | *i* | AML | AML | 09 58 57.0 | |
| | comp=Z,90nm,0.3s | | | | | | | |
| **VMUR** | **Van-Muradiye** | **0.85** | **322** | P | | **Pb** | **09 58 43.8** | **-0.1** |
| VMUR | | | | S | | **Sn** | **09 58 58.2** | **+0.9** |
| VMUR | | | | *i* | AML | AML | 09 59 09.0 | |
| | comp=Z,95nm,0.8s | | | | | | | |
| **CLDR** | **Caldiran** | **0.85** | **343** | Pg | | **Pg** | **09 58 39.4** | **-4.5** |
| CLDR | | | | Sg | | **Sg** | **09 58 51.2** | **-4.0** |
| **CLDR** | **Caldiran** | **0.85** | **343** | P | | Pg | 09 58 38.5 | -5.5 |
| CLDR | | | | S | | **Sg** | **09 58 52.8** | **-2.4** |
| **HAKT** | **HAKKARI** | **0.88** | **209** | P | | **Pb** | **09 58 42.8** | **-1.7** |
| HAKT | | | | S | | **Sn** | **09 58 57.4** | **-0.8** |
| HAKT | | | | *i* | AML | AML | 09 59 02.0 | |
| | comp=Z,147nm,0.4s | | | | | | | |
| **GEVA** | **Gevas** | **0.94** | **269** | P | | **Pb** | **09 58 43.1** | **-2.3** |
| GEVA | | | | S | | **Sn** | **09 58 59.1** | **-0.3** |
| GEVA | | | | *i* | AML | AML | 09 59 02.0 | |
| | comp=Z,90nm,0.3s | | | | | | | |
| **AKDM** | **Akdamar-Van** | **1.00** | **270** | Pn | | **Pb** | **09 58 45.3** | **-1.1** |
| AKDM | | | | Sn | | **Sn** | **09 59 01.0** | **0.0** |
| **ISHB** | **Shabestar** | **1.08** | **92** | Pg | | **Pb** | **09 58 45.7** | **-2.2** |
| **MAKU** | **Maku** | **1.08** | **18** | Pg | | **Pb** | **09 58 46.4** | **-1.5** |
| **IMRD** | **Marand** | **1.21** | **71** | Pg | | **Pn** | **09 58 48.8** | **-1.1** |
| **ADCV** | **BITLIS_Adilcev** | **1.29** | **292** | P | | Pg | **09 58 52.3** | **+0.2** |
| ADCV | | | | S | | **Sg** | **09 59 13.8** | **+5.0** |
| ADCV | | | | *i* | AML | AML | 09 59 18.0 | |
| | comp=Z,35nm,1.0s | | | | | | | |
| **DYDN** | **Diyadin** | **1.29** | **340** | P | | **Pg** | **09 58 52.9** | **+0.7** |
| DYDN | | | | S | | **Sg** | **09 59 11.1** | **+2.1** |
| DYDN | | | | *i* | AML | AML | 09 59 16.0 | |
| | comp=Z,42nm,0.6s | | | | | | | |
| **NAX** | **Nakhchivan** | **1.29** | **49** | P | | **Pb** | **09 58 51.5** | **0.0** |
| NAX | | | | S | | **Sg** | **09 59 11.6** | **+2.6** |
| **PERV** | **Siirt/Pervari-** | **1.40** | **255** | P | | **Pg** | **09 58 54.5** | **+0.3** |
| PERV | | | | S | | **Sg** | **09 59 18.0** | **+5.6** |
| PERV | | | | *i* | AML | AML | 09 59 24.0 | |
| | comp=Z,84nm,0.7s | | | | | | | |
| **HYR** | **Heyderabad** | **1.47** | **19** | P | | **Pg** | **09 58 56.1** | **+0.6** |
| HYR | | | | S | | **Sg** | **09 59 20.3** | **+5.7** |
| **SBZ** | **Shahbuz** | **1.48** | **43** | P | | **Pb** | **09 58 54.5** | **-0.2** |
| SBZ | | | | S | | **Sg** | **09 59 18.2** | **+3.0** |
| **ORD** | **Ordubad** | **1.49** | **66** | P | | **Pn** | **09 58 53.7** | **0.0** |
| ORD | | | | S | | **Sg** | **09 59 16.6** | **+1.1** |
| **ITBZ** | **Tabriz** | **1.50** | **93** | Pg | | **Pn** | **09 58 54.0** | **+0.1** |
| **IAZR** | **Azarshahr** | **1.52** | **115** | Pg | | **Pb** | **09 58 55.2** | **-0.1** |
| **IGDI** | **IGDIR** | **1.54** | **355** | P | | **Pb** | **09 58 54.7** | **-1.0** |
| IGDI | | | | S | | **Sg** | **09 59 19.9** | **+2.8** |
| IGDI | | | | *i* | AML | AML | 09 59 26.0 | |
| | comp=Z,18nm,0.5s | | | | | | | |
| **DORK** | **Agr/Tutak/Do** | **1.56** | **313** | P | | **Pn** | **09 58 54.0** | **-0.7** |
| DORK | | | | S | | **Sg** | **09 59 19.6** | **+2.0** |
| DORK | | | | *i* | AML | AML | 09 59 24.0 | |
| | comp=Z,32nm,1.2s | | | | | | | |
| **AGRB** | **Hanur-Agry** | **1.58** | **322** | Pn | | **Pn** | **09 58 53.8** | **-1.3** |
| **SIRN** | **Sirnak** | **1.67** | **241** | P | | **Pg** | **09 58 59.8** | **+0.3** |
| SIRN | | | | S | | **Sg** | **09 59 24.9** | **+3.8** |
| SIRN | | | | *i* | AML | AML | 09 59 32.0 | |
| | comp=Z,64nm,0.7s | | | | | | | |
| **KOTA** | **Agri, Merkez-K** | **1.68** | **331** | P | | **Pb** | **09 58 58.2** | **+0.1** |
| KOTA | | | | S | | **Sg** | **09 59 25.6** | **+4.1** |
| **GURO** | **Guroymak-BITLI** | **1.75** | **278** | Pn | | **Pn** | **09 58 56.9** | **-0.5** |
| **SRTM** | **Siirt_Merkez** | **1.86** | **260** | P | | **Pg** | **09 59 02.1** | **-0.9** |
| SRTM | | | | S | | **Sg** | **09 59 28.3** | **+1.0** |
| SRTM | | | | *i* | AML | AML | 09 59 36.0 | |
| | comp=Z,32nm,0.6s | | | | | | | |
| **EATA** | **Eleskirt** | **2.05** | **319** | P | | **Pb** | **09 59 05.0** | **+0.5** |
| EATA | | | | S | | **Sg** | **09 59 38.1** | **+4.7** |
| EATA | | | | *i* | AML | AML | 09 59 52.0 | |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| **IHRS** | **Heris** | **2.20** | **89** | Pn | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.44** | **223** | P | | P | | 10 21 34.4 | -0.2 |
| | 2.4nm,0.9s,baz=50,slow=10,SNR=9.0 | | | | | | | | |
| | 2.4nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.41** | **217** | P | | P | | 10 22 01.6 | -0.5 |
| | 0.3nm,0.6s,baz=52,slow=8.4,SNR=11 | | | | | | | | |
| | 0.3nm,0.6s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.59** | **289** | PKPbc | | PKPbc | | 10 36 17.0 | -0.6 |
| | 0.3nm,0.8s,baz=72,slow=4.7,SNR=1.7 | | | | | | | | |

*IDC **06** 10:18:05.1±5.2,3˚.69S×150˚.10E,h79$^{km}$±47$^{km}$,mb3.5/8, mbtmp3.7/10,ML2.0/2,MS3.6/6,Error ellipse: s-maj=42.9km s-min=27.4km az=103.0*

**ISC 06 10:18:07.3±0.9,3.8S±0.1×150.1E±0.3,h100$^{km}$,n17, σ0$^{s}$60/11,mb3.6/8,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.30** | **207** | P | **Pn** | **10 19 37.2** | **-0.4** |
| | 0.7nm,0.3s,baz=335,slow=9.9,SNR=2.8 | | | | | | |
| | 21nm,1.0s | | | | | | |
| **HNR** | **Honiara** | **11.32** | **120** | LR | LR | 10 24 51.1 | |
| | comp=Z,2μm,21.5s,baz=308,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **16.64** | **193** | P | **Pn** | **10 21 54.1** | **-0.5** |
| | baz=28,slow=11,SNR=4.7 | | | | | | |
| CTA | | | | LR | LR | 10 28 08.5 | |
| | comp=Z,9.6nm,18.6s,baz=16,slow=36 | | | | | | |
| | 0.5nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.21** | **222** | P | **P** | **10 22 55.6** | **-0.1** |
| | 4.5nm,1.1s,baz=50,slow=10,SNR=7.1 | | | | | | |
| | 4.5nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **24.16** | **140** | LR | LR | 10 31 42.2 | |
| | comp=Z,133nm,20.0s,baz=326,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **25.19** | **217** | P | **P** | **10 23 24.8** | **+1.0** |
| | 1.1nm,0.7s,baz=51,slow=9.2,SNR=7.7 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **DAV** | **Davao City (W)** | **26.69** | **294** | LR | LR | 10 33 38.1 | |
| | comp=Z,48nm,18.5s,baz=258,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **30.23** | **267** | LR | LR | 10 36 36.9 | |
| | comp=Z,74nm,19.1s,baz=74,slow=37 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.22** | **223** | LR | LR | 10 44 33.4 | |
| | comp=Z,123nm,18.5s,baz=196,slow=38 | | | | | | |
| **RAR** | **Rarotonga** | **51.70** | **114** | LR | LR | 10 45 38.3 | |
| | comp=Z,47nm,19.3s,baz=257,slow=32 | | | | | | |
| **SONM** | **Songino Array** | **64.01** | **329** | P | **P** | **10 28 30.4** | **0.0** |
| | 0.3nm,0.4s,baz=144,slow=3.2,SNR=1.5 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **77.76** | **319** | P | **P** | **10 29 53.9** | **+0.4** |
| | 0.5nm,0.7s,baz=103,slow=7.8,SNR=4.4 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **81.31** | **322** | P | **P** | **10 30 12.4** | **-0.2** |
| | 0.4nm,0.2s,baz=113,slow=6.1,SNR=1.8 | | | | | | |
| | 0.4nm,0.2s | | | | | | |
| **ILAR** | **Eielson Array** | **82.25** | **23** | P | **P** | **10 30 16.9** | **-0.4** |
| | 0.3nm,0.7s,baz=260,slow=5.3,SNR=5.1 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.19** | **180** | P | **P** | **10 30 38.2** | **+0.9** |
| | 0.6nm,0.7s,baz=190,slow=6.6,SNR=1.3 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.61** | **52** | P | **P** | **10 31 12.7** | **-0.2** |
| | 0.2nm,0.5s,baz=269,slow=8.8,SNR=1.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.38** | **289** | PKPbc | **PKPbc** | **10 37 40.0** | **-0.5** |
| | 0.9nm,1.1s,baz=63,slow=4.5,SNR=2.3 | | | | | | |

**DJA 06 10:38:24.4±0.5,8˚S±4˚×11˚6E±˚,h14$^{km}$±4$^{km}$,M4.2/9, mb4.8/1,MLv4.0/9,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRBI** | **Singaraja** | **0.81** | **275** | P | Pg | 10 38 40.0 | -0.2 |
| SRBI | | | | S | Sb | 10 38 51.8 | +0.7 |
| **DNP** | **Denpasar** | **0.97** | **237** | P | Pb | 10 38 42.6 | -0.3 |
| DNP | | | | S | Sn | 10 38 58.6 | +1.5 |
| **TWSI** | **Taliwang, Sumb** | **1.03** | **125** | P | Pb | 10 38 42.4 | -1.6 |
| TWSI | | | | S | Sb | 10 38 56.7 | -0.6 |
| **PLAI** | **Plampang** | **1.85** | **111** | P | Pn | 10 38 56.9 | +1.1 |
| PLAI | | | | S | Sn | 10 39 19.7 | +0.6 |
| **JAGI** | **Jajag, Banyuwa** | **1.89** | **260** | P | Pn | 10 38 55.2 | -1.0 |
| JAGI | | | | S | Sn | 10 39 18.9 | -0.9 |
| **PWJI** | **Pagerwoja** | **4.19** | **271** | P | Pn | 10 39 27.7 | -0.2 |
| **BSSI** | **Bau Bau, Buton** | **4.85** | **66** | P | Pn | 10 39 37.5 | +0.4 |
| BSSI | | | | S | Sn | 10 40 34.4 | +1.2 |
| **UGM** | **Wanagama** | **5.46** | **272** | P | Pn | 10 39 46.1 | +0.7 |

*IDC **06** 10:39:22.2±1.1,36˚.55N×98˚.88W,h0$^{km}$,mbtmp3.3/5, ML3.5/4,Error ellipse: s-maj=13.9km s-min=11.1km az=117.0*
*NEIC **06** 10:39:22.2±0.9,36˚.45N±0˚.01×98˚.80W±0˚.05,h5$^{km}$±2$^{km}$, Error ellipse: s-maj=7.4km s-min=3.0km az=283.0*
*TUL **06** 10:39:22.6±1.0,36˚.46N±0˚.02×98˚.79W±0˚.05,h6$^{km}$±6$^{km}$, ML3.0,mb_Lg3.2/129(NEIC),ML3.3/25(NEIC),Error ellipse: s-maj=6.4km s-min=2.3km az=106.0*

**ISC 06 10:39:22.6±1.0,36˚.46N±0˚.03×98˚.76W±0˚.03,h10$^{km}$±8$^{km}$, n102,σ1$^{s}$00/53,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK038** | **West end E0370** | **0.02** | **46** | Pg | **Pg** | **10 39 24.4** | **0.0** |
| **U32A** | **Winter Ranch,** | **0.21** | **247** | Pg | **Pg** | **10 39 26.8** | **-0.2** |
| U32A | | | | IAML | | 10 39 30.1 | |
| | comp=N,8μm,0.4s | | | | | | |
| U32A | | | | IAML | | 10 39 30.1 | |
| | comp=E,8μm,0.4s | | | | | | |
| **NOKA** | **Waynoka** | **0.22** | **321** | Pg | **Pg** | **10 39 27.1** | **-0.1** |
| **OK032** | **Salt Plains WL** | **0.56** | **52** | | **Pg** | **10 39 33.9** | **+0.4** |
| OK032 | | | | IAML | | 10 39 46.1 | |
| | comp=E,2μm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.63** | **86** | | **Pg** | **10 39 35.2** | **+0.4** |
| CROK | | | | IAML | | 10 39 53.8 | |
| | comp=E,1μm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **0.66** | **233** | | **Pg** | **10 39 34.8** | **-0.6** |
| ELIS | | | | IAML | | 10 39 51.1 | |
| | comp=E,3μm,0.3s | | | | | | |
| ELIS | | | | IAML | | 10 39 51.3 | |
| | comp=N,2μm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.81** | **52** | | **Pg** | **10 39 38.4** | **+0.2** |
| KAN14 | | | | IAML | | 10 39 57.4 | |
| | comp=E,976nm,0.1s | | | | | | |
| KAN14 | | | | IAML | | 10 39 58.0 | |
| | comp=N,915nm,0.1s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.82** | **176** | | **Pg** | **10 39 38.1** | **-0.3** |
| **GC02** | **Grant County #** | **0.82** | **62** | | **Pg** | **10 39 38.7** | **+0.2** |
| **KAN17** | **Caldwell West** | **0.99** | **54** | | **Pg** | **10 39 41.6** | **0.0** |
| **KAN08** | **Anthony NE Sta** | **0.99** | **40** | | **Pg** | **10 39 41.6** | **-0.1** |
| KAN08 | | | | IAML | | 10 40 01.5 | |
| | comp=N,703nm,0.1s | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.03** | **36** | | **Pg** | **10 39 42.5** | **0.0** |
| **KAN01** | **Argonia South** | **1.06** | **49** | | **Pg** | **10 39 43.0** | **0.0** |
| KAN01 | | | | IAML | | 10 40 00.4 | |
| | comp=E,682nm,0.4s | | | | | | |
| KAN01 | | | | IAML | | 10 40 00.5 | |
| | comp=N,682nm,0.3s | | | | | | |
| **KAN09** | **Caldwell North** | **1.14** | **53** | | **Pg** | **10 39 44.2** | **-0.3** |
| **KAN13** | **South Haven SW** | **1.17** | **62** | | **Pg** | **10 39 44.8** | **-0.3** |
| **KS21** | **Milan North St** | **1.20** | **47** | IAML | | 10 40 09.2 | |
| | comp=N,703nm,0.5s | | | | | | |
| KS21 | | | | IAML | | 10 40 09.9 | |
| | comp=N,660nm,0.1s | | | | | | |
| **OK029** | **Liberty Lake** | **1.25** | **122** | | **Pg** | **10 39 46.1** | **-0.5** |
| **BLOK** | **Blackwell** | **1.28** | **76** | | **Pn** | **10 39 46.8** | **+0.2** |
| **ADOK** | **Arcadia Dam** | **1.39** | **125** | | **Pn** | **10 39 48.4** | **+0.3** |
| **OKCSW** | **OKLAHOMA CITY** | **1.51** | **134** | IAmb_Lg | | 10 40 13.6 | |
| | comp=Z,149nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | | **Pn** | **10 39 52.9** | **+0.2** |
| **SMWD** | **Samnorwood** | **1.81** | **222** | Pn | **Pb** | **10 39 54.8** | **-1.2** |
| **R32A** | **Long Quarter,** | **1.96** | **1** | Pn | **Pb** | **10 39 57.4** | **-1.0** |
| **X34A** | **Smith Ranch, M** | **2.01** | **158** | | **Pb** | **10 39 58.5** | **-0.7** |
| **TUL3** | **Leonard** | **2.46** | **102** | | **Pn** | **10 40 03.4** | **+0.5** |
| **CBKS** | **Cedar Bluff** | **2.47** | **342** | | **Pb** | **10 40 05.5** | **-1.6** |
| **WTFS** | **Witchita Falls** | **2.70** | **175** | Pn | **Pn** | **10 40 08.1** | **+1.9** |
| **LOOK** | **Love County** | **2.79** | **152** | | **Pn** | **10 40 08.2** | **+0.9** |
| **AMTX** | **Amarillo** | **2.85** | **237** | Pn | **Pn** | **10 40 09.4** | **+1.1** |
| **RLO** | **Rose Lookout** | **3.03** | **95** | Pn | **Pn** | **10 40 11.2** | **+0.4** |
| **KSU1** | **Kansas State U** | **3.14** | **32** | Pn | **Pn** | **10 40 13.8** | **+1.7** |
| **RTBA** | **Rita Blanca** | **3.21** | **271** | | **Pn** | **10 40 14.2** | **+1.0** |
| **DKNS** | **Dickens** | **3.31** | **213** | Pn | **Pn** | **10 40 16.3** | **+1.7** |
| DKNS | | | | IAmb_Lg | | 10 41 05.1 | |
| | comp=Z,65nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.34** | **123** | Pn | **Pn** | **10 40 15.8** | **+0.9** |
| X37A | | | | IAmb_Lg | | 10 41 16.3 | |
| | comp=Z,91nm,0.9s | | | | | | |
| **Z35A** | **Perchaven, San** | **3.36** | **158** | | **Pn** | **10 40 15.6** | **+0.4** |
| **U38A** | **Gravette** | **3.53** | **89** | Pn | **Pn** | **10 40 18.2** | **+0.7** |
| U38A | | | | IAmb_Lg | | 10 41 16.0 | |
| | comp=Z,56nm,0.7s | | | | | | |
| **FW06** | **Azle** | **3.62** | **164** | IAmb_Lg | | 10 41 22.0 | |
| | comp=Z,62nm,1.0s | | | | | | |
| **PLPT** | **Palo Pinto** | **3.66** | **174** | Pn | **Pn** | **10 40 20.2** | **+0.9** |
| PLPT | | | | IAmb_Lg | | 10 41 19.3 | |
| | comp=Z,47nm,1.1s | | | | | | |
| **SN07** | **Snyder 07** | **3.79** | **208** | | **Pn** | **10 40 19.8** | **-1.5** |
| **FW07** | **Weatherford** | **3.84** | **168** | IAmb_Lg | | 10 41 26.6 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **3.90** | **91** | Pn | **Pn** | **10 40 23.5** | **+0.9** |
| **ABTX** | **Abilene, Hawle** | **3.90** | **191** | IAmb_Lg | | 10 41 25.8 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.98** | **207** | IAmb_Lg | | 10 41 33.7 | |
| | comp=Z,85nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.98** | **311** | Pn | **Pn** | **10 40 21.5** | **-2.4** |
| KSCO | | | | IAmb_Lg | | 10 41 36.2 | |
| | comp=Z,62nm,0.8s | | | | | | |
| **POST** | **Post** | **4.07** | **214** | | **Pn** | **10 40 26.4** | **+1.4** |
| POST | | | | IAmb_Lg | | 10 41 38.5 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **FW13** | **Cleburne** | **4.25** | **165** | IAmb_Lg | | 10 41 40.5 | |
| | comp=Z,68nm,1.1s | | | | | | |
| **FW16** | **Waxahatchie** | **4.26** | **158** | IAmb_Lg | | 10 41 43.8 | |
| | comp=Z,52nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.52** | **73** | Pn | **Pn** | **10 40 32.3** | **+1.2** |
| S39A | | | | IAmb_Lg | | 10 41 47.7 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **4.58** | **280** | Pn | **Pn** | **10 40 32.8** | **+0.6** |
| **WHTX** | **Lake Whitney,** | **4.59** | **166** | IAmb_Lg | | 10 41 52.1 | |
| | comp=Z,45nm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **4.64** | **113** | IAmb_Lg | | 10 42 02.6 | |
| | comp=Z,44nm,1.0s | | | | | | |
| **BGNE** | **Belgrade** | **4.96** | **5** | Pn | **Pn** | **10 40 37.4** | **+0.2** |
| **237A** | **Washetta, Mont** | **5.08** | **150** | IAmb_Lg | | 10 42 05.4 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **BRDY** | **Brady** | **5.17** | **182** | | **Pn** | **10 40 40.8** | **+0.7** |
| BRDY | | | | IAmb_Lg | | 10 42 13.8 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.20** | **51** | IAmb_Lg | | 10 42 16.0 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.25** | **81** | | **Pn** | **10 40 42.5** | **+1.3** |
| **WHAR** | **Wooly Hollow** | **5.38** | **101** | IAmb_Lg | | 10 42 16.5 | |
| | comp=Z,63nm,1.1s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.40** | **119** | IAmb_Lg | | 10 42 26.3 | |
| | comp=Z,42nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.40** | **94** | IAmb_Lg | | 10 42 14.9 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **R40A** | **Maddies Statio** | **5.48** | **69** | IAmb_Lg | | 10 42 27.2 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **UALR** | **University of** | **5.49** | **106** | IAmb_Lg | | 10 42 32.2 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.54** | **285** | | **Pn** | **10 40 46.7** | **+1.3** |
| **Q24A** | **Divide** | **5.65** | **298** | IAmb_Lg | | 10 42 31.1 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.75** | **170** | IAmb_Lg | | 10 42 38.0 | |
| | comp=Z,52nm,0.8s | | | | | | |
| **NATX** | **Nacogdoches** | **5.79** | **143** | IAmb_Lg | | 10 42 42.6 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **5.85** | **121** | IAmb_Lg | | 10 42 43.9 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **5.99** | **315** | IAmb_Lg | | 10 42 34.8 | |
| | comp=Z,55nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.20** | **73** | IAmb_Lg | | 10 42 47.8 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **CCAR** | **Cane Creek** | **6.26** | **112** | IAmb_Lg | | 10 42 50.7 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.34** | **304** | IAmb_Lg | | 10 42 49.5 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **6.44** | **259** | Pn | **Pn** | **10 40 57.3** | **-0.4** |
| **ANMO** | **Albuquerque** | **6.44** | **259** | Pn | **Pn** | **10 40 57.3** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=101,slow=19,SNR=6.0 | | | | | | |
| ANMO | | | | Pg | **Pb** | **10 41 17.6** | **+2.6** |
| | comp=Z,0.5nm,0.3s,baz=166,slow=16,SNR=6.6 | | | | | | |
| ANMO | | | | Lg | Lg | 10 42 41.8 | |
| | comp=Z,1.4nm,0.3s,baz=75,slow=23,SNR=5.7 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.71** | **85** | IAmb_Lg | | 10 43 01.6 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **FVM** | **French Village** | **6.82** | **75** | IAmb_Lg | | 10 42 56.4 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **SCIA** | **State Center** | **6.93** | **37** | IAmb_Lg | | 10 43 15.3 | |
| | comp=Z,46nm,0.7s | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **7.09** | **253** | IAmb_Lg | | 10 43 21.4 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **SLM** | **Saint Louis** | **7.11** | **70** | IAmb_Lg | | 10 43 13.6 | |
| | comp=Z,43nm,1.0s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.11** | **315** | IAmb_Lg | | 10 43 08.7 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **ALPN** | **Alpine** | **7.31** | **215** | Pn | **Pn** | **10 41 08.8** | **-0.8** |
| **CGM3** | **Cape Girardeau** | **7.34** | **81** | IAmb_Lg | | 10 43 23.9 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.45** | **12** | Pn | **Pn** | **10 41 10.4** | **-0.9** |
| ECSD | | | | IAmb_Lg | | 10 43 20.9 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **735A** | **Kenedy** | **7.63** | **174** | IAmb_Lg | | 10 43 44.5 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **GLAT** | **Glass** | **7.65** | **89** | IAmb_Lg | | 10 43 39.8 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **7.70** | **78** | IAmb_Lg | | 10 43 33.9 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **OXF** | **Oxford** | **7.87** | **102** | IAmb_Lg | | 10 43 49.8 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **EPT** | **El Paso** | **7.94** | **236** | IAmb_Lg | | 10 43 43.5 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **SUSD** | **Mike** | **7.97** | **359** | IAmb_Lg | | 10 43 55.2 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **L40A** | **Anamosa** | **8.09** | **44** | IAmb_Lg | | 10 43 43.4 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **833A** | **Chaparral WMA,** | **8.13** | **184** | IAmb_Lg | | 10 43 44.3 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **8.22** | **211** | Pn | **Pn** | **10 41 22.1** | **+0.1** |
| | comp=Z,0.4nm,0.3s,baz=32,slow=12,SNR=27 | | | | | | |
| TXAR | | | | Lg | Lg | 10 43 36.5 | |
| | comp=Z,1.3nm,0.3s,baz=31,slow=30,SNR=4.4 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **RWWY** | **Rawlins** | **8.39** | **311** | IAmb_Lg | | 10 44 10.0 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **I37A** | **Lemond, Waseca** | **8.58** | **27** | IAmb_Lg | | 10 44 01.9 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **K22A** | **Casper** | **8.61** | **318** | IAmb_Lg | | 10 44 07.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **RSSD** | **Black Hills** | **8.64** | **334** | IAmb_Lg | | 10 44 08.8 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **L42A** | **Oliver, Polo** | **8.96** | **49** | IAmb_Lg | | 10 44 11.9 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.19** | **43** | IAmb_Lg | | 10 44 18.9 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.55** | **10** | IAmb_Lg | | 10 44 24.8 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **I40A** | **Norwalk** | **9.68** | **38** | IAmb_Lg | | 10 44 38.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **SPMN** | **Marine on St.** | **9.84** | **25** | IAmb_Lg | | 10 44 40.4 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **10.44** | **310** | Pn | **Pn** | **10 41 53.6** | **+1.1** |
| | comp=Z,0.1nm,0.3s,baz=124,slow=16,SNR=4.2 | | | | | | |
| PDAR | | | | Pg | | 10 42 30.7 | |
| | comp=Z,0.2nm,0.3s,baz=118,slow=14,SNR=4.2 | | | | | | |
| PDAR | | | | Lg | Lg | 10 44 41.4 | |
| | comp=Z,0.4nm,0.3s,baz=120,slow=32,SNR=4.7 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **TKL** | **Tuckaleechee C** | **12.16** | **89** | Pn | **Pn** | **10 42 15.5** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=282,slow=18,SNR=1.9 | | | | | | |
| TKL | | | | Lg | Lg | 10 45 42.2 | |
| | comp=Z,0.4nm,0.3s,baz=360,slow=23,SNR=8.5 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **13.94** | **8** | Pn | Pn | 10 42 35.2 | -4.9 |
| | comp=Z,1.4nm,0.7s,baz=294,slow=18,SNR=1.6 | | | | | | |
| ULM | | | | Sn | Sn | 10 45 02.5 | -12 |
| | comp=Z,0.2nm,0.3s,baz=246,slow=20,SNR=1.8 | | | | | | |
| ULM | | | | Lg | Lg | 10 46 32.1 | |
| | comp=Z,0.1nm,0.3s,baz=290,slow=23,SNR=1.7 | | | | | | |

*JMA **06** 10:53:11.6±0.2,25˚.0N±0˚.6×123˚.6E±0˚.2,h18$^{km}$±4$^{km}$, MV3.2/11,NW OFF ISHIGAKIJIMA IS*
*IDC **06** 10:53:12.8±1.2,24˚.35N×122˚.25E,h0$^{km}$,mb3.6/7, mbtmp3.6/8,ML3.0/1,MS3.1/1,Error ellipse: s-maj=43.1km s-min=19.0km az=67.0*

**ISC 06 10:53:12.4±2.1,24.95N±0.08×123.58E±0.04,h14$^{km}$±14$^{km}$, n18,σ0$^{s}$85/21,mb3.5/7,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.63** | **167** | P | **Pg** | **10 53 24.9** | **+0.2** |
| IRIF | | | | *e*S | **Sb** | **10 53 34.3** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **0.71** | **227** | P | **Pb** | **10 53 25.9** | **-0.7** |
| YOJ | | | | *e*S | **Sb** | **10 53 35.7** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **0.76** | **118** | P | **Pb** | **10 53 26.5** | **-0.9** |
| **JYNG** | **Yonagunijimaku** | **0.76** | **229** | P | **Pb** | **10 53 26.7** | **-0.8** |
| JYNG | | | | S | **Sb** | **10 53 37.2** | **-0.5** |
| **JIJ** | **Ishigaki jima** | **0.78** | **139** | P | **Pb** | **10 53 26.8** | **-0.9** |
| **JKRS** | **Kuro-shima** | **0.81** | **151** | P | **Pb** | **10 53 27.9** | **-0.4** |
| JKRS | | | | *e*S | **Sg** | **10 53 39.2** | **+0.4** |
| **HATJ** | **Hateruma jima** | **0.91** | **167** | P | **Pb** | **10 53 29.7** | **-0.4** |
| HATJ | | | | *e*S | **Sg** | **10 53 42.6** | **+0.5** |
| **JTJ** | **Tarama** | **1.06** | **107** | P | **Pb** | **10 53 31.8** | **-0.9** |
| JTJ | | | | *e*S | **Sb** | **10 53 46.3** | **-0.1** |
| **JIRB** | **Irabujima** | **1.45** | **94** | *e*P | **Pn** | **10 53 37.8** | **-0.5** |
| **KSRS** | **Korea Array** | **13.00** | **16** | Pn | P | 10 56 32.5 | +5.2 |
| | 0.1nm,0.3s,baz=192,slow=12,SNR=4.3 | | | | | | |
| | 1.6nm,0.9s | | | | | | |
| **DAV** | **Davao City (W)** | **17.88** | **174** | LR | LR | 11 04 42.3 | |
| | comp=Z,62nm,19.0s,baz=172,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.77** | **259** | P | P | 10 58 13.9 | -11 |
| | 0.8nm,0.3s,baz=91,slow=6.3,SNR=2.4 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **26.58** | **334** | P | **P** | **10 58 52.2** | **+1.9** |
| | 0.3nm,0.3s,baz=134,slow=8.3,SNR=1.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **39.34** | **314** | P | **P** | **11 00 40.0** | **-1.3** |
| | 0.5nm,0.7s,baz=97,slow=10,SNR=5.2 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.82** | **326** | P | **P** | **11 00 54.4** | **+1.0** |
| | 0.5nm,0.4s,baz=94,slow=7.4,SNR=1.9 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.95** | **319** | P | **P** | **11 01 10.9** | **-0.1** |
| | 0.3nm,0.6s,baz=108,slow=8.7,SNR=2.2 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.84** | **166** | P | **P** | **11 01 34.0** | **-0.2** |
| | 1.2nm,0.9s,baz=346,slow=8.9,SNR=8.9 | | | | | | |
| | 1.2nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **49.35** | **167** | P | **P** | **11 02 02.1** | **+0.6** |
| | 0.4nm,0.6s,baz=349,slow=6.9,SNR=7.8 | | | | | | |
| | 0.4nm,0.6s | | | | | | |

*MOS **06** 10:56:03.2±0.8,35˚.45N×141˚.09E,h36$^{km}$,mb4.8/17,Error ellipse: s-maj=11.8km s-min=6.3km az=117.3*
*JMA **06** 10:56:05.0±0.2,35˚.6N±0˚.6×141˚.1E±˚,h37$^{km}$±1$^{km}$, MD4.5/39,MW4.5/39,NEAR CHOSHI CITY*
*JMA Felt II J1 at NEAR CHOSHI CITY .*
*NEIC **06** 10:56:05.3±1.4,35˚.51N±0˚.06×141˚.19E±0˚.10,h37$^{km}$±6$^{km}$, mb4.7/29,Error ellipse: s-maj=12.1km s-min=7.4km az=113.0*
*NIED **06** 10:56:05.0,35˚.55N×141˚.05E,h37$^{km}$,MW4.6,Moment Tensor Solution. s3 Moment tensor: Scale 10$^{15}$Nm; $M_{rr}$3.70; $M_{\theta\theta}$-2.11; $M_{\phi\phi}$-1.59; $M_{r\theta}$0.95; $M_{\theta\phi}$-0.47; $M_{\phi r}$9.31; Fault plane solution: $M_0$9.75000×10$^{15}$ NP1:$\phi_s$7.00000°, δ82.00000°,λ87.00000°. NP2:$\phi_s$209.00000°,δ9.00000°, λ112.00000°.*
*IDC **06** 10:56:06.6±1.8,35˚.45N×140˚.94E,h44$^{km}$±16$^{km}$,mb3.9/19, mbtmp4.1/25,ML3.2/6,MS3.7/35 Error ellipse: s-maj=18.0km s-min=8.2km az=72.0*

**ISC 06 10:56:04.5±0.4,35˚.53N±0˚.04×141˚.12E±0˚.05,h33$^{km}$,n203, σ1$^{s}$50/160,mb4.5/52,MS3.8/38,8C-7D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSMT** | **Sammumatsuo** | **0.56** | **282** | *i* P | **Pb** | **10 56 15.8** | **-0.2** |
| **JSMT** | **Sammumatsuo** | **0.56** | **282** | A | A | 10 56 15.8 | |
| | comp=E,93nm,0.9s,comp=N,51nm,1.5s | | | | | | |
| **JIHU** | **Itakohorinouch** | **0.66** | **312** | *i* P | **Pn** | **10 56 17.4** | **0.0** |
| **JIHU** | **Itakohorinouch** | **0.66** | **312** | A | A | 10 56 17.4 | |
| | comp=E,112nm,1.0s,comp=N,76nm,2.0s | | | | | | |
| **JCN** | **Nagara** | **0.76** | **262** | P | **Pb** | **10 56 19.4** | **+0.1** |
| **JCN** | **Nagara** | **0.76** | **262** | A | A | 10 56 19.4 | |
| | comp=E,60nm,3.0s,comp=N,44nm,2.2s | | | | | | |
| **KTR** | **Katsuura** | **0.76** | **240** | P | **Pn** | **10 56 18.9** | **0.0** |
| **BSO4** | **Boso 4** | **0.84** | **230** | *i* P | **Pn** | **10 56 20.0** | **+0.2** |
| **JKUC** | **kamogawauchiur** | **0.84** | **244** | A | A | 10 56 19.8 | |
| | comp=E,21nm,2.8s,comp=N,29nm,0.9s | | | | | | |
| **BSO1** | **Boso 1** | **0.88** | **188** | *i* P | **Pb** | **10 56 20.8** | **-0.2** |
| **BSO3** | **Boso 3** | **0.88** | **215** | *i* P | **Pn** | **10 56 20.6** | **+0.3** |
| **JHYU** | **Hitachinakayam** | **0.92** | **332** | A | A | 10 56 20.9 | |
| | comp=E,15nm,0.6s,comp=N,26nm,1.2s | | | | | | |
| **JYT** | **Yasato** | **1.03** | **313** | *i* P | **Pn** | **10 56 22.1** | **-0.4** |
| **JYT** | **Yasato** | **1.03** | **313** | A | A | 10 56 22.1 | |
| | comp=E,16nm,0.5s,comp=N,17nm,1.3s | | | | | | |
| **TATJ** | **Tateyama 2** | **1.12** | **244** | A | A | 10 56 24.1 | |
| | comp=E,23nm,1.6s,comp=N,29nm,4.0s | | | | | | |
| **TOK** | **Tokyo** | **1.12** | **279** | A | A | 10 56 23.8 | |
| |

comp=N,13nm,0.8s,baz=327,slow=20,SNR=3.9
ASAJ LR LR 11 02 36.5
comp=N,251nm,20.1s,baz=177,slow=45
**ASAJ Asahikawa 8.65 7** P **Pn** **10 58 06.4 -0.9**
**JKA Kamikawa-asahi 8.65 7** **Pn** **10 58 06.4 -0.9**
**JNU Nakatsue 8.81 257** P **Pn** **10 58 12.3 +2.8**
**JNU Nakatsue 8.81 257** Pn **Pn** **10 58 08.9 -0.6**
**JNU Nakatsue 8.81 257** P **Pn** **10 58 07.1 -2.4**
comp=N,0.2nm,0.3s,baz=267,slow=13,SNR=3.6
JNU LR LR 11 01 54.6
comp=N,1µm,20.3s,baz=71,slow=40
comp=N,7.8nm,1.0s
**YUK Yuzh-Kuril'sk 9.24 22** *i* P **Pn** **10 58 17.0 +1.6**
**KSRS Korea Array 10.80 284** P **Pn** **10 58 37.2 +0.5**
comp=N,0.2nm,0.3s,baz=100,slow=14,SNR=11
comp=N,1.7nm,0.9s
**USRK Ussuriysk Ar. 11.14 324** Pn **Pn** **10 58 43.1 +1.7**
**USRK Ussuriysk Ar. 11.14 324** P **Pn** **10 58 42.4 +1.0**
comp=N,0.1nm,0.3s,baz=130,slow=12,SNR=4.7
USRK LR LR 11 02 48.2
comp=N,535nm,18.6s,baz=139,slow=36
comp=N,2.9nm,0.8s
**USRK Ussuriysk Ar. 11.14 324** P **Pn** **10 58 43.1 +1.7**
**YSS Yuzh-Sakhalins 11.48 6** Pn **Pn** **10 58 45.9 -0.1**
**YSS Yuzh-Sakhalins 11.48 6** *eP* **Pn** **10 58 45.7 -0.3**
YSS *eS* **Sn** **11 00 48.0 -5.0**
YSS pmax pmax
comp=Z,20nm,0.7s
YSS MLR MLR
comp=Z,400nm,15.0s
YSS MLR MLR
comp=N,200nm,14.0s
YSS MLR MLR
comp=E,200nm,13.0s
**MDJ Mudanjiang 12.65 319** P **P** **10 59 10.1 -2.9**
MDJ S Sn 11 01 40.4 +19
MDJ SS SnSn 11 01 53.7 +20
MDJ pmax pmax
comp=Z,6.0nm,1.0s
MDJ LR LR
comp=N,340nm,18.2s
MDJ LR LR
comp=E,280nm,19.6s
MDJ LR LR
comp=Z,510nm,16.2s
**JOW Kunigami 13.99 235** LR LR 11 03 07.3
comp=Z,42nm,21.7s,baz=90,slow=30
**CN2 Changchun 14.61 309** *eP* **Pn** **10 59 29.9 +1.1**
CN2 *eS* **Sn** **11 02 11.0 +1.5**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=N,200nm,12.0s
CN2 LR LR
comp=E,200nm,12.0s
CN2 LR LR
comp=Z,300nm,15.0s
**KLR Kul'dur 15.33 336** P **Pn** **10 59 38.5 +0.3**
comp=Z,0.2nm,0.3s,baz=337,slow=15,SNR=1.9
KLR LR LR 11 05 31.6
comp=Z,346nm,18.7s,baz=148,slow=37
comp=Z,0.8nm,0.5s
**KLR Kul'dur 15.33 336** *i* P **Pn** **10 59 39.3 +1.1**
KLR pmax pmax
comp=Z,4.0nm,0.9s
**TYV Tymovskoe 15.37 4** *eP* **Pn** **10 59 39.0 +0.2**
TYV pmax pmax
comp=Z,100nm,5.6s
TYV pmax pmax
comp=Z,6.0nm,1.4s
**DL2 Dalian 15.89 288** P **P** **10 59 49.4 +0.5**
DL2 S **Sn** **11 02 46.1 +5.4**
DL2 pmax pmax
comp=Z,31nm,0.6s
DL2 LR LR
comp=N,220nm,15.8s
DL2 LR LR
comp=E,600nm,18.3s
DL2 LR LR
comp=Z,810nm,21.3s
**NJ2 Nanjing 18.83 266** *eP* **Pn** **11 00 22.2 +0.1**
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
NJ2 pmax pmax
comp=Z,140nm,6.4s
NJ2 LR LR
comp=N,340nm,15.6s
NJ2 LR LR
comp=E,310nm,19.4s
NJ2 LR LR
comp=Z,620nm,17.6s
**ZEA Zeya 20.64 336** *eP* **P** **11 00 42.3 +1.2**
ZEA pmax pmax
comp=Z,10.0nm,0.8s
**XLT XiLinHaoTe 20.94 301** *eP* **P** **11 00 42.2 -2.3**
XLT pmax pmax
comp=Z,5.0nm,0.6s
XLT LR LR
comp=N,12nm,8.1s
XLT LR LR
comp=E,220nm,14.7s
XLT LR LR
comp=Z,250nm,15.6s
**HNS HongShan 21.31 283** ⇑P **P** **11 00 44.9 -3.4**
HNS S **S** **11 04 41.7 -1.5**
HNS pmax pmax
comp=Z,16nm,1.1s
HNS LR LR
comp=N,260nm,17.7s
HNS LR LR
comp=E,280nm,19.6s
HNS LR LR
comp=Z,310nm,16.7s
**LYN LuoYang 23.45 276** P **P** **11 01 07.5 -3.4**
LYN pmax pmax
comp=Z,21nm,0.8s
LYN pmax pmax
comp=Z,160nm,4.7s
LYN LR LR
comp=N,360nm,14.3s
LYN LR LR
comp=E,500nm,18.9s
LYN LR LR
comp=Z,670nm,19.2s
**HHC Hu-ho-hao-te 23.77 292** *eP* **P** **11 01 15.7 +1.6**
HHC pmax pmax
comp=Z,9.0nm,0.6s
HHC pmax pmax
comp=Z,62nm,4.0s
HHC LR LR
comp=N,140nm,16.0s
HHC LR LR
comp=E,120nm,16.8s
**MA2 Magadan 24.87 12** LR LR 11 11 39.0
comp=E,61nm,21.4s,baz=181,slow=37
**XAN Xi'an 26.43 276** ⇓P **P** **11 01 36.8 -1.5**
XAN pP pP 11 01 43.2 -4.5
XAN S **S** **11 06 05.5 -4.3**
XAN pmax pmax
comp=Z,10.0nm,0.8s
XAN pmax pmax
comp=Z,150nm,8.0s
XAN LR LR
comp=N,520nm,18.9s
XAN LR LR
comp=E,480nm,22.9s
XAN LR LR
comp=Z,580nm,16.5s
**YAK Yakutsk 27.49 348** LR LR 11 12 53.4
comp=Z,178nm,19.8s,baz=184,slow=37
**YAK Yakutsk 27.49 348** *eP* **P** **11 01 47.7 +0.3**
YAK pmax pmax
comp=Z,8.0nm,0.7s
YAK pmax pmax
comp=E,4.0nm,1.4s
YAK pmax pmax
comp=N,5.0nm,2.0s
**H11N2 WAKE ISLAND Hy 27.61 118** T T 11 30 54.4
baz=310,slow=75,SNR=105
**H11N1 WAKE ISLAND Hy 27.62 118** T T 11 30 50.9
baz=310,slow=75,SNR=91
**H11N3 WAKE ISLAND Hy 27.63 118** T T 11 30 55.7
baz=310,slow=75,SNR=122
**ULN Ulaanbaatar 28.04 307** *ceP* **P** **11 01 53.5 +0.8**
ULN pmax pmax
comp=Z,1.0nm,0.6s
**H11S3 WAKE ISLAND Hy 28.27 120** T T 11 31 41.8
baz=312,slow=75,SNR=475
**H11S1 WAKE ISLAND Hy 28.27 120** T T 11 31 41.8
baz=312,slow=75,SNR=642
**H11S2 WAKE ISLAND Hy 28.29 120** T T 11 31 47.0
baz=312,slow=75,SNR=440
**SEY Seymchan 28.31 11** *i* P **P** **11 01 56.9 +2.2**
SEY pmax pmax
comp=Z,4.0nm,1.1s
**SONM Songino Array 28.46 306** P **P** **11 01 56.0 -0.4**
comp=Z,1.4nm,0.5s,baz=106,slow=9.6,SNR=7.9
SONM LR LR 11 13 41.5
comp=Z,133nm,19.0s,baz=106,slow=37
comp=Z,1.4nm,0.5s
**SONM Songino Array 28.46 306** P **P** **11 01 56.0 -0.4**
**SHEM Shemya Is, Ala 28.91 43** LR LR 11 10 44.0
comp=Z,108nm,20.8s,baz=240,slow=30
**LZH Lanzhou 30.12 282** *eP* **P** **11 02 11.3 0.0**
LZH sP sP 11 02 25.7 +1.0
LZH pmax pmax
comp=Z,19nm,1.1s
**GYA Guiyang 30.77 263** P **P** **11 02 20.0 +3.0**
GYA sP sP 11 02 35.4 +5.0
GYA S **S** **11 07 19.9 +1.7**
GYA pmax pmax
comp=Z,11nm,0.5s
GYA pmax pmax
comp=Z,91nm,4.8s
GYA LR LR
comp=Z,320nm,15.1s
**QIZ Qiongzhong 32.12 248** P **P** **11 02 26.9 -1.9**
QIZ S **S** **11 07 36.8 -2.4**
QIZ LR LR
comp=N,83nm,10.0s
QIZ LR LR
comp=E,100nm,9.0s
QIZ LR LR
comp=Z,160nm,23.5s
**PZH PanZhiHua 34.74 266** P **P** **11 02 53.1 +1.3**
PZH S **S** **11 08 24.2 +4.1**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,100nm,4.4s
PZH LR LR
comp=N,250nm,19.4s
PZH LR LR
comp=E,230nm,18.6s
PZH LR LR
comp=Z,270nm,20.2s
**BILL Bilibino 35.54 16** ⇓*i*P **P** **11 02 59.9 +1.9**
BILL *e**SP **pP** **11 03 05.7 -1.8**
BILL pmax pmax
comp=Z,10.0nm,1.4s
BILL MLR MLR
comp=Z,105nm,22.0s
**CMAR Chiang Mai Arr 40.91 257** P **P** **11 03 44.3 +0.5**
comp=Z,0.6nm,0.3s,baz=47,slow=7.6,SNR=4.5
CMAR LR LR 11 22 25.9
comp=Z,165nm,18.1s,baz=55,slow=39
comp=Z,0.6nm,0.3s
**DGZ Jazzator, Alta 41.10 307** *ci*P **P** **11 03 46.4 +1.2**
DGZ pmax pmax
comp=Z,21nm,0.8s
**WMQ Urumqi 41.33 298** *eP* **P** **11 03 48.1 +1.0**
WMQ LR LR
comp=Z,110nm,24.1s
**ZAA0 Zalesovo Array 42.77 314** P **P** **11 03 58.0 -0.6**
**ZALV Zalesovo Beam 42.77 314** P **P** **11 03 58.5 -0.1**
**ZALV Zalesovo Beam 42.77 314** P **P** **11 03 58.6 +0.1**
comp=Z,4.1nm,0.8s,baz=94,slow=6.7,SNR=12
ZALV LR LR 11 22 41.7
comp=Z,61nm,18.2s,baz=84,slow=37
comp=Z,4.1nm,0.8s
**MK31 Makanchi Array 44.73 303** P **P** **11 04 14.9 +0.3**
**MK31 Makanchi Array 44.73 303** *ce*P **P** **11 04 14.3 -0.2**
**MKAR Makanchi Array 44.73 303** P **P** **11 04 14.7 +0.1**
comp=Z,4.9nm,0.9s,baz=92,slow=9.4,SNR=30
MKAR PcP **PcP** **11 05 56.2 -0.2**
comp=Z,0.7nm,0.8s,baz=69,slow=4.8,SNR=2.0
MKAR LR LR 11 23 26.4
comp=Z,120nm,20.7s,baz=134,slow=37
comp=Z,4.9nm,0.9s
**MKAR Makanchi Array 44.73 303** P **P** **11 04 14.8 +0.3**
**MAKZ Makanchi 44.95 303** P **P** **11 04 16.7 +0.5**
MAKZ lAmb lAmb 11 04 17.5
comp=Z,6.7nm,1.0s
**MAKZ Makanchi 44.95 303** P **P** **11 04 16.7 +0.5**
MAKZ pmax pmax
comp=Z,7.0nm,1.0s
**KURK Kurchatov 46.69 309** P **P** **11 04 29.8 -0.1**
**KURK Kurchatov 46.69 309** *ce*P **P** **11 04 30.1 +0.3**
KURK pmax pmax
comp=Z,15nm,1.3s
**KURBB Kurchatov Arra 46.76 309** P **P** **11 04 30.4 0.0**
comp=Z,7.0nm,1.0s,baz=84,slow=8.7,SNR=27
KURBB LR LR 11 24 44.7
comp=Z,81nm,20.0s,baz=172,slow=37
comp=Z,7.0nm,1.0s
**E19K Redstone River 46.91 28** lAmb lAmb 11 04 51.9
comp=Z,4.0nm,0.9s
**B21K Ikpikpuk River 48.25 25** P **P** **11 04 41.8 +0.1**
B21K lAmb lAmb 11 04 58.5
comp=Z,4.5nm,0.9s
**D22K Ayikyak River 48.81 26** P **P** **11 04 47.1 +1.0**
D22K lAmb lAmb 11 05 12.6
comp=Z,11nm,1.4s
**TARG Taragay, Kyrgy 48.87 297** P **P** **11 04 47.8 +0.4**
TARG lAmb lAmb 11 05 03.5
comp=Z,7.1nm,0.8s
**TARG Taragay, Kyrgy 48.87 297** P **P** **11 04 47.8 +0.4**
TARG pmax pmax
comp=Z,7.0nm,0.8s
**COLA College 50.48 32** *i* P **P** **11 05 00.2 +1.4**
COLA pmax pmax
comp=Z,3.0nm,0.8s
**IL31 50.89 32** P **P** **11 05 03.5 +1.6**
**ILAR Eielson Array 50.89 32** P **P** **11 05 04.1 +2.2**
comp=Z,1.2nm,0.7s,baz=265,slow=6.2,SNR=14
comp=Z,1.2nm,0.7s
**AAK Ala-Archa 51.01 299** LR LR 11 27 35.2
comp=Z,176nm,21.8s,baz=84,slow=37
**BRVK Borovoye 51.48 313** P **P** **11 05 07.1 +0.6**
BRVK lAmb lAmb 11 05 22.5
comp=Z,4.8nm,1.0s
**BRVK Borovoye 51.48 313** *ce*P **P** **11 05 06.4 -0.1**
BRVK pmax pmax
comp=Z,3.0nm,0.8s
**KKAR Karatay Array 53.69 301** P **P** **11 05 22.9 -0.1**
**KKAR Karatay Array 53.69 301** P **P** **11 05 22.9 -0.1**
**I30M Mount Dempster 55.28 31** P **P** **11 05 37.1 +2.7**
I30M lAmb lAmb 11 06 09.8
comp=Z,6.8nm,1.1s
**WB0 Warramunga Arr 55.36 188** P **P** **11 05 35.1 -0.1**
**WRAB Tennant Creek 55.53 188** P **P** **11 05 36.1 -0.4**
WRAB lAmb lAmb 11 05 37.8
comp=Z,8.8nm,0.8s
**WRAB Tennant Creek 55.53 188** *i* P **P** **11 05 35.7 -0.8**
WRAB pmax pmax
comp=Z,20nm,1.6s
**WB2 Warramunga Arr 55.54 188** lAmb lAmb 11 05 37.5
comp=Z,8.5nm,0.8s
**WRA Warramunga Arr 55.54 188** P **P** **11 05 35.8 -0.8**
**WRA Warramunga Arr 55.54 188** P **P** **11 05 36.4 -0.1**
comp=Z,9.2nm,0.8s,baz=6.0,slow=7.7,SNR=81
comp=Z,9.2nm,0.8s
**ARU Arti 57.34 319** P **P** **11 05 48.9 -0.1**
ARU lAmb lAmb 11 05 50.7
comp=Z,8.3nm,0.8s
**ARU Arti 57.34 319** LR LR 11 32 49.6
comp=Z,88nm,18.1s,baz=168,slow=38
**ARU Arti 57.34 319** *ci*P **P** **11 05 49.4 +0.4**
ARU 11 06 45.6
ARU 11 07 54.5
ARU S **S** **11 13 42.9 -0.1**
ARU SS **SS** **11 17 31.9 -0.2**
ARU pmax pmax
comp=Z,9.0nm,0.8s
**ABKAR Akbulak array 58.74 311** P **P** **11 05 59.0 0.0**
ABKAR lAmb lAmb 11 05 60.0
comp=Z,4.2nm,0.7s
**ABKAR Akbulak array 58.74 311** P **P** **11 05 58.3 -0.7**
**ASAR Alice Springs 59.27 188** P **P** **11 06 02.9 +0.1**
comp=Z,1.4nm,0.9s,baz=16,slow=15,SNR=15
comp=Z,1.4nm,0.9s
**AKTO Aktyubinsk 59.51 313** LR LR 11 32 51.1
comp=Z,73nm,19.0s,baz=85,slow=37
**DLBC Dease Lake 59.96 37** LR LR 11 41 31.5
comp=Z,10nm,18.0s,baz=66,slow=45
**KIRV Kirov 61.31 323** *ce*P **P** **11 06 17.2 +0.8**
**PALK Pallekele 61.82 258** LR LR 11 34 21.1
comp=Z,70nm,20.7s,baz=157,slow=37
**DZM Mont Dzumac 62.11 153** *e*LR LR 11 24 49.5
comp=Z,98nm,25.1s
**BBB Bella Bella 63.31 44** LR LR 11 30 38.9
comp=Z,34nm,21.4s,baz=286,slow=33
**MSVF Nonsavu 63.49 140** LR LR 11 29 20.4
comp=Z,35nm,19.7s,baz=338,slow=31
**YKA Yellowknife Ar 65.23 30** P **P** **11 06 43.4 +1.1**
comp=Z,0.4nm,0.7s,baz=305,slow=6.7,SNR=1.9
comp=Z,0.4nm,0.7s
**ARCES ARCESS Array B 65.32 340** P **P** **11 06 43.9 +1.1**
comp=Z,2.7nm,0.8s,baz=58,slow=7.9,SNR=4.8
comp=Z,2.7nm,0.8s
**DAG Danmarks Havn 67.25 355** *i* P **P** **11 06 52.0 -3.0**
**VALR Valaam 68.22 331** *i* P **P** **11 07 03.3 +1.9**
VALR pmax pmax
comp=Z,53nm,0.9s
**OBN Obninsk 69.16 323** LR LR 11 39 42.9
comp=Z,52nm,18.4s,baz=288,slow=38
**FINES FINESS Array B 70.04 332** P **P** **11 07 13.4 +0.8**
comp=Z,1.6nm,0.4s,baz=54,slow=6.8,SNR=12
comp=Z,1.6nm,0.4s
**KBZ Khabaz 71.71 311** P **P** **11 07 24.3 +1.2**
comp=Z,4.7nm,0.8s,baz=71,slow=0.9,SNR=13
KBZ LR LR 11 42 45.4
comp=Z,37nm,19.8s,baz=52,slow=39
comp=Z,4.7nm,0.8s
**KBZ Khabaz 71.71 311** *i* P **P** **11 07 24.2 +1.2**
KBZ pmax pmax
comp=Z,7.0nm,0.9s
**KIV Kislovodsk 71.72 311** *eP* **P** **11 07 23.8 +0.5**
KIV pmax pmax
comp=Z,12nm,1.1s
**SHA1 Shidzhatmaz 71.85 311** *i* P **P** **11 07 24.6 +0.3**
**GNI Garni 72.42 307** LR LR 11 41 49.5
comp=Z,65nm,18.6s,baz=34,slow=38
**RAO Raoul Island 75.10 144** P **P** **11 07 42.5 -0.5**
**RAO Raoul Island 75.10 144** P **P** **11 07 42.6 -0.5**
**AKASG Malin Array Be 75.34 322** P **P** **11 07 44.5 +0.2**
comp=Z,0.8nm,0.3s,baz=48,slow=5.8,SNR=10
AKASG LR LR 11 43 56.6
comp=Z,132nm,18.4s,baz=34,slow=38
comp=Z,0.8nm,0.3s
**AKBB Malin Array Si 75.34 322** *eP* **P** **11 07 43.9 -0.4**
AKBB pmax pmax
comp=Z,5.0nm,0.8s
**HFS Hagfors 75.36 336** P **P** **11 07 44.6 +0.4**
comp=Z,1.4nm,0.6s,baz=51,slow=11,SNR=5.7
comp=Z,1.4nm,0.6s
**NB2 NORSAR Subarra 75.48 337** P **P** **11 07 45.8 +0.8**
comp=Z,4.7nm,0.9s,baz=40,slow=6.2
**NB2 NORSAR Subarra 75.48 337** P **P** **11 07 46.4 +1.4**
**NOA NORSAR Array B 75.48 337** P **P** **11 07 45.5 +0.5**
comp=Z,2.8nm,0.8s,baz=40,slow=5.8,SNR=10
comp=Z,2.8nm,0.8s
**NVAR Mina Array Bea 76.08 53** P **P** **11 07 50.8 +1.7**
comp=Z,0.3nm,0.7s,baz=308,slow=4.4,SNR=2.1
NVAR LR LR 11 34 06.3
comp=Z,37nm,21.7s,baz=318,slow=30
comp=Z,0.3nm,0.7s
**SFJD Kangerlussuaq 77.40 5** LR LR 11 45 28.3
comp=Z,25nm,18.9s,baz=346,slow=38
**FRB Frobisher Bay 78.29 13** LR LR 11 46 24.1
comp=Z,35nm,19.4s,baz=2.0,slow=38
**PDAR Pinedale Array 78.89 45** P **P** **11 08 07.5 +2.7**
comp=Z,0.3nm,0.6s,baz=226,slow=1.5,SNR=5.5
comp=Z,0.3nm,0.6s
**RAR Rarotonga 79.47 125** LR LR 11 39 20.9
comp=Z,80nm,19.3s,baz=270,slow=33
**BR131 Keskin Array S 79.67 312** *i* P **P** **11 08 09.2 +0.2**
**BRTR Keskin Array B 79.67 312** P **P** **11 08 09.2 +0.2**
comp=Z,1.6nm,0.8s,baz=91,slow=5.8,SNR=6.0
comp=Z,1.6nm,0.8s
**PFO Pinyon Flats O 80.07 56** LR LR 11 38 38.7
comp=Z,77nm,19.6s,baz=274,slow=32
**MLR Muntele Rosu 80.38 320** LR LR 11 46 49.6
comp=Z,86nm,19.1s,baz=38,slow=38
**RAYN Ar Rayn 81.01 292** P **P** **11 08 15.8 -0.5**
RAYN lAmb lAmb 11 08 17.5
comp=Z,5.7nm,1.0s
**RAYN Ar Rayn 81.01 292** P **P** **11 08 15.8 -0.5**
RAYN pmax pmax
comp=Z,6.0nm,1.0s
**VRAC Vranov 82.26 327** LR LR 11 47 42.4
comp=Z,47nm,19.2s,baz=42,slow=38
**CLL Collm 82.28 330** *i* P **P** **11 08 23.7 +1.3**
comp=Z,7.0nm,1.0s
**CLL Collm 82.28 330** *i* P **P** **11 08 23.7 +1.3**
CLL pmax pmax
comp=Z,7.0nm,1.0s
**KHC Kasperske Hory 83.70 328** *eP* **P** **11 08 30.5 +0.6**
**KHC Kasperske Hory 83.70 328** *i* P **P** **11 08 29.9 0.0**
KHC pmax pmax
comp=Z,12nm,1.5s
**PPT Papeete 84.17 116** LR LR 11 38 50.8
comp=Z,60nm,21.4s,baz=314,slow=30
**PPT2 Papeete2 84.19 116** *e*LR LR 11 34 59.6
comp=Z,76nm,22.2s
PPT2 *e*LR LR 11 35 00.4
comp=Z,102nm,32.2s
**TAOE Nuku Hiva Isla 86.04 104** *e*LR LR 11 35 51.2
comp=Z,145nm,26.5s
**TBI Tubuai 87.96 121** *e*LR LR 11 36 45.3
comp=Z,781nm,33.2s
**FDMO Fiordimonte 88.58 325** P **P** **11 08 54.8 +0.8**
FDMO lAmb lAmb 11 08 55.8
comp=Z,5.3nm,0.8s
**NRCA Norcia 88.72 325** P **P** **11 08 54.5 -0.2**
NRCA lAmb lAmb 11 08 56.5
comp=Z,4.6nm,0.9s
**TXAR Lajitas Array 91.23 52** P **P** **11 09 07.7 +1.0**
comp=Z,0.3nm,0.7s,baz=308,slow=3.0,SNR=2.7
comp=Z,0.3nm,0.7s
**PKME Peaks-Kenny Pk 95.00 21** P **P** **11 09 20.4 -3.2**
**Q51A Peebles 95.20 33** P **P** **11 09 22.9 -1.8**
**RKT Rikitea 98.40 112** *e*LR LR 11 41 35.9
comp=Z,513nm,27.5s
**ESDC Sonseca Array 98.53 333** LR LR 11 57 46.0
comp=Z,59nm,21.5s,baz=11,slow=38
**H03N2 Juan Fernandez 147.07 98** T T 14 00 22.5
baz=289,slow=76,SNR=44
**H03N3 Juan Fernandez 147.08 98** T T 14 00 22.6
baz=289,slow=76,SNR=50
**H03N1 Juan Fernandez 147.09 98** T T 14 00 29.1
baz=289,slow=76,SNR=48
**LPAZ La Paz 147.64 61** PKPbc **PKPbc** **11 15 47.3 +0.5**
comp=Z,1.7nm,0.8s,baz=308,slow=3.4,SNR=6.3

*NEIC **06** 11:02:19.9±2.0,31.87N±0.02×115.86W±0.02,h5km±1km, Error ellipse: s-maj=3.3km s-min=2.8km az=168.0*
*ANF **06** 11:02:20.3±0.5,31.96N×115.80W,h10km,Error ellipse: s-maj=4.5km s-min=3.1km az=29.0*
*PAS **06** 11:02:21.1±2.1,31.90N±0.02×115.84W±0.02,h8km±5km, ML3.3/186,ML3.1/43(NEIC),Error ellipse: s-maj=2.8km s-min=2.2km az=172.0*
*MEX **06** 11:02:22.6±0.6,31.91N×115.83W,h10km,MD4.0*
**ISC 06 11:02:20.2±0.9,31.91N±0.02×115.80W±0.02,h10km±7km, n114,σ0.91/153,Baja California**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ESJX** | **Sierra Juarez** | **0.16** | **306** | | | **Pg** | **11 02 24.1** | **+0.4** |
| ESJX | | | | | | **Sg** | **11 02 26.2** | **0.0** |
| **ESJX** | **Sierra Juarez** | **0.16** | **306** | IAML | | | 11 02 26.6 | |
| | comp=E,21µm,0.1s | | | | | | | |
| ESJX | | | | IAML | | | 11 02 26.8 | |
| | comp=N,16µm,0.1s | | | | | | | |
| **VTX** | **Valle De La Tr** | **0.52** | **179** | | | **Pg** | **11 02 30.6** | **+0.3** |
| VTX | | | | | | **Sg** | **11 02 37.4** | **+0.2** |
| **VTX** | **Valle De La Tr** | **0.52** | **179** | IAML | | | 11 02 38.3 | |
| | comp=N,813nm,0.1s | | | | | | | |
| VTX | | | | IAML | | | 11 02 38.4 | |
| | comp=E,488nm,0.1s | | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.66** | **40** | | | **Pb** | **11 02 34.1** | **+0.4** |
| CPBX | | | | | | **Sn** | **11 02 45.2** | **-0.8** |
| **MBIG** | **Mexicali** | **0.71** | **46** | *eP* | | **Pb** | **11 02 34.2** | **-0.4** |
| MBIG | | | | *eP* | | **Pn** | **11 02 35.7** | **-0.6** |
| MBIG | | | | *eS* | | **Sb** | **11 02 44.5** | **0.0** |
| MBIG | | | | *eS* | | **Sn** | **11 02 46.1** | **-1.2** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **RMX** | **La Rumorosa** | **0.73** | **341** | | **Pg** | **11 02 33.4 -0.9** |
| RMX | | | | | **Sg** | **11 02 42.3 -1.5** |
| **RMX** | **La Rumorosa** | **0.73** | **341** | IAML | | 11 02 47.0 |
| | comp=N,434nm,0.2s | | | | | |
| RMX | | | | IAML | | 11 02 47.6 |
| | comp=E,517nm,0.3s | | | | | |
| **SGL** | **Mount Signal** | **0.74** | **5** | | **Pb** | **11 02 35.0 -0.2** |
| SGL | | | | | **Sb** | **11 02 45.3 0.0** |
| **CCX** | **Cicese** | **0.74** | **267** | | **Pg** | **11 02 34.5 +0.1** |
| **CCX** | **Cicese** | **0.74** | **267** | IAML | | 11 02 44.6 |
| | comp=E,1µm,0.3s | | | | | |
| CCX | | | | IAML | | 11 02 45.0 |
| | comp=N,1µm,0.3s | | | | | |
| **YUH** | **Yuha Desert** | **0.74** | **352** | | **Sg** | **11 02 44.0 -0.1** |
| **YUH** | **Yuha Desert** | **0.74** | **352** | Pg | **Pb** | **11 02 34.7 -0.5** |
| **YUH** | **Yuha Desert** | **0.74** | **352** | IAML | | 11 02 44.5 |
| | comp=N,397nm,0.2s | | | | | |
| YUH | | | | IAML | | 11 02 44.6 |
| | comp=E,773nm,0.3s | | | | | |
| **UABX** | **UABC, Campus M** | **0.78** | **23** | | **Pn** | **11 02 36.6 -0.6** |
| UABX | | | | | **Sn** | **11 02 48.5 -0.5** |
| **IKP** | **In-Ko-Pah, Jac** | **0.78** | **340** | | **Pg** | **11 02 35.3 +0.1** |
| IKP | | | | | **Sg** | **11 02 45.3 -0.1** |
| **IKP** | **In-Ko-Pah, Jac** | **0.78** | **340** | P | **Pg** | **11 02 35.4 +0.1** |
| | baz=163,SNR=65 | | | | | |
| IKP | | | | S | **Sg** | **11 02 45.4 -0.1** |
| | baz=163 | | | | | |
| **5053** | **Calexico** | **0.80** | **19** | | **Pn** | **11 02 36.9 -0.6** |
| 5053 | | | | | **Sn** | **11 02 48.6 -0.9** |
| **CBX** | **Cerro Bola** | **0.84** | **299** | | **Pg** | **11 02 36.4 +0.1** |
| CBX | | | | | **Sg** | **11 02 47.3 +0.1** |
| **CBX** | **Cerro Bola** | **0.84** | **299** | IAML | | 11 02 48.4 |
| | comp=E,2µm,0.3s | | | | | |
| **CBX** | **Cerro Bola** | **0.84** | **299** | *eP* | **Pg** | **11 02 36.1 -0.2** |
| **WESC** | **Westside Schoo** | **0.85** | **4** | | **Pn** | **11 02 37.5 -0.7** |
| WESC | | | | | **Sn** | **11 02 49.9 -0.8** |
| **5054** | **Holtville Bond** | **0.87** | **26** | | **Pn** | **11 02 38.2 -0.3** |
| 5054 | | | | | **Sn** | **11 02 51.3 0.0** |
| **TJIG** | **Tijuana** | **0.91** | **305** | *eP* | **Pg** | **11 02 37.1 -0.6** |
| TJIG | | | | *eS* | **Sg** | **11 02 48.4 -1.1** |
| **SPIG** | **San Pedro Mart** | **0.91** | **162** | *eP* | **Pg** | **11 02 37.8 +0.1** |
| SPIG | | | | *eS* | **Sg** | **11 02 49.2 -0.4** |
| **COK2** | **Cook Ranch 2** | **0.94** | **4** | | **Pn** | **11 02 39.0 -0.5** |
| COK2 | | | | | **Sn** | **11 02 52.4 -0.6** |
| **DREC** | **Desert Rsrch C** | **0.94** | **18** | | **Pn** | **11 02 39.3 -0.1** |
| DREC | | | | | **Sn** | **11 02 53.7 +0.7** |
| **TKX** | **Tecate** | **0.95** | **314** | | **Pg** | **11 02 38.2 -0.2** |
| TKX | | | | | **Sg** | **11 02 49.8 -0.9** |
| **TKX** | **Tecate** | **0.95** | **314** | IAML | | 11 02 52.4 |
| | comp=N,985nm,0.2s | | | | | |
| TKX | | | | IAML | | 11 02 52.5 |
| | comp=E,1µm,0.1s | | | | | |
| **CRR** | **Carrizo Plain** | **0.98** | **352** | | **Pb** | **11 02 39.3 0.0** |
| CRR | | | | | **Sb** | **11 02 52.2 -0.1** |
| **SNR** | **Schaffner Ranc** | **0.99** | **18** | | **Pn** | **11 02 39.8 -0.4** |
| SNR | | | | | **Sn** | **11 02 54.2 -0.1** |
| **IMPE** | **Imperial** | **1.01** | **11** | | **Pn** | **11 02 40.5 +0.1** |
| IMPE | | | | | **Sn** | **11 02 54.9 +0.3** |
| **SWSC** | **Sam W. Stewart** | **1.03** | **360** | | **Pb** | **11 02 40.2 +0.1** |
| SWSC | | | | | **Sb** | **11 02 53.6 -0.1** |
| **SWSC** | **Sam W. Stewart** | **1.03** | **360** | P | **Pb** | **11 02 40.2 +0.1** |
| | baz=182,SNR=60 | | | | | |
| SWSC | | | | S | **Sb** | **11 02 53.5 -0.3** |
| | baz=182 | | | | | |
| **BAR** | **Barrett** | **1.06** | **316** | | **Sg** | **11 02 53.4 -1.1** |
| **BAR** | **Barrett** | **1.06** | **316** | | **Pg** | **11 02 39.9 -0.7** |
| **BAR** | **Barrett** | **1.06** | **316** | IAML | | 11 02 47.3 |
| | comp=N,4.3nm,0.3s | | | | | |
| **EMSC** | **East Mesa** | **1.07** | **40** | | **Pb** | **11 02 40.8 -0.1** |
| EMSC | | | | | **Sn** | **11 02 57.6 +1.3** |
| **DUZA** | **Dulzura** | **1.08** | **310** | | **Pg** | **11 02 40.1 -0.8** |
| DUZA | | | | | **Sg** | **11 02 53.9 -1.1** |
| **COA** | **Coachella** | **1.11** | **31** | | **Pb** | **11 02 41.3 -0.1** |
| **MONP2** | **Monument Peak** | **1.11** | **332** | | **Pg** | **11 02 41.2 -0.3** |
| MONP2 | | | | | **Sg** | **11 02 55.6 -0.4** |
| **MONP2** | **Monument Peak** | **1.11** | **332** | P | **Pg** | **11 02 41.3 -0.3** |
| | baz=153,SNR=129 | | | | | |
| MONP2 | | | | S | **Sg** | **11 02 55.0 -1.0** |
| | baz=153 | | | | | |
| **OLP** | **Otay Lakes Par** | **1.18** | **306** | | **Sg** | **11 02 57.1 -1.2** |
| **SFX** | **San Felipe** | **1.19** | **137** | Pg | **Pb** | **11 02 42.2 -0.6** |
| SFX | | | | IAML | | 11 03 00.7 |
| | comp=N,254nm,0.6s | | | | | |
| SFX | | | | IAML | | 11 03 02.5 |
| | comp=E,344nm,0.7s | | | | | |
| **SFX** | **San Felipe** | **1.19** | **137** | *eP* | **Pb** | **11 02 41.7 -1.1** |
| **ERRC** | **Elmore Ranch** | **1.20** | **359** | | **Pn** | **11 02 44.1 +1.1** |
| ERRC | | | | | **Sn** | **11 03 00.5 +1.1** |
| **TJX** | **Tijuana** | **1.22** | **300** | | **Pb** | **11 02 43.1 -0.2** |
| TJX | | | | IAML | | 11 03 03.8 |
| | comp=N,838nm,0.5s | | | | | |
| **TJX** | **Tijuana** | **1.22** | **300** | | **Sb** | **11 02 59.2 0.0** |
| **RUN** | **Ruthven** | **1.26** | **33** | | **Pn** | **11 02 43.1 -0.8** |
| **SDRC** | **San Diego Road** | **1.27** | **311** | | **Pn** | **11 02 43.3 -0.7** |
| SDRC | | | | | **Sb** | **11 02 59.3 -1.3** |
| **EML** | **El Monte Cty P** | **1.32** | **318** | | **Pn** | **11 02 44.1 -0.6** |
| EML | | | | | **Sb** | **11 03 01.2 -0.8** |
| **SLH** | **Sleepy Hollow** | **1.33** | **343** | | **Pn** | **11 02 44.7 -0.2** |
| **JUEM** | **Julian Eagle M** | **1.35** | **330** | | **Pn** | **11 02 45.3 +0.1** |
| JUEM | | | | | **Sb** | **11 03 02.8 -0.2** |
| **MTRP** | **Mission Trails** | **1.40** | **311** | | **Sb** | **11 03 03.9 -0.4** |
| **GLA** | **Glamis** | **1.40** | **36** | | **Pn** | **11 02 45.1 -0.7** |
| GLA | | | | IAML | | 11 03 06.8 |
| | comp=N,147nm,0.4s | | | | | |
| GLA | | | | IAML | | 11 03 16.9 |
| | comp=E,157nm,0.6s | | | | | |
| **GLA** | **Glamis** | **1.40** | **36** | P | **Pn** | **11 02 45.2 -0.7** |
| | baz=217,SNR=32 | | | | | |
| GLA | | | | S | **Sb** | **11 03 03.4 -1.0** |
| | baz=217 | | | | | |
| **SDMC** | **San Diego Miss** | **1.43** | **308** | | **Sn** | **11 03 04.6 -0.4** |
| **BORC** | **Borrego Spring** | **1.45** | **339** | | **Sg** | **11 03 06.4 -0.4** |
| **DPP** | **Dos Picos Cty** | **1.45** | **319** | | **Pn** | **11 02 46.5 -0.1** |
| DPP | | | | | **Sn** | **11 03 05.4 -0.3** |
| **MATG** | **Mataguay Scout** | **1.47** | **331** | | **Pn** | **11 02 47.2 +0.3** |
| MATG | | | | | **Sb** | **11 03 06.7 +0.2** |
| **109C** | **Camp Elliot, M** | **1.47** | **312** | | **Pn** | **11 02 47.1 +0.3** |
| **109C** | **Camp Elliot, M** | **1.47** | **312** | P | **Pn** | **11 02 46.8 0.0** |
| | baz=132,SNR=59 | | | | | |
| 109C | | | | S | **Sn** | **11 03 05.3 -0.9** |
| | baz=132 | | | | | |
| **CPE** | **Camp Elliot** | **1.47** | **312** | | **Pn** | **11 02 46.9 +0.1** |
| **PLM** | **Palomar** | **1.69** | **328** | | **Pn** | **11 02 50.7 +0.6** |
| PLM | | | | | **Sb** | **11 03 12.8 -0.2** |
| **FRD** | **Ford Ranch, An** | **1.72** | **337** | | **Pg** | **11 02 52.9 -0.2** |
| **GORC** | **Green Oak Ranc** | **1.73** | **316** | | **Pn** | **11 02 51.1 +0.8** |
| **BZNA** | **Buzz No.'s Pla** | **1.74** | **335** | | **Pn** | **11 02 50.9 +0.3** |
| **BC3** | **Big Chuckawall** | **1.76** | **9** | P | **Pn** | **11 02 50.7 -0.2** |
| | baz=190,SNR=32 | | | | | |
| BC3 | | | | S | **Sn** | **11 03 12.3 -1.2** |
| | baz=190 | | | | | |
| **SNDA** | **J Saunders Pla** | **1.77** | **337** | | **Pg** | **11 02 54.0 -0.2** |
| **PFO** | **Pinyon Flats O** | **1.78** | **342** | | **Pn** | **11 02 50.9 -0.3** |
| PFO | | | | IAML | | 11 03 21.1 |
| | comp=E,72nm,0.3s | | | | | |
| **PFO** | **Pinyon Flats O** | **1.78** | **342** | | **Pg** | **11 02 54.2 -0.2** |
| **PFO** | **Pinyon Flats O** | **1.78** | **342** | P | **Pn** | **11 02 50.9 -0.3** |
| | baz=163,SNR=17 | | | | | |
| PFO | | | | Sb | **Sb** | **11 03 16.0 +0.5** |
| | baz=163 | | | | | |
| **PMD** | **Palm Desert** | **1.80** | **344** | | **Pn** | **11 02 51.1 -0.2** |
| PMD | | | | | **Sg** | **11 03 17.0 -1.0** |
| **CRY** | **Cary Ranch** | **1.83** | **335** | | **Pb** | **11 02 54.4 +0.6** |
| **113A** | **Mohawk Valley,** | **1.92** | **63** | Pn | **Pn** | **11 02 52.5 -0.4** |
| **BACC** | **Bachelor Mtn.** | **1.99** | **329** | | **Pn** | **11 02 54.5 +0.5** |
| **POB** | **Polly Butte** | **2.01** | **332** | | **Pn** | **11 02 54.8 +0.5** |
| **DGR** | **Domenigoni Val** | **2.01** | **330** | | **Pn** | **11 02 54.8 +0.5** |
| **PIX** | **Pinacate** | **2.02** | **99** | | **Pn** | **11 02 54.8 +0.4** |
| **MURC** | **Murrieta** | **2.05** | **325** | P | **Pn** | **11 02 55.7 +0.8** |
| | baz=146,SNR=19 | | | | | |
| MURC | | | | Sb | **Sb** | **11 03 23.0 -0.3** |
| | baz=146 | | | | | |
| **HMTC** | **Hemet** | **2.06** | **331** | | **Pn** | **11 02 55.5 +0.6** |
| **BELC** | **Belle Mtn. Jos** | **2.09** | **355** | P | **Pn** | **11 02 55.5 +0.1** |
| | baz=176,SNR=11 | | | | | |
| BELC | | | | S | **Sn** | **11 03 20.8 -0.8** |
| | baz=176 | | | | | |
| **BLYC** | **Blythe** | **2.12** | **30** | | **Pb** | **11 02 57.2 -1.6** |
| BLYC | | | | IAML | | 11 03 36.4 |
| | comp=E,68nm,0.7s | | | | | |
| BLYC | | | | IAML | | 11 03 37.4 |
| | comp=N,72nm,0.8s | | | | | |
| **TPC** | **Twentynine Pal** | **2.20** | **355** | | **Pn** | **11 02 57.4 +0.6** |
| **ELS** | **Elsinore Mount** | **2.21** | **322** | | **Pn** | **11 02 57.9 +0.8** |
| ELS | | | | IAML | | 11 03 28.0 |
| | comp=N,140nm,0.3s | | | | | |
| ELS | | | | IAML | | 11 03 29.5 |
| | comp=E,223nm,0.4s | | | | | |
| **IRM** | **Iron Mountain** | **2.30** | **14** | P | **Pn** | **11 02 59.2 +0.9** |
| | baz=195,SNR=9.0 | | | | | |
| **BBRC** | **Big Bear Solar** | **2.52** | **338** | | **Pn** | **11 03 02.7 +1.2** |
| **BBRC** | **Big Bear Solar** | **2.52** | **338** | P | **Pn** | **11 03 02.4 +0.9** |
| | baz=159,SNR=9.4 | | | | | |
| BBRC | | | | Sb | **Sb** | **11 03 39.0 +2.0** |
| | baz=159 | | | | | |
| **214A** | **Organ Pipe Nat** | **2.54** | **88** | | **Pn** | **11 03 01.3 -0.3** |
| **214A** | **Organ Pipe Nat** | **2.54** | **88** | P | **Pn** | **11 03 01.2 -0.4** |
| | baz=270 | | | | | |
| 214A | | | | S | **Sn** | **11 03 32.0 -0.5** |
| | baz=270 | | | | | |
| **SCI2** | **San Clemente I** | **2.56** | **295** | S | **Sn** | **11 03 31.7 -1.2** |
| | baz=114 | | | | | |
| **CIS** | **Catalina Islan** | **2.66** | **305** | P | **Pn** | **11 03 03.0 -0.2** |
| | baz=124 | | | | | |
| CIS | | | | S | **Sn** | **11 03 35.2 -0.3** |
| | baz=124 | | | | | |
| **FMP** | **Fort Macarthur** | **2.76** | **311** | Sb | **Sb** | **11 03 44.5 +0.9** |
| | baz=131 | | | | | |
| **BFSC** | **Mount Baldy Ra** | **2.80** | **327** | Pb | **Pb** | **11 03 09.5 -0.9** |
| | baz=146 | | | | | |
| BFSC | | | | Sb | **Sb** | **11 03 45.4 +0.7** |
| | baz=146 | | | | | |
| **Y14A** | **Wickenburg** | **3.10** | **49** | | **Pn** | **11 03 10.5 +1.2** |
| **DECC** | **Green Verdugo** | **3.16** | **318** | Sb | **Sb** | **11 03 56.1 +1.0** |
| | baz=138 | | | | | |
| **GSC** | **Goldstone, Bar** | **3.48** | **346** | Pn | **Pn** | **11 03 15.1 +0.6** |
| GSC | | | | IAML | | 11 04 13.8 |
| | comp=E,14nm,0.9s | | | | | |
| **EDW2** | **Edwards Air Fo** | **3.48** | **329** | Sb | **Sb** | **11 04 06.5 +2.0** |
| | baz=148 | | | | | |
| **W13A** | **Hualapai Mount** | **3.56** | **26** | | **Pn** | **11 03 17.8 +2.1** |
| **OSI** | **Osito Audit: C** | **3.64** | **318** | Sb | **Sb** | **11 04 09.8 +0.8** |
| | baz=138 | | | | | |
| **V12A** | **Nelson** | **3.88** | **11** | | **Pn** | **11 03 19.1 -1.0** |
| **ARVC** | **Arvin** | **4.08** | **323** | Sb | **Sb** | **11 04 24.0 +2.3** |
| | baz=141 | | | | | |
| **BCW** | **Bitter Crk WRg** | **4.27** | **316** | Pn | **Pn** | **11 03 26.8 +1.4** |
| BCW | | | | IAML | | 11 04 26.7 |
| | comp=E,30nm,2.7s | | | | | |
| BCW | | | | IAML | | 11 04 36.3 |
| | comp=N,33nm,3.0s | | | | | |
| **TUC** | **Tucson** | **4.27** | **83** | | **Pn** | **11 03 25.8 +0.4** |
| **GWY** | **Greenwater Val** | **4.32** | **351** | | **Pn** | **11 03 27.8 +1.7** |
| **ISA** | **Isabella, Lake** | **4.35** | **330** | Sb | **Sb** | **11 04 32.5 +3.0** |
| | baz=149 | | | | | |
| **X16A** | **Lo Mia Camp, P** | **4.43** | **54** | Pn | **Pn** | **11 03 28.5 +0.9** |
| **TPNV** | **Topopah Spring** | **5.04** | **356** | Pn | **Pn** | **11 03 38.6 +2.6** |
| **U15A** | **North Rim** | **5.36** | **32** | | **Pn** | **11 03 42.1 +1.6** |
| **LCMT** | **Little Creek M** | **5.51** | **22** | | **Pn** | **11 03 43.7 +1.2** |
| **X18A** | **Snowflake** | **5.55** | **60** | Pn | **Pn** | **11 03 44.7 +1.6** |
| **319A** | **Douglas** | **5.58** | **94** | Pn | **Pn** | **11 03 46.2 +2.7** |
| **KNB** | **Kanab** | **5.65** | **25** | | **Pn** | **11 03 47.7 +3.2** |
| **CCUT** | **Cedar City** | **5.97** | **19** | Pn | **Pn** | **11 03 51.1 +2.2** |

*NEIC **06** 11:22:19.6±2.8, 3°.52S±0°.09×151°.34E±0°.04, h10km±1km, mb4.5/19, Error ellipse: s-maj=17.3km s-min=3.4km az=23.0*

*IDC **06** 11:22:27.5±6.0, 3°.70S×150°.91E, h63km±56km, mb3.5/6, mbtmp3.8/7, ML2.2/2, MS3.2/13, Error ellipse: s-maj=60.8km s-min=31.5km az=114.0*

**ISC 06 11:22:22.6±0.6, 3°.57S±0°.08×151°.31E±0°.08, h35km, n45, σ1§26/35, mb4.3/16, MS3.3/11, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.05** | **126** | Pn | **Pn** | **11 22 40.8** | **-0.1** |
| **MANU** | **Manus Island** | **4.22** | **291** | Pn | **Pn** | **11 23 24.3** | **-0.3** |
| **PMG** | **Port Moresby** | **7.12** | **215** | Pn | **Pn** | **11 24 05.3** | **+0.9** |
| **PMG** | **Port Moresby** | **7.12** | **215** | P | **Pn** | **11 24 05.7** | **+1.3** |
| | 1.4nm,0.3s,baz=60,slow=16,SNR=1.9 | | | | | | |
| PMG | | | | LR | LR | 11 26 44.0 | |
| | comp=Z,147nm,20.9s,baz=37,slow=38 | | | | | | |
| | 14nm,0.9s | | | | | | |
| **COEN** | **Coen** | **13.08** | **217** | Pn | **Pn** | **11 25 26.6** | **+0.5** |
| **CTA** | **Charters Tower** | **17.15** | **196** | P | **P** | **11 26 21.5** | **+0.5** |
| | baz=17,slow=13,SNR=1.6 | | | | | | |
| **GUMO** | **Guam** | **18.20** | **340** | LR | LR | 11 32 24.3 | |
| | comp=Z,58nm,20.6s,baz=140,slow=33 | | | | | | |
| **EIDS** | **Eidsvold** | **21.68** | **181** | P | **P** | **11 27 10.4** | **-0.1** |
| EIDS | | | | IAmb | IAmb | 11 27 19.0 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.06** | **224** | P | **P** | **11 27 24.0** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 11 27 29.8 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.09** | **224** | P | **P** | **11 27 24.0** | **-1.5** |
| WR0 | | | | IAmb | IAmb | 11 27 30.2 | |
| | comp=Z,9.7nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.20** | **224** | P | **P** | **11 27 25.2** | **-1.5** |
| WRAB | | | | IAmb | IAmb | 11 27 31.2 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.21** | **224** | P | **P** | **11 27 24.9** | **-1.9** |
| WB2 | | | | IAmb | IAmb | 11 27 31.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.22** | **224** | P | **P** | **11 27 24.6** | **-2.2** |
| **WRA** | **Warramunga Arr** | **23.22** | **224** | P | **P** | **11 27 24.5** | **-2.3** |
| | comp=Z,2.1nm,0.8s,baz=50,slow=11,SNR=15 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.54** | **143** | LR | LR | 11 35 27.1 | |
| | comp=Z,140nm,21.8s,baz=276,slow=33 | | | | | | |
| **AS31** | **Alice Springs** | **26.12** | **219** | P | **P** | **11 27 53.9** | **+0.3** |
| **ASAR** | **Alice Springs** | **26.12** | **219** | P | **P** | **11 27 53.9** | **+0.3** |
| **ASAR** | **Alice Springs** | **26.12** | **219** | P | **P** | **11 27 52.5** | **-1.1** |
| | comp=Z,1.5nm,0.7s,baz=53,slow=8.0,SNR=18 | | | | | | |
| ASAR | | | | LR | LR | 11 37 11.1 | |
| | comp=Z,34nm,21.2s,baz=64,slow=34 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.99** | **238** | P | **P** | **11 28 18.6** | **-0.7** |
| **JOW** | **Kunigami** | **37.54** | **325** | LR | LR | 11 41 46.4 | |
| | comp=Z,64nm,20.3s,baz=148,slow=31 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **38.08** | **344** | LR | LR | 11 44 53.2 | |
| | comp=Z,43nm,18.7s,baz=122,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.73** | **344** | LR | LR | 11 47 50.8 | |
| | comp=Z,48nm,18.4s,baz=176,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **46.24** | **334** | LR | LR | 11 48 08.8 | |
| | comp=Z,17nm,21.2s,baz=155,slow=33 | | | | | | |
| **KS19** | **Wonju Array Si** | **46.31** | **334** | P | **P** | **11 30 43.4** | **-1.7** |
| **KLR** | **Kul'dur** | **55.26** | **345** | LR | LR | 11 52 31.2 | |
| | comp=Z,20nm,21.6s,baz=116,slow=33 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **56.01** | **295** | P | **P** | **11 31 59.1** | **+0.7** |
| CM31 | | | | IAmb | IAmb | 11 32 34.9 | |
| | comp=Z,5.0nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.01** | **295** | P | **P** | **11 31 58.9** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **56.01** | **295** | LR | LR | 11 55 59.0 | |
| | comp=Z,13nm,20.0s,baz=310,slow=36 | | | | | | |
| **MA2** | **Magadan** | **62.95** | **360** | LR | LR | 11 56 02.2 | |
| | comp=Z,22nm,21.8s,baz=164,slow=32 | | | | | | |
| **SHL** | **Shillong** | **64.41** | **300** | P | **P** | **11 32 54.9** | **-1.1** |
| **SONM** | **Songino Array** | **64.50** | **328** | P | **P** | **11 32 56.5** | **+0.4** |
| SONM | | | | IAmb | IAmb | 11 33 00.9 | |
| | comp=Z,1.7nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **64.50** | **328** | P | **P** | **11 32 57.4** | **+1.3** |
| | comp=Z,0.6nm,0.7s,baz=134,slow=6.2,SNR=2.1 | | | | | | |
| SONM | | | | LR | LR | 12 01 37.4 | |
| | comp=Z,32nm,19.3s,baz=243,slow=36 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **67.48** | **349** | LR | LR | 12 00 28.3 | |
| | comp=Z,18nm,21.4s,baz=162,slow=34 | | | | | | |
| **CASY** | **Casey** | **68.76** | **196** | P | **P** | **11 33 23.0** | **+0.3** |
| CASY | | | | IAmb | IAmb | 11 33 24.0 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **74.11** | **178** | P | **P** | **11 33 54.3** | **-0.6** |
| **MK31** | **Makanchi Array** | **78.43** | **319** | P | **P** | **11 34 21.3** | **+1.3** |
| **MKAR** | **Makanchi Array** | **78.43** | **319** | P | **P** | **11 34 20.0** | **0.0** |
| **MKAR** | **Makanchi Array** | **78.43** | **319** | P | **P** | **11 34 22.0** | **+2.0** |
| | comp=Z,0.6nm,0.8s,baz=101,slow=6.3,SNR=4.6 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **RND** | **Reindeer** | **80.18** | **23** | P | **P** | **11 34 29.5** | **+0.3** |
| RND | | | | IAmb | IAmb | 11 34 53.6 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **BWN** | **Browne** | **80.32** | **22** | P | **P** | **11 34 30.6** | **+0.8** |
| **ILAR** | **Eielson Array** | **81.59** | **22** | P | **P** | **11 34 39.2** | **+2.6** |
| | comp=Z,0.7nm,0.7s,baz=237,slow=5.0,SNR=9.2 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **81.92** | **322** | P | **P** | **11 34 38.1** | **-0.5** |
| | comp=Z,0.7nm,0.8s,baz=108,slow=3.8,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **82.10** | **23** | P | **P** | **11 34 41.5** | **+2.1** |
| J25K | | | | IAmb | IAmb | 11 34 43.8 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.39** | **180** | P | **P** | **11 35 00.2** | **-1.0** |
| QSPA | | | | IAmb | IAmb | 11 35 18.2 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.51** | **289** | PKPbc | **PKiKP** | **11 42 08.2** | **-0.2** |
| | comp=Z,0.6nm,0.7s,baz=46,slow=4.2,SNR=3.1 | | | | | | |

*IDC **06** 11:27:56.3±1.6, 36°.86N×35°.63E, h0km, mb4.0/1, mbtmp3.8/7, ML3.5/4, MS3.1/8, Error ellipse: s-maj=39.0km s-min=11.2km az=74.0*

*GII **06** 11:27:57.9±0.2, 36°.743N±0°.001×35°.581E±0°.001, h1km, Md3.5/5, Mws3.7/8, confirmed*

*AFAD **06** 11:27:57.4±0.0, 36°.78N×35°.59E, h34km±1km, MW3.8*

*ISK **06** 11:27:57.3, 36°.79N×35°.59E, h14km, ML3.7/35*

*NIC **06** 11:28:07.1, 36°.43N×35°.30E, h40km±60km, Ml3.0/7*

**ISC 06 11:27:59.1±0.8, 36°.80N±0°.02×35°.59E±0°.02, h26km±6km, n114, σ1§46/143, MS3.2/5, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YURE** | **YUREGIR** | **0.04** | **57** | P | **Pb** | **11 28 03.5** | **-0.1** |
| YURE | | | | S | **Sb** | **11 28 07.6** | **+0.9** |
| **CEYT** | **Ceyhan** | **0.24** | **32** | Pg | **Pb** | **11 28 05.2** | **-0.2** |
| CEYT | | | | Sg | **Sb** | **11 28 07.5** | **-2.2** |
| **ASUZ** | **Hatay-Arsuz** | **0.53** | **163** | P | **Pb** | **11 28 08.4** | **-1.5** |
| ASUZ | | | | S | **Sb** | **11 28 16.9** | **-0.3** |
| **KARA** | **Karaisali** | **0.62** | **317** | Pg | **Pb** | **11 28 10.5** | **-1.0** |
| KARA | | | | Sg | **Sb** | **11 28 19.7** | **-0.2** |
| **TAHT** | **Tahtakopru-Hat** | **0.64** | **131** | Pg | **Pb** | **11 28 10.3** | **-1.5** |
| TAHT | | | | Sg | **Sb** | **11 28 19.6** | **-0.8** |
| **DED** | **Mersin** | **0.65** | **284** | P | **Pb** | **11 28 11.6** | **-0.3** |
| DED | | | | S | **Sb** | **11 28 20.5** | **-0.1** |
| **AKO** | **Adana** | **0.67** | **350** | P | **Pb** | **11 28 11.4** | **-0.8** |
| AKO | | | | S | **Sb** | **11 28 21.6** | **+0.5** |
| **KOZT** | **Kozan** | **0.70** | **16** | Pg | **Pb** | **11 28 11.5** | **-1.3** |
| KOZT | | | | Sg | **Sb** | **11 28 21.8** | **-0.3** |
| **HASA** | **Hatay-Hassa-Ha** | **0.72** | **94** | P | **Pb** | **11 28 11.8** | **-1.3** |
| HASA | | | | S | **Sn** | **11 28 23.7** | **-0.4** |
| **GULE** | **Gulek** | **0.81** | **307** | P | **Pn** | **11 28 14.8** | **-0.2** |
| GULE | | | | S | **Sn** | **11 28 27.9** | **+1.5** |
| **KAMA** | **Osmaniye** | **0.95** | **66** | P | **Pb** | **11 28 15.8** | **-1.2** |
| KAMA | | | | S | **Sb** | **11 28 28.8** | **-0.3** |
| **RHAN** | **Hatay/Reyhanl** | **0.98** | **123** | P | **Pb** | **11 28 15.9** | **-1.6** |
| RHAN | | | | S | **Sn** | **11 28 30.5** | **+0.2** |
| **CMRD** | **Camardi-Nigde** | **0.98** | **331** | Pg | **Pb** | **11 28 16.9** | **-0.7** |
| **ANDN** | **Andirin** | **0.98** | **38** | P | **Pb** | **11 28 15.4** | **-2.2** |
| ANDN | | | | S | **Sn** | **11 28 31.7** | **+1.1** |
| **HCB** | **Kahramanmara** | **1.19** | **63** | P | **Pn** | **11 28 20.0** | **-0.1** |
| HCB | | | | S | **Sn** | **11 28 35.4** | **-0.1** |
| **KHMR** | **Kahramanmara** | **1.19** | **63** | P | **Pn** | **11 28 19.7** | **-0.5** |
| KHMR | | | | S | **Sn** | **11 28 35.1** | **-0.4** |
| **KIZK** | **Mersin** | **1.20** | **255** | Pn | **Pn** | **11 28 20.2** | **-0.1** |
| **KIZK** | **Mersin** | **1.20** | **255** | P | **Pn** | **11 28 19.9** | **-0.4** |
| KIZK | | | | S | **Sb** | **11 28 35.6** | **-0.8** |
| **SAIM** | **ADANA** | **1.24** | **18** | P | **Pn** | **11 28 19.8** | **-1.1** |
| SAIM | | | | S | **Sb** | **11 28 38.3** | **+0.8** |
| **KMRS** | **Kahramanmaras** | **1.26** | **56** | Pn | **Pn** | **11 28 21.2** | **0.0** |
| **YAHY** | **KAYSERI_Yahyal** | **1.30** | **352** | P | **Pn** | **11 28 21.4** | **-0.4** |
| YAHY | | | | S | **Sb** | **11 28 39.3** | **-0.1** |
| **KERG** | **Konya-Eregli** | **1.32** | **298** | P | **Pb** | **11 28 22.7** | **-0.7** |
| KERG | | | | S | **Sb** | **11 28 40.9** | **+1.1** |
| **GAZ** | **Gaziantep** | **1.35** | **74** | Pn | **Pn** | **11 28 22.3** | **-0.2** |
| **NIDE** | **Nigde/Merkez-G** | **1.36** | **332** | P | **Pn** | **11 28 22.8** | **+0.1** |
| NIDE | | | | S | **Sb** | **11 28 41.8** | **+0.8** |
| **SLFK** | **Silifke-Mersin** | **1.38** | **253** | Pn | **Pn** | **11 28 22.8** | **0.0** |
| **KHMN** | **Narli-Kahraman** | **1.39** | **64** | Pn | **Pn** | **11 28 23.1** | **+0.2** |
| **SILI** | **Silifke-Mersin** | **1.41** | **253** | Pn | **Pn** | **11 28 23.2** | **+0.1** |
| **NIG** | **Nigde** | **1.52** | **330** | Pn | **Pn** | **11 28 25.2** | **+0.3** |
| **KEBE** | **Keben-Mersin** | **1.55** | **257** | Pn | **Pn** | **11 28 25.3** | **+0.2** |
| **KARG** | **Kargicak-Mersi** | **1.63** | **249** | Pn | **Pn** | **11 28 26.3** | **+0.1** |
| **IKL** | **Isikli** | **1.63** | **250** | Pn | **Pn** | **11 28 26.4** | **+0.2** |
| **TISA** | **Tisan-Mersin** | **1.67** | **248** | Pn | **Pn** | **11 28 26.5** | **-0.2** |
| **YESI** | **Yesilovacik-Me** | **1.68** | **249** | Pn | **Pn** | **11 28 26.9** | **0.0** |
| **EREN** | **Erenkoy** | **1.71** | **222** | Pn | **Pn** | **11 28 27.2** | **-0.1** |
| **SARI** | **SarD1z-Kayseri** | **1.73** | **22** | Pn | **Pn** | **11 28 28.2** | **+0.4** |
| **AKKU** | **Akkuyu-Mersin** | **1.76** | **249** | Pn | **Pn** | **11 28 28.2** | **+0.2** |
| **TEVE** | **Tevekalti-Mers** | **1.76** | **259** | Pn | **Pn** | **11 28 28.3** | **+0.2** |
| **YESY** | **Yesilyurt** | **1.77** | **304** | Pn | **Pn** | **11 28 28.6** | **+0.4** |
| **AKK1** | **Akkuyu-Mersin** | **1.77** | **249** | Pn | **Pn** | **11 28 28.3** | **+0.1** |
| **BSIR** | **Belisirma, Guz** | **1.79** | **325** | P | **Pn** | **11 28 29.6** | **+1.0** |
| BSIR | | | | S | **Sb** | **11 28 54.2** | **+0.8** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MMAI** | **Mount Meron Ar** | **3.78 182** | Pn | | **Pn** | **11 28 56.5** | **+0.7** |
| | 35nm,0.3s,baz=346,slow=14,SNR=89 | | | | | | | |
| MMAI | | | Sn | | **Sn** | **11 29 39.8** | **+0.2** |
| | 30nm,0.3s,baz=358,slow=36,SNR=4.8 | | | | | | | |
| MMAI | | | LR | | LR | 11 30 49.5 | | |
| | comp=Z,70nm,20.2s,slow=45 | | | | | | | |
| **KSHT** | **Keshet** | **3.82 177** | S | | **Sn** | **11 29 42.5** | **+2.1** |
| **KSHT** | **Keshet** | **3.82 177** | P | | **Pn** | **11 28 57.6** | **+1.3** |
| **BLGI** | **Bet Lehem HaGe** | **4.07 185** | S | | **Sn** | **11 29 48.8** | **+2.2** |
| **BLGI** | **Bet Lehem HaGe** | **4.07 185** | P | | **Pn** | **11 29 00.7** | **+0.9** |
| **OFRI** | **`Ofer** | **4.20 187** | S | | **Sn** | **11 29 51.9** | **+2.1** |
| **OFRI** | **`Ofer** | **4.20 187** | P | | **Pn** | **11 29 02.2** | **+0.6** |
| **MMLI** | **Mount Malkishu** | **4.36 182** | P | | **Pn** | **11 29 04.9** | **+1.1** |
| **MMLI** | **Mount Malkishu** | **4.36 182** | S | | **Sn** | **11 29 55.8** | **+2.1** |
| **MMLI** | **Mount Malkishu** | **4.36 182** | P | | **Pn** | **11 29 05.3** | **+1.5** |
| MMLI | | | S | | **Sn** | **11 29 53.3** | **-0.4** |
| **HMDT** | **Nahal Hemdat** | **4.54 181** | S | | **Sn** | **11 30 00.6** | **+2.4** |
| **HMDT** | **Nahal Hemdat** | **4.54 181** | P | | **Pn** | **11 29 07.3** | **+1.1** |
| **SLTI** | **Sal'it** | **4.57 186** | P | | **Pn** | **11 29 07.7** | **+1.0** |
| **SLTI** | **Sal'it** | **4.57 186** | S | | **Sn** | **11 30 01.4** | **+2.4** |
| **ASF** | **Jabal al Asfar** | **4.74 166** | Pn | | **Pn** | **11 29 11.8** | **+2.7** |
| | 0.7nm,0.3s,baz=360,slow=0.0,SNR=9.6 | | | | | | | |
| ASF | | | Lg | | Lg | 11 30 28.4 | | |
| | 4.9nm,0.3s,baz=139,slow=0.0,SNR=7.1 | | | | | | | |
| | 9.4nm,0.7s | | | | | | | |
| **DSI** | **Dead Sea** | **5.22 182** | P | | **Pn** | **11 29 16.4** | **+0.8** |
| **DSI** | **Dead Sea** | **5.22 182** | S | | **Sn** | **11 30 16.6** | **+1.6** |
| **YTIR** | **Yattir** | **5.44 184** | P | | **Pn** | **11 29 20.0** | **+1.3** |
| **YTIR** | **Yattir** | **5.44 184** | S | | **Sn** | **11 30 23.2** | **+2.8** |
| **MSBI** | **Mazada** | **5.48 182** | P | | **Pn** | **11 29 20.1** | **+1.0** |
| **ZFRI** | **Zfri** | **6.24 183** | P | | **Pn** | **11 29 30.6** | **+1.1** |
| **ZFRI** | **Zfri** | **6.24 183** | S | | **Sn** | **11 30 41.9** | **+1.9** |
| **PRNI** | **Paran** | **6.45 184** | S | | **Sn** | **11 30 47.8** | **+2.5** |
| **PRNI** | **Paran** | **6.45 184** | P | | **Pn** | **11 29 33.7** | **+1.2** |
| **KRMI** | **Paran Flat** | **6.71 186** | P | | **Pn** | **11 29 37.2** | **+1.2** |
| **KRMI** | **Paran Flat** | **6.71 186** | S | | **Sn** | **11 30 54.0** | **+2.4** |
| **HRFI** | **Mount Harif** | **6.76 184** | S | | **Sn** | **11 30 55.6** | **+2.6** |
| **HRFI** | **Mount Harif** | **6.76 184** | P | | **Pn** | **11 29 37.7** | **+0.9** |
| **MBRI** | **Mt Berech** | **7.01 185** | P | | **Pn** | **11 29 41.4** | **+1.1** |
| **MBRI** | **Mt Berech** | **7.01 185** | S | | **Sn** | **11 31 02.0** | **+2.8** |
| **EIL** | **Elat** | **7.13 184** | Pn | | **Pn** | **11 29 42.5** | **+0.6** |
| | 0.4nm,0.3s,baz=356,slow=15,SNR=2.7 | | | | | | | |
| EIL | | | Sn | | **Sn** | **11 31 04.2** | **+2.1** |
| | 0.5nm,0.3s,baz=15,slow=8.7,SNR=1.4 | | | | | | | |
| EIL | | | LR | | LR | 11 32 57.5 | | |
| | comp=Z,50nm,19.5s,baz=250,slow=42 | | | | | | | |
| | 4.2nm,0.7s | | | | | | | |
| **EIL** | **Elat** | **7.13 184** | P | | **Pn** | **11 29 42.8** | **+1.0** |
| **EIL** | **Elat** | **7.13 184** | S | | **Sn** | **11 31 04.7** | **+2.6** |
| **IDI** | **Anoyia** | **8.79 263** | Pn | | **Pn** | **11 30 04.0** | **-0.7** |
| | 3.0nm,0.3s,baz=80,slow=7.5,SNR=6.2 | | | | | | | |
| IDI | | | Sn | | **Sn** | **11 31 36.4** | **-6.6** |
| | 0.4nm,0.3s,baz=69,slow=2.4,SNR=2.4 | | | | | | | |
| **GERES** | **GERESS Array B** | **19.98 314** | P | | **P** | **11 32 29.9** | **+0.3** |
| | 0.3nm,0.3s,baz=122,slow=7.3,SNR=3.9 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **25.38 349** | P | | **P** | **11 33 23.9** | **-0.1** |
| | 2.4nm,0.7s,baz=157,slow=10,SNR=5.3 | | | | | | | |
| | 2.4nm,0.7s | | | | | | | |
| **FURI** | **Furi** | **27.92 173** | LR | | LR | 11 43 23.9 | | |
| | comp=Z,36nm,18.0s,baz=259,slow=33 | | | | | | | |
| **MKAR** | **Makanchi Array** | **35.75 59** | LR | | LR | 11 50 25.9 | | |
| | comp=Z,18nm,18.6s,baz=214,slow=38 | | | | | | | |
| **TIXI** | **Tiksi** | **56.55 22** | LR | | LR | 12 04 59.7 | | |
| | comp=Z,20nm,19.4s,baz=206,slow=39 | | | | | | | |
| **LBTB** | **Lobatse** | **62.20 190** | LR | | LR | 12 06 37.7 | | |
| | comp=Z,40nm,18.9s,baz=56,slow=37 | | | | | | | |
| **DAV** | **Davao City (W)** | **85.81 84** | LR | | LR | 12 21 34.4 | | |
| | comp=Z,88nm,21.1s,baz=200,slow=38 | | | | | | | |

*SJA **06** 11:46:29.0±0.5,23.2°S×66.6°W,h266km±44km,ML3.6, MW4.0*
*IDC **06** 11:46:31.3±0.9,23.2°S×66.4°W,h215km±10km,mb3.1/5, mbtmp3.8/11,Error ellipse: s-maj=15.8km s-min=12.9km az=134.0*
*NEIC **06** 11:46:32.0±1.2,23.2°S±0.0°×66.7°W±0.1°,h253km±9km, mb4.3/10,ML4.4(GUC),Error ellipse: s-maj=15.9km s-min=10.7km az=106.0*
*GUC **06** 11:46:32.7±0.5,23.30°S×66.96°W,h260km±8km,ML4.4*
*VAO **06** 11:46:35.4±1.1,23.03°S×66.46°W,h257km±7km,mb4.0*

**ISC 06 11:46:30.2±0.6,23°27'S±0.04'×66°67'W±0.04',h247km±6km, n103,σ1§52/118,mb3.8/8,10C,Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **AF01** | **San Pedro de A** | **1.43 283** | | | | **Pn** | **11 47 09.6** | **+1.6** |
| **AF01** | **San Pedro de A** | **1.43 283** | | *eP* | | **Pn** | **11 47 09.1** | **+1.1** |
| AF01 | | | | IAML | | | 11 47 43.6 | |
| | comp=Z,200nm,0.6s | | | | | | | |
| **AF01** | **San Pedro de A** | **1.43 283** | | ↑*iP* | | **Pn** | **11 47 09.6** | **+1.6** |
| **AF01** | **San Pedro de A** | **1.43 283** | | ↑*iP* | | **Pn** | **11 47 09.6** | **+1.6** |
| **YJA** | **Yavi** | **1.52** | **45** | *eP* | | **Pn** | **11 47 09.5** | **+0.5** |
| YJA | | | | *eS* | | **S** | **11 47 39.8** | **+0.5** |
| **AZAP** | **Zapla** | **1.75 123** | | *eP* | | **Pn** | **11 47 10.2** | **-0.2** |
| AZAP | | | | *eS* | | **S** | **11 47 39.8** | **-2.3** |
| AZAP | | | | IAML | | | 11 47 41.9 | |
| | comp=Z,164nm,0.6s | | | | | | | |
| **SLA** | **San Lorenzo** | **1.79 144** | | *eP* | | **Pn** | **11 47 11.6** | **+0.8** |
| SLA | | | | *eS* | | **S** | **11 47 43.1** | **+0.4** |
| SLA | | | | IAML | | | 11 47 44.8 | |
| | comp=Z,136nm,1.3s | | | | | | | |
| **ASTB** | **Santa Barbara** | **2.14 109** | | *eP* | | **Pn** | **11 47 14.1** | **+0.2** |
| **LVC** | **Limon Verde** | **2.17 287** | | | | **Pn** | **11 47 15.4** | **+1.0** |
| **LVC** | **Limon Verde** | **2.17 287** | | *eP* | | **Pn** | **11 47 15.6** | **+1.2** |
| LVC | | | | *eS* | | **S** | **11 47 49.1** | **-0.1** |
| LVC | | | | IAML | | | 11 47 51.7 | |
| | comp=Z,72nm,0.2s | | | | | | | |
| **LVC** | **Limon Verde** | **2.17 287** | | P | | **Pn** | **11 47 15.6** | **+1.2** |
| | comp=Z,189nm,0.4s,baz=123,slow=5.7,SNR=471 | | | | | | | |
| LVC | | | | S | | **S** | **11 47 48.5** | **-0.6** |
| | comp=Z,97nm,0.2s,baz=226,slow=22,SNR=20 | | | | | | | |
| **LVC** | **Limon Verde** | **2.17 287** | | *eP* | | **Pn** | **11 47 15.4** | **+1.0** |
| LVC | | | | *iS* | | **S** | **11 47 48.0** | **-1.1** |
| LVC | | | | IAML | | | 11 47 50.8 | |
| | comp=Z,942nm,0.1s | | | | | | | |
| **LVC** | **Limon Verde** | **2.17 287** | | *eP* | | **Pn** | **11 47 15.4** | **+1.0** |
| LVC | | | | ↑*iP* | | | 11 47 15.4 | |
| LVC | | | | *eS* | | **S** | **11 47 48.0** | **-1.1** |
| LVC | | | | IAML | | | 11 47 50.8 | |
| | comp=Z,903nm,0.2s | | | | | | | |
| **ALOL** | **LOMAS DE OLMED** | **2.52 103** | | *eP* | | **Pn** | **11 47 16.5** | **-1.0** |
| **PB09** | **IPOC Station P** | **2.80 301** | | | | **Pn** | **11 47 21.8** | **+1.2** |
| **FSA** | **Cafayete** | **2.90 168** | | *eP* | | **Pn** | **11 47 22.2** | **+0.7** |
| FSA | | | | *eS* | | **S** | **11 47 59.8** | **-2.4** |
| **GO02** | **Mina Guanaco** | **3.27 234** | | | | **Pn** | **11 47 26.9** | **+1.2** |
| **GO02** | **Mina Guanaco** | **3.27 234** | | *eP* | | **Pn** | **11 47 27.0** | **+1.2** |
| GO02 | | | | *eS* | | **S** | **11 48 09.0** | **-0.1** |
| **GO02** | **Mina Guanaco** | **3.27 234** | | ↑*iP* | | **Pn** | **11 47 27.0** | **+1.3** |
| GO02 | | | | *iS* | | **S** | **11 48 08.9** | **-0.7** |
| **GO02** | **Mina Guanaco** | **3.27 234** | | ↑*iP* | | **Pn** | **11 47 27.1** | **+1.3** |
| GO02 | | | | *eS* | | **S** | **11 48 08.9** | **-0.7** |
| **PB05** | **IPOC Station P** | **3.28 277** | | | | **Pn** | **11 47 26.3** | **+0.6** |
| **PB04** | **IPOC Station P** | **3.35 286** | | Pn | | **Pn** | **11 47 26.9** | **+0.4** |
| **PB04** | **IPOC Station P** | **3.35 286** | | *eP* | | **Pn** | **11 47 27.8** | **+1.3** |
| PB04 | | | | *eS* | | **S** | **11 48 10.2** | **-0.8** |
| **PB04** | **IPOC Station P** | **3.35 286** | | ↑*iP* | | **Pn** | **11 47 27.6** | **+1.1** |
| PB04 | | | | *iS* | | **S** | **11 48 08.6** | **-2.4** |
| **PB04** | **IPOC Station P** | **3.35 286** | | ↑*eP* | | **Pn** | **11 47 27.7** | **+1.1** |
| PB04 | | | | *eS* | | **S** | **11 48 09.3** | **-1.7** |
| **PB14** | **IPOC Station P** | **3.68 248** | | Pn | | **Pn** | **11 47 31.3** | **+0.9** |
| **PB14** | **IPOC Station P** | **3.68 248** | | *eP* | | **Pn** | **11 47 31.4** | **+1.0** |
| PB14 | | | | *eS* | | **S** | **11 48 16.5** | **-1.5** |
| **PB14** | **IPOC Station P** | **3.68 248** | | ↑*iP* | | **Pn** | **11 47 31.4** | **+1.0** |
| PB14 | | | | *eS* | | **S** | **11 48 15.9** | **-2.1** |
| **PB14** | **IPOC Station P** | **3.68 248** | | ↑*iP* | | **Pn** | **11 47 31.4** | **+1.0** |
| PB14 | | | | *eS* | | **S** | **11 48 16.1** | **-1.9** |
| **HMBC** | **Humberstone** | **4.22 314** | | | | **Pn** | **11 47 37.5** | **+0.8** |
| **HMBC** | **Humberstone** | **4.22 314** | | *eP* | | **Pn** | **11 47 36.9** | **+0.2** |
| HMBC | | | | *eS* | | **S** | **11 48 27.3** | **-2.2** |
| **HMBC** | **Humberstone** | **4.22 314** | | *eP* | | **Pn** | **11 47 36.6** | **-0.1** |
| HMBC | | | | *iS* | | **S** | **11 48 26.6** | **-2.8** |
| **HMBC** | **Humberstone** | **4.22 314** | | *eP* | | **Pn** | **11 47 36.9** | **+0.2** |
| **TA01** | **Diego Aracena** | **4.23 309** | | Pn | | **Pn** | **11 47 37.1** | **+0.4** |
| **TA01** | **Diego Aracena** | **4.23 309** | | *eP* | | **Pn** | **11 47 36.9** | **+0.2** |
| TA01 | | | | *eS* | | **S** | **11 48 27.6** | **-1.8** |
| TA01 | | | | IAML | | | 11 48 29.3 | |
| | comp=Z,119nm,0.3s | | | | | | | |
| **TA01** | **Diego Aracena** | **4.23 309** | | *eP* | | **Pn** | **11 47 36.7** | **+0.1** |
| TA01 | | | | *iS* | | **S** | **11 48 25.7** | **-3.6** |
| **TA01** | **Diego Aracena** | **4.23 309** | | *eP* | | **Pn** | **11 47 37.5** | **+0.8** |
| **GO01** | **Chusmiza** | **4.29 326** | | *eP* | | **Pn** | **11 47 39.4** | **+1.6** |
| GO01 | | | | *eS* | | **S** | **11 48 32.1** | **+0.7** |
| **GO01** | **Chusmiza** | **4.29 326** | | ↑*eP* | | **Pn** | **11 47 39.1** | **+1.3** |
| GO01 | | | | *iS* | | **S** | **11 48 30.4** | **-1.1** |
| **GO01** | **Chusmiza** | **4.29 326** | | *eP* | | **Pn** | **11 47 39.3** | **+1.4** |
| GO01 | | | | *eS* | | **S** | **11 48 31.5** | **0.0** |
| **AC06** | **Mina Casimiro** | **5.26 219** | | | | **Pn** | **11 47 49.2** | **+0.1** |
| **AC06** | **Mina Casimiro** | **5.26 219** | | *eP* | | **Pn** | **11 47 48.9** | **-0.2** |
| AC06 | | | | *iS* | | **S** | **11 48 48.3** | **-3.8** |
| **GO03** | **Copiap** | **5.38 216** | | *eP* | | **Pn** | **11 47 50.8** | **+0.2** |
| GO03 | | | | *eS* | | **S** | **11 48 52.3** | **-2.4** |
| **GO03** | **Copiap** | **5.38 216** | | *eP* | | **Pn** | **11 47 50.4** | **-0.2** |
| GO03 | | | | *iS* | | **S** | **11 48 51.1** | **-3.6** |
| **AC04** | **Llanos de Chal** | **6.32 218** | | Pn | | **Pn** | **11 48 01.7** | **-0.5** |
| **LCO** | **Las Campanas** | **6.77 212** | | | | **Pn** | **11 48 07.5** | **-0.6** |
| **LPAZ** | **La Paz** | **7.08 349** | | P | | **Pn** | **11 48 14.2** | **+1.6** |
| | comp=Z,2.2nm,0.4s,baz=174,slow=6.3,SNR=9.4 | | | | | | | |
| LPAZ | | | | S | | **S** | **11 49 34.2** | **-0.3** |
| | comp=Z,2.4nm,0.7s,baz=356,slow=14,SNR=1.9 | | | | | | | |
| **CO01** | **Juntas del Tor** | **7.35 204** | | Pn | | **Pn** | **11 48 17.0** | **+1.5** |
| **BBSD** | **Serra de San D** | **8.30** | **44** | *eP* | | **Pn** | **11 48 27.2** | **-0.2** |
| **CO03** | **El Pedregal** | **8.35 205** | | | | **Pn** | **11 48 27.6** | **-0.3** |
| **MURT** | **Porto Murtinho** | **8.53** | **81** | *eP* | | **Pn** | **11 48 31.4** | **+1.2** |
| **CO02** | **Combarbal** | **8.79 205** | | Pn | | **Pn** | **11 48 34.5** | **+0.9** |
| **SIV** | **San Ignacio** | **8.96** | **37** | P | | **Pn** | **11 48 35.5** | **-0.3** |
| | comp=Z,3.6nm,0.4s,baz=218,slow=11,SNR=27 | | | | | | | |
| SIV | | | | S | | **S** | **11 50 14.2** | **-2.9** |
| | comp=Z,1.0nm,0.5s,baz=204,slow=19,SNR=1.6 | | | | | | | |
| **CPUP** | **Villa Florida** | **9.01 112** | | P | | **Pn** | **11 48 36.6** | **+0.3** |
| | comp=Z,0.8nm,0.6s,baz=291,slow=12,SNR=1.4 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.53** | **44** | | | **P** | **11 48 57.0** | **-3.8** |
| **PTLB** | **Pontes e Lacer** | **10.53** | **44** | *eP* | | **P** | **11 48 57.7** | **-3.1** |
| **AQDB** | **Aquidauana** | **10.56** | **77** | *eP* | | **P** | **11 48 58.7** | **-2.3** |
| **BO02** | **Sierra Bellavi** | **12.03 196** | | | | **P** | 11 49 15.6 | -1.7 |
| **CRSM** | **Crissiumal (Br** | **12.16 113** | | *eP* | | **P** | 11 49 21.8 | +3.0 |
| **RODS** | **Rosario do Sul** | **12.43 127** | | *eP* | | **P** | 11 49 24.3 | +2.6 |
| **SALV** | **Santo Antonio** | **12.67** | **57** | *eP* | | **P** | **11 49 23.2** | **-1.4** |
| **PTGB** | **Pitanga** | **13.43** | **99** | *eP* | | **P** | 11 49 36.2 | +3.2 |
| **ALGR** | **Alto Alegre (B** | **13.44 117** | | *eP* | | **P** | 11 49 35.9 | +2.9 |
| **ITAB** | **Concordia** | **13.73 110** | | *eP* | | **P** | 11 49 39.2 | +3.0 |
| **CPSB** | **Cacapava Do Su** | **13.77 124** | | *eP* | | **P** | **11 49 38.6** | **+2.0** |
| **PLTB** | **Pedras Altas** | **14.34 129** | | | | **Pn** | **11 49 44.1** | **+1.6** |
| **PLTB** | **Pedras Altas** | **14.34 129** | | *eP* | | Pn | 11 49 47.1 | +4.5 |
| **SAML** | **Samuel** | **14.63** | **14** | P | | **Pn** | **11 49 47.8** | **+1.7** |
| **SAML** | **Samuel** | **14.63** | **14** | *eP* | | **Pn** | **11 49 47.9** | **+1.7** |
| **PDRB** | **Porto dos Gac** | **14.97** | **41** | *eP* | | **Pn** | **11 49 51.0** | **+0.7** |
| **TRQA** | **Tornquist** | **15.28 166** | | P | | **Pn** | **11 49 53.9** | **+0.1** |
| **ITRB** | **Iturama** | **15.59** | **80** | *eP* | | **Pn** | **11 49 59.4** | **+1.7** |
| **FRTB** | **Fartura** | **15.71** | **94** | *eP* | | **Pn** | **11 50 00.7** | **+1.5** |
| **ARAG** | **Araguaiana, MT** | **15.89** | **64** | *eP* | | **Pn** | **11 50 02.8** | **+1.5** |
| **PLCA** | **Paso Flores** | **17.72 190** | | P | | **Pn** | **11 50 22.0** | **-0.6** |
| PLCA | | | | IAmb | | IAmb | 11 50 54.4 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **PLCA** | **Paso Flores** | **17.72 190** | | P | | **Pn** | **11 50 23.9** | **+1.3** |
| | comp=Z,1.3nm,0.4s,baz=2.4,slow=10,SNR=7.2 | | | | | | | |
| **IPMB** | **Ipameri, GO** | **18.05** | **76** | *eP* | | **Pn** | **11 50 25.8** | **-0.9** |
| **VAO** | **Valinhos** | **18.12** | **93** | P | | **Pn** | **11 50 26.5** | **-1.1** |
| **VAO** | **Valinhos** | **18.12** | **93** | *eP* | | **Pn** | **11 50 26.2** | **-1.3** |
| **SNDB** | **Serra Nova Dou** | **18.44** | **55** | *eP* | | **Pn** | **11 50 29.4** | **-1.9** |
| **BDFB** | **Brasilia** | **19.14** | **70** | P | | **Pn** | **11 50 37.8** | **-1.8** |
| BDFB | | | | IAmb | | IAmb | 11 50 38.9 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **BDFB** | **Brasilia** | **19.14** | **70** | P | | **Pn** | **11 50 37.3** | **-2.3** |
| | comp=Z,14nm,0.7s,baz=236,slow=11,SNR=19 | | | | | | | |
| **PARB** | **Paraibuna** | **19.33** | **94** | *eP* | | **Pn** | **11 50 39.5** | **-2.3** |
| **PMNB** | **Patos De Minas** | **19.47** | **80** | *eP* | | **Pn** | **11 50 41.5** | **-2.0** |
| **TEFE** | **Tefe** | **19.74** | **6** | *eP* | | **Pn** | **11 50 44.0** | **-2.5** |
| **ITTB** | **Itaituba** | **21.56** | **31** | *eP* | | **P** | **11 51 01.2** | **+0.6** |
| **DIAM** | **Diamantina, MG** | **22.05** | **81** | *eP* | | **P** | **11 51 07.6** | **+2.4** |
| **JANB** | **Januaria** | **22.62** | **73** | *eP* | | **P** | **11 51 11.6** | **+1.2** |
| **SMTB** | **Santa Maria do** | **23.22** | **55** | *eP* | | **P** | **11 51 18.0** | **+2.2** |
| **SDBA** | **SAO DESIDERIO** | **23.33** | **66** | *eP* | | **P** | **11 51 18.0** | **+1.2** |
| **GUA01** | **Guaratinga, BA** | **26.09** | **80** | *eP* | | **P** | **11 51 43.6** | **+2.0** |
| **MG01** | **Puerto William** | **31.63 181** | | P | | **P** | **11 52 30.4** | **+0.3** |
| **RCBR** | **Riachuelo** | **34.33** | **64** | P | | P | 11 52 56.0 | +2.0 |
| RCBR | | | | IAmb | | IAmb | 11 53 17.9 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **MIAR** | **Mount Ida** | **62.93 335** | | P | | **P** | **11 56 31.2** | **+0.7** |
| MIAR | | | | IAmb | | IAmb | 11 57 05.8 | |
| | comp=Z,9.1nm,1.3s | | | | | | | |
| **TXAR** | **Lajitas Array** | **63.27 324** | | P | | P | 11 56 37.8 | +4.8 |
| | comp=Z,0.1nm,0.5s,baz=138,slow=9.6,SNR=2.2 | | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **66.93 180** | | P | | **P** | **11 56 55.6** | **-0.5** |
| **QSPA** | **South Pole Qui** | **66.93 180** | | P | | P | 11 57 00.8 | +4.8 |
| | comp=Z,0.5nm,0.5s,baz=90,slow=5.1,SNR=6.3 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **76.02** | **69** | P | | P | 11 57 52.8 | +1.9 |
| TOA0 | | | | IAmb | | IAmb | 11 58 01.5 | |
| | comp=Z,6.8nm,1.4s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.02** | **69** | P | | P | 11 57 53.2 | +2.3 |
| TORD | | | | IAmb | | IAmb | 11 58 01.4 | |
| | comp=Z,6.9nm,1.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.02** | **69** | P | | P | 11 57 53.0 | +2.2 |
| | comp=Z,1.1nm,0.4s,baz=264,slow=5.6,SNR=24 | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **76.68 329** | | P | | P | 11 57 59.3 | +5.0 |
| | comp=Z,0.1nm,0.3s,baz=136,slow=11,SNR=1.8 | | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.66** | **43** | P | | P | 11 58 45.3 | +4.0 |
| | comp=Z,0.2nm,0.3s,baz=224,slow=5.4,SNR=2.0 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.77** | **39** | PKPbc | | **PKiKP** | **12 05 44.5** | **+1.0** |
| | comp=Z,1.9nm,0.8s,baz=321,slow=3.4,SNR=16 | | | | | | | |

*IDC **06** 12:06:23.4±0.5, 11°.30S×118°.23E,h0km,mb4.6/17, mbtmp4.6/19,ML4.8/2,MS3.6/27,Error ellipse: s-maj=24.4km s-min=11.9km az=76.0*
*NEIC **06** 12:06:25.2±2.6, 11°.38S±0°.07×118°.21E±0°.07,h10km±1km, mb4.9/54,Error ellipse: s-maj=12.5km s-min=10.4km az=46.0*
*DJA **06** 12:06:26.9±1.0,12°S±2°×11°8E±°,h20km±9km,M5.3/58, mB5.7/31,mb5.4/58,MLv5.7/19,Mw(mB)5.2/31, MwMwp7.5/1,Mwp7.2/1*

**ISC 06 12:06:25.0±0.3,11°.43S±0°.04×118°.20E±0°.05,h10km,n232, σ1§69/214,mb4.9/58,MS3.6/29,3C,South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **PLAI** | **Plampang** | **2.62 351** | | P | | **Pn** | **12 07 09.4** | **+2.0** |
| **BASI** | **Baing, Sumba** | **2.63** | **63** | P | | **Pn** | **12 07 09.3** | **+1.7** |
| **TWSI** | **Taliwang, Sumb** | **2.97 334** | | P | | **Pn** | **12 07 14.1** | **+1.8** |
| **DNP** | **Denpasar** | **4.01 313** | | P | | **Pn** | **12 07 28.5** | **+1.9** |
| **SRBI** | **Singaraja** | **4.44 318** | | P | | **Pn** | **12 07 34.9** | **+2.5** |
| **MMRI** | **Maumere** | **4.85** | **55** | P | | **Pn** | **12 07 39.8** | **+1.6** |
| **MMRI** | **Maumere** | **4.85** | **55** | Pn | | **Pn** | **12 07 39.4** | **+1.2** |
| **MMRI** | **Maumere** | **4.85** | **55** | P | | **Pn** | **12 07 39.4** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **4.95 306** | | P | | **Pn** | **12 07 39.3** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **4.95 306** | | Pn | | **Pn** | **12 07 39.5** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **4.95 306** | | P | | **Pn** | **12 07 39.5** | **0.0** |
| **BATI** | **Baumata** | **5.51** | **78** | P | | **Pn** | **12 07 48.8** | **+1.6** |
| **BSSI** | **Bau Bau, Buton** | **5.72** | **24** | P | | **Pn** | **12 07 52.6** | **+2.5** |
| **SOEI** | **Soe** | **6.20** | **75** | P | | **Pn** | **12 07 59.4** | **+2.6** |
| **SOEI** | **Soe** | **6.20** | **75** | Pn | | **Pn** | **12 07 59.2** | **+2.4** |
| **SOEI** | **Soe** | **6.20** | **75** | P | | **Pn** | **12 07 58.6** | **+1.8** |
| **KAPI** | **Kappang** | **6.56** | **14** | P | | **Pn** | **12 08 03.9** | **+2.3** |
| **KAPI** | **Kappang** | **6.56** | **14** | Pn | | **Pn** | **12 08 04.8** | **+3.2** |
| | 20nm,0.3s,baz=191,slow=9.1,SNR=30 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **12 09 12.4** | **-4.1** |
| | 77nm,0.3s,baz=220,slow=12,SNR=15 | | | | | | | |
| **PWJI** | **Pagerwojo** | **7.15 298** | | P | | **Pn** | **12 08 09.3** | **-0.5** |
| **BNSI** | **Bone** | **7.24** | **15** | P | | **Pn** | **12 08 15.5** | **+4.6** |
| | 239nm,0.9s,2μm1.7nm | | | | | | | |
| **BBSI** | **Bau Bau** | **7.32** | **37** | P | | **Pn** | **12 08 13.1** | **+1.0** |
| | 99nm,0.7s,2μm | | | | | | | |
| **SPSI** | **Sidrap Palu** | **7.58** | **12** | P | | **Pn** | **12 08 19.8** | **+4.2** |
| | 124nm,0.7s,0.8nm | | | | | | | |
| **NGJI** | **Ngawi** | **7.77 301** | | P | | **Pn** | **12 08 22.2** | **+3.9** |
| | 375nm,0.8s,1.4nm | | | | | | | |
| **UGM** | **Wanagama** | **8.33 294** | | P | | **Pn** | **12 08 26.8** | **+0.8** |
| **UGM** | **Wanagama** | **8.33 294** | | Pn | | **Pn** | **12 08 27.3** | **+1.3** |
| **UGM** | **Wanagama** | **8.33 294** | | P | | **Pn** | **12 08 25.6** | **-0.4** |
| **YOGI** | **Yogyakarta** | **8.58 294** | | P | | **Pn** | **12 08 29.8** | **+0.4** |
| | 231nm,1.1s | | | | | | | |
| **SMRI** | **Semarang** | **8.80 299** | | P | | **Pn** | **12 08 34.7** | **+2.2** |
| **SMRI** | **Semarang** | **8.80 299** | | | | **Pn** | **12 08 33.6** | **+1.1** |
| **SMRI** | **Semarang** | **8.80 299** | | P | | **Pn** | **12 08 34.1** | **+1.6** |
| | 294nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.79 134** | | Pn | | **Pn** | **12 08 46.5** | **+0.6** |
| **MBWA** | **Marble Bar** | **9.79 172** | | P | | **Pn** | **12 08 45.3** | **-0.6** |
| **MBWA** | **Marble Bar** | **9.79 172** | | Pn | | **Pn** | **12 08 45.4** | **-0.5** |
| **MBWA** | **Marble Bar** | **9.79 172** | | P | | **Pn** | **12 08 45.6** | **-0.4** |
| | 120nm,0.5s,SNR=7.1 | | | | | | | |
| **KPJI** | **Karang Pucung** | **10.01 293** | | P | | **Pn** | **12 08 48.9** | **-0.1** |
| | 252nm,0.5s,4μm | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **10.21 171** | | P | | **Pn** | **12 08 50.9** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **10.21 171** | | Pn | | **Pn** | **12 08 51.8** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **10.21 171** | | P | | **Pn** | **12 08 51.4** | **-0.4** |
| | 84nm,0.5s,SNR=5.8 | | | | | | | |
| **CMJI** | **Cimerak** | **10.27 290** | | P | | **Pn** | **12 08 51.0** | **-1.6** |
| **KNRA** | **Kununurra** | **11.11 114** | | Pn | | **Pn** | **12 09 04.6** | **+0.5** |
| **KNRA** | **Kununurra** | **11.11 114** | | P | | **Pn** | **12 09 04.3** | **+0.3** |
| | 58nm,0.5s,SNR=5.7 | | | | | | | |
| **BBJI** | **Bungbulang** | **11.12 290** | | P | | **Pn** | **12 09 03.7** | **-0.7** |
| **LUWI** | **Luwuk** | **11.28** | **24** | P | | **Pn** | **12 09 07.3** | **+0.9** |
| **LUWI** | **Luwuk** | **11.28** | **24** | P | | **Pn** | **12 09 09.9** | **+3.5** |
| | 57nm,0.8s,3μm | | | | | | | |
| **CNJI** | **Cibinong** | **11.66 290** | | P | | **Pn** | **12 09 10.4** | **-1.2** |
| | 80nm,0.6s,2μm | | | | | | | |
| **GIRL** | **Giralia** | **11.78 198** | | P | | **Pn** | **12 09 13.3** | **+0.1** |
| **GIRL** | **Giralia** | **11.78 198** | | Pn | | **Pn** | **12 09 14.5** | **+1.4** |
| **NLAI** | **Namlea** | **12.00** | **48** | P | | Pn | 12 09 22.4 | +6.1 |
| | 149nm,1.1s,1μm | | | | | | | |
| **DBJI** | **Dramaga** | **12.30 292** | | P | | **Pn** | **12 09 21.6** | **+1.2** |
| | 97nm,0.5s | | | | | | | |
| **SKJI** | **Sukabumi** | **12.30 290** | | P | | **Pn** | **12 09 21.5** | **+1.1** |
| **XMIS** | **Christmas Isla** | **12.35 273** | | P | | Pn | **12 09 19.8** | **-1.3** |
| **XMIS** | **Christmas Isla** | **12.35 273** | | | | **Pn** | **12 09 19.4** | **-1.7** |
| **MRSI** | **Marisa** | **12.40** | **18** | P | | **Pn** | **12 09 24.4** | **+2.6** |
| | 52nm,0.9s | | | | | | | |
| **DRS** | **Darwin Rock St** | **12.47** | **96** | P | | **Pn** | **12 09 22.3** | **-0.4** |
| **MTN** | **Manton Dam** | **12.73** | **98** | P | | **Pn** | **12 09 26.4** | **+0.2** |
| **MTN** | **Manton Dam** | **12.73** | **98** | Pn | | **Pn** | **12 09 26.2** | **-0.1** |
| **MTN** | **Manton Dam** | **12.73** | **98** | P | | **Pn** | **12 09 25.8** | **-0.5** |
| | 155nm,0.5s,SNR=19 | | | | | | | |
| **GTOI** | **Gorontalo** | **12.91** | **22** | P | | **Pn** | **12 09 32.7** | **+4.0** |
| **MSAI** | **Masohi** | **13.33** | **54** | P | | **Pn** | **12 09 36.8** | **+2.

TOO IAmb IAmb 12 13 31.1
comp=Z,32nm,1.2s
**ARMA Armidale 36.30 126 P P 12 13 28.1 -1.0**
ARMA IAmb IAmb 12 14 45.4
comp=Z,46nm,1.7s
**GUMO Guam 36.30 48 LR LR** 12 30 10.0
comp=Z,20nm,18.3s,baz=241,slow=39
**CAN Canberra 36.68 135 P P 12 13 32.9 +0.6**
**JOW Kunigami 39.27 14 LR LR** 12 30 03.0
comp=Z,86nm,21.2s,baz=266,slow=36
**GYA Guiyang 39.29 344 P P 12 13 57.4 +3.0**
GYA pmax pmax
comp=Z,12nm,1.0s
**PZH PanZhiHua 40.96 337 P P 12 14 10.9 +2.6**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,110nm,4.3s
**HNR Honiara 41.09 91 LR LR** 12 32 15.3
comp=Z,1µm,19.9s,baz=250,slow=38
**PALK Pallekele 41.67 295 LR LR** 12 33 08.7
comp=Z,97nm,19.1s,baz=220,slow=38
**NJ2 Nanjing 43.24 1 eP P 12 14 28.7 +2.1**
NJ2 sP **sP 12 14 31.6 +3.3**
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
**SHL Shillong 44.82 325 P P 12 14 38.3 -1.4**
SHL IAmb IAmb 12 14 39.9
comp=Z,15nm,0.7s
**XAN Xi'an 46.07 349 ⇑P P 12 14 48.3 -1.0**
XAN pP pwP 12 14 55.2 -3.3
XAN pmax pmax
comp=Z,16nm,0.9s
**DZM Mont Dzumac 47.22 109** eLR LR 12 28 17.6
comp=Z,176nm,23.4s
**JHJ Hachijo jima 2 48.85 24 LR LR** 12 34 26.3
comp=Z,42nm,21.8s,baz=212,slow=34
**KSRS Korea Array 49.47 10 P P 12 15 14.5 -1.1**
comp=Z,4.2nm,0.8s,baz=186,slow=8.7,SNR=13
KSRS LR LR 12 35 46.5
comp=Z,39nm,21.1s,baz=190,slow=36
comp=Z,4.2nm,0.8s
**MJAR Matsushiro Arr 51.31 21 P P 12 15 27.1 -2.5**
comp=Z,6.1nm,0.8s,baz=190,slow=7.2,SNR=4.0
MJAR LR LR 12 35 52.2
comp=Z,37nm,21.6s,baz=179,slow=35
comp=Z,6.1nm,0.8s
**BTO Baotou 52.32 352** eP P 12 15 41.9 +4.8
BTO pP pwP 12 15 49.4 +3.0
BTO sP sP 12 15 52.2 +13
BTO PP PP 12 17 51.9 +16
BTO S **S 12 23 10.2 +7.5**
**BTO Baotou 52.32 352** SS **SKiKP 12 26 50.8 -10**
BTO pmax pmax
comp=Z,18nm,0.6s
BTO pmax pmax
comp=Z,100nm,5.4s
BTO LR LR
comp=N,220nm,13.2s
BTO LR LR
comp=E,210nm,11.8s
BTO LR LR
comp=Z,140nm,5.7s
**HHC Hu-ho-hao-te 52.38 354** eP **P 12 15 39.4 +1.9**
HHC pmax pmax
comp=Z,15nm,0.5s
HHC pmax pmax
comp=Z,100nm,5.0s
**GTA Gaotai 53.40 342** eP P 12 15 52.5 +7.4
GTA sP pwP 12 16 00.9 +6.5
GTA pmax pmax
comp=Z,11nm,0.9s
**CASY Casey 55.03 184 P P 12 15 55.6 -0.9**
CASY IAmb IAmb 12 15 57.2
comp=Z,8.3nm,0.8s
**MDJ Mudanjiang 56.73 10 P P 12 16 07.7 -1.3**
MDJ pmax pmax
comp=Z,13nm,0.8s
**USA0B Ussuriysk Arra 56.77 12 P P 12 16 07.6 -1.6**
USA0B IAmb IAmb 12 16 09.1
comp=Z,41nm,1.8s
**USRK Ussuriysk Ar. 56.77 12 P P 12 16 07.5 -1.7**
**USRK Ussuriysk Ar. 56.77 12 P P 12 16 08.2 -1.0**
comp=Z,6.4nm,0.7s,baz=191,slow=7.1,SNR=18
USRK LR LR 12 40 00.4
comp=Z,28nm,20.8s,baz=187,slow=36
comp=Z,6.4nm,0.7s
**ASAJ Asahikawa 59.57 20 LR LR** 12 43 41.1
comp=Z,22nm,19.4s,baz=191,slow=38
**ULN Ulaanbaatar 59.86 351 P P 12 16 29.8 -1.2**
ULN IAmb IAmb 12 16 38.6
comp=Z,4.0nm,0.7s
**SONM Songino Array 59.93 351 P P 12 16 30.8 -0.6**
SONM IAmb IAmb 12 16 39.0
comp=Z,3.9nm,0.8s
**SONM Songino Array 59.93 351 P P 12 16 30.8 -0.6**
comp=Z,3.1nm,0.7s,baz=168,slow=9.0,SNR=14
SONM LR LR 12 45 46.2
comp=Z,43nm,18.6s,baz=176,slow=40
comp=Z,3.1nm,0.7s
**KLR Kul'dur 61.57 10 LR LR** 12 44 57.2
comp=Z,23nm,19.5s,baz=222,slow=38
**HEH HeiHe 61.95 7 eP P 12 16 43.2 -1.7**
HEH pmax pmax
comp=Z,8.0nm,0.9s
**KSH Kashi 64.10 325 P P 12 16 59.4 -0.2**
KSH sP pwP 12 17 07.0 -2.1
KSH pmax pmax
comp=Z,14nm,0.7s
**SHLS Shalkode 64.82 330** eP **P 12 17 01.5 -2.8**
comp=Z,3.9nm,0.8s,baz=330
**UZB Uzynbulak 65.03 329** eP **P 12 17 04.1 -1.6**
comp=Z,5.5nm,0.8s,baz=329
**SATY Saty 65.28 329** eP **P 12 17 06.1 -1.2**
comp=Z,4.3nm,0.8s,baz=329
**NRN Naryn 65.39 326 P P 12 17 07.6 -0.8**
NRN IAmb IAmb 12 17 30.0
comp=Z,11nm,1.1s
**KPKS Kokpek 65.43 329** eP **P 12 17 06.9 -1.3**
comp=Z,7.1nm,0.9s,baz=329
**ZSN Zaisan 65.71 336** eP **P 12 17 08.0 -1.8**
baz=336
**MDOK Medeo 66.05 328** eP **P 12 17 10.5 -1.8**
baz=328
**AAA Alma-Ata 66.15 328** eP **P 12 17 11.7 -1.2**
baz=328
**BOOM Boomskoye usch 66.16 327 P P 12 17 12.5 -0.5**
BOOM IAmb IAmb 12 17 34.1
comp=Z,13nm,0.9s
**MK31 Makanchi Array 66.26 334 P P 12 17 12.5 -1.0**
MK31 IAmb IAmb 12 17 21.3
comp=Z,6.7nm,0.7s
**MKAR Makanchi Array 66.26 334 P P 12 17 12.6 -0.8**
**MKAR Makanchi Array 66.26 334 P P 12 17 12.9 -0.5**
comp=Z,5.1nm,0.4s,baz=147,slow=7.0,SNR=83
MKAR LR LR 12 47 19.2
comp=Z,33nm,21.6s,baz=160,slow=37
comp=Z,5.1nm,0.4s
**MAKZ Makanchi 66.41 334 P P 12 17 12.7 -1.7**
MAKZ IAmb IAmb 12 17 22.8
comp=Z,3.6nm,0.8s
**CHKK Chushkaly 66.57 329** eP **P 12 17 14.3 -1.2**
baz=329
**TDK Taldyqorghan 66.69 330** eP **P 12 17 14.8 -1.3**
comp=Z,7.8nm,0.6s,baz=330
**MAW Mawson 66.70 200 P P 12 17 16.0 +0.2**
comp=Z,3.2nm,0.6s,baz=355,slow=5.9,SNR=4.3
MAW LR LR 12 41 25.2
comp=Z,80nm,21.7s,baz=57,slow=32
comp=Z,3.2nm,0.6s
**KUU Kurty 66.93 328** eP **P 12 17 16.6 -1.1**
comp=Z,8.0nm,0.6s,baz=328
**AAK Ala-Archa 67.04 326 P P 12 17 17.7 -0.9**
AAK IAmb IAmb 12 17 44.8
comp=Z,13nm,0.8s
**GAR Garm 67.11 321 P P 12 17 18.4 -0.8**
**SGDS Sogindy 67.52 327** eP **P 12 17 20.3 -1.3**
baz=327
**CHGR Chuyangaron 67.62 320 P P 12 17 21.3 -1.1**
**WSAR Wadi Sarin 67.69 301 P P 12 17 22.8 -0.2**
comp=Z,4.0nm,0.6s,baz=174,slow=11,SNR=2.5
WSAR LR LR 12 48 22.0
comp=Z,57nm,18.8s,baz=182,slow=37
comp=Z,4.0nm,0.6s
**SIMJ Simiganj 67.72 320 P P 12 17 21.6 -1.4**
SIMJ IAmb IAmb 12 17 40.2
comp=Z,13nm,1.4s

**BTLS Baital 68.91 328** eP **P 12 17 29.1 -1.1**
baz=328
**VNDA Vanda 69.73 171 P P 12 17 35.6 +0.9**
VNDA IAmb IAmb 12 17 36.7
comp=Z,5.5nm,1.0s
**VNDA Vanda 69.73 171 P P 12 17 35.3 +0.5**
comp=Z,4.1nm,1.0s,baz=311,slow=5.2,SNR=10.0
VNDA LR LR 12 45 26.6
comp=Z,61nm,21.4s,baz=321,slow=34
comp=Z,4.1nm,1.0s
**BRLS Borolday 69.89 324** eP **P 12 17 34.2 -2.1**
baz=324
**SBA Scott Base 70.74 170 P P 12 17 42.3 +1.3**
**KURBB Kurchatov Arra 70.80 334 P P 12 17 40.8 -0.8**
comp=Z,2.5nm,0.6s,baz=145,slow=6.0,SNR=18
comp=Z,2.5nm,0.6s
**KURK Kurchatov 70.83 335 P P 12 17 40.8 -1.1**
KURK IAmb IAmb 12 17 49.8
comp=Z,9.3nm,0.8s
**ZAA0 Zalesovo Array 71.03 340 P P 12 17 41.5 -1.5**
ZAA0 IAmb IAmb 12 18 03.8
comp=Z,6.3nm,0.8s
**ZALV Zalesovo Beam 71.03 340 P P 12 17 41.4 -1.5**
comp=Z,5.5nm,0.5s,baz=150,slow=5.2,SNR=25
comp=Z,5.5nm,0.5s
**YAK Yakutsk 73.78 6 LR LR** 12 55 35.5
comp=Z,20nm,18.1s,baz=203,slow=40
**MA2 Magadan 75.46 16 LR LR** 12 55 01.3
comp=Z,10nm,18.1s,baz=190,slow=39
**QSPA South Pole Qui 78.58 180 P P 12 18 26.8 -0.1**
QSPA IAmb IAmb 12 18 28.3
comp=Z,9.9nm,1.2s
**QSPA South Pole Qui 78.58 180 P P 12 18 26.6 -0.2**
comp=Z,5.5nm,1.0s,baz=296,slow=1.0,SNR=16
QSPA LR LR 12 51 06.7
comp=Z,65nm,20.7s,baz=320,slow=34
comp=Z,5.5nm,1.0s
**RAYN Ar Rayn 79.07 297 P P 12 18 29.4 -0.7**
RAYN IAmb IAmb 12 18 30.6
comp=Z,5.4nm,0.9s
**ABKAR Akbulak array 79.09 325 P P 12 18 29.1 -0.5**
ABKAR IAmb IAmb 12 18 38.9
comp=Z,10nm,1.2s
**ABKAR Akbulak array 79.09 325 P P 12 18 28.8 -0.9**
**KIBK Kibwezi 79.89 270 P P 12 18 33.9 -1.0**
**KMBO Kilima Mbogo 80.90 271 P P 12 18 40.2 -0.4**
KMBO IAmb IAmb 12 18 43.0
comp=Z,6.4nm,1.0s
**FURI Furi 81.60 281 LR LR** 12 51 49.7
comp=Z,54nm,18.6s,baz=115,slow=33
**POGA Pongola 81.76 244 P P 12 18 45.1 +0.5**
**LODK Lodwar 83.66 275 P P 12 18 53.9 -1.0**
**TROLL Troll, Antarti 86.84 196 ⇑P P 12 19 10.6 +0.9**
comp=Z,122nm,0.7s
**LSZ Lusaka 87.05 255 P P 12 19 12.3 +0.5**
**BOSA Boshof 87.16 242 P P 12 19 12.6 +0.5**
**BOSA Boshof 87.16 242 P P 12 19 12.6 +0.5**
comp=Z,10nm,0.6s,baz=109,slow=3.5,SNR=28
comp=Z,10nm,0.6s
**MBAR Mbarara 87.39 270 P P 12 19 14.1 +0.5**
MBAR IAmb IAmb 12 19 15.7
comp=Z,7.1nm,0.8s
**BELG Belogornoye 87.46 325 LR LR** 13 03 45.2
comp=Z,24nm,18.6s,baz=90,slow=39
**LBTB Lobatse 87.57 245 P P 12 19 14.4 +0.3**
**LBTB Lobatse 87.57 245 LR LR** 12 51 35.3
comp=Z,89nm,20.3s,baz=109,slow=31
**SNAA Sanae 88.46 196 P P 12 19 17.2 -0.2**
**SNAA Sanae 88.46 196 ⇑P P 12 19 18.0 +0.6**
comp=Z,90nm,1.1s
**SNAA Sanae 88.46 196 P P 12 19 18.0 +0.6**
comp=Z,3.3nm,0.9s,baz=153,slow=8.5,SNR=6.0
SNAA LR LR 12 56 29.1
comp=Z,138nm,19.1s,baz=117,slow=34
comp=Z,3.3nm,0.9s
**PPT2 Papeete2 88.69 108** eLR LR 12 47 29.0
comp=Z,38nm,22.8s
**BELA Belgrano 2 89.54 186 P P 12 19 22.4 +0.1**
BELA IAmb IAmb 12 19 23.6
comp=Z,11nm,1.2s
**EIL Elat 89.81 300 LR LR** 13 02 24.7
comp=Z,31nm,18.6s,baz=63,slow=37
**BRTR Keskin Array B 93.07 310 P P 12 19 39.2 -0.3**
comp=Z,1.0nm,0.8s,baz=125,slow=6.2,SNR=4.6
comp=Z,1.0nm,0.8s
**BR106 Keskin Array S 93.09 310 P P 12 19 39.2 -0.4**
comp=Z,1.8nm,1.2s
**BZK Bozkurt 93.28 312 P P 12 19 40.0 -0.2**
**TORD Torodi Ar. Bea 118.08 279 PKP PKPdf 12 25 12.8 -0.5**
comp=Z,0.4nm,0.5s,baz=29,slow=1.5,SNR=4.8
**NVAR Mina Array Bea 123.15 51 PKP PKPdf 12 25 21.1 -1.6**
comp=Z,0.1nm,0.3s,baz=258,slow=3.5,SNR=2.8
**TXAR Lajitas Array 137.18 59 PKP PKPdf 12 25 48.3 -1.1**
comp=Z,0.2nm,0.6s,baz=274,slow=1.4,SNR=2.0
**CPUP Villa Florida 142.22 187 PKhKP PKPpre** 12 25 54.2
comp=Z,1.0nm,0.5s,baz=172,slow=4.2,SNR=3.4
**BDFB Brasilia 149.84 207 PKPbc PKiKP 12 26 17.6 0.0**
comp=Z,7.2nm,0.5s,baz=161,slow=4.8,SNR=12
**LPAZ La Paz 151.76 167 PKPbc PKiKP 12 26 22.9 +0.7**
comp=Z,4.2nm,0.9s,baz=116,slow=1.8,SNR=15

*IDC **06** 12:20:55.4±1.2, 13°.51N×57°.03E, h0km, mb3.6/7, mbtmp3.6/7, MS3.3/6, Error ellipse: s-maj=35.0km s-min=31.3km az=167.0*
**ISC 06 12:20:56.9±1.1, 13°.5N±0°.3×57°.0E±0°.2, h10km, n18, σ0s76/9, mb3.6/7, MS3.1/5, Socotra region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WSAR** | **Wadi Sarin** | **9.78** | **9** | LR | | LR | LR | 12 26 39.6 | |
| | comp=Z,306nm,19.7s,baz=225,slow=35 | | | | | | | | |
| **GNI** | **Garni** | **28.62** | **340** | LR | | LR | LR | 12 40 21.8 | |
| | comp=Z,36nm,20.9s,baz=178,slow=41 | | | | | | | | |
| **MBAR** | **Mbarara** | **29.57** | **244** | LR | | LR | LR | 12 37 22.1 | |
| | comp=Z,93nm,20.6s,baz=135,slow=33 | | | | | | | | |
| **KBZ** | **Khabaz** | **32.44** | **341** | LR | | LR | LR | 12 42 21.9 | |
| | comp=Z,25nm,21.4s,baz=187,slow=40 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **33.22** | **326** | LR | | LR | LR | 12 42 46.9 | |
| | comp=Z,38nm,18.5s,baz=134,slow=39 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **36.81** | **1** | LR | | LR | LR | 12 45 11.3 | |
| | comp=Z,36nm,18.7s,baz=156,slow=40 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.37** | **28** | P | | **P** | **P** | **12 28 26.5** | **-0.1** |
| | 0.6nm,0.7s,baz=222,slow=8.2,SNR=4.3 | | | | | | | | |
| | 0.6nm,0.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.55** | **77** | P | | **P** | **P** | **12 28 37.3** | **+0.5** |
| | 1.1nm,1.0s,baz=266,slow=7.1,SNR=4.2 | | | | | | | | |
| | 1.1nm,1.0s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **40.93** | **21** | P | | **P** | **P** | **12 28 39.2** | **-0.3** |
| | 0.5nm,0.7s,baz=216,slow=8.1,SNR=5.0 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.90** | **23** | P | | **P** | **P** | **12 29 19.0** | **-0.4** |
| | 0.3nm,0.3s,baz=212,slow=5.1,SNR=2.1 | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **53.71** | **276** | P | | **P** | **P** | **12 30 19.6** | **-0.1** |
| | 0.7nm,1.1s,baz=61,slow=7.9,SNR=1.9 | | | | | | | | |
| | 0.7nm,1.1s | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **72.45** | **134** | T | | T | T | 13 51 24.3 | |
| | baz=303,slow=75,SNR=20 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **72.45** | **134** | T | | T | T | 13 51 24.9 | |
| | baz=303,slow=75,SNR=22 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **72.47** | **134** | T | | T | T | 13 51 25.7 | |
| | baz=303,slow=75,SNR=26 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.01** | **112** | P | | **P** | **P** | **12 33 21.6** | **-1.4** |
| | 0.5nm,0.7s,baz=296,slow=4.1,SNR=2.6 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **ASAR** | **Alice Springs** | **83.73** | **116** | P | | **P** | **P** | **12 33 27.1** | **+0.4** |
| | 0.3nm,0.7s,baz=296,slow=4.8,SNR=2.4 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **128.13** | **355** | PKP | | **PKiKP** | | **12 40 05.7** | **+0.9** |
| | comp=Z,0.5nm,0.5s,baz=307,slow=3.3,SNR=1.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **133.48** | **337** | PKP | | **PKPdf** | | **12 40 14.4** | **0.0** |
| | 0.1nm,0.6s,baz=64,slow=2.1,SNR=1.7 | | | | | | | | |

*IDC **06** 12:26:54.2±1.1, 17°.85S×65°.35E, h0km, mb3.8/8, mbtmp3.8/9, ML4.4/1, MS3.4/5, Error ellipse: s-maj=33.7km s-min=26.7km az=75.0*
**ISC 06 12:26:57.1±0.9, 17°.9S±0°.2×65°.4E±0°.2, h17km, n21, σ0s84/9, mb3.9/8, MS3.3/5, Mauritius-Reunion region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Garcia H** | **12.30** | **35** | T | | T | T | 12 42 32.8 | |
| | baz=213,slow=75,SNR=94 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **12.31** | **35** | T | | T | T | 12 42 36.0 | |
| | baz=213,slow=75,SNR=95 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **12.32** | **35** | T | | T | T | 12 42 39.0 | |
| | baz=213,slow=75,SNR=166 | | | | | | | | |
| **OPO** | **Amboihidratompo** | **17.27** | **265** | P | | **Pn** | | **12 30 58.0** | **+0.2** |
| | 0.1nm,0.3s,baz=89,slow=12,SNR=10 | | | | | | | | |
| | 3.6nm,0.6s | | | | | | | | |
| **PALK** | **Pallekele** | **29.22** | **33** | LR | | LR | | 12 42 06.0 | |
| | comp=Z,20nm,19.6s,baz=270,slow=31 | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **30.38** | **199** | T | | T | | 13 04 53.8 | |
| | baz=26,slow=75,SNR=776 | | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **30.38** | **199** | T | | T | | 13 04 58.3 | |
| | baz=26,slow=75,SNR=688 | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **30.39** | **199** | T | | T | | 13 04 57.1 | |
| | baz=26,slow=75,SNR=661 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **46.42** | **121** | T | | T | | 13 24 57.3 | |
| | baz=278,slow=75,SNR=53 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **46.42** | **121** | T | | T | | 13 25 12.6 | |
| | baz=278,slow=75,SNR=50 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **46.43** | **121** | T | | T | | 13 24 59.4 | |
| | baz=278,slow=75,SNR=62 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **48.92** | **44** | P | | **P** | | **12 35 43.8** | **+1.1** |
| | 0.3nm,0.3s,baz=245,slow=5.9,SNR=1.9 | | | | | | | | |
| CMAR | | | | LR | | LR | | 12 52 53.0 | |
| | comp=Z,23nm,21.9s,baz=240,slow=32 | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | |
| **GNI** | **Garni** | **60.82** | **342** | LR | | LR | | 13 02 25.3 | |
| | comp=Z,21nm,18.6s,baz=185,slow=35 | | | | | | | | |
| **ASAR** | **Alice Springs** | **63.84** | **108** | P | | **P** | | **12 37 29.1** | **-0.1** |
| | 1.3nm,0.9s,baz=266,slow=5.4,SNR=5.9 | | | | | | | | |
| ASAR | | | | LR | | LR | | 13 00 48.8 | |
| | comp=Z,105nm,21.4s,baz=271,slow=32 | | | | | | | | |
| | 1.3nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **64.88** | **104** | P | | **P** | | **12 37 35.3** | **-0.7** |
| | 2.7nm,0.9s,baz=263,slow=6.2,SNR=7.4 | | | | | | | | |
| | 2.7nm,0.9s | | | | | | | | |
| **IDI** | **Anoyia** | **65.32** | **324** | LR | | LR | | 13 04 10.6 | |
| | comp=Z,56nm,20.1s,baz=58,slow=34 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **66.14** | **13** | P | | **P** | | **12 37 42.1** | **-1.5** |
| | 0.4nm,0.7s,baz=201,slow=6.2,SNR=3.4 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.17** | **9** | P | | **P** | | **12 38 02.1** | **-0.4** |
| | 0.7nm,0.9s,baz=200,slow=6.2,SNR=4.9 | | | | | | | | |
| | 0.7nm,0.9s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.24** | **180** | P | | **P** | | **12 38 21.4** | **+0.1** |
| | 1.4nm,1.1s,baz=96,slow=2.0,SNR=2.8 | | | | | | | | |
| | 1.4nm,1.1s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **73.45** | **12** | P | | **P** | | **12 38 27.9** | **-0.4** |
| | 0.4nm,0.3s,baz=208,slow=2.8,SNR=2.6 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **SONM** | **Songino Array** | **75.01** | **27** | P | | **P** | | **12 38 38.0** | **+0.3** |
| | 0.5nm,0.7s,baz=246,slow=6.1,SNR=2.1 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |

*NEIC **06** 12:27:58.6±2.0, 19°.4S×107°.1×169°.7E±0°.1, h275km±7km, mb4.3/16, Error ellipse: s-maj=21.8km s-min=13.9km az=161.0*
*IDC **06** 12:27:58.3±2.4, 19°.09S×169°.46E, h275km±25km, mb4.0/4, mbtmp4.6/6, Error ellipse: s-maj=57.0km s-min=14.9km az=166.0*
*NOU **06** 12:27:59.2, 19°.37S×169°.67E, h275km, mb4.2/35, Vanuatu Islands*
**ISC 06 12:27:59.1±0.7, 19°.38S±0°.08×169°.63E±0°.07, h275km, n62, σ1s08/63, mb4.2/9, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.95** | **324** | P | | P | **Pn** | **12 28 43.6** | **+0.3** |
| **DVP** | **Devils Point** | **2.14** | **320** | P | | P | **Pn** | **12 28 45.3** | **+0.4** |
| **MARNC** | **Mare, Loyalty** | **2.58** | **215** | P | | P | **Pn** | **12 28 48.8** | **-0.1** |
| **LIFIC** | **LIFOU** | **2.65** | **238** | P | | P | **Pn** | **12 28 49.3** | **-0.3** |
| **LIFNC** | **LIFOU** | **2.65** | **238** | | | | **Pn** | **12 28 49.0** | **-0.6** |
| **YATNC** | **Mamie plateau,** | **3.70** | **223** | P | | P | **Pn** | **12 29 00.1** | **-0.6** |
| **PINNC** | **Pines Island,** | **3.81** | **212** | P | | P | **Pn** | **12 29 02.6** | **+0.7** |
| **PINNC** | **Pines Island,** | **3.81** | **212** | | | | **Pn** | **12 29 01.8** | **-0.1** |
| **DZM** | **Mont Dzumac** | **4.01** | **228** | P | | P | **Pn** | **12 29 05.4** | **+1.1** |
| **DZM** | **Mont Dzumac** | **4.01** | **228** | | | | **Pn** | **12 29 04.8** | **+0.5** |
| **DZM** | **Mont Dzumac** | **4.01** | **228** | P | | P | **Pn** | **12 29 05.0** | **+0.7** |
| | 24nm,0.4s,baz=47,slow=19,SNR=111 | | | | | | | | |
| DZM | | | | S | | S | **S** | **12 29 57.2** | **+0.9** |
| | 20nm,0.7s,baz=119,slow=19,SNR=5.7 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **4.13** | **228** | P | | P | **Pn** | **12 29 06.7** | **+1.2** |
| **ONTNC** | **Ouen Toro** | **4.16** | **225** | P | | P | **Pn** | **12 29 07.1** | **+1.2** |
| **ONTNC** | **Ouen Toro** | **4.16** | **225** | | | | **Pn** | **12 29 06.2** | **+0.3** |
| **KOUNC** | **Koumac, New Ca** | **5.16** | **256** | P | | P | **Pn** | **12 29 19.4** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **5.16** | **256** | | | | **Pn** | **12 29 18.0** | **+0.4** |
| **MSVF** | **Nonsavu** | **8.15** | **80** | P | | P | **Pn** | **12 29 54.2** | **-0.3** |
| **MSVF** | **Nonsavu** | **8.15** | **80** | | | | **Pn** | **12 29 54.5** | **0.0** |
| **MSVF** | **Nonsavu** | **8.15** | **80** | P | | P | **Pn** | **12 29 55.0** | **+0.5** |
| | 52nm,0.8s,baz=264,slow=13,SNR=32 | | | | | | | | |
| **RAO** | **Raoul Island** | **15.00** | **133** | P | | P | **P** | **12 31 17.2** | **-0.3** |
| **OUZ** | **Omahuta** | **16.16** | **168** | P | | P | **P** | **12 31 30.3** | **+0.1** |
| **EIDS** | **Eidsvold** | **18.16** | **247** | P | | P | **P** | **12 31 53.2** | **+1.3** |
| **EIDS** | **Eidsvold** | **18.16** | **247** | P | | P | **P** | **12 31 52.3** | **+0.3** |
| EIDS | | | | | | IAmb | IAmb | 12 32 32.1 | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| **ARMA** | **Armidale** | **19.66** | **233** | P | | P | **P** | **12 32 07.6** | **-0.5** |
| ARMA | | | | | | IAmb | IAmb | 12 32 41.7 | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **20.59** | **165** | P | | P | **P** | **12 32 18.1** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **20.59** | **165** | P | | P | **P** | **12 32 17.1** | **-0.6** |
| BKZ | | | | | | IAmb | IAmb | 12 32 18.0 | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **CTA** | **Charters Tower** | **22.02** | **264** | P | | P | **P** | **12 32 31.3** | **-0.1** |
| **CTAO** | **Charters Tower** | **22.02** | **264** | P | | P | **P** | **12 32 31.1** | **-0.3** |
| **CTAO** | **Charters Tower** | **22.02** | **264** | P | | P | **P** | **12 32 31.1** | **-0.3** |
| CTAO | | | | | | IAmb | IAmb | 12 32 32.5 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **TCW** | **Tory Channel** | **22.12** | **171** | P | | P | **P** | **12 32 32.1** | **0.0** |
| **CNB** | **Canberra Magne** | **23.93** | **224** | P | | P | **P** | **12 32 49.1** | **+0.4** |
| **MTSU** | **Mount Surprise** | **24.00** | **269** | P | | P | **P** | **12 32 49.7** | **+0.2** |
| **CMSA** | **Cobar Meteorol** | **24.72** | **236** | P | | P | **P** | **12 32 55.2** | **-0.5** |
| **STKA** | **Stephens Creek** | **28.09** | **238** | P | | P | **P** | **12 33 26.8** | **+1.0** |
| **STKA** | **Stephens Creek** | **28.09** | **238** | P | | P | **P** | **12 33 24.8** | **-1.0** |
| **STKA** | **Stephens Creek** | **28.09** | **238** | P | | P | **P** | **12 33 25.2** | **-0.6** |
| | comp=Z,2.8nm,0.5s,baz=66,slow=8.5,SNR=7.0 | | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | | |
| **RAR** | **Rarotonga** | **28.73** | **99** | P | | **P** | **P** | **12 33 32.7** | **+1.1** |
| | comp=Z,6.6nm,0.5s,baz=260,slow=14,SNR=1.7 | | | | | | | | |
| | comp=Z,6.6nm,0.5s | | | | | | | | |
| **LCRK** | **Leigh Creek** | **30.45** | **243** | P | | P | **P** | **12 33 46.6** | **-0.1** |
| **OOD** | **Oodnadatta** | **32.14** | **248** | P | | P | **P** | **12 34 00.9** | **-0.5** |
| **BBOO** | **Buckleboo** | **32.84** | **239** | P | | P | **P** | **12 34 07.9** | **+0.5** |
| **BBOO** | **Buckleboo** | **32.84** | **239** | P | | P | **P** | **12 34 05.9** | **-1.5** |
| **WR0** | **Warramunga Arr** | **33.02** | **263** | P | | P | **P** | **12 34 07.0** | **-2.1** |
| **WB0** | **Warramunga Arr** | **33.17** | **263** | P | | P | **P** | **12 34 08.3** | **-2.1** |
| WB0 | | | | | | IAmb | IAmb | 12 34 09.6 | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.20** | **263** | P | | P | **P** | **12 34 08.6** | **-2.1** |
| **WRAB** | **Tennant Creek** | **33.20** | **263** | P | | P | **P** | **12 34 08.5** | **-2.2** |
| WRAB | | | | | | IAmb | IAmb | 12 34 09.6 | |
| | comp=Z,4.6nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.21** | **263** | P | | P | **P** | **12 34 08.2** | **-2.5** |
| **WRA** | **Warramunga Arr** | **33.21** | **263** | P | | P | **P** | **12 34 08.5** | **-2.3** |
| | comp=Z,1.7nm,0.3s,baz=97,slow=8.4,SNR=100 | | | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | | | |
| **AS01** | **Alice Springs** | **33.41** | **256** | P | | P | **P** | **12 34 11.6** | **-0.9** |
| **AS31** | **Alice Springs** | **33.45** | **256** | P | | P | **P** | **12 34 11.4** | **-1.5** |
| **ASAR** | **Alice Springs** | **33.46** | **256** | P | | P | **P** | **12 34 11.2** | **-1.8** |
| **ASAR** | **Alice Springs** | **33.46** | **256** | P | | P | **P** | **12 34 11.4** | **-1.5** |
| | comp=Z,9.2nm,0.6s,baz=80,slow=9.2,SNR=206 | | | | | | | | |
| | comp=Z,9.2nm,0.6s | | | | | | | | |
| **MULG** | **Mulgathing** | **33.93** | **244** | P | | P | **P** | **12 34 17.5** | **+0.6** |
| **KDU** | **Kakadu** | **36.28** | **275** | P | | P | **P** | **12 34 37.6** | **+0.7** |
| **MTN** | **Manton Dam** | **37.50** | **274** | P | | P | **P** | **12 34 48.3** | **+1.1** |
| **MTN** | **Manton Dam** | **37.50** | **274** | P | | P | **P** | **12 34 45.7** | **-1.5** |
| MTN | | | | | | IAmb | IAmb | 12 35 16.6 | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **WRKA** | **Warakurna** | **38.58** | **254** | P | | P | **P** | **12 34 56.7** | **+0.6** |
| **KNRA** | **Kununurra** | **39.09** | **269** | P | | P | **P** | **12 34 58.8** | **-1.6** |
| KNRA | | | | | | IAmb | IAmb | 12 35 38.1 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.60** | **264** | P | | P | **P** | **12 35 20.4** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **41.60** | **264** | P | | P | **P** | **12 35 20.2** | **-0.6** |
| **MBWA** | **Marble Bar** | **46.69** | **259** | P | | P | **P** | **12 36 02.2** | **+1.1** |
| **MBWA** | **Marble Bar** | **46.69** | **259** | P | | P | **P** | **12 35 59.7** | **-1.4** |
| **MEEK** | **Meekatharra** | **47.27** | **251** | P | | P | **P** | **12 36 06.0** | **+0.5** |

*IDC **06** 12:58:

**ISC 06 12:59:01.0**±1.0, **8°3S**±0°1×**116°23E**±0°06, **h10**km, **n8,**
σ0§**16**/9, **mb3.1/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.79** | **125** | P | **Pn** | **12 59 18.1** | **-0.1** |
| TWSI | | | | S | **Sn** | **12 59 30.3** | **+0.2** |
| **SRBI** | **Singaraja** | **1.02** | **281** | P | **Pg** | **12 59 20.9** | **+0.1** |
| SRBI | | | | S | **Sn** | **12 59 35.8** | **-0.1** |
| **PLAI** | **Plampang** | **1.62** | **109** | P | **Pb** | **12 59 31.0** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.06** | **265** | P | **Pn** | **12 59 35.7** | **-0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.74** | **64** | P | **Pn** | **13 00 12.6** | **0.0** |
| **WRA** | **Warramunga Arr** | **21.01** | **125** | P | **P** | **13 03 44.9** | **-0.1** |
| | 0.4nm,0.5s,baz=300,slow=12,SNR=13<br>0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.82** | **134** | P | **P** | **13 04 04.5** | **+0.1** |
| | 0.3nm,0.6s,baz=308,slow=8.9,SNR=10<br>0.3nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.55** | **352** | P | P | 13 08 39.1 | -4.8 |
| | 0.4nm,0.4s,baz=165,slow=6.0,SNR=2.1<br>0.4nm,0.4s | | | | | | |

*NOU **06** 13:02:19.1,40°.10S×174°.29E, h123km, MLv3.7/11, Cook Strait, New Zealand*
*WEL **06** 13:02:22.1±0.5,40°S±2°×17°4E±°, h83km±7km, M3.3/55, ML3.6/51, MLv3.3/55, Error ellipse: s-maj=0.0km s-min=0.0km az=111.7, confirmed*

**ISC 06 13:02:18.7**±1.4, **40°15S**±0°03×**174°32E**±0°03, **h121**km±8km,
**n144,** σ1§**14**/163, **Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WAZ** | **Wanganui** | **0.65** | **53** | P | **Pn** | **13 02 38.7** | **+0.9** |
| **LREZ** | **Lake Rotokare** | **0.69** | **6** | P | **Pn** | **13 02 39.0** | **+0.9** |
| LREZ | | | | S | **Sn** | **13 02 52.2** | **-0.5** |
| **DUWZ** | **D'Urville Isla** | **0.71** | **205** | P | **Pn** | **13 02 38.9** | **+0.6** |
| DUWZ | | | | S | **Sn** | **13 02 51.7** | **-1.4** |
| **OHWZ** | **Ohakea** | **0.77** | **94** | P | **Pn** | **13 02 40.0** | **+1.4** |
| OHWZ | | | | S | **Sn** | **13 02 53.8** | **+0.1** |
| **NMEZ** | **Namu Road** | **0.81** | **335** | P | **Pn** | **13 02 39.7** | **+0.6** |
| NMEZ | | | | S | **Sn** | **13 02 53.4** | **-1.0** |
| **PREZ** | **Palmer Road** | **0.82** | **351** | P | **Pn** | **13 02 39.8** | **+0.6** |
| **KIW** | **Kapiti Island** | **0.84** | **148** | P | **Pn** | **13 02 40.1** | **+0.8** |
| KIW | | | | S | **Sn** | **13 02 53.0** | **-1.9** |
| **KHEZ** | **Kahui Hut** | **0.89** | **345** | P | **Pn** | **13 02 40.3** | **+0.4** |
| **KHEZ** | **Kahui Hut** | **0.89** | **345** | P | **Pn** | **13 02 40.4** | **+0.6** |
| KHEZ | | | | S | **Sn** | **13 02 54.7** | **-1.1** |
| **NEZ** | **North Egmont** | **0.90** | **349** | P | **Pn** | **13 02 40.4** | **+0.5** |
| **OGWZ** | **Otaki Gorge** | **0.93** | **136** | P | **Pn** | **13 02 41.2** | **+1.1** |
| **NBEZ** | **Newall Road No** | **0.95** | **338** | P | **Pn** | **13 02 41.2** | **+0.9** |
| NBEZ | | | | S | **Sn** | **13 02 55.9** | **-0.7** |
| **DREZ** | **Durham Road** | **0.97** | **355** | P | **Pn** | **13 02 41.3** | **+0.8** |
| **PKE** | **Pukeiti** | **0.99** | **345** | P | **Pn** | **13 02 41.5** | **+0.8** |
| **TCW** | **Tory Channel** | **1.06** | **182** | P | **Pn** | **13 02 42.5** | **+1.2** |
| **MHEZ** | **Mangahewa** | **1.07** | **0** | P | **Pn** | **13 02 42.7** | **+1.2** |
| **VRZ** | **Vera Road** | **1.08** | **19** | P | **Pn** | **13 02 42.5** | **+0.9** |
| **MRZ** | **Mangatainoka R** | **1.09** | **118** | P | **Pn** | **13 02 42.8** | **+1.1** |
| MRZ | | | | S | **Sn** | **13 02 57.7** | **-1.4** |
| **CAW** | **Cannon Point** | **1.11** | **149** | P | **Pn** | **13 02 43.2** | **+1.3** |
| **POWZ** | **Post Office Ro** | **1.14** | **103** | P | **Pn** | **13 02 43.3** | **+1.1** |
| **PKVZ** | **Pokaka** | **1.17** | **43** | P | **Pn** | **13 02 43.8** | **+1.2** |
| **MTVZ** | **Mangateitei** | **1.18** | **50** | P | **Pn** | **13 02 43.7** | **+1.1** |
| **HOWZ** | **Holdsworth Sta** | **1.18** | **130** | P | **Pn** | **13 02 44.1** | **+1.5** |
| **WEL** | **Wellington** | **1.18** | **163** | P | **Pn** | **13 02 44.0** | **+1.4** |
| **SNZO** | **South Karori** | **1.20** | **166** | P | **Pn** | **13 02 44.1** | **+1.4** |
| **TSZ** | **Takapari Road** | **1.27** | **86** | P | **Pn** | **13 02 44.4** | **+0.8** |
| **TRVZ** | **Turoa** | **1.28** | **49** | P | **Pn** | **13 02 45.1** | **+1.2** |
| **NNZ** | **Nelson** | **1.28** | **213** | P | **Pn** | **13 02 44.8** | **+1.1** |
| **WNVZ** | **Wahianoa** | **1.29** | **51** | P | **Pn** | **13 02 45.1** | **+1.1** |
| **MAVZ** | **Matarangi** | **1.30** | **48** | P | **Pn** | **13 02 45.5** | **+1.2** |
| **TUWZ** | **Tuamarina** | **1.31** | **192** | P | **Pn** | **13 02 45.4** | **+1.4** |
| TUWZ | | | | S | **Sn** | **13 03 02.3** | **-0.9** |
| **FWVZ** | **Far West T-bar** | **1.31** | **47** | P | **Pn** | **13 02 45.4** | **+1.1** |
| **WHVZ** | **Whangaehu Hut** | **1.31** | **49** | P | **Pn** | **13 02 45.5** | **+1.2** |
| **BHW** | **Baring Head** | **1.32** | **162** | P | **Pn** | **13 02 45.5** | **+1.3** |
| BHW | | | | S | **Sn** | **13 03 02.0** | **-1.6** |
| **PRWZ** | **Pori Road** | **1.33** | **108** | P | **Pn** | **13 02 45.8** | **+1.6** |
| PRWZ | | | | S | **Sn** | **13 03 02.7** | **-1.0** |
| **MOVZ** | **Moawhango** | **1.33** | **57** | P | **Pn** | **13 02 45.2** | **+0.8** |
| MOVZ | | | | S | **Sn** | **13 03 03.5** | **-0.4** |
| **COVZ** | **Chateau Observ** | **1.34** | **45** | P | **Pn** | **13 02 45.5** | **+1.0** |
| COVZ | | | | S | **Sn** | **13 03 04.3** | **+0.2** |
| **MTW** | **Mount Morrison** | **1.35** | **138** | P | **Pn** | **13 02 45.9** | **+1.4** |
| MTW | | | | S | **Sn** | **13 03 03.0** | **-1.1** |
| **TIWZ** | **Tintock** | **1.35** | **118** | P | **Pn** | **13 02 45.8** | **+1.3** |
| TIWZ | | | | S | **Sn** | **13 03 02.8** | **-1.3** |
| **TKNZ** | **Takaka Hill** | **1.36** | **229** | P | **Pn** | **13 02 45.5** | **+0.9** |
| TKNZ | | | | S | **Sn** | **13 03 03.5** | **-0.7** |
| **TUVZ** | **Tukino** | **1.36** | **50** | P | **Pn** | **13 02 45.9** | **+1.1** |
| **TWVZ** | **Taurewa** | **1.39** | **39** | P | **Pn** | **13 02 46.0** | **+1.0** |
| **NGZ** | **Ngauruhoe** | **1.39** | **46** | P | **Pn** | **13 02 46.1** | **+1.0** |
| **SNVZ** | **South Ngauruho** | **1.41** | **47** | P | **Pn** | **13 02 46.4** | **+1.1** |
| **DVHZ** | **Dannevirke** | **1.43** | **97** | P | **Pn** | **13 02 46.3** | **+1.0** |
| **WTVZ** | **West Tongariro** | **1.43** | **44** | P | **Pn** | **13 02 46.5** | **+1.0** |
| **NNVZ** | **North Ngauruho** | **1.43** | **45** | P | **Pn** | **13 02 46.5** | **+1.0** |
| **OTVZ** | **Oturere** | **1.44** | **47** | P | **Pn** | **13 02 46.7** | **+1.1** |
| **MSWZ** | **Moikau Station** | **1.45** | **151** | P | **Pn** | **13 02 47.0** | **+1.4** |
| **PNHZ** | **Pukenui** | **1.47** | **81** | P | **Pn** | **13 02 46.6** | **+0.8** |
| **KRVZ** | **Karewarewa** | **1.47** | **45** | P | **Pn** | **13 02 47.0** | **+1.0** |
| **ETVZ** | **East Tongariro** | **1.48** | **47** | P | **Pn** | **13 02 47.3** | **+1.2** |
| **NTVZ** | **North Tongarir** | **1.49** | **45** | P | **Pn** | **13 02 47.7** | **+1.6** |
| **TMVZ** | **Te Maari** | **1.49** | **46** | P | **Pn** | **13 02 47.5** | **+1.3** |
| **PAWZ** | **Paruwai Farm** | **1.49** | **146** | P | **Pn** | **13 02 47.5** | **+1.4** |
| **QRZ** | **Quartz Range** | **1.52** | **243** | P | **Pn** | **13 02 46.9** | **+0.5** |
| **QRZ** | **Quartz Range** | **1.52** | **243** | P | **Pn** | **13 02 46.9** | **+0.5** |
| QRZ | | | | S | **Sn** | **13 03 05.9** | **-1.6** |
| **TMWZ** | **Te Maipa** | **1.53** | **129** | P | **Pn** | **13 02 48.3** | **+1.8** |
| TMWZ | | | | S | **Sn** | **13 03 06.7** | **-1.1** |
| **BFZ** | **Birch Farm** | **1.57** | **110** | P | **Pn** | **13 02 48.2** | **+1.3** |
| **BFZ** | **Birch Farm** | **1.57** | **110** | P | **Pn** | **13 02 48.1** | **+1.2** |
| BFZ | | | | S | **Sn** | **13 03 06.8** | **-1.6** |
| **PLWZ** | **Palliser** | **1.58** | **154** | P | **Pn** | **13 02 48.6** | **+1.4** |
| PLWZ | | | | S | **Sn** | **13 03 07.7** | **-1.3** |
| **KATZ** | **Kakaramea** | **1.59** | **43** | P | **Pn** | **13 02 48.5** | **+1.2** |
| **BSWZ** | **Blackbirch Sta** | **1.60** | **192** | P | **Pn** | **13 02 49.1** | **+1.8** |
| **CMWZ** | **Cape Campbell** | **1.60** | **183** | P | **Pn** | **13 02 49.6** | **+2.3** |
| **TRWZ** | **Traveller** | **1.62** | **141** | P | **Pn** | **13 02 49.5** | **+1.9** |
| **WPHZ** | **Waipukurau** | **1.63** | **88** | P | **Pn** | **13 02 48.8** | **+1.1** |
| **KRHZ** | **Kereru** | **1.66** | **73** | P | **Pn** | **13 02 48.9** | **+0.9** |
| **RITZ** | **Rihia Road** | **1.67** | **46** | P | **Pn** | **13 02 49.6** | **+1.4** |
| **ANWZ** | **Angora Road** | **1.68** | **101** | P | **Pn** | **13 02 49.7** | **+1.4** |
| **HIZ** | **Hauiti** | **1.69** | **15** | P | **Pn** | **13 02 49.3** | **+0.9** |
| **HIZ** | **Hauiti** | **1.69** | **15** | P | **Pn** | **13 02 49.5** | **+1.0** |
| **RATZ** | **Rangitukua** | **1.71** | **42** | P | **Pn** | **13 02 50.1** | **+1.4** |
| **MRNZ** | **Matariki Terra** | **1.72** | **223** | P | **Pn** | **13 02 50.1** | **+1.4** |
| **KWHZ** | **Kaweka Forest** | **1.78** | **67** | P | **Pn** | **13 02 50.5** | **+0.9** |
| **PRHZ** | **Porangahau** | **1.78** | **94** | P | **Pn** | **13 02 50.8** | **+1.3** |
| **WATZ** | **Wairara** | **1.81** | **38** | P | **Pn** | **13 02 51.4** | **+1.5** |
| **THZ** | **Tophouse** | **1.93** | **213** | P | **Pn** | **13 02 52.9** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **1.95** | **60** | P | **Pn** | **13 02 52.0** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **1.95** | **60** | P | **Pn** | **13 02 52.2** | **+0.6** |
| **WHTZ** | **Whakaora** | **1.95** | **41** | P | **Pn** | **13 02 53.4** | **+1.7** |
| **PXZ** | **Pawanui** | **1.96** | **87** | P | **Pn** | **13 02 52.7** | **+1.1** |
| **MCHZ** | **McNeill Hill** | **1.97** | **70** | P | **Pn** | **13 02 52.9** | **+1.2** |
| **KAHZ** | **Kahuranaki** | **2.00** | **81** | P | **Pn** | **13 02 53.3** | **+1.1** |
| **KUTZ** | **Kaahu Road** | **2.03** | **36** | P | **Pn** | **13 02 53.7** | **+1.1** |
| **TLZ** | **Tolley Road** | **2.05** | **28** | P | **Pn** | **13 02 54.0** | **+1.1** |
| **MRHZ** | **Matea Rd** | **2.09** | **52** | P | **Pn** | **13 02 53.7** | **+0.3** |
| **WPRZ** | **Whakapapatarin** | **2.17** | **42** | P | **Pn** | **13 02 55.5** | **+1.2** |
| **NMHZ** | **Naumai** | **2.19** | **62** | P | **Pn** | **13 02 55.9** | **+1.2** |
| **ALRZ** | **Allen Road** | **2.23** | **45** | P | **Pn** | **13 02 56.1** | **+0.9** |
| **ARHZ** | **Aropaoanui** | **2.25** | **68** | P | **Pn** | **13 02 56.1** | **+0.7** |
| **KHZ** | **Kahutara** | **2.34** | **194** | P | **Pn** | **13 02 57.9** | **+1.5** |
| **KHZ** | **Kahutara** | **2.34** | **194** | P | **Pn** | **13 02 58.1** | **+1.7** |
| **MTHZ** | **Maungataniwha** | **2.35** | **57** | P | **Pn** | **13 02 56.9** | **+0.3** |
| **RAHZ** | **Arahi** | **2.47** | **61** | P | **Pn** | **13 02 58.6** | **+0.4** |
| **DSZ** | **Denniston Nort** | **2.48** | **229** | P | **Pn** | **13 02 59.4** | **+1.1** |
| **WHHZ** | **Waihua** | **2.50** | **65** | P | **Pn** | **13 02 59.0** | **+0.6** |
| **MUGZ** | **Murupara** | **2.53** | **49** | P | **Pn** | **13 02 59.2** | **+0.2** |
| **RTZ** | **Ruatahuna** | **2.57** | **54** | P | **Pn** | **13 02 59.7** | **+0.1** |
| **TOZ** | **Tahuroa Road** | **2.59** | **21** | P | **Pn** | **13 03 00.9** | **+1.2** |
| **KMRZ** | **Kaimai** | **2.63** | **29** | P | Pn | 13 03 05.4 | +5.1 |
| **SNGZ** | **Shannon Statio** | **2.71** | **61** | P | **Pn** | **13 03 01.7** | **+0.5** |
| **KNZ** | **Kokohu** | **2.83** | **68** | P | **Pn** | **13 03 02.5** | **-0.3** |
| **URZ** | **Urewera** | **2.88** | **50** | P | **Pn** | **13 03 03.1** | **-0.3** |
| **URZ** | **Urewera** | **2.88** | **50** | P | **Pn** | **13 03 03.2** | **-0.3** |
| **RAGZ** | **Rawiri** | **2.92** | **56** | P | **Pn** | **13 03 04.1** | **+0.1** |
| **MHGZ** | **Mahia Peninsul** | **2.95** | **71** | P | **Pn** | **13 03 04.7** | **+0.4** |
| **GVZ** | **Greta Valley S** | **2.97** | **198** | P | **Pn** | **13 03 05.7** | **+1.1** |
| **PRGZ** | **Paritu Road** | **3.02** | **67** | P | **Pn** | **13 03 05.1** | **-0.1** |
| **RIGZ** | **Rimuhau** | **3.04** | **63** | P | **Pn** | **13 03 05.4** | **-0.1** |
| **LTZ** | **Lake Taylor** | **3.04** | **210** | P | **Pn** | **13 03 06.2** | **+0.6** |
| **MWZ** | **Matawai** | **3.08** | **55** | P | **Pn** | **13 03 05.7** | **-0.5** |
| **AWAZ** | **Awhitu Peninsu** | **3.09** | **5** | P | **Pn** | **13 03 08.0** | **+1.7** |
| **MKAZ** | **Moumakai** | **3.11** | **13** | P | **Pn** | **13 03 07.9** | **+1.4** |
| **ETAZ** | **East Tamaki Re** | **3.23** | **9** | P | **Pn** | **13 03 09.9** | **+1.9** |
| **TKGZ** | **Te Karaka** | **3.23** | **59** | P | **Pn** | **13 03 08.0** | **-0.1** |
| **INZ** | **Inchbonnie** | **3.36** | **219** | P | **Pn** | **13 03 11.0** | **+1.4** |
| **RVAZ** | **Riverhead Bore** | **3.38** | **4** | P | **Pn** | **13 03 12.4** | **+2.4** |
| **RUGZ** | **Raukumara Rang** | **3.41** | **51** | P | **Pn** | **13 03 09.9** | **-0.6** |
| **WIAZ** | **Waiheke Island** | **3.42** | **11** | P | **Pn** | **13 03 12.5** | **+2.0** |
| **CNGZ** | **Carnagh Statio** | **3.45** | **62** | P | **Pn** | **13 03 10.9** | **0.0** |
| **TWGZ** | **Tauwhareparae** | **3.46** | **56** | P | **Pn** | **13 03 11.2** | **+0.1** |
| **OXZ** | **Oxford** | **3.60** | **208** | P | **Pn** | **13 03 13.8** | **+0.9** |
| **HAZ** | **Te Kaha** | **3.61** | **50** | P | **Pn** | **13 03 12.0** | **-1.0** |
| **OKCZ** | **Okains Bay** | **3.69** | **194** | P | **Pn** | **13 03 14.4** | **+0.3** |
| **PUZ** | **Puketiti** | **3.70** | **57** | P | **Pn** | **13 03 13.6** | **-0.7** |
| **PKGZ** | **Pakihiroa** | **3.72** | **53** | P | **Pn** | **13 03 14.2** | **-0.3** |
| **MQZ** | **McQueen's Vall** | **3.76** | **199** | P | **Pn** | **13 03 14.5** | **-0.5** |
| **AKCZ** | **Akaroa Harbour** | **3.86** | **195** | P | **Pn** | **13 03 16.9** | **+0.6** |
| **RACZ** | **Rakaia** | **3.92** | **204** | P | **Pn** | **13 03 17.6** | **+0.5** |
| **MHCZ** | **Mount Hutt** | **3.95** | **210** | P | **Pn** | **13 03 19.0** | **+1.4** |
| **WMGZ** | **Waiomatatini S** | **3.95** | **55** | P | **Pn** | **13 03 17.0** | **-0.6** |
| **WVZ** | **Waitaha Valley** | **3.96** | **221** | P | **Pn** | **13 03 19.3** | **+1.6** |
| **WACZ** | **Wakanui South** | **4.21** | **205** | P | **Pn** | **13 03 21.6** | **+0.6** |
| **RPZ** | **Rata Peaks** | **4.31** | **213** | P | **Pn** | **13 03 23.9** | **+1.5** |
| **RPZ** | **Rata Peaks** | **4.31** | **213** | P | **Pn** | **13 03 24.2** | **+1.8** |
| **GCSZ** | **Gaunt Creek Bo** | **4.35** | **222** | P | **Pn** | **13 03 23.8** | **+1.0** |
| **ARCZ** | **Arundel** | **4.45** | **211** | P | **Pn** | **13 03 25.7** | **+1.4** |
| **FOZ** | **Fox Glacier** | **4.76** | **223** | P | **Pn** | **13 03 29.1** | **+0.7** |
| **TMZ** | **Timaru** | **4.89** | **209** | P | **Pn** | **13 03 30.8** | **+0.7** |
| **ODZ** | **Otahua Downs** | **5.59** | **208** | P | **Pn** | **13 03 40.5** | **+1.0** |
| **ODZ** | **Otahua Downs** | **5.59** | **208** | P | **Pn** | **13 03 40.2** | **+0.7** |
| **JCZ** | **Jackson Bay** | **5.68** | **225** | P | **Pn** | **13 03 41.2** | **+0.3** |
| **JCZ** | **Jackson Bay** | **5.68** | **225** | P | **Pn** | **13 03 41.1** | **+0.3** |
| **CTZ** | **Chatham Island** | **7.65** | **121** | P | **Pn** | **13 04 10.2** | **+2.9** |

*NNC **06** 13:06:27.0±0.4,49°.99N×78°.39E, h0km, mb3.2, mpv2.8, Error ellipse: s-maj=6.4km s-min=1.8km az=91.0, Suspected Mining explosion.*
*IDC **06** 13:06:29.4±0.9,50°.10N×78°.80E, h0km, mbtmp2.8/2, ML2.2/2, Error ellipse: s-maj=8.6km s-min=6.1km az=60.0*

**ISC 06 13:06:26.7**±1.1, **50°04N**±0°04×**78°34E**±0°08, **h0**km, **n19,**
σ0§**51**/31, **17C-10D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.55** | **12** | ⇑P | **Pb** | **13 06 39.0** | **-0.3** |
| KUR07 | | | | ⇑S | **Sb** | **13 06 47.9** | **+0.1** |
| **KUR06** | **Kurchatov Arra** | **0.57** | **12** | ⇓P | **Pb** | **13 06 39.6** | **0.0** |
| KUR06 | | | | ⇑S | **Sb** | **13 06 48.6** | **+0.2** |
| **KUR15** | **Kurchatov Arra** | **0.59** | **14** | ⇑P | **Pb** | **13 06 39.7** | **-0.3** |
| KUR15 | | | | ⇓S | **Sb** | **13 06 48.6** | **-0.3** |
| **KUR16** | **Kurchatov Arra** | **0.59** | **10** | ⇑P | **Pb** | **13 06 40.0** | **0.0** |
| KUR16 | | | | ⇓S | **Sb** | **13 06 48.8** | **-0.1** |
| **KURBB** | **Kurchatov Arra** | **0.59** | **12** | Pg | **Pb** | **13 06 39.8** | **-0.2** |
| | 1.0nm,0.3s,baz=161,slow=33,SNR=89 | | | | | | |
| KURBB | | | | Lg | Lg | 13 06 48.8 | |
| | 1.6nm,0.3s,baz=165,slow=32,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.59** | **12** | ⇑P | **Pb** | **13 06 39.7** | **-0.3** |
| | 20nm,0.4s | | | | | | |
| KURBB | | | | ⇑S | **Sb** | **13 06 48.8** | **-0.1** |
| **KUR14** | **Kurchatov Arra** | **0.59** | **16** | ⇓P | **Pb** | **13 06 39.4** | **-0.6** |
| KUR14 | | | | ⇑S | **Sb** | **13 06 48.3** | **-0.6** |
| **KUR17** | **Kurchatov Arra** | **0.59** | **8** | ⇑P | **Pb** | **13 06 40.3** | **+0.3** |
| KUR17 | | | | ⇑S | **Sb** | **13 06 49.0** | **+0.1** |
| **KUR05** | **Kurchatov Arra** | **0.61** | **12** | ⇑P | **Pb** | **13 06 40.0** | **-0.3** |
| KUR05 | | | | ⇓S | **Sb** | **13 06 49.0** | **-0.5** |
| **KUR04** | **Kurchatov Arra** | **0.63** | **12** | ⇑P | **Pb** | **13 06 40.6** | **-0.1** |
| KUR04 | | | | ⇓S | **Sb** | **13 06 49.4** | **-0.6** |
| **KURK** | **Kurchatov** | **0.70** | **15** | ⇑P | **Pb** | **13 06 41.1** | **-0.6** |
| | 13nm,0.7s | | | | | | |
| KURK | | | | ⇓S | **Sb** | **13 06 51.6** | **-0.3** |
| | 51nm,0.9s | | | | | | |
| **MAKZ** | **Makanchi** | **4.04** | **142** | ⇑Pn | **Pn** | **13 07 30.4** | **+0.6** |
| | 0.4nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Pg | **Pb** | **13 07 38.8** | **0.0** |
| | 9.5nm,1.0s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 13 08 32.5 | |
| | 19nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **4.18** | **140** | Pn | **Pn** | **13 07 31.7** | **0.0** |
| | 0.1nm,0.2s,baz=320,slow=9.7,SNR=18 | | | | | | |
| MK31 | | | | Pg | **Pb** | **13 07 41.9** | **+0.7** |
| | 2.2nm,0.6s,baz=329,slow=15,SNR=20 | | | | | | |
| MK31 | | | | Lg | Lg | 13 08 36.9 | |
| | 17nm,0.7s,baz=334,slow=27,SNR=25 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.18** | **140** | Pn | **Pn** | **13 07 32.3** | **+0.5** |
| | 0.1nm,0.3s,baz=321,slow=10,SNR=28 | | | | | | |
| MKAR | | | | Pg | **Pb** | **13 07 40.7** | **-0.4** |
| | 0.3nm,0.3s,baz=328,slow=13,SNR=21 | | | | | | |
| MKAR | | | | Sn | **Sn** | **13 08 20.3** | **-1.1** |
| | 0.2nm,0.3s,baz=333,slow=26,SNR=5.4 | | | | | | |
| MKAR | | | | Lg | Lg | 13 08 33.2 | |
| | 0.7nm,0.3s,baz=335,slow=26,SNR=12<br>0.6nm,0.6s | | | | | | |
| **OTUK** | **Ortayu** | **4.33** | **248** | ⇓Pn | **Pn** | **13 07 33.5** | **-0.3** |
| | 1.0nm,0.4s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 13 08 43.9 | |
| | 15nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.59** | **43** | Pn | **Pn** | **13 07 52.5** | **+1.4** |
| | 0.5nm,0.3s,baz=231,slow=12,SNR=10 | | | | | | |
| ZALV | | | | Sn | **Sn** | **13 08 55.7** | **-0.4** |
| | 0.1nm,0.3s,baz=233,slow=22,SNR=1.8 | | | | | | |
| ZALV | | | | Lg | Lg | 13 09 17.8 | |
| | 0.1nm,0.3s,baz=225,slow=20,SNR=1.8<br>1.2nm,0.2s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.59** | **43** | I | I | 13 41 30.0 | |
| | baz=225,slow=327,SNR=3.3 | | | | | | |
| **PDGK** | **Podgornoye** | **6.76** | **173** | ⇑Lg | Lg | 13 10 00.9 | |
| | 12nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.37** | **196** | ⇓Lg | Lg | 13 10 20.9 | |
| | 10.0nm,1.0s | | | | | | |

*IDC **06** 13:18:04.9±0.8, 18°.64N×101°.07W, h59km±6km, mb4.0/20, mbtmp4.3/23, MS3.4/42, Error ellipse: s-maj=20.8km s-min=11.8km az=54.0*
*NEIC **06** 13:18:04.8±1.8, 18°.48N±0°.02×101°.29W±0°.04, h69km±6km, mb4.6/203, Md4.7/133(MEX), Error ellipse: s-maj=5.6km s-min=3.5km az=94.0*
*MEX **06** 13:18:06.4±0.7, 18°.48N×101°.30W, h71km±9km, MD4.7*

**ISC 06 13:18:04.2**±0.5, **18°42N**±0°02×**101°29W**±0°02, **h62**km±4km,
**n636,** σ1§**75**/675, **mb4.5**/80, **Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UON** | **La Union** | **0.67** | **228** | *e*P | **Pn** | **13 18 19.5** | **+1.3** |
| UON | | | | *e*S | **Sn** | **13 18 30.5** | **+2.1** |
| **ZIIG** | **Zihuatanejo** | **0.82** | **192** | | **Pn** | **13 18 21.6** | **+1.5** |
| ZIIG | | | | | **Sn** | **13 18 34.3** | **+2.6** |
| **ZIIG** | **Zihuatanejo** | **0.82** | **192** | *e*P | **Pn** | **13 18 21.6** | **+1.5** |
| ZIIG | | | | *e*S | **Sn** | **13 18 34.3** | **+2.6** |
| **PET2** | **Petatlan** | **0.88** | **178** | *e*P | **Pn** | **13 18 22.3** | **+1.5** |
| PET2 | | | | *e*S | **Sn** | **13 18 35.4** | **+2.4** |
| **ARIG** | **Puente Sto Nin** | **0.91** | **98** | | **Pn** | **13 18 22.4** | **+1.2** |
| ARIG | | | | | **Sn** | **13 18 35.0** | **+1.3** |
| **ARIG** | **Puente Sto Nin** | **0.91** | **98** | *e*P | **Pn** | **13 18 22.4** | **+1.2** |
| ARIG | | | | *e*S | **Sn** | **13 18 35.0** | **+1.3** |
| **URUA** | **Uruapan** | **1.25** | **324** | | **Pn** | **13 18 26.9** | **+1.2** |
| URUA | | | | | **Sn** | **13 18 43.2** | **+1.4** |
| **URUA** | **Uruapan** | **1.25** | **324** | *i* P | **Pn** | **13 18 26.9** | **+1.2** |
| URUA | | | | *e*S | **Sn** | **13 18 43.2** | **+1.4** |
| **MOIG** | **Morelia** | **1.26** | **4** | | **Pn** | **13 18 26.0** | **0.0** |
| MOIG | | | | Sn | **Sn** | **13 18 39.1** | **-3.1** |
| **MOIG** | **Morelia** | **1.26** | **4** | *e*P | **Pn** | **13 18 26.3** | **+0.3** |
| **ATYC** | **Atoyac** | **1.45** | **146** | *e*P | **Pn** | **13 18 30.4** | **+2.2** |
| ATYC | | | | *e*S | **Sn** | **13 18 45.7** | **-0.7** |
| **MEIG** | **Mezcala** | **1.66** | **107** | | **Pn** | **13 18 32.9** | **+1.7** |
| MEIG | | | | | **Sn** | **13 18 52.8** | **+1.1** |
| **MEIG** | **Mezcala** | **1.66** | **107** | *e*P | **Pn** | **13 18 32.9** | **+1.7** |
| MEIG | | | | *e*S | **Sn** | **13 18 52.8** | **+1.1** |
| **PLIG** | **Platanillo** | **1.70** | **90** | | **Pn** | **13 18 33.4** | **+1.7** |
| PLIG | | | | | **Sn** | **13 18 53.4** | **+0.9** |
| **PLIG** | **Platanillo** | **1.70** | **90** | *e*P | **Pn** | **13 18 33.4** | **+1.7** |
| PLIG | | | | *e*S | **Sn** | **13 18 53.4** | **+0.9** |
| **TOVM** | **TOLUCA** | **1.75** | **60** | | **Pn** | **13 18 34.2** | **+1.6** |
| TOVM | | | | | **Sn** | **13 18 50.9** | **-3.3** |
| **TOVM** | **TOLUCA** | **1.75** | **60** | *e*P | **Pn** | **13 18 34.2** | **+1.6** |
| TOVM | | | | *i* S | **Sn** | **13 18 50.9** | **-3.3** |
| **MAVM** | **Malinalco, Edo** | **1.79** | **72** | *e*P | Pn | 13 18 19.4 | -14 |
| MAVM | | | | *i* S | Sn | 13 18 39.4 | -15 |
| **MMIG** | **Aquila** | **1.96** | **267** | | **Pn** | **13 18 35.8** | **+0.7** |
| MMIG | | | | | **Sn** | **13 18 58.9** | **+0.3** |
| **MMIG** | **Aquila** | **1.96** | **267** | *e*P | **Pn** | **13 18 35.8** | **+0.7** |
| MMIG | | | | *e*S | **Sn** | **13 18 58.9** | **+0.3** |
| **ACP2** | **Acapulco** | **2.04** | **139** | | **Pn** | **13 18 37.4** | **+1.2** |
| ACP2 | | | | | **Sn** | **13 18 59.5** | **-1.0** |
| **ACP2** | **Acapulco** | **2.04** | **139** | *e*P | **Pn** | **13 18 37.4** | **+1.2** |
| ACP2 | | | | *e*S | **Sn** | **13 18 59.5** | **-1.0** |
| **AOVM** | **Tlapan** | **2.05** | **65** | | **Pn** | **13 18 38.4** | **+1.6** |
| AOVM | | | | | **Sn** | **13 18 57.4** | **-4.1** |
| **AOVM** | **Tlapan** | **2.05** | **65** | *e*P | **Pn** | **13 18 38.4** | **+1.6** |
| AOVM | | | | *e*S | **Sn** | **13 18 57.4** | **-4.1** |
| **ACIG** | **Acambay** | **2.05** | **40** | | **Pn** | **13 18 37.5** | **+0.9** |
| ACIG | | | | | **Sn** | **13 18 53.4** | **-7.8** |
| **ACIG** | **Acambay** | **2.05** | **40** | *e*P | **Pn** | **13 18 37.5** | **+0.9** |
| ACIG | | | | *e*S | Sn | 13 18 53.4 | -7.8 |
| **DAIG** | **Los Arroyos** | **2.09** | **131** | | **Pn** | **13 18 38.7** | **+1.7** |
| DAIG | | | | | **Sn** | **13 19 03.5** | **+1.6** |
| **DAIG** | **Los Arroyos** | **2.09** | **131** | *e*P | **Pn** | **13 18 38.7** | **+1.7** |
| DAIG | | | | *e*S | **Sn** | **13 19 03.5** | **+1.6** |
| **CJVM** | **Cuajimalpa** | **2.12** | **63** | *e*P | **Pn** | **13 18 37.4** | **-0.2** |
| CJVM | | | | *i* S | **Sn** | **13 19 04.4** | **+1.4** |
| **YAIG** | **Yautepec** | **2.15** | **78** | | **Pn** | **13 18 39.6** | **+1.7** |
| YAIG | | | | | **Sn** | **13 19 04.1** | **+0.4** |
| **YAIG** | **Yautepec** | **2.15** | **78** | *e*P | **Pn** | **13 18 39.6** | **+1.7** |
| YAIG | | | | *i* S | **Sn** | **13 19 04.1** | **+0.4** |
| **TLVM** | **San Miguel Top** | **2.17** | **68** | *e*P | **Pn** | **13 18 40.1** | **+1.7** |
| TLVM | | | | *e*S | **Sn** | **13 19 12.5** | **+8.1** |
| **CUP5** | **Mexico City** | **2.19** | **65** | *e*P | **Pn** | **13 18 40.3** | **+1.7** |
| CUP5 | | | | *e*S | **Sn** | **13 19 10.7** | **+5.8** |
| **UNM** | **Universidad Na** | **2.20** | **65** | | **Pn** | **13 18 40.2** | **+1.6** |
| **UNM** | **Universidad Na** | **2.20** | **65** | *e*P | **Pn** | **13 18 40.2** | **+2.0** |
| UNM | | | | *e*S | Sn | 13 19 14.2 | +9.3 |
| **MHVM** | **Bosque de Chap** | **2.20** | **63** | *e

**LVIG Laguna Verde 4.79 73** *eP* **Pn 13 19 15.5 +1.7**
LVIG *eS* **Sn 13 20 16.4 +8.4**
**GTIG Gomez Farias 5.04 23** **Pn 13 19 18.3 +1.0**
GTIG **Sn 13 20 14.9 +0.8**
**GTIG Gomez Farias 5.04 23** *eP* **Pn 13 19 18.3 +1.0**
GTIG *eS* **Sn 13 20 14.9 +0.8**
**NEUV Arroyo Zacate 5.27 97** *i P* **Pn 13 19 22.2 +1.9**
NEUV *eS* **Sn 13 20 17.5 -2.3**
**HUIG Huatulco 5.61 117** **Pn 13 19 28.4 +3.3**
HUIG **Sn 13 20 24.8 -3.5**
**HUIG Huatulco 5.61 117** *eP* **Pn 13 19 28.4 +3.3**
HUIG *eS* **Sn 13 20 24.8 -3.5**
**PMUV Sontecomapan 5.86 88** *eP* **Pn 13 19 29.7 +1.2**
PMUV *i S* **Sn 13 20 30.3 -4.1**
**CMIG Matias Romero 6.25 101** **Pn 13 19 36.4 +2.6**
CMIG **Sn 13 20 41.4 -2.4**
**CMIG Matias Romero 6.25 101** P **Pn 13 19 36.5 +2.6**
59nm,0.3s,baz=282,slow=9.6,SNR=133
CMIG S **Sn 13 20 40.0 -3.8**
56nm,0.3s,baz=307,slow=21,SNR=3.0
CMIG LR LR 13 22 16.5
comp=Z,436nm,21.0s,baz=300,slow=41
**CMIG Matias Romero 6.25 101** *eP* **Pn 13 19 36.4 +2.6**
CMIG *eS* **Sn 13 20 41.4 -2.4**
**HBVL Hebbronville 8.94 15** Pn **Pn 13 20 10.3 -0.3**
**CCIG Comitan 8.99 102** Pn **Pn 13 20 12.1 +0.5**
**HPIG 9.39 335** Pn **Pn 13 20 16.3 -0.7**
**833A Chaparral WMA, 10.02 10** **Pn 13 20 25.7 +0.4**
**833A Chaparral WMA, 10.02 10** P **Pn 13 20 26.7 +1.4**
baz=190,SNR=8.5
**LPIG La Paz 10.13 305** P **Pn 13 20 31.5 +4.6**
26nm,0.3s,baz=178,slow=10,SNR=3.1
LPIG LR LR 13 24 01.9
comp=Z,259nm,21.8s,baz=152,slow=35
**APG El Apazote 10.91 107** P **Pn 13 20 40.8 +3.0**
1.2nm,0.7s,baz=299,slow=19,SNR=16
APG S **Sn 13 22 37.0 -1.5**
1.9nm,0.5s,baz=230,slow=19,SNR=6.0
**DRIO Del Rio 10.97 3** Pn **Pn 13 20 37.5 -0.9**
**TX31 Lajitas Ar. Si 11.08 349** Pn **Pn 13 20 39.0 -1.0**
**TXAR Lajitas Array 11.08 349** P **Pn 13 20 42.9 +2.9**
4.0nm,0.9s,baz=168,slow=15,SNR=23
TXAR LR LR 13 25 26.9
comp=Z,222nm,21.1s,baz=159,slow=40
**SAND Sanderson 11.51 356** Pn **Pn 13 20 47.7 +1.9**
**JCT Junction City 12.09 6** **Pn 13 20 53.2 -0.4**
**JCT Junction City 12.09 6** P **Pn 13 20 55.0 +1.4**
baz=188,SNR=7.6
**TEIG Tepich 12.42 80** Pn **Pn 13 20 57.2 -0.9**
**TEIG Tepich 12.42 80** P **Pn 13 20 56.7 -1.5**
11nm,0.5s,baz=229,slow=11,SNR=15
TEIG S **Sn 13 23 10.7 -4.2**
10nm,0.6s,baz=196,slow=20,SNR=2.1
TEIG LR LR 13 26 36.0
comp=Z,130nm,18.4s,baz=239,slow=42
**OZNA Ozona 12.45 1** Pn **Pn 13 20 58.3 -0.4**
**435B Jarrell 12.76 15** P **Pn 13 21 03.9 +1.0**
baz=196
**VHRN Van Horn 12.77 345** Pn **Pn 13 21 03.6 +0.6**
**MNHN Monahans 12.94 354** Pn **Pn 13 21 05.8 +0.6**
**BRDY Brady 12.98 9** **Pn 13 21 06.3 +0.4**
**HNVL Huntsville, TX 13.38 22** Pn **Pn 13 21 12.1 +0.9**
**SGCY Sterling City 13.44 1** Pn **Pn 13 21 11.2 -1.0**
**ODSA Odessa 13.69 355** Pn **Pn 13 21 15.5 0.0**
**MNTX Cornudas Mount 13.73 345** P **Pn 13 21 17.4 +1.4**
baz=162
**WHTX Lake Whitney, 13.95 14** **Pn 13 21 18.2 -0.7**
**WHTX Lake Whitney, 13.95 14** P **Pn 13 21 19.4 +0.5**
baz=195
**ABTX Abilene, Hawle 14.23 6** **Pn 13 21 22.0 -0.5**
**ABTX Abilene, Hawle 14.23 6** P **Pn 13 21 22.6 +0.1**
baz=186,SNR=6.6
**237A Washetta, Mont 14.40 19** **Pn 13 21 23.5 -1.4**
**SN05 Snyder 5 14.41 1** **Pn 13 21 24.2 -0.7**
**FW07 Weatherford 14.57 12** Pn **Pn 13 21 26.6 -0.4**
**NATX Nacogdoches 14.57 23** Pn **Pn 13 21 25.7 -1.3**
**NATX Nacogdoches 14.57 23** P **Pn 13 21 27.1 0.0**
baz=205,SNR=5.4
**PLPT Palo Pinto 14.58 10** **Pn 13 21 26.5 -0.7**
**POST Post 14.59 359** **Pn 13 21 27.3 -0.1**
**SN07 Snyder 07 14.62 1** **Pn 13 21 27.3 -0.4**
**319A Douglas 14.79 332** P **P 13 21 35.4 +0.9**
**APMT Aspermont 14.88 4** **Pn 13 21 31.3 +0.2**
**TREL Terrell 15.00 17** Pn **Pn 13 21 32.5 -0.1**
**DKNS Dickens 15.19 1** Pn **Pn 13 21 34.2 -0.9**
DKNS IAmb IAmb 13 21 41.3
comp=Z,26nm,0.7s
**121A Cookes Peak, D 15.22 339** P **Pn 13 21 37.0 +1.4**
baz=155,SNR=7.3
**Z35A Perchaven, San 15.29 13** Pn **Pn 13 21 35.8 -0.5**
Z35A IAmb IAmb 13 21 59.6
comp=Z,21nm,0.8s
**WTFS Witchita Falls 15.50 9** Pn **Pn 13 21 37.5 -1.4**
WTFS IAmb IAmb 13 21 53.5
comp=Z,31nm,1.1s
**MSTX Muleshoe 15.55 355** Pn **Pn 13 21 38.8 -0.9**
MSTX IAmb IAmb 13 21 44.4
comp=Z,48nm,1.0s
**MSTX Muleshoe 15.55 355** P **Pn 13 21 40.7 +1.0**
baz=174,SNR=13
**Z38A Mt. Pleasant 15.83 20** Pn **Pn 13 21 40.2 -2.9**
Z38A IAmb IAmb 13 21 46.8
comp=Z,68nm,1.1s
**TUC Tucson 16.27 330** Pn **Pn 13 21 47.9 -0.8**
**TUC Tucson 16.27 330** P **Pn 13 21 49.2 +0.4**
baz=145
**AMTX Amarillo 16.41 359** **Pn 13 21 50.0 -0.5**
AMTX IAmb IAmb 13 22 08.6
comp=Z,49nm,0.8s
**AMTX Amarillo 16.41 359** P **Pn 13 21 50.4 -0.1**
baz=178
**WMOK Wichita Mounta 16.41 7** Pn **Pn 13 21 48.6 -1.9**
**WMOK Wichita Mounta 16.41 7** P **Pn 13 21 49.7 -0.8**
baz=188,SNR=12
**X34A Smith Ranch, M 16.41 10** Pn **Pn 13 21 47.9 -2.6**
X34A IAmb IAmb 13 22 20.5
comp=Z,32nm,1.0s
**Z41A Richland Creek 16.62 26** Pn **Pn 13 21 52.0 -1.1**
**SMWD Samnorwood 16.65 3** Pn **Pn 13 21 52.6 -0.9**
SMWD IAmb IAmb 13 22 12.1
comp=Z,48nm,0.9s
**346A Big Creek Wild 16.77 37** **Pn 13 21 54.7 -0.3**
346A IAmb IAmb 13 22 09.4
comp=Z,44nm,0.8s
**143A Socs Landing, 16.78 30** **Pn 13 21 55.2 +0.2**
**VBMS Vicksburg 16.83 33** P **Pn 13 21 54.5 -1.2**
baz=218
**WLAR White Oak Lake 16.88 24** Pn **Pn 13 21 54.5 -1.8**
WLAR IAmb IAmb 13 22 18.3
comp=Z,73nm,1.2s
**X37A Clayton 16.95 17** **Pn 13 21 56.0 -1.2**
X37A IAmb IAmb 13 22 19.2
comp=Z,37nm,1.0s
**214A Organ Pipe Nat 17.02 325** P **P 13 21 59.9 +0.8**
baz=139
**ANMO Albuquerque 17.09 345** **Pn 13 21 58.8 -0.4**
ANMO IAmb IAmb 13 22 24.5
comp=Z,32nm,1.2s
**ANMO Albuquerque 17.09 345** P **Pn 13 21 59.6 +0.4**
comp=Z,2.9nm,0.7s,baz=253,slow=9.7,SNR=8.4
ANMO LR LR 13 29 12.0
comp=Z,340nm,19.9s,baz=258,slow=39
**ANMO Albuquerque 17.09 345** P **Pn 13 21 59.9 +0.8**
baz=162
**MIAR Mount Ida 17.47 22** **Pn 13 22 02.1 -1.5**
MIAR IAmb IAmb 13 22 11.5
comp=Z,35nm,0.9s
**MIAR Mount Ida 17.47 22** P **Pn 13 22 02.8 -0.8**
baz=205,SNR=9.9
**JTS Las Juntas de 17.76 115** P **Pn 13 22 08.7 +1.4**
comp=Z,2.7nm,0.6s,baz=11,slow=16,SNR=1.9
JTS LR LR 13 28 40.9
comp=Z,49nm,21.6s,baz=293,slow=36
**OK031 S. Brethren Rd 17.91 12** P **P 13 22 07.5 -1.3**
OK031 IAmb IAmb 13 22 38.0
comp=Z,30nm,0.8s
**OK052 Battle Ridge R 17.95 12** **P 13 22 08.0 -1.3**
OK052 IAmb IAmb 13 22 38.5
comp=Z,39nm,0.8s
**RTBA Rita Blanca 18.00 356** P **P 13 22 09.4 -0.6**
RTBA IAmb IAmb 13 22 12.3
comp=Z,49nm,0.8s
**TUL3 Leonard 18.09 15** P **P 13 22 09.8 -1.0**
TUL3 IAmb IAmb 13 22 11.0
comp=Z,41nm,0.9s
**TUL3 Leonard 18.09 15** P **P 13 22 10.3 -0.6**
baz=197
**BRAL Brewton 18.10 43** P **P 13 22 10.1 -0.8**
baz=229
**UALR University of 18.14 24** P **P 13 22 09.8 -1.5**
**W18A Petrified Fore 18.25 337** P **P 13 22 13.3 +0.5**
baz=153
**OK048 Pawnee Station 18.34 11** **P 13 22 12.2 -1.4**
OK048 IAmb IAmb 13 22 15.6
comp=Z,24nm,0.9s
**RLO Rose Lookout 18.53 16** **P 13 22 14.2 -1.5**
RLO IAmb IAmb 13 22 16.3
comp=Z,34nm,1.0s
**WHAR Wooly Hollow 18.61 24** P **P 13 22 15.5 -1.0**
**BLOK Blackwell 18.62 10** P **P 13 22 16.0 -0.7**
**Y14A Wickenburg 18.67 328** P **P 13 22 16.5 -0.8**
**KAN14 Manchester OK 18.70 8** P **P 13 22 16.6 -0.9**
**KAN13 South Haven SW 18.83 9** P **P 13 22 18.1 -0.9**
KAN13 IAmb IAmb 13 22 19.9
comp=Z,34nm,0.9s
**T25A Trinidad 18.85 352** P **P 13 22 19.7 +0.3**
baz=170,SNR=13
**Z47A Carrollton 18.90 36** P **P 13 22 19.4 -0.3**
**KAN01 Argonia South 18.92 9** P **P 13 22 19.7 -0.3**
KAN01 IAmb IAmb 13 22 20.6
comp=Z,31nm,0.8s
**KAN09 Caldwell North 18.93 9** P **P 13 22 19.3 -0.7**
KAN09 IAmb IAmb 13 22 31.8
comp=Z,60nm,1.2s
**HHAR Hobbs 18.94 19** P **P 13 22 19.0 -1.2**
HHAR IAmb IAmb 13 22 20.8
comp=Z,32nm,1.0s
**U38A Gravette 18.96 17** P **P 13 22 19.0 -1.4**
U38A IAmb IAmb 13 22 21.2
comp=Z,27nm,0.8s
**KAN08 Anthony NE Sta 18.97 8** P **P 13 22 19.3 -1.1**
**GLA Glamis 18.97 323** P **P 13 22 21.7 +1.1**
baz=136
**FCAR Ozark Folk Cen 19.20 23** P **P 13 22 22.0 -1.0**
FCAR IAmb IAmb 13 22 23.4
comp=Z,53nm,1.0s
**OXF Oxford 19.21 31** P **P 13 22 21.9 -1.2**
OXF IAmb IAmb 13 22 26.2
comp=Z,41nm,0.8s
**OXF Oxford 19.21 31** P **P 13 22 22.3 -0.8**
baz=216
**LRAL Lakeview Retre 19.40 39** P **P 13 22 23.7 -1.5**
**LRAL Lakeview Retre 19.40 39** P **P 13 22 24.3 -0.9**
baz=225
**IKP In-Ko-Pah, Jac 19.45 320** P **P 13 22 27.1 +1.2**
baz=132
**SWSC Sam W. Stewart 19.47 321** P **P 13 22 27.2 +1.2**
baz=134
**PDMCI Parker Dam,Lak 19.54 327** P **P 13 22 27.8 +1.1**
baz=140
**SDCO Great Sand Dun 19.61 350** Pn **P 13 22 28.7 +1.0**
**SDCO Great Sand Dun 19.61 350** P **P 13 22 28.9 +1.2**
baz=167,SNR=36
**352A Blakely 19.70 46** P **P 13 22 27.0 -1.4**
**MVCO Mesa Verde 19.77 343** P **P 13 22 30.5 +1.1**
baz=159,SNR=6.7
**BC3 Big Chuckawall 19.77 323** P **P 13 22 30.5 +1.2**
baz=136
**MONP2 Monument Peak 19.81 320** P **P 13 22 31.2 +1.3**
baz=132
**S22A 4UR Ranch, Cre 19.86 347** **P 13 22 31.9 +1.4**
**S22A 4UR Ranch, Cre 19.86 347** P **P 13 22 31.2 +0.7**
baz=164,SNR=14
**IRM Iron Mountain 19.97 324** P **Pn 13 22 33.4 -0.2**
baz=138,SNR=9.2
**NEE2 Needles Airpor 20.15 327** P **P 13 22 34.8 +1.5**
baz=140
**109C Camp Elliot, M 20.23 318** P **P 13 22 35.6 +1.3**
baz=131
**PLAL Pickwick Lake 20.25 33** P **P 13 22 33.4 -1.1**
PLAL IAmb IAmb 13 22 37.6
comp=Z,39nm,0.8s
**MGMO Mountain Grove 20.28 21** P **P 13 22 33.3 -1.5**
MGMO IAmb IAmb 13 22 34.8
comp=Z,38nm,0.9s
**TPFO Pinon Flats 20.32 321** P **P 13 22 37.1 +1.7**
baz=134
**PFO Pinyon Flats O 20.33 321** P **P 13 22 37.2 +1.8**
comp=Z,2.5nm,0.7s,baz=106,slow=3.5,SNR=4.9
PFO LR LR 13 30 48.3
comp=Z,88nm,19.5s,baz=151,slow=38
comp=Z,2.5nm,0.7s
**PFO Pinyon Flats O 20.33 321** P **P 13 22 37.1 +1.6**
baz=134
**Y49A Blount Mountai 20.33 38** P **P 13 22 33.5 -1.8**
Y49A IAmb IAmb 13 22 38.7
comp=Z,28nm,0.8s
**BELC Belle Mtn. Jos 20.33 323** P **P 13 22 37.3 +1.8**
baz=135
**CBKS Cedar Bluff 20.37 3** P **P 13 22 34.3 -1.4**
**CBKS Cedar Bluff 20.37 3** P **P 13 22 35.7 0.0**
baz=184
**HALT Halls 20.38 29** P **P 13 22 34.6 -1.2**
**X48A Hartselle 20.40 36** P **P 13 22 34.4 -1.6**
X48A IAmb IAmb 13 22 35.4
comp=Z,15nm,0.6s
**S39A Bolivar 20.43 18** P **P 13 22 34.6 -1.8**
**KSCO Kaye Shedlock' 20.55 357** P **P 13 22 37.6 -0.2**
KSCO IAmb IAmb 13 22 54.6
comp=Z,37nm,0.8s
**KSCO Kaye Shedlock' 20.55 357** P **P 13 22 38.0 +0.2**
baz=176
**152A Waverly Hall 20.57 43** P **P 13 22 37.4 -0.6**
**T42A Van Buren 20.60 24** P **P 13 22 36.4 -1.7**
T42A IAmb IAmb 13 22 42.0
comp=Z,22nm,0.9s
**PBMO Poplar Bluff 20.64 25** P **P 13 22 37.9 -0.8**
PBMO IAmb IAmb 13 22 42.8
comp=Z,36nm,0.9s
**GMRC Granite Mounta 20.72 325** P **P 13 22 41.5 +1.9**
baz=138
**Q24A Divide 20.75 351** P **P 13 22 39.2 -0.9**
**Q24A Divide 20.75 351** P **P 13 22 40.3 +0.1**
baz=169
**MURC Murrieta 20.77 320** P **P 13 22 41.6 +1.5**
baz=132
**HICK Hickman 20.95 28** P **P 13 22 41.1 -0.9**
**KSU1 Kansas State U 21.01 10** P **P 13 22 41.6 -1.0**
KSU1 IAmb IAmb 13 23 09.8
comp=Z,31nm,1.1s
**KSU1 Kansas State U 21.01 10** P **P 13 22 42.3 -0.3**
baz=192
**BBRC Big Bear Solar 21.06 322** P **P 13 22 45.0 +1.6**
baz=134
**HEC Hector,Ludlow 21.12 324** P **P 13 22 45.0 +1.0**
baz=136
**HMU Henry Mountain 21.14 339** P **P 13 22 43.8 -0.5**
HMU IAmb IAmb 13 22 47.5
comp=Z,29nm,1.0s
**WVT Waverly 21.28 31** P **P 13 22 42.6 -2.9**
WVT IAmb IAmb 13 22 49.8
comp=Z,17nm,0.9s
**WVT Waverly 21.28 31** P **P 13 22 45.0 -0.4**
baz=217
**PKCU Pink Cliffs 21.28 335** P **P 13 22 44.4 -1.4**
PKCU IAmb IAmb 13 23 20.4
comp=Z,29nm,1.3s
**R40A Maddies Statio 21.31 20** P **P 13 22 43.7 -2.1**
R40A IAmb IAmb 13 22 50.2
comp=Z,24nm,0.7s
**TUQ Turquoise Moun 21.35 325** P **P 13 22 47.4 +1.1**
baz=138,SNR=9.9
**CIS Catalina Islan 21.40 318** P **P 13 22 47.6 +0.7**
baz=129
**CCM Cathedral Cave 21.45 22** P **P 13 22 45.3 -1.9**
CCM IAmb IAmb 13 23 06.8
comp=Z,17nm,0.8s
**CCM Cathedral Cave 21.45 22** P **P 13 22 45.9 -1.3**
baz=207
**BFSC Mount Baldy Ra 21.48 320** P **P 13 22 48.8 +1.0**
baz=132
**SWET Sewanee 21.58 36** P **P 13 22 46.6 -2.2**
**ISCO Idaho Springs 21.64 351** P **P 13 22 49.9 +0.3**
baz=168
**FVM French Village 21.69 24** P **P 13 22 47.6 -2.2**
FVM IAmb IAmb 13 22 50.6
comp=Z,14nm,0.8s
**GSC Goldstone, Bar 21.73 324** P **P 13 22 52.5 +2.1**
baz=136
**GOGA Godfrey 21.86 43** P **P 13 22 50.8 -0.9**
baz=231
**SHOC Shoshone, Teco 21.88 326** P **P 13 22 54.3 +2.3**
baz=138
**S44A Carbondale 21.91 26** P **P 13 22 49.9 -2.3**
**W50A Signal Mountai 21.92 37** P **P 13 22 49.5 -2.9**
W50A IAmb IAmb 13 23 18.7
comp=Z,11nm,0.7s
**CLTN Cedars of Leba 22.01 34** P **P 13 22 50.7 -2.6**
**EDW2 Edwards Air Fo 22.12 321** P **P 13 22 55.8 +1.2**
baz=133
**MSU Marysvale 22.16 337** P **P 13 22 54.0 -1.1**
**P38A Dawn 22.18 16** P **P 13 22 53.3 -1.8**
P38A IAmb IAmb 13 23 15.2
comp=Z,21nm,1.1s
**T47A Sharon Grove 22.31 31** P **P 13 22 54.1 -2.5**
T47A IAmb IAmb 13 22 58.8
comp=Z,20nm,0.8s
**LRMC Laurel Mtn Rad 22.36 323** P **P 13 22 58.4 +1.1**
baz=135
**OSI Osito Audit: C 22.39 320** P **P 13 22 59.0 +1.5**
baz=131
**O20A White River Ci 22.46 346** P **P 13 22 58.3 -0.1**
O20A IAmb IAmb 13 23 00.1
comp=Z,12nm,0.8s
**O20A White River Ci 22.46 346** P **P 13 22 58.6 +0.2**
baz=162,SNR=8.8
**OGNE Ogallala 22.46 359** P **P 13 22 56.9 -1.4**
**OGNE Ogallala 22.46 359** P **P 13 22 58.3 0.0**
baz=178
**P40A Paris 22.51 19** P **P 13 22 55.1 -3.6**
P40A IAmb IAmb 13 23 05.3
comp=Z,29nm,0.9s
**MTDJ Mount Denham 22.55 87** P **P 13 22 59.3 -0.2**
**CPCT Cooper Cave 22.55 38** P **P 13 22 56.2 -3.0**
CPCT IAmb IAmb 13 23 28.6
comp=Z,16nm,1.1s
**FURC Furnace Creek, 22.62 326** P **P 13 23 01.2 +1.3**
baz=138
**W52A Murphy 22.66 39** P **P 13 22 58.4 -2.0**
W52A IAmb IAmb 13 23 26.2
comp=Z,13nm,0.7s
**MPMC Manual Prospec 22.66 324** P **P 13 23 01.4 +0.8**
baz=136,SNR=5.9
**TPNV Topopah Spring 22.67 328** P **P 13 23 01.3 +0.7**
baz=140,SNR=11
**N23A Red Feather La 22.76 351** P **P 13 23 01.5 -0.1**
N23A IAmb IAmb 13 23 03.0
comp=Z,21nm,0.9s
**N23A Red Feather La 22.76 351** P **P 13 23 02.0 +0.4**
baz=168,SNR=16
**PSUT Pine Spring 22.84 334** P **P 13 23 00.9 -1.5**
**ISA Isabella, Lake 22.95 322** P **P 13 23 05.4 +2.0**
baz=133
**Q44A Meyer Farm, Va 23.04 25** P **P 13 23 01.7 -2.4**
**BGNE Belgrade 23.07 6** P **P 13 23 02.4 -2.2**
**BGNE Belgrade 23.07 6** P **P 13 23 04.1 -0.5**
baz=187
**TKL Tuckaleechee C 23.14 39** P **P 13 23 01.5 -3.7**
**TKL Tuckaleechee C 23.14 39** LR LR 13 33 54.9
comp=Z,59nm,21.9s,baz=204,slow=42
**BG3 Lake Jocassee 23.21 41** P **P 13 23 02.9 -2.9**
**PKM Mcpherson Peak 23.24 319** P **P 13 23 06.9 +0.5**
baz=130
**CWC Cottonwood Cre 23.27 324** P **P 13 23 07.8 +1.1**
baz=135
**MPU Maple Canyon 23.31 340** P **P 13 23 04.3 -2.7**
**N38A Joes South For 23.35 16** P **P 13 23 05.1 -2.1**
**V52A Sevierville 23.37 39** P **P 13 23 04.4 -3.0**
V52A IAmb IAmb 13 23 05.9
comp=Z,10nm,0.7s
**R11B Troy Canyon, C 23.45 331** P **P 13 23 09.5 +1.2**
baz=143,SNR=11
**T50A Nancy 23.51 35** P **P 13 23 05.2 -3.5**
**SMMC Simmler 23.63 319** P **P 13 23 10.7 +0.9**
baz=130
**WCI Wyandotte Cave 23.69 30** P **P 13 23 07.7 -2.6**
WCI IAmb IAmb 13 23 27.2
comp=Z,20nm,0.8s
**WCI Wyandotte Cave 23.69 30** P **P 13 23 09.0 -1.2**
baz=218
**V53A Saluda 23.72 40** P **P 13 23 07.6 -3.1**
**L34A Svendsen Farm, 23.85 9** P **P 13 23 10.1 -1.6**
L34A IAmb IAmb 13 23 11.8
comp=Z,41nm,1.4s
**DUG Dugway, Tooele 23.87 338** P **P 13 23 12.5 +0.4**
baz=152,SNR=5.5
**TZTN Tazewell 23.88 37** P **P 13 23 11.3 -0.8**
baz=226
**N41A Harden Midland 23.96 20** P **P 13 23 10.2 -2.5**
**K30B Basset 24.22 3** P **P 13 23 14.5 -0.6**
**R49A Shelbyville 24.29 32** P **P 13 23 14.7 -1.0**
R49A IAmb IAmb 13 23 43.8
comp=Z,19nm,1.4s
**KMSC Kings Mountain 24.32 43** P **P 13 23 15.1 -0.9**
baz=232,SNR=5.1
**HDIL Hopedale 24.36 23** P **P 13 23 14.2 -2.2**
**HDIL Hopedale 24.36 23** P **P 13 23 15.2 -1.1**
baz=208,SNR=6.7
**SCIA State Center 24.41 15** P **P 13 23 15.9 -0.8**
baz=198
**MLAC Mammoth, Mammo 24.55 325** P **P 13 23 19.2 +0.8**
baz=136
**K22A Casper 24.56 351** P **P 13 23 18.4 0.0**
**K22A Casper 24.56 351** P **P 13 23 18.8 +0.5**
baz=168,SNR=24
**S51A Beattyville 24.64 35** P **P 13 23 16.2 -2.7**
S51A IAmb IAmb 13 23 20.5
comp=Z,17nm,0.8s
**HWUT Hardware Ranch 24.73 341** IAmb IAmb 13 23 22.9
comp=Z,16nm,0.8s
**NVAR Mina Array Bea 24.85 327** P **P 13 23 22.3 +1.2**
**NVAR Mina Array Bea 24.85 327** P **P 13 23 22.8 +1.7**
comp=Z,6.9nm,0.7s,baz=146,slow=10,SNR=45
NVAR LR LR 13 33 51.4
comp=Z,68nm,21.9s,baz=156,slow=38
comp=Z,6.9nm,0.7s
**U54A Nelsons Funny 24.89 40** IAmb IAmb 13 23 20.6
comp=Z,14nm,0.6s
**SFIN Lafayette 25.07 26** IAmb IAmb 13 23 23.2
comp=Z,16nm,0.6s
**SFIN Lafayette 25.07 26** P **P 13 23 22.1 -0.7**
baz=213,SNR=6.1
**P48A Milroy 25.07 30** IAmb IAmb 13 23 23.1
comp=Z,13nm,0.8s
**L40A Anamosa 25.09 18** IAmb IAmb 13 23 23.6
comp=Z,18nm,1.1s
**BW06 Boulder Array 25.27 346** P **P 13 23 24.7 -0.1**
baz=161,SNR=34
**PD31 Pinedale Array 25.27 346** IAmb IAmb 13 23 27.6
comp=Z,19nm,0.9s
**PDAR Pinedale Array 25.27 346** P **P 13 23 23.8 -1.1**
**PDAR Pinedale Array 25.27 346** P **P 13 23 24.6 -0.2**
comp=Z,15nm,0.8s,baz=146,slow=11,SNR=74
PDAR pP **pP 13 23 40.4 +0.1**
comp=Z,8.4nm,0.9s,baz=155,slow=11,SNR=10
PDAR PcP **PcP 13 26 57.4 +0.6**
comp=Z,0.6nm,0.7s,baz=152,slow=4.9,SNR=4.2
PDAR pPcP 13 27 14.8
comp=Z,1.0nm,0.6s,baz=136,slow=6.5,SNR=5.0
PDAR LR LR 13 34 34.1
comp=Z,103nm,18.3s,baz=162,slow=39
comp=Z,15nm,0.8s
**ELK Elko 25.28 335** LR LR 13 33 53.9
comp=Z,124nm,20.9s,baz=154,slow=38
**P49A Miami Univ. Ec 25.47 31** IAmb IAmb 13 23 27.9
comp=Z,18nm,0.8s
**P49A Miami Univ. Ec 25.47 31** P **P 13 23 25.5 -1.0**
baz=219
**L42A Oliver, Polo 25.52 20** IAmb IAmb 13 23 27.6
comp=Z,15nm,0.8s
**ECSD EROS Data Cent 25.55 8** IAmb IAmb 13 23 29.0
comp=Z,12nm,0.8s
**ECSD EROS Data Cent 25.55 8** P **P 13 23 26.6 -0.6**
baz=190,SNR=7.1
**RSSD Black Hills 25.73 355** P **P 13 23 27.6 -1.5**
**RSSD Black Hills 25.73 355** P **P 13 23 28.5 -0.5**
baz=174
**O48B Farmland 25.83 29** P **P 13 23 29.2 -0.5**
baz=217,SNR=8.5
**SUSD Miller 26.02 4** P **P 13 23 31.5 +0.1**
baz=185,SNR=5.7
**JFWS Jewell Farm 26.15 19** P **P 13 23 32.6 0.0**
baz=204
**V58A Windy Hill, Pi 26.15 44** P **P 13 23 30.2 -2.4**
**SNOW Snow King Moun 26.22 344** IAmb IAmb 13 23 38.0
comp=Z,13nm,0.8s
**TPAW Teton Pass 26.30 344** IAmb IAmb 13 23 37.8
comp=Z,17nm,0.8s

**LOHW Long Hollow** 26.32 345 IAmb IAmb 13 23 38.4
comp=Z,11nm,0.8s
**I37A Lemond, Waseca** 26.37 13 IAmb IAmb 13 23 33.9
comp=Z,18nm,0.7s
**N49A Columbus Grove** 26.81 30 IAmb IAmb 13 23 39.7
comp=Z,15nm,0.8s
**ACSO Alum Creek Sta** 26.86 32 P P **13 23 38.6 -0.4**
baz=221
**HLID Hailey** 27.41 339 P P **13 23 44.8 +0.7**
baz=152
**RLMT Red Lodge** 27.45 348 P P **13 23 44.4 -0.1**
baz=163
**BOZ Bozeman (W)** 28.43 345 P P **13 23 54.4 +1.2**
baz=159
**DLMT Dillon** 28.47 343 IAmb IAmb 13 24 12.2
comp=Z,12nm,1.2s
**OTAV Otavalo** 28.80 126 P P **13 23 53.9 -3.2**
**M53A WI Miller and** 28.94 33 P P **13 23 56.3 -1.2**
baz=224
**MDND Maddock** 29.39 2 P P **13 24 01.1 -0.4**
baz=183
**YBH Yreka Blue Hor** 29.57 326 LR LR 13 35 05.8
comp=Z,68nm,20.1s,baz=144,slow=35
**ROSC El Rosal** 29.60 114 P P **13 24 06.2 +2.1**
comp=Z,8.1nm,0.4s,baz=225,slow=17,SNR=1.2
comp=Z,8.1nm,0.4s
**SSPA Standing Stone** 29.91 37 P P **13 24 04.4 -1.7**
**AGMN Agassiz Nation** 30.13 7 P P **13 24 06.8 -1.2**
baz=190
**MSO Missoula** 30.19 343 P P **13 24 08.5 -0.2**
baz=155
**EGMT Eagleton** 30.33 349 P P **13 24 09.1 -0.7**
baz=164
**F10A Beach Ranch, E** 30.49 338 IAmb IAmb 13 24 12.3
comp=Z,9.7nm,0.9s
**N58A Sunbury** 30.72 38 IAmb IAmb 13 24 16.2
comp=Z,8.1nm,0.9s
**SDV Santo Domingo** 31.21 104 LR LR 13 38 58.4
comp=Z,59nm,19.9s,baz=358,slow=40
**ULM Lac du Bonnet** 32.05 7 IAmb IAmb 13 24 24.1
comp=Z,9.8nm,0.8s
**ULM Lac du Bonnet** 32.05 7 P P **13 24 22.4 -2.5**
comp=Z,12nm,1.0s,baz=197,slow=9.1,SNR=12
ULM pP **pP 13 24 38.2 -2.2**
comp=Z,8.1nm,0.9s,baz=183,slow=8.7,SNR=6.2
ULM LR LR 13 38 23.8
comp=Z,96nm,19.5s,baz=196,slow=38
comp=Z,12nm,1.0s
**SADO Sadowa** 32.14 30 IAmb IAmb 13 24 26.0
comp=Z,9.6nm,0.8s
**SADO Sadowa** 32.14 30 LR LR 13 38 53.9
comp=Z,52nm,19.1s,baz=181,slow=39
**NEW Newport** 32.44 340 LR LR 13 37 39.4
comp=Z,55nm,19.3s,baz=154,slow=36
**PAL Palisades** 32.51 40 P P **13 24 27.4 -1.6**
baz=234
**IGPR InterUniversit** 33.40 85 P P **13 24 37.6 +0.5**
**ATAH Atahualpa** 33.98 136 LR LR 13 35 58.2
comp=Z,34nm,21.5s,baz=32,slow=32
**L61B Northampton** 34.10 39 P P **13 24 42.1 -0.8**
baz=234
**LONY Lake Ozonia** 34.36 35 P P **13 24 44.2 -0.9**
baz=229
**NNA Nana** 38.66 140 LR LR 13 37 23.0
comp=Z,44nm,20.2s,baz=287,slow=30
**BBB Bella Bella** 39.73 334 LR LR 13 41 42.9
comp=Z,48nm,19.8s,baz=152,slow=36
**V35K Ketchikan** 43.45 335 P P **13 26 01.1 +0.3**
baz=136
**TOAD Toad River Com** 44.00 342 P P **13 26 05.1 -0.2**
baz=146
**T35M Bob Quinn** 44.15 338 IAmb IAmb 13 26 08.5
comp=Z,5.9nm,0.8s
**T35M Bob Quinn** 44.15 338 P P **13 26 06.5 +0.1**
baz=138
**ETMB Extrema** 44.55 126 P P **13 26 11.1 +0.9**
**SCHQ Schefferville** 44.84 28 P P **13 26 09.4 -2.7**
comp=Z,3.1nm,0.8s,baz=228,slow=17,SNR=2.7
SCHQ LR LR 13 47 18.4
comp=Z,35nm,20.6s,baz=318,slow=39
comp=Z,3.1nm,0.8s
**YKA Yellowknife Ar** 45.00 351 P P **13 26 11.6 -1.5**
comp=Z,1.0nm,0.8s,baz=167,slow=8.1,SNR=5.8
YKA PcP **PcP 13 27 53.5 +0.3**
comp=Z,3.6nm,1.2s,baz=129,slow=5.5,SNR=5.1
YKA LR LR 13 46 23.5
comp=Z,168nm,18.1s,baz=129,slow=38
comp=Z,1.0nm,0.8s
**DLBC Dease Lake** 45.18 339 P P **13 26 15.2 +0.4**
DLBC IAmb IAmb 13 26 17.1
comp=Z,7.4nm,0.9s
**DLBC Dease Lake** 45.18 339 LR LR 13 46 59.3
comp=Z,96nm,20.6s,baz=128,slow=38
**DLBC Dease Lake** 45.18 339 P P **13 26 15.1 +0.4**
baz=140,SNR=7.1
**RPN Rapa Nui** 45.94 190 LR LR 13 41 03.5
comp=Z,68nm,20.6s,baz=352,slow=30
**S32K Killisnoo** 46.13 336 P P **13 26 22.6 +0.5**
baz=133
**SIT Sitka** 46.14 335 P P **13 26 22.6 +0.4**
baz=132
**R33M Jennings River** 46.22 339 P P **13 26 23.1 +0.1**
baz=139
**Q32M Nakina River** 46.34 338 P P **13 26 23.3 -0.8**
baz=137
**R32K Eaglecrest** 46.67 337 P P **13 26 27.1 +0.8**
baz=134
**TAOE Nuku Hiva Isla** 46.95 238 *e*LR LR 13 39 53.2
comp=Z,95nm,26.6s
**P32M Atlin** 47.31 338 P P **13 26 31.9 +0.4**
baz=136
**P33M Teslin, Yukon** 47.46 339 P P **13 26 32.7 +0.1**
baz=137
**LPAZ La Paz** 47.48 135 P P **13 26 34.4 +0.4**
comp=Z,1.6nm,0.8s,baz=341,slow=6.3,SNR=5.9
LPAZ LR LR 13 44 24.1
comp=Z,40nm,21.7s,baz=30,slow=33
comp=Z,1.6nm,0.8s
**PLBC Pleasant Camp** 48.18 337 P P **13 26 38.1 +0.1**
baz=133
**WHY Whitehorse** 48.49 339 P P **13 26 40.3 -0.2**
baz=135
**P30M Million Dollar** 48.85 337 P P **13 26 43.6 +0.3**
baz=132
**O30N Mendenhall** 48.99 338 P P **13 26 44.7 +0.4**
baz=134
**FARO Faro, Yukon** 49.13 341 IAmb IAmb 13 26 47.1
comp=Z,3.8nm,0.9s
**FARO Faro, Yukon** 49.13 341 P P **13 26 45.2 -0.2**
baz=138
**MDP Montagnes des** 49.27 99 LR LR 13 48 25.4
comp=Z,28nm,20.0s,baz=164,slow=37
**N31M Braeburn, Yuko** 49.38 339 P P **13 26 48.2 +0.9**
baz=135
**M31M Drury Creek, Y** 49.44 340 IAmb IAmb 13 26 49.7
comp=Z,4.0nm,0.7s
**M31M Drury Creek, Y** 49.44 340 P P **13 26 47.9 +0.2**
baz=137,SNR=5.6
**N30M Aishikik Lake** 49.82 338 P P **13 26 51.0 +0.4**
baz=133
**YUK6 Outpost Mounta** 49.92 337 P P **13 26 52.4 +0.7**
baz=131
**YUK4 Talbot Arm** 50.29 338 P P **13 26 55.0 +0.6**
baz=131
**FRB Frobisher Bay** 50.48 18 LR LR 13 48 56.5
comp=Z,41nm,20.2s,baz=206,slow=37
**O28M Mount Upton** 50.49 336 P P **13 26 56.5 +0.5**
baz=129
**M30M Minto, Yukon** 50.49 340 P P **13 26 56.6 +0.8**
baz=134
**YUK8 Steele Glacier** 50.66 337 P P **13 26 58.2 +0.9**
baz=130,SNR=6.4
**MESA MESA** 50.81 335 P P **13 26 59.8 +1.5**
baz=127
**M29M Somme Creek** 50.96 339 IAmb IAmb 13 27 01.7
comp=Z,4.1nm,0.8s
**M29M Somme Creek** 50.96 339 P P **13 27 00.2 +0.9**
baz=132,SNR=6.6
**CTG Chitna Glacier** 51.05 336 P P **13 27 00.8 +0.7**
baz=128
**L29M L29M** 51.30 340 P P **13 27 03.0 +1.2**
baz=133,SNR=14
**CRQE Cirque** 51.60 335 P P **13 27 05.4 +1.2**
baz=126
**K29M Barlow Dome** 51.62 340 P P **13 27 05.1 +0.8**
K29M IAmb IAmb 13 27 06.5
comp=Z,5.0nm,0.8s
**K29M Barlow Dome** 51.62 340 P P **13 27 04.7 +0.5**
baz=134,SNR=5.4
**J30M Hart River** 51.77 342 P P **13 27 06.2 +0.8**
baz=136
**MCARA McCarthy VSAT** 51.95 336 P P **13 27 07.1 +0.4**
baz=126
**M27K Edge Creek, AK** 52.12 337 P P **13 27 08.2 +0.1**
baz=128
**Q23K Middleton Isla** 52.22 333 P P **13 27 09.3 +0.7**
baz=122
**I30M Mount Dempster** 52.25 342 IAmb IAmb 13 27 10.1
comp=Z,3.1nm,0.8s
**I30M Mount Dempster** 52.25 342 P P **13 27 09.3 +0.3**
baz=136
**DAWY Dawson** 52.37 340 P P **13 27 10.3 +0.6**
baz=132
**L27K Beaver Creek,** 52.54 338 P P **13 27 11.6 +0.6**
baz=129
**M26K Nabesna, AK** 52.56 337 P P **13 27 12.2 +1.0**
baz=127
**G31M Satah River** 52.95 344 P P **13 27 14.3 +0.4**
baz=139,SNR=5.8
**L26K Log Cabin Wild** 53.06 338 P P **13 27 15.2 +0.4**
baz=127
**KLU Klutina** 53.16 335 P P **13 27 15.8 +0.2**
baz=123
**EPYK Eagle Plains** 53.19 343 P P **13 27 16.4 +0.6**
baz=136
**K27K Chicken** 53.24 339 P P **13 27 16.6 +0.5**
baz=129
**GLI Glacier Island** 53.30 334 P P **13 27 16.7 +0.1**
baz=122
**EGAK Eagle** 53.42 340 P P **13 27 17.1 -0.3**
EGAK IAmb IAmb 13 27 18.4
comp=Z,7.0nm,0.8s
**EGAK Eagle** 53.42 340 P P **13 27 17.9 +0.5**
baz=130,SNR=7.1
**I28M Miner Creek** 53.48 341 P P **13 27 18.3 +0.4**
baz=132
**H29M Whitestone** 53.55 342 IAmb IAmb 13 27 19.4
comp=Z,5.1nm,0.7s
**H29M Whitestone** 53.55 342 P P **13 27 18.9 +0.6**
baz=134,SNR=5.3
**M24K Tolsona, Glenn** 53.60 336 P P **13 27 19.4 +0.6**
baz=123
**PAX Paxson** 53.81 337 P P **13 27 21.0 +0.5**
baz=125
**INK Inuvik** 53.84 346 IAmb IAmb 13 27 21.4
comp=Z,7.3nm,0.9s
**INK Inuvik** 53.84 346 LR LR 13 52 03.7
comp=Z,56nm,21.4s,baz=267,slow=38
**INK Inuvik** 53.84 346 P P **13 27 20.4 0.0**
baz=141
**F30M Barrier River** 53.86 344 P P **13 27 21.3 +0.8**
baz=133
**SCRK Sand Creek** 53.87 338 P P **13 27 21.7 +0.8**
baz=127
**SCM Sheep Creek Mo** 53.90 335 P P **13 27 21.2 +0.1**
baz=122
**G29M Pine Creek** 53.94 343 P P **13 27 21.7 +0.5**
baz=135
**M23K Glacier View** 54.04 335 P P **13 27 22.3 +0.3**
baz=122
**J26L Joseph Creek** 54.05 339 P P **13 27 22.6 +0.5**
baz=128,SNR=7.5
**I27K Kandik River** 54.11 341 P P **13 27 23.1 +0.6**
baz=130
**SML Sawmill** 54.30 335 P P **13 27 24.4 +0.5**
baz=121
**BRSE Bradley Lake S** 54.31 332 P P **13 27 24.5 +0.4**
baz=117
**KDAK Kodiak Island** 54.33 329 LR LR 13 50 10.3
comp=Z,37nm,19.9s,baz=223,slow=36
**KDAK Kodiak Island** 54.33 329 P P **13 27 24.4 +0.3**
baz=114
**K24K Donnelly Dome** 54.41 338 P P **13 27 25.0 +0.3**
baz=125
**I26K Coal Creek Min** 54.41 340 P P **13 27 24.9 +0.3**
baz=128
**OHAK Old Harbor** 54.45 328 P P **13 27 25.6 +0.7**
baz=113
**WAT6 Susitna Watana** 54.47 336 P P **13 27 25.5 +0.2**
baz=122
**H27K Steamboat Moun** 54.49 341 P P **13 27 25.7 +0.4**
baz=131
**PMR Palmer** 54.51 334 P P **13 27 26.1 +0.7**
baz=120
**DHY Denali Highway** 54.59 336 P P **13 27 26.4 +0.2**
baz=123
**HOM Homer** 54.69 331 P P **13 27 26.8 +0.2**
baz=116
**J25K Sala River,** 54.74 338 P P **13 27 27.8 +0.7**
baz=126
**G27K Doyon Strip** 54.91 342 IAmb IAmb 13 27 29.1
comp=Z,4.6nm,0.6s
**G27K Doyon Strip** 54.91 342 P P **13 27 28.6 +0.4**
baz=131,SNR=9.3
**F28M Old Crow** 54.95 343 IAmb IAmb 13 27 29.7
comp=Z,8.1nm,1.0s
**F28M Old Crow** 54.95 343 P P **13 27 28.8 +0.3**
baz=133
**E29M Blow River** 54.97 344 P P **13 27 29.1 +0.4**
baz=136
**CAPN Captain Cook N** 54.97 333 P P **13 27 28.5 -0.2**
baz=117
**SUA Susitna One** 55.12 334 P P **13 27 29.9 -0.1**
baz=118
**R18K Karluk** 55.16 328 P P **13 27 30.0 -0.2**
baz=112
**HDA Harding Lake** 55.18 338 IAmb IAmb 13 27 31.3
comp=Z,5.0nm,0.7s
**HDA Harding Lake** 55.18 338 P P **13 27 30.7 +0.5**
baz=124
**Q19K Cape Douglas,** 55.30 330 P P **13 27 31.6 +0.4**
baz=114
**O20K Slope Mountain** 55.32 332 P P **13 27 31.2 -0.1**
baz=115
**PRP Porcupine Dome** 55.33 339 P P **13 27 30.7 -0.7**
baz=126
**IL31** 55.36 338 IAmb IAmb 13 27 33.2
comp=Z,6.2nm,0.9s
**ILAR Eielson Array** 55.36 338 P P **13 27 31.6 +0.1**
**ILAR Eielson Array** 55.36 338 P P **13 27 31.4 0.0**
comp=Z,3.5nm,0.9s,baz=142,slow=5.4,SNR=29
ILAR pP **pP 13 27 47.0 -1.3**
comp=Z,3.9nm,0.9s,baz=146,slow=5.9,SNR=11
ILAR PcP **PcP 13 28 32.4 +1.1**
comp=Z,1.7nm,0.6s,baz=155,slow=2.7,SNR=14
ILAR LR LR 13 52 25.1
comp=Z,44nm,19.2s,baz=84,slow=37
comp=Z,3.5nm,0.9s
**A36M Sachs Harbour** 55.37 351 P P **13 27 31.6 +0.3**
baz=152
**CUT Chulitna** 55.38 335 P P **13 27 31.5 -0.1**
baz=119
**P19K Oil Pt** 55.41 331 P P **13 27 31.8 -0.2**
baz=114
**MCK McKinley** 55.54 336 P P **13 27 32.7 -0.1**
baz=121
**E28M Babbage River** 55.55 344 P P **13 27 32.2 -0.6**
baz=134
**N20K Mount Spurr** 55.63 333 P P **13 27 33.3 -0.2**
baz=116
**SPCR Spurr Chakacha** 55.63 333 P P **13 27 33.4 -0.1**
baz=116
**G26K Porcupine Rive** 55.65 341 P P **13 27 33.5 0.0**
baz=129,SNR=5.9
**SKT Skwentna** 55.70 334 P P **13 27 33.8 -0.2**
baz=118
**POKR Poker Plat Res** 55.75 338 P P **13 27 34.1 -0.2**
baz=124
**COLA College** 55.76 338 P P **13 27 35.1 +0.8**
baz=123
**E27K Coleen River** 55.82 343 P P **13 27 35.5 +0.7**
baz=132
**Q18K Katmai Hardscr** 55.85 329 P P **13 27 35.5 +0.3**
baz=112
**H25L Birch Creek** 55.87 340 P P **13 27 35.6 +0.5**
baz=126,SNR=9.3
**MDM Murphy Dome** 55.94 338 IAmb IAmb 13 27 36.4
comp=Z,5.7nm,1.2s
**NEA2 Nenana** 56.05 337 P P **13 27 36.8 +0.4**
baz=122
**Q17K Contact Creek** 56.13 329 P P **13 27 37.2 0.0**
baz=111
**R17L Mt. Peulik Vol** 56.14 328 P P **13 27 38.0 +0.8**
baz=110
**F26K Sheenjek River** 56.23 342 P P **13 27 38.4 +0.7**
baz=129
**P18K Big Mountain,** 56.24 330 P P **13 27 38.4 +0.5**
baz=112
**G25K Bearman Lake** 56.26 340 P P **13 27 39.0 +1.1**
baz=126,SNR=5.2
**H24K Noodor Dome** 56.31 339 IAmb IAmb 13 27 39.7
comp=Z,6.1nm,0.7s
**H24K Noodor Dome** 56.31 339 P P **13 27 38.7 +0.4**
baz=124,SNR=9.6
**M20K Styx River** 56.33 333 P P **13 27 38.5 -0.1**
baz=116,SNR=7.1
**O18K Koktuh Hills** 56.41 331 P P **13 27 38.8 -0.3**
baz=113
**I23K Minto, Yukon-K** 56.45 338 IAmb IAmb 13 27 40.6
comp=Z,5.9nm,0.7s
**I23K Minto, Yukon-K** 56.45 338 P P **13 27 39.3 +0.1**
baz=122,SNR=6.7
**N19K Bonanza Creek** 56.46 332 P P **13 27 39.0 -0.5**
baz=114,SNR=6.3
**BPAW Bear Paw Mtn.** 56.51 336 P P **13 27 39.5 -0.2**
baz=120
**F25K Christian Rive** 56.61 341 P P **13 27 40.5 0.0**
baz=127
**G24K Hadweenzic Riv** 56.66 340 P P **13 27 40.5 -0.3**
baz=125,SNR=11
**H23K Yukon River** 56.87 338 IAmb IAmb 13 27 43.5
comp=Z,3.3nm,0.8s
**H23K Yukon River** 56.87 338 P P **13 27 42.3 0.0**
baz=122
**M19K Big River Lodg** 56.88 333 P P **13 27 42.5 +0.2**
baz=115
**MLY Manley** 56.89 337 IAmb IAmb 13 27 43.7
comp=Z,7.7nm,1.1s
**MLY Manley** 56.89 337 P P **13 27 42.1 -0.4**
baz=120,SNR=5.8
**L20K Farewell, AK** 56.91 334 P P **13 27 42.6 0.0**
baz=116
**CHNA Chernabura Isl** 56.99 324 P P **13 27 43.3 +0.1**
baz=105
**N18K Kilae Creek** 57.04 331 P P **13 27 43.3 -0.3**
baz=112
**L19K White Mountain** 57.19 333 P P **13 27 44.5 -0.1**
baz=114
**O17K Koliganek Bris** 57.26 330 P P **13 27 45.1 0.0**
baz=111
**F24K Squaw Lake** 57.27 341 P P **13 27 45.0 -0.1**
baz=125
**M18K Stony River** 57.33 332 P P **13 27 45.8 +0.3**
baz=113
**C27K Jago River** 57.35 344 P P **13 27 45.1 -0.4**
baz=130
**K20K Telida** 57.37 335 P P **13 27 46.0 +0.1**
baz=116
**I21K Tanana** 57.42 337 P P **13 27 46.5 +0.4**
baz=119
**G23K Bananza Creek** 57.51 339 IAmb IAmb 13 27 48.1
comp=Z,5.8nm,0.8s
**G23K Bananza Creek** 57.51 339 P P **13 27 46.6 -0.2**
baz=122,SNR=7.2
**H22K Ishtalitna Cre** 57.55 338 P P **13 27 47.5 +0.4**
baz=120,SNR=7.9
**N17K Nushagak Hills** 57.58 331 P P **13 27 47.3 0.0**
baz=111
**SDPT Sand Point** 57.62 324 P P **13 27 47.6 0.0**
baz=105
**J20K Nowinta River** 57.77 336 P P **13 27 48.3 -0.3**
baz=116,SNR=5.9
**E24K Your Creek** 57.77 341 IAmb IAmb 13 27 50.0
comp=Z,2.6nm,0.8s
**E24K Your Creek** 57.77 341 P P **13 27 47.7 -0.9**
baz=124
**COLD Coldfoot** 57.85 340 P P **13 27 49.4 +0.3**
baz=122,SNR=5.9
**C26K Camden Bay** 57.85 344 P P **13 27 48.9 -0.1**
baz=129
**D25K Kavik River** 57.88 343 IAmb IAmb 13 27 50.4
comp=Z,5.7nm,0.9s
**D25K Kavik River** 57.88 343 P P **13 27 49.2 -0.2**
baz=127,SNR=7.9
**H21K Melozitna Rive** 57.95 337 P P **13 27 49.6 -0.2**
baz=118,SNR=7.6
**L18K Granite Mounta** 57.99 333 P P **13 27 50.6 +0.4**
baz=112
**M17K Holitna River** 58.01 332 P P **13 27 50.5 +0.2**
baz=111
**E23K Chandalar** 58.11 341 P P **13 27 50.6 -0.5**
baz=123,SNR=5.8
**G22K Bettles** 58.12 339 P P **13 27 50.7 -0.3**
baz=120
**I20K Naaghedeneel** 58.17 336 P P **13 27 51.3 -0.1**
baz=116
**J19K Poorman** 58.27 335 P P **13 27 52.0 -0.1**
baz=115,SNR=8.1
**N16K Nishlik Lake** 58.29 331 P P **13 27 52.3 -0.1**
baz=110
**SFJD Kangerlussuaq** 58.32 21 LR LR 13 53 54.3
comp=Z,47nm,19.8s,baz=223,slow=37
**O15K Ungalikthiuk R** 58.37 329 P P **13 27 52.8 -0.1**
baz=108
**TOLK Toolik Lake Re** 58.42 341 IAmb IAmb 13 27 54.2
comp=Z,4.2nm,0.7s
**TOLK Toolik Lake Re** 58.42 341 P P **13 27 53.3 +0.2**
baz=124,SNR=5.3
**D24K Happy Valley** 58.49 342 P P **13 27 53.6 +0.1**
baz=124
**J18K Innoko River** 58.50 334 P P **13 27 53.6 -0.1**
baz=113
**M16K Timber Creek** 58.57 331 P P **13 27 54.0 -0.2**
baz=110
**S12K Black Hills** 58.58 325 P P **13 27 54.9 +0.5**
baz=104
**G21K Allakaket** 58.61 338 P P **13 27 54.3 -0.1**
baz=118
**H20K Anotleneega Mo** 58.64 337 P P **13 27 55.0 +0.3**
baz=116
**F22K John River** 58.65 340 P P **13 27 54.4 -0.3**
baz=120,SNR=6.8
**L17K Donlin** 58.66 333 P P **13 27 54.9 0.0**
baz=111
**C24K Franklin Bluff** 58.78 343 P P **13 27 55.9 +0.3**
baz=125
**E22K Anaktuvuk Pass** 58.85 340 P P **13 27 56.4 +0.2**
baz=121
**K17K Iditarod** 58.88 333 P P **13 27 56.6 +0.3**
baz=111
**D23K Nanushuk River** 58.94 341 P P **13 27 56.8 +0.1**
baz=122,SNR=5.5
**F21K Alatna River** 58.95 339 P P **13 27 56.7 -0.1**
baz=119,SNR=11
**L16K Owhat River** 59.03 332 P P **13 27 57.5 +0.1**
baz=110
**H19K Roundabout Mou** 59.24 337 P P **13 27 58.6 -0.2**
baz=115
**M15K Kasigluk River** 59.26 330 P P **13 27 59.4 +0.4**
baz=108
**C23K Itkillik River** 59.40 342 P P **13 27 59.8 0.0**
baz=123,SNR=9.1
**PPT Papeete** 59.44 236 LR LR 13 47 08.3
comp=Z,24nm,21.7s,baz=354,slow=29
**PPT2 Papeete2** 59.45 236 *e*LR LR 13 45 42.0
comp=Z,56nm,23.0s
**J17K VABM Dome** 59.45 334 P P **13 28 00.2 -0.1**
baz=111
**D22K Ayikyak River** 59.51 341 P P **13 28 00.5 -0.2**
baz=120,SNR=8.8
**F20K Avaraart Lake** 59.64 338 IAmb IAmb 13 28 02.8
comp=Z,4.9nm,1.1s
**F20K Avaraart Lake** 59.64 338 P P **13 28 01.4 -0.1**
baz=116
**E21K Killik River** 59.70 340 IAmb IAmb 13 28 02.9
comp=Z,8.0nm,1.3s
**E21K Killik River** 59.70 340 P P **13 28 01.9 -0.1**
baz=119
**G19K Purcell Mounta** 59.74 337 P P **13 28 02.1 -0.1**
baz=114,SNR=6.6
**H18K Honbosa River** 59.82 336 P P **13 28 03.2 +0.3**
baz=112
**L15K Ungalak Mounta** 59.93 331 P P **13 28 03.1 -0.5**
baz=108
**J16K Anvik River** 60.06 333 P P **13 28 04.4 -0.1**
baz=109
**K15K Wolf Creek Mou** 60.14 332 P P **13 28 05.3 +0.3**
baz=108
**G18K Tagagawik** 60.23 337 P P **13 28 05.8 +0.2**
baz=113
**F19K Shaleruckik Mo** 60.28 338 P P **13 28 06.2 +0.3**
baz=114
**I17K Unalakleet** 60.30 334 P P **13 28 06.2 +0.2**
baz=110

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C21K | Knifeblade Rid | 60.31 | 341 | P | | P | 13 28 06.4 | +0.3 | |
| | baz=118 | | | | | | | | |
| E20K | Nigu River | 60.34 | 339 | P | | P | 13 28 06.4 | 0.0 | |
| | baz=116 | | | | | | | | |
| E19K | Redstone River | 60.35 | 338 | P | | P | 13 28 07.1 | +0.7 | |
| | baz=115 | | | | | | | | |
| H17K | Granite Mounta | 60.35 | 335 | P | | P | 13 28 06.8 | +0.3 | |
| | baz=111 | | | | | | | | |
| L14K | Kuka Creek | 60.38 | 331 | P | | P | 13 28 07.1 | +0.4 | |
| | baz=106 | | | | | | | | |
| B21K | Ikpikpuk River | 60.48 | 341 | P | | P | 13 28 07.4 | +0.2 | |
| | baz=119 | | | | | | | | |
| D20K | Etivluk River | 60.69 | 340 | P | | P | 13 28 08.4 | -0.3 | |
| | baz=116 | | | | | | | | |
| G17K | Kiwalik Mounta | 60.85 | 336 | P | | P | 13 28 09.9 | +0.1 | |
| | baz=110 | | | | | | | | |
| F18K | Selawik | 60.87 | 337 | P | | P | 13 28 09.9 | 0.0 | |
| | baz=112 | | | | | | | | |
| D19K | Kuna River | 61.09 | 339 | P | | P | 13 28 12.2 | +0.7 | |
| | baz=114 | | | | | | | | |
| J14K | Nanvaranak Lak | 61.17 | 332 | P | | P | 13 28 12.9 | +0.9 | |
| | baz=106 | | | | | | | | |
| A22K | Sinclair Lake | 61.26 | 342 | P | | P | 13 28 13.0 | +0.5 | |
| | baz=119 | | | | | | | | |
| F17K | Baldwin Pennin | 61.41 | 337 | P | | P | 13 28 13.6 | 0.0 | |
| | baz=110 | | | | | | | | |
| B20K | Meade River | 61.44 | 341 | P | | P | 13 28 13.2 | -0.5 | |
| B20K | Meade River | 61.44 | 341 | P | | P | 13 28 13.7 | 0.0 | |
| | baz=116 | | | | | | | | |
| K13K | Kusilvak Mount | 61.45 | 331 | P | | P | 13 28 14.9 | +0.9 | |
| | baz=105 | | | | | | | | |
| G16K | Koyuk River | 61.48 | 335 | P | | P | 13 28 14.6 | +0.6 | |
| | baz=109 | | | | | | | | |
| E18K | Tukpahlearik C | 61.53 | 338 | P | | P | 13 28 14.7 | +0.3 | |
| | baz=112 | | | | | | | | |
| CPUP | Villa Florida | 61.66 | 135 | P | | P | 13 28 16.7 | +0.9 | |
| | comp=Z,3.0nm,0.8s,baz=348,slow=9.3,SNR=8.3 | | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| C19K | Lookout Ridge | 61.83 | 340 | P | | P | 13 28 16.0 | -0.5 | |
| C19K | Lookout Ridge | 61.83 | 340 | P | | P | 13 28 17.0 | +0.5 | |
| | baz=113,SNR=6.2 | | | | | | | | |
| A21K | Barrow | 61.88 | 343 | P | | P | 13 28 17.3 | +0.6 | |
| | baz=118 | | | | | | | | |
| C18K | Utukok River | 62.19 | 339 | P | | P | 13 28 19.4 | +0.5 | |
| | baz=112 | | | | | | | | |
| BDFB | Brasilia | 62.43 | 119 | P | | P | 13 28 21.6 | +0.2 | |
| | comp=Z,1.9nm,0.5s,baz=294,slow=20,SNR=3.3 | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| D17K | Noatak River | 62.52 | 338 | P | | P | 13 28 21.2 | +0.2 | |
| | baz=109 | | | | | | | | |
| RDOG | Red Dog Mine | 62.57 | 338 | P | | P | 13 28 21.0 | -0.4 | |
| | baz=110 | | | | | | | | |
| B18K | Kokolik River | 62.66 | 340 | P | | P | 13 28 22.3 | +0.4 | |
| | baz=111 | | | | | | | | |
| TBI | Tubuai | 62.73 | 230 | *e*LR | | LR | 13 47 17.5 | | |
| | comp=Z,644nm,26.8s | | | | | | | | |
| C17K | DeLong Mountai | 62.81 | 339 | P | | P | 13 28 22.8 | -0.2 | |
| | baz=109 | | | | | | | | |
| PLCA | Paso Flores | 65.42 | 155 | P | | P | 13 28 42.2 | +1.8 | |
| | comp=Z,4.1nm,1.1s,baz=336,slow=11,SNR=3.5 | | | | | | | | |
| | comp=Z,4.1nm,1.1s | | | | | | | | |
| RAR | Rarotonga | 69.50 | 238 | LR | | LR | 13 52 32.3 | | |
| | comp=Z,101nm,18.6s,baz=276,slow=30 | | | | | | | | |
| SPITS | Spitsbergen Ar | 77.50 | 11 | P | | P | 13 29 52.2 | -0.5 | |
| | comp=Z,2.5nm,0.5s,baz=264,slow=2.4,SNR=6.8 | | | | | | | | |
| SPITS | | | | LR | | LR | 14 05 46.9 | | |
| | comp=Z,34nm,18.7s,baz=276,slow=37 | | | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| EKA | Eskdalemuir Ar | 79.57 | 35 | P | | P | 13 30 03.6 | -0.8 | |
| | comp=Z,1.5nm,0.5s,baz=299,slow=5.4,SNR=6.2 | | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| BBTS | Babate | 80.62 | 78 | LR | | LR | 14 00 25.7 | | |
| | comp=Z,37nm,21.4s,baz=198,slow=32 | | | | | | | | |
| ESDC | Sonseca Array | 83.90 | 50 | P | | P | 13 30 27.4 | -0.3 | |
| ESDC | Sonseca Array | 83.90 | 50 | P | | P | 13 30 28.1 | +0.4 | |
| | comp=Z,2.4nm,0.7s,baz=301,slow=5.1,SNR=17 | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | |
| TIXI | Tiksi | 83.96 | 346 | LR | | LR | 14 13 07.6 | | |
| | comp=Z,29nm,18.1s,baz=7.5,slow=39 | | | | | | | | |
| NB2 | NORSAR Subarra | 84.41 | 27 | P | | P | 13 30 30.3 | +0.6 | |
| | comp=Z,1.2nm,0.6s,baz=298,slow=4.8 | | | | | | | | |
| NOA | NORSAR Array B | 84.41 | 27 | P | | P | 13 30 29.8 | +0.1 | |
| | comp=Z,0.8nm,0.6s,baz=301,slow=4.7,SNR=4.0 | | | | | | | | |
| NOA | | | | LR | | LR | 14 09 38.5 | | |
| | comp=Z,13nm,18.6s,baz=290,slow=37 | | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | | |
| ARCES | ARCESS Array B | 84.61 | 16 | P | | P | 13 30 30.2 | -0.3 | |
| | comp=Z,1.4nm,0.6s,baz=339,slow=6.5,SNR=6.6 | | | | | | | | |
| ARCES | | | | pP | | pP | 13 30 45.6 | -2.6 | |
| | comp=Z,2.5nm,0.9s,baz=256,slow=3.6,SNR=2.0 | | | | | | | | |
| ARCES | | | | LR | | LR | 14 08 37.2 | | |
| | comp=Z,24nm,19.7s,baz=292,slow=36 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| HFS | Hagfors | 85.92 | 27 | P | | P | 13 30 36.7 | -0.5 | |
| | comp=Z,2.5nm,0.8s,baz=306,slow=3.4,SNR=2.7 | | | | | | | | |
| HFS | | | | LR | | LR | 14 09 38.2 | | |
| | comp=Z,12nm,18.5s,baz=282,slow=36 | | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | | |
| FINES | FINESS Array B | 90.09 | 22 | LR | | LR | 14 11 26.5 | | |
| | comp=Z,28nm,20.6s,baz=265,slow=36 | | | | | | | | |
| YAK | Yakutsk | 90.28 | 339 | LR | | LR | 14 15 56.3 | | |
| | comp=Z,25nm,18.7s,baz=89,slow=38 | | | | | | | | |
| GERES | GERESS Array B | 91.68 | 37 | P | | P | 13 31 05.0 | +0.1 | |
| | comp=Z,0.9nm,0.6s,baz=300,slow=7.8,SNR=2.0 | | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | | |
| VRAC | Vranov | 93.05 | 35 | LR | | LR | 14 15 15.0 | | |
| | comp=Z,11nm,19.1s,baz=294,slow=37 | | | | | | | | |
| KEST | Kesra | 95.14 | 50 | LR | | LR | 14 13 04.9 | | |
| | comp=Z,18nm,19.0s,baz=292,slow=35 | | | | | | | | |
| TORD | Torodi Ar. Bea | 97.86 | 73 | P | | Pdif | 13 31 34.1 | +0.3 | |
| | comp=Z,0.4nm,0.6s,baz=305,slow=4.6,SNR=3.5 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| DZM | Mont Dzumac | 98.75 | 250 | *e*LR | | LR | 14 03 56.2 | | |
| | comp=Z,120nm,26.1s | | | | | | | | |
| STKA | Stephens Creek | 122.22 | 244 | PKP | | PKiKP | 13 36 53.5 | +0.8 | |
| | comp=Z,3.1nm,0.7s,baz=14,slow=4.2,SNR=5.0 | | | | | | | | |
| WRA | Warramunga Arr | 127.64 | 259 | PKP | | PKiKP | 13 37 04.2 | +0.5 | |
| | comp=Z,2.6nm,0.7s,baz=82,slow=2.2,SNR=17 | | | | | | | | |
| ASAR | Alice Springs | 128.48 | 254 | PKP | | PKiKP | 13 37 05.3 | 0.0 | |
| | comp=Z,1.6nm,0.8s,baz=83,slow=1.7,SNR=14 | | | | | | | | |
| MAW | Mawson | 129.79 | 172 | PKP | | PKiKP | 13 37 07.2 | +0.6 | |
| | comp=Z,2.5nm,0.7s,baz=283,slow=5.4,SNR=4.2 | | | | | | | | |
| CMAR | Chiang Mai Arr | 138.31 | 330 | PKP | | PKPdf | 13 37 23.5 | +0.2 | |
| | comp=Z,0.7nm,0.5s,baz=330,slow=2.7,SNR=4.3 | | | | | | | | |
| CMAR | | | | pPKP | | pPKPdf | 13 37 41.1 | -0.6 | |
| | comp=Z,1.1nm,0.7s,baz=327,slow=2.7,SNR=2.9 | | | | | | | | |

*CNRM **06** 13:28:06.7, 35.76N×2.37W, h14km, ML2.2*
*MDD **06** 13:28:08.3±0.8, 35.75N×2.34W, h30km, mb_Lg2.6/7, Error ellipse: s-maj=7.2km s-min=4.1km az=124.0*
*SFS **06** 13:28:10.0, 35.73N×2.39W, h21km, ML2.5/7, ML2.5/7, MLv2.5/7*

**ISC 06 13:28:06.2±1.2, 35.74N±0.03×2.26W±0.04, h15km±9km, n30, σ0 93/44, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| EALB | Alboran | 0.66 | 288 | Sg | | Sg | 13 28 28.0 | +0.2 |
| EALB | | | | Pg | | Pn | 13 28 20.9 | -0.1 |
| EALB | Alboran | 0.66 | 288 | Pg | | Pn | 13 28 20.7 | -0.3 |
| EALB | | | | Sg | | Sg | 13 28 28.1 | +0.2 |
| EALB | | | | *i* | Vmb_Lg | | 13 28 29.3 | |
| EMLI | Melilla | 0.71 | 232 | Sg | | Sg | 13 28 29.8 | +0.2 |
| EMLI | | | | Pg | | Pb | 13 28 21.0 | +0.6 |
| EMEL | Melilla | 0.72 | 232 | Pg | | Pb | 13 28 20.9 | +0.5 |
| EMEL | | | | Sg | | Sg | 13 28 29.6 | -0.1 |
| GOG | Mont Gurugu | 0.79 | 229 | P | | Pg | 13 28 21.3 | -0.4 |
| GOG | Mont Gurugu | 0.79 | 229 | S | | Sg | 13 28 31.3 | -0.9 |
| TAF | Taforalt | 0.94 | 188 | P | | Pn | 13 28 25.0 | +0.1 |
| TAF | Taforalt | 0.94 | 188 | S | | Sn | 13 28 38.3 | +0.3 |
| ENIJ | Nijar | 1.23 | 2 | Pn | | Pg | 13 28 30.8 | +0.9 |
| ENIJ | | | | Sn | | Sn | 13 28 45.5 | +0.3 |
| ENIJ | Nijar | 1.23 | 2 | Pg | | Pg | 13 28 30.8 | +0.9 |
| ENIJ | | | | Sg | | Sn | 13 28 46.6 | +1.4 |
| ENIJ | | | | *i* | Vmb_Lg | | 13 28 56.5 | |
| EBER | Berja | 1.26 | 336 | Pn | | Pg | 13 28 30.4 | -0.1 |
| EBER | | | | Sn | | Sn | 13 28 47.5 | +1.3 |
| EBER | Berja | 1.26 | 336 | Pg | | Pg | 13 28 30.6 | 0.0 |
| EBER | | | | Sg | | Sn | 13 28 47.0 | +0.8 |
| EBER | | | | *i* | Vmb_Lg | | 13 28 59.8 | |
| PALE | Palemas | 1.47 | 249 | P | | Pn | 13 28 32.1 | -0.1 |
| PALE | Palemas | 1.47 | 249 | S | | Sn | 13 28 51.2 | +0.1 |
| ELGU | Los Guajares, | 1.57 | 316 | Pn | | Pn | 13 28 34.0 | +0.4 |
| ELGU | | | | Sn | | Sn | 13 28 52.6 | -1.2 |
| ELGU | Los Guajares, | 1.57 | 316 | Pg | | Pn | 13 28 34.1 | +0.4 |
| ELGU | | | | Sg | | Sn | 13 28 52.6 | -1.2 |
| ELGU | | | | *i* | Vmb_Lg | | 13 28 53.3 | |
| PVLZ | Peæn de | 1.76 | 252 | Pn | | Pn | 13 28 37.3 | +1.2 |
| AKLM | AKL | 1.80 | 227 | P | | Pn | 13 28 37.0 | +0.2 |
| AKLM | AKL | 1.80 | 227 | S | | Sn | 13 28 58.9 | -0.5 |
| EGOR | Sierra Gorda, | 2.02 | 313 | Pn | | Pb | 13 28 43.5 | +0.8 |
| CART | Cartagena | 2.10 | 29 | Sn | | Sn | 13 29 07.5 | +0.8 |
| CART | Cartagena | 2.10 | 29 | P | | Pn | 13 28 41.7 | +0.9 |
| CART | Cartagena | 2.10 | 29 | S | | Sb | 13 29 08.6 | -1.3 |
| EQES | Quesada | 2.15 | 343 | Pg | | Pb | 13 28 45.6 | +0.6 |
| EQES | | | | *i* | Vmb_Lg | | 13 28 47.2 | |
| EQES | | | | Sg | | Sb | 13 29 11.4 | -0.2 |
| EMUR | La Murta | 2.25 | 21 | Pn | | Pb | 13 28 46.2 | -0.3 |
| EMUR | | | | Sn | | Sn | 13 29 11.9 | +1.5 |
| EMUR | La Murta | 2.25 | 21 | Pg | | Pb | 13 28 46.3 | -0.3 |
| EMUR | | | | *i* | Vmb_Lg | | 13 29 13.3 | |
| EMUR | | | | Sg | | Sb | 13 29 13.8 | -0.5 |
| ETOB | Tobarra | 2.95 | 11 | Pn | | Pb | 13 28 57.4 | -1.2 |
| ETOB | Tobarra | 2.95 | 11 | Pg | | Pb | 13 28 56.9 | -1.7 |
| ETOB | | | | Sg | | Sb | 13 29 31.4 | -3.1 |
| MD31 | MD31 | 3.54 | 216 | P | | Pn | 13 29 01.6 | +0.9 |
| MD31 | MD31 | 3.54 | 216 | S | | Sn | 13 29 42.7 | +0.5 |

**IDC 06 13:37:52.4±3.1, 0.36S×135.26E, h0km, mb3.6/3, mbtmp3.6/4, ML3.6/1, MS2.7/1, Error ellipse: s-maj=161.0km s-min=23.8km az=78.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| WRA | Warramunga Arr | 19.48 | 183 | P | | P | 13 42 20.9 | -0.3 |
| | 0.2nm,0.3s,baz=1.7,slow=11,SNR=12 | | | | | | | |
| | 0.8nm,0.6s | | | | | | | |
| ASAR | Alice Springs | 23.21 | 183 | P | | P | 13 43 01.5 | +0.3 |
| | 1.2nm,0.5s,baz=9.7,slow=12,SNR=44 | | | | | | | |
| | 1.2nm,0.5s | | | | | | | |
| JOW | Kunigami | 27.86 | 347 | LR | | LR | 13 56 26.7 | |
| | comp=Z,15nm,18.1s,baz=141,slow=40 | | | | | | | |
| MKAR | Makanchi Array | 65.84 | 323 | P | | P | 13 48 39.9 | 0.0 |
| | 0.4nm,0.7s,baz=134,slow=6.2,SNR=4.1 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| KURBB | Kurchatov Arra | 69.84 | 325 | P | | P | 13 49 04.9 | 0.0 |
| | 0.5nm,0.7s,baz=119,slow=6.5,SNR=5.9 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |

*NEIC **06** 14:08:34.1±1.8, 23.95S±0.08×179.7W±0.2, h536km±9km, mb4.3/24, Error ellipse: s-maj=20.9km s-min=11.4km az=99.0*
*IDC **06** 14:08:34.6±2.3, 23.97S×179.81W, h531km±31km, mb3.0/5, mbtmp3.9/7, Error ellipse: s-maj=34.7km s-min=23.1km az=24.0*

**ISC 06 14:08:32.2±0.7, 24.17S±0.08×179.7W±0.1, h512km, n49, σ 25/48, mb4.1/14, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| MSVF | Nonsavu | 6.76 | 341 | P | | P | 14 10 17.3 | +0.7 |
| | 4.8nm,0.4s,baz=169,slow=6.0,SNR=14 | | | | | | | |
| AFI | Afiamalu | 12.63 | 37 | P | | P | 14 11 17.2 | -0.4 |
| DZM | Mont Dzumac | 12.96 | 277 | P | | P | 14 11 22.1 | +1.1 |
| | 3.7nm,0.8s,baz=84,slow=19,SNR=2.6 | | | | | | | |
| MKRZ | Makatiti | 14.31 | 192 | P | | P | 14 11 45.5 | +11 |
| URZ | Urewera | 14.31 | 190 | P | | P | 14 11 35.2 | +0.4 |
| | 2.6nm,0.4s,baz=117,slow=1.9,SNR=6.1 | | | | | | | |
| URZ | | | | S | | S | 14 13 60.0 | -5.4 |
| | 3.2nm,0.5s,baz=314,slow=23,SNR=7.3 | | | | | | | |
| MUGZ | Murupara | 14.58 | 191 | P | | P | 14 11 48.3 | +11 |
| HIZ | Hauiti | 15.04 | 197 | P | | P | 14 11 49.1 | +6.6 |
| RITZ | Rihia Road | 15.24 | 193 | P | | P | 14 11 50.6 | +6.0 |
| BKZ | Black Stump Fm | 15.30 | 191 | P | | P | 14 11 43.4 | -1.8 |
| OTVZ | Oturere | 15.46 | 194 | P | | P | 14 11 46.7 | -0.3 |
| KWHZ | Kaweka Forest | 15.56 | 191 | P | | P | 14 11 47.5 | -0.4 |
| WNVZ | Wahianoa | 15.63 | 194 | P | | P | 14 11 46.2 | -2.7 |
| VRZ | Vera Road | 15.64 | 196 | P | | P | 14 11 50.6 | +2.0 |
| BHHZ | Black Hill Sta | 15.70 | 192 | P | | P | 14 11 45.0 | -4.3 |
| ANWZ | Angora Road | 16.56 | 190 | P | | P | 14 11 56.3 | -1.9 |
| MRZ | Mangatainoka R | 16.92 | 193 | P | | P | 14 11 57.7 | -4.0 |
| SNZO | South Karori | 17.73 | 194 | P | | P | 14 12 06.9 | -2.4 |
| PLWZ | Palliser | 17.86 | 193 | P | | P | 14 12 08.1 | -2.5 |
| THZ | Tophouse | 18.60 | 198 | P | | P | 14 12 15.5 | -1.9 |
| THZ | | | | IAmb | | IAmb | 14 12 24.1 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| INZ | Inchbonnie | 19.91 | 200 | P | | P | 14 12 27.6 | -1.6 |
| INZ | | | | IAmb | | IAmb | 14 12 28.6 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| EIDS | Eidsvold | 26.58 | 261 | P | | P | 14 13 29.7 | +0.7 |
| EIDS | | | | IAmb | | IAmb | 14 13 42.8 | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| CAN | Canberra | 29.28 | 240 | P | | P | 14 13 53.5 | +0.9 |
| CAN | | | | IAmb | | IAmb | 14 14 16.0 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| CTAO | Charters Tower | 31.79 | 271 | P | | P | 14 14 15.1 | +0.7 |
| CTAO | | | | IAmb | | IAmb | 14 14 16.4 | |
| | comp=Z,5.4nm,0.6s | | | | | | | |
| TOO | Toolangi | 32.57 | 238 | P | | P | 14 14 20.3 | -0.5 |
| TOO | | | | IAmb | | IAmb | 14 14 31.9 | |
| | comp=Z,31nm,1.4s | | | | | | | |
| TAU | Tasmania Unive | 32.98 | 227 | P | | P | 14 14 24.5 | +0.3 |
| STKA | Stephens Creek | 34.91 | 248 | P | | P | 14 14 41.0 | +0.4 |
| STKA | Stephens Creek | 34.91 | 248 | P | | P | 14 14 41.0 | +0.4 |
| | comp=Z,2.2nm,0.5s,baz=84,slow=8.9,SNR=8.8 | | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | | |
| BBOO | Buckleboo | 39.63 | 247 | P | | P | 14 15 18.8 | -0.6 |
| AS31 | Alice Springs | 42.30 | 261 | P | | P | 14 15 40.1 | -0.7 |
| ASAR | Alice Springs | 42.30 | 261 | P | | P | 14 15 40.2 | -0.6 |
| ASAR | Alice Springs | 42.30 | 261 | P | | P | 14 15 40.9 | +0.1 |
| | comp=Z,0.8nm,0.8s,baz=94,slow=6.9,SNR=18 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| WR0 | Warramunga Arr | 42.52 | 266 | P | | P | 14 15 42.3 | -0.2 |
| WR0 | | | | IAmb | | IAmb | 14 16 20.4 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| WB2 | Warramunga Arr | 42.69 | 266 | P | | P | 14 15 43.9 | 0.0 |
| WB2 | | | | IAmb | | IAmb | 14 15 49.9 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| WRAB | Tennant Creek | 42.70 | 266 | P | | P | 14 15 43.8 | -0.1 |
| WRAB | | | | IAmb | | IAmb | 14 15 49.0 | |
| | comp=Z,7.4nm,1.4s | | | | | | | |
| WB0 | Warramunga Arr | 42.70 | 267 | P | | P | 14 15 44.0 | 0.0 |
| WB0 | | | | IAmb | | IAmb | 14 15 45.6 | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| WRA | Warramunga Arr | 42.70 | 266 | P | | P | 14 15 43.9 | -0.1 |
| | comp=Z,1.1nm,0.5s,baz=98,slow=7.9,SNR=26 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| FORT | Forrest | 46.51 | 250 | P | | P | 14 16 12.6 | -0.6 |
| SBA | Scott Base | 54.12 | 184 | P | | P | 14 17 11.6 | +3.4 |
| VNDA | Vanda | 54.13 | 185 | P | | P | 14 17 10.4 | +2.2 |
| VNDA | Vanda | 54.13 | 185 | P | | P | 14 17 10.5 | +2.2 |
| | comp=Z,0.3nm,0.6s,baz=12,slow=6.4,SNR=3.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| MORW | Morawa | 57.08 | 250 | P | | P | 14 17 27.4 | -2.2 |
| MORW | | | | IAmb | | IAmb | 14 18 06.3 | |
| | comp=Z,29nm,1.4s | | | | | | | |
| CASY | Casey | 60.01 | 206 | P | | P | 14 17 48.8 | +0.2 |
| QSPA | South Pole Qui | 65.91 | 180 | P | | P | 14 18 28.5 | +1.6 |
| QSPA | | | | IAmb | | IAmb | 14 18 29.9 | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| QSPA | South Pole Qui | 65.91 | 180 | P | | P | 14 18 28.7 | +1.9 |
| | comp=Z,1.5nm,0.6s,baz=301,slow=0.9,SNR=12 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| JSD | Sado | 73.42 | 326 | P | | P | 14 19 09.5 | -2.4 |
| BELA | Belgrano 2 | 76.13 | 173 | P | | P | 14 19 27.8 | +1.2 |
| HG4B | Hotspring | 87.09 | 27 | P | | P | 14 20 21.7 | -1.3 |
| HFS | Hagfors | 142.87 | 349 | PKP | | PKPdf | 14 27 06.6 | -0.1 |
| | comp=Z,0.9nm,0.3s,baz=32,slow=2.6,SNR=9.7 | | | | | | | |
| TORD | Torodi Ar. Bea | 168.96 | 187 | PKPab | | PKPab | 14 28 56.5 | +1.0 |
| | comp=Z,0.3nm,0.6s,baz=150,slow=3.2,SNR=2.6 | | | | | | | |

**TAP 06 14:12:01.3, 25.16N×121.44E, h149km, ML2.3, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| TWS1 | Kuangyinshan | 0.06 | 201 | *e*P | | Pn | 14 12 20.3 | -1.0 |
| | baz=179 | | | | | | | |
| TWS1 | | | | *e*S | | Sn | 14 12 36.0 | -0.5 |
| | baz=179 | | | | | | | |
| ANP | Anpu | 0.07 | 69 | *e*P | | Pn | 14 12 21.8 | +0.4 |
| | baz=90 | | | | | | | |
| TWA | Mucha | 0.22 | 144 | *e*P | | Pn | 14 12 21.5 | -0.1 |
| | baz=143 | | | | | | | |
| TWA | | | | *e*S | | Sn | 14 12 35.5 | -1.5 |
| | baz=143 | | | | | | | |
| NWLT | Wulai | 0.39 | 172 | P | | Pn | 14 12 21.8 | -0.3 |
| | baz=162 | | | | | | | |
| NWLT | | | | S | | Sn | 14 12 36.0 | -2.0 |
| | baz=162 | | | | | | | |
| TIPB | Shuangxi | 0.39 | 118 | P | | Pn | 14 12 21.8 | -0.4 |
| | baz=118 | | | | | | | |
| TIPB | | | | S | | Sn | 14 12 36.1 | -1.9 |
| | baz=118 | | | | | | | |
| SXI1 | Grass Mountain | 0.40 | 99 | *e*P | | Pn | 14 12 22.5 | +0.3 |
| | baz=99 | | | | | | | |
| SXI1 | | | | S | | Sn | 14 12 37.1 | -0.9 |
| | baz=99 | | | | | | | |
| FUSB | Fushanzhiwuyua | 0.42 | 162 | *i* P | | Pn | 14 12 21.8 | -0.5 |
| | baz=168 | | | | | | | |
| FUSB | | | | *e*S | | Sn | 14 12 36.0 | -2.2 |
| | baz=168 | | | | | | | |
| TWE | Neicheng | 0.48 | 155 | P | | Pn | 14 12 22.1 | -0.4 |
| | baz=159 | | | | | | | |
| TWE | | | | S | | Sn | 14 12 36.6 | -1.9 |
| | baz=159 | | | | | | | |
| NSK | Sanguang | 0.49 | 189 | *i* P | | Pn | 14 12 22.4 | -0.2 |
| | baz=191 | | | | | | | |
| NSK | | | | *i* S | | Sn | 14 12 37.2 | -1.6 |
| | baz=191 | | | | | | | |
| YHNB | Yeheng | 0.49 | 187 | *i* P | | Pn | 14 12 22.4 | -0.3 |
| | baz=190 | | | | | | | |
| YHNB | | | | *i* S | | Sn | 14 12 37.2 | -1.7 |
| | baz=190 | | | | | | | |
| ENTT | Nioudou | 0.53 | 168 | *i* P | | Pn | 14 12 22.4 | -0.4 |
| | baz=167 | | | | | | | |
| ENTT | | | | *i* S | | Sn | 14 12 37.5 | -1.6 |
| | baz=167 | | | | | | | |
| EGS | | 0.54 | 125 | P | | Pn | 14 12 23.2 | +0.4 |
| | baz=125 | | | | | | | |
| EGS | | | | *e*S | | Sn | 14 12 38.7 | -0.3 |
| | baz=125 | | | | | | | |
| NDT | Datong Townshi | 0.56 | 173 | *i* P | | Pn | 14 12 22.7 | -0.3 |
| | baz=167 | | | | | | | |
| NDT | | | | *i* S | | Sn | 14 12 38.5 | -0.9 |
| | baz=167 | | | | | | | |
| NDS | Dongshan | 0.58 | 155 | *e*P | | Pn | 14 12 22.8 | -0.2 |
| | baz=159 | | | | | | | |
| NDS | | | | *e*S | | Sn | 14 12 39.7 | +0.2 |
| | baz=159 | | | | | | | |
| NFF | Wufeng Townshi | 0.60 | 209 | *i* P | | Pn | 14 12 23.3 | +0.1 |
| | baz=205 | | | | | | | |
| NFF | | | | S | | Sn | 14 12 39.3 | -0.6 |
| | baz=205 | | | | | | | |
| LATG | Datong | 0.63 | 173 | P | | Pn | 14 12 23.3 | -0.2 |
| | baz=171 | | | | | | | |
| LATG | | | | S | | Sn | 14 12 38.8 | -1.4 |
| | baz=171 | | | | | | | |
| LIOB | Emei | 0.64 | 217 | P | | Pn | 14 12 24.2 | +0.8 |
| | baz=222 | | | | | | | |
| LIOB | | | | S | | Sn | 14 12 40.5 | +0.3 |
| | baz=222 | | | | | | | |
| TWC | Suao | 0.66 | 146 | *i* P | | Pn | 14 12 23.7 | +0.2 |
| | baz=149 | | | | | | | |
| TWC | | | | S | | Sn | 14 12 40.4 | +0.1 |
| | baz=149 | | | | | | | |
| NSTT | Nanjuang | 0.66 | 217 | *e*P | | Pn | 14 12 23.9 | +0.4 |
| | baz=223 | | | | | | | |
| NSTT | | | | *e*S | | Sn | 14 12 40.9 | +0.5 |
| | baz=223 | | | | | | | |
| NNS | Nan Shan | 0.72 | 185 | *e*P | | Pn | 14 12 24.2 | +0.1 |
| | baz=182 | | | | | | | |
| NNS | | | | *e*S | | Sn | 14 12 40.2 | -1.1 |
| | baz=182 | | | | | | | |
| NNSB | Datong | 0.73 | 184 | P | | Pn | 14 12 24.1 | 0.0 |
| | baz=182 | | | | | | | |
| NNSB | | | | *i* S | | Sn | 14 12 40.6 | -0.9 |
| | baz=182 | | | | | | | |
| EWUT | Wuta | 0.77 | 157 | *i* P | | Pn | 14 12 23.3 | -1.0 |
| | baz=163 | | | | | | | |
| EWUT | | | | S | | Sn | 14 12 40.9 | -0.8 |
| | baz=163 | | | | | | | |
| ENA | Nanau | 0.78 | 160 | *e*P | | Pn | 14 12 23.6 | -0.7 |
| | baz=166 | | | | | | | |
| ENA | | | | *i* S | | Sn | 14 12 41.3 | -0.5 |
| | baz=166 | | | | | | | |
| FUSS | Fushou | 0.93 | 191 | P | | Pn | 14 12 26.4 | +0.7 |
| | baz=191 | | | | | | | |
| FUSS | | | | S | | Sn | 14 12 44.1 | -0.2 |
| | baz=191 | | | | | | | |
| TDCB | Techi | 0.94 | 196 | P | | Pn | 14 12 26.6 | +0.9 |
| | baz=202 | | | | | | | |
| TDCB | | | | *e*S | | Sn | 14 12 44.0 | -0.2 |
| | baz=202 | | | | | | | |
| ETLH | Xiulin Townshi | 0.95 | 178 | *i* P | | Pn | 14 12 25.2 | -0.6 |
| | baz=170 | | | | | | | |
| ETLH | | | | *i* S | | Sn | 14 12 43.5 | -0.9 |
| | baz=170 | | | | | | | |
| WHP | Taichung City | 0.99 | 207 | P | | Pn | 14 12 26.8 | +0.7 |
| | baz=213 | | | | | | | |
| WHP | | | | *e*S | | Sn | 14 12 44.4 | -0.4 |
| | baz=213 | | | | | | | |
| NACB | Ninganchiao | 0.99 | 172 | P | | Pn | 14 12 25.7 | -0.3 |
| | baz=165 | | | | | | | |
| NACB | | | | S | | Sn | 14 12 42.8 | -1.9 |
| | baz=165 | | | | | | | |
| WHF | Hehuan Shan | 1.02 | 189 | *i* P | | Pn | 14 12 27.5 | +0.7 |
| | baz=186 | | | | | | | |
| WHF | | | | S | | Sn | 14 12 46.4 | +0.3 |
| | baz=186 | | | | | | | |
| CHGB | Renai | 1.12 | 193 | P | | Pn | 14 12 28.1 | +0.7 |
| | baz=200 | | | | | | | |
| CHGB | | | | *e*S | | Sn | 14 12 47.5 | +0.3 |
| | baz=200 | | | | | | | |
| LXIB | Xiulin Townshi | 1.13 | 181 | P | | Pn | 14 12 28.0 | +0.5 |
| | baz=175 | | | | | | | |
| LXIB | | | | S | | Sn | 14 12 47.2 | -0.1 |
| | baz=175 | | | | | | | |
| WCS | Beigang Elemen | 1.20 | 204 | *e*P | | Pn | 14 12 28.4 | +0.6 |
| | baz=208 | | | | | | | |
| WCS | | | | *e*S | | Sn | 14 12 47.5 | -0.6 |
| | baz=208 | | | | | | | |
| TYC | Yuchr | 1.36 | 203 | P | | Pn | 14 12 30.6 | +1.2 |
| | baz=208 | | | | | | | |
| TYC | | | | *e*S | | Sn | 14 12 49.4 | -1.4 |
| | baz=208 | | | | | | | |
| SHUL | Shoufeng | 1.37 | 175 | *e*P | | Pn | 14 12 28.4 | -1.1 |
| | baz=173 | | | | | | | |
| SHUL | | | | *e*S | | Sn | 14 12 49.8 | -1.2 |
| | baz=173 | | | | | | | |
| VWDT | VWDT | 1.43 | 191 | *e*P | | Pn | 14 12 30.8 | +0.7 |
| | baz=196 | | | | | | | |
| VWDT | | | | *e*S | | Sn | 14 12 52.0 | -0.1 |
| | baz=196 | | | | | | | |
| SSLB | Suanglung | 1.44 | 198 | P | | Pn | 14 12 30.6 | +0.4 |
| | baz=191 | | | | | | | |
| SSLB | | | | *e*S | | Sn | 14 12 51.4 | -0.9 |
| | baz=191 | | | | | | | |
| WARBT | Fenglin

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **3.12** | **295** | P | **Pb** | **14 38 58.7** | **-0.9** |
| **HNR** | **Honiara** | **3.12** | **295** | Pn | **Pb** | **14 38 58.0** | **-1.7** |
| **HNR** | **Honiara** | **3.12** | **295** | LR | LR | 14 40 26.0 | |
| | comp=Z,1μm,19.1s,baz=304,slow=46 | | | | | | |
| **DVP** | **Devils Point** | **8.65** | **144** | P | **Pn** | **14 40 07.7** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **9.83** | **172** | P | **Pn** | **14 40 23.1** | **-0.7** |
| **KOUNC** | **Koumac, New Ca** | **9.83** | **172** | Pn | **Pn** | **14 40 22.8** | **-0.9** |
| **NOUC** | **Port Laguerre** | **11.76** | **164** | P | **Pn** | **14 40 49.9** | **-0.2** |
| **DZM** | **Mont Dzumac** | **11.77** | **163** | P | **Pn** | **14 40 50.3** | **-0.1** |
| **DZM** | **Mont Dzumac** | **11.77** | **163** | Pn | **Pn** | **14 40 49.4** | **-1.0** |
| **DZM** | **Mont Dzumac** | **11.77** | **163** | Pn | **Pn** | **14 40 49.2** | **-1.2** |
| | 0.6nm,0.3s,baz=13,slow=11,SNR=35 | | | | | | |
| DZM | | | | Sn | Sn | 14 42 49.2 | -11 |
| | 0.3nm,0.3s,baz=217,slow=20,SNR=2.2 | | | | | | |
| DZM | | | | LR | LR | 14 44 33.8 | |
| | comp=Z,94nm,21.5s,baz=16,slow=34 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| **YATNC** | **Mamie plateau,** | **11.89** | **161** | P | **Pn** | **14 40 51.1** | **-0.8** |
| **PINNC** | **Pines Island,** | **12.59** | **160** | P | **Pn** | **14 41 01.4** | **0.0** |
| **PINNC** | **Pines Island,** | **12.59** | **160** | Pn | **Pn** | **14 41 01.1** | **-0.4** |
| **CTA** | **Charters Tower** | **18.45** | **238** | P | **Pn** | **14 42 19.3** | **+1.4** |
| | baz=56,slow=7.3,SNR=2.7 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| **COEN** | **Coen** | **19.45** | **259** | P | **Pn** | **14 42 30.0** | **0.0** |
| COEN | | | | IAmb | IAmb | 14 42 48.8 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **27.49** | **205** | P | **P** | **14 43 47.8** | **-0.2** |
| **NIUE** | **Niue** | **27.57** | **111** | P | **P** | **14 43 47.6** | **-1.2** |
| **WB0** | **Warramunga Arr** | **28.81** | **248** | P | **P** | **14 44 01.1** | **+1.2** |
| WB0 | | | | IAmb | IAmb | 14 44 08.8 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **28.89** | **248** | P | **P** | **14 44 00.9** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 14 44 32.6 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **28.90** | **248** | P | **P** | **14 44 01.7** | **+0.9** |
| | comp=Z,0.4nm,0.6s,baz=79,slow=8.7,SNR=8.1 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.32** | **8** | T | T | 15 15 05.3 | |
| | baz=188,slow=76,SNR=110 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.32** | **8** | T | T | 15 15 06.6 | |
| | baz=188,slow=76,SNR=111 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.34** | **8** | T | T | 15 15 01.2 | |
| | baz=188,slow=76,SNR=108 | | | | | | |
| **GUMO** | **Guam** | **30.05** | **323** | LR | LR | 14 58 06.3 | |
| | comp=Z,19nm,18.3s,baz=107,slow=40 | | | | | | |
| **URZ** | **Urewera** | **30.22** | **157** | LR | LR | 14 54 23.8 | |
| | comp=Z,85nm,20.3s,baz=118,slow=33 | | | | | | |
| **AS31** | **Alice Springs** | **30.38** | **241** | P | **P** | **14 44 14.7** | **+0.8** |
| **ASAR** | **Alice Springs** | **30.38** | **241** | P | **P** | **14 44 14.8** | **+0.9** |
| **ASAR** | **Alice Springs** | **30.38** | **241** | P | **P** | **14 44 13.9** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=65,slow=10,SNR=11 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.55** | **8** | T | T | 15 16 37.8 | |
| | baz=188,slow=76,SNR=52 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.56** | **8** | T | T | 15 16 32.3 | |
| | baz=188,slow=76,SNR=73 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.57** | **8** | T | T | 15 16 38.3 | |
| | baz=188,slow=76,SNR=68 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **36.68** | **254** | P | **P** | **14 45 09.1** | **+0.3** |
| **ILAR** | **Eielson Array** | **84.18** | **19** | P | **P** | **14 50 32.4** | **+0.1** |
| **MKAR** | **Makanchi Array** | **91.36** | **317** | P | **P** | **14 51 08.6** | **+1.3** |
| | comp=Z,0.5nm,0.6s,baz=94,slow=5.8,SNR=7.2 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |

*CATAC **06** 14:41:44.4±0.5, 13°.29N×89°.65W, h34km±3km, ML3.9*
*SNET **06** 14:41:45.2±1.0, 13°.37N×89°.58W, h55km, ML3.8*
**ISC 06 14:41:46.2**±1.6**, 13°.35N**±0°.08×**89°.58W**±0°.05**, h51**km±8km**,**
**n71**, σ0**°87**/106**, 1C, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LALI** | **Alcalda de L** | **0.29** | **62** | *e*P | **Pn** | **14 41 54.6** | **-0.7** |
| LALI | | | | *e*S | **Sn** | **14 42 02.3** | **+0.5** |
| **LALI** | **Alcalda de L** | **0.29** | **62** | *i* P | **Pn** | **14 41 54.9** | **-0.4** |
| LALI | | | | *i* S | **Sn** | **14 42 02.8** | **+1.0** |
| LALI | | | | IAML | | 14 42 04.2 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.33** | **23** | *e*P | **Pn** | **14 41 55.2** | **-0.7** |
| JAYA | | | | *e*S | **Sn** | **14 42 03.1** | **+0.3** |
| **JAYA** | **Jayaque - finc** | **0.33** | **23** | *i* P | **Pn** | **14 41 55.2** | **-0.7** |
| JAYA | | | | *i* S | **Sn** | **14 42 03.3** | **+0.5** |
| JAYA | | | | IAML | | 14 42 04.1 | |
| | comp=Z,46μm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **0.43** | **42** | *e*P | **Pn** | **14 41 56.1** | **-0.8** |
| ITCA | | | | *e*S | **Sn** | **14 42 05.0** | **+0.4** |
| **ITCA** | **Escuela Especi** | **0.43** | **42** | *i* P | **Pn** | **14 41 55.3** | **-1.6** |
| ITCA | | | | *i* S | **Sn** | **14 42 05.4** | **+0.8** |
| ITCA | | | | IAML | | 14 42 09.1 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **MAGS** | **Ministerio de** | **0.44** | **41** | *e*P | **Pn** | **14 41 56.2** | **-0.8** |
| MAGS | | | | *e*S | **Sn** | **14 42 05.2** | **+0.6** |
| **PMON** | **Piamonte** | **0.44** | **36** | *e*P | **Pn** | **14 41 56.6** | **-0.5** |
| PMON | | | | *e*S | **Sn** | **14 42 05.9** | **+1.2** |
| **PMON** | **Piamonte** | **0.44** | **36** | *i* P | **Pn** | **14 41 56.5** | **-0.5** |
| PMON | | | | *i* S | **Sn** | **14 42 05.5** | **+0.8** |
| PMON | | | | IAML | | 14 42 08.9 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **PANCS** | **Alcalda de** | **0.47** | **56** | *e*P | **Pn** | **14 41 56.5** | **-0.7** |
| **PANCS** | **Alcalda de** | **0.47** | **56** | *i* S | **Sn** | **14 42 05.5** | **+0.3** |
| **CEVE** | **Cerro Verde** | **0.47** | **355** | *e*P | **Pn** | **14 41 56.8** | **-0.8** |
| CEVE | | | | *e*S | **Sn** | **14 42 06.2** | **+0.6** |
| **CEVE** | **Cerro Verde** | **0.47** | **355** | *i* P | **Pn** | **14 41 56.9** | **-0.7** |
| CEVE | | | | *i* S | **Sn** | **14 42 06.2** | **+0.6** |
| CEVE | | | | IAML | | 14 42 07.4 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.47** | **45** | *e*P | **Pn** | **14 41 56.5** | **-0.9** |
| **SNET** | **Serv Nac Est T** | **0.47** | **45** | *i* P | **Pn** | **14 41 56.9** | **-0.5** |
| SNET | | | | *i* S | **Sn** | **14 42 06.1** | **+0.8** |
| SNET | | | | IAML | | 14 42 06.9 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **0.48** | **37** | *e*P | **Pn** | **14 41 57.1** | **-0.4** |
| BOQS | | | | *e*S | **Sn** | **14 42 06.5** | **+0.8** |
| **CEDA** | **San Andres** | **0.48** | **22** | *e*P | **Pn** | **14 41 56.6** | **-0.8** |
| **CEDA** | **San Andres** | **0.48** | **22** | *i* P | **Pn** | **14 41 56.9** | **-0.5** |
| CEDA | | | | *i* S | **Sn** | **14 42 06.3** | **+0.9** |
| CEDA | | | | IAML | | 14 42 08.7 | |
| | comp=Z,17μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **0.49** | **355** | *e*P | **Pn** | **14 41 56.7** | **-1.0** |
| SBLS | | | | *e*S | **Sn** | **14 42 06.1** | **+0.2** |
| **UEES** | **Universidad Ev** | **0.49** | **42** | *e*P | **Pn** | **14 41 57.0** | **-0.5** |
| UEES | | | | *e*S | **Sn** | **14 42 06.7** | **+1.0** |
| **UEES** | **Universidad Ev** | **0.49** | **42** | *i* P | **Pn** | **14 41 57.1** | **-0.5** |
| UEES | | | | *i* S | **Sn** | **14 42 06.6** | **+0.9** |
| UEES | | | | IAML | | 14 42 08.1 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **0.49** | **54** | *e*P | **Pn** | **14 41 57.2** | **-0.4** |
| **LOMA** | **Loma Larga** | **0.49** | **54** | *i* P | **Pn** | **14 41 57.1** | **-0.5** |
| LOMA | | | | *i* S | **Sn** | **14 42 06.8** | **+1.0** |
| LOMA | | | | IAML | | 14 42 09.5 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **UTEC** | **Universidad Te** | **0.51** | **47** | *e*P | **Pn** | **14 41 57.1** | **-0.6** |
| **UTEC** | **Universidad Te** | **0.51** | **47** | *i* S | **Sn** | **14 42 06.8** | **+0.9** |
| **SNJE** | **San Jose** | **0.51** | **357** | *e*P | **Pn** | **14 41 57.0** | **-0.9** |
| **IGN** | **Direccin Gen** | **0.54** | **48** | *e*P | **Pn** | **14 41 57.8** | **-0.3** |
| **IGN** | **Direccin Gen** | **0.54** | **48** | *i* S | **Sn** | **14 42 07.9** | **+1.3** |
| **RTR** | **El Retiro** | **0.55** | **353** | *e*P | **Pn** | **14 41 57.4** | **-1.0** |
| **UDBS** | **Universidad Do** | **0.55** | **49** | *e*P | **Pn** | **14 41 57.6** | **-0.6** |
| **UDBS** | **Universidad Do** | **0.55** | **49** | *i* P | **Pn** | **14 41 57.5** | **-0.7** |
| UDBS | | | | *i* S | **Sn** | **14 42 08.0** | **+1.2** |
| UDBS | | | | IAML | | 14 42 09.2 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **0.57** | **32** | *i* P | **Pn** | **14 41 57.8** | **-0.6** |
| QUEZ | | | | *i* S | **Sn** | **14 42 08.4** | **+1.2** |
| QUEZ | | | | IAML | | 14 42 17.4 | |
| | comp=Z,15μm,1.0s | | | | | | |
| **AEIL** | **Aeropuerto Ilo** | **0.57** | **53** | *e*P | **Pn** | **14 41 58.0** | **-0.5** |
| **LFRS** | **El Faro** | **0.57** | **62** | *e*P | **Pn** | **14 41 57.8** | **-0.7** |
| LFRS | | | | *e*S | **Sn** | **14 42 08.8** | **+1.4** |
| **NUBE** | **Las Nubes** | **0.58** | **340** | *e*P | **Pn** | **14 41 57.6** | **-1.0** |
| **NUBE** | **Las Nubes** | **0.58** | **340** | *i* P | **Pn** | **14 41 57.7** | **-1.0** |
| NUBE | | | | *i* S | **Sn** | **14 42 07.4** | **-0.3** |
| NUBE | | | | IAML | | 14 42 09.4 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **LFU** | **La Fuente** | **0.60** | **49** | *e*P | **Pn** | **14 41 58.3** | **-0.6** |
| LFU | | | | *e*S | **Sn** | **14 42 08.4** | **+0.4** |
| **UNIC** | **Universidad Ca** | **0.63** | **3** | *e*P | **Pn** | **14 41 58.0** | **-1.2** |
| **UNIC** | **Universidad Ca** | **0.63** | **3** | *i* P | **Pn** | **14 41 58.2** | **-1.0** |
| UNIC | | | | *i* S | **Sn** | **14 42 08.3** | **-0.2** |
| UNIC | | | | IAML | | 14 42 12.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **0.67** | **343** | *e*P | **Pn** | **14 41 58.8** | **-0.9** |
| **LOAL** | **Lomas de Alarc** | **0.67** | **343** | *i* P | **Pn** | **14 41 58.8** | **-0.9** |
| LOAL | | | | *i* S | **Sn** | **14 42 10.0** | **+0.5** |
| LOAL | | | | IAML | | 14 42 22.8 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **0.70** | **344** | *e*P | **Pn** | **14 41 58.9** | **-1.2** |
| **COEG** | **Centro de Oper** | **0.73** | **69** | *e*P | **Pn** | **14 41 59.7** | **-0.8** |
| **COEG** | **Centro de Oper** | **0.73** | **69** | *i* P | **Pn** | **14 42 00.0** | **-0.5** |
| COEG | | | | IAML | | 14 42 00.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| COEG | | | | *i* S | **Sn** | **14 42 11.7** | **+0.8** |
| **SNVI** | **San Vicente** | **0.77** | **70** | *e*P | **Pn** | **14 42 00.5** | **-0.6** |
| **TECO** | **Alcaldia de Te** | **0.80** | **77** | *e*P | **Pn** | **14 42 00.1** | **-1.2** |
| **TECO** | **Alcaldia de Te** | **0.80** | **77** | *i* P | **Pn** | **14 42 00.6** | **-0.7** |
| TECO | | | | *i* S | **Sn** | **14 42 12.7** | **+0.3** |
| TECO | | | | IAML | | 14 42 17.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **0.82** | **70** | *e*P | **Pn** | **14 42 00.8** | **-0.9** |
| **UESV** | **Universidad de** | **0.82** | **70** | *i* P | **Pn** | **14 42 01.0** | **-0.6** |
| UESV | | | | *i* S | **Sn** | **14 42 13.7** | **+0.8** |
| UESV | | | | IAML | | 14 42 18.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.90** | **67** | *e*P | **Pn** | **14 42 01.6** | **-1.1** |
| **SCLA** | **Alcaldia de Sa** | **0.90** | **67** | *i* P | **Pn** | **14 42 02.0** | **-0.7** |
| SCLA | | | | *i* S | **Sn** | **14 42 16.9** | **+2.2** |
| SCLA | | | | IAML | | 14 42 22.3 | |
| | comp=Z,600nm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **1.03** | **75** | *e*P | **Pn** | **14 42 03.4** | **-1.0** |
| **PQSS** | **Presa 15 de Se** | **1.03** | **75** | *i* P | **Pn** | **14 42 03.4** | **-1.0** |
| PQSS | | | | *i* S | **Sn** | **14 42 18.9** | **+1.2** |
| PQSS | | | | IAML | | 14 42 22.3 | |
| | comp=Z,830nm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **1.06** | **82** | *e*P | **Pn** | **14 42 04.0** | **-1.0** |
| **MTO3** | **Montecristo** | **1.06** | **12** | *e*P | **Pn** | **14 42 03.5** | **-1.6** |
| **MTO3** | **Montecristo** | **1.06** | **12** | *i* P | **Pn** | **14 42 03.8** | **-1.3** |
| MTO3 | | | | IAML | | 14 42 04.3 | |
| | comp=Z,810nm,1.0s | | | | | | |
| MTO3 | | | | *i* S | **Sn** | **14 42 18.3** | **-0.6** |
| **PACA** | **Pacayal** | **1.23** | **84** | *e*P | **Pn** | **14 42 07.0** | **-0.1** |
| **PACA** | **Pacayal** | **1.23** | **84** | *i* P | **Pn** | **14 42 06.9** | **-0.3** |
| PACA | | | | *i* S | **Sn** | **14 42 24.4** | **+1.6** |
| PACA | | | | IAML | | 14 42 29.5 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **LCY** | **Lacayo** | **1.25** | **87** | *e*P | **Pn** | **14 42 06.7** | **-0.8** |
| **RANC** | **El Ranchito** | **1.26** | **86** | *e*P | **Pn** | **14 42 07.0** | **-0.6** |
| **RANC** | **El Ranchito** | **1.26** | **86** | *i* P | **Pn** | **14 42 06.9** | **-0.7** |
| RANC | | | | IAML | | 14 42 33.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **VSM** | **San Miguel** | **1.27** | **86** | *e*P | **Pn** | **14 42 07.4** | **-0.5** |
| **JUCU** | **Jucuarn** | **1.30** | **94** | *e*P | **Pn** | **14 42 06.6** | **-1.5** |
| **JUCU** | **Jucuarn** | **1.30** | **94** | *i* P | **Pn** | **14 42 07.2** | **-0.9** |
| JUCU | | | | *i* S | **Sn** | **14 42 23.6** | **-0.8** |
| JUCU | | | | IAML | | 14 42 29.2 | |
| | comp=Z,800nm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **1.31** | **86** | *e*P | **Pn** | **14 42 07.8** | **-0.4** |
| **NBG** | **Las Nubes** | **1.44** | **329** | *i* P | **Pn** | **14 42 11.7** | **+1.5** |
| **FUG** | **Fuego 3** | **1.64** | **312** | *i* P | **Pn** | **14 42 12.5** | **-0.4** |
| FUG | | | | *i* S | **Sn** | **14 42 34.1** | **+1.2** |
| **CNCH** | **Conchagua** | **1.70** | **92** | *e*P | **Pn** | **14 42 12.7** | **-0.8** |
| **CNCH** | **Conchagua** | **1.70** | **92** | *i* P | **Pn** | **14 42 12.8** | **-0.8** |
| CNCH | | | | *i* S | **Sn** | **14 42 34.9** | **+0.6** |
| CNCH | | | | IAML | | 14 42 40.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **MARCA** | **Marcala la Paz** | **1.70** | **62** | *i* P | **Pn** | **14 42 12.8** | **-0.8** |
| **MRL** | **Marmol** | **1.72** | **357** | *i* P | **Pn** | **14 42 14.1** | **+0.1** |

*NEIC **06** 14:46:35.8±2.0, 30°.22S×0°.07×177°.8W±0°.2, h35km±7km,*
*mb4.8/26, Error ellipse: s-maj=25.7km s-min=10.1km*
*az=82.0*
*IDC **06** 14:46:36.4±1.5, 30°.20S×177°.77W, h48km±12km, mb4.1/8,*
*mbtmp4.4/8, MS3.4/12, Error ellipse: s-maj=21.4km*
*s-min=14.8km az=95.0*
*NOU **06** 14:47:13.3, 30°.44S×178°.36W, h398km, mB4.3/17,*
*Kermadec Islands, New Zealand*
**ISC 06 14:46:34.9**±0.6**, 30°.31S**±0°.06×**177°.8W**±0°.1**, h35**km**, n110,**
σ1º**38**/**88**, **mb4.8**/20, **MS3.4**/10**, 5C, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.06** | **353** | P | **Pn** | **14 46 53.0** | **-0.3** |
| RAO | | | | Sn | **Sn** | **14 47 05.5** | **-1.2** |
| **RAO** | **Raoul Island** | **1.06** | **353** | P | **Pn** | **14 46 53.5** | **+0.2** |
| | 2μm,0.2s,baz=15,slow=23,SNR=16 | | | | | | |
| RAO | | | | S | **Sn** | **14 47 06.6** | **-0.2** |
| | 9μm,0.3s,baz=270,slow=20,SNR=21 | | | | | | |
| **URZ** | **Urewera** | **8.99** | **207** | S | **Sn** | **14 50 18.0** | **-4.1** |
| | 32nm,0.4s,baz=266,slow=17,SNR=9.2 | | | | | | |
| **RTZ** | **Ruatahuna** | **9.35** | **206** | Pn | Pn | 14 48 42.1 | -5.0 |
| **HIZ** | **Hauiti** | **10.20** | **215** | Pn | **Pn** | **14 48 58.4** | **-0.3** |
| **MSVF** | **Nonsavu** | **13.09** | **342** | LR | LR | 14 53 58.8 | |
| | comp=Z,193nm,19.4s,baz=170,slow=34 | | | | | | |
| **ONTNC** | **Ouen Toro** | **16.23** | **296** | P | P | 14 50 35.1 | +12 |
| **DZM** | **Mont Dzumac** | **16.36** | **296** | P | P | 14 50 36.5 | +12 |
| **DZM** | **Mont Dzumac** | **16.36** | **296** | P | **P** | **14 50 26.9** | **+2.3** |
| **DZM** | **Mont Dzumac** | **16.36** | **296** | LR | LR | 14 55 20.6 | |
| | comp=Z,194nm,21.8s,baz=139,slow=32 | | | | | | |
| **NOUC** | **Port Laguerre** | **16.45** | **296** | P | P | 14 50 37.4 | +12 |
| **KOUNC** | **Koumac, New Ca** | **18.88** | **297** | P | Pn | 14 51 02.0 | +9.0 |
| **ARMA** | **Armidale** | **26.37** | **262** | P | **P** | **14 52 09.1** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 14 52 18.5 | |
| | comp=Z,53nm,1.9s | | | | | | |
| **EIDS** | **Eidsvold** | **27.93** | **272** | P | **P** | **14 52 22.9** | **+1.0** |
| EIDS | | | | IAmb | IAmb | 14 52 24.3 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **CNB** | **Canberra Magne** | **27.99** | **251** | P | **P** | **14 52 25.2** | **+2.7** |
| **CAN** | **Canberra** | **28.29** | **251** | P | **P** | **14 52 27.4** | **+2.3** |
| **CAN** | **Canberra** | **28.29** | **251** | P | **P** | **14 52 26.6** | **+1.4** |
| CAN | | | | IAmb | IAmb | 14 53 03.4 | |
| | comp=Z,71nm,1.5s | | | | | | |
| **HNR** | **Honiara** | **29.39** | **310** | LR | LR | 15 02 28.5 | |
| | comp=Z,544nm,20.3s,baz=201,slow=32 | | | | | | |
| **TOO** | **Toolangi** | **31.18** | **247** | P | **P** | **14 52 52.9** | **+2.2** |
| **TOO** | **Toolangi** | **31.18** | **247** | P | **P** | **14 52 51.8** | **+1.1** |
| **CMSA** | **Cobar Meteorol** | **31.28** | **258** | P | **P** | **14 52 53.5** | **+1.9** |
| **CTA** | **Charters Tower** | **33.98** | **279** | P | **P** | **14 53 16.9** | **+1.5** |
| | comp=Z,2.9nm,0.8s,baz=105,slow=10.0,SNR=69 | | | | | | |
| CTA | | | | LR | LR | 15 06 21.8 | |
| | comp=Z,10nm,18.0s,baz=111,slow=35 | | | | | | |
| | comp=Z,9nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **33.98** | **279** | P | **P** | **14 53 17.1** | **+1.8** |
| **CTAO** | **Charters Tower** | **33.98** | **279** | P | **P** | **14 53 16.0** | **+0.7** |
| **CTAO** | **Charters Tower** | **33.98** | **279** | P | **P** | **14 53 16.8** | **+1.5** |
| **STKA** | **Stephens Creek** | **34.69** | **257** | P | **P** | **14 53 23.3** | **+1.9** |
| **STKA** | **Stephens Creek** | **34.69** | **257** | P | **P** | **14 53 22.6** | **+1.2** |
| STKA | | | | IAmb | IAmb | 14 53 24.3 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **34.69** | **257** | P | **P** | **14 53 23.0** | **+1.6** |
| | comp=Z,22nm,0.7s,baz=109,slow=11,SNR=27 | | | | | | |
| STKA | | | | LR | LR | 15 06 18.0 | |
| | comp=Z,90nm,18.1s,baz=37,slow=34 | | | | | | |
| | comp=Z,22nm,0.7s | | | | | | |
| **INKA** | **Innaminka** | **36.23** | **263** | P | **P** | **14 53 36.5** | **+1.9** |
| **MTSU** | **Mount Surprise** | **36.47** | **281** | P | **P** | **14 53 38.7** | **+1.9** |
| **HTT** | **Hallett** | **36.72** | **254** | P | **P** | **14 53 39.8** | **+1.0** |
| **LCRK** | **Leigh Creek** | **37.79** | **258** | P | **P** | **14 53 48.4** | **+0.5** |
| **PMG** | **Port Moresby** | **38.75** | **295** | LR | LR | 15 09 08.4 | |
| | comp=Z,56nm,18.4s,baz=123,slow=35 | | | | | | |
| **BBOO** | **Buckleboo** | **39.19** | **254** | P | **P** | **14 54 00.1** | **+0.5** |
| **BBOO** | **Buckleboo** | **39.19** | **254** | P | **P** | **14 53 59.6** | **0.0** |
| **COEN** | **Coen** | **39.44** | **286** | P | **P** | **14 54 03.6** | **+1.8** |
| **COEN** | **Coen** | **39.44** | **286** | P | **P** | **14 54 03.1** | **+1.3** |
| COEN | | | | IAmb | IAmb | 14 54 04.8 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **AS31** | **Alice Springs** | **43.31** | **267** | P | **P** | **14 54 33.3** | **-0.3** |
| **ASAR** | **Alice Springs** | **43.31** | **267** | P | **P** | **14 54 33.1** | **-0.6** |
| **ASAR** | **Alice Springs** | **43.31** | **267** | P | **P** | **14 54 32.9** | **-0.7** |
| | comp=Z,2.7nm,0.4s,baz=104,slow=7.4,SNR=113 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 56 21.2** | **-0.9** |
| | comp=Z,0.3nm,0.4s,baz=120,slow=4.4,SNR=1.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **15 00 10.4** | **-0.4** |
| | comp=Z,0.4nm,0.7s,baz=108,slow=3.0,SNR=4.4 | | | | | | |
| ASAR | | | | LR | LR | 15 12 28.6 | |
| | comp=Z,73nm,18.4s,baz=104,slow=36 | | | | | | |
| | comp=Z,2.7nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.11** | **272** | P | **P** | **14 54 39.3** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 14 55 51.9 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.28** | **272** | | **P** | **14 54 40.8** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 14 54 42.4 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.29** | **272** | P | **P** | **14 54 40.8** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 14 54 42.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.29** | **272** | | **P** | **14 54 40.6** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.29** | **272** | P | **P** | **14 54 40.7** | **-0.8** |
| | comp=Z,12nm,0.5s,baz=111,slow=8.0,SNR=219 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 56 23.5** | **-2.0** |
| | comp=Z,1.0nm,0.8s,baz=116,slow=3.3,SNR=1.9 | | | | | | |
| WRA | | | | ScP | **ScP** | **15 00 14.8** | **0.0** |
| | comp=Z,0.2nm,0.7s,baz=108,slow=3.8,SNR=1.5 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **DRV** | **Dumont d'Urvil** | **44.30** | **203** | P | **P** | **14 54 40.4** | **-0.5** |
| **WB0** | **Warramunga Arr** | **44.32** | **272** | | **P** | **14 54 41.0** | **-0.7** |
| **FORT** | **Forrest** | **46.26** | **255** | P | **P** | **14 54 56.1** | **-0.8** |
| **SBA** | **Scott Base** | **48.14** | **184** | P | **P** | **14 55 13.9** | **+2.9** |
| **VNDA** | **Vanda** | **48.20** | **186** | P | **P** | **14 55 14.6** | **+3.2** |
| VNDA | | | | IAmb | IAmb | 14 55 49.9 | |
| | comp=Z,11nm,1.9s | | | | | | |
| **VNDA** | **Vanda** | **48.20** | **186** | P | **P** | **14 55 12.8** | **+1.3** |
| | comp=Z,1.0nm,0.7s,baz=23,slow=7.8,SNR=9.2 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **48.20** | **186** | P | **P** | **14 55 15.3** | **+3.8** |
| **MTN** | **Manton Dam** | **50.17** | **279** | P | **P** | **14 55 27.2** | **0.0** |
| MTN | | | | IAmb | IAmb | 14 56 07.8 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **50.90** | **274** | P | **P** | **14 55 32.9** | **+0.1** |
| **FITZ** | **Fitzroy Crossi** | **52.56** | **270** | P | **P** | **14 55 45.0** | **-0.2** |
| **CCD** | **Concordia, Ant** | **53.09** | **196** | P | **P** | **14 55 49.0** | **+0.2** |
| **CASY** | **Casey** | **55.31** | **208** | P | **P** | **14 56 03.7** | **-0.9** |
| CASY | | | | IAmb | IAmb | 14 56 04.5 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **CASY** | **Casey** | **55.31** | **208** | P | **P** | **14 56 03.8** | **-0.7** |
| **MBWA** | **Marble Bar** | **56.43** | **264** | P | **P** | **14 56 12.0** | **-1.3** |
| **MORW** | **Morawa** | **56.75** | **253** | P | **P** | **14 56 13.8** | **-1.7** |
| **RPN** | **Rapa Nui** | **59.27** | **105** | LR | LR | 15 15 29.7 | |
| | comp=Z,25nm,21.7s,baz=291,slow=29 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.80** | **180** | P | **P** | **14 56 38.0** | **+1.6** |
| **QSPA** | **South Pole Qui** | **59.80** | **180** | P | **P** | **14 56 37.9** | **+1.5** |
| | comp=Z,2.5nm,0.7s,baz=31,slow=1.0,SNR=13 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **DAV** | **Davao City (W)** | **65.77** | **295** | LR | LR | 15 26 32.3 | |
| | comp=Z,21nm,18.2s,baz=62,slow=36 | | | | | | |
| **TROLL** | **Troll, Antarti** | **77.96** | **180** | ⇑P | **P** | **14 58 29.7** | **+0.5** |
| | comp=Z,312nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **78.24** | **178** | ⇑P | P | 14 58 37.4 | +6.8 |
| | comp=Z,37nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **78.24** | **178** | P | **P** | **14 58 31.7** | **+1.1** |
| | comp=Z,0.5nm,0.4s,baz=254,slow=17,SNR=2.4 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **78.38** | **176** | ⇑P | P | 14 58 38.4 | +7.1 |
| | comp=Z,17nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **78.82** | **177** | ⇑P | P | 14 58 41.4 | +7.7 |
| | comp=Z,13nm,0.7s,baz=180,slow=5.8 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **79.05** | **176** | ⇑P | P | 14 58 41.7 | +6.8 |
| | comp=Z,9.8nm,0.9s | | | | | | |
| **H03S2** | **Juan Fernandez** | **80.35** | **123** | T | T | 16 27 54.6 | |
| | baz=238,slow=74,SNR=165 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.36** | **123** | T | T | 16 27 55.8 | |
| | baz=238,slow=74,SNR=140 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.36** | **123** | T | T | 16 27 54.5 | |
| | baz=238,slow=74,SNR=144 | | | | | | |
| **H03N3** | **Juan Fernandez** | **80.54** | **123** | T | T | 16 28 04.7 | |
| | baz=242,slow=72,SNR=35 | | | | | | |
| **H03N2** | **Juan Fernandez** | **80.54** | **123** | T | T | 16 28 11.2 | |
| | baz=242,slow=72,SNR=29 | | | | | | |
| **H03N1** | **Juan Fernandez** | **80.56** | **123** | T | T | 16 28 06.7 | |
| | baz=242,slow=72,SNR=68 | | | | | | |
| **KIWB** | **Kanaga Island** | **81.81** | **0** | P | **P** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RACZ | Rakaia | 2.84 | 73 | P | Pb | 14 48 47.5 | -0.8 |
| INZ | Inchbonnie | 2.91 | 51 | P | Pn | 14 48 44.5 | +0.8 |
| OXZ | Oxford | 2.93 | 65 | P | Pn | 14 48 43.4 | -0.7 |
| MQZ | McQueen's Vall | 3.20 | 75 | P | Pn | 14 48 47.9 | +0.1 |
| AKCZ | Akaroa Harbour | 3.34 | 79 | P | Pn | 14 48 50.3 | +0.6 |
| LTZ | Lake Taylor | 3.36 | 59 | P | Pn | 14 48 49.8 | -0.2 |
| AMCZ | Amberley | 3.40 | 67 | P | Pn | 14 48 50.5 | 0.0 |
| OKCZ | Okains Bay | 3.48 | 77 | P | Pn | 14 48 53.3 | +1.7 |
| GVZ | Greta Valley S | 3.75 | 66 | P | Pn | 14 48 55.1 | -0.2 |
| DSZ | Denniston Nort | 3.80 | 42 | P | Pn | 14 48 56.6 | +0.6 |
| THZ | Tophouse | 4.36 | 51 | P | Pn | 14 49 03.6 | -0.2 |
| MRNZ | Matariki Terra | 4.54 | 47 | P | Pn | 14 49 07.2 | +1.1 |
| QRZ | Quartz Range | 4.86 | 40 | P | Pn | 14 49 11.1 | +0.6 |
| QRZ | Quartz Range | 4.86 | 40 | P | Pn | 14 49 11.2 | +0.7 |
| TKNZ | Takaka Hill | 4.91 | 45 | P | Pn | 14 49 12.6 | +1.3 |
| NNZ | Nelson | 4.99 | 49 | P | Pn | 14 49 13.6 | +1.3 |
| TUWZ | Tuamarina | 5.17 | 54 | P | Pn | 14 49 18.9 | +4.2 |
| TCW | Tory Channel | 5.50 | 54 | P | Pn | 14 49 23.2 | +3.8 |
| DUWZ | D'Urville Isla | 5.58 | 49 | P | Pn | 14 49 22.2 | +1.8 |
| KHEZ | Kahui Hut | 6.76 | 40 | P | Pn | 14 49 39.9 | +3.1 |
| KHEZ | Kahui Hut | 6.76 | 40 | P | Pn | 14 49 38.3 | +1.5 |

*NOU* ***06*** *15:01:35.4, 44°.53S×168°.32E, h0km, MLv3.6/6, South Island, New Zealand*
*WEL* ***06*** *15:01:35.0±0.4, 45°.3°×16°.8E±°, h5km, M3.3/14, ML3.5/17, MLv3.3/14, Error ellipse: s-maj=0.0km s-min=0.0km az=136.7, confirmed*
**ISC 06 15:01:35.0**±1.3, **44°.59S**±0°.03×**168°.33E**±0°.03, **h0**km±13km, **n44**, σ0s**97**/52, **South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| GLNY | Glenorchy | 0.28 | 169 | P | | P | Pg | 15 01 39.7 | -0.6 |
| GLNY | | | | S | | S | Sg | 15 01 43.3 | -0.5 |
| MSZ | Milford Sound | 0.30 | 254 | P | | P | Pg | 15 01 41.4 | +0.6 |
| MSZ | | | | S | | S | Sg | 15 01 45.7 | +1.1 |
| WKZ | Wanaka | 0.54 | 116 | P | | P | Pg | 15 01 45.8 | +0.5 |
| WKZ | | | | S | | S | Sg | 15 01 53.1 | +0.8 |
| JCZ | Jackson Bay | 0.61 | 32 | P | | P | Pg | 15 01 45.8 | -0.9 |
| JCZ | Jackson Bay | 0.61 | 32 | P | | P | Pg | 15 01 46.0 | -0.7 |
| JCZ | | | | S | | S | Sg | 15 01 54.8 | +0.2 |
| MECS | Makarora Emerg | 0.74 | 61 | P | | P | Pg | 15 01 48.7 | -0.4 |
| MLZ | Mavora Lakes | 0.79 | 191 | P | | P | Pg | 15 01 50.2 | +0.1 |
| MLZ | | | | S | | S | Sg | 15 02 01.2 | +0.9 |
| TAFS | Te Anau Fire S | 0.93 | 208 | P | | P | Pg | 15 01 52.0 | -0.8 |
| EAZ | Earnscleugh | 0.94 | 133 | P | | P | Pg | 15 01 52.9 | -0.2 |
| MOSS | Mossburn Schoo | 1.08 | 184 | P | | P | Pg | 15 01 55.5 | -0.1 |
| DCZ | Deep Cove | 1.21 | 223 | P | | P | Pg | 15 01 57.1 | -1.1 |
| DCZ | | | | S | | S | Sg | 15 02 13.3 | -0.5 |
| WHZ | Wether Hill Ro | 1.33 | 192 | P | | P | Pn | 15 01 59.5 | -1.3 |
| WHZ | | | | S | | S | Sg | 15 02 17.8 | +0.1 |
| LBZ | Lake Benmore | 1.34 | 82 | P | | P | Pn | 15 02 00.5 | -0.5 |
| LBZ | | | | S | | S | Sg | 15 02 17.9 | -0.2 |
| FOZ | Fox Glacier | 1.50 | 46 | P | | P | Pn | 15 02 01.7 | -1.4 |
| TUZ | Tuapeka | 1.64 | 147 | P | | P | Pn | 15 02 05.4 | +0.4 |
| TUZ | | | | S | | S | Sn | 15 02 25.9 | -0.9 |
| ODZ | Otahua Downs | 1.71 | 106 | P | | P | Pn | 15 02 06.4 | +0.5 |
| ODZ | Otahua Downs | 1.71 | 106 | P | | P | Pn | 15 02 06.2 | +0.3 |
| GCSZ | Gaunt Creek Bo | 1.92 | 49 | P | | P | Pn | 15 02 08.3 | -0.6 |
| TMZ | Timaru | 1.92 | 85 | P | | P | Pn | 15 02 08.7 | -0.2 |
| PYZ | Puysegur Point | 1.96 | 216 | P | | P | Pn | 15 02 10.7 | +1.3 |
| PYZ | Puysegur Point | 1.96 | 216 | P | | P | Pn | 15 02 10.3 | +0.9 |
| SYZ | Scrubby Hill | 2.02 | 164 | P | | P | Pn | 15 02 11.0 | +0.7 |
| SYZ | Scrubby Hill | 2.02 | 164 | P | | P | Pn | 15 02 10.2 | -0.1 |
| HHSZ | Highcliff Hill | 2.06 | 130 | P | | P | Pn | 15 02 10.5 | -0.3 |
| ARDZ | Arundel | 2.14 | 73 | P | | P | Pn | 15 02 12.0 | 0.0 |
| RPZ | Rata Peaks | 2.15 | 67 | P | | P | Pn | 15 02 13.0 | +1.0 |
| RPZ | Rata Peaks | 2.15 | 67 | P | | P | Pn | 15 02 12.8 | +0.8 |
| APZ | The Paps | 2.25 | 186 | P | | P | Pn | 15 02 13.6 | +0.1 |
| WVZ | Waitaha Valley | 2.31 | 50 | P | | P | Pn | 15 02 15.2 | +1.0 |
| WACZ | Wakanui South | 2.60 | 77 | P | | P | Pn | 15 02 17.7 | -0.5 |
| INZ | Inchbonnie | 2.93 | 51 | P | | P | Pn | 15 02 23.7 | +1.0 |
| OXZ | Oxford | 2.96 | 66 | P | | P | Pn | 15 02 23.4 | +0.2 |
| MQZ | McQueen's Vall | 3.23 | 76 | P | | P | Pn | 15 02 26.8 | -0.1 |
| LTZ | Lake Taylor | 3.38 | 59 | P | | P | Pn | 15 02 28.3 | -0.8 |
| DSZ | Denniston Nort | 3.81 | 43 | P | | P | Pn | 15 02 34.3 | -0.7 |
| THZ | Tophouse | 4.38 | 51 | P | | P | Pn | 15 02 43.9 | +1.1 |
| MRNZ | Matariki Terra | 4.55 | 47 | P | | P | Pn | 15 02 45.4 | +0.3 |
| QRZ | Quartz Range | 4.87 | 41 | P | | P | Pn | 15 02 49.2 | -0.2 |
| QRZ | Quartz Range | 4.87 | 41 | P | | P | Pn | 15 02 49.1 | -0.4 |
| TKNZ | Takaka Hill | 4.92 | 45 | P | | P | Pn | 15 02 50.2 | 0.0 |
| NNZ | Nelson | 5.01 | 49 | P | | P | Pn | 15 02 52.0 | +0.7 |
| DUWZ | D'Urville Isla | 5.59 | 49 | P | | P | Pn | 15 03 02.6 | +3.2 |
| BHHZ | Black Hill Sta | 7.69 | 51 | P | | P | Pn | 15 03 34.3 | +6.2 |
| OTVZ | Oturere | 7.70 | 48 | P | | P | Pn | 15 03 31.9 | +3.4 |

*NOU* ***06*** *15:07:13.0, 14°.61S×171°.70E, h627km, mb4.4/46, Vanuatu Islands Region*
*IDC* ***06*** *15:07:15.2±1.7, 14°.68S×171°.47E, h638km±22km, mb3.4/7, mbtmp4.5/9, Error ellipse: s-maj=24.0km s-min=15.8km az=172.0*
*NEIC* ***06*** *15:07:15.8±1.4, 14°.77S±0°.09×171°.5E±0°.1, h635km±10km, mb4.5/57, Error ellipse: s-maj=17.4km s-min=12.4km az=68.0*
**ISC 06 15:07:15.8**±0.5, **14°.80S**±0°.07×**171°.44E**±0°.08, **h635**km, **n126**, σ0s**83**/126, **mb4.4**/38, **Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| DVP | Devils Point | 4.27 | 227 | P | | P | | 15 08 45.0 | -0.6 |
| MSVF | Nonsavu | 6.98 | 116 | P | | P | | 15 09 07.0 | -0.3 |
| MSVF | Nonsavu | 6.98 | 116 | P | | P | | 15 09 07.4 | +0.1 |
| | 37nm,0.5s,baz=96,slow=21,SNR=73 | | | | | | | | |
| LIFNC | LIFOU | 7.17 | 213 | P | | P | | 15 09 07.3 | -1.5 |
| LIFNC | LIFOU | 7.17 | 213 | P | | P | | 15 09 07.2 | -1.5 |
| MARNC | Mare, Loyalty | 7.39 | 206 | P | | P | | 15 09 09.1 | -1.7 |
| YATNC | Mamie plateau, | 8.41 | 210 | P | | P | | 15 09 19.5 | -0.6 |
| PINNC | Pines Island, | 8.64 | 205 | P | | P | | 15 09 22.2 | -0.1 |
| PINNC | Pines Island, | 8.64 | 205 | P | | P | | 15 09 22.2 | -0.1 |
| DZM | Mont Dzumac | 8.65 | 213 | P | | P | | 15 09 22.8 | +0.3 |
| DZM | Mont Dzumac | 8.65 | 213 | P | | P | | 15 09 22.4 | 0.0 |
| DZM | Mont Dzumac | 8.65 | 213 | P | | P | | 15 09 22.9 | +0.5 |
| | 28nm,0.6s,baz=70,slow=22,SNR=40 | | | | | | | | |
| NOUC | Port Laguerre | 8.74 | 213 | P | | P | | 15 09 23.7 | +0.4 |
| ONTNC | Ouen Toro | 8.84 | 212 | P | | P | | 15 09 24.9 | +0.8 |
| ONTNC | Ouen Toro | 8.84 | 212 | P | | P | | 15 09 24.1 | 0.0 |
| KOUNC | Koumac, New Ca | 8.90 | 229 | P | | P | | 15 09 25.3 | +0.6 |
| KOUNC | Koumac, New Ca | 8.90 | 229 | P | | P | | 15 09 25.4 | +0.7 |
| HNR | Honiara | 12.44 | 294 | P | | P | | 15 09 57.4 | -1.4 |
| TARA | Tarawa | 16.12 | 5 | P | | P | | 15 10 32.0 | -0.9 |
| TARA | | | | | | IAmb | IAmb | 15 10 33.8 | |
| | comp=Z,33nm,0.8s | | | | | | | | |
| OUZ | Omahuta | 20.42 | 175 | P | | P | | 15 11 11.1 | -0.5 |
| EIDS | Eidsvold | 21.79 | 238 | P | | P | | 15 11 24.1 | +0.1 |
| EIDS | Eidsvold | 21.79 | 238 | P | | P | | 15 11 24.0 | +0.1 |
| EIDS | | | | | | IAmb | IAmb | 15 11 24.8 | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| TOZ | Tahuroa Road | 23.12 | 172 | P | | P | | 15 11 36.4 | +0.9 |
| TOZ | | | | | | IAmb | IAmb | 15 11 37.0 | |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| HIZ | Hauiti | 23.81 | 173 | P | | P | | 15 11 42.3 | +0.6 |
| HIZ | Hauiti | 23.81 | 173 | P | | P | | 15 11 42.4 | +0.8 |
| URZ | Urewera | 23.90 | 169 | P | | P | | 15 11 41.6 | +0.8 |
| URZ | Urewera | 23.90 | 169 | P | | P | | 15 11 41.6 | -0.8 |
| | comp=Z,9.8nm,0.6s,baz=60,slow=10,SNR=2.5 | | | | | | | | |
| | comp=Z,9.8nm,0.6s | | | | | | | | |
| TV1H | Townsville Har | 23.97 | 256 | P | | P | | 15 11 43.8 | +0.4 |
| RTZ | Ruatahuna | 24.22 | 169 | P | | P | | 15 11 44.3 | -1.0 |
| PMG | Port Moresby | 24.33 | 280 | P | | P | | 15 11 45.6 | -1.0 |
| PMG | | | | | | IAmb | IAmb | 15 11 48.2 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| CTA | Charters Tower | 24.59 | 254 | P | | P | | 15 11 49.0 | +0.1 |
| | comp=Z,0.5nm,0.6s,baz=88,slow=14,SNR=9.1 | | | | | | | | |
| CTAO | Charters Tower | 24.59 | 254 | P | | P | | 15 11 48.9 | +0.1 |
| CTAO | Charters Tower | 24.59 | 254 | P | | P | | 15 11 48.3 | -0.5 |
| CTAO | | | | | | IAmb | IAmb | 15 11 49.9 | |
| | comp=Z,6.7nm,0.7s | | | | | | | | |
| BKZ | Black Stump Fm | 24.67 | 171 | P | | P | | 15 11 48.7 | -0.6 |
| QRZ | Quartz Range | 25.95 | 178 | P | | P | | 15 12 01.4 | +1.0 |
| QRZ | Quartz Range | 25.95 | 178 | P | | P | | 15 12 01.1 | +0.7 |
| BFZ | Birch Farm | 26.12 | 172 | P | | P | | 15 12 00.5 | -1.5 |
| NNZ | Nelson | 26.37 | 177 | P | | P | | 15 12 04.2 | +0.1 |
| NNZ | | | | | | IAmb | IAmb | 15 12 05.6 | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| MRNZ | Matariki Terra | 26.53 | 178 | P | | P | | 15 12 05.3 | -0.2 |
| SNZO | South Karori | 26.56 | 174 | P | | P | | 15 12 04.5 | -1.3 |
| BHW | Baring Head | 26.68 | 174 | P | | P | | 15 12 05.5 | -1.3 |
| BHW | | | | | | IAmb | IAmb | 15 12 17.9 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| DSZ | Denniston Nort | 26.85 | 179 | P | | P | | 15 12 08.1 | -0.2 |
| THZ | Tophouse | 26.89 | 178 | P | | P | | 15 12 08.5 | -0.3 |
| THZ | | | | | | IAmb | IAmb | 15 12 11.6 | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| MANU | Manus Island | 26.93 | 296 | P | | P | | 15 12 07.0 | -2.5 |
| COEN | Coen | 27.39 | 268 | P | | P | | 15 12 13.6 | +0.2 |
| COEN | Coen | 27.39 | 268 | P | | P | | 15 12 13.4 | 0.0 |
| COEN | | | | | | IAmb | IAmb | 15 12 14.6 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| KHZ | Kahutara | 27.58 | 177 | P | | P | | 15 12 12.8 | -1.8 |
| QLP | Quilpie | 27.96 | 241 | P | | P | | 15 12 18.4 | +0.2 |
| CNB | Canberra Magne | 28.47 | 220 | P | | P | | 15 12 23.7 | +1.2 |
| CAN | Canberra | 28.70 | 221 | P | | P | | 15 12 25.3 | +0.8 |
| CMSA | Cobar Meteorol | 28.84 | 230 | P | | P | | 15 12 25.8 | +0.1 |
| LBZ | Lake Benmore | 29.51 | 182 | P | | P | | 15 12 30.5 | -0.8 |
| MLZ | Mavora Lakes | 30.60 | 185 | P | | P | | 15 12 40.6 | +0.1 |
| MLZ | | | | | | IAmb | IAmb | 15 13 08.4 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| QIS | Mount Isa | 30.84 | 255 | P | | P | | 15 12 43.0 | 0.0 |
| INKA | Innaminka | 31.27 | 241 | P | | P | | 15 12 47.1 | +0.6 |
| STKA | Stephens Creek | 32.10 | 233 | P | | P | | 15 12 54.2 | +0.7 |
| STKA | Stephens Creek | 32.10 | 233 | P | | P | | 15 12 54.2 | +0.7 |
| STKA | Stephens Creek | 32.10 | 233 | P | | P | | 15 12 54.4 | +0.9 |
| | comp=Z,2.1nm,0.3s,baz=55,slow=8.5,SNR=19 | | | | | | | | |
| | comp=Z,2.1nm,0.3s | | | | | | | | |
| TOO | Toolangi | 32.31 | 221 | P | | P | | 15 12 56.3 | +1.1 |
| LCRK | Leigh Creek | 34.24 | 237 | P | | P | | 15 13 11.6 | +0.2 |
| HTT | Hallett | 34.79 | 232 | P | | P | | 15 13 16.8 | +0.8 |
| WR0 | Warramunga Arr | 35.54 | 256 | P | | P | | 15 13 21.3 | -1.0 |
| WR0 | | | | | | IAmb | IAmb | 15 13 22.4 | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| OOD | Oodnadatta | 35.60 | 243 | P | | P | | 15 13 23.1 | +0.5 |
| WB0 | Warramunga Arr | 35.67 | 257 | P | | P | | 15 13 22.6 | -0.8 |
| WB2 | Warramunga Arr | 35.72 | 256 | P | | P | | 15 13 22.9 | -0.9 |
| WB2 | | | | | | IAmb | IAmb | 15 13 23.9 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| WRAB | Tennant Creek | 35.72 | 256 | P | | P | | 15 13 22.8 | -1.0 |
| WRAB | | | | | | IAmb | IAmb | 15 13 23.7 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| WRA | Warramunga Arr | 35.73 | 256 | P | | P | | 15 13 23.1 | -0.8 |
| | comp=Z,11nm,0.5s,baz=88,slow=8.8,SNR=140 | | | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | | | |
| AS01 | Alice Springs | 36.39 | 250 | P | | P | | 15 13 28.8 | -0.5 |
| AS31 | Alice Springs | 36.43 | 250 | P | | P | | 15 13 29.1 | -0.5 |
| AS31 | | | | | | IAmb | IAmb | 15 13 29.9 | |
| | comp=Z,9.6nm,0.5s | | | | | | | | |
| ASAR | Alice Springs | 36.43 | 250 | P | | P | | 15 13 28.4 | -1.2 |
| ASAR | Alice Springs | 36.43 | 250 | P | | P | | 15 13 29.2 | -0.4 |
| | comp=Z,14nm,0.6s,baz=75,slow=10.0,SNR=284 | | | | | | | | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| BBOO | Buckleboo | 36.78 | 235 | P | | P | | 15 13 32.6 | +0.3 |
| BBOO | Buckleboo | 36.78 | 235 | P | | P | | 15 13 32.6 | +0.3 |
| MULG | Mulgathing | 37.61 | 239 | P | | P | | 15 13 39.0 | 0.0 |
| KDU | Kakadu | 37.88 | 268 | P | | P | | 15 13 41.2 | -0.2 |
| MTN | Manton Dam | 39.16 | 268 | P | | P | | 15 13 52.0 | +0.3 |
| MTN | Manton Dam | 39.16 | 268 | P | | P | | 15 13 51.6 | -0.1 |
| DRS | Darwin Rock St | 39.44 | 268 | P | | P | | 15 13 54.0 | +0.1 |
| FAKI | Fak Fak | 40.40 | 283 | P | | P | | 15 14 01.4 | -0.2 |
| FAKI | Fak Fak | 40.40 | 283 | P | | P | | 15 14 01.3 | -0.2 |
| FAKI | | | | | | IAmb | IAmb | 15 14 13.1 | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| KNRA | Kununurra | 41.14 | 263 | P | | P | | 15 14 07.0 | -0.3 |
| KNRA | | | | | | IAmb | IAmb | 15 14 07.9 | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| WRKA | Warakurna | 41.67 | 249 | P | | P | | 15 14 11.6 | +0.1 |
| FORT | Forrest | 42.76 | 241 | P | | P | | 15 14 19.6 | -0.2 |
| FORT | Forrest | 42.76 | 241 | P | | P | | 15 14 19.8 | +0.1 |
| FITZ | Fitzroy Crossi | 43.97 | 259 | P | | P | | 15 14 29.3 | 0.0 |
| PSA00 | Pilbara Seismi | 49.30 | 254 | P | | P | | 15 15 09.6 | +0.4 |
| PSA00 | Pilbara Seismi | 49.30 | 254 | P | | P | | 15 15 09.1 | -0.2 |
| MEEK | Meekatharra | 50.48 | 248 | P | | P | | 15 15 17.8 | 0.0 |
| NWAO | Narrogin (SRO) | 52.19 | 240 | P | | P | | 15 15 29.7 | -0.1 |
| NWAO | Narrogin (SRO) | 52.19 | 240 | P | | P | | 15 15 29.6 | -0.3 |
| NWAO | | | | | | IAmb | IAmb | 15 15 32.4 | |
| | comp=Z,50nm,1.3s | | | | | | | | |
| TOLI2 | Tolitoli | 52.55 | 283 | P | | P | | 15 15 32.3 | -0.4 |
| TOLI2 | Tolitoli | 52.55 | 283 | P | | P | | 15 15 32.7 | +0.1 |
| TOLI2 | | | | | | IAmb | IAmb | 15 16 07.9 | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| MORW | Morawa | 52.88 | 245 | P | | P | | 15 15 34.7 | -0.1 |
| MORW | | | | | | IAmb | IAmb | 15 15 51.9 | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| UGM | Wanagama | 59.97 | 269 | P | | P | | 15 16 23.6 | +0.1 |
| VNDA | Vanda | 62.92 | 182 | P | | P | | 15 16 41.5 | +0.1 |
| SBA | Scott Base | 63.11 | 181 | P | | P | | 15 16 43.9 | +1.3 |
| CASY | Casey | 65.01 | 203 | P | | P | | 15 16 55.0 | +0.2 |
| KIWB | Kanaga Island | 67.11 | 8 | P | | P | | 15 17 08.2 | +0.3 |
| PET | Petropavlovsk | 68.44 | 352 | P | | P | | 15 17 15.8 | -0.1 |
| PET | | | | | | IAmb | IAmb | 15 17 27.3 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| NJ2 | Nanjing | 68.60 | 314 | eP | | P | | 15 17 18.9 | +1.6 |
| NJ2 | | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| KULM | Kulim | 72.93 | 280 | P | | P | | 15 17 40.8 | -2.2 |
| KULM | | | | | | IAmb | IAmb | 15 17 59.3 | |
| | comp=Z,29nm,1.5s | | | | | | | | |
| QSPA | South Pole Qui | 75.23 | 180 | P | | P | | 15 17 55.1 | 0.0 |
| QSPA | South Pole Qui | 75.23 | 180 | P | | P | | 15 17 55.3 | +0.2 |
| | comp=Z,3.0nm,0.9s,baz=287,slow=2.2,SNR=13 | | | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| O16K | Kokwok River B | 78.14 | 15 | P | | P | | 15 18 10.1 | -0.6 |
| O16K | | | | | | IAmb | IAmb | 15 18 10.5 | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| HHC | Hu-ho-hao-te | 78.30 | 318 | eP | | P | | 15 18 15.8 | +3.6 |
| HHC | | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| HHC | | | | | | pmax | pmax | | |
| | comp=Z,61nm,4.9s | | | | | | | | |
| PZH | PanZhiHua | 79.16 | 301 | P | | P | | 15 18 17.9 | +0.8 |
| PZH | | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| PZH | | | | | | pmax | pmax | | |
| | comp=Z,110nm,5.1s | | | | | | | | |
| L18K | Granite Mounta | 80.76 | 15 | P | | P | | 15 18 25.6 | +1.2 |
| L18K | | | | | | IAmb | IAmb | 15 18 37.5 | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| J16K | Anvik River | 80.81 | 12 | P | | P | | 15 18 25.7 | +1.1 |
| J16K | | | | | | IAmb | IAmb | 15 18 34.1 | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| L19K | White Mountain | 81.18 | 15 | P | | P | | 15 18 27.6 | +1.0 |
| L19K | | | | | | IAmb | IAmb | 15 18 29.1 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| J17K | VABM Dome | 81.23 | 13 | P | | P | | 15 18 27.8 | +1.1 |
| J17K | | | | | | IAmb | IAmb | 15 19 05.4 | |
| | comp=Z,15nm,1.5s | | | | | | | | |
| PWL | Port Wells | 81.95 | 19 | P | | P | | 15 18 30.3 | -0.2 |
| PWL | | | | | | IAmb | IAmb | 15 18 59.1 | |
| | comp=Z,21nm,1.5s | | | | | | | | |
| H17K | Granite Mounta | 82.42 | 12 | P | | P | | 15 18 33.4 | +0.7 |
| J19K | Poorman | 82.53 | 14 | P | | P | | 15 18 34.1 | +0.8 |
| J20K | Nowinta River | 83.03 | 14 | P | | P | | 15 18 35.9 | +0.1 |
| H19K | Roundabout Mou | 83.66 | 13 | P | | P | | 15 18 39.0 | +0.2 |
| G19K | Purcell Mounta | 84.05 | 12 | P | | P | | 15 18 41.1 | +0.3 |
| G19K | | | | | | IAmb | IAmb | 15 19 21.8 | |
| | comp=Z,8.2nm,1.4s | | | | | | | | |
| NVAR | Mina Array Bea | 84.29 | 48 | P | | P | | 15 18 42.0 | -0.9 |
| | comp=Z,0.7nm,0.7s,baz=220,slow=6.8,SNR=4.3 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |
| F19K | Shaleruckik Mo | 84.51 | 12 | P | | P | | 15 18 43.0 | 0.0 |
| ILAR | Eielson Array | 85.40 | 17 | P | | P | | 15 18 47.1 | -0.2 |
| ILAR | Eielson Array | 85.40 | 17 | P | | P | | 15 18 45.7 | -1.6 |
| | comp=Z,0.9nm,0.6s,baz=235,slow=4.8,SNR=15 | | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | | |
| C19K | Lookout Ridge | 86.18 | 10 | P | | P | | 15 18 51.4 | +0.3 |
| C19K | | | | | | IAmb | IAmb | 15 19 01.8 | |
| | comp=Z,6.7nm,1.4s | | | | | | | | |
| E21K | Killik River | 86.65 | 12 | P | | P | | 15 18 53.8 | +0.5 |
| M30M | Minto, Yukon | 87.01 | 21 | P | | P | | 15 18 54.6 | -0.4 |
| D22K | Ayikyak River | 87.28 | 12 | P | | P | | 15 18 56.6 | +0.4 |
| BMAR | Burnt Mountain | 88.02 | 16 | P | | P | | 15 18 59.4 | -0.3 |
| TORD | Torodi Ar. Bea | 169.91 | 262 | PKPab | | PKPab | | 15 27 32.2 | -0.5 |
| | comp=Z,0.5nm,0.7s,baz=78,slow=5.6,SNR=3.2 | | | | | | | | |

*SNET* ***06*** *15:12:55.2±1.3, 12°.77N×88°.32W, h50km, ML3.7*
*CATAC* ***06*** *15:12:55.1±0.5, 12°.75N×88°.32W, h32km±5km, ML3.7*
**ISC 06 15:12:55.2**±1.4, **12°.70N**±0°.09×**88°.35W**±0°.05, **h40**km±45km, **n46**, σ0s**54**/75, **Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| JUCU | Jucuarįn | 0.56 | 11 | eP | | Pn | | 15 13 06.6 | -0.2 |
| JUCU | | | | eS | | Sn | | 15 13 15.7 | +0.7 |
| JUCU | | | | i P | | Pn | | 15 13 06.6 | -0.2 |
| JUCU | | | | i S | | Sn | | 15 13 15.3 | +0.3 |
| JUCU | | | | IAML | | | | 15 13 23.7 | |
| | comp=Z,3µm,1.0s | | | | | | | | |
| LCY | Lacayo | 0.72 | 5 | eP | | Pn | | 15 13 08.9 | -0.1 |
| VSM | San Miguel | 0.72 | 6 | eP | | Pn | | 15 13 09.3 | 0.0 |
| RANC | El Ranchito | 0.73 | 5 | i P | | Pn | | 15 13 09.3 | 0.0 |
| RANC | | | | IAML | | | | 15 13 09.6 | |
| | comp=Z,3µm,1.0s | | | | | | | | |
| RANC | | | | i S | | Sn | | 15 13 19.1 | -0.2 |
| BLLM | Bellamira | 0.74 | 9 | eP | | Pn | | 15 13 09.2 | -0.2 |
| CNCH | Conchagua | 0.76 | 42 | i P | | Pn | | 15 13 09.6 | -0.1 |
| CNCH | | | | i S | | Sn | | 15 13 19.7 | -0.4 |
| CNCH | | | | IAML | | | | 15 13 24.0 | |
| | comp=Z,7µm,1.0s | | | | | | | | |
| CNRM | Centro Naciona | 0.79 | 13 | i P | | Pn | | 15 13 09.8 | -0.1 |
| CNRM | | | | i S | | Sn | | 15 13 20.9 | +0.4 |
| CNRM | | | | IAML | | | | 15 13 23.8 | |
| | comp=Z,9µm,1.0s | | | | | | | | |
| TECA | Tecapa | 0.80 | 350 | eP | | Pn | | 15 13 10.2 | -0.1 |
| TECA | | | | eS | | Sn | | 15 13 21.6 | +0.5 |
| TECO | Alcaldia de Te | 0.93 | 333 | eP | | Pn | | 15 13 11.2 | -0.7 |
| TECO | | | | eS | | Sn | | 15 13 23.0 | -1.1 |
| TECO | Alcaldia de Te | 0.93 | 333 | i P | | Pn | | 15 13 11.2 | -0.7 |
| TECO | | | | i S | | Sn | | 15 13 22.9 | -1.1 |
| TECO | | | | IAML | | | | 15 13 27.6 | |
| | comp=Z,1µm,1.0s | | | | | | | | |
| PQSS | Presa 15 de Se | 0.94 | 348 | eP | | Pn | | 15 13 11.7 | -0.2 |
| PQSS | | | | eS | | Sn | | 15 13 24.5 | +0.3 |
| PQSS | Presa 15 de Se | 0.94 | 348 | i P | | Pn | | 15 13 11.8 | -0.2 |
| PQSS | | | | i S | | Sn | | 15 13 24.9 | +0.7 |
| PQSS | | | | IAML | | | | 15 13 28.6 | |
| | comp=Z,1µm,1.0s | | | | | | | | |
| SNVI | San Vicente | 1.02 | 332 | eP | | Pn | | 15 13 13.4 | +0.2 |
| UESV | Universidad de | 1.02 | 336 | i P | | Pn | | 15 13 13.1 | 0.0 |
| UESV | | | | i S | | Sn | | 15 13 26.3 | +0.1 |
| UESV | | | | IAML | | | | 15 13 27.5 | |
| | comp=Z,1µm,1.0s | | | | | | | | |
| COEG | Centro de Oper | 1.04 | 331 | eP | | Pn | | 15 13 13.1 | -0.4 |
| COEG | Centro de Oper | 1.04 | 331 | i P | | Pn | | 15 13 13.3 | -0.2 |
| COEG | | | | i S | | Sn | | 15 13 27.1 | +0.1 |
| COEG | | | | IAML | | | | 15 13 33.1 | |
| | comp=Z,1µm,1.0s | | | | | | | | |
| SCLA | Alcaldia de Sa | 1.06 | 340 | eP | | Pn | | 15 13 13.8 | +0.1 |
| SCLA | Alcaldia de Sa | 1.06 | 340 | i P | | Pn | | 15 13 13.7 | +0.1 |
| SCLA | | | | IAML | | | | 15 13 14.1 | |
| | comp=Z,820nm,1.0s | | | | | | | | |
| SCLA | | | | i S | | Sn | | 15 13 27.6 | +0.4 |
| LFRS | El Faro | 1.15 | 323 | eP | | Pn | | 15 13 14.8 | -0.1 |
| LFRS | | | | eS | | Sn | | 15 13 28.5 | -1.0 |
| LALI | Alcalda de L | 1.22 | 310 | eP | | Pn | | 15 13 15.5 | -0.3 |
| LOMA | Loma Larga | 1.23 | 320 | eP | | Pn | | 15 13 15.8 | -0.3 |
| LOMA | | | | eS | | Sn | | 15 13 31.3 | -0.2 |
| LOMA | Loma Larga | 1.23 | 320 | i P | | Pn | | 15 13 15.9 | -0.2 |
| LOMA | | | | i S | | Sn | | 15 13 31.9 | +0.4 |
| LOMA | | | | IAML | | | | 15 13 34.6 | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| CRIN | San Cristobal | 1.27 | 90 | i P | | Pn | | 15 13 17.1 | +0.5 |
| CRIN | | | | i S | | Sn | | 15 13 33.5 | +1.0 |
| CRIN | | | | IAML | | | | 15 13 37.6 | |
| | comp=Z,7µm,1.0s | | | | | | | | |
| UEES | Universidad Ev | 1.32 | 320 | eP | | Pn | | 15 13 17.6 | +0.2 |
| PKGN | Cerro Pekin | 1.34 | 91 | i P | | Pn | | 15 13 17.7 | +0.2 |
| PKGN | | | | i S | | Sn | | 15 13 34.6 | +0.4 |
| PKGN | | | | IAML | | | | 15 13 36.2 | |
| | comp=Z,9µm,1.0s | | | | | | | | |
| BOQS | Boqueron | 1.36 | 319 | eP | | Pn | | 15 13 18.3 | +0.3 |
| PMON | Piamonte | 1.37 | 317 | i P | | Pn | | 15 13 18.1 | +0.1 |
| PMON | | | | i S | | Sn | | 15 13 35.4 | +0.4 |
| PMON | | | | IAML | | | | 15 13 45.6 | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| JAYA | Jayaque - finc | 1.43 | 312 | eP | | Pn | | 15 13 18.5 | -0.3 |
| JAYA | | | | eS | | Sn | | 15 13 36.7 | +0.3 |
| JAYA | Jayaque - finc | 1.43 | 312 | i P | | Pn | | 15 13 18.7 | -0.1 |
| JAYA | | | | i S | | Sn | | 15 13 36.7 | +0.3 |
| JAYA | | | | IAML | | | | 15 13 39.6 | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| TEL3 | Telica 3 | 1.48 | 95 | i P | | Pn | | 15 13 19.4 | 0.0 |
| CEDA | San Andres | 1.49 | 317 | eP | | Pn | | 15 13 19.5 | -0.1 |
| 

comp=Z,2.1nm,0.6s,baz=299,slow=12,SNR=24
comp=Z,2.1nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **WRAB** | **Tennant Creek** | **20.82 126** | Pn | Pn | 15 26 53.0 | -0.8 |
| WRAB | | | IAmb | IAmb | 15 27 33.0 | |

comp=Z,4.7nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **WB2** | **Warramunga Arr** | **20.82 126** | Pn | **P** | **15 26 52.8** | **+1.4** |
| WB2 | | | IAmb | IAmb | 15 26 57.7 | |

comp=Z,5.9nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| **WR0** | **Warramunga Arr** | **20.98 125** | P | **P** | **15 26 53.6** | **+0.5** |
| WR0 | | | IAmb | IAmb | 15 27 03.2 | |

comp=Z,5.4nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **21.12 296** | P | **P** | **15 26 54.4** | **-0.2** |
| **AS31** | **Alice Springs** | **22.64 134** | P | **P** | **15 27 11.4** | **+0.5** |
| **ASAR** | **Alice Springs** | **22.64 134** | P | **P** | **15 27 11.8** | **+0.9** |

comp=Z,1.7nm,0.8s,baz=312,slow=9.9,SNR=18

| | | | | | | |
|---|---|---|---|---|---|---|
| ASAR | | | PcP | **PcP** | **15 31 03.5** | **-0.4** |

comp=Z,0.4nm,0.8s,baz=299,slow=1.8,SNR=2.5
comp=Z,1.7nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **COEN** | **Coen** | **26.78 105** | P | **P** | **15 27 50.3** | **+0.3** |
| COEN | | | IAmb | IAmb | 15 27 50.5 | |

comp=Z,18nm,1.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **33.10 139** | P | **P** | **15 28 46.1** | **+0.3** |

comp=Z,2.3nm,0.8s,baz=285,slow=12,SNR=1.7
comp=Z,2.3nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **49.91 112** | P | **P** | **15 31 01.7** | **-2.2** |
| **SONM** | **Songino Array** | **56.59 352** | P | **P** | **15 31 53.5** | **+0.9** |

comp=Z,1.1nm,0.7s,baz=171,slow=7.3,SNR=5.9
comp=Z,1.1nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **62.72 334** | P | **P** | **15 32 33.9** | **-0.8** |

comp=Z,0.3nm,0.7s,baz=145,slow=8.1,SNR=2.4
comp=Z,0.3nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MAW** | **Mawson** | **69.06 199** | P | **P** | **15 33 16.4** | **+1.2** |

comp=Z,1.8nm,0.5s,baz=348,slow=20,SNR=2.5
comp=Z,1.8nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **CPUP** | **Villa Florida** | **145.06 190** | PKPbc | **PKPdf** | **15 41 48.1** | **+0.1** |

comp=Z,1.4nm,0.6s,baz=95,slow=6.1,SNR=3.3

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*IDC **06** 15:47:08.1±1.3,32.96S×179.11W,h0km,mb3.8/3, mbtmp3.9/4,ML3.8/1,Error ellipse: s-maj=36.5km s-min=31.1km az=77.0*

**ISC 06 15:47:14.3±1.3,33.2S±0.1×179.3W±0.2,h35**km**,n41,** σ1§**51**/40,**mb3.8/3,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | | **4.96 202** | P | | **Pn** | | **15 48 28.2** | **+2.1** |
| **PKGZ** | **Pakihiroa** | | **5.11 204** | P | | **Pn** | | **15 48 29.2** | **+0.9** |
| **HAZ** | **Te Kaha** | | **5.12 207** | P | | **Pn** | | **15 48 29.4** | **+1.0** |
| **PUZ** | **Puketiti** | | **5.24 202** | P | | **Pn** | | **15 48 32.1** | **+2.0** |
| **TWGZ** | **Tauwhareparae** | | **5.42 204** | P | | **Pn** | | **15 48 33.0** | **+0.4** |
| **CNGZ** | **Carnagh Statio** | | **5.63 201** | P | | **Pn** | | **15 48 37.6** | **+2.2** |
| **MWZ** | **Matawai** | | **5.72 206** | P | | **Pn** | | **15 48 37.1** | **+0.3** |
| **MARZ** | **Manawahe** | | **5.78 214** | P | | **Pn** | | **15 48 42.0** | **+4.4** |
| **URZ** | **Urewera** | | **5.82 209** | Pn | | **Pn** | | **15 48 37.7** | **-0.3** |

2.1nm,0.3s,baz=356,slow=5.6,SNR=25

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| URZ | | | | Sn | | **Sn** | | **15 49 42.7** | **-0.8** |

4.2nm,0.3s,baz=138,slow=22,SNR=8.0
8.8nm,0.4s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | | **5.82 209** | P | | **Pn** | | **15 48 37.7** | **-0.3** |
| **RAGZ** | **Rawiri** | | **5.91 206** | P | | **Pn** | | **15 48 39.2** | **-0.1** |
| **LIRZ** | **Lichensteins R** | | **5.93 215** | P | | Pn | | 15 48 45.0 | +5.4 |
| **RIGZ** | **Rimuhau** | | **5.97 203** | P | | **Pn** | | **15 48 41.4** | **+1.2** |
| **RTZ** | **Ruatahuna** | | **6.18 208** | P | | **Pn** | | **15 48 42.7** | **-0.4** |
| **SNGZ** | **Shannon Statio** | | **6.18 205** | P | | **Pn** | | **15 48 43.5** | **+0.4** |
| **RAHZ** | **Arahi** | | **6.40 206** | P | | **Pn** | | **15 48 46.9** | **+0.9** |
| **MTHZ** | **Maungataniwha** | | **6.43 208** | P | | **Pn** | | **15 48 48.1** | **+1.5** |
| **WHHZ** | **Waihua** | | **6.49 205** | P | | **Pn** | | **15 48 47.7** | **+0.5** |
| **MRHZ** | **Matea Rd** | | **6.59 211** | P | | **Pn** | | **15 48 48.8** | **0.0** |
| **NMHZ** | **Naumai** | | **6.66 207** | P | | **Pn** | | **15 48 50.1** | **+0.4** |
| **BKZ** | **Black Stump Fm** | | **6.84 209** | P | | **Pn** | | **15 48 51.1** | **-1.1** |
| **MCHZ** | **McNeill Hill** | | **7.00 206** | P | | **Pn** | | **15 48 54.2** | **-0.1** |
| **KWHZ** | **Kaweka Forest** | | **7.09 208** | P | | **Pn** | | **15 48 55.9** | **+0.3** |
| **HIZ** | **Hauiti** | | **7.11 220** | P | | Pn | | 15 49 00.2 | +4.4 |
| **NTVZ** | **North Tongarir** | | **7.14 213** | P | | **Pn** | | **15 48 54.9** | **-1.5** |
| **ETVZ** | **East Tongariro** | | **7.16 213** | P | | **Pn** | | **15 48 57.4** | **+0.9** |
| **NNVZ** | **North Ngauruho** | | **7.20 214** | P | | **Pn** | | **15 48 58.5** | **+1.4** |
| **OTVZ** | **Oturere** | | **7.20 213** | P | | **Pn** | | **15 48 58.0** | **+0.8** |
| **SNVZ** | **South Ngauruho** | | **7.23 213** | P | | **Pn** | | **15 48 58.9** | **+1.3** |
| **KAHZ** | **Kahuranaki** | | **7.25 204** | P | | **Pn** | | **15 48 55.6** | **-2.2** |
| **WNVZ** | **Wahianoa** | | **7.36 213** | P | | **Pn** | | **15 48 59.5** | **+0.1** |
| **BFZ** | **Birch Farm** | | **8.26 204** | P | | **Pn** | | **15 49 09.6** | **-2.0** |
| **MRZ** | **Mangatainoka R** | | **8.48 208** | P | | **Pn** | | **15 49 11.8** | **-2.8** |
| **OGWZ** | **Otaki Gorge** | | **8.78 209** | P | | **Pn** | | **15 49 16.3** | **-2.4** |
| **CAW** | **Cannon Point** | | **9.07 208** | P | | **Pn** | | **15 49 20.3** | **-2.3** |
| **ASAR** | **Alice Springs** | | **41.96 271** | P | | **P** | | **15 55 02.1** | **+0.1** |

0.6nm,0.4s,baz=110,slow=7.9,SNR=28
0.6nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.21 276** | P | **P** | **15 55 12.1** | **0.0** |

1.2nm,0.7s,baz=115,slow=7.8,SNR=18
1.2nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **56.89 180** | P | **P** | **15 56 56.8** | **+1.4** |

0.6nm,0.5s,baz=108,slow=6.4,SNR=9.4
0.6nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **147.38 338** | PKPbc | **PKPdf** | **16 06 51.5** | **+0.6** |

1.1nm,0.5s,baz=46,slow=4.0,SNR=5.7

| | | | | | | |
|---|---|---|---|---|---|---|
| **NOA** | **NORSAR Array B** | **151.35 349** | PKPbc | **PKPbc** | **16 07 02.0** | **-1.4** |

0.6nm,0.9s,baz=15,slow=4.1,SNR=3.6

| | | | | | | |
|---|---|---|---|---|---|---|
| **HFS** | **Hagfors** | **151.76 346** | PKPbc | **PKPbc** | **16 07 02.8** | **-1.6** |

2.4nm,0.8s,baz=20,slow=4.7,SNR=1.8

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*IDC **06** 15:50:50.3±0.4,8.22S×115.92E,h0km,mb4.9/20, mbtmp4.9/21,ML5.3/1,MS4.1/54,Error ellipse: s-maj=17.5km s-min=9.9km az=64.0*

*MOS **06** 15:50:51.7±0.9,8.19S×116.06E,h30km,mb5.1/23,Error ellipse: s-maj=8.9km s-min=6.4km az=108.2*

*DJA **06** 15:50:54.6±0.4,8.2S×11.6E±.,h17km±3km,M5.0/66, mb5.2/66,mB5.5/28,MLv5.4/25,Mw5.0/19,Mw(mB)4.9/28, MwMwp4.8/4,Mwp5.1/4*

*GCMT **06** 15:50:54.6±0.2,8.34S±0.01×116.00E±0.01,h19km, MW5.2/103,Moment Tensor Solution. s78,c105; s103,c183; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr4.11±.17; Mθθ-4.50±.11; Mϕϕ0.38±.11; Mrθ-4.39±.31; Mθϕ-1.32±.07; Mrϕ-2.20±.28; Best double couple: Mo6.65200×10^16^ NP1:ϕs246.00000°,δ69.00000°, λ82.00000°. NP2:ϕs88.00000°,δ22.00000°,λ111.00000°. Principal axes: T 6.3620, Plg65.0000°, Azm142.0000°; N 0.5770, Plg8.0000°, Azm249.0000°; P -6.9420, Plg24.0000°, Azm342.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **06** 15:50:55.6,8.60S×116.01E,h26km,Moment Tensor Solution. Duration: 1s1.0 Moment tensor: Scale 10^16 Nm; Mrr4.29; Mθθ-4.83; Mϕϕ0.54; Mrθ-3.60; Mθϕ-0.66; Mrϕ-0.35; Fault plane solution: Mo5.85000×10^16^ NP1: ϕs264.00000°,δ64.07000°,λ90.90000°. NP2:ϕs81.95000°, δ25.95000°,λ88.16000°. Principal axes: T 5.5449, Plg71.0000°, Azm176.0000°; N 0.6187, Plg1.0000°, Azm84.0000°; P -6.1636, Plg19.0000°, Azm353.0000°;*

*BJI **06** 15:50:55.1±0.0,8.40S×116.00E,h40km,mb4.9/70, mB5.2/44,Ms4.6/68,Ms7 4.4/66*

*NEIC **06** 15:50:55.6±2.1,8.40S±0.07×116.01E±0.06,h26km±4km, mb5.2/70,Mww5.1/25,Error ellipse: s-maj=10.4km s-min=8.1km az=177.0*

*NEIC **06** 15:50:55.6,8.40S×116.01E,h26km*

**ISC 06 15:50:55.7±0.4,8.40S±0.03×116.04E±0.03,h32**km**±2**km**, h32**km**:pP-P,n389,**σ2§**04**/386,**mb5.1**/107,**MS4.3**/80, 13C-4D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DNP** | **Denpasar** | | **0.87 251** | P | | **Pb** | | **15 51 11.8** | **-0.5** |
| **DNP** | **Denpasar** | | **0.87 251** | P | | **Pb** | | **15 51 11.8** | **-0.5** |
| **SRBI** | **Singaraja** | | **0.88 291** | P | | **Pb** | | **15 51 09.9** | **-2.6** |
| **TWSI** | **Taliwang, Sumb** | | **0.90 112** | P | | **Pb** | | **15 51 11.8** | **-1.0** |
| **PLAI** | **Plampang** | | **1.77 104** | P | | **Pn** | | **15 51 24.8** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | | **1.87 268** | P | | **Pn** | | **15 51 25.4** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | | **1.87 268** | | | **Pn** | | **15 51 25.0** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | | **1.87 268** | P | | **Pn** | | **15 51 25.0** | **-0.5** |
| **GRJI** | **Gresik** | | **3.83 292** | P | | **Pn** | | **15 51 52.3** | **-0.1** |
| **BWJI** | **Bawean** | | **4.21 307** | P | | **Pn** | | **15 51 57.2** | **-0.4** |
| **PWJI** | **Pagerwojo** | | **4.21 275** | P | | **Pn** | | **15 51 57.6** | **-0.1** |
| **NGJI** | **Ngawi** | | **4.65 282** | P | | **Pn** | | **15 52 07.6** | **+3.8** |
| **BASI** | **Baing, Sumba** | | **4.83 112** | P | | **Pn** | | **15 52 08.8** | **+2.6** |
| **BSSI** | **Bau Bau, Buton** | | **4.95 63** | P | | **Pn** | | **15 52 07.1** | **-0.7** |
| **KAPI** | **Kappang** | | **4.99 48** | P | | **Pn** | | **15 52 08.1** | **-0.3** |
| **KAPI** | **Kappang** | | **4.99 48** | | | **Pn** | | **15 52 07.6** | **-0.8** |
| **KAPI** | **Kappang** | | **4.99 48** | Pn | | **Pn** | | **15 52 07.8** | **-0.6** |

111nm,0.3s,baz=206,slow=7.2,SNR=107

| | | | | | | |
|---|---|---|---|---|---|---|
| KAPI | | | Sn | **Sn** | **15 53 02.6** | **-2.3** |

72nm,0.3s,baz=0.0,slow=20,SNR=3.2

| | | | | | | |
|---|---|---|---|---|---|---|
| KAPI | | | LR | LR | 15 54 24.4 | |

comp=Z,3μm,20.1s,baz=217,slow=43
213nm,0.3s

| | | | | | | |
|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **4.99 48** | *d* P | **Pn** | **15 52 07.4** | **-1.0** |
| **UGM** | **Wanagama** | **5.49 275** | P | **Pn** | **15 52 16.3** | **+1.0** |
| **UGM** | **Wanagama** | **5.49 275** | Pn | **Pn** | **15 52 15.2** | **-0.1** |
| **UGM** | **Wanagama** | **5.49 275** | P | **Pn** | **15 52 15.9** | **+0.6** |
| **BNSI** | **Bone** | **5.67 46** | P | **Pn** | **15 52 18.7** | **+1.0** |

374nm,0.5s,4μm4μm3.2nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **SMRI** | **Semarang** | **5.71 283** | P | **Pn** | **15 52 19.7** | **+1.4** |
| **SMRI** | **Semarang** | **5.71 283** | | **Pn** | **15 52 17.8** | **-0.6** |
| **SMRI** | **Semarang** | **5.71 283** | P | **Pn** | **15 52 19.3** | **+1.0** |

252nm,0.6s,2.3nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **YOGI** | **Yogyakarta** | **5.72 275** | P | **Pn** | **15 52 18.9** | **+0.4** |

277nm,1.1s,2.9nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **SPSI** | **Sidrap Palu** | **5.76 40** | P | **Pn** | **15 52 18.1** | **-0.8** |

76nm,0.9s,3μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **6.13 93** | P | **Pn** | **15 52 24.1** | **0.0** |
| **MMRI** | **Maumere** | **6.13 93** | Pn | **Pn** | **15 52 23.6** | **-0.5** |
| **MMRI** | **Maumere** | **6.13 93** | P | **Pn** | **15 52 23.8** | **-0.3** |
| **TTSI** | **Tana Toraja** | **6.51 35** | P | **Pn** | **15 52 30.5** | **+1.2** |
| **BBSI** | **Bau Bau** | **7.10 66** | P | **Pn** | **15 52 39.1** | **+1.7** |

218nm,0.8s,2μm0.7nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **KPJI** | **Karang Pucung** | **7.12 278** | P | **Pn** | **15 52 39.4** | **+1.7** |

207nm,0.6s,1.1nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **MTKI** | **Muara Teweh, K** | **7.50 351** | P | **Pn** | **15 52 42.0** | **-0.9** |

123nm,0.8s,5μm0.9nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **CMJI** | **Cimerak** | **7.54 274** | P | **Pn** | **15 52 42.0** | **-1.5** |

157nm,0.9s,1.1nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **7.73 104** | P | **Pn** | **15 52 47.7** | **+1.6** |
| **SOEI** | **Soe** | **8.23 100** | P | **Pn** | **15 52 54.4** | **+1.3** |
| **SOEI** | **Soe** | **8.23 100** | Pn | **Pn** | **15 52 54.0** | **+0.9** |
| **SOEI** | **Soe** | **8.23 100** | P | **Pn** | **15 52 54.4** | **+1.3** |
| **BBJI** | **Bungbulang** | **8.37 276** | P | **Pn** | **15 52 55.1** | **+0.2** |
| **CNJI** | **Cibinong** | **8.90 276** | P | **Pn** | **15 53 02.9** | **+0.8** |

108nm,1.2s,1μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **DBJI** | **Dramaga** | **9.39 281** | P | **Pn** | **15 53 10.6** | **+1.7** |

184nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **SKJI** | **Sukabumi** | **9.50 278** | P | **Pn** | **15 53 11.6** | **+1.2** |
| **STKI** | **Sintang** | **9.56 331** | P | **Pn** | **15 53 11.3** | **+0.1** |

72nm,1.0s,3μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **LUWI** | **Luwuk** | **9.92 43** | P | **Pn** | **15 53 16.6** | **+0.5** |

51nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **TOLI2** | **Tolitoli** | **10.56 27** | P | **Pn** | **15 53 26.5** | **+1.6** |
| **TOLI2** | **Tolitoli** | **10.56 27** | Pn | **Pn** | **15 53 26.6** | **+1.6** |
| **GTOI** | **Gorontalo** | **11.35 38** | P | **Pn** | **15 53 36.4** | **+0.7** |
| **KSM** | **Kuching** | **11.35 330** | P | **Pn** | **15 53 36.3** | **+0.6** |
| **KSM** | **Kuching** | **11.35 330** | Pn | **Pn** | **15 53 34.6** | **-1.1** |
| **SBUM** | **Sibu** | **11.43 340** | Pn | **Pn** | **15 53 37.8** | **+0.9** |
| **PPBI** | **Pangkal Pinang** | **11.65 302** | P | **Pn** | **15 53 40.6** | **+0.8** |

36nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **SANI** | **Sanana** | **11.74 58** | P | **Pn** | **15 53 41.7** | **+0.7** |
| **SANI** | **Sanana** | **11.74 58** | P | **Pn** | **15 53 42.1** | **+1.1** |

72nm,1.2s,1μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **KASI** | **Kota Agung** | **11.81 283** | P | **Pn** | **15 53 44.2** | **+2.2** |

65nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **11.92 42** | P | **Pn** | **15 53 45.9** | **+2.4** |

95nm,1.0s

| | | | | | | |
|---|---|---|---|---|---|---|
| **NLAI** | **Namlea** | **12.13 66** | P | **Pn** | **15 53 48.9** | **+2.5** |

63nm,0.8s,896nm

| | | | | | | |
|---|---|---|---|---|---|---|
| **LWLI** | **Liwa** | **12.37 285** | P | **Pn** | **15 53 50.0** | **+0.3** |

99nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MBWA** | **Marble Bar** | **13.18 165** | P | **Pn** | **15 53 59.4** | **-1.3** |
| **MBWA** | **Marble Bar** | **13.18 165** | Pn | **Pn** | **15 53 58.1** | **-2.6** |
| **MBWA** | **Marble Bar** | **13.18 165** | P | **Pn** | **15 53 58.4** | **-2.2** |
| **PSA00** | **Pilbara Seismi** | **13.60 165** | P | **Pn** | **15 54 05.1** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **13.60 165** | Pn | **Pn** | **15 54 03.5** | **-3.0** |
| **PSA00** | **Pilbara Seismi** | **13.60 165** | P | **Pn** | **15 54 04.0** | **-2.5** |
| **MNAI** | **Manna** | **13.61 286** | P | **Pn** | **15 54 07.5** | **+0.9** |
| **MSAI** | **Masohi** | **13.76 69** | P | **Pn** | **15 54 09.1** | **+0.4** |

59nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **GIRL** | **Giralia** | **14.27 187** | P | **Pn** | **15 54 14.7** | **-0.9** |
| **GIRL** | **Giralia** | **14.27 187** | Pn | **Pn** | **15 54 13.7** | **-1.9** |
| **KNRA** | **Kununurra** | **14.38 121** | Pn | **Pn** | **15 54 15.5** | **-1.7** |
| **KNRA** | **Kununurra** | **14.38 121** | P | **Pn** | **15 54 15.5** | **-1.7** |

103nm,0.8s,SNR=7.7

| | | | | | | |
|---|---|---|---|---|---|---|
| **TPRI** | **Tanjung Pinang** | **14.75 308** | P | **Pn** | **15 54 22.5** | **+0.4** |

51nm,0.9s,2μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **15.11 90** | Pn | **Pn** | **15 54 25.1** | **-1.8** |
| SAUI | | | IAmb | IAmb | 15 54 34.1 | |

comp=Z,176nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **15.11 90** | P | **Pn** | **15 54 27.8** | **+0.8** |
| **DRS** | **Darwin Rock St** | **15.15 107** | P | **Pn** | **15 54 28.4** | **+0.9** |
| **MTN** | **Manton Dam** | **15.47 108** | P | **Pn** | **15 54 30.4** | **-1.3** |
| **MTN** | **Manton Dam** | **15.47 108** | Pn | **Pn** | **15 54 29.1** | **-2.6** |
| MTN | | | IAmb | IAmb | 15 54 39.8 | |

comp=Z,60nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **15.47 108** | P | **Pn** | **15 54 28.5** | **-3.2** |
| **KDU** | **Kakadu** | **16.70 106** | P | **Pn** | **15 54 46.8** | **-0.7** |
| **KDU** | **Kakadu** | **16.70 106** | P | **Pn** | **15 54 44.4** | **-3.1** |
| **SWI** | **Sorong** | **16.91 64** | P | **P** | **15 54 51.5** | **-0.3** |

comp=Z,123nm,1.2s,comp=Z,1μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **SWI** | **Sorong** | **16.91 64** | P | **P** | **15 54 51.8** | **0.0** |
| SWI | | | pmax | pmax | | |

comp=Z,123nm,1.2s

| | | | | | | |
|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **17.02 72** | P | **Pn** | **15 54 52.4** | **+1.0** |
| **FAKI** | **Fak Fak** | **17.02 72** | Pn | **Pn** | **15 54 50.0** | **-1.4** |
| FAKI | | | IAmb | IAmb | 15 54 53.0 | |

comp=Z,70nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **17.02 72** | P | **Pn** | **15 54 50.3** | **-1.1** |

comp=Z,97nm,0.8s,comp=Z,1μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **18.07 32** | LR | LR | 16 03 27.7 | |

comp=Z,978nm,19.5s,baz=204,slow=42

| | | | | | | |
|---|---|---|---|---|---|---|
| **MEEK** | **Meekatharra** | **18.30 173** | P | **Pn** | **15 55 09.1** | **+1.8** |
| **MEEK** | **Meekatharra** | **18.30 173** | P | **Pn** | **15 55 08.5** | **+1.2** |

comp=Z,189nm,0.6s,SNR=11

| | | | | | | |
|---|---|---|---|---|---|---|
| **IPM** | **Ipoh** | **19.70 310** | P | **Pn** | **15 55 24.0** | **-0.1** |
| **IPM** | **Ipoh** | **19.70 310** | P | **P** | **15 55 23.5** | **+1.0** |
| **WRKA** | **Warakurna** | **20.26 146** | P | **P** | **15 55 30.0** | **+1.4** |
| **WRKA** | **Warakurna** | **20.26 146** | P | Pn | 15 55 30.2 | -0.5 |

comp=Z,3μm,SNR=3.1

| | | | | | | |
|---|---|---|---|---|---|---|
| **KULM** | **Kulim** | **20.51 311** | P | **P** | **15 55 31.8** | **+0.5** |
| **MORW** | **Morawa** | **20.56 180** | P | Pn | 15 55 34.1 | -0.1 |
| **MORW** | **Morawa** | **20.56 180** | P | **P** | **15 55 30.2** | **-1.6** |
| MORW | | | IAmb | IAmb | 15 55 42.9 | |

comp=Z,59nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MORW** | **Morawa** | **20.56 180** | P | Pn | 15 55 34.0 | -0.1 |

comp=Z,86nm,0.9s,SNR=5.5

| | | | | | | |
|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **20.78 297** | P | **P** | **15 55 33.6** | **-0.7** |
| **GSI** | **Gunungsitoli** | **20.78 297** | P | **P** | **15 55 35.6** | **+1.3** |
| **WB0** | **Warramunga Arr** | **21.06 124** | P | **P** | **15 55 37.2** | **0.0** |
| **WRA** | **Warramunga Arr** | **21.10 125** | P | **P** | **15 55 37.5** | **-0.2** |
| **WRA** | **Warramunga Arr** | **21.10 125** | P | **P** | **15 55 37.7** | **0.0** |

comp=Z,86nm,0.6s,baz=300,slow=12,SNR=586

| | | | | | | |
|---|---|---|---|---|---|---|
| WRA | | | S | **S** | **15 59 29.4** | **-1.6** |

comp=Z,4.3nm,0.8s,baz=297,slow=22,SNR=2.9

| | | | | | | |
|---|---|---|---|---|---|---|
| WRA | | | LR | LR | 16 03 48.9 | |

comp=Z,383nm,19.2s,baz=262,slow=36
comp=Z,86nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **WRAB** | **Tennant Creek** | **21.10 125** | P | **P** | **15 55 37.6** | **-0.1** |
| **WRAB** | **Tennant Creek** | **21.10 125** | *c* P | **P** | **15 55 37.8** | **0.0** |
| WRAB | | | pmax | pmax | | |

comp=Z,123nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **WB2** | **Warramunga Arr** | **21.11 125** | P | **P** | **15 55 37.6** | **-0.2** |
| WB2 | | | IAmb | IAmb | 15 55 41.9 | |

comp=Z,115nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **BLDU** | **Ballidu** | **22.11 178** | P | **P** | **15 55 49.9** | **+1.4** |
| **BLDU** | **Ballidu** | **22.11 178** | P | **P** | **15 55 49.7** | **+1.2** |

comp=Z,95nm,0.9s,SNR=5.6

| | | | | | | |
|---|---|---|---|---|---|---|
| **ASPA** | **Alice Springs** | **22.87 134** | P | **P** | **15 55 56.6** | **-0.1** |

comp=Z,28nm,0.6s,SNR=33

| | | | | | | |
|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **22.87 134** | P | **P** | **15 55 56.8** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.87 134** | P | **P** | **15 55 57.0** | **+0.3** |

comp=Z,53nm,0.6s,baz=307,slow=9.1,SNR=896

| | | | | | | |
|---|---|---|---|---|---|---|
| ASAR | | | PcP | **PcP** | **15 59 46.3** | **-0.7** |

comp=Z,2.7nm,0.6s,baz=294,slow=0.9,SNR=2.9

| | | | | | | |
|---|---|---|---|---|---|---|
| ASAR | | | S | **S** | **16 00 12.1** | **+7.6** |

comp=Z,12nm,0.8s,baz=298,slow=21,SNR=5.3

| | | | | | | |
|---|---|---|---|---|---|---|
| ASAR | | | LR | LR | 16 05 22.6 | |

comp=Z,387nm,18.9s,baz=305,slow=38
comp=Z,53nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **22.87 134** | IAmb | IAmb | 15 55 58.0 | |

comp=Z,22nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **AS01** | **Alice Springs** | **22.90 134** | P | **P** | **15 55 57.6** | **+0.6** |
| **KLBR** | **Kellerberrin** | **23.13 176** | P | **P** | **15 56 00.3** | **+1.1** |
| **KLBR** | **Kellerberrin** | **23.13 176** | P | **P** | **15 55 59.7** | **+0.5** |

comp=Z,117nm,0.6s,SNR=5.6

| | | | | | | |
|---|---|---|---|---|---|---|
| **MLSI** | **Meulaboh, Aceh** | **23.28 302** | P | **P** | **15 56 01.2** | **+0.4** |

comp=Z,85nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MUN** | **Mundaring** | **23.46 180** | P | **P** | **15 56 00.1** | **-2.3** |
| **KMBL** | **Kambalda** | **23.49 167** | P | **P** | **15 56 03.1** | **+0.3** |
| **KMBL** | **Kambalda** | **23.49 167** | P | **P** | **15 56 03.0** | **+0.2** |

comp=Z,107nm,1.4s,SNR=4.7

| | | | | | | |
|---|---|---|---|---|---|---|
| **MMPI** | **Merauke** | **24.08 92** | P | **P** | **15 56 08.0** | **-0.5** |
| **NWAO** | **Narrogin (SRO)** | **24.43 178** | P | **P** | **15 56 14.4** | **+2.9** |
| **NWAO** | **Narrogin (SRO)** | **24.43 178** | P | **P** | **15 56 12.4** | **+0.9** |
| NWAO | | | IAmb | IAmb | 15 56 14.1 | |

comp=Z,71nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **NWAO** | **Narrogin (SRO)** | **24.43 178** | LR | LR | 16 06 23.0 | |

comp=Z,650nm,19.3s,baz=24,slow=38

| | | | | | | |
|---|---|---|---|---|---|---|
| **NWAO** | **Narrogin (SRO)** | **24.43 178** | P | | | |
| NWAO | | | pmax | pmax | **15 56 12.4** | **+0.9** |

comp=Z,71nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **GENI** | **Genyem** | **24.69 78** | P | **P** | **15 56 14.3** | **+0.2** |
| **GENI** | **Genyem** | **24.69 78** | P | **P** | **15 56 13.5** | **-0.6** |

comp=Z,104nm,0.9s,comp=Z,2μm

| | | | | | | |
|---|---|---|---|---|---|---|
| **FORT** | **Forrest** | **24.94 155** | P | **P** | **15 56 18.7** | **+2.6** |
| **FORT** | **Forrest** | **24.94 155** | P | **P** | **15 56 16.8** | **+0.6** |

comp=Z,119nm,0.8s,SNR=3.8

| | | | | | | |
|---|---|---|---|---|---|---|
| **TABU** | **Tabubil** | **25.19 85** | P | **P** | **15 56 19.0** | **+0.3** |
| **JAY** | **Jayapura** | **25.23 78** | P | **P** | **15 56 18.6** | **-0.4** |

comp=Z,37nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **QIS** | **Mount Isa** | **25.77 121** | P | **P** | **15 56 24.2** | **+0.3** |
| **QIS** | **Mount Isa** | **25.77 121** | P | **P** | **15 56 24.0** | **+0.2** |

comp=Z,80nm,1.1s,SNR=20

| | | | | | | |
|---|---|---|---|---|---|---|
| **OOD** | **Oodnadatta** | **26.77 139** | P | **P** | **15 56 33.5** | **+0.7** |
| **COEN** | **Coen** | **27.17 104** | P | **P** | **15 56 37.3** | **+0.8** |
| **COEN** | **Coen** | **27.17 104** | P | **P** | **15 56 36.5** | **0.0** |
| COEN | | | IAmb | IAmb | 15 56 38.1 | |

comp=Z,38nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **COEN** | **Coen** | **27.17 104** | P | **P** | **15 56 36.5** | **0.0** |

comp=Z,50nm,0.6s,SNR=7.3

| | | | | | | |
|---|---|---|---|---|---|---|
| **MULG** | **Mulgathing** | **27.54 145** | P | **P** | **15 56 40.7** | **+1.1** |
| **QIZ** | **Qiongzhong** | **27.93 347** | P | **P** | **15 56 47.9** | **+4.7** |
| QIZ | | | S | **S** | **16 01 31.6** | **+6.4** |
| QIZ | | | PcS | **PcS** | **16 03 39.1** | **-1.5** |
| QIZ | | | pmax | pmax | | |

comp=Z,230nm,7.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| QIZ | | | LR | LR | | |

comp=Z,540nm,14.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| QIZ | | | LR | LR | | |

comp=Z,180nm,12.9s

| | | |

TNCH pP pP 15 58 12.5 -2.3
TNCH PP **PnPn** **15 59 37.1 +5.0**
TNCH S **S** **16 03 55.0 +3.1**
TNCH pmax pmax
comp=Z,16nm,0.9s
TNCH pmax pmax
comp=Z,160nm,4.8s
TNCH LR LR
comp=Z,570nm,12.2s
TNCH LR LR
comp=Z,310nm,13.4s
TNCH LR LR
comp=Z,710nm,13.0s
**PZH PanZhiHua 37.37 339** P **P** **15 58 07.7 +2.0**
PZH S **S** **16 03 54.7 +2.8**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,160nm,5.1s
PZH LR LR
comp=Z,280nm,12.7s
PZH LR LR
comp=Z,340nm,13.7s
PZH LR LR
comp=Z,360nm,14.5s
**EIDS Eidsvold 37.37 121** IAmb IAmb 15 58 14.0
comp=Z,42nm,1.6s
**EIDS Eidsvold 37.37 121** P **P** **15 58 06.5 +0.8**
comp=Z,13nm,1.9s,SNR=1.5
**PALK Pallekele 38.52 293** LR LR 16 16 03.2
comp=Z,318nm,18.5s,baz=221,slow=40
**WHN Wuhan 38.75 358** P P 15 58 22.7 +5.5
WHN PP **PnPn** **15 59 54.0 +5.3**
WHN S **S** **16 04 19.0 +6.5**
WHN pmax pmax
comp=Z,400nm,4.4s
WHN LR LR
comp=Z,1μm,16.1s
**GEXS Deakin Univers 39.10 144** P **P** **15 58 22.1 +2.1**
**YNG Young 39.34 136** P **P** **15 58 24.3 +2.1**
**YNG Young 39.34 136** P **P** **15 58 23.7 +1.5**
comp=Z,162nm,0.8s,SNR=1.8
**TOO Toolangi 39.40 142** P **P** **15 58 24.9 +2.2**
**TOO Toolangi 39.40 142** IAmb IAmb 15 58 27.3
comp=Z,176nm,2.0s
**TOO Toolangi 39.40 142** P **P** **15 58 24.7 +2.0**
comp=Z,32nm,1.1s,SNR=1.6
**TOO Toolangi 39.40 142** P **P** **15 58 23.7 +1.0**
**AUWSH Wavell State H 39.74 123** P **P** **15 58 27.4 +1.9**
**ARMA Armidale 39.81 128** IAmb IAmb 15 58 44.6
comp=Z,105nm,1.9s
**ARMA Armidale 39.81 128** P **P** **15 58 28.7 +2.4**
comp=Z,24nm,0.8s,SNR=2.1
**NJ2 Nanjing 40.31 4** *e*P **P** **15 58 28.2 -1.9**
NJ2 pP **sP** **15 58 40.8 -2.3**
NJ2 S **S** **16 04 37.0 +1.2**
NJ2 sS **sS** **16 04 53.4 +2.6**
NJ2 pmax pmax
comp=Z,11nm,0.7s
NJ2 pmax pmax
comp=Z,270nm,4.3s
NJ2 LR LR
comp=Z,370nm,15.2s
NJ2 LR LR
comp=Z,180nm,15.2s
NJ2 LR LR
comp=Z,370nm,15.6s
**CD2 Chengdu 40.82 344** P **P** **15 58 35.7 +1.2**
CD2 S **S** **16 04 46.5 +2.9**
CD2 pmax pmax
comp=Z,20nm,0.5s
CD2 pmax pmax
comp=Z,130nm,6.8s
CD2 LR LR
comp=Z,480nm,11.9s
CD2 LR LR
comp=Z,570nm,11.6s
**SHL Shillong 41.14 326** P **P** **15 58 38.3 +0.9**
**SHL Shillong 41.14 326** P **P** **15 58 38.3 +0.9**
SHL pmax pmax
comp=Z,18nm,0.8s
**XAN Xi'an 42.74 351** ⇓P **P** **15 58 51.1 +1.0**
XAN pP pP 15 58 58.5 -1.1
XAN S **S** **16 05 12.8 +0.9**
XAN pmax pmax
comp=Z,35nm,0.8s
XAN pmax pmax
comp=Z,380nm,9.1s
XAN LR LR
comp=Z,690nm,15.1s
XAN LR LR
comp=Z,500nm,15.8s
XAN LR LR
comp=Z,880nm,15.1s
**HNR Honiara 43.37 95** P **P** **15 58 57.3 +1.8**
**HNR Honiara 43.37 95** P **P** **15 58 54.7 -0.8**
**HNR Honiara 43.37 95** LR LR 16 19 21.5
comp=Z,3μm,19.1s,baz=242,slow=39
**HNR Honiara 43.37 95** P **P** **15 58 54.7 -0.8**
HNR pmax pmax
comp=Z,102nm,0.8s
**JCJ Chichijima 43.44 35** LR LR 16 20 02.7
comp=Z,77nm,18.5s,baz=221,slow=40
**JNU Nakatsue 43.64 18** LR LR 16 21 19.9
comp=Z,136nm,18.1s,baz=191,slow=42
**LSA Lhasa 44.82 329** P **P** **15 59 09.8 +2.4**
LSA pmax pmax
comp=Z,6.0nm,0.8s
**HYB Hyderabad 45.06 305** *e*P **P** **15 59 09.7 +0.6**
HYB *e*sP **sP** **15 59 20.3 -1.8**
HYB *e*PP **PP** **16 00 55.7 +0.9**
HYB *e*S **S** **16 05 46.8 +0.6**
**HNS HongShan 45.58 359** ⇑P **P** **15 59 13.0 +0.3**
HNS PP **PP** **16 01 04.8 +4.9**
HNS S **S** **16 05 53.8 +0.9**
HNS pmax pmax
comp=Z,8.0nm,0.9s
HNS LR LR
comp=Z,160nm,15.7s
HNS LR LR
comp=Z,290nm,16.1s
HNS LR LR
comp=Z,380nm,16.9s
**LZH Lanzhou 45.72 346** *e*P **P** **15 59 16.3 +2.3**
LZH S **S** **16 05 58.0 +2.6**
LZH sS sS 16 06 13.2 +2.7
LZH pmax pmax
comp=Z,22nm,1.0s
LZH LR LR
comp=Z,450nm,16.5s
LZH LR LR
comp=Z,390nm,17.2s
LZH LR LR
comp=Z,360nm,15.5s
**KSAR Wonju Array Be 46.93 13** P **P** **15 59 23.9 +0.6**
**KSAR Wonju Array Be 46.93 13** P **P** **15 59 23.9 +0.6**
**KSRS Korea Array 46.95 13** P **P** **15 59 22.4 -1.1**
comp=Z,16nm,1.1s,baz=194,slow=8.1,SNR=23
KSRS LR LR 16 21 06.8
comp=Z,133nm,21.6s,baz=200,slow=39
comp=Z,16nm,1.1s
**JHJ Hachijo jima 2 47.07 27** LR LR 16 18 34.5
comp=Z,150nm,21.6s,baz=238,slow=35
**DL2 Dalian 47.35 6** P **P** **15 59 27.9 +1.3**
DL2 S **S** **16 06 18.4 +0.1**
DL2 pmax pmax
comp=Z,18nm,0.8s
DL2 pmax pmax
comp=Z,310nm,4.9s
DL2 LR LR
comp=Z,400nm,16.8s
DL2 LR LR
comp=Z,270nm,16.8s
DL2 LR LR
comp=Z,470nm,14.0s
**KOUNC Koumac, New Ca 48.08 110** P **P** **15 59 31.9 -0.7**
KOUNC IAmb IAmb 15 59 39.8
comp=Z,16nm,0.7s
**JGF Kuroka 48.16 23** P **P** **15 59 32.2 -0.8**
JGF IAmb IAmb 16 00 35.5
comp=Z,80nm,2.0s
**BTO Baotou 49.08 354** *e*P **P** **15 59 41.9 +1.9**
BTO pP **sP** **15 59 50.7 -2.5**
BTO sP **pP** **15 59 55.3 +5.7**
BTO S **S** **16 06 45.8 +2.8**
BTO pmax pmax
comp=Z,56nm,0.7s
BTO LR LR
comp=Z,440nm,17.7s
BTO LR LR
comp=Z,580nm,18.4s
**HHC Hu-ho-hao-te 49.18 356** *e*P **P** **15 59 44.5 +3.7**
HHC S **S** **16 06 46.9 +2.5**
HHC sS sS 16 07 00.3 +0.7
HHC ScS **ScS** **16 09 28.5 -2.2**
HHC SS **SS** **16 10 14.3 -1.9**
HHC pmax pmax
comp=Z,13nm,0.7s
HHC pmax pmax
comp=Z,100nm,4.3s
HHC LR LR
comp=Z,190nm,17.6s
HHC LR LR
comp=Z,230nm,18.3s
HHC LR LR
comp=Z,260nm,17.6s
**MAJO Matsushiro 49.32 24** P **P** **15 59 44.0 +2.1**
**MAJO Matsushiro 49.32 24** P **P** **15 59 41.0 -0.8**
**MAJO Matsushiro 49.32 24** *i* P **P** **15 59 39.3 -2.6**
MAJO pmax pmax
comp=Z,44nm,1.8s
**MJAR Matsushiro Arr 49.32 24** P **P** **15 59 40.5 -1.4**
comp=Z,4.1nm,0.6s,baz=203,slow=8.3,SNR=13
comp=Z,4.1nm,0.6s
**GTA Gaotai 49.89 344** *e*P **P** **15 59 48.4 +2.0**
GTA S **S** **16 06 55.1 +0.6**
GTA pmax pmax
comp=Z,10.0nm,1.0s
GTA LR LR
comp=Z,180nm,16.7s
GTA LR LR
comp=Z,230nm,17.8s
GTA LR LR
comp=Z,300nm,16.7s
**DZM Mont Dzumac 50.27 112** P **P** **15 59 51.5 +2.0**
**DZM Mont Dzumac 50.27 112** *e*P **P** **15 59 49.6 +0.1**
comp=Z,33nm,1.1s
**DZM Mont Dzumac 50.27 112** *e*PP **PP** **16 01 40.8 -4.3**
comp=Z,85nm,24.1s
DZM *e*S **S** **16 07 02.6 +2.3**
DZM *e*SS **SS** **16 10 33.5 -0.7**
DZM *e*LR LR 16 14 04.1
comp=Z,435nm,23.2s
**DZM Mont Dzumac 50.27 112** P **P** **15 59 50.0 +0.5**
DZM IAmb IAmb 16 00 01.4
comp=Z,12nm,0.9s
**DZM Mont Dzumac 50.27 112** LR LR 16 21 58.4
comp=Z,353nm,20.1s,baz=280,slow=37
**SNY Shenyang 50.46 7** ⇓P **P** **15 59 50.2 -0.2**
SNY pmax pmax
comp=Z,21nm,1.0s
**XLT XiLinHaoTe 52.05 0** *e*P **P** **16 00 02.2 -0.2**
XLT S **S** **16 07 20.0 -4.2**
XLT ScS **ScS** **16 09 46.8 -3.4**
XLT SS **SS** **16 11 00.4 -1.5**
XLT pmax pmax
comp=Z,11nm,0.7s
XLT LR LR
comp=Z,210nm,16.4s
XLT LR LR
comp=Z,170nm,21.3s
**CN2 Changchun 52.65 9** *e*P **P** **16 00 05.8 -1.0**
CN2 *e*S **S** **16 07 25.4 -6.8**
CN2 SS **SS** **16 11 10.1 -1.0**
CN2 pmax pmax
comp=Z,10.0nm,0.8s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,200nm,12.0s
CN2 LR LR
comp=Z,100nm,12.0s
CN2 LR LR
comp=Z,200nm,15.0s
**VLA Vladivostok 53.27 14** *i* P **P** **16 00 11.0 -0.3**
VLA pmax pmax
comp=Z,19nm,1.3s
**MDJ Mudanjiang 54.17 12** P **P** **16 00 18.1 +0.2**
MDJ S **S** **16 07 58.5 +5.7**
MDJ sS sS 16 08 14.2 +6.1
MDJ ScS **ScS** **16 10 04.4 -0.5**
MDJ pmax pmax
comp=Z,50nm,0.8s
MDJ LR LR
comp=Z,270nm,21.6s
MDJ LR LR
comp=Z,250nm,19.9s
**USA0B Ussuriysk Arra 54.31 14** IAmb IAmb 16 00 20.1
comp=Z,40nm,1.5s
**USA0B Ussuriysk Arra 54.31 14** *i* P **P** **16 00 18.7 -0.2**
**USRK Ussuriysk Ar. 54.31 14** P **P** **16 00 19.1 +0.2**
**USRK Ussuriysk Ar. 54.31 14** P **P** **16 00 18.7 -0.2**
comp=Z,9.3nm,0.5s,baz=197,slow=6.9,SNR=35
USRK LR LR 16 25 40.8
comp=Z,72nm,20.1s,baz=214,slow=39
comp=Z,9.3nm,0.5s
**USRK Ussuriysk Ar. 54.31 14** P **P** **16 00 19.1 +0.2**
**BNX BinXian 54.85 10** ⇓P **P** **16 00 22.7 -0.1**
BNX sP sP 16 00 36.4 +0.4
BNX S **S** **16 08 03.1 +1.2**
BNX sS sS 16 08 18.6 +1.4
BNX pmax pmax
comp=Z,20nm,0.6s
BNX pmax pmax
comp=Z,240nm,4.9s
BNX LR LR
comp=Z,160nm,14.2s
BNX LR LR
comp=Z,110nm,16.4s
BNX LR LR
comp=Z,190nm,16.7s
**ULN Ulaanbaatar 56.58 353** P **P** **16 00 35.2 -0.2**
ULN IAmb IAmb 16 00 36.2
comp=Z,12nm,0.7s
**ULN Ulaanbaatar 56.58 353** *ce*P **P** **16 00 35.3 -0.1**
ULN pmax pmax
comp=Z,28nm,1.7s
**SONM Songino Array 56.64 352** P **P** **16 00 35.7 -0.1**
SONM IAmb IAmb 16 00 36.6
comp=Z,17nm,0.7s
**SONM Songino Array 56.64 352** P **P** **16 00 35.4 -0.4**
comp=Z,16nm,0.7s,baz=173,slow=9.1,SNR=72
SONM LR LR 16 27 31.8
comp=Z,163nm,19.1s,baz=177,slow=39
comp=Z,16nm,0.7s
**SONM Songino Array 56.64 352** P **P** **16 00 35.7 -0.1**
SONM pmax pmax
comp=Z,17nm,0.7s
**ASAJ Asahikawa 57.53 22** LR LR 16 23 49.6
comp=Z,82nm,21.9s,baz=198,slow=34
**JKA Kamikawa-asahi 57.53 22** IAmb IAmb 16 00 43.0
comp=Z,23nm,1.0s
**JCZ Jackson Bay 57.84 137** P **P** **16 00 46.5 +2.1**
**CASY Casey 57.92 183** P **P** **16 00 44.8 +0.4**
CASY IAmb IAmb 16 00 46.1
comp=Z,29nm,0.7s
**WMQ Urumqi 57.98 336** *e*P **P** **16 00 48.6 +3.3**
WMQ LR LR
comp=Z,210nm,24.3s
WMQ LR LR
comp=Z,190nm,17.7s
WMQ LR LR
comp=Z,230nm,24.1s
**KLR Kul'dur 59.02 12** LR LR 16 29 39.0
comp=Z,90nm,18.8s,baz=208,slow=40
**KLR Kul'dur 59.02 12** *ce*P **P** **16 00 51.0 -1.3**
KLR pmax pmax
comp=Z,17nm,1.7s
**HEH HeiHe 59.24 8** *e*P **P** **16 00 53.2 -0.6**
HEH pP **sP** **16 01 06.3 -0.7**
HEH S **S** **16 08 58.8 -0.8**
HEH pmax pmax
comp=Z,39nm,1.0s
HEH LR LR
comp=Z,140nm,17.5s
HEH LR LR
comp=Z,160nm,17.1s
HEH LR LR
comp=Z,190nm,18.6s
**RPZ Rata Peaks 59.25 136** P **P** **16 00 54.8 +0.6**
comp=Z,19nm,0.6s,baz=286,slow=4.5,SNR=17
RPZ LR LR 16 26 26.8
comp=Z,597nm,20.8s,baz=288,slow=36
comp=Z,19nm,0.6s
**ODZ Otahua Downs 59.43 138** P **P** **16 00 58.1 +2.8**
**ZAK Zakamensk 59.58 351** *e*P **P** **16 00 55.4 -0.9**
ZAK pmax pmax
comp=Z,5.0nm,1.3s
**OXZ Oxford 59.80 136** P **P** **16 00 58.6 +0.6**
**YSS Yuzh-Sakhalins 60.02 21** P **P** **16 00 59.8 +0.6**
**YSS Yuzh-Sakhalins 60.02 21** P **P** **16 00 58.8 -0.4**
YSS IAmb IAmb 16 01 04.6
comp=Z,36nm,1.3s
**YSS Yuzh-Sakhalins 60.02 21** *e*P **P** **16 00 58.4 -0.8**
YSS *e*S **S** **16 09 09.8 +0.1**
YSS *e*PS **PnS** **16 09 20.0 -5.6**
YSS pmax pmax
comp=Z,20nm,1.3s
**KSH Kashi 60.41 325** P P 16 01 07.3 +5.0
KSH pmax pmax
comp=Z,3.0nm,0.6s
KSH LR LR
comp=Z,220nm,16.5s
KSH LR LR
comp=Z,250nm,14.4s
KSH LR LR
comp=Z,290nm,16.1s
**MSVF Nonsavu 60.89 106** P **P** **16 01 06.4 +0.5**
comp=Z,8.5nm,0.9s,baz=274,slow=17,SNR=2.4
MSVF LR LR 16 26 31.8
comp=Z,228nm,21.0s,baz=196,slow=35
comp=Z,8.5nm,0.9s
**SHLS Shalkode 61.15 330** *e*P **P** **16 01 04.3 -2.9**
comp=Z,4.1nm,0.8s,baz=330
**SHLS Shalkode 61.15 330** *e*P **P** **16 01 04.3 -2.9**
SHLS pmax pmax
comp=Z,4.0nm,0.8s
**IRK Irkutsk 61.24 352** *e*P **P** **16 01 06.1 -1.4**
IRK pmax pmax
comp=Z,43nm,1.6s
**UZB Uzynbulak 61.36 330** *e*P **P** **16 01 07.5 -1.3**
baz=330
**UZB Uzynbulak 61.36 330** *e*P **P** **16 01 07.4 -1.3**
**MRZ Mangatainoka R 61.59 132** P **P** **16 01 10.3 +0.1**
MRZ IAmb IAmb 16 01 31.1
comp=Z,31nm,1.1s
**SATY Saty 61.60 329** *e*P **P** **16 01 08.9 -1.4**
baz=329
**SATY Saty 61.60 329** *e*P **P** **16 01 08.9 -1.4**
**KPKS Kokpek 61.76 330** *e*P **P** **16 01 09.8 -1.6**
baz=330
**KPKS Kokpek 61.76 330** *e*P **P** **16 01 09.7 -1.6**
**BKZ Black Stump Fm 61.92 130** P **P** **16 01 13.1 +0.5**
**ZSN Zaisan 62.10 337** *e*P **P** **16 01 12.1 -1.3**
baz=336
**ZSN Zaisan 62.10 337** *e*P **P** **16 01 12.1 -1.3**
**RTZ Ruatahuna 62.18 129** P **P** **16 01 15.2 +0.9**
**URZ Urewera 62.21 129** LR LR 16 30 49.2
comp=Z,782nm,18.0s,baz=14,slow=38
**MDOK Medeo 62.37 329** *e*P **P** **16 01 14.4 -1.1**
baz=329
**MDOK Medeo 62.37 329** *e*P **P** **16 01 14.4 -1.1**
**ZEA Zeya 62.62 7** *e*P **P** **16 01 16.4 -0.3**
ZEA pmax pmax
comp=Z,20nm,1.0s
**MK31 Makanchi Array 62.63 335** P **P** **16 01 14.7 -2.3**
**MK31 Makanchi Array 62.63 335** *ce*P **P** **16 01 15.9 -1.1**
**MKAR Makanchi Array 62.63 335** P **P** **16 01 14.9 -2.0**
**MKAR Makanchi Array 62.63 335** P **P** **16 01 15.5 -1.5**
comp=Z,2.3nm,0.6s,baz=148,slow=7.7,SNR=30
MKAR LR LR 16 32 30.7
comp=Z,180nm,18.4s,baz=163,slow=40
comp=Z,2.3nm,0.6s
**DGZ Jazzator, Alta 63.02 340** *i* P **P** **16 01 18.7 -1.0**
DGZ pmax pmax
comp=Z,12nm,0.7s
**KUU Kurty 63.25 329** *e*P **P** **16 01 19.9 -1.3**
comp=Z,7.7nm,0.5s,baz=329
**KUU Kurty 63.25 329** *e*P **P** **16 01 19.9 -1.3**
KUU pmax pmax
comp=Z,8.0nm,0.5s
**AAK Ala-Archa 63.35 327** LR LR 16 33 46.5
comp=Z,238nm,18.2s,baz=134,slow=41
**SGDS Sogindy 63.84 328** *e*P **P** **16 01 23.6 -1.6**
baz=328
**SGDS Sogindy 63.84 328** *e*P **P** **16 01 23.5 -1.6**
**WSAR Wadi Sarin 64.33 301** LR LR 16 30 16.8
comp=Z,120nm,19.3s,baz=142,slow=37
**BTLS Baital 65.23 329** *e*P **P** **16 01 33.0 -1.1**
baz=328
**BTLS Baital 65.23 329** *e*P **P** **16 01 33.0 -1.1**
**CHM Chimkent 65.90 324** *e*P **P** **16 01 37.4 -1.2**
baz=324
**CHM Chimkent 65.90 324** *e*P **P** **16 01 37.3 -1.2**
**BOD Bodaibo 66.01 359** *e*P **P** **16 01 38.0 -0.8**
BOD pmax pmax
comp=Z,1.0nm,2.2s
**BRLS Borolday 66.21 325** *e*P **P** **16 01 39.1 -1.4**
baz=324
**BRLS Borolday 66.21 325** *e*P **P** **16 01 39.1 -1.4**
**H04N2 CROZET ISLANDS 66.22 223** T T 17 13 36.7
baz=76,slow=74
**H04N1 CROZET ISLANDS 66.24 223** T T 17 13 35.5
baz=76,slow=74
**H04N3 CROZET ISLANDS 66.24 223** T T 17 13 34.4
baz=76
**KURBB Kurchatov Arra 67.17 335** P **P** **16 01 44.4 -2.0**
comp=Z,1.4nm,0.2s,baz=142,slow=5.5,SNR=6.6
KURBB LR LR 16 33 46.7
comp=Z,177nm,21.9s,baz=170,slow=38
comp=Z,1.4nm,0.2s
**KURK Kurchatov 67.20 335** *ce*P **P** **16 01 45.6 -1.0**
KURK pmax pmax
comp=Z,2.0nm,0.6s
**ZALV Zalesovo Beam 67.48 341** P **P** **16 01 45.5 -2.7**
comp=Z,4.7nm,0.6s,baz=144,slow=4.5,SNR=21
ZALV LR LR 16 34 00.9
comp=Z,116nm,18.2s,baz=134,slow=38
comp=Z,4.7nm,0.6s
**ZALV Zalesovo Beam 67.48 341** *i* P **P** **16 01 46.2 -2.1**
ZALV pmax pmax
comp=Z,5.0nm,0.6s
**MAW Mawson 68.82 199** P **P** **16 01 57.9 +1.4**
comp=Z,28nm,0.7s,baz=58,slow=6.6,SNR=38
MAW LR LR 16 27 25.8
comp=Z,171nm,20.3s,baz=50,slow=32
comp=Z,28nm,0.7s
**YAK Yakutsk 71.01 7** P **P** **16 02 08.8 -1.2**
YAK IAmb IAmb 16 02 10.3
comp=Z,19nm,0.6s
**YAK Yakutsk 71.01 7** LR LR 16 36 09.2
comp=Z,70nm,18.5s,baz=202,slow=38
**YAK Yakutsk 71.01 7** *e*P **P** **16 02 08.3 -1.7**
YAK *e**PP **pP** **16 02 17.7 -2.1**
YAK *e* 16 02 28.2
YAK *e* 16 04 41.3
YAK *e*PPP PPP 16 06 26.7
YAK *e*S **S** **16 11 22.1 -1.6**
YAK *e**SS **sS** **16 11 42.0 +2.0**
YAK *e* 16 12 10.9
YAK pmax pmax
comp=Z,14nm,0.8s
YAK pmax pmax
comp=N,5.0nm,1.5s
YAK pmax pmax
comp=E,1.0nm,0.9s
YAK pmax pmax
comp=Z,96nm,5.6s
YAK pmax pmax
comp=N,70nm,5.9s
YAK pmax pmax
comp=E,46nm,3.2s
YAK smax smax
comp=N,213nm,6.5s
YAK smax smax
comp=E,68nm,3.3s
**PET Petropavlovsk 71.08 26** *e*P **P** **16 02 09.1 -1.5**
PET *e*S **S** **16 11 25.0 +0.2**
PET *e*SS **SS** **16 15 51.2 -7.6**
PET pmax pmax
comp=Z,100nm,9.6s
PET pmax pmax
comp=Z,15nm,1.3s
PET MLR MLR
comp=Z,100nm,20.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PET** | **Petropavlovsk** | **71.08** | **26** | P | | **P** | **16 02 11.5** | **+0.9** |
| | comp=Z,13nm,1.2s | | | | | | | |
| **BRVK** | **Borovoye** | **72.49** | **333** | *ce*P | | **P** | **16 02 17.8** | **-1.3** |
| BRVK | | | | | pmax | pmax | | |
| | comp=E,6.0nm,2.5s | | | | | | | |
| **VNDA** | **Vanda** | **73.04** | **171** | | IAmb | IAmb | 16 02 24.7 | |
| | comp=Z,29nm,1.4s | | | | | | | |
| **VNDA** | **Vanda** | **73.04** | **171** | P | | **P** | **16 02 23.4** | **+1.4** |
| | comp=Z,9.3nm,0.6s,baz=316,slow=6.2,SNR=96 | | | | | | | |
| VNDA | | | | | LR | LR | 16 31 59.4 | |
| | comp=Z,312nm,21.0s,baz=314,slow=34 | | | | | | | |
| | comp=Z,9.3nm,0.6s | | | | | | | |
| **MA2** | **Magadan** | **73.20** | **18** | | LR | LR | 16 37 15.2 | |
| | comp=Z,68nm,20.0s,baz=215,slow=38 | | | | | | | |
| **SBA** | **Scott Base** | **74.07** | **170** | P | | **P** | **16 02 30.0** | **+2.0** |
| SBA | | | | | IAmb | IAmb | 16 02 41.7 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **SBA** | **Scott Base** | **74.07** | **170** | P | | **P** | **16 02 30.0** | **+2.0** |
| SBA | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **ABKAR** | **Akbulak array** | **75.41** | **326** | P | | **P** | **16 02 33.5** | **-2.7** |
| **ABKAR** | **Akbulak array** | **75.41** | **326** | | IAmb | IAmb | 16 02 34.9 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **RAYN** | **Ar Rayn** | **75.82** | **297** | P | | **P** | **16 02 36.9** | **-2.3** |
| **RAYN** | **Ar Rayn** | **75.82** | **297** | P | | **P** | **16 02 36.9** | **-2.3** |
| RAYN | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **SEY** | **Seymchan** | **76.38** | **16** | *e*P | | **P** | **16 02 40.1** | **-1.4** |
| SEY | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **77.09** | **326** | | LR | LR | 16 41 16.1 | |
| | comp=Z,228nm,20.8s,baz=105,slow=39 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **78.28** | **32** | | LR | LR | 16 34 21.7 | |
| | comp=Z,53nm,20.6s,baz=230,slow=33 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **78.75** | **271** | P | | **P** | **16 02 55.2** | **-0.9** |
| **KMBO** | **Kilima Mbogo** | **78.75** | **271** | P | | **P** | **16 02 55.2** | **-0.9** |
| KMBO | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **FURI** | **Furi** | **78.96** | **281** | | LR | LR | 16 35 01.4 | |
| | comp=Z,121nm,20.8s,baz=102,slow=34 | | | | | | | |
| **ARU** | **Arti** | **79.93** | **332** | | LR | LR | 16 42 45.0 | |
| | comp=Z,156nm,19.7s,baz=124,slow=39 | | | | | | | |
| **TIXI** | **Tiksi** | **80.33** | **4** | | LR | LR | 16 41 58.4 | |
| | comp=Z,158nm,19.0s,baz=201,slow=38 | | | | | | | |
| **GNI** | **Garni** | **81.38** | **313** | | LR | LR | 16 44 14.0 | |
| | comp=Z,105nm,18.4s,baz=109,slow=40 | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.59** | **180** | P | | **P** | **16 03 10.9** | **+0.6** |
| QSPA | | | | | IAmb | IAmb | 16 03 12.4 | |
| | comp=Z,47nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.59** | **180** | P | | **P** | **16 03 10.6** | **+0.3** |
| | comp=Z,19nm,0.9s,baz=310,slow=1.7,SNR=68 | | | | | | | |
| QSPA | | | | | LR | LR | 16 35 27.8 | |
| | comp=Z,243nm,21.9s,baz=334,slow=33 | | | | | | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **RAR** | **Rarotonga** | **81.62** | **110** | | LR | LR | 16 42 26.9 | |
| | comp=Z,44nm,18.0s,baz=274,slow=38 | | | | | | | |
| **BELG** | **Belogornoye** | **83.78** | **325** | | LR | LR | 16 44 14.2 | |
| | comp=Z,120nm,18.8s,baz=94,slow=38 | | | | | | | |
| **BELG** | **Belogornoye** | **83.78** | **325** | *i* P | | **P** | **16 03 20.9** | **-0.7** |
| BELG | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **KBZ** | **Khabaz** | **83.80** | **316** | P | | **P** | **16 03 20.1** | **-1.8** |
| | comp=Z,0.9nm,0.5s,baz=207,slow=6.8,SNR=2.4 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **GRHM** | **Grahamstown, E** | **85.18** | **237** | P | | **P** | **16 03 30.4** | **+1.0** |
| **MBAR** | **Mbarara** | **85.27** | **270** | P | | **P** | **16 03 30.0** | **-0.3** |
| MBAR | | | | | IAmb | IAmb | 16 03 30.8 | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **MBAR** | **Mbarara** | **85.27** | **270** | LR | | LR | 16 37 52.0 | |
| | comp=Z,40nm,18.2s,baz=78,slow=33 | | | | | | | |
| **MBAR** | **Mbarara** | **85.27** | **270** | *i* P | | **P** | **16 03 29.2** | **-1.1** |
| MBAR | | | | | pmax | pmax | | |
| | comp=Z,19nm,1.7s | | | | | | | |
| **KIRV** | **Kirov** | **85.30** | **331** | | LR | LR | 16 47 20.3 | |
| | comp=Z,222nm,19.3s,baz=124,slow=40 | | | | | | | |
| **LSZ** | **Lusaka** | **85.77** | **255** | P | | **P** | **16 03 32.3** | **-0.4** |
| **LSZ** | **Lusaka** | **85.77** | **255** | P | | **P** | **16 03 32.3** | **-0.4** |
| LSZ | | | | | pmax | pmax | | |
| | comp=Z,26nm,0.7s | | | | | | | |
| **SOC** | **Sochi** | **85.97** | **315** | *e*P | | **P** | **16 03 29.0** | **-3.9** |
| SOC | | | | *e* | | | 16 06 48.8 | |
| SOC | | | | *e*PPP | | PPP | 16 08 42.3 | |
| SOC | | | | *e*S | | **SKSac** | **16 13 50.8** | **-5.8** |
| SOC | | | | *e*SS | | **SS** | **16 19 35.9** | **-7.2** |
| SOC | | | | *e*SSS | | SSS | 16 23 10.4 | |
| SOC | | | | | MLR | MLR | | |
| | comp=Z,51nm,19.0s | | | | | | | |
| **EIL** | **Elat** | **86.45** | **301** | | LR | LR | 16 45 20.5 | |
| | comp=Z,111nm,19.3s,baz=70,slow=38 | | | | | | | |
| **BOSA** | **Boshof** | **86.72** | **242** | P | | **P** | **16 03 37.2** | **0.0** |
| | comp=Z,30nm,0.7s,baz=100,slow=4.5,SNR=50 | | | | | | | |
| BOSA | | | | | LR | LR | 16 38 19.4 | |
| | comp=Z,109nm,18.4s,baz=85,slow=33 | | | | | | | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.12** | **197** | ⇑P | | **P** | **16 03 49.6** | **+1.9** |
| | comp=Z,518nm,0.7s | | | | | | | |
| **BR131** | **Keskin Array S** | **89.51** | **310** | P | | **P** | **16 03 48.2** | **-2.0** |
| **BR131** | **Keskin Array S** | **89.51** | **310** | P | | **P** | **16 03 48.2** | **-2.0** |
| BR131 | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **BRTR** | **Keskin Array B** | **89.51** | **310** | P | | **P** | **16 03 48.1** | **-2.1** |
| | comp=Z,1.4nm,0.9s,baz=122,slow=6.3,SNR=7.7 | | | | | | | |
| BRTR | | | | | LR | LR | 16 49 31.0 | |
| | comp=Z,75nm,18.8s,baz=124,slow=39 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **SUR** | **Sutherland** | **89.94** | **237** | | LR | LR | 16 38 10.6 | |
| | comp=Z,110nm,20.6s,baz=134,slow=32 | | | | | | | |
| **SNAA** | **Sanae** | **90.78** | **196** | P | | **P** | **16 03 56.2** | **+0.8** |
| SNAA | | | | | IAmb | IAmb | 16 03 58.1 | |
| | comp=Z,33nm,1.5s | | | | | | | |
| **SNAA** | **Sanae** | **90.78** | **196** | ⇑P | | **P** | **16 03 56.9** | **+1.5** |
| | comp=Z,165nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.78** | **196** | P | | **P** | **16 03 56.3** | **+1.0** |
| | comp=Z,8.1nm,0.8s,baz=166,slow=3.5,SNR=21 | | | | | | | |
| SNAA | | | | | LR | LR | 16 38 46.1 | |
| | comp=Z,262nm,22.0s,baz=180,slow=32 | | | | | | | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **90.78** | **196** | *ce*P | | **P** | **16 03 56.6** | **+1.2** |
| SNAA | | | | | pmax | pmax | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **TBI** | **Tubuai** | **90.81** | **114** | *e*S | | **S** | **16 14 54.6** | **+3.2** |
| | comp=Z,1μm,39.5s | | | | | | | |
| **TBI** | **Tubuai** | **90.81** | **114** | *e*LR | | LR | 16 32 58.0 | |
| | comp=Z,748nm,22.8s | | | | | | | |
| **OBN** | **Obninsk** | **90.86** | **326** | | LR | LR | 16 48 31.6 | |
| | comp=Z,98nm,21.3s,baz=308,slow=38 | | | | | | | |
| **PPT2** | **Papeete2** | **91.63** | **108** | *e*S | | **S** | **16 14 55.9** | **-3.3** |
| | comp=Z,72nm,23.8s | | | | | | | |
| **PPT2** | **Papeete2** | **91.63** | **108** | *e*LR | | LR | 16 33 21.5 | |
| | comp=Z,201nm,30.5s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 16 33 25.4 | |
| | comp=Z,157nm,27.8s | | | | | | | |
| **PPT** | **Papeete** | **91.64** | **108** | | LR | LR | 16 42 35.5 | |
| | comp=Z,41nm,20.7s,baz=228,slow=34 | | | | | | | |
| **BELA** | **Belgrano 2** | **92.32** | **186** | | IAmb | IAmb | 16 04 04.1 | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.42** | **196** | ⇑P | | **P** | **16 04 04.5** | **+1.5** |
| | comp=Z,7.8nm,0.5s,baz=132,slow=5.0 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.84** | **195** | ⇑P | | **P** | **16 04 06.2** | **+1.3** |
| | comp=Z,5.1nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **94.42** | **320** | | LR | LR | 16 54 13.3 | |
| | comp=Z,64nm,19.6s,baz=64,slow=40 | | | | | | | |
| **TSUM** | **Tsumeb** | **95.17** | **250** | | LR | LR | 16 40 43.9 | |
| | comp=Z,117nm,21.9s,baz=98,slow=32 | | | | | | | |
| **G19K** | **Purcell Mounta** | **96.35** | **24** | | IAmb | IAmb | 16 04 21.0 | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **H19K** | **Roundabout Mou** | **96.55** | **25** | | IAmb | IAmb | 16 04 21.7 | |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **97.30** | **331** | | LR | LR | 16 52 03.1 | |
| | comp=Z,100nm,18.6s,baz=92,slow=38 | | | | | | | |
| **E21K** | **Killik River** | **97.74** | **22** | P | | **P** | **16 04 26.4** | **-0.8** |
| E21K | | | | | IAmb | IAmb | 16 04 27.9 | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **98.00** | **339** | | LR | LR | 16 51 58.0 | |
| | comp=Z,159nm,20.3s,baz=88,slow=38 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **100.15** | **348** | | LR | LR | 16 56 41.5 | |
| | comp=Z,107nm,18.2s,baz=56,slow=40 | | | | | | | |
| **ILAR** | **Eielson Array** | **100.56** | **26** | P | | **Pdif** | **16 04 37.0** | **-2.9** |
| | comp=Z,0.3nm,0.6s,baz=270,slow=5.1,SNR=4.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **114.82** | **23** | PKP | | **PKiKP** | **16 09 30.1** | **-2.6** |
| | comp=Z,0.6nm,0.7s,baz=313,slow=2.4,SNR=4.7 | | | | | | | |
| **ESDC** | **Sonseca Array** | **118.30** | **311** | PKP | | **PKPdf** | **16 09 38.4** | **-1.9** |
| | comp=Z,0.4nm,0.6s,baz=3.4,slow=3.1,SNR=4.6 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.87** | **49** | PKP | | **PKPdf** | **16 09 48.4** | **-0.9** |
| | comp=Z,0.9nm,0.6s,baz=249,slow=1.6,SNR=7.9 | | | | | | | |
| NVAR | | | | | PKKPbc | **PKKPab** | **16 19 42.4** | **+0.9** |
| | comp=Z,0.4nm,0.7s,baz=101,slow=4.9,SNR=3.0 | | | | | | | |
| **HLID** | **Hailey** | **123.89** | **42** | | PKPdf | **PKPdf** | **16 09 50.5** | **-0.6** |
| **YHL** | **Hebgen Lake** | **125.45** | **40** | | | **PKPdf** | **16 09 54.0** | **-0.2** |
| **PDAR** | **Pinedale Array** | **127.44** | **42** | | PKP | **PKPdf** | **16 09 57.3** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=270,slow=2.7,SNR=3.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **137.34** | **55** | | PKhKP | PKPpre | 16 10 09.3 | |
| | comp=Z,0.3nm,0.6s,baz=168,slow=1.7,SNR=4.3 | | | | | | | |
| **VAO** | **Valinhos** | **144.64** | **208** | | | PKPbc | 16 10 29.8 | +0.9 |
| **WVT** | **Waverly** | **144.85** | **35** | | | **PKPab** | **16 10 26.5** | **-2.5** |
| **WVT** | **Waverly** | **144.85** | **35** | | PKIKP | **PKPab** | **16 10 26.5** | **-2.5** |
| **CPUP** | **Villa Florida** | **144.88** | **190** | | | **PKPab** | **16 10 29.6** | **+0.2** |
| **CPUP** | **Villa Florida** | **144.88** | **190** | | PKPbc | **PKPab** | **16 10 30.1** | **+0.7** |
| | comp=Z,15nm,0.7s,baz=160,slow=3.4,SNR=30 | | | | | | | |
| **SSPA** | **Standing Stone** | **145.59** | **19** | | | **PKPdf** | **16 10 28.7** | **-2.4** |
| **X48A** | **Hartselle** | **146.50** | **36** | | PKPdf | **PKPdf** | **16 10 31.9** | **-0.9** |
| **AQDB** | **Aquidauana** | **150.18** | **196** | | | **PKPbc** | **16 10 43.2** | **-1.1** |
| **BDFB** | **Brasilia** | **151.37** | **214** | | PKPbc | **PKPbc** | **16 10 46.9** | **-0.4** |
| | comp=Z,4.6nm,0.8s,baz=145,slow=6.9,SNR=5.1 | | | | | | | |
| **LPAZ** | **La Paz** | **155.13** | **170** | | PKPbc | PKPdf | 16 10 57.5 | +10 |
| | comp=Z,1.3nm,0.7s,baz=266,slow=4.8,SNR=2.1 | | | | | | | |
| LPAZ | | | | | PKPab | **PKPab** | **16 11 12.8** | **+1.0** |
| | comp=Z,6.0nm,0.6s,baz=177,slow=5.9,SNR=22 | | | | | | | |

*IGIL **06** 15:58:40.0, 36˚.48N×11˚.26W, h11km, ML1.9*
*INMG **06** 15:58:40.8±1.0, 36˚.46N×11˚.29W, h20km±9km, ML2.4, Error ellipse: s-maj=8.0km s-min=2.7km az=72.0*
*MDD **06** 15:58:40.2±0.8, 36˚.47N×11˚.35W, h40km, Mb4.3/12, M_mb3.7/12, Error ellipse: s-maj=6.2km s-min=4.8km az=69.0*
*CNRM **06** 15:58:41.0, 36˚.27N×11˚.17W, h77km, ML2.7*

**ISC 06 15:58:38.6±1.9, 36˚.43N±0˚.05×11˚.26W±0˚.10, h35km, n80, σ1@91/137, 16C-3D, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **2.07** | **69** | ⇑*e*P | | **Pn** | **15 59 12.7** | **+1.8** |
| PFVI | | | | *e*S | | **Sn** | **15 59 36.1** | **+0.6** |
| PFVI | | | | A | | A | 15 59 37.8 | |
| | 24nm,0.3s | | | | | | | |
| **MORF** | **Marmelete** | **2.26** | **67** | ⇑*e*P | | **Pn** | **15 59 15.4** | **+1.8** |
| MORF | | | | *e*S | | **Sn** | **15 59 41.5** | **+1.2** |
| MORF | | | | A | | A | 15 59 42.1 | |
| | 19nm,0.2s | | | | | | | |
| **MORF** | **Marmelete** | **2.26** | **67** | *e*P | | **Pn** | **15 59 15.4** | **+1.8** |
| MORF | | | | *e*S | | **Sn** | **15 59 41.0** | **+0.7** |
| MORF | | | | IAML | | | 15 59 41.7 | |
| | comp=N,18nm,0.1s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.31** | **60** | ⇓*e*P | | **Pn** | **15 59 16.2** | **+2.0** |
| PTEO | | | | *e*S | | **Sn** | **15 59 43.1** | **+1.6** |
| PTEO | | | | A | | A | 15 59 43.1 | |
| | comp=N,7.9nm,0.2s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.75** | **52** | *e*P | | **Pn** | **15 59 22.0** | **+1.8** |
| PNCL | | | | *e*S | | **Sn** | **15 59 53.9** | **+1.7** |
| PNCL | | | | A | | A | 15 59 57.3 | |
| | comp=N,5.5nm,0.1s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.75** | **52** | S | | **Sn** | **15 59 52.1** | **0.0** |
| PNCL | | | | P | | **Pn** | **15 59 21.9** | **+1.8** |
| **PBDV** | **Barranco-do-Ve** | **2.79** | **72** | *e*P | | **Pn** | **15 59 22.9** | **+2.1** |
| PBDV | | | | *e*S | | **Sn** | **15 59 54.4** | **+1.2** |
| **PBDV** | **Barranco-do-Ve** | **2.79** | **72** | S | | **Sn** | **15 59 53.3** | **+0.1** |
| PBDV | | | | P | | **Pn** | **15 59 22.5** | **+1.7** |
| **MESJ** | **Messejana** | **2.81** | **59** | *e*P | | **Pn** | **15 59 22.9** | **+1.9** |
| MESJ | | | | *e*S | | **Sn** | **15 59 54.6** | **+1.0** |
| MESJ | | | | A | | A | 16 00 03.6 | |
| | comp=N,5.5nm,1.0s | | | | | | | |
| **MESJ** | **Messejana** | **2.81** | **59** | *e*P | | **Pn** | **15 59 22.8** | **+1.8** |
| MESJ | | | | *e*S | | **Sn** | **15 59 54.0** | **+0.4** |
| MESJ | | | | IAML | | | 15 59 54.5 | |
| | comp=E,2.1nm,0.1s | | | | | | | |
| **PCVE** | **Castro Verde** | **2.84** | **64** | *e*P | | **Pn** | **15 59 23.5** | **+2.0** |
| PCVE | | | | *e*S | | **Sn** | **15 59 55.3** | **+0.8** |
| PCVE | | | | A | | A | 16 00 00.8 | |
| | comp=E,6.0nm,0.2s | | | | | | | |
| **PCVE** | **Castro Verde** | **2.84** | **64** | P | | **Pn** | **15 59 23.1** | **+1.6** |
| PCVE | | | | S | | **Sn** | **15 59 54.3** | **-0.2** |
| **PMAFR** | **Mafra** | **2.97** | **31** | *e*P | | **Pn** | **15 59 24.6** | **+1.3** |
| PMAFR | | | | *e*S | | **Sn** | **15 59 57.6** | **0.0** |
| PMAFR | | | | A | | A | 16 00 00.1 | |
| | comp=E,24nm,0.3s | | | | | | | |
| **PMAFR** | **Mafra** | **2.97** | **31** | P | | **Pn** | **15 59 24.1** | **+0.8** |
| PMAFR | | | | S | | **Sn** | **15 59 57.2** | **-0.5** |
| **PVAQ** | **Vaqueiros** | **3.00** | **70** | ⇑*e*P | | **Pn** | **15 59 25.6** | **+2.0** |
| PVAQ | | | | *e*S | | **Sn** | **15 59 59.3** | **+0.9** |
| **PVAQ** | **Vaqueiros** | **3.00** | **70** | P | | **Pn** | **15 59 25.5** | **+1.8** |
| PVAQ | | | | S | | **Sn** | **15 59 58.9** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **3.00** | **70** | P | | **Pn** | **15 59 25.8** | **+2.2** |
| **PVAQ** | **Vaqueiros** | **3.00** | **70** | S | | **Sn** | **16 00 02.4** | **+4.0** |
| **PBEJ** | **Beja** | **3.14** | **58** | *e*P | | **Pn** | **15 59 27.3** | **+1.7** |
| PBEJ | | | | *e*S | | **Sn** | **16 00 02.9** | **+1.0** |
| **EGRO** | **El Granado** | **3.22** | **69** | P | | **Pn** | **15 59 28.7** | **+2.1** |
| EGRO | | | | S | | **Sn** | **16 00 03.9** | **+0.2** |
| **EGRO** | **El Granado** | **3.22** | **69** | P | | **Pn** | **15 59 28.7** | **+2.1** |
| EGRO | | | | ⇑*i*Vmb_V | | | 15 59 35.7 | |
| | comp=E,318nm,SNR=2.2 | | | | | | | |
| EGRO | | | | S | | **Sn** | **16 00 02.9** | **-0.9** |
| **EVO** | **Evora** | **3.33** | **50** | *e*P | | **Pn** | **15 59 29.9** | **+1.7** |
| EVO | | | | *e*S | | **Sn** | **16 00 06.8** | **+0.4** |
| **EVO** | **Evora** | **3.33** | **50** | P | | **Pn** | **15 59 29.7** | **+1.5** |
| EVO | | | | S | | **Sn** | **16 00 05.6** | **-0.9** |
| **PMTG** | **Montargil** | **3.57** | **41** | *e*P | | **Pn** | **15 59 32.5** | **+1.1** |
| PMTG | | | | *e*S | | **Sn** | **16 00 12.2** | **-0.2** |
| **PSBE** | **So Bento** | **3.64** | **32** | *e*P | | **Pn** | **15 59 34.2** | **+1.7** |
| PSBE | | | | *e*S | | **Sn** | **16 00 15.4** | **+1.1** |
| PSBE | | | | A | | A | 16 00 30.5 | |
| | comp=E,11nm,0.7s | | | | | | | |
| **PBAR** | **Barrancos** | **3.79** | **61** | ⇓*e*P | | **Pn** | **15 59 36.5** | **+2.0** |
| PBAR | | | | *e*S | | **Sn** | **16 00 17.7** | **-0.1** |
| **PBAR** | **Barrancos** | **3.79** | **61** | P | | **Pn** | **15 59 36.0** | **+1.5** |
| PBAR | | | | S | | **Sn** | **16 00 17.4** | **-0.5** |
| **PESTR** | **Estremoz** | **3.79** | **49** | *e*P | | **Pn** | **15 59 36.3** | **+1.7** |
| PESTR | | | | *e*S | | **Sn** | **16 00 17.9** | **-0.1** |
| **PESTR** | **Estremoz** | **3.79** | **49** | P | | **Pn** | **15 59 35.9** | **+1.3** |
| PESTR | | | | S | | **Sn** | **16 00 17.2** | **-0.8** |
| **PESTR** | **Estremoz** | **3.79** | **49** | P | | **Pn** | **15 59 37.0** | **+2.4** |
| **PESTR** | **Estremoz** | **3.79** | **49** | S | | **Sn** | **16 00 20.9** | **+2.9** |
| **EMIN** | **Mina Concepcio** | **3.90** | **69** | P | | **Pn** | **15 59 37.4** | **+1.4** |
| EMIN | | | | S | | **Sn** | **16 00 19.5** | **-1.1** |
| **EMIN** | **Mina Concepcio** | **3.90** | **69** | P | | **Pn** | **15 59 37.8** | **+1.8** |
| EMIN | | | | ⇑*i*Vmb_V | | | 15 59 47.2 | |
| | comp=E,163nm,SNR=1.7 | | | | | | | |
| EMIN | | | | S | | **Sn** | **16 00 19.0** | **-1.6** |
| **EBAD** | **Badajoz** | **4.09** | **54** | P | | **Pn** | **15 59 39.9** | **+1.3** |
| EBAD | | | | S | | **Sn** | **16 00 23.1** | **-2.2** |
| **EBAD** | **Badajoz** | **4.09** | **54** | P | | **Pn** | **15 59 40.0** | **+1.3** |
| EBAD | | | | ⇑*i*Vmb_V | | | 15 59 40.9 | |
| | comp=E,318nm,SNR=5.4 | | | | | | | |
| EBAD | | | | S | | **Sn** | **16 00 25.8** | **+0.5** |
| **PCAS** | **Casmilo, Conde** | **4.22** | **30** | ⇓*e*P | | **Pn** | **15 59 41.8** | **+1.4** |
| PCAS | | | | *e*S | | **Sn** | **16 00 27.8** | **-0.7** |
| PCAS | | | | A | | A | 16 00 30.6 | |
| | comp=E,3.4nm,0.2s | | | | | | | |
| **PMRV** | **Marv??o** | **4.28** | **44** | *e*P | | **Pn** | **15 59 42.4** | **+1.1** |
| PMRV | | | | *e*S | | **Sn** | **16 00 28.6** | **-1.3** |
| PMRV | | | | A | | A | 16 00 31.8 | |
| | comp=E,4.7nm,0.3s | | | | | | | |
| **ESPR** | **Espera** | **4.36** | **83** | P | | **Pn** | **15 59 44.3** | **+1.9** |
| ESPR | | | | S | | **Sn** | **16 00 31.0** | **-1.0** |
| **ESPR** | **Espera** | **4.36** | **83** | P | | **Pn** | **15 59 44.5** | **+2.1** |
| ESPR | | | | ⇑*i*Vmb_V | | | 15 59 44.9 | |
| | comp=E,353nm,SNR=4.5 | | | | | | | |
| ESPR | | | | S | | **Sn** | **16 00 31.3** | **-0.8** |
| **AVE** | **Averroes** | **4.44** | **134** | P | | **Pn** | **15 59 45.1** | **+1.6** |
| AVE | | | | S | | **Sn** | **16 00 32.7** | **-1.3** |
| **PCBR** | **Castelo Branco** | **4.53** | **40** | *e*P | | **Pn** | **15 59 46.3** | **+1.7** |
| PCBR | | | | *e*S | | **Sn** | **16 00 35.5** | **-0.5** |
| PCBR | | | | A | | A | 16 00 37.0 | |
| | comp=E,3.9nm,0.4s | | | | | | | |
| **LIJA** | **Lijar** | **4.73** | **82** | P | | **Pn** | **15 59 48.2** | **+0.7** |
| LIJA | | | | S | | **Sn** | **16 00 39.8** | **-1.4** |
| **ZHG** | **ZHG** | **4.82** | **127** | P | | **Pn** | **15 59 49.7** | **+0.9** |
| **ZHG** | **ZHG** | **4.82** | **127** | S | | **Sn** | **16 00 42.3** | **-1.1** |
| **MTE** | **Manteigas** | **4.92** | **35** | *e*P | | **Pn** | **15 59 51.3** | **+1.2** |
| MTE | | | | *e*S | | **Sn** | **16 00 45.2** | **-0.7** |
| MTE | | | | A | | A | 16 00 48.5 | |
| | comp=E,3.4nm,0.2s | | | | | | | |
| **ECAB** | **El Cabril** | **4.94** | **69** | P | | **Pn** | **15 59 52.0** | **+1.7** |
| ECAB | | | | S | | **Sn** | **16 00 44.9** | **-1.3** |
| **ECAB** | **El Cabril** | **4.94** | **69** | P | | **Pn** | **15 59 52.1** | **+1.8** |
| ECAB | | | | ⇑*i*Vmb_V | | | 15 59 52.4 | |
| | comp=E,191nm,SNR=3.6 | | | | | | | |
| ECAB | | | | S | | **Sn** | **16 00 43.5** | **-2.7** |
| **PVIS** | **Viseu** | **5.03** | **31** | *e*P | | **Pn** | **15 59 53.1** | **+1.5** |
| PVIS | | | | *e*S | | **Sn** | **16 00 46.6** | **-1.8** |
| **EPLA** | **Plasencia** | **5.46** | **47** | P | | **Pn** | **15 59 59.0** | **+1.6** |
| EPLA | | | | ⇑*i*Vmb_V | | | 16 00 07.9 | |
| | comp=E,103nm,SNR=1.6 | | | | | | | |
| EPLA | | | | S | | **Sn** | **16 00 57.1** | **-1.9** |
| **EADA** | **Adamuz** | **5.60** | **70** | P | | **Pn** | **16 00 00.7** | **+1.2** |
| EADA | | | | S | | **Sn** | **16 01 01.2** | **-1.4** |
| **EADA** | **Adamuz** | **5.60** | **70** | P | | **Pn** | **16 00 01.0** | **+1.5** |
| EADA | | | | ⇑*i*Vmb_V | | | 16 00 02.7 | |
| | comp=E,132nm,SNR=2.6 | | | | | | | |
| EADA | | | | S | | **Sn** | **16 01 00.2** | **-2.4** |
| **POLO** | **Lamas de Olo** | **5.63** | **28** | *e*P | | **Pn** | **16 00 00.9** | **+1.0** |
| POLO | | | | *e*S | | **Sn** | **16 01 01.0** | **-2.3** |
| POLO | | | | A | | A | 16 01 02.6 | |
| | comp=E,1.1nm,0.3s | | | | | | | |
| **MVO** | **Moncorvo** | **5.77** | **34** | *e*P | | **Pn** | **16 00 02.8** | **+1.0** |
| MVO | | | | *e*S | | **Sn** | **16 01 03.8** | **-2.9** |
| MVO | | | | A | | A | 16 01 13.9 | |
| | comp=E,2.2nm,1.0s | | | | | | | |
| **IFR** | **Ifrane** | **5.81** | **118** | S | | **Sn** | **16 01 04.3** | **-3.7** |
| **PCAB** | **Cabril** | **5.84** | **24** | *e*S | | **Sn** | **16 01 06.2** | **-2.3** |
| PCAB | | | | A | | A | 16 01 08.6 | |
| | comp=E,4.1nm,0.3s | | | | | | | |
| **OUK** | **Oukaimeden** | **5.92** | **151** | P | | **Pn** | **16 00 05.2** | **+1.0** |
| **OUK** | **Oukaimeden** | **5.92** | **151** | S | | **Sn** | **16 01 08.8** | **-2.2** |
| **ELOB** | **Lobios** | **5.97** | **24** | P | | **Pn** | **16 00 05.4** | **+0.8** |
| ELOB | | | | ⇑*i*Vmb_V | | | 16 00 06.3 | |
| | comp=E,122nm,SNR=0.9 | | | | | | | |
| ELOB | | | | S | | **Sn** | **16 01 07.5** | **-4.2** |
| **PGAV** | **Gavieira, Arco** | **6.00** | **22** | ⇑*e*P | | **Pn** | **16 00 06.1** | **+1.2** |
| PGAV | | | | *e*S | | **Sn** | **16 01 09.7** | **-2.7** |
| PGAV | | | | A | | A | 16 01 11.2 | |
| | comp=E,2.2nm,0.4s | | | | | | | |
| **EZAM** | **Zamans** | **6.05** | **18** | P | | **Pn** | **16 00 06.6** | **+1.1** |
| EZAM | | | | S | | **Sn** | **16 01 09.1** | **-4.4** |
| **ELGU** | **Los Guajares,** | **6.15** | **84** | P | | **Pn** | **16 00 09.8** | **+2.8** |
| ELGU | | | | ⇑*i*Vmb_V | | | 16 00 15.4 | |
| | comp=E,64nm,SNR=1.7 | | | | | | | |
| ELGU | | | | S | | **Sn** | **16 01 15.0** | **-1.2** |
| **PAB** | **San Pablo** | **6.28** | **58** | P | | **Pn** | **16 00 10.1** | **+1.2** |
| PAB | | | | ⇑*i*Vmb_V | | | 16 00 11.3 | |
| | comp=E,89nm,SNR=2.4 | | | | | | | |
| PAB | | | | S | | **Sn** | **16 01 16.4** | **-3.0** |
| **TTIG** | **Tnine Tigouga,** | **6.32** | **157** | P | | **Pn** | **16 00 07.6** | **-1.8** |
| **TTIG** | **Tnine Tigouga,** | **6.32** | **157** | S | | **Sn** | **16 01 18.8** | **-1.7** |
| **AKLM** | **AKL** | **6.33** | **105** | P | | **Pn** | **16 00 09.4** | **-0.1** |
| **AKLM** | **AKL** | **6.33** | **105** | S | | **Sn** | **16 01 17.3** | **-3.3** |
| **PBRG** | **Braganca** | **6.41** | **32** | *e*P | | **Pn** | **16 00 12.2** | **+1.6** |
| PBRG | | | | *e*S | | **Sn** | **16 01 20.6** | **-2.0** |
| PBRG | | | | A | | A | 16 01 22.0 | |
| | comp=E,2.0nm,0.2s | | | | | | | |
| **PSIM** | **Granatula de C** | **6.41** | **66** | P | | **Pn** | **16 00 12.4** | **+1.8** |
| PSIM | | | | S | | **Sn** | **16 01 19.5** | **-3.1** |
| **TIO** | **Tiouine** | **6.42** | **148** | P | | **Pn** | **16 00 12.5** | **+1.7** |
| **TIO** | **Tiouine** | **6.42** | **148** | P | | **Pn** | **16 00 12.3** | **+1.5** |
| **TIO** | **Tiouine** | **6.42** | **148** | S | | **Sn** | **16 01 21.3** | **-1.6** |
| **MD31** | **MD31** | **6.43** | **122** | P | | **Pn** | **16 00 11.9** | **+1.1** |
| **MD31** | **MD31** | **6.43** | **122** | S | | **Sn** | **16 01 22.6** | **-0.4** |
| **ECAL** | **Calabor** | **6.53** | **31** | P | | **Pn** | **16 00 13.7** | **+1.5** |
| ECAL | | | | ⇑*i*Vmb_V | | | 16 00 22.9 | |
| | comp=E,153nm,SNR=1.1 | | | | | | | |
| ECAL | | | | S | | **Sn** | **16 01 21.1** | **-4.4** |
| **OUZM** | **OUZ** | **6.66** | **144** | P | | **Pn** | **16 00 15.0** | **+0.9** |
| **OUZM** | **OUZ** | **6.66** | **144** | S | | **Sn** | **16 01 26.0** | **-1.9** |
| **EQES** | **Quesada** | **6.68** | **76** | S | | **Sn** | **16 01

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NUBE** | **Las Nubes** | **0.69** | **12** | *e*P | | **Pb** | **16 43 12.1** | **-0.1** |
| **NUBE** | **Las Nubes** | **0.69** | **12** | *i* P | | **Pb** | **16 43 12.1** | **-0.1** |
| NUBE | | | | *i* S | | **Sb** | **16 43 22.3** | **+0.7** |
| NUBE | | | | IAML | | | 16 43 24.8 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **SNJE** | **San Jose** | **0.72** | **26** | *e*P | | **Pb** | **16 43 12.4** | **-0.2** |
| **RTR** | **El Retiro** | **0.73** | **23** | *e*P | | **Pb** | **16 43 12.7** | **-0.1** |
| **PMON** | **Piamonte** | **0.78** | **51** | *i* P | | **Pn** | **16 43 13.2** | **-0.4** |
| PMON | | | | *i* S | | **Sb** | **16 43 24.4** | **+0.6** |
| PMON | | | | IAML | | | 16 43 31.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CEDA** | **San Andres** | **0.78** | **42** | *e*P | | **Pn** | **16 43 13.0** | **-0.6** |
| **CEDA** | **San Andres** | **0.78** | **42** | *i* P | | **Pn** | **16 43 13.0** | **-0.6** |
| CEDA | | | | *i* S | | **Sb** | **16 43 24.2** | **+0.3** |
| CEDA | | | | IAML | | | 16 43 28.8 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **LOAL** | **Lomas de Alarc** | **0.79** | **11** | *i* P | | **Pn** | **16 43 13.6** | **-0.1** |
| LOAL | | | | *i* S | | **Sn** | **16 43 25.6** | **+1.1** |
| LOAL | | | | IAML | | | 16 43 28.1 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **0.81** | **10** | *e*P | | **Pn** | **16 43 13.9** | **-0.2** |
| SLOZ | | | | *e*S | | **Sb** | **16 43 24.8** | **-0.1** |
| **BOQS** | **Boqueron** | **0.82** | **51** | *e*P | | **Pn** | **16 43 14.1** | **-0.2** |
| BOQS | | | | *e*S | | **Sb** | **16 43 25.6** | **+0.5** |
| **SNET** | **Serv Nac Est T** | **0.83** | **56** | *i* P | | **Pn** | **16 43 13.4** | **-0.8** |
| SNET | | | | *i* S | | **Sb** | **16 43 25.8** | **+0.6** |
| SNET | | | | IAML | | | 16 43 28.7 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **PANCS** | **Alcalda de** | **0.83** | **62** | *i* P | | **Pn** | **16 43 13.6** | **-0.7** |
| PANCS | | | | *i* S | | **Sb** | **16 43 24.9** | **-0.4** |
| PANCS | | | | IAML | | | 16 43 25.5 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| **UEES** | **Universidad Ev** | **0.84** | **54** | *e*P | | **Pn** | **16 43 14.1** | **-0.4** |
| **UEES** | **Universidad Ev** | **0.84** | **54** | *i* P | | **Pn** | **16 43 14.0** | **-0.4** |
| UEES | | | | *i* S | | **Sb** | **16 43 26.0** | **+0.5** |
| UEES | | | | IAML | | | 16 43 27.8 | |
| | comp=Z,870nm,1.0s | | | | | | | |
| **UNIC** | **Universidad Ca** | **0.84** | **26** | *i* P | | **Pn** | **16 43 14.3** | **-0.2** |
| UNIC | | | | IAML | | | 16 43 28.9 | |
| | comp=Z,340nm,1.0s | | | | | | | |
| **LOMA** | **Loma Larga** | **0.85** | **60** | *e*P | | **Pn** | **16 43 13.8** | **-0.9** |
| **LOMA** | **Loma Larga** | **0.85** | **60** | *i* P | | **Pn** | **16 43 14.2** | **-0.5** |
| LOMA | | | | *i* S | | **Sb** | **16 43 26.2** | **+0.1** |
| LOMA | | | | IAML | | | 16 43 28.5 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **0.89** | **46** | *i* P | | **Pn** | **16 43 15.1** | **+0.1** |
| QUEZ | | | | *i* S | | **Sb** | **16 43 27.5** | **+0.6** |
| QUEZ | | | | IAML | | | 16 43 29.7 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **LFRS** | **El Faro** | **0.94** | **65** | *e*P | | **Pn** | **16 43 15.2** | **-0.6** |
| LFRS | | | | *e*S | | **Sn** | **16 43 27.6** | **-0.7** |
| **LFU** | **La Fuente** | **0.95** | **57** | *e*P | | **Pn** | **16 43 15.8** | **-0.2** |
| LFU | | | | *e*S | | **Sn** | **16 43 28.3** | **-0.4** |
| **COEG** | **Centro de Oper** | **1.10** | **69** | *e*P | | **Pn** | **16 43 17.5** | **-0.5** |
| **COEG** | **Centro de Oper** | **1.10** | **69** | *i* P | | **Pn** | **16 43 18.0** | **0.0** |
| COEG | | | | *i* S | | **Sn** | **16 43 32.5** | **+0.3** |
| COEG | | | | IAML | | | 16 43 35.3 | |
| | comp=Z,680nm,1.0s | | | | | | | |
| **SNVI** | **San Vicente** | **1.14** | **70** | *e*P | | **Pn** | **16 43 18.8** | **+0.3** |
| SNVI | | | | *e*S | | **Sn** | **16 43 33.6** | **+0.4** |
| **UESV** | **Universidad de** | **1.19** | **70** | *i* P | | **Pn** | **16 43 19.2** | **0.0** |
| UESV | | | | *i* S | | **Sn** | **16 43 34.9** | **+0.5** |
| UESV | | | | IAML | | | 16 43 39.2 | |
| | comp=Z,570nm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.27** | **68** | *i* P | | **Pn** | **16 43 20.0** | **-0.3** |
| SCLA | | | | *i* S | | **Sn** | **16 43 37.4** | **+1.1** |
| SCLA | | | | IAML | | | 16 43 42.5 | |
| | comp=Z,240nm,1.0s | | | | | | | |
| **MTO3** | **Montecristo** | **1.30** | **25** | *e*P | | **Pn** | **16 43 20.1** | **-0.7** |
| **MTO3** | **Montecristo** | **1.30** | **25** | *i* P | | **Pn** | **16 43 20.4** | **-0.5** |
| MTO3 | | | | IAML | | | 16 43 20.6 | |
| | comp=Z,230nm,1.0s | | | | | | | |
| MTO3 | | | | *i* S | | **Sn** | **16 43 36.4** | **-1.0** |
| **PQSS** | **Presa 15 de Se** | **1.40** | **73** | *e*P | | **Pn** | **16 43 21.7** | **-0.3** |
| **PQSS** | **Presa 15 de Se** | **1.40** | **73** | *i* P | | **Pn** | **16 43 21.9** | **-0.1** |
| PQSS | | | | *i* S | | **Sn** | **16 43 39.5** | **+0.1** |
| PQSS | | | | IAML | | | 16 43 41.2 | |
| | comp=Z,410nm,1.0s | | | | | | | |
| **TECA** | **Tecapa** | **1.42** | **79** | *e*P | | **Pn** | **16 43 22.4** | **-0.1** |
| **PACA** | **Pacayal** | **1.59** | **81** | *i* P | | **Pn** | **16 43 25.5** | **+0.8** |
| PACA | | | | *i* S | | **Sn** | **16 43 44.8** | **+0.4** |
| PACA | | | | IAML | | | 16 43 47.3 | |
| | comp=Z,2μm,1.0s | | | | | | | |

*IDC **06** 17:00:50.1±0.6,29.˚14S×175.˚99W, h0km, mb4.2/12, mbtmp4.2/13, ML3.0/1, MS3.3/12, Error ellipse: s-maj=20.6km s-min=16.9km az=4.0*

*NEIC **06** 17:00:53.4±1.5,29.˚5S±0.˚1×176.˚25W±0.˚05, h10km±1km, mb4.8/26, Error ellipse: s-maj=19.5km s-min=8.0km az=359.0*

*NOU **06** 17:01:01.7, 30.˚14S×176.˚53W, h40km, mb4.6/23, Kermadec Islands Region*

**ISC 06 17:00:54.8**±0.6,**29.˚81S**±0.˚06×**176.˚05W**±0.˚08,**h35**km, **n135**,σ2**39**/148,**mb4.7**/21,**MS3.4**/9,**Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **1.72** | **288** | P | **Pn** | **17 01 21.9** | **-0.3** |
| GLKZ | | | | S | **Sn** | **17 01 44.4** | **+1.5** |
| **RAO** | **Raoul Island** | **1.72** | **288** | Pn | **Pn** | **17 01 20.9** | **-1.3** |
| **RAO** | **Raoul Island** | **1.72** | **288** | Pn | **Pn** | **17 01 23.0** | **+0.8** |
| | 517nm,0.3s,baz=86,slow=22,SNR=5.3 | | | | | | |
| RAO | | | | Sn | **Sn** | **17 01 43.7** | **+0.7** |
| | 1μm,0.3s,baz=94,slow=23,SNR=12 | | | | | | |
| **MXZ** | **Matakaoa Point** | **9.04** | **210** | S | **Sn** | **17 04 45.2** | **+1.8** |
| **WMGZ** | **Waiomatatini S** | **9.21** | **208** | P | **Pn** | **17 03 06.2** | **+1.0** |
| WMGZ | | | | S | **Sn** | **17 04 52.4** | **+4.7** |
| **PKGZ** | **Pakihiroa** | **9.40** | **210** | P | **Pn** | **17 03 07.5** | **-0.2** |
| PKGZ | | | | S | **Sn** | **17 04 55.5** | **+3.3** |
| **HAZ** | **Te Kaha** | **9.44** | **211** | P | **Pn** | **17 03 08.4** | **+0.2** |
| HAZ | | | | S | **Sn** | **17 04 55.9** | **+2.9** |
| **PUZ** | **Puketiti** | **9.49** | **208** | P | **Pn** | **17 03 08.1** | **-1.0** |
| PUZ | | | | S | **Sn** | **17 04 57.1** | **+2.5** |
| **TWGZ** | **Tauwhareparae** | **9.70** | **209** | P | **Pn** | **17 03 11.0** | **-0.9** |
| TWGZ | | | | S | **Sn** | **17 05 01.6** | **+2.0** |
| **MWZ** | **Matawai** | **10.03** | **210** | P | **Pn** | **17 03 15.2** | **-1.2** |
| MWZ | | | | S | **Sn** | **17 05 07.5** | **-0.1** |
| **WCZ** | **Waipu Caves** | **10.12** | **230** | P | Pn | 17 03 23.9 | +6.3 |
| **URZ** | **Urewera** | **10.15** | **212** | P | **Pn** | **17 03 16.7** | **-1.3** |
| **URZ** | **Urewera** | **10.15** | **212** | Pn | **Pn** | **17 03 16.4** | **-1.6** |
| | 1.5nm,0.3s,baz=29,slow=19,SNR=12 | | | | | | |
| URZ | | | | Sn | **Sn** | **17 05 10.3** | **-0.3** |
| | 7.8nm,0.3s,baz=162,slow=21,SNR=23 | | | | | | |
| URZ | | | | LR | LR | 17 07 44.0 | |
| | comp=Z,75nm,19.0s,baz=49,slow=38 | | | | | | |
| **URZ** | **Urewera** | **10.15** | **212** | P | **Pn** | **17 03 16.5** | **-1.6** |
| URZ | | | | S | **Sn** | **17 05 11.3** | **+0.7** |
| **RAGZ** | **Rawiri** | **10.21** | **210** | P | **Pn** | **17 03 15.6** | **-3.3** |
| RAGZ | | | | S | **Sn** | **17 05 14.1** | **+2.0** |
| **RIGZ** | **Rimuhau** | **10.24** | **208** | P | **Pn** | **17 03 18.9** | **-0.3** |
| RIGZ | | | | S | **Sn** | **17 05 15.2** | **+2.4** |
| **OUZ** | **Omahuta** | **10.27** | **236** | P | Pn | 17 03 24.9 | +5.3 |
| **SNGZ** | **Shannon Statio** | **10.48** | **210** | P | **Pn** | **17 03 22.4** | **-0.1** |
| SNGZ | | | | S | **Sn** | **17 05 20.0** | **+1.3** |
| **MUGZ** | **Murupara** | **10.49** | **213** | P | **Pn** | **17 03 21.1** | **-1.5** |
| MUGZ | | | | S | **Sn** | **17 05 18.9** | **0.0** |
| **RTZ** | **Ruatahuna** | **10.50** | **211** | Pn | **Pn** | **17 03 20.9** | **-2.0** |
| RTZ | | | | S | **Sn** | **17 05 12.3** | **-7.0** |
| **RTZ** | **Ruatahuna** | **10.50** | **211** | P | **Pn** | **17 03 21.0** | **-2.0** |
| RTZ | | | | S | **Sn** | **17 05 20.1** | **+0.8** |
| **TOZ** | **Tahuroa Road** | **10.57** | **219** | Pn | **Pn** | **17 03 25.4** | **+1.7** |
| **RAHZ** | **Arahi** | **10.70** | **210** | P | **Pn** | **17 03 25.2** | **-0.4** |
| RAHZ | | | | S | **Sn** | **17 05 24.5** | **+0.4** |
| **MTHZ** | **Maungataniwha** | **10.76** | **211** | P | **Pn** | **17 03 24.8** | **-1.6** |
| MTHZ | | | | S | **Sn** | **17 05 27.1** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **11.17** | **211** | P | **Pn** | **17 03 32.8** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **11.17** | **211** | Pn | **Pn** | **17 03 29.9** | **-2.2** |
| BKZ | | | | | **Sn** | **17 05 27.6** | **-8.1** |
| **BKZ** | **Black Stump Fm** | **11.17** | **211** | P | **Pn** | **17 03 28.8** | **-3.3** |
| BKZ | | | | S | **Sn** | **17 05 34.5** | **-1.2** |
| **MCHZ** | **McNeill Hill** | **11.31** | **210** | P | **Pn** | **17 03 30.3** | **-3.6** |
| MCHZ | | | | S | **Sn** | **17 05 39.9** | **+0.9** |
| **KWHZ** | **Kaweka Forest** | **11.41** | **211** | P | **Pn** | **17 03 33.6** | **-1.8** |
| KWHZ | | | | S | **Sn** | **17 05 40.5** | **-1.1** |
| **HIZ** | **Hauiti** | **11.48** | **219** | P | **Pn** | **17 03 36.9** | **+0.6** |
| **HIZ** | **Hauiti** | **11.48** | **219** | Pn | **Pn** | **17 03 35.5** | **-0.8** |
| **HIZ** | **Hauiti** | **11.48** | **219** | P | **Pn** | **17 03 39.5** | **+3.3** |
| **OTVZ** | **Oturere** | **11.56** | **214** | P | **Pn** | **17 03 35.2** | **-2.2** |
| OTVZ | | | | S | **Sn** | **17 05 45.4** | **+0.2** |
| **SNVZ** | **South Ngauruho** | **11.59** | **214** | P | **Pn** | **17 03 38.0** | **+0.1** |
| **KRHZ** | **Kereru** | **11.62** | **210** | P | **Pn** | **17 03 38.0** | **-0.1** |
| KRHZ | | | | S | **Sn** | **17 05 42.6** | **-3.9** |
| **WNVZ** | **Wahianoa** | **11.72** | **214** | P | **Pn** | **17 03 39.6** | **0.0** |
| WNVZ | | | | S | **Sn** | **17 05 49.2** | **0.0** |
| **WPHZ** | **Waipukurau** | **11.93** | **209** | P | **Pn** | **17 03 40.9** | **-1.5** |
| WPHZ | | | | S | **Sn** | **17 05 53.5** | **-0.8** |
| **VRZ** | **Vera Road** | **11.98** | **217** | P | Pn | 17 03 50.9 | +7.8 |
| **BFZ** | **Birch Farm** | **12.53** | **208** | P | **Pn** | **17 03 51.5** | **+0.9** |
| **BFZ** | **Birch Farm** | **12.53** | **208** | Pn | **Pn** | **17 03 47.3** | **-3.3** |
| **BFZ** | **Birch Farm** | **12.53** | **208** | P | **Pn** | **17 03 46.1** | **-4.5** |
| BFZ | | | | S | **Sn** | **17 06 05.0** | **-3.9** |
| **MRZ** | **Mangatainoka R** | **12.79** | **210** | P | **Pn** | **17 03 51.0** | **-3.2** |
| MRZ | | | | S | **Sn** | **17 06 11.1** | **-4.2** |
| **HOWZ** | **Holdsworth Sta** | **13.02** | **210** | P | **Pn** | **17 03 56.1** | **-1.1** |
| HOWZ | | | | S | **Sn** | **17 06 15.3** | **-5.5** |
| **OGWZ** | **Otaki Gorge** | **13.10** | **211** | S | **Sn** | **17 06 15.6** | **-7.2** |
| **CAW** | **Cannon Point** | **13.38** | **210** | P | **Pn** | **17 03 57.6** | **-4.6** |
| CAW | | | | S | **Sn** | **17 06 23.3** | **-6.4** |
| **MSWZ** | **Moikau Station** | **13.56** | **209** | P | Pn | 17 03 58.0 | -6.7 |
| MSWZ | | | | S | **Sn** | **17 06 27.6** | **-6.4** |
| **SNZO** | **South Karori** | **13.71** | **211** | P | **Pn** | **17 04 07.5** | **+0.9** |
| **BHW** | **Baring Head** | **13.71** | **210** | P | **Pn** | **17 04 06.6** | **-0.1** |
| BHW | | | | S | **Sn** | **17 06 31.7** | **-6.0** |
| **CTZ** | **Chatham Island** | **13.90** | **182** | P | **Pn** | **17 04 11.4** | **+2.1** |
| **TUWZ** | **Tuamarina** | **14.15** | **212** | P | **Pn** | **17 04 15.2** | **+2.5** |
| **NNZ** | **Nelson** | **14.25** | **214** | | **Pn** | **17 04 10.5** | **-3.6** |
| **NNZ** | **Nelson** | **14.25** | **214** | P | **Pn** | **17 04 16.3** | **+2.3** |
| **QRZ** | **Quartz Range** | **14.39** | **217** | P | **Pn** | **17 04 14.7** | **-1.3** |
| **QRZ** | **Quartz Range** | **14.39** | **217** | Pn | **Pn** | **17 04 14.5** | **-1.5** |
| **MRNZ** | **Matariki Terra** | **14.70** | **215** | P | **Pn** | **17 04 19.9** | **-0.2** |
| **THZ** | **Tophouse** | **14.90** | **214** | Pn | **Pn** | **17 04 19.6** | **-3.3** |
| **THZ** | **Tophouse** | **14.90** | **214** | P | **Pn** | **17 04 20.0** | **-2.9** |
| **KHZ** | **Kahutara** | **15.11** | **211** | P | **Pn** | **17 04 24.5** | **-1.1** |
| **KHZ** | **Kahutara** | **15.11** | **211** | Pn | **Pn** | **17 04 21.6** | **-4.1** |
| KHZ | | | | IAmb | IAmb | 17 04 37.4 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **GVZ** | **Greta Valley S** | **15.78** | **211** | P | **Pn** | **17 04 32.5** | **-1.8** |
| **LTZ** | **Lake Taylor** | **15.98** | **213** | P | **Pn** | **17 04 36.5** | **-0.5** |
| **INZ** | **Inchbonnie** | **16.34** | **215** | P | **Pn** | **17 04 41.0** | **-0.5** |
| **MQZ** | **McQueen's Vall** | **16.54** | **210** | P | **Pn** | **17 04 41.3** | **-2.6** |
| **MHCZ** | **Mount Hutt** | **16.89** | **212** | P | **Pn** | **17 04 48.0** | **-0.4** |
| **WVZ** | **Waitaha Valley** | **16.95** | **215** | P | **P** | **17 04 50.0** | **-0.7** |
| **RAR** | **Rarotonga** | **16.99** | **64** | LR | LR | 17 09 37.7 | |
| | comp=Z,107nm,19.4s,baz=178,slow=32 | | | | | | |
| **WACZ** | **Wakanui South** | **17.08** | **211** | P | **Pn** | **17 04 50.1** | **-0.7** |
| **RPZ** | **Rata Peaks** | **17.27** | **213** | P | **P** | **17 04 54.5** | **+0.1** |
| **RPZ** | **Rata Peaks** | **17.27** | **213** | P | **P** | **17 04 53.9** | **-0.5** |
| | comp=Z,5.7nm,0.4s,baz=59,slow=19,SNR=11 | | | | | | |
| RPZ | | | | S | Sn | 17 07 53.0 | -11 |
| | comp=Z,7.9nm,0.6s,baz=200,slow=22,SNR=5.6 | | | | | | |
| **RPZ** | **Rata Peaks** | **17.27** | **213** | P | **Pn** | **17 04 52.0** | **-1.1** |
| **ARCZ** | **Arundel** | **17.39** | **212** | P | **Pn** | **17 04 53.6** | **-1.0** |
| **DZM** | **Mont Dzumac** | **17.51** | **292** | P | **Pn** | **17 04 54.3** | **-2.2** |
| | baz=280,slow=4.8,SNR=2.5 | | | | | | |
| DZM | | | | LR | LR | 17 10 04.4 | |
| | comp=Z,106nm,19.1s,baz=90,slow=32 | | | | | | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **NOUC** | **Port Laguerre** | **17.61** | **292** | P | **P** | **17 05 00.6** | **+2.3** |
| **TMZ** | **Timaru** | **17.80** | **212** | P | **Pn** | **17 04 58.4** | **-1.3** |
| **LBZ** | **Lake Benmore** | **18.19** | **213** | P | **Pn** | **17 05 05.1** | **+0.6** |
| **ODZ** | **Otahua Downs** | **18.48** | **211** | P | **Pn** | **17 05 08.0** | **0.0** |
| **JCZ** | **Jackson Bay** | **18.65** | **216** | P | **Pn** | **17 05 10.3** | **+0.1** |
| KOUNC | **Koumac, New Ca** | **20.02** | **293** | P | Pn | 17 05 29.6 | +3.0 |
| **SYZ** | **Scrubby Hill** | **20.30** | **211** | P | Pn | 17 05 29.6 | -0.1 |
| **PPT** | **Papeete** | **27.06** | **69** | LR | LR | 17 14 09.5 | |
| | comp=Z,35nm,21.1s,baz=198,slow=30 | | | | | | |
| **ARMA** | **Armidale** | **27.91** | **261** | P | **P** | **17 06 41.7** | **-0.2** |
| ARMA | | | | IAmb | IAmb | 17 06 57.7 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **EIDS** | **Eidsvold** | **29.40** | **271** | P | **P** | **17 06 53.0** | **-2.1** |
| EIDS | | | | IAmb | IAmb | 17 07 57.0 | |
| | comp=Z,23nm,1.6s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **30.52** | **274** | P | **P** | **17 07 07.3** | **+2.5** |
| **CMSA** | **Cobar Meteorol** | **32.84** | **257** | P | **P** | **17 07 28.6** | **+3.4** |
| **CTA** | **Charters Tower** | **35.38** | **277** | P | **P** | **17 07 49.8** | **+2.4** |
| **CTA** | **Charters Tower** | **35.38** | **277** | P | **P** | **17 07 48.0** | **+0.6** |
| | comp=Z,0.5nm,0.6s,baz=106,slow=10,SNR=23 | | | | | | |
| CTA | | | | LR | LR | 17 21 26.4 | |
| | comp=Z,5.7nm,18.1s,baz=113,slow=35 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **35.38** | **277** | P | **P** | **17 07 49.8** | **+2.4** |
| **CTAO** | **Charters Tower** | **35.38** | **277** | P | **P** | **17 07 48.2** | **+0.7** |
| CTAO | | | | IAmb | IAmb | 17 07 50.2 | |
| | comp=Z,6.6nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **36.26** | **256** | P | **P** | **17 07 57.5** | **+2.7** |
| **STKA** | **Stephens Creek** | **36.26** | **256** | P | **P** | **17 07 57.3** | **+2.6** |
| **STKA** | **Stephens Creek** | **36.26** | **256** | P | **P** | **17 07 56.9** | **+2.1** |
| | comp=Z,8.1nm,0.6s,baz=97,slow=10.0,SNR=20 | | | | | | |
| STKA | | | | LR | LR | 17 22 01.0 | |
| | comp=Z,95nm,18.0s,baz=24,slow=35 | | | | | | |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **HTT** | **Hallett** | **38.29** | **253** | P | **P** | **17 08 14.0** | **+1.9** |
| **LCRK** | **Leigh Creek** | **39.35** | **257** | P | **P** | **17 08 23.0** | **+2.1** |
| **PMG** | **Port Moresby** | **39.91** | **293** | LR | LR | 17 22 57.7 | |
| | comp=Z,42nm,18.7s,baz=45,slow=33 | | | | | | |
| **BBOO** | **Buckleboo** | **40.75** | **253** | P | **P** | **17 08 34.0** | **+1.5** |
| **BBOO** | **Buckleboo** | **40.75** | **253** | P | **P** | **17 08 32.9** | **+0.3** |
| **AS31** | **Alice Springs** | **44.83** | **265** | P | **P** | **17 09 05.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **44.83** | **265** | P | **P** | **17 09 05.7** | **-0.1** |
| | comp=Z,1.1nm,0.4s,baz=106,slow=8.2,SNR=69 | | | | | | |
| ASAR | | | | PcP | **PP** | **17 10 49.7** | **-1.1** |
| | comp=Z,0.6nm,0.6s,baz=120,slow=3.9,SNR=3.1 | | | | | | |
| ASAR | | | | LR | LR | 17 27 30.7 | |
| | comp=Z,123nm,18.8s,baz=105,slow=36 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.59** | **271** | P | **P** | **17 09 11.0** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 17 10 47.8 | |
| | comp=Z,22nm,1.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.76** | **271** | P | **P** | **17 09 12.5** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 17 09 14.6 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.77** | **271** | P | **P** | **17 09 13.1** | **-0.1** |
| **WRA** | **Warramunga Arr** | **45.77** | **271** | P | **P** | **17 09 12.6** | **-0.6** |
| | comp=Z,5.2nm,0.5s,baz=110,slow=7.7,SNR=75 | | | | | | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.79** | **271** | P | **P** | **17 09 12.8** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 17 09 14.7 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **48.85** | **186** | P | P | 17 09 43.2 | +6.8 |
| | comp=Z,1.0nm,1.0s,baz=347,slow=8.9,SNR=6.0 | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **52.35** | **273** | P | **P** | **17 10 04.2** | **+0.6** |
| KNRA | | | | IAmb | IAmb | 17 10 59.8 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **54.05** | **269** | P | **P** | **17 10 17.1** | **+0.9** |
| **FAKI** | **Fak Fak** | **55.74** | **288** | P | **P** | **17 10 28.3** | **-0.1** |
| **CASY** | **Casey** | **56.45** | **208** | P | **P** | **17 10 36.2** | **+3.6** |
| CASY | | | | IAmb | IAmb | 17 10 37.8 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **57.28** | **313** | LR | LR | 17 35 43.3 | |
| | comp=Z,15nm,18.4s,baz=82,slow=37 | | | | | | |
| **RPN** | **Rapa Nui** | **57.96** | **105** | P | P | 17 10 47.1 | +3.1 |
| **MORW** | **Morawa** | **58.31** | **252** | P | **P** | **17 10 44.6** | **-1.8** |
| **QSPA** | **South Pole Qui** | **60.30** | **180** | P | P | 17 11 03.4 | +3.7 |
| QSPA | | | | IAmb | IAmb | 17 11 07.1 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.30** | **180** | P | P | 17 11 05.0 | +5.3 |
| | comp=Z,4.7nm,0.9s,baz=66,slow=1.9,SNR=15 | | | | | | |
| QSPA | | | | LR | LR | 17 33 43.0 | |
| | comp=Z,27nm,19.3s,baz=36,slow=32 | | | | | | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **KAPI** | **Kappang** | **65.17** | **279** | P | **P** | **17 11 32.1** | **-0.7** |
| **DAV** | **Davao City (W)** | **66.93** | **293** | LR | LR | 17 39 04.4 | |
| | comp=Z,158nm,20.3s,baz=292,slow=34 | | | | | | |
| **SMAI** | **San Martin Ant** | **69.34** | **158** | P | P | 17 12 03.6 | +5.3 |
| **BELA** | **Belgrano 2** | **70.13** | **172** | P | P | 17 12 06.9 | +3.7 |
| **MAW** | **Mawson** | **73.44** | **200** | P | **P** | **17 12 26.5** | **+3.4** |
| | comp=Z,3.0nm,0.8s,baz=134,slow=5.5,SNR=3.8 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **78.69** | **178** | P | P | 17 12 57.1 | +4.1 |
| | comp=Z,2.6nm,1.0s,baz=163,slow=20,SNR=5.1 | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **78.74** | **324** | P | **P** | **17 12 51.0** | **-2.6** |
| | comp=Z,1.5nm,0.7s,baz=147,slow=2.9,SNR=2.7 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **82.72** | **331** | LR | LR | 17 45 03.2 | |
| | comp=Z,22nm,19.7s,baz=190,slow=32 | | | | | | |
| **KSRS** | **Korea Array** | **85.01** | **319** | P | **P** | **17 13 25.4** | **-1.1** |
| | comp=Z,0.7nm,0.8s,baz=123,slow=6.7,SNR=1.9 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.67** | **42** | P | **P** | **17 13 32.9** | **-2.2** |
| | comp=Z,2.7nm,0.9s,baz=287,slow=7.9,SNR=5.5 | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **PRN** | **Pahroc Range** | **87.92** | **44** | IAmb | IAmb | 17 13 56.1 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **MTPU** | **Mount Pierson** | **90.08** | **45** | P | **P** | **17 13 53.6** | **+2.1** |
| MTPU | | | | IAmb | IAmb | 17 14 07.0 | |
| | comp=Z,21nm,1.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.66** | **56** | P | **P** | **17 13 52.8** | **-1.2** |
| | comp=Z,0.6nm,0.9s,baz=282,slow=32,SNR=4.2 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| KURBB | **Kurchatov Arra** | **121.90** | **314** | PKP | **PKiKP** | **17 19 45.0** | **-0.1** |
| | comp=Z,0.2nm,0.6s,baz=98,slow=2.4,SNR=4.4 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **131.22** | **357** | PKP | **PKiKP** | **17 20 01.8** | **-1.3** |
| | comp=Z,7.6nm,0.8s,baz=67,slow=3.7,SNR=7.7 | | | | | | |
| **FINES** | **FINESS Array B** | **145.15** | **342** | PKP | **PKPbc** | **17 20 26.7** | **-0.8** |
| | comp=Z,2.5nm,0.6s,baz=65,slow=3.7,SNR=16 | | | | | | |
| **NB2** | **NORSAR Subarra** | **148.40** | **353** | PKP | **PKiKP** | **17 20 38.0** | **-0.5** |
| | comp=Z,0.7nm,0.6s,baz=14,slow=3.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **148.40** | **353** | PKPbc | **PKPbc** | **17 20 35.2** | **-1.8** |
| | comp=Z,2.4nm,0.9s,baz=17,slow=4.6,SNR=5.4 | | | | | | |
| NBO00 | **NORSAR Array S** | **148.45** | **354** | PKPdf | **PKPbc** | **17 20 34.7** | **-2.3** |
| **HFS** | **Hagfors** | **148.97** | **351** | PKPbc | **PKPbc** | **17 20 37.0** | **-1.4** |
| | comp=Z,1.7nm,0.7s,baz=104,slow=10,SNR=2.5 | | | | | | |
| AKASG | **Malin Array Be** | **151.82** | **325** | PKPbc | **PKiKP** | **17 20 46.9** | **+1.0** |
| | comp=Z,2.8nm,0.6s,baz=45,slow=2.7,SNR=6.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.29** | **172** | PKPab | **PKPab** | **17 21 47.8** | **+3.0** |
| | comp=Z,0.8nm,0.5s,baz=158,slow=1.6,SNR=3.8 | | | | | | |

*MOS **06** 17:05:44.7±0.8,51.˚68N×173.˚36W, h36km, mb4.7/62, Error ellipse: s-maj=8.5km s-min=5.9km az=87.6*

*AEIC **06** 17:05:44.9±2.3,51.˚54N±0.˚05×173.˚36W±0.˚06, h26km±4km, Error ellipse: s-maj=7.9km s-min=5.3km az=179.0*

*NEIC **06** 17:05:47.2±1.9,51.˚63N±0.˚07×173.˚36W±0.˚07, h43km±7km, mb4.6/385, ML3.9(AEIC), Error ellipse: s-maj=10.7km s-min=6.2km az=174.0*

*IDC **06** 17:05:48.8±3.2,51.˚75N×173.˚34W, h64km±28km, mb3.9/23, mbtmp4.2/26, ML4.0/3, MS3.6/47, Error ellipse: s-maj=20.8km s-min=11.5km az=176.0*

**ISC 06 17:05:46.3**±0.5,**51.˚61N**±0.˚08×**173.˚34W**±0.˚04,**h37**km, **n579**,σ1**912**/430,**mb4.5**/252,**MS3.6**/47,**13C-2D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOFP** | **Korovin Flat P** | **0.82** | **325** | | **Pn** | **17 06 01.1** | **-0.2** |
| **KOKL** | **Mount Kliuchef** | **0.89** | **324** | | **Pn** | **17 06 02.1** | **-0.3** |
| **KONE** | **Korovin Northe** | **0.92** | **329** | | **Pn** | **17 06 03.0** | **+0.3** |
| **GSMY** | **Great Sitkin M** | **1.74** | **286** | | **Pn** | **17 06 12.3** | **-1.6** |
| **GSTR** | **Great Sitkin T** | **1.75** | **287** | | **Pn** | **17 06 12.9** | **-1.2** |
| **GSCK** | **Great Sitkin C** | **1.80** | **284** | | **Pn** | **17 06 13.2** | **-1.5** |
| **GSTD** | **Great Sitkin T** | **1.80** | **286** | | **Pn** | **17 06 13.3** | **-1.4** |
| GSTD | | | | | **Sn** | **17 06 37.9** | **+1.6** |
| **ADAG** | **Mount Adagdak** | **2.06** | **282** | | **Pn** | **17 06 17.8** | **-0.5** |
| **ADK** | **Adak** | **2.10** | **279** | | **Pn** | **17 06 17.8** | **-1.0** |
| **ADK** | **Adak** | **2.10** | **279** | P | **Pn

**I23K Minto, Yukon-K** 18.33 33 IAmb IAmb 17 10 01.0
comp=Z,35nm,1.1s
**HMT Hamilton** 18.33 50 P **Pn** **17 09 57.7 +0.4**
HMT IAmb IAmb 17 10 04.2
comp=Z,22nm,1.0s
**WRH Wood River Hil** 18.39 36 P **P** **17 09 55.3 -2.4**
**D19K Kuna River** 18.47 18 P **P** **17 09 58.4 -0.1**
**SUCK Suckling Hills** 18.50 51 P **P** **17 09 56.1 -2.8**
SUCK IAmb IAmb 17 10 35.7
comp=Z,86nm,1.5s
**N25K Chitina, Valde** 18.56 46 P **P** **17 09 58.6 -1.0**
**PAX Paxson** 18.70 42 P **P** **17 10 00.8 -0.4**
**PAX Paxson** 18.70 42 P **P** **17 10 00.8 -0.4**
PAX pmax pmax
comp=Z,4.0nm,0.8s
**COLA College** 18.70 35 *i* P **P** **17 10 00.0 -1.0**
**C19K Lookout Ridge** 18.74 15 IAmb IAmb 17 10 39.9
comp=Z,27nm,1.2s
**HDA Harding Lake** 18.78 37 IAmb IAmb 17 10 04.1
comp=Z,15nm,0.7s
**GLB Gilahina Butte** 18.86 47 P **P** **17 10 01.8 -1.2**
**CRQM Cirque** 18.98 49 P **P** **17 10 02.5 -1.9**
CRQM IAmb IAmb 17 10 08.5
comp=Z,21nm,1.0s
**POKR Poker Plat Res** 18.98 35 **P** **17 10 03.9 -0.3**
**ILAR Eielson Array** 18.99 36 P **P** **17 10 01.7 -2.6**
**ILAR Eielson Array** 18.99 36 P **P** **17 10 02.4 -1.9**
comp=Z,1.0nm,0.3s,baz=235,slow=8.9,SNR=57
ILAR LR LR 17 18 08.3
comp=Z,319nm,18.4s,baz=244,slow=39
comp=Z,12nm,0.9s
**IL03 Eielson Array** 19.00 36 P **P** **17 10 02.6 -1.8**
**WAX Waxell Ridge** 19.04 50 P **P** **17 10 05.1 +0.2**
WAX IAmb IAmb 17 10 09.7
comp=Z,25nm,1.0s
**G23K Bananza Creek** 19.10 29 P **Pn** **17 10 06.2 -0.3**
**TGL Tana Glacier** 19.13 50 P **P** **17 10 06.2 +0.3**
**BILL Bilibino** 19.23 337 P **P** **17 10 07.1 +0.2**
**BILL Bilibino** 19.23 337 ⇓ *e*P **Pn** **17 10 07.7 -0.4**
BILL pmax pmax
comp=Z,12nm,1.7s
BILL MLR MLR
comp=Z,200nm,16.0s
**H24K Noodor Dome** 19.23 32 IAmb IAmb 17 10 09.3
comp=Z,41nm,0.9s
**ISLE Juniper Island** 19.32 50 IAmb IAmb 17 10 15.1
comp=Z,15nm,0.8s
**COLD Coldfoot** 19.39 27 P **P** **17 10 08.0 -0.6**
**MENT Mentasta** 19.42 43 P **P** **17 10 09.0 -0.1**
**J25K Salcha River,** 19.48 37 IAmb IAmb 17 10 10.1
comp=Z,36nm,0.8s
**M26K Nabesna, AK** 19.54 45 P **P** **17 10 10.7 +0.3**
**GRNC Granite Creek** 19.63 50 P **P** **17 10 11.6 0.0**
**TABL Table Mountain** 19.86 51 IAmb IAmb 17 10 22.1
comp=Z,20nm,1.0s
**PRP Porcupine Dome** 19.87 35 P **P** **17 10 13.6 -0.4**
PRP IAmb IAmb 17 10 15.5
comp=Z,17nm,1.0s
**G24K Hadweenzic Riv** 19.88 31 IAmb IAmb 17 10 17.4
comp=Z,30nm,0.9s
**CTGM Chitina Glacie** 19.89 49 IAmb IAmb 17 10 17.9
comp=Z,18nm,1.0s
**D22K Ayikyak River** 19.94 22 IAmb IAmb 17 10 41.8
comp=Z,34nm,1.5s
**LOGN Logan Glacier** 20.01 50 IAmb IAmb 17 10 19.8
comp=Z,22nm,1.1s
**J26L Joseph Creek** 20.12 39 IAmb IAmb 17 10 18.2
comp=Z,46nm,0.8s
**L27K Beaver Creek,** 20.27 43 Pn 17 10 20.3 -0.1
**BCAR Beaver Creek A** 20.29 43 P **P** **17 10 18.6 +0.1**
**BCPM Bancas Point** 20.51 53 IAmb IAmb 17 10 24.2
comp=Z,32nm,1.0s
**FYU Fort Yukon** 20.53 32 IAmb IAmb 17 10 27.5
comp=Z,33nm,1.0s
**TOLK Toolik Lake Re** 20.54 25 IAmb IAmb 17 10 24.1
comp=Z,19nm,0.9s
**I26K Coal Creek Min** 20.64 37 IAmb IAmb 17 10 23.1
comp=Z,51nm,0.9s
**O29M Mount Kennedy** 21.09 52 P **P** **17 10 27.4 +0.2**
O29M IAmb IAmb 17 10 50.1
comp=Z,11nm,0.7s
**C23K Itkillik River** 21.15 22 IAmb IAmb 17 10 29.2
comp=Z,17nm,0.9s
**BMAR Burnt Mountain** 21.23 31 P **P** **17 10 29.6 +1.0**
**P29M Windy Craggy** 21.42 54 IAmb IAmb 17 10 34.8
comp=Z,30nm,0.9s
**SEY Seymchan** 21.43 315 P **P** **17 10 28.9 -1.7**
comp=Z,2.2nm,0.8s,baz=86,slow=14,SNR=3.4
comp=Z,2.2nm,0.8s
**SEY Seymchan** 21.43 315 *ce*P **P** **17 10 31.0 +0.3**
SEY pmax pmax
comp=Z,7.0nm,1.3s
**MA2 Magadan** 21.56 306 LR LR 17 18 52.7
comp=Z,150nm,18.1s,baz=102,slow=36
**L29M L29M** 21.89 45 IAmb IAmb 17 10 40.1
comp=Z,18nm,0.9s
**I28M Miner Creek** 21.92 38 P **P** **17 10 35.3 -0.7**
I28M IAmb IAmb 17 10 38.1
comp=Z,18nm,0.8s
**S31K Pelican** 22.11 59 IAmb IAmb 17 10 46.0
comp=Z,27nm,0.9s
**K29M Barlow Dome** 22.35 43 IAmb IAmb 17 10 44.0
comp=Z,33nm,0.8s
**I29M Ogilvie Camp,** 22.52 39 IAmb IAmb 17 10 55.6
comp=Z,16nm,0.9s
**E27K Coleen River** 22.59 31 IAmb IAmb 17 10 45.9
comp=Z,16nm,1.1s
**H29M Whitestone** 22.81 37 IAmb IAmb 17 10 46.4
comp=Z,32nm,0.8s
**J30M Hart River** 23.06 42 P **P** **17 10 47.9 -0.3**
**G29M Pine Creek** 23.21 35 IAmb IAmb 17 10 52.0
comp=Z,20nm,0.9s
**I30M Mount Dempster** 23.23 40 IAmb IAmb 17 10 50.2
comp=Z,12nm,0.7s
**D27M Malcolm River** 23.35 29 IAmb IAmb 17 10 52.5
comp=Z,17nm,1.5s
**E28M Babbage River** 23.46 31 IAmb IAmb 17 10 53.4
comp=Z,13nm,1.1s
**EPYK Eagle Plains** 23.49 37 IAmb IAmb 17 10 55.5
comp=Z,10nm,0.8s
**E29M Blow River** 23.89 32 IAmb IAmb 17 10 58.0
comp=Z,26nm,1.0s
**G30M tAoh Zraii Nji** 23.90 36 IAmb IAmb 17 10 56.5
comp=Z,16nm,1.1s
**Q32M Nakina River** 24.19 56 IAmb IAmb 17 11 03.4
comp=Z,18nm,0.9s
**G31M Satah River** 24.60 37 IAmb IAmb 17 11 36.5
comp=Z,16nm,1.4s
**S34M Telegraph Cree** 24.83 59 IAmb IAmb 17 11 08.3
comp=Z,8.4nm,0.8s
**V35K Ketchikan** 24.84 65 IAmb IAmb 17 11 51.1
comp=Z,16nm,1.3s
**R33M Jennings River** 24.86 55 IAmb IAmb 17 11 40.5
comp=Z,13nm,1.4s
**INK Inuvik** 25.34 34 P **P** **17 11 08.3 -0.9**
INK IAmb IAmb 17 11 10.9
comp=Z,27nm,1.1s
**INK Inuvik** 25.34 34 LR LR 17 22 15.8
comp=Z,220nm,19.2s,baz=240,slow=39
**INK Inuvik** 25.34 34 P **P** **17 11 08.3 -0.9**
INK pmax pmax
comp=Z,27nm,1.1s
**DLBC Dease Lake** 25.38 57 IAmb IAmb 17 11 14.9
comp=Z,18nm,0.9s
**T35M Bob Quinn** 25.38 61 IAmb IAmb 17 11 17.3
comp=Z,9.7nm,1.0s
**BBB Bella Bella** 27.58 71 LR LR 17 21 15.1
comp=Z,85nm,19.9s,baz=296,slow=34
**YSS Yuzh-Sakhalins** 28.68 278 P **P** **17 11 39.5 +0.2**
YSS IAmb IAmb 17 11 54.2
comp=Z,21nm,1.2s
**YSS Yuzh-Sakhalins** 28.68 278 *e*P **P** **17 11 40.1 +0.7**
YSS *e*S **S** **17 16 26.7 +1.1**
YSS pmax pmax
comp=Z,10.0nm,1.2s
YSS MLR MLR
comp=E,200nm,15.0s
**JKA Kamikawa-asahi** 30.11 273 P **P** **17 11 53.2 +1.2**
**ASAJ Asahikawa** 30.11 273 LR LR 17 24 14.2
comp=E,47nm,19.5s,baz=148,slow=37
**ASAJ Asahikawa** 30.11 273 P **P** **17 11 53.3 +1.2**
ASAJ pmax pmax
comp=Z,27nm,1.1s
**YAK Yakutsk** 31.83 311 LR LR 17 25 21.0
comp=Z,199nm,18.3s,baz=89,slow=37

**TIXI Tiksi** 32.14 330 LR LR 17 26 47.2
comp=Z,97nm,18.2s,baz=170,slow=39
**GNW Green Mountain** 32.47 77 P **P** **17 12 14.1 +1.3**
GNW IAmb IAmb 17 12 16.0
comp=Z,6.2nm,1.0s
**YKA Yellowknife Ar** 32.58 47 P **P** **17 12 13.6 0.0**
**YKA Yellowknife Ar** 32.58 47 P **P** **17 12 13.3 -0.3**
comp=Z,1.7nm,0.8s,baz=273,slow=11,SNR=6.0
YKA PcP **PcP** **17 14 57.0 -2.0**
comp=Z,0.8nm,0.8s,baz=312,slow=4.1,SNR=2.4
YKA LR LR 17 27 10.4
comp=Z,330nm,18.6s,baz=286,slow=39
comp=Z,1.7nm,0.8s
**YKA Yellowknife Ar** 32.58 47 P **P** **17 12 13.6 0.0**
**LON Longmire** 33.45 78 P **P** **17 12 23.9 +2.4**
LON IAmb IAmb 17 12 25.1
comp=Z,3.1nm,0.7s
**LON Longmire** 33.45 78 P **P** **17 12 23.9 +2.4**
LON pmax pmax
comp=Z,3.0nm,0.7s
**LTY Liberty** 33.91 76 P **P** **17 12 27.1 +1.6**
**B08A Colville Reser** 34.22 74 IAmb IAmb 17 12 30.6
comp=Z,8.4nm,0.9s
**H04A Detroit Lake** 34.22 81 P **P** **17 12 29.6 +1.4**
H04A IAmb IAmb 17 12 31.0
comp=Z,8.3nm,0.9s
**KLR Kul'dur** 34.38 288 LR LR 17 26 07.4
comp=Z,92nm,20.9s,baz=66,slow=36
**MXC Moxie City** 34.46 77 P **P** **17 12 30.6 +0.4**
MXC IAmb IAmb 17 12 45.8
comp=Z,2.7nm,0.7s
**I04A Tendick Farm,** 34.54 83 P **P** **17 12 32.8 +1.8**
I04A IAmb IAmb 17 12 33.8
comp=Z,10.0nm,1.0s
**L02F Cave Junction** 34.72 86 P **P** **17 12 34.9 +2.5**
L02F IAmb IAmb 17 12 48.4
comp=Z,8.8nm,0.9s
**I05D Terrebonne, OR** 34.92 81 P **P** **17 12 35.9 +1.6**
I05D IAmb IAmb 17 12 37.0
comp=Z,8.4nm,0.9s
**HAWA Hanford** 35.01 77 IAmb IAmb 17 12 37.9
comp=Z,9.2nm,0.9s
**D08A Wollman Farm,** 35.06 75 IAmb IAmb 17 12 37.5
comp=Z,5.9nm,0.8s
**C09A Chrisman Ranch** 35.11 74 IAmb IAmb 17 12 38.0
comp=Z,10.0nm,1.1s
**ZEA Zeya** 35.18 297 *e*P **P** **17 12 35.3 -0.9**
ZEA *e* 17 22 57.3
**H11N2 WAKE ISLAND Hy** 35.39 213 T T 17 50 37.6
baz=21,slow=76,SNR=23
**H11N3 WAKE ISLAND Hy** 35.40 213 T T 17 50 38.3
baz=21,slow=76,SNR=23
**H11N1 WAKE ISLAND Hy** 35.41 213 T T 17 50 41.4
baz=21,slow=76,SNR=18
**PINE Pine Mountain** 35.45 82 P **P** **17 12 41.4 +2.4**
PINE IAmb IAmb 17 12 42.2
comp=Z,7.3nm,1.1s
**YBH Yreka Blue Hor** 35.47 86 **P** **17 12 40.6 +1.6**
YBH IAmb IAmb 17 12 55.7
comp=Z,4.5nm,1.1s
**YBH Yreka Blue Hor** 35.47 86 P **P** **17 12 40.6 +1.6**
YBH pmax pmax
comp=Z,4.0nm,1.1s
**J05D Fort Rock, OR** 35.54 83 P **P** **17 12 41.1 +1.5**
J05D IAmb IAmb 17 12 42.9
comp=Z,4.5nm,0.9s
**NEW Newport** 35.58 73 IAmb IAmb 17 12 42.0
comp=Z,7.6nm,0.9s
**NEW Newport** 35.58 73 LR LR 17 25 01.7
comp=Z,62nm,21.5s,baz=322,slow=32
**E09A Wood Farm, Sta** 35.79 76 P **P** **17 12 42.5 +0.9**
E09A IAmb IAmb 17 12 43.7
comp=Z,9.2nm,1.0s
**G08A Pilot Rock** 35.90 78 P **P** **17 12 41.9 -0.8**
**I07A Izee** 36.18 80 IAmb IAmb 17 12 47.8
comp=Z,4.9nm,0.9s
**O02D Mt. Diablo Mer** 36.30 88 P **P** **17 12 48.1 +2.0**
O02D IAmb IAmb 17 13 02.3
comp=Z,9.1nm,0.9s
**HEH HeiHe** 36.48 292 *e*P **P** **17 12 45.8 -1.6**
HEH pmax pmax
comp=Z,6.0nm,0.9s
**H11S1 WAKE ISLAND Hy** 36.59 213 T T 17 51 59.0
baz=20,slow=76,SNR=27
**H11S2 WAKE ISLAND Hy** 36.61 213 T T 17 52 00.2
baz=20,slow=76,SNR=21
**H11S3 WAKE ISLAND Hy** 36.61 213 T T 17 52 00.3
baz=20,slow=76,SNR=11
**F10A Beach Ranch, E** 36.61 76 P **P** **17 12 47.8 -1.0**
**USA0B Ussuriysk Arra** 36.63 280 P **P** **17 12 46.7 -2.1**
USA0B IAmb IAmb 17 12 48.5
comp=Z,5.7nm,0.8s
**USA0B Ussuriysk Arra** 36.63 280 *i* P **P** **17 12 46.4 -2.4**
**USRK Ussuriysk Ar.** 36.63 280 P **P** **17 12 47.2 -1.6**
**USRK Ussuriysk Ar.** 36.63 280 P **P** **17 12 47.7 -1.1**
comp=Z,6.2nm,1.0s,baz=64,slow=11,SNR=5.1
USRK LR LR 17 27 41.4
comp=Z,78nm,20.7s,baz=53,slow=36
comp=Z,6.2nm,1.0s
**MJAR Matsushiro Arr** 37.20 265 LR LR 17 25 20.8
comp=Z,75nm,20.9s,baz=123,slow=32
**J08A Circle Bar Ran** 37.20 81 IAmb IAmb 17 12 56.3
comp=Z,4.1nm,0.7s
**VLA Vladivostok** 37.27 279 *i* P **P** **17 12 54.5 +0.3**
VLA pmax pmax
comp=Z,18nm,1.1s
**WVOR Wild Horse Val** 37.60 82 IAmb IAmb 17 12 59.8
comp=Z,5.3nm,0.9s
**MDJ Mudanjiang** 37.88 283 P **P** **17 13 00.8 +1.4**
MDJ pmax pmax
comp=Z,5.0nm,1.0s
**MSHR Mys Shultsa** 38.01 279 *ce*P **P** **17 13 00.8 +0.3**
MSHR pmax pmax
comp=Z,10.0nm,1.3s
**RES Resolute Bay** 38.11 25 LR LR 17 32 44.4
comp=Z,151nm,18.7s,baz=320,slow=42
**MSO Missoula** 38.16 73 IAmb IAmb 17 13 03.7
comp=Z,5.5nm,0.9s
**BNX BinXian** 38.62 285 ⇓ P **P** **17 13 05.3 -0.3**
BNX pmax pmax
comp=Z,6.0nm,0.9s
**PAHR Pah Rah Range** 38.70 86 P **P** **17 13 06.4 -0.1**
PAHR IAmb IAmb 17 13 21.9
comp=Z,9.1nm,1.0s
**PNTR Pine Nut** 38.93 87 IAmb IAmb 17 13 24.3
comp=Z,12nm,0.9s
**CMB Columbia Colle** 39.08 89 P **P** **17 13 09.1 -0.5**
CMB IAmb IAmb 17 13 25.2
comp=Z,9.1nm,1.5s
**CMB Columbia Colle** 39.08 89 P **P** **17 13 09.1 -0.5**
CMB pmax pmax
comp=Z,9.0nm,1.5s
**WAKR Walker** 39.38 88 **P** **17 13 12.6 +0.3**
WAKR IAmb IAmb 17 13 28.1
comp=Z,8.0nm,1.1s
**BMN Battle Mountai** 39.61 84 P **P** **17 13 15.3 +1.1**
**BMN Battle Mountai** 39.61 84 P **P** **17 13 15.3 +1.1**
BMN pmax pmax
comp=Z,3.0nm,1.0s
**DLMT Dillon** 39.71 74 P **P** **17 13 15.2 +0.3**
DLMT IAmb IAmb 17 13 18.5
comp=Z,6.3nm,1.2s
**MCMT McKenzie Canyo** 39.84 75 P **P** **17 13 16.5 +0.4**
**KVN Kaiserville** 39.89 86 P **P** **17 13 17.4 +0.9**
**KVN Kaiserville** 39.89 86 P **P** **17 13 17.4 +0.9**
KVN pmax pmax
comp=Z,4.0nm,1.0s
**EGMT Eagleton** 40.04 69 P **P** **17 13 18.2 +0.7**
**NVAR Mina Array Bea** 40.13 87 P **P** **17 13 18.6 +0.1**
comp=Z,3.2nm,0.9s,baz=291,slow=7.6,SNR=5.1
comp=Z,3.2nm,0.9s
**MDPB Devils Postpil** 40.14 89 IAmb IAmb 17 13 34.4
comp=Z,9.0nm,0.9s
**BOZ Bozeman (W)** 40.17 73 IAmb IAmb 17 13 20.5
comp=Z,5.7nm,0.8s
**OMMB Old Mammoth Mi** 40.20 88 IAmb IAmb 17 13 35.7
comp=Z,18nm,1.5s
**ELK Elko** 40.66 82 P **P** **17 13 22.2 -0.7**
**ELK Elko** 40.66 82 LR LR 17 27 35.3
comp=Z,92nm,19.3s,baz=326,slow=32
**ELK Elko** 40.66 82 P **P** **17 13 22.2 -0.7**
ELK pmax pmax
comp=Z,3.0nm,0.9s
**YHL Hebgen Lake** 40.83 74 IAmb IAmb 17 13 26.4
comp=Z,6.0nm,0.9s
**YHB Horse Butte** 40.88 74 IAmb IAmb 17 13 23.1

comp=Z,5.3nm,0.9s
**DSP Deep Springs** 40.99 88 P **P** **17 13 25.9 +0.6**
DSP IAmb IAmb 17 13 41.4
comp=Z,7.0nm,1.0s
**TPH Tonopah** 41.02 87 P **P** **17 13 26.4 +0.5**
**TPH Tonopah** 41.02 87 P **P** **17 13 26.4 +0.5**
TPH pmax pmax
comp=Z,22nm,0.9s
**MZP Montezuma Peak** 41.16 87 P **P** **17 13 28.0 +1.0**
**YNR Norris Junctio** 41.21 74 P **P** **17 13 28.0 +0.5**
YNR IAmb IAmb 17 13 30.5
comp=Z,11nm,0.9s
**GCMT Greycliff** 41.24 72 P **P** **17 13 27.6 +0.1**
**YFT Old Faithful** 41.26 74 P **P** **17 13 27.6 -0.2**
**H17A Grant Village** 41.45 74 IAmb IAmb 17 13 32.8
comp=Z,5.3nm,0.8s
**FLWY Flagg Ranch** 41.54 75 IAmb IAmb 17 13 52.8
comp=Z,7.4nm,1.1s
**HVU Hansel Valley** 41.58 79 P **P** **17 13 31.4 +1.1**
**HVU Hansel Valley** 41.58 79 P **P** **17 13 31.4 +1.1**
HVU pmax pmax
comp=Z,4.0nm,0.8s
**ISA Isabella, Lake** 41.76 90 P **P** **17 13 32.4 +0.6**
**ISA Isabella, Lake** 41.76 90 P **P** **17 13 32.4 +0.6**
ISA pmax pmax
comp=Z,7.0nm,1.1s
**RLMT Red Lodge** 41.83 73 IAmb IAmb 17 13 34.8
comp=Z,14nm,1.0s
**LAO LASA Array** 42.78 69 P **P** **17 13 40.6 +0.6**
LAO IAmb IAmb 17 14 09.7
comp=Z,12nm,0.7s
**TCUT Toone Canyon** 42.80 79 P **P** **17 13 41.3 +0.9**
**PSUT Pine Spring** 42.84 84 P **P** **17 13 40.9 +0.2**
**BW06 Boulder Array** 42.97 76 P **P** **17 13 41.9 +0.2**
BW06 IAmb IAmb 17 13 43.6
comp=Z,7.5nm,0.8s
**PD31 Pinedale Array** 42.97 76 IAmb IAmb 17 13 43.6
comp=Z,7.2nm,0.8s
**PDAR Pinedale Array** 42.97 76 P **P** **17 13 41.7 -0.1**
comp=Z,5.4nm,0.7s,baz=308,slow=4.4,SNR=47
PDAR LR LR 17 31 28.8
comp=Z,39nm,18.4s,baz=290,slow=36
comp=Z,5.4nm,0.7s
**GSC Goldstone, Bar** 43.03 89 P **P** **17 13 42.6 +0.4**
GSC IAmb IAmb 17 13 57.8
comp=Z,12nm,1.0s
**GSC Goldstone, Bar** 43.03 89 P **P** **17 13 42.6 +0.4**
GSC pmax pmax
comp=Z,12nm,1.0s
**KSRS Korea Array** 43.03 275 P **P** **17 13 43.0 +1.0**
comp=Z,5.6nm,0.9s,baz=52,slow=7.9,SNR=14
comp=Z,5.6nm,0.9s
**CCUT Cedar City** 43.75 84 P **P** **17 13 48.9 +0.8**
CCUT IAmb IAmb 17 14 02.7
comp=Z,9.4nm,1.5s
**MVU Marysvale** 43.87 82 P **P** **17 13 48.7 -0.4**
MVU IAmb IAmb 17 14 04.2
comp=Z,14nm,0.9s
**MSU Marysvale** 43.89 82 P **P** **17 13 49.6 +0.4**
**MSU Marysvale** 43.89 82 P **P** **17 13 49.6 +0.4**
**V12A Nelson** 43.98 88 P **P** **17 13 50.5 +0.8**
V12A IAmb IAmb 17 14 05.8
comp=Z,11nm,1.4s
**JNU Nakatsue** 43.99 268 P **P** **17 13 49.8 -0.1**
JNU IAmb IAmb 17 13 54.4
comp=Z,22nm,1.1s
**TMUT Trail Mountain** 44.01 81 P **P** **17 13 51.5 +1.3**
TMUT IAmb IAmb 17 14 08.2
comp=Z,5.2nm,0.9s
**TJN Taejon** 44.06 274 *ce*P **P** **17 13 49.3 -1.0**
**LCMT Little Creek M** 44.16 85 P **P** **17 13 53.1 +1.9**
**P17A Butcher Ranch,** 44.19 80 P **P** **17 13 52.0 +0.5**
**RDMU Red Mountain** 44.24 78 IAmb IAmb 17 13 54.2
comp=Z,8.6nm,0.9s
**Q16A Castle Valley** 44.26 81 P **P** **17 13 52.6 +0.4**
Q16A IAmb IAmb 17 14 07.3
comp=Z,7.4nm,1.0s
**P18A Preston Nutter** 44.40 80 IAmb IAmb 17 14 16.8
comp=Z,9.0nm,1.2s
**SRU San Rafael Swe** 44.54 81 IAmb IAmb 17 13 56.8
comp=Z,4.9nm,0.7s
**K22A Casper** 44.86 74 IAmb IAmb 17 13 58.1
comp=Z,9.7nm,1.1s
**U15A North Rim** 45.12 85 P **P** **17 14 00.4 +1.3**
U15A IAmb IAmb 17 14 14.3
comp=Z,6.1nm,0.9s
**HMU Henry Mountain** 45.13 82 IAmb IAmb 17 14 14.1
comp=Z,6.5nm,0.8s
**RSSD Black Hills** 45.49 71 P **P** **17 14 01.7 -0.2**
RSSD IAmb IAmb 17 14 03.1
comp=Z,4.1nm,0.7s
**RSSD Black Hills** 45.49 71 P **P** **17 14 01.7 -0.2**
RSSD pmax pmax
comp=Z,4.0nm,0.7s
**ESJX Sierra Juarez** 45.75 92 P **P** **17 14 04.1 +0.1**
**PV21 Cone Mtn., Par** 45.83 80 P **P** **17 14 03.5 -1.2**
PV21 IAmb IAmb 17 14 07.7
comp=Z,5.3nm,1.2s
**PV04 Paradox Valley** 45.98 80 P **P** **17 14 06.0 +0.2**
PV04 IAmb IAmb 17 14 07.3
comp=Z,5.2nm,0.8s
**PV17 East Wray Mesa** 46.02 80 P **P** **17 14 06.1 0.0**
PV17 IAmb IAmb 17 14 07.5
comp=Z,5.2nm,0.7s
**PV11 David Mesa, Pa** 46.06 80 P **P** **17 14 07.2 +0.8**
PV11 IAmb IAmb 17 14 09.2
comp=Z,5.7nm,0.7s
**PV18 Skein Mesa, Pa** 46.07 81 P **P** **17 14 07.3 +0.8**
PV18 IAmb IAmb 17 14 20.7
comp=Z,17nm,1.2s
**PV12 Saucer Basin,** 46.09 80 P **P** **17 14 06.9 +0.2**
PV12 IAmb IAmb 17 14 22.1
comp=Z,6.3nm,0.9s
**PV07 Paradox Valley** 46.11 80 P **P** **17 14 06.7 -0.1**
PV07 IAmb IAmb 17 14 26.8
comp=Z,4.9nm,0.9s
**PV13 Radium Mtn., P** 46.18 81 P **P** **17 14 07.8 +0.4**
PV13 IAmb IAmb 17 14 21.6
comp=Z,8.8nm,0.9s
**PV02 Paradox Valley** 46.20 80 P **P** **17 14 08.2 +0.7**
PV02 IAmb IAmb 17 14 09.0
comp=Z,12nm,0.8s
**N23A Red Feather La** 46.25 76 IAmb IAmb 17 14 10.4
comp=Z,6.3nm,0.9s
**PV01 Paradox Valley** 46.35 80 P **P** **17 14 08.9 +0.2**
PV01 IAmb IAmb 17 14 22.9
comp=Z,4.9nm,0.8s
**XLT XiLinHaoTe** 46.37 290 *e*P **P** **17 14 09.5 +0.9**
XLT pmax pmax
comp=Z,3.0nm,0.7s
**ULM Lac du Bonnet** 46.67 59 P **P** **17 14 10.3 -0.5**
ULM IAmb IAmb 17 14 13.9
comp=Z,7.7nm,1.1s
**ULM Lac du Bonnet** 46.67 59 P **P** **17 14 10.7 -0.1**
comp=Z,2.2nm,0.7s,baz=296,slow=6.8,SNR=5.8
comp=Z,2.2nm,0.7s
**MVCO Mesa Verde** 46.97 81 P **P** **17 14 13.5 -0.2**
MVCO IAmb IAmb 17 14 37.2
comp=Z,5.8nm,1.4s
**AGMN Agassiz Nation** 47.77 62 P **P** **17 14 18.7 -0.7**
**TUC Tucson** 48.76 88 P **P** **17 14 28.3 +0.9**
TUC IAmb IAmb 17 14 42.2
comp=Z,4.2nm,1.0s
**TUC Tucson** 48.76 88 P **P** **17 14 28.3 +0.9**
TUC pmax pmax
comp=Z,4.0nm,1.0s
**K30B Basset** 48.94 70 P **P** **17 14 29.0 +0.4**
**ULN Ulaanbaatar** 49.18 299 P **P** **17 14 30.0 -0.4**
ULN IAmb IAmb 17 14 31.8
comp=Z,2.5nm,0.8s
**ULN Ulaanbaatar** 49.18 299 *ce*P **P** **17 14 30.3 -0.2**
ULN pmax pmax
comp=Z,2.0nm,1.0s
**KSCO Kaye Shedlock**[7] 49.42 76 P **P** **17 14 32.9 +0.5**
KSCO IAmb IAmb 17 14 35.6
comp=Z,8.9nm,0.7s
**T25A Trinidad** 49.53 79 P **P** **17 14 34.1 +0.8**
T25A IAmb IAmb 17 14 48.9
comp=Z,13nm,1.3s
**SONM Songino Array** 49.55 299 P **P** **17 14 33.5 +0.2**
**SONM Songino Array** 49.55 299 P **P** **17 14 33.7 +0.4**
comp=Z,2.1nm,0.6s,baz=42,slow=9.2,SNR=10.0
SONM LR LR 17 36 26.6
comp=Z,124nm,19.2s,baz=65,slow=37
comp=Z,2.1nm,0.6s
**ANMO Albuquerque** 49.70 82 P **P** **17 14 34.7 +0.1**

**ANMO Albuquerque 49.70 82** P **P** **17 14 34.7 +0.1**
ANMO pmax pmax
comp=Z,2.0nm,1.0s

**ZAK Zakamensk 49.72 304** *e*P **P** **17 14 35.2 +0.7**
ZAK pmax pmax
comp=Z,4.0nm,1.2s

**ECSD EROS Data Cent 50.04 67** IAmb IAmb 17 14 37.5
comp=Z,7.8nm,0.9s

**BNM Barren Site 50.12 83** P **P** **17 14 37.9 +0.1**
**SPITS Spitsbergen Ar 50.34 357** P **P** **17 14 37.0 -1.7**
comp=Z,14nm,1.0s,baz=28,slow=9.8,SNR=2.3
comp=Z,14nm,1.0s

**EYMN Ely 50.35 60** IAmb IAmb 17 14 40.8
comp=Z,7.0nm,0.9s

**BGNE Belgrade 50.58 70** P **P** **17 14 40.6 -0.4**
**FRB Frobisher Bay 51.00 34** LR LR 17 37 47.5
comp=Z,268nm,18.9s,baz=313,slow=38

**E38A The Farm, Brul 51.12 61** IAmb IAmb 17 14 46.3
comp=Z,12nm,0.9s

**HNS HongShan 51.20 284** ⇑P **P** **17 14 45.8 +0.2**
HNS pmax pmax
comp=Z,19nm,1.0s

**CBKS Cedar Bluff 51.28 74** P **P** **17 14 46.7 +0.4**
**CBKS Cedar Bluff 51.28 74** P **P** **17 14 46.7 +0.4**
CBKS pmax pmax
comp=Z,21nm,1.0s

**I37A Lemond, Waseca 51.70 65** P **P** **17 14 49.5 +0.2**
**R32A Long Quarter, 52.15 74** P **P** **17 14 52.2 -0.6**
**N35A Tabor 52.40 69** P **P** **17 14 54.3 -0.3**
**G40A Rib Lake 52.69 62** IAmb IAmb 17 14 58.2
comp=Z,8.1nm,0.9s

**KSU1 Kansas State U 52.96 72** P **P** **17 14 58.5 -0.3**
**SCIA State Center 53.13 67** P **P** **17 15 00.1 +0.1**
**SMWD Samnorwood 53.41 78** P **P** **17 15 02.3 +0.1**
**VHRN Van Horn 53.41 85** P **P** **17 15 02.5 +0.1**
VHRN IAmb IAmb 17 15 17.2
comp=Z,7.2nm,1.2s

**F42A Maple Grove Fa 53.51 60** P **P** **17 15 03.1 +0.4**
**SFJD Kangerlussuaq 54.10 24** LR LR 17 41 01.1
comp=Z,62nm,19.0s,baz=313,slow=39

**JFWS Jewell Farm 54.17 64** P **P** **17 15 07.0 -0.5**
**JFWS Jewell Farm 54.17 64** P **P** **17 15 07.0 -0.5**
JFWS pmax pmax
comp=Z,10.0nm,0.8s

**L40A Anamosa 54.17 65** P **P** **17 15 06.9 -0.6**
L40A IAmb IAmb 17 15 07.7
comp=Z,7.8nm,0.9s

**LYN LuoYang 54.44 283** *e*P **P** **17 15 10.6 +1.0**
LYN pmax pmax
comp=Z,21nm,0.8s

LYN pmax pmax
comp=Z,170nm,5.2s

**TX31 Lajitas Ar. Si 55.24 85** IAmb IAmb 17 15 30.0
comp=Z,4.4nm,1.0s

**TXAR Lajitas Array 55.24 85** P **P** **17 15 15.6 0.0**
**TXAR Lajitas Array 55.24 85** P **P** **17 15 14.7 -0.9**
comp=Z,1.8nm,0.7s,baz=292,slow=4.8,SNR=23
comp=Z,1.8nm,0.7s

**TXAR Lajitas Array 55.24 85** P **P** **17 15 15.6 0.0**
**S39A Bolivar 55.83 71** IAmb IAmb 17 15 19.0
comp=Z,6.0nm,0.8s

**ZALV Zalesovo Beam 56.30 316** LR LR 17 41 07.9
comp=Z,50nm,18.2s,baz=136,slow=38

**HHAR Hobbs 56.41 72** IAmb IAmb 17 15 36.0
comp=Z,9.4nm,0.9s

**SSLB Suanglung 56.73 267** P **P** **17 15 27.0 +0.7**
**BRDY Brady 56.77 80** IAmb IAmb 17 15 28.4
comp=Z,3.0nm,0.8s

**CCM Cathedral Cave 56.80 69** P **P** **17 15 25.4 -1.1**
CCM IAmb IAmb 17 15 26.4
comp=Z,8.6nm,1.1s

**CCM Cathedral Cave 56.80 69** P **P** **17 15 25.4 -1.1**
CCM pmax pmax
comp=Z,9.0nm,1.1s

**MGMO Mountain Grove 56.81 71** IAmb IAmb 17 15 26.7
comp=Z,9.7nm,0.8s

**JMIC Jan Mayen 57.23 6** LR LR 17 42 15.9
comp=Z,24nm,18.4s,baz=344,slow=38

**T42A Van Buren 57.59 70** IAmb IAmb 17 15 31.4
comp=Z,5.5nm,0.7s

**MIAR Mount Ida 57.81 74** P **P** **17 15 34.2 +0.5**
**DGZ Jazzator, Alta 58.02 311** *i* P **P** **17 15 34.4 -0.8**
DGZ pmax pmax
comp=Z,6.0nm,2.3s

**PBMO Poplar Bluff 58.14 70** P **P** **17 15 35.1 -0.9**
PBMO IAmb IAmb 17 15 36.2
comp=Z,11nm,1.1s

**LCAR Lake Charles 58.20 71** IAmb IAmb 17 15 36.1
comp=Z,4.2nm,0.8s

**ARCES ARCESS Array B 58.39 352** LR LR 17 40 37.0
comp=Z,56nm,21.9s,baz=356,slow=36

**LZH Lanzhou 58.56 290** *e*P **P** **17 15 39.7 +0.6**
LZH pmax pmax
comp=Z,19nm,0.9s

**GTA Gaotai 58.61 295** P **P** **17 15 39.8 +0.4**
GTA pmax pmax
comp=Z,7.0nm,1.0s

GTA LR LR
comp=N,61nm,15.3s

GTA LR LR
comp=E,110nm,15.6s

GTA LR LR
comp=Z,87nm,15.6s

**BLO Bloomington 58.76 65** P **P** **17 15 40.5 +0.2**
**BLO Bloomington 58.76 65** P **P** **17 15 40.5 +0.2**
BLO pmax pmax
comp=Z,31nm,1.1s

**O48B Farmland 58.78 63** P **P** **17 15 39.9 -0.6**
**USIN University of 58.93 67** P **P** **17 15 40.8 -0.7**
**WCI Wyandotte Cave 59.54 66** P **P** **17 15 45.7 0.0**
**WCI Wyandotte Cave 59.54 66** P **P** **17 15 45.7 0.0**
WCI pmax pmax
comp=Z,13nm,0.8s

**WVT Waverly 60.11 69** P **P** **17 15 49.6 0.0**
WVT IAmb IAmb 17 15 50.6
comp=Z,6.9nm,0.8s

**WVT Waverly 60.11 69** P **P** **17 15 49.6 0.0**
WVT pmax pmax
comp=Z,7.0nm,0.9s

**ALLY Alegheny Colle 60.56 59** P **P** **17 15 53.1 +0.4**
**PECO Prince Edward 60.62 55** P **P** **17 15 53.2 +0.3**
**V48A Smith Brothers 60.96 68** IAmb IAmb 17 15 56.2
comp=Z,7.4nm,0.8s

**U49A Red Boiling Sp 61.02 67** IAmb IAmb 17 15 56.8
comp=Z,6.3nm,0.7s

**T50A Nancy 61.20 66** IAmb IAmb 17 15 58.2
comp=Z,7.5nm,0.9s

**KURK Kurchatov 61.27 316** P **P** **17 15 56.7 -0.6**
KURK IAmb IAmb 17 15 57.4
comp=Z,4.0nm,1.1s

**KURK Kurchatov 61.27 316** *ce*P **P** **17 15 57.2 -0.1**
KURK pmax pmax
comp=Z,2.0nm,0.8s

**KURBB Kurchatov Arra 61.38 316** P **P** **17 15 57.2 -0.8**
comp=Z,1.6nm,0.7s,baz=46,slow=6.9,SNR=14
KURBB LR LR 17 44 29.1
comp=Z,88nm,18.1s,baz=172,slow=38
comp=Z,1.6nm,0.7s

**X48A Hartselle 61.74 69** IAmb IAmb 17 16 00.9
comp=Z,5.2nm,0.8s

**SSPA Standing Stone 62.48 59** P **P** **17 16 05.7 +0.1**
**MK31 Makanchi Array 62.51 311** P **P** **17 16 04.8 -0.9**
**MK31 Makanchi Array 62.51 311** *ce*P **P** **17 16 06.3 +0.6**
**MKAR Makanchi Array 62.51 311** P **P** **17 16 05.2 -0.5**
**MKAR Makanchi Array 62.51 311** P **P** **17 16 04.2 -1.5**
comp=Z,1.3nm,0.6s,baz=48,slow=6.5,SNR=16
MKAR LR LR 17 43 50.2
comp=Z,58nm,19.7s,baz=68,slow=37
comp=Z,1.3nm,0.6s

**MKAR Makanchi Array 62.51 311** *i* P **P** **17 16 05.0 -0.7**
MKAR pmax pmax
comp=Z,1.0nm,0.6s

**TKL Tuckaleechee C 62.77 66** IAmb IAmb 17 16 08.5
comp=Z,6.4nm,0.9s

**BRVK Borovoye 62.87 323** P **P** **17 16 07.4 -0.6**
BRVK IAmb IAmb 17 16 09.0
comp=Z,3.6nm,0.8s

**BRVK Borovoye 62.87 323** *ce*P **P** **17 16 08.2 +0.2**
BRVK pmax pmax
comp=Z,6.0nm,1.3s

**KSPA Keystone Colle 62.94 57** IAmb IAmb 17 16 10.5
comp=Z,8.9nm,1.0s

**F63A Nahmakanta, Br 63.25 50** IAmb IAmb 17 16 12.2
comp=Z,8.3nm,0.8s

**V53A Saluda 63.31 66** IAmb IAmb 17 16 12.7
comp=Z,6.6nm,0.9s

**PKME Peaks-Kenny Pk 63.48 50** IAmb IAmb 17 16 13.9
comp=Z,8.4nm,0.9s

**F64A Sherman 63.48 49** IAmb IAmb 17 16 13.2
comp=Z,9.2nm,0.9s

**GYA Guiyang 63.67 280** P **P** **17 16 15.9 +2.1**
GYA pP sP 17 16 27.4 -0.6
GYA pmax pmax
comp=Z,5.0nm,0.9s

**BG3 Lake Jocassee 63.73 66** IAmb IAmb 17 16 15.2
comp=Z,8.3nm,0.7s

**Y52A Lilburn 63.89 68** IAmb IAmb 17 16 15.8
comp=Z,7.8nm,0.8s

**SDMD Soldier's Deli 63.92 59** IAmb IAmb 17 16 17.0
comp=Z,7.0nm,1.0s

**S57A Dark Hollow, R 63.97 62** IAmb IAmb 17 16 17.4
comp=Z,9.7nm,0.9s

**KSCT Kent School, K 64.00 55** P **P** **17 16 16.1 +0.5**
**V55A Taylorsville 64.09 64** IAmb IAmb 17 16 17.8
comp=Z,11nm,0.9s

**ARU Arti 64.14 331** LR LR 17 48 37.5
comp=Z,99nm,18.2s,baz=78,slow=40

**T57A Hurt 64.35 62** IAmb IAmb 17 16 19.4
comp=Z,8.5nm,0.8s

**R58B Mineral 64.41 61** IAmb IAmb 17 16 20.3
comp=Z,8.9nm,1.1s

**KIRV Kirov 64.78 337** LR LR 17 48 18.1
comp=Z,41nm,19.2s,baz=42,slow=39

**HNR Honiara 65.01 209** LR LR 17 38 30.2
comp=Z,772nm,20.1s,baz=198,slow=30

**LMN Caledonia Moun 65.13 47** P **P** **17 16 23.6 +0.7**
**JSC Jenkinsville 65.20 66** IAmb IAmb 17 16 24.9
comp=Z,9.1nm,0.8s

**V58A Windy Hill, Pi 65.30 63** IAmb IAmb 17 16 25.9
comp=Z,10nm,0.9s

**BIRD Birdtown, Kers 65.39 65** IAmb IAmb 17 16 26.1
comp=Z,8.8nm,0.8s

**FINES FINESS Array B 66.24 350** P **P** **17 16 27.3 -2.5**
comp=Z,4.6nm,1.0s,baz=31,slow=7.0,SNR=2.8
FINES LR LR 17 45 39.5
comp=Z,40nm,21.9s,baz=23,slow=36
comp=Z,4.6nm,1.0s

**PZH PanZhiHua 66.64 284** P **P** **17 16 34.0 +0.9**
PZH pmax pmax
comp=Z,10.0nm,1.0s

PZH pmax pmax
comp=Z,100nm,4.3s

**KMI Kunming 67.05 282** ⇑P P 17 16 42.7 +6.9
KMI pmax pmax
comp=Z,8.0nm,1.0s

**NOA NORSAR Array B 67.65 358** P **P** **17 16 36.9 -2.0**
comp=Z,1.0nm,1.0s,baz=358,slow=6.1,SNR=2.7
NOA LR LR 17 46 48.0
comp=Z,21nm,19.0s,baz=0.0,slow=36
comp=Z,1.0nm,1.0s

**HFS Hagfors 68.47 356** P **P** **17 16 43.4 -0.6**
comp=Z,3.0nm,0.8s,baz=50,slow=2.5,SNR=6.8
HFS LR LR 17 47 28.9
comp=Z,20nm,19.2s,baz=22,slow=37
comp=Z,3.0nm,0.8s

**BOOM Boomskoye usch 68.72 312** IAmb IAmb 17 16 47.7
comp=Z,5.1nm,1.1s

**AAK Ala-Archa 69.27 313** LR LR 17 48 38.1
comp=Z,29nm,18.7s,baz=56,slow=37

**AKTO Aktyubinsk 69.39 328** LR LR 17 50 57.7
comp=Z,85nm,18.2s,baz=237,slow=39

**NRN Naryn 69.52 311** P **P** **17 16 51.5 +0.3**
NRN IAmb IAmb 17 16 53.0
comp=Z,7.1nm,1.3s

**NRN Naryn 69.52 311** P **P** **17 16 51.5 +0.3**
NRN pmax pmax
comp=Z,7.0nm,1.3s

**PMG Port Moresby 69.64 222** LR LR 17 43 49.6
comp=Z,45nm,19.0s,baz=356,slow=33

**ABKAR Akbulak array 69.74 326** P **P** **17 16 51.8 -0.3**
**ABKAR Akbulak array 69.74 326** IAmb IAmb 17 16 53.1
comp=Z,6.8nm,1.1s

**LSA Lhasa 70.53 293** P **P** **17 16 59.8 +2.0**
LSA pmax pmax
comp=Z,22nm,0.8s

**KKAR Karatay Array 70.67 316** P **P** **17 16 57.3 -0.6**
**KKAR Karatay Array 70.67 316** P **P** **17 16 57.3 -0.6**
**BELG Belogornoye 70.78 335** LR LR 17 50 30.3
comp=Z,35nm,21.9s,baz=330,slow=38

**KSH Kashi 71.03 310** P **P** **17 17 04.1 +3.8**
KSH pP sP 17 17 16.8 +1.0
KSH pmax pmax
comp=Z,11nm,1.0s

**PPT Papeete 71.94 156** LR LR 17 41 22.8
comp=Z,54nm,19.8s,baz=350,slow=30

**PPT2 Papeete2 71.97 156** *e*LR LR 17 39 08.5
comp=Z,104nm,29.2s

PPT2 *e*LR LR 17 39 14.6
comp=Z,79nm,23.5s

**CRAI Chiangrai 72.14 280** IAmb IAmb 17 17 21.4
comp=Z,9.5nm,1.0s

**BTK Batken 72.99 314** IAmb IAmb 17 17 13.3
comp=Z,5.7nm,0.9s

**BTK Batken 72.99 314** P **P** **17 17 12.6 +0.6**
**DRK Karamyk 73.01 313** P **P** **17 17 13.4 +1.1**
**RAR Rarotonga 73.47 167** LR LR 17 43 36.6
comp=Z,101nm,18.9s,baz=336,slow=31

**CMAR Chiang Mai Arr 74.36 280** P **P** **17 17 20.0 -0.2**
**CMAR Chiang Mai Arr 74.36 280** P **P** **17 17 18.8 -1.3**
comp=Z,1.7nm,0.9s,baz=19,slow=5.7,SNR=8.1
comp=Z,1.7nm,0.9s

**CMAR Chiang Mai Arr 74.36 280** *i* P **P** **17 17 20.2 +0.1**
CMAR pmax pmax
comp=Z,2.0nm,0.9s

**CHGR Chuyangaron 74.88 314** P **P** **17 17 23.5 +0.5**
**SIMJ Simiganj 74.94 314** P **P** **17 17 23.4 0.0**
SIMJ IAmb IAmb 17 17 24.6
comp=Z,11nm,0.9s

**DZM Mont Dzumac 75.47 199** LR LR 17 47 57.5
comp=Z,91nm,18.6s,baz=320,slow=33

**AK21 Malin Array Si 76.24 346** P **P** **17 17 29.6 -0.8**
**AK22 Malin Array Si 76.25 346** P **P** **17 17 29.7 -0.8**
**AK03 Malin Array Si 76.26 345** P **P** **17 17 30.1 -0.5**
**AK04 Malin Array Si 76.27 345** P **P** **17 17 29.4 -1.2**
**AK20 Malin Array Si 76.28 346** P **P** **17 17 29.8 -0.8**
**AKASG Malin Array Be 76.28 345** P **P** **17 17 28.5 -2.2**
comp=Z,0.6nm,0.4s,baz=13,slow=5.3,SNR=7.5
AKASG LR LR 17 55 29.9
comp=Z,29nm,20.2s,baz=11,slow=39
comp=Z,0.6nm,0.4s

**AKASG Malin Array Be 76.28 345** *i* P **P** **17 17 30.0 -0.7**
AKASG pmax pmax
comp=Z,1.0nm,0.4s

**AKBB Malin Array Si 76.28 345** IAmb IAmb 17 17 31.1
comp=Z,5.0nm,1.0s

**AKBB Malin Array Si 76.28 345** *ce*P **P** **17 17 28.9 -1.8**
AKBB pmax pmax
comp=Z,6.0nm,1.0s

**AKBB Malin Array Si 76.28 345** P **P** **17 17 30.1 -0.6**
**AK18 Malin Array Si 76.29 346** P **P** **17 17 29.9 -0.8**
**KIEV Kiev 76.30 345** P **P** **17 17 29.7 -1.0**
KIEV IAmb IAmb 17 17 31.1
comp=Z,4.5nm,1.0s

**KIEV Kiev 76.30 345** P **P** **17 17 29.7 -1.0**
KIEV pmax pmax
comp=Z,5.0nm,1.0s

**KIEV Kiev 76.30 345** P **P** **17 17 30.1 -0.6**
comp=Z,22nm,1.0s

**AK01 Malin Array Si 76.30 345** P **P** **17 17 29.7 -1.1**
**AK19 Malin Array Si 76.30 346** P **P** **17 17 30.0 -0.8**
**AK11 Malin Array Si 76.32 345** P **P** **17 17 29.8 -1.1**
**AK02 Malin Array Si 76.33 345** P **P** **17 17 29.9 -1.0**
**AK08 Malin Array Si 76.35 345** P **P** **17 17 30.0 -1.0**
**AK09 Malin Array Si 76.36 345** P **P** **17 17 30.1 -1.0**
**AK05 Malin Array Si 76.37 345** P **P** **17 17 30.1 -1.1**
**AK14 Malin Array Si 76.37 346** P **P** **17 17 30.2 -1.0**
**AK10 Malin Array Si 76.38 345** P **P** **17 17 30.2 -1.0**
**NIL Nilore 77.03 308** P **P** **17 17 35.2 -0.1**
**NIL Nilore 77.03 308** P **P** **17 17 35.2 -0.1**
NIL pmax pmax
comp=Z,25nm,0.9s

**CLL Collm 77.32 356** *i* P **P** **17 17 36.3 -0.2**
comp=Z,4.0nm,1.0s

**CLL Collm 77.32 356** *i* P **P** **17 17 36.3 -0.2**
CLL pmax pmax
comp=Z,4.0nm,1.0s

**TBI Tubuai 77.52 158** *e*LR LR 17 41 46.1
comp=Z,631nm,32.8s

**KSP Ksiaz 77.60 354** P **P** **17 17 38.3 +0.2**
**KSP Ksiaz 77.60 354** P **P** **17 17 38.3 +0.2**
comp=Z,5.2nm,1.0s

**BRG Berggiesshubel 77.71 355** *i* P **P** **17 17 39.1 +0.4**
BRG Amp 17 17 39.9
comp=Z,5.8nm,0.9s

**OJC Ojcow 77.94 351** P **P** **17 17 40.5 +0.5**
**OJC Ojcow 77.94 351** P **P** **17 17 40.5 +0.5**
comp=Z,6.6nm,0.8s

**HSKC Hora Svate Kat 78.00 356** *e*P **P** **17 17 40.9 +0.5**
**DPC Dobruska-Polom 78.09 354** *e*P **P** **17 17 41.6 +0.7**
**DPC Dobruska-Polom 78.09 354** *e*P **P** **17 17 41.6 +0.7**
**DPC Dobruska-Polom 78.09 354** P **P** **17 17 40.6 -0.3**
comp=Z,7.0nm,1.0s

**KWP Kalwaria Pacla 78.22 349** P **P** **17 17 41.9 +0.3**
comp=Z,18nm,0.5s

**KBL Kabul 78.31 312** P **P** **17 17 41.7 -0.9**
KBL IAmb IAmb 17 17 42.9
comp=Z,8.9nm,0.8s

**KBL Kabul 78.31 312** P **P** **17 17 41.7 -0.9**
KBL pmax pmax
comp=Z,9.0nm,0.8s

**KRLC Kraliky 78.33 353** *e*P **P** **17 17 42.8 +0.6**
**KRLC Kraliky 78.33 353** *e*P **P** **17 17 42.8 +0.6**
**SHIU Shidnytsya 78.54 349** P **P** **17 17 43.8 +0.4**
**MORS Morshin 78.57 349** P **P** **17 17 43.0 -0.5**
**MORS Morshin 78.57 349** P **P** **17 17 43.0 -0.5**
**MORC Moravsky Berou 78.57 353** *e*P **P** **17 17 43.9 +0.3**
**GIVF Givet 78.66 1** *e*P **P** **17 17 43.9 -0.1**
GIVF pmax pmax
comp=Z,1.0nm,0.3s

**BAIF Baives 78.69 2** *e*P **P** **17 17 44.3 +0.2**
BAIF pmax pmax
comp=Z,11nm,1.4s

**KMPD K-Podol'skiy 78.78 347** P **P** **17 17 43.4 -1.3**
KMPD P **P** **17 17 43.3 -1.4**
**STNU Starunia 78.91 348** P **P** **17 17 43.9 -1.5**
**SORM Soroca 78.92 345** P **P** **17 17 44.8 -0.6**
**SORM Soroca 78.92 345** P **P** **17 17 44.8 -0.6**
comp=Z,8.3nm,1.0s

**KOLS Kolonicke sedl 78.95 350** *e*P **P** **17 17 46.2 +0.5**
KOLS pmax pmax
comp=Z,5.0nm,1.1s

**KOLS Kolonicke sedl 78.95 350** *e*P **P** **17 17 46.2 +0.5**
**LANS Liptovska Anna 79.03 351** *e*P **P** **17 17 47.6 +1.5**
LANS pmax pmax
comp=Z,3.0nm,0.8s

**LANS Liptovska Anna 79.03 351** *e*P **P** **17 17 47.6 +1.5**
**VRAC Vranov 79.11 353** *e*P **P** **17 17 46.8 +0.3**
**VRAC Vranov 79.11 353** LR LR 17 57 24.3
comp=Z,16nm,18.8s,baz=2.5,slow=39

**KRUC Moravsky 79.37 354** *e*P **P** **17 17 47.9 0.0**
**NSLU Nyzhne Selyshc 79.41 348** P **P** **17 17 49.1 +1.0**
**KHC Kasperske Hory 79.47 355** IAmb IAmb 17 17 50.1
comp=Z,4.7nm,0.9s

**KHC Kasperske Hory 79.47 355** *e*P **P** **17 17 49.2 +0.7**
**KHC Kasperske Hory 79.47 355** *ce*P **P** **17 17 47.9 -0.6**
KHC pmax pmax
comp=Z,14nm,1.3s

**KHC Kasperske Hory 79.47 355** P **P** **17 17 48.8 +0.3**
comp=Z,6.5nm,1.1s

**JAVC Velka Javorina 79.47 353** *e*P **P** **17 17 49.9 +1.4**
**BERU Beregovo 79.60 349** P **P** **17 17 48.9 -0.2**
**VYHS Vyhne 79.74 352** *e*P **P** **17 17 50.2 +0.3**
VYHS pmax pmax
comp=Z,4.0nm,1.2s

**VYHS Vyhne 79.74 352** *e*P **P** **17 17 50.2 +0.3**
**GEC2 GERESS Array S 79.75 355** IAmb IAmb 17 17 51.2
comp=Z,5.1nm,1.1s

**GERES GERESS Array B 79.75 355** P **P** **17 17 50.0 -0.1**
**GERES GERESS Array B 79.75 355** P **P** **17 17 49.3 -0.8**
comp=Z,2.5nm,0.9s,baz=335,slow=4.3,SNR=10.0
comp=Z,2.5nm,0.9s

**GERES GERESS Array B 79.75 355** P **P** **17 17 50.0 -0.1**
**KIV Kislovodsk 79.84 334** *e*P **P** **17 17 48.7 -2.0**
KIV pmax pmax
comp=Z,5.0nm,1.1s

**BUR08 Bucovina Ar. S 79.86 347** IAmb IAmb 17 18 18.7
comp=Z,6.2nm,1.4s

**BURAR Bucovina Array 79.88 347** P **P** **17 17 50.4 -0.5**
**BURAR Bucovina Array 79.88 347** P **P** **17 17 50.4 -0.5**
BURAR pmax pmax
comp=Z,3.0nm,0.8s

**KBZ Khabaz 79.99 334** P **P** **17 17 50.6 -0.7**
comp=Z,3.2nm,0.8s,baz=7.4,slow=2.6,SNR=6.4
KBZ LR LR 17 59 56.7
comp=Z,42nm,18.2s,baz=28,slow=41
comp=Z,3.2nm,0.8s

**KBZ Khabaz 79.99 334** *ce*P **P** **17 17 50.9 -0.4**
KBZ pmax pmax
comp=Z,4.0nm,1.0s

**LDF La Druitiere 80.01 5** *e*P **P** **17 17 50.8 -0.6**
LDF pmax pmax
comp=Z,9.0nm,1.2s

**SHA1 Shidzhatmaz 80.05 334** *ce*P **P** **17 17 51.2 -0.8**
**GRR Gorron 80.18 5** *e*P **P** **17 17 52.0 -0.3**
GRR pmax pmax
comp=Z,8.0nm,1.0s

**CDF Champ du Feu 80.36 360** *e*P **P** **17 17 53.3 -0.1**
CDF pmax pmax
comp=Z,3.0nm,0.7s

**CONA Conrad Observa 80.53 354** *i* P **P** **17 17 54.9 +0.6**
comp=Z,5.4nm,1.0s

**ECH Echery 80.56 360** IAmb IAmb 17 17 56.2
comp=Z,6.9nm,1.0s

**ECH Echery 80.56 360** P **P** **17 17 54.4 0.0**
**MOA Molln 80.71 355** *i* P **P** **17 17 54.9 -0.3**
comp=Z,3.1nm,1.1s

**RONA Rosalia, Austr 80.73 353** *i* P **P** **17 17 55.5 +0.2**
comp=Z,2.1nm,0.8s

**HAU Haudompre 80.77 0** *e*P **P** **17 17 54.2 -1.3**
HAU pmax pmax
comp=Z,4.0nm,0.8s

**BIOA Bad Ischl, Aus 80.90 355** *i* P **P** **17 17 56.2 -0.1**
comp=Z,4.2nm,0.8s

**SOC Sochi 80.95 336** *e*P **P** **17 17 53.0 -3.5**
SOC *e* 17 20 59.8
SOC *e*PPP PPP 17 22 50.1
SOC *e*S **S** **17 28 00.0 -2.4**
SOC *e*SS **SS** **17 33 16.5 +1.0**
SOC *e*SSS SSS 17 36 47.5
**HINF Hinteralfeld 80.96 360** *e*P **P** **17 17 56.2 -0.3**
HINF pmax pmax
comp=Z,3.0nm,0.9s

**MPLH Magyarpolny 81.16 353** P **P** **17 17 57.9 +0.3**
comp=Z,16nm,1.1s

**RETA Reutte 81.22 357** *e*P **P** **17 17 57.9 -0.1**
comp=Z,3.4nm,1.1s

**WATA Walderalm 81.35 357** *i* P **P** **17 17 59.1 +0.3**
comp=Z,5.8nm,1.1s

**MOTA Moosalm 81.36 357** *i* P **P** **17 17 59.0 +0.2**
comp=Z,4.0nm,1.0s

**WTTA Wattenberg 81.42 357** *i* P **P** **17 17 59.0 -0.2**
comp=Z,1.7nm,0.6s

**DAVA Damuels 81.45 358** *i* P **P** **17 18 00.5 +1.2**
comp=Z,3.9nm,0.8s

**SQTA Sankt Quirin 81.48 357** *i* P **P** **17 18 00.1 +0.7**
comp=Z,6.0nm,0.9s

**LOR Lormes 81.48 2** *e*P **P** **17 17 59.2 -0.1**
LOR pmax pmax
comp=Z,7.0nm,1.0s

**HRA Herat 81.49 316** IAmb IAmb 17 18 01.2
comp=Z,8.5nm,0.9s

**KBA Koelnbreinsper 81.53 355** *i* P **P** **17 18 00.7 +1.0**
comp=Z,12nm,0.9s

**SSF Saint Saulge 81.68 2** *e*P **P** **17 18 00.3 0.0**
SSF pmax pmax
comp=Z,6.0nm,1.0s

**FETA Feichten 81.69 357** *i* P **P** **17 18 01.1 +0.5**
comp=Z,6.4nm,0.9s

**SOKA Soboth 81.83 354** *i* P **P** **17 18 01.6 +0.4**
comp=Z,7.8nm,1.1s

**MLR Muntele Rosu 81.86 346** IAmb IAmb 17 18 05.3
comp=Z,5.5nm,1.1s

**MLR Muntele Rosu 81.86 346** LR LR 17 59 23.6
comp=Z,18nm,18.5s,baz=324,slow=39

**ABTA Abfaltersbach 81.90 356** *i* P **P** **17 18 01.9 +0.3**
comp=Z,3.5nm,1.0s

**AVF Avril sur Loir 81.94 2** *e*P **P** **17 18 01.6 -0.1**
AVF pmax pmax
comp=Z,7.0nm,1.0s

**MFF Saint Martin d 82.00 5** *e*P **P** **17 18 02.0 0.0**
MFF pmax pmax
comp=Z,8.0nm,1.0s

**OBKA Obir 82.03 355** *i* P **P** **17 18 02.0 -0.3**
comp=Z,3.4nm,0.9s

**SMF Signal de Mont 82.10 2** *e*P **P** **17 18 02.5 -0.1**
SMF pmax pmax
comp=Z,7.0nm,1.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FUORN** | **Ofenpass-Fuorn** | **82.11** | **357** | IAmb | IAmb | 17 18 04.8 | | | |
| | comp=Z,4.1nm,1.2s | | | | | | | | |
| **PRED** | **Cave del Predi** | **82.15** | **355** | IAmb | IAmb | 17 18 03.5 | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | | |
| **BGF** | **Bois d'Agland** | **82.16** | **3** | *eP* | **P** | **17 18 02.9** | **0.0** | | |
| BGF | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **TUE** | **Stuetta** | **82.28** | **358** | IAmb | IAmb | 17 18 05.6 | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| **TUE** | **Stuetta** | **82.28** | **358** | P | **P** | **17 18 04.1** | **+0.4** | | |
| **TCF** | **Toulx Ste Croi** | **82.41** | **3** | *eP* | **P** | **17 18 04.0** | **-0.2** | | |
| TCF | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **GNI** | **Garni** | **82.77** | **332** | LR | LR | 18 02 14.8 | | | |
| | comp=Z,28nm,18.1s,baz=40,slow=41 | | | | | | | | |
| **LFF** | **La Frestale** | **83.70** | **4** | *eP* | **P** | **17 18 10.2** | **-0.6** | | |
| LFF | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **BNI** | **Bardonecchia** | **83.72** | **360** | IAmb | IAmb | 17 18 26.8 | | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **MBDF** | **Montbardon** | **84.05** | **360** | *eP* | **P** | **17 18 10.1** | **-2.7** | | |
| MBDF | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.2s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **84.63** | **228** | P | **P** | **17 18 14.8** | **-1.0** | | |
| | comp=Z,0.4nm,0.6s,baz=34,slow=5.8,SNR=8.8 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **SBF** | **Sospel** | **84.91** | **359** | *eP* | **P** | **17 18 17.1** | **0.0** | | |
| SBF | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **GEVA** | **Gevas** | **84.97** | **332** | | **P** | **17 18 18.0** | **+0.3** | | |
| GEVA | | | | IAmb | IAmb | 17 18 19.8 | | | |
| | comp=Z,4.2nm,0.9s | | | | | | | | |
| **MTLF** | **Montolieu** | **85.36** | **3** | *eP* | **P** | **17 18 19.6** | **+0.3** | | |
| MTLF | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **EPF** | **Esparros** | **85.58** | **5** | *eP* | **P** | **17 18 21.2** | **+0.7** | | |
| EPF | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **ETSF** | **Etsaut** | **85.67** | **5** | *eP* | **P** | **17 18 21.2** | **+0.3** | | |
| ETSF | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| **NRCA** | **Norcia** | **85.77** | **355** | P | **P** | **17 18 21.7** | **+0.2** | | |
| NRCA | | | | IAmb | IAmb | 17 18 23.0 | | | |
| | comp=Z,6.8nm,1.0s | | | | | | | | |
| **BR131** | **Keskin Array S** | **86.04** | **339** | P | **P** | **17 18 23.4** | **+0.5** | | |
| BR131 | | | | IAmb | IAmb | 17 18 24.1 | | | |
| | comp=Z,3.4nm,1.1s | | | | | | | | |
| **BR131** | **Keskin Array S** | **86.04** | **339** | P | **P** | **17 18 23.4** | **+0.5** | | |
| BR131 | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **86.04** | **339** | P | **P** | **17 18 21.6** | **-1.3** | | |
| | comp=Z,2.0nm,1.0s,baz=69,slow=2.8,SNR=8.0 | | | | | | | | |
| BRTR | | | | LR | LR | 18 04 43.5 | | | |
| | comp=Z,22nm,18.1s,baz=76,slow=41 | | | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| **PGF** | **Pioggiola** | **86.20** | **358** | *eP* | **P** | **17 18 23.6** | **0.0** | | |
| PGF | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **FNA** | **Florina** | **87.10** | **349** | IAmb | IAmb | 17 18 28.8 | | | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| **LIT** | **Litokhoron** | **87.63** | **348** | P | **P** | **17 18 30.0** | **-0.5** | | |
| **LIT** | **Litokhoron** | **87.63** | **348** | P | **P** | **17 18 30.0** | **-0.5** | | |
| **ASAR** | **Alice Springs** | **88.05** | **227** | P | **P** | **17 18 32.7** | **+0.2** | | |
| **ASAR** | **Alice Springs** | **88.05** | **227** | P | **P** | **17 18 32.4** | **-0.1** | | |
| | comp=Z,0.8nm,0.7s,baz=28,slow=5.3,SNR=13 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **ASAR** | **Alice Springs** | **88.05** | **227** | P | **P** | **17 18 32.7** | **+0.2** | | |
| **ESDC** | **Sonseca Array** | **88.62** | **8** | P | **P** | **17 18 34.1** | **-1.1** | | |
| | comp=Z,1.2nm,0.8s,baz=341,slow=4.3,SNR=8.0 | | | | | | | | |
| ESDC | | | | LR | LR | 17 58 58.1 | | | |
| | comp=Z,15nm,18.5s,baz=334,slow=36 | | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | | |
| **VAE** | **Valguarnera** | **91.03** | **354** | LR | LR | 18 05 20.3 | | | |
| | comp=Z,34nm,18.1s,baz=157,slow=39 | | | | | | | | |
| **STKA** | **Stephens Creek** | **92.07** | **217** | LR | LR | 17 54 24.5 | | | |
| | comp=Z,69nm,20.5s,baz=26,slow=32 | | | | | | | | |
| **MDT** | **Midelt** | **95.36** | **10** | LR | LR | 18 05 02.9 | | | |
| | comp=Z,19nm,18.0s,baz=333,slow=37 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **117.96** | **109** | T | T | 19 34 28.7 | | | |
| | baz=317 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **117.97** | **109** | T | T | 19 34 43.2 | | | |
| | baz=317 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **117.98** | **109** | T | T | 19 34 28.8 | | | |
| | baz=317 | | | | | | | | |

*ISN **06** 17:23:43.7±0.8, 32.°06N×47.°53E, h19km±17km, ML3.0*
*TEH **06** 17:23:45.9, 32.°20N×47.°55E, h28km±96km, ML2.8*
**ISC 06 17:23:44.1±1.3, 32°09N±0.°07×47°51E±0.°05, h10km, n10, σ0s92/14, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAFI** | **Al-Rafai** | **1.24** | **253** | *eP*g | **Pg** | **17 24 07.0** | **-1.0** |
| RAFI | | | | *eS*g | **Sn** | **17 24 23.0** | **-1.3** |
| RAFI | | | | AML | AML | 17 24 45.5 | |
| | comp=N,598nm,0.4s | | | | | | |
| RAFI | | | | AML | AML | 17 24 45.8 | |
| | comp=E,505nm,0.6s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.46** | **11** | Pg | **Pn** | **17 24 10.9** | **+0.3** |
| **IBDR** | **Badra** | **1.68** | **308** | *eP*n | **Pn** | **17 24 14.0** | **+0.4** |
| IBDR | | | | *eS*n | **Sb** | **17 24 37.0** | **+0.7** |
| IBDR | | | | AML | AML | 17 24 45.3 | |
| | comp=N,149nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 17 24 50.2 | |
| | comp=E,109nm,0.6s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **1.89** | **325** | Pn | **Pn** | **17 24 16.3** | **-0.2** |
| **HSAM** | **Samen** | **2.31** | **23** | Pn | **Pn** | **17 24 21.6** | **-0.9** |
| **SNQR** | **Sonqor, Kerman** | **2.77** | **2** | Pn | **Pn** | **17 24 29.2** | **+0.4** |
| **BHD** | **Baghdad** | **2.89** | **295** | *eP*n | **Pn** | **17 24 31.0** | **+0.8** |
| BHD | | | | *eS*n | **Sn** | **17 25 06.0** | **+0.9** |
| **KLNJ** | **Kolanjah** | **3.65** | **106** | Pn | **Pn** | **17 24 42.3** | **+1.3** |
| **IKRK** | **Kirkuk** | **4.23** | **322** | *eP*n | **Pn** | **17 24 50.0** | **+1.3** |
| IKRK | | | | *eS*n | **Sn** | **17 25 38.0** | **-0.2** |
| **KRSH** | **Karshahi** | **4.32** | **63** | Pn | **Pn** | **17 24 49.9** | **-0.1** |

**SOME 06 17:36:41.5, 42°28N×81°02E, h15km, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **1.26** | **337** | *eP* | Pb | 17 37 05.0 | -0.1 |
| | 1.0nm,0.1s | | | | | | |
| KTMS | | | | *eS* | Sg | 17 37 21.9 | -0.4 |
| | 4.2nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **1.44** | **308** | *eP* | Pn | 17 37 04.2 | -3.0 |
| | 3.5nm,0.1s | | | | | | |
| SHLS | | | | *eS* | Sn | 17 37 20.6 | -5.3 |
| | 9.3nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **1.71** | **301** | *eP* | Pb | 17 37 13.4 | +0.7 |
| | 2.1nm,0.5s | | | | | | |
| UZB | | | | *eS* | Sg | 17 37 36.5 | +0.1 |
| | 4.2nm,0.1s | | | | | | |
| **KPKS** | **Kokpek** | **2.08** | **305** | *eP* | Pb | 17 37 19.5 | +0.5 |
| | 5.5nm,0.5s | | | | | | |
| KPKS | | | | *eS* | Sg | 17 37 47.1 | -1.4 |
| | 10nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.23** | **337** | *eP* | Pb | 17 37 22.3 | +0.7 |
| | 0.9nm,0.5s | | | | | | |
| DJR | | | | *eS* | Sg | 17 37 51.7 | -1.7 |
| | 2.8nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.03** | **290** | *eP* | Pb | 17 37 36.9 | +1.7 |
| | 1.9nm,0.3s | | | | | | |
| KOTS | | | | *eS* | Sg | 17 38 16.6 | -2.2 |
| | 13nm,0.9s | | | | | | |
| **KTBS** | **Karatobe** | **3.49** | **296** | *eP* | Pb | 17 37 45.0 | +2.1 |
| | 0.6nm,0.4s | | | | | | |
| KTBS | | | | *eS* | Sg | 17 38 30.7 | -2.7 |
| | 3.6nm,0.3s | | | | | | |

**IDC 06 17:36:49.0±7.3, 33°81N×82°59E, h0km, mb3.3/3, mbtmp3.3/5, ML3.0/2, Error ellipse: s-maj=325.2km s-min=26.7km az=74.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **12.97** | **359** | Pn | Pn | 17 39 54.4 | -0.3 |
| | 0.2nm,0.3s,baz=184,slow=13,SNR=5.3 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.06** | **351** | P | Pn | 17 40 49.1 | +0.2 |
| | baz=175,slow=9.4,SNR=2.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.20** | **4** | P | P | 17 41 25.2 | +0.1 |
| | 0.4nm,0.5s,baz=188,slow=10,SNR=2.4 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **72.72** | **129** | P | P | 17 48 18.9 | -0.2 |
| | 0.4nm,0.9s,baz=320,slow=6.5,SNR=1.8 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **75.16** | **132** | P | P | 17 48 33.7 | +0.2 |
| | 0.4nm,0.9s,baz=324,slow=5.8,SNR=4.6 | | | | | | |
| | 0.4nm,0.9s | | | | | | |

**DJA 06 17:37:31.5±1.5, 8°S±10°×11°6E±°, h17km±17km, M3.6/6, mb3.8/1, MLv3.5/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.77** | **124** | P | Pb | 17 37 46.4 | -0.1 |
| **SRBI** | **Singaraja** | **1.04** | **282** | P | Pg | 17 37 51.5 | -0.2 |
| **DNP** | **Denpasar** | **1.08** | **250** | P | Pb | 17 37 51.4 | -0.4 |
| **PLAI** | **Plampang** | **1.61** | **109** | P | Pn | 17 37 59.9 | +0.8 |
| **JAGI** | **Jajag, Banyuwa** | **2.07** | **265** | P | Pn | 17 38 06.3 | +0.8 |
| **BSSI** | **Bau Bau, Buton** | **4.73** | **63** | P | Pn | 17 38 40.6 | -1.5 |
| **BNSI** | **Bone** | **5.46** | **45** | P | Pn | 17 38 53.3 | +1.2 |

*AEIC **06** 17:40:54.0±1.6, 52.°1N±0.°2×179.°7E±0.°2, h191km±8km, Error ellipse: s-maj=37.3km s-min=10.4km az=157.0*
**NEIC 06 17:40:55.0±0.8, 51.°9N±0.°3×179.°7E±0.°1, h197km±11km, ML2.8**(AEIC)**, Error ellipse: s-maj=42.8km s-min=5.9km az=169.0, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.57** | **206** | | Pn | 17 41 22.1 | +0.1 |
| AMKA | | | | | Sn | 17 41 41.2 | -1.7 |
| **GANO** | **Gareloi North** | **0.93** | **94** | | Pn | 17 41 23.7 | -0.2 |
| **GANE** | **Gareloi Northe** | **0.95** | **94** | | Pn | 17 41 24.0 | -0.1 |
| **GAEA** | **Gareloi East** | **0.97** | **96** | | Pn | 17 41 24.4 | +0.2 |
| GAEA | | | | | Sn | 17 41 47.6 | +0.8 |
| **TASE** | **Tanaga Southea** | **1.41** | **92** | | Pn | 17 41 27.7 | +0.1 |
| **TAFP** | **Tanaga Falls P** | **1.44** | **89** | | Pn | 17 41 27.5 | -0.3 |
| TAFP | | | | | Sn | 17 41 52.3 | -1.0 |
| **KICM** | **Kanaga Island** | **1.93** | **88** | | Pn | 17 41 32.7 | +0.3 |
| **KIWB** | **Kanaga Island** | **1.95** | **90** | Pn | Pn | 17 41 32.4 | -0.3 |
| **KINC** | **Kanaga Island** | **1.97** | **88** | | Pn | 17 41 32.9 | 0.0 |
| **ADK** | **Adak** | **2.24** | **89** | | Pn | 17 41 35.5 | -0.3 |
| **ADK** | **Adak** | **2.24** | **89** | Sn | Sn | 17 42 06.4 | -1.1 |
| **GSCK** | **Great Sitkin C** | **2.56** | **86** | | Pn | 17 41 39.3 | -0.1 |
| **GSMY** | **Great Sitkin M** | **2.63** | **85** | | Pn | 17 41 40.0 | -0.1 |
| **GSTR** | **Great Sitkin T** | **2.63** | **84** | Pn | Pn | 17 41 39.4 | -0.8 |
| **CNPA** | **Chernabura Isl** | **12.71** | **69** | P | P | 17 43 51.4 | -0.9 |
| **CNPM** | **China Poot** | **17.95** | **53** | P | P | 17 44 50.5 | +0.4 |
| **SUA** | **Susitna One** | **18.68** | **48** | P | P | 17 44 58.9 | +0.8 |
| **D19K** | **Kuna River** | **19.76** | **24** | P | P | 17 45 09.1 | -0.4 |
| **F21K** | **Alatna River** | **20.24** | **31** | P | P | 17 45 14.0 | -0.7 |
| **G24K** | **Hadweenzic Riv** | **21.99** | **35** | P | P | 17 45 32.5 | -0.4 |
| **SCRK** | **Sand Creek** | **22.39** | **43** | P | P | 17 45 37.0 | +0.2 |
| **C23K** | **Itkillik River** | **22.66** | **26** | P | P | 17 45 38.9 | -0.1 |
| **I28M** | **Miner Creek** | **24.45** | **41** | P | P | 17 45 54.9 | -0.4 |

*IDC **06** 17:49:25.6±0.8, 8.°20S×116.°27E, h0km, mb3.8/8, mbtmp3.8/9, ML3.9/1, MS3.0/5, Error ellipse: s-maj=23.2km s-min=17.4km az=82.0*
*NEIC **06** 17:49:26.9±2.4, 8.°30S±0.°09×116.°37E±0.°06, h10km±1km, mb4.2/11, Error ellipse: s-maj=14.9km s-min=9.2km az=187.0*
*DJA **06** 17:49:28.2±0.8, 8°S±8°×11°6E±°, h12km±8km, M4.2/9, mb4.2/1, MLv4.2/9*
**ISC 06 17:49:26.8±0.6, 8°28S±0°06×116°32E±0°05, h10km, n58, σ1s26/54, mb3.9/9, MS2.9/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.72** | **129** | P | **Pn** | **17 49 44.0** | **+1.0** |
| **SRBI** | **Singaraja** | **1.11** | **280** | P | **Pb** | **17 49 47.7** | **-0.4** |
| **DNP** | **Denpasar** | **1.17** | **250** | P | **Pn** | **17 49 48.1** | **-1.1** |
| **PLAI** | **Plampang** | **1.54** | **111** | P | **Pb** | **17 49 56.1** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.15** | **265** | P | **Pn** | **17 50 02.8** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.15** | **265** | Pn | **Pn** | **17 50 02.8** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.15** | **265** | P | **Pn** | **17 50 02.7** | **0.0** |
| **PWJI** | **Pagerwoju** | **4.48** | **273** | P | **Pn** | **17 50 35.0** | **+0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.65** | **63** | P | **Pn** | **17 50 38.1** | **+1.0** |
| **KAPI** | **Kappang** | **4.71** | **47** | Pn | **Pn** | **17 50 37.1** | **-0.8** |
| **KAPI** | **Kappang** | **4.71** | **47** | Pn | **Pn** | **17 50 38.7** | **+0.8** |
| | 4.8nm,0.3s,baz=203,slow=16,SNR=2.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **17 51 31.0** | **-1.5** |
| | 11nm,0.3s,baz=180,slow=20,SNR=6.3 | | | | | | |
| KAPI | | | | Lg | Lg | 17 51 55.2 | |
| | 8.7nm,0.3s,baz=294,slow=19,SNR=4.3 | | | | | | |
| KAPI | | | | LR | LR | 17 51 59.1 | |
| | comp=Z,57nm,21.9s,baz=242,slow=33 | | | | | | |
| | 8.2nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.39** | **45** | P | **Pn** | **17 50 49.7** | **+2.4** |
| **UGM** | **Wanagama** | **5.75** | **273** | P | **Pn** | **17 50 55.5** | **+3.2** |
| **UGM** | **Wanagama** | **5.75** | **273** | Pn | **Pn** | **17 50 52.7** | **+0.4** |
| **MMRI** | **Maumere** | **5.86** | **94** | Pn | **Pn** | **17 50 51.3** | **-2.6** |
| **SOEI** | **Soe** | **7.99** | **101** | Pn | **Pn** | **17 51 21.7** | **-1.4** |
| **LUWI** | **Luwuk** | **9.64** | **42** | Pn | **Pn** | **17 51 43.8** | **-2.0** |
| **MBWA** | **Marble Bar** | **13.22** | **166** | P | **Pn** | **17 52 35.4** | **+0.9** |
| **MBWA** | **Marble Bar** | **13.22** | **166** | Pn | **Pn** | **17 52 34.4** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **13.32** | **138** | Pn | **Pn** | **17 52 35.7** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **13.65** | **166** | Pn | **Pn** | **17 52 40.2** | **-0.3** |
| **GIRL** | **Giralia** | **14.42** | **188** | P | **Pn** | **17 52 50.8** | **-0.3** |
| **GIRL** | **Giralia** | **14.42** | **188** | Pn | **Pn** | **17 52 50.3** | **-0.8** |
| **DRS** | **Darwin Rock St** | **14.92** | **107** | P | **Pn** | **17 52 56.5** | **-1.5** |
| **MTN** | **Manton Dam** | **15.25** | **109** | P | **Pn** | **17 53 03.5** | **+1.2** |
| **MTN** | **Manton Dam** | **15.25** | **109** | | **Pn** | **17 53 02.4** | **+0.1** |
| **KDU** | **Kakadu** | **16.47** | **107** | P | **Pn** | **17 53 17.8** | **-0.4** |
| **DAV** | **Davao City (W)** | **17.82** | **31** | LR | LR | 18 00 34.2 | |
| | comp=Z,71nm,21.6s,baz=226,slow=38 | | | | | | |
| **MEEK** | **Meekatharra** | **18.39** | **173** | P | **Pn** | **17 53 43.4** | **+1.4** |
| **WRKA** | **Warakurna** | **20.20** | **147** | P | **P** | **17 54 03.6** | **+1.6** |
| **MORW** | **Morawa** | **20.68** | **181** | P | Pn | 17 54 09.8 | +0.4 |
| MORW | | | | IAmb | IAmb | 17 54 47.9 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.90** | **125** | P | **P** | **17 54 10.6** | **+1.1** |
| WB0 | | | | IAmb | IAmb | 17 54 21.3 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.94** | **126** | P | **P** | **17 54 07.3** | **-2.7** |
| **WRA** | **Warramunga Arr** | **20.94** | **126** | P | **P** | **17 54 10.6** | **+0.5** |
| | comp=Z,4.6nm,0.6s,baz=301,slow=12,SNR=51 | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.95** | **125** | P | **P** | **17 54 10.0** | **0.0** |
| WRAB | | | | IAmb | IAmb | 17 54 22.0 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.95** | **125** | P | **P** | **17 54 11.2** | **+1.0** |
| WB2 | | | | IAmb | IAmb | 17 54 12.1 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **22.76** | **134** | P | **P** | **17 54 27.6** | **-1.9** |
| **ASAR** | **Alice Springs** | **22.76** | **134** | P | **P** | **17 54 28.2** | **-1.3** |
| **ASAR** | **Alice Springs** | **22.76** | **134** | P | **P** | **17 54 30.4** | **+0.9** |
| | comp=Z,4.0nm,0.9s,baz=307,slow=8.6,SNR=47 | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **AS01** | **Alice Springs** | **22.79** | **134** | P | **P** | **17 54 30.6** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **24.54** | **178** | LR | LR | 18 06 26.1 | |
| | comp=Z,37nm,18.1s,baz=154,slow=42 | | | | | | |
| **FORT** | **Forrest** | **24.93** | **155** | P | **P** | **17 54 52.4** | **+2.1** |
| **FORT** | **Forrest** | **24.93** | **155** | P | **P** | **17 54 49.4** | **-0.9** |
| **OOD** | **Oodnadatta** | **26.68** | **139** | P | **P** | **17 55 06.8** | **+0.7** |
| **COEN** | **Coen** | **26.93** | **104** | P | **P** | **17 55 09.2** | **+0.6** |
| **COEN** | **Coen** | **26.93** | **104** | P | **P** | **17 55 08.8** | **+0.2** |
| COEN | | | | IAmb | IAmb | 17 55 15.7 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.62** | **327** | LR | LR | 18 09 02.0 | |
| | comp=Z,43nm,19.7s,baz=175,slow=37 | | | | | | |
| **STKA** | **Stephens Creek** | **33.22** | **138** | P | **P** | **17 56 01.6** | **-2.5** |
| STKA | | | | IAmb | IAmb | 17 56 05.8 | |
| | comp=Z,2.8nm,1.4s | | | | | | |
| **GUMO** | **Guam** | **35.71** | **53** | LR | LR | 18 11 23.1 | |
| | comp=Z,16nm,18.1s,baz=164,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **56.56** | **352** | P | **P** | **17 59 10.2** | **+0.5** |
| SONM | | | | IAmb | IAmb | 17 59 16.5 | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.56** | **352** | P | **P** | **17 59 10.4** | **+0.8** |
| | comp=Z,1.0nm,0.6s,baz=173,slow=8.4,SNR=5.3 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.64** | **334** | P | **P** | **17 59 52.5** | **+1.0** |
| **MKAR** | **Makanchi Array** | **62.64** | **334** | P | **P** | **17 59 50.9** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=144,slow=7.3,SNR=4.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.18** | **335** | P | **P** | **18 00 20.0** | **-0.9** |
| | comp=Z,0.2nm,0.4s,baz=146,slow=6.7,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.45** | **340** | P | **P** | **18 00 21.9** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=150,slow=6.5,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **73.11** | **171** | P | **P** | **18 00 58.5** | **+1.5** | | |
| | comp=Z,0.4nm,0.5s,baz=320,slow=4.2,SNR=6.9 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.71** | **180** | P | **P** | **18 01 45.9** | **+0.4** | | |
| | comp=Z,1.6nm,1.1s,baz=259,slow=11,SNR=2.5 | | | | | | | | |
| | comp=Z,1.6nm,1.1s | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.05** | **190** | PKPbc | **PKPdf** | **18 09 05.0** | **-0.3** | | |
| | comp=Z,1.1nm,0.5s,baz=85,slow=2.3,SNR=2.6 | | | | | | | | |

*NEIC **06** 17:58:25.0±2.2, 9.°86N×0.°06×78.°64W±0.°06, h35km±2km, mb4.9/438, Error ellipse: s-maj=10.4km s-min=10.1km az=162.0*
*IDC **06** 17:58:26.0±0.7, 9.°77N×78.°66W, h68km±6km, mb4.4/23, mbtmp4.8/28, MS3.6/38, Error ellipse: s-maj=14.9km s-min=9.5km az=58.0*
*RSNC **06** 17:58:26.3±0.0, 10.°N±2°×7.°9W±°, h23km±5km, M5.3, mb5.5, mB5.6, ML4.4, Mw(mB)5.1*
*UPA **06** 17:58:26.9±0.8, 9.°71N×78.°68W, h50km±7km, MW5.0, Fault plane solution: NP1:φs62.00000°, δ28.00000°, λ47.00000°.*
*UCR **06** 17:58:28.9±1.4, 9.°73N×78.°92W, h57km±19km, MW4.8*
*CATAC **06** 17:58:29.3±0.7, 10.°06N×79.°15W, h10km, MB5.3, mb5.3, ML5.1*
*GCMT **06** 17:58:29.0±0.3, 10.°01N±0.°02×78.°63W±0.°02, h42km±1km, MW4.8/52, Moment Tensor Solution. s39,c49; s52,c67; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.85±.12; $M_{\theta\theta}$-1.77±.07; $M_{\phi\phi}$-0.08±.10; $M_{r\theta}$0.84±.05; $M_{\theta\phi}$0.48±.08; $M_{\phi r}$0.64±.06; Best double couple: $M_0$2.14000×$10^{16}$ NP1:$\phi_s$84.00000°, δ58.00000°, λ67.00000°. NP2: $\phi_s$303.00000°, δ39.00000°, λ122.00000°. Principal axes: T 2.2640, Plg68.0000°, Azm307.0000°; N -0.2480, Plg19.0000°, Azm97.0000°; P -2.0160, Plg10.0000°, Azm191.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 06 17:58:24.5±0.4, 9.°89N±0.°03×78.°63W±0.°03, h45km±3km, h45km:pP-P, n886, σ1s43/766, mb4.9/249, MS3.6/33, 20C-31D, Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNTA3** | **Canitas, Panam** | **0.71** | **201** | ⇓*iP* | **Pn** | **17 58 38.1** | **-0.1** |
| CNTA3 | | | | *eS* | **Sn** | **17 58 47.1** | **-1.0** |
| **CHPO** | **Chepo, Panama** | **0.86** | **214** | ⇓*eP* | **Pn** | **17 58 40.1** | **-0.1** |
| CHPO | | | | *eS* | **Sn** | **17 58 50.2** | **-1.4** |
| **TOTI** | **Torti** | **1.00** | **162** | ⇓*iP* | **Pn** | **17 58 42.3** | **+0.2** |
| TOTI | | | | *eS* | **Sn** | **17 58 54.7** | **-0.3** |
| **FRIJ** | **El Hiral** | **1.27** | **239** | ⇓*eP* | **Pn** | **17 58 45.7** | **-0.1** |
| **UPA** | **Univ. de Panam** | **1.27** | **225** | ⇓*eP* | **Pn** | **17 58 45.9** | **+0.1** |
| UPA | | | | *eS* | **Sn** | **17 58 59.3** | **-2.3** |
| **FLAM** | **Flamenco Islan** | **1.32** | **223** | ⇑*eP* | **Pn** | **17 58 46.6** | **+0.1** |
| FLAM | | | | *eS* | **Sn** | **17 59 01.9** | **-1.0** |
| **ARRA3** | **Arraijan, Pana** | **1.37** | **228** | ⇓*eP* | **Pn** | **17 58 47.4** | **+0.2** |
| **MLIR** | **Monte Lirio** | **1.37** | **242** | ⇓*iP* | **Pn** | **17 58 47.4** | **+0.3** |
| MLIR | | | | *eS* | **Sn** | **17 58 56.3** | **-7.8** |
| **BCIP** | **Isla Barro Col** | **1.39** | **239** | Pn | **Pn** | **17 58 47.5** | **0.0** |
| **BCIP** | **Isla Barro Col** | **1.39** | **239** | P | **Pn** | **17 58 47.7** | **+0.3** |
| BCIP | | | | S | **Sn** | **17 59 03.5** | **-1.2** |
| **BCIP** | **Isla Barro Col** | **1.39** | **239** | *i* P | **Pn** | **17 58 47.8** | **+0.3** |
| BCIP | | | | *i* S | **Sn** | **17 59 03.9** | **-0.8** |
| BCIP | | | | IAML | | 17 59 05.9 | |
| | comp=Z,17μm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **1.39** | **239** | ⇓*eP* | **Pn** | **17 58 47.8** | **+0.3** |
| BCIP | | | | *eS* | **Sn** | **17 59 03.7** | **-1.0** |
| **BCIP** | **Isla Barro Col** | **1.39** | **239** | *eP* | **Pn** | **17 58 47.7** | **+0.3** |
| **TABO3** | **Taboga, Panama** | **1.42** | **220** | ⇑*iP* | **Pn** | **17 58 48.0** | **+0.2** |
| TABO3 | | | | *eS* | **Sn** | **17 59 04.3** | **-1.1** |
| **UPD2** | **Meteti** | **1.46** | **156** | ⇓*eP* | **Pn** | **17 58 48.7** | **+0.3** |
| UPD2 | | | | *eS* | **Sn** | **17 59 05.5** | **-0.9** |
| **ZANG** | **Zanguenga, Cho** | **1.53** | **233** | ⇑*eP* | **Pn** | **17 58 50.9** | **+1.5** |
| ZANG | | | | *eS* | **Sn** | **17 59 07.8** | **-0.3** |
| **CAPC** | **Capurgana** | **1.77** | **135** | P | **Pn** | **17 58 53.2** | **+0.6** |
| CAPC | | | | S | **Sn** | **17 59 13.8** | **-0.1** |
| **LCBC** | **Los crdobas,** | **2.45** | **114** | P | **Pn** | **17 59 03.9** | **+1.9** |
| LCBC | | | | S | **Sn** | **17 59 28.3** | **-2.5** |
| **LCBC** | **Los crdobas,** | **2.45** | **114** | ⇓*iP* | **Pn** | **17 59 04.0** | **+1.9** |
| LCBC | | | | *eS* | **Sn** | **17 59 31.9** | **+1.1** |
| **CHIT3** | **Chitre** | **2.61** | **223** | ⇓*eP* | **Pn** | **17 59 04.1** | **-0.1** |
| CHIT3 | | | | *eS* | **Sn** | **17 59 32.5** | **-2.2** |
| **AZU** | **Azuero** | **2.64** | **218** | P | **Pn** | **17 59 04.5** | **-0.1** |
| AZU | | | | S | **Sn** | **17 59 33.3** | **-2.1** |
| **AZU** | **Azuero** | **2.64** | **218** | ⇓*iP* | **Pn** | **17 59

SMRC S Sn 18 00 19.1 -2.5
**PTPM Petroterminale 4.52 249** eP Pn 17 59 32.2 +1.7
PTPM eS Sn 18 00 19.4 -2.4
**DRK0 Durika 4.60 263** i P Pn 17 59 33.5 +1.8
DRK0 i S Sn 18 00 20.2 -3.7
DRK0 IAML 18 00 23.9
comp=Z,13µm,1.0s
**DRK0 Durika 4.60 263** eP Pn 17 59 32.8 +1.1
**BURE Buenos Aires 4.70 262** eP Pn 17 59 35.5 +2.5
**CBOC Ciudad Bolivar 4.76 147** P Pn 17 59 34.3 +0.4
CBOC S Sn 18 00 27.0 -1.0
**LCOCO El Coco 4.86 273** eP Pn 17 59 36.2 +1.1
**OCHAL Ojochal 5.01 261** i P Pn 17 59 39.6 +2.4
OCHAL i S Sn 18 00 32.1 -1.8
OCHAL IAML 18 00 39.7
comp=Z,1µm,1.0s
**VTCV VTCV, Calle Va 5.03 272** eP Pn 17 59 38.8 +1.3
**PIZC Pizarro, Choco 5.05 166** P Pn 17 59 38.8 +1.1
comp=Z,650nm,0.6s,comp=Z,8µm
PIZC S Sn 18 00 35.4 +0.6
comp=Z,650nm,0.6s,comp=Z,8µm
**VTR0 Volcan Turrial 5.06 272** eP Pn 17 59 40.0 +1.8
**VTLA Turrialba Volc 5.07 272** eP Pn 17 59 39.5 +1.2
**VICA Volcano Irazu 5.14 272** eP Pn 17 59 40.0 +0.6
**PTBC PUERTO BERRIO. 5.30 129** P Pn 17 59 40.2 -1.0
comp=Z,170nm,0.5s
PTBC S Sn 18 00 37.7 -3.3
comp=Z,170nm,0.5s
**LCR2 La Lucha 2 5.30 269** Pn Pn 17 59 42.6 +1.2
**LCR2 La Lucha 2 5.30 269** i P Pn 17 59 43.0 +1.6
LCR2 i S Sn 18 00 39.3 -2.1
LCR2 IAML 18 00 46.0
comp=Z,780nm,1.0s
**LCR2 La Lucha 2 5.30 269** eP Pn 17 59 42.6 +1.2
**ABE2 San Pablo 5.35 269** eP Pn 17 59 44.0 +1.9
**HDC Heredia 5.41 272** Pn Pn 17 59 44.4 +1.6
**HDC Heredia 5.41 272** eP Pn 17 59 44.6 +1.9
HDC eS Sn 18 00 42.3 -1.6
**HDC Heredia 5.41 272** eP Pn 17 59 44.8 +2.0
**HDC Heredia 5.41 272** eP Pn 17 59 44.5 +1.8
HDC eS Sn 18 00 42.1 -1.8
**PLMC San Jos del P 5.47 155** P Pn 17 59 42.4 -1.1
comp=Z,308nm,0.5s,comp=Z,6µm
PLMC S Sn 18 00 41.3 -3.9
comp=Z,308nm,0.5s,comp=Z,6µm
**OCAC Ocana 5.49 107** P Pn 17 59 43.8 -0.1
comp=Z,616nm,0.6s
OCAC S Sn 18 00 44.5 -1.4
comp=Z,616nm,0.6s
**BRJC Barrancabermej 5.63 121** P Pn 17 59 45.8 +0.1
comp=Z,503nm,0.5s,comp=Z,6µm
BRJC S Sn 18 00 47.6 -1.5
comp=Z,503nm,0.5s,comp=Z,6µm
**NORC Norcasia 5.68 139** P Pn 17 59 48.1 +1.6
comp=Z,226nm,0.5s,comp=Z,3µm
NORC S Sn 18 00 50.2 -0.3
comp=Z,226nm,0.5s,comp=Z,3µm
**COVE Coope Vega, Sa 5.74 279** i P Pn 17 59 48.3 +1.0
COVE IAmb IAmb 18 00 03.4
comp=Z,530nm,0.8s
COVE i S Sn 18 00 47.7 -4.2
COVE IVmB_BB 18 00 48.2
comp=Z,8µm,1.0s
COVE IAML 18 00 55.9
comp=Z,2µm,1.0s
**CRJC Cerrejon, Guaj 5.76 78** P Pn 17 59 49.7 +2.1
CRJC S Sn 18 00 48.3 -4.2
**SOCE Pocosol 5.92 275** Pn Pn 17 59 51.1 +1.4
**MALC Bahia Malaga 5.97 168** P Pn 17 59 51.8 +1.4
MALC S Sn 18 00 58.1 +0.5
**SPBC San Pablo de B 6.17 133** P Pn 17 59 52.2 -1.0
comp=Z,144nm,0.6s
SPBC S Sn 18 00 58.2 -4.3
comp=Z,144nm,0.6s
**ANIL Santa Ana 6.24 149** P Pn 17 59 56.3 +2.0
**JTS Las Juntas de 6.24 274** Pn Pn 17 59 55.5 +1.5
**JTS Las Juntas de 6.24 274** P Pn 17 59 55.6 +1.5
comp=Z,58nm,0.5s,baz=90,slow=20,SNR=38
JTS S Sn 18 01 04.4 +0.2
comp=Z,86nm,0.7s,baz=344,slow=23,SNR=6.1
**JTS Las Juntas de 6.24 274** P Pn 17 59 55.8 +1.7
**JTS Las Juntas de 6.24 274**⇑ eP Pn 17 59 55.6 +1.5
JTS eS Sn 18 01 01.6 -2.7
**JTS Las Juntas de 6.24 274** eP Pn 17 59 55.6 +1.5
**YOTC Yotoco, Valle 6.29 159** P Pn 17 59 54.1 -0.7
comp=Z,536nm,0.6s,comp=Z,6µm
**BARC Barichara 6.30 121** P Pn 17 59 54.9 -0.3
comp=Z,249nm,0.6s
**PAMC Pamplona, Colo 6.38 113** P Pn 17 59 56.8 +0.3
**CUI Cuipilapa 6.48 277** eP Pn 17 59 58.5 +1.1
**ROSC El Rosal 6.58 139** Pn Pn 17 59 60.0 +0.8
**ROSC El Rosal 6.58 139** P Pn 17 59 59.2 0.0
comp=Z,102nm,0.6s,baz=56,slow=6.6,SNR=20
ROSC S Sn 18 01 14.7 +1.6
comp=Z,198nm,0.8s,baz=15,slow=24,SNR=6.5
ROSC LR LR 18 02 22.9
comp=Z,483nm,21.7s,baz=343,slow=36
**ACON Acoyapa 6.75 288** Pn Pn 18 00 02.3 +1.2
**ACON Acoyapa 6.75 288** P Pn 17 59 59.6 -1.5
**ACON Acoyapa 6.75 288** eP Pn 18 00 02.3 +1.2
**URIC Uribia, Colomb 6.76 74** P Pn 18 00 02.7 +1.5
comp=Z,51nm,0.6s
**RUSC La Rusia 6.77 125** P Pn 18 00 01.0 -0.8
comp=Z,105nm,0.8s
**ORTC Ortega, Tolima 6.82 150** P Pn 18 00 05.2 +3.1
**GR1C Gorgona, Isla 6.85 176** P Pn 18 00 04.7 +2.2
**JAMC Jamundi, Valle 6.91 164** P Pn 18 00 03.6 +0.2
comp=Z,298nm,0.5s,comp=Z,4µm
**CVER Cruz Verde, Cu 6.99 139** P Pn 18 00 07.1 +2.4
comp=Z,416nm,0.6s,comp=Z,5µm
**CHIC Chingaza 7.13 137** P Pn 18 00 08.2 +1.5
comp=Z,70nm,0.6s,comp=Z,1µm
**PRAC Prado 7.17 149** P Pn 18 00 09.4 +2.5
comp=Z,187nm,0.6s,comp=Z,2µm
**BOAB BOACO BROADBAN 7.36 291** Pn Pn 18 00 10.9 +1.4
**BOAB BOACO BROADBAN 7.36 291** i P Pn 18 00 11.3 +1.8
BOAB IVmB_BB 18 00 13.4
comp=Z,2µm,1.0s
BOAB IAmb IAmb 18 00 37.8
comp=Z,81nm,0.6s
BOAB i S Sn 18 01 27.4 -4.4
BOAB IAML 18 01 46.2
comp=Z,250nm,1.0s
**VILC Villavicencio, 7.54 139** P Pn 18 00 14.4 +2.4
**POPC Popayan, Colom 7.55 165** P Pn 18 00 13.8 +1.5
comp=Z,608nm,1.0s,comp=Z,6µm
**TAMC Tame, Arauca 7.58 116** P Pn 18 00 13.3 +0.7
comp=Z,80nm,0.6s
**BETC Betania 7.83 156** P Pn 18 00 18.0 +2.1
**URMC La Uribe, Meta 7.83 147** P Pn 18 00 17.5 +1.5
comp=Z,118nm,0.5s,comp=Z,2µm
**BBAC Balboa, Cauca 7.93 170** P Pn 18 00 19.0 +1.5
comp=Z,760nm,0.7s,comp=Z,8µm
**SDV Santo Domingo 7.95 97** Pn Pn 18 00 18.4 +0.7
**SDV Santo Domingo 7.95 97** P Pn 18 00 18.7 +1.0
comp=Z,24nm,0.4s,baz=305,slow=14,SNR=11
SDV S Sn 18 01 44.4 -2.1
comp=Z,449nm,0.4s,baz=38,slow=15,SNR=25
SDV LR LR 18 04 43.1
comp=Z,385nm,18.9s,baz=251,slow=47
**SDV Santo Domingo 7.95 97** eP Pn 18 00 16.5 -1.2
**GARC Garzon, Huila 8.26 158** P Pn 18 00 23.4 +1.4
comp=Z,291nm,0.5s,comp=Z,6µm
**HOJ Hope 8.27 13**⇑ eP Pn 18 00 24.5 +2.6
**STH Stony Hill 8.33 12** eP Pn 18 00 24.8 +2.0
**STH Stony Hill 8.33 12** eP Pn 18 00 24.5 +1.7
STH eS Sn 18 01 51.0 -4.6
**MTDJ Mount Denham 8.36 7** Pn Pn 18 00 24.2 +1.0
**MTDJ Mount Denham 8.36 7**⇑ i P Pn 18 00 24.6 +1.3
**MTDJ Mount Denham 8.36 7** eP Pn 18 00 24.3 +1.0
MTDJ IAmb IAmb 18 00 25.2
comp=Z,41nm,0.3s
MTDJ eS Sn 18 01 52.8 -3.6
**CRUC La Cruz 8.43 169** P Pn 18 00 27.8 +3.4
**PTGC Puerto Gaitan, 8.57 131** P Pn 18 00 23.9 -2.1
**SOMN Somoto 8.58 295** i P Pn 18 00 26.9 +0.6
SOMN IAML 18 00 36.7
comp=Z,58nm,1.0s
SOMN IVmB_BB 18 00 38.5
comp=Z,920nm,1.0s
**GCUF Volcan Galeras 8.70 171** P Pn 18 00 30.4 +2.2
comp=Z,672nm,0.5s,comp=Z,9µm
**FLOC Florencia 8.76 160** P Pn 18 00 29.9 +1.2
**CMBC Cumbal 8.92 175** P Pn 18 00 33.8 +2.5

**TULM Tulcn-Chalpat 9.15 175** Pn Pn 18 00 36.9 +2.5
**TULM Tulcn-Chalpat 9.15 175** P Pn 18 00 38.3 +3.9
**TGUH Tegucigalpa,Un 9.42 297** Pn Pn 18 00 38.5 +0.6
**BONI La Bonita 9.43 173** P Pn 18 00 41.0 +2.9
**IMBA Imbabura, San 9.55 177** Pn Pn 18 00 41.2 +1.2
**PAC1 Pacto, Paraso 9.56 181** P Pn 18 00 41.7 +2.0
**OTAV Otavalo 9.59 179** Pn Pn 18 00 42.1 +1.7
**OTAV Otavalo 9.59 179** P Pn 18 00 42.0 +1.6
**HATO Hato, Curacao 9.76 76** Sn 18 02 28.6 -2.0
**PULU Pululahua 9.80 179** Pn 18 00 45.9 +2.6
**LMGC Las Mercedes 10.24 9** eP Pn 18 00 49.7 +0.8
**CHIV Chivirico 10.26 12** Pn 18 00 50.8 +1.6
**CHIV Chivirico 10.26 12** eP Pn 18 00 50.6 +1.5
**ANTS Antisana-Sarah 10.32 177** Pn 18 00 54.2 +3.6
**MARVS Santiago de Cu 10.39 14** eP Pn 18 00 53.2 +2.2
**GTBY Guantanamo Bay 10.54 18** Pn Pn 18 00 56.0 +2.9
**GTBY Guantanamo Bay 10.54 18**⇑ i P Pn 18 00 56.2 +3.2
**GTBY Guantanamo Bay 10.54 18** eP Pn 18 00 55.8 +2.7
**SLOR San Lorenzo - 10.55 179** Pn 18 00 56.9 +3.3
**QMBU Quimbuelo 10.89 19** eP Pn 18 01 00.0 +2.1
**MASC Masc 11.07 22** eP Pn 18 01 02.7 +2.4
**HLGC Holguin 11.22 12** eP Pn 18 01 05.2 +2.9
**MOAC Moa 11.28 18** eP Pn 18 01 05.5 +2.3
MOAC eS Sn 18 03 07.2 -0.6
**SDDR Presa de Saban 11.50 37** Pn Pn 18 01 07.3 +1.2
**SDDR Presa de Saban 11.50 37** eP Pn 18 01 08.8 +2.6
SDDR i S Sn 18 03 04.7 -8.6
**APG El Apazote 12.63 295** P Pn 18 01 23.3 +1.5
comp=Z,0.3nm,0.8s,baz=68,slow=18,SNR=2.7
APG S Sn 18 03 41.0 -0.2
comp=Z,0.3nm,0.3s,baz=192,slow=13,SNR=10
**PCRV Puerto La Cruz 13.78 88** P Pn 18 01 36.0 -1.4
comp=Z,3.6nm,0.5s,baz=281,slow=7.3,SNR=2.6
PCRV S Sn 18 04 02.8 -6.3
comp=Z,9.8nm,0.5s,baz=7.0,slow=13,SNR=2.1
PCRV LR LR 18 09 45.4
comp=Z,221nm,18.3s,slow=49
**TEIG Tepich 13.87 319** P Pn 18 01 39.2 +0.7
comp=Z,5.4nm,0.3s,baz=290,slow=1.8,SNR=15
TEIG S Sn 18 04 06.5 -4.6
comp=Z,9.0nm,0.6s,baz=56,slow=22,SNR=2.8
TEIG LR LR 18 06 41.4
comp=Z,419nm,21.6s,baz=152,slow=36
**OBIP Obispado Ponce 14.20 54** Pn Pn 18 01 44.4 +1.4
**AOPR Arecibo Observ 14.25 53** Pn 18 01 41.9 -1.8
**CCIG Comitan 14.61 297** P 18 01 55.5 +1.3
**TBTG Tabatinga, AM 16.46 148** Pn Pn 18 02 11.9 -0.5
**TBTG Tabatinga, AM 16.46 148** eP Pn 18 02 10.5 -1.9
**ATAH Atahualpa 16.91 179** P Pn 18 02 16.1 -2.4
comp=Z,19nm,1.1s,baz=354,slow=9.5,SNR=7.7
ATAH LR LR 18 09 06.5
comp=Z,118nm,20.1s,baz=12,slow=38
**CMIG Matias Romero 17.35 296** P Pn 18 02 20.2 -3.3
comp=Z,3.6nm,0.6s,baz=111,slow=14,SNR=4.4
CMIG LR LR 18 10 22.3
comp=Z,150nm,18.5s,baz=123,slow=41
**DWPF Disney Wildern 18.32 352** P Pn 18 02 37.4 +2.1
baz=171
**CZSB Cruzeiro do Su 18.47 161** P P 18 02 35.9 -0.8
**CZSB Cruzeiro do Su 18.47 161** eP P 18 02 35.9 -0.8
**TEFE Tefe 19.27 133** eP P 18 02 46.1 +0.3
**BOAV Boa Vista 19.47 111** P P 18 02 48.0 +0.3
**BOAV Boa Vista 19.47 111** eP Pn 18 02 48.7 -0.5
**451A Vernon 21.67 343** P P 18 03 12.3 +0.9
451A IAmb IAmb 18 03 31.4
comp=Z,113nm,1.3s
**NNA Nana 21.80 175** P P 18 03 13.3 +0.3
NNA IAmb IAmb 18 03 14.7
comp=Z,112nm,1.6s
**NNA Nana 21.80 175** P P 18 03 12.1 -0.8
comp=Z,20nm,0.6s,baz=359,slow=9.4,SNR=8.3
NNA LR LR 18 12 56.8
comp=Z,128nm,21.8s,baz=340,slow=40
comp=Z,20nm,0.6s
**TIGA Tifton 21.94 349** P P 18 03 17.0 +2.8
baz=167
**MACA Manacapuru-AM 22.08 125** IAmb IAmb 18 03 18.6
comp=Z,37nm,0.6s
**MACA Manacapuru-AM 22.08 125** eP P 18 03 16.1 +0.2
**BRAL Brewton 22.58 341** P P 18 03 23.5 +2.4
baz=158
**ETMB Extrema 23.14 147** P P 18 03 25.8 -1.3
ETMB IAmb IAmb 18 03 33.5
comp=Z,30nm,0.8s
**ETMB Extrema 23.14 147** eP P 18 03 25.6 -1.5
**NHSC New Hope 23.16 357** P P 18 03 29.3 +2.3
baz=176
**GOGA Godfrey 23.84 350** P P 18 03 35.7 +2.2
baz=168,SNR=8.7
**SAML Samuel 24.22 140** P P 18 03 35.9 -1.3
SAML IAmb IAmb 18 03 37.4
comp=Z,56nm,1.3s
**SAML Samuel 24.22 140** eP P 18 03 36.0 -1.2
**LRAL Lakeview Retre 24.30 343** P P 18 03 40.6 +2.8
baz=160,SNR=9.7
**BIRD Birdtown, Kers 24.70 356** IAmb IAmb 18 04 14.4
comp=Z,32nm,1.0s
**VBMS Vicksburg 24.80 335** IAmb IAmb 18 03 46.2
comp=Z,52nm,0.8s
**VBMS Vicksburg 24.80 335** P P 18 03 44.8 +2.4
baz=151
**Y49A Blount Mountai 24.91 344** IAmb IAmb 18 03 46.7
comp=Z,19nm,0.8s
**X51A Calhoun 25.22 348** P P 18 03 47.8 +1.7
**KMSC Kings Mountain 25.26 355** P P 18 03 48.9 +2.3
baz=174
**HBVL Hebbronville 25.49 315** P P 18 03 49.3 +0.6
**HKT Hockley 25.63 324** P P 18 03 50.9 +1.1
HKT IAmb IAmb 18 03 54.7
comp=Z,30nm,1.2s
**TKL Tuckaleechee C 26.08 350** LR LR 18 14 13.7
comp=Z,153nm,19.1s,baz=151,slow=36
**SWET Senee 26.08 346** P P 18 03 55.4 +1.3
**MDP Montagnes des 26.19 99** LR LR 18 15 45.9
comp=Z,149nm,18.5s,baz=258,slow=40
**NATX Nacogdoches 26.36 328** P P 18 03 58.5 +2.0
baz=142
**OXF Oxford 26.43 340** P P 18 03 58.6 +1.6
baz=156
**PLAL Pickwick Lake 26.43 342** IAmb IAmb 18 04 00.3
comp=Z,46nm,1.7s
**833A Chaparral WMA, 26.78 316** IAmb IAmb 18 04 01.7
comp=Z,35nm,0.9s
**833A Chaparral WMA, 26.78 316** P P 18 04 00.8 +0.4
baz=129,SNR=6.7
**ITTB Itaituba 26.84 121** eP P 18 04 02.5 +1.4
**TZTN Tazewell 26.91 351** P P 18 04 03.6 +2.2
baz=169
**237A Washetta, Mont 27.16 327** P P 18 04 04.5 +0.8
237A IAmb IAmb 18 04 06.6
comp=Z,30nm,0.9s
**WLAR White Oak Lake 27.18 333** P P 18 04 05.6 +1.8
**BLA Blacksburg 27.25 357** P P 18 04 06.6 +2.0
baz=176
**WVT Waverly 27.43 344** P P 18 04 05.7 -0.4
**WVT Waverly 27.43 344** P P 18 04 07.7 +1.6
baz=160
**T50A Nancy 27.59 349** P P 18 04 08.5 +0.9
**LPAZ La Paz 28.00 158** P P 18 04 11.4 -0.7
comp=Z,9.6nm,0.6s,baz=343,slow=7.5,SNR=38
LPAZ LR LR 18 16 24.5
comp=Z,196nm,20.3s,baz=304,slow=39
comp=Z,9.6nm,0.6s
**LPAZ La Paz 28.00 158** eP P 18 04 12.1 0.0
**WHTX Lake Whitney, 28.07 324** P P 18 04 12.8 +1.0
baz=138
**MIAR Mount Ida 28.10 333** P P 18 04 13.5 +1.4
baz=148,SNR=9.9
**DRIO Del Rio 28.30 316** P P 18 04 13.5 -0.5
**MCPB Macapa, AP 28.33 110** eP P 18 04 15.2 +0.7
**LCAR Lake Charles 28.45 338** IAmb IAmb 18 04 17.8
comp=Z,25nm,1.0s
**NPGB Novo Progresso 28.64 125** eP P 18 04 17.4 +0.3
**FCAR Ozark Folk Cen 28.65 337** IAmb IAmb 18 04 19.0
comp=Z,15nm,0.7s
**PBMO Poplar Bluff 28.83 340** IAmb IAmb 18 04 21.2
comp=Z,26nm,0.8s
**FW06 Azle 28.85 326** IAmb IAmb 18 04 22.9
comp=Z,27nm,1.0s
**X37A Clayton 28.97 331** IAmb IAmb 18 04 22.6
comp=Z,19nm,0.9s
**WCI Wyandotte Cave 29.05 348** P P 18 04 22.3 +1.8
baz=164
**CGM3 Cape Girardeau 29.05 342** IAmb IAmb 18 04 23.6
comp=Z,20nm,0.7s

**PLPT Palo Pinto 29.16 324** IAmb IAmb 18 04 23.8
comp=Z,20nm,1.1s
**T42A Van Buren 29.28 339** IAmb IAmb 18 04 24.9
comp=Z,26nm,0.8s
**S44A Carbondale 29.30 343** IAmb IAmb 18 04 26.4
comp=Z,44nm,1.4s
**HHAR Hobbs 29.73 335** IAmb IAmb 18 04 28.6
comp=Z,30nm,1.0s
**P52A Corning 29.79 355** P P 18 04 28.9 +1.9
baz=173
**ABTX Abilene, Hawle 29.81 322** P P 18 04 28.1 +0.8
baz=135
**WTFS Witchita Falls 29.95 326** IAmb IAmb 18 04 32.1
comp=Z,15nm,0.8s
**OLIL Olney 29.95 345** IAmb IAmb 18 04 32.4
comp=Z,29nm,0.9s
**P49A Miami Univ. Ec 30.02 351** P P 18 04 30.7 +1.6
baz=168
**U38A Gravette 30.05 334** IAmb IAmb 18 04 31.2
comp=Z,28nm,0.8s
**P48A Milroy 30.07 349** IAmb IAmb 18 04 32.1
comp=Z,16nm,0.8s
**TUL3 Leonard 30.25 332** P P 18 04 32.1 +1.0
baz=145,SNR=6.3
**CCM Cathedral Cave 30.26 340** P P 18 04 32.1 +0.9
**CCM Cathedral Cave 30.26 340** P P 18 04 32.7 +1.4
baz=155
**CCM Cathedral Cave 30.26 340** P P 18 04 32.6 +1.4
**O53A New Philadelph 30.33 356** P P 18 04 33.6 +1.8
baz=175
**Q44A Meyer Farm, Va 30.36 344** IAmb IAmb 18 04 35.5
comp=Z,30nm,0.9s
**TXAR Lajitas Array 30.39 313** P P 18 04 32.7 +0.2
**TXAR Lajitas Array 30.39 313** P P 18 04 32.1 -0.4
comp=Z,9.7nm,1.0s,baz=135,slow=9.0,SNR=46
TXAR pP sP 18 04 48.4 -0.7
comp=Z,5.4nm,0.8s,baz=127,slow=7.9,SNR=11
TXAR PcP PcP 18 07 31.0 -0.8
comp=Z,1.1nm,0.7s,baz=140,slow=5.8,SNR=3.9
TXAR LR LR 18 19 11.7
comp=Z,42nm,19.8s,baz=114,slow=41
comp=Z,9.7nm,1.0s
**TX31 Lajitas Ar. Si 30.39 313** IAmb IAmb 18 04 34.7
comp=Z,15nm,1.1s
**PDRB Porto dos Gac 30.49 134** eP P 18 04 33.5 0.0
**FNO Franklin 30.51 329** IAmb IAmb 18 04 35.3
comp=Z,20nm,0.9s
**P46A Rosedale 30.58 347** IAmb IAmb 18 04 37.8
comp=Z,28nm,0.8s
**APMT Aspermont 30.59 323** IAmb IAmb 18 04 52.5
comp=Z,34nm,1.8s
**CLDB Colider 30.67 132** eP P 18 04 35.0 -0.1
**S39A Bolivar 30.69 337** IAmb IAmb 18 04 37.1
comp=Z,49nm,1.4s
**OK031 S. Brethren Rd 30.78 330** IAmb IAmb 18 04 37.1
comp=Z,18nm,0.7s
**O48B Farmland 30.80 350** P P 18 04 37.3 +1.4
baz=167
**GO01 Chusmiza 30.80 162** P P 18 04 37.2 +0.5
GO01 IAmb IAmb 18 04 38.9
comp=Z,18nm,0.8s
**R40A Maddies Statio 30.82 339** IAmb IAmb 18 04 38.1
comp=Z,23nm,0.7s
**WMOK Wichita Mounta 30.85 326** P P 18 04 36.9 +0.4
baz=139,SNR=9.3
**QUOK Quay 30.89 331** IAmb IAmb 18 04 38.7
comp=Z,30nm,0.9s
**SIV San Ignacio 31.03 146** LR LR 18 18 30.5
comp=Z,97nm,18.7s,baz=352,slow=39
**P43A Skaggs, Pawnee 31.18 344** IAmb IAmb 18 04 42.9
comp=Z,25nm,0.8s
**OK048 Pawnee Station 31.20 331** IAmb IAmb 18 04 41.6
comp=Z,26nm,1.0s
**N49A Columbus Grove 31.30 352** IAmb IAmb 18 04 43.2
comp=Z,13nm,0.8s
**M53A WI Miller and 31.48 357** P P 18 04 42.9 +0.9
baz=176
**PTLB Pontes e Lacer 31.72 142** P P 18 04 42.9 -1.4
PTLB IAmb IAmb 18 05 49.5
comp=Z,23nm,1.8s
**PTLB Pontes e Lacer 31.72 142** eP P 18 04 44.5 +0.2
**SMWD Samnorwood 31.93 325** IAmb IAmb 18 04 49.3
comp=Z,15nm,0.8s
**HDIL Hopedale 31.98 345** P P 18 04 47.3 +1.0
baz=160
**VHRN Van Horn 32.15 314** P P 18 04 47.9 -0.3
**BBSD Serra de San D 32.26 146** eP P 18 04 48.1 -1.0
**AAM Ann Arbor 32.59 353** P P 18 04 52.9 +1.2
baz=171
**AMTX Amarillo 32.60 323** P P 18 04 52.7 +0.7
baz=134
**PRPB Parauapebas 32.84 118** eP P 18 04 54.8 +0.6
**L61B Northampton 32.85 8** P P 18 04 55.9 +1.9
baz=191
**MNTX Cornudas Mount 32.95 315** P P 18 04 55.4 +0.4
baz=126,SNR=17
**KSU1 Kansas State U 33.24 334** P P 18 04 58.3 +0.9
baz=146,SNR=12
**LPIG La Paz 33.33 299** LR LR 18 19 56.1
comp=Z,67nm,19.5s,baz=66,slow=39
**L42A Oliver, Polo 33.43 345** IAmb IAmb 18 05 01.5
comp=Z,21nm,0.8s
**LVC Limon Verde 33.67 164** P P 18 05 03.1 +1.4
**LVC Limon Verde 33.67 164** LR LR 18 21 22.4
comp=Z,115nm,18.6s,baz=324,slow=41
**LVC Limon Verde 33.67 164** eP P 18 05 00.2 -1.4
**LVC Limon Verde 33.67 164** P P 18 05 03.4 +1.7
**RTBA Rita Blanca 34.30 324** IAmb IAmb 18 05 08.7
comp=Z,20nm,1.0s
**SCIA State Center 34.38 341** P P 18 05 07.9 +0.7
baz=154
**JFWS Jewell Farm 34.44 345** P P 18 05 08.7 +0.9
baz=160,SNR=11
**CBKS Cedar Bluff 34.45 330** P P 18 05 09.1 +1.1
baz=141
**LBNH Lisbon 34.72 8** P P 18 05 11.7 +1.6
baz=192
**SADO Sadowa 34.76 359** LR LR 18 19 23.4
comp=Z,153nm,21.0s,baz=154,slow=36
**SNDB Serra Nova Dou 34.78 128** eP P 18 05 11.6 +0.6
**LONY Lake Ozonia 34.78 5** P P 18 05 12.2 +1.5
baz=187
**121A Cookes Peak, D 35.10 314** IAmb IAmb 18 05 16.8
comp=Z,12nm,1.0s
**121A Cookes Peak, D 35.10 314** P P 18 05 15.4 +1.6
baz=124,SNR=6.8
**I40A Norwalk 35.45 345** IAmb IAmb 18 05 18.8
comp=Z,34nm,1.3s
**319A Douglas 35.57 311** IAmb IAmb 18 05 20.7
comp=Z,16nm,0.9s
**ANMO Albuquerque 35.60 319** P P 18 05 19.4 +1.2
ANMO IAmb IAmb 18 05 20.6
comp=Z,18nm,0.8s
**ANMO Albuquerque 35.60 319** LR LR 18 23 32.5
comp=Z,29nm,19.8s,baz=222,slow=42
**ANMO Albuquerque 35.60 319** P P 18 05 19.7 +1.6
baz=128
**ANMO Albuquerque 35.60 319** P P 18 05 19.5 +1.3
**T25A Trinidad 35.75 323** IAmb IAmb 18 05 22.8
comp=Z,22nm,1.3s
**T25A Trinidad 35.75 323** P P 18 05 20.0 +0.6
baz=133
**BGNE Belgrade 35.81 335** P P 18 05 19.9 +0.3
baz=146
**KSCO Kaye Shedlock' 36.08 327** P P 18 05 23.3 +1.3
baz=137
**SMTB Santa Maria do 36.08 120** eP P 18 05 23.3 +1.1
**PKME Peaks-Kenny Pk 36.16 11** P P 18 05 25.4 +2.9
baz=196
**E46A Sault Ste Mari 36.68 353** IAmb IAmb 18 05 29.4
comp=Z,12nm,0.8s
**ARAG Araguaiana, MT 36.77 133** eP P 18 05 27.3 -0.7
**SDCO Great Sand Dun 36.80 323** IAmb IAmb 18 05 31.8
comp=Z,24nm,1.4s
**SDCO Great Sand Dun 36.80 323** P P 18 05 30.6 +2.1
baz=132,SNR=16
**TUC Tucson 37.15 312** P P 18 05 31.9 +0.7
**TUC Tucson 37.15 312** P P 18 05 32.8 +1.5
baz=120
**TUC Tucson 37.15 312** P P 18 05 32.6 +1.4
**ECSD EROS Data Cent 37.17 338** IAmb IAmb 18 05 32.1
comp=Z,29nm,1.0s
**ECSD EROS Data Cent 37.17 338** P P 18 05 31.0 -0.2
baz=150,SNR=15
**COWI Conover 37.19 348** IAmb IAmb 18 05 34.2
comp=Z,11nm,0.9s
**OGNE Ogallala 37.22 330** IAmb IAmb 18 05 34.9

comp=Z,26nm,0.8s
**OGNE Ogallala** 37.22 330 P P 18 05 32.9 +1.1
baz=140
**SPMN Marine on St.** 37.27 343 P P 18 05 32.3 +0.4
baz=157
**Q24A Divide** 37.42 325 P P 18 05 35.0 +1.3
baz=134
**S22A 4UR Ranch, Cre** 37.60 322 IAmb IAmb 18 05 38.3
comp=Z,15nm,0.8s
**S22A 4UR Ranch, Cre** 37.60 322 P P 18 05 37.3 +2.0
baz=130,SNR=21
**AQDB Aquidauana** 37.67 143 eP P 18 05 34.6 -1.0
**X18A Snowflake** 37.70 315 IAmb IAmb 18 05 40.2
comp=Z,11nm,0.8s
**W18A Petrified Fore** 37.88 316 P P 18 05 39.6 +2.0
baz=124,SNR=6.5
**ISCO Idaho Springs** 38.26 326 IAmb IAmb 18 05 44.1
comp=Z,33nm,1.6s
**ISCO Idaho Springs** 38.26 326 P P 18 05 42.5 +1.7
baz=134,SNR=8.4
**MVCO Mesa Verde** 38.29 320 P P 18 05 42.4 +1.3
baz=128
**214A Organ Pipe Nat** 38.49 310 IAmb IAmb 18 05 45.1
comp=Z,13nm,0.9s
**214A Organ Pipe Nat** 38.49 310 P P 18 05 44.0 +1.5
baz=117,SNR=5.4
**SUSD Miller** 38.66 337 P P 18 05 43.4 -0.3
baz=147
**F33A 5 Mile Ranch,** 38.90 340 IAmb IAmb 18 05 46.1
comp=Z,23nm,0.9s
**N23A Red Feather La** 39.20 327 IAmb IAmb 18 05 51.9
comp=Z,24nm,1.4s
**N23A Red Feather La** 39.20 327 P P 18 05 50.5 +1.8
baz=134
**EYMN Ely** 39.46 346 P P 18 05 50.4 +0.1
baz=160,SNR=7.3
**BDFB Brasilia** 39.53 130 P P 18 05 50.0 -1.5
comp=Z,5.3nm,0.4s,baz=287,slow=10,SNR=12
BDFB LR LR 18 23 14.4
comp=Z,227nm,19.4s,baz=323,slow=38
comp=Z,5.3nm,0.4s
**O20A White River Ci** 39.98 324 P P 18 05 56.9 +1.8
baz=131,SNR=5.2
**HMU Henry Mountain** 40.16 319 IAmb IAmb 18 05 59.5
comp=Z,23nm,1.0s
**SDBA SAO DESIDERIO** 40.16 123 eP P 18 05 58.2 +1.5
**RWWY Rawlins** 40.44 326 IAmb IAmb 18 06 02.0
comp=Z,38nm,1.4s
**GLA Glamis** 40.50 310 IAmb IAmb 18 06 01.9
comp=Z,22nm,0.9s
**GLA Glamis** 40.50 310 P P 18 06 01.0 +1.7
baz=116,SNR=11
**PDMCI Parker Dam,Lak** 40.57 312 P P 18 06 01.1 +1.3
baz=118,SNR=9.8
**RSSD Black Hills** 40.59 332 P P 18 06 01.1 +1.0
RSSD IAmb IAmb 18 06 02.5
comp=Z,24nm,0.9s
**RSSD Black Hills** 40.59 332 P P 18 06 01.1 +1.0
baz=140
**RSSD Black Hills** 40.59 332 P P 18 06 01.3 +1.2
**SRU San Rafael Swe** 40.71 321 IAmb IAmb 18 06 03.6
comp=Z,14nm,0.9s
**K22A Casper** 40.75 328 IAmb IAmb 18 06 04.1
comp=Z,52nm,1.5s
**K22A Casper** 40.75 328 P P 18 06 02.7 +1.3
baz=135,SNR=8.6
**IPMB Ipameri, GO** 40.85 133 eP P 18 06 01.7 -0.6
**PKCU Pink Cliffs** 40.90 318 IAmb IAmb 18 06 06.0
comp=Z,23nm,1.2s
**AGMN Agassiz Nation** 40.94 342 P P 18 06 02.8 +0.2
baz=154
**P17A Butcher Ranch,** 41.06 321 IAmb IAmb 18 06 06.7
comp=Z,31nm,1.5s
**SWSC Sam W. Stewart** 41.19 310 P P 18 06 06.2 +1.3
baz=116
**IRM Iron Mountain** 41.24 312 P P 18 06 06.9 +1.6
baz=117,SNR=8.2
**BC3 Big Chuckawall** 41.24 311 P P 18 06 06.5 +1.0
baz=116,SNR=8.1
**PCMB Pacaembu** 41.25 140 eP P 18 06 06.3 +0.8
**IKP In-Ko-Pah, Jac** 41.30 309 P P 18 06 07.5 +1.5
baz=115
**MVU Marysvale** 41.43 319 IAmb IAmb 18 06 10.1
comp=Z,46nm,1.1s
**CPUP Villa Florida** 41.53 151 P P 18 06 04.6 -3.1
comp=Z,1.8nm,0.8s,baz=0.0,slow=11,SNR=4.4
CPUP LR LR 18 25 44.6
comp=Z,77nm,18.0s,baz=331,slow=40
comp=Z,1.8nm,0.8s
**CBX Cerro Bola** 41.59 308 P P 18 06 08.5 +0.1
CBX IAmb IAmb 18 06 28.8
comp=Z,20nm,1.1s
**TCRU Three Creeks R** 41.64 319 IAmb IAmb 18 06 29.7
comp=Z,20nm,1.0s
**MONP2 Monument Peak** 41.65 309 P P 18 06 10.2 +1.3
baz=115
**V12A Nelson** 41.76 314 IAmb IAmb 18 06 13.1
comp=Z,16nm,0.9s
**MDND Maddock** 41.77 339 P P 18 06 09.6 +0.1
baz=148,SNR=14
**BELC Belle Mtn. Jos** 41.80 311 P P 18 06 11.4 +1.4
baz=116,SNR=5.2
**GMRC Granite Mounta** 41.90 312 P P 18 06 12.3 +1.4
baz=118,SNR=7.8
**MPU Maple Canyon** 41.94 321 IAmb IAmb 18 06 13.7
comp=Z,32nm,1.4s
**TPFO Pinon Flats** 41.97 310 P P 18 06 12.9 +1.4
baz=116,SNR=8.5
**PFO Pinyon Flats O** 41.98 310 P P 18 06 12.4 +0.9
**PFO Pinyon Flats O** 41.98 310 LR LR 18 25 59.0
comp=Z,34nm,18.4s,baz=120,slow=39
**PFO Pinyon Flats O** 41.98 310 P P 18 06 12.9 +1.4
baz=116,SNR=5.5
**PFO Pinyon Flats O** 41.98 310 P P 18 06 12.9 +1.4
**JANB Januaria** 42.08 126 eP P 18 06 13.3 +0.9
**JLU Jordanelle** 42.18 322 IAmb IAmb 18 06 15.8
comp=Z,48nm,1.7s
**TUQ Turquoise Moun** 42.39 313 P P 18 06 16.3 +1.4
baz=118,SNR=15
**HEC Hector,Ludlow** 42.42 312 P P 18 06 16.8 +1.8
baz=117,SNR=28
**BW06 Boulder Array** 42.46 326 P P 18 06 16.4 +1.0
baz=132,SNR=28
**PD31 Pinedale Array** 42.46 326 IAmb IAmb 18 06 17.6
comp=Z,18nm,1.0s
**PDAR Pinedale Array** 42.46 326 P P 18 06 15.8 +0.4
**PDAR Pinedale Array** 42.46 326 P P 18 06 15.7 +0.3
comp=Z,8.1nm,0.7s,baz=127,slow=10,SNR=64
PDAR PcP PcP 18 08 06.7 -1.1
comp=Z,1.7nm,0.7s,baz=129,slow=5.2,SNR=3.8
PDAR LR LR 18 29 15.7
comp=Z,32nm,18.4s,baz=104,slow=44
comp=Z,8.1nm,0.7s
**PSUT Pine Spring** 42.52 318 IAmb IAmb 18 06 20.1
comp=Z,14nm,0.8s
**MURC Murrieta** 42.53 310 P P 18 06 17.4 +1.5
baz=115
**ULM Lac du Bonnet** 42.70 344 P P 18 06 16.5 -0.5
comp=Z,41nm,0.9s,baz=153,slow=9.4,SNR=51
ULM LR LR 18 25 13.9
comp=Z,123nm,18.9s,baz=178,slow=38
comp=Z,41nm,0.9s
**DUG Dugway, Tooele** 42.78 321 IAmb IAmb 18 06 20.7
comp=Z,13nm,0.8s
**DUG Dugway, Tooele** 42.78 321 P P 18 06 19.7 +1.7
baz=126,SNR=18
**SHOC Shoshone, Teco** 42.86 313 P P 18 06 19.7 +1.1
baz=118
**GSC Goldstone, Bar** 42.97 312 P P 18 06 20.8 +1.3
baz=117,SNR=10
**DRLN Deer Lake** 43.02 20 P P 18 06 21.2 +1.7
DRLN IAmb IAmb 18 06 22.4
comp=Z,20nm,0.8s
**VA03 San Esteban** 43.10 170 IAmb IAmb 18 06 22.9
comp=Z,14nm,0.7s
**BFSC Mount Baldy Ra** 43.15 310 P P 18 06 22.0 +1.0
baz=115
**AHID Auburn Hatcher** 43.32 325 IAmb IAmb 18 06 24.5
comp=Z,39nm,1.3s
**BGU Big Grassy Mou** 43.34 321 IAmb IAmb 18 06 24.8
comp=Z,38nm,1.6s
**TPNV Topopah Spring** 43.34 315 P P 18 06 24.4 +1.8
baz=119,SNR=14
**FMP Fort Macarthur** 43.41 309 P P 18 06 24.5 +1.5
baz=114
**LAO LASA Array** 43.54 332 IAmb IAmb 18 06 26.4
comp=Z,24nm,1.1s
**LAO LASA Array** 43.54 332 P P 18 06 24.3 +0.4
baz=139
**FURC Furnace Creek,** 43.55 314 P P 18 06 26.1 +2.1
baz=118
**R11B Troy Canyon, C** 43.58 317 P P 18 06 26.1 +1.6
baz=121,SNR=18
**LOHW Long Hollow** 43.59 326 IAmb IAmb 18 06 27.7
comp=Z,29nm,1.1s
**EDW2 Edwards Air Fo** 43.67 311 P P 18 06 26.4 +1.2
baz=115,SNR=7.3
**LRMC Laurel Mtn Rad** 43.69 312 P P 18 06 26.8 +1.4
baz=116,SNR=6.1
**TPAW Teton Pass** 43.70 326 IAmb IAmb 18 06 27.6
comp=Z,17nm,0.7s
**CCAC Calif City Air** 43.80 311 IAmb IAmb 18 06 28.6
comp=Z,29nm,0.8s
**MPMC Manual Prospec** 43.81 313 P P 18 06 27.3 +0.9
baz=117,SNR=9.3
**FXWY Fox Creek** 43.84 326 IAmb IAmb 18 06 29.4
comp=Z,21nm,1.0s
**MT08 Bocatoma Ro** 43.86 170 P P 18 06 26.7 -0.1
**RLMT Red Lodge** 43.89 329 IAmb IAmb 18 06 29.3
comp=Z,45nm,1.2s
**RLMT Red Lodge** 43.89 329 P P 18 06 28.2 +1.3
baz=134,SNR=24
**FLWY Flagg Ranch** 43.95 327 IAmb IAmb 18 06 37.4
comp=Z,16nm,1.0s
**IMW Indian Meadow** 43.96 326 IAmb IAmb 18 06 29.8
comp=Z,56nm,1.5s
**MT09 Talagante** 44.02 171 IAmb IAmb 18 06 33.1
comp=Z,20nm,1.3s
**DGMT Dagmar** 44.04 336 P P 18 06 29.1 +1.3
baz=142,SNR=5.1
**H17A Grant Village** 44.09 327 IAmb IAmb 18 06 33.3
comp=Z,28nm,1.8s
**H17A Grant Village** 44.09 327 P P 18 06 30.3 +1.7
baz=132
**GRAC Grapevine Rang** 44.15 314 P P 18 06 30.5 +1.6
baz=118
**SNCC San Nicolas Is** 44.18 308 P P 18 06 30.9 +1.7
baz=112
**ISA Isabella, Lake** 44.35 312 P P 18 06 32.1 +1.5
baz=116
**ARVC Arvin** 44.39 311 P P 18 06 32.4 +1.5
baz=115
**CWC Cottonwood Cre** 44.41 313 P P 18 06 32.4 +1.2
baz=117
**DIAM Diamantina, MG** 44.43 129 eP P 18 06 31.7 +0.2
**SCZ2 Santa Cruz Isl** 44.55 309 P P 18 06 33.3 +1.2
baz=113
**BO01 Tunca** 44.61 171 P P 18 06 33.2 +0.7
BO01 IAmb IAmb 18 06 52.9
comp=Z,16nm,1.1s
**YHB Horse Butte** 44.66 327 IAmb IAmb 18 06 34.0
comp=Z,10nm,0.7s
**ITQB Itaqui** 44.68 152 eP P 18 06 31.4 -1.7
**YHL Hebgen Lake** 44.71 327 IAmb IAmb 18 06 37.7
comp=Z,40nm,1.4s
**RCBR Riachuelo** 45.34 108 LR LR 18 27 04.2
comp=Z,61nm,18.4s,baz=333,slow=38
**NV11 Mina Array Sit** 45.38 315 IAmb IAmb 18 06 42.6
comp=Z,14nm,0.9s
**BOZ Bozeman (W)** 45.44 328 IAmb IAmb 18 06 41.8
comp=Z,25nm,1.1s
**BOZ Bozeman (W)** 45.44 328 P P 18 06 40.8 +1.6
baz=131,SNR=36
**NVAR Mina Array Bea** 45.48 315 P P 18 06 40.1 +0.4
**NVAR Mina Array Bea** 45.48 315 P P 18 06 39.6 -0.1
comp=Z,8.4nm,0.8s,baz=127,slow=6.9,SNR=46
NVAR pP sP 18 06 57.4 +0.9
comp=Z,4.2nm,0.8s,baz=132,slow=6.7,SNR=6.3
NVAR PcP PcP 18 08 18.3 +0.2
comp=Z,3.8nm,0.7s,baz=138,slow=4.4,SNR=10.0
NVAR LR LR 18 30 47.5
comp=Z,38nm,18.0s,baz=92,slow=43
comp=Z,8.4nm,0.8s
**LHV Little Huntoon** 45.53 315 IAmb IAmb 18 06 42.7
comp=Z,11nm,1.0s
**KVN Kaiserville** 45.63 316 IAmb IAmb 18 06 43.7
comp=Z,11nm,0.8s
**HLID Hailey** 45.72 324 IAmb IAmb 18 06 44.0
comp=Z,22nm,1.1s
**HLID Hailey** 45.72 324 P P 18 06 42.9 +1.4
baz=26,SNR=28
**BMN Battle Mountai** 45.73 318 IAmb IAmb 18 06 43.8
comp=Z,18nm,1.0s
**SCHQ Schefferville** 45.80 9 LR LR 18 25 03.1
comp=Z,66nm,21.4s,baz=244,slow=35
**EGMT Eagleton** 46.16 331 P P 18 06 46.0 +1.3
baz=135
**WAKR Walker** 46.30 315 IAmb IAmb 18 06 48.7
comp=Z,10nm,1.0s
**YERR Yerington** 46.38 316 IAmb IAmb 18 06 50.4
comp=Z,15nm,1.1s
**NBAN Anadia - AL** 46.41 113 eP P 18 06 49.1 +2.0
**MFID Camas Ranch** 46.47 323 IAmb IAmb 18 06 49.6
comp=Z,25nm,1.0s
**GUA01 Guaratinga, BA** 46.55 124 eP P 18 06 49.4 +1.3
**SJMB Sao Joao De Ma** 46.59 128 eP P 18 06 49.3 +0.9
**PNTR Pine Nut** 46.68 315 IAmb IAmb 18 06 54.1
comp=Z,17nm,0.8s
**RPN Rapa Nui** 47.34 218 LR LR 18 21 59.9
comp=Z,48nm,20.8s,baz=328,slow=30
**MSO Missoula** 47.46 327 IAmb IAmb 18 06 56.9
comp=Z,17nm,1.0s
**MSO Missoula** 47.46 327 P P 18 06 55.8 +0.8
baz=130,SNR=11
**RIB01 Linhares ES** 47.55 128 eP P 18 06 56.1 +0.2
**J08A Circle Bar Ran** 48.05 321 IAmb IAmb 18 07 20.0
comp=Z,12nm,0.8s
**BMO Blue Mountains** 48.16 323 IAmb IAmb 18 07 01.3
comp=Z,7.8nm,0.9s
**FFC Flin Flon** 48.42 342 P P 18 07 02.5 +0.4
**FFC Flin Flon** 48.42 342 P P 18 07 02.8 +0.7
**HATC Hat Creek Radi** 48.74 317 IAmb IAmb 18 07 07.1
comp=Z,15nm,0.8s
**F10A Beach Ranch, E** 48.76 325 IAmb IAmb 18 07 06.5
comp=Z,18nm,0.9s
**PINE Pine Mountain** 49.81 320 IAmb IAmb 18 07 15.1
comp=Z,15nm,0.8s
**YBH Yreka Blue Hor** 49.99 317 P P 18 07 13.0 -1.5
**NEW Newport** 50.05 327 IAmb IAmb 18 07 16.2
comp=Z,21nm,0.9s
**NEW Newport** 50.05 327 LR LR 18 33 20.0
comp=Z,44nm,18.1s,baz=153,slow=42
**NEW Newport** 50.05 327 P P 18 07 15.2 +0.5
baz=127,SNR=18
**KHMM Horse Mountain** 50.31 316 IAmb IAmb 18 07 19.4
comp=Z,13nm,0.8s
**KMPM Mount Pierce** 50.39 315 IAmb IAmb 18 07 21.8
comp=Z,22nm,0.9s
**C09A Chrisman Ranch** 50.40 326 IAmb IAmb 18 07 19.2
comp=Z,11nm,0.8s
**KSXB Camp Six Broad** 50.82 317 IAmb IAmb 18 07 21.8
comp=Z,8.9nm,0.7s
**MXC Moxie City** 50.86 324 IAmb IAmb 18 07 23.2
comp=Z,13nm,1.0s
**PLCA Paso Flores** 50.91 172 P P 18 07 19.9 -1.4
comp=Z,7.7nm,0.8s,baz=350,slow=9.6,SNR=17
comp=Z,7.7nm,0.8s
**PLCA Paso Flores** 50.91 172 eP P 18 07 22.4 +1.1
**PLCA Paso Flores** 50.91 172 P P 18 07 21.9 +0.6
**B08A Colville Geoser** 51.30 326 IAmb IAmb 18 07 25.7
comp=Z,20nm,0.9s
**LTY Liberty** 51.44 324 IAmb IAmb 18 07 27.1
comp=Z,10nm,0.9s
**LON Longmire** 51.84 323 IAmb IAmb 18 07 48.1
comp=Z,9.0nm,0.8s
**LL02 Futaleuf** 53.18 174 P P 18 07 37.9 -0.2
LL02 IAmb IAmb 18 07 38.9
comp=Z,8.6nm,0.8s
**CLRS Cowichan Lake** 54.24 324 IAmb IAmb 18 07 48.3
comp=Z,30nm,1.4s
**FRB Frobisher Bay** 54.25 6 LR LR 18 31 57.5
comp=Z,79nm,20.5s,baz=186,slow=37
**BBB Bella Bella** 58.10 327 LR LR 18 36 41.3
comp=Z,49nm,19.2s,baz=135,slow=40
**YKA Yellowknife Ar** 58.58 341 P P 18 08 16.1 -0.3
**YKA Yellowknife Ar** 58.58 341 P P 18 08 16.4 -0.1
comp=Z,31nm,0.7s,baz=133,slow=7.5,SNR=117
YKA LR LR 18 34 29.6
comp=Z,74nm,18.7s,baz=122,slow=37
comp=Z,31nm,0.7s
**SFJD Kangerlussuaq** 60.08 12 LR LR 18 36 00.1
comp=Z,28nm,18.1s,baz=196,slow=37
**TOAD Toad River Com** 60.16 334 P P 18 08 27.5 0.0
baz=124,SNR=10
**DY2G Dye2** 60.64 14 *i* P P 18 08 29.9 -1.0
DY2G IAmb IAmb 18 08 32.0
comp=Z,4.8nm,0.8s
**BBTS Babate** 60.71 79 LR LR 18 32 33.5
comp=Z,18nm,20.2s,baz=150,slow=34
**LIRD Liard River Hi** 60.84 334 P P 18 08 32.5 +0.4
baz=124,SNR=10
**V35K Ketchikan** 61.38 329 P P 18 08 36.7 +0.9
baz=116
**T35M Bob Quinn** 61.47 331 P P 18 08 37.7 +1.3
baz=118,SNR=7.7
**ISOG Isortoq, Green** 61.91 18 *i* P P 18 08 39.1 0.0
ISOG IAmb IAmb 18 08 41.3
comp=Z,11nm,0.7s
**WRGLY Wrigley** 62.06 339 P P 18 08 40.5 +0.3
baz=128,SNR=16
**DLBC Dease Lake** 62.07 332 LR LR 18 39 43.3
comp=Z,44nm,18.4s,baz=113,slow=40
**DLBC Dease Lake** 62.07 332 P P 18 08 41.8 +1.3
baz=119,SNR=12
**CRAG Craig** 62.22 328 P P 18 08 42.1 +0.7
baz=115
**S34M Telegraph Cree** 62.33 331 IAmb IAmb 18 08 44.2
comp=Z,12nm,0.8s
**S34M Telegraph Cree** 62.33 331 P P 18 08 43.2 +1.0
baz=118
**U33K Whale Pass** 62.49 329 IAmb IAmb 18 08 45.0
comp=Z,25nm,1.4s
**U33K Whale Pass** 62.49 329 P P 18 08 43.9 +0.7
baz=115
**R33M Jennings River** 62.96 333 IAmb IAmb 18 08 48.4
comp=Z,14nm,0.8s
**R33M Jennings River** 62.96 333 P P 18 08 47.5 +1.0
baz=119,SNR=15
**Q32M Nakina River** 63.35 332 P P 18 08 50.3 +1.1
baz=118,SNR=12
**S32K Killisnoo** 63.79 330 IAmb IAmb 18 08 53.5
comp=Z,12nm,0.8s
**S32K Killisnoo** 63.79 330 P P 18 08 52.5 +0.7
baz=115,SNR=5.0
**SIT Sitka** 63.99 329 P P 18 08 53.7 +0.5
baz=114
**R32K Eaglecrest** 64.10 331 IAmb IAmb 18 08 55.6
comp=Z,10nm,0.8s
**R32K Eaglecrest** 64.10 331 P P 18 08 54.7 +0.8
baz=115
**P33M Teslin, Yukon** 64.17 333 IAmb IAmb 18 08 56.2
comp=Z,26nm,1.4s
**P33M Teslin, Yukon** 64.17 333 P P 18 08 55.0 +0.6
baz=118,SNR=7.3
**ICESG Greenland Ices** 64.27 15 *i* P P 18 08 52.9 -2.3
ICESG IAmb IAmb 18 08 56.6
comp=Z,13nm,0.9s
**P32M Atlin** 64.30 332 P P 18 08 55.8 +0.6
baz=116
**N32M Quiet Lake** 64.72 334 P P 18 08 58.6 +0.6
baz=118
**S31K Pelican** 64.81 330 P P 18 08 59.3 +0.9
baz=113
**SKAG Skagway** 64.98 332 P P 18 09 00.1 +0.5
baz=115
**WHY Whitehorse** 65.29 333 IAmb IAmb 18 09 03.1
comp=Z,17nm,1.5s
**WHY Whitehorse** 65.29 333 P P 18 09 02.0 +0.3
baz=116
**FARO Faro, Yukon** 65.34 335 P P 18 09 02.4 +0.5
baz=118
**RES Resolute Bay** 65.43 355 LR LR 18 37 56.3
comp=Z,65nm,21.6s,baz=168,slow=36
**PLBC Pleasant Camp** 65.47 332 P P 18 09 03.8 +1.0
baz=114
**M31M Drury Creek, Y** 65.76 335 IAmb IAmb 18 09 06.6
comp=Z,8.4nm,0.8s
**M31M Drury Creek, Y** 65.76 335 P P 18 09 05.6 +1.0
baz=117,SNR=12
**O30N Mendenhall** 65.88 333 IAmb IAmb 18 09 07.2
comp=Z,16nm,0.8s
**O30N Mendenhall** 65.88 333 P P 18 09 06.3 +0.9
baz=114,SNR=18
**P30M Million Dollar** 66.01 332 P P 18 09 07.4 +1.1
baz=113
**N31M Braeburn, Yuko** 66.04 334 IAmb IAmb 18 09 08.3
comp=Z,18nm,1.1s
**N31M Braeburn, Yuko** 66.04 334 P P 18 09 07.5 +1.1
baz=115,SNR=6.1
**C36M Paulatuk** 66.13 344 P P 18 09 08.2 +1.4
baz=130
**P29M Windy Craggy** 66.18 332 IAmb IAmb 18 09 09.3
comp=Z,14nm,0.8s
**P29M Windy Craggy** 66.18 332 P P 18 09 08.1 +0.7
baz=112,SNR=5.9
**N30M Aishikik Lake** 66.60 334 IAmb IAmb 18 09 12.3
comp=Z,22nm,1.2s
**N30M Aishikik Lake** 66.60 334 P P 18 09 11.3 +1.3
baz=114,SNR=9.7
**O29M Mount Kennedy** 66.82 332 IAmb IAmb 18 09 13.4
comp=Z,14nm,1.0s
**O29M Mount Kennedy** 66.82 332 P P 18 09 12.3 +0.7
baz=112
**M30M Minto, Yukon** 66.93 335 P P 18 09 13.0 +0.8
baz=115
**YUK6 Outpost Mounta** 66.97 333 P P 18 09 13.7 +1.0
baz=112
**PNL Peninsula** 66.97 331 P P 18 09 13.3 +0.8
baz=111
**SUMG Summit** 67.08 12 P P 18 09 13.6 +0.3
**SUMG Summit** 67.08 12 *i* P P 18 09 11.4 -1.9
SUMG IAmb IAmb 18 09 15.0
comp=Z,12nm,0.5s
**YUK4 Talbot Arm** 67.25 333 P P 18 09 15.5 +1.1
baz=112
**M29M Somme Creek** 67.59 334 IAmb IAmb 18 09 18.5
comp=Z,16nm,0.9s
**M29M Somme Creek** 67.59 334 P P 18 09 17.5 +1.1
baz=113,SNR=17
**J30M Hart River** 67.60 337 IAmb IAmb 18 09 18.9
comp=Z,23nm,1.2s
**J30M Hart River** 67.60 337 P P 18 09 17.7 +1.3
baz=116,SNR=14
**L29M L29M** 67.71 335 P P 18 09 17.9 +0.9
baz=114,SNR=31
**YUK8 Steele Glacier** 67.72 333 P P 18 09 18.7 +1.2
baz=111,SNR=6.8
**O28M Mount Upton** 67.74 332 P P 18 09 18.6 +1.0
baz=111
**K29M Barlow Dome** 67.76 336 P P 18 09 18.3 +0.9
baz=114,SNR=32
**I30M Mount Dempster** 67.90 337 P P 18 09 19.3 +1.0
baz=116,SNR=38
**G31M Satah River** 67.92 339 P P 18 09 18.4 +0.2
**G31M Satah River** 67.92 339 P P 18 09 18.8 +0.6
baz=119,SNR=12
**F31M Tsiigehtchic** 67.99 340 P P 18 09 19.0 +0.3
baz=119
**A36M Sachs Harbour** 68.12 346 P P 18 09 18.7 -0.7
baz=130,SNR=6.2
**LOGN Logan Glacier** 68.13 332 IAmb IAmb 18 09 22.1
comp=Z,20nm,1.0s
**MORF Marmelete** 68.16 54 eP P 18 09 22.3 +1.9
comp=Z,67nm,1.6s
**YUK3 Moose Creek** 68.21 333 P P 18 09 21.3 +0.8
baz=111
**J29N Klondike Camp** 68.29 336 P P 18 09 21.8 +1.1
baz=114
**PNCL Nicolau / Gran** 68.32 53 eP P 18 09 23.0 +1.7
comp=Z,2.5nm,0.7s
**CTG Chitna Glacier** 68.33 332 P P 18 09 22.5 +1.4
baz=110
**INK Inuvik** 68.35 341 P P 18 09 20.7 -0.2
**INK Inuvik** 68.35 341 LR LR 18 41 14.2
comp=Z,165nm,18.9s,baz=106,slow=38
**INK Inuvik** 68.35 341 P P 18 09 21.4 +0.5
baz=120,SNR=11
**GRNC Granite Creek** 68.44 332 IAmb IAmb 18 09 24.1
comp=Z,15nm,1.0s
**PCAS Casmilo, Conde** 68.50 51 eP P 18 09 23.6 +1.1
comp=Z,46nm,1.6s
**EPYK Eagle Plains** 68.53 338 P P 18 09 22.8 +0.7
baz=116,SNR=5.5
**MESJ Messejana** 68.54 53 eP P 18 09 24.2 +1.5
comp=Z,3.1nm,0.9s
**DAWY Dawson** 68.61 336 P P 18 09 23.0 +0.3
baz=113
**G30M tAoh Zrail Nji** 68.62 339 IAmb IAmb 18 09 29.0
comp=Z,6.2nm,0.7s
**G30M tAoh Zrail Nji** 68.62 339 P P 18 09 23.3 +0.6
baz=117
**PMTG Montargil** 68.63 52 eP P 18 09 24.4 +1.2
comp=Z,12nm,0.7s
**I29M Ogilvie Camp,** 68.69 337 IAmb IAmb 18 09 25.0

comp=Z,8.6nm,0.8s
**I29M** **Ogilvie Camp,** 68.69 337 P P 18 09 23.8 +0.7
baz=114,SNR=11
**EVO** **Evora** 68.76 53 *e*P P 18 09 25.2 +1.2
comp=Z,23nm,1.7s
**F30M** **Barrier River** 68.76 340 P P 18 09 24.2 +0.6
baz=117,SNR=20
**PBEJ** **Beja** 68.83 53 *e*P P 18 09 26.1 +1.6
comp=Z,37nm,2.2s
**TGL** **Tana Glacier** 68.95 332 IAmb IAmb 18 09 27.1
comp=Z,16nm,0.8s
**PVIS** **Viseu** 69.02 50 *e*P P 18 09 26.8 +1.1
**M27K** **Edge Creek, AK** 69.04 334 P P 18 09 26.7 +1.2
baz=110,SNR=17
**NEEM** **North Greenlan** 69.05 6 *i* P P 18 09 21.4 -4.1
NEEM IAmb IAmb 18 09 27.1
comp=Z,18nm,0.7s
**H29M** **Whitestone** 69.07 338 P P 18 09 26.4 +0.9
baz=114,SNR=13
**CRQE** **Cirque** 69.08 332 P P 18 09 26.6 +0.9
baz=108
**CRQM** **Cirque** 69.10 332 IAmb IAmb 18 09 27.8
comp=Z,21nm,1.1s
**PESTR** **Estremoz** 69.11 52 *e*P P 18 09 27.2 +0.9
comp=Z,4.4nm,0.6s
**POLO** **Lamas de Olo** 69.16 50 *e*P P 18 09 27.8 +1.2
comp=Z,3.0nm,0.8s
**PVRL** **Vila Real** 69.21 50 *e*P P 18 09 27.9 +1.1
**G29M** **Pine Creek** 69.23 339 P P 18 09 27.1 +0.7
baz=115,SNR=19
**MCARA** **McCarthy VSAT** 69.24 332 P P 18 09 27.6 +1.0
baz=108
**BCAR** **Beaver Creek A** 69.24 334 P P 18 09 27.4 +0.8
**L27K** **Beaver Creek,** 69.26 334 P P 18 09 27.9 +1.2
baz=110,SNR=35
**MTE** **Manteigas** 69.26 51 *e*P P 18 09 28.3 +1.1
comp=Z,25nm,1.8s
**PCBR** **Castelo Branco** 69.27 51 *e*P P 18 09 28.3 +1.1
comp=Z,25nm,1.7s
**PMRV** **Marv??o** 69.31 52 *e*P P 18 09 28.6 +1.2
comp=Z,1.9nm,0.7s
**I28M** **Miner Creek** 69.35 337 P P 18 09 28.2 +0.9
baz=113,SNR=15
**VRDI** **Verde Repeater** 69.39 332 IAmb IAmb 18 09 29.8
comp=Z,16nm,1.0s
**KAIM** **Kayak Island** 69.46 331 P P 18 09 28.8 +0.9
baz=106
**PBAR** **Barrancos** 69.50 53 *e*P P 18 09 30.0 +1.4
comp=Z,3.9nm,0.7s
**M26K** **Nabesna, AK** 69.55 333 P P 18 09 29.3 +0.8
baz=109
**EGAK** **Eagle** 69.58 336 IAmb IAmb 18 09 31.6
comp=Z,16nm,1.1s
**EGAK** **Eagle** 69.58 336 P P 18 09 29.1 +0.5
baz=111,SNR=12
**K27K** **Chicken** 69.69 335 P P 18 09 30.4 +1.0
baz=110
**MVO** **Moncorvo** 69.72 50 *e*P P 18 09 31.3 +1.3
comp=Z,6.4nm,0.7s
**E29M** **Blow River** 69.82 340 P P 18 09 30.6 +0.5
baz=116,SNR=17
**BMRM** **Bremner River** 69.85 332 P P 18 09 31.3 +0.9
baz=107,SNR=5.1
**L26K** **Log Cabin Wild** 69.90 334 IAmb IAmb 18 09 33.1
comp=Z,18nm,0.9s
**L26K** **Log Cabin Wild** 69.90 334 P P 18 09 31.9 +1.2
baz=108,SNR=8.1
**PBRG** **Braganca** 69.98 49 *e*P P 18 09 32.8 +1.2
comp=Z,2.7nm,0.7s
**N25K** **Chitina, Valde** 70.03 332 IAmb IAmb 18 09 33.8
comp=Z,19nm,1.1s
**N25K** **Chitina, Valde** 70.03 332 P P 18 09 32.7 +1.2
baz=107,SNR=5.4
**MENT** **Mentasta** 70.03 334 IAmb IAmb 18 09 34.5
comp=Z,10.0nm,0.8s
**I27K** **Kandik River** 70.06 337 P P 18 09 32.6 +1.0
baz=111,SNR=18
**F28M** **Old Crow** 70.18 339 P P 18 09 32.5 +0.2
baz=113,SNR=13
**H27K** **Steamboat Moun** 70.25 337 P P 18 09 33.2 +0.4
baz=111,SNR=5.3
**EYAK** **Cordova Ski Ar** 70.27 331 P P 18 09 33.9 +1.0
baz=105
**Q23K** **Middleton Isla** 70.28 330 P P 18 09 33.7 +0.8
baz=104
**E28M** **Babbage River** 70.46 340 IAmb IAmb 18 09 34.8
comp=Z,16nm,0.8s
**E28M** **Babbage River** 70.46 340 P P 18 09 33.9 -0.1
baz=114,SNR=15
**J26L** **Joseph Creek** 70.46 335 IAmb IAmb 18 09 37.2
comp=Z,28nm,1.3s
**J26L** **Joseph Creek** 70.46 335 P P 18 09 35.2 +1.1
baz=109,SNR=8.1
**SCRK** **Sand Creek** 70.47 335 P P 18 09 35.3 +1.0
baz=108,SNR=9.8
**HARP** **HAARP** 70.51 333 P P 18 09 35.2 +0.8
baz=106
**G27K** **Doyon Strip** 70.51 338 P P 18 09 34.2 -0.2
baz=111,SNR=6.5
**I26K** **Coal Creek Min** 70.56 336 IAmb IAmb 18 09 37.1
comp=Z,25nm,1.5s
**I26K** **Coal Creek Min** 70.56 336 P P 18 09 35.1 +0.5
baz=109
**KLU** **Klutina** 70.60 332 IAmb IAmb 18 09 36.8
comp=Z,22nm,1.1s
**KLU** **Klutina** 70.60 332 P P 18 09 35.6 +0.5
baz=106
**PAX** **Paxson** 70.81 334 P P 18 09 36.8 +0.5
baz=106,SNR=6.5
**M24K** **Tolsona, Glenn** 70.88 333 P P 18 09 37.5 +0.8
baz=106
**E27K** **Coleen River** 71.00 339 IAmb IAmb 18 09 38.7
comp=Z,30nm,1.4s
**E27K** **Coleen River** 71.00 339 P P 18 09 37.6 +0.4
baz=112,SNR=14
**K24K** **Donnelly Dome** 71.18 334 P P 18 09 39.5 +1.1
baz=106,SNR=7.1
**D27M** **Malcolm River** 71.19 341 IAmb IAmb 18 09 39.9
comp=Z,7.3nm,0.8s
**D27M** **Malcolm River** 71.19 341 P P 18 09 38.8 +0.3
baz=113,SNR=8.6
**J25K** **Salcha River,** 71.24 335 P P 18 09 39.7 +0.9
baz=107,SNR=20
**SCM** **Sheep Creek Mo** 71.34 332 P P 18 09 39.9 +0.4
baz=104,SNR=8.7
**G26K** **Porcupine Rive** 71.35 338 P P 18 09 39.4 +0.1
baz=109
**M23K** **Glacier View** 71.51 332 P P 18 09 40.8 +0.4
baz=104,SNR=6.6
**PRP** **Porcupine Dome** 71.57 336 P P 18 09 41.1 +0.1
PRP IAmb IAmb 18 09 42.2
comp=Z,13nm,0.8s
**PRP** **Porcupine Dome** 71.57 336 P P 18 09 41.2 +0.3
baz=107
**PWL** **Port Wells** 71.58 331 P P 18 09 40.9 0.0
baz=103
**PAB** **San Pablo** 71.66 52 P P 18 09 42.4 +0.5
PAB IAmb IAmb 18 09 44.2
comp=Z,15nm,1.4s
**PAB** **San Pablo** 71.66 52 P P 18 09 43.3 +1.4
**DHY** **Denali Highway** 71.67 333 IAmb IAmb 18 09 43.5
comp=Z,10.0nm,1.1s
**DHY** **Denali Highway** 71.67 333 P P 18 09 41.7 +0.1
baz=105,SNR=5.6
**WAT6** **Susitna Watana** 71.71 333 P P 18 09 42.0 +0.1
baz=104,SNR=12
**F26K** **Sheenjek River** 71.73 339 P P 18 09 42.2 +0.5
baz=109,SNR=7.7
**KNK** **Knik Glacier** 71.76 332 P P 18 09 42.5 +0.5
baz=103,SNR=6.4
**FYU** **Fort Yukon** 71.77 337 IAmb IAmb 18 09 43.6
comp=Z,21nm,1.0s
**SML** **Sawmill** 71.80 332 P P 18 09 42.5 +0.3
baz=103,SNR=7.6
**BMAR** **Burnt Mountain** 71.80 338 P P 18 09 42.0 -0.2
**HDA** **Harding Lake** 71.84 335 P P 18 09 42.9 +0.6
baz=106,SNR=15
**H25L** **Birch Creek** 71.91 337 P P 18 09 43.6 +0.9
baz=107
**IL31** **71.91 335** IAmb IAmb 18 09 44.0
comp=Z,22nm,1.1s
**ILAR** **Eielson Array** 71.91 335 P P 18 09 42.4 -0.4
**ILAR** **Eielson Array** 71.91 335 P P 18 09 42.6 -0.2
comp=Z,8.1nm,0.9s,baz=108,slow=4.1,SNR=53
ILAR PP PP 18 12 21.7 -1.0
comp=Z,0.9nm,0.8s,baz=107,slow=6.4,SNR=4.9
comp=Z,8.1nm,0.9s
**SEW** **Seward** 71.96 330 P P 18 09 42.9 -0.2
baz=102
**ESDC** **Sonseca Array** 71.97 52 P P 18 09 44.8 +1.1
ESDC IAmb IAmb 18 09 46.2
comp=Z,11nm,1.0s
**ESDC** **Sonseca Array** 71.97 52 P P 18 09 44.0 +0.3
comp=Z,11nm,0.8s,baz=273,slow=6.1,SNR=69
ESDC LR LR 18 36 11.8
comp=Z,43nm,20.9s,baz=253,slow=31
comp=Z,11nm,0.8s
**ESBB** **Sonseca Array** 71.97 52 IAmb IAmb 18 09 46.0
comp=Z,13nm,0.9s
**PMR** **Palmer** 72.12 332 P P 18 09 44.3 +0.2
baz=103
**WAT1** **Susitna Watana** 72.13 333 P P 18 09 44.3 +0.1
baz=104
**G25K** **Bearman Lake** 72.16 337 P P 18 09 45.4 +1.1
baz=107,SNR=6.6
**POKR** **Poker Plat Res** 72.23 336 P P 18 09 45.6 +0.9
baz=105
**C27K** **Jago River** 72.23 341 P P 18 09 45.0 +0.4
baz=110,SNR=11
**F25K** **Christian Rive** 72.24 338 P P 18 09 45.5 +0.8
baz=108,SNR=13
**RC01** **Rabbit Creek A** 72.30 331 P P 18 09 45.4 +0.3
baz=102
**WRH** **Wood River Hil** 72.33 335 IAmb IAmb 18 09 47.5
comp=Z,11nm,1.0s
**COLA** **College** 72.33 335 P P 18 09 45.9 +0.6
baz=105
**MDM** **Murphy Dome** 72.51 335 IAmb IAmb 18 09 47.7
comp=Z,21nm,1.2s
**MCK** **McKinley** 72.51 334 P P 18 09 46.9 +0.5
baz=104,SNR=7.8
**BRSE** **Bradley Lake S** 72.52 330 P P 18 09 46.8 +0.2
baz=101
**H24K** **Noodor Dome** 72.59 336 IAmb IAmb 18 09 48.5
comp=Z,22nm,1.1s
**H24K** **Noodor Dome** 72.59 336 P P 18 09 47.5 +0.6
baz=105,SNR=13
**G24K** **Hadweenzic Riv** 72.67 337 IAmb IAmb 18 09 49.3
comp=Z,19nm,1.1s
**G24K** **Hadweenzic Riv** 72.67 337 P P 18 09 48.0 +0.7
baz=106,SNR=14
**C26K** **Camden Bay** 72.73 341 P P 18 09 48.3 +0.8
baz=105,SNR=8.5
**NEA2** **Nenana** 72.77 335 IAmb IAmb 18 09 49.2
comp=Z,22nm,1.0s
**NEA2** **Nenana** 72.77 335 P P 18 09 48.1 +0.2
baz=104,SNR=6.8
**CUT** **Chulitna** 72.82 332 P P 18 09 48.5 +0.3
baz=102
**SUA** **Susitna One** 72.85 331 P P 18 09 48.9 +0.3
baz=101
**CAPN** **Captain Cook N** 72.91 331 P P 18 09 49.4 +0.6
baz=100
**DBIC** **Dimbokro** 72.95 86 P P 18 09 50.4 +0.5
DBIC IAmb IAmb 18 09 51.5
comp=Z,18nm,1.0s
**DBIC** **Dimbokro** 72.95 86 P P 18 09 50.1 +0.2
comp=Z,12nm,1.0s,baz=285,slow=8.6,SNR=9.6
comp=Z,12nm,1.0s
**HOM** **Homer** 72.96 329 P P 18 09 49.7 +0.6
baz=100
**D25K** **Kavik River** 73.02 340 P P 18 09 49.8 +0.3
baz=108,SNR=22
**I23K** **Minto, Yukon-K** 73.02 335 P P 18 09 50.0 +0.6
baz=104,SNR=16
**F24K** **Squaw Lake** 73.04 338 IAmb IAmb 18 09 51.6
comp=Z,12nm,1.1s
**F24K** **Squaw Lake** 73.04 338 P P 18 09 50.5 +0.9
baz=106,SNR=10
**KDAK** **Kodiak Island** 73.15 327 P P 18 09 51.1 +0.8
baz=98
**H23K** **Yukon River** 73.26 336 IAmb IAmb 18 09 52.4
comp=Z,20nm,1.1s
**H23K** **Yukon River** 73.26 336 P P 18 09 51.4 +0.6
baz=104,SNR=12
**SKT** **Skwentna** 73.31 332 IAmb IAmb 18 09 52.4
comp=Z,22nm,1.0s
**SKT** **Skwentna** 73.31 332 P P 18 09 51.3 +0.1
baz=100,SNR=10
**E24K** **Your Creek** 73.41 338 IAmb IAmb 18 09 53.6
comp=Z,16nm,1.4s
**E24K** **Your Creek** 73.41 338 P P 18 09 52.4 +0.7
baz=105,SNR=8.6
**SPU** **Mount Spurr** 73.42 331 IAmb IAmb 18 09 53.0
comp=Z,10nm,1.0s
**OHAK** **Old Harbor** 73.45 327 P P 18 09 51.9 -0.1
baz=98
**BPAW** **Bear Paw Mtn.** 73.48 334 P P 18 09 52.5 +0.3
baz=102,SNR=24
**N20K** **Mount Spurr** 73.50 331 P P 18 09 52.2 -0.1
baz=100
**O20K** **Slope Mountain** 73.52 330 P P 18 09 52.1 -0.4
baz=99
**MLY** **Manley** 73.57 335 IAmb IAmb 18 09 54.0
comp=Z,19nm,0.9s
**MLY** **Manley** 73.57 335 P P 18 09 53.0 +0.3
baz=105,SNR=18
**G23K** **Bananza Creek** 73.65 337 IAmb IAmb 18 09 55.2
comp=Z,20nm,0.9s
**G23K** **Bananza Creek** 73.65 337 P P 18 09 54.1 +1.0
baz=103,SNR=22
**EKA** **Eskdalemuir Ar** 73.67 35 P P 18 09 52.4 -1.0
comp=Z,5.8nm,0.7s,baz=261,slow=5.0,SNR=22
comp=Z,5.8nm,0.7s
**P19K** **Oil Pt** 73.75 329 P P 18 09 54.6 +0.7
baz=98
**DAG** **Danmarks Havn** 73.77 12 *i* P P 18 09 52.3 -1.3
DAG IAmb IAmb 18 09 55.9
comp=Z,2.8nm,0.7s
**PPLA** **Purkeypile** 73.78 333 P P 18 09 54.1 0.0
baz=100
**D24K** **Happy Valley** 73.81 339 IAmb IAmb 18 09 55.3
comp=Z,11nm,1.1s
**D24K** **Happy Valley** 73.81 339 P P 18 09 54.7 +0.7
baz=105
**E23K** **Chandalar** 73.82 338 P P 18 09 54.9 +0.7
baz=104,SNR=15
**COLD** **Coldfoot** 73.84 337 P P 18 09 55.3 +1.2
baz=103,SNR=12
**SII** **Sitkinak Islan** 73.85 326 P P 18 09 55.0 +0.6
baz=97
**TOLK** **Toolik Lake Re** 73.95 339 IAmb IAmb 18 09 56.1
comp=Z,14nm,1.4s
**TOLK** **Toolik Lake Re** 73.95 339 P P 18 09 54.9 +0.1
baz=104
**H22K** **Ishtalitna Cre** 74.01 336 P P 18 09 55.4 +0.2
baz=102,SNR=7.1
**M20K** **Styx River** 74.04 332 IAmb IAmb 18 09 56.5
comp=Z,15nm,0.9s
**M20K** **Styx River** 74.04 332 P P 18 09 55.5 -0.1
baz=99
**R18K** **Karluk** 74.12 327 P P 18 09 56.5 +0.6
baz=97
**G22K** **Bettles** 74.27 337 P P 18 09 57.5 +0.8
baz=102
**D23K** **Nanushuk River** 74.42 339 P P 18 09 58.1 +0.6
baz=103,SNR=14
**L20K** **Farewell, AK** 74.48 332 P P 18 09 57.8 -0.2
baz=99,SNR=8.8
**Q18K** **Katmai Hardscr** 74.53 328 P P 18 09 58.3 -0.2
baz=96
**N19K** **Bonanza Creek** 74.53 330 P P 18 09 57.9 -0.5
baz=98
**H21K** **Melozitna Rive** 74.54 336 P P 18 09 58.3 0.0
baz=100
**C23K** **Itkillik River** 74.59 340 P P 18 09 59.0 +0.5
baz=104,SNR=13
**M19K** **Big River Lodg** 74.64 332 P P 18 09 58.9 -0.1
baz=98
**F22K** **John River** 74.65 338 P P 18 09 59.5 +0.6
baz=102,SNR=13
**ACHA** **Angle Creek He** 74.65 328 IAmb IAmb 18 10 01.7
comp=Z,14nm,1.3s
**K20K** **Telida** 74.70 333 IAmb IAmb 18 10 00.2
comp=Z,22nm,1.2s
**K20K** **Telida** 74.70 333 P P 18 09 59.2 -0.1
baz=99
**P18K** **Big Mountain,** 74.73 329 P P 18 09 59.7 +0.1
baz=96
**O18K** **Koktuh Hills** 74.77 329 P P 18 09 59.3 -0.4
baz=97
**J20K** **Nowinta River** 74.86 334 P P 18 09 60.0 -0.2
baz=99,SNR=17
**L19K** **White Mountain** 74.89 332 P P 18 10 00.2 -0.3
baz=98
**Q17K** **Contact Creek** 74.95 328 P P 18 10 00.5 -0.4
baz=96
**G21K** **Allakaket** 74.97 336 IAmb IAmb 18 10 02.7
comp=Z,20nm,0.9s
**G21K** **Allakaket** 74.97 336 P P 18 10 01.3 +0.5
baz=100,SNR=21
**IMAR** **Indian Mountai** 74.98 336 P P 18 09 60.0 -0.9
**F21K** **Alatna River** 75.09 337 P P 18 10 01.9 +0.5
baz=100,SNR=36
**I20K** **Naaghedeneel** 75.09 335 P P 18 10 01.2 -0.2
baz=99
**D22K** **Ayikyak River** 75.10 339 IAmb IAmb 18 10 03.6
comp=Z,20nm,1.1s
**D22K** **Ayikyak River** 75.10 339 P P 18 10 02.0 +0.5
baz=101,SNR=12
**R17L** **Mt. Peulik Vol** 75.14 327 P P 18 10 01.6 -0.4
baz=95
**N18K** **Kilae Creek** 75.20 330 IAmb IAmb 18 10 02.9
comp=Z,18nm,1.0s
**N18K** **Kilae Creek** 75.20 330 P P 18 10 01.9 -0.3
baz=96
**M18K** **Stony River** 75.26 331 P P 18 10 02.1 -0.4
baz=96,SNR=5.5
**P17K** **Kvichak River** 75.33 329 P P 18 10 02.5 -0.4
baz=95
**H20K** **Anotleneega Mo** 75.36 335 P P 18 10 02.9 -0.1
baz=98,SNR=6.3
**Q16K** **King Salmon** 75.39 328 P P 18 10 03.2 -0.1
baz=95
**J19K** **Poorman** 75.47 334 P P 18 10 03.4 -0.3
baz=97
**E21K** **Killik River** 75.49 338 IAmb IAmb 18 10 04.8
comp=Z,13nm,1.3s
**E21K** **Killik River** 75.49 338 P P 18 10 03.8 0.0
baz=100
**B22K** **Teshekpuk Lake** 75.64 340 P P 18 10 04.7 +0.2
baz=101
**O17K** **Koliganek Bris** 75.71 329 P P 18 10 04.9 -0.2
baz=95
**L18K** **Granite Mounta** 75.75 332 IAmb IAmb 18 10 06.7
comp=Z,14nm,1.1s
**L18K** **Granite Mounta** 75.75 332 P P 18 10 05.2 -0.1
baz=96
**N17K** **Nushagak Hills** 75.83 330 IAmb IAmb 18 10 06.4
comp=Z,14nm,1.1s
**N17K** **Nushagak Hills** 75.83 330 P P 18 10 05.4 -0.4
baz=95
**J18K** **Innoko River** 75.89 333 IAmb IAmb 18 10 07.0
comp=Z,12nm,1.1s
**J18K** **Innoko River** 75.89 333 P P 18 10 06.2 +0.1
baz=96
**C21K** **Knifeblade Rid** 75.90 339 P P 18 10 06.4 +0.3
baz=100,SNR=5.0
**B21K** **Ikpikpuk River** 75.92 339 IAmb IAmb 18 10 07.9
comp=Z,20nm,0.9s
**B21K** **Ikpikpuk River** 75.92 339 P P 18 10 06.2 +0.2
baz=100,SNR=12
**F20K** **Avaraart Lake** 75.93 337 P P 18 10 06.7 +0.5
baz=98,SNR=6.8
**CEST** **Esterri de Car** 75.94 49 P P 18 10 08.6 +1.6
CEST IAmb IAmb 18 10 09.8
comp=Z,14nm,1.1s
**H19K** **Roundabout Mou** 76.02 335 IAmb IAmb 18 10 08.2
comp=Z,18nm,1.1s
**H19K** **Roundabout Mou** 76.02 335 P P 18 10 07.1 +0.4
baz=97,SNR=6.8
**M17K** **Holitna River** 76.02 331 IAmb IAmb 18 10 07.7
comp=Z,16nm,1.0s
**M17K** **Holitna River** 76.02 331 P P 18 10 06.6 -0.3
baz=95,SNR=5.5
**GCSA** **Galena City Sc** 76.11 334 P P 18 10 07.7 +0.4
baz=96
**P16K** **Nushagak River** 76.11 328 P P 18 10 08.4 +1.0
baz=94
**CHGN** **Chignik** 76.17 326 P P 18 10 08.1 +0.3
baz=93
**O16K** **Kokwok River B** 76.20 329 P P 18 10 08.3 +0.4
baz=94
**E20K** **Nigu River** 76.27 338 P P 18 10 08.7 +0.4
baz=98,SNR=20
**A22K** **Sinclair Lake** 76.27 341 P P 18 10 08.4 +0.3
baz=100
**G19K** **Purcell Mounta** 76.35 336 IAmb IAmb 18 10 10.1
comp=Z,12nm,0.9s
**G19K** **Purcell Mounta** 76.35 336 P P 18 10 09.1 +0.5
baz=97,SNR=8.5
**D20K** **Etivluk River** 76.49 338 P P 18 10 09.5 +0.1
baz=98,SNR=10.0
**L17K** **Donlin** 76.49 332 P P 18 10 09.6 +0.1
baz=94,SNR=6.5
**K17K** **Iditarod** 76.54 332 IAmb IAmb 18 10 10.8
comp=Z,19nm,0.9s
**K17K** **Iditarod** 76.54 332 P P 18 10 09.7 -0.1
baz=95
**E19K** **Redstone River** 76.56 337 IAmb IAmb 18 10 11.1
comp=Z,8.3nm,0.9s
**E19K** **Redstone River** 76.56 337 P P 18 10 09.9 +0.1
baz=97,SNR=5.9
**N16K** **Nishlik Lake** 76.60 330 P P 18 10 10.3 +0.1
baz=94
**F19K** **Shaleruckik Mo** 76.70 336 IAmb IAmb 18 10 11.7
comp=Z,9.0nm,1.0s
**F19K** **Shaleruckik Mo** 76.70 336 P P 18 10 10.7 +0.1
baz=96,SNR=5.9
**M16K** **Timber Creek** 76.73 330 P P 18 10 10.9 0.0
baz=94
**H18K** **Honhosa River** 76.78 335 P P 18 10 12.0 +0.9
baz=95,SNR=6.0
**CHNA** **Chernabura Isl** 76.78 324 P P 18 10 11.2 -0.1
baz=92
**B20K** **Meade River** 76.85 340 P P 18 10 12.7 +1.3
baz=97
**J17K** **VABM Dome** 76.94 333 IAmb IAmb 18 10 13.8
comp=Z,19nm,0.9s
**J17K** **VABM Dome** 76.94 333 P P 18 10 12.8 +0.7
baz=94
**G18K** **Tagagawik** 76.96 335 IAmb IAmb 18 10 14.4
comp=Z,24nm,1.2s
**G18K** **Tagagawik** 76.96 335 P P 18 10 12.7 +0.6
baz=95,SNR=11
**D19K** **Kuna River** 77.01 338 IAmb IAmb 18 10 14.1
comp=Z,23nm,1.1s
**D19K** **Kuna River** 77.01 338 P P 18 10 13.0 +0.6
baz=96,SNR=11
**L16K** **Owhat River** 77.02 331 P P 18 10 13.0 +0.5
baz=93
**O15K** **Ungalikthiuk R** 77.06 329 P P 18 10 13.6 +0.8
baz=92
**N15K** **Kwethluk River** 77.24 330 P P 18 10 14.8 +1.0
baz=92
**SDPT** **Sand Point** 77.30 325 P P 18 10 15.0 +0.8
baz=91
**H17K** **Granite Mounta** 77.42 334 IAmb IAmb 18 10 16.5
comp=Z,10nm,0.9s
**H17K** **Granite Mounta** 77.42 334 P P 18 10 15.4 +0.7
baz=94
**F18K** **Selawik** 77.42 336 P P 18 10 15.1 +0.4
baz=94
**M15K** **Kasigluk River** 77.56 330 P P 18 10 15.8 +0.3
baz=92,SNR=7.1
**C19K** **Lookout Ridge** 77.60 339 P P 18 10 16.4 +0.7
baz=95,SNR=12
**J16K** **Anvik River** 77.62 333 P P 18 10 16.9 +1.0
baz=93
**I17K** **Unalakleet** 77.69 333 P P 18 10 17.6 +1.4
baz=93
**G17K** **Kiwalik Mounta** 77.76 335 P P 18 10 17.3 +0.7
baz=93
**O14K** **Tigyukauivet M** 77.81 329 P P 18 10 18.0 +1.1
baz=91
**E18K** **Tukpahlearik C** 77.85 337 IAmb IAmb 18 10 17.5
comp=Z,16nm,1.4s
**E18K** **Tukpahlearik C** 77.85 337 P P 18 10 17.0 0.0
baz=94
**L15K** **Ungalak Mounta** 77.98 331 P P 18 10 18.3 +0.5
baz=92
**K15K** **Wolf Creek Mou** 78.01 332 P P 18 10 19.1 +1.1
baz=92
**N14K** **Kuskokwak Cree** 78.03 329 P P 18 10 18.3 +0.1
baz=91
**F17K** **Baldwin Pennin** 78.05 336 P P 18 10 18.4 +0.3
baz=93
**C18K** **Utukok River** 78.15 338 IAmb IAmb 18 10 20.2
comp=Z,12nm,1.1s
**C18K** **Utukok River** 78.15 338 P P 18 10 19.1 +0.3
baz=93,SNR=5.8
**DOU** **Dourbes** 78.15 41 *d*P P 18 10 19.8 +0.7
comp=Z,5.0nm,1.0s
DOU *dx* x 18 10 36.8
**M14K** **Bethel** 78.19 330 P P 18 10 19.5 +0.5

baz=91
BMRD **Maredsous** 78.25 41 *d*P P 18 10 20.6 +1.0
H16K **Elim** 78.40 334 P P 18 10 21.1 +0.9
baz=92
B18K **Kokolik River** 78.41 339 P P 18 10 20.8 +0.7
baz=93,SNR=7.0
G16K **Koyuk River** 78.47 335 P P 18 10 21.4 +0.9
baz=92
L14K **Kuka Creek** 78.54 331 P P 18 10 22.3 +1.3
baz=90
BCLA **Clavier** 78.59 40 *d*P P 18 10 22.2 +0.7
RDOG **Red Dog Mine** 78.76 338 P P 18 10 23.3 +1.3
baz=92
D17K **Noatak River** 78.81 337 P P 18 10 23.5 +1.2
baz=91
C17K **DeLong Mountai** 78.87 338 P P 18 10 23.1 +0.4
baz=91
M13K **Dall Lake** 78.87 330 P P 18 10 23.5 +0.8
baz=90
J14K **Nanvaranak Lak** 78.96 332 IAmb IAmb 18 10 26.1
comp=Z,24nm,1.0s
J14K **Nanvaranak Lak** 78.96 332 P P 18 10 24.4 +1.2
baz=90,SNR=6.3
FALS **False Pass** 79.00 324 P P 18 10 24.9 +1.4
baz=88
MEM **Membach** 79.04 40 *d*P P 18 10 25.0 +1.0
comp=Z,4.3nm,1.0s
MEM *d*pP **pP** 18 10 35.3 -1.2
WLF **Walferdange** 79.17 41 IAmb IAmb 18 10 26.9
comp=Z,11nm,0.8s
WLF **Walferdange** 79.17 41 *d*P P 18 10 26.1 +1.4
comp=Z,9.1nm,1.0s
WLF *d*PcP **PcP** 18 10 33.4 +0.5
G15K **Niukluk** 79.17 334 P P 18 10 25.6 +1.2
baz=90
F15K **North Star Dit** 79.42 335 P P 18 10 26.9 +1.2
baz=90,SNR=6.4
C16K **Lisburne Hills** 79.67 338 P P 18 10 28.3 +1.3
baz=89
ANM **Nome** 79.75 334 P P 18 10 28.7 +1.1
baz=89
F14K **Arctic Creek** 80.13 335 P P 18 10 30.4 +0.9
baz=88
M11K **Mekoryuk** 80.28 330 P P 18 10 31.0 +0.5
baz=87
TNA **Tin City** 80.79 335 P P 18 10 33.9 +0.9
baz=86
UNV **Unalaska Valle** 80.85 323 P P 18 10 34.4 +0.8
baz=86
NB2 **NORSAR Subarra** 81.35 29 P P 18 10 36.9 +0.6
comp=Z,1.3nm,0.6s,baz=272,slow=5.3
NOA **NORSAR Array B** 81.35 29 P P 18 10 35.4 -0.9
comp=Z,3.8nm,0.9s,baz=275,slow=5.3,SNR=10
NOA LR LR 18 43 50.2
comp=Z,27nm,19.8s,baz=80,slow=33
comp=Z,3.8nm,0.9s
SPITS **Spitsbergen Ar** 81.42 12 P P 18 10 35.9 -0.3
comp=Z,13nm,0.9s,baz=251,slow=4.4,SNR=4.1
SPITS pP **sP** 18 10 54.5 +0.7
comp=Z,7.4nm,0.9s,baz=176,slow=3.3,SNR=1.5
comp=Z,13nm,0.9s
VSL **Villasalto** 82.27 51 IAmb IAmb 18 10 43.9
comp=Z,17nm,1.0s
NIKH **Nikolski High** 82.33 322 P P 18 10 42.1 +0.6
baz=84
P08K **Saint George I** 82.34 326 P P 18 10 41.8 +0.4
baz=84
GAMB **Gambell** 82.57 333 P P 18 10 43.1 +0.7
baz=83
SPIA **Saint Paul Isl** 82.65 327 P P 18 10 43.4 +0.3
baz=83
HFS **Hagfors** 82.66 30 P P 18 10 43.4 +0.3
comp=Z,1.3nm,0.6s,baz=208,slow=5.9,SNR=2.3
HFS LR LR 18 44 27.1
comp=Z,29nm,20.5s,baz=238,slow=33
comp=Z,1.3nm,0.6s
KEST **Kesra** 82.67 55 IAmb IAmb 18 10 46.6
comp=Z,11nm,1.0s
KEST **Kesra** 82.67 55 P P 18 10 43.5 -0.3
comp=Z,8.1nm,0.9s,baz=246,slow=7.2,SNR=8.7
comp=Z,8.1nm,0.9s
CLL **Collm** 83.39 39 *i* P P 18 10 47.8 +0.8
comp=Z,7.0nm,1.2s
CLL *i* sP **pwP** 18 11 03.2 +1.0
comp=Z,3.0nm,1.0s
KHC **Kasperske Hory** 84.05 41 *e*P P 18 10 50.0 -0.5
KHC *ex* x 18 11 08.0
GERES **GERESS Array B** 84.17 42 P P 18 10 51.8 +0.5
GERES **GERESS Array B** 84.17 42 P P 18 10 50.4 -0.8
comp=Z,2.9nm,0.9s,baz=208,slow=7.6,SNR=13
comp=Z,2.9nm,0.8s
PRED **Cave del Predi** 84.42 44 IAmb IAmb 18 10 53.2
comp=Z,11nm,1.2s
CADS **Cadrg** 84.57 44 *i* P P 18 10 53.8 +0.5
GBAS **Gorenja Brezov** 85.10 44 *i* P P 18 10 56.8 +0.9
PDKS **Podkum** 85.47 44 *i* P P 18 10 58.7 +1.0
PDKS *i* 18 10 59.2
ARCES **ARCESS Array B** 85.70 20 P P 18 10 58.3 -0.1
comp=Z,3.2nm,0.6s,baz=289,slow=2.8,SNR=9.2
ARCES pP **sP** 18 11 16.0 0.0
comp=Z,2.5nm,0.5s,baz=289,slow=3.7,SNR=3.5
comp=Z,3.2nm,0.6s
KRUC **Moravsky** 85.89 41 *e*P P 18 11 00.2 +0.5
VRAC **Vranov** 85.97 41 *e*P P 18 11 00.9 +0.8
VAE **Valguarnera** 86.46 53 LR LR 18 44 35.8
comp=Z,66nm,19.6s,baz=306,slow=32
MORC **Moravsky Berou** 86.49 40 *e*P P 18 11 02.9 +0.2
FINES **FINESS Array B** 88.31 28 P P 18 11 10.7 -0.4
comp=Z,3.6nm,0.9s,baz=264,slow=5.2,SNR=5.3
comp=Z,3.6nm,0.9s
FNA **Florina** 91.09 48 IAmb IAmb 18 11 27.0
comp=Z,6.0nm,1.0s
VNA3 **Neumayer Olymp** 92.69 162 ⇑P P 18 11 31.6 +0.3
comp=Z,14nm,0.8s
VNA1 **Neumayer--Stat** 92.89 162 ⇑P P 18 11 32.4 +0.2
comp=Z,14nm,1.0s
MLR **Muntele Rosu** 93.05 43 IAmb IAmb 18 11 35.9
comp=Z,8.1nm,0.9s
VNA2 **Neumayer--Watz** 93.26 162 ⇑P P 18 11 34.1 +0.2
comp=Z,7.5nm,0.7s,baz=301,slow=5.3
SNAA **Sanae** 94.89 162 P P 18 11 41.4 -0.1
SNAA IAmb IAmb 18 11 42.9
comp=Z,8.1nm,1.2s
SNAA **Sanae** 94.89 162 ⇑P P 18 11 41.5 0.0
comp=Z,92nm,0.7s
SNAA **Sanae** 94.89 162 P P 18 11 40.5 -1.0
comp=Z,5.0nm,0.9s,baz=293,slow=4.0,SNR=13
comp=Z,5.0nm,0.9s
TROLL **Troll, Antarti** 96.61 162 ⇑P P 18 11 48.9 -0.5
comp=Z,271nm,0.7s
QSPA **South Pole Qui** 99.87 180 P Pdif 18 12 02.9 -1.2
comp=Z,1.4nm,0.9s,baz=139,slow=1.6,SNR=4.5
comp=Z,1.4nm,0.9s
MKAR **Makanchi Array** 121.06 15 PKP PKPdf 18 17 10.1 -2.4
comp=Z,0.5nm,0.8s,baz=38,slow=1.6,SNR=5.9
SONM **Songino Array** 122.36 356 PKhKP PKPpre 18 17 11.0
comp=Z,0.9nm,0.7s,baz=49,slow=4.4,SNR=3.7
WMQ **Urumqi** 125.12 12 *e*PKP **PKiKP** 18 17 22.1 +1.3
WMQ LR LR
comp=N,340nm,19.1s
WMQ LR LR
comp=E,280nm,14.1s
WMQ LR LR
comp=Z,220nm,17.1s
KSRS **Korea Array** 126.74 334 PKP PKPdf 18 17 20.1 -3.5
comp=Z,1.9nm,0.8s,baz=349,slow=1.2,SNR=6.6
HHC **Hu-ho-hao-te** 128.65 350 *e*P PKPdf 18 17 26.7 -0.6
NJ2 **Nanjing** 135.07 339 *e*P PKPdf 18 17 39.1 -0.4
NJ2 pmax pmax
comp=Z,3.0nm,0.5s
PZH **PanZhiHua** 143.83 359 PKP PKPdf 18 17 56.0 +0.2
KMI **Kunming** 145.18 358 ||PKPbc PKPbc 18 17 56.9 -0.9
ASAR **Alice Springs** 146.08 242 PKPbc PKPdf 18 17 57.3 -2.3
comp=Z,7.4nm,0.8s,baz=116,slow=3.4,SNR=65
WRA **Warramunga Arr** 146.68 249 PKPbc PKPdf 18 17 59.1 -1.6
comp=Z,5.0nm,0.9s,baz=98,slow=3.4,SNR=44
CMAR **Chiang Mai Arr** 151.74 5 PKPbc PKPbc 18 18 12.9 -2.2
comp=Z,5.4nm,0.6s,baz=326,slow=2.9,SNR=35

**IDC 06 18:16:59.5±2.3,5.14S×150.61E,h0km,mb3.2/5, mbtmp3.3/5,Error ellipse: s-maj=89.7km s-min=30.6km az=116.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.61** | **226** | P | P | 18 21 52.1 | +0.7 |
| | 0.4nm,0.8s,baz=50,slow=10,SNR=2.6 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **24.46** | **220** | P | P | 18 22 19.7 | -0.7 |
| | 0.3nm,0.9s,baz=58,slow=7.9,SNR=1.8 | | | | | | |
| | 0.3nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **79.15** | **319** | P | P | 18 29 07.3 | +1.0 |
| | 0.2nm,0.6s,baz=103,slow=4.6,SNR=2.3 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.72** | **322** | P | P | 18 29 24.4 | -0.8 |
| | 0.2nm,0.4s,baz=105,slow=5.4,SNR=1.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **83.30** | **23** | P | P | 18 29 27.8 | -0.1 |
| | 0.5nm,0.9s,baz=238,slow=5.2,SNR=1.5 | | | | | | |
| | 0.5nm,0.9s | | | | | | |

*BJI **06** 18:21:12.7±0.0,9.07S×116.91E,h40km,mb5.0/85, mB5.3/58,Ms5.0/90,Ms7 4.8/86*
*MOS **06** 18:21:15.6±1.0,8.13S×116.39E,h23km,mb5.4/49,Error ellipse: s-maj=7.5km s-min=5.0km az=111.7*
*IDC **06** 18:21:15.3±0.4,8.15S×116.32E,h0km,mb5.1/23, mbtmp5.1/25,ML5.2/2,MS4.6/29,Error ellipse: s-maj=15.8km s-min=9.3km az=78.0*
*NEIC **06** 18:21:19.2±1.8,8.25S±0.05×116.36E±0.05,h22km±3km, mb5.4/118,Mww5.3/28,Error ellipse: s-maj=9.9km s-min=3.7km az=141.0*
*DJA **06** 18:21:19.3±0.4,8.3S±1.1×11.6E±.°,h18km±3km,M5.2/95, mb5.3/95,mB5.7/56,MLv5.7/27,Mw5.2/121,Mw(mB)5.2/56, MwMwp5.0/25,Mwp5.3/25*
*NEIC **06** 18:21:20,8.25S×116.36E,h24km*
*GCMT **06** 18:21:20.0±0.1,8.28S±0.01×116.33E±0.01,h16km, MW5.3/114,Moment Tensor Solution. s86,c133; s114,c206; Duration: 1s1 Moment tensor: Scale 10^17 Nm; Mrr0.40±.02; Mθθ-0.89±.02; Mφφ0.48±.02; Mrθ-1.05±.09; Mθφ0.28±.01; Mφr-0.09±.05; Best double couple: M○1.28200×10^17 NP1:φ○259.00000°,δ77.00000°, λ68.00000°. NP2:φ○139.00000°,δ25.00000°,λ148.00000°. Principal axes: T 1.0670, Plg53.0000°, Azm144.0000°; N 0.4280, Plg21.0000°, Azm265.0000°; P -1.4960, Plg29.0000°, Azm7.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **06** 18:21:20,8.35S×116.36E,h24km,Moment Tensor Solution. Duration: 2s4 Moment tensor: Scale 10^17Nm; Mrr0.85; Mθθ-1.24; Mφφ0.39; Mrθ-0.57; Mθφ0.43; Mφr0.07; Fault plane solution: M○1.24000×10^17 NP1: φ○277.36000°,δ59.26000°,λ81.56000°. NP2: φ○113.54000°,δ31.77000°,λ103.86000°. Principal axes: T 0.9983, Plg74.0000°, Azm165.0000°; N 0.4862, Plg7.0000°, Azm282.0000°; P -1.4845, Plg14.0000°, Azm13.0000°;*
**ISC 06 18:21:20.3±0.5,8.31S±0.03×116.37E±0.04,h32km±2km, h32km:pP-P,n580,σ1s90/573,mb5.3/165,MS4.8/76, 10C-12D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.66** | **130** | P | **Pb** | **18 21 32.2** | **-1.3** |
| **SRBI** | **Singaraja** | **1.17** | **281** | P | **Pn** | **18 21 37.9** | **-2.5** |
| **DNP** | **Denpasar** | **1.20** | **252** | P | **Pn** | **18 21 40.5** | **-0.4** |
| **DNP** | **Denpasar** | **1.20** | **252** | P | **Pn** | **18 21 40.8** | **-0.1** |
| **PLAI** | **Plampang** | **1.48** | **110** | P | **Pn** | **18 21 45.6** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.20** | **266** | P | **Pn** | **18 21 55.0** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.20** | **266** | Pn | **Pn** | **18 21 52.7** | **-1.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.20** | **266** | P | **Pn** | **18 21 52.9** | **-1.7** |
| **GRJI** | **Gresik** | **4.10** | **289** | P | **Pn** | **18 22 19.5** | **-1.2** |
| **BWJI** | **Bawean** | **4.42** | **303** | P | **Pn** | **18 22 24.7** | **-0.4** |
| **PWJI** | **Pagerwojo** | **4.53** | **273** | P | **Pn** | **18 22 25.8** | **-0.9** |
| **BASI** | **Baing, Sumba** | **4.57** | **115** | P | **Pn** | **18 22 28.6** | **+1.4** |
| **BSSI** | **Bau Bau, Buton** | **4.62** | **63** | P | **Pn** | **18 22 26.8** | **-1.1** |
| **KAPI** | **Kappang** | **4.69** | **46** | Pn | **Pn** | **18 22 26.9** | **-2.0** |
| **KAPI** | **Kappang** | **4.69** | **46** | Pn | **Pn** | **18 22 27.3** | **-1.6** |
| | 15nm,0.3s,baz=223,slow=11,SNR=15 | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 23 20.1** | **-2.1** |
| | 87nm,0.3s,baz=322,slow=8.3,SNR=13 | | | | | | |
| KAPI | | | | LR | LR | 18 24 46.0 | |
| | comp=Z,12μm,18.8s,baz=226,slow=46 | | | | | | |
| | 43nm,0.3s | | | | | | |
| **KAPI** | **Kappang** | **4.69** | **46** | P | **Pn** | **18 22 27.4** | **-1.4** |
| **NGJI** | **Ngawi** | **4.95** | **281** | P | **Pn** | **18 22 34.3** | **+1.8** |
| **BNSI** | **Bone** | **5.37** | **44** | P | **Pn** | **18 22 38.3** | **0.0** |
| | 294nm,0.5s,12μm6.3nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.48** | **38** | P | **Pn** | **18 22 37.9** | **-1.9** |
| | 311nm,1.3s,9μm12μm2.7nm | | | | | | |
| **UGM** | **Wanagama** | **5.80** | **273** | P | **Pn** | **18 22 46.4** | **+2.2** |
| **UGM** | **Wanagama** | **5.80** | **273** | Pn | **Pn** | **18 22 44.1** | **-0.1** |
| **UGM** | **Wanagama** | **5.80** | **273** | P | **Pn** | **18 22 43.8** | **-0.4** |
| **MMRI** | **Maumere** | **5.81** | **94** | P | **Pn** | **18 22 46.1** | **+1.7** |
| **MMRI** | **Maumere** | **5.81** | **94** | Pn | **Pn** | **18 22 43.5** | **-0.8** |
| **MMRI** | **Maumere** | **5.81** | **94** | P | **Pn** | **18 22 44.5** | **+0.1** |
| **SMRI** | **Semarang** | **6.01** | **282** | P | **Pn** | **18 22 48.7** | **+1.7** |
| **SMRI** | **Semarang** | **6.01** | **282** | | **Pn** | **18 22 46.4** | **-0.7** |
| **SMRI** | **Semarang** | **6.01** | **282** | P | **Pn** | **18 22 48.4** | **+1.4** |
| | 458nm,0.8s,9μm4.3nm | | | | | | |
| **YOGI** | **Yogyakarta** | **6.03** | **274** | P | **Pn** | **18 22 49.0** | **+1.6** |
| | 470.9s,9μm6.9nm | | | | | | |
| **BBSI** | **Bau Bau** | **6.76** | **66** | P | **Pn** | **18 22 59.1** | **+1.7** |
| | 122nm,0.8s,3μm1.2nm | | | | | | |
| **BKB** | **Balikpapan** | **7.02** | **4** | Pn | **Pn** | **18 23 01.5** | **+0.6** |
| **KPJI** | **Karang Pucung** | **7.43** | **277** | P | **Pn** | **18 23 08.3** | **+1.7** |
| | 218nm,1.0s,5μm1.6nm | | | | | | |
| **BATI** | **Baumata** | **7.44** | **105** | P | **Pn** | **18 23 07.7** | **+0.9** |
| | 570nm,1.2s,6μm3μm2.4nm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.46** | **349** | P | **Pn** | **18 23 05.7** | **-1.3** |
| | 285nm,0.9s,10μm8μm | | | | | | |
| **CMJI** | **Cimerak** | **7.86** | **273** | P | **Pn** | **18 23 14.5** | **+2.0** |
| | 298nm,0.8s,4μm1.1nm | | | | | | |
| **SOEI** | **Soe** | **7.93** | **101** | P | **Pn** | **18 23 15.1** | **+1.5** |
| **SOEI** | **Soe** | **7.93** | **101** | Pn | **Pn** | **18 23 11.7** | **-1.9** |
| **SOEI** | **Soe** | **7.93** | **101** | P | **Pn** | **18 23 14.8** | **+1.2** |
| **BBJI** | **Bungbulang** | **8.68** | **275** | P | **Pn** | **18 23 26.6** | **+2.8** |
| **CNJI** | **Cibinong** | **9.21** | **276** | P | **Pn** | **18 23 32.9** | **+1.9** |
| | 107nm,1.1s | | | | | | |
| **MPSI** | **Mapaga** | **9.28** | **22** | P | **Pn** | **18 23 32.8** | **+0.9** |
| **LUWI** | **Luwuk** | **9.63** | **42** | P | **Pn** | **18 23 38.1** | **+1.3** |
| | 60nm,1.2s,4μm | | | | | | |
| **DBJI** | **Dramaga** | **9.70** | **280** | P | **Pn** | **18 23 40.9** | **+3.2** |
| | 179nm,0.9s,4μm | | | | | | |
| **TOLI2** | **Tolitoli** | **10.34** | **25** | P | **Pn** | **18 23 49.0** | **+2.5** |
| **TOLI2** | **Tolitoli** | **10.34** | **25** | Pn | **Pn** | **18 23 46.2** | **-0.2** |
| **MRSI** | **Marisa** | **10.34** | **33** | P | **Pn** | **18 23 49.5** | **+3.0** |
| | 58nm,1.1s,4μm | | | | | | |
| **GTOI** | **Gorontalo** | **11.08** | **37** | P | **Pn** | **18 23 56.5** | **-0.1** |
| **SANI** | **Sanana** | **11.42** | **58** | P | **Pn** | **18 24 04.0** | **+2.8** |
| **SANI** | **Sanana** | **11.42** | **58** | P | **Pn** | **18 24 03.4** | **+2.2** |
| | 119nm,1.3s,1μm | | | | | | |
| **KSM** | **Kuching** | **11.44** | **328** | P | **Pn** | **18 24 03.4** | **+1.8** |
| **KSM** | **Kuching** | **11.44** | **328** | Pn | **Pn** | **18 24 01.1** | **-0.5** |
| **SBUM** | **Sibu** | **11.46** | **339** | | **Pn** | **18 24 01.4** | **-0.4** |
| **NLAI** | **Namlea** | **11.80** | **65** | P | **Pn** | **18 24 08.1** | **+1.6** |
| | 84nm,1.0s,2μm | | | | | | |
| **PPBI** | **Pangkal Pinang** | **11.88** | **300** | P | **Pn** | **18 24 09.2** | **+1.7** |
| | 48nm,0.7s,5μm | | | | | | |
| **KASI** | **Kota Agung** | **12.11** | **282** | P | **Pn** | **18 24 12.6** | **+1.9** |
| | 147nm,1.1s,3μm | | | | | | |
| **MBWA** | **Marble Bar** | **13.18** | **166** | P | **Pn** | **18 24 24.3** | **-1.1** |
| **MBWA** | **Marble Bar** | **13.18** | **166** | Pn | **Pn** | **18 24 23.2** | **-2.2** |
| **MBWA** | **Marble Bar** | **13.18** | **166** | P | **Pn** | **18 24 23.7** | **-1.6** |
| | 182nm,0.9s,SNR=11 | | | | | | |
| **MBWA** | **Marble Bar** | **13.18** | **166** | P | **Pn** | **18 24 23.4** | **-2.0** |
| **FITZ** | **Fitzroy Crossi** | **13.27** | **138** | P | **Pn** | **18 24 26.0** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **13.27** | **138** | | **Pn** | **18 24 25.4** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **13.61** | **166** | P | **Pn** | **18 24 30.3** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **13.61** | **166** | | **Pn** | **18 24 29.5** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **13.61** | **166** | P | **Pn** | **18 24 29.5** | **-1.7** |
| | 156nm,1.4s,SNR=9.1 | | | | | | |
| **KNRA** | **Kununurra** | **14.16** | **122** | Pn | **Pn** | **18 24 37.7** | **-1.0** |
| **KNRA** | **Kununurra** | **14.16** | **122** | P | **Pn** | **18 24 37.2** | **-1.5** |
| | 125nm,0.8s,SNR=10 | | | | | | |
| **GIRL** | **Giralia** | **14.40** | **188** | P | **Pn** | **18 24 41.4** | **-0.6** |
| **GIRL** | **Giralia** | **14.40** | **188** | P | **Pn** | **18 24 40.6** | **-1.4** |
| **SAUI** | **Saumlaki** | **14.79** | **90** | P | **Pn** | **18 24 47.1** | **-0.2** |
| | 200nm,1.0s | | | | | | |
| **DRS** | **Darwin Rock St** | **14.87** | **107** | P | **Pn** | **18 24 49.6** | **+1.3** |
| **TPRI** | **Tanjung Pinang** | **14.95** | **307** | P | **Pn** | **18 24 51.3** | **+1.9** |
| | 141nm,1.2s,2μm | | | | | | |
| **MTN** | **Manton Dam** | **15.20** | **109** | P | **Pn** | **18 24 54.5** | **+1.8** |
| **BTDF** | **Bukit Timah Da** | **15.81** | **307** | P | **P** | **18 25 04.1** | **-0.1** |
| **KDU** | **Kakadu** | **16.42** | **107** | P | **Pn** | **18 25 08.4** | **-0.1** |
| **SWI** | **Sorong** | **16.57** | **64** | P | **P** | **18 25 12.1** | **-0.6** |
| | 105nm,1.3s,3μm | | | | | | |
| **SWI** | **Sorong** | **16.57** | **64** | P | **P** | **18 25 12.6** | **-0.1** |
| SWI | | | | pmax | pmax | | |
| | comp=Z,105nm,1.3s | | | | | | |
| **FAKI** | **Fak Fak** | **16.68** | **72** | P | **P** | **18 25 14.0** | **+0.1** |
| **FAKI** | **Fak Fak** | **16.68** | **72** | P | **Pn** | **18 25 10.3** | **-1.6** |
| **FAKI** | **Fak Fak** | **16.68** | **72** | P | **Pn** | **18 25 11.3** | **-0.5** |
| **PDSI** | **Padang** | **17.46** | **294** | P | **P** | **18 25 23.3** | **+0.7** |
| | comp=Z,71nm,1.4s,comp=Z,1μmcomp=Z,3μm | | | | | | |
| **BKNI** | **Bangkinang** | **17.52** | **299** | P | **P** | **18 25 24.9** | **+1.7** |
| **BKNI** | **Bangkinang** | **17.52** | **299** | P | **P** | **18 25 23.8** | **+0.6** |
| BKNI | | | | IAmb | IAmb | 18 25 31.8 | |
| | comp=Z,386nm,1.2s | | | | | | |
| **BKNI** | **Bangkinang** | **17.52** | **299** | P | **P** | **18 25 24.7** | **+1.5** |
| | comp=Z,326nm,1.2s,comp=Z,4μm | | | | | | |
| **DAV** | **Davao City (W)** | **17.82** | **31** | P | **Pn** | **18 25 24.7** | **-1.3** |
| | comp=Z,51nm,0.3s,baz=228,slow=18,SNR=1.5 | | | | | | |
| DAV | | | | LR | LR | 18 33 55.0 | |
| | comp=Z,2μm,19.5s,baz=212,slow=43 | | | | | | |
| | comp=Z,149nm,0.4s | | | | | | |
| **MEEK** | **Meekatharra** | **18.36** | **174** | P | **Pn** | **18 25 33.4** | **+0.9** |
| **MEEK** | **Meekatharra** | **18.36** | **174** | P | **P** | **18 25 32.1** | **-0.2** |
| | comp=Z,201nm,0.9s,SNR=13 | | | | | | |
| **IPM** | **Ipoh** | **19.89** | **309** | P | **Pn** | **18 25 50.7** | **-0.3** |
| **IPM** | **Ipoh** | **19.89** | **309** | P | **Pn** | **18 25 49.9** | **-1.1** |
| IPM | | | | IAmb | IAmb | 18 25 57.5 | |
| | comp=Z,188nm,1.2s | | | | | | |
| **WRKA** | **Warakurna** | **20.16** | **147** | P | **P** | **18 25 53.5** | **+1.4** |
| **WRKA** | **Warakurna** | **20.16** | **147** | P | **P** | **18 25 52.9** | **+0.8** |
| | comp=Z,6μm,SNR=5.3 | | | | | | |
| **MORW** | **Morawa** | **20.66** | **181** | P | **P** | **18 25 59.2** | **+1.8** |
| **MORW** | **Morawa** | **20.66** | **181** | P | **P** | **18 25 56.9** | **-0.5** |
| MORW | | | | IAmb | IAmb | 18 26 04.0 | |
| | comp=Z,194nm,1.0s | | | | | | |
| **MORW** | **Morawa** | **20.66** | **181** | P | Pn | 18 25 59.7 | -0.2 |
| | comp=Z,205nm,1.0s,SNR=14 | | | | | | |
| **KULM** | **Kulim** | **20.69** | **310** | P | **P** | **18 25 56.5** | **-1.5** |
| KULM | | | | IAmb | IAmb | 18 26 07.6 | |
| | comp=Z,135nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.84** | **125** | P | **P** | **18 25 58.6** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 18 26 10.0 | |
| | comp=Z,268nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.89** | **126** | P | **P** | **18 25 59.8** | **-0.2** |
| **WRA** | **Warramunga Arr** | **20.89** | **126** | P | **P** | **18 25 59.9** | **-0.2** |
| | comp=Z,93nm,0.9s,baz=302,slow=12,SNR=285 | | | | | | |
| WRA | | | | LR | LR | 18 34 00.8 | |
| | comp=Z,2μm,22.0s,baz=299,slow=36 | | | | | | |
| | comp=Z,93nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.89** | **125** | P | **P** | **18 25 59.6** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 18 26 10.7 | |
| | comp=Z,238nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.89** | **125** | P | **P** | **18 25 59.6** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,238nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.90** | **125** | P | **P** | **18 25 59.7** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 18 26 10.7 | |
| | comp=Z,219nm,1.0s | | | | | | |
| **GSI** | **Gunungsitoli** | **21.03** | **296** | P | **P** | **18 26 05.3** | **+3.7** |
| **GSI** | **Gunungsitoli** | **21.03** | **296** | P | **P** | **18 26 02.5** | **+0.9** |
| **GSI** | **Gunungsitoli** | **21.03** | **296** | P | **P** | **18 26 03.1** | **+1.5** |
| | comp=Z,83nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.06** | **125** | IAmb | IAmb | 18 26 11.1 | |
| | comp=Z,262nm,1.0s | | | | | | |
| **DLV** | **T Lat** | **21.59** | **339** | P | **P** | **18 26 09.7** | **+1.9** |
| **DLV** | **T Lat** | **21.59** | **339** | P | **P** | **18 26 08.5** | **+0.7** |
| DLV | | | | IAmb | IAmb | 18 26 21.9 | |
| | comp=Z,175nm,1.3s | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **21.96** | **302** | P | **P** | **18 26 13.1** | **+1.5** |
| | comp=Z,155nm,1.4s,comp=Z,3μm | | | | | | |
| **BLDU** | **Ballidu** | **22.20** | **179** | P | **P** | **18 26 15.4** | **+1.4** |
| **BLDU** | **Ballidu** | **22.20** | **179** | P | **P** | **18 26 14.9** | **+0.9** |
| | comp=Z,185nm,1.0s,SNR=8.3 | | | | | | |
| **SNSI** | **Sinabang, Aceh** | **22.64** | **297** | P | **P** | **18 26 19.8** | **+0.9** |
| | comp=Z,393nm,1.4s | | | | | | |
| **ASPA** | **Alice Springs** | **22.70** | **134** | P | **P** | **18 26 20.1** | **+0.6** |
| | comp=Z,45nm,SNR=45 | | | | | | |
| **ASAR** | **Alice Springs** | **22.70** | **134** | P | **P** | **18 26 19.4** | **-0.1** |
| | comp=Z,128nm,1.0s,baz=310,slow=7.7,SNR=220 | | | | | | |
| | comp=Z,128nm,1.0s | | | | | | |
| **AS01** | **Alice Springs** | **22.73** | **134** | P | **P** | **18 26 20.8** | **+0.9** |
| **KLBR** | **Kellerberrin** | **23.20** | **177** | P | **P** | **18 26 25.5** | **+1.0** |
| **KLBR** | **Kellerberrin** | **23.20** | **177** | P | **P** | **18 26 24.9** | **+0.4** |
| | comp=Z,176nm,1.3s,SNR=10 | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **23.51** | **301** | P | **P** | **18 26 26.9** | **-0.8** |
| | comp=Z,138nm,1.1s | | | | | | |
| **KMBL** | **Kambalda** | **23.51** | **168** | P | **P** | **18 26 27.8** | **+0.2** |
| **KMBL** | **Kambalda** | **23.51** | **168** | P | **P** | **18 26 27.5** | **-0.1** |
| | comp=Z,159nm,1.0s,SNR=6.8 | | | | | | |
| **MTKN** | **Mount Kenneth** | **23.52** | **181** | P | **P** | **18 26 29.8** | **+2.2** |
| **MUN** | **Mundaring** | **23.55** | **180** | P | **P** | **18 26 29.4** | **+1.4** |
| **MUN** | **Mundaring** | **23.55** | **180** | P | **P** | **18 26 28.9** | **+0.9** |
| | comp=Z,113nm,1.2s,SNR=6.4 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **23.58** | **304** | P | **P** | **18 26 31.6** | **+3.2** |
| **LHMI** | **Lhok Sumawe** | **23.58** | **304** | P | **P** | **18 26 26.6** | **-1.8** |
| **LHMI** | **Lhok Sumawe** | **23.58** | **304** | P | **P** | **18 26 27.8** | **-0.6** |
| **SRIT** | **Nakonsritamara** | **23.69** | **315** | P | **P** | **18 26 31.1** | **+1.7** |
| **MMPI** | **Merauke** | **23.76** | **92** | P | **P** | **18 26 31.4** | **+1.3** |
| | comp=Z,286nm,1.6s,comp=Z,5μm | | | | | | |
| **SURA** | **Surathani** | **24.07** | **316** | P | **P** | **18 26 34.9** | **+1.9** |
| **GENI** | **Genyem** | **24.35** | **78** | P | **P** | **18 26 38.6** | **+3.0** |
| **GENI** | **Genyem** | **24.35** | **78** | P | **P** | **18 26 33.6** | **-2.0** |
| | comp=Z,81nm,1.0s,comp=Z,2μm | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.51** | **178** | P | **P** | **18 26 39.6** | **+2.7** |
| **NWAO** | **Narrogin (SRO)** | **24.51** | **178** | P | **P** | **18 26 36.7** | **-0.2** |
| NWAO | | | | IAmb | IAmb | 18 26 55.7 | |
| | comp=Z,98nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.51** | **178** | P | **P** | **18 26 37.5** | **+0.7** |
| | comp=Z,49nm,0.9s,baz=348,slow=9.3,SNR=12 | | | | | | |
| NWAO | | | | LR | LR | 18 35 27.9 | |
| | comp=Z,1μm,21.6s,baz=4.5,slow=35 | | | | | | |
| | comp=Z,49nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.51** | **178** | P | **P** | **18 26 37.7** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **24.51** | **178** | P | **P** | **18 26 36.7** | **-0.2** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,98nm,0.9s | | | | | | |
| **TABU** | **Tabubil** | **24.86** | **85** | P | **P** | **18 26 43.1** | **+2.8** |
| **FORT** | **Forrest** | **24.88** | **156** | P | **P** | **18 26 42.9** | **+2.6** |
| **FORT** | **Forrest** | **24.88** | **156** | P | **P** | **18 26 39.4** | **-0.9** |
| | comp=Z,206nm,1.1s,SNR=8.6 | | | | | | |
| **JAY** | **Jayapura** | **24.89** | **78** | P | **P** | **18 26 41.6** | **+1.0** |
| | comp=Z,31nm,0.8s,comp=Z,1μm | | | | | | |
| **JAY** | **Jayapura** | **24.89** | **78** | P | **P** | **18 26 44.9** | **+4.3** |
| JAY | | | | pmax | pmax | | |
| | comp=Z,31nm,0.8s | | | | | | |
| **QIS** | **Mount Isa** | **25.54** | **121** | P

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WHYH | Whyalla | 31.47 | 144 | P | P | 18 27 41.0 +1.9 | AUWSH | Wavell State H | 39.52 | 123 | P | P | 18 28 51.1 +2.8 | | LR | LR | | | |
| CM31 | Chiang Mai Arr | 31.67 | 327 | IAmb | IAmb | 18 27 48.8 | ARMA | Armidale | 39.61 | 129 | P | P | 18 28 51.8 +2.6 | BTO | | | LR | LR | |
| | comp=Z,89nm,1.2s | | | | | | ARMA | Armidale | 39.61 | 129 | IAmb | IAmb | 18 29 01.8 | | comp=Z,1μm,22.6s | | | | |
| CM31 | Chiang Mai Arr | 31.67 | 327 | P | P | 18 27 42.8 +1.8 | | comp=Z,163nm,1.8s | | | | | | MAJO | Matsushiro | 49.10 | 23 | P | P | 18 30 03.3 -1.6 |
| | SNR=19 | | | | | | ARMA | Armidale | 39.61 | 129 | P | P | 18 28 51.8 +2.6 | MAJO | Matsushiro | 49.10 | 23 | P | P | 18 30 03.3 -1.6 |
| CMAR | Chiang Mai Arr | 31.67 | 327 | P | P | 18 27 41.2 +0.2 | | comp=Z,54nm,1.4s,SNR=3.7 | | | | | | MAJO | | | | pmax | pmax | |
| CMAR | Chiang Mai Arr | 31.67 | 327 | P | P | 18 27 40.3 -0.7 | CAN | Canberra | 40.17 | 137 | P | P | 18 28 55.8 +2.1 | | comp=Z,217nm,1.8s | | | | |
| | comp=Z,28nm,1.0s,baz=154,slow=7.0,SNR=78 | | | | | | CAN | Canberra | 40.17 | 137 | P | P | 18 28 54.1 +0.4 | MJAR | Matsushiro Arr | 49.10 | 23 | P | P | 18 30 03.2 -1.6 |
| CMAR | | | | LR | LR | 18 41 33.8 | CAN | Canberra | 40.17 | 137 | P | P | 18 28 54.1 +0.4 | | comp=Z,16nm,0.9s,baz=195,slow=7.5,SNR=27 | | | | |
| | comp=Z,2μm,18.4s,baz=145,slow=39 | | | | | | CAN | | | | pmax | pmax | | | comp=Z,16nm,0.9s | | | | |
| | comp=Z,28nm,1.0s | | | | | | | comp=Z,50nm,1.2s | | | | | | HHC | Hu-ho-hao-te | 49.11 | 355 | eP | P | 18 30 09.3 +4.4 |
| CMAR | Chiang Mai Arr | 31.67 | 327 | P | P | 18 27 41.2 +0.2 | NJ2 | Nanjing | 40.20 | 3 | ⇓P | P | 18 28 50.7 -3.1 | HHC | | | | pP | sP | 18 30 19.7 +1.3 |
| CHTO | Chiang Mai | 31.96 | 328 | P | P | 18 27 43.5 -0.1 | NJ2 | | | | sP | sP | 18 29 05.2 -2.0 | HHC | | | | S | S | 18 37 07.9 -0.1 |
| CHTO | | | | IAmb | IAmb | 18 27 50.5 | NJ2 | | | | S | S | 18 35 00.2 +1.5 | HHC | | | | pmax | pmax | |
| | comp=Z,62nm,1.4s | | | | | | NJ2 | | | | sS | sS | 18 35 16.3 +2.2 | | comp=Z,15nm,0.6s | | | | |
| CHTO | Chiang Mai | 31.96 | 328 | P | P | 18 27 43.5 -0.1 | NJ2 | | | | pmax | pmax | | HHC | | | | pmax | pmax | |
| CHTO | | | | pmax | pmax | | | comp=Z,25nm,1.1s | | | | | | | comp=Z,200nm,4.8s | | | | |
| | comp=Z,62nm,1.4s | | | | | | NJ2 | | | | pmax | pmax | | HHC | | | | LR | LR | |
| QLP | Quilpie | 32.08 | 128 | P | P | 18 27 46.7 +2.2 | | comp=Z,250nm,4.3s | | | | | | | comp=Z,490nm,13.8s | | | | |
| QLP | Quilpie | 32.08 | 128 | P | P | 18 27 46.1 +1.6 | NJ2 | | | | LR | LR | | HHC | | | | LR | LR | |
| | comp=Z,137nm,1.2s,SNR=10 | | | | | | | comp=Z,790nm,19.9s | | | | | | | comp=Z,510nm,17.2s | | | | |
| AUAYR | Ayr State High | 32.08 | 114 | P | P | 18 27 46.3 +1.7 | NJ2 | | | | LR | LR | | HHC | | | | LR | LR | |
| SSLB | Suanglung | 32.21 | 8 | P | P | 18 27 49.9 +4.2 | | comp=Z,290nm,17.0s | | | | | | | comp=Z,620nm,18.3s | | | | |
| SSLB | Suanglung | 32.21 | 8 | P | P | 18 27 46.3 +0.6 | NJ2 | | | | LR | LR | | NOUC | Port Laguerre | 49.88 | 112 | P | P | 18 30 05.9 -5.1 |
| HTT | Hallett | 32.54 | 143 | P | P | 18 27 50.2 +1.6 | | comp=Z,800nm,18.9s | | | | | | GTA | Gaotai | 49.90 | 343 | ⇓P | P | 18 30 11.8 +0.8 |
| HTT | Hallett | 32.54 | 143 | P | P | 18 27 50.0 +1.4 | CNB | Canberra Magne | 40.41 | 137 | P | P | 18 28 57.7 +2.0 | GTA | | | | S | S | 18 37 20.9 +1.7 |
| | comp=Z,46nm,1.6s,SNR=2.7 | | | | | | CNB | Canberra Magne | 40.41 | 137 | P | P | 18 28 57.1 +1.4 | GTA | | | | SS | SS | 18 40 52.9 +0.4 |
| QZH | Quanzhou | 33.12 | 4 | P | P | 18 28 01.7 +8.1 | | comp=Z,44nm,1.7s,SNR=2.1 | | | | | | GTA | | | | pmax | pmax | |
| QZH | | | | S | S | 18 33 13.4 +2.5 | CD2 | Chengdu | 40.83 | 343 | eP | P | 18 28 59.0 -0.1 | | comp=Z,26nm,1.5s | | | | |
| QZH | | | | LR | LR | | CD2 | | | | pmax | pmax | | GTA | | | | pmax | pmax | |
| | comp=N,890nm,23.0s | | | | | | | comp=Z,10.0nm,0.5s | | | | | | | comp=Z,240nm,6.2s | | | | |
| QZH | | | | LR | LR | | SHL | Shillong | 41.25 | 325 | IAmb | IAmb | 18 29 04.1 | GTA | | | | LR | LR | |
| | comp=E,1μm,20.6s | | | | | | | comp=Z,49nm,0.9s | | | | | | | comp=Z,400nm,18.2s | | | | |
| QZH | | | | LR | LR | | SHL | Shillong | 41.25 | 325 | P | P | 18 29 03.1 +0.2 | GTA | | | | LR | LR | |
| | comp=Z,1μm,16.8s | | | | | | | SNR=17 | | | | | | | comp=Z,540nm,19.3s | | | | |
| YHNB | Yeheng | 33.14 | 8 | P | P | 18 27 55.9 +2.0 | XAN | Xi'an | 42.70 | 351 | ⇓P | P | 18 29 13.8 -0.6 | GTA | | | | LR | LR | |
| YHNB | Yeheng | 33.14 | 8 | P | P | 18 27 54.9 +1.0 | XAN | | | | S | S | 18 35 32.5 -3.4 | | comp=Z,490nm,20.4s | | | | |
| YHNB | | | | IAmb | IAmb | 18 28 08.9 | XAN | | | | SS | SS | 18 38 48.2 +0.8 | DZM | Mont Dzumac | 50.00 | 112 | eLR | LR | 18 44 25.8 |
| | comp=Z,88nm,1.3s | | | | | | XAN | | | | pmax | pmax | | | comp=Z,1μm,22.6s | | | | |
| STKA | Stephens Creek | 33.16 | 138 | P | P | 18 27 55.2 +1.2 | | comp=Z,20nm,0.9s | | | | | | DZM | Mont Dzumac | 50.00 | 112 | LR | LR | 18 52 16.6 |
| STKA | Stephens Creek | 33.16 | 138 | P | P | 18 27 55.1 +1.1 | XAN | | | | pmax | pmax | | | comp=Z,1μm,18.2s,baz=292,slow=37 | | | | |
| | comp=Z,11nm,1.5s,SNR=3.9 | | | | | | | comp=Z,280nm,3.8s | | | | | | ONTNC | Ouen Toro | 50.04 | 112 | P | P | 18 30 14.5 +2.2 |
| STKA | Stephens Creek | 33.16 | 138 | P | P | 18 27 54.8 +0.8 | XAN | | | | LR | LR | | SNY | Shenyang | 50.33 | 7 | ⇓P | P | 18 30 12.9 -1.1 |
| | comp=Z,31nm,1.0s,baz=308,slow=11,SNR=17 | | | | | | | comp=Z,1μm,18.6s | | | | | | SNY | | | | S | S | 18 37 27.8 +3.1 |
| | comp=Z,31nm,1.0s | | | | | | XAN | | | | LR | LR | | SNY | | | | pmax | pmax | |
| GULI | GuiLin | 33.90 | 350 | ⇓P | P | 18 28 02.8 +2.4 | | comp=Z,1μm,18.3s | | | | | | | comp=Z,19nm,1.2s | | | | |
| GULI | | | | S | S | 18 33 25.8 +2.8 | XAN | | | | LR | LR | | SNY | | | | pmax | pmax | |
| GULI | | | | pmax | pmax | | | comp=Z,2μm,16.5s | | | | | | | comp=Z,95nm,3.5s | | | | |
| | comp=Z,10.0nm,1.4s | | | | | | LYN | LuoYang | 42.78 | 355 | P | P | 18 29 15.4 +0.4 | SNY | | | | LR | LR | |
| GULI | | | | pmax | pmax | | LYN | | | | S | S | 18 35 37.1 +0.1 | | comp=Z,350nm,24.1s | | | | |
| | comp=Z,240nm,7.6s | | | | | | LYN | | | | pmax | pmax | | SNY | | | | LR | LR | |
| GULI | | | | LR | LR | | | comp=Z,48nm,1.4s | | | | | | | comp=Z,250nm,14.1s | | | | |
| | comp=Z,760nm,20.4s | | | | | | LYN | | | | pmax | pmax | | SNY | | | | LR | LR | |
| GULI | | | | LR | LR | | | comp=Z,380nm,4.6s | | | | | | | comp=Z,520nm,24.3s | | | | |
| | comp=Z,930nm,17.6s | | | | | | LYN | | | | LR | LR | | YATNC | Mamie plateau, | 50.41 | 112 | P | P | 18 30 09.2 -5.9 |
| GULI | | | | LR | LR | | | comp=Z,1μm,15.5s | | | | | | JMM | Marumori | 51.29 | 25 | P | P | 18 30 23.2 +1.9 |
| | comp=Z,850nm,20.8s | | | | | | LYN | | | | LR | LR | | XLT | XiLinHaoTe | 51.96 | 360 | eP | P | 18 30 25.9 -0.5 |
| GUMO | Guam | 35.69 | 53 | P | P | 18 28 15.4 -0.6 | | comp=Z,1μm,15.3s | | | | | | XLT | | | | S | S | 18 37 46.9 -0.6 |
| | comp=Z,38nm,0.6s,baz=232,slow=19,SNR=2.3 | | | | | | LYN | | | | LR | LR | | XLT | | | | SS | SS | 18 41 25.6 +0.6 |
| | comp=Z,38nm,0.6s | | | | | | | comp=Z,1μm,19.8s | | | | | | XLT | | | | pmax | pmax | |
| CMSA | Cobar Meteorol | 35.76 | 134 | P | P | 18 28 18.7 +2.2 | HNR | Honiara | 43.05 | 95 | P | P | 18 29 19.2 +1.7 | | comp=Z,16nm,1.1s | | | | |
| CMSA | Cobar Meteorol | 35.76 | 134 | P | P | 18 28 17.6 +1.1 | HNR | Honiara | 43.05 | 95 | LR | LR | 18 49 19.5 | XLT | | | | pmax | pmax | |
| | comp=Z,55nm,1.4s,SNR=4.3 | | | | | | | comp=Z,12μm,18.9s,baz=238,slow=39 | | | | | | | comp=Z,220nm,4.8s | | | | |
| KMI | Kunming | 35.78 | 339 | ⇓P | P | 18 28 19.1 +2.2 | HNR | Honiara | 43.05 | 95 | P | P | 18 29 17.7 +0.2 | XLT | | | | LR | LR | |
| KMI | | | | S | S | 18 33 58.8 +6.3 | JNU | Nakatsue | 43.45 | 18 | LR | LR | 18 49 04.3 | | comp=Z,62nm,21.4s | | | | |
| KMI | | | | pmax | pmax | | | comp=Z,363nm,21.0s,baz=162,slow=38 | | | | | | XLT | | | | LR | LR | |
| | comp=Z,34nm,1.3s | | | | | | DGAR | Diego Garcia | 43.50 | 268 | eP | P | 18 29 19.5 -1.6 | | comp=Z,360nm,11.1s | | | | |
| KMI | | | | pmax | pmax | | DGAR | | | | pmax | pmax | | XLT | | | | LR | LR | |
| | comp=Z,290nm,7.1s | | | | | | | comp=Z,240nm,1.7s | | | | | | | comp=Z,870nm,21.0s | | | | |
| KMI | | | | LR | LR | | TIA | Tai'an | 44.29 | 1 | P | P | 18 29 26.5 -0.6 | PSTR | Posyet | 52.40 | 13 | i P | P | 18 30 28.4 -1.1 |
| | comp=Z,550nm,19.6s | | | | | | TIA | | | | S | S | 18 35 56.3 -2.6 | MSHR | Mys Shultsa | 52.41 | 14 | eP | P | 18 30 27.9 -1.7 |
| KMI | | | | LR | LR | | TIA | | | | pmax | pmax | | CN2 | Changchun | 52.51 | 8 | eP | P | 18 30 27.7 -2.6 |
| | comp=Z,1μm,15.6s | | | | | | | comp=Z,41nm,0.9s | | | | | | CN2 | | | | eS | S | 18 37 49.3 -5.5 |
| KMI | | | | LR | LR | | TIA | | | | pmax | pmax | | CN2 | | | | SS | SS | 18 41 30.7 -2.8 |
| | comp=Z,1μm,14.7s | | | | | | | comp=Z,230nm,6.5s | | | | | | CN2 | | | | pmax | pmax | |
| GYA | Guiyang | 35.82 | 345 | P | P | 18 28 18.2 +1.1 | TIA | | | | LR | LR | | | comp=Z,10.0nm,0.7s | | | | |
| GYA | | | | pP | sP | 18 28 29.0 -1.4 | | comp=Z,930nm,18.1s | | | | | | CN2 | | | | pmax | pmax | |
| GYA | | | | sP | pP | 18 28 33.8 +7.6 | TIA | | | | LR | LR | | | comp=Z,100nm,3.0s | | | | |
| GYA | | | | S | S | 18 33 55.4 +2.6 | | comp=Z,460nm,20.6s | | | | | | CN2 | | | | LR | LR | |
| GYA | | | | pmax | pmax | | TIA | | | | LR | LR | | | comp=Z,400nm,17.0s | | | | |
| | comp=Z,18nm,1.1s | | | | | | | comp=Z,1μm,17.2s | | | | | | CN2 | | | | LR | LR | |
| GYA | | | | pmax | pmax | | LSA | Lhasa | 44.91 | 328 | P | P | 18 29 34.4 +1.7 | | comp=Z,300nm,17.0s | | | | |
| | comp=Z,290nm,4.3s | | | | | | LSA | | | | pmax | pmax | | CN2 | | | | LR | LR | |
| GYA | | | | LR | LR | | | comp=Z,36nm,1.0s | | | | | | | comp=Z,400nm,22.0s | | | | |
| | comp=Z,1μm,18.7s | | | | | | LSA | | | | LR | LR | | VLA | Vladivostok | 53.10 | 14 | i P | P | 18 30 33.2 -1.4 |
| GYA | | | | LR | LR | | | comp=Z,540nm,23.0s | | | | | | VLA | | | | pmax | pmax | |
| | comp=Z,780nm,16.7s | | | | | | LSA | | | | LR | LR | | | comp=Z,55nm,1.8s | | | | |
| GYA | | | | LR | LR | | | comp=Z,410nm,17.3s | | | | | | MDJ | Mudanjiang | 54.01 | 12 | P | P | 18 30 41.0 -0.4 |
| | comp=Z,2μm,19.0s | | | | | | LSA | | | | LR | LR | | MDJ | | | | ScP | ScP | 18 35 40.1 -2.0 |
| RK1H | Rockhampton Ha | 35.97 | 119 | P | P | 18 28 21.3 +3.0 | | comp=Z,1μm,20.8s | | | | | | MDJ | | | | S | S | 18 38 15.4 +0.2 |
| CNSH | ChangSha | 36.43 | 355 | P | P | 18 28 21.1 -1.0 | JMN | Monobe | 44.99 | 21 | IAmb | IAmb | 18 29 52.8 | MDJ | | | | sS | sS | 18 38 33.9 +3.0 |
| CNSH | | | | S | S | 18 34 00.5 -1.3 | | comp=Z,62nm,1.1s | | | | | | MDJ | | | | pmax | pmax | |
| CNSH | | | | pmax | pmax | | HYB | Hyderabad | 45.27 | 305 | eP | P | 18 29 36.3 +1.0 | | comp=Z,44nm,0.9s | | | | |
| | comp=Z,17nm,1.2s | | | | | | HNS | HongShan | 45.49 | 358 | ⇓P | P | 18 29 36.3 -0.3 | MDJ | | | | pmax | pmax | |
| CNSH | | | | LR | LR | | HNS | | | | PP | PP | 18 31 23.8 +0.2 | | comp=Z,330nm,5.2s | | | | |
| | comp=Z,780nm,16.7s | | | | | | HNS | | | | S | S | 18 36 12.0 -4.3 | MDJ | | | | LR | LR | |
| CNSH | | | | LR | LR | | HNS | | | | pmax | pmax | | | comp=Z,450nm,24.7s | | | | |
| | comp=Z,760nm,16.7s | | | | | | | comp=Z,22nm,1.5s | | | | | | MDJ | | | | LR | LR | |
| ARPS | Mount Arapiles | 36.59 | 145 | P | P | 18 28 24.8 +1.4 | HNS | | | | LR | LR | | | comp=Z,420nm,21.0s | | | | |
| ARPS | Mount Arapiles | 36.59 | 145 | P | P | 18 28 24.5 +1.0 | | comp=Z,1μm,15.6s | | | | | | MDJ | | | | LR | LR | |
| | comp=Z,35nm,1.1s,SNR=2.5 | | | | | | HNS | | | | LR | LR | | | comp=Z,940nm,24.4s | | | | |
| EIDS | Eidsvold | 37.14 | 121 | P | P | 18 28 30.1 +1.7 | | comp=Z,250nm,15.4s | | | | | | USA0B | Ussuriysk Arra | 54.14 | 14 | IAmb | IAmb | 18 30 58.3 |
| PZH | PanZhiHua | 37.40 | 338 | P | P | 18 28 32.9 +2.3 | HNS | | | | LR | LR | | | comp=Z,75nm,1.3s | | | | |
| PZH | | | | PP | PnPn | 18 30 04.0 +6.8 | | comp=Z,1μm,16.3s | | | | | | USRK | Ussuriysk Ar. | 54.14 | 14 | P | P | 18 30 41.0 -1.2 |
| PZH | | | | S | S | 18 34 19.6 +2.6 | LZH | Lanzhou | 45.70 | 346 | eP | P | 18 29 39.8 +1.2 | USRK | Ussuriysk Ar. | 54.14 | 14 | P | P | 18 30 41.3 -1.0 |
| PZH | | | | SS | SS | 18 37 03.6 +1.7 | LZH | | | | sP | sP | 18 29 53.2 +1.2 | | comp=Z,18nm,0.8s,baz=190,slow=5.9,SNR=36 | | | | |
| PZH | | | | pmax | pmax | | LZH | | | | S | S | 18 36 16.9 -2.9 | | comp=Z,18nm,0.8s | | | | |
| | comp=Z,30nm,1.2s | | | | | | LZH | | | | pmax | pmax | | BNX | BinXian | 54.70 | 9 | ⇓P | P | 18 30 45.4 -1.0 |
| PZH | | | | pmax | pmax | | | comp=Z,110nm,1.1s | | | | | | BNX | | | | S | S | 18 38 21.2 -3.3 |
| | comp=Z,260nm,4.7s | | | | | | LZH | | | | pmax | pmax | | BNX | | | | pmax | pmax | |
| PZH | | | | LR | LR | | | comp=Z,390nm,5.3s | | | | | | | comp=Z,21nm,1.5s | | | | |
| | comp=Z,900nm,18.8s | | | | | | LZH | | | | LR | LR | | BNX | | | | pmax | pmax | |
| PZH | | | | LR | LR | | | comp=Z,1μm,17.9s | | | | | | | comp=Z,300nm,6.2s | | | | |
| | comp=Z,1μm,19.6s | | | | | | LZH | | | | LR | LR | | BNX | | | | LR | LR | |
| PZH | | | | LR | LR | | | comp=Z,1μm,19.2s | | | | | | | comp=Z,490nm,18.0s | | | | |
| | comp=Z,1μm,19.0s | | | | | | LZH | | | | LR | LR | | BNX | | | | LR | LR | |
| TNCH | TengChong | 37.42 | 333 | ⇓P | P | 18 28 32.5 +1.6 | | comp=Z,1μm,15.8s | | | | | | | comp=Z,250nm,20.2s | | | | |
| TNCH | | | | S | S | 18 34 21.9 +4.5 | KSAR | Wonju Array Be | 46.77 | 13 | P | P | 18 29 46.8 +0.1 | BNX | | | | LR | LR | |
| TNCH | | | | pmax | pmax | | KSAR | Wonju Array Be | 46.77 | 13 | P | P | 18 29 46.8 +0.1 | | comp=Z,410nm,16.4s | | | | |
| | comp=Z,82nm,1.5s | | | | | | KSRS | Korea Array | 46.79 | 13 | P | P | 18 29 46.6 -0.2 | ERM | Erimo | 55.76 | 24 | i P | P | 18 30 54.1 0.0 |
| TNCH | | | | pmax | pmax | | | comp=Z,16nm,1.1s,baz=193,slow=8.1,SNR=31 | | | | | | ERM | | | | pmax | pmax | |
| | comp=Z,420nm,4.2s | | | | | | | comp=Z,16nm,1.1s | | | | | | | comp=Z,74nm,1.3s | | | | |
| TNCH | | | | LR | LR | | JHJ | Hachijo jima 2 | 46.84 | 27 | LR | LR | 18 47 23.8 | TEY | Ternei | 56.14 | 17 | eP | P | 18 30 54.8 -1.9 |
| | comp=Z,930nm,11.7s | | | | | | | comp=Z,577nm,20.7s,baz=236,slow=34 | | | | | | TEY | | | | e | | 18 38 40.3 |
| TNCH | | | | LR | LR | | DL2 | Dalian | 47.22 | 6 | P | P | 18 29 49.2 -1.0 | ULN | Ulaanbaatar | 56.53 | 352 | P | P | 18 30 58.7 -1.0 |
| | comp=Z,870nm,15.7s | | | | | | DL2 | | | | S | S | 18 36 41.6 +0.5 | ULN | | | | IAmb | IAmb | 18 31 06.6 |
| TNCH | | | | LR | LR | | DL2 | | | | pmax | pmax | | | comp=Z,42nm,1.1s | | | | |
| | comp=Z,2μm,14.5s | | | | | | | comp=Z,43nm,1.2s | | | | | | ULN | Ulaanbaatar | 56.53 | 352 | P | P | 18 30 59.6 -0.1 |
| AUMAG | Moama Anglican | 37.88 | 141 | P | P | 18 28 36.9 +2.5 | DL2 | | | | pmax | pmax | | ULN | Ulaanbaatar | 56.53 | 352 | P | P | 18 30 58.7 -1.0 |
| AUDCS | Dubbo College | 38.24 | 133 | P | P | 18 28 39.2 +1.7 | | comp=Z,290nm,7.6s | | | | | | ULN | | | | pmax | pmax | |
| BRAT | Ballarat | 38.34 | 144 | P | P | 18 28 40.1 +1.9 | DL2 | | | | LR | LR | | | comp=Z,42nm,1.1s | | | | |
| WHN | Wuhan | 38.68 | 357 | ⇑ iP | P | 18 28 42.3 +1.2 | | comp=Z,670nm,19.6s | | | | | | SONM | Songino Array | 56.59 | 352 | P | P | 18 30 59.4 -0.7 |
| WHN | | | | sP | sP | 18 28 56.2 +1.8 | DL2 | | | | LR | LR | | SONM | | | | IAmb | IAmb | 18 31 06.9 |
| WHN | | | | PP | PnPn | 18 30 18.7 +6.3 | | comp=Z,460nm,16.7s | | | | | | | comp=Z,70nm,1.2s | | | | |
| WHN | | | | S | S | 18 34 38.6 +2.7 | DL2 | | | | LR | LR | | SONM | Songino Array | 56.59 | 352 | P | P | 18 30 59.6 -0.4 |
| WHN | | | | pmax | pmax | | | comp=Z,890nm,20.6s | | | | | | | comp=Z,14nm,0.7s,baz=172,slow=8.3,SNR=65 | | | | |
| | comp=Z,150nm,1.3s | | | | | | INU | Inuyama | 47.59 | 23 | IAmb | IAmb | 18 30 08.8 | | comp=Z,14nm,0.7s | | | | |
| WHN | | | | LR | LR | | | comp=Z,48nm,1.3s | | | | | | DCZ | Deep Cove | 57.16 | 140 | IAmb | IAmb | 18 31 07.5 |
| | comp=Z,2μm,16.9s | | | | | | JGF | Kuroka | 47.95 | 23 | IAmb | IAmb | 18 30 27.5 | | comp=Z,81nm,1.2s | | | | |
| WHN | | | | LR | LR | | | comp=Z,50nm,1.5s | | | | | | ASAJ | Asahikawa | 57.33 | 22 | LR | LR | 18 57 10.2 |
| | comp=Z,910nm,7.9s | | | | | | BJI | Beijing | 48.10 | 360 | P | P | 18 29 56.7 -0.3 | | comp=Z,442nm,19.9s,baz=200,slow=38 | | | | |
| WHN | | | | LR | LR | | BJI | | | | S | S | 18 36 53.5 -0.1 | JKA | Kamikawa-asahi | 57.33 | 22 | IAmb | IAmb | 18 31 06.5 |
| | comp=Z,4μm,16.8s | | | | | | BJI | | | | pmax | pmax | | | comp=Z,48nm,1.0s | | | | |
| PALK | Pallekele | 38.78 | 293 | LR | LR | 18 45 58.7 | | comp=Z,11nm,1.2s | | | | | | JCZ | Jackson Bay | 57.69 | 137 | P | P | 18 31 10.7 +2.7 |
| | comp=Z,968nm,20.8s,baz=220,slow=38 | | | | | | BJI | | | | LR | LR | | MLZ | Mavora Lakes | 57.74 | 139 | IAmb | IAmb | 18 31 11.2 |
| PALK | Pallekele | 38.78 | 293 | i P | P | 18 28 42.2 -0.1 | | comp=Z,320nm,16.2s | | | | | | | comp=Z,66nm,1.1s | | | | |
| YNG | Young | 39.19 | 136 | P | P | 18 28 47.7 +2.2 | BJI | | | | LR | LR | | WHZ | Wether Hill Ro | 57.84 | 140 | IAmb | IAmb | 18 31 11.8 |
| YNG | Young | 39.19 | 136 | P | P | 18 28 46.9 +1.4 | | comp=Z,240nm,19.1s | | | | | | | comp=Z,68nm,1.2s | | | | |
| | comp=Z,376nm,1.7s,SNR=5.1 | | | | | | BJI | | | | LR | LR | | CASY | Casey | 58.02 | 183 | P | P | 18 31 10.0 +0.3 |
| TOO | Toolangi | 39.28 | 142 | P | P | 18 28 49.1 +2.9 | | comp=Z,350nm,22.9s | | | | | | CASY | | | | IAmb | IAmb | 18 31 15.8 |
| TOO | Toolangi | 39.28 | 142 | IAmb | IAmb | 18 28 50.0 | GOMU | GeErMu | 48.69 | 337 | P | P | 18 30 03.3 +1.2 | | comp=Z,26nm,0.9s | | | | |
| | comp=Z,90nm,1.2s | | | | | | GOMU | | | | S | S | 18 37 09.4 +6.6 | WMQ | Urumqi | 58.03 | 336 | eP | P | 18 31 10.4 +0.1 |
| TOO | Toolangi | 39.28 | 142 | P | P | 18 28 48.5 +2.3 | GOMU | | | | pmax | pmax | | WMQ | | | | pP | sP | 18 31 24.6 +0.8 |
| | comp=Z,58nm,1.9s,SNR=2.9 | | | | | | | comp=Z,33nm,1.1s | | | | | | WMQ | | | | S | S | 18 39 09.9 +1.0 |
| TOO | Toolangi | 39.28 | 142 | P | P | 18 28 48.5 +2.3 | GOMU | | | | LR | LR | | WMQ | | | | pmax | pmax | |
| AUPHS | Peel High Scho | 39.36 | 130 | P | P | 18 28 49.5 +2.5 | | comp=Z,1μm,19.5s | | | | | | | comp=Z,31nm,1.5s | | | | |
| SSE | Sheshan | 39.45 | 7 | P | P | 18 28 48.0 +0.4 | GOMU | | | | LR | LR | | WMQ | | | | pmax | pmax | |
| SSE | | | | S | S | 18 34 52.0 +4.5 | | comp=Z,2μm,19.6s | | | | | | | comp=Z,140nm,4.9s | | | | |
| SSE | | | | pmax | pmax | | GOMU | | | | LR | LR | | WMQ | | | | LR | LR | |
| | comp=Z,7.0nm,0.7s | | | | | | | comp=Z,2μm,18.6s | | | | | | | comp=Z,580nm,21.3s | | | | |
| SSE | | | | pmax | pmax | | BTO | Baotou | 49.02 | 354 | eP | P | 18 30 04.9 +0.7 | WMQ | | | | LR | LR | |
| | comp=Z,120nm,4.2s | | | | | | BTO | | | | S | S | 18 37 10.4 +3.7 | | comp=Z,820nm,23.7s | | | | |
| SSE | | | | LR | LR | | BTO | | | | pmax | pmax | | WMQ | | | | LR | LR | |
| | comp=Z,280nm,20.7s | | | | | | | comp=Z,41nm,1.1s | | | | | | | comp=Z,710nm,24.0s | | | | |
| SSE | | | | LR | LR | | BTO | | | | LR | LR | | NIL | Nilore | 58.44 | 318 | P | P | 18 31 15.1 +1.8 |
| | comp=Z,160nm,14.2s | | | | | | | comp=Z,980nm,22.2s | | | | | | | | | | | | |

**LBZ Lake Benmore 58.74 137** lAmb lAmb 18 31 17.5
comp=Z,52nm,1.2s
**KLR Kul'dur 58.86 12** *eP* **P** **18 31 13.1 -2.7**
KLR pmax pmax
comp=Z,28nm,1.7s
**RPZ Rata Peaks 59.09 136** P **P** **18 31 18.5 +0.9**
**RPZ Rata Peaks 59.09 136** P **P** **18 31 18.8 +1.2**
comp=Z,105nm,1.0s,baz=296,slow=4.6,SNR=21
comp=Z,105nm,1.0s
**HEH HeiHe 59.10 8** *eP* **P** **18 31 17.2 -0.3**
HEH pP **sP** **18 31 28.3 -2.8**
HEH sP pP 18 31 33.8 +6.4
HEH S **S** **18 39 20.4 -2.0**
HEH pmax pmax
comp=Z,82nm,1.2s
HEH pmax pmax
comp=Z,390nm,4.0s
HEH LR LR
comp=Z,550nm,21.1s
HEH LR LR
comp=Z,340nm,18.5s
HEH LR LR
comp=Z,740nm,19.2s
**ZAK Zakamensk 59.55 350** *eP* **P** **18 31 19.8 -0.9**
ZAK pmax pmax
comp=Z,34nm,1.4s
**OXZ Oxford 59.64 136** lAmb lAmb 18 31 23.3
comp=Z,34nm,1.0s
**RER Riviere de l'E 59.69 250** P **P** **18 31 21.6 -0.6**
**RER Riviere de l'E 59.69 250** P **P** **18 31 24.5 +2.2**
**THZ Tophouse 59.77 134** P **P** **18 31 22.0 -0.5**
**YSS Yuzh-Sakhalins 59.82 21** P **P** **18 31 21.7 -0.8**
**YSS Yuzh-Sakhalins 59.82 21** *eP* **P** **18 31 22.9 +0.4**
YSS *eS* **S** **18 39 26.7 -5.0**
YSS *e* 18 41 15.0
YSS *eSS* **SS** **18 43 26.2 -2.3**
YSS pmax pmax
comp=Z,40nm,1.1s
YSS pmax pmax
comp=Z,300nm,3.9s
YSS MLR MLR
comp=Z,500nm,16.0s
**CIT Chita 60.13 358** *eP* **P** **18 31 24.6 0.0**
CIT *e* 18 32 09.4
CIT pmax pmax
comp=Z,63nm,1.6s
**MSVF Nonsavu 60.60 106** P **P** **18 31 30.8 +2.2**
**MSVF Nonsavu 60.60 106** P **P** **18 31 29.4 +0.9**
comp=Z,9.8nm,0.9s,baz=270,slow=20,SNR=3.6
MSVF LR LR 18 58 07.9
comp=Z,384nm,18.4s,baz=255,slow=36
comp=Z,9.8nm,0.9s
**SNZO South Karori 60.94 133** P **P** **18 31 32.5 +2.2**
**SNZO South Karori 60.94 133** P **P** **18 31 29.6 -0.7**
**MOY Mondy 61.18 349** *eP* **P** **18 31 36.4 +4.5**
MOY pmax pmax
comp=Z,92nm,1.8s
**IRK Irkutsk 61.20 352** *eP* **P** **18 31 31.7 -0.1**
IRK pmax pmax
comp=Z,93nm,1.8s
**SHLS Shalkode 61.23 330** *eP* **P** **18 31 30.9 -1.5**
comp=Z,20nm,1.2s,baz=330
**SHLS Shalkode 61.23 330** *eP* **P** **18 31 30.9 -1.5**
SHLS pmax pmax
comp=Z,21nm,1.2s
**GRNR Gornyy 61.35 14⇓** *iP* **P** **18 31 33.4 +0.5**
GRNR pmax pmax
comp=Z,9.0nm,1.0s
**MRZ Mangatainoka R 61.41 132** P **P** **18 31 33.4 -0.2**
**UZB Uzynbulak 61.45 330** *eP* **P** **18 31 33.6 -0.3**
comp=Z,14nm,1.0s,baz=330
**UZB Uzynbulak 61.45 330** *eP* **P** **18 31 33.6 -0.3**
UZB pmax pmax
comp=Z,14nm,1.0s
**SATY Saty 61.69 329** *eP* **P** **18 31 35.4 -0.2**
comp=Z,22nm,1.2s,baz=329
**SATY Saty 61.69 329** *eP* **P** **18 31 35.3 -0.2**
SATY pmax pmax
comp=Z,22nm,1.2s
**BKZ Black Stump Fm 61.74 130** P **P** **18 31 38.4 +2.5**
**BKZ Black Stump Fm 61.74 130** P **P** **18 31 36.3 +0.4**
**ZHN Zhinishke 61.76 329** *eP* **P** **18 31 35.4 -0.5**
baz=329
**ZHN Zhinishke 61.76 329** *eP* **P** **18 31 35.4 -0.5**
**KBL Kabul 61.79 316** P **P** **18 31 36.0 -0.4**
**KBL Kabul 61.79 316** P **P** **18 31 36.0 -0.4**
KBL pmax pmax
comp=Z,9.0nm,1.0s
**KPKS Kokpek 61.85 330** *eP* **P** **18 31 36.0 -0.5**
comp=Z,22nm,1.1s,baz=330
**KPKS Kokpek 61.85 330** *eP* **P** **18 31 36.0 -0.5**
KPKS pmax pmax
comp=Z,22nm,1.1s
**URZ Urewera 62.01 129** LR LR 19 00 36.1
comp=Z,904nm,18.5s,baz=22,slow=38
**ZSN Zaisan 62.14 336** *eP* **P** **18 31 38.4 0.0**
comp=Z,25nm,1.1s,baz=336
**ZSN Zaisan 62.14 336** *eP* **P** **18 31 38.3 0.0**
ZSN pmax pmax
comp=Z,25nm,1.1s
**TNSS Tian-Shan 62.42 328** *eP* **P** **18 31 40.2 -0.6**
baz=328
**TNSS Tian-Shan 62.42 328** *eP* **P** **18 31 40.2 -0.6**
**MDOK Medeo 62.46 328** *eP* **P** **18 31 40.5 -0.2**
baz=328
**MDOK Medeo 62.46 328** *eP* **P** **18 31 40.5 -0.2**
**ZEA Zeya 62.49 7** *eP* **P** **18 31 40.5 0.0**
ZEA *eS* **S** **18 40 08.3 +2.8**
ZEA pmax pmax
comp=N,100nm,2.0s
ZEA pmax pmax
comp=Z,200nm,1.6s
ZEA pmax pmax
comp=E,20nm,1.4s
ZEA smax smax
comp=E,100nm,9.3s
ZEA smax smax
comp=N,100nm,14.3s
**AAA Alma-Ata 62.56 328** *eP* **P** **18 31 41.2 -0.1**
baz=328
**AAA Alma-Ata 62.56 328** *eP* **P** **18 31 41.2 -0.1**
**BOOM Boomskoye usch 62.57 327** lAmb lAmb 18 31 58.7
comp=Z,33nm,1.1s
**MK31 Makanchi Array 62.68 334** lAmb lAmb 18 31 46.9
comp=Z,20nm,1.1s
**MKAR Makanchi Array 62.68 334** P **P** **18 31 39.8 -2.2**
**MKAR Makanchi Array 62.68 334** P **P** **18 31 40.6 -1.3**
comp=Z,13nm,1.0s,baz=147,slow=7.2,SNR=44
MKAR PKP2bc 19 00 54.2
comp=Z,0.6nm,0.9s,baz=54,slow=2.1,SNR=3.9
MKAR LR LR 19 02 07.1
comp=Z,385nm,18.2s,baz=146,slow=39
comp=Z,13nm,1.0s
**MAKZ Makanchi 62.83 334** P **P** **18 31 41.4 -1.5**
MAKZ lAmb lAmb 18 31 48.5
comp=Z,29nm,1.4s
**MAKZ Makanchi 62.83 334** P **P** **18 31 41.4 -1.5**
MAKZ pmax pmax
comp=Z,29nm,1.5s
**CHKK Chushkaly 62.98 329** *eP* **P** **18 31 44.0 0.0**
baz=329
**CHKK Chushkaly 62.98 329** *eP* **P** **18 31 44.0 0.0**
**TDK Taldyqorghan 63.10 331** *eP* **P** **18 31 44.6 -0.2**
baz=331
**TDK Taldyqorghan 63.10 331** *eP* **P** **18 31 44.5 -0.2**
**TYV Tymovskoe 63.17 18** *eP* **P** **18 31 44.8 -0.3**
TYV *eS* **S** **18 40 15.1 +0.9**
TYV pmax pmax
comp=Z,16nm,1.2s
TYV pmax pmax
comp=Z,200nm,4.6s
TYV smax smax
comp=N,200nm,5.5s
TYV smax smax
comp=E,300nm,5.5s
**NGCH Negor - Chabah 63.29 304** P **P** **18 31 44.0 -2.4**
**KUU Kurty 63.34 329** *eP* **P** **18 31 46.1 -0.3**
baz=329
**KUU Kurty 63.34 329** *eP* **P** **18 31 46.0 -0.3**
**AAK Ala-Archa 63.45 327** LR LR 19 04 20.7
comp=E,695nm,18.4s,baz=137,slow=41
**BTK Batken 63.90 322** lAmb lAmb 18 32 07.7
comp=Z,64nm,1.5s
**BTK Batken 63.90 322** P **P** **18 31 51.7 +1.4**
**SGDS Sogindy 63.93 327** *eP* **P** **18 31 50.3 -0.1**
baz=327
**SGDS Sogindy 63.93 327** *eP* **P** **18 31 50.3 -0.1**
**CHGR Chuyangaron 64.08 320** P **P** **18 31 50.1 -1.4**
CHGR lAmb lAmb 18 32 07.4
comp=Z,30nm,1.1s
**CHGR Chuyangaron 64.08 320** P **P** **18 31 50.1 -1.4**
CHGR pmax pmax
comp=Z,30nm,1.1s
**SIMJ Simiganj 64.18 320** P **P** **18 31 51.3 -0.9**
SIMJ lAmb lAmb 18 32 08.1
comp=Z,34nm,1.6s
**MHTO MHTO 64.31 298** P **P** **18 31 54.8 +1.6**
**DQM DQM 64.32 297** P **P** **18 31 55.0 +1.7**
**WSAR Wadi Sarin 64.56 301** LR LR 19 00 14.0
comp=Z,550nm,21.0s,baz=136,slow=36
**WSAR Wadi Sarin 64.56 301** P **P** **18 31 58.1 +3.3**
**JMDO Jabal Madar 64.69 299** P **P** **18 31 57.0 +1.3**
**RAO Raoul Island 64.82 118** P **P** **18 31 58.8 +2.4**
**SMDO Samad 64.99 300** P **P** **18 31 59.8 +2.1**
**BIDO Bidbid 65.09 301** P **P** **18 32 01.2 +3.0**
**BTLS Baital 65.32 328** *eP* **P** **18 31 59.6 +0.2**
baz=328
**BTLS Baital 65.32 328** *eP* **P** **18 31 59.5 +0.2**
**HOQ Hoqain 65.81 300** P **P** **18 32 03.5 +0.6**
**KKAR Karatay Array 65.98 325** P **P** **18 32 02.1 -1.4**
**KKAR Karatay Array 65.98 325** P **P** **18 32 02.2 -1.4**
**BRLS Boroldday 66.32 324** *eP* **P** **18 32 05.2 -0.6**
baz=324
**BRLS Boroldday 66.32 324** *eP* **P** **18 32 05.2 -0.6**
**SEM Semipalatinsk 66.34 336** *eP* **P** **18 32 05.6 -0.5**
comp=Z,22nm,1.1s,baz=336
**SEM Semipalatinsk 66.34 336** *eP* **P** **18 32 05.6 -0.5**
SEM pmax pmax
comp=Z,22nm,1.1s
**ARQ Araqi 66.40 300** P **P** **18 32 09.6 +2.9**
**H04N2 CROZET ISLANDS 66.51 223** T T 19 44 09.9
baz=81,slow=74
**H04N1 CROZET ISLANDS 66.53 223** T T 19 44 43.2
baz=81,slow=74
**H04N3 CROZET ISLANDS 66.53 223** T T 19 44 42.8
baz=81
**RBK Rabkut 66.54 293** P **P** **18 32 11.1 +3.4**
**DOK Doka 66.95 294** P **P** **18 32 07.6 -2.7**
**WHFO Wadi Hawf 67.06 293** P **P** **18 32 08.8 -2.2**
**KURBB Kurchatov Arra 67.22 335** P **P** **18 32 09.7 -1.6**
comp=Z,7.5nm,0.9s,baz=145,slow=5.9,SNR=38
KURBB PP **PP** **18 34 38.6 -1.3**
comp=Z,5.6nm,1.3s,baz=140,slow=8.5,SNR=4.1
KURBB PKP2bc 19 00 38.0
comp=Z,1.0nm,0.9s,baz=322,slow=2.1,SNR=4.3
KURBB LR LR 19 05 56.3
comp=Z,431nm,19.6s,baz=142,slow=40
comp=Z,7.5nm,0.9s
**UOSS Minazif 67.25 301** P **P** **18 32 11.7 -0.4**
**UOSS Minazif 67.25 301** P **P** **18 32 13.0 +1.0**
**KURK Kurchatov 67.25 335** P **P** **18 32 09.7 -1.8**
KURK lAmb lAmb 18 32 16.4
comp=Z,40nm,1.2s
**KURK Kurchatov 67.25 335** P **P** **18 32 10.2 -1.3**
**KURK Kurchatov 67.25 335** P **P** **18 32 09.7 -1.8**
**ASHO Ashiyiah 67.28 301** P **P** **18 32 10.4 -1.9**
**ABTO Aybut 67.33 293** P **P** **18 32 10.5 -2.2**
**UMZA Um Al Zommool 67.36 299** P **P** **18 32 09.3 -3.5**
**ZAA0 Zalesovo Array 67.50 340** lAmb lAmb 18 32 17.8
comp=Z,19nm,0.9s
**ZALV Zalesovo Beam 67.50 340** P **P** **18 32 10.6 -2.4**
**ZALV Zalesovo Beam 67.50 340** P **P** **18 32 11.3 -1.7**
comp=Z,11nm,0.7s,baz=144,slow=4.8,SNR=46
ZALV PKP2bc 19 00 39.7
comp=Z,0.3nm,0.3s,baz=246,slow=11,SNR=3.6
comp=Z,11nm,0.7s
**ZALV Zalesovo Beam 67.50 340** *iP* **P** **18 32 11.3 -1.7**
ZALV pmax pmax
comp=Z,12nm,0.7s
**ABPO Ambohimpanom 67.67 253** P **P** **18 32 14.9 -0.2**
**ABPO Ambohimpanom 67.67 253** P **P** **18 32 14.9 -0.2**
ABPO pmax pmax
comp=Z,12nm,0.9s
**FAQ Al Faqa, Dubai 67.69 301** P **P** **18 32 12.4 -2.4**
**VOI Vohitsoka 68.04 250** P **P** **18 32 17.2 -0.1**
VOI lAmb lAmb 18 32 23.4
comp=Z,21nm,0.8s
**VOI Vohitsoka 68.04 250** P **P** **18 32 18.3 +1.0**
**SKR Severo-Kuril's 68.08 26** *eP* **P** **18 32 17.4 +0.7**
SKR *eS* **S** **18 41 16.6 +2.5**
SKR pmax pmax
comp=Z,100nm,8.0s
**MZR Muzera 68.91 298** P **P** **18 32 20.1 -2.4**
**MAW Mawson 69.01 199** P **P** **18 32 24.5 +2.2**
comp=Z,32nm,1.0s,baz=55,slow=7.6,SNR=29
comp=Z,32nm,1.0s
**MAW Mawson 69.01 199** P **P** **18 32 23.8 +1.5**
**JRN Qarnain Island 70.10 300** P **P** **18 32 29.4 -0.4**
**PET Petropavlovsk 70.86 25** P **P** **18 32 37.1 +3.3**
**PET Petropavlovsk 70.86 25** *eP* **S** **18 32 33.5 -0.3**
PET *eS* **S** **18 41 46.7 -0.1**
PET *ePS* **PnS** **18 42 22.3 +4.5**
PET *eSS* **SS** **18 46 12.6 -7.4**
PET pmax pmax
comp=Z,100nm,12.9s
PET pmax pmax
comp=Z,20nm,1.5s
**YAK Yakutsk 70.89 7** P **P** **18 32 32.6 -1.2**
**YAK Yakutsk 70.89 7** *eP* **P** **18 32 32.8 -1.0**
YAK *e*PP* **pP** **18 32 37.1 -6.8**
YAK *e* 18 32 49.5
YAK *eS* **S** **18 41 48.9 +2.2**
YAK *e* 18 42 36.6
YAK *eSS* **SS** **18 46 24.8 +4.7**
YAK pmax pmax
comp=Z,41nm,1.2s
YAK pmax pmax
comp=N,22nm,1.7s
YAK pmax pmax
comp=E,8.0nm,1.5s
YAK smax smax
comp=E,84nm,3.5s
YAK smax smax
comp=N,68nm,3.7s
**TRNA Turayna 71.44 299** P **P** **18 32 35.3 -2.6**
**SAKB Bahrain 72.41 301** P **P** **18 32 45.8 +2.0**
**BRVK Borovoye 72.55 333** P **P** **18 32 42.0 -2.1**
**BRVK Borovoye 72.55 333** P **P** **18 32 43.0 -1.0**
**BRVK Borovoye 72.55 333** P **P** **18 32 42.0 -2.1**
BRVK pmax pmax
comp=Z,24nm,1.2s
**MA2 Magadan 73.02 17** P **P** **18 32 50.1 +3.4**
**VNDA Vanda 73.08 171** lAmb lAmb 18 32 49.8
comp=Z,35nm,1.1s
**VNDA Vanda 73.08 171** P **P** **18 32 47.6 +0.7**
comp=Z,21nm,1.1s,baz=308,slow=7.3,SNR=71
VNDA S **SKiKP** **18 42 16.2 -0.7**
comp=Z,0.2nm,0.7s,baz=194,slow=20,SNR=1.0
VNDA LR LR 19 01 54.7
comp=Z,422nm,21.2s,baz=324,slow=33
comp=Z,21nm,1.1s
**SBA Scott Base 74.10 170** P **P** **18 32 54.7 +1.9**
**SBA Scott Base 74.10 170** P **P** **18 32 54.7 +1.9**
SBA pmax pmax
comp=Z,26nm,1.2s
**ABKAR Akbulak array 75.51 326** P **P** **18 32 58.7 -2.7**
**ABKAR Akbulak array 75.51 326** lAmb lAmb 18 33 05.5
comp=Z,23nm,0.9s
**ATD Arta Tunnel 75.72 284** LR LR 19 04 41.4
comp=Z,6.8nm,18.7s,baz=78,slow=34
**RAYN Ar Rayn 76.07 297** P **P** **18 33 02.6 -2.7**
**RAYN Ar Rayn 76.07 297** P **P** **18 33 02.9 -2.4**
**RAYN Ar Rayn 76.07 297** P **P** **18 33 02.6 -2.7**
RAYN pmax pmax
comp=Z,12nm,1.0s
**SEY Seymchan 76.20 16** *eP* **P** **18 33 03.5 -1.6**
SEY pmax pmax
comp=Z,47nm,1.6s
**AKTO Aktyubinsk 77.19 326** LR LR 19 11 42.3
comp=Z,511nm,21.1s,baz=100,slow=39
**KIBK Kibwezi 78.11 269** P **P** **18 33 17.3 +0.3**
**KMBO Kilima Mbogo 79.07 270** P **P** **18 33 22.4 -0.1**
**KMBO Kilima Mbogo 79.07 270** P **P** **18 33 23.0 +0.5**
**KMBO Kilima Mbogo 79.07 270** P **P** **18 33 22.4 -0.1**
KMBO pmax pmax
comp=Z,8.0nm,0.9s
**SVE Sverdlovsk 79.25 332** *eP* **P** **18 33 20.9 -1.3**
SVE *eS* **S** **18 43 18.8 -1.3**
SVE pmax pmax
comp=Z,39nm,1.3s
**FURI Furi 79.26 281** LR LR 19 07 12.8
comp=Z,473nm,18.9s,baz=100,slow=35
**ARU Arti 80.00 331** P **P** **18 33 24.8 -1.6**
**ARU Arti 80.00 331** *c iP* **P** **18 33 26.4 +0.1**
ARU 18 36 23.5
ARU S **S** **18 43 29.1 +1.1**
ARU SS **SS** **18 48 34.0 -4.6**
ARU pmax pmax
comp=Z,29nm,1.3s
ARU MLR MLR
comp=Z,532nm,21.0s
**TIXI Tiksi 80.22 4** *iP* **P** **18 33 26.4 -0.7**
TIXI pmax pmax
comp=Z,29nm,1.1s
**MAK Makhachkala 80.53 316** *eP* **P** **18 33 28.9 -0.5**
MAK *e* 18 36 32.9
MAK *ePPP* PPP 18 38 27.0
MAK *eS* **S** **18 43 32.3 -1.8**
MAK *eSS* **SS** **18 48 47.1 0.0**
MAK pmax pmax
comp=Z,88nm,1.0s
MAK MLR MLR
comp=Z,453nm,19.0s
**RAR Rarotonga 81.35 110** LR LR 19 12 07.4
comp=Z,136nm,18.1s,baz=262,slow=38
**POGA Pongola 81.52 244** lAmb lAmb 18 33 41.7
comp=Z,35nm,0.8s
**GNI Garni 81.55 313** LR LR 19 14 32.5
comp=Z,230nm,19.4s,baz=106,slow=39
**LODK Lodwar 81.61 275** P **P** **18 33 36.3 +0.3**
SNR=5.2
**QSPA South Pole Qui 81.68 180** P **P** **18 33 35.7 +0.4**
QSPA lAmb lAmb 18 33 37.7
comp=Z,46nm,1.1s
**QSPA South Pole Qui 81.68 180** P **P** **18 33 36.0 +0.6**
comp=Z,32nm,1.0s,baz=323,slow=2.6,SNR=43
QSPA S **SKSac** **18 43 53.5 +0.7**
comp=Z,1.0nm,1.0s,baz=114,slow=22,SNR=6.7
QSPA LR LR 19 08 19.7
comp=Z,334nm,19.1s,baz=342,slow=34
comp=Z,32nm,1.0s
**TRLG Trialeti 82.45 314** P **P** **18 33 42.1 +2.2**
**GURO Guroymak-BITLI 83.08 310** lAmb lAmb 18 33 48.3
comp=Z,25nm,1.2s
**ELIB Princess Elisa 83.10 198** *dP* **P** **18 33 44.4 +1.7**
comp=Z,25nm,1.1s
**BELG Belogornoye 83.89 325** *iP* **P** **18 33 45.7 -1.1**
BELG pmax pmax
comp=Z,7.0nm,1.1s
**KBZ Khabaz 83.96 316** P **P** **18 33 47.0 -0.3**
comp=Z,6.0nm,1.1s,baz=151,slow=1.3,SNR=10
comp=Z,6.0nm,1.1s
**KBZ Khabaz 83.96 316⇑** *eP* **P** **18 33 47.5 +0.1**
KBZ pmax pmax
comp=Z,11nm,1.3s
**SHA1 Shidzhatmaz 84.13 316** *iP* **P** **18 33 46.6 -2.0**
**KIV Kislovodsk 84.17 316** *eP* **P** **18 33 49.4 +0.8**
KIV *e* 18 44 09.4
KIV pmax pmax
comp=Z,3.0nm,1.0s
**GOF Gofitskoye 84.26 317** *ceP* **P** **18 33 51.4 +2.5**
**KIRV Kirov 85.37 331** LR LR 19 15 59.0
comp=Z,548nm,21.0s,baz=120,slow=38
**KIRV Kirov 85.37 331⇑** *eP* **P** **18 33 53.7 -0.4**
**MBAR Mbarara 85.59 270** P **P** **18 33 54.6 -1.9**
**MBAR Mbarara 85.59 270** *iP* **P** **18 33 53.3 -3.2**
MBAR pmax pmax
comp=Z,12nm,1.2s
**VSLR Vesyoloye 85.88 315** *iP* **P** **18 33 56.9 -0.2**
VSLR pmax pmax
comp=Z,62nm,1.2s
**LSZ Lusaka 86.11 255** P **P** **18 33 58.1 -0.9**
LSZ lAmb lAmb 18 34 13.1
comp=Z,22nm,1.0s
**LSZ Lusaka 86.11 255** P **P** **18 33 58.9 -0.1**
**LSZ Lusaka 86.11 255** P **P** **18 33 58.1 -0.9**
LSZ pmax pmax
comp=Z,22nm,1.0s
**SOC Sochi 86.13 315** *eP* **P** **18 33 57.2 -1.1**
SOC *e* 18 37 15.4
SOC *eS* **SKSac** **18 44 20.0 -2.1**
SOC *eSS* **SS** **18 50 03.9 -6.2**
SOC *eSSS* SSS 18 53 35.3
**EIL Elat 86.68 300** LR LR 19 15 15.7
comp=Z,412nm,19.5s,baz=72,slow=37
**VRH Novokhopyorsk 86.95 323** *eP* **P** **18 34 02.9 +0.8**
VRH pmax pmax
comp=Z,34nm,1.0s
**NVL N'lazarevskaya 86.96 199** *eP* P 18 34 07.9 +6.1
NVL *eS* **S** **18 44 33.2 -4.7**
NVL pmax pmax
comp=Z,22nm,0.9s
NVL MLR MLR
comp=Z,348nm,19.0s
**BOSA Boshof 87.05 242** lAmb lAmb 18 34 25.4
comp=Z,19nm,0.9s
**BOSA Boshof 87.05 242** P **P** **18 34 03.6 +0.2**
comp=Z,14nm,0.9s,baz=95,slow=6.6,SNR=12
BOSA LR LR 19 09 38.5
comp=Z,563nm,18.4s,baz=110,slow=33
comp=Z,14nm,0.9s
**LBTB Lobatse 87.23 245** lAmb lAmb 18 34 15.8
comp=Z,21nm,1.0s
**VORD Divnogorie 88.35 322** *eP* **P** **18 34 05.6 -3.2**
VORD pmax pmax
comp=Z,20nm,1.0s
**VSR Storozhevoye 88.49 322** *eP* **P** **18 34 06.8 -2.7**
VSR pmax pmax
comp=Z,20nm,1.1s
**VORR Voronezh 88.59 323** *eP* **P** **18 34 12.0 +2.1**
VORR pmax pmax
comp=Z,36nm,0.4s
**LPSR Galich'ya Gora 89.00 323** *eP* **P** **18 34 09.7 -2.1**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**TROLL Troll, Antarti 89.31 197** ⇑P **P** **18 34 15.1 +1.9**
comp=Z,589nm,0.7s
**BR131 Keskin Array S 89.70 310** P **P** **18 34 14.8 -0.8**
SNR=5.7
**BR131 Keskin Array S 89.70 310** *iP* **P** **18 34 13.6 -2.1**
**BRTR Keskin Array B 89.70 310** P **P** **18 34 13.9 -1.8**
**BRTR Keskin Array B 89.70 310** P **P** **18 34 13.6 -2.1**
comp=Z,3.8nm,1.1s,baz=143,slow=2.9,SNR=10
comp=Z,3.8nm,1.1s
**BRTR Keskin Array B 89.70 310** P **P** **18 34 13.9 -1.8**
**SUR Sutherland 90.26 237** LR LR 19 08 54.2
comp=Z,432nm,21.8s,baz=118,slow=32
**MOS Moscow 90.52 326** *eP* **P** **18 34 18.9 0.0**
MOS *e* 18 37 55.0
MOS *eS* **S** **18 45 08.8 -3.1**
**TBI Tubuai 90.55 114** *eS* **S** **18 45 09.9 -3.7**
comp=Z,576nm,25.2s
TBI *eSS* **SS** **18 51 12.6 -2.4**
comp=Z,3μm,31.0s
TBI *eLQ* LQ 18 59 29.4
comp=Z,2μm,36.8s
TBI *eLR* LR 19 03 20.9
comp=Z,2μm,23.2s
**SNAA Sanae 90.95 196** P **P** **18 34 21.0 +0.2**
SNAA lAmb lAmb 18 34 23.6
comp=Z,27nm,1.1s
**SNAA Sanae 90.95 196** ⇑P **P** **18 34 21.9 +1.1**
comp=Z,288nm,0.9s
**SNAA Sanae 90.95 196** P **P** **18 34 21.3 +0.5**
comp=Z,21nm,1.0s,baz=163,slow=5.1,SNR=32
comp=Z,21nm,1.0s
**SNAA Sanae 90.95 196** P **P** **18 34 21.0 +0.2**
SNAA pmax pmax
comp=Z,27nm,1.1s
**PPT2 Papeete2 91.35 108** *eP* **P** **18 34 21.2 -2.6**
comp=Z,44nm,22.5s
**PPT2 Papeete2 91.35 108** *eS* **S** **18 45 19.3 -2.0**
comp=Z,132nm,25.0s
PPT2 *eSS* **SS** **18 51 26.4 -0.7**
comp=Z,711nm,34.2s
**PPT2 Papeete2 91.35 108** *eLR* LR 19 03 38.9
comp=Z,545nm,27.0s
PPT2 *eLR* LR 19 03 44.6
comp=Z,353nm,26.5s
**PPT Papeete 91.36 108** LR LR 19 10 59.7
comp=Z,159nm,21.4s,baz=249,slow=33
**VNA2 Neumayer--Watz 92.59 196** ⇑P **P** **18 34 30.0 +1.6**
comp=Z,11nm,0.8s,baz=106,slow=3.5
**VNA1 Neumayer--Stat 92.99 196** ⇑P **P** **18 34 31.7 +1.6**
comp=Z,15nm,1.1s
**VNA3 Neumayer Olymp 93.01 195** ⇑P **P** **18 34 31.3 +1.0**

comp=Z,11nm,0.8s
**AK09 Malin Array Si 94.51 320 P P 18 34 39.9 +2.5**
**AK10 Malin Array Si 94.53 320 P P 18 34 40.0 +2.5**
**AK08 Malin Array Si 94.53 320 P P 18 34 39.9 +2.4**
**AK07 Malin Array Si 94.55 320 P P 18 34 40.1 +2.5**
**AKASG Malin Array Be 94.56 320 P P 18 34 36.6 -1.0**
comp=Z,1.4nm,0.7s,baz=85,slow=4.1,SNR=2.5
comp=Z,1.4nm,0.7s
**AKBB Malin Array Si 94.56 320 P P 18 34 39.5 +1.8**
**AK03 Malin Array Si 94.56 320 P P 18 34 39.8 +2.1**
**AK01 Malin Array Si 94.56 320 P P 18 34 39.8 +2.1**
**AK02 Malin Array Si 94.56 320 P P 18 34 39.6 +1.9**
**KIEV Kiev 94.56 320 P P 18 34 39.5 +1.8**
**KIEV Kiev 94.56 320 P P 18 34 39.5 +1.8**
comp=Z,11nm,1.3s
**AK11 Malin Array Si 94.59 320 P P 18 34 39.7 +1.9**
**AK12 Malin Array Si 94.59 320 P P 18 34 39.7 +1.9**
**AK18 Malin Array Si 94.66 320 P P 18 34 40.1 +2.0**
**AK21 Malin Array Si 94.68 320 P P 18 34 39.8 +1.6**
**AK19 Malin Array Si 94.69 320 P P 18 34 40.0 +1.7**
**AK20 Malin Array Si 94.70 320 P P 18 34 40.0 +1.7**
**SORM Soroca 94.80 318 P P 18 34 40.1 +1.3**
**SORM Soroca 94.80 318 P P 18 34 40.1 +1.3**
**APA Apatity 94.93 336** *i*P **P 18 34 35.5 -3.5**
APA *i* 18 38 27.0
APA pmax pmax
comp=Z,9.0nm,1.0s
**MNK Minsk 95.82 324** *i* P P 18 34 38.6 -4.7
MNK *i* 18 38 33.0
MNK *i* S **SKSac 18 45 11.8 -5.4**
MNK *i* PS **PS 18 47 16.6 -5.0**
MNK pmax pmax
comp=Z,6.0nm,0.8s
MNK pmax pmax
comp=N,7.0nm,0.9s
MNK pmax pmax
comp=E,3.0nm,0.8s
MNK MLR MLR
comp=N,261nm,18.0s
**IDI Anoyia 95.94 305** LR LR 19 25 02.5
comp=N,119nm,19.3s,baz=102,slow=40
**D19K Kuna River 96.02 22 P P 18 34 43.0 -1.1**
D19K IAmb IAmb 18 34 51.1
comp=Z,9.0nm,0.9s
**H19K Roundabout Mou 96.33 25** IAmb IAmb 18 36 56.4
comp=Z,11nm,1.1s
**J19K Poorman 96.53 26** IAmb IAmb 18 36 52.1
comp=Z,22nm,1.6s
**RNPP9 Sopachiv 96.72 321 P P 18 34 50.6 +3.1**
**E21K Killik River 97.54 22 P P 18 34 50.2 -0.8**
E21K IAmb IAmb 18 37 16.9
comp=Z,9.0nm,1.1s
**ARCES ARCESS Array B 98.03 339** LR LR 19 26 47.3
comp=Z,512nm,18.0s,baz=96,slow=40
**C23K Itkillik River 98.78 21** IAmb IAmb 18 37 11.8
comp=Z,36nm,1.9s
**G23K Bananza Creek 99.00 24** IAmb IAmb 18 35 19.2
comp=Z,17nm,1.7s
**TOLK Toolik Lake Re 99.16 22** IAmb IAmb 18 36 28.2
comp=Z,28nm,1.9s
**I23K Minto, Yukon-K 99.28 25** IAmb IAmb 18 35 19.0
comp=Z,23nm,1.6s
**ILAR Eielson Array 100.34 26** P **Pdif 18 35 03.3 -0.2**
comp=Z,0.4nm,0.7s,baz=258,slow=4.5,SNR=3.3
**OKC Ostrava-Krasne 101.60 319** AMS AMS 19 27 00.0
comp=Z,300nm,24.0s
**TAOE Nuku Hiva Isla 101.89 101** *e*LR LR 19 08 34.4
comp=Z,376nm,24.5s
**MORC Moravsky Berou 101.99 319** *e*PP **PP 18 39 19.0 -3.8**
**KRLC Kraliky 102.47 319** AMS AMS 19 30 10.0
comp=Z,300nm,21.3s
**VRAC Vranov 102.62 319** *e*PP **PP 18 39 27.1 -0.4**
**DPC Dobruska-Polom 102.76 320** AMS AMS 19 30 20.0
comp=Z,300nm,17.9s
**OSTC Ostas 102.82 320** AMS AMS 19 29 30.0
comp=Z,400nm,18.0s
**CHVC Chvalec 102.92 320** AMS AMS 19 29 40.0
comp=Z,400nm,16.3s
**UPC Upice 102.95 320** AMS AMS 19 29 40.0
comp=Z,400nm,18.1s
**RKT Rikitea 103.62 116** *e*LR LR 19 09 19.7
comp=Z,1μm,23.5s
**PVCC Panska Ves 103.87 320** AMS AMS 19 28 10.0
comp=Z,300nm,17.7s
**PRU Pruhonice 103.92 319** AMS AMS 19 30 20.0
comp=Z,400nm,17.9s
**CKRC Cesky Krumlov 104.14 318** AMS AMS 19 31 00.0
comp=Z,300nm,17.3s
**BRG Berggiesshubel 104.24 320** *e*P PKiKP 18 39 25.0 -13
**HSKC Hora Svate Kat 104.58 320** AMS AMS 19 31 00.0
comp=Z,400nm,24.1s
**KHC Kasperske Hory 104.60 319** AMS AMS 19 31 30.0
comp=Z,300nm,20.7s
**CLL Collm 104.79 321** *e*SS SS 18 54 30.0 -4.4
CLL *e*SSSS 19 01 54.0
CLL AMS AMS 19 35 00.0
comp=Z,400nm,21.4s
**YKA Yellowknife Ar 114.61 23** PKiKP **PKiKP 18 39 55.4 -1.5**
comp=Z,1.4nm,0.9s,baz=309,slow=2.0,SNR=3.1
**ESDC Sonseca Array 118.49 311** PKP **PKPdf 18 40 04.0 -1.2**
comp=Z,0.2nm,0.5s,baz=46,slow=2.4,SNR=4.2
ESDC PKKPbc **PKKPab 18 50 25.1 +0.2**
comp=Z,1.0nm,1.0s,baz=250,slow=7.6,SNR=4.5
**JO5D Fort Rock, OR 119.03 45** PKPdf **PKPdf 18 40 05.2 -1.1**
**NVAR Mina Array Bea 122.57 49 PKPdf 18 40 12.8 -0.5**
**NVAR Mina Array Bea 122.57 49** PKP **PKPdf 18 40 13.3 0.0**
comp=Z,0.9nm,0.7s,baz=222,slow=1.2,SNR=4.1
**MSO Missoula 122.57 39** PKPdf **PKPdf 18 40 11.3 -1.7**
**HLID Hailey 123.60 43** PKPdf **PKPdf 18 40 14.4 -0.7**
**ELK Elko 124.08 46** PKPdf **PKPdf 18 40 15.7 -0.5**
**ELK Elko 124.08 46** PKIKP **PKPdf 18 40 15.7 -0.5**
**EGMT Eagleton 124.53 36 PKPdf 18 40 15.4 -1.2**
**BOZ Bozeman (W) 124.55 39 PKPdf 18 40 15.9 -0.9**
**BOZ Bozeman (W) 124.55 39** PKIKP **PKPdf 18 40 15.9 -0.9**
**PFO Pinyon Flats O 125.32 55** PKPdf **PKPdf 18 40 18.5 -0.1**
**PFO Pinyon Flats O 125.32 55** PKIKP **PKPdf 18 40 18.5 -0.1**
**PDAR Pinedale Array 127.16 42** PKPdf **PKPdf 18 40 19.6 -2.4**
**PDAR Pinedale Array 127.16 42** PKP **PKPdf 18 40 21.5 -0.5**
comp=Z,1.2nm,0.9s,baz=270,slow=1.8,SNR=6.3
**RSSD Black Hills 129.97 38** PKPdf **PKPdf 18 40 25.3 -2.0**
**RSSD Black Hills 129.97 38** PKIKP **PKPdf 18 40 25.3 -2.0**
**ULM Lac du Bonnet 130.35 27** SKP 18 44 02.6
comp=Z,6.4nm,1.0s,baz=299,slow=7.1,SNR=5.7
**SCHQ Schefferville 133.53 3** PKP **PKPdf 18 40 33.2 -0.2**
comp=Z,3.1nm,0.8s,baz=344,slow=1.1,SNR=2.0
**TXAR Lajitas Array 137.02 55** PKhKP PKPpre 18 40 35.6
comp=Z,1.0nm,0.9s,baz=285,slow=2.5,SNR=4.6
TXAR SKPbc **SKPbc 18 44 12.7 +1.1**
comp=Z,0.1nm,0.3s,baz=307,slow=3.3,SNR=3.3
**CO06 Fray Jorge 140.49 169** PKPpre 18 40 38.4
**MIAR Mount Ida 142.08 42** PKPdf **PKPdf 18 40 48.6 -1.2**
**MIAR Mount Ida 142.08 42** PKIKP **PKPdf 18 40 48.6 -1.2**
**WVT Waverly 144.59 35 PKPab 18 40 51.5 -1.1**
**WVT Waverly 144.59 35** PKIKP **PKPab 18 40 51.5 -1.1**
**OXF Oxford 144.77 39** PKPdf **PKPab 18 40 52.0 -1.3**
**OXF Oxford 144.77 39** PKIKP **PKPab 18 40 52.0 -1.3**
**TLIG Tlapa 144.79 71** PKPdf **PKPab 18 40 52.0 -2.0**
**CPUP Villa Florida 145.03 190** PKPbc **PKPbc 18 40 54.4 -0.1**
comp=Z,55nm,1.0s,baz=172,slow=2.8,SNR=68
**HRV Adam Dziewonsk 145.23 10 PKPbc 18 40 53.0 -1.6**
**HRV Adam Dziewonsk 145.23 10** PKIKP **PKPbc 18 40 53.0 -1.6**
**SSPA Standing Stone 145.39 19 PKPbc 18 40 53.5 -1.8**
**PB05 IPOC Station P 148.37 168 PKPbc 18 41 05.5 +1.0**
**BRAL Brewton 148.47 41 PKPdf 18 40 58.7 -2.1**
**LVC Limon Verde 148.84 171 PKPdf 18 41 01.7 -0.4**
**LVC Limon Verde 148.84 171** PKIKP **PKPdf 18 41 01.7 -0.4**
**PB09 IPOC Station P 149.58 170 PKiKP 18 41 09.5 +0.7**
**BDFB Brasilia 151.62 213 PKPbc 18 41 10.0 -2.6**
**BDFB Brasilia 151.62 213** PKPbc **PKPbc 18 41 11.7 -0.9**
comp=Z,6.4nm,0.6s,baz=140,slow=5.1,SNR=3.0
**BDFB Brasilia 151.62 213** PKIKP **PKPbc 18 41 10.0 -2.6**
**LPAZ La Paz 155.16 170** PKP **PKPdf 18 41 11.9 -0.1**
comp=Z,1.9nm,1.0s,baz=85,slow=4.5,SNR=4.9
LPAZ PKPab **PKPab 18 41 37.7 +1.2**
comp=Z,18nm,0.9s,baz=157,slow=4.0,SNR=24
**LPAZ La Paz 155.16 170** PKIKP **PKPdf 18 41 12.0 -0.1**
**SIV San Ignacio 155.73 186** PKP **PKPdf 18 41 11.2 -0.9**
comp=Z,0.7nm,0.4s,baz=168,slow=19,SNR=6.5
SIV PKPab **PKPab 18 41 39.9 +1.7**
comp=Z,15nm,0.9s,baz=155,slow=4.3,SNR=21
**ETMB Extrema 161.81 172** PKPab **PKPab 18 42 05.0 +0.4**

*BJI **06** 18:24:41.8±0.0,4°.17S×151°.31E,h14km,mb4.6/34,*



*mB5.0/8,Ms5.1/9,Ms7.4/8/9*
*IDC **06** 18:24:42.7±1.1,3°.78S×151°.02E,h0km,mb4.2/11, mbtmp4.2/13,ML2.4/2,MS4.5/19,Error ellipse: s-maj=37.7km s-min=17.2km az=105.0*
*NEIC **06** 18:24:43.1±2.3,3°.96S±0°.04×151°.21E±0°.08,h10km±1km, mb4.9/40,Error ellipse: s-maj=13.5km s-min=6.9km az=287.0*
*GCMT **06** 18:24:47.1±0.2,3°.74S±0°.01×150°.98E±0°.01,h15km±1km, MW5.2/120,Moment Tensor Solution. s45,c56; s120,c208; Duration: 1ꜱ0 Moment tensor: Scale 10^17 Nm; Mrr-0.15±.02; Mθθ0.84±.02; Mφφ-0.68±.01; Mrθ0.16±.03; Mθφ0.09±.01; Mφr-0.15±.03; Best double couple: M0:0.80400×10^17 NP1:ϕs311.00000°,δ85.00000°, λ-17.00000°. NP2:ϕs42.00000°,δ73.00000°, λ-175.00000°. Principal axes: T 0.8710, Plg9.0000°, Azm358.0000°; N -0.1340, Plg72.0000°, Azm115.0000°; P -0.7370, Plg16.0000°, Azm265.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 06 18:24:44.0±0.5,3°.87S±0°.06×151°.22E±0°.07,h10km,n92, σ2ꜱ11/72,mb4.8/39,MS4.6/23,2C,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **0.99** | **109** | Pn | **Pg** | **18 25 02.6** | **-0.6** |
| **MANU** | **Manus Island** | **4.25** | **295** | Pn | **Pn** | **18 25 45.6** | **-3.3** |
| **PMG** | **Port Moresby** | **6.82** | **216** | P | **Pn** | **18 26 26.9** | **+2.7** |
| **PMG** | **Port Moresby** | **6.82** | **216** | Pn | **Pn** | **18 26 21.9** | **-2.3** |
| **PMG** | **Port Moresby** | **6.82** | **216** | Pn | **Pn** | **18 26 24.2** | **+0.1** |
| | 2.5nm,0.3s,baz=46,slow=9.3,SNR=14 | | | | | | |
| PMG | | | | Sn | **Sn** | **18 27 40.7** | **-1.2** |
| | baz=342,slow=21 | | | | | | |
| PMG | | | | LR | LR | 18 29 00.1 | |
| | comp=Z,6μm,21.9s,baz=22,slow=38 79nm,0.9s | | | | | | |
| **HNR** | **Honiara** | **10.28** | **123** | LR | LR | 18 31 41.4 | |
| | comp=Z,35μm,18.2s,baz=296,slow=40 | | | | | | |
| **TV1H** | **Townsville Har** | **15.89** | **195** | P | **P** | **18 28 34.2** | **+2.5** |
| **AUAYR** | **Ayr State High** | **16.05** | **193** | P | **P** | **18 28 35.6** | **+2.2** |
| **CTA** | **Charters Tower** | **16.83** | **196** | P | **P** | **18 28 45.5** | **+3.4** |
| **CTA** | **Charters Tower** | **16.83** | **196** | Pn | **P** | **18 28 41.7** | **-0.4** |
| | baz=327,slow=10,SNR=3.1 | | | | | | |
| CTA | | | | LR | LR | 18 34 50.0 | |
| | comp=Z,98nm,19.4s,baz=328,slow=36 3.2nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **16.83** | **196** | P | **P** | **18 28 45.2** | **+3.1** |
| **GUMO** | **Guam** | **18.46** | **340** | LR | LR | 18 34 25.2 | |
| | comp=Z,659nm,20.3s,baz=169,slow=32 | | | | | | |
| **FAKI** | **Fak Fak** | **18.96** | **272** | P | **Pn** | **18 29 11.5** | **+5.2** |
| **RK1H** | **Rockhampton Ha** | **19.41** | **182** | P | Pn | 18 29 18.7 | +7.0 |
| **EIDS** | **Eidsvold** | **21.38** | **180** | P | P | 18 29 39.9 | +8.1 |
| **WB0** | **Warramunga Arr** | **22.78** | **225** | P | **P** | **18 29 42.0** | **-4.9** |
| **WR0** | **Warramunga Arr** | **22.81** | **224** | P | **P** | **18 29 42.3** | **-4.9** |
| WR0 | | | | IAmb | IAmb | 18 30 02.4 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.92** | **225** | P | **P** | **18 29 44.4** | **-4.0** |
| WRAB | | | | IAmb | IAmb | 18 30 09.2 | |
| | comp=Z,60nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.93** | **224** | P | **P** | **18 29 44.5** | **-4.0** |
| WB2 | | | | IAmb | IAmb | 18 29 59.0 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.93** | **225** | P | **P** | **18 29 45.2** | **-3.4** |
| **WRA** | **Warramunga Arr** | **22.93** | **225** | P | **P** | **18 29 47.0** | **-1.6** |
| | comp=Z,16nm,0.8s,baz=49,slow=10,SNR=7.3 | | | | | | |
| | comp=Z,16nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.35** | **142** | P | **P** | **18 29 50.7** | **-2.2** |
| DZM | | | | IAmb | IAmb | 18 30 15.5 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.35** | **142** | LR | LR | 18 38 23.6 | |
| | comp=Z,2μm,20.7s,baz=311,slow=35 | | | | | | |
| **ONTNC** | **Quen Toro** | **23.54** | **142** | P | **P** | **18 29 51.9** | **-2.8** |
| **ASAR** | **Alice Springs** | **25.82** | **219** | P | **P** | **18 30 15.2** | **-0.6** |
| | comp=Z,6.3nm,0.8s,baz=56,slow=8.6,SNR=10.0 | | | | | | |
| ASAR | | | | LR | LR | 18 40 14.5 | |
| | comp=Z,2μm,18.2s,baz=310,slow=36 comp=Z,6.3nm,0.8s | | | | | | |
| **MSVF** | **Nonsavu** | **29.67** | **120** | LR | LR | 18 41 52.6 | |
| | comp=Z,688nm,18.2s,baz=295,slow=34 | | | | | | |
| **KAPI** | **Kappang** | **31.39** | **267** | LR | LR | 18 44 35.9 | |
| | comp=Z,480nm,18.7s,baz=100,slow=38 | | | | | | |
| **JCJ** | **Chichijima** | **32.00** | **345** | LR | LR | 18 43 55.7 | |
| | comp=Z,513nm,19.4s,baz=172,slow=36 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.94** | **224** | LR | LR | 18 50 04.6 | |
| | comp=Z,930nm,21.3s,baz=58,slow=36 | | | | | | |
| **RPZ** | **Rata Peaks** | **43.39** | **159** | LR | LR | 18 49 16.3 | |
| | comp=Z,1μm,20.1s,baz=306,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **46.48** | **334** | P | **P** | **18 33 11.7** | **+0.3** |
| | comp=Z,0.4nm,0.6s,baz=153,slow=9.4,SNR=1.6 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **47.14** | **322** | *e*P | **P** | **18 33 16.1** | **-0.6** |
| NJ2 | | | | pP | **pwP** | **18 33 20.9** | **-1.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,790nm,19.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,290nm,19.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,750nm,21.8s | | | | | | |
| **GYA** | **Guiyang** | **52.58** | **308** | P | **P** | **18 34 00.3** | **+1.9** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **BNX** | **BinXian** | **53.74** | **339** | ⇑P | **P** | **18 34 10.3** | **+3.9** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **KMI** | **Kunming** | **55.16** | **304** | ⇑P | P | 18 34 21.2 | +3.7 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **55.53** | **345** | LR | LR | 18 54 55.7 | |
| | comp=Z,492nm,21.7s,baz=182,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.06** | **295** | P | **P** | **18 34 22.8** | **-1.0** |
| | comp=Z,1.6nm,1.0s,baz=124,slow=4.7,SNR=5.2 | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **CD2** | **Chengdu** | **56.94** | **311** | P | **P** | **18 34 31.4** | **+1.5** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **XLT** | **XiLinHaoTe** | **57.08** | **330** | *e*P | P | 18 34 34.9 | +4.2 |
| XLT | | | | S | **S** | **18 42 26.1** | **+0.4** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.6s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,42nm,17.3s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,280nm,13.9s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,560nm,16.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.38** | **325** | *e*P | **P** | **18 34 34.9** | **+2.0** |
| HHC | | | | sP | pwP | 18 34 40.9 | +2.6 |
| HHC | | | | S | **S** | **18 42 27.9** | **-1.9** |
| HHC | | | | sS | sS | 18 42 41.5 | +7.6 |
| HHC | | | | ScS | **ScS** | **18 44 23.0** | **+0.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,5.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,490nm,14.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,580nm,17.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,440nm,15.3s | | | | | | |
| **BTO** | **Baotou** | **58.12** | **324** | *e*P | **P** | **18 34 41.8** | **+3.7** |
| BTO | | | | pP | **pwP** | **18 34 46.2** | **+2.6** |
| BTO | | | | sP | sP | 18 34 49.0 | +7.5 |
| BTO | | | | S | S | 18 42 47.4 | +7.9 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,1μm,17.0s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,2μm,14.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,1μm,18.2s | | | | | | |
| **LZH** | **Lanzhou** | **59.47** | **316** | *e*P | **P** | **18 34 50.2** | **+2.6** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1μm,18.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1μm,20.3s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **59.62** | **16** | LR | LR | 18 56 32.2 | |
| | comp=Z,408nm,21.2s,baz=222,slow=32 | | | | | | |
| **SONM** | **Songino Array** | **64.71** | **328** | P | **P** | **18 35 22.2** | **-0.3** |
| | comp=Z,1.3nm,0.8s,baz=145,slow=5.3,SNR=2.6 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **CASY** | **Casey** | **68.44** | **196** | P | **P** | **18 35 44.6** | **-1.3** |
| CASY | | | | IAmb | IAmb | 18 35 50.7 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **73.81** | **178** | P | **P** | **18 36 20.4** | **+2.0** |
| | comp=Z,2.0nm,0.8s,baz=337,slow=9.0,SNR=3.0 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **WMQ** | **Urumqi** | **74.00** | **318** | *e*P | **P** | **18 36 20.7** | **+0.6** |
| WMQ | | | | LR | LR | | |
| | comp=Z,510nm,14.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,520nm,14.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,690nm,21.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **75.09** | **21** | P | **P** | **18 36 26.9** | **+0.9** |
| **M16K** | **Timber Creek** | **75.23** | **23** | P | **P** | **18 36 28.1** | **+1.3** |
| **L16K** | **Owhat River** | **75.47** | **22** | P | **P** | **18 36 27.4** | **-0.7** |
| L16K | | | | IAmb | IAmb | 18 36 44.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **KDAK** | **Kodiak Island** | **76.07** | **27** | LR | LR | 19 07 06.2 | |
| | comp=Z,265nm,19.5s,baz=266,slow=33 | | | | | | |
| **J17K** | **VABM Dome** | **76.67** | **21** | P | **P** | **18 36 34.1** | **-0.8** |
| **L18K** | **Granite Mounta** | **76.82** | **22** | P | **P** | **18 36 36.6** | **+0.8** |
| **L19K** | **White Mountain** | **77.50** | **23** | P | **P** | **18 36 40.1** | **+0.4** |
| L19K | | | | IAmb | IAmb | 18 37 11.8 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **M20K** | **Styx River** | **78.02** | **24** | P | **P** | **18 36 42.5** | **-0.1** |
| M20K | | | | IAmb | IAmb | 18 36 57.5 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **G18K** | **Tagagawik** | **78.37** | **19** | P | **P** | **18 36 43.9** | **-0.6** |
| **K20K** | **Telida** | **78.46** | **22** | P | **P** | **18 36 45.8** | **+0.8** |
| **MK31** | **Makanchi Array** | **78.60** | **319** | P | **P** | **18 36 45.1** | **-1.0** |
| **MKAR** | **Makanchi Array** | **78.60** | **319** | P | **P** | **18 36 45.0** | **-1.1** |
| **MKAR** | **Makanchi Array** | **78.60** | **319** | P | **P** | **18 36 45.2** | **-0.9** |
| | comp=Z,4.1nm,1.1s,baz=104,slow=7.5,SNR=5.9 | | | | | | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | **78.81** | **319** | P | **P** | **18 36 45.3** | **-1.9** |
| **H19K** | **Roundabout Mou** | **78.87** | **20** | P | **P** | **18 36 48.2** | **+1.1** |
| **J20K** | **Nowinta River** | **78.89** | **21** | P | **P** | **18 36 48.2** | **+0.9** |
| J20K | | | | IAmb | IAmb | 18 37 02.0 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.51** | **327** | P | **P** | **18 36 49.2** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **79.51** | **327** | P | **P** | **18 36 49.5** | **-1.4** |
| | comp=Z,1.8nm,0.7s,baz=111,slow=5.8,SNR=4.4 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **E19K** | **Redstone River** | **79.78** | **18** | IAmb | IAmb | 18 37 06.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **80.01** | **19** | P | **P** | **18 36 54.4** | **+1.1** |
| F20K | | | | IAmb | IAmb | 18 36 59.6 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **IMAR** | **Indian Mountai** | **80.05** | **20** | P | **P** | **18 36 54.1** | **+0.5** |
| **RND** | **Reindeer** | **80.50** | **23** | P | **P** | **18 36 55.3** | **-0.8** |
| RND | | | | IAmb | IAmb | 18 37 16.5 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **MLY** | **Manley** | **80.59** | **21** | P | **P** | **18 36 57.0** | **+0.4** |
| **CCB** | **Clear Creek Bu** | **81.50** | **22** | P | **P** | **18 36 59.1** | **-2.2** |
| CCB | | | | IAmb | IAmb | 18 37 20.5 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **81.90** | **22** | P | **P** | **18 37 02.2** | **-1.3** |
| **ILAR** | **Eielson Array** | **81.90** | **22** | P | **P** | **18 37 02.7** | **-0.8** |
| | comp=Z,0.8nm,0.8s,baz=245,slow=5.3,SNR=6.1 | | | | | | |
| ILAR | | | | LR | LR | 19 11 43.3 | |
| | comp=Z,118nm,19.4s,baz=262,slow=34 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **82.00** | **18** | IAmb | IAmb | 18 37 14.9 | |
| | comp=Z,21nm,1.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.10** | **322** | P | **P** | **18 37 04.0** | **-0.8** |
| | comp=Z,1.5nm,0.8s,baz=105,slow=5.2,SNR=5.4 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **82.42** | **23** | IAmb | IAmb | 18 37 31.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **L27K** | **Beaver Creek,** | **83.21** | **25** | P | **P** | **18 37 10.1** | **-0.3** |
| **M30M** | **Minto, Yukon** | **85.22** | **26** | IAmb | IAmb | 18 37 42.2 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **MAW** | **Mawson** | **85.81** | **203** | LR | LR | 19 12 59.2 | |
| | comp=Z,367nm,20.7s,baz=90,slow=34 | | | | | | |
| **KK31** | **Karatay Array** | **85.85** | **314** | P | **P** | **18 37 21.9** | **-2.3** |
| KK31 | | | | IAmb | IAmb | 18 37 31.8 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **85.85** | **314** | P | **P** | **18 37 23.2** | **-1.1** |
| **KKAR** | **Karatay Array** | **85.85** | **314** | P | **P** | **18 37 21.4** | **-2.8** |
| KKAR | | | | IAmb | IAmb | 18 37 31.8 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **J30M** | **Hart River** | **86.02** | **24** | IAmb | IAmb | 18 37 46.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **I30M** | **Mount Dempster** | **86.20** | **24** | P | **P** | **18 37 24.4** | **-1.2** |
| **BBB** | **Bella Bella** | **87.32** | **37** | LR | LR | 19 12 09.2 | |
| | comp=Z,215nm,18.2s,baz=264,slow=33 | | | | | | |
| **G31M** | **Satah River** | **87.51** | **22** | IAmb | IAmb | 18 37 52.1 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **87.63** | **323** | P | **P** | **18 37 31.2** | **-1.4** |
| **INK** | **Inuvik** | **88.16** | **21** | LR | LR | 19 15 36.7 | |
| | comp=Z,218nm,19.4s,baz=275,slow=35 | | | | | | |
| **PFO** | **Pinyon Flats O** | **94.05** | **57** | LR | LR | 19 15 32.0 | |
| | comp=Z,156nm,18.2s,baz=266,slow=32 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.34** | **28** | P | **P** | **18 38 08.7** | **+0.5** |
| | comp=Z,1.2nm,0.8s,baz=269,slow=6.2,SNR=4.5 | | | | | | |
| YKA | | | | LR | LR | 19 17 38.3 | |
| | comp=Z,204nm,20.8s,baz=314,slow=33 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **LPIG** | **La Paz** | **99.30** | **66** | LR | LR | 19 17 51.2 | |
| | comp=Z,438nm,18.9s,baz=242,slow=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.52** | **289** | PKPbc | **PKPbc** | **18 44 31.6** | **-0.7** |
| | comp=Z,3.0nm,0.9s,baz=57,slow=4.0,SNR=9.2 | | | | | | |

*IDC **06** 18:25:00.9±1.4,8°.17S×116°.37E,h0km,mb4.0/5, mbtmp4.1/6,ML3.6/1,Error ellipse: s-maj=40.4km s-min=23.1km az=50.0*

**ISC 06 18:25:02.5±1.5,8°.25±0°.1×116°.4E±0°.2,h10km,n6,σ0ꜱ86/7, mb4.1/4,Subawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.60** | **47** | Pn | **Pn** | **18 26 12.6** | **+0.5** |
| | 3.0nm,0.3s,baz=184,slow=13,SNR=0.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 27 05.3** | **-0.4** |
| | 19nm,0.3s,baz=255,slow=8.0,SNR=9.1 62nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.95** | **126** | P | **P** | **18 29 46.0** | **+0.2** |
| | 10nm,0.8s,baz=301,slow=12,SNR=4.8 10nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.77** | **135** | P | **P** | **18 30 05.1** | **-0.3** |
| | 4.8nm,0.7s,baz=310,slow=9.0,SNR=5.5 4.8nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.59** | **334** | P | **P** | **18 35 27.9** | **+1.0** |
| | 1.0nm,0.9s,baz=156,slow=7.9,SNR=1.6 1.0nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.12** | **335** | P | **P** | **18 35 56.0** | **-0.2** |
| | 0.8nm,1.0s,baz=133,slow=7.7,SNR=0.8 0.8nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.39** | **340** | P | **P** | **18 35 56.7** | **-1.2** |
| | 1.4nm,0.8s,baz=150,slow=6.0,SNR=2.4 1.4nm,0.8s | | | | | | |

*IDC **06** 18:32:57.0±0.8,8°.16S×116°.41E,h0km,mb3.9/11, mbtmp3.9/12,ML3.9/1,Error ellipse: s-maj=30.4km s-min=15.8km az=64.0*
*NEIC **06** 18:32:58.9±1.1,8°.22S±0°.10×116°.30E±0°.06,h10km±1km, mb4.3/14,Error ellipse: s-maj=17.1km s-min=9.1km az=168.0*
*DJA **06** 18:32:59.8±0.3,8°.5S±4°×11°.6E±°,h10km,M4.4/12,mb4.6/4, MLv4.3/12*

**ISC 06 18:32:58.3±0.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BNSI | **Bone** | 5.31 | 45 | P | Pn | 18 34 18.5 | +0.8 |
| | 41nm,1.0s,0.3nm | | | | | | |
| SPSI | **Sidrap Palu** | 5.41 | 39 | P | Pn | 18 34 19.8 | +0.7 |
| | 34nm,0.8s,0.2nm | | | | | | |
| UGM | **Wanagama** | 5.79 | 273 | Pn | Pn | 18 34 24.4 | 0.0 |
| UGM | **Wanagama** | 5.79 | 273 | P | Pn | 18 34 27.1 | +2.7 |
| MMRI | **Maumere** | 5.83 | 95 | Pn | Pn | 18 34 25.8 | +1.0 |
| SOEI | **Soe** | 7.96 | 102 | Pn | Pn | 18 34 54.1 | -0.1 |
| MBWA | **Marble Bar** | 13.28 | 166 | Pn | Pn | 18 36 05.8 | -1.2 |
| FITZ | **Fitzroy Crossi** | 13.34 | 138 | Pn | Pn | 18 36 06.2 | -1.6 |
| KNRA | **Kununurra** | 14.21 | 123 | Pn | Pn | 18 36 20.7 | +0.9 |
| GIRL | **Giralia** | 14.50 | 188 | Pn | Pn | 18 36 21.3 | -2.4 |
| MTN | **Manton Dam** | 15.23 | 109 | Pn | Pn | 18 36 32.2 | -1.4 |
| MTN | | | | IAmb | IAmb | 18 36 38.3 | |
| | comp=Z,23nm,1.2s | | | | | | |
| MORW | **Morawa** | 20.75 | 181 | P | P | 18 37 38.3 | -1.1 |
| WB0 | **Warramunga Arr** | 20.90 | 125 | P | P | 18 37 40.8 | -0.3 |
| WB0 | | | | IAmb | IAmb | 18 37 41.9 | |
| | comp=Z,16nm,1.2s | | | | | | |
| WRA | **Warramunga Arr** | 20.95 | 126 | P | P | 18 37 41.1 | -0.5 |
| WRA | **Warramunga Arr** | 20.95 | 126 | P | P | 18 37 41.5 | -0.1 |
| | comp=Z,3.6nm,0.7s,baz=301,slow=12,SNR=28 | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| WRAB | **Tennant Creek** | 20.95 | 126 | P | P | 18 37 42.0 | +0.4 |
| WRAB | | | | IAmb | IAmb | 18 37 45.3 | |
| | comp=Z,8.4nm,0.6s | | | | | | |
| WB2 | **Warramunga Arr** | 20.96 | 126 | P | P | 18 37 42.0 | +0.3 |
| WB2 | | | | IAmb | IAmb | 18 37 51.2 | |
| | comp=Z,26nm,1.5s | | | | | | |
| WR0 | **Warramunga Arr** | 21.12 | 125 | P | P | 18 37 43.7 | +0.3 |
| WR0 | | | | IAmb | IAmb | 18 37 51.0 | |
| | comp=Z,16nm,1.1s | | | | | | |
| AS31 | **Alice Springs** | 22.77 | 134 | P | P | 18 38 01.1 | -0.1 |
| ASAR | **Alice Springs** | 22.77 | 134 | P | P | 18 38 01.7 | +0.5 |
| ASAR | **Alice Springs** | 22.77 | 134 | P | P | 18 38 01.4 | +0.2 |
| | comp=Z,2.5nm,0.5s,baz=309,slow=8.7,SNR=30 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| FORT | **Forrest** | 24.97 | 156 | P | P | 18 38 23.2 | +1.0 |
| COEN | **Coen** | 26.91 | 105 | P | P | 18 38 40.3 | +0.4 |
| CMAR | **Chiang Mai Arr** | 31.59 | 327 | P | P | 18 39 22.0 | +0.6 |
| | comp=Z,0.3nm,0.3s,baz=146,slow=6.6,SNR=1.1 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| STKA | **Stephens Creek** | 33.24 | 139 | P | P | 18 39 36.0 | +0.2 |
| | comp=Z,2.7nm,0.8s,baz=337,slow=13,SNR=1.0 | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| USRK | **Ussuriysk Ar.** | 54.05 | 14 | P | P | 18 42 23.4 | +0.4 |
| | comp=Z,2.1nm,0.6s,baz=197,slow=7.8,SNR=6.9 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| SONM | **Songino Array** | 56.49 | 352 | P | P | 18 42 40.9 | +0.2 |
| | comp=Z,1.3nm,0.8s,baz=177,slow=7.2,SNR=7.1 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| MK31 | **Makanchi Array** | 62.60 | 334 | P | P | 18 43 23.2 | +0.5 |
| MK31 | | | | IAmb | IAmb | 18 43 42.5 | |
| | comp=Z,2.4nm,1.4s | | | | | | |
| MKAR | **Makanchi Array** | 62.60 | 334 | P | P | 18 43 23.4 | +0.7 |
| MKAR | **Makanchi Array** | 62.60 | 334 | P | P | 18 43 23.0 | +0.3 |
| | comp=Z,0.5nm,0.7s,baz=152,slow=8.1,SNR=5.3 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| KURBB | **Kurchatov Arra** | 67.13 | 335 | P | P | 18 43 51.5 | -0.6 |
| | comp=Z,0.2nm,0.3s,baz=141,slow=6.0,SNR=1.9 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| ZAA0 | **Zalesovo Array** | 67.41 | 340 | P | P | 18 43 56.4 | +2.6 |
| ZAA0 | | | | IAmb | IAmb | 18 43 57.5 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| ZALV | **Zalesovo Beam** | 67.41 | 340 | P | P | 18 43 53.7 | -0.1 |
| ZALV | **Zalesovo Beam** | 67.41 | 340 | P | P | 18 43 53.0 | -0.8 |
| | comp=Z,0.8nm,0.5s,baz=138,slow=6.3,SNR=3.8 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| VNDA | **Vanda** | 73.17 | 171 | P | P | 18 44 29.8 | +0.9 |
| VNDA | **Vanda** | 73.17 | 171 | P | P | 18 44 30.1 | +1.3 |
| | comp=Z,0.3nm,0.6s,baz=323,slow=8.2,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| ABKAR | **Akbulak array** | 75.43 | 326 | P | P | 18 44 41.1 | -1.3 |
| QSPA | **South Pole Qui** | 81.78 | 180 | P | P | 18 45 17.6 | +0.3 |
| QSPA | | | | IAmb | IAmb | 18 45 43.1 | |
| | comp=Z,2.4nm,1.2s | | | | | | |
| QSPA | **South Pole Qui** | 81.78 | 180 | P | P | 18 45 17.6 | +0.3 |
| | comp=Z,0.8nm,0.7s,baz=268,slow=1.0,SNR=1.4 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |

*IDC **06** 18:36:54.3±1.1,8°.18S×116°.43E,h0km,mb3.9/7, mbtmp3.9/8,ML3.4/1,Error ellipse: s-maj=35.9km s-min=19.0km az=63.0*
*NEIC **06** 18:36:55.8±1.7,8°.24S±0°.07×116°.34E±0°.06,h10km±2km, mb4.2/10,Error ellipse: s-maj=15.1km s-min=4.1km az=137.0*
*DJA **06** 18:36:56.9±0.3,8°S±5°×11°6E±°,h10km,M4.3/12,mb4.6/3, MLv4.2/12*

**ISC 06 18:36:55.6±0.6,8°.25S±0°.07×116°.38E±0°.04,h10km,n36, σ1§01/38,mb3.9/7,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | 0.70 | 134 | P | Pn | 18 37 11.6 | +0.1 |
| SRBI | **Singaraja** | 1.16 | 278 | P | Pb | 18 37 17.2 | -0.6 |
| DNP | **Denpasar** | 1.23 | 250 | P | Pg | 18 37 20.0 | +0.8 |
| PLAI | **Plampang** | 1.50 | 113 | P | Pg | 18 37 24.5 | +0.1 |
| JAGI | **Jajag, Banyuwa** | 2.21 | 264 | P | Pn | 18 37 30.9 | -1.4 |
| JAGI | **Jajag, Banyuwa** | 2.21 | 264 | P | Pn | 18 37 31.6 | -0.8 |
| PWJI | **Pagerwojo** | 4.53 | 273 | P | Pn | 18 38 05.0 | +0.7 |
| BSSI | **Bau Bau, Buton** | 4.59 | 63 | P | Pn | 18 38 04.5 | -0.6 |
| KAPI | **Kappang** | 4.64 | 46 | Pn | Pn | 18 38 04.9 | -0.9 |
| KAPI | | | | | Sn | 18 39 00.3 | +0.5 |
| KAPI | **Kappang** | 4.64 | 46 | Pn | Pn | 18 38 05.5 | -0.3 |
| | 1.6nm,0.3s,baz=175,slow=9.0,SNR=1.5 | | | | | | |
| KAPI | | | | Sn | Sn | 18 38 57.7 | -2.1 |
| | 4.8nm,0.3s,baz=284,slow=22,SNR=6.5 | | | | | | |
| | 5.0nm,0.3s | | | | | | |
| BNSI | **Bone** | 5.33 | 44 | P | Pn | 18 38 16.5 | +1.3 |
| SPSI | **Sidrap Palu** | 5.43 | 39 | P | Pn | 18 38 19.2 | +2.6 |
| | 21nm,0.7s,0.1nm | | | | | | |
| UGM | **Wanagama** | 5.80 | 273 | Pn | Pn | 18 38 21.3 | -0.5 |
| UGM | **Wanagama** | 5.80 | 273 | P | Pn | 18 38 23.3 | +1.5 |
| | 158nm,1.8s | | | | | | |
| BATI | **Baumata** | 7.45 | 106 | P | Pn | 18 38 46.9 | +2.4 |
| SOEI | **Soe** | 7.94 | 101 | Pn | Pn | 18 38 51.3 | +0.1 |
| MBWA | **Marble Bar** | 13.24 | 166 | Pn | Pn | 18 40 02.2 | -1.5 |
| GIRL | **Giralia** | 14.46 | 188 | Pn | Pn | 18 40 18.8 | -1.6 |
| MTN | **Manton Dam** | 15.21 | 109 | Pn | Pn | 18 40 29.9 | -0.7 |
| MTN | | | | IAmb | IAmb | 18 40 32.9 | |
| | comp=Z,33nm,1.4s | | | | | | |
| WB0 | **Warramunga Arr** | 20.87 | 125 | P | P | 18 41 38.4 | +0.4 |
| WB0 | | | | IAmb | IAmb | 18 41 39.0 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| WRA | **Warramunga Arr** | 20.92 | 126 | P | P | 18 41 38.1 | -0.4 |
| WRA | **Warramunga Arr** | 20.92 | 126 | P | P | 18 41 38.5 | 0.0 |
| | comp=Z,4.9nm,0.6s,baz=301,slow=12,SNR=28 | | | | | | |
| | comp=Z,4.9nm,0.6s | | | | | | |
| WRAB | **Tennant Creek** | 20.92 | 126 | P | P | 18 41 38.9 | +0.3 |
| WRAB | | | | IAmb | IAmb | 18 41 39.8 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| WB2 | **Warramunga Arr** | 20.93 | 126 | P | P | 18 41 38.8 | +0.1 |
| WB2 | | | | IAmb | IAmb | 18 41 39.8 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| WR0 | **Warramunga Arr** | 21.09 | 125 | P | P | 18 41 40.7 | +0.4 |
| WR0 | | | | IAmb | IAmb | 18 42 07.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| AS31 | **Alice Springs** | 22.74 | 134 | P | P | 18 41 57.7 | -0.4 |
| ASAR | **Alice Springs** | 22.74 | 134 | P | P | 18 41 57.4 | -0.6 |
| ASAR | **Alice Springs** | 22.74 | 134 | P | P | 18 41 58.4 | +0.3 |
| | comp=Z,2.4nm,0.5s,baz=310,slow=8.7,SNR=25 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| FORT | **Forrest** | 24.94 | 156 | P | P | 18 42 20.1 | +1.0 |
| COEN | **Coen** | 26.89 | 105 | P | P | 18 42 37.5 | +0.6 |
| STKA | **Stephens Creek** | 33.21 | 139 | P | P | 18 43 33.4 | +0.6 |
| STKA | | | | IAmb | IAmb | 18 43 52.3 | |
| | comp=Z,5.4nm,1.5s | | | | | | |
| STKA | **Stephens Creek** | 33.21 | 139 | P | P | 18 43 33.1 | +0.3 |
| | comp=Z,5.2nm,1.0s,baz=322,slow=12,SNR=3.0 | | | | | | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| SONM | **Songino Array** | 56.53 | 352 | P | P | 18 46 38.0 | -0.2 |
| | comp=Z,1.1nm,1.0s,baz=190,slow=7.3,SNR=3.5 | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | |
| MKAR | **Makanchi Array** | 62.63 | 334 | P | P | 18 47 20.2 | 0.0 |
| | comp=Z,0.7nm,0.9s,baz=141,slow=7.1,SNR=3.9 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| ZALV | **Zalesovo Beam** | 67.44 | 340 | P | P | 18 47 51.5 | +0.2 |
| | comp=Z,0.4nm,0.4s,baz=143,slow=8.1,SNR=2.1 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| VNDA | **Vanda** | 73.14 | 171 | P | P | 18 48 26.5 | +0.6 |
| | comp=Z,0.4nm,0.6s,baz=297,slow=6.8,SNR=3.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |

**IDC 06 18:37:26.1±4.7,3°.23S×150°.44E,h0km,mb3.5/3, mbtmp3.5/3,Error ellipse: s-maj=164.2km s-min=37.0km az=105.0,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | **Warramunga Arr** | 22.86 | 222 | P | P | 18 42 30.8 | -0.5 |
| | 0.6nm,0.5s,baz=47,slow=10,SNR=3.5 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | 25.85 | 217 | P | P | 18 42 59.9 | +0.3 |
| | 0.5nm,0.6s,baz=50,slow=8.9,SNR=2.1 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| MKAR | **Makanchi Array** | 77.60 | 319 | P | P | 18 49 24.3 | 0.0 |
| | 0.6nm,0.9s,baz=103,slow=6.5,SNR=3.1 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| TORD | **Torodi Ar. Bea** | 147.57 | 290 | PKPbc | PKPbc | 18 57 12.8 | -0.7 |
| | 0.7nm,0.9s,baz=56,slow=3.7,SNR=3.2 | | | | | | |

**DJA 06 18:43:06.4±0.4,8°S±5°×11°6E±°,h10km,M4.2/7,mb4.8/1, MLv3.9/7,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | 0.82 | 138 | P | Pg | 18 43 21.8 | -0.5 |
| TWSI | | | | S | Sb | 18 43 33.9 | 0.0 |
| SRBI | **Singaraja** | 1.11 | 272 | P | Pb | 18 43 26.9 | -0.7 |
| DNP | **Denpasar** | 1.24 | 243 | P | Pg | 18 43 30.5 | +0.3 |
| PLAI | **Plampang** | 1.59 | 116 | P | Pn | 18 43 35.1 | +0.4 |
| JAGI | **Jajag, Banyuwa** | 2.18 | 261 | P | Pn | 18 43 41.9 | -0.9 |
| PWJI | **Pagerwojo** | 4.48 | 271 | P | Pn | 18 44 14.9 | +0.5 |
| BSSI | **Bau Bau, Buton** | 4.57 | 65 | P | Pn | 18 44 15.7 | 0.0 |
| UGM | **Wanagama** | 5.75 | 272 | P | Pn | 18 44 30.5 | -1.5 |

*IDC **06** 18:48:46.8±0.5,57°.89S×25°.40W,h0km,mb4.4/12, mbtmp4.4/13,ML4.2/1,MS3.8/3,Error ellipse: s-maj=21.4km s-min=15.2km az=59.0*
*NEIC **06** 18:48:55±1.7,58°.0S±0°.1×25°.3W±0°.2,h67km±6km, mb4.7/30,Error ellipse: s-maj=15.3km s-min=14.6km az=92.0*

**ISC 06 18:48:53.3±0.4,58°.08S±0°.06×25°.19W±0°.08,h50km,n241, σ1§34/228,mb4.6/21,7C-2D,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HOPE | **Hope Point** | 7.37 | 296 | Pn | Pn | 18 50 39.9 | +1.8 |
| VNA1 | **Neumayer--Stat** | 14.49 | 157 | ⇑P | Pn | 18 52 17.7 | +2.5 |
| | comp=Z,7.2nm,0.3s | | | | | | |
| VNA1 | | | | ⇓S | Sn | 18 54 49.8 | -4.3 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| VNA3 | **Neumayer Olymp** | 14.70 | 160 | ⇑P | Pn | 18 52 19.7 | +1.8 |
| | comp=Z,5.5nm,0.2s | | | | | | |
| VNA3 | | | | ⇓S | Sn | 18 54 51.8 | -7.5 |
| | comp=Z,1.8nm,0.3s | | | | | | |
| VNA2 | **Neumayer--Watz** | 14.89 | 157 | ⇑P | Pn | 18 52 22.2 | +1.9 |
| | comp=Z,6.6nm,0.3s,baz=321,slow=14 | | | | | | |
| VNA2 | | | | ⇑S | Sn | 18 54 59.7 | -4.1 |
| | comp=Z,0.5nm,0.3s,baz=318,slow=24 | | | | | | |
| SNAA | **Sanae** | 16.43 | 155 | P | P | 18 52 42.5 | +0.2 |
| SNAA | **Sanae** | 16.43 | 155 | ⇑P | P | 18 52 43.5 | +1.3 |
| | comp=Z,149nm,0.4s | | | | | | |
| SNAA | | | | ⇑S | Sn | 18 55 34.9 | -6.4 |
| | comp=Z,28nm,0.4s | | | | | | |
| SNAA | **Sanae** | 16.43 | 155 | Pn | P | 18 52 43.0 | +0.8 |
| | comp=Z,0.8nm,0.3s,baz=316,slow=16,SNR=10 | | | | | | |
| SNAA | | | | Sn | Sn | 18 55 33.8 | -7.5 |
| | comp=Z,0.1nm,0.3s,baz=312,slow=9.3,SNR=2.2 | | | | | | |
| | comp=Z,2.9nm,0.3s | | | | | | |
| TROLL | **Troll, Antarti** | 17.93 | 152 | ⇑P | P | 18 52 59.3 | +0.5 |
| | comp=Z,328nm,0.6s | | | | | | |
| PMSA | **Palmer Station** | 19.48 | 234 | | Pn | 18 53 18.2 | +0.9 |
| PMSA | | | | IAmb | IAmb | 18 53 24.9 | |
| | comp=Z,24nm,0.9s | | | | | | |
| PMSA | **Palmer Station** | 19.48 | 234 | LR | LR | 18 59 45.6 | |
| | comp=Z,236nm,18.2s,baz=104,slow=34 | | | | | | |
| BELA | **Belgrano 2** | 20.14 | 186 | P | P | 18 53 23.7 | +1.0 |
| BELA | | | | IAmb | IAmb | 18 53 35.8 | |
| | comp=Z,13nm,0.5s | | | | | | |
| SMAI | **San Martin Ant** | 21.00 | 224 | P | P | 18 53 32.5 | +0.5 |
| MG05 | **Puerto Natales** | 27.48 | 263 | P | P | 18 54 34.3 | -0.1 |
| GO09 | **Cerro Castillo** | 27.61 | 264 | P | P | 18 54 37.5 | +1.9 |
| GO09 | | | | IAmb | IAmb | 18 55 04.1 | |
| | comp=Z,36nm,1.4s | | | | | | |
| GO08 | **Villa O'Higgin** | 29.34 | 268 | P | P | 18 54 50.9 | -0.1 |
| QSPA | **South Pole Qui** | 32.16 | 180 | P | P | 18 55 17.5 | +1.6 |
| QSPA | | | | IAmb | IAmb | 18 55 19.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| QSPA | **South Pole Qui** | 32.16 | 180 | P | P | 18 55 18.4 | +2.5 |
| | comp=Z,8.3nm,1.0s,baz=208,slow=5.0,SNR=17 | | | | | | |
| | comp=Z,8.3nm,1.0s | | | | | | |
| PLTB | **Pedras Altas** | 32.67 | 311 | | P | 18 55 18.6 | -1.9 |
| PLTB | | | | IAmb | IAmb | 18 55 20.5 | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| PLTB | **Pedras Altas** | 32.67 | 311 | eP | P | 18 55 18.5 | -2.0 |
| PLCA | **Paso Flores** | 33.45 | 281 | P | P | 18 55 26.0 | -1.3 |
| PLCA | **Paso Flores** | 33.45 | 281 | P | P | 18 55 26.3 | -1.1 |
| | comp=Z,6.7nm,1.0s,baz=152,slow=8.1,SNR=7.9 | | | | | | |
| PLCA | | | | LR | LR | 19 09 25.2 | |
| | comp=Z,84nm,18.0s,baz=145,slow=37 | | | | | | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| PLCA | **Paso Flores** | 33.45 | 281 | eP | P | 18 55 25.8 | -1.6 |
| RODS | **Rosario do Sul** | 34.56 | 310 | eP | P | 18 55 35.6 | -1.3 |
| PSAL | **Palomas, Salto** | 34.92 | 307 | eP | P | 18 55 39.3 | -0.6 |
| CRSM | **Crissiumal (Br** | 36.64 | 314 | eP | P | 18 55 52.6 | -2.2 |
| PET01 | **Itanhaem-SP** | 37.27 | 325 | eP | P | 18 55 59.4 | -0.8 |
| PARB | **Paraibuna** | 37.69 | 328 | eP | P | 18 56 04.2 | +0.4 |
| MAW | **Mawson** | 37.87 | 141 | P | P | 18 56 06.5 | +1.8 |
| | comp=Z,0.6nm,0.3s,baz=207,slow=11,SNR=1.4 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| SPB | **Sao Paulo** | 37.98 | 326 | P | P | 18 56 05.3 | -0.8 |
| SPB | **Sao Paulo** | 37.98 | 326 | eP | P | 18 56 06.2 | +0.1 |
| DUB01 | **Friburgo-RJ** | 38.06 | 334 | eP | P | 18 56 08.0 | +1.1 |
| VAO | **Valinhos** | 38.40 | 327 | P | P | 18 56 10.4 | +0.7 |
| VAO | **Valinhos** | 38.40 | 327 | eP | P | 18 56 09.7 | -0.1 |
| PTGB | **Pitanga** | 38.44 | 319 | eP | P | 18 56 10.2 | 0.0 |
| CPUP | **Villa Florida** | 38.97 | 311 | P | P | 18 56 12.2 | -2.2 |
| CPUP | **Villa Florida** | 38.97 | 311 | P | P | 18 56 12.4 | -2.0 |
| | comp=Z,4.1nm,0.9s,baz=157,slow=11,SNR=7.6 | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| CPUP | **Villa Florida** | 38.97 | 311 | eP | P | 18 56 12.8 | -1.6 |
| MT09 | **Talagante** | 38.99 | 288 | P | P | 18 56 14.3 | -0.4 |
| MT09 | | | | IAmb | IAmb | 18 56 31.2 | |
| | comp=Z,17nm,1.3s | | | | | | |
| LDASE | **Londrina, Braz** | 39.34 | 321 | eP | P | 18 56 17.2 | -0.4 |
| MT02 | **Curacav** | 39.47 | 289 | P | P | 18 56 17.5 | -1.1 |
| MT02 | | | | IAmb | IAmb | 18 56 40.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| BSCB | **Bom Sucesso** | 39.69 | 331 | eP | P | 18 56 20.9 | +0.3 |
| RIB01 | **Linhares ES** | 40.30 | 337 | eP | P | 18 56 26.0 | +0.5 |
| SJMB | **Sao Joao De Ma** | 41.06 | 337 | eP | P | 18 56 31.6 | -0.2 |
| DIAM | **Diamantina, MG** | 42.01 | 333 | eP | P | 18 56 40.0 | +0.3 |
| PMNB | **Patos De Minas** | 42.48 | 329 | eP | P | 18 56 43.6 | +0.1 |
| GUA01 | **Guaratinga, BA** | 42.84 | 339 | eP | P | 18 56 46.2 | -0.1 |
| MURT | **Porto Murtinho** | 43.28 | 313 | eP | P | 18 56 48.3 | -1.5 |
| IPMB | **Ipameri, GO** | 43.51 | 327 | eP | P | 18 56 51.7 | -0.1 |
| SBA | **Scott Base** | 44.12 | 184 | P | P | 18 56 58.7 | +2.8 |
| SBA | | | | IAmb | IAmb | 18 57 00.5 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| VNDA | **Vanda** | 44.58 | 182 | P | P | 18 57 02.2 | +2.5 |
| VNDA | | | | IAmb | IAmb | 18 57 03.7 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| VNDA | **Vanda** | 44.58 | 182 | P | P | 18 57 02.3 | +2.6 |
| | comp=Z,6.9nm,0.9s,baz=184,slow=7.5,SNR=37 | | | | | | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| JANB | **Januaria** | 45.28 | 334 | eP | P | 18 57 05.7 | -0.3 |
| BOSA | **Boshof** | 45.48 | 72 | P | P | 18 57 08.4 | +0.9 |
| BOSA | **Boshof** | 45.48 | 72 | P | P | 18 57 09.2 | +1.6 |
| | comp=Z,2.5nm,0.8s,baz=195,slow=12,SNR=3.2 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| BDFB | **Brasilia** | 45.67 | 328 | P | P | 18 57 09.0 | -0.1 |
| BDFB | | | | IAmb | IAmb | 18 57 10.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| BDFB | **Brasilia** | 45.67 | 328 | P | P | 18 57 09.0 | -0.1 |
| | comp=Z,9.9nm,0.8s,baz=137,slow=5.1,SNR=11 | | | | | | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| H04S2 | **CROZET ISLANDS** | 45.76 | 111 | T | T | 19 47 47.1 | |
| | baz=226,slow=75,SNR=29 | | | | | | |
| H04S3 | **CROZET ISLANDS** | 45.77 | 111 | T | T | 19 47 48.3 | |
| | baz=226,slow=75,SNR=26 | | | | | | |
| H04S1 | **CROZET ISLANDS** | 45.77 | 111 | T | T | 19 47 48.2 | |
| | baz=226,slow=75,SNR=28 | | | | | | |
| ARAG | **Araguaiana, MT** | 46.74 | 324 | eP | P | 18 57 17.2 | -0.1 |
| LVC | **Limon Verde** | 47.27 | 300 | P | P | 18 57 20.0 | -1.8 |
| LVC | | | | IAmb | IAmb | 18 58 01.6 | |
| | comp=Z,20nm,1.5s | | | | | | |
| LVC | **Limon Verde** | 47.27 | 300 | P | P | 18 57 21.3 | -0.6 |
| | comp=Z,3.1nm,0.7s,baz=124,slow=11,SNR=2.2 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| SALV | **Santo Antonio** | 47.85 | 319 | eP | P | 18 57 25.7 | -0.3 |
| NBLA | **Lagarto - SE** | 47.97 | 343 | eP | P | 18 57 26.6 | -0.2 |
| SDBA | **SAO DESIDERIO** | 47.98 | 334 | eP | P | 18 57 27.0 | 0.0 |
| BBSD | **Serra de San D** | 48.50 | 312 | eP | P | 18 57 29.4 | -1.6 |
| PTLB | **Pontes e Lacer** | 49.52 | 315 | P | P | 18 57 37.6 | -1.2 |
| PTLB | | | | IAmb | IAmb | 18 57 39.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| PTLB | **Pontes e Lacer** | 49.52 | 315 | eP | P | 18 57 37.7 | -1.1 |
| H10S2 | **ASCENSION HYDR** | 49.68 | 14 | T | T | 19 52 14.8 | |
| | baz=33,slow=74,SNR=43 | | | | | | |
| H10S3 | **ASCENSION HYDR** | 49.68 | 14 | T | T | 19 52 12.5 | |
| | baz=187,slow=74,SNR=55 | | | | | | |
| SNDB | **Serra Nova Dou** | 50.10 | 326 | eP | P | 18 57 43.4 | +0.2 |
| H10N1 | **ASCENSION HYDR** | 50.80 | 14 | T | T | 19 53 34.5 | |
| | baz=190,slow=72,SNR=9.3 | | | | | | |
| H10N3 | **ASCENSION HYDR** | 50.80 | 14 | T | T | 19 53 36.4 | |
| | baz=190,slow=72,SNR=34 | | | | | | |
| H10N2 | **ASCENSION HYDR** | 50.81 | 14 | T | T | 19 53 38.8 | |
| | baz=190,slow=72,SNR=23 | | | | | | |
| SMTB | **Santa Maria do** | 52.05 | 331 | eP | P | 18 57 58.2 | +0.3 |
| PDRB | **Porto dos Gac** | 52.19 | 320 | eP | P | 18 57 57.2 | -1.7 |
| VILB | **Vilhena** | 52.20 | 315 | P | P | 18 57 57.7 | -1.4 |
| LPAZ | **La Paz** | 52.44 | 304 | P | P | 18 57 59.7 | -1.7 |
| LPAZ | **La Paz** | 52.44 | 304 | P | P | 18 57 60.0 | -1.5 |
| | comp=Z,3.2nm,0.7s,baz=158,slow=4.8,SNR=15 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| LPAZ | **La Paz** | 52.44 | 304 | eP | P | 18 57 59.8 | -1.7 |
| CLDB | **Colider** | 52.56 | 321 | eP | P | 18 58 00.9 | -0.8 |
| PRPB | **Parauapebas** | 55.20 | 330 | eP | P | 18 58 21.4 | +0.4 |
| NPGB | **Novo Progresso** | 56.01 | 323 | eP | P | 18 58 25.9 | -0.9 |
| SAML | **Samuel** | 57.01 | 314 | P | P | 18 58 31.9 | -1.9 |
| SAML | **Samuel** | 57.01 | 314 | eP | P | 18 58 31.0 | -2.8 |
| ETMB | **Extrema** | 57.42 | 310 | P | P | 18 58 34.5 | -2.2 |
| ETMB | | | | IAmb | IAmb | 18 58 37.0 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| ETMB | **Extrema** | 57.42 | 310 | eP | P | 18 58 37.0 | +0.3 |
| TMAB | **Tom-Au,PA,Br** | 58.42 | 333 | eP | P | 18 58 45.0 | +1.3 |
| ITTB | **Itaituba** | 58.65 | 324 | eP | P | 18 58 44.3 | -1.0 |
| MAL2 | **Monte Alegre,** | 60.40 | 326 | P | P | 18 58 56.7 | -0.6 |
| MCPB | **Macapa, AP** | 61.37 | 329 | eP | P | 18 59 04.3 | +0.4 |
| TEFE | **Tefe** | 62.55 | 314 | eP | P | 18 59 11.0 | -0.8 |
| ATAH | **Atahualpa** | 65.15 | 299 | LR | LR | 19 30 43.8 | |
| | comp=Z,178nm,19.3s,baz=251,slow=39 | | | | | | |
| BOAV | **Boa Vista** | 66.56 | 321 | P | P | 18 59 36.4 | -1.6 |
| DBIC | **Dimbokro** | 66.61 | 22 | P | P | 18 59 37.7 | -0.5 |
| DBIC | | | | IAmb | IAmb | 18 59 39.6 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| DBIC | **Dimbokro** | 66.61 | 22 | P | P | 18 59 37.9 | -0.3 |
| | comp=Z,7.0nm,0.8s,baz=176,slow=6.3,SNR=8.5 | | | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| OTAV | **Otavalo** | 71.69 | 302 | eP | P | 19 00 10.4 | +0.1 |
| TORD | **Torodi Ar. Bea** | 74.33 | 27 | P | P | 19 00 25.7 | +0.4 |
| | comp=Z,6.0nm,0.8s,baz=199,slow=5.5,SNR=31 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| RUSC | **La Rusia** | 74.46 | 310 | P | P | 19 00 23.7 | -3.0 |
| RUSC | | | | IAmb | IAmb | 19 00 26.6 | |
| | comp=Z,12nm,1.2s | | | | | | |
| BAUV | **El Baul** | 75.29 | 316 | P | P | 19 00 28.0 | -2.9 |
| BAUV | | | | IAmb | IAmb | 19 00 31.0 | |
| | comp=Z,14nm,1.0s | | | | | | |
| ASAR | **Alice Springs** | 96.71 | 161 | P | P | 19 02 18.6 | +0.4 |
| ASAR | **Alice Springs** | 96.71 | 161 | P | P | 19 02 18.2 | -0.1 |
| | comp=Z,1.1nm,0.8s,baz=182,slow=4.0,SNR=8.0 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| PDAR | **Pinedale Array** | 122.33 | 300 | PKP | PKPdf | 19 07 41.2 | -0.9 |
| | comp=Z,0.5nm,0.5s,baz=144,slow=3.2,SNR=3.6 | | | | | | |
| ULM | **Lac du Bonnet** | 122.47 | 314 | PKP | PKPdf | 19 07 41.0 | -0.8 |
| | comp=Z,1.9nm,0.6s,baz=127,slow=10,SNR=4.5 | | | | | | |
| NVAR | **Mina Array Bea** | 123.17 | 290 | PKP | PKPdf | 19 07 43.2 | -0.6 |
| | comp=Z,1.0nm,0.6s,baz=117,slow=3.4,SNR=8.8 | | | | | | |
| CMAR | **Chiang Mai Arr** | 123.33 | 110 | PKP | PKPdf | 19 07 44.5 | 0.0 |
| | comp=Z,1.8nm,0.7s,baz=224,slow=3.8,SNR=9.1 | | | | | | |
| FINES | **FINESS Array B** | 125.68 | 27 | PKP | PKPdf | 19 07 46.9 | -0.6 |
| | comp=Z,2.9nm,0.8s,baz=205,slow=2.9,SNR=8.0 | | | | | | |
| ARCES | **ARCESS Array B** | 132.43 | 22 | PKP | PKiKP | 19 08 02.9 | +1.6 |
| | comp=Z,1.8nm,0.8s,baz=198,slow=1.7,SNR=7.1 | | | | | | |
| MKAR | **Makanchi Array** | 136.49 | 72 | PKP | PKiKP | 19 08 10.2 | -0.1 |
| | comp=Z,0.5nm,0.6s,baz=228,slow=3.7,SNR=4.5 | | | | | | |
| KURBB

| | | | | | | |
|---|---|---|---|---|---|---|
| EPYK | Eagle Plains | 148.64 314 | P | PKPbc | 19 08 33.4 | +0.2 |
| | baz=108 | | | | | |
| G30M | tAoh Zraii Nji | 148.64 315 | | PKPbc | 19 08 32.5 | -0.7 |
| G30M | tAoh Zraii Nji | 148.64 315 | P | PKiKP | 19 08 34.2 | -0.5 |
| | baz=108 | | | | | |
| F30M | Barrier River | 148.67 316 | P | PKPbc | 19 08 33.1 | -0.1 |
| | baz=107 | | | | | |
| I29M | Ogilvie Camp, | 148.94 312 | | PKPbc | 19 08 32.4 | -1.6 |
| I29M | Ogilvie Camp, | 148.94 312 | P | PKPbc | 19 08 33.1 | -0.8 |
| | baz=109 | | | | | |
| H29M | Whitestone | 149.23 313 | P | PKPbc | 19 08 34.1 | -0.5 |
| | baz=107 | | | | | |
| G29M | Pine Creek | 149.30 315 | P | PKPbc | 19 08 34.7 | -0.1 |
| | baz=106 | | | | | |
| CRQE | Cirque | 149.33 302 | P | PKPbc | 19 08 35.5 | +0.3 |
| | baz=113 | | | | | |
| M27K | Edge Creek, AK | 149.40 305 | P | PKPbc | 19 08 35.6 | +0.3 |
| | baz=111 | | | | | |
| MCARA | McCarthy VSAT | 149.54 303 | P | PKPbc | 19 08 35.8 | +0.3 |
| | baz=112 | | | | | |
| I28M | Miner Creek | 149.62 311 | P | PKPbc | 19 08 36.3 | +0.5 |
| | baz=107 | | | | | |
| L27K | Beaver Creek, | 149.63 306 | P | PKPbc | 19 08 36.0 | +0.3 |
| | baz=110 | | | | | |
| E29M | Blow River | 149.65 317 | P | PKPbc | 19 08 36.1 | +0.6 |
| | baz=104 | | | | | |
| SONM | Songino Array | 149.72 88 | PKPbc | PKiKP | 19 08 37.2 | -0.4 |
| | comp=Z,5.9nm,0.7s,baz=221,slow=3.4,SNR=27 | | | | | |
| M26K | Nabesna, AK | 149.90 305 | P | PKPbc | 19 08 36.3 | -0.1 |
| | baz=110 | | | | | |
| EGAK | Eagle | 149.91 310 | P | PKPbc | 19 08 36.3 | 0.0 |
| | baz=108 | | | | | |
| BMRM | Bremner River | 150.10 302 | P | PKiKP | 19 08 38.3 | +0.5 |
| | baz=112 | | | | | |
| F28M | Old Crow | 150.18 316 | P | PKiKP | 19 08 37.9 | +0.1 |
| | baz=104 | | | | | |
| L26K | Log Cabin Wild | 150.27 306 | P | PKiKP | 19 08 38.2 | +0.2 |
| | baz=109 | | | | | |
| E28M | Babbage River | 150.28 318 | P | PKPbc | 19 08 37.4 | +0.2 |
| | baz=102 | | | | | |
| N25K | Chitina, Valde | 150.33 303 | P | PKiKP | 19 08 38.6 | +0.3 |
| | baz=111 | | | | | |
| I27K | Kandik River | 150.33 311 | P | PKPbc | 19 08 37.8 | +0.4 |
| | baz=106 | | | | | |
| H27K | Steamboat Moun | 150.46 313 | P | PKPbc | 19 08 38.0 | +0.4 |
| | baz=105 | | | | | |
| G27K | Doyon Strip | 150.66 314 | P | PKPbc | 19 08 38.4 | +0.3 |
| | baz=104 | | | | | |
| J26L | Joseph Creek | 150.81 309 | P | PKiKP | 19 08 39.1 | -0.1 |
| | baz=106 | | | | | |
| SCRK | Sand Creek | 150.84 308 | P | PKiKP | 19 08 39.6 | +0.3 |
| | baz=107 | | | | | |
| I26K | Coal Creek Min | 150.87 310 | P | PKiKP | 19 08 39.6 | +0.5 |
| | baz=105 | | | | | |
| KLU | Klutina | 150.88 302 | P | PKiKP | 19 08 39.8 | +0.4 |
| | baz=110,SNR=13 | | | | | |
| D27M | Malcolm River | 150.92 319 | P | PKiKP | 19 08 39.5 | +0.2 |
| | baz=100 | | | | | |
| E27K | Coleen River | 150.94 316 | P | PKPbc | 19 08 39.0 | +0.3 |
| | baz=102 | | | | | |
| P23K | Montague Islan | 151.02 299 | P | PKiKP | 19 08 39.9 | +0.3 |
| | baz=112 | | | | | |
| PAX | Paxson | 151.17 305 | P | PKiKP | 19 08 39.9 | -0.1 |
| | baz=108,SNR=12 | | | | | |
| M24K | Tolsona, Glenn | 151.20 303 | P | PKiKP | 19 08 41.0 | +1.0 |
| | baz=109,SNR=8.6 | | | | | |
| G26K | Porcupine Rive | 151.51 314 | P | PKiKP | 19 08 40.4 | 0.0 |
| | baz=102,SNR=21 | | | | | |
| K24K | Donnelly Dome | 151.55 307 | P | PKiKP | 19 08 40.7 | 0.0 |
| | baz=106 | | | | | |
| J25K | Salcha River, | 151.59 308 | P | PKiKP | 19 08 40.8 | 0.0 |
| | baz=105,SNR=11 | | | | | |
| SCM | Sheep Creek Mo | 151.63 302 | P | PKiKP | 19 08 41.6 | +0.6 |
| | baz=109,SNR=7.6 | | | | | |
| PWL | Port Wells | 151.76 300 | P | PKiKP | 19 08 41.5 | +0.3 |
| | baz=110,SNR=12 | | | | | |
| F26K | Sheenjek River | 151.79 315 | P | PKiKP | 19 08 41.6 | +0.5 |
| | baz=100,SNR=25 | | | | | |
| M23K | Glacier View | 151.79 302 | P | PKiKP | 19 08 41.3 | +0.1 |
| | baz=108,SNR=10 | | | | | |
| PRP | Porcupine Dome | 151.88 310 | P | PKPbc | 19 08 41.2 | +0.1 |
| | baz=103 | | | | | |
| C27K | Jago River | 151.94 319 | P | PKiKP | 19 08 41.5 | +0.2 |
| | baz=97,SNR=9.0 | | | | | |
| KNK | Knik Glacier | 152.00 301 | P | PKiKP | 19 08 42.6 | +0.9 |
| | baz=109 | | | | | |
| SEW | Seward | 152.02 298 | P | PKPbc | 19 08 41.5 | +0.2 |
| | baz=110 | | | | | |
| DHY | Denali Highway | 152.03 305 | P | PKiKP | 19 08 42.5 | +0.6 |
| | baz=106,SNR=9.7 | | | | | |
| WAT6 | Susitna Watana | 152.04 304 | P | PKiKP | 19 08 42.0 | +0.1 |
| | baz=107,SNR=22 | | | | | |
| SML | Sawmill | 152.07 302 | P | PKiKP | 19 08 42.1 | +0.3 |
| | baz=108,SNR=7.3 | | | | | |
| HDA | Harding Lake | 152.20 308 | P | PKiKP | 19 08 42.2 | +0.2 |
| | baz=104,SNR=8.6 | | | | | |
| ILAR | Eielson Array | 152.26 308 | PKPbc | PKPbc | 19 08 41.6 | -0.2 |
| | comp=Z,20nm,0.9s,baz=141,slow=2.0,SNR=110 | | | | | |
| F25K | Christian Rive | 152.34 315 | P | PKiKP | 19 08 42.7 | +0.5 |
| | baz=99,SNR=14 | | | | | |
| G25K | Bearman Lake | 152.37 313 | P | PKiKP | 19 08 43.5 | +1.3 |
| | baz=100,SNR=13 | | | | | |
| C26K | Camden Bay | 152.38 320 | P | PKiKP | 19 08 42.9 | +0.7 |
| | baz=96 | | | | | |
| WAT1 | Susitna Watana | 152.47 304 | P | PKiKP | 19 08 43.0 | +0.3 |
| | baz=106 | | | | | |
| RC01 | Rabbit Creek A | 152.48 300 | P | PKiKP | 19 08 43.2 | +0.5 |
| | baz=109 | | | | | |
| BRSE | Bradley Lake S | 152.50 297 | P | PKiKP | 19 08 44.0 | +1.3 |
| | baz=110 | | | | | |
| OHAK | Old Harbor | 152.78 291 | P | PKiKP | 19 08 43.4 | +0.1 |
| | baz=114 | | | | | |
| D25K | Kavik River | 152.84 318 | P | PKiKP | 19 08 43.2 | 0.0 |
| | baz=95,SNR=10 | | | | | |
| M22K | Willow | 152.87 301 | P | PKiKP | 19 08 44.2 | +0.8 |
| | baz=107 | | | | | |
| MCK | McKinley | 152.88 306 | P | PKiKP | 19 08 43.9 | +0.5 |
| | baz=104,SNR=7.5 | | | | | |
| G24K | Hadweenzic Riv | 152.90 312 | P | PKiKP | 19 08 43.9 | +0.5 |
| | baz=100,SNR=15 | | | | | |
| H24K | Noodor Dome | 152.90 310 | P | PKiKP | 19 08 43.8 | +0.3 |
| | baz=101,SNR=8.9 | | | | | |
| SUA | Susitna One | 153.06 300 | P | PKiKP | 19 08 44.5 | +0.5 |
| | baz=107 | | | | | |
| NEA2 | Nenana | 153.14 308 | P | PKPbc | 19 08 43.8 | +0.1 |
| | baz=102,SNR=7.7 | | | | | |
| F24K | Squaw Lake | 153.18 314 | P | PKiKP | 19 08 44.9 | +0.9 |
| | baz=98,SNR=5.5 | | | | | |
| I23K | Minto, Yukon-K | 153.38 309 | P | PKiKP | 19 08 45.5 | +1.2 |
| | baz=101 | | | | | |
| E24K | Your Creek | 153.48 315 | P | PKiKP | 19 08 45.5 | +0.9 |
| | baz=96,SNR=7.0 | | | | | |
| SKT | Skwentna | 153.57 301 | P | PKPbc | 19 08 44.7 | -0.1 |
| | baz=106 | | | | | |
| H23K | Yukon River | 153.57 310 | P | PKiKP | 19 08 45.6 | +0.8 |
| | baz=100,SNR=5.4 | | | | | |
| BPAW | Bear Paw Mtn. | 153.85 306 | P | PKiKP | 19 08 45.6 | +0.2 |
| | baz=102,SNR=9.7 | | | | | |
| G23K | Bananza Creek | 153.90 312 | P | PKiKP | 19 08 46.3 | +0.9 |
| | baz=98,SNR=12 | | | | | |
| MLY | Manley | 153.93 308 | P | PKiKP | 19 08 47.5 | +1.9 |
| | baz=100,SNR=5.8 | | | | | |
| TOLK | Toolik Lake Re | 153.93 317 | P | PKiKP | 19 08 45.9 | +0.4 |
| | baz=94,SNR=15 | | | | | |
| COLD | Coldfoot | 154.03 313 | P | PKPbc | 19 08 45.7 | +0.1 |
| | baz=96 | | | | | |
| M20K | Styx River | 154.27 301 | P | PKPbc | 19 08 46.3 | -0.1 |
| | baz=105 | | | | | |
| H22K | Ishtalitna Cre | 154.33 310 | P | PKiKP | 19 08 47.3 | +0.9 |
| | baz=98 | | | | | |
| N19K | Bonanza Creek | 154.61 298 | P | PKPbc | 19 08 47.1 | -0.1 |
| | baz=106 | | | | | |
| F22K | John River | 154.82 314 | P | PKiKP | 19 08 48.2 | +0.9 |
| | baz=94 | | | | | |
| H21K | Melozitna Rive | 154.88 309 | P | PKiKP | 19 08 48.4 | +0.9 |
| | baz=98 | | | | | |
| K20K | Telida | 155.04 304 | P | PKPdf | 19 08 47.1 | +8.1 |
| | baz=101 | | | | | |
| J20K | Nowinta River | 155.22 306 | P | PKPdf | 19 08 48.7 | +9.5 |
| | baz=100 | | | | | |
| G21K | Allakaket | 155.26 311 | P | PKPdf | 19 08 48.7 | +9.5 |
| | baz=95 | | | | | |
| F21K | Alatna River | 155.31 313 | P | PKPdf | 19 08 49.2 | +10 |
| | baz=94 | | | | | |

*IDC **06** 18:55:15.6±1.2,2°.31N×128°.21E,h0km,mb3.8/7, mbtmp3.8/7,Error ellipse: s-maj=86.0km s-min=17.0km az=65.0*

*DJA **06** 18:55:19.5±0.6,2°N±5°×12°8E±°,h10km,M4.0/8,mb4.1/5, MLv4.0/8*

*NEIC **06** 18:55:21.1±1.4,2°.23N±0°.06×128°.2E±0°.1,h35km±2km, mb4.2/14,Error ellipse: s-maj=21.6km s-min=3.9km az=118.0*

**ISC 06 18:55:20.6±0.7,2°.24N±0°.07×128°.2E±0°.1,h35km,n37, σ1s25/32,mb4.1/15,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.68** | **210** | | **Pn** | **18 55 47.9** | **+0.4** |
| TNTI | | | | Sn | **Sn** | **18 56 08.0** | **+0.3** |
| **TNTI** | **Ternate** | **1.68** | **210** | P | **Pn** | **18 55 47.8** | **+0.3** |
| **GTOI** | **Gorontalo** | **5.43** | **253** | P | **Pn** | **18 56 39.8** | **+0.7** |
| **LUWI** | **Luwuk** | **6.33** | **239** | Pn | **Pn** | **18 56 51.8** | **+0.3** |
| **LUWI** | **Luwuk** | **6.33** | **239** | P | **Pn** | **18 56 53.5** | **+2.0** |
| **FAKI** | **Fak Fak** | **6.53** | **142** | Pn | **Pn** | **18 56 53.0** | **-1.2** |
| **FAKI** | **Fak Fak** | **6.53** | **142** | P | Pn | 18 56 58.7 | +4.5 |
| **TOLI2** | **Tolitoli** | **7.50** | **262** | Pn | **Pn** | **18 57 05.5** | **-2.0** |
| **SBUM** | **Sibu** | **15.97** | **271** | | **Pn** | **18 59 03.7** | **+1.0** |
| **KNRA** | **Kununurra** | **17.81** | **178** | P | **P** | **18 59 25.8** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **20.36** | **187** | P | **P** | **18 59 49.2** | **-5.1** |
| **WB0** | **Warramunga Arr** | **22.70** | **165** | P | **P** | **19 00 19.8** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 19 00 28.7 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.85** | **165** | P | **P** | **19 00 21.3** | **+0.3** |
| | comp=Z,1.1nm,0.9s,baz=336,slow=11,SNR=5.8 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.85** | **165** | P | **P** | **19 00 20.1** | **-1.0** |
| **WR0** | **Warramunga Arr** | **22.92** | **165** | P | **P** | **19 00 22.2** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 19 00 31.3 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **26.34** | **168** | P | **P** | **19 00 54.5** | **+1.0** |
| | comp=Z,0.6nm,0.9s,baz=348,slow=7.9,SNR=6.3 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 04 18.0** | **-1.1** |
| | comp=Z,0.2nm,0.6s,baz=358,slow=2.8,SNR=1.5 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **PHRA** | **Phrae** | **31.82** | **302** | P | **P** | **19 01 43.1** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** | **32.89** | **301** | P | **P** | **19 01 51.6** | **-0.1** |
| | comp=Z,1.1nm,0.8s,baz=119,slow=7.3,SNR=6.4 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **33.05** | **302** | P | **P** | **19 01 53.3** | **+0.2** |
| CHTO | | | | IAmb | IAmb | 19 01 54.3 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **36.23** | **161** | P | **P** | **19 02 21.7** | **+1.3** |
| | comp=Z,2.0nm,0.6s,baz=352,slow=4.4,SNR=3.2 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.02** | **64** | T | T | 19 47 01.4 | |
| | baz=253 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.03** | **64** | T | T | 19 46 50.9 | |
| | baz=253 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.03** | **64** | T | T | 19 46 58.4 | |
| | baz=253 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.60** | **63** | T | T | 19 47 26.7 | |
| | baz=250 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.61** | **62** | T | T | 19 47 27.8 | |
| | baz=250 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.62** | **63** | T | T | 19 47 26.6 | |
| | baz=250 | | | | | | |
| **SHL** | **Shillong** | **41.94** | **307** | P | **P** | **19 03 08.7** | **+0.2** |
| SHL | | | | IAmb | IAmb | 19 03 09.6 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **49.18** | **341** | P | **P** | **19 04 05.8** | **+0.4** |
| | comp=Z,0.8nm,0.8s,baz=152,slow=9.4,SNR=4.4 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **59.61** | **325** | P | **P** | **19 05 20.5** | **-0.6** |
| MK31 | | | | IAmb | IAmb | 19 05 22.2 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.61** | **325** | P | **P** | **19 05 20.9** | **-0.2** |
| **MKAR** | **Makanchi Array** | **59.61** | **325** | P | **P** | **19 05 21.1** | **0.0** |
| | comp=Z,1.9nm,0.7s,baz=120,slow=8.4,SNR=25 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **59.66** | **1** | P | **P** | **19 05 21.4** | **+0.4** |
| **MAKZ** | **Makanchi** | **59.80** | **325** | P | **P** | **19 05 22.4** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 19 05 23.4 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.78** | **327** | P | **P** | **19 05 48.6** | **-0.4** |
| | comp=Z,1.8nm,0.7s,baz=124,slow=6.4,SNR=12 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **65.32** | **317** | P | **P** | **19 05 58.5** | **-0.9** |
| KK31 | | | | IAmb | IAmb | 19 06 10.9 | |
| | comp=Z,2.4nm,1.2s | | | | | | |
| **KKAR** | **Karatay Array** | **65.32** | **317** | P | **P** | **19 05 58.9** | **-0.5** |
| **BRVK** | **Borovoye** | **69.44** | **327** | P | **P** | **19 06 24.9** | **-0.3** |
| BRVK | | | | IAmb | IAmb | 19 06 25.3 | |
| | comp=Z,1.4nm,0.9s | | | | | | |

*NEIC **06** 18:56:54.9±1.1,65°.38N±0°.02×144°.82W±0°.04,h7km±7km, Error ellipse: s-maj=3.2km s-min=2.4km az=154.0*

**AEIC 06 18:56:55.2±1.0,65°.39N±0°.02×144°.79W±0°.05,h5km±6km, ML2.5,ML2.8/**146(NEIC)**,Error ellipse: s-maj=3.3km s-min=2.8km az=169.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRP** | **Porcupine Dome** | **0.33** | **293** | Pg | Pg | 18 57 01.6 | 0.0 |
| PRP | | | | Sg | Sg | 18 57 05.9 | -0.2 |
| PRP | | | | IAML | | 18 57 06.8 | |
| | comp=E,1μm,0.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **0.69** | **96** | | Pg | 18 57 08.1 | -0.3 |
| I26K | | | | IAML | | 18 57 18.0 | |
| | comp=E,293nm,0.5s | | | | | | |
| **I26K** | **Coal Creek Min** | **0.69** | **96** | | Sg | 18 57 17.7 | +0.4 |
| **J25K** | **Salcha River,** | **0.82** | **198** | | Pg | 18 57 10.5 | -0.3 |
| **J25K** | **Salcha River,** | **0.82** | **198** | | Sg | 18 57 20.9 | -0.5 |
| **J25K** | **Salcha River,** | **0.82** | **198** | IAML | | 18 57 21.2 | |
| | comp=E,714nm,0.5s | | | | | | |
| J25K | | | | IAML | | 18 57 21.3 | |
| | comp=N,414nm,0.2s | | | | | | |
| **H25L** | **Birch Creek** | **0.98** | **335** | | Pb | 18 57 14.5 | -0.1 |
| **J26L** | **Joseph Creek** | **1.03** | **149** | | Sg | 18 57 28.2 | -0.1 |
| **J26L** | **Joseph Creek** | **1.03** | **149** | | Pg | 18 57 14.6 | -0.3 |
| **J26L** | **Joseph Creek** | **1.03** | **149** | IAML | | 18 57 31.3 | |
| | comp=E,190nm,0.2s | | | | | | |
| J26L | | | | IAML | | 18 57 31.6 | |
| | comp=N,379nm,0.4s | | | | | | |
| **IL31** | | **1.08** | **236** | | Pg | 18 57 15.2 | -0.7 |
| **ILAR** | **Eielson Array** | **1.08** | **236** | | Pg | 18 57 14.9 | -1.0 |
| **POKR** | **Poker Plat Res** | **1.15** | **257** | | Pg | 18 57 16.3 | -0.8 |
| POKR | | | | IAML | | 18 57 34.1 | |
| | comp=N,194nm,0.4s | | | | | | |
| **FYU** | **Fort Yukon** | **1.20** | **351** | | Pb | 18 57 18.2 | -0.1 |
| FYU | | | | IAML | | 18 57 35.2 | |
| | comp=E,159nm,0.4s | | | | | | |
| FYU | | | | IAML | | 18 57 35.8 | |
| | comp=N,155nm,0.4s | | | | | | |
| **I27K** | **Kandik River** | **1.34** | **79** | | Pn | 18 57 19.6 | -1.0 |
| **HDA** | **Harding Lake** | **1.35** | **224** | | Pn | 18 57 20.2 | -0.5 |
| HDA | | | | IAML | | 18 57 40.0 | |
| | comp=N,208nm,0.2s | | | | | | |
| **H24K** | **Noodor Dome** | **1.36** | **291** | | Sg | 18 57 37.7 | -1.1 |
| **H24K** | **Noodor Dome** | **1.36** | **291** | Pn | Pn | 18 57 20.5 | -0.4 |
| **H24K** | **Noodor Dome** | **1.36** | **291** | IAML | | 18 57 40.2 | |
| | comp=N,237nm,0.6s | | | | | | |
| H24K | | | | IAML | | 18 57 42.4 | |
| | comp=E,172nm,0.4s | | | | | | |
| **COLA** | **College** | **1.39** | **250** | | Pn | 18 57 20.9 | -0.4 |
| **SCRK** | **Sand Creek** | **1.46** | **166** | | Pn | 18 57 22.0 | -0.3 |
| SCRK | | | | IAML | | 18 57 42.9 | |
| | comp=E,136nm,0.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **1.48** | **241** | | Pn | 18 57 21.8 | -0.7 |
| **CCB** | **Clear Creek Bu** | **1.48** | **241** | IAML | | 18 57 43.1 | |
| | comp=N,149nm,0.4s | | | | | | |
| CCB | | | | IAML | | 18 57 44.2 | |
| | comp=E,93nm,0.3s | | | | | | |
| **G25K** | **Bearman Lake** | **1.48** | **339** | | Sn | 18 57 42.2 | 0.0 |
| **MDM** | **Murphy Dome** | **1.52** | **255** | | Pn | 18 57 22.3 | -0.7 |
| MDM | | | | IAML | | 18 57 47.6 | |
| | comp=E,168nm,0.5s | | | | | | |
| MDM | | | | IAML | | 18 57 48.4 | |
| | comp=N,163nm,0.6s | | | | | | |
| **H27K** | **Steamboat Moun** | **1.59** | **56** | | Pn | 18 57 23.0 | -1.1 |
| **G26K** | **Porcupine Rive** | **1.62** | **14** | | Pn | 18 57 24.1 | -0.3 |
| G26K | | | | | Sg | 18 57 46.7 | -0.4 |
| **K24K** | **Donnelly Dome** | **1.65** | **195** | | Pb | 18 57 25.7 | -0.4 |
| **EGAK** | **Eagle** | **1.66** | **110** | | Pn | 18 57 24.6 | -0.3 |
| **WRH** | **Wood River Hil** | **1.68** | **238** | | Pn | 18 57 24.9 | -0.3 |
| **WRH** | **Wood River Hil** | **1.68** | **238** | IAML | | 18 57 50.7 | |
| | comp=E,70nm,0.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **1.71** | **321** | | Pn | 18 57 25.2 | -0.5 |
| G24K | | | | | Sb | 18 57 49.2 | +0.2 |
| **G24K** | **Hadweenzic Riv** | **1.71** | **321** | IAML | | 18 57 50.0 | |
| | comp=E,72nm,0.7s | | | | | | |
| G24K | | | | IAML | | 18 57 50.7 | |
| | comp=N,82nm,0.7s | | | | | | |
| **DOT** | **Dot Lake** | **1.77** | **169** | | Pn | 18 57 26.9 | +0.4 |
| **K27K** | **Chicken** | **1.79** | **138** | | Pn | 18 57 26.8 | 0.0 |
| **G27K** | **Doyon Strip** | **1.91** | **40** | | Pn | 18 57 27.5 | -1.0 |
| **I23K** | **Minto, Yukon-K** | **1.94** | **265** | | Pn | 18 57 28.0 | -0.7 |
| I23K | | | | IAML | | 18 58 00.7 | |
| | comp=E,92nm,0.3s | | | | | | |
| I23K | | | | IAML | | 18 58 05.7 | |
| | comp=N,74nm,0.5s | | | | | | |
| **NEA2** | **Nenana** | **1.99** | **248** | | Pn | 18 57 29.1 | -0.4 |
| NEA2 | | | | IAML | | 18 58 01.8 | |
| | comp=E,72nm,0.3s | | | | | | |
| NEA2 | | | | IAML | | 18 58 01.8 | |
| | comp=N,82nm,0.3s | | | | | | |
| **H23K** | **Yukon River** | **2.02** | **285** | | Pn | 18 57 29.0 | -1.0 |
| **H23K** | **Yukon River** | **2.02** | **285** | IAML | | 18 57 59.7 | |
| | comp=E,70nm,0.5s | | | | | | |
| **I28M** | **Miner Creek** | **2.03** | **86** | | Pn | 18 57 29.5 | -0.7 |
| **BMAR** | **Burnt Mountain** | **2.05** | **2** | Pn | Pn | 18 57 30.0 | -0.4 |
| **F25K** | **Christian Rive** | **2.24** | **352** | | Pn | 18 57 32.9 | -0.1 |
| **BWN** | **Browne** | **2.35** | **241** | | Pn | 18 57 33.4 | -1.0 |
| BWN | | | | IAML | | 18 58 17.8 | |
| | comp=E,70nm,0.7s | | | | | | |
| BWN | | | | IAML | | 18 58 18.5 | |
| | comp=N,68nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.48** | **331** | Pn | Pn | 18 57 36.0 | -0.2 |
| F24K | | | | IAML | | 18 58 15.7 | |
| | comp=E,33nm,0.3s | | | | | | |
| **MENT** | **Mentasta** | **2.50** | **169** | | Pn | 18 57 36.1 | -0.5 |
| **G23K** | **Bananza Creek** | **2.52** | **304** | Pn | Pn | 18 57 36.0 | -0.7 |
| G23K | | | | IAML | | 18 58 22.4 | |
| | comp=N,38nm,0.9s | | | | | | |
| **MLY** | **Manley** | **2.53** | **265** | | Pn | 18 57 36.0 | -1.0 |
| **MLY** | **Manley** | **2.53** | **265** | IAML | | 18 58 17.2 | |
| | comp=N,37nm,0.3s | | | | | | |
| MLY | | | | IAML | | 18 58 19.2 | |
| | comp=E,41nm,0.4s | | | | | | |
| **DHY** | **Denali Highway** | **2.58** | **207** | | Pn | 18 57 38.3 | +0.5 |
| DHY | | | | IAML | | 18 58 17.9 | |
| | comp=E,42nm,0.5s | | | | | | |
| DHY | | | | IAML | | 18 58 19.0 | |
| | comp=N,47nm,0.4s | | | | | | |
| **RND** | **Reindeer** | **2.66** | **223** | | Pn | 18 57 39.5 | +0.8 |
| **DAWY** | **Dawson** | **2.67** | **117** | | Pn | 18 57 38.5 | -0.3 |
| **L27K** | **Beaver Creek,** | **2.67** | **150** | | Pn | 18 57 39.4 | +0.6 |
| **L27K** | **Beaver Creek,** | **2.67** | **150** | IAML | | 18 58 20.1 | |
| | comp=N,35nm,0.6s | | | | | | |
| L27K | | | | IAML | | 18 58 23.9 | |
| | comp=E,51nm,0.6s | | | | | | |
| **BCAR** | **Beaver Creek A** | **2.68** | **149** | | Pn | 18 57 38.8 | -0.2 |
| **I29M** | **Ogilvie Camp,** | **2.71** | **88** | | Pn | 18 57 38.2 | -1.2 |
| I29M | | | | IAML | | 18 58 28.4 | |
| | comp=E,31nm,0.1s | | | | | | |
| I29M | | | | IAML | | 18 58 33.6 | |
| | comp=N,32nm,0.6s | | | | | | |
| **H29M** | **Whitestone** | **2.77** | **70** | Pn | Pn | 18 57 39.4 | -0.9 |
| H29M | | | | IAML | | 18 58 28.1 | |
| | comp=N,28nm,0.8s | | | | | | |
| **COLD** | **Coldfoot** | **2.86** | **313** | | Pn | 18 57 42.8 | +1.4 |
| **BPAW** | **Bear Paw Mtn.** | **2.96** | **247** | | Pn | 18 57 41.5 | -1.3 |
| BPAW | | | | IAML | | 18 58 31.3 | |
| | comp=E,31nm,0.3s | | | | | | |
| BPAW | | | | IAML | | 18 58 32.0 | |
| | comp=N,28nm,0.4s | | | | | | |
| **E24K** | **Your Creek** | **3.07** | **333** | Pn | Pn | 18 57 44.6 | +0.2 |
| **E27K** | **Coleen River** | **3.08** | **23** | | Pn | 18 57 43.4 | -1.1 |
| **M26K** | **Nabesna, AK** | **3.10** | **164** | Pn | Pn | 18 57 43.5 | -1.3 |
| M26K | | | | Pg | Pb | 18 57 52.5 | +1.7 |
| M26K | | | | IAML | | 18 58 35.5 | |
| | comp=N,26nm,0.6s | | | | | | |
| M26K | | | | IAML | | 18 58 38.6 | |
| | comp=E,27nm,0.5s | | | | | | |
| **G29M** | **Pine Creek** | **3.15** | **58** | | Pn | 18 57 44.9 | -0.5 |
| **G29M** | **Pine Creek** | **3.15** | **58** | IAML | | 18 58 47.3 | |
| | comp=N,29nm,0.9s | | | | | | |
| G29M | | | | IAML | | 18 58 49.4 | |
| | comp=E,29nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **3.30** | **327** | | Pn | 18 57 48.2 | +0.7 |
| **M27K** | **Edge Creek, AK** | **3.30** | **156** | | Pn | 18 57 48.0 | +0.3 |
| **M27K** | **Edge Creek, AK** | **3.30** | **156** | IAML | | 18 58 42.7 | |
| | comp=E,29nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **3.35** | **278** | | Pn | 18 57 47.8 | -0.4 |
| **H21K** | **Melozitna Rive** | **3.35** | **278** | IAML | | 18 58 42.6 | |
| | comp=E,23nm,0.4s | | | | | | |
| **EPYK** | **Eagle Plains** | **3.46** | **70** | | Pn | 18 57 48.1 | -1.6 |
| EPYK | | | | IAML | | 18 59 07.2 | |
| | comp=E,20nm,0.1s | | | | | | |
| EPYK | | | | IAML | | 18 59 11.6 | |
| | comp=N,15nm,0.9s | | | | | | |
| **K29M** | **Barlow Dome** | **3.49** | **113** | | Pn | 18 57 48.0 | -2.3 |
| K29M | | | | IAML | | 18 58 50.0 | |
| | comp=E,23nm,0.6s | | | | | | |
| K29M | | | | IAML | | 18 58 52.5 | |
| | comp=N,25nm,0.6s | | | | | | |
| **I30M** | **Mount Dempster** | **3.54** | **89** | | Pn | 18 57 50.2 | -0.6 |
| **I30M** | **Mount Dempster** | **3.54** | **89** | IAML | | 18 58 55.2 | |
| | comp=E,13nm,0.4s | | | | | | |
| **F22K** | **John River** | **3.65** | **309** | | Pn | 18 57 52.7 | +0.4 |
| **J30M** | **Hart River** | **3.69** | **99** | | Pn | 18 57 52.4 | -0.5 |
| **J30M** | **Hart River** | **3.69** | **99** | IAML | | 18 58 56.2 | |
| | comp=N,20nm,0.8s | | | | | | |
| J30M | | | | IAML | | 18 59 00.2 | |
| | comp=E,13nm,0.5s | | | | | | |
| **L29M** | **L29M** | **3.70** | **125** | Pn | Pn | 18 57 52.0 | -1.0 |
| **G21K** | **Allakaket** | **3.74** | **292** | | Pn | 18 57 53.2 | -0.4 |
| G21K | | | | IAML | | 18 58 55.0 | |
| | comp=N,14nm,0.5s | | | | | | |
| G21K | | | | IAML | | 18 58 56.2 | |
| | comp=E,16nm,0.5s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **3.75** | **199** | Pn | Pn | 18 57 54.7 | +1.0 |
| **IMAR** | **Indian Mountai** | **3.75** | **283** | | Pn | 18 57 53.4 | -0.3 |
| **TOLK** | **Toolik Lake Re** | **3.77** | **332** | | Pn | 18 57 54.9 | +0.9 |
| **N25K** | **Chitina, Valde** | **3.80** | **179** | Pn | Pn | 18 57 51.0 | -3.4 |
| **G30M** | **tAoh Zraii Nji** | **3.83** | **61** | Pn | Pn | 18 57 53.0 | -1.7 |
| G30M | | | | IAML | | 18 58 37.4 | |
| | comp=N,11nm,0.4s | | | | | | |
| **E28M** | **Babbage River** | **3.83** | **30** | | Pn | 18 57 53.8 | -1.0 |
| E28M | | | | IAML | | 18 59 05.6 | |
| | comp=E,10nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **3.93** | **205** | Pn | Pn | 18 57 55.0 | -1.2 |
| SML | | | | IAML | | 18 58 58.6 | |
| | comp=E,14nm,0.7s | | | | | | |
| **KLU** | **Klutina** | **3.94** | **188** | Pn | Pn | 18 57 54.2 | -2.2 |
| KLU | | | | IAML | | 18 58 57.6 | |
| | comp=E,13nm,0.8s | | | | | | |
| KLU | | | | IAML | | 18 59 10.1 | |
| | comp=N,9.3nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **3.96** | **302** | | Pn | 18 57 56.4 | -0.2 |
| **F21K** | **Alatna River** | **3.96** | **302** | IAML | | 18 59 02.7 | |
| | comp=N,12nm,0.5s | | | | | | |
| F21K | | | | IAML | | 18 59 04.5 | |
| | comp=E,8.5nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **4.00** | **352** | | Pn | 18 57 58.2 | +1.1 |
| **D25K** | **Kav

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PWL | | | IAML | | 18 59 30.2 | | |
| | comp=E,8.0nm,1.1s | | | | | | |
| **J19K** | **Poorman** | **4.86 258** | | Pn | 18 58 08.1 | -0.7 | |
| **J19K** | **Poorman** | **4.86 258** | IAML | | 18 59 38.6 | | |
| | comp=E,8.2nm,0.7s | | | | | | |
| **H19K** | **Roundabout Mou** | **4.87 277** | | Pn | 18 58 08.9 | 0.0 | |
| **H19K** | **Roundabout Mou** | **4.87 277** | IAML | | 18 59 31.5 | | |
| | comp=N,9.2nm,1.1s | | | | | | |
| H19K | | | IAML | | 18 59 35.1 | | |
| | comp=E,9.4nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **4.99 336** | | Pn | 18 58 11.6 | +0.9 | |
| **M20K** | **Styx River** | **5.12 230** | Pn | Pn | 18 58 11.0 | -1.5 | |
| M20K | | | IAML | | 18 59 47.7 | | |
| | comp=E,4.1nm,1.0s | | | | | | |
| M20K | | | IAML | | 18 59 57.3 | | |
| | comp=N,4.0nm,1.1s | | | | | | |
| **G19K** | **Purcell Mounta** | **5.12 284** | Pn | Pn | 18 58 11.3 | -1.2 | |
| **N30M** | **Aishikik Lake** | **5.24 135** | Pn | Pn | 18 58 14.0 | -0.2 | |
| **INK** | **Inuvik** | **5.32 52** | Pn | Pn | 18 58 14.1 | -1.0 | |
| **E19K** | **Redstone River** | **5.41 298** | Pn | Pn | 18 58 15.6 | -0.8 | |
| **H18K** | **Honhosa River** | **5.70 274** | Pn | Pn | 18 58 20.5 | 0.0 | |
| **G18K** | **Tagagawik** | **5.76 281** | Pn | Pn | 18 58 21.2 | 0.0 | |
| **O30N** | **Mendenhall** | **6.09 136** | Pn | Pn | 18 58 25.5 | -0.3 | |
| **D19K** | **Kuna River** | **6.09 307** | | Pn | 18 58 26.4 | +0.7 | |
| **L18K** | **Granite Mounta** | **6.15 244** | Pn | Pn | 18 58 25.0 | -1.6 | |
| **K17K** | **Iditarod** | **6.50 252** | Pn | Pn | 18 58 29.1 | -2.3 | |
| **J17K** | **VABM Dome** | **6.51 259** | Pn | Pn | 18 58 31.5 | 0.0 | |
| **WHY** | **Whitehorse** | **6.54 132** | Pn | Pn | 18 58 31.5 | -0.6 | |
| **C36M** | **Paulatuk** | **8.89 54** | Pn | Pn | 18 59 01.9 | -2.2 | |
| **PINE** | **Pine Mountain** | **25.36 137** | P | P | 19 02 22.2 | -0.9 | |

*IDC **06** 19:03:46.6±2.0,3.°90S×150.°30E,h0km,mb3.7/5, mbtmp3.7/6,ML1.5/1,Error ellipse: s-maj=80.5km s-min=24.0km az=112.0*

**ISC 06 19:03:48.8±1.5,3.°9S±0.°2×150.°0E±0.°4,h10km,n8,σ1s46/8, mb3.7/5,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.21** | **207** | Pn | **Pn** | **19 05 18.7** | **-1.8** |
| | 0.6nm,0.3s,baz=6.5,slow=15,SNR=1.6 9.4nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **16.55** | **193** | Pn | **P** | **19 07 45.2** | **+1.5** |
| | baz=11,slow=14,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.13** | **222** | P | **P** | **19 08 46.7** | **+1.9** |
| | 2.3nm,0.8s,baz=49,slow=10,SNR=12 2.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **25.11** | **217** | P | **P** | **19 09 14.7** | **+0.6** |
| | 0.7nm,0.8s,baz=57,slow=8.5,SNR=11 0.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **77.81** | **319** | P | **P** | **19 15 46.0** | **-0.6** |
| | 0.2nm,0.5s,baz=100,slow=6.3,SNR=2.4 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **81.37** | **322** | P | **P** | **19 16 06.5** | **+0.7** |
| | 0.7nm,0.2s,baz=113,slow=4.6,SNR=2.4 0.7nm,0.2s | | | | | | |
| **ILAR** | **Eielson Array** | **82.35** | **23** | P | **P** | **19 16 10.4** | **-0.3** |
| | 0.6nm,0.9s,baz=254,slow=5.2,SNR=2.2 0.6nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.39** | **288** | PKPbc | **PKPbc** | **19 23 33.6** | **-0.5** |
| | 0.7nm,0.8s,baz=61,slow=3.7,SNR=2.6 | | | | | | |

**JMA 06 19:05:06.5±0.1,25.°0N±0.°6×123.°6E±0.°2,h13km,MV0.9/8, NW OFF ISHIGAKIJIMA IS,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.65** | **170** | *e*P | Pg | 19 05 19.0 | -0.2 |
| IRIF | | | | *e*S | Sg | 19 05 27.4 | -0.4 |
| **JISG** | **Ishigakijimahi** | **0.75** | **122** | *e*P | Pg | 19 05 20.6 | -0.4 |
| JISG | | | | *e*S | Sg | 19 05 30.8 | -0.1 |
| **YOJ** | **Yonaguni jima** | **0.75** | **227** | *e*P | Pg | 19 05 20.7 | -0.4 |
| YOJ | | | | *e*S | Sg | 19 05 30.5 | -0.4 |
| **JIJ** | **Ishigaki jima** | **0.78** | **142** | *e*P | Pg | 19 05 21.6 | -0.1 |
| JIJ | | | | *e*S | Sg | 19 05 31.8 | -0.2 |
| **JYNG** | **Yonagunijimaku** | **0.80** | **229** | *e*P | Pg | 19 05 21.7 | -0.3 |
| JYNG | | | | *e*S | Sg | 19 05 32.4 | -0.1 |
| **JKRS** | **Kuro-shima** | **0.83** | **154** | *e*P | Pg | 19 05 22.1 | -0.4 |
| JKRS | | | | *e*S | Sg | 19 05 32.6 | -0.7 |
| **HATJ** | **Hateruma jima** | **0.94** | **169** | *e*S | Sg | 19 05 36.4 | -0.5 |

**TAP 06 19:05:20.7,24.°86N×122.°17E,h88km±1km,ML2.1,C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.21** | **266** | P | Pn | 19 05 33.7 | +0.2 |
| | baz=265 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.22** | **313** | P | Pn | 19 05 33.6 | +0.1 |
| TWB1 | baz=313 | | | S | Sn | 19 05 43.4 | +0.5 |
| | baz=313 | | | | | | |
| **TIPB** | **Shuangxi** | **0.33** | **290** | P | Pn | 19 05 34.5 | +0.4 |
| TIPB | baz=289 | | | *i* S | Sn | 19 05 44.2 | +0.2 |
| | baz=289 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.35** | **312** | P | Pn | 19 05 34.4 | +0.1 |
| SXI1 | baz=311 | | | *e*S | Sn | 19 05 45.7 | +1.4 |
| | baz=311 | | | | | | |
| **TWC** | **Suao** | **0.38** | **229** | P | Pn | 19 05 34.6 | +0.3 |
| TWC | baz=227 | | | *e*S | Sn | 19 05 43.5 | -1.0 |
| | baz=227 | | | | | | |
| **EOS2** | **EOS2** | **0.44** | **172** | *e*P | Pn | 19 05 35.3 | +0.6 |
| | baz=172 | | | | | | |
| **TWE** | **Neicheng** | **0.47** | **253** | P | Pn | 19 05 35.1 | +0.1 |
| TWE | baz=252 | | | S | Sn | 19 05 45.8 | +0.2 |
| | baz=252 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.53** | **259** | *i* P | Pn | 19 05 35.7 | +0.1 |
| FUSB | baz=259 | | | *i* S | Sn | 19 05 45.8 | -0.9 |
| | baz=259 | | | | | | |
| **TWA** | **Mucha** | **0.54** | **283** | *e*S | Sn | 19 05 47.5 | +0.8 |
| | baz=282 | | | | | | |
| **EWUT** | **Wuta** | **0.54** | **221** | *e*P | Pn | 19 05 35.9 | +0.3 |
| EWUT | baz=220 | | | *e*S | Sn | 19 05 47.0 | +0.4 |
| | baz=220 | | | | | | |
| **ENA** | **Nanau** | **0.58** | **222** | *i* P | Pn | 19 05 36.3 | +0.4 |
| ENA | baz=221 | | | *i* S | Sn | 19 05 47.8 | +0.6 |
| | baz=221 | | | | | | |
| **ENTT** | **Nioudou** | **0.59** | **248** | *i* P | Pn | 19 05 36.3 | +0.3 |
| ENTT | baz=247 | | | S | Sn | 19 05 47.5 | +0.1 |
| | baz=247 | | | | | | |
| **EOS3** | **EOS3** | **0.59** | **166** | P | Pn | 19 05 36.5 | +0.7 |
| EOS3 | baz=166 | | | S | Sn | 19 05 48.5 | +1.5 |
| | baz=166 | | | | | | |
| **NWLT** | **Wulai** | **0.61** | **262** | P | Pn | 19 05 36.4 | +0.2 |
| NWLT | baz=262 | | | *e*S | Sn | 19 05 47.3 | -0.4 |
| | baz=262 | | | | | | |
| **YM01** | **YM01** | **0.61** | **298** | P | Pn | 19 05 36.6 | +0.4 |
| YM01 | baz=297 | | | S | Sn | 19 05 47.9 | +0.1 |
| | baz=297 | | | | | | |
| **NDT** | **Datong Townshi** | **0.65** | **247** | *e*P | Pn | 19 05 37.3 | +0.8 |
| NDT | baz=246 | | | *e*S | Sn | 19 05 49.4 | +1.1 |
| | baz=246 | | | | | | |
| **LATG** | **Datong** | **0.67** | **241** | P | Pn | 19 05 37.5 | +0.7 |
| LATG | baz=240 | | | S | Sn | 19 05 50.0 | +1.2 |
| | baz=240 | | | | | | |
| **YHNB** | **Yeheng** | **0.74** | **255** | *e*P | Pn | 19 05 38.2 | +0.7 |
| YHNB | baz=255 | | | *i* S | Sn | 19 05 50.9 | +0.8 |
| | baz=255 | | | | | | |
| **EOS4** | **EOS4** | **0.75** | **169** | *e*P | Pn | 19 05 37.6 | +0.4 |
| | baz=169 | | | | | | |
| **NSK** | **Sanguang** | **0.76** | **256** | P | Pn | 19 05 38.2 | +0.5 |
| NSK | baz=255 | | | S | Sn | 19 05 50.9 | +0.6 |
| | baz=255 | | | | | | |
| **NNSB** | **Datong** | **0.83** | **239** | P | Pn | 19 05 39.1 | +0.5 |
| NNSB | baz=238 | | | S | Sn | 19 05 52.1 | +0.3 |
| | baz=238 | | | | | | |
| **NNS** | **Nan Shan** | **0.83** | **240** | *e*P | Pn | 19 05 39.2 | +0.6 |
| | baz=239 | | | | | | |
| NNS | | | | *e*S | Sn | 19 05 52.2 | +0.3 |
| | baz=239 | | | | | | |
| **NACB** | **Ninganchiao** | **0.86** | **217** | *e*P | Pn | 19 05 38.7 | 0.0 |
| | baz=217 | | | | | | |
| NACB | | | | *e*S | Sn | 19 05 51.6 | -0.5 |
| | baz=217 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.87** | **117** | P | Pn | 19 05 38.5 | -0.2 |
| | baz=117 | | | | | | |
| YOJ | | | | *i* S | Sn | 19 05 52.4 | +0.2 |
| | baz=117 | | | | | | |
| **NCUH** | **Zhongli** | **0.90** | **277** | *e*S | Sn | 19 05 53.2 | +0.4 |
| | baz=276 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.90** | **224** | *e*P | Pn | 19 05 39.5 | +0.3 |
| | baz=223 | | | | | | |
| ETLH | | | | *e*S | Sn | 19 05 52.7 | -0.4 |
| | baz=223 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.98** | **257** | *e*P | Pn | 19 05 40.2 | +0.2 |
| | baz=256 | | | | | | |
| NFF | | | | *e*S | Sn | 19 05 55.0 | +0.4 |
| | baz=256 | | | | | | |
| **FUSS** | **Fushou** | **1.04** | **234** | *e*P | Pn | 19 05 41.5 | +0.6 |
| | baz=233 | | | | | | |
| FUSS | | | | *e*S | Sn | 19 05 56.4 | +0.3 |
| | baz=233 | | | | | | |
| **LIOB** | **Emei** | **1.07** | **259** | *e*P | Pn | 19 05 40.2 | -0.8 |
| | baz=258 | | | | | | |
| LIOB | | | | *e*S | Sn | 19 05 56.8 | +0.5 |
| | baz=258 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.08** | **220** | *e*S | Sn | 19 05 55.6 | -1.2 |
| | baz=219 | | | | | | |
| **ETM** | **Tongmen** | **1.08** | **215** | *e*S | Sn | 19 05 55.3 | -1.3 |
| | baz=214 | | | | | | |
| **NSTT** | **Nanjuang** | **1.08** | **258** | *e*P | Pn | 19 05 41.6 | +0.4 |
| | baz=257 | | | | | | |
| NSTT | | | | *e*S | Sn | 19 05 57.0 | +0.4 |
| | baz=257 | | | | | | |
| **TWT** | **Tachien** | **1.08** | **236** | *e*S | Sn | 19 05 57.4 | +0.5 |
| | baz=236 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.09** | **229** | *e*P | Pn | 19 05 42.0 | +0.3 |
| | baz=228 | | | | | | |
| WHF | | | | *e*S | Sn | 19 05 57.3 | -0.1 |
| | baz=228 | | | | | | |
| **TDCB** | **Techi** | **1.10** | **237** | *e*P | Pn | 19 05 42.5 | +1.0 |
| | baz=236 | | | | | | |
| TDCB | | | | *i* S | Sn | 19 05 57.5 | +0.3 |
| | baz=236 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.11** | **208** | *e*S | Sn | 19 05 58.0 | +0.7 |
| | baz=208 | | | | | | |
| **SHUL** | **Shoufeng** | **1.20** | **207** | *e*P | Pn | 19 05 42.4 | -0.3 |
| | baz=207 | | | | | | |
| SHUL | | | | *e*S | Sn | 19 05 59.5 | +0.4 |
| | baz=207 | | | | | | |
| **CHGB** | **Renai** | **1.20** | **229** | *e*P | Pn | 19 05 43.6 | +0.7 |
| | baz=228 | | | | | | |
| CHGB | | | | *i* S | Sn | 19 05 59.5 | 0.0 |
| | baz=228 | | | | | | |
| **VWDT** | **VWDT** | **1.44** | **221** | *e*P | Pn | 19 05 46.3 | +0.6 |
| | baz=220 | | | | | | |
| VWDT | | | | S | Sn | 19 06 04.2 | -0.3 |
| | baz=220 | | | | | | |
| **HGSD** | **Ruisui** | **1.52** | **207** | *e*P | Pn | 19 05 47.3 | +0.7 |
| | baz=206 | | | | | | |
| **EHY** | **Hungye** | **1.55** | **210** | *e*P | Pn | 19 05 48.1 | +1.0 |
| | baz=209 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.67** | **226** | *e*P | Pn | 19 05 49.8 | +1.2 |
| | baz=225 | | | | | | |
| **SNJT** | **Kaohsiung City** | **2.68** | **219** | *e*P | Pn | 19 06 03.0 | +1.0 |
| | baz=218 | | | | | | |
| SNJT | | | | S | Sn | 19 06 34.8 | +1.1 |
| | baz=218 | | | | | | |

*IDC **06** 19:05:55.3±1.5,4.°32S×151.°43E,h0km,mb3.8/9, mbtmp3.8/10,ML1.3/1,MS3.7/16,Error ellipse: s-maj=49.0km s-min=22.1km az=105.0*

*GCMT **06** 19:06:00.0±0.3,3.°74S±0.°02×150.°96E±0.°02,h13km±2km, MW4.7/69,Moment Tensor Solution. s13,c16; s69,c94; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.12±.08; $M_{\theta\theta}$1.53±.08; $M_{\phi\phi}$-1.65±.09; $M_{r\theta}$0.24±.17; $M_{\theta\phi}$0.12±.06; $M_{\phi r}$0.27±.19; Best double couple: $M_o$1.63500×$10^{16}$ NP1:$\phi_s$43.00000°,δ89.00000°,λ167.00000°. NP2: $\phi_s$133.00000°,δ77.00000°,λ1.00000°. Principal axes: T 1.5790, Plg10.0000°, Azm357.0000°; N 0.1150, Plg77.0000°, Azm217.0000°; P -1.6910, Plg8.0000°, Azm89.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**ISC 06 19:05:57.3±1.2,4.°2S±0.°1×151.°4E±0.°3,h10km,n23, σ1s43/11,mb3.8/9,MS3.7/15,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.62** | **219** | Pn | **Pn** | **19 07 34.8** | **+0.1** |
| | 0.4nm,0.3s,baz=210,slow=20,SNR=1.4 | | | | | | |
| PMG | | | | LR | LR | 19 10 11.0 | |
| | comp=Z,1μm,22.0s,baz=18,slow=39 7.6nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **16.53** | **197** | Pn | **P** | **19 09 53.7** | **+1.6** |
| | baz=29,slow=5.4,SNR=4.2 | | | | | | |
| CTA | | | | LR | LR | 19 15 27.4 | |
| | comp=Z,22nm,20.9s,baz=18,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.78** | **225** | P | **P** | **19 10 58.2** | **-2.1** |
| | 2.3nm,0.8s,baz=50,slow=11,SNR=5.5 2.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **25.64** | **219** | P | **P** | **19 11 26.2** | **-1.2** |
| | 0.6nm,0.7s,baz=54,slow=8.6,SNR=4.3 | | | | | | |
| ASAR | | | | LR | LR | 19 21 25.8 | |
| | comp=Z,192nm,19.5s,baz=42,slow=36 0.6nm,0.7s | | | | | | |
| **DAV** | **Davao City (W)** | **28.07** | **293** | LR | LR | 19 21 41.0 | |
| | comp=Z,76nm,19.3s,baz=258,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **28.99** | **197** | LR | LR | 19 24 23.0 | |
| | comp=Z,234nm,18.2s,baz=14,slow=38 | | | | | | |
| **MSVF** | **Nonsavu** | **29.38** | **119** | LR | LR | 19 22 56.6 | |
| | comp=Z,219nm,20.6s,baz=272,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **31.51** | **267** | LR | LR | 19 26 58.1 | |
| | comp=Z,66nm,18.1s,baz=88,slow=40 | | | | | | |
| **JCJ** | **Chichijima** | **32.38** | **345** | LR | LR | 19 25 08.3 | |
| | comp=Z,110nm,20.0s,baz=107,slow=36 | | | | | | |
| **JNU** | **Nakatsue** | **41.91** | **334** | LR | LR | 19 28 48.9 | |
| | comp=Z,95nm,21.8s,baz=125,slow=33 | | | | | | |
| **ASAJ** | **Asahikawa** | **48.76** | **352** | LR | LR | 19 33 45.0 | |
| | comp=Z,86nm,19.9s,baz=169,slow=34 | | | | | | |
| **KLR** | **Kul'dur** | **55.90** | **345** | LR | LR | 19 39 53.6 | |
| | comp=Z,48nm,18.9s,baz=178,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.33** | **295** | P | **P** | **19 15 38.6** | **-0.4** |
| | 0.7nm,0.4s,baz=106,slow=5.7,SNR=1.6 | | | | | | |
| CMAR | | | | LR | LR | 19 40 16.4 | |
| | comp=Z,30nm,18.5s,baz=150,slow=36 0.7nm,0.4s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **59.92** | **16** | LR | LR | 19 37 43.3 | |
| | comp=Z,72nm,20.1s,baz=272,slow=32 | | | | | | |
| **SONM** | **Songino Array** | **65.08** | **328** | P | **P** | **19 16 39.9** | **+1.6** |
| | 1.2nm,1.1s,baz=134,slow=4.2,SNR=4.1 1.2nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **76.32** | **27** | LR | LR | 19 48 29.5 | |
| | comp=Z,70nm,19.0s,baz=326,slow=33 | | | | | | |
| **TIXI** | **Tiksi** | **77.15** | **353** | LR | LR | 19 47 37.8 | |
| | comp=Z,43nm,21.1s,baz=184,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **78.95** | **319** | P | **P** | **19 18 01.3** | **-0.1** |
| | 0.7nm,0.7s,baz=134,slow=4.2,SNR=15 0.7nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.88** | **327** | P | **P** | **19 18 06.3** | **+0.1** |
| | 0.9nm,0.7s,baz=165,slow=6.0,SNR=3.6 0.9nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **82.18** | **22** | P | **P** | **19 18 16.5** | **-1.7** |
| | 0.5nm,0.8s,baz=264,slow=6.0,SNR=1.2 0.5nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.46** | **322** | P | **P** | **19 18 21.4** | **+1.4** |
| | 0.8nm,0.6s,baz=104,slow=3.9,SNR=5.0 0.8nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **85.54** | **203** | LR | LR | 19 55 22.5 | |
| | comp=Z,67nm,19.7s,baz=98,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **85.73** | **180** | P | **P** | **19 18 37.0** | **+0.4** |
| | 1.1nm,0.9s,baz=166,slow=1.4,SNR=3.0 | | | | | | |
| QSPA | | | | LR | LR | 19 53 56.1 | |
| | comp=Z,48nm,21.6s,baz=0.0,slow=34 1.1nm,0.9s | | | | | | |

*IDC **06** 19:12:36.1±2.3,3.°99S×151.°08E,h0km,mb3.7/7, mbtmp3.7/8,ML1.8/1,MS3.8/3,Error ellipse: s-maj=82.0km s-min=21.8km az=111.0*

*NEIC **06** 19:12:37.4±1.1,3.°92S±0.°06×151.°17E±0.°06,h10km±2km, mb4.3/10,Error ellipse: s-maj=13.0km s-min=5.9km az=320.0*

**ISC 06 19:12:37.6±0.8,3.°94S±0.°09×151.°14E±0.°08,h10km,n29, σ1s22/26,mb4.0/14,MS3.9/3,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.05** | **104** | Pn | **Pn** | **19 12 58.0** | **-0.4** |
| **MANU** | **Manus Island** | **4.22** | **296** | | **Pn** | **19 13 41.9** | **-0.1** |
| **PMG** | **Port Moresby** | **6.72** | **216** | | **Pn** | **19 14 17.9** | **+1.5** |
| **PMG** | **Port Moresby** | **6.72** | **216** | Pn | **Pn** | **19 14 17.0** | **+0.6** |
| | 1.1nm,0.3s,baz=0.0,slow=10,SNR=3.8 7.8nm,0.8s | | | | | | |
| **COEN** | **Coen** | **12.69** | **218** | Pn | **Pn** | **19 15 37.3** | **-1.0** |
| **CTA** | **Charters Tower** | **16.75** | **196** | Pn | **P** | **19 16 36.5** | **+1.8** |
| | baz=19,slow=11,SNR=7.6 | | | | | | |
| **CTAO** | **Charters Tower** | **16.75** | **196** | | **Pn** | **19 16 33.3** | **+0.9** |
| CTAO | | | | IAmb | IAmb | 19 16 44.8 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **21.31** | **180** | P | **P** | **19 17 24.6** | **-0.1** |
| EIDS | | | | IAmb | IAmb | 19 17 37.2 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.68** | **225** | P | **P** | **19 17 39.2** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 19 17 46.0 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.71** | **224** | P | **P** | **19 17 38.9** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 19 18 01.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.82** | **224** | P | **P** | **19 17 39.8** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 19 17 46.2 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.83** | **224** | P | **P** | **19 17 39.7** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 19 17 46.3 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.84** | **224** | P | **P** | **19 17 40.6** | **-0.5** |
| **WRA** | **Warramunga Arr** | **22.84** | **224** | P | **P** | **19 17 39.6** | **-1.5** |
| | comp=Z,3.4nm,0.9s,baz=50,slow=11,SNR=13 comp=Z,3.4nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.35** | **142** | P | **P** | **19 17 46.0** | **-0.5** |
| **AS31** | **Alice Springs** | **25.72** | **219** | P | **P** | **19 18 08.5** | **+0.1** |
| **ASAR** | **Alice Springs** | **25.73** | **219** | P | **P** | **19 18 07.5** | **-0.9** |
| **ASAR** | **Alice Springs** | **25.73** | **219** | P | **P** | **19 18 07.7** | **-0.7** |
| | comp=Z,1.1nm,0.8s,baz=54,slow=8.4,SNR=13 comp=Z,1.1nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.65** | **239** | P | **P** | **19 18 33.6** | **-1.2** |
| **JOW** | **Kunigami** | **37.74** | **325** | LR | LR | 19 33 12.1 | |
| | comp=Z,106nm,20.3s,baz=128,slow=33 | | | | | | |
| **URZ** | **Urewera** | **41.57** | **149** | LR | LR | 19 36 39.5 | |
| | comp=Z,215nm,18.9s,baz=28,slow=35 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.39** | **325** | *e*P | **P** | **19 22 27.1** | **+0.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,97nm,5.6s | | | | | | |
| **LZH** | **Lanzhou** | **59.47** | **316** | *e*P | **P** | **19 22 38.2** | **-3.0** |
| LZH | | | | pP | pP | 19 22 42.7 | -0.9 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,790nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **64.72** | **328** | P | **P** | **19 23 17.5** | **+1.3** |
| | comp=Z,0.3nm,0.4s,baz=152,slow=6.5,SNR=3.7 comp=Z,0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **78.60** | **319** | P | **P** | **19 24 39.2** | **-0.5** |
| | comp=Z,0.6nm,0.9s,baz=102,slow=6.0,SNR=3.3 comp=Z,0.6nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.53** | **327** | P | **P** | **19 24 42.9** | **-1.6** |
| | comp=Z,0.3nm,0.3s,baz=57,slow=5.3,SNR=1.9 comp=Z,0.3nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **81.99** | **22** | P | **P** | **19 24 58.3** | **+0.7** |
| | comp=Z,0.3nm,0.7s,baz=238,slow=5.2,SNR=2.8 comp=Z,0.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.11** | **322** | P | **P** | **19 25 00.1** | **+1.7** |
| | comp=Z,0.8nm,0.9s,baz=102,slow=3.7,SNR=4.2 comp=Z,0.8nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **82.88** | **314** | LR | LR | 20 02 24.5 | |
| | comp=Z,46nm,19.5s,baz=143,slow=36 | | | | | | |

*ISK **06** 19:13:23.1,34.°86N×23.°18E,h24km,ML3.5/14*

*ATH **06** 19:13:24.9,34.°95N×23.°19E,h26km±2km,ML3.3/11,Error ellipse: s-maj=4.3km s-min=1.4km az=200.0*

*THE **06** 19:13:24.6,34.°89N×23.°16E,h22km±1km,ML3.3/4,Error ellipse: s-maj=1.5km s-min=0.6km az=156.0*

*IDC **06** 19:13:25.2±2.5,34.°84N×23.°31E,h74km±15km,mb3.6/12, mbtmp3.8/17,MS3.6/1,Error ellipse: s-maj=31.7km s-min=16.4km az=16.0*

**ISC 06 19:13:20.4±1.7,34.°82N±0.°07×23.°01E±0.°05,h24km±11km, n111,σ2s01/119,mb3.9/12,Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNDR** | **Palaiochora Ch** | **0.69** | **53** | Pg | **Pb** | **19 13 34.3** | **+0.5** |
| KNDR | | | | Sg | **Sb** | **19 13 42.6** | **-0.4** |
| **KNDR** | **Palaiochora Ch** | **0.69** | **53** | P | **Pb** | **19 13 34.2** | **+0.5** |
| KNDR | | | | S | **Sb** | **19 13 40.4** | **-2.5** |
| KNDR | | | | AML | AML | 19 13 50.4 | |
| | comp=E,16438μm,0.4s | | | | | | |
| KNDR | | | | AML | AML | 19 13 53.6 | |
| | comp=N,12544μm,0.6s | | | | | | |
| **GVD** | **Gavdhos** | **0.89** | **88** | Pg | **Pn** | **19 13 38.5** | **+1.2** |
| GVD | | | | Sg | **Sb** | **19 13 49.5** | **+1.0** |
| **GVD** | **Gavdhos** | **0.89** | **88** | P | **Pn** | **19 13 39.0** | **+1.7** |
| GVD | | | | S | **Sn** | **19 13 49.7** | **+0.3** |
| | comp=N,3μm,0.3s | | | | | | |
| **GVD** | **Gavdhos** | **0.89** | **88** | P | **Pn** | **19 13 39.1** | **+1.8** |
| GVD | | | | S | **Sb** | **19 13 49.3** | **+0.7** |
| GVD | | | | AML | AML | 19 13 56.4 | |
| | comp=E,5451μm,0.5s | | | | | | |
| GVD | | | | AML | AML | 19 13 56.8 | |
| | comp=N,7028μm,0.4s | | | | | | |
| **RODP** | **Rodopos** | **0.96** | **39** | Pg | **Pn** | **19 13 39.9** | **+1.5** |
| RODP | | | | Sg | **Sn** | **19 13 52.2** | **+0.9** |
| **RODP** | **Rodopos** | **0.96** | **39** | P | **Pn** | **19 13 39.8** | **+1.4** |
| RODP | | | | S | **Sn** | **19 13 51.9** | **+0.6** |
| **IMMV** | **Iera Moni Meta** | **1.02** | **51** | Pg | **Pn** | **19 13 40.5** | **+1.3** |
| IMMV | | | | Sg | **Sn** | **19 13 53.1** | **+0.4** |
| **IMMV** | **Iera Moni Meta** | **1.02** | **51** | P | **Pn** | **19 13 39.8** | **+0.6** |
| IMMV | | | | S | **Sn** | **19 13 53.2** | **+0.5** |
| | comp=N,3μm,0.6s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.02** | **51** | P | **Pn** | **19 13 40.3** | **+1.1** |
| IMMV | | | | S | **Sn** | **19 13 51.8** | **-0.9** |
| IMMV | | | | AML | AML | 19 13 54.0 | |
| | comp=N,5073μm,0.7s | | | | | | |
| IMMV | | | | AML | AML | 19 13 59.4 | |
| | comp=E,4894μm,0.7s | | | | | | |
| **ANKY** | **Antikythira Is** | **1.07** | **13** | P | **Pn** | **19 13 42.1** | **+2.2** |
| ANKY | | | | S | **Sn** | **19 13 55.5** | **+1.5** |
| | comp=E,2μm,0.6s | | | | | | |
| **ANKY** | **Antikythira Is** | **1.07** | **13** | P | **Pn** | **19 13 42.0** | **+2.2** |
| ANKY | | | | AML | AML | 19 14 02.0 | |
| | comp=E,3354μm,0.6s | | | | | | |
| ANKY | | | | AML | AML | 19 14 02.2 | |
| | comp=N,3598μm,0.7s | | | | | | |
| **CHAN** | **Chania** | **1.10** | **50** | P | **Pb** | **19 13 41.8** | **+1.1** |
| CHAN | | | | AML | AML | 19 13 58.4 | |
| | comp=N,4999μm,0.6s | | | | | | |
| CHAN | | | | AML | AML | 19 14 02.0 | |
| | comp=E,5378μm,0.6s | | | | | | |
| **KTHA** | **Kythira Island** | **1.43** | **2** | Pn | **Pb** | **19 13 47.9** | **+1.4** |
| **KTHA** | **Kythira Island** | **1.43** | **2** | P | **Pb** | **19 13 47.8** | **+1.3** |
| KTHA | | | | S | **Sb** | **19 14 04.9** | **+0.6** |
| | comp=E,902nm,0.6s | | | | | | |
| **KTHA** | **Kythira Island** | **1.43** | **2** | P | **Pb** | **19 13 47.6** | **+1.1** |
| KTHA | | | | AML | AML | 19 14 14.5 | |
| | comp=N,1019μm,0.6s | | | | | | |
| KTHA | | | | AML | AML | 19 14 18.3 | |
| | comp=E,2313μm,0.8s | | | | | | |
| **IDI** | **Anoyia** | **1.61** | **73** | Pn | **Pn** | **19 13 48.9** | **+1.5** |
| **IDI** | **Anoyia** | **1.61** | **73** | P | **Pn** | **19 13 48.8** | **+1.4** |
| **IDI** | **Anoyia** | **1.61** | **73** | P | **Pn** | **19 13 48.7** | **+1.3** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MHLO** | **Agia Marina, M** | **2.18** | **31** | P | **Pn** | **19 13 55.8** | **+0.7** |
| MHLO | | | | AML | AML | 19 14 36.0 | | |
| | comp=E,2321µm,0.8s | | | | | | | |
| MHLO | | | | AML | AML | 19 14 39.8 | | |
| | comp=N,2084µm,0.5s | | | | | | | |
| **PYL** | **PYLOS** | **2.31** | **334** | P | **Pb** | **19 14 00.1** | **-1.4** |
| **THR5** | **Thira Island,** | **2.48** | **49** | P | **Pn** | **19 13 59.9** | **+0.6** |
| **SNT5** | **Nea Kammeni, S** | **2.50** | **50** | P | **Pn** | **19 14 00.3** | **+0.7** |
| **THR3** | **Thira Island,** | **2.51** | **50** | P | **Pn** | **19 14 00.5** | **+0.8** |
| **ITM** | **Ithomi** | **2.51** | **340** | Pn | **Pb** | **19 14 03.7** | **-1.2** |
| **ITM** | **Ithomi** | **2.51** | **340** | P | **Pb** | **19 14 02.8** | **-2.1** |
| **ITM** | **Ithomi** | **2.51** | **340** | P | **Pb** | **19 14 02.7** | **-2.2** |
| **SANT** | **Santorini** | **2.52** | **51** | Pn | **Pb** | **19 14 01.8** | **+1.9** |
| **KRND** | **KRANIDI** | **2.56** | **2** | P | **Pb** | **19 14 03.4** | **-2.2** |
| KRND | | | | AML | AML | 19 14 46.2 | | |
| | comp=N,427µm,0.6s | | | | | | | |
| KRND | | | | AML | AML | 19 14 50.1 | | |
| | comp=E,466µm,0.7s | | | | | | | |
| **ZKR** | **Zakros** | **2.65** | **83** | Pn | **Pn** | **19 14 03.6** | **+2.0** |
| **ZKR** | **Zakros** | **2.65** | **83** | P | **Pn** | **19 14 04.0** | **+2.4** |
| **ZKR** | **Zakros** | **2.65** | **83** | P | **Pn** | **19 14 03.3** | **+1.7** |
| **APE** | **Apeiranthos** | **3.04** | **42** | Pn | **Pn** | **19 14 09.2** | **+2.2** |
| **APE** | **Apeiranthos** | **3.04** | **42** | P | **Pn** | **19 14 06.8** | **-0.1** |
| **VLY** | **Voula,Athens** | **3.09** | **12** | P | **Pn** | **19 14 09.3** | **+1.6** |
| **GUR** | **Goura** | **3.16** | **350** | P | **Pn** | **19 14 11.7** | **+3.0** |
| **GUR** | **Goura** | **3.16** | **350** | P | **Pb** | **19 14 12.4** | **-3.5** |
| **LOUT** | **Loutraki** | **3.16** | **359** | P | **Pn** | **19 14 11.3** | **+2.6** |
| **LOUT** | **Loutraki** | **3.16** | **359** | P | **Pn** | **19 14 11.2** | **+2.6** |
| **ATH** | **Athens Observa** | **3.20** | **10** | P | **Pn** | **19 14 11.2** | **+2.1** |
| **ATH** | **Athens Observa** | **3.20** | **10** | P | **Pn** | **19 14 10.9** | **+1.8** |
| **ATHU** | **Athens Univers** | **3.20** | **11** | P | **Pn** | **19 14 10.6** | **+1.4** |
| **KLV** | **Kalavryta, Ach** | **3.29** | **348** | P | **Pn** | **19 14 13.9** | **+3.4** |
| **KLV** | **Kalavryta, Ach** | **3.29** | **348** | P | **Pn** | **19 14 13.6** | **+3.1** |
| KLV | | | | AML | AML | 19 15 17.0 | | |
| | comp=E,125µm,0.7s | | | | | | | |
| KLV | | | | AML | AML | 19 15 18.2 | | |
| | comp=N,166µm,1.1s | | | | | | | |
| **PTL** | **Penteli** | **3.29** | **12** | P | **Pn** | **19 14 12.1** | **+1.6** |
| **DION** | **Dionisos Attik** | **3.34** | **13** | P | **Pn** | **19 14 13.7** | **+2.6** |
| **VIL2** | **Platees** | **3.39** | **3** | P | **Pn** | **19 14 12.6** | **+0.8** |
| **RLS** | **Riolos of Patr** | **3.46** | **339** | P | **Pn** | **19 14 16.7** | **+3.9** |
| **RLS** | **Riolos of Patr** | **3.46** | **339** | P | **Pn** | **19 14 16.6** | **+3.8** |
| **KARP** | **Karpathos** | **3.48** | **77** | Pn | **Pn** | **19 14 15.2** | **+2.2** |
| **KARP** | **Karpathos** | **3.48** | **77** | P | **Pn** | **19 14 15.6** | **+2.6** |
| **ALIK** | **Aliki, Aigiali** | **3.51** | **348** | P | **Pn** | **19 14 16.4** | **+3.0** |
| **KALE** | **Kalithea** | **3.63** | **349** | P | **Pn** | **19 14 17.9** | **+2.7** |
| **KALE** | **Kalithea** | **3.63** | **349** | P | **Pn** | **19 14 17.6** | **+2.4** |
| **EFP** | **Efpalio** | **3.71** | **346** | P | **Pn** | **19 14 19.2** | **+3.1** |
| **EFP** | **Efpalio** | **3.71** | **346** | P | **Pn** | **19 14 19.4** | **+3.3** |
| **PSDA** | **Pessada-Kefalo** | **3.83** | **330** | P | **Pn** | **19 14 20.5** | **+2.8** |
| **ANX** | **Ano Chora** | **3.87** | **347** | P | **Pn** | **19 14 21.0** | **+2.6** |
| **VLS** | **Valsamata** | **3.88** | **330** | P | **Pn** | **19 14 20.9** | **+2.5** |
| **AXAR** | **Agios Charalam** | **3.95** | **356** | P | **Pn** | **19 14 21.8** | **+2.3** |
| **PVO** | **Paravola** | **3.97** | **343** | P | **Pn** | **19 14 23.8** | **+4.0** |
| PVO | | | | S | **Sn** | **19 15 09.9** | **+4.3** |
| **PVO** | **Paravola** | **3.97** | **343** | P | **Pn** | **19 14 23.9** | **+4.2** |
| **DMLN** | **Damoulianata-K** | **4.02** | **329** | P | **Pn** | **19 14 23.0** | **+2.6** |
| **FSK** | **Fiskardo** | **4.13** | **332** | P | **Pn** | **19 14 24.9** | **+2.9** |
| **BODT** | **Bodrum** | **4.14** | **56** | Pn | **Pn** | **19 14 24.9** | **+2.7** |
| **DAT** | **Datca** | **4.17** | **62** | Pn | **Pn** | **19 14 25.4** | **+2.8** |
| **EVR** | **Evrytania** | **4.20** | **347** | P | Pn | 19 14 27.8 | +4.8 |
| **NYDR** | **Nydri-Lefkada** | **4.31** | **335** | P | **Pn** | **19 14 28.3** | **+3.9** |
| **ARG** | **Arkhangelos** | **4.40** | **70** | Pn | **Pn** | **19 14 28.2** | **+2.6** |
| **OHR** | **Ohrid** | **6.52** | **345** | *i* Pn | **Pn** | **19 14 56.9** | **+2.1** |
| OHR | | | | *i* Sn | **Sn** | **19 16 06.3** | **-2.1** |
| **STIP** | **Stip** | **6.89** | **355** | *i* Pn | **Pn** | **19 15 01.6** | **+1.7** |
| **DRME** | **Dracevica, Mon** | **7.94** | **339** | *e*Pn | **Pn** | **19 15 14.0** | **-0.3** |
| **PDG** | **Podgorica** | **8.15** | **340** | *e*Pn | **Pn** | **19 15 16.1** | **-1.0** |
| **TREB** | **Trebinje** | **8.68** | **337** | *e*Pn | **Pn** | **19 15 22.5** | **-2.0** |
| **SJES** | **Sjenica** | **8.75** | **345** | *e*Pn | **Pn** | **19 15 25.1** | **-0.4** |
| **BRY** | **Bratogost** | **8.79** | **338** | *e*Pn | **Pn** | **19 15 23.8** | **-2.2** |
| **UPM** | **Unac-Piva** | **8.96** | **340** | *e*Pn | **Pn** | **19 15 28.0** | **-0.4** |
| **STON** | **Ston** | **9.04** | **334** | *e*Pn | **Pn** | **19 15 28.1** | **-1.2** |
| **RUDO** | **Rudo** | **9.23** | **343** | *e*Pn | **Pn** | **19 15 29.6** | **-2.3** |
| **BBLS** | **Lazi&#263i** | **9.46** | **344** | *e*Pn | **Pn** | **19 15 33.5** | **-1.6** |
| **BRTR** | **Keskin Array B** | **9.78** | **57** | P | **Pn** | **19 15 41.4** | **+1.8** |
| | comp=N,0.5nm,0.7s,baz=236,slow=10,SNR=3.1 | | | | | | | |
| **TEKS** | **Tekeris** | **10.08** | **346** | *e*Pn | **Pn** | **19 15 42.4** | **-1.2** |
| **MMAI** | **Mount Meron Ar** | **10.45** | **96** | P | **Pn** | **19 15 47.4** | **-1.4** |
| | comp=N,0.4nm,0.3s,baz=284,slow=13,SNR=1.0 | | | | | | | |
| **FRGS** | **Fruska Gora** | **10.61** | **348** | *e*Pn | **Pn** | **19 15 50.4** | **-0.5** |
| **A050A** | **Klekovaca** | **10.86** | **335** | *e*Pn | **Pn** | **19 15 53.6** | **-0.7** |
| **BLY** | **Banja Luka** | **10.88** | **337** | *e*Pn | **Pn** | **19 15 53.4** | **-1.1** |
| **A051A** | **Mrakovica** | **11.20** | **337** | *e*Pn | **Pn** | **19 15 57.6** | **-1.4** |
| **EIL** | **Elat** | **11.34** | **114** | P | Pn | 19 16 00.1 | -0.7 |
| | comp=N,1.3nm,0.4s,baz=337,slow=8.0,SNR=6.7 | | | | | | | |
| **BOJS** | **Bojanci** | **12.20** | **335** | *e*Pn | **Pn** | **19 16 10.7** | **-1.9** |
| **CRES** | **Cresnjev** | **12.40** | **335** | *e*Pn | **Pn** | **19 16 13.7** | **-1.7** |
| **CEY** | **Cerknica** | **12.71** | **332** | *e*Pn | **Pn** | **19 16 18.7** | **-0.9** |
| **GERES** | **GERESS Array B** | **15.62** | **337** | P | **P** | **19 17 02.5** | **-0.5** |
| | comp=N,0.5nm,0.4s,baz=148,slow=13,SNR=4.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **16.50** | **14** | P | **Pn** | **19 17 10.7** | **+0.5** |
| | comp=N,0.4nm,0.3s,baz=211,slow=9.5,SNR=6.0 | | | | | | | |
| **ESDC** | **Sonseca Array** | **21.98** | **291** | P | **P** | **19 18 16.3** | **+3.7** |
| | comp=N,0.3nm,0.5s,baz=87,slow=8.2,SNR=2.7 | | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **26.05** | **349** | P | **P** | **19 18 50.4** | **-1.2** |
| | comp=N,1.7nm,0.5s,baz=138,slow=13,SNR=9.6 | | | | | | | |
| | comp=N,1.7nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **26.71** | **3** | P | **P** | **19 18 55.8** | **-1.7** |
| | comp=N,3.0nm,1.0s,baz=168,slow=12,SNR=4.1 | | | | | | | |
| | comp=N,3.0nm,1.0s | | | | | | | |
| **NOA** | **NORSAR Array B** | **27.31** | **347** | P | **P** | **19 19 04.5** | **+1.5** |
| | comp=N,0.6nm,0.8s,baz=162,slow=10,SNR=5.0 | | | | | | | |
| | comp=N,0.6nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **27.33** | **327** | P | **P** | **19 19 04.3** | **+1.1** |
| | comp=N,0.2nm,0.3s,baz=132,slow=9.2,SNR=1.8 | | | | | | | |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.80** | **2** | P | **P** | **19 20 07.8** | **-0.9** |
| | comp=N,5.5nm,1.1s,baz=182,slow=8.1,SNR=6.3 | | | | | | | |
| | comp=N,5.5nm,1.1s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.70** | **51** | P | **P** | **19 21 13.8** | **-1.4** |
| | comp=N,0.6nm,0.5s,baz=271,slow=8.1,SNR=5.5 | | | | | | | |
| | comp=N,0.6nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.43** | **56** | P | P | 19 21 35.2 | -2.0 | |
| | comp=N,0.8nm,0.4s,baz=269,slow=7.9,SNR=24 | | | | | | | |
| | comp=N,0.8nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.51** | **46** | P | P | 19 21 42.6 | -2.9 | |
| | comp=N,0.9nm,0.3s,baz=269,slow=7.7,SNR=6.1 | | | | | | | |
| | comp=N,0.9nm,0.3s | | | | | | | |
| **PALK** | **Pallekele** | **59.49** | **103** | LR | LR | 19 51 00.6 | | |
| | comp=N,44nm,19.2s,baz=210,slow=38 | | | | | | | |
| **SONM** | **Songino Array** | **61.06** | **50** | P | **P** | **19 23 31.2** | **-1.1** |
| | comp=N,0.8nm,0.4s,baz=289,slow=7.5,SNR=5.8 | | | | | | | |
| | comp=N,0.8nm,0.4s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **78.32** | **44** | P | P | 19 25 15.4 | -3.0 | |
| | comp=N,1.1nm,0.7s,baz=298,slow=3.2,SNR=5.3 | | | | | | | |
| | comp=N,1.1nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **79.88** | **51** | P | P | 19 25 25.2 | -1.9 | |
| | comp=N,0.6nm,0.5s,baz=312,slow=4.2,SNR=2.3 | | | | | | | |
| | comp=N,0.6nm,0.5s | | | | | | | |

*IDC **06** 19:27:28.6±1.6,8.°16S×116.°46E, h0km, mb3.7/5, mbtmp3.7/6, ML3.6/1, Error ellipse: s-maj=40.9km s-min=22.2km az=59.0*

*DJA **06** 19:27:30.8±0.7,8.°3S±6.°×11.°6E±.°, h10km±6km, M4.3/9, mb4.8/1, MLv4.1/9*

**ISC 06 19:27:30.0±0.8,8.°13S±0.°07×116.°38E±0.°06, h10km, n15, σ1§19/18, mb3.7/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.78** | **141** | P | **Pg** | **19 27 45.3** | **+0.2** |
| TWSI | | | | S | **Sb** | **19 27 57.0** | **+0.6** |
| **SRBI** | **Singaraja** | **1.16** | **272** | P | **Pn** | **19 27 51.0** | **-1.3** |
| **DNP** | **Denpasar** | **1.28** | **245** | P | **Pn** | **19 27 54.0** | **0.0** |
| **PLAI** | **Plampang** | **1.54** | **117** | P | **Pb** | **19 27 58.7** | **0.0** |
| PLAI | | | | S | **Sg** | **19 28 19.0** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.23** | **261** | P | **Pn** | **19 28 05.9** | **-1.2** |
| **BSSI** | **Bau Bau, Buton** | **4.53** | **64** | P | **Pn** | **19 28 39.5** | **+0.9** |
| **PWJI** | **Pagerwojo** | **4.54** | **271** | P | **Pn** | **19 28 39.6** | **+0.8** |
| **KAPI** | **Kappang** | **4.55** | **47** | Pn | **Pn** | **19 28 39.9** | **+0.9** |
| | 2.8nm,0.3s,baz=180,slow=17,SNR=4.5 | | | | | | | |
| KAPI | | | | Sn | **Sn** | **19 29 30.1** | **-1.9** |
| | 3.5nm,0.3s,baz=175,slow=22,SNR=5.6 | | | | | | | |
| | 8.3nm,0.3s | | | | | | | |
| **BNSI** | **Bone** | **5.23** | **45** | P | **Pn** | **19 28 51.3** | **+3.0** |
| **UGM** | **Wanagama** | **5.81** | **272** | P | **Pn** | **19 28 56.5** | **+0.2** |
| **WRA** | **Warramunga Arr** | **20.98** | **126** | P | **P** | **19 32 12.7** | **-0.9** |
| | 2.0nm,0.5s,baz=301,slow=12,SNR=30 | | | | | | | |
| | 2.0nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.82** | **135** | P | **P** | **19 32 32.5** | **-0.9** |
| | 1.5nm,0.6s,baz=308,slow=8.8,SNR=15 | | | | | | | |
| | 1.5nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.96** | **14** | P | **P** | **19 36 54.1** | **+0.1** |
| | 1.2nm,0.7s,baz=190,slow=7.0,SNR=3.4 | | | | | | | |
| | 1.2nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **56.41** | **352** | P | **P** | **19 37 12.4** | **+0.6** |
| | 0.3nm,0.4s,baz=179,slow=7.2,SNR=2.0 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.53** | **334** | P | **P** | **19 37 54.7** | **+0.7** |
| | 0.4nm,0.7s,baz=153,slow=7.6,SNR=4.3 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |

*JMA **06** 19:30:45.8±0.2,35.°6N±0.°5×141.°1E±1.°0, h38km±1km, MV3.3/38, NEAR CHOSHI CITY*

*IDC **06** 19:30:46.1±2.4,35.°57N×141.°15E, h44km±22km, mb3.3/6, mbtmp3.6/9, ML3.3/3, MS3.1/3, Error ellipse: s-maj=32.6km s-min=14.0km az=92.0*

**ISC 06 19:30:45.3±0.8,35.°54N±0.°04×141.°14E±0.°07, h33km, n40, σ1§18/32, mb3.7/6, 8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSMT** | **Sammumatsuo** | **0.57** | **281** | ⇓*i*P | **Pn** | **19 30 56.6** | **-0.4** |
| JSMT | | | | ⇓*e*S | **Sn** | **19 31 04.4** | **-1.0** |
| **JIHU** | **Itakohorinouch** | **0.66** | **310** | ⇓P | **Pb** | **19 30 58.2** | **-0.2** |
| JIHU | | | | ⇓*e*S | **Sn** | **19 31 07.3** | **-0.1** |
| **JCN** | **Nagara** | **0.78** | **261** | *e*P | **Pb** | **19 31 00.2** | **-0.1** |
| **KTR** | **Katsuura** | **0.78** | **240** | P | **Pn** | **19 30 59.5** | **-0.4** |
| **BSO4** | **Boso 4** | **0.86** | **230** | ⇓P | **Pn** | **19 31 00.8** | **0.0** |
| **BSO1** | **Boso 1** | **0.89** | **189** | ⇓P | **Pn** | **19 31 01.5** | **+0.4** |
| **BSO3** | **Boso 3** | **0.90** | **215** | *i* P | **Pn** | **19 31 01.5** | **+0.1** |
| **JYT** | **Yasato** | **1.03** | **312** | ⇓P | **Pn** | **19 31 03.0** | **-0.4** |
| **JHO** | **Hitachi** | **1.17** | **337** | ⇓P | **Pn** | **19 31 05.2** | **-0.1** |
| **JAG** | **Ashikaga** | **1.63** | **303** | *e*P | **Pn** | **19 31 11.9** | **+0.2** |
| **JMM** | **Marumori** | **2.34** | **353** | P | **Pn** | **19 31 22.6** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **2.58** | **294** | P | **Pn** | **19 31 26.0** | **+1.3** |
| | 1.3nm,0.3s,baz=97,slow=8.3,SNR=56 | | | | | | | |
| MJAR | | | | LR | LR | 19 32 35.3 | | |
| | comp=Z,242nm,20.0s,baz=184,slow=42 | | | | | | | |
| | 6.4nm,0.4s | | | | | | | |
| **MAJO** | **Matsushiro** | **2.58** | **294** | P | **Pn** | **19 31 26.4** | **+1.7** |
| **JHJ2** | **Mitsune** | **2.66** | **205** | P | **Pb** | **19 31 32.0** | **-0.2** |
| **JHJ** | **Hachijo jima 2** | **2.66** | **205** | P | **Pn** | **19 31 27.1** | **+1.2** |
| | 20nm,0.3s,baz=64,slow=22,SNR=6.3 | | | | | | | |
| JHJ | | | | S | **Sn** | **19 31 58.4** | **+1.4** |
| | 113nm,0.3s,baz=85,slow=22,SNR=6.5 | | | | | | | |
| | 70nm,0.3s | | | | | | | |
| **JGF** | **Kuroka** | **3.09** | **272** | P | **Pn** | **19 31 33.8** | **+2.1** |
| **INU** | **Inuyama** | **3.37** | **268** | P | **Pn** | **19 31 38.8** | **+3.2** |
| **JSD** | **Sado** | **3.40** | **318** | P | **Pn** | **19 31 38.1** | **+2.1** |
| **JTM** | **Tenmabayashi** | **5.24** | **359** | P | **Pn** | **19 32 02.9** | **+1.7** |
| **ERM** | **Erimo** | **6.65** | **13** | P | **Pn** | **19 32 20.9** | **+0.3** |
| **JEM** | **Erimo** | **6.66** | **13** | P | **Pn** | **19 32 21.5** | **+0.8** |
| **ASAJ** | **Asahikawa** | **8.64** | **7** | P | **Pn** | **19 32 46.6** | **-1.3** |
| | 0.5nm,0.3s,baz=233,slow=9.9,SNR=1.8 | | | | | | | |
| | 2.5nm,0.5s | | | | | | | |
| **KSRS** | **Korea Array** | **10.81** | **284** | LR | LR | 19 37 27.8 | | |
| | comp=Z,102nm,20.1s,baz=125,slow=37 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.61** | **118** | T | T | 20 05 33.6 | | |
| | baz=310,slow=75,SNR=27 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.61** | **118** | T | T | 20 05 35.1 | | |
| | baz=310,slow=75,SNR=23 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.62** | **118** | T | T | 20 05 34.1 | | |
| | baz=310,slow=75,SNR=32 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.27** | **120** | T | T | 20 06 21.8 | | |
| | baz=312,slow=75,SNR=123 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.27** | **120** | T | T | 20 06 21.8 | | |
| | baz=312,slow=75,SNR=180 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.28** | **120** | T | T | 20 06 23.0 | | |
| | baz=312,slow=75,SNR=94 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.77** | **314** | P | **P** | **19 38 37.8** | **-1.6** |
| | 0.5nm,0.3s,baz=80,slow=6.7,SNR=3.5 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.74** | **303** | P | **P** | **19 38 55.4** | **0.0** |
| | 0.2nm,0.5s,baz=82,slow=9.8,SNR=5.0 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.76** | **309** | P | **P** | **19 39 10.6** | **-0.6** |
| | 0.4nm,0.4s,baz=84,slow=8.5,SNR=5.9 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **50.88** | **32** | P | **P** | **19 39 42.7** | **+0.1** |
| | 0.2nm,0.7s,baz=230,slow=8.1,SNR=2.4 | | | | | | | |
| | 0.2nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.55** | **188** | P | **P** | **19 40 17.3** | **-0.1** |
| | 0.5nm,0.7s,baz=5.7,slow=7.6,SNR=8.5 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **59.28** | **188** | LR | LR | 20 05 52.4 | | |
| | comp=Z,28nm,19.0s,baz=75,slow=36 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.48** | **337** | P | **P** | **19 42 26.5** | **+0.7** |
| | comp=Z,1.0nm,0.7s,baz=40,slow=5.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **75.48** | **337** | P | **P** | **19 42 24.7** | **-1.1** |
| | comp=Z,1.1nm,0.8s,baz=40,slow=5.8,SNR=4.5 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.06** | **98** | T | T | 22 35 01.7 | | |
| | baz=290,slow=76,SNR=16 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.07** | **98** | T | T | 22 34 51.2 | | |
| | baz=290,slow=76,SNR=14 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.07** | **98** | T | T | 22 35 01.7 | | |
| | baz=290,slow=76,SNR=13 | | | | | | | |

**NOU 06 19:46:03.6, 19.°21S×168.°61E, h0km, MLv4.3/13, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTV** | **Rentapao** | **1.42** | **353** | P | Pn | 19 46 29.7 | -1.0 |
| **DVP** | **Devils Point** | **1.53** | **345** | P | Pn | 19 46 31.9 | -0.3 |
| **LIFNC** | **LIFOU** | **2.02** | **219** | P | Pn | 19 46 38.0 | -1.0 |
| **MARNC** | **Mare, Loyalty** | **2.32** | **193** | P | Pn | 19 46 41.5 | -1.6 |
| **YATNC** | **Mamie plateau,** | **3.26** | **209** | P | Pn | 19 46 55.3 | -0.7 |
| **DZM** | **Mont Dzumac** | **3.50** | **215** | P | Pn | 19 47 00.1 | +0.8 |
| **NOUC** | **Port Laguerre** | **3.60** | **217** | P | Pn | 19 47 01.8 | +1.1 |
| **ONTNC** | **Ouen Toro** | **3.68** | **213** | P | Pn | 19 47 02.7 | +0.9 |
| **KOUNC** | **Koumac, New Ca** | **4.28** | **251** | P | Pn | 19 47 10.3 | +0.2 |

**TAP 06 19:47:28.5, 24.°74N×121.°66E, h45km, ML2.1, 3C-2D, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWE** | **Neicheng** | **0.02** | **161** | ⇓*i*P | Pn | 19 47 36.2 | +0.7 |
| | baz=136 | | | | | | |
| TWE | | | | *i* S | Sn | 19 47 41.5 | +1.1 |
| | baz=136 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.07** | **287** | ⇑*i*P | Pn | 19 47 36.2 | +0.4 |
| | baz=286 | | | | | | |
| FUSB | | | | S | Sn | 19 47 41.3 | +0.5 |
| | baz=286 | | | | | | |
| **ILA** | **Ilan** | **0.08** | **72** | *e*P | Pn | 19 47 36.5 | +0.9 |
| | baz=74 | | | | | | |
| ILA | | | | *e*S | Sn | 19 47 42.1 | +1.4 |
| | baz=74 | | | | | | |
| **NDS** | **Dongshan** | **0.12** | **154** | ⇑*i*P | Pn | 19 47 36.3 | +0.5 |
| | baz=154 | | | | | | |
| NDS | | | | S | Sn | 19 47 41.8 | +0.9 |
| | baz=154 | | | | | | |
| **ENTT** | **Nioudou** | **0.13** | **221** | *i* P | Pn | 19 47 36.4 | +0.5 |
| | baz=217 | | | | | | |
| ENTT | | | | S | Sn | 19 47 41.7 | +0.7 |
| | baz=217 | | | | | | |
| **NWLT** | **Wulai** | **0.15** | **285** | *e*P | Pn | 19 47 36.2 | +0.2 |
| | baz=284 | | | | | | |
| NWLT | | | | *i* S | Sn | 19 47 41.9 | +0.6 |
| | baz=284 | | | | | | |
| **NDT** | **Datong Townshi** | **0.19** | **224** | *i* P | Pn | 19 47 36.7 | +0.4 |
| | baz=224 | | | | | | |
| NDT | | | | *i* S | Sn | 19 47 42.4 | +0.6 |
| | baz=224 | | | | | | |
| **TWC** | **Suao** | **0.22** | **127** | *i* P | Pn | 19 47 36.8 | +0.4 |
| | baz=125 | | | | | | |
| TWC | | | | S | Sn | 19 47 42.3 | +0.3 |
| | baz=125 | | | | | | |
| **ESAO** | **Su ao** | **0.23** | **134** | *e*P | Pn | 19 47 36.7 | +0.1 |
| | baz=134 | | | | | | |
| ESAO | | | | *i* S | Sn | 19 47 42.5 | +0.3 |
| | baz=134 | | | | | | |
| **LATG** | **Datong** | **0.24** | **211** | ⇑*i*P | Pn | 19 47 37.3 | +0.5 |
| | baz=210 | | | | | | |
| LATG | | | | *i* S | Sn | 19 47 43.5 | +0.9 |
| | baz=210 | | | | | | |
| **EGS** | | **0.27** | **67** | *e*P | Pn | 19 47 37.8 | +0.9 |
| | baz=68 | | | | | | |
| EGS | | | | *e*S | Sn | 19 47 44.4 | +1.6 |
| | baz=68 | | | | | | |
| **YHNB** | **Yeheng** | **0.27** | **255** | *e*P | Pn | 19 47 37.5 | +0.6 |
| | baz=254 | | | | | | |
| YHNB | | | | S | Sn | 19 47 43.4 | +0.4 |
| | baz=254 | | | | | | |
| **TIPB** | **Shuangxi** | **0.28** | **33** | P | Pn | 19 47 37.4 | +0.4 |
| | baz=33 | | | | | | |
| TIPB | | | | *i* S | Sn | 19 47 43.5 | +0.5 |
| | baz=33 | | | | | | |
| **NSK** | **Sanguang** | **0.28** | **257** | *i* P | Pn | 19 47 37.4 | +0.3 |
| | baz=256 | | | | | | |
| NSK | | | | S | Sn | 19 47 43.3 | +0.2 |
| | baz=256 | | | | | | |
| **EWUT** | **Wuta** | **0.31** | **160** | *e*P | Pn | 19 47 37.5 | +0.2 |
| | baz=159 | | | | | | |
| EWUT | | | | *e*S | Sn | 19 47 44.0 | +0.5 |
| | baz=159 | | | | | | |
| **ENA** | **Nanau** | **0.32** | **167** | P | Pn | 19 47 37.4 | 0.0 |
| | baz=165 | | | | | | |
| ENA | | | | S | Sn | 19 47 44.3 | +0.7 |
| | baz=165 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.35** | **18** | P | Pn | 19 47 38.4 | +0.6 |
| | baz=18 | | | | | | |
| NWF | | | | S | Sn | 19 47 44.5 | +0.2 |
| | baz=18 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.35** | **18** | *e*S | Sn | 19 47 45.0 | +0.8 |
| | baz=18 | | | | | | |
| **NNS** | **Nan Shan** | **0.40** | **221** | ⇓*i*P | Pn | 19 47 38.8 | +0.4 |
| | baz=220 | | | | | | |
| NNS | | | | *e*S | Sn | 19 47 45.9 | +0.6 |
| | baz=220 | | | | | | |
| **NNSB** | **Datong** | **0.40** | **219** | *i* P | Pn | 19 47 38.8 | +0.4 |
| | baz=219 | | | | | | |
| NNSB | | | | *i* S | Sn | 19 47 45.8 | +0.4 |
| | baz=219 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.40** | **48** | *e*P | Pn | 19 47 38.7 | +0.4 |
| | baz=49 | | | | | | |
| TWB1 | | | | S | Sn | 19 47 45.1 | -0.1 |
| | baz=49 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.40** | **29** | P | Pn | 19 47 39.0 | +0.6 |
| | baz=28 | | | | | | |
| SXI1 | | | | S | Sn | 19 47 46.1 | +0.7 |
| | baz=28 | | | | | | |
| **YM01** | **YM01** | **0.41** | **349** | P | Pn | 19 47 39.6 | +1.1 |
| | baz=348 | | | | | | |
| YM01 | | | | *i* S | Sn | 19 47 46.1 | +0.6 |
| | baz=348 | | | | | | |
| **EAHA** | **Aohua** | **0.41** | **170** | *i* P | Pn | 19 47 38.9 | +0.5 |
| | baz=170 | | | | | | |
| **TNOU** | **National Taiwa** | **0.42** | **14** | *e*S | Sn | 19 47 45.9 | +0.3 |
| | baz=14 | | | | | | |
| **YM08** | **YM08** | **0.45** | **352** | *e*S | Sn | 19 47 46.0 | -0.3 |
| | baz=351 | | | | | | |
| **ANP** | **Anpu** | **0.46** | **344** | *e*P | Pn | 19 47 39.0 | -0.1 |
| | baz=344 | | | | | | |
| ANP | | | | *e*S | Sn | 19 47 47.0 | +0.4 |
| | baz=344 | | | | | | |
| **NTST** | **Danshui** | **0.46** | **336** | *e*S | Sn | 19 47 47.5 | +1.0 |
| | baz=335 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.51** | **258** | P | Pn | 19 47 40.0 | +0.4 |
| | baz=257 | | | | | | |
| NFF | | | | *i* S | Sn | 19 47 47.6 | +0.1 |
| | baz=257 | | | | | | |
| **TWY** | **Chenhua** | **0.54** | **354** | *e*S | Sn | 19 47 49.4 | +1.3 |
| | baz=354 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.56** | **197** | P | Pn | 19 47 40.1 | -0.2 |
| | baz=197 | | | | | | |
| ETLH | | | | *i* S | Sn | 19 47 48.6 | -0.1 |
| | baz=197 | | | | | | |
| **NACB** | **Ninganchiao** | **0.57** | **186** | P | Pn | 19 47 39.9 | -0.5 |
| | baz=186 | | | | | | |
| NACB | | | | *e*S | Sn | 19 47 49.1 | +0.3 |
| | baz=186 | | | | | | |
| **LIOB** | **Emei** | **0.59** | **261** | *e*P | Pn | 19 47 41.3 | +0.6 |
| | baz=261 | | | | | | |
| LIOB | | | | *i* S | Sn | 19 47 50.5 | +1.0 |
| | baz=261 | | | | | | |
| **NSTT** | **Nanjuang** | **0.61** | **260** | *e*P | Pn | 19 47 41.3 | +0.4 |
| | baz=259 | | | | | | |
| NSTT | | | | *e*S | Sn | 19 47 50.6 | +0.9 |
| | baz=259 | | | | | | |
| **EOS2** | **EOS2** | **0.61** | **121** | *e*P | Pn | 19 47 42.2 | +1.4 |
| | baz=121 | | | | | | |
| EOS2 | | | | *e*S | Sn | 19 47 52.6 | +3.0 |
| | baz=121 | | | | | | |
| **FUSS** | **Fushou** | **0.62** | **218** | *i* P | Pn | 19 47 41.9 | +0.6 |
| | baz=217 | | | | | | |
| FUSS | | | | S | Sn | 19 47 51.3 | +0.9 |
| | baz=217 | | | | | | |
| **TW

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JISG** | **Ishigakijimahi** | **0.78** | **122** | *e*P | Pb | 19 54 42.1 | -0.1 |
| JISG | | | | *e*S | Sb | 19 54 52.0 | -0.3 |
| **JYNG** | **Yonagunijimaku** | **0.81** | **227** | *e*S | Sb | 19 54 53.2 | 0.0 |
| **JIJ** | **Ishigaki jima** | **0.81** | **142** | *e*P | Pb | 19 54 42.1 | -0.7 |
| JIJ | | | | *e*S | Sb | 19 54 53.1 | -0.2 |
| **JKRS** | **Kuro-shima** | **0.85** | **154** | *e*S | Sb | 19 54 54.6 | +0.1 |
| **HATJ** | **Hateruma jima** | **0.96** | **168** | *e*P | Pb | 19 54 45.4 | 0.0 |
| HATJ | | | | *e*S | Sb | 19 54 57.8 | +0.1 |

**TAP 06 19:55:13.7, 24.75N×121.64E, h55km, ML1.8, 1D, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWE** | **Neicheng** | **0.04** | **142** | P | Pn | 19 55 22.5 | +0.5 |
| | baz=130 | | | | | | |
| TWE | | | | *e*S | Sn | 19 55 26.9 | -0.9 |
| | baz=130 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.05** | **281** | P | Pn | 19 55 22.5 | +0.4 |
| | baz=281 | | | | | | |
| FUSB | | | | S | Sn | 19 55 28.4 | +0.4 |
| | baz=281 | | | | | | |
| **ILA** | **Ilan** | **0.10** | **81** | *i* P | Pn | 19 55 22.5 | +0.4 |
| | baz=82 | | | | | | |
| ILA | | | | S | Sn | 19 55 28.5 | +0.5 |
| | baz=82 | | | | | | |
| **ENTT** | **Nioudou** | **0.13** | **212** | P | Pn | 19 55 22.8 | +0.5 |
| | baz=209 | | | | | | |
| ENTT | | | | S | Sn | 19 55 29.3 | +0.9 |
| | baz=209 | | | | | | |
| **NWLT** | **Wulai** | **0.13** | **282** | *i* P | Pn | 19 55 22.6 | +0.3 |
| | baz=282 | | | | | | |
| NWLT | | | | S | Sn | 19 55 28.6 | +0.2 |
| | baz=282 | | | | | | |
| **NDS** | **Dongshan** | **0.13** | **150** | *i* P | Pn | 19 55 22.5 | +0.3 |
| | baz=149 | | | | | | |
| NDS | | | | *i* S | Sn | 19 55 29.0 | +0.7 |
| | baz=149 | | | | | | |
| **NDT** | **Datong Townshi** | **0.19** | **219** | P | Pn | 19 55 23.0 | +0.5 |
| | baz=218 | | | | | | |
| NDT | | | | *i* S | Sn | 19 55 29.4 | +0.6 |
| | baz=218 | | | | | | |
| **TWA** | **Mucha** | **0.23** | **347** | *i* P | Pn | 19 55 23.3 | +0.5 |
| | baz=348 | | | | | | |
| TWA | | | | S | Sn | 19 55 30.3 | +0.9 |
| | baz=348 | | | | | | |
| **TWC** | **Suao** | **0.23** | **127** | P | Pn | 19 55 23.7 | +0.9 |
| | baz=125 | | | | | | |
| TWC | | | | *i* S | Sn | 19 55 30.2 | +0.9 |
| | baz=125 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.24** | **333** | *e*P | Pn | 19 55 22.4 | -0.4 |
| | baz=333 | | | | | | |
| NHDH | | | | *e*S | Sn | 19 55 28.1 | -1.2 |
| | baz=333 | | | | | | |
| **LATG** | **Datong** | **0.24** | **206** | *e*P | Pn | 19 55 23.7 | +0.7 |
| | baz=206 | | | | | | |
| LATG | | | | *e*S | Sn | 19 55 30.6 | +1.0 |
| | baz=206 | | | | | | |
| **ESAO** | **Su ao** | **0.25** | **133** | *i* P | Pn | 19 55 23.3 | +0.4 |
| | baz=133 | | | | | | |
| ESAO | | | | S | Sn | 19 55 30.5 | +1.0 |
| | baz=133 | | | | | | |
| **YHNB** | **Yeheng** | **0.26** | **252** | P | Pn | 19 55 23.4 | +0.4 |
| | baz=251 | | | | | | |
| YHNB | | | | S | Sn | 19 55 30.2 | +0.5 |
| | baz=251 | | | | | | |
| **TATO** | **Taipei** | **0.26** | **328** | *i* P | Pn | 19 55 23.4 | +0.4 |
| | baz=329 | | | | | | |
| TATO | | | | *e*S | Sn | 19 55 30.9 | +1.2 |
| | baz=329 | | | | | | |
| **NSK** | **Sanguang** | **0.27** | **254** | ⇓*i* P | Pn | 19 55 23.5 | +0.3 |
| | baz=253 | | | | | | |
| NSK | | | | S | Sn | 19 55 30.3 | +0.4 |
| | baz=253 | | | | | | |
| **TIPB** | **Shuangxi** | **0.28** | **37** | *i* P | Pn | 19 55 23.6 | +0.4 |
| | baz=37 | | | | | | |
| TIPB | | | | *i* S | Sn | 19 55 30.6 | +0.7 |
| | baz=37 | | | | | | |
| **EGS** | | **0.28** | **70** | P | Pn | 19 55 23.8 | +0.7 |
| | baz=71 | | | | | | |
| EGS | | | | S | Sn | 19 55 31.2 | +1.3 |
| | baz=71 | | | | | | |
| **EWUT** | **Wuta** | **0.33** | **158** | P | Pn | 19 55 23.8 | +0.3 |
| | baz=157 | | | | | | |
| EWUT | | | | S | Sn | 19 55 31.6 | +1.1 |
| | baz=157 | | | | | | |
| **ENA** | **Nanau** | **0.33** | **164** | P | Pn | 19 55 24.4 | +0.8 |
| | baz=163 | | | | | | |
| ENA | | | | S | Sn | 19 55 31.8 | +1.1 |
| | baz=163 | | | | | | |
| **NWF** | **Wu-ten Shan** | **0.34** | **22** | *i* P | Pn | 19 55 24.2 | +0.4 |
| | baz=21 | | | | | | |
| **NNS** | **Nan Shan** | **0.39** | **218** | *i* P | Pn | 19 55 24.7 | +0.4 |
| | baz=217 | | | | | | |
| NNS | | | | S | Sn | 19 55 32.7 | +0.8 |
| | baz=217 | | | | | | |
| **NNSB** | **Datong** | **0.40** | **216** | P | Pn | 19 55 24.9 | +0.6 |
| | baz=216 | | | | | | |
| NNSB | | | | S | Sn | 19 55 32.6 | +0.6 |
| | baz=216 | | | | | | |
| **YM01** | **YM01** | **0.40** | **351** | P | Pn | 19 55 24.5 | +0.2 |
| | baz=350 | | | | | | |
| YM01 | | | | *i* S | Sn | 19 55 32.7 | +0.8 |
| | baz=350 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.40** | **32** | P | Pn | 19 55 24.6 | +0.2 |
| | baz=31 | | | | | | |
| SXI1 | | | | *i* S | Sn | 19 55 32.8 | +0.8 |
| | baz=31 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.41** | **51** | *i* P | Pn | 19 55 24.8 | +0.5 |
| | baz=51 | | | | | | |
| TWB1 | | | | *i* S | Sn | 19 55 33.0 | +1.1 |
| | baz=51 | | | | | | |
| **YM08** | **YM08** | **0.44** | **354** | *e*P | Pn | 19 55 24.4 | -0.3 |
| | baz=353 | | | | | | |
| YM08 | | | | *e*S | Sn | 19 55 32.9 | +0.4 |
| | baz=353 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.49** | **256** | *i* P | Pn | 19 55 25.6 | +0.4 |
| | baz=256 | | | | | | |
| NFF | | | | *i* S | Sn | 19 55 34.5 | +0.9 |
| | baz=256 | | | | | | |
| **TWY** | **Chenhua** | **0.53** | **356** | P | Pn | 19 55 25.9 | +0.3 |
| | baz=356 | | | | | | |
| TWY | | | | S | Sn | 19 55 35.3 | +1.2 |
| | baz=356 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.56** | **195** | *i* P | Pn | 19 55 26.7 | +0.6 |
| | baz=195 | | | | | | |
| ETLH | | | | *e*S | Sn | 19 55 34.5 | -0.5 |
| | baz=195 | | | | | | |
| **NACB** | **Ninganchiao** | **0.57** | **184** | *e*P | Pn | 19 55 25.3 | -0.9 |
| | baz=184 | | | | | | |
| NACB | | | | *e*S | Sn | 19 55 35.1 | 0.0 |
| | baz=184 | | | | | | |
| **LIOB** | **Emei** | **0.58** | **260** | P | Pn | 19 55 27.1 | +0.8 |
| | baz=259 | | | | | | |
| LIOB | | | | S | Sn | 19 55 36.7 | +1.4 |
| | baz=259 | | | | | | |
| **NSTT** | **Nanjuang** | **0.59** | **259** | *i* P | Pn | 19 55 27.0 | +0.6 |
| | baz=258 | | | | | | |
| NSTT | | | | *i* S | Sn | 19 55 36.6 | +1.0 |
| | baz=258 | | | | | | |
| **FUSS** | **Fushou** | **0.62** | **216** | *e*P | Pn | 19 55 28.2 | +1.3 |
| | baz=215 | | | | | | |
| FUSS | | | | *i* S | Sn | 19 55 37.3 | +0.8 |
| | baz=215 | | | | | | |
| **TWT** | **Tachien** | **0.65** | **221** | *e*P | Pn | 19 55 26.8 | -0.5 |
| | baz=221 | | | | | | |
| TWT | | | | *i* S | Sn | 19 55 38.2 | +1.1 |
| | baz=221 | | | | | | |
| **TDCB** | **Techi** | **0.66** | **222** | *e*P | Pn | 19 55 28.8 | +1.4 |
| | baz=221 | | | | | | |
| TDCB | | | | *e*S | Sn | 19 55 38.7 | +1.4 |
| | baz=221 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.69** | **210** | P | Pn | 19 55 27.8 | -0.2 |
| | baz=209 | | | | | | |
| WHF | | | | S | Sn | 19 55 39.0 | +0.7 |
| | baz=209 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.76** | **196** | P | Pn | 19 55 28.7 | +0.2 |
| | baz=196 | | | | | | |
| LXIB | | | | *e*S | Sn | 19 55 39.8 | +0.5 |
| | baz=196 | | | | | | |
| **CHGB** | **Renai** | **0.81** | **212** | *i* P | Pn | 19 55 29.9 | +0.6 |
| | baz=211 | | | | | | |
| CHGB | | | | S | Sn | 19 55 41.8 | +1.1 |
| | baz=211 | | | | | | |
| **EOS4** | **EOS4** | **0.88** | **135** | *e*P | Pn | 19 55 29.8 | +0.2 |
| | baz=135 | | | | | | |
| EOS4 | | | | *e*S | Sn | 19 55 42.6 | +1.3 |
| | baz=135 | | | | | | |
| **ESL** | **Shilin** | **0.95** | **192** | *e*P | Pn | 19 55 31.3 | +0.4 |
| | baz=191 | | | | | | |
| ESL | | | | *e*S | Sn | 19 55 43.5 | -0.2 |
| | baz=191 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.05** | **193** | *e*P | Pn | 19 55 32.5 | +0.1 |
| | baz=192 | | | | | | |
| WARBT | | | | *e*S | Sn | 19 55 46.0 | -0.1 |
| | baz=192 | | | | | | |
| **VWDT** | **VWDT** | **1.09** | **205** | P | Pn | 19 55 33.3 | +0.5 |
| | baz=204 | | | | | | |
| VWDT | | | | *e*S | Sn | 19 55 49.1 | +2.2 |
| | baz=204 | | | | | | |
| **YULB** | **Yu-li** | **1.39** | **193** | *e*P | Pn | 19 55 37.0 | +0.2 |
| | baz=193 | | | | | | |
| YULB | | | | *e*S | Sn | 19 55 54.3 | +0.2 |
| | baz=193 | | | | | | |

*DJA **06** 19:56:41.0±1.1, 8°S±18°×116°6E±°, h11km±10km, M3.4/5, MLv3.4/5*
*IDC **06** 19:56:44.1±3.6, 8°.65S×116°.73E, h0km, mb3.2/3, mbtmp3.3/3, Error ellipse: s-maj=262.1km s-min=28.3km az=49.0*

**ISC 06 19:56:39.4±1.3, 8°.2S±0°.1×116°.31E±0°.05, h10km, n9, σ0°50/9, mb3.3/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.80** | **135** | P | **Pb** | **19 56 55.8** | **+0.3** |
| TWSI | | | | S | **Sb** | **19 57 06.6** | **+0.2** |
| **SRBI** | **Singaraja** | **1.09** | **274** | P | **Pn** | **19 57 01.1** | **+0.3** |
| **DNP** | **Denpasar** | **1.20** | **245** | P | **Pg** | **19 57 02.1** | **-0.4** |
| **PLAI** | **Plampang** | **1.59** | **114** | P | **Pb** | **19 57 09.0** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.15** | **262** | P | **Pn** | **19 57 16.0** | **+0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.61** | **64** | P | **Pn** | **19 57 49.6** | **+0.3** |
| **WRA** | **Warramunga Arr** | **21.02** | **126** | P | **P** | **20 01 22.9** | **-0.6** |
| | 0.7nm,0.5s,baz=301,slow=12,SNR=19 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.84** | **134** | P | **P** | **20 01 42.5** | **-0.6** |
| | 0.4nm,0.5s,baz=310,slow=9.0,SNR=12 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.54** | **334** | P | P | 20 07 13.8 | +10 |
| | 0.2nm,0.6s,baz=144,slow=5.5,SNR=2.5 0.2nm,0.6s | | | | | | |

*HEL **06** 20:02:52.9±0.2, 67°.81N×20°.37E, h0km, ML1.3, Suspected explosion*
*IDC **06** 20:02:54.2±1.5, 67°.80N×20°.59E, h0km, mbtmp2.9/3, ML1.9/3, Error ellipse: s-maj=24.6km s-min=10.8km az=114.0*

**ISC 06 20:02:52.9±1.1, 67°.90N±0°.03×20°.64E±0°.05, h0km, n22, σ1°39/30, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LANU** | **Lannavaara** | **0.53** | **74** | PG | **Pb** | **20 03 04.7** | **-0.4** |
| LANU | | | | SG | **Sg** | **20 03 10.8** | **+0.8** |
| **SALU** | **Saltoluokta** | **0.97** | **238** | *e*P | Pg | 20 03 06.9 | -4.6 |
| **HEF** | **Hetta** | **1.24** | **65** | *e*P | **Pg** | **20 03 16.3** | **-0.3** |
| **HEF** | **Hetta** | **1.24** | **65** | PG | **Pn** | **20 03 17.7** | **+0.2** |
| HEF | | | | MSG | | 20 03 34.4 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| HEF | | | | SN | **Sn** | **20 03 37.9** | **+3.0** |
| **PAJU** | **Pajala** | **1.30** | **132** | PG | **Pg** | **20 03 16.7** | **-1.1** |
| PAJU | | | | SN | **Sn** | **20 03 37.0** | **+0.6** |
| **I37NO** | **I37NO** | **1.39** | **328** | I | I | 20 11 40.0 | |
| | baz=154,slow=328,SNR=7.2 | | | | | | |
| **KLF** | **Kolari** | **1.44** | **116** | PG | **Pn** | **20 03 20.1** | **-0.1** |
| KLF | | | | MSG | | 20 03 38.0 | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| KLF | | | | SN | **Sn** | **20 03 43.4** | **+3.5** |
| **KTK1** | **Kautokeino** | **1.47** | **40** | PG | **Pb** | **20 03 21.9** | **+0.8** |
| **TRO** | **Tromso** | **1.84** | **341** | PG | **Pb** | **20 03 27.2** | **-0.3** |
| TRO | | | | SG | **Sg** | **20 03 52.1** | **0.0** |
| **SGF** | **Sodankyl** | **2.30** | **99** | PG | **Pb** | **20 03 35.2** | **0.0** |
| SGF | | | | SG | **Sg** | **20 04 06.0** | **-0.6** |
| **KALU** | **Kalix** | **2.32** | **151** | PB | **Pn** | **20 03 32.2** | **0.0** |
| | baz=332 | | | | | | |
| KALU | | | | SG | **Sb** | **20 04 05.0** | **+0.4** |
| **TOF** | **Tornio** | **2.34** | **140** | PG | **Pn** | **20 03 33.5** | **+1.0** |
| TOF | | | | MSG | | 20 04 02.1 | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.42** | **45** | PN | **Pb** | **20 03 35.2** | **-2.0** |
| ARA0 | | | | SN | **Sb** | **20 04 06.3** | **-1.2** |
| **ARCES** | **ARCESS Array B** | **2.42** | **45** | Pn | **Pb** | **20 03 35.9** | **-1.3** |
| | comp=Z,0.3nm,0.3s,baz=231,slow=17,SNR=14 | | | | | | |
| ARCES | | | | Sn | **Sg** | **20 04 09.7** | **-0.8** |
| | comp=Z,0.9nm,0.3s,baz=227,slow=21,SNR=3.8 comp=Z,0.7nm,0.4s | | | | | | |
| **RNF** | **Rovaniemi** | **2.46** | **119** | PB | **Pb** | **20 03 36.4** | **-1.6** |
| RNF | | | | SG | **Sg** | **20 04 11.6** | **-0.2** |
| **RAJF** | **Raja-Jooseppi** | **2.92** | **75** | PB | **Pb** | **20 03 43.3** | **-2.5** |
| RAJF | | | | SG | **Sg** | **20 04 26.2** | **-0.4** |
| **KEV** | **Kevo** | **2.97** | **48** | SB | **Sb** | **20 04 23.1** | **-0.2** |
| KEV | | | | MSG | | 20 04 24.1 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| **VRF** | **Varrio** | **3.41** | **88** | SG | **Sg** | **20 04 41.4** | **-0.8** |
| **KU6** | **Riekki** | **4.10** | **113** | PN | **Pn** | **20 03 59.4** | **+2.7** |
| **FINES** | **FINESS Array B** | **6.89** | **158** | Pn | **Pn** | **20 04 35.8** | **+0.8** |
| | baz=342,slow=12,SNR=1.9 | | | | | | |
| FINES | | | | Lg | Lg | 20 06 25.0 | |
| | comp=Z,0.1nm,0.3s,baz=351,slow=27,SNR=2.2 comp=Z,1.8nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **7.99** | **215** | Lg | Lg | 20 07 00.7 | |
| | baz=46,slow=26,SNR=2.5 | | | | | | |
| **HFS** | **Hagfors** | **8.37** | **205** | Pn | **Pn** | **20 04 54.4** | **-0.9** |
| | comp=Z,0.1nm,0.3s,baz=20,slow=9.7,SNR=1.1 comp=Z,1.1nm,0.8s | | | | | | |

**HEL 06 20:05:22.6±0.2, 67°.72N×33°.70E, h0km, ML1.3, Explosion, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVZ** | **Lovozero** | **0.40** | **64** | PG | Pg | 20 05 29.9 | -0.4 |
| LVZ | | | | SG | Sg | 20 05 34.5 | -1.0 |
| **VRF** | **Varrio** | **1.56** | **273** | PG | Pn | 20 05 50.6 | -1.0 |
| VRF | | | | MSG | | 20 06 09.3 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| VRF | | | | SG | Sn | 20 06 09.6 | -2.8 |
| **RAJF** | **Raja-Jooseppi** | **2.16** | **293** | SG | Sn | 20 06 27.4 | +0.2 |
| **OLKF** | **Oulanka, Finla** | **2.20** | **232** | PB | Pn | 20 06 00.3 | 0.0 |
| OLKF | | | | MSG | | 20 06 27.6 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| OLKF | | | | SB | Sn | 20 06 28.8 | +0.7 |
| **KU6** | **Riekki** | **2.27** | **223** | PN | Pn | 20 06 01.0 | -0.4 |
| KU6 | | | | MSG | | 20 06 30.0 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| KU6 | | | | SB | Sn | 20 06 31.2 | +1.2 |
| **MSF** | **Maaselka** | **2.59** | **228** | PB | Pb | 20 06 08.3 | -1.5 |
| **RNF** | **Rovaniemi** | **3.20** | **253** | SN | Sn | 20 06 52.0 | -0.8 |
| **ARA0** | **ARCESS Array S** | **3.51** | **305** | PN | Pn | 20 06 17.0 | -1.3 |
| ARA0 | | | | SN | Sn | 20 06 58.3 | -2.2 |
| **HEF** | **Hetta** | **3.83** | **285** | SG | Sb | 20 07 21.5 | +3.7 |
| **PAJU** | **Pajala** | **4.15** | **265** | SN | Sn | 20 07 14.1 | -2.2 |
| **LANU** | **Lannavaara** | **4.44** | **280** | SN | Sn | 20 07 22.2 | -1.1 |
| **OBF4** | **Vikkela, Lumij** | **4.54** | **234** | PG | Pb | 20 06 45.3 | +2.3 |

**KOLA 06 20:06:19.9, 67°.68N×33°.74E, h0km, ML1.9, Error ellipse: s-maj=3.0km s-min=1.6km az=120.0, Khibiny, mines Kirovsk, Yukspor, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **APA** | **Apatity** | **0.17** | **229** | S | Sg | 20 06 24.7 | -0.7 |
| **LVZ** | **Lovozero** | **0.41** | **57** | PG | Pg | 20 06 27.4 | -0.3 |
| LVZ | | | | S | Sg | 20 06 33.0 | 0.0 |
| **TERR** | **Teriberka** | **1.61** | **18** | P | Pn | 20 06 47.2 | -2.2 |
| TERR | | | | S | Sn | 20 07 09.7 | -1.2 |
| **VADS** | **Vadso** | **2.92** | **329** | S | Sn | 20 07 42.8 | -0.4 |
| **ARCES** | **ARCESS Array B** | **3.54** | **305** | P | Pn | 20 07 13.1 | -3.0 |
| ARCES | | | | S | Sn | 20 07 57.1 | -1.5 |
| **FAUS** | **Fauske** | **7.07** | **276** | S | Sn | 20 09 21.7 | -3.7 |

*BJI **06** 20:10:49.0±0.0, 35°.46N×140°.88E, h66km, mb4.4/33, mB4.5/11, Ms3.7/3*
*MOS **06** 20:10:52.1±1.2, 35°.56N×140°.36E, h54km, mb4.6/17, Error ellipse: s-maj=11.4km s-min=5.7km az=113.4*
*NEIC **06** 20:10:54.9±1.9, 35°.50N±0°.05×140°.29E±0°.09, h59km±7km, mb4.6/69, Error ellipse: s-maj=10.3km s-min=7.8km az=104.0*
*NIED **06** 20:10:54.7, 35°.56N×140°.17E, h73km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; $M_{rr}$0.97; $M_{\theta\theta}$-0.24; $M_{\phi\phi}$-0.73; $M_{r\theta}$-0.48; $M_{\theta\phi}$-1.82; $M_{\phi r}$0.36; Fault plane solution: $M_0$2.06000×10¹⁵ NP1: φs260.00000°, δ66.00000°, λ152.00000°. NP2:φs2.00000°, δ65.00000°, λ27.00000°.*
*JMA **06** 20:10:54.7±0.2, 35°.6N±0°.6×140°.2E±0°.9, h73km±1km, MD4.2/40, MV4.1/40, CENTRAL CHIBA PREF*
*JMA Felt II J1 at CENTRAL CHIBA PREF .*
*IDC **06** 20:10:57.6±1.4, 35°.44N×140°.01E, h87km±11km, mb3.8/18, mbtmp4.1/22, MS3.1/5, Error ellipse: s-maj=22.0km s-min=6.3km az=68.0*

**ISC 06 20:10:55.2±0.6, 35°.55N±0°.04×140°.25E±0°.04, h64km±5km, n243, σ1°47/223, mb4.5/69, 7C-12D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCN** | **Nagara** | **0.13** | **199** | P | **Pn** | **20 11 06.0** | **+1.2** |
| JCN | | | | *e*S | **Sn** | **20 11 14.7** | **+3.0** |
| **JCN** | **Nagara** | **0.13** | **199** | A | A | 20 11 06.0 | |
| | comp=E,70nm,1.7s,comp=N,65nm,1.3s | | | | | | |
| **JSMT** | **Sammumatsuo** | **0.19** | **58** | P | **Pn** | **20 11 06.2** | **+1.1** |
| JSMT | | | | *e*S | **Sn** | **20 11 14.7** | **+2.6** |
| **JSMT** | **Sammumatsuo** | **0.19** | **58** | A | A | 20 11 06.2 | |
| | comp=E,67nm,1.3s,comp=N,243nm,0.6s | | | | | | |
| **JKUC** | **kamogawauchiur** | **0.39** | **187** | A | A | 20 11 07.0 | |
| | comp=E,40nm,1.5s,comp=N,35nm,0.8s | | | | | | |
| **TOK** | **Tokyo** | **0.43** | **289** | P | **Pn** | **20 11 07.4** | **+0.7** |
| TOK | | | | S | **Sn** | **20 11 17.0** | **+1.9** |
| **TOK** | **Tokyo** | **0.43** | **289** | A | A | 20 11 07.4 | |
| | comp=E,39nm,0.7s,comp=N,58nm,0.4s | | | | | | |
| **JIHU** | **Itakohorinouch** | **0.47** | **28** | A | A | 20 11 07.8 | |
| | comp=E,64nm,1.2s,comp=N,79nm,1.6s | | | | | | |
| **JYO** | **Yokosk** | **0.58** | **236** | A | A | 20 11 08.2 | |
| | comp=E,50nm,0.9s,comp=N,69nm,0.5s | | | | | | |
| **TATJ** | **Tateyama 2** | **0.59** | **210** | A | A | 20 11 08.6 | |
| | comp=E,29nm,0.9s,comp=N,19nm,0.8s | | | | | | |
| **JYT** | **Yasato** | **0.68** | **356** | A | A | 20 11 09.6 | |
| | comp=E,33nm,0.4s,comp=N,26nm,0.8s | | | | | | |
| **BSO3** | **Boso 3** | **0.77** | **164** | ⇓*i* P | **Pn** | **20 11 10.6** | **+0.3** |
| **JHYU** | **Hitachinakayam** | **0.84** | **19** | A | A | 20 11 11.6 | |
| | comp=E,9.0nm,2.1s,comp=N,13nm,1.9s | | | | | | |
| **JHU** | **Hanno** | **0.85** | **291** | A | A | 20 11 10.9 | |
| | comp=E,9.0nm,0.9s,comp=N,8.0nm,1.7s | | | | | | |
| **JSGW** | **Sagamiharawaka** | **0.85** | **274** | A | A | 20 11 10.9 | |
| | comp=E,30nm,0.7s,comp=N,21nm,0.4s | | | | | | |
| **JOD2** | **Odawara 2** | **0.99** | **254** | ⇓*i* P | **Pn** | **20 11 12.7** | **-0.6** |
| JOD2 | | | | ⇓S | **Sn** | **20 11 25.4** | **-1.3** |
| **JOD2** | **Odawara 2** | **0.99** | **254** | A | A | 20 11 12.7 | |
| | comp=E,11nm,0.3s,comp=N,11nm,0.5s | | | | | | |
| **JIM2** | **Oshima 3** | **1.07** | **219** | P | **Pn** | **20 11 13.4** | **-0.8** |
| JIM2 | | | | S | **Sn** | **20 11 27.7** | **-0.7** |
| **JIM2** | **Oshima 3** | **1.07** | **219** | A | A | 20 11 13.4 | |
| | comp=E,32nm,0.3s,comp=N,32nm,0.3s | | | | | | |
| **BSO1** | **Boso 1** | **1.07** | **146** | ⇓*i* P | **Pn** | **20 11 13.7** | **-0.1** |
| **JAG** | **Ashikaga** | **1.09** | **324** | ⇓*i* P | **Pn** | **20 11 14.4** | **-0.2** |
| **JAG** | **Ashikaga** | **1.09** | **324** | A | A | 20 11 14.4 | |
| | comp=E,8.0nm,0.5s,comp=N,8.0nm,0.5s | | | | | | |
| **JHTM** | **Izuhatsuma** | **1.18** | **241** | A | A | 20 11 15.1 | |
| | comp=E,28nm,0.3s,comp=N,30nm,0.4s | | | | | | |
| **JRY** | **Ryogami san** | **1.20** | **294** | ⇓*i* P | **Pn** | **20 11 16.0** | **0.0** |
| JRY | | | | ⇓S | **Sn** | **20 11 31.5** | **0.0** |
| **JFNN** | **Fujinakano** | **1.33** | **255** | P | **Pn** | **20 11 17.3** | **-0.4** |
| **JYN** | **Shimob** | **1.40** | **269** | ⇓*i* P | **Pn** | **20 11 18.2** | **-0.5** |
| **JIZS** | **Izushimoda** | **1.40** | **234** | *i* P | **Pn** | **20 11 18.0** | **-0.6** |
| **JIZS** | **Izushimoda** | **1.40** | **234** | A | A | 20 11 18.0 | |
| | comp=E,7.0nm,0.6s,comp=N,7.0nm,0.9s | | | | | | |
| **JSB** | **Shiboa** | **1.45** | **349** | A | A | 20 11 19.1 | |
| | comp=E,9.0nm,0.7s,comp=N,8.0nm,0.9s | | | | | | |
| **JKT** | **Katashina** | **1.47** | **327** | ⇓*i* P | **Pn** | **20 11 19.3** | **-0.3** |
| **JMYK** | **Miyake Tsubota** | **1.59** | **202** | A | A | 20 11 21.2 | |
| | comp=E,12nm,0.6s,comp=N,10.0nm,0.4s | | | | | | |
| **JSG** | **Sagara** | **1.91** | **243** | P | **Pn** | **20 11 26.7** | **+1.3** |
| **JSG** | **Sagara** | **1.91** | **243** | | **Pn** | **20 11 26.0** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **1.93** | **302** | P | **Pn** | **20 11 25.6** | **-0.2** |
| | comp=N,194nm,0.5s,baz=101,slow=14,SNR=364 | | | | | | |
| MJAR | | | | S | **Sn** | **20 11 49.5** | **+0.4** |
| | comp=N,97nm,0.3s,baz=114,slow=16,SNR=5.3 | | | | | | |
| MJAR | | | | LR | LR | 20 12 20.0 | |
| | comp=N,231nm,18.4s,baz=182,slow=45 | | | | | | |
| **MAJO** | **Matsushiro** | **1.94** | **302** | P | **Pn** | **20 11 26.4** | **+0.6** |
| **MAJO** | **Matsushiro** | **1.94** | **302** | | **Pn** | **20 11 25.9** | **0.0** |
| **MAJO** | **Matsushiro** | **1.94** | **302** | *i* P | **Pn** | **20 11 25.5** | **-0.3** |
| **MJB9** | **Matsu-Tunnel** | **1.94** | **302** | | **Pn** | **20 11 25.6** | **-0.2** |
| **JNY** | **Yasuok** | **1.96** | **265** | A | A | 20 11 25.6 | |
| | comp=E,3.0nm,1.0s,comp=N,5.0nm,1.3s | | | | | | |
| **JMM** | **Marumori** | **2.36** | **10** | P | **Pn** | **20 11 32.8** | **+1.3** |
| **JMM** | **Marumori** | **2.36** | **10** | | **Pn** | **20 11 31.8** | **+0.3** |
| **JGF** | **Kuroka** | **2.36** | **272** | P | **Pn** | **20 11 32.7** | **+1.0** |
| **JGF** | **Kuroka** | **2.36** | **272** | Pn | **Pn** | **20 11 31.6** | **-0.1** |
| **JHJ** | **Hachijo jima 2** | **2.45** | **189** | P | **Pn** | **20 11 32.8** | **-0.1** |
| | comp=N,1μm,0.3s,baz=341,slow=18,SNR=69 | | | | | | |
| JHJ | | | | S | **Sn** | **20 12 03.1** | **+1.5** |
| | comp=N,2μm,0.3s,baz=105,slow=22,SNR=12 | | | | | | |
| **JHJ2** | **Mitsune** | **2.45** | **189** | P | **Pn** | **20 11 33.1** | **+0.2** |
| **JHJ2** | **Mitsune** | **2.45** | **189** | | **Pn** | **20 11 32.5** | **-0.4** |
| **INU** | **Inuyama** | **2.65** | **267** | P | **Pn** | **20 11 35.8** | **+0.3** |
| **INU** | **Inuyama** | **2.65** | **267** | | **Pn** | **20 11 35.4** | **-0.2** |
| **JSD** | **Sado** | **2.96** | **328** | P | **Pn** | **20 11 39.7** | **0.0** |
| **JSD** | **Sado** | **2.96** | **328** | | **Pn** | **20 11 39.5** | **-0.2** |
| **JTM** | **Tenmabayashi** | **5.27** | **7** | P | **Pn** | **20 12 11.9** | **+0.6** |
| **JTM** | **Tenmabayashi** | **5.27** | **7** | Pn | **Pn** | **20 12 11.7** | **+0.4** |
| **JMN** | **Monobe** | **5.56** | **253** | P | **Pn** | **20 12 16.4** | **+1.0** |
| **JMN** | **Monobe** | **5.56** | **253** | Pn | **Pn** | **20 12 15.9** | **+0.5** |
| **ERM** | **Erimo** | **6.85** | **18** | P | **Pn** | **20 12 32.0** | **-0.9** |
| **ERM** | **Erimo** | **6.85** | **18** | Pn | **Pn** | **20 12 31.6** | **-1.3** |
| **ERM** | **Erimo** | **6.85** | **18** | *i* P | **Pn** | **20 12 31.0** | **-1.9** |
| **JEM** | **Erimo** | **6.85** | **18** | P | **Pn** | **20 12 32.1** | **-0.8** |
| **JNU** | **Nakatsue** | **8.12** | **255** | P | **Pn** | **20 12 52.0** | **+1.6** |
| **JNU** | **Nakatsue** | **8.12** | **255** | Pn | **Pn** | **20 12 51.6** | **+1.2** |
| **JNU** | **Nakatsue** | **8.12** | **255** | P | **Pn** | **20 12 50.6** | **+0.2** |
| | comp=N,4.9nm,0.3s,baz=60,slow=4.3,SNR=19 | | | | | | |
| **JCJ** | **Chichijima** | **8.58** | **168** | P | **Pn** | **20 12 54.5** | **-2.2** |
| **JCJ** | **Chichijima** | **8.58** | **168** | Pn | **Pn** | **20 12 53.6** | **-3.1** |
| **JCJ** | **Chichijima** | **8.58** | **168** | P | Pn | 20 12 48.8 | -8.0 |
| | comp=N,142nm,0.3s,baz=296,slow=18,SNR=14 | | | | | | |
| JCJ | | | | S | Sn | 20 14 17.8 | -14 |
| | comp=N,61nm,0.3s,baz=92,slow=22,SNR=2.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.75** | **11** | P | **Pn** | **20 12 56.6** | **-2.3** |
| | comp=N,5.6nm,0.3s,baz=240,slow=9.6,SNR=13 | | | | | | |
| ASAJ | | | | S | **Sn** | **20 14 29.9** | **-6.1** |
| | comp=N,4.9nm,0.4s,baz=229,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **JMJ** | **Miyako jima 2** | **16.76** | **234** | P | | **P** | **20 14 46.4** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **18.55** | **238** | P | | **P** | **20 15 05.4** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **18.55** | **238** | P | | **P** | **20 15 03.9** | **-2.8** |
| **YOJ** | **Yonaguni jima** | **18.55** | **238** | P | | **P** | **20 15 03.9** | **-2.8** |
| YOJ | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **NACB** | **Ninganchiao** | **19.72** | **240** | P | | **P** | **20 15 19.0** | **-0.5** |
| **NACB** | **Ninganchiao** | **19.72** | **240** | P | | **P** | **20 15 17.2** | **-2.3** |
| **XLT** | **XiLinHaoTe** | **20.33** | **302** | *e*P | | **P** | **20 15 24.0** | **-2.1** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **ZEA** | **Zeya** | **20.35** | **337** | *e*P | | **P** | **20 15 25.8** | **-0.3** |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **SSLB** | **Suanglung** | **20.42** | **240** | P | | **P** | **20 15 25.5** | **-1.6** |
| **YULB** | **Yu-li** | **20.43** | **239** | P | | **P** | **20 15 23.3** | **-4.0** |
| **TPUB** | **Ta-pu** | **20.96** | **240** | P | | **P** | **20 15 33.8** | **+0.9** |
| **TPUB** | **Ta-pu** | **20.96** | **240** | P | | **P** | **20 15 30.9** | **-2.0** |
| TPUB | | | | IAmb | IAmb | | 20 15 35.2 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **GUMO** | **Guam** | **22.25** | **168** | P | | **P** | **20 15 46.5** | **-0.3** |
| | comp=Z,22nm,0.3s,baz=220,slow=13,SNR=2.0 | | | | | | | |
| | comp=Z,22nm,0.3s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **23.11** | **292** | *e*P | | **P** | **20 15 57.4** | **+1.7** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,74nm,5.2s | | | | | | | |
| **MA2** | **Magadan** | **25.01** | **13** | P | | **P** | **20 16 12.8** | **0.0** |
| MA2 | | | | IAmb | IAmb | | 20 16 27.9 | |
| | comp=Z,34nm,1.4s | | | | | | | |
| **MA2** | **Magadan** | **25.01** | **13** | P | | **P** | **20 16 12.8** | **0.0** |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.4s | | | | | | | |
| **YAK** | **Yakutsk** | **27.33** | **349** | LR | | LR | 20 27 06.0 | |
| | comp=Z,44nm,20.6s,baz=184,slow=35 | | | | | | | |
| **YAK** | **Yakutsk** | **27.33** | **349** | *ce*P | | **P** | **20 16 34.0** | **+0.3** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **SONM** | **Songino Array** | **27.88** | **307** | P | | **P** | **20 16 37.6** | **-1.3** |
| **SONM** | **Songino Array** | **27.88** | **307** | P | | **P** | **20 16 37.4** | **-1.6** |
| | comp=Z,1.2nm,0.6s,baz=106,slow=9.2,SNR=10 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **27.88** | **307** | P | | **P** | **20 16 37.7** | **-1.3** |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.25** | **117** | T | | T | 20 46 37.3 | |
| | baz=309,slow=75,SNR=131 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.26** | **117** | T | | T | 20 46 35.9 | |
| | baz=309,slow=75,SNR=131 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.27** | **117** | T | | T | 20 46 38.7 | |
| | baz=309,slow=75,SNR=118 | | | | | | | |
| **SEY** | **Seymchan** | **28.43** | **12** | *i* P | | **P** | **20 16 43.0** | **-0.5** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.90** | **119** | T | | T | 20 46 44.7 | |
| | baz=312,slow=75,SNR=52 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.90** | **119** | T | | T | 20 46 43.7 | |
| | baz=312,slow=75,SNR=69 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.91** | **119** | T | | T | 20 46 44.5 | |
| | baz=312,slow=75,SNR=44 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **29.39** | **44** | LR | | LR | 20 28 30.5 | |
| | comp=Z,29nm,19.0s,baz=110,slow=36 | | | | | | | |
| **GYA** | **Guiyang** | **30.07** | **262** | P | | **P** | **20 17 01.8** | **+3.3** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **PZH** | **PanZhiHua** | **34.03** | **266** | P | | **P** | **20 17 35.1** | **+1.8** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,110nm,4.6s | | | | | | | |
| **BILL** | **Bilibino** | **35.72** | **16**↓ | *e*P | | **P** | **20 17 49.1** | **+1.9** |
| BILL | | | | *SP | | **pP** | **20 18 03.0** | **0.0** |
| BILL | | | | | | | 20 19 13.0 | |
| BILL | | | | SS | SS | | 20 25 50.0 | -6.7 |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **TOLI2** | **Tolitoli** | **38.75** | **212** | P | | **P** | **20 18 11.6** | **-1.8** |
| TOLI2 | | | | IAmb | IAmb | | 20 18 25.7 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **FAKI** | **Fak Fak** | **38.99** | **193** | P | | **P** | **20 18 14.2** | **-1.2** |
| **FAKI** | **Fak Fak** | **38.99** | **193** | P | | **P** | **20 18 13.4** | **-2.0** |
| **PHRA** | **Phrae** | **39.18** | **255** | P | | **P** | **20 18 16.5** | **-0.5** |
| **DGZ** | **Jazzator, Alta** | **40.52** | **307** | *c i* P | | **P** | **20 18 28.9** | **+0.9** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **42.24** | **314** | P | | **P** | **20 18 41.6** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **42.24** | **314** | P | | **P** | **20 18 41.4** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **42.24** | **314** | P | | **P** | **20 18 41.8** | **-0.1** |
| | comp=Z,1.8nm,0.3s,baz=91,slow=8.9,SNR=9.6 | | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **44.13** | **303** | P | | **P** | **20 18 57.3** | **0.0** |
| **MK31** | **Makanchi Array** | **44.13** | **303** | *ce*P | | **P** | **20 18 57.7** | **+0.5** |
| **MKAR** | **Makanchi Array** | **44.13** | **303** | P | | **P** | **20 18 56.9** | **-0.3** |
| **MKAR** | **Makanchi Array** | **44.13** | **303** | P | | **P** | **20 18 57.0** | **-0.3** |
| | comp=Z,1.2nm,0.5s,baz=92,slow=9.5,SNR=22 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.13** | **303** | *i* P | | **P** | **20 18 57.4** | **+0.2** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **44.34** | **303** | P | | **P** | **20 18 59.0** | **+0.1** |
| **MAKZ** | **Makanchi** | **44.34** | **303** | P | | **P** | **20 18 59.0** | **+0.1** |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **C18K** | **Utukok River** | **46.02** | **26** | P | | **P** | **20 19 13.1** | **+1.1** |
| C18K | | | | IAmb | IAmb | | 20 19 55.5 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **K17K** | **Iditarod** | **46.11** | **34** | P | | **P** | **20 19 13.4** | **+0.8** |
| K17K | | | | IAmb | IAmb | | 20 19 42.3 | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **KURK** | **Kurchatov** | **46.13** | **309** | P | | **P** | **20 19 12.3** | **-0.6** |
| KURK | | | | IAmb | IAmb | | 20 19 14.6 | |
| | comp=Z,6.7nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **46.13** | **309** | *ce*P | | **P** | **20 19 13.2** | **+0.3** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.19** | **309** | P | | **P** | **20 19 13.1** | **-0.4** |
| | comp=Z,3.5nm,0.5s,baz=87,slow=8.3,SNR=32 | | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| **G18K** | **Tagagawik** | **46.40** | **30** | P | | **P** | **20 19 15.1** | **+0.2** |
| G18K | | | | IAmb | IAmb | | 20 19 38.4 | |
| | comp=Z,8.7nm,1.3s | | | | | | | |
| **H18K** | **Honhosa River** | **46.40** | **31** | P | | **P** | **20 19 15.2** | **+0.3** |
| H18K | | | | IAmb | IAmb | | 20 19 32.3 | |
| | comp=Z,22nm,1.5s | | | | | | | |
| **C19K** | **Lookout Ridge** | **46.70** | **25** | P | | **P** | **20 19 18.7** | **+1.5** |
| C19K | | | | IAmb | IAmb | | 20 19 47.4 | |
| | comp=Z,9.3nm,1.1s | | | | | | | |
| **D19K** | **Kuna River** | **47.09** | **26** | P | | **P** | **20 19 21.2** | **+0.9** |
| D19K | | | | IAmb | IAmb | | 20 19 43.2 | |
| | comp=Z,6.8nm,1.1s | | | | | | | |
| **E19K** | **Redstone River** | **47.23** | **28** | P | | **P** | **20 19 23.0** | **+1.7** |
| E19K | | | | IAmb | IAmb | | 20 19 46.7 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **H19K** | **Roundabout Mou** | **47.25** | **30** | P | | **P** | **20 19 22.0** | **+0.5** |
| H19K | | | | IAmb | IAmb | | 20 19 42.4 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **J19K** | **Poorman** | **47.44** | **33** | P | | **P** | **20 19 24.4** | **+1.4** |
| J19K | | | | IAmb | IAmb | | 20 19 43.3 | |
| | comp=Z,6.9nm,1.2s | | | | | | | |
| **OHAK** | **Old Harbor** | **48.48** | **42** | P | | **P** | **20 19 28.7** | **-2.4** |
| **KDU** | **Kakadu** | **48.53** | **190** | P | | **P** | **20 19 31.3** | **-0.6** |
| **G21K** | **Allakaket** | **48.55** | **29** | P | | **P** | **20 19 32.4** | **+0.9** |
| **KDAK** | **Kodiak Island** | **48.83** | **41** | P | | **P** | **20 19 33.5** | **-0.3** |
| **KDAK** | **Kodiak Island** | **48.83** | **41** | P | | **P** | **20 19 33.5** | **-0.3** |
| KDAK | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.3s | | | | | | | |
| **MTN** | **Manton Dam** | **48.89** | **192** | P | | **P** | **20 19 33.7** | **-1.0** |
| **COEN** | **Coen** | **49.31** | **176** | P | | **P** | **20 19 38.1** | **+0.3** |
| **COEN** | **Coen** | **49.31** | **176** | P | | **P** | **20 19 37.6** | **-0.3** |
| **C23K** | **Itkillik River** | **49.94** | **25** | P | | **P** | **20 19 43.4** | **+1.3** |
| C23K | | | | IAmb | IAmb | | 20 20 17.5 | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| **KSH** | **Kashi** | **50.17** | **295** | P | | P | 20 19 49.5 | +5.1 |
| **MDM** | **Murphy Dome** | **50.67** | **31** | P | | **P** | **20 19 49.1** | **+1.3** |
| MDM | | | | IAmb | IAmb | | 20 20 17.7 | |
| | comp=Z,9.1nm,1.3s | | | | | | | |
| **H24K** | **Noodor Dome** | **50.81** | **30** | P | | **P** | **20 19 49.3** | **+0.6** |
| H24K | | | | IAmb | IAmb | | 20 20 30.2 | |
| | comp=Z,4.3nm,1.3s | | | | | | | |
| **BRVK** | **Borovoye** | **50.95** | **313** | P | | **P** | **20 19 51.8** | **+1.9** |
| BRVK | | | | IAmb | IAmb | | 20 20 00.6 | |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **50.95** | **313** | P | | **P** | **20 19 51.8** | **+1.9** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **51.25** | **32** | P | | **P** | **20 19 53.3** | **+1.2** |
| | comp=Z,0.5nm,0.7s,baz=266,slow=6.6,SNR=6.2 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **ARSB** | **Arslanbob** | **51.83** | **298** | P | | **P** | **20 19 57.5** | **+0.6** |
| **ARSB** | **Arslanbob** | **51.83** | **298** | P | | **P** | **20 19 57.5** | **+0.6** |
| ARSB | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **KNRA** | **Kununurra** | **52.09** | **194** | P | | **P** | **20 19 57.9** | **-0.9** |
| KNRA | | | | IAmb | IAmb | | 20 19 58.9 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **GSI** | **Gunungsitoli** | **52.23** | **239** | P | | **P** | **20 19 59.2** | **-0.8** |
| **GSI** | **Gunungsitoli** | **52.23** | **239** | P | | **P** | **20 19 57.8** | **-2.2** |
| **KK31** | **Karatay Array** | **53.07** | **301** | P | | **P** | **20 20 05.5** | **-0.4** |
| **KK31** | **Karatay Array** | **53.07** | **301** | P | | **P** | **20 20 05.5** | **-0.4** |
| KK31 | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **53.07** | **301** | P | | **P** | **20 20 05.3** | **-0.5** |
| **KKAR** | **Karatay Array** | **53.07** | **301** | P | | **P** | **20 20 05.5** | **-0.5** |
| KKAR | | | | IAmb | IAmb | | 20 20 15.9 | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **53.07** | **301** | P | | **P** | **20 20 05.4** | **-0.5** |
| KKAR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **E27K** | **Coleen River** | **53.17** | **27** | P | | **P** | **20 20 08.1** | **+1.9** |
| E27K | | | | IAmb | IAmb | | 20 20 27.1 | |
| | comp=Z,3.5nm,1.1s | | | | | | | |
| **BTK** | **Batken** | **53.78** | **297** | P | | **P** | **20 20 12.8** | **+1.6** |
| BTK | | | | IAmb | IAmb | | 20 20 36.2 | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **BTK** | **Batken** | **53.78** | **297** | P | | **P** | **20 20 12.8** | **+1.6** |
| BTK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **E28M** | **Babbage River** | **53.90** | **27** | P | | **P** | **20 20 10.6** | **-0.9** |
| E28M | | | | IAmb | IAmb | | 20 20 42.8 | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **I28M** | **Miner Creek** | **54.12** | **31** | P | | **P** | **20 20 14.9** | **+1.5** |
| I28M | | | | IAmb | IAmb | | 20 20 52.8 | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **H29M** | **Whitestone** | **54.65** | **29** | P | | **P** | **20 20 18.1** | **+1.1** |
| H29M | | | | IAmb | IAmb | | 20 20 25.5 | |
| | comp=Z,8.4nm,1.4s | | | | | | | |
| **G29M** | **Pine Creek** | **54.68** | **29** | P | | **P** | **20 20 17.4** | **+0.2** |
| G29M | | | | IAmb | IAmb | | 20 20 48.1 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.12** | **197** | P | | **P** | **20 20 20.5** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **55.12** | **197** | P | | **P** | **20 20 20.4** | **-0.5** |
| **M29M** | **Somme Creek** | **55.26** | **34** | P | | **P** | **20 20 22.8** | **+1.2** |
| M29M | | | | IAmb | IAmb | | 20 20 42.0 | |
| | comp=Z,4.3nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **55.29** | **187** | P | | **P** | **20 20 21.0** | **-1.1** |
| **CHGR** | **Chuyangaron** | **55.47** | **296** | P | | **P** | **20 20 23.0** | **-0.5** |
| CHGR | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **WR0** | **Warramunga Arr** | **55.47** | **187** | P | | **P** | **20 20 22.4** | **-0.9** |
| **WB2** | **Warramunga Arr** | **55.47** | **187** | P | | **P** | **20 20 22.1** | **-1.3** |
| WB2 | | | | IAmb | IAmb | | 20 20 23.9 | |
| | comp=Z,9.7nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.47** | **187** | P | | **P** | **20 20 22.1** | **-1.3** |
| **WRA** | **Warramunga Arr** | **55.47** | **187** | P | | **P** | **20 20 22.1** | **-1.3** |
| | comp=Z,6.4nm,0.5s,baz=0.5,slow=7.6,SNR=72 | | | | | | | |
| | comp=Z,6.4nm,0.5s | | | | | | | |
| **SIMJ** | **Simiganj** | **55.58** | **296** | P | | **P** | **20 20 24.8** | **+0.5** |
| SIMJ | | | | IAmb | IAmb | | 20 20 47.5 | |
| | comp=Z,7.6nm,1.3s | | | | | | | |
| **I30M** | **Mount Dempster** | **55.63** | **30** | P | | **P** | **20 20 25.8** | **+1.5** |
| I30M | | | | IAmb | IAmb | | 20 20 55.0 | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| **QIS** | **Mount Isa** | **55.80** | **181** | P | | **P** | **20 20 25.6** | **-0.2** |
| **G31M** | **Satah River** | **56.13** | **28** | P | | **P** | **20 20 28.9** | **+1.2** |
| G31M | | | | IAmb | IAmb | | 20 20 57.2 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **ARU** | **Arti** | **56.86** | **319** | P | | **P** | **20 20 32.9** | **-0.1** |
| ARU | | | | IAmb | IAmb | | 20 20 33.5 | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **56.86** | **319** | *c i* P | | **P** | **20 20 33.1** | **+0.1** |
| ARU | | | | S | | **S** | **20 28 26.0** | **+4.5** |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **ABKAR** | **Akbulak array** | **58.19** | **311** | P | | **P** | **20 20 42.2** | **-0.2** |
| **ABKAR** | **Akbulak array** | **58.19** | **311** | IAmb | IAmb | | 20 21 03.3 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.98** | **312** | LR | | LR | 20 49 51.7 | |
| | comp=Z,32nm,18.3s,baz=300,slow=40 | | | | | | | |
| **AS01** | **Alice Springs** | **59.19** | **187** | P | | **P** | **20 20 48.5** | **-1.1** |
| **AS31** | **Alice Springs** | **59.19** | **187** | P | | **P** | **20 20 48.9** | **-0.7** |
| AS31 | | | | IAmb | IAmb | | 20 20 55.3 | |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **59.20** | **187** | P | | **P** | **20 20 48.5** | **-1.1** |
| **ASAR** | **Alice Springs** | **59.20** | **187** | P | | **P** | **20 20 48.2** | **-1.4** |
| | comp=Z,1.9nm,0.4s,baz=5.4,slow=7.2,SNR=63 | | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **59.20** | **187** | P | | **P** | **20 20 48.5** | **-1.1** |
| **MBWA** | **Marble Bar** | **59.66** | **202** | P | | **P** | **20 20 52.2** | **-0.6** |
| **MBWA** | **Marble Bar** | **59.66** | **202** | P | | **P** | **20 20 51.3** | **-1.5** |
| **PSA00** | **Pilbara Seismi** | **60.01** | **202** | P | | **P** | **20 20 54.3** | **-1.0** |
| PSA00 | | | | IAmb | IAmb | | 20 20 54.7 | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **WRKA** | **Warakurna** | **61.31** | **192** | P | | **P** | **20 21 03.7** | **-0.3** |
| **SPITS** | **Spitsbergen Ar** | **61.80** | **349** | P | | **P** | **20 21 08.4** | **+1.6** |
| | comp=Z,4.3nm,0.8s,baz=76,slow=12,SNR=1.5 | | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **INKA** | **Innaminka** | **62.95** | **180** | P | | **P** | **20 21 15.4** | **+0.5** |
| **OOD** | **Oodnadatta** | **63.15** | **185** | P | | **P** | **20 21 15.3** | **-0.9** |
| **GC1S** | **Gold Coast 1 S** | **64.59** | **167** | P | | **P** | **20 21 25.0** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **65.06** | **339** | P | | **P** | **20 21 28.1** | **-0.3** |
| | comp=Z,1.9nm,0.8s,baz=37,slow=5.1,SNR=1.5 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **MULG** | **Mulgathing** | **65.74** | **186** | P | | **P** | **20 21 33.4** | **+0.3** |
| **FORT** | **Forrest** | **66.96** | **191** | P | | **P** | **20 21 40.5** | **-0.4** |
| **FORT** | **Forrest** | **66.96** | **191** | P | | **P** | **20 21 40.0** | **-0.9** |
| **STKA** | **Stephens Creek** | **67.08** | **179** | P | | **P** | **20 21 40.3** | **-1.4** |
| **STKA** | **Stephens Creek** | **67.08** | **179** | P | | **P** | **20 21 39.1** | **-2.5** |
| | comp=Z,1.9nm,0.7s,baz=332,slow=14,SNR=1.6 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **STKA** | **Stephens Creek** | **67.08** | **179** | P | | **P** | **20 21 40.3** | **-1.4** |
| STKA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **MORW** | **Morawa** | **68.20** | **203** | P | | **P** | **20 21 48.5** | **-0.3** |
| **MORW** | **Morawa** | **68.20** | **203** | P | | **P** | **20 21 49.0** | **+0.2** |
| MORW | | | | IAmb | IAmb | | 20 22 02.1 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **BLDU** | **Ballidu** | **69.44** | **202** | P | | **P** | **20 21 55.8** | **-0.6** |
| **FIA1** | **FINESS Array S** | **69.69** | **332** | P | | **P** | **20 21 57.0** | **-0.7** |
| **FINES** | **FINESS Array B** | **69.69** | **332** | P | | **P** | **20 21 57.4** | **-0.3** |
| | comp=Z,3.0nm,0.7s,baz=54,slow=7.1,SNR=7.6 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **KLBR** | **Kellerberrin** | **70.05** | **200** | P | | **P** | **20 21 59.4** | **-0.8** |
| **KBZ** | **Khabaz** | **71.16** | **311** | *ce*P | | **P** | **20 22 06.9** | **0.0** |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **71.17** | **311** | *e*P | | **P** | **20 22 05.8** | **-1.4** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **71.45** | **200** | P | | **P** | **20 22 08.6** | **0.0** |
| **NWAO** | **Narrogin (SRO)** | **71.45** | **200** | P | | **P** | **20 22 09.1** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **71.45** | **200** | P | | **P** | **20 22 09.1** | **+0.5** |
| NWAO | | | | pmax | pmax | | | |
| | comp=Z,55nm,1.3s | | | | | | | |
| **KARS** | **Kars** | **72.67** | **308** | P | | **P** | **20 22 17.7** | **+1.4** |
| **KARS** | **Kars** | **72.67** | **308** | P | | **P** | **20 22 17.7** | **+1.4** |
| **SOC** | **Sochi** | **73.19** | **312** | *e*P | | **P** | **20 22 20.6** | **+1.5** |
| SOC | | | | *e* | | | 20 25 01.5 | |
| SOC | | | | *e*S | | **SKiKP** | **20 31 49.5** | **+4.6** |
| SOC | | | | *e*SS | | **SS** | **20 36 26.2** | **+2.4** |
| SOC | | | | MLR | MLR | | | |
| | comp=Z,31nm,17.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.90** | **322** | P | | **P** | **20 22 28.4** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=49,slow=6.3,SNR=3.9 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **HFS** | **Hagfors** | **75.05** | **335** | P | | **P** | **20 22 29.3** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=74,slow=6.3,SNR=5.7 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **NC204** | **NORSAR Array S** | **75.16** | **337** | P | | **P** | **20 22 30.8** | **+0.5** |
| NC204 | | | | IAmb | IAmb | | 20 23 06.5 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.19** | **337** | P | | **P** | **20 22 30.5** | **0.0** |
| | comp=Z,1.1nm,0.7s,baz=42,slow=6.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **75.19** | **337** | P | | **P** | **20 22 30.3** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=40,slow=8.2,SNR=2.2 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **78.88** | **321** | P | | **P** | **20 22 52.8** | **+1.2** |
| **BURAR** | **Bucovina Array** | **78.89** | **321** | P | | **P** | **20 22 53.7** | **+2.1** |
| **BURAR** | **Bucovina Array** | **78.89** | **321** | P | | **P** | **20 22 53.7** | **+2.1** |
| BURAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.13** | **311** | P | | **P** | **20 22 52.5** | **-0.6** |
| | comp=Z,0.4nm,0.8s,baz=46,slow=8.3,SNR=2.1 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **79.38** | **45** | P | | **P** | **20 22 55.5** | **+1.0** |
| | comp=Z,0.3nm,0.5s,baz=325,slow=1.4,SNR=4.0 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **RAYN** | **Ar Rayn** | **80.35** | **292** | P | | **P** | **20 23 00.1** | **+0.2** |
| **RAYN** | **Ar Rayn** | **80.35** | **292** | P | | **P** | **20 23 00.1** | **+0.2** |
| RAYN | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **BMRD** | **Maredsous** | **85.92** | **333** | *d*PcP | | **PcP** | **20 23 30.6** | **0.0** |
| **TXAR** | **Lajitas Array** | **91.77** | **52** | P | | **P** | **20 23 57.6** | **+1.4** |
| | comp=Z,1.0nm,0.6s,baz=267,slow=1.8,SNR=1.5 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **125.29** | **180** | PKP | | **PKiKP** | **20 29 47.4** | **-0.6** |
| | comp=Z,0.4nm,0.3s,baz=113,slow=1.2,SNR=2.4 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.78** | **98** | T | | T | 23 15 38.1 | |
| | baz=290,slow=76,SNR=7.1 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.79** | **98** | T | | T | 23 15 40.8 | |
| | baz=290,slow=76,SNR=6.6 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.79** | **98** | T | | T | 23 15 36.3 | |
| | baz=290,slow=76,SNR=6.6 | | | | | | | |
| **LPAZ** | **La Paz** | **148.25** | **60** | PKPbc | | **PKiKP** | **20 30 36.8** | **-0.1** |
| | comp=Z,0.4nm,0.4s,baz=315,slow=4.3,SNR=2.6 | | | | | | | |

*CATAC* ***06*** *20:14:33.5±0.3, 12°.37N×87°.86W, h41km±16km, ML3.9*
*SNET* ***06*** *20:14:36.9±0.7, 12°.57N×88°.18W, h13km±5km, ML3.5*
**ISC 06 20:14:29.6±1.7, 12°.27N±0°.07×87°.93W±0°.04, h13km±10km, n44, σ1°31/68, 2C, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **0.96** | **63** | *i* P | | **Pg** | **20 14 49.7** | **+1.6** |
| CRIN | | | | *i* S | | **Sg** | **20 15 02.1** | **+1.5** |
| CRIN | | | | IAML | | | 20 15 06.8 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **1.01** | **5** | *i* P | | **Pg** | **20 14 49.9** | **+0.8** |
| CNCH | | | | *i* S | | **Sg** | **20 15 02.4** | **+0.2** |
| CNCH | | | | IAML | | | 20 15 05.5 | |
| | comp=Z,12μm,1.0s | | | | | | | |
| **PKGN** | **Cerro Pekin** | **1.01** | **67** | *i* P | | **Pg** | **20 14 50.2** | **+1.1** |
| PKGN | | | | *i* S | | **Sg** | **20 15 02.6** | **+0.3** |
| PKGN | | | | IAML | | | 20 15 06.9 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **JUCU** | **Jucuarįn** | **1.03** | **342** | *e*P | | **Pg** | **20 14 49.9** | **+0.4** |
| **JUCU** | **Jucuarįn** | **1.03** | **342** | *i* P | | **Pg** | **20 14 50.1** | **+0.6** |
| JUCU | | | | *i* S | | **Sg** | **20 15 02.3** | **-0.7** |
| JUCU | | | | IAML | | | 20 15 04.4 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **ROCN** | **Rota Cerro Neg** | **1.18** | **78** | *i* P | | **Pg** | **20 14 51.5** | **-0.9** |
| ROCN | | | | *i* S | | **Sg** | **20 15 06.4** | **-1.4** |
| ROCN | | | | IAML | | | 20 15 10.7 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **VSM** | **San Miguel** | **1.20** | **344** | *e*P | | **Pg** | **20 14 53.2** | **+0.4** |
| **BLLM** | **Bellamira** | **1.21** | **345** | *e*P | | **Pg** | **20 14 52.7** | **-0.1** |
| **RANC** | **El Ranchito** | **1.21** | **343** | *i* P | | **Pg** | **20 14 53.0** | **0.0** |
| RANC | | | | *i* S | | **Sg** | **20 15 07.7** | **-1.1** |
| RANC | | | | IAML | | | 20 15 09.0 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **CNGA** | **Al SSO del Vol** | **1.22** | **79** | *i* P | | Pg | 20 14 51.1 | -1.9 |
| CNGA | | | | *i* S | | **Sg** | **20 15 05.8** | **-3.1** |
| CNGA | | | | IAML | | | 20 15 09.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.22** | **79** | *i* P | | **Pg** | **20 14 53.0** | **-0.1** |
| CNGN | | | | *i* S | | **Sg** | **20 15 08.3** | **-0.7** |
| CNGN | | | | IAML | | | 20 15 13.3 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CNRM** | **Centro Naciona** | **1.22** | **349** | *i* S | | **Sg** | **20 15 07.7** | **-1.4** |
| **ILCN** | **San Idelfonso** | **1.24** | **75** | *i* P | | **Pg** | **20 14 52.9** | **-0.5** |
| ILCN | | | | *i* S | | **Sg** | **20 15 08.3** | **-1.2** |
| ILCN | | | | IAML | | | 20 15 09.1 | |
| | comp=Z,780nm,1.0s | | | | | | | |
| **PACA** | **Pacayal** | **1.26** | **342** | *e*P | | **Pg** | **20 14 53.9** | **+0.1** |
| **PACA** | **Pacayal** | **1.26** | **342** | *i* P | | **Pg**

*AEIC **06** 20:24:37.0±6.9,55°.7N±0°.1×147°.8W±0°.1,h9km±8km,Error ellipse: s-maj=16.2km s-min=10.2km az=168.0*

**NEIC 06 20:24:42.9±1.5,56°.42N±0°.04×148°.65W±0°.07,h10km±1km, ML3.6/68,ML3.5(AEIC),Error ellipse: s-maj=6.9km s-min=5.5km az=52.0,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **2.55** | **304** | | Pn | 20 25 24.2 | 0.0 |
| **KDAK** | **Kodiak Island** | **2.55** | **304** | | Sb | 20 26 01.7 | +1.7 |
| **KDAK** | **Kodiak Island** | **2.55** | **304** | IAML | | 20 26 08.9 | |
| | 70nm,0.6s | | | | | | |
| KDAK | | | | IAML | | 20 26 12.5 | |
| | 53nm,0.5s | | | | | | |
| **OHAK** | **Old Harbor** | **2.68** | **289** | | Pn | 20 25 25.5 | -0.5 |
| **OHAK** | **Old Harbor** | **2.68** | **289** | | Sb | 20 26 03.2 | -0.5 |
| **SYI** | **Shuyak Island** | **2.99** | **319** | | Pn | 20 25 30.8 | +0.5 |
| SYI | | | | | Sb | 20 26 14.2 | +1.6 |
| **SII** | **Sitkinak Islan** | **3.08** | **275** | Pn | Pn | 20 25 31.1 | -0.4 |
| SII | | | | IAML | | 20 26 15.6 | |
| | comp=N,196nm,0.9s | | | | | | |
| SII | | | | IAML | | 20 26 22.3 | |
| | comp=E,157nm,0.9s | | | | | | |
| **Q23K** | **Middleton Isla** | **3.26** | **21** | | Pn | 20 25 32.7 | -1.3 |
| **Q23K** | **Middleton Isla** | **3.26** | **21** | IAML | | 20 26 19.3 | |
| | comp=N,140nm,0.8s | | | | | | |
| Q23K | | | | IAML | | 20 26 27.9 | |
| | comp=E,153nm,0.9s | | | | | | |
| **MID** | **Middleton Isla** | **3.26** | **21** | | Pn | 20 25 32.8 | -1.2 |
| **MID** | **Middleton Isla** | **3.26** | **21** | IAML | | 20 26 19.3 | |
| | comp=N,134nm,0.7s | | | | | | |
| MID | | | | IAML | | 20 26 27.9 | |
| | comp=E,165nm,0.9s | | | | | | |
| **R18K** | **Karluk** | **3.38** | **292** | | Pn | 20 25 36.1 | +0.5 |
| R18K | | | | | Sb | 20 26 20.7 | -3.2 |
| **CNPM** | **China Poot** | **3.41** | **337** | | Pn | 20 25 36.5 | +0.3 |
| **BRSE** | **Bradley Lake S** | **3.52** | **342** | | Pn | 20 25 37.7 | +0.1 |
| **BRLK** | **Bradley Lake** | **3.56** | **341** | | Pn | 20 25 38.1 | -0.1 |
| BRLK | | | | IAML | | 20 26 34.3 | |
| | comp=E,88nm,0.3s | | | | | | |
| BRLK | | | | IAML | | 20 26 37.1 | |
| | comp=N,66nm,0.8s | | | | | | |
| **HOM** | **Homer** | **3.62** | **335** | Pn | Pn | 20 25 38.1 | -0.9 |
| **P23K** | **Montague Islan** | **3.65** | **10** | | Pn | 20 25 39.1 | -0.3 |
| **Q19K** | **Cape Douglas,** | **3.68** | **315** | | Pn | 20 25 40.7 | +0.9 |
| **SEW** | **Seward** | **3.72** | **354** | | Pn | 20 25 40.0 | -0.4 |
| **KAHG** | **Katmai Hook Gl** | **3.81** | **306** | | Pn | 20 25 43.2 | +1.6 |
| **CHIR** | **Chirikof Islan** | **3.95** | **264** | Pn | Pn | 20 25 42.9 | -0.6 |
| CHIR | | | | IAML | | 20 26 37.2 | |
| | comp=N,62nm,1.1s | | | | | | |
| CHIR | | | | IAML | | 20 26 38.9 | |
| | comp=E,69nm,0.7s | | | | | | |
| **ACHA** | **Angle Creek He** | **4.04** | **299** | | Pn | 20 25 45.2 | +0.3 |
| **P19K** | **Oil Pt** | **4.06** | **325** | | Pn | 20 25 46.7 | +1.7 |
| **P19K** | **Oil Pt** | **4.06** | **325** | IAML | | 20 26 49.4 | |
| | comp=N,90nm,0.7s | | | | | | |
| P19K | | | | IAML | | 20 26 49.6 | |
| | comp=E,100nm,0.6s | | | | | | |
| **KAHC** | **Katmai Hardscr** | **4.09** | **306** | | Pn | 20 25 46.9 | +1.3 |
| **ANCK** | **Angle Creek** | **4.12** | **299** | | Pn | 20 25 47.2 | +1.3 |
| **HIN** | **Hinchinbrook I** | **4.15** | **15** | Pn | Pn | 20 25 45.4 | -0.9 |
| **KAIM** | **Kayak Island** | **4.17** | **31** | | Pn | 20 25 46.4 | -0.1 |
| **CNTC** | **Contact Creek** | **4.34** | **298** | | Pn | 20 25 50.2 | +1.3 |
| **PLK4** | **Peulik 4** | **4.39** | **289** | | Pn | 20 25 49.2 | -0.4 |
| **PLK4** | **Peulik 4** | **4.39** | **289** | IAML | | 20 27 02.2 | |
| | comp=N,72nm,0.8s | | | | | | |
| **PWL** | **Port Wells** | **4.46** | **2** | | Pn | 20 25 50.5 | 0.0 |
| **PWL** | **Port Wells** | **4.46** | **2** | IAML | | 20 26 50.2 | |
| | comp=N,46nm,0.8s | | | | | | |
| PWL | | | | IAML | | 20 26 56.2 | |
| | comp=E,55nm,0.8s | | | | | | |
| **SUCK** | **Suckling Hills** | **4.48** | **33** | | Pn | 20 25 50.6 | -0.2 |
| SUCK | | | | IAML | | 20 27 11.3 | |
| | comp=E,62nm,0.8s | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.50** | **26** | | Pn | 20 25 51.0 | -0.1 |
| **GLI** | **Glacier Island** | **4.55** | **10** | | Pn | 20 25 51.6 | -0.1 |
| **GLI** | **Glacier Island** | **4.55** | **10** | IAML | | 20 26 52.2 | |
| | comp=E,59nm,0.7s | | | | | | |
| GLI | | | | IAML | | 20 26 54.2 | |
| | comp=N,55nm,0.7s | | | | | | |
| **P18K** | **Big Mountain,** | **4.61** | **313** | Pn | Pn | 20 25 51.2 | -1.4 |
| **RC01** | **Rabbit Creek A** | **4.72** | **354** | Pn | Pn | 20 25 53.0 | -1.1 |
| RC01 | | | | IAML | | 20 27 00.7 | |
| | comp=N,65nm,0.5s | | | | | | |
| RC01 | | | | IAML | | 20 27 02.2 | |
| | comp=E,59nm,0.5s | | | | | | |
| **SNH** | **Sunshine Point** | **4.86** | **37** | Pn | Pn | 20 25 55.9 | -0.2 |
| SNH | | | | IAML | | 20 27 09.1 | |
| | comp=N,54nm,0.9s | | | | | | |
| SNH | | | | IAML | | 20 27 23.3 | |
| | comp=E,48nm,1.0s | | | | | | |
| **O18K** | **Koktuh Hills** | **4.89** | **317** | | Pn | 20 25 56.9 | +0.4 |
| **O18K** | **Koktuh Hills** | **4.89** | **317** | IAML | | 20 27 22.2 | |
| | comp=N,25nm,1.1s | | | | | | |
| **WAX** | **Waxell Ridge** | **5.06** | **35** | Pn | Pn | 20 25 57.8 | -1.0 |
| **MESA** | **MESA** | **5.17** | **40** | Pn | Pn | 20 25 58.2 | -2.1 |
| MESA | | | | IAML | | 20 27 14.6 | |
| | comp=E,38nm,0.5s | | | | | | |
| **SUA** | **Susitna One** | **5.18** | **349** | | Pn | 20 26 01.0 | +0.5 |
| **CRQM** | **Cirque** | **5.22** | **31** | | Pn | 20 26 00.9 | -0.2 |
| CRQM | | | | IAML | | 20 27 09.7 | |
| | comp=E,46nm,0.8s | | | | | | |
| CRQM | | | | IAML | | 20 27 10.7 | |
| | comp=N,44nm,0.4s | | | | | | |
| **KLU** | **Klutina** | **5.28** | **14** | | Pn | 20 26 02.3 | +0.4 |
| **KLU** | **Klutina** | **5.28** | **14** | IAML | | 20 27 09.5 | |
| | comp=E,35nm,0.4s | | | | | | |
| KLU | | | | IAML | | 20 27 10.1 | |
| | comp=N,45nm,0.4s | | | | | | |
| **TGL** | **Tana Glacier** | **5.31** | **33** | | Pn | 20 26 01.6 | -0.7 |
| TGL | | | | IAML | | 20 27 18.1 | |
| | comp=N,33nm,0.5s | | | | | | |
| TGL | | | | IAML | | 20 27 23.7 | |
| | comp=E,39nm,0.7s | | | | | | |
| **ISLE** | **Juniper Island** | **5.34** | **36** | Pn | Pn | 20 26 02.5 | -0.3 |
| ISLE | | | | IAML | | 20 27 20.9 | |
| | comp=E,30nm,1.0s | | | | | | |
| ISLE | | | | IAML | | 20 27 35.4 | |
| | comp=N,28nm,1.1s | | | | | | |
| **STLK** | **Strandline Lak** | **5.36** | **343** | | Pn | 20 26 03.4 | +0.5 |
| **N19K** | **Bonanza Creek** | **5.36** | **328** | | Pn | 20 26 03.0 | 0.0 |
| **GHO** | **Glory Hole Cre** | **5.37** | **359** | Pn | Pn | 20 26 03.6 | +0.4 |
| GHO | | | | IAML | | 20 27 13.6 | |
| | comp=N,44nm,1.0s | | | | | | |
| GHO | | | | IAML | | 20 27 20.2 | |
| | comp=E,41nm,0.7s | | | | | | |
| **SML** | **Sawmill** | **5.41** | **2** | | Pn | 20 26 04.3 | +0.7 |
| **CHGN** | **Chignik** | **5.43** | **273** | Pn | Pn | 20 26 04.3 | +0.5 |
| **SCM** | **Sheep Creek Mo** | **5.48** | **7** | Pn | Pn | 20 26 06.2 | +1.7 |
| **VRDI** | **Verde Repeater** | **5.53** | **27** | Pn | Pn | 20 26 04.4 | -0.9 |
| **O17K** | **Koliganek Bris** | **5.60** | **310** | | Pn | 20 26 07.2 | +1.0 |
| **N25K** | **Chitina, Valde** | **5.61** | **20** | Pn | Pn | 20 26 06.6 | +0.2 |
| **GLB** | **Gilahina Butte** | **5.63** | **24** | Pn | Pn | 20 26 06.4 | -0.2 |
| **GRNC** | **Granite Creek** | **5.63** | **37** | Pn | Pn | 20 26 06.2 | -0.6 |
| **TABL** | **Table Mountain** | **5.64** | **41** | | Pn | 20 26 06.9 | 0.0 |
| **N18K** | **Kilae Creek** | **5.71** | **321** | | Pn | 20 26 07.8 | +0.1 |
| **SKT** | **Skwentna** | **5.77** | **346** | | Pn | 20 26 10.0 | +1.5 |
| **BCPM** | **Bancas Point** | **5.94** | **50** | Pn | Pn | 20 26 11.4 | +0.6 |
| **CTGM** | **Chitina Glacie** | **5.94** | **37** | Pn | Pn | 20 26 10.5 | -0.5 |
| **O16K** | **Kokwok River B** | **5.95** | **306** | | Pn | 20 26 11.7 | +0.9 |
| **M20K** | **Styx River** | **5.95** | **339** | Pn | Pn | 20 26 11.0 | 0.0 |
| **LOGN** | **Logan Glacier** | **5.95** | **39** | Pn | Pn | 20 26 11.2 | +0.1 |
| **N17K** | **Nushagak Hills** | **6.09** | **316** | Pn | Pn | 20 26 12.8 | 0.0 |
| **M19K** | **Big River Lodg** | **6.24** | **334** | Pn | Pn | 20 26 14.5 | -0.5 |
| **CNBA** | **Chernabura Isl** | **6.40** | **260** | Pn | Pn | 20 26 16.6 | -0.6 |
| **O29M** | **Mount Kennedy** | **6.57** | **50** | Pn | Pn | 20 26 19.0 | -0.7 |
| **L19K** | **White Mountain** | **6.60** | **334** | Pn | Pn | 20 26 19.0 | -0.9 |
| **P29M** | **Windy Craggy** | **6.63** | **56** | Pn | Pn | 20 26 19.5 | -0.8 |
| **DHY** | **Denali Highway** | **6.71** | **5** | Pn | Pn | 20 26 22.6 | +1.1 |
| **M16K** | **Timber Creek** | **7.08** | **315** | Pn | Pn | 20 26 26.3 | -0.2 |
| **N15K** | **Kwethluk River** | **7.11** | **307** | Pn | Pn | 20 26 27.2 | +0.4 |
| **L18K** | **Granite Mounta** | **7.12** | **328** | Pn | Pn | 20 26 27.2 | +0.2 |
| **L16K** | **Owhat River** | **7.70** | **318** | Pn | Pn | 20 26 35.3 | +0.5 |
| **BPAW** | **Bear Paw Mtn.** | **7.80** | **352** | Pn | Pn | 20 26 35.7 | -0.6 |
| **N30M** | **Aishikik Lake** | **7.82** | **45** | Pn | Pn | 20 26 37.2 | +0.5 |
| **R32K** | **Eaglecrest** | **7.87** | **70** | Pn | Pn | 20 26 37.1 | -0.1 |
| **J17K** | **VABM Dome** | **8.73** | **328** | Pn | Pn | 20 26 49.0 | -0.1 |
| **K29M** | **Barlow Dome** | **9.28** | **32** | Pn | Pn | 20 26 56.8 | +0.2 |
| **I26K** | **Coal Creek Min** | **9.31** | **14** | Pn | Pn | 20 26 57.0 | 0.0 |
| **H21K** | **Melozitna Rive** | **9.49** | **349** | Pn | Pn | 20 26 59.6 | +0.2 |
| **R33M** | **Jennings River** | **9.87** | **65** | Pn | Pn | 20 27 05.3 | +0.6 |
| **IMAR** | **Indian Mountai** | **9.91** | **348** | Pn | Pn | 20 27 04.0 | -1.1 |
| **I28M** | **Miner Creek** | **9.99** | **21** | Pn | Pn | 20 27 06.5 | +0.1 |
| **G23K** | **Bananza Creek** | **10.35** | **357** | Pn | Pn | 20 27 12.3 | +1.0 |

*IDC **06** 20:28:21.5±0.8,8°.28S×116°.24E,h0km,mb3.9/8, mbtmp3.9/9,ML3.6/1,MS3.0/2,Error ellipse: s-maj=24.8km s-min=14.7km az=54.0*

*NEIC **06** 20:28:23.7±1.2,8°.26S±0°.10×116°.21E±0°.03,h10km±1km, mb4.3/12,Error ellipse: s-maj=16.8km s-min=4.4km az=352.0*

*DJA **06** 20:28:25.1±0.3,8°.5S±5°×11°.6E±°,h10km,M4.4/12,mb4.7/3, MLv4.2/12*

**ISC 06 20:28:23.1±0.5,8°.31S±0°.06×116°.25E±0°.04,h10km,n54, σ1§31/52,mb4.0/9,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.75** | **125** | P | **Pb** | **20 28 39.5** | **+1.1** |
| **SRBI** | **Singaraja** | **1.05** | **282** | P | **Pg** | **20 28 43.9** | **+0.5** |
| **DNP** | **Denpasar** | **1.10** | **250** | P | **Pn** | **20 28 45.7** | **+1.2** |
| **PLAI** | **Plampang** | **1.59** | **109** | P | **Pg** | **20 28 53.9** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.09** | **265** | P | **Pn** | **20 28 58.7** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.09** | **265** | | **Pn** | **20 28 58.7** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.09** | **265** | P | **Pn** | **20 28 58.8** | **+0.6** |
| **GRJI** | **Gresik** | **3.99** | **290** | P | **Pn** | **20 29 26.1** | **+1.7** |
| **PWJI** | **Pagerwojo** | **4.41** | **273** | P | **Pn** | **20 29 31.3** | **+1.1** |
| **BSSI** | **Bau Bau, Buton** | **4.72** | **63** | P | **Pn** | **20 29 36.1** | **+1.6** |
| **KAPI** | **Kappang** | **4.77** | **47** | P | **Pn** | **20 29 38.9** | **+3.7** |
| **KAPI** | **Kappang** | **4.77** | **47** | Pn | **Pn** | **20 29 36.8** | **+1.7** |
| **KAPI** | **Kappang** | **4.77** | **47** | Pn | **Pn** | **20 29 36.3** | **+1.2** |
| | 2.6nm,0.3s,baz=201,slow=5.7,SNR=16 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 30 29.7** | **-0.8** |
| | 7.3nm,0.3s,baz=349,slow=20,SNR=17 | | | | | | |
| KAPI | | | | LR | LR | 20 31 02.1 | |
| | comp=Z,37nm,19.9s,baz=252,slow=34 5.7nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.45** | **45** | P | Pn | 20 29 49.6 | +5.1 |
| | 29nm,0.7s,0.2nm | | | | | | |
| **UGM** | **Wanagama** | **5.69** | **274** | P | **Pn** | **20 29 50.1** | **+2.3** |
| **UGM** | **Wanagama** | **5.69** | **274** | P | **Pn** | **20 29 49.0** | **+1.2** |
| **MBWA** | **Marble Bar** | **13.21** | **166** | P | **Pn** | **20 31 31.3** | **+0.4** |
| **MBWA** | **Marble Bar** | **13.21** | **166** | Pn | **Pn** | **20 31 29.9** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **13.34** | **138** | Pn | **Pn** | **20 31 31.7** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **166** | P | **Pn** | **20 31 37.1** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **166** | Pn | **Pn** | **20 31 35.2** | **-1.5** |
| **KNRA** | **Kununurra** | **14.26** | **122** | Pn | **Pn** | **20 31 43.0** | **-2.2** |
| **GIRL** | **Giralia** | **14.38** | **188** | P | **Pn** | **20 31 46.6** | **-0.4** |
| **GIRL** | **Giralia** | **14.38** | **188** | Pn | **Pn** | **20 31 45.0** | **-1.9** |
| **MTN** | **Manton Dam** | **15.30** | **108** | Pn | **Pn** | **20 31 57.0** | **-2.4** |
| MTN | | | | IAmb | IAmb | 20 32 02.2 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **MEEK** | **Meekatharra** | **18.37** | **173** | P | **P** | **20 32 38.9** | **+0.7** |
| **WRKA** | **Warakurna** | **20.22** | **147** | P | Pn | 20 33 00.3 | -0.1 |
| **MORW** | **Morawa** | **20.65** | **181** | | Pn | 20 33 05.8 | +0.4 |
| **WB0** | **Warramunga Arr** | **20.94** | **125** | P | **P** | **20 33 06.9** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 20 33 07.4 | |
| | comp=Z,9.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.98** | **125** | P | **P** | **20 33 06.8** | **+0.1** |
| **WRA** | **Warramunga Arr** | **20.98** | **125** | P | **P** | **20 33 07.2** | **+0.4** |
| | comp=Z,5.7nm,0.6s,baz=301,slow=12,SNR=182 | | | | | | |
| WRA | | | | S | **S** | **20 37 02.0** | **+1.3** |
| | comp=Z,0.4nm,0.7s,baz=296,slow=24,SNR=2.3 comp=Z,5.7nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.99** | **125** | P | **P** | **20 33 07.5** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 20 33 08.1 | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.15** | **125** | P | **P** | **20 33 09.4** | **+0.7** |
| **ASAR** | **Alice Springs** | **22.78** | **134** | P | **P** | **20 33 26.4** | **+0.3** |
| | comp=Z,3.0nm,0.8s,baz=309,slow=8.7,SNR=28 comp=Z,3.0nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.79** | **134** | P | **P** | **20 33 26.0** | **-0.1** |
| **AS01** | **Alice Springs** | **22.82** | **134** | P | **P** | **20 33 27.9** | **+1.5** |
| **OOD** | **Oodnadatta** | **26.70** | **139** | P | **P** | **20 34 05.2** | **+2.5** |
| **COEN** | **Coen** | **26.99** | **104** | P | **P** | **20 34 06.7** | **+1.2** |
| **COEN** | **Coen** | **26.99** | **104** | P | **P** | **20 34 05.9** | **+0.4** |
| COEN | | | | IAmb | IAmb | 20 34 16.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **33.24** | **138** | P | **P** | **20 35 01.4** | **+0.7** |
| STKA | | | | IAmb | IAmb | 20 35 14.6 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| **KOUNC** | **Kounac, New Ca** | **47.91** | **110** | P | **P** | **20 37 01.6** | **-0.4** |
| **SONM** | **Songino Array** | **56.57** | **352** | P | **P** | **20 38 06.7** | **+0.6** |
| | comp=Z,0.7nm,0.5s,baz=175,slow=9.2,SNR=5.0 comp=Z,0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.63** | **334** | P | **P** | **20 38 45.7** | **-2.1** |
| **MKAR** | **Makanchi Array** | **62.63** | **334** | P | **P** | **20 38 47.1** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=142,slow=7.4,SNR=8.1 comp=Z,0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.46** | **341** | P | **P** | **20 39 17.6** | **-1.4** |
| | comp=Z,0.7nm,0.6s,baz=116,slow=3.4,SNR=3.6 comp=Z,0.7nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **68.97** | **199** | P | **P** | **20 39 27.5** | **-0.8** |
| | comp=Z,1.5nm,0.4s,baz=67,slow=18,SNR=2.7 comp=Z,1.5nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **73.10** | **171** | P | **P** | **20 39 54.5** | **+1.3** |
| VNDA | | | | IAmb | IAmb | 20 40 28.2 | |
| | comp=Z,3.1nm,1.5s | | | | | | |
| **VNDA** | **Vanda** | **73.10** | **171** | P | **P** | **20 39 53.9** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=316,slow=6.8,SNR=5.0 comp=Z,0.3nm,0.4s | | | | | | |
| **SBA** | **Scott Base** | **74.12** | **170** | P | **P** | **20 39 59.3** | **+0.1** |
| **ABKAR** | **Akbulak array** | **75.45** | **326** | P | **P** | **20 40 05.5** | **-1.8** |
| **QSPA** | **South Pole Qui** | **81.68** | **180** | P | **P** | **20 40 42.0** | **+0.4** |
| | comp=Z,1.2nm,0.9s,baz=307,slow=2.1,SNR=2.4 comp=Z,1.2nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **86.95** | **242** | LR | LR | 21 12 22.9 | |
| | comp=Z,35nm,20.5s,baz=209,slow=30 | | | | | | |
| **WVT** | **Waverly** | **144.66** | **35** | PKPdf | **PKPab** | **20 47 58.5** | **-0.8** |
| **CPUP** | **Villa Florida** | **145.01** | **190** | PKPbc | **PKPab** | **20 48 01.1** | **+0.4** |
| | comp=Z,1.5nm,0.6s,baz=90,slow=2.0,SNR=5.2 | | | | | | |

*IDC **06** 20:46:36.4±2.1,3°.96S×150°.35E,h0km,mb3.7/6, mbtmp3.7/6,MS3.1/15,Error ellipse: s-maj=75.5km s-min=26.7km az=112.0*

**ISC 06 20:46:38.7±1.5,3°.95S±0°.2×150°.2E±0°.4,h10km,n21, σ1§07/7,mb3.6/6,MS3.2/13,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.27** | **209** | LR | LR | 20 49 46.8 | |
| | comp=Z,28nm,20.2s,baz=12,slow=30 | | | | | | |
| **HNR** | **Honiara** | **11.16** | **120** | LR | LR | 20 53 32.7 | |
| | comp=Z,1μm,21.9s,baz=145,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **16.57** | **193** | Pn | **P** | **20 50 34.5** | **+0.6** |
| | baz=34,slow=17,SNR=1.8 | | | | | | |
| CTA | | | | LR | LR | 20 56 29.1 | |
| | comp=Z,8.3nm,18.6s,baz=50,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.23** | **223** | P | **P** | **20 51 35.8** | **0.0** |
| | 1.4nm,0.6s,baz=49,slow=10,SNR=9.3 1.4nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **24.00** | **140** | LR | LR | 20 59 50.6 | |
| | comp=Z,108nm,19.7s,baz=328,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **25.20** | **217** | P | **P** | **20 52 03.8** | **-0.9** |
| | 0.7nm,0.9s,baz=57,slow=7.7,SNR=3.2 | | | | | | |
| ASAR | | | | LR | LR | 21 02 06.1 | |
| | comp=Z,57nm,18.4s,baz=57,slow=37 0.7nm,0.9s | | | | | | |
| **DAV** | **Davao City (W)** | **26.86** | **294** | LR | LR | 21 02 19.2 | |
| | comp=Z,30nm,20.8s,baz=113,slow=35 | | | | | | |
| **STKA** | **Stephens Creek** | **29.01** | **195** | LR | LR | 21 03 23.8 | |
| | comp=Z,82nm,21.1s,baz=24,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **30.36** | **267** | LR | LR | 21 06 14.6 | |
| | comp=Z,28nm,19.7s,baz=85,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **46.03** | **335** | LR | LR | 21 12 31.9 | |
| | comp=Z,26nm,21.9s,baz=115,slow=34 | | | | | | |
| **ASAJ** | **Asahikawa** | **48.25** | **353** | LR | LR | 21 14 22.4 | |
| | comp=Z,24nm,19.5s,baz=179,slow=34 | | | | | | |
| **KLR** | **Kul'dur** | **55.26** | **345** | LR | LR | 21 17 39.6 | |
| | comp=Z,19nm,20.0s,baz=144,slow=34 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **59.90** | **17** | LR | LR | 21 17 38.7 | |
| | comp=Z,29nm,21.1s,baz=252,slow=31 | | | | | | |
| **MA2** | **Magadan** | **63.25** | **0** | LR | LR | 21 20 50.2 | |
| | comp=Z,24nm,21.4s,baz=82,slow=32 | | | | | | |
| **YAK** | **Yakutsk** | **67.57** | **350** | LR | LR | 21 24 52.4 | |
| | comp=Z,17nm,21.8s,baz=165,slow=34 | | | | | | |
| **TIXI** | **Tiksi** | **76.65** | **353** | LR | LR | 21 33 31.1 | |
| | comp=Z,16nm,19.2s,baz=354,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **77.92** | **319** | P | **P** | **20 58 36.6** | **-0.4** |
| | 0.4nm,0.7s,baz=101,slow=8.3,SNR=4.2 0.4nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **78.94** | **327** | P | **P** | **20 58 44.1** | **+1.7** |
| | 0.5nm,0.5s,baz=129,slow=5.7,SNR=3.7 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **81.47** | **322** | P | **P** | **20 58 55.8** | **-0.4** |
| | 0.8nm,0.3s,baz=108,slow=3.0,SNR=4.3 0.8nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **82.29** | **23** | P | **P** | **20 58 59.8** | **-0.4** |
| | 0.4nm,0.8s,baz=262,slow=3.5,SNR=3.4 0.4nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.82** | **28** | LR | LR | 21 40 05.3 | |
| | comp=Z,16nm,19.5s,baz=325,slow=34 | | | | | | |

*NEIC **06** 20:47:50.8±2.0,56°.23S±0°.10×27°.1W±0°.2,h86km±6km, mb4.9/29,Error ellipse: s-maj=14.3km s-min=12.0km az=190.0*

*IDC **06** 20:47:53.5±1.6,56°.26S×26°.82W,h116km±12km,mb4.4/11, mbtmp4.8/13,MS3.3/7,Error ellipse: s-maj=16.7km s-min=10.5km az=63.0*

**ISC 06 20:47:51.5±0.3,56°.40S±0°.05×27°.05W±0°.06,h100km, n343,σ1§56/350,mb4.9/22,9C-1D,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.79** | **288** | Pn | **Pn** | **20 49 14.1** | **-0.7** |
| HOPE | | | | Sn | **Sn** | **20 50 13.4** | **-6.3** |
| **ORCD** | **Orcadas** | **10.20** | **237** | Pn | Pn | 20 50 08.4 | -6.2 |
| **VNA1** | **Neumayer--Stat** | **16.45** | **158** | ⇑P | **P** | **20 51 39.1** | **+2.3** |
| | comp=Z,86nm,0.8s | | | | | | |
| VNA1 | | | | ⇑S | **Sn** | **20 54 30.6** | **-7.2** |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.64** | **160** | ⇑P | **P** | **20 51 39.8** | **+0.8** |
| | comp=Z,24nm,0.5s | | | | | | |
| VNA3 | | | | ⇑S | **Sn** | **20 54 35.8** | **-6.7** |
| | comp=Z,2.6nm,0.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **16.84** | **158** | ⇑P | **P** | **20 51 41.5** | **+0.2** |
| | comp=Z,26nm,0.6s,baz=314,slow=16 | | | | | | |
| VNA2 | | | | ⇓S | **Sn** | **20 54 38.2** | **-9.3** |
| | comp=Z,2.2nm,0.6s,baz=180,slow=14 | | | | | | |
| **SNAA** | **Sanae** | **18.39** | **156** | P | **Pn** | **20 51 59.6** | **+0.1** |
| **SNAA** | **Sanae** | **18.39** | **156** | ⇑P | **P** | **20 51 59.1** | **+0.8** |
| | comp=Z,542nm,0.5s | | | | | | |
| SNAA | | | | ⇑S | **S** | **20 55 18.5** | **-4.4** |
| | comp=Z,27nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **18.39** | **156** | P | **Pn** | **20 51 59.8** | **+0.2** |
| | comp=Z,29nm,0.7s,baz=323,slow=13,SNR=94 | | | | | | |
| SNAA | | | | S | **S** | **20 55 20.5** | **-2.4** |
| | comp=Z,1.6nm,0.5s,baz=308,slow=18,SNR=2.5 | | | | | | |
| SNAA | | | | PcP | **PcP** | **20 56 24.8** | **+0.3** |
| | comp=Z,1.6nm,0.4s,baz=220,slow=8.9,SNR=2.6 | | | | | | |
| SNAA | | | | ScP | **ScP** | **20 59 49.9** | **-0.6** |
| | comp=Z,3.6nm,0.8s,baz=304,slow=3.4,SNR=9.5 | | | | | | |
| **EFI** | **East Falkland** | **18.72** | **272** | P | **P** | **20 52 00.8** | **-1.1** |
| **PMSA** | **Palmer Station** | **19.73** | **230** | | **Pn** | **20 52 16.7** | **+1.5** |
| **PMSA** | **Palmer Station** | **19.73** | **230** | P | **Pn** | **20 52 16.5** | **+1.3** |
| | comp=Z,61nm,0.6s,baz=71,slow=7.6,SNR=21 | | | | | | |
| PMSA | | | | S | | 20 55 38.6 | -11 |
| | comp=Z,10nm,0.3s,baz=180,slow=19,SNR=94 | | | | | | |
| **TROLL** | **Troll, Antarti** | **19.90** | **153** | ⇑P | **Pn** | **20 52 16.3** | **-1.0** |
| | comp=Z,2μm,0.8s | | | | | | |
| TROLL | | | | ⇑S | **S** | **20 55 45.0** | **-8.1** |
| | comp=Z,77nm,0.3s | | | | | | |
| **SMAI** | **San Martin Ant** | **21.55** | **221** | | **P** | **20 52 34.3** | **+1.9** |
| **BELA** | **Belgrano 2** | **21.74** | **184** | P | **P** | **20 52 35.4** | **+1.1** |
| **GO09** | **Cerro Castillo** | **26.82** | **262** | P | **P** | **20 53 19.7** | **-2.3** |
| GO09 | | | | IAmb | IAmb | 20 53 58.6 | |
| | comp=Z,70nm,1.8s | | | | | | |
| **GO08** | **Villa O'Higgin** | **28.39** | **267** | P | **P** | **20 53 34.5** | **-1.6** |
| GO08 | | | | IAmb | IAmb | 20 54 30.2 | |
| | comp=Z,48nm,1.8s | | | | | | |
| **TRQA** | **Tornquist** | **29.53** | **294** | P | **P** | **20 53 45.0** | **-1.3** |
| **PLTB** | **Pedras Altas** | **30.79** | **312** | P | **P** | **20 53 56.1** | **-1.3** |
| **PLCA** | **Paso Flores** | **32.14** | **280** | PcP | **PcP** | **20 56 55.4** | **-0.5** |
| | comp=Z,2.1nm,0.9s,baz=47,slow=11,SNR=3.0 | | | | | | |
| PLCA | | | | LR | LR | 21 06 41.5 | |
| | comp=Z,52nm,18.7s,baz=131,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **33.85** | **180** | P | **P** | **20 54 26.3** | **+2.2** |
| **QSPA** | **South Pole Qui** | **33.85** | **180** | P | **P** | **20 54 26.2** | **+2.1** |
| | comp=Z,21nm,0.6s,baz=198,slow=1.6,SNR=95 | | | | | | |
| QSPA | | | | PcP | **PcP** | **20 57 00.5** | **+0.1** |
| | comp=Z,2.8nm,0.4s,baz=146,slow=0.8,SNR=2.5 | | | | | | |
| QSPA | | | | ScP | **ScP** | **21 00 35.4** | **-0.3** |
| | comp=Z,5.8nm,0.9s,baz=208,slow=3.3,SNR=8.3 comp=Z,21nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **33.85** | **180** | P | **P** | **20 54 26.4** | **+2.4** |
| QSPA | | | | PcP | **PcP** | **20 57 01.0** | **+0.6** |
| QSPA | | | | ScP | **ScP** | **21 00 35.5** | **-0.1** |
| **CPUP** | **Villa Florida** | **37.10** | **311** | P | **P** | **20 54 50.3** | **-1.7** |
| CPUP | | | | IAmb | IAmb | 20 55 18.8 | |
| | comp=Z,17nm,

comp=Z,10nm,1.0s
CASY Casey 53.56 160 P P 20 57 03.4 +2.1
SAML Samuel 55.10 315 P P 20 57 12.0 -1.1
DRV Dumont d'Urvil 56.87 174 P P 20 57 26.4 +1.3
DRV ScP ScP 21 02 11.1 +1.7
LSZ Lusaka 58.43 69 P P 20 57 36.6 -0.2
LSZ IAmb IAmb 20 57 37.6
comp=Z,9.1nm,1.0s
RPN Rapa Nui 63.67 260 LR LR 21 20 21.9
comp=Z,19nm,20.9s,baz=314,slow=30
BOAV Boa Vista 64.60 322 P P 20 58 17.1 -1.0
MDP Montagnes des 64.78 332 LR LR 21 24 43.3
comp=Z,24nm,19.8s,baz=179,slow=34
DBIC Dimbokro 65.45 24 P P 20 58 22.9 -0.7
comp=Z,2.1nm,0.6s,baz=188,slow=3.3,SNR=1.9
comp=Z,2.1nm,0.6s
ARNL Arenillas 67.36 300 P P 20 58 35.8 -0.1
OTAV Otavalo 69.91 304 P P 20 58 52.9 +0.7
TULM Tulcn-Chalpat 70.03 305 P P 20 58 52.4 -0.5
TULM IAmb IAmb 20 58 54.9
comp=Z,26nm,1.2s
ROSC El Rosal 72.16 310 P P 20 59 06.5 +0.8
comp=Z,7.4nm,0.3s,baz=13,slow=23,SNR=2.2
comp=Z,7.4nm,0.3s
MBAR Mbarara 72.24 63 P P 20 59 04.8 -1.1
TORD Torodi Ar. Bea 73.32 29 P P 20 59 11.3 -0.7
comp=Z,1.5nm,0.7s,baz=201,slow=6.2,SNR=9.8
comp=Z,1.5nm,0.7s
BAUV El Baul 73.36 317 P P 20 59 11.7 -0.6
BAUV IAmb IAmb 20 59 36.4
comp=Z,21nm,1.0s
SDV Santo Domingo 74.31 315 LR LR 21 31 16.6
comp=Z,24nm,21.6s,baz=42,slow=35
MTO3 Montecristo 87.42 301 P P 21 00 27.4 -0.3
STKA Stephens Creek 91.55 170 P P 21 00 48.0 +1.2
comp=Z,4.5nm,0.6s,baz=158,slow=3.4,SNR=8.4
comp=Z,4.5nm,0.6s
KEST Kesra 96.84 29 LR LR 21 36 50.3
comp=Z,25nm,20.7s,baz=268,slow=30
ASAR Alice Springs 98.64 162 P Pdif 21 01 19.5 +0.2
comp=Z,4.4nm,0.8s,baz=184,slow=3.9,SNR=29
ASAR PP PP 21 05 19.4 -0.8
comp=Z,0.5nm,0.5s,baz=196,slow=7.4,SNR=11
comp=Z,4.4nm,0.8s
AS31 Alice Springs 98.64 162 P Pdif 21 01 21.9 +2.6
AS31 IAmb IAmb 21 01 23.2
comp=Z,1.6nm,0.8s
WRA Warramunga Arr 102.35 162 P Pdif 21 01 36.0 +0.2
comp=Z,0.6nm,0.7s,baz=200,slow=4.7,SNR=3.2
WRA PKKPbc PKKPbc 21 17 34.9 +0.7
comp=Z,0.9nm,1.1s,baz=354,slow=2.9,SNR=8.3
L61B Northampton 105.73 327 P PKiKP 21 06 04.3 +2.0
baz=156
SSPA Standing Stone 105.78 322 P PKiKP 21 06 04.1 +1.7
baz=153
O53A New Philadelph 106.60 320 P PKiKP 21 06 06.7 +2.7
baz=152
SFIN Lafayette 108.92 316 P PKiKP 21 06 10.1 +1.8
baz=149
JFWS Jewell Farm 112.31 315 P PKiKP 21 06 16.9 +2.2
baz=148
Y22D IRIS PASSCAL I 112.48 298 P PKiKP 21 06 17.6 +2.2
baz=144
TUC Tucson 113.00 294 P PKiKP 21 06 18.2 +1.8
baz=143
T25A Trinidad 113.73 302 P PKiKP 21 06 19.9 +2.1
baz=144
IKP In-Ko-Pah, Jac 116.01 290 P PKiKP 21 06 23.7 +1.6
baz=142
SWSC Sam W. Stewart 116.08 291 P PKiKP 21 06 24.5 +2.4
baz=142
TPFO Pinon Flats 116.94 291 P PKiKP 21 06 26.1 +2.1
baz=141
PFO Pinyon Flats O 116.95 291 P PKiKP 21 06 25.8 +1.9
baz=141
EYMN Ely 117.00 317 P PKiKP 21 06 25.6 +2.1
baz=146
MURC Murrieta 117.32 290 P PKiKP 21 06 26.7 +2.1
baz=141
O20A White River Ci 117.93 301 P PKiKP 21 06 28.1 +2.3
baz=141
FMP Fort Macarthur 117.98 289 P PKiKP 21 06 27.4 +1.6
baz=141
K22A Casper 119.09 304 P PKiKP 21 06 29.2 +1.3
baz=141
RSSD Black Hills 119.11 307 P PKiKP 21 06 30.1 +2.1
baz=142
SBC Santa Barbara 119.29 289 P PKiKP 21 06 30.2 +1.9
baz=140
ARVC Arvin 119.36 290 P PKiKP 21 06 30.6 +2.1
baz=140
TPNV Topopah Spring 119.42 293 P PKiKP 21 06 30.8 +2.0
baz=140
PKM Mcpherson Peak 119.69 289 P PKiKP 21 06 31.2 +1.8
baz=140
ULM Lac du Bonnet 120.55 316 PKP PKPdf 21 06 30.1 -0.1
comp=Z,1.8nm,0.7s,baz=127,slow=5.1,SNR=3.2
BOZ Bozeman (W) 123.71 303 P PKiKP 21 06 38.9 +2.0
baz=138
FINES FINESS Array B 124.65 28 PKP PKPdf 21 06 37.1 -0.6
comp=Z,2.8nm,0.9s,baz=242,slow=3.0,SNR=8.1
EGMT Eagleton 124.66 306 P PKiKP 21 06 40.2 +1.6
baz=138
ARCES ARCESS Array B 131.24 22 PKP PKPdf 21 06 49.6 -0.5
comp=Z,1.3nm,0.6s,baz=177,slow=2.3,SNR=4.7
YKA Yellowknife Ar 136.48 318 PKP PKPdf 21 06 59.7 -0.3
comp=Z,1.8nm,0.7s,baz=123,slow=2.8,SNR=4.3
YKA SKPbc SKPbc 21 10 21.1 -1.9
comp=Z,2.3nm,0.9s,baz=126,slow=2.5,SNR=3.9
MKAR Makanchi Array 136.92 72 PKP PKPdf 21 07 00.4 -1.1
comp=Z,0.4nm,0.8s,baz=234,slow=5.0,SNR=3.5
KURBB Kurchatov Arra 137.38 65 PKiKP PKPpre 21 06 59.2
comp=Z,0.3nm,0.6s,baz=232,slow=3.2,SNR=4.2
ZAA0 Zalesovo Array 142.45 64 PKPdf PKiKP 21 07 13.0 -1.2
ZALV Zalesovo Beam 142.45 64 PKP PKiKP 21 07 12.7 -1.6
comp=Z,2.2nm,0.5s,baz=244,slow=2.5,SNR=13
P32M Atlin 142.81 306 P PKiKP 21 07 13.8 -1.2
baz=118
R31K City Hall, Gus 143.18 304 P PKiKP 21 07 14.9 -0.7
baz=118
WHY Whitehorse 143.82 307 PKPdf PKPbc 21 07 11.4 -0.2
FARO Faro, Yukon 143.84 310 PKPdf PKPab 21 07 11.0 +0.2
M31M Drury Creek, Y 144.28 310 PKPdf PKPab 21 07 12.6 +0.1
O30N Mendenhall 144.41 307 PKPdf PKPbc 21 07 13.6 +0.3
P30M Million Dollar 144.52 306 P PKPdf 21 07 14.4 -0.3
baz=116
A36M Sachs Harbour 144.54 328 PKPdf PKPbc 21 07 13.5 +0.2
A36M Sachs Harbour 144.54 328 P PKPdf 21 07 14.1 -0.2
baz=108
N31M Braeburn, Yuko 144.58 308 PKPdf PKPab 21 07 13.1 -0.5
N31M Braeburn, Yuko 144.58 308 P PKPdf 21 07 14.4 -0.4
baz=114
P29M Windy Craggy 144.65 305 PKPdf PKPab 21 07 13.8 -0.1
P29M Windy Craggy 144.65 305 P PKPdf 21 07 15.3 +0.4
baz=116
LYN LuoYang 144.92 111 PKPbc PKPdf 21 07 16.1 -0.1
N30M Aishikik Lake 145.14 308 P PKPab 21 07 16.6 +0.8
baz=114
O29M Mount Kennedy 145.32 305 P PKPab 21 07 17.3 +0.7
baz=114
PNL Peninsula 145.43 304 P PKPab 21 07 16.9 0.0
baz=115
M30M Minto, Yukon 145.45 310 PKPdf 21 07 16.0 -0.2
M30M Minto, Yukon 145.45 310 P PKPab 21 07 17.1 +0.2
baz=112,SNR=9.1
YUK6 Outpost Mounta 145.49 307 P PKPab 21 07 17.4 0.0
baz=114
YUK4 Talbot Arm 145.78 307 P PKPab 21 07 18.6 +0.3
baz=113
F31M Tsiigehtchic 145.94 319 PKPdf PKPdf 21 07 17.1 +0.3
F31M Tsiigehtchic 145.94 319 P PKPbc 21 07 17.8 0.0
baz=108
G31M Satah River 145.97 318 PKPdf PKPdf 21 07 17.2 +0.3
G31M Satah River 145.97 318 P PKPbc 21 07 17.8 -0.1
baz=108,SNR=13
J30M Hart River 145.99 313 PKPdf PKPbc 21 07 18.2 0.0
J30M Hart River 145.99 313 P PKPbc 21 07 18.6 +0.4
baz=110
INK Inuvik 146.12 320 PKPdf PKPdf 21 07 16.8 -0.3
INK Inuvik 146.12 320 P PKPbc 21 07 17.9 -0.4
baz=107
M29M Somme Creek 146.12 309 P PKPbc 21 07 18.8 +0.2
baz=112
L29M L29M 146.22 310 PKPdf PKPbc 21 07 18.6 -0.3
L29M L29M 146.22 310 P PKPbc 21 07 18.5 -0.3
baz=111,SNR=39
K29M Barlow Dome 146.23 312 PKPdf PKPdf 21 07 18.0 +0.4
K29M Barlow Dome 146.23 312 P PKPbc 21 07 18.5 -0.4
baz=110
I30M Mount Dempster 146.23 314 PKPdf PKPdf 21 07 18.2 +0.6
I30M Mount Dempster 146.23 314 P PKPbc 21 07 18.6 -0.3
baz=109
O28M Mount Upton 146.24 306 P PKPbc 21 07 18.7 -0.6
baz=113
YUK8 Steele Glacier 146.25 307 P PKPbc 21 07 18.7 -0.6
baz=112
G30M tAoh Zraii Nji 146.72 317 PKPdf PKPbc 21 07 19.6 -0.5
G30M tAoh Zraii Nji 146.72 317 P PKPbc 21 07 19.7 -0.5
baz=107,SNR=11
J29N Klondike Camp 146.72 313 PKPdf PKPbc 21 07 19.6 -0.6
EPYK Eagle Plains 146.73 316 PKPdf PKPbc 21 07 19.6 -0.6
EPYK Eagle Plains 146.73 316 P PKPbc 21 07 19.5 -0.6
baz=107
F30M Barrier River 146.74 319 P PKPbc 21 07 20.1 -0.1
baz=106
YUK3 Moose Creek 146.75 307 P PKPbc 21 07 20.2 -0.4
baz=111
CTG Chitna Glacier 146.84 306 P PKPbc 21 07 20.2 -0.5
baz=112
I29M Ogilvie Camp, 147.04 314 PKPdf PKPdf 21 07 19.8 +1.0
I29M Ogilvie Camp, 147.04 314 P PKPbc 21 07 20.3 -0.8
baz=107
H29M Whitestone 147.32 316 PKPdf PKPbc 21 07 21.0 -0.8
H29M Whitestone 147.32 316 P PKPbc 21 07 21.1 -0.7
baz=106,SNR=11
G29M Pine Creek 147.38 317 PKPdf PKPbc 21 07 21.1 -0.9
G29M Pine Creek 147.38 317 P PKPbc 21 07 21.1 -0.9
baz=105,SNR=16
BGLC Bering Glacier 147.41 304 P PKPbc 21 07 21.5 -0.6
baz=112
CRQE Cirque 147.56 305 P PKPbc 21 07 22.1 -0.6
baz=111
M27K Edge Creek, AK 147.58 308 PKPdf PKPdf 21 07 21.3 +1.3
M27K Edge Creek, AK 147.58 308 P PKPbc 21 07 22.4 -0.4
baz=109
E29M Blow River 147.71 320 PKPdf PKPbc 21 07 21.6 -1.2
E29M Blow River 147.71 320 P PKPbc 21 07 21.9 -0.8
baz=103
I28M Miner Creek 147.72 314 PKPdf PKPbc 21 07 22.0 -1.0
I28M Miner Creek 147.72 314 P PKPbc 21 07 22.8 -0.3
baz=106,SNR=11
BCAR Beaver Creek A 147.77 309 PKPdf PKPbc 21 07 21.7 -1.5
L27K Beaver Creek, 147.79 309 PKPdf PKPbc 21 07 21.8 -1.5
L27K Beaver Creek, 147.79 309 P PKPbc 21 07 22.9 -0.4
baz=108
EGAK Eagle 148.03 312 PKPdf PKPbc 21 07 22.1 -1.6
EGAK Eagle 148.03 312 P PKPbc 21 07 22.9 -0.8
baz=106
M26K Nabesna, AK 148.08 308 P PKPbc 21 07 23.4 -0.6
baz=109
K27K Chicken 148.19 311 P PKPbc 21 07 24.2 0.0
baz=107
D28M Stokes Point 148.21 321 P PKPbc 21 07 23.8 -0.3
baz=101
F28M Old Crow 148.25 318 PKPdf PKPbc 21 07 23.2 -1.0
F28M Old Crow 148.25 318 P PKPbc 21 07 24.1 -0.2
baz=103
BMRM Bremner River 148.32 305 P PKPbc 21 07 24.0 -0.6
baz=110
E28M Babbage River 148.34 320 PKPdf PKPbc 21 07 23.2 -1.3
E28M Babbage River 148.34 320 P PKPbc 21 07 23.9 -0.6
baz=102
L26K Log Cabin Wild 148.43 309 PKPdf PKPbc 21 07 23.4 -1.5
L26K Log Cabin Wild 148.43 309 P PKPbc 21 07 24.5 -0.3
baz=107
I27K Kandik River 148.44 314 P PKPbc 21 07 24.3 -0.6
baz=105
N25K Chitina, Valde 148.54 306 P PKPbc 21 07 25.3 0.0
baz=109
H27K Steamboat Moun 148.56 315 P PKPbc 21 07 24.8 -0.3
baz=104
MENT Mentasta 148.57 308 PKPdf PKPbc 21 07 23.4 -1.8
Q23K Middleton Isla 148.59 301 P PKPbc 21 07 25.6 +0.3
baz=111
G27K Doyon Strip 148.75 316 P PKPbc 21 07 25.2 -0.3
baz=103
J26L Joseph Creek 148.95 311 PKPbc 21 07 25.8 -0.5
J26L Joseph Creek 148.95 311 P PKPbc 21 07 26.1 -0.1
baz=105
D27M Malcolm River 148.97 321 PKPbc 21 07 25.6 -0.6
D27M Malcolm River 148.97 321 P PKPbc 21 07 26.0 -0.1
baz=99
SCRK Sand Creek 148.98 310 PKPbc 21 07 25.8 -0.5
SCRK Sand Creek 148.98 310 P PKPbc 21 07 26.2 -0.2
baz=106
I26K Coal Creek Min 148.99 313 P PKPbc 21 07 26.3 +0.1
baz=104
E27K Coleen River 149.01 319 PKPbc 21 07 25.2 -0.9
E27K Coleen River 149.01 319 P PKPbc 21 07 26.0 -0.2
baz=100
KLU Klutina 149.10 305 P PKPbc 21 07 26.8 +0.1
baz=108
P23K Montague Islan 149.29 302 P PKPbc 21 07 26.8 -0.2
baz=110
PAX Paxson 149.34 308 P PKPbc 21 07 27.2 -0.1
baz=106
M24K Tolsona, Glenn 149.40 306 P PKPbc 21 07 27.2 -0.2
baz=107
G26K Porcupine Rive 149.60 316 P PKPbc 21 07 27.7 +0.1
baz=101
K24K Donnelly Dome 149.70 310 P PKPbc 21 07 27.9 -0.1
baz=104
J25K Salcha River, 149.73 311 PKPbc 21 07 28.0 -0.1
J25K Salcha River, 149.73 311 P PKPbc 21 07 28.1 -0.1
baz=104
SCM Sheep Creek Mo 149.84 305 P PKPbc 21 07 28.5 0.0
baz=107
F26K Sheenjek River 149.87 317 P PKiKP 21 07 28.8 -0.5
baz=99
C27K Jago River 149.99 321 P PKPbc 21 07 28.4 -0.1
baz=96
BMAR Burnt Mountain 149.99 317 PKPbc 21 07 28.2 -0.5
PRP Porcupine Dome 150.00 313 P PKPbc 21 07 28.9 +0.1
baz=102
PWL Port Wells 150.01 303 P PKPbc 21 07 28.5 -0.3
baz=108
M23K Glacier View 150.01 305 P PKPbc 21 07 29.0 +0.2
baz=106
DHY Denali Highway 150.21 308 P PKPbc 21 07 29.5 +0.1
baz=105
KNK Knik Glacier 150.24 304 P PKiKP 21 07 29.8 -0.3
baz=107
WAT6 Susitna Watana 150.24 307 P PKiKP 21 07 30.0 -0.3
baz=105
SML Sawmill 150.29 305 P PKPbc 21 07 29.3 -0.2
baz=106
SEW Seward 150.30 301 P PKiKP 21 07 29.9 -0.3
baz=108
HDA Harding Lake 150.35 310 P PKiKP 21 07 30.3 0.0
baz=103
IL03 Eielson Array 150.39 311 PKPdf PKPbc 21 07 27.5 -2.1
IL31 150.40 311 PKPdf PKPbc 21 07 27.6 -2.0
ILAR Eielson Array 150.40 311 PKPdf PKPbc 21 07 27.4 -2.3
ILAR Eielson Array 150.40 311 PKPbc PKPbc 21 07 29.4 -0.2
comp=Z,6.4nm,0.7s,baz=137,slow=2.3,SNR=67
F25K Christian Rive 150.42 317 P PKiKP 21 07 30.3 -0.1
baz=98
C26K Camden Bay 150.43 322 P PKiKP 21 07 29.9 -0.3
baz=95
G25K Bearman Lake 150.47 315 P PKiKP 21 07 30.1 -0.3
baz=99
WAT1 Susitna Watana 150.66 307 P PKPbc 21 07 30.6 +0.2
baz=104
SONM Songino Array 150.67 87 PKPbc PKPbc 21 07 30.3 -0.7
comp=Z,4.1nm,0.6s,baz=229,slow=3.5,SNR=24
SONM PKPab PKPab 21 07 36.5 -1.9
comp=Z,2.1nm,0.5s,baz=222,slow=3.1,SNR=9.4
CCB Clear Creek Bu 150.76 311 PKPbc 21 07 29.1 -1.3
BRSE Bradley Lake S 150.80 300 P PKPbc 21 07 30.8 +0.1
baz=108
WRH Wood River Hil 150.84 310 PKPbc 21 07 30.0 -0.7
D25K Kavik River 150.89 320 PKPbc 21 07 29.8 -0.9
D25K Kavik River 150.89 320 P PKiKP 21 07 31.1 -0.2
baz=94
RND Reindeer 150.94 308 PKPbc 21 07 31.1 +0.1
G24K Hadweenzic Riv 150.99 315 PKPbc 21 07 31.0 0.0
G24K Hadweenzic Riv 150.99 315 P PKPbc 21 07 30.9 0.0
baz=98
H24K Noodor Dome 151.02 313 P PKPbc 21 07 30.9 -0.2
baz=99
KDAK Kodiak Island 151.04 296 P PKPbc 21 07 31.5 +0.2
baz=110
MCK McKinley 151.05 309 P PKPbc 21 07 31.1 -0.1
baz=102
OHAK Old Harbor 151.19 294 P PKPbc 21 07 31.9 +0.2
baz=111
Q20K Shuyak Island 151.23 297 P PKiKP 21 07 32.0 -0.2
baz=109
F24K Squaw Lake 151.26 317 P PKPbc 21 07 31.8 +0.1
baz=96
NEA2 Nenana 151.28 310 PKPbc 21 07 30.9 -0.8
NEA2 Nenana 151.28 310 P PKPbc 21 07 31.3 -0.4
baz=101
CAPN Captain Cook N 151.30 302 P PKiKP 21 07 32.1 -0.1
baz=106
SUA Susitna One 151.31 304 P PKiKP 21 07 32.3 -0.1
baz=105
CUT Chulitna 151.33 306 P PKiKP 21 07 32.5 +0.2
baz=104
SII Sitkinak Islan 151.40 293 P PKPbc 21 07 32.0 -0.3
baz=112
I23K Minto, Yukon-K 151.51 312 PKPbc 21 07 30.8 -1.3
I23K Minto, Yukon-K 151.51 312 P PKPbc 21 07 31.9 -0.3
baz=100
E24K Your Creek 151.55 318 P PKPbc 21 07 32.3 0.0
baz=95
H23K Yukon River 151.69 313 P PKPbc 21 07 32.4 -0.2
baz=98
D24K Happy Valley 151.75 320 P PKPbc 21 07 32.6 0.0
baz=93
SKT Skwentna 151.80 305 PKPbc 21 07 32.8 -0.1
SKT Skwentna 151.80 305 P PKPbc 21 07 33.1 +0.1
baz=104
O20K Slope Mountain 151.80 300 P PKPbc 21 07 33.0 -0.1
baz=106
CHIR Chirikof Islan 151.86 291 P PKPbc 21 07 33.4 +0.1
baz=112
E23K Chandalar 151.97 318 P PKiKP 21 07 33.7 +0.1
baz=94
P19K Oil Pt 151.97 299 P PKPbc 21 07 33.1 -0.3
baz=107
TOLK Toolik Lake Re 151.99 319 P PKiKP 21 07 33.6 +0.1
baz=93
G23K Bananza Creek 152.00 315 PKPbc 21 07 33.3 0.0
G23K Bananza Creek 152.00 315 P PKPbc 21 07 33.3 0.0
baz=96
BPAW Bear Paw Mtn. 152.01 309 PKPbc 21 07 32.8 -0.7
BPAW Bear Paw Mtn. 152.01 309 P PKiKP 21 07 33.7 0.0
baz=100
MLY Manley 152.06 311 P PKiKP 21 07 34.0 +0.2
baz=99
COLD Coldfoot 152.12 316 P PKiKP 21 07 33.8 0.0
baz=95
PPLA Purkeypile 152.30 306 P PKiKP 21 07 34.4 -0.1
baz=102
C23K Itkillik River 152.40 321 P PKiKP 21 07 34.6 +0.3
baz=90
D23K Nanushuk River 152.41 320 P PKiKP 21 07 34.5 +0.1
baz=91
H22K Ishtalitna Cre 152.45 313 P PKiKP 21 07 34.5 -0.1
baz=96
M20K Styx River 152.51 304 PKPbc 21 07 32.8 -1.9
M20K Styx River 152.51 304 P PKiKP 21 07 34.9 0.0
baz=103
CHUM Lake Minchumin 152.55 308 P PKiKP 21 07 34.8 0.0
baz=100
G22K Bettles 152.61 315 P PKiKP 21 07 35.1 +0.3
baz=94
P18K Big Mountain, 152.87 298 P PKPbc 21 07 35.3 -0.2
baz=106
N19K Bonanza Creek 152.89 301 P PKiKP 21 07 36.2 +0.5
baz=104
F22K John River 152.91 316 P PKiKP 21 07 35.7 +0.2
baz=93
L20K Farewell, AK 152.98 305 P PKiKP 21 07 36.5 +0.7
baz=101
O18K Koktuh Hills 152.99 299 P PKiKP 21 07 36.3 +0.5
baz=105
H21K Melozitna Rive 153.01 312 PKPbc 21 07 34.8 -0.8
H21K Melozitna Rive 153.01 312 P PKiKP 21 07 36.2 +0.5
baz=96
M19K Big River Lodg 153.10 304 P PKiKP 21 07 36.5 +0.5
baz=102
D22K Ayikyak River 153.13 319 P PKiKP 21 07 36.7 +0.8
baz=90
G21K Allakaket 153.37 314 P PKiKP 21 07 36.8 +0.4
baz=94
L19K White Mountain 153.37 304 P PKPbc 21 07 36.2 -0.3
baz=101
J20K Nowinta River 153.39 309 P PKPbc 21 07 35.7 -0.7
baz=98
F21K Alatna River 153.40 316 P PKPbc 21 07 36.4 0.0
baz=92
N18K Kilae Creek 153.53 301 P PKPbc 21 07 36.4 -0.4
baz=103
CHNA Chernabura Isl 153.56 287 P PKiKP 21 07 39.6 +2.5
baz=113
I20K Naaghedeneel 153.61 310 P PKiKP 21 07 39.1 +2.2
baz=96
M18K Stony River 153.68 302 P PKiKP 21 07 38.8 +1.6
baz=102
B21K Ikpikpuk River 153.80 321 P PKiKP 21 07 39.0 +1.8
baz=86
A22K Sinclair Lake 153.80 324 P PKiKP 21 07 38.6 +1.5
baz=83
H20K Anotleneega Mo 153.85 312 P PKiKP 21 07 39.2 +1.8
baz=94
C21K Knifeblade Rid 153.88 320 P PKiKP 21 07 39.2 +1.8
baz=87
J19K Poorman 154.01 308 P PKiKP 21 07 39.6 +1.8
baz=97
N17K Nushagak Hills 154.11 300 P PKiKP 21 07 40.0 +1.9
baz=103
P16K Nushagak River 154.13 296 P PKiKP 21 07 40.0 +1.9
baz=105
L18K Granite Mounta 154.22 304 P PKiKP 21 07 39.5 +1.3
baz=100
F20K Avaraart Lake 154.27 315 P PKiKP 21 07 39.9 +1.7
baz=90
A21K Barrow 154.28 325 P PKiKP 21 07 39.4 +1.3
baz=81
M17K Holitna River 154.42 302 P PKiKP 21 07 40.2 +1.4
baz=101
E20K Nigu River 154.43 318 P PKiKP 21 07 39.1 +0.4
baz=88
H19K Roundabout Mou 154.50 312 P PKiKP 21 07 40.0 +1.3
baz=93
D20K Etivluk River 154.57 319 P PKiKP 21 07 40.3 +1.4
baz=86
B20K Meade River 154.64 322 P PKiKP 21 07 40.7 +1.8
baz=83
G19K Purcell Mounta 154.79 313 P PKiKP 21 07 40.7 +1.4
baz=91
E19K Redstone River 154.85 316 P PKPab 21 07 55.8 +0.5
baz=88
L17K Donlin 154.95 303 P PKPab 21 07 56.7 +0.9
baz=99
K17K Iditarod 155.04 305 P PKPab 21 07 57.2 +1.0
baz=97
M16K Timber Creek 155.07 301 P PKPab 21 07 58.0 +1.6
baz=100
F19K Shaleruckik Mo 155.07 315 P PKPab 21 07 57.6 +1.4
baz=89
O15K Ungalikthiuk R 155.09 296 P PKPab 21 07 58.6 +2.1
baz=104
D19K Kuna River 155.13 319 P PKPab 21 07 58.5 +2.0
baz=85
S12K Black Hills 155.20 287 P PKPab 21 07 59.2 +2.1
baz=110
H18K Honhosa River 155.29 311 P PKPab 21 07 58.9 +1.7
baz=92
G18K Tagagawik 155.43 312 P PKPab 21 07 59.2 +1.4
baz=90
L16K Owhat River 155.43 302 P PKPab 21 07 59.8 +1.9
baz=99
N15K Kwethluk River 155.44 298 P PKPab 21 07 59.8 +1.8
baz=102
J17K VABM Dome 155.47 306 P PKPab 21 07 59.9 +1.9
baz=95
C19K Lookout Ridge 155.60 320 P PKPab 21 08 00.0 +1.5
baz=82
F18K Selawik 155.83 314 P PKPab 21 08 01.8 +2.4
baz=88
M15K Kasigluk River 155.84 300 P PKPab 21 08 01.6 +1.9
baz=100
H17K Granite Mounta 155.94 310 P PKPab 21 08 02.0 +2.0
baz=91
E18K Tukpahlearik C 156.15 316 P PKPab 21 08 02.2 +1.4
baz=85
N14K Kuskokwak Cree 156.18 297 P PKPab 21 08 02.8 +1.7
baz=101
G17K Kiwalik Mounta 156.25 311 P PKPab 21 08 03.1 +1.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=89 | | | | | | |
| B18K | **Kokolik River** | 156.34 | 321 | P | PKPab | 21 08 04.1 | +2.5 |
| | baz=79 | | | | | | |
| L15K | **Ungalak Mounta** | 156.38 | 302 | P | PKPab | 21 08 04.1 | +2.1 |
| | baz=97 | | | | | | |
| M14K | **Bethel** | 156.46 | 299 | P | PKPab | 21 08 04.0 | +1.7 |
| | baz=99 | | | | | | |
| K15K | **Wolf Creek Mou** | 156.47 | 303 | P | PKPab | 21 08 03.9 | +1.5 |
| | baz=96 | | | | | | |
| E17K | **Hotham Inlet** | 156.66 | 315 | P | PKPab | 21 08 03.6 | +0.6 |
| | baz=84 | | | | | | |
| L14K | **Kuka Creek** | 156.90 | 301 | P | PKPab | 21 08 06.2 | +2.1 |
| | baz=97 | | | | | | |
| H16K | **Elim** | 156.93 | 309 | P | PKPab | 21 08 05.8 | +1.5 |
| | baz=90 | | | | | | |
| C17K | **DeLong Mountai** | 156.99 | 319 | P | PKPab | 21 08 05.9 | +1.5 |
| | baz=80 | | | | | | |
| D17K | **Noatak River** | 157.07 | 317 | P | PKPab | 21 08 06.6 | +1.8 |
| | baz=82 | | | | | | |
| M13K | **Dall Lake** | 157.08 | 298 | P | PKPab | 21 08 07.7 | +2.7 |
| | baz=99 | | | | | | |
| C16K | **Lisburne Hills** | 157.81 | 319 | P | PKPab | 21 08 09.4 | +1.4 |
| | baz=78 | | | | | | |
| NIKH | **Nikolski High** | 157.85 | 277 | P | PKPab | 21 08 10.8 | +2.3 |
| | baz=114 | | | | | | |
| F15K | **North Star Dit** | 157.90 | 312 | P | PKPab | 21 08 09.4 | +0.9 |
| | baz=85 | | | | | | |
| ANM | **Nome** | 158.28 | 309 | P | PKPab | 21 08 13.7 | +3.6 |
| | baz=87 | | | | | | |
| F14K | **Arctic Creek** | 158.62 | 312 | P | PKPab | 21 08 15.4 | +3.8 |
| | baz=84 | | | | | | |
| P08K | **Saint George I** | 159.46 | 286 | P | PKPab | 21 08 17.8 | +2.4 |
| | baz=105 | | | | | | |

*NEIC* **06** *20:49:11.5±1.4, 43.°04N±0.°05×0.°28E±0.°06, h10km±2km, ML3.5/10, Error ellipse: s-maj=10.4km s-min=6.3km az=213.0*

*STR* **06** *20:49:13.0±0.3, 43.°N±5.°×.°±.°, h21km±5km, MLv3.8/48, Error ellipse: s-maj=0.0km s-min=0.0km az=18.7, preliminary*

*LDG* **06** *20:49:13.3±0.1, 43.°04N×0.°32E, h2km, Md3.3/3, Ml4.0/48, Error ellipse: s-maj=1.4km s-min=1.1km az=120.0*

*MRB* **06** *20:49:14.2±0.5, 42.°95N×0.°32E, h5km±2km, ML3.5/32, Error ellipse: s-maj=1.6km s-min=1.1km az=47.0*

*MDD* **06** *20:49:14.8±0.1, 42.°95N×0.°32E, h11km, mb_Lg3.7/85, Error ellipse: s-maj=0.9km s-min=0.7km az=170.0*

*INMG* **06** *20:49:15.2±1.3, 42.°91N×0.°24E, h17km±2km, ML3.2, Error ellipse: s-maj=1.8km s-min=1.8km az=5.0*

**ISC 06 20:49:11.9**±0.7, **42.°95N**±0.°01×**0.°31E**±0.°01, **h18**km±2km, **n295**, σ2 **s24**/508, **5C-5D, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | ISC | Res |
|---|---|---|---|---|---|---|---|---|---|
| **EPF** | **Esparros** | **0.08** | **17** | Op | *e*Pg | **Pb** | **20 49 16.3** | **+0.8** | |
| EPF | | | | | *e*Sg | **Sg** | **20 49 18.5** | **+0.6** | |
| | 5µm,0.2s | | | | | | | | |
| **EPF** | **Esparros** | **0.08** | **17** | Pg | | **Pb** | **20 49 16.3** | **+0.8** | |
| EPF | | | | Sg | | **Sg** | **20 49 18.5** | **+0.6** | |
| **RESF** | **Ens** | **0.15** | **171** | ⇑P | | **Pb** | **20 49 17.5** | **+1.7** | |
| RESF | | | | S | | **Sb** | **20 49 20.4** | **+2.1** | |
| | 15µm,0.3s | | | | | | | | |
| **VIEF** | **Viey** | **0.22** | **252** | ⇑P | | **Pb** | **20 49 19.1** | **+1.9** | |
| VIEF | | | | S | | **Sb** | **20 49 22.6** | **+1.8** | |
| **VIEF** | **Viey** | **0.22** | **252** | Pg | | **Pb** | **20 49 18.5** | **+1.3** | |
| VIEF | | | | Sg | | **Sb** | **20 49 22.5** | **+1.6** | |
| **ECHI** | **Chisagues Biel** | **0.30** | **196** | ⇑P | | **Pb** | **20 49 19.9** | **+1.2** | |
| ECHI | | | | S | | **Sb** | **20 49 24.5** | **+1.1** | |
| | 2µm,0.2s | | | | | | | | |
| **ECHI** | **Chisagues Biel** | **0.30** | **196** | Pg | | **Pb** | **20 49 19.9** | **+1.2** | |
| ECHI | | | | Sg | | **Sb** | **20 49 24.3** | **+0.9** | |
| ECHI | | | | *i* Vmb_Lg | | | 20 49 24.7 | | |
| **ECHI** | **Chisagues Biel** | **0.30** | **196** | Pg | | **Pb** | **20 49 19.9** | **+1.2** | |
| ECHI | | | | Sg | | **Sb** | **20 49 24.3** | **+0.9** | |
| **PYLO** | **Lourdes** | **0.30** | **299** | P | | **Pb** | **20 49 20.2** | **+1.5** | |
| PYLO | | | | S | | **Sb** | **20 49 24.7** | **+1.4** | |
| | 2µm,0.3s | | | | | | | | |
| **PYLO** | **Lourdes** | **0.30** | **299** | Pg | | **Pb** | **20 49 19.6** | **+0.9** | |
| PYLO | | | | Sg | | **Sb** | **20 49 24.1** | **+0.8** | |
| **MLS** | **Moulis** | **0.58** | **89** | S | | **Sb** | **20 49 32.6** | **+1.3** | |
| **MLS** | **Moulis** | **0.58** | **89** | Pg | | **Pb** | **20 49 23.1** | **-0.2** | |
| **CANF** | **Canfranc** | **0.64** | **253** | Pg | | **Pb** | **20 49 25.5** | **+1.0** | |
| CANF | | | | Sg | | **Sb** | **20 49 34.8** | **+1.7** | |
| **ETSF** | **Etsaut** | **0.64** | **266** | *e*Pg | | **Pb** | **20 49 25.8** | **+1.3** | |
| ETSF | | | | *e*Sg | | **Sb** | **20 49 34.2** | **+1.1** | |
| | 5µm,0.3s | | | | | | | | |
| **ETSF** | **Etsaut** | **0.64** | **266** | Pg | | **Pb** | **20 49 25.8** | **+1.3** | |
| **SALF** | **Salau** | **0.68** | **106** | P | | **Pb** | **20 49 26.6** | **+1.4** | |
| SALF | | | | S | | **Sb** | **20 49 35.8** | **+1.6** | |
| | 2µm,0.2s | | | | | | | | |
| **SALF** | **Salau** | **0.68** | **106** | Pg | | **Pg** | **20 49 25.5** | **+0.2** | |
| SALF | | | | Sg | | **Sg** | **20 49 34.7** | **+0.5** | |
| **CTRE** | **Tremp** | **0.71** | **151** | ⇑P | | **Pb** | **20 49 27.3** | **+1.4** | |
| CTRE | | | | S | | **Sn** | **20 49 37.7** | **-0.1** | |
| **CEST** | **Esterri de Car** | **0.78** | **117** | Pg | | **Pg** | **20 49 27.6** | **+0.4** | |
| CEST | | | | Sg | | **Sg** | **20 49 37.5** | **0.0** | |
| CEST | | | | IAML | | | 20 49 39.9 | | |
| | comp=E,803nm,0.4s | | | | | | | | |
| CEST | | | | IAML | | | 20 49 40.4 | | |
| | comp=N,2µm,0.6s | | | | | | | | |
| **CEST** | **Esterri de Car** | **0.78** | **117** | P | | **Pb** | **20 49 28.3** | **+1.3** | |
| CEST | | | | S | | **Sb** | **20 49 39.2** | **+1.9** | |
| | comp=N,1µm,0.3s | | | | | | | | |
| **URDF** | **Urds** | **0.82** | **307** | Pg | | **Pn** | **20 49 29.8** | **+1.3** | |
| **CSOR** | **Sort** | **0.84** | **133** | P | | **Pn** | **20 49 29.4** | **+0.5** | |
| CSOR | | | | S | | **Sn** | **20 49 41.3** | **+0.4** | |
| | comp=N,552nm,0.4s | | | | | | | | |
| **GENF** | **Genat** | **0.94** | **97** | *e*P | | **Pg** | **20 49 31.1** | **+0.9** | |
| GENF | | | | S | | **Sg** | **20 49 43.8** | **+1.3** | |
| | comp=N,448nm,0.2s | | | | | | | | |
| **PAND** | **Andorre** | **1.01** | **115** | Pg | | **Pg** | **20 49 32.1** | **+0.6** | |
| PAND | | | | Sg | | **Sg** | **20 49 45.4** | **+0.6** | |
| **CORG** | **Organya** | **1.04** | **134** | P | | **Pn** | **20 49 33.1** | **+1.6** | |
| CORG | | | | S | | **Sn** | **20 49 47.6** | **+2.0** | |
| | comp=N,390nm,0.4s | | | | | | | | |
| **ARBS** | **La Rabassa** | **1.04** | **118** | P | | **Pn** | **20 49 33.1** | **+1.2** | |
| ARBS | | | | S | | **Sn** | **20 49 48.1** | **+1.9** | |
| | comp=N,667nm,0.3s | | | | | | | | |
| **CAVN** | **Les Avellanes** | **1.12** | **163** | ⇑P | | **Pg** | **20 49 34.7** | **+1.2** | |
| CAVN | | | | S | | **Sn** | **20 49 49.6** | **+2.0** | |
| | comp=N,1µm,0.4s | | | | | | | | |
| **SJPF** | **Ste Jean** | **1.14** | **279** | *e*Pg | | **Pg** | **20 49 34.6** | **+0.8** | |
| SJPF | | | | *e*Sg | | **Sg** | **20 49 49.2** | **+0.5** | |
| | comp=N,431nm,0.2s | | | | | | | | |
| **SJPF** | **Ste Jean** | **1.14** | **279** | Pg | | **Pg** | **20 49 34.6** | **+0.8** | |
| **EORO** | **Oroz-Betelu** | **1.19** | **268** | Pg | | **Pg** | **20 49 35.8** | **+0.9** | |
| EORO | | | | Sg | | **Sg** | **20 49 52.3** | **+1.9** | |
| **EORO** | **Oroz-Betelu** | **1.19** | **268** | Pg | | **Pg** | **20 49 35.8** | **+0.9** | |
| EORO | | | | Sg | | **Sg** | **20 49 52.3** | **+1.9** | |
| EORO | | | | *i* Vmb_Lg | | | 20 49 57.5 | | |
| **OSSF** | **Osses** | **1.19** | **285** | Pg | | **Pn** | **20 49 34.1** | **+0.5** | |
| **TERF** | **Tercis-les-Bai** | **1.27** | **306** | Pg | | **Pb** | **20 49 36.5** | **+1.3** | |
| **CLLI** | **Llivia** | **1.32** | **110** | P | | **Pg** | **20 49 37.9** | **+0.6** | |
| CLLI | | | | S | | **Sg** | **20 49 56.1** | **+1.6** | |
| | comp=N,348nm,0.4s | | | | | | | | |
| **CARF** | **Carcanieres** | **1.34** | **99** | P | | **Pg** | **20 49 38.3** | **+0.5** | |
| CARF | | | | S | | **Sg** | **20 49 56.4** | **+1.0** | |
| | comp=N,383nm,0.5s | | | | | | | | |
| **CARF** | **Carcanieres** | **1.34** | **99** | Pg | | **Pb** | **20 49 37.7** | **+1.2** | |
| CARF | | | | Sg | | **Sg** | **20 49 56.1** | **+0.7** | |
| **EALK** | **Alkurruntz** | **1.36** | **282** | Pn | | **Pg** | **20 49 39.0** | **+1.0** | |
| EALK | | | | Sg | | **Sg** | **20 49 58.3** | **+2.6** | |
| **EALK** | **Alkurruntz** | **1.36** | **282** | Pn | | **Pg** | **20 49 39.0** | **+1.0** | |
| EALK | | | | Pg | | **Pb** | **20 49 40.9** | **+4.1** | |
| EALK | | | | Sg | | **Sg** | **20 49 58.3** | **+2.6** | |
| **EALK** | **Alkurruntz** | **1.36** | **282** | Pg | | **Pg** | **20 49 39.5** | **+1.5** | |
| **ESAC** | **San Caprasio** | **1.36** | **205** | Pg | | **Pg** | **20 49 35.6** | **-0.3** | |
| ESAC | | | | Sg | | **Sb** | **20 49 54.1** | **+0.3** | |
| ESAC | | | | *i* Vmb_Lg | | | 20 49 57.5 | | |
| **EMIR** | **Miracle** | **1.37** | **139** | P | | **Pg** | **20 49 39.5** | **+1.2** | |
| EMIR | | | | S | | **Sg** | **20 49 58.4** | **+2.1** | |
| | comp=N,597nm,0.3s | | | | | | | | |
| **EMIR** | **Miracle** | **1.37** | **139** | Pg | | **Pg** | **20 49 39.7** | **+1.4** | |
| EMIR | | | | Sg | | **Sg** | **20 49 58.3** | **+2.0** | |
| EMIR | | | | *i* Vmb_Lg | | | 20 50 00.6 | | |
| **EARA** | **Aranguren** | **1.40** | **263** | Pg | | **Pg** | **20 49 40.7** | **+1.8** | |
| EARA | | | | Sg | | **Sg** | **20 50 00.3** | **+3.2** | |
| **EARA** | **Aranguren** | **1.40** | **263** | Pg | | **Pg** | **20 49 40.7** | **+1.8** | |
| EARA | | | | Sg | | **Sg** | **20 50 00.3** | **+3.2** | |
| EARA | | | | *i* Vmb_Lg | | | 20 50 03.7 | | |
| **EARA** | **Aranguren** | **1.40** | **263** | Pg | | **Pg** | **20 49 40.2** | **+1.3** | |
| **VALC** | **Valcebollere** | **1.40** | **113** | Pg | | **Pg** | **20 49 39.4** | **+0.5** | |
| VALC | | | | Sg | | **Sg** | **20 49 58.8** | **+1.6** | |
| **MTLF** | **Montolieu** | **1.45** | **74** | *e*Pn | | **Pn** | **20 49 37.1** | **-0.1** | |
| **MTLF** | **Montolieu** | **1.45** | **74** | *e*Pg | | **Pb** | **20 49 40.0** | **+1.6** | |
| MTLF | | | | *e*Sg | | **Sn** | **20 49 57.4** | **+1.6** | |
| | comp=N,584nm,0.3s | | | | | | | | |
| **MTLF** | **Montolieu** | **1.45** | **74** | Pg | | **Pb** | **20 49 40.0** | **+1.6** | |
| **MTLF** | **Montolieu** | **1.45** | **74** | Sn | | **Sb** | **20 49 58.5** | **+2.0** | |
| **MTLF** | **Montolieu** | **1.45** | **74** | Pn | | **Pn** | **20 49 37.0** | **-0.3** | |
| **CBRU** | **Bruguera** | **1.53** | **115** | P | | **Pg** | **20 49 42.1** | **+0.7** | |
| CBRU | | | | S | | **Sg** | **20 50 03.0** | **+1.6** | |
| | comp=N,642nm,0.5s | | | | | | | | |
| **MONQ** | **Montcuq** | **1.56** | **24** | Pn | | **Pn** | **20 49 38.2** | **-0.5** | |
| MONQ | | | | Sn | | **Sb** | **20 50 02.2** | **+2.7** | |
| **CORI** | **Orista** | **1.62** | **127** | P | | **Pg** | **20 49 43.3** | **+0.3** | |
| CORI | | | | S | | **Sg** | **20 50 05.3** | **+1.2** | |
| | comp=N,2µm,0.3s | | | | | | | | |
| **EPOB** | **Poblet** | **1.70** | **160** | P | | **Pg** | **20 49 44.1** | **-0.4** | |
| EPOB | | | | S | | **Sg** | **20 50 06.7** | **+0.1** | |
| | comp=N,395nm,0.6s | | | | | | | | |
| **EPOB** | **Poblet** | **1.70** | **160** | Pn | | **Pb** | **20 49 42.9** | **+0.2** | |
| EPOB | | | | Pg | | **Pg** | **20 49 45.2** | **+0.7** | |
| EPOB | | | | Sg | | **Sg** | **20 50 07.0** | **+0.3** | |
| EPOB | | | | *i* Vmb_Lg | | | 20 50 07.6 | | |
| **FILF** | **Fillols** | **1.71** | **103** | P | | **Pb** | **20 49 43.0** | **+0.2** | |
| FILF | | | | S | | **Sb** | **20 50 04.3** | **+0.5** | |
| | comp=N,196nm,0.3s | | | | | | | | |
| **FILF** | **Fillols** | **1.71** | **103** | Pn | | **Pb** | **20 49 43.1** | **+0.4** | |
| FILF | | | | Sn | | **Sb** | **20 50 05.3** | **+1.5** | |
| **CBEU** | **Beuda** | **1.88** | **111** | P | | **Pb** | **20 49 47.1** | **+1.3** | |
| CBEU | | | | S | | **Sb** | **20 50 11.0** | **+2.1** | |
| | comp=N,545nm,0.3s | | | | | | | | |
| **SJAF** | **Saint Jean de** | **1.95** | **103** | P | | **Pb** | **20 49 47.7** | **+0.8** | |
| SJAF | | | | S | | **Sb** | **20 50 12.9** | **+1.9** | |
| | comp=N,140nm,0.3s | | | | | | | | |
| SJAF | | | | Sg | | **Sg** | **20 50 16.4** | **+1.6** | |
| **SJAF** | **Saint Jean de** | **1.95** | **103** | Pn | | **Pb** | **20 49 47.7** | **+0.8** | |
| SJAF | | | | Sn | | **Sg** | **20 50 14.7** | **-0.1** | |
| **EJON** | **La Jonquera** | **1.97** | **104** | Pn | | **Pb** | **20 49 47.9** | **+0.7** | |
| EJON | | | | Pg | | **Pg** | **20 49 50.5** | **+0.8** | |
| EJON | | | | Sn | | **Sn** | **20 50 09.6** | **+0.9** | |
| EJON | | | | Sg | | **Sg** | **20 50 16.8** | **+1.5** | |
| EJON | | | | *i* Vmb_Lg | | | 20 50 18.9 | | |
| **CFON** | **Fontmartina** | **1.98** | **126** | ⇓P | | **Pb** | **20 49 47.9** | **+0.5** | |
| CFON | | | | S | | **Sb** | **20 50 13.7** | **+2.1** | |
| CFON | | | | Sg | | **Sg** | **20 50 17.5** | **+2.0** | |
| **ERTA** | **Horta de San J** | **1.99** | **179** | P | | **Pb** | **20 49 48.2** | **+0.6** | |
| ERTA | | | | S | | **Sb** | **20 50 14.0** | **+1.8** | |
| | comp=N,275nm,0.4s | | | | | | | | |
| **ERTA** | **Horta de San J** | **1.99** | **179** | Pn | | **Pb** | **20 49 47.3** | **-0.3** | |
| ERTA | | | | Pg | | **Pg** | **20 49 50.7** | **+0.6** | |
| ERTA | | | | Sn | | **Sn** | **20 50 11.0** | **+1.8** | |
| ERTA | | | | Sg | | **Sg** | **20 50 16.4** | **+0.3** | |
| ERTA | | | | *i* Vmb_Lg | | | 20 50 18.7 | | |
| **LFF** | **La Frestale** | **2.01** | **9** | *e*Pn | | **Pn** | **20 49 44.0** | **-0.9** | |
| **LFF** | **La Frestale** | **2.01** | **9** | *e*Pg | | **Pb** | **20 49 48.8** | **+0.9** | |
| LFF | | | | *e*Sg | | **Sb** | **20 50 14.3** | **+1.7** | |
| | comp=N,576nm,0.3s | | | | | | | | |
| **CGAR** | **Garraf** | **2.04** | **144** | P | | **Pb** | **20 49 49.3** | **+0.8** | |
| CGAR | | | | S | | **Sb** | **20 50 14.5** | **+1.0** | |
| | comp=N,187nm,0.4s | | | | | | | | |
| CGAR | | | | Sg | | **Sg** | **20 50 19.7** | **+2.0** | |
| **LRVF** | **chteau la Riv** | **2.04** | **348** | Pn | | **Pn** | **20 49 45.7** | **+0.3** | |
| **CLAF** | **Gruissan** | **2.05** | **84** | Pn | | **Pn** | **20 49 45.9** | **+0.5** | |
| **MTJR** | **Montjuic** | **2.10** | **138** | Sg | | **Sg** | **20 50 20.5** | **+1.2** | |
| **CGIR** | **Ginora - Unive** | **2.10** | **117** | Sg | | **Sg** | **20 50 20.7** | **+1.3** | |
| | comp=N,325nm,0.5s | | | | | | | | |
| **EBR** | **Ebro Roquetas** | **2.13** | **176** | P | | **Pb** | **20 49 51.0** | **+1.0** | |
| EBR | | | | S | | **Sb** | **20 50 17.1** | **+1.0** | |
| | comp=N,644nm,0.4s | | | | | | | | |
| EBR | | | | Sg | | **Sg** | **20 50 22.6** | **+2.1** | |
| **CCAS** | **Cassa de la Se** | **2.20** | **118** | P | | **Pb** | **20 49 50.8** | **-0.4** | |
| CCAS | | | | S | | **Sb** | **20 50 18.8** | **+0.7** | |
| | comp=N,273nm,0.4s | | | | | | | | |
| CCAS | | | | Sg | | **Sg** | **20 50 24.2** | **+1.6** | |
| **CPAL** | **Palau Saverder** | **2.20** | **106** | ⇓P | | **Pb** | **20 49 50.8** | **-0.3** | |
| CPAL | | | | S | | **Sb** | **20 50 18.7** | **+0.6** | |
| | comp=N,105nm,0.3s | | | | | | | | |
| CPAL | | | | Sg | | **Sg** | **20 50 24.5** | **+1.7** | |
| **CMAS** | **Mas de Barbera** | **2.22** | **180** | P | | **Pb** | **20 49 51.4** | **-0.2** | |
| CMAS | | | | Pg | | **Pg** | **20 49 55.0** | **+0.5** | |
| CMAS | | | | S | | **Sb** | **20 50 19.3** | **+0.6** | |
| | comp=N,234nm,0.4s | | | | | | | | |
| **CBUD** | **Illa de Buda** | **2.28** | **170** | Pg | | **Pg** | **20 49 55.2** | **-0.4** | |
| CBUD | | | | S | | **Sb** | **20 50 21.0** | **+0.8** | |
| | comp=N,572nm,0.4s | | | | | | | | |
| **CAF** | **Calviac** | **2.35** | **32** | *e*Pn | | **Pn** | **20 49 48.7** | **-0.9** | |
| **CAF** | **Calviac** | **2.35** | **32** | *e*Pg | | **Pb** | **20 49 55.5** | **+1.9** | |
| CAF | | | | *e*Sn | | **Sn** | **20 50 17.0** | **-1.0** | |
| CAF | | | | *e*Sg | | **Sb** | **20 50 25.0** | **+2.7** | |
| | comp=N,249nm,0.2s | | | | | | | | |
| **ALCN** | **Alcanar** | **2.40** | **177** | P | | **Pb** | **20 49 53.8** | **-0.7** | |
| ALCN | | | | S | | **Sb** | **20 50 23.3** | **-0.6** | |
| | comp=N,248nm,0.5s | | | | | | | | |
| ALCN | | | | Sg | | **Sg** | **20 50 31.4** | **+2.3** | |
| **CFAR** | **Far de la Bany** | **2.40** | **174** | S | | **Sb** | **20 50 23.2** | **-0.7** | |
| | comp=N,591nm,0.3s | | | | | | | | |
| **RJF** | **Les Rejaudoux** | **2.51** | **20** | *e*Pn | | **Pn** | **20 49 51.1** | **-0.7** | |
| **RJF** | **Les Rejaudoux** | **2.51** | **20** | *e*Pg | | **Pb** | **20 49 58.3** | **+1.9** | |
| RJF | | | | *e*Sn | | **Sn** | **20 50 20.5** | **-1.4** | |
| RJF | | | | *e*Sg | | **Sb** | **20 50 29.7** | **+2.8** | |
| | comp=N,379nm,0.2s | | | | | | | | |
| **EMOS** | **Mosqueruela** | **2.65** | **193** | P | | **Pb** | **20 49 57.6** | **-1.3** | |
| EMOS | | | | Pg | | **Pg** | **20 50 02.9** | **+0.2** | |
| EMOS | | | | S | | **Sb** | **20 50 30.1** | **-1.1** | |
| | comp=N,165nm,0.8s | | | | | | | | |
| **EMOS** | **Mosqueruela** | **2.65** | **193** | Pn | | **Pb** | **20 49 57.7** | **-1.2** | |
| EMOS | | | | Sn | | **Sn** | **20 50 27.0** | **+1.3** | |
| EMOS | | | | Sg | | **Sg** | **20 50 37.4** | **+0.3** | |
| EMOS | | | | *i* Vmb_Lg | | | 20 50 44.1 | | |
| **ALCX** | **Castello** | **2.69** | **181** | P | | **Pn** | **20 49 57.5** | **+3.2** | |
| ALCX | | | | S | | **Sb** | **20 50 30.6** | **-1.5** | |
| **E0901** | **Celadas (Terue** | **2.69** | **204** | Pn | | **Pn** | **20 49 56.7** | **+2.3** | |
| E0901 | | | | Sn | | **Sn** | **20 50 27.7** | **+1.1** | |
| E0901 | | | | Sg | | **Sg** | **20 50 39.3** | **+0.9** | |
| E0901 | | | | *i* Vmb_Lg | | | 20 50 45.6 | | |
| **ELAN** | **Lanestosa** | **2.75** | **277** | Pn | | **Pb** | **20 49 59.0** | **-1.7** | |
| ELAN | | | | Sn | | **Sn** | **20 50 28.8** | **+0.8** | |
| ELAN | | | | *i* Vmb_Lg | | | 20 50 46.2 | | |
| **ETOR** | **Torete** | **2.77** | **220** | Pn | | **Pn** | **20 49 58.5** | **+3.1** | |
| ETOR | | | | Sn | | **Sn** | **20 50 30.1** | **+1.8** | |
| ETOR | | | | Sg | | **Sg** | **20 50 41.5** | **+0.7** | |
| **LASF** | **Ste Croix** | **2.82** | **65** | *e*Pn | | **Pn** | **20 49 55.5** | **-0.5** | |
| **LASF** | **Ste Croix** | **2.82** | **65** | *e*Pg | | **Pb** | **20 50 04.6** | **+3.0** | |
| LASF | | | | *e*Sn | | **Sn** | **20 50 26.7** | **-2.8** | |
| LASF | | | | *e*Sg | | **Sb** | **20 50 39.5** | **+3.7** | |
| | comp=N,316nm,0.4s | | | | | | | | |
| **FRNF** | **Fournols** | **2.93** | **33** | Pn | | **Pn** | **20 49 56.5** | **-1.0** | |
| **ECOL** | **Islas Columbre** | **3.06** | **175** | P | | **Pn** | **20 50 02.8** | **+3.4** | |
| ECOL | | | | S | | **Sn** | **20 50 39.9** | **+4.3** | |
| | comp=N,121nm,0.5s | | | | | | | | |
| **ECOL** | **Islas Columbre** | **3.06** | **175** | Pn | | **Pn** | **20 50 01.6** | **+2.2** | |
| ECOL | | | | Sn | | **Sn** | **20 50 36.3** | **+0.7** | |
| ECOL | | | | Sg | | **Sg** | **20 50 51.4** | **+1.1** | |
| **LBL** | **Lubilhac** | **3.11** | **42** | Pn | | **Pn** | **20 49 59.2** | **-0.9** | |
| **CHIF** | **Chize** | **3.22** | **351** | Pn | | **Pn** | **20 50 01.9** | **+0.3** | |
| **ECHE** | **Chera** | **3.49** | **196** | Pn | | **Pn** | **20 50 08.1** | **+2.8** | |
| ECHE | | | | Sn | | **Sn** | **20 50 46.8** | **+0.6** | |
| ECHE | | | | *i* Vmb_Lg | | | 20 51 08.3 | | |
| **COLF** | **Collangettes** | **3.54** | **42** | Pn | | **Pn** | **20 50 04.8** | **-1.1** | |
| **TCF** | **Toulx Ste Croi** | **3.60** | **22** | *e*Pn | | **Pn** | **20 50 05.2** | **-1.6** | |
| **TCF** | **Toulx Ste Croi** | **3.60** | **22** | *e*Pg | | **Pb** | **20 50 18.3** | **+3.3** | |
| TCF | | | | *e*Sg | | **Sb** | **20 51 03.8** | **+5.4** | |
| | comp=N,167nm,0.3s | | | | | | | | |
| **SAUF** | **chteau de Sau** | **3.63** | **73** | Pn | | **Pn** | **20 50 07.7** | **+0.5** | |
| **MFF** | **Saint Martin d** | **3.66** | **355** | *e*Pn | | **Pn** | **20 50 07.0** | **-0.6** | |
| **MFF** | **Saint Martin d** | **3.66** | **355** | *e*Pg | | **Pb** | **20 50 19.3** | **+3.2** | |
| MFF | | | | *e*Sn | | **Sn** | **20 50 48.2** | **-2.2** | |
| MFF | | | | *e*Sg | | **Sb** | **20 51 05.3** | **+5.1** | |
| | comp=N,102nm,0.3s | | | | | | | | |
| **MFF** | **Saint Martin d** | **3.66** | **355** | Pn | | **Pn** | **20 50 07.0** | **-0.6** | |
| **VIVF** | **Saint-Julien-l** | **3.69** | **57** | *e*Pn | | **Pn** | **20 50 06.8** | **-1.2** | |
| **VIVF** | **Saint-Julien-l** | **3.69** | **57** | *e*Pg | | **Pg** | **20 50 20.8** | **-1.6** | |
| VIVF | | | | *e*Sn | | **Sn** | **20 50 48.9** | **-2.1** | |
| VIVF | | | | *e*Sg | | **Sg** | **20 51 07.3** | **-2.9** | |
| | comp=N,266nm,0.6s | | | | | | | | |
| **ETOS** | **Mallorca** | **3.70** | **148** | S | | **Sn** | **20 50 55.6** | **+4.3** | |
| **ETOS** | **Mallorca** | **3.70** | **148** | Pn | | **Pn** | **20 50 10.3** | **+2.1** | |
| ETOS | | | | Sn | | **Sn** | **20 50 52.2** | **+0.9** | |
| ETOS | | | | *i* Vmb_Lg | | | 20 51 24.2 | | |
| **AGO** | **Saint Agoulin** | **3.70** | **32** | Pn | | **Pn** | **20 50 07.5** | **-0.7** | |
| **SSB** | **Saint Sauveur** | **3.83** | **51** | Pn | | **Pn** | **20 50 09.5** | **-0.6** | |
| SSB | | | | Pg | | **Pg** | **20 50 23.8** | **-1.5** | |
| SSB | | | | IAML | | | 20 51 16.1 | | |
| | comp=E,103nm,0.3s | | | | | | | | |
| SSB | | | | IAML | | | 20 51 20.7 | | |
| | comp=N,94nm,0.5s | | | | | | | | |
| **SSB** | **Saint Sauveur** | **3.83** | **51** | Pn | | **Pn** | **20 50 09.4** | **-0.6** | |
| **EVIV** | **Cofrentes, Val** | **3.84** | **197** | Pn | | **Pn** | **20 50 12.4** | **+2.3** | |
| EVIV | | | | Sn | | **Sn** | **20 50 55.6** | **+0.9** | |
| EVIV | | | | Sg | | **Sg** | **20 51 14.3** | **-0.7** | |
| EVIV | | | | *i* Vmb_Lg | | | 20 51 27.6 | | |
| **RUSF** | **Rustrel** | **3.90** | **74** | Pn | | **Pn** | **20 50 11.1** | **+0.2** | |
| **SMRF** | **Simiane la Rot** | **3.97** | **73** | *e*Pn | | **Pn** | **20 50 12.0** | **+0.1** | |
| **SMRF** | **Simiane la Rot** | **3.97** | **73** | *e*Pg | | **Pg** | **20 50 27.2** | **-0.7** | |
| SMRF | | | | *e*Sg | | **Sg** | **20 51 16.9** | **-2.4** | |
| | comp=N,102nm,0.6s | | | | | | | | |
| **LEPF** | **PUYLOUBIER** | **3.98** | **80** | Pn | | **Pn** | **20 50 12.5** | **+0.5** | |
| **BSTF** | **la Bastide-des** | **4.00** | **75** | Pn | | **Pn** | **20 50 12.0** | **-0.3** | |
| **EIBI** | **Ibiza** | **4.00** | **168** | Pn | | **Pn** | **20 50 14.3** | **+2.0** | |
| EIBI | | | | Sn | | **Sn** | **20 50 58.5** | **-0.2** | |
| EIBI | | | | *i* Vmb_Lg | | | 20 51 20.5 | | |
| **BGF** | **Bois d'Agland** | **4.03** | **26** | *e*Pn | | **Pn** | **20 50 11.7** | **-1.0** | |
| **BGF** | **Bois d'Agland** | **4.03** | **26** | *e*Pg | | Pb | 20 50 26.8 | +4.4 | |
| BGF | | | | *e*Sn | | **Sn** | **20 50 57.4** | **-2.1** | |
| BGF | | | | *e*Sg | | **Sb** | **20 51 17.2** | **+6.4** | |
| | comp=N,520nm,0.3s | | | | | | | | |
| **EARI** | **Arriondas** | **4.05** | **277** | Pn | | **Pn** | **20 50 16.2** | **+3.1** | |
| EARI | | | | Sn | | **Sn** | **20 51 01.7** | **+1.6** | |
| EARI | | | | *i* Vmb_Lg | | | 20 51 36.3 | | |
| **GUD** | **Guadarrama** | **4.05** | **237** | Pn | | **Pn** | **20 50 16.0** | **+2.8** | |
| GUD | | | | Sn | | **Sn** | **20 51 00.7** | **+0.5** | |
| GUD | | | | *i* Vmb_Lg | | | 20 51 34.6 | | |
| **ARTF** | **Artigues** | **4.07** | **79** | Pn | | **Pn** | **20 50 13.3** | **+0.1** | |
| **MLYF** | **Mely** | **4.11** | **74** | Pn | | **Pn** | **20 50 14.3** | **+0.5** | |
| **EBEN2** | **Beniarda presa** | **4.29** | **185** | Pn | | **Pn** | **20 50 18.5** | **+2.2** | |
| EBEN2 | | | | Sn | | **Sn** | **20 51 06.5** | **+0.7** | |
| EBEN2 | | | | *i* Vmb_Lg | | | 20 51 43.0 | | |
| **BLAF** | **les Blancs** | **4.29** | **75** | Pn | | **Pn** | **20 50 16.5** | **+0.1** | |
| **AFON** | **Font Roja** | **4.33** | **189** | Pn | | **Pn** | **20 50 19.9** | **+3.0** | |
| AFON | | | | Sn | | **Sn** | **20 51 06.0** | **-1.0** | |
| AFON | | | | *i* Vmb_Lg | | | 20 51 49.3 | | |
| **AVF** | **Avril sur Loir** | **4.41** | **28** | *e*Pn | | **Pn** | **20 50 16.2** | **-1.6** | |
| **AVF** | **Avril sur Loir** | **4.41** | **28** | *e*Pg | | **Pb** | **20 50 33.0** | **+4.3** | |
| AVF | | | | *e*Sn | | **Sn** | **20 51 05.6** | **-3.1** | |
| AVF | | | | *e*Sg | | **Sg** | **20 51 29.1** | **-4.2** | |
| | comp=N,78nm,0.3s | | | | | | | | |
| **SMF** | **Signal de Mont** | **4.47** | **33** | *e*Pn | | **Pn** | **20 50 17.3** | **-1.4** | |
| **SMF** | **Signal de Mont** | **4.47** | **33** | *e*Pg | | Pb | 20 50 34.5 | +4.7 | |
| SMF | | | | *e*Sn | | **Sn** | **20 51 08.1** | **-2.1** | |
| SMF | | | | *e*Sg | | **Sb** | **20 51 30.5** | **+7.2** | |
| | comp=N,65nm,0.4s | | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.48** | **62** | *e*Pn | | **Pn** | **20 50 19.0** | **+0.1** | |
| **ORIF** | **Oris-en-Rattie** | **4.48** | **62** | *e*Pg | | **Pg** | **20 50 35.2** | **-2.4** | |
| ORIF | | | | *e*Sn | | **Sn** | **20 51 09.0** | **-1.6** | |
| ORIF | | | | *e*Sg | | **Sg** | **20 51 32.4** | **-3.2** | |
| | comp=N,19nm,0.3s | | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.48** | **62** | Pn | | **Pn** | **20 50 19.3** | **+0.3** | |
| **OGDI** | **Digne** | **4.51** | **73** | Pn | | **Pn** | **20 50 19.0** | **-0.3** | |
| **TRIG

comp=N,100nm,0.8s
**QUIF Quistinic 5.53 335** *e*Pn **Pn 20 50 33.1 -0.2**
**QUIF Quistinic 5.53 335** *e*Pg Pb 20 50 53.8 +5.9
QUIF *e*Sn **Sn 20 51 31.3 -5.1**
QUIF *e*Sg **Sg 20 52 04.1 -5.3**
comp=N,30nm,0.4s
**GIMEL St. Georges / 5.55 48** Pn **Pn 20 50 35.2 +1.5**
**EPLA Plasencia 5.60 241** Pn **Pn 20 50 36.5 +2.2**
EPLA Sn **Sn 20 51 38.1 0.0**
EPLA *i* Vmb_Lg 20 52 24.2
**GBOS Grotte di Boss 5.62 74** Pn **Pn 20 50 38.6 +4.0**
**LDF La Druitiere 5.65 357** *e*Pn **Pn 20 50 33.7 -1.2**
LDF *e*Sn **Sn 20 51 36.0 -3.3**
LDF *e*Sg **Sg 20 52 07.8 -5.3**
comp=N,32nm,0.3s
**SGMF Saint Gilles 5.67 340** *e*Pn **Pn 20 50 33.7 -1.5**
**SGMF Saint Gilles 5.67 340** *e*Pg Pg 20 50 56.6 -3.8
SGMF *e*Sn **Sn 20 51 37.0 -2.8**
SGMF *e*Sg **Sg 20 52 08.3 -5.4**
comp=N,30nm,0.4s
**MVO Moncorvo 5.75 254** *e*Pn **Pn 20 50 38.4 +2.1**
MVO *e*Sn **Sn 20 51 41.0 -0.8**
MVO A A 20 52 20.3
comp=N,33nm,0.4s
**EQES Quesada 5.75 208** Pn **Pn 20 50 38.7 +2.2**
EQES Sn **Sn 20 51 40.8 -1.3**
EQES Sg **Sg 20 52 15.5 -1.0**
EQES *i* Vmb_Lg 20 52 28.3
**LOUF Saint-Loup 5.83 350** Pn **Pn 20 50 36.6 -0.8**
**FLN La Foliniere 5.84 355** *e*Sn **Sn 20 51 40.4 -3.5**
FLN *e*Sg **Sg 20 52 13.4 -5.7**
comp=N,50nm,0.4s
**BRANT Les Verrieres 5.92 46** Pn **Pn 20 50 39.4 +0.7**
BRANT Sn **Sn 20 51 44.3 -1.8**
BRANT Sg **Sg 20 52 18.3 -3.4**
**BRANT Les Verrieres 5.92 46** Pn **Pn 20 50 39.4 +0.7**
**ROSF Rostrenen 5.94 336** *e*Pn **Pn 20 50 37.5 -1.4**
ROSF *e*Sn **Sn 20 51 43.9 -2.6**
ROSF *e*Sg **Sg 20 52 16.5 -5.9**
comp=N,50nm,0.6s
**ROSF Rostrenen 5.94 336** Pn **Pn 20 50 38.6 -0.3**
**SENIN Lac Senin/Sane 6.04 53** Pn **Pn 20 50 40.5 0.0**
**SENIN Lac Senin/Sane 6.04 53** Pn **Pn 20 50 43.1 +2.6**
SENIN Sn **Sn 20 51 46.7 -2.6**
SENIN Sg **Sg 20 52 22.6 -3.1**
**EADA Adamuz 6.05 220** Pn **Pn 20 50 42.7 +2.1**
EADA Sn **Sn 20 51 46.7 -2.7**
EADA Sg **Sg 20 52 23.5 -2.6**
EADA *i* Vmb_Lg 20 52 34.8
**EAGO Agolada(Pontev 6.17 271** Pn **Pn 20 50 44.4 +2.3**
EAGO Sn **Sn 20 51 50.8 -1.4**
EAGO *i* Vmb_Lg 20 52 32.9
**PCP Piancastagn 6.17 72** Pn **Pn 20 50 43.4 +1.2**
PCP Sn **Sn 20 51 51.1 -1.3**
**PVRL Vila Real 6.20 257** *e*Pn **Pn 20 50 44.5 +2.0**
PVRL *e*Sn **Sn 20 51 52.0 -0.9**
PVRL A A 20 52 28.2
comp=N,15nm,0.3s
**CHMF Charmoille 6.21 44** Pn Pn 20 50 48.5 +5.8
**SFTF Sexfontaines 6.21 31** *e*Pn **Pn 20 50 41.4 -1.3**
**SFTF Sexfontaines 6.21 31** *e*Pg Pg 20 51 06.9 -3.8
SFTF *e*Sn **Sn 20 51 47.2 -6.0**
SFTF *e*Sg **Sg 20 52 24.6 -6.5**
comp=N,131nm,1.0s
**POLO Lamas de Olo 6.22 258** *e*Pn **Pn 20 50 44.9 +2.0**
POLO *e*Sn **Sn 20 51 52.0 -1.6**
POLO A A 20 52 35.7
comp=N,8.8nm,0.5s
**ELOB Lobios 6.29 263** Pn **Pn 20 50 45.8 +2.0**
ELOB Sn **Sn 20 51 52.3 -2.9**
ELOB *i* Vmb_Lg 20 52 42.3
**PCAB Cabril 6.30 261** *e*Pn **Pn 20 50 45.9 +2.0**
PCAB *e*Sn **Sn 20 51 54.3 -1.1**
PCAB A A 20 52 36.6
comp=N,18nm,0.5s
**CAMF Camaret-sur-Me 6.34 329** Pn **Pn 20 50 44.6 +0.3**
**MTE Manteigas 6.41 249** Pn **Pn 20 50 46.4 +1.0**
**MTE Manteigas 6.41 249** *e*Pn **Pn 20 50 47.8 +2.4**
MTE *e*Sn **Sn 20 51 56.6 -1.5**
**PGF Pioggiola 6.41 91** *e*Pn **Pn 20 50 44.7 -0.8**
PGF *e*Sn **Sn 20 51 53.3 -5.0**
comp=N,12nm,0.4s
**PGF Pioggiola 6.41 91** Pn **Pn 20 50 44.4 -1.1**
**EQUE Quentar 6.42 208** Pn **Pn 20 50 48.1 +2.6**
EQUE Sn **Sn 20 51 57.0 -1.4**
EQUE Sg **Sg 20 52 34.3 -3.5**
EQUE *i* Vmb_Lg 20 52 46.5
**PGAV Gavieira, Arco 6.42 264** *e*Pn **Pn 20 50 47.9 +2.3**
PGAV *e*Sn **Sn 20 51 57.1 -1.4**
PGAV A A 20 52 38.6
comp=N,13nm,0.5s
**MEZF Maizieres J'vi 6.47 29** *e*Pn **Pn 20 50 44.5 -1.6**
**MEZF Maizieres J'vi 6.47 29** *e*Pg Pg 20 51 11.6 -4.0
MEZF *e*Sn **Sn 20 51 55.4 -4.0**
MEZF *e*Sg **Sg 20 52 33.3 -5.9**
comp=N,87nm,0.7s
**JSA Saint Aubin 6.47 345** Pn **Pn 20 50 45.6 -0.5**
JSA Sn **Sn 20 51 53.2 -6.3**
JSA Sg **Sg 20 52 35.9 -3.5**
**JSA Saint Aubin 6.47 345** Pn **Pn 20 50 45.1 -1.0**
**PVIS Viseu 6.52 253** *e*Pn **Pn 20 50 48.7 +1.8**
PVIS *e*Sn **Sn 20 51 59.4 -1.5**
PVIS A A 20 52 53.1
comp=N,14nm,0.6s
**EBER Berja 6.53 203** Pn **Pn 20 50 50.5 +3.4**
EBER Sn **Sn 20 51 59.5 -1.8**
EBER Sg **Sg 20 52 39.7 -1.6**
EBER *i* Vmb_Lg 20 53 04.7
**ECAB El Cabril 6.54 224** Pn **Pn 20 50 49.2 +2.0**
ECAB Sn **Sn 20 51 59.7 -1.6**
ECAB *i* Vmb_Lg 20 52 53.8
**FIESA Fiescheralp 6.56 55** Pn **Pn 20 50 50.5 +2.8**
FIESA Sn **Sn 20 51 59.7 -2.5**
FIESA Sg **Sg 20 52 40.5 -1.8**
**SAVF Savonnieres en 6.59 29** *e*Sg **Sg 20 52 37.3 -5.8**
comp=N,73nm,0.7s
**HAU Haudompre 6.60 38** *e*Pg Pg 20 51 14.0 -4.1
HAU *e*Sg **Sg 20 52 38.2 -5.3**
comp=N,24nm,0.3s
**PCBR Castelo Branco 6.63 245** *e*Pn **Pn 20 50 50.2 +1.9**
PCBR *e*Sn **Sn 20 52 02.7 -0.7**
PCBR A A 20 52 58.9
comp=N,14nm,0.5s
**EZAM Zamans 6.70 266** Pn **Pn 20 50 51.5 +2.2**
EZAM Sn **Sn 20 52 03.5 -1.6**
EZAM *i* Vmb_Lg 20 52 57.6
**HINF Hinteralfeld 6.70 41** *e*Pn **Pn 20 50 47.8 -1.6**
**HINF Hinteralfeld 6.70 41** *e*Pg Pg 20 51 15.5 -4.5
HINF *e*Sg **Sg 20 52 40.9 -5.8**
comp=N,15nm,0.4s
**EGOR Sierra Gorda, 6.75 212** Pn **Pn 20 50 52.7 +2.6**
EGOR Sn **Sn 20 52 04.8 -1.8**
EGOR *i* Vmb_Lg 20 53 03.9
**HASLI Hasliberg/Brie 6.75 53** Pn **Pn 20 50 52.0 +1.9**
HASLI Sn **Sn 20 52 05.2 -1.4**
HASLI Sg **Sg 20 52 45.7 -2.6**
**PAGF Fort de Pagny 6.76 32** *e*Pn **Pn 20 50 48.8 -1.4**
PAGF *e*Sg **Sg 20 52 42.6 -6.1**
comp=N,75nm,0.8s
**ELGU Los Guajares, 6.79 208** Pn **Pn 20 50 52.7 +2.1**
ELGU Sn **Sn 20 52 05.8 -1.7**
ELGU *i* Vmb_Lg 20 53 02.6
**PMRV Marv??o 6.79 241** *e*Pn **Pn 20 50 52.6 +2.0**
PMRV *e*Sn **Sn 20 52 06.3 -1.2**
PMRV A A 20 52 08.4
comp=N,23nm,0.4s
**EMAZ Mazaricos 6.81 273** Pn **Pn 20 50 53.0 +2.1**
EMAZ Sn **Sn 20 52 06.1 -1.9**
EMAZ *i* Vmb_Lg 20 53 03.4
**EBAD Badajoz 6.95 235** Pn **Pn 20 50 54.6 +1.8**
EBAD Sn **Sn 20 52 08.1 -3.3**
EBAD *i* Vmb_Lg 20 53 04.6
**COI Coimbra 7.09 250** *e*Sn **Sn 20 52 13.7 -1.1**
**ECH Echery 7.13 40** Pn **Pn 20 50 55.7 +0.5**
**PCAS Casmilo, Conde 7.22 249** *e*Pn **Pn 20 50 58.6 +2.2**
PCAS *e*Sn **Sn 20 52 16.5 -1.4**
PCAS A A 20 53 07.3
comp=N,14nm,0.7s
**PESTR Estremoz 7.24 238** Pn **Pn 20 50 55.4 -1.4**
**PESTR Estremoz 7.24 238** *e*Pn **Pn 20 50 58.8 +2.0**
PESTR *e*Sn **Sn 20 52 16.7 -1.8**
PESTR A A 20 53 23.8
comp=N,9.9nm,0.6s
**CDF Champ du Feu 7.32 39** *e*Pn **Pn 20 50 56.2 -1.7**
**CDF Champ du Feu 7.32 39** *e*Pg Pg 20 51 27.2 -4.7
CDF *e*Sg **Sg 20 52 59.7 -6.9**
comp=N,22nm,0.6s
**TUE Stuetta 7.34 58** Pn **Pn 20 51 01.4 +3.2**
**TUE Stuetta 7.34 58** Pn **Pn 20 51 00.7 +2.4**
TUE Sn **Sn 20 52 18.9 -2.3**
**PBAR Barrancos 7.35 232** *e*Pn **Pn 20 51 00.5 +2.2**
PBAR *e*LQ LQ 20 52 18.8
PBAR *e*Sn **Sn 20 52 19.3 -1.9**
PBAR A A 20 53 16.3
comp=N,11nm,0.4s
**EMIN Mina Concepcio 7.43 228** Pn **Pn 20 51 00.9 +1.5**
EMIN Sn **Sn 20 52 18.6 -4.5**
EMIN *i* Vmb_Lg 20 53 24.1
**DGI Dorgali Grotta 7.45 108** Pn **Pn 20 51 01.4 +1.9**
DGI Sn **Sn 20 52 21.3 -2.3**
**SLE Schleitheim 7.51 47** Pn Pn 20 51 04.3 +3.8
SLE Sn **Sn 20 52 24.2 -0.9**
SLE Sg 20 53 09.8
**PMTG Montargil 7.53 242** *e*Pn **Pn 20 51 02.4 +1.7**
PMTG *e*Sn **Sn 20 52 23.4 -2.2**
PMTG A A 20 53 21.0
comp=N,7.4nm,0.5s
**BAIF Baives 7.60 19** *e*Pn **Pn 20 50 59.4 -2.3**
**BAIF Baives 7.60 19** *e*P Pn 20 51 06.2 +4.5
BAIF *e*Sn Sn 20 52 19.7 -7.6
comp=N,5.1nm,0.3s
BAIF *e*Sg 20 53 08.5
comp=N,46nm,1.0s
**VSL Villasalto 7.66 114** Pn **Pn 20 51 02.7 +0.2**
**VSL Villasalto 7.66 114** Pn **Pn 20 51 05.4 +2.9**
VSL Sn **Sn 20 52 28.7 -0.1**
**PSBE So Bento 7.67 246** *e*Sn **Sn 20 52 27.9 -1.3**
**ESPR Espera 7.70 220** Pn **Pn 20 51 06.2 +3.1**
ESPR Sn **Sn 20 52 30.4 +0.6**
ESPR *i* Vmb_Lg 20 53 24.7
**EVO Evora 7.71 238** *e*Pn **Pn 20 51 04.8 +1.7**
EVO *e*Sn **Sn 20 52 28.3 -1.6**
**DOU Dourbes 7.73 21** Pn **Pn 20 51 03.2 -0.2**
DOU Sn **Sn 20 52 25.1 -5.4**
**DOU Dourbes 7.73 21** Pn **Pn 20 51 02.1 -1.4**
**DOU Dourbes 7.73 21** *d*P **Pn 20 51 01.5 -2.0**
DOU *d*S Sn 20 52 21.9 -8.6
**BFO Black Forest 7.78 43** Pn **Pn 20 51 03.4 -0.8**
**BFO Black Forest 7.78 43** Pn **Pn 20 51 07.2 +3.1**
BFO Sn **Sn 20 52 31.3 -0.4**
BFO Sg 20 53 18.0
**GIVF Givet 7.80 22** *e*Pn **Pn 20 51 02.6 -1.8**
GIVF *e*Sn Sn 20 52 24.2 -8.0
comp=N,7.3nm,0.4s
GIVF *e*Sg 20 53 14.7
comp=N,45nm,0.8s
**LIENZ Kamor/St.Gall 7.81 53** Pn **Pn 20 51 07.2 +2.5**
LIENZ Sn **Sn 20 52 32.5 -0.3**
**HMNX Herstmonceux 7.92 0** Pn **Pn 20 51 09.1 +3.1**
HMNX Sn **Sn 20 52 32.4 -2.7**
**PBEJ Beja 7.94 234** *e*Sn **Sn 20 52 33.2 -2.4**
**BMRD Maredsous 7.97 21** *d*P **Pn 20 51 06.2 -0.4**
**FUORN Ofenpass-Fuorn 7.97 59** Pn **Pn 20 51 07.7 +0.7**
**OSSC Osservatorio P 8.01 82** Pn **Pn 20 51 08.1 +0.8**
**DYA Yadsworthy 8.03 340** Pn **Pn 20 51 06.5 -1.1**
DYA Sn **Sn 20 52 31.2 -6.7**
**EGRO El Granado 8.05 230** Pn **Pn 20 51 08.0 +0.1**
EGRO Sn **Sn 20 52 33.4 -4.9**
EGRO *i* Vmb_Lg 20 53 39.6
**CCA1 Carnmenellis 8.18 334** Pn **Pn 20 51 06.3 -3.2**
CCA1 Sn **Sn 20 52 34.4 -7.0**
**ELSH Elham, Standar 8.22 4** Pn **Pn 20 51 12.7 +2.6**
ELSH Sn **Sn 20 52 40.6 -1.8**
**MESJ Messejana 8.27 235** Pn **Pn 20 51 12.5 +1.6**
**MESJ Messejana 8.27 235** *e*Sn **Sn 20 52 41.9 -1.9**
**PVAQ Vaqueiros 8.27 231** Pn **Pn 20 51 10.8 -0.1**
**PVAQ Vaqueiros 8.27 231** *e*Pn **Pn 20 51 12.3 +1.4**
PVAQ *e*Sn **Sn 20 52 40.2 -3.6**
PVAQ A A 20 53 45.0
comp=N,6.5nm,0.6s
**PNCL Nicolau / Gran 8.28 237** *e*Pn **Pn 20 51 12.6 +1.5**
PNCL *e*Sn **Sn 20 52 41.6 -2.5**
**PCVE Castro Verde 8.30 233** *e*Pn **Pn 20 51 12.8 +1.5**
PCVE *e*Sn **Sn 20 52 41.6 -3.0**
**PBDV Barranco-do-Ve 8.50 231** *e*Pn **Pn 20 51 15.8 +1.7**
PBDV *e*Sn **Sn 20 52 46.6 -3.0**
**HTL Hartland 8.69 340** Pn **Pn 20 51 18.4 +1.9**
HTL Sn **Sn 20 52 49.7 -4.2**
**PTEO Sao Teotonio 8.76 235** *e*Pn **Pn 20 51 20.2 +2.6**
**MORF Marmelete 8.88 234** Pn **Pn 20 51 19.8 +0.5**
**MORF Marmelete 8.88 234** *e*Pn **Pn 20 51 21.2 +1.9**
**MCH1 Michaelchurch 9.32 347** Pn **Pn 20 51 27.6 +2.4**
MCH1 Sn Sn 20 53 01.9 -7.6
**ESK Eskdalemuir 12.59 351** Pn **Pn 20 52 11.4 +1.5**

*STR **06** 20:49:46.1±0.9,43°N±7″×±°, h10km, MLv2.9/3, Error ellipse: s-maj=0.0km s-min=0.0km az=179.8, preliminary*
*LDG **06** 20:49:46.6±0.2,43°.01N×0°.29E, h2km, Md2.6/2, Ml3.6/7, Error ellipse: s-maj=3.9km s-min=2.7km az=4.0*
*MRB **06** 20:49:47.1±0.4,42°.95N×0°.32E, h5km±5km, ML2.8/26, Error ellipse: s-maj=1.9km s-min=1.3km az=90.0*

**ISC 06 20:49:46.8±0.9, 42°.98N±0°.03×0°.32E±0°.02, h11km±5km, n44, σ1s0.00/56, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **EPF** | **Esparros** | **0.05** | **20** | *e*Pg | **Pg** | | **20 49 48.8** | **-0.2** |
| EPF | | | | *e*Sg | **Sg** | | **20 49 50.3** | **-0.3** |
| | 916nm,0.2s | | | | | | | |
| **EPF** | **Esparros** | **0.05** | **20** | Pg | **Pg** | | **20 49 48.8** | **-0.2** |
| EPF | | | | Sg | **Sg** | | **20 49 50.3** | **-0.3** |
| **RESF** | **Ens** | **0.18** | **175** | P | **Pg** | | **20 49 50.3** | **-0.4** |
| RESF | | | | S | **Sg** | | **20 49 52.6** | **-0.8** |
| | 3µm,0.3s | | | | | | | |
| **VIEF** | **Viey** | **0.24** | **245** | P | **Pg** | | **20 49 51.9** | **+0.2** |
| VIEF | | | | S | **Sg** | | **20 49 55.7** | **+0.6** |
| | 3µm,0.3s | | | | | | | |
| **VIEF** | **Viey** | **0.24** | **245** | Pg | **Pg** | | **20 49 51.2** | **-0.6** |
| VIEF | | | | Sg | **Sg** | | **20 49 54.9** | **-0.2** |
| **PYLO** | **Lourdes** | **0.29** | **293** | S | **Sg** | | **20 49 57.8** | **+1.1** |
| **PYLO** | **Lourdes** | **0.29** | **293** | Pg | **Pg** | | **20 49 51.4** | **-1.2** |
| **ECHI** | **Chisagues Biel** | **0.33** | **196** | P | **Pg** | | **20 49 52.7** | **-0.7** |
| ECHI | | | | S | **Sg** | | **20 49 57.2** | **-0.7** |
| | 1µm,0.1s | | | | | | | |
| **ECHI** | **Chisagues Biel** | **0.33** | **196** | Pg | **Pg** | | **20 49 52.6** | **-0.8** |
| ECHI | | | | Sg | **Sg** | | **20 49 56.7** | **-1.2** |
| **ETSF** | **Etsaut** | **0.65** | **263** | *e*Pg | **Pg** | | **20 49 58.6** | **-0.8** |
| ETSF | | | | *e*Sg | **Sg** | | **20 50 06.3** | **-1.6** |
| | 414nm,0.2s | | | | | | | |
| **ETSF** | **Etsaut** | **0.65** | **263** | Pg | **Pg** | | **20 49 58.6** | **-0.8** |
| **CANF** | **Canfranc** | **0.65** | **251** | Sg | **Sg** | | **20 50 07.4** | **-0.5** |
| **SALF** | **Salau** | **0.68** | **109** | P | **Pg** | | **20 49 59.7** | **-0.2** |
| SALF | | | | S | **Sg** | | **20 50 08.7** | **-0.1** |
| | 378nm,0.1s | | | | | | | |
| **SALF** | **Salau** | **0.68** | **109** | Pg | **Pg** | | **20 49 59.0** | **-0.9** |
| SALF | | | | Sg | **Sg** | | **20 50 07.4** | **-1.4** |
| **CTRE** | **Tremp** | **0.74** | **153** | S | **Sg** | | **20 50 10.3** | **-0.5** |
| | 103nm,0.2s | | | | | | | |
| **CEST** | **Esterri de Car** | **0.79** | **119** | P | **Pg** | | **20 50 01.9** | **-0.1** |
| CEST | | | | S | **Sg** | | **20 50 12.3** | **0.0** |
| | 247nm,0.1s | | | | | | | |
| **CSOR** | **Sort** | **0.85** | **135** | S | **Sg** | | **20 50 14.3** | **-0.1** |
| | 164nm,0.3s | | | | | | | |
| **ARBS** | **La Rabassa** | **1.05** | **120** | S | **Sg** | | **20 50 20.8** | **0.0** |
| | 154nm,0.2s | | | | | | | |
| **CORG** | **Organya** | **1.05** | **135** | S | **Sg** | | **20 50 20.3** | **-0.4** |
| | 58nm,0.2s | | | | | | | |
| **SJPF** | **Ste Jean** | **1.14** | **277** | *e*Sg | **Sg** | | **20 50 22.3** | **-1.1** |
| | 82nm,0.2s | | | | | | | |
| **CAVN** | **Les Avellanes** | **1.15** | **164** | S | **Sg** | | **20 50 22.3** | **-1.4** |
| | 365nm,0.2s | | | | | | | |
| **CLLI** | **Llivia** | **1.32** | **112** | S | **Sg** | | **20 50 28.9** | **-0.4** |
| | 70nm,0.4s | | | | | | | |
| **CARF** | **Carcanieres** | **1.34** | **101** | S | **Sg** | | **20 50 29.5** | **-0.4** |
| | 82nm,0.2s | | | | | | | |
| **EMIR** | **Miracle** | **1.39** | **140** | S | **Sb** | | **20 50 30.7** | **+0.1** |
| | 156nm,0.4s | | | | | | | |
| **MTLF** | **Montolieu** | **1.44** | **75** | *e*Sg | **Sb** | | **20 50 30.8** | **-1.0** |
| | 121nm,0.2s | | | | | | | |
| **MTLF** | **Montolieu** | **1.44** | **75** | Pg | **Pn** | | **20 50 13.4** | **+0.7** |
| MTLF | | | | Sn | **Sb** | | **20 50 31.7** | **-0.2** |
| **CBRU** | **Bruguera** | **1.54** | **116** | S | **Sn** | | **20 50 35.2** | **+0.8** |
| | 128nm,0.5s | | | | | | | |
| **CORI** | **Orista** | **1.63** | **128** | S | **Sn** | | **20 50 36.8** | **+0.3** |
| | 219nm,0.3s | | | | | | | |
| **FILF** | **Fillols** | **1.71** | **104** | S | **Sn** | | **20 50 37.2** | **-1.2** |
| | 55nm,0.3s | | | | | | | |
| **EPOB** | **Poblet** | **1.73** | **161** | S | **Sn** | | **20 50 39.7** | **+0.8** |
| | 86nm,0.2s | | | | | | | |
| **CBEU** | **Beuda** | **1.89** | **112** | S | **Sn** | | **20 50 43.4** | **+0.6** |
| | 82nm,0.3s | | | | | | | |
| **SJAF** | **Saint Jean de** | **1.96** | **104** | S | **Sn** | | **20 50 45.8** | **+1.4** |
| | 40nm,0.3s | | | | | | | |
| **LFF** | **La Frestale** | **1.98** | **9** | *e*Sg | **Sb** | | **20 50 47.5** | **0.0** |
| | 120nm,0.3s | | | | | | | |
| **CFON** | **Fontmartina** | **1.99** | **127** | S | **Sn** | | **20 50 45.6** | **+0.3** |
| **ERTA** | **Horta de San J** | **2.02** | **180** | S | **Sn** | | **20 50 47.0** | **+0.8** |
| | 59nm,0.3s | | | | | | | |
| **CGAR** | **Garraf** | **2.06** | **144** | S | **Sn** | | **20 50 47.2** | **0.0** |
| | 52nm,0.5s | | | | | | | |
| **CPAL** | **Palau Saverder** | **2.21** | **107** | S | **Sn** | | **20 50 51.8** | **+1.3** |
| | 29nm,0.4s | | | | | | | |
| **CCAS** | **Cassa de la Se** | **2.21** | **119** | S | **Sn** | | **20 50 50.9** | **+0.3** |
| | 44nm,0.4s | | | | | | | |
| **CMAS** | **Mas de Barbera** | **2.25** | **180** | S | **Sn** | | **20 50 52.6** | **+0.8** |
| | 61nm,0.3s | | | | | | | |
| **CBUD** | **Illa de Buda** | **2.31** | **170** | S | **Sn** | | **20 50 53.9** | **+0.8** |
| **RJF** | **Les Rejaudoux** | **2.48** | **20** | *e*Sg | **Sb** | | **20 51 03.0** | **+1.2** |
| | 39nm,0.2s | | | | | | | |
| **EMOS** | **Mosqueruela** | **2.68** | **193** | S | **Sn** | | **20 51 03.1** | **+0.4** |
| | 40nm,0.5s | | | | | | | |
| **LASF** | **Ste Croix** | **2.80** | **66** | *e*Sg | **Sb** | | **20 51 13.5** | **+2.5** |
| | 44nm,0.3s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **3.66** | **58** | *e*Sg | **Sg** | | **20 51 40.4** | **-3.9** |
| | 32nm,0.3s | | | | | | | |

**IDC 06 20:58:17.4±8.2, 5°.89S×143°.31E, h0km, mb3.4/1, mbtmp3.4/3, ML3.2/2, Error ellipse: s-maj=281.6km s-min=37.4km az=97.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **16.47** | **211** | Pn | Pn | | 21 02 08.4 | -1.6 |
| | 0.1nm,0.3s,baz=28,slow=13,SNR=5.3 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **19.86** | **206** | P | P | | 21 02 50.9 | +0.7 |
| | 0.1nm,0.3s,baz=38,slow=10,SNR=11 | | | | | | | |
| | 2.3nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **75.10** | **322** | P | P | | 21 10 01.4 | 0.0 |
| | 0.2nm,0.4s,baz=103,slow=7.6,SNR=2.5 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |

**TRN 06 21:04:11.6, 15°.76N×61°.22W, h113km, MD3.7, North-east of Dominica., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MAGL** | **Barre de l'ile** | **0.20** | **342** | *e*P | Pn | | 21 04 28.9 | +1.6 |
| **TDBA** | **Terre de Bas,** | **0.41** | **282** | *e*P | Pn | | 21 04 30.1 | +2.0 |
| TDBA | | | | *e*S | Sn | | 21 04 42.9 | +2.3 |
| **TBG** | **Guadaloupe-3** | **0.42** | **282** | *e*P | Pn | | 21 04 29.7 | +1.5 |
| TBG | | | | *e*S | Sn | | 21 04 41.6 | +0.9 |
| **CBE** | **Ff, Capester** | **0.48** | **309** | *e*P | Pn | | 21 04 30.1 | +1.4 |
| **ABD** | **La Joyeuse, An** | **0.75** | **340** | *e*P | Pn | | 21 04 32.2 | +1.6 |
| **SVN** | **Savane Anatole** | **0.92** | **177** | *e*P | Pn | | 21 04 33.4 | +1.2 |
| SVN | | | | *e*S | Sn | | 21 04 48.4 | +0.6 |
| **PCM** | **Pelee Case Pet** | **0.94** | **179** | *e*P | Pn | | 21 04 33.5 | +1.0 |
| **BAMF** | **Morne Balai** | **0.94** | **176** | *e*P | Pn | | 21 04 33.8 | +1.3 |
| **CXM** | **Morne La Croix** | **0.95** | **177** | *e*P | Pn | | 21 04 34.0 | +1.4 |
| **GBMF** | **Grand Be** | **0.96** | **177** | *e*P | Pn | | 21 04 33.9 | +1.1 |
| **PML** | **Morne Lenard** | **0.98** | **178** | *e*P | Pn | | 21 04 33.8 | +1.0 |
| **FDF** | **Fort de France** | **1.02** | **176** | *e*P | Pn | | 21 04 34.4 | +1.0 |
| **ILAM** | **Ilet Lapin Mar** | **1.04** | **161** | *e*P | Pn | | 21 04 34.5 | +1.2 |
| ILAM | | | | *e*S | Sn | | 21 04 50.4 | +0.6 |
| **LPMF** | **Morne Lapointe** | **1.21** | **168** | *e*P | Pn | | 21 04 35.9 | +0.7 |
| **MVM** | **Montagne Vaucl** | **1.24** | **165** | *e*P | Pn | | 21 04 36.7 | +1.1 |
| **BIM** | **Bigot** | **1.25** | **173** | *e*P | Pn | | 21 04 37.1 | +1.5 |
| BIM | | | | *e*S | Sn | | 21 04 55.3 | +1.4 |
| **MLYT** | **Lee's Yard** | **1.33** | **316** | *e*P | Pn | | 21 04 38.2 | +1.6 |
| MLYT | | | | *e*S | Sn | | 21 04 56.3 | +0.7 |
| **MPOM** | **Morne Pois Mar** | **1.35** | **165** | *e*P | Pn | | 21 04 38.0 | +1.1 |
| **MBFL** | **Flemmings, Mon** | **1.37** | **316** | *e*P | Pn | | 21 04 38.3 | +1.3 |
| MBFL | | | | *e*S | Sn | | 21 04 56.9 | +0.5 |
| **ANBD** | **Bethesda, Anti** | **1.38** | **338** | *e*P | Pn | | 21 04 38.4 | +1.2 |
| ANBD | | | | *e*S | Sn | | 21 04 57.3 | +0.7 |
| **SLB** | **Belfond** | **1.93** | **175** | *e*P | Pn | | 21 04 46.1 | +2.2 |
| **ANWB** | **Willy Bob** | **1.97** | **344** | *e*P | Pn | | 21 04 45.1 | +0.8 |
| ANWB | | | | *e*S | Sn | | 21 05 10.2 | +0.8 |

*IDC **06** 21:07:44.2±0.6, 7°.65S×30°.40E, h0km, mb4.0/17, mbtmp4.1/22, ML3.4/4, MS3.5/13, Error ellipse: s-maj=23.6km s-min=12.8km az=93.0*
*BGR **06** 21:07:45.5, 7°.91S×30°.93E, h33km, mb4.4*
*NEIC **06** 21:07:47.4±1.1, 7°.55S±0°.07×30°.4E±0°.1, h10km±1km, mb4.4/22, Error ellipse: s-maj=18.4km s-min=12.0km az=280.0*
*LSZ **06** 21:07:49.1±0.3, 7°.48S×31°.07E, h10km, MD3.8*

**ISC 06 21:07:47.3±0.6, 7°.79S±0°.04×30°.20E±0°.06, h23km±4km, h24km:pP-P, n97, σ1s89/101, mb4.3/42, MS3.6/8, Lake Tanganyika region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **KSMZ** | **Kasama** | **2.57** | **157** | *i* P | | **Pb** | **21 08 32.8** | **0.0** |
| KSMZ | | | | *i* | | | 21 08 32.9 | |
| | baz=357,slow=16 | | | | | | | |
| KSMZ | | | | *i* S | | **Sb** | **21 09 04.8** | **+0.7** |
| **KSMZ** | **Kasama** | **2.57** | **157** | *i* P | | **Pb** | **21 08 32.9** | **0.0** |
| KSMZ | | | | *i* | | | 21 08 32.9 | |
| | baz=357,slow=16 | | | | | | | |
| KSMZ | | | | *i* S | | **Sb** | **21 09 04.5** | **+0.4** |
| **PDHT** | **Panda Hill** | **3.23** | **112** | *i* P | | **Pn** | **21 08 38.2** | **+1.4** |
| PDHT | | | | *i* S | | **Sb** | **21 09 23.4** | **+0.3** |
| **DODT** | **Dodoma, Tanzan** | **5.73** | **74** | *i* P | | **Pn** | **21 09 07.9** | **-3.3** |
| DODT | | | | *i* S | | Sn | 21 10 06.7 | -10 |
| **MBAR** | **Mbarara** | **7.16** | **4** | Pn | | **Pn** | **21 09 28.2** | **-2.7** |
| | 39nm,0.2s,baz=246,slow=17,SNR=72 | | | | | | | |
| MBAR | | | | Sn | | Sn | 21 10 44.4 | -7.3 |
| | 149nm,0.3s,baz=271,slow=2.6,SNR=5.6 | | | | | | | |
| MBAR | | | | Lg | | Lg | 21 11 14.6 | |
| | 79nm,0.3s,baz=93,slow=23,SNR=4.9 | | | | | | | |
| MBAR | | | | LR | | LR | 21 12 45.7 | |
| | comp=Z,46nm,18.8s,baz=175,slow=43 | | | | | | | |
| **LSZ** | **Lusaka** | **7.70** | **195** | Pn | | Pn | 21 09 43.8 | +5.6 |
| **KRI** | **Karoi** | **9.00** | **184** | *i* P | | **Pn** | **21 10 00.5** | **+4.4** |
| **KRI** | **Karoi** | **9.00** | **184** | *i* P | | **Pn** | **21 10 00.5** | **+4.4** |
| **KIBK** | **Kibwezi** | **9.50** | **56** | Pn | | Pn | 21 09 58.6 | -4.4 |
| **KMBO** | **Kilima Mbogo** | **9.65** | **47** | Pn | | Pn | 21 10 00.7 | -4.4 |
| **LODK** | **Lodwar** | **12.27** | **25** | Pn | | Pn | 21 10 33.8 | -7.1 |
| **CHIPN** | **CHIPINGE** | **12.59** | **169** | *i* P | | **Pn** | **21 10 45.2** | **0.0** |
| **CHIPN** | **CHIPINGE** | **12.59** | **169** | *i* P | | **Pn** | **21 10 45.2** | **0.0** |
| **MATP** | **Matopo** | **12.67** | **187** | Pn | | **Pn** | **21 10 49.2** | **+2.9** |
| | 1.0nm,0.3s,baz=8.2,slow=13,SNR=35 | | | | | | | |
| MATP | | | | Sn | | **Sn** | **21 13 04.7** | **-2.1** |
| | 1.2nm,0.3s,baz=34,slow=11,SNR=3.1 | | | | | | | |
| MATP | | | | Lg | | Lg | 21 14 29.8 | |
| | 1.1nm,0.3s,baz=279,slow=19,SNR=1.8 | | | | | | | |
| | 5.0nm,0.5s | | | | | | | |
| **MATP** | **Matopo** | **12.67** | **187** | *i* P | | **Pn** | **21 10 45.8** | **-0.5** |
| MATP | | | | *i* S | | Sn | 21 12 58.0 | -8.7 |
| **MATP** | **Matopo** | **12.67** | **187** | *i* P | | **Pn** | **21 10 45.8** | **-0.5** |
| MATP | | | | *i* S | | Sn | 21 12 58.0 | -8.7 |
| **MUSN** | **Musina, Limpop** | **14.41** | **181** | *i* P | | **Pn** | **21 11 08.9** | **-1.2** |
| **MUSN** | **Musina, Limpop** | **14.41** | **181** | *i* P | | **

comp=Z,0.4nm,0.3s,baz=291,slow=18,SNR=2.8
LBTB LR LR 21 19 08.3
comp=Z,158nm,21.7s,baz=12,slow=38
comp=Z,3.7nm,0.5s
**LBTB Lobatse 17.68 194** *i* P **P 21 11 54.2 +1.1**
LBTB *i* S **Sn 21 15 02.4 -6.4**
**LBTB Lobatse 17.68 194** *i* P **P 21 11 54.2 +1.1**
LBTB *i* S **Sn 21 15 02.4 -6.4**
**FURI Furi 18.61 27** LR LR 21 20 02.6
comp=Z,23nm,20.0s,baz=209,slow=40
**POGA Pongola 19.50 176** P **Pn 21 12 16.6 +2.3**
**OPO Ambohidratompo 19.68 125** P **P 21 12 14.1 -1.1**
baz=318,slow=15,SNR=1.6
OPO LR LR 21 18 51.8
comp=Z,144nm,20.8s,baz=210,slow=34
comp=Z,1.7nm,0.7s
**ABPO Ambohimpanom 19.95 126** Pn **Pn 21 12 21.4 +1.6**
**BOSA Boshof 21.23 192** P **P 21 12 35.4 +3.5**
BOSA IAmb IAmb 21 12 38.2
comp=Z,32nm,1.5s
**BOSA Boshof 21.23 192** P **P 21 12 33.7 +1.8**
comp=Z,6.1nm,1.0s,baz=14,slow=12,SNR=10
BOSA Sn **S 21 16 26.9 -0.1**
comp=Z,0.5nm,0.3s,baz=350,slow=11,SNR=6.0
BOSA Lg Lg 21 18 54.4
comp=Z,0.3nm,0.3s,baz=90,slow=20,SNR=2.2
BOSA LR LR 21 21 13.8
comp=Z,166nm,18.8s,baz=20,slow=38
comp=Z,6.1nm,1.0s
**BOSA Boshof 21.23 192** *i* P **P 21 12 35.0 +3.1**
BOSA *i* S **S 21 16 24.5 -2.5**
**BOSA Boshof 21.23 192** *i* P **P 21 12 35.0 +3.1**
BOSA *i* S **S 21 16 24.5 -2.5**
**VOI Vohitsoka 21.27 133** P **P 21 12 34.9 +2.6**
VOI IAmb IAmb 21 13 04.9
comp=Z,29nm,1.5s
**SUR Sutherland 25.98 198** LR LR 21 23 43.4
comp=Z,191nm,18.7s,baz=356,slow=37
**TORD Torodi Ar. Bea 35.14 306** P **P 21 14 41.2 +1.7**
comp=Z,1.5nm,0.6s,baz=111,slow=8.1,SNR=12
comp=Z,1.5nm,0.6s
**DBIC Dimbokro 37.80 291** P **P 21 15 03.8 +1.5**
comp=Z,1.3nm,0.7s,baz=72,slow=9.6,SNR=1.2
DBIC LR LR 21 30 07.5
comp=Z,92nm,18.9s,baz=102,slow=35
comp=Z,1.3nm,0.7s
**BR131 Keskin Array S 47.38 4** P **P 21 16 19.5 -0.5**
**BRTR Keskin Array B 47.38 4** P **P 21 16 19.6 -0.3**
**BRTR Keskin Array B 47.38 4** P **P 21 16 19.4 -0.5**
comp=Z,3.5nm,0.8s,baz=175,slow=8.9,SNR=25
comp=Z,3.5nm,0.8s
**CEL Celeste 47.72 345** P **P 21 16 22.7 +0.3**
**BBTS Babate 51.44 296** LR LR 21 38 57.7
comp=Z,66nm,18.9s,baz=344,slow=36
**PALK Pallekele 52.53 75** LR LR 21 36 13.1
comp=Z,41nm,19.1s,baz=3.2,slow=33
**MLR Muntele Rosu 53.18 356** P **P 21 17 02.6 -1.1**
comp=Z,1.2nm,0.6s,baz=160,slow=15
comp=Z,1.2nm,0.6s
**GCIS Gornji Cirnik 54.99 348** *i* P **P 21 17 18.1 +1.3**
GCIS *i* pP **sP 21 17 28.0 +0.7**
**CEY Cerknica 55.13 347** *i* P **P 21 17 18.7 +0.9**
CEY *i* pP **sP 21 17 28.6 +0.3**
**BURAR Bucovina Array 55.34 356** P **P 21 17 19.8 +0.4**
**PERS Pernice 55.83 347** *i* P **P 21 17 24.1 +1.2**
PERS *i* pP **sP 21 17 33.9 +0.6**
**OBKA Obir 55.84 347** *i* pP pP 21 17 33.7 +3.2
comp=Z,3.9nm,1.4s
**SOKA Soboth 55.89 347** *i* pP pP 21 17 34.0 +3.1
comp=Z,3.0nm,0.9s
**PRED Cave del Predi 56.00 346** P **P 21 17 24.4 +0.4**
PRED IAmb IAmb 21 17 35.5
comp=Z,3.2nm,0.8s
**CTI Castel Tesino 56.11 345** P **P 21 17 25.9 +1.0**
CTI IAmb IAmb 21 17 36.5
comp=Z,3.7nm,0.9s
**MYKA Terra Mystica 56.16 346** *i* pP pP 21 17 36.4 +3.6
comp=Z,3.9nm,1.0s
**ABTA Abfaltersbach 56.54 345** *i* pP pP 21 17 38.9 +3.4
comp=Z,1.9nm,0.8s
**RONA Rosalia, Austr 56.61 349** *e*pP pP 21 17 39.0 +3.1
comp=Z,2.3nm,1.1s
**KBA Koelnbreinsper 56.65 346** *i* P **P 21 17 30.2 +1.4**
comp=Z,2.4nm,1.0s
KBA *i* pP **sP 21 17 39.6 +0.2**
comp=Z,4.7nm,0.8s
**BNI Bardonecchia 56.70 340** P **P 21 17 29.9 +0.7**
BNI IAmb IAmb 21 17 32.5
comp=Z,2.4nm,0.5s
**ESDC Sonseca Array 56.83 329** P **P 21 17 30.2 +0.1**
comp=Z,0.7nm,0.8s,baz=142,slow=7.5,SNR=4.1
comp=Z,0.7nm,0.8s
**CONA Conrad Observa 56.91 349** *e*P **P 21 17 31.8 +1.2**
comp=Z,1.7nm,0.9s
CONA *i* pP **sP 21 17 41.2 +0.1**
comp=Z,4.7nm,1.4s
**LESA Schwarzleotal 57.13 346** *i* P **P 21 17 34.1 +2.0**
comp=Z,1.5nm,1.0s
LESA *i* pP **sP 21 17 42.3 -0.3**
comp=Z,2.8nm,0.9s
**TUE Stuetta 57.14 343** P **P 21 17 32.3 -0.1**
**BIOA Bad Ischl, Aus 57.16 347** *i* P **P 21 17 33.7 +1.4**
comp=Z,1.1nm,0.7s
BIOA *i* pP **sP 21 17 42.1 -0.6**
comp=Z,2.3nm,0.8s
**MOA Molln 57.17 347** *e*P **P 21 17 33.3 +1.0**
comp=Z,4.6nm,1.1s
MOA *i* pP **sP 21 17 42.9 +0.1**
comp=Z,8.5nm,0.9s
**WTTA Wattenberg 57.24 345** *i* pP pP 21 17 44.1 +3.4
comp=Z,3.2nm,0.9s
**SQTA Sankt Quirin 57.31 345** *e*P **P 21 17 34.3 +0.8**
comp=Z,0.7nm,0.5s
SQTA *i* pP **sP 21 17 43.8 -0.2**
comp=Z,2.3nm,0.7s
**WATA Walderalm 57.32 345** *i* pP pP 21 17 44.4 +3.2
comp=Z,4.3nm,1.0s
**MOTA Moosalm 57.45 345** *i* pP pP 21 17 44.7 +2.6
comp=Z,3.4nm,0.8s
**KWP Kalwaria Pacla 57.56 354** P **P 21 17 34.6 -0.4**
**RETA Reutte 57.67 345** *i* P **P 21 17 36.4 +0.5**
comp=Z,3.3nm,1.1s
RETA *i* pP **sP 21 17 46.0 -0.5**
comp=Z,4.4nm,1.2s
**DAVA Damuels 57.73 344** *i* pP pP 21 17 47.0 +3.0
comp=Z,3.0nm,0.7s
**GEC2 GERESS Array S 58.23 347** P **P 21 17 40.5 +0.6**
GEC2 IAmb IAmb 21 17 51.0
comp=Z,3.2nm,0.8s
**GERES GERESS Array B 58.23 347** P **P 21 17 40.1 +0.2**
**GERES GERESS Array B 58.23 347** P **P 21 17 40.2 +0.3**
comp=Z,0.7nm,0.7s,baz=153,slow=7.6,SNR=4.8
comp=Z,0.7nm,0.7s
**AKASG Malin Array Be 58.26 359** P **P 21 17 39.3 -0.6**
comp=Z,1.4nm,0.5s,baz=183,slow=6.6,SNR=5.3
comp=Z,1.4nm,0.5s
**KHC Kasperske Hory 58.53 347** P **P 21 17 41.9 0.0**
**KHC Kasperske Hory 58.53 347** *e*P **P 21 17 42.0 +0.1**
KHC *ex* x 21 17 51.0
**GRF Grafenberg Arr 59.60 346** *e*P **P 21 17 50.0 +0.7**
comp=Z,3.8nm,0.9s,baz=156,slow=6.7
GRF *e*pP **sP 21 18 00.1 +0.4**
**KK31 Karatay Array 62.50 32** P **P 21 18 08.6 -0.6**
KK31 IAmb IAmb 21 18 10.2
comp=Z,3.2nm,1.0s
**KKAR Karatay Array 62.50 32** P **P 21 18 08.6 -0.6**
KKAR IAmb IAmb 21 18 10.2
comp=Z,3.2nm,1.0s
**MAW Mawson 63.64 167** P **P 21 18 17.8 +1.7**
comp=Z,2.2nm,0.6s,baz=252,slow=9.9,SNR=3.1
comp=Z,2.2nm,0.6s
**SNAA Sanae 67.01 191** LR LR 21 46 53.0
comp=Z,46nm,19.2s,baz=9.0,slow=35
**HFS Hagfors 68.97 351** P **P 21 18 49.2 -1.3**
comp=Z,3.8nm,1.1s,baz=170,slow=9.0,SNR=1.6
comp=Z,3.8nm,1.1s
**FINES FINESS Array B 69.10 358** P **P 21 18 50.6 -0.6**
**FINES FINESS Array B 69.10 358** P **P 21 18 50.3 -0.9**
comp=Z,3.2nm,1.0s,baz=167,slow=13,SNR=5.3
comp=Z,3.2nm,1.0s
**NB2 NORSAR Subarra 70.22 350** P P 21 19 08.8 +11
comp=Z,0.5nm,0.7s,baz=162,slow=5.9
**NOA NORSAR Array B 70.22 350** P **P 21 18 58.0 -0.2**
comp=Z,0.7nm,0.9s,baz=164,slow=5.7,SNR=2.2
comp=Z,0.7nm,0.9s
**MAKZ Makanchi 71.14 35** P **P 21 19 03.7 -0.4**
MAKZ IAmb IAmb 21 19 04.5
comp=Z,1.6nm,0.8s
**MK31 Makanchi Array 71.31 35** P **P 21 19 04.1 -1.0**
**MKAR Makanchi Array 71.31 35** P **P 21 19 04.7 -0.5**
comp=Z,1.6nm,0.7s,baz=235,slow=6.6,SNR=19
comp=Z,1.6nm,0.7s
**KURBB Kurchatov Arra 71.59 30** P **P 21 19 06.6 -0.1**
comp=Z,1.2nm,0.8s,baz=239,slow=6.5,SNR=8.3
KURBB LR LR 21 53 51.4
comp=Z,44nm,18.4s,baz=164,slow=39
comp=Z,1.2nm,0.8s
**ZALV Zalesovo Beam 76.67 30** P **P 21 19 35.0 -1.3**
comp=Z,0.6nm,0.6s,baz=294,slow=4.6,SNR=2.6
comp=Z,0.6nm,0.6s
**ARCES ARCESS Array B 77.22 358** P **P 21 19 39.5 +0.4**
comp=Z,3.3nm,0.9s,baz=192,slow=7.1,SNR=2.0
comp=Z,3.3nm,0.9s
**QSPA South Pole Qui 82.29 180** P **P 21 20 11.5 +4.6**
QSPA IAmb IAmb 21 20 14.1
comp=Z,4.7nm,1.3s
**QSPA South Pole Qui 82.29 180** P **P 21 20 09.2 +2.3**
comp=Z,0.9nm,0.6s,baz=217,slow=4.5,SNR=3.8
comp=Z,0.9nm,0.6s
**HHC Hu-ho-hao-te 88.56 49** *e*P **P 21 20 39.2 +0.6**
HHC pmax pmax
comp=Z,8.0nm,0.8s
HHC pmax pmax
comp=Z,40nm,5.2s
**LPAZ La Paz 95.76 253** LR LR 22 02 53.9
comp=Z,19nm,18.9s,baz=76,slow=34

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*NEIC* ***06*** *21:11:48.6± 1.5, 67.47N± 0.03× 146.92W± 0.07, h13km± 5km, Error ellipse: s-maj=5.6km s-min=2.5km az=220.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr=0.14; Mθθ-2.37; Mϕϕ2.51; Mrθ0.41; Mθϕ-3.00; Mϕr-0.65; Fault plane solution: M₀3.94000×10¹⁴ NP1: ϕs200.03000°, δ81.70000°, λ6.20000°. NP2:ϕs109.13000°, δ83.86000°, λ171.65000°. Principal axes: T 4.0713, Plg10.0000°, Azm64.0000°; N -0.2739, Plg80.0000°, Azm253.0000°; P -3.7974, Plg2.0000°, Azm155.0000°;*

*NEIC* ***06*** *21:11:48.7, 67.45N× 146.95W, h12km*

**AEIC 06 21:11:48.6**± 1.4, **67.45N**± 0.03× **146.90W**± 0.09, **h12**km± 6km, **ML3.7, ML3.9**/152(NEIC), **Mwr3.7**/44(NEIC), **Error ellipse: s-maj=5.5km s-min=3.5km az=53.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **F24K** | **Squaw Lake** | **0.39** | **281** | | | | Pg | 21 11 55.9 | -0.4 |
| F24K | | | | | | | Sg | 21 12 00.6 | -0.9 |
| F24K | | | | IAML | | | | 21 12 01.4 | |
| comp=E,16μm,0.3s | | | | | | | | | |
| **F25K** | **Christian Rive** | **0.50** | **73** | | | | Pg | 21 11 58.4 | -0.1 |
| F25K | | | | | | | Sg | 21 12 05.2 | 0.0 |
| **G25K** | **Bearman Lake** | **0.76** | **155** | | | | Pb | 21 12 03.6 | 0.0 |
| G25K | | | | | | | Sb | 21 12 14.5 | +0.7 |
| **G24K** | **Hadweenzic Riv** | **0.79** | **197** | Pg | | | Pg | 21 12 03.4 | -0.3 |
| G24K | | | | Sg | | | Sg | 21 12 13.4 | -0.6 |
| G24K | | | | IAML | | | | 21 12 17.6 | |
| comp=N,5μm,0.6s | | | | | | | | | |
| G24K | | | | IAML | | | | 21 12 17.7 | |
| comp=E,4μm,0.7s | | | | | | | | | |
| **E24K** | **Your Creek** | **0.87** | **317** | Pg | | | Pg | 21 12 04.1 | -1.3 |
| E24K | | | | | | | Sg | 21 12 15.4 | -1.4 |
| E24K | | | | IAML | | | | 21 12 20.0 | |
| comp=N,4μm,0.4s | | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **0.89** | **90** | Pg | | | Pg | 21 12 05.6 | -0.2 |
| **F26K** | **Sheenjek River** | **1.08** | **76** | | | | Pb | 21 12 09.0 | -0.3 |
| **FYU** | **Fort Yukon** | **1.10** | **143** | | | | Pb | 21 12 09.6 | +0.1 |
| FYU | | | | IAML | | | | 21 12 27.6 | |
| comp=N,4μm,0.7s | | | | | | | | | |
| FYU | | | | IAML | | | | 21 12 28.0 | |
| comp=E,3μm,0.5s | | | | | | | | | |
| **E23K** | **Chandalar** | **1.20** | **302** | | | | Pn | 21 12 10.6 | -0.7 |
| E23K | | | | | | | Sb | 21 12 25.8 | -1.0 |
| **H25L** | **Birch Creek** | **1.26** | **160** | | | | Pn | 21 12 12.1 | 0.0 |
| **COLD** | **Coldfoot** | **1.30** | **262** | | | | Pn | 21 12 12.0 | -0.5 |
| **G26K** | **Porcupine Rive** | **1.31** | **111** | | | | Pn | 21 12 12.3 | -0.4 |
| **G23K** | **Bananza Creek** | **1.43** | **240** | Pn | | | Pn | 21 12 14.0 | -0.4 |
| G23K | | | | IAML | | | | 21 12 37.5 | |
| comp=E,1μm,0.5s | | | | | | | | | |
| G23K | | | | IAML | | | | 21 12 38.1 | |
| comp=N,2μm,0.6s | | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.56** | **321** | Pn | | | Pn | 21 12 16.6 | +0.4 |
| TOLK | | | | IAML | | | | 21 12 46.0 | |
| comp=E,1μm,0.6s | | | | | | | | | |
| **H24K** | **Noodor Dome** | **1.67** | **194** | Pn | | | Pn | 21 12 17.0 | -0.6 |
| H24K | | | | IAML | | | | 21 12 42.5 | |
| comp=N,1μm,0.8s | | | | | | | | | |
| H24K | | | | IAML | | | | 21 12 42.9 | |
| comp=E,1μm,0.9s | | | | | | | | | |
| **D24K** | **Happy Valley** | **1.85** | **338** | Pn | | | Pn | 21 12 20.5 | +0.3 |
| D24K | | | | IAML | | | | 21 12 54.1 | |
| comp=N,928nm,1.1s | | | | | | | | | |
| D24K | | | | IAML | | | | 21 12 56.6 | |
| comp=E,960nm,0.8s | | | | | | | | | |
| **G22K** | **Bettles** | **1.87** | **256** | | | | Pn | 21 12 20.7 | +0.3 |
| **D25K** | **Kavik River** | **1.89** | **6** | Pn | | | Pn | 21 12 21.2 | +0.5 |
| D25K | | | | IAML | | | | 21 12 54.1 | |
| comp=N,807nm,0.6s | | | | | | | | | |
| **H23K** | **Yukon River** | **1.94** | **214** | Pn | | | Pn | 21 12 21.4 | 0.0 |
| **PRP** | **Porcupine Dome** | **2.02** | **164** | Pn | | | Pn | 21 12 22.4 | -0.2 |
| **F22K** | **John River** | **2.04** | **274** | | | | Pn | 21 12 23.2 | +0.5 |
| **D23K** | **Nanushuk River** | **2.08** | **319** | | | | Pn | 21 12 24.4 | +1.2 |
| **E27K** | **Coleen River** | **2.15** | **67** | Pn | | | Pn | 21 12 23.1 | -1.1 |
| **G27K** | **Doyon Strip** | **2.15** | **105** | Pn | | | Pn | 21 12 25.0 | +0.7 |
| G27K | | | | IAML | | | | 21 13 00.5 | |
| comp=E,632nm,0.8s | | | | | | | | | |
| **POKR** | **Poker Plat Res** | **2.35** | **186** | Pn | | | Pn | 21 12 27.3 | +0.3 |
| POKR | | | | IAML | | | | 21 13 08.1 | |
| comp=N,635nm,0.8s | | | | | | | | | |
| POKR | | | | IAML | | | | 21 13 08.4 | |
| comp=E,758nm,0.8s | | | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **2.37** | **231** | | | | Pn | 21 12 26.7 | -0.6 |
| **H27K** | **Steamboat Moun** | **2.45** | **117** | | | | Pn | 21 12 29.0 | +0.6 |
| **C27K** | **Jago River** | **2.48** | **27** | | | | Pn | 21 12 29.2 | +0.5 |
| **I23K** | **Minto, Yukon-K** | **2.52** | **204** | Pn | | | Pn | 21 12 28.9 | -0.3 |
| I23K | | | | IAML | | | | 21 13 09.7 | |
| comp=N,680nm,0.7s | | | | | | | | | |
| I23K | | | | IAML | | | | 21 13 20.1 | |
| comp=E,431nm,0.9s | | | | | | | | | |
| **MDM** | **Murphy Dome** | **2.56** | **193** | Pn | | | Pn | 21 12 29.4 | -0.5 |
| MDM | | | | IAML | | | | 21 13 10.5 | |
| comp=E,780nm,0.7s | | | | | | | | | |
| MDM | | | | IAML | | | | 21 13 12.5 | |
| comp=N,569nm,0.5s | | | | | | | | | |
| **F21K** | **Alatna River** | **2.56** | **268** | Pn | | | Pn | 21 12 29.8 | -0.1 |
| F21K | | | | IAML | | | | 21 13 14.4 | |
| comp=N,674nm,0.5s | | | | | | | | | |
| **C26K** | **Camden Bay** | **2.58** | **15** | | | | Pn | 21 12 30.8 | +0.7 |
| **D22K** | **Ayikyak River** | **2.60** | **306** | Pn | | | Pn | 21 12 30.3 | 0.0 |
| **COLA** | **College** | **2.62** | **189** | Pn | | | Pn | 21 12 30.5 | -0.1 |
| **I26K** | **Coal Creek Min** | **2.63** | **143** | Pn | | | Pn | 21 12 30.3 | -0.5 |
| I26K | | | | IAML | | | | 21 13 14.8 | |
| comp=N,650nm,0.8s | | | | | | | | | |
| I26K | | | | IAML | | | | 21 13 17.6 | |
| comp=E,651nm,0.7s | | | | | | | | | |
| **IL31** | | **2.69** | **180** | Pn | | | Pn | 21 12 31.0 | -0.6 |
| **ILAR** | **Eielson Array** | **2.69** | **180** | Pn | | | Pn | 21 12 31.7 | 0.0 |
| **F28M** | **Old Crow** | **2.70** | **83** | Pn | | | Pn | 21 12 30.8 | -1.0 |
| F28M | | | | IAML | | | | 21 13 16.3 | |
| comp=N,393nm,0.5s | | | | | | | | | |
| F28M | | | | IAML | | | | 21 13 19.4 | |
| comp=E,360nm,0.6s | | | | | | | | | |
| **C23K** | **Itkillik River** | **2.76** | **332** | Pn | | | Pn | 21 12 33.1 | +0.6 |
| C23K | | | | IAML | | | | 21 13 28.4 | |
| comp=E,374nm,1.0s | | | | | | | | | |
| C23K | | | | IAML | | | | 21 13 30.4 | |
| comp=N,349nm,0.6s | | | | | | | | | |
| **G21K** | **Allakaket** | **2.76** | **253** | Pn | | | Pn | 21 12 32.4 | -0.3 |
| **I27K** | **Kandik River** | **2.81** | **129** | | | | Pn | 21 12 33.7 | +0.3 |
| **CCB** | **Clear Creek Bu** | **2.84** | **188** | Pn | | | Pn | 21 12 33.3 | -0.4 |
| **D27M** | **Malcolm River** | **2.84** | **48** | Pn | | | Pn | 21 12 33.3 | -0.5 |
| **E21K** | **Killik River** | **2.85** | **294** | Pn | | | Pn | 21 12 34.0 | +0.2 |
| **MLY** | **Manley** | **2.88** | **214** | Pn | | | Pn | 21 12 34.2 | -0.1 |
| MLY | | | | IAML | | | | 21 13 20.9 | |
| comp=E,482nm,0.4s | | | | | | | | | |
| MLY | | | | IAML | | | | 21 13 22.1 | |
| comp=N,336nm,0.7s | | | | | | | | | |
| **J25K** | **Salcha River,** | **2.92** | **167** | Pn | | | Pn | 21 12 34.7 | -0.1 |
| **H21K** | **Melozitna Rive** | **2.97** | **235** | Pn | | | Pn | 21 12 35.5 | 0.0 |
| H21K | | | | IAML | | | | 21 13 26.5 | |
| comp=N,472nm,0.7s | | | | | | | | | |
| **E28M** | **Babbage River** | **3.00** | **64** | Pn | | | Pn | 21 12 35.2 | -0.7 |
| **NEA2** | **Nenana** | **3.00** | **198** | Pn | | | Pn | 21 12 35.3 | -0.6 |
| **WRH** | **Wood River Hil** | **3.03** | **190** | Pn | | | Pn | 21 12 36.1 | -0.2 |
| WRH | | | | IAML | | | | 21 13 25.1 | |
| comp=E,307nm,0.7s | | | | | | | | | |
| WRH | | | | IAML | | | | 21 13 28.6 | |
| comp=N,299nm,0.8s | | | | | | | | | |
| **HDA** | **Harding Lake** | **3.05** | **180** | Pn | | | Pn | 21 12 36.6 | 0.0 |
| HDA | | | | IAML | | | | 21 13 27.5 | |
| comp=E,277nm,0.6s | | | | | | | | | |
| HDA | | | | IAML | | | | 21 13 29.5 | |
| comp=N,299nm,0.6s | | | | | | | | | |
| **IMAR** | **Indian Mountai** | **3.09** | **245** | Pn | | | Pn | 21 12 36.0 | -1.2 |
| **J26L** | **Joseph Creek** | **3.26** | **154** | Pn | | | Pn | 21 12 39.4 | -0.1 |
| **C21K** | **Knifeblade Rid** | **3.39** | **304** | | | | Pn | 21 12 42.0 | +0.7 |
| **I28M** | **Miner Creek** | **3.44** | **122** | Pn | | | Pn | 21 12 42.1 | +0.1 |
| I28M | | | | IAML | | | | 21 13 50.8 | |
| comp=E,203nm,0.8s | | | | | | | | | |
| **F20K** | **Avaraart Lake** | **3.45** | **267** | Pn | | | Pn | 21 12 41.9 | -0.2 |
| F20K | | | | IAML | | | | 21 13 42.2 | |
| comp=E,221nm,0.8s | | | | | | | | | |
| **BWN** | **Browne** | **3.46** | **199** | Pn | | | Pn | 21 12 42.0 | -0.2 |
| BWN | | | | IAML | | | | 21 13 45.0 | |
| comp=E,365nm,0.8s | | | | | | | | | |
| **G29M** | **Pine Creek** | **3.50** | **95** | Pn | | | Pn | 21 12 42.5 | -0.3 |
| **E29M** | **Blow River** | **3.53** | **70** | Pn | | | Pn | 21 12 42.0 | -1.1 |
| **EGAK** | **Eagle** | **3.56** | **136** | Pn | | | Pn | 21 12 43.7 | +0.2 |
| **D28M** | **Stokes Point** | **3.56** | **54** | | | | Pn | 21 12 44.9 | +1.4 |
| **B21K** | **Ikpikpuk River** | **3.58** | **311** | Pn | | | Pn | 21 12 43.8 | 0.0 |
| B21K | | | | IAML | | | | 21 13 47.5 | |
| comp=E,327nm,0.6s | | | | | | | | | |
| B21K | | | | IAML | | | | 21 13 48.4 | |
| comp=N,252nm,0.6s | | | | | | | | | |
| **H29M** | **Whitestone** | **3.59** | **106** | Pn | | | Pn | 21 12 44.3 | +0.3 |
| H29M | | | | IAML | | | | 21 13 48.4 | |
| comp=N,298nm,0.8s | | | | | | | | | |
| **E20K** | **Nigu River** | **3.61** | **287** | | | | Pn | 21 12 45.3 | +1.0 |
| **SCRK** | **Sand Creek** | **3.69** | **160** | Pn | | | Pn | 21 12 45.8 | +0.3 |
| **K24K** | **Donnelly Dome** | **3.69** | **172** | | | | Pn | 21 12 46.4 | +1.0 |
| **B22K** | **Teshekpuk Lake** | **3.74** | **324** | Pn | | | Pn | 21 12 45.9 | -0.1 |
| B22K | | | | IAML | | | | 21 14 10.3 | |
| comp=N,200nm,0.9s | | | | | | | | | |
| B22K | | | | IAML | | | | 21 14 10.6 | |
| comp=E,168nm,1.0s | | | | | | | | | |
| **H20K** | **Anotleneega Mo** | **3.76** | **242** | | | | Pn | 21 12 45.0 | -1.3 |
| **BPAW** | **Bear Paw Mtn.** | **3.76** | **209** | Pn | | | Pn | 21 12 46.0 | -0.4 |
| BPAW | | | | IAML | | | | 21 13 46.5 | |
| comp=E,231nm,0.5s | | | | | | | | | |
| BPAW | | | | IAML | | | | 21 13 49.5 | |
| comp=N,207nm,0.5s | | | | | | | | | |
| **MCK** | **McKinley** | **3.83** | **194** | Pn | | | Pn | 21 12 46.9 | -0.4 |
| **D20K** | **Etivluk River** | **3.86** | **294** | | | | Pn | 21 12 48.9 | +1.2 |
| **K27K** | **Chicken** | **3.97** | **148** | Pn | | | Pn | 21 12 49.1 | -0.1 |
| **E19K** | **Redstone River** | **3.98** | **275** | Pn | | | Pn | 21 12 49.9 | +0.6 |
| **DOT** | **Dot Lake** | **4.00** | **162** | | | | Pn | 21 12 50.2 | +0.6 |
| **I29M** | **Ogilvie Camp,** | **4.04** | **117** | Pn | | | Pn | 21 12 50.1 | -0.1 |
| I29M | | | | IAML | | | | 21 14 06.1 | |
| comp=N,142nm,1.2s | | | | | | | | | |
| **I20K** | **Naaghedeneel** | **4.07** | **233** | Pn | | | Pn | 21 12 50.9 | +0.4 |
| **RND** | **Reindeer** | **4.14** | **192** | Pn | | | Pn | 21 12 51.7 | 0.0 |
| RND | | | | IAML | | | | 21 13 59.7 | |
| comp=E,114nm,0.8s | | | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.15** | **100** | Pn | | | Pn | 21 12 51.5 | -0.3 |
| **G30M** | **tAoh Zraii Nji** | **4.18** | **92** | Pn | | | Pn | 21 12 51.6 | -0.5 |
| G30M | | | | IAML | | | | 21 14 05.7 | |
| comp=E,135nm,1.1s | | | | | | | | | |
| G30M | | | | IAML | | | | 21 14 10.8 | |
| comp=N,110nm,0.9s | | | | | | | | | |
| **CHUM** | **Lake Minchumin** | **4.22** | **215** | | | | Pn | 21 12 53.2 | +0.5 |
| **G19K** | **Purcell Mounta** | **4.24** | **257** | Pn | | | Pn | 21 12 52.8 | -0.1 |
| **KTH** | **Kantishna Hill** | **4.26** | **205** | Pn | | | Pn | 21 12 52.4 | -0.8 |
| KTH | | | | IAML | | | | 21 14 07.9 | |
| comp=N,196nm,0.9s | | | | | | | | | |
| KTH | | | | IAML | | | | 21 14 27.5 | |
| comp=E,112nm,1.1s | | | | | | | | | |
| **F30M** | **Barrier River** | **4.27** | **83** | | | | Pn | 21 12 52.6 | -0.7 |
| **H19K** | **Roundabout Mou** | **4.29** | **248** | Pn | | | Pn | 21 12 52.9 | -0.6 |
| **F19K** | **Shaleruckik Mo** | **4.29** | **267** | Pn | | | Pn | 21 12 52.5 | -1.0 |
| F19K | | | | IAML | | | | 21 14 13.2 | |
| comp=N,167nm,1.0s | | | | | | | | | |
| **D19K** | **Kuna River** | **4.35** | **289** | Pn | | | Pn | 21 12 55.0 | +0.5 |
| D19K | | | | IAML | | | | 21 14 15.9 | |
| comp=E,94nm,1.4s | | | | | | | | | |
| **DHY** | **Denali Highway** | **4.40** | **183** | Pn | | | Pn | 21 12 56.0 | +0.8 |
| **J20K** | **Nowinta River** | **4.44** | **226** | Pn | | | Pn | 21 12 54.5 | -1.1 |
| **B20K** | **Meade River** | **4.53** | **309** | Pn | | | Pn | 21 12 56.8 | -0.1 |
| B20K | | | | IAML | | | | 21 14 30.9 | |
| comp=E,160nm,0.9s | | | | | | | | | |
| **PAX** | **Paxson** | **4.54** | **172** | Pn | | | Pn | 21 12 57.3 | +0.2 |
| **A22K** | **Sinclair Lake** | **4.58** | **325** | | | | Pn | 21 12 57.3 | -0.3 |
| **DAWY** | **Dawson** | **4.59** | **134** | Pn | | | Pn | 21 12 59.4 | +1.5 |
| **L26K** | **Log Cabin Wild** | **4.69** | **160** | Pn | | | Pn | 21 12 59.8 | +0.7 |
| **WAT1** | **Susitna Watana** | **4.69** | **189** | | | | Pn | 21 13 00.3 | +1.1 |
| **WAT7** | **Susitna Watana** | **4.71** | **191** | | | | Pn | 21 13 00.4 | +1.0 |
| **I30M** | **Mount Dempster** | **4.79** | **113** | Pn | | | Pn | 21 12 59.8 | -0.8 |
| I30M | | | | IAML | | | | 21 14 31.0 | |
| comp=E,73nm,1.2s | | | | | | | | | |
| I30M | | | | IAML | | | | 21 14 34.6 | |
| comp=N,88nm,1.2s | | | | | | | | | |
| **L27K** | **Beaver Creek,** | **4.89** | **152** | Pn | | | Pn | 21 13 02.1 | +0.1 |
| L27K | | | | IAML | | | | 21 14 29.5 | |
| comp=E,77nm,0.7s | | | | | | | | | |
| L27K | | | | IAML | | | | 21 14 30.3 | |
| comp=N,61nm,0.6s | | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **4.90** | **152** | Pn | | | Pn | 21 13 01.5 | -0.5 |
| **WAT6** | **Susitna Watana** | **4.90** | **185** | | | | Pn | 21 13 03.2 | +1.1 |
| **G18K** | **Tagagawik** | **4.93** | **257** | Pn | | | Pn | 21 13 02.5 | +0.2 |
| G18K | | | | IAML | | | | 21 14 29.8 | |
| comp=N,98nm,0.9s | | | | | | | | | |
| **G31M** | **Satah River** | **4.94** | **90** | Pn | | | Pn | 21 13 01.4 | -1.2 |
| G31M | | | | IAML | | | | 21 14 32.5 | |
| comp=N,115nm,0.8s | | | | | | | | | |
| G31M | | | | IAML | | | | 21 14 39.6 | |
| comp=E,105nm,1.1s | | | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.00** | **295** | Pn | | | Pn | 21 13 03.6 | +0.2 |
| C19K | | | | IAML | | | | 21 14 38.1 | |
| comp=E,86nm,1.1s | | | | | | | | | |
| C19K | | | | IAML | | | | 21 14 43.7 | |
| comp=N,114nm,1.0s | | | | | | | | | |
| **J19K** | **Poorman** | **5.00** | **230** | Pn | | | Pn | 21 13 02.9 | -0.4 |
| **F31M** | **Tsiigehtchic** | **5.07** | **84** | Pn | | | Pn | 21 13 03.8 | -0.4 |
| F31M | | | | IAML | | | | 21 14 36.7 | |
| comp=N,76nm,1.1s | | | | | | | | | |
| F31M | | | | IAML | | | | 21 14 41.2 | |
| comp=E,76nm,1.2s | | | | | | | | | |
| **K20K** | **Telida** | **5.08** | **219** | Pn | | | Pn | 21 13 04.9 | +0.4 |
| K20K | | | | IAML | | | | 21 14 40.1 | |
| comp=N,105nm,1.5s | | | | | | | | | |
| **INK** | **Inuvik** | **5.13** | **74** | Pn | | | Pn | 21 13 04.5 | -0.6 |
| **H18K** | **Honhosa River** | **5.17** | **249** | Pn | | | Pn | 21 13 04.6 | -1.0 |
| H18K | | | | IAML | | | | 21 14 32.0 | |
| comp=E,79nm,1.1s | | | | | | | | | |
| H18K | | | | IAML | | | | 21 14 42.7 | |
| comp=N,73nm,0.9s | | | | | | | | | |
| **A21K** | **Barrow** | **5.18** | **323** | | | | Pn | 21 13 05.3 | -0.6 |
| **J30M** | **Hart River** | **5.19** | **119** | Pn | | | Pn | 21 13 05.9 | -0.1 |
| J30M | | | | IAML | | | | 21 14 38.8 | |
| comp=N,64nm,0.7s | | | | | | | | | |
| J30M | | | | IAML | | | | 21 14 42.5 | |
| comp=E,58nm,0.8s | | | | | | | | | |
| **E18K** | **Tukpahlearik C** | **5.28** | **276** | Pn | | | Pn | 21 13 07.7 | +0.6 |
| E18K | | | | IAML | | | | 21 14 44.1 | |
| comp=E,59nm,0.8s | | | | | | | | | |
| E18K | | | | IAML | | | | 21 14 45.6 | |
| comp=N,96nm,0.9s | | | | | | | | | |
| **K29M** | **Barlow Dome** | **5.30** | **129** | Pn | | | Pn | 21 13 08.4 | +0.8 |
| K29M | | | | IAML | | | | 21 14 41.4 | |
| comp=N,47nm,1.1s | | | | | | | | | |
| K29M | | | | IAML | | | | 21 15 00.9 | |
| comp=E,45nm,1.1s | | | | | | | | | |
| **M26K** | **Nabesna, AK** | **5.33** | **160** | Pn | | | Pn | 21 13 08.2 | +0.2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H17K** | **Granite Mounta** | **5.84** | **251** | Pn | Pn | 21 13 14.9 | 0.0 | |
| **N25K** | **Chitina, Valde** | **5.95** | **169** | Pn | Pn | 21 13 17.0 | +0.5 | |
| **KLU** | **Klutina** | **6.00** | **176** | Pn | Pn | 21 13 17.9 | +0.8 | |
| **KNK** | **Knik Glacier** | **6.10** | **187** | Pn | Pn | 21 13 20.1 | +1.6 | |
| **M29M** | **Somme Creek** | **6.17** | **141** | Pn | Pn | 21 13 19.9 | +0.4 | |
| **GLB** | **Gilahina Butte** | **6.18** | **166** | Pn | Pn | 21 13 20.9 | +1.3 | |
| **M20K** | **Styx River** | **6.19** | **208** | Pn | Pn | 21 13 19.9 | +0.1 | |
| **D17K** | **Noatak River** | **6.20** | **280** | | Pn | 21 13 20.1 | +0.3 | |
| **C17K** | **DeLong Mountai** | **6.21** | **287** | | Pn | 21 13 19.9 | 0.0 | |
| **SUA** | **Susitna One** | **6.24** | **197** | Pn | Pn | 21 13 21.8 | +1.3 | |
| **YUK2** | **White River** | **6.25** | **153** | | Pn | 21 13 21.4 | +0.8 | |
| **L19K** | **White Mountain** | **6.28** | **216** | Pn | Pn | 21 13 19.5 | -1.4 | |
| **STLK** | **Strandline Lak** | **6.34** | **202** | | Pn | 21 13 22.5 | +0.7 | |
| **VRDI** | **Verde Repeater** | **6.42** | **165** | Pn | Pn | 21 13 25.5 | +2.4 | |
| **M19K** | **Big River Lodg** | **6.42** | **213** | Pn | Pn | 21 13 22.1 | -0.8 | |
| **M30M** | **Minto, Yukon** | **6.49** | **134** | Pn | Pn | 21 13 22.9 | -1.0 | |
| **J17K** | **VABM Dome** | **6.50** | **237** | Pn | Pn | 21 13 25.0 | +1.1 | |
| **RC01** | **Rabbit Creek A** | **6.50** | **192** | Pn | Pn | 21 13 25.2 | +1.2 | |
| **G16K** | **Koyuk River** | **6.53** | **259** | Pn | Pn | 21 13 25.7 | +1.3 | |
| **BMRM** | **Bremner River** | **6.58** | **170** | | Pn | 21 13 26.1 | +0.9 | |
| **GLI** | **Glacier Island** | **6.60** | **181** | Pn | Pn | 21 13 28.3 | +3.0 | |
| **PWL** | **Port Wells** | **6.65** | **186** | Pn | Pn | 21 13 27.2 | +1.2 | |
| **L18K** | **Granite Mounta** | **6.70** | **223** | Pn | Pn | 21 13 26.7 | 0.0 | |
| **I17K** | **Unalakleet** | **6.72** | **244** | Pn | Pn | 21 13 25.2 | -1.7 | |
| **K17K** | **Iditarod** | **6.76** | **231** | Pn | Pn | 21 13 27.9 | +0.4 | |
| **CRQM** | **Cirque** | **6.92** | **164** | Pn | Pn | 21 13 31.0 | +1.2 | |
| **CTGM** | **Chitina Glacie** | **6.95** | **157** | Pn | Pn | 21 13 29.9 | -0.3 | |
| **C16K** | **Lisburne Hills** | **7.01** | **285** | Pn | Pn | 21 13 30.9 | 0.0 | |
| **J16K** | **Anvik River** | **7.08** | **240** | Pn | Pn | 21 13 31.6 | -0.3 | |
| **GRNC** | **Granite Creek** | **7.11** | **159** | Pn | Pn | 21 13 33.4 | +0.9 | |
| **M18K** | **Stony River** | **7.11** | **217** | | Pn | 21 13 33.3 | +1.0 | |
| **N31M** | **Braeburn, Yuko** | **7.66** | **136** | Pn | Pn | 21 13 32.5 | -0.3 | |
| **L16K** | **Owhat River** | **7.89** | **229** | Pn | Pn | 21 13 42.1 | -0.8 | |
| **K15K** | **Wolf Creek Mou** | **8.08** | **237** | Pn | Pn | 21 13 44.5 | -1.1 | |
| **CNPM** | **China Poot** | **8.19** | **196** | Pn | Pn | 21 13 48.5 | +1.5 | |
| **N17K** | **Nushagak Hills** | **8.28** | **218** | Pn | Pn | 21 13 48.0 | -0.3 | |
| **M16K** | **Timber Creek** | **8.30** | **225** | Pn | Pn | 21 13 47.7 | -1.0 | |
| **J14K** | **Nanvaranak Lak** | **8.45** | **244** | Pn | Pn | 21 13 49.0 | -1.5 | |
| **C36M** | **Paulatuk** | **8.61** | **67** | Pn | Pn | 21 13 51.5 | -1.3 | |
| **A36M** | **Sachs Harbour** | **8.75** | **49** | Pn | Pn | 21 13 54.1 | -0.5 | |
| **L14K** | **Kuka Creek** | **9.15** | **236** | Pn | Pn | 21 14 00.0 | -0.3 | |
| **N15K** | **Kwethluk River** | **9.33** | **225** | Pn | Pn | 21 14 02.7 | 0.0 | |
| **WRGLY** | **Wrigley** | **10.63** | **102** | Pn | Pn | 21 14 19.1 | -1.3 | |

*TEH* ***06*** *21:22:52.8, 35˚.06N×45˚.56E, h8km±34km, ML2.5*
*ISN* ***06*** *21:22:53.4±1.3, 35˚.06N×45˚.58E, h9km±16km, ML2.4*

**ISC 06 21:22:53.7±1.0, 35˚.01N±0˚.04×45˚.51E±0˚.05, h10km, n11, σ0s69/14, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KGS1** | **Ghasr-e-Shirin** | **0.51** | **173** | Pg | **Pg** | **21 23 03.7** | **0.0** |
| **IDHR** | **Derhash** | **0.79** | **113** | Pg | **Pg** | **21 23 07.8** | **-1.1** |
| IDHR | | | | Sg | **Sg** | **21 23 19.1** | **-0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.96** | **160** | Pg | **Pg** | **21 23 11.7** | **-0.4** |
| **IKRK** | **Kirkuk** baz=109 | **1.03** | **292** | *e*Pg | **Pg** | **21 23 13.0** | **-0.6** |
| IKRK | | | | *e*Sg | **Sn** | **21 23 29.0** | **+0.2** |
| IKRK | comp=N,75nm,0.4s | | | AML | AML | 21 23 33.1 | |
| IKRK | comp=E,115nm,0.4s | | | AML | AML | 21 23 33.6 | |
| **IGHG** | **Ghaleghazi** | **1.11** | **128** | Pg | **Pg** | **21 23 14.8** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **1.50** | **157** | Pg | **Pn** | **21 23 21.1** | **+0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.75** | **94** | Pg | **Pn** | **21 23 24.9** | **+0.5** |
| **MAHB** | **Mahabad** | **1.76** | **5** | Sg | **Sg** | **21 23 50.2** | **-0.1** |
| **IBDR** | **Badra** | **1.93** | **169** | *e*Pn | **Pb** | **21 23 29.0** | **0.0** |
| IBDR | | | | *e*Sn | **Sg** | **21 23 55.0** | **-0.8** |
| **IBZA** | **Bozab** | **2.01** | **105** | Pn | **Pn** | **21 23 28.8** | **+0.8** |
| **IKFM** | **Kafar-mosalman** | **2.44** | **127** | Pn | **Pn** | **21 23 34.9** | **+1.3** |

*IDC* ***06*** *21:24:44.1±2.6, 8˚.48S×116˚.13E, h0km, mb3.1/3, mbtmp3.2/3, Error ellipse: s-maj=148.2km s-min=28.6km az=50.0*
*DJA* ***06*** *21:24:45.8±0.5, 8˚S±7˚×11˚7E±˚, h10km, M4.2/7, mb5.0/1, MLv3.9/7*

**ISC 06 21:24:46.2±1.1, 8˚2S±0˚.1×116˚.64E±0˚.08, h10km, n11, σ1s18/10, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.58** | **155** | P | **Pg** | **21 24 56.3** | **-1.1** |
| **PLAI** | **Plampang** | **1.28** | **119** | P | Pn | 21 25 00.0 | -10 |
| **SRBI** | **Singaraja** | **1.42** | **275** | P | **Pn** | **21 25 11.1** | **-0.9** |
| **DNP** | **Denpasar** | **1.49** | **252** | P | **Pb** | **21 25 14.3** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.47** | **264** | P | **Pn** | **21 25 25.8** | **-0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.34** | **62** | P | **Pn** | **21 25 52.4** | **+0.1** |
| **PWJI** | **Pagerwojo** | **4.79** | **272** | P | **Pn** | **21 25 57.6** | **-0.8** |
| **UGM** | **Wanagama** | **6.06** | **272** | P | **Pn** | **21 26 16.7** | **+0.7** |
| **WRA** | **Warramunga Arr** 0.5nm,0.6s,baz=299,slow=12,SNR=7.7 0.5nm,0.6s | **20.73** | **126** | P | **P** | **21 29 28.7** | **+1.6** |
| **ASAR** | **Alice Springs** 0.9nm,0.8s,baz=313,slow=10,SNR=5.8 0.9nm,0.8s | **22.58** | **135** | P | **P** | **21 29 48.8** | **+1.7** |
| **MKAR** | **Makanchi Array** 0.1nm,0.5s,baz=151,slow=6.3,SNR=1.3 0.1nm,0.5s | **62.72** | **334** | P | **P** | **21 35 11.1** | **-0.3** |

*DJA* ***06*** *22:01:56.6±0.6, 8˚S±7˚×11˚6E±˚, h10km, M3.3/6, MLv3.3/6*
*IDC* ***06*** *22:02:25.7±3.6, 10˚.04S×118˚.72E, h0km, mb3.1/1, mbtmp3.1/3, ML3.1/2, Error ellipse: s-maj=267.6km s-min=31.3km az=49.0*

**ISC 06 22:01:55.6±1.6, 8˚.1S±0˚.1×116˚.42E±0˚.05, h10km, n8, σ0s69/11, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.75** | **142** | P | **Pg** | **22 02 10.4** | **+0.2** |
| TWSI | | | | S | **Sb** | **22 02 22.1** | **+0.9** |
| **SRBI** | **Singaraja** | **1.19** | **272** | P | **Pn** | **22 02 18.7** | **+0.3** |
| **DNP** | **Denpasar** | **1.31** | **246** | P | **Pn** | **22 02 18.8** | **-1.2** |
| DNP | | | | S | **Sg** | **22 02 38.2** | **+0.3** |
| **PLAI** | **Plampang** | **1.51** | **117** | P | **Pb** | **22 02 23.8** | **0.0** |
| PLAI | | | | S | **Sg** | **22 02 44.4** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.27** | **261** | P | **Pn** | **22 02 33.7** | **+0.5** |
| JAGI | | | | S | **Sn** | **22 03 01.3** | **+0.1** |
| **WBSI** | **Waikabubak, Su** | **3.30** | **117** | P | Pn | 22 02 34.7 | -13 |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=300,slow=12,SNR=5.6 0.3nm,0.5s | **20.95** | **126** | P | **P** | **22 06 38.1** | **-0.8** |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=315,slow=9.1,SNR=2.1 0.2nm,0.4s | **22.79** | **135** | P | **P** | **22 06 58.0** | **-0.7** |

*DJA* ***06*** *22:18:18.8±1.7, 7˚N±6˚×12˚4E±˚, h12km±13km, M5.0/14, mB5.5/9, mb5.0/14, MLv5.0/9, Mw(mB)5.0/9*
*BJI* ***06*** *22:18:20.2±0.0, 7˚.24N×123˚.36E, h36km, mb4.3/22, mB4.7/12, Ms4.0/5, Ms7 3.7/7*
*NEIC* ***06*** *22:18:20.4±2.2, 7˚.31N±0˚.09×123˚.61E±0˚.08, h45km±10km, mb4.5/24, Error ellipse: s-maj=13.5km s-min=10.8km az=176.0*
*IDC* ***06*** *22:18:21.5±3.0, 7˚.34N×123˚.74E, h70km±29km, mb3.6/15, mbtmp3.9/15, MS3.4/20, Error ellipse: s-maj=31.1km s-min=12.8km az=71.0*

**ISC 06 22:18:19.0±0.4, 7˚23N±0˚.05×123˚56E±0˚.06, h35km, n78, σ1s69/72, mb4.3/30, MS3.4/21, 1C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **2.01** | **94** | Pn | **Pn** | **22 18 51.3** | **+0.9** |
| **DAV** | **Davao City (W)** 1μm,0.4s,baz=0.3,slow=1.2,SNR=29 | **2.01** | **94** | P | **Pn** | **22 18 51.0** | **+0.6** |
| DAV | | | | S | **Sn** | **22 19 17.7** | **+3.4** |
| **MYLDM** | **Lahad Datu** 712nm,0.3s,baz=253,slow=19,SNR=17 | **5.43** | **248** | Pn | **Pn** | **22 19 39.1** | **+1.5** |
| **GTOI** | **Gorontalo** 118nm,0.6s,2μm0.6nm | **6.57** | **185** | P | **Pn** | **22 19 52.7** | **-0.5** |
| **KMSI** | **Cibinong** 475nm,0.7s,5μm | **6.62** | **176** | P | **Pn** | **22 19 55.6** | **+1.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TOLI2** | **Tolitoli** | **6.68** | **205** | Pn | **Pn** | **22 19 53.0** | **-1.7** | |
| **MRSI** | **Marisa** 75nm,0.7s,2μm0.8nm | **6.90** | **194** | P | **Pn** | **22 19 59.6** | **+1.9** | |
| MRSI | 75nm,0.7s,2μm0.8nm | | | S | **Sn** | **22 21 14.7** | **-0.3** | |
| **TNTI** | **Ternate** | **7.45** | **149** | Pn | **Pn** | **22 20 03.0** | **-2.3** | |
| **MPSI** | **Mapaga** | **7.76** | **208** | P | **Pn** | **22 20 08.5** | **-1.1** | |
| **LUWI** | **Luwuk** | **8.25** | **186** | Pn | **Pn** | **22 20 18.9** | **+2.6** | |
| **LUWI** | **Luwuk** | **8.25** | **186** | P | **Pn** | **22 20 17.9** | **+1.6** | |
| **LBMI** | **Labuha** 128nm,0.8s,4μm | **8.74** | **153** | P | **Pn** | **22 20 24.7** | **+1.6** | |
| **SANI** | **Sanana** 46nm,0.8s | **9.53** | **165** | P | **Pn** | **22 20 36.4** | **+2.6** | |
| **SMKI** | **Samarinda** 58nm,0.7s,3μm | **9.91** | **220** | P | **Pn** | **22 20 40.7** | **+1.6** | |
| **NLAI** | **Namlea** 25nm,0.7s | **10.98** | **161** | P | **Pn** | **22 20 55.0** | **+1.3** | |
| **SPSI** | **Sidrap Palu** | **11.74** | **199** | P | **Pn** | **22 21 05.1** | **+0.9** | |
| **KAPI** | **Kappang** comp=Z,167nm,18.6s,baz=44,slow=41 | **12.74** | **197** | LR | LR | 22 27 14.9 | | |
| **QIZ** | **Qiongzhong** | **17.76** | **313** | P | **P** | **22 22 25.9** | **+1.7** | |
| QIZ | | | | S | **Sn** | **22 25 43.4** | **+2.6** | |
| QIZ | comp=N,100nm,14.2s | | | LR | LR | | | |
| QIZ | comp=E,88nm,14.0s | | | LR | LR | | | |
| QIZ | comp=Z,180nm,17.3s | | | LR | LR | | | |
| **QZH** | **Quanzhou** | **18.25** | **345** | *e*P | **Pn** | **22 22 31.9** | **+2.3** | |
| **UBPT** | **Khong Chiam** | **19.45** | **296** | P | **P** | **22 22 42.0** | **-0.8** | |
| UBPT | comp=Z,25nm,1.0s | | | IAmb | IAmb | 22 22 51.4 | | |
| **JOW** | **Kunigami** comp=Z,85nm,20.6s,baz=152,slow=37 | **20.01** | **12** | LR | LR | 22 30 37.9 | | |
| **KNRA** | **Kununurra** | **23.33** | **167** | P | **P** | **22 23 26.3** | **+2.1** | |
| KNRA | comp=Z,16nm,0.9s | | | IAmb | IAmb | 22 23 52.7 | | |
| **GYA** | **Guiyang** | **24.99** | **322** | P | **P** | **22 23 41.7** | **+1.9** | |
| GYA | comp=Z,6.0nm,0.6s | | | pmax | pmax | | | |
| **NJ2** | **Nanjing** | **25.09** | **351** | *e*P | **P** | **22 23 42.7** | **+2.3** | |
| NJ2 | | | | pP | **pwP** | **22 23 52.4** | **+2.2** | |
| NJ2 | | | | sP | **sP** | **22 23 57.2** | **+2.9** | |
| NJ2 | comp=Z,7.0nm,0.5s | | | pmax | pmax | | | |
| NJ2 | comp=Z,62nm,5.0s | | | pmax | pmax | | | |
| **FITZ** | **Fitzroy Crossi** | **25.25** | **175** | P | **P** | **22 23 42.4** | **+0.4** | |
| **CMAR** | **Chiang Mai Arr** | **26.43** | **297** | P | **P** | **22 23 54.6** | **+1.8** | |
| **CMAR** | **Chiang Mai Arr** comp=Z,0.6nm,0.5s,baz=148,slow=7.1,SNR=4.1 | **26.43** | **297** | P | **P** | **22 23 54.2** | **+1.4** | |
| CMAR | comp=Z,91nm,18.0s,baz=120,slow=37 comp=Z,0.6nm,0.5s | | | LR | LR | 22 34 49.6 | | |
| **GSI** | **Gunungsitoli** | **26.57** | **258** | P | **P** | **22 23 56.0** | **+2.0** | |
| GSI | comp=Z,24nm,0.9s | | | IAmb | IAmb | 22 24 01.5 | | |
| **JNU** | **Nakatsue** comp=Z,44nm,18.1s,baz=250,slow=40 | **26.64** | **14** | LR | LR | 22 35 59.6 | | |
| **KMI** | **Kunming** | **26.70** | **314** | ⇑P | **P** | **22 23 56.0** | **+0.6** | |
| KMI | comp=Z,7.0nm,1.0s | | | pmax | pmax | | | |
| KMI | comp=Z,130nm,12.9s | | | LR | LR | | | |
| **PZH** | **PanZhiHua** | **28.26** | **315** | P | **P** | **22 24 11.7** | **+2.5** | |
| PZH | comp=Z,20nm,0.9s | | | pmax | pmax | | | |
| PZH | comp=Z,100nm,4.5s | | | pmax | pmax | | | |
| **PSA00** | **Pilbara Seismi** | **28.85** | **187** | P | **P** | **22 24 14.7** | **+0.3** | |
| **WB0** | **Warramunga Arr** | **28.87** | **158** | P | **P** | **22 24 13.5** | **-1.1** | |
| **WRA** | **Warramunga Arr** | **29.01** | **159** | P | **P** | **22 24 14.6** | **-1.2** | |
| **WRA** | **Warramunga Arr** comp=Z,2.7nm,1.0s,baz=331,slow=11,SNR=11 | **29.01** | **159** | P | **P** | **22 24 15.1** | **-0.7** | |
| WRA | comp=Z,0.8nm,0.7s,baz=335,slow=2.5,SNR=4.1 comp=Z,2.7nm,1.0s | | | PcP | **PcP** | **22 27 21.8** | **-2.2** | |
| **WB2** | **Warramunga Arr** | **29.01** | **159** | P | **P** | **22 24 14.9** | **-0.9** | |
| **WR0** | **Warramunga Arr** | **29.10** | **158** | P | **P** | **22 24 15.5** | **-1.0** | |
| **MJAR** | **Matsushiro Arr** comp=Z,0.7nm,0.3s,baz=199,slow=7.7,SNR=1.6 | **32.10** | **23** | P | **P** | **22 24 41.3** | **-1.7** | |
| MJAR | comp=Z,43nm,21.5s,baz=199,slow=32 comp=Z,0.7nm,0.3s | | | LR | LR | 22 35 25.1 | | |
| **ASAR** | **Alice Springs** | **32.32** | **162** | P | **P** | **22 24 44.8** | **-0.2** | |
| **ASAR** | **Alice Springs** comp=Z,2.4nm,0.7s,baz=342,slow=6.7,SNR=23 | **32.32** | **162** | P | **P** | **22 24 44.4** | **-0.7** | |
| ASAR | comp=Z,0.6nm,0.6s,baz=340,slow=3.1,SNR=5.1 | | | PcP | **PcP** | **22 27 30.9** | **-1.7** | |
| ASAR | comp=Z,58nm,19.8s,baz=280,slow=39 comp=Z,2.4nm,0.7s | | | LR | LR | 22 39 12.7 | | |
| **HHC** | **Hu-ho-hao-te** | **35.15** | **344** | *e*P | **P** | **22 25 11.8** | **+2.2** | |
| HHC | comp=Z,11nm,0.7s | | | pmax | pmax | | | |
| HHC | comp=Z,54nm,4.5s | | | pmax | pmax | | | |
| HHC | comp=Z,99nm,14.5s | | | LR | LR | | | |
| HHC | comp=Z,94nm,15.3s | | | LR | LR | | | |
| HHC | comp=Z,86nm,16.0s | | | LR | LR | | | |
| **SHL** | **Shillong** | **35.29** | **305** | P | **P** | **22 25 09.7** | **-1.4** | |
| **MORW** | **Morawa** | **36.80** | **191** | P | **P** | **22 25 24.0** | **+0.3** | |
| **USRK** | **Ussuriysk Ar.** comp=Z,0.8nm,0.7s,baz=190,slow=7.3,SNR=2.5 comp=Z,0.8nm,0.7s | **37.56** | **10** | P | **P** | **22 25 26.9** | **-3.0** | |
| **FORT** | **Forrest** | **38.03** | **174** | P | **P** | **22 25 35.0** | **+0.9** | |
| **ASAJ** | **Asahikawa** comp=Z,38nm,20.1s,baz=177,slow=36 | **40.34** | **21** | LR | LR | 22 42 30.8 | | |
| **BBOO** | **Bukebboo** | **41.55** | **164** | P | **P** | **22 26 03.6** | **+0.2** | |
| **KLR** | **Kul'dur** comp=Z,1.4nm,0.7s,baz=153,slow=9.0,SNR=1.4 comp=Z,1.4nm,0.7s | **42.43** | **8** | P | **P** | **22 26 09.9** | **-0.3** | |
| **PALK** | **Pallekele** comp=Z,48nm,18.1s,baz=220,slow=41 | **42.51** | **273** | LR | LR | 22 47 16.8 | | |
| **STKA** | **Stephens Creek** | **42.53** | **157** | P | **P** | **22 26 11.8** | **+0.5** | |
| **STKA** | **Stephens Creek** comp=Z,3.5nm,0.8s,baz=320,slow=7.2,SNR=5.6 | **42.53** | **157** | P | **P** | **22 26 10.5** | **-0.8** | |
| STKA | comp=Z,49nm,18.8s,baz=16,slow=38 comp=Z,3.5nm,0.8s | | | LR | LR | 22 45 00.9 | | |
| **SONM** | **Songino Array** comp=Z,0.3nm,0.6s,baz=183,slow=4.9,SNR=1.7 | **43.03** | **343** | P | **P** | **22 26 13.1** | **-2.3** | |
| SONM | comp=Z,42nm,18.9s,baz=154,slow=37 comp=Z,0.3nm,0.6s | | | LR | LR | 22 44 35.7 | | |
| **MK31** | **Makanchi Array** | **52.91** | **325** | P | **P** | **22 27 29.8** | **-1.9** | |
| MK31 | comp=Z,3.7nm,0.9s | | | IAmb | IAmb | 22 27 39.6 | | |
| **MKAR** | **Makanchi Array** comp=Z,1.0nm,0.7s,baz=127,slow=8.1,SNR=9.1 | **52.91** | **325** | P | **P** | **22 27 29.7** | **-2.0** | |
| MKAR | comp=Z,60nm,18.1s,baz=114,slow=36 comp=Z,1.0nm,0.7s | | | LR | LR | 22 50 14.0 | | |
| **MAKZ** | **Makanchi** | **53.09** | **325** | P | **P** | **22 27 30.9** | **-2.2** | |
| **AAK** | **Ala-Archa** comp=Z,45nm,19.2s,baz=118,slow=38 | **55.67** | **318** | LR | LR | 22 53 38.3 | | |
| **ZALV** | **Zalesovo Beam** comp=Z,0.4nm,0.3s,baz=156,slow=7.3,SNR=2.1 | **56.07** | **334** | P | **P** | **22 27 52.2** | **-2.3** | |
| ZALV | comp=Z,33nm,19.4s,baz=100,slow=37 comp=Z,0.4nm,0.3s | | | LR | LR | 22 53 01.5 | | |
| **MA2** | **Magadan** comp=Z,16nm,18.0s,baz=210,slow=40 | **56.17** | **16** | LR | LR | 22 56 00.8 | | |
| **KBL** | **Kabul** | **56.91** | **307** | P | **P** | **22 27 59.8** | **-1.4** | |
| KBL | comp=Z,5.5nm,1.0s | | | IAmb | IAmb | 22 28 11.2 | | |
| **KURBB** | **Kurchatov Arra** comp=Z,0.7nm,0.3s,baz=124,slow=6.9,SNR=8.1 comp=Z,0.7nm,0.3s | **57.12** | **328** | P | **P** | **22 27 59.9** | **-2.1** | |
| **KURK** | **Kurchatov** | **57.12** | **328** | P | **P** | **22 27 59.8** | **-2.2** | |
| KURK | comp=Z,5.8nm,0.8s | | | IAmb | IAmb | 22 28 08.0 | | |
| **BTK** | **Batken** | **57.24** | **313** | P | **P** | **22 28 03.6** | **+0.4** | |
| BTK | comp=Z,8.4nm,1.4s | | | IAmb | IAmb | 22 28 27.4 | | |
| **GAR** | **Garm** | **57.25** | **312** | P | **P** | **22 28 02.5** | **-0.9** | |
| GAR | comp=Z,9.1nm,0.9s | | | IAmb | IAmb | 22 28 15.7 | | |
| **KK31** | **Karatay Array** | **58.54** | **317** | P | **P** | **22 28 13.3** | **+1.1** | |
| KK31 | comp=Z,2.6nm,0.9s | | | IAmb | IAmb | 22 28 20.7 | | |
| **KKAR** | **Karatay Array** | **58.54** | **317** | P | **P** | **22 28 13.8** | **+1.6** | |
| **KKAR** | **Karatay Array** | **58.54** | **317** | P | **P** | **22 28 13.0** | **+0.8** | |
| KKAR | | | | IAmb | IAmb | 22 28 20.7 | | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| **BRVK** | **Borovoye** | **62.76** | **327** | P | **P** | **22 28 40.5** | **-0.2** | |
| BRVK | comp=Z,3.8nm,0.9s | | | IAmb | IAmb | 22 28 46.8 | | |
| **TIXI** | **Tiksi** comp=Z,28nm,18.1s,baz=264,slow=38 | **64.44** | **2** | LR | LR | 22 59 09.1 | | |
| **ABKAR** | **Akbulak array** | **67.47** | **321** | P | **P** | **22 29 12.0** | **+0.7** | |
| **AKTO** | **Aktyubinsk** comp=Z,46nm,20.7s,baz=40,slow=37 | **68.98** | **321** | LR | LR | 23 00 35.4 | | |
| **ARU** | **Arti** comp=Z,25nm,18.9s,baz=132,slow=37 | **70.32** | **328** | LR | LR | 23 01 29.6 | | |
| **ILAR** | **Eielson Array** comp=Z,0.2nm,0.5s,baz=255,slow=6.2,SNR=2.0 comp=Z,0.2nm,0.5s | **83.32** | **26** | P | **P** | **22 30 39.4** | **-2.7** | |
| **BRTR** | **Keskin Array B** comp=Z,0.5nm,0.8s,baz=97,slow=10,SNR=4.0 comp=Z,0.5nm,0.8s | **85.38** | **309** | P | **P** | **22 30 52.8** | **-0.5** | |
| **SPITS** | **Spitsbergen Ar** comp=Z,43nm,18.0s,baz=57,slow=40 | **86.46** | **349** | LR | LR | 23 15 10.3 | | |
| **AKASG** | **Malin Array Be** comp=Z,17nm,18.2s,baz=50,slow=38 | **87.21** | **321** | LR | LR | 23 14 21.7 | | |
| **FINES** | **FINESS Array B** comp=Z,3.6nm,1.0s,baz=143,slow=14,SNR=3.8 comp=Z,3.6nm,1.0s | **87.28** | **332** | P | **P** | **22 31 00.0** | **-1.9** | |
| **VNDA** | **Vanda** comp=Z,0.8nm,1.0s,baz=296,slow=3.6,SNR=4.2 comp=Z,0.8nm,1.0s | **87.28** | **172** | P | **P** | **22 31 00.6** | **-1.0** | |
| **NOA** | **NORSAR Array B** comp=Z,25nm,19.8s,baz=70,slow=38 | **94.27** | **333** | LR | LR | 23 17 12.3 | | |

**TAP 06 22:22:29.3, 24˚.49N×121˚.81E, h21km, ML1.2, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** baz=215 | **0.05** | **215** | *i* P | Pb | 22 22 33.2 | +0.1 |
| EWUT | | | | *i* S | Sb | 22 22 35.6 | -0.1 |
| **ENA** | **Nanau** baz=222 | **0.09** | **227** | *i* P | Pb | 22 22 33.5 | +0.1 |
| ENA | | | | *i* S | Sb | 22 22 36.2 | +0.1 |
| **ESAO** | **Su ao** baz=19 | **0.09** | **19** | *e*P | Pb | 22 22 34.1 | +0.6 |
| ESAO | | | | *e*S | Sb | 22 22 36.4 | +0.2 |
| **TWC** | **Suao** baz=20 | **0.13** | **16** | *i* P | Pb | 22 22 33.9 | -1.6 |
| TWC | | | | S | Sb | 22 22 37.0 | -2.8 |
| **LATG** | **Datong** baz=281 | **0.26** | **281** | *i* P | Pb | 22 22 35.9 | +0.1 |
| LATG | | | | *i* S | Sb | 22 22 40.2 | +0.1 |
| **ENTT** | **Nioudou** baz=305 | **0.27** | **304** | *i* P | Pb | 22 22 36.0 | +0.3 |
| ENTT | | | | *i* S | Sb | 22 22 40.2 | +0.1 |
| **NDT** | **Datong Townshi** baz=293 | **0.29** | **293** | *i* P | Pb | 22 22 36.2 | +0.2 |
| NDT | | | | *i* S | Sb | 22 22 41.0 | +0.4 |
| **FUSB** | **Fushanzhiwuyua** baz=323 | **0.34** | **323** | P | Pb | 22 22 37.2 | +0.6 |
| FUSB | | | | *i* S | Sb | 22 22 42.5 | +0.8 |
| **NACB** | **Ninganchiao** baz=212 | **0.37** | **212** | *i* P | Pb | 22 22 36.9 | -0.2 |
| NACB | | | | S | Sb | 22 22 41.9 | -0.5 |
| **NNSB** | **Datong** baz=262 | **0.39** | **262** | P | Pb | 22 22 37.4 | -0.2 |
| NNSB | | | | S | Sb | 22 22 44.1 | +0.9 |
| **NWLT** | **Wulai** baz=316 | **0.40** | **316** | P | Pb | 22 22 38.0 | +0.3 |
| NWLT | | | | *i* S | Sb | 22 22 43.7 | +0.3 |
| **ETLH** | **Xiulin Townshi** baz=227 | **0.41** | **227** | *e*P | Pb | 22 22 38.1 | +0.3 |
| ETLH | | | | S | Sb | 22 22 43.8 | +0.2 |
| **YHNB** | **Yeheng** baz=295 | **0.43** | **295** | P | Pb | 22 22 38.5 | +0.2 |
| YHNB | | | | S | Sb | 22 22 44.7 | +0.3 |
| **NSK** | **Sanguang** baz=295 | **0.45** | **295** | P | Pb | 22 22 38.9 | +0.2 |
| NSK | | | | S | Sb | 22 22 45.7 | +0.8 |

**JMA 06 22:23:04.7±0.1, 24˚.1N±0˚.4×123˚.0E±0˚.8, h12km, MV1.1/5, NW OFF ISHIGAKIJIMA IS, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.37** | **353** | P | Pg | 22 23 12.1 | 0.0 |
| JYNG | | | | S | Sg | 22 23 17.4 | +0.3 |
| **YOJ** | **Yonaguni jima** | **0.38** | **2** | P | Pg | 22 23 12.3 | 0.0 |
| YOJ | | | | S | Sg | 22 23 17.7 | +0.3 |
| **JKRS** | **Kuro-shima** | **0.94** | **80** | S | Sg | 22 23 34.9 | -0.2 |
| **JISG** | **Ishigakijimahi** | **1.30** | **67** | S | Sn | 22 23 46.3 | +0.2 |

*NEIC* ***06*** *22:30:53.4±0.5, 36˚.211N±0˚.009×97˚.550W±0˚.006, h5km±1km, Error ellipse: s-maj=2.8km s-min=1.6km az=8.0*

**TUL 06 22:30:53.4±0.4, 36˚.214N±0˚.005×97˚.55W±0˚.01, h4km±4km, ML2.6, mb_Lg2.4/44(NEIC), ML2.7/65(NEIC), Error ellipse: s-maj=1.3km s-min=0.5km az=66.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK029** | **Liberty Lake** | **0.42** | **169** | Pg | Pg | 22 31 01.8 | +0.2 |
| OK029 | | | | Sg | Sg | 22 31 07.7 | +0.6 |
| **CROK** | **Carrier** | **0.45** | **310** | Pg | Pg | 22 31 02.4 | +0.3 |
| CROK | | | | Sg | Sg | 22 31 08.6 | +0.6 |
| **OK048** | **Pawnee Station** | **0.53** | **67** | Pg | Pg | 22 31 03.8 | +0.2 |
| OK048 | | | | Sg | Sg | 22 31 11.2 | +0.7 |
| **ADOK** | **Arcadia Dam** | **0.58** | **165** | Pg | Pg | 22 31 04.7 | +0.2 |
| **BLOK** | **Blackwell** | **0.61** | **26** | Pg | Pg | 22 31 05.4 | +0.3 |
| BLOK | | | | Sg | Sg | 22 31 14.1 | +1.0 |
| BLOK | comp=E,608nm,0.2s | | | IAML | | 22 31 16.9 | |
| **OK031** | **S. Brethren Rd** | **0.63** | **114** | Pg | Pg | 22 31 05.8 | +0.3 |
| OK031 | | | | Sg | Sg | 22 31 14.6 | +0.8 |
| OK031 | comp=E,584nm,0.5s | | | IAML | | 22 31 16.9 | |
| OK031 | comp=E,298nm,0.4s | | | IAML | | 22 31 18.7 | |
| **OK052** | **Battle Ridge R** | **0.64** | **110** | Pg | Pg | 22 31 06.1 | +0.4 |
| OK052 | | | | Sg | Sg | 22 31 14.9 | +0.8 |
| OK052 | comp=E,397nm,0.4s | | | IAML | | 22 31 17.3 | |
| **OK051** | **E0350 and S346** | **0.65** | **63** | Pg | Pg | 22 31 05.9 | +0.1 |
| OK051 | comp=E,480nm,0.1s | | | IAML | | 22 31 21.2 | |
| OK051 | comp=E,580nm,0.2s | | | IAML | | 22 31 21.8 | |
| **QUOK** | **Quay** | **0.68** | **93** | Pg | Pg | 22 31 06.7 | +0.2 |
| QUOK | | | | Sg | Sg | 22 31 16.1 | +0.7 |
| QUOK | comp=N,314nm,0.3s | | | IAML | | 22 31 18.2 | |
| QUOK | comp=E,322nm,0.2s | | | IAML | | 22 31 22.7 | |
| **GC02** | **Grant County #** | **0.68** | **339**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DEOK | | | | IAML | | 22 31 24.9 | |
| | comp=E,197nm,0.2s | | | | | | |
| DEOK | | | | IAML | | 22 31 25.9 | |
| | comp=N,321nm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **0.95 350** | Pg | Pg | | 22 31 11.3 | -0.4 |
| KAN01 | | | | IAML | | 22 31 26.8 | |
| | comp=E,247nm,0.3s | | | | | | |
| KAN01 | | | | IAML | | 22 31 30.5 | |
| | comp=N,287nm,0.1s | | | | | | |
| **FNO** | **Franklin** | **0.96 173** | Pg | Pg | | 22 31 11.6 | -0.3 |
| FNO | | | | IAML | | 22 31 27.5 | |
| | comp=E,177nm,0.1s | | | | | | |
| **OK038** | **West end E0370** | **1.00 286** | Pg | Pg | | 22 31 12.2 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **1.07 342** | Pg | Pg | | 22 31 13.6 | -0.2 |
| KAN08 | | | | IAML | | 22 31 32.9 | |
| | comp=N,201nm,0.1s | | | | | | |
| KAN08 | | | | IAML | | 22 31 33.6 | |
| | comp=E,179nm,0.1s | | | | | | |
| **CSTR** | **Hydro, Custer** | **1.08 239** | Pg | Pg | | 22 31 13.8 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.09 50** | Pg | Pg | | 22 31 14.1 | -0.3 |
| T35A | | | | IAML | | 22 31 33.9 | |
| | comp=E,220nm,0.3s | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.14 342** | Pg | Pg | | 22 31 14.8 | -0.5 |
| **U32A** | **Winter Ranch,** | **1.18 278** | Pg | Pg | | 22 31 15.4 | -0.7 |
| U32A | | | | IAML | | 22 31 32.4 | |
| | comp=N,212nm,0.1s | | | | | | |
| U32A | | | | IAML | | 22 31 33.1 | |
| | comp=E,180nm,0.1s | | | | | | |
| **NOKA** | **Waynoka** | **1.19 291** | Pg | Pg | | 22 31 15.7 | -0.5 |
| **TUL3** | **Leonard** | **1.46 101** | | Pn | | 22 31 19.9 | -0.5 |
| **ELLS** | **Ellis County** | **1.52 265** | | Pn | | 22 31 21.4 | 0.0 |
| **X34A** | **Smith Ranch, M** | **1.62 188** | | Pb | | 22 31 23.6 | -0.4 |
| **R32A** | **Long Quarter,** | **2.39 338** | Pn | Pn | | 22 31 34.3 | +0.9 |
| **X37A** | **Clayton** | **2.41 132** | Pn | Pn | | 22 31 34.2 | +0.7 |
| **SMWD** | **Samnorwood** | **2.46 244** | Pn | Pn | | 22 31 34.5 | +0.2 |
| SMWD | | | IAmb_Lg | | | 22 32 11.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WTFS** | **Witchita Falls** | **2.55 197** | Pn | Pn | | 22 31 35.4 | -0.2 |
| **U38A** | **Gravette** | **2.57 84** | Pn | Pn | | 22 31 36.3 | +0.6 |
| **AMTX** | **Amarillo** | **3.62 250** | IAmb_Lg | | | 22 32 57.4 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.65 116** | Pn | Pn | | 22 31 51.3 | +0.7 |
| MIAR | | | IAmb_Lg | | | 22 32 58.2 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.69 65** | Pn | Pn | | 22 31 49.0 | -2.2 |
| **ABTX** | **Abilene, Hawle** | **3.98 206** | IAmb_Lg | | | 22 33 00.9 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.19 275** | Pn | Pn | | 22 31 56.9 | -1.3 |
| RTBA | | | IAmb_Lg | | | 22 33 09.7 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.22 113** | Pn | Pn | | 22 31 58.9 | +0.4 |
| X40A | | | IAmb_Lg | | | 22 33 09.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **SN05** | **Snyder 5** | **4.32 221** | IAmb_Lg | | | 22 33 13.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.35 76** | IAmb_Lg | | | 22 33 10.0 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.38 101** | IAmb_Lg | | | 22 33 15.3 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **POST** | **Post** | **4.52 227** | IAmb_Lg | | | 22 33 24.5 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.66 42** | IAmb_Lg | | | 22 33 28.5 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **4.70 62** | Pn | Pn | | 22 32 04.7 | -0.3 |
| **MSTX** | **Muleshoe** | **4.83 244** | Pn | Pn | | 22 32 06.0 | -1.0 |
| **KSCO** | **Kaye Shedlock'** | **4.90 306** | IAmb_Lg | | | 22 33 37.2 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **BRDY** | **Brady** | **5.06 194** | Pn | Pn | | 22 32 08.5 | -1.6 |
| **LCAR** | **Lake Charles** | **5.18 90** | IAmb_Lg | | | 22 33 42.2 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.36 68** | IAmb_Lg | | | 22 33 49.3 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.47 51** | IAmb_Lg | | | 22 33 52.7 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.59 282** | IAmb_Lg | | | 22 34 00.9 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.76 82** | Pn | Pn | | 22 32 20.6 | +0.9 |
| **FVM** | **French Village** | **5.96 71** | Pn | Pn | | 22 32 20.4 | -2.0 |
| FVM | | | IAmb_Lg | | | 22 34 08.4 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.43 78** | IAmb_Lg | | | 22 34 17.4 | |
| | comp=Z,5.1nm,0.7s | | | | | | |

*DJA **06** 22:43:18.0±0.7, 8°S±6°×11°6E±°, h10km, M3.5/6, MLv3.5/6*
*IDC **06** 22:43:19.2±2.4, 8°.21S×116°.58E, h0km, mb3.4/3, mbtmp3.5/4, ML3.1/1, Error ellipse: s-maj=49.7km s-min=27.7km az=72.0*
**ISC 06 22:43:19.5±0.8, 8°.10S±0°.07×116°.37E±0°.04, h10km, n9, σ1§40/14, mb3.3/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.81** | **141** | P | **Pg** | **22 43 34.4** | **-0.7** |
| TWSI | | | | S | **Sb** | **22 43 48.2** | **+1.5** |
| **SRBI** | **Singaraja** | **1.15** | **271** | P | **Pb** | **22 43 40.2** | **-1.3** |
| SRBI | | | | S | **Sb** | **22 43 55.8** | **-0.6** |
| **DNP** | **Denpasar** | **1.28** | **243** | P | **Pn** | **22 43 44.0** | **+0.5** |
| DNP | | | | S | **Sg** | **22 44 03.3** | **+2.4** |
| **PLAI** | **Plampang** | **1.57** | **118** | P | **Pn** | **22 43 47.5** | **+0.1** |
| PLAI | | | | S | **Sb** | **22 44 08.2** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.23** | **260** | P | **Pn** | **22 43 55.9** | **-0.6** |
| **KAPI** | **Kappang** | **4.55** | **48** | Pn | **Pn** | **22 44 29.2** | **+0.8** |
| | 1.0nm,0.3s,baz=198,slow=19,SNR=1.2 | | | | | | |
| KAPI | | | | Sn | **Sn** | **22 45 20.4** | **-1.0** |
| | 3.8nm,0.3s,baz=174,slow=19,SNR=4.3 | | | | | | |
| | 3.6nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.01** | **126** | P | **P** | **22 48 02.0** | **-1.4** |
| | 1.0nm,0.6s,baz=300,slow=12,SNR=16 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.84** | **135** | P | **P** | **22 48 21.7** | **-1.4** |
| | 0.5nm,0.5s,baz=312,slow=8.5,SNR=5.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **56.39** | **352** | P | **P** | **22 53 03.3** | **+2.2** |
| | 0.3nm,0.4s,baz=180,slow=7.1,SNR=1.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*SOME **06** 22:46:59.0, 39°.35N×72°.33E, h10km*
*NNC **06** 22:47:00.8±8.1, 38°.91N×72°.94E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=61.1km s-min=28.2km az=161.0*
**ISC 06 22:46:59.1±4.0, 38°.7N±0°.2×72°.7E±0°.1, h10km, n6, σ2§15/9, 1C-2D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **4.03** | **5** | *eP* | **Pn** | **22 48 02.6** | **+1.7** |
| | 12nm,0.3s | | | | | | |
| MRKS | | | | *eS* | **Sn** | **22 48 48.1** | **-0.2** |
| | 46nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **4.13** | **18** | ⇓S | **Sn** | **22 48 50.2** | **-0.6** |
| | 13nm,0.3s | | | | | | |
| **KK31** | **Karatay Array** | **4.69** | **340** | ⇓P | **Pn** | **22 48 12.6** | **+2.8** |
| | 2.4nm,0.2s,baz=140,slow=11,SNR=74 | | | | | | |
| KK31 | | | | S | **Sn** | **22 49 06.3** | **+2.0** |
| | 5.0nm,0.4s,baz=151,slow=23,SNR=9.1 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.72** | **27** | ⇑S | **Sn** | **22 49 03.9** | **-1.6** |
| | 6.5nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **4.83** | **334** | *eP* | **Pn** | **22 48 12.6** | **+0.8** |
| | 23nm,0.1s | | | | | | |
| BRLS | | | | *eS* | **Sn** | **22 49 05.3** | **-2.5** |
| | 10nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **13.96** | **323** | P | **Pn** | **22 50 15.0** | **-1.8** |
| | 0.9nm,0.5s,baz=129,slow=14,SNR=22 | | | | | | |

*SVSA **06** 22:48:58.6±1.2, 37°.10N×24°.38W, h5km, ML3.5(INMG), Error ellipse: s-maj=5.2km s-min=3.8km az=83.0*
**ISC 06 22:48:56.1±1.5, 37°.20N±0°.08×24°.40W±0°.09, h21km±6km, n26, σ0§88/47, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSMN** | **Pico do Norte,** | **0.57** | **250** | *eP* | **Pb** | **22 49 08.0** | **+0.6** |
| PSMN | | | | *eS* | **Sb** | **22 49 15.2** | **+0.1** |
| PSMN | | | | A | A | 22 49 18.6 | |
| | 698nm,0.3s | | | | | | |
| **PSMA** | **Santa Maria** | **0.62** | **250** | *eP* | **Pb** | **22 49 08.5** | **+0.2** |
| PSMA | | | | *eS* | **Sb** | **22 49 16.4** | **-0.2** |
| PSMA | | | | A | A | 22 49 22.5 | |
| | 515nm,0.5s | | | | | | |
| **BART** | **Pico Bartolome** | **0.84** | **313** | *eP* | **Pn** | **22 49 12.9** | **+0.2** |
| BART | | | | *eS* | **Sn** | **22 49 23.7** | **-0.7** |
| BART | | | | A | A | 22 49 30.9 | |
| | 2µm,0.4s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PNOR2** | **Nordeste** | **0.86** | **317** | *eP* | **Pn** | **22 49 13.7** | **+0.7** |
| PNOR2 | | | | *eS* | **Sn** | **22 49 24.6** | **-0.4** |
| PNOR2 | | | | A | A | 22 49 25.9 | |
| | 431nm,0.3s | | | | | | |
| **PPOV** | **Povoa§£o** | **0.86** | **309** | *eP* | **Pn** | **22 49 13.5** | **+0.5** |
| PPOV | | | | *eS* | **Sn** | **22 49 24.5** | **-0.4** |
| PPOV | | | | A | A | 22 49 24.9 | |
| | 659nm,0.4s | | | | | | |
| **PGRON** | **Lagoa das Cont** | **0.96** | **306** | *eP* | **Pn** | **22 49 14.8** | **+0.5** |
| PGRON | | | | *eS* | **Sn** | **22 49 27.3** | **-0.1** |
| PGRON | | | | A | A | 22 49 33.5 | |
| | 578nm,0.3s | | | | | | |
| **PCALD** | **Caldeiras da R** | **1.05** | **305** | *eP* | **Pn** | **22 49 16.5** | **+1.0** |
| PCALD | | | | *eS* | **Sn** | **22 49 29.6** | **+0.1** |
| PCALD | | | | A | A | 22 49 34.9 | |
| | 308nm,0.5s | | | | | | |
| **CMLA** | **Cha da Macela** | **1.05** | **302** | *eP* | **Pn** | **22 49 15.9** | **+0.3** |
| CMLA | | | | *eS* | **Sn** | **22 49 29.3** | **-0.4** |
| CMLA | | | | A | A | 22 49 33.4 | |
| | 1µm,0.4s | | | | | | |
| **PDA** | **Ponta Delgada** | **1.14** | **299** | *eP* | **Pn** | **22 49 16.9** | **+0.1** |
| PDA | | | | *eS* | **Sb** | **22 49 31.5** | **+0.1** |
| PDA | | | | A | A | 22 49 36.9 | |
| | 225nm,0.4s | | | | | | |
| **PSET** | **Sete Cidades** | **1.22** | **301** | *eP* | **Pb** | **22 49 18.4** | **0.0** |
| PSET | | | | *eS* | **Sn** | **22 49 33.8** | **+0.1** |
| PSET | | | | A | A | 22 49 46.4 | |
| | 516nm,0.5s | | | | | | |
| **PSCM** | **Serra do Cume** | **2.62** | **306** | *eP* | **Pn** | **22 49 38.1** | **+1.0** |
| PSCM | | | | *eS* | **Sn** | **22 50 07.5** | **-0.7** |
| PSCM | | | | A | A | 22 50 11.6 | |
| | 96nm,0.1s | | | | | | |
| **PAGU** | **Agualva, Azore** | **2.70** | **306** | *eP* | **Pn** | **22 49 39.0** | **+0.8** |
| PAGU | | | | *eS* | **Sn** | **22 50 09.6** | **-0.6** |
| PAGU | | | | A | A | 22 50 11.9 | |
| | 200nm,0.3s | | | | | | |
| **PSBA** | **Serra de Santa** | **2.79** | **305** | *eP* | **Pn** | **22 49 40.7** | **+1.2** |
| PSBA | | | | *eS* | **Sn** | **22 50 11.8** | **-0.7** |
| PSBA | | | | A | A | 22 50 15.0 | |
| | 64nm,0.5s | | | | | | |
| **PID** | **Ribeirinha** | **3.19** | **294** | *eP* | **Pn** | **22 49 46.1** | **+1.1** |
| PID | | | | *eS* | **Sn** | **22 50 21.2** | **-1.3** |
| PID | | | | A | A | 22 50 24.0 | |
| | 45nm,0.4s | | | | | | |
| **PMAN** | **Manadas** | **3.25** | **297** | *eP* | **Pn** | **22 49 46.6** | **+0.9** |
| PMAN | | | | *eS* | **Sn** | **22 50 22.9** | **-0.8** |
| PMAN | | | | A | A | 22 50 25.4 | |
| | 39nm,0.5s | | | | | | |
| **PPNO** | **Prainha do Nor** | **3.31** | **294** | *eP* | **Pn** | **22 49 47.8** | **+1.1** |
| PPNO | | | | *eS* | **Sn** | **22 50 24.2** | **-1.2** |
| PPNO | | | | A | A | 22 50 25.8 | |
| | 20nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **3.39** | **298** | *eP* | **Pn** | **22 49 49.0** | **+1.3** |
| ROSA | | | | *eS* | **Sn** | **22 50 25.7** | **-1.6** |
| ROSA | | | | A | A | 22 50 29.4 | |
| | 22nm,0.2s | | | | | | |
| **PICO** | **Pico** | **3.44** | **293** | *eP* | **Pn** | **22 49 49.9** | **+1.5** |
| PICO | | | | *eS* | **Sn** | **22 50 27.0** | **-1.6** |
| PICO | | | | A | A | 22 50 29.8 | |
| | 59nm,0.4s | | | | | | |
| **PCAN** | **Candelaria** | **3.47** | **292** | *eP* | **Pn** | **22 49 49.6** | **+0.8** |
| PCAN | | | | *eS* | **Sn** | **22 50 28.0** | **-1.3** |
| PCAN | | | | A | A | 22 50 29.0 | |
| | 31nm,0.4s | | | | | | |
| **CALA** | **Caldeira** | **3.67** | **293** | *eP* | **Pn** | **22 49 52.8** | **+1.2** |
| CALA | | | | *eS* | **Sn** | **22 50 33.0** | **-1.3** |
| CALA | | | | A | A | 22 50 36.4 | |
| | 68nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **3.69** | **294** | *eP* | **Pn** | **22 49 52.7** | **+0.9** |
| PCED | | | | *eS* | **Sn** | **22 50 33.5** | **-1.1** |
| PCED | | | | A | A | 22 50 34.9 | |
| | 12nm,0.2s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **7.35** | **124** | *eP* | **Pn** | **22 50 41.8** | **-0.4** |
| **PMAR** | **Madeira** | **7.60** | **124** | *eP* | **Pn** | **22 50 45.4** | **-0.3** |
| PMAR | | | | *eS* | Sn | 22 52 02.3 | -8.9 |
| PMAR | | | | A | A | 22 52 08.6 | |
| | 21nm,0.3s | | | | | | |
| **FUL** | **Funchal** | **7.66** | **124** | *eP* | **Pn** | **22 50 47.1** | **+0.8** |
| **PMPST** | **Porto Santo, M** | **7.78** | **120** | *eP* | **Pn** | **22 50 47.2** | **-0.9** |
| **PMPS** | **Porto Santo** | **7.79** | **120** | *eP* | **Pn** | **22 50 47.9** | **-0.3** |

**IDC 06 22:58:12.7±6.1, 12°.07N×140°.43E, h0km, mb3.8/5, mbtmp3.8/5, Error ellipse: s-maj=274.4km s-min=28.9km az=80.0, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **32.38** | **191** | P | P | 23 04 44.3 | +0.1 |
| | 0.8nm,0.8s,baz=12,slow=9.9,SNR=5.1 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **45.60** | **328** | P | P | 23 06 35.9 | +1.1 |
| | 0.4nm,0.6s,baz=128,slow=7.7,SNR=2.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.62** | **317** | P | P | 23 08 19.3 | +0.7 |
| | 0.7nm,0.8s,baz=93,slow=8.7,SNR=5.2 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.38** | **326** | P | P | 23 08 22.4 | -1.3 |
| | 0.7nm,0.5s,baz=99,slow=7.7,SNR=3.6 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.02** | **321** | P | P | 23 08 41.2 | -0.4 |
| | 2.1nm,0.7s,baz=106,slow=6.9,SNR=16 | | | | | | |
| | 2.1nm,0.7s | | | | | | |

**RSNC 06 23:04:00.1±0.0, 7°N±1°×7°3W±°, h139km±3km, M3.3, mb3.5, mB5.2, ML3.1, Mw(mB)4.5, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.20** | **189** | P | Pn | 23 04 18.2 | -1.2 |
| BARC | | | | S | Sn | 23 04 33.0 | -1.0 |
| **BRJC** | **Barrancabermej** | **0.62** | **287** | P | Pn | 23 04 19.9 | -1.0 |
| BRJC | | | | S | Sn | 23 04 36.8 | +0.2 |
| **PAMC** | **Pamplona, Colo** | **0.71** | **39** | P | Pn | 23 04 21.0 | -1.1 |
| PAMC | | | | S | Sn | 23 04 38.4 | -0.3 |
| PAMC | | | | S | Sn | 23 04 38.4 | -0.3 |
| **RUSC** | **La Rusia** | **0.89** | **176** | P | Pn | 23 04 22.2 | -1.3 |
| RUSC | | | | S | Sn | 23 04 41.5 | +0.2 |
| **PTBC** | **PUERTO BERRIO,** | **1.32** | **259** | P | Pn | 23 04 24.6 | -2.4 |
| PTBC | | | | S | Sn | 23 04 46.0 | -1.4 |
| **TAMC** | **Tame, Arauca** | **1.40** | **105** | P | Pn | 23 04 26.7 | -1.1 |
| TAMC | | | | S | Sn | 23 04 48.2 | -0.6 |
| **OCAC** | **Ocana** | **1.45** | **353** | P | Pn | 23 04 26.4 | -2.1 |
| OCAC | | | | S | Sn | 23 04 48.7 | -1.5 |
| **SPBC** | **San Pablo de B** | **1.46** | **219** | P | Pn | 23 04 27.0 | -1.5 |
| SPBC | | | | S | Sn | 23 04 49.9 | -0.2 |
| **ZARC** | **Zaragoza, Cauc** | **1.83** | **292** | P | Pn | 23 04 30.7 | -1.9 |
| ZARC | | | | S | Sn | 23 04 55.8 | -1.7 |
| **NORC** | **Norcasia** | **2.10** | **235** | P | Pn | 23 04 33.9 | -1.9 |
| NORC | | | | S | Sn | 23 05 02.2 | -1.0 |
| **CHIC** | **Chingaza** | **2.22** | **195** | P | Pn | 23 04 36.4 | -1.3 |
| CHIC | | | | S | Sn | 23 05 05.6 | -0.9 |
| **ROSC** | **El Rosal** | **2.26** | **211** | P | Pn | 23 04 38.1 | 0.0 |
| ROSC | | | | S | Sn | 23 05 07.5 | +0.2 |
| **UREC** | **San Jos de Ur** | **2.55** | **292** | P | Pn | 23 04 38.6 | -2.7 |
| UREC | | | | S | Sn | 23 05 09.4 | -3.7 |
| **VILC** | **Villavicencio,** | **2.71** | **192** | P | Pn | 23 04 42.0 | -1.6 |
| VILC | | | | S | Sn | 23 05 15.7 | -1.4 |
| **PTGC** | **Puerto Gaitan,** | **2.77** | **158** | P | Pn | 23 04 41.4 | -2.7 |
| PTGC | | | | S | Sn | 23 05 14.7 | -3.3 |
| **RECRC** | **Villamaria, Ca** | **2.85** | **230** | P | Pn | 23 04 46.4 | +0.8 |
| RECRC | | | | S | Sn | 23 05 22.4 | +1.8 |
| **CBOC** | **Ciudad Bolivar** | **2.99** | **252** | P | Pn | 23 04 46.7 | -0.4 |
| CBOC | | | | S | Sn | 23 05 23.0 | -0.3 |
| **DBBC** | **Dabeiba** | **3.05** | **274** | P | Pn | 23 04 45.8 | -1.9 |
| DBBC | | | | S | Sn | 23 05 20.7 | -3.8 |
| **ANIL** | **Santa Ana** | **3.20** | **225** | P | Pn | 23 04 49.8 | -0.1 |
| ANIL | | | | S | Sn | 23 05 28.3 | -0.1 |
| **ARGC** | **Ariguani, Magd** | **3.23** | **340** | P | Pn | 23 04 48.4 | -1.7 |
| ARGC | | | | S | Sn | 23 05 28.0 | -0.8 |
| **PRAC** | **Prado** | **3.51** | **210** | P | Pn | 23 04 52.1 | -1.6 |
| PRAC | | | | S | Sn | 23 05 33.8 | -1.5 |
| **ORTC** | **Ortega, Tolima** | **3.54** | **216** | P | Pn | 23 04 52.6 | -1.5 |
| ORTC | | | | S | Sn | 23 05 35.3 | -0.7 |
| **APAC** | **Apartado, Choc** | **3.58** | **288** | P | Pn | 23 04 51.8 | -2.7 |
| APAC | | | | S | Sn | 23 05 33.4 | -3.3 |
| **PLMC** | **San Jos del P** | **3.64** | **239** | P | Pn | 23 04 54.1 | -1.3 |
| PLMC | | | | P | Pn | 23 04 54.1 | -1.3 |
| PLMC | | | | P | | 23 04 54.2 | |
| PLMC | | | | S | Sn | 23 05 36.9 | -1.3 |
| **SJCC** | **San Jacinto, C** | **3.68** | **327** | P | Pn | 23 04 51.8 | -4.2 |
| SJCC | | | | S | Sn | 23 05 34.3 | -5.0 |
| **URMC** | **La Uribe, Meta** | **3.73** | **199** | P | Pn | 23 04 55.3 | -1.3 |
| URMC | | | | S | Sn | 23 05 38.4 | -2.0 |
| **LCBC** | **Los crdobas,** | **3.79** | **303** | P | Pn | 23 04 54.6 | -2.8 |
| LCBC | | | | S | Sn | 23 05 39.7 | -2.1 |
| **CRJC** | **Cerrejon, Guaj** | **4.21** | **4** | P | Pn | 23 04 58.5 | -4.5 |
| CRJC | | | | S | Sn | 23 05 46.4 | -5.4 |
| **YOTC** | **Yotoco, Valle** | **4.23** | **229** | P | Pn | 23 05 00.9 | -2.4 |
| YOTC | | | | S | Sn | 23 05 51.2 | -1.1 |
| **SMRC** | **Santa Marta, M** | **4.47** | **346** | P | Pn | 23 05 03.4 | -3.0 |
| SMRC | | | | S | Sn | 23 05 51.5 | -6.4 |
| **CAPC** | **Capurgana** | **4.55** | **294** | P | Pn | 23 05 08.3 | +0.9 |
| CAPC | | | | S | Sn | 23 05 53.7 | -6.0 |
| **JAMC** | **Jamundi, Valle** | **4.99** | **225** | P | Pn | 23 05 08.8 | -4.7 |
| | 6.4nm,1.3s | | | | | | |
| **MALC** | **Bahia Malaga** | **5.00** | **237** | P | Pn | 23 05 12.3 | -1.0 |
| **URIC** | **Uribia, Colomb** | **5.01** | **13** | P | Pn | 23 05 09.0 | -4.5 |
| URIC | | | | S | Sn | 23 06 05.0 | -5.8 |
| **POPC** | **Popayan, Colom** | **5.49** | **220** | P | Pn | 23 05 19.1 | -1.1 |
| | 4.6nm,0.7s | | | | | | |
| **FLOC** | **Florencia** | **5.74** | **206** | P | Pn | 23 05 21.0 | -2.4 |
| | 9.6nm,0.9s | | | | | | |
| FLOC | | | | S | Sn | 23 06 22.8 | -5.5 |
| | 9.6nm,0.9s | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.25** | **221** | P | Pn | 23 05 29.3 | -1.1 |
| BBAC | | | | S | Sn | 23 06 37.2 | -3.7 |
| **BCIP** | **Isla Barro Col** | **7.03** | **290** | P | Pn | 23 05 36.1 | -4.5 |

*IDC **06** 23:16:03.6±2.0, 7°.01S×117°.86E, h0km, mb3.7/6, mbtmp3.8/6, MS3.3/1, Error ellipse: s-maj=152.2km s-min=20.2km az=53.0*
*DJA **06** 23:16:03.4±0.3, 8°S±3°×11°6E±°, h10km, M4.2/11, mb4.4/1, MLv4.1/11*
**ISC 06 23:16:02.9±0.8, 8°.17S±0°.08×116°.36E±0°.04, h10km, n17, σ1§32/19, mb3.9/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.77** | **138** | P | **Pg** | **23 16 17.5** | **-0.2** |
| TWSI | | | | S | **Sg** | **23 16 27.2** | **-0.6** |
| **SRBI** | **Singaraja** | **1.14** | **274** | P | **Pb** | **23 16 23.7** | **-1.0** |
| SRBI | | | | S | **Sb** | **23 16 39.5** | **0.0** |
| **DNP** | **Denpasar** | **1.25** | **246** | P | **Pg** | **23 16 27.1** | **+0.3** |
| DNP | | | | S | **Sn** | **23 16 44.7** | **+1.5** |
| **PLAI** | **Plampang** | **1.55** | **115** | P | **Pn** | **23 16 30.8** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.21** | **262** | P | **Pn** | **23 16 39.2** | **-0.4** |
| JAGI | | | | S | **Sn** | **23 17 08.4** | **+1.5** |
| **GRJI** | **Gresik** | **4.04** | **288** | P | **Pn** | **23 17 06.9** | **+2.0** |
| **BWJI** | **Bawean** | **4.33** | **302** | P | **Pn** | **23 17 05.7** | **-3.2** |
| **PWJI** | **Pagerwojo** | **4.51** | **272** | P | **Pn** | **23 17 12.1** | **+0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.57** | **64** | P | **Pn** | **23 17 12.9** | **+0.8** |
| **BNSI** | **Bone** | **5.28** | **45** | P | **Pn** | **23 17 23.1** | **+1.2** |
| **WRA** | **Warramunga Arr** | **20.98** | **126** | P | **P** | **23 20 45.0** | **-1.5** |
| | 4.8nm,0.9s,baz=302,slow=12,SNR=38 | | | | | | |
| | 4.8nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.81** | **135** | P | **P** | **23 21 05.3** | **-0.8** |
| | 1.9nm,0.5s,baz=311,slow=9.1,SNR=18 | | | | | | |
| | 1.9nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.55** | **327** | P | **P** | **23 22 26.9** | **+1.2** |
| | 0.6nm,0.3s,baz=146,slow=5.5,SNR=4.7 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **JNU** | **Nakatsue** | **43.32** | **18** | LR | LR | 23 42 39.2 | |
| | comp=Z,37nm,18.3s,baz=98,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **56.45** | **352** | P | P | 23 25 39.7 | -5.3 |
| | 0.2nm,0.3s,baz=168,slow=7.4,SNR=1.6 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.55** | **334** | P | **P** | **23 26 26.9** | **-0.1** |
| | 0.4nm,0.9s,baz=132,slow=8.0,SNR=3.2 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.36** | **340** | P | **P** | **23 26 57.5** | **-0.6** |
| | 0.3nm,0.3s,baz=141,slow=6.5,SNR=2.0 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*IDC **06** 23:24:57.1±1.4, 6°.62S×129°.96E, h0km, mb4.1/4, mbtmp4.2/6, ML4.6/2, Error ellipse: s-maj=63.7km s-min=28.1km az=71.0*
*NEIC **06** 23:25:06.3±1.6, 6°.41S±0°.02×130°.7E±0°.1, h88km±10km, mb4.1/9, Error ellipse: s-maj=20.3km s-min=1.8km az=98.0*
**ISC 06 23:25:06.0±0.6, 6°.39S±0°.05×130°.8E±0°.1, h90km, n36, σ2§04/39, mb4.1/7, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.67** | **161** | Pn | **Pn** | **23 25 36.6** | **+2.6** |
| SAUI | | | | Sn | **Sn** | **23 25 55.5** | **+0.3** |
| **FAKI** | **Fak Fak** | **3.76** | **24** | Pn | **Pn** | **23 26 02.8** | **+0.9** |
| FAKI | | | | Sn | **Sn** | **23 26 44.5** | **-0.7** |
| **DRS** | **Darwin Rock St** | **6.00** | **179** | P | **Pn** | **23 26 34.7** | **+2.4** |
| **MTN** | **Manton Dam** | **6.42** | **177** | P | **Pn** | **23 26 38.8** | **+0.7** |
| **MTN** | **Manton Dam** | **6.42** | **177** | Pn | **Pn** | **23 26 38.2** | **+0.2** |
| MTN | | | | Sn | **Sn** | **23 27 47.6** | **-2.4** |
| **KDU** | **Kakadu** | **6.48** | **165** | P | **Pn** | **23 26 38.5** | **-0.4** |
| **KNRA** | **Kununurra** | **9.43** | **192** | Pn | **Pn** | **23 27 18.2** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **12.65** | **203** | | **Pn** | **23 27 59.7** | **-3.1** |
| **WB0** | **Warramunga Arr** | **13.76** | **165** | | **Pn** | **23 28 13.2** | **-4.1** |
| **WRAB** | **Tennant Creek** | **13.91** | **166** | Pn | **Pn** | **23 28 14.8** | **-4.5** |
| **WRA** | **Warramunga Arr** | **13.91** | **166** | | **Pn** | **23 28 15.9** | **-3.5** |
| **WRA** | **Warramunga Arr** | **13.91** | **166** | Pn | **Pn** | **23 28 14.7** | **-4.6** |
| | 2.8nm,0.3s,baz=342,slow=14,SNR=38 | | | | | | |
| WRA | | | | Sn | Sn | 23 30 38.8 | -14 |
| | 1.2nm,0.3s,baz=338,slow=22,SNR=2.4 | | | | | | |
| | 6.5nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **13.92** | **166** | | **Pn** | **23 28 15.5** | **-3.9** |
| **WR0** | **Warramunga Arr** | **13.98** | **165** | | **Pn** | **23 28 18.2** | **-2.0** |
| **COEN** | **Coen** | **14.35** | **123** | Pn | **Pn** | **23 28 25.4** | **+0.4** |
| **QIS** | **Mount Isa** | **16.50** | **149** | P | **Pn** | **23 28 51.0** | **-1.1** |
| **AS31** | **Alice Springs** | **17.44** | **170** | | **P** | **23 29 02.9** | **-0.8** |
| AS31 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KOVU | | | | S | | **Sg** | **23 42 35.2** | **-0.3** | | |
| **LANU** | **Lannavaara** | **0.69** | **68** | P | | **Pg** | **23 42 36.1** | **+0.9** | | |
| LANU | | | | S | | **Sg** | **23 42 45.4** | **+1.2** | | |
| **LANU** | **Lannavaara** | **0.69** | **68** | PG | | **Pg** | **23 42 36.0** | **+0.9** | | |
| LANU | | | | SG | | **Sg** | **23 42 45.3** | **+1.2** | | |
| **DUNU** | **Dundret** | **0.69** | **171** | P | | **Pb** | **23 42 36.6** | **-0.3** | | |
| DUNU | | | | S | | **Sb** | **23 42 46.7** | **-0.3** | | |
| **MASU** | **Masugnsbyn** | **0.74** | **117** | P | | **Pb** | **23 42 37.6** | **-0.1** | | |
| MASU | | | | S | | **Sb** | **23 42 48.5** | **+0.1** | | |
| **SALU** | **Saltoluokta** | **0.81** | **239** | *e*P | | **Pg** | **23 42 37.5** | **+0.2** | | |
| **SALU** | **Saltoluokta** | **0.81** | **239** | P | | **Pg** | **23 42 37.9** | **+0.6** | | |
| SALU | | | | S | | **Sg** | **23 42 48.9** | **+1.2** | | |
| **PAJU** | **Pajala** | **1.34** | **124** | P | | **Pn** | **23 42 48.3** | **+0.4** | | |
| PAJU | | | | S | | **Sn** | **23 43 06.7** | **+0.2** | | |
| **PAJU** | **Pajala** | **1.34** | **124** | PG | | **Pn** | **23 42 47.9** | **0.0** | | |
| PAJU | | | | SB | | **Sn** | **23 43 06.6** | **+0.2** | | |
| **HEF** | **Hetta** | **1.40** | **63** | *e*P | | **Pn** | **23 42 47.7** | **-1.1** | | |
| **HEF** | **Hetta** | **1.40** | **63** | PG | | **Pn** | **23 42 48.6** | **-0.2** | | |
| | baz=249 | | | | | | | | | |
| HEF | | | | MSG | | | 23 43 06.1 | | | |
| | comp=Z,7.3nm,0.2s | | | | | | | | | |
| HEF | | | | SG | | **Sg** | **23 43 07.1** | **+0.1** | | |
| **KLF** | **Kolari** | **1.52** | **110** | PG | | **Pg** | **23 42 51.2** | **0.0** | | |
| KLF | | | | MSG | | | 23 43 10.0 | | | |
| | comp=Z,7.8nm,0.2s | | | | | | | | | |
| KLF | | | | SN | | **Sn** | **23 43 12.6** | **+1.7** | | |
| **KTK1** | **Kautokeino** | **1.63** | **41** | PG | | **Pn** | **23 42 52.3** | **+0.4** | | |
| KTK1 | | | | SN | | **Sn** | **23 43 14.0** | **+0.4** | | |
| **TRO** | **Tromso** | **1.90** | **346** | PG | | **Pn** | **23 42 56.2** | **+0.6** | | |
| TRO | | | | SG | | **Sn** | **23 43 21.1** | **+0.8** | | |
| **KALU** | **Kalix** | **2.30** | **147** | PB | | **Pb** | **23 43 03.5** | **-0.7** | | |
| KALU | | | | SG | | **Sg** | **23 43 34.2** | **-1.5** | | |
| **TOF** | **Tornio** | **2.35** | **136** | PG | | **Pb** | **23 43 04.7** | **-0.4** | | |
| TOF | | | | MSG | | | 23 43 33.8 | | | |
| | comp=Z,5.6nm,0.2s | | | | | | | | | |
| TOF | | | | SG | | **Sg** | **23 43 36.4** | **-1.0** | | |
| **SGF** | **Sodankyl** | **2.42** | **96** | PB | | **Pn** | **23 43 04.2** | **+1.5** | | |
| | baz=286 | | | | | | | | | |
| SGF | | | | SB | | **Sb** | **23 43 35.8** | **-0.7** | | |
| **RNF** | **Rovaniemi** | **2.53** | **116** | PB | | **Pb** | **23 43 07.4** | **-0.8** | | |
| RNF | | | | SG | | **Sb** | **23 43 41.0** | **+1.2** | | |
| **ARA0** | **ARCESS Array S** | **2.58** | **45** | PB | | **Pn** | **23 43 06.6** | **+1.6** | | |
| ARA0 | | | | SN | | **Sn** | **23 43 36.6** | **-0.4** | | |
| **ARCES** | **ARCESS Array B** | **2.58** | **45** | Pn | | **Pn** | **23 43 06.1** | **+1.2** | | |
| | comp=Z,0.8nm,0.3s,baz=227,slow=13,SNR=33 | | | | | | | | | |
| ARCES | | | | Lg | | Lg | 23 43 39.8 | | | |
| | comp=Z,2.9nm,0.3s,baz=226,slow=24,SNR=9.2 | | | | | | | | | |
| | comp=Z,1.6nm,0.3s | | | | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **3.08** | **74** | PN | | **Pn** | **23 43 13.4** | **+1.6** | | |
| RAJF | | | | SB | | **Sb** | **23 43 54.8** | **-0.7** | | |
| **RANF** | **Ranua** | **3.13** | **122** | PB | | **Pb** | **23 43 15.7** | **-2.7** | | |
| RANF | | | | SG | | **Sg** | **23 44 00.8** | **-1.6** | | |
| **KEV** | **Kevo** | **3.13** | **48** | PN | | **Pn** | **23 43 14.3** | **+1.8** | | |
| KEV | | | | SN | | **Sn** | **23 43 52.1** | **+1.6** | | |
| **VRF** | **Varrio** | **3.54** | **87** | PB | | **Pb** | **23 43 22.6** | **-2.8** | | |
| VRF | | | | SG | | **Sb** | **23 44 10.8** | **+1.9** | | |
| **OBF4** | **Vikkela, Lumij** | **3.58** | **145** | PB | | **Pb** | **23 43 23.4** | **-2.6** | | |
| **OLKF** | **Oulanka, Finla** | **3.87** | **108** | PN | | **Pn** | **23 43 25.0** | **+2.4** | | |
| OLKF | | | | SG | | **Sg** | **23 44 25.8** | **-0.2** | | |
| **UMAU** | **Umeaa** | **3.94** | **177** | PN | | **Pn** | **23 43 26.4** | **+2.9** | | |
| **MSF** | **Maaselka** | **3.94** | **115** | PN | | **Pn** | **23 43 26.3** | **+2.7** | | |
| MSF | | | | SG | | **Sg** | **23 44 27.0** | **-1.4** | | |
| **KU6** | **Riekki** | **4.18** | **111** | PN | | **Pn** | **23 43 29.4** | **+2.5** | | |
| KU6 | | | | SG | | **Sg** | **23 44 34.2** | **-1.9** | | |
| **FINES** | **FINESS Array B** | **6.85** | **156** | Pn | | **Pn** | **23 44 05.2** | **+1.7** | | |
| | comp=Z,0.1nm,0.3s,baz=340,slow=10,SNR=1.7 | | | | | | | | | |
| FINES | | | | Sn | | **Sn** | **23 45 21.6** | **-0.4** | | |
| | comp=Z,0.2nm,0.3s,baz=338,slow=26,SNR=2.3 | | | | | | | | | |
| FINES | | | | Lg | | Lg | 23 45 54.9 | | | |
| | comp=Z,0.5nm,0.3s,baz=341,slow=28,SNR=9.3 | | | | | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **7.83** | **214** | Pn | | **Pn** | **23 44 18.4** | **+1.3** | | |
| | baz=24,slow=11,SNR=1.6 | | | | | | | | | |
| NOA | | | | Lg | | Lg | 23 46 30.1 | | | |
| | baz=48,slow=12,SNR=6.7 | | | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | | | |
| **HFS** | **Hagfors** | **8.22** | **204** | Pn | | **Pn** | **23 44 22.4** | **0.0** | | |
| | comp=Z,0.1nm,0.3s,baz=14,slow=13,SNR=1.2 | | | | | | | | | |
| HFS | | | | Sn | | **Sn** | **23 45 51.9** | **-3.9** | | |
| | comp=Z,0.1nm,0.3s,baz=16,slow=22,SNR=4.6 | | | | | | | | | |
| HFS | | | | Lg | | Lg | 23 46 41.4 | | | |
| | comp=Z,0.2nm,0.3s,baz=22,slow=28,SNR=3.3 | | | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | | | |

*SJA **06** 23:42:40.0±0.6,20°.55S×66°.67W,h253km±6km,ML4.3, MW3.9*
*VAO **06** 23:42:40.9±0.4,20°.50S×66°.52W,h189km,mb4.0*
*IDC **06** 23:42:41.8±1.4,20°.42S×66°.68W,h240km±20km,mb3.5/4, mbtmp4.1/7,Error ellipse: s-maj=28.3km s-min=16.7km az=92.0*
*SCB **06** 23:42:41.3±1.4,20°.59S×66°.65W,h242km±17km,ML3.2/2, MW3.7,Error ellipse: s-maj=7.6km s-min=4.9km az=0.0*

**ISC 06 23:42:41.5±0.6,20°.58S±0°.04×66°.69W±0°.05,h236km±7km, n65,σ1$57/77,mb4.0/3,Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **MOCB** | **Mochara** | **1.19** | **125** | Pg | | **Pn** | **23 43 18.0** | | **+1.3** |
| **YJA** | **Yavi** | **1.93** | **146** | *e*P | | **Pn** | **23 43 23.6** | | **+1.0** |
| YJA | | | | *e*S | | **S** | **23 43 55.6** | | **+0.7** |
| **SOEO** | **Opoqueri** | **2.30** | **330** | Pg | | **Pn** | **23 43 27.8** | | **+1.5** |
| **GO01** | **Chusmiza** | **2.52** | **291** | *e*P | | **Pn** | **23 43 28.8** | | **+0.3** |
| GO01 | | | | *e*S | | **S** | **23 44 08.7** | | **+3.4** |
| **GO01** | **Chusmiza** | **2.52** | **291** | Pg | | **Pn** | **23 43 29.1** | | **+0.6** |
| **SOET** | **ToroToro** | **2.58** | **19** | Pg | | **Pn** | **23 43 29.2** | | **+0.1** |
| SOET | | | | Sg | | **S** | **23 44 06.2** | | **-0.2** |
| SOET | | | | IAML | | | 23 44 07.0 | | |
| | 16nm,0.7s | | | | | | | | |
| **PB09** | **IPOC Station P** | **2.68** | **243** | *e*P | | **Pn** | **23 43 30.4** | | **+0.7** |
| PB09 | | | | *e*S | | **S** | **23 44 06.7** | | **-1.0** |
| **PB09** | **IPOC Station P** | **2.68** | **243** | Pg | | **Pn** | **23 43 30.6** | | **+0.8** |
| PB09 | | | | Sg | | **S** | **23 44 08.0** | | **+0.3** |
| PB09 | | | | IAML | | | 23 44 14.3 | | |
| | 165nm,0.4s | | | | | | | | |
| **AOEA** | **Aiquile** | **2.75** | **30** | Pg | | **Pn** | **23 43 30.9** | | **+0.1** |
| **LVC** | **Limon Verde** | **2.89** | **225** | *e*P | | **Pn** | **23 43 32.7** | | **+0.4** |
| LVC | | | | *e*S | | **S** | **23 44 11.8** | | **-0.5** |
| **LVC** | **Limon Verde** | **2.89** | **225** | *e*P | | **Pn** | **23 43 32.9** | | **+0.6** |
| **SOTI** | **Planta Incahua** | **2.94** | **76** | Pg | | **Pn** | **23 43 33.3** | | **+0.7** |
| **TA02** | **Huaiquique** | **3.25** | **275** | *e*P | | **Pn** | **23 43 35.3** | | **-0.5** |
| TA02 | | | | IAML | | | 23 44 17.0 | | |
| | comp=Z,647nm,0.1s | | | | | | | | |
| TA02 | | | | *e*S | | **S** | **23 44 17.1** | | **-1.6** |
| **TA01** | **Diego Aracena** | **3.27** | **270** | *e*P | | **Pn** | **23 43 35.3** | | **-0.9** |
| TA01 | | | | *e*S | | **S** | **23 44 15.6** | | **-3.6** |
| TA01 | | | | IAML | | | 23 44 21.6 | | |
| | comp=Z,193nm,0.2s | | | | | | | | |
| **PB04** | **IPOC Station P** | **3.67** | **241** | *e*S | | **S** | **23 44 24.5** | | **-3.3** |
| PB04 | | | | IAML | | | 23 44 28.2 | | |
| | comp=Z,386nm,0.1s | | | | | | | | |
| **SOEJ** | **Jacaque** | **3.86** | **338** | Pg | | **Pn** | **23 43 45.5** | | **+1.9** |
| **AZAP** | **Zapla** | **3.93** | **158** | *e*P | | **Pn** | **23 43 44.5** | | **+0.5** |
| AZAP | | | | *e*S | | **S** | **23 44 30.6** | | **-2.6** |
| **BBOE** | **La Paz, Chanca** | **3.94** | **342** | Pg | | **Pn** | **23 43 46.2** | | **+1.6** |
| **AP01** | **Chacalluta** | **4.09** | **302** | *e*P | | **Pn** | **23 43 44.5** | | **-1.3** |
| AP01 | | | | IAML | | | 23 44 41.8 | | |
| | comp=Z,238nm,0.2s | | | | | | | | |
| **BBOD** | **La Paz, Gloria** | **4.32** | **335** | Pg | | **Pn** | **23 43 50.4** | | **+1.3** |
| **LPAZ** | **La Paz** | **4.48** | **342** | *e*P | | **Pn** | **23 43 52.6** | | **+1.5** |
| **LPAZ** | **La Paz** | **4.48** | **342** | P | | **Pn** | **23 43 51.2** | | **+0.1** |
| | comp=Z,12nm,0.4s,baz=112,slow=3.7,SNR=69 | | | | | | | | |
| LPAZ | | | | S | | **S** | **23 44 43.5** | | **-2.7** |
| | comp=Z,39nm,1.0s,baz=15,slow=20,SNR=15 | | | | | | | | |
| **LPAZ** | **La Paz** | **4.48** | **342** | Pg | | **Pn** | **23 43 52.0** | | **+0.8** |
| **GO02** | **Mina Guanaco** | **5.29** | **210** | *e*P | | **Pn** | **23 43 59.8** | | **-1.0** |
| GO02 | | | | *e*S | | **S** | **23 45 00.5** | | **-3.3** |
| **PB14** | **IPOC Station P** | **5.29** | **220** | *e*P | | **Pn** | **23 43 59.5** | | **-1.3** |
| PB14 | | | | *e*S | | **S** | **23 44 59.1** | | **-4.7** |
| PB14 | | | | IAML | | | 23 45 02.3 | | |
| | comp=Z,166nm,0.4s | | | | | | | | |
| **BBSD** | **Serra de San D** | **6.67** | **61** | *e*P | | **Pn** | **23 44 16.2** | | **-1.7** |
| **MURT** | **Porto Murtinho** | **8.54** | **99** | *e*P | | **Pn** | **23 44 40.0** | | **-1.7** |
| **PTLB** | **Pontes e Lacer** | **8.81** | **56** | *e*P | | **Pn** | **23 44 44.0** | | **-1.2** |
| **VILB** | **Vilhena** | **9.80** | **40** | *e*P | | **Pn** | **23 44 56.5** | | **-1.3** |
| **AQDB** | **Aquidauana** | **10.30** | **91** | *e*P | | **Pn** | **23 45 02.1** | | **-2.0** |
| **CPUP** | **Villa Florida** | **10.32** | **125** | P | | **Pn** | **23 45 04.1** | | **-0.1** |
| | comp=Z,0.8nm,0.6s,baz=313,slow=12,SNR=3.2 | | | | | | | | |
| **SALV** | **Santo Antonio** | **11.43** | **68** | *e*P | | **Pn** | **23 45 17.9** | | **-0.5** |
| **SAML** | **Samuel** | **12.05** | **17** | *e*P | | **Pn** | **23 45 24.3** | | **-1.8** |
| **PDRB** | **Porto dos Gac** | **13.07** | **49** | *e*P | | **Pn** | **23 45 37.9** | | **-1.0** |
| **TRCB** | **Terra Rica** | **13.25** | **102** | *e*P | | **Pn** | **23 45 40.4** | | **-0.6** |
| **CRSM** | **Crissiumal (Br** | **13.44** | **123** | *e*P | | **Pn** | **23 45 43.6** | | **+0.3** |
| **PTGB** | **Pitanga** | **14.11** | **110** | *e*P | | **P** | **23 45 51.7** | | **-0.8** |
| **RODS** | **Rosario do Sul** | **14.21** | **135** | *e*P | | **P** | **23 45 53.4** | | **0.0** |
| **LDASE** | **Londrina, Braz** | **14.71** | **104** | *e*P | | **P** | **23 45 58.5** | | **-0.5** |
| **ALGR** | **Alto Alegre (B** | **14.86** | **126** | *e*P | | **Pn** | **23 46 00.9** | | **+0.3** |
| **ITAB** | **Concordia** | **14.86** | **119** | *e*P | | **Pn** | **23 46 01.4** | | **+0.8** |
| **ARAG** | **Araguaiana, MT** | **14.94** | **74** | *e*P | | **Pn** | **23 46 01.8** | | **+0.2** |
| **CPSB** | **Cacapava Do Su** | **15.44** | **132** | *e*P | | **Pn** | **23 46 09.1** | | **+1.6** |
| **FRTB** | **Fartura** | **16.12** | **103** | *e*P | | **Pn** | **23 46 15.1** | | **-0.7** |
| **PLTB** | **Pedras Altas** | **16.17** | **136** | *e*P | | **P** | **23 46 15.1** | | **+0.1** |
| **CNLB** | **Canela** | **16.77** | **124** | *e*P | | **Pn** | **23 46 22.6** | | **-0.8** |
| **BB19B** | **Bebedouro** | **16.98** | **95** | *e*P | | **Pn** | **23 46 24.8** | | **-1.2** |
| **SNDB** | **Serra Nova Dou** | **17.06** | **62** | *e*P | | **Pn** | **23 46 24.9** | | **-1.9** |
| **IPMB** | **Ipameri, GO** | **17.63** | **85** | *e*P | | **Pn** | **23 46 32.1** | | **-1.5** |
| **RCLB** | **Rio Claro- Sao** | **17.92** | **99** | *e*P | | **P** | **23 46 34.4** | | **+0.1** |
| **PET01** | **Itanhaem-SP** | **18.32** | **105** | *e*P | | **Pn** | **23 46 39.8** | | **-1.8** |
| **BDFB** | **Brasilia** | **18.41** | **78** | P | | **Pn** | **23 46 40.6** | | **-2.2** |
| | comp=Z,5.4nm,0.6s,baz=244,slow=13,SNR=9.5 | | | | | | | | |
| **VAO** | **Valinhos** | **18.47** | **101** | *e*P | | **P** | **23 46 40.0** | | **-0.2** |
| **PMNB** | **Patos De Minas** | **19.19** | **87** | *e*P | | **P** | **23 46 48.2** | | **+0.2** |
| **ITTB** | **Itaituba** | **19.32** | **35** | *e*P | | **P** | **23 46 48.7** | | **-0.6** |
| **PLCA** | **Paso Flores** | **20.36** | **188** | P | | **P** | **23 47 02.3** | | **+2.0** |
| | comp=Z,1.9nm,0.6s,baz=2.1,slow=10,SNR=6.5 | | | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | | | |
| **PLCA** | **Paso Flores** | **20.36** | **188** | *e*P | | **P** | **23 47 02.8** | | **+2.5** |
| **BSCB** | **Bom Sucesso** | **20.49** | **95** | *e*P | | **P** | **23 47 02.5** | | **+0.5** |
| **SMTB** | **Santa Maria do** | **21.81** | **61** | *e*P | | **P** | **23 47 14.8** | | **-0.3** |
| **DIAM** | **Diamantina, MG** | **21.82** | **88** | *e*P | | **P** | **23 47 15.5** | | **+0.2** |
| **ALF01** | **Guarapari-ES** | **24.30** | **95** | *e*P | | **P** | **23 47 38.3** | | **+0.7** |
| **PMSA** | **Palmer Station** | **44.21** | **178** | *e*P | | **P** | **23 50 31.2** | | **+4.2** |
| **TORD** | **Torodi Ar. Bea** | **75.09** | **70** | P | | **P** | **23 53 56.8** | | **-1.3** |
| | comp=Z,2.7nm,0.4s,baz=256,slow=5.2,SNR=10 | | | | | | | | |
| | comp=Z,2.7nm,0.4s | | | | | | | | |
| **BOSA** | **Boshof** | **82.04** | **117** | P | | **P** | **23 54 36.0** | | **+0.1** |
| | comp=Z,1.9nm,0.5s,baz=262,slow=3.7,SNR=5.9 | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **83.73** | **44** | P | | **P** | **23 54 44.9** | | **+0.8** |
| | comp=Z,0.6nm,0.8s,baz=254,slow=4.6,SNR=2.8 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |

*IDC **06** 23:48:30.3±2.7,41°.42N×78°.51E,h0km,mb3.4/1, mbtmp3.5/5,ML2.8/4,MS1.9/1,Error ellipse: s-maj=30.4km s-min=24.6km az=98.0*
*SOME **06** 23:48:31.8,41°.38N×78°.53E,h10km,MS3.0*
*KRNET **06** 23:48:32.6±0.1,41°.45N×78°.50E,h16km,mb3.8*
*NNC **06** 23:48:33.4±0.6,41°.43N×78°.57E,h0km,mb4.5,mpv4.2, Error ellipse: s-maj=4.5km s-min=3.0km az=165.0*
*KNET **06** 23:48:34.5±1.0,41°.23N×78°.12E,h4km±8km,ml3.5,Error ellipse: s-maj=25.1km s-min=5.5km az=41.0*
*MOS **06** 23:48:36.7±0.9,41°.50N×78°.50E,h31km,mb3.9/1,Error ellipse: s-maj=6.7km s-min=5.1km az=112.6*

**ISC 06 23:48:35.3±1.5,41°.53N±0°.05×78°.51E±0°.03,h12km±10km, n133,σ1$34/206,38C-41D,Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **PRZ** | **Przheval'sk** | **0.96** | **355** | ⇓*e*P | | **Pb** | **23 48 52.6** | | **-1.4** |
| | baz=56 | | | | | | | | |
| PRZ | | | | ⇓*e*S | | **Sg** | **23 49 07.3** | | **+0.9** |
| | baz=56 | | | | | | | | |
| **PRZ** | **Przheval'sk** | **0.96** | **355** | ⇓*e*PG | | **Pb** | **23 48 52.6** | | **-1.4** |
| PRZ | | | | *e*S | | **Sg** | **23 49 07.3** | | **+0.9** |
| **KDJ** | **Kajisay** | **1.16** | **302** | ⇓*e*P | | **Pn** | **23 48 55.2** | | **-2.4** |
| | baz=5.0 | | | | | | | | |
| KDJ | | | | ⇓*i*S | | **Sb** | **23 49 11.6** | | **-0.9** |
| | baz=5.0 | | | | | | | | |
| **KDJ** | **Kajisay** | **1.16** | **302** | ⇓*e*PG | | **Pn** | **23 48 55.2** | | **-2.4** |
| KDJ | | | | *e*S | | **Sb** | **23 49 11.6** | | **-0.9** |
| **SATY** | **Saty** | **1.54** | **357** | *e*P | | **Pn** | **23 49 03.1** | | **+0.5** |
| | 152nm,0.2s | | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **23 49 25.6** | | **+0.9** |
| | 1μm,0.3s | | | | | | | | |
| **SATY** | **Saty** | **1.54** | **357** | P | | **Pn** | **23 49 03.1** | | **+0.5** |
| | 152nm,0.2s | | | | | | | | |
| SATY | | | | S | | **Sg** | **23 49 25.6** | | **+0.9** |
| | 1μm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **1.64** | **358** | *e*P | | **Pb** | **23 49 04.9** | | **-0.7** |
| | 379nm,0.2s | | | | | | | | |
| ZHN | | | | *e*S | | **Sg** | **23 49 28.7** | | **+0.5** |
| | 1μm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **1.64** | **358** | P | | **Pb** | **23 49 04.9** | | **-0.7** |
| | 379nm,0.2s | | | | | | | | |
| ZHN | | | | S | | **Sg** | **23 49 28.7** | | **+0.5** |
| | 1μm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **1.64** | **358** | *e*PN | | **Pn** | **23 49 04.8** | | **+0.7** |
| **UZB** | **Uzynbulak** | **1.67** | **13** | *e*P | | **Pn** | **23 49 04.8** | | **+0.4** |
| | 109nm,0.3s | | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **23 49 28.8** | | **-0.1** |
| | 321nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **1.67** | **13** | P | | **Pn** | **23 49 04.8** | | **+0.4** |
| | 109nm,0.3s | | | | | | | | |
| UZB | | | | S | | **Sg** | **23 49 28.8** | | **-0.1** |
| | 321nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **1.67** | **13** | *e*PN | | **Pn** | **23 49 04.8** | | **+0.4** |
| **SHLS** | **Shalkode** | **1.78** | **23** | *e*P | | **Pg** | **23 49 09.6** | | **+0.2** |
| | 210nm,0.2s | | | | | | | | |
| SHLS | | | | *e*S | | **Sg** | **23 49 36.7** | | **+4.2** |
| | 805nm,0.2s | | | | | | | | |
| **SHLS** | **Shalkode** | **1.78** | **23** | Pg | | **Pg** | **23 49 09.6** | | **+0.2** |
| | 210nm,0.2s | | | | | | | | |
| SHLS | | | | Lg | | Lg | 23 49 36.7 | | |
| | 805nm,0.2s | | | | | | | | |
| **SHLS** | **Shalkode** | **1.78** | **23** | *e*PN | | **Pg** | **23 49 09.4** | | **0.0** |
| **ULHL** | **Ulahol** | **1.84** | **294** | ⇓P | | **Pn** | **23 49 07.3** | | **+0.3** |
| | 182nm,0.4s,SNR=113 | | | | | | | | |
| ULHL | | | | ⇑S | | **Sb** | **23 49 32.4** | | **+0.3** |
| | 299nm,0.2s | | | | | | | | |
| **ULHL** | **Ulahol** | **1.84** | **294** | ⇑*e*P | | **Pn** | **23 49 07.2** | | **+0.3** |
| | baz=96 | | | | | | | | |
| ULHL | | | | ⇑*e*S | | **Sb** | **23 49 32.6** | | **+0.6** |
| | baz=96 | | | | | | | | |
| **ULHL** | **Ulahol** | **1.84** | **294** | *e*PN | | **Pn** | **23 49 07.2** | | **+0.3** |
| ULHL | | | | *e*S | | **Sb** | **23 49 32.6** | | **+0.6** |
| **NRN** | **Naryn** | **1.89** | **268** | ⇑*e*P | | **Pn** | **23 49 07.8** | | **+0.2** |
| | baz=70 | | | | | | | | |
| NRN | | | | ⇑*e*S | | **Sb** | **23 49 34.0** | | **+0.5** |
| | baz=70 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.90** | **323** | *e*P | | **Pb** | **23 49 09.6** | | **-0.6** |
| | 139nm,0.3s | | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **23 49 36.8** | | **+0.3** |
| | 885nm,0.5s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.90** | **323** | Pg | | **Pb** | **23 49 09.6** | | **-0.6** |
| | 139nm,0.3s | | | | | | | | |
| TNSS | | | | Lg | | Lg | 23 49 36.8 | | |
| | 885nm,0.5s | | | | | | | | |
| **KPKS** | **Kokpek** | **1.94** | **4** | *e*P | | **Pb** | **23 49 10.4** | | **-0.3** |
| | 284nm,0.2s | | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **23 49 38.3** | | **+0.5** |
| | 1μm,0.1s | | | | | | | | |
| **KPKS** | **Kokpek** | **1.94** | **4** | Pg | | **Pb** | **23 49 10.4** | | **-0.3** |
| | 284nm,0.2s | | | | | | | | |
| KPKS | | | | Lg | | Lg | 23 49 38.3 | | |
| | 1μm,0.1s | | | | | | | | |
| **KPKS** | **Kokpek** | **1.94** | **4** | *e*PN | | **Pb** | **23 49 10.2** | | **-0.5** |
| **PDGK** | **Podgornoye** | **1.94** | **22** | Pg | | **Pb** | **23 49 10.0** | | **-0.7** |
| | 74nm,0.2s | | | | | | | | |
| PDGK | | | | Lg | | Lg | 23 49 37.4 | | |
| | 245nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **1.94** | **22** | ⇑Pn | | **Pb** | **23 49 09.5** | | **-1.2** |
| | 110nm,0.6s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 23 49 37.2 | | |
| | 428nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **1.94** | **22** | *i* PN | | **Pb** | **23 49 09.5** | | **-1.2** |
| PDGK | | | | pmax | | pmax | | | |
| | comp=Z,110nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **1.96** | **327** | *e*P | | **Pb** | **23 49 10.8** | | **-0.2** |
| | comp=Z,141nm,0.3s | | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **23 49 38.8** | | **+0.4** |
| | comp=Z,946nm,1.3s | | | | | | | | |
| **MDOK** | **Medeo** | **1.96** | **327** | ⇓Pn | | **Pn** | **23 49 09.9** | | **+1.4** |
| | comp=Z,133nm,0.5s | | | | | | | | |
| MDOK | | | | Pg | | **Pb** | **23 49 10.8** | | **-0.2** |
| | comp=Z,141nm,0.3s | | | | | | | | |
| MDOK | | | | ⇑Sn | | **Sg** | **23 49 38.1** | | **-0.3** |
| | comp=Z,565nm,0.4s | | | | | | | | |
| MDOK | | | | Lg | | Lg | 23 49 38.8 | | |
| | comp=Z,946nm,1.3s | | | | | | | | |
| **MDOK** | **Medeo** | **1.96** | **327** | PN | | **Pn** | **23 49 09.9** | | **+1.4** |
| MDOK | | | | S | | **Sg** | **23 49 38.8** | | **+0.4** |
| **KURS** | **Kuram** | **1.98** | **353** | *e*P | | **Pb** | **23 49 11.1** | | **-0.2** |
| | comp=Z,80nm,0.3s | | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **23 49 39.4** | | **+0.5** |
| | comp=Z,541nm,0.4s | | | | | | | | |
| **KURS** | **Kuram** | **1.98** | **353** | Pg | | **Pb** | **23 49 11.1** | | **-0.2** |
| | comp=Z,80nm,0.3s | | | | | | | | |
| KURS | | | | Lg | | Lg | 23 49 39.4 | | |
| | comp=Z,541nm,0.4s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.00** | **329** | *e*P | | **Pb** | **23 49 11.3** | | **-0.3** |
| | comp=Z,429nm,0.1s | | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **23 49 39.8** | | **+0.3** |
| | comp=Z,2μm,0.1s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.00** | **329** | Pg | | **Pb** | **23 49 11.3** | | **-0.3** |
| | comp=Z,429nm,0.1s | | | | | | | | |
| KOTS | | | | Lg | | Lg | 23 49 39.8 | | |
| | comp=Z,2μm,0.1s | | | | | | | | |
| **KNDC** | **Almaty** | **2.04** | **326** | ⇓Pn | | **Pb** | **23 49 11.3** | | **-1.1** |
| | comp=Z,210nm,0.5s | | | | | | | | |
| KNDC | | | | ⇑Sn | | **Sg** | **23 49 40.7** | | **-0.2** |
| | comp=Z,597nm,0.5s | | | | | | | | |
| **KNDC** | **Almaty** | **2.04** | **326** | PN | | **Pb** | **23 49 11.3** | | **-1.1** |
| KNDC | | | | S | | **Sg** | **23 49 40.7** | | **-0.2** |
| **AAA** | **Alma-Ata** | **2.06** | **325** | *e*P | | **Pb** | **23 49 12.8** | | **+0.2** |
| | comp=Z,574nm,0.2s | | | | | | | | |
| AAA | | | | *e*S | | **Sg** | **23 49 42.2** | | **+0.9** |
| | comp=Z,28μm,39.6s | | | | | | | | |
| **AAA** | **Alma-Ata** | **2.06** | **325** | Pg | | **Pb** | **23 49 12.8** | | **+0.2** |
| | comp=Z,574nm,0.2s | | | | | | | | |
| AAA | | | | Lg | | Lg | 23 49 42.2 | | |
| | comp=Z,3μm,0.4s | | | | | | | | |
| **IZV** | **Izvestkoviy** | **2.06** | **318** | *e*P | | **Pb** | **23 49 12.1** | | **-0.7** |
| | comp=Z,0.2nm,0.1s | | | | | | | | |
| IZV | | | | *e*S | | **Sg** | **23 49 41.1** | | **-0.5** |
| | comp=Z,545nm,0.2s | | | | | | | | |
| **IZV** | **Izvestkoviy** | **2.06** | **318** | Pg | | **Pb** | **23 49 12.1** | | **-0.7** |
| | comp=Z,0.2nm,0.1s | | | | | | | | |
| IZV | | | | Lg | | Lg | 23 49 41.1 | | |
| | comp=Z,545nm,0.2s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.14** | **298** | ⇑*e*P | | **Pn** | **23 49 12.0** | | **+1.0** |
| | baz=99 | | | | | | | | |
| BOOM | | | | ⇑*e*S | | **Sb** | **23 49 40.8** | | **+0.1** |
| | baz=99 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.14** | **298** | *e*PN | | **Pn** | **23 49 12.0** | | **+1.0** |
| BOOM | | | | *e*S | | **Sb** | **23 49 40.8** | | **+0.1** |
| **MTBS** | **Maitube** | **2.22** | **317** | *e*P | | **Pb** | **23 49 15.1** | | **-0.3** |
| | comp=Z,98nm,0.1s | | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **23 49 46.4** | | **-0.4** |
| | comp=Z,522nm,0.4s | | | | | | | | |
| **MTBS** | **Maitube** | **2.22** | **317** | Pg | | **Pb** | **23 49 15.1** | | **-0.3** |
| | comp=Z,98nm,0.1s | | | | | | | | |
| MTBS | | | | Lg | | Lg | 23 49 46.4 | | |
| | comp=Z,522nm,0.4s | | | | | | | | |
| **KTMS** | **Ketmen** | **2.35** | **35** | *e*P | | **Pb** | **23 49 17.6** | | **-0.1** |
| | comp=Z,22nm,0.4s | | | | | | | | |
| KTMS | | | | *e*S | | **Sg** | **23 49 50.5** | | **-0.4** |
| | comp=Z,183nm,0.5s | | | | | | | | |
| **KTMS** | **Ketmen** | **2.35** | **35** | Pg | | **Pb** | **23 49 17.6** | | **-0.1** |
| | comp=Z,22nm,0.4s | | | | | | | | |
| KTMS | | | | Lg | | Lg | 23 49 50.5 | | |
| | comp=Z,183nm,0.5s | | | | | | | | |
| **KST** | **Kastek** | **2.42** | **310** | *e*P | | **Pb** | **23 49 18.6** | | **-0.2** |
| | comp=Z,62nm,0.5s | | | | | | | | |
| KST | | | | *e*S | | **Sg** | **23 49 52.2** | | **-0.9** |
| | comp=Z,533nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **2.42** | **310** | Pg | | **Pb** | **23 49 18.6** | | **-0.2** |
| | comp=Z,62nm,0.5s | | | | | | | | |
| KST | | | | Lg | | Lg | 23 49 52.2 | | |
| | comp=Z,533nm,0.6s | | | | | | | | |
| **KTBS** | **Kar

comp=Z,58nm,0.5s
**CHMS Chumysh 3.15 299**⇑*i*P **Pn 23 49 25.9 +1.1**
baz=0.0
CHMS ⇑*i*S **Sn 23 50 04.8 +2.4**
baz=0.0
**CHMS Chumysh 3.15 299** *i* PN **Pn 23 49 25.9 +1.1**
CHMS *i* S **Sn 23 50 04.8 +2.4**
**AAK Ala-Archa 3.19 292** ⇑P **Pn 23 49 26.8 +1.4**
comp=Z,20nm,0.2s,SNR=7.7
**AAK Ala-Archa 3.19 292** ⇑Pn **Pn 23 49 26.6 +1.2**
comp=Z,19nm,0.7s
AAK ⇓Lg Lg 23 50 15.9
comp=Z,54nm,0.5s
**AAK Ala-Archa 3.19 292**⇓*i*P **Pn 23 49 26.4 +1.0**
baz=93
AAK ⇓*e*S **Sn 23 50 05.7 +2.3**
baz=93
**AAK Ala-Archa 3.19 292**⇓*i*PN **Pn 23 49 26.4 +1.0**
AAK *e*S **Sn 23 50 05.7 +2.3**
**USP Ospenovka 3.44 302** ⇓P **Pn 23 49 30.2 +1.4**
comp=Z,36nm,0.4s,SNR=10
**USP Ospenovka 3.44 302**⇑*e*P **Pn 23 49 30.0 +1.2**
baz=3.0
USP ⇑*i*S **Sn 23 50 11.9 +2.4**
baz=3.0
**USP Ospenovka 3.44 302** *e*PN **Pn 23 49 30.0 +1.2**
USP *e*S **Sn 23 50 11.9 +2.4**
**SGDS Sogindy 3.45 305** Pg **Pb 23 49 36.5 +0.1**
comp=Z,8.0nm,0.5s
SGDS Lg Lg 23 50 22.8
comp=Z,89nm,0.4s
**TDK Taldyqorghan 3.48 359** *e*P **Pb 23 49 37.7 +0.9**
comp=Z,100nm,0.5s
TDK *e*S **Sg 23 50 25.3 -1.6**
comp=Z,339nm,0.9s
**TDK Taldyqorghan 3.48 359** Pg **Pb 23 49 37.7 +0.9**
comp=Z,100nm,0.5s
TDK Lg Lg 23 50 25.3
comp=Z,339nm,0.9s
**AML Almayashu 3.65 281** ⇓P **Pn 23 49 30.8 -1.1**
comp=Z,22nm,0.2s,SNR=8.8
**AML Almayashu 3.65 281**⇑*e*P **Pn 23 49 32.8 +0.9**
baz=82
AML ⇑*e*S **Sn 23 50 16.7 +1.6**
baz=82
**AML Almayashu 3.65 281** *e*PN **Pn 23 49 32.8 +0.9**
AML *e*S **Sn 23 50 16.7 +1.6**
**EKS2 Erkin-Say 3.70 289**⇓*e*P **Pn 23 49 33.4 +1.0**
baz=91
EKS2 ⇓*e*S **Sn 23 50 17.8 +1.8**
baz=91
**EKS2 Erkin-Say 3.70 289**⇓*e*PN **Pn 23 49 33.4 +1.0**
EKS2 *e*S **Sn 23 50 17.8 +1.8**
**SFK Sufi-Kurgan 4.09 250**⇓*e*P **Pn 23 49 38.3 +0.5**
baz=51
SFK ⇓*i*S **Sn 23 50 26.2 +0.5**
baz=51
**SFK Sufi-Kurgan 4.09 250**⇓*e*PN **Pn 23 49 38.3 +0.5**
SFK *e*S **Sn 23 50 26.2 +0.5**
**MRKS Merke 4.11 289** *e*P **Pb 23 49 48.4 +0.8**
comp=Z,4.6nm,0.5s
MRKS *e*S **Sg 23 50 43.6 -3.7**
comp=Z,53nm,0.3s
**MRKS Merke 4.11 289** Pg **Pb 23 49 48.4 +0.8**
comp=Z,4.6nm,0.5s
MRKS Lg Lg 23 50 43.6
comp=Z,53nm,0.3s
**ARSB Arslanbob 4.16 269**⇓*e*P **Pn 23 49 39.5 +0.8**
baz=70
ARSB ⇓*i*S **Sn 23 50 28.4 +1.1**
baz=70
**ARSB Arslanbob 4.16 269**⇓*e*PN **Pn 23 49 39.5 +0.8**
ARSB *e*S **Sn 23 50 28.4 +1.1**
**OHH Osh 4.44 259**⇑*e*P **Pn 23 49 43.2 +0.6**
baz=60
OHH ⇑*e*S **Sn 23 50 34.7 +0.5**
baz=60
**OHH Osh 4.44 259** *e*PN **Pn 23 49 43.2 +0.6**
OHH *e*S **Sn 23 50 34.7 +0.5**
**MNAS Manas 4.58 284**⇑*e*P **Pn 23 49 45.5 +1.1**
baz=85
MNAS ⇑*e*S **Sn 23 50 38.8 +1.2**
baz=85
**MNAS Manas 4.58 284** *e*PN **Pn 23 49 45.5 +1.1**
MNAS *e*S **Sn 23 50 38.8 +1.2**
**TRKS Terek-Say 5.53 272**⇑*e*P **Pn 23 49 58.2 +0.6**
baz=73
TRKS ⇑*i*S **Sn 23 51 00.5 -0.7**
baz=73
**TRKS Terek-Say 5.53 272** *e*PN **Pn 23 49 58.2 +0.6**
**MAKZ Makanchi 5.84 24** ⇓Pn **Pn 23 50 01.3 -0.4**
comp=Z,6.7nm,1.1s
MAKZ ⇓Lg Lg 23 51 41.7
comp=Z,11nm,0.6s
**MAKZ Makanchi 5.84 24** *i* PN **Pn 23 50 01.3 -0.4**
MAKZ pmax pmax
comp=Z,7.0nm,1.1s
**MK31 Makanchi Array 5.93 26** Pn **Pn 23 50 02.8 -0.2**
comp=Z,1.0nm,0.3s,baz=206,slow=13,SNR=101
MK31 ⇑Sn **Sn 23 51 13.1 +2.4**
comp=Z,12nm,0.8s,baz=204,slow=24,SNR=3.9
MK31 ⇓Lg Lg 23 51 43.8
comp=Z,12nm,0.5s
**MK31 Makanchi Array 5.93 26** *i* PN **Pn 23 50 02.7 -0.2**
**MKAR Makanchi Array 5.93 26** Pn **Pn 23 50 02.5 -0.4**
comp=Z,1.4nm,0.3s,baz=210,slow=14,SNR=63
MKAR Sn **Sn 23 51 11.3 +0.6**
comp=Z,1.5nm,0.3s,baz=209,slow=20,SNR=5.9
MKAR Lg Lg 23 51 39.0
comp=Z,3.5nm,0.3s,baz=214,slow=26,SNR=5.4
MKAR LR LR 23 51 40.4
comp=Z,12nm,21.2s,baz=187,slow=32
comp=Z,1.9nm,0.3s
**MKAR Makanchi Array 5.93 26** *i* PN **Pn 23 50 03.0 +0.1**
MKAR pmax pmax
comp=Z,2.0nm,0.3s
**KK31 Karatay Array 6.13 288** ⇓Pg **Pb 23 50 26.1 +4.1**
comp=Z,3.1nm,0.6s,baz=102,slow=15,SNR=26
KK31 Lg Lg 23 51 52.0
comp=Z,3.6nm,0.4s,baz=101,slow=28,SNR=5.9
**KKAR Karatay Array 6.13 288**⇑*e*P **Pn 23 50 06.9 +1.2**
baz=88
KKAR ⇑*e*S **Sn 23 51 15.6 -0.2**
baz=88
**KKAR Karatay Array 6.13 288** *e*PN **Pn 23 50 06.9 +1.2**
**GAR Garm 6.75 251**⇑*e*P **Pn 23 50 14.7 +0.4**
baz=51
GAR ⇑*e*S **Sn 23 51 29.4 -1.8**
baz=51
**GAR Garm 6.75 251** *e*PN **Pn 23 50 14.7 +0.4**
**OTUK Ortayu 8.02 329** ⇓Pn **Pn 23 50 33.6 +2.1**
comp=Z,3.8nm,1.1s
OTUK ⇓Lg Lg 23 52 53.0
comp=Z,40nm,0.8s
**OTUK Ortayu 8.02 329** P **Pn 23 50 33.6 +2.1**
**KURBB Kurchatov Arra 9.10 0** Pn **Pn 23 50 44.0 -2.4**
comp=Z,0.1nm,0.3s,baz=185,slow=12,SNR=7.0
KURBB Sn **Sn 23 52 26.3 -2.3**
comp=Z,0.1nm,0.3s,baz=217,slow=9.1,SNR=1.4
KURBB Lg Lg 23 53 21.5
comp=Z,0.2nm,0.3s,baz=182,slow=27,SNR=10
comp=Z,0.4nm,0.4s
**KURK Kurchatov 9.19 0**⇑Lg Lg 23 53 25.1
comp=Z,31nm,0.9s
**KURK Kurchatov 9.19 0** *i* P **Pn 23 50 48.0 +0.4**
**DGZ Jazzator, Alta 10.29 34** *i* P **Pn 23 51 06.6 +3.9**
**BVA0 Borovoye Array 12.75 337** Pn **Pn 23 51 36.4 +0.2**
comp=Z,0.1nm,0.4s,baz=130,slow=14,SNR=9.4
**BVA0 Borovoye Array 12.75 337** P **Pn 23 51 36.4 +0.2**
**BRVK Borovoye 12.81 337** *i* P **Pn 23 51 32.5 -4.5**
**ZALV Zalesovo Beam 13.13 17** Pn **Pn 23 51 37.5 -3.9**
comp=Z,0.1nm,0.3s,baz=205,slow=13,SNR=1.5
ZALV Lg Lg 23 55 29.1
comp=Z,0.1nm,0.3s,baz=194,slow=24,SNR=2.1
comp=Z,0.4nm,0.5s
**AB31 Akbulak array 15.13 307** Pn **Pn 23 52 09.8 +1.0**
comp=Z,0.3nm,0.6s,baz=114,slow=13,SNR=3.6
**AB31 Akbulak array 15.13 307** P **Pn 23 52 09.8 +1.0**
**ARU Arti 19.73 326** P **P 23 53 01.5 -3.1**
baz=142,slow=14,SNR=3.8
comp=Z,1.6nm,0.5s
**SONM Songino Array 20.74 63** P **P 23 53 12.6 -3.2**
comp=Z,1.8nm,0.8s,baz=267,slow=11,SNR=7.5
comp=Z,1.8nm,0.8s
**ULN Ulaanbaatar 21.18 63** *i* P **P 23 53 24.0 +3.4**
ULN pmax pmax
comp=Z,2.0nm,0.9s

*IDC **06** 23:49:03.7±3.6,34.°96N×22.°58E,h0km,mb3.9/5, mbtmp3.7/8,ML3.4/3,MS3.0/2,Error ellipse: s-maj=65.6km s-min=23.2km az=28.0*
*THE **06** 23:49:13.7,35.°17N×23.°02E,h12km,ML3.5/5,Error ellipse: s-maj=1.0km s-min=0.4km az=46.0*
*ATH **06** 23:49:14.1,35.°19N×23.°04E,h16km±1km,ML3.3/10,Error ellipse: s-maj=1.9km s-min=0.8km az=172.0*
**ISC 06 23:49:08.5±1.6,35.°05N±0.°06×22.°83E±0.°05,h15km±9km, n97,σ2s00/111,mb3.7/5,Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNDR** | **Palaiochora Ch** | **0.72** | **75** | P | **Pb** | **23 49 23.4** | **+0.5** |
| KNDR | | | | S | **Sg** | **23 49 30.4** | **-1.9** |
| KNDR | | | | AML | AML | 23 49 36.3 | |
| | comp=N,29594μm,0.6s | | | | | | |
| KNDR | | | | AML | AML | 23 49 37.5 | |
| | comp=E,26633μm,0.4s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.90** | **25** | P | **Pn** | **23 49 27.3** | **+0.6** |
| ANKY | | | | S | **Sb** | **23 49 38.9** | **+1.2** |
| | comp=E,3μm,0.7s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.90** | **25** | P | **Pn** | **23 49 27.3** | **+0.6** |
| ANKY | | | | S | **Sg** | **23 49 37.5** | **-0.3** |
| ANKY | | | | AML | AML | 23 49 42.2 | |
| | comp=E,4434μm,0.9s | | | | | | |
| ANKY | | | | AML | AML | 23 49 42.7 | |
| | comp=N,4971μm,0.7s | | | | | | |
| **RODP** | **Rodopos** | **0.91** | **56** | P | **Pn** | **23 49 27.9** | **+1.0** |
| RODP | | | | S | **Sb** | **23 49 37.9** | **-0.2** |
| **IMMV** | **Iera Moni Meta** | **1.03** | **66** | P | **Pn** | **23 49 29.6** | **+1.2** |
| IMMV | | | | S | **Sb** | **23 49 41.7** | **+0.3** |
| | comp=N,4μm,0.6s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.03** | **66** | P | **Pn** | **23 49 29.8** | **+1.4** |
| IMMV | | | | S | **Sg** | **23 49 40.0** | **-1.8** |
| IMMV | | | | AML | AML | 23 49 48.2 | |
| | comp=E,6731μm,0.9s | | | | | | |
| IMMV | | | | AML | AML | 23 49 48.7 | |
| | comp=N,7906μm,0.6s | | | | | | |
| **GVD** | **Gavdhos** | **1.05** | **101** | P | **Pn** | **23 49 31.1** | **+2.2** |
| GVD | | | | S | **Sn** | **23 49 45.1** | **+1.8** |
| | comp=N,3μm,0.4s | | | | | | |
| **GVD** | **Gavdhos** | **1.05** | **101** | P | **Pn** | **23 49 31.0** | **+2.2** |
| GVD | | | | S | **Sn** | **23 49 43.9** | **+0.6** |
| GVD | | | | AML | AML | 23 49 49.2 | |
| | comp=N,6265μm,0.4s | | | | | | |
| GVD | | | | AML | AML | 23 49 54.4 | |
| | comp=E,6340μm,0.5s | | | | | | |
| **CHAN** | **Chania** | **1.10** | **65** | P | **Pn** | **23 49 30.9** | **+1.5** |
| CHAN | | | | S | **Sg** | **23 49 42.9** | **-1.2** |
| CHAN | | | | AML | AML | 23 49 50.2 | |
| | comp=E,6026μm,0.6s | | | | | | |
| CHAN | | | | AML | AML | 23 49 52.3 | |
| | comp=N,5619μm,0.5s | | | | | | |
| **KTHA** | **Kythira Island** | **1.22** | **9** | P | **Pg** | **23 49 33.5** | **+1.5** |
| KTHA | | | | S | **Sn** | **23 49 49.4** | **+2.1** |
| | comp=N,2μm,0.6s | | | | | | |
| **KTHA** | **Kythira Island** | **1.22** | **9** | P | **Pg** | **23 49 33.9** | **+1.9** |
| KTHA | | | | S | **Sb** | **23 49 47.5** | **+0.6** |
| KTHA | | | | AML | AML | 23 49 54.5 | |
| | comp=E,4572μm,0.8s | | | | | | |
| KTHA | | | | AML | AML | 23 49 58.3 | |
| | comp=N,1022μm,0.6s | | | | | | |
| **TMBK** | **Timbaki Herakl** | **1.59** | **89** | P | **Pg** | **23 49 38.8** | **-0.3** |
| **TMBK** | **Timbaki Herakl** | **1.59** | **89** | P | **Pg** | **23 49 38.3** | **-0.8** |
| **VLI** | **Veliai** | **1.67** | **3** | P | **Pg** | **23 49 40.5** | **-0.1** |
| **VLI** | **Veliai** | **1.67** | **3** | P | **Pg** | **23 49 40.4** | **-0.1** |
| VLI | | | | S | **Sn** | **23 49 58.9** | **+0.5** |
| VLI | | | | AML | AML | 23 50 10.0 | |
| | comp=N,2643μm,1.2s | | | | | | |
| VLI | | | | AML | AML | 23 50 10.2 | |
| | comp=E,1678μm,1.2s | | | | | | |
| **IDI** | **Anoyia** | **1.71** | **81** | P | **Pb** | **23 49 39.7** | **+0.1** |
| **IDI** | **Anoyia** | **1.71** | **81** | Pn | **Pb** | **23 49 39.5** | **-0.2** |
| | comp=E,8.1nm,0.3s,baz=257,slow=7.1,SNR=63 | | | | | | |
| IDI | | | | Sn | **Sg** | **23 50 04.6** | **+1.1** |
| | comp=E,33nm,0.3s,baz=339,slow=18,SNR=9.3 | | | | | | |
| **IDI** | **Anoyia** | **1.71** | **81** | P | **Pb** | **23 49 39.7** | **+0.1** |
| IDI | | | | AML | AML | 23 50 07.8 | |
| | comp=N,886μm,0.4s | | | | | | |
| IDI | | | | AML | AML | 23 50 15.1 | |
| | comp=E,723μm,0.6s | | | | | | |
| **KSTL** | **Kastelli Herak** | **1.85** | **82** | P | **Pg** | **23 49 45.4** | **+1.3** |
| KSTL | | | | S | **Sg** | **23 50 08.8** | **+0.6** |
| **KSTL** | **Kastelli Herak** | **1.85** | **82** | P | **Pg** | **23 49 45.7** | **+1.6** |
| **PYL** | **PYLOS** | **2.04** | **335** | P | **Pb** | **23 49 46.2** | **+0.9** |
| **PYL** | **PYLOS** | **2.04** | **335** | P | **Pb** | **23 49 46.9** | **+1.6** |
| PYL | | | | S | **Sb** | **23 50 11.4** | **+0.9** |
| PYL | | | | AML | AML | 23 50 35.5 | |
| | comp=E,330μm,0.9s | | | | | | |
| PYL | | | | AML | AML | 23 50 39.9 | |
| | comp=N,439μm,1.2s | | | | | | |
| **MHLO** | **Agia Marina, M** | **2.07** | **38** | P | **Pb** | **23 49 45.4** | **-0.5** |
| MHLO | | | | S | **Sn** | **23 50 09.4** | **+1.0** |
| | comp=N,2μm,0.7s | | | | | | |
| **MHLO** | **Agia Marina, M** | **2.07** | **38** | P | **Pb** | **23 49 44.9** | **-1.0** |
| **ITM** | **Ithomi** | **2.25** | **341** | P | **Pb** | **23 49 49.2** | **+0.4** |
| **ITM** | **Ithomi** | **2.25** | **341** | P | **Pb** | **23 49 49.3** | **+0.5** |
| ITM | | | | AML | AML | 23 50 33.0 | |
| | comp=N,164μm,0.8s | | | | | | |
| ITM | | | | AML | AML | 23 50 44.5 | |
| | comp=E,207μm,0.8s | | | | | | |
| **KRND** | **KRANIDI** | **2.34** | **6** | P | **Pb** | **23 49 49.3** | **-1.1** |
| **KRND** | **KRANIDI** | **2.34** | **6** | P | **Pb** | **23 49 49.5** | **-0.9** |
| **THR5** | **Thira Island,** | **2.46** | **56** | P | **Pn** | **23 49 48.9** | **+0.7** |
| **THR6** | **Thira Island,** | **2.46** | **57** | P | **Pn** | **23 49 49.0** | **+0.8** |
| **SAP3** | **Santorini-Thir** | **2.47** | **55** | P | **Pn** | **23 49 49.6** | **+1.3** |
| **SNT5** | **Nea Kammeni, S** | **2.49** | **56** | P | **Pn** | **23 49 49.2** | **+0.7** |
| **THR3** | **Thira Island,** | **2.49** | **56** | P | **Pn** | **23 49 49.4** | **+0.8** |
| **SANT** | **Santorini** | **2.51** | **58** | P | **Pn** | **23 49 50.7** | **+1.8** |
| **SANT** | **Santorini** | **2.51** | **58** | P | **Pn** | **23 49 51.0** | **+2.1** |
| **CMBO** | **Columbo, Santo** | **2.53** | **55** | P | **Pn** | **23 49 49.6** | **+0.5** |
| **THR8** | **Santorini-Mono** | **2.54** | **57** | P | **Pn** | **23 49 50.0** | **+0.7** |
| **ZKR** | **Zakros** | **2.78** | **88** | P | **Pn** | **23 49 55.1** | **+2.6** |
| **VLY** | **Voula,Athens** | **2.90** | **15** | P | **Pn** | **23 49 56.5** | **+2.3** |
| **VLY** | **Voula,Athens** | **2.90** | **15** | P | **Pn** | **23 49 56.6** | **+2.3** |
| **GUR** | **Goura** | **2.91** | **352** | P | **Pn** | **23 49 57.9** | **+3.5** |
| **GUR** | **Goura** | **2.91** | **352** | P | **Pb** | **23 49 58.4** | **-1.7** |
| **LOUT** | **Loutraki** | **2.93** | **2** | P | **Pn** | **23 49 57.4** | **+2.7** |
| **APE** | **Apeiranthos** | **2.97** | **47** | P | **Pn** | **23 49 55.4** | **+0.1** |
| **ATH** | **Athens Observa** | **3.00** | **14** | P | **Pn** | **23 49 58.1** | **+2.5** |
| **ATH** | **Athens Observa** | **3.00** | **14** | P | **Pn** | **23 49 57.8** | **+2.2** |
| **ATHU** | **Athens Univers** | **3.01** | **15** | P | **Pn** | **23 49 57.9** | **+2.2** |
| **ATHU** | **Athens Univers** | **3.01** | **15** | P | **Pn** | **23 49 57.9** | **+2.2** |
| **KLV** | **Kalavryta, Ach** | **3.04** | **350** | P | **Pb** | **23 50 00.2** | **-2.1** |
| **KLV** | **Kalavryta, Ach** | **3.04** | **350** | P | **Pb** | **23 50 00.4** | **-2.0** |
| **PTL** | **Penteli** | **3.10** | **15** | P | **Pn** | **23 49 59.5** | **+2.4** |
| **PTL** | **Penteli** | **3.10** | **15** | P | **Pn** | **23 49 59.2** | **+2.2** |
| **DION** | **Dionisos Attik** | **3.15** | **16** | P | **Pn** | **23 49 59.9** | **+2.3** |
| **VIL2** | **Platees** | **3.17** | **6** | P | **Pn** | **23 49 59.6** | **+1.6** |
| **RLS** | **Riolos of Patr** | **3.19** | **340** | P | **Pb** | **23 50 02.6** | **-2.4** |
| **RLS** | **Riolos of Patr** | **3.19** | **340** | P | **Pb** | **23 50 02.6** | **-2.4** |
| **KALE** | **Kalithea** | **3.38** | **351** | P | **Pn** | **23 50 04.1** | **+3.2** |
| **KALE** | **Kalithea** | **3.38** | **351** | P | **Pn** | **23 50 04.0** | **+3.2** |
| **EFP** | **Efpalio** | **3.45** | **348** | P | **Pn** | **23 50 05.9** | **+4.2** |
| **EFP** | **Efpalio** | **3.45** | **348** | P | **Pn** | **23 50 06.3** | **+4.6** |
| **PSDA** | **Pessada-Kefalo** | **3.55** | **330** | P | **Pn** | **23 50 06.2** | **+3.1** |
| **VLS** | **Valsamata** | **3.60** | **331** | P | **Pn** | **23 50 06.6** | **+2.7** |
| **ANX** | **Ano Chora** | **3.61** | **349** | P | **Pn** | **23 50 07.8** | **+3.8** |
| **ANX** | **Ano Chora** | **3.61** | **349** | P | **Pn** | **23 50 08.2** | **+4.2** |
| **PVO** | **Paravola** | **3.71** | **344** | P | **Pn** | **23 50 09.9** | **+4.6** |
| **PVO** | **Paravola** | **3.71** | **344** | P | **Pn** | **23 50 09.9** | **+4.6** |
| **AXAR** | **Agios Charalam** | **3.71** | **358** | P | **Pn** | **23 50 08.4** | **+3.0** |
| **AXAR** | **Agios Charalam** | **3.71** | **358** | P | **Pn** | **23 50 08.3** | **+2.9** |
| **EVGI** | **Lefkada island** | **3.97** | **335** | P | **Pn** | **23 50 12.4** | **+3.5** |
| **LKD2** | **Lefkada island** | **4.12** | **336** | P | **Pn** | **23 50 14.6** | **+3.6** |
| **TSLK** | **Tsoukalades, L** | **4.15** | **336** | P | **Pn** | **23 50 15.4** | **+4.0** |
| **TYRN** | **Tyrnavos** | **4.67** | **354** | P | **Pn** | **23 50 21.1** | **+2.5** |
| **OHR** | **Ohrid** | **6.26** | **346** | *i* Pn | **Pn** | **23 50 43.0** | **+2.7** |
| **STIP** | **Stip** | **6.65** | **356** | *i* Pn | **Pn** | **23 50 48.9** | **+3.1** |
| **DRME** | **Dracevica, Mon** | **7.67** | **339** | *e*Pn | **Pn** | **23 51 00.0** | **+0.2** |
| **PDG** | **Podgorica** | **7.88** | **340** | *e*Pn | **Pn** | **23 51 04.6** | **+2.1** |
| **TREB** | **Trebinje** | **8.41** | **337** | *e*Pn | **Pn** | **23 51 09.5** | **-0.4** |
| **SJES** | **Sjenica** | **8.49** | **346** | *e*Pn | **Pn** | **23 51 11.6** | **+0.5** |
| **BRY** | **Bratogost** | **8.52** | **338** | *e*Pn | **Pn** | **23 51 11.6** | **+0.1** |
| **STON** | **Ston** | **8.77** | **334** | *e*Pn | **Pn** | **23 51 13.7** | **-1.0** |
| **RUDO** | **Rudo** | **8.96** | **344** | *e*Pn | **Pn** | **23 51 16.0** | **-1.5** |
| **BBLS** | **Lazi&#263i** | **9.19** | **344** | *e*Pn | **Pn** | **23 51 20.6** | **0.0** |
| **BRTR** | **Keskin Array B** | **9.78** | **58** | Pn | **Pn** | **23 51 30.6** | **+1.7** |
| | comp=E,0.1nm,0.3s,baz=244,slow=14,SNR=6.0 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| **TEKS** | **Tekeris** | **9.82** | **346** | *e*Pn | **Pn** | **23 51 28.0** | **-1.2** |
| **A050A** | **Klekovaca** | **10.59** | **335** | *e*Pn | **Pn** | **23 51 39.8** | **0.0** |
| **BLY** | **Banja Luka** | **10.61** | **338** | *e*Pn | **Pn** | **23 51 40.9** | **+0.9** |
| **MMAI** | **Mount Meron Ar** | **10.63** | **97** | Pn | **Pn** | **23 51 40.0** | **-0.4** |
| | comp=E,1.1nm,0.3s,baz=279,slow=11,SNR=2.1 | | | | | | |
| | comp=E,0.5nm,0.3s | | | | | | |
| **A051A** | **Mrakovica** | **10.93** | **337** | *e*Pn | **Pn** | **23 51 44.1** | **-0.4** |
| **EIL** | **Elat** | **11.57** | **114** | Pn | **Pn** | **23 51 52.6** | **-0.5** |
| | comp=E,0.2nm,0.3s,baz=349,slow=5.2,SNR=9.1 | | | | | | |
| | comp=E,1.6nm,0.6s | | | | | | |
| **CRES** | **Cresnjev** | **12.13** | **335** | *e*Pn | **Pn** | **23 52 00.7** | **-0.1** |
| **HFS** | **Hagfors** | **25.79** | **349** | P | **P** | **23 54 37.9** | **-0.8** |
| | comp=E,0.9nm,0.5s,baz=150,slow=10,SNR=9.0 | | | | | | |
| | comp=E,0.9nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **26.49** | **3** | P | **P** | **23 54 43.0** | **-2.0** |
| | comp=E,1.5nm,0.9s,baz=171,slow=9.8,SNR=3.4 | | | | | | |
| | comp=E,1.5nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **27.05** | **348** | LR | LR | 00 06 47.6 | |
| | comp=E,7.9nm,18.4s,baz=40,slow=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.67** | **51** | P | **P** | **23 57 02.3** | **-2.2** |
| | comp=E,0.7nm,0.5s,baz=275,slow=8.7,SNR=2.0 | | | | | | |
| | comp=E,0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.42** | **56** | P | **P** | **23 57 25.6** | **-1.0** |
| | comp=E,0.3nm,0.3s,baz=272,slow=8.4,SNR=10 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.46** | **46** | P | **P** | **23 57 32.9** | **-1.8** |
| | comp=E,1.1nm,0.3s,baz=264,slow=8.4,SNR=7.1 | | | | | | |
| | comp=E,1.1nm,0.3s | | | | | | |
| **BBB** | **Bella Bella** | **89.49** | **343** | LR | LR | 00 44 23.4 | |
| | comp=E,27nm,18.4s,baz=168,slow=37 | | | | | | |

*IDC **07** 00:00:21.9±2.8,36.°04N×140.°55E,h61km±23km,mb3.4/8, mbtmp3.8/12,ML3.3/3,MS2.6/3,Error ellipse: s-maj=29.4km s-min=10.6km az=64.0*
*JMA **07** 00:00:25.4±0.2,35.°9N±0.°5×140.°1E±0.°6,h61km±1km, MV3.3/40,SOUTHERN IBARAKI PREF*
*JMA Felt I J1 at SOUTHERN IBARAKI PREF .*
**ISC 07 00:00:24.2±0.8,35.°93N±0.°04×140.°19E±0.°05,h77km±6km, n39,σ1s52/45,mb3.7/8,8D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIHU** | **Itakohorinouch** | **0.28** | **82** | P | **Pn** | **00 00 36.3** | **+0.5** |
| JIHU | | | | *e*S | **Sn** | **00 00 45.3** | **+0.7** |
| **JYT** | **Yasato** | **0.30** | **1** | P | **Pn** | **00 00 35.8** | **-0.3** |
| JYT | | | | S | **Sn** | **00 00 43.8** | **-1.0** |
| **JSMT** | **Sammumatsuo** | **0.36** | **143** | P | **Pn** | **00 00 37.1** | **+0.7** |
| **TOK** | **Tokyo** | **0.42** | **235** | P | **Pn** | **00 00 37.6** | **+0.8** |
| TOK | | | | S | **Sn** | **00 00 47.7** | **+1.5** |
| **JAG** | **Ashikaga** | **0.77** | **310**⇓*i*P | | **Pn** | **00 00 40.4** | **+0.1** |
| JAG | | | | ⇓S | **Sn** | **00 00 51.4** | **-1.0** |
| **JRY** | **Ryogami san** | **1.05** | **275**⇓*i*P | | **Pn** | **00 00 43.7** | **+0.1** |
| JRY | | | | ⇓S | **Sn** | **00 00 57.9** | **-0.2** |
| **JOD2** | **Odawara 2** | **1.11** | **234**⇓*i*P | | **Pn** | **00 00 43.8** | **-0.6** |
| JOD2 | | | | ⇓S | **Sn** | **00 00 57.2** | **-2.4** |
| **JKT** | **Katashina** | **1.13** | **318** *i* P | | **Pn** | **00 00 45.0** | **+0.3** |
| JKT | | | | S | **Sn** | **00 01 00.5** | **+0.5** |
| **BSO3** | **Boso 3** | **1.16** | **167** | P | **Pn** | **00 00 44.6** | **0.0** |
| BSO3 | | | | S | **Sn** | **00 01 01.0** | **+1.0** |
| **JIM2** | **Oshima 3** | **1.36** | **207** | S | **Sn** | **00 01 02.9** | **-2.2** |
| **JYN** | **Shimob** | **1.40** | **253**⇓*i*P | | **Pn** | **00 00 48.2** | **+0.1** |
| JYN | | | | ⇓S | **Sn** | **00 01 05.0** | **-1.2** |
| **JFNN** | **Fujinakano** | **1.43** | **240** | P | **Pn** | **00 00 48.1** | **-0.3** |
| JFNN | | | | S | **Sn** | **00 01 04.5** | **-2.2** |
| **BSO1** | **Boso 1** | **1.43** | **153** | P | **Pn** | **00 00 48.8** | **+0.9** |
| BSO1 | | | | S | **Sn** | **00 01 05.8** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **1.71** | **292** | P | **Pn** | **00 00 52.9** | **+0.8** |
| | 209nm,0.8s,baz=93,slow=13,SNR=301 | | | | | | |
| MJAR | | | | S | **Sn** | **00 01 15.5** | **+2.2** |
| | 28nm,0.4s,baz=132,slow=14,SNR=2.8 | | | | | | |
| MJAR | | | | LR | LR | 00 01 44.4 | |
| | comp=Z,181nm,20.1s,baz=170,slow=42 | | | | | | |
| **MAJO** | **Matsushiro** | **1.71** | **292** | P | **Pn** | **00 00 53.2** | **+1.0** |
| **JMM** | **Marumori** | **1.99** | **14** | P | **Pn** | **00 00 58.9** | **+3.1** |
| **JGF** | **Kuroka** | **2.32** | **263** | P | **Pn** | **00 01 02.1** | **+1.8** |
| **JSD** | **Sado** | **2.61** | **324** | P | **Pn** | **00 01 05.4** | **+1.3** |
| **INU** | **Inuyama** | **2.65** | **258** | P | **Pn** | **00 01 05.4** | **+0.8** |
| **JHJ** | **Hachijo jima 2** | **2.82** | **187** | P | **Pn** | **00 01 07.6** | **+0.6** |
| | 18nm,0.3s,baz=75,slow=23,SNR=1.2 | | | | | | |
| JHJ | | | | S | **Sn** | **00 01 40.8** | **+0.8** |
| | 226nm,0.7s,baz=98,slow=22,SNR=1.7 | | | | | | |
| | 78nm,0.3s | | | | | | |
| **JMN** | **Monobe** | **5.63** | **249** | P | **Pn** | **00 01 47.9** | **+2.5** |
| **JNU** | **Nakatsue** | **8.18** | **253** | P | **Pn** | **00 02 23.3** | **+3.2** |
| | 0.2nm,0.3s,baz=130,slow=9.5,SNR=3.6 | | | | | | |
| JNU | | | | LR | LR | 00 05 40.7 | |
| | comp=Z,68nm,20.7s,baz=130,slow=38 | | | | | | |
| | 5.1nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **9.97** | **282** | P | **Pn** | **00 02 48.0** | **+3.6** |
| | 0.3nm,0.3s,baz=97,slow=15,SNR=7.9 | | | | | | |
| KSRS | | | | LR | LR | 00 06 43.0 | |
| | comp=Z,20nm,21.3s,baz=100,slow=37 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.37** | **325** | P | **Pn** | **00 02 49.4** | **-0.5** |
| | 1.8nm,0.7s,baz=137,slow=14,SNR=2.4 | | | | | | |
| **KLR** | **Kul'dur** | **14.66** | **338** | LR | LR | 00 08 30.8 | |
| | comp=Z,19nm,19.6s,baz=132,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **27.61** | **306** | P | **P** | **00 06 04.2** | **-0.1** |
| | 0.2nm,0.5s,baz=79,slow=7.5,SNR=1.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.48** | **117** | T | T | 00 36 43.7 | |
| | baz=313 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.48** | **117** | T | T | 00 36 23.5 | |
| | baz=313 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.49** | **117** | T | T | 00 36 38.2 | |
| | baz=313 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.13** | **120** | T | T | 00 37 02.0 | |
| | baz=310 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.13** | **120** | T | T | 00 37 22.0 | |
| | baz=310 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.15** | **120** | T | T | 00 37 24.0 | |
| | baz=310 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.94** | **313** | P | **P** | **00 08 07.2** | **+0.1** |
| | 0.4nm,0.3s,baz=87,slow=8.1,SNR=3.6 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.88** | **303** | P | **P** | **00 08 23.6** | **+0.7** |
| | 1.1nm,0.8s,baz=77,slow=8.9,SNR=10.0 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.91** | **309** | P | **P** | **00 08 40.4** | **+1.5** |
| | 2.4nm,0.2s,baz=87,slow=8.3,SNR=7.0 | | | | | | |
|

comp=Z,45nm,21.6s,baz=242,slow=34
**SIV San Ignacio 38.84 244** LR LR 00 31 59.4
comp=Z,93nm,18.4s,baz=104,slow=35
**PCRV Puerto La Cruz 40.29 285** LR LR 00 31 48.6
comp=Z,30nm,18.9s,slow=34
**CPUP Villa Florida 40.68 227** LR LR 00 32 04.6
comp=Z,60nm,20.6s,baz=51,slow=34
**ESDC Sonseca Array 43.73 24** P **P 00 17 11.7 +0.2**
1.1nm,0.9s,baz=223,slow=8.7,SNR=5.7
ESDC LR LR 00 33 04.5
comp=Z,12nm,18.3s,baz=260,slow=33
1.1nm,0.9s
**LPAZ La Paz 45.34 247** LR LR 00 36 09.1
comp=Z,114nm,19.0s,baz=58,slow=36
**SDV Santo Domingo 45.90 282** LR LR 00 35 53.3
comp=Z,24nm,19.6s,baz=60,slow=35
**KEST Kesra 47.73 39** LR LR 00 37 50.0
comp=Z,106nm,21.4s,baz=146,slow=36
**LVC Limon Verde 48.16 239** LR LR 00 38 37.0
comp=Z,30nm,18.1s,baz=81,slow=37
**ROSC El Rosal 49.13 276** LR LR 00 38 00.6
comp=Z,65nm,18.4s,baz=114,slow=35
**VAE Valguarnera 52.02 40** LR LR 00 42 16.7
comp=Z,94nm,18.3s,baz=151,slow=38
**NNA Nana 52.58 255** LR LR 00 39 18.3
comp=Z,31nm,18.6s,baz=114,slow=34
**ATAH Atahualpa 53.45 261** LR LR 00 40 45.2
comp=Z,40nm,18.8s,baz=54,slow=36
**MBAR Mbarara 56.07 91** LR LR 00 39 17.7
comp=Z,33nm,21.0s,baz=237,slow=32
**PLCA Paso Flores 57.91 220** LR LR 00 41 28.6
comp=Z,38nm,19.7s,baz=76,slow=34
**JTS Las Juntas de 60.09 282** LR LR 00 45 27.3
comp=Z,9.9nm,19.6s,baz=128,slow=36
**MLR Muntele Rosu 63.62 38** LR LR 00 50 04.8
comp=Z,44nm,18.3s,baz=210,slow=39
**EIL Elat 64.25 57** LR LR 00 47 14.1
comp=Z,35nm,19.3s,baz=249,slow=36
**FURI Furi 64.28 80** LR LR 00 46 28.2
comp=Z,18nm,19.1s,baz=148,slow=35
**TKL Tuckaleechee C 64.55 310** LR LR 00 42 40.6
comp=Z,17nm,18.6s,baz=167,slow=31
**BRTR Keskin Array B 66.33 46** P **P 00 19 55.0 -0.1**
1.0nm,0.8s,baz=236,slow=7.6,SNR=7.8
1.0nm,0.8s
**NOA NORSAR Array B 66.65 18** P **P 00 19 56.2 -0.3**
0.8nm,0.8s,baz=221,slow=6.5,SNR=3.5
0.8nm,0.8s
**AKASG Malin Array Be 68.07 34** P **P 00 20 04.9 -0.8**
0.7nm,0.5s,baz=245,slow=6.6,SNR=1.6
AKASG LR LR 00 51 52.5
comp=Z,16nm,18.0s,baz=231,slow=38
0.7nm,0.5s
**FINES FINESS Array B 72.24 23** P **P 00 20 31.5 +0.5**
1.8nm,0.9s,baz=204,slow=9.1,SNR=1.5
1.8nm,0.9s
**KBZ Khabaz 74.15 44** P **P 00 20 43.9 +1.2**
1.8nm,0.8s,baz=286,slow=4.0,SNR=4.8
1.8nm,0.8s
**BELG Belogornoye 79.37 37** LR LR 00 57 13.6
comp=Z,13nm,18.4s,baz=309,slow=36
**TXAR Lajitas Array 79.66 300** P **P 00 21 14.1 -0.2**
0.3nm,0.8s,baz=104,slow=7.5,SNR=2.6
0.3nm,0.8s
**RPN Rapa Nui 84.82 243** LR LR 00 54 40.6
comp=Z,30nm,21.2s,baz=22,slow=32

*IDC **07** 00:13:20.8±1.5,8°.55S×115°.60E,h0km,mb3.4/5, mbtmp3.5/6,ML3.6/1,MS2.9/2,Error ellipse: s-maj=41.1km s-min=22.0km az=51.0*
*DJA **07** 00:13:26.5±0.5,8°S±10°×11°6E±°,h10km,M3.9/6, MLv3.9/6*
**ISC 07 00:13:25.6**±0.8,**8°.31S**±0°.07×**116°.17E**±0°.03,**h10**km,**n13,**
**σ1§40/15,mb3.6/5,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.83** | **121** | P | **Pg** | **00 13 42.0** | **+0.5** |
| TWSI | | | | S | **Sb** | **00 13 54.4** | **+1.1** |
| **SRBI** | **Singaraja** | **0.97** | **283** | P | **Pg** | **00 13 44.9** | **+0.6** |
| SRBI | | | | S | **Sb** | **00 13 58.8** | **+1.4** |
| **DNP** | **Denpasar** | **1.01** | **249** | P | **Pn** | **00 13 46.9** | **+1.0** |
| **PLAI** | **Plampang** | **1.67** | **108** | P | **Pn** | **00 13 55.5** | **+0.5** |
| PLAI | | | | S | **Sb** | **00 14 18.0** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.00** | **265** | P | **Pn** | **00 13 59.5** | **+0.1** |
| JAGI | | | | S | **Sn** | **00 14 25.6** | **+1.0** |
| **KAPI** | **Kappang** | **4.84** | **48** | Pn | **Pn** | **00 14 41.4** | **+2.9** |
| KAPI | 2.0nm,0.3s,baz=213,slow=17,SNR=2.0 | | | Sn | **Sb** | **00 15 47.8** | **-0.9** |
| | 2.6nm,0.3s,baz=252,slow=19,SNR=2.7 5.4nm,0.3s | | | | | | |
| **DAV** | **Davao City (W)** | **17.93** | **32** | LR | LR | 00 26 42.4 | |
| | comp=Z,33nm,19.2s,baz=110,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.05** | **125** | P | **P** | **00 18 09.5** | **-0.5** |
| | 1.1nm,0.4s,baz=300,slow=12,SNR=30 1.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.85** | **134** | P | **P** | **00 18 28.7** | **-0.5** |
| | 0.9nm,0.7s,baz=306,slow=8.9,SNR=9.5 0.9nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.56** | **328** | LR | LR | 00 35 09.4 | |
| | comp=Z,25nm,18.5s,baz=195,slow=42 | | | | | | |
| **SONM** | **Songino Array** | **56.56** | **352** | P | **P** | **00 23 07.7** | **-0.8** |
| | 0.4nm,0.5s,baz=170,slow=8.8,SNR=2.4 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.60** | **334** | P | **P** | **00 23 47.5** | **-2.5** |
| | 0.2nm,0.7s,baz=134,slow=7.5,SNR=1.5 0.2nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.14** | **335** | P | P | 00 24 14.8 | -4.6 |
| | 0.2nm,0.4s,baz=141,slow=6.0,SNR=1.8 0.2nm,0.4s | | | | | | |

*SOME **07** 00:26:17.2,39°.67N×76°.78E,h0km*
*KRNET **07** 00:26:17.2±0.1,39°.54N×76°.74E,mb3.3*
*NNC **07** 00:26:18.9±1.3,39°.62N×76°.82E,h0km,mb4.0,mpv3.7, Error ellipse: s-maj=8.7km s-min=6.7km az=167.0*
**ISC 07 00:26:18.6**±1.3,**39°.60N**±0°.06×**76°.66E**±0°.03,**h10**km,**n61,**
**σ2§56/94,35C-16D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NRN** | **Naryn** | **1.90** | **345** | ⇓*iP* | **Pb** | **00 26 53.9** | **+0.2** |
| NRN | baz=43 | | | ⇓*iS* | **Sg** | **00 27 20.4** | **+0.5** |
| | baz=43 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.30** | **22** | ⇑*iP* | **Pb** | **00 26 59.0** | **-1.5** |
| TARG | baz=20 | | | ⇑*iS* | **Sb** | **00 27 29.6** | **+0.4** |
| | baz=20 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.46** | **281** | ⇑*iP* | **Pb** | **00 27 02.0** | **-1.2** |
| SFK | baz=82 | | | ⇑*iS* | **Sb** | **00 27 34.7** | **+1.0** |
| | baz=82 | | | | | | |
| **KDJ** | **Kajisay** | **2.56** | **9** | ⇑*eP* | **Pb** | **00 27 02.8** | **-2.0** |
| KDJ | baz=7.0 | | | ⇑*iS* | **Sb** | **00 27 36.1** | **-0.4** |
| | baz=7.0 | | | | | | |
| **ULHL** | **Ulahol** | **2.67** | **353** | ⇑*iP* | **Pb** | **00 27 04.5** | **-2.1** |
| ULHL | baz=52 | | | ⇑*iS* | **Sb** | **00 27 39.0** | **-0.5** |
| | baz=52 | | | | | | |
| **ARLS** | **Aral** | **2.88** | **323** | ⇓*eP* | **Pb** | **00 27 07.7** | **-2.4** |
| ARLS | baz=22 | | | ⇓*iS* | **Sb** | **00 27 44.3** | **-1.1** |
| | baz=22 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.94** | **350** | ⇑*eP* | **Pb** | **00 27 08.5** | **-2.8** |
| BOOM | baz=49 | | | ⇑*iS* | **Sb** | **00 27 45.9** | **-1.5** |
| | baz=49 | | | | | | |
| **OHH** | **Osh** | **3.11** | **289** | ⇑*eP* | **Pb** | **00 27 10.9** | **-3.2** |
| OHH | baz=89 | | | ⇑*eS* | **Sb** | **00 27 49.9** | **-2.3** |
| | baz=89 | | | | | | |
| **PRZ** | **Przheval'sk** | **3.17** | **24** | ⇓*eP* | **Pn** | **00 27 10.9** | **+2.1** |
| PRZ | baz=22 | | | ⇓*eS* | **Sb** | **00 27 50.6** | **-3.4** |
| | baz=22 | | | | | | |
| **KBK** | **Karagaybulak** | **3.32** | **338** | ⇓*iP* | **Pn** | **00 27 13.8** | **+3.0** |
| KBK | baz=37 | | | ⇓*iS* | **Sb** | **00 27 55.0** | **-3.2** |
| | baz=37 | | | | | | |
| **AML** | **Almayashu** | **3.39** | **319** | ⇑*iP* | **Pn** | **00 27 15.0** | **+3.1** |
| AML | baz=19 | | | ⇑*eS* | **Sb** | **00 27 57.2** | **-3.1** |
| | baz=19 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.42** | **347** | ⇓Pg | **Pg** | **00 27 22.4** | **-1.7** |
| TKM2 | 4.4nm,0.5s | | | ⇑Lg | Lg | 00 28 09.9 | |
| | 24nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.45** | **4** | *eP* | **Pb** | **00 27 21.6** | **+1.6** |
| TNSS | 7.5nm,0.5s | | | *eS* | **Sg** | **00 28 07.8** | **-1.6** |
| | 52nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.45** | **4** | Pg | **Pb** | **00 27 21.6** | **+1.6** |
| TNSS | 7.5nm,0.5s | | | Lg | Lg | 00 28 07.8 | |
| | 52nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **3.45** | **332** | ⇑Pg | **Pb** | **00 27 22.0** | **+2.1** |
| AAK | 28nm,0.8s | | | ⇑Lg | Lg | 00 28 10.6 | |
| | 57nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.45** | **332** | ⇑*eP* | **Pn** | **00 27 15.5** | **+2.9** |
| AAK | baz=32 | | | ⇑*eS* | **Sn** | **00 27 58.2** | **+4.6** |
| | baz=32 | | | | | | |
| **KST** | **Kastek** | **3.48** | **352** | *eP* | **Pb** | **00 27 22.7** | **+2.2** |
| KST | 4.1nm,0.3s | | | *eS* | **Sg** | **00 28 09.5** | **-1.0** |
| | 59nm,0.6s | | | | | | |
| **KST** | **Kastek** | **3.48** | **352** | Pg | **Pb** | **00 27 22.7** | **+2.2** |
| KST | 4.1nm,0.3s | | | Lg | Lg | 00 28 09.5 | |
| | 59nm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **3.54** | **357** | *eP* | **Pb** | **00 27 22.7** | **+1.4** |
| MTBS | 3.3nm,0.1s | | | *eS* | **Sg** | **00 28 09.9** | **-2.3** |
| | 45nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **3.54** | **357** | Pg | **Pb** | **00 27 21.7** | **+0.3** |
| MTBS | 9.2nm,0.4s | | | Lg | Lg | 00 28 10.0 | |
| | 45nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.58** | **5** | *eP* | **Pb** | **00 27 23.7** | **+1.6** |
| MDOK | 5.3nm,0.4s | | | *eS* | **Sg** | **00 28 11.3** | **-2.2** |
| | 96nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **3.58** | **5** | Pg | **Pb** | **00 27 23.7** | **+1.6** |
| MDOK | 5.3nm,0.5s | | | ⇑Pg | Pg | **00 27 27.1** | **-0.1** |
| | 4.1nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 00 28 11.3 | |
| | 96nm,0.7s | | | | | | |
| MDOK | | | | Lg | Lg | 00 28 12.2 | |
| | 93nm,0.8s | | | | | | |
| **AAA** | **Alma-Ata** | **3.62** | **3** | *eP* | **Pg** | **00 27 25.0** | **-2.9** |
| AAA | 17nm,0.1s | | | *eS* | **Sg** | **00 28 13.8** | **-0.9** |
| | 101nm,0.3s | | | | | | |
| **AAA** | **Alma-Ata** | **3.62** | **3** | Pg | **Pg** | **00 27 25.0** | **-2.9** |
| AAA | 11nm,0.1s | | | Lg | Lg | 00 28 13.8 | |
| | 105nm,0.5s | | | | | | |
| **KNDC** | **Almaty** | **3.63** | **4** | ⇑Pg | **Pg** | **00 27 28.0** | **-0.1** |
| KNDC | 11nm,0.3s | | | ⇓Lg | Lg | 00 28 14.2 | |
| | 444nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.65** | **5** | *eP* | **Pg** | **00 27 26.0** | **-2.5** |
| KOTS | 4.8nm,0.4s | | | *eS* | **Sg** | **00 28 15.4** | **-0.5** |
| | 137nm,0.6s | | | | | | |
| **CHMS** | **Chumysh** | **3.69** | **338** | ⇓Pg | **Pb** | **00 27 24.7** | **+0.7** |
| CHMS | 3.6nm,0.5s | | | ⇓Lg | Lg | 00 28 17.3 | |
| | 53nm,0.9s | | | | | | |
| **CHMS** | **Chumysh** | **3.69** | **338** | ⇑*iP* | **Pn** | **00 27 18.6** | **+2.8** |
| CHMS | baz=37 | | | ⇑*eS* | **Sn** | **00 28 03.7** | **+4.4** |
| | baz=37 | | | | | | |
| **SATY** | **Saty** | **3.70** | **20** | *eP* | **Pb** | **00 27 25.1** | **+0.9** |
| SATY | 1.4nm,0.2s | | | *eS* | **Sg** | **00 28 13.8** | **-3.7** |
| | 48nm,0.6s | | | | | | |
| **SATY** | **Saty** | **3.70** | **20** | Pg | **Pb** | **00 27 25.1** | **+0.9** |
| SATY | 14nm,0.6s | | | Lg | Lg | 00 28 14.3 | |
| | 43nm,0.5s | | | | | | |
| **DRK** | **Karamyk** | **3.76** | **270** | ⇑*eP* | **Pn** | **00 27 19.8** | **+2.9** |
| DRK | baz=71 | | | ⇑*eS* | **Sn** | **00 28 05.1** | **+3.8** |
| | baz=71 | | | | | | |
| **ZHN** | **Zhinishke** | **3.81** | **20** | *eP* | **Pb** | **00 27 26.9** | **+0.9** |
| ZHN | 3.0nm,0.2s | | | *eS* | **Sg** | **00 28 16.9** | **-4.2** |
| | 62nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **3.81** | **20** | Pg | **Pb** | **00 27 26.9** | **+0.9** |
| ZHN | 5.1nm,0.1s | | | Lg | Lg | 00 28 16.9 | |
| | 62nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **3.97** | **26** | *eP* | **Pb** | **00 27 29.7** | **+0.9** |
| UZB | 9.3nm,0.4s | | | *eS* | **Sg** | **00 28 21.6** | **-4.5** |
| | 22nm,0.7s | | | | | | |
| **UZB** | **Uzynbulak** | **3.97** | **26** | Pg | **Pb** | **00 27 29.7** | **+0.9** |
| UZB | 9.3nm,0.4s | | | Lg | Lg | 00 28 21.6 | |
| | 29nm,0.6s | | | | | | |
| **MRKS** | **Merke** | **4.08** | **322** | *eP* | **Pg** | **00 27 34.5** | **-2.2** |
| MRKS | 20nm,0.4s | | | *eS* | **Sg** | **00 28 29.8** | **+0.3** |
| | 30nm,0.6s | | | | | | |
| **MRKS** | **Merke** | **4.08** | **322** | Pg | **Pg** | **00 27 34.5** | **-2.2** |
| MRKS | 20nm,0.3s | | | Lg | Lg | 00 28 29.8 | |
| | 30nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.11** | **0** | *eP* | **Pb** | **00 27 33.7** | **+2.6** |
| KTBS | 4.4nm,0.4s | | | *eS* | **Sg** | **00 28 28.5** | **-2.2** |
| | 84nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **4.11** | **0** | Pg | **Pb** | **00 27 33.3** | **+2.2** |
| KTBS | 7.2nm,0.6s | | | Lg | Lg | 00 28 28.5 | |
| | 85nm,0.8s | | | | | | |
| **SHLS** | **Shalkode** | **4.14** | **30** | *eP* | **Pg** | **00 27 36.7** | **-1.1** |
| SHLS | 16nm,0.4s | | | *eS* | **Sg** | **00 28 33.7** | **+2.2** |
| | 61nm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **4.14** | **30** | Pg | **Pg** | **00 27 36.7** | **-1.1** |
| SHLS | 27nm,0.5s | | | Lg | Lg | 00 28 33.7 | |
| | 61nm,0.6s | | | | | | |
| **KPKS** | **Kokpek** | **4.16** | **21** | *eP* | **Pb** | **00 27 33.6** | **+1.7** |
| KPKS | 7.7nm,0.4s | | | *eS* | **Sg** | **00 28 28.2** | **-3.8** |
| | 43nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **4.16** | **350** | *eP* | **Pb** | **00 27 34.6** | **+2.6** |
| KRBS | 4.7nm,0.5s | | | *eS* | **Sg** | **00 28 30.5** | **-1.8** |
| | 27nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **4.16** | **350** | Pg | **Pb** | **00 27 34.6** | **+2.6** |
| KRBS | 8.7nm,0.5s | | | Lg | Lg | 00 28 30.5 | |
| | 27nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **4.27** | **314** | ⇑*eP* | **Pn** | **00 27 27.2** | **+3.4** |
| MNAS | baz=14 | | | ⇑*eS* | **Sn** | **00 28 18.1** | **+4.4** |
| | baz=14 | | | | | | |
| **PDGK** | **Podgornoye** | **4.29** | **29** | Pg | **Pb** | **00 27 34.1** | **-0.1** |
| PDGK | 10nm,0.4s | | | Lg | Lg | 00 28 30.2 | |
| | 14nm,1.0s | | | | | | |
| **PDGK** | **Podgornoye** | **4.29** | **29** | ⇑Pn | **Pn** | **00 27 24.4** | **+0.3** |
| PDGK | 0.9nm,0.3s | | | ⇓Pg | **Pb** | **00 27 35.2** | **+0.9** |
| | 15nm,0.5s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 00 28 31.4 | |
| | 36nm,0.8s | | | | | | |
| **KUU** | **Kurty** | **4.30** | **357** | Pg | **Pb** | **00 27 37.0** | **+2.7** |
| KUU | 4.9nm,0.1s | | | Lg | Lg | 00 28 34.1 | |
| | 42nm,0.9s | | | | | | |
| **BTK** | **Batken** | **4.52** | **278** | ⇑*eP* | **Pn** | **00 27 30.2** | **+3.0** |
| BTK | baz=78 | | | ⇑*eS* | **Sn** | **00 28 23.3** | **+3.5** |
| | baz=78 | | | | | | |
| **TRKS** | **Terek-Say** | **4.62** | **296** | ⇑*eP* | **Pn** | **00 27 31.3** | **+2.6** |
| TRKS | baz=96 | | | ⇑*eS* | **Sn** | **00 28 25.2** | **+2.6** |
| | baz=96 | | | | | | |
| **ARXS** | **Arharly** | **4.70** | **10** | *eP* | **Pg** | **00 27 44.4** | **-4.1** |
| ARXS | 4.2nm,0.6s | | | *eS* | **Sg** | **00 28 47.0** | **-2.4** |
| | 18nm,0.8s | | | | | | |
| **ARXS** | **Arharly** | **4.70** | **10** | Pg | **Pg** | **00 27 44.4** | **-4.1** |
| ARXS | 4.3nm,0.6s | | | Lg | Lg | 00 28 47.0 | |
| | 18nm,0.8s | | | | | | |
| **BLB** | **Baldybastay** | **4.70** | **16** | Pg | **Pb** | **00 27 42.7** | **+1.5** |
| BLB | 18nm,0.3s | | | Lg | Lg | 00 28 44.0 | |
| | 29nm,0.7s | | | | | | |
| **KNOS** | **Konyrlen** | **5.12** | **21** | Pg | **Pb** | **00 27 50.9** | **+2.6** |
| KNOS | 1.1nm,0.5s | | | Lg | Lg | 00 28 59.2 | |
| | 9.4nm,0.8s | | | | | | |
| **DJR** | **Jarkent** | **5.28** | **25** | *eP* | **Pb** | **00 27 53.3** | **+2.3** |
| DJR | 4.0nm,0.4s | | | *eS* | **Sg** | **00 29 02.0** | **-6.0** |
| | 18nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **5.80** | **309** | Pg | **Pg** | **00 28 05.7** | **-4.0** |
| KK31 | 2.4nm,0.5s,baz=140,slow=16,SNR=17 2.4nm,0.5s,baz=126,slow=28 | | | ⇑Lg | Lg | 00 29 23.8 | |
| **BRLS** | **Borolday** | **6.18** | **306** | *eP* | **Pg** | **00 28 12.3** | **-4.5** |
| BRLS | 2.6nm,0.8s | | | *eS* | **Sg** | **00 29 34.9** | **-2.0** |
| | 3.0nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **6.18** | **306** | Pg | **Pg** | **00 28 12.3** | **-4.5** |
| BRLS | 2.5nm,0.5s | | | Lg | Lg | 00 29 34.9 | |
| | 3.4nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **8.29** | **28** | ⇓Pg | Pb | 00 28 48.2 | +6.0 |
| MK31 | 0.4nm,0.5s,baz=101,slow=4.7,SNR=3.8 1.3nm,0.7s | | | ⇑Lg | Lg | 00 30 33.1 | |
| **KURBB** | **Kurchatov Arra** | **11.11** | **6** | ⇓Lg | Lg | 00 32 10.9 | |
| | 14nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **11.21** | **6** | ⇑Lg | Lg | 00 32 09.4 | |
| | 6.8nm,1.0s | | | | | | |

*PRU **07** 00:56:42.9,50°.20N×19°.06E,h0km*
*IPEC **07** 00:56:42.6±0.1,50°.16N×19°.10E,h1km,ML2.5/4,Error ellipse: s-maj=2.4km s-min=0.7km az=166.0*
*VIE **07** 00:56:42.1±0.7,50°.17N×19°.06E,h0km,mb2.1/6,ml2.4/6, ms3.0/1,Error ellipse: s-maj=8.7km s-min=3.8km az=159.0, Suspected Mining induced.*
**ISC 07 00:56:42.7**±0.8,**50°.14N**±0°.03×**19°.10E**±0°.02,**h0**km,**n44,**
**σ1§10/72,10C-1D,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.46** | **80** | *e*Pg | **Pg** | **00 56 51.2** | **-0.4** |
| OJC | | | | *e*Sg | **Sg** | **00 56 57.5** | **0.0** |
| **RAC** | **Raciborz** | **0.58** | **265** | *e*PG | **Pb** | **00 56 55.7** | **-0.1** |
| RAC | | | | *e*SG | **Sb** | **00 57 04.9** | **+0.3** |
| **OKC** | **Ostrava-Krasne** | **0.68** | **244** | *e*PG | **Pg** | **00 56 55.7** | **-0.1** |
| OKC | comp=Z,68nm,0.6s | | | *e*SG | **Sg** | **00 57 06.2** | **+1.6** |
| **LANS** | **Liptovska Anna** | **1.02** | **166** | *e*PG | **Pg** | **00 57 01.5** | **-0.8** |
| LANS | | | | *e*SG | **Sg** | **00 57 15.5** | **0.0** |
| LANS | | | | *e*LG | Lg | 00 57 20.0 | |
| **NIE** | **Niedzica** | **1.06** | **132** | *e*Pg | **Pg** | **00 57 02.8** | **-0.3** |
| NIE | | | | *e*Sg | **Sg** | **00 57 18.1** | **+1.2** |
| **MORC** | **Moravsky Berou** | **1.07** | **251** | *e*Pg | **Pg** | **00 57 03.0** | **-0.2** |
| MORC | baz=69 | | | *e*Sg | **Sg** | **00 57 15.9** | **-1.1** |
| | 98nm,0.6s,baz=69 | | | | | | |
| **MORC** | **Moravsky Berou** | **1.07** | **251** | ⇑P | **Pg** | **00 57 03.7** | **+0.6** |
| MORC | | | | ⇑S | **Sb** | **00 57 18.5** | **-0.1** |
| **MAUC** | **Maruska** | **1.13** | **227** | *e*PG | **Pg** | **00 57 04.4** | **0.0** |
| **KRLC** | **Kraliky** | **1.49** | **268** | *e*PG | **Pn** | **00 57 09.6** | **-1.2** |
| KRLC | comp=Z,37nm,0.4s | | | *e*SG | **Sg** | **00 57 29.8** | **-0.8** |
| **JAVC** | **Velka Javorina** | **1.58** | **216** | *e*Pn | **Pn** | **00 57 12.3** | **+0.2** |
| VRAC | baz=35 | | | *e*Sg | **Sb** | **00 57 40.4** | **0.0** |
| | 34nm,0.7s,baz=61 | | | | | | |
| **VRAC** | **Vranov** | **1.82** | **244** | ⇑P | **Pn** | **00 57 15.3** | **-0.1** |
| VRAC | | | | ⇓S | **Sb** | **00 57 40.7** | **+0.3** |
| **OSTC** | **Ostas** | **1.89** | **284** | *e*PG | **Pn** | **00 57 16.3** | **0.0** |
| OSTC | comp=Z,18nm,0.5s | | | *e*SG | **Sn** | **00 57 41.0** | **+0.1** |
| **KECS** | **Kecovo** | **1.89** | **151** | *e*PN | **Pn** | **00 57 14.7** | **-1.6** |
| KECS | | | | *e*LG | Lg | 00 57 43.6 | |
| **KSP** | **Ksiaz** | **1.92** | **293** | *e*Pg | **Pn** | **00 57 16.3** | **-0.5** |
| KSP | | | | *e*Sg | **Sn** | **00 57 41.4** | **-0.2** |
| **CRVS** | **Cervenica-Dubn** | **1.98** | **128** | *e*PG | **Pn** | **00 57 18.8** | **+1.3** |
| **KRUC** | **Moravsky** | **2.06** | **239** | *e*Pn | **Pn** | **00 57 18.5** | **-0.1** |
| KRUC | baz=57 | | | *e*Sg | **Sb** | **00 57 47.2** | **0.0** |
| | 28nm,0.6s,baz=57 | | | | | | |
| **MODS** | **Modra-Piesok** | **2.13** | **215** | *e*PN | **Pn** | **00 57 18.7** | **-0.9** |
| MODS | | | | *e*SN | **Sn** | **00 57 46.5** | **-0.3** |
| **PSZ** | **Piszkesteto** | **2.29** | **166** | ⇑P | **Pn** | **00 57 22.0** | **+0.3** |
| PSZ | | | | ⇑S | **Sb** | **00 57 54.2** | **+0.5** |
| **KOLS** | **Kolonicke sedl** | **2.40** | **119** | *e*PG | **Pn** | **00 57 24.7** | **+1.5** |
| KOLS | | | | *e*LG | Lg | 00 58 13.3 | |
| KOLS | | | | *e* | | 01 23 27.2 | |
| **TREC** | **Trest** | **2.49** | **252** | *e*PG | **Pb** | **00 57 27.3** | **-1.0** |
| **PRU** | **Pruhonice** | **2.94** | **269** | *e*SG | **Sb** | **00 58 14.3** | **+1.9** |
| **RONA** | comp=Z,6.4nm,0.5s **Rosalia, Austr** | **3.06** | **218** | *i* Pn | **Pn** | **00 57 31.9** | **-0.5** |
| RONA | 0.7nm,0.3s | | | *e*Sn | **Sn** | **00 58 09.8** | **0.0** |
| | 2.3nm,0.5s | | | | | | |
| **CONA** | **Conrad Observa** | **3.07** | **225** | *i* Pn | **Pn** | **00 57 32.1** | **-0.5** |
| CONA | 0.4nm,0.3s | | | *i* Sn | **Sn** | **00 58 08.5** | **-1.5** |
| | 1.6nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.37** | **285** | Pg | **Pg** | **00 57 46.5** | **-0.8** |
| BRG | | | | Sg | **Sg** | **00 58 31.0** | **0.0** |
| BRG | | | | Amp | | 00 58 38.0 | |
| | comp=Z,7.7nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.39** | **249** | *e*SG | **Sb** | **00 58 28.1** | **+2.7** |
| | comp=Z,8.8nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.73** | **256** | *e*PN | **Pn** | **00 57 41.2** | **-0.3** |
| KHC | | | | *e*PG | **Pb** | **00 57 48.4** | **-1.0** |
| KHC | | | | *e*SG | **Sg** | **00 58 40.4** | **-2.0** |
| | comp=Z,8.1nm,0.5s | | | | | | |
| **ARSA** | **Arzberg** | **3.74** | **221** | *e*Pn | **Pn** | **00 57 41.9** | **+0.2** |
| ARSA | | | | *e*Sg | **Sg** | **00 58 47.2** | **+4.5** |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **MOA** | **Molln** | **3.92** | **236** | *i* Pn | **Pn** | **00 57 43.7** | **-0.5** |
| MOA | comp=Z,0.3nm,0.2s | | | *i* Sn | **Sn** | **00 58 30.6** | **-0.3** |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **CLL** | **Collm** | **4.04** | **289** | *i* Pg | **Pg** | **00 58 02.1** | **+1.9** |
| CLL | | | | *i* Sg | **Sg** | **00 58 53.0** | **+0.4** |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **DRGR** | | **4.12** | **143** | ⇑P | **Pn** | **00 57 46.1** | **-1.0** |
| **BIOA** | **Bad Ischl, Aus** | **4.35** | **238** | *e*Pg | **Pb** | **00 58 02.3** | **+2.2** |
| BIOA | comp=Z,1.3nm,0.3s | | | *i* Sn | **Sn** | **00 58 43.3** | **+1.7** |
| | comp=Z,5.6nm,0.4s | | | | | | |
| **BURAR** | **Bucovina Array** | **4.76** | **120** | ⇑P | **Pn** | **00 57 55.1** | **-0.8** |
| **BZS** | **Buzias** | **4.83** | **158** | ⇑P | **Pn** | **00 57 55.8** | **-0.9** |
| **SURR** | **Surduc** | **4.84** | **154** | ⇑P | **Pn** | **00 57 56.0** | **-0.7** |
| **KBA** | **Koelnbreinsper** | **4.89** | **233** | *e*Pn | **Pn** | **00 57 57.2** | **-0.4** |
| KBA | comp=Z,0.8nm,0.5s | | | *e*Sn | **Sn** | **00 58 54.7** | **-0.4** |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **GZR** | **Gura Zlata** | **5.36** | **151** | ⇑P | **Pn** | **00 58 03.9** | **-0.1** |
| **BSD** | **Bornholm Skovb** | **5.59** | **335** | *i* P | **Pn** | **00 58 06.9** | **-0.2** |
| **WTTA** | **Wattenberg** | **5.71** | **243** | *e*Pg | **Pg** | **00 58 31.1** | **-1.1** |
| WTTA | comp=Z,1.0nm,0.6s | | | *e*Sg | **Sg** | **00 59 46.1** | **-0.2** |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **LUNU** | **Lund** | **6.47** | **330** | *e* | **Pn** | **00 58 18.6** | **-0.6** |
| **BJUU** | **Bjuv** | **6.97** | **331** | *e* | **Pn** | **00 58 24.7** | **-1.3** |
| **DEL** | **Delary** | **7.07** | **336** | *e* | **Pg** | **00 58 26.4** | **-0.9** |

*BGR **07** 01:03:48.0,18°.08S×173°.93W,h33km*
*NEIC **07** 01:04:03.8±1.6,18°.16S±0°.10×174°.6W±0°.1,h166km±8km, mb4.6/42,Error ellipse: s-maj=14.2km s-min=14.2km az=134.0*
*IDC **07** 01:04:11.5±1.8,18°.13S×174°.86W,h232km±16km, mb3.7/14,mbtmp4.3/17,Error ellipse: s-maj=14.3km s-min=10.4km az=130.0*
**ISC 07 01:04:02.5**±0.4,**18°.12S**±0°.08×**174°.73W**±0°.06,**h150**km,
**n137,σ1§37/136,mb4.5/39,16C-4D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **4.66** | **103** | Pn | **Pn** | **01 05 11.3** | **-0.2** |
| NIUE | | | | Sn | **Sn** | **01 06 02.6** | **-2.5** |
| **AFI** | **Afiamalu** | **5.06** | **35** | | **Pn** | **01 05 17.9** | **+1.1** |
| **MSVF** | **Nonsavu** | **6.88** | **272** | | Pn | 01 05 50.0 | +8.9 |
| **MSVF** | **Nonsavu** | **6.88** | **272** | P | Pn | 01 05 50.2 | +9.1 |
| | 40nm,0.7s,baz=97,slow=11,SNR=31 | | | | | | |
| **RAR** | **Rarotonga** | **14.43** | **105** | P | **P** | **01 07 26.2** | **+3.8** |
| | 18nm,0.6s,baz=270,slow=1.0,SNR=2.0 | | | | | | |
| **PINNC** | **Pines Island,** | **17.29** | **252** | P | **P** | **01 07 56.3** | **+2.2** |
| PINNC | | | | IAmb | IAmb | 01 07 57.6 | |
| | comp=Z,56nm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.11** | **254** | P | **P** | **01 08 05.1** | **+1.9** |
| **DZM** | **Mont Dzumac** | **18.11** | **254** | P | **P** | **01 08 05.2** | **+2.0** |
| | comp=Z,6.7nm,0.9s,baz=72,slow=18 | | | | | | |
| **URZ** | **Urewera** | **21.30** | **198** | P | **P** | **01 08 39.3** | **+2.0** |
| | comp=Z,7.1nm,0.4s,baz=41,slow=11,SNR=7.8 | | | | | | |
| URZ | | | | S | **S** | **01 12 21.5** | **-3.4** |
| | comp=Z,10.0nm,0.9s,baz=71,slow=18,SNR=2.1 | | | | | | |
| | comp=Z,7.1nm,0.4s | | | | | | |
| **RTZ** | **Ruatahuna** | **21.66** | **198** | P | **P** | **01 08 41.8** | **+0.4** |
| RTZ | | | | IAmb | IAmb | 01 09 25.7 | |
| | comp=Z,30nm,1.3s | | | | | | |
| **BKZ** | **Black Stump Fm** | **22.32** | **198** | P | **P** | **01 08 48.3** | **+0.4** |
| BKZ | | | | IAmb | IAmb | 01 09 28.7 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.97** | **198** | P | **P** | **01 09 03.4** | **+0.4** |
| MRZ | | | | IAmb | IAmb | 01 09 13.6 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **MSWZ** | **Moikau Station** | **24.76** | **198** | P | **P** | **01 09 11.3** | **+1.1** |
| **QRZ** | **Quartz Range** | **25.14** | **203** | P | **P** | **01 09 14.5** | **+0.8** |
| **LTZ** | **Lake Taylor** | **26.95** | **201** | P | **P** | **01 09 29.4** | **-0.6** |
| LTZ | | | | IAmb | IAmb | 01 10 01.3 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **32.49** | **251** | P | **P** | **01 10 19.3** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 01 10 55.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **36.86** | **261** | P | **P** | **01 10 56.6** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 01 10 57.8 | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **COEN** | **Coen** | **40.60** | **270** | P | **P** | **01 11 27.7** | **-0.2** |
| COEN | | | | IAmb | IAmb | 01 11 28.1 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **41.61** | **242** | P | **P** | **01 11 36.2** | **+0.2** |
| **STKA** | **Stephens Creek** | **41.61** | **242** | P | **P** | **01 11 35.5** | **-0.5** |
| | comp=Z,4.0nm,0.7s,baz=96,slow=9.2,SNR=5.6 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **46.38** | **242** | P | **P** | **01 12 13.5** | **-0.4** |
| **WR0** | **Warramunga Arr** | **47.84** | **259** | P | **P** | **01 12 24.7** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 01 12 28.9 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **48.00** | **259** | | **P** | **01 12 26.0** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 01 12 26.5 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **48.02** | **259** | | **P** | **01 12 26.0** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 01 12 26.6 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.03** | **259** | | **P** | **01 12 26.1** | **-0.9** |
| **WRA** | **Warramunga Arr** | **48.03** | **259** | P | **P** | **01 12 26.1** | **-0.9** |
| | comp=Z,12nm,0.5s,baz=98,slow=7.4,SNR=193 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **48.10** | **254** | | **P** | **01 12 27.0** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 01 12 28.1 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **48.10** | **254** | | **P** | **01 12 27.3** | **-0.2** |
| **ASAR** | **Alice Springs** | **48.10** | **254** | P | **P** | **01 12 27.0** | **-0.5** |
| | comp=Z,62nm,0.6s,baz=89,slow=8.7,SNR=540 | | | | | | |
| ASAR | | | | S | S | 01 19 07.8 | -7.2 |
| | comp=Z,0.6nm,0.7s,baz=91,slow=15,SNR=5.9 | | | | | | |
| **MTN** | **Manton Dam** | **52.29** | **268** | P | **P** | **01 12 57.8** | **-1.3** |
| MTN | | | | IAmb | IAmb | 01 12 58.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **53.08** | **245** | P | **P** | **01 13 03.3** | **-1.4** |
| **KNRA** | **Kununurra** | **53.94** | **264** | P | **P** | **01 13 10.3** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **56.44** | **260** | P | **P** | **01 13 28.7** | **-0.3** |
| **SOEI** | **Soe** | **59.57** | **269** | P | **P** | **01 13 51.3** | **+0.3** |
| **VNDA** | **Vanda** | **60.56** | **186** | P | **P** | **01 13 57.6** | **+1.1** |
| | comp=Z,0.5nm,0.7s,baz=333,slow=8.1,SNR=2.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **61.24** | **255** | P | **P** | **01 14 01.2** | **-0.9** |
| **MBWA** | **Marble Bar** | **61.41** | **255** | P | **P** | **01 14 01.5** | **-1.8** |
| **MORW** | **Morawa** | **63.60** | **246** | P | **P** | **01 14 16.6** | **-1.1** |
| MORW | | | | IAmb | IAmb | 01 14 17.0 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **TOLI2** | **Tolitoli** | **66.19** | **280** | P | **P** | **01 14 35.6** | **+0.9** |
| TOLI2 | | | | IAmb | IAmb | 01 14 57.3 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.21** | **321** | P | **P** | **01 14 58.7** | **-0.6** |
| | comp=Z,1.5nm,0.3s,baz=157,slow=5.9,SNR=5.5 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **01 15 10.3** | **+0.9** |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **01 15 09.9** | **+0.5** |
| | comp=Z,3.3nm,0.8s,baz=32,slow=1.8,SNR=14 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **KMRM** | **Mail Ridge** | **74.98** | **38** | P | **P** | **01 15 25.9** | **-1.5** |
| KMRM | | | | IAmb | IAmb | 01 15 52.6 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **WAKR** | **Walker** | **76.52** | **42** | P | **P** | **01 15 34.5** | **-1.9** |
| **YBH** | **Yreka Blue Hor** | **76.52** | **37** | P | **P** | **01 15 35.9** | **-0.3** |
| **NVAR** | **Mina Array Bea** | **77.19** | **42** | P | **P** | **01 15 39.3** | **-0.9** |
| **NVAR** | **Mina Array Bea** | **77.19** | **42** | P | **P** | **01 15 40.5** | **+0.3** |
| | comp=Z,1.2nm,0.7s,baz=227,slow=9.0,SNR=12 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **77.22** | **317** | P | **P** | **01 15 40.8** | **+0.8** |
| | comp=Z,2.1nm,0.7s,baz=138,slow=6.2,SNR=7.9 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **NV11** | **Mina Array Sit** | **77.29** | **42** | P | **P** | **01 15 39.0** | **-1.6** |
| **K04D** | **Chiloquin, OR** | **77.64** | **37** | P | **P** | **01 15 39.4** | **-3.1** |
| **SYI** | **Shuyak Island** | **78.64** | **12** | P | **P** | **01 15 44.7** | **-2.6** |
| **PINE** | **Pine Mountain** | **78.83** | **37** | P | **P** | **01 15 48.2** | **-0.9** |
| **P18K** | **Big Mountain,** | **78.86** | **10** | P | **P** | **01 15 47.2** | **-1.5** |
| P18K | | | | IAmb | IAmb | 01 15 48.6 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **M14K** | **Bethel** | **79.27** | **6** | P | **P** | **01 15 49.7** | **-1.0** |
| M14K | | | | IAmb | IAmb | 01 16 09.7 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **O18K** | **Koktuh Hills** | **79.31** | **10** | P | **P** | **01 15 48.9** | **-2.1** |
| O18K | | | | IAmb | IAmb | 01 16 33.1 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **I07A** | **Izee** | **79.83** | **37** | P | **P** | **01 15 53.1** | **-1.3** |
| **M16K** | **Timber Creek** | **79.88** | **8** | P | **P** | **01 15 53.8** | **-0.3** |
| M16K | | | | IAmb | IAmb | 01 15 55.2 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **80.82** | **6** | P | **P** | **01 15 59.9** | **+0.8** |
| K15K | | | | IAmb | IAmb | 01 16 00.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **G08A** | **Pilot Rock** | **80.87** | **36** | P | **P** | **01 15 59.1** | **-0.8** |
| G08A | | | | IAmb | IAmb | 01 16 00.7 | |
| | comp=Z,5.4nm,1.0s | | | | | | |
| **J18K** | **Innoko River** | **82.53** | **8** | P | **P** | **01 16 07.4** | **-0.7** |
| **TXAR** | **Lajitas Array** | **83.18** | **56** | P | **P** | **01 16 12.9** | **+0.6** |
| | comp=Z,0.9nm,0.9s,baz=212,slow=8.7,SNR=5.1 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **84.82** | **199** | P | **P** | **01 16 19.6** | **-0.2** |
| | comp=Z,2.7nm,0.7s,baz=104,slow=6.1,SNR=4.6 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **85.13** | **42** | P | **P** | **01 16 21.6** | **-0.5** |
| | comp=Z,0.7nm,0.7s,baz=228,slow=3.8,SNR=6.7 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.35** | **12** | P | **P** | **01 16 21.1** | **-1.2** |
| | comp=Z,1.6nm,0.7s,baz=228,slow=6.2,SNR=22 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.08** | **179** | ⇑P | **P** | **01 16 44.6** | **-0.6** |
| | comp=Z,89nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.27** | **177** | ⇑P | **P** | **01 16 45.2** | **-0.8** |
| | comp=Z,22nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.27** | **177** | P | **P** | **01 16 45.3** | **-0.8** |
| | comp=Z,1.2nm,0.8s,baz=161,slow=6.9,SNR=4.7 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.28** | **175** | ⇑P | **P** | **01 16 45.5** | **-0.4** |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.75** | **176** | ⇑P | **P** | **01 16 48.0** | **-0.2** |
| | comp=Z,4.9nm,0.6s,baz=195,slow=4.9 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.96** | **176** | ⇑P | **P** | **01 16 48.8** | **-0.3** |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.26** | **289** | P | **P** | **01 16 55.4** | **-0.7** |
| | comp=Z,1.2nm,0.3s,baz=134,slow=4.1,SNR=4.5 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **114.37** | **318** | PKiKP | PKPdf | 01 22 22.8 | -1.6 |
| | comp=Z,0.3nm,0.6s,baz=87,slow=2.8,SNR=3.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.10** | **351** | PKP | **PKPdf** | **01 22 46.7** | **-1.6** |
| | comp=Z,4.2nm,0.8s,baz=60,slow=3.2,SNR=4.4 | | | | | | |
| **FINES** | **FINESS Array B** | **134.28** | **346** | PKP | **PKPdf** | **01 23 00.9** | **-1.1** |
| | comp=Z,2.7nm,1.0s,baz=347,slow=3.1,SNR=3.9 | | | | | | |
| **SORM** | **Soroca** | **144.64** | **333** | ⇑P | **PKPab** | **01 23 19.2** | **-1.1** |
| **RETH** | **Rethem/Aller,** | **145.30** | **356** | *e*PKPbc | **PKPdf** | **01 23 21.7** | **-0.5** |
| | baz=9.9,slow=2.8 | | | | | | |
| **NRDL** | **Niedersach Rie** | **145.49** | **355** | *e*PKPbc | **PKPdf** | **01 23 22.2** | **-0.3** |
| | baz=9.9,slow=2.8 | | | | | | |
| **FLTG** | **Flechtingen** | **145.54** | **354** | *e*PKPbc | **PKPdf** | **01 23 22.1** | **-0.5** |
| | baz=9.9,slow=2.8 | | | | | | |
| **IBBN** | **Ibbenburen** | **145.83** | **357** | *e*PKPbc | **PKPdf** | **01 23 23.6** | **+0.4** |
| | baz=9.9,slow=2.8 | | | | | | |
| **CLZ** | **Clausthal** | **146.11** | **354** | *e*PKPbc | **PKPdf** | **01 23 24.5** | **+0.7** |
| | baz=9.9,slow=2.8 | | | | | | |
| **CLL** | **Collm** | **146.32** | **351** | ⇑*i*PKPbc | **PKPdf** | **01 23 24.8** | **+0.7** |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **CLL** | **Collm** | **146.32** | **351** | *e*PKPbc | **PKPdf** | **01 23 24.7** | **+0.7** |
| | baz=9.9,slow=2.8 | | | | | | |
| **BURAR** | **Bucovina Array** | **146.35** | **335** | ⇓P | **PKPbc** | **01 23 26.7** | **+0.8** |
| **BRG** | **Berggiesshubel** | **146.59** | **350** | *e*P | **PKPdf** | **01 23 26.0** | **+1.5** |
| BRG | | | | Amp | | 01 23 26.8 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **146.59** | **350** | *e*PKPbc | **PKPdf** | **01 23 25.7** | **+1.1** |
| | baz=9.9,slow=2.8 | | | | | | |
| **TESR** | **Tescani** | **146.63** | **333** | ⇑P | **PKPdf** | **01 23 25.8** | **+1.0** |
| **BUG** | **Bochum--Univer** | **146.71** | **358** | *e*PKPbc | **PKPdf** | **01 23 26.0** | **+1.4** |
| | baz=9.9,slow=2.8 | | | | | | |
| **KASTN** | **Kahler Asten** | **146.89** | **356** | *e*PKPbc | **PKPdf** | **01 23 26.5** | **+1.4** |
| | baz=9.9,slow=2.8 | | | | | | |
| **MORC** | **Moravsky Berou** | **146.91** | **345** | *e*PKP | **PKPdf** | **01 23 25.3** | **+0.1** |
| **TPGR** | **Topolog** | **147.06** | **329** | ⇑P | **PKPdf** | **01 23 27.6** | **+2.1** |
| **VRI** | **Vrincioaia** | **147.09** | **332** | ⇑P | **PKPdf** | **01 23 27.7** | **+2.1** |
| **MOX** | **Moxa** | **147.15** | **353** | *e*PKPbc | **PKPdf** | **01 23 27.4** | **+1.9** |
| | baz=9.9,slow=2.8 | | | | | | |
| **PLN** | **Plauen** | **147.24** | **352** | *e*PKPbc | **PKPdf** | **01 23 27.5** | **+1.9** |
| | baz=9.9,slow=2.8 | | | | | | |
| **TURR** | **Turia** | **147.26** | **333** | ⇑P | **PKPdf** | **01 23 28.1** | **+2.3** |
| **TANN** | **Tannenbergstba** | **147.27** | **351** | *e*PKPbc | **PKPdf** | **01 23 27.8** | **+2.0** |
| | baz=9.9,slow=2.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.36** | **317** | PKPbc | **PKPdf** | **01 23 28.2** | **+1.8** |
| | comp=Z,2.6nm,0.9s,baz=128,slow=3.3,SNR=12 | | | | | | |
| **VRAC** | **Vranov** | **147.57** | **346** | *e*PKP | **PKPdf** | **01 23 28.8** | **+2.5** |
| **MLR** | **Muntele Rosu** | **147.73** | **332** | ⇑P | **PKPdf** | **01 23 29.5** | **+2.7** |
| **MANZ** | **Manzenberg** | **147.74** | **352** | *e*PKPbc | **PKPdf** | **01 23 29.2** | **+2.6** |
| | baz=9.9,slow=2.8 | | | | | | |
| **KRUC** | **Moravsky** | **147.84** | **346** | *e*PKP | **PKPdf** | **01 23 28.9** | **+2.2** |
| **TNS** | **Taunus Mts** | **147.87** | **356** | *e*PKPbc | **PKPdf** | **01 23 29.5** | **+2.7** |
| | baz=9.9,slow=2.8 | | | | | | |
| **MARR** | **Marisel-Cluj** | **147.94** | **337** | ⇑P | **PKPbc** | **01 23 30.2** | **-0.1** |
| **ROTZ** | **Rotzenmuhle** | **147.94** | **352** | *e*PKPbc | **PKPdf** | **01 23 29.7** | **+2.8** |
| | baz=9.9,slow=2.8 | | | | | | |
| **DRGR** | | **147.99** | **337** | ⇑P | **PKPbc** | **01 23 30.3** | **-0.1** |
| **GRF** | **Grafenberg Arr** | **148.14** | **353** | *e*PKPbc | **PKPdf** | **01 23 30.0** | **+2.8** |
| | baz=9.9,slow=2.8 | | | | | | |
| **VOIR** | | **148.16** | **333** | ⇑P | **PKPbc** | **01 23 30.8** | **-0.1** |
| **ARR** | **Arges** | **148.40** | **334** | ⇓P | **PKPbc** | **01 23 31.9** | **+0.4** |
| **WET** | **Wettzell** | **148.44** | **350** | *e*PKPbc | **PKPbc** | **01 23 31.4** | **0.0** |
| | baz=9.9,slow=2.8 | | | | | | |
| **WLF** | **Walferdange** | **148.52** | **359** | *e*PKPbc | **PKPbc** | **01 23 31.1** | **-0.4** |
| | baz=9.9,slow=2.8 | | | | | | |
| **GEC2** | **GERESS Array S** | **148.59** | **349** | *e*PKPbc | **PKPdf** | **01 23 31.0** | **+2.9** |
| | baz=9.9,slow=2.8 | | | | | | |
| **GERES** | **GERESS Array B** | **148.59** | **349** | PKPbc | **PKPdf** | **01 23 31.0** | **+2.9** |
| | comp=Z,1.6nm,0.7s,baz=90,slow=4.9,SNR=6.1 | | | | | | |
| **SIRR** | **Siria** | **148.82** | **338** | ⇓P | **PKPbc** | **01 23 32.4** | **-0.1** |
| **CONA** | **Conrad Observa** | **149.03** | **346** | *i* PKP | **PKPbc** | **01 23 32.9** | **-0.1** |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **SURR** | **Surduc** | **149.08** | **337** | ⇑P | **PKPbc** | **01 23 32.7** | **-0.3** |
| **RONA** | **Rosalia, Austr** | **149.14** | **345** | *i* PKP | **PKPbc** | **01 23 33.0** | **-0.3** |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BZS** | **Buzias** | **149.39** | **337** | ⇓P | **PKPbc** | **01 23 33.1** | **-0.8** |
| **MOA** | **Molln** | **149.44** | **348** | *i* PKP | **PKPdf** | **01 23 33.0** | **+3.6** |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **FUR** | **Furstenfeldbru** | **149.63** | **352** | *e*PKPbc | **PKPbc** | **01 23 34.0** | **-0.4** |
| | baz=9.9,slow=2.8 | | | | | | |
| **BIOA** | **Baz Ischl, Aus** | **149.72** | **349** | *i* PKP | **PKPbc** | **01 23 34.3** | **-0.4** |
| | comp=Z,5.8nm,1.3s | | | | | | |
| **ARSA** | **Arzberg** | **149.75** | **346** | *e*PKP | **PKPdf** | **01 23 30.9** | **+1.0** |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **BFO** | **Black Forest** | **149.76** | **356** | *e*PKPbc | **PKPbc** | **01 23 34.1** | **-0.6** |
| | baz=9.9,slow=2.8 | | | | | | |
| **RJOB** | **Jochberg** | **149.82** | **350** | *e*PKPbc | **PKPbc** | **01 23 34.2** | **-0.7** |
| | baz=9.9,slow=2.8 | | | | | | |
| **LESA** | **Schwarzleotal** | **150.14** | **350** | *i* PKP | **PKPbc** | **01 23 35.4** | **-0.4** |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **UBR** | **Ueberruh** | **150.25** | **353** | *e*PKPbc | **PKPbc** | **01 23 35.5** | **-0.5** |
| | baz=9.9,slow=2.8 | | | | | | |
| **KBA** | **Koelnbreinsper** | **150.36** | **349** | *e*PKP | **PKPbc** | **01 23 35.3** | **-1.1** |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **RETA** | **Reutte** | **150.36** | **352** | *i* PKP | **PKPbc** | **01 23 35.7** | **-0.6** |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **SOKA** | **Soboth** | **150.40** | **346** | *i* PKP | **PKPbc** | **01 23 35.1** | **-1.3** |
| | comp=Z,4.2nm,1.3s | | | | | | |
| **WATA** | **Walderalm** | **150.40** | **351** | *e*PKP | **PKPbc** | **01 23 35.3** | **-1.1** |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **150.46** | **352** | *i* PKP | **PKPbc** | **01 23 35.9** | **-0.7** |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **WTTA** | **Wattenberg** | **150.46** | **351** | *i* PKP | **PKPbc** | **01 23 35.9** | **-0.7** |
| | comp=Z,6.6nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.57** | **352** | *i* PKP | **PKPbc** | **01 23 36.2** | **-0.6** |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **DAVA** | **Damuels** | **150.66** | **354** | *i* PKP | **PKPbc** | **01 23 37.0** | **0.0** |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **OBKA** | **Obir** | **150.66** | **347** | *i* PKP | **PKPbc** | **01 23 37.5** | **+0.5** |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **MYKA** | **Terra Mystica** | **150.74** | **348** | *e*PKP | **PKPdf** | **01 23 32.1** | **+0.6** |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **FETA** | **Feichten** | **150.82** | **352** | *i* PKP | **PKPbc** | **01 23 37.0** | **-0.4** |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.83** | **350** | *i* PKP | **PKPbc** | **01 23 36.3** | **-1.1** |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **157.08** | **19** | PKPab | **PKPab** | **01 24 10.7** | **-1.0** |
| | comp=Z,1.2nm,0.8s,baz=314,slow=2.9,SNR=8.6 | | | | | | |

*NEIC **07** 01:09:48.1±1.4,35.38N±0.02×98.13W±0.03,h5km±1km, Error ellipse: s-maj=3.6km s-min=3.0km az=273.0*

**TUL 07 01:09:48.9±1.5,35.38N±0.02×98.10W±0.02,h5km±5km, ML2.5,mb_Lg2.5/56(NEIC),ML2.5/45(NEIC),Error ellipse: s-maj=2.5km s-min=2.0km az=127.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCSW** | **OKLAHOMA CITY** | **0.55** | **87** | | Pg | 01 09 59.3 | -0.1 |
| OKCSW | | | | Sg | Sg | 01 10 06.6 | +0.1 |
| OKCSW | | | | IAML | | 01 10 14.2 | |
| | comp=N,200nm,0.3s | | | | | | |
| OKCSW | | | | IAML | | 01 10 16.7 | |
| | comp=E,317nm,0.5s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.55** | **299** | | Pg | 01 09 59.4 | -0.1 |
| **FNO** | **Franklin** | **0.59** | **102** | | Pg | 01 10 00.3 | +0.1 |
| **ADOK** | **Arcadia Dam** | **0.66** | **65** | Pg | Pg | 01 10 01.6 | +0.1 |
| **OK029** | **Liberty Lake** | **0.67** | **52** | Pg | Pg | 01 10 01.6 | -0.2 |
| OK029 | | | | IAML | | 01 10 11.7 | |
| | comp=E,147nm,0.5s | | | | | | |
| OK029 | | | | IAML | | 01 10 20.9 | |
| | comp=E,164nm,0.6s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.81** | **164** | Pg | Pg | 01 10 04.2 | -0.2 |
| X34A | | | | IAML | | 01 10 30.6 | |
| | comp=N,158nm,0.6s | | | | | | |
| X34A | | | | IAML | | 01 10 32.3 | |
| | comp=E,268nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **0.85** | **221** | | Pg | 01 10 04.6 | -0.5 |
| **W35A** | **Tecumseh** | **1.03** | **102** | | Pg | 01 10 08.3 | -0.4 |
| W35A | | | | IAML | | 01 10 31.7 | |
| | comp=N,99nm,0.3s | | | | | | |
| W35A | | | | IAML | | 01 10 33.7 | |
| | comp=E,113nm,0.4s | | | | | | |
| **CROK** | **Carrier** | **1.13** | **5** | | Pg | 01 10 10.0 | -0.5 |
| **OK031** | **S. Brethren Rd** | **1.18** | **61** | | Pg | 01 10 10.8 | -0.7 |
| OK031 | | | | IAML | | 01 10 33.2 | |
| | comp=E,142nm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **1.21** | **335** | | Pg | 01 10 11.8 | -0.4 |
| **OK052** | **Battle Ridge R** | **1.22** | **60** | | Pg | 01 10 11.7 | -0.7 |
| **U32A** | **Winter Ranch,** | **1.24** | **324** | Pg | Pg | 01 10 12.4 | -0.2 |
| U32A | | | | IAML | | 01 10 33.5 | |
| | comp=N,177nm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **1.27** | **303** | | Pg | 01 10 12.8 | -0.4 |
| ELIS | | | | IAML | | 01 10 39.6 | |
| | comp=E,178nm,0.2s | | | | | | |
| **QUOK** | **Quay** | **1.38** | **55** | | Pn | 01 10 14.5 | -0.4 |
| **DEOK** | **Depew** | **1.39** | **70** | | Pn | 01 10 14.3 | -0.7 |
| **OK048** | **Pawnee Station** | **1.40** | **42** | | Pn | 01 10 15.1 | -0.1 |
| **NOKA** | **Waynoka** | **1.42** | **332** | | Pn | 01 10 15.1 | -0.3 |
| **OK032** | **Salt Plains WL** | **1.43** | **357** | | Pn | 01 10 15.1 | -0.4 |
| **GC02** | **Grant County #** | **1.48** | **8** | | Pn | 01 10 16.0 | -0.3 |
| **OK051** | **E0350 and S346** | **1.52** | **42** | | Pn | 01 10 16.5 | -0.4 |
| **BLOK** | **Blackwell** | **1.56** | **27** | | Pn | 01 10 17.4 | +0.1 |
| **KAN14** | **Manchester OK** | **1.58** | **4** | | Pn | 01 10 17.3 | -0.3 |
| **LOOK** | **Love County** | **1.58** | **151** | | Pn | 01 10 17.4 | -0.2 |
| LOOK | | | | Sg | | 01 10 39.3 | -0.3 |
| **WTFS** | **Witchita Falls** | **1.64** | **191** | | Pn | 01 10 18.2 | -0.2 |
| **KAN17** | **Caldwell West** | **1.68** | **9** | | Pn | 01 10 19.2 | +0.1 |
| **KAN13** | **South Haven SW** | **1.71** | **17** | | Pn | 01 10 19.5 | +0.1 |
| **SMWD** | **Samnorwood** | **1.77** | **262** | Pn | Pn | 01 10 20.3 | 0.0 |
| **KAN01** | **Argonia South** | **1.79** | **9** | Pn | Pn | 01 10 20.8 | +0.2 |
| KAN01 | | | | IAmb_Lg | | 01 10 46.2 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **KAN09** | **Caldwell North** | **1.80** | **12** | | Pn | 01 10 21.2 | +0.6 |
| KAN09 | | | | IAmb_Lg | | 01 10 49.2 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **TUL3** | **Leonard** | **1.96** | **74** | | Pn | 01 10 22.7 | -0.1 |
| TUL3 | | | | IAmb_Lg | | 01 10 53.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **Z35A** | **Perchaven, San** | **2.16** | **161** | | Pn | 01 10 25.9 | +0.3 |
| **FW03** | **Perrin-Whitt E** | **2.33** | **179** | Pn | Pn | 01 10 28.1 | +0.1 |
| FW03 | | | | IAmb_Lg | | 01 11 08.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **2.38** | **109** | Pn | Pn | 01 10 28.8 | +0.2 |
| X37A | | | | IAmb_Lg | | 01 11 07.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **2.57** | **184** | Pn | Pn | 01 10 30.8 | -0.4 |
| PLPT | | | | IAmb_Lg | | 01 11 12.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **RLO** | **Rose Lookout** | **2.62** | **72** | Pn | Pn | 01 10 32.2 | +0.2 |
| **APMT** | **Aspermont** | **2.64** | **220** | | Pn | 01 10 32.2 | -0.1 |
| **DKNS** | **Dickens** | **2.89** | **235** | Pn | Pn | 01 10 35.3 | -0.4 |
| DKNS | | | | IAmb_Lg | | 01 11 26.1 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **AMTX** | **Amarillo** | **2.97** | **261** | IAmb_Lg | | 01 11 22.9 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.03** | **205** | Pn | Pn | 01 10 37.0 | -0.6 |
| **R32A** | **Long Quarter,** | **3.08** | **351** | Pn | Pn | 01 10 38.2 | 0.0 |
| **TREL** | **Terrell** | **3.13** | **147** | IAmb_Lg | | 01 11 31.0 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **3.20** | **70** | Pn | Pn | 01 10 40.4 | +0.5 |
| **SN07** | **Snyder 07** | **3.25** | **226** | IAmb_Lg | | 01 11 30.2 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.34** | **128** | IAmb_Lg | | 01 11 31.9 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.40** | **224** | IAmb_Lg | | 01 11 44.6 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **3.50** | **74** | Pn | Pn | 01 10 43.6 | -0.5 |
| **POST** | **Post** | **3.64** | **232** | Pn | Pn | 01 10 45.2 | -0.8 |
| POST | | | | IAmb_Lg | | 01 11 47.2 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.67** | **340** | Pn | Pn | 01 10 46.5 | +0.1 |
| **MIAR** | **Mount Ida** | **3.81** | **101** | | Pn | 01 10 48.8 | +0.5 |
| MIAR | | | | IAmb_Lg | | 01 11 55.9 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **KSU1** | **Kansas State U** | **3.90** | **17** | IAmb_Lg | | 01 11 57.4 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.91** | **287** | Pn | Pn | 01 10 49.8 | 0.0 |
| **BRDY** | **Brady** | **4.15** | **191** | Pn | Pn | 01 10 53.0 | 0.0 |
| **SGCY** | **Sterling City** | **4.28** | **217** | IAmb_Lg | | 01 12 10.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **X40A

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SFX** | **San Felipe** | **1.12** | **318** | *eP* | **Pn** | **02 15 18.2** | **+0.6** |
| SFX | | | | ⇓*e* | | 02 15 43.3 | |
| SFX | | | | IAML | | 02 15 43.3 | |
| | comp=N,351nm,0.6s | | | | | | |
| SFX | | | | ⇑*e* | | 02 15 43.4 | |
| SFX | | | | IAML | | 02 15 43.4 | |
| | comp=E,239nm,0.6s | | | | | | |
| **PLIB** | **Puerto Liberta** | **1.15** | **104** | ⇓*eP* | **Pn** | **02 15 18.5** | **+0.4** |
| PLIB | | | | *eS* | **Sn** | **02 15 34.6** | **+0.6** |
| PLIB | | | | IAML | | 02 15 35.4 | |
| | comp=E,226nm,0.4s | | | | | | |
| PLIB | | | | *e* | | 02 15 35.4 | |
| **PPXB** | **Puerto Peasco** | **1.17** | **15** | ⇑*eP* | **Pg** | **02 15 18.2** | **-0.3** |
| **PIX** | **Pinacate** | **1.43** | **18** | *eP* | **Pg** | **02 15 22.8** | **-0.6** |
| **LAPR** | **La Primavera** | **1.47** | **78** | *eP* | **Pg** | **02 15 23.5** | **-0.7** |
| LAPR | | | | *eS* | **Sg** | **02 15 43.2** | **0.0** |
| **SPIG** | **San Pedro Mart** | **1.53** | **304** | ⇑*eP* | **Pb** | **02 15 24.1** | **-0.6** |
| **ECBX** | **El Chinero** | **1.57** | **324** | *eP* | **Pb** | **02 15 24.7** | **-0.3** |
| ECBX | | | | *eS* | **Sg** | **02 15 46.9** | **+0.5** |
| **SQX** | **San Quintin** | **1.68** | **283** | ⇑*eP* | **Pb** | **02 15 26.4** | **-0.6** |
| SQX | | | | *eS* | **Sg** | **02 15 49.3** | **-0.6** |
| SQX | | | | IAML | | 02 15 52.1 | |
| | comp=E,330nm,0.4s | | | | | | |
| SQX | | | | ⇑*e* | | 02 15 52.1 | |
| **214A** | **Organ Pipe Nat** | **2.02** | **30** | ⇑*eP* | **Pn** | **02 15 30.8** | **+0.6** |

**IDC 07 02:17:33.5±5.7, 5.79S×141.50E, h0km, mb3.5/1, mbtmp3.5/3, ML3.5/2, Error ellipse: s-maj=198.9km s-min=36.5km az=93.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.70** | **206** | Pn | Pn | 02 21 14.8 | -1.5 |
| | 2.0nm,0.3s,baz=28,slow=14,SNR=6.2 | | | | | | |
| WRA | | | | Sn | Sn | 02 24 03.9 | -7.2 |
| | 0.1nm,0.3s,baz=29,slow=24,SNR=2.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **19.22** | **202** | P | Pn | 02 21 60.0 | -0.4 |
| | 0.2nm,0.3s,baz=30,slow=10,SNR=12 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **73.91** | **322** | P | P | 02 29 10.7 | +0.1 |
| | 0.3nm,0.6s,baz=115,slow=6.8,SNR=2.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*NEIC **07** 02:25:29.9±2.2, 18.24N±0.07×76.76W±0.04, h10km±2km, ML2.6/8, Error ellipse: s-maj=11.9km s-min=5.9km az=161.0*
*JSN **07** 02:25:31.3±0.4, 18.09N×76.66W, h10km±4km, MD3.3*
*SSNC **07** 02:25:31.4±1.1, 18.20N×76.69W, h7km±11km, MD2.9, ML3.4, MW2.6*

**ISC 07 02:25:29.3±1.3, 18.25N±0.10×76.64W±0.06, h11km±15km, n18, σ1§10/29, 4D, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GWJ** | **Greenwich** | **0.20** | **205** | ⇓*iP* | **Pg** | **02 25 33.7** | **+0.1** |
| **STH** | **Stony Hill** | **0.24** | **222** | ⇓*iP* | **Pg** | **02 25 34.5** | **+0.2** |
| **STH** | **Stony Hill** | **0.24** | **222** | *eP* | **Pg** | **02 25 34.5** | **+0.2** |
| STH | | | | *eS* | **Sg** | **02 25 37.0** | **-0.7** |
| STH | | | | IAML | | 02 25 37.5 | |
| | comp=N,801μm,0.1s | | | | | | |
| STH | | | | IAML | | 02 25 38.0 | |
| | comp=E,411μm,0.1s | | | | | | |
| **HOJ** | **Hope** | **0.27** | **203** | ⇓*iP* | **Pg** | **02 25 34.2** | **-0.6** |
| **MTDJ** | **Mount Denham** | **0.85** | **268** | Pg | **Pb** | **02 25 46.1** | **-0.1** |
| MTDJ | | | | Sn | **Sb** | **02 25 58.0** | **+0.3** |
| MTDJ | | | | IAML | | 02 26 04.0 | |
| | comp=E,283nm,0.3s | | | | | | |
| **MTDJ** | **Mount Denham** | **0.85** | **268** | ⇓*iP* | **Pb** | **02 25 46.2** | **-0.1** |
| **MTDJ** | **Mount Denham** | **0.85** | **268** | *eP* | **Pb** | **02 25 46.2** | **-0.1** |
| MTDJ | | | | *eS* | **Sb** | **02 25 57.3** | **-0.4** |
| MTDJ | | | | IAML | | 02 26 03.6 | |
| | comp=E,288nm,0.3s | | | | | | |
| MTDJ | | | | IAML | | 02 26 03.9 | |
| | comp=E,243nm,0.1s | | | | | | |
| **CHIV** | **Chivirico** | **1.73** | **7** | Pn | **Pn** | **02 26 00.2** | **+0.8** |
| CHIV | | | | Sn | **Sn** | **02 26 21.7** | **+0.3** |
| CHIV | | | | IAML | | 02 26 23.2 | |
| | comp=N,30nm,0.1s | | | | | | |
| CHIV | | | | IAML | | 02 26 26.0 | |
| | comp=E,22nm,0.1s | | | | | | |
| **CHIV** | **Chivirico** | **1.73** | **7** | *eP* | **Pn** | **02 26 00.2** | **+0.8** |
| CHIV | | | | *eS* | **Sn** | **02 26 20.7** | **-0.8** |
| **LMGC** | **Las Mercedes** | **1.83** | **349** | *eP* | **Pn** | **02 26 01.2** | **+0.4** |
| LMGC | | | | *eS* | **Sn** | **02 26 23.5** | **-0.6** |
| LMGC | | | | *eSg* | **Sb** | **02 26 25.0** | **-1.0** |
| LMGC | | | | IAML | | 02 26 25.3 | |
| | comp=N,105nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 02 26 25.5 | |
| | comp=E,114nm,0.1s | | | | | | |
| **MARVS** | **Santiago de Cu** | **1.87** | **22** | *eP* | **Pn** | **02 26 02.5** | **+1.2** |
| MARVS | | | | *eS* | **Sn** | **02 26 24.7** | **-0.4** |
| MARVS | | | | IAML | | 02 26 27.7 | |
| | comp=N,30nm,0.1s | | | | | | |
| **RCC** | **Rio Carpintero** | **1.95** | **27** | *eS* | **Sn** | **02 26 25.4** | **-1.6** |
| **GTBY** | **Guantanamo Bay** | **2.21** | **41** | Pn | **Pn** | **02 26 07.4** | **+1.5** |
| GTBY | | | | IAML | | 02 26 26.3 | |
| | comp=N,44nm,2.5s | | | | | | |
| GTBY | | | | Sn | **Sn** | **02 26 33.1** | **-0.2** |
| **GTBY** | **Guantanamo Bay** | **2.21** | **41** | *eP* | **Pn** | **02 26 07.6** | **+1.6** |
| GTBY | | | | *eS* | **Sn** | **02 26 33.1** | **-0.2** |
| **HLGC** | **Holguin** | **2.68** | **12** | *eP* | **Pn** | **02 26 14.5** | **+2.0** |
| **NMDO** | **Nuevo Mundo** | **2.78** | **34** | Pn | **Pn** | **02 26 15.5** | **+1.6** |
| NMDO | | | | IAML | | 02 26 39.0 | |
| | comp=N,16nm,2.5s | | | | | | |
| NMDO | | | | IAML | | 02 27 02.0 | |
| | comp=E,19nm,2.6s | | | | | | |
| **NMDO** | **Nuevo Mundo** | **2.78** | **34** | *eP* | **Pn** | **02 26 14.6** | **+0.7** |
| **MASC** | **Masc** | **2.97** | **50** | *eP* | **Pn** | **02 26 17.7** | **+1.2** |
| MASC | | | | *eS* | **Sn** | **02 26 49.4** | **-2.9** |

*FUNV **07** 02:35:21.8, 8.32N×71.21W, h5km, MW3.0*
*RSNC **07** 02:35:23.4±0.0, 8.1N±2.2×7.1W±.1, h2km±3km, M2.0, ML2.0*

**ISC 07 02:35:19.8±1.2, 8.19N±0.05×71.17W±0.03, h9km±11km, n13, σ1§45/25, 1D, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOCV** | **Socops** | **0.33** | **74** | ⇓*iP* | **Pb** | **02 35 28.2** | **+0.4** |
| SOCV | | | | *eS* | **Sb** | **02 35 33.0** | **-0.3** |
| **SDV** | **Santo Domingo** | **0.87** | **38** | P | **Pg** | **02 35 36.4** | **-0.3** |
| SDV | | | | S | **Sg** | **02 35 46.8** | **-1.3** |
| **CAPV** | **Capacho** | **1.18** | **254** | *eP* | **Pn** | **02 35 44.0** | **+1.3** |
| CAPV | | | | *eS* | **Sn** | **02 35 59.7** | **+0.8** |
| **PAMC** | **Pamplona, Colo** | **1.73** | **241** | P | **Pg** | **02 35 54.6** | **+1.5** |
| PAMC | | | | S | **Sg** | **02 36 16.6** | **+0.9** |
| **TAMC** | **Tame, Arauca** | **1.85** | **199** | P | **Pg** | **02 35 55.8** | **+0.5** |
| TAMC | | | | S | **Sg** | **02 36 21.8** | **+2.4** |
| **OCAC** | **Ocana** | **2.12** | **271** | P | **Pb** | **02 35 58.5** | **-0.1** |
| OCAC | | | | S | **Sb** | **02 36 25.4** | **+0.2** |
| **TEPV** | **Terepaima** | **2.63** | **48** | *eP* | **Pn** | **02 36 03.8** | **+1.2** |
| TEPV | | | | *eS* | **Sn** | **02 36 35.8** | **+1.1** |
| **BRJC** | **Barrancabermej** | **2.82** | **245** | P | **Pn** | **02 36 01.5** | **-3.6** |
| **RUSC** | **La Rusia** | **2.97** | **220** | P | **Pb** | **02 36 11.4** | **-1.8** |
| RUSC | | | | S | **Sg** | **02 36 55.2** | **-0.1** |
| **BAUV** | **El Baul** | **3.19** | **76** | *eP* | **Pn** | **02 36 11.4** | **+1.3** |
| BAUV | | | | *eS* | **Sn** | **02 36 48.1** | **-0.1** |
| **PTBC** | **PUERTO BERRIO,** | **3.65** | **243** | P | **Pg** | **02 36 28.9** | **-0.9** |
| PTBC | | | | S | **Sb** | **02 37 09.5** | **+0.6** |
| **BENV** | **Beln** | **3.94** | **63** | *eP* | **Pn** | **02 36 22.4** | **+1.8** |
| BENV | | | | *eS* | **Sn** | **02 37 06.1** | **-0.9** |
| **CACV** | **CAICARA DEL OR** | **4.63** | **97** | *eP* | **Pb** | **02 36 39.1** | **-2.1** |
| CACV | | | | *eS* | **Sb** | **02 37 36.9** | **-0.4** |

*BJI **07** 02:47:37.7±0.0, 3.11S×148.07E, h21km, mb4.7/39, mB5.0/17, Ms4.6/19, Ms7 4.4/23*
*IDC **07** 02:47:38.9±0.7, 2.98S×147.69E, h0km, mb4.1/14, mbtmp4.1/15, ML1.6/1, MS4.2/21, Error ellipse: s-maj=23.1km s-min=11.9km az=104.0*
*NEIC **07** 02:47:40.7±1.7, 2.85S±0.06×147.74E±0.10, h10km±1km, mb4.9/40, Error ellipse: s-maj=17.9km s-min=7.8km az=243.0*
*GCMT **07** 02:47:41.7±0.2, 2.98S±0.01×147.71E±0.01, h16km±1km, MW4.9/103, Moment Tensor Solution. s44,c48; s103,c152; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr0.48±.10; Mθθ0.46±.09; Mϕϕ-0.93±.10; Mrθ-0.04±.27; Mθϕ2.98±.09; Mϕr-0.12±.26; Best double couple:*

*Mo3.06400×10^16^ NP1:ϕ±187.00000°, δ89.00000°, λ177.00000°. NP2:ϕ±277.00000°, δ87.00000°, λ1.00000°. Principal axes: T 2.8280, Pl93.0000°, Azm142.0000°; N 0.4720, Pl87.0000°, Azm343.0000°; P -3.3000, Pl1.0000°, Azm232.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA **07** 02:47:45.4±2.1, 3.3S±5.5×14.8E±., h21km±16km, M4.8/17, mB5.3/6, mb4.7/17, MLv4.9/3, Mw(mB)4.8/6*

**ISC 07 02:47:40.6±0.5, 2.92S±0.05×147.77E±0.07, h10km, n108, σ1§45/94, mb4.8/51, MS4.4/32, 1C-2D, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **0.96** | **335** | Pg | **Pg** | **02 47 57.8** | **-1.3** |
| MANU | | | | Sn | **Sn** | **02 48 11.8** | **-2.1** |
| **RABL** | **Rabaul** | **4.57** | **106** | Pn | **Pn** | **02 48 49.8** | **-0.1** |
| **PMG** | **Port Moresby** | **6.47** | **185** | Pn | **Pn** | **02 49 14.8** | **-1.2** |
| **PMG** | **Port Moresby** | **6.47** | **185** | Pn | **Pn** | **02 49 15.1** | **-0.9** |
| | 0.7nm,0.3s,baz=11,slow=14,SNR=1.1 | | | | | | |
| PMG | | | | Sn | **Sn** | **02 50 30.3** | **+0.4** |
| | baz=30,slow=20 | | | | | | |
| | 5.3nm,0.3s | | | | | | |
| **JAY** | **Jayapura** | **7.07** | **273** | P | **Pn** | **02 49 25.1** | **+0.9** |
| | 47nm,1.0s,0.2nm | | | | | | |
| **GENI** | **Genyem** | **7.60** | **272** | P | **Pn** | **02 49 32.4** | **+0.9** |
| | 135nm,1.0s,4μm0.8nm | | | | | | |
| **COEN** | **Coen** | **11.87** | **202** | Pn | **Pn** | **02 50 28.9** | **-1.1** |
| **HNR** | **Honiara** | **13.72** | **119** | LR | LR | 02 56 32.6 | |
| | comp=Z,11μm,18.1s,baz=307,slow=39 | | | | | | |
| **FAKI** | **Fak Fak** | **15.50** | **270** | Pn | **Pn** | **02 51 18.4** | **-1.0** |
| **SWI** | **Sorong** | **16.62** | **277** | P | **P** | **02 51 37.9** | **+1.5** |
| | 47nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **16.65** | **350** | LR | LR | 02 57 54.9 | |
| | comp=Z,360nm,18.3s,baz=158,slow=37 | | | | | | |
| **CTA** | **Charters Tower** | **17.13** | **185** | P | **Pn** | **02 51 39.8** | **-0.5** |
| | 0.3nm,0.8s,baz=3.8,slow=12,SNR=4.0 | | | | | | |
| CTA | | | | LR | LR | 02 58 08.8 | |
| | comp=Z,47nm,18.2s,baz=7.0,slow=37 | | | | | | |
| **CTAO** | **Charters Tower** | **17.13** | **185** | Pn | **Pn** | **02 51 39.9** | **-0.3** |
| **MTN** | **Manton Dam** | **19.18** | **238** | P | **P** | **02 52 02.7** | **-2.0** |
| **WB0** | **Warramunga Arr** | **21.24** | **217** | P | **P** | **02 52 26.2** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 02 52 31.2 | |
| | comp=Z,47nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.30** | **216** | P | **P** | **02 52 26.7** | **-0.9** |
| **WRAB** | **Tennant Creek** | **21.39** | **217** | P | **P** | **02 52 28.0** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 02 52 32.7 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.40** | **217** | P | **P** | **02 52 27.9** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 02 52 33.4 | |
| | comp=Z,54nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.40** | **217** | P | **P** | **02 52 28.5** | **-0.2** |
| **WRA** | **Warramunga Arr** | **21.40** | **217** | P | **P** | **02 52 25.9** | **-2.8** |
| | comp=Z,17nm,1.1s,baz=40,slow=10,SNR=35 | | | | | | |
| WRA | | | | S | **S** | **02 56 26.1** | **-0.3** |
| | comp=Z,1.2nm,1.0s,baz=37,slow=25,SNR=6.9 | | | | | | |
| WRA | | | | LR | LR | 03 01 24.3 | |
| | comp=Z,1μm,18.1s,baz=18,slow=39 | | | | | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **SANI** | **Sanana** | **21.77** | **272** | P | **P** | **02 52 36.3** | **+3.5** |
| | comp=Z,45nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **22.60** | **235** | P | **P** | **02 52 40.6** | **-1.0** |
| KNRA | | | | IAmb | IAmb | 02 53 02.4 | |
| | comp=Z,62nm,1.5s | | | | | | |
| **DAV** | **Davao City (W)** | **24.27** | **294** | LR | LR | 03 01 25.7 | |
| | comp=Z,158nm,19.4s,baz=160,slow=34 | | | | | | |
| **SOEI** | **Soe** | **24.31** | **253** | P | **P** | **02 53 00.9** | **+2.1** |
| | comp=Z,44nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **24.60** | **212** | P | **P** | **02 53 00.9** | **-0.4** |
| **ASAR** | **Alice Springs** | **24.60** | **212** | P | **P** | **02 52 59.9** | **-1.4** |
| | comp=Z,14nm,1.0s,baz=40,slow=5.9,SNR=40 | | | | | | |
| ASAR | | | | LR | LR | 03 03 16.1 | |
| | comp=Z,847nm,18.1s,baz=44,slow=38 | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **BATI** | **Baumata** | **25.00** | **252** | P | **P** | **02 53 05.8** | **+0.9** |
| | comp=Z,44nm,0.9s | | | | | | |
| **LUWI** | **Luwuk** | **25.05** | **274** | P | **P** | **02 53 04.6** | **-0.7** |
| **LUWI** | **Luwuk** | **25.05** | **274** | P | **P** | **02 53 06.2** | **+0.9** |
| **DZM** | **Mont Dzumac** | **26.30** | **138** | *eS* | **S** | **02 57 46.3** | **-3.3** |
| | comp=Z,67nm,22.1s | | | | | | |
| DZM | | | | *e*LR | LR | 02 59 47.7 | |
| | comp=Z,2μm,25.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **26.30** | **138** | P | **P** | **02 53 18.0** | **+1.3** |
| | comp=Z,4.1nm,0.9s,baz=298,slow=13,SNR=3.1 | | | | | | |
| DZM | | | | LR | LR | 03 02 05.5 | |
| | comp=Z,1μm,20.6s,baz=312,slow=33 | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.42** | **234** | P | **P** | **02 53 16.8** | **-0.9** |
| **H11S3** | **WAKE ISLAND Hy** | **28.29** | **40** | T | T | 03 23 13.1 | |
| | baz=223,slow=76,SNR=698 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.29** | **41** | T | T | 03 23 13.8 | |
| | baz=223,slow=76,SNR=487 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.30** | **40** | T | T | 03 23 14.4 | |
| | baz=223,slow=76,SNR=513 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.31** | **39** | T | T | 03 24 32.5 | |
| | baz=221,slow=76,SNR=189 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.32** | **39** | T | T | 03 24 33.1 | |
| | baz=221,slow=76,SNR=417 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.32** | **39** | T | T | 03 24 32.0 | |
| | baz=221,slow=76,SNR=334 | | | | | | |
| **YULB** | **Yu-li** | **36.73** | **317** | P | **P** | **02 54 47.0** | **-1.4** |
| YULB | | | | IAmb | IAmb | 02 54 58.9 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **41.34** | **220** | LR | LR | 03 13 32.7 | |
| | comp=Z,870nm,18.4s,baz=64,slow=38 | | | | | | |
| **QIZ** | **Qiongzhong** | **43.21** | **302** | P | **P** | **02 55 40.6** | **-1.6** |
| QIZ | | | | S | **S** | **03 02 07.6** | **-1.8** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,16nm,1.6s | | | | | | |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,200nm,4.4s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,130nm,16.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,260nm,23.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,360nm,20.6s | | | | | | |
| **KSRS** | **Korea Array** | **44.20** | **337** | P | **P** | **02 55 50.1** | **+0.2** |
| | comp=Z,1.8nm,0.8s,baz=164,slow=10.0,SNR=5.3 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **44.23** | **146** | LR | LR | 03 11 43.1 | |
| | comp=Z,639nm,19.4s,baz=33,slow=33 | | | | | | |
| **NJ2** | **Nanjing** | **44.30** | **324** | *eP* | **P** | **02 55 46.6** | **-4.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,240nm,6.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,260nm,19.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,280nm,17.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,490nm,21.3s | | | | | | |
| **GULI** | **GuiLin** | **45.84** | **310** | P | **P** | **02 56 06.0** | **+2.8** |
| GULI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,260nm,20.9s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,210nm,22.5s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,510nm,20.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.00** | **345** | P | **P** | **02 56 27.7** | **+0.2** |
| | comp=Z,2.7nm,0.9s,baz=171,slow=7.1,SNR=5.4 | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **GYA** | **Guiyang** | **49.29** | **309** | P | **P** | **02 56 29.7** | **-0.5** |
| GYA | | | | pP | sP | 02 56 33.9 | -0.3 |
| GYA | | | | S | **S** | **03 03 36.2** | **-0.6** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,120nm,6.1s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,260nm,20.0s | | | | | | |
| **LYN** | **LuoYang** | **49.89** | **321** | *eP* | **P** | **02 56 33.4** | **-1.1** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,160nm,4.0s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,520nm,23.4s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,390nm,15.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,710nm,19.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **50.04** | **343** | P | **P** | **02 56 33.7** | **-1.7** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **CN2** | **Changchun** | **50.65** | **339** | *eP* | **P** | **02 56 37.0** | **-3.0** |
| **BNX** | **BinXian** | **51.71** | **342** | ⇓P | **P** | **02 56 48.9** | **+0.9** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **KMI** | **Kunming** | **51.79** | **305** | ⇓P | **P** | **02 56 50.7** | **+1.4** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,140nm,17.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,140nm,18.7s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,250nm,22.3s | | | | | | |
| **XAN** | **Xi'an** | **51.85** | **319** | ⇑P | **P** | **02 56 48.8** | **-0.5** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.54** | **296** | P | **P** | **02 56 55.6** | **+1.0** |
| | comp=Z,0.9nm,0.3s,baz=106,slow=5.8,SNR=5.8 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **PZH** | **PanZhiHua** | **53.21** | **306** | P | **P** | **02 56 59.7** | **+0.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,5.1s | | | | | | |
| **CD2** | **Chengdu** | **53.74** | **312** | *eP* | **P** | **02 57 01.0** | **-2.3** |
| **RAR** | **Rarotonga** | **54.13** | **114** | LR | LR | 03 18 50.8 | |
| | comp=Z,75nm,18.1s,baz=270,slow=35 | | | | | | |
| **XLT** | **XiLinHaoTe** | **54.59** | **332** | *eP* | **P** | **02 57 12.9** | **+3.5** |
| XLT | | | | pP | pwP | 02 57 15.0 | +2.8 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,95nm,4.3s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,190nm,16.6s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,230nm,16.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **54.66** | **327** | *eP* | **P** | **02 57 10.4** | **+0.4** |
| HHC | | | | pP | pwP | 02 57 15.1 | +2.2 |
| HHC | | | | *eS* | **S** | **03 04 50.5** | **+0.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,53nm,4.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,180nm,20.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,170nm,19.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,420nm,19.7s | | | | | | |
| **BTO** | **Baotou** | **55.36** | **325** | *eP* | **P** | **02 57 15.0** | **0.0** |
| BTO | | | | pP | **pwP** | **02 57 19.3** | **+1.4** |
| BTO | | | | sP | **sP** | **02 57 22.3** | **+3.3** |
| BTO | | | | PP | **PP** | **02 59 19.4** | **+0.5** |
| BTO | | | | S | **S** | **03 05 01.8** | **+2.3** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,180nm,3.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,280nm,7.8s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,500nm,9.1s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,580nm,16.5s | | | | | | |
| **LZH** | **Lanzhou** | **56.43** | **318** | *eP* | **P** | **02 57 24.9** | **+2.1** |
| LZH | | | | sP | pwP | 02 57 30.9 | +5.2 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,240nm,19.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,240nm,16.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,230nm,17.2s | | | | | | |
| **GTA** | **Gaotai** | **60.91** | **319** | *eP* | **P** | **02 57 57.7** | **+3.7** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,140nm,15.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,110nm,18.2s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,150nm,17.1s | | | | | | |
| **SHL** | **Shillong** | **61.04** | **301** | P | **P** | **02 57 54.9** | **-0.3** |
| SHL | | | | IAmb | IAmb | 02 58 03.2 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **62.12** | **330** | P | **P** | **02 58 02.5** | **+0.5** |
| | comp=Z,1.3nm,1.0s,baz=139,slow=5.5,SNR=5.6 | | | | | | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **PPT2** | **Papeete2** | **63.08** | **108** | *e*LR | LR | 03 16 50.9 | |
| | comp=Z,168nm,24.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 03 16 54.7 | |
| | comp=Z,185nm,27.5s | | | | | | |
| **TBI** | **Tubuai** | **63.90** | **114** | *e*LQ | LQ | 03 14 33.8 | |
| | comp=Z,2μm,33.5s | | | | | | |
| TBI | | | | *e*LR | LR | 03 17 15.4 | |
| | comp=Z,1μm,29.2s | | | | | | |
| **WMQ** | **Urumqi** | **70.99** | **318** | *eP* | **P** | **02 58 58.8** | **+0.1** |
| WMQ | | | | LR | LR | | |
| | comp=Z,120nm,20.7s | | | | | | |
| **VNDA** | **Vanda** | **74.92** | **177** | P | **P** | **02 59 21.6** | **+0.3** |
| | comp=Z,1.3nm,1.0s,baz=338,slow=7.5,SNR=4.8 | | | | | | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **75.64** | **320** | P | **P** | **02 59 26.4** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=107,slow=5.0,SNR=2.9 | | | | | | |
| MKAR | | | | LR | LR | 03 33 16.0 | |
| | comp=Z,165nm,19.0s,baz=93,slow=36 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **76.84** | **327** | P | **P** | **02 59 33.1** | **+0.5** |
| | comp=Z,0.7nm,0.4s,baz=122,slow=5.4,SNR=1.6 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **76.84** | **28** | LR | LR | 03 27 48.3 | |
| | comp=Z,130nm,21.9s,baz=255,slow=31 | | | | | | |
| **L18K** | **Granite Mounta** | **77.29** | **23** | P | **P** | **02 59 34.9** | **-0.2** |
| **H19K** | **Roundabout Mou** | **79.17** | **21** | P | **P** | **02 59 45.0** | **-0.3** |
| H19K | | | | IAmb | IAmb | 02 59 48.8 | |
| | comp=Z,25nm,1.8s | | | | | | |
| **KURK** | **Kurchatov** | **79.23** | **323** | P | **P** | **02 59 44.5** | **-1.4** |
| **KURBB** | **Kurchatov Arra** | **79.25** | **323** | P | **P** | **02 59 45.2** | **-0.9** |
| | comp=Z,1.1nm,1.0s,baz=103,slow=5.1,SNR=3.4 | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | |
| **SKT** | **Skwentna** | **79.27** | **25** | P | **P** | **02 59 45.3** | **-0.7** |
| SKT | | | | IAmb | IAmb | 03 01 10.4 | |
| | comp=Z,21nm,1.6s | | | | | | |
| **J20K** | **Nowinta River** | **79.30** | **22** | P | **P** | **02 59 44.0** | **-2.1** |
| J20K | | | | IAmb | IAmb | 02 59 51.2 | |
| | comp=Z,19nm,1.6s | | | | | | |
| **AAK** | **Ala-Archa** | **79.75** | **314** | LR | LR | 03 34 42.9 | |
| | comp=Z,193nm,21.1s,baz=99,slow=35 | | | | | | |
| **E21K** | **Killik River** | **81.54** | **19** | P | **P** | **02 59 57.7** | **-0.5** |
| **WRH** | **Wood River Hil** | **81.77** | **23** | P | **P** | **02 59 59.5** | **+0.1** |
| WRH | | | | IAmb | IAmb | 03 00 01.0 | |
| | comp=Z,18nm,1.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **81.96** | **23** | P | **P** | **03 00 00.4** | **+0.1** |
| **D22K** | **Ayikyak River** | **82.17** | **18** | P | **P** | **03 00 01.9** | **+0.5** |
| D22K | | | | IAmb | IAmb | 03 00 07.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **82.37** | **23** | P | **P** | **03 00 01.5** | **-1.0** |
| | comp=Z,0.9nm,0.8s,baz=251,slow=5.7,SNR=13 | | | | | | |
| ILAR | | | | LR | LR | 03 31 55.3 | |
| | comp=Z,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,12nm,1.6s | | | | | | | |
| **G29M** | **Pine Creek** | **86.52** | **22** | P | **P** | **03 00 23.8** | **+0.2** |
| G29M | | | | IAmb | IAmb | 03 00 28.8 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **J30M** | **Hart River** | **86.60** | **25** | P | **P** | **03 00 24.5** | **+0.4** |
| **G31M** | **Satah River** | **87.96** | **23** | P | **P** | **03 00 31.4** | **+1.0** |
| G31M | | | | IAmb | IAmb | 03 00 35.0 | |
| | comp=Z,7.2nm,1.0s | | | | | | | |
| **DLBC** | **Dease Lake** | **88.39** | **31** | P | **P** | **03 00 32.9** | **+0.1** |
| DLBC | | | | IAmb | IAmb | 03 00 35.4 | |
| | comp=Z,8.5nm,1.2s | | | | | | | |
| **DLBC** | **Dease Lake** | **88.39** | **31** | LR | LR | 03 33 53.2 | |
| | comp=Z,205nm,20.1s,baz=273,slow=31 | | | | | | | |
| **INK** | **Inuvik** | **88.53** | **21** | LR | LR | 03 37 28.2 | |
| | comp=Z,141nm,20.1s,baz=255,slow=34 | | | | | | | |
| **BBB** | **Bella Bella** | **88.68** | **38** | LR | LR | 03 33 36.9 | |
| | comp=Z,225nm,20.0s,baz=266,slow=31 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **91.57** | **48** | LR | LR | 03 35 44.6 | |
| | comp=Z,177nm,19.6s,baz=281,slow=32 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **92.07** | **320** | LR | LR | 03 42 05.8 | |
| | comp=Z,200nm,20.6s,baz=230,slow=36 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.88** | **52** | P | **P** | **03 01 04.0** | **+0.4** |
| | comp=Z,1.0nm,0.9s,baz=252,slow=8.7,SNR=5.8 | | | | | | | |
| NVAR | | | | LR | LR | 03 36 35.3 | | |
| | comp=Z,184nm,21.0s,baz=270,slow=31 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **NEW** | **Newport** | **95.57** | **42** | LR | LR | 03 36 40.8 | |
| | comp=Z,70nm,21.6s,baz=268,slow=31 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **96.11** | **28** | P | **P** | **03 01 08.4** | **+0.1** |
| | comp=Z,1.3nm,0.8s,baz=273,slow=4.8,SNR=5.2 | | | | | | | |
| YKA | | | | LR | LR | 03 40 47.7 | | |
| | comp=Z,64nm,19.8s,baz=296,slow=33 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **96.42** | **57** | LR | LR | 03 38 30.4 | | |
| | comp=Z,138nm,18.9s,baz=270,slow=32 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.95** | **289** | PKP | PKPbc | 03 07 18.5 | 0.0 | |
| | comp=Z,0.9nm,0.9s,baz=50,slow=3.5,SNR=4.1 | | | | | | | |

*SDD **07** 02:50:26.5±2.2, 19°.68N×70°.25W, h18km±13km, MD3.5, ML2.8, MW3.1*
*OSPL **07** 02:50:27.9±3.0, 19°.59N×70°.34W, h0km±16km, ML2.8*
**ISC 07 02:50:24.5**±1.3**, 19.65N**±0.03×**70.24W**±0.02**, h7**km±11km**, n28**, σ1§34/50, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CADR** | **Cabrera** | **0.28** | **86** | *e*Pg | **Pb** | **02 50 32.5** | **+0.6** |
| CADR | | | | *e*Sg | **Sb** | **02 50 38.6** | **+1.8** |
| CADR | | | | IAML | | 02 50 41.2 | |
| | comp=N,684nm,0.2s | | | | | | |
| **SODR** | **Sosua Marina B** | **0.34** | **288** | *e*Pg | **Pb** | **02 50 33.6** | **+0.7** |
| SODR | | | | *e*Sg | **Sb** | **02 50 37.6** | **-0.8** |
| SODR | | | | IAML | | 02 50 49.7 | |
| | comp=N,556nm,0.5s | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **0.44** | **127** | *i* P | **Pb** | **02 50 34.5** | **-0.1** |
| LONA1 | | | | *e*S | **Sb** | **02 50 42.5** | **+1.1** |
| LONA1 | | | | IAML | | 02 50 49.6 | |
| | comp=Z,1μm,3.6s | | | | | | |
| **SC01** | **Santiago de Io** | **0.52** | **245** | *e*Pg | **Pb** | **02 50 35.6** | **-0.3** |
| SC01 | | | | *e*Sg | **Sb** | **02 50 43.6** | **+0.1** |
| SC01 | | | | IAML | | 02 50 48.5 | |
| | comp=N,143nm,0.3s | | | | | | |
| **SC01** | **Santiago de Io** | **0.52** | **245** | *i* P | **Pb** | **02 50 35.6** | **-0.3** |
| SC01 | | | | IAML | | 02 50 53.2 | |
| | comp=Z,178nm,0.3s | | | | | | |
| **ABDR** | **Alto Bandera** | **0.91** | **204** | *e*Pg | **Pn** | **02 50 43.2** | **-0.9** |
| ABDR | | | | IAML | | 02 51 26.8 | |
| | comp=N,294nm,0.6s | | | | | | |
| **REDR** | **Restauracion** | **1.20** | **246** | *e*Pg | **Pg** | **02 50 50.6** | **+3.1** |
| REDR | | | | *e*Sg | **Sn** | **02 51 09.4** | **+5.2** |
| REDR | | | | IAML | | 02 51 13.6 | |
| | comp=N,302nm,0.2s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.20** | **236** | *e*Pg | **Pn** | **02 50 46.3** | **-1.4** |
| SDDR | | | | *e*Sg | **Sb** | **02 51 02.0** | **-1.2** |
| SDDR | | | | IAML | | 02 51 03.4 | |
| | comp=N,40nm,0.6s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.20** | **236** | *i* P | **Pn** | **02 50 46.5** | **-1.3** |
| SDDR | | | | *e*S | **Sb** | **02 51 02.4** | **-0.9** |
| SDDR | | | | IAML | | 02 51 05.3 | |
| | comp=Z,44nm,0.6s | | | | | | |
| **BANI** | **BANI** | **1.26** | **185** | *e*Pg | **Pg** | **02 50 48.7** | **0.0** |
| BANI | | | | *e*Sg | **Sg** | **02 51 05.4** | **+0.4** |
| BANI | | | | IAML | | 02 51 05.5 | |
| | comp=N,164nm,0.6s | | | | | | |
| **MIDR** | **Miches** | **1.30** | **120** | *e*Pg | **Pg** | **02 50 49.2** | **-0.3** |
| MIDR | | | | *e*Sg | **Sg** | **02 51 08.1** | **+1.7** |
| MIDR | | | | IAML | | 02 51 08.3 | |
| | comp=N,59nm,1.2s | | | | | | |
| **MCDR** | **Montecristi** | **1.36** | **280** | *e*Pg | **Pn** | **02 50 49.9** | **0.0** |
| MCDR | | | | *e*Sg | **Sn** | **02 51 06.9** | **-1.3** |
| MCDR | | | | IAML | | 02 51 14.2 | |
| | comp=N,143nm,0.5s | | | | | | |
| **LODA1** | **ITESIL, Dajabo** | **1.39** | **266** | *i* P | **Pb** | **02 50 50.3** | **-0.5** |
| LODA1 | | | | *e*S | **Sn** | **02 51 08.2** | **-0.7** |
| LODA1 | | | | IAML | | 02 51 13.9 | |
| | comp=Z,1μm,1.6s | | | | | | |
| **NEDR** | **Neiba UASD** | **1.61** | **224** | *e*Pg | **Pb** | **02 50 54.9** | **+0.3** |
| NEDR | | | | *e*Sg | **Sg** | **02 51 16.9** | **+0.5** |
| NEDR | | | | IAML | | 02 51 18.7 | |
| | comp=N,30nm,0.3s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **1.76** | **208** | *e*Pg | **Pb** | **02 50 56.4** | **-0.7** |
| LOBA2 | | | | *e*Sg | **Sg** | **02 51 20.1** | **-1.1** |
| **PODR** | **Polo** | **1.78** | **214** | *e*Pg | **Pg** | **02 50 58.7** | **+0.1** |
| PODR | | | | *e*Sg | **Sg** | **02 51 22.0** | **+0.3** |
| PODR | | | | IAML | | 02 51 53.9 | |
| | comp=N,122nm,0.7s | | | | | | |
| **HIDR** | **Higuey Centro** | **1.78** | **126** | *e*Pg | **Pb** | **02 50 57.0** | **-0.5** |
| HIDR | | | | *e*Sg | **Sg** | **02 51 21.5** | **-0.2** |
| HIDR | | | | IAML | | 02 51 24.3 | |
| | comp=N,252nm,0.2s | | | | | | |
| **JIDR** | **Jimani** | **1.91** | **233** | *e*Pg | **Pb** | **02 50 59.3** | **-0.5** |
| JIDR | | | | *e*Sg | **Sg** | **02 51 24.9** | **-1.2** |
| JIDR | | | | IAML | | 02 51 28.6 | |
| | comp=N,80nm,1.6s | | | | | | |
| **GRTK** | **Grand Turk** | **2.04** | **336** | *e*Pg | **Pb** | **02 51 00.6** | **-1.2** |
| GRTK | | | | *e*Sg | **Sb** | **02 51 27.8** | **+0.4** |
| GRTK | | | | IAML | | 02 51 28.4 | |
| | comp=N,125nm,0.3s | | | | | | |
| **GRTK** | **Grand Turk** | **2.04** | **336** | *i* P | **Pb** | **02 51 00.4** | **-1.4** |
| GRTK | | | | *e*S | **Sb** | **02 51 27.8** | **+0.4** |
| GRTK | | | | IAML | | 02 51 30.8 | |
| | comp=Z,44nm,1.9s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.08** | **122** | *e*Pg | **Pb** | **02 51 02.4** | **-0.3** |
| PCDR | | | | *e*Sg | **Sb** | **02 51 29.1** | **+0.3** |
| PCDR | | | | IAML | | 02 51 44.3 | |
| | comp=N,179nm,2.5s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.08** | **122** | *i* P | **Pb** | **02 51 02.4** | **-0.3** |
| PCDR | | | | *e*S | **Sg** | **02 51 30.1** | **-1.5** |
| PCDR | | | | IAML | | 02 51 36.5 | |
| | comp=Z,91nm,0.8s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **3.18** | **111** | *e*Pg | **Pb** | **02 51 20.3** | **-1.1** |
| AGPR | | | | *e*Sg | **Sb** | **02 52 01.9** | **+1.6** |
| AGPR | | | | IAML | | 02 52 18.2 | |
| | comp=N,84nm,2.1s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **3.18** | **111** | *i* P | **Pb** | **02 51 19.2** | **-2.2** |
| AGPR | | | | IAML | | 02 52 17.4 | |
| | comp=Z,67nm,1.6s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **3.38** | **118** | *e*Pg | **Pb** | **02 51 23.6** | **-1.2** |
| CRPR | | | | IAML | | 02 52 56.7 | |
| | comp=N,34nm,3.0s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **3.38** | **118** | *i* P | **Pb** | **02 51 23.1** | **-1.7** |
| CRPR | | | | IAML | | 02 52 20.3 | |
| | comp=Z,38nm,1.9s | | | | | | |
| **AOPR** | **Arecibo Observ** | **3.54** | **111** | *e*Pg | **Pb** | **02 51 26.6** | **-0.9** |
| AOPR | | | | *e*Sg | **Sb** | **02 52 11.7** | **+1.0** |
| AOPR | | | | IAML | | 02 52 23.5 | |
| | comp=N,32nm,0.4s | | | | | | |
| **CELP** | **Cerrillos** | **3.80** | **114** | *e*Pg | **Pb** | **02 51 30.6** | **-1.4** |
| CELP | | | | IAML | | 02 53 05.6 | |
| | comp=N,16nm,3.0s | | | | | | |

*KRNET **07** 02:52:37.4±0.1, 39°.55N×76°.82E, mb3.1*
*SOME **07** 02:52:39.4, 39°.72N×76°.80E, h0km*
*NNC **07** 02:52:40.9±1.2, 39°.68N×76°.86E, h0km, mb3.9, mpv3.6, Error ellipse: s-maj=8.2km s-min=6.2km az=171.0*
**ISC 07 02:52:43.0**±1.5**, 39.51N**±0.07×**76.81E**±0.04**, h25**km**, n60, σ1§68/94, 26C-17D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NRN** | **Naryn** | **2.02** | **342** | ⇓*i*P | **Pn** | **02 53 14.2** | **-1.7** |
| | baz=41 | | | | | | |
| NRN | | | | ⇓*i*S | **Sn** | **02 53 41.3** | **+0.8** |
| | baz=41 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.35** | **18** | ⇑*e*P | **Pn** | **02 53 19.2** | **-1.2** |
| | baz=19 | | | | | | |
| TARG | | | | ⇑*i*S | **Sn** | **02 53 49.6** | **+1.0** |
| | baz=19 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.60** | **282** | ⇑*i*P | **Pn** | **02 53 23.2** | **-0.5** |
| | baz=81 | | | | | | |
| SFK | | | | ⇑*i*S | **Sn** | **02 53 56.3** | **+1.7** |
| | baz=81 | | | | | | |
| **KDJ** | **Kajisay** | **2.64** | **6** | ⇑*e*P | **Pn** | **02 53 23.1** | **-1.1** |
| | baz=6.0 | | | | | | |
| KDJ | | | | ⇑*e*S | **Sn** | **02 53 56.1** | **+0.7** |
| | baz=6.0 | | | | | | |
| **ARLS** | **Aral** | **3.02** | **322** | ⇑*i*P | **Pn** | **02 53 28.5** | **-0.9** |
| | baz=21 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **02 54 05.6** | **+0.7** |
| | baz=21 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.05** | **348** | ⇑*e*P | **Pn** | **02 53 28.6** | **-1.3** |
| | baz=48 | | | | | | |
| BOOM | | | | ⇑*e*S | **Sn** | **02 54 06.1** | **+0.4** |
| | baz=48 | | | | | | |
| **PRZ** | **Przheval'sk** | **3.21** | **21** | ⇑*e*P | **Pn** | **02 53 31.1** | **-0.9** |
| | baz=22 | | | | | | |
| PRZ | | | | ⇑*e*S | **Sn** | **02 54 10.0** | **+0.5** |
| | baz=22 | | | | | | |
| **KBK** | **Karagaybulak** | **3.45** | **336** | ⇑*e*P | **Pn** | **02 53 34.3** | **-1.0** |
| | baz=36 | | | | | | |
| KBK | | | | ⇑*i*S | **Sn** | **02 54 16.0** | **+0.5** |
| | baz=36 | | | | | | |
| **TNSS** | **Tian-Shan** | **3.53** | **2** | *e*P | **Pb** | **02 53 42.9** | **-2.1** |
| | 5.0nm,0.5s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **02 54 28.5** | **+0.9** |
| | 34nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.53** | **2** | Pg | **Pb** | **02 53 42.9** | **-2.1** |
| | 4.6nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 02 54 28.5 | |
| | 34nm,0.8s | | | | | | |
| **AML** | **Almayashu** | **3.53** | **319** | ⇓*i*P | **Pn** | **02 53 36.0** | **-0.7** |
| | baz=18 | | | | | | |
| AML | | | | ⇓*i*S | **Sn** | **02 54 18.6** | **+0.8** |
| | baz=18 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.53** | **345** | ⇑Pg | **Pn** | **02 53 39.8** | **+3.3** |
| | 2.7nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 02 54 30.2 | |
| | 18nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.53** | **345** | ⇑*e*P | **Pn** | **02 53 35.7** | **-0.8** |
| | baz=45 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sn** | **02 54 18.0** | **+0.4** |
| | baz=45 | | | | | | |
| **AAK** | **Ala-Archa** | **3.59** | **331** | ⇓Pg | **Pb** | **02 53 43.6** | **-2.2** |
| | 5.7nm,0.3s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 02 54 31.0 | |
| | 44nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.59** | **331** | ⇓*i*P | **Pn** | **02 53 36.5** | **-0.7** |
| | baz=31 | | | | | | |
| AAK | | | | ⇓*i*S | **Sn** | **02 54 19.4** | **+0.6** |
| | baz=31 | | | | | | |
| **KST** | **Kastek** | **3.59** | **350** | *e*P | **Pb** | **02 53 43.8** | **-2.2** |
| | 3.3nm,0.3s | | | | | | |
| KST | | | | *e*S | **Sb** | **02 54 30.1** | **+1.0** |
| | 39nm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.59** | **350** | Pg | **Pb** | **02 53 45.4** | **-0.5** |
| | 3.9nm,0.5s | | | | | | |
| KST | | | | Lg | Lg | 02 54 32.8 | |
| | 39nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **3.63** | **356** | *e*P | **Pb** | **02 53 44.4** | **-2.2** |
| | 3.8nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **02 54 31.1** | **+0.8** |
| | 30nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **3.63** | **356** | Pg | **Pb** | **02 53 44.4** | **-2.2** |
| | 4.8nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 02 54 31.1 | |
| | 20nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **3.66** | **3** | *e*P | **Pb** | **02 53 45.4** | **-1.7** |
| | 5.0nm,0.4s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **02 54 32.8** | **+1.7** |
| | 64nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **3.66** | **3** | Pg | **Pb** | **02 53 45.4** | **-1.7** |
| | 5.0nm,0.4s | | | | | | |
| MDOK | | | | ⇓Pg | Pn | 02 53 46.0 | +7.9 |
| | 6.1nm,0.7s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 02 54 32.4 | |
| | 58nm,0.8s | | | | | | |
| MDOK | | | | Lg | Lg | 02 54 32.8 | |
| | 33nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.73** | **3** | *e*P | **Pb** | **02 53 45.9** | **-2.5** |
| | 4.1nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **02 54 33.6** | **+0.4** |
| | 86nm,0.6s | | | | | | |
| **SATY** | **Saty** | **3.75** | **18** | *e*P | **Pb** | **02 53 46.6** | **-1.9** |
| | 5.2nm,0.3s | | | | | | |
| SATY | | | | *e*S | **Sb** | **02 54 34.7** | **+1.2** |
| | 30nm,0.5s | | | | | | |
| **SATY** | **Saty** | **3.75** | **18** | Pg | **Pb** | **02 53 46.6** | **-1.9** |
| | 10nm,0.6s | | | | | | |
| SATY | | | | Lg | Lg | 02 54 34.9 | |
| | 29nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **3.82** | **337** | ⇑*e*P | **Pn** | **02 53 39.5** | **-0.8** |
| | baz=36 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sn** | **02 54 24.6** | **+0.2** |
| | baz=36 | | | | | | |
| **ZHN** | **Zhinishke** | **3.86** | **18** | *e*P | **Pb** | **02 53 47.9** | **-2.5** |
| | 5.3nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **02 54 37.1** | **+0.3** |
| | 37nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **3.86** | **18** | Pg | **Pb** | **02 53 47.9** | **-2.5** |
| | 5.3nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 02 54 37.1 | |
| | 37nm,0.2s | | | | | | |
| **DRK** | **Karamyk** | **3.88** | **271** | ⇓*e*P | **Pn** | **02 53 40.6** | **-0.7** |
| | baz=71 | | | | | | |
| DRK | | | | ⇓*e*S | **Sn** | **02 54 27.3** | **+1.1** |
| | baz=71 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.90** | **325** | ⇑*e*P | **Pn** | **02 53 40.8** | **-0.7** |
| | baz=25 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **02 54 26.9** | **+0.4** |
| | baz=25 | | | | | | |
| **UZB** | **Uzynbulak** | **4.00** | **24** | *e*P | **Pb** | **02 53 50.5** | **-2.4** |
| | 5.0nm,0.5s | | | | | | |
| UZB | | | | *e*S | **Sb** | **02 54 41.4** | **+0.5** |
| | 14nm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **4.00** | **24** | Pg | **Pb** | **02 53 49.9** | **-2.9** |
| | 4.6nm,0.5s | | | | | | |
| UZB | | | | Lg | Lg | 02 54 41.4 | |
| | 14nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **4.11** | **14** | *e*P | **Pb** | **02 53 52.4** | **-2.3** |
| | 3.2nm,0.6s | | | | | | |
| KURS | | | | *e*S | **Sb** | **02 54 44.8** | **+0.9** |
| | 19nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **4.11** | **14** | Pg | **Pb** | **02 53 52.4** | **-2.3** |
| | 4.1nm,0.4s | | | | | | |
| KURS | | | | Lg | Lg | 02 54 44.8 | |
| | 19nm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **4.16** | **28** | *e*P | **Pb** | **02 53 57.9** | **+2.4** |
| | 18nm,0.5s | | | | | | |
| SHLS | | | | *e*S | Sb | 02 54 54.2 | +8.9 |
| | 40nm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **4.16** | **28** | Pg | **Pb** | **02 53 57.9** | **+2.4** |
| | 18nm,0.5s | | | | | | |
| SHLS | | | | Lg | Lg | 02 54 54.2 | |
| | 40nm,0.6s | | | | | | |
| **KPKS** | **Kokpek** | **4.20** | **19** | *e*P | **Pb** | **02 53 54.6** | **-1.6** |
| | 5.0nm,0.3s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **02 54 48.6** | **+2.1** |
| | 29nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **4.20** | **19** | Pg | **Pb** | **02 53 54.9** | **-1.4** |
| | 5.0nm,0.3s | | | | | | |
| KPKS | | | | Lg | Lg | 02 54 48.6 | |
| | 29nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **4.20** | **359** | *e*P | **Pb** | **02 53 54.6** | **-1.6** |
| | 3.9nm,0.5s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **02 54 48.6** | **+2.0** |
| | 54nm,0.9s | | | | | | |
| **KTBS** | **Karatobe** | **4.20** | **359** | Pg | **Pb** | **02 53 54.6** | **-1.6** |
| | 3.9nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 02 54 48.6 | |
| | 54nm,0.9s | | | | | | |
| **MRKS** | **Merke** | **4.22** | **321** | *e*P | **Pb** | **02 53 55.4** | **-1.2** |
| | 14nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **02 54 49.9** | **+2.8** |
| | 21nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **4.22** | **321** | Pg | **Pb** | **02 53 55.4** | **-1.2** |
| | 14nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 02 54 49.9 | |
| | 13nm,0.3s | | | | | | |
| **SGDS** | **Sogindy** | **4.27** | **338** | Pg | **Pb** | **02 53 56.4** | **-1.0** |
| | 5.1nm,0.4s | | | | | | |
| SGDS | | | | Lg | Lg | 02 54 51.7 | |
| | 17nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **4.27** | **349** | *e*P | **Pb** | **02 53 55.4** | **-2.1** |
| | 5.6nm,0.7s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **02 54 49.9** | **+1.3** |
| | 17nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **4.27** | **349** | Pg | **Pb** | **02 53 55.6** | **-1.9** |
| | 5.7nm,0.6s | | | | | | |
| KRBS | | | | Lg | Lg | 02 54 49.9 | |
| | 17nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **4.32** | **27** | Pg | **Pb** | **02 53 56.1** | **-2.1** |
| | 7.0nm,0.5s | | | | | | |
| PDGK | | | | Lg | Lg | 02 54 51.2 | |
| | 8.7nm,0.9s | | | | | | |
| **PDGK** | **Podgornoye** | **4.32** | **27** | ⇓Pg | **Pb** | **02 53 55.8** | **-2.5** |
| | 9.0nm,0.5s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 02 54 50.6 | |
| | 20nm,0.8s | | | | | | |
| **CHKK** | **Chushkaly** | **4.35** | **2** | *e*P | **Pb** | **02 53 56.9** | **-1.8** |
| | 6.7nm,0.2s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **02 54 52.5** | **+1.8** |
| | 29nm,0.4s | | | | | | |
| **CHKK** | **Chushkaly** | **4.35** | **2** | Pg | **Pb** | **02 53 57.1** | **-1.6** |
| | 11nm,0.4s | | | | | | |
| CHKK | | | | Lg | Lg | 02 54 52.5 | |
| | 29nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **4.40** | **356** | Pg | **Pb** | **02 53 57.1** | **-2.4** |
| | 30nm,0.7s | | | | | | |
| KUU | | | | Lg | Lg | 02 54 52.9 | |
| **MNAS** | **Manas** | **4.42** | **314** | ⇓*e*P | **Pn** | **02 53 47.7** | **-0.9** |
| | baz=13 | | | | | | |
| MNAS | | | | ⇓*e*S | **Sn** | **02 54 39.4** | **+0.1** |
| | baz=13 | | | | | | |
| **BTK** | **Batken** | **4.65** | **279** | ⇑*e*P | **Pn** | **02 53 51.2** | **-0.6** |
| | baz=78 | | | | | | |
| BTK | | | | ⇑*e*S | **Sn** | **02 54 45.4** | **+0.4** |
| | baz=78 | | | | | | |
| **KTMS** | **Ketmen** | **4.75** | **33** | *e*P | **Pb** | **02 54 04.7** | **-0.9** |
| | 3.5nm,0.6s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **02 55 06.1** | **+3.7** |
| | 8.7nm,0.8s | | | | | | |
| **KTMS** | **Ketmen** | **4.75** | **33** | Pg | **Pb** | **02 54 03.1** | **-2.5** |
| | 1.7nm,0.3s | | | | | | |
| KTMS | | | | Lg | Lg | 02 55 03.2 | |
| | 4.5nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **4.75** | **15** | Pg | **Pb** | **02 54 04.2** | **-1.5** |
| | 11nm,0.4s | | | | | | |
| BLB | | | | Lg | Lg | 02 55 04.5 | |
| | 20nm,0.7s | | | | | | |
| **ARXS** | **Arharly** | **4.76** | **9** | *e*P | **Pb** | **02 54 04.6** | **-1.2** |
| | 2.7nm,0.6s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **02 55 05.9** | **+3.2** |
| | 15nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.76** | **9** | Pg | **Pb** | **02 54 05.2** | **-0.7** |
| | 2.7nm,0.5s | | | | | | |
| ARXS | | | | Lg | Lg | 02 55 06.2 | |
| | 15nm,0.4s | | | | | | |
| **TRKS** | **Terek-Say** | **4.77** | **297** | ⇑*e*P | **Pn** | **02 53 52.3** | **-1.2** |
| | baz=96 | | | | | | |
| TRKS | | | | ⇑*e*S | **Sn** | **02 54 47.2** | **-0.9** |
| | baz=96 | | | | | | |
| **KNOS** | **Konyrlen** | **5.16** | **19** | Pg | **Pb** | **02 54 12.4** | **-0.3** |
| | 1.1nm,0.5s | | | | | | |
| KNOS | | | | Lg | Lg | 02 55 18.7 | |
| | 6.0nm,0.7s | | | | | | |
| **DJR** | **Jarkent** | **5.31** | **24** | *e*P | **Pb** | **02 54 14.0** | **-1.1** |
| | 2.3nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sb** | **02 55 22.0** | **+3.6** |
| | 12nm,1.0s | | | | | | |
| **KK31** | **Karatay Array** | **5.95** | **309** | Pg | **Pb** | **02 54 26.1** | **+0.1** |
| | 1.8nm,0.5s,baz=127,slow=15,SNR=10.0 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 02 55 44.9 | |
| | 1.5nm,0.4s,baz=120,slow=29,SNR=4.3 | | | | | | |

*IDC **07** 02:58:17.9±0.7, 3°.06S×147°.62E, h0km, mb4.3/15, mbtmp4.3/16, ML2.2/2, MS4.0/26, Error ellipse: s-maj=30.7km s-min=13.6km az=93.0*
*NEIC **07** 02:58:19.9±1.3, 2°.97S±0°.04×147°.72E±0°.04, h10km±1km, mb4.9/46, Error ellipse: s-maj=7.3km s-min=6.4km az=352.0*
*BJI **07** 02:58:20.0±0.0, 2°.83S×147°.57E, h10km, mb4.7/49, mB5.1/21, Ms4.6/24, Ms7 4.4/25*
*GCMT **07** 02:58:20.9±0.2, 2°.94S±0°.01×147°.67E±0°.01, h16km±1km, MW4.9/113, Moment Tensor Solution. s30,c34; s113,c166; Duration: 0 Moment tensor: Scale 10¹⁶Nm; $M_{rr}$0.20±.09; $M_{\theta\theta}$2.13±.07; $M_{\phi\phi}$-2.33±.08; $M_{r\theta}$0.45±.22; $M_{\theta\phi}$2.21±.08; $M_{\phi r}$0.60±.23; Best double couple: $M_o$3.23300×10¹⁶ NP1:φ22.00000°, δ86.00000°, λ167.00000°. NP2:φ113.00000°, δ77.00000°, λ4.00000°. Principal axes: T 3.1820, Plg12.0000°, Azm337.0000°; N 0.1010, Plg76.0000°, Azm185.0000°; P -3.2830, Plg6.0000°, Azm68.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA **07** 02:58:25.5±0.6, 3°S±4°×14°.8E±°, h51km±7km, M5.0/16, mB5.5/5, mb4.8/16, MLv5.0/3, Mw(mB)5.0/5*
**ISC 07 02:58:19.7**±0.4**, 3.00S**±0.04×**147.73E**±0.06**, h10**km**, n159, σ1§40/139, mb4.8/54, MS4.1/35, 2C-2D, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **1.02** | **339** | | **Pg** | **02 58 37.5** | **-1.8** |
| MANU | | | | Sg | **Sb** | **02 58 52.0** | **-0.8** |
| **KAVG** | **Kavieng** | **3.11** | **82** | P | **Pn** | **02 59 06.3** | **-2.5** |
| **RABL** | **Rabaul** | **4.58** | **105** | Pn | **Pn** | **02 59 29.4** | **+0.2** |
| **PMG** | **Port Moresby** | **6.39** | **185** | P | **Pn** | **02 59 55.8** | **+1.8** |
| **PMG** | **Port Moresby** | **6.39** | **185** | P | **Pn** | **02 59 55.6** | **+1.6** |
| **PMG** | **Port Moresby** | **6.39** | **185** | Pn | **Pn** | **02 59 54.5** | **+0.5** |
| **PMG** | **Port Moresby** | **6.39** | **185** | Pn | **Pn** | **02 59 52.5** | **-1.5** |
| | 2.6nm,0.3s,baz=286,slow=16,SNR=3.8 | | | | | | |
| PMG | | | | Sn | **Sn** | **03 01 03.7** | **-3.4** |
| | 2.3nm,0.3s,baz=302,slow=15,SNR=3.3 | | | | | | |
| PMG | | | | LR | LR | 03 01 50.2 | |
| | comp=Z,631nm,19.9s,baz=23,slow=34 | | | | | | |
| | 8.1nm,0.4s | | | | | | |
| **TABU** | **Tabubil** | **6.87** | **251** | P | **Pn** | **03 00 00.6** | **0.0** |
| **JAY** | **Jayapura** | **7.03** | **274** | P | **Pn** | **03 00 03.3** | **+0.5** |
| | 74nm,1.1s,0.2nm | | | | | | |
| **GENI** | **Genyem** | **7.56** | **273** | P | **Pn** | **03 00 10.8** | **+0.7** |
| **GENI** | **Genyem** | **7.56** | **273** | P | **Pn** | **03 00 11.6** | **+1.5** |
| **COEN** | **Coen** | **11.78** | **202** | P | **Pn** | **03 01 07.7** | **-0.3** |
| **COEN** | **Coen** | **11.78** | **202** | Pn | **Pn** | **03 01 08.0** | **0.0** |
| **HNR** | **Honiara** | **13.72** | **118** | LR | LR | 03 07 19.1 | |
| | comp=Z,8μm,18.3s,baz=312,slow=39 | | | | | | |
| **MTSU** | **Mount Surprise** | **15.41** | **192** | P | **Pn** | **03 01 58.1** | **+0.7** |
| **FAKI** | **Fak Fak** | **15.46** | **270** | P | **Pn** | **03 01 57.7** | **-0.4** |
| | 36nm,1.3s | | | | | | |
| **TV1H** | **Townsville Har** | **16.19** | **183** | P | **Pn** | **03 02 08.2** | **+0.7** |
| **SWI** | **Sorong** | **16.59** | **277** | P | **Pn** | **03 02 13.0** | **+0.3** |
| | 46nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **16.72** | **350** | LR | LR | 03 08 34.4 | |
| | comp=Z,578nm,18.5s,baz=175,slow=37 | | | | | | |
| **C

KNRA IAmb IAmb 03 03 22.8
comp=Z,58nm,1.2s
**QLP Quilpie 23.69 188** P **P** **03 03 32.5 +0.7**
**DAV Davao City (W) 24.26 294** LR LR 03 13 14.6
comp=Z,236nm,18.1s,baz=208,slow=37
**AS01 Alice Springs 24.48 212** P **P** **03 03 39.6 +0.3**
**AS31 Alice Springs 24.51 212** P **P** **03 03 39.4 -0.2**
**ASAR Alice Springs 24.51 212** P **P** **03 03 39.2 -0.4**
comp=Z,42nm,1.0s,baz=36,slow=6.8,SNR=136
ASAR LR LR 03 13 51.5
comp=Z,294nm,18.9s,baz=44,slow=38
comp=Z,42nm,1.0s
**GTOI Gorontalo 24.97 278** P **P** **03 03 44.3 +0.5**
comp=Z,39nm,1.4s
**LUWI Luwuk 25.01 274** P **P** **03 03 44.5 +0.3**
**LUWI Luwuk 25.01 274** P **P** **03 03 43.9 -0.3**
**INKA Innaminka 25.49 194** P **P** **03 03 49.9 +1.6**
**DZM Mont Dzumac 26.27 138** P **P** **03 03 56.2 +0.7**
**DZM Mont Dzumac 26.27 138** *e*LR LR 03 10 24.6
comp=Z,1µm,24.6s
**DZM Mont Dzumac 26.27 138** P **P** **03 03 54.2 -1.3**
DZM IAmb IAmb 03 04 11.4
comp=Z,20nm,1.1s
**DZM Mont Dzumac 26.27 138** LR LR 03 12 54.4
comp=Z,958nm,19.0s,baz=314,slow=33
**FITZ Fitzroy Crossi 26.34 234** P **P** **03 03 56.4 +0.3**
**FITZ Fitzroy Crossi 26.34 234** P **P** **03 03 55.7 -0.4**
**YATNC Mamie plateau, 26.56 137** P **P** **03 03 58.3 +0.2**
**OOD Oodnadatta 27.20 204** P **P** **03 04 04.1 +0.3**
**ARMA Armidale 27.52 173** P **P** **03 04 06.9 +0.1**
**ARMA Armidale 27.52 173** P **P** **03 04 06.2 -0.5**
ARMA IAmb IAmb 03 04 11.2
comp=Z,31nm,1.1s
**KAPI Kappang 27.98 265** LR LR 03 16 46.5
comp=Z,248nm,19.2s,baz=72,slow=40
**H11S3 WAKE ISLAND Hy 28.37 40** T T 03 33 58.3
baz=223,slow=76,SNR=467
**H11S2 WAKE ISLAND Hy 28.38 40** T T 03 33 58.2
baz=223,slow=76,SNR=380
**H11S1 WAKE ISLAND Hy 28.39 40** T T 03 33 59.0
baz=223,slow=76,SNR=378
**LCRK Leigh Creek 28.75 197** P **P** **03 04 18.4 +0.8**
**STKA Stephens Creek 29.30 191** P **P** **03 04 21.4 -1.1**
comp=Z,3.1nm,0.8s,baz=5.5,slow=7.5,SNR=3.3
STKA LR LR 03 15 56.4
comp=Z,441nm,21.1s,baz=5.7,slow=36
comp=Z,3.1nm,0.8s
**H11N1 WAKE ISLAND Hy 29.39 39** T T 03 35 15.5
baz=221,slow=76,SNR=142
**H11N3 WAKE ISLAND Hy 29.41 39** T T 03 35 16.2
baz=221,slow=76,SNR=344
**H11N2 WAKE ISLAND Hy 29.41 39** T T 03 35 17.4
baz=221,slow=76,SNR=266
**MULG Mulgathing 30.06 204** P **P** **03 04 30.7 +1.4**
**JCJ Chichijima 30.39 350** LR LR 03 15 03.1
comp=Z,224nm,19.6s,baz=163,slow=33
**YNG Young 31.15 179** P **P** **03 04 40.6 +1.8**
**MSVF Nonsavu 33.14 118** LR LR 03 17 01.7
comp=Z,366nm,19.6s,baz=217,slow=34
**FORT Forrest 33.30 212** P **P** **03 04 56.7 -1.0**
**JOW Kunigami 35.11 329** LR LR 03 16 35.5
comp=Z,475nm,20.5s,baz=102,slow=31
**JHJ Hachijo jima 2 36.70 349** LR LR 03 16 37.0
comp=Z,463nm,21.1s,baz=156,slow=30
**JNU Nakatsue 39.30 337** LR LR 03 20 49.2
comp=Z,221nm,19.4s,baz=159,slow=34
**MJAR Matsushiro Arr 40.33 348** P **P** **03 05 55.6 -1.9**
comp=Z,0.9nm,0.6s,baz=116,slow=5.5,SNR=1.6
MJAR LR LR 03 21 32.1
comp=Z,241nm,18.1s,baz=160,slow=34
comp=Z,0.9nm,0.6s
**QIZ Qiongzhong 43.21 302** P **P** **03 06 20.8 -0.6**
QIZ S **S** **03 12 48.3 -0.3**
QIZ LR LR
comp=Z,150nm,14.1s
QIZ LR LR
comp=Z,210nm,16.9s
QIZ LR LR
comp=Z,290nm,25.7s
**URZ Urewera 44.19 146** LR LR 03 21 60.0
comp=Z,518nm,20.8s,baz=33,slow=32
**KSRS Korea Array 44.25 337** P **P** **03 06 28.8 -0.7**
comp=Z,2.3nm,0.9s,baz=159,slow=9.1,SNR=5.6
KSRS LR LR 03 23 05.0
comp=Z,254nm,20.6s,baz=160,slow=34
comp=Z,2.3nm,0.9s
**NJ2 Nanjing 44.34 324** *e*P **P** **03 06 29.6 -0.7**
NJ2 pmax pmax
comp=Z,12nm,0.5s
NJ2 pmax pmax
comp=Z,240nm,4.2s
NJ2 LR LR
comp=Z,290nm,15.2s
NJ2 LR LR
comp=Z,240nm,19.9s
NJ2 LR LR
comp=Z,370nm,18.9s
**GULI GuiLin 45.85 310** P **P** **03 06 45.1 +2.6**
GULI pmax pmax
comp=Z,10.0nm,1.0s
**ASAJ Asahikawa 47.13 355** LR LR 03 23 42.3
comp=Z,156nm,21.7s,baz=164,slow=32
**TIA Tai'an 48.35 327** P **P** **03 07 03.7 +1.9**
TIA pmax pmax
comp=Z,10.0nm,1.3s
**USRK Ussuriysk Ar. 49.06 345** P **P** **03 07 07.5 +0.4**
comp=Z,4.6nm,1.0s,baz=161,slow=7.5,SNR=6.6
USRK LR LR 03 26 39.3
comp=Z,158nm,18.9s,baz=161,slow=35
comp=Z,4.6nm,1.0s
**LYN LuoYang 49.93 321** *e*P **P** **03 07 17.6 +3.7**
LYN pmax pmax
comp=Z,12nm,0.6s
LYN pmax pmax
comp=Z,190nm,4.3s
LYN LR LR
comp=Z,280nm,18.2s
LYN LR LR
comp=Z,350nm,14.4s
LYN LR LR
comp=Z,650nm,18.2s
**MDJ Mudanjiang 50.10 343** P **P** **03 07 15.8 +0.8**
MDJ pmax pmax
comp=Z,7.0nm,0.6s
MDJ pmax pmax
comp=Z,170nm,5.5s
**CN2 Changchun 50.71 339** *e*P **P** **03 07 15.2 -4.4**
**BNX BinXian 51.77 342** ⇑P **P** **03 07 28.3 +0.7**
BNX pmax pmax
comp=Z,10.0nm,1.5s
**KMI Kunming 51.80 305** ⇑P **P** **03 07 30.9 +2.4**
KMI pmax pmax
comp=Z,15nm,1.3s
KMI LR LR
comp=Z,180nm,11.6s
KMI LR LR
comp=Z,150nm,20.8s
KMI LR LR
comp=Z,150nm,15.9s
**XAN Xi'an 51.88 319** ⇓P **P** **03 07 28.7 0.0**
XAN pP sP 03 07 36.2 +3.5
XAN pmax pmax
comp=Z,31nm,1.7s
**CMAR Chiang Mai Arr 52.54 296** P **P** **03 07 33.9 +0.1**
**CMAR Chiang Mai Arr 52.54 296** P **P** **03 07 33.7 -0.1**
comp=Z,1.2nm,0.3s,baz=148,slow=6.4,SNR=9.5
**CMAR Chiang Mai Arr 52.54 296**
comp=Z,1.2nm,0.3s
**PZH PanZhiHua 53.22 306** P **P** **03 07 39.7 +0.9**
PZH S **S** **03 15 08.6 -1.7**
PZH SS **SS** **03 18 49.5 -0.7**
PZH pmax pmax
comp=Z,20nm,1.3s
PZH pmax pmax
comp=Z,130nm,4.7s
PZH LR LR
comp=Z,140nm,14.9s
PZH LR LR
comp=Z,200nm,16.3s
PZH LR LR
comp=Z,170nm,16.2s
**CD2 Chengdu 53.76 312** P **P** **03 07 42.0 -0.6**
CD2 pP pP 03 07 45.3 -0.3
CD2 S **S** **03 15 19.5 +2.2**
CD2 pmax pmax
comp=Z,20nm,0.7s
CD2 pmax pmax
comp=Z,120nm,4.3s
CD2 LR LR
comp=Z,270nm,15.0s
CD2 LR LR
comp=Z,250nm,17.9s
CD2 LR LR
comp=Z,320nm,18.5s
**KLR Kul'dur 53.84 347** LR LR 03 28 33.0
comp=Z,137nm,21.0s,baz=171,slow=34
**RAR Rarotonga 54.13 114** LR LR 03 29 17.7
comp=Z,104nm,18.6s,baz=272,slow=34
**XLT XiLinHaoTe 54.64 332** *e*P **P** **03 07 51.2 +2.3**
XLT pmax pmax
comp=Z,6.0nm,0.9s
XLT pmax pmax
comp=Z,120nm,4.1s
XLT LR LR
comp=Z,280nm,15.8s
XLT LR LR
comp=Z,270nm,16.2s
**HHC Hu-ho-hao-te 54.71 327** *e*P **P** **03 07 49.8 +0.4**
HHC pP sP 03 07 54.4 +0.9
HHC *e*S **S** **03 15 27.9 -2.0**
HHC sS sS 03 15 38.9 +4.1
HHC pmax pmax
comp=Z,6.0nm,0.5s
HHC pmax pmax
comp=Z,64nm,4.8s
HHC LR LR
comp=Z,220nm,18.6s
HHC LR LR
comp=Z,190nm,17.2s
HHC LR LR
comp=Z,370nm,17.7s
**BTO Baotou 55.40 326** *e*P **P** **03 07 58.8 +4.3**
BTO pP **sP** **03 08 02.8 +4.3**
BTO sP pP 03 08 05.7 +8.3
BTO PP **PP** **03 10 01.7 +3.3**
BTO pmax pmax
comp=Z,14nm,0.6s
BTO pmax pmax
comp=Z,220nm,4.1s
BTO LR LR
comp=Z,230nm,6.2s
BTO LR LR
comp=Z,370nm,6.3s
BTO LR LR
comp=Z,660nm,17.7s
**LZH Lanzhou 56.46 318** *e*P **P** **03 08 05.1 +2.9**
LZH sP sP 03 08 11.8 +5.6
LZH pmax pmax
comp=Z,27nm,1.1s
LZH LR LR
comp=Z,200nm,13.7s
LZH LR LR
comp=Z,240nm,15.8s
LZH LR LR
comp=Z,230nm,15.8s
**GTA Gaotai 60.94 319** P **P** **03 08 34.7 +1.4**
GTA LR LR
comp=Z,170nm,16.7s
GTA LR LR
comp=Z,120nm,16.7s
GTA LR LR
comp=Z,150nm,16.7s
**SHL Shillong 61.04 301** P **P** **03 08 33.2 -1.1**
SHL IAmb IAmb 03 09 10.1
comp=Z,20nm,1.3s
**SONM Songino Array 62.17 330** P **P** **03 08 41.9 +0.4**
comp=Z,1.1nm,0.8s,baz=145,slow=5.4,SNR=9.8
comp=Z,1.1nm,0.8s
**MA2 Magadan 62.43 2** LR LR 03 37 44.9
comp=Z,72nm,18.0s,baz=147,slow=38
**PPT2 Papeete2 63.09 108** *e*LQ LQ 03 24 45.3
comp=Z,276nm,28.8s
PPT2 *e*LR LR 03 27 32.5
comp=Z,220nm,26.5s
PPT2 *e*LR LR 03 27 34.3
comp=Z,212nm,27.0s
**TBI Tubuai 63.91 114** *e*LQ LQ 03 25 15.8
comp=Z,2µm,36.2s
TBI *e*LR LR 03 28 00.8
comp=Z,637nm,32.8s
**YAK Yakutsk 66.31 351** LR LR 03 37 32.9
comp=Z,38nm,18.4s,baz=160,slow=36
**PALK Pallekele 67.65 279** LR LR 03 40 53.8
comp=Z,58nm,19.3s,baz=211,slow=38
**WMQ Urumqi 71.02 318** *e*P **P** **03 09 38.9 +0.8**
WMQ LR LR
comp=Z,140nm,19.3s
**TAOE Nuku Hiva Isla 71.89 98** *e*LR LR 03 31 36.0
comp=Z,293nm,24.5s
**VNDA Vanda 74.85 177** P **P** **03 10 00.8 +0.8**
**VNDA Vanda 74.85 177** P **P** **03 09 58.7 -1.3**
comp=Z,2.8nm,0.9s,baz=321,slow=6.3,SNR=10
VNDA LR LR 03 40 01.9
comp=Z,115nm,18.9s,baz=344,slow=34
comp=Z,2.8nm,0.9s
**SBA Scott Base 75.48 176** P **P** **03 10 03.9 +0.2**
SBA IAmb IAmb 03 10 20.9
comp=Z,16nm,1.6s
**TIXI Tiksi 75.52 354** LR LR 03 44 16.0
comp=Z,57nm,18.8s,baz=182,slow=36
**MK31 Makanchi Array 75.67 320** P **P** **03 10 04.4 -1.0**
**MKAR Makanchi Array 75.67 320** P **P** **03 10 04.8 -0.6**
**MKAR Makanchi Array 75.67 320** P **P** **03 10 05.0 -0.4**
comp=Z,1.0nm,0.8s,baz=98,slow=8.7,SNR=8.8
comp=Z,1.0nm,0.8s
**ZALV Zalesovo Beam 76.88 327** P **P** **03 10 11.2 -0.9**
comp=Z,0.7nm,0.4s,baz=97,slow=7.6,SNR=3.7
comp=Z,0.7nm,0.4s
**KSH Kashi 77.94 311** P **P** **03 10 23.2 +4.7**
KSH pP PcP 03 10 27.0 -1.3
KSH pmax pmax
comp=Z,5.0nm,0.9s
**L19K White Mountain 78.09 24** P **P** **03 10 19.6 +0.9**
L19K IAmb IAmb 03 10 28.6
comp=Z,9.9nm,1.1s
**CNPM China Poot 78.36 27** P **P** **03 10 20.3 +0.1**
**KURK Kurchatov 79.26 323** P **P** **03 10 24.8 -0.5**
**KURBB Kurchatov Arra 79.29 323** P **P** **03 10 25.4 0.0**
comp=Z,0.5nm,0.2s,baz=108,slow=5.1,SNR=7.7
comp=Z,0.5nm,0.2s
**J20K Nowinta River 79.39 22** P **P** **03 10 25.8 +0.1**
J20K IAmb IAmb 03 10 31.2
comp=Z,16nm,1.5s
**E19K Redstone River 80.06 19** P **P** **03 10 29.6 +0.2**
E19K IAmb IAmb 03 10 54.5
comp=Z,19nm,1.8s
**F20K Avaraart Lake 80.33 19** P **P** **03 10 30.6 -0.1**
**IMAR Indian Mountai 80.45 21** P **P** **03 10 31.6 +0.1**
**MLY Manley 81.08 22** P **P** **03 10 36.2 +1.2**
MLY IAmb IAmb 03 12 24.5
comp=Z,23nm,2.0s
**RND Reindeer 81.10 24** P **P** **03 10 33.9 -1.2**
**CCB Clear Creek Bu 82.05 23** P **P** **03 10 39.8 -0.2**
**IL31 82.46 23** P **P** **03 10 41.3 -0.8**
IL31 IAmb IAmb 03 11 45.9
comp=Z,9.9nm,1.5s
**ILAR Eielson Array 82.46 23** P **P** **03 10 41.4 -0.7**
**ILAR Eielson Array 82.46 23** P **P** **03 10 41.7 -0.4**
comp=Z,1.9nm,0.9s,baz=255,slow=5.1,SNR=14
comp=Z,1.9nm,0.9s
**KKAR Karatay Array 82.73 314** P **P** **03 10 43.7 -0.4**
**J25K Salcha River, 83.00 24** P **P** **03 10 44.1 -1.0**
**F24K Squaw Lake 83.22 20** P **P** **03 10 46.8 +0.7**
**C23K Itkillik River 83.36 18** P **P** **03 10 48.2 +1.5**
**M27K Edge Creek, AK 83.67 26** P **P** **03 10 48.5 -0.1**
M27K IAmb IAmb 03 10 51.1
comp=Z,15nm,1.4s
**EGAK Eagle 84.75 24** P **P** **03 10 54.4 +0.5**
EGAK IAmb IAmb 03 11 00.5
comp=Z,9.2nm,1.2s
**E27K Coleen River 85.68 21** P **P** **03 10 57.9 -0.7**
E27K IAmb IAmb 03 11 49.2
comp=Z,7.8nm,0.6s
**K29M Barlow Dome 86.00 25** P **P** **03 11 00.5 +0.2**
K29M IAmb IAmb 03 11 03.5
comp=Z,9.0nm,1.1s
**I29M Ogilvie Camp, 86.08 24** P **P** **03 11 00.3 -0.2**
I29M IAmb IAmb 03 11 07.0
comp=Z,7.3nm,1.2s
**D27M Malcolm River 86.24 20** P **P** **03 11 01.0 -0.3**
**E28M Babbage River 86.54 21** P **P** **03 11 03.2 +0.4**
E28M IAmb IAmb 03 12 14.9
comp=Z,5.0nm,0.6s
**J30M Hart River 86.69 25** P **P** **03 11 04.7 +1.0**
**EPYK Eagle Plains 86.97 23** P **P** **03 11 02.9 -2.1**
**G30M tAoh Zraii Nji 87.31 22** P **P** **03 11 05.9 -0.8**
G30M IAmb IAmb 03 11 10.7
comp=Z,18nm,1.6s
**FARO Faro, Yukon 87.48 27** P **P** **03 11 07.6 +0.1**
FARO IAmb IAmb 03 11 11.7
comp=Z,7.0nm,1.3s
**G31M Satah River 88.05 23** P **P** **03 11 10.2 +0.2**
**DLBC Dease Lake 88.47 31** P **P** **03 11 12.2 -0.1**
DLBC IAmb IAmb 03 11 16.9
comp=Z,6.5nm,1.2s
**DLBC Dease Lake 88.47 31** P **P** **03 11 13.4 +1.1**
comp=Z,4.2nm,1.1s,baz=267,slow=3.5,SNR=3.7
comp=Z,4.2nm,1.1s
**NVAR Mina Array Bea 94.96 52** P **P** **03 11 44.0 +0.8**
comp=Z,1.2nm,0.9s,baz=259,slow=6.4,SNR=8.7
comp=Z,1.2nm,0.9s
**NEW Newport 95.66 42** P **P** **03 11 45.1 -0.7**
NEW IAmb IAmb 03 11 50.4
comp=Z,8.6nm,1.4s
**YKA Yellowknife Ar 96.19 28** P **P** **03 11 48.3 +0.5**
comp=Z,2.2nm,1.1s,baz=280,slow=4.9,SNR=4.3
comp=Z,2.2nm,1.1s
**ELIB Princess Elisa 97.26 195** *d*P **P** **03 11 51.7 -1.0**
**PDAR Pinedale Array 101.36 47** P **Pdif** **03 12 12.9 +1.0**
comp=Z,0.1nm,0.5s,baz=263,slow=1.2,SNR=3.7
**NACGM Naroch 109.81 328** *e*Pdif **Pdif** **03 12 45.8 -3.0**
comp=E,1µm,0.8s,baz=66
**LPAZ La Paz 139.71 120** PKP **PKPdf** **03 17 50.7 +0.9**
comp=E,2.4nm,1.0s,baz=242,slow=5.3,SNR=5.5
**CPUP Villa Florida 142.09 142** PKP **PKPdf** **03 17 52.3 -0.7**
comp=E,2.6nm,1.0s,baz=252,slow=6.4,SNR=3.7
**TORD Torodi Ar. Bea 144.94 289** PKP **PKPab** **03 17 57.0 -0.6**
comp=E,2.6nm,1.0s,baz=52,slow=3.3,SNR=8.0

**VIE 07 02:58:38.2±0.1, 47°58N×15°56E, *h*7km±1km, mb0.4/1, ml0.9/4, Error ellipse: s-maj=1.0km s-min=0.7km az=174.0, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ARSA** | **Arzberg** 0.2nm,0.1s | **0.33** | **184** | *i* Pg | Pg | | 02 58 44.9 | +0.1 |
| ARSA | 1.2nm,0.1s | | | *i* Sg | Sg | | 02 58 49.5 | +0.3 |
| **CONA** | **Conrad Observa** 0.5nm,0.1s | **0.40** | **30** | *i* Pg | Pg | | 02 58 45.9 | -0.1 |
| CONA | 2.7nm,0.2s | | | *i* Sg | Sg | | 02 58 52.0 | +0.6 |
| **RONA** | **Rosalia, Austr** 0.2nm,0.1s | **0.51** | **77** | *i* Pg | Pg | | 02 58 48.2 | +0.1 |
| RONA | 0.9nm,0.1s | | | *i* Sg | Sg | | 02 58 55.8 | +1.0 |
| **MOA** | **Molln** 0.1nm,0.1s | **0.91** | **287** | *i* Pg | Pg | | 02 58 55.9 | +0.1 |
| MOA | 867nm,0.0s | | | *e*Sg | Sb | | 02 59 09.0 | +0.2 |

**ROM 07 02:59:36.8±0.1, 42°.814N±0°.003×13°.144E±0°.004, *h*9km, ML0.8/11, 1D, Error ellipse: s-maj=0.3km s-min=0.1km az=82.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NRCA** | **Norcia** | **0.03** | **312** | P | Pg | | 02 59 39.0 | +0.4 |
| NRCA | | | | S | Sg | | 02 59 40.2 | +0.2 |
| NRCA | | | | AML | AML | | | |
| | comp=N,489µm,0.1s | | | | | | | |
| NRCA | | | | AML | AML | | | |
| | comp=N,570µm,0.1s | | | | | | | |
| NRCA | | | | AML | AML | | | |
| | comp=E,500µm,0.1s | | | | | | | |
| NRCA | | | | AML | AML | | | |
| | comp=E,440µm,0.1s | | | | | | | |
| **MC2** | **Monte Cornacci** | **0.10** | **19** | P | Pg | | 02 59 40.1 | +0.5 |
| MC2 | | | | S | Sg | | 02 59 42.3 | +0.8 |
| **MMO1** | **Montemonaco** | **0.16** | **57** | ⇓P | Pg | | 02 59 40.8 | +0.5 |
| MMO1 | | | | S | Sg | | 02 59 43.5 | +0.8 |
| **FEMA** | **Monte Fema** | **0.16** | **335** | P | Pg | | 02 59 40.8 | +0.4 |
| FEMA | | | | S | Sg | | 02 59 43.3 | +0.4 |
| **MTRA** | **Matera** | **0.19** | **107** | P | Pg | | 02 59 41.4 | +0.6 |
| MTRA | | | | S | Sg | | 02 59 44.7 | +1.1 |
| MTRA | | | | AML | AML | | | |
| | comp=N,54µm,0.3s | | | | | | | |
| MTRA | | | | AML | AML | | | |
| | comp=E,59µm,0.2s | | | | | | | |
| **GAVE** | **Gavelli** | **0.22** | **237** | P | Pg | | 02 59 42.1 | +0.7 |
| GAVE | | | | S | Sg | | 02 59 46.0 | +1.6 |
| GAVE | | | | AML | AML | | | |
| | comp=E,87µm,0.5s | | | | | | | |
| GAVE | | | | AML | AML | | | |
| | comp=E,87µm,0.5s | | | | | | | |
| GAVE | | | | AML | AML | | | |
| | comp=N,68µm,1.0s | | | | | | | |
| GAVE | | | | AML | AML | | | |
| | comp=N,65µm,0.2s | | | | | | | |
| GAVE | | | | AML | AML | | | |
| | comp=E,77µm,0.2s | | | | | | | |
| **LNSS** | **Leonessa** | **0.22** | **200** | P | Pg | | 02 59 42.2 | +0.8 |
| LNSS | | | | S | Sg | | 02 59 46.0 | +1.5 |
| **FDMO** | **Fiordimonte** | **0.23** | **349** | P | Pg | | 02 59 42.0 | +0.5 |
| FDMO | | | | S | Sg | | 02 59 45.9 | +1.3 |
| FDMO | | | | AML | AML | | | |
| | comp=N,22µm,0.2s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=E,25µm,1.1s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=E,21µm,0.2s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=N,22µm,0.2s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.23** | **142** | P | Pg | | 02 59 42.1 | +0.6 |
| SMA1 | | | | S | Sg | | 02 59 45.8 | +1.1 |
| SMA1 | | | | AML | AML | | | |
| | comp=E,24µm,0.6s | | | | | | | |
| SMA1 | | | | AML | AML | | | |
| | comp=N,26µm,0.6s | | | | | | | |
| **CSP1** | **Cessapalombo** | **0.28** | **9** | P | Pg | | 02 59 43.0 | +0.5 |
| CSP1 | | | | S | Sb | | 02 59 47.8 | -1.1 |
| CSP1 | | | | AML | AML | | | |
| | comp=N,20µm,0.2s | | | | | | | |
| **MF5** | **Montefalcone A** | **0.29** | **53** | P | Pb | | 02 59 43.5 | -0.7 |
| MF5 | | | | S | Sb | | 02 59 48.7 | -0.5 |
| **RM33** | **Pellescritta (** | **0.31** | **170** | P | Pg | | 02 59 43.5 | +0.6 |
| RM33 | | | | S | Sb | | 02 59 48.6 | -1.0 |
| RM33 | | | | AML | AML | | | |
| | comp=N,14µm,1.0s | | | | | | | |
| RM33 | | | | AML | AML | | | |
| | comp=E,15µm,1.0s | | | | | | | |
| RM33 | | | | AML | AML | | | |
| | comp=N,14µm,1.0s | | | | | | | |
| RM33 | | | | AML | AML | | | |
| | comp=E,12µm,0.1s | | | | | | | |
| **ASSB** | **Assisi San Ben** | **0.42** | **303** | P | Pg | | 02 59 45.7 | +0.6 |
| ASSB | | | | S | Sb | | 02 59 52.1 | -0.8 |
| ASSB | | | | AML | AML | | | |
| | comp=N,9µm,0.2s | | | | | | | |
| ASSB | | | | AML | AML | | | |
| | comp=E,10µm,0.1s | | | | | | | |

*IDC **07** 03:01:07.7±0.7, 8°.20S×116°.37E, h0km, mb4.2/13, mbtmp4.3/14, ML3.9/1, Error ellipse: s-maj=20.1km s-min=14.4km az=77.0*
*NEIC **07** 03:01:08.5±1.8, 8°.21S±0°.08×116°.39E±0°.05, h10km±1km, mb4.5/13, Error ellipse: s-maj=14.4km s-min=7.5km az=164.0*
*DJA **07** 03:01:10.0±0.3, 8°S±4°×11°6E±°, h10km, M4.5/14, mb4.6/2, mB5.1/1, MLv4.5/14, Mw(mB)4.5/1*
**ISC 07 03:01:08.5±0.5, 8°.22S±0°.06×116°.38E±0°.04, h10km, n53, σ0°96/59, mb4.3/14, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.72** | **136** | P | **Pn** | | **03 01 25.0** | **+0.3** |
| **SRBI** | **Singaraja** | **1.16** | **276** | P | **Pb** | | **03 01 30.1** | **-0.6** |
| SRBI | | | | S | **Sb** | | **03 01 45.7** | **-0.1** |
| **DNP** | **Denpasar** | **1.24** | **248** | P | **Pn** | | **03 01 32.1** | **+0.2** |
| DNP | | | | S | **Sn** | | **03 01 49.2** | **+0.4** |
| **IGBI** | **Denpasar** | **1.36** | **244** | P | **Pn** | | **03 01 33.6** | **+0.1** |
| **PLAI** | **Plampang** | **1.51** | **114** | P | **Pg** | | **03 01 37.9** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.22** | **263** | | **Pn** | | **03 01 45.5** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.22** | **263** | P | **Pn** | | **03 01 45.2** | **-0.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GRJI** | **Gresik** | **4.08** | **288** | P | **Pn** | **03 02 11.2** | **+0.3** |
| GRJI | | | | S | **Sn** | **03 02 58.3** | **-0.4** |
| **PWJI** | **Pagerwojo** | **4.53** | **272** | P | **Pn** | **03 02 17.8** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.57** | **63** | P | **Pn** | **03 02 19.5** | **+1.8** |
| **BASI** | **Baing, Sumba** | **4.60** | **116** | P | **Pn** | **03 02 21.0** | **+2.9** |
| **KAPI** | **Kappang** | **4.62** | **47** | Pn | **Pn** | **03 02 17.7** | **-0.7** |
| **KAPI** | **Kappang** | **4.62** | **47** | Pn | **Pn** | **03 02 19.7** | **+1.3** |
| | 5.5nm,0.3s,baz=210,slow=20,SNR=3.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **03 03 11.7** | **-0.5** |
| | 9.7nm,0.3s,baz=225,slow=23,SNR=10.0 | | | | | | |
| KAPI | | | | Lg | Lg | 03 03 34.7 | |
| | 7.7nm,0.3s,baz=224,slow=21,SNR=4.0 | | | | | | |
| | 12nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.30** | **45** | P | **Pn** | **03 02 30.1** | **+2.3** |
| | 106nm,1.5s,2µm0.6nm | | | | | | |
| **UGM** | **Wanagama** | **5.81** | **273** | Pn | **Pn** | **03 02 35.6** | **+0.8** |
| **UGM** | **Wanagama** | **5.81** | **273** | P | **Pn** | **03 02 35.4** | **+0.6** |
| **MMRI** | **Maumere** | **5.81** | **95** | Pn | **Pn** | **03 02 35.5** | **+0.7** |
| **SOEI** | **Soe** | **7.94** | **102** | | **Pn** | **03 03 04.0** | **-0.2** |
| **LUWI** | **Luwuk** | **9.56** | **42** | | **Pn** | **03 03 26.4** | **+0.1** |
| **MBWA** | **Marble Bar** | **13.27** | **166** | Pn | **Pn** | **03 04 16.1** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **166** | Pn | **Pn** | **03 04 21.8** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **166** | Pn | **Pn** | **03 04 22.3** | **-0.5** |
| **KNRA** | **Kununurra** | **14.20** | **123** | Pn | **Pn** | **03 04 29.6** | **-0.2** |
| **GIRL** | **Giralia** | **14.49** | **188** | Pn | **Pn** | **03 04 32.3** | **-1.5** |
| **WB0** | **Warramunga Arr** | **20.89** | **125** | P | **P** | **03 05 51.6** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 03 05 52.9 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.93** | **126** | P | **P** | **03 05 51.1** | **-0.5** |
| **WRA** | **Warramunga Arr** | **20.93** | **126** | P | **P** | **03 05 52.4** | **+0.8** |
| | comp=Z,19nm,0.8s,baz=301,slow=12,SNR=40 | | | | | | |
| WRA | | | | S | **S** | **03 09 45.2** | **0.0** |
| | comp=Z,1.2nm,1.0s,baz=298,slow=22,SNR=3.0 | | | | | | |
| | comp=Z,19nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.94** | **126** | P | **P** | **03 05 50.0** | **-1.6** |
| WRAB | | | | IAmb | IAmb | 03 05 53.5 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.94** | **126** | P | **P** | **03 05 50.2** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 03 05 53.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.11** | **125** | P | **P** | **03 05 53.8** | **+0.3** |
| **AS31** | **Alice Springs** | **22.76** | **134** | P | **P** | **03 06 11.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **22.76** | **134** | P | **P** | **03 06 10.8** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.76** | **134** | P | **P** | **03 06 11.9** | **+0.7** |
| | comp=Z,10nm,0.7s,baz=309,slow=8.5,SNR=37 | | | | | | |
| ASAR | | | | S | **S** | **03 10 19.8** | **-0.4** |
| | comp=Z,1.8nm,0.9s,baz=306,slow=22,SNR=4.5 | | | | | | |
| | comp=Z,10nm,0.7s | | | | | | |
| **COEN** | **Coen** | **26.89** | **105** | | **P** | **03 06 48.2** | **-1.7** |
| **BBOO** | **Buckleboo** | **30.52** | **146** | P | **P** | **03 07 21.2** | **-0.9** |
| **STKA** | **Stephens Creek** | **33.23** | **139** | P | **P** | **03 07 43.7** | **-2.2** |
| **STKA** | **Stephens Creek** | **33.23** | **139** | P | **P** | **03 07 47.0** | **+1.2** |
| | comp=Z,4.3nm,0.7s,baz=298,slow=11,SNR=6.9 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.02** | **23** | P | **P** | **03 09 56.0** | **+0.4** |
| | comp=Z,2.8nm,0.8s,baz=205,slow=7.9,SNR=4.1 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.50** | **352** | P | **P** | **03 10 50.8** | **-0.1** |
| SONM | | | | IAmb | IAmb | 03 10 59.0 | |
| | comp=Z,5.4nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **56.50** | **352** | P | **P** | **03 10 50.9** | **-0.1** |
| | comp=Z,1.5nm,0.7s,baz=160,slow=7.8,SNR=6.2 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **CASY** | **Casey** | **58.12** | **183** | P | **P** | **03 11 02.6** | **+0.7** |
| CASY | | | | IAmb | IAmb | 03 11 23.8 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.61** | **334** | P | **P** | **03 11 32.8** | **-0.2** |
| **MKAR** | **Makanchi Array** | **62.61** | **334** | P | **P** | **03 11 33.8** | **+0.8** |
| | comp=Z,1.6nm,0.9s,baz=132,slow=8.3,SNR=5.7 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.14** | **335** | P | **P** | **03 12 02.8** | **+0.4** |
| | comp=Z,0.3nm,0.2s,baz=139,slow=6.2,SNR=3.6 | | | | | | |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.41** | **340** | P | **P** | **03 12 04.3** | **+0.3** |
| | comp=Z,0.7nm,0.3s,baz=144,slow=6.2,SNR=3.9 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **BRVK** | **Borovoye** | **72.47** | **333** | P | **P** | **03 12 34.1** | **-1.1** |
| BRVK | | | | IAmb | IAmb | 03 13 15.9 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **73.17** | **171** | P | **P** | **03 12 40.5** | **+1.5** |
| | comp=Z,1.1nm,0.7s,baz=284,slow=4.8,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **SBA** | **Scott Base** | **74.19** | **170** | P | **P** | **03 12 44.9** | **-0.1** |
| SBA | | | | IAmb | IAmb | 03 13 09.3 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.44** | **326** | P | **P** | **03 12 51.6** | **-1.0** |
| **QSPA** | **South Pole Qui** | **81.78** | **180** | P | **P** | **03 13 28.4** | **+0.9** |
| | comp=Z,2.8nm,0.9s,baz=303,slow=2.2,SNR=4.5 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **87.10** | **242** | P | **P** | **03 13 55.5** | **+0.2** |
| | comp=Z,4.3nm,1.0s,baz=35,slow=8.3,SNR=3.2 | | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **91.04** | **196** | P | **P** | **03 14 13.3** | **+0.4** |
| | comp=Z,2.5nm,0.9s,baz=158,slow=3.0,SNR=4.8 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **CPUP** | **Villa Florida** | **145.12** | **190** | PKPbc | **PKPdf** | **03 20 47.1** | **0.0** |
| | comp=Z,4.0nm,0.9s,baz=167,slow=3.4,SNR=9.0 | | | | | | |

*IDC **07** 03:13:30.5±1.7, 3°.50S×150°.26E, h0km, mb3.8/5, mbtmp3.9/6, MS3.5/7, Error ellipse: s-maj=71.7km s-min=21.3km az=113.0*
*NEIC **07** 03:13:30.8±1.5, 3°.81S±0°.09×151°.05E±0°.07, h10km±1km, mb4.6/15, Error ellipse: s-maj=15.8km s-min=10.1km az=330.0*
**ISC 07 03:13:30.5**±0.6, **3°.80S**±0°.08×**151°.03E**±0°.09, **h10**km, **n33,** σ1§**60**/**28**, **mb4.4**/13, **MS3.6**/5, **New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **RABL** | **Rabaul** | **1.20** | **109** | Pn | | **Pb** | | **03 13 52.8** | **-0.6** |
| **PMG** | **Port Moresby** | **6.77** | **214** | Pn | | **Pn** | | **03 15 11.1** | **+1.1** |
| | 5.0nm,0.3s,baz=158,slow=18,SNR=1.4 | | | | | | | | |
| PMG | | | | Sn | | **Sn** | | **03 16 25.8** | **-1.4** |
| | 2.0nm,0.3s,baz=66,slow=16,SNR=1.3 | | | | | | | | |
| PMG | | | | LR | | LR | | 03 17 56.2 | |
| | comp=Z,348nm,21.2s,baz=3.0,slow=40 | | | | | | | | |
| **HNR** | **Honiara** | **10.48** | **123** | LR | | LR | | 03 20 18.3 | |
| | comp=Z,3µm,19.7s,baz=2.0,slow=36 | | | | | | | | |
| **CTA** | **Charters Tower** | **16.85** | **196** | Pn | | **P** | | **03 17 32.8** | **+4.1** |
| | baz=38,slow=9.4 | | | | | | | | |
| CTA | | | | LR | | LR | | 03 23 53.3 | |
| | comp=Z,9.1nm,18.4s,baz=358,slow=37 | | | | | | | | |
| **GUMO** | **Guam** | **18.32** | **341** | LR | | LR | | 03 24 27.5 | |
| | comp=Z,98nm,19.4s,baz=194,slow=37 | | | | | | | | |
| **EIDS** | **Eidsvold** | **21.45** | **180** | P | | **P** | | **03 18 21.0** | **+1.9** |
| EIDS | | | | IAmb | | IAmb | | 03 18 25.0 | |
| | comp=Z,41nm,1.5s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **22.73** | **224** | P | | **P** | | **03 18 32.2** | **-0.6** |
| WR0 | | | | IAmb | | IAmb | | 03 18 35.2 | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **22.85** | **224** | P | | **P** | | **03 18 32.4** | **-1.7** |
| WB2 | | | | IAmb | | IAmb | | 03 18 44.1 | |
| | comp=Z,6.8nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.85** | **224** | P | | **P** | | **03 18 32.5** | **-1.7** |
| | comp=Z,3.3nm,1.0s,baz=49,slow=10,SNR=11 | | | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **23.53** | **142** | P | | **P** | | **03 18 40.2** | **-0.9** |
| **DZM** | **Mont Dzumac** | **23.53** | **142** | LR | | LR | | 03 25 57.4 | |
| | comp=Z,137nm,22.0s,baz=322,slow=31 | | | | | | | | |
| **ONTNC** | **Ouen Toro** | **23.71** | **142** | P | | **P** | | **03 18 41.2** | **-1.6** |
| **KNRA** | **Kununurra** | **24.88** | **240** | P | | **P** | | **03 18 52.9** | **-0.8** |
| KNRA | | | | IAmb | | IAmb | | 03 19 00.3 | |
| | comp=Z,9.3nm,1.1s | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.76** | **218** | P | | **P** | | **03 19 01.6** | **-0.1** |
| **ASAR** | **Alice Springs** | **25.76** | **218** | P | | **P** | | **03 19 01.0** | **-0.7** |
| | comp=Z,0.5nm,0.6s,baz=57,slow=8.1,SNR=6.3 | | | | | | | | |
| ASAR | | | | LR | | LR | | 03 28 48.1 | |
| | comp=Z,161nm,18.9s,baz=48,slow=36 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **BBOO** | **Buckleboo** | **32.09** | **204** | P | | **P** | | **03 19 57.6** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **36.94** | **261** | P | | **P** | | **03 20 39.8** | **-0.4** |
| **JOW** | **Kunigami** | **37.56** | **325** | P | | **P** | | **03 20 44.4** | **-0.9** |
| **INU** | **Inuyama** | **41.10** | **342** | P | | **P** | | **03 21 16.6** | **+2.0** |
| INU | | | | IAmb | | IAmb | | 03 21 32.0 | |
| | comp=Z,8.7nm,1.0s | | | | | | | | |
| **URZ** | **Urewera** | **41.75** | **149** | LR | | LR | | 03 38 46.6 | |
| | comp=Z,66nm,18.1s,baz=29,slow=36 | | | | | | | | |
| **FOZ** | **Fox Glacier** | **42.93** | **160** | P | | **P** | | **03 21 29.4** | **-0.1** |
| FOZ | | | | IAmb | | IAmb | | 03 21 43.3 | |
| | comp=Z,40nm,1.3s | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **59.60** | **16** | LR | | LR | | 03 45 07.3 | |
| | comp=Z,38nm,20.9s,baz=196,slow=32 | | | | | | | | |
| **MA2** | **Magadan** | **63.18** | **360** | LR | | LR | | 03 48 32.6 | |
| | comp=Z,54nm,20.8s,baz=248,slow=33 | | | | | | | | |
| **RSO** | **Redoubt South** | **77.42** | **25** | P | | **P** | | **03 25 27.1** | **+1.2** |
| **MK31** | **Makanchi Array** | **78.42** | **319** | P | | **P** | | **03 25 30.7** | **-0.9** |
| **MKAR** | **Makanchi Array** | **78.42** | **319** | P | | **P** | | **03 25 31.9** | **+0.3** |
| **MKAR** | **Makanchi Array** | **78.42** | **319** | P | | **P** | | **03 25 30.7** | **-0.9** |
| | comp=Z,0.4nm,0.7s,baz=111,slow=6.1,SNR=3.2 | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **81.91** | **22** | P | | **P** | | **03 25 52.5** | **+2.5** |
| | comp=Z,0.5nm,0.7s,baz=255,slow=5.5,SNR=7.0 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **81.93** | **322** | P | | **P** | | **03 25 46.9** | **-3.5** |
| | comp=Z,1.3nm,0.2s,baz=105,slow=5.0,SNR=1.6 | | | | | | | | |
| | comp=Z,1.3nm,0.2s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **83.93** | **20** | P | | **P** | | **03 25 59.9** | **-0.6** |
| **DAWY** | **Dawson** | **84.61** | **24** | P | | **P** | | **03 26 05.6** | **+1.6** |
| DAWY | | | | IAmb | | IAmb | | 03 26 17.0 | |
| | comp=Z,5.3nm,1.5s | | | | | | | | |
| **HG4B** | **Hotspring** | **85.53** | **37** | P | | **P** | | **03 26 08.2** | **-0.7** |
| HG4B | | | | IAmb | | IAmb | | 03 26 18.7 | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.31** | **289** | PKPbc | | **PKPdf** | | **03 33 15.3** | **+0.5** |
| | comp=Z,0.4nm,1.0s,baz=71,slow=3.7,SNR=2.1 | | | | | | | | |

**DJA 07 03:21:59.5**±0.9, **3°.5S**±3°.×**12°.6E**±°, **h11**km±8km, **M4.0**/9, **mb4.4**/3, **mB6.0**/1, **MLv3.8**/9, **Mw(mB)5.7**/1, **Buru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **NLAI** | **Namlea** | **1.10** | **78** | P | | Pb | | 03 22 20.0 | -0.6 |
| NLAI | | | | S | | Sn | | 03 22 35.7 | -0.5 |
| **SANI** | **Sanana** | **1.42** | **359** | P | | Pn | | 03 22 23.8 | -1.5 |
| SANI | | | | S | | Sb | | 03 22 44.3 | +0.1 |
| **BBSI** | **Bau Bau** | **3.98** | **240** | P | | Pn | | 03 22 59.9 | -0.6 |
| **LUWI** | **Luwuk** | **4.05** | **307** | P | | Pn | | 03 23 00.9 | -0.6 |
| **SAUI** | **Saumlaki** | **6.90** | **131** | P | | Pn | | 03 23 40.4 | -0.3 |

*AFAD **07** 03:36:11.4±0.0, 36°.88N×27°.65E, h14km±1km, MW3.9*
*THE **07** 03:36:11.9, 36°.88N×27°.66E, h7km±1km, ML3.7/4, Error ellipse: s-maj=1.2km s-min=0.6km az=238.0*
*ISK **07** 03:36:11.0, 36°.87N×27°.66E, h11km, ML3.7/23*
*ATH **07** 03:36:12.2, 36°.90N×27°.66E, h14km±1km, ML3.7/12, Error ellipse: s-maj=1.8km s-min=0.9km az=221.0*
**ISC 07 03:36:11.7**±0.8, **36°.88N**±0°.02×**27°.67E**±0°.02, **h12**km±6km, **n114,** σ0§**64**/139, **Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **DATC** | **Datca-Mugla** | **0.12** | **184** | Pg | | **Pg** | | **03 36 14.3** | **-0.4** |
| **DAT** | **Datca** | **0.16** | **207** | Pg | | **Pg** | | **03 36 14.9** | **-0.6** |
| **DAT** | **Datca** | **0.16** | **207** | P | | **Pg** | | **03 36 15.8** | **+0.3** |
| **DAT** | **Datca** | **0.16** | **207** | P | | **Pg** | | **03 36 15.8** | **+0.3** |
| DAT | | | | S | | **Sg** | | **03 36 18.8** | **+0.6** |
| **YAZI** | **Mula-Dat§a-** | **0.26** | **222** | P | | **Pg** | | **03 36 17.3** | **+0.2** |
| YAZI | | | | S | | **Sg** | | **03 36 20.8** | **0.0** |
| **BDRM** | **Kayabasi** | **0.26** | **316** | P | | **Pg** | | **03 36 17.2** | **+0.1** |
| BDRM | | | | S | | **Sg** | | **03 36 20.8** | **0.0** |
| **BODT** | **Bodrum** | **0.34** | **303** | Pg | | **Pg** | | **03 36 18.3** | **-0.3** |
| BODT | | | | Sg | | **Sg** | | **03 36 23.5** | **+0.3** |
| **BODT** | **Bodrum** | **0.34** | **303** | P | | **Pg** | | **03 36 18.6** | **0.0** |
| BODT | | | | S | | **Sg** | | **03 36 23.8** | **+0.6** |
| **YKAV** | **Yalikavak-Bodr** | **0.40** | **309** | Pg | | **Pg** | | **03 36 19.3** | **-0.3** |
| YKAV | | | | Sg | | **Sg** | | **03 36 25.4** | **+0.4** |
| **MLSB** | **Milas** | **0.43** | **11** | Pg | | **Pg** | | **03 36 19.9** | **-0.3** |
| **MRSB** | **Marmaris-Mugla** | **0.45** | **111** | Pg | | **Pg** | | **03 36 20.4** | **-0.2** |
| **TURN** | **Turunc** | **0.47** | **102** | Pg | | **Pg** | | **03 36 20.8** | **-0.1** |
| **TURN** | **Turunc** | **0.47** | **102** | P | | **Pg** | | **03 36 20.9** | **-0.1** |
| **NISR** | **Nisiros** | **0.51** | **239** | P | | **Pg** | | **03 36 21.8** | **+0.2** |
| NISR | | | | S | | **Sb** | | **03 36 29.4** | **-0.6** |
| **NISR** | **Nisiros** | **0.51** | **239** | P | | **Pg** | | **03 36 21.8** | **+0.2** |
| NISR | | | | S | | **Sb** | | **03 36 29.7** | **-0.2** |
| NISR | | | | AML | | AML | | 03 36 31.4 | |
| NISR | | | | AML | | AML | | 03 36 31.6 | |
| **KLNA** | **Kalymnos** | **0.56** | **278** | P | | **Pg** | | **03 36 22.8** | **0.0** |
| KLNA | | | | S | | **Sg** | | **03 36 30.6** | **+0.4** |
| KLNA | | | | AML | | AML | | 03 36 34.2 | |
| | comp=N,63380µm,0.3s | | | | | | | | |
| KLNA | | | | AML | | AML | | 03 36 34.4 | |
| | comp=E,69001µm,0.3s | | | | | | | | |
| **DIDI** | **Didim-Aydin** | **0.61** | **326** | Pg | | **Pg** | | **03 36 23.2** | **-0.3** |
| **MULA** | **Mugla, Merkez-** | **0.64** | **54** | P | | **Pg** | | **03 36 24.5** | **+0.3** |
| **DDIM** | **Aydin, Didim** | **0.67** | **330** | P | | **Pg** | | **03 36 24.5** | **-0.3** |
| DDIM | | | | S | | **Sg** | | **03 36 33.6** | **0.0** |
| **ARG** | **Arkhangelos** | **0.75** | **151** | Pg | | **Pg** | | **03 36 26.1** | **-0.2** |
| **ARG** | **Arkhangelos** | **0.75** | **151** | P | | **Pg** | | **03 36 26.3** | **0.0** |
| ARG | | | | S | | **Sb** | | **03 36 37.8** | **+0.8** |
| | comp=E,6µm,0.9s | | | | | | | | |
| **ARG** | **Arkhangelos** | **0.75** | **151** | P | | **Pb** | | **03 36 26.9** | **+0.1** |
| ARG | | | | S | | **Sn** | | **03 36 38.5** | **-1.0** |
| ARG | | | | AML | | AML | | 03 36 41.0 | |
| | comp=N,11198µm,0.9s | | | | | | | | |
| ARG | | | | AML | | AML | | 03 36 43.1 | |
| | comp=E,11597µm,0.9s | | | | | | | | |
| **GCAM** | **G?zelcaml?** | **0.89** | **337** | Pg | | **Pg** | | **03 36 28.6** | **-0.4** |
| GCAM | | | | Sg | | **Sb** | | **03 36 41.5** | **+0.4** |
| **GCAM** | **G?zelcaml?** | **0.89** | **337** | P | | **Pg** | | **03 36 28.6** | **-0.4** |
| **SABU** | **Mula-Dalaman** | **1.04** | **92** | P | | **Pb** | | **03 36 31.2** | **-0.5** |
| SABU | | | | S | | **Sb** | | **03 36 44.8** | **-0.6** |
| **ESEN** | **Aydn-Nazilli** | **1.07** | **30** | P | | **Pb** | | **03 36 31.6** | **-0.6** |
| ESEN | | | | S | | **Sb** | | **03 36 44.5** | **-1.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.08** | **9** | Pn | | **Pb** | | **03 36 32.3** | **-0.2** |
| **TAVA** | **DENIZLI_Tavas** | **1.15** | **59** | P | | **Pb** | | **03 36 33.5** | **-0.1** |
| TAVA | | | | S | | **Sb** | | **03 36 48.8** | **+0.2** |
| **DNZT** | **Denizli-Tavas-** | **1.16** | **69** | P | | **Pn** | | **03 36 33.9** | **+0.1** |
| DNZT | | | | S | | **Sb** | | **03 36 48.8** | **0.0** |
| **FETY** | **Fethiye** | **1.16** | **102** | Pn | | **Pn** | | **03 36 33.8** | **0.0** |
| **NAZL** | **Nazilli-Aydin** | **1.19** | **24** | Pn | | **Pn** | | **03 36 34.2** | **-0.1** |
| **IZMR** | **zmir-demi** | **1.28** | **10** | P | | **Pn** | | **03 36 34.7** | **-0.8** |
| IZMR | | | | S | | **Sg** | | **03 36 52.8** | **-0.1** |
| **CAME** | **Cameli-Denizli** | **1.31** | **87** | Pn | | **Pn** | | **03 36 35.9** | **-0.1** |
| **DNIZ** | **Denizli-Tavas-** | **1.32** | **55** | P | | **Pb** | | **03 36 36.7** | **+0.1** |
| **IZZE** | **Mula-Seydike** | **1.32** | **109** | P | | **Pb** | | **03 36 37.0** | **+0.5** |
| **DGB** | **zmir** | **1.33** | **332** | P | | **Pn** | | **03 36 34.9** | **-1.3** |
| **GMLD** | **Gumuldur** | **1.34** | **334** | Pn | | **Pb** | | **03 36 36.6** | **-0.2** |
| **CAEL** | **Denizli, Camel** | **1.34** | **79** | P | | **Pb** | | **03 36 37.2** | **+0.3** |
| CAEL | | | | S | | **Sn** | | **03 36 54.6** | **+0.3** |
| **KARP** | **Karpathos** | **1.39** | **197** | Pn | | **Pn** | | **03 36 36.5** | **-0.5** |
| **KARP** | **Karpathos** | **1.39** | **197** | P | | **Pn** | | **03 36 36.4** | **-0.5** |
| KARP | | | | S | | **Sn** | | **03 36 54.3** | **-1.0** |
| | comp=E,5µm,0.6s | | | | | | | | |
| **KARP** | **Karpathos** | **1.39** | **197** | P | | **Pn** | | **03 36 36.6** | **-0.5** |
| KARP | | | | AML | | AML | | 03 37 02.3 | |
| | comp=N,10051µm,0.6s | | | | | | | | |
| KARP | | | | AML | | AML | | 03 37 05.3 | |
| | comp=E,8528µm,0.6s | | | | | | | | |
| **APMY** | **Acipayam-Deniz** | **1.43** | **65** | Pn | | **Pn** | | **03 36 37.7** | **+0.1** |
| **KIRA** | **zmir-Kiraz** | **1.44** | **24** | P | | **Pn** | | **03 36 37.2** | **-0.6** |
| **KNIK** | **Mula-Seydike** | **1.53** | **91** | P | | **Pb** | | **03 36 40.5** | **+0.5** |
| KNIK | | | | S | | **Sg** | | **03 37 00.9** | **0.0** |
| **GOLH** | **Golhisar** | **1.56** | **76** | P | | **Pg** | | **03 36 41.7** | **+0.2** |
| **ZEYE** | **Izmir, Urla-Ze** | **1.65** | **326** | P | | **Pn** | | **03 36 40.8** | **+0.3** |
| **AKAS** | **Kas** | **1.69** | **112** | P | | **Pb** | | **03 36 42.1** | **-0.6** |
| **URLA** | **Izmir** | **1.71** | **330** | Pn | | **Pn** | | **03 36 41.5** | **+0.1** |
| **URLA** | **Izmir** | **1.71** | **330** | P | | **Pb** | | **03 36 42.6** | **-0.5** |
| **APE** | **Apeiranthos** | **1.73** | **277** | Pn | | **Pn** | | **03 36 40.7** | **-0.9** |
| **APE** | **Apeiranthos** | **1.73** | **277** | P | | **Pn** | | **03 36 40.5** | **-1.1** |
| **APE** | **Apeiranthos** | **1.73** | **277** | P | | **Pn** | | **03 36 40.9** | **-0.7** |
| APE | | | | AML | | AML | | 03 37 13.6 | |
| | comp=E,1997µm,0.4s | | | | | | | | |
| APE | | | | AML | | AML | | 03 37 14.5 | |
| | comp=N,2020µm,0.3s | | | | | | | | |
| **INCE** | **Denizli-Bozkur** | **1.73** | **61** | P | | **Pn** | | **03 36 42.3** | **+0.5** |
| **MANT** | **Manisa** | **1.76** | **23** | P | | **Pn** | | **03 36 41.4** | **-0.9** |
| **KULA** | **Kula-Manisa** | **1.81** | **25** | P | | **Pn** | | **03 36 42.6** | **-0.3** |
| **THR8** | **Santorini-Mono** | **1.82** | **256** | P | | **Pn** | | **03 36 42.2** | **-0.7** |
| **GOMA** | **Golmarmara-Man** | **1.84** | **6** | Pn | | **Pn** | | **03 36 43.5** | **+0.4** |
| **SANT** | **Santorini** | **1.85** | **255** | Pn | | **Pn** | | **03 36 43.7** | **+0.4** |
| **THR3** | **Thira Island,** | **1.88** | **256** | P | | **Pn** | | **03 36 43.0** | **-0.7** |
| **THR3** | **Thira Island,** | **1.88** | **256** | P | | **Pn** | | **03 36 43.3** | **-0.5** |
| **SNT5** | **Nea Kammeni, S** | **1.89** | **256** | P | | **Pn** | | **03 36 43.3** | **-0.6** |
| **THR6** | **Thira Island,** | **1.90** | **255** | P | | **Pn** | | **03 36 43.5** | **-0.5** |
| **THR6** | **Thira Island,** | **1.90** | **255** | P | | **Pn** | | **03 36 43.8** | **-0.2** |
| **THR5** | **Thira Island,** | **1.92** | **257** | P | | **Pn** | | **03 36 43.2** | **-1.1** |
| **FOCM** | **Foa** | **1.98** | **338** | Pn | | **Pn** | | **03 36 45.4** | **+0.3** |
| **CHOS** | **Chios island** | **1.98** | **320** | Pn | | **Pn** | | **03 36 45.5** | **+0.3** |
| **CHOS** | **Chios island** | **1.98** | **320** | P | | **Pn** | | **03 36 44.4** | **-0.8** |
| CHOS | | | | S | | **Sn** | | **03 37 09.1** | **-0.9** |
| | comp=N,1µm,0.7s | | | | | | | | |
| **CHOS** | **Chios island** | **1.98** | **320** | P | | **Pn** | | **03 36 44.7** | **-0.5** |
| CHOS | | | | AML | | AML | | 03 37 24.0 | |
| | comp=N,2575µm,0.7s | | | | | | | | |
| CHOS | | | | AML | | AML | | 03 37 24.6 | |
| | comp=E,2794µm,0.6s | | | | | | | | |
| **KARB** | **zmir-Karabur** | **2.04** | **331** | P | | **Pn** | | **03 36 45.1** | **-0.8** |
| **PASA** | **Karahalli, USA** | **2.06** | **44** | P | | **Pn** | | **03 36 46.5** | **+0.2** |
| **ZKR** | **Zakros** | **2.12** | **214** | P | | **Pn** | | **03 36 46.8** | **-0.2** |
| ZKR | | | | S | | **Sb** | | **03 37 14.8** | **-1.5** |
| | comp=E,655nm,0.9s | | | | | | | | |
| **ZKR** | **Zakros** | **2.12** | **214** | P | | **Pn** | | **03 36 47.1** | **+0.2** |
| ZKR | | | | AML | | AML | | 03 37 23.5 | |
| | comp=N,790µm,0.7s | | | | | | | | |
| ZKR | | | | AML | | AML | | 03 37 27.9 | |
| | comp=E,1827µm,1.1s | | | | | | | | |
| **ZEDA** | **zmir-Bergama** | **2.14** | **348** | P | | **Pn** | | **03 36 45.8** | **-1.5** |
| **KORT** | **Korkueli** | **2.15** | **86** | P | | **Pb** | | **03 36 51.0** | **+0.3** |
| **AKUM** | **Antalya-Kumluc** | **2.22** | **104** | P | | **Pb** | | **03 36 50.7** | **-1.1** |
| **AYVA** | **Ayvalik** | **2.55** | **343** | P | | **Pn** | | **03 36 52.2** | **-0.6** |
| **PRK** | **Paraskevi** | **2.61** | **335** | P | | **Pn** | | **03 36 53.4** | **-0.4** |
| **PRK** | **Paraskevi** | **2.61** | **335** | P | | **Pn** | | **03 36 53.4** | **-0.4** |
| PRK | | | | AML | | AML | | 03 37 44.5 | |
| | comp=E,3177µm,0.7s | | | | | | | | |
| PRK | | | | AML | | AML | | 03 37 47.5 | |
| | comp=N,2549µm,0.7s | | | | | | | | |
| **SIGR** | **SIGRI** | **2.74** | **329** | P | | **Pn** | | **03 36 55.0** | **-0.5** |
| **SIGR** | **SIGRI** | **2.74** | **329** | P | | **Pn** | | **03 36 55.1** | **-0.3** |
| SIGR | | | | AML | | AML | | 03 37 50.6 | |
| | comp=E,649µm,0.7s | | | | | | | | |
| SIGR | | | | AML | | AML | | 03 37 50.6 | |
| | comp=N,821µm,0.6s | | | | | | | | |
| **IDI** | **Anoyia** | **2.75** | **236** | P | | **Pn** | | **03 36 55.5** | **-0.3** |
| **IDI** | **Anoyia** | **2.75** | **236** | P | | **Pn** | | **03 36 56.0** | **+0.3** |
| IDI | | | | AML | | AML | | 03 37 45.1 | |
| | comp=N,430µm,0.4s | | | | | | | | |
| IDI | | | | AML | | AML | | 03 37 48.0 | |
| | comp=E,504µm,0.6s | | | | | | | | |
| **EZN** | **Ezine** | **3.13** | **341** | P | | **Pn** | | **03 36 59.8** | **-1.1** |
| **VLY** | **Voula,Athens** | **3.24** | **289** | P | | **Pn** | | **03 37 02.8** | **+0.4** |
| **PTL** | **Penteli** | **3.25** | **292** | P | | **Pn** | | **03 37 02.1** | **-0.4** |
| PTL | | | | AML | | AML | | 03 38 05.8 | |
| | comp=E,241µm,0.9s | | | | | | | | |
| PTL | | | | AML | | AML | | 03 38 06.4 | |
| | comp=N,343µm,0.6s | | | | | | | | |
| **ATHU** | **Athens Univers** | **3.28** | **291** | P | | **Pn** | | **03 37 03.1** | **+0.1** |
| **IMMV** | **Iera Moni Meta** | **3.30** | **246** | P | | **Pn** | | **03 37 03.4** | **+0.2** |
| **KYMI** | **Kymi, Euboea I** | **3.33** | **303** | P | | **Pn** | | **03 37 03.3** | **-0.3** |
| **KYMI** | **Kymi, Euboea I** | **3.33** | **303** | P | | **Pn** | | **03 37 03.5** | **-0.1** |
| **GVD** | **Gavdhos** | **3.55** | **236** | P | | **Pn** | | **03 37 07.5** | **+0.9** |
| **LIA** | **Limnos Island** | **3.59** | **328** | P | | **Pn** | | **03 37 07.3** | **0.0** |
| **LIA** | **Limnos Island** | **3.59** | **328** | P | | **Pn** | | **03 37 07.4** | **+0.2** |
| LIA | | | | AML | | AML | | 03 38 11.3 | |
| | comp=N,545µm,0.8s | | | | | | | | |
| LIA | | | | AML | | AML | | 03 38 16.4 | |
| | comp=E,685µm,0.6s | | | | | | | | |
| **ANKY** | **Antikythira Is** | **3.67** | **255**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HATJ** | **Hateruma jima** | **1.38 123** | *e*S | | **Sn** | **03 39 38.8** | **0.0** |
| **CHGB** | **Renai** | **1.45 239** | *e*P | | **Pb** | **03 39 23.4** | **-0.1** |
| | baz=239 | | | | | | |
| **WUSB** | **Renai** | **1.53 238** | *e*P | | **Pb** | **03 39 25.2** | **+0.4** |
| | baz=237 | | | | | | |
| WUSB | | | *e*S | | **Sb** | **03 39 44.3** | **+0.5** |
| | baz=237 | | | | | | |
| **WHP** | **Taichung City** | **1.55 250** | *e*P | | **Pb** | **03 39 26.4** | **+1.4** |
| | baz=250 | | | | | | |

*JMA **07** 03:39:18.7±0.8, 45°N×4°×14°9E±°, h30km, MV4.0/12, SE OFF ETOROFU*

*NIED **07** 03:39:18.7, 44°.62N×149°.45E, h30km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr0.82; Mθθ-0.35; Mφφ-0.47; Mrθ0.12; Mθφ-0.50; Mφr0.66; Fault plane solution: M0 1.09000×10^15 NP1:φ23.00000°, δ64.00000°, λ72.00000°. NP2:φ240.00000°, δ31.00000°, λ122.00000°.*

*SKHL **07** 03:39:19.1±0.5, 44°.10N×149°.70E, h50km±5km, mb4.6/3*

*MOS **07** 03:39:21.2±0.9, 44°.26N×149°.35E, h54km, mb4.6/15, Error ellipse: s-maj=9.9km s-min=8.0km az=38.9*

*NEIC **07** 03:39:23.0±1.2, 44°.3N±0°.1×149°.4E±0°.1, h50km±7km, mb4.5/50, Error ellipse: s-maj=17.5km s-min=11.5km az=155.0*

*IDC **07** 03:39:25.2±3.4, 44°.24N×149°.28E, h71km±30km, mb3.6/15, mbtmp3.9/17, MS3.2/5, Error ellipse: s-maj=22.2km s-min=19.3km az=180.0*

**ISC 07 03:39:21.7±1.5, 44°.15N±0°.06×149°.43E±0°.07, h47km±12km, n165, σ1§14/170, mb4.3/60, MS3.2/6, 7C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.56** | **315** | *i* P | **Pn** | **03 39 45.6** | **-1.4** |
| KUR | | | | AMB | AMB | 03 39 46.9 | |
| | 420nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **03 40 05.9** | **0.0** |
| KUR | | | | A | A | 03 40 11.4 | |
| | 680nm,0.6s | | | | | | |
| KUR | | | | A | A | 03 40 11.4 | |
| | 590nm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.56** | **315** | *c i*PN | **Pn** | **03 39 45.5** | **-1.4** |
| KUR | | | | *e*S | **Sn** | **03 40 05.9** | **0.0** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,419nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,188nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,72nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,739nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,324nm,0.8s | | | | | | |
| **SHO** | **Shikotan** | **1.90** | **262** | *e*P | **Pn** | **03 39 50.6** | **-1.0** |
| SHO | | | | AMB | AMB | 03 39 53.2 | |
| | comp=E,50nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **03 40 13.8** | **-0.5** |
| SHO | | | | A | A | 03 40 17.1 | |
| | comp=E,360nm,0.5s | | | | | | |
| SHO | | | | A | A | 03 40 17.1 | |
| | comp=E,400nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.90** | **262** | *e*PN | **Pn** | **03 39 50.6** | **-1.0** |
| SHO | | | | *e*S | **Sn** | **03 40 13.7** | **-0.5** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,49nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,28nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,42nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,421nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,307nm,0.7s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.58** | **269** | *e*P | **Pn** | **03 40 01.0** | **+0.2** |
| YUK | | | | AMB | AMB | 03 40 02.1 | |
| | comp=N,170nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **03 40 32.1** | **+1.2** |
| YUK | | | | A | A | 03 40 41.9 | |
| | comp=N,380nm,0.5s | | | | | | |
| YUK | | | | A | A | 03 40 41.9 | |
| | comp=N,450nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.58** | **269** | *e*PN | **Pn** | **03 40 01.1** | **+0.2** |
| YUK | | | | *e*S | **Sn** | **03 40 32.7** | **+1.8** |
| YUK | | | | smax | smax | | |
| | comp=N,222nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,405nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.79** | **255** | *e*P | **Pn** | **03 40 02.3** | **-1.4** |
| NEM2 | | | | *e*S | **Sn** | **03 40 35.0** | **-1.1** |
| **NMR** | **Nemuro--Hokkai** | **2.79** | **255** | *e*P | **Pn** | **03 40 02.6** | **-1.3** |
| NMR | | | | *e*S | **Sn** | **03 40 35.5** | **-0.9** |
| **NMR** | **Nemuro--Hokkai** | **2.79** | **255** | *e*PN | **Pn** | **03 40 02.5** | **-1.3** |
| NMR | | | | *e*S | **Sn** | **03 40 35.4** | **-0.9** |
| **RUSJ** | **Misakicho** | **3.01** | **271** | *e*PN | **Pn** | **03 40 07.9** | **+1.0** |
| RUSJ | | | | *e*S | **Sn** | **03 40 44.5** | **+2.8** |
| **JRA** | **Rausu** | **3.12** | **268** | *e*P | **Pn** | **03 40 08.0** | **-0.3** |
| JRA | | | | *e*S | **Sn** | **03 40 46.0** | **+1.8** |
| **JNK** | **Nakash** | **3.45** | **262** | *e*P | **Pn** | **03 40 13.0** | **0.0** |
| **AKK** | **Akkeshi** | **3.52** | **253** | *e*P | **Pn** | **03 40 13.5** | **-0.4** |
| AKK | | | | *e*S | **Sn** | **03 40 54.1** | **-0.1** |
| **JAK** | **Akkeshi** | **3.63** | **253** | *e*P | **Pn** | **03 40 14.7** | **-0.7** |
| JAK | | | | *e*S | **Sn** | **03 40 53.6** | **-3.2** |
| **JTKR** | **Abashiri--Toko** | **3.99** | **269** | *e*P | **Pn** | **03 40 20.4** | **+0.1** |
| **JAR** | **Ashorobuto** | **4.19** | **260** | *e*P | **Pn** | **03 40 23.9** | **+0.8** |
| JAR | | | | *e*S | **Sn** | **03 41 12.0** | **+1.3** |
| **JCH** | **Churui** | **4.68** | **253** | *e*P | **Pn** | **03 40 30.3** | **+0.5** |
| JCH | | | | *e*S | **Sn** | **03 41 21.9** | **-0.9** |
| **JKK2** | **Kamakawa 2** | **4.83** | **269** | *e*P | **Pn** | **03 40 32.8** | **+1.0** |
| **JKA** | **Kamikawa-asahi** | **4.92** | **272** | Pn | **Pn** | **03 40 35.3** | **+2.2** |
| **JKA** | **Kamikawa-asahi** | **4.92** | **272** | *e*P | **Pn** | **03 40 35.4** | **+2.3** |
| **ASAJ** | **Asahikawa** | **4.92** | **272** | P | **Pn** | **03 40 35.4** | **+2.3** |
| | comp=E,2.6nm,0.3s,baz=65,slow=12,SNR=6.9 | | | | | | |
| ASAJ | | | | S | **Sn** | **03 41 29.9** | **+1.2** |
| | comp=E,9.1nm,0.8s,baz=91,slow=25,SNR=1.2 | | | | | | |
| **ERM** | **Erimo** | **5.07** | **247** | Pn | **Pn** | **03 40 37.0** | **+1.9** |
| **ERM** | **Erimo** | **5.07** | **247** | *i* PN | **Pn** | **03 40 36.0** | **+0.9** |
| **JNBK** | **Urakawa-nobuka** | **5.23** | **251** | *e*P | **Pn** | **03 40 37.1** | **-0.1** |
| **YSS** | **Yuzh-Sakhalins** | **5.46** | **303** | *e*PN | Pn | 03 40 31.3 | -9.2 |
| **JTM** | **Tenmabayashi** | **7.04** | **244** | Pn | **Pn** | **03 41 03.4** | **+1.2** |
| **JMM** | **Marumori** | **9.05** | **229** | Pn | **Pn** | **03 41 27.9** | **-1.8** |
| **USRK** | **Ussuriysk Ar.** | **12.53** | **276** | P | **Pn** | **03 42 18.4** | **+1.2** |
| | comp=E,1.6nm,0.5s,baz=84,slow=15,SNR=5.5 | | | | | | |
| **KLR** | **Kul'dur** | **13.15** | **299** | LR | LR | 03 48 10.0 | |
| | comp=E,160nm,18.4s,baz=92,slow=40 | | | | | | |
| **KLR** | **Kul'dur** | **13.15** | **299** | *e*P | **Pn** | **03 42 25.8** | **+0.1** |
| **KLR** | **Kul'dur** | **13.15** | **299** | *i* PN | **Pn** | **03 42 25.8** | **+0.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **BNX** | **BinXian** | **15.67** | **284** | ⇓P | **Pn** | **03 42 58.0** | **-1.3** |
| BNX | | | | pmax | pmax | | |
| | comp=E,8.0nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **17.58** | **255** | LR | LR | 03 50 00.3 | |
| | comp=Z,59nm,19.2s,baz=70,slow=36 | | | | | | |
| **SEY** | **Seymchan** | **18.90** | **4** | P | **P** | **03 43 35.5** | **-2.5** |
| | comp=Z,4.4nm,0.2s,baz=139,slow=11,SNR=4.7 | | | | | | |
| **SEY** | **Seymchan** | **18.90** | **4** | *e*P | **P** | **03 43 36.8** | **-1.3** |
| **SEY** | **Seymchan** | **18.90** | **4** | *ce*P | **P** | **03 43 36.8** | **-1.3** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| **YAK** | **Yakutsk** | **21.32** | **334** | LR | LR | 03 53 34.4 | |
| | comp=Z,52nm,18.4s,baz=154,slow=40 | | | | | | |
| **BILL** | **Bilibino** | **25.54** | **15** | *e*P | **P** | **03 44 45.7** | **+0.1** |
| **BILL** | **Bilibino** | **25.54** | **15** | *e*P | **P** | **03 44 45.7** | **+0.1** |
| BILL | | | | *e*PPP | PPP | 03 45 30.1 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,40nm,20.0s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.38** | **144** | T | T | 04 16 18.3 | |
| | baz=334,slow=75,SNR=14 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.39** | **144** | T | T | 04 16 19.1 | |
| | baz=334,slow=75,SNR=14 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.40** | **143** | T | T | 04 16 19.6 | |
| | baz=334,slow=75,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.39** | **145** | T | T | 04 17 37.3 | |
| | baz=335,slow=76,SNR=10 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.39** | **145** | T | T | 04 17 32.1 | |
| | baz=335,slow=76,SNR=12 | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.40** | **292** | *e*P | **P** | **03 45 21.7** | **+1.1** |
| **ULN** | **Ulaanbaatar** | **29.40** | **292** | *ce*P | **P** | **03 45 21.7** | **+1.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.7s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.41** | **145** | T | T | 04 17 33.9 | |
| | baz=335,slow=76,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **29.84** | **292** | P | **P** | **03 45 24.4** | **-1.0** |
| | comp=Z,1.2nm,0.8s,baz=87,slow=8.6,SNR=6.1 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **35.86** | **28** | P | **P** | **03 46 16.4** | **-0.2** |
| C19K | | | | IAmb | IAmb | 03 46 18.8 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **36.20** | **30** | P | **P** | **03 46 19.1** | **-0.5** |
| D19K | | | | IAmb | IAmb | 03 46 22.9 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **H19K** | **Roundabout Mou** | **36.22** | **35** | P | **P** | **03 46 19.8** | **+0.1** |
| H19K | | | | IAmb | IAmb | 03 46 33.2 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **36.28** | **32** | P | **P** | **03 46 20.3** | **+0.2** |
| E19K | | | | IAmb | IAmb | 03 46 33.6 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **37.39** | **34** | P | **P** | **03 46 29.7** | **+0.1** |
| **F21K** | **Alatna River** | **37.66** | **32** | P | **P** | **03 46 32.2** | **+0.3** |
| **B21K** | **Ikpikpuk River** | **37.69** | **28** | P | **P** | **03 46 32.3** | **+0.2** |
| B21K | | | | IAmb | IAmb | 03 46 35.0 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **37.74** | **35** | P | **P** | **03 46 32.0** | **-0.6** |
| H21K | | | | IAmb | IAmb | 03 46 34.6 | |
| | comp=Z,4.1nm,1.3s | | | | | | |
| **SPU** | **Mount Spurr** | **37.87** | **42** | P | **P** | **03 46 34.3** | **+0.5** |
| SPU | | | | IAmb | IAmb | 03 46 48.8 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **38.22** | **30** | P | **P** | **03 46 36.7** | **+0.1** |
| D22K | | | | IAmb | IAmb | 03 46 56.5 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **38.42** | **31** | P | **P** | **03 46 38.3** | **-0.1** |
| E22K | | | | IAmb | IAmb | 03 46 51.9 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **39.10** | **28** | P | **P** | **03 46 44.1** | **+0.1** |
| C23K | | | | IAmb | IAmb | 03 46 44.9 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **E24K** | **Your Creek** | **39.66** | **31** | P | **P** | **03 46 49.4** | **+0.7** |
| **G24K** | **Hadweenzic Riv** | **39.97** | **34** | P | **P** | **03 46 52.5** | **+1.3** |
| G24K | | | | IAmb | IAmb | 03 47 23.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **40.19** | **37** | P | **P** | **03 46 54.8** | **+1.7** |
| | comp=Z,0.3nm,0.6s,baz=271,slow=7.8,SNR=5.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **40.52** | **29** | P | **P** | **03 46 55.7** | **-0.1** |
| D25K | | | | IAmb | IAmb | 03 47 01.4 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **41.12** | **32** | P | **P** | **03 47 02.1** | **+1.4** |
| **DGZ** | **Jazzator, Alta** | **41.64** | **300** | *i* P | **P** | **03 47 04.1** | **-1.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,3.2s | | | | | | |
| **CRQM** | **Cirque** | **42.24** | **42** | P | **P** | **03 47 10.6** | **+0.4** |
| CRQM | | | | IAmb | IAmb | 03 47 29.4 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **D27M** | **Malcolm River** | **42.44** | **30** | P | **P** | **03 47 12.1** | **+0.5** |
| **BCAR** | **Beaver Creek A** | **42.56** | **39** | P | **P** | **03 47 13.8** | **+1.2** |
| **EGAK** | **Eagle** | **42.64** | **36** | P | **P** | **03 47 14.4** | **+1.3** |
| EGAK | | | | IAmb | IAmb | 03 47 43.9 | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **E29M** | **Blow River** | **43.60** | **31** | P | **P** | **03 47 21.1** | **+0.3** |
| **I30M** | **Mount Dempster** | **44.59** | **35** | P | **P** | **03 47 29.3** | **+0.3** |
| **INK** | **Inuvik** | **45.22** | **31** | P | **P** | **03 47 34.4** | **+0.7** |
| **INK** | **Inuvik** | **45.22** | **31** | P | **P** | **03 47 34.4** | **+0.7** |
| INK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **MK31** | **Makanchi Array** | **45.86** | **298** | P | **P** | **03 47 39.4** | **+0.3** |
| MK31 | | | | IAmb | IAmb | 03 47 40.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **45.86** | **298** | *ce*P | **P** | **03 47 39.1** | **0.0** |
| **MKAR** | **Makanchi Array** | **45.86** | **298** | P | **P** | **03 47 39.2** | **0.0** |
| | comp=Z,3.1nm,0.8s,baz=72,slow=8.2,SNR=27 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.86** | **298** | *e*P | **P** | **03 47 39.7** | **+0.6** |
| **MKAR** | **Makanchi Array** | **45.86** | **298** | *ce*P | **P** | **03 47 39.7** | **+0.6** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **46.05** | **298** | P | **P** | **03 47 39.7** | **-1.0** |
| MAKZ | | | | IAmb | IAmb | 03 47 41.9 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **46.05** | **298** | P | **P** | **03 47 39.7** | **-1.0** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.67** | **304** | P | **P** | **03 47 44.4** | **-1.0** |
| **KURK** | **Kurchatov** | **46.67** | **304** | *e*P | **P** | **03 47 45.9** | **+0.5** |
| **KURK** | **Kurchatov** | **46.67** | **304** | P | **P** | **03 47 45.9** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **46.76** | **304** | P | **P** | **03 47 45.9** | **-0.2** |
| | comp=Z,1.5nm,0.2s,baz=74,slow=8.1,SNR=4.3 | | | | | | |
| | comp=Z,1.5nm,0.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.22** | **255** | LR | LR | 04 11 34.8 | |
| | comp=Z,28nm,18.1s,baz=125,slow=39 | | | | | | |
| **DIB** | **Dawson Inlet,** | **49.92** | **50** | P | **P** | **03 48 12.2** | **+1.8** |
| **BOOM** | **Boomskoye usch** | **51.80** | **296** | | **P** | **03 48 25.5** | **+0.5** |
| BOOM | | | | IAmb | IAmb | 03 48 27.1 | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.80** | **296** | P | **P** | **03 48 25.5** | **+0.5** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **53.24** | **292** | P | P | 03 48 42.2 | +6.6 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **ARSB** | **Arslanbob** | **54.29** | **296** | | **P** | **03 48 44.5** | **+1.2** |
| ARSB | | | | IAmb | IAmb | 03 48 46.0 | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **ARSB** | **Arslanbob** | **54.29** | **296** | P | **P** | **03 48 44.5** | **+1.2** |
| ARSB | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **54.98** | **299** | P | **P** | **03 48 47.1** | **-0.9** |
| **KKAR** | **Karatay Array** | **54.98** | **299** | P | **P** | **03 48 47.1** | **-0.9** |
| **KULM** | **Kulim** | **57.59** | **243** | P | **P** | **03 49 09.6** | **+2.6** |
| **ABKAR** | **Akbulak array** | **58.09** | **309** | P | **P** | **03 49 10.1** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 03 49 11.2 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.09** | **309** | P | **P** | **03 49 09.9** | **-0.2** |
| **CHGR** | **Chuyangaron** | **58.20** | **295** | P | **P** | **03 49 10.9** | **-0.2** |
| **CHGR** | **Chuyangaron** | **58.20** | **295** | P | **P** | **03 49 10.9** | **-0.2** |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| **KIRV** | **Kirov** | **58.28** | **323** | *ce*P | **P** | **03 49 09.8** | **-1.4** |
| **SIMJ** | **Simiganj** | **58.29** | **295** | P | **P** | **03 49 10.9** | **-0.9** |
| SIMJ | | | | IAmb | IAmb | 03 49 26.1 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **KMPM** | **Mount Pierce** | **61.16** | **60** | P | **P** | **03 49 31.8** | **+0.3** |
| **WR0** | **Warramunga Arr** | **65.24** | **195** | P | **P** | **03 49 59.5** | **+1.2** |
| WR0 | | | | IAmb | IAmb | 03 50 05.0 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **FIA1** | **FINESS Array S** | **65.26** | **334** | P | **P** | **03 49 57.8** | **-0.3** |
| **FINES** | **FINESS Array B** | **65.26** | **334** | P | **P** | **03 49 57.4** | **-0.7** |
| **FINES** | **FINESS Array B** | **65.26** | **334** | P | **P** | **03 49 57.5** | **-0.6** |
| | comp=Z,3.4nm,0.7s,baz=47,slow=8.4,SNR=10 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.26** | **196** | P | **P** | **03 49 59.4** | **+0.9** |
| **WRA** | **Warramunga Arr** | **65.26** | **196** | P | **P** | **03 49 58.9** | **+0.4** |
| | comp=Z,0.5nm,0.8s,baz=20,slow=7.3,SNR=2.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.26** | **196** | P | **P** | **03 49 59.4** | **+0.9** |
| **BOZ** | **Bozeman (W)** | **65.44** | **50** | P | **P** | **03 50 00.9** | **+1.3** |
| **BOZ** | **Bozeman (W)** | **65.44** | **50** | P | **P** | **03 50 01.0** | **+1.3** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.3s | | | | | | |
| **OBN** | **Obninsk** | **65.96** | **325** | *e*P | **P** | **03 50 02.6** | **-0.1** |
| **OBN** | **Obninsk** | **65.96** | **325** | *e*P | **P** | **03 50 02.6** | **-0.1** |
| OBN | | | | *e* | | 03 50 34.4 | |
| OBN | | | | *e*PPP | PPP | 03 54 01.4 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,32nm,18.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.96** | **59** | P | **P** | **03 50 04.6** | **+1.2** |
| | comp=Z,0.4nm,0.7s,baz=302,slow=6.3,SNR=2.7 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **68.39** | **51** | P | **P** | **03 50 19.0** | **+0.4** |
| **PDAR** | **Pinedale Array** | **68.39** | **51** | P | **P** | **03 50 19.6** | **+1.0** |
| | comp=Z,0.1nm,0.3s,baz=322,slow=2.8,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **68.97** | **195** | P | **P** | **03 50 23.5** | **+1.5** |
| **ASAR** | **Alice Springs** | **68.97** | **195** | P | **P** | **03 50 24.1** | **+2.0** |
| | comp=Z,0.5nm,0.7s,baz=11,slow=5.9,SNR=3.3 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **68.97** | **195** | P | **P** | **03 50 23.5** | **+1.5** |
| **NC303** | **NORSAR Array S** | **69.61** | **340** | P | **P** | **03 50 25.5** | **-0.1** |
| **MVU** | **Marysvale** | **69.62** | **56** | P | **P** | **03 50 26.0** | **-0.4** |
| MVU | | | | IAmb | IAmb | 03 51 03.7 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **NC405** | **NORSAR Array S** | **69.62** | **340** | P | **P** | **03 50 25.4** | **-0.3** |
| NC405 | | | | IAmb | IAmb | 03 50 26.4 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **NC204** | **NORSAR Array S** | **69.72** | **340** | P | **P** | **03 50 26.3** | **-0.1** |
| **NB201** | **NORSAR Array S** | **69.78** | **340** | P | **P** | **03 50 26.2** | **-0.5** |
| **NB2** | **NORSAR Subarra** | **69.81** | **340** | P | **P** | **03 50 26.5** | **-0.4** |
| | comp=Z,2.8nm,0.6s,baz=31,slow=6.5 | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.81** | **340** | P | **P** | **03 50 25.1** | **-1.8** |
| **NOA** | **NORSAR Array B** | **69.81** | **340** | P | **P** | **03 50 26.8** | **-0.1** |
| | comp=Z,2.3nm,0.8s,baz=31,slow=6.2,SNR=14 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **69.95** | **338** | P | **P** | **03 50 27.4** | **-0.3** |
| | comp=Z,3.2nm,0.6s,baz=36,slow=5.5,SNR=16 | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **PFO** | **Pinyon Flats O** | **70.16** | **62** | *i* P | **P** | **03 50 29.6** | **0.0** |
| **KIV** | **Kislovodsk** | **70.71** | **313** | *e*P | **P** | **03 50 32.0** | **-0.8** |
| **KIV** | **Kislovodsk** | **70.71** | **313** | *e*P | **P** | **03 50 32.0** | **-0.8** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,32nm,18.0s | | | | | | |
| **KBZ** | **Khabaz** | **70.76** | **313** | P | **P** | **03 50 34.0** | **+1.1** |
| | comp=Z,2.0nm,0.8s,baz=52,slow=2.5,SNR=5.9 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **70.76** | **313** | *e*P | **P** | **03 50 33.8** | **+0.9** |
| **KBZ** | **Khabaz** | **70.76** | **313** | *i* P | **P** | **03 50 33.8** | **+0.9** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.22** | **325** | P | **P** | **03 50 41.6** | **+0.1** |
| | comp=Z,1.0nm,0.5s,baz=36,slow=5.7,SNR=6.0 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **AKBB** | **Malin Array Si** | **72.22** | **325** | *i* P | **P** | **03 50 40.3** | **-1.3** |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **SOC** | **Sochi** | **72.52** | **314** | *e*P | **P** | **03 50 39.6** | **-3.9** |
| SOC | | | | *e* | | 03 53 20.7 | |
| SOC | | | | *e*PPP | PPP | 03 55 10.9 | |
| SOC | | | | *e*S | **S** | **04 00 02.8** | **-1.4** |
| SOC | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **ISCO** | **Idaho Springs** | **72.58** | **51** | P | **P** | **03 50 41.3** | **-3.0** |
| ISCO | | | | IAmb | IAmb | 03 50 57.6 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **72.58** | **51** | P | **P** | **03 50 41.3** | **-3.0** |
| ISCO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **KARS** | **Kars** | **72.79** | **310** | P | **P** | **03 50 44.9** | **-0.5** |
| **KARS** | **Kars** | **72.79** | **310** | P | **P** | **03 50 44.9** | **-0.5** |
| KARS | | | | pmax | pmax | | |
| | comp=Z,19nm,0.5s | | | | | | |
| **OJC** | **Ojcow** | **76.29** | **329** | P | **P** | **03 51 03.8** | **-1.5** |
| **OJC** | **Ojcow** | **76.29** | **329** | P | **P** | **03 51 03.8** | **-1.5** |
| OJC | | | | pmax | pmax | | |
| | comp=Z,22nm,0.7s | | | | | | |
| **OJC** | **Ojcow** | **76.29** | **329** | *e*Pg | **P** | **03 51 03.7** | **-1.6** |
| **CLL** | **Collm** | **77.70** | **334** | *i* P | **P** | **03 51 13.3** | **+0.1** |
| CLL | | | | *i* x | x | 03 51 25.9 | |
| **EKA** | **Eskdalemuir Ar** | **78.20** | **344** | P | **P** | **03 51 16.0** | **+0.1** |
| | comp=Z,0.7nm,0.7s,baz=15,slow=5.9,SNR=3.4 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **EKB** | **Eskdalemuir** | **78.21** | **344** | P | **P** | **03 51 15.9** | **0.0** |
| **KHC** | **Kasperske Hory** | **79.39** | **332** | P | **P** | **03 51 23.2** | **+0.6** |
| KHC | | | | IAmb | IAmb | 03 51 37.8 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **KHC** | **Kasperske Hory** | **79.39** | **332** | *e*P | **P** | **03 51 23.0** | **+0.4** |
| **KHC** | **Kasperske Hory** | **79.39** | **332** | *ce*P | **P** | **03 51 22.5** | **-0.1** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **CONA** | **Conrad Observa** | **79.63** | **330** | *e*P | **P** | **03 51 25.4** | **+1.4** |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **RONA** | **Rosalia, Austr** | **79.67** | **330** | *e*PcP | **P** | **03 51 26.0** | **+1.8** |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **J47A** | **Sunmer** | **80.42** | **37** | P | **P** | **03 51 27.8** | **-0.4** |
| **SOKA** | **Soboth** | **80.99** | **330** | *e*P | **P** | **03 51 32.3** | **+0.9** |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **81.05** | **58** | P | **P** | **03 51 34.0** | **+2.0** |
| **TXAR** | **Lajitas Array** | **81.05** | **58** | P | **P** | **03 51 32.0** | **0.0** |
| **TXAR** | **Lajitas Array** | **81.05** | **58** | P | **P** | **03 51 32.3** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=304,slow=4.7,SNR=6.7 | | | | | | |
| TXAR | | | | LR | LR | 04 30 11.0 | |
| | comp=Z,8.6nm,18.4s,baz=14,slow=38 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.05** | **58** | P | **P** | **03 51 32.0** | **0.0** |
| **LESA** | **Schwarzleotal** | **81.17** | **332** | *i* P | **P** | **03 51 32.6** | **+0.3** |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **KBA** | **Koelnbreinsper** | **81.24** | **331** | *i* PcP | **P** | **03 51 33.9** | **+1.1** |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **OZNA** | **Ozona** | **81.43** | **55** | P | **P** | **03 51 33.1** | **-0.8** |
| **RETA** | **Reutte** | **81.75** | **333** | *e*PcP | **P** | **03 51 36.3** | **+1.0** |
| | comp=Z,1.7nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **81.77** | **333** | *e*PcP | **P** | **03 51 36.5** | **+1.0** |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **SQTA** | **Sankt Quirin** | **81.84** | **333** | *e*PcP | **P** | **03 51 37.7** | **+1.8** |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **82.68** | **333** | P | **P** | **03 51 39.1** | **-1.3** |
| FUORN | | | | IAmb | IAmb | 03 51 42.6 | |
| | comp=Z,3.0nm,1.1s | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ELIS | | | | IAML | | 04 40 46.2 | | |
| | comp=N,208nm,0.2s | | | | | | | |
| **OK032** | **Salt Plains WL** | **0.69** | **65** | Pg | Pg | 04 40 35.8 | -0.1 | |
| OK032 | | | | Sg | Sg | 04 40 45.4 | +0.5 | |
| **CROK** | **Carrier** | **0.81** | **91** | Pg | Pg | 04 40 38.0 | -0.2 | |
| **CSTR** | **Hydro, Custer** | **0.91** | **164** | Pg | Pg | 04 40 39.8 | -0.1 | |
| **KAN14** | **Manchester OK** | **0.94** | **62** | Pg | Pg | 04 40 40.6 | 0.0 | |
| **GC02** | **Grant County #** | **0.97** | **70** | Pg | Pg | 04 40 41.0 | -0.2 | |
| **KAN08** | **Anthony NE Sta** | **1.08** | **49** | Pg | Pg | 04 40 43.1 | -0.3 | |
| **KAN12** | **Harper NE Stat** | **1.11** | **45** | Pg | Pg | 04 40 43.7 | -0.3 | |
| **KAN17** | **Caldwell West** | **1.12** | **62** | Pg | Pg | 04 40 43.8 | -0.3 | |
| **KAN01** | **Argonia South** | **1.18** | **57** | Pg | Pg | 04 40 44.8 | -0.4 | |
| **KAN09** | **Caldwell North** | **1.26** | **60** | | Pn | 04 40 46.5 | -0.4 | |
| **KS21** | **Milan North St** | **1.31** | **54** | | Pn | 04 40 47.0 | -0.5 | |
| **OK029** | **Liberty Lake** | **1.44** | **120** | Pg | Pn | 04 40 49.1 | -0.1 | |
| **BLOK** | **Blackwell** | **1.45** | **80** | | Pn | 04 40 48.8 | -0.6 | |
| **ADOK** | **Arcadia Dam** | **1.57** | **123** | | Pn | 04 40 51.1 | 0.0 | |
| **OK048** | **Pawnee Station** | **1.66** | **93** | | Pn | 04 40 52.3 | +0.1 | |
| OK048 | | | | IAmb_Lg | | 04 41 14.5 | | |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| **OK051** | **E0350 and S346** | **1.74** | **90** | | Pn | 04 40 53.9 | +0.6 | |
| **SMWD** | **Samnorwood** | **1.74** | **216** | | Pn | 04 40 53.1 | -0.3 | |
| SMWD | | | | IAmb_Lg | | 04 41 22.4 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.79** | **174** | | Pn | 04 40 54.2 | +0.2 | |
| WMOK | | | | IAmb_Lg | | 04 41 23.9 | | |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| **FNO** | **Franklin** | **1.81** | **134** | Pn | Pn | 04 40 54.2 | -0.1 | |
| **OK031** | **S. Brethren Rd** | **1.83** | **107** | | Pn | 04 40 54.5 | -0.1 | |
| **OK052** | **Battle Ridge R** | **1.85** | **106** | | Pn | 04 40 55.0 | +0.2 | |
| **QUOK** | **Quay** | **1.88** | **100** | | Pn | 04 40 55.0 | -0.3 | |
| **R32A** | **Long Quarter,** | **1.91** | **7** | | Pn | 04 40 55.9 | +0.1 | |
| R32A | | | | IAmb_Lg | | 04 41 24.9 | | |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.13** | **153** | Pn | Pn | 04 40 58.7 | -0.1 | |
| **CBKS** | **Cedar Bluff** | **2.37** | **346** | Pn | Pn | 04 41 01.9 | -0.2 | |
| **TUL3** | **Leonard** | **2.66** | **102** | IAmb_Lg | | 04 41 53.4 | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **AMTX** | **Amarillo** | **2.73** | **234** | IAmb_Lg | | 04 41 48.8 | | |
| | comp=Z,8.4nm,1.0s | | | | | | | |
| **RTBA** | **Rita Blanca** | **3.02** | **270** | Pn | Pn | 04 41 10.9 | -0.2 | |
| **KSU1** | **Kansas State U** | **3.20** | **35** | IAmb_Lg | | 04 42 12.1 | | |
| | comp=Z,5.3nm,1.0s | | | | | | | |
| **DKNS** | **Dickens** | **3.26** | **210** | Pn | Pn | 04 41 14.2 | -0.1 | |
| **APMT** | **Aspermont** | **3.32** | **197** | Pn | Pn | 04 41 14.9 | -0.2 | |
| APMT | | | | IAmb_Lg | | 04 42 12.5 | | |
| | comp=Z,3.7nm,0.8s | | | | | | | |
| **X37A** | **Clayton** | **3.52** | **122** | Pn | Pn | 04 41 17.8 | -0.1 | |
| **U38A** | **Gravette** | **3.71** | **90** | Pn | Pn | 04 41 20.7 | +0.2 | |
| **PLPT** | **Palo Pinto** | **3.74** | **171** | IAmb_Lg | | 04 42 22.3 | | |
| | comp=Z,6.4nm,1.3s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.81** | **312** | IAmb_Lg | | 04 42 28.5 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **MSTX** | **Muleshoe** | **4.00** | **232** | IAmb_Lg | | 04 42 32.0 | | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| **HHAR** | **Hobbs** | **4.08** | **92** | IAmb_Lg | | 04 42 32.4 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **T25A** | **Trinidad** | **4.39** | **280** | IAmb_Lg | | 04 42 46.6 | | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **S39A** | **Bolivar** | **4.68** | **74** | IAmb_Lg | | 04 42 51.2 | | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.84** | **112** | IAmb_Lg | | 04 43 07.2 | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.59** | **94** | IAmb_Lg | | 04 43 24.8 | | |
| | comp=Z,3.9nm,0.9s | | | | | | | |

*JMA* ***07*** *05:37:59.5±0.2,25°N±1°×122°.3E±0°.4,h77km±2km, MV3.2/15, TAIWAN REGION*
*TAP* ***07*** *05:37:59.7,24°.58N×122°.24E,h79km,ML4.0,C*
**ISC 07 05:37:58.9**±1.2**,24°.57N**±0°.03×**122°.30E**±0°.02**,h83**km±5km**,
**n148,σ1°12/275,52C-5D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.17** | **203** | ⇓*i*P | **Pn** | **05 38 11.6** | **+0.8** |
| | baz=218 | | | | | | |
| EOS2 | | | | S | **Sn** | **05 38 20.9** | **+1.4** |
| | baz=218 | | | | | | |
| **EOS3** | **EOS3** | **0.28** | **177** | P | **Pn** | **05 38 12.2** | **+0.9** |
| | baz=189 | | | | | | |
| EOS3 | | | | S | **Sn** | **05 38 21.3** | **+0.9** |
| | baz=189 | | | | | | |
| **TWC** | **Suao** | **0.41** | **275** | ⇑*i*P | **Pn** | **05 38 12.1** | **-0.1** |
| | baz=274 | | | | | | |
| TWC | | | | S | **Sn** | **05 38 21.0** | **-1.2** |
| | baz=274 | | | | | | |
| **ESAO** | **Su ao** | **0.42** | **271** | P | **Pn** | **05 38 12.2** | **0.0** |
| | baz=269 | | | | | | |
| ESAO | | | | S | **Sn** | **05 38 21.4** | **-0.8** |
| | baz=269 | | | | | | |
| **EGS** | | **0.43** | **309** | ⇑*i*P | **Pn** | **05 38 12.5** | **+0.1** |
| | baz=307 | | | | | | |
| EGS | | | | S | **Sn** | **05 38 21.6** | **-0.8** |
| | baz=307 | | | | | | |
| **EOS4** | **EOS4** | **0.45** | **178** | *e*P | **Pn** | **05 38 12.6** | **+0.5** |
| | baz=179 | | | | | | |
| EOS4 | | | | S | **Sn** | **05 38 22.0** | **+0.1** |
| | baz=179 | | | | | | |
| **EWUT** | **Wuta** | **0.49** | **255** | P | **Pn** | **05 38 13.2** | **+0.3** |
| | baz=252 | | | | | | |
| EWUT | | | | S | **Sn** | **05 38 23.0** | **-0.3** |
| | baz=252 | | | | | | |
| **NTC** | **Toucheng** | **0.51** | **303** | *e*S | **Sn** | **05 38 23.4** | **-0.1** |
| | baz=305 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.52** | **327** | ⇑*i*P | **Pn** | **05 38 13.2** | **0.0** |
| | baz=327 | | | | | | |
| TWB1 | | | | S | **Sn** | **05 38 22.6** | **-1.1** |
| | baz=327 | | | | | | |
| **ENA** | **Nanau** | **0.53** | **254** | ⇑*i*P | **Pn** | **05 38 13.6** | **+0.4** |
| | baz=251 | | | | | | |
| ENA | | | | S | **Sn** | **05 38 24.0** | **+0.2** |
| | baz=251 | | | | | | |
| **NDS** | **Dongshan** | **0.54** | **277** | ⇓P | **Pn** | **05 38 13.6** | **+0.4** |
| | baz=276 | | | | | | |
| NDS | | | | S | **Sn** | **05 38 23.3** | **-0.6** |
| | baz=276 | | | | | | |
| **ILA** | **Ilan** | **0.54** | **291** | P | **Pn** | **05 38 13.6** | **+0.4** |
| | baz=292 | | | | | | |
| ILA | | | | S | **Sn** | **05 38 23.8** | **-0.2** |
| | baz=292 | | | | | | |
| **EAHA** | **Aohua** | **0.57** | **245** | ⇑P | **Pn** | **05 38 13.8** | **+0.3** |
| | baz=241 | | | | | | |
| EAHA | | | | S | **Sn** | **05 38 24.6** | **+0.2** |
| | baz=241 | | | | | | |
| **EHP** | **Heping Village** | **0.57** | **243** | P | **Pn** | **05 38 14.0** | **+0.3** |
| | baz=238 | | | | | | |
| EHP | | | | S | **Sn** | **05 38 24.7** | **+0.2** |
| | baz=238 | | | | | | |
| **TIPB** | **Shuangxi** | **0.59** | **313** | ⇑*i*P | **Pn** | **05 38 13.8** | **+0.1** |
| | baz=320 | | | | | | |
| TIPB | | | | S | **Sn** | **05 38 24.0** | **-0.9** |
| | baz=320 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.60** | **101** | P | **Pn** | **05 38 14.1** | **+0.3** |
| JYNG | | | | *e*S | **Sn** | **05 38 24.5** | **-0.4** |
| **TWE** | **Neicheng** | **0.60** | **285** | ⇑*i*P | **Pn** | **05 38 14.2** | **+0.4** |
| | baz=284 | | | | | | |
| TWE | | | | S | **Sn** | **05 38 24.5** | **-0.4** |
| | baz=284 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.65** | **323** | ⇑*i*P | **Pn** | **05 38 14.6** | **+0.2** |
| | baz=331 | | | | | | |
| SXI1 | | | | *i* S | **Sn** | **05 38 25.2** | **-0.7** |
| | baz=331 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.65** | **100** | P | **Pn** | **05 38 14.6** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **0.65** | **100** | ⇓*i*P | **Pn** | **05 38 14.7** | **+0.3** |
| | baz=99 | | | | | | |
| YOJ | | | | S | **Sn** | **05 38 25.2** | **-0.6** |
| | baz=99 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.65** | **100** | P | **Pn** | **05 38 14.7** | **+0.3** |
| YOJ | | | | *e*S | **Sn** | **05 38 25.4** | **-0.4** |
| **ENTT** | **Nioudou** | **0.67** | **276** | ⇑*i*P | **Pn** | **05 38 15.3** | **+0.8** |
| | baz=277 | | | | | | |
| ENTT | | | | S | **Sn** | **05 38 26.5** | **+0.3** |
| | baz=277 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.68** | **286** | ⇑*i*P | **Pn** | **05 38 15.2** | **+0.5** |
| | baz=292 | | | | | | |
| FUSB | | | | S | **Sn** | **05 38 25.9** | **-0.5** |
| | baz=292 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.69** | **316** | ⇑*i*P | **Pn** | **05 38 15.1** | **+0.3** |
| | baz=311 | | | | | | |
| NWF | | | | S | **Sn** | **05 38 25.9** | **-0.7** |
| | baz=311 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.69** | **316** | ⇑*i*P | **Pn** | **05 38 15.1** | **+0.4** |
| | baz=311 | | | | | | |
| WFSB | | | | S | **Sn** | **05 38 25.8** | **-0.6** |
| | baz=311 | | | | | | |
| **LATG** | **Datong** | **0.71** | **267** | ⇑*i*P | **Pn** | **05 38 15.5** | **+0.5** |
| | baz=261 | | | | | | |
| LATG | | | | S | **Sn** | **05 38 27.0** | **0.0** |
| | baz=261 | | | | | | |
| **NDT** | **Datong Townshi** | **0.72** | **273** | ⇑P | **Pn** | **05 38 15.9** | **+0.9** |
| | baz=273 | | | | | | |
| NDT | | | | S | **Sn** | **05 38 27.6** | **+0.5** |
| | baz=273 | | | | | | |
| **ETL** | **Fush Village** | **0.74** | **237** | P | **Pn** | **05 38 15.1** | **-0.2** |
| | baz=233 | | | | | | |
| ETL | | | | S | **Sn** | **05 38 26.5** | **-1.1** |
| | baz=233 | | | | | | |
| **TNOU** | **National Taiwa** | **0.75** | **320** | *i* P | **Pn** | **05 38 15.6** | **+0.3** |
| | baz=319 | | | | | | |
| TNOU | | | | S | **Sn** | **05 38 27.0** | **-0.6** |
| | baz=319 | | | | | | |
| **NACB** | **Ninganchiao** | **0.76** | **239** | P | **Pn** | **05 38 15.2** | **-0.2** |
| **NACB** | **Ninganchiao** | **0.76** | **239** | ⇑*i*P | **Pn** | **05 38 15.0** | **-0.4** |
| | baz=229 | | | | | | |
| **TWA** | **Mucha** | **0.77** | **302** | ⇑*i*P | **Pn** | **05 38 15.8** | **+0.3** |
| | baz=303 | | | | | | |
| TWA | | | | S | **Sn** | **05 38 27.1** | **-0.8** |
| | baz=303 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.81** | **299** | P | **Pn** | **05 38 16.3** | **+0.3** |
| | baz=300 | | | | | | |
| NHDH | | | | S | **Sn** | **05 38 27.9** | **-0.8** |
| | baz=300 | | | | | | |
| **TWD** | **Chiawan** | **0.81** | **233** | ⇑*i*P | **Pn** | **05 38 15.8** | **-0.2** |
| | baz=229 | | | | | | |
| TWD | | | | S | **Sn** | **05 38 28.0** | **-0.7** |
| | baz=229 | | | | | | |
| **NHY** | **Taipei** | **0.81** | **305** | S | **Sn** | **05 38 28.7** | **-0.1** |
| | baz=306 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.83** | **244** | ⇑*i*P | **Pn** | **05 38 16.4** | **+0.1** |
| | baz=234 | | | | | | |
| ETLH | | | | S | **Sn** | **05 38 28.8** | **-0.5** |
| | baz=234 | | | | | | |
| **TATO** | **Taipei** | **0.84** | **299** | P | **Pn** | **05 38 16.5** | **+0.2** |
| **YHNB** | **Yeheng** | **0.85** | **277** | P | **Pn** | **05 38 17.2** | **+0.7** |
| **YHNB** | **Yeheng** | **0.85** | **277** | ⇑*i*P | **Pn** | **05 38 17.3** | **+0.8** |
| | baz=276 | | | | | | |
| YHNB | | | | S | **Sn** | **05 38 29.2** | **-0.4** |
| | baz=276 | | | | | | |
| **NNSB** | **Datong** | **0.85** | **261** | ⇑*i*P | **Pn** | **05 38 16.9** | **+0.4** |
| | baz=252 | | | | | | |
| NNSB | | | | S | **Sn** | **05 38 29.2** | **-0.5** |
| | baz=252 | | | | | | |
| **NNS** | **Nan Shan** | **0.86** | **261** | ⇑*i*P | **Pn** | **05 38 17.0** | **+0.3** |
| | baz=253 | | | | | | |
| NNS | | | | S | **Sn** | **05 38 29.6** | **-0.3** |
| | baz=253 | | | | | | |
| **NSK** | **Sanguang** | **0.87** | **277** | ⇑*i*P | **Pn** | **05 38 17.4** | **+0.7** |
| | baz=276 | | | | | | |
| NSK | | | | S | **Sn** | **05 38 29.8** | **-0.1** |
| | baz=276 | | | | | | |
| **HWA** | **Hwalien** | **0.87** | **227** | P | **Pn** | **05 38 16.9** | **+0.3** |
| | baz=216 | | | | | | |
| HWA | | | | S | **Sn** | **05 38 30.1** | **+0.2** |
| | baz=216 | | | | | | |
| **YM01** | **YM01** | **0.88** | **311** | ⇑*i*P | **Pn** | **05 38 17.0** | **+0.2** |
| | baz=305 | | | | | | |
| YM01 | | | | S | **Sn** | **05 38 29.3** | **-0.9** |
| | baz=305 | | | | | | |
| **YM08** | **YM08** | **0.89** | **314** | ⇑*i*P | **Pn** | **05 38 16.9** | **0.0** |
| | baz=308 | | | | | | |
| YM08 | | | | S | **Sn** | **05 38 28.8** | **-1.6** |
| | baz=308 | | | | | | |
| **ANP** | **Anpu** | **0.94** | **311** | P | **Pn** | **05 38 17.6** | **+0.1** |
| | baz=306 | | | | | | |
| ANP | | | | S | **Sn** | **05 38 30.5** | **-0.9** |
| | baz=306 | | | | | | |
| **TWY** | **Chenhua** | **0.95** | **318** | ⇑*i*P | **Pn** | **05 38 18.2** | **+0.6** |
| | baz=312 | | | | | | |
| TWY | | | | S | **Sn** | **05 38 31.7** | **+0.2** |
| | baz=312 | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.95** | **223** | P | **Pn** | **05 38 17.6** | **0.0** |
| | baz=215 | | | | | | |
| TEYL | | | | S | **Sn** | **05 38 31.2** | **-0.3** |
| | baz=215 | | | | | | |
| **ETM** | **Tongmen** | **0.95** | **231** | ⇑P | **Pn** | **05 38 17.6** | **0.0** |
| | baz=237 | | | | | | |
| ETM | | | | S | **Sn** | **05 38 30.4** | **-1.2** |
| | baz=237 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.96** | **303** | ⇑*i*P | **Pn** | **05 38 17.2** | **-0.5** |
| | baz=309 | | | | | | |
| TWS1 | | | | S | **Sn** | **05 38 30.5** | **-1.2** |
| | baz=309 | | | | | | |
| **NTST** | **Danshui** | **0.97** | **307** | ⇑P | **Pn** | **05 38 18.4** | **+0.6** |
| | baz=308 | | | | | | |
| NTST | | | | S | **Sn** | **05 38 32.1** | **+0.1** |
| | baz=308 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.98** | **236** | ⇑*i*P | **Pn** | **05 38 17.9** | **-0.2** |
| | baz=233 | | | | | | |
| LXIB | | | | *e*S | **Sn** | **05 38 30.5** | **-1.9** |
| | baz=233 | | | | | | |
| **FUSS** | **Fushou** | **1.02** | **252** | *e*P | **Pn** | **05 38 19.2** | **+0.6** |
| | baz=245 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **05 38 33.3** | **-0.1** |
| | baz=245 | | | | | | |
| **SHUL** | **Shoufeng** | **1.03** | **221** | *e*P | **Pn** | **05 38 18.7** | **+0.2** |
| | baz=209 | | | | | | |
| SHUL | | | | S | **Sn** | **05 38 33.2** | **0.0** |
| | baz=209 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.04** | **246** | ⇓P | **Pn** | **05 38 19.5** | **+0.4** |
| | baz=237 | | | | | | |
| WHF | | | | *e*S | **Sn** | **05 38 33.7** | **-0.3** |
| | baz=237 | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.07** | **349** | *e*P | **Pn** | **05 38 19.9** | **+0.9** |
| | baz=344 | | | | | | |
| **TWT** | **Tachien** | **1.07** | **253** | ⇑*i*P | **Pn** | **05 38 20.3** | **+1.1** |
| | baz=243 | | | | | | |
| TWT | | | | S | **Sn** | **05 38 34.9** | **+0.4** |
| | baz=243 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.08** | **273** | ⇑P | **Pn** | **05 38 20.0** | **+0.9** |
| | baz=279 | | | | | | |
| NFF | | | | S | **Sn** | **05 38 34.6** | **+0.3** |
| | baz=279 | | | | | | |
| **NCUH** | **Zhongli** | **1.09** | **291** | *e*P | **Pn** | **05 38 20.3** | **+1.1** |
| | baz=291 | | | | | | |
| NCUH | | | | S | **Sn** | **05 38 35.4** | **+0.9** |
| | baz=291 | | | | | | |
| **TDCB** | **Techi** | **1.09** | **253** | ⇑*i*P | **Pn** | **05 38 20.4** | **+1.0** |
| | baz=243 | | | | | | |
| TDCB | | | | S | **Sn** | **05 38 34.4** | **-0.3** |
| | baz=243 | | | | | | |
| **ESL** | **Shilin** | **1.10** | **227** | ⇑*i*P | **Pn** | **05 38 19.0** | **-0.3** |
| | baz=231 | | | | | | |
| ESL | | | | S | **Sn** | **05 38 33.4** | **-1.2** |
| | baz=231 | | | | | | |
| **CHGB** | **Renai** | **1.15** | **244** | ⇑*i*P | **Pn** | **05 38 21.0** | **+0.8** |
| | baz=235 | | | | | | |
| CHGB | | | | S | **Sn** | **05 38 36.1** | **0.0** |
| | baz=235 | | | | | | |
| **LIOB** | **Emei** | **1.17** | **274** | P | **Pn** | **05 38 21.1** | **+0.9** |
| | baz=273 | | | | | | |
| LIOB | | | | S | **Sn** | **05 38 36.9** | **+0.6** |
| | baz=273 | | | | | | |
| **NSTT** | **Nanjuang** | **1.19** | **273** | P | **Pn** | **05 38 21.2** | **+0.8** |
| | baz=272 | | | | | | |
| NSTT | | | | S | **Sn** | **05 38 36.8** | **+0.2** |
| | baz=272 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.19** | **225** | ⇑*i*P | **Pn** | **05 38 20.1** | **-0.4** |
| | baz=229 | | | | | | |
| WARBT | | | | S | **Sn** | **05 38 35.0** | **-1.7** |
| | baz=229 | | | | | | |
| **OWD** | **Renai** | **1.20** | **239** | ⇑*i*P | **Pn** | **05 38 21.2** | **+0.5** |
| | baz=232 | | | | | | |
| OWD | | | | S | **Sn** | **05 38 36.3** | **-0.8** |
| | baz=232 | | | | | | |
| **EGFH** | **Guangfu** | **1.20** | **222** | *e*P | **Pn** | **05 38 20.4** | **-0.3** |
| | baz=228 | | | | | | |
| EGFH | | | | *e*S | **Sn** | **05 38 36.2** | **-0.7** |
| | baz=228 | | | | | | |
| **SBCB** | **Hsinchu** | **1.22** | **281** | *e*P | **Pn** | **05 38 21.7** | **+1.0** |
| | baz=280 | | | | | | |
| SBCB | | | | S | **Sn** | **05 38 38.1** | **+0.8** |
| | baz=280 | | | | | | |
| **WUSB** | **Renai** | **1.23** | **242** | ⇑*i*P | **Pn** | **05 38 21.8** | **+0.8** |
| | baz=235 | | | | | | |
| WUSB | | | | S | **Sn** | **05 38 37.2** | **-0.4** |
| | baz=235 | | | | | | |
| **HSN** | **Hsinchu** | **1.23** | **281** | *e*P | **Pn** | **05 38 21.5** | **+0.5** |
| | baz=282 | | | | | | |
| HSN | | | | S | **Sn** | **05 38 37.3** | **-0.3** |
| | baz=282 | | | | | | |
| **WHP** | **Taichung City** | **1.27** | **257** | ⇑*i*P | **Pn** | **05 38 23.4** | **+1.8** |
| | baz=255 | | | | | | |
| WHP | | | | S | **Sn** | **05 38 39.7** | **+1.1** |
| | baz=255 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.32** | **100** | P | **Pn** | **05 38 22.4** | **+0.3** |
| IRIF | | | | *e*S | **Sn** | **05 38 39.2** | **-0.3** |
| **VWDT** | **VWDT** | **1.34** | **233** | ⇑*i*P | **Pn** | **05 38 23.0** | **+0.8** |
| | baz=225 | | | | | | |
| VWDT | | | | S | **Sn** | **05 38 38.6** | **-1.3** |
| | baz=225 | | | | | | |
| **HGSD** | **Ruisui** | **1.34** | **217** | ⇑*i*P | **Pn** | **05 38 22.3** | **-0.1** |
| | baz=207 | | | | | | |
| HGSD | | | | S | **Sn** | **05 38 39.0** | **-1.0** |
| | baz=207 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.37** | **248** | P | **Pn** | **05 38 24.1** | **+1.4** |
| | baz=246 | | | | | | |
| WCS | | | | S | **Sn** | **05 38 42.0** | **+1.4** |
| | baz=246 | | | | | | |
| **NMLH** | **Miaoli** | **1.38** | **269** | *e*P | **Pn** | **05 38 23.9** | **+1.1** |
| | baz=267 | | | | | | |
| NMLH | | | | S | **Sn** | **05 38 41.5** | **+0.7** |
| | baz=267 | | | | | | |
| **EHYH** | **Wanrong** | **1.39** | **219** | *e*P | **Pn** | **05 38 22.3** | **-0.6** |
| | baz=225 | | | | | | |
| **EHY** | **Hungye** | **1.39** | **220** | ⇑P | **Pn** | **05 38 22.4** | **-0.5** |
| | baz=225 | | | | | | |
| **TWQ1** | **Liyutan** | **1.41** | **261** | *e*P | **Pn** | **05 38 24.2** | **+1.0** |
| | baz=259 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **05 38 41.5** | **-0.1** |
| | baz=259 | | | | | | |
| **SSLB** | **Suanglung** | **1.46** | **238** | P | **Pn** | **05 38 24.5** | **+0.6** |
| **SSLB** | **Suanglung** | **1.46** | **238** | ⇑P | **Pn** | **05 38 24.5** | **+0.6** |
| | baz=232 | | | | | | |
| SSLB | | | | S | **Sn** | **05 38 43.9** | **+1.2** |
| | baz=232 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.46** | **110** | *e*P | **Pn** | **05 38 24.9** | **+1.0** |
| HATJ | | | | *e*S | **Sn** | **05 38 43.4** | **+0.7** |
| **ECBN** | **Changbin** | **1.47** | **212** | *e*P | **Pn** | **05 38 23.9** | **-0.1** |
| | baz=202 | | | | | | |
| ECBN | | | | S | **Sn** | **05 38 41.4** | **-1.6** |
| | baz=202 | | | | | | |
| **TYC** | **Yuchr** | **1.48** | **244** | P | **Pn** | **05 38 25.2** | **+1.1** |
| | baz=246 | | | | | | |
| TYC | | | | S | **Sn** | **05 38 45.0** | **+1.9** |
| | baz=246 | | | | | | |
| **YULB** | **Yu-li** | **1.49** | **218** | P | **Pn** | **05 38 23.8** | **-0.5** |
| **YULB** | **Yu-li** | **1.49** | **218** | ⇑*i*P | **Pn** | **05 38 23.7** | **-0.5** |
| | baz=224 | | | | | | |
| YULB | | | | *e*S | **Sn** | **05 38 41.9** | **-1.5** |
| | baz=224 | | | | | | |
| **EYUL** | **Yuli** | **1.52** | **217** | *e*P | **Pn** | **05 38 24.6** | **0.0** |
| | baz=223 | | | | | | |
| EYUL | | | | S | **Sn** | **05 38 44.6** | **+0.7** |
| | baz=223 | | | | | | |
| **TWF1** | **Yuli** | **1.52** | **217** | ⇑*i*P | **Pn** | **05 38 24.3** | **-0.4** |
| | baz=222 | | | | | | |
| **WDJ** | **Dajia District** | **1.53** | **262** | P | **Pn** | **05 38 26.1** | **+1.3** |
| | baz=260 | | | | | | |
| WDJ | | | | *e*S | **Sn** | **05 38 45.4** | **+1.1** |
| | baz=260 | | | | | | |
| **TCU** | **Taichung** | **1.54** | **254** | P | **Pn** | **05 38 26.1** | **+1.2** |
| | baz=263 | | | | | | |
| TCU | | | | *e*S | **Sn** | **05 38 45.2** | **+0.6** |
| | baz=263 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.59** | **237** | *e*P | **Pn** | **05 38 27.0** | **+1.5** |
| | baz=228 | | | | | | |
| WHYT | | | | *e*S | **Sn** | **05 38 47.6** | **+2.0** |
| | baz=228 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.59** | **102** | P | **Pn** | **05 38 26.4** | **+0.9** |
| JKRS | | | | *e*S | **Sn** | **05 38 46.2** | **+0.6** |
| **CHKH** | **Chenggong** | **1.60** | **211** | P | **Pn** | **05 38 25.2** | **-0.5** |
| | baz=201 | | | | | | |
| CHKH | | | | S | **Sn** | **05 38 44.7** | **-1.3** |
| | baz=201 | | | | | | |
| **WJS** | **Zhushan** | **1.62** | **243** | P | **Pn** | **05 38 28.1** | **+2.2** |
| | baz=252 | | | | | | |
| WJS | | | | S | **Sn** | **05 38 48.5** | **+2.2** |
| | baz=252 | | | | | | |
| **WNT** | **Mingjian** | **1.63** | **245** | P | **Pn** | **05 38 27.7** | **+1.6** |
| | baz=254 | | | | | | |
| WNT | | | | S | **Sn** | **05 38 48.4** | **+1.8** |
| | baz=254 | | | | | | |
| **FULB** | **Fuli** | **1.65** | **214** | *e*P | **Pn** | **05 38 26.4** | **+0.1** |
| | baz=220 | | | | | | |
| FULB | | | | S | **Sn** | **05 38 46.8** | **-0.4** |
| | baz=220 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.69** | **97** | *e*P | **Pn** | **05 38 27.0** | **+0.2** |
| JIJ | | | | *e*S | **Sn** | **05 38 47.1** | **-0.9** |
| **CHKT** | **Chengkung** | **1.70** | **211** | *e*P | **Pn** | **05 38 26.3** | **-0.7** |
| | baz=200 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **05 38 45.5** | **-2.7** |
| | baz=200 | | | | | | |
| **EHD** | **Haiduan** | **1.74** | **216** | *e*P | **Pn** | **05 38 27.0** | **-0.5** |
| | baz=213 | | | | | | |
| EHD | | | | *e*S | **Sn** | **05 38 49.6** | **+0.5** |
| | baz=213 | | | | | | |
| **ECS** | **Chishang** | **1.77** | **214** | *e*P | **Pn** | **05 38 28.0** | **+0.1** |
| | baz=211 | | | | | | |
| ECS | | | | *e*S | **Sn** | **05 38 50.0** | **+0.1** |
| | baz=211 | | | | | | |
| **CHN5** | **Tsauling** | **1.77** | **237** | ⇑*i*P | **Pn** | **05 38 29.6** | **+1.6** |
| | baz=246 | | | | | | |
| CHN5 | | | | S | **Sn** | **05 38 52.0** | **+2.0** |
| | baz=246 | | | | | | |
| **ELDTW** | **Lidau** | **1.81** | **221** | ⇑P | **Pn** | **05 38 28.3** | **-0.2** |
| | baz=212 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **05 38 49.7** | **-1.3** |
| | baz=212 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.83** | **89** | *e*P | **Pn** | **05 38 29.1** | **+0.5** |
| JISG | | | | *e*S | **Sn** | **05 38 51.7** | **+0.5** |
| **EDH** | **Donghe** | **1.84** | **210** | *e*P | **Pn** | **05 38 28.2** | **-0.5** |
| | baz=218 | | | | | | |
| EDH | | | | S | **Sn** | **05 38 49.3** | **-2.1** |
| | baz=218 | | | | | | |
| **WDLH** | **Douliu** | **1.84** | **242** | *e*P | **Pn** | **05 38 30.1** | **+1.4** |
| | baz=251 | | | | | | |
| WDLH | | | | S | **Sn** | **05 38 53.2** | **+1.8** |
| | baz=251 | | | | | | |
| **WCKO** | **Fanlu** | **1.92** | **234** | P | **Pn** | **05 38 31.8** | **+2.0** |
| | baz=232 | | | | | | |
| WCKO | | | | S | **Sn** | **05 38 55.9** | **+2.5** |
| | baz=232 | | | | | | |
| **WTK** | **Tuku** | **1.96** | **244** | *e*P | **Pn** | **05 38 31.5** | **+1.1** |
| | baz=241 | | | | | | |
| WTK | | | | S | **Sn** | **05 38 55.2** | **+0.9** |
| | baz=241 | | | | | | |
| **CHN2** | **Minshiung** | **1.97** | **239** | *e*P | **Pn** | **05 38 33.3** | **+2.9** |
| | baz=247 | | | | | | |
| CHN2 | | | | S | **Sn** | **05 38 57.1** | **+2.6** |
| | baz=247 | | | | | | |
| **STYH** | **Taoyuan** | **1.98** | **225** | P | **Pn** | **05 38 31.8** | **+1.2** |
| | baz=223 | | | | | | |
| STYH | | | | S | **Sn** | **05 38 55.6** | **+0.9** |
| | baz=223 | | | | | | |
| **LONT** | **Longtian** | **1.98** | **213** | *e*P | **Pn** | **05 38 30.2** | **-0.4** |
| | baz=211 | | | | | | |
| LONT | | | | *e*S | **Sn** | **05 38 53.1** | **-1.6** |
| | baz=211 | | | | | | |
| **TPUB** | **Ta-pu** | **1.99** | **231** | P | **Pn** | **05 38 32.1** | **+1.4** |
| **TPUB** | **Ta-pu** | **1.99** | **231** | ⇑*i*P | **Pn** | **05 38 32.2** | **+1.4** |
| | baz=228 | | | | | | |
| TPUB | | | | S | **Sn** | **05 38 56.2** | **+1.2** |
| | baz=228 | | | | | | |
| **WTP** | **Ta-pu** | **2.03** | **230** | P | **Pn** | **05 38 33.4** | **+2.0** |
| | baz=227 | | | | | | |
| **LDUT** | **Ludao** | **2.04** | **202** | P | **Pn** | **05 38 30.5** | **-0.9** |
| | baz=200 | | | | | | |
| LDUT | | | | S | **Sn** | **05 38 54.0** | **-2.2** |
| | baz=200 | | | | | | |
| **TWGBT** | **Beinan** | **2.08** | **213** | P | **Pn** | **05 38 31.7** | **-0.2** |
| **TWGBT** | **Beinan** | **2.08** | **213** | P | **Pn** | **05 38 31.5** | **-0.4** |
| | baz=210 | | | | | | |
| TWGBT | | | | S | **Sn** | **05 38 55.2** | **-1.9** |
| | baz=210 | | | | | | |
| **TWG** | **Pinlang** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=227 | | | | | | | |
| **SGST** | **Jiashian** | **2.16** | **227** | *e*P | **Pn** | **05 38 33.9** | **+0.8** |
| | baz=224 | | | | | | | |
| SGST | | | | S | **Sn** | **05 39 00.9** | **+1.7** |
| | baz=224 | | | | | | | |
| **SLGT** | **Liugui** | **2.18** | **224** | *e*P | **Pn** | **05 38 35.6** | **+2.2** |
| | baz=231 | | | | | | | |
| SLGT | | | | *e*S | **Sn** | **05 39 02.1** | **+2.4** |
| | baz=231 | | | | | | | |
| **JTJ** | **Tarama** | **2.19** | **88** | *e*P | **Pn** | **05 38 34.7** | **+1.4** |
| JTJ | | | | *e*S | **Sn** | **05 39 01.2** | **+1.6** |
| **ICHU** | **Yijhu** | **2.21** | **237** | P | **Pn** | **05 38 35.1** | **+1.4** |
| | baz=235 | | | | | | | |
| ICHU | | | | *e*S | **Sn** | **05 39 01.9** | **+1.6** |
| | baz=235 | | | | | | | |
| **SCST** | **Cishan** | **2.36** | **225** | *e*P | **Pn** | **05 38 38.5** | **+2.8** |
| | baz=222 | | | | | | | |
| SCST | | | | *e*S | **Sn** | **05 39 07.5** | **+3.7** |
| | baz=222 | | | | | | | |
| **TSMG** | **Majia** | **2.40** | **220**⇑ | *i*P | **Pn** | **05 38 38.1** | **+1.8** |
| | baz=217 | | | | | | | |
| TSMG | | | | S | **Sn** | **05 39 05.2** | **+0.4** |
| | baz=217 | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.48** | **218** | P | **Pn** | **05 38 38.8** | **+1.5** |
| | baz=216 | | | | | | | |
| MASBT | | | | S | **Sn** | **05 39 07.1** | **+0.3** |
| | baz=216 | | | | | | | |
| **EAST** | **Anshuo** | **2.56** | **212** | *e*P | **Pn** | **05 38 38.5** | **+0.2** |
| | baz=204 | | | | | | | |
| **LAY** | **Lan-yu** | **2.62** | **195** | *e*P | **Pn** | **05 38 38.6** | **-0.5** |
| | baz=196 | | | | | | | |
| LAY | | | | *e*S | **Sn** | **05 39 06.8** | **-3.2** |
| | baz=196 | | | | | | | |
| **VWUC** | **VWUC** | **2.63** | **280**⇑ | *i*P | **Pn** | **05 38 39.5** | **+0.3** |
| | baz=279 | | | | | | | |
| VWUC | | | | *i* S | **Sn** | **05 39 07.8** | **-2.5** |
| | baz=279 | | | | | | | |
| **LYUB** | **Lan-yu** | **2.64** | **195** | *e*P | **Pn** | **05 38 38.6** | **-1.0** |
| | baz=195 | | | | | | | |
| LYUB | | | | S | **Sn** | **05 39 07.2** | **-3.5** |
| | baz=195 | | | | | | | |
| **MATB** | **Ma-tsu** | **2.65** | **307** | P | **Pn** | **05 38 40.1** | **+0.5** |
| | baz=298 | | | | | | | |
| MATB | | | | S | **Sn** | **05 39 09.7** | **-1.1** |
| | baz=298 | | | | | | | |
| **SCZT** | **Fangliau** | **2.68** | **216** | *e*P | **Pn** | **05 38 41.6** | **+1.6** |
| | baz=213 | | | | | | | |
| SCZT | | | | *e*S | **Sn** | **05 39 13.1** | **+1.6** |
| | baz=213 | | | | | | | |
| **PNG** | **Penghu** | **2.70** | **249** | P | **Pn** | **05 38 40.2** | **-0.1** |
| | baz=246 | | | | | | | |
| PNG | | | | S | **Sn** | **05 39 10.3** | **-1.8** |
| | baz=246 | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.71** | **248** | *e*P | **Pn** | **05 38 40.2** | **-0.2** |
| | baz=245 | | | | | | | |
| PHUB | | | | *e*S | **Sn** | **05 39 10.0** | **-2.3** |
| | baz=245 | | | | | | | |
| **SLIU** | **Shizi** | **2.72** | **211** | *e*P | **Pn** | **05 38 41.1** | **+0.5** |
| | baz=204 | | | | | | | |
| **WDGT** | **Dungji** | **2.75** | **242** | P | **Pn** | **05 38 41.3** | **+0.4** |
| | baz=239 | | | | | | | |
| WDGT | | | | S | **Sn** | **05 39 11.6** | **-1.6** |
| | baz=239 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.93** | **280**⇑ | P | **Pn** | **05 38 43.5** | **+0.2** |
| | baz=279 | | | | | | | |
| PTMZ | | | | *e*S | **Sn** | **05 39 15.2** | **-2.4** |
| | baz=279 | | | | | | | |
| **TWKBT** | **Hengchun** | **2.96** | **208** | *e*P | **Pn** | **05 38 44.4** | **+0.7** |
| | baz=198 | | | | | | | |
| TWKBT | | | | *e*S | **Sn** | **05 39 17.5** | **-0.7** |
| | baz=198 | | | | | | | |
| **TWK1** | **Hengchun** | **2.96** | **208** | *e*P | **Pn** | **05 38 44.8** | **+1.1** |
| | baz=201 | | | | | | | |
| **VCHM** | **Qimei** | **2.96** | **243** | *e*P | **Pn** | **05 38 43.8** | **0.0** |
| | baz=231 | | | | | | | |
| VCHM | | | | *e*S | **Sn** | **05 39 16.8** | **-1.5** |
| | baz=231 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.03** | **311** | *e*P | **Pn** | **05 38 44.8** | **+0.1** |
| | baz=311 | | | | | | | |
| LYJJ | | | | *e*S | **Sn** | **05 39 18.9** | **-1.0** |
| | baz=311 | | | | | | | |
| **MHZQ** | **Yeshan** | **3.33** | **298** | P | **Pn** | **05 38 48.8** | **+0.1** |
| | baz=298 | | | | | | | |
| MHZQ | | | | *e*S | **Sn** | **05 39 25.8** | **-1.5** |
| | baz=298 | | | | | | | |
| **KNM** | **Kinmen** | **3.53** | **268** | *e*P | **Pn** | **05 38 53.2** | **+1.7** |
| | baz=265 | | | | | | | |
| KNM | | | | *e*S | **Sn** | **05 39 31.8** | **-0.4** |
| | baz=265 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.57** | **269** | *e*P | **Pn** | **05 38 51.9** | **-0.1** |
| | baz=266 | | | | | | | |
| KNMB | | | | *e*S | **Sn** | **05 39 29.3** | **-3.7** |
| | baz=266 | | | | | | | |
| **ZPLA** | **Ao Xicun** | **4.20** | **262** | *e*P | **Pn** | **05 39 02.1** | **+1.5** |
| | baz=258 | | | | | | | |
| ZPLA | | | | *e*S | **Sn** | **05 39 47.1** | **-1.5** |
| | baz=258 | | | | | | | |
| **JOW** | **Kunigami** | **5.84** | **66** | P | **Pn** | **05 39 22.9** | **0.0** |

**NAM 07 05:41:01.6±0.4, 19°.79S × 14°.57E, h7km±2km, ML0.1, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.03** | **249** | *i* P | Pg | 05 41 03.1 | +0.1 |
| ST9N | | | | *i* S | Sg | 05 41 03.9 | -0.1 |
| ST9N | | | | IAML | | 05 41 04.8 | |
| | comp=Z,86nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.03** | **249** | *i* P | Pg | 05 41 02.8 | -0.2 |
| ST9N | | | | *i* S | Sg | 05 41 03.9 | -0.1 |
| ST9N | | | | IAML | | 05 41 04.7 | |
| | comp=Z,91nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.07** | **37** | *i* P | Pg | 05 41 03.6 | +0.1 |
| ST1N | | | | *i* S | Sg | 05 41 04.7 | -0.1 |
| ST1N | | | | IAML | | 05 41 04.9 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.07** | **37** | *i* P | Pg | 05 41 03.5 | +0.1 |
| ST1N | | | | *i* S | Sg | 05 41 04.7 | 0.0 |
| ST1N | | | | IAML | | 05 41 04.9 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.08** | **304** | *i* P | Pg | 05 41 03.6 | -0.1 |
| ST3N | | | | *i* S | Sg | 05 41 05.3 | +0.2 |
| **ST3N** | **ST3** | **0.08** | **304** | *i* P | Pg | 05 41 04.0 | +0.3 |
| ST3N | | | | *i* S | Sg | 05 41 05.3 | +0.2 |
| ST3N | | | | IAML | | 05 41 05.6 | |
| | comp=Z,3.9nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.14** | **170** | *i* P | Pg | 05 41 04.4 | -0.2 |
| ST2N | | | | IAML | | 05 41 06.7 | |
| | comp=Z,3.9nm,0.1s | | | | | | |
| ST2N | | | | *i* S | Sg | 05 41 07.0 | +0.4 |
| **ST2N** | **ST2** | **0.14** | **170** | *i* P | Pg | 05 41 04.8 | +0.2 |
| ST2N | | | | IAML | | 05 41 06.7 | |
| | comp=Z,3.9nm,0.1s | | | | | | |
| ST2N | | | | *i* S | Sg | 05 41 07.0 | +0.3 |
| **ST6N** | **ST6** | **0.16** | **266** | *i* P | Pg | 05 41 05.0 | 0.0 |
| ST6N | | | | IAML | | 05 41 07.9 | |
| | comp=Z,2.0nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **91** | *i* P | Pg | 05 41 05.4 | +0.2 |
| ST5N | | | | *i* S | Sg | 05 41 07.7 | +0.1 |
| ST5N | | | | IAML | | 05 41 07.8 | |
| | comp=Z,2.4nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **91** | *i* P | Pg | 05 41 05.2 | 0.0 |
| ST5N | | | | *i* S | Sg | 05 41 07.5 | -0.2 |
| ST5N | | | | IAML | | 05 41 07.8 | |
| | comp=Z,2.4nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **220** | *i* P | Pg | 05 41 06.8 | -0.2 |
| **ST10N** | **ST10** | **0.27** | **220** | *i* S | Sg | 05 41 11.8 | +1.2 |

*IDC **07** 05:41:30.4±1.5, 8°.27S × 116°.48E, h0km, mb3.8/3, mbtmp3.9/4, ML3.4/1, MS2.4/2, Error ellipse: s-maj=31.6km s-min=21.7km az=110.0*
*DJA **07** 05:41:31.3±0.3, 8°.S±3° × 11°.6E±°, h10km, M3.9/6, MLv3.9/6*
**ISC 07 05:41:33.3±1.6, 8°.18S±0°.07 × 116°.38E±0°.04, h24km±13km, n14, σ1§10/21, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.75** | **139** | P | **Pb** | **05 41 46.9** | **-0.8** |
| TWSI | | | | S | **Sn** | **05 41 59.2** | **+0.3** |
| **SRBI** | **Singaraja** | **1.16** | **274** | P | **Pn** | **05 41 52.3** | **-1.7** |
| SRBI | | | | S | **Sn** | **05 42 08.0** | **-1.2** |
| **DNP** | **Denpasar** | **1.26** | **247** | P | **Pn** | **05 41 55.3** | **-0.1** |
| DNP | | | | S | **Sb** | **05 42 14.4** | **+2.1** |
| **IGBI** | **Denpasar** | **1.38** | **242** | P | **Pn** | **05 41 57.1** | **0.0** |
| IGBI | | | | S | **Sn** | **05 42 14.9** | **+0.3** |
| **PLAI** | **Plampang** | **1.52** | **115** | P | **Pb** | **05 42 00.1** | **-0.8** |
| PLAI | | | | S | **Sb** | **05 42 20.8** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.23** | **262** | P | **Pn** | **05 42 07.3** | **-1.4** |
| JAGI | | | | S | **Sn** | **05 42 36.9** | **+1.4** |
| **BSSI** | **Bau Bau, Buton** | **4.55** | **64** | P | **Pn** | **05 42 40.6** | **-0.1** |
| BSSI | | | | S | **Sn** | **05 43 32.4** | **-0.4** |
| **KAPI** | **Kappang** | **4.59** | **47** | Pn | **Pn** | **05 42 41.6** | **+0.4** |
| | 1.8nm,0.3s,baz=185,slow=15,SNR=1.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **05 43 33.7** | **-0.1** |
| | 5.8nm,0.3s,baz=246,slow=21,SNR=7.5 | | | | | | |
| KAPI | | | | Lg | Lg | 05 43 56.3 | |
| | 1.1nm,0.3s,baz=216,slow=23,SNR=1.9 | | | | | | |
| KAPI | | | | LR | LR | 05 44 20.5 | |
| | comp=Z,31nm,19.3s,baz=333,slow=37 5.8nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.95** | **126** | P | **P** | **05 46 13.7** | **-1.0** |
| | 3.8nm,0.5s,baz=302,slow=12,SNR=6.4 3.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.79** | **135** | P | **P** | **05 46 33.8** | **-0.6** |
| | 2.2nm,0.7s,baz=309,slow=8.8,SNR=17 2.2nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **31.23** | **115** | LR | LR | 06 00 39.3 | |
| | comp=Z,7.1nm,19.0s,baz=271,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **56.46** | **352** | P | **P** | **05 51 15.0** | **+1.7** |
| | 0.5nm,0.5s,baz=160,slow=8.9,SNR=1.8 0.5nm,0.5s | | | | | | |
| **CPUP** | **Vila Fhda** | **145.16** | **190** | PKPbc | **PKPdf** | **06 01 08.8** | **-0.8** |
| | 0.4nm,0.3s,baz=162,slow=3.2,SNR=1.7 | | | | | | |
| **LPAZ** | **La Paz** | **155.29** | **170** | PKPab | **PKPab** | **06 01 51.3** | **+0.1** |
| | 0.7nm,0.8s,baz=225,slow=11,SNR=2.1 | | | | | | |

*IDC **07** 05:47:13.9±3.3, 8°.70S × 115°.97E, h0km, mb3.4/2, mbtmp3.6/3, ML3.2/1, Error ellipse: s-maj=59.3km s-min=34.4km az=113.0*
*DJA **07** 05:47:15.4±0.5, 8°.S±8° × 11°.6E±°, h10km, M3.6/6, MLv3.6/6*
**ISC 07 05:47:14.9±0.9, 8°.28S±0°.08 × 116°.18E±0°.04, h10km, n10, σ1§09/14, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.83** | **124** | P | **Pg** | **05 47 30.6** | **-0.3** |
| TWSI | | | | S | **Sb** | **05 47 44.5** | **+1.8** |
| **SRBI** | **Singaraja** | **0.98** | **281** | P | **Pg** | **05 47 33.4** | **-0.3** |
| SRBI | | | | S | **Sn** | **05 47 48.6** | **+0.1** |
| **DNP** | **Denpasar** | **1.04** | **247** | P | **Pg** | **05 47 35.5** | **+0.6** |
| **IGBI** | **Denpasar** | **1.16** | **242** | P | **Pb** | **05 47 36.9** | **-0.1** |
| **PLAI** | **Plampang** | **1.67** | **109** | P | **Pn** | **05 47 44.0** | **-0.2** |
| PLAI | | | | S | **Sb** | **05 48 07.9** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.02** | **264** | P | **Pn** | **05 47 48.3** | **-0.7** |
| JAGI | | | | S | **Sn** | **05 48 15.8** | **+1.5** |
| **KAPI** | **Kappang** | **4.80** | **48** | Pn | Pn | 05 48 32.7 | +5.4 |
| | 0.8nm,0.3s,baz=2.9,slow=22,SNR=1.2 | | | | | | |
| KAPI | | | | Sn | **Sb** | **05 49 38.7** | **+1.6** |
| | 1.9nm,0.3s,baz=62,slow=23,SNR=2.5 4.2nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.06** | **125** | P | **P** | **05 51 58.1** | **-1.2** |
| | 1.4nm,0.6s,baz=302,slow=10,SNR=16 1.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.86** | **134** | P | **P** | **05 52 17.5** | **-1.1** |
| | 1.0nm,0.7s,baz=307,slow=9.0,SNR=7.2 1.0nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **155.22** | **170** | PKPab | **PKPab** | **06 07 34.4** | **-0.5** |
| | 0.9nm,0.7s,baz=212,slow=13,SNR=4.5 | | | | | | |

*IDC **07** 05:57:48.4±2.3, 35°.64N × 60°.29E, h0km, mb3.7/5, mbtmp3.6/9, ML3.6/4, Error ellipse: s-maj=47.9km s-min=19.0km az=160.0*
*TEH **07** 05:57:48.2, 35°.80N × 60°.22E, h5km, ML3.7*
**ISC 07 05:57:48.8±1.2, 35°.78N±0°.04 × 60°.33E±0°.05, h5km±9km, n23, σ1§60/28, mb3.8/5, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JRKH** | **Jarkhoshk** | **0.13** | **7** | Pg | **Pg** | **05 57 51.9** | **+0.4** |
| JRKH | | | | Sg | **Sg** | **05 57 54.0** | **+0.6** |
| **TBJM** | **Torbat-e-JAM** | **0.51** | **180** | Pg | **Pb** | **05 57 59.3** | **-1.1** |
| TBJM | | | | Sg | **Sb** | **05 58 06.6** | **-1.5** |
| **IMYA** | **Miami** | **0.59** | **342** | Pg | **Pg** | **05 57 59.9** | **-0.3** |
| IMYA | | | | Sg | **Sg** | **05 58 08.3** | **+0.3** |
| **IMOG** | **Moghan** | **0.87** | **293** | Pg | **Pg** | **05 58 04.7** | **-0.8** |
| IMOG | | | | Sg | **Sg** | **05 58 16.0** | **-0.8** |
| **IKRD** | **Kardeh** | **1.19** | **327** | Pg | **Pb** | **05 58 11.0** | **-1.0** |
| **IPAY** | **Payeh** | **1.27** | **302** | Pg | **Pn** | **05 58 12.3** | **-1.1** |
| **IAKL** | **Akhelmad** | **1.51** | **303** | Pg | **Pn** | **05 58 15.7** | **-1.1** |
| **SBZV** | **Sabzevar** | **2.28** | **286** | Pn | **Pb** | **05 58 29.0** | **-1.7** |
| **AFRZ** | **Afriz** | **2.59** | **205** | Pn | **Pb** | **05 58 33.2** | **-2.5** |
| **TAPT** | **Tabas- Tapeh t** | **2.74** | **252** | Pn | **Pn** | **05 58 35.1** | **+1.6** |
| **TKDS** | **Koohdasht(Taba** | **3.41** | **232** | Pn | **Pn** | **05 58 44.3** | **+1.5** |
| **MRVT** | **Maraveh tapeh** | **3.89** | **300** | Pn | **Pn** | **05 58 50.6** | **+1.3** |
| **TPRV** | **Parvadeh(Tabas** | **4.07** | **229** | Pn | **Pn** | **05 58 53.9** | **+2.0** |
| **ANAR** | **Anarak** | **6.03** | **247** | Pn | **Pn** | **05 59 20.9** | **+2.1** |
| **AAK** | **Ala-Archa** | **12.94** | **54** | Pn | **Pn** | **06 00 53.2** | **-0.2** |
| | 1.4nm,0.3s,baz=190,slow=1.9,SNR=4.1 | | | | | | |
| AAK | | | | Sn | **Sn** | **06 03 13.9** | **-3.9** |
| | 0.4nm,0.3s,baz=43,slow=22,SNR=1.6 4.1nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.74** | **354** | Pn | **Pn** | **06 01 18.1** | **+0.2** |
| | 0.3nm,0.3s,baz=121,slow=4.5,SNR=2.3 | | | | | | |
| AKTO | | | | Sn | Sn | 06 03 53.0 | -8.6 |
| | baz=64,slow=21,SNR=1.6 0.8nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **19.77** | **49** | P | **Pn** | **06 02 21.8** | **+0.7** |
| | 0.1nm,0.3s,baz=238,slow=11,SNR=3.0 0.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **19.82** | **36** | P | **Pn** | **06 02 23.2** | **+1.5** |
| | 0.1nm,0.3s,baz=228,slow=11,SNR=4.0 0.7nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **21.44** | **289** | P | **P** | **06 02 40.1** | **+2.2** |
| | 1.5nm,1.0s,baz=89,slow=8.8,SNR=3.1 1.5nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **24.92** | **36** | P | **P** | **06 03 13.7** | **+1.1** |
| | 0.8nm,0.3s,baz=231,slow=8.1,SNR=5.0 0.8nm,0.3s | | | | | | |
| **AKASG** | **Malin Array Be** | **26.88** | **313** | P | **P** | **06 03 31.6** | **+1.2** |
| | 0.4nm,0.4s,baz=103,slow=9.2,SNR=1.7 0.4nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **33.55** | **331** | P | **P** | **06 04 30.4** | **+1.1** |
| | 1.1nm,0.8s,baz=126,slow=8.8,SNR=3.7 1.1nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **57.05** | **262** | P | **P** | **06 07 35.0** | **-1.1** |
| | 1.2nm,1.3s,baz=60,slow=7.4,SNR=2.3 1.2nm,1.3s | | | | | | |

**IDC 07 05:59:32.0±3.6, 54°.23N × 87°.33E, h0km, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=32.0km s-min=20.0km az=51.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.51** | **260** | I | I | 06 08 42.3 | |
| | baz=81,slow=317,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.51** | **260** | Pg | Pn | 05 59 58.8 | -1.4 |
| | 2.2nm,0.3s,baz=75,slow=15,SNR=15 | | | | | | |
| ZALV | | | | Lg | Lg | 06 00 20.0 | |
| | 1.6nm,0.3s,baz=76,slow=26,SNR=5.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.49** | **240** | Pn | Pn | 06 01 09.6 | +1.0 |
| | 0.1nm,0.3s,baz=52,slow=13,SNR=2.7 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.11** | **205** | Pn | Pn | 06 01 31.9 | +1.0 |
| | 0.1nm,0.3s,baz=22,slow=14,SNR=1.6 0.1nm,0.3s | | | | | | |

*IDC **07** 06:01:08.3±0.7, 8°.38S × 115°.95E, h0km, mb4.1/12, mbtmp4.2/13, ML4.3/1, MS3.2/13, Error ellipse: s-maj=23.6km s-min=13.8km az=68.0*
*NEIC **07** 06:01:10.5±1.7, 8°.42S±0°.09 × 116°.00E±0°.03, h10km±1km, mb4.5/18, Error ellipse: s-maj=14.9km s-min=5.2km az=349.0*
*DJA **07** 06:01:11.1±0.6, 8°.S±5° × 11°.6E±°, h11km±6km, M4.8/14, mb4.9/2, mB5.3/1, MLv4.7/14, Mw(mB)4.7/1*
**ISC 07 06:01:10.5±0.4, 8°.41S±0°.05 × 116°.06E±0°.04, h10km, n92, σ1§44/83, mb4.4/23, MS3.2/13, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.87** | **112** | P | **Pb** | **06 01 28.6** | **+0.8** |
| **DNP** | **Denpasar** | **0.89** | **252** | P | **Pn** | **06 01 28.6** | **-0.4** |
| **SRBI** | **Singaraja** | **0.90** | **291** | P | **Pb** | **06 01 27.7** | **-0.6** |
| **PLAI** | **Plampang** | **1.74** | **104** | P | **Pb** | **06 01 43.0** | **+0.4** |
| **PLAI** | **Plampang** | **1.74** | **104** | P | **Pn** | **06 01 42.5** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **1.89** | **268** | P | **Pn** | **06 01 43.0** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.89** | **268** | Pn | **Pn** | **06 01 42.4** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **1.89** | **268** | P | **Pn** | **06 01 42.7** | **-0.2** |
| **GRJI** | **Gresik** | **3.85** | **292** | P | **Pn** | **06 02 09.3** | **-0.6** |
| **PWJI** | **Pagerwojo** | **4.23** | **275** | P | **Pn** | **06 02 15.1** | **0.0** |
| **NGJI** | **Ngawi** | **4.68** | **282** | P | **Pn** | **06 02 21.4** | **+0.2** |
| **BASI** | **Baing, Sumba** | **4.80** | **112** | P | **Pn** | **06 02 24.3** | **+1.3** |
| **BSSI** | **Bau Bau, Buton** | **4.94** | **63** | P | **Pn** | **06 02 24.6** | **-0.2** |
| **KAPI** | **Kappang** | **4.98** | **48** | P | **Pn** | **06 02 25.9** | **+0.5** |
| **KAPI** | **Kappang** | **4.98** | **48** | Pn | **Pn** | **06 02 25.6** | **+0.2** |
| | 12nm,0.3s,baz=204,slow=8.1,SNR=31 | | | | | | |
| KAPI | | | | Sn | **Sn** | **06 03 19.4** | **-3.6** |
| | 18nm,0.3s,baz=230,slow=21,SNR=12 | | | | | | |
| KAPI | | | | Lg | Lg | 06 03 44.6 | |
| | 12nm,0.3s,baz=240,slow=21,SNR=4.5 28nm,0.3s | | | | | | |
| **UGM** | **Wanagama** | **5.51** | **275** | P | **Pn** | **06 02 36.5** | **+3.8** |
| **UGM** | **Wanagama** | **5.51** | **275** | Pn | **Pn** | **06 02 32.7** | **0.0** |
| **UGM** | **Wanagama** | **5.51** | **275** | P | **Pn** | **06 02 32.7** | **0.0** |
| | 133nm,1.2s | | | | | | |
| **BNSI** | **Bone** | **5.66** | **45** | P | **Pn** | **06 02 36.0** | **+1.3** |
| **MMRI** | **Maumere** | **6.11** | **93** | Pn | **Pn** | **06 02 42.7** | **+1.8** |
| **SOEI** | **Soe** | **8.21** | **100** | Pn | **Pn** | **06 03 11.0** | **+1.1** |
| **BBJI** | **Bungbulang** | **8.39** | **276** | P | **Pn** | **06 03 16.0** | **+3.7** |
| **MBWA** | **Marble Bar** | **13.16** | **165** | P | **Pn** | **06 04 16.1** | **-1.5** |
| **MBWA** | **Marble Bar** | **13.16** | **165** | Pn | **Pn** | **06 04 15.7** | **-1.9** |
| **FITZ** | **Fitzroy Crossi** | **13.40** | **137** | P | **Pn** | **06 04 20.1** | **-0.7** |
| | 32nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.40** | **137** | Pn | **Pn** | **06 04 19.4** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **13.59** | **165** | P | **Pn** | **06 04 22.3** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **13.59** | **165** | Pn | **Pn** | **06 04 21.9** | **-1.5** |
| **GIRL** | **Giralia** | **14.26** | **187** | P | **Pn** | **06 04 31.8** | **-0.8** |
| **GIRL** | **Giralia** | **14.26** | **187** | Pn | **Pn** | **06 04 31.3** | **-1.3** |
| **KNRA** | **Kununurra** | **14.36** | **121** | Pn | **Pn** | **06 04 33.0** | **-1.0** |
| **MTN** | **Manton Dam** | **15.45** | **108** | Pn | **Pn** | **06 04 47.1** | **-1.6** |
| MTN | | | | IAmb | IAmb | 06 05 11.8 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **FAKI** | **Fak Fak** | **17.00** | **72** | P | **Pn** | **06 05 09.9** | **+1.3** |
| **FAKI** | **Fak Fak** | **17.00** | **72** | Pn | **Pn** | **06 05 07.8** | **-0.8** |
| FAKI | | | | IAmb | IAmb | 06 05 11.4 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **DAV** | **Davao City (W)** | **18.07** | **32** | LR | LR | 06 12 56.8 | |
| | comp=Z,67nm,19.4s,baz=175,slow=39 | | | | | | |
| **MEEK** | **Meekatharra** | **18.29** | **173** | P | **P** | **06 05 26.2** | **+1.5** |
| **WRKA** | **Warakurna** | **20.24** | **146** | P | Pn | 06 05 47.8 | -0.2 |
| **MORW** | **Morawa** | **20.55** | **180** | P | **P** | **06 05 50.3** | **+0.9** |
| **MORW** | **Morawa** | **20.55** | **180** | P | **P** | **06 05 48.1** | **-1.3** |
| MORW | | | | IAmb | IAmb | 06 06 00.4 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.03** | **124** | P | **P** | **06 05 54.4** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 06 05 58.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.08** | **125** | P | **P** | **06 05 54.9** | **-0.2** |
| **WRA** | **Warramunga Arr** | **21.08** | **125** | P | **P** | **06 05 55.0** | **-0.2** |
| | comp=Z,7.4nm,0.5s,baz=299,slow=12,SNR=155 | | | | | | |
| WRA | | | | S | **S** | **06 09 46.2** | **-3.8** |
| | comp=Z,1.3nm,0.8s,baz=296,slow=20,SNR=2.9 comp=Z,7.4nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.09** | **125** | P | **P** | **06 05 54.9** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 06 05 59.1 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.25** | **125** | P | **P** | **06 05 57.1** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 06 06 01.0 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **BLDU** | **Ballidu** | **22.10** | **179** | P | **P** | **06 06 08.1** | **+2.0** |
| **ASAR** | **Alice Springs** | **22.85** | **134** | P | **P** | **06 06 14.1** | **-0.1** |
| **ASAR** | **Alice Springs** | **22.85** | **134** | P | **P** | **06 06 14.2** | **+0.1** |
| | comp=Z,4.7nm,0.5s,baz=310,slow=9.5,SNR=84 | | | | | | |
| ASAR | | | | S | **S** | **06 10 27.1** | **+3.2** |
| | comp=Z,0.7nm,0.7s,baz=303,slow=22,SNR=1.6 | | | | | | |
| ASAR | | | | LR | LR | 06 15 30.5 | |
| | comp=Z,54nm,18.6s,baz=296,slow=38 comp=Z,4.7nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **22.85** | **134** | P | **P** | **06 06 13.7** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 06 06 19.7 | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| **AS01** | **Alice Springs** | **22.88** | **134** | P | **P** | **06 06 14.1** | **-0.4** |
| | comp=Z,12nm,0.7s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **23.39** | **305** | P | **P** | **06 06 24.2** | **+4.5** |
| **KMBL** | **Kambalda** | **23.48** | **167** | P | **P** | **06 06 21.4** | **+0.9** |
| **NWAO** | **Narrogin (SRO)** | **24.42** | **178** | P | **P** | **06 06 28.5** | **-0.9** |
| NWAO | | | | IAmb | IAmb | 06 06 30.6 | |
| | comp=Z,57nm,1.2s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.42** | **178** | LR | LR | 06 17 27.3 | |
| | comp=Z,44nm,18.9s,baz=185,slow=40 | | | | | | |
| **FORT** | **Forrest** | **24.92** | **155** | P | **P** | **06 06 33.2** | **-0.7** |
| **FORT** | **Forrest** | **24.92** | **155** | P | **P** | **06 06 34.2** | **+0.3** |
| **QIS** | **Mount Isa** | **25.75** | **121** | P | **P** | **06 06 41.4** | **-0.2** |
| **OOD** | **Oodnadatta** | **26.75** | **139** | P | **P** | **06 06 51.1** | **+0.6** |
| **COEN** | **Coen** | **27.15** | **104** | P | **P** | **06 06 54.8** | **+0.5** |
| **COEN** | **Coen** | **27.15** | **104** | P | **P** | **06 06 53.8** | **-0.5** |
| COEN | | | | IAmb | IAmb | 06 07 01.8 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **MULG** | **Mulgathing** | **27.52** | **145** | P | **P** | **06 06 59.6** | **+2.2** |
| **BBOO** | **Buckleboo** | **30.54** | **145** | P | **P** | **06 07 23.7** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **31.59** | **328** | LR | LR | 06 22 15.6 | |
| | comp=Z,51nm,18.4s,baz=155,slow=40 | | | | | | |
| **STKA** | **Stephens Creek** | **33.29** | **138** | P | **P** | **06 07 48.3** | **-0.2** |
| **STKA** | **Stephens Creek** | **33.29** | **138** | P | **P** | **06 07 49.1** | **+0.7** |
| | comp=Z,1.7nm,0.4s,baz=332,slow=8.7,SNR=7.1 | | | | | | |
| STKA | | | | LR | LR | 06 21 42.9 | |
| | comp=Z,56nm,19.1s,baz=27,slow=37 comp=Z,1.7nm,0.4s | | | | | | |
| **GUMO** | **Guam** | **35.99** | **53** | LR | LR | 06 23 58.3 | |
| | comp=Z,11nm,19.4s,baz=259,slow=38 | | | | | | |
| **PALK** | **Pallekele** | **38.54** | **293** | LR | LR | 06 24 35.5 | |
| | comp=Z,29nm,18.2s,baz=162,slow=37 | | | | | | |
| **NJ2** | **Nanjing** | **40.32** | **4** | *e*P |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **90.77** | **196** | P | **P** | **06 14 13.1** | **-0.5** |
| | comp=Z,0.6nm,0.4s,baz=206,slow=5.2,SNR=13 | | | | | | | |
| SNAA | | | | LR | LR | 06 50 17.8 | | |
| | comp=Z,24nm,18.4s,baz=16,slow=32 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **CPUP** | **Villa Florida** | **144.88** | **190** | PKP | **PKPab** | **06 20 46.6** | **-1.0** |
| | comp=Z,1.3nm,0.4s,baz=174,slow=1.9,SNR=7.9 | | | | | | | |
| **LPAZ** | **La Paz** | **155.11** | **170** | PKPab | **PKPab** | **06 21 29.7** | **-0.3** |
| | comp=Z,0.7nm,0.5s,baz=203,slow=12,SNR=3.1 | | | | | | | |

*SFS **07** 06:34:36.9, 41.°40N×8.°23W, h0km, ML3.7/11, ML3.7/11, MLv3.6/11*
*INMG **07** 06:34:36.4±1.4, 41.°69N×8.°45W, h16km±2km, ML3.2, Error ellipse: s-maj=3.8km s-min=1.4km az=95.0*
*LDG **07** 06:34:36.0±0.2, 41.°67N×8.°47W, h2km, Ml3.2/4, Error ellipse: s-maj=4.0km s-min=2.4km az=110.0*
*MDD **07** 06:34:36.1±0.3, 41.°68N×8.°58W, h12km, mb_Lg3.4/18, Error ellipse: s-maj=3.1km s-min=1.8km az=103.0*
*IGIL **07** 06:34:37.3, 41.°68N×8.°42W, h20km, ML2.0*

**ISC 07 06:34:33.9±1.0, 41.°71N±0.°02×8.°43W±0.°02, h15km±8km, n67, σ1s68/147, 2C-2D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PGAV** | **Gavieira, Arco** | **0.28** | **24** | ⇑*i* P g | **Pb** | **06 34 42.8** | **+2.0** |
| PGAV | | | | *e* S g | **Sb** | **06 34 47.2** | **+1.8** |
| PGAV | | | | A | A | 06 34 48.3 | |
| | 1μm,0.5s | | | | | | |
| **PCAB** | **Cabril** | **0.30** | **89** | ⇑*e* P g | **Pn** | **06 34 43.0** | **-0.8** |
| PCAB | | | | *e* S g | **Sb** | **06 34 47.3** | **+1.6** |
| PCAB | | | | A | A | 06 34 48.4 | |
| | 2μm,0.3s | | | | | | |
| **ELOB** | **Lobios** | **0.32** | **59** | P g | **Pn** | **06 34 43.4** | **-0.6** |
| ELOB | | | | S g | **Sn** | **06 34 48.7** | **-1.8** |
| **EZAM** | **Zamans** | **0.48** | **336** | P g | **Pn** | **06 34 45.7** | **-0.6** |
| EZAM | | | | S g | **Sg** | **06 34 50.1** | **0.0** |
| **POLO** | **Lamas de Olo** | **0.58** | **125** | ⇓*e* P g | **Pn** | **06 34 47.4** | **-0.3** |
| POLO | | | | *e* S g | **Sb** | **06 34 54.7** | **+0.8** |
| POLO | | | | A | A | 06 34 58.3 | |
| | 158nm,0.1s | | | | | | |
| **PVRL** | **Vila Real** | **0.69** | **129** | ⇓*e* P g | **Pn** | **06 34 49.2** | **+0.1** |
| PVRL | | | | *e* S g | **Sb** | **06 34 58.0** | **+1.1** |
| PVRL | | | | A | A | 06 35 01.2 | |
| | 841nm,0.1s | | | | | | |
| **PVIS** | **Viseu** | **1.07** | **158** | *e* P | **Pg** | **06 34 55.5** | **+0.9** |
| PVIS | | | | *e* S | **Sg** | **06 35 09.3** | **+0.8** |
| PVIS | | | | A | A | 06 35 11.1 | |
| | 650nm,0.1s | | | | | | |
| **EAGO** | **Agolada(Pontev** | **1.12** | **13** | P g | **Pg** | **06 34 56.5** | **+0.9** |
| EAGO | | | | S g | **Sn** | **06 35 11.9** | **+1.7** |
| **MVO** | **Moncorvo** | **1.18** | **117** | *e* P | **Pg** | **06 34 57.0** | **+0.3** |
| MVO | | | | *e* S | **Sg** | **06 35 13.2** | **+1.1** |
| MVO | | | | A | A | 06 35 18.8 | |
| | 556nm,0.4s | | | | | | |
| **PBRG** | **Braganca** | **1.26** | **85** | *e* P | **Pg** | **06 34 58.3** | **0.0** |
| PBRG | | | | *e* S | **Sg** | **06 35 15.1** | **+0.4** |
| PBRG | | | | A | A | 06 35 18.7 | |
| | 212nm,0.1s | | | | | | |
| **ECAL** | **Calabor** | **1.28** | **79** | P | **Pg** | **06 34 58.5** | **-0.1** |
| ECAL | | | | S | **Sg** | **06 35 15.1** | **-0.3** |
| **ECAL** | **Calabor** | **1.28** | **79** | P g | **Pg** | **06 34 58.7** | **+0.1** |
| ECAL | | | | S g | **Sg** | **06 35 18.1** | **+2.7** |
| ECAL | | | | *i* Vmb_Lg | | 06 35 20.5 | |
| **EMAZ** | **Mazaricos** | **1.31** | **342** | P g | **Pg** | **06 34 59.0** | **-0.1** |
| EMAZ | | | | S g | **Sg** | **06 35 17.7** | **+1.6** |
| EMAZ | | | | *i* Vmb_Lg | | 06 35 19.2 | |
| **MTE** | **Manteigas** | **1.47** | **153** | *e* P n | **Pb** | **06 35 01.0** | **+0.1** |
| **MTE** | **Manteigas** | **1.47** | **153** | *e* P g | **Pg** | **06 35 02.8** | **+0.7** |
| MTE | | | | *e* S n | **Sn** | **06 35 19.1** | **+0.3** |
| MTE | | | | *e* S g | **Sg** | **06 35 21.6** | **+0.4** |
| MTE | | | | A | A | 06 35 23.5 | |
| | 373nm,0.4s | | | | | | |
| **COI** | **Coimbra** | **1.50** | **180** | *e* P g | **Pb** | **06 35 02.7** | **+1.3** |
| COI | | | | *e* S g | **Sb** | **06 35 22.1** | **+1.9** |
| COI | | | | A | A | 06 35 25.9 | |
| | 399nm,0.2s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **1.65** | **182** | *e* P n | **Pn** | **06 35 03.5** | **+1.1** |
| **PCAS** | **Casmilo, Conde** | **1.65** | **182** | *e* P g | **Pb** | **06 35 05.2** | **+1.1** |
| PCAS | | | | *e* S n | **Sn** | **06 35 22.8** | **-0.5** |
| PCAS | | | | *e* S g | **Sb** | **06 35 26.9** | **+2.2** |
| PCAS | | | | A | A | 06 35 28.1 | |
| | 184nm,0.3s | | | | | | |
| **EPON** | **Pontenova** | **1.87** | **30** | P n | **Pb** | **06 35 06.8** | **-1.0** |
| EPON | | | | S n | **Sb** | **06 35 30.8** | **-0.3** |
| EPON | | | | *i* Vmb_Lg | | 06 35 39.4 | |
| **PCBR** | **Castelo Branco** | **2.00** | **159** | *e* P n | **Pn** | **06 35 08.3** | **+1.2** |
| **PCBR** | **Castelo Branco** | **2.00** | **159** | *e* P g | **Pg** | **06 35 12.5** | **+0.2** |
| PCBR | | | | *e* S n | **Sn** | **06 35 32.2** | **+0.4** |
| PCBR | | | | *e* S g | **Sg** | **06 35 37.6** | **-0.6** |
| PCBR | | | | A | A | 06 35 40.1 | |
| | 135nm,0.4s | | | | | | |
| **EJUZ** | **Juzbado, Salam** | **2.01** | **107** | P n | **Pb** | **06 35 10.4** | **+0.3** |
| EJUZ | | | | P g | **Pg** | **06 35 14.3** | **+1.9** |
| EJUZ | | | | S n | **Sg** | **06 35 37.2** | **-1.2** |
| **PSBE** | **So Bento** | **2.21** | **187** | *e* P n | **Pn** | **06 35 11.4** | **+1.4** |
| PSBE | | | | *e* S n | **Sn** | **06 35 35.7** | **-1.4** |
| PSBE | | | | *e* S g | **Sg** | **06 35 44.1** | **-0.8** |
| PSBE | | | | A | A | 06 35 50.5 | |
| | 108nm,0.5s | | | | | | |
| **PMRV** | **Marv??o** | **2.41** | **161** | *e* P n | **Pn** | **06 35 14.6** | **+1.8** |
| **PMRV** | **Marv??o** | **2.41** | **161** | *e* P g | **Pg** | **06 35 19.6** | **-0.5** |
| PMRV | | | | *e* S n | **Sn** | **06 35 42.2** | **+0.2** |
| PMRV | | | | *e* S g | **Sb** | **06 35 49.1** | **+2.7** |
| PMRV | | | | A | A | 06 35 53.1 | |
| | 67nm,0.4s | | | | | | |
| **EPLA** | **Plasencia** | **2.42** | **132** | P n | **Pb** | **06 35 15.2** | **-1.9** |
| EPLA | | | | S n | **Sb** | **06 35 46.2** | **-0.6** |
| EPLA | | | | *i* Vmb_Lg | | 06 35 55.9 | |
| **PMTG** | **Montargil** | **2.64** | **177** | *e* P n | **Pn** | **06 35 17.2** | **+1.3** |
| **PMTG** | **Montargil** | **2.64** | **177** | *e* P g | **Pg** | **06 35 24.2** | **-0.3** |
| PMTG | | | | *e* S n | **Sn** | **06 35 46.4** | **-1.2** |
| PMTG | | | | *e* S g | **Sb** | **06 35 56.4** | **+3.3** |
| PMTG | | | | A | A | 06 36 01.4 | |
| | 38nm,0.5s | | | | | | |
| **PMAFR** | **Mafra** | **2.83** | **194** | *e* P n | **Pn** | **06 35 19.5** | **+1.0** |
| PMAFR | | | | *e* S n | **Sn** | **06 35 50.5** | **-1.8** |
| PMAFR | | | | *e* S g | **Sg** | **06 36 03.5** | **-1.2** |
| PMAFR | | | | A | A | 06 36 08.1 | |
| | 95nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **2.83** | **194** | S | **Sn** | **06 35 50.3** | **-1.9** |
| PMAFR | | | | P | **Pn** | **06 35 19.5** | **+1.0** |
| **EARI** | **Arriondas** | **2.86** | **55** | P n | **Pb** | **06 35 22.2** | **-2.5** |
| EARI | | | | S n | **Sb** | **06 35 57.2** | **-2.3** |
| **PESTR** | **Estremoz** | **2.91** | **167** | *e* P n | **Pn** | **06 35 20.5** | **+0.9** |
| PESTR | | | | *e* S n | **Sn** | **06 35 53.9** | **-0.4** |
| PESTR | | | | *e* S g | **Sb** | **06 36 04.4** | **+3.6** |
| PESTR | | | | A | A | 06 36 10.1 | |
| | 60nm,0.8s | | | | | | |
| **PESTR** | **Estremoz** | **2.91** | **167** | S | **Sn** | **06 35 53.3** | **-1.0** |
| PESTR | | | | P | **Pn** | **06 35 20.9** | **+1.2** |
| **LIS** | **Lisbon** | **3.04** | **191** | *e* S g | **Sg** | **06 36 09.8** | **-1.6** |
| **EBAD** | **Badajoz** | **3.14** | **159** | P | **Pn** | **06 35 24.0** | **+1.2** |
| EBAD | | | | S | **Sn** | **06 35 58.4** | **-1.6** |
| **EBAD** | **Badajoz** | **3.14** | **159** | P n | **Pn** | **06 35 24.2** | **+1.4** |
| EBAD | | | | S n | **Sn** | **06 36 00.3** | **+0.3** |
| EBAD | | | | S g | **Sg** | **06 36 13.4** | **-1.4** |
| EBAD | | | | *i* Vmb_Lg | | 06 36 17.3 | |
| **EVO** | **Evora** | **3.19** | **174** | *e* S n | **Sn** | **06 36 00.0** | **-1.2** |
| EVO | | | | *e* S g | **Sg** | **06 36 13.7** | **-2.6** |
| EVO | | | | A | A | 06 36 20.5 | |
| | 75nm,0.4s | | | | | | |
| **EVO** | **Evora** | **3.19** | **174** | S | **Sn** | **06 35 58.9** | **-2.3** |
| EVO | | | | P | **Pn** | **06 35 24.6** | **+1.1** |
| **GUD** | **Guadarrama** | **3.40** | **107** | P n | **Pn** | **06 35 28.3** | **+1.8** |
| GUD | | | | S n | **Sn** | **06 36 08.2** | **+1.7** |
| GUD | | | | S g | **Sg** | **06 36 23.0** | **+0.1** |
| GUD | | | | *i* Vmb_Lg | | 06 36 24.7 | |
| **PNCL** | **Nicolau / Gran** | **3.59** | **181** | *e* P n | **Pn** | **06 35 29.9** | **+0.9** |
| PNCL | | | | *e* S n | **Sn** | **06 36 09.2** | **-1.9** |
| PNCL | | | | *e* S g | **Sb** | **06 36 25.8** | **+5.3** |
| PNCL | | | | A | A | 06 36 34.0 | |
| | 23nm,0.5s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **3.59** | **181** | P | **Pn** | **06 35 29.5** | **+0.5** |
| PNCL | | | | S | **Sn** | **06 36 08.4** | **-2.7** |
| **PBAR** | **Barrancos** | **3.69** | **163** | *e* P n | **Pn** | **06 35 31.5** | **+1.2** |
| PBAR | | | | *e* S n | **Sn** | **06 36 11.7** | **-1.8** |
| PBAR | | | | *e* S g | **Sg** | **06 36 30.8** | **-1.4** |
| PBAR | | | | A | A | 06 36 36.7 | |
| | 37nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **3.69** | **163** | P | **Pn** | **06 35 31.3** | **+1.0** |
| PBAR | | | | S | **Sn** | **06 36 10.9** | **-2.6** |
| **PBEJ** | **Beja** | **3.70** | **173** | *e* S n | **Sn** | **06 36 12.2** | **-1.7** |
| PBEJ | | | | *e* S g | **Sg** | **06 36 29.7** | **-3.1** |
| PBEJ | | | | A | A | 06 36 35.4 | |
| | 24nm,0.5s | | | | | | |
| **PAB** | **San Pablo** | **3.78** | **123** | P n | **Pn** | **06 35 33.4** | **+1.8** |
| PAB | | | | S n | **Sn** | **06 36 16.9** | **+1.0** |
| PAB | | | | S g | **Sg** | **06 36 35.7** | **+0.4** |
| PAB | | | | *i* Vmb_Lg | | 06 36 41.0 | |
| **MESJ** | **Messejana** | **3.87** | **178** | *e* P n | **Pn** | **06 35 33.8** | **+1.0** |
| MESJ | | | | *e* S n | **Sn** | **06 36 15.9** | **-2.0** |
| MESJ | | | | *e* S g | **Sg** | **06 36 36.6** | **-1.4** |
| MESJ | | | | A | A | 06 36 43.1 | |
| | 23nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **3.87** | **178** | *e* P | **Pn** | **06 35 33.7** | **+1.0** |
| MESJ | | | | *e* S | **Sn** | **06 36 15.0** | **-3.0** |
| MESJ | | | | IAML | | 06 36 15.5 | |
| | comp=E,3.4nm,0.1s | | | | | | |
| **ESDC** | **Sonseca Array** | **3.95** | **119** | P n | **Pn** | **06 35 36.3** | **+2.3** |
| ESDC | | | | S n | **Sn** | **06 36 22.1** | **+2.0** |
| ESDC | | | | S g | **Sg** | **06 36 40.1** | **-0.8** |
| ESDC | | | | *i* Vmb_Lg | | 06 36 43.4 | |
| **PCVE** | **Castro Verde** | **4.08** | **176** | *e* P n | **Pn** | **06 35 36.6** | **+0.9** |
| PCVE | | | | *e* S n | **Sn** | **06 36 20.3** | **-2.9** |
| PCVE | | | | *e* S g | **Sg** | **06 36 43.2** | **-1.7** |
| PCVE | | | | A | A | 06 36 48.1 | |
| | comp=E,26nm,0.5s | | | | | | |
| **PCVE** | **Castro Verde** | **4.08** | **176** | P | **Pn** | **06 35 36.2** | **+0.5** |
| PCVE | | | | S | **Sn** | **06 36 20.0** | **-3.3** |
| **EMIN** | **Mina Concepcio** | **4.16** | **160** | P | **Pn** | **06 35 37.9** | **+1.1** |
| EMIN | | | | S | **Sn** | **06 36 22.3** | **-2.8** |
| **EMIN** | **Mina Concepcio** | **4.16** | **160** | P n | **Pn** | **06 35 38.1** | **+1.2** |
| EMIN | | | | S n | **Sn** | **06 36 24.1** | **-1.0** |
| EMIN | | | | S g | **Sg** | **06 36 45.9** | **-1.6** |
| **PTEO** | **Sao Teotonio** | **4.16** | **183** | *e* P n | **Pn** | **06 35 37.4** | **+0.6** |
| PTEO | | | | *e* S n | **Sn** | **06 36 23.1** | **-2.1** |
| PTEO | | | | *e* S g | **Sg** | **06 36 45.2** | **-2.3** |
| PTEO | | | | A | A | 06 36 50.9 | |
| | comp=E,34nm,0.6s | | | | | | |
| **EGRO** | **El Granado** | **4.23** | **170** | P | **Pn** | **06 35 39.1** | **+1.3** |
| EGRO | | | | S | **Sn** | **06 36 24.7** | **-2.2** |
| **EGRO** | **El Granado** | **4.23** | **170** | S n | **Sn** | **06 36 25.6** | **-1.2** |
| EGRO | | | | S g | **Sg** | **06 36 47.1** | **-2.7** |
| **ECAB** | **El Cabril** | **4.30** | **147** | S | **Sn** | **06 36 27.1** | **-1.6** |
| ECAB | | | | P | **Pn** | **06 35 39.9** | **+1.0** |
| **ECAB** | **El Cabril** | **4.30** | **147** | P n | **Pn** | **06 35 40.6** | **+1.8** |
| ECAB | | | | S n | **Sn** | **06 36 29.0** | **+0.2** |
| ECAB | | | | *i* Vmb_Lg | | 06 36 58.9 | |
| **PVAQ** | **Vaqueiros** | **4.33** | **173** | *e* P n | **Pn** | **06 35 40.3** | **+1.1** |
| PVAQ | | | | *e* S n | **Sn** | **06 36 27.6** | **-1.8** |
| PVAQ | | | | *e* S g | **Sg** | **06 36 49.3** | **-3.7** |
| PVAQ | | | | A | A | 06 36 57.1 | |
| | comp=E,40nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **4.33** | **173** | P | **Pn** | **06 35 40.0** | **+0.8** |
| PVAQ | | | | S | **Sn** | **06 36 26.6** | **-2.8** |
| **MORF** | **Marmelete** | **4.40** | **182** | *e* P n | **Pn** | **06 35 41.2** | **+1.4** |
| MORF | | | | *e* S n | **Sn** | **06 36 28.9** | **-2.3** |
| MORF | | | | A | A | 06 36 56.5 | |
| | comp=E,14nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **4.47** | **175** | *e* P n | **Pn** | **06 35 42.5** | **+1.3** |
| PBDV | | | | *e* S n | **Sn** | **06 36 30.5** | **-2.5** |
| PBDV | | | | *e* S g | **Sg** | **06 36 54.5** | **-3.1** |
| PBDV | | | | A | A | 06 37 05.7 | |
| | comp=E,18nm,0.6s | | | | | | |
| **EADA** | **Adamuz** | **4.61** | **139** | P | **Pn** | **06 35 44.2** | **+1.1** |
| EADA | | | | S | **Sn** | **06 36 35.1** | **-1.2** |
| **EADA** | **Adamuz** | **4.61** | **139** | P n | **Pn** | **06 35 44.3** | **+1.3** |
| EADA | | | | S n | **Sn** | **06 36 37.4** | **+1.1** |
| EADA | | | | S g | **Sg** | **06 36 59.4** | **-2.4** |
| EADA | | | | *i* Vmb_Lg | | 06 37 14.0 | |
| **SJPF** | **Ste Jean** | **5.51** | **73** | *e* P | Pn | 06 36 01.2 | +5.8 |
| SJPF | | | | *e* S n | **Sn** | **06 36 58.9** | **+0.4** |
| | comp=E,6.6nm,0.5s | | | | | | |
| **ETSF** | **Etsaut** | **5.95** | **76** | *e* P | Pn | 06 36 06.8 | +5.3 |
| ETSF | | | | *e* S n | **Sn** | **06 37 07.0** | **-2.5** |
| | comp=E,3.3nm,0.4s | | | | | | |
| **EPF** | **Esparros** | **6.63** | **76** | *e* P | Pn | 06 36 16.7 | +6.0 |
| EPF | | | | *e* S n | **Sn** | **06 37 24.9** | **-1.1** |
| | comp=E,14nm,0.9s | | | | | | |
| **CAF** | **Calviac** | **8.30** | **64** | *e* P n | **Pn** | **06 36 35.7** | **+2.1** |
| CAF | | | | *e* S n | **Sn** | **06 38 06.3** | **-0.8** |
| | comp=E,2.9nm,0.5s | | | | | | |

*SJA **07** 06:50:05.5±0.6, 23.°06S×67.°50W, h180km±7km, ML3.5, MW3.4*
*GUC **07** 06:50:06.9±0.5, 23.°12S×67.°62W, h185km±7km, ML3.7*

**ISC 07 06:50:05.4±1.7, 23.°17S±0.°04×67.°48W±0.°04, h177km±16km, n18, σ1s62/29, 3C, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **0.68** | **289** | *e* P | **Pn** | **06 50 31.3** | **+0.2** |
| **AF01** | **San Pedro de A** | **0.68** | **289** | ⇑*i* P | **Pn** | **06 50 32.0** | **+0.9** |
| **YJA** | **Yavi** | **2.07** | **62** | *e* P | **Pn** | **06 50 44.6** | **+1.1** |
| YJA | | | | *e* S | **Sn** | **06 51 13.4** | **+0.5** |
| **SLA** | **San Lorenzo** | **2.38** | **131** | *e* P | **Pn** | **06 50 49.1** | **+2.4** |
| **AZAP** | **Zapla** | **2.45** | **116** | *e* P | **Pn** | **06 50 48.3** | **+0.7** |
| AZAP | | | | *e* S | **Sn** | **06 51 15.5** | **-4.8** |
| **PB04** | **IPOC Station P** | **2.60** | **288** | *e* P | Pn | 06 50 36.4 | -13 |
| PB04 | | | | *e* S | **Sn** | **06 51 22.5** | **-0.9** |
| PB04 | | | | IAML | | 06 51 25.5 | |
| | comp=Z,279nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.60** | **288** | *e* P | **Pn** | **06 50 49.9** | **+0.6** |
| PB04 | | | | *i* S | **Sn** | **06 51 21.9** | **-1.5** |
| PB04 | | | | IAML | | 06 51 23.9 | |
| | comp=N,338nm,0.5s | | | | | | |
| **GO02** | **Mina Guanaco** | **2.77** | **224** | *e* P | **Pn** | **06 50 53.1** | **+1.7** |
| GO02 | | | | *e* S | **Sn** | **06 51 28.6** | **+1.5** |
| **GO02** | **Mina Guanaco** | **2.77** | **224** | ⇑*i* P | **Pn** | **06 50 53.1** | **+1.7** |
| GO02 | | | | *i* S | **Sn** | **06 51 28.2** | **+1.1** |
| **PB14** | **IPOC Station P** | **3.04** | **241** | *e* P | **Pn** | **06 50 55.8** | **+1.1** |
| PB14 | | | | *e* S | **Sn** | **06 51 32.4** | **-0.7** |
| PB14 | | | | IAML | | 06 51 34.8 | |
| | comp=Z,95nm,0.2s | | | | | | |
| **PB14** | **IPOC Station P** | **3.04** | **241** | ⇑*e* P | **Pn** | **06 50 55.7** | **+0.9** |
| PB14 | | | | *i* S | **Sn** | **06 51 32.3** | **-0.8** |
| PB14 | | | | IAML | | 06 51 34.3 | |
| | comp=N,79nm,0.2s | | | | | | |
| **FSA** | **Cafayete** | **3.23** | **155** | *e* P | Pn | 06 50 54.1 | -2.8 |
| **TA01** | **Diego Aracena** | **3.61** | **315** | *e* P | **Pn** | **06 51 01.5** | **+0.1** |
| TA01 | | | | *e* S | **Sn** | **06 51 44.4** | **-0.9** |
| TA01 | | | | IAML | | 06 51 47.7 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **TA01** | **Diego Aracena** | **3.61** | **315** | *e* P | **Pn** | **06 51 01.6** | **+0.1** |
| **GO01** | **Chusmiza** | **3.83** | **335** | *e* P | **Pn** | **06 51 05.9** | **+1.0** |
| GO01 | | | | *e* S | **Sn** | **06 51 51.2** | **+0.1** |
| **GO01** | **Chusmiza** | **3.83** | **335** | *e* P | **Pn** | **06 51 05.8** | **+1.0** |
| GO01 | | | | *e* S | **Sn** | **06 51 50.3** | **-0.9** |
| **AC01** | **Pan de Azucar** | **4.10** | **223** | *e* P | **Pn** | **06 51 08.0** | **+0.2** |
| AC01 | | | | *e* S | **Sn** | **06 51 55.4** | **-1.2** |
| AC01 | | | | IAML | | 06 52 03.1 | |
| | comp=Z,28nm,0.4s | | | | | | |
| **AC01** | **Pan de Azucar** | **4.10** | **223** | *e* P | **Pn** | **06 51 07.9** | **+0.2** |
| AC01 | | | | *i* S | **Sn** | **06 51 52.9** | **-3.6** |

**IDC 07 06:54:57.5±3.6, 53.°43N×90.°55E, h0km, mbtmp3.2/3, ML2.5/3, Error ellipse: s-maj=32.9km s-min=23.7km az=37.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZALV** | **Zalesovo Beam** | **3.44** | **281** | P n | Pn | 06 55 53.9 | +1.5 |
| | 0.5nm,0.3s,baz=92,slow=16,SNR=2.8 | | | | | | |
| ZALV | | | | Lg | Lg | 06 56 47.2 | |
| | 1.1nm,0.3s,baz=100,slow=31,SNR=7.3 | | | | | | |
| | 2.2nm,0.4s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **3.45** | **281** | I | I | 07 16 50.0 | |
| | 0.1nm,1.1s,baz=91,slow=318,SNR=19 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.93** | **254** | P n | Pn | 06 56 53.9 | 0.0 |
| | 0.1nm,0.3s,baz=66,slow=14,SNR=2.9 | | | | | | |
| KURBB | | | | S n | Sn | 06 58 21.6 | -2.6 |
| | baz=67,slow=25,SNR=1.9 | | | | | | |
| KURBB | | | | Lg | Lg | 06 59 11.5 | |
| | 0.1nm,0.3s,baz=64,slow=32,SNR=2.1 | | | | | | |
| | 0.8nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.50** | **222** | P n | Pn | 06 57 02.4 | +0.6 |
| | 0.2nm,0.3s,baz=33,slow=14,SNR=8.9 | | | | | | |
| MKAR | | | | Lg | Lg | 06 59 27.7 | |
| | baz=30,slow=23,SNR=1.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*IDC **07** 07:04:57.1±3.1, 54.°26N×87.°32E, h0km, mbtmp2.7/2, ML2.5/2, Error ellipse: s-maj=25.9km s-min=17.3km az=57.0*
*NNC **07** 07:04:58.0±3.6, 54.°04N×87.°34E, h0km, mb2.8, mpv2.6, Error ellipse: s-maj=27.2km s-min=18.0km az=36.0, Suspected Mining explosion.*

**ISC 07 07:04:59.8±4.2, 54.°2N±0.°2×87.°0E±0.°2, h0km, n8, σ1s55/12, 4C-6D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.31** | **262** | I | I | 07 13 30.0 | |
| | baz=79,slow=318,SNR=5.2 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.31** | **262** | ⇓P | **Pb** | **07 05 24.4** | **-0.9** |
| | 0.3nm,0.4s | | | | | | |
| ZAA0 | | | | ⇓S | **Sn** | **07 05 46.2** | **+2.6** |
| | 0.5nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.31** | **262** | Pg | **Pg** | **07 05 23.6** | **-1.3** |
| | 1.1nm,0.3s,baz=80,slow=17,SNR=8.5 | | | | | | |
| ZALV | | | | Lg | Lg | 07 05 45.2 | |
| | 1.7nm,0.3s,baz=73,slow=24,SNR=5.2 | | | | | | |
| **KURK** | **Kurchatov** | **6.18** | **240** | ⇑Pn | **Pn** | **07 06 34.3** | **+2.1** |
| | 0.4nm,0.5s | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | **07 07 43.8** | **+0.2** |
| | 1.1nm,0.8s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 07 08 22.2 | |
| | 1.1nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.29** | **239** | Pn | **Pn** | **07 06 34.2** | **+0.5** |
| | baz=58,slow=14,SNR=1.9 | | | | | | |
| KURBB | | | | Lg | Lg | 07 08 23.2 | |
| | baz=61,slow=33,SNR=2.4 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.29** | **239** | ⇑Pn | **Pn** | **07 06 32.7** | **-1.0** |
| | 1.0nm,0.6s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **07 07 47.0** | **+0.9** |
| | 0.5nm,0.3s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 07 08 23.7 | |
| | 2.4nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **7.96** | **204** | Pn | **Pn** | **07 06 58.0** | **+1.2** |
| | 0.2nm,0.5s,baz=21,slow=12,SNR=7.4 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **07 08 25.9** | **-1.6** |
| | 0.3nm,0.5s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 09 07.8 | |
| | 0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.96** | **204** | Pn | **Pn** | **07 06 57.8** | **+1.0** |
| | 0.2nm,0.3s,baz=27,slow=13,SNR=7.9 | | | | | | |
| MKAR | | | | Sn | **Sn** | **07 08 28.5** | **+1.0** |
| | 0.1nm,0.3s,baz=27,slow=27,SNR=5.5 | | | | | | |
| MKAR | | | | Lg | Lg | 07 09 15.9 | |
| | baz=25,slow=35,SNR=2.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*KRNET **07** 07:10:49.6±0.1, 41.°10N×78.°60E, h35km, mb2.0*
*NNC **07** 07:10:49.4±1.3, 40.°86N×78.°06E, h0km, mb3.1, mpv2.7, Error ellipse: s-maj=9.0km s-min=6.1km az=4.0*
*SOME **07** 07:10:50.1, 40.°92N×78.°03E, h15km*

**ISC 07 07:10:52.3±2.2, 41.°07N±0.°09×78.°17E±0.°05, h17km±10km, n23, σ1s48/40, 12C-7D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TARG** | **Taragay, Kyrgy** | **0.72** | **338** | ⇓*i* P | **Pg** | **07 11 06.3** | **-0.1** |
| | baz=17 | | | | | | |
| TARG | | | | ⇓*i* S | **Sn** | **07 11 18.7** | **-0.3** |
| | baz=17 | | | | | | |
| **KDJ** | **Kajisay** | **1.30** | **325** | ⇑*i* P | **Pn** | **07 11 15.7** | **-0.1** |
| | baz=15 | | | | | | |
| KDJ | | | | ⇑*i* S | **Sn** | **07 11 34.4** | **+1.5** |
| | baz=15 | | | | | | |
| **PRZ** | **Przheval'sk** | **1.43** | **7** | ⇓*e* P | **Pn** | **07 11 14.7** | **-2.9** |
| | baz=54 | | | | | | |
| PRZ | | | | ⇓*e* S | **Sn** | **07 11 33.0** | **-3.1** |
| | baz=54 | | | | | | |
| **NRN** | **Naryn** | **1.68** | **283** | ⇑*e* P | **Pg** | **07 11 23.5** | **-1.0** |
| | baz=80 | | | | | | |
| NRN | | | | ⇑*e* S | **Sg** | **07 11 47.5** | **+1.1** |
| | baz=80 | | | | | | |
| **ULHL** | **Ulahol** | **1.86** | **310** | ⇑*i* P | **Pn** | **07 11 24.8** | **+1.1** |
| | baz=4.0 | | | | | | |
| ULHL | | | | ⇑*i* S | **Sg** | **07 11 50.3** | **-2.0** |
| | baz=4.0 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.17** | **336** | *e* P | **Pg** | **07 11 32.7** | **-1.3** |
| | 3.9nm,0.3s | | | | | | |
| TNSS | | | | *e* S | **Sg** | **07 12 03.7** | **+1.6** |
| | 2.3nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.17** | **336** | Pg | **Pb** | **07 11 32.4** | **+1.0** |
| | 3.8nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 07 12 03.7 | |
| | 2.3nm,0.6s | | | | | | |
| **UZB** | **Uzynbulak** | **2.17** | **17** | *e* P | **Pb** | **07 11 32.2** | **+0.9** |
| | 1.1nm,0.2s | | | | | | |
| UZB | | | | *e* S | **Sg** | **07 12 02.6** | **+0.4** |
| | 3.6nm,0.4s | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.19** | **311** | ⇑*e* P | **Pn** | **07 11 29.2** | **+1.1** |
| | baz=6.0 | | | | | | |
| BOOM | | | | ⇑*e* S | **Sb** | **07 11 57.8** | **-0.8** |
| | baz=6.0 | | | | | | |
| **MDOK** | **Medeo** | **2.26** | **339** | *e* P | **Pg** | **07 11 34.1** | **-1.5** |
| | 3.9nm,0.5s | | | | | | |
| MDOK | | | | *e* S | **Sg** | **07 12 06.1** | **+1.2** |
| | 4.2nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **2.26** | **339** | ⇓Pg | **Pb** | **07 11 33.6** | **+0.9** |
| | 2.5nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 07 12 06.4 | |
| | 5.3nm,0.8s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.31** | **340** | *e* P | **Pg** | **07 11 35.3** | **-1.2** |
| | 8.0nm,0.2s | | | | | | |
| KOTS | | | | *e* S | **Sg** | **07 12 08.2** | **+1.7** |
| | 14nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **2.42** | **0** | *e* P | **Pg** | **07 11 37.7** | **-1.0** |
| | 3.4nm,0.4s | | | | | | |
| KURS | | | | *e

σ0$96/48, **mb4.1**/23, **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.52** | **63** | | **Pn** | **07 57 32.2** | **+0.8** |
| **MSVF** | **Nonsavu** | **6.03** | **253** | Pn | **Pn** | **07 57 50.0** | **+2.1** |
| **MSVF** | **Nonsavu** | **6.03** | **253** | P | **Pn** | **07 57 50.3** | **+2.4** |
| | 16nm,0.9s,baz=116,slow=12,SNR=9.1 | | | | | | |
| MSVF | | | | S | **S** | **07 59 03.2** | **+1.0** |
| | 6.9nm,0.9s,baz=51,slow=22,SNR=0.9 | | | | | | |
| **PINNC** | **Pines Island,** | **17.01** | **245** | P | **P** | **07 59 52.9** | **+0.6** |
| **DZM** | **Mont Dzumac** | **17.72** | **247** | P | **P** | **08 00 00.8** | **+0.8** |
| **DZM** | **Mont Dzumac** | **17.72** | **247** | P | **P** | **08 00 00.5** | **+0.5** |
| | 4.2nm,0.6s,baz=67,slow=19,SNR=8.4 | | | | | | |
| **ARMA** | **Armidale** | **32.95** | **238** | P | **P** | **08 02 18.3** | **-0.5** |
| **CTA** | **Charters Tower** | **36.15** | **258** | P | **P** | **08 02 46.0** | **0.0** |
| | 0.3nm,0.5s,baz=93,slow=9.5,SNR=5.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **CTAO** | **Charters Tower** | **36.15** | **258** | P | **P** | **08 02 46.2** | **+0.2** |
| **COEN** | **Coen** | **39.53** | **267** | P | **P** | **08 03 14.4** | **+0.3** |
| COEN | | | | IAmb | IAmb | 08 03 15.6 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **41.63** | **240** | P | **P** | **08 03 29.2** | **-1.6** |
| | comp=Z,2.4nm,0.5s,baz=61,slow=10,SNR=2.9 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **46.41** | **240** | P | **P** | **08 04 07.5** | **-0.9** |
| BBOO | | | | IAmb | IAmb | 08 04 49.2 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **47.16** | **257** | P | **P** | **08 04 13.8** | **-0.6** |
| **WB0** | **Warramunga Arr** | **47.31** | **258** | P | **P** | **08 04 14.8** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 08 04 15.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **47.34** | **258** | P | **P** | **08 04 15.0** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 08 04 15.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **47.34** | **258** | P | **P** | **08 04 15.1** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 08 04 15.6 | |
| | comp=Z,7.9nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.35** | **258** | P | **P** | **08 04 14.8** | **-1.0** |
| **WRA** | **Warramunga Arr** | **47.35** | **258** | P | **P** | **08 04 15.1** | **-0.7** |
| | comp=Z,9.0nm,0.7s,baz=92,slow=6.3,SNR=155 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 05 40.2** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=96,slow=3.6,SNR=2.5 | | | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **47.62** | **252** | P | **P** | **08 04 17.3** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 08 04 18.2 | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **47.62** | **252** | P | **P** | **08 04 17.5** | **-0.4** |
| **ASAR** | **Alice Springs** | **47.62** | **252** | P | **P** | **08 04 16.4** | **-1.4** |
| | comp=Z,24nm,0.4s,baz=89,slow=7.8,SNR=505 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 05 41.0** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=96,slow=4.3,SNR=1.4 | | | | | | |
| **MTN** | **Manton Dam** | **51.28** | **266** | P | **P** | **08 04 44.4** | **-0.8** |
| **FORT** | **Forrest** | **52.97** | **243** | P | **P** | **08 04 55.7** | **-1.7** |
| **KNRA** | **Kununurra** | **53.09** | **262** | P | **P** | **08 04 58.1** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 08 05 25.9 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.72** | **259** | P | **P** | **08 05 16.7** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **60.71** | **254** | P | **P** | **08 05 50.2** | **-1.2** |
| **MBWA** | **Marble Bar** | **60.86** | **254** | P | **P** | **08 05 50.8** | **-1.6** |
| **VNDA** | **Vanda** | **62.51** | **185** | P | **P** | **08 06 02.4** | **+0.2** |
| **VNDA** | **Vanda** | **62.51** | **185** | P | **P** | **08 06 03.0** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=10,slow=11,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **MORW** | **Morawa** | **63.43** | **245** | P | **P** | **08 06 07.4** | **-1.8** |
| MORW | | | | IAmb | IAmb | 08 06 24.9 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.90** | **321** | P | **P** | **08 06 36.8** | **-0.4** |
| | comp=Z,0.7nm,0.4s,baz=146,slow=8.8,SNR=2.6 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.01** | **180** | P | **P** | **08 07 13.9** | **+0.7** |
| QSPA | | | | IAmb | IAmb | 08 07 44.0 | |
| | comp=Z,6.9nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.01** | **180** | P | **P** | **08 07 13.9** | **+0.7** |
| | comp=Z,1.1nm,0.8s,baz=353,slow=3.1,SNR=3.8 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **78.89** | **7** | P | **P** | **08 07 41.2** | **+1.1** |
| K15K | | | | IAmb | IAmb | 08 07 45.2 | |
| | comp=Z,9.7nm,1.3s | | | | | | |
| **L18K** | **Granite Mounta** | **79.47** | **9** | P | **P** | **08 07 43.7** | **+0.5** |
| L18K | | | | IAmb | IAmb | 08 07 47.1 | |
| | comp=Z,6.7nm,1.3s | | | | | | |
| **K17K** | **Iditarod** | **79.71** | **8** | P | **P** | **08 07 45.7** | **+1.2** |
| K17K | | | | IAmb | IAmb | 08 08 00.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **J16K** | **Amvik River** | **79.97** | **7** | P | **P** | **08 07 47.1** | **+1.3** |
| **K20K** | **Telida** | **80.95** | **10** | P | **P** | **08 07 51.2** | **+0.2** |
| K20K | | | | IAmb | IAmb | 08 08 08.8 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **RND** | **Reindeer** | **81.94** | **12** | P | **P** | **08 07 56.9** | **+0.6** |
| RND | | | | IAmb | IAmb | 08 08 25.0 | |
| | comp=Z,5.3nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.26** | **12** | P | **P** | **08 08 03.0** | **+0.1** |
| CCB | | | | IAmb | IAmb | 08 08 04.0 | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **IMAR** | **Indian Mountai** | **83.46** | **9** | P | **P** | **08 08 04.5** | **+0.6** |
| **ILAR** | **Eielson Array** | **83.55** | **12** | P | **P** | **08 08 04.6** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=218,slow=5.3,SNR=18 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **83.72** | **7** | P | **P** | **08 08 05.9** | **+0.7** |
| **PDAR** | **Pinedale Array** | **84.36** | **43** | P | **P** | **08 08 08.5** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=270,slow=2.7,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.08** | **318** | PKP | **PKPab** | **08 15 12.4** | **-0.1** |
| | comp=Z,2.1nm,0.7s,baz=52,slow=2.6,SNR=6.4 | | | | | | |

**STR 07 07:58:21.6±0.6, 46°N±3°×°±°, h0km, MLv0.9/5, Error ellipse: s-maj=0.0km s-min=0.0km az=123.9, preliminary, France**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OG35** | **Corcelles** | **0.27** | **25** | Pg | Pg | 07 58 26.2 | -0.5 |
| OG35 | | | | Sg | Sg | 07 58 30.5 | +0.3 |
| **OGSM** | **Saint Maurice** | **0.28** | **134** | Pg | Pg | 07 58 26.4 | -0.6 |
| OGSM | | | | Sg | Sg | 07 58 30.9 | +0.4 |
| **SSB** | **Saint Sauveur** | **0.81** | **230** | Pg | Pg | 07 58 36.9 | -0.1 |
| SSB | | | | Sg | Sg | 07 58 48.3 | +0.9 |
| **ORIF** | **Oris-en-Rattie** | **0.94** | **159** | Pg | Pb | 07 58 40.3 | -0.6 |
| ORIF | | | | Sg | Sg | 07 58 52.5 | +0.6 |

**STR 07 07:58:23.2±2.5, 45°N±5°×°±1°4, h0km, MLv1.2/3, Error ellipse: s-maj=0.0km s-min=0.0km az=80.7, preliminary, France**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBL** | **Lubilhac** | **0.23** | **34** | Pg | Pg | 07 58 27.5 | -0.1 |
| LBL | | | | Sg | Sg | 07 58 30.4 | -0.1 |
| **LBL** | **Lubilhac** | **0.23** | **34** | Pg | Pg | 07 58 27.4 | -0.2 |
| LBL | | | | Sg | Sg | 07 58 30.4 | -0.1 |
| **COLF** | **Collangettes** | **0.65** | **43** | Pg | Pg | 07 58 35.1 | -0.6 |
| COLF | | | | Sg | Sg | 07 58 43.9 | -0.1 |

**IDC 07 08:04:50.7±3.2, 54°29N×87°55E, h0km, mbtmp2.8/2, ML2.6/2, Error ellipse: s-maj=25.0km s-min=17.6km az=43.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.64** | **259** | I | I | 08 13 36.4 | |
| | baz=79,slow=314,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.64** | **259** | Pg | Pn | 08 05 20.9 | +0.1 |
| | 0.9nm,0.3s,baz=76,slow=18,SNR=8.7 | | | | | | |
| ZALV | | | | Lg | Lg | 08 05 41.4 | |
| | 1.2nm,0.3s,baz=88,slow=25,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.62** | **240** | Pn | Pn | 08 06 29.4 | +0.1 |
| | 0.1nm,0.3s,baz=58,slow=14,SNR=2.6 | | | | | | |
| KURBB | | | | Sn | Sn | 08 07 45.2 | -0.1 |
| | baz=44,slow=16,SNR=1.2 | | | | | | |
| KURBB | | | | Lg | Lg | 08 08 22.0 | |
| | baz=56,slow=31,SNR=1.8 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.21** | **206** | Pn | Pn | 08 06 52.1 | +1.0 |
| | 0.1nm,0.3s,baz=23,slow=13,SNR=7.0 | | | | | | |
| MKAR | | | | Sn | Sn | 08 08 24.9 | +0.3 |
| | 0.1nm,0.3s,baz=26,slow=27,SNR=13 | | | | | | |
| MKAR | | | | Lg | Lg | 08 09 12.1 | |
| | baz=30,slow=30,SNR=1.6 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*IDC 07 08:08:18.4±0.9, 67°.16N×20°.95E, h0km, mbtmp3.0/4, ML2.4/4, Error ellipse: s-maj=14.7km s-min=7.3km az=117.0*
*UPP 07 08:08:18.2±0.1, 67°.19N×20°.66E, h0km, ML2.7, Confirmed Induced event*
*HEL 07 08:08:18.8±0.0, 67°.19N×20°.64E, h1km, ML2.3, ML2.7(UPP), Confirmed Induced event*
*BER 07 08:08:21.8±1.9, 67°.39N×20°.43E, h1km, ML2.2, Confirmed Induced event*

**ISC 07 08:08:16.8±0.7, 67°.22N±0°.02×20°.68E±0°.02, h0km, n34, σ1$07/53, 2D, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUNU** | **Dundret** | **0.11** | **203** | P | **Pg** | **08 08 19.9** | **+1.2** |
| DUNU | | | | S | **Sg** | **08 08 21.1** | **+1.1** |
| **DUNU** | **Dundret** | **0.11** | **203** | *i* P | **Pg** | **08 08 19.9** | **+1.2** |
| DUNU | | | | *i* S | **Sg** | **08 08 21.1** | **+1.1** |
| **MASU** | **Masugnsbyn** | **0.57** | **64** | P | **Pb** | **08 08 29.4** | **-0.2** |
| MASU | | | | S | **Sb** | **08 08 36.9** | **-1.2** |
| **MASU** | **Masugnsbyn** | **0.57** | **64** | *i* P | **Pb** | **08 08 29.4** | **-0.2** |
| MASU | | | | *i* S | **Sb** | **08 08 36.9** | **-1.2** |
| **SALU** | **Saltoluokta** | **0.86** | **282** | ⇓*i*P | **Pb** | **08 08 34.2** | **-0.3** |
| SALU | | | | *e*S | **Sb** | **08 08 46.0** | **-0.6** |
| **SALU** | **Saltoluokta** | **0.86** | **282** | P | **Pb** | **08 08 34.3** | **-0.3** |
| SALU | | | | S | **Sb** | **08 08 46.0** | **-0.6** |
| **SALU** | **Saltoluokta** | **0.86** | **282** | *i* P | **Pb** | **08 08 34.3** | **-0.3** |
| SALU | | | | *i* S | **Sb** | **08 08 46.0** | **-0.6** |
| **PAJU** | **Pajala** | **0.97** | **100** | P | **Pb** | **08 08 36.1** | **-0.3** |
| **PAJU** | **Pajala** | **0.97** | **100** | *e*P | **Pb** | **08 08 36.2** | **-0.3** |
| PAJU | | | | *e*S | **Sb** | **08 08 49.2** | **-0.6** |
| **LANU** | **Lannavaara** | **0.97** | **31** | P | **Pb** | **08 08 36.7** | **+0.2** |
| **LANU** | **Lannavaara** | **0.97** | **31** | *e*P | **Pb** | **08 08 36.5** | **0.0** |
| LANU | | | | *e*S | **Sb** | **08 08 50.4** | **+0.5** |
| **KOVU** | **Salmi** | **1.03** | **349** | P | **Pb** | **08 08 37.5** | **+0.1** |
| **KOVU** | **Salmi** | **1.03** | **349** | *e*P | **Pb** | **08 08 37.5** | **+0.1** |
| **HARU** | **Harads** | **1.07** | **173** | P | **Pg** | **08 08 37.1** | **0.0** |
| **HARU** | **Harads** | **1.07** | **173** | *e*P | **Pg** | **08 08 37.1** | **0.0** |
| **KLF** | **Kolari** | **1.28** | **88** | *e*P | **Pn** | **08 08 41.8** | **-0.1** |
| KLF | | | | *e*S | **Sb** | **08 08 58.6** | **-0.1** |
| **HEF** | **Hetta** | **1.65** | **42** | *e*P | **Pg** | **08 08 48.2** | **0.0** |
| HEF | | | | *e*S | **Sg** | **08 09 10.5** | **+0.9** |
| **HEF** | **Hetta** | **1.65** | **42** | *e*P | **Pg** | **08 08 48.2** | **0.0** |
| HEF | | | | *e*S | **Sg** | **08 09 10.9** | **+1.3** |
| **KALU** | **Kalix** | **1.74** | **141** | *e*P | **Pb** | **08 08 49.2** | **-0.2** |
| KALU | | | | *e*S | **Sb** | **08 09 11.4** | **-0.4** |
| **TOF** | **Tornio** | **1.85** | **126** | *e*P | **Pb** | **08 08 51.3** | **-0.1** |
| TOF | | | | *e*S | **Sb** | **08 09 15.3** | **+0.3** |
| **KTK1** | **Kautokeino** | **2.04** | **27** | *e*PB | **Pg** | **08 08 55.3** | **-0.5** |
| KTK1 | | | | *e*SG | **Sg** | **08 09 22.3** | **+0.1** |
| **FAUS** | **Fauske** | **2.10** | **277** | ⇓*i*P | **Pb** | **08 08 55.5** | **0.0** |
| FAUS | | | | *e*Sg | **Sg** | **08 09 24.2** | **+0.2** |
| FAUS | | | | IAML | | 08 09 27.9 | |
| | comp=Z,55nm,0.4s | | | | | | |
| **RNF** | **Rovaniemi** | **2.19** | **104** | *e*PB | **Pb** | **08 08 56.9** | **-0.3** |
| RNF | | | | *e*SB | **Sb** | **08 09 25.3** | **+0.4** |
| **STEI** | **Steigen** | **2.20** | **291** | *e*Pg | **Pb** | **08 08 57.7** | **+0.3** |
| STEI | | | | *e*Sg | **Sb** | **08 09 25.5** | **+0.3** |
| STEI | | | | IAML | | 08 09 33.5 | |
| | comp=Z,25nm,0.6s | | | | | | |
| **SGF** | **Sodankyl** | **2.28** | **82** | *e*P | **Pb** | **08 08 57.9** | **-0.8** |
| SGF | | | | *e*SB | **Sb** | **08 09 28.4** | **+1.1** |
| **TRO** | **Tromso** | **2.51** | **346** | *e*SG | **Sg** | **08 09 37.2** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **2.94** | **35** | Pn | **Pn** | **08 09 06.3** | **+1.7** |
| | comp=Z,1.1nm,0.3s,baz=214,slow=13,SNR=47 | | | | | | |
| ARCES | | | | Sn | **Sn** | **08 09 42.3** | **+1.8** |
| | comp=Z,1.2nm,0.3s,baz=219,slow=27,SNR=7.2 | | | | | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **OBF4** | **Vikkela, Lumij** | **3.02** | **141** | MSG | | 08 09 53.0 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| **KEV** | **Kevo** | **3.45** | **40** | MSG | | 08 10 12.1 | |
| | comp=Z,9.4nm,0.3s | | | | | | |
| **VRF** | **Varrio** | **3.48** | **77** | MSG | | 08 10 09.9 | |
| | comp=Z,11nm,0.3s | | | | | | |
| **OLKF** | **Oulanka, Finla** | **3.57** | **101** | MSG | | 08 10 16.4 | |
| | comp=Z,9.3nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **6.25** | **155** | Pn | **Pn** | **08 09 51.9** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=346,slow=12,SNR=7.4 | | | | | | |
| FINES | | | | Sn | **Sn** | **08 11 00.3** | **-1.9** |
| | comp=Z,0.7nm,0.3s,baz=346,slow=22,SNR=8.9 | | | | | | |
| FINES | | | | Lg | Lg | 08 11 32.4 | |
| | comp=Z,0.6nm,0.3s,baz=348,slow=27,SNR=3.9 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **7.45** | **218** | Pn | **Pn** | **08 10 07.6** | **+1.1** |
| | baz=23,slow=21,SNR=1.6 | | | | | | |
| NOA | | | | Sn | **Sn** | **08 11 29.0** | **-2.7** |
| | baz=34,slow=19,SNR=4.4 | | | | | | |
| NOA | | | | Lg | Lg | 08 12 13.6 | |
| | comp=Z,0.1nm,0.3s,baz=38,slow=24,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **7.75** | **207** | Pn | **Pn** | **08 10 09.9** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=22,slow=13,SNR=9.6 | | | | | | |
| HFS | | | | Sn | **Sn** | **08 11 34.6** | **-4.5** |
| | comp=Z,0.6nm,0.3s,baz=22,slow=21,SNR=7.7 | | | | | | |
| HFS | | | | Lg | Lg | 08 12 23.9 | |
| | comp=Z,0.4nm,0.3s,baz=22,slow=24,SNR=5.2 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |

**RSNC 07 08:11:23.9±0.4, 12°N±6°×7°0W±°, h0km, M2.6, mb3.8, mB4.7, ML2.6, Mw(mB)3.9, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUA1** | **Aruba** | **0.45** | **69** | P | Pg | 08 11 32.0 | -0.6 |
| AUA1 | | | | S | Sg | 08 11 38.1 | -0.3 |
| **URIC** | **Uribia, Colomb** | **1.65** | **247** | P | Pn | 08 11 53.4 | -0.7 |
| URIC | | | | S | Sn | 08 12 14.4 | -1.6 |
| **CRJC** | **Cerrejon, Guaj** | **2.73** | **242** | P | Pn | 08 12 08.0 | -1.1 |
| CRJC | | | | S | Sn | 08 12 43.2 | +0.3 |
| **SMRC** | **Santa Marta, M** | **3.89** | **253** | P | Pn | 08 12 27.6 | +2.7 |
| SMRC | | | | S | Sb | 08 13 17.7 | -3.3 |
| **ARGC** | **Ariguani, Magd** | **4.48** | **237** | P | Pn | 08 12 33.2 | +0.1 |
| ARGC | | | | S | Sn | 08 13 25.0 | -0.9 |
| **OCAC** | **Ocana** | **4.96** | **215** | P | Pn | 08 12 39.8 | -0.1 |
| OCAC | | | | S | Sn | 08 13 37.6 | -0.5 |
| **SJCC** | **San Jacinto, C** | **5.25** | **243** | P | Pn | 08 12 45.2 | +1.5 |
| | 13nm,1.2s | | | | | | |
| SJCC | | | | S | Sn | 08 13 42.3 | -2.7 |
| | 13nm,1.2s | | | | | | |
| **BARC** | **Barichara** | **6.32** | **206** | P | Pn | 08 12 59.8 | +1.2 |
| BARC | | | | S | Sn | 08 14 04.3 | -7.4 |
| **ZARC** | **Zaragoza, Cauc** | **6.49** | **223** | P | Pn | 08 13 00.5 | -0.3 |
| | 4.7nm,1.0s | | | | | | |
| ZARC | | | | S | Sn | 08 14 16.6 | +1.0 |
| | 4.7nm,1.0s | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **6.99** | **215** | P | Pn | 08 13 07.4 | -0.3 |

*CATAC 07 08:15:33.6±0.6, 12°.84N×88°.62W, h34km±5km, ML3.5*
**ISC 07 08:15:33.5±1.6, 12°.78N±0°.07×88°.64W±0°.04, h35km, n33, σ0$37/50, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JUCU** | **Jucuarįn** | **0.61** | **39** | *e*P | **Pn** | **08 15 45.8** | **0.0** |
| JUCU | | | | *e*S | **Sn** | **08 15 54.7** | **+0.2** |
| **JUCU** | **Jucuarįn** | **0.61** | **39** | *i* P | **Pn** | **08 15 45.8** | **0.0** |
| JUCU | | | | IAML | | 08 15 46.1 | |
| | comp=Z,2µm,1.0s | | | | | | |
| JUCU | | | | *i* S | **Sn** | **08 15 54.9** | **+0.4** |
| **LCY** | **Lacayo** | **0.73** | **28** | *e*P | **Pn** | **08 15 47.4** | **0.0** |
| **TECA** | **Tecapa** | **0.73** | **11** | *e*P | **Pn** | **08 15 47.5** | **0.0** |
| **RANC** | **El Ranchito** | **0.74** | **28** | *i* P | **Pn** | **08 15 47.4** | **-0.2** |
| RANC | | | | IAML | | 08 15 48.3 | |
| | comp=Z,820nm,1.0s | | | | | | |
| **VSM** | **San Miguel** | **0.74** | **29** | *e*P | **Pn** | **08 15 47.9** | **+0.2** |
| **PACA** | **Pacayal** | **0.76** | **24** | *e*P | **Pn** | **08 15 48.0** | **+0.2** |
| **PACA** | **Pacayal** | **0.76** | **24** | *i* P | **Pn** | **08 15 48.0** | **+0.2** |
| PACA | | | | IAML | | 08 15 59.6 | |
| | comp=Z,6µm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.77** | **350** | *i* P | **Pn** | **08 15 47.8** | **-0.1** |
| TECO | | | | *i* S | **Sn** | **08 15 58.2** | **-0.1** |
| TECO | | | | IAML | | 08 16 00.8 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **0.77** | **31** | *e*P | **Pn** | **08 15 48.0** | **0.0** |
| **CNRM** | **Centro Naciona** | **0.83** | **34** | *i* P | **Pn** | **08 15 48.5** | **-0.3** |
| CNRM | | | | *i* S | **Sn** | **08 16 00.7** | **+0.8** |
| CNRM | | | | IAML | | 08 16 37.5 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.85** | **6** | *e*P | **Pn** | **08 15 48.9** | **-0.1** |
| PQSS | | | | *e*S | **Sn** | **08 16 00.4** | **+0.2** |
| **PQSS** | **Presa 15 de Se** | **0.85** | **6** | *i* P | **Pn** | **08 15 48.8** | **-0.1** |
| PQSS | | | | *i* S | **Sn** | **08 16 00.2** | **0.0** |
| PQSS | | | | IAML | | 08 16 01.1 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **0.87** | **351** | *i* P | **Pn** | **08 15 49.1** | **-0.2** |
| UESV | | | | *i* S | **Sn** | **08 16 00.9** | **+0.2** |
| UESV | | | | IAML | | 08 16 02.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **0.87** | **345** | *e*P | **Pn** | **08 15 49.3** | **-0.1** |
| **COEG** | **Centro de Oper** | **0.87** | **345** | *i* P | **Pn** | **08 15 49.1** | **-0.2** |
| COEG | | | | *i* S | **Sn** | **08 16 00.9** | **0.0** |
| COEG | | | | IAML | | 08 16 04.5 | |
| | comp=Z,780nm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.92** | **355** | *e*P | **Pn** | **08 15 50.4** | **+0.3** |
| **SCLA** | **Alcaldia de Sa** | **0.92** | **355** | *i* P | **Pn** | **08 15 50.0** | **-0.1** |
| SCLA | | | | *i* S | **Sn** | **08 16 02.8** | **+0.6** |
| SCLA | | | | IAML | | 08 16 05.1 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **0.93** | **58** | *e*P | **Pn** | **08 15 49.9** | **-0.3** |
| **CNCH** | **Conchagua** | **0.93** | **58** | *i* P | **Pn** | **08 15 49.8** | **-0.4** |
| CNCH | | | | IAML | | 08 16 10.2 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **LFRS** | **El Faro** | **0.94** | **334** | *e*P | **Pn** | **08 15 50.4** | **+0.2** |
| **LOMA** | **Loma Larga** | **1.00** | **329** | *e*P | **Pn** | **08 15 51.4** | **+0.1** |
| LOMA | | | | *e*S | **Sn** | **08 16 04.3** | **0.0** |
| **LOMA** | **Loma Larga** | **1.00** | **329** | *i* P | **Pn** | **08 15 51.3** | **+0.1** |
| LOMA | | | | *i* S | **Sn** | **08 16 04.2** | **0.0** |
| LOMA | | | | IAML | | 08 16 06.6 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **1.06** | **332** | *i* P | **Pn** | **08 15 51.9** | **0.0** |
| UDBS | | | | *i* S | **Sn** | **08 16 05.8** | **+0.3** |
| UDBS | | | | IAML | | 08 16 07.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **UTEC** | **Universidad Te** | **1.07** | **330** | *i* P | **Pn** | **08 15 52.1** | **0.0** |
| UTEC | | | | *i* S | **Sn** | **08 16 05.7** | **0.0** |
| UTEC | | | | IAML | | 08 16 07.5 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.07** | **328** | *i* S | **Sn** | **08 16 05.0** | **-0.8** |
| **PMON** | **Piamonte** | **1.14** | **325** | *i* P | **Pn** | **08 15 52.6** | **-0.4** |
| PMON | | | | *i* S | **Sn** | **08 16 07.8** | **+0.3** |
| PMON | | | | IAML | | 08 16 09.8 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.17** | **318** | *i* S | **Sn** | **08 16 08.5** | **0.0** |
| **NUBE** | **Las Nubes** | **1.57** | **315** | *i* S | **Sn** | **08 16 18.7** | **+0.4** |
| **PKGN** | **Cerro Pekin** | **1.63** | **94** | *i* P | **Pn** | **08 16 00.6** | **+0.9** |
| PKGN | | | | *i* S | **Sn** | **08 16 19.3** | **-0.2** |
| PKGN | | | | IAML | | 08 16 24.8 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **YUSH** | **Yuscaran** | **2.11** | **56** | *i* P | **Pn** | **08 16 05.9** | **-0.5** |
| YUSH | | | | *i* S | **Sn** | **08 16 30.6** | **-0.9** |
| **LIMN** | **Finca el Limon** | **2.24** | **82** | *i* P | **Pn** | **08 16 07.9** | **-0.3** |
| LIMN | | | | IAML | | 08 16 39.8 | |
| | comp=Z,69nm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.92** | **96** | *i* P | **Pn** | **08 16 16.9** | **-0.6** |
| BOAB | | | | *i* S | **Sn** | **08 16 52.3** | **+0.8** |
| BOAB | | | | IAML | | 08 17 08.9 | |
| | comp=Z,30nm,1.0s | | | | | | |

*IDC 07 08:43:48.1±2.4, 17°.24S×177°.92W, h468km±22km, mb3.1/6, mbtmp3.8/7, Error ellipse: s-maj=37.7km s-min=25.1km az=10.0*
**ISC 07 08:43:46.4±1.2, 17°.3S±0°.3×177°.7W±0°.2, h450km, n11, σ0$97/13, mb3.7/8, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.04** | **263** | P | **P** | **08 45 04.0** | **+2.0** |
| | 4.8nm,0.8s,baz=58,slow=7.1,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **39.49** | **241** | P | **P** | **08 50 35.6** | **-1.0** |
| | 1.1nm,0.5s,baz=84,slow=9.2,SNR=2.3 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.37** | **259** | P | **P** | **08 51 21.9** | **-1.5** |
| | 0.4nm,0.5s,baz=97,slow=7.4,SNR=11 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 52 53.7** | **-0.2** |
| | 0.2nm,0.4s,baz=89,slow=3.6,SNR=5.8 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.57** | **254** | P | **P** | **08 51 24.0** | **-0.9** |
| | 2.7nm,0.4s,baz=89,slow=8.3,SNR=58 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 52 55.1** | **+0.6** |
| | 0.2nm,0.4s,baz=97,slow=3.7,SNR=1.9 | | | | | | |
| | 2.7nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.77** | **180** | P | **P** | **08 54 28.2** | **+0.6** |
| | 2.0nm,0.6s,baz=212,slow=2.0,SNR=26 | | | | | | |
| | 2.0nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.13** | **57** | P | **P** | **08 55 34.0** | **-0.2** |
| | 0.1nm,0.6s,baz=252,slow=4.1,SNR=2.0 | | | | | | |
| | 0.1nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.93** | **180** | ⇑P | **P** | **08 56 01.1** | **+0.3** |
| | comp=Z,39nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **91.20** | **178** | ⇑P | **P** | **08 56 01.7** | **-0.3** |
| | comp=Z,9.2nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **91.20** | **178** | P | **P** | **08 56 02.1** | **+0.1** |
| | comp=Z,0.3nm,0.6s,baz=187,slow=8.1,SNR=6.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.31** | **176** | ⇑P | **P** | **08 56 02.2** | **-0.3** |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.76** | **177** | ⇑P | **P** | **08 56 04.8** | **+0.3** |
| | comp=Z,0.9nm,0.5s,baz=182,slow=3.2 | | | | | | |

**IDC 07 08:45:41.1±6.9, 47°.96N×80°.52E, h0km, 2C, Error ellipse: s-maj=46.1km s-min=34.6km az=

SHO AMB AMB 09 01 37.0
comp=N,120nm,0.4s
SHO eS Sn 09 01 58.5 -0.4
SHO A A 09 02 00.2
comp=N,420nm,0.4s
SHO A A 09 02 00.2
comp=N,320nm,0.4s
**SHO Shikotan 1.91 260** ePN Pn 09 01 35.0 -0.3
SHO eS Sn 09 01 58.2 -0.7
SHO pmax pmax
comp=Z,46nm,0.2s
SHO smax smax
comp=N,328nm,0.4s
SHO smax smax
comp=E,331nm,0.3s
**YUK Yuzh-Kuril'sk 2.58 267** eP Pn 09 01 45.2 +0.6
YUK AMB AMB 09 01 46.0
comp=E,210nm,0.3s
YUK eS Sn 09 02 16.7 +1.3
YUK A A 09 02 29.1
comp=E,590nm,0.6s
YUK A A 09 02 29.1
comp=E,990nm,0.6s
**YUK Yuzh-Kuril'sk 2.58 267** ePN Pn 09 01 45.7 +1.1
YUK eS Sn 09 02 16.3 +0.9
YUK pmax pmax
comp=Z,162nm,0.2s
YUK smax smax
comp=N,561nm,0.3s
YUK smax smax
comp=E,767nm,0.5s
**NEM2 Nemuro 2 2.81 254** P Pn 09 01 46.2 -1.5
NEM2 eS Sn 09 02 18.9 -2.0
**NMR Nemuro--Hokkai 2.82 254** eP Pn 09 01 46.8 -1.0
NMR eS Sn 09 02 19.9 -1.3
**NMR Nemuro--Hokkai 2.82 254** ePN Pn 09 01 46.8 -1.0
NMR eS Sn 09 02 19.8 -1.4
**RUSJ Misakicho 3.02 269** ePN Pn 09 01 52.0 +1.4
RUSJ eS Sn 09 02 27.7 +1.6
**JRA Rausu 3.12 266** P Pn 09 01 53.1 +1.1
JRA eS Sn 09 02 28.7 0.0
**JNK Nakash 3.47 261** P Pn 09 01 57.4 +0.6
JNK eS Sn 09 02 36.9 -0.4
**AKK Akkeshi 3.55 252** eP Pn 09 01 57.6 -0.3
**JAK Akkeshi 3.65 252** P Pn 09 01 58.9 -0.4
JAK eS Sn 09 02 40.3 -1.5
**JTKR Abashiri--Toko 3.99 268** eP Pn 09 02 05.5 +1.5
**JAR Ashorobuto 4.21 259** P Pn 09 02 08.2 +1.2
**JOB Onbets 4.28 254** eP Pn 09 02 08.4 +0.4
**JCH Churui 4.71 252** eP Pn 09 02 13.7 -0.1
JCH eS Sn 09 03 06.3 -1.5
**JKA Kamikawa-asahi 4.92 271** Pn Pn 09 02 15.1 -1.7
**ASAJ Asahikawa 4.92 271** Pn Pn 09 02 14.9 -1.9
comp=E,1.1nm,0.3s,baz=58,slow=15,SNR=5.5
ASAJ LR LR 09 04 38.7
comp=E,678nm,19.0s,baz=128,slow=44
comp=E,6.3nm,0.5s
**ASAJ Asahikawa 4.92 271** PN Pn 09 02 15.1 -1.7
**ERM Erimo 5.10 247** Pn Pn 09 02 19.9 +0.8
**ERM Erimo 5.10 247**⇑ iPN Pn 09 02 20.9 +1.7
**JNBK Urakawa-nobuka 5.25 251** eP Pn 09 02 20.6 -0.8
**YSS Yuzh-Sakhalins 5.43 303** Pn Pn 09 02 22.1 -1.6
**YSS Yuzh-Sakhalins 5.43 303** eP Pn 09 02 26.5 +2.8
YSS AMB AMB 09 02 30.7
comp=E,10.0nm,0.9s
YSS eS Sn 09 03 28.6 +3.0
YSS A A 09 03 34.9
comp=E,20nm,0.6s
YSS A A 09 03 34.9
comp=E,20nm,0.6s
YSS AMS AMS 09 04 48.0
comp=E,500nm,18.0s
YSS AMS AMS 09 04 48.0
comp=E,600nm,18.0s
**YSS Yuzh-Sakhalins 5.43 303** ePN Pn 09 02 27.0 +3.3
YSS eS Sn 09 03 30.8 +5.2
YSS pmax pmax
comp=E,10.0nm,0.9s
YSS smax smax
comp=N,20nm,0.7s
YSS smax smax
comp=E,20nm,0.6s
**JANG Nango 7.02 240** eS Sn 09 03 58.6 -6.1
**JTM Tenmabayashi 7.07 244** Pn Pn 09 02 46.6 +0.3
**JTH Tanohata 7.07 235** eS Sn 09 03 56.7 -9.3
**SKR Severo-Kuril's 7.89 33** eP Pn 09 02 56.7 -0.8
SKR AMB AMB 09 02 57.1
comp=E,10.0nm,0.4s
**SKR Severo-Kuril's 7.89 33** ePN Pn 09 02 56.7 -0.8
SKR pmax pmax
comp=Z,14nm,0.4s
**TYV Tymovskoe 8.07 328** eP Pn 09 03 03.7 +3.7
TYV AMB AMB 09 03 06.7
comp=Z,10.0nm,0.3s
TYV eS Sn 09 04 34.3 +3.7
TYV A A 09 04 41.8
comp=Z,10.0nm,0.4s
TYV A A 09 04 41.8
comp=Z,10.0nm,0.4s
**TYV Tymovskoe 8.07 328** ePN Pn 09 02 58.8 -1.2
TYV pmax pmax
comp=Z,100nm,4.3s
TYV pmax pmax
comp=Z,6.0nm,0.9s
TYV MLR MLR
comp=Z,200nm,16.0s
**JSD Sado 10.45 238** Pn Pn 09 03 32.6 +0.1
**MJB9 Matsu-Tunnel 11.48 232** Pn Pn 09 03 48.5 +1.7
**MAJO Matsushiro 11.49 232** Pn Pn 09 03 48.4 +1.6
**MAJO Matsushiro 11.49 232** PN Pn 09 03 48.4 +1.6
**USA0B Ussuriysk Arra 12.52 276** Pn Pn 09 04 00.2 -0.8
**USA0B Ussuriysk Arra 12.52 276**⇑ ePN Pn 09 04 05.3 +4.3
**USRK Ussuriysk Ar. 12.52 276** Pn Pn 09 04 00.3 -0.6
**USRK Ussuriysk Ar. 12.52 276** PN Pn 09 04 00.3 -0.6
**KLR Kul'dur 13.12 299** LR LR 09 09 54.2
comp=Z,244nm,18.0s,baz=100,slow=41
**KLR Kul'dur 13.12 299**⇑ ePN Pn 09 04 13.2 +4.1
KLR MLR MLR
comp=Z,231nm,18.0s
**MA2 Magadan 15.40 3** LR LR 09 10 46.3
comp=Z,124nm,18.2s,baz=189,slow=38
**ZEA Zeya 17.34 311** eP Pn 09 05 03.4 -1.1
**ZEA Zeya 17.34 311**⇓ ePN Pn 09 05 03.5 -1.1
**KSAR Wonju Array Be 17.63 255** P 09 05 09.4 +0.2
**KSAR Wonju Array Be 17.63 255** P P 09 05 09.4 +0.2
**JCJ Chichijima 18.06 201** P 09 05 16.1 +2.1
**SHEM Shemya Is, Ala 18.36 54** LR LR 09 10 51.3
comp=Z,52nm,20.6s,baz=280,slow=32
**YAK Yakutsk 21.26 334** LR LR 09 14 27.5
comp=Z,73nm,19.9s,baz=127,slow=38
**YAK Yakutsk 21.26 334**⇑ eP P 09 05 46.4 -2.2
YAK pmax pmax
comp=Z,13nm,0.7s
**BILL Bilibino 25.47 15** eP P 09 06 26.9 -3.4
BILL ePPP PPP 09 07 12.0
BILL e 09 09 57.5
BILL pmax pmax
comp=Z,2.0nm,0.9s
BILL MLR MLR
comp=Z,81nm,19.0s
**H11N2 WAKE ISLAND Hy 28.43 144** T T 09 38 01.0
baz=334,slow=76,SNR=51
**H11N1 WAKE ISLAND Hy 28.45 144** T T 09 38 02.2
baz=334,slow=76,SNR=54
**H11N3 WAKE ISLAND Hy 28.45 144** T T 09 37 56.6
baz=334,slow=76,SNR=42
**ULN Ulaanbaatar 29.38 292** eP P 09 07 05.6 -0.1
**ULN Ulaanbaatar 29.38 292**⇓ iP P 09 07 05.6 -0.1
ULN pmax pmax
comp=Z,3.0nm,0.7s
**H11S1 WAKE ISLAND Hy 29.44 145** T T 09 39 15.1
baz=335,slow=76,SNR=33
**H11S3 WAKE ISLAND Hy 29.45 145** T T 09 39 19.4
baz=335,slow=76,SNR=37
**H11S2 WAKE ISLAND Hy 29.46 145** T T 09 39 20.3
baz=335,slow=76,SNR=41
**TATO Taipei 29.74 239** P P 09 07 09.6 +0.7
**SONM Songino Array 29.82 292** P P 09 07 08.8 -0.8
**SONM Songino Array 29.82 292** P P 09 07 09.7 +0.1
comp=Z,1.5nm,0.7s,baz=95,slow=7.2,SNR=7.7
SONM LR LR 09 20 27.6
comp=Z,152nm,18.5s,baz=92,slow=39
comp=Z,1.5nm,0.7s
**SONM Songino Array 29.82 292** eP P 09 07 09.4 -0.2
SONM pmax pmax
comp=Z,1.0nm,0.8s
**GUMO Guam 30.77 189** P P 09 07 21.9 +3.8
**GUMO Guam 30.77 189** P P 09 07 21.9 +3.8
**C19K Lookout Ridge 35.79 28** P P 09 08 01.2 -0.2
**F19K Shaleruckik Mo 35.87 33** P P 09 08 01.9 -0.2
F19K IAmb IAmb 09 08 14.5
comp=Z,6.8nm,1.2s
**D19K Kuna River 36.14 30** P P 09 08 04.1 -0.3
D19K IAmb IAmb 09 08 07.9
comp=Z,13nm,1.4s
**H19K Roundabout Mou 36.16 35** P P 09 08 04.3 -0.2
H19K IAmb IAmb 09 08 17.9
comp=Z,4.7nm,0.8s
**E19K Redstone River 36.22 32** P P 09 08 04.9 -0.1
E19K IAmb IAmb 09 08 21.6
comp=Z,4.1nm,0.8s
**B20K Meade River 36.87 27** P P 09 08 10.0 -0.5
**J20K Nowinta River 36.97 37** P P 09 08 11.3 -0.1
J20K IAmb IAmb 09 08 34.8
comp=Z,3.8nm,1.1s
**ILSW Iliamna Southw 37.31 44** P P 09 08 14.9 +0.3
**IMAR Indian Mountai 37.33 34** P P 09 08 14.1 -0.4
**G21K Allakaket 37.49 34** P P 09 08 16.9 +0.9
G21K IAmb IAmb 09 08 39.2
comp=Z,3.7nm,1.1s
**F21K Alatna River 37.60 32** P P 09 08 16.9 +0.1
**B21K Ikpikpuk River 37.63 28** P P 09 08 15.5 -1.5
B21K IAmb IAmb 09 08 19.0
comp=Z,11nm,0.9s
**H21K Melozitna Rive 37.68 35** P P 09 08 18.8 +1.3
**D22K Ayikyak River 38.16 30** P P 09 08 21.3 -0.3
D22K IAmb IAmb 09 08 23.1
comp=Z,3.4nm,0.8s
**RC01 Rabbit Creek A 38.95 42** P P 09 08 27.8 -0.4
RC01 IAmb IAmb 09 08 29.3
comp=Z,17nm,1.0s
**BWN Browne 39.02 38** P P 09 08 29.9 +1.2
**C23K Itkillik River 39.04 28** P P 09 08 28.5 -0.3
C23K IAmb IAmb 09 09 04.7
comp=Z,4.3nm,0.9s
**TOLK Toolik Lake Re 39.25 30** P P 09 08 30.5 -0.2
**GHO Glory Hole Cre 39.30 41** P P 09 08 30.5 -0.7
**D24K Happy Valley 39.58 30** P P 09 08 32.7 -0.6
**E24K Your Creek 39.60 31** P P 09 08 33.9 +0.3
E24K IAmb IAmb 09 08 34.2
comp=Z,5.8nm,1.2s
**F24K Squaw Lake 39.78 32** P P 09 08 33.3 -1.9
**G24K Hadweenzic Riv 39.91 34** P P 09 08 34.2 -2.0
**D25K Kavik River 40.46 30** P P 09 08 40.4 -0.4
**BMAR Burnt Mountain 41.05 32** P P 09 08 43.8 -1.9
**N25K Chitina, Valde 41.37 41** P P 09 08 47.0 -1.5
N25K IAmb IAmb 09 09 30.7
comp=Z,12nm,1.4s
**SCRK Sand Creek 41.43 38** P P 09 08 46.8 -2.0
**ZALV Zalesovo Beam 42.03 307** LR LR 09 27 44.1
comp=Z,71nm,18.4s,baz=56,slow=38
**K27K Chicken 42.26 38** P P 09 08 54.7 -0.8
K27K IAmb IAmb 09 09 36.2
comp=Z,9.9nm,1.4s
**D27M Malcolm River 42.38 30** P P 09 08 56.0 -0.6
**DAV Davao City (W) 42.47 216** P P 09 08 59.9 +2.1
**L27K Beaver Creek, 42.48 39** P P 09 08 58.6 +1.2
**BCAR Beaver Creek A 42.50 39** P P 09 08 59.2 +1.6
**M27K Edge Creek, AK 42.55 40** P P 09 08 58.0 -0.1
M27K IAmb IAmb 09 09 12.1
comp=Z,12nm,1.4s
**F28M Old Crow 42.86 32** P P 09 08 59.7 -0.7
**I28M Miner Creek 43.02 35** P P 09 09 01.4 -0.4
**E29M Blow River 43.54 31** P P 09 09 06.4 +0.5
E29M IAmb IAmb 09 09 26.6
comp=Z,4.1nm,1.2s
**H29M Whitestone 43.58 34** P P 09 09 06.7 +0.5
**G29M Pine Creek 43.64 33** P P 09 09 07.1 +0.5
G29M IAmb IAmb 09 09 46.0
comp=Z,14nm,1.4s
**M29M Somme Creek 44.11 39** P P 09 09 09.8 -0.8
M29M IAmb IAmb 09 09 50.6
comp=Z,4.6nm,1.2s
**G30M tAoh Zraii Nji 44.33 33** P P 09 09 11.6 -0.7
G30M IAmb IAmb 09 09 48.4
comp=Z,5.3nm,1.1s
**I30M Mount Dempster 44.53 35** P P 09 09 13.7 -0.4
I30M IAmb IAmb 09 09 44.2
comp=Z,7.3nm,1.4s
**J30M Hart River 44.66 36** P P 09 09 13.2 -1.8
**G31M Satah River 45.10 33** P P 09 09 19.2 +0.9
G31M IAmb IAmb 09 09 53.8
comp=Z,5.5nm,1.4s
**INK Inuvik 45.16 31** P P 09 09 19.2 +0.4
INK IAmb IAmb 09 09 49.2
comp=Z,5.9nm,1.5s
**INK Inuvik 45.16 31** P P 09 09 19.2 +0.4
INK pmax pmax
comp=Z,6.0nm,1.5s
**F31M Tsiigehtchic 45.22 32** P P 09 09 20.5 +1.3
F31M IAmb IAmb 09 09 41.9
comp=Z,8.4nm,1.4s
**MK31 Makanchi Array 45.83 298** P P 09 09 24.4 0.0
MK31 IAmb IAmb 09 09 24.7
comp=Z,4.3nm,0.8s
**MK31 Makanchi Array 45.83 298** *d* iP P 09 09 23.9 -0.5
**MKAR Makanchi Array 45.83 298** P P 09 09 24.5 +0.1
**MKAR Makanchi Array 45.83 298** P P 09 09 24.3 -0.1
comp=Z,3.8nm,0.8s,baz=74,slow=8.0,SNR=38
MKAR LR LR 09 30 03.4
comp=Z,193nm,18.0s,baz=69,slow=38
comp=Z,3.8nm,0.8s
**MKAR Makanchi Array 45.83 298** eP P 09 09 24.0 -0.4
**MKAR Makanchi Array 45.83 298** eP P 09 09 24.0 -0.4
MKAR pmax pmax
comp=Z,4.0nm,0.8s
**MAKZ Makanchi 46.02 298** IAmb IAmb 09 09 26.2
comp=Z,3.6nm,0.8s
MAKZ P P 09 09 26.5 +0.6
**KURK Kurchatov 46.63 304** P P 09 09 29.5 -1.2
**KURK Kurchatov 46.63 304** eP P 09 09 29.4 -1.2
**KURK Kurchatov 46.63 304**⇓ eP P 09 09 29.4 -1.2
KURK pmax pmax
comp=Z,5.0nm,1.6s
**KURBB Kurchatov Arra 46.72 304** P P 09 09 29.9 -1.4
comp=Z,0.4nm,0.3s,baz=72,slow=8.7,SNR=5.0
KURBB LR LR 09 30 23.0
comp=Z,53nm,18.2s,baz=178,slow=38
comp=Z,0.4nm,0.3s
**DLBC Dease Lake 49.21 43** LR LR 09 33 26.3
comp=Z,35nm,18.3s,baz=2.5,slow=40
**CMAR Chiang Mai Arr 49.24 255** LR LR 09 33 46.6
comp=Z,42nm,18.6s,baz=50,slow=40
**BOOM Boomskoye usch 51.77 295** P P 09 10 10.8 +0.5
BOOM IAmb IAmb 09 10 11.5
comp=Z,7.3nm,0.9s
**BOOM Boomskoye usch 51.77 295** P P 09 10 10.8 +0.5
BOOM pmax pmax
comp=Z,7.0nm,0.9s
**ARSB Arslanbob 54.27 296** P P 09 10 29.8 +1.1
ARSB IAmb IAmb 09 10 29.9
comp=Z,2.5nm,0.9s
**ARSB Arslanbob 54.27 296** P P 09 10 29.8 +1.1
ARSB pmax pmax
comp=Z,3.0nm,0.9s
**SAUI Saumlaki 54.49 202** P P 09 10 32.4 +2.2
**KK31 Karatay Array 54.95 299** P P 09 10 33.1 -0.3
KK31 IAmb IAmb 09 10 33.6
comp=Z,2.7nm,0.8s
**KK31 Karatay Array 54.95 299** P P 09 10 33.1 -0.3
KK31 pmax pmax
comp=Z,3.0nm,0.8s
**KKAR Karatay Array 54.95 299** P P 09 10 33.1 -0.3
**KKAR Karatay Array 54.95 299** P P 09 10 33.1 -0.3
**ARU Arti 55.13 317** eP P 09 10 34.1 -0.4
**ARU Arti 55.13 317**⇑ iP P 09 10 34.1 -0.4
ARU pmax pmax
comp=Z,4.0nm,1.0s
ARU MLR MLR
comp=Z,96nm,17.0s
**ABKAR Akbulak array 58.05 309** P P 09 10 54.8 -0.6
**CHGR Chuyangaron 58.17 295** P P 09 10 56.2 -0.3
**CHGR Chuyangaron 58.17 295** P P 09 10 56.2 -0.3
CHGR pmax pmax
comp=Z,13nm,1.0s
**NIL Nilore 58.23 288** P P 09 10 57.6 +0.7
**NIL Nilore 58.23 288** P P 09 10 57.6 +0.7
NIL pmax pmax
comp=Z,15nm,1.1s
**SIMJ Simiganj 58.27 295** P P 09 10 56.8 -0.5
SIMJ IAmb IAmb 09 11 10.1
comp=Z,6.0nm,0.8s
**BELG Belogornoye 62.68 318** LR LR 09 41 12.3
comp=Z,69nm,18.5s,baz=68,slow=38
**BELG Belogornoye 62.68 318**⇓ eP P 09 11 23.2 -3.7
BELG pmax pmax
comp=Z,1.0nm,0.6s
**FIA1 FINESS Array S 65.20 334** P P 09 11 42.6 -0.7
**FINES FINESS Array B 65.20 334** P P 09 11 42.4 -1.0
comp=Z,2.6nm,0.7s,baz=46,slow=8.2,SNR=7.2
comp=Z,2.6nm,0.7s
**FINES FINESS Array B 65.20 334** eP P 09 11 42.1 -1.2
FINES pmax pmax
comp=Z,3.0nm,0.7s
**WRA Warramunga Arr 65.33 196** P P 09 11 44.2 -0.4
comp=Z,0.6nm,0.8s,baz=19,slow=7.0,SNR=2.2
comp=Z,0.6nm,0.8s
**OBN Obninsk 65.90 325** eP P 09 11 45.7 -2.3
**OBN Obninsk 65.90 325** eP P 09 11 45.7 -2.3
OBN e 09 12 14.8
OBN e 09 14 11.5
OBN ePPP PPP 09 15 45.8
OBN pmax pmax
comp=Z,4.0nm,0.9s
OBN MLR MLR
comp=Z,54nm,16.0s
**NVAR Mina Array Bea 65.93 59** P P 09 11 49.4 +0.7
comp=Z,0.3nm,0.7s,baz=316,slow=5.9,SNR=4.0
comp=Z,0.3nm,0.7s
**PDAR Pinedale Array 68.34 51** P P 09 12 03.9 -0.1
comp=Z,0.1nm,0.5s,baz=337,slow=2.1,SNR=2.0
comp=Z,0.1nm,0.5s
**ASAR Alice Springs 69.03 195** P P 09 12 09.0 +0.9
comp=Z,0.4nm,0.9s,baz=10,slow=6.6,SNR=2.0
comp=Z,0.4nm,0.9s
**NC405 NORSAR Array S 69.56 340** P P 09 12 10.0 -1.0
**NC204 NORSAR Array S 69.66 340** P P 09 12 11.2 -0.4
**NB201 NORSAR Array S 69.72 340** P P 09 12 11.4 -0.6
**NB2 NORSAR Subarra 69.75 340** P P 09 12 11.1 -1.1
comp=Z,3.1nm,0.7s,baz=31,slow=6.5
**NOA NORSAR Array B 69.75 340** P P 09 12 11.3 -0.8
comp=Z,2.7nm,0.7s,baz=30,slow=6.3,SNR=14
comp=Z,2.7nm,0.7s
**NOA NORSAR Array B 69.75 340** eP P 09 12 11.2 -1.0
NOA pmax pmax
comp=Z,3.0nm,0.7s
**HFS Hagfors 69.88 338** P P 09 12 11.7 -1.3
comp=Z,3.1nm,0.6s,baz=64,slow=6.8,SNR=9.2
HFS LR LR 09 46 09.1
comp=Z,20nm,21.2s,baz=16,slow=39
comp=Z,3.1nm,0.6s
**KIV Kislovodsk 70.67 313** eP P 09 12 18.5 +0.3
**KIV Kislovodsk 70.67 313** eP P 09 12 18.5 +0.3
KIV pmax pmax
comp=Z,10.0nm,1.1s
KIV MLR MLR
comp=Z,74nm,18.0s
**KBZ Khabaz 70.71 313** P P 09 12 18.7 +0.4
comp=Z,2.7nm,0.8s,baz=62,slow=5.4,SNR=6.6
comp=Z,2.7nm,0.8s
**KBZ Khabaz 70.71 313** eP P 09 12 18.3 0.0
**KBZ Khabaz 70.71 313**⇑ eP P 09 12 18.3 0.0
KBZ pmax pmax
comp=Z,3.0nm,0.9s
**AKASG Malin Array Be 72.17 325** P P 09 12 25.8 -1.2
comp=Z,1.7nm,0.6s,baz=38,slow=5.9,SNR=6.4
AKASG LR LR 09 47 03.6
comp=Z,68nm,18.6s,baz=54,slow=38
comp=Z,1.7nm,0.6s
**AKASG Malin Array Be 72.17 325** *i* P P 09 12 27.0 0.0
**AKBB Malin Array Si 72.17 325** *de* P P 09 12 25.8 -1.2
AKBB pmax pmax
comp=Z,5.0nm,0.8s
**ANMO Albuquerque 75.38 55**⇑ eP P 09 12 38.8 -7.6
ANMO pmax pmax
comp=Z,4.0nm,3.9s
**BUR08 Bucovina Ar. S 76.20 325** P P 09 12 50.3 -0.4
BUR08 IAmb IAmb 09 13 06.3
comp=Z,2.3nm,0.8s
**BURAR Bucovina Array 76.22 325** P P 09 12 50.4 -0.5
BURAR IAmb IAmb 09 13 12.6
comp=Z,2.0nm,1.1s
**OJC Ojcow 76.23 329** P P 09 12 49.3 -1.4
OJC IAmb IAmb 09 12 51.3
comp=Z,4.8nm,1.0s
**OJC Ojcow 76.23 329** P P 09 12 49.3 -1.4
OJC pmax pmax
comp=Z,5.0nm,1.0s
**CLL Collm 77.64 334** *i* P P 09 12 57.2 -1.4
**PSZ Piszkesteto 78.09 328** P P 09 13 01.1 -0.2
PSZ IAmb IAmb 09 13 15.1
comp=Z,6.9nm,1.1s
**PSZ Piszkesteto 78.09 328** P P 09 13 01.1 -0.2
PSZ pmax pmax
comp=Z,7.0nm,1.1s
**TXAR Lajitas Array 81.01 58** P P 09 13 17.1 -0.4
**TXAR Lajitas Array 81.01 58** P P 09 13 16.5 -1.0
comp=Z,0.4nm,0.6s,baz=279,slow=4.6,SNR=3.9
comp=Z,0.4nm,0.6s
**DAVOX Davos/Dischmat 82.60 333** LR LR 09 53 06.9
comp=Z,32nm,18.4s,baz=68,slow=38

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*NEIC* ***07*** *09:16:30.4±1.5, 44.2°N±0.1°×149.6°E±0.1°, h10km±2km, mb4.2/67, Error ellipse: s-maj=20.0km s-min=16.4km az=137.0*
*IDC* ***07*** *09:16:30.6±2.2, 44.6°N×149.45E, h0km, mb4.0/12, mbtmp4.0/13, ML3.3/1, MS3.5/11, Error ellipse: s-maj=68.0km s-min=19.2km az=177.0*
*NIED* ***07*** *09:16:31.4, 44.49°N×149.62E, h30km, MW4.1, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr1.71; Mθθ-0.72; Mφφ-0.99; Mrθ-0.23; Mθφ-0.74; Mφr0.79; Fault plane solution: M0 1.84000×10^15 NP1:φ±21.00000°, δ56.00000°, λ,69.00000°. NP2:φ±235.00000°, δ39.00000°, λ,118.00000°.*
*JMA* ***07*** *09:16:31.4±0.6, 44°N±4°×15°0E±°, h30km, MV4.3/13, SE OFF ETOROFU*
*SKHL* ***07*** *09:16:31.5±0.3, 44.10°N×149.80E, h46km±5km, mb4.9/4*
*MOS* ***07*** *09:16:32.8±1.3, 44.24°N×149.48E, h43km, mb4.4/16, Error ellipse: s-maj=9.4km s-min=8.0km az=34.0*
**ISC 07 09:16:32.6±1.1, 44.12N±0.07°×149.56E±0.06, h30km±6km, n176, σ1s28/180, mb4.3/62, MS3.6/11, 7C-10D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.65** | **313** | *c i* PN | **Pn** | **Pn** | **09 16 58.6** | **-0.8** |
| KUR | | | | eS | **Sb** | **Sb** | **09 17 19.7** | **-2.9** |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,552nm,0.5s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=N,237nm,0.6s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=E,116nm,0.3s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=N,1μm,0.4s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=E,923nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **1.99** | **264** | eP | **Pn** | **Pn** | **09 17 03.5** | **-0.6** |
| SHO | | | | AMB | AMB | AMB | 09 17 06.3 | |
| | comp=E,70nm,0.3s | | | | | | | |
| SHO | | | | eS | **Sn** | **Sn** | **09 17 27.6** | **-0.4** |
| SHO | | | | A | A | A | 09 17 29.9 | |
| | comp=E,580nm,0.3s | | | | | | | |
| SHO | | | | A | A | A | 09 17 29.9 | |
| | comp=E,700nm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **1.99** | **264** | ePN | **Pn** | **Pn** | **09 17 03.6** | **-0.6** |
| SHO | | | | eS | **Sn** | **Sn** | **09 17 26.8** | **-1.2** |
| SHO | | | | pmax | pmax | | | |
| | comp=N,39nm,0.3s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=Z,68nm,0.3s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=E,51nm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=N,552nm,0.3s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=E,710nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.67** | **270** | eP | **Pn** | **Pn** | **09 17 13.9** | **+0.4** |
| YUK | | | | AMB | AMB | AMB | 09 17 15.0 | |
| | comp=E,150nm,0.2s | | | | | | | |
| YUK | | | | eS | **Sn** | **Sn** | **09 17 45.4** | **+0.6** |
| YUK | | | | A | A | A | 09 17 50.5 | |

YUK A A 09 17 50.5
comp=E,640nm,0.4s
YUK Pn Pn 09 17 13.9 +0.4
comp=E,340nm,0.4s
YUK eS Sn 09 17 45.1 +0.3
YUK pmax pmax
comp=N,83nm,0.3s
YUK pmax pmax
comp=Z,172nm,0.3s
YUK pmax pmax
comp=E,106nm,0.4s
YUK smax smax
comp=N,556nm,0.4s
YUK smax smax
comp=E,521nm,0.2s
NEM2 Nemuro 2 2.87 256 P Pn 09 17 16.1 -0.1
NEM2 eS Sn 09 17 49.3 -0.4
NMR Nemuro--Hokkai 2.88 256 eP Pn 09 17 16.0 -0.4
NMR eS Sn 09 17 49.4 -0.5
NMR Nemuro--Hokkai 2.88 256 ePN Pn 09 17 16.0 -0.4
NMR eS Sn 09 17 48.3 -1.6
RUSJ Misakicho 3.11 271 ePN Pn 09 17 21.0 +1.5
RUSJ eS Sn 09 17 59.0 +3.4
JRA Rausu 3.21 268 eS Sn 09 18 00.6 +2.5
JNK Nakash 3.54 263 P Pn 09 17 26.5 +1.0
JNK S Sn 09 18 09.5 +3.2
AKK Akkeshi 3.60 254 eP Pn 09 17 27.8 +1.5
JAK Akkeshi 3.71 254 P Pn 09 17 28.0 +0.2
JAK eS Sn 09 18 09.3 -1.1
JTKR Abashiri--Toko 4.08 270 P Pn 09 17 34.4 +1.5
JAR Ashorobuto 4.28 261 P Pn 09 17 37.0 +1.4
JAR eS Sn 09 18 25.9 +1.4
JCH Churui 4.76 254 P Pn 09 17 42.4 +0.1
JCH eS Sn 09 18 36.9 +0.5
JKA Kamikawa-asahi 5.01 272 Pn Pn 09 17 46.5 +0.8
JKA Kamikawa-asahi 5.01 272 eP Pn 09 17 48.1 +2.4
ASAJ Asahikawa 5.01 272 Pn Pn 09 17 48.1 +2.3
comp=E,0.9nm,0.3s,baz=68,slow=5.4,SNR=2.5
ASAJ LR LR 09 20 08.1
comp=E,598nm,18.8s,baz=134,slow=44
comp=E,2.2nm,0.3s
ERM Erimo 5.14 248 Pn Pn 09 17 48.1 +0.7
ERM Erimo 5.14 248 ePN Pn 09 17 49.8 +2.3
JNBK Urakawa-nobuka 5.30 252 P Pn 09 17 52.3 +2.6
JNBK S Sn 09 18 49.6 -0.2
YSS Yuzh-Sakhalins 5.56 303 Pn Pn 09 17 53.8 +0.6
YSS Yuzh-Sakhalins 5.56 303 eP Pn 09 17 54.5 +1.3
YSS AMB AMB 09 17 56.2
comp=E,10.0nm,0.4s
YSS eS Sn 09 18 57.4 +1.4
YSS A A 09 19 02.4
comp=E,20nm,0.7s
YSS A A 09 19 02.4
comp=E,30nm,0.7s
YSS AMS AMS 09 20 31.0
comp=E,400nm,15.0s
YSS AMS AMS 09 20 31.0
comp=E,400nm,15.0s
YSS Yuzh-Sakhalins 5.56 303 ePN Pn 09 17 54.5 +1.3
YSS eS Sn 09 18 57.4 +1.4
YSS pmax pmax
comp=Z,10.0nm,1.1s
YSS smax smax
comp=N,20nm,0.8s
YSS smax smax
comp=E,30nm,0.7s
YSS MLR MLR
comp=Z,400nm,16.0s
YSS MLR MLR
comp=E,400nm,14.0s
JANG Nango 7.04 241 eS Sn 09 19 28.2 -4.5
JTH Tanohata 7.09 237 S Sn 09 19 27.8 -6.0
JTM Tenmabayashi 7.11 245 Pn Pn 09 18 14.8 +0.3
JMM Marumori 9.10 230 Pn Pn 09 18 42.3 +0.4
TEY Ternei 9.29 280 ePN Pn 09 18 52.8 +8.3
MAJO Matsushiro 11.49 233 Pn Pn 09 19 15.0 +0.3
MAJO Matsushiro 11.49 233 PN Pn 09 19 15.0 +0.3
MJB9 Matsu-Tunnel 11.49 233 Pn Pn 09 19 15.4 +0.8
USA0B Ussuriysk Arra 12.62 276 Pn Pn 09 19 29.4 -0.6
USA0B Ussuriysk Arra 12.62 276 PN Pn 09 19 29.4 -0.6
KLR Kul'dur 13.25 299 LR LR 09 25 15.5
comp=E,162nm,19.1s,baz=106,slow=41
KLR Kul'dur 13.25 299 eP Pn 09 19 39.0 +0.5
KLR Kul'dur 13.25 299 ePN Pn 09 19 42.5 +4.0
KLR MLR MLR
comp=Z,163nm,15.0s
MA2 Magadan 15.50 2 LR LR 09 26 24.4
comp=Z,102nm,18.1s,baz=192,slow=40
ZEA Zeya 17.47 311 eP Pn 09 20 31.0 -2.8
ZEA Zeya 17.47 311 eP P 09 20 38.4 +3.6
ZEA MLR MLR
comp=Z,100nm,15.0s
KSRS Korea Array 17.66 255 LR LR 09 27 04.9
comp=Z,97nm,18.4s,baz=60,slow=36
SEY Seymchan 18.92 4 eP P 09 20 48.6 -2.1
YAK Yakutsk 21.39 334 LR LR 09 29 56.6
comp=Z,89nm,19.6s,baz=134,slow=39
BILL Bilibino 25.55 15 eP P 09 21 56.0 -2.3
BILL ePPP PPP 09 22 42.4
BILL e 09 25 28.2
BILL pmax pmax
comp=Z,3.0nm,0.8s
BILL MLR MLR
comp=Z,93nm,15.0s
HHC Hu-ho-hao-te 28.05 277 eP P 09 22 21.5 +0.3
HHC pP sP 09 22 31.5 +0.3
HHC pmax pmax
comp=Z,12nm,0.7s
HHC pmax pmax
comp=Z,61nm,4.5s
HHC LR LR
comp=N,97nm,10.2s
HHC LR LR
comp=E,140nm,9.2s
HHC LR LR
comp=Z,190nm,14.5s
H11N2 WAKE ISLAND Hy 28.30 144 T T 09 53 27.7
baz=334,slow=75,SNR=36
H11N1 WAKE ISLAND Hy 28.31 144 T T 09 53 28.4
baz=334,slow=75,SNR=26
H11N3 WAKE ISLAND Hy 28.32 144 T T 09 53 30.9
baz=334,slow=75,SNR=27
H11S1 WAKE ISLAND Hy 29.31 145 T T 09 54 45.1
baz=335,slow=76,SNR=56
H11S3 WAKE ISLAND Hy 29.32 145 T T 09 54 50.8
baz=335,slow=76,SNR=23
H11S2 WAKE ISLAND Hy 29.33 145 T T 09 54 47.0
baz=335,slow=76,SNR=28
ULN Ulaanbaatar 29.49 292 eP P 09 22 35.1 +1.0
ULN Ulaanbaatar 29.49 292 i P P 09 22 35.1 +1.0
ULN pmax pmax
comp=Z,4.0nm,1.0s
SONM Songino Array 29.94 293 P P 09 22 38.6 +0.6
SONM IAmb IAmb 09 22 39.1
comp=Z,3.5nm,1.2s
SONM Songino Array 29.94 293 P P 09 22 37.2 -0.8
comp=Z,2.1nm,1.0s,baz=73,slow=9.6,SNR=7.7
SONM LR LR 09 35 38.8
comp=Z,94nm,19.8s,baz=82,slow=39
comp=Z,2.1nm,1.0s
SONM Songino Array 29.94 293 eP P 09 22 38.8 +0.8
SONM pmax pmax
comp=Z,2.0nm,0.9s
GUMO Guam 30.69 189 LR LR 09 37 31.0
comp=Z,18nm,18.1s,baz=147,slow=40
H18K Honhosa River 35.34 35 P P 09 23 24.4 -0.4
H18K IAmb IAmb 09 23 41.0
comp=Z,7.2nm,1.1s
LZH Lanzhou 35.50 273 eP P 09 23 28.0 +1.3
LZH pP pP 09 23 36.3 +2.5
LZH pmax pmax
comp=Z,19nm,1.1s
J18K Innoko River 35.79 38 P P 09 23 28.1 -0.6
J18K IAmb IAmb 09 23 47.5
comp=Z,2.8nm,1.1s
C19K Lookout Ridge 35.84 28 P P 09 23 30.1 +0.9
F19K Shaleruckik Mo 35.91 32 P P 09 23 29.2 -0.5
F19K IAmb IAmb 09 23 30.2
comp=Z,5.8nm,1.3s
D19K Kuna River 36.18 30 P P 09 23 33.0 +0.9
H19K Roundabout Mou 36.19 35 P P 09 23 33.3 +1.2
E19K Redstone River 36.26 31 P P 09 23 33.3 +0.6
E19K IAmb IAmb 09 23 49.1
comp=Z,4.7nm,0.8s
O18K Koktuh Hills 36.28 44 P P 09 23 33.0 0.0
J19K Poorman 36.33 37 P P 09 23 34.1 +0.7
J19K IAmb IAmb 09 23 49.7
comp=Z,4.4nm,1.2s
L19K White Mountain 36.52 41 P P 09 23 35.6 +0.5
L19K IAmb IAmb 09 23 51.1
comp=Z,8.9nm,1.3s
F20K Avaraart Lake 36.74 32 P P 09 23 36.8 0.0
B20K Meade River 36.92 27 P P 09 23 37.3 -0.9
K20K Telida 36.96 39 P P 09 23 38.5 -0.3
K20K IAmb IAmb 09 23 51.0
comp=Z,7.4nm,1.5s
J20K Nowinta River 36.99 37 P P 09 23 37.9 -1.0
IMAR Indian Mountai 37.36 34 P P 09 23 42.6 +0.5
OHAK Old Harbor 37.38 49 P P 09 23 42.4 +0.1
F21K Alatna River 37.64 32 P P 09 23 44.3 -0.1
E21K Killik River 37.66 30 P P 09 23 44.4 -0.3
E21K IAmb IAmb 09 23 58.5
comp=Z,4.7nm,1.0s
B21K Ikpikpuk River 37.68 28 P P 09 23 44.6 -0.1
H21K Melozitna Rive 37.71 35 P P 09 23 45.3 +0.2
H21K IAmb IAmb 09 23 49.9
comp=Z,4.1nm,1.2s
KDAK Kodiak Island 37.72 48 P P 09 23 45.4 +0.2
KDAK Kodiak Island 37.72 48 P P 09 23 45.4 +0.2
KDAK pmax pmax
comp=Z,32nm,1.5s
SKT Skwentna 38.08 41 P P 09 23 46.2 -2.0
SKT IAmb IAmb 09 23 50.4
comp=Z,3.7nm,1.1s
D22K Ayikyak River 38.20 30 P P 09 23 47.2 -1.9
D22K IAmb IAmb 09 24 24.0
comp=Z,9.1nm,1.5s
G23K Bananza Creek 38.93 33 P P 09 23 57.5 +2.2
C23K Itkillik River 39.09 28 P P 09 23 57.3 +0.8
C23K IAmb IAmb 09 24 10.6
comp=Z,5.2nm,0.8s
I23K Minto, Yukon-K 39.11 36 P P 09 23 58.4 +1.6
TOLK Toolik Lake Re 39.29 30 P P 09 23 59.9 +1.6
TOLK IAmb IAmb 09 24 11.9
comp=Z,3.5nm,0.8s
RND Reindeer 39.31 39 P P 09 23 59.5 +1.0
RND IAmb IAmb 09 24 18.7
comp=Z,6.5nm,1.2s
RND Reindeer 39.31 39 P P 09 23 59.6 +1.0
RND pmax pmax
comp=Z,7.0nm,1.2s
GHO Glory Hole Cre 39.32 41 P P 09 23 57.9 -0.8
MDM Murphy Dome 39.59 36 P P 09 24 01.2 +0.4
SML Sawmill 39.60 41 P P 09 24 00.4 -0.6
SML IAmb IAmb 09 24 25.2
comp=Z,8.5nm,1.0s
D24K Happy Valley 39.62 30 P P 09 24 00.9 -0.1
D24K IAmb IAmb 09 24 06.3
comp=Z,4.4nm,0.8s
E24K Your Creek 39.64 31 P P 09 24 01.8 +0.6
E24K IAmb IAmb 09 24 15.2
comp=Z,3.6nm,0.8s
CCB Clear Creek Bu 39.77 37 P P 09 24 00.8 -1.4
F24K Squaw Lake 39.82 32 P P 09 24 02.7 -0.1
G24K Hadweenzic Riv 39.94 33 P P 09 24 04.5 +0.8
G24K IAmb IAmb 09 24 18.7
comp=Z,3.5nm,0.8s
ILAR Eielson Array 40.16 37 P P 09 24 04.9 -0.6
ILAR Eielson Array 40.16 37 P P 09 24 06.5 +0.9
comp=Z,0.3nm,0.6s,baz=257,slow=7.3,SNR=4.7
comp=Z,0.3nm,0.6s
IL03 Eielson Array 40.17 37 P P 09 24 04.1 -1.6
GLI Glacier Island 40.26 43 P P 09 24 06.1 -0.3
D25K Kavik River 40.50 29 P P 09 24 08.6 +0.2
D25K IAmb IAmb 09 24 21.8
comp=Z,3.3nm,0.7s
PRP Porcupine Dome 40.73 35 P P 09 24 10.4 +0.1
BMAR Burnt Mountain 41.09 32 P P 09 24 14.1 +0.8
SCRK Sand Creek 41.45 38 P P 09 24 15.7 -0.7
J26L Joseph Creek 41.60 37 P P 09 24 18.2 +0.6
DGZ Jazzator, Alta 41.74 300 eP P 09 24 19.1 +0.2
DGZ pmax pmax
comp=Z,7.0nm,2.5s
PZH PanZhiHua 42.16 262 P P 09 24 22.2 -0.4
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,150nm,5.0s
ZALV Zalesovo Beam 42.16 307 LR LR 09 43 05.1
comp=Z,70nm,18.7s,baz=47,slow=38
E27K Coleen River 42.22 31 P P 09 24 21.5 -1.0
D27M Malcolm River 42.42 30 P P 09 24 22.9 -1.2
L27K Beaver Creek, 42.51 39 P P 09 24 24.7 -0.1
BCAR Beaver Creek A 42.52 39 P P 09 24 25.4 +0.4
F28M Old Crow 42.90 32 P P 09 24 27.5 -0.5
E28M Babbage River 42.96 31 P P 09 24 28.1 -0.4
E28M IAmb IAmb 09 24 58.7
comp=Z,5.7nm,1.5s
CTGM Chitina Glacie 43.04 42 P P 09 24 28.6 -0.7
I28M Miner Creek 43.06 35 P P 09 24 30.6 +1.3
TABL Table Mountain 43.22 43 P P 09 24 32.5 +1.6
DAWY Dawson 43.46 37 P P 09 24 32.0 -0.5
DAWY IAmb IAmb 09 25 12.5
comp=Z,5.6nm,1.4s
WMQ Urumqi 43.57 292 eP P 09 24 36.6 +2.8
WMQ pmax pmax
comp=Z,30nm,0.6s
E29M Blow River 43.58 31 P P 09 24 33.1 -0.4
E29M IAmb IAmb 09 24 55.0
comp=Z,6.6nm,1.2s
H29M Whitestone 43.61 34 P P 09 24 33.8 +0.1
H29M IAmb IAmb 09 24 44.6
comp=Z,5.6nm,1.2s
G29M Pine Creek 43.67 33 P P 09 24 33.2 -1.0
G29M IAmb IAmb 09 24 49.1
comp=Z,4.0nm,1.0s
I29M Ogilvie Camp, 43.74 35 P P 09 24 34.9 +0.1
I29M IAmb IAmb 09 24 59.6
comp=Z,3.0nm,0.8s
M29M Somme Creek 44.13 39 P P 09 24 37.4 -0.6
M29M IAmb IAmb 09 24 46.6
comp=Z,5.2nm,1.4s
G30M tAoh Zraii Nji 44.37 33 P P 09 24 39.4 -0.5
G30M IAmb IAmb 09 24 42.1
comp=Z,6.7nm,1.4s
I30M Mount Dempster 44.57 35 P P 09 24 42.0 +0.5
I30M IAmb IAmb 09 25 06.1
comp=Z,5.7nm,1.1s
J30M Hart River 44.69 36 P P 09 24 44.6 +2.0
J30M IAmb IAmb 09 25 12.7
comp=Z,4.3nm,1.2s
G31M Satah River 45.14 33 P P 09 24 45.3 -0.5
INK Inuvik 45.20 31 P P 09 24 46.7 +0.4
INK IAmb IAmb 09 25 02.8
comp=Z,5.2nm,1.2s
INK Inuvik 45.20 31 P P 09 24 46.7 +0.4
INK pmax pmax
comp=Z,5.0nm,1.2s
MK31 Makanchi Array 45.95 298 P P 09 24 53.1 +0.5
MK31 IAmb IAmb 09 24 54.0
comp=Z,4.2nm,0.9s
MK31 Makanchi Array 45.95 298 c i P P 09 24 52.5 -0.1
MKAR Makanchi Array 45.95 298 P P 09 24 53.0 +0.4
MKAR Makanchi Array 45.95 298 P P 09 24 52.9 +0.2
comp=Z,3.7nm,0.8s,baz=71,slow=9.1,SNR=25
MKAR LR LR 09 45 33.5
comp=Z,159nm,18.2s,baz=88,slow=38
comp=Z,3.7nm,0.8s
KURK Kurchatov 46.76 304 P P 09 24 58.5 -0.4
KURK IAmb IAmb 09 25 25.0
comp=Z,4.4nm,1.4s
KURK Kurchatov 46.76 304 eP P 09 24 57.5 -1.4
KURK Kurchatov 46.76 304 i eP P 09 24 57.5 -1.4
KURK pmax pmax
comp=Z,2.0nm,1.0s
KURBB Kurchatov Arra 46.85 304 P P 09 24 59.6 0.0
comp=Z,1.6nm,0.2s,baz=66,slow=9.2,SNR=2.2
comp=Z,1.6nm,0.2s
BRVK Borovoye 50.66 310 eP P 09 25 28.0 -0.8
BRVK Borovoye 50.66 310 i eP P 09 25 28.0 -0.8
BRVK pmax pmax
comp=Z,7.0nm,4.0s
KK31 Karatay Array 55.07 299 P P 09 26 02.0 +0.4
KK31 IAmb IAmb 09 26 02.6
comp=Z,3.9nm,1.1s
KK31 Karatay Array 55.07 299 P P 09 26 02.0 +0.4
KK31 pmax pmax
comp=Z,4.0nm,1.1s
KKAR Karatay Array 55.07 299 P P 09 26 02.0 +0.5
KKAR IAmb IAmb 09 26 02.6
comp=Z,3.9nm,1.1s
KKAR Karatay Array 55.07 299 P P 09 26 01.9 +0.3
KKAR Karatay Array 55.07 299 P P 09 26 01.9 +0.3
KKAR pmax pmax
comp=Z,4.0nm,1.1s
ARU Arti 55.26 317 LR LR 09 51 59.5
comp=Z,98nm,18.6s,baz=336,slow=39
ARU Arti 55.26 317 c i P P 09 26 00.4 -2.2
ARU *PP sP 09 26 12.6 -0.5
ARU 09 28 01.1
ARU S S 09 33 42.2 -1.9
ARU SS SS 09 37 23.0 -4.9
ARU pmax pmax
comp=Z,4.0nm,1.2s
ABKAR Akbulak array 58.18 310 P P 09 26 23.7 +0.2
CHGR Chuyangaron 58.29 295 P P 09 26 24.9 +0.3
CHGR Chuyangaron 58.29 295 P P 09 26 24.9 +0.3
CHGR pmax pmax
comp=Z,18nm,1.2s
NIL Nilore 58.34 288 P P 09 26 25.5 +0.6
NIL Nilore 58.34 288 P P 09 26 25.5 +0.6
NIL pmax pmax
comp=Z,8.0nm,1.0s
SIMJ Simiganj 58.39 295 P P 09 26 25.7 +0.4
VALR Valaam 63.81 332 i eP P 09 27 00.8 -0.6
VALR pmax pmax
comp=Z,37nm,0.8s
FINES FINESS Array B 65.33 334 P P 09 27 10.1 -1.3
comp=Z,3.6nm,0.9s,baz=33,slow=10,SNR=6.7
comp=Z,3.6nm,0.9s
NVAR Mina Array Bea 65.90 59 P P 09 27 17.3 +1.5
comp=Z,0.2nm,0.6s,baz=289,slow=5.6,SNR=2.6
comp=Z,0.2nm,0.6s
OBN Obninsk 66.04 325 eP P 09 27 15.5 -0.5
OBN Obninsk 66.04 325 i P P 09 27 15.5 -0.5
OBN e 09 27 45.9
OBN e 09 29 40.8
OBN ePPP PPP 09 31 15.2
OBN pmax pmax
comp=Z,6.0nm,0.4s
OBN MLR MLR
comp=Z,36nm,17.0s
PDAR Pinedale Array 68.33 51 P P 09 27 31.9 +0.8
comp=Z,0.2nm,0.6s,baz=339,slow=2.2,SNR=2.8
comp=Z,0.2nm,0.6s
NB2 NORSAR Subarra 69.87 340 P P 09 27 39.5 -0.6
comp=Z,4.0nm,0.8s,baz=31,slow=6.5
NOA NORSAR Array B 69.87 340 P P 09 27 39.6 -0.6
comp=Z,2.8nm,0.8s,baz=32,slow=6.2,SNR=10.0
NOA LR LR 10 02 17.4
comp=Z,16nm,18.4s,baz=25,slow=40
comp=Z,2.8nm,0.8s
HFS Hagfors 70.01 338 P P 09 27 39.8 -1.1
comp=Z,3.0nm,0.7s,baz=69,slow=8.1,SNR=6.9
comp=Z,3.0nm,0.7s
KIV Kislovodsk 70.80 313 eP P 09 27 43.3 -2.9
KIV pmax pmax
comp=Z,4.0nm,1.1s
KIV MLR MLR
comp=Z,66nm,18.0s
KBZ Khabaz 70.84 313 P P 09 27 46.7 +0.4
comp=Z,2.2nm,0.8s,baz=13,slow=2.6,SNR=6.0
comp=Z,2.2nm,0.8s
KBZ Khabaz 70.84 313 eP P 09 27 46.9 +0.6
KBZ Khabaz 70.84 313 i eP P 09 27 46.9 +0.6
KBZ pmax pmax
comp=Z,2.0nm,0.8s
GNI Garni 72.28 309 i eP P 09 27 57.0 +1.7
GNI pmax pmax
comp=Z,30nm,1.0s
AKASG Malin Array Be 72.30 325 P P 09 27 54.2 -0.7
comp=Z,1.7nm,0.8s,baz=40,slow=6.1,SNR=4.9
comp=Z,1.7nm,0.8s
AKASG Malin Array Be 72.30 325 i P P 09 27 54.7 -0.2
AKASG pmax pmax
comp=Z,1.0nm,0.5s
AKBB Malin Array Si 72.30 325 i eP P 09 27 54.0 -0.9
AKBB pmax pmax
comp=Z,7.0nm,1.5s
CLL Collm 77.77 334 i P P 09 28 26.9 +0.4
MODS Modra-Piesok 78.82 330 eP P 09 28 33.8 +1.4
MODS Modra-Piesok 78.82 330 eP P 09 28 33.8 +1.4
KHC Kasperske Hory 79.46 332 i eP P 09 28 36.4 +0.5
KHC pmax pmax
comp=Z,7.0nm,0.9s
TXAR Lajitas Array 80.99 58 P P 09 28 45.5 +0.9
comp=Z,0.7nm,0.8s,baz=299,slow=3.7,SNR=8.3
comp=Z,0.7nm,0.8s

**IDC 07 09:18:41.1±2.8, 0°.04N×128°.91E, h0km, mb3.1/3, mbtmp3.2/3, MS3.4/1, Error ellipse: s-maj=205.6km s-min=29.2km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 20.56 | 165 | P | P | P | 09 23 20.4 | -1.2 |
| | 0.3nm,0.8s,baz=345,slow=12,SNR=1.9 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |
| ASAR | Alice Springs | 24.06 | 169 | P | P | P | 09 23 59.0 | +0.6 |
| | 0.7nm,0.6s,baz=340,slow=9.4,SNR=13 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |
| JOW | Kunigami | 26.64 | 359 | LR | LR | LR | 09 35 49.4 | |
| | comp=Z,80nm,18.7s,baz=118,slow=39 | | | | | | | |
| MKAR | Makanchi Array | 61.81 | 325 | P | P | P | 09 29 01.8 | -0.1 |
| | 0.1nm,0.4s,baz=110,slow=6.3,SNR=1.5 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |

*NOU **07** 09:39:37.9, 41°.88S×174°.53E, h15km, MLv3.5/8, Cook Strait, New Zealand*
*WEL **07** 09:39:38.8±0.3, 42°.3S±2°×174°.4E±°, h8km±2km, M3.0/18, ML3.3/18, MLv3.0/18, Error ellipse: s-maj=0.0km s-min=0.0km az=153.5, confirmed*

**ISC 07 09:39:38.5±0.8, 41°.78S±0°.03×174°.38E±0°.02, h16km±6km, n93, σ1°01/122, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| CMWZ | Cape Campbell | 0.13 | 285 | P | Pg | Pg | 09 39 42.0 | -0.3 |
| CMWZ | | | | S | Sg | Sg | 09 39 45.0 | +0.2 |
| WDFS | Ward Fire Stat | 0.18 | 256 | P | Pg | Pg | 09 39 43.3 | +0.3 |
| WDFS | | | | S | Sg | Sg | 09 39 46.9 | +0.9 |
| SEDS | Seddon Fire St | 0.25 | 296 | P | Pg | Pg | 09 39 43.5 | -0.6 |
| SEDS | | | | S | Sg | Sg | 09 39 47.5 | -0.4 |
| BSWZ | Blackbirch Sta | 0.38 | 280 | P | Pg | Pg | 09 39 45.8 | -0.6 |
| BSWZ | | | | S | Sg | Sg | 09 39 51.2 | -0.4 |
| TUWZ | Tuamarina | 0.48 | 317 | P | Pg | Pg | 09 39 47.6 | -0.5 |
| TUWZ | | | | S | Sg | Sg | 09 39 54.0 | -0.6 |
| BWRS | Waikakaho Road | 0.49 | 314 | P | Pg | Pg | 09 39 47.3 | -1.0 |
| BWRS | | | | S | Sg | Sg | 09 39 53.6 | -1.4 |
| BHW | Baring Head | 0.53 | 45 | P | Pb | Pb | 09 39 49.5 | +0.2 |
| SNZO | South Karori | 0.53 | 28 | P | Pb | Pb | 09 39 49.5 | +0.1 |
| WNAS | Wellington Int | 0.56 | 36 | S | Sg | Sg | 09 39 56.6 | -0.4 |
| TRTW | Torrens Terrac | 0.57 | 32 | P | Pg | Pg | 09 39 48.7 | -1.0 |
| TRTW | | | | S | Sg | Sg | 09 39 56.8 | -0.4 |
| WNKS | Wellington Kar | 0.57 | 29 | P | Pg | Pg | 09 39 48.2 | -1.5 |
| QCCS | Picton Queen C | 0.57 | 332 | P | Pg | Pg | 09 39 46.9 | -2.8 |
| QCCS | | | | S | Sg | Sg | 09 39 53.9 | -3.5 |
| MKVS | Makara Village | 0.57 | 26 | P | Pg | Pg | 09 39 48.5 | -1.3 |
| SEAW | Seatoun School | 0.57 | 37 | S | Sg | Sg | 09 39 57.0 | -0.4 |
| MISS | Wellington Mir | 0.57 | 35 | S | Sg | Sg | 09 39 58.4 | +0.4 |
| TCW | Tory Channel | 0.58 | 352 | P | Pg | Pg | 09 39 49.0 | -0.9 |
| TCW | | | | S | Sg | Sg | 09 39 56.0 | -1.6 |
| WEL | Wellington | 0.58 | 31 | P | Pb | Pb | 09 39 50.1 | -0.1 |
| WEL | | | | S | Sb | Sb | 09 39 58.6 | +0.5 |
| FKPS | Wellington Fra | 0.58 | 31 | S | Sg | Sg | 09 39 56.8 | -0.8 |
| BOWS | Bowen St Turnb | 0.58 | 31 | S | Sg | Sg | 09 39 57.8 | -0.1 |
| VUWS | Victoria Unive | 0.58 | 31 | P | Pg | Pg | 09 39 48.9 | -1.2 |
| VUWS | | | | S | Sg | Sg | 09 39 57.3 | -0.5 |
| POTA | Wellington Pot | 0.59 | 30 | P | Pg | Pg | 09 39 50.0 | -0.2 |
| MKBS | Makara Bunker | 0.60 | 23 | P | Pg | Pg | 09 39 50.3 | -0.2 |
| MKBS | | | | S | Sg | Sg | 09 39 58.6 | +0.1 |
| SOMS | Somes Island | 0.64 | 35 | P | Pb | Pb | 09 39 51.1 | -0.1 |
| NEWS | Newlands | 0.64 | 31 | P | Pb | Pb | 09 39 51.2 | -0.1 |
| PHHS | Point Howard | 0.66 | 37 | P | Pb | Pb | 09 39 51.6 | 0.0 |
| HAVS | Havelock | 0.68 | 319 | P | Pg | Pg | 09 39 50.4 | -1.4 |
| PLWZ | Palliser | 0.69 | 72 | P | Pn | Pn | 09 39 53.5 | -0.1 |
| PLWZ | | | | S | Sn | Sn | 09 40 04.8 | +0.8 |
| MSWZ | Moikau Station | 0.75 | 61 | P | Pn | Pn | 09 39 54.2 | -0.2 |
| MSWZ | | | | S | Sn | Sn | 09 40 06.3 | +0.9 |
| CAW | Cannon Point | 0.85 | 38 | P | Pb | Pb | 09 39 54.9 | 0.0 |
| CAW | | | | S | Sb | Sb | 09 40 06.4 | +0.4 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PAWZ** | **Paruwai Farm** | **0.88** | **63** | P | | **Pn** | **09 39 56.1** | **-0.2** |
| PAWZ | | | | S | | **Sn** | **09 40 09.4** | **+0.6** |
| **KHZ** | **Kahutara** | **0.89** | **224** | P | | **Pb** | **09 39 56.5** | **+1.0** |
| **KHZ** | **Kahutara** | **0.89** | **224** | P | | **Pb** | **09 39 56.3** | **+0.8** |
| KHZ | | | | S | | **Sn** | **09 40 09.3** | **+0.4** |
| **NNZ** | **Nelson** | **0.94** | **307** | P | | **Pg** | **09 39 55.2** | **-1.5** |
| **KIW** | **Kapiti Island** | **1.00** | **24** | P | | **Pg** | **09 39 57.1** | **-0.8** |
| KIW | | | | S | | **Sb** | **09 40 10.7** | **+0.3** |
| **DUWZ** | **D'Urville Isla** | **1.04** | **340** | P | | **Pb** | **09 39 56.9** | **-1.2** |
| DUWZ | | | | S | | **Sb** | **09 40 09.7** | **-1.7** |
| **MTW** | **Mount Morrison** | **1.05** | **54** | P | | **Pg** | **09 39 58.2** | **-0.6** |
| MTW | | | | S | | **Sn** | **09 40 13.6** | **+0.8** |
| **TRWZ** | **Traveller** | **1.05** | **69** | P | | **Pg** | **09 39 58.3** | **-0.6** |
| TRWZ | | | | S | | **Sn** | **09 40 13.7** | **+0.8** |
| **THZ** | **Tophouse** | **1.10** | **271** | P | | **Pb** | **09 39 58.8** | **-0.4** |
| THZ | | | | S | | **Sb** | **09 40 14.8** | **+1.4** |
| **OGWZ** | **Otaki Gorge** | **1.13** | **32** | P | | **Pb** | **09 39 59.5** | **-0.2** |
| OGWZ | | | | S | | **Sg** | **09 40 14.6** | **-0.6** |
| **HOWZ** | **Holdsworth Sta** | **1.23** | **44** | P | | **Pn** | **09 40 00.8** | **-0.2** |
| HOWZ | | | | S | | **Sn** | **09 40 18.0** | **+0.7** |
| **MRNZ** | **Matariki Terra** | **1.27** | **287** | P | | **Pn** | **09 40 01.8** | **+0.1** |
| MRNZ | | | | S | | **Sb** | **09 40 18.8** | **+0.6** |
| **TKNZ** | **Takaka Hill** | **1.30** | **305** | P | | **Pn** | **09 40 01.7** | **-0.3** |
| TKNZ | | | | S | | **Sb** | **09 40 19.4** | **+0.3** |
| **TMWZ** | **Te Maipa** | **1.32** | **60** | P | | **Pn** | **09 40 01.8** | **-0.5** |
| **MRZ** | **Mangatainoka R** | **1.44** | **39** | P | | **Pn** | **09 40 03.7** | **-0.2** |
| MRZ | | | | S | | **Sb** | **09 40 23.3** | **+0.3** |
| **TIWZ** | **Tintock** | **1.52** | **49** | P | | **Pn** | **09 40 04.5** | **-0.5** |
| TIWZ | | | | S | | **Sn** | **09 40 24.6** | **+0.2** |
| **GVZ** | **Greta Valley S** | **1.55** | **220** | P | | **Pn** | **09 40 05.2** | **-0.2** |
| **QRZ** | **Quartz Range** | **1.69** | **304** | P | | **Pn** | **09 40 08.4** | **+1.1** |
| **QRZ** | **Quartz Range** | **1.69** | **304** | P | | **Pn** | **09 40 08.1** | **+0.8** |
| QRZ | | | | S | | **Sn** | **09 40 29.6** | **+1.0** |
| **PRWZ** | **Pori Road** | **1.72** | **45** | P | | **Pn** | **09 40 07.3** | **-0.4** |
| **POWZ** | **Post Office Ro** | **1.74** | **38** | P | | **Pn** | **09 40 07.9** | **-0.1** |
| **BFZ** | **Birch Farm** | **1.79** | **53** | P | | **Pn** | **09 40 07.5** | **-1.1** |
| **BFZ** | **Birch Farm** | **1.79** | **53** | P | | **Pn** | **09 40 07.5** | **-1.1** |
| **LTZ** | **Lake Taylor** | **1.86** | **237** | P | | **Pn** | **09 40 09.5** | **-0.2** |
| **DSZ** | **Denniston Nort** | **1.93** | **270** | P | | **Pn** | **09 40 11.4** | **+0.8** |
| **DVHZ** | **Dannevirke** | **2.01** | **43** | P | | **Pn** | **09 40 10.7** | **-1.0** |
| **ANWZ** | **Angora Road** | **2.06** | **51** | P | | **Pg** | **09 40 18.9** | **+0.8** |
| **WAZ** | **Wanganui** | **2.08** | **13** | P | | **Pb** | **09 40 16.6** | **+0.8** |
| **TSZ** | **Takapari Road** | **2.10** | **35** | P | | **Pn** | **09 40 12.6** | **-0.4** |
| **MQZ** | **McQueen's Vall** | **2.31** | **213** | P | | **Pn** | **09 40 14.2** | **-1.6** |
| **OXZ** | **Oxford** | **2.32** | **227** | P | | **Pn** | **09 40 14.7** | **-1.2** |
| **LREZ** | **Lake Rotokare** | **2.32** | **0** | P | | **Pg** | **09 40 22.3** | **-0.7** |
| **WPHZ** | **Waipukurau** | **2.32** | **43** | P | | **Pb** | **09 40 18.3** | **-1.6** |
| **PNHZ** | **Pukenui** | **2.32** | **37** | P | | **Pn** | **09 40 15.3** | **-0.7** |
| **INZ** | **Inchbonnie** | **2.37** | **246** | P | | **Pn** | **09 40 15.8** | **+0.1** |
| **NBEZ** | **Newall Road No** | **2.54** | **351** | P | | **Pb** | **09 40 25.3** | **+1.6** |
| **MOVZ** | **Moawhango** | **2.59** | **24** | P | | **Pb** | **09 40 24.2** | **-0.4** |
| **KRHZ** | **Kereru** | **2.62** | **36** | P | | **Pn** | **09 40 19.0** | **-1.1** |
| **WNVZ** | **Wahianoa** | **2.62** | **21** | P | | **Pn** | **09 40 21.1** | **+0.8** |
| **BHHZ** | **Black Hill Sta** | **2.62** | **30** | P | | **Pn** | **09 40 22.0** | **+1.7** |
| **TRVZ** | **Turoa** | **2.64** | **20** | P | | **Pb** | **09 40 26.8** | **+1.4** |
| **WHVZ** | **Whangaehu Hut** | **2.66** | **21** | P | | **Pn** | **09 40 22.8** | **+1.9** |
| **VRZ** | **Vera Road** | **2.67** | **6** | P | | **Pn** | **09 40 23.3** | **+2.5** |
| **FWVZ** | **Far West T-bar** | **2.68** | **20** | P | | **Pb** | **09 40 26.4** | **+0.2** |
| **COVZ** | **Chateau Observ** | **2.73** | **19** | P | | **Pb** | **09 40 27.5** | **+0.6** |
| **NGZ** | **Ngauruhoe** | **2.77** | **20** | P | | **Pb** | **09 40 29.1** | **+1.5** |
| **SNVZ** | **South Ngauruho** | **2.77** | **21** | P | | **Pn** | **09 40 24.8** | **+2.5** |
| **OTVZ** | **Oturere** | **2.79** | **21** | P | | **Pb** | **09 40 28.3** | **+0.1** |
| **NNVZ** | **North Ngauruho** | **2.81** | **20** | P | | **Pb** | **09 40 29.8** | **+1.4** |
| **WTVZ** | **West Tongariro** | **2.82** | **20** | P | | **Pb** | **09 40 29.1** | **+0.6** |
| **ETVZ** | **East Tongariro** | **2.83** | **21** | P | | **Pb** | **09 40 29.0** | **+0.3** |
| **TMVZ** | **Te Maari** | **2.85** | **21** | P | | **Pb** | **09 40 29.8** | **+0.7** |
| **KRVZ** | **Karewarewa** | **2.85** | **20** | P | | **Pb** | **09 40 29.6** | **+0.5** |
| **NTVZ** | **North Tongarir** | **2.86** | **21** | P | | **Pb** | **09 40 24.6** | **+1.1** |
| **WVZ** | **Waitaha Valley** | **2.99** | **243** | P | | **Pb** | **09 40 31.1** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **3.07** | **32** | P | | **Pn** | **09 40 26.6** | **+0.2** |
| **RPZ** | **Rata Peaks** | **3.12** | **231** | P | | **Pn** | **09 40 26.5** | **-0.5** |
| **RPZ** | **Rata Peaks** | **3.12** | **231** | P | | **Pn** | **09 40 26.3** | **-0.7** |
| **HIZ** | **Hauiti** | **3.29** | **7** | P | | **Pn** | **09 40 30.9** | **+1.6** |
| **HIZ** | **Hauiti** | **3.29** | **7** | P | | **Pn** | **09 40 31.7** | **+2.4** |
| **TMZ** | **Timaru** | **3.59** | **222** | P | | **Pn** | **09 40 32.5** | **-1.0** |
| **ODZ** | **Otahua Downs** | **4.25** | **219** | P | | **Pn** | **09 40 41.6** | **-0.9** |
| **ODZ** | **Otahua Downs** | **4.25** | **219** | P | | **Pn** | **09 40 40.8** | **-1.6** |
| **RIZ** | **Raoul Island** | **13.98** | **29** | P | | **Pn** | **09 42 56.3** | **+0.4** |

**SJA 07 09:44:27.5±0.6, 22°.56S×66°.05W, h276km±5km, ML3.5, MW3.3, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YJA** | **Yavi** | **0.62** | **53** | *eP* | Pn | 09 45 05.0 | +0.7 |
| YJA | | | | *eS* | S | 09 45 32.0 | -1.3 |
| **AZAP** | **Zapla** | **1.89** | **152** | *eP* | Pn | 09 45 12.0 | +0.5 |
| **AF01** | **San Pedro de A** | **2.00** | **258** | *eP* | Pn | 09 45 13.9 | +1.4 |
| **SLA** | **San Lorenzo** | **2.21** | **167** | *eP* | Pn | 09 45 14.7 | +0.5 |
| **ALOL** | **LOMAS DE OLMED** | **2.28** | **124** | *eP* | Pn | 09 45 15.7 | +1.1 |
| **LVC** | **Limon Verde** | **2.64** | **268** | *eP* | Pn | 09 45 19.0 | +0.5 |
| LVC | | | | *eS* | S | 09 45 56.8 | -2.1 |
| **FSA** | **Cafayete** | **3.54** | **179** | *eP* | Pn | 09 45 27.8 | +0.3 |
| **PB04** | **IPOC Station P** | **3.80** | **273** | *eP* | Pn | 09 45 30.6 | +0.2 |
| PB04 | | | | *eS* | S | 09 46 16.7 | -3.9 |
| PB04 | | | | IAML | | 09 46 20.6 | |
| | comp=Z,43nm,0.2s | | | | | | |
| **GO01** | **Chusmiza** | **4.11** | **314** | *eP* | Pn | 09 45 36.5 | +2.2 |
| GO01 | | | | *eS* | S | 09 46 26.9 | -0.6 |
| **HMBC** | **Humberstone** | **4.23** | **302** | *eP* | Pn | 09 45 35.3 | -0.1 |
| HMBC | | | | *eS* | S | 09 46 25.9 | -3.6 |
| HMBC | | | | IAML | | 09 46 26.9 | |
| | comp=Z,29nm,0.5s | | | | | | |
| **TA01** | **Diego Aracena** | **4.32** | **296** | *eP* | Pn | 09 45 36.7 | +0.4 |
| TA01 | | | | *eS* | S | 09 46 27.3 | -3.9 |
| TA01 | | | | IAML | | 09 46 32.6 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **PB14** | **IPOC Station P** | **4.49** | **242** | *eP* | Pn | 09 45 38.6 | +0.1 |
| PB14 | | | | IAML | | 09 46 35.2 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **AC01** | **Pan de Azucar** | **5.48** | **228** | *eP* | Pn | 09 45 49.3 | -0.5 |
| AC01 | | | | *eS* | S | 09 46 51.7 | -4.2 |
| AC01 | | | | IAML | | 09 46 52.2 | |
| | comp=Z,22nm,1.2s | | | | | | |

*IDC **07** 09:48:59.5±1.2, 8°.20S×116°.84E, h0km, mb4.0/5, mbtmp4.1/6, ML3.8/1, MS3.0/2, Error ellipse: s-maj=25.8km s-min=19.1km az=83.0*
*NEIC **07** 09:49:00.7±2.7, 8°.72S±0°.08×116°.28E±0°.06, h10km±1km, mb4.5/19, Error ellipse: s-maj=13.6km s-min=8.7km az=19.0*
*DJA **07** 09:49:01.6±0.2, 8°.5S±3°×117°.7E±°, h10km, M4.5/10, mb4.9/1, MLv4.4/10*

**ISC 07 09:48:59.3±1.5, 8°.19S±0°.04×116°.71E±0°.03, h3km±11km, n51, σ1°87/52, mb4.3/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.57** | **163** | P | **Pb** | **09 49 12.2** | **+0.2** |
| TWSI | | | | S | **Sb** | **09 49 20.6** | **0.0** |
| **PLAI** | **Plampang** | **1.23** | **121** | P | **Pg** | **09 49 24.6** | **+1.6** |
| PLAI | | | | S | **Sn** | **09 49 42.4** | **+1.8** |
| **SRBI** | **Singaraja** | **1.49** | **274** | P | **Pn** | **09 49 27.0** | **0.0** |
| SRBI | | | | S | **Sn** | **09 49 46.9** | **0.0** |
| **DNP** | **Denpasar** | **1.56** | **252** | P | **Pb** | **09 49 29.3** | **+0.3** |
| DNP | | | | S | **Sg** | **09 49 51.1** | **+1.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.55** | **263** | Pn | Pn | 09 49 36.0 | -5.6 |
| JAGI | | | | Sn | Sn | 09 50 02.7 | -10 |
| **JAGI** | **Jajag, Banyuwa** | **2.55** | **263** | P | **Pn** | **09 49 40.6** | **-1.0** |
| JAGI | | | | S | **Sb** | **09 50 15.9** | **-1.7** |
| **BSSI** | **Bau Bau, Buton** | **4.26** | **62** | P | **Sn** | **09 50 05.1** | **+0.4** |
| BSSI | | | | S | **Sn** | **09 50 56.1** | **+0.6** |
| **BASI** | **Baing, Sumba** | **4.32** | **118** | P | **Pn** | **09 50 07.5** | **+1.6** |
| BASI | | | | S | **Sn** | **09 50 59.9** | **+3.1** |
| **KAPI** | **Kappang** | **4.36** | **44** | Pn | **Pb** | **09 50 14.5** | **-2.2** |
| **KAPI** | **Kappang** | **4.36** | **44** | Pn | **Pn** | **09 50 06.9** | **+0.4** |
| | 5.7nm,0.3s,baz=182,slow=2.6,SNR=14 | | | | | | |
| KAPI | | | | Sn | **Sn** | **09 50 58.0** | **+0.1** |
| | 9.5nm,0.3s,baz=129,slow=16,SNR=3.6 | | | | | | |
| KAPI | | | | Lg | Lg | 09 51 15.0 | |
| | 5.6nm,0.3s,baz=257,slow=18,SNR=1.4 | | | | | | |
| KAPI | | | | LR | LR | 09 51 59.0 | |
| | comp=Z,124nm,20.1s,baz=208,slow=42 13nm,0.2s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.86** | **272** | P | **Pn** | **09 50 14.1** | **+0.7** |
| PWJI | | | | S | **Sn** | **09 51 13.3** | **+3.0** |
| **MMRI** | **Maumere** | **5.48** | **95** | Pn | Pn | 09 50 27.3 | +5.3 |
| **UGM** | **Wanagama** | **6.14** | **272** | Pn | **Pn** | **09 50 27.6** | **-3.4** |
| **UGM** | **Wanagama** | **6.14** | **272** | P | **Pn** | **09 50 32.4** | **+1.4** |
| **SMRI** | **Semarang** | **6.32** | **280** | Pn | **Pn** | **09 50 30.6** | **-2.9** |
| **FITZ** | **Fitzroy Crossi** | **13.13** | **139** | Pn | **Pn** | **09 52 06.6** | **-0.3** |
| **MBWA** | **Marble Bar** | **13.22** | **168** | | **Pn** | **09 52 03.8** | **-4.3** |
| **MYLDM** | **Lahad Datu** | **13.40** | **8** | Pn | **P** | **09 52 17.8** | **-2.4** |
| **PSA00** | **Pilbara Seismi** | **13.65** | **168** | Pn | Pn | 09 52 07.0 | -6.9 |
| **TNTI** | **Ternate** | **13.86** | **51** | Pn | **P** | **09 52 27.6** | **+2.3** |
| **KNRA** | **Kununurra** | **13.94** | **123** | Pn | **Pn** | **09 52 20.3** | **+2.4** |
| **MNAI** | **Manna** | **14.19** | **285** | Pn | **Pn** | **09 52 18.6** | **-2.8** |
| **SAUI** | **Saumlaki** | **14.44** | **90** | Pn | **P** | **09 52 30.9** | **-0.9** |
| **MTN** | **Manton Dam** | **14.91** | **109** | Pn | **Pn** | **09 52 33.1** | **+1.9** |
| MTN | | | | IAmb | IAmb | 09 53 13.8 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.64** | **126** | P | **P** | **09 53 40.5** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 09 53 49.0 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.68** | **126** | P | **P** | **09 53 40.8** | **+0.1** |
| **WRA** | **Warramunga Arr** | **20.68** | **126** | P | **P** | **09 53 40.9** | **+0.2** |
| | comp=Z,8.5nm,0.7s,baz=299,slow=12,SNR=35 comp=Z,8.5nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.69** | **126** | P | **P** | **09 53 40.8** | **0.0** |
| WRAB | | | | IAmb | IAmb | 09 53 54.1 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.69** | **126** | P | **P** | **09 53 40.0** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 09 53 54.1 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.85** | **126** | P | **P** | **09 53 42.9** | **+0.3** |
| WR0 | | | | IAmb | IAmb | 09 53 48.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.55** | **135** | P | **P** | **09 54 00.2** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.55** | **135** | P | **P** | **09 53 58.8** | **-1.9** |
| **ASAR** | **Alice Springs** | **22.55** | **135** | P | **P** | **09 54 00.9** | **+0.1** |
| | comp=Z,5.5nm,0.7s,baz=313,slow=8.7,SNR=28 comp=Z,5.5nm,0.7s | | | | | | |
| **COEN** | **Coen** | **26.58** | **105** | P | **P** | **09 54 41.1** | **+2.1** |
| COEN | | | | IAmb | IAmb | 09 55 11.3 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.75** | **327** | LR | LR | 10 09 27.9 | |
| | comp=Z,32nm,18.3s,baz=195,slow=39 | | | | | | |
| **YHNB** | **Yeheng** | **32.97** | **8** | P | P | 09 55 41.2 | +5.6 |
| **STKA** | **Stephens Creek** | **33.03** | **139** | P | **P** | **09 55 34.4** | **-1.7** |
| STKA | | | | IAmb | IAmb | 09 55 42.3 | |
| | comp=Z,3.9nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **33.03** | **139** | P | **P** | **09 55 34.4** | **-1.7** |
| | comp=Z,3.0nm,0.8s,baz=299,slow=11,SNR=4.4 comp=Z,3.0nm,0.8s | | | | | | |
| **LHI** | **Lord Howe Isla** | **45.70** | **127** | P | **P** | **09 57 19.9** | **-1.9** |
| **INCN** | **Inchon** | **46.37** | **11** | P | **P** | **09 57 29.9** | **+2.9** |
| **KSAR** | **Wonju Array Be** | **46.58** | **12** | P | P | 09 57 33.6 | +5.1 |
| **KS19** | **Wonju Array Si** | **46.63** | **12** | P | **P** | **09 57 33.1** | **+4.1** |
| **MAJO** | **Matsushiro** | **48.86** | **23** | P | P | 09 57 52.6 | +6.2 |
| MAJO | | | | IAmb | IAmb | 09 58 10.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **48.86** | **23** | P | P | 09 57 52.6 | +6.3 |
| MJB9 | | | | IAmb | IAmb | 09 57 57.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **09 58 44.0** | **+1.0** |
| | comp=Z,1.4nm,0.9s,baz=168,slow=7.4,SNR=2.6 comp=Z,1.4nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **62.72** | **334** | P | **P** | **09 59 26.5** | **+0.8** |
| **MKAR** | **Makanchi Array** | **62.72** | **334** | P | **P** | **09 59 26.3** | **+0.6** |
| **MKAR** | **Makanchi Array** | **62.72** | **334** | P | **P** | **09 59 26.6** | **+0.9** |
| | comp=Z,0.6nm,0.7s,baz=125,slow=7.6,SNR=6.3 comp=Z,0.6nm,0.7s | | | | | | |
| **SBA** | **Scott Base** | **74.16** | **170** | P | **P** | **10 00 33.5** | **-3.2** |
| SBA | | | | IAmb | IAmb | 10 00 42.2 | |
| | comp=Z,5.8nm,1.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.61** | **326** | P | **P** | **10 00 46.9** | **+1.3** |
| **CPUP** | **Villa Florida** | **145.21** | **189** | PKPbc | **PKPab** | **10 08 39.2** | **+0.3** |
| | comp=Z,1.0nm,0.4s,baz=276,slow=3.1,SNR=7.0 | | | | | | |

*NNC **07** 09:59:55.3±1.1, 51°.45N×75°.67E, h0km, mb3.1, mpv2.7, Error ellipse: s-maj=11.7km s-min=6.3km az=13.0, Suspected Mining explosion.*
*IDC **07** 09:59:57.4±3.7, 51°.49N×75°.81E, h0km, mbtmp2.8/2, ML2.3/2, Error ellipse: s-maj=29.9km s-min=23.2km az=83.0*

**ISC 07 09:59:55.9±1.0, 51°.38N±0°.07×75°.67E±0°.06, h0km, n9, σ1°72/12, 6C-4D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **1.96** | **112** | Pg | **Pn** | **10 00 31.6** | **+1.3** |
| | 0.9nm,0.3s,baz=297,slow=18,SNR=25 | | | | | | |
| KURBB | | | | Lg | Lg | 10 00 58.9 | |
| | 1.0nm,0.3s,baz=297,slow=31,SNR=9.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **1.96** | **112** | ⇓Pg | **Pn** | **10 00 31.6** | **+1.3** |
| | 4.9nm,0.2s,baz=302,slow=16 | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 10 00 59.8 | |
| | 15nm,0.4s,baz=307,slow=36 | | | | | | |
| **KURK** | **Kurchatov** | **1.98** | **109** | ⇓Pg | **Pn** | **10 00 31.3** | **+0.7** |
| | 3.0nm,0.4s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 10 00 59.5 | |
| | 5.1nm,0.5s | | | | | | |
| **BVA0** | **Borovoye Array** | **3.64** | **299** | ⇑Pg | **Pb** | **10 01 00.6** | **-0.6** |
| | 0.8nm,0.5s,baz=123,slow=14,SNR=5.2 | | | | | | |
| BVA0 | | | | ⇓Sn | **Sn** | **10 01 37.3** | **0.0** |
| | 0.6nm,0.3s | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 10 01 48.8 | |
| | 1.5nm,0.3s,baz=104,slow=24,SNR=4.6 | | | | | | |
| **OTUK** | **Ortayu** | **3.81** | **216** | Pg | **Pg** | **10 01 07.8** | **-1.1** |
| | 0.8nm,0.6s | | | | | | |
| OTUK | | | | Sn | **Sn** | **10 01 42.6** | **+1.2** |
| | 0.8nm,0.4s | | | | | | |
| OTUK | | | | Lg | Lg | 10 01 56.5 | |
| | 0.9nm,0.2s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.13** | **62** | I | I | 10 33 26.8 | |
| | baz=249,slow=326,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.13** | **62** | Pn | **Pn** | **10 01 29.1** | **+1.5** |
| | 0.4nm,0.3s,baz=258,slow=14,SNR=4.2 1.1nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **6.32** | **134** | ⇓Pg | **Pg** | **10 01 54.2** | **-2.8** |
| | 0.1nm,0.2s,baz=5.6,slow=10,SNR=4.6 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **10 02 42.9** | **-0.3** |
| | 0.3nm,0.4s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 10 03 12.9 | |
| | 0.8nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **6.32** | **134** | Pn | **Pn** | **10 01 31.9** | **+1.5** |
| | 0.1nm,0.3s,baz=310,slow=9.3,SNR=2.2 | | | | | | |
| MKAR | | | | Sn | **Sn** | **10 02 46.0** | **+2.7** |
| | 0.2nm,0.3s,baz=306,slow=18,SNR=2.1 | | | | | | |
| MKAR | | | | Lg | Lg | 10 03 16.7 | |
| | 0.4nm,0.3s,baz=316,slow=29,SNR=5.8 0.1nm,0.3s | | | | | | |

**NEIC 07 10:02:04.7±1.2, 32°.95N±0°.02×100°.90W±0°.02, h2km±7km, mb_Lg2.5/76, Error ellipse: s-maj=3.2km s-min=2.6km az=159.0, Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SN05** | **Snyder 5** | **0.07** | **169** | | Pg | 10 02 05.9 | -0.2 |
| SN05 | | | | Sg | Sg | 10 02 07.2 | +0.1 |
| **SN07** | **Snyder 07** | **0.14** | **3** | Pg | Pg | 10 02 07.3 | -0.2 |
| SN07 | | | | Sg | Sg | 10 02 08.7 | -0.7 |
| **POST** | **Post** | **0.52** | **283** | | Pg | 10 02 14.1 | -0.5 |
| POST | | | | Sg | Sg | 10 02 21.0 | -0.3 |
| **DKNS** | **Dickens** | **0.72** | **359** | Pg | Pg | 10 02 17.6 | -0.8 |
| DKNS | | | | Sg | Sg | 10 02 27.4 | -0.3 |
| **APMT** | **Aspermont** | **0.75** | **60** | | Pg | 10 02 18.6 | -0.6 |
| APMT | | | | Sg | Sg | 10 02 28.7 | -0.2 |
| **SGCY** | **Sterling City** | **1.05** | **191** | | Pg | 10 02 23.7 | -1.1 |
| SGCY | | | | Sg | Sg | 10 02 37.5 | -0.9 |
| **ABTX** | **Abilene, Hawle** | **1.11** | **107** | | Pg | 10 02 25.0 | -0.9 |
| **ODSA** | **Odessa** | **1.62** | **240** | | Pn | 10 02 32.9 | -1.4 |
| ODSA | | | | | Pb | 10 02 33.1 | -2.2 |
| **MSTX** | **Muleshoe** | **1.87** | **304** | | Pn | 10 02 37.5 | -0.2 |
| **OZNA** | **Ozona** | **2.03** | **185** | | Pn | 10 02 39.3 | -0.7 |
| **AMTX** | **Amarillo** | **2.04** | **342** | | Pn | 10 02 41.0 | +0.9 |
| **PLPT** | **Palo Pinto** | **2.18** | **93** | | Pn | 10 02 41.3 | -0.6 |
| **WTFS** | **Witchita Falls** | **2.20** | **68** | | Pn | 10 02 41.4 | -0.8 |
| **SMWD** | **Samnorwood** | **2.22** | **14** | Pn | Pn | 10 02 42.0 | -0.5 |
| **MNHN** | **Monahans** | **2.25** | **225** | | Pn | 10 02 42.4 | -0.6 |
| **BRDY** | **Brady** | **2.31** | **135** | Pn | Pn | 10 02 44.0 | +0.1 |
| **FW03** | **Perrin-Whitt E** | **2.38** | **87** | Pn | Pn | 10 02 44.8 | 0.0 |
| **WMOK** | **Wichita Mounta** | **2.51** | **44** | | Pn | 10 02 46.6 | +0.1 |
| **FW07** | **Weatherford** | **2.63** | **95** | Pn | Pn | 10 02 48.2 | 0.0 |
| FW07 | | | | IAmb_Lg | | 10 03 32.9 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **2.63** | **159** | Pn | Pn | 10 02 48.2 | 0.0 |
| **FW06** | **Azle** | **2.81** | **89** | Pn | Pn | 10 02 50.3 | -0.4 |
| **PECS** | **Pecos** | **2.97** | **239** | Pn | Pn | 10 02 51.9 | -0.9 |
| **FW13** | **Cleburne** | **2.99** | **101** | Pn | Pn | 10 02 53.0 | 0.0 |
| FW13 | | | | IAmb_Lg | | 10 03 44.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **X34A** | **Smith Ranch, M** | **3.04** | **56** | Pn | Pn | 10 02 54.3 | +0.5 |
| X34A | | | | IAmb_Lg | | 10 03 39.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.06** | **107** | Pn | Pn | 10 02 53.9 | -0.2 |
| **Z35A** | **Perchaven, San** | **3.08** | **82** | Pn | Pn | 10 02 54.3 | -0.1 |
| Z35A | | | | IAmb_Lg | | 10 03 48.7 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **SAND** | **Sanderson** | **3.16** | **200** | | Pn | 10 02 55.1 | -0.4 |
| **FW14** | **Alvarado** | **3.18** | **99** | Pn | Pn | 10 02 55.7 | 0.0 |
| **CSTR** | **Hydro, Custer** | **3.25** | **34** | Pn | Pn | 10 02 55.9 | -0.8 |
| **LOOK** | **Love County** | **3.28** | **70** | Pn | Pn | 10 02 57.1 | 0.0 |
| LOOK | | | | IAmb_Lg | | 10 03 50.4 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **ELIS** | **Ellis County** | **3.34** | **21** | IAmb_Lg | | 10 03 51.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **ALPN** | **Alpine** | **3.47** | **223** | | Pn | 10 02 59.7 | -0.1 |
| **DRIO** | **Del Rio** | **3.52** | **176** | | Pn | 10 03 01.0 | +0.6 |
| **435B** | **Jarrell** | **3.55** | **127** | Pn | Pn | 10 03 01.0 | +0.2 |
| **HNDO** | **Hondo** | **3.68** | **157** | Pn | Pn | 10 03 02.1 | -0.5 |
| **U32A** | **Winter Ranch,** | **3.76** | **24** | Pn | Pn | 10 03 01.2 | -2.6 |
| U32A | | | | IAmb_Lg | | 10 04 11.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.79** | **337** | | Pn | 10 03 02.3 | -2.0 |
| **OK038** | **West end E0370** | **3.94** | **26** | Pn | Pn | 10 03 06.2 | -0.1 |
| **NOKA** | **Waynoka** | **4.02** | **23** | Pn | Pn | 10 03 06.4 | -0.8 |
| **OK029** | **Liberty Lake** | **4.02** | **44** | IAmb_Lg | | 10 04 17.1 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **TREL** | **Terrell** | **4.06** | **92** | Pn | Pn | 10 03 07.8 | +0.1 |
| **VHRN** | **Van Horn** | **4.09** | **239** | Pn | Pn | 10 03 08.5 | +0.2 |
| **TX31** | **Lajitas Ar. Si** | **4.31** | **214** | | Pn | 10 03 10.5 | -0.9 |
| **TXAR** | **Lajitas Array** | **4.31** | **214** | Pn | Pn | 10 03 11.4 | 0.0 |
| **237A** | **Washetta, Mont** | **4.41** | **101** | Pn | Pn | 10 03 12.2 | -0.4 |
| **OK032** | **Salt Plains WL** | **4.44** | **29** | IAmb_Lg | | 10 04 37.9 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **OK031** | **S. Brethren Rd** | **4.50** | **47** | IAmb_Lg | | 10 04 37.4 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **833A** | **Chaparral WMA,** | **4.79** | **164** | Pn | Pn | 10 03 17.7 | -0.2 |
| **X37A** | **Clayton** | **4.89** | **69** | Pn | Pn | 10 03 18.6 | -0.6 |
| X37A | | | | IAmb_Lg | | 10 04 46.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **5.03** | **295** | IAmb_Lg | | 10 04 44.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.08** | **326** | Pn | Pn | 10 03 22.4 | +0.4 |
| T25A | | | | IAmb_Lg | | 10 04 57.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **5.74** | **17** | IAmb_Lg | | 10 05 19.0 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **5.93** | **9** | IAmb_Lg | | 10 05 24.0 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.08** | **323** | IAmb_Lg | | 10 05 27.1 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **6.21** | **347** | Pn | Pn | 10 03 38.8 | +1.4 |
| KSCO | | | | IAmb_Lg | | 10 05 33.2 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **6.31** | **73** | Pn | Pn | 10 03 38.8 | +0.1 |
| MIAR | | | | IAmb_Lg | | 10 05 33.9 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **6.40** | **55** | Pn | Pn | 10 03 40.2 | +0.3 |
| **WLAR** | **White Oak Lake** | **6.56** | **81** | Pn | Pn | 10 03 42.3 | +0.2 |
| **HHAR** | **Hobbs** | **6.63** | **58** | Pn | Pn | 10 03 42.6 | -0.5 |
| **Q24A** | **Divide** | **6.92** | **331** | IAmb_Lg | | 10 05 44.7 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **7.05** | **28** | IAmb_Lg | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NMUT** | **North Mineral** | **0.27** | **192** | | Pg | 10 06 30.8 | -0.1 |
| **TCRU** | **Three Creeks R** | **0.31** | **123** | | Pg | 10 06 31.5 | -0.1 |
| TCRU | | | | Sg | Sg | 10 06 37.3 | +1.5 |
| TCRU | | | | IAML | | 10 06 40.5 | |
| | comp=E,3μm,0.6s | | | | | | |
| TCRU | | | | IAML | | 10 06 40.5 | |
| | comp=N,2μm,0.7s | | | | | | |
| **IMU** | **Iron Mountain** | **0.33** | **244** | | Pg | 10 06 32.9 | +0.8 |
| **MVU** | **Marysvale** | **0.52** | **122** | | Pg | 10 06 35.5 | -0.1 |
| MVU | | | | Sg | Sg | 10 06 39.2 | -3.2 |
| MVU | | | | IAML | | 10 06 51.0 | |
| | comp=E,2μm,0.6s | | | | | | |
| MVU | | | | IAML | | 10 06 51.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| **MSU** | **Marysvale** | **0.54** | **119** | Pg | Pg | 10 06 35.6 | -0.3 |
| **WCU** | **Willow Creek** | **0.57** | **71** | | Pg | 10 06 36.2 | -0.3 |
| **DWU** | **Dry Willow Pea** | **0.69** | **195** | | Pg | 10 06 39.1 | +0.1 |
| **FLU** | **Fool Peak** | **0.76** | **38** | | Pg | 10 06 40.2 | -0.1 |
| **MTPU** | **Mount Pierson** | **0.87** | **148** | | Pg | 10 06 42.5 | +0.2 |
| **PSUT** | **Pine Spring** | **0.88** | **254** | | Pg | 10 06 42.9 | +0.5 |
| **SGU** | **Sterling** | **0.97** | **65** | | Pg | 10 06 44.3 | +0.1 |
| **LEVU** | **Levan** | **1.04** | **46** | | Pg | 10 06 45.8 | +0.2 |
| **ARUT** | **Antelope Range** | **1.12** | **208** | | Pg | 10 06 47.1 | +0.1 |
| **SZCU** | **Shurtz Canyon** | **1.21** | **192** | | Pg | 10 06 48.8 | +0.1 |
| SZCU | | | | IAML | | 10 07 11.1 | |
| | comp=E,261nm,0.6s | | | | | | |
| SZCU | | | | IAML | | 10 07 11.0 | |
| | comp=N,248nm,0.8s | | | | | | |
| **SPR3** | **Spring Creek 3** | **1.23** | **281** | | Pg | 10 06 49.2 | -0.1 |
| SPR3 | | | | IAML | | 10 06 54.3 | |
| | comp=E,307nm,0.6s | | | | | | |
| SPR3 | | | | IAML | | 10 07 13.9 | |
| | comp=N,338nm,0.7s | | | | | | |
| **BTU** | **Barney Top** | **1.24** | **145** | | Pb | 10 06 49.9 | +0.1 |
| **Q16A** | **Castle Valley** | **1.26** | **83** | Pg | Pg | 10 06 49.3 | -0.5 |
| Q16A | | | | IAML | | 10 07 11.8 | |
| | comp=E,244nm,0.8s | | | | | | |
| **NLU** | **North Lily Min** | **1.29** | **25** | | Pg | 10 06 50.1 | -0.3 |
| **CCUT** | **Cedar City** | **1.31** | **201** | Pg | Pn | 10 06 50.8 | 0.0 |
| **TMUT** | **Trail Mountain** | **1.33** | **67** | | Pg | 10 06 50.8 | -0.2 |
| TMUT | | | | IAML | | 10 06 58.5 | |
| | comp=E,612nm,0.5s | | | | | | |
| TMUT | | | | IAML | | 10 07 17.6 | |
| | comp=N,620nm,0.6s | | | | | | |
| **PKCU** | **Pink Cliffs** | **1.38** | **164** | | Pb | 10 06 52.5 | +0.4 |
| PKCU | | | | IAML | | 10 07 15.6 | |
| | comp=E,284nm,0.4s | | | | | | |
| PKCU | | | | IAML | | 10 07 32.5 | |
| | comp=N,217nm,1.2s | | | | | | |
| **DUG** | **Dugway, Tooele** | **1.42** | **359** | | Pn | 10 06 51.9 | -0.3 |
| DUG | | | | IAML | | 10 07 17.5 | |
| | comp=N,280nm,1.1s | | | | | | |
| DUG | | | | IAML | | 10 07 18.4 | |
| | comp=N,253nm,0.8s | | | | | | |
| **ZNPU** | **Zion National** | **1.45** | **191** | | Pb | 10 06 53.0 | -0.2 |
| **MPU** | **Maple Canyon** | **1.52** | **35** | | Pn | 10 06 53.8 | +0.2 |
| **Q12A** | **Willow Creek R** | **1.62** | **280** | | Pb | 10 06 55.9 | -0.2 |
| **P17A** | **Butcher Ranch,** | **1.73** | **66** | | Pb | 10 06 57.4 | -0.5 |
| P17A | | | | IAML | | 10 07 24.6 | |
| | comp=N,170nm,0.8s | | | | | | |
| P17A | | | | IAML | | 10 07 28.8 | |
| | comp=E,142nm,0.7s | | | | | | |
| **KNB** | **Kanab** | **1.76** | **181** | | Pb | 10 06 57.9 | -0.6 |
| **SRU** | **San Rafael Swe** | **1.79** | **79** | Pg | Pb | 10 06 58.4 | -0.5 |
| SRU | | | | IAML | | 10 07 27.0 | |
| | comp=N,232nm,0.6s | | | | | | |
| SRU | | | | IAML | | 10 07 30.8 | |
| | comp=E,339nm,0.8s | | | | | | |
| **LCMT** | **Little Creek M** | **1.80** | **192** | | Pb | 10 06 59.0 | -0.2 |
| LCMT | | | | IAML | | 10 07 27.8 | |
| | comp=E,160nm,0.8s | | | | | | |
| **HMU** | **Henry Mountain** | **1.81** | **117** | | Pn | 10 06 58.2 | +0.6 |
| HMU | | | | IAML | | 10 07 28.5 | |
| | comp=E,138nm,0.7s | | | | | | |
| HMU | | | | IAML | | 10 07 48.2 | |
| | comp=N,136nm,0.9s | | | | | | |
| **CTU** | **Camp Tracy** | **2.07** | **22** | | Pn | 10 07 00.8 | -0.4 |
| **JLU** | **Jordanelle** | **2.09** | **29** | | Pn | 10 07 00.4 | -1.1 |
| **P18A** | **Preston Nutter** | **2.14** | **66** | | Pn | 10 07 03.0 | +0.7 |
| P18A | | | | IAML | | 10 07 39.3 | |
| | comp=N,91nm,0.6s | | | | | | |
| **BGU** | **Big Grassy Mou** | **2.15** | **355** | Pn | Pn | 10 07 02.3 | 0.0 |
| **R11B** | **Troy Canyon, C** | **2.24** | **260** | | Pn | 10 07 03.3 | -0.3 |
| **PRN** | **Pahroc Range** | **2.26** | **233** | | Pn | 10 07 04.1 | +0.4 |
| **SPUT** | **South Promonto** | **2.54** | **6** | | Pn | 10 07 08.1 | +0.5 |
| SPUT | | | | IAML | | 10 07 55.7 | |
| | comp=N,57nm,0.8s | | | | | | |
| **TCUT** | **Toone Canyon** | **2.56** | **24** | | Pn | 10 07 06.8 | -1.2 |
| TCUT | | | | IAML | | 10 07 54.6 | |
| | comp=E,156nm,0.7s | | | | | | |
| **S11A** | **Rachel** | **2.60** | **245** | | Pn | 10 07 09.0 | +0.6 |
| **ELK** | **Elko** | **2.73** | **317** | Pn | Pn | 10 07 11.3 | +1.0 |
| **SHPR** | **Sheep Range** | **2.96** | **221** | Pn | Pn | 10 07 12.7 | -0.7 |
| **PV23** | **Carpenter Ridg** | **2.97** | **95** | Pn | Pn | 10 07 13.8 | +0.2 |
| **PV14** | **Lion Creek, Pa** | **2.97** | **97** | Pn | Pn | 10 07 13.6 | +0.1 |
| **PV05** | **Paradox Valley** | **2.97** | **102** | Pn | Pn | 10 07 13.1 | -0.5 |
| PV05 | | | | IAML | | 10 08 14.8 | |
| | comp=N,88nm,1.2s | | | | | | |
| **HWUT** | **Hardware Ranch** | **2.97** | **18** | Pn | Pn | 10 07 12.5 | -1.1 |
| HWUT | | | | IAML | | 10 08 07.1 | |
| | comp=N,49nm,0.8s | | | | | | |
| HWUT | | | | IAML | | 10 08 16.7 | |
| | comp=N,42nm,1.1s | | | | | | |
| **PV21** | **Cone Mtn., Par** | **2.98** | **93** | Pn | Pn | 10 07 11.7 | -2.1 |
| PV21 | | | | IAML | | 10 08 02.7 | |
| | comp=E,99nm,0.7s | | | | | | |
| **HVU** | **Hansel Valley** | **3.00** | **0** | Pn | Pn | 10 07 14.2 | +0.3 |
| HVU | | | | IAML | | 10 08 07.7 | |
| | comp=N,75nm,0.8s | | | | | | |
| HVU | | | | IAML | | 10 08 11.0 | |
| | comp=E,62nm,0.8s | | | | | | |
| **PV19** | **Morning Glory** | **3.01** | **98** | Pn | Pn | 10 07 12.7 | -1.4 |
| PV19 | | | | IAML | | 10 08 11.3 | |
| | comp=N,71nm,1.0s | | | | | | |
| PV19 | | | | IAML | | 10 08 15.0 | |
| | comp=E,52nm,0.8s | | | | | | |
| **PV20** | **West Nyswonger** | **3.02** | **97** | Pn | Pn | 10 07 13.1 | -1.1 |
| **PV17** | **East Wray Mesa** | **3.03** | **98** | Pn | Pn | 10 07 11.3 | -3.1 |
| PV17 | | | | IAML | | 10 08 10.0 | |
| | comp=N,84nm,1.3s | | | | | | |
| PV17 | | | | IAML | | 10 08 17.9 | |
| | comp=E,65nm,0.8s | | | | | | |
| **RDMU** | **Red Mountain** | **3.05** | **53** | Pn | Pn | 10 07 12.6 | -2.1 |
| RDMU | | | | IAML | | 10 08 15.5 | |
| | comp=E,36nm,1.0s | | | | | | |
| RDMU | | | | IAML | | 10 08 27.8 | |
| | comp=N,37nm,2.0s | | | | | | |
| **PV04** | **Paradox Valley** | **3.06** | **96** | Pn | Pn | 10 07 13.2 | -1.6 |
| PV04 | | | | IAML | | 10 08 10.8 | |
| | comp=E,88nm,0.9s | | | | | | |
| **PV16** | **Nyswonger Mesa** | **3.06** | **98** | Pn | Pn | 10 07 13.9 | -0.9 |
| **PV18** | **Skein Mesa, Pa** | **3.08** | **99** | Pn | Pn | 10 07 12.9 | -2.2 |
| **PV11** | **David Mesa, Pa** | **3.10** | **98** | Pn | Pn | 10 07 13.6 | -1.8 |
| **PV03** | **Paradox Valley** | **3.12** | **98** | Pn | Pn | 10 07 14.2 | -1.5 |
| PV03 | | | | IAML | | 10 08 14.1 | |
| | comp=E,60nm,1.2s | | | | | | |
| PV03 | | | | IAML | | 10 08 18.9 | |
| | comp=N,65nm,1.0s | | | | | | |
| **PV22** | **Blue Mesa, Par** | **3.13** | **93** | Pn | Pn | 10 07 13.3 | -2.5 |
| PV22 | | | | IAML | | 10 08 12.2 | |
| | comp=N,52nm,1.2s | | | | | | |
| PV22 | | | | IAML | | 10 08 20.0 | |
| | comp=E,52nm,1.0s | | | | | | |
| **PV12** | **Saucer Basin,** | **3.15** | **97** | Pn | Pn | 10 07 13.3 | -2.8 |
| **PV13** | **Radium Mtn., P** | **3.17** | **100** | Pn | Pn | 10 07 13.2 | -3.1 |
| PV13 | | | | IAML | | 10 08 14.5 | |
| | comp=N,86nm,1.0s | | | | | | |
| PV13 | | | | IAML | | 10 08 14.9 | |
| | comp=E,79nm,1.1s | | | | | | |
| **PV02** | **Paradox Valley** | **3.22** | **99** | Pn | Pn | 10 07 17.1 | +0.1 |
| **PV07** | **Paradox Valley** | **3.25** | **95** | Pn | Pn | 10 07 16.5 | -0.9 |
| PV07 | | | | IAML | | 10 08 13.4 | |
| | comp=E,89nm,0.9s | | | | | | |
| PV07 | | | | IAML | | 10 08 14.6 | |
| | comp=N,43nm,0.9s | | | | | | |
| **PV01** | **Paradox Valley** | **3.36** | **100** | Pn | Pn | 10 07 18.6 | -0.5 |
| PV01 | | | | IAML | | 10 08 21.3 | |
| | comp=E,37nm,0.8s | | | | | | |
| PV01 | | | | IAML | | 10 08 27.6 | |
| | comp=N,36nm,1.2s | | | | | | |
| **PV15** | **Paradox Valley** | **3.40** | **96** | Pn | Pn | 10 07 18.2 | -1.3 |
| PV15 | | | | IAML | | 10 08 29.6 | |
| | comp=N,70nm,0.9s | | | | | | |
| **Q09A** | **Carvers** | **3.44** | **272** | Pn | Pn | 10 07 18.2 | -1.8 |
| **WCT** | **Wildcat Mounta** | **3.64** | **238** | Pn | Pn | 10 07 18.8 | -3.8 |
| WCT | | | | IAML | | 10 08 29.0 | |
| | comp=E,50nm,1.1s | | | | | | |
| WCT | | | | IAML | | 10 08 29.7 | |
| | comp=N,34nm,1.1s | | | | | | |
| **MVCO** | **Mesa Verde** | **3.72** | **114** | Pn | Pn | 10 07 22.2 | -1.7 |
| MVCO | | | | IAML | | 10 08 36.7 | |
| | comp=N,43nm,1.4s | | | | | | |
| MVCO | | | | IAML | | 10 08 41.4 | |
| | comp=N,36nm,0.9s | | | | | | |
| **O20A** | **White River Ci** | **3.76** | **67** | Pn | Pn | 10 07 21.7 | -2.8 |
| **W13A** | **Hualapai Mount** | **3.78** | **194** | Pn | Pn | 10 07 22.5 | -2.2 |
| **MZP** | **Montezuma Peak** | **3.78** | **255** | Pn | Pn | 10 07 23.1 | -1.7 |
| MZP | | | | IAML | | 10 08 31.0 | |
| | comp=N,19nm,0.6s | | | | | | |
| **BMN** | **Battle Mountai** | **3.81** | **297** | | Pn | 10 07 21.7 | -3.3 |
| BMN | | | | IAML | | 10 08 38.6 | |
| | comp=E,24nm,0.9s | | | | | | |
| BMN | | | | IAML | | 10 08 44.1 | |
| | comp=N,26nm,1.0s | | | | | | |
| **GMN** | **Gold Mountain** | **3.83** | **249** | | Pn | 10 07 22.9 | -2.6 |
| GMN | | | | IAML | | 10 08 36.4 | |
| | comp=N,35nm,0.6s | | | | | | |
| **GWY** | **Greenwater Val** | **4.04** | **231** | Pn | Pn | 10 07 24.8 | -3.4 |
| GWY | | | | IAML | | 10 08 49.9 | |
| | comp=N,44nm,1.2s | | | | | | |
| **GRAC** | **Grapevine Rang** | **4.04** | **245** | | Pn | 10 07 24.7 | -3.4 |
| **KVN** | **Kaiserville** | **4.16** | **275** | Pn | Pn | 10 07 27.8 | -2.1 |
| KVN | | | | IAML | | 10 08 50.7 | |
| | comp=N,34nm,1.1s | | | | | | |
| **AHID** | **Auburn Hatcher** | **4.18** | **17** | Pn | Pn | 10 07 25.0 | -5.2 |
| AHID | | | | IAML | | 10 08 53.2 | |
| | comp=N,26nm,0.9s | | | | | | |
| AHID | | | | IAML | | 10 08 54.5 | |
| | comp=N,32nm,1.0s | | | | | | |
| **DSP** | **Deep Springs** | **4.33** | **253** | Pn | Pn | 10 07 29.9 | -2.1 |
| DSP | | | | IAML | | 10 08 50.5 | |
| | comp=E,15nm,0.7s | | | | | | |
| DSP | | | | IAML | | 10 08 58.6 | |
| | comp=N,16nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **4.34** | **267** | Pn | Pn | 10 07 28.6 | -3.8 |
| **X16A** | **Lo Mia Camp, P** | **4.48** | **166** | Pn | Pn | 10 07 32.0 | -2.3 |
| X16A | | | | IAML | | 10 09 04.7 | |
| | comp=N,15nm,1.3s | | | | | | |
| X16A | | | | IAML | | 10 09 07.7 | |
| | comp=E,17nm,1.3s | | | | | | |
| **RYN** | **Ryan** | **4.50** | **270** | Pn | Pn | 10 07 32.1 | -2.4 |
| **LHV** | **Little Huntoon** | **4.52** | **265** | Pn | Pn | 10 07 31.6 | -3.1 |
| **SMCO** | **Snowmass** | **4.54** | **83** | Pn | Pn | 10 07 31.9 | -3.4 |
| SMCO | | | | IAML | | 10 08 51.7 | |
| | comp=E,30nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **4.67** | **30** | Pn | Pn | 10 07 35.4 | -1.6 |
| **PDAR** | **Pinedale Array** | **4.67** | **30** | Pn | Pn | 10 07 34.6 | -2.4 |
| **GSC** | **Goldstone, Bar** | **4.74** | **224** | Pn | Pn | 10 07 35.1 | -2.6 |
| GSC | | | | IAML | | 10 09 08.1 | |
| | comp=E,24nm,1.0s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **4.79** | **101** | Pn | Pn | 10 07 36.2 | -2.5 |
| S22A | | | | IAML | | 10 09 03.4 | |
| | comp=N,10.0nm,1.2s | | | | | | |
| **REDW** | **Red Top Meadow** | **4.80** | **17** | Pn | Pn | 10 07 35.5 | -3.3 |
| **X18A** | **Snowflake** | **4.81** | **151** | Pn | Pn | 10 07 36.9 | -1.9 |
| **Y14A** | **Wickenburg** | **4.83** | **182** | Pn | Pn | 10 07 38.2 | -0.9 |
| Y14A | | | | IAML | | 10 09 14.5 | |
| | comp=N,12nm,0.8s | | | | | | |
| Y14A | | | | IAML | | 10 09 15.3 | |
| | comp=E,11nm,1.4s | | | | | | |
| **TPAW** | **Teton Pass** | **4.90** | **16** | Pn | Pn | 10 07 36.3 | -3.9 |
| TPAW | | | | IAML | | 10 09 16.8 | |
| | comp=E,9.3nm,1.0s | | | | | | |
| **SNOW** | **Snow King Moun** | **4.92** | **17** | Pn | Pn | 10 07 36.4 | -4.0 |
| SNOW | | | | IAML | | 10 09 13.3 | |
| | comp=E,14nm,3.2s | | | | | | |
| SNOW | | | | IAML | | 10 09 17.8 | |
| | comp=E,13nm,2.5s | | | | | | |
| **HLID** | **Hailey** | **4.94** | **346** | Pn | Pn | 10 07 35.6 | -4.9 |
| **FXWY** | **Fox Creek** | **5.03** | **15** | Pn | Pn | 10 07 37.2 | -4.7 |
| **OMMB** | **Old Mammoth Mi** | **5.04** | **259** | Pn | Pn | 10 07 38.1 | -4.0 |
| OMMB | | | | IAML | | 10 09 36.2 | |
| | comp=N,7.9nm,4.0s | | | | | | |
| **YERR** | **Yerington** | **5.05** | **274** | Pn | Pn | 10 07 38.8 | -3.3 |
| YERR | | | | IAML | | 10 09 11.9 | |
| | comp=N,17nm,0.8s | | | | | | |
| **MDPB** | **Devils Postpil** | **5.09** | **259** | Pn | Pn | 10 07 40.5 | -2.3 |
| MDPB | | | | IAML | | 10 09 10.2 | |
| | comp=N,7.8nm,0.6s | | | | | | |
| **LOHW** | **Long Hollow** | **5.10** | **18** | Pn | Pn | 10 07 39.6 | -3.2 |
| **RWWY** | **Rawlins** | **5.16** | **54** | Pn | Pn | 10 07 40.6 | -3.0 |
| **MFID** | **Camas Ranch** | **5.17** | **335** | Pn | Pn | 10 07 40.6 | -3.1 |
| MFID | | | | IAML | | 10 09 22.7 | |
| | comp=N,11nm,1.3s | | | | | | |
| MFID | | | | IAML | | 10 09 33.6 | |
| | comp=N,13nm,0.9s | | | | | | |
| **BLYC** | **Blythe** | **5.21** | **196** | Pn | Pn | 10 07 41.7 | -2.5 |
| BLYC | | | | IAML | | 10 09 25.0 | |
| | comp=E,13nm,1.5s | | | | | | |
| BLYC | | | | IAML | | 10 09 33.7 | |
| | comp=N,10.0nm,2.8s | | | | | | |
| **PAHR** | **Pah Rah Range** | **5.21** | **282** | Pn | Pn | 10 07 41.2 | -3.2 |
| PAHR | | | | IAML | | 10 08 56.3 | |
| | comp=N,9.3nm,4.7s | | | | | | |
| PAHR | | | | IAML | | 10 09 28.5 | |
| | comp=E,11nm,2.9s | | | | | | |
| **WAKR** | **Walker** | **5.22** | **269** | Pn | Pn | 10 07 41.3 | -3.3 |
| WAKR | | | | IAML | | 10 09 25.5 | |
| | comp=E,12nm,1.2s | | | | | | |
| WAKR | | | | IAML | | 10 09 33.3 | |
| | comp=N,9.5nm,2.3s | | | | | | |
| **IMW** | **Indian Meadow** | **5.30** | **15** | Pn | Pn | 10 07 41.2 | -4.4 |
| IMW | | | | IAML | | 10 08 25.0 | |
| | comp=N,8.8nm,0.6s | | | | | | |
| IMW | | | | IAML | | 10 08 30.5 | |
| | comp=N,10nm,0.6s | | | | | | |
| **PNTR** | **Pine Nut** | **5.33** | **275** | Pn | Pn | 10 07 45.5 | -0.5 |
| **ISA** | **Isabella, Lake** | **5.51** | **237** | Pn | Pn | 10 07 47.2 | -1.1 |
| **FLWY** | **Flagg Ranch** | **5.52** | **16** | Pn | Pn | 10 07 49.0 | +0.3 |
| **ISCO** | **Idaho Springs** | **5.65** | **77** | Pn | Pn | 10 07 49.0 | -1.4 |
| **N23A** | **Red Feather La** | **5.67** | **66** | Pn | Pn | 10 07 49.0 | -1.7 |
| **MPK** | **Martis Peak** | **5.67** | **277** | Pn | Pn | 10 07 48.7 | -2.1 |
| **YPP** | **Pitchstone Pla** | **5.68** | **14** | Pn | Pn | 10 07 49.1 | -1.8 |
| **EMB** | **Emerald Bay** | **5.72** | **274** | Pn | Pn | 10 07 49.0 | -2.4 |
| **SDCO** | **Great Sand Dun** | **5.82** | **98** | Pn | Pn | 10 07 49.7 | -3.1 |
| **PFO** | **Pinyon Flats O** | **5.95** | **211** | Pn | Pn | 10 07 51.6 | -2.9 |
| **Q24A** | **Divide** | **5.96** | **86** | Pn | Pn | 10 07 51.7 | -2.9 |
| **K22A** | **Casper** | **6.12** | **49** | Pn | Pn | 10 07 56.1 | -0.7 |
| **YHL** | **Hebgen Lake** | **6.18** | **11** | Pn | Pn | 10 07 57.2 | -0.5 |
| **J08A** | **Circle Bar Ran** | **6.28** | **319** | Pn | Pn | 10 07 57.4 | -1.5 |
| **ANMO** | **Albuquerque** | **6.35** | **125** | | Pn | 10 07 56.5 | -3.5 |
| **ELS** | **Elsinore Mount** | **6.35** | **218** | Pn | Pn | 10 08 00.4 | +0.5 |
| **UABX** | **UABC, Campus M** | **6.50** | **200** | Pn | Pn | 10 08 03.6 | +1.7 |
| **H04A** | **Detroit Lake** | **9.18** | **313** | Pn | Pn | 10 08 37.9 | -0.7 |
| **LAO** | **LASA Array** | **9.26** | **29** | Pn | Pn | 10 08 38.5 | -1.2 |
| **HOOD** | **Mount Hood Mea** | **9.29** | **318** | Pn | Pn | 10 08 40.2 | 0.0 |
| **MSTX** | **Muleshoe** | **9.38** | **118** | Pn | Pn | 10 08 39.4 | -2.2 |

**NEIC 07 10:31:43.5±0.8, 32°.95N±0°.02×100°.92W±0°.02, h5km±1km, mb_Lg2.4/59, Error ellipse: s-maj=3.3km s-min=2.7km az=326.0, Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SN05** | **Snyder 5** | **0.07** | **158** | Pg | Pg | 10 31 44.9 | -0.3 |
| SN05 | | | | Sg | Sg | 10 31 46.2 | -0.2 |
| **SN07** | **Snyder 07** | **0.15** | **8** | | Pg | 10 31 46.2 | -0.2 |
| SN07 | | | | Sg | Sg | 10 31 47.8 | -0.6 |
| **POST** | **Post** | **0.51** | **284** | | Pg | 10 31 53.1 | -0.1 |
| POST | | | | Sg | Sg | 10 32 00.1 | +0.3 |
| **DKNS** | **Dickens** | **0.72** | **359** | | Pg | 10 31 56.6 | -0.7 |
| DKNS | | | | Sg | Sg | 10 32 06.6 | -0.1 |
| **APMT** | **Aspermont** | **0.77** | **60** | Pg | Pg | 10 31 57.6 | -0.6 |
| APMT | | | | Sg | Sg | 10 32 08.0 | -0.2 |
| **SGCY** | **Sterling City** | **1.04** | **190** | Pg | Pg | 10 32 02.6 | -0.8 |
| SGCY | | | | Sg | Sg | 10 32 16.4 | -0.6 |
| **ABTX** | **Abilene, Hawle** | **1.12** | **106** | | Pg | 10 32 04.0 | -1.0 |
| **ODSA** | **Odessa** | **1.61** | **240** | | Pn | 10 32 11.8 | -0.8 |
| **MSTX** | **Muleshoe** | **1.86** | **304** | Pn | Pn | 10 32 15.4 | -0.7 |
| **OZNA** | **Ozona** | **2.03** | **185** | | Pn | 10 32 18.6 | +0.2 |
| **AMTX** | **Amarillo** | **2.04** | **342** | | Pn | 10 32 18.3 | -0.2 |
| AMTX | | | | IAmb_Lg | | 10 32 52.3 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **PLPT** | **Palo Pinto** | **2.19** | **93** | Pn | Pn | 10 32 20.4 | -0.1 |
| **WTFS** | **Witchita Falls** | **2.21** | **68** | Pn | Pn | 10 32 20.0 | -0.8 |
| **SMWD** | **Samnorwood** | **2.23** | **14** | | Pn | 10 32 20.7 | -0.4 |
| **MNHN** | **Monahans** | **2.24** | **225** | | Pn | 10 32 20.6 | -0.6 |
| **BRDY** | **Brady** | **2.32** | **135** | | Pn | 10 32 22.6 | +0.3 |
| BRDY | | | | IAmb_Lg | | 10 33 02.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **2.40** | **87** | Pn | Pn | 10 32 22.2 | -1.2 |
| **WMOK** | **Wichita Mounta** | **2.52** | **44** | Pn | Pn | 10 32 24.6 | -0.5 |
| WMOK | | | | IAmb_Lg | | 10 33 03.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **2.64** | **159** | | Pn | 10 32 25.9 | -0.8 |
| **FW06** | **Azle** | **2.82** | **89** | Pn | Pn | 10 32 29.4 | +0.1 |
| **PECS** | **Pecos** | **2.96** | **239** | Pn | Pn | 10 32 30.6 | -0.5 |
| **FW13** | **Cleburne** | **3.00** | **100** | IAmb_Lg | | 10 33 26.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **X34A** | **Smith Ranch, M** | **3.05** | **56** | Pn | Pn | 10 32 32.4 | 0.0 |
| X34A | | | | IAmb_Lg | | 10 33 18.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **WHTX** | **Lake Whitney,** | **3.08** | **107** | Pn | Pn | 10 32 32.6 | -0.1 |
| **Z35A** | **Perchaven, San** | **3.10** | **82** | IAmb_Lg | | 10 33 29.0 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **SAND** | **Sanderson** | **3.15** | **199** | Pn | Pn | 10 32 34.0 | +0.1 |
| **LOOK** | **Love County** | **3.29** | **70** | IAmb_Lg | | 10 33 27.5 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| **ELIS** | **Ellis County** | **3.35** | **21** | IAmb_Lg | | 10 33 37.0 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **ALPN** | **Alpine** | **3.46** | **223** | Pn | Pn | 10 32 37.8 | -0.3 |
| **DRIO** | **Del Rio** | **3.52** | **176** | | Pn | 10 32 39.6 | +0.7 |
| **435B** | **Jarrell** | **3.56** | **126** | Pn | Pn | 10 32 39.6 | +0.2 |
| **HNDO** | **Hondo** | **3.68** | **157** | | Pn | 10 32 41.5 | +0.4 |
| **U32A** | **Winter Ranch,** | **3.77** | **24** | IAmb_Lg | | 10 33 50.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.79** | **337** | Pn | Pn | 10 32 42.6 | -0.1 |
| **NOKA** | **Waynoka** | **4.03** | **23** | IAmb_Lg | | 10 34 01.2 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **OK029** | **Liberty Lake** | **4.04** | **44** | IAmb_Lg | | 10 34 00.7 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **VHRN** | **Van Horn** | **4.08** | **239** | Pn | Pn | 10 32 47.3 | +0.7 |
| **TX31** | **Lajitas Ar. Si** | **4.30** | **214** | Pn | Pn | 10 32 50.1 | +0.4 |
| **TXAR** | **Lajitas Array** | **4.30** | **214** | Pn | Pn | 10 32 50.1 | +0.3 |
| **833A** | **Chaparral WMA,** | **4.79** | **164** | Pn | Pn | 10 32 55.8 | -0.5 |
| **KAN12** | **Harper NE Stat** | **4.96** | **28** | IAmb_Lg | | 10 34 33.8 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **5.02** | **295** | IAmb_Lg | | 10 34 22.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.07** | **327** | IAmb_Lg | | 10 34 25.1 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **5.75** | **18** | IAmb_Lg | | 10 34 51.2 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **121A** | **Cookes Peak, D** | **5.80** | **268** | IAmb_Lg | | 10 35 00.7 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **5.93** | **9** | IAmb_Lg | | 10 35 03.5 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.08** | **323** | IAmb_Lg | | 10 35 02.2 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **6.21** | **348** | IAmb_Lg | | 10 35 05.7 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **6.32** | **73** | IAmb_Lg | | 10 35 12.8 | |
| | comp=Z,5.3nm,0.8s | | | | | | |

*HEL **07** 10:39:46.4±0.1, 63°.12N×27°.79E, h0km, ML1.9, Explosion*
*UPP **07** 10:39:46.3±3.1, 62°.84N×27°.84E, h0km, ML1.8*
*IDC **07** 10:39:48.8±1.7, 63°.02N×27°.64E, h0km, mbtmp3.2/1, ML2.6/1, Error ellipse: s-maj=28.4km s-min=6.9km az=104.0*

**ISC 07 10:39:46.4±0.8, 63°.05N±0°.02×27°.90E±0°.03, h0km, n39, σ1s54/53, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIF** | **Nilsia** | **0.35** | **354** | PG | **Pg** | **10 39 51.5** | **-1.6** |
| | baz=178 | | | | | | |
| NIF | | | | SG | **Sg** | **10 39 55.9** | **-1.7** |
| **SUF** | **Sumiainen** | **0.86** | **249** | PG | **Pg** | **10 40 01.5** | **-1.5** |
| SUF | | | | MSG | | 10 40 12.9 | |
| | comp=Z,7.2nm,0.2s | | | | | | |
| SUF | | | | SB | **Sb** | **10 40 16.8** | **+0.4** |
| **KAF** | **Kangasniemi** | **1.19** | **219** | PG | **Pg** | **10 40 08.3** | **-0.9** |
| | baz=36 | | | | | | |
| KAF | | | | MSG | | 10 40 23.5 | |
| | comp=Z,16nm,0.2s | | | | | | |
| KAF | | | | SB | **Sb** | **10 40 25.2** | **-0.6** |
| **RMF** | **Romuvaara** | **1.49** | **37** | PN | **Pn** | **10 40 13.5** | **-0.9** |
| RMF | | | | MSG | | 10 40 30.2 | |
| | comp=Z,9.1nm,0.2s | | | | | | |
| **JOF** | **Joensuu** | **1.56** | **93** | *eP* | **Pn** | **10 40 15.3** | **-0.1** |
| **JOF** | **Joensuu** | **1.56** | **93** | PG | **Pn** | **10 40 15.4** | **-0.1** |
| JOF | | | | SN | **Sg** | **10 40 37.8** | **+1.2** |
| **KEF** | **Keuruu** | **1.65** | **239** | *eP* | **Pn** | **10 40 16.1** | **-0.6** |
| **KEF** | **Keuruu** | **1.65** | **239** | PG | **Pn** | **10 40 16.0** | **-0.6** |
| KEF | | | | MSG | | 10 40 35.9 | |
| | comp=Z,9.2nm,0.2s | | | | | | |
| KEF | | | | SN | **Sn** | **10 40 38.7** | **+0.1** |
| **RUF** | **Ruokolahti** | **1.70** | **163** | PG | **Pg** | **10 40 18.4** | **-0.6** |
| | baz=340 | | | | | | |
| RUF | | | | MSG | | 10 40 39.5 | |
| | comp=Z,11nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **1.82** | **209** | PG | **Pb** | **10 40 19.8** | **-0.8** |
| FIA0 | | | | MSG | | 10 40 41.9 | |
| | comp=Z,7.8nm,0.2s | | | | | | |
| FIA0 | | | | SG | **Sg** | **10 40 44.6** | **-0.2** |
| **FINES** | **FINESS Array B** | **1.82** | **209** | Pg | **Pb** | **10 40 19.8** | **-0.8** |
| | comp=Z,0.4nm,0.3s,baz=24,slow=16,SNR=14 | | | | | | |
| FINES | | | | Lg | | 10 40 43.7 | |
| | comp=Z,0.8nm,0.3s,baz=23,slow=30,SNR=13 | | | | | | |
| **OUF** | **Merijarvi** | **1.94** | **315** | PG | **Pn** | **10 40 19.4** | **-1.1** |
| OUF | | | | MSG | | 10 40 41.6 | |
| | comp=Z,12nm,0.2s | | | | | | |
| OUF | | | | SG | **Sn** | **10 40 45.3** | **-0.2** |
| **OBF4** | **Vikkela, Lumij** | **2.16** | **326** | PG | **Pn** | **10 40 23.7** | **0.0** |
| OBF4 | | | | MSG | | 10 40 48.1 | |
| | comp=Z,8.4nm,0.2s | | | | | | |
| **OBF0** | **Syolatti, Pyha** | **2.18** | **314** | PG | **Pn** | **10 40 24.2** | **+0.3** |
| OBF0 | | | | M

**mb4.4**/1,**MLv4.0**/9,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.91** | **136** | P | Pg | 10 51 34.3 | -1.2 |
| **SRBI** | **Singaraja** | **1.03** | **270** | P | Pg | 10 51 37.2 | -0.6 |
| SRBI | | | | S | Sn | 10 51 52.1 | -0.7 |
| **DNP** | **Denpasar** | **1.19** | **240** | P | Pb | 10 51 40.1 | -0.5 |
| DNP | | | | S | Sn | 10 51 57.3 | +0.6 |
| **PLAI** | **Plampang** | **1.68** | **116** | P | Pn | 10 51 46.7 | -0.7 |
| PLAI | | | | S | Sb | 10 52 10.2 | 0.0 |
| **JAGI** | **Jajag, Banyuwa** | **2.11** | **259** | P | Pn | 10 51 52.4 | -0.9 |
| JAGI | | | | S | Sn | 10 52 19.3 | -0.3 |
| **PWJI** | **Pagerwojo** | **4.40** | **270** | P | Pn | 10 52 24.7 | -0.1 |
| **BSSI** | **Bau Bau, Buton** | **4.63** | **66** | P | Pn | 10 52 28.2 | +0.3 |
| BSSI | | | | S | Sn | 10 53 21.8 | +0.1 |

*NORS **07** 11:06:58.5,43.°10N×44.°31E,h10km,MPVA3.9*
*DRS **07** 11:06:58.7,42.°92N×44.°34E,h48km*
**MOS 07 11:06:58.3,43.°13N×44.°32E,h12km,MPVA3.9,Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARNR** | **Ardon** | **0.06** | **337** | *i* Pg | Pg | 11 07 02.0 | +1.2 |
| ARNR | | | | *i* Sg | Sg | 11 07 04.1 | +1.4 |
| **KORR** | **Kora** | **0.19** | **258** | *e*Pg | Pb | 11 07 04.2 | +0.5 |
| KORR | | | | *e*Sg | Sg | 11 07 07.4 | +2.0 |
| **VLKR** | **Vladikavkaz** | **0.28** | **106** | *e*Pg | Pb | 11 07 05.5 | +0.3 |
| VLKR | | | | *e*Sg | Sb | 11 07 10.7 | +0.8 |
| **BTKR** | **Batakoyurt** | **0.30** | **34** | *e*Pg | Pb | 11 07 06.0 | +0.4 |
| BTKR | | | | *e*Sg | Sb | 11 07 11.0 | +0.6 |
| **LACR** | **Lac** | **0.30** | **183** | *e*Pg | Pb | 11 07 06.0 | +0.4 |
| LACR | | | | *e*Sg | Sb | 11 07 12.0 | +1.5 |
| **STDR** | **Stavd-Durt** | **0.31** | **323** | *i* Pg | Pb | 11 07 06.7 | +1.0 |
| STDR | | | | *e*Sg | Sb | 11 07 11.2 | +0.5 |
| **LSNR** | **Lesken** | **0.39** | **293** | *e*Pg | Pb | 11 07 08.3 | +1.1 |
| LSNR | | | | *e*Sg | Sb | 11 07 15.4 | +2.2 |
| **KMGR** | **Komgaron** | **0.41** | **99** | *e*Pg | Pb | 11 07 07.9 | +0.4 |
| KMGR | | | | *e*Sg | Sb | 11 07 15.7 | +2.0 |
| **PRTR** | **Priterechnaya** | **0.63** | **358** | *e*Pg | Pn | 11 07 13.4 | +0.4 |
| PRTR | | | | *e*Sg | Sn | 11 07 24.6 | +1.7 |
| **NCK** | **Nalchik** | **0.64** | **305** | *e*Pg | Pn | 11 07 13.3 | 0.0 |
| NCK | | | | *e*Sg | Sn | 11 07 23.6 | +0.2 |
| **TRKR** | **Terskaya** | **0.67** | **27** | *e*Pg | Pn | 11 07 13.9 | +0.3 |
| TRKR | | | | *e*Sg | Sn | 11 07 22.8 | -1.2 |
| **KBTC** | **Kuba-Taba** | **0.96** | **317** | *e*Pg | Pn | 11 07 18.9 | +1.3 |
| KBTC | | | | *e*Sg | Sn | 11 07 33.6 | +2.5 |
| **KBZ** | **Khabaz** | **1.20** | **301** | *e*Pg | Pg | 11 07 22.4 | +1.1 |
| KBZ | | | | *e*Sg | Sn | 11 07 38.5 | +1.6 |
| **PYA1** | **Pyatigorsk** | **1.29** | **317** | *e*Pg | Pg | 11 07 23.7 | +0.6 |
| PYA1 | | | | *e*Sg | Sg | 11 07 41.4 | +1.5 |
| **DVE** | **Vedeno** | **1.34** | **97** | *e*Pg | Pg | 11 07 24.5 | +0.5 |
| DVE | | | | *e*Sg | Sg | 11 07 44.2 | +2.8 |
| **SHA1** | **Shidzhatmaz** | **1.35** | **297** | *e*Pg | Pg | 11 07 25.4 | +1.0 |
| SHA1 | | | | *e*Sg | Sg | 11 07 43.9 | +1.9 |
| **BEYR** | **Belyy Ugol+** | **1.41** | **310** | *e*Pg | Pg | 11 07 25.6 | +0.3 |
| BEYR | | | | *e*Sg | Sg | 11 07 44.7 | +1.2 |
| **KIV** | **Kislovodsk** | **1.45** | **306** | *e*Pg | Pb | 11 07 25.6 | +0.4 |
| KIV | | | | *e*Sg | Sg | 11 07 46.1 | +1.2 |
| **BTLR** | **Botlikh** | **1.47** | **108** | *e*Pg | Pb | 11 07 26.1 | +0.4 |
| BTLR | | | | *e*Sg | Sb | 11 07 44.6 | +0.2 |
| **DLMR** | **Dylym** | **1.69** | **91** | *e*Pg | Pb | 11 07 28.8 | -0.6 |
| DLMR | | | | *e*Sg | Sb | 11 07 51.3 | +0.7 |
| **DBC** | **Dubki** | **1.84** | **92** | *e*Pg | Pb | 11 07 32.2 | +0.2 |
| DBC | | | | *e*Sg | Sg | 11 07 56.5 | -1.2 |
| **XNZR** | **Khunzakh** | **1.85** | **108** | *e*Pg | Pb | 11 07 31.2 | -0.9 |
| XNZR | | | | *e*Sg | Sb | 11 07 55.2 | -0.1 |
| **ARKR** | **Arakani** | **2.04** | **104** | *e*Pg | Pb | 11 07 34.5 | -0.7 |
| ARKR | | | | *e*Sg | Sn | 11 07 58.4 | +0.6 |
| **GNBR** | **Gunib** | **2.08** | **110** | *e*Pg | Pn | 11 07 34.3 | +1.3 |
| GNBR | | | | *e*Sg | Sb | 11 08 00.9 | -0.9 |
| **KMKR** | **Kumukh** | **2.28** | **115** | *e*Pn | Pb | 11 07 39.1 | -0.4 |
| KMKR | | | | *i* Sn | Sb | 11 08 07.8 | +0.1 |
| **GUZR** | **Guzeripl'** | **3.17** | **287** | *e*Pn | Pn | 11 07 49.3 | +1.3 |
| GUZR | | | | *e*Sn | Sn | 11 08 27.6 | +1.8 |

*NEIC **07** 11:20:39.6±1.4,36.°53N±0.°02×98.°99W±0.°03,h5km±1km,*
*Error ellipse: s-maj=4.4km s-min=2.7km az=299.0*
**TUL 07 11:20:40**±1.5,**36.°52N**±0.°02×**98.°99W**±0.°04,**h5**km±5km,
**ML2.8,mb_Lg2.6**/76(NEIC),**ML2.9**/10(NEIC),**Error ellipse: s-maj=4.8km s-min=1.8km az=116.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOKA** | **Waynoka** | **0.12** | **24** | Pg | Pg | 11 20 43.1 | +0.5 |
| NOKA | | | | Sg | Sg | 11 20 45.4 | +1.1 |
| NOKA | | | | IAML | | 11 20 45.6 | |
| | comp=E,4μm,0.4s | | | | | | |
| **U32A** | **Winter Ranch,** | **0.14** | **183** | Pg | Pg | 11 20 43.3 | +0.4 |
| U32A | | | | IAML | | 11 20 45.7 | |
| | comp=N,3μm,0.2s | | | | | | |
| U32A | | | | Sg | Sg | 11 20 45.8 | +1.0 |
| U32A | | | | IAML | | 11 20 45.9 | |
| | comp=E,4μm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **0.21** | **102** | Pg | Pg | 11 20 44.7 | +0.6 |
| OK038 | | | | IAML | | 11 20 49.9 | |
| | comp=E,3μm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **0.57** | **217** | Pg | Pg | 11 20 51.3 | +0.4 |
| ELIS | | | | Sg | Sb | 11 20 59.7 | -1.2 |
| ELIS | | | | IAML | | 11 21 07.3 | |
| | comp=E,658nm,0.4s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.69** | **66** | Pg | Pg | 11 20 53.1 | -0.2 |
| **CROK** | **Carrier** | **0.81** | **91** | | Pg | 11 20 55.6 | 0.0 |
| CROK | | | | IAML | | 11 21 12.7 | |
| | comp=E,539nm,0.3s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.91** | **164** | | Pg | 11 20 57.6 | +0.2 |
| CSTR | | | | Sg | Sb | 11 21 10.1 | -0.6 |
| **KAN14** | **Manchester OK** | **0.94** | **62** | | Pg | 11 20 58.0 | +0.1 |
| KAN14 | | | | Sg | Sg | 11 21 10.5 | +0.4 |
| **GC02** | **Grant County #** | **0.97** | **70** | | Pg | 11 20 58.5 | -0.1 |
| GC02 | | | | Sg | Sg | 11 21 11.2 | 0.0 |
| **KAN08** | **Anthony NE Sta** | **1.08** | **49** | | Pg | 11 21 00.2 | -0.5 |
| **KAN12** | **Harper NE Stat** | **1.11** | **46** | | Pg | 11 21 00.9 | -0.4 |
| **KAN17** | **Caldwell West** | **1.12** | **62** | | Pg | 11 21 00.6 | -0.8 |
| **KAN01** | **Argonia South** | **1.17** | **57** | Pg | Pg | 11 21 02.0 | -0.5 |
| **KAN09** | **Caldwell North** | **1.26** | **61** | | Pg | 11 21 03.6 | -0.6 |
| **KAN13** | **South Haven SW** | **1.31** | **68** | Pg | Pn | 11 21 04.2 | -0.8 |
| **OK029** | **Liberty Lake** | **1.44** | **120** | Pg | Pn | 11 21 06.5 | -0.3 |
| **BLOK** | **Blackwell** | **1.45** | **80** | | Pn | 11 21 06.7 | -0.3 |
| **ADOK** | **Arcadia Dam** | **1.57** | **123** | | Pn | 11 21 07.8 | -0.8 |
| **OK048** | **Pawnee Station** | **1.66** | **93** | | Pn | 11 21 10.0 | +0.3 |
| **OKCSW** | **OKLAHOMA CITY** | **1.68** | **131** | | Pn | 11 21 09.7 | -0.4 |
| **OK051** | **E0350 and S346** | **1.74** | **90** | | Pn | 11 21 11.4 | +0.6 |
| **SMWD** | **Samnorwood** | **1.74** | **216** | Pn | Pn | 11 21 11.6 | +0.7 |
| **WMOK** | **Wichita Mounta** | **1.79** | **174** | Pn | Pn | 11 21 11.9 | +0.4 |
| **FNO** | **Franklin** | **1.81** | **134** | | Pn | 11 21 12.4 | +0.6 |
| **OK031** | **S. Brethren Rd** | **1.83** | **107** | | Pn | 11 21 12.7 | +0.6 |
| **OK052** | **Battle Ridge R** | **1.85** | **106** | | Pn | 11 21 12.8 | +0.4 |
| **QUOK** | **Quay** | **1.88** | **100** | | Pn | 11 21 13.0 | +0.2 |
| **R32A** | **Long Quarter,** | **1.91** | **7** | Pn | Pn | 11 21 13.9 | +0.7 |
| R32A | | | | IAmb_Lg | | 11 21 43.8 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **T35A** | **Sooner Cattle** | **2.03** | **78** | Pn | Pn | 11 21 15.2 | +0.2 |
| **DEOK** | **Depew** | **2.13** | **108** | | Pn | 11 21 16.6 | +0.4 |
| **X34A** | **Smith Ranch, M** | **2.14** | **153** | | Pn | 11 21 16.8 | +0.5 |
| **CBKS** | **Cedar Bluff** | **2.36** | **346** | | Pn | 11 21 18.0 | -1.5 |
| **TUL3** | **Leonard** | **2.66** | **102** | Pn | Pn | 11 21 22.1 | -1.4 |
| **AMTX** | **Amarillo** | **2.73** | **234** | Pn | Pn | 11 21 24.1 | -0.4 |
| AMTX | | | | IAmb_Lg | | 11 22 04.3 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **WTFS** | **Witchita Falls** | **2.78** | **171** | Pn | Pn | 11 21 24.1 | -1.2 |
| **LOOK** | **Love County** | **2.93** | **149** | IAmb_Lg | | 11 22 14.5 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.02** | **270** | Pn | Pn | 11 21 27.1 | -1.4 |
| **KSU1** | **Kansas State U** | **3.19** | **36** | Pn | Pn | 11 21 29.7 | -1.2 |
| KSU1 | | | | IAmb_Lg | | 11 22 23.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **RLO** | **Rose Lookout** | **3.23** | **95** | IAmb_Lg | | 11 22 25.0 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **DKNS** | **Dickens** | **3.26** | **210** | Pn | Pn | 11 21 32.0 | +0.1 |
| **APMT** | **Aspermont** | **3.32** | **197** | | Pn | 11 21 34.1 | +1.5 |
| APMT | | | | IAmb_Lg | | 11 22 29.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.53** | **122** | Pn | Pn | 11 21 34.8 | -0.6 |
| X37A | | | | IAmb_Lg | | 11 22 37.6 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **3.56** | **167** | IAmb_Lg | | 11 22 40.7 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **3.71** | **90** | Pn | Pn | 11 21 37.1 | -0.9 |
| U38A | | | | IAmb_Lg | | 11 22 43.8 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **FW06** | **Azle** | **3.73** | **161** | Pn | Pn | 11 21 36.8 | -1.4 |
| FW06 | | | | IAmb_Lg | | 11 22 45.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **3.74** | **171** | Pn | Pn | 11 21 37.6 | -0.8 |
| **SN07** | **Snyder 07** | **3.76** | **205** | | Pn | 11 21 38.1 | -0.7 |
| SN07 | | | | IAmb_Lg | | 11 22 45.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.80** | **312** | Pn | Pn | 11 21 37.1 | -2.3 |
| **ABTX** | **Abilene, Hawle** | **3.92** | **188** | Pn | Pn | 11 21 40.4 | -0.5 |
| **FW07** | **Weatherford** | **3.94** | **165** | IAmb_Lg | | 11 22 44.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.95** | **204** | Pn | Pn | 11 21 40.7 | -0.7 |
| SN05 | | | | IAmb_Lg | | 11 22 51.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.00** | **232** | Pn | Pn | 11 21 43.6 | +1.5 |
| MSTX | | | | IAmb_Lg | | 11 22 57.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **POST** | **Post** | **4.02** | **212** | Pn | Pn | 11 21 42.5 | +0.3 |
| POST | | | | IAmb_Lg | | 11 22 55.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **4.08** | **92** | Pn | Pn | 11 21 44.0 | +0.9 |
| HHAR | | | | IAmb_Lg | | 11 22 53.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **4.39** | **280** | Pn | Pn | 11 21 47.5 | 0.0 |
| T25A | | | | IAmb_Lg | | 11 23 05.0 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.63** | **133** | Pn | Pn | 11 21 51.6 | +1.0 |
| **S39A** | **Bolivar** | **4.68** | **74** | Pn | Pn | 11 21 51.2 | -0.1 |
| S39A | | | | IAmb_Lg | | 11 23 08.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.70** | **164** | Pn | Pn | 11 21 51.2 | -0.3 |
| **MIAR** | **Mount Ida** | **4.84** | **112** | Pn | Pn | 11 21 53.4 | -0.1 |
| **BGNE** | **Belgrade** | **4.92** | **7** | Pn | Pn | 11 21 54.0 | -0.6 |
| BGNE | | | | IAmb_Lg | | 11 23 23.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **5.22** | **180** | Pn | Pn | 11 21 58.7 | -0.1 |
| BRDY | | | | IAmb_Lg | | 11 23 33.2 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **P38A** | **Dawn** | **5.31** | **53** | Pn | Pn | 11 21 59.2 | -0.7 |
| P38A | | | | IAmb_Lg | | 11 23 30.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.34** | **285** | Pn | Pn | 11 22 00.6 | -0.1 |
| **X40A** | **Basin Creek Fa** | **5.42** | **110** | Pn | Pn | 11 22 01.4 | -0.1 |
| **MGMO** | **Mountain Grove** | **5.43** | **81** | IAmb_Lg | | 11 23 36.3 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **5.45** | **298** | IAmb_Lg | | 11 23 46.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.58** | **101** | Pn | Pn | 11 22 00.8 | -2.8 |
| WHAR | | | | IAmb_Lg | | 11 23 41.8 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.59** | **94** | Pn | Pn | 11 22 01.7 | -2.1 |
| **R40A** | **Maddies Statio** | **5.64** | **70** | Pn | Pn | 11 22 02.5 | -2.0 |
| R40A | | | | IAmb_Lg | | 11 23 38.2 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **5.84** | **168** | IAmb_Lg | | 11 23 59.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **OZNA** | **Ozona** | **5.86** | **198** | Pn | Pn | 11 22 05.3 | -2.3 |
| **JCT** | **Junction City** | **6.06** | **187** | IAmb_Lg | | 11 24 07.3 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **6.27** | **258** | Pn | Pn | 11 22 12.7 | -0.7 |
| **T42A** | **Van Buren** | **6.36** | **83** | IAmb_Lg | | 11 24 07.6 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.37** | **74** | IAmb_Lg | | 11 24 09.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **PECS** | **Pecos** | **6.54** | **220** | Pn | Pn | 11 22 16.0 | -1.0 |
| **PBMO** | **Poplar Bluff** | **6.89** | **85** | IAmb_Lg | | 11 24 18.6 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **6.94** | **315** | Pn | Pn | 11 22 22.0 | -0.6 |
| PHWY | | | | IAmb_Lg | | 11 24 24.6 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **6.97** | **311** | Pn | Pn | 11 22 22.4 | -0.6 |
| **ECSD** | **EROS Data Cent** | **7.43** | **13** | Pn | Pn | 11 22 29.1 | 0.0 |
| **VHRN** | **Van Horn** | **7.59** | **223** | Pn | Pn | 11 22 32.0 | +0.6 |
| **TX31** | **Lajitas Ar. Si** | **8.17** | **210** | Pn | Pn | 11 22 39.4 | 0.0 |
| **RSSD** | **Black Hills** | **8.51** | **335** | IAmb_Lg | | 11 25 12.2 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **L42A** | **Oliver, Polo** | **9.07** | **50** | IAmb_Lg | | 11 25 46.1 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.28** | **44** | IAmb_Lg | | 11 25 31.9 | |
| | comp=Z,8.3nm,0.9s | | | | | | |

*IDC **07** 11:31:27.4±2.2,63.°91N×28.°55E,h0km,mbtmp2.8/2,*
*ML1.6/2,Error ellipse: s-maj=47.1km s-min=10.9km az=97.0*
*HEL **07** 11:31:27.3±0.1,63.°98N×28.°11E,h0km,ML1.5,Explosion*
**ISC 07 11:31:26.2**±0.8,**63.°95N**±0.°02×**28.°17E**±0.°03,**h0**km,**n27,**
**σ1s05/43,Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIF** | **Nilsia** | **0.59** | **196** | PG | **Pb** | **11 31 38.3** | **-1.0** |
| | baz=16 | | | | | | |
| NIF | | | | SG | **Sg** | **11 31 45.4** | **+0.4** |
| **RMF** | **Romuvaara** | **0.82** | **70** | PG | **Pb** | **11 31 42.9** | **-0.4** |
| RMF | | | | SG | **Sg** | **11 31 51.7** | **-0.8** |
| RMF | | | | MSG | | 11 31 53.2 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| **SUF** | **Sumiainen** | **1.54** | **217** | PG | **Pb** | **11 31 55.2** | **-0.3** |
| SUF | | | | MSG | | 11 32 13.4 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| SUF | | | | SN | **Sg** | **11 32 16.0** | **+0.5** |
| **OUF** | **Merijarvi** | **1.56** | **287** | PG | **Pn** | **11 31 54.6** | **-0.5** |
| OUF | | | | MSG | | 11 32 13.2 | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| **OBF4** | **Vikkela, Lumij** | **1.59** | **304** | PG | **Pn** | **11 31 55.4** | **-0.1** |
| | baz=118 | | | | | | |
| OBF4 | | | | MSG | | 11 32 14.0 | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| OBF4 | | | | SN | **Sg** | **11 32 18.4** | **+1.3** |
| **JOF** | **Joensuu** | **1.75** | **125** | PG | **Pg** | **11 31 59.3** | **-0.4** |
| JOF | | | | SN | **Sg** | **11 32 23.3** | **+0.9** |
| **OBF0** | **Syolatti, Pyha** | **1.80** | **289** | PG | **Pb** | **11 31 59.1** | **-0.9** |
| OBF0 | | | | MSG | | 11 32 20.2 | |
| | comp=Z,2.9nm,0.2s | | | | | | |
| **MSF** | **Maaselka** | **2.00** | **10** | PG | **Pb** | **11 32 02.3** | **-1.1** |
| | baz=195 | | | | | | |
| MSF | | | | SG | **Sg** | **11 32 29.8** | **-0.6** |
| **KAF** | **Kangasniemi** | **2.03** | **206** | PG | **Pb** | **11 32 03.8** | **-0.1** |
| | baz=26 | | | | | | |
| KAF | | | | MSG | | 11 32 27.9 | |
| | comp=Z,4.2nm,0.2s | | | | | | |
| KAF | | | | SG | **Sb** | **11 32 30.4** | **+0.7** |
| **OBF8** | **Ulkokalla** | **2.10** | **283** | PG | **Pb** | **11 32 04.1** | **-1.1** |
| OBF8 | | | | MSG | | 11 32 29.0 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| **RANF** | **Ranua** | **2.15** | **345** | PG | **Pb** | **11 32 04.9** | **-1.0** |
| RANF | | | | SG | **Sb** | **11 32 32.1** | **-1.1** |
| **KU6** | **Riekki** | **2.21** | **19** | PG | **Pb** | **11 32 06.8** | **-0.1** |
| | baz=199 | | | | | | |
| KU6 | | | | MSG | | 11 32 32.4 | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| KU6 | | | | SB | **Sb** | **11 32 34.3** | **-0.4** |
| **KEF** | **Keuruu** | **2.34** | **221** | PG | **Pb** | **11 32 08.7** | **-0.4** |
| KEF | | | | MSG | | 11 32 36.5 | |
| | comp=Z,3.5nm,0.2s | | | | | | |
| KEF | | | | SG | **Sb** | **11 32 38.6** | **+0.1** |
| **OLKF** | **Oulanka, Finla** | **2.44** | **12** | MSG | | 11 32 38.8 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| OLKF | | | | SB | **Sb** | **11 32 40.8** | **-0.4** |
| **RUF** | **Ruokolahti** | **2.56** | **172** | PG | **Pb** | **11 32 12.9** | **-0.1** |
| | baz=349 | | | | | | |
| RUF | | | | MSG | | 11 32 43.7 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| RUF | | | | SG | **Sg** | **11 32 46.6** | **-1.8** |
| **VAF** | **Ylistaro** | **2.63** | **252** | PG | **Pb** | **11 32 13.1** | **-1.0** |
| VAF | | | | MSG | | 11 32 44.3 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| VAF | | | | SG | **Sb** | **11 32 46.6** | **-0.2** |
| **TOF** | **Tornio** | **2.69** | **324** | MSG | | 11 32 45.3 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| TOF | | | | SB | **Sb** | **11 32 48.3** | **-0.3** |
| **FIA0** | **FINESS Array S** | **2.70** | **202** | PB | **Pb** | **11 32 13.9** | **-1.3** |
| FIA0 | | | | MSG | | 11 32 47.1 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| FIA0 | | | | SB | **Sb** | **11 32 47.3** | **-1.5** |
| **FINES** | **FINESS Array B** | **2.70** | **202** | Pn | **Pb** | **11 32 13.9** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=30,slow=16,SNR=6.4 | | | | | | |
| FINES | | | | Sn | **Sb** | **11 32 49.0** | **+0.2** |
| | comp=Z,0.6nm,0.3s,baz=25,slow=27,SNR=13 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **KALU** | **Kalix** | **2.81** | **315** | SB | **Sn** | **11 32 48.7** | **+2.1** |
| **RNF** | **Rovaniemi** | **2.82** | **342** | SB | **Sb** | **11 32 50.8** | **-1.5** |
| **KLF** | **Kolari** | **3.73** | **334** | PN | **Pn** | **11 32 26.5** | **+1.6** |
| KLF | | | | SB | **Sb** | **11 33 18.4** | **0.0** |
| **PAJU** | **Pajala** | **3.73** | **328** | PN | **Pn** | **11 32 26.7** | **+1.7** |
| | baz=147 | | | | | | |
| PAJU | | | | SB | **Sb** | **11 33 18.5** | **-0.2** |
| **MEF** | **Metsahovi** | **4.15** | **207** | PN | **Pn** | **11 32 31.8** | **+1.2** |
| **RAJF** | **Raja-Jooseppi** | **4.54** | **1** | PN | **Pn** | **11 32 38.4** | **+2.4** |
| **ARCES** | **ARCESS Array B** | **5.71** | **351** | Pn | **Pn** | **11 32 53.3** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=175,slow=12,SNR=2.4 | | | | | | |
| ARCES | | | | Sn | **Sn** | **11 33 56.9** | **-1.2** |
| | comp=Z,0.1nm,0.3s,baz=171,slow=23,SNR=1.7 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **I37NO** | **I37NO** | **6.40** | **328** | I | I | 12 10 30.0 | |
| | baz=139,slow=329,SNR=3.4 | | | | | | |

*AEIC **07** 11:32:10.4±2.7,56.°33N±0.°09×148.°4W±0.°1,h12km±7km,*
*Error ellipse: s-maj=13.1km s-min=9.3km az=165.0*
**NEIC 07 11:32:05.3**±2.7,**56.°32N**±0.°08×**148.°420W**±0.°010,
**h10**km±2km,**ML3.5**/42,**ML3.2**(AEIC),**Error ellipse: s-maj=13.7km s-min=3.0km az=182.0,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.83** | **291** | | Pn | 11 32 49.9 | -0.6 |
| **SYI** | **Shuyak Island** | **3.15** | **319** | | Pn | 11 32 55.0 | +0.1 |
| **SII** | **Sitkinak Islan** | **3.21** | **277** | Pn | Pn | 11 32 54.2 | -1.6 |
| SII | | | | IAML | | 11 33 37.4 | |
| | comp=N,152nm,0.9s | | | | | | |
| SII | | | | IAML | | 11 33 39.9 | |
| | comp=E,133nm,0.9s | | | | | | |
| **MID** | **Middleton Isla** | **3.31** | **19** | | Pn | 11 32 55.8 | -1.4 |
| MID | | | | IAML | | 11 33 35.3 | |
| | comp=N,89nm,0.9s | | | | | | |
| MID | | | | | Sn | 11 33 36.6 | +0.1 |
| MID | | | | IAML | | 11 34 00.4 | |
| | comp=E,111nm,1.2s | | | | | | |
| **CNPM** | **China Poot** | **3.55** | **336** | | Pn | 11 33 00.3 | -0.2 |
| CNPM | | | | IAML | | 11 33 45.4 | |
| | comp=N,49nm,1.2s | | | | | | |
| **BRSE** | **Bradley Lake S** | **3.65** | **341** | | Pn | 11 33 01.5 | -0.4 |
| **BRLK** | **Bradley Lake** | **3.70** | **340** | | Pn | 11 33 02.3 | -0.2 |
| BRLK | | | | IAML | | 11 33 48.9 | |
| | comp=N,40nm,0.4s | | | | | | |
| BRLK | | | | IAML | | 11 33 50.8 | |
| | comp=E,66nm,0.3s | | | | | | |
| **P23K** | **Montague Islan** | **3.73** | **8** | | Pn | 11 33 02.8 | -0.2 |
| **HOM** | **Homer** | **3.77** | **334** | | Pn | 11 33 04.0 | +0.6 |
| **SEW** | **Seward** | **3.84** | **352** | | Pn | 11 33 04.4 | 0.0 |
| **Q19K** | **Cape Douglas,** | **3.84** | **315** | | Pn | 11 33 03.6 | -0.9 |
| **KAHG** | **Katmai Hook Gl** | **3.97** | **306** | | Pn | 11 33 07.2 | +0.9 |
| **AU22** | **Augustine Moun** | **4.04** | **321** | | Pn | 11 33 08.0 | +0.8 |
| **KAIM** | **Kayak Island** | **4.20** | **29** | | Pn | 11 33 07.8 | -1.6 |
| KAIM | | | | IAML | | 11 34 04.4 | |
| | comp=E,67nm,1.2s | | | | | | |
| KAIM | | | | IAML | | 11 34 19.2 | |
| | comp=N,67nm,1.2s | | | | | | |
| **ACHA** | **Angle Creek He** | **4.20** | **300** | Pn | Pn | 11 33 08.2 | -1.3 |
| **P19K** | **Oil Pt** | **4.21** | **325** | | Pn | 11 33 08.2 | -1.4 |
| P19K | | | | IAML | | 11 34 01.8 | |
| | comp=E,78nm,1.0s | | | | | | |
| P19K | | | | IAML | | 11 34 02.1 | |
| | comp=N,79nm,1.0s | | | | | | |
| **HIN** | **Hinchinbrook I** | **4.22** | **13** | Pn | Pn | 11 33 08.4 | -1.3 |
| **KAHC** | **Katmai Hardscr** | **4.26** | **306** | | Pn | 11 33 11.2 | +0.9 |
| **ANCK** | **Angle Creek** | **4.28** | **299** | | Pn | 11 33 12.2 | +1.7 |
| **ILSW** | **Iliamna Southw** | **4.45** | **328** | | Pn | 11 33 10.5 | -2.4 |
| ILSW | | | | IAML | | 11 34 08.4 | |
| | comp=N,52nm,0.5s | | | | | | |
| ILSW | | | | IAML | | 11 34 17.4 | |
| | comp=E,47nm,0.9s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **4.47** | **17** | | Pn | 11 33 12.8 | -0.3 |
| **CNTC** | **Contact Creek** | **4.50** | **299** | | Pn | 11 33 14.3 | +0.8 |
| **PLK4** | **Peulik 4** | **4.54** | **290** | Pn | Pn | 11 33 12.3 | -1.9 |
| PLK4 | | | | IAML | | 11 34 13.8 | |
| | comp=N,47nm,0.8s | | | | | | |
| **HMT** | **Hamilton** | **4.59** | **27** | Pn | Pn | 11 33 13.2 | -1.5 |
| **RSO** | **Redoubt South** | **4.74** | **333** | Pn | Pn | 11 33 15.7 | -1.4 |
| **RC01** | **Rabbit Creek A** | **4.84** | **352** | Pn | Pn | 11 33 16.6 | -1.6 |
| RC01 | | | | IAML | | 11 34 13.0 | |
| | comp=N,24nm,1.2s | | | | | | |
| RC01 | | | | IAML | | 11 34 14.0 | |
| | comp=E,21nm,1.1s | | | | | | |
| **O18K** | **Koktuh Hills** | **5.05** | **317** | Pn | Pn | 11 33 19.9 | -1.3 |
| O18K | | | | IAML | | 11 34 28.1 | |
| | comp=N,21nm,0.9s | | | | | | |
| **SPU** | **Mount Spurr** | **5.23** | **340** | Pn | Pn | 11 33 23.0 | -0.7 |
| **CRQM** | **Cirque** | **5.24** | **30** | Pn | Pn | 11 33 24.0 | +0.1 |
| CRQM | | | | IAML | | 11 34 26.4 | |
| | comp=E,31nm,0.9s | | | | | | |
| **BAGL** | **Bagley Icefiel** | **5.35** | **36** | | Pn | 11 33 25.7 | +0.7 |
| **KLU** | **Klutina** | **5.35** | **13** | | Pn | 11 33 23.7 | -1.5 |
| KLU | | | | IAML | | 11 34 26.8 | |
| | comp=E,27nm,1.0s | | | | | | |
| KLU | | | | IAML | | 11 34 27.9 | |
| | comp=N,28nm,0.8s | | | | | | |
| **ISLE** | **Juniper Island** | **5.35** | **34** | Pn | Pn | 11 33 25.0 | -0.3 |

| | | | | | |
|---|---|---|---|---|---|
| F20K | Avaraart Lake | 11.30 345 | Pn | Pn | 11 34 48.0 +1.3 |
| E21K | Killik River | 12.43 350 | Pn | Pn | 11 35 01.6 -0.6 |
| G31M | Satah River | 12.55 26 | Pn | Pn | 11 35 03.0 -0.6 |

*OMAN **07** 12:23:48.9±0.1,28°.24N×57°.55E,h10km,mb5.7/1, ml3.4/16, Error ellipse: s-maj=1.3km s-min=0.9km az=234.0*
*DSN **07** 12:23:49.6±2.2,27°.93N×58°.29E,h15km,ML3.1/6, Error ellipse: s-maj=49.5km s-min=13.8km az=148.0*
*TEH **07** 12:23:49.4,28°.29N×57°.48E,h8km±7.1km, ML3.6*

**ISC 07 12:23:48.8±0.9,28°.28N±0°.04×57°.53E±0°.05,h10km,n44, σ1°64/61,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KHNJ | Kahnooj | 0.37 | 155 | Pg | Pg | 12 23 57.7 | +1.6 |
| KBAM | BAM | 1.18 | 43 | Pg | Pb | 12 24 11.9 | +0.6 |
| IBND | Bandar-abas | 1.20 | 227 | Pg | Pg | 12 24 12.8 | +0.9 |
| GENO | Geno | 1.49 | 234 | Pg | Pb | 12 24 16.7 | 0.0 |
| NGRK | Negar Kerman | 1.53 | 333 | Pg | Pb | 12 24 17.3 | -0.1 |
| CHMN | Cheshme madani | 1.57 | 0 | Pg | Pg | 12 24 19.4 | +0.3 |
| TVBK | TV Kerman | 1.83 | 339 | Pn | Pb | 12 24 23.0 | +0.4 |
| SHME | Shamm | 2.54 | 209 | P | Pn | 12 24 32.3 | +2.2 |
| SHME | | | | S | Sb | 12 25 05.4 | -0.4 |
| SHME | Shamm SNR=52 | 2.54 | 209 | P | Pn | 12 24 30.4 | +0.3 |
| SHME | | | | S | Sn | 12 25 01.5 | +0.4 |
| BANOM | Banah | 2.59 | 205 | P | Pn | 12 24 32.1 | +1.3 |
| BANOM | Banah | 2.59 | 205 | P | Pn | 12 24 31.8 | +0.9 |
| BANOM | | | | S | Sn | 12 25 03.8 | +1.4 |
| ZHDN | Zahedan | 3.09 | 68 | Pn | Pn | 12 24 41.1 | +3.3 |
| MASF | Masafi | 3.14 | 203 | P | Pn | 12 24 39.4 | +0.9 |
| MASF | | | | S | Sn | 12 25 16.8 | +0.7 |
| MSFE | Esma-Masafi | 3.15 | 203 | P | Pn | 12 24 40.3 | +1.7 |
| MDH | Madha | 3.17 | 201 | P | Pn | 12 24 37.8 | -0.9 |
| MDH | Madha | 3.17 | 201 | P | Pn | 12 24 38.0 | -0.7 |
| UMQ | Umm Al-Quwin | 3.21 | 212 | P | Pn | 12 24 38.9 | -0.4 |
| UOSS | Minazif | 3.53 | 200 | P | Pn | 12 24 43.4 | -0.2 |
| UOSS | Minazif | 3.53 | 200 | P | Pn | 12 24 44.9 | +1.2 |
| UOSS | | | | S | Sn | 12 25 28.4 | +3.0 |
| UOSS | | | | S | Sn | 12 25 28.5 | +3.0 |
| HATD | Hatta, Dubai | 3.66 | 200 | P | Pn | 12 24 45.4 | -0.1 |
| HATD | Hatta, Dubai | 3.66 | 200 | P | Pn | 12 24 44.6 | -0.9 |
| HATD | | | | S | Sn | 12 25 28.6 | -0.1 |
| NAZ | Nazwa, Dubai | 3.68 | 207 | P | Pn | 12 24 47.1 | +1.4 |
| NAZ | | | | S | Sn | 12 25 30.4 | +1.2 |
| ASHO | Ashiyiah | 3.82 | 201 | P | Pn | 12 24 48.8 | +1.2 |
| ASHO | Ashiyiah SNR=14 | 3.82 | 201 | P | Pn | 12 24 49.4 | +1.8 |
| FAQ | Al Faqa, Dubai | 3.92 | 207 | P | Pn | 12 24 50.7 | +1.5 |
| FAQ | | | | S | Sn | 12 25 35.4 | +0.1 |
| ASUD | Al Ashush, Dub | 4.14 | 209 | P | Pn | 12 24 54.4 | +2.3 |
| ASUD | | | | S | Sn | 12 25 40.8 | +0.3 |
| SOHO | SOHO | 4.22 | 192 | P | Pn | 12 24 51.6 | -1.6 |
| AJN | Ajban SNR=6.0 | 4.35 | 212 | P | Pn | 12 24 55.6 | +0.7 |
| AJN | | | | S | Sn | 12 25 44.6 | -1.1 |
| HOQ | Hoqain | 4.68 | 182 | P | Pn | 12 24 58.5 | -1.0 |
| HOQ | | | | S | Sn | 12 25 50.6 | -3.4 |
| BIDO | Bidbid | 4.77 | 173 | P | Pn | 12 25 00.8 | +0.1 |
| ARQ | Araqi SNR=18 | 5.00 | 191 | P | Pn | 12 25 05.5 | +1.5 |
| ARQ | | | | S | Sn | 12 26 02.1 | +0.1 |
| WSAR | Wadi Sarin SNR=12 | 5.12 | 169 | P | Pn | 12 25 05.2 | -0.3 |
| WSAR | | | | S | Sn | 12 26 01.1 | -3.7 |
| SMDO | Samad | 5.22 | 175 | P | Pn | 12 25 08.3 | +1.2 |
| SMDO | | | | S | Sn | 12 26 04.9 | -2.5 |
| WBK | Wadi Bani Khal | 5.79 | 167 | P | Pn | 12 25 15.1 | +0.2 |
| KLNJ | Kolanjah | 5.84 | 299 | Pn | Pn | 12 25 18.5 | +2.7 |
| SHMA | Al-Shehemyia SNR=10 | 6.33 | 249 | P | Pn | 12 25 23.0 | +0.8 |
| JLN | Jalan Bani Buh SNR=11 | 6.34 | 164 | P | Pn | 12 25 22.0 | -0.3 |
| JLN | | | | S | Sn | 12 26 31.6 | -3.2 |
| SAKB | Bahrain | 6.64 | 251 | P | Pn | 12 25 26.9 | +0.5 |
| TRNA | Turayna | 6.67 | 239 | P | Pn | 12 25 27.3 | +0.4 |
| SMRA | Abu-Samra | 6.96 | 241 | P | Pn | 12 25 31.2 | +0.4 |
| SMRA | | | | S | Sn | 12 26 45.6 | -4.5 |
| KBD | Kabd | 8.68 | 278 | P | Pn | 12 25 53.3 | -1.1 |
| WHFO | Wadi Hawf SNR=7.1 | 10.88 | 199 | P | Pn | 12 26 24.0 | -0.6 |
| ABTO | Aybut | 11.55 | 201 | P | Pn | 12 26 32.7 | -1.2 |
| RAYN | Ar Rayn | 11.81 | 249 | P | Pn | 12 26 34.7 | -2.8 |

*DJA **07** 12:24:13.6±0.6,8°.S±3°×11°.9E±°,h258km±6km,M4.4/13, mb4.8/1,mB5.1/1,MLv4.2/13,Mw(mB)4.5/1*
*NEIC **07** 12:24:13.1±2.2,7°.67S±0°.06×119°.41E±0°.06,h281km±8km, mb4.3/28,Error ellipse: s-maj=11.9km s-min=1.4km az=45.0*
*IDC **07** 12:24:14.0±1.6,7°.56S×119°.62E,h293km±15km,mb3.6/10, mbtmp4.2/12,Error ellipse: s-maj=26.9km s-min=8.4km az=58.0*

**ISC 07 12:24:13.6±0.4,7°.70S±0°.04×119°.44E±0°.05,h300km,n103, σ2°36/111,mb4.1/20,Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BSSI | Bau Bau, Buton | 1.87 | 34 | P | Pn | 12 24 55.8 | -3.6 |
| PLAI | Plampang | 1.99 | 236 | P | Pn | 12 24 56.8 | -3.5 |
| PLAI | | | | S | S | 12 25 30.4 | -7.1 |
| KAPI | Kappang | 2.69 | 7 | Pn | Pn | 12 25 03.9 | -2.5 |
| KAPI | Kappang 31nm,0.3s,baz=152,slow=7.4,SNR=12 | 2.69 | 7 | P | Pn | 12 25 04.1 | -2.4 |
| TWSI | Taliwang, Sumb | 2.73 | 248 | P | Pn | 12 25 03.3 | -3.5 |
| TWSI | | | | S | S | 12 25 41.5 | -7.7 |
| BASI | Baing, Sumba | 2.75 | 156 | P | Pn | 12 25 03.7 | -3.2 |
| BASI | | | | S | S | 12 25 42.4 | -7.1 |
| MMRI | Maumere | 2.92 | 109 | P | Pn | 12 25 06.4 | -2.3 |
| MMRI | Maumere | 2.92 | 109 | Pn | Pn | 12 25 06.1 | -2.6 |
| MMRI | Maumere | 2.92 | 109 | P | Pn | 12 25 06.1 | -2.6 |
| MMRI | | | | S | S | 12 25 46.4 | -6.2 |
| BNSI | Bone | 3.34 | 12 | P | Pn | 12 25 11.3 | -1.6 |
| BNSI | | | | S | S | 12 25 54.4 | -5.9 |
| SPSI | Sidrap Palu | 3.73 | 5 | P | Pn | 12 25 15.1 | -1.8 |
| BBSI | Bau Bau | 3.81 | 55 | P | Pn | 12 25 16.8 | -1.1 |
| SRBI | Singaraja | 4.20 | 264 | P | Pn | 12 25 19.0 | -3.1 |
| BATI | Baumata | 4.86 | 121 | P | Pn | 12 25 28.1 | -1.5 |
| SOEI | Soe | 5.19 | 113 | P | Pn | 12 25 31.7 | -1.9 |
| SOEI | Soe | 5.19 | 113 | Pn | Pn | 12 25 31.6 | -2.0 |
| SOEI | Soe | 5.19 | 113 | P | Pn | 12 25 31.1 | -2.5 |
| SOEI | | | | S | S | 12 26 30.6 | -7.2 |
| JAGI | Jajag, Banyuwa | 5.29 | 261 | P | Pn | 12 25 32.1 | -2.5 |
| JAGI | Jajag, Banyuwa | 5.29 | 261 | Pn | Pn | 12 25 32.0 | -2.6 |
| UGM | Wanagama | 8.83 | 268 | P | Pn | 12 26 16.0 | -1.6 |
| UGM | Wanagama | 8.83 | 268 | Pn | Pn | 12 26 14.6 | -2.9 |
| TOLI2 | Tolitoli | 8.86 | 9 | P | Pn | 12 26 15.6 | -2.2 |
| TOLI2 | Tolitoli | 8.86 | 9 | Pn | Pn | 12 26 15.4 | -2.4 |
| BBJI | Bungbulang | 11.69 | 270 | P | Pn | 12 26 52.9 | +0.4 |
| FITZ | Fitzroy Crossi | 11.97 | 150 | | P | 12 26 57.9 | +0.7 |
| KNRA | Kununurra | 12.09 | 132 | Pn | Pn | 12 26 56.4 | -0.9 |
| DRS | Darwin Rock St | 12.22 | 114 | P | Pn | 12 26 58.8 | -0.2 |
| SBUM | Sibu | 12.39 | 324 | Pn | Pn | 12 26 58.9 | -2.1 |
| MTN | Manton Dam | 12.59 | 115 | P | Pn | 12 27 03.1 | -0.3 |
| MTN | Manton Dam | 12.59 | 115 | Pn | Pn | 12 27 01.4 | -2.1 |
| MYLDM | Lahad Datu | 12.83 | 356 | Pn | Pn | 12 27 02.9 | -3.4 |
| KSM | Kuching | 12.88 | 315 | Pn | Pn | 12 27 05.0 | -2.0 |
| MBWA | Marble Bar | 13.38 | 179 | Pn | Pn | 12 27 10.9 | -1.9 |
| FAKI | Fak Fak | 13.61 | 70 | P | P | 12 27 14.3 | -1.2 |
| FAKI | Fak Fak | 13.61 | 70 | | P | 12 27 13.6 | -2.0 |
| KDU | Kakadu | 13.75 | 112 | P | Pn | 12 27 18.2 | +0.8 |
| PSA00 | Pilbara Seismi | 13.80 | 178 | | P | 12 27 15.7 | -1.8 |
| WB0 | Warramunga Arr | 18.82 | 131 | P | P | 12 28 12.6 | +0.4 |
| WB0 | comp=Z,12nm,0.7s | | | IAmb | IAmb | 12 28 13.2 | |
| MEEK | Meekatharra | 18.85 | 182 | P | P | 12 28 13.7 | +1.3 |
| WRA | Warramunga Arr | 18.89 | 132 | P | P | 12 28 12.8 | -0.1 |
| WRA | Warramunga Arr comp=Z,6.1nm,0.6s,baz=300,slow=12,SNR=136 | 18.89 | 132 | P | P | 12 28 13.3 | +0.4 |
| WRA | | | | S | S | 12 31 31.1 | -0.4 |
| WRAB | Tennant Creek comp=Z,3.1nm,0.9s,baz=293,slow=21,SNR=7.4 | 18.89 | 132 | P | P | 12 28 13.8 | +0.8 |
| WRAB | | | | IAmb | IAmb | 12 28 16.7 | |
| WB2 | Warramunga Arr comp=Z,12nm,0.7s | 18.90 | 132 | P | P | 12 28 13.6 | +0.6 |
| WB2 | | | | IAmb | IAmb | 12 28 16.7 | |
| WR0 | Warramunga Arr | 19.05 | 131 | P | P | 12 28 15.5 | +0.9 |
| WR0 | comp=Z,14nm,0.7s | | | IAmb | IAmb | 12 28 15.8 | |
| WRKA | Warakurna | 19.21 | 155 | P | P | 12 28 17.1 | +0.8 |
| AS31 | Alice Springs | 21.09 | 140 | P | P | 12 28 36.7 | +1.2 |
| AS31 | comp=Z,6.5nm,0.5s | | | IAmb | IAmb | 12 28 37.1 | |
| ASAR | Alice Springs | 21.09 | 140 | P | P | 12 28 36.8 | +1.3 |
| ASAR | Alice Springs comp=Z,9.8nm,0.3s,baz=317,slow=8.8,SNR=42! | 21.09 | 140 | P | P | 12 28 36.6 | +1.2 |
| ASAR | | | | S | S | 12 32 11.9 | +2.0 |
| AS01 | Alice Springs comp=Z,9.8nm,0.3s | 21.11 | 140 | P | P | 12 28 36.9 | +1.2 |
| MORW | Morawa | 21.50 | 188 | P | P | 12 28 40.4 | +1.3 |
| MORW | Morawa | 21.50 | 188 | P | P | 12 28 40.3 | +1.3 |
| MORW | comp=Z,18nm,1.2s | | | IAmb | IAmb | 12 29 17.4 | |
| KULM | Kulim comp=Z,30nm,1.3s | 22.75 | 304 | P | P | 12 28 50.9 | +0.2 |
| KULM | | | | IAmb | IAmb | 12 29 20.7 | |
| BLDU | Ballidu | 22.94 | 186 | P | P | 12 28 53.3 | +1.1 |
| QIS | Mount Isa | 23.33 | 125 | P | P | 12 28 57.8 | +1.9 |
| KMBL | Kambalda | 23.66 | 175 | P | P | 12 28 59.5 | +0.8 |
| KLBR | Kellerberrin | 23.82 | 184 | P | P | 12 29 01.4 | +1.2 |
| COEN | Coen | 24.12 | 107 | P | P | 12 29 02.8 | -0.3 |
| COEN | Coen | 24.12 | 107 | P | P | 12 29 02.1 | -1.0 |
| COEN | comp=Z,11nm,1.3s | | | IAmb | IAmb | 12 29 36.1 | |
| FORT | Forrest | 24.34 | 162 | P | P | 12 29 06.9 | +2.1 |
| FORT | Forrest | 24.34 | 162 | P | P | 12 29 06.3 | +1.4 |
| NWAO | Narrogin (SRO) | 25.18 | 184 | P | P | 12 29 14.1 | +1.6 |
| OOD | Oodnadatta | 25.22 | 144 | P | P | 12 29 15.1 | +2.3 |
| MULG | Mulgathing | 26.32 | 150 | P | P | 12 29 24.3 | +1.7 |
| MTSU | Mount Surprise | 26.34 | 116 | P | P | 12 29 24.0 | +1.0 |
| LCRK | Leigh Creek | 28.66 | 145 | P | P | 12 29 45.1 | +1.7 |
| BBOO | Buckleboo | 29.36 | 151 | P | P | 12 29 50.6 | +1.1 |
| BBOO | Buckleboo | 29.36 | 151 | P | P | 12 29 51.1 | +1.5 |
| TPUB | Ta-pu | 30.83 | 2 | P | P | 12 30 03.0 | +0.5 |
| YULB | Yu-li | 30.95 | 3 | P | P | 12 30 03.1 | -0.5 |
| YULB | comp=Z,13nm,1.3s | | | IAmb | IAmb | 12 30 04.4 | |
| HTT | Hallett | 31.32 | 148 | P | P | 12 30 08.2 | +1.5 |
| SSLB | Suanglung | 31.33 | 3 | P | P | 12 30 07.3 | +0.5 |
| STKA | Stephens Creek | 31.69 | 142 | P | P | 12 30 11.7 | +1.8 |
| STKA | Stephens Creek | 31.69 | 142 | P | P | 12 30 11.8 | +1.8 |
| STKA | Stephens Creek comp=Z,4.8nm,0.3s,baz=316,slow=8.9,SNR=26 | 31.69 | 142 | P | P | 12 30 11.6 | +1.6 |
| YHNB | Yeheng | 32.23 | 3 | P | P | 12 30 14.9 | +0.2 |
| YHNB | Yeheng comp=Z,4.8nm,0.3s | 32.23 | 3 | P | P | 12 30 14.4 | -0.3 |
| CMAR | Chiang Mai Arr comp=Z,0.7nm,0.4s,baz=140,slow=5.7,SNR=1.9 | 32.93 | 322 | P | P | 12 30 25.2 | +4.4 |
| CRAI | Chiangrai | 33.50 | 326 | P | P | 12 30 27.1 | +1.5 |
| CRAI | comp=Z,5.2nm,0.8s | | | IAmb | IAmb | 12 30 28.2 | |
| CMSA | Cobar Meteorol | 34.08 | 138 | P | P | 12 30 32.0 | +1.5 |
| ARPS | Mount Arapiles | 35.40 | 148 | P | P | 12 30 44.1 | +2.4 |
| YNG | Young | 37.57 | 139 | P | P | 12 31 02.1 | +2.1 |
| ENH | Enshi | 38.95 | 346 | P | P | 12 31 11.1 | -0.3 |
| ENH | comp=Z,9.6nm,0.6s | | | IAmb | IAmb | 12 31 13.4 | |
| KSRS | Korea Array comp=Z,1.0nm,0.6s,baz=202,slow=9.2,SNR=4.7 | 45.61 | 9 | P | P | 12 32 06.0 | +1.4 |
| SONM | Songino Array | 56.48 | 349 | P | P | 12 33 25.8 | +0.8 |
| SONM | Songino Array comp=Z,1.7nm,0.6s,baz=156,slow=10,SNR=5.3 | 56.48 | 349 | P | P | 12 33 25.7 | +0.6 |
| CASY | Casey | 58.81 | 184 | P | P | 12 33 42.6 | +1.9 |
| CASY | comp=Z,8.2nm,1.4s | | | IAmb | IAmb | 12 33 48.5 | |
| MK31 | Makanchi Array | 63.51 | 332 | P | P | 12 34 13.3 | +0.9 |
| MKAR | Makanchi Array | 63.51 | 332 | P | P | 12 34 13.2 | +0.8 |
| MKAR | Makanchi Array comp=Z,1.0nm,0.4s,baz=145,slow=7.0,SNR=21 | 63.51 | 332 | P | P | 12 34 13.0 | +0.6 |
| MAKZ | Makanchi comp=Z,1.0nm,0.4s | 63.66 | 332 | P | P | 12 34 15.4 | +2.0 |
| BOOM | Boomskoye usch | 63.76 | 325 | P | P | 12 34 15.1 | +0.8 |
| GAR | Garm | 65.04 | 319 | P | P | 12 34 22.0 | -0.5 |
| GAR | comp=Z,5.1nm,0.7s | | | IAmb | IAmb | 12 34 23.3 | |
| ZALV | Zalesovo Beam | 67.99 | 339 | P | P | 12 34 40.7 | 0.0 |
| ZALV | Zalesovo Beam comp=Z,2.0nm,0.3s,baz=132,slow=6.4,SNR=9.3 comp=Z,2.0nm,0.3s | 67.99 | 339 | P | P | 12 34 40.4 | -0.2 |
| KURBB | Kurchatov Arra comp=Z,0.5nm,0.4s,baz=140,slow=6.1,SNR=6.3 comp=Z,0.5nm,0.4s | 68.00 | 333 | P | P | 12 34 40.9 | +0.1 |
| MAW | Mawson comp=Z,1.3nm,0.6s,baz=124,slow=7.3,SNR=2.1 comp=Z,1.3nm,0.6s | 70.60 | 200 | P | P | 12 34 58.7 | +2.4 |
| VNDA | Vanda | 73.20 | 171 | P | P | 12 35 13.9 | +2.3 |
| VNDA | Vanda comp=Z,1.1nm,0.5s,baz=313,slow=7.5,SNR=24 comp=Z,1.1nm,0.5s | 73.20 | 171 | P | P | 12 35 13.8 | +2.3 |
| SBA | Scott Base | 74.19 | 171 | P | P | 12 35 18.8 | +1.5 |
| ABKAR | Akbulak array | 76.76 | 325 | P | P | 12 35 32.4 | +0.2 |
| QSPA | South Pole Qui | 82.28 | 180 | P | P | 12 36 03.3 | +1.5 |
| QSPA | comp=Z,5.5nm,1.5s | | | IAmb | IAmb | 12 36 42.8 | |
| QSPA | South Pole Qui comp=Z,0.6nm,0.5s,baz=293,slow=1.4,SNR=11 comp=Z,0.6nm,0.5s | 82.28 | 180 | P | P | 12 36 03.3 | +1.5 |
| CPUP | Villa Florida comp=Z,1.0nm,0.5s,baz=161,slow=2.1,SNR=4.9 | 146.03 | 185 | PKPbc | PKPab | 12 43 20.3 | +0.1 |

**KRSC 07 12:54:04.7±2.0,55°.57N×164°.39E,h15km±27km,MI3.7, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBTR | Krutoberegovo | 1.09 | 307 | eP | Pb | 12 54 23.9 | -1.3 |
| KBTR | | | | eS | Sb | 12 54 37.7 | -1.5 |
| KBG | Krutoberegovo | 1.17 | 307 | eP | Pn | 12 54 25.1 | -1.3 |
| KBG | | | | eS | Sb | 12 54 39.9 | -1.6 |
| MKZ | Mys Kozlova | 1.83 | 238 | eP | Pb | 12 54 37.0 | -0.9 |
| BZGR | Bezymyannyi-Gr | 2.12 | 282 | eP | Pn | 12 54 41.0 | +1.4 |
| BZP | Bezymyannyi-Pe | 2.21 | 281 | eP | Pb | 12 54 43.5 | -0.8 |
| KLY | Klyuchi | 2.23 | 291 | eP | Pn | 12 54 41.0 | +0.1 |
| KLY | | | | eS | Sn | 12 55 07.4 | -0.8 |
| BZMR | Bezymyannaya | 2.23 | 281 | eP | Pn | 12 54 42.7 | +1.5 |
| BZWR | Bezymyannyi-We | 2.23 | 282 | eP | Pb | 12 54 43.6 | -1.2 |
| TUMD | Tumrok D | 2.31 | 263 | eP | Pb | 12 54 44.9 | -1.0 |
| TUMD | | | | eS | Sb | 12 55 13.3 | -0.8 |
| KIRR | Kirishev | 2.32 | 281 | eP | Pb | 12 54 44.5 | -1.7 |
| KMNR | Kamenistaya | 2.36 | 276 | eP | Pb | 12 54 45.7 | -1.1 |
| KPT | Kopyto | 2.39 | 281 | eP | Pb | 12 54 45.3 | -2.0 |
| TUMR | Tumrok | 2.44 | 265 | eP | Pb | 12 54 47.0 | -1.1 |
| KOZ | Kozyrevsk | 2.60 | 283 | eP | Pb | 12 54 49.2 | -1.7 |
| SRDR | Sredinnyy | 2.73 | 288 | eP | Pb | 12 54 50.8 | -2.4 |
| ESO | Esso | 3.24 | 279 | eP | Pn | 12 54 56.4 | +1.6 |
| KRER | Koryakskii | 4.00 | 238 | eP | Pn | 12 55 09.3 | +3.9 |
| SMAR | Somma | 4.00 | 237 | eP | Pn | 12 55 08.8 | +3.3 |
| KRX | Arik | 4.01 | 239 | eP | Pn | 12 55 09.5 | +3.8 |
| UGLR | Uglovaya | 4.02 | 236 | eP | Pn | 12 55 09.0 | +3.3 |
| AVH | Avacha | 4.03 | 237 | eP | Pn | 12 55 08.8 | +4.0 |
| KOK | Koryaka | 4.06 | 238 | eP | Pn | 12 55 10.3 | +4.0 |
| DALK | Dalny | 4.17 | 235 | eP | Pn | 12 55 10.5 | +3.0 |
| GNL | Ganaly | 4.19 | 246 | eP | Pn | 12 55 12.1 | +4.1 |
| KRMR | Karymshinskiy | 4.59 | 236 | eP | Pn | 12 55 16.9 | +3.6 |
| MTVR | Mutnovka | 4.79 | 232 | eP | Pn | 12 55 19.8 | +3.6 |
| GRL | Gorelyy | 4.79 | 234 | eP | Pn | 12 55 20.1 | +3.8 |
| ASAK | Asacha | 4.99 | 233 | eP | Pn | 12 55 23.1 | +4.2 |

*NOU **07** 13:07:13.8,36°.21S×178°.18E,h341km,MLv4.1/8, Off E. Coast of N. Island, N.Z.*
*WEL **07** 13:07:33.2±0.8,37°.5±6°×17°.7E±°,h208km±6km, M2.9/24, ML2.9/8,MLv2.9/24, Error ellipse: s-maj=0.0km s-min=0.0km az=46.4, confirmed*

**ISC 07 13:07:27.2±2.4,36°.93S±0°.09×177°.15E±0°.09, h256km±12km,n97,σ1°84/107,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HAZ | Te Kaha | 0.97 | 149 | P | Pn | 13 08 03.8 | +1.1 |
| HAZ | | | | S | S | 13 08 27.3 | -3.3 |
| RUGZ | Raukumara Rang | 1.12 | 158 | P | Pn | 13 08 04.5 | +0.8 |
| RUGZ | | | | S | S | 13 08 28.7 | -3.8 |
| KUZ | Kuaotunu | 1.16 | 279 | P | Pn | 13 08 04.6 | +0.8 |
| KUZ | Kuaotunu | 1.16 | 279 | P | Pn | 13 08 04.6 | +0.8 |
| URZ | Urewera | 1.33 | 181 | P | Pn | 13 08 06.1 | +1.3 |
| URZ | Urewera | 1.33 | 181 | P | Pn | 13 08 05.9 | +1.1 |
| URZ | | | | S | S | 13 08 31.7 | -2.9 |
| WMGZ | Waiomatatini S | 1.34 | 132 | P | Pn | 13 08 07.3 | +2.3 |
| TWGZ | Tauwhareparae | 1.41 | 152 | P | Pn | 13 08 07.9 | +2.5 |
| TWGZ | | | | S | S | 13 08 34.8 | -0.9 |
| MWZ | Matawai | 1.43 | 168 | P | Pn | 13 08 07.4 | +1.7 |
| MWZ | | | | S | S | 13 08 33.6 | -2.4 |
| PUZ | Puketiti | 1.44 | 143 | P | Pn | 13 08 07.7 | +2.1 |
| RRRZ | Republican Roa | 1.50 | 200 | P | Pn | 13 08 07.7 | +1.6 |
| TOZ | Tahuroa Road | 1.54 | 238 | P | Pn | 13 08 08.5 | +2.2 |
| MUGZ | Murupara | 1.57 | 191 | P | Pn | 13 08 08.3 | +1.6 |
| MKAZ | Moumakai | 1.60 | 263 | P | Pn | 13 08 08.6 | +1.8 |
| TKGZ | Te Karaka | 1.61 | 160 | P | Pn | 13 08 09.0 | +2.2 |
| TKGZ | | | | S | S | 13 08 36.4 | -1.8 |
| WIAZ | Waiheke Island | 1.62 | 274 | P | Pn | 13 08 08.6 | +1.6 |
| PRRZ | Plateau Road | 1.68 | 201 | P | Pn | 13 08 09.5 | +2.0 |
| PRRZ | | | | S | S | 13 08 38.7 | -0.6 |
| RTZ | Ruatahuna | 1.69 | 185 | P | Pn | 13 08 09.4 | +1.8 |
| ALRZ | Allen Road | 1.75 | 201 | P | Pn | 13 08 10.2 | +2.2 |
| CNGZ | Carnagh Statio | 1.76 | 152 | P | Pn | 13 08 11.1 | +3.0 |
| ETAZ | East Tamaki Re | 1.78 | 269 | P | Pn | 13 08 10.3 | +1.9 |
| MBAZ | Motutapu North | 1.81 | 274 | P | Pn | 13 08 10.4 | +1.9 |
| RIGZ | Rimuhau | 1.84 | 165 | P | Pn | 13 08 11.4 | +2.6 |
| RIGZ | | | | S | S | 13 08 40.9 | -0.9 |
| SNGZ | Shannon Statio | 1.85 | 175 | P | Pn | 13 08 11.1 | +2.2 |
| SNGZ | | | | S | S | 13 08 40.9 | -1.1 |
| MTHZ | Maungataniwha | 1.94 | 187 | P | Pn | 13 08 11.4 | +1.8 |
| RAHZ | Arahi | 1.98 | 181 | P | Pn | 13 08 12.3 | +2.3 |
| MRHZ | Matea Rd | 1.99 | 197 | P | Pn | 13 08 12.0 | +1.9 |
| MRHZ | | | | S | S | 13 08 43.3 | -0.7 |
| AWAZ | Awhitu Peninsu | 2.01 | 265 | P | Pn | 13 08 12.0 | +1.7 |
| RVAZ | Riverhead Bore | 2.07 | 274 | P | Pn | 13 08 11.5 | +0.7 |
| KNZ | Kokohu | 2.13 | 169 | P | Pn | 13 08 13.4 | +2.1 |
| WHHZ | Waihua | 2.15 | 178 | P | Pn | 13 08 14.0 | +2.5 |
| NMHZ | Naumai | 2.18 | 187 | P | Pn | 13 08 14.6 | +2.7 |
| RATZ | Rangitukua | 2.22 | 209 | P | Pn | 13 08 14.5 | +2.3 |
| BKZ | Black Stump Fm | 2.29 | 193 | P | Pn | 13 08 14.4 | +1.5 |
| BKZ | Black Stump Fm | 2.29 | 193 | P | Pn | 13 08 14.4 | +1.5 |
| MHGZ | Mahia Peninsul | 2.30 | 165 | P | Pn | 13 08 15.7 | +2.8 |
| ARHZ | Aropaoanui | 2.33 | 183 | P | Pn | 13 08 15.6 | +2.4 |
| HIZ | Hauiti | 2.41 | 228 | P | Pn | 13 08 17.6 | +3.6 |
| HIZ | Hauiti | 2.41 | 228 | P | Pn | 13 08 17.3 | +3.4 |
| NTVZ | North Tongarir | 2.46 | 208 | P | Pn | 13 08 16.9 | +2.4 |
| TMVZ | Te Maari | 2.46 | 207 | P | Pn | 13 08 16.9 | +2.2 |
| KRVZ | Karewarewa | 2.47 | 208 | P | Pn | 13 08 17.4 | +2.7 |
| WCZ | Waipu Caves | 2.47 | 293 | P | Pn | 13 08 15.8 | +1.2 |
| ETVZ | East Tongariro | 2.48 | 207 | P | Pn | 13 08 17.0 | +2.2 |
| WTVZ | West Tongariro | 2.51 | 209 | P | Pn | 13 08 17.3 | +2.3 |
| OTVZ | Oturere | 2.52 | 207 | P | Pn | 13 08 17.6 | +2.3 |
| MCHZ | McNeill Hill | 2.54 | 188 | P | Pn | 13 08 17.6 | +2.4 |
| SNVZ | South Ngauruho | 2.55 | 207 | P | Pn | 13 08 17.8 | +2.2 |
| KWHZ | Kaweka Forest | 2.56 | 193 | P | Pn | 13 08 17.6 | +2.1 |
| FWVZ | Far West T-bar | 2.64 | 208 | P | Pn | 13 08 18.7 | +2.2 |
| WHVZ | Whangaehu Hut | 2.65 | 207 | P | Pn | 13 08 18.7 | +2.0 |
| WNVZ | Wahianoa | 2.69 | 207 | P | Pn | 13 08 18.8 | +1.9 |
| MOVZ | Moawhango | 2.71 | 204 | P | Pn | 13 08 18.5 | +1.5 |
| KRHZ | Kereru | 2.78 | 193 | P | Pn | 13 08 19.5 | +1.7 |
| KAHZ | Kahuranaki | 2.87 | 184 | P | Pn | 13 08 20.9 | +2.3 |
| VRZ | Vera Road | 2.89 | 220 | P | Pn | 13 08 22.1 | +3.2 |
| PNHZ | Pukenui | 3.07 | 194 | P | Pn | 13 08 22.3 | +1.5 |
| PXZ | Pawanui | 3.10 | 184 | P | Pn | 13 08 22.9 | +1.8 |
| WPHZ | Waipukurau | 3.18 | 190 | P | Pn | 13 08 23.5 | +1.6 |
| TSZ | Takapari Road | 3.26 | 196 | P | Pn | 13 08 24.4 | +1.5 |
| OUZ | Omahuta | 3.35 | 300 | P | Pn | 13 08 25.9 | +2.0 |
| PRHZ | Porangahau | 3.36 | 187 | P | Pn | 13 08 25.6 | +1.7 |
| DVHZ | Dannevirke | 3.45 | 193 | P | Pn | 13 08 26.1 | +1.2 |
| ANWZ | Angora Road | 3.56 | 188 | P | Pn | 13 08 27.9 | +1.8 |
| POWZ | Post Office Ro | 3.62 | 197 | P | Pn | 13 08 28.2 | +1.3 |
| PRWZ | Pori Road | 3.74 | 194 | P | Pn | 13 08 29.8 | +1.7 |
| BFZ | Birch Farm | 3.81 | 190 | P | Pn | 13 08 30.5 | +1.5 |
| BFZ | Birch Farm | 3.81 | 190 | P | Pn | 13 08 30.2 | +1.2 |
| MRZ | Mangatainoka R | 3.92 | 198 | P | Pn | 13 08 31.2 | +0.9 |
| TIWZ | Tintock | 3.97 | 194 | P | Pn | 13 08 31.6 | +0.8 |
| HOWZ | Holdsworth Sta | 4.16 | 197 | P | Pn | 13 08 33.8 | +0.7 |
| OGWZ | Otaki Gorge | 4.18 | 201 | P | Pn | 13 08 34.2 | +0.9 |
| TMWZ | Te Maipa | 4.29 | 193 | P | Pn | 13 08 35.7 | +1.1 |
| KIW | Kapiti Island | 4.30 | 203 | P | Pn | 13 08 35.7 | +1.0 |
| MTW | Mount Morrison | 4.41 | 196 | P | Pn | 13 08 36.7 | +0.6 |
| CAW | Cannon Point | 4.48 | 201 | P | Pn | 13 08 37.3 | +0.5 |
| TRWZ | Traveller | 4.61 | 194 | P | Pn | 13 08 39.2 | +0.8 |
| MSWZ | Moikau Station | 4.72 | 198 | P | Pn | 13 08 40.1 | +0.3 |
| WEL | Wellington | 4.73 | 202 | P | Pn | 13 08 40.3 | +0.5 |
| SNZO | South Karori | 4.77 | 203 | P | Pn | 13 08 40.9 | +0.6 |
| BHW | Baring Head | 4.81 | 201 | P | Pn | 13 08 41.0 | +0.2 |
| TCW | Tory Channel | 4.83 | 207 | P | Pn | 13 08 41.8 | +0.8 |
| PLWZ | Palliser | 4.86 | 197 | P | Pn | 13 08 41.9 | +0.5 |
| TUWZ | Tuamarina | 5.14 | 208 | P | Pn | 13 08 46.1 | +1.4 |
| NNZ | Nelson | 5.19 | 213 | P | Pn | 13 08 45.5 | +0.1 |
| QRZ | Quartz Range 62nm,1.8s | 5.30 | 221 | P | Pn | 13 08 49.1 | +2.3 |
| QRZ | Quartz Range | 5.30 | 221 | P | Pn | 13 08 47.3 | +0.5 |
| MRNZ | Matariki Terra | 5.62 | 216 | P | Pn | 13 08 52.2 | +1.5 |
| THZ | Tophouse | 5.84 | 213 | P | Pn | 13 08 54.2 | +0.7 |
| KHZ | Kahutara | 6.15

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YENI** | **Yenice-Canakka** | **1.37** | **43** | Pn | **Pb** | **13 15 58.5** | **-0.4** |
| **AKS** | **Akhisar** | **1.40** | **92** | Pn | **Pn** | **13 15 58.8** | **+0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.49** | **13** | Pn | **Pn** | **13 16 00.0** | **+0.1** |
| **KYMI** | **Kymi, Euboea I** | **1.53** | **259** | P | **Pb** | **13 16 02.0** | **+0.4** |
| KYMI | | | | S | **Sb** | **13 16 21.9** | **+1.0** |
| | comp=N,38nm,1.0s | | | | | | |
| **LPK** | **Lapseki** | **1.54** | **22** | Pn | **Pn** | **13 16 00.7** | **+0.2** |
| **GCAM** | **G?zelcaml?** | **1.57** | **142** | Pn | **Pn** | **13 16 00.8** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **1.57** | **346** | P | **Pn** | **13 16 00.4** | **-0.6** |
| **GONE** | **Gonen-Balikesi** | **1.70** | **49** | Pn | **Pn** | **13 16 03.0** | **+0.3** |
| **KRBG** | **Karabiga-Canak** | **1.75** | **34** | Pn | **Pn** | **13 16 03.2** | **-0.2** |
| **ERIK** | **Erikli-Kesan** | **1.77** | **12** | Pn | **Pn** | **13 16 03.9** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.78** | **124** | Pn | **Pn** | **13 16 04.1** | **+0.2** |
| **ENEZ** | **Enez** | **1.79** | **3** | Pn | **Pn** | **13 16 04.1** | **+0.1** |
| **SUSR** | **Susurluk-Balik** | **1.90** | **57** | Pn | **Pn** | **13 16 04.9** | **-0.5** |
| **APE** | **Apeiranthos** | **1.91** | **192** | Pn | **Pn** | **13 16 05.1** | **-0.6** |
| **APE** | **Apeiranthos** | **1.91** | **192** | P | **Pn** | **13 16 05.0** | **-0.6** |
| **APE** | **Apeiranthos** | **1.91** | **192** | P | **Pn** | **13 16 04.9** | **-0.7** |
| **THAS** | **Thassos island** | **1.94** | **329** | P | **Pn** | **13 16 05.7** | **-0.3** |
| **ALN** | **Alexandroupoli** | **1.95** | **1** | Pn | **Pn** | **13 16 06.4** | **+0.2** |
| **ALN** | **Alexandroupoli** | **1.95** | **1** | P | **Pn** | **13 16 05.8** | **-0.4** |
| ALN | | | | S | **Sb** | **13 16 32.6** | **-0.4** |
| | comp=N,58nm,0.4s | | | | | | |
| **ALN** | **Alexandroupoli** | **1.95** | **1** | P | **Pn** | **13 16 05.8** | **-0.4** |
| ALN | | | | AML | AML | 13 16 36.8 | |
| | comp=N,149µm,0.6s | | | | | | |
| ALN | | | | AML | AML | 13 16 38.1 | |
| | comp=E,76µm,0.3s | | | | | | |
| **RKY** | **Sarkoy-Tekirda** | **1.96** | **27** | Pn | **Pn** | **13 16 06.6** | **+0.3** |
| **EDC** | **Edincik** | **2.00** | **45** | Pn | **Pn** | **13 16 07.3** | **+0.5** |
| **NAZL** | **Nazilli-Aydin** | **2.04** | **118** | Pn | **Pn** | **13 16 07.7** | **+0.3** |
| **BODT** | **Bodrum** | **2.14** | **151** | Pn | **Pn** | **13 16 08.2** | **-0.6** |
| **RDO** | **Rodhopi** | **2.23** | **351** | Pn | **Pn** | **13 16 10.2** | **+0.2** |
| **UKOP** | **Uzunkopru-Edir** | **2.23** | **12** | Pn | **Pn** | **13 16 10.5** | **+0.5** |
| **KCTX** | **Karacabey (Bur** | **2.24** | **53** | Pn | **Pn** | **13 16 10.6** | **+0.4** |
| **KAVA** | **Kavala** | **2.35** | **331** | P | **Pn** | **13 16 11.5** | **-0.2** |
| **MDNY** | **Mudanya-Bursa** | **2.63** | **56** | Pn | **Pn** | **13 16 12.6** | **+0.7** |
| **YLV** | **Yalova** | **3.05** | **57** | Pn | **Pn** | **13 16 22.4** | **+1.0** |
| **BGKT** | **Bogazkoy** | **3.08** | **43** | Pn | **Pn** | **13 16 22.7** | **+1.1** |
| **ISK** | **Istanbul-Kandi** | **3.15** | **47** | Pn | **Pn** | **13 16 23.7** | **+1.0** |

*IDC **07** 13:22:57.5±3.6,8°.05N×91°.73E,h49km±.39km, mb3.5/4, mbtmp3.8/6,ML3.7/2,MS3.0/1,Error ellipse: s-maj=37.8km s-min=30.1km az=59.0*

**ISC 07 13:22:56.4±1.3,8°.0N±0°.2×91°.8E±0°.1,h35km,n12,σ0s98/6, mb3.7/4,Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALK** | **Pallekele** | **11.04** | **267** | P | **Pn** | **13 25 32.4** | **+0.4** |
| | 0.7nm,0.3s,baz=135,slow=2.9,SNR=2.2 | | | | | | |
| PALK | | | | S | Sn | 13 27 20.9 | -13 |
| | 4.2nm,0.4s,baz=152,slow=17,SNR=1.9 | | | | | | |
| PALK | | | | LR | LR | 13 29 18.8 | |
| | comp=Z,67nm,18.2s,baz=181,slow=35 | | | | | | |
| | 9.5nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **12.48** | **33** | P | **Pn** | **13 25 52.0** | **+0.5** |
| | 0.1nm,0.3s,baz=234,slow=14,SNR=4.7 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **H08S3** | **Diego Garcia H** | **24.76** | **232** | T | T | 13 54 41.2 | |
| | baz=51,slow=75,SNR=40 | | | | | | |
| **H08S2** | **Diego Garcia H** | **24.76** | **232** | T | T | 13 54 33.6 | |
| | baz=51,slow=75,SNR=17 | | | | | | |
| **H08S1** | **Diego Garcia H** | **24.78** | **232** | T | T | 13 54 32.8 | |
| | baz=51,slow=75,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.49** | **350** | P | **P** | **13 30 22.9** | **-0.6** |
| | 1.2nm,0.9s,baz=156,slow=6.6,SNR=6.6 | | | | | | |
| | 1.2nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **41.57** | **15** | P | **P** | **13 30 41.4** | **+0.6** |
| | 1.1nm,0.7s,baz=190,slow=7.5,SNR=3.6 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.88** | **348** | P | **P** | **13 30 58.0** | **-1.3** |
| | 0.6nm,0.3s,baz=174,slow=6.9,SNR=5.3 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.23** | **124** | P | **P** | **13 31 49.3** | **-0.2** |
| | 0.6nm,0.8s,baz=304,slow=8.6,SNR=2.0 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **64.69** | **210** | T | T | 14 44 34.4 | |
| | baz=45,slow=75,SNR=16 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **64.70** | **210** | T | T | 14 44 31.4 | |
| | baz=45,slow=75,SNR=17 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **64.71** | **210** | T | T | 14 44 30.8 | |
| | baz=45,slow=75,SNR=17 | | | | | | |

**IDC 07 13:33:33.5±4.2,3°.74S×150°.63E,h0km,mb3.5/4, mbtmp3.5/4,MS3.4/4,Error ellipse: s-maj=143.1km s-min=30.1km az=105.0,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **10.84** | **122** | LR | LR | 13 40 28.9 | |
| | comp=Z,1µm,18.4s,baz=267,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **16.80** | **194** | LR | LR | 13 42 54.2 | |
| | comp=Z,4.7nm,18.6s,baz=9.0,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.62** | **223** | P | P | 13 38 36.6 | +0.5 |
| | 1.6nm,1.0s,baz=48,slow=11,SNR=5.1 | | | | | | |
| | 1.6nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.82** | **141** | LR | LR | 13 46 39.0 | |
| | comp=Z,126nm,21.3s,baz=327,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **25.56** | **218** | P | P | 13 39 04.4 | +0.1 |
| | 0.4nm,0.7s,baz=53,slow=8.4,SNR=8.9 | | | | | | |
| ASAR | | | | LR | LR | 13 50 07.3 | |
| | comp=Z,68nm,19.1s,baz=42,slow=39 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **29.25** | **196** | LR | LR | 13 50 22.4 | |
| | comp=Z,40nm,18.6s,baz=29,slow=34 | | | | | | |
| **JOW** | **Kunigami** | **37.29** | **326** | LR | LR | 13 52 36.7 | |
| | comp=Z,64nm,21.9s,baz=94,slow=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **78.11** | **319** | P | P | 13 45 35.0 | +0.5 |
| | 0.4nm,0.8s,baz=92,slow=9.2,SNR=4.1 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **81.64** | **322** | P | P | 13 45 53.5 | 0.0 |
| | 0.4nm,0.7s,baz=103,slow=5.2,SNR=4.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.92** | **289** | PKPbc | PKPdf | 13 53 20.1 | +1.2 |
| | 0.7nm,1.0s,baz=46,slow=4.2,SNR=2.8 | | | | | | |

*PGC **07** 13:41:51.4,62°.51N×135°.77W,h18km,ML3.4,ML3.5/34, 200km Nnw of Whitehorse, Yt Southern Yukon Territory, Canada*

**ISC 07 13:41:48.6±1.1,62°.54N±0°.01×135°.65W±0°.02,h2km±9km, n159,σ2s03/320,Southern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **M31M** | **Drury Creek, Y** | **0.68** | **119** | P | **Pb** | **13 42 03.8** | **+0.6** |
| | baz=296,SNR=1000 | | | | | | |
| M31M | | | | S | **Sb** | **13 42 12.7** | **-0.3** |
| | baz=296 | | | | | | |
| **M31M** | **Drury Creek, Y** | **0.68** | **119** | P | **Pb** | **13 42 03.8** | **+0.6** |
| M31M | | | | S | **Sb** | **13 42 12.7** | **-0.3** |
| **N31M** | **Braeburn, Yuko** | **1.06** | **183** | P | **Pb** | **13 42 10.1** | **+0.5** |
| | baz=0.1,SNR=426 | | | | | | |
| N31M | | | | S | **Sb** | **13 42 24.5** | **+0.6** |
| | baz=0.1 | | | | | | |
| **N31M** | **Braeburn, Yuko** | **1.06** | **183** | P | **Pb** | **13 42 10.2** | **+0.5** |
| N31M | | | | S | **Sb** | **13 42 24.4** | **+0.5** |
| **FARO** | **Faro, Yukon** | **1.11** | **105** | P | **Pn** | **13 42 12.1** | **+0.8** |
| | baz=285,SNR=20 | | | | | | |
| FARO | | | | S | **Sn** | **13 42 27.2** | **-0.1** |
| | baz=285 | | | | | | |
| **FARO** | **Faro, Yukon** | **1.11** | **105** | P | **Pn** | **13 42 12.2** | **+0.8** |
| FARO | | | | S | **Sn** | **13 42 26.6** | **-0.7** |
| **L29M** | **L29M** | **1.28** | **298** | P | **Pg** | **13 42 13.0** | **-0.1** |
| | baz=118,SNR=1000 | | | | | | |
| L29M | | | | S | **Sg** | **13 42 28.7** | **-0.9** |
| | baz=118 | | | | | | |
| **L29M** | **L29M** | **1.28** | **298** | P | **Pg** | **13 42 13.2** | **+0.1** |
| L29M | | | | S | **Sg** | **13 42 29.5** | **-0.1** |
| **N30M** | **Aishikik Lake** | **1.28** | **213** | P | **Pg** | **13 42 13.4** | **+0.3** |
| | baz=30,SNR=1000 | | | | | | |
| N30M | | | | S | **Sg** | **13 42 29.5** | **-0.1** |
| | baz=30 | | | | | | |
| **N30M** | **Aishikik Lake** | **1.28** | **213** | P | **Pg** | **13 42 13.4** | **+0.3** |
| N30M | | | | S | **Sg** | **13 42 29.5** | **-0.1** |
| **M29M** | **Somme Creek** | **1.31** | **267** | P | **Pg** | **13 42 13.5** | **-0.2** |
| | baz=86,SNR=1000 | | | | | | |
| M29M | | | | S | **Sg** | **13 42 29.9** | **-0.9** |
| | baz=86 | | | | | | |
| **M29M** | **Somme Creek** | **1.31** | **267** | Pn | **Pg** | **13 42 13.7** | **0.0** |
| M29M | | | | Sn | **Sg** | **13 42 29.8** | **-0.9** |
| **K29M** | **Barlow Dome** | **1.56** | **328** | P | **Pn** | **13 42 17.5** | **0.0** |
| | baz=149,SNR=722 | | | | | | |
| K29M | | | | S | **Sn** | **13 42 38.5** | **+0.1** |
| | baz=149 | | | | | | |
| **K29M** | **Barlow Dome** | **1.56** | **328** | Pn | **Pn** | **13 42 17.5** | **0.0** |
| K29M | | | | Pg | **Pg** | **13 42 19.8** | **+1.2** |
| K29M | | | | Sn | **Sn** | **13 42 37.6** | **-0.8** |
| **YUK5** | **Granite Creek** | **1.76** | **218** | Pn | **Pn** | **13 42 21.0** | **+0.7** |
| YUK5 | | | | Sn | **Sn** | **13 42 41.6** | **-1.6** |
| YUK5 | | | | Sg | **Sb** | **13 42 44.6** | **+0.3** |
| **O30N** | **Mendenhall** | **1.79** | **187** | P | **Pn** | **13 42 21.2** | **+0.8** |
| | baz=4.8,SNR=766 | | | | | | |
| O30N | | | | Sb | **Sg** | **13 42 47.0** | **+1.1** |
| | baz=4.8 | | | | | | |
| **O30N** | **Mendenhall** | **1.79** | **187** | Pn | **Pn** | **13 42 21.3** | **+0.8** |
| O30N | | | | Sn | **Sn** | **13 42 42.5** | **-1.3** |
| O30N | | | | Sg | **Sb** | **13 42 46.3** | **+1.4** |
| **N32M** | **Quiet Lake** | **1.85** | **138** | P | **Pn** | **13 42 22.1** | **+0.7** |
| | baz=318 | | | | | | |
| N32M | | | | S | **Sg** | **13 42 47.7** | **-0.2** |
| | baz=318 | | | | | | |
| **N32M** | **Quiet Lake** | **1.85** | **138** | Pn | **Pn** | **13 42 22.1** | **+0.7** |
| N32M | | | | Pg | **Pg** | **13 42 25.0** | **+1.0** |
| N32M | | | | Sg | **Sg** | **13 42 49.8** | **+1.9** |
| **YUK4** | **Talbot Arm** | **1.85** | **231** | P | **Pn** | **13 42 20.7** | **-1.0** |
| | baz=49,SNR=550 | | | | | | |
| YUK4 | | | | Sb | **Sn** | **13 42 44.7** | **-1.0** |
| | baz=49 | | | | | | |
| **YUK4** | **Talbot Arm** | **1.85** | **231** | Pn | **Pn** | **13 42 20.8** | **-0.8** |
| YUK4 | | | | Sn | **Sn** | **13 42 40.2** | **-5.5** |
| YUK4 | | | | Sg | **Sb** | **13 42 44.5** | **-2.6** |
| **WHY** | **Whitehorse** | **1.92** | **169** | P | **Pn** | **13 42 22.8** | **+0.4** |
| | baz=348,SNR=78 | | | | | | |
| WHY | | | | Sb | **Sg** | **13 42 51.3** | **+1.1** |
| | baz=348 | | | | | | |
| **WHY** | **Whitehorse** | **1.92** | **169** | Pn | **Pn** | **13 42 22.9** | **+0.4** |
| WHY | | | | Pg | **Pg** | **13 42 25.9** | **+0.5** |
| WHY | | | | Sg | **Sg** | **13 42 51.1** | **+0.8** |
| **HYT** | **Haines Junctio** | **1.93** | **208** | Pn | **Pn** | **13 42 23.4** | **+0.8** |
| HYT | | | | Pg | **Pb** | **13 42 25.7** | **+1.0** |
| HYT | | | | Sn | **Sn** | **13 42 45.5** | **-2.0** |
| HYT | | | | Sg | **Sb** | **13 42 49.5** | **+0.3** |
| **BRWY** | **Burwash Landin** | **1.98** | **235** | Pn | **Pn** | **13 42 23.6** | **+0.4** |
| BRWY | | | | Sg | **Sn** | **13 42 51.1** | **+2.4** |
| **YUK6** | **Outpost Mounta** | **2.06** | **220** | P | **Pn** | **13 42 24.7** | **+0.3** |
| | baz=37,SNR=58 | | | | | | |
| YUK6 | | | | Sb | **Sb** | **13 42 54.4** | **+1.5** |
| | baz=37 | | | | | | |
| **YUK6** | **Outpost Mounta** | **2.06** | **220** | Pn | **Pn** | **13 42 25.2** | **+0.8** |
| YUK6 | | | | Sg | **Sb** | **13 42 53.7** | **+0.8** |
| **J30M** | **Hart River** | **2.07** | **352** | P | **Pn** | **13 42 25.1** | **+0.6** |
| | baz=173,SNR=477 | | | | | | |
| J30M | | | | Sb | **Sg** | **13 42 54.9** | **-0.2** |
| | baz=173 | | | | | | |
| **J30M** | **Hart River** | **2.07** | **352** | Pn | **Pn** | **13 42 25.1** | **+0.6** |
| J30M | | | | Pg | **Pg** | **13 42 29.3** | **+1.0** |
| J30M | | | | Sg | **Sg** | **13 42 54.9** | **-0.2** |
| **J29N** | **Klondike Camp** | **2.24** | **330** | Pg | **Pg** | **13 42 31.8** | **+0.2** |
| | baz=150 | | | | | | |
| J29N | | | | Sb | **Sb** | **13 42 59.6** | **+1.5** |
| | baz=150 | | | | | | |
| **J29N** | **Klondike Camp** | **2.24** | **330** | Pg | **Pg** | **13 42 31.8** | **+0.2** |
| J29N | | | | Sg | **Sb** | **13 42 59.5** | **+1.4** |
| **DAWY** | **Dawson** | **2.28** | **314** | P | **Pn** | **13 42 26.9** | **-0.5** |
| | baz=132,SNR=25 | | | | | | |
| DAWY | | | | Sb | **Sb** | **13 43 00.7** | **+1.4** |
| | baz=132 | | | | | | |
| **DAWY** | **Dawson** | **2.28** | **314** | Pn | **Pn** | **13 42 26.9** | **-0.5** |
| DAWY | | | | Pg | **Pg** | **13 42 32.3** | **-0.1** |
| DAWY | | | | Sg | **Sb** | **13 43 00.7** | **+1.4** |
| **YUK8** | **Steele Glacier** | **2.32** | **239** | P | **Pn** | **13 42 27.8** | **-0.3** |
| | baz=55,SNR=22 | | | | | | |
| YUK8 | | | | Sb | **Sb** | **13 43 02.0** | **+1.5** |
| | baz=55 | | | | | | |
| **YUK8** | **Steele Glacier** | **2.32** | **239** | Pn | **Pn** | **13 42 28.2** | **+0.1** |
| YUK8 | | | | Pg | **Pb** | **13 42 32.2** | **+0.9** |
| YUK8 | | | | Sg | **Sb** | **13 43 01.9** | **+1.5** |
| **YUK3** | **Moose Creek** | **2.38** | **253** | P | **Pn** | **13 42 28.5** | **-0.3** |
| | baz=69,SNR=36 | | | | | | |
| YUK3 | | | | Sb | **Sb** | **13 43 03.1** | **+0.8** |
| | baz=69 | | | | | | |
| **YUK3** | **Moose Creek** | **2.38** | **253** | Pn | **Pn** | **13 42 28.6** | **-0.3** |
| YUK3 | | | | Pg | **Pb** | **13 42 33.5** | **+1.1** |
| YUK3 | | | | Sg | **Sb** | **13 43 02.9** | **+0.6** |
| **BVCY** | **Beaver Creek** | **2.42** | **269** | Pn | **Pn** | **13 42 29.3** | **0.0** |
| BVCY | | | | Pg | **Pb** | **13 42 34.0** | **+1.1** |
| BVCY | | | | Sg | **Sb** | **13 43 04.3** | **+1.0** |
| **P30M** | **Million Dollar** | **2.50** | **195** | P | **Pn** | **13 42 31.2** | **+0.8** |
| | baz=13 | | | | | | |
| P30M | | | | Sb | **Sb** | **13 43 07.7** | **+2.1** |
| | baz=13 | | | | | | |
| **P30M** | **Million Dollar** | **2.50** | **195** | Pn | **Pn** | **13 42 31.5** | **+1.0** |
| P30M | | | | Sg | **Sb** | **13 43 07.0** | **+1.3** |
| **YUK2** | **White River** | **2.55** | **255** | Pn | **Pn** | **13 42 31.4** | **+0.3** |
| YUK2 | | | | Pg | **Pb** | **13 42 35.9** | **+0.8** |
| YUK2 | | | | Sg | **Sb** | **13 43 07.8** | **+0.8** |
| **O29M** | **Mount Kennedy** | **2.65** | **213** | Pb | **Pb** | **13 42 37.9** | **+1.1** |
| | baz=30 | | | | | | |
| O29M | | | | Sb | **Sb** | **13 43 11.5** | **+1.7** |
| | baz=30 | | | | | | |
| **O29M** | **Mount Kennedy** | **2.65** | **213** | Pn | **Pn** | **13 42 34.1** | **+1.6** |
| **P33M** | **Teslin, Yukon** | **2.70** | **148** | P | **Pn** | **13 42 33.2** | **+0.1** |
| | baz=330,SNR=37 | | | | | | |
| P33M | | | | Sb | **Sg** | **13 43 14.7** | **-0.6** |
| | baz=330 | | | | | | |
| **P33M** | **Teslin, Yukon** | **2.70** | **148** | Pn | **Pn** | **13 42 33.1** | **-0.1** |
| P33M | | | | Pg | **Pg** | **13 42 39.5** | **-0.8** |
| P33M | | | | Sg | **Sg** | **13 43 14.8** | **-0.5** |
| **I30M** | **Mount Dempster** | **2.72** | **353** | P | **Pn** | **13 42 34.6** | **+1.2** |
| | baz=174,SNR=651 | | | | | | |
| I30M | | | | Sb | **Sb** | **13 43 13.3** | **+1.6** |
| | baz=174 | | | | | | |
| **I30M** | **Mount Dempster** | **2.72** | **353** | Pn | **Pn** | **13 42 34.5** | **+1.1** |
| I30M | | | | Sg | **Sg** | **13 43 14.7** | **-1.1** |
| **O28M** | **Mount Upton** | **2.80** | **233** | Pb | **Pb** | **13 42 39.6** | **+0.1** |
| | baz=48 | | | | | | |
| O28M | | | | Sb | **Sb** | **13 43 16.6** | **+2.2** |
| | baz=48 | | | | | | |
| **O28M** | **Mount Upton** | **2.80** | **233** | Pn | **Pn** | **13 42 35.0** | **+0.3** |
| O28M | | | | Pg | **Pb** | **13 42 40.0** | **+0.5** |
| O28M | | | | Sg | **Sb** | **13 43 16.5** | **+2.2** |
| **L27K** | **Beaver Creek,** | **2.89** | **283** | P | **Pn** | **13 42 35.6** | **-0.1** |
| | baz=98,SNR=70 | | | | | | |
| L27K | | | | Sb | **Sb** | **13 43 18.9** | **+2.3** |
| | baz=98 | | | | | | |
| **L27K** | **Beaver Creek,** | **2.89** | **283** | Pn | **Pn** | **13 42 36.9** | **+1.2** |
| L27K | | | | Pg | **Pb** | **13 42 41.9** | **+1.0** |
| L27K | | | | Sg | **Sb** | **13 43 18.6** | **+2.0** |
| **M27K** | **Edge Creek, AK** | **2.90** | **269** | P | **Pn** | **13 42 35.8** | **-0.2** |
| | baz=84,SNR=29 | | | | | | |
| M27K | | | | Sb | **Sb** | **13 43 19.6** | **+2.5** |
| | baz=84 | | | | | | |
| M27K | | | | Sb | **Sb** | **13 43 19.6** | **+2.5** |
| | baz=84 | | | | | | |
| **M27K** | **Edge Creek, AK** | **2.90** | **269** | Pn | **Pn** | **13 42 36.7** | **+0.7** |
| M27K | | | | Pg | **Pb** | **13 42 42.5** | **+1.3** |
| M27K | | | | Sg | **Sb** | **13 43 19.6** | **+2.5** |
| **I29M** | **Ogilvie Camp,** | **3.07** | **339** | Sn | **Sn** | **13 43 14.8** | **-0.6** |
| I29M | | | | Sg | **Sg** | **13 43 26.8** | **-0.3** |
| **LOGN** | **Logan Glacier** | **3.08** | **238** | Pn | **Pn** | **13 42 37.7** | **-0.7** |
| LOGN | | | | Pg | **Pb** | **13 42 45.7** | **+1.6** |
| LOGN | | | | Sn | **Sn** | **13 43 14.6** | **-1.2** |
| LOGN | | | | Sg | **Sb** | **13 43 25.8** | **+3.6** |
| **P29M** | **Windy Craggy** | **3.09** | **200** | P | **Pn** | **13 42 39.7** | **+1.3** |
| | baz=17 | | | | | | |
| P29M | | | | Sb | **Sb** | **13 43 26.1** | **+3.7** |
| | baz=17 | | | | | | |
| **P29M** | **Windy Craggy** | **3.09** | **200** | Pg | **Pb** | **13 42 46.2** | **+1.9** |
| P29M | | | | Sg | **Sb** | **13 43 25.8** | **+3.4** |
| **SKAG** | **Skagway** | **3.09** | **177** | Sb | **Sb** | **13 43 25.8** | **+3.5** |
| | baz=356 | | | | | | |
| **P32M** | **Atlin** | **3.10** | **162** | P | **Pn** | **13 42 39.0** | **+0.3** |
| | baz=342,SNR=28 | | | | | | |
| P32M | | | | Sb | **Sg** | **13 43 26.6** | **-1.6** |
| | baz=342 | | | | | | |
| **P32M** | **Atlin** | **3.10** | **162** | Pn | **Pn** | **13 42 38.8** | **+0.2** |
| P32M | | | | Pg | **Pg** | **13 42 46.9** | **-1.1** |
| P32M | | | | Sg | **Sg** | **13 43 26.3** | **-1.9** |
| **PLBC** | **Pleasant Camp** | **3.11** | **187** | P | **Pn** | **13 42 39.3** | **+0.6** |
| | baz=5.1 | | | | | | |
| PLBC | | | | Sb | **Sb** | **13 43 26.2** | **+3.3** |
| | baz=5.1 | | | | | | |
| **PLBC** | **Pleasant Camp** | **3.11** | **187** | Pn | **Pn** | **13 42 39.4** | **+0.7** |
| PLBC | | | | Pg | **Pb** | **13 42 46.8** | **+2.2** |
| PLBC | | | | Sg | **Sb** | **13 43 25.6** | **+2.6** |
| **CTGM** | **Chitina Glacie** | **3.13** | **242** | Pn | **Pn** | **13 42 38.1** | **-1.0** |
| CTGM | | | | Pg | **Pb** | **13 42 46.7** | **+1.6** |
| CTGM | | | | Sg | **Sb** | **13 43 27.2** | **+3.5** |
| **CTG** | **Chitna Glacier** | **3.13** | **242** | P | **Pn** | **13 42 40.3** | **+1.2** |
| | baz=57 | | | | | | |
| CTG | | | | Sb | **Sb** | **13 43 26.7** | **+3.0** |
| | baz=57 | | | | | | |
| **K27K** | **Chicken** | **3.27** | **300** | P | **Pn** | **13 42 41.0** | **+0.2** |
| | baz=115 | | | | | | |
| K27K | | | | Sb | **Sb** | **13 43 29.2** | **+1.8** |
| | baz=115 | | | | | | |
| K27K | | | | Sb | **Sb** | **13 43 29.2** | **+1.8** |
| | baz=115 | | | | | | |
| **K27K** | **Chicken** | **3.27** | **300** | Pn | **Pn** | **13 42 41.2** | **+0.3** |
| K27K | | | | Pg | **Pb** | **13 42 48.9** | **+1.6** |
| K27K | | | | Sg | **Sb** | **13 43 29.9** | **+2.4** |
| **EGAK** | **Eagle** | **3.33** | **315** | P | **Pn** | **13 42 41.1** | **-0.6** |
| | baz=131,SNR=10 | | | | | | |
| EGAK | | | | Sb | **Sb** | **13 43 31.5** | **+2.2** |
| | baz=131 | | | | | | |
| **EGAK** | **Eagle** | **3.33** | **315** | Pn | **Pn** | **13 42 41.1** | **-0.6** |
| EGAK | | | | Pg | **Pb** | **13 42 50.0** | **+1.6** |
| EGAK | | | | Sg | **Sb** | **13 43 31.6** | **+2.2** |
| **TABL** | **Table Mountain** | **3.37** | **234** | Sg | **Sb** | **13 43 33.0** | **+2.3** |
| **PNL** | **Peninsula** | **3.41** | **214** | P | **Pn** | **13 42 44.9** | **+2.1** |
| | baz=30 | | | | | | |
| **PNL** | **Peninsula** | **3.41** | **214** | Pn | **Pn** | **13 42 43.8** | **+1.1** |
| PNL | | | | Pg | **Pb** | **13 42 52.3** | **+2.7** |
| PNL | | | | Sg | **Sb** | **13 43 35.8** | **+4.4** |
| **M26K** | **Nabesna, AK** | **3.42** | **271** | P | **Pn** | **13 42 44.5** | **+1.5** |
| | baz=85 | | | | | | |
| M26K | | | | Sb | **Sb** | **13 43 33.7** | **+1.9** |
| | baz=85 | | | | | | |
| M26K | | | | Sb | **Sb** | **13 43 33.7** | **+1.9** |
| | baz=85 | | | | | | |
| **M26K** | **Nabesna, AK** | **3.42** | **271** | Pn | **Pn** | **13 42 43.2** | **+0.2** |
| M26K | | | | Sn | **Sn** | **13 43 21.3** | **-2.7** |
| M26K | | | | Sg | **Sb** | **13 43 34.5** | **+2.7** |
| **GRNC** | **Granite Creek** | **3.43** | **241** | Pn | **Pn** | **13 42 42.5** | **-0.7** |
| GRNC | | | | Sn | **Sn** | **13 43 22.0** | **-2.6** |
| GRNC | | | | Sg | **Sb** | **13 43 36.4** | **+4.0** |
| **SAMH** | **Samovar Hills** | **3.46** | **228** | Pn | **Pn** | **13 42 44.0** | **+0.4** |
| SAMH | | | | Sg | **Sb** | **13 43 36.3** | **+3.3** |
| **I28M** | **Miner Creek** | **3.48** | **329** | P | **Pn** | **13 42 44.4** | **+0.6** |
| | baz=146 | | | | | | |
| **I28M** | **Miner Creek** | **3.48** | **329** | Pn | **Pn** | **13 42 45.0** | **+1.1** |
| I28M | | | | Pg | **Pb** | **13 42 53.4** | **+2.5** |
| I28M | | | | Sg | **Sb** | **13 43 37.3** | **+3.6** |
| **PTPK** | **Patty Peak** | **3.50** | **250** | Pn | **Pn** | **13 42 44.3** | **0.0** |
| PTPK | | | | Sg | **Sb** | **13 43 38.6** | **+4.2** |
| **BALM** | **Baldy** | **3.52** | **248** | Pn | **Pn** | **13 42 44.0** | **-0.4** |
| BALM | | | | Pg | **Pb** | **13 42 54.3** | **+2.6** |
| BALM | | | | Sg | **Sb** | **13 43 39.4** | **+4.6** |
| **RKAV** | **Rock Avalanche** | **3.54** | **233** | Sg | **Sb** | **13 43 37.5** | **+2.0** |
| **L26K** | **Log Cabin Wild** | **3.57** | **281** | P | **Pn** | **13 42 45.5** | **+0.4** |
| | baz=95,SNR=19 | | | | | | |
| L26K | | | | Sb | **Sb** | **13 43 38.9** | **+2.6** |
| | baz=95 | | | | | | |
| L26K | | | | Sb | **Sb** | **13 43 38.9** | **+2.6** |
| | baz=95 | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.57** | **281** | Pn | **Pn** | **13 42 45.7** | **+0.6** |
| L26K | | | | Sg | **Sb** | **13 43 39.2** | **+2.9** |
| **KIAG** | **Kiagna River** | **3.58** | **246** | Pn | **Pn** | **13 42 47.7** | **+2.4** |
| KIAG | | | | Sg | **Sb** | **13 43 40.8** | **+4.2** |
| **TGTN** | **Hyland Airport** | **3.62** | **103** | Pg | **Pg** | **13 42 58.7** | **+0.7** |
| | baz=289 | | | | | | |
| TGTN | | | | Sb | **Sg** | **13 43 43.8** | **-1.0** |
| | baz=289 | | | | | | |
| **TGTN** | **Hyland Airport** | **3.62** | **103** | Pg | **Pg** | **13 42 58.3** | **+0.4** |
| TGTN | | | | Sg | **Sg** | **13 43 44.1** | **-0.7** |
| **MCARA** | **McCarthy VSAT** | **3.67** | **255** | Pg | **Pb** | **13 42 57.4** | **+3.2** |
| | baz=68 | | | | | | |
| MCARA | | | | Sb | **Sb** | **13 43 41.6** | **+2.5** |
| | baz=68 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **3.67** | **255** | Pn | **Pn** | **13 42 49.7** | **+3.3** |
| MCARA | | | | Pg | **Pb** | **13 42 57.0** | **+2.8** |
| MCARA | | | | Sg | **Sb** | **13 43 42.6** | **+3.5** |
| **MESA** | **MESA** | **3.85** | **235** | Pb | **Pb** | **13 42 56.5** | **-0.8** |
| | baz=49 | | | | | | |
| **MESA** | **MESA** | **3.85** | **235** | Pn | **Pn** | **13 42 47.0** | **-2.0** |
| **EPYK** | **Eagle Plains** | **3.88** | **354** | P | **Pn** | **13 42 50.0** | **+0.8** |
| | baz=174,SNR=13 | | | | | | |
| EPYK | | | | Sb | **Sb** | **13 43 47.9** | **+2.9** |
| | baz=174 | | | | | | |
| **EPYK** | **Eagle Plains** | **3.88** | **354** | Pn | **Pn** | **13 42 50.1** | **+0.9** |
| EPYK | | | | Sg | **Sg** | **13 43 51.1** | **-2.0** |
| **H29M** | **Whitestone** | **3.88** | **343** | P | **Pn** | **13 42 49.6** | **+0.3** |
| | baz=162,SNR=43 | | | | | | |
| H29M | | | | Sb | **Sb** | **13 43 47.6** | **+2.5** |
| | baz=162 | | | | | | |
| **H29M** | **Whitestone** | **3.88** | **343** | Pn | **Pn** | **13 42 49.6** | **+0.3** |
| **R33M** | **Jennings River** | **3.89** | **142** | P | **Pn** | **13 42 50.3** | **+0.8** |
| | baz=325,SNR=25 | | | | | | |
| R33M | | | | Sb | **Sg** | **13 43 51.2** | **-2.3** |
| | baz=325 | | | | | | |
| **R33M** | **Jennings River** | **3.89** | **142** | Pn | **Pn** | **13 42 50.3** | **+0.8** |
| R33M | | | | Pg | **Pg** | **13 43 01.3** | **-1.8** |
| R33M | | | | Sg | **Sg** | **13 43 51.5** | **-2.0** |
| **Q32M** | **Nakina River** | **3.95** | **154** | P | **Pn** | **13 42 51.7** | **+1.3** |
| | baz=336,

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **K24K** | **Donnelly Dome** baz=102 | **4.76** | **290** | P | **Pn** | **13 43 02.4** | **+0.9** |
| **J25K** | **Salcha River,** baz=112 | **4.82** | **300** | P | **Pn** | **13 43 02.5** | **+0.3** |
| **J25K** | **Salcha River,** | **4.82** | **300** | Pn | **Pn** | **13 43 02.1** | **-0.1** |
| J25K | | | | Sg | **Sg** | **13 44 20.1** | **-3.2** |
| **KLU** | **Klutina** baz=74 | **4.95** | **262** | P | **Pn** | **13 43 04.9** | **+0.8** |
| **DLBC** | **Dease Lake** baz=328,SNR=20 | **4.96** | **143** | P | **Pn** | **13 43 05.4** | **+1.2** |
| **DLBC** | **Dease Lake** | **4.96** | **143** | Pn | **Pn** | **13 43 05.1** | **+1.0** |
| DLBC | | | | Sg | **Sg** | **13 44 24.5** | **-3.4** |
| **F31M** | **Tsiigehtchic** baz=191,SNR=22 | **4.99** | **8** | P | **Pn** | **13 43 05.0** | **+0.5** |
| **F31M** | **Tsiigehtchic** | **4.99** | **8** | Pn | **Pn** | **13 43 04.9** | **+0.5** |
| **G27K** | **Doyon Strip** baz=147,SNR=10 | **5.00** | **332** | P | **Pn** | **13 43 04.7** | **0.0** |
| **G27K** | **Doyon Strip** | **5.00** | **332** | Pn | **Pn** | **13 43 04.3** | **-0.4** |
| G27K | | | | Sn | **Sn** | **13 44 00.6** | **-2.5** |
| **F30M** | **Barrier River** baz=180,SNR=26 | **5.10** | **359** | P | **Pn** | **13 43 06.6** | **+0.6** |
| **F30M** | **Barrier River** | **5.10** | **359** | Pn | **Pn** | **13 43 06.3** | **+0.4** |
| F30M | | | | Sn | **Sn** | **13 44 03.5** | **-1.8** |
| F30M | | | | Sg | **Sg** | **13 44 29.7** | **-2.4** |
| **S32K** | **Killisnoo** | **5.11** | **173** | Sg | **Sg** | **13 44 28.3** | **-4.4** |
| **F28M** | **Old Crow** baz=159,SNR=49 | **5.40** | **343** | P | **Pn** | **13 43 10.7** | **+0.5** |
| **F28M** | **Old Crow** | **5.40** | **343** | Pn | **Pn** | **13 43 10.4** | **+0.3** |
| F28M | | | | Sn | **Sn** | **13 44 10.8** | **-2.1** |
| F28M | | | | Sg | **Sg** | **13 44 40.2** | **-1.7** |
| **LIRD** | **Liard River Hi** | **5.61** | **120** | Sg | **Sg** | **13 44 45.4** | **-3.2** |
| **G26K** | **Porcupine Rive** | **5.63** | **325** | Pn | **Pn** | **13 43 13.2** | **-0.1** |
| G26K | | | | Sn | **Sn** | **13 44 16.0** | **-2.5** |
| G26K | | | | Sg | **Sg** | **13 44 45.4** | **-4.0** |
| **E29M** | **Blow River** baz=170,SNR=52 | **5.95** | **352** | P | **Pn** | **13 43 18.1** | **+0.4** |
| **E29M** | **Blow River** | **5.95** | **352** | Pn | **Pn** | **13 43 17.9** | **+0.3** |
| E29M | | | | Sg | **Sg** | **13 44 58.5** | **-1.1** |
| **G25K** | **Bearman Lake** | **6.17** | **318** | Sg | **Sg** | **13 45 01.3** | **-5.3** |
| **E27K** | **Coleen River** baz=154,SNR=9.1 | **6.19** | **339** | P | **Pn** | **13 43 20.6** | **-0.3** |
| **E27K** | **Coleen River** | **6.19** | **339** | Pn | **Pn** | **13 43 20.5** | **-0.4** |
| E27K | | | | Sg | **Sg** | **13 45 04.4** | **-2.8** |
| **T35M** | **Bob Quinn** | **6.20** | **152** | Pn | **Pn** | **13 43 21.7** | **+0.6** |
| T35M | | | | Sg | **Sg** | **13 45 07.2** | **-0.5** |
| **F26K** | **Sheenjek River** | **6.29** | **329** | Pn | **Pn** | **13 43 23.1** | **+0.7** |
| F26K | | | | Sg | **Sg** | **13 45 04.8** | **-5.7** |
| **E28M** | **Babbage River** baz=164,SNR=39 | **6.30** | **347** | P | **Pn** | **13 43 22.4** | **-0.1** |
| **E28M** | **Babbage River** | **6.30** | **347** | Pn | **Pn** | **13 43 22.3** | **-0.1** |
| E28M | | | | Sg | **Sg** | **13 45 08.2** | **-2.5** |
| **TOAD** | **Toad River Com** | **6.31** | **121** | Pn | **Pn** | **13 43 22.3** | **-0.3** |
| **U33K** | **Whale Pass** baz=349 | **6.57** | **168** | P | **Pn** | **13 43 27.1** | **+1.0** |
| **U33K** | **Whale Pass** | **6.57** | **168** | Pn | **Pn** | **13 43 26.5** | **+0.4** |
| U33K | | | | Sg | **Sg** | **13 45 13.6** | **-5.8** |
| **F25K** | **Christian Rive** | **6.60** | **325** | Pn | **Pn** | **13 43 25.5** | **-1.1** |
| F25K | | | | Sg | **Sg** | **13 45 14.5** | **-5.7** |
| **D27M** | **Malcolm River** baz=160,SNR=47 | **7.08** | **344** | P | **Pn** | **13 43 33.5** | **+0.4** |
| **D27M** | **Malcolm River** | **7.08** | **344** | Pn | **Pn** | **13 43 33.7** | **+0.6** |
| D27M | | | | Sn | **Sn** | **13 44 48.9** | **-5.2** |
| **C27K** | **Jago River** | **7.83** | **339** | Pn | **Pn** | **13 43 43.5** | **+0.1** |
| C27K | | | | Sn | **Sn** | **13 45 08.2** | **-4.3** |
| **D25K** | **Kavik River** | **8.09** | **332** | Sn | **Sn** | **13 45 14.3** | **-4.6** |
| **NBC5** | **NorthernBC 5** | **8.20** | **122** | Pn | **Pn** | **13 43 48.0** | **-0.6** |
| NBC5 | | | | Sn | **Sn** | **13 45 16.3** | **-5.6** |
| **C36M** | **Paulatuk** | **8.30** | **30** | Pn | **Pn** | **13 43 49.5** | **-0.3** |

**KRSC 07 13:42:38.1±1.4, 55.90N×163.08E, h31km±13km, MI4.0, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.34** | **335** | *e*P | Pb | 13 42 46.5 | +0.2 |
| KBTR | | | | *e*S | Sn | 13 42 53.2 | +0.4 |
| **KBG** | **Krutoberegovo** | **0.41** | **330** | *e*P | Pb | 13 42 47.4 | +0.1 |
| KBG | | | | *e*S | Sn | 13 42 55.0 | +0.4 |
| **SRKR** | **Sorokina** | **1.31** | **306** | *e*P | Pb | 13 43 01.8 | -0.3 |
| SRKR | | | | *e*S | Sb | 13 43 19.4 | +0.9 |
| **BZGR** | **Bezymyannyi-Gr** | **1.34** | **273** | *e*P | Pn | 13 43 01.1 | +0.3 |
| **BZP** | **Bezymyannyi-Pe** | **1.43** | **272** | *e*P | Pn | 13 43 02.6 | +0.4 |
| **BZWR** | **Bezymyannyi-We** | **1.45** | **274** | *e*P | Pn | 13 43 03.2 | +0.8 |
| **BZMR** | **Bezymyannaya** | **1.46** | **272** | *e*P | Pn | 13 43 03.4 | +0.9 |
| **MKZ** | **Mys Kozlova** | **1.55** | **210** | *e*P | Pb | 13 43 05.2 | -0.9 |
| MKZ | | | | *e*S | Sb | 13 43 25.6 | +0.2 |
| **KMNR** | **Kamenistaya** | **1.61** | **266** | *e*P | Pb | 13 43 06.2 | -1.0 |
| **TUMD** | **Tumrok D** | **1.68** | **246** | *e*P | Pn | 13 43 06.4 | +1.1 |
| TUMD | | | | *e*S | Sb | 13 43 27.9 | -1.0 |
| **TUMR** | **Tumrok** | **1.77** | **251** | *e*P | Pb | 13 43 08.7 | -1.4 |
| **SRDR** | **Sredinnyy** | **1.93** | **284** | *e*P | Pb | 13 43 10.9 | -1.7 |
| SRDR | | | | *e*S | Sb | 13 43 36.0 | -0.3 |
| **ESO** | **Esso** | **2.46** | **272** | *e*P | Pn | 13 43 18.3 | +2.1 |
| **KII** | **Karymskiy** | **2.80** | **230** | *e*P | Pb | 13 43 24.7 | -2.8 |
| **SPN** | **Mys Shipunski** | **3.32** | **214** | *e*P | Pn | 13 43 31.4 | +3.5 |
| SPN | | | | *e*S | Sn | 13 44 09.5 | +3.1 |
| **KRER** | **Koryakskii** | **3.62** | **226** | *e*P | Pb | 13 43 37.5 | -4.0 |
| **KRX** | **Arik** | **3.62** | **227** | *e*P | Pn | 13 43 36.7 | +4.5 |
| **SMAR** | **Somma** | **3.63** | **225** | *e*P | Pn | 13 43 36.8 | +4.4 |
| **AVH** | **Avacha** | **3.65** | **226** | *e*P | Pb | 13 43 38.5 | -3.5 |
| **UGLR** | **Uglovaya** | **3.66** | **224** | *e*P | Pn | 13 43 35.0 | +2.3 |
| **KOK** | **Koryaka** | **3.67** | **227** | *e*P | Pn | 13 43 37.6 | +4.7 |
| **GNL** | **Ganaly** | **3.70** | **236** | *e*P | Pn | 13 43 36.2 | +2.9 |
| **DALK** | **Dalny** | **3.82** | **223** | *e*P | Pn | 13 43 38.0 | +3.1 |
| **KRMR** | **Karymshinskiy** | **4.22** | **225** | *e*P | Pn | 13 43 44.9 | +4.6 |
| KRMR | | | | *e*S | Sn | 13 44 33.9 | +5.4 |
| **GRL** | **Gorelyy** | **4.46** | **223** | *e*P | Pn | 13 43 47.8 | +4.1 |
| **ASAK** | **Asacha** | **4.66** | **223** | *e*P | Pn | 13 43 50.8 | +4.5 |

*IDC **07** 13:51:59.6±5.9, 3.74S×149.94E, h107km±47km, mb3.4/6, mbtmp3.7/8, MS2.9/5, Error ellipse: s-maj=61.9km s-min=26.0km az=84.0*

**ISC 07 13:51:47.1±0.9, 3.37S±0.10×150.6E±0.3, h10km, n17, σ1196/15, mb3.8/6, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAVG** | **Kavieng** | **0.83** | **18** | P | **Pg** | **13 52 02.8** | **-0.3** |
| **PMG** | **Port Moresby** 20nm,0.9s,baz=35,slow=11,SNR=4.9 | **6.88** | **209** | P | **Pn** | **13 53 29.7** | **+1.6** |
| PMG | | | | LR | LR | 13 55 59.7 | |
| | comp=Z,194nm,21.5s,baz=27,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **17.14** | **194** | P | **P** | **13 55 50.6** | **+2.0** |
| **CTA** | **Charters Tower** 1.0nm,1.0s,baz=11,slow=16,SNR=4.3 | **17.14** | **194** | P | **Pn** | **13 55 46.0** | **-0.9** |
| CTA | | | | LR | LR | 14 01 59.9 | |
| | comp=Z,4.8nm,19.6s,baz=13,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **17.14** | **194** | P | **P** | **13 55 50.9** | **+2.3** |
| **GUMO** | **Guam** comp=Z,55nm,20.0s,baz=166,slow=34 | **17.77** | **342** | LR | LR | 14 02 04.6 | |
| **QIS** | **Mount Isa** | **20.14** | **211** | P | **P** | **13 56 22.1** | **+0.5** |
| **WRA** | **Warramunga Arr** 2.6nm,0.8s,baz=48,slow=10,SNR=7.4 2.6nm,0.8s | **22.83** | **223** | P | **P** | **13 56 47.2** | **-3.4** |
| **QLP** | **Quilpie** | **23.86** | **194** | P | **P** | **13 57 00.5** | **-0.3** |
| **DZM** | **Mont Dzumac** comp=Z,136nm,21.4s,baz=296,slow=31 | **24.16** | **142** | LR | LR | 14 04 24.8 | |
| **ASAR** | **Alice Springs** 0.5nm,0.6s,baz=54,slow=8.3,SNR=13 | **25.80** | **217** | P | **P** | **13 57 14.7** | **-4.0** |
| ASAR | | | | LR | LR | 14 08 01.4 | |
| | comp=Z,39nm,21.8s,baz=47,slow=38 0.5nm,0.6s | | | | | | |
| **AULRC** | **Lightning Ridg** | **26.03** | **185** | P | **P** | **13 57 20.8** | **+0.2** |
| **SONM** | **Songino Array** 0.3nm,0.4s,baz=145,slow=5.3,SNR=2.4 0.3nm,0.4s | **63.93** | **329** | P | **P** | **14 02 22.3** | **+1.7** |
| **VNDA** | **Vanda** 0.6nm,0.8s,baz=331,slow=7.6,SNR=4.4 0.6nm,0.8s | **74.34** | **177** | P | **P** | **14 03 23.8** | **-0.7** |
| **MKAR** | **Makanchi Array** 1.2nm,0.9s,baz=97,slow=9.5,SNR=2.6 1.2nm,0.9s | **77.78** | **319** | P | **P** | **14 03 44.2** | **-0.5** |
| **KURBB** | **Kurchatov Arra** 0.9nm,0.8s,baz=108,slow=4.9,SNR=5.1 0.9nm,0.8s | **81.30** | **322** | P | **P** | **14 04 03.2** | **-0.5** |
| **TORD** | **Torodi Ar. Bea** 0.8nm,0.7s,baz=69,slow=4.2,SNR=2.6 | **147.72** | **289** | PKPbc | **PKPab** | **14 11 36.7** | **+1.2** |

*DNK **07** 13:57:03.2±4.5, 75.19N×9.90E, h0km±107km, mb6.0*
*NAO **07** 13:57:06.1±1.1, 74.73N×8.67E, ML5.2*

*MOS **07** 13:57:08.8±1.1, 74.68N×8.75E, h10km, mb5.6/97, MS5.2/46, Error ellipse: s-maj=14.6km s-min=2.6km az=93.9*

*IDC **07** 13:57:08.6±0.4, 74.66N×8.72E, h0km, mb5.0/29, mbtmp5.0/35, ML4.0/5, MS5.3/85, Error ellipse: s-maj=10.3km s-min=6.8km az=45.0*

*IPGP **07** 13:57:09.0, 74.63N×8.40E, h6km, Mw5.7, Fault plane solution: NP1:φs40.00000°, δ47.00000°, λ-73.00000°. NP2:φs197.00000°, δ46.00000°, λ-107.00000°.*

*BJI **07** 13:57:09.0±0.0, 74.80N×8.80E, h10km, mb5.1/78, mB5.7/79, Ms5.8/92, Ms7 5.7/88*

*BER **07** 13:57:09.9±4.3, 74.78N×8.88E, h6km±16km, mb(Pn)5.4, MW5.8(USGS), Confirmed Earthquake*

*NEIC **07** 13:57:09.8±1.9, 74.65N±0.06×8.5E±0.2, h10km±1km, mb5.6/734, Ms_20 5.5/963, Mwb5.6/75, Mww5.7/56, Error ellipse: s-maj=11.6km s-min=10.4km az=226.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr-1.90; Mθθ0.07; Mφφ1.83; Mrθ1.81; Mφr1.06; Mθr0.66; Fault plane solution: Mo2.89000×10¹⁷ NP1:φs0.66000°, δ33.91000°, λ-136.07000°. NP2:φs232.01000°, δ67.23000°, λ-64.17000°. Principal axes: T 2.7839, Plg18.00000°, Azm303.0000°; N 0.1959, Plg24.0000°, Azm41.0000°; P -2.9798, Plg59.0000°, Azm179.0000°;*

*GCMT **07** 13:57:09.8±0.1, 74.67N±0.01×8.35E±0.02, h12km, MW5.7/152, Moment Tensor Solution. s125,c240; s152,c354; Duration: 18 Moment tensor: Scale 10¹⁷ Nm; Mrr-4.60±.04; Mθθ0.88±.04; Mφφ3.71±.04; Mrθ-1.18±.11; Mφθ2.13±.03; Mφr-1.36±.10; Best double couple: Mo5.05900×10¹⁷ NP1:φs33.00000°, δ55.00000°, λ-84.00000°. NP2:φs203.00000°, δ35.00000°, λ-98.00000°. Principal axes: T 5.1700, Plg10.0000°, Azm119.0000°; N -0.2270, Plg5.0000°, Azm210.0000°; P -4.9480, Plg79.0000°, Azm323.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **07** 13:57:09.9, 74.65N×8.47E, h12km*

*NEIC **07** 13:57:09.9, 74.65N×8.47E, h10km*

*NEIC **07** 13:57:09.9, 74.75N×8.84E, h12km, Moment Tensor Solution. Duration: 39 Moment tensor: Scale 10¹⁷Nm; Mrr-4.48; Mθθ0.81; Mφφ3.67; Mrθ2.39; Mφr1.72; Mθr1.19; Fault plane solution: Mo5.20000×10¹⁷ NP1: φs222.37000°, δ59.89000°, λ-72.35000°. NP2:φs9.99000°, δ34.48000°, λ-117.60000°. Principal axes: T 4.9644, Plg13.0000°, Azm300.0000°; N 0.4623, Plg15.0000°, Azm33.0000°; P -5.4266, Plg70.0000°, Azm170.0000°;*

*FCIAR **07** 13:57:11.0, 74.90N×8.33E, h10km, station KBS has station magnitude of 5.22*

*KOLA **07** 13:57:16.1, 75.35N×9.92E, h0km, ML3.8, Norwegian sea*

*BGR **07** 13:57:20.3, 73.96N×10.62E, h33km, mb5.6, Ms5.2*

**ISC 07 13:57:09.6±0.4, 74.68N±0.02×8.62E±0.02, h5km±2km, h5km:pP-P, n2128, σ239/30/1985, mb5.6/590, MS5.4/604, 75C-55D, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BJO1** | **Bjornoya** | **2.78** | **89** | *i*P | **Pn** | **13 57 51.0** | **-3.7** |
| BJO1 | | | | *e*S | **Sn** | **13 58 20.8** | **-7.7** |
| BJO1 | | | | IAML | | 13 58 24.1 | |
| | comp=Z,754nm,0.6s | | | | | | |
| **BJO1** | **Bjornoya** | **2.78** | **89** | Pn | **Pn** | **13 57 51.0** | **-3.7** |
| BJO1 | | | | Sn | **Sn** | **13 58 20.8** | **-7.7** |
| **BJO1** | **Bjornoya** | **2.78** | **89** | *i*P | **Pn** | **13 57 51.1** | **-3.7** |
| BJO1 | | | | *e*S | **Sn** | **13 58 21.8** | **-6.7** |
| **HSPB** | **Hornsund (broa** | **2.89** | **33** | *e*P | **Pn** | **13 57 52.9** | **-3.4** |
| **HSPB** | **Hornsund (broa** | **2.89** | **33** | P | **Pn** | **13 57 53.0** | **-3.2** |
| HSPB | | | | S | Sn | 13 58 20.5 | -11 |
| **HSPB** | **Hornsund (broa** | **2.89** | **33** | Pn | **Pn** | **13 57 52.8** | **-3.4** |
| HSPB | | | | Sn | **Sn** | **13 58 22.8** | **-8.5** |
| **HSPB** | **Hornsund (broa** | **2.89** | **33** | Pn | **Pn** | **13 57 52.8** | **-3.4** |
| HSPB | | | | Sn | **Sn** | **13 58 22.8** | **-8.5** |
| **BRBA** | **Barentsburg A** | **3.65** | **19** | *i*P | **Pn** | **13 58 04.3** | **-2.4** |
| **BRBA** | **Barentsburg A** | **3.65** | **19** | Pn | **Pn** | **13 58 04.1** | **-2.6** |
| BRBA | | | | Sn | **Sn** | **13 58 45.4** | **-4.6** |
| **BRBB** | **Barentsburg B** | **3.68** | **18** | P | **Pn** | **13 58 04.2** | **-2.9** |
| **BRBB** | **Barentsburg B** | **3.68** | **18** | *i*P | **Pn** | **13 58 04.6** | **-2.5** |
| BRBB | | | | Pn | Pb | 13 58 04.6 | -10 |
| BRBB | | | | Sn | **Sn** | **13 58 47.6** | **-3.2** |
| **BRBB** | **Barentsburg B** | **3.68** | **18** | Pn | **Pn** | **13 58 04.6** | **-2.5** |
| BRBB | | | | Sn | **Sn** | **13 58 47.6** | **-3.2** |
| **KBS** | **Kingsbay** | **4.34** | **9** | Pn | **Pn** | **13 58 13.0** | **-3.2** |
| **KBS** | **Kingsbay** | **4.34** | **9** | P | **Pn** | **13 58 12.9** | **-3.2** |
| KBS | | | | S | Sn | 13 58 56.1 | -11 |
| **KBS** | **Kingsbay** | **4.34** | **9** | *i*P | **Pn** | **13 58 13.1** | **-3.2** |
| KBS | | | | *e*S | **Sn** | **13 59 01.0** | **-6.0** |
| KBS | | | | IAML | | 13 59 11.2 | |
| | comp=Z,283nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **4.34** | **9** | Pn | **Pn** | **13 58 13.0** | **-3.2** |
| KBS | | | | Sn | **Sn** | **13 59 00.9** | **-6.1** |
| **KBS** | **Kingsbay** | **4.34** | **9** | *e*P | **Pn** | **13 58 13.1** | **-3.1** |
| KBS | | | | *e*S | Sn | 13 58 58.1 | -9.0 |
| **KBS** | **Kingsbay** | **4.34** | **9** | *c*P | **Pn** | **13 58 13.0** | **-3.2** |
| **HOPEN** | **Hopen** | **4.48** | **58** | *e*P | **Pn** | **13 58 15.7** | **-2.4** |
| HOPEN | | | | *e*S | **Sn** | **13 59 03.1** | **-7.4** |
| HOPEN | | | | IAML | | 13 59 05.7 | |
| | comp=Z,390nm,0.5s | | | | | | |
| **HOPEN** | **Hopen** | **4.48** | **58** | Pn | **Pn** | **13 58 15.5** | **-2.5** |
| HOPEN | | | | Sn | **Sn** | **13 59 02.8** | **-7.7** |
| **HOPEN** | **Hopen** | **4.48** | **58** | *e*P | **Pn** | **13 58 15.2** | **-2.8** |
| HOPEN | | | | *e*S | **Sn** | **13 59 02.2** | **-8.3** |
| **TRO** | **Tromso** | **5.97** | **143** | *e*P | **Pn** | **13 58 37.5** | **-1.0** |
| TRO | | | | IAML | | 13 59 51.7 | |
| | comp=Z,70nm,0.6s | | | | | | |
| **TRO** | **Tromso** | **5.97** | **143** | Pn | **Pn** | **13 58 36.7** | **-1.7** |
| **TRO** | **Tromso** | **5.97** | **143** | P | **Pn** | **13 58 38.0** | **-0.5** |
| **HAMF** | **Hammerfest** | **6.04** | **125** | *e*P | **Pn** | **13 58 35.4** | **-4.1** |
| HAMF | | | | *e*S | **Sn** | **13 59 40.5** | **-8.4** |
| HAMF | | | | IAML | | 13 59 44.5 | |
| | comp=Z,170nm,0.7s | | | | | | |
| **HAMF** | **Hammerfest** | **6.04** | **125** | Pn | **Pn** | **13 58 35.2** | **-4.3** |
| HAMF | | | | Sn | Sn | 13 59 39.0 | -10 |
| **JMIC** | **Jan Mayen** | **6.26** | **242** | Pn | **Pn** | **13 58 39.9** | **-2.5** |
| JMIC | | | | *e*S | **Sn** | **13 59 51.7** | **-2.5** |
| JMIC | | | | IAML | | 13 59 52.8 | |
| | comp=Z,102nm,0.5s | | | | | | |
| **JMIC** | **Jan Mayen** | **6.26** | **242** | Pn | **Pn** | **13 58 39.9** | **-2.5** |
| **JMIC** | **Jan Mayen** | **6.26** | **242** | Pn | **Pn** | **13 58 39.7** | **-2.8** |
| | comp=Z,152nm,0.3s,baz=56,slow=7.3,SNR=178 | | | | | | |
| JMIC | | | | Sn | **Sn** | **13 59 51.3** | **-3.0** |
| | comp=Z,8.3nm,0.3s,baz=162,slow=20,SNR=0.7 | | | | | | |
| JMIC | | | | LR | LR | 14 00 29.4 | |
| | comp=Z,32μm,19.3s,baz=42,slow=32 | | | | | | |
| **JETT** | **Jettan, Norway** | **6.28** | **139** | Pn | **Pn** | **13 58 41.8** | **-1.1** |
| **JETT** | **Jettan, Norway** | **6.28** | **139** | Pn | **Pn** | **13 58 41.8** | **-1.1** |
| **JMI** | **Jan Mayen** | **6.35** | **242** | *i*P | **Pn** | **13 58 41.4** | **-2.3** |
| JMI | | | | *e*S | **Sn** | **13 59 51.9** | **-4.6** |
| JMI | | | | IAML | | 13 59 58.9 | |
| | comp=Z,100nm,0.7s | | | | | | |
| **JMI** | **Jan Mayen** | **6.35** | **242** | Pn | **Pn** | **13 58 41.5** | **-2.3** |
| **LOF** | **Lofoten** | **6.76** | **164** | *e*P | **Pn** | **13 58 47.4** | **-2.0** |
| LOF | | | | *e*S | **Sn** | **14 00 01.4** | **-5.3** |
| LOF | | | | IAML | | 14 00 02.5 | |
| | comp=Z,83nm,0.5s | | | | | | |
| **LOF** | **Lofoten** | **6.76** | **164** | Pn | **Pn** | **13 58 47.6** | **-1.8** |
| LOF | | | | Sn | **Sn** | **14 00 00.8** | **-5.9** |
| **KIF** | **Kilpisjarvi** | **6.83** | **140** | *e*P | **Pn** | **13 58 49.3** | **-1.1** |
| KIF | | | | *e*S | **Sn** | **14 00 02.0** | **-6.5** |
| **KIF** | **Kilpisjarvi** | **6.83** | **140** | P | **Pn** | **13 58 49.2** | **-1.1** |
| **DAG** | **Danmarks Havn** | **7.01** | **300** | *e*P | **Pn** | **13 58 49.3** | **-3.5** |
| DAG | | | | *e*S | Sn | 14 00 00.6 | -12 |
| **DAG** | **Danmarks Havn** | **7.01** | **300** | P | Pn | 13 58 47.5 | -5.3 |
| **DAG** | **Danmarks Havn** | **7.01** | **300** | P | **Pn** | **13 58 49.4** | **-3.4** |
| DAG | | | | pmax | pmax | | |
| | comp=Z,277nm,1.8s | | | | | | |
| **DAG** | **Danmarks Havn** | **7.01** | **300** | *i* P | Pn | 13 58 48.0 | -4.8 |
| **STEI** | **Steigen** | **7.10** | **159** | *e*P | **Pn** | **13 58 52.9** | **-1.1** |
| STEI | | | | *e*S | **Sn** | **14 00 06.5** | **-8.4** |
| STEI | | | | IAML | | 14 00 13.6 | |
| | comp=Z,34nm,0.6s | | | | | | |
| **KTK1** | **Kautokeino** | **7.27** | **134** | *e*P | **Pn** | **13 58 54.5** | **-1.9** |
| KTK1 | | | | *e*S | **Sn** | **14 00 11.4** | **-7.8** |
| KTK1 | | | | IAML | | 14 00 16.6 | |
| | comp=Z,52nm,0.6s | | | | | | |
| **ARA0** | **ARCESS Array S** baz=325,slow=11 | **7.30** | **126** | Pn | **Pn** | **13 58 53.8** | **-2.9** |
| ARA0 | | | | Sn | **Sn** | **14 00 11.3** | **-8.6** |
| | baz=333,slow=22 | | | | | | |
| **ARCES** | **ARCESS Array B** | **7.30** | **126** | | **Pn** | **13 58 52.3** | **-4.4** |
| **ARCES** | **ARCESS Array B** comp=Z,22nm,0.4s,baz=332,slow=11,SNR=22 | **7.30** | **126** | Pn | **Pn** | **13 58 53.4** | **-3.4** |
| ARCES | | | | Sn | **Sn** | **14 00 11.3** | **-8.6** |
| | comp=Z,17nm,0.3s,baz=334,slow=22,SNR=9.6 | | | | | | |
| ARCES | | | | LR | LR | 14 01 58.1 | |
| | comp=Z,35μm,20.7s,baz=338,slow=40 | | | | | | |
| **ARCES** | **ARCESS Array B** | **7.30** | **126** | P | **Pn** | **13 58 55.9** | **-0.8** |
| ARCES | | | | S | **Sn** | **14 00 14.6** | **-5.3** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.3s | | | | | | |
| ARCES | | | | smax | smax | | |
| | comp=N,8.0nm,0.2s | | | | | | |
| **KEV** | **Kevo** | **7.46** | **122** | Pn | **Pn** | **13 58 54.9** | **-3.9** |
| **KEV** | **Kevo** | **7.46** | **122** | *e*P | **Pn** | **13 58 55.8** | **-3.0** |
| **KEV** | **Kevo** | **7.46** | **122** | Pn | **Pn** | **13 58 55.0** | **-3.9** |
| **KEV** | **Kevo** | **7.46** | **122** | P | **Pn** | **13 58 59.4** | **+0.5** |
| KEV | | | | pmax | pmax | | |
| | comp=Z,220nm,0.6s | | | | | | |
| **FAUS** | **Fauske** | **7.64** | **160** | *e*P | **Pn** | **13 59 00.8** | **-0.6** |
| FAUS | | | | *e*S | **Sn** | **14 00 21.5** | **-6.7** |
| FAUS | | | | IAML | | 14 00 38.9 | |
| | comp=Z,15nm,0.5s | | | | | | |
| **DBG** | **Daneborg** | **7.69** | **281** | *e*P | Pn | 13 58 57.2 | -4.9 |
| DBG | | | | *e*S | Sn | 14 00 17.0 | -12 |
| **DBG** | **Daneborg** | **7.69** | **281** | Pn | Pn | 13 58 56.9 | -5.2 |
| DBG | | | | Sn | Sn | 14 00 15.6 | -14 |
| **DBG** | **Daneborg** | **7.69** | **281** | *i* P | **Pn** | **13 58 58.2** | **-3.9** |
| **VADS** | **Vadso** | **7.73** | **116** | *e*P | **Pn** | **13 58 58.8** | **-3.9** |
| VADS | | | | *e*S | Sn | 14 00 21.0 | -9.5 |
| VADS | | | | IAML | | 14 00 25.4 | |
| | comp=Z,336nm,0.4s | | | | | | |
| **HEF** | **Hetta** | **7.87** | **135** | Pn | **Pn** | **13 59 02.0** | **-2.5** |
| HEF | | | | *e*S | **Sn** | **14 00 25.8** | **-8.1** |
| **HEF** | **Hetta** | **7.87** | **135** | Pn | **Pn** | **13 59 02.0** | **-2.5** |
| **SALU** | **Saltoluokta** | **7.99** | **151** | *e*P | **Pn** | **13 59 05.1** | **-1.2** |
| **KONS** | **Konsvik** | **8.35** | **167** | *e*P | **Pn** | **13 59 10.0** | **-1.1** |
| KONS | | | | IAML | | 14 00 42.2 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **STOK** | **Stokkvaagen** | **8.51** | **168** | *e*P | **Pn** | **13 59 12.0** | **-1.4** |
| **NOR** | **Nord** | **8.56** | **335** | *e*P | **Pn** | **13 59 10.5** | **-3.4** |
| NOR | | | | *e*S | Sn | 14 00 37.8 | -13 |
| **NOR** | **Nord** | **8.56** | **335** | Pn | **Pn** | **13 59 09.8** | **-4.1** |
| **NOR** | **Nord** | **8.56** | **335** | P | **Pn** | **13 59 10.2** | **-3.7** |
| NOR | | | | pmax | pmax | | |
| | comp=Z,87nm,1.4s | | | | | | |
| **NOR** | **Nord** | **8.56** | **335** | *i* P | Pn | 13 59 04.1 | -10 |
| **MOR8** | **Moi Rana** | **8.76** | **164** | *e*P | **Pn** | **13 59 15.2** | **-1.6** |
| **SGF** | **Sodankyl** | **9.25** | **132** | P | **Pn** | **13 59 21.8** | **-1.7** |
| SGF | | | | pmax | pmax | | |
| | comp=Z,153nm,1.0s | | | | | | |
| **SCO** | **Scoresbysund** | **9.98** | **261** | Pn | **Pn** | **13 59 30.6** | **-2.8** |
| **SCO** | **Scoresbysund** | **9.98** | **261** | P | **Pn** | **13 59 30.6** | **-2.8** |
| **SCO** | **Scoresbysund** | **9.98** | **261** | *i* P | **Pn** | **13 59 32.6** | **-0.8** |
| **ZFI2** | **Zemlya Franca-** | **10.05** | **35** | *e*P | **Pn** | **13 59 31.6** | **-2.7** |
| ZFI2 | | | | *e*S | Sn | 14 01 15.3 | -12 |
| **OMEGA** | **Omega** | **10.05** | **36** | *e*P | **Pn** | **13 59 31.7** | **-2.7** |
| OMEGA | | | | *e*S | Sn | 14 01 19.2 | -12 |
| **NSS** | **Namsos** | **10.26** | **172** | *e*P | **Pn** | **13 59 35.8** | **-1.5** |
| **APA0** | **Apatity Array** baz=325,slow=12 | **10.51** | **120** | Pn | Pn | 13 59 35.3 | -5.3 |
| APA0 | | | | Sn | Sn | 14 01 24.8 | -14 |
| **APA0** | **Apatity Array** baz=325,slow=12 | **10.51** | **120** | Pn | Pn | 13 59 35.3 | -5.3 |
| APA0 | | | | Sn | Sn | 14 01 24.8 | -14 |
| **APA** | **Apatity** | **10.63** | **119** | *i* P | **Pn** | **13 59 38.9** | **-3.5** |
| APA | | | | *i* | | 14 01 35.5 | |
| APA | | | | pmax | pmax | | |
| | comp=Z,63nm,1.2s | | | | | | |
| **LVZ** | **Lovozero** | **10.66** | **116** | | Pn | 13 59 37.3 | -5.6 |
| **LVZ** | **Lovozero** | **10.66** | **116** | *de*P | Pn | 13 59 37.4 | -5.5 |
| LVZ | | | | pmax | pmax | | |
| | comp=Z,129nm,1.3s | | | | | | |
| **MSF** | **Maaselka** | **11.09** | **132** | P | **Pn** | **13 59 45.4** | **-3.2** |
| MSF | | | | pmax | pmax | | |
| | comp=Z,268nm,0.9s | | | | | | |
| **NOD** | **Norderasen** | **11.49** | **166** | *e*P | **Pn** | **13 59 54.4** | **+0.2** |
| **TBLU** | **Trondheim** | **11.49** | **176** | *e*P | **Pn** | **13 59 50.2** | **-4.0** |
| **MOL** | **Molde** | **12.17** | **182** | *e*P | **Pn** | **14 00 02.0** | **-1.4** |
| **AKN** | **Aaknes** | **12.57** | **183** | Pn | **Pn** | **14 00 08.3** | **-0.6** |
| **AKN** | **Aaknes** | **12.57** | **183** | Pn | **Pn** | **14 00 08.3** | **-0.6** |
| **VAF** | **Ylistaro** | **12.68** | **150** | *e*P | **Pn** | **14 00 09.1** | **-1.2** |
| **DOMB** | **Dombas** | **12.70** | **179** | *e*P | **Pn** | **14 00 08.7** | **-2.0** |
| **SUMG** | **Summit** | **13.15** | **284** | Pn | **Pn** | **14 00 14.3** | **-2.8** |
| **SUMG** | **Summit** | **13.15** | **284** | P | **Pn** | **14 00 13.6** | **-3.5** |
| **SUMG** | **Summit** | **13.15** | **284** | P | **Pn** | **14 00 14.3** | **-2.8** |
| **SUMG** | **Summit** | **13.15** | **284** | *i* P | **Pn** | **14 00 13.0** | **-4.1** |
| **FOO** | **Floro** | **13.20** | **187** | *e*P | **Pn** | **14 00 15.6** | **-1.9** |
| **NC204** | **NORSAR Array S** | **13.49** | **176** | Pn | **Pn** | **14 00 19.4** | **-2.0** |
| **N

**BLS5 Blasjo 15.35 184** *e*P Pn 14 00 38.6 -8.0
**VALR Valaam 15.57 137***c e*P **Pn 14 00 48.1 -1.4**
VALR pmax pmax
comp=Z,100nm,0.9s
**ICESG Greenland Ices 15.57 274** *i* P **Pn 14 00 46.5 -3.4**
**KMY Karmoy 15.59 186** *e*P **Pn 14 00 46.5 -3.2**
**MEF Metsahovi 15.63 150** *e*P **Pn 14 00 47.9 -2.4**
**STRU Stroemstad 15.74 175** *e*P **Pn 14 00 48.0 -3.7**
**SNART Snartemo 16.42 183** *e*P **Pn 14 00 57.4 -3.0**
**HOMB Homborsund 16.48 180** *e*P **Pn 14 00 58.7 -2.5**
**ARBE Arbavere 16.60 148** *e*P **Pn 14 01 01.9 -0.8**
**KULLO Kullorsuaq 16.67 302** *i* P Pn 14 00 56.2 -7.3
**BIGH Upper Bighouse 16.92 203** *e*P **Pn 14 01 06.0 -0.8**
**BIGH Upper Bighouse 16.92 203** *e*P **Pn 14 01 04.5 -2.3**
**PUL Pulkovo 16.96 140**⇑ *e*P **Pn 14 01 04.9 -2.4**
PUL pmax pmax
comp=Z,631nm,1.1s
**MTSE Matsula 17.01 152** *e*P **Pn 14 01 06.1 -1.8**
**UPNV Upernavik 17.44 296** *i* P **Pn 14 01 07.0 -6.2**
**NUUG Nuugaatsiaq 17.49 291** *i* P **Pn 14 01 08.0 -5.8**
**ANGG Ammassalik, Gr 17.57 263** *i* P **Pn 14 01 14.3 -0.5**
**VSU Vasula 17.65 147***c i* P **Pn 14 01 11.0 -4.8**
VSU pmax pmax
comp=Z,501nm,1.7s
**GOET G??ttrup 17.72 179** *i* P **Pn 14 01 14.3 -2.4**
**MCD Coleburn Disti 17.75 201** *e*P **P 14 01 17.1 -1.0**
**UMMG Uummannaq 17.77 288** *i* P **Pn 14 01 15.7 -1.6**
**SLIT Slitere, Latvi 17.90 156** *e*P **Pn 14 01 18.2 -0.7**
**ISOG Isortoq, Green 17.98 265** *i* P **Pn 14 01 19.0 -0.9**
**TULEG Thule 18.06 312** Pn **Pn 14 01 15.8 -5.1**
TULEG IAmb IAmb 14 01 30.1
comp=Z,1μm,1.7s
**TULEG Thule 18.06 312** *i* P **Pn 14 01 14.3 -6.5**
**KPL Plockton 18.25 205** *e*P **P 14 01 22.6 -0.8**
**KPL Plockton 18.25 205** *e*P **Pn 14 01 21.6 -1.6**
**MUD Monsted U'grnd 18.30 179** *e*P **Pn 14 01 22.3 -1.6**
**MUD Monsted U'grnd 18.30 179** P **P 14 01 24.5 +0.4**
MUD pmax pmax
comp=Z,96nm,2.1s
**MUD Monsted U'grnd 18.30 179** *i* P **P 14 01 23.6 -0.4**
MUD IAmb IAmb 14 01 58.3
comp=Z,186nm,1.2s
**DRUM Mains of Drumt 18.35 200** *e*P **P 14 01 24.1 -0.4**
**PRGR Permogore 18.49 115** *e*P **P 14 01 20.9 -5.2**
**INVG Invergeldie, C 18.97 202** *e*P **Pn 14 01 31.4 -0.6**
**EUNU Eureka 19.05 328** P **P 14 01 29.9 -2.3**
EUNU IAmb IAmb 14 01 41.7
comp=Z,713nm,1.3s
**COP Copenhagen 19.13 173** P **Pn 14 01 34.2 +0.2**
COP pmax pmax
comp=Z,2μm,1.8s
**COP Copenhagen 19.13 173** *i* P **Pn 14 01 32.9 -1.0**
COP IAmb IAmb 14 01 47.1
comp=Z,666nm,1.2s
**DY2G Dye2 19.21 274** *i* P **Pn 14 01 35.3 +0.1**
DY2G IAmb IAmb 14 01 43.9
comp=Z,2μm,1.4s
**SVZ Severnaya Zeml 19.21 35**⇑ *i* P **P 14 01 29.4 -4.6**
SVZ *i* S Sn 14 04 38.7 -31
**LAWE Loch Awe, Argy 19.28 204** *e*P **Pn 14 01 35.0 -0.7**
**SSRD Sdr. Stenderup 19.28 178** *i* P **Pn 14 01 35.3 -0.5**
SSRD IAmb IAmb 14 01 49.2
comp=Z,221nm,0.9s
**ESY Stoneypath 19.34 199** *e*P **Pn 14 01 35.5 -1.1**
**EDI Edinburgh 19.39 200** *e*P **Pn 14 01 36.0 -1.0**
**PBUR Paburge 19.44 157** *e*P **P 14 01 35.8 -0.7**
**PGBU Glenifferbraes 19.62 202** *e*P **Pn 14 01 39.6 -0.3**
**VSVD Vaisvydziai 19.70 154** *e*P **P 14 01 38.4 -0.9**
**BSD Bornholm Skovb 19.80 169** *e*P **P 14 01 39.4 -1.1**
**BSD Bornholm Skovb 19.80 169** *e*P **P 14 01 40.1 -0.4**
**BSD Bornholm Skovb 19.80 169** P **P 14 01 39.8 -0.7**
BSD pmax pmax
comp=Z,180nm,0.9s
**BSD Bornholm Skovb 19.80 169** *i* P **P 14 01 39.4 -1.1**
BSD IAmb IAmb 14 01 56.5
comp=Z,167nm,1.1s
**EKA Eskdalemuir Ar 19.97 200** P **Pn 14 01 42.4 -1.6**
baz=6.5,slow=10
comp=Z,20nm,1.0s
**SFJD Kangerlussuaq 19.97 279** P **P 14 01 39.2 -3.0**
**SFJD Kangerlussuaq 19.97 279** P **P 14 01 42.1 -0.2**
comp=Z,1.1nm,0.3s,baz=41,slow=11,SNR=27
SFJD LR LR 14 08 27.8
comp=Z,21μm,18.7s,baz=44,slow=34
comp=Z,194nm,1.1s
**SFJD Kangerlussuaq 19.97 279** *i* P **P 14 01 41.3 -0.9**
SFJD IAmb IAmb 14 01 51.6
comp=Z,2μm,1.6s
**ESK Eskdalemuir 19.99 200** P **P 14 01 40.0 -2.6**
**ESK Eskdalemuir 19.99 200** P **P 14 01 39.0 -3.6**
ESK pmax pmax
comp=Z,195nm,1.0s
**PABE Paberze 20.17 154** P **P 14 01 41.9 -2.6**
PABE IAmb IAmb 14 01 48.0
comp=Z,508nm,1.3s
**PABE Paberze 20.17 154** *e*P **P 14 01 43.6 -0.8**
**IZAR Zarasai 20.21 150** *e*P **P 14 01 44.3 -0.7**
**NEWG New Galloway 20.28 202** *e*P Pn 14 01 45.9 -1.8
NEWG IAmb IAmb 14 01 53.8
comp=Z,246nm,1.0s
**RGN Rugen 20.30 172** P **P 14 01 43.7 -2.2**
**RGN Rugen 20.30 172** *e*P Pn 14 01 46.6 -1.3
**RGN Rugen 20.30 172** *e*P Pn 14 01 48.2 +0.3
comp=Z,2μm,1.4s,baz=1.2,slow=9.9
**ISAL Salakas 20.37 151** *e*P **P 14 01 46.9 +0.2**
**HLG Helgoland 20.58 181** *e*P Pn 14 01 50.3 -0.8
comp=Z,296nm,1.2s,baz=1.2,slow=9.9
**GDLE Glaisdale, N Y 20.68 196** *e*P **P 14 01 50.1 0.0**
**KESW Keswick, Cumbr 20.70 200** *e*P Pn 14 01 50.6 -2.0
KESW IAmb IAmb 14 01 55.0
comp=Z,408nm,1.3s
**BSEG Bad Segeberg 20.84 177** P Pn 14 01 52.3 -1.9
BSEG pmax pmax
comp=Z,243nm,1.6s
**BSEG Bad Segeberg 20.84 177** *e*P **P 14 01 51.9 +0.2**
comp=Z,536nm,1.6s,baz=1.2,slow=9.9
**NACGM Naroch 21.11 150** *i* P **P 14 01 54.4 -0.2**
comp=E,11μm,1.1s
**IOMK Kirk Michael 21.16 202** *e*P **P 14 01 54.9 -0.3**
IOMK IAmb IAmb 14 02 03.2
comp=Z,496nm,1.1s
**HPK Haverah Park 21.20 197** *e*P **P 14 01 55.2 -0.5**
HPK IAmb IAmb 14 02 04.1
comp=Z,584nm,1.4s
**WIM Isle of Man 21.29 202** *e*P **P 14 01 56.3 -0.3**
**SUW Suwalki 21.55 156** *e*P **P 14 01 58.3 -1.1**
SUW *e*S **S 14 05 55.2 -3.1**
SUW *e*L L 14 09 31.9
comp=Z,8μm,19.9s
**SUW Suwalki 21.55 156** P **P 14 01 57.4 -2.0**
**SUW Suwalki 21.55 156** *e*P **P 14 01 59.3 -0.1**
**SUW Suwalki 21.55 156** P **P 14 01 57.4 -2.0**
SUW pmax pmax
comp=Z,500nm,1.1s
SUW MLR MLR
comp=Z,9μm,22.0s
**LMK Market Rasen 21.61 195** *e*P **P 14 01 59.2 -0.9**
**MNK Minsk 21.65 149** *i* P **P 14 02 00.0 -0.5**
comp=E,52nm,1.1s
MNK *i* P **P 14 02 00.0 -0.5**
comp=N,489nm,1.1s
MNK *i* P **P 14 02 00.0 -0.5**
comp=Z,428nm,1.1s,baz=346
MNK *i* PP **PnPn 14 02 19.3 -1.5**
MNK *i* PPP PPP 14 02 27.9
MNK *i* S **S 14 06 01.0 +0.7**
MNK *i* SS **SnSn 14 06 24.8 +1.2**
MNK *i* SSS SSS 14 06 38.1
MNK *i* LQ LQ 14 08 20.5
MNK *i* LR LR 14 10 10.9
MNK *i* LRM MLR 14 10 43.2
comp=E,2μm,13.1s
MNK *i* LRM MLR 14 11 30.9
comp=Z,8μm,13.6s
MNK *i* LRM MLR 14 11 34.7
comp=N,6μm,13.4s
**MNK Minsk 21.65 149** *i* P **P 14 02 00.0 -0.5**
MNK *i* PPP PPP 14 02 27.8
MNK *i* S **S 14 06 01.0 +0.7**
MNK *i* SSS SSS 14 06 38.1
MNK pmax pmax
comp=N,489nm,1.1s
MNK pmax pmax
comp=Z,428nm,1.0s
MNK pmax pmax
comp=E,52nm,1.0s
MNK MLR MLR
MNK comp=E,2μm,13.0s MLR MLR
MNK comp=Z,8μm,14.0s MLR MLR
MNK comp=N,6μm,13.0s MLR MLR
**LBWR Ladybower, Pea 21.76 197** *e*P **P 14 02 02.0 +0.3**
LBWR IAmb IAmb 14 02 06.4
comp=Z,416nm,1.0s
**GKP Gorka Klasztor 21.77 166** *e*P **P 14 02 02.6 +0.8**
**GKP Gorka Klasztor 21.77 166** *e*P **P 14 01 01.6 -0.2**
**GORT1 Trebel 21.80 176** *e*P **P 14 02 02.7 +0.6**
comp=Z,3μm,2.1s,baz=1.2,slow=9.9
**WME Myndd Eilian 21.99 201** *e*P **P 14 02 03.7 -0.4**
**WPS Cemaes, Angles 22.01 201** *e*P **P 14 02 03.5 -0.8**
**RETH Rethem/Aller, 22.03 179** *e*P **P 14 02 05.1 +0.6**
comp=Z,333nm,1.3s,baz=1.2,slow=9.9
**KIRV Kirov 22.09 114** P **P 14 02 03.8 -1.3**
comp=Z,279nm,1.0s,baz=334,slow=23,SNR=123
KIRV S **S 14 06 07.0 -1.6**
comp=Z,6.1nm,0.4s,baz=190,slow=6.1,SNR=1.4
KIRV LR LR 14 10 56.1
comp=Z,15μm,21.1s,baz=334,slow=38
comp=Z,279nm,1.0s
**MOS Moscow 22.10 133** *e*P **P 14 02 03.1 -2.2**
MOS *e* 14 02 08.8
MOS *e*S **S 14 06 10.9 +2.0**
MOS pmax pmax
comp=Z,800nm,1.4s
MOS pmax pmax
comp=Z,512nm,1.2s
MOS pmax pmax
comp=N,400nm,1.2s
MOS pmax pmax
comp=N,463nm,1.2s
MOS smax smax
comp=E,2μm,4.5s
MOS MLR MLR
comp=Z,6μm,14.0s
**WLF1 Llynfaes 22.11 201** *e*P **P 14 02 05.0 -0.4**
**YLL Llanberis 22.23 201** *e*P **P 14 02 06.0 -0.7**
**NRDL Niedersach Rie 22.28 178** *e*P **P 14 02 07.5 +0.3**
comp=Z,449nm,1.2s,baz=1.2,slow=9.9
**DSB Dublin 22.35 204** P **P 14 02 06.3 -1.7**
DSB IAmb IAmb 14 02 15.9
comp=Z,232nm,1.1s
**RUE Ruedersdorf 22.38 172** *e*P **P 14 02 08.4 +0.1**
**RUE Ruedersdorf 22.38 172** *e*P **P 14 02 08.2 -0.1**
comp=Z,1μm,1.8s,baz=1.2,slow=9.9
**NUUK Nuuk 22.44 275** *i* P **P 14 02 08.7 -0.2**
NUUK IAmb IAmb 14 02 17.0
comp=Z,1μm,1.4s
**FLTG Flechtingen 22.46 176** *e*P **P 14 02 08.8 -0.4**
comp=Z,478nm,1.2s,baz=1.2,slow=9.9
**IBBN Ibbenburen 22.46 181** *e*P **P 14 02 09.1 -0.1**
comp=Z,566nm,1.9s,baz=1.2,slow=9.9
**OBN Obninsk 22.49 135** IAMs_20 IAMs_20 14 11 18.7
comp=Z,16μm,20.0s
**OBN Obninsk 22.49 135** P **P 14 02 08.0 -1.5**
comp=Z,460nm,1.1s,baz=340,slow=11,SNR=45
OBN LR LR 14 11 31.1
comp=Z,16μm,18.8s,baz=344,slow=38
comp=Z,460nm,1.1s
**OBN Obninsk 22.49 135** ⇓ P **P 14 02 08.5 -1.0**
**OBN Obninsk 22.49 135***c i* P **P 14 02 07.9 -1.5**
OBN *e*PPP PPP 14 02 38.4
OBN *e* 14 06 02.2
OBN *e*S **S 14 06 16.1 -0.2**
OBN pmax pmax
comp=Z,651nm,1.3s
OBN MLR MLR
comp=Z,13μm,16.0s
**HLM1 Long Mynd 22.73 198** *e*P **P 14 02 12.1 -0.1**
**CLZ Clausthal 22.93 177** *e*P **P 14 02 14.4 +0.1**
comp=Z,251nm,1.2s,baz=1.2,slow=9.9
**GTTG Gottingen 23.23 178** *e*P **P 14 02 18.3 +1.1**
comp=Z,281nm,1.8s,baz=1.2,slow=9.9
**NRS Narsarsuaq 23.25 264** P **P 14 02 15.9 -1.4**
NRS IAMs_20 IAMs_20 14 09 39.9
comp=Z,14μm,21.0s
**NRS Narsarsuaq 23.25 264** P **P 14 02 15.9 -1.4**
NRS pmax pmax
comp=Z,549nm,1.3s
NRS MLR MLR
comp=Z,14μm,21.0s
**NRS Narsarsuaq 23.25 264** *i* P **P 14 02 16.6 -0.7**
NRS IAmb IAmb 14 02 26.9
comp=Z,1μm,1.5s
**BUG Bochum--Univer 23.33 182** P **P 14 02 18.6 +0.3**
BUG pmax pmax
comp=Z,168nm,1.4s
**BUG Bochum--Univer 23.33 182** *e*P **P 14 02 18.5 +0.2**
comp=Z,178nm,1.1s,baz=1.2,slow=9.9
**MONM Monmouth 23.40 198** *e*P **P 14 02 18.6 -0.4**
MONM IAmb IAmb 14 02 23.2
comp=Z,171nm,1.2s
**STRD Stroud 23.41 197** *e*P **P 14 02 18.8 -0.3**
**RSBS Rosebush, Pemb 23.46 201** *e*P **P 14 02 19.0 -0.6**
RSBS IAmb IAmb 14 02 26.8
comp=Z,101nm,1.1s
**BEL Belsk 23.47 161** *e*P **P 14 02 19.3 -0.4**
BEL *e*S Sn 14 06 42.1 -10
BEL *e*L L 14 10 49.5
comp=Z,57μm,19.7s
**BEL Belsk 23.47 161** P **P 14 02 20.9 +1.3**
**CLL Collm 23.53 173** *i* P **P 14 02 20.8 +0.6**
comp=Z,610nm,1.8s
CLL *e*Pmax 14 02 21.0
CLL *e*S **S 14 06 37.0 +2.7**
CLL *e*S **S 14 06 37.0 +2.7**
comp=E,6μm,11.9s
CLL AMS AMS 14 12 00.0
comp=N,6μm,18.1s
CLL AMS AMS 14 12 00.0
comp=E,5μm,19.0s
CLL AMS AMS 14 12 00.0
comp=Z,8μm,18.6s
**CLL Collm 23.53 173** *i* P **P 14 02 20.8 +0.6**
CLL *e*S **S 14 06 37.0 +2.7**
CLL pmax pmax
comp=Z,610nm,1.8s
CLL MLR MLR
comp=Z,7μm,20.4s
**CLL Collm 23.53 173** *e*P **P 14 02 19.3 -0.9**
comp=Z,137nm,1.1s,baz=1.2,slow=9.9
**KASTN Kahler Asten 23.56 180** *e*P **P 14 02 21.2 +0.6**
comp=Z,692nm,2.0s,baz=1.2,slow=9.9
**NEUB Neuenburg 23.59 175** *e*P **P 14 02 20.8 -0.1**
comp=Z,185nm,0.9s,baz=1.2,slow=9.9
**IVI Ivigtut 23.94 267** P **P 14 02 21.8 -2.3**
IVI IAMs_20 IAMs_20 14 10 24.9
comp=Z,18μm,18.0s
**IVI Ivigtut 23.94 267** *i* P **P 14 02 23.6 -0.5**
IVI IAmb IAmb 14 02 32.0
comp=Z,2μm,2.1s
**UBBA Unterbreizbach 23.95 178** *e*P **P 14 02 24.5 +0.2**
comp=Z,766nm,2.4s,baz=1.2,slow=9.9
**BRG Berggiesshubel 24.00 172** *e*P **P 14 02 24.6 -0.1**
BRG Amp 14 02 26.9
comp=Z,187nm,1.5s
**BRG Berggiesshubel 24.00 172** S **S 14 06 46.0 +4.2**
**BRG Berggiesshubel 24.00 172** P **P 14 02 24.1 -0.7**
BRG pmax pmax
comp=Z,91nm,2.0s
**BRG Berggiesshubel 24.00 172** *e*P **P 14 02 23.7 -1.1**
comp=Z,188nm,1.5s,baz=1.2,slow=9.9
**BEBN Eben Emael 24.00 185** *d*P **P 14 02 25.7 +0.9**
comp=Z,76nm,1.2s
**VAL Valentia 24.10 209** P **P 14 02 24.9 -0.8**
**KSP Ksiaz 24.14 168** *e*P **P 14 02 25.9 -0.2**
KSP *e*S **S 14 06 45.8 +1.7**
KSP *e*L L 14 10 39.8
comp=Z,7μm,23.9s
**KSP Ksiaz 24.14 168** P **P 14 02 25.9 -0.2**
**MOX Moxa 24.16 175** P **P 14 02 26.7 +0.4**
MOX pmax pmax
comp=Z,227nm,1.6s
**MOX Moxa 24.16 175** *e*P **P 14 02 26.6 +0.4**
comp=Z,332nm,1.3s,baz=1.2,slow=9.9
MOX *e*L L 14 13 33.2
comp=Z,7μm,18.2s
**MEM Membach 24.18 184** *d*P **P 14 02 26.8 +0.3**
comp=Z,72nm,1.0s
**MEM Membach 24.18 184** P **P 14 02 27.1 +0.6**
MEM pmax pmax
comp=Z,144nm,1.0s
**BTNL Ternell 24.20 184** *d*P **P 14 02 27.0 +0.3**
comp=Z,66nm,1.1s
**BSTI Sart Tilman 24.22 185** *d*P **P 14 02 27.9 +1.1**
comp=Z,12nm,1.6s
**AHRW Bad Neuenahr-A 24.23 182** *e*P **P 14 02 28.6 +1.6**
comp=Z,228nm,1.1s,baz=1.2,slow=9.9
**HSKC Hora Svate Kat 24.24 173** *e*P **P 14 02 27.1 0.0**
HSKC *e*S **S 14 06 47.7 +1.9**
HSKC AMS AMS 14 11 00.0
comp=Z,7μm,21.2s
**PLN Plauen 24.33 175** *e*P **P 14 02 28.1 +0.2**
comp=Z,486nm,1.7s,baz=1.2,slow=9.9
**RICC Richard 24.33 171** *e*P **P 14 02 28.3 +0.4**
RICC AMS AMS 14 11 20.0
comp=Z,6μm,18.3s
**PVCC Panska Ves 24.37 171** *e*P **P 14 02 28.5 +0.3**
**PVCC Panska Ves 24.37 171** *e*P **P 14 02 28.5 +0.3**
**CHVC Chvalec 24.38 168** *e*P **P 14 02 28.6 +0.2**
CHVC AMS AMS 14 11 30.0
comp=Z,6μm,18.1s
**CHVC Chvalec 24.38 168** *e*P **P 14 02 28.6 +0.2**
CHVC MLR MLR
comp=Z,6μm,18.1s
**HTL Hartland 24.39 200** *e*P **P 14 02 28.2 -0.2**
**BCLA Clavier 24.39 185** *d*P **P 14 02 29.4 +1.0**
comp=Z,34nm,1.3s
**TANN Tannenbergstha 24.41 174** *e*P **P 14 02 28.6 0.0**
comp=Z,109nm,1.1s,baz=1.2,slow=9.9
**OSTC Ostas 24.42 168** AMS AMS 14 11 30.0
comp=Z,6μm,19.2s
**BGES Gesves 24.43 185** *d*P **P 14 02 31.1 +2.3**
comp=Z,54nm,1.2s
**BHOU Houvegnez 24.44 184** *d*P **P 14 02 29.8 +0.9**
comp=Z,66nm,1.4s
**UPC Upice 24.46 169** *e*P **P 14 02 29.8 +0.8**
UPC AMS AMS 14 11 40.0
comp=Z,6μm,18.8s
**UPC Upice 24.46 169** *e*P **P 14 02 29.8 +0.8**
UPC MLR MLR
comp=Z,6μm,18.8s
**BMRD Maredsous 24.52 186** *d*P **P 14 02 30.9 +1.3**
**TNS Taunus Mts 24.55 180** P **P 14 02 31.2 +1.3**
**TNS Taunus Mts 24.55 180** *e*P **P 14 02 31.3 +1.3**
comp=Z,308nm,1.6s,baz=1.2,slow=9.9
**DPC Dobruska-Polom 24.63 168** *e*P **P 14 02 30.5 -0.2**
DPC AMS AMS 14 11 50.0
comp=Z,5μm,17.1s
**DPC Dobruska-Polom 24.63 168** *e*P **P 14 02 30.5 -0.2**
DPC MLR MLR
comp=Z,5μm,17.1s
**RCHB Rochefort 24.65 185** *d*P **P 14 02 31.9 +1.1**
comp=Z,46nm,1.1s
**GIVF Givet 24.72 186** *e*P **P 14 02 32.3 +0.9**
GIVF pmax pmax
comp=Z,104nm,1.2s
**DOU Dourbes 24.73 186** *d*P **P 14 02 31.9 +0.4**
comp=Z,45nm,1.0s
DOU *d*PP **PnPn 14 02 59.6 -3.3**
**BAIF Baives 24.78 187** *e*P **P 14 02 33.2 +1.3**
BAIF pmax pmax
comp=Z,130nm,1.1s
**PRA Prague 24.82 171** *e*P **P 14 02 33.6 +1.3**
PRA AMS AMS 14 11 30.0
comp=Z,6μm,19.5s
**PRA Prague 24.82 171** *e*P **P 14 02 33.6 +1.3**
PRA MLR MLR
comp=Z,6μm,19.5s
**MANZ Manzenberg 24.82 175** *e*P **P 14 02 32.9 +0.5**
comp=Z,102nm,2.0s,baz=1.2,slow=9.9
**PRU Pruhonice 24.90 171** *e*P **P 14 02 33.8 +0.7**
PRU *e*S **S 14 06 58.9 +2.5**
PRU AMS AMS 14 11 30.0
comp=Z,6μm,18.3s
**PRU Pruhonice 24.90 171** *e*P **P 14 02 33.8 +0.7**
PRU *e*S **S 14 06 58.9 +2.5**
PRU MLR MLR
comp=Z,6μm,18.3s
**KRLC Kraliky 24.93 167** *e*P **P 14 02 33.4 0.0**
KRLC AMS AMS 14 11 30.0
comp=Z,5μm,20.3s
**KRLC Kraliky 24.93 167** *e*P **P 14 02 33.4 0.0**
KRLC MLR MLR
comp=Z,5μm,20.3s
**GOPC GO Pecny, Ondr 24.99 171** AMS AMS 14 11 40.0
comp=Z,6μm,19.1s
**OJC Ojcow 24.99 163** *e*P **P 14 02 34.1 +0.2**
OJC *e*S **S 14 06 59.2 +1.4**
OJC *e*L L 14 11 48.3
comp=Z,12μm,20.1s
**OJC Ojcow 24.99 163** P **P 14 02 34.1 +0.2**
**ROTZ Rotzenmuhle 25.05 174** *e*P **P 14 02 35.1 +0.7**
comp=Z,33nm,1.1s,baz=1.2,slow=9.9
**GRA1 Grafenberg Arr 25.10 176** IAmb IAmb 14 02 56.0
comp=Z,252nm,1.3s
GRA1 IAMs_20 IAMs_20 14 14 11.4
comp=Z,7μm,19.0s
**GRF Grafenberg Arr 25.10 176** *e*P **P 14 02 36.1 +1.2**
comp=Z,238nm,1.3s,baz=1.2,slow=9.9
GRF *e*L L 14 14 12.3
comp=Z,7μm,18.3s
**GRFO Grafenberg 25.10 176** P **P 14 02 35.1 +0.3**
GRFO IAmb IAmb 14 02 55.9
comp=Z,221nm,1.3s
GRFO IAMs_20 IAMs_20 14 14 12.5
comp=Z,7μm,18.0s
**GRFO Grafenberg 25.10 176** P **P 14 02 35.1 +0.3**
GRFO pmax pmax
comp=Z,221nm,1.3s
GRFO MLR MLR
comp=Z,7μm,18.0s
**WLF Walferdange 25.12 184** IAmb IAmb 14 02 56.6
comp=Z,202nm,1.4s
**WLF Walferdange 25.12 184** P **P 14 02 35.6 +0.5**
**WLF Walferdange 25.12 184** *d*P **P 14 02 37.1 +2.1**
comp=Z,50nm,1.2s
**WLF Walferdange 25.12 184** *e*P **P 14 02 37.2 +2.1**
comp=Z,179nm,1.3s,baz=1.2,slow=9.9
**OKC Ostrava-Krasne 25.25 165** *e*P **P 14 02 36.8 +0.6**
OKC *e*S **S 14 07 05.1 +3.1**
OKC AMS AMS 14 11 50.0
comp=Z,8μm,21.1s
**OKC Ostrava-Krasne 25.25 165** *e*P **P 14 02 36.8 +0.6**
OKC *e*S **S 14 07 05.1 +3.1**
OKC MLR MLR
comp=Z,8μm,21.1s
**MORC Moravsky Berou 25.27 166** IAmb IAmb 14 02 50.5
comp=Z,231nm,1.4s
**MORC Moravsky Berou 25.27 166** *e*P **P 14 02 36.3 -0.2**
MORC *e*S **S 14 07 10.1 +7.7**
**MORC Moravsky Berou 25.27 166**⇑ P **P 14 02 36.4 0.0**
**MORC Moravsky Berou 25.27 166** P **P 14 02 36.4 0.0**
**LPSR Galich'ya Gora 25.32 134** *e*P **P 14 02 35.5 -1.3**
LPSR pmax pmax
comp=Z,490nm,1.0s
LPSR MLR MLR
comp=Z,13μm,21.0s
**ZVC Zvikov 25.44 172** *e*S **S 14 07 07.9 +2.9**
ZVC AMS AMS 14 12 00.0
comp=Z,6μm,19.0s
**AKASG Malin Array Be 25.54 149** P **P 14 02 36.9 -1.9**
**AKASG Malin Array Be 25.54 149** P **P 14 02 37.7 -1.1**
comp=Z,27nm,0.8s,baz=343,slow=9.5,SNR=80
AKASG S **S 14 07 05.5 -1.0**
comp=Z,0.3nm,0.3s,baz=71,slow=21,SNR=1.8
AKASG LR LR 14 12 44.8
comp=Z,6μm,20.7s,baz=344,slow=37
comp=Z,27nm,0.8s
**AKBB Malin Array Si 25.54 149** IAmb IAmb 14 03 01.1
comp=Z,203nm,1.1s
**AKBB Malin Array Si 25.54 149***c i* P **P 14 02 37.7 -1.1**
**KIEV Kiev 25.55 149** P **P 14 02 37.4 -1.4**
KIEV IAmb IAmb 14 03 01.1
comp=Z,183nm,1.1s
**KIEV Kiev 25.55 149** IAMs_20 IAMs_20 14 13 44.0
comp=Z,7μm,19.0s
**KIEV Kiev 25.55 149** *i* P **P 14 02 37.8 -1.1**
SNR=25
**KIEV Kiev 25.55 149**⇑ P **P 14 02 38.2 -0.6**
**KIEV Kiev 25.55 149** P **P 14 02 38.2 -0.6**
**TREC Trest 25.64 170** AMS AMS 14 12 10.0
comp=Z,6μm,18.5s
**VRAC Vranov 25.68 168** *e*P **P 14 02 40.5 +0.3**
VRAC *e*S **S 14 07 11.5 +2.6**
**VRAC Vranov 25.68 168** P **P 14 02 40.6 +0.5**

comp=Z,86nm,0.9s,baz=358,slow=9.4,SNR=47
VRAC S **S** **14 07 11.1 +2.2**
comp=Z,2.5nm,0.6s,baz=41,slow=19,SNR=1.5
VRAC LR LR 14 12 54.5
comp=Z,6µm,19.0s,baz=352,slow=37
comp=Z,86nm,0.9s
**VRAC Vranov 25.68 168** ⇑P **P** **14 02 40.7 +0.5**
**WET Wettzell 25.69 174** P **P** **14 02 41.0 +0.8**
**WET Wettzell 25.69 174** *e*P **P** **14 02 41.1 +0.8**
comp=Z,299nm,1.3s,baz=1.2,slow=9.9
**MAUC Maruska 25.70 166** *e*P **P** **14 02 41.6 +1.3**
**KHC Kasperske Hory 25.72 172** IAmb IAmb 14 02 51.8
comp=Z,119nm,1.2s
KHC IAMs_20 IAMs_20 14 12 31.3
comp=Z,7µm,20.0s
**KHC Kasperske Hory 25.72 172** *e*P **P** **14 02 41.3 +0.7**
KHC *e*pP **pwP** **14 02 46.0 +0.9**
KHC *e*S **S** **14 07 12.9 +3.3**
KHC AMS AMS 14 12 10.0
comp=Z,7µm,19.8s
**KHC Kasperske Hory 25.72 172** *e*P **P** **14 02 41.3 +0.7**
KHC *e* 14 02 46.0
KHC *e*S **S** **14 07 12.9 +3.3**
KHC MLR MLR
comp=Z,7µm,19.8s
**LVV L'vov 25.78 157** *e*P **P** **14 02 41.1 +0.1**
LVV *e* 14 03 26.6
LVV *e* 14 07 02.7
LVV pmax pmax
comp=Z,700nm,1.6s
LVV MLR MLR
comp=N,5µm,11.0s
LVV MLR MLR
comp=E,1µm,11.0s
LVV MLR MLR
comp=Z,4µm,11.0s
**NIE Niedzica 25.83 162** *e*P **P** **14 02 42.9 +1.3**
NIE *e*S **S** **14 07 18.4 +7.2**
NIE *e*L L 14 12 38.1
comp=Z,7µm,19.2s
**NIE Niedzica 25.83 162** P **P** **14 02 42.8 +1.3**
**KWP Kalwaria Pacla 25.83 159** *e*P **P** **14 02 41.6 +0.2**
KWP *e*S S 14 07 23.1 +12
KWP *e*L L 14 12 17.7
comp=Z,11µm,18.1s
**KWP Kalwaria Pacla 25.83 159** IAMs_20 IAMs_20 14 12 38.5
comp=Z,11µm,20.0s
**KWP Kalwaria Pacla 25.83 159** P **P** **14 02 41.9 +0.4**
**KRUC Moravsky 25.92 168** *e*P **P** **14 02 42.5 +0.2**
KRUC *e*S **S** **14 07 16.9 +4.4**
**JSA Saint Aubin 25.99 196** *e*P **P** **14 02 43.5 +0.7**
**STU Stuttgart 26.00 179** IAmb IAmb 14 02 50.6
comp=Z,148nm,1.3s
**STU Stuttgart 26.00 179** P **P** **14 02 44.8 +1.8**
**STU Stuttgart 26.00 179** *e*P **P** **14 02 44.9 +1.8**
comp=Z,372nm,1.3s,baz=1.2,slow=9.9
**GEC2 GERESS Array S 26.01 172** IAmb IAmb 14 02 55.2
comp=Z,247nm,1.3s
**GEC2 GERESS Array S 26.01 172** *e*P **P** **14 02 44.0 +0.7**
comp=Z,251nm,1.3s,baz=1.2,slow=9.9
**GERES GERESS Array B 26.01 172** P **P** **14 02 43.9 +0.7**
comp=Z,50nm,1.0s,baz=94,slow=1.7,SNR=43
GERES LR LR 14 12 51.5
comp=Z,7µm,20.0s,baz=2.5,slow=36
comp=Z,50nm,1.0s
**LANS Liptovska Anna 26.03 164** *e*P **P** **14 02 44.6 +1.3**
LANS pmax pmax
comp=Z,56nm,1.0s
**LANS Liptovska Anna 26.03 164** *e*P **P** **14 02 44.6 +1.3**
**CKRC Cesky Krumlov 26.06 171** *e*P **P** **14 02 44.4 +0.8**
CKRC AMS AMS 14 12 20.0
comp=Z,6µm,20.0s
**CKRC Cesky Krumlov 26.06 171** *e*P **P** **14 02 44.4 +0.8**
CKRC MLR MLR
comp=Z,6µm,20.0s
**JAVC Velka Javorina 26.20 166** *e*P **P** **14 02 45.6 +0.7**
JAVC *e*S **S** **14 07 26.0 +9.0**
**VORR Voronezh 26.26 134** *e*P **P** **14 02 48.5 +3.2**
VORR pmax pmax
comp=Z,58nm,0.9s
**ARU Arti 26.28 106** P **P** **14 02 45.4 0.0**
ARU IAMs_20 IAMs_20 14 13 37.6
comp=Z,9µm,19.0s
**ARU Arti 26.28 106** P **P** **14 02 45.5 0.0**
comp=Z,62nm,0.7s,baz=326,slow=6.0,SNR=82
ARU S **S** **14 07 21.3 +3.1**
comp=Z,5.4nm,0.7s,baz=156,slow=20,SNR=0.9
ARU LR LR 14 13 49.2
comp=Z,10µm,19.7s,baz=329,slow=38
comp=Z,62nm,0.7s
**ARU Arti 26.28 106** *i* P **P** **14 02 45.6 +0.1**
ARU pmax pmax
comp=Z,301nm,1.7s
**FLN La Foliniere 26.29 194** *e*P **P** **14 02 45.1 -0.6**
FLN pmax pmax
comp=Z,123nm,1.2s
**CDF Champ du Feu 26.36 182** *e*P **P** **14 02 47.8 +1.4**
CDF pmax pmax
comp=Z,77nm,1.3s
**CRVS Cervenica-Dubn 26.44 161** *e*P **P** **14 02 47.2 +0.2**
CRVS pmax pmax
comp=Z,343nm,1.5s
**CRVS Cervenica-Dubn 26.44 161** *e*P **P** **14 02 47.2 +0.2**
**BFO Black Forest 26.44 180** P **P** **14 02 47.6 +0.6**
BFO IAmb IAmb 14 03 07.2
comp=Z,174nm,1.1s
BFO IAMs_20 IAMs_20 14 14 19.1
comp=Z,6µm,18.0s
**BFO Black Forest 26.44 180** P **P** **14 02 47.6 +0.6**
BFO pmax pmax
comp=Z,174nm,1.1s
BFO MLR MLR
comp=Z,6µm,18.0s
**BFO Black Forest 26.44 180** *e*P **P** **14 02 48.2 +1.2**
comp=Z,211nm,1.2s,baz=1.2,slow=9.9
**LDF La Druitiere 26.44 193** *e*P **P** **14 02 46.7 -0.3**
LDF pmax pmax
comp=Z,121nm,1.3s
**SVE Sverdlovsk 26.46 103** *de*P **P** **14 02 47.2 +0.1**
SVE *e*S **S** **14 07 25.8 +4.8**
SVE pmax pmax
comp=Z,222nm,1.5s
SVE MLR MLR
comp=Z,10µm,18.0s
**KOLS Kolonicke sedl 26.48 160** *e*P **P** **14 02 48.3 +0.9**
KOLS pmax pmax
comp=Z,132nm,0.9s
**KOLS Kolonicke sedl 26.48 160** *e*P **P** **14 02 48.3 +0.9**
**SMOL Smolenice 26.52 167** *e*P **P** **14 02 48.8 +1.0**
SMOL pmax pmax
comp=Z,138nm,1.8s
**ECH Echery 26.56 182** P **P** **14 02 49.9 +1.8**
**FUR Furstenfeldbru 26.63 176** P **P** **14 02 50.0 +1.3**
**FUR Furstenfeldbru 26.63 176** *e*P **P** **14 02 50.0 +1.3**
comp=Z,302nm,1.4s,baz=1.2,slow=9.9
**VYHS Vyhne 26.64 165** *e*P **P** **14 02 48.9 +0.1**
VYHS pmax pmax
comp=Z,78nm,1.4s
**VYHS Vyhne 26.64 165** *e*P **P** **14 02 48.9 +0.1**
**MODS Modra-Piesok 26.66 167** *e*P **P** **14 02 49.9 +0.9**
MODS pmax pmax
comp=Z,585nm,1.7s
**MODS Modra-Piesok 26.66 167** *e*P **P** **14 02 49.9 +0.9**
**VSR Storozhevoye 26.68 135** *e*P **P** **14 02 47.7 -1.4**
VSR pmax pmax
comp=Z,100nm,1.1s
VSR MLR MLR
comp=Z,15µm,25.0s
**GRR Gorron 26.69 194** *e*P **P** **14 02 48.8 -0.4**
GRR pmax pmax
comp=Z,79nm,0.9s
**KECS Kecovo 26.77 162** *e*P **P** **14 02 50.5 +0.5**
KECS pmax pmax
comp=Z,43nm,1.1s
**KECS Kecovo 26.77 162** *e*P **P** **14 02 50.5 +0.5**
**HAU Haudompre 26.78 183** *e*P **P** **14 02 54.1 +4.0**
HAU pmax pmax
comp=Z,422nm,2.4s
**ZST Bratislava 26.82 167** *e*P **P** **14 02 51.9 +1.5**
ZST pmax pmax
comp=Z,309nm,1.4s
**ZST Bratislava 26.82 167** *e*P **P** **14 02 51.9 +1.5**
**VORD Divnogorie 26.95 135** *e*P **P** **14 02 48.8 -2.7**
VORD pmax pmax
comp=Z,50nm,0.8s
VORD MLR MLR
comp=Z,10µm,20.0s
**HINF Hinteralfeld 26.96 183** *e*P **P** **14 02 52.9 +1.1**
HINF pmax pmax
comp=Z,155nm,2.3s
**SLE Schleitheim 27.00 180** P **P** **14 02 53.1 +1.0**
**CONA Conrad Observa 27.02 169** *e*pP pP 14 02 52.7 -0.1
comp=Z,215nm,1.6s,SNR=34
**MOA Molln 27.03 172** *e*pP pP 14 02 52.7 -0.1
comp=Z,135nm,1.4s,SNR=28
**RJOB Jochberg 27.09 174** *e*P **P** **14 02 53.6 +0.7**
comp=Z,86nm,1.1s,baz=1.2,slow=9.9
**UBR Ueberruh 27.10 178** *e*P **P** **14 02 54.4 +1.4**
comp=Z,212nm,1.7s,baz=1.2,slow=9.9
**BIOA Bad Ischl, Aus 27.16 173** *e*pP pP 14 02 54.4 +0.4
comp=Z,104nm,1.8s,SNR=11
**FRB Frobisher Bay 27.17 288** LR LR 14 13 01.9
comp=Z,9µm,20.4s,baz=32,slow=35
**VRH Novokhopyorsk 27.19 131** *e*P **P** **14 02 52.5 -1.2**
VRH pmax pmax
comp=Z,68nm,0.8s
**RONA Rosalia, Austr 27.27 169** *e*pP pP 14 02 55.1 +0.1
comp=Z,84nm,1.5s,SNR=35
**SRO Srobarova 27.28 166** *e*P **P** **14 02 55.9 +1.4**
**SRO Srobarova 27.28 166** *e*P **P** **14 02 55.8 +1.3**
**PSZ Piszkesteto 27.29 163** IAMs_20 IAMs_20 14 13 46.9
comp=Z,11µm,20.0s
**PSZ Piszkesteto 27.29 163** ⇑P **P** **14 02 55.1 +0.3**
**PSZ Piszkesteto 27.29 163** P **P** **14 02 55.0 +0.3**
**RETA Reutte 27.30 177** *e*pP pP 14 02 55.1 -0.2
comp=Z,44nm,1.4s,SNR=9.7
**SOP Sopron 27.30 168** P **P** **14 02 56.4 +1.7**
**BELG Belogornoye 27.33 123** P **P** **14 02 53.9 -1.0**
comp=Z,98nm,0.9s,baz=15,slow=0.5,SNR=27
BELG LR LR 14 13 46.2
comp=Z,17µm,21.5s,baz=328,slow=36
comp=Z,98nm,0.9s
**LESA Schwarzleotal 27.40 174** *e*pP pP 14 02 57.0 +0.8
comp=Z,109nm,1.8s
**MOTA Moosalm 27.45 176** *i* pP pP 14 02 56.9 +0.1
comp=Z,49nm,1.1s
**WATA Walderalm 27.46 176** *i* pP pP 14 02 57.2 +0.3
comp=Z,66nm,1.2s,SNR=18
**DAVA Damuels 27.49 178** *e*pP pP 14 02 57.8 +0.7
comp=Z,37nm,1.1s,SNR=12
**WTTA Wattenberg 27.54 176** *e*pP pP 14 02 58.0 +0.4
comp=Z,65nm,1.5s,SNR=22
**WTTA Wattenberg 27.54 176** P **P** **14 02 58.4 +1.3**
**SQTA Sankt Quirin 27.57 176** *e*pP pP 14 02 58.4 +0.6
comp=Z,89nm,2.0s,SNR=13
**LOR Lormes 27.58 187** *e*P **P** **14 02 58.8 +1.5**
LOR pmax pmax
comp=Z,280nm,2.6s
**BUD Budapest 27.66 165** P **P** **14 02 59.6 +1.7**
**ARSA Arzberg 27.68 170** *e*pP pP 14 02 58.7 +0.1
comp=Z,71nm,1.3s,SNR=18
**FETA Feichten 27.76 177** *i* pP pP 14 02 59.5 0.0
comp=Z,42nm,1.5s,SNR=17
**KBA Koelnbreinsper 27.77 173** *e*pP pP 14 03 00.2 +0.6
comp=Z,61nm,1.5s,SNR=18
**KBA Koelnbreinsper 27.77 173** P **P** **14 03 00.7 +1.6**
**BMR Baia Mare 27.84 158** ⇑P **P** **14 02 59.9 +0.3**
**BMR Baia Mare 27.84 158** P **P** **14 02 59.9 +0.3**
**SORM Soroca 27.94 151** ⇓P **P** **14 03 00.0 -0.4**
**SORM Soroca 27.94 151** P **P** **14 03 00.0 -0.4**
**DAVOX Davos/Dischmat 28.00 178** LR LR 14 15 33.4
comp=Z,6µm,18.9s,baz=355,slow=40
**ABTA Abfaltersbach 28.07 174** *e*pP pP 14 03 02.9 +0.6
comp=Z,16nm,1.0s
**AVF Avril sur Loir 28.07 188** *e*P **P** **14 03 02.9 +1.3**
AVF pmax pmax
comp=Z,63nm,1.3s
**BURAR Bucovina Array 28.08 156** P **P** **14 03 01.3 -0.5**
**BURAR Bucovina Array 28.08 156** ⇓P **P** **14 03 01.4 -0.5**
**BURAR Bucovina Array 28.08 156** P **P** **14 03 01.4 -0.5**
**CABF La Chapelle 28.18 184** *e*P P 14 03 06.8 +4.1
CABF pmax pmax
comp=Z,31nm,0.9s
**SMF Signal de Mont 28.20 187** *e*P P 14 03 07.7 +4.9
SMF pmax pmax
comp=Z,58nm,1.4s
**MYKA Terra Mystica 28.23 173** *e*pP pP 14 03 04.2 +0.6
comp=Z,129nm,1.5s,SNR=21
**SOKA Soboth 28.23 171** *e*pP pP 14 03 03.8 +0.2
comp=Z,46nm,1.4s,SNR=23
**BORR Bors 28.26 161** ⇓P **P** **14 03 03.9 +0.6**
**PERS Pernice 28.28 171** *i* P **P** **14 03 04.0 +0.5**
PERS *e*S **S** **14 07 52.5 +2.7**
**TUE Stuetta 28.30 179** IAMs_20 IAMs_20 14 15 24.3
comp=Z,5µm,19.0s
**BGF Bois d'Agland 28.32 188** *e*P **P** **14 03 04.7 +0.8**
BGF pmax pmax
comp=Z,54nm,1.1s
**OBKA Obir 28.38 171** *e*pP pP 14 03 05.2 +0.3
comp=Z,52nm,1.1s,SNR=31
**PRED Cave del Predi 28.41 173** IAmb IAmb 14 03 25.8
comp=Z,127nm,1.4s
PRED IAMs_20 IAMs_20 14 14 08.3
comp=Z,7µm,20.0s
**MFF Saint Martin d 28.43 193** *e*P **P** **14 03 05.0 +0.2**
MFF pmax pmax
comp=Z,51nm,1.0s
**ARCR ARCALIA 28.51 157** ⇑P **P** **14 03 06.4 +0.8**
**STAL STALIGIAL 28.57 174** IAMs_20 IAMs_20 14 14 33.5
comp=Z,5µm,20.0s
**TCF Toulx Ste Croi 28.62 189** *e*P **P** **14 03 07.5 +0.9**
TCF pmax pmax
comp=Z,22nm,0.8s
**DRGR 28.64 160** ⇓P **P** **14 03 07.1 +0.3**
**DRGR 28.64 160** P **P** **14 03 07.1 +0.3**
**CTI Castel Tesino 28.75 176** IAmb IAmb 14 03 18.5
comp=Z,119nm,1.3s
**MARR Marisel-Cluj 28.80 159** ⇓P **P** **14 03 08.1 -0.1**
**CRNS Crni Vrh 28.80 172** *i* P **P** **14 03 08.4 +0.3**
**CJR Cluj-Napoca 28.80 158** ⇑P **P** **14 03 09.0 +0.8**
**CJR Cluj-Napoca 28.80 158** P **P** **14 03 09.0 +0.8**
**LJU Ljubljana 28.84 171** *e*P **P** **14 03 09.2 +0.7**
**SABO M.te Sabotino 28.87 173** IAmb IAmb 14 03 20.2
comp=Z,457nm,1.9s
SABO IAMs_20 IAMs_20 14 14 33.4
comp=Z,6µm,20.0s
**MORH Mrgy, Hungar 28.89 166** ⇑P **P** **14 03 09.4 +0.5**
**SIRR Siria 29.07 161** ⇑P **P** **14 03 11.1 +0.6**
**KIS Kishinev 29.12 151** *e*P **P** **14 03 09.5 -1.4**
comp=Z,90nm,1.3s
**KIS Kishinev 29.12 151** *e*P **P** **14 03 09.5 -1.4**
KIS *e*S **S** **14 08 01.0 -1.9**
KIS pmax pmax
comp=Z,90nm,1.3s
KIS MLR MLR
comp=Z,3µm,16.0s
KIS MLR MLR
comp=N,2µm,14.5s
**MILM Milestii Mici 29.20 151** ⇑ *i*P **P** **14 03 10.0 -1.6**
comp=N,200nm,1.7s
**MILM Milestii Mici 29.20 151** ⇓P **P** **14 03 11.2 -0.4**
**MILM Milestii Mici 29.20 151** P **P** **14 03 11.2 -0.4**
**LPG La Plagne 29.28 183** *e*P **P** **14 03 15.1 +2.3**
LPG pmax pmax
comp=Z,101nm,1.6s
**TIXI Tiksi 29.32 34** P **P** **14 03 12.6 +0.1**
**TIXI Tiksi 29.32 34** *d i*P **P** **14 03 13.9 +1.4**
TIXI pmax pmax
comp=Z,63nm,1.3s
**TESR Tescani 29.33 154** ⇑P **P** **14 03 12.9 +0.1**
**TEOL Teolo 29.44 176** IAmb IAmb 14 03 16.2
comp=Z,78nm,0.8s
**SURR Surduc 29.62 161** ⇑P **P** **14 03 16.1 +0.7**
**RJF Les Rejaudoux 29.63 190** *e*P **P** **14 03 16.4 +0.9**
RJF pmax pmax
comp=Z,42nm,1.0s
**BZS Buzias 29.71 161** ⇓P **P** **14 03 16.8 +0.6**
**BZS Buzias 29.71 161** P **P** **14 03 16.8 +0.6**
**DOPR Dopca 29.73 156** ⇓P **P** **14 03 16.6 +0.3**
**BNI Bardonecchia 29.73 183** pP 14 03 16.9 -0.1
**BNI Bardonecchia 29.73 183** P **P** **14 03 18.2 +1.6**
**VRI Vrincioaia 29.98 154** ⇓P **P** **14 03 18.7 +0.1**
**VRI Vrincioaia 29.98 154** P **P** **14 03 18.7 +0.1**
**PLOR Plostina 29.98 154** ⇑P **P** **14 03 18.7 +0.1**
**PLOR Plostina 29.98 154** P **P** **14 03 18.7 +0.1**
**FRGS Fruska Gora 30.02 164** ⇑P **P** **14 03 19.5 +0.5**
**MBDF Montbardon 30.05 183** *e*P P 14 03 23.8 +4.4
MBDF pmax pmax
comp=Z,156nm,2.3s
**VOIR 30.22 157** ⇑P **P** **14 03 21.0 +0.2**
**VOIR 30.22 157** P **P** **14 03 21.0 +0.2**
**MLR Muntele Rosu 30.26 155** IAmb IAmb 14 03 52.9
comp=Z,122nm,1.3s
MLR IAMs_20 IAMs_20 14 15 54.8
comp=Z,8µm,18.0s
**MLR Muntele Rosu 30.26 155** LR LR 14 16 06.2
comp=Z,9µm,18.3s,baz=359,slow=38
**MLR Muntele Rosu 30.26 155** ⇓P **P** **14 03 21.7 +0.4**
**MLR Muntele Rosu 30.26 155** P **P** **14 03 21.6 +0.4**
**BISRR Bisoca 30.29 154** ⇑P **P** **14 03 22.1 +0.7**
**SCTR Scanteiesti 30.32 153** ⇑P **P** **14 03 21.6 +0.1**
**NEGRR Negrea 30.44 153** ⇑P **P** **14 03 22.7 +0.1**
**ZCCA Zocca 30.44 177** IAmb IAmb 14 04 14.3
comp=Z,92nm,1.1s
ZCCA IAMs_20 IAMs_20 14 17 16.9
comp=Z,6µm,20.0s
**MSSA Maissana 30.46 179** IAMs_20 IAMs_20 14 16 59.3
comp=Z,6µm,19.0s
**SCHLR Schela 30.50 153** ⇑P **P** **14 03 23.5 +0.4**
**MDVR Moldovita 30.55 161** ⇓P **P** **14 03 24.0 +0.3**
**VLC Villacollemand 30.62 178** P **P** **14 03 25.2 +0.9**
**ISR Istrita 30.69 155** ⇑P **P** **14 03 25.4 +0.4**
**ISR Istrita 30.69 155** P **P** **14 03 25.3 +0.4**
**SRE Strehaia 30.80 159** ⇓P **P** **14 03 26.3 +0.5**
**SRE Strehaia 30.80 159** P **P** **14 03 26.3 +0.5**
**A36M Sachs Harbour 30.82 334** IAmb IAmb 14 03 46.3
comp=Z,104nm,1.1s
A36M IAMs_20 IAMs_20 14 17 04.5
comp=Z,6µm,18.0s
**A36M Sachs Harbour 30.82 334** P **P** **14 03 25.9 +0.2**
baz=22,SNR=14
A36M S **S** **14 08 27.9 -1.2**
baz=22
**CFR Carcaliu 30.82 153** ⇓P **P** **14 03 26.0 -0.1**
**CFR Carcaliu 30.82 153** P **P** **14 03 25.9 -0.1**
**SBF Sospel 30.91 182** *e*P **P** **14 03 28.7 +1.8**
SBF pmax pmax
comp=Z,59nm,0.8s
**SULR 31.10 155** ⇑P **P** **14 03 28.5 +0.1**
**TPGR Topolog 31.18 152** ⇓P **P** **14 03 29.2 0.0**
**AMRR Amara 31.29 154** ⇑P **P** **14 03 30.2 0.0**
**AMRR Amara 31.29 154** P **P** **14 03 30.1 0.0**
**AKTO Aktyubinsk 31.59 112** LR LR 14 16 57.7
comp=Z,14µm,19.2s,baz=349,slow=38
**BOVS Bovan 31.69 162** ⇓P **P** **14 03 33.7 0.0**
**FDMO Fiordimonte 31.80 174** IAmb IAmb 14 03 42.0
comp=Z,149nm,1.3s
**PLE Pljevlja 31.81 165** ⇓ *i*P **P** **14 03 35.4 +0.5**
**ICOR Ion Corvin 31.83 153** ⇓P **P** **14 03 35.0 +0.1**
**SIM Simferopol' 31.88 145** *e*P **P** **14 03 38.3 +3.0**
SIM *e*S **S** **14 08 43.4 -2.8**
SIM pmax pmax
comp=Z,6.0nm,0.5s
**EPF Esparros 31.96 192** *e*P **P** **14 03 35.6 -0.5**
EPF pmax pmax
comp=Z,28nm,0.9s
**ETSF Etsaut 32.14 193** *e*P **P** **14 03 38.2 +0.4**
ETSF pmax pmax
comp=Z,26nm,0.8s
**BRY Bratogost 32.18 166** ⇓ *i*P **P** **14 03 37.8 -0.4**
**CESX Cesi 32.21 175** IAmb IAmb 14 03 46.2
comp=Z,177nm,1.5s
CESX IAMs_20 IAMs_20 14 18 30.9
comp=Z,4µm,18.0s
**ERBR Yeremizino-Bor 32.21 136** *e*P **P** **14 03 35.5 -2.8**
ERBR *e**PP **pP** **14 03 38.8 0.0**
ERBR *e*S **S** **14 08 49.6 -1.8**
ERBR pmax pmax
comp=Z,124nm,1.5s
ERBR MLR MLR
comp=Z,8µm,15.0s
ERBR MLR MLR
comp=E,7µm,10.0s
ERBR MLR MLR
comp=N,10µm,11.0s
**PGF Pioggiola 32.22 179** *e*P **P** **14 03 42.1 +3.6**
PGF pmax pmax
comp=Z,122nm,1.9s
**KOME Kolasin 32.30 165** ⇓ *i*P **P** **14 03 39.1 -0.1**
**IVA Berane 32.30 164** ⇓ *i*P **P** **14 03 40.3 +1.1**
**PSN Preselentsi 32.34 153** P **P** **14 03 40.0 +0.6**
**CEST Esterri de Car 32.34 190** IAmb IAmb 14 04 07.0
comp=Z,79nm,1.3s
CEST IAMs_20 IAMs_20 14 18 44.0
comp=Z,3µm,18.0s
**NKME Niksic 32.34 166** ⇓ *i*P **P** **14 03 38.9 -0.6**
**BRVK Borovoye 32.35 97** P **P** **14 03 39.3 -0.1**
**BRVK Borovoye 32.35 97** IAMs_20 IAMs_20 14 18 05.6
comp=Z,9µm,20.0s
**BRVK Borovoye 32.35 97** P **P** **14 03 40.0 +0.6**
BRVK P **P** **14 03 40.0 +0.6**
BRVK P **P** **14 03 40.0 +0.6**
BRVK S **S** **14 08 53.8 +0.3**
BRVK S **S** **14 08 53.8 +0.3**
BRVK S **S** **14 08 53.8 +0.3**
**BRVK Borovoye 32.35 97** *c i*P **P** **14 03 39.5 +0.1**
BRVK pmax pmax
comp=Z,28nm,0.8s
**EJON La Jonquera 32.43 188** P **P** **14 03 41.0 +0.8**
**SZH Strazhitsa 32.46 156** P **P** **14 03 39.0 -1.5**
**ANN Anapa 32.56 140** *e*P **P** **14 03 37.4 -3.9**
ANN *i* *PP **pP** **14 03 40.7 -1.1**
ANN *e*PPP PPP 14 04 51.6
ANN *e*S **S** **14 08 51.8 -4.9**
ANN pmax pmax
comp=Z,74nm,1.1s
ANN MLR MLR
comp=N,4µm,15.0s
ANN MLR MLR
comp=Z,3µm,16.0s
ANN MLR MLR
comp=E,4µm,19.0s
**CEME Cevo 32.56 166** ⇓ *i*P **P** **14 03 40.8 -0.6**
**NEF NEVSHA 32.61 154** P **P** **14 03 41.0 -0.7**
**PDG Podgorica 32.70 165** ⇑P **P** **14 03 42.7 +0.2**
**PDG Podgorica 32.70 165** ⇓ *i*P **P** **14 03 41.8 -0.7**
**PRD Provadia 32.73 154** P **P** **14 03 42.0 -0.7**
**BUM Brajici-Budva 32.80 166** ⇓ *i*P **P** **14 03 42.8 -0.8**
**VTS Vitosha 32.83 160** P **P** **14 03 42.7 -1.2**
**INTR Introdacqua 32.85 173** IAmb IAmb 14 03 59.0
comp=Z,92nm,1.4s
**DRME Dracevica, Mon 32.94 165** ⇓ *i*P **P** **14 03 44.2 -0.4**
**PLNA Plana 32.99 160** P **P** **14 03 44.0 -1.2**
**PGB Panagyurishte 33.02 159** P **P** **14 03 43.0 -2.4**
**PUK Puka 33.13 165** IAmb IAmb 14 03 56.7
comp=Z,133nm,1.6s
**C36M Paulatuk 33.14 332** IAmb IAmb 14 04 03.1
comp=Z,191nm,1.6s
C36M IAMs_20 IAMs_20 14 17 49.9
comp=Z,7µm,20.0s
**C36M Paulatuk 33.14 332** P **P** **14 03 45.4 -0.7**
baz=21,SNR=10
C36M S **S** **14 09 02.5 -2.9**
baz=21
**AB31 Akbulak array 33.16 111** *i* P **P** **14 03 45.8 -0.7**
**ABKAR Akbulak array 33.16 111** P **P** **14 03 46.1 -0.4**
**ABKAR Akbulak array 33.16 111** IAmb IAmb 14 03 55.2
comp=Z,71nm,1.1s
**LABN Labinsk 33.29 136** *e*P **P** **14 03 45.0 -2.7**
LABN *e**PP **pP** **14 03 48.1 -0.2**
LABN *e*S **S** **14 09 04.0 -4.2**
LABN pmax pmax
comp=Z,72nm,0.7s
LABN MLR MLR
comp=N,6µm,13.0s
LABN MLR MLR
comp=Z,4µm,12.0s
LABN MLR MLR
comp=E,8µm,12.0s
**GOF Gofitskoye 33.33 133** *c i*P **P** **14 03 47.9 -0.1**
**ECAL Calabor 33.57 201** P **P** **14 03 50.6 +0.4**
**KKB Krupnik 33.59 160** P **P** **14 03 48.3 -2.0**
**PEHC Pehcevo 33.63 161** *i* P **P** **14 03 50.5 -0.3**
**PGAV Gavieira, Arco 33.70 203** *e*P **P** **14 03 51.0 -0.4**
comp=E,62nm,1.7s
**PBRG Braganca 33.70 201** *e*P **P** **14 03 52.0 +0.6**
comp=E,151nm,1.6s
**TIR Tirane 33.82 165** ⇑P **P** **14 03 52.2 -0.1**
**TIR Tirane 33.82 165** P **P** **14 03 52.2 -0.1**
**PAOL Paolisi 33.85 172** IAMs_20 IAMs_20 14 18 27.3
comp=Z,5µm,18.0s
**RZN Rozhen 33.89 158** P **P** **14 03 52.0 -1.1**
**PCAB Cabril 33.92 203** *e*P **P** **14 03 54.5 +1.2**
comp=Z,97nm,1.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **A21K** | **Barrow** | **33.93** | **352** | P | **P** | **14 03 52.9** | **0.0** |
| | baz=7.0 | | | | | | | |
| A21K | | | | S | **S** | **14 09 16.4** | **-1.1** |
| | baz=7.0 | | | | | | | |
| **VAY** | **Valandovo** | **34.06** | **161** | *i* P | **P** | **14 03 54.6** | **+0.2** |
| **OHR** | **Ohrid** | **34.12** | **163** | *i* P | **P** | **14 03 55.7** | **+0.7** |
| **SOC** | **Sochi** | **34.14** | **138** | *e*P | **P** | **14 03 53.7** | **-1.3** |
| SOC | | | | *e* | | 14 05 06.3 | | |
| SOC | | | | *e*S | **S** | **14 09 21.6** | **+0.3** |
| SOC | | | | *e*SS | **SnSn** | **14 11 30.8** | **+2.5** |
| SOC | | | | *e*SSS | SSS | 14 11 53.1 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| SOC | | | | MLR | MLR | | |
| | comp=Z,12µm,20.0s | | | | | | |
| **NVR** | **Nevrokopi** | **34.15** | **159** | P | **P** | **14 03 55.6** | **+0.4** |
| **A22K** | **Sinclair Lake** | **34.18** | **351** | P | **P** | **14 03 55.6** | **+0.5** |
| | baz=7.8 | | | | | | | |
| A22K | | | | S | **S** | **14 09 22.8** | **+1.4** |
| | baz=7.8 | | | | | | | |
| **POLO** | **Lamas de Olo** | **34.23** | **202** | *e*P | **P** | **14 03 56.6** | **+0.6** |
| | comp=Z,57nm,1.3s | | | | | | | |
| **KNT** | **Kendrikon** | **34.24** | **161** | P | **P** | **14 03 55.8** | **-0.2** |
| **VSLR** | **Vesyoloye** | **34.31** | **138** | *c*eP | **P** | **14 03 56.7** | **+0.1** |
| VSLR | | | | pmax | pmax | | |
| | comp=Z,87nm,1.1s | | | | | | |
| **KIV** | **Kislovodsk** | **34.32** | **134** | P | **P** | **14 03 56.2** | **-0.6** |
| KIV | | | | IAmb | IAmb | 14 05 04.9 | |
| | comp=Z,60nm,0.9s | | | | | | |
| KIV | | | | IAMs_20 | IAMs_20 | 14 18 09.9 | |
| | comp=Z,11µm,21.0s | | | | | | |
| **KIV** | **Kislovodsk** | **34.32** | **134** | *i* P | **P** | **14 03 56.7** | **-0.2** |
| | SNR=17 | | | | | | | |
| **KIV** | **Kislovodsk** | **34.32** | **134** | P | **P** | **14 03 57.3** | **+0.5** |
| KIV | | | | P | **P** | **14 03 57.3** | **+0.5** |
| KIV | | | | P | **P** | **14 03 57.3** | **+0.5** |
| KIV | | | | S | **S** | **14 09 27.9** | **+3.6** |
| KIV | | | | S | **S** | **14 09 27.9** | **+3.6** |
| KIV | | | | S | **S** | **14 09 27.9** | **+3.6** |
| **KIV** | **Kislovodsk** | **34.32** | **134** | ⇑P | **P** | **14 03 56.6** | **-0.2** |
| **KIV** | **Kislovodsk** | **34.32** | **134** | *e*P | **P** | **14 03 56.6** | **-0.2** |
| KIV | | | | *e* | | 14 05 10.2 | | |
| KIV | | | | *e*S | **S** | **14 09 24.6** | **+0.2** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,45nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,6µm,16.0s | | | | | | |
| **PVRL** | **Vila Real** | **34.32** | **202** | *e*P | **P** | **14 03 56.2** | **-0.6** |
| | comp=Z,141nm,1.4s | | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **34.33** | **134** | LR | LR | 14 18 07.5 | |
| | comp=Z,9µm,20.2s,baz=257,slow=37 | | | | | | | |
| **MVO** | **Moncorvo** | **34.37** | **201** | *e*P | **P** | **14 03 57.6** | **+0.4** |
| | comp=Z,101nm,1.3s | | | | | | | |
| **FNA** | **Florina** | **34.49** | **163** | IAmb | IAmb | 14 04 03.2 | |
| | comp=Z,81nm,0.9s | | | | | | | |
| FNA | | | | IAMs_20 | IAMs_20 | 14 18 06.6 | |
| | comp=Z,8µm,22.0s | | | | | | | |
| **FNA** | **Florina** | **34.49** | **163** | P | **P** | **14 03 57.7** | **-0.5** |
| **FNA** | **Florina** | **34.49** | **163** | P | **P** | **14 03 57.8** | **-0.5** |
| **RDO** | **Rodhopi** | **34.51** | **157** | IAmb | IAmb | 14 04 06.1 | |
| | comp=Z,161nm,1.3s | | | | | | | |
| **RDO** | **Rodhopi** | **34.51** | **157** | P | **P** | **14 03 58.2** | **-0.1** |
| **SHA1** | **Shidzhatmaz** | **34.53** | **134** | *c i* P | **P** | **14 03 58.7** | **0.0** |
| **KAVA** | **Kavala** | **34.56** | **159** | P | **P** | **14 03 58.5** | **-0.2** |
| **KBZ** | **Khabaz** | **34.58** | **134** | P | **P** | **14 03 59.3** | **+0.4** |
| | comp=Z,15nm,0.9s,baz=336,slow=6.0,SNR=33 | | | | | | | |
| KBZ | | | | LR | LR | 14 18 32.5 | |
| | comp=Z,13µm,21.6s,baz=336,slow=37 | | | | | | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **KBZ** | **Khabaz** | **34.58** | **134** | *c i* P | **P** | **14 03 59.2** | **+0.4** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,39nm,1.3s | | | | | | | |
| **KBN** | **Korca** | **34.61** | **164** | IAMs_20 | IAMs_20 | 14 18 54.6 | |
| | comp=Z,6µm,19.0s | | | | | | | |
| **SOH** | **Sokhos** | **34.62** | **160** | P | **P** | **14 03 58.9** | **-0.4** |
| **VLO** | **Vlora** | **34.67** | **165** | IAMs_20 | IAMs_20 | 14 19 33.2 | |
| | comp=Z,5µm,20.0s | | | | | | | |
| **C26K** | **Camden Bay** | **34.67** | **344** | P | **P** | **14 03 59.7** | **+0.3** |
| | baz=12,SNR=17 | | | | | | | |
| C26K | | | | S | **S** | **14 09 31.2** | **+2.2** |
| | baz=12 | | | | | | | |
| **D28M** | **Stokes Point** | **34.75** | **340** | P | **P** | **14 04 00.5** | **+0.4** |
| | baz=15 | | | | | | | |
| D28M | | | | S | **S** | **14 09 32.4** | **+2.2** |
| | baz=15 | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **34.77** | **349** | P | **P** | **14 04 00.5** | **+0.3** |
| | baz=8.3,SNR=11 | | | | | | | |
| B22K | | | | S | **S** | **14 09 32.1** | **+1.6** |
| | baz=8.3 | | | | | | | |
| **THE** | **Thessaloniki** | **34.77** | **161** | P | **P** | **14 04 00.2** | **-0.4** |
| **BZK** | **Bozkurt** | **34.78** | **146** | ⇑P | **P** | **14 04 00.6** | **0.0** |
| **ALN** | **Alexandroupoli** | **34.81** | **157** | IAMs_20 | IAMs_20 | 14 18 51.5 | |
| | comp=Z,8µm,20.0s | | | | | | | |
| **ALN** | **Alexandroupoli** | **34.81** | **157** | P | **P** | **14 04 00.8** | **-0.1** |
| **ALN** | **Alexandroupoli** | **34.81** | **157** | P | **P** | **14 04 00.9** | **0.0** |
| **HORT** | **Hortiatis** | **34.82** | **161** | P | **P** | **14 04 00.9** | **-0.2** |
| **NEST** | **Nestorio** | **34.83** | **163** | P | **P** | **14 04 00.7** | **-0.5** |
| **C27K** | **Jago River** | **34.87** | **343** | P | **P** | **14 04 01.3** | **+0.1** |
| | baz=13,SNR=55 | | | | | | | |
| C27K | | | | S | **S** | **14 09 34.5** | **+2.4** |
| | baz=13 | | | | | | | |
| **PVIS** | **Viseu** | **34.90** | **202** | *e*P | **P** | **14 04 02.1** | **+0.4** |
| | comp=Z,102nm,1.4s | | | | | | | |
| **UCM** | **Universidad Co** | **34.90** | **196** | P | **P** | **14 04 01.1** | **-0.6** |
| **CUC** | **Castrocucco** | **34.94** | **170** | IAmb | IAmb | 14 04 10.3 | |
| | comp=Z,121nm,1.5s | | | | | | | |
| **THAS** | **Thassos island** | **34.96** | **158** | P | **P** | **14 04 01.5** | **-0.7** |
| **ENEZ** | **Enez** | **34.98** | **156** | P | **P** | **14 04 02.5** | **+0.1** |
| **ISK** | **Istanbul-Kandi** | **34.99** | **153** | P | **P** | **14 04 02.9** | **+0.5** |
| **ISK** | **Istanbul-Kandi** | **34.99** | **153** | P | **P** | **14 04 03.0** | **+0.5** |
| **SCTE** | **Santa Cesarea** | **35.00** | **167** | IAmb | IAmb | 14 04 27.4 | |
| | comp=Z,74nm,1.0s | | | | | | | |
| **D27M** | **Malcolm River** | **35.02** | **342** | IAmb | IAmb | 14 04 13.0 | |
| | comp=Z,124nm,1.5s | | | | | | | |
| **D27M** | **Malcolm River** | **35.02** | **342** | P | **P** | **14 04 02.4** | **-0.2** |
| | baz=14,SNR=19 | | | | | | | |
| D27M | | | | S | **S** | **14 09 37.4** | **+2.8** |
| | baz=14 | | | | | | | |
| **ETOS** | **Mallorca** | **35.10** | **188** | P | **P** | **14 04 04.6** | **+1.1** |
| **C23K** | **Itkillik River** | **35.12** | **348** | P | **P** | **14 04 04.0** | **+0.8** |
| | baz=9.5,SNR=84 | | | | | | | |
| C23K | | | | S | **S** | **14 09 39.9** | **+4.0** |
| | baz=9.5 | | | | | | | |
| **C24K** | **Franklin Bluff** | **35.12** | **346** | P | **P** | **14 04 03.4** | **+0.1** |
| | baz=10 | | | | | | | |
| C24K | | | | S | **S** | **14 09 38.8** | **+2.9** |
| | baz=10 | | | | | | | |
| **OUR** | **Ouranopolis** | **35.16** | **159** | P | **P** | **14 04 03.6** | **-0.3** |
| **OUR** | **Ouranopolis** | **35.16** | **159** | P | **P** | **14 04 03.8** | **-0.1** |
| **MTE** | **Manteigas** | **35.17** | **202** | P | **P** | **14 04 04.4** | **+0.3** |
| MTE | | | | IAmb | IAmb | 14 04 17.3 | |
| | comp=Z,78nm,1.2s | | | | | | | |
| **MTE** | **Manteigas** | **35.17** | **202** | *e*P | **P** | **14 04 04.6** | **+0.5** |
| | comp=Z,108nm,1.3s | | | | | | | |
| **A19K** | **Wainwright** | **35.20** | **354** | P | **P** | **14 04 03.7** | **-0.2** |
| | baz=4.8 | | | | | | | |
| A19K | | | | S | **S** | **14 09 36.8** | **-0.3** |
| | baz=4.8 | | | | | | | |
| **INK** | **Inuvik** | **35.23** | **337** | IAmb | IAmb | 14 04 20.9 | |
| | comp=Z,99nm,1.3s | | | | | | | |
| INK | | | | IAMs_20 | IAMs_20 | 14 19 33.2 | |
| | comp=Z,4µm,20.0s | | | | | | | |
| **INK** | **Inuvik** | **35.23** | **337** | LR | LR | 14 20 04.9 | |
| | comp=Z,4µm,19.0s,baz=26,slow=39 | | | | | | | |
| **INK** | **Inuvik** | **35.23** | **337** | P | **P** | **14 04 04.0** | **-0.2** |
| | baz=16,SNR=22 | | | | | | | |
| INK | | | | S | **S** | **14 09 36.0** | **-1.7** |
| | baz=16 | | | | | | | |
| **B20K** | **Meade River** | **35.26** | **352** | P | **P** | **14 04 05.0** | **+0.5** |
| | baz=6.6,SNR=12 | | | | | | | |
| B20K | | | | S | **S** | **14 09 40.1** | **+2.0** |
| | baz=6.6 | | | | | | | |
| **LIT** | **Litokhoron** | **35.26** | **161** | P | **P** | **14 04 04.7** | **-0.1** |
| **LIT** | **Litokhoron** | **35.26** | **161** | P | **P** | **14 04 04.9** | **+0.1** |
| **DIKM** | **Dikmen** | **35.28** | **144** | ⇑P | **P** | **14 04 04.9** | **0.0** |
| **KPRO** | **Kipourio** | **35.31** | **163** | P | **P** | **14 04 04.4** | **-1.0** |
| **D25K** | **Kavik River** | **35.36** | **345** | IAmb | IAmb | 14 04 16.1 | |
| | comp=Z,138nm,1.3s | | | | | | | |
| **D25K** | **Kavik River** | **35.36** | **345** | P | **P** | **14 04 05.8** | **+0.3** |
| | baz=11,SNR=72 | | | | | | | |
| D25K | | | | S | **S** | **14 09 40.3** | **+0.5** |
| | baz=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.41** | **82** | P | **P** | **14 04 04.8** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **35.41** | **82** | P | **P** | **14 04 05.4** | **-0.5** |
| | comp=Z,20nm,0.9s,baz=331,slow=9.0,SNR=50 | | | | | | | |
| ZALV | | | | LR | LR | 14 22 54.9 | |
| | comp=Z,7µm,18.2s,baz=324,slow=44 | | | | | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.41** | **82** | *i* P | **P** | **14 04 05.6** | **-0.3** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **KEK** | **Kerkira** | **35.44** | **165** | IAmb | IAmb | 14 04 13.7 | |
| | comp=Z,100nm,1.3s | | | | | | | |
| KEK | | | | IAMs_20 | IAMs_20 | 14 19 59.6 | |
| | comp=Z,4µm,20.0s | | | | | | | |
| **KEK** | **Kerkira** | **35.44** | **165** | P | **P** | **14 04 05.9** | **-0.5** |
| **COI** | **Coimbra** | **35.45** | **203** | *e*P | **P** | **14 04 08.0** | **+1.6** |
| | comp=Z,67nm,1.6s | | | | | | | |
| **ECHE** | **Chera** | **35.46** | **193** | P | **P** | **14 04 05.8** | **-0.7** |
| **E28M** | **Babbage River** | **35.52** | **341** | P | **P** | **14 04 06.8** | **0.0** |
| E28M | | | | IAmb | IAmb | 14 04 16.5 | |
| | comp=Z,133nm,1.4s | | | | | | | |
| **E28M** | **Babbage River** | **35.52** | **341** | P | **P** | **14 04 06.9** | **0.0** |
| | baz=14,SNR=44 | | | | | | | |
| E28M | | | | S | **S** | **14 09 43.3** | **+1.0** |
| | baz=14 | | | | | | | |
| **B21K** | **Ikpikpuk River** | **35.54** | **350** | P | **P** | **14 04 07.5** | **+0.7** |
| B21K | | | | IAmb | IAmb | 14 04 17.2 | |
| | comp=Z,160nm,1.1s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **35.54** | **350** | P | **P** | **14 04 07.5** | **+0.7** |
| | baz=7.7,SNR=26 | | | | | | | |
| B21K | | | | S | **S** | **14 09 43.5** | **+1.1** |
| | baz=7.7 | | | | | | | |
| **JAN** | **Janina** | **35.57** | **164** | P | **P** | **14 04 07.3** | **-0.2** |
| **ESDC** | **Sonseca Array** | **35.58** | **197** | P | **P** | **14 04 07.4** | **-0.2** |
| | comp=Z,9.8nm,0.9s,baz=2.1,slow=9.1,SNR=43 | | | | | | | |
| | comp=Z,9.8nm,0.9s | | | | | | | |
| **E29M** | **Blow River** | **35.59** | **339** | P | **P** | **14 04 07.4** | **+0.1** |
| | baz=15,SNR=58 | | | | | | | |
| E29M | | | | S | **S** | **14 09 45.9** | **+2.8** |
| | baz=15 | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **35.61** | **203** | *e*P | **P** | **14 04 10.0** | **+2.2** |
| | comp=Z,99nm,1.8s | | | | | | | |
| **KRAR** | **Krasnoyarsk** | **35.65** | **73** | ⇑*i* P | **P** | **14 04 09.0** | **+1.0** |
| **D24K** | **Happy Valley** | **35.69** | **346** | IAmb | IAmb | 14 04 21.8 | |
| | comp=Z,115nm,1.1s | | | | | | | |
| **D24K** | **Happy Valley** | **35.69** | **346** | P | **P** | **14 04 08.9** | **+0.7** |
| | baz=10,SNR=20 | | | | | | | |
| D24K | | | | S | **S** | **14 09 46.9** | **+2.2** |
| | baz=10 | | | | | | | |
| **LIA** | **Limnos Island** | **35.71** | **158** | P | **P** | **14 04 08.6** | **0.0** |
| **PCBR** | **Castelo Branco** | **35.72** | **201** | *e*P | **P** | **14 04 09.3** | **+0.5** |
| | comp=Z,122nm,1.7s | | | | | | | |
| **PAB** | **San Pablo** | **35.74** | **197** | P | **P** | **14 04 09.1** | **+0.1** |
| **PAB** | **San Pablo** | **35.74** | **197** | P | **P** | **14 04 09.1** | **+0.1** |
| PAB | | | | pmax | pmax | | |
| | comp=Z,47nm,0.9s | | | | | | |
| PAB | | | | MLR | MLR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| **THL** | **Klokotos Trika** | **35.75** | **162** | P | **P** | **14 04 08.0** | **-1.0** |
| **TIP** | **Timpagrande** | **35.79** | **169** | IAmb | IAmb | 14 04 17.8 | |
| | comp=Z,148nm,1.4s | | | | | | | |
| TIP | | | | IAMs_20 | IAMs_20 | 14 21 32.8 | |
| | comp=Z,4µm,18.0s | | | | | | | |
| **TIP** | **Timpagrande** | **35.79** | **169** | ⇑P | **P** | **14 04 10.1** | **+0.6** |
| **EZN** | **Ezine** | **35.90** | **156** | P | **P** | **14 04 09.2** | **-1.1** |
| **EIBI** | **Ibiza** | **35.90** | **190** | P | **P** | **14 04 11.4** | **+1.1** |
| **D23K** | **Nanushuk River** | **35.98** | **347** | P | **P** | **14 04 11.6** | **+0.8** |
| | baz=9.3 | | | | | | | |
| D23K | | | | S | **S** | **14 09 50.2** | **+0.9** |
| | baz=9.3 | | | | | | | |
| **B18K** | **Kokolik River** | **36.06** | **354** | P | **P** | **14 04 11.6** | **+0.2** |
| | baz=4.4 | | | | | | | |
| B18K | | | | S | **S** | **14 09 48.0** | **-2.4** |
| | baz=4.4 | | | | | | | |
| **F31M** | **Tsiigehtchic** | **36.09** | **336** | IAmb | IAmb | 14 04 28.4 | |
| | comp=Z,192nm,1.4s | | | | | | | |
| **F31M** | **Tsiigehtchic** | **36.09** | **336** | P | **P** | **14 04 10.9** | **-0.7** |
| | baz=16,SNR=40 | | | | | | | |
| F31M | | | | S | **S** | **14 09 52.3** | **+1.5** |
| | baz=16 | | | | | | | |
| **E27K** | **Coleen River** | **36.11** | **342** | IAmb | IAmb | 14 04 25.6 | |
| | comp=Z,157nm,1.6s | | | | | | | |
| **E27K** | **Coleen River** | **36.11** | **342** | P | **P** | **14 04 12.0** | **+0.1** |
| | baz=13,SNR=40 | | | | | | | |
| E27K | | | | S | **S** | **14 09 54.7** | **+3.4** |
| | baz=13 | | | | | | | |
| **NEO** | **Neokhori** | **36.11** | **161** | P | **P** | **14 04 11.8** | **-0.4** |
| **PMRV** | **Marv??o** | **36.12** | **201** | *e*P | **P** | **14 04 12.8** | **+0.6** |
| | comp=Z,226nm,1.7s | | | | | | | |
| **F30M** | **Barrier River** | **36.14** | **338** | P | **P** | **14 04 11.4** | **-0.6** |
| | baz=15,SNR=16 | | | | | | | |
| F30M | | | | S | **S** | **14 09 53.8** | **+2.2** |
| | baz=15 | | | | | | | |
| **PSBE** | **So Bento** | **36.18** | **203** | *e*P | **P** | **14 04 14.8** | **+2.1** |
| | comp=Z,172nm,1.8s | | | | | | | |
| **D22K** | **Ayikyak River** | **36.18** | **349** | P | **P** | **14 04 13.0** | **+0.5** |
| D22K | | | | IAmb | IAmb | 14 04 22.7 | |
| | comp=Z,162nm,1.2s | | | | | | | |
| D22K | | | | IAMs_20 | IAMs_20 | 14 17 27.7 | |
| | comp=Z,4µm,20.0s | | | | | | | |
| **D22K** | **Ayikyak River** | **36.18** | **349** | P | **P** | **14 04 11.8** | **-0.7** |
| | baz=8.4,SNR=41 | | | | | | | |
| D22K | | | | S | **S** | **14 09 55.9** | **+3.6** |
| | baz=8.4 | | | | | | | |
| **MAK** | **Makhachkala** | **36.24** | **129** | *c i* P | P | 14 04 07.8 | -5.3 |
| MAK | | | | *e*S | **S** | **14 09 46.3** | **-7.3** |
| MAK | | | | *e*SS | **SnSn** | **14 12 20.3** | **+1.1** |
| MAK | | | | pmax | pmax | | |
| | comp=Z,309nm,1.5s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,7µm,17.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **36.24** | **347** | IAmb | IAmb | 14 04 35.4 | |
| | comp=Z,105nm,1.2s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **36.24** | **347** | P | **P** | **14 04 11.6** | **-1.4** |
| | baz=9.7,SNR=34 | | | | | | | |
| TOLK | | | | S | **S** | **14 09 56.9** | **+3.6** |
| | baz=9.7 | | | | | | | |
| **C19K** | **Lookout Ridge** | **36.25** | **353** | IAmb | IAmb | 14 04 25.1 | |
| | comp=Z,112nm,1.2s | | | | | | | |
| C19K | | | | IAMs_20 | IAMs_20 | 14 17 11.6 | |
| | comp=Z,4µm,19.0s | | | | | | | |
| **C19K** | **Lookout Ridge** | **36.25** | **353** | P | **P** | **14 04 12.9** | **-0.2** |
| | baz=5.3,SNR=12 | | | | | | | |
| C19K | | | | S | **S** | **14 09 58.1** | **+4.7** |
| | baz=5.3 | | | | | | | |
| **EVR** | **Evrytania** | **36.38** | **163** | P | **P** | **14 04 15.8** | **+1.3** |
| **LKD2** | **Lefkada island** | **36.42** | **164** | P | **P** | **14 04 14.4** | **-0.4** |
| **ETOB** | **Tobarra** | **36.44** | **193** | P | **P** | **14 04 16.2** | **+1.2** |
| **SIGR** | **SIGRI** | **36.46** | **157** | P | **P** | **14 04 15.4** | **+0.3** |
| **PRK** | **Paraskevi** | **36.47** | **157** | P | **P** | **14 04 15.4** | **+0.3** |
| **F28M** | **Old Crow** | **36.52** | **340** | P | **P** | **14 04 14.8** | **-0.5** |
| | baz=14,SNR=38 | | | | | | | |
| F28M | | | | S | **S** | **14 09 59.2** | **+1.7** |
| | baz=14 | | | | | | | |
| **D20K** | **Etivluk River** | **36.53** | **351** | P | **P** | **14 04 14.9** | **-0.6** |
| | baz=6.6 | | | | | | | |
| D20K | | | | S | **S** | **14 09 57.5** | **-0.2** |
| | baz=6.6 | | | | | | | |
| **PMTG** | **Montargil** | **36.56** | **202** | *e*P | **P** | **14 04 15.3** | **-0.6** |
| | comp=Z,124nm,1.4s | | | | | | | |
| **AXAR** | **Agios Charalam** | **36.60** | **161** | P | **P** | **14 04 16.0** | **-0.3** |
| **G31M** | **Satah River** | **36.65** | **337** | P | **P** | **14 04 15.8** | **-0.6** |
| G31M | | | | IAmb | IAmb | 14 04 33.2 | |
| | comp=Z,221nm,1.4s | | | | | | | |
| **G31M** | **Satah River** | **36.65** | **337** | P | **P** | **14 04 15.7** | **-0.6** |
| | baz=16,SNR=44 | | | | | | | |
| G31M | | | | S | **S** | **14 10 00.3** | **+0.9** |
| | baz=16 | | | | | | | |
| **ANTO** | **Ankara** | **36.66** | **148** | P | **P** | **14 04 16.5** | **-0.3** |
| **ANTO** | **Ankara** | **36.66** | **148** | IAMs_20 | IAMs_20 | 14 21 40.3 | |
| | comp=Z,3µm,18.0s | | | | | | | |
| **ANTO** | **Ankara** | **36.66** | **148** | P | **P** | **14 04 18.1** | **+1.3** |
| ANTO | | | | S | **S** | **14 10 04.9** | **+4.7** |
| **ANTO** | **Ankara** | **36.66** | **148** | ⇑P | **P** | **14 04 17.7** | **+0.8** |
| **ANTO** | **Ankara** | **36.66** | **148** | P | **P** | **14 04 17.7** | **+0.8** |
| **E21K** | **Killik River** | **36.68** | **349** | IAmb | IAmb | 14 04 42.4 | |
| | comp=Z,162nm,1.4s | | | | | | | |
| **E21K** | **Killik River** | **36.68** | **349** | P | **P** | **14 04 16.2** | **-0.6** |
| | baz=7.7,SNR=25 | | | | | | | |
| E21K | | | | S | **S** | **14 10 02.3** | **+2.3** |
| | baz=7.7 | | | | | | | |
| **KURK** | **Kurchatov** | **36.68** | **90** | P | **P** | **14 04 16.4** | **-0.4** |
| KURK | | | | IAmb | IAmb | 14 04 30.1 | |
| | comp=Z,161nm,1.4s | | | | | | | |
| **KURK** | **Kurchatov** | **36.68** | **90** | IAMs_20 | IAMs_20 | 14 21 19.3 | |
| | comp=Z,13µm,20.0s | | | | | | | |
| **KURK** | **Kurchatov** | **36.68** | **90** | P | **P** | **14 04 17.1** | **+0.3** |
| KURK | | | | P | **P** | **14 04 17.1** | **+0.3** |
| KURK | | | | P | **P** | **14 04 17.1** | **+0.3** |
| KURK | | | | S | **S** | **14 10 00.5** | **+0.3** |
| KURK | | | | S | **S** | **14 10 00.5** | **+0.3** |
| **KURK** | **Kurchatov** | **36.68** | **90** *c i* | P | **P** | **14 04 16.3** | **-0.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,81nm,1.7s | | | | | | | |
| **PESTR** | **Estremoz** | **36.70** | **201** | P | **P** | **14 04 17.0** | **-0.1** |
| PESTR | | | | IAmb | IAmb | 14 04 26.0 | |
| | comp=Z,85nm,0.9s | | | | | | | |
| **PESTR** | **Estremoz** | **36.70** | **201** | *e*P | **P** | **14 04 16.8** | **-0.3** |
| | comp=Z,146nm,1.4s | | | | | | | |
| **PESTR** | **Estremoz** | **36.70** | **201** | P | **P** | **14 04 16.5** | **-0.7** |
| **ANX** | **Ano Chora** | **36.71** | **162** | P | **P** | **14 04 17.2** | **-0.2** |
| **E24K** | **Your Creek** | **36.73** | **346** | P | **P** | **14 04 17.4** | **+0.1** |
| | baz=10.0,SNR=57 | | | | | | | |
| E24K | | | | S | **S** | **14 10 02.7** | **+1.8** |
| | baz=10.0 | | | | | | | |
| **FSK** | **Fiskardo** | **36.74** | **164** | P | **P** | **14 04 16.4** | **-1.1** |
| **KURBB** | **Kurchatov Arra** | **36.74** | **91** | P | **P** | **14 04 16.9** | **-0.4** |
| | comp=Z,24nm,0.9s,baz=335,slow=7.1,SNR=93 | | | | | | | |
| KURBB | | | | PP | **PnPn** | **14 05 38.9** | **-1.6** |
| | comp=Z,11nm,1.0s,baz=340,slow=10,SNR=2.4 | | | | | | | |
| KURBB | | | | LR | LR | 14 23 29.1 | |
| | comp=Z,8µm,18.3s,baz=334,slow=43 | | | | | | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **EBAD** | **Badajoz** | **36.75** | **201** | P | **P** | **14 04 16.5** | **-1.1** |
| **C18K** | **Utukok River** | **36.76** | **354** | IAmb | IAmb | 14 04 43.4 | |
| | comp=Z,143nm,1.4s | | | | | | | |
| C18K | | | | IAMs_20 | IAMs_20 | 14 17 20.1 | |
| | comp=Z,4µm,20.0s | | | | | | | |
| **C18K** | **Utukok River** | **36.76** | **354** | P | **P** | **14 04 17.3** | **-0.1** |
| | baz=4.6,SNR=13 | | | | | | | |
| C18K | | | | S | **S** | **14 09 59.8** | **-1.4** |
| | baz=4.6 | | | | | | | |
| C18K | | | | S | **S** | **14 10 01.9** | **+0.7** |
| | baz=4.6 | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **36.79** | **338** | IAmb | IAmb | 14 04 27.2 | |
| | comp=Z,123nm,1.4s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **36.79** | **338** | P | **P** | **14 04 17.3** | **-0.4** |
| | baz=15,SNR=20 | | | | | | | |
| G30M | | | | S | **S** | **14 10 02.6** | **+0.9** |
| | baz=15 | | | | | | | |
| **F26K** | **Sheenjek River** | **36.80** | **343** | P | **P** | **14 04 17.9** | **+0.1** |
| | baz=12,SNR=30 | | | | | | | |
| F26K | | | | S | **S** | **14 10 05.9** | **+4.1** |
| | baz=12 | | | | | | | |
| **BILL** | **Bilibino** | **36.80** | **14** | P | **P** | **14 04 18.9** | **+1.2** |
| **BILL** | **Bilibino** | **36.80** | **14** *c i* | P | **P** | **14 04 19.9** | **+2.2** |
| BILL | | | | *e* | | 14 05 39.4 | | |
| BILL | | | | *e* | | 14 06 38.0 | | |
| BILL | | | | *e*S | **S** | **14 10 02.3** | **+0.5** |
| BILL | | | | *e*SS | **SnSn** | **14 12 33.2** | **+1.0** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,62nm,1.3s | | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,3µm,16.0s | | | | | | | |
| **D19K** | **Kuna River** | **36.81** | **352** | P | **P** | **14 04 18.2** | **+0.3** |
| | baz=5.9 | | | | | | | |
| D19K | | | | S | **S** | **14 10 01.7** | **-0.3** |
| | baz=5.9 | | | | | | | |
| **E23K** | **Chandalar** | **36.82** | **347** | P | **P** | **14 04 18.1** | **+0.1** |
| | baz=9.5,SNR=80 | | | | | | | |
| E23K | | | | S | **S** | **14 10 06.6** | **+4.4** |
| | baz=9.5 | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **36.88** | **348** | P | **P** | **14 04 18.5** | **0.0** |
| | baz=8.6 | | | | | | | |
| E22K | | | | S | **S** | **14 09 59.3** | **-3.7** |
| | baz=8.6 | | | | | | | |
| **EFP** | **Efpalio** | **36.88** | **162** | P | **P** | **14 04 18.5** | **-0.1** |
| **BR131** | **Keskin Array S** | **36.92** | **147** | P | **P** | **14 04 19.3** | **+0.1** |
| | SNR=19 | | | | | | | |
| BR131 | | | | P | **P** | **14 04 19.3** | **+0.1** |
| | SNR=19 | | | | | | | |
| BR131 | | | | S | **S** | **14 10 06.5** | **+2.2** |
| BR131 | | | | S | **S** | **14 10 06.5** | **+2.2** |
| **BR131** | **Keskin Array S** | **36.92** | **147** | *c i* P | **P** | **14 04 19.8** | **+0.6** |
| **BRTR** | **Keskin Array B** | **36.92** | **147** | P | **P** | **14 04 19.1** | **0.0** |
| **BRTR** | **Keskin Array B** | **36.92** | **147** | P | **P** | **14 04 19.3** | **+0.1** |
| | comp=Z,10.0nm,0.8s,baz=348,slow=6.8,SNR=39 | | | | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **36.92** | **147** | *i* P | **P** | **14 04 19.8** | **+0.6** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| **TRLG** | **Trialeti** | **36.93** | **134** | P | **P** | **14 04 19.9** | **+0.7** |
| **E20K** | **Nigu River** | **36.97** | **351** | P | **P** | **14 04 17.4** | **-1.8** |
| | baz=6.7 | | | | | | | |
| E20K | | | | S | **S** | **14 10 03.3** | **-1.2** |
| | baz=6.7 | | | | | | | |
| **C17K** | **DeLong Mountai** | **36.98** | **355** | P | **P** | **14 04 19.0** | **-0.3** |
| | baz=3.7,SNR=13 | | | | | | | |
| C17K | | | | S | **S** | **14 10 09.1** | **+4.6** |
| | baz=3.7 | | | | | | | |
| **DRLN** | **Deer Lake** | **36.99** | **265** | IAMs_20 | IAMs_20 | 14 17 48.1 | |
| | comp=Z,5µm,18.0s | | | | | | | |
| **LIS** | **Lisbon** | **37.00** | **203** | *e*P | **P** | **14 04 20.7** | **+1.0** |
| LIS | | | | IAMs_20 | IAMs_20 | 14 17 23.3 | |
| | comp=N,4µm,23.3s | | | | | | | |
| **F25K** | **Christian Rive** | **37.01** | **344** | P | **P** | **14 04 18.9** | **-0.7** |
| | baz=11,SNR=64 | | | | | | | |
| F25K | | | | S | **S** | **14 10 09.8** | **+4.7** |
| | baz=11 | | | | | | | |
| **G29M** | **Pine Creek** | **37.04** | **339** | IAmb | IAmb | 14 04 29.4 | |
| | comp=Z,192nm,1.2s | | | | | | | |
| **G29M** | **Pine Creek** | **37.04** | **339** | P | **P** | **14 04 19.2** | **-0.6** |
| | baz=14,SNR=54 | | | | | | | |
| G29M | | | | S | **S** | **14 10 09.4** | **+4.0** |
| | baz=14 | | | | | | | |
| **EVO** | **Evora** | **37.07** | **202** | *e*P | **P** | **14 04 19.6** | **-0.7** |
| | comp=Z,41nm,1.7s | | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **37.09** | **164** | P | **P** | **14 04 19.9** | **-0.5** |
| **BMAR** | **Burnt Mountain** | **37.09** | **343** | P | **P** | **14 04 20.9** | **+0.6** |
| **KZRT** | **Kazreti** | **37.13** | **133** | P | **P** | **14 04 22.4** | **+1.5** |
| **RLS** | **Riolos of Patr** | **37.21** | **163** | P | **P** | **14 04 21.5** | **+0.1** |
| **C16K** | **Lisburne Hills** | **37.23** | **356** | IAMs_20 | IAMs_20 | 14 17 18.6 | |
| | comp=Z,5µm,22.0s | | | | | | | |
| **C16K** | **Lisburne Hills** | **37.23** | **356** | P | **P** | **14 04 21.3** | **0.0** |
| | baz=2.7,SNR=10 | | | | | | | |
| C16K | | | | S | **S** | **14 10 12.8** | **+4.6** |
| | baz=2.7 | | | | | | | |
| **F24K** | **Squaw Lake** | **37.24** | **345** | P | **P** | **14 04 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,11µm,19.0s | | | | | | | |
| **VLY** | **Voula,Athens** | **37.61** | **160** | P | **P** | **14 04 24.4** | **-0.4** |
| **RAFF** | **Raffo Rosso** | **37.64** | **172** | IAmb | IAmb | 14 04 34.7 | | |
| | comp=Z,177nm,1.3s | | | | | | | |
| RAFF | | | | IAMs_20 | IAMs_20 | 14 20 42.6 | | |
| | comp=Z,5µm,20.0s | | | | | | | |
| **COLD** | **Coldfoot** | **37.68** | **347** | P | **P** | **14 04 24.8** | **-0.4** |
| | baz=9.1,SNR=71 | | | | | | | |
| COLD | | | | S | **S** | **14 10 17.6** | **+2.5** |
| | baz=9.1 | | | | | | | |
| **H29M** | **Whitestone** | **37.74** | **339** | IAmb | IAmb | 14 04 35.5 | | |
| | comp=Z,158nm,1.1s | | | | | | | |
| **H29M** | **Whitestone** | **37.74** | **339** | P | **P** | **14 04 25.2** | **-0.6** |
| | baz=14,SNR=84 | | | | | | | |
| H29M | | | | S | **S** | **14 10 14.9** | **-1.3** |
| | baz=14 | | | | | | | |
| **D17K** | **Noatak River** | **37.76** | **355** | P | **P** | **14 04 25.0** | **-0.9** |
| | baz=3.7,SNR=13 | | | | | | | |
| D17K | | | | S | **S** | **14 10 19.9** | **+3.7** |
| | baz=3.7 | | | | | | | |
| **MESJ** | **Messejana** | **37.78** | **202** | IAmb | IAmb | 14 04 39.6 | | |
| | comp=Z,184nm,1.6s | | | | | | | |
| **MESJ** | **Messejana** | **37.78** | **202** | *e*P | **P** | **14 04 25.6** | **-0.7** |
| | comp=Z,111nm,1.6s | | | | | | | |
| **MESJ** | **Messejana** | **37.78** | **202** | *e*P | **P** | **14 04 27.2** | **+0.9** |
| MESJ | | | | *e*PP | **PnPn** | **14 05 54.3** | **+1.0** |
| MESJ | | | | *e*S | **S** | **14 10 20.2** | **+3.1** |
| MESJ | | | | IAMs_20 | IAMs_20 | 14 18 29.0 | | |
| | comp=Z,2µm,21.2s | | | | | | | |
| **MESJ** | **Messejana** | **37.78** | **202** | *e*P | **P** | **14 04 27.2** | **+0.9** |
| MESJ | | | | *e* | | 14 05 54.3 | | |
| MESJ | | | | *e*S | **S** | **14 10 20.2** | **+3.1** |
| **E19K** | **Redstone River** | **37.81** | **351** | P | **P** | **14 04 25.0** | **-1.3** |
| | baz=6.2 | | | | | | | |
| E19K | | | | S | **S** | **14 10 17.4** | **+0.3** |
| | baz=6.2 | | | | | | | |
| **SEKA** | **Sheki** | **37.86** | **130** | P | **P** | **14 04 25.7** | **-1.3** |
| **G25K** | **Bearman Lake** | **37.86** | **344** | P | **P** | **14 04 25.5** | **-1.2** |
| | baz=11,SNR=14 | | | | | | | |
| G25K | | | | S | **S** | **14 10 23.9** | **+6.0** |
| | baz=11 | | | | | | | |
| **F21K** | **Alatna River** | **37.87** | **349** | IAmb | IAmb | 14 04 36.6 | | |
| | comp=Z,130nm,1.2s | | | | | | | |
| F21K | | | | IAMs_20 | IAMs_20 | 14 18 51.4 | | |
| | comp=Z,3µm,19.0s | | | | | | | |
| **F21K** | **Alatna River** | **37.87** | **349** | P | **P** | **14 04 26.2** | **-0.6** |
| | baz=7.7,SNR=66 | | | | | | | |
| F21K | | | | S | **S** | **14 10 21.9** | **+3.8** |
| | baz=7.7 | | | | | | | |
| **PCVE** | **Castro Verde** | **37.97** | **202** | *e*P | **P** | **14 04 28.0** | **+0.1** |
| | comp=Z,84nm,1.1s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **37.97** | **353** | IAMs_20 | IAMs_20 | 14 18 30.5 | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **37.97** | **353** | P | **P** | **14 04 26.8** | **-0.8** |
| | baz=4.7 | | | | | | | |
| E18K | | | | S | **S** | **14 10 23.3** | **+3.8** |
| | baz=4.7 | | | | | | | |
| **H27K** | **Steamboat Moun** | **38.02** | **341** | P | **P** | **14 04 27.2** | **-1.0** |
| | baz=12,SNR=56 | | | | | | | |
| H27K | | | | S | **S** | **14 10 24.7** | **+4.2** |
| | baz=12 | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **38.02** | **345** | P | **P** | **14 04 27.2** | **-0.9** |
| | baz=10,SNR=37 | | | | | | | |
| G24K | | | | S | **S** | **14 10 25.3** | **+4.9** |
| | baz=10 | | | | | | | |
| **ABA** | **Alger-Bouzarea** | **38.05** | **187** | P | **P** | **14 04 30.2** | **+1.6** |
| **G22K** | **Bettles** | **38.06** | **347** | P | **P** | **14 04 27.5** | **-0.9** |
| | baz=8.5 | | | | | | | |
| G22K | | | | S | **S** | **14 10 23.5** | **+2.6** |
| | baz=8.5 | | | | | | | |
| **ITM** | **Ithomi** | **38.12** | **163** | IAmb | IAmb | 14 04 38.5 | | |
| | comp=Z,172nm,1.5s | | | | | | | |
| **ITM** | **Ithomi** | **38.12** | **163** | P | **P** | **14 04 29.0** | **-0.2** |
| **PTEO** | **Sao Teotonio** | **38.12** | **203** | *e*P | **P** | **14 04 31.9** | **+2.8** |
| | comp=Z,122nm,1.6s | | | | | | | |
| **CMAH** | **Djebel Manchou** | **38.14** | **182** | P | **P** | **14 04 31.0** | **+1.6** |
| **F20K** | **Avaraart Lake** | **38.15** | **350** | P | **P** | **14 04 28.1** | **-1.0** |
| | baz=6.7,SNR=39 | | | | | | | |
| F20K | | | | S | **S** | **14 10 25.3** | **+3.1** |
| | baz=6.7 | | | | | | | |
| **PVAQ** | **Vaqueiros** | **38.16** | **201** | *e*P | **P** | **14 04 29.9** | **+0.4** |
| | comp=Z,96nm,1.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.17** | **321** | P | **P** | **14 04 28.7** | **-0.7** |
| | comp=Z,13nm,0.9s,baz=12,slow=8.2,SNR=21 | | | | | | | |
| YKA | | | | PcP | **PcP** | **14 06 43.2** | **-0.4** |
| | comp=Z,4.3nm,0.8s,baz=17,slow=2.8,SNR=5.1 | | | | | | | |
| YKA | | | | LR | LR | 14 20 11.9 | | |
| | comp=Z,4µm,18.4s,baz=16,slow=36 | | | | | | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.17** | **321** | *i* P | **P** | **14 04 31.0** | **+1.6** |
| YKA | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **G23K** | **Bananza Creek** | **38.18** | **346** | P | **P** | **14 04 28.7** | **-0.8** |
| | baz=9.1,SNR=16 | | | | | | | |
| G23K | | | | S | **S** | **14 10 24.5** | **+1.6** |
| | baz=9.1 | | | | | | | |
| **YAK** | **Yakutsk** | **38.24** | **41** | P | **P** | **14 04 29.8** | **-0.1** |
| **YAK** | **Yakutsk** | **38.24** | **41** | LR | LR | 14 21 13.0 | | |
| | comp=Z,3µm,21.9s,baz=338,slow=38 | | | | | | | |
| **YAK** | **Yakutsk** | **38.24** | **41** | *e*P | **P** | **14 04 29.0** | **-0.9** |
| YAK | | | | *e*S | **S** | **14 10 22.8** | **-0.8** |
| YAK | | | | *e*SS | **SnSn** | **14 13 04.1** | **-2.8** |
| YAK | | | | *e* | | 14 14 40.0 | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.1s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,17nm,1.0s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,7.0nm,1.2s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=E,260nm,4.1s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=N,276nm,3.8s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=Z,4µm,23.0s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=N,1µm,19.0s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=E,3µm,19.0s | | | | | | | |
| **MNGR** | **Mingechevir, A** | **38.26** | **130** | P | **P** | **14 04 28.6** | **-1.7** |
| **ARPR** | **Arapgir-MALATY** | **38.27** | **141** | IAmb | IAmb | 14 04 50.1 | | |
| | comp=Z,144nm,1.0s | | | | | | | |
| ARPR | | | | IAMs_20 | IAMs_20 | 14 22 30.1 | | |
| | comp=Z,4µm,19.0s | | | | | | | |
| **H25L** | **Birch Creek** | **38.33** | **344** | P | **P** | **14 04 29.2** | **-1.4** |
| | baz=11,SNR=35 | | | | | | | |
| H25L | | | | S | **S** | **14 10 29.4** | **+4.5** |
| | baz=11 | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **38.34** | **201** | *e*P | **P** | **14 04 32.2** | **+1.1** |
| | comp=Z,193nm,1.4s | | | | | | | |
| **E17K** | **Hotham Inlet** | **38.34** | **354** | P | **P** | **14 04 29.8** | **-1.0** |
| | baz=4.2 | | | | | | | |
| E17K | | | | S | **S** | **14 10 24.3** | **-0.8** |
| | baz=4.2 | | | | | | | |
| **MORF** | **Marmelete** | **38.35** | **202** | IAMs_20 | IAMs_20 | 14 18 40.7 | | |
| | comp=Z,4µm,21.0s | | | | | | | |
| **MORF** | **Marmelete** | **38.35** | **202** | *e*P | **P** | **14 04 33.0** | **+1.8** |
| | comp=Z,108nm,1.8s | | | | | | | |
| **MORF** | **Marmelete** | **38.35** | **202** | *e*P | **P** | **14 04 32.1** | **+0.9** |
| MORF | | | | *e*PP | **PnPn** | **14 06 00.6** | **+0.4** |
| MORF | | | | *e*S | **S** | **14 10 29.1** | **+3.2** |
| MORF | | | | IAMs_20 | IAMs_20 | 14 18 34.7 | | |
| | comp=Z,3µm,15.1s | | | | | | | |
| **MORF** | **Marmelete** | **38.35** | **202** | *e*P | **P** | **14 04 32.1** | **+0.9** |
| MORF | | | | *e* | | 14 06 00.6 | | |
| MORF | | | | *e*S | **S** | **14 10 29.1** | **+3.2** |
| **ATKJ** | **Tikjda** | **38.38** | **186** | P | **P** | **14 04 32.2** | **+0.6** |
| **PYL** | **PYLOS** | **38.38** | **163** | P | **P** | **14 04 30.7** | **-0.7** |
| **GNI** | **Garni** | **38.39** | **133** | P | **P** | **14 04 31.3** | **-0.4** |
| GNI | | | | IAmb | IAmb | 14 05 00.1 | | |
| | comp=Z,190nm,1.4s | | | | | | | |
| **GNI** | **Garni** | **38.39** | **133** | IAMs_20 | IAMs_20 | 14 20 50.7 | | |
| | comp=Z,7µm,21.0s | | | | | | | |
| **GNI** | **Garni** | **38.39** | **133** | LR | LR | 14 21 02.2 | | |
| | comp=Z,7µm,21.6s,baz=342,slow=37 | | | | | | | |
| **GNI** | **Garni** | **38.39** | **133** | P | **P** | **14 04 32.6** | **+0.9** |
| GNI | | | | P | **P** | **14 04 32.6** | **+0.9** |
| **GNI** | **Garni** | **38.39** | **133***c* | *i*P | **P** | **14 04 32.2** | **+0.5** |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,60nm,1.3s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **38.46** | **351** | P | **P** | **14 04 31.3** | **-0.4** |
| **F19K** | **Shaleruckik Mo** | **38.46** | **351** | P | **P** | **14 04 30.9** | **-0.8** |
| | baz=5.8,SNR=22 | | | | | | | |
| F19K | | | | S | **S** | **14 10 28.4** | **+1.6** |
| | baz=5.8 | | | | | | | |
| **I30M** | **Mount Dempster** | **38.52** | **337** | IAmb | IAmb | 14 04 45.0 | | |
| | comp=Z,263nm,1.6s | | | | | | | |
| **I30M** | **Mount Dempster** | **38.52** | **337** | P | **P** | **14 04 30.7** | **-1.7** |
| | baz=14,SNR=65 | | | | | | | |
| I30M | | | | S | **S** | **14 10 28.3** | **+0.2** |
| | baz=14 | | | | | | | |
| **APE** | **Apeiranthos** | **38.55** | **158** | ⇓P | **P** | **14 04 33.3** | **+0.5** |
| **APE** | **Apeiranthos** | **38.55** | **158** | P | **P** | **14 04 33.3** | **+0.5** |
| **I29M** | **Ogilvie Camp,** | **38.58** | **338** | P | **P** | **14 04 31.7** | **-1.1** |
| | baz=14,SNR=76 | | | | | | | |
| I29M | | | | S | **S** | **14 10 30.4** | **+1.6** |
| | baz=14 | | | | | | | |
| **G21K** | **Allakaket** | **38.58** | **349** | P | **P** | **14 04 32.0** | **-0.7** |
| | baz=7.6 | | | | | | | |
| G21K | | | | S | **S** | **14 10 29.6** | **+0.9** |
| | baz=7.6 | | | | | | | |
| **I27K** | **Kandik River** | **38.65** | **341** | P | **P** | **14 04 31.8** | **-1.6** |
| | baz=12,SNR=58 | | | | | | | |
| I27K | | | | S | **S** | **14 10 35.2** | **+5.3** |
| | baz=12 | | | | | | | |
| I27K | | | | S | **S** | **14 10 35.2** | **+5.3** |
| | baz=12 | | | | | | | |
| **I28M** | **Miner Creek** | **38.65** | **340** | IAmb | IAmb | 14 04 46.5 | | |
| | comp=Z,183nm,1.9s | | | | | | | |
| **I28M** | **Miner Creek** | **38.65** | **340** | P | **P** | **14 04 32.0** | **-1.4** |
| | baz=13,SNR=25 | | | | | | | |
| I28M | | | | S | **S** | **14 10 32.0** | **+2.1** |
| | baz=13 | | | | | | | |
| **EMHD** | **Djebel Mahouad** | **38.66** | **187** | P | **P** | **14 04 36.9** | **+3.0** |
| **ADJB** | **Djebel Djouab** | **38.68** | **187** | P | **P** | **14 04 36.3** | **+2.2** |
| **CTEI** | **Djebel Teioual** | **38.71** | **183** | P | **P** | **14 04 35.9** | **+1.6** |
| **F18K** | **Selawik** | **38.76** | **353** | P | **P** | **14 04 33.4** | **-0.8** |
| | baz=5.0,SNR=30 | | | | | | | |
| F18K | | | | S | **S** | **14 10 33.6** | **+2.2** |
| | baz=5.0 | | | | | | | |
| **WRGLY** | **Wrigley** | **38.85** | **328** | IAMs_20 | IAMs_20 | 14 20 26.6 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| **WRGLY** | **Wrigley** | **38.85** | **328** | P | **P** | **14 04 34.5** | **-0.6** |
| | baz=18 | | | | | | | |
| WRGLY | | | | S | **S** | **14 10 34.7** | **+1.9** |
| | baz=18 | | | | | | | |
| **H24K** | **Noodor Dome** | **38.91** | **345** | P | **P** | **14 04 35.5** | **-0.1** |
| **H24K** | **Noodor Dome** | **38.91** | **345** | P | **P** | **14 04 35.8** | **+0.2** |
| | baz=9.8,SNR=63 | | | | | | | |
| H24K | | | | S | **S** | **14 10 35.3** | **+1.5** |
| | baz=9.8 | | | | | | | |
| H24K | | | | S | **S** | **14 10 35.3** | **+1.5** |
| | baz=9.8 | | | | | | | |
| **ATAF** | **Djebel Tarf** | **38.94** | **186** | P | **P** | **14 04 38.6** | **+2.4** |
| **F17K** | **Baldwin Pennin** | **38.97** | **354** | P | **P** | **14 04 35.8** | **-0.2** |
| | baz=4.3 | | | | | | | |
| F17K | | | | S | **S** | **14 10 38.0** | **+3.5** |
| | baz=4.3 | | | | | | | |
| **KEST** | **Kesra** | **39.03** | **179** | P | **P** | **14 04 36.6** | **-0.4** |
| | comp=Z,9.4nm,0.9s,baz=314,slow=2.7,SNR=12 | | | | | | | |
| KEST | | | | LR | LR | 14 22 46.2 | | |
| | comp=Z,2µm,19.0s,baz=327,slow=39 | | | | | | | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| **KEST** | **Kesra** | **39.03** | **179** | P | **P** | **14 04 38.0** | **+1.1** |
| | SNR=12 | | | | | | | |
| KEST | | | | P | **P** | **14 04 38.0** | **+1.1** |
| | SNR=12 | | | | | | | |
| **H23K** | **Yukon River** | **39.03** | **346** | IAmb | IAmb | 14 04 47.2 | | |
| | comp=Z,195nm,1.2s | | | | | | | |
| **H23K** | **Yukon River** | **39.03** | **346** | P | **P** | **14 04 35.8** | **-0.8** |
| | baz=9.1,SNR=112 | | | | | | | |
| H23K | | | | S | **S** | **14 10 39.5** | **+3.9** |
| | baz=9.1 | | | | | | | |
| H23K | | | | S | **S** | **14 10 39.5** | **+3.9** |
| | baz=9.1 | | | | | | | |
| **BOD** | **Bodaibo** | **39.05** | **55** | *e*P | **P** | **14 04 35.3** | **-1.5** |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,103nm,1.7s | | | | | | | |
| **PRP** | **Porcupine Dome** | **39.05** | **343** | P | **P** | **14 04 36.8** | **-0.1** |
| | baz=11,SNR=12 | | | | | | | |
| PRP | | | | S | **S** | **14 10 41.8** | **+5.7** |
| | baz=11 | | | | | | | |
| **I26K** | **Coal Creek Min** | **39.07** | **342** | P | **P** | **14 04 36.9** | **0.0** |
| | baz=12 | | | | | | | |
| I26K | | | | S | **S** | **14 10 37.7** | **+1.6** |
| | baz=12 | | | | | | | |
| I26K | | | | S | **S** | **14 10 37.7** | **+1.6** |
| | baz=12 | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **39.08** | **347** | P | **P** | **14 04 36.6** | **-0.3** |
| | baz=8.4,SNR=44 | | | | | | | |
| H22K | | | | S | **S** | **14 10 41.5** | **+5.2** |
| | baz=8.4 | | | | | | | |
| H22K | | | | S | **S** | **14 10 41.5** | **+5.2** |
| | baz=8.4 | | | | | | | |
| **G19K** | **Purcell Mounta** | **39.12** | **351** | P | **P** | **14 04 37.2** | **-0.1** |
| | baz=6.0,SNR=16 | | | | | | | |
| G19K | | | | S | **S** | **14 10 40.3** | **+3.4** |
| | baz=6.0 | | | | | | | |
| **IMAR** | **Indian Mountai** | **39.12** | **349** | P | **P** | **14 04 37.1** | **-0.1** |
| **J30M** | **Hart River** | **39.14** | **337** | IAmb | IAmb | 14 04 46.8 | | |
| | comp=Z,140nm,1.2s | | | | | | | |
| **J30M** | **Hart River** | **39.14** | **337** | P | **P** | **14 04 37.0** | **-0.7** |
| | baz=14,SNR=87 | | | | | | | |
| J30M | | | | S | **S** | **14 10 39.9** | **+2.3** |
| | baz=14 | | | | | | | |
| **ABRIN** | **Birine** | **39.23** | **187** | P | **P** | **14 04 40.9** | **+2.4** |
| **SANT** | **Santorini** | **39.23** | **158** | IAMs_20 | IAMs_20 | 14 21 21.2 | | |
| | comp=Z,4µm,21.0s | | | | | | | |
| **SANT** | **Santorini** | **39.23** | **158** | ⇓P | **P** | **14 04 38.3** | **-0.3** |
| **ICQ** | **Pointe Anglais** | **39.34** | **274** | P | **P** | **14 04 38.0** | **-1.2** |
| ICQ | | | | IAmb | IAmb | 14 04 46.8 | | |
| | comp=Z,311nm,2.0s | | | | | | | |
| **ELL** | **Elmali** | **39.35** | **153** | IAmb | IAmb | 14 04 54.0 | | |
| | comp=Z,210nm,1.1s | | | | | | | |
| **H21K** | **Melozitna Rive** | **39.39** | **348** | P | **P** | **14 04 39.5** | **-0.1** |
| H21K | | | | IAMs_20 | IAMs_20 | 14 19 50.6 | | |
| | comp=Z,3µm,19.0s | | | | | | | |
| **H21K** | **Melozitna Rive** | **39.39** | **348** | P | **P** | **14 04 39.9** | **+0.3** |
| | baz=7.7,SNR=42 | | | | | | | |
| H21K | | | | S | **S** | **14 10 45.2** | **+4.2** |
| | baz=7.7 | | | | | | | |
| H21K | | | | S | **S** | **14 10 45.2** | **+4.2** |
| | baz=7.7 | | | | | | | |
| **EGAK** | **Eagle** | **39.42** | **340** | P | **P** | **14 04 39.4** | **-0.4** |
| | baz=12,SNR=83 | | | | | | | |
| EGAK | | | | S | **S** | **14 10 45.9** | **+4.6** |
| | baz=12 | | | | | | | |
| **G18K** | **Tagagawik** | **39.43** | **352** | | pP | 14 04 40.6 | +0.2 |
| **G18K** | **Tagagawik** | **39.43** | **352** | P | **P** | **14 04 39.1** | **-0.8** |
| | baz=5.4,SNR=25 | | | | | | | |
| G18K | | | | S | **S** | **14 10 42.9** | **+1.3** |
| | baz=5.4 | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **39.44** | **137** | IAMs_20 | IAMs_20 | 14 21 50.1 | | |
| | comp=Z,5µm,22.0s | | | | | | | |
| **J29N** | **Klondike Camp** | **39.45** | **338** | IAmb | IAmb | 14 04 49.4 | | |
| | comp=Z,151nm,1.4s | | | | | | | |
| **J29N** | **Klondike Camp** | **39.45** | **338** | P | **P** | **14 04 39.5** | **-0.7** |
| | baz=13 | | | | | | | |
| J29N | | | | S | **S** | **14 10 46.7** | **+4.6** |
| | baz=13 | | | | | | | |
| **AFDJ** | **Sidi Ladjel** | **39.47** | **188** | P | **P** | **14 04 43.3** | **+2.7** |
| **NAX** | **Nakhchivan** | **39.48** | **133** | P | **P** | **14 04 39.0** | **-1.7** |
| **SRBC** | **Serra Branca** | **39.57** | **227** | *e*P | P | 14 04 45.5 | +4.2 |
| | comp=Z,662nm,1.7s | | | | | | | |
| **POKR** | **Poker Plat Res** | **39.59** | **344** | IAmb | IAmb | 14 04 51.8 | | |
| | comp=Z,182nm,1.2s | | | | | | | |
| **POKR** | **Poker Plat Res** | **39.59** | **344** | P | **P** | **14 04 40.6** | **-0.6** |
| | baz=9.8,SNR=23 | | | | | | | |
| POKR | | | | S | **S** | **14 10 51.1** | **+7.1** |
| | baz=9.8 | | | | | | | |
| **CBBAR** | **Babar** | **39.62** | **182** | P | P | 14 04 37.1 | -4.8 |
| **H20K** | **Anotleneega Mo** | **39.67** | **349** | P | **P** | **14 04 41.4** | **-0.4** |
| | baz=6.9,SNR=40 | | | | | | | |
| H20K | | | | S | **S** | **14 10 51.8** | **+6.6** |
| | baz=6.9 | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **39.69** | **346** | IAmb | IAmb | 14 04 52.5 | | |
| | comp=Z,148nm,1.1s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **39.69** | **346** | P | **P** | **14 04 41.7** | **-0.3** |
| | baz=9.1,SNR=93 | | | | | | | |
| I23K | | | | S | **S** | **14 10 50.9** | **+5.5** |
| | baz=9.1 | | | | | | | |
| I23K | | | | S | **S** | **14 10 50.9** | **+5.5** |
| | baz=9.1 | | | | | | | |
| **PSBA** | **Serra de Santa** | **39.70** | **226** | *e*P | **P** | **14 04 43.9** | **+1.5** |
| | comp=Z,228nm,1.9s | | | | | | | |
| **H19K** | **Roundabout Mou** | **39.70** | **350** | P | **P** | **14 04 42.3** | **+0.1** |
| **H19K** | **Roundabout Mou** | **39.70** | **350** | P | **P** | **14 04 40.8** | **-1.3** |
| | baz=6.2,SNR=30 | | | | | | | |
| H19K | | | | S | **S** | **14 10 50.5** | **+4.9** |
| | baz=6.2 | | | | | | | |
| **PSCM** | **Serra do Cume** | **39.72** | **226** | *e*P | **P** | **14 04 45.3** | **+2.7** |
| | comp=Z,167nm,2.2s | | | | | | | |
| **F15K** | **North Star Dit** | **39.79** | **356** | IAMs_20 | IAMs_20 | 14 19 22.3 | | |
| | comp=Z,4µm,21.0s | | | | | | | |
| **F15K** | **North Star Dit** | **39.79** | **356** | P | **P** | **14 04 41.5** | **-1.4** |
| | baz=2.9 | | | | | | | |
| F15K | | | | S | **S** | **14 10 51.8** | **+4.8** |
| | baz=2.9 | | | | | | | |
| **COLA** | **College** | **39.86** | **345** | P | **P** | **14 04 45.2** | **+1.8** |
| **COLA** | **College** | **39.86** | **345** | P | **P** | **14 04 43.9** | **+0.5** |
| **COLA** | **College** | **39.86** | **345** | P | **P** | **14 04 41.3** | **-2.1** |
| | baz=9.6 | | | | | | | |
| COLA | | | | S | **S** | **14 10 49.6** | **+1.7** |
| | baz=9.6 | | | | | | | |
| **COLA** | **College** | **39.86** | **345***d* | *i*P | **P** | **14 04 44.4** | **+1.0** |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,105nm,1.1s | | | | | | | |
| **IL31** | | **39.89** | **344** | IAmb | IAmb | 14 04 53.6 | | |
| | comp=Z,132nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **39.89** | **344** | P | **P** | **14 04 44.5** | **+0.8** |
| | comp=Z,57nm,0.9s,baz=2.3,slow=6.9,SNR=77 | | | | | | | |
| ILAR | | | | LR | LR | 14 22 01.0 | | |
| | comp=Z,2µm,20.6s,baz=4.0,slow=37 | | | | | | | |
| | comp=Z,57nm,0.9s | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **39.89** | **353** | P | **P** | **14 04 42.7** | **-1.1** |
| | baz=4.5,SNR=8.8 | | | | | | | |
| G17K | | | | S | **S** | **14 10 53.1** | **+4.7** |
| | baz=4.5 | | | | | | | |
| **MLY** | **Manley** | **39.90** | **347** | P | **P** | **14 04 44.2** | **+0.4** |
| **MLY** | **Manley** | **39.90** | **347** | P | **P** | **14 04 44.0** | **+0.2** |
| | baz=8.5,SNR=24 | | | | | | | |
| MLY | | | | S | **S** | **14 10 55.2** | **+6.6** |
| | baz=8.5 | | | | | | | |
| **J26L** | **Joseph Creek** | **39.90** | **342** | P | **P** | **14 04 42.9** | **-1.0** |
| | baz=11,SNR=30 | | | | | | | |
| J26L | | | | S | **S** | **14 10 54.1** | **+5.4** |
| | baz=11 | | | | | | | |
| J26L | | | | S | **S** | **14 10 54.1** | **+5.4** |
| | baz=11 | | | | | | | |
| **ROSA** | **Rosais** | **39.92** | **227** | *e*P | **P** | **14 04 46.6** | **+2.4** |
| | comp=Z,209nm,2.0s | | | | | | | |
| **J25K** | **Salcha River,** | **39.93** | **343** | P | **P** | **14 04 43.9** | **-0.2** |
| | baz=10,SNR=66 | | | | | | | |
| J25K | | | | S | **S** | **14 10 52.3** | **+3.1** |
| | baz=10 | | | | | | | |
| J25K | | | | S | **S** | **14 10 52.3** | **+3.1** |
| | baz=10 | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **39.95** | **83***c* | *i*P | **P** | **14 04 45.4** | **+0.9** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,60nm,1.3s | | | | | | | |
| **DAWY** | **Dawson** | **39.95** | **339** | P | **P** | **14 04 43.7** | **-0.6** |
| | baz=13,SNR=14 | | | | | | | |
| DAWY | | | | S | **S** | **14 10 53.5** | **+4.0** |
| | baz=13 | | | | | | | |
| **GAZ** | **Gaziantep** | **39.96** | **143** | IAmb | IAmb | 14 05 03.6 | | |
| | comp=Z,133nm,1.2s | | | | | | | |
| **PMAN** | **Manadas** | **39.97** | **227** | *e*P | **P** | **14 04 46.3** | **+1.6** |
| | comp=Z,205nm,1.9s | | | | | | | |
| **K29M** | **Barlow Dome** | **39.98** | **337** | IAmb | IAmb | 14 05 05.7 | | |
| | comp=Z,195nm,1.3s | | | | | | | |
| **K29M** | **Barlow Dome** | **39.98** | **337** | P | **P** | **14 04 44.3** | **-0.3** |
| | baz=13,SNR=66 | | | | | | | |
| K29M | | | | S | **S** | **14 10 51.6** | **+1.5** |
| | baz=13 | | | | | | | |
| **TNA** | **Tin City** | **39.99** | **358** | P | **P** | **14 04 43.9** | **-0.5** |
| | baz=1.5 | | | | | | | |
| TNA | | | | S | **S** | **14 10 53.4** | **+3.6** |
| | baz=1.5 | | | | | | | |
| **EADEB** | **Ain Deheb** | **40.05** | **189** | P | **P** | **14 04 44.8** | **-0.7** |
| **G16K** | **Koyuk River** | **40.05** | **354** | IAMs_20 | IAMs_20 | 14 21 15.1 | | |
| | comp=Z,3µm,18.0s | | | | | | | |
| **G16K** | **Koyuk River** | **40.05** | **354** | P | **P** | **14 04 44.7** | **-0.4** |
| | baz=3.8,SNR=9.8 | | | | | | | |
| G16K | | | | S | **S** | **14 10 55.5** | **+4.7** |
| | baz=3.8 | | | | | | | |
| **F14K** | **Arctic Creek** | **40.05** | **357** | P | **P** | **14 04 43.7** | **-1.4** |
| | baz=2.1 | | | | | | | |
| F14K | | | | S | **S** | **14 10 54.5** | **+3.6** |
| | baz=2.1 | | | | | | | |
| **PCED** | **Cedros** | **40.10** | **227** | *e*P | P | 14 04 49.5 | +3.8 |
| | comp=Z,222nm,2.1s | | | | | | | |
| **CALA** | **Caldeira** | **40.14** | **227** | A | A | 14 05 02.3 | | |
| | comp=Z,360nm,1.5s | | | | | | | |
| **H18K** | **Honhosa River** | **40.16** | **352** | P | **P** | **14 04 45.2** | **-0.8** |
| | baz=5.4 | | | | | | | |
| H18K | | | | S | **S** | **14 10 54.3** | **+1.7** |
| | baz=5.4 | | | | | | | |
| **PPNO** | **Prainha do Nor** | **40.16** | **227** | *e*P | **P** | **14 04 48.0** | **+1.7** |
| | comp=Z,181nm,1.8s | | | | | | | |
| **PID** | **Ribeirinha** | **40.16** | **227** | *e*P | **P** | **14 04 48.5** | **+2.2** |
| | comp=Z,235nm,1.6s | | | | | | | |
| **PICO** | **Pico** | **40.17** | **227** | *e*P | **P** | **14 04 47.2** | **+0.9** |
| | comp=Z,306nm,1.5s | | | | | | | |
| **CDCN** | **Doucen** | **40.21** | **184** | P | **P** | **14 04 47.1** | **+0.5** |
| **PCAN** | **Candelaria** | **40.21** | **227** | *e*P | **P** | **14 04 49.5** | **+2.8** |
| | comp=Z,287nm,1.9s | | | | | | | |
| **KARP** | **Karpathos** | **40.22** | **156** | IAMs_20 | IAMs_20 | 14 22 22.4 | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| **NEA2** | **Nenana** | **40.22** | **345** | P | **P** | **14 04 46.3** | **-0.1** |
| | baz=9.1,SNR=15 | | | | | | | |
| NEA2 | | | | S | **S** | **14 10 56.9** | **+3.4** |
| | baz=9.1 | | | | | | | |
| **K27K** | **Chicken** | **40.23** | **341** | P | **P** | **14 04 46.5** | **-0.1** |
| | baz=12 | | | | | | | |
| K27K | | | | S | **S** | **14 10 54.1** | **+0.5** |
| | baz=12 | | | | | | | |
| K27K | | | | S | **S** | **14 10 54.1** | **+0.5** |
| | baz=12 | | | | | | | |
| **IDI** | **Anoyia** | **40.25** | **159** | LR | LR | 14 23 47.5 | | |
| | comp=Z,3µm,18.6s,baz=340,slow=40 | | | | | | | |
| **BART** | **Pico Bartolome** | **40.25** | **223** | *e*P | **P** | **14 04 50.2** | **+3.1** |
| | comp=Z,204nm,1.2s | | | | | | | |
| **HDA** | **Harding Lake** | **40.25** | **344** | P | **P** | **14 04 46.0** | **-0.7** |
| | baz=9.9,SNR=41 | | | | | | | |
| HDA | | | | S | **S** | **14 10 58.7** | **+4.8** |
| | baz=9.9 | | | | | | | |
| **WRH** | **Wood River Hil** | **40.27** | **345** | IAmb | IAmb | 14 04 56.6 | | |
| | comp=Z,112nm,1.1s | | | | | | | |
| **PSET** | **Sete Cidades** | **40.31** | **224** | *e*P | **P** | **14 04 48.0** | **+0.5** |
| | comp=Z,184nm,2.1s | | | | | | | |
| **I20K** | **Naaghedeneel** | **40.34** | **349** | P | **P** | **14 04 47.0** | **-0.4** |
| | baz=6.9,SNR=20 | | | | | | | |
| I20K | | | | S | **S** | **14 11 00.5** | **+5.4** |
| | baz=6.9 | | | | | | | |
| **H17K** | **Granite Mounta** | **40.43** | **352** | P | **P** | **14 04 47.7** | **-0.5** |
| | baz=4.7,SNR=7.3 | | | | | | | |
| H17K | | | | S | **S** | **14 11 00.2** | **+3.7** |
| | baz=4.7 | | | | | | | |
| **SCRK** | **Sand Creek** | **40.45** | **342** | P | **P** | **14 04 47.5** | **-1.0** |
| | baz=11,SNR=49 | | | | | | | |
| SCRK | | | | S | **S** | **14 11 00.8** | **+3.8** |
| | baz=11 | | | | | | | |
| **G15K** | **Niukluk** | **40.49** | **355** | P | **P** | **14 04 47.2** | **-1.5** |
| | baz=3.1 | | | | | | | |
| G15K | | | | S | **S** | **14 11 01.8** | **+4.4** |
| | baz=3.1 | | | | | | | |
| **GCSA** | **Galena City Sc** | **40.51** | **350** | P | **P** | **14 04 47.8** | **-0.9** |
| | baz=6.0 | | | | | | | |
| GCSA | | | | S | **S** | **14 11 02.9** | **+5.4** |
| | baz=6.0 | | | | | | | |
| **LKRN** | **Lenkeran, Azer** | **40.59** | **129** | P | **P** | **14 04 50.0** | **+0.3** |
| **SEY** | **Seymchan** | **40.62** | **25** | *e*P | **P** | **14 04 51.

BPAW S **S** **14 11 05.6 +3.0**
baz=8.2
**J20K** **Nowinta River** **40.94 349** IAmb IAmb 14 05 03.1
comp=Z,156nm,1.6s
**J20K** **Nowinta River** **40.94 349** P **P** **14 04 52.1 -0.3**
baz=7.0,SNR=23
J20K S **S** **14 11 10.2 +6.1**
baz=7.0
J20K S **S** **14 11 10.2 +6.1**
baz=7.0
**ANM** **Nome** **40.95 356** IAMs_20 IAMs_20 14 20 08.0
comp=Z,4µm,20.0s
**ANM** **Nome** **40.95 356** P **P** **14 04 51.1 -1.4**
baz=2.5
ANM S **S** **14 11 07.7 +3.5**
baz=2.5
**PSMN** **Pico do Norte,** **40.99 223** *e*P **P** **14 04 54.0 +0.9**
comp=Z,156nm,1.5s
**PSMA** **Santa Maria** **41.01 223** *e*P **P** **14 04 56.0 +2.8**
comp=Z,138nm,1.8s
**MCK** **McKinley** **41.07 345** P **P** **14 04 52.4 -1.1**
baz=8.9,SNR=15
MCK S **S** **14 11 09.1 +3.1**
baz=8.9
**FARO** **Faro, Yukon** **41.10 334** IAmb IAmb 14 05 11.9
comp=Z,170nm,1.3s
FARO IAMs_20 IAMs_20 14 22 52.2
comp=Z,4µm,20.0s
**FARO** **Faro, Yukon** **41.10 334** P **P** **14 04 52.9 -0.9**
baz=14,SNR=35
FARO S **S** **14 11 13.5 +7.0**
baz=14
**CHUM** **Lake Minchumin** **41.13 347** P **P** **14 04 54.2 +0.3**
baz=7.7
CHUM S **S** **14 11 08.3 +1.4**
baz=7.7
**TGTN** **Hyland Airport** **41.15 330** P **P** **14 04 53.5 -0.7**
baz=16
TGTN S **S** **14 11 12.8 +5.5**
baz=16
**BCAR** **Beaver Creek A** **41.16 340** pP 14 04 54.9 +0.1
**MAKZ** **Makanchi** **41.16 90** P **P** **14 04 54.1 -0.3**
MAKZ IAMs_20 IAMs_20 14 23 43.6
comp=Z,9µm,21.0s
**MAKZ** **Makanchi** **41.16 90** P **P** **14 04 54.4 0.0**
**L27K** **Beaver Creek,** **41.16 340** IAmb IAmb 14 05 04.5
comp=Z,118nm,1.2s
**L27K** **Beaver Creek,** **41.16 340** P **P** **14 04 53.5 -0.8**
baz=12,SNR=74
L27K S **S** **14 11 15.2 +7.6**
baz=12
**J19K** **Poorman** **41.20 350** P **P** **14 04 53.8 -0.7**
baz=6.4,SNR=24
J19K S **S** **14 11 11.3 +3.3**
baz=6.4
J19K S **S** **14 11 11.3 +3.3**
baz=6.4
**M31M** **Drury Creek, Y** **41.24 335** P **P** **14 04 54.6 -0.4**
baz=14,SNR=7.5
M31M S **S** **14 11 13.7 +5.0**
baz=14
**MK31** **Makanchi Array** **41.25 89***c i*P **P** **14 04 55.1 -0.1**
**MKAR** **Makanchi Array** **41.25 89** P **P** **14 04 55.0 -0.3**
**MKAR** **Makanchi Array** **41.25 89** P **P** **14 04 55.2 0.0**
comp=Z,23nm,0.8s,baz=339,slow=6.5,SNR=107
MKAR LR LR 14 24 20.5
comp=Z,6µm,21.8s,baz=344,slow=40
comp=Z,23nm,0.8s
**MKAR** **Makanchi Array** **41.25 89** *i* P **P** **14 04 55.2 0.0**
MKAR pmax pmax
comp=Z,14nm,0.6s
**L26K** **Log Cabin Wild** **41.33 341** IAmb IAmb 14 05 10.2
comp=Z,124nm,1.4s
**L26K** **Log Cabin Wild** **41.33 341** P **P** **14 04 55.8 +0.1**
baz=11,SNR=33
L26K S **S** **14 11 16.0 +6.0**
baz=11
L26K S **S** **14 11 16.0 +6.0**
baz=11
**ZSN** **Zaisan** **41.33 87** *e*P **P** **14 04 56.4 +0.5**
baz=86
ZSN *e*S **S** **14 11 11.3 +1.0**
baz=86
**ZSN** **Zaisan** **41.33 87** *e*P **P** **14 04 56.3 +0.5**
ZSN *e*S **S** **14 11 11.3 +1.0**
**M29M** **Somme Creek** **41.45 338** P **P** **14 04 55.6 -1.2**
baz=13,SNR=9.0
M29M S **S** **14 11 15.9 +4.0**
baz=13
**MENT** **Mentasta** **41.45 341** P **P** **14 04 58.4 +1.7**
**BRLS** **Borolday** **41.47 104**⇑ *i*P **P** **14 04 58.8 +1.7**
baz=104
BRLS *e*S **S** **14 11 15.7 +3.2**
baz=104
**BRLS** **Borolday** **41.47 104***c i*P **P** **14 04 58.7 +1.7**
BRLS *e*S **S** **14 11 15.6 +3.2**
**I17K** **Unalakleet** **41.51 353** P **P** **14 04 56.3 -0.7**
baz=4.3
I17K S **S** **14 11 17.1 +4.5**
baz=4.3
**CSS** **Mathiatis** **41.55 149** P **P** **14 04 57.6 -0.2**
CSS IAMs_20 IAMs_20 14 24 37.0
comp=Z,3µm,20.0s
**PAX** **Paxson** **41.56 342** P **P** **14 04 57.0 -0.6**
baz=10,SNR=48
PAX S **S** **14 11 17.4 +3.8**
baz=10
**KK31** **Karatay Array** **41.57 103** P **P** **14 04 58.5 +0.6**
**KKAR** **Karatay Array** **41.57 103** P **P** **14 04 58.3 +0.4**
**KKAR** **Karatay Array** **41.57 103** IAmb IAmb 14 05 07.5
comp=Z,80nm,1.1s
**KKAR** **Karatay Array** **41.57 103** P **P** **14 04 58.3 +0.4**
**GBN** **Guysborough** **41.59 266** IAmb IAmb 14 05 05.8
comp=Z,192nm,1.4s
GBN IAMs_20 IAMs_20 14 20 59.0
comp=Z,4µm,18.0s
**DHY** **Denali Highway** **41.61 344** IAmb IAmb 14 05 07.2
comp=Z,138nm,0.9s
**DHY** **Denali Highway** **41.61 344** P **P** **14 04 57.6 -0.5**
baz=9.4,SNR=103
DHY S **S** **14 11 16.7 +2.4**
baz=9.4
**MOY** **Mondy** **41.64 69** *e*P **P** **14 04 59.4 +1.0**
MOY pmax pmax
comp=Z,327nm,1.9s
**K20K** **Telida** **41.75 348** IAmb IAmb 14 05 09.4
comp=Z,110nm,1.1s
K20K IAMs_20 IAMs_20 14 21 32.0
comp=Z,3µm,18.0s
**K20K** **Telida** **41.75 348** P **P** **14 04 59.2 +0.1**
baz=6.9,SNR=54
K20K S **S** **14 11 22.7 +6.5**
baz=6.9
K20K S **S** **14 11 22.7 +6.5**
baz=6.9
**J18K** **Innoko River** **41.78 350** P **P** **14 04 58.6 -0.7**
baz=5.9,SNR=16
J18K S **S** **14 11 22.4 +5.8**
baz=5.9
**GAMB** **Gambell** **41.80 0** P **P** **14 04 59.5 +0.1**
baz=360
GAMB S **S** **14 11 18.9 +2.2**
baz=360
**LDAQ** **Lac Daran** **41.82 277** IAmb IAmb 14 05 08.3
comp=Z,185nm,1.7s
LDAQ IAMs_20 IAMs_20 14 20 36.1
comp=Z,8µm,20.0s
**M27K** **Edge Creek, AK** **41.86 340** P **P** **14 04 59.9 -0.3**
baz=11,SNR=9.7
M27K S **S** **14 11 24.6 +6.5**
baz=11
M27K S **S** **14 11 24.6 +6.5**
baz=11
**TDK** **Taldyqorghan** **41.88 94** *e*P **P** **14 05 00.9 +0.6**
baz=94
TDK LR LR 14 23 30.8
comp=Z,3µm,14.2s,baz=94
**TDK** **Taldyqorghan** **41.88 94** *e*P **P** **14 05 00.9 +0.6**
TDK MLR MLR
comp=Z,3µm,14.0s
**KOTAN** **Kotaneelee Air** **41.90 327** P **P** **14 04 59.6 -0.7**
baz=17
**IRK** **Irkutsk** **41.92 66** *e*P **P** **14 04 59.1 -1.5**
IRK *e* 14 06 40.1
IRK *e*S **S** **14 11 18.7 -0.2**
IRK pmax pmax
comp=Z,208nm,1.9s

**M26K** **Nabesna, AK** **41.92 341** IAmb IAmb 14 05 15.1
comp=Z,112nm,1.2s
**M26K** **Nabesna, AK** **41.92 341** P **P** **14 04 59.7 -0.9**
baz=11,SNR=43
M26K S **S** **14 11 25.1 +6.3**
baz=11
M26K S **S** **14 11 25.1 +6.3**
baz=11
**WAT1** **Susitna Watana** **41.94 345** P **P** **14 04 59.4 -1.3**
baz=8.9
WAT1 S **S** **14 11 18.9 -0.1**
baz=8.9
**J17K** **VABM Dome** **41.95 352** P **P** **14 04 59.5 -1.1**
baz=4.9,SNR=11
J17K S **S** **14 11 23.8 +4.8**
baz=4.9
J17K S **S** **14 11 23.8 +4.8**
baz=4.9
**LMQ** **La Malbaie** **41.96 276** IAMs_20 IAMs_20 14 20 59.7
comp=Z,6µm,20.0s
**D62A** **Allapoint, All** **42.05 275** IAmb IAmb 14 05 11.2
comp=Z,234nm,1.8s
**LMN** **Caledonia Moun** **42.06 270** P **P** **14 05 00.8 -0.9**
LMN IAmb IAmb 14 05 10.3
comp=Z,117nm,1.3s
**N31M** **Braeburn, Yuko** **42.10 335** P **P** **14 05 01.3 -0.7**
baz=13,SNR=11
N31M S **S** **14 11 25.4 +4.0**
baz=13
**HARP** **HAARP** **42.10 342** P **P** **14 05 00.4 -1.6**
baz=10
HARP S **S** **14 11 28.2 +6.8**
baz=10
**J16K** **Anvik River** **42.11 353** P **P** **14 05 01.2 -0.8**
baz=4.3,SNR=8.6
J16K S **S** **14 11 26.2 +4.7**
baz=4.3
**N32M** **Quiet Lake** **42.11 333** IAMs_20 IAMs_20 14 23 50.6
comp=Z,4µm,18.0s
**N32M** **Quiet Lake** **42.11 333** P **P** **14 05 01.7 -0.5**
baz=14
N32M S **S** **14 11 26.1 +4.4**
baz=14
**WAT6** **Susitna Watana** **42.12 344** P **P** **14 05 01.7 -0.6**
baz=9.2,SNR=58
WAT6 S **S** **14 11 23.6 +1.6**
baz=9.2
**N30M** **Aishikik Lake** **42.27 336** P **P** **14 05 03.3 -0.1**
baz=13,SNR=26
N30M S **S** **14 11 29.5 +5.5**
baz=13
**YUK3** **Moose Creek** **42.30 339** P **P** **14 05 04.1 +0.3**
baz=12,SNR=13
YUK3 S **S** **14 11 30.3 +5.6**
baz=12
**SGDS** **Sogindy** **42.32 99** *e*P **P** **14 05 04.5 +0.4**
baz=99
**SGDS** **Sogindy** **42.32 99** *e*P **P** **14 05 04.4 +0.4**
**KUU** **Kurty** **42.36 97** *e*P **P** **14 05 04.6 +0.3**
baz=97
KUU LR LR 14 23 39.0
comp=Z,5µm,17.1s,baz=97
**KUU** **Kurty** **42.36 97** *e*P **P** **14 05 04.6 +0.3**
KUU MLR MLR
comp=Z,5µm,17.0s
**MDT** **Midelt** **42.45 197** LR LR 14 23 16.0
comp=Z,661nm,18.8s,baz=16,slow=37
**ARXS** **Arharly** **42.46 95** *e*P **P** **14 05 05.0 -0.1**
**USP** **Ospenovka** **42.46 99** P **P** **14 05 05.8 +0.6**
SNR=9.6
**M24K** **Tolsona, Glenn** **42.47 343** P **P** **14 05 04.5 -0.5**
baz=9.7,SNR=8.3
M24K S **S** **14 11 31.7 +4.8**
baz=9.7
**CUT** **Chulitna** **42.48 346** IAmb IAmb 14 05 12.6
comp=Z,214nm,1.2s
**CUT** **Chulitna** **42.48 346** P **P** **14 05 04.7 -0.3**
baz=8.2,SNR=13
**YUK4** **Talbot Arm** **42.54 337** P **P** **14 05 04.7 -1.1**
baz=12,SNR=11
YUK4 S **S** **14 11 30.9 +2.6**
baz=12
**CHKK** **Chushkaly** **42.57 96** *e*P **P** **14 05 06.5 +0.4**
baz=96
**CHKK** **Chushkaly** **42.57 96** *e*P **P** **14 05 06.4 +0.4**
**WTLY** **Watson Lake, Y** **42.58 330** IAMs_20 IAMs_20 14 23 01.3
comp=Z,3µm,20.0s
**WTLY** **Watson Lake, Y** **42.58 330** P **P** **14 05 05.3 -0.6**
baz=16
WTLY S **S** **14 11 32.5 +4.0**
baz=16
**K17K** **Iditarod** **42.59 351** P **P** **14 05 06.0 +0.1**
baz=5.2,SNR=11
K17K S **S** **14 11 33.3 +4.7**
baz=5.2
**L20K** **Farewell, AK** **42.62 348** P **P** **14 05 06.0 -0.2**
baz=6.8,SNR=112
L20K S **S** **14 11 31.9 +2.8**
baz=6.8
L20K S **S** **14 11 31.9 +2.8**
baz=6.8
**YUK8** **Steele Glacier** **42.71 338** P **P** **14 05 06.8 -0.5**
baz=12,SNR=15
YUK8 S **S** **14 11 37.9 +7.0**
baz=12
**J14K** **Nanvaranak Lak** **42.73 355** P **P** **14 05 06.6 -0.4**
baz=3.1
J14K S **S** **14 11 35.0 +4.4**
baz=3.1
**CHMS** **Chumysh** **42.78 99** P **P** **14 05 08.8 +1.1**
SNR=9.7
**WHY** **Whitehorse** **42.80 334** P **P** **14 05 07.3 -0.5**
baz=14,SNR=17
WHY S **S** **14 11 33.8 +1.9**
baz=14
**O30N** **Mendenhall** **42.83 335** P **P** **14 05 07.4 -0.6**
baz=13,SNR=39
O30N S **S** **14 11 37.2 +5.0**
baz=13
**SCM** **Sheep Creek Mo** **42.83 343** IAmb IAmb 14 05 18.8
comp=Z,143nm,1.0s
**SCM** **Sheep Creek Mo** **42.83 343** P **P** **14 05 07.5 -0.5**
baz=9.2,SNR=46
SCM S **S** **14 11 31.5 -0.8**
baz=9.2
**EKS2** **Erkin-Say** **42.84 100** P **P** **14 05 09.4 +1.1**
SNR=33
**N25K** **Chitina, Valde** **42.84 342** P **P** **14 05 08.0 -0.1**
baz=10,SNR=13
N25K S **S** **14 11 35.2 +2.8**
baz=10
**HAL** **Halifax** **42.86 268** IAMs_20 IAMs_20 14 21 02.5
comp=Z,4µm,21.0s
**LIRD** **Liard River Hi** **42.89 328** P **P** **14 05 08.3 -0.1**
baz=16
LIRD S **S** **14 11 36.6 +3.6**
baz=16
**M23K** **Glacier View** **42.90 344** P **P** **14 05 08.0 -0.5**
baz=9.1,SNR=18
M23K S **S** **14 11 36.8 +3.6**
baz=9.1
**YUK6** **Outpost Mounta** **42.91 337** P **P** **14 05 07.7 -1.1**
baz=12,SNR=14
YUK6 S **S** **14 11 40.0 +6.3**
baz=12
**FRU1** **Bishkek** **42.92 99** IAMs_20 IAMs_20 14 24 00.1
comp=Z,9µm,19.0s
**MCARA** **McCarthy VSAT** **42.92 340** P **P** **14 05 07.8 -0.8**
baz=11
MCARA S **S** **14 11 37.0 +3.5**
baz=11
**SML** **Sawmill** **42.93 344** P **P** **14 05 08.3 -0.5**
baz=8.8,SNR=50
SML S **S** **14 11 34.9 +1.2**
baz=8.8
**L19K** **White Mountain** **42.97 349** IAmb IAmb 14 05 19.0
comp=Z,122nm,1.1s
**L19K** **White Mountain** **42.97 349** P **P** **14 05 09.3 +0.2**
baz=6.4,SNR=55
L19K S **S** **14 11 38.4 +4.3**
baz=6.4
L19K S **S** **14 11 38.4 +4.3**
baz=6.4
**SKT** **Skwentna** **42.98 346** P **P** **14 05 08.4 -0.7**
SKT IAmb IAmb 14 05 17.7
comp=Z,204nm,1.0s
**SKT** **Skwentna** **42.98 346** P **P** **14 05 08.4 -0.7**
baz=7.7,SNR=110

SKT S **S** **14 11 36.4 +2.1**
baz=7.7
**F64A** **Sherman** **42.99 273** IAmb IAmb 14 05 18.4
comp=Z,182nm,1.5s
F64A IAMs_20 IAMs_20 14 21 31.0
comp=Z,5µm,20.0s
**P33M** **Teslin, Yukon** **43.00 333** IAmb IAmb 14 05 26.9
comp=Z,120nm,1.3s
P33M IAMs_20 IAMs_20 14 25 03.4
comp=Z,4µm,18.0s
**P33M** **Teslin, Yukon** **43.00 333** P **P** **14 05 08.8 -0.5**
baz=14,SNR=36
P33M S **S** **14 11 38.6 +3.8**
baz=14
**GHO** **Glory Hole Cre** **43.01 345** IAmb IAmb 14 05 17.6
comp=Z,138nm,1.2s
**L18K** **Granite Mounta** **43.02 350** IAmb IAmb 14 05 24.1
comp=Z,191nm,1.4s
**L18K** **Granite Mounta** **43.02 350** P **P** **14 05 09.4 0.0**
baz=5.7,SNR=38
L18K S **S** **14 11 38.3 +3.5**
baz=5.7
L18K S **S** **14 11 38.3 +3.5**
baz=5.7
**FFC** **Flin Flon** **43.03 307** P **P** **14 05 08.6 -1.0**
FFC IAmb IAmb 14 05 23.8
comp=Z,134nm,1.0s
**FFC** **Flin Flon** **43.03 307** IAMs_20 IAMs_20 14 22 57.7
comp=Z,9µm,20.0s
**FFC** **Flin Flon** **43.03 307** P **P** **14 05 08.6 -1.0**
FFC pmax pmax
comp=Z,134nm,1.0s
FFC MLR MLR
comp=Z,9µm,20.0s
**AAK** **Ala-Archa** **43.05 99** P **P** **14 05 11.8 +1.7**
SNR=6.1
**AAK** **Ala-Archa** **43.05 99** LR LR 14 24 25.6
comp=Z,7µm,19.9s,baz=340,slow=38
**AAK** **Ala-Archa** **43.05 99** P **P** **14 05 10.9 +0.9**
**KLU** **Klutina** **43.06 342** P **P** **14 05 09.8 -0.1**
baz=9.7,SNR=15
KLU S **S** **14 11 37.6 +1.9**
baz=9.7
**TKM2** **Tokmak 2** **43.07 98** P **P** **14 05 11.6 +1.3**
SNR=15
**TKM2** **Tokmak 2** **43.07 98** *i* P **P** **14 05 10.7 +0.4**
TKM2 pmax pmax
comp=Z,72nm,1.5s
**M22K** **Willow** **43.11 345** P **P** **14 05 09.0 -1.1**
baz=8.2,SNR=17
**K15K** **Wolf Creek Mou** **43.13 353** P **P** **14 05 09.2 -1.1**
baz=3.9
K15K S **S** **14 11 41.4 +4.9**
baz=3.9
**KBK** **Karagaybulak** **43.15 99** P **P** **14 05 12.5 +1.6**
SNR=6.4
**AAA** **Alma-Ata** **43.15 97** LR LR 14 24 08.0
comp=Z,6µm,15.5s,baz=97
**M20K** **Styx River** **43.17 347** IAMs_20 IAMs_20 14 22 26.9
comp=Z,3µm,19.0s
**M20K** **Styx River** **43.17 347** P **P** **14 05 09.7 -1.1**
baz=7.0
**L17K** **Donlin** **43.18 351** P **P** **14 05 10.6 0.0**
baz=5.1,SNR=24
L17K S **S** **14 11 41.7 +4.6**
baz=5.1
**CTG** **Chitna Glacier** **43.18 339** P **P** **14 05 09.1 -1.8**
baz=11,SNR=6.7
CTG S **S** **14 11 41.7 +4.1**
baz=11
**PMR** **Palmer** **43.20 345** P **P** **14 05 13.6 +2.7**
**PMR** **Palmer** **43.20 345** P **P** **14 05 10.2 -0.6**
baz=8.5,SNR=8.1
PMR S **S** **14 11 40.3 +2.8**
baz=8.5
**M19K** **Big River Lodg** **43.22 348** P **P** **14 05 11.2 +0.1**
baz=6.6
M19K S **S** **14 11 41.5 +3.7**
baz=6.6
M19K S **S** **14 11 41.5 +3.7**
baz=6.6
**MDOK** **Medeo** **43.23 97** *e*P **P** **14 05 11.9 +0.3**
baz=96
MDOK *e*S **S** **14 11 39.5 +0.8**
baz=96
MDOK LR LR 14 24 08.0
comp=Z,3µm,14.0s,baz=96
**MDOK** **Medeo** **43.23 97** *e*P **P** **14 05 11.8 +0.3**
MDOK *e*S **S** **14 11 39.4 +0.8**
MDOK MLR MLR
comp=Z,3µm,14.0s
**O28M** **Mount Upton** **43.26 338** P **P** **14 05 11.4 -0.3**
baz=12
O28M S **S** **14 11 42.8 +3.9**
baz=12
**GGN** **Saint George** **43.28 271** IAmb IAmb 14 05 27.7
comp=Z,150nm,1.6s
**TOAD** **Toad River Com** **43.30 327** P **P** **14 05 11.9 +0.2**
baz=16,SNR=14
TOAD S **S** **14 11 43.1 +4.0**
baz=16
**VLDQ** **Val d'Or** **43.31 283** IAMs_20 IAMs_20 14 22 20.7
comp=Z,7µm,19.0s
**AML** **Almayashu** **43.31 100** P **P** **14 05 14.2 +1.8**
SNR=33
**TNSS** **Tian-Shan** **43.32 97** *e*P **P** **14 05 12.5 0.0**
baz=97
**KNK** **Knik Glacier** **43.33 344** IAmb IAmb 14 05 21.5
comp=Z,106nm,1.1s
**KNK** **Knik Glacier** **43.33 344** P **P** **14 05 11.8 -0.1**
baz=8.7,SNR=16
KNK S **S** **14 11 41.4 +1.8**
baz=8.7
**F63A** **Nahmakanta, Br** **43.34 274** IAmb IAmb 14 05 21.4
comp=Z,235nm,1.7s
F63A IAMs_20 IAMs_20 14 21 53.2
comp=Z,3µm,19.0s
**KPKS** **Kokpek** **43.38 95** *e*P **P** **14 05 13.3 +0.6**
baz=95
**KPKS** **Kokpek** **43.38 95** *e*P **P** **14 05 13.2 +0.6**
**F62A** **Pittston Farm,** **43.39 275** IAmb IAmb 14 05 20.6
comp=Z,241nm,1.9s
F62A IAMs_20 IAMs_20 14 22 36.6
comp=Z,3µm,18.0s
**ZAK** **Zakamensk** **43.39 68** *e*P **P** **14 05 11.9 -0.7**
ZAK pmax pmax
comp=Z,23nm,1.7s
**G65A** **Princeton** **43.39 272** IAMs_20 IAMs_20 14 21 40.7
comp=Z,10µm,20.0s
**SUA** **Susitna One** **43.44 346** P **P** **14 05 12.6 -0.3**
baz=7.9,SNR=94
SUA S **S** **14 11 42.2 +0.9**
baz=7.9
**GRNC** **Granite Creek** **43.45 339** IAmb IAmb 14 05 22.6
comp=Z,168nm,1.8s
**BMRM** **Bremner River** **43.47 341** P **P** **14 05 12.8 -0.3**
baz=10,SNR=15
BMRM S **S** **14 11 45.1 +3.5**
baz=10
**TGL** **Tana Glacier** **43.52 340** IAmb IAmb 14 05 23.0
comp=Z,116nm,1.2s
**CRQE** **Cirque** **43.55 340** P **P** **14 05 13.8 -0.1**
baz=11,SNR=12
CRQE S **S** **14 11 48.4 +5.5**
baz=11
**CRQM** **Cirque** **43.55 340** IAmb IAmb 14 05 23.3
comp=Z,160nm,1.2s
**O29M** **Mount Kennedy** **43.56 337** P **P** **14 05 14.3 +0.4**
baz=12
O29M S **S** **14 11 48.4 +5.4**
baz=12
**R33M** **Jennings River** **43.56 331** IAMs_20 IAMs_20 14 23 52.2
comp=Z,6µm,21.0s
**R33M** **Jennings River** **43.56 331** P **P** **14 05 14.2 +0.2**
baz=14
R33M S **S** **14 11 50.0 +6.9**
baz=14
**P30M** **Million Dollar** **43.56 336** P **P** **14 05 13.3 -0.5**
baz=13
**BOOM** **Boomskoye usch** **43.56 98** IAmb IAmb 14 05 22.8
comp=Z,146nm,1.3s
**K13K** **Kusilvak Mount** **43.58 355** IAMs_20 IAMs_20 14 21 48.9
comp=Z,4µm,20.0s
**K13K** **Kusilvak Mount** **43.58 355** P **P** **14 05 13.6 -0.3**
baz=2.6
**ZHN** **Zhinishke** **43.59 95** *e*P **P** **14 05 14.8 +0.4**
baz=95

ZHN **Zhinishke** 43.59 95 *e*P P **14 05 14.8 +0.4**
L16K **Owhat River** 43.65 352 IAMs_20 IAMs_20 14 21 37.9
comp=Z,3µm,20.0s
L16K **Owhat River** 43.65 352 P P **14 05 15.2 +0.8**
baz=4.6,SNR=12
L16K S **S** **14 11 50.8 +6.8**
baz=4.6
TABL **Table Mountain** 43.68 339 IAmb IAmb 14 05 24.4
comp=Z,90nm,1.1s
SATY **Saty** 43.69 95⇑ *i*P P **14 05 15.6 +0.4**
comp=Z,42nm,1.0s,baz=95
SATY **Saty** 43.69 95 *c i*P P **14 05 15.5 +0.4**
SATY pmax pmax
comp=Z,42nm,1.0s
MA2 **Magadan** 43.70 27 LR LR 14 23 49.0
comp=Z,1µm,18.3s,baz=354,slow=37
M18K **Stony River** 43.71 349 P P **14 05 14.8 -0.2**
baz=6.0,SNR=12
M18K S **S** **14 11 50.8 +5.9**
baz=6.0
P32M **Atlin** 43.71 333 IAMs_20 IAMs_20 14 25 28.3
comp=Z,3µm,18.0s
P32M **Atlin** 43.71 333 P P **14 05 15.6 +0.5**
baz=14,SNR=8.0
P32M S **S** **14 11 51.8 +6.6**
baz=14
PDGK **Podgornoye** 43.72 94 P P **14 05 15.4 0.0**
RC01 **Rabbit Creek A** 43.75 345 IAmb IAmb 14 05 24.5
comp=Z,226nm,1.7s
RC01 **Rabbit Creek A** 43.75 345 P P **14 05 15.2 -0.1**
baz=8.2,SNR=8.7
RC01 S **S** **14 11 44.7 -0.8**
baz=8.2
L15K **Ungalak Mounta** 43.75 353 P P **14 05 15.4 +0.1**
baz=3.9,SNR=9.7
L15K S **S** **14 11 50.1 +4.6**
baz=3.9
GLI **Glacier Island** 43.76 343 IAmb IAmb 14 05 25.0
comp=Z,173nm,1.1s
GLI **Glacier Island** 43.76 343 P P **14 05 15.3 -0.1**
baz=9.2,SNR=13
GLI S **S** **14 11 49.6 +3.8**
baz=9.2
MMAI **Mount Meron Ar** 43.76 147 LR LR 14 25 17.3
comp=Z,1µm,21.4s,slow=39
UZB **Uzynbulak** 43.77 95 *e*P P **14 05 16.1 +0.3**
baz=34
UZB **Uzynbulak** 43.77 95 *e*P P **14 05 16.1 +0.3**
PKME **Peaks-Kenny Pk** 43.79 274 IAmb IAmb 14 05 24.1
comp=Z,300nm,1.8s
PKME IAMs_20 IAMs_20 14 22 24.3
comp=Z,4µm,18.0s
PKME **Peaks-Kenny Pk** 43.79 274 P P **14 05 15.5 -0.3**
baz=22,SNR=17
PKME S **S** **14 11 48.2 +1.7**
baz=22
N20K **Mount Spurr** 43.80 347 P P **14 05 15.2 -0.5**
baz=7.3,SNR=11
N20K S **S** **14 11 47.8 +1.4**
baz=7.3
SPCR **Spurr Chakacha** 43.80 347 P P 14 04 58.9 -17
baz=7.3
PMOZ **Porto Moniz, M** 43.81 212 *e*P P **14 05 19.7 +3.5**
comp=Z,54nm,0.8s
PMOZ A A 14 05 31.7
comp=Z,378nm,1.5s
EMMW **East Machias** 43.82 272 IAmb IAmb 14 05 23.9
comp=Z,314nm,1.9s
EMMW IAMs_20 IAMs_20 14 21 54.1
comp=Z,10µm,20.0s
PMAR **Madeira** 43.87 212 *e*P P **14 05 19.3 +2.5**
comp=Z,290nm,1.6s
M17K **Holitna River** 43.87 350 P P **14 05 16.5 +0.2**
baz=5.4,SNR=24
M17K S **S** **14 11 52.6 +5.3**
baz=5.4
PWL **Port Wells** 43.87 344 IAmb IAmb 14 05 25.9
comp=Z,166nm,1.1s
PWL **Port Wells** 43.87 344 P P **14 05 16.1 -0.2**
baz=8.7,SNR=31
PWL S **S** **14 11 48.4 +0.9**
baz=8.7
SHLS **Shalkode** 43.87 94 *e*P P **14 05 17.8 +1.2**
comp=Z,72nm,0.9s,baz=94
SHLS **Shalkode** 43.87 94 *e*P P **14 05 17.8 +1.2**
SHLS pmax pmax
comp=Z,72nm,0.9s
FUL **Funchal** 43.94 212 *e*P P **14 05 20.3 +3.2**
comp=Z,276nm,1.7s
EYAK **Cordova Ski Ar** 43.98 342 P P **14 05 21.1 +4.0**
EYAK **Cordova Ski Ar** 43.98 342 P P **14 05 17.5 +0.4**
baz=9.6,SNR=11
EYAK S **S** **14 11 55.0 +6.2**
baz=9.6
MESA **MESA** 44.01 339 P P **14 05 17.3 -0.4**
baz=11,SNR=7.9
MESA S **S** **14 11 54.8 +4.9**
baz=11
SKAG **Skagway** 44.03 334 IAMs_20 IAMs_20 14 25 05.6
comp=Z,3µm,18.0s
SKAG **Skagway** 44.03 334 P P **14 05 17.1 -0.4**
baz=19
HMT **Hamilton** 44.07 341 IAmb IAmb 14 05 28.0
comp=Z,160nm,1.0s
SVW2 **Sparrevohn** 44.09 349 P P **14 05 22.2 +4.2**
SVW2 **Sparrevohn** 44.09 349 IAmb IAmb 14 05 28.3
comp=Z,146nm,1.1s
L14K **Kuka Creek** 44.12 354 P P **14 05 17.6 -0.7**
baz=3.4,SNR=8.0
L14K S **S** **14 11 57.9 +7.0**
baz=3.4
P29M **Windy Craggy** 44.13 336 IAMs_20 IAMs_20 14 25 51.4
comp=Z,4µm,18.0s
P29M **Windy Craggy** 44.13 336 P P **14 05 17.7 -0.7**
baz=12
P29M S **S** **14 11 55.6 +4.5**
baz=12
PLBC **Pleasant Camp** 44.15 335 P P **14 05 18.4 0.0**
baz=13,SNR=8.9
PLBC S **S** **14 11 56.3 +5.0**
baz=13
Q32M **Nakina River** 44.15 332 IAmb IAmb 14 05 31.9
comp=Z,223nm,1.8s
Q32M IAMs_20 IAMs_20 14 24 22.8
comp=Z,5µm,20.0s
Q32M **Nakina River** 44.15 332 P P **14 05 18.6 -0.1**
baz=14,SNR=13
Q32M S **S** **14 11 56.8 +5.0**
baz=14
G62A **West of Eustis** 44.16 275 IAmb IAmb 14 05 27.2
comp=Z,245nm,2.0s
G62A IAMs_20 IAMs_20 14 21 58.1
comp=Z,3µm,21.0s
HIN **Hinchinbrook I** 44.19 343 IAmb IAmb 14 05 23.6
comp=Z,172nm,1.3s
BGLC **Bering Glacier** 44.19 340 P P **14 05 16.3 -2.5**
baz=10
PRZ **Przheval'sk** 44.22 96 IAmb IAmb 14 05 36.0
comp=Z,92nm,1.2s
PRZ IAMs_20 IAMs_20 14 25 31.2
comp=Z,6µm,20.0s
PNL **Peninsula** 44.26 337 P P **14 05 18.2 -1.2**
baz=12
TRQ **Mont Tremblant** 44.30 279 IAmb IAmb 14 05 28.0
comp=Z,100nm,0.9s
CIT **Chita** 44.31 59 *e*P P **14 05 21.0 +1.0**
CIT *e* 14 07 03.8
CIT *e* 14 07 09.1
CIT *e* 14 07 46.5
CIT pmax pmax
comp=Z,115nm,3.6s
N19K **Bonanza Creek** 44.31 348 IAmb IAmb 14 05 30.7
comp=Z,197nm,1.8s
N19K **Bonanza Creek** 44.31 348 P P **14 05 19.6 -0.3**
baz=6.4,SNR=12
N19K S **S** **14 11 55.6 +1.7**
baz=6.4
N19K S **S** **14 11 55.6 +1.7**
baz=6.4
M16K **Timber Creek** 44.31 351 IAmb IAmb 14 05 30.3
comp=Z,138nm,1.4s
M16K **Timber Creek** 44.31 351 P P **14 05 19.9 +0.1**
baz=4.8,SNR=19
M16K S **S** **14 11 58.3 +4.5**
baz=4.8
O22K **Cooper Landing** 44.35 345 IAmb IAmb 14 05 42.6
comp=Z,129nm,0.9s
O22K **Cooper Landing** 44.35 345 P P **14 05 20.0 -0.1**
baz=8.1,SNR=5.6
O22K S **S** **14 11 56.4 +2.2**
baz=8.1
DLBC **Dease Lake** 44.37 330 IAmb IAmb 14 05 38.8
comp=Z,120nm,1.8s
DLBC IAMs_20 IAMs_20 14 25 32.5
comp=Z,4µm,22.0s
DLBC **Dease Lake** 44.37 330 LR LR 14 25 44.4
comp=Z,3µm,18.1s,baz=22,slow=39
DLBC **Dease Lake** 44.37 330 P P **14 05 20.6 +0.3**
baz=15,SNR=8.5
DLBC S **S** **14 11 58.6 +3.8**
baz=15
KAIM **Kayak Island** 44.48 341 P P **14 05 20.7 -0.5**
baz=10.0
BTK **Batken** 44.51 104 IAmb IAmb 14 05 46.3
comp=Z,135nm,1.4s
N18K **Kilae Creek** 44.52 349 IAmb IAmb 14 05 31.8
comp=Z,132nm,1.1s
N18K **Kilae Creek** 44.52 349 P P **14 05 21.7 +0.2**
baz=5.9,SNR=22
N18K S **S** **14 12 02.6 +5.8**
baz=5.9
N18K S **S** **14 12 02.6 +5.8**
baz=5.9
WVL **Waterville** 44.54 274 IAMs_20 IAMs_20 14 22 38.1
comp=Z,4µm,18.0s
P23K **Montague Islan** 44.66 343 P P **14 05 22.9 +0.3**
baz=8.9,SNR=14
P23K S **S** **14 12 02.6 +3.8**
baz=8.9
P23K S **S** **14 12 02.6 +3.8**
baz=8.9
M14K **Bethel** 44.69 353 P P **14 05 22.3 -0.4**
baz=3.6,SNR=7.3
M14K S **S** **14 12 02.4 +3.2**
baz=3.6
SEW **Seward** 44.70 345 P P **14 05 21.9 -1.0**
baz=8.2,SNR=34
SEW S **S** **14 12 03.5 +4.1**
baz=8.2
M15K **Kasigluk River** 44.71 353 P P **14 05 22.8 -0.1**
baz=4.1,SNR=9.9
M15K S **S** **14 12 05.2 +5.7**
baz=4.1
BALJ **Balqa** 44.71 147 P P **14 05 22.4 -0.9**
MNTQ **Montreal, Queb** 44.72 278 IAmb IAmb 14 05 36.8
comp=Z,84nm,1.2s
MNTQ IAMs_20 IAMs_20 14 22 33.9
comp=Z,8µm,20.0s
N17K **Nushagak Hills** 44.73 350 IAmb IAmb 14 05 50.1
comp=Z,192nm,1.7s
N17K **Nushagak Hills** 44.73 350 P P **14 05 22.8 -0.3**
baz=5.4,SNR=13
N17K S **S** **14 12 06.4 +6.5**
baz=5.4
ASF **Jabal al Asfar** 44.81 145 LR LR 14 26 57.8
comp=Z,2µm,19.1s,baz=86,slow=40
N16K **Nishlik Lake** 44.85 351 P P **14 05 23.9 -0.2**
baz=4.8,SNR=14
N16K S **S** **14 12 09.0 +7.3**
baz=4.8
H62A **Milan** 44.93 275 IAMs_20 IAMs_20 14 22 32.3
comp=Z,4µm,21.0s
O20K **Slope Mountain** 44.94 347 P P **14 05 23.7 -1.1**
baz=7.0
ILSW **Iliamna Southw** 45.06 347 IAMs_20 IAMs_20 14 23 12.0
comp=Z,3µm,20.0s
M13K **Dall Lake** 45.07 354 P P **14 05 25.3 -0.5**
baz=3.1
JIS **Juneau Island** 45.07 333 P P **14 05 29.8 +4.0**
R32K **Eaglecrest** 45.09 333 IAmb IAmb 14 05 44.5
comp=Z,50nm,0.8s
R32K IAMs_20 IAMs_20 14 26 19.9
comp=Z,4µm,19.0s
R32K **Eaglecrest** 45.09 333 P P **14 05 24.9 -1.2**
baz=13,SNR=11
R31K **City Hall, Gus** 45.10 334 P P **14 05 24.8 -1.2**
baz=13
R31K S **S** **14 12 09.2 +4.1**
baz=13
Q23K **Middleton Isla** 45.14 342 P P **14 05 25.4 -0.9**
baz=9.2
BRSE **Bradley Lake S** 45.15 345 P P **14 05 26.4 -0.1**
baz=7.7
BRSE S **S** **14 12 10.3 +4.2**
baz=7.7
M11K **Mekoryuk** 45.16 356 P P **14 05 26.7 +0.2**
baz=2.0
M11K S **S** **14 12 09.3 +3.4**
baz=2.0
N15K **Kwethluk River** 45.21 352 IAmb IAmb 14 05 37.4
comp=Z,112nm,1.3s
N15K IAMs_20 IAMs_20 14 22 57.5
comp=Z,3µm,20.0s
N15K **Kwethluk River** 45.21 352 P P **14 05 26.6 -0.4**
baz=4.3,SNR=10
N15K S **S** **14 12 10.8 +3.9**
baz=4.3
I63A **Otisfield** 45.26 274 IAmb IAmb 14 05 54.9
comp=Z,167nm,1.8s
I63A IAMs_20 IAMs_20 14 23 03.2
comp=Z,3µm,19.0s
HOM **Homer** 45.30 346 IAMs_20 IAMs_20 14 23 42.6
comp=Z,3µm,21.0s
HOM **Homer** 45.30 346 P P **14 05 27.1 -0.5**
baz=7.3
HOM S **S** **14 12 09.3 +1.3**
baz=7.3
O18K **Koktuh Hills** 45.31 349 IAmb IAmb 14 05 38.7
comp=Z,105nm,1.2s
O18K **Koktuh Hills** 45.31 349 P P **14 05 27.2 -0.6**
baz=6.0,SNR=10
O18K S **S** **14 12 11.5 +3.3**
baz=6.0
O18K S **S** **14 12 11.5 +3.3**
baz=6.0
SIMJ **Simiganj** 45.37 107 P P **14 05 28.5 -0.1**
SIMJ IAmb IAmb 14 05 36.6
comp=Z,60nm,1.0s
SIMJ IAMs_20 IAMs_20 14 27 57.7
comp=Z,4µm,19.0s
GAR **Garm** 45.38 105 IAmb IAmb 14 05 37.1
comp=Z,116nm,1.0s
P19K **Oil Pt** 45.40 347 P P **14 05 28.1 -0.4**
baz=6.7
CNPM **China Poot** 45.40 346 IAmb IAmb 14 05 41.4
comp=Z,146nm,1.4s
CNPM IAMs_20 IAMs_20 14 23 46.3
comp=Z,3µm,21.0s
CHGR **Chuyangaron** 45.41 107 P P **14 05 29.4 +0.5**
LBNH **Lisbon** 45.44 276 IAmb IAmb 14 05 37.7
comp=Z,81nm,1.2s
LBNH IAMs_20 IAMs_20 14 22 57.0
comp=Z,5µm,20.0s
LBNH **Lisbon** 45.44 276 P P **14 05 29.1 +0.1**
baz=22,SNR=7.0
LBNH S **S** **14 12 09.8 -0.7**
baz=22
WMQ **Urumqi** 45.44 86 *e*P P **14 05 30.0 +0.9**
WMQ pmax pmax
comp=Z,44nm,1.1s
WMQ pmax pmax
comp=Z,880nm,3.9s
WMQ LR LR
comp=Z,14µm,14.5s
WMQ LR LR
comp=Z,11µm,15.7s
WMQ LR LR
comp=Z,13µm,17.3s
O17K **Koliganek Bris** 45.48 350 P P **14 05 28.4 -0.7**
baz=5.3,SNR=5.8
O17K S **S** **14 12 18.2 +7.5**
baz=5.3
N14K **Kuskokwak Cree** 45.51 353 P P **14 05 29.7 +0.4**
baz=3.7
N14K S **S** **14 12 17.4 +6.4**
baz=3.7
VT1 **Waterbury** 45.58 277 IAmb IAmb 14 05 44.4
comp=Z,84nm,1.3s
VT1 IAMs_20 IAMs_20 14 23 10.8
comp=Z,7µm,19.0s
ZEA **Zeya** 45.59 47 *e*P P **14 05 31.3 +1.2**
ZEA *e* 14 07 21.7
ZEA *e*S S **14 12 18.9 +6.5**
ZEA pmax pmax
comp=E,100nm,3.9s
ZEA pmax pmax
comp=N,200nm,4.4s
ZEA pmax pmax
comp=Z,500nm,4.3s
ZEA pmax pmax
comp=E,10.0nm,1.1s
ZEA pmax pmax
comp=Z,40nm,1.1s
ZEA pmax pmax
comp=E,100nm,4.8s
ZEA pmax pmax
comp=N,100nm,4.4s
ZEA pmax pmax
comp=Z,300nm,5.9s
ZEA smax smax
comp=E,400nm,15.4s
ZEA smax smax
comp=N,400nm,12.9s
ZEA MLR MLR
comp=Z,2µm,15.0s
S31K **Pelican** 45.60 335 IAmb IAmb 14 05 47.7
comp=Z,158nm,1.8s
S31K **Pelican** 45.60 335 P P **14 05 30.2 +0.2**
baz=12
S31K S **S** **14 12 16.9 +4.6**
baz=12
S31K S **S** **14 12 16.9 +4.6**
baz=12
I62A **Tamworth** 45.63 275 IAMs_20 IAMs_20 14 23 53.8
comp=Z,4µm,19.0s
O16K **Kokwok River B** 45.71 351 IAmb IAmb 14 05 41.3
comp=Z,64nm,1.2s
O16K **Kokwok River B** 45.71 351 P P **14 05 30.8 0.0**
baz=5.0,SNR=9.8
O16K S **S** **14 12 20.0 +6.1**
baz=5.0
P18K **Big Mountain,** 45.77 349 IAmb IAmb 14 05 41.1
comp=Z,111nm,1.1s
P18K **Big Mountain,** 45.77 349 P P **14 05 31.0 -0.5**
baz=6.0,SNR=12
P18K S **S** **14 12 18.9 +3.9**
baz=6.0
LONY **Lake Ozonia** 45.79 278 IAMs_20 IAMs_20 14 23 17.2
comp=Z,8µm,20.0s
LONY **Lake Ozonia** 45.79 278 P P **14 05 31.3 -0.5**
baz=22,SNR=13
LONY S **S** **14 12 15.8 +0.2**
baz=22
T35M **Bob Quinn** 45.81 330 IAMs_20 IAMs_20 14 26 01.9
comp=Z,5µm,19.0s
T35M **Bob Quinn** 45.81 330 P P **14 05 31.4 -0.4**
baz=14,SNR=11
T35M S **S** **14 12 21.8 +6.2**
baz=14
ULM **Lac du Bonnet** 45.86 300 P P **14 05 31.6 -0.6**
comp=Z,53nm,0.9s,baz=20,slow=7.5,SNR=28
ULM S **S** **14 12 15.3 -1.1**
comp=Z,1.4nm,0.6s,baz=328,slow=15,SNR=1.1
ULM LR LR 14 24 55.0
comp=Z,10µm,18.9s,baz=22,slow=36
comp=Z,53nm,0.9s
S32K **Killisnoo** 45.88 333 IAMs_20 IAMs_20 14 25 39.9
comp=Z,3µm,18.0s
S32K **Killisnoo** 45.88 333 P P **14 05 31.7 -0.6**
baz=13
S32K S **S** **14 12 20.8 +4.3**
baz=13
S32K S **S** **14 12 20.8 +4.3**
baz=13
P17K **Kvichak River** 46.03 349 P P **14 05 33.6 +0.2**
baz=5.5
HNH **Hanover** 46.03 276 IAMs_20 IAMs_20 14 23 15.7
comp=Z,6µm,20.0s
Q19K **Cape Douglas,** 46.15 347 IAMs_20 IAMs_20 14 23 46.0
comp=Z,3µm,20.0s
Q19K **Cape Douglas,** 46.15 347 P P **14 05 33.3 -1.1**
baz=6.5
O14K **Tigyukauivet M** 46.17 353 P P **14 05 34.2 -0.3**
baz=3.8
O14K S **S** **14 12 21.5 +1.0**
baz=3.8
O15K **Ungalikthiuk R** 46.20 352 P P **14 05 34.1 -0.6**
baz=4.3
O15K S **S** **14 12 26.5 +5.5**
baz=4.3
P16K **Nushagak River** 46.27 350 P P **14 05 35.1 -0.2**
baz=5.0
P16K S **S** **14 12 25.4 +3.5**
baz=5.0
P16K S **S** **14 12 25.4 +3.5**
baz=5.0
NCB **Newcomb** 46.30 278 IAmb IAmb 14 05 44.0
comp=Z,117nm,1.6s
NCB IAMs_20 IAMs_20 14 23 12.6
comp=Z,7µm,20.0s
T33K **Petersburg** 46.32 332 P P **14 05 35.6 -0.2**
baz=13
KSH **Kashi** 46.36 99 P P **14 05 39.2 +2.8**
KSH sP pwP 14 05 46.4 +5.6
KSH PP **PP** **14 07 28.6 +3.7**
KSH S **S** **14 12 29.2 +5.2**
KSH pmax pmax
comp=Z,20nm,0.9s
KSH pmax pmax
comp=Z,790nm,6.2s
KSH LR LR
comp=Z,6µm,20.3s
KSH LR LR
comp=Z,4µm,18.9s
KSH LR LR
comp=Z,7µm,19.6s
SIT **Sitka** 46.38 334 IAMs_20 IAMs_20 14 27 08.8
comp=Z,4µm,18.0s
SIT **Sitka** 46.38 334 P P **14 05 35.8 -0.4**
baz=12
SIT S **S** **14 12 26.8 +3.2**
baz=12
Q20K **Shuyak Island** 46.39 346 P P **14 05 34.9 -1.3**
baz=6.9,SNR=9.0
Q20K S **S** **14 12 26.4 +2.7**
baz=6.9
SYI **Shuyak Island** 46.39 346 IAMs_20 IAMs_20 14 24 16.5
comp=Z,3µm,21.0s
J61A **Chester** 46.44 276 IAmb IAmb 14 05 45.9
comp=Z,176nm,1.9s
J61A IAMs_20 IAMs_20 14 23 27.4
comp=Z,6µm,20.0s
Q18K **Katmai Hardscr** 46.50 348 P P **14 05 34.8 -2.5**
baz=6.0
Q18K S **S** **14 12 25.7 +0.1**
baz=6.0
SONM **Songino Array** 46.52 67 P P **14 05 37.5 -0.1**
comp=Z,11nm,1.0s,baz=329,slow=7.7,SNR=34
SONM LR LR 14 27 40.3
comp=Z,789nm,20.3s,baz=344,slow=39
comp=Z,11nm,1.0s
ULN **Ulaanbaatar** 46.65 66 P P **14 05 38.2 -0.5**
ULN **Ulaanbaatar** 46.65 66 IAMs_20 IAMs_20 14 25 51.0
comp=Z,3µm,22.0s
ULN **Ulaanbaatar** 46.65 66 P P **14 05 39.6 +0.9**
ULN S **S** **14 12 30.1 +2.0**
ULN **Ulaanbaatar** 46.65 66 *c i*P P **14 05 39.0 +0.3**
ULN pmax pmax
comp=Z,49nm,1.3s
E46A **Sault Ste Mari** 46.68 288 IAMs_20 IAMs_20 14 24 18.8
comp=Z,4µm,19.0s
DELO **Deloro Mine** 46.68 281 IAMs_20 IAMs_20 14 23 54.8
comp=Z,5µm,20.0s
ACCN **Adirondack Com** 46.70 277 IAMs_20 IAMs_20 14 23 53.2
comp=Z,6µm,19.0s
U35K **Hyder** 46.82 329 IAMs_20 IAMs_20 14 26 32.5
comp=Z,6µm,19.0s
U35K **Hyder** 46.82 329 P P **14 05 38.5 -1.1**
baz=14
U35K S **S** **14 12 31.8 +1.9**
baz=14
SADO **Sadowa** 46.84 283 IAmb IAmb 14 05 54.0
comp=Z,88nm,1.1s
SADO **Sadowa** 46.84 283 LR LR 14 24 19.8
comp=Z,4µm,18.4s,baz=34,slow=35
Q17K **Contact Creek** 46.93 349 P P **14 05 39.2 -1.5**
baz=5.6
Q17K S **S** **14 12 33.8 +2.1**
baz=5.6
HRV **Adam Dziewonsk** 46.96 275 P P **14 05 40.0 -1.0**
HRV IAmb IAmb 14 05 45.8
comp=Z,80nm,1.3s
HRV **Adam Dziewonsk** 46.96 275 IAMs_20 IAMs_20 14 23 30.1
comp=Z,2µm,21.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HRV** | **Adam Dziewonsk** | **46.96** | **275** | P | **P** | **14 05 39.9** | **-1.0** |
| | baz=21 | | | | | | |
| HRV | | | | S | **S** | **14 12 34.0** | **+1.8** |
| | baz=21 | | | | | | |
| **HRV** | **Adam Dziewonsk** | **46.96** | **275** | P | **P** | **14 05 41.9** | **+1.0** |
| **EYMN** | **Ely** | **46.98** | **295** | P | **P** | **14 05 40.2** | **-0.9** |
| EYMN | | | | IAmb | IAmb | 14 05 49.0 | |
| | comp=Z,59nm,1.0s | | | | | | |
| **EYMN** | **Ely** | **46.98** | **295** | P | **P** | **14 05 40.0** | **-1.1** |
| | baz=21,SNR=12 | | | | | | |
| EYMN | | | | S | **S** | **14 12 30.4** | **-2.2** |
| | baz=21 | | | | | | |
| **EIL** | **Elat** | **46.98** | **148** | LR | LR | 14 27 25.3 | |
| | comp=Z,1µm,21.5s,baz=326,slow=39 | | | | | | |
| **K62A** | **Royalston** | **46.99** | **275** | IAmb | IAmb | 14 05 50.1 | |
| | comp=Z,130nm,1.5s | | | | | | |
| K62A | | | | IAMs_20 | IAMs_20 | 14 23 43.9 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **WES** | **Weston** | **47.01** | **274** | IAMs_20 | IAMs_20 | 14 23 23.4 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **U33K** | **Whale Pass** | **47.03** | **332** | IAmb | IAmb | 14 05 59.1 | |
| | comp=Z,71nm,1.2s | | | | | | |
| U33K | | | | IAMs_20 | IAMs_20 | 14 26 00.2 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **U33K** | **Whale Pass** | **47.03** | **332** | P | **P** | **14 05 41.6** | **+0.3** |
| | baz=13,SNR=8.3 | | | | | | |
| U33K | | | | S | **S** | **14 12 38.2** | **+5.3** |
| | baz=13 | | | | | | |
| U33K | | | | S | **S** | **14 12 38.2** | **+5.3** |
| | baz=13 | | | | | | |
| **PECO** | **Prince Edward** | **47.06** | **280** | IAMs_20 | IAMs_20 | 14 24 25.8 | |
| | comp=Z,8µm,18.0s | | | | | | |
| **J58A** | **Remsen** | **47.15** | **278** | IAmb | IAmb | 14 05 51.0 | |
| | comp=Z,62nm,1.1s | | | | | | |
| J58A | | | | IAMs_20 | IAMs_20 | 14 23 50.1 | |
| | comp=Z,7µm,20.0s | | | | | | |
| **KDAK** | **Kodiak Island** | **47.22** | **346** | P | **P** | **14 05 43.0** | **+0.2** |
| **KDAK** | **Kodiak Island** | **47.22** | **346** | IAMs_20 | IAMs_20 | 14 24 53.5 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **KDAK** | **Kodiak Island** | **47.22** | **346** | LR | LR | 14 25 04.0 | |
| | comp=Z,2µm,20.1s,baz=39,slow=36 | | | | | | |
| **KDAK** | **Kodiak Island** | **47.22** | **346** | P | **P** | **14 05 41.8** | **-0.9** |
| | baz=6.8 | | | | | | |
| KDAK | | | | S | **S** | **14 12 35.6** | **-0.1** |
| | baz=6.8 | | | | | | |
| **KDAK** | **Kodiak Island** | **47.22** | **346** | P | **P** | **14 05 43.0** | **+0.2** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,125nm,0.9s | | | | | | |
| KDAK | | | | MLR | MLR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| **L64A** | **Middleborough** | **47.30** | **274** | IAMs_20 | IAMs_20 | 14 24 09.1 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **L61B** | **Northampton** | **47.31** | **276** | IAMs_20 | IAMs_20 | 14 23 54.4 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **L61B** | **Northampton** | **47.31** | **276** | P | **P** | **14 05 42.7** | **-1.0** |
| | baz=21,SNR=16 | | | | | | |
| L61B | | | | S | **S** | **14 12 40.5** | **+3.2** |
| | baz=21 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **47.59** | **349** | P | **P** | **14 05 44.6** | **-1.1** |
| | baz=5.4 | | | | | | |
| R17L | | | | S | **S** | **14 12 40.5** | **-0.4** |
| | baz=5.4 | | | | | | |
| **M65A** | **Busby, Falmout** | **47.60** | **273** | IAMs_20 | IAMs_20 | 14 23 58.0 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **M65A** | **Busby, Falmout** | **47.60** | **273** | P | **P** | **14 05 45.2** | **-0.7** |
| | baz=21 | | | | | | |
| M65A | | | | S | **S** | **14 12 44.9** | **+3.5** |
| | baz=21 | | | | | | |
| **V35K** | **Ketchikan** | **47.60** | **330** | IAMs_20 | IAMs_20 | 14 27 35.3 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **V35K** | **Ketchikan** | **47.60** | **330** | P | **P** | **14 05 45.5** | **-0.2** |
| | baz=13,SNR=6.9 | | | | | | |
| V35K | | | | S | **S** | **14 12 45.3** | **+4.3** |
| | baz=13 | | | | | | |
| V35K | | | | S | **S** | **14 12 45.3** | **+4.3** |
| | baz=13 | | | | | | |
| **CRAG** | **Craig** | **47.66** | **332** | P | **P** | **14 05 49.9** | **+3.7** |
| **CRAG** | **Craig** | **47.66** | **332** | IAMs_20 | IAMs_20 | 14 26 59.7 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **CRAG** | **Craig** | **47.66** | **332** | P | **P** | **14 05 45.3** | **-0.9** |
| | baz=13 | | | | | | |
| CRAG | | | | S | **S** | **14 12 45.8** | **+3.9** |
| | baz=13 | | | | | | |
| **AGMN** | **Agassiz Nation** | **47.69** | **299** | IAmb | IAmb | 14 05 54.4 | |
| | comp=Z,77nm,0.9s | | | | | | |
| **AGMN** | **Agassiz Nation** | **47.69** | **299** | P | **P** | **14 05 45.4** | **-1.2** |
| | baz=20,SNR=29 | | | | | | |
| AGMN | | | | S | **S** | **14 12 42.2** | **-0.3** |
| | baz=20 | | | | | | |
| **UCCT** | **U. Connecticut** | **47.80** | **275** | IAmb | IAmb | 14 05 56.2 | |
| | comp=Z,107nm,1.3s | | | | | | |
| UCCT | | | | IAMs_20 | IAMs_20 | 14 24 29.4 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **OHAK** | **Old Harbor** | **47.82** | **347** | P | **P** | **14 05 50.8** | **+3.3** |
| **OHAK** | **Old Harbor** | **47.82** | **347** | P | **P** | **14 05 47.1** | **-0.4** |
| | baz=6.5,SNR=13 | | | | | | |
| **J55A** | **Hilton** | **47.90** | **281** | IAmb | IAmb | 14 06 02.2 | |
| | comp=Z,56nm,1.1s | | | | | | |
| J55A | | | | IAMs_20 | IAMs_20 | 14 25 01.0 | |
| | comp=Z,6µm,18.0s | | | | | | |
| **J54A** | **Appleton** | **48.11** | **281** | IAMs_20 | IAMs_20 | 14 24 49.6 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **M63A** | **Gales Ferry** | **48.12** | **274** | IAMs_20 | IAMs_20 | 14 24 39.8 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **COWI** | **Conover** | **48.13** | **292** | IAmb | IAmb | 14 05 55.3 | |
| | comp=Z,154nm,2.0s | | | | | | |
| **L59A** | **Walton** | **48.18** | **278** | IAmb | IAmb | 14 06 04.9 | |
| | comp=Z,74nm,1.4s | | | | | | |
| L59A | | | | IAMs_20 | IAMs_20 | 14 24 30.3 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **F42A** | **Maple Grove Fa** | **48.21** | **291** | IAmb | IAmb | 14 05 58.3 | |
| | comp=Z,53nm,1.0s | | | | | | |
| F42A | | | | IAMs_20 | IAMs_20 | 14 25 23.3 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **E38A** | **The Farm, Brul** | **48.25** | **295** | IAmb | IAmb | 14 06 04.5 | |
| | comp=Z,81nm,1.3s | | | | | | |
| E38A | | | | IAMs_20 | IAMs_20 | 14 25 25.5 | |
| | comp=Z,8µm,20.0s | | | | | | |
| **HIA** | **Hailar** | **48.27** | **55** | P | **P** | **14 05 51.4** | **+0.3** |
| **HIA** | **Hailar** | **48.27** | **55** | IAMs_20 | IAMs_20 | 14 28 24.0 | |
| | comp=Z,6µm,19.0s | | | | | | |
| **BINY** | **Binghamton** | **48.42** | **279** | IAMs_20 | IAMs_20 | 14 24 38.7 | |
| | comp=Z,7µm,20.0s | | | | | | |
| **BINY** | **Binghamton** | **48.42** | **279** | P | **P** | **14 05 51.2** | **-1.0** |
| | baz=21,SNR=6.6 | | | | | | |
| BINY | | | | S | **S** | **14 12 53.8** | **+0.8** |
| | baz=21 | | | | | | |
| **SII** | **Sitkinak Islan** | **48.54** | **347** | P | **P** | **14 05 52.3** | **-0.7** |
| | baz=6.1 | | | | | | |
| **I49A** | **Point Hope** | **48.57** | **286** | IAMs_20 | IAMs_20 | 14 25 49.7 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **WVNY** | **West Valley, N** | **48.91** | **281** | IAMs_20 | IAMs_20 | 14 25 23.7 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **HEH** | **HeiHe** | **48.93** | **48** | *e*P | **P** | **14 05 55.9** | **-0.2** |
| HEH | | | | sP | **sP** | **14 06 00.3** | **+3.4** |
| HEH | | | | PP | **PP** | **14 07 48.9** | **-0.1** |
| HEH | | | | S | **S** | **14 12 58.2** | **-1.9** |
| HEH | | | | sS | **sS** | **14 13 04.9** | **+4.0** |
| HEH | | | | SS | **SS** | **14 16 28.7** | **-1.3** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,32nm,1.0s | | | | | | |
| HEH | | | | pmax | pmax | | |
| | comp=Z,560nm,4.0s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,3µm,16.9s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,3µm,16.1s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,5µm,17.1s | | | | | | |
| **N62A** | **Caumsett State** | **48.94** | **276** | IAMs_20 | IAMs_20 | 14 24 51.5 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **TRNY** | **Table Rock, Ra** | **48.94** | **276** | IAmb | IAmb | 14 06 01.2 | |
| | comp=Z,104nm,1.3s | | | | | | |
| **KSPA** | **Keystone Colle** | **48.96** | **278** | IAmb | IAmb | 14 06 30.8 | |
| | comp=Z,108nm,1.7s | | | | | | |
| KSPA | | | | IAMs_20 | IAMs_20 | 14 24 55.0 | |
| | comp=Z,7µm,20.0s | | | | | | |
| **MDND** | **Maddock** | **48.97** | **302** | IAMs_20 | IAMs_20 | 14 26 35.6 | |
| | comp=Z,7µm,20.0s | | | | | | |
| **MDND** | **Maddock** | **48.97** | **302** | P | **P** | **14 05 55.4** | **-1.1** |
| | baz=20,SNR=8.2 | | | | | | |
| MDND | | | | S | **S** | **14 13 03.3** | **+2.6** |
| | baz=20 | | | | | | |
| **PAL** | **Palisades** | **48.98** | **276** | IAMs_20 | IAMs_20 | 14 24 54.7 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **PAL** | **Palisades** | **48.98** | **276** | P | **P** | **14 05 55.5** | **-1.1** |
| | baz=20 | | | | | | |
| PAL | | | | S | **S** | **14 13 04.6** | **+3.7** |
| | baz=20 | | | | | | |
| **P08K** | **Saint George I** | **48.99** | **359** | P | **P** | **14 05 55.6** | **-0.8** |
| | baz=0.7 | | | | | | |
| **CHGN** | **Chignik** | **49.01** | **350** | P | **P** | **14 05 55.2** | **-1.4** |
| | baz=4.6 | | | | | | |
| **ODNJ** | **Ogdensburg** | **49.10** | **277** | IAmb | IAmb | 14 06 02.3 | |
| | comp=Z,83nm,1.4s | | | | | | |
| ODNJ | | | | IAMs_20 | IAMs_20 | 14 24 58.7 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **G40A** | **Rib Lake** | **49.17** | **293** | IAmb | IAmb | 14 06 11.8 | |
| | comp=Z,58nm,1.1s | | | | | | |
| **CPNY** | **Central Park** | **49.20** | **276** | IAMs_20 | IAMs_20 | 14 24 52.4 | |
| | comp=Z,6µm,22.0s | | | | | | |
| **KBL** | **Kabul** | **49.27** | **109** | P | **P** | **14 05 58.6** | **-0.6** |
| **KBL** | **Kabul** | **49.27** | **109** | P | **P** | **14 05 59.8** | **+0.6** |
| | SNR=13 | | | | | | |
| KBL | | | | P | **P** | **14 05 59.8** | **+0.6** |
| | SNR=13 | | | | | | |
| KBL | | | | S | **S** | **14 13 05.6** | **0.0** |
| KBL | | | | S | **S** | **14 13 05.6** | **0.0** |
| **KBL** | **Kabul** | **49.27** | **109** | P | **P** | **14 05 58.6** | **-0.6** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,44nm,1.3s | | | | | | |
| **H43A** | **Windswept, Lux** | **49.32** | **290** | IAmb | IAmb | 14 06 07.2 | |
| | comp=Z,77nm,1.0s | | | | | | |
| H43A | | | | IAMs_20 | IAMs_20 | 14 26 04.8 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **I45A** | **Fountain** | **49.34** | **289** | IAMs_20 | IAMs_20 | 14 25 52.3 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **CHIR** | **Chirikof Islan** | **49.35** | **348** | P | **P** | **14 05 57.8** | **-1.5** |
| | baz=5.5 | | | | | | |
| **DGMT** | **Dagmar** | **49.39** | **306** | IAMs_20 | IAMs_20 | 14 26 34.9 | |
| | comp=Z,8µm,20.0s | | | | | | |
| **DGMT** | **Dagmar** | **49.39** | **306** | P | **P** | **14 05 58.1** | **-1.6** |
| | baz=19,SNR=6.5 | | | | | | |
| DGMT | | | | S | **S** | **14 13 09.2** | **+2.6** |
| | baz=19 | | | | | | |
| **M57A** | **Sunshine Farm,** | **49.52** | **279** | IAmb | IAmb | 14 06 13.4 | |
| | comp=Z,155nm,1.7s | | | | | | |
| **ERPA** | **Erie** | **49.54** | **282** | IAMs_20 | IAMs_20 | 14 25 42.4 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **ERPA** | **Erie** | **49.54** | **282** | P | **P** | **14 05 60.0** | **-0.9** |
| | baz=20 | | | | | | |
| ERPA | | | | S | **S** | **14 13 07.8** | **-1.0** |
| | baz=20 | | | | | | |
| **KBD** | **Kabd** | **49.60** | **134** | P | **P** | **14 06 01.7** | **+0.3** |
| KBD | | | | S | **S** | **14 13 11.4** | **+1.5** |
| **K50A** | **Casco** | **49.60** | **285** | IAMs_20 | IAMs_20 | 14 26 14.2 | |
| | comp=Z,6µm,18.0s | | | | | | |
| **J47A** | **Sunmer** | **49.73** | **287** | IAMs_20 | IAMs_20 | 14 26 11.6 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **S12K** | **Black Hills** | **49.75** | **353** | P | **P** | **14 06 00.7** | **-1.6** |
| | baz=3.3 | | | | | | |
| S12K | | | | S | **S** | **14 13 13.1** | **+1.7** |
| | baz=3.3 | | | | | | |
| **DIB** | **Dawson Inlet,** | **49.79** | **330** | IAMs_20 | IAMs_20 | 14 28 35.0 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **SPMN** | **Marine on St.** | **49.85** | **295** | IAMs_20 | IAMs_20 | 14 26 26.8 | |
| | comp=Z,8µm,21.0s | | | | | | |
| **SPMN** | **Marine on St.** | **49.85** | **295** | P | **P** | **14 06 02.2** | **-1.0** |
| | baz=20,SNR=9.3 | | | | | | |
| SPMN | | | | S | **S** | **14 13 14.3** | **+1.3** |
| | baz=20 | | | | | | |
| **N58A** | **Sunbury** | **49.88** | **279** | IAmb | IAmb | 14 06 11.9 | |
| | comp=Z,169nm,1.8s | | | | | | |
| N58A | | | | IAMs_20 | IAMs_20 | 14 25 33.4 | |
| | comp=Z,7µm,20.0s | | | | | | |
| **ALLY** | **Alegheny Colle** | **50.02** | **282** | IAMs_20 | IAMs_20 | 14 26 06.1 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **SDPT** | **Sand Point** | **50.05** | **352** | P | **P** | **14 06 03.1** | **-1.4** |
| | baz=3.8 | | | | | | |
| **GRNR** | **Gornyy** | **50.12** | **41** | ⇓ *i*P | **P** | **14 06 05.6** | **+0.4** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=E,620nm,14.0s | | | | | | |
| **I42A** | **Draeger Farm,** | **50.15** | **291** | IAmb | IAmb | 14 06 13.2 | |
| | comp=Z,66nm,0.8s | | | | | | |
| I42A | | | | IAMs_20 | IAMs_20 | 14 26 22.6 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **BBB** | **Bella Bella** | **50.18** | **327** | IAMs_20 | IAMs_20 | 14 27 19.1 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **BBB** | **Bella Bella** | **50.18** | **327** | LR | LR | 14 27 29.8 | |
| | comp=Z,4µm,19.9s,baz=21,slow=36 | | | | | | |
| **AAM** | **Ann Arbor** | **50.31** | **286** | IAMs_20 | IAMs_20 | 14 26 45.0 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **AAM** | **Ann Arbor** | **50.31** | **286** | P | **P** | **14 06 05.5** | **-1.3** |
| | baz=20 | | | | | | |
| AAM | | | | S | **S** | **14 13 19.5** | **-0.1** |
| | baz=20 | | | | | | |
| **M53A** | **WI Miller and** | **50.35** | **282** | IAMs_20 | IAMs_20 | 14 26 17.0 | |
| | comp=Z,3µm,19.0s | | | | | | |
| **M53A** | **WI Miller and** | **50.35** | **282** | P | **P** | **14 06 05.5** | **-1.5** |
| | baz=20 | | | | | | |
| M53A | | | | S | **S** | **14 13 20.9** | **+0.7** |
| | baz=20 | | | | | | |
| **SSPA** | **Standing Stone** | **50.38** | **280** | P | **P** | **14 06 06.9** | **-0.4** |
| SSPA | | | | IAmb | IAmb | 14 06 16.6 | |
| | comp=Z,111nm,1.6s | | | | | | |
| **SSPA** | **Standing Stone** | **50.38** | **280** | P | **P** | **14 06 06.4** | **-0.8** |
| | baz=20 | | | | | | |
| **E28A** | **Huff** | **50.41** | **302** | IAMs_20 | IAMs_20 | 14 27 01.3 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **M52A** | **Chesterland** | **50.44** | **283** | IAMs_20 | IAMs_20 | 14 26 37.2 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **WUPA** | **West Chester U** | **50.44** | **277** | IAMs_20 | IAMs_20 | 14 25 29.2 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **P61A** | **Hammonton** | **50.47** | **276** | IAMs_20 | IAMs_20 | 14 25 48.9 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **CHNA** | **Chernabura Isl** | **50.53** | **351** | P | **P** | **14 06 06.2** | **-1.9** |
| | baz=4.1 | | | | | | |
| **CNBA** | **Chernabura Isl** | **50.54** | **351** | IAmb | IAmb | 14 06 16.9 | |
| | comp=Z,67nm,1.2s | | | | | | |
| CNBA | | | | IAMs_20 | IAMs_20 | 14 26 23.9 | |
| | comp=Z,3µm,21.0s | | | | | | |
| **I40A** | **Norwalk** | **50.57** | **292** | IAmb | IAmb | 14 06 12.6 | |
| | comp=Z,64nm,1.1s | | | | | | |
| **MVL** | **Millersville** | **50.57** | **278** | IAmb | IAmb | 14 06 18.2 | |
| | comp=Z,126nm,1.7s | | | | | | |
| MVL | | | | IAMs_20 | IAMs_20 | 14 26 24.7 | |
| | comp=Z,6µm,19.0s | | | | | | |
| **FALS** | **False Pass** | **50.64** | **354** | P | **P** | **14 06 06.4** | **-2.6** |
| | baz=2.8 | | | | | | |
| **KLR** | **Kul'dur** | **50.75** | **45** | LR | LR | 14 29 53.5 | |
| | comp=Z,4µm,19.2s,baz=339,slow=39 | | | | | | |
| **KLR** | **Kul'dur** | **50.75** | **45** | ⇑ *i*P | **P** | **14 06 09.0** | **-1.0** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | |
| **L48A** | **N Adams** | **50.85** | **286** | IAMs_20 | IAMs_20 | 14 26 35.1 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **EGMT** | **Eagleton** | **50.97** | **311** | IAmb | IAmb | 14 06 28.0 | |
| | comp=Z,150nm,1.2s | | | | | | |
| **EGMT** | **Eagleton** | **50.97** | **311** | P | **P** | **14 06 10.7** | **-1.1** |
| | baz=18,SNR=22 | | | | | | |
| EGMT | | | | S | **S** | **14 13 29.2** | **+0.4** |
| | baz=18 | | | | | | |
| **N53A** | **Lisbon** | **50.99** | **282** | IAMs_20 | IAMs_20 | 14 26 45.3 | |
| | comp=Z,3µm,18.0s | | | | | | |
| **M50A** | **Fremont** | **51.00** | **285** | IAMs_20 | IAMs_20 | 14 26 38.5 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **PET** | **Petropavlovsk** | **51.02** | **23** | P | **P** | **14 06 13.1** | **+1.2** |
| **PET** | **Petropavlovsk** | **51.02** | **23** | P | **P** | **14 06 11.7** | **-0.2** |
| **PET** | **Petropavlovsk** | **51.02** | **23** | *e*P | **P** | **14 06 12.3** | **+0.4** |
| PET | | | | *e* | | 14 07 26.5 | |
| PET | | | | *e*S | **S** | **14 13 27.3** | **-1.7** |
| PET | | | | pmax | pmax | | |
| | comp=Z,300nm,4.4s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,200nm,8.2s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,600nm,6.4s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,400nm,7.8s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| **TYV** | **Tymovskoe** | **51.06** | **36** | *e*P | **P** | **14 06 10.3** | **-1.9** |
| TYV | | | | *e*S | **S** | **14 13 28.1** | **-1.5** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,400nm,3.9s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,11nm,1.7s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,200nm,7.4s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,300nm,7.4s | | | | | | |
| **K43A** | **Burlington** | **51.12** | **290** | IAmb | IAmb | 14 06 20.9 | |
| | comp=Z,113nm,1.1s | | | | | | |
| K43A | | | | IAMs_20 | IAMs_20 | 14 27 08.8 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **NIL** | **Nilore** | **51.19** | **105** | P | **P** | **14 06 13.2** | **-0.3** |
| NIL | | | | IAmb | IAmb | 14 06 22.4 | |
| | comp=Z,67nm,1.0s | | | | | | |
| **NIL** | **Nilore** | **51.19** | **105** | IAMs_20 | IAMs_20 | 14 29 22.6 | |
| | comp=Z,6µm,18.0s | | | | | | |
| **NIL** | **Nilore** | **51.19** | **105** | P | **P** | **14 06 13.2** | **-0.3** |
| NIL | | | | pmax | pmax | | |
| | comp=Z,67nm,1.0s | | | | | | |
| NIL | | | | MLR | MLR | | |
| | comp=Z,6µm,18.0s | | | | | | |
| **SDMD** | **Soldier's Deli** | **51.25** | **278** | IAMs_20 | IAMs_20 | 14 26 16.8 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **L46A** | **Eue Claire** | **51.26** | **288** | IAmb | IAmb | 14 06 22.2 | |
| | comp=Z,100nm,1.1s | | | | | | |
| L46A | | | | IAMs_20 | IAMs_20 | 14 26 59.4 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **N51A** | **Ashland** | **51.28** | **284** | IAmb | IAmb | 14 06 18.5 | |
| | comp=Z,112nm,1.4s | | | | | | |
| N51A | | | | IAMs_20 | IAMs_20 | 14 26 03.6 | |
| | comp=Z,4µm,22.0s | | | | | | |
| **JFWS** | **Jewell Farm** | **51.40** | **292** | IAmb | IAmb | 14 06 19.1 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **JFWS** | **Jewell Farm** | **51.40** | **292** | P | **P** | **14 06 13.8** | **-1.1** |
| | baz=20,SNR=9.3 | | | | | | |
| JFWS | | | | S | **S** | **14 13 33.5** | **-1.1** |
| | baz=20 | | | | | | |
| **O54A** | **Avella** | **51.46** | **282** | IAmb | IAmb | 14 06 19.2 | |
| | comp=Z,161nm,1.9s | | | | | | |
| O54A | | | | IAMs_20 | IAMs_20 | 14 27 11.6 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **L44A** | **Lake County Fo** | **51.51** | **289** | IAmb | IAmb | 14 06 24.0 | |
| | comp=Z,157nm,1.2s | | | | | | |
| L44A | | | | IAMs_20 | IAMs_20 | 14 27 20.1 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **L44A** | **Lake County Fo** | **51.51** | **289** | P | **P** | **14 06 14.7** | **-1.0** |
| | baz=20 | | | | | | |
| L44A | | | | S | **S** | **14 13 36.5** | **+0.4** |
| | baz=20 | | | | | | |
| **LAO** | **LASA Array** | **51.52** | **307** | IAmb | IAmb | 14 06 26.3 | |
| | comp=Z,125nm,1.2s | | | | | | |
| **LAO** | **LASA Array** | **51.52** | **307** | P | **P** | **14 06 15.5** | **-0.3** |
| | baz=18,SNR=16 | | | | | | |
| LAO | | | | S | **S** | **14 13 34.8** | **-1.4** |
| | baz=18 | | | | | | |
| **O53A** | **New Philadelph** | **51.61** | **282** | IAmb | IAmb | 14 06 29.8 | |
| | comp=Z,156nm,1.4s | | | | | | |
| O53A | | | | IAMs_20 | IAMs_20 | 14 27 05.7 | |
| | comp=Z,3µm,18.0s | | | | | | |
| **O53A** | **New Philadelph** | **51.61** | **282** | P | **P** | **14 06 15.4** | **-1.1** |
| | baz=20,SNR=5.7 | | | | | | |
| O53A | | | | S | **S** | **14 13 37.8** | **+0.2** |
| | baz=20 | | | | | | |
| **HOLB** | **Holberg** | **51.68** | **326** | IAMs_20 | IAMs_20 | 14 28 04.2 | |
| | comp=Z,2µm,18.0s | | | | | | |
| **UNV** | **Unalaska Valle** | **51.72** | **356** | P | **P** | **14 06 15.6** | **-1.5** |
| | baz=1.7 | | | | | | |
| **N49A** | **Columbus Grove** | **51.74** | **285** | IAmb | IAmb | 14 06 25.6 | |
| | comp=Z,110nm,1.3s | | | | | | |
| N49A | | | | IAMs_20 | IAMs_20 | 14 27 02.3 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **MCWV** | **Mont Chateau** | **51.81** | **281** | IAMs_20 | IAMs_20 | 14 27 14.0 | |
| | comp=Z,7µm,19.0s | | | | | | |
| **MCWV** | **Mont Chateau** | **51.81** | **281** | P | **P** | **14 06 17.7** | **-0.3** |
| | baz=20 | | | | | | |
| MCWV | | | | S | **S** | **14 13 39.3** | **-1.0** |
| | baz=20 | | | | | | |
| **HQIL** | **Hanson Quary C** | **51.85** | **289** | IAMs_20 | IAMs_20 | 14 26 01.1 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **CBB** | **Campbell River** | **51.85** | **324** | IAMs_20 | IAMs_20 | 14 30 01.2 | |
| | comp=Z,3µm,18.0s | | | | | | |
| **R61A** | **Willards** | **51.87** | **276** | IAMs_20 | IAMs_20 | 14 26 42.6 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **O52A** | **Adamsville** | **51.90** | **283** | IAMs_20 | IAMs_20 | 14 26 47.3 | |
| | comp=Z,3µm,22.0s | | | | | | |
| **TAM** | **Tamanrasset** | **51.95** | **184** | IAMs_20 | IAMs_20 | 14 31 11.3 | |
| | comp=Z,2µm,19.0s | | | | | | |
| **TAM** | **Tamanrasset** | **51.95** | **184** | P | **P** | **14 06 21.8** | **+2.4** |
| **SUSD** | **Miller** | **52.04** | **300** | P | **P** | **14 06 19.2** | **-0.5** |
| | baz=19,SNR=16 | | | | | | |
| SUSD | | | | S | **S** | **14 13 43.0** | **-0.4** |
| | baz=19 | | | | | | |
| **ACSO** | **Alum Creek Sta** | **52.08** | **284** | IAmb | IAmb | 14 06 28.0 | |
| | comp=Z,163nm,1.8s | | | | | | |
| ACSO | | | | IAMs_20 | IAMs_20 | 14 27 39.3 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **52.08** | **284** | P | **P** | **14 06 18.8** | **-1.2** |
| | baz=20 | | | | | | |
| ACSO | | | | S | **S** | **14 13 45.0** | **+1.0** |
| | baz=20 | | | | | | |
| **L42A** | **Oliver, Polo** | **52.11** | **291** | IAmb | IAmb | 14 06 24.3 | |
| | comp=Z,85nm,1.0s | | | | | | |
| L42A | | | | IAMs_20 | IAMs_20 | 14 27 33.0 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **52.16** | **298** | IAmb | IAmb | 14 06 24.3 | |
| | comp=Z,70nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **52.16** | **298** | P | **P** | **14 06 18.9** | **-1.7** |
| | baz=19,SNR=51 | | | | | | |
| ECSD | | | | S | **S** | **14 13 45.0** | **-0.1** |
| | baz=19 | | | | | | |
| **NEW** | **Newport** | **52.16** | **317** | IAMs_20 | IAMs_20 | 14 28 06.7 | |
| | comp=Z,7µm,22.0s | | | | | | |
| **NEW** | **Newport** | **52.16** | **317** | LR | LR | 14 28 29.7 | |
| | comp=Z,7µm,21.8s,baz=20,slow=36 | | | | | | |
| **NEW** | **Newport** | **52.16** | **317** | P | **P** | **14 06 18.8** | **-1.9** |
| | baz=16,SNR=17 | | | | | | |
| NEW | | | | S | **S** | **14 13 44.5** | **-0.6** |
| | baz=16 | | | | | | |
| **NEW** | **Newport** | **52.16** | **317** | P | **P** | **14 06 20.9** | **+0.3** |
| **N47A** | **Urbana** | **52.17** | **287** | IAmb | IAmb | 14 06 28.5 | |
| | comp=Z,103nm,1.1s | | | | | | |
| N47A | | | | IAMs_20 | IAMs_20 | 14 27 25.5 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **M44A** | **Midewin, Midew** | **52.28** | **289** | IAMs_20 | IAMs_20 | 14 27 10.6 | |
| | comp=Z,4µm,22.0s | | | | | | |
| **P53A** | **Whipple** | **52.37** | **282** | IAMs_20 | IAMs_20 | 14 28 28.9 | |
| | comp=Z,3µm,19.0s | | | | | | |
| **P52A** | **Corning** | **52.43** | **283** | IAMs_20 | IAMs_20 | 14 27 23.3 | |
| | comp=Z,3µm,19.0s | | | | | | |
| **P52A** | **Corning** | **52.43** | **283** | P | **P** | **14 06 21.7** | **-1.0** |
| | baz=20 | | | | | | |
| P52A | | | | S | **S** | **14 13 50.8** | **+2.0** |
| | baz=20 | | | | | | |
| **B08A** | **Colville Reser** | **52.47** | **318** | IAMs_20 | IAMs_20 | 14 28 36.8 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **O49A** | **Covington** | **52.47** | **285** | IAmb | IAmb | 14 06 30.9 | |
| | comp=Z,129nm,1.4s | | | | | | |
| O49A | | | | IAMs_20 | IAMs_20 | 14 28 26.6 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **52.51** | **11** | LR | LR | 14 30 05.5 | |
| | comp=Z,985nm,18.1s,baz=358,slow=38 | | | | | | |
| **XLT** | **XiLinHaoTe** | **52.52** | **60** | *e*P | **P** | **14 06 24.2** | **+0.8** |
| XLT | | | | sS | sS | 14 13 57.2 | +6.0 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,460nm,4.4s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,5µm,21.6s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,5µm,20.1s | | | | | | |
| **CBN** | **Corbin Frederi** | **52.53** | **278** | IAMs_20 | IAMs_20 | 14 26 44.0 | |
| | comp=Z,7µm,22.0s | | | | | | |
| **CBN** | **Corbin Frederi** | **52.53** | **278** | P | **P** | **14 06 22.3** | **-1.0** |
| | baz=20 | | | | | | |
| CBN | | | | S | **S** | **14 13 53.2** | **+3.0** |
| | baz=20 

GTA LR LR
comp=Z,5µm,17.1s
GTA LR LR
comp=Z,5µm,16.4s
GTA LR LR
comp=Z,7µm,17.1s
**CLES Cleveland East 52.78 359** IAMs_20 IAMs_20 14 30 07.7
comp=Z,3µm,19.0s
**C09A Chrisman Ranch 52.82 317** IAMs_20 IAMs_20 14 28 05.1
comp=Z,8µm,21.0s
**CLRS Cowichan Lake 52.83 322** IAMs_20 IAMs_20 14 28 52.5
comp=Z,3µm,19.0s
**R58B Mineral 52.89 278** IAMs_20 IAMs_20 14 26 54.5
comp=Z,7µm,22.0s
**OZB Mount Ozzard 52.92 324** IAMs_20 IAMs_20 14 31 14.7
comp=Z,3µm,18.0s
**MSO Missoula 52.95 314** P **P** **14 06 25.4 -1.1**
baz=16,SNR=83
MSO S **S** **14 13 57.2 +1.2**
baz=16
**THN Thein Dam 52.98 103** *e*P **P** **14 06 27.7 +1.0**
THN IAmb IAmb 14 06 35.1
comp=Z,58nm,0.9s
**SFIN Lafayette 53.00 288** IAmb IAmb 14 06 30.4
comp=Z,64nm,0.9s
SFIN IAMs_20 IAMs_20 14 28 02.5
comp=Z,3µm,19.0s
**SFIN Lafayette 53.00 288** P **P** **14 06 25.6 -1.2**
baz=19,SNR=9.9
SFIN S **S** **14 13 58.2 +1.7**
baz=19
**SCIA State Center 53.08 294** P **P** **14 06 26.3 -1.1**
baz=19
SCIA S **S** **14 13 57.1 -0.5**
baz=19
**Q52A Bidwell 53.09 283** IAMs_20 IAMs_20 14 27 53.0
comp=Z,3µm,18.0s
**P49A Miami Univ. Ec 53.19 285** IAmb IAmb 14 06 35.8
comp=Z,128nm,1.4s
P49A IAMs_20 IAMs_20 14 28 16.5
comp=Z,4µm,18.0s
**P49A Miami Univ. Ec 53.19 285** P **P** **14 06 26.9 -1.4**
baz=19
P49A S **S** **14 13 58.0 -1.1**
baz=19
**BNX BinXian 53.24 50** ||P **P** **14 06 28.1 -0.4**
BNX S **S** **14 14 02.0 +2.3**
BNX SS **SS** **14 17 35.7 -2.8**
BNX pmax pmax
comp=Z,14nm,1.0s
BNX pmax pmax
comp=Z,460nm,4.2s
BNX LR LR
comp=Z,3µm,16.0s
BNX LR LR
comp=Z,2µm,15.5s
BNX LR LR
comp=Z,3µm,15.7s
**SAKB Bahrain 53.27 131** P **P** **14 06 29.3 +0.4**
SAKB S **S** **14 14 01.3 +0.9**
**DHRM DHARAMSHALA 53.31 102** *e*P **P** **14 06 30.3 +0.8**
DHRM IAmb IAmb 14 06 39.3
comp=Z,80nm,1.0s
**HDIL Hopedale 53.38 290** IAMs_20 IAMs_20 14 28 28.4
comp=Z,4µm,18.0s
**HDIL Hopedale 53.38 290** S **S** **14 14 01.6 -0.2**
baz=19
**P48A Milroy 53.44 286** IAmb IAmb 14 06 33.1
comp=Z,92nm,1.0s
P48A IAMs_20 IAMs_20 14 28 33.1
comp=Z,5µm,19.0s
**SHMA Al-Shehemyia 53.47 131** P **P** **14 06 30.0 -0.4**
SHMA S **S** **14 14 03.9 +0.7**
**GSTR Great Sitkin T 53.48 4** P **P** **14 06 31.5 +1.3**
**RSSD Black Hills 53.49 304** P **P** **14 06 29.7 -0.9**
RSSD IAmb IAmb 14 06 46.0
comp=Z,59nm,1.1s
**RSSD Black Hills 53.49 304** P **P** **14 06 29.1 -1.5**
baz=18
RSSD S **S** **14 14 03.3 -0.3**
baz=18
**RSSD Black Hills 53.49 304** P **P** **14 06 29.7 -0.9**
RSSD pmax pmax
comp=Z,59nm,1.1s
RSSD MLR MLR
comp=Z,7µm,18.0s
**HNLY HANLEY 53.51 99** *e*P **P** **14 06 32.7 +1.4**
**N41A Harden Midland 53.63 291** IAMs_20 IAMs_20 14 28 32.2
comp=Z,7µm,21.0s
**RLMT Red Lodge 53.65 309** IAmb IAmb 14 06 42.2
comp=Z,94nm,1.2s
**RLMT Red Lodge 53.65 309** P **P** **14 06 30.4 -1.4**
baz=17,SNR=14
RLMT S **S** **14 14 06.6 +0.9**
baz=17
**D08A Wollman Farm, 53.65 318** IAMs_20 IAMs_20 14 28 41.1
comp=Z,7µm,21.0s
**BOZ Bozeman (W) 53.67 311** P **P** **14 06 30.5 -1.4**
baz=17
BOZ S **S** **14 14 05.7 -0.2**
baz=17
**ADK Adak 53.67 4** P **P** **14 06 34.1 +2.5**
**ADK Adak 53.67 4** IAMs_20 IAMs_20 14 28 12.5
comp=Z,3µm,20.0s
**ADK Adak 53.67 4** P **P** **14 06 34.1 +2.5**
**T59A Double "B" Far 53.74 278** IAMs_20 IAMs_20 14 27 51.0
comp=Z,6µm,20.0s
**P46A Rosedale 53.74 288** IAmb IAmb 14 06 35.6
comp=Z,75nm,1.0s
P46A IAMs_20 IAMs_20 14 28 34.2
comp=Z,3µm,20.0s
**C03A Quillayute Air 53.75 323** IAMs_20 IAMs_20 14 30 11.8
comp=Z,3µm,19.0s
**LTY Liberty 53.77 319** IAMs_20 IAMs_20 14 28 46.2
comp=Z,3µm,21.0s
**GNW Green Mountain 53.84 321** IAmb IAmb 14 06 41.9
comp=Z,92nm,1.4s
GNW IAMs_20 IAMs_20 14 29 03.1
comp=Z,4µm,19.0s
**S54A Dingess, Beckl 53.94 282** IAMs_20 IAMs_20 14 28 40.4
comp=Z,6µm,18.0s
**BLO Bloomington 53.99 287** IAmb IAmb 14 06 37.4
comp=Z,65nm,0.8s
BLO IAMs_20 IAMs_20 14 29 01.7
comp=Z,5µm,18.0s
**E09A Wood Farm, Sta 54.04 317** IAMs_20 IAMs_20 14 29 25.3
comp=Z,7µm,21.0s
**D05A Enumclaw 54.06 320** IAMs_20 IAMs_20 14 29 08.0
comp=Z,3µm,18.0s
**DLMT Dillon 54.09 312** IAmb IAmb 14 06 56.1
comp=Z,56nm,1.1s
**BHK Bhakra 54.13 102** *e*P **P** **14 06 36.6 +1.4**
BHK IAmb IAmb 14 06 43.5
comp=Z,99nm,0.7s
**N38A Joes South For 54.13 294** IAmb IAmb 14 06 38.6
comp=Z,72nm,0.9s
**T57A Hurt 54.16 279** IAmb IAmb 14 06 40.2
comp=Z,97nm,1.6s
**NLWA Neilton Lookou 54.18 322** IAmb IAmb 14 07 02.3
comp=Z,48nm,1.1s
NLWA IAMs_20 IAMs_20 14 30 59.1
comp=Z,4µm,18.0s
**YMP Mirror Lake Pl 54.20 310** IAmb IAmb 14 06 45.2
comp=Z,99nm,1.1s
**BTO Baotou 54.20 67** *e*P **P** **14 06 33.5 -2.3**
BTO pP **pP** **14 06 37.8 +1.5**
BTO sP **pwP** **14 06 40.6 +0.5**
BTO PP **PP** **14 08 42.2 +5.2**
BTO S **S** **14 14 09.7 -3.4**
BTO SS **SKiKP** **14 17 46.9 -0.2**
BTO pmax pmax
comp=Z,12nm,0.5s
BTO pmax pmax
comp=Z,1µm,9.3s
BTO LR LR
comp=Z,3µm,14.0s
BTO LR LR
comp=Z,10µm,18.2s
BTO LR LR
comp=Z,2µm,15.1s
**E08A Dider Farm, El 54.22 318** IAmb IAmb 14 06 44.2
comp=Z,75nm,1.3s
E08A IAMs_20 IAMs_20 14 28 57.2
comp=Z,7µm,21.0s
**BLA Blacksburg 54.26 280** P **P** **14 06 35.1 -1.1**
baz=19
BLA S **S** **14 14 17.1 +3.2**
baz=19
**R50A Paris 54.27 284** IAmb IAmb 14 06 39.5
comp=Z,65nm,1.0s
R50A IAMs_20 IAMs_20 14 29 23.1
comp=Z,6µm,18.0s
**YHL Hebgen Lake 54.30 311** IAmb IAmb 14 06 57.0
comp=Z,115nm,1.1s
**E07A Sunnyside 54.30 318** IAmb IAmb 14 06 44.8
comp=Z,135nm,1.7s
E07A IAMs_20 IAMs_20 14 29 02.3
comp=Z,4µm,21.0s
**P43A Skaggs, Pawnee 54.30 290** IAMs_20 IAMs_20 14 28 23.7
comp=Z,4µm,22.0s
**HHC Hu-ho-hao-te 54.34 65** *e*P **P** **14 06 37.4 +0.6**
HHC sP pwP 14 06 45.0 +3.9
HHC PcP **PcP** **14 07 37.8 -2.9**
HHC PP **PP** **14 08 40.7 +2.4**
HHC S **S** **14 14 14.5 -0.5**
HHC sS sS 14 14 20.3 +4.3
HHC pmax pmax
comp=Z,16nm,0.9s
HHC pmax pmax
comp=Z,400nm,5.0s
HHC LR LR
comp=Z,3µm,16.2s
HHC LR LR
comp=Z,4µm,15.8s
HHC LR LR
comp=Z,4µm,14.9s
**MXC Moxie City 54.36 319** IAmb IAmb 14 06 48.5
comp=Z,93nm,1.8s
**SHME Shamm 54.37 125** *i* P **P** **14 06 36.2 -0.8**
SNR=9.0
**SHME Shamm 54.37 125** P **P** **14 06 36.5 -0.5**
SNR=9.1
SHME S **S** **14 14 16.6 +1.3**
**F10A Beach Ranch, E 54.39 316** IAMs_20 IAMs_20 14 29 37.6
comp=Z,5µm,22.0s
**YHB Horse Butte 54.40 311** IAmb IAmb 14 06 54.3
comp=Z,116nm,1.3s
**HAWA Hanford 54.40 318** IAmb IAmb 14 06 45.8
comp=Z,97nm,1.5s
HAWA IAMs_20 IAMs_20 14 29 05.0
comp=Z,5µm,21.0s
**WISH Wishkah 54.43 322** IAMs_20 IAMs_20 14 29 32.7
comp=Z,3µm,19.0s
**LON Longmire 54.45 320** IAmb IAmb 14 06 52.5
comp=Z,125nm,1.6s
LON IAMs_20 IAMs_20 14 29 20.4
comp=Z,4µm,19.0s
**GOMU GeErMu 54.47 83** P **P** **14 06 38.7 +0.6**
GOMU pmax pmax
comp=Z,45nm,0.9s
GOMU LR LR
comp=Z,4µm,16.2s
GOMU LR LR
comp=Z,7µm,16.1s
GOMU LR LR
comp=Z,11µm,16.6s
**R49A Shelbyville 54.48 285** IAMs_20 IAMs_20 14 28 56.6
comp=Z,5µm,19.0s
**KLP Kalpa 54.50 100** *e*P **P** **14 06 39.1 +0.8**
KLP IAmb IAmb 14 06 46.3
comp=Z,302nm,1.5s
**SMRA Abu-Samra 54.52 131** P **P** **14 06 37.8 -0.3**
SMRA S **S** **14 14 18.9 +1.5**
**BANOM Banah 54.52 125** P **P** **14 06 38.9 +0.7**
**V61A Roper 54.59 276** IAMs_20 IAMs_20 14 28 37.6
comp=Z,5µm,20.0s
**SMLA Simla 54.60 102** *e*P **P** **14 06 39.4 +0.8**
SMLA IAmb IAmb 14 06 46.7
comp=Z,137nm,1.1s
**TRNA Turayna 54.61 131** P **P** **14 06 39.0 +0.2**
TRNA S **S** **14 14 17.4 -1.2**
**H17A Grant Village 54.61 310** IAmb IAmb 14 06 48.7
comp=Z,63nm,1.1s
**H17A Grant Village 54.61 310** P **P** **14 06 37.9 -1.0**
baz=17,SNR=19
H17A S **S** **14 14 25.3 +6.5**
baz=17
**N35A Tabor 54.65 296** IAmb IAmb 14 06 46.4
comp=Z,74nm,0.8s
**S51A Beattyville 54.69 284** IAMs_20 IAMs_20 14 28 43.1
comp=Z,4µm,19.0s
**RAYN Ar Rayn 54.70 138** P **P** **14 06 39.1 -0.5**
RAYN IAmb IAmb 14 06 57.8
comp=Z,102nm,1.2s
**RAYN Ar Rayn 54.70 138** *i* P **P** **14 06 39.5 -0.1**
SNR=34
**RAYN Ar Rayn 54.70 138** P **P** **14 06 40.0 +0.5**
RAYN S **S** **14 14 25.0 +5.0**
**RAYN Ar Rayn 54.70 138** P **P** **14 06 39.8 +0.3**
**BGNE Belgrade 54.73 298** P **P** **14 06 38.4 -1.1**
baz=18
BGNE S **S** **14 14 20.4 +0.4**
baz=18
**JRN Qarnain Island 54.74 129** P **P** **14 06 39.5 -0.2**
JRN S **S** **14 14 21.0 +0.6**
**MDJ Mudanjiang 54.76 49** P **P** **14 06 40.1 +0.5**
**MDJ Mudanjiang 54.76 49** P **P** **14 06 38.4 -1.2**
MDJ PP **PP** **14 08 41.8 0.0**
MDJ S **S** **14 14 18.6 -1.7**
MDJ pmax pmax
comp=Z,23nm,1.2s
MDJ pmax pmax
comp=Z,540nm,6.2s
MDJ LR LR
comp=Z,4µm,16.5s
MDJ LR LR
comp=Z,2µm,16.5s
MDJ LR LR
comp=Z,4µm,17.2s
**MDJ Mudanjiang 54.76 49** IAMs_20 IAMs_20 14 33 20.5
comp=Z,2µm,18.0s
**UMQ Umm Al-Quwin 54.77 126** P **P** **14 06 41.1 +1.2**
UMQ S **S** **14 14 24.3 +3.6**
**YPP Pitchstone Pla 54.78 310** IAmb IAmb 14 07 14.0
comp=Z,126nm,1.3s
**OLIL Olney 54.80 288** IAMs_20 IAMs_20 14 29 00.3
comp=Z,3µm,20.0s
**WCI Wyandotte Cave 54.82 286** P **P** **14 06 39.1 -1.1**
WCI IAmb IAmb 14 06 43.4
comp=Z,61nm,0.9s
**WCI Wyandotte Cave 54.82 286** IAMs_20 IAMs_20 14 28 57.7
comp=Z,4µm,21.0s
**WCI Wyandotte Cave 54.82 286** P **P** **14 06 38.7 -1.4**
baz=19
WCI S **S** **14 14 19.0 -2.2**
baz=19
WCI S S 14 14 21.7 +0.4
baz=19
**WCI Wyandotte Cave 54.82 286** P **P** **14 06 39.1 -1.1**
WCI pmax pmax
comp=Z,61nm,0.9s
**YSS Yuzh-Sakhalins 54.87 37** P **P** **14 06 43.6 +3.2**
**YSS Yuzh-Sakhalins 54.87 37** P **P** **14 06 41.1 +0.8**
**YSS Yuzh-Sakhalins 54.87 37** *e*P **P** **14 06 37.9 -2.5**
YSS *e*S **S** **14 14 14.5 -7.2**
YSS *e*PS **PnS** **14 14 31.6 +1.5**
YSS pmax pmax
comp=Z,30nm,1.3s
YSS pmax pmax
comp=Z,600nm,8.7s
YSS MLR MLR
comp=N,1µm,16.0s
YSS MLR MLR
comp=Z,2µm,16.0s
**Q44A Meyer Farm, Va 54.88 289** IAMs_20 IAMs_20 14 29 15.2
comp=Z,3µm,19.0s
**E03A Lebam 54.95 321** IAMs_20 IAMs_20 14 29 49.5
comp=Z,4µm,19.0s
**F07A Phinny Hill Vi 54.95 318** IAMs_20 IAMs_20 14 29 32.6
comp=Z,5µm,20.0s
**MASF Masafi 55.03 125** P **P** **14 06 42.2 +0.4**
SNR=30
MASF S **S** **14 14 26.7 +2.3**
**MSFE Esma-Masafi 55.04 125** *i* P **P** **14 06 41.8 -0.1**
SNR=24
**U56A King 55.07 280** IAmb IAmb 14 06 50.0
comp=Z,59nm,1.0s
**RADR Rader Ridge 55.11 321** IAMs_20 IAMs_20 14 30 05.7
comp=Z,4µm,19.0s
**MDH Madha 55.13 125** *i* P **P** **14 06 42.2 -0.3**
SNR=16
**MDH Madha 55.13 125** P **P** **14 06 43.0 +0.5**
SNR=17
MDH S **S** **14 14 17.3 -8.3**
**IMW Indian Meadow 55.16 310** IAmb IAmb 14 06 52.1
comp=Z,62nm,0.9s
**V58A Windy Hill, Pi 55.26 279** IAmb IAmb 14 06 47.1
comp=Z,56nm,1.1s
V58A IAMs_20 IAMs_20 14 28 38.3
comp=Z,7µm,21.0s
**U54A Nelsons Funny 55.28 281** IAmb IAmb 14 06 47.2
comp=Z,77nm,1.1s
**NAZ Nazwa, Dubai 55.29 126** *i* P **P** **14 06 43.4 -0.3**
SNR=6.7
**NAZ Nazwa, Dubai 55.29 126** P **P** **14 06 44.1 +0.4**
SNR=12
NAZ P **P** **14 06 44.1 +0.4**
SNR=12
NAZ S **S** **14 14 28.6 +0.8**
NAZ S **S** **14 14 28.6 +0.8**
**F04D Rainier, OR 55.30 321** IAMs_20 IAMs_20 14 29 49.9
comp=Z,3µm,20.0s
**P38A Dawn 55.31 293** IAmb IAmb 14 06 50.5
comp=Z,177nm,1.9s
**F04A Amboy 55.35 320** IAMs_20 IAMs_20 14 29 49.1
comp=Z,3µm,20.0s
**SLWR Sila 55.35 131** P **P** **14 06 44.1 0.0**
SLWR P **P** **14 06 44.1 0.0**
SLWR S **S** **14 14 27.5 -1.1**
SLWR S **S** **14 14 27.5 -1.1**
**G08A Pilot Rock 55.37 317** IAmb IAmb 14 07 17.0
comp=Z,104nm,1.5s
G08A IAMs_20 IAMs_20 14 29 43.5
comp=Z,6µm,22.0s
**LOHW Long Hollow 55.37 310** IAmb IAmb 14 07 03.0
comp=Z,76nm,1.4s
**USIN University of 55.42 287** IAMs_20 IAMs_20 14 29 47.6
comp=Z,3µm,19.0s
**FXWY Fox Creek 55.43 310** IAmb IAmb 14 06 55.7
comp=Z,83nm,1.4s
**K22A Casper 55.43 306** IAmb IAmb 14 06 53.6
comp=Z,90nm,0.9s
K22A IAMs_20 IAMs_20 14 30 26.0
comp=Z,6µm,19.0s
**K22A Casper 55.43 306** P **P** **14 06 42.9 -1.8**
baz=17,SNR=17
K22A S **S** **14 14 28.6 -1.1**
baz=17
**SLM Saint Louis 55.43 290** IAmb IAmb 14 06 47.2
comp=Z,64nm,0.9s
SLM IAMs_20 IAMs_20 14 29 51.0
comp=Z,4µm,18.0s
**UOSS Minazif 55.45 126** P **P** **14 06 43.1 -1.8**
UOSS IAmb IAmb 14 06 58.2
comp=Z,46nm,0.9s
**UOSS Minazif 55.45 126** IAMs_20 IAMs_20 14 34 18.0
comp=Z,2µm,22.0s
**UOSS Minazif 55.45 126** *i* P **P** **14 06 44.5 -0.3**
SNR=12
**UOSS Minazif 55.45 126** P **P** **14 06 45.0 +0.1**
UOSS P **P** **14 06 45.0 +0.1**
**CNNC Cliffs of the 55.46 277** IAMs_20 IAMs_20 14 29 12.6
comp=Z,4µm,19.0s
**CNNC Cliffs of the 55.46 277** P **P** **14 06 43.7 -1.1**
baz=19
**BMO Blue Mountains 55.49 316** IAmb IAmb 14 06 53.1
comp=Z,83nm,1.4s
BMO IAMs_20 IAMs_20 14 30 22.6
comp=Z,6µm,21.0s
**FAQ Al Faqa, Dubai 55.51 126** P **P** **14 06 45.0 -0.3**
**FAQ Al Faqa, Dubai 55.51 126** P **P** **14 06 45.1 -0.2**
FAQ S **S** **14 14 32.8 +2.1**
**F03A Seaside 55.55 321** IAMs_20 IAMs_20 14 30 08.3
comp=Z,4µm,19.0s
**HATD Hatta, Dubai 55.55 126** *i* P **P** **14 06 45.7 +0.2**
SNR=15
**HATD Hatta, Dubai 55.55 126** P **P** **14 06 46.0 +0.4**
SNR=35
HATD P **P** **14 06 46.0 +0.4**
SNR=35
HATD S **S** **14 14 31.4 +0.1**
HATD S **S** **14 14 31.4 +0.1**
**TPAW Teton Pass 55.56 310** IAmb IAmb 14 07 03.8
comp=Z,86nm,1.5s
**AJN Ajban 55.56 127** P **P** **14 06 45.5 -0.1**
AJN S **S** **14 14 31.6 +0.3**
**ASUD Al Ashush, Dub 55.57 127** P **P** **14 06 45.3 -0.4**
**ASUD Al Ashush, Dub 55.57 127** P **P** **14 06 46.0 +0.3**
ASUD P **P** **14 06 46.0 +0.3**
ASUD S **S** **14 14 33.3 +1.7**
ASUD S **S** **14 14 33.3 +1.7**
**T50A Nancy 55.59 284** IAmb IAmb 14 06 49.0
comp=Z,62nm,1.1s
T50A IAMs_20 IAMs_20 14 29 13.1
comp=Z,4µm,20.0s
**DDI Dehra Dun 55.60 101** *e*P **P** **14 06 47.2 +1.2**
**USA0B Ussuriysk Arra 55.63 47** ||*e*P **P** **14 06 45.9 0.0**
**USRK Ussuriysk Ar. 55.63 47** P **P** **14 06 45.8 -0.1**
comp=Z,8.4nm,0.8s,baz=347,slow=5.9,SNR=10
USRK PcP **PcP** **14 07 44.5 -0.8**
comp=Z,9.7nm,0.9s,baz=328,slow=5.1,SNR=2.3
USRK LR LR 14 34 02.6
comp=Z,2µm,18.2s,baz=343,slow=40
comp=Z,8.4nm,0.8s
**ASHO Ashiyiah 55.67 126** *i* P **P** **14 06 46.2 -0.3**
SNR=16
**ASHO Ashiyiah 55.67 126** P **P** **14 06 47.0 +0.5**
SNR=16
ASHO S **S** **14 14 34.5 +1.5**
**W59A Clinton 55.67 278** IAMs_20 IAMs_20 14 28 27.2
comp=Z,7µm,22.0s
**TZTN Tazewell 55.71 283** IAmb IAmb 14 06 50.4
comp=Z,85nm,1.3s
TZTN IAMs_20 IAMs_20 14 28 42.2
comp=Z,3µm,22.0s
**TZTN Tazewell 55.71 283** P **P** **14 06 46.2 -0.4**
baz=19,SNR=16
TZTN S **S** **14 14 32.9 -0.3**
baz=19
**G06A Carlson Farm, 55.72 319** IAmb IAmb 14 07 00.0
comp=Z,75nm,1.5s
G06A IAMs_20 IAMs_20 14 29 46.8
comp=Z,4µm,22.0s
**HOOD Mount Hood Mea 55.81 319** IAMs_20 IAMs_20 14 30 55.3
comp=Z,4µm,19.0s
**G05A Wamic 55.83 319** IAMs_20 IAMs_20 14 31 03.8
comp=Z,2µm,20.0s
**BW06 Boulder Array 55.96 308** P **P** **14 06 47.5 -1.1**
baz=16,SNR=64
BW06 S **S** **14 14 36.2 -0.7**
baz=16
**PD31 Pinedale Array 55.96 308** IAmb IAmb 14 07 06.5
comp=Z,66nm,1.2s
**PDAR Pinedale Array 55.96 308** P **P** **14 06 47.6 -1.1**
**PDAR Pinedale Array 55.96 308** P **P** **14 06 48.0 -0.6**
comp=Z,4.9nm,1.0s,baz=39,slow=7.6,SNR=16
PDAR PP **PP** **14 08 53.1 +0.2**
comp=Z,2.6nm,0.9s,baz=37,slow=9.1,SNR=2.0
PDAR LR LR 14 31 26.5
comp=Z,5µm,18.5s,baz=358,slow=37
comp=Z,4.9nm,1.0s
**OGNE Ogallala 56.06 301** P **P** **14 06 48.7 -0.5**
baz=17,SNR=7.7
OGNE S **S** **14 14 39.6 +1.6**
baz=17
**S44A Carbondale 56.08 289** IAMs_20 IAMs_20 14 29 41.0
comp=Z,3µm,20.0s
**W57A Gilead 56.09 279** IAmb IAmb 14 06 52.8
comp=Z,52nm,0.9s
W57A IAMs_20 IAMs_20 14 29 15.4
comp=Z,7µm,20.0s
**FVM French Village 56.10 290** IAmb IAmb 14 06 52.1
comp=Z,65nm,0.9s
FVM IAMs_20 IAMs_20 14 30 20.6
comp=Z,4µm,18.0s
**HLID Hailey 56.18 313** IAmb IAmb 14 07 08.1
comp=Z,80nm,1.4s
**HLID Hailey 56.18 313** P **P** **14 06 48.9 -1.2**
baz=16,SNR=38
HLID S **S** **14 14 40.9 +1.3**
baz=16
**SNY Shenyang 56.18 55** ||P **P** **14 06 53.5 +3.6**
SNY pmax pmax
comp=Z,15nm,1.2s
SNY pmax pmax
comp=Z,310nm,8.7s
SNY LR LR
comp=Z,970nm,16.5s
SNY LR LR
comp=Z,1µm,17.0s

SNY LR LR
comp=Z,1µm,24.2s
**G03D McMinnville, O 56.19 321** IAMs_20 IAMs_20 14 30 53.4
comp=Z,3µm,20.0s
**T47A Sharon Grove 56.20 287** IAmb IAmb 14 06 53.0
comp=Z,59nm,0.9s
T47A IAMs_20 IAMs_20 14 30 11.3
comp=Z,4µm,19.0s
**ALNE Al Ain 56.21 126** P **P** **14 06 54.1 +3.8**
SNR=13
ALNE S **S** **14 14 38.9 -1.3**
**BJI Beijing 56.21 62** P **P** **14 06 50.5 +0.4**
BJI pmax pmax
comp=Z,8.0nm,1.0s
BJI pmax pmax
comp=Z,260nm,4.5s
BJI LR LR
comp=Z,2µm,16.7s
BJI LR LR
comp=Z,820nm,14.9s
BJI LR LR
comp=Z,2µm,16.0s
**BJT Baijiatuao 56.23 62** P **P** **14 06 53.4 +3.1**
**BJT Baijiatuao 56.23 62** IAMs_20 IAMs_20 14 34 30.7
comp=Z,3µm,21.0s
**CCM Cathedral Cave 56.23 291** P **P** **14 06 48.2 -2.1**
CCM IAmb IAmb 14 06 56.9
comp=Z,66nm,0.8s
**CCM Cathedral Cave 56.23 291** P **P** **14 06 48.8 -1.6**
baz=18
CCM S **S** **14 14 37.2 -3.0**
baz=18
**CCM Cathedral Cave 56.23 291** P **P** **14 06 48.2 -2.1**
CCM pmax pmax
comp=Z,66nm,0.8s
CCM MLR MLR
comp=Z,8µm,18.0s
**R40A Maddies Statio 56.27 292** IAmb IAmb 14 06 53.1
comp=Z,66nm,1.0s
**HEBO Mount Hebo 56.27 321** IAMs_20 IAMs_20 14 30 31.6
comp=Z,3µm,20.0s
**AHID Auburn Hatcher 56.28 310** IAmb IAmb 14 07 02.4
comp=Z,179nm,1.9s
**SOHO SOHO 56.30 125** *i* P **P** **14 06 50.2 -0.7**
SNR=15
**SOHO SOHO 56.30 125** P **P** **14 06 50.7 -0.3**
SOHO P **P** **14 06 50.7 -0.3**
SOHO S **S** **14 14 40.0 -1.2**
SOHO S **S** **14 14 40.0 -1.2**
**U49A Red Boiling Sp 56.31 285** IAmb IAmb 14 07 02.2
comp=Z,87nm,1.6s
U49A IAMs_20 IAMs_20 14 30 04.2
comp=Z,4µm,18.0s
**V53A Saluda 56.34 282** IAmb IAmb 14 06 54.9
comp=Z,54nm,1.1s
V53A IAMs_20 IAMs_20 14 30 23.0
comp=Z,4µm,18.0s
**V52A Sevierville 56.38 283** IAmb IAmb 14 06 55.0
comp=Z,51nm,1.1s
V52A IAMs_20 IAMs_20 14 29 39.1
comp=Z,2µm,21.0s
**KMSC Kings Mountain 56.46 280** IAmb IAmb 14 06 59.8
comp=Z,54nm,0.9s
**KMSC Kings Mountain 56.46 280** P **P** **14 06 50.2 -1.8**
baz=19,SNR=7.6
KMSC S **S** **14 14 43.1 -0.1**
baz=19
**PHWY Pilot Hill 56.49 304** IAmb IAmb 14 07 07.4
comp=Z,104nm,1.5s
PHWY IAMs_20 IAMs_20 14 30 57.0
comp=Z,6µm,20.0s
**X58A Rowland 56.49 278** IAMs_20 IAMs_20 14 29 44.8
comp=Z,7µm,20.0s
**RWWY Rawlins 56.50 306** IAmb IAmb 14 07 00.2
comp=Z,88nm,1.2s
**H04A Detroit Lake 56.52 320** IAMs_20 IAMs_20 14 31 17.1
comp=Z,4µm,19.0s
**KSU1 Kansas State U 56.55 296** IAmb IAmb 14 06 55.5
comp=Z,70nm,1.0s
**KSU1 Kansas State U 56.55 296** P **P** **14 06 51.0 -1.6**
baz=18,SNR=6.2
KSU1 S **S** **14 14 44.7 +0.4**
baz=18
**CGM3 Cape Girardeau 56.55 289** IAmb IAmb 14 06 55.5
comp=Z,86nm,0.9s
CGM3 IAMs_20 IAMs_20 14 29 44.6
comp=Z,4µm,22.0s
**T45A Paducah 56.56 288** IAMs_20 IAMs_20 14 30 14.0
comp=Z,3µm,20.0s
**TKL Tuckaleechee C 56.60 283** LR LR 14 30 05.9
comp=Z,2µm,19.6s,baz=22,slow=35
**I07A Izee 56.63 317** IAmb IAmb 14 07 21.9
comp=Z,63nm,1.2s
I07A IAMs_20 IAMs_20 14 30 35.0
comp=Z,5µm,22.0s
**VLA Vladivostok 56.65 47** *i* P **P** **14 06 55.0 +1.8**
VLA pmax pmax
comp=Z,108nm,1.7s
**BIRD Birdtown, Kers 56.70 279** IAmb IAmb 14 07 05.7
comp=Z,116nm,1.5s
**I05D Terrebonne, OR 56.71 319** IAmb IAmb 14 07 03.1
comp=Z,119nm,1.8s
I05D IAMs_20 IAMs_20 14 30 30.1
comp=Z,3µm,21.0s
**Y60A Bolivia 56.71 277** IAMs_20 IAMs_20 14 29 50.8
comp=Z,3µm,19.0s
**MZR Muzera 56.75 129** *i* P **P** **14 06 53.8 -0.4**
SNR=15
**MZR Muzera 56.75 129** P **P** **14 06 54.3 +0.1**
SNR=12
MZR S **S** **14 14 48.1 +0.8**
**H04D Lebanon 56.77 320** IAmb IAmb 14 07 08.7
comp=Z,53nm,1.1s
H04D IAMs_20 IAMs_20 14 31 24.7
comp=Z,2µm,20.0s
**COR Corvallis 56.81 321** IAMs_20 IAMs_20 14 31 22.7
comp=Z,3µm,21.0s
**CLTN Cedars of Leba 56.85 285** IAmb IAmb 14 07 06.0
comp=Z,128nm,1.6s
CLTN IAMs_20 IAMs_20 14 30 29.5
comp=Z,5µm,18.0s
**BRIGG Briggsdale 56.92 303** IAMs_20 IAMs_20 14 31 27.6
comp=Z,4µm,20.0s
**LZH Lanzhou 56.93 74** *e*P **P** **14 06 55.6 +0.1**
LZH pP pwP 14 07 00.6 +0.8
LZH PP **PP** **14 09 00.9 -0.7**
LZH S **S** **14 14 46.7 -3.0**
LZH pmax pmax
comp=Z,31nm,1.3s
LZH pmax pmax
comp=Z,710nm,4.1s
LZH LR LR
comp=Z,6µm,16.2s
LZH LR LR
comp=Z,4µm,17.2s
LZH LR LR
comp=Z,8µm,17.5s
**NDI New Delhi 56.94 103** *e*P **P** **14 06 55.7 +0.3**
NDI IAmb IAmb 14 07 02.9
comp=Z,68nm,0.8s
**NPLP NPLP New Delhi 56.97 103** *e*P **P** **14 06 56.1 +0.4**
**N23A Red Feather La 56.98 305** IAMs_20 IAMs_20 14 31 14.1
comp=Z,5µm,20.0s
**N23A Red Feather La 56.98 305** P **P** **14 06 55.4 -0.6**
baz=17,SNR=17
N23A S **S** **14 14 49.3 -1.2**
baz=17
**CPCT Cooper Cave 56.99 284** IAmb IAmb 14 07 07.6
comp=Z,117nm,1.8s
CPCT IAMs_20 IAMs_20 14 30 39.2
comp=Z,4µm,18.0s
**LGTI Lohaghat 57.00 99** *e*P **P** **14 06 56.1 +0.3**
LGTI IAmb IAmb 14 07 05.4
comp=Z,114nm,1.3s
**HOQ Hoqain 57.01 125** P **P** **14 06 55.8 -0.2**
**BG3 Lake Jocassee 57.01 282** IAmb IAmb 14 06 59.4
comp=Z,48nm,1.0s
BG3 IAMs_20 IAMs_20 14 30 26.8
comp=Z,5µm,18.0s
**ARQ Araqi 57.07 126** P **P** **14 06 56.7 +0.2**
SNR=12
ARQ P **P** **14 06 56.7 +0.2**
SNR=12
ARQ S **S** **14 14 52.9 +1.4**
ARQ S **S** **14 14 52.9 +1.4**
**S39A Bolivar 57.09 292** IAmb IAmb 14 06 59.1
comp=Z,66nm,1.1s

**J08A Circle Bar Ran 57.15 316** IAMs_20 IAMs_20 14 31 25.5
comp=Z,6µm,21.0s
**HICK Hickman 57.16 288** IAMs_20 IAMs_20 14 30 43.8
comp=Z,2µm,20.0s
**T42A Van Buren 57.17 290** IAmb IAmb 14 06 59.7
comp=Z,79nm,0.8s
**PINE Pine Mountain 57.17 318** IAmb IAmb 14 07 06.9
comp=Z,104nm,1.9s
PINE IAMs_20 IAMs_20 14 30 52.2
comp=Z,4µm,20.0s
**W52A Murphy 57.18 283** IAMs_20 IAMs_20 14 29 38.1
comp=Z,2µm,21.0s
**PARMO Parma 57.18 289** IAMs_20 IAMs_20 14 30 25.2
comp=Z,4µm,22.0s
**WVT Waverly 57.20 287** P **P** **14 06 55.4 -1.8**
WVT IAmb IAmb 14 07 04.1
comp=Z,118nm,1.7s
**WVT Waverly 57.20 287** IAMs_20 IAMs_20 14 30 51.7
comp=Z,4µm,18.0s
**WVT Waverly 57.20 287** P **P** **14 06 55.7 -1.5**
baz=18
WVT S **S** **14 14 51.5 -1.4**
baz=18
**WVT Waverly 57.20 287** P **P** **14 06 55.4 -1.8**
WVT pmax pmax
comp=Z,118nm,1.7s
**PBMO Poplar Bluff 57.24 289** IAMs_20 IAMs_20 14 30 46.8
comp=Z,4µm,19.0s
**BIDO Bidbid 57.24 124** P **P** **14 06 57.7 0.0**
BIDO S **S** **14 14 58.3 +4.6**
**UTMT University of 57.26 288** IAMs_20 IAMs_20 14 30 33.1
comp=Z,3µm,21.0s
**KUDL Kundal 57.26 103** *e*P **P** **14 06 57.8 +0.1**
KUDL IAmb IAmb 14 07 05.0
comp=Z,102nm,1.3s
**Y57A Sumter 57.27 279** IAMs_20 IAMs_20 14 30 00.6
comp=Z,7µm,20.0s
**UMZA Um Al Zommool 57.38 127** P **P** **14 06 58.4 -0.3**
UMZA P **P** **14 06 58.4 -0.3**
UMZA S **S** **14 14 57.4 +1.8**
UMZA S **S** **14 14 57.4 +1.8**
**PVMO Portageville 57.40 289** IAMs_20 IAMs_20 14 30 32.1
comp=Z,4µm,22.0s
**I04A Tendick Farm, 57.42 320** IAMs_20 IAMs_20 14 30 55.0
comp=Z,3µm,20.0s
**W50A Signal Mountai 57.44 284** IAmb IAmb 14 07 06.2
comp=Z,53nm,1.0s
**GLAT Glass 57.44 288** IAMs_20 IAMs_20 14 31 02.0
comp=Z,3µm,19.0s
**HWUT Hardware Ranch 57.49 310** IAmb IAmb 14 07 10.8
comp=Z,68nm,1.4s
**TIY Taiyuan 57.53 66** ⇑P **P** **14 07 01.9 +2.3**
TIY pmax pmax
comp=Z,480nm,4.3s
TIY LR LR
comp=Z,5µm,17.2s
TIY LR LR
comp=Z,3µm,15.8s
TIY LR LR
comp=Z,3µm,16.5s
**CBKS Cedar Bluff 57.56 299** P **P** **14 06 58.9 -1.0**
baz=17
CBKS S **S** **14 14 58.8 +1.0**
baz=17
**SWET Sewanee 57.58 285** IAmb IAmb 14 07 06.4
comp=Z,43nm,0.9s
SWET IAMs_20 IAMs_20 14 30 24.7
comp=Z,4µm,20.0s
**ASAJ Asahikawa 57.61 38** LR LR 14 34 35.2
comp=Z,2µm,18.5s,baz=353,slow=39
**JKA Kamikawa-asahi 57.61 38** IAMs_20 IAMs_20 14 34 42.0
comp=Z,2µm,20.0s
**WSAR Wadi Sarin 57.63 123** LR LR 14 36 31.8
comp=Z,1µm,18.1s,baz=348,slow=41
**WSAR Wadi Sarin 57.63 123** P **P** **14 07 01.1 +0.7**
WSAR S **S** **14 15 00.5 +1.6**
**LNXT Lenox 57.65 288** IAMs_20 IAMs_20 14 31 08.6
comp=Z,3µm,19.0s
**SMDO Samad 57.67 124** P **P** **14 07 01.0 +0.1**
SNR=11
SMDO S **S** **14 14 59.8 +0.1**
**I03D Drain, OR 57.68 320** IAMs_20 IAMs_20 14 31 14.7
comp=Z,2µm,22.0s
**J05D Fort Rock, OR 57.71 318** IAmb IAmb 14 07 30.7
comp=Z,75nm,1.2s
J05D IAMs_20 IAMs_20 14 31 46.6
comp=Z,3µm,19.0s
**PEBM Pemiscott Bayo 57.73 289** IAMs_20 IAMs_20 14 30 40.7
comp=Z,4µm,22.0s
**HALT Halls 57.79 288** IAMs_20 IAMs_20 14 31 12.3
comp=Z,2µm,19.0s
**GNAR Gosnell 57.91 289** IAMs_20 IAMs_20 14 31 08.5
comp=Z,3µm,20.0s
**X51A Calhoun 57.92 284** IAmb IAmb 14 07 09.7
comp=Z,52nm,0.9s
X51A IAMs_20 IAMs_20 14 30 35.7
comp=Z,3µm,20.0s
**TCUT Toone Canyon 57.93 309** IAmb IAmb 14 07 13.8
comp=Z,67nm,1.3s
**ISCO Idaho Springs 57.96 304** IAmb IAmb 14 07 18.6
comp=Z,59nm,1.2s
**ISCO Idaho Springs 57.96 304** P **P** **14 07 01.9 -1.0**
baz=17
ISCO S **S** **14 15 05.3 +1.8**
baz=17
**KSCO Kaye Shedlock' 58.04 301** P **P** **14 07 02.1 -1.2**
baz=17
KSCO S **S** **14 15 04.8 +0.6**
baz=17
**WVOR Wild Horse Val 58.07 316** P **P** **14 07 06.1 +2.7**
**NHSC New Hope 58.08 279** P **P** **14 07 02.4 -1.0**
baz=18
**LCAR Lake Charles 58.09 290** IAmb IAmb 14 07 10.6
comp=Z,43nm,0.8s
LCAR IAMs_20 IAMs_20 14 31 40.4
comp=Z,5µm,19.0s
**FPAL Fort Paine 58.14 284** IAmb IAmb 14 07 10.7
comp=Z,60nm,0.9s
FPAL IAMs_20 IAMs_20 14 30 50.5
comp=Z,4µm,18.0s
**O20A White River Ci 58.21 306** P **P** **14 07 03.9 -0.6**
baz=16,SNR=28
O20A S **S** **14 15 08.1 +1.6**
baz=16
**J01E Myrtle Point 58.30 321** IAMs_20 IAMs_20 14 32 19.1
comp=Z,3µm,19.0s
**WBK Wadi Bani Khal 58.31 123** P **P** **14 07 05.8 +0.6**
WBK P **P** **14 07 05.8 +0.6**
**PLAL Pickwick Lake 58.35 287** IAmb IAmb 14 07 12.0
comp=Z,58nm,1.2s
PLAL IAMs_20 IAMs_20 14 31 06.1
comp=Z,4µm,20.0s
**JMDO Jabal Madar 58.35 124** P **P** **14 07 07.2 +1.7**
**AJM Ajmer 58.38 106** *e*P **P** **14 07 03.1 -2.5**
**HNS HongShan 58.38 64** ⇓P **P** **14 07 06.2 +0.8**
HNS PP **PP** **14 09 18.3 +4.2**
HNS pmax pmax
comp=Z,20nm,1.1s
HNS LR LR
comp=Z,4µm,15.6s
HNS LR LR
comp=Z,2µm,16.6s
HNS LR LR
comp=Z,6µm,17.1s
**Y52A Lilburn 58.38 283** IAmb IAmb 14 07 13.2
comp=Z,62nm,1.1s
Y52A IAMs_20 IAMs_20 14 32 37.6
comp=Z,4µm,18.0s
**BGU Big Grassy Mou 58.44 311** IAmb IAmb 14 07 17.6
comp=Z,90nm,1.8s
**K04D Chiloquin, OR 58.45 319** IAMs_20 IAMs_20 14 31 49.0
comp=Z,4µm,22.0s
**HBAR Harrisburg 58.46 289** IAMs_20 IAMs_20 14 31 33.0
comp=Z,4µm,19.0s
**FCAR Ozark Folk Cen 58.51 291** IAmb IAmb 14 07 09.2
comp=Z,68nm,0.9s
**DL2 Dalian 58.54 57** P **P** **14 07 08.8 +2.2**
DL2 S **S** **14 15 13.0 +2.6**
DL2 pmax pmax
comp=Z,440nm,5.9s
DL2 LR LR
comp=Z,2µm,25.9s
DL2 LR LR
comp=Z,5µm,22.7s
DL2 LR LR
comp=Z,5µm,22.8s
**U38A Gravette 58.54 293** IAmb IAmb 14 07 13.0

comp=Z,67nm,0.8s
**X48A Hartselle 58.59 286** IAmb IAmb 14 07 13.2
comp=Z,46nm,1.1s
X48A IAMs_20 IAMs_20 14 31 25.2
comp=Z,5µm,18.0s
**GOGA Godfrey 58.65 282** IAMs_20 IAMs_20 14 31 18.1
comp=Z,5µm,18.0s
**GOGA Godfrey 58.65 282** IAmb IAmb 14 07 10.6
comp=Z,53nm,1.1s
**GOGA Godfrey 58.65 282** P **P** **14 07 06.5 -0.9**
baz=18,SNR=18
GOGA S **S** **14 15 10.8 -1.1**
baz=18
**GOGA Godfrey 58.65 282** P **P** **14 07 06.8 -0.6**
**Q24A Divide 58.66 303** IAmb IAmb 14 07 23.0
comp=Z,92nm,1.3s
Q24A IAMs_20 IAMs_20 14 32 28.0
comp=Z,5µm,19.0s
**Q24A Divide 58.66 303** P **P** **14 07 06.7 -1.1**
baz=17,SNR=17
Q24A S **S** **14 15 11.8 -0.8**
baz=17
**KAN08 Anthony NE Sta 58.66 296** IAmb IAmb 14 07 14.9
comp=Z,88nm,1.0s
**HUMO Hull Mountain 58.67 320** IAMs_20 IAMs_20 14 33 16.0
comp=Z,3µm,21.0s
**MET Memphis–Engin 58.69 288** IAMs_20 IAMs_20 14 31 09.1
comp=Z,3µm,21.0s
**SMCO Snowmass 58.85 305** IAmb IAmb 14 07 20.9
comp=Z,76nm,1.4s
**JLN Jalan Bani Buh 58.85 123** P **P** **14 07 08.9 0.0**
**BLOK Blackwell 58.92 296** IAmb IAmb 14 07 12.6
comp=Z,73nm,0.9s
**L04D Klamath Falls 58.94 319** IAMs_20 IAMs_20 14 32 03.4
comp=Z,4µm,21.0s
**RLO Rose Lookout 58.96 293** IAmb IAmb 14 07 11.7
comp=Z,45nm,1.0s
**Y49A Blount Mountai 58.99 285** IAMs_20 IAMs_20 14 31 17.8
comp=Z,4µm,20.0s
**ELK Elko 59.06 313** LR LR 14 33 19.4
comp=Z,10µm,19.0s,baz=19,slow=37
**ELK Elko 59.06 313** P **P** **14 07 10.4 -0.1**
**DUG Dugway, Tooele 59.10 310** IAmb IAmb 14 07 44.0
comp=Z,105nm,1.8s
**DUG Dugway, Tooele 59.10 310** P **P** **14 07 09.6 -1.1**
baz=15,SNR=10
DUG S **S** **14 15 19.1 +1.1**
baz=15
**WHAR Wooly Hollow 59.12 291** IAmb IAmb 14 07 13.7
comp=Z,69nm,0.9s
**P18A Preston Nutter 59.12 308** IAmb IAmb 14 07 32.9
comp=Z,122nm,1.7s
**OXF Oxford 59.13 288** IAMs_20 IAMs_20 14 31 23.6
comp=Z,2µm,21.0s
**OXF Oxford 59.13 288** P **P** **14 07 09.3 -1.5**
baz=18
OXF S **S** **14 15 17.9 -0.3**
baz=18
**NLU North Lily Min 59.18 310** IAmb IAmb 14 07 23.3
comp=Z,128nm,2.0s
**L02F Cave Junction 59.25 320** IAmb IAmb 14 07 16.2
comp=Z,117nm,2.0s
L02F IAMs_20 IAMs_20 14 35 01.8
comp=Z,3µm,19.0s
**KBO Bosley Butte 59.27 321** IAMs_20 IAMs_20 14 32 59.9
comp=Z,3µm,20.0s
**QUOK Quay 59.36 295** IAmb IAmb 14 07 15.6
comp=Z,80nm,1.0s
**P17A Butcher Ranch, 59.37 308** IAmb IAmb 14 07 40.0
comp=Z,127nm,2.0s
**257A Skidaway Islan 59.38 279** IAMs_20 IAMs_20 14 31 04.0
comp=Z,6µm,22.0s
**TUL3 Leonard 59.39 294** IAmb IAmb 14 07 24.6
comp=Z,134nm,1.9s
**TUL3 Leonard 59.39 294** P **P** **14 07 10.5 -2.0**
baz=17
TUL3 S **S** **14 15 20.7 -0.9**
baz=17
**YBH Yreka Blue Hor 59.48 319** IAMs_20 IAMs_20 14 32 21.9
comp=Z,3µm,21.0s
**YBH Yreka Blue Hor 59.48 319** LR LR 14 32 33.4
comp=Z,4µm,21.4s,baz=14,slow=36
**KSXB Camp Six Broad 59.59 320** IAmb IAmb 14 07 46.8
comp=Z,85nm,1.4s
KSXB IAMs_20 IAMs_20 14 33 58.7
comp=Z,4µm,19.0s
**UALR University of 59.62 290** IAmb IAmb 14 07 17.2
comp=Z,61nm,0.9s
**TMUT Trail Mountain 59.64 309** IAmb IAmb 14 07 33.4
comp=Z,57nm,1.0s
**LSA Lhasa 59.65 89** P **P** **14 07 16.3 +1.3**
LSA S **S** **14 15 28.9 +2.9**
LSA pmax pmax
comp=Z,18nm,1.0s
LSA LR LR
comp=Z,3µm,21.2s
LSA LR LR
comp=Z,2µm,17.6s
LSA LR LR
comp=Z,5µm,22.3s
**LSA Lhasa 59.65 89** IAmb IAmb 14 07 27.6
comp=Z,39nm,1.0s
LSA IAMs_20 IAMs_20 14 36 32.2
comp=Z,6µm,20.0s
**MHTO MHTO 59.66 125** P **P** **14 07 15.3 +0.8**
SNR=6.1
**152A Waverly Hall 59.68 283** IAmb IAmb 14 07 17.4
comp=Z,40nm,1.1s
152A IAMs_20 IAMs_20 14 32 35.1
comp=Z,3µm,18.0s
**U32A Winter Ranch, 59.71 297** IAmb IAmb 14 07 22.7
comp=Z,65nm,0.9s
U32A IAMs_20 IAMs_20 14 32 53.0
comp=Z,5µm,19.0s
**Y45A Yeager Farm, C 59.78 288** IAMs_20 IAMs_20 14 31 52.8
comp=Z,3µm,20.0s
**KRMB Red Mountain 59.89 320** IAmb IAmb 14 07 26.6
comp=Z,93nm,1.5s
KRMB IAMs_20 IAMs_20 14 34 07.7
comp=Z,3µm,20.0s
**SDCO Great Sand Dun 59.90 303** P **P** **14 07 14.9 -1.5**
baz=16,SNR=21
SDCO S **S** **14 15 27.9 -0.8**
baz=16
**LRAL Lakeview Retre 59.92 285** P **P** **14 07 13.5 -2.7**
baz=18
LRAL S **S** **14 15 23.3 -5.1**
baz=18
**Q16A Castle Valley 60.00 309** IAmb IAmb 14 07 32.4
comp=Z,51nm,1.0s
**X40A Basin Creek Fa 60.02 291** IAmb IAmb 14 07 24.2
comp=Z,38nm,1.0s
X40A IAMs_20 IAMs_20 14 32 20.0
comp=Z,5µm,21.0s
**Z47A Carrollton 60.04 286** IAmb IAmb 14 07 23.0
comp=Z,45nm,0.8s
Z47A IAMs_20 IAMs_20 14 32 45.6
comp=Z,5µm,18.0s
**TIA Tai'an 60.08 62** P **P** **14 07 17.4 +0.1**
TIA PP **PP** **14 09 32.6 +3.3**
TIA S **S** **14 15 32.2 +1.7**
TIA SS **SS** **14 19 30.9 +4.5**
TIA pmax pmax
comp=Z,42nm,1.0s
TIA pmax pmax
comp=Z,550nm,4.3s
TIA LR LR
comp=Z,2µm,20.4s
TIA LR LR
comp=Z,5µm,21.8s
TIA LR LR
comp=Z,4µm,21.0s
**MIAR Mount Ida 60.15 292** P **P** **14 07 17.1 -0.7**
baz=17,SNR=47
MIAR S **S** **14 15 33.4 +2.1**
baz=17
**HATC Hat Creek Radi 60.15 318** IAMs_20 IAMs_20 14 32 30.6
comp=Z,3µm,22.0s
**XAN Xi'an 60.16 70** ⇑P **P** **14 07 17.2 -0.7**
XAN pP sP 14 07 22.2 +3.5
XAN S **S** **14 15 31.7 +0.2**
XAN SS **SS** **14 19 32.8 +5.0**
XAN pmax pmax
comp=Z,23nm,0.9s
XAN pmax pmax
comp=Z,690nm,4.8s
XAN LR LR
comp=Z,10µm,17.3s

XAN LR LR
comp=Z,4µm,14.5s
XAN LR LR
comp=Z,12µm,16.1s
**S22A 4UR Ranch, Cre 60.19 304** IAmb IAmb 14 07 34.4
comp=Z,57nm,1.1s
S22A IAMs_20 IAMs_20 14 33 22.5
comp=Z,4µm,19.0s
**S22A 4UR Ranch, Cre 60.19 304** P **P** **14 07 17.6 -0.8**
baz=16,SNR=26
S22A S **S** **14 15 33.6 +1.1**
baz=16
**T25A Trinidad 60.24 302** P **P** **14 07 16.8 -1.8**
baz=16
T25A S **S** **14 15 35.0 +2.1**
baz=16
**KRPM Rodgers 60.26 320** IAMs_20 IAMs_20 14 34 48.7
comp=Z,3µm,20.0s
**CCAR Cane Creek 60.30 290** IAMs_20 IAMs_20 14 32 58.4
comp=Z,5µm,18.0s
**FNO Franklin 60.40 295** IAMs_20 IAMs_20 14 33 07.2
comp=Z,5µm,19.0s
**KHMM Horse Mountain 60.49 320** IAMs_20 IAMs_20 14 34 38.6
comp=Z,3µm,19.0s
**RTBA Rita Blanca 60.53 300** IAmb IAmb 14 07 34.3
comp=Z,42nm,1.0s
**X37A Clayton 60.55 293** IAmb IAmb 14 07 28.1
comp=Z,50nm,0.8s
**LYN LuoYang 60.55 67** *e*P **P** **14 07 20.8 +0.3**
LYN S **S** **14 15 34.0 -2.4**
LYN pmax pmax
comp=Z,25nm,0.5s
LYN pmax pmax
comp=Z,620nm,3.9s
LYN LR LR
comp=Z,7µm,15.1s
LYN LR LR
comp=Z,3µm,15.1s
LYN LR LR
comp=Z,9µm,16.1s
**TIGA Tifton 60.55 281** P **P** **14 07 19.9 -0.7**
baz=18
TIGA S **S** **14 15 36.3 -0.3**
baz=18
**TCRU Three Creeks R 60.56 310** IAmb IAmb 14 07 31.5
comp=Z,83nm,1.1s
**DQM DQM 60.59 125** P **P** **14 07 21.9 +0.9**
**JCC Jacoby Creek, 60.60 320** IAMs_20 IAMs_20 14 34 59.4
comp=Z,3µm,18.0s
**Q12A Willow Creek R 60.62 312** IAmb IAmb 14 08 16.1
comp=Z,76nm,1.6s
**250A Grady 60.74 284** IAMs_20 IAMs_20 14 32 12.1
comp=Z,4µm,21.0s
**GUNA GUNA 60.81 104** *e*P **P** **14 07 22.4 -0.1**
**146A Union 60.83 287** IAMs_20 IAMs_20 14 33 04.4
comp=Z,5µm,18.0s
**PAHR Pah Rah Range 60.85 316** IAmb IAmb 14 07 51.0
comp=Z,112nm,1.7s
PAHR IAMs_20 IAMs_20 14 34 26.0
comp=Z,4µm,19.0s
**352A Blakely 60.86 283** IAMs_20 IAMs_20 14 32 10.5
comp=Z,4µm,20.0s
**KMPM Mount Pierce 61.00 320** IAMs_20 IAMs_20 14 33 25.2
comp=Z,2µm,22.0s
**INCN Inchon 61.00 53** P **P** **14 07 27.0 +3.4**
**INCN Inchon 61.00 53** IAMs_20 IAMs_20 14 37 49.8
comp=Z,2µm,18.0s
**O02D Mt. Diablo Mer 61.01 319** IAmb IAmb 14 07 52.3
comp=Z,78nm,1.6s
O02D IAMs_20 IAMs_20 14 34 14.3
comp=Z,3µm,19.0s
**MVCO Mesa Verde 61.07 306** P **P** **14 07 23.5 -0.8**
baz=16,SNR=18
MVCO S **S** **14 15 45.5 +1.9**
baz=16
**KMRM Mail Ridge 61.12 320** IAMs_20 IAMs_20 14 35 17.8
comp=Z,4µm,20.0s
**X34A Smith Ranch, M 61.13 295** IAMs_20 IAMs_20 14 32 14.5
comp=Z,6µm,22.0s
**DOK Doka 61.14 129** P **P** **14 07 24.0 -0.6**
**WMOK Wichita Mounta 61.23 296** P **P** **14 07 24.6 -0.6**
baz=17,SNR=50
WMOK S **S** **14 15 46.6 +1.4**
baz=17
**GTK Tadong 61.23 92** *e*P **P** **14 07 25.1 -0.4**
**KVN Kaiserville 61.24 315** IAmb IAmb 14 07 45.4
comp=Z,51nm,1.4s
**KSRS Korea Array 61.30 52** P **P** **14 07 24.8 -0.8**
comp=Z,4.8nm,0.9s,baz=354,slow=5.6,SNR=12
KSRS PP **PP** **14 09 41.6 +1.6**
comp=Z,1.8nm,0.8s,baz=343,slow=9.0,SNR=4.0
KSRS LR LR 14 38 11.5
comp=Z,3µm,18.3s,baz=335,slow=40
comp=Z,4.8nm,0.9s
**KSAR Wonju Array Be 61.31 52** P **P** **14 07 24.7 -0.9**
**KSAR Wonju Array Be 61.31 52** P **P** **14 07 24.7 -0.9**
**ALBI Allahabad 61.35 99** *e*P **P** **14 07 25.8 -0.2**
ALBI IAmb IAmb 14 07 32.8
comp=Z,104nm,0.9s
**143A Socs Landing, 61.36 289** IAMs_20 IAMs_20 14 33 34.5
comp=Z,5µm,21.0s
**MPK Martis Peak 61.37 316** IAMs_20 IAMs_20 14 33 40.9
comp=Z,5µm,21.0s
**ORV Oroville 61.38 318** IAMs_20 IAMs_20 14 34 06.2
comp=Z,4µm,21.0s
**R11B Troy Canyon, C 61.44 312** P **P** **14 07 25.4 -1.3**
baz=14,SNR=30
R11B S **S** **14 15 50.0 +1.9**
baz=14
**PNTR Pine Nut 61.49 316** IAmb IAmb 14 07 56.2
comp=Z,77nm,1.2s
PNTR IAMs_20 IAMs_20 14 33 43.0
comp=Z,4µm,21.0s
**YERR Yerington 61.52 316** IAmb IAmb 14 07 55.6
comp=Z,62nm,1.3s
YERR IAMs_20 IAMs_20 14 33 32.9
comp=Z,5µm,22.0s
**VBMS Vicksburg 61.59 288** IAMs_20 IAMs_20 14 32 59.8
comp=Z,3µm,22.0s
**VBMS Vicksburg 61.59 288** P **P** **14 07 26.2 -1.4**
baz=17
VBMS S **S** **14 15 50.7 +1.0**
baz=17
**BBTS Babate 61.61 208** LR LR 14 29 17.1
comp=Z,2µm,22.0s,baz=237,slow=31
**KCPM Cahto Peak 61.62 319** IAMs_20 IAMs_20 14 33 44.6
comp=Z,4µm,21.0s
**TOA0 Torodi Ar. Sit 61.64 188** P **P** **14 07 29.1 +1.0**
SNR=20
**TORD Torodi Ar. Bea 61.64 188** P **P** **14 07 27.7 -0.4**
**TORD Torodi Ar. Bea 61.64 188** P **P** **14 07 27.9 -0.2**
comp=Z,20nm,0.8s,baz=1.1,slow=7.0,SNR=50
TORD LR LR 14 36 09.7
comp=Z,1µm,18.2s,baz=6.0,slow=38
TORD PKPPKP **P'P'df** **14 36 38.8 +2.5**
comp=Z,0.6nm,0.8s,baz=200,slow=3.8,SNR=3.8
comp=Z,20nm,0.8s
**SZCU Shurtz Canyon 61.66 310** IAmb IAmb 14 07 48.1
comp=Z,82nm,1.4s
**EMB Emerald Bay 61.69 316** IAmb IAmb 14 07 38.5
comp=Z,114nm,1.9s
EMB IAMs_20 IAMs_20 14 33 51.4
comp=Z,6µm,22.0s
**BRAL Brewton 61.71 284** IAMs_20 IAMs_20 14 33 01.8
comp=Z,4µm,20.0s
**BRAL Brewton 61.71 284** P **P** **14 07 26.6 -1.7**
baz=17
BRAL S **S** **14 15 49.4 -1.8**
baz=17
**RYN Ryan 61.73 315** IAMs_20 IAMs_20 14 34 45.5
comp=Z,4µm,20.0s
**WHFO Wadi Hawf 61.75 130** P **P** **14 07 27.9 -1.0**
**CCUT Cedar City 61.77 310** IAmb IAmb 14 07 48.3
comp=Z,80nm,1.3s
**AMTX Amarillo 61.77 299** P **P** **14 07 28.6 -0.4**
baz=16
AMTX S **S** **14 15 51.3 -0.9**
baz=16
**CD2 Chengdu 61.82 76** P **P** **14 07 29.4 +0.2**
CD2 pP sP 14 07 31.8 +1.8
CD2 S **S** **14 15 51.3 -1.5**
CD2 SS **SS** **14 19 55.6 +1.7**
CD2 pmax pmax
comp=Z,30nm,0.8s
CD2 pmax pmax
comp=Z,460nm,5.8s
CD2 LR LR
comp=Z,10µm,18.6s
CD2 LR LR
comp=Z,4µm,15.4s
CD2 LR LR
comp=Z,10µm,19.4s
**AFDM Forest Hills D 61.88 317** IAMs_20 IAMs_20 14 33 55.3
comp=Z,5µm,21.0s
**NVAR Mina Array Bea 61.88 315** P **P** **14 07 29.1 -0.7**
**NVAR Mina Array Bea 61.88 315** P **P** **14 07 29.8 0.0**
comp=Z,4.4nm,0.8s,baz=15,slow=5.6,SNR=20
NVAR PP **PP** **14 09 43.5 -1.9**
comp=Z,2.2nm,0.9s,baz=44,slow=7.9,SNR=2.5
NVAR LR LR 14 35 57.3
comp=Z,7µm,18.3s,baz=13,slow=38
NVAR PKP2ab 14 36 52.5
comp=Z,0.6nm,0.6s,baz=242,slow=1.9,SNR=5.8
comp=Z,4.4nm,0.8s
**451A Vernon 61.90 283** IAMs_20 IAMs_20 14 34 03.8
comp=Z,3µm,18.0s
**WAKR Walker 62.03 316** IAMs_20 IAMs_20 14 34 34.2
comp=Z,5µm,21.0s
**LHV Little Huntoon 62.10 315** IAmb IAmb 14 08 00.1
comp=Z,78nm,1.6s
LHV IAMs_20 IAMs_20 14 34 57.1
comp=Z,5µm,20.0s
**346A Big Creek Wild 62.12 287** IAMs_20 IAMs_20 14 33 54.7
comp=Z,4µm,18.0s
**BHPL Bhopal 62.18 104** *e*P **P** **14 07 31.9 +0.1**
**ABTO Aybut 62.20 131** P **P** **14 07 31.4 -0.5**
ABTO P **P** **14 07 31.4 -0.5**
**HOPS Hopland Field 62.21 319** IAMs_20 IAMs_20 14 35 13.0
comp=Z,2µm,20.0s
**TJN Taejon 62.22 53** P **P** **14 07 31.1 -0.7**
**TJN Taejon 62.22 53** P **P** **14 07 30.9 -0.9**
**TJN Taejon 62.22 53** P **P** **14 07 30.9 -0.9**
TJN pmax pmax
comp=Z,359nm,1.3s
TJN MLR MLR
comp=Z,10µm,18.0s
**RBK Rabkut 62.24 130** P **P** **14 07 31.3 -0.8**
**PRN Pahroc Range 62.24 312** IAmb IAmb 14 07 55.0
comp=Z,44nm,1.2s
**LCMT Little Creek M 62.26 310** IAmb IAmb 14 07 51.4
comp=Z,46nm,1.1s
**GDXM Geysers 62.34 319** IAMs_20 IAMs_20 14 33 22.5
comp=Z,3µm,21.0s
**ZIRO ZIRO 62.43 87** *e*P **P** **14 07 34.4 +0.9**
ZIRO IAmb IAmb 14 07 41.3
comp=Z,70nm,0.7s
**NRDN NARMADA NAGAR 62.61 105** *e*P **P** **14 07 35.6 +1.0**
NRDN IAmb IAmb 14 07 43.0
comp=Z,33nm,0.9s
**FW06 Azle 62.62 295** IAmb IAmb 14 07 42.4
comp=Z,57nm,0.9s
**U15A North Rim 62.63 309** IAmb IAmb 14 08 02.6
comp=Z,34nm,1.1s
**FW03 Perrin-Whitt E 62.68 295** IAmb IAmb 14 07 42.9
comp=Z,56nm,0.9s
**DKNS Dickens 62.76 298** IAmb IAmb 14 07 43.7
comp=Z,113nm,1.7s
**MLAC Mammoth, Mammo 62.76 315** P **P** **14 07 34.2 -1.5**
baz=14
**ANMO Albuquerque 62.80 303** P **P** **14 07 34.4 -1.5**
**ANMO Albuquerque 62.80 303** LR LR 14 35 24.9
comp=Z,7µm,19.3s,baz=110,slow=36
**ANMO Albuquerque 62.80 303** P **P** **14 07 34.8 -1.1**
baz=16
ANMO S **S** **14 16 06.7 +1.3**
baz=16
**ANMO Albuquerque 62.80 303** *d* P **P** **14 07 35.5 -0.4**
ANMO pmax pmax
comp=Z,18nm,1.4s
**MDPB Devils Postpil 62.80 315** IAmb IAmb 14 07 45.6
comp=Z,85nm,1.8s
MDPB IAMs_20 IAMs_20 14 35 31.9
comp=Z,4µm,19.0s
**OMMB Old Mammoth Mi 62.81 315** IAmb IAmb 14 07 45.8
comp=Z,101nm,2.0s
**APMT Aspermont 62.90 297** IAmb IAmb 14 07 55.9
comp=Z,84nm,1.4s
**MSTX Muleshoe 62.90 300** P **P** **14 07 36.2 -0.3**
baz=16
MSTX S **S** **14 16 10.1 +3.6**
baz=16
**TPNV Topopah Spring 62.92 312** P **P** **14 07 35.0 -1.7**
baz=14,SNR=27
**NATX Nacogdoches 63.07 292** P **P** **14 07 36.5 -1.0**
baz=17
NATX S **S** **14 16 10.2 +1.8**
baz=17
**GRAC Grapevine Rang 63.09 313** P **P** **14 07 37.7 0.0**
baz=14
**SHPR Sheep Range 63.14 311** IAMs_20 IAMs_20 14 35 47.6
comp=Z,5µm,18.0s
**DWPF Disney Wildern 63.15 278** IAMs_20 IAMs_20 14 33 33.1
comp=Z,3µm,21.0s
**DWPF Disney Wildern 63.15 278** P **P** **14 07 37.4 -0.7**
baz=17
DWPF S **S** **14 16 09.8 +0.4**
baz=17
**FW13 Cleburne 63.18 294** IAmb IAmb 14 07 46.0
comp=Z,44nm,0.8s
**TIN Tinemaha, Big 63.20 314** P **P** **14 07 37.8 -0.6**
baz=14
TIN S **S** **14 16 14.7 +4.5**
baz=14
**W18A Petrified Fore 63.35 306** IAmb IAmb 14 07 48.6
comp=Z,67nm,1.1s
W18A IAMs_20 IAMs_20 14 35 24.3
comp=Z,5µm,20.0s
**W18A Petrified Fore 63.35 306** P **P** **14 07 38.9 -0.7**
baz=15,SNR=10
W18A S **S** **14 16 14.1 +1.8**
baz=15
**ABTX Abilene, Hawle 63.45 296** P **P** **14 07 39.5 -0.6**
baz=16
ABTX S **S** **14 16 14.8 +1.6**
baz=16
**FURC Furnace Creek, 63.51 313** P **P** **14 07 39.3 -1.0**
baz=14
FURC S **S** **14 16 18.3 +4.6**
baz=14
**WHTX Lake Whitney, 63.53 294** P **P** **14 07 39.5 -1.1**
baz=17
WHTX S **S** **14 16 15.4 +1.2**
baz=17
**441A DeRidder 63.67 290** IAMs_20 IAMs_20 14 35 33.6
comp=Z,4µm,19.0s
**Y22D IRIS PASSCAL I 63.74 303** P **P** **14 07 41.7 -0.4**
baz=16
Y22D S **S** **14 16 19.9 +2.8**
baz=16
**GWY Greenwater Val 63.74 313** IAmb IAmb 14 07 46.7
comp=Z,60nm,1.5s
**CWC Cottonwood Cre 63.77 314** P **P** **14 07 41.8 -0.6**
baz=14
CWC S **S** **14 16 22.2 +4.8**
baz=14
**SHL Shillong 63.77 89** P **P** **14 07 41.5 -1.0**
SHL IAmb IAmb 14 08 10.3
comp=Z,72nm,1.3s
**SHL Shillong 63.77 89** P **P** **14 07 41.5 -1.0**
SHL pmax pmax
comp=Z,72nm,1.3s
**BOK Bokaro 63.87 96** *e*P **P** **14 07 42.8 -0.1**
BOK IAmb IAmb 14 07 51.6
comp=Z,31nm,0.9s
**ENH Enshi 63.89 71** P **P** **14 07 42.4 -0.6**
**ENH Enshi 63.89 71** IAmb IAmb 14 08 06.6
comp=Z,62nm,1.3s
ENH IAMs_20 IAMs_20 14 38 37.5
comp=Z,5µm,21.0s
**060A Indiantown 63.89 277** IAMs_20 IAMs_20 14 35 01.6
comp=Z,4µm,20.0s
**SHOC Shoshone, Teco 63.94 312** P **P** **14 07 43.0 -0.2**
baz=14
**X18A Snowflake 63.96 306** IAMs_20 IAMs_20 14 35 35.3
comp=Z,5µm,21.0s
**MPMC Manual Prospec 64.03 313** P **P** **14 07 42.8 -1.3**
baz=14,SNR=23
MPMC S **S** **14 16 25.5 +4.8**
baz=14
**SAO San Andreas Ge 64.08 317** IAMs_20 IAMs_20 14 35 04.8
comp=Z,5µm,21.0s
**VOG Valley Oaks Go 64.13 315** P **P** **14 07 43.9 -0.6**
baz=14
**BBGB Big Mountain B 64.19 316** IAMs_20 IAMs_20 14 35 18.6
comp=Z,5µm,21.0s
**MJB9 Matsu-Tunnel 64.21 44** IAmb IAmb 14 07 55.7
comp=Z,53nm,1.4s
**MAJO Matsushiro 64.21 44** P **P** **14 07 46.6 +1.6**
**MAJO Matsushiro 64.21 44** ⇑*e*P **P** **14 07 45.1 +0.1**
MAJO pmax pmax
comp=Z,51nm,1.6s
**MJAR Matsushiro Arr 64.22 44** P **P** **14 07 45.2 +0.2**
comp=Z,10nm,1.0s,baz=342,slow=6.7,SNR=4.5
MJAR PP **PP** **14 10 06.1 +0.4**
comp=Z,3.5nm,1.0s,baz=350,slow=6.2,SNR=2.9
MJAR LR LR 14 37 37.0
comp=Z,1µm,19.8s,baz=348,slow=38
comp=Z,10nm,1.0s
**KOHI KOHIMA 64.22 87** *e*P **P** **14 07 45.1 -0.3**
KOHI IAmb IAmb 14 07 54.6
comp=Z,131nm,1.8s
**TUQ Turquoise Moun 64.32 312** P **P** **14 07 45.4 -0.5**
baz=14
TUQ S **S** **14 16 29.0 +4.8**
baz=14
**NJ2 Nanjing 64.47 62** ⇑P **P** **14 07 46.0 -0.7**
NJ2 pP **sP** **14 07 50.4 +3.0**
NJ2 sP **pwP** **14 07 55.4 +4.2**
NJ2 PP **PP** **14 10 10.9 +2.9**
NJ2 S **S** **14 16 29.0 +3.3**
NJ2 SS **SS** **14 20 33.6 -1.4**
NJ2 pmax pmax
comp=Z,14nm,0.5s
NJ2 pmax pmax
comp=Z,330nm,5.7s
NJ2 LR LR
comp=Z,3µm,18.5s
NJ2 LR LR
comp=Z,820nm,13.7s
NJ2 LR LR
comp=Z,3µm,18.5s
**PMPB Monarch Peak 64.50 316** IAMs_20 IAMs_20 14 35 38.7
comp=Z,4µm,20.0s
**VES Vestal, Richgr 64.54 315** P **P** **14 07 46.2 -1.0**
baz=14
**BRDY Brady 64.58 295** IAmb IAmb 14 07 55.2
comp=Z,44nm,1.0s
**ISA Isabella, Lake 64.60 314** IAmb IAmb 14 08 07.1
comp=Z,60nm,1.3s
**ISA Isabella, Lake 64.60 314** P **P** **14 07 47.0 -0.7**
baz=14,SNR=20
ISA S **S** **14 16 32.9 +5.4**
baz=14
**LRMC Laurel Mtn Rad 64.63 313** P **P** **14 07 46.2 -1.7**
baz=14
LRMC S **S** **14 16 33.1 +5.2**
baz=14
**GSC Goldstone, Bar 64.63 312** P **P** **14 07 47.0 -0.8**
baz=14
GSC S **S** **14 16 33.7 +5.8**
baz=14
**NEE2 Needles Airpor 64.71 310** P **P** **14 07 46.7 -1.5**
baz=14
NEE2 S **S** **14 16 33.1 +4.4**
baz=14
**435B Jarrell 64.72 294** P **P** **14 07 47.1 -1.3**
baz=16
435B S **S** **14 16 31.7 +2.8**
baz=16
**WHN Wuhan 64.83 67** P **P** **14 07 47.6 -1.5**
WHN pP **sP** **14 07 53.0 +3.2**
WHN S **S** **14 16 30.7 +0.4**
WHN pmax pmax
comp=Z,960nm,4.5s
WHN LR LR
comp=Z,6µm,12.9s
WHN LR LR
comp=Z,3µm,10.5s
WHN LR LR
comp=Z,12µm,15.4s
**GMRC Granite Mounta 64.90 311** P **P** **14 07 48.1 -1.6**
baz=14,SNR=24
GMRC S **S** **14 16 36.0 +4.6**
baz=14
**HEC Hector,Ludlow 64.99 312** P **P** **14 07 49.3 -1.0**
baz=14
HEC S **S** **14 16 33.4 +1.0**
baz=14
**IMP Imphal 65.02 87** *e*P **P** **14 07 51.2 +0.7**
IMP IAmb IAmb 14 08 00.1
comp=Z,23nm,0.8s
**PDMCI Parker Dam,Lak 65.06 310** P **P** **14 07 49.4 -1.1**
baz=14,SNR=6.8
PDMCI S **S** **14 16 37.0 +4.0**
baz=14
**RRX Edison Barstow 65.08 313** P **P** **14 07 49.7 -1.0**
baz=14
**HKT Hockley 65.09 292** P **P** **14 07 49.8 -0.9**
**HKT Hockley 65.09 292** *d* P **P** **14 07 50.2 -0.5**
HKT pmax pmax
comp=Z,82nm,2.0s
**061Z Ochoppi 65.15 277** IAMs_20 IAMs_20 14 35 51.0
comp=Z,4µm,20.0s
**INU Inuyama 65.15 45** P **P** **14 07 54.6 +3.5**
**Y14A Wickenburg 65.18 309** IAmb IAmb 14 08 03.6
comp=Z,60nm,1.5s
**ARVC Arvin 65.19 314** P **P** **14 07 50.8 -0.6**
baz=13
**SMMC Simmler 65.23 315** P **P** **14 07 49.8 -1.8**
baz=13
**EDW2 Edwards Air Fo 65.27 313** P **P** **14 07 51.2 -0.8**
baz=14
EDW2 S **S** **14 16 38.4 +2.7**
baz=14
**IRM Iron Mountain 65.41 311** P **P** **14 07 51.2 -1.7**
baz=14
IRM S **S** **14 16 40.9 +3.5**
baz=14
**121A Cookes Peak, D 65.42 304** IAmb IAmb 14 08 01.8
comp=Z,67nm,1.4s
**121A Cookes Peak, D 65.42 304** P **P** **14 07 51.4 -1.7**
baz=15,SNR=13
121A S **S** **14 16 40.5 +2.7**
baz=15
**MNHN Monahans 65.42 299** IAmb IAmb 14 08 01.6
comp=Z,53nm,1.1s
**BCW Bitter Crk WRg 65.48 315** IAMs_20 IAMs_20 14 37 07.7
comp=Z,5µm,21.0s
**PZH PanZhiHua 65.49 80** P **P** **14 07 55.0 +1.4**
PZH S **S** **14 16 37.0 -1.7**
PZH SS **SS** **14 20 56.9 +5.5**
PZH pmax pmax
comp=Z,30nm,0.9s
PZH pmax pmax
comp=Z,540nm,6.9s
PZH LR LR
comp=Z,2µm,18.1s
PZH LR LR
comp=Z,2µm,18.6s
PZH LR LR
comp=Z,4µm,16.2s
**JCT Junction City 65.54 296** P **P** **14 07 52.4 -1.4**
baz=16
JCT S **S** **14 16 41.9 +2.7**
baz=16
**PKM Mcpherson Peak 65.61 315** P **P** **14 07 52.7 -1.6**
baz=13
**PECS Pecos 65.65 300** IAmb IAmb 14 08 12.9
comp=Z,54nm,1.3s
**BBRC Big Bear Solar 65.66 312** P **P** **14 07 53.5 -1.3**
baz=14
BBRC S **S** **14 16 47.3 +6.5**
baz=14
**OSI Osito Audit: C 65.67 314** P **P** **14 07 53.1 -1.4**
baz=13
OSI S **S** **14 16 45.2 +4.7**
baz=13
**BLYC Blythe 65.67 310** IAmb IAmb 14 08 14.4
comp=Z,76nm,1.2s
**MNTX Cornudas Mount 65.68 301** P **P** **14 07 53.7 -1.0**
baz=15,SNR=11
MNTX S **S** **14 16 44.3 +3.6**
baz=15
**BELC Belle Mtn. Jos 65.73 311** P **P** **14 07 53.9 -1.1**
baz=14,SNR=14
BELC S **S** **14 16 48.3 +6.8**
baz=14
**BFSC Mount Baldy Ra 65.82 313** P **P** **14 07 55.1 -0.6**
baz=14
BFSC S **S** **14 16 46.8 +4.1**
baz=14
**SSE Sheshan 65.93 60** P **P** **14 07 54.6 -1.6**
SSE S **S** **14 16 42.6 -1.1**

SSE pmax pmax
comp=Z,19nm,0.8s
SSE pmax pmax
comp=Z,200nm,4.3s
SSE LR LR
comp=Z,1µm,19.6s
SSE LR LR
comp=Z,2µm,19.2s
**DECC Green Verdugo 65.94 314** P **P** **14 07 54.9 -1.4**
baz=14
**BC3 Big Chuckawall 65.95 311** P **P** **14 07 55.4 -1.1**
baz=14
**ATD Arta Tunnel 65.99 143** LR LR 14 39 02.7
comp=Z,31nm,19.3s,baz=357,slow=38
**SBC Santa Barbara 66.02 315** P **P** **14 07 55.5 -1.2**
baz=13
**TNCH TengChong 66.05 83** ⇑P **P** **14 07 55.6 -1.7**
TNCH sS sS 14 16 51.5 +4.8
TNCH pmax pmax
comp=Z,24nm,2.5s
TNCH LR LR
comp=Z,1µm,16.9s
TNCH LR LR
comp=Z,950nm,22.5s
TNCH LR LR
comp=Z,2µm,19.9s
**JNU Nakatsue 66.10 51** P **P** **14 07 58.6 +1.3**
**JNU Nakatsue 66.10 51** P **P** **14 07 57.3 0.0**
JNU IAmb IAmb 14 08 06.8
comp=Z,61nm,1.1s
**JNU Nakatsue 66.10 51** LR LR 14 41 13.3
comp=Z,2µm,18.8s,baz=343,slow=40
**JMN Monobe 66.12 48** IAMs_20 IAMs_20 14 39 56.2
comp=Z,1µm,20.0s
**PFO Pinyon Flats O 66.20 312** P **P** **14 07 57.2 -0.9**
PFO IAmb IAmb 14 08 16.0
comp=Z,67nm,1.9s
**PFO Pinyon Flats O 66.20 312** LR LR 14 37 56.5
comp=Z,6µm,18.0s,baz=10,slow=37
**PFO Pinyon Flats O 66.20 312** P **P** **14 07 57.4 -0.7**
baz=14
**PFO Pinyon Flats O 66.20 312** P **P** **14 07 57.2 -0.9**
PFO pmax pmax
comp=Z,67nm,1.9s
PFO MLR MLR
comp=Z,6µm,19.0s
**TPFO Pinon Flats 66.20 312** P **P** **14 07 57.1 -1.0**
baz=14
**TUC Tucson 66.28 306** P **P** **14 07 58.9 +0.3**
**TUC Tucson 66.28 306** P **P** **14 07 57.5 -1.0**
baz=15
TUC S **S** **14 16 51.9 +3.7**
baz=15
**TUC Tucson 66.28 306** P **P** **14 07 58.9 +0.3**
TUC pmax pmax
comp=Z,136nm,1.6s
TUC MLR MLR
comp=Z,6µm,20.0s
**HNDO Hondo 66.33 295** IAmb IAmb 14 08 07.6
comp=Z,50nm,1.0s
**MURC Murrieta 66.35 312** P **P** **14 07 58.1 -0.9**
baz=14
MURC S **S** **14 16 52.9 +3.9**
baz=14
**GLA Glamis 66.41 310** IAmb IAmb 14 08 09.6
comp=Z,87nm,1.6s
**GLA Glamis 66.41 310** P **P** **14 07 58.9 -0.5**
baz=14
GLA S **S** **14 16 56.4 +6.8**
baz=14
**SCZ2 Santa Cruz Isl 66.44 315** P **P** **14 07 57.2 -2.3**
baz=13
**FMP Fort Macarthur 66.46 313** P **P** **14 07 58.0 -1.6**
baz=13
**VHRN Van Horn 66.46 301** IAmb IAmb 14 08 04.3
comp=Z,57nm,1.2s
**SAND Sanderson 66.60 298** IAmb IAmb 14 08 08.4
comp=Z,104nm,1.7s
**GRTK Grand Turk 66.70 266** IAMs_20 IAMs_20 14 34 50.9
comp=Z,2µm,20.0s
**SWSC Sam W. Stewart 66.71 311** P **P** **14 07 59.2 -2.0**
baz=14
**CNSH ChangSha 66.74 69** P **P** **14 08 01.0 -0.4**
CNSH S **S** **14 16 53.4 -0.2**
CNSH pmax pmax
comp=Z,20nm,1.0s
CNSH LR LR
comp=Z,3µm,18.0s
CNSH LR LR
comp=Z,2µm,14.7s
CNSH LR LR
comp=Z,7µm,15.6s
**DRIO Del Rio 66.75 296** IAmb IAmb 14 08 39.3
comp=Z,49nm,1.4s
**CIS Catalina Islan 66.78 313** P **P** **14 07 59.6 -2.0**
baz=13
**GYA Guiyang 66.81 75** ⇓P **P** **14 08 01.7 -0.3**
GYA S **S** **14 16 54.4 -0.3**
GYA pmax pmax
comp=Z,29nm,1.3s
GYA pmax pmax
comp=Z,560nm,4.3s
GYA LR LR
comp=Z,3µm,23.3s
GYA LR LR
comp=Z,3µm,14.3s
GYA LR LR
comp=Z,5µm,21.4s
**MONP2 Monument Peak 66.89 311** P **P** **14 08 00.9 -1.7**
baz=14
**YUH Yuha Desert 67.02 311** IAmb IAmb 14 08 22.3
comp=Z,50nm,1.4s
YUH IAMs_20 IAMs_20 14 38 01.3
comp=Z,3µm,19.0s
**109C Camp Elliot, M 67.02 312** P **P** **14 08 01.9 -1.3**
baz=14
**214A Organ Pipe Nat 67.05 308** P **P** **14 08 01.9 -1.5**
baz=14
214A S **S** **14 17 01.1 +3.7**
baz=14
**IKP In-Ko-Pah, Jac 67.06 311** P **P** **14 08 02.0 -1.6**
baz=14
**KMI Kunming 67.06 79** ⇑P **P** **14 08 04.4 +0.6**
KMI PP **PP** **14 10 35.0 +3.9**
KMI S **S** **14 16 51.5 -6.6**
KMI SS **SS** **14 21 18.4 +2.3**
KMI pmax pmax
comp=Z,16nm,1.4s
KMI pmax pmax
comp=Z,440nm,4.4s
KMI LR LR
comp=Z,4µm,18.1s
KMI LR LR
comp=Z,2µm,16.3s
KMI LR LR
comp=Z,5µm,21.0s
**RMX La Rumorosa 67.10 311** IAmb IAmb 14 08 24.1
comp=Z,46nm,1.3s
RMX IAMs_20 IAMs_20 14 38 16.3
comp=Z,4µm,20.0s
**CPBX Cerro Prieto 67.12 310** IAMs_20 IAMs_20 14 35 10.9
comp=Z,1µm,22.0s
**SNCC San Nicolas Is 67.14 314** P **P** **14 08 01.8 -2.1**
baz=13
**SCI2 San Clemente I 67.22 313** P **P** **14 08 02.0 -2.4**
baz=13
**TKX Tecate 67.24 312** IAMs_20 IAMs_20 14 38 17.0
comp=Z,4µm,19.0s
**CBX Cerro Bola 67.50 312** IAmb IAmb 14 08 19.9
comp=Z,69nm,1.5s
**833A Chaparral WMA, 67.51 295** P **P** **14 08 05.2 -1.1**
baz=16,SNR=16
833A S **S** **14 17 06.2 +3.3**
baz=16
**TX31 Lajitas Ar. Si 67.56 299** IAmb IAmb 14 08 41.5
comp=Z,35nm,1.1s
**TXAR Lajitas Array 67.56 299** P **P** **14 08 05.6 -1.1**
**TXAR Lajitas Array 67.56 299** P **P** **14 08 05.9 -0.8**
comp=Z,5.1nm,0.8s,baz=38,slow=4.7,SNR=20
TXAR PP **PP** **14 10 30.1 -5.0**
comp=Z,2.5nm,0.9s,baz=44,slow=5.3,SNR=4.0
TXAR PKP2bc 14 36 31.3
comp=Z,1.6nm,1.2s,baz=184,slow=2.7,SNR=4.0
TXAR LR LR 14 38 14.5
comp=Z,6µm,18.6s,baz=15,slow=36
comp=Z,5.1nm,0.8s
**PIX Pinacate 67.57 309** IAMs_20 IAMs_20 14 37 17.8
comp=Z,5µm,22.0s

**ESJX Sierra Juarez 67.65 311** IAMs_20 IAMs_20 14 38 31.9
comp=Z,3µm,19.0s
**JHJ Hachijo jima 2 67.83 43** LR LR 14 38 57.5
comp=Z,1µm,21.8s,baz=37,slow=37
**SMRT St. Maarten 67.89 257** IAMs_20 IAMs_20 14 31 03.6
comp=Z,1µm,22.0s
**CAMR Camarioca 67.94 276** IAMs_20 IAMs_20 14 37 07.7
comp=Z,8µm,20.0s
**HYB Hyderabad 68.04 105** *e*P **P** **14 08 10.3 +0.5**
HYB ePP **PP** **14 10 40.6 +1.0**
**VTX Valle De La Tr 68.21 311** IAMs_20 IAMs_20 14 38 59.8
comp=Z,4µm,19.0s
**DBIC Dimbokro 68.40 194** P **P** **14 08 11.6 -0.4**
DBIC IAmb IAmb 14 08 27.7
comp=Z,54nm,1.2s
**DBIC Dimbokro 68.40 194** P **P** **14 08 11.1 -0.9**
comp=Z,11nm,0.8s,baz=346,slow=14,SNR=7.6
DBIC LR LR 14 38 33.3
comp=Z,1µm,18.9s,baz=9.0,slow=36
comp=Z,11nm,0.8s
**DBIC Dimbokro 68.40 194** P **P** **14 08 11.6 -0.4**
DBIC pmax pmax
comp=Z,54nm,1.3s
**SEUS St. Eustatius 68.40 257** IAMs_20 IAMs_20 14 31 40.1
comp=Z,1µm,22.0s
**HUMP Col San Antoni 68.53 260** IAmb IAmb 14 08 22.1
comp=Z,71nm,1.2s
**SOR Soroa 68.63 278** P **P** **14 08 11.6 -1.9**
SOR IAmb IAmb 14 08 25.4
comp=Z,56nm,1.2s
SOR IAMs_20 IAMs_20 14 36 25.0
comp=Z,5µm,22.0s
**SOR Soroa 68.63 278** P **P** **14 08 11.6 -1.9**
SOR pmax pmax
comp=Z,56nm,1.2s
**NMDO Nuevo Mundo 68.63 270** IAMs_20 IAMs_20 14 35 01.1
comp=Z,2µm,20.0s
**IGPR InterUniversit 68.76 260** P **P** **14 08 13.4 -0.9**
**GULI GuiLin 68.86 72** P **P** **14 08 15.5 +0.6**
GULI S **S** **14 17 21.3 +2.2**
GULI pmax pmax
comp=Z,20nm,1.1s
GULI pmax pmax
comp=Z,370nm,6.5s
GULI LR LR
comp=Z,3µm,19.2s
GULI LR LR
comp=Z,2µm,19.5s
GULI LR LR
comp=Z,5µm,19.3s
**SDDR Presa de Saban 69.16 265** P **P** **14 08 16.4 -0.3**
SDDR IAMs_20 IAMs_20 14 35 39.1
comp=Z,2µm,21.0s
**GTBY Guantanamo Bay 69.27 269** IAMs_20 IAMs_20 14 35 20.0
comp=Z,2µm,21.0s
**MAGL Barre de l'ile 69.44 255** IAMs_20 IAMs_20 14 31 29.7
comp=Z,2µm,22.0s
**CHIV Chivirico 69.57 271** IAMs_20 IAMs_20 14 34 22.0
comp=Z,4µm,22.0s
**ILAM Ilet Lapin Mar 70.46 254** IAMs_20 IAMs_20 14 34 08.8
comp=Z,1µm,21.0s
**SVN Savane Anatole 70.47 254** IAMs_20 IAMs_20 14 33 30.0
comp=Z,2µm,19.0s
**FDF Fort de France 70.57 254** IAMs_20 IAMs_20 14 34 21.6
comp=Z,1µm,20.0s
**BIM Bigot 70.76 254** IAMs_20 IAMs_20 14 32 56.6
comp=Z,1µm,21.0s
**CRAI Chiangrai 71.11 83** IAmb IAmb 14 08 42.2
comp=Z,71nm,1.9s
**QZH Quanzhou 71.23 64** P **P** **14 08 29.2 -0.1**
QZH pmax pmax
comp=Z,300nm,6.1s
QZH LR LR
comp=Z,2µm,17.5s
QZH LR LR
comp=Z,3µm,15.1s
QZH LR LR
comp=Z,5µm,18.2s
**MTDJ Mount Denham 71.54 271** IAMs_20 IAMs_20 14 35 33.1
comp=Z,3µm,22.0s
**JOW Kunigami 71.62 55** P **P** **14 08 33.0 +1.2**
**JOW Kunigami 71.62 55** IAmb IAmb 14 08 34.8
comp=Z,66nm,1.1s
JOW IAMs_20 IAMs_20 14 41 23.1
comp=Z,2µm,20.0s
**JOW Kunigami 71.62 55** LR LR 14 46 04.1
comp=Z,1µm,18.5s,baz=349,slow=41
**KNMB Chin-men Tao 71.64 65** IAMs_20 IAMs_20 14 44 57.8
comp=Z,3µm,19.0s
**BBGH Gun Hill 71.69 252** IAMs_20 IAMs_20 14 32 57.4
comp=Z,3µm,21.0s
**TATO Taipei 71.88 62** IAMs_20 IAMs_20 14 44 36.3
comp=Z,3µm,19.0s
**YHNB Yeheng 72.15 62** IAMs_20 IAMs_20 14 44 46.3
comp=Z,4µm,18.0s
**CMAR Chiang Mai Arr 72.43 85** P **P** **14 08 35.5 -1.2**
**CMAR Chiang Mai Arr 72.43 85** P **P** **14 08 35.8 -0.9**
comp=Z,2.9nm,0.9s,baz=323,slow=6.4,SNR=11
CMAR LR LR 14 45 07.7
comp=Z,2µm,21.7s,baz=325,slow=40
comp=Z,2.9nm,0.9s
**CMAR Chiang Mai Arr 72.43 85** *i* P **P** **14 08 36.0 -0.6**
CMAR pmax pmax
comp=Z,3.0nm,0.9s
**TEIG Tepich 72.46 282** P **P** **14 08 35.3 -1.5**
**TEIG Tepich 72.46 282** LR LR 14 40 10.6
comp=Z,5µm,18.6s,baz=24,slow=36
**NACB Ninganchiao 72.68 62** IAMs_20 IAMs_20 14 45 13.2
comp=Z,3µm,18.0s
**HKPS Hong Kong Po S 72.70 69** IAMs_20 IAMs_20 14 44 16.9
comp=Z,2µm,20.0s
**YOJ Yonaguni jima 72.73 60** IAMs_20 IAMs_20 14 43 22.5
comp=Z,3µm,22.0s
**LODK Lodwar 72.89 152** P **P** **14 08 39.1 -0.4**
LODK IAmb IAmb 14 08 48.3
comp=Z,77nm,1.5s
**LODK Lodwar 72.89 152** P **P** **14 08 40.2 +0.8**
SNR=28
**SSLB Suanglung 72.90 62** P **P** **14 08 40.6 +1.2**
**SSLB Suanglung 72.90 62** IAmb IAmb 14 08 50.3
comp=Z,57nm,1.0s
SSLB IAMs_20 IAMs_20 14 43 25.1
comp=Z,3µm,21.0s
**TPUB Ta-pu 73.29 63** IAMs_20 IAMs_20 14 45 44.5
comp=Z,3µm,18.0s
**YULB Yu-li 73.36 62** IAMs_20 IAMs_20 14 43 02.3
comp=Z,3µm,21.0s
**ZAIG Zacatecas 73.61 296** IAmb IAmb 14 08 57.6
comp=Z,75nm,1.4s
**TWG Pinlang 73.86 63** IAMs_20 IAMs_20 14 46 21.6
comp=Z,3µm,18.0s
**TWGBT Beinan 73.86 63** P **P** **14 08 47.1 +2.0**
**LPIG La Paz 74.10 304** LR LR 14 42 38.9
comp=Z,6µm,18.1s,baz=14,slow=37
**JCJ Chichijima 74.14 42** LR LR 14 43 02.5
comp=Z,747nm,21.5s,baz=312,slow=37
**QIZ Qiongzhong 74.72 74** P **P** **14 08 48.8 -1.3**
QIZ S **S** **14 18 24.8 -1.9**
QIZ SS **SS** **14 23 13.7 +0.3**
QIZ pmax pmax
comp=Z,19nm,2.1s
QIZ pmax pmax
comp=Z,410nm,4.4s
QIZ LR LR
comp=Z,2µm,17.3s
QIZ LR LR
comp=Z,2µm,15.3s
QIZ LR LR
comp=Z,3µm,17.5s
**QIZ Qiongzhong 74.72 74** IAMs_20 IAMs_20 14 47 02.6
comp=Z,3µm,19.0s
**HATO Hato, Curacao 75.05 261** IAMs_20 IAMs_20 14 35 17.1
comp=Z,1µm,22.0s
**PCRV Puerto La Cruz 75.84 256** LR LR 14 36 18.0
comp=Z,956nm,21.7s,slow=31
**UNM Universidad Na 76.09 292** IAMs_20 IAMs_20 14 43 12.4
comp=Z,3µm,21.0s
**MBAR Mbarara 76.33 157** P **P** **14 08 59.4 -0.1**
**MBAR Mbarara 76.33 157** P **P** **14 08 59.8 +0.2**
comp=Z,9.1nm,0.2s,baz=358,slow=4.9,SNR=12
MBAR LR LR 14 44 55.1
comp=Z,598nm,20.9s,baz=350,slow=38
comp=Z,9.1nm,0.2s
**MBAR Mbarara 76.33 157** P **P** **14 09 00.3 +0.7**
**NAYO Nakonayok 77.02 84** P **P** **14 09 02.7 -0.5**
**CMIG Matias Romero 77.16 287** LR LR 14 45 19.3
comp=Z,2µm,21.7s,baz=6.5,slow=37

**UBPT Khong Chiam 77.18 79** P **P** **14 09 02.8 -1.4**
**KMBO Kilima Mbogo 77.61 151** P **P** **14 09 06.4 -0.4**
**KMBO Kilima Mbogo 77.61 151** *i* P **P** **14 09 08.2 +1.4**
SNR=9.7
**KMBO Kilima Mbogo 77.61 151** P **P** **14 09 06.4 -0.4**
KMBO pmax pmax
comp=Z,70nm,1.8s
KMBO MLR MLR
comp=Z,600nm,20.0s
**TLIG Tlapa 77.63 291** IAMs_20 IAMs_20 14 43 44.4
comp=Z,2µm,20.0s
**MDP Montagnes des 77.73 243** LR LR 14 35 21.8
comp=Z,712nm,20.7s,baz=3.5,slow=30
**BAUV El Baul 77.91 259** IAMs_20 IAMs_20 14 41 48.9
comp=Z,3µm,20.0s
**APG El Apazote 78.03 283** LR LR 14 43 47.5
comp=Z,472nm,19.7s,baz=19,slow=36
**TGUH Tegucigalpa,Un 78.10 279** IAMs_20 IAMs_20 14 41 13.8
comp=Z,4µm,21.0s
**MTO3 Montecristo 78.32 282** IAMs_20 IAMs_20 14 43 37.6
comp=Z,4µm,20.0s
**PALK Pallekele 78.32 105** IAMs_20 IAMs_20 14 45 43.5
comp=Z,3µm,21.0s
**PALK Pallekele 78.32 105** LR LR 14 45 55.5
comp=Z,3µm,21.4s,baz=94,slow=37
**SDV Santo Domingo 78.64 262** P **P** **14 09 11.9 -0.6**
SDV IAmb IAmb 14 09 21.3
comp=Z,77nm,0.8s
**SDV Santo Domingo 78.64 262** LR LR 14 42 35.6
comp=Z,778nm,20.0s,baz=38,slow=35
**SDV Santo Domingo 78.64 262** *e*P **P** **14 09 13.3 +0.8**
**KIBK Kibwezi 78.91 150** P **P** **14 09 15.8 +2.0**
**SNET Serv Nac Est T 78.97 281** IAMs_20 IAMs_20 14 44 59.8
comp=Z,2µm,18.0s
**ESPN Las Esperanzas 79.10 276** IAMs_20 IAMs_20 14 43 45.3
comp=Z,3µm,20.0s
**ACON Acoyapa 79.55 277** IAmb IAmb 14 09 25.4
comp=Z,75nm,1.1s
ACON IAMs_20 IAMs_20 14 44 00.2
comp=Z,2µm,19.0s
**BCIP Isla Barro Col 80.81 271** IAMs_20 IAMs_20 14 42 36.8
comp=Z,1µm,21.0s
**JTS Las Juntas de 81.09 276** IAMs_20 IAMs_20 14 44 46.2
comp=Z,2µm,20.0s
**JTS Las Juntas de 81.09 276** LR LR 14 45 37.2
comp=Z,2µm,18.2s,baz=352,slow=36
**HDC Heredia 81.15 275** IAMs_20 IAMs_20 14 44 49.6
comp=Z,3µm,20.0s
**DLV T Lat 81.16 77** IAMs_20 IAMs_20 14 51 09.2
comp=Z,2µm,19.0s
**LCR2 La Lucha 2 81.37 275** IAMs_20 IAMs_20 14 43 55.5
comp=Z,3µm,20.0s
**BRU2 Volcan 81.93 274** IAMs_20 IAMs_20 14 41 20.3
comp=Z,2µm,22.0s
**BOAV Boa Vista 82.26 250** *e*P **P** **14 09 31.5 -0.2**
**MCPB Macapa, AP 82.86 241** *e*P **P** **14 09 35.0 +0.1**
**KAAM Kaadhehdhoo 82.92 115** P P 14 09 28.7 -6.4
**ROSC El Rosal 83.49 264** P **P** **14 09 40.0 +1.4**
comp=Z,80nm,0.8s,baz=111,slow=4.1,SNR=24
ROSC LR LR 14 45 39.1
comp=Z,536nm,19.9s,baz=54,slow=35
comp=Z,80nm,0.8s
**NBCL Cascavel-CE 83.65 227** *e*P **P** **14 09 40.2 +1.3**
**MSEY Mahe Island 84.08 133** IAMs_20 IAMs_20 14 49 31.8
comp=Z,1µm,20.0s
**MSEY Mahe Island 84.08 133** P P 14 09 35.0 -6.1
**LHMI Lhok Sumawe 84.55 90** IAMs_20 IAMs_20 14 54 22.4
comp=Z,2µm,20.0s
**RCBR Riachuelo 84.75 224** IAMs_20 IAMs_20 14 38 05.0
comp=Z,995nm,22.0s
**RCBR Riachuelo 84.75 224** LR LR 14 38 37.5
comp=Z,301nm,21.4s,baz=360,slow=29
**RCBR Riachuelo 84.75 224** *e*P **P** **14 09 47.0 +2.5**
**NBPB Pedra_Branca-C 85.19 228** *e*P **P** **14 09 48.0 +1.3**
**POHA Pohakuloa 85.24 345** P **P** **14 09 49.0 +1.7**
**ITTB Itaituba 87.60 244** *e*P **P** **14 09 59.4 +0.8**
**MACA Manacapuru-AM 87.65 249** *e*P **P** **14 09 59.4 +0.7**
**GUMO Guam 87.81 42** LR LR 14 50 51.0
comp=Z,536nm,19.9s,baz=346,slow=37
**PRPB Parauapebas 87.97 238** *e*P **P** **14 10 01.0 +0.7**
**TEFE Tefe 88.98 253** *e*P **P** **14 10 05.5 +0.4**
**OTAV Otavalo 88.99 267** P **P** **14 10 06.3 +0.6**
**OTAV Otavalo 88.99 267** P **P** **14 10 06.3 +0.6**
OTAV pmax pmax
comp=Z,190nm,1.5s
**OTAV Otavalo 88.99 267** *e*P **P** **14 10 04.5 -1.3**
**PULU Pululahua 89.21 267** IAMs_20 IAMs_20 14 51 46.5
comp=Z,2µm,20.0s
**SMTB Santa Maria do 90.08 235** *e*P **P** **14 10 10.9 +0.7**
**NPGB Novo Progresso 90.09 243** *e*P **P** **14 10 11.1 +0.8**
**DAV Davao City (W) 90.10 62** IAMs_20 IAMs_20 14 50 58.1
comp=Z,2µm,22.0s
**DAV Davao City (W) 90.10 62** LR LR 14 57 38.1
comp=Z,1µm,19.8s,baz=342,slow=40
**NBLA Lagarto - SE 90.15 225** *e*P **P** **14 10 10.3 -0.2**
**BKNI Bangkinang 90.33 88** IAMs_20 IAMs_20 14 56 09.6
comp=Z,2µm,21.0s
**LSZ Lusaka 90.61 161** P **P** **14 10 11.9 -0.8**
LSZ IAMs_20 IAMs_20 14 50 42.4
comp=Z,931nm,22.0s
**LSZ Lusaka 90.61 161** P **P** **14 10 11.9 -0.8**
LSZ pmax pmax
comp=Z,19nm,1.2s
**SBUM Sibu 91.23 76** IAMs_20 IAMs_20 14 59 10.2
comp=Z,1µm,18.0s
**KSM Kuching 91.68 78** IAMs_20 IAMs_20 14 57 07.1
comp=Z,2µm,20.0s
**PAYG Puerto Ayora 93.00 278** IAMs_20 IAMs_20 14 50 11.8
comp=Z,2µm,20.0s
**SAML Samuel 93.84 250** IAMs_20 IAMs_20 14 45 41.2
comp=Z,878nm,22.0s
**SAML Samuel 93.84 250** *e*P **P** **14 10 27.8 +0.3**
**TSUM Tsumeb 93.84 172** IAMs_20 IAMs_20 14 59 39.8
comp=Z,1µm,18.0s
**TSUM Tsumeb 93.84 172** LR LR 14 55 53.0
comp=Z,760nm,19.7s,baz=1.0,slow=38
**CLDB Colider 93.89 243** *e*P **P** **14 10 27.5 -0.3**
**SNDB Serra Nova Dou 93.92 238** *e*P **P** **14 10 27.0 -0.9**
**PMBI Palembang 94.44 85** IAMs_20 IAMs_20 14 59 37.2
comp=Z,1µm,19.0s
**CZSB Cruzeiro do Su 95.11 260** IAMs_20 IAMs_20 14 52 02.8
comp=Z,766nm,20.0s
**MNAI Manna 95.33 87** IAMs_20 IAMs_20 15 00 29.0
comp=Z,3µm,19.0s
**ETMB Extrema 95.44 253** *e*P **P** **14 10 34.5 -0.3**
**MATP Matopo 95.73 161** LR LR 14 57 16.9
comp=Z,192nm,19.8s,baz=28,slow=38
**BKB Balikpapan 96.00 73** IAMs_20 IAMs_20 15 01 09.6
comp=Z,2µm,20.0s
**ATAH Atahualpa 96.04 265** LR LR 14 53 06.5
comp=Z,517nm,20.4s,baz=13,slow=35
**OPO Ambohidratompo 96.20 143** LR LR 14 54 58.5
comp=Z,261nm,21.8s,baz=186,slow=36
**ABPO Ambohimpanom 96.64 144** IAMs_20 IAMs_20 14 56 28.7
comp=Z,984nm,20.0s
**BDFB Brasilia 96.74 234** LR LR 14 46 41.8
comp=Z,964nm,20.8s,baz=356,slow=31
**LUWI Luwuk 97.25 67** IAMs_20 IAMs_20 14 59 39.6
comp=Z,925nm,20.0s
**ARAG Araguaiana, MT 97.64 238** *e*P Pdif 14 10 44.6 -0.3
**PTLB Pontes e Lacer 99.10 245** IAMs_20 IAMs_20 14 49 22.8
comp=Z,1µm,21.0s
**VOI Vohitsoka 99.41 144** IAMs_20 IAMs_20 14 58 21.7
comp=Z,1µm,20.0s
**NNA Nana 100.27 262** IAMs_20 IAMs_20 14 55 23.8
comp=Z,883nm,21.0s
**FAKI Fak Fak 101.30 58** IAMs_20 IAMs_20 15 00 49.5
comp=Z,913nm,20.0s
**POGA Pongola 102.88 159** IAMs_20 IAMs_20 15 02 38.4
comp=Z,1µm,20.0s
**MMRI Maumere 104.43 69** IAMs_20 IAMs_20 15 05 28.7
comp=Z,842nm,22.0s
**SOEI Soe 106.01 68** IAMs_20 IAMs_20 15 06 18.5
comp=Z,809nm,21.0s
**TA01 Diego Aracena 106.75 254** IAMs_20 IAMs_20 15 07 29.6
comp=Z,991nm,21.0s
**GRHM Grahamstown, E 108.32 164** IAMs_20 IAMs_20 15 07 52.4
comp=Z,2µm,20.0s
**ITAB Concordia 108.85 235** IAMs_20 IAMs_20 14 54 43.4
comp=Z,1µm,21.0s
**TAOE Nuku Hiva Isla 111.85 326** *e*LR LR 14 48 56.0
comp=Z,2µm,25.7s
**HNR Honiara 112.78 31** IAMs_20 IAMs_20 15 01 51.3
comp=Z,675nm,22.0s
**WRA Warramunga Arr 118.22 60** PKPdf **PKPdf** **14 15 56.3 -1.0**
**WRA Warramunga Arr 118.22 60** PKP **PKiKP** **14 15 57.1 -0.2**
comp=Z,3.1nm,0.9s,baz=346,slow=2.5,SNR=11

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| WRA | | | | | PKKPab | **PKKPab** | **14 26 18.2** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=160,slow=3.0,SNR=3.0 | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **118.22** | **60** | | PKIKP | **PKPdf** | **14 15 56.3** | **-1.0** |
| **MT08** | **Bocatoma Ro** | **119.01** | **250** | | IAMs_20 | IAMs_20 | 15 02 08.4 | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **MT05** | **Renca** | **119.14** | **250** | | IAMs_20 | IAMs_20 | 14 51 06.8 | |
| | comp=Z,971nm,21.0s | | | | | | | | | |
| **MT13** | **San Alfonso** | **119.36** | **250** | | IAMs_20 | IAMs_20 | 15 04 49.6 | |
| | comp=Z,743nm,21.0s | | | | | | | | | |
| **LMEL** | **Las Melosas** | **119.44** | **250** | | IAMs_20 | IAMs_20 | 15 04 40.7 | |
| | comp=Z,782nm,18.0s | | | | | | | | | |
| **BO01** | **Tunca** | **120.18** | **250** | | IAMs_20 | IAMs_20 | 14 58 02.2 | |
| | comp=Z,643nm,18.0s | | | | | | | | | |
| **ML02** | **Panimavida** | **121.56** | **250** | | IAMs_20 | IAMs_20 | 15 10 30.0 | |
| | comp=Z,809nm,18.0s | | | | | | | | | |
| **PPT2** | **Papeete2** | **121.67** | **335** | *eP* | | **PKPdf** | **14 15 58.4** | **-5.6** |
| | comp=Z,38nm,26.8s | | | | | | | | | |
| **PPT2** | **Papeete2** | **121.67** | **335** | *e*SS | | SS | 14 34 15.9 | +3.4 |
| | comp=Z,2μm,31.8s | | | | | | | | | |
| **PPT2** | **Papeete2** | **121.67** | **335** | *e*LQ | | LQ | 14 48 19.9 | | | |
| | comp=Z,1μm,41.2s | | | | | | | | | |
| PPT2 | | | | | *e*LR | LR | 14 53 28.9 | | | |
| | comp=Z,1μm,23.5s | | | | | | | | | |
| PPT2 | | | | | *e*LR | LR | 14 53 31.0 | | | |
| | comp=Z,2μm,39.8s | | | | | | | | | |
| **AS31** | **Alice Springs** | **121.71** | **62** | | PKPdf | **PKPdf** | **14 16 03.1** | **-0.8** |
| **ASAR** | **Alice Springs** | **121.71** | **62** | | PKPdf | **PKPdf** | **14 16 02.3** | **-1.6** |
| **ASAR** | **Alice Springs** | **121.71** | **62** | | PKP | **PKPdf** | **14 16 02.5** | **-1.4** |
| | comp=Z,6.2nm,0.8s,baz=348,slow=2.3,SNR=23 | | | | | | | | | |
| **ASAR** | **Alice Springs** | **121.71** | **62** | | PKIKP | **PKPdf** | **14 16 02.3** | **-1.6** |
| **KOUNC** | **Koumac, New Ca** | **124.30** | **28** | | IAMs_20 | IAMs_20 | 15 09 01.3 | |
| | comp=Z,720nm,20.0s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **126.06** | **26** | *e*LR | | LR | 14 55 34.9 | | | |
| | comp=Z,1μm,22.9s | | | | | | | | | |
| **PLCA** | **Paso Flores** | **126.06** | **247** | | PKP | **PKPdf** | **14 16 09.5** | **-2.2** |
| | comp=Z,3.7nm,0.8s,baz=329,slow=0.7,SNR=6.0 | | | | | | | | | |
| **LL04** | **Puerto Octay** | **126.69** | **249** | | IAMs_20 | IAMs_20 | 15 15 55.5 | | | |
| | comp=Z,831nm,22.0s | | | | | | | | | |
| **EIDS** | **Eidsvold** | **126.98** | **44** | | IAMs_20 | IAMs_20 | 15 11 14.7 | | | |
| | comp=Z,495nm,20.0s | | | | | | | | | |
| **FORT** | **Forrest** | **127.11** | **70** | | IAMs_20 | IAMs_20 | 15 19 17.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **TBI** | **Tubuai** | **127.35** | **334** | *e*SS | | SS | 14 35 23.1 | -0.8 | | |
| | comp=Z,7μm,34.8s | | | | | | | | | |
| **TBI** | **Tubuai** | **127.35** | **334** | *e*LQ | | LQ | 14 50 31.0 | | | |
| | comp=Z,4μm,42.2s | | | | | | | | | |
| TBI | | | | | *e*LR | LR | 14 56 07.2 | | | |
| | comp=Z,2μm,26.0s | | | | | | | | | |
| TBI | | | | | *e*LR | LR | 14 56 07.2 | | | |
| | comp=Z,12μm,40.0s | | | | | | | | | |
| **LL01** | **San Ignacio de** | **128.07** | **248** | | IAMs_20 | IAMs_20 | 15 02 59.2 | | | |
| | comp=Z,682nm,22.0s | | | | | | | | | |
| **MRZ** | **Mangatainoka R** | **145.36** | **18** | | | **PKPab** | **14 16 46.8** | **-0.6** |
| **VNA1** | **Neumayer--Stat** | **145.49** | **190** | ⇑ | PKPdf | **PKPab** | **14 16 47.1** | **+0.1** |
| | comp=Z,185nm,1.0s | | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **145.73** | **189** | ⇑ | PKPdf | **PKPab** | **14 16 47.4** | **-0.5** |
| | comp=Z,28nm,0.8s,baz=349,slow=4.2 | | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **146.15** | **190** | ⇑ | PKPdf | **PKPab** | **14 16 48.6** | **-0.9** |
| | comp=Z,46nm,0.7s | | | | | | | | | |
| **MAW** | **Mawson** | **146.19** | **146** | | PKPbc | **PKPab** | **14 16 49.5** | **-0.2** |
| | comp=Z,29nm,0.8s,baz=305,slow=4.8,SNR=19 | | | | | | | | | |
| **SNAA** | **Sanae** | **146.31** | **187** | | IAMs_20 | IAMs_20 | 15 23 21.7 | | | |
| | comp=Z,458nm,21.0s | | | | | | | | | |
| **SNAA** | **Sanae** | **146.31** | **187** | ⇑ | PKPdf | **PKPbc** | **14 16 48.1** | **-1.2** |
| | comp=Z,475nm,0.8s | | | | | | | | | |
| **SNAA** | **Sanae** | **146.31** | **187** | | PKPbc | **PKPab** | **14 16 49.3** | **-0.9** |
| | comp=Z,14nm,1.0s,baz=99,slow=0.7,SNR=38 | | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **146.52** | **183** | ⇑ | PKPdf | **PKPab** | **14 16 50.0** | **-1.1** |
| | comp=Z,3μm,0.8s | | | | | | | | | |
| **ELIB** | **Princess Elisa** | **146.69** | **172** | *d*PKPdf | | **PKPbc** | **14 16 49.8** | **-0.8** |
| **PMSA** | **Palmer Station** | **146.83** | **228** | PKPdf | | **PKPab** | **14 16 50.7** | **-1.6** |
| **PMSA** | **Palmer Station** | **146.83** | **228** | *eP* | | **PKiKP** | **14 16 52.5** | **-0.9** |
| **OXZ** | **Oxford** | **147.68** | **23** | PKPdf | | **PKPdf** | **14 16 50.8** | **-0.4** |
| **BELA** | **Belgrano 2** | **154.32** | **200** | PKPbc | | **PKiKP** | **14 17 08.0** | **-0.6** |
| BELA | | | | | IAMs_20 | IAMs_20 | 15 38 36.4 | | | |
| | comp=Z,471nm,19.0s | | | | | | | | | |
| **CASY** | **Casey** | **154.66** | **112** | | IAMs_20 | IAMs_20 | 15 26 39.4 | | | |
| | comp=Z,882nm,19.0s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **164.63** | **180** | | PKP | **PKPdf** | **14 17 12.9** | **+0.5** |
| | comp=Z,4.0nm,1.1s,baz=303,slow=3.8,SNR=4.1 | | | | | | | | | |
| QSPA | | | | | PKPab | **pPKPab** | **14 18 08.4** | **-0.2** |
| | comp=Z,11nm,1.0s,baz=264,slow=3.6,SNR=6.1 | | | | | | | | | |
| **VNDA** | **Vanda** | **173.01** | **126** | | | **PKPdf** | **14 17 14.7** | **-2.8** |
| **VNDA** | **Vanda** | **173.01** | **126** | | PKIKP | **PKPdf** | **14 17 14.7** | **-2.8** |

*IDC **07** 14:04:37.2±1.7,8.2°1S×116.3°1E,h0km,mb4.0/3, mbtmp4.1/4,ML3.4/1,MS3.1/1,Error ellipse: s-maj=32.3km s-min=24.4km az=100.0*

*NEIC **07** 14:04:38.4±1.1,8.3°3S±0.1°×116.1°7E±0.06°,h10km±2km, mb4.3/10,Error ellipse: s-maj=19.6km s-min=9.8km az=359.0*

*DJA **07** 14:04:39.6±0.9,8°5S±6°×11°6E±°,h15km±9km,M4.4/9, mb4.7/2,mB4.7/1,MLv4.2/9,Mw(mB)4.0/1*

**ISC 07 14:04:38.2±0.6,8°23S±0.06°×116°22E±0.03°,h10km,n45, σ1ᵍ22°/47°,mb4.3/9,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.83** | **128** | P | **Pg** | **14 04 54.3** | **+0.2** |
| TWSI | | | | S | **Sb** | **14 05 07.9** | **+2.1** |
| **SRBI** | **Singaraja** | **1.01** | **278** | P | **Pg** | **14 04 57.7** | **+0.1** |
| SRBI | | | | S | **Sb** | **14 05 12.9** | **+1.8** |
| **DNP** | **Denpasar** | **1.09** | **246** | P | **Pg** | **14 04 59.9** | **+0.7** |
| **PLAI** | **Plampang** | **1.65** | **111** | P | **Pn** | **14 05 08.3** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.06** | **263** | P | **Pn** | **14 05 12.8** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.06** | **263** | | **Pn** | **14 05 12.1** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.06** | **263** | P | **Pn** | **14 05 12.4** | **-0.5** |
| JAGI | | | | S | **Sn** | **14 05 38.9** | **+0.2** |
| **PWJI** | **Pagerwojo** | **4.38** | **272** | P | **Pn** | **14 05 46.9** | **+2.1** |
| **BSSI** | **Bau Bau, Buton** | **4.72** | **64** | P | **Pn** | **14 05 49.5** | **0.0** |
| **KAPI** | **Kappang** | **4.75** | **48** | P | **Pb** | **14 05 59.5** | **-2.0** |
| **KAPI** | **Kappang** | **4.75** | **48** | Pn | **Pn** | **14 05 50.4** | **+0.6** |
| **KAPI** | **Kappang** | **4.75** | **48** | Pn | **Pn** | **14 05 50.6** | **+0.7** |
| | 1.6nm,0.3s,baz=143,slow=5.1,SNR=2.1 | | | | | | |
| KAPI | | | | Lg | Lg | 14 07 03.3 | |
| | 4.8nm,0.3s,baz=73,slow=19,SNR=2.1 | | | | | | |
| KAPI | | | | LR | LR | 14 08 06.5 | |
| | comp=Z,191nm,18.4s,baz=226,slow=45 | | | | | | |
| | 5.2nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.42** | **46** | P | **Pn** | **14 06 01.2** | **+2.1** |
| | 42nm,0.8s,742nm0.4nm | | | | | | |
| **UGM** | **Wanagama** | **5.65** | **273** | P | **Pn** | **14 06 05.0** | **+2.7** |
| **UGM** | **Wanagama** | **5.65** | **273** | Pn | **Pn** | **14 06 01.0** | **-1.4** |
| **UGM** | **Wanagama** | **5.65** | **273** | P | **Pn** | **14 06 04.4** | **+2.1** |
| **MMRI** | **Maumere** | **5.97** | **94** | Pn | **Pn** | **14 06 07.2** | **+0.5** |
| **MBWA** | **Marble Bar** | **13.29** | **166** | P | **Pn** | **14 07 46.1** | **-1.0** |
| **MBWA** | **Marble Bar** | **13.29** | **166** | | **Pn** | **14 07 45.8** | **-1.3** |
| **FITZ** | **Fitzroy Crossi** | **13.42** | **138** | Pn | **Pn** | **14 07 47.5** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.72** | **166** | Pn | **Pn** | **14 07 51.3** | **-1.6** |
| **MNAI** | **Manna** | **13.73** | **285** | Pn | **Pn** | **14 07 52.4** | **-0.7** |
| **KNRA** | **Kununurra** | **14.32** | **122** | Pn | **Pn** | **14 08 00.6** | **-0.6** |
| **GIRL** | **Giralia** | **14.46** | **187** | P | **Pn** | **14 08 01.4** | **-1.6** |
| **GIRL** | **Giralia** | **14.46** | **187** | Pn | **Pn** | **14 08 00.7** | **-2.4** |
| **MEEK** | **Meekatharra** | **18.45** | **173** | P | **P** | **14 08 54.0** | **-0.1** |
| **WRKA** | **Warakurna** | **20.30** | **147** | P | **P** | **14 09 15.4** | **+1.0** |
| **MORW** | **Morawa** | **20.73** | **180** | | **P** | **14 09 20.7** | **+1.7** |
| MORW | | | | IAmb | IAmb | 14 10 01.6 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.01** | **125** | P | **P** | **14 09 21.7** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 14 09 22.5 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.05** | **125** | P | **P** | **14 09 21.9** | **-0.7** |
| **WRA** | **Warramunga Arr** | **21.05** | **125** | P | **P** | **14 09 22.5** | **-0.1** |
| | comp=Z,9.1nm,0.8s,baz=299,slow=12,SNR=94 | | | | | | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.06** | **125** | P | **P** | **14 09 22.3** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 14 09 23.3 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.06** | **125** | P | **P** | **14 09 22.2** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 14 09 23.3 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.22** | **125** | P | **P** | **14 09 24.1** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 14 09 28.9 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **22.86** | **134** | P | **P** | **14 09 41.8** | **-0.2** |
| **ASAR** | **Alice Springs** | **22.86** | **134** | P | **P** | **14 09 41.3** | **-0.6** |
| **ASAR** | **Alice Springs** | **22.86** | **134** | P | **P** | **14 09 42.0** | **+0.1** |
| | comp=Z,7.7nm,0.8s,baz=309,slow=8.9,SNR=32 | | | | | | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.59** | **178** | P | **P** | **14 09 58.5** | **-0.1** |
| **QIS** | **Mount Isa** | **25.71** | **121** | P | **P** | **14 10 11.2** | **+2.3** |
| **OOD** | **Oodnadatta** | **26.78** | **139** | P | **P** | **14 10 18.9** | **+0.4** |
| **COEN** | **Coen** | **27.04** | **105** | P | **P** | **14 10 21.1** | **+0.1** |
| **SONM** | **Songino Array** | **56.49** | **352** | P | **P** | **14 14 21.4** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=169,slow=8.4,SNR=2.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.55** | **334** | P | P | 14 15 09.5 | +7.2 |
| | comp=Z,0.6nm,0.8s,baz=154,slow=7.3,SNR=3.0 | | | | | | |
| **VNDA** | **Vanda** | **73.18** | **171** | P | **P** | **14 16 09.5** | **+0.7** |
| VNDA | | | | IAmb | IAmb | 14 16 23.2 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **CPUP** | **Villa Florida** | **145.08** | **190** | PKPbc | **PKPbc** | **14 24 15.4** | **-0.7** |
| | comp=Z,1.1nm,0.7s,baz=180,slow=2.0,SNR=3.1 | | | | | | |

*NEIC **07** 14:12:42.4±0.7,36°50N±0.02°×98°97W±0.01,h5km±1km, Error ellipse: s-maj=3.4km s-min=2.5km az=338.0*

**TUL 07 14:12:42.4±0.5,36°52N±0.01°×99°00W±0.03,h6km±2km, ML2.5,mb_Lg2.4/14(NEIC),ML2.6/10(NEIC),Error ellipse: s-maj=3.1km s-min=1.2km az=112.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NOKA** | **Waynoka** | **0.13** | **23** | Pg | Pg | 14 12 45.6 | +0.5 |
| NOKA | | | | Sg | Sg | 14 12 47.7 | +0.8 |
| **U32A** | **Winter Ranch,** | **0.14** | **182** | Pg | Pg | 14 12 45.6 | +0.4 |
| U32A | | | | Sg | Sg | 14 12 48.0 | +0.8 |
| U32A | | | | IAML | | 14 12 48.2 | |
| | comp=E,1μm,0.1s | | | | | | |
| **OK038** | **West end E0370** | **0.21** | **101** | | Pg | 14 12 47.0 | +0.5 |
| OK038 | | | | IAML | | 14 12 52.4 | |
| | comp=E,1μm,0.2s | | | | | | |
| OK038 | | | | IAML | | 14 12 53.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **0.57** | **217** | | Pg | 14 12 53.4 | +0.1 |
| ELIS | | | | Sg | Sg | 14 13 01.1 | +0.4 |
| ELIS | | | | IAML | | 14 13 07.2 | |
| | comp=E,326nm,0.3s | | | | | | |
| ELIS | | | | IAML | | 14 13 14.0 | |
| | comp=N,267nm,0.4s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.69** | **65** | Pg | Pg | 14 12 55.8 | 0.0 |
| OK032 | | | | IAML | | 14 13 08.7 | |
| | comp=N,330nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.81** | **91** | Pg | Pg | 14 12 57.8 | -0.2 |
| CROK | | | | Sg | Sg | 14 13 08.3 | -0.3 |
| **CSTR** | **Hydro, Custer** | **0.91** | **164** | Pg | Pg | 14 12 59.5 | -0.2 |
| **KAN14** | **Manchester OK** | **0.94** | **62** | Pg | Pg | 14 13 00.3 | -0.1 |
| **GC02** | **Grant County #** | **0.97** | **70** | Pg | Pg | 14 13 00.7 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **1.08** | **49** | Pg | Pg | 14 13 02.8 | -0.5 |
| **KAN12** | **Harper NE Stat** | **1.11** | **45** | Pg | Pg | 14 13 03.2 | -0.6 |
| **KAN01** | **Argonia South** | **1.18** | **57** | Pg | Pg | 14 13 04.5 | -0.5 |
| **KAN09** | **Caldwell North** | **1.27** | **60** | | Pn | 14 13 06.0 | -0.6 |
| **KAN13** | **South Haven SW** | **1.31** | **67** | Pg | Pn | 14 13 06.8 | -0.5 |
| **OK029** | **Liberty Lake** | **1.44** | **120** | | Pb | 14 13 09.4 | -0.2 |
| **BLOK** | **Blackwell** | **1.45** | **80** | | Pn | 14 13 09.0 | -0.2 |
| **OK048** | **Pawnee Station** | **1.66** | **93** | | Pn | 14 13 12.4 | +0.4 |
| **SMWD** | **Samnorwood** | **1.74** | **216** | | Pb | 14 13 14.1 | -0.6 |
| SMWD | | | | IAmb_Lg | | 14 13 41.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **OK051** | **E0350 and S346** | **1.74** | **90** | | Pn | 14 13 13.6 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.78** | **174** | Pn | Pn | 14 13 13.8 | 0.0 |
| **FNO** | **Franklin** | **1.81** | **134** | Pn | Pn | 14 13 14.8 | +0.7 |
| **OK031** | **S. Brethren Rd** | **1.83** | **107** | Pn | Pn | 14 13 15.0 | +0.6 |
| **OK052** | **Battle Ridge R** | **1.85** | **106** | Pn | Pn | 14 13 15.4 | +0.8 |
| **QUOK** | **Quay** | **1.88** | **100** | Pn | Pn | 14 13 15.5 | +0.5 |
| **R32A** | **Long Quarter,** | **1.92** | **7** | Pn | Pn | 14 13 16.5 | +0.9 |
| R32A | | | | IAmb_Lg | | 14 13 43.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.73** | **234** | IAmb_Lg | | 14 14 13.6 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.02** | **270** | Pn | Pn | 14 13 30.5 | -0.3 |
| **APMT** | **Aspermont** | **3.32** | **197** | Pn | Pn | 14 13 34.8 | -0.1 |
| **KSCO** | **Kaye Shedlock'** | **3.81** | **312** | IAmb_Lg | | 14 14 52.7 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **4.08** | **92** | IAmb_Lg | | 14 14 55.6 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **4.39** | **280** | IAmb_Lg | | 14 15 03.2 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.37** | **74** | IAmb_Lg | | 14 16 08.5 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **7.87** | **79** | IAmb_Lg | | 14 16 54.9 | |
| | comp=Z,8.1nm,0.8s | | | | | | |

*RSNC **07** 14:15:49.5±0.0,11°N±1°×7°2W±°,h84km±2km,M3.1,mb3.6, ML2.7*

*FUNV **07** 14:15:51.5,11°13N×72°14W,h34km,MW3.4*

**ISC 07 14:15:46.4±1.5,11°23N±0.06°×72°22W±0.03°, h101km±11km,n26,σ1ᵍ74°/48°,4C,Near north coast of Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URIC** | **Uribia, Colomb** | **0.52** | **26** | P | **Pn** | **14 16 04.0** | **+1.5** |
| URIC | | | | S | **Sn** | **14 16 15.5** | **+1.0** |
| **CRJC** | **Cerrejon, Guaj** | **0.68** | **252** | P | **Pn** | **14 16 03.8** | **0.0** |
| CRJC | | | | S | **Sn** | **14 16 15.1** | **-1.8** |
| **MCQV** | **Machiques** | **1.21** | **195** | ⇑ *eP* | **Pn** | **14 16 10.5** | **+1.2** |
| MCQV | | | | *eS* | **Sn** | **14 16 25.4** | **-1.2** |
| **SMRC** | **Santa Marta, M** | **1.96** | **268** | P | **Pn** | **14 16 19.1** | **+0.5** |
| SMRC | | | | S | **Sn** | **14 16 41.5** | **-1.6** |
| **ARGC** | **Ariguani, Magd** | **2.41** | **236** | P | **Pn** | **14 16 24.4** | **0.0** |
| ARGC | | | | S | **Sn** | **14 16 51.6** | **-1.9** |
| **SDV** | **Santo Domingo** | **2.81** | **146** | P | **Pn** | **14 16 31.2** | **+1.4** |
| SDV | | | | S | **Sn** | **14 17 03.3** | **+0.1** |
| **OCAC** | **Ocana** | **3.16** | **200** | P | **Pn** | **14 16 34.6** | **+0.1** |
| OCAC | | | | S | **Sn** | **14 17 09.9** | **-1.7** |
| **SJCC** | **San Jacinto, C** | **3.19** | **246** | P | **Pn** | **14 16 36.6** | **+1.8** |
| SJCC | | | | S | **Sn** | **14 17 12.3** | **+0.1** |
| **SOCV** | **Socops** | **3.22** | **155** | ⇑ *eP* | **Pn** | **14 16 37.0** | **+1.8** |
| SOCV | | | | *eS* | **Sn** | **14 17 10.6** | **-2.3** |
| **TEPV** | **Terepaima** | **3.24** | **113** | *eP* | **Pn** | **14 16 37.6** | **+2.2** |
| TEPV | | | | *eS* | **Sn** | **14 17 11.3** | **-2.0** |
| **CAPV** | **Capacho** | **3.34** | **182** | *eP* | **Pn** | **14 16 39.0** | **+1.9** |
| CAPV | | | | *eS* | **Sn** | **14 17 14.0** | **-2.1** |
| **MAPV** | **Macapo** | **3.96** | **110** | *eP* | **Pn** | **14 16 46.9** | **+1.9** |
| MAPV | | | | *eS* | **Sn** | **14 17 27.9** | **-2.7** |
| **TURV** | **Turiamo** | **4.38** | **100** | ⇑ *eP* | **Pn** | **14 16 52.8** | **+2.1** |
| TURV | | | | *eS* | **Sn** | **14 17 37.9** | **-2.8** |
| **BRJC** | **Barrancabermej** | **4.49** | **200** | P | **Pn** | **14 16 53.2** | **+0.9** |
| BRJC | | | | S | **Sn** | **14 17 43.0** | **-0.4** |
| **ZARC** | **Zaragoza, Cauc** | **4.53** | **215** | P | **Pn** | **14 16 52.8** | **-0.1** |
| ZARC | | | | S | **Sn** | **14 17 41.9** | **-2.6** |
| **BARC** | **Barichara** | **4.70** | **192** | P | **Pn** | **14 16 57.0** | **+1.6** |
| BARC | | | | S | **Sn** | **14 17 49.4** | **+0.4** |
| **BAUV** | **El Baul** | **4.70** | **119** | ⇑ *eP* | **Pn** | **14 16 56.7** | **+1.6** |
| BAUV | | | | *eS* | **Sn** | **14 17 45.8** | **-2.9** |
| **LCBC** | **Los crdobas,** | **4.71** | **240** | P | **Pn** | **14 16 54.8** | **-0.5** |
| LCBC | | | | S | **Sn** | **14 17 48.8** | **0.0** |
| **BENV** | **Beln** | **4.72** | **105** | *eP* | **Pn** | **14 16 57.3** | **+1.9** |
| BENV | | | | *eS* | **Sn** | **14 17 45.8** | **-3.3** |
| **UREC** | **San Jos de Ur** | **4.75** | **224** | P | Pn | 14 16 51.7 | -4.2 |
| UREC | | | | S | **Sn** | **14 17 49.9** | **0.0** |
| **TAMC** | **Tame, Arauca** | **4.78** | **175** | P | **Pn** | **14 16 57.6** | **+1.3** |
| TAMC | | | | S | **Sn** | **14 17 50.0** | **-0.6** |
| **PTBC** | **PUERTO BERRIO,** | **5.16** | **206** | P | **Pn** | **14 17 01.7** | **+0.4** |
| | 10nm,0.6s | | | | | | |
| PTBC | | | | S | **Sn** | **14 18 00.9** | **+1.3** |
| | 10nm,0.6s | | | | | | |
| **TACV** | **Tcata** | **5.22** | **102** | *eP* | **Pn** | **14 17 04.2** | **+2.0** |
| TACV | | | | *eS* | **Sn** | **14 17 57.8** | **-3.5** |
| **NORC** | **Norcasia** | **6.21** | **205** | P | **Pn** | **14 17 17.0** | **+1.4** |
| | 3.1nm,0.6s | | | | | | |
| **CHIC** | **Chingaza** | **6.73** | **193** | P | **Pn** | **14 17 24.8** | **+1.8** |
| | 6.8nm,1.1s | | | | | | |
| **PRAC** | **Prado** | **7.92** | **200** | P | **Pn** | **14 17 39.7** | **+0.8** |

*IDC **07** 14:46:25.9±1.2,5.85°S×130.22°E,h0km,mb4.2/5, mbtmp4.2/8,ML3.7/3,Error ellipse: s-maj=55.9km s-min=24.1km az=58.0*

*NEIC **07** 14:46:40.0±1.3,6.13°S±0.08°×130.6°E±0.1°,h140km±7km, mb4.4/9,Error ellipse: s-maj=17.3km s-min=11.2km az=100.0*

*DJA **07** 14:46:40.3±0.5,6°S±5°×13°1E±°,h132km±27km,M4.5/11, mb4.3/7,mB5.0/4,MLv4.6/11,Mw(mB)4.3/4,MwMwp5.2/3, Mwp5.4/3*

**ISC 07 14:46:40.1±0.5,6°11S±0.05°×130°54E±0.06°,h150km,n56, σ1ᵍ64°/59°,mb4.1/9,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.01** | **158** | P | **Pn** | **14 47 15.9** | **+0.5** |
| **SAUI** | **Saumlaki** | **2.01** | **158** | Pn | **Pn** | **14 47 15.8** | **+0.3** |
| **SAUI** | **Saumlaki** | **2.01** | **158** | P | **Pn** | **14 47 15.9** | **+0.5** |
| **MSAI** | **Masohi** | **3.18** | **330** | P | **Pn** | **14 47 30.5** | **+0.7** |
| MSAI | | | | S | **Sn** | **14 48 07.5** | **-0.7** |
| **FAKI** | **Fak Fak** | **3.59** | **28** | P | **Pn** | **14 47 34.5** | **-0.6** |
| **FAKI** | **Fak Fak** | **3.59** | **28** | | **Pn** | **14 47 34.2** | **-1.0** |
| **FAKI** | **Fak Fak** | **3.59** | **28** | P | **Pn** | **14 47 34.6** | **-0.6** |
| **KMPI** | **Kaimana, Papua** | **3.98** | **53** | P | **Pn** | **14 47 40.9** | **+0.7** |
| KMPI | | | | S | **Sn** | **14 48 24.9** | **-1.9** |
| **NLAI** | **Namlea** | **4.46** | **310** | P | **Pn** | **14 47 46.4** | **0.0** |
| **SWI** | **Sorong** | **5.26** | **8** | P | **Pn** | **14 47 56.2** | **-0.8** |
| | 17nm,0.4s,3μm0.7nm | | | | | | |
| **DRS** | **Darwin Rock St** | **6.30** | **177** | P | **Pn** | **14 48 10.1** | **-0.7** |
| **MTN** | **Manton Dam** | **6.72** | **175** | P | **Pn** | **14 48 15.8** | **-0.7** |
| **MTN** | **Manton Dam** | **6.72** | **175** | | **Pn** | **14 48 15.0** | **-1.5** |
| **SOEI** | **Soe** | **7.19** | **239** | P | **Pn** | **14 48 23.7** | **+0.8** |
| **SOEI** | **Soe** | **7.19** | **239** | Pn | **Pn** | **14 48 23.0** | **0.0** |
| **SOEI** | **Soe** | **7.19** | **239** | P | **Pn** | **14 48 22.9** | **0.0** |
| | 31nm,0.7s,2μm11μm0.3nm | | | | | | |
| **BATI** | **Baumata** | **7.93** | **239** | P | **Pn** | **14 48 32.8** | **+0.1** |
| **KNRA** | **Kununurra** | **9.67** | **190** | | **Pn** | **14 48 53.1** | **-2.7** |
| **TOLI2** | **Tolitoli** | **12.09** | **306** | P | **Pn** | **14 49 27.1** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **12.84** | **201** | Pn | **Pn** | **14 49 33.4** | **-4.0** |
| **WB0** | **Warramunga Arr** | **14.09** | **165** | Pn | **Pn** | **14 49 50.0** | **-3.2** |
| **WRAB** | **Tennant Creek** | **14.24** | **165** | Pn | **Pn** | **14 49 52.3** | **-2.8** |
| **WRA** | **Warramunga Arr** | **14.24** | **165** | Pn | **Pn** | **14 49 52.5** | **-2.7** |
| **WRA** | **Warramunga Arr** | **14.24** | **165** | Pn | **Pn** | **14 49 52.2** | **-3.0** |
| | 0.8nm,0.3s,baz=348,slow=14,SNR=37 | | | | | | |
| WRA | | | | Sn | Sn | 14 52 19.4 | -14 |
| | 2.8nm,0.3s,baz=335,slow=22,SNR=11 | | | | | | |
| | 2.0nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **14.24** | **165** | Pn | **Pn** | **14 49 52.0** | **-3.2** |
| **WR0** | **Warramunga Arr** | **14.31** | **165** | Pn | **Pn** | **14 49 53.1** | **-3.0** |
| **COEN** | **Coen** | **14.68** | **123** | P | **P** | **14 50 02.6** | **-0.3** |
| **COEN** | **Coen** | **14.68** | **123** | Pn | **Pn** | **14 49 59.9** | **-0.9** |
| **PMG** | **Port Moresby** | **16.79** | **102** | P | **Pn** | **14 50 29.4** | **+2.7** |
| PMG | | | | IAmb | IAmb | 14 50 30.0 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **16.79** | **102** | P | **Pn** | **14 50 29.2** | **+2.6** |
| | comp=Z,1.5nm,0.3s,baz=270,slow=7.2,SNR=6.1 | | | | | | |
| | comp=Z,23nm,0.7s | | | | | | |
| **QIS** | **Mount Isa** | **16.85** | **149** | P | **Pn** | **14 50 28.7** | **+1.4** |
| **ASAR** | **Alice Springs** | **17.76** | **170** | | **P** | **14 50 37.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **17.76** | **170** | P | **Pn** | **14 50 38.7** | **+0.5** |
| | comp=Z,0.5nm,0.3s,baz=345,slow=9.8,SNR=14 | | | | | | |
| ASAR | | | | S | **S** | **14 53 49.1** | **-4.6** |
| | comp=Z,1.4nm,0.4s,baz=345,slow=24,SNR=6.4 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **AS01** | **Alice Springs** | **17.77** | **170** | P | **Pn** | **14 50 39.5** | **+1.2** |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **MTSU** | **Mount Surprise** | **17.99** | **133** | P | **Pn** | **14 50 42.1** | **+1.1** |
| **PSA00** | **Pilbara Seismi** | **18.53** | **213** | P | **P** | **14 50 46.2** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **18.53** | **213** | P | **P** | **14 50 44.2** | **-1.1** |
| **WRKA** | **Warakurna** | **18.95** | **186** | P | **Pn** | **14 50 51.2** | **-1.0** |
| **OOD** | **Oodnadatta** | **22.12** | **168** | P | **P** | **14 51 25.3** | **+1.7** |
| **BBJI** | **Bungbulang** | **22.77** | **265** | P | **P** | **14 51 30.7** | **+0.7** |
| **MORW** | **Morawa** | **26.64** | **209** | P | **P** | **14 52 05.2** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **39.58** | **309** | P | **P** | **14 53 57.4** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **D19K** | **Kuna River** | **17.72** | **20** | P | P | 14 55 02.2 +0.5 |
| **I23K** | **Minto, Yukon-K** | **17.90** | **36** | P | P | 14 55 03.9 +0.3 |
| I23K | | | | IAmb | IAmb | 14 55 06.2 |
| | comp=Z,5.6nm,0.9s | | | | | |
| **MDM** | **Murphy Dome** | **18.21** | **37** | P | P | 14 55 06.3 -0.7 |
| MDM | | | | IAmb | IAmb | 14 55 08.5 |
| | comp=Z,2.4nm,0.7s | | | | | |
| **CCB** | **Clear Creek Bu** | **18.22** | **38** | P | P | 14 55 05.7 -1.4 |
| CCB | | | | IAmb | IAmb | 14 55 10.2 |
| | comp=Z,1.8nm,0.5s | | | | | |
| **E21K** | **Killik River** | **18.63** | **24** | P | P | 14 55 11.7 +0.2 |
| E21K | | | | IAmb | IAmb | 14 55 12.7 |
| | comp=Z,4.9nm,1.2s | | | | | |
| **H24K** | **Noodor Dome** | **18.79** | **35** | P | P | 14 55 14.0 +0.7 |
| H24K | | | | IAmb | IAmb | 14 55 15.3 |
| | comp=Z,3.8nm,0.9s | | | | | |
| **J25K** | **Salcha River,** | **19.14** | **40** | P | P | 14 55 15.8 -1.3 |
| J25K | | | | IAmb | IAmb | 14 55 18.6 |
| | comp=Z,4.7nm,1.4s | | | | | |
| **G24K** | **Hadweenzic Riv** | **19.39** | **33** | P | P | 14 55 19.9 +0.2 |
| G24K | | | | IAmb | IAmb | 14 55 31.4 |
| | comp=Z,4.9nm,1.4s | | | | | |
| **SCRK** | **Sand Creek** | **19.45** | **42** | P | P | 14 55 20.2 -0.2 |
| SCRK | | | | IAmb | IAmb | 14 55 22.4 |
| | comp=Z,2.1nm,0.5s | | | | | |
| **E24K** | **Your Creek** | **19.88** | **29** | P | P | 14 55 25.4 +0.4 |
| **K27K** | **Chicken** | **20.25** | **43** | P | P | 14 55 28.9 0.0 |
| **C23K** | **Itkillik River** | **20.48** | **24** | P | P | 14 55 30.9 -0.3 |
| C23K | | | | IAmb | IAmb | 14 55 59.5 |
| | comp=Z,6.8nm,1.2s | | | | | |
| **D25K** | **Kavik River** | **21.26** | **28** | P | P | 14 55 39.2 -0.2 |
| **H29M** | **Whitestone** | **22.46** | **39** | P | P | 14 55 50.1 -0.8 |
| **J30M** | **Hart River** | **22.81** | **44** | P | P | 14 55 54.4 +0.2 |
| J30M | | | | IAmb | IAmb | 14 55 56.1 |
| | comp=Z,2.6nm,0.6s | | | | | |
| **I30M** | **Mount Dempster** | **22.95** | **42** | P | P | 14 55 54.8 -0.6 |
| I30M | | | | IAmb | IAmb | 14 55 56.7 |
| | comp=Z,2.3nm,0.7s | | | | | |

**IDC 07 15:09:09.4±1.6, 74°59N×7°73E, h0km, mb3.2/2, mbtmp3.3/4, ML3.2/2, Error ellipse: s-maj=40.8km s-min=21.8km az=38.0, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JMIC** | **Jan Mayen** | **6.01** | **241** | Pn | Pn | 15 10 39.0 | -0.3 |
| | 0.8nm,0.3s,baz=20,slow=16,SNR=1.8 | | | | | | |
| JMIC | | | | Sn | Sn | 15 11 55.7 | +7.0 |
| | 0.2nm,0.3s,baz=150,slow=8.1,SNR=1.3 | | | | | | |
| | 8.7nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **7.44** | **124** | Pn | Pn | 15 10 58.5 | -0.5 |
| | 0.3nm,0.3s,baz=320,slow=9.6,SNR=7.3 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **39.91** | **343** | P | P | 15 16 44.5 | +0.2 |
| | 0.4nm,0.9s,baz=8.9,slow=6.4,SNR=4.6 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **41.49** | **88** | P | P | 15 16 56.8 | -0.9 |
| | 0.1nm,0.4s,baz=350,slow=7.9,SNR=2.2 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **07** 15:12:54.6±0.4, 37°79N×144°12E, h0km, mb5.4/35, mbtmp5.4/42, ML5.1/7, MS5.1/70, Error ellipse: s-maj=11.3km s-min=9.7km az=136.0*

*BJI **07** 15:12:54.0±0.0, 37°90N×144°10E, h10km, mb5.4/93, mB5.6/63, Ms5.5/99, Ms7 5.3/97*

*MOS **07** 15:12:56.8±0.9, 38°00N×144°05E, h18km, mb6.0/115, MS5.3/55, Error ellipse: s-maj=5.6km s-min=3.1km az=113.8*

*NEIC **07** 15:12:57.5±1.5, 37°89N±0°06×144°06E±0°06, h14km±2km, mb5.8/823, Ms_20 5.1/740, Mwb5.5/73, Mww5.5/22, Error ellipse: s-maj=9.4km s-min=6.0km az=159.0, Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-1.49; $M_{\theta\theta}$0.10; $M_{\phi\phi}$1.39; $M_{r\theta}$-0.71; $M_{\theta\phi}$1.25; $M_{\phi r}$-0.06; Fault plane solution: $M_o$2.04000×$10^{17}$ NP1:φs54.61000°, δ56.89000°, λ-58.50000°. NP2:φs186.31000°, δ44.42000°, λ-128.71000°. Principal axes: T 2.1996, Plg7.0000°, Azm123.0000°; N -0.3800, Plg26.0000°, Azm216.0000°; P -1.8196, Plg63.0000°, Azm19.0000°;*

*NEIC **07** 15:12:58.3, 37°89N×144°03E, h24km*

*NEIC **07** 15:12:58.3, 37°89N×144°03E, h24km, Moment Tensor Solution. Duration: 2s8 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-2.02; $M_{\theta\theta}$0.25; $M_{\phi\phi}$1.77; $M_{r\theta}$-0.83; $M_{\theta\phi}$0.82; $M_{\phi r}$-0.36; Fault plane solution: $M_o$2.27000×$10^{17}$ NP1:φs39.09000°, δ55.89000°, λ-71.63000°. NP2:φs188.46000°, δ38.21000°, λ-114.95000°. Principal axes: T 2.2415, Plg9.0000°, Azm116.0000°; N 0.0552, Plg15.0000°, Azm209.0000°; P -2.2967, Plg72.0000°, Azm356.0000°;*

*NEIC **07** 15:12:58.2, 37°89N×144°04E, h18km*

*JMA **07** 15:12:59.4±0.2, 37°9N±0°8×14°4E±, h50km, MD5.6/33, MW5.6/33, FAR E OFF MIYAGI PREF*

*JMA Felt III J1 at FAR E OFF MIYAGI PREF .*

*NIED **07** 15:12:59.4, 37°92N×143°94E, h50km, MW5.6, Moment Tensor Solution. s3 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-2.25; $M_{\theta\theta}$-0.03; $M_{\phi\phi}$2.29; $M_{r\theta}$-1.31; $M_{\theta\phi}$1.17; $M_{\phi r}$0.31; Fault plane solution: $M_o$2.88000×$10^{17}$ NP1:φs46.00000°, δ53.00000°, λ-57.00000°. NP2:φs179.00000°, δ48.00000°, λ-126.00000°. Principal axes: T 3.5140, Plg2.0000°, Azm113.0000°; N -0.2630, Plg26.0000°, Azm204.0000°; P -3.2550, Plg64.0000°, Azm18.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR **07** 15:12:59.7, 37°66N×144°88E, h33km, mb5.6, Ms5.4*

*GCMT **07** 15:13:00.5±0.1, 37°87N±0°01×144°01E±0°01, h30km, MW5.6/147, Moment Tensor Solution. s126,c225; s147,c317; Duration: 1s6 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$-2.68±.04; $M_{\theta\theta}$-0.20±.03; $M_{\phi\phi}$2.88±.03; $M_{r\theta}$-1.18±.06; $M_{\theta\phi}$1.52±.02; $M_{\phi r}$0.21±.05; Best double couple: $M_o$3.38500×$10^{17}$ NP1:φs46.00000°, δ53.00000°, λ-57.00000°. NP2:φs179.00000°, δ48.00000°, λ-126.00000°. Principal axes: T 3.5140, Plg2.0000°, Azm113.0000°; N -0.2630, Plg26.0000°, Azm204.0000°; P -3.2550, Plg64.0000°, Azm18.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 07 15:12:58.8±0.3, 37°94N±0°03×144°07E±0°03, h25km±1km, h25km:pP-P, n2298, σ1°59/1790, mb5.8/671, MS5.1/487, 84C-123D, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakibo** | **2.09** | **281** | *i* P | **Pn** | **15 13 31.5** | **-0.7** |
| JIKH | | | | *e*S | **Sn** | **15 13 55.1** | **-2.3** |
| **JIKH** | **Ishinomakibo** | **2.09** | **281** | A | A | 15 13 31.5 | |
| | comp=E,48nm,4.5s,comp=N,50nm,3.8s | | | | | | |
| **OFUJ** | **Ofunato** | **2.21** | **302** | P | **Pn** | **15 13 33.4** | **-0.3** |
| **OFUJ** | **Ofunato** | **2.21** | **302** | A | A | 15 13 33.4 | |
| | comp=E,43nm,4.8s,comp=N,71nm,1.2s | | | | | | |
| **JIO** | **Ouri** | **2.21** | **284** | P | **Pn** | **15 13 33.2** | **-0.6** |
| JIO | | | | S | **Sn** | **15 13 58.3** | **-2.0** |
| **JIO** | **Ouri** | **2.21** | **284** | A | A | 15 13 33.2 | |
| | comp=E,33nm,2.3s,comp=N,45nm,4.1s | | | | | | |
| **JKMT** | **Kesennumamotoy** | **2.22** | **294** | *i* P | **Pn** | **15 13 33.5** | **-0.5** |
| JKMT | | | | *e*S | **Sn** | **15 13 59.4** | **-1.3** |
| **JKMT** | **Kesennumamotoy** | **2.22** | **294** | A | A | 15 13 33.5 | |
| | comp=E,32nm,0.3s,comp=N,33nm,1.2s | | | | | | |
| **MIYJ** | **Miyakonagasawa** | **2.41** | **314** | A | A | 15 13 36.4 | |
| | comp=E,43nm,1.9s,comp=N,74nm,1.8s | | | | | | |
| **JMK** | **Ichinoseki** | **2.46** | **295** | P | **Pn** | **15 13 37.0** | **-0.3** |
| **JMK** | **Ichinoseki** | **2.46** | **295** | A | A | 15 13 37.0 | |
| | comp=E,31nm,1.1s,comp=N,46nm,1.2s | | | | | | |
| **JOFO** | **Osakifurukawao** | **2.58** | **286** | A | A | 15 13 38.4 | |
| | comp=E,283nm,3.2s,comp=N,366nm,5.3s | | | | | | |
| **JMM** | **Marumori** | **2.60** | **269** | P | **Pn** | **15 13 38.7** | **-0.5** |
| **JMM** | **Marumori** | **2.60** | **269** | | **Pn** | **15 13 38.4** | **-0.8** |
| **JMM** | **Marumori** | **2.60** | **269** | A | A | 15 13 38.5 | |
| | comp=E,35nm,1.7s,comp=N,29nm,9.5s | | | | | | |
| **JFK** | **Kawauchi** | **2.60** | **258** | A | A | 15 13 38.5 | |
| | comp=E,25nm,6.8s,comp=N,43nm,1.6s | | | | | | |
| **JTH** | **Tanohata** | **2.64** | **320** | A | A | 15 13 39.9 | |
| | comp=E,49nm,4.4s,comp=N,58nm,3.5s | | | | | | |
| **JOM** | **Ohasama** | **2.66** | **306** | P | **Pn** | **15 13 40.2** | **+0.1** |
| JOM | | | | S | **Sn** | **15 14 10.8** | **-0.7** |
| **JOM** | **Ohasama** | **2.66** | **306** | A | A | 15 13 40.2 | |
| | comp=E,58nm,0.3s,comp=N,87nm,1.9s | | | | | | |
| **JOU** | **Okura** | **2.72** | **280** | A | A | 15 13 40.4 | |
| | comp=E,91nm,2.8s,comp=N,100nm,3.8s | | | | | | |
| **ONAJ** | **Iwakimizuishiy** | **2.73** | **253** | A | A | 15 13 40.4 | |
| | comp=E,54nm,0.3s,comp=N,93nm,1.5s | | | | | | |
| **JFFD** | **Fukushimafurud** | **2.92** | **254** | A | A | 15 13 43.0 | |
| | comp=E,34nm,1.5s,comp=N,51nm,1.8s | | | | | | |
| **JKEN** | **Kujiedanarisaw** | **2.92** | **322** | A | A | 15 13 43.9 | |
| | comp=E,53nm,1.7s,comp=N,70nm,3.8s | | | | | | |
| **JKZ** | **Kuzumaki** | **2.96** | **315** | A | A | 15 13 44.4 | |
| | comp=E,58nm,6.2s,comp=N,41nm,3.6s | | | | | | |
| **JOTO** | **OTAMA OYAMA** | **2.99** | **264** | P | **Pn** | **15 13 44.2** | **-0.3** |
| JOTO | | | | S | **Sn** | **15 14 17.1** | **-2.6** |
| **JOTO** | **OTAMA OYAMA** | **2.99** | **264** | A | A | 15 13 44.2 | |
| | comp=E,150nm,1.2s,comp=N,166nm,1.5s | | | | | | |
| **JSZI** | **Iwateshizukuis** | **3.03** | **307** | A | A | 15 13 45.1 | |
| | comp=E,143nm,1.5s,comp=N,127nm,1.8s | | | | | | |
| **JRG** | **Rokugo** | **3.06** | **299** | A | A | 15 13 45.5 | |
| | comp=E,44nm,3.1s,comp=N,51nm,3.0s | | | | | | |
| **JYK** | **Kaneyama** | **3.08** | **290** | P | **Pn** | **15 13 46.0** | **+0.2** |
| JYK | | | | *e*S | **Sn** | **15 14 21.3** | **-0.5** |
| **JYK** | **Kaneyama** | **3.08** | **290** | A | A | 15 13 46.0 | |
| | comp=E,31nm,3.0s,comp=N,32nm,2.6s | | | | | | |
| **JHO** | **Hitachi** | **3.09** | **246** | A | A | 15 13 45.5 | |
| | comp=E,24nm,4.5s,comp=N,28nm,3.5s | | | | | | |
| **JYAR** | **Yonezawaarcadi** | **3.11** | **271** | A | A | 15 13 45.8 | |
| | comp=E,77nm,1.3s,comp=N,86nm,1.3s | | | | | | |
| **JANG** | **Nango** | **3.14** | **322** | P | **Pn** | **15 13 46.3** | **-0.4** |
| **JANG** | **Nango** | **3.14** | **322** | A | A | 15 13 46.3 | |
| | comp=E,34nm,2.7s,comp=N,46nm,1.9s | | | | | | |
| **JYS** | **Shirataka** | **3.18** | **276** | A | A | 15 13 46.8 | |
| | comp=E,53nm,1.6s,comp=N,69nm,2.4s | | | | | | |
| **JHYU** | **Hitachinakayam** | **3.21** | **241** | A | A | 15 13 47.2 | |
| | comp=E,36nm,4.4s,comp=N,24nm,4.1s | | | | | | |
| **JYW** | **Yuwa** | **3.42** | **299** | A | A | 15 13 50.5 | |
| | comp=E,117nm,3.3s,comp=N,86nm,1.4s | | | | | | |
| **JYYZ** | **Yamagatayuza** | **3.43** | **290** | A | A | 15 13 50.4 | |
| | comp=E,93nm,2.9s,comp=N,109nm,4.3s | | | | | | |
| **JSB** | **Shiboa** | **3.44** | **255** | A | A | 15 13 50.4 | |
| | comp=E,71nm,3.0s,comp=N,91nm,3.3s | | | | | | |
| **JYA** | **Atsumi** | **3.49** | **282** | A | A | 15 13 51.4 | |
| | comp=E,29nm,5.8s,comp=N,33nm,4.0s | | | | | | |
| **JAH** | **Hinai** | **3.50** | **311** | A | A | 15 13 51.8 | |
| | comp=E,54nm,2.9s,comp=N,52nm,2.9s | | | | | | |
| **JFY** | **Yanaizu** | **3.51** | **263** | A | A | 15 13 51.4 | |
| | comp=E,28nm,2.9s,comp=N,27nm,6.7s | | | | | | |
| **JYT** | **Yasato** | **3.54** | **242** | A | A | 15 13 51.9 | |
| | comp=E,38nm,0.3s,comp=N,39nm,1.6s | | | | | | |
| **JTM** | **Tenmabayashi** | **3.68** | **322** | P | **Pn** | **15 13 55.6** | **+1.6** |
| **JTM** | **Tenmabayashi** | **3.68** | **322** | | **Pn** | **15 13 54.1** | **+0.1** |
| **JTM** | **Tenmabayashi** | **3.68** | **322** | A | A | 15 13 54.6 | |
| | comp=E,45nm,2.3s,comp=N,34nm,2.8s | | | | | | |
| **JARK** | **Aomorirokkasho** | **3.71** | **327** | A | A | 15 13 55.2 | |
| | comp=E,43nm,3.1s,comp=N,62nm,1.9s | | | | | | |
| **JTB** | **Tobi-shima** | **3.76** | **291** | A | A | 15 13 55.1 | |
| | comp=E,56nm,2.0s,comp=N,47nm,4.1s | | | | | | |
| **JNS** | **Sasagawa** | **3.77** | **270** | P | **Pn** | **15 13 55.4** | **+0.1** |
| JNS | | | | *e*S | **Sn** | **15 14 37.1** | **-1.6** |
| **JNS** | **Sasagawa** | **3.77** | **270** | A | A | 15 13 55.4 | |
| | comp=E,19nm,2.9s,comp=N,31nm,5.2s | | | | | | |
| **JNTW** | **Noshirotokiwa** | **3.83** | **309** | A | A | 15 13 56.5 | |
| | comp=E,122nm,2.2s,comp=N,205nm,2.3s | | | | | | |
| **JAW** | **Awa shima** | **3.84** | **279** | P | **Pn** | **15 13 56.5** | **+0.3** |
| **JAW** | **Awa shima** | **3.84** | **279** | A | A | 15 13 56.5 | |
| | comp=E,25nm,4.6s,comp=N,35nm,5.8s | | | | | | |
| **JAHD** | **Aomorihigashid** | **3.94** | **328** | A | A | 15 13 58.4 | |
| | comp=E,50nm,2.2s,comp=N,53nm,1.5s | | | | | | |
| **JHHS** | **Hirosakihyakuz** | **3.96** | **314** | A | A | 15 13 58.4 | |
| | comp=E,98nm,4.7s,comp=N,107nm,3.6s | | | | | | |
| **JAG** | **Ashikaga** | **3.99** | **249** | A | A | 15 13 58.1 | |
| | comp=E,23nm,0.9s,comp=N,35nm,4.5s | | | | | | |
| **JKT** | **Katashina** | **4.02** | **255** | A | A | 15 13 58.5 | |
| | comp=E,20nm,6.3s,comp=N,30nm,4.4s | | | | | | |
| **JUON** | **Uonuma** | **4.05** | **261** | A | A | 15 13 59.0 | |
| | comp=E,13nm,3.5s,comp=N,22nm,4.3s | | | | | | |
| **BSO1** | **Boso 1** | **4.12** | **218** | P | **Pn** | **15 13 57.9** | **-1.8** |
| **JIW** | **Iwasaki** | **4.12** | **311** | A | A | 15 14 00.6 | |
| | comp=E,35nm,3.4s,comp=N,28nm,6.0s | | | | | | |
| **ERM** | **Erimo** | **4.13** | **350** | P | **Pn** | **15 14 01.2** | **+0.9** |
| **ERM** | **Erimo** | **4.13** | **350** | | **Pn** | **15 14 00.5** | **+0.2** |
| **ERM** | **Erimo** | **4.13** | **350** | *d* iP | **Pn** | **15 13 59.9** | **-0.4** |
| **JEM** | **Erimo** | **4.13** | **350** | P | **Pn** | **15 14 01.0** | **+0.7** |
| **JEM** | **Erimo** | **4.13** | **350** | A | A | 15 14 01.9 | |
| | comp=E,15nm,5.5s,comp=N,10.0nm,1.8s | | | | | | |
| **JOT** | **Ohata** | **4.16** | **327** | P | **Pn** | **15 14 00.8** | **+0.1** |
| **JOT** | **Ohata** | **4.16** | **327** | A | A | 15 14 00.8 | |
| | comp=E,15nm,3.5s,comp=N,20nm,2.4s | | | | | | |
| **JSI2** | **Shiura 2** | **4.21** | **319** | A | A | 15 14 02.0 | |
| | comp=E,39nm,2.9s,comp=N,29nm,2.2s | | | | | | |
| **JIZZ** | **Izumozaki** | **4.27** | **266** | A | A | 15 14 02.1 | |
| | comp=E,68nm,3.7s,comp=N,82nm,3.8s | | | | | | |
| **JHU** | **Hanno** | **4.37** | **243** | A | A | 15 14 03.5 | |
| | comp=E,12nm,3.9s,comp=N,15nm,2.9s | | | | | | |
| **JOG3** | **Oga3** | **4.37** | **299** | A | A | 15 13 56.9 | |
| | comp=E,37nm,2.0s,comp=N,42nm,2.6s | | | | | | |
| **JTHR** | **Tokachihiroo** | **4.39** | **352** | A | A | 15 14 05.4 | |
| | comp=E,18nm,2.5s,comp=N,13nm,4.4s | | | | | | |
| **TATJ** | **Tateyama 2** | **4.45** | **231** | A | A | 15 14 04.8 | |
| | comp=E,69nm,5.8s,comp=N,46nm,3.6s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **4.46** | **347** | A | A | 15 14 06.2 | |
| | comp=E,26nm,1.7s,comp=N,34nm,2.3s | | | | | | |
| **JYO** | **Yokosk** | **4.46** | **234** | A | A | 15 14 04.9 | |
| | comp=E,45nm,3.8s,comp=N,39nm,5.1s | | | | | | |
| **JGK** | **Kuni** | **4.55** | **254** | A | A | 15 14 06.0 | |
| | comp=E,24nm,3.4s,comp=N,40nm,5.0s | | | | | | |
| **JSGW** | **Sagamiharawaka** | **4.55** | **241** | A | A | 15 14 06.0 | |
| | comp=E,19nm,3.5s,comp=N,16nm,2.4s | | | | | | |
| **JRY** | **Ryogami san** | **4.56** | **247** | P | **Pn** | **15 14 05.1** | **-1.2** |
| JRY | | | | *e*S | **Sn** | **15 14 53.9** | **-4.6** |
| **JRY** | **Ryogami san** | **4.56** | **247** | A | A | 15 14 05.1 | |
| | comp=E,13nm,2.7s,comp=N,21nm,1.7s | | | | | | |
| **JSR** | **Shiriuchi** | **4.56** | **323** | A | A | 15 14 07.2 | |
| | comp=E,21nm,3.5s,comp=N,18nm,5.0s | | | | | | |
| **JKB** | **Kayabe** | **4.59** | **330** | A | A | 15 14 07.7 | |
| | comp=E,17nm,1.3s,comp=N,16nm,3.6s | | | | | | |
| **JSD** | **Sado** | **4.59** | **273** | P | **Pn** | **15 14 06.3** | **-0.3** |
| **JSD** | **Sado** | **4.59** | **273** | | **Pn** | **15 14 05.9** | **-0.7** |
| **JSHD** | **Hidakashinhida** | **4.63** | **345** | A | A | 15 14 08.7 | |
| | comp=E,50nm,1.9s,comp=N,39nm,2.6s | | | | | | |
| **JCH** | **Churui** | **4.71** | **354** | P | **Pn** | **15 14 08.1** | **0.0** |
| **JCH** | **Churui** | **4.71** | **354** | A | A | 15 14 08.1 | |
| | comp=E,10.0nm,3.7s,comp=N,12nm,2.5s | | | | | | |
| **JOMM** | **Oshimamatsumae** | **4.76** | **320** | A | A | 15 14 09.8 | |
| | comp=E,14nm,5.2s,comp=N,13nm,3.0s | | | | | | |
| **JJN** | **Nakama** | **4.77** | **262** | A | A | 15 14 09.2 | |
| | comp=E,19nm,3.9s,comp=N,21nm,4.6s | | | | | | |
| **JOD2** | **Odawara 2** | **4.82** | **238** | P | **Pn** | **15 14 08.4** | **-1.3** |
| JOD2 | | | | *e*S | **Sn** | **15 14 59.2** | **-5.5** |
| **JOD2** | **Odawara 2** | **4.82** | **238** | A | A | 15 14 08.4 | |
| | comp=E,20nm,7.8s,comp=N,21nm,2.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.88** | **255** | Pn | **Pn** | **15 14 11.0** | **+0.4** |
| | comp=N,87nm,0.3s,baz=81,slow=15,SNR=1681 | | | | | | |
| MJAR | | | | Sn | **Sn** | **15 15 07.9** | **+1.5** |
| | comp=N,24nm,0.3s,baz=86,slow=27,SNR=5.5 | | | | | | |
| | comp=N,1μm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **4.88** | **255** | P | **Pn** | **15 14 10.9** | **+0.3** |
| **MAJO** | **Matsushiro** | **4.88** | **255** | *c* iP | **Pn** | **15 14 11.1** | **+0.5** |
| **MJB9** | **Matsu-Tunnel** | **4.88** | **255** | | **Pn** | **15 14 11.0** | **+0.4** |
| **JIAM** | **Iburiatsuma** | **4.96** | **341** | A | A | 15 14 13.2 | |
| | comp=E,38nm,3.7s,comp=N,45nm,1.6s | | | | | | |
| **JOB** | **Onbets** | **4.96** | **358** | A | A | 15 14 13.7 | |
| | comp=E,15nm,2.3s,comp=N,18nm,2.4s | | | | | | |
| **JNG** | **Nsakai** | **5.01** | **254** | A | A | 15 14 12.4 | |
| | comp=E,10.0nm,1.8s,comp=N,17nm,3.3s | | | | | | |
| **JBT2** | **Biratori 2** | **5.01** | **345** | A | A | 15 14 13.9 | |
| | comp=E,14nm,2.9s,comp=N,16nm,2.1s | | | | | | |
| **JHTM** | **Izuhatsuma** | **5.05** | **235** | A | A | 15 14 13.2 | |
| | comp=E,31nm,1.5s,comp=N,29nm,2.4s | | | | | | |
| **JYM2** | **Yakumo 2** | **5.05** | **327** | A | A | 15 14 14.0 | |
| | comp=E,12nm,2.3s,comp=N,14nm,1.9s | | | | | | |
| **JYN** | **Shimob** | **5.06** | **243** | A | A | 15 14 13.2 | |
| | comp=E,18nm,2.0s,comp=N,14nm,1.7s | | | | | | |
| **JAK** | **Akkeshi** | **5.08** | **5** | A | A | 15 14 15.3 | |
| | comp=E,37nm,3.3s,comp=N,27nm,1.3s | | | | | | |
| **JFNN** | **Fujinakano** | **5.13** | **239** | A | A | 15 14 14.2 | |
| | comp=E,32nm,4.1s,comp=N,26nm,2.2s | | | | | | |
| **JNT** | **Takato** | **5.18** | **248** | A | A | 15 14 14.9 | |
| | comp=E,19nm,4.2s,comp=N,24nm,4.2s | | | | | | |
| **JKHN** | **Kushirohamanak** | **5.21** | **9** | A | A | 15 14 17.2 | |
| | comp=E,26nm,1.5s,comp=N,22nm,1.0s | | | | | | |
| **JIZS** | **Izushimoda** | **5.28** | **234** | A | A | 15 14 16.4 | |
| | comp=E,10.0nm,1.0s,comp=N,12nm,6.2s | | | | | | |
| **JEW** | **Eniwo** | **5.29** | **339** | A | A | 15 14 17.8 | |
| | comp=E,29nm,2.6s,comp=N,20nm,4.5s | | | | | | |
| **JFR** | **Furan** | **5.34** | **348** | A | A | 15 14 18.6 | |
| | comp=E,10.0nm,1.8s,comp=N,8.0nm,1.8s | | | | | | |
| **JAR** | **Ashorobuto** | **5.36** | **358** | A | A | 15 14 19.1 | |
| | comp=E,25nm,2.6s,comp=N,25nm,1.6s | | | | | | |
| **JOSM** | **Okushiri--Mats** | **5.44** | **321** | A | A | 15 14 19.4 | |
| | comp=E,11nm,7.3s,comp=N,8.0nm,2.7s | | | | | | |
| **JHST** | **Hiyamasetana** | **5.51** | **326** | A | A | 15 14 20.4 | |
| | comp=E,13nm,2.0s,comp=N,13nm,6.1s | | | | | | |
| **JTT** | **Ttatey** | **5.54** | **258** | A | A | 15 14 19.9 | |
| | comp=E,25nm,6.1s,comp=N,23nm,6.1s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **5.57** | **13** | *d* iP | **Pn** | **15 14 18.2** | **-1.8** |
| NMR | | | | *e*S | **Sn** | **15 15 19.5** | **-3.7** |
| **JNY** | **Yasuok** | **5.62** | **245** | A | A | 15 14 21.0 | |
| | comp=E,19nm,3.6s,comp=N,23nm,3.8s | | | | | | |
| **JGN** | **Niukaw** | **5.67** | **254** | A | A | 15 14 21.6 | |
| | comp=E,7.0nm,5.6s,comp=N,5.0nm,2.9s | | | | | | |
| **JAB** | **Ashibetsu** | **5.74** | **346** | A | A | 15 14 24.1 | |
| | comp=E,28nm,2.3s,comp=N,21nm,2.3s | | | | | | |
| **JSG** | **Sagara** | **5.76** | **237** | P | **Pn** | **15 14 24.6** | **+1.9** |
| **JSG** | **Sagara** | **5.76** | **237** | | **Pn** | **15 14 22.2** | **-0.4** |
| **JSG** | **Sagara** | **5.76** | **237** | A | A | 15 14 23.0 | |
| | comp=E,22nm,7.7s,comp=N,19nm,3.4s | | | | | | |
| **JGF** | **Kuroka** | **5.87** | **249** | P | **Pn** | **15 14 25.2** | **+0.9** |
| **JGF** | **Kuroka** | **5.87** | **249** | | **Pn** | **15 14 24.4** | **+0.1** |
| **JNSB** | **Nemuroshibetsu** | **5.88** | **7** | A | A | 15 14 26.5 | |
| | comp=E,25nm,1.4s,comp=N,32nm,2.8s | | | | | | |
| **JHJ2** | **Mitsune** | **5.93** | **217** | | **Pn** | **15 14 22.7** | **-2.4** |
| **JHJ** | **Hachijo jima 2** | **5.94** | **217** | Pn | **Pn** | **15 14 23.1** | **-2.1** |
| | comp=N,397nm,0.3s,baz=332,slow=20,SNR=22 | | | | | | |
| JHJ | | | | Sn | **Sn** | **15 15 25.4** | **-7.1** |
| | comp=N,689nm,0.3s,baz=79,slow=22,SNR=7.4 | | | | | | |
| | comp=N,920nm,0.3s | | | | | | |
| **JTKR** | **Abashiri--Toko** | **6.03** | **359** | A | A | 15 14 28.5 | |
| | comp=E,12nm,1.7s,comp=N,6.0nm,2.0s | | | | | | |
| **JRA** | **Rausu** | **6.05** | **7** | A | A | 15 14 28.9 | |
| | comp=E,9.0nm,7.1s,comp=N,9.0nm,3.0s | | | | | | |
| **JHR** | **Hokuryu** | **6.07** | **344** | A | A | 15 14 28.6 | |
| | comp=E,27nm,2.0s,comp=N,17nm,1.4s | | | | | | |
| **JAO** | **Obara** | **6.09** | **246** | A | A | 15 14 27.8 | |
| | comp=E,10.0nm,3.6s,comp=N,13nm,5.4s | | | | | | |
| **RUSJ** | **Misakicho** | **6.23** | **8** | *d* iP | **Pn** | **15 14 28.8** | **-0.2** |
| RUSJ | | | | *e*S | **Sn** | **15 15 37.2** | **-2.1** |
| **INU** | **Inuyama** | **6.23** | **248** | P | **Pn** | **15 14 29.7** | **+0.6** |
| **INU** | **Inuyama** | **6.23** | **248** | | **Pn** | **15 14 28.5** | **-0.6** |
| **YUK** | **Yuzh-Kuril'sk** | **6.24** | **12** | *c* iP | **Pn** | **15 14 27.8** | **-1.4** |
| YUK | | | | *e*S | **Sn** | **15 15 35.9** | **-3.8** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,1μm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,10μm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,8μm,0.5s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=N,6μm,11.0s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **6.27** | **350** | Pn | **Pn** | **15 14 30.2** | **+0.5** |
| **ASAJ** | **Asahikawa** | **6.28** | **350** | Pn | **Pn** | **15 14 30.9** | **+1.2** |
| | comp=N,210nm,0.3s,baz=199,slow=13,SNR=797 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **15 15 38.3** | **-2.3** |
| | comp=N,41nm,0.3s,baz=44,slow=13,SNR=6.3 | | | | | | |
| | comp=N,1μm,0.5s | | | | | | |
| **ASAJ** | **Asahikawa** | **6.28** | **350** | P | **Pn** | **15 14 30.2** | **+0.5** |
| **SHO** | **Shikotan** | **6.29** | **19** | *d* iP | **Pn** | **15 14 28.7** | **-1.1** |
| SHO | | | | *e*S | **Sn** | **15 15 35.1** | **-5.7** |
| SHO | | | | smax | smax | | |
| | comp=E,3μm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,4μm,0.4s | | | | | | |
| **JYTA** | **Yamagatataniai** | **6.34** | **251** | A | A | 15 14 31.0 | |
| | comp=E,6.0nm,4.1s,comp=N,11nm,4.0s | | | | | | |
| **JICN** | **Ichinomiyachia** | **6.38** | **248** | A | A | 15 14 31.6 | |
| | comp=E,12nm,3.5s,comp=N,18nm,2.9s | | | | | | |
| **KUR** | **Kuril'sk** | **7.83** | **20** | *eP* | **Pn** | **15 14 49.1** | **-1.8** |
| KUR | | | | *e*S | **Sn** | **15 16 12.1** | **-6.5** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,597nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,210nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,2μm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,550nm,0.4s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,14μm,10.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,9μm,11.0s | | | | | | |
| **TEY** | **Ternei** | **9.04** | **324** | *eP* | **Pn** | **15 15 08.6** | **+1.0** |
| TEY | | | | *e*S | **Sn** | **15 16 46.1** | **-2.4** |
| TEY | | | | pmax | pmax | | |
| | comp=N,800nm,1.8s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=E,700nm,1.8s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=Z,900nm,1.8s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=N,190nm,1.2s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=E,150nm,1.2s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=Z,210nm,1.2s | | | | | | |
| TEY | | | | MLR | MLR | | |
| | comp=N,8μm,16.0s | | | | | | |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KS19** | **Wonju Array Si** | **12.84** | **273** | | | **Pn** | | **15 15 59.8 +0.1** |
| **TYV** | **Tymovskoe** | **12.96** | **356** | *e* | P | **Pn** | | **15 16 00.7 -0.6** |
| TYV | | | | *e* | S | **Sn** | | **15 18 26.8 +2.2** |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,82nm,0.8s | | | | | | | |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,600nm,2.7s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=N,27nm,1.6s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=E,21nm,1.6s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=N,1µm,4.5s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=E,800nm,4.5s | | | | | | | |
| **TJN** | **Taejon** | **13.42** | **268** | P | | **Pn** | | **15 16 08.4 +0.8** |
| **TJN** | **Taejon** | **13.42** | **268** | *c i* | P | **Pn** | | **15 16 07.6 0.0** |
| **INCN** | **Inchon** | **13.82** | **273** | P | | **Pn** | | **15 16 13.9 +0.8** |
| **INCN** | **Inchon** | **13.82** | **273** | Pn | | **Pn** | | **15 16 13.1 0.0** |
| **INCN** | **Inchon** | **13.82** | **273** | P | | Pn | | 15 16 05.3 -7.7 |
| INCN | | | | S | | **Sn** | | **15 18 49.4 +3.7** |
| **INCN** | **Inchon** | **13.82** | **273** | P | | **Pn** | | **15 16 13.1 0.0** |
| **GRNR** | **Gornyy** | **13.94** | **339** | ⇑ *i* | P | **Pn** | | **15 16 15.0 +0.4** |
| GRNR | | | | *e* | S | **Sn** | | **15 18 53.6 +5.2** |
| GRNR | | | | | pmax | pmax | | |
| | comp=E,20nm,0.8s | | | | | | | |
| GRNR | | | | | pmax | pmax | | |
| | comp=N,30nm,1.0s | | | | | | | |
| GRNR | | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| GRNR | | | | | smax | smax | | |
| | comp=N,9.0nm,0.9s | | | | | | | |
| **KLR** | **Kul'dur** | **14.37** | **326** | Pn | | **Pn** | | **15 16 18.5 -2.0** |
| | comp=N,1.5nm,0.3s,baz=127,slow=14,SNR=78 | | | | | | | |
| KLR | | | | | Sn | **Sn** | | **15 18 56.6 -2.3** |
| | baz=344,slow=7.4 | | | | | | | |
| KLR | | | | | LR | LR | | 15 22 20.1 |
| | comp=N,15µm,18.1s,baz=143,slow=39 | | | | | | | |
| **BNX** | **BinXian** | **14.65** | **307** | ⇑ P | | **Pn** | | **15 16 22.7 -1.6** |
| BNX | | | | S | | **Sn** | | **15 19 05.0 -0.8** |
| BNX | | | | | pmax | pmax | | |
| | comp=N,77nm,1.0s | | | | | | | |
| BNX | | | | | pmax | pmax | | |
| | comp=N,1µm,6.8s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=N,9µm,14.7s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=N,14µm,19.1s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=N,18µm,17.2s | | | | | | | |
| **CN2** | **Changchun** | **15.25** | **298** | *e* | P | **Pn** | | **15 16 29.5 -2.8** |
| CN2 | | | | *e* | PP | **pP** | | **15 16 41.8 -0.2** |
| CN2 | | | | *e* | S | **Sn** | | **15 19 18.5 -1.9** |
| CN2 | | | | | pmax | pmax | | |
| | comp=N,60nm,1.4s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=N,2µm,14.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=N,3µm,14.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=N,3µm,16.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **15.36** | **30** | *e* | P | **Pn** | | **15 16 29.8 -3.9** |
| SKR | | | | *e* | S | **Sn** | | **15 19 17.3 -5.6** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,746nm,1.4s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,700nm,3.5s | | | | | | | |
| SKR | | | | | MLR | MLR | | |
| | comp=Z,6µm,20.0s | | | | | | | |
| **NKL** | **Nikolayevsk** | **15.40** | **352** | *e* | P | **Pn** | | **15 16 31.4 -2.8** |
| NKL | | | | *e* | S | **Sn** | | **15 19 28.5 +4.7** |
| NKL | | | | | pmax | pmax | | |
| | comp=E,448nm,1.1s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=N,146nm,1.0s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=Z,542nm,1.0s | | | | | | | |
| NKL | | | | | smax | smax | | |
| | comp=E,590nm,4.1s | | | | | | | |
| NKL | | | | | smax | smax | | |
| | comp=N,516nm,5.3s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=E,10µm,16.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=N,25µm,19.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=Z,18µm,18.0s | | | | | | | |
| **OKH** | **Okha** | **15.64** | **357** | *de* | P | **Pn** | | **15 16 31.0 -6.3** |
| OKH | | | | | pmax | pmax | | |
| | comp=Z,300nm,13.4s | | | | | | | |
| **SNY** | **Shenyang** | **16.20** | **290** | ⇑ P | | **Pn** | | **15 16 43.1 -1.5** |
| SNY | | | | S | | **Sn** | | **15 19 44.1 +0.6** |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,85nm,1.6s | | | | | | | |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,960nm,4.9s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,4µm,15.5s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,3µm,22.6s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,5µm,22.5s | | | | | | | |
| **JMZ** | **Minamidaito 2** | **16.26** | **226** | P | | **P** | | **15 16 48.7 +0.4** |
| **JMZ** | **Minamidaito 2** | **16.26** | **226** | Pn | | **Pn** | | **15 16 43.3 -2.2** |
| **HEH** | **HeiHe** | **17.12** | **321** | *e* | P | **Pn** | | **15 16 52.5 -3.7** |
| HEH | | | | S | | **Sn** | | **15 20 06.7 +1.0** |
| HEH | | | | sS | | **S** | | **15 20 13.1 -1.7** |
| HEH | | | | | pmax | pmax | | |
| | comp=Z,140nm,0.7s | | | | | | | |
| HEH | | | | | pmax | pmax | | |
| | comp=Z,1µm,4.5s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,11µm,18.2s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,8µm,18.8s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,20µm,18.5s | | | | | | | |
| **JOW** | **Kunigami** | **17.31** | **235** | P | | **P** | | **15 17 00.1 +0.1** |
| **JOW** | **Kunigami** | **17.31** | **235** | Pn | | **Pn** | | **15 16 56.9 -1.9** |
| **JOW** | **Kunigami** | **17.31** | **235** | P | | **Pn** | | **15 16 57.8 -1.0** |
| | comp=Z,5.6nm,0.3s,baz=31,slow=8.1,SNR=11 | | | | | | | |
| JOW | | | | | LR | LR | | 15 24 10.4 |
| | comp=Z,3µm,18.5s,baz=49,slow=39 | | | | | | | |
| | comp=Z,64nm,0.7s | | | | | | | |
| **DL2** | **Dalian** | **17.61** | **280** | P | | **Pn** | | **15 17 01.3 -1.1** |
| DL2 | | | | sP | | **sP** | | **15 17 10.4 0.0** |
| DL2 | | | | S | | **Sn** | | **15 20 16.6 -1.2** |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,320nm,0.9s | | | | | | | |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,1µm,4.5s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,5µm,13.8s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,4µm,11.5s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,8µm,18.4s | | | | | | | |
| **PET** | **Petropavlovsk** | **18.17** | **29** | P | | **Pn** | | **15 17 09.1 0.0** |
| **PET** | **Petropavlovsk** | **18.17** | **29** | | | **Pn** | | **15 17 08.0 -1.1** |
| **PET** | **Petropavlovsk** | **18.17** | **29** | *e* | P | **Pn** | | **15 17 09.3 +0.2** |
| PET | | | | *e* | S | **Sn** | | **15 20 20.9 -10** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,148nm,1.5s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,2µm,3.6s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,2µm,8.6s | | | | | | | |
| **PET** | **Petropavlovsk** | **18.17** | **29** | P | | **P** | | **15 17 09.6 +0.4** |
| | comp=Z,97nm,1.4s,comp=Z,4µm | | | | | | | |
| **ZEA** | **Zeya** | **19.59** | **329** | *e* | P | **P** | | **15 17 25.1 +0.2** |
| ZEA | | | | *e* | S | S | | 15 20 52.2 -12 |
| ZEA | | | | | pmax | pmax | | |
| | comp=E,300nm,1.7s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=N,400nm,1.8s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,700nm,2.0s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=N,130nm,0.9s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=N,190nm,1.0s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,300nm,1.1s | | | | | | | |
| ZEA | | | | | smax | smax | | |
| | comp=E,2µm,5.9s | | | | | | | |
| ZEA | | | | | smax | smax | | |
| | comp=N,2µm,6.4s | | | | | | | |
| **SSE** | **Sheshan** | **20.03** | **257** | P | | **P** | | **15 17 29.0 -0.8** |
| SSE | | | | S | | Sn | | 15 21 14.8 -1.4 |
| SSE | | | | | pmax | pmax | | |
| | comp=N,80nm,1.3s | | | | | | | |
| SSE | | | | | pmax | pmax | | |
| | comp=N,470nm,4.1s | | | | | | | |
| SSE | | | | | LR | LR | | |
| | comp=N,5µm,19.1s | | | | | | | |
| SSE | | | | | LR | LR | | |
| | comp=N,4µm,19.6s | | | | | | | |
| **JMJ** | **Miyako jima 2** | **20.64** | **236** | P | | Pn | | 15 17 37.6 -1.3 |
| **HIA** | **Hailar** | **20.85** | **311** | P | | **P** | | **15 17 37.5 -1.1** |
| **NJ2** | **Nanjing** | **21.45** | **262** | ⇑ P | | **P** | | **15 17 43.2 -1.9** |
| NJ2 | | | | sP | | **pP** | | **15 17 49.4 -0.6** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=N,26nm,0.9s | | | | | | | |
| NJ2 | | | | | pmax | pmax | | |
| | comp=N,1µm,3.6s | | | | | | | |
| NJ2 | | | | | LR | LR | | |
| | comp=N,3µm,16.1s | | | | | | | |
| NJ2 | | | | | LR | LR | | |
| | comp=N,6µm,16.1s | | | | | | | |
| NJ2 | | | | | LR | LR | | |
| | comp=N,6µm,17.5s | | | | | | | |
| **TIA** | **Tai'an** | **21.55** | **274** | P | | **P** | | **15 17 45.2 -1.0** |
| TIA | | | | S | | **S** | | **15 21 38.5 -5.3** |
| TIA | | | | PcP | | **PcP** | | **15 21 52.4 +4.5** |
| TIA | | | | | pmax | pmax | | |
| | comp=N,200nm,0.9s | | | | | | | |
| TIA | | | | | pmax | pmax | | |
| | comp=N,1µm,3.8s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=N,5µm,14.5s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=N,2µm,13.9s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=N,9µm,14.9s | | | | | | | |
| **BJI** | **Beijing** | **21.75** | **284** | P | | **P** | | **15 17 45.3 -3.1** |
| BJI | | | | S | | **S** | | **15 21 42.4 -5.4** |
| BJI | | | | | pmax | pmax | | |
| | comp=N,160nm,1.2s | | | | | | | |
| BJI | | | | | pmax | pmax | | |
| | comp=N,570nm,3.5s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=N,1µm,12.7s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=N,2µm,14.5s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=N,3µm,13.9s | | | | | | | |
| **BJT** | **Baijiatuau** | **21.76** | **284** | P | | **P** | | **15 17 47.4 -1.1** |
| **XLT** | **XiLinHaoTe** | **21.92** | **295** | *e* | P | **P** | | **15 17 49.7 -0.5** |
| XLT | | | | sP | | pP | | 15 17 56.3 +1.1 |
| XLT | | | | S | | **S** | | **15 21 46.4 -4.6** |
| XLT | | | | | pmax | pmax | | |
| | comp=N,250nm,1.1s | | | | | | | |
| XLT | | | | | pmax | pmax | | |
| | comp=N,1µm,3.9s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=N,310nm,13.6s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=N,3µm,16.1s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=N,3µm,18.1s | | | | | | | |
| **MA2** | **Magadan** | **22.08** | **9** | P | | **P** | | **15 17 52.8 +1.1** |
| **MA2** | **Magadan** | **22.08** | **9** | P | | **P** | | **15 17 52.2 +0.5** |
| **MA2** | **Magadan** | **22.08** | **9** | LR | | LR | | 15 26 51.7 |
| | comp=N,3µm,21.6s,baz=201,slow=38 | | | | | | | |
| **MA2** | **Magadan** | **22.08** | **9** | P | | **P** | | **15 17 52.2 +0.5** |
| MA2 | | | | | pmax | pmax | | |
| | comp=Z,154nm,1.0s | | | | | | | |
| MA2 | | | | | MLR | MLR | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **22.41** | **239** | P | | **P** | | **15 17 53.3 -2.2** |
| **YOJ** | **Yonaguni jima** | **22.41** | **239** | P | | **P** | | **15 17 51.8 -3.7** |
| YOJ | | | | IAmb | | IAmb | | 15 18 15.0 |
| YOJ | comp=Z,316nm,1.1s | | | IAMs_20 | | IAMs_20 | | 15 27 23.8 |
| | comp=Z,5µm,20.0s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **22.41** | **239** | P | | **P** | | **15 17 51.8 -3.7** |
| YOJ | | | | | pmax | pmax | | |
| | comp=Z,316nm,1.1s | | | | | | | |
| YOJ | | | | | MLR | MLR | | |
| | comp=Z,5µm,20.0s | | | | | | | |
| **TATO** | **Taipei** | **23.13** | **243** | P | | **P** | | **15 18 03.4 +0.4** |
| **TATO** | **Taipei** | **23.13** | **243** | P | | **P** | | **15 18 03.0 0.0** |
| TATO | | | | S | | **S** | | **15 22 09.5 -3.4** |
| **HNS** | **HongShan** | **23.21** | **278** | ⇑ P | | **P** | | **15 18 00.6 -3.2** |
| HNS | | | | S | | **S** | | **15 22 04.7 -9.5** |
| HNS | | | | | pmax | pmax | | |
| | comp=Z,190nm,1.1s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=Z,6µm,16.4s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=Z,3µm,16.0s | | | | | | | |
| HNS | | | | | LR | LR | | |
| | comp=Z,6µm,14.3s | | | | | | | |
| **YHNB** | **Yeheng** | **23.40** | **242** | P | | **P** | | **15 18 04.0 -1.8** |
| **NACB** | **Ninganchiao** | **23.57** | **241** | P | | **P** | | **15 18 06.2 -1.2** |
| **NACB** | **Ninganchiao** | **23.57** | **241** | IAmb | | IAmb | | 15 18 22.1 |
| NACB | comp=Z,275nm,0.9s | | | IAMs_20 | | IAMs_20 | | 15 28 12.2 |
| | comp=Z,5µm,20.0s | | | | | | | |
| **GUMO** | **Guam** | **24.26** | **178** | LR | | LR | | 15 27 23.8 |
| | comp=Z,1µm,19.0s,baz=18,slow=36 | | | | | | | |
| **SSLB** | **Suanglung** | **24.26** | **241** | P | | **P** | | **15 18 12.7 -1.3** |
| **SSLB** | **Suanglung** | **24.26** | **241** | P | | **P** | | **15 18 12.0 -2.0** |
| SSLB | | | | IAmb | | IAmb | | 15 18 32.8 |
| SSLB | comp=Z,297nm,1.0s | | | IAMs_20 | | IAMs_20 | | 15 28 22.5 |
| | comp=Z,5µm,21.0s | | | | | | | |
| **YULB** | **Yu-li** | **24.29** | **240** | P | | **P** | | **15 18 14.2 0.0** |
| **YULB** | **Yu-li** | **24.29** | **240** | P | | **P** | | **15 18 12.4 -1.7** |
| YULB | | | | IAmb | | IAmb | | 15 18 33.9 |
| | comp=Z,466nm,1.1s | | | | | | | |
| **TPUB** | **Ta-pu** | **24.80** | **241** | P | | **P** | | **15 18 19.0 +0.1** |
| **TPUB** | **Ta-pu** | **24.80** | **241** | IAMs_20 | | IAMs_20 | | 15 28 40.9 |
| | comp=Z,7µm,20.0s | | | | | | | |
| **TWGBT** | **Beinan** | **24.82** | **239** | P | | **P** | | **15 18 18.7 -0.3** |
| **TWG** | **Pinlang** | **24.82** | **239** | P | | **P** | | **15 18 17.0 -2.0** |
| TWG | | | | IAmb | | IAmb | | 15 18 44.0 |
| | comp=Z,391nm,1.0s | | | | | | | |
| **TIY** | **Taiyuan** | **24.93** | **279** | *e* | P | **P** | | **15 18 21.0 +0.9** |
| TIY | | | | S | | **S** | | **15 22 42.8 +0.7** |
| TIY | | | | | pmax | pmax | | |
| | comp=Z,280nm,1.1s | | | | | | | |
| TIY | | | | | pmax | pmax | | |
| | comp=Z,2µm,5.3s | | | | | | | |
| TIY | | | | | LR | LR | | |
| | comp=Z,1µm,15.8s | | | | | | | |
| TIY | | | | | LR | LR | | |
| | comp=Z,7µm,14.4s | | | | | | | |
| TIY | | | | | LR | LR | | |
| | comp=Z,9µm,13.7s | | | | | | | |
| **QZH** | **Quanzhou** | **25.21** | **246** | ⇑ *i* | P | **P** | | **15 18 21.6 -0.9** |
| QZH | | | | S | | **S** | | **15 22 46.2 -0.3** |
| QZH | | | | | pmax | pmax | | |
| | comp=Z,160nm,1.0s | | | | | | | |
| QZH | | | | | pmax | pmax | | |
| | comp=Z,960nm,4.5s | | | | | | | |
| QZH | | | | | LR | LR | | |
| | comp=Z,5µm,19.2s | | | | | | | |
| QZH | | | | | LR | LR | | |
| | comp=Z,2µm,17.2s | | | | | | | |
| QZH | | | | | LR | LR | | |
| | comp=Z,6µm,18.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **25.21** | **287** | ⇓ *i* | P | **P** | | **15 18 24.4 +1.8** |
| HHC | | | | | pP | pP | | 15 18 29.2 +1.5 |
| HHC | | | | | sP | sP | | 15 18 32.4 +2.5 |
| HHC | | | | | S | **S** | | **15 22 46.3 -0.3** |
| HHC | | | | | sS | sS | | 15 22 58.4 +2.2 |
| HHC | | | | | SS | **SnSn** | | **15 23 44.4 +6.7** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,190nm,1.0s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,1µm,4.2s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,1µm,13.3s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,7µm,13.5s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,10µm,13.8s | | | | | | | |
| **SEY** | **Seymchan** | **25.54** | **9** | LR | | LR | | 15 29 12.1 |
| | comp=Z,2µm,21.3s,baz=196,slow=38 | | | | | | | |
| **SEY** | **Seymchan** | **25.54** | **9** | *d i* | P | **P** | | **15 18 26.7 +1.6** |
| SEY | | | | | pmax | pmax | | |
| | comp=Z,188nm,0.9s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.54** | **45** | LR | | LR | | 15 26 44.7 |
| | comp=Z,3µm,19.5s,baz=244,slow=32 | | | | | | | |
| **CIT** | **Chita** | **25.55** | **313** | *e* | P | **P** | | **15 18 26.4 +1.0** |
| CIT | | | | *e* | | | | 15 19 02.8 |
| CIT | | | | *e* | | | | 15 19 15.6 |
| CIT | | | | *e* | S | **S** | | **15 22 54.6 +3.1** |
| CIT | | | | *e* | | | | 15 24 15.8 |
| CIT | | | | | pmax | pmax | | |
| | comp=Z,942nm,1.8s | | | | | | | |
| **WHN** | **Wuhan** | **25.58** | **262** | P | | **P** | | **15 18 26.0 +0.2** |
| WHN | | | | pP | | **pP** | | **15 18 31.3 +0.1** |
| WHN | | | | sP | | **sP** | | **15 18 34.0 +0.4** |
| WHN | | | | S | | **S** | | **15 22 52.6 +0.3** |
| WHN | | | | sS | | **pS** | | **15 22 58.7 +0.1** |
| WHN | | | | | pmax | pmax | | |
| | comp=Z,6µm,2.6s | | | | | | | |
| WHN | | | | | LR | LR | | |
| | comp=Z,16µm,14.6s | | | | | | | |
| WHN | | | | | LR | LR | | |
| | comp=Z,25µm,15.6s | | | | | | | |
| WHN | | | | | LR | LR | | |
| | comp=Z,26µm,14.9s | | | | | | | |
| **LYN** | **LuoYang** | **25.65** | **272** | ⇓ P | | **P** | | **15 18 27.3 +0.8** |
| LYN | | | | pP | | pP | | 15 18 32.5 +0.7 |
| LYN | | | | sP | | sP | | 15 18 35.2 +1.0 |
| LYN | | | | S | | **S** | | **15 22 53.5 +0.2** |
| LYN | | | | sS | | pS | | 15 22 59.6 -0.1 |
| LYN | | | | SS | | **SnSn** | | **15 23 54.6 +6.3** |
| LYN | | | | | pmax | pmax | | |
| | comp=Z,220nm,1.0s | | | | | | | |
| LYN | | | | | pmax | pmax | | |
| | comp=Z,3µm,7.0s | | | | | | | |
| LYN | | | | | LR | LR | | |
| | comp=Z,12µm,16.1s | | | | | | | |
| LYN | | | | | LR | LR | | |
| | comp=Z,7µm,14.8s | | | | | | | |
| LYN | | | | | LR | LR | | |
| | comp=Z,8µm,14.8s | | | | | | | |
| **KNMB** | **Chin-men Tao** | **25.65** | **246** | IAMs_20 | | IAMs_20 | | 15 30 08.8 |
| | comp=Z,4µm,19.0s | | | | | | | |
| **YAK** | **Yakutsk** | **25.71** | **344** | P | | **P** | | **15 18 26.6 -0.2** |
| YAK | | | | IAmb | | IAmb | | 15 18 28.9 |
| | comp=Z,243nm,0.8s | | | | | | | |
| **YAK** | **Yakutsk** | **25.71** | **344** | P | | **P** | | **15 18 27.6 +0.9** |
| | comp=Z,208nm,0.6s,baz=354,slow=1.4,SNR=11 | | | | | | | |
| YAK | | | | S | | **S** | | **15 22 57.8 +4.0** |
| | comp=Z,13nm,0.7s,baz=333,slow=2.3,SNR=1.4 | | | | | | | |
| YAK | | | | LR | | LR | | 15 29 23.7 |
| | comp=Z,8µm,20.2s,baz=148,slow=38 | | | | | | | |
| | comp=Z,208nm,0.6s | | | | | | | |
| **YAK** | **Yakutsk** | **25.71** | **344** | *e* | P | **P** | | **15 18 26.9 +0.2** |
| YAK | | | | *e* | | | | 15 19 01.4 |
| YAK | | | | *e* | S | **S** | | **15 22 57.8 +4.0** |
| YAK | | | | *e* | SS | **SnSn** | | **15 23 49.7 +0.4** |
| YAK | | | | *e* | SSS | SSS | | 15 24 07.5 |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,202nm,0.8s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,68nm,0.9s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,31nm,0.9s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,479nm,1.9s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,431nm,1.8s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,272nm,1.9s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=E,1µm,3.8s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=N,3µm,3.4s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=Z,8µm,23.0s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=N,4µm,22.0s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=E,4µm,19.0s | | | | | | | |
| **BTO** | **Baotou** | **26.40** | **287** | *e* | P | **P** | | **15 18 35.7 +2.3** |
| BTO | | | | | pP | **pP** | | **15 18 40.2 +1.7** |
| BTO | | | | | sP | **sP** | | **15 18 41.6 +0.9** |
| BTO | | | | | PP | **PnPn** | | **15 19 19.4 +6.1** |
| BTO | | | | | pmax | pmax | | |
| | comp=E,620nm,1.2s | | | | | | | |
| BTO | | | | | LR | LR | | |
| | comp=E,9µm,14.7s | | | | | | | |
| BTO | | | | | LR | LR | | |
| | comp=E,5µm,15.7s | | | | | | | |
| BTO | | | | | LR | LR | | |
| | comp=E,9µm,17.1s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **26.88** | **126** | T | | T | | 15 45 41.0 |
| | baz=317,slow=74,SNR=113 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.89** | **126** | T | | T | | 15 45 42.2 |
| | baz=317,slow=74,SNR=88 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.89** | **126** | T | | T | | 15 45 44.2 |
| | baz=317,slow=74,SNR=96 | | | | | | | |
| **WAKE** | **Wake Island** | **27.05** | **127** | IAMs_20 | | IAMs_20 | | 15 26 32.4 |
| | comp=Z,5µm,22.0s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.66** | **128** | T | | T | | 15 46 43.7 |
| | baz=318,slow=76,SNR=24 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.66** | **128** | T | | T | | 15 46 41.9 |
| | baz=318,slow=76,SNR=29 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.68** | **128** | T | | T | | 15 46 42.5 |
| | baz=318,slow=76,SNR=22 | | | | | | | |
| **CNSH** | **ChangSha** | **27.75** | **259** | P | | **P** | | **15 18 44.8 -0.6** |
| CNSH | | | | S | | **S** | | **15 23 25.6 -0.9** |
| CNSH | | | | | pmax | pmax | | |
| | comp=Z,110nm,1.5s | | | | | | | |
| CNSH | | | | | LR | LR | | |
| | comp=Z,7µm,19.7s | | | | | | | |
| CNSH | | | | | LR | LR | | |
| | comp=Z,3µm,20.5s | | | | | | | |
| CNSH | | | | | LR | LR | | |
| | comp=Z,5µm,14.6s | | | | | | | |
| **BOD** | **Bodaibo** | **27.95** | **325** | *e* | P | **P** | | **15 18 46.7 -0.2** |
| BOD | | | | | pmax | pmax | | |
| | comp=Z,331nm,1.6s | | | | | | | |
| **XAN** | **Xi'an** | **28.60** | **273** | ⇓ P | | **P** | | **15 18 53.0 -0.1** |
| XAN | | | | pP | | sP | | 15 19 00.2 -0.2 |
| XAN | | | | S | | **S** | | **15 23 41.1 +1.0** |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,46nm,0.8s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=Z,3µm,19.6s | | | | | | | |
| XAN | | | | | LR | LR | | |
| | comp=Z,4µm,19.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.63** | **302** | P | | **P** | | **15 18 53.9 +0.6** |
| ULN | | | | IAmb | | IAmb | | 15 19 08.0 |
| | comp=Z,257nm,1.3s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.63** | **302** | P | | **P** | | **15 18 55.1 +1.8** |
| ULN | | | | P | | **P** | | **15 18 55.1 +1.8** |
| ULN | | | | S | | **S** | | **15 23 44.9 +4.4** |
| ULN | | | | S | | **S** | | **15 23 44.9 +4.4** |
| **ULN** | **Ulaanbaatar** | **28.63** | **302** | *d i* | P | **P** | | **15 18 54.5 +1.2** |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,121nm,1.3s | | | | | | | |
| ULN | | | | | MLR | MLR | | |
| | comp=Z,4µm,17.0s | | | | | | | |
| **SZP** | **Santa** | **29.00** | **232** | P | | **P** | | **15 18 57.6 +1.0** |
| **SONM** | **Songino Array** | **29.07** | **302** | P | | **P** | | **15 18 57.9 +0.7** |
| SONM | | | | IAmb | | IAmb | | 15 19 11.2 |
| | comp=Z,325nm,1.5s | | | | | | | |
| **SONM** | **Songino Array** | **29.07** | **302** | P | | **P** | | **15 18 58.6 +1.5** |
| | comp=Z,29nm,0.6s,baz=99,slow=7.5,SNR=77 | | | | | | | |
| SONM | | | | LR | | LR | | 15 31 13.0 |
| | comp=Z,5µm,18.3s,baz=30,slow=38 | | | | | | | |
| | comp=Z,29nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **29.07** | **302** | P | | **P** | | **15 18 57.9 +0.7** |
| SONM | | | | | pmax | pmax | | |
| | comp=Z,325nm,1.5s | | | | | | | |
| **ENH** | **Enshi** | **29.52** | **265** | P | | **P** | | **15 19 01.2 0.0** |
| **ENH** | **Enshi** | **29.52** | **265** | IAMs_20 | | IAMs_20 | | 15 31 17.7 |
| | comp=Z,4µm,20.0s | | | | | | | |
| **HKPS** | **Hong Kong Po S** | **30.07** | **247** | P | | **P** | | **15 19 07.0 +0.9** |
| **HKPS** | **Hong Kong Po S** | **30.07** | **247** | P | | **P** | | **15 19 05.6 -0.5** |
| HKPS | | | | IAmb | | IAmb | | 15 19 25.7 |
| | comp=Z,160nm,1.3s | | | | | | | |
| HKPS | | | | IAMs_20 | | IAMs_20 | | 15 32 05.8 |
| | comp=Z,4µm,20.0s | | | | | | | |
| **ADK** | **Adak** | **30.68** | **50** | P | | **P** | | **15 19 11.1 -0.1** |
| **ADK** | **Adak** | **30.68** | **50** | P | | **P** | | **15 19 10.5 -0.7** |
| **ADK** | **Adak** | **30.68** | **50** | IAMs_20 | | IAMs_20 | | 15 29 07.3 |
| | comp=Z,3µm,21.0s | | | | | | | |
| **ADK** | **Adak** | **30.68** | **50** | P | | **P** | | **15 19 10.5 -0.7** |

ADK pmax pmax
comp=Z,118nm,1.3s
**IRK Irkutsk 31.09 310** *e*P **P 15 19 14.5 -0.4**
IRK *e*S **S 15 24 21.5 +2.8**
IRK pmax pmax
comp=Z,288nm,2.7s
**GSTR Great Sitkin T 31.11 50** P **P 15 19 14.3 -0.7**
**GULI GuiLin 31.18 256** P **P 15 19 17.6 +1.7**
GULI S **S 15 24 15.1 -5.4**
GULI pmax pmax
comp=Z,120nm,1.2s
GULI LR LR
comp=Z,4µm,19.1s
GULI LR LR
comp=Z,2µm,18.6s
GULI LR LR
comp=Z,4µm,20.5s
**ZAK Zakamensk 31.40 307** *e*P **P 15 19 18.3 +0.6**
ZAK pmax pmax
comp=Z,80nm,1.3s
**LZH Lanzhou 32.01 279** ⇓P **P 15 19 24.2 +0.9**
LZH pP pP 15 19 29.3 +0.8
LZH S **S 15 24 28.8 -4.8**
LZH sS sS 15 24 44.4 +1.2
LZH pmax pmax
comp=Z,190nm,1.4s
LZH LR LR
comp=Z,5µm,20.3s
LZH LR LR
comp=Z,4µm,17.5s
LZH LR LR
comp=Z,5µm,18.2s
**BILL Bilibino 32.58 15** P **P 15 19 28.0 +0.3**
BILL IAmb IAmb 15 19 29.6
comp=Z,171nm,1.2s
**BILL Bilibino 32.58 15***d i*P **P 15 19 27.8 +0.1**
BILL *e* 15 20 36.5
BILL *e*PPP PPP 15 20 46.4
BILL *e* 15 22 13.9
BILL *e*S **S 15 24 44.7 +3.2**
BILL *e*SS **SnSn 15 26 41.2 +4.8**
BILL pmax pmax
comp=Z,247nm,1.7s
BILL MLR MLR
comp=Z,3µm,21.0s
**MOY Mondy 33.00 309** *e*P **P 15 19 32.6 +0.8**
MOY pmax pmax
comp=Z,125nm,2.5s
**GYA Guiyang 33.45 261** P **P 15 19 35.4 -0.6**
GYA S **S 15 24 53.6 -2.6**
GYA pmax pmax
comp=Z,63nm,1.0s
GYA pmax pmax
comp=Z,620nm,8.2s
GYA LR LR
comp=Z,4µm,16.3s
GYA LR LR
comp=Z,4µm,23.4s
GYA LR LR
comp=Z,7µm,19.1s
**MIDW Midway 33.53 95** IAMs_20 IAMs_20 15 32 21.6
comp=Z,4µm,19.0s
**CD2 Chengdu 33.79 270** P **P 15 19 38.5 -0.2**
CD2 pP pP 15 19 41.1 -2.9
CD2 sP sP 15 19 42.3 -3.8
CD2 S **S 15 25 00.4 -0.7**
CD2 sS pS 15 25 06.6 -1.1
CD2 pmax pmax
comp=Z,30nm,0.6s
CD2 pmax pmax
comp=Z,560nm,5.2s
CD2 LR LR
comp=Z,7µm,16.1s
CD2 LR LR
comp=Z,6µm,15.8s
CD2 LR LR
comp=Z,6µm,15.6s
**GTA Gaotai 34.33 287** *e*P **P 15 19 44.5 +1.0**
GTA pP pP 15 19 50.2 +1.5
GTA PcP **PcP 15 22 20.4 +1.2**
GTA S **S 15 25 09.0 -0.5**
GTA sS pS 15 25 15.9 -0.3
GTA PcS **PcS 15 26 05.9 +0.3**
GTA SS **SnSn 15 27 16.0 -3.7**
GTA pmax pmax
comp=Z,52nm,1.3s
GTA pmax pmax
comp=Z,1µm,7.6s
GTA LR LR
comp=Z,2µm,18.5s
GTA LR LR
comp=Z,3µm,20.0s
GTA LR LR
comp=Z,4µm,20.4s
**CLES Cleveland East 34.94 50** P **P 15 19 48.3 -0.1**
CLES IAmb IAmb 15 19 50.8
comp=Z,237nm,1.2s
CLES IAMs_20 IAMs_20 15 31 36.9
comp=Z,4µm,22.0s
**DAV Davao City (W) 35.01 213** IAMs_20 IAMs_20 15 34 00.4
comp=Z,3µm,20.0s
**DAV Davao City (W) 35.01 213** LR LR 15 34 10.4
comp=Z,2µm,19.2s,baz=40,slow=37
**QIZ Qiongzhong 35.23 247** P **P 15 19 52.0 +0.8**
**QIZ Qiongzhong 35.23 247** P **P 15 19 50.9 -0.3**
QIZ PP **PP 15 21 10.3 -1.1**
QIZ S **S 15 25 24.3 +0.9**
QIZ pmax pmax
comp=Z,28nm,1.3s
QIZ pmax pmax
comp=Z,370nm,9.6s
QIZ LR LR
comp=Z,3µm,22.9s
QIZ LR LR
comp=Z,3µm,23.1s
QIZ LR LR
comp=Z,3µm,18.9s
**QIZ Qiongzhong 35.23 247** IAMs_20 IAMs_20 15 34 43.0
comp=Z,3µm,20.0s
**SPIA Saint Paul Isl 35.48 42** P **P 15 19 54.3 +1.3**
baz=257
**NIKH Nikolski High 35.59 50** P **P 15 19 53.3 -0.7**
baz=264
**P08K Saint George I 35.73 43** P **P 15 19 56.1 +0.9**
baz=258
**GAMB Gambell 36.85 31** P **P 15 20 06.2 +1.6**
baz=247
**UNV Unalaska Valle 37.07 48** P **P 15 20 06.8 +0.2**
baz=265
**KMI Kunming 37.19 262** ⇑P **P 15 20 08.1 -0.1**
KMI PP **PP 15 21 32.7 -0.4**
KMI S **S 15 25 49.8 -3.9**
KMI pmax pmax
comp=Z,95nm,1.4s
KMI LR LR
comp=Z,2µm,14.3s
KMI LR LR
comp=Z,6µm,17.4s
KMI LR LR
comp=Z,6µm,18.5s
**PZH PanZhiHua 37.29 265** P **P 15 20 09.3 +0.3**
PZH PP **PP 15 21 33.4 -0.8**
PZH S **S 15 25 53.3 -1.9**
PZH pmax pmax
comp=Z,100nm,0.8s
PZH pmax pmax
comp=Z,550nm,5.5s
PZH LR LR
comp=Z,3µm,14.5s
PZH LR LR
comp=Z,4µm,16.7s
PZH LR LR
comp=Z,4µm,17.1s
**M11K Mekoryuk 38.26 38** P **P 15 20 18.1 +1.6**
baz=257
**KRAR Krasnoyarsk 38.30 315**⇑*e*P **P 15 20 18.4 +1.4**
**SLVN Son La 38.30 256** P **P 15 20 16.7 -0.8**
SLVN IAMs_20 IAMs_20 15 36 51.7
comp=Z,4µm,20.0s
**GOMU GeErMu 38.98 283** P **P 15 20 24.6 +1.2**
GOMU PcP **PcP 15 22 34.9 +1.4**
GOMU S **S 15 26 19.4 -1.6**
GOMU pmax pmax
comp=Z,110nm,1.4s
GOMU LR LR
comp=Z,3µm,17.0s
GOMU LR LR
comp=Z,3µm,16.5s
GOMU LR LR
comp=Z,5µm,16.2s
**TNA Tin City 39.03 29** P **P 15 20 24.9 +1.9**
baz=249
**K13K Kusilvak Mount 39.34 36** P **P 15 20 27.4 +1.8**
baz=257
**F14K Arctic Creek 39.62 30** P **P 15 20 30.3 +2.3**
baz=251,SNR=8.5
**M13K Dall Lake 39.65 38** P **P 15 20 29.4 +1.2**
**M13K Dall Lake 39.65 38** P **P 15 20 30.3 +2.1**
baz=260,SNR=6.4
**ANM Nome 39.72 31** P **P 15 20 30.8 +1.9**
baz=253
**S12K Black Hills 39.77 46** IAMs_20 IAMs_20 15 34 30.9
comp=Z,3µm,18.0s
**S12K Black Hills 39.77 46** P **P 15 20 31.4 +2.1**
baz=267
**MANU Manus Island 39.90 175** P **P 15 20 29.9 -0.8**
**J14K Nanvaranak Lak 40.03 35** P **P 15 20 33.5 +2.2**
baz=257,SNR=9.7
**TNTI Ternate 40.05 207** P **P 15 20 30.8 -1.2**
**TNTI Ternate 40.05 207** P **P 15 20 33.1 +1.1**
comp=Z,132nm,1.4s,comp=Z,2µm
**MYLDM Lahad Datu 40.07 222** IAMs_20 IAMs_20 15 35 30.2
comp=Z,3µm,20.0s
**L14K Kuka Creek 40.14 37** P **P 15 20 33.8 +1.5**
L14K IAmb IAmb 15 20 35.9
comp=Z,272nm,1.5s
**L14K Kuka Creek 40.14 37** P **P 15 20 34.5 +2.2**
baz=259,SNR=23
**F15K North Star Dit 40.36 30** P **P 15 20 36.1 +2.0**
baz=252,SNR=11
**JAY Jayapura 40.37 185** P **P 15 20 35.8 +1.1**
JAY pmax pmax
comp=Z,98nm,1.0s
**SWI Sorong 40.38 200** P **P 15 20 34.7 0.0**
SWI pmax pmax
comp=Z,86nm,1.1s
**M14K Bethel 40.38 38** IAmb IAmb 15 20 37.7
**M14K Bethel 40.38 38** P **P 15 20 36.4 +2.1**
baz=261,SNR=24
**N14K Kuskokwak Cree 40.39 39** P **P 15 20 36.1 +1.7**
baz=262,SNR=9.6
**G15K Niukluk 40.40 31** P **P 15 20 36.5 +2.1**
baz=254,SNR=18
**GENI Genyem 40.49 186** P **P 15 20 37.3 +1.7**
**O14K Tigyukauivet M 40.52 40** P **P 15 20 37.2 +1.8**
baz=263,SNR=6.6
**TNCH TengChong 40.55 265** ⇑P **P 15 20 36.9 +0.6**
TNCH pP pP 15 20 39.5 -2.1
TNCH sP sP 15 20 42.2 -1.6
TNCH PP **PnPn 15 22 15.1 +1.3**
TNCH S **S 15 26 44.2 -0.1**
TNCH sS sS 15 26 53.0 -0.7
TNCH SS **SS 15 29 43.5 -0.9**
TNCH pmax pmax
comp=Z,48nm,1.2s
TNCH pmax pmax
comp=Z,290nm,3.0s
TNCH LR LR
comp=Z,3µm,18.3s
TNCH LR LR
comp=Z,2µm,17.2s
TNCH LR LR
comp=Z,2µm,23.2s
**SDPT Sand Point 40.66 46** IAMs_20 IAMs_20 15 34 36.3
comp=Z,2µm,22.0s
**SDPT Sand Point 40.66 46** P **P 15 20 38.0 +1.4**
baz=268
**L15K Ungalak Mounta 40.76 36** P **P 15 20 39.1 +1.7**
baz=260,SNR=12
**KAVG Kavieng 40.79 170** P **P 15 20 42.1 +4.0**
**UBPT Khong Chiam 40.83 247** P **P 15 20 39.3 +0.8**
**UBPT Khong Chiam 40.83 247** P **P 15 20 38.8 +0.4**
UBPT IAmb IAmb 15 20 56.0
comp=Z,170nm,1.1s
**K15K Wolf Creek Mou 40.85 36** P **P 15 20 40.4 +2.2**
baz=259,SNR=14
**DLV T Lat 40.96 240** P **P 15 20 40.8 +1.0**
**C16K Lisburne Hills 40.96 26** IAmb IAmb 15 20 41.8
comp=Z,197nm,1.2s
**C16K Lisburne Hills 40.96 26** P **P 15 20 40.4 +1.4**
baz=249,SNR=17
**M15K Kasigluk River 40.99 38** P **P 15 20 40.9 +1.6**
baz=262,SNR=29
**H16K Elim 41.05 32** P **P 15 20 41.5 +1.7**
baz=256,SNR=7.9
**CHNA Chernabura Isl 41.16 47** P **P 15 20 40.4 -0.3**
baz=270,SNR=5.5
**CNBA Chernabura Isl 41.16 47** P **P 15 20 40.3 -0.4**
CNBA IAMs_20 IAMs_20 15 35 44.6
comp=Z,3µm,21.0s
**G16K Koyuk River 41.19 31** P **P 15 20 42.2 +1.4**
baz=255
**N15K Kwethluk River 41.22 39** IAmb IAmb 15 20 44.5
comp=Z,326nm,1.5s
N15K IAMs_20 IAMs_20 15 36 46.1
comp=Z,2µm,18.0s
**N15K Kwethluk River 41.22 39** P **P 15 20 43.2 +2.0**
baz=263,SNR=28
**O15K Ungalikthiuk R 41.25 40** P **P 15 20 43.1 +1.7**
baz=264,SNR=27
**J16K Anvik River 41.46 34** P **P 15 20 45.1 +1.9**
baz=259,SNR=6.7
**I17K Unalakleet 41.54 33** P **P 15 20 45.7 +2.0**
baz=258,SNR=6.8
**D17K Noatak River 41.57 27** P **P 15 20 45.8 +1.8**
baz=252,SNR=30
**DGZ Jazzator, Alta 41.59 305***d i*P **P 15 20 46.4 +1.8**
DGZ pmax pmax
comp=Z,224nm,0.9s
DGZ MLR MLR
comp=Z,10µm,18.0s
**CRAI Chiangrai 41.65 257** P **P 15 20 45.8 +0.6**
CRAI IAmb IAmb 15 20 56.5
comp=Z,344nm,1.6s
**L16K Owhat River 41.72 37** P **P 15 20 46.9 +1.6**
baz=262,SNR=37
**RDOG Red Dog Mine 41.75 27** IAmb IAmb 15 20 48.7
comp=Z,204nm,1.3s
**RDOG Red Dog Mine 41.75 27** P **P 15 20 47.5 +2.0**
baz=252,SNR=13
**C17K DeLong Mountai 41.79 26** P **P 15 20 47.6 +1.8**
baz=251,SNR=28
**CHGN Chignik 41.84 45** IAMs_20 IAMs_20 15 36 29.7
comp=Z,2µm,19.0s
**E17K Hotham Inlet 41.85 28** P **P 15 20 48.1 +1.8**
baz=254
**M16K Timber Creek 41.87 38** P **P 15 20 48.4 +1.8**
baz=263,SNR=29
**GTOI Gorontalo 41.88 213** P **P 15 20 51.0 +3.9**
comp=Z,51nm,1.0s
**F17K Baldwin Pennin 41.90 29** P **P 15 20 48.6 +1.9**
baz=255,SNR=12
**G17K Kiwalik Mounta 41.90 31** P **P 15 20 48.7 +1.9**
baz=257,SNR=30
**N16K Nishlik Lake 41.91 39** P **P 15 20 48.9 +2.0**
baz=264,SNR=59
**H17K Granite Mounta 42.08 32** P **P 15 20 50.2 +2.0**
baz=258,SNR=20
**FAKI Fak Fak 42.10 198** P **P 15 20 51.9 +3.0**
**J17K VABM Dome 42.16 34** IAmb IAmb 15 20 52.4
comp=Z,290nm,1.5s
**J17K VABM Dome 42.16 34** P **P 15 20 51.0 +2.1**
baz=260,SNR=33
**O16K Kokwok River B 42.16 40** P **P 15 20 50.0 +1.1**
O16K IAmb IAmb 15 20 52.0
comp=Z,206nm,1.3s
**O16K Kokwok River B 42.16 40** P **P 15 20 50.6 +1.6**
baz=266,SNR=34
**P16K Nushagak River 42.18 41** P **P 15 20 51.2 +2.1**
baz=266,SNR=7.5
**L17K Donlin 42.33 36** P **P 15 20 52.5 +2.2**
baz=263,SNR=35
**WMQ Urumqi 42.33 296** ⇓P **P 15 20 52.2 +1.6**
WMQ S **S 15 27 08.9 -1.2**
WMQ pmax pmax
comp=Z,70nm,0.9s
WMQ pmax pmax
comp=Z,1µm,3.7s
WMQ LR LR
comp=Z,4µm,15.9s
WMQ LR LR
comp=Z,1µm,17.5s
WMQ LR LR
comp=Z,2µm,20.1s
**E18K Tukpahlearik C 42.40 28** P **P 15 20 52.6 +1.8**
baz=255,SNR=15
**K17K Iditarod 42.40 35** IAmb IAmb 15 20 54.5
comp=Z,360nm,1.4s
**K17K Iditarod 42.40 35** P **P 15 20 53.0 +2.2**
baz=262,SNR=59
**TOLI2 Tolitoli 42.45 216** P **P 15 20 54.0 +2.3**
**TOLI2 Tolitoli 42.45 216** P **P 15 20 50.5 -1.2**
**MRSI Marisa 42.48 214** P **P 15 20 52.1 +0.1**
comp=Z,221nm,1.3s,comp=Z,2µm
**C18K Utukok River 42.53 26** IAmb IAmb 15 20 54.9
comp=Z,141nm,0.9s
C18K IAMs_20 IAMs_20 15 37 54.9
comp=Z,2µm,21.0s
**C18K Utukok River 42.53 26** P **P 15 20 53.5 +1.6**
baz=253,SNR=36
**B18K Kokolik River 42.55 25** P **P 15 20 53.8 +1.8**
baz=251
**F18K Selawik 42.56 29** P **P 15 20 53.9 +1.9**
baz=256,SNR=25
**M17K Holitna River 42.65 37** IAmb IAmb 15 20 56.5
comp=Z,472nm,1.7s
**M17K Holitna River 42.65 37** P **P 15 20 54.9 +2.0**
baz=264,SNR=39
**O17K Koliganek Bris 42.68 40** P **P 15 20 55.0 +1.9**
baz=266,SNR=38
**N17K Nushagak Hills 42.69 39** IAmb IAmb 15 20 56.9
comp=Z,375nm,1.6s
**N17K Nushagak Hills 42.69 39** P **P 15 20 55.4 +2.2**
baz=265,SNR=39
**H18K Honhosa River 42.77 32** IAmb IAmb 15 20 56.9
comp=Z,234nm,1.2s
**H18K Honhosa River 42.77 32** P **P 15 20 55.3 +1.5**
baz=259
**G18K Tagagawik 42.80 31** P **P 15 20 55.4 +1.4**
baz=258
**Q16K King Salmon 42.85 41** P **P 15 20 56.0 +1.5**
baz=268
**ZALV Zalesovo Beam 42.88 312** P **P 15 20 55.1 +0.2**
**ZALV Zalesovo Beam 42.88 312** P **P 15 20 55.4 +0.5**
comp=Z,47nm,0.8s,baz=90,slow=7.4,SNR=142
ZALV PcP **PcP 15 22 45.3 -0.1**
comp=Z,59nm,0.7s,baz=101,slow=3.3,SNR=14
ZALV LR LR 15 39 34.2
comp=Z,5µm,18.9s,baz=82,slow=37
comp=Z,47nm,0.8s
**R17L Mt. Peulik Vol 42.98 43** P **P 15 20 55.8 +0.2**
baz=269
**P17K Kvichak River 42.99 41** P **P 15 20 57.0 +1.4**
baz=268
**PLK4 Peulik 4 42.99 43** IAMs_20 IAMs_20 15 36 59.8
comp=Z,2µm,19.0s
**A19K Wainwright 43.06 24** P **P 15 20 58.1 +2.1**
baz=251,SNR=8.5
**TABU Tabubil 43.06 184** P **P 15 20 59.0 +2.2**
**L18K Granite Mounta 43.09 36** IAmb IAmb 15 21 00.2
comp=Z,214nm,1.4s
**L18K Granite Mounta 43.09 36** P **P 15 20 58.7 +2.3**
baz=264,SNR=57
**SANI Sanana 43.16 207** P **P 15 20 56.6 -0.9**
**SANI Sanana 43.16 207** P **P 15 20 55.8 -1.7**
comp=Z,188nm,0.9s,comp=Z,2µm
**J18K Innoko River 43.22 34** P **P 15 20 58.9 +1.4**
baz=263,SNR=30
**C19K Lookout Ridge 43.22 26** IAmb IAmb 15 21 00.9
comp=Z,265nm,1.1s
C19K IAMs_20 IAMs_20 15 38 28.1
comp=Z,3µm,22.0s
**C19K Lookout Ridge 43.22 26** P **P 15 20 59.5 +2.0**
baz=254,SNR=65
**Q17K Contact Creek 43.25 42** P **P 15 20 57.7 -0.2**
baz=269,SNR=12
**GCSA Galena City Sc 43.33 32** P **P 15 20 59.1 +0.8**
baz=261
**F19K Shaleruckik Mo 43.34 29** IAmb IAmb 15 21 01.1
comp=Z,362nm,1.9s
**F19K Shaleruckik Mo 43.34 29** P **P 15 20 59.5 +1.2**
baz=258,SNR=38
**N18K Kilae Creek 43.34 38** IAmb IAmb 15 21 02.2
comp=Z,236nm,1.2s
**N18K Kilae Creek 43.34 38** P **P 15 21 00.8 +2.3**
baz=266,SNR=48
**CHIR Chirikof Islan 43.41 46** P **P 15 20 59.3 +0.2**
baz=272
**MSAI Masohi 43.41 202** P **P 15 21 01.7 +2.2**
comp=Z,101nm,0.8s,comp=Z,2µm
**M18K Stony River 43.43 37** P **P 15 21 01.3 +2.1**
baz=266,SNR=42
**G19K Purcell Mounta 43.47 30** P **P 15 21 00.8 +1.3**
baz=260,SNR=34
**SVW2 Sparrevohn 43.52 38** P **P 15 21 02.0 +2.1**
**SVW2 Sparrevohn 43.52 38** P **P 15 21 01.6 +1.7**
**MPSI Mapaga 43.54 216** P **P 15 21 00.7 +0.2**
**D19K Kuna River 43.58 27** IAmb IAmb 15 21 03.5
comp=Z,158nm,1.1s
**D19K Kuna River 43.58 27** P **P 15 21 02.0 +1.6**
baz=256
**ZSN Zaisan 43.59 302** *e*P **P 15 21 01.2 +0.4**
comp=Z,98nm,1.0s,baz=302
ZSN *e*S **S 15 27 31.1 +2.6**
baz=302
**ZSN Zaisan 43.59 302** *e*P **P 15 21 01.1 +0.4**
ZSN *e*S **S 15 27 31.0 +2.6**
ZSN pmax pmax
comp=Z,98nm,1.0s
**P18K Big Mountain, 43.61 40** IAmb IAmb 15 21 03.8
comp=Z,348nm,1.3s
**P18K Big Mountain, 43.61 40** P **P 15 21 02.4 +1.6**
baz=268,SNR=27
**H19K Roundabout Mou 43.63 31** P **P 15 21 02.4 +1.7**
baz=261,SNR=137
**O18K Koktuh Hills 43.64 40** IAmb IAmb 15 21 05.1
comp=Z,279nm,1.3s
**O18K Koktuh Hills 43.64 40** P **P 15 21 02.9 +1.9**
baz=268,SNR=28
**E19K Redstone River 43.67 28** P **P 15 21 02.9 +1.8**
baz=258
**Q18K Katmai Hardscr 43.71 41** P **P 15 21 01.9 +0.3**
baz=269,SNR=12
**J19K Poorman 43.77 34** IAmb IAmb 15 21 04.7
comp=Z,256nm,1.4s
**J19K Poorman 43.77 34** P **P 15 21 03.3 +1.4**
baz=263,SNR=59
**CM31 Chiang Mai Arr 43.77 257** P **P 15 21 03.6 +1.1**
SNR=17
CM31 P **P 15 21 03.6 +1.1**
SNR=17
**CMAR Chiang Mai Arr 43.77 257** P **P 15 21 02.3 -0.2**
**CMAR Chiang Mai Arr 43.77 257** P **P 15 21 03.2 +0.7**
comp=Z,11nm,0.8s,baz=48,slow=6.7,SNR=56
CMAR PcP **PcP 15 22 50.0 +1.1**
comp=Z,9.5nm,0.7s,baz=10,slow=1.5,SNR=6.3
comp=Z,11nm,0.8s
**CMAR Chiang Mai Arr 43.77 257** P **P 15 21 02.3 -0.2**
**L19K White Mountain 43.94 36** IAmb IAmb 15 21 06.6
comp=Z,147nm,1.2s
**L19K White Mountain 43.94 36** P **P 15 21 05.2 +1.8**
baz=266,SNR=58
**R18K Karluk 44.01 43** P **P 15 21 03.6 -0.2**
baz=271
**N19K Bonanza Creek 44.04 38** P **P 15 21 06.1 +1.9**
baz=268,SNR=29
**M19K Big River Lodg 44.14 37** P **P 15 21 07.0 +2.1**
baz=266,SNR=29
**D20K Etivluk River 44.17 27** P **P 15 21 06.8 +1.7**
baz=257
**F20K Avaraart Lake 44.17 29** P **P 15 21 06.5 +1.4**
baz=260,SNR=45
**SII Sitkinak Islan 44.19 44** IAmb IAmb 15 21 07.3
comp=Z,461nm,1.8s
SII IAMs_20 IAMs_20 15 36 56.7
comp=Z,3µm,22.0s
**SII Sitkinak Islan 44.19 44** P **P 15 21 05.7 +0.3**
baz=272
**E20K Nigu River 44.23 27** P **P 15 21 07.1 +1.5**
baz=258
**LSA Lhasa 44.23 276** P **P 15 21 08.1 +1.5**
LSA S **S 15 27 34.1 -5.0**
LSA pmax pmax
comp=Z,16nm,1.1s
LSA LR LR
comp=Z,2µm,18.0s
LSA LR LR
comp=Z,760nm,23.7s
LSA LR LR
comp=Z,2µm,22.6s

**LSA Lhasa 44.23 276** P **P** **15 21 08.1 +1.5**
**LSA Lhasa 44.23 276** P **P** **15 21 07.3 +0.7**
LSA S **S** **15 27 39.0 -0.1**
**H20K Anotleneega Mo 44.27 32** P **P** **15 21 07.5 +1.6**
baz=262,SNR=82
**B20K Meade River 44.28 25** P **P** **15 21 07.8 +1.9**
baz=256,SNR=64
**I20K Naaghedeneel 44.35 33** IAmb IAmb 15 21 09.9
comp=Z,195nm,1.1s
**I20K Naaghedeneel 44.35 33** P **P** **15 21 08.4 +1.9**
baz=264,SNR=23
**K20K Telida 44.39 35** IAmb IAmb 15 21 10.3
comp=Z,291nm,1.6s
K20K IAMs_20 IAMs_20 15 38 48.0
comp=Z,2µm,20.0s
**K20K Telida 44.39 35** P **P** **15 21 08.8 +1.9**
baz=265,SNR=64
**L20K Farewell, AK 44.41 36** P **P** **15 21 09.1 +2.0**
baz=266,SNR=57
**Q19K Cape Douglas, 44.42 41** P **P** **15 21 07.5 +0.2**
baz=270,SNR=6.7
**J20K Nowinta River 44.43 33** IAmb IAmb 15 21 10.5
comp=Z,213nm,1.3s
**J20K Nowinta River 44.43 33** P **P** **15 21 08.8 +1.6**
baz=264,SNR=88
**NAYO Nakonayok 44.50 250** P **P** **15 21 09.4 +1.1**
**P19K Oil Pt 44.63 40** IAMs_20 IAMs_20 15 38 37.4
comp=Z,2µm,20.0s
**P19K Oil Pt 44.63 40** P **P** **15 21 10.0 +1.1**
baz=270,SNR=8.7
**OHAK Old Harbor 44.65 43** P **P** **15 21 09.0 0.0**
**OHAK Old Harbor 44.65 43** IAmb IAmb 15 21 10.7
comp=Z,164nm,1.5s
OHAK IAMs_20 IAMs_20 15 37 49.0
comp=Z,2µm,22.0s
**OHAK Old Harbor 44.65 43** P **P** **15 21 09.5 +0.4**
baz=272,SNR=12
**M20K Styx River 44.73 37** P **P** **15 21 11.9 +2.2**
baz=268,SNR=40
**IMAR Indian Mountai 44.80 31** P **P** **15 21 10.9 +0.9**
**A21K Barrow 44.80 23** P **P** **15 21 11.2 +1.3**
baz=255,SNR=5.5
**O20K Slope Mountain 44.94 39** P **P** **15 21 12.2 +0.8**
baz=270
**G21K Allakaket 44.96 30** IAmb IAmb 15 21 14.6
comp=Z,155nm,1.2s
**G21K Allakaket 44.96 30** P **P** **15 21 12.9 +1.5**
baz=263
**KDAK Kodiak Island 45.01 43** P **P** **15 21 11.8 -0.1**
**KDAK Kodiak Island 45.01 43** P **P** **15 21 12.3 +0.4**
comp=Z,89nm,0.7s,baz=295,slow=4.3,SNR=83
comp=Z,89nm,0.7s
**KDAK Kodiak Island 45.01 43** P **P** **15 21 12.3 +0.4**
baz=272
**KDAK Kodiak Island 45.01 43** P **P** **15 21 11.8 -0.1**
KDAK pmax pmax
comp=Z,667nm,1.6s
KDAK MLR MLR
comp=Z,3µm,20.0s
**B21K Ikpikpuk River 45.06 26** P **P** **15 21 14.0 +1.9**
baz=258,SNR=76
**F21K Alatna River 45.06 29** P **P** **15 21 13.5 +1.3**
baz=262,SNR=29
**E21K Killik River 45.07 27** IAmb IAmb 15 21 15.1
comp=Z,136nm,1.2s
**E21K Killik River 45.07 27** P **P** **15 21 13.4 +1.2**
baz=260,SNR=79
**Q20K Shuyak Island 45.08 41** P **P** **15 21 12.5 +0.1**
baz=272,SNR=13
**SYI Shuyak Island 45.08 41** P **P** **15 21 12.4 0.0**
SYI IAMs_20 IAMs_20 15 37 39.2
comp=Z,2µm,22.0s
**H21K Melozitna Rive 45.15 31** IAmb IAmb 15 21 16.1
comp=Z,136nm,1.1s
**H21K Melozitna Rive 45.15 31** P **P** **15 21 14.6 +1.7**
baz=264,SNR=106
**SPCR Spurr Chakacha 45.16 38** P P 15 20 58.5 -15
baz=269
**N20K Mount Spurr 45.16 38** P **P** **15 21 15.1 +2.0**
baz=269,SNR=41
**CHUM Lake Minchumin 45.21 34** P **P** **15 21 15.6 +2.2**
baz=266
**A22K Sinclair Lake 45.24 24** P **P** **15 21 15.1 +1.6**
baz=257,SNR=12
**MK31 Makanchi Array 45.44 302** IAmb IAmb 15 21 25.6
comp=Z,92nm,0.8s
**MK31 Makanchi Array 45.44 302** *d* iP **P** **15 21 16.1 +0.6**
**MKAR Makanchi Array 45.44 302** P **P** **15 21 15.7 +0.2**
**MKAR Makanchi Array 45.44 302** P **P** **15 21 16.1 +0.7**
comp=Z,53nm,0.7s,baz=85,slow=9.7,SNR=493
MKAR PcP **PcP** **15 22 54.4 +0.1**
comp=Z,8.7nm,0.7s,baz=72,slow=4.7,SNR=1.3
MKAR ScP **ScP** **15 26 46.6 +1.3**
comp=Z,1.4nm,0.7s,baz=93,slow=5.8,SNR=2.4
MKAR S **S** **15 27 54.5 -0.9**
comp=Z,0.7nm,0.8s,baz=42,slow=18,SNR=1.3
MKAR LR LR 15 41 02.3
comp=Z,2µm,19.0s,baz=80,slow=37
comp=Z,53nm,0.7s
**HOM Homer 45.44 40** IAMs_20 IAMs_20 15 39 39.8
comp=Z,2µm,20.0s
**HOM Homer 45.44 40** P **P** **15 21 16.2 +1.0**
baz=271
**SKT Skwentna 45.49 37** IAmb IAmb 15 21 18.3
comp=Z,133nm,1.3s
SKT IAMs_20 IAMs_20 15 40 08.2
comp=Z,2µm,20.0s
**SKT Skwentna 45.49 37** P **P** **15 21 16.8 +1.1**
baz=269,SNR=39
**F22K John River 45.60 29** P **P** **15 21 18.1 +1.6**
baz=263,SNR=63
**B22K Teshekpuk Lake 45.60 25** P **P** **15 21 18.1 +1.8**
baz=259,SNR=12
**D22K Ayikyak River 45.60 27** IAmb IAmb 15 21 19.8
comp=Z,179nm,1.1s
D22K IAMs_20 IAMs_20 15 40 10.1
comp=Z,2µm,22.0s
**D22K Ayikyak River 45.60 27** P **P** **15 21 18.4 +1.9**
baz=261,SNR=82
**MAKZ Makanchi 45.65 302** P **P** **15 21 17.3 +0.2**
MAKZ IAmb IAmb 15 21 27.4
comp=Z,110nm,0.8s
MAKZ IAMs_20 IAMs_20 15 40 58.1
comp=Z,2µm,18.0s
**MAKZ Makanchi 45.65 302** P **P** **15 21 17.3 +0.2**
MAKZ pmax pmax
comp=Z,110nm,0.9s
MAKZ MLR MLR
comp=Z,2µm,18.0s
**CNPM China Poot 45.65 40** IAmb IAmb 15 21 18.9
comp=Z,120nm,1.3s
**CAPN Captain Cook N 45.67 38** IAMs_20 IAMs_20 15 39 13.9
comp=Z,2µm,21.0s
**H22K Ishtalitna Cre 45.75 31** P **P** **15 21 19.7 +2.0**
baz=265,SNR=95
**G22K Bettles 45.80 30** P **P** **15 21 19.2 +1.2**
baz=264,SNR=142
**BPAW Bear Paw Mtn. 45.80 34** IAmb IAmb 15 21 21.4
comp=Z,192nm,1.5s
**BPAW Bear Paw Mtn. 45.80 34** P **P** **15 21 19.7 +1.5**
baz=267,SNR=64
**SBUM Sibu 45.81 227** P **P** **15 21 18.8 +0.1**
**BRLK Bradley Lake 45.82 40** IAmb IAmb 15 21 21.3
comp=Z,233nm,1.6s
BRLK IAMs_20 IAMs_20 15 40 56.7
comp=Z,2µm,20.0s
**SUA Susitna One 45.86 37** IAmb IAmb 15 21 23.7
comp=Z,124nm,1.1s
**SUA Susitna One 45.86 37** P **P** **15 21 19.5 +0.8**
baz=270,SNR=37
**BRSE Bradley Lake S 45.90 40** P **P** **15 21 20.5 +1.6**
baz=272,SNR=13
**MLY Manley 45.96 32** IAmb IAmb 15 21 22.7
comp=Z,160nm,1.1s
**MLY Manley 45.96 32** P **P** **15 21 21.2 +1.8**
baz=267,SNR=112
**CUT Chulitna 46.09 36** P **P** **15 21 21.2 +0.8**
baz=270
**SRDT SRDT 46.12 252** P **P** **15 21 22.3 +1.1**
**M22K Willow 46.16 37** IAmb IAmb 15 21 31.8
comp=Z,77nm,0.8s
**M22K Willow 46.16 37** P **P** **15 21 20.9 0.0**
baz=270
**COLD Coldfoot 46.33 29** P **P** **15 21 23.8 +1.5**
baz=265,SNR=33
**D23K Nanushuk River 46.33 27** P **P** **15 21 24.1 +1.9**
baz=263
**RC01 Rabbit Creek A 46.35 38** IAMs_20 IAMs_20 15 39 48.0
comp=Z,2µm,22.0s
**RC01 Rabbit Creek A 46.35 38** P **P** **15 21 22.9 +0.4**
baz=271,SNR=26
**G23K Bananza Creek 46.36 30** P **P** **15 21 24.0 +1.5**
baz=266,SNR=62
**O22K Cooper Landing 46.38 39** IAMs_20 IAMs_20 15 41 05.5
comp=Z,2µm,21.0s
**O22K Cooper Landing 46.38 39** P **P** **15 21 23.1 +0.4**
baz=272,SNR=12
**C23K Itkillik River 46.47 26** P **P** **15 21 25.1 +1.8**
baz=262,SNR=134
**H23K Yukon River 46.50 31** P **P** **15 21 25.8 +2.2**
baz=267,SNR=145
**SEW Seward 46.53 39** P **P** **15 21 24.5 +0.7**
baz=273,SNR=24
**I23K Minto, Yukon-K 46.55 32** P **P** **15 21 25.8 +1.9**
baz=268,SNR=107
**E23K Chandalar 46.63 28** P **P** **15 21 26.5 +1.9**
baz=265,SNR=136
**PMR Palmer 46.63 37** P **P** **15 21 24.9 +0.3**
**PMR Palmer 46.63 37** IAMs_20 IAMs_20 15 39 28.4
comp=Z,2µm,21.0s
**PMR Palmer 46.63 37** P **P** **15 21 25.4 +0.8**
baz=272,SNR=29
**NEA2 Nenana 46.66 33** P **P** **15 21 26.3 +1.5**
baz=269,SNR=202
**TOLK Toolik Lake Re 46.70 27** IAmb IAmb 15 21 28.3
comp=Z,205nm,1.4s
TOLK IAMs_20 IAMs_20 15 40 46.0
comp=Z,2µm,22.0s
**TOLK Toolik Lake Re 46.70 27** P **P** **15 21 26.8 +1.6**
baz=264,SNR=53
**MCK McKinley 46.70 34** P **P** **15 21 26.2 +1.0**
baz=270,SNR=36
**MCK McKinley 46.70 34** P **P** **15 21 26.0 +0.8**
**GHO Glory Hole Cre 46.73 37** IAMs_20 IAMs_20 15 39 44.8
comp=Z,2µm,21.0s
**WAT1 Susitna Watana 46.88 35** P **P** **15 21 27.2 +0.6**
baz=271
**KNK Knik Glacier 46.96 37** IAMs_20 IAMs_20 15 40 41.1
comp=Z,2µm,20.0s
**KNK Knik Glacier 46.96 37** P **P** **15 21 28.1 +0.8**
baz=272,SNR=24
**SML Sawmill 47.01 37** IAMs_20 IAMs_20 15 39 51.3
comp=Z,2µm,22.0s
**SML Sawmill 47.01 37** P **P** **15 21 28.7 +1.0**
baz=272,SNR=38
**D24K Happy Valley 47.02 27** IAMs_20 IAMs_20 15 41 18.4
comp=Z,2µm,20.0s
**D24K Happy Valley 47.02 27** P **P** **15 21 29.2 +1.7**
baz=265,SNR=60
**KURK Kurchatov 47.05 308** P **P** **15 21 28.1 +0.1**
**KURK Kurchatov 47.05 308** P **P** **15 21 28.5 +0.5**
KURK P **P** **15 21 28.5 +0.5**
KURK S **S** **15 28 17.6 -0.6**
KURK S **S** **15 28 17.6 -0.6**
**KURK Kurchatov 47.05 308** *d* iP **P** **15 21 28.3 +0.3**
KURK pmax pmax
comp=Z,243nm,1.3s
KURK MLR MLR
comp=Z,5µm,16.0s
**PWL Port Wells 47.05 38** IAMs_20 IAMs_20 15 41 47.3
comp=Z,2µm,20.0s
**PWL Port Wells 47.05 38** P **P** **15 21 28.5 +0.6**
baz=273,SNR=37
**E24K Your Creek 47.05 28** IAMs_20 IAMs_20 15 43 56.4
comp=Z,1µm,20.0s
**E24K Your Creek 47.05 28** P **P** **15 21 29.8 +1.8**
baz=266,SNR=130
**WRH Wood River Hil 47.08 33** IAmb IAmb 15 21 32.2
comp=Z,240nm,1.8s
**C24K Franklin Bluff 47.12 26** P **P** **15 21 29.8 +1.5**
baz=264
**KURBB Kurchatov Arra 47.12 308** P **P** **15 21 29.0 +0.4**
comp=Z,123nm,0.8s,baz=82,slow=8.1,SNR=593
KURBB PcP **PcP** **15 23 00.2 +0.2**
comp=Z,15nm,0.9s,baz=78,slow=4.0,SNR=4.3
KURBB S **S** **15 28 17.5 -1.7**
comp=Z,0.2nm,0.3s,baz=76,slow=15,SNR=1.4
KURBB LR LR 15 42 26.7
comp=Z,4µm,18.4s,baz=60,slow=38
comp=Z,123nm,0.8s
**MTKI Muara Teweh, K 47.13 222** P **P** **15 21 29.8 +0.7**
comp=Z,108nm,1.6s
**PMG Port Moresby 47.18 176** P **P** **15 21 33.2 +3.9**
**PMG Port Moresby 47.18 176** P **P** **15 21 33.3 +3.9**
**PMG Port Moresby 47.18 176** LR LR 15 39 32.8
comp=Z,891nm,21.4s,baz=353,slow=34
**PMG Port Moresby 47.18 176** P **P** **15 21 34.0 +4.6**
**COLA College 47.18 33** P **P** **15 21 29.6 +0.7**
**COLA College 47.18 33** P **P** **15 21 30.1 +1.2**
**COLA College 47.18 33** P **P** **15 21 30.3 +1.5**
baz=270
**COLA College 47.18 33** *d* iP **P** **15 21 30.1 +1.2**
COLA pmax pmax
comp=Z,244nm,2.0s
COLA MLR MLR
comp=Z,771nm,16.0s
**H24K Noodor Dome 47.19 31** P **P** **15 21 31.1 +2.0**
baz=269,SNR=106
**F24K Squaw Lake 47.25 29** P **P** **15 21 31.1 +1.6**
baz=267,SNR=28
**WAT6 Susitna Watana 47.26 36** P **P** **15 21 30.5 +0.8**
baz=272,SNR=53
**M23K Glacier View 47.30 37** P **P** **15 21 30.8 +1.0**
baz=272,SNR=19
**POKR Poker Plat Res 47.36 32** IAMs_20 IAMs_20 15 42 24.6
comp=Z,1µm,19.0s
**POKR Poker Plat Res 47.36 32** P **P** **15 21 32.1 +1.8**
baz=270,SNR=266
**G24K Hadweenzic Riv 47.37 30** P **P** **15 21 32.6 +2.2**
baz=268,SNR=198
**SPSI Sidrap Palu 47.40 214** P **P** **15 21 30.3 -0.8**
**DHY Denali Highway 47.41 35** P **P** **15 21 31.7 +0.8**
baz=272,SNR=72
**SCM Sheep Creek Mo 47.48 37** IAMs_20 IAMs_20 15 40 50.8
comp=Z,2µm,21.0s
**SCM Sheep Creek Mo 47.48 37** P **P** **15 21 32.6 +1.3**
baz=273,SNR=41
**P23K Montague Islan 47.56 39** P **P** **15 21 32.9 +0.9**
baz=274,SNR=13
**HDA Harding Lake 47.57 33** P **P** **15 21 32.4 +0.4**
baz=271,SNR=61
**ILAR Eielson Array 47.60 33** P **P** **15 21 32.4 +0.3**
**ILAR Eielson Array 47.60 33** P **P** **15 21 32.5 +0.4**
comp=Z,35nm,0.7s,baz=259,slow=5.7,SNR=337
ILAR LR LR 15 42 27.5
comp=Z,556nm,20.2s,baz=250,slow=37
comp=Z,35nm,0.7s
**BBSI Bau Bau 47.61 210** P P 15 21 39.0 +6.3
**BNSI Bone 47.64 213** P **P** **15 21 32.8 -0.2**
comp=Z,82nm,1.1s,comp=Z,1µm
**GLI Glacier Island 47.65 38** P **P** **15 21 33.6 +1.0**
baz=274,SNR=12
**KSM Kuching 47.72 229** P **P** **15 21 34.8 +1.1**
**KSM Kuching 47.72 229** IAmb IAmb 15 21 51.8
comp=Z,118nm,1.1s
**D25K Kavik River 47.90 27** IAmb IAmb 15 21 37.5
comp=Z,116nm,0.8s
D25K IAMs_20 IAMs_20 15 41 33.8
comp=Z,2µm,22.0s
**D25K Kavik River 47.90 27** P **P** **15 21 36.0 +1.6**
baz=267,SNR=198
**G25K Beaman Lake 47.92 30** P **P** **15 21 36.9 +2.3**
baz=269,SNR=54
**HIN Hinchinbrook I 47.98 39** IAMs_20 IAMs_20 15 41 55.0
comp=Z,1µm,19.0s
**M24K Tolsona, Glenn 48.01 36** P **P** **15 21 37.5 +2.0**
baz=274,SNR=42
**H25L Birch Creek 48.03 31** P **P** **15 21 37.8 +2.4**
baz=270,SNR=31
**K24K Donnelly Dome 48.10 34** P **P** **15 21 36.9 +0.8**
baz=272,SNR=46
**F25K Christian Rive 48.11 29** P **P** **15 21 38.5 +2.4**
baz=269,SNR=67
**Q23K Middleton Isla 48.15 40** P **P** **15 21 38.1 +1.7**
baz=276
**PRP Porcupine Dome 48.16 32** IAmb IAmb 15 21 39.5
comp=Z,154nm,1.5s
**PRP Porcupine Dome 48.16 32** P **P** **15 21 37.5 +0.8**
baz=271,SNR=11
**KLU Klutina 48.17 37** IAMs_20 IAMs_20 15 41 46.1
comp=Z,2µm,20.0s
**KLU Klutina 48.17 37** P **P** **15 21 37.9 +1.2**
baz=274,SNR=45
**STKI Sintang 48.18 226** P **P** **15 21 38.1 +0.9**
comp=Z,147nm,1.0s
**PDGK Podgornoye 48.22 298** P **P** **15 21 37.6 +0.1**
**J25K Salcha River, 48.25 33** P **P** **15 21 37.0 -0.2**
baz=272,SNR=34
**PAX Paxson 48.28 35** P **P** **15 21 38.2 +0.6**
baz=273,SNR=64
**SHLS Shalkode 48.29 298** *e*P **P** **15 21 35.1 -2.9**
comp=Z,47nm,0.9s,baz=298
SHLS *e*S **S** **15 28 34.9 -1.5**
baz=298
**SHLS Shalkode 48.29 298** *e*P **P** **15 21 35.9 -2.1**
SHLS *e*S **S** **15 28 34.9 -1.5**
SHLS pmax pmax
comp=Z,47nm,0.9s
**EYAK Cordova Ski Ar 48.34 38** P **P** **15 21 39.2 +1.3**
**EYAK Cordova Ski Ar 48.34 38** P **P** **15 21 39.2 +1.3**
baz=275,SNR=22
**KAPI Kappang 48.34 213** P **P** **15 21 40.1 +1.7**
**KAPI Kappang 48.34 213** P **P** **15 21 38.0 -0.5**
KAPI IAmb IAmb 15 23 13.2
comp=Z,123nm,1.2s
**KAPI Kappang 48.34 213** P **P** **15 21 38.9 +0.4**
KAPI S **S** **15 28 38.9 +1.7**
**KAPI Kappang 48.34 213** P **P** **15 21 38.0 -0.5**
KAPI pmax pmax
comp=Z,123nm,1.3s
**C26K Camden Bay 48.44 26** P **P** **15 21 40.7 +2.1**
baz=268,SNR=31
**HARP HAARP 48.47 36** P **P** **15 21 40.5 +1.6**
baz=274,SNR=13
**TDK Taldyqorghan 48.50 300** *e*P **P** **15 21 40.0 +0.5**
comp=Z,85nm,0.9s,baz=300
TDK LR LR 15 43 19.4
comp=Z,2µm,13.8s,baz=300
**TDK Taldyqorghan 48.50 300** *e*P **P** **15 21 39.9 +0.5**
TDK pmax pmax
comp=Z,85nm,0.9s
TDK MLR MLR
comp=Z,2µm,14.0s
**BMAR Burnt Mountain 48.52 29** P **P** **15 21 41.4 +2.1**
**UZB Uzunbulak 48.60 298** *e*P **P** **15 21 40.8 +0.4**
comp=Z,46nm,1.0s,baz=298
**UZB Uzunbulak 48.60 298** *e*P **P** **15 21 40.8 +0.4**
UZB pmax pmax
comp=Z,46nm,1.0s
**F26K Sheenjek River 48.68 29** P **P** **15 21 43.0 +2.5**
baz=270,SNR=147
**KPKS Kokpek 48.74 298** *e*P **P** **15 21 42.0 +0.5**
comp=Z,59nm,1.0s,baz=298
KPKS *e*S **S** **15 28 45.6 +2.9**
baz=298
**KPKS Kokpek 48.74 298** *e*P **P** **15 21 41.9 +0.5**
KPKS *e*S **S** **15 28 45.6 +2.9**
KPKS pmax pmax
comp=Z,59nm,1.0s
**N25K Chitina, Valde 48.80 37** IAMs_20 IAMs_20 15 42 13.5
comp=Z,2µm,19.0s
**N25K Chitina, Valde 48.80 37** P **P** **15 21 43.2 +1.7**
baz=275,SNR=24
**G26K Porcupine Rive 48.84 30** P **P** **15 21 43.9 +2.3**
baz=271,SNR=114
**C27K Jago River 48.85 26** P **P** **15 21 43.6 +1.9**
baz=269,SNR=116
**BMRM Bremner River 48.86 38** P **P** **15 21 43.5 +1.5**
baz=276,SNR=34
**RAGM Ragged Mountai 48.88 39** IAMs_20 IAMs_20 15 41 31.8
comp=Z,2µm,21.0s
**SCRK Sand Creek 48.89 34** P **P** **15 21 42.9 +0.7**
baz=274,SNR=186
**ZHN Zhinishke 49.01 298** *e*P **P** **15 21 43.9 +0.4**
baz=298
**ZHN Zhinishke 49.01 298** *e*P **P** **15 21 43.8 +0.4**
**J26L Joseph Creek 49.04 33** IAmb IAmb 15 21 45.2
comp=Z,199nm,1.6s
**J26L Joseph Creek 49.04 33** P **P** **15 21 43.6 +0.3**
baz=274,SNR=76
**SATY Saty 49.06 298** *e*P **P** **15 21 44.2 +0.3**
comp=Z,63nm,1.3s,baz=298
SATY *e*S **S** **15 28 49.6 +2.4**
baz=298
**SATY Saty 49.06 298** *e*P **P** **15 21 44.2 +0.3**
SATY *e*S **S** **15 28 49.6 +2.4**
SATY pmax pmax
comp=Z,63nm,1.3s
**KAIM Kayak Island 49.06 39** P **P** **15 21 45.4 +1.9**
baz=277
**MENT Mentasta 49.09 35** P **P** **15 21 44.9 +1.2**
**MENT Mentasta 49.09 35** IAmb IAmb 15 21 47.1
comp=Z,142nm,1.1s
MENT IAMs_20 IAMs_20 15 46 30.2
comp=Z,1µm,18.0s
**HMT Hamilton 49.09 39** IAMs_20 IAMs_20 15 41 24.4
comp=Z,2µm,22.0s
**ARXS Arharly 49.12 299** *e*P **P** **15 21 44.6 +0.3**
**SURA Surathani 49.13 246** P **P** **15 21 45.9 +1.3**
**I26K Coal Creek Min 49.16 32** IAMs_20 IAMs_20 15 43 02.3
comp=Z,2µm,20.0s
**I26K Coal Creek Min 49.16 32** P **P** **15 21 44.1 -0.1**
baz=273
**GLB Gilahina Butte 49.19 37** IAMs_20 IAMs_20 15 41 19.9
comp=Z,2µm,22.0s
**PRZ Przheval'sk 49.24 297** IAmb IAmb 15 21 48.4
comp=Z,130nm,1.0s
**L26K Log Cabin Wild 49.25 35** IAMs_20 IAMs_20 15 42 12.4
comp=Z,2µm,21.0s
**L26K Log Cabin Wild 49.25 35** P **P** **15 21 46.7 +1.8**
baz=275,SNR=142
**SUCK Suckling Hills 49.37 39** IAMs_20 IAMs_20 15 40 26.6
comp=Z,2µm,20.0s
**VRDI Verde Repeater 49.38 37** IAMs_20 IAMs_20 15 42 15.0
comp=Z,2µm,20.0s
**HNR Honiara 49.40 159** IAMs_20 IAMs_20 15 39 46.6
comp=Z,3µm,21.0s
**HNR Honiara 49.40 159** LR LR 15 40 21.0
comp=Z,31µm,21.9s,baz=329,slow=33
**M26K Nabesna, AK 49.47 36** IAMs_20 IAMs_20 15 42 50.3
comp=Z,2µm,20.0s
**M26K Nabesna, AK 49.47 36** P **P** **15 21 48.6 +2.0**
baz=276,SNR=88
**SRIT Nakonsritamara 49.54 246** P **P** **15 21 49.4 +1.7**
**MCARA McCarthy VSAT 49.57 37** IAMs_20 IAMs_20 15 42 11.0
comp=Z,2µm,20.0s
**MCARA McCarthy VSAT 49.57 37** P **P** **15 21 48.9 +1.6**
baz=277,SNR=33
**CRQM Cirque 49.59 38** IAMs_20 IAMs_20 15 41 24.2
comp=Z,2µm,22.0s
**CRQE Cirque 49.62 38** P **P** **15 21 49.5 +1.7**
baz=277,SNR=59
**E27K Coleen River 49.63 28** IAmb IAmb 15 21 51.4
comp=Z,108nm,1.1s
E27K IAMs_20 IAMs_20 15 45 18.6
comp=Z,1µm,20.0s
**E27K Coleen River 49.63 28** P **P** **15 21 49.8 +2.0**
baz=272,SNR=49
**G27K Doyon Strip 49.68 30** IAmb IAmb 15 21 52.0
comp=Z,162nm,1.7s
**G27K Doyon Strip 49.68 30** P **P** **15 21 50.1 +2.0**
baz=273,SNR=66
**K27K Chicken 49.72 34** IAMs_20 IAMs_20 15 42 33.0
comp=Z,1µm,20.0s
**K27K Chicken 49.72 34** P **P** **15 21 50.3 +1.8**
baz=275
**TGL Tana Glacier 49.74 38** IAMs_20 IAMs_20 15 46 24.6
comp=Z,1µm,18.0s
**H27K Steamboat Moun 49.77 31** P **P** **15 21 51.2 +2.3**
baz=274,SNR=168
**WAX Waxell Ridge 49.77 38** IAMs_20 IAMs_20 15 40 43.4
comp=Z,1µm,20.0s
**I27K Kandik River 49.78 32** P **P** **15 21 50.0 +1.0**
baz=274,SNR=46
**CHKK Chushkaly 49.80 299** *e*P **P** **15 21 49.9 +0.5**
baz=299
**CHKK Chushkaly 49.80 299** *e*P **P** **15 21 49.9 +0.5**
**SNH Sunshine Point 49.82 39** IAMs_20 IAMs_20 15 40 24.6
comp=Z,2µm,21.0s
**D27M Malcolm River 49.83 27** IAmb IAmb 15 21 52.7
comp=Z,130nm,1.1s
D27M IAMs_20 IAMs_20 15 42 56.6
comp=Z,1µm,21.0s
**D27M Malcolm River 49.83 27** P **P** **15 21 51.2 +2.0**
baz=272,SNR=46
**TARG Taragay, Kyrgy 49.90 296** IAmb IAmb 15 22 09.8
comp=Z,81nm,1.0s
**L27K Beaver Creek, 49.93 35** IAMs_20 IAMs_20 15 42 41.5
comp=Z,2µm,20.0s
**L27K Beaver Creek, 49.93 35** P **P** **15 21 52.0 +1.8**
baz=276,SNR=146
**BCAR Beaver Creek A 49.95 35** P **P** **15 21 52.0 +1.7**
**MDOK Medeo 49.98 298** *e*P **P** **15 21 51.3 +0.4**

baz=298
MDOK LR LR 15 43 25.4
baz=298
**MDOK Medeo 49.98 298** *e*P **P 15 21 51.3 +0.4**
**M27K Edge Creek, AK 49.99 36** IAmb IAmb 15 21 54.0
comp=Z,195nm,1.3s
**M27K Edge Creek, AK 49.99 36** P **P 15 21 52.5 +1.7**
baz=277,SNR=65
**ISLE Juniper Island 50.00 38** IAMs_20 IAMs_20 15 40 52.4
comp=Z,2µm,22.0s
**EGAK Eagle 50.05 33** P **P 15 21 51.7 +0.8**
baz=276,SNR=54
**AAA Alma-Ata 50.05 298** *e*P **P 15 21 51.7 +0.2**
AAA comp=Z,63nm,0.7s,baz=298 LR LR 15 43 32.6
baz=298
**AAA Alma-Ata 50.05 298** *e*P **P 15 21 51.6 +0.2**
AAA pmax pmax
comp=Z,63nm,0.7s
**TNSS Tian-Shan 50.09 298** *e*P **P 15 21 51.8 -0.3**
baz=298
**TNSS Tian-Shan 50.09 298** *e*P **P 15 21 51.7 -0.3**
**KUU Kurty 50.24 300** *e*P **P 15 21 52.9 +0.2**
baz=300
KUU LR LR 15 43 51.7
comp=Z,1µm,13.9s,baz=300
**KUU Kurty 50.24 300** *e*P **P 15 21 52.9 +0.2**
KUU MLR MLR
comp=Z,1µm,14.0s
**MESA MESA 50.26 39** IAmb IAmb 15 21 56.0
comp=Z,225nm,1.3s
MESA IAMs_20 IAMs_20 15 40 49.2
comp=Z,2µm,20.0s
**MESA MESA 50.26 39** P **P 15 21 54.5 +1.6**
baz=279,SNR=6.4
**GRNC Granite Creek 50.27 38** IAMs_20 IAMs_20 15 40 51.3
comp=Z,2µm,22.0s
**F28M Old Crow 50.32 29** IAmb IAmb 15 21 56.7
comp=Z,242nm,1.4s
**F28M Old Crow 50.32 29** P **P 15 21 55.2 +2.2**
baz=274,SNR=70
**E28M Babbage River 50.37 28** IAmb IAmb 15 21 57.0
comp=Z,198nm,1.4s
E28M IAMs_20 IAMs_20 15 46 03.1
comp=Z,1µm,20.0s
**E28M Babbage River 50.37 28** P **P 15 21 55.5 +2.2**
baz=274,SNR=42
**CTG Chitna Glacier 50.44 38** P **P 15 21 55.8 +1.7**
baz=279,SNR=24
**CTGM Chitina Glacie 50.44 38** IAmb IAmb 15 21 57.1
comp=Z,220nm,1.3s
**I28M Miner Creek 50.49 32** IAmb IAmb 15 21 57.6
comp=Z,191nm,1.4s
**I28M Miner Creek 50.49 32** P **P 15 21 56.0 +1.5**
baz=276,SNR=72
**D28M Stokes Point 50.61 27** P **P 15 21 57.1 +2.0**
baz=274
**TABL Table Mountain 50.61 38** IAmb IAmb 15 21 58.2
comp=Z,210nm,1.4s
**LOGN Logan Glacier 50.62 38** IAmb IAmb 15 22 01.9
comp=Z,146nm,1.4s
LOGN IAMs_20 IAMs_20 15 41 01.6
comp=Z,2µm,22.0s
**MMRI Maumere 50.62 208** P **P 15 21 58.3 +2.5**
**MMRI Maumere 50.62 208** P P 15 22 00.8 +5.0
**YUK3 Moose Creek 50.73 36** P **P 15 21 57.6 +1.2**
baz=279,SNR=37
**ULHL Ulahol 50.83 298** P **P 15 21 59.1 +1.6**
SNR=6.1
**DAWY Dawson 50.89 33** IAmb IAmb 15 22 00.3
comp=Z,257nm,1.8s
**DAWY Dawson 50.89 33** P **P 15 21 58.8 +1.4**
baz=278,SNR=28
**SOEI Soe 50.93 205** P **P 15 22 00.7 +2.4**
**SOEI Soe 50.93 205** P **P 15 21 57.5 -0.8**
comp=Z,138nm,1.2s,comp=Z,2µm
**BOOM Boomskoye usch 50.96 298** IAmb IAmb 15 22 01.0
comp=Z,190nm,1.1s
**E29M Blow River 50.99 28** IAMs_20 IAMs_20 15 43 23.5
comp=Z,2µm,22.0s
**E29M Blow River 50.99 28** P **P 15 22 00.3 +2.3**
baz=276,SNR=85
**O28M Mount Upton 51.02 38** P **P 15 22 00.2 +1.5**
baz=280,SNR=14
**H29M Whitestone 51.05 31** IAmb IAmb 15 22 02.0
comp=Z,252nm,1.4s
**H29M Whitestone 51.05 31** P **P 15 22 00.5 +2.0**
baz=277,SNR=84
**TKM2 Tokmak 2 51.06 299** P **P 15 22 00.6 +1.4**
SNR=172
**TKM2 Tokmak 2 51.06 299** *i* P **P 15 22 00.1 +0.9**
TKM2 pmax pmax
comp=Z,319nm,1.1s
**G29M Pine Creek 51.10 30** P **P 15 22 01.3 +2.4**
baz=277,SNR=163
**KULM Kulim 51.10 242** IAmb IAmb 15 22 16.5
comp=Z,193nm,1.3s
**YUK8 Steele Glacier 51.14 37** P **P 15 22 00.8 +1.2**
baz=280,SNR=13
**I29M Ogilvie Camp, 51.18 32** P **P 15 22 01.1 +1.5**
baz=278,SNR=263
**J29N Klondike Camp 51.34 33** P **P 15 22 02.2 +1.4**
baz=278
**BCPM Bancas Point 51.44 39** IAmb IAmb 15 22 04.4
comp=Z,286nm,1.5s
BCPM IAMs_20 IAMs_20 15 41 59.4
comp=Z,1µm,20.0s
**BTLS Baital 51.45 302** ||| *i* P **P 15 22 02.1 +0.3**
baz=302
**BTLS Baital 51.45 302** *d i* P **P 15 22 02.1 +0.3**
**KDU Kakadu 51.52 195** P **P 15 21 01.8 -0.7**
**BVA0 Borovoye Array 51.53 312** *i* P **P 15 22 02.6 +0.3**
**M29M Somme Creek 51.55 35** IAmb IAmb 15 22 06.0
comp=Z,137nm,1.3s
**M29M Somme Creek 51.55 35** P **P 15 22 04.3 +1.8**
baz=280,SNR=56
**SGDS Sogindy 51.56 299** *e*P **P 15 22 03.0 +0.2**
baz=300
**SGDS Sogindy 51.56 299** *e*P **P 15 22 02.9 +0.2**
**BATI Baumata 51.56 206** P **P 15 22 02.1 -0.8**
comp=Z,117nm,1.1s
**BRVK Borovoye 51.59 312** P **P 15 22 03.2 +0.5**
BRVK IAmb IAmb 15 22 05.0
comp=Z,97nm,1.0s
**BRVK Borovoye 51.59 312** P **P 15 22 03.4 +0.8**
BRVK P **P 15 22 03.4 +0.8**
BRVK S **S 15 29 20.6 -1.2**
BRVK S **S 15 29 20.6 -1.2**
**BRVK Borovoye 51.59 312** *d i* P **P 15 22 03.1 +0.5**
BRVK pmax pmax
comp=Z,119nm,1.1s
BRVK MLR MLR
comp=Z,4µm,16.0s
**L29M L29M 51.59 35** P **P 15 22 05.0 +2.4**
baz=280,SNR=161
**KBK Karagaybulak 51.60 298** P **P 15 22 04.4 +1.3**
SNR=89
**DRS Darwin Rock St 51.60 197** P **P 15 22 03.1 0.0**
**OTUK Ortayu 51.61 306** P **P 15 22 03.2 +0.2**
**PNL Peninsula 51.61 39** P **P 15 22 04.3 +1.5**
**PNL Peninsula 51.61 39** P **P 15 22 03.9 +1.1**
baz=281
**CHMS Chumysh 51.62 299** P **P 15 22 04.1 +0.9**
SNR=20
**COEN Coen 51.62 181** P **P 15 22 03.8 +0.5**
**COEN Coen 51.62 181** P **P 15 22 02.9 -0.3**
COEN IAmb IAmb 15 22 09.5
comp=Z,170nm,1.1s
COEN IAMs_20 IAMs_20 15 40 55.2
comp=Z,1µm,21.0s
**YUK4 Talbot Arm 51.66 37** P **P 15 22 05.4 +2.0**
baz=280,SNR=17
**EPYK Eagle Plains 51.69 30** P **P 15 22 05.2 +1.9**
baz=278,SNR=130
**USP Ospenovka 51.71 299** P **P 15 22 04.6 +0.7**
SNR=61
**TPRI Tanjung Pinang 51.73 234** P **P 15 22 05.1 +0.9**
comp=Z,112nm,1.6s
**K29M Barlow Dome 51.74 34** P **P 15 22 05.8 +2.0**
baz=279,SNR=243
**FRU1 Bishkek 51.77 299** IAmb IAmb 15 22 22.8
comp=Z,272nm,1.4s
**FRU1 Bishkek 51.77 299** P **P 15 22 05.6 +1.3**
FRU1 pmax pmax
comp=Z,128nm,1.1s
**G30M tAoh Zrail Nji 51.80 29** P **P 15 22 05.8 +1.6**
baz=278,SNR=206

**YUK6 Outpost Mounta 51.87 37** P **P 15 22 07.0 +2.0**
baz=281,SNR=24
**F30M Barrier River 51.88 29** P **P 15 22 06.9 +2.3**
baz=278,SNR=94
**BTDF Bukit Timah Da 51.88 235** P **P 15 22 06.1 +0.8**
**O29M Mount Kennedy 51.89 38** IAMs_20 IAMs_20 15 41 48.3
comp=Z,1µm,21.0s
**O29M Mount Kennedy 51.89 38** P **P 15 22 07.2 +2.2**
baz=281,SNR=22
**AAK Ala-Archa 51.92 299** P **P 15 22 06.5 +0.9**
SNR=20
**AAK Ala-Archa 51.92 299** P **P 15 22 05.4 -0.1**
**AAK Ala-Archa 51.92 299** LR LR 15 44 21.2
comp=Z,1µm,20.9s,baz=108,slow=36
**AAK Ala-Archa 51.92 299** P **P 15 22 05.4 -0.1**
AAK pmax pmax
comp=Z,72nm,1.1s
**MTN Manton Dam 51.95 196** P **P 15 22 04.8 -0.9**
**MTN Manton Dam 51.95 196** IAmb IAmb 15 22 11.1
comp=Z,189nm,1.0s
**KSH Kashi 51.97 294** P P 15 22 10.8 +4.9
KSH sP pwP 15 22 18.7 -2.1
KSH S S 15 29 36.6 +8.9
KSH SS **SS 15 33 13.3 +8.9**
KSH pmax pmax
comp=Z,89nm,1.3s
KSH pmax pmax
comp=Z,720nm,2.9s
KSH LR LR
comp=Z,2µm,17.9s
KSH LR LR
comp=Z,2µm,18.2s
KSH LR LR
comp=Z,740nm,18.9s
**I30M Mount Dempster 52.00 32** P **P 15 22 07.5 +1.7**
baz=279,SNR=429
**UCH Uchtor 52.05 298** P **P 15 22 08.4 +1.6**
SNR=5.5
**J30M Hart River 52.13 33** IAmb IAmb 15 22 10.0
comp=Z,130nm,1.2s
**J30M Hart River 52.13 33** P **P 15 22 08.6 +1.8**
baz=280,SNR=74
**N30M Aishikik Lake 52.38 37** IAmb IAmb 15 22 12.2
comp=Z,153nm,1.6s
N30M IAMs_20 IAMs_20 15 43 44.1
comp=Z,1µm,21.0s
**N30M Aishikik Lake 52.38 37** P **P 15 22 10.5 +2.0**
baz=282,SNR=20
**EKS2 Erkin-Say 52.41 299** P **P 15 22 09.9 +0.8**
SNR=64
**P29M Windy Craggy 52.44 39** IAMs_20 IAMs_20 15 44 05.9
comp=Z,1µm,20.0s
**P29M Windy Craggy 52.44 39** P **P 15 22 11.5 +2.5**
baz=282,SNR=52
**G31M Satah River 52.56 29** P **P 15 22 11.1 +1.4**
baz=280,SNR=93
**INK Inuvik 52.61 28** IAmb IAmb 15 22 12.8
comp=Z,166nm,1.2s
**INK Inuvik 52.61 28** P **P 15 22 11.4 +1.3**
comp=Z,73nm,1.1s,baz=285,slow=6.9,SNR=70
INK LR LR 15 46 29.3
comp=Z,736nm,21.8s,baz=278,slow=38
comp=Z,73nm,1.1s
**INK Inuvik 52.61 28** P **P 15 22 11.4 +1.3**
baz=280,SNR=55
**AML Almayashu 52.65 298** P **P 15 22 12.7 +1.4**
SNR=150
**F31M Tsiigehtchic 52.68 29** P **P 15 22 11.8 +1.2**
baz=280,SNR=85
**P30M Million Dollar 52.72 38** P **P 15 22 13.3 +2.2**
baz=283
**TWSI Taliwang, Sumb 52.92 214** P **P 15 22 10.3 -2.7**
comp=Z,103nm,1.0s,comp=Z,1µm
**N31M Braeburn, Yuko 52.98 36** IAmb IAmb 15 22 16.7
comp=Z,249nm,1.2s
N31M IAMs_20 IAMs_20 15 44 12.2
comp=Z,1µm,21.0s
**N31M Braeburn, Yuko 52.98 36** P **P 15 22 15.4 +2.4**
baz=283,SNR=32
**O30N Mendenhall 52.99 37** IAMs_20 IAMs_20 15 43 44.4
comp=Z,1µm,20.0s
**O30N Mendenhall 52.99 37** P **P 15 22 14.9 +1.8**
baz=283,SNR=27
**PPBI Pangkal Pinang 53.11 230** P **P 15 22 15.1 +0.7**
**SRBI Singaraja 53.12 217** P **P 15 22 14.8 +0.4**
comp=Z,220nm,0.9s,comp=Z,4µm
**PLBC Pleasant Camp 53.16 39** P **P 15 22 16.5 +2.2**
baz=284,SNR=33
**M31M Drury Creek, Y 53.46 35** IAmb IAmb 15 22 19.8
comp=Z,162nm,1.4s
**M31M Drury Creek, Y 53.46 35** P **P 15 22 18.3 +1.8**
baz=283,SNR=51
**WHY Whitehorse 53.60 37** IAmb IAmb 15 22 21.1
comp=Z,183nm,1.4s
**WHY Whitehorse 53.60 37** P **P 15 22 19.5 +1.9**
baz=284,SNR=35
**S31K Pelican 53.60 41** IAmb IAmb 15 22 20.9
comp=Z,146nm,1.6s
**S31K Pelican 53.60 41** P **P 15 22 18.9 +1.4**
baz=285
**SKAG Skagway 53.68 39** P **P 15 22 20.2 +2.2**
**SKAG Skagway 53.68 39** IAmb IAmb 15 22 29.8
comp=Z,215nm,1.5s
**SKAG Skagway 53.68 39** P **P 15 22 20.0 +2.0**
baz=284,SNR=7.5
**R31K City Hall, Gus 53.74 40** P **P 15 22 20.6 +2.1**
baz=285
**FARO Faro, Yukon 53.93 35** IAmb IAmb 15 22 23.1
comp=Z,121nm,1.3s
**FARO Faro, Yukon 53.93 35** P **P 15 22 21.6 +1.7**
baz=284,SNR=53
**SIT Sitka 54.32 42** P **P 15 22 25.1 +2.4**
**SIT Sitka 54.32 42** IAmb IAmb 15 22 26.4
comp=Z,181nm,1.6s
**SIT Sitka 54.32 42** P **P 15 22 24.9 +2.2**
baz=286
**N32M Quiet Lake 54.33 36** IAMs_20 IAMs_20 15 45 26.0
comp=Z,1µm,20.0s
**N32M Quiet Lake 54.33 36** P **P 15 22 24.3 +1.4**
baz=285
**NGJI Ngawi 54.37 221** P **P 15 22 23.5 -0.1**
comp=Z,134nm,1.2s
**R32K Eaglecrest 54.40 40** IAmb IAmb 15 22 26.9
comp=Z,136nm,1.6s
**R32K Eaglecrest 54.40 40** P **P 15 22 25.5 +2.1**
baz=286
**P32M Atlin 54.44 38** IAmb IAmb 15 22 27.2
comp=Z,148nm,1.4s
**P32M Atlin 54.44 38** P **P 15 22 25.5 +1.8**
baz=286,SNR=18
**BKNI Bangkinang 54.45 237** P **P 15 22 25.3 +1.1**
**BKNI Bangkinang 54.45 237** P **P 15 22 25.4 +1.2**
**JIS Juneau Island 54.46 40** P **P 15 22 25.7 +1.9**
**KK31 Karatay Array 54.50 300** IAmb IAmb 15 22 26.2
comp=Z,222nm,1.6s
**KK31 Karatay Array 54.50 300** P **P 15 22 24.7 +0.3**
**KKAR Karatay Array 54.50 300** P **P 15 22 24.3 -0.1**
**KKAR Karatay Array 54.50 300** IAmb IAmb 15 22 26.2
comp=Z,220nm,1.6s
**KKAR Karatay Array 54.50 300** P **P 15 22 24.3 -0.1**
**S32K Killisnoo 54.59 41** IAmb IAmb 15 22 28.2
comp=Z,120nm,1.6s
**S32K Killisnoo 54.59 41** P **P 15 22 26.5 +1.8**
baz=286
**A36M Sachs Harbour 54.63 22** IAmb IAmb 15 22 27.9
comp=Z,212nm,1.4s
**A36M Sachs Harbour 54.63 22** P **P 15 22 26.5 +1.7**
baz=284,SNR=16
**SMRI Semarang 54.63 222** P **P 15 22 25.9 +0.4**
**P33M Teslin, Yukon 54.70 37** IAMs_20 IAMs_20 15 45 21.6
comp=Z,1µm,20.0s
**P33M Teslin, Yukon 54.70 37** P **P 15 22 27.6 +1.9**
baz=286,SNR=84
**PWJI Pagerwojo 54.74 220** P **P 15 22 24.7 -1.6**
comp=Z,180nm,1.0s
**MLSI Meulaboh, Aceh 54.81 244** P **P 15 22 27.7 +0.8**
comp=Z,48nm,1.0s
**DRK Karamyk 54.97 296** IAmb IAmb 15 22 30.6
comp=Z,178nm,1.2s
**DRK Karamyk 54.97 296** P **P 15 22 29.4 +1.2**
**BRLS Borolday 54.99 300** ||| *i* P **P 15 22 29.8 +1.8**
baz=300
**BRLS Borolday 54.99 300** *d i* P **P 15 22 29.7 +1.8**
**POHA Pohakuloa 55.00 91** P **P 15 22 30.6 +2.1**
**POHA Pohakuloa 55.00 91** P **P 15 22 29.2 +0.7**
**MLOA Mauna Loa Obse 55.08 92** P **P 15 22 30.1 +0.8**
**KNRA Kununurra 55.23 198** P **P 15 22 28.9 -0.8**

**UGM Wanagama 55.32 222** P **P 15 22 29.2 -1.3**
**Q32M Nakina River 55.33 39** IAmb IAmb 15 22 34.3
comp=Z,250nm,1.9s
**Q32M Nakina River 55.33 39** P **P 15 22 32.4 +2.1**
baz=287,SNR=17
**YOGI Yogyakarta 55.36 222** P P 15 22 37.8 +7.1
**CHM Chimkent 55.41 300** *e*P **P 15 22 31.4 +0.5**
baz=300
CHM LR LR 15 46 54.9
baz=300
**CHM Chimkent 55.41 300** *e*P **P 15 22 31.4 +0.5**
**BTK Batken 55.44 297** IAmb IAmb 15 22 33.3
comp=Z,208nm,1.5s
**BTK Batken 55.44 297** P **P 15 22 31.9 +0.6**
**T33K Petersburg 55.63 41** P **P 15 22 34.6 +2.4**
baz=288
**KPJI Karang Pucung 55.69 224** P **P 15 22 32.1 -1.0**
comp=Z,108nm,1.0s
**C36M Paulatuk 55.72 25** P **P 15 22 33.6 +1.0**
baz=287,SNR=21
**PDSI Padang 55.76 237** P **P 15 22 32.7 -1.0**
**U33K Whale Pass 55.76 42** IAmb IAmb 15 22 36.8
comp=Z,125nm,1.2s
U33K IAMs_20 IAMs_20 15 42 25.7
comp=Z,1µm,21.0s
**U33K Whale Pass 55.76 42** P **P 15 22 35.5 +2.3**
baz=288,SNR=19
**MTSU Mount Surprise 55.77 180** P **P 15 22 34.1 +0.5**
**R33M Jennings River 55.84 38** IAmb IAmb 15 22 37.8
comp=Z,199nm,1.6s
**R33M Jennings River 55.84 38** P **P 15 22 36.0 +2.1**
baz=288,SNR=44
**SVE Sverdlovsk 55.87 319** *ce*P **P 15 22 35.5 +1.5**
SVE *e*S **S 15 30 21.4 +1.7**
SVE pmax pmax
comp=Z,357nm,0.9s
SVE MLR MLR
comp=Z,7µm,18.0s
**CRAG Craig 55.97 43** P **P 15 22 36.4 +1.7**
**CRAG Craig 55.97 43** IAmb IAmb 15 22 38.1
comp=Z,96nm,1.2s
CRAG IAMs_20 IAMs_20 15 42 17.2
comp=Z,1µm,21.0s
**CRAG Craig 55.97 43** P **P 15 22 36.7 +2.0**
baz=289,SNR=19
**WRAK Wrangell Islan 56.07 42** IAMs_20 IAMs_20 15 42 59.9
comp=Z,1µm,21.0s
**GSI Gunungsitoli 56.08 241** P **P 15 22 36.8 +0.8**
**GSI Gunungsitoli 56.08 241** P **P 15 22 36.5 +0.5**
comp=Z,212nm,1.3s
**NIL Nilore 56.34 289** P **P 15 22 38.6 +0.9**
**NIL Nilore 56.34 289** P **P 15 22 38.6 +0.9**
NIL pmax pmax
comp=Z,371nm,1.4s
**TGTN Hyland Airport 56.44 35** P **P 15 22 40.1 +2.1**
baz=289,SNR=32
**DLBC Dease Lake 56.60 39** P **P 15 22 41.5 +2.2**
comp=Z,47nm,1.2s,baz=299,slow=5.1,SNR=43
DLBC LR LR 15 49 38.9
comp=Z,425nm,19.1s,baz=279,slow=39
comp=Z,47nm,1.2s
**DLBC Dease Lake 56.60 39** P **P 15 22 41.5 +2.2**
baz=289,SNR=35
**LWLI Liwa 56.63 230** P **P 15 22 38.1 -1.9**
comp=Z,144nm,1.2s
**WTLY Watson Lake, Y 56.65 37** P **P 15 22 41.1 +1.5**
baz=289
**KASI Kota Agung 56.76 229** P **P 15 22 38.7 -2.1**
**V35K Ketchikan 56.83 43** IAmb IAmb 15 22 43.9
comp=Z,167nm,1.8s
V35K IAMs_20 IAMs_20 15 42 54.8
comp=Z,1µm,21.0s
**V35K Ketchikan 56.83 43** P **P 15 22 42.3 +1.6**
baz=290,SNR=14
**T35M Bob Quinn 56.98 41** IAmb IAmb 15 22 46.0
comp=Z,179nm,1.3s
**T35M Bob Quinn 56.98 41** P **P 15 22 44.5 +2.6**
baz=290,SNR=53
**ARU Arti 57.08 319** P **P 15 22 43.1 +0.5**
**ARU Arti 57.08 319** LR LR 15 49 48.8
comp=Z,9µm,18.9s,baz=66,slow=39
**ARU Arti 57.08 319** *c i* P **P 15 22 43.1 +0.5**
ARU 15 23 34.1
ARU 15 24 45.3
ARU S **S 15 30 38.6 +2.8**
ARU 15 32 31.8
ARU SS **SS 15 34 31.2 +7.1**
ARU pmax pmax
comp=Z,323nm,0.9s
ARU MLR MLR
comp=Z,8µm,18.0s
**ARU Arti 57.08 319** P **P 15 22 43.1 +0.5**
comp=Z,359nm,1.1s,comp=Z,3µm
**DIB Dawson Inlet, 57.09 45** IAmb IAmb 15 22 45.3
comp=Z,96nm,1.2s
DIB IAMs_20 IAMs_20 15 43 38.0
comp=Z,1µm,20.0s
**CHGR Chuyangaron 57.18 296** P **P 15 22 44.4 +0.7**
CHGR pmax pmax
comp=Z,678nm,1.2s
**SIMJ Simiganj 57.29 296** P **P 15 22 44.7 +0.2**
**U35K Hyder 57.47 42** IAMs_20 IAMs_20 15 43 19.8
comp=Z,1µm,21.0s
**U35K Hyder 57.47 42** P **P 15 22 47.0 +1.7**
baz=291
**CTA Charters Tower 57.75 178** LR LR 15 44 48.9
comp=Z,80nm,21.7s,baz=2.0,slow=33
**CTAO Charters Tower 57.75 178** P **P 15 22 51.3 +3.7**
**CTAO Charters Tower 57.75 178** P **P 15 22 47.4 -0.2**
**CTAO Charters Tower 57.75 178** IAMs_20 IAMs_20 15 45 17.5
comp=Z,1µm,20.0s
**CTAO Charters Tower 57.75 178** P **P 15 22 47.4 -0.2**
CTAO pmax pmax
comp=Z,88nm,1.6s
**WRGLY Wrigley 57.97 32** P **P 15 22 50.4 +1.7**
baz=291,SNR=29
**HG4B Hotspring 58.15 46** IAmb IAmb 15 22 52.4
comp=Z,92nm,1.2s
**LIRD Liard River Hi 58.18 37** P **P 15 22 52.5 +2.2**
baz=292,SNR=7.1
**GRNB Grenville Isla 58.26 44** IAmb IAmb 15 22 53.9
comp=Z,206nm,1.6s
**WRAB Tennant Creek 58.28 191** P **P 15 22 49.6 -1.8**
**WRAB Tennant Creek 58.28 191** *d i* P **P 15 22 49.7 -1.7**
WRAB pmax pmax
comp=Z,237nm,0.8s
WRAB MLR MLR
comp=Z,331nm,7.0s
**WRA Warramunga Arr 58.29 191** P **P 15 22 49.8 -1.7**
comp=Z,183nm,0.6s,baz=11,slow=7.3,SNR=263
WRA LR LR 15 46 54.4
comp=Z,941nm,22.0s,baz=3.0,slow=35
WRA PKP2bc 15 52 44.2
comp=Z,3.0nm,1.1s,baz=200,slow=2.1,SNR=6.2
**QIS Mount Isa 58.33 185** P **P 15 22 50.5 -1.2**
**FITZ Fitzroy Crossi 58.37 201** P **P 15 22 51.9 -0.1**
**TOAD Toad River Com 58.80 37** P **P 15 22 56.4 +1.7**
baz=292,SNR=46
**KOTAN Kotaneelee Air 58.87 36** P **P 15 22 56.7 +1.7**
baz=293
**AB31 Akbulak array 58.97 310** *i* P **P 15 22 56.1 +0.2**
**ABKAR Akbulak array 58.97 310** P **P 15 22 56.0 0.0**
**ABKAR Akbulak array 58.97 310** IAmb IAmb 15 22 57.7
comp=Z,130nm,1.1s
**EUNU Eureka 58.97 9** IAmb IAmb 15 22 57.3
comp=Z,66nm,0.8s
**KBL Kabul 59.06 292** P **P 15 22 56.3 -0.8**
**KBL Kabul 59.06 292** P **P 15 22 56.9 -0.2**
SNR=30
KBL P **P 15 22 56.9 -0.2**
SNR=30
KBL S **S 15 30 57.7 -5.0**
KBL S **S 15 30 57.7 -5.0**
**KBL Kabul 59.06 292** P **P 15 22 56.3 -0.8**
KBL pmax pmax
comp=Z,152nm,1.1s
**AKTO Aktyubinsk 59.64 312** LR LR 15 50 09.6
comp=Z,3µm,19.4s,baz=66,slow=37
**HOPEN Hopen 59.67 346** *e*P **P 15 23 01.5 +1.2**
**BBB Bella Bella 59.93 45** IAmb IAmb 15 23 04.9
comp=Z,161nm,1.6s
**BBB Bella Bella 59.93 45** P **P 15 23 02.8 +0.3**
comp=Z,50nm,1.2s,baz=278,slow=7.5,SNR=11
BBB LR LR 15 45 01.1
comp=Z,772nm,21.0s,baz=295,slow=32
comp=Z,50nm,1.2s

KBS Kingsbay 60.12 350 P P 15 23 04.8 +1.3
KBS IAmb IAmb 15 23 05.9
comp=Z,106nm,1.1s
KBS Kingsbay 60.12 350 IAMs_20 IAMs_20 15 51 03.7
comp=Z,2µm,20.0s
KBS Kingsbay 60.12 350 eP P 15 23 03.9 +0.5
KBS IAmb IAmb 15 23 05.7
comp=Z,106nm,1.1s
KBS Kingsbay 60.12 350 P P 15 23 04.8 +1.3
KBS pmax pmax
comp=Z,106nm,1.1s
KBS MLR MLR
comp=Z,2µm,20.0s
KBS Kingsbay 60.12 350 i P P 15 23 03.7 +0.3
NOR Nord 60.28 357 P P 15 23 05.0 +0.5
NOR pmax pmax
comp=Z,92nm,1.6s
NOR Nord 60.28 357 i P P 15 23 02.3 -2.2
NOR IAmb IAmb 15 23 06.2
comp=Z,266nm,1.7s
HYB Hyderabad 60.34 270 eP P 15 23 06.5 +0.6
HYB esP sP 15 23 13.7 +0.2
HYB ePcP PcP 15 23 50.8 -0.1
HYB ePP PP 15 25 19.8 +0.9
HYB eS S 15 31 20.5 +1.4
HOLB Holberg 60.56 47 P P 15 23 07.3 +0.4
KIRV Kirov 60.80 323 LR LR 15 52 03.6
comp=Z,3µm,18.2s,baz=53,slow=38
KIRV Kirov 60.80 323 d iP P 15 23 08.8 +0.5
KOUNC Koumac, New Ca 61.20 158 P P 15 23 14.1 +2.7
RK1H Rockhampton Ha 61.30 173 P P 15 23 12.1 +0.1
GD1S Gladstone Soft 61.81 173 P P 15 23 19.9 +4.4
YKA Yellowknife Ar 61.96 31 P P 15 23 16.2 +0.1
YKA Yellowknife Ar 61.96 31 P P 15 23 16.5 +0.4
comp=Z,13nm,0.7s,baz=298,slow=6.4,SNR=35
YKA LR LR 15 52 16.1
comp=Z,290nm,21.2s,baz=294,slow=38
comp=Z,13nm,0.7s
YKA Yellowknife Ar 61.96 31 P P 15 23 16.2 +0.1
AS01 Alice Springs 62.01 191 P P 15 23 15.9 -1.0
ASAR Alice Springs 62.02 191 P P 15 23 15.6 -1.4
ASAR pP pP 15 23 21.9 -0.7
ASAR Alice Springs 62.02 191 P P 15 23 15.6 -1.4
comp=Z,25nm,0.5s,baz=4.4,slow=6.9,SNR=217
ASAR LR LR 15 48 47.7
comp=Z,1µm,22.0s,baz=15,slow=35
ASAR PKPPKP P'P'df 15 52 26.4 +7.8
comp=Z,2.6nm,1.0s,baz=197,slow=3.4,SNR=4.4
comp=Z,25nm,0.5s
BJO1 Bjornoya 62.13 346 eP P 15 23 17.3 +0.3
LVZ Lovozero 62.15 336 P P 15 23 17.6 +0.2
LVZ IAmb IAmb 15 23 18.9
comp=Z,145nm,1.4s
LVZ Lovozero 62.15 336 deP P 15 23 17.4 0.0
LVZ pmax pmax
comp=Z,94nm,1.1s
LVZ MLR MLR
comp=Z,2µm,19.0s
LVZ Lovozero 62.15 336 P P 15 23 17.8 +0.4
comp=Z,78nm,1.4s
LIFNC LIFOU 62.33 155 P P 15 23 23.3 +4.3
LIFNC LIFOU 62.33 155 IAMs_20 IAMs_20 15 53 38.1
comp=Z,1µm,19.0s
VADS Vadso 62.47 339 eP P 15 23 19.7 +0.3
VADS IAmb IAmb 15 23 21.1
comp=Z,191nm,1.0s
APA Apatity 62.73 336 ⇓iP P 15 23 18.9 -2.3
APA i PPP PPP 15 27 15.0
APA i S S 15 31 44.0 -4.0
APA i 15 33 12.0
APA i SS SS 15 35 50.0 -2.0
APA i SSS SSS 15 38 35.0
APA pmax pmax
comp=Z,47nm,0.7s
OZB Mount Ozzard 62.84 48 IAmb IAmb 15 23 25.0
comp=Z,140nm,1.4s
MBWA Marble Bar 63.08 206 P P 15 23 23.5 -0.5
MBWA Marble Bar 63.08 206 P P 15 23 23.0 -1.1
MBWA IAmb IAmb 15 23 25.0
comp=Z,50nm,0.7s
NOUC Port Laguerre 63.27 157 P P 15 23 27.2 +1.9
DZM Mont Dzumac 63.29 157 P P 15 23 27.5 +2.0
DZM Mont Dzumac 63.29 157 eP P 15 23 25.1 -0.4
comp=Z,178nm,1.1s
DZM eS S 15 31 57.7 +1.6
comp=Z,1µm,26.2s
DZM eLQ LQ 15 39 14.6
comp=Z,4µm,32.8s
DZM eLR LR 15 42 08.0
comp=Z,4µm,22.4s
DZM Mont Dzumac 63.29 157 P P 15 23 25.1 -0.4
DZM pP pP 15 23 32.0 +0.8
DZM IAmb IAmb 15 23 42.1
comp=Z,72nm,1.0s
EIDS Eidsvold 63.31 173 P P 15 23 26.4 +0.9
EIDS Eidsvold 63.31 173 IAmb IAmb 15 23 40.9
comp=Z,59nm,1.0s
EIDS IAMs_20 IAMs_20 15 54 52.9
comp=Z,877nm,18.0s
KEV Kevo 63.34 340 P P 15 23 25.7 +0.5
KEV IAmb IAmb 15 23 27.2
comp=Z,88nm,1.1s
KEV Kevo 63.34 340 P P 15 23 25.7 +0.5
KEV pmax pmax
comp=Z,88nm,1.1s
KEV MLR MLR
comp=Z,3µm,22.0s
YATNC Mamie plateau, 63.42 156 P P 15 23 28.8 +2.5
PSA00 Pilbara Seismi 63.43 205 P P 15 23 25.7 -0.6
PSA00 Pilbara Seismi 63.43 205 P P 15 23 25.5 -0.8
PSA00 pP pP 15 23 31.2 -0.7
PSA00 IAmb IAmb 15 23 32.2
comp=Z,84nm,1.6s
PSA00 Pilbara Seismi 63.43 205 IAmb IAmb 15 23 32.3
comp=Z,126nm,1.5s
ONTNC Ouen Toro 63.51 157 P P 15 23 29.4 +2.5
HAMF Hammerfest 63.65 341 eP P 15 23 27.3 +0.1
HAMF IAmb IAmb 15 23 28.4
comp=Z,321nm,1.9s
CLRS Cowichan Lake 63.70 47 IAmb IAmb 15 23 30.7
comp=Z,103nm,1.4s
ARCES ARCESS Array B 63.89 340 P P 15 23 28.9 0.0
ARCES IAmb IAmb 15 23 30.9
comp=Z,77nm,1.2s
ARCES ARCESS Array B 63.89 340 P P 15 23 29.4 +0.5
comp=Z,19nm,0.8s,baz=66,slow=4.1,SNR=26
ARCES LR LR 15 53 31.6
comp=Z,2µm,21.3s,baz=52,slow=38
comp=Z,19nm,0.8s
ARCES ARCESS Array B 63.89 340 P P 15 23 28.9 0.0
ARCES pmax pmax
comp=Z,77nm,1.2s
TULEG Thule 63.92 8 i P P 15 23 27.6 -1.3
TULEG IAmb IAmb 15 23 30.0
comp=Z,117nm,0.8s
MSVF Nonsavu 63.92 144 P P 15 23 32.5 +2.7
MSVF Nonsavu 63.92 144 P P 15 23 30.4 +0.6
MSVF IAmb IAmb 15 23 37.9
comp=Z,125nm,1.4s
MSVF Nonsavu 63.92 144 LR LR 15 47 07.4
comp=Z,2µm,20.2s,baz=335,slow=32
MSVF Nonsavu 63.92 144 P P 15 23 30.4 +0.6
MSVF pmax pmax
comp=Z,125nm,1.4s
HRA Herat 64.08 294 IAmb IAmb 15 23 48.9
comp=Z,83nm,0.9s
PGC Sidney 64.18 47 IAmb IAmb 15 23 33.7
comp=Z,93nm,1.3s
QLP Quilpie 64.18 180 P P 15 23 29.9 -1.3
WRKA Warakurna 64.37 196 P P 15 23 31.7 -0.8
B04A Port Angeles 64.43 48 IAmb IAmb 15 23 35.9
comp=Z,111nm,1.2s
B04A IAMs_20 IAMs_20 15 44 58.2
comp=Z,1µm,18.0s
NEEM North Greenlan 64.51 4 i P P 15 23 32.7 -0.5
NEEM IAmb IAmb 15 23 34.7
comp=Z,200nm,1.1s
BELG Belogornoye 64.57 318 LR LR 15 54 31.4
comp=Z,5µm,18.4s,baz=56,slow=39
BELG Belogornoye 64.57 318 d iP P 15 23 33.6 0.0
BELG pmax pmax
comp=Z,45nm,1.0s
BELG MLR MLR
comp=Z,732nm,18.0s
PALK Pallekele 64.62 259 LR LR 15 54 17.7
comp=Z,1µm,19.1s,baz=156,slow=38
PALK Pallekele 64.62 259 P P 15 23 35.8 +1.3
PALK P P 15 23 35.8 +1.3
KTK1 Kautokeino 64.84 340 eP P 15 23 35.6 +0.5
KTK1 IAmb IAmb 15 23 36.6
comp=Z,66nm,0.9s
SGF Sodankyl 64.93 338 P P 15 23 36.1 +0.4
SGF pmax pmax
comp=Z,118nm,1.3s
DAG Danmarks Havn 65.05 356 P P 15 23 36.4 +0.1
DAG pmax pmax
comp=Z,117nm,1.7s
DAG Danmarks Havn 65.05 356 i P P 15 23 34.5 -1.8
DAG IAmb IAmb 15 23 37.6
comp=Z,83nm,1.0s
MSF Maaselka 65.11 336 P P 15 23 37.6 +0.7
MSF pmax pmax
comp=Z,129nm,1.5s
INKA Innaminka 65.41 183 P P 15 23 38.6 -0.5
AUWSH Wavell State H 65.53 171 P P 15 23 40.5 +0.5
TRO Tromso 65.54 342 eP P 15 23 40.3 +0.8
TRO IAmb IAmb 15 23 40.9
comp=Z,272nm,1.7s
TRO Tromso 65.54 342 P P 15 23 40.5 +0.9
OOD Oodnadatta 65.86 188 P P 15 23 42.2 +0.1
LON Longmire 66.08 49 IAmb IAmb 15 23 46.3
comp=Z,93nm,1.6s
JOF Joensuu 66.15 333 eP P 15 23 43.9 +0.3
COR Corvallis 66.27 51 P P 15 23 45.9 +1.2
COR Corvallis 66.27 51 IAMs_20 IAMs_20 15 49 01.9
comp=Z,898nm,20.0s
COR Corvallis 66.27 51 P P 15 23 45.9 +1.2
COR pmax pmax
comp=Z,240nm,1.3s
J01E Myrtle Point 66.60 53 IAMs_20 IAMs_20 15 57 31.8
comp=Z,1µm,18.0s
KULLO Kullorsuaq 66.87 6 i P P 15 23 45.7 -2.3
KULLO IAmb IAmb 15 23 49.2
comp=Z,210nm,1.2s
DBO Dodson Butte 67.06 53 IAmb IAmb 15 23 53.2
comp=Z,111nm,1.5s
MXC Moxie City 67.06 48 IAmb IAmb 15 23 52.7
comp=Z,112nm,1.3s
AULRC Lightning Ridg 67.11 176 P P 15 23 49.3 -0.8
VALR Valaam 67.27 331 c iP P 15 23 51.7 +1.0
VALR pmax pmax
comp=Z,153nm,1.0s
VALR MLR MLR
comp=Z,2µm,17.0s
KSXB Camp Six Broad 67.32 54 IAmb IAmb 15 23 54.9
comp=Z,143nm,1.3s
L02F Cave Junction 67.36 54 IAmb IAmb 15 23 55.0
comp=Z,88nm,1.4s
KRMB Red Mountain 67.45 54 IAmb IAmb 15 23 55.9
comp=Z,106nm,1.4s
HUMO Hull Mountain 67.50 53 IAmb IAmb 15 23 56.0
comp=Z,101nm,1.6s
DBG Daneborg 67.55 355 i P P 15 23 49.0 -3.4
DBG IAmb IAmb 15 23 53.4
comp=Z,82nm,1.5s
C09A Chrisman Ranch 67.59 46 IAmb IAmb 15 23 55.5
comp=Z,127nm,1.4s
I05D Terrebonne, OR 67.60 51 IAmb IAmb 15 23 56.2
comp=Z,107nm,1.3s
HAWA Hanford 67.61 48 IAmb IAmb 15 23 56.1
comp=Z,123nm,1.5s
STEI Steigen 67.70 341 eP P 15 23 53.9 +0.5
JCC Jacoby Creek, 67.74 55 IAmb IAmb 15 23 57.7
comp=Z,139nm,1.2s
MOS Moscow 67.77 324 eP P 15 23 52.0 -2.1
MOS e 15 26 20.7
MOS ePPP PPP 15 27 56.9
MOS eS S 15 32 48.7 -1.5
MOS e 15 33 28.4
MOS e 15 33 54.1
MOS eSS SS 15 37 11.7 +0.9
MOS pmax pmax
comp=Z,600nm,1.8s
MOS pmax pmax
comp=Z,285nm,1.4s
MOS pmax pmax
comp=N,159nm,1.3s
MOS smax smax
comp=E,1µm,4.4s
MOS smax smax
comp=N,800nm,4.4s
MOS MLR MLR
comp=N,3µm,17.0s
MOS MLR MLR
comp=E,3µm,17.0s
MOS MLR MLR
comp=Z,4µm,17.0s
LOF Lofoten 67.97 342 eP P 15 23 55.7 +0.6
NEW Newport 68.00 45 IAmb IAmb 15 23 58.1
comp=Z,92nm,1.2s
NEW Newport 68.00 45 IAMs_20 IAMs_20 15 56 42.5
comp=Z,846nm,19.0s
NEW Newport 68.00 45 P P 15 23 56.3 +0.6
comp=Z,89nm,1.3s,baz=306,slow=5.4,SNR=47
NEW LR LR 15 48 43.5
comp=Z,363nm,21.9s,baz=309,slow=32
comp=Z,89nm,1.3s
NEW Newport 68.00 45 P P 15 23 56.7 +0.9
baz=303,SNR=24
FAUS Fauske 68.10 341 eP P 15 23 56.2 +0.3
FAUS IAmb IAmb 15 23 57.3
comp=Z,80nm,1.0s
FAUS e 15 23 58.6
YBH Yreka Blue Hor 68.11 54 IAmb IAmb 15 23 59.9
comp=Z,130nm,1.4s
YBH Yreka Blue Hor 68.11 54 P P 15 23 58.3 +1.7
comp=Z,48nm,1.2s,baz=280,slow=0.7,SNR=36
YBH LR LR 15 48 37.2
comp=Z,306nm,20.4s,baz=302,slow=31
comp=Z,48nm,1.2s
PINE Pine Mountain 68.14 51 IAMs_20 IAMs_20 15 54 18.3
comp=Z,861nm,19.0s
LCRK Leigh Creek 68.25 185 P P 15 23 56.9 -0.3
KMRM Mail Ridge 68.26 55 IAmb IAmb 15 24 01.1
comp=Z,86nm,1.3s
VRH Novokhopyorsk 68.32 319 eP P 15 23 57.2 -0.4
VRH pmax pmax
comp=Z,115nm,0.7s
ARMA Armidale 68.37 173 P P 15 23 58.7 +0.6
ARMA Armidale 68.37 173 IAmb IAmb 15 24 05.2
comp=Z,116nm,1.2s
ARMA IAMs_20 IAMs_20 15 52 59.7
comp=Z,1µm,20.0s
PUL Pulkovo 68.47 330 d iP P 15 23 59.3 +0.9
PUL pmax pmax
comp=Z,150nm,0.8s
PUL MLR MLR
comp=Z,2µm,17.0s
MULG Mulgathing 68.51 189 P P 15 23 58.8 0.0
MEEK Meekatharra 68.53 204 P P 15 23 58.2 -0.9
G08A Pilot Rock 68.53 49 IAmb IAmb 15 24 02.0
comp=Z,100nm,1.6s
OBN Obninsk 68.63 324 P P 15 23 59.3 -0.1
OBN Obninsk 68.63 324 LR LR 15 56 47.2
comp=Z,4µm,18.0s,baz=35,slow=38
OBN Obninsk 68.63 324 ⇓iP P 15 24 00.4 +1.0
OBN Obninsk 68.63 324 d iP P 15 23 59.6 +0.2
OBN e 15 24 23.8
OBN e 15 26 31.5
OBN ePPP PPP 15 28 10.7
OBN eS S 15 33 02.8 +2.5
OBN eSS SS 15 37 23.0 -1.0
OBN pmax pmax
comp=Z,215nm,1.2s
OBN MLR MLR
comp=Z,4µm,16.0s
OBN Obninsk 68.63 324 P P 15 23 59.8 +0.4
comp=Z,180nm,1.5s,comp=Z,2µm
UPNV Upernavik 68.69 6 i P P 15 23 57.3 -2.2
UPNV IAmb IAmb 15 24 00.7
comp=Z,109nm,1.2s
O02D Mt. Diablo Mer 68.88 55 IAmb IAmb 15 24 04.8
comp=Z,132nm,1.4s
O02D IAMs_20 IAMs_20 15 49 46.3
comp=Z,1µm,20.0s
KEF Keuruu 68.93 334 eP P 15 24 01.4 +0.1
LPSR Galich'ya Gora 68.95 321 eP P 15 23 58.5 -3.0
LPSR e 15 24 00.3
LPSR pmax pmax
comp=Z,170nm,0.8s
LPSR pmax pmax
comp=Z,190nm,0.8s
LPSR MLR MLR
AUPHS Peel High Scho 68.97 174 P P 15 24 02.0 +0.2
FINES FINESS Array B 68.99 333 P P 15 24 01.3 -0.3
FINES pP sP 15 24 10.6 +1.3
FINES FINESS Array B 68.99 333 P P 15 24 01.7 +0.2
comp=Z,61nm,0.7s,baz=51,slow=7.6,SNR=132
FINES LR LR 15 57 07.1
comp=Z,3µm,19.0s,baz=44,slow=38
comp=Z,61nm,0.7s
FINES FINESS Array B 68.99 333 P P 15 24 01.3 -0.3
FINES *PP sP 15 24 10.6 +1.3
VAF Ylistaro 69.07 335 eP P 15 24 02.3 +0.2
CMSA Cobar Meteorol 69.13 179 P P 15 24 03.2 +0.5
F10A Beach Ranch, E 69.18 48 IAmb IAmb 15 24 05.9
comp=Z,106nm,1.9s
MOR8 Moi Rana 69.24 340 eP P 15 24 02.0 -1.1
MOR8 IAmb IAmb 15 24 03.0
comp=Z,75nm,1.0s
KONS Konsvik 69.33 341 eP P 15 24 03.8 +0.2
KONS IAmb IAmb 15 24 04.6
comp=Z,106nm,1.7s
HOPS Hopland Field 69.33 56 IAmb IAmb 15 24 06.9
comp=Z,148nm,1.4s
HOPS IAMs_20 IAMs_20 15 54 02.1
comp=Z,1µm,19.0s
VORR Voronezh 69.35 320 eP P 15 24 04.7 +0.7
VORR pmax pmax
comp=Z,132nm,0.8s
STOK Stokkvaagen 69.48 341 eP P 15 24 03.9 -0.7
STKA Stephens Creek 69.49 182 P P 15 24 04.5 -0.5
STKA Stephens Creek 69.49 182 P P 15 24 04.0 -0.9
STKA Stephens Creek 69.49 182 P P 15 24 03.6 -1.3
comp=Z,14nm,0.8s,baz=347,slow=6.5,SNR=22
STKA LR LR 15 53 42.7
comp=Z,940nm,21.2s,baz=7.7,slow=35
comp=Z,14nm,0.8s
STKA Stephens Creek 69.49 182⇑eP P 15 24 04.4 -0.5
MAK Makhachkala 69.55 309 d iP P 15 24 02.9 -2.5
MAK e 15 26 40.8
MAK ePPP PPP 15 28 20.4
MAK eS S 15 33 09.7 -2.0
MAK eSS SS 15 37 39.2 +0.3
MAK pmax pmax
comp=Z,271nm,1.6s
MAK MLR MLR
comp=Z,2µm,15.0s
GDXM Geysers 69.61 56 IAmb IAmb 15 24 09.1
comp=Z,108nm,1.4s
JMIC Jan Mayen 69.61 351 eP P 15 24 06.2 +0.9
JMIC IAmb IAmb 15 24 07.5
comp=Z,298nm,2.0s
JMIC Jan Mayen 69.61 351 LR LR 15 57 15.4
comp=Z,463nm,18.5s,baz=39,slow=38
VSR Storozhevoye 69.63 320 eP P 15 24 01.7 -4.0
VSR e 15 24 04.3
VSR pmax pmax
comp=Z,170nm,1.3s
VSR pmax pmax
comp=Z,310nm,1.5s
VSR MLR MLR
comp=Z,6µm,17.0s
JMI Jan Mayen 69.70 351 eP P 15 24 06.8 +1.1
JMI IAmb IAmb 15 24 08.7
comp=Z,53nm,1.1s
VORD Divnogorie 69.71 319 eP P 15 24 03.6 -2.6
VORD e 15 24 05.1
VORD pmax pmax
comp=Z,70nm,0.7s
VORD pmax pmax
comp=Z,270nm,1.6s
VORD MLR MLR
comp=Z,3µm,15.0s
BMO Blue Mountains 69.76 49 IAmb IAmb 15 24 09.4
comp=Z,93nm,1.4s
SUMG Summit 69.77 1 IAMs_20 IAMs_20 15 53 08.4
comp=Z,1µm,21.0s
SUMG Summit 69.77 1 P P 15 24 07.6 +0.8
SUMG pmax pmax
comp=Z,183nm,1.7s
SUMG Summit 69.77 1 i P P 15 24 07.1 +0.3
SUMG IAmb IAmb 15 24 09.6
comp=Z,167nm,1.2s
J08A Circle Bar Ran 69.88 50 IAmb IAmb 15 24 10.5
comp=Z,154nm,1.3s
MCCM Marconi Confer 69.91 57 IAMs_20 IAMs_20 15 50 24.6
comp=Z,1µm,19.0s
AUDCS Dubbo College 69.94 176 P P 15 24 07.2 -0.5
FORT Forrest 69.98 195 P P 15 24 08.0 +0.1
FORT Forrest 69.98 195 P P 15 24 07.6 -0.3
ORV Oroville 70.05 55 IAmb IAmb 15 24 10.7
comp=Z,90nm,1.2s
WVOR Wild Horse Val 70.29 51 IAmb IAmb 15 24 12.9
comp=Z,147nm,1.4s
WVOR IAMs_20 IAMs_20 15 57 28.3
comp=Z,856nm,19.0s
WVOR Wild Horse Val 70.29 51 P P 15 24 11.5 +1.4
ARBE Arbavere 70.37 331 eP P 15 24 10.9 +0.8
MEF Metsahovi 70.43 333 eP P 15 24 11.8 +1.4
MSO Missoula 70.59 45 P P 15 24 12.2 +0.3
baz=305,SNR=16
SEKA Sheki 70.71 307 P P 15 24 13.0 +0.4
AFDM Forest Hills D 70.73 55 IAmb IAmb 15 24 15.2
comp=Z,100nm,1.5s
AFDM IAMs_20 IAMs_20 15 55 22.2
comp=Z,718nm,19.0s
VSU Vasula 70.73 330 d iP P 15 24 12.7 +0.4
VSU pmax pmax
comp=Z,192nm,1.0s
VSU MLR MLR
comp=Z,2µm,16.0s
BBOO Buckleboo 70.78 187 P P 15 24 13.5 +0.7
BBOO Buckleboo 70.78 187 IAmb IAmb 15 24 18.8
comp=Z,65nm,1.1s
NTLH Newcastle Hard 70.83 173 P P 15 24 15.6 +2.5
WHYH Whyalla 70.87 186 P P 15 24 13.5 +0.2
MNGR Mingechevir, A 71.02 307 P P 15 24 16.0 +1.6
GOF Gofitskoye 71.06 313 d iP P 15 24 15.5 +0.9
LKRN Lenkeran, Azer 71.08 305 P P 15 24 15.5 +0.7
HTT Hallett 71.17 185 P P 15 24 17.1 +1.9
NSS Namsos 71.17 340 eP P 15 24 14.4 -0.5
NSS IAmb IAmb 15 24 15.9
comp=Z,53nm,1.2s
EMB Emerald Bay 71.28 55 IAmb IAmb 15 24 18.9
comp=Z,116nm,1.3s
PAHR Pah Rah Range 71.33 54 IAmb IAmb 15 24 19.1
comp=Z,103nm,1.3s
SCO Scoresbysund 71.41 355 IAmb IAmb 15 24 18.6
comp=Z,117nm,1.3s
SCO IAMs_20 IAMs_20 15 55 14.8
comp=Z,968nm,22.0s
SCO Scoresbysund 71.41 355 i P P 15 24 16.9 +0.6
SCO IAmb IAmb 15 24 18.4
comp=Z,115nm,1.3s
MFID Camas Ranch 71.44 49 IAmb IAmb 15 24 19.8
comp=Z,195nm,1.7s
PNTR Pine Nut 71.54 55 IAmb IAmb 15 24 20.7
comp=Z,199nm,1.7s
PNTR IAMs_20 IAMs_20 15 55 55.6
comp=Z,660nm,18.0s
GANJ Ganja 71.57 307 P P 15 24 18.2 +0.4
SYDH Sydney Hard Ro 71.60 174 P P 15 24 19.3 +1.6
CMB Columbia Colle 71.62 56 IAmb IAmb 15 24 20.7
comp=Z,119nm,1.3s
CMB IAMs_20 IAMs_20 15 48 04.7
comp=Z,960nm,22.0s
MORW Morawa 71.64 206 P P 15 24 17.4 -0.7
MORW Morawa 71.64 206 IAmb IAmb 15 24 18.3
comp=Z,172nm,1.6s
MTSE Matsula 71.68 332 eP P 15 24 18.8 +0.7
FFC Flin Flon 71.79 34 P P 15 24 18.5 -0.3
FFC IAmb IAmb 15 24 20.8
comp=Z,173nm,1.2s
FFC Flin Flon 71.79 34 P P 15 24 18.5 -0.3
FFC pmax pmax
comp=Z,173nm,1.3s
YERR Yerington 71.83 55 IAmb IAmb 15 24 22.3
comp=Z,152nm,1.3s
YERR IAMs_20 IAMs_20 15 56 13.2
comp=Z,802nm,19.0s
KHAM Kharkiv 71.85 320 P P 15 24 20.5 +1.2
KVAR Kislovodsk Arr 71.89 312 LR LR 16 00 30.4
comp=Z,2µm,18.6s,baz=256,slow=40
KIV Kislovodsk 71.90 312 P P 15 24 20.6 +0.7
KIV Kislovodsk 71.90 312 i P P 15 24 21.4 +1.6

SNR=32
KIV **Kislovodsk** 71.90 312 P **P** 15 24 19.3 -0.5
KIV P **pP** 15 24 20.2 -5.4
KIV S **S** 15 33 38.4 -0.8
KIV **Kislovodsk** 71.90 312 eP **P** 15 24 20.5 +0.7
KIV e 15 26 59.3
KIV eS **S** 15 33 40.1 +0.9
KIV eSS **SS** 15 38 19.7 +4.6
KIV pmax pmax
comp=Z,92nm,2.7s
KIV pmax pmax
comp=Z,228nm,1.1s
KIV **Kislovodsk** 71.90 312 P **P** 15 24 21.1 +1.3
comp=Z,282nm,1.3s,comp=Z,3µm
KBZ **Khabaz** 71.91 312 P **P** 15 24 20.7 +1.0
comp=Z,75nm,0.9s,baz=56,slow=3.9,SNR=140
KBZ LR LR 16 01 31.6
comp=Z,2µm,18.2s,baz=42,slow=40
comp=Z,75nm,0.9s
KBZ **Khabaz** 71.91 312 d iP **P** 15 24 20.5 +0.8
KBZ pmax pmax
comp=Z,155nm,1.0s
WAKR **Walker** 71.97 55 IAmb IAmb 15 24 23.4
comp=Z,119nm,1.6s
WAKR IAMs_20 IAMs_20 15 56 02.0
comp=Z,976nm,19.0s
YNG **Young** 71.98 176 P **P** 15 24 20.3 +0.2
KMBL **Kambalda** 71.99 200 P **P** 15 24 19.4 -0.8
BBGB **Big Mountain B** 72.00 57 IAmb IAmb 15 24 33.9
comp=Z,199nm,1.4s
SHA1 **Shidzhatmaz** 72.04 312 d iP **P** 15 24 21.7 +0.9
ERBR **Yeremizino-Bor** 72.14 314 eP **P** 15 24 19.6 -1.5
ERBR e*PP **pP** 15 24 22.9 -3.9
ERBR eS **S** 15 33 43.2 +1.4
ERBR pmax pmax
comp=Z,257nm,1.1s
ERBR MLR MLR
comp=Z,2µm,17.0s
ERBR MLR MLR
comp=E,3µm,19.0s
ERBR MLR MLR
comp=N,2µm,16.0s
EGMT **Eagleton** 72.19 43 IAmb IAmb 15 24 23.6
comp=Z,130nm,1.5s
EGMT IAMs_20 IAMs_20 15 53 16.2
comp=Z,850nm,20.0s
EGMT **Eagleton** 72.19 43 P **P** 15 24 22.1 +0.6
baz=307,SNR=17
HLID **Hailey** 72.20 48 P **P** 15 24 22.9 +1.2
baz=306,SNR=30
DLMT **Dillon** 72.20 46 IAmb IAmb 15 24 24.0
comp=Z,180nm,1.6s
FCC **Fort Churchill** 72.23 28 IAMs_20 IAMs_20 15 58 42.0
comp=Z,1µm,21.0s
WOLH **Wollongong Har** 72.25 174 P **P** 15 24 24.7 +3.1
BMN **Battle Mountai** 72.29 52 IAmb IAmb 15 24 25.2
comp=Z,170nm,1.5s
PMPB **Monarch Peak** 72.36 58 IAmb IAmb 15 25 04.1
comp=Z,95nm,1.3s
PMPB IAMs_20 IAMs_20 15 48 48.4
comp=Z,1µm,21.0s
RYN **Ryan** 72.49 55 IAmb IAmb 15 24 26.2
comp=Z,110nm,1.4s
RYN IAMs_20 IAMs_20 15 56 24.8
comp=Z,799nm,20.0s
KVN **Kaiserville** 72.52 54 IAmb IAmb 15 24 26.4
comp=Z,158nm,1.4s
BOZ **Bozeman (W)** 72.61 45 P **P** 15 24 25.0 +0.9
baz=307,SNR=44
LABN **Labinsk** 72.64 313 eP **P** 15 24 21.9 -2.2
LABN e*PP **pP** 15 24 26.0 -3.8
LABN eS **S** 15 33 47.4 -0.1
LABN pmax pmax
comp=Z,214nm,1.0s
LABN MLR MLR
comp=E,3µm,15.0s
LABN MLR MLR
comp=N,2µm,18.0s
LABN MLR MLR
comp=Z,2µm,18.0s
TBLU **Trondheim** 72.65 340 eP **P** 15 24 23.0 -0.8
TBLU IAmb IAmb 15 24 24.0
comp=Z,331nm,1.9s
WSAR **Wadi Sarin** 72.66 286 LR LR 16 02 11.6
comp=Z,549nm,18.3s,baz=100,slow=41
JLN **Jalan Bani Buh** 72.68 285 P **P** 15 24 26.0 +1.3
SNR=7.3
LHV **Little Huntoon** 72.72 55 IAMs_20 IAMs_20 15 49 08.8
comp=Z,989nm,21.0s
NVAR **Mina Array Bea** 72.75 55 P **P** 15 24 25.7 +0.5
NVAR **sP** 15 24 33.0 0.0
NVAR **Mina Array Bea** 72.75 55 P **P** 15 24 26.2 +1.1
comp=Z,36nm,1.1s,baz=285,slow=6.0,SNR=121
NVAR LR LR 15 50 20.9
comp=Z,536nm,21.9s,baz=298,slow=31
comp=Z,36nm,1.1s
WBK **Wadi Bani Khal** 72.76 285 P **P** 15 24 27.1 +1.9
SNR=6.1
OMMB **Old Mammoth Mi** 72.76 56 IAMs_20 IAMs_20 15 51 50.9
comp=Z,172nm,20.0s
IZAR **Zarasai** 72.77 328 eP **P** 15 24 27.6 +3.0
BLDU **Ballidu** 72.83 205 P **P** 15 24 24.0 -1.2
NV11 **Mina Array Sit** 72.84 55 IAmb IAmb 15 24 28.3
comp=Z,96nm,1.4s
GNI **Garni** 72.85 308 P **P** 15 24 26.5 +0.8
GNI **Garni** 72.85 308 P **P** 15 24 27.6 +1.9
GNI **Garni** 72.85 308 LR LR 15 59 45.6
comp=Z,2µm,18.5s,baz=67,slow=38
GNI **Garni** 72.85 308 P **P** 15 24 26.4 +0.8
GNI S **S** 15 33 51.5 +1.1
GNI **Garni** 72.85 308 d iP **P** 15 24 27.0 +1.3
GNI pmax pmax
comp=Z,146nm,1.4s
GNI MLR MLR
comp=Z,2µm,17.0s
GNI **Garni** 72.85 308 P **P** 15 24 26.9 +1.3
comp=Z,161nm,1.5s,comp=Z,2µm
MLAC **Mammoth, Mammo** 72.86 56 P **P** 15 24 26.9 +1.1
baz=305
BIDO **Bidbid** 72.89 287 P **P** 15 24 28.0 +2.1
SNR=5.3
BIDO S **S** 15 33 49.9 -1.0
MNK **Minsk** 72.92 327 i P **P** 15 24 24.7 -0.8
MNK i 15 27 05.4
MNK i PPP PPP 15 28 50.2
MNK i S **S** 15 33 51.7 +1.4
MNK i SS **SS** 15 38 34.2 +4.4
MNK pmax pmax
comp=Z,147nm,1.0s
MNK pmax pmax
comp=E,35nm,1.1s
MNK pmax pmax
comp=N,75nm,1.0s
MNK MLR MLR
comp=N,2µm,16.0s
MNK MLR MLR
comp=Z,4µm,17.0s
MNK MLR MLR
comp=E,1µm,17.0s
NAX **Nakhchivan** 72.93 306 P **P** 15 24 26.8 +0.7
ISAL **Salakas** 72.94 328 eP **P** 15 24 27.3 +1.7
SHME **Shamm** 72.96 290 i P **P** 15 24 26.6 +0.3
SNR=49
SHME **Shamm** 72.96 290 P **P** 15 24 27.0 +0.7
SNR=25
SHME S **S** 15 33 49.9 -1.8
PLTM **Poltava** 72.96 320 P **P** 15 24 27.2 +1.3
SLIT **Slitere, Latvi** 73.02 331 eP **P** 15 24 25.9 -0.2
CAN **Canberra** 73.03 176 P **P** 15 24 27.6 +1.3
CAN **Canberra** 73.03 176 IAmb IAmb 15 24 33.2
comp=Z,92nm,1.3s
CNB **Canberra Magne** 73.05 175 P **P** 15 24 28.4 +1.9
AUUHS **Ulladulla High** 73.17 175 P **P** 15 24 28.0 +1.0
SMDO **Samad** 73.21 286 P **P** 15 24 27.7 -0.3
SMDO S **S** 15 33 54.5 -0.3
Q09A **Carvers** 73.23 54 IAmb IAmb 15 24 30.6
comp=Z,114nm,1.2s
VOG **Valley Oaks Go** 73.25 57 P **P** 15 24 28.4 +0.5
baz=305
ICESG **Greenland Ices** 73.25 1 i P **P** 15 24 26.3 -1.4
ICESG IAmb IAmb 15 24 29.7
comp=Z,229nm,1.2s
MDH **Madha** 73.26 289 i P **P** 15 24 27.9 -0.2
SNR=9.1
MDH **Madha** 73.26 289 P **P** 15 24 30.0 +1.9
SNR=7.7
MDH S **S** 15 33 51.2 -3.9
MASF **Masafi** 73.33 289 P **P** 15 24 28.3 -0.3
SNR=16
MASF S **S** 15 33 56.5 +0.6
MSFE **Esma-Masafi** 73.33 289 i P **P** 15 24 29.3 +0.7
SNR=9.8
ELK **Elko** 73.34 51 IAmb IAmb 15 24 31.6
comp=Z,120nm,1.7s
ELK IAMs_20 IAMs_20 15 52 43.2
comp=Z,655nm,19.0s
ELK **Elko** 73.34 51 LR LR 15 52 53.2
comp=Z,462nm,19.8s,baz=300,slow=33
ELK **Elko** 73.34 51 P **P** 15 24 29.7 +1.0
KLBR **Kellerberrin** 73.40 203 P **P** 15 24 28.1 -0.4
SMMC **Simmler** 73.41 58 P **P** 15 24 30.3 +1.4
baz=305,SNR=5.8
HOQ **Hoqain** 73.47 287 P **P** 15 24 28.2 -1.2
SNR=9.2
HOQ S **S** 15 33 56.1 -1.6
UOSS **Minazif** 73.53 289 P **P** 15 24 29.8 +0.1
UOSS **Minazif** 73.53 289 i P **P** 15 24 30.1 +0.4
SNR=38
UOSS **Minazif** 73.53 289 P **P** 15 24 29.2 -0.5
UOSS S **S** 15 33 54.6 -3.6
VSVD **Vaisvydziai** 73.55 330 eP **P** 15 24 30.8 +1.5
JMDO **Jabal Madar** 73.56 286 P **P** 15 24 29.8 -0.1
DSP **Deep Springs** 73.57 55 IAmb IAmb 15 24 32.8
comp=Z,117nm,1.3s
TIN **Tinemaha, Big** 73.58 56 P **P** 15 24 31.0 +1.0
baz=305
UMQ **Umm Al-Quwin** 73.61 290 i P **P** 15 24 32.1 +2.0
SNR=6.4
UMQ **Umm Al-Quwin** 73.61 290 P **P** 15 24 32.6 +2.4
SNR=5.9
HATD **Hatta, Dubai** 73.65 289 i P **P** 15 24 31.4 +1.0
SNR=30
HATD **Hatta, Dubai** 73.65 289 P **P** 15 24 30.6 +0.2
SNR=25
HATD S **SKiKP** 15 33 58.5 -0.2
YNM **Yellowstone No** 73.66 46 IAmb IAmb 15 25 16.4
comp=Z,58nm,0.5s
VES **Vestal, Richgr** 73.72 57 P **P** 15 24 31.0 +0.4
baz=305
VSLR **Vesyoloye** 73.74 313 d iP **P** 15 24 31.3 +0.6
VSLR pmax pmax
comp=Z,282nm,1.2s
VSLR MLR MLR
comp=Z,2µm,18.0s
SOHO **SOHO** 73.74 288 i P **P** 15 24 31.0 +0.1
SNR=20
SOHO **SOHO** 73.74 288 P **P** 15 24 31.0 +0.1
SOHO S **SKiKP** 15 33 58.6 -0.3
YFT **Old Faithful** 73.75 46 IAmb IAmb 15 24 36.2
comp=Z,162nm,1.7s
PKM **Mcpherson Peak** 73.78 58 P **P** 15 24 33.0 +1.8
baz=305,SNR=12
ASHO **Ashiyiah** 73.79 289 i P **P** 15 24 31.6 +0.3
SNR=37
ASHO **Ashiyiah** 73.79 289 P **P** 15 24 31.1 -0.2
SNR=23
ASHO S **S** 15 34 01.1 -0.2
SOC **Sochi** 73.85 313 eP **P** 15 24 31.8 +0.5
SOC e 15 24 44.7
SOC e 15 27 14.0
SOC ePPP PPP 15 28 58.5
SOC eS **S** 15 34 02.0 +0.7
SOC eSS **SS** 15 38 51.3 +6.6
SOC pmax pmax
comp=Z,87nm,1.1s
SOC MLR MLR
comp=Z,2µm,16.0s
PABE **Paberze** 73.87 329 eP **P** 15 24 31.9 +0.8
NAZ **Nazwa, Dubai** 73.91 289 i P **P** 15 24 33.0 +1.0
SNR=11
NAZ **Nazwa, Dubai** 73.91 289 P **P** 15 24 32.5 +0.5
SNR=13
NAZ S **S** 15 34 02.2 -0.3
MOL **Molde** 73.93 341 eP **P** 15 24 32.0 +0.6
MOL IAmb IAmb 15 24 32.9
comp=Z,29nm,0.9s
H17A **Grant Village** 73.93 46 IAmb IAmb 15 24 36.2
comp=Z,73nm,0.9s
H17A **Grant Village** 73.93 46 P **P** 15 24 34.9 +2.9
baz=308,SNR=24
DOMB **Dombas** 73.95 340 eP **P** 15 24 31.6 +0.1
DOMB IAmb IAmb 15 24 32.8
comp=Z,69nm,1.1s
NC303 **NORSAR Array S** 73.96 338 IAmb IAmb 15 24 33.5
comp=Z,102nm,1.2s
BCA **Borcka** 74.01 310 ⇑P **P** 15 24 33.7 +1.5
BCW **Bitter Crk WRg** 74.02 58 IAmb IAmb 15 24 35.5
comp=Z,244nm,1.5s
CWC **Cottonwood Cre** 74.04 56 P **P** 15 24 33.2 +0.5
baz=306
FLWY **Flagg Ranch** 74.05 46 IAmb IAmb 15 24 36.3
comp=Z,234nm,1.6s
NC204 **NORSAR Array S** 74.10 339 IAmb IAmb 15 24 34.3
comp=Z,103nm,0.9s
SBC **Santa Barbara** 74.10 59 P **P** 15 24 33.7 +0.8
baz=305
FAQ **Al Faqa, Dubai** 74.10 289 i P **P** 15 24 33.0 -0.1
SNR=18
FAQ **Al Faqa, Dubai** 74.10 289 P **P** 15 24 34.0 +0.9
SNR=11
HFS **Hagfors** 74.12 337 P **P** 15 24 32.8 +0.2
comp=Z,29nm,0.7s,baz=46,slow=6.4,SNR=62
HFS LR LR 16 00 44.8
comp=Z,3µm,20.9s,baz=36,slow=39
comp=Z,29nm,0.7s
SOEG **Soedalen** 74.12 358 i P **P** 15 24 32.4 0.0
SOEG IAmb IAmb 15 24 34.0
comp=Z,198nm,1.7s
FXWY **Fox Creek** 74.13 47 IAmb IAmb 15 24 36.3
comp=Z,111nm,1.4s
NB2 **NORSAR Subarra** 74.15 338 P **P** 15 24 32.9 +0.1
comp=Z,110nm,1.0s,baz=38,slow=6.2
NB2 **NORSAR Subarra** 74.15 338 P **P** 15 24 32.9 +0.1
baz=38,slow=6.2
NB2 **NORSAR Subarra** 74.15 338 P **P** 15 24 29.7 -3.1
NB2 pmax pmax
comp=Z,34nm,1.0s
NOA **NORSAR Array B** 74.15 338 P **P** 15 24 32.8 +0.1
comp=Z,25nm,0.7s,baz=38,slow=5.9,SNR=62
NOA LR LR 16 01 26.2
comp=Z,2µm,21.7s,baz=35,slow=39
comp=Z,25nm,0.7s
GRAC **Grapevine Rang** 74.18 55 IAmb IAmb 15 24 36.1
comp=Z,96nm,1.2s
GRAC **Grapevine Rang** 74.18 55 P **P** 15 24 34.5 +1.1
baz=306,SNR=17
ARQ **Aragi** 74.20 287 P **P** 15 24 34.3 +0.6
SNR=11
ARQ S **S** 15 34 05.3 -0.6
RLMT **Red Lodge** 74.22 45 P **P** 15 24 34.7 +1.0
baz=308,SNR=32
ISA **Isabella, Lake** 74.23 57 IAMs_20 IAMs_20 15 49 24.8
comp=Z,980nm,21.0s
ISA **Isabella, Lake** 74.23 57 P **P** 15 24 33.9 +0.2
baz=306,SNR=8.7
ARVC **Arvin** 74.30 58 P **P** 15 24 34.5 +0.4
baz=306
NC602 **NORSAR Array S** 74.30 338 IAmb IAmb 15 24 35.1
comp=Z,126nm,1.6s
NC602 **NORSAR Array S** 74.30 338 eP **P** 15 24 33.3 -0.3
NC602 IAmb IAmb 15 24 34.6
comp=Z,140nm,1.7s
NORES **NORESS Array B** 74.30 338 P **P** 15 24 33.8 +0.2
NORES pmax pmax
comp=Z,28nm,1.4s
PBUR **Paburge** 74.31 330 eP **P** 15 24 34.6 +1.0
ARPS **Mount Arapiles** 74.36 182 P **P** 15 24 36.0 +2.0
ASUD **Al Ashush, Dub** 74.37 289 i P **P** 15 24 34.9 +0.3
SNR=24
ASUD **Al Ashush, Dub** 74.37 289 P **P** 15 24 34.7 +0.1
SNR=11
ASUD S **S** 15 34 07.6 0.0
ALNE **Al Ain** 74.38 288 i P **P** 15 24 35.2 +0.5
SNR=22
ALNE **Al Ain** 74.38 288 P **P** 15 24 34.9 +0.2
SNR=14
SNOW **Snow King Moun** 74.40 47 IAMs_20 IAMs_20 16 00 59.9
comp=Z,663nm,19.0s
NAO01 **NORSAR Array S** 74.41 338 IAmb IAmb 15 24 35.8
comp=Z,102nm,1.3s
SCZ2 **Santa Cruz Isl** 74.41 59 P **P** 15 24 35.5 +0.8
baz=305
ANN **Anapa** 74.41 315 eP **P** 15 24 31.5 -3.0
ANN e*PP **pP** 15 24 35.7 -4.5
ANN e 15 24 49.5
ANN eS **S** 15 34 05.4 -2.1
ANN pmax pmax
comp=Z,185nm,1.6s
ANN MLR MLR
comp=E,2µm,17.0s
ANN MLR MLR
comp=N,2µm,18.0s
ANN MLR MLR
comp=Z,2µm,18.0s
MHTO **MHTO** 74.44 285 P **P** 15 24 35.2 +0.1
R11B **Troy Canyon, C** 74.53 53 IAmb IAmb 15 24 38.2
comp=Z,162nm,1.6s
R11B **Troy Canyon, C** 74.53 53 P **P** 15 24 36.5 +1.0
baz=306,SNR=88
Q12A **Willow Creek R** 74.60 52 IAmb IAmb 15 24 38.7
comp=Z,219nm,1.7s
MPMC **Manual Prospec** 74.65 56 P **P** 15 24 37.0 +0.7
baz=306,SNR=48
AJN **Ajban** 74.66 289 i P **P** 15 24 35.8 -0.5
SNR=6.8
AJN **Ajban** 74.66 289 P **P** 15 24 36.0 -0.3
SNR=7.5
AJN S **S** 15 34 06.1 -4.8
OSI **Osito Audit: C** 74.67 58 P **P** 15 24 36.9 +0.7
baz=306
MILA **Mila** 74.77 176 P **P** 15 24 40.1 +3.6
WCT **Wildcat Mounta** 74.78 55 IAMs_20 IAMs_20 15 53 09.4
comp=Z,674nm,19.0s
SFJD **Kangerlussuaq** 74.79 6 P **P** 15 24 36.8 +0.5
SFJD IAmb IAmb 15 24 38.1
comp=Z,90nm,0.9s
SFJD **Kangerlussuaq** 74.79 6 P **P** 15 24 36.9 +0.7
comp=Z,49nm,0.8s,baz=1.7,slow=6.1,SNR=11
SFJD LR LR 16 00 16.7
comp=Z,760nm,20.4s,baz=350,slow=38
comp=Z,49nm,0.8s
SFJD **Kangerlussuaq** 74.79 6 i P **P** 15 24 36.0 -0.2
SFJD IAmb IAmb 15 24 37.9
comp=Z,90nm,0.9s
NWAO **Narrogin (SRO)** 74.80 203 P **P** 15 24 37.1 +0.4
NWAO **Narrogin (SRO)** 74.80 203 P **P** 15 24 36.3 -0.4
NWAO **Narrogin (SRO)** 74.80 203 P **P** 15 24 36.1 -0.6
NWAO IAmb IAmb 15 24 52.8
comp=Z,109nm,1.3s
NWAO **Narrogin (SRO)** 74.80 203 P **P** 15 24 36.1 -0.6
NWAO pmax pmax
comp=Z,109nm,1.3s
DGMT **Dagmar** 74.80 40 IAmb IAmb 15 24 38.5
comp=Z,103nm,1.2s
DGMT **Dagmar** 74.80 40 IAMs_20 IAMs_20 15 53 34.3
comp=Z,1µm,22.0s
DGMT **Dagmar** 74.80 40 P **P** 15 24 37.0 +0.2
baz=310
FURC **Furnace Creek,** 74.82 56 P **P** 15 24 38.1 +1.1
baz=306,SNR=27
CCAC **Calif City Air** 74.83 57 IAmb IAmb 15 24 39.5
comp=Z,84nm,1.1s
CCAC IAMs_20 IAMs_20 15 49 43.7
comp=Z,1µm,21.0s
AK03 **Malin Array Si** 74.84 323 P **P** 15 24 36.8 -0.1
S11A **Rachel** 74.85 54 IAmb IAmb 15 25 08.1
comp=Z,149nm,1.3s
S11A IAMs_20 IAMs_20 16 00 30.1
comp=Z,700nm,19.0s
LRMC **Laurel Mtn Rad** 74.86 57 P **P** 15 24 38.0 +0.6
baz=306,SNR=20
AKASG **Malin Array Be** 74.86 323 P **P** 15 24 36.8 -0.2
AKASG IAmb IAmb 15 24 38.5
comp=Z,116nm,0.9s
AKASG pP **sP** 15 24 45.1 +0.3
AKASG **Malin Array Be** 74.86 323 P **P** 15 24 36.6 -0.4
comp=Z,48nm,0.6s,baz=44,slow=5.9,SNR=146
AKASG LR LR 16 00 43.9
comp=Z,2µm,19.2s,baz=47,slow=38
comp=Z,48nm,0.6s
AKASG **Malin Array Be** 74.86 323 i P **P** 15 24 37.0 0.0
AKASG pmax pmax
comp=Z,49nm,0.6s
AKBB **Malin Array Si** 74.86 323 IAmb IAmb 15 24 38.5
comp=Z,131nm,0.9s
AKBB **Malin Array Si** 74.86 323 d iP **P** 15 24 36.8 -0.2
AKBB pmax pmax
comp=Z,170nm,1.0s
AKBB MLR MLR
comp=Z,3µm,18.0s
AKBB **Malin Array Si** 74.86 323 P **P** 15 24 37.0 0.0
KIEV **Kiev** 74.87 323 P **P** 15 24 36.6 -0.4
KIEV IAmb IAmb 15 24 38.5
comp=Z,118nm,0.9s
KIEV **Kiev** 74.87 323 i P **P** 15 24 36.9 -0.1
SNR=88
KIEV **Kiev** 74.87 323 ⇓P **P** 15 24 37.7 +0.7
KIEV **Kiev** 74.87 323 P **P** 15 24 36.6 -0.4
KIEV pmax pmax
comp=Z,118nm,0.9s
KIEV MLR MLR
comp=Z,2µm,18.0s
KIEV **Kiev** 74.87 323 P **P** 15 24 37.0 -0.1
comp=Z,635nm,1.4s,comp=Z,7µm
AK02 **Malin Array Si** 74.90 323 P **P** 15 24 37.0 -0.2
LAO **LASA Array** 74.90 42 IAmb IAmb 15 24 39.8
comp=Z,179nm,1.4s
LAO IAMs_20 IAMs_20 15 54 51.9
comp=Z,962nm,21.0s
LAO **LASA Array** 74.90 42 P **P** 15 24 38.3 +0.9
baz=310,SNR=19
AK10 **Malin Array Si** 74.92 323 P **P** 15 24 37.4 +0.1
SNCC **San Nicolas Is** 74.92 60 IAmb IAmb 15 24 40.2
comp=Z,172nm,1.2s
SNCC **San Nicolas Is** 74.92 60 P **P** 15 24 38.0 +0.4
baz=306
AK18 **Malin Array Si** 74.92 323 P **P** 15 24 37.2 -0.1
AK05 **Malin Array Si** 74.92 323 P **P** 15 24 37.4 0.0
AK12 **Malin Array Si** 74.93 323 P **P** 15 24 37.2 -0.2
TPNV **Topopah Spring** 74.93 55 P **P** 15 24 38.7 +0.8
baz=306,SNR=46
SPR3 **Spring Creek 3** 74.94 52 IAmb IAmb 15 24 41.3
comp=Z,166nm,1.7s
EDW2 **Edwards Air Fo** 75.00 57 P **P** 15 24 39.2 +1.0
baz=306,SNR=33
HWUT **Hardware Ranch** 75.05 49 IAmb IAmb 15 24 41.3
comp=Z,161nm,1.4s
GWY **Greenwater Val** 75.11 56 IAmb IAmb 15 24 41.1
comp=Z,111nm,1.3s
BRAT **Ballarat** 75.11 180 P **P** 15 24 40.0 +1.7
DECC **Green Verdugo** 75.14 58 P **P** 15 24 39.5 +0.5
baz=306
TOO **Toolangi** 75.15 179 P **P** 15 24 39.1 +0.5
DUG **Dugway, Tooele** 75.16 51 IAMs_20 IAMs_20 15 59 42.2
comp=Z,668nm,19.0s
DUG **Dugway, Tooele** 75.16 51 P **P** 15 24 40.3 +1.2
baz=307,SNR=40
DUG **Dugway, Tooele** 75.16 51 P **P** 15 24 40.3 +1.2
OSL **Oslo** 75.19 338 eP **P** 15 24 39.0 +0.3
OSL IAmb IAmb 15 24 40.2
comp=Z,103nm,1.0s
SUW **Suwalki** 75.25 328 eP **P** 15 24 39.5 +0.3
SUW **Suwalki** 75.25 328 P **P** 15 24 40.0 +0.8
SUW pmax pmax
comp=Z,178nm,1.2s
MI30 **MI30,Zelenitsa** 75.32 324 P **P** 15 24 39.4 -0.2
DQM **DQM** 75.38 284 P **P** 15 24 40.3 -0.2
FOO **Floro** 75.39 341 eP **P** 15 24 40.4 +0.6
FOO IAmb IAmb 15 24 41.4
comp=Z,261nm,2.1s
FRB **Frobisher Bay** 75.39 14 P **P** 15 24 40.1 +0.3
comp=Z,63nm,0.8s,baz=334,slow=6.1,SNR=18
FRB LR LR 16 02 28.9
comp=Z,1µm,19.3s,baz=340,slow=39
comp=Z,63nm,0.8s
MI28 **MI28,Pidlybu** 75.43 324 P **P** 15 24 40.8 +0.5
TCUT **Toone Canyon** 75.45 49 IAmb IAmb 15 24 43.5
comp=Z,226nm,1.7s
HYA **Hoyanger** 75.46 340 eP **P** 15 24 40.6 +0.4
FMP **Fort Macarthur** 75.48 59 P **P** 15 24 41.7 +0.8
baz=306
GURO **Guroymak-BITLI** 75.48 308 IAmb IAmb 15 24 43.8
comp=Z,79nm,0.9s
GURO IAMs_20 IAMs_20 16 01 27.7
comp=Z,1µm,20.0s
CTU **Camp Tracy** 75.50 50 IAmb IAmb 15 24 43.6
comp=Z,137nm,1.8s
CTU IAMs_20 IAMs_20 16 02 54.2
comp=Z,686nm,19.0s

**PSUT Pine Spring 75.52 52** IAmb IAmb 15 24 43.8
comp=Z,112nm,1.5s
**BW06 Boulder Array 75.52 47** P **P** **15 24 41.6 +0.4**
baz=308,SNR=51
**PDAR Pinedale Array 75.52 47** P **P** **15 24 41.3 +0.1**
**PDAR Pinedale Array 75.52 47** P **P** **15 24 41.5 +0.2**
comp=Z,12nm,0.6s,baz=279,slow=1.5,SNR=132
comp=Z,12nm,0.6s
**SHOC Shoshone, Teco 75.54 56** P **P** **15 24 41.9 +0.7**
baz=306
**GSC Goldstone, Bar 75.54 57** P **P** **15 24 42.0 +0.7**
baz=306,SNR=21
**CIS Catalina Islan 75.58 59** P **P** **15 24 42.0 +0.5**
baz=306,SNR=6.6
**UMZA Um Ai Zommool 75.59 288** P **P** **15 24 40.8 -0.8**
**BFSC Mount Baldy Ra 75.60 58** P **P** **15 24 41.8 0.0**
baz=306,SNR=14
**DY2G Dye2 75.61 4** *i* P **P** **15 24 41.1 -0.2**
DY2G IAmb IAmb 15 24 43.2
comp=Z,499nm,1.6s
**RRX Edison Barstow 75.67 57** P **P** **15 24 42.8 +0.8**
baz=306
**MI29 MI29, Kamyanyy 75.70 324** P **P** **15 24 41.9 +0.1**
**RAO Raoul Island 75.71 146** LR LR 15 59 07.7
comp=Z,786nm,18.2s,baz=113,slow=37
**SCI2 San Clemente I 75.74 59** P **P** **15 24 42.7 +0.3**
baz=306
**KONO Kongsberg 75.75 338** P **P** **15 24 42.4 +0.4**
**KONO Kongsberg 75.75 338** *eP* **P** **15 24 42.1 +0.1**
**KONO Kongsberg 75.75 338** P **P** **15 24 42.4 +0.4**
KONO pmax pmax
comp=Z,36nm,1.0s
KONO MLR MLR
comp=Z,4µm,22.0s
**NLU North Lily Min 75.75 50** IAmb IAmb 15 24 45.2
comp=Z,136nm,1.9s
NLU IAMs_20 IAMs_20 16 00 19.9
comp=Z,712nm,18.0s
**RNPP9 Sopachiv 75.91 325** P **P** **15 24 43.1 +0.1**
**MZWR Madinat Zayed 75.95 289** P **P** **15 24 40.5 -3.2**
MZWR S **S** **15 34 21.2 -4.0**
**RNPP2 Kostyukhnivka 75.97 325** P **P** **15 24 43.6 +0.2**
**MPU Maple Canyon 75.98 50** IAmb IAmb 15 24 46.5
comp=Z,181nm,1.8s
**TUQ Turquoise Moun 76.04 56** P **P** **15 24 44.9 +0.7**
baz=307,SNR=36
**RNPP5 Staryi Chortor 76.04 325** P **P** **15 24 44.2 +0.4**
**BBRC Big Bear Solar 76.08 57** P **P** **15 24 45.2 +0.6**
baz=306
**LUBAR Lubar, Ukraine 76.08 323** P **P** **15 24 43.7 -0.3**
**ELS Elsinore Mount 76.10 58** IAmb IAmb 15 24 46.8
comp=Z,160nm,1.7s
**HEC Hector,Ludlow 76.13 57** P **P** **15 24 45.4 +0.7**
baz=307,SNR=28
**SIM Simferopol' 76.15 317** *eP* **P** **15 24 45.2 +0.7**
SIM *eS* **S** **15 34 18.5 -8.3**
SIM pmax pmax
comp=Z,179nm,1.2s
**MURC Murrieta 76.29 58** P **P** **15 24 45.9 +0.4**
baz=306,SNR=6.9
**ASK Askoy 76.30 340** *eP* **P** **15 24 46.2 +1.2**
**BER Bergen 76.34 340** *eP* **P** **15 24 45.8 +0.6**
**TCRU Three Creeks R 76.35 52** IAmb IAmb 15 24 49.0
comp=Z,141nm,1.8s
TCRU IAMs_20 IAMs_20 16 00 52.6
comp=Z,740nm,18.0s
**ODD1 Odda 76.39 339** *eP* **P** **15 24 46.4 +0.7**
**CCUT Cedar City 76.42 53** IAMs_20 IAMs_20 16 00 39.6
comp=Z,810nm,19.0s
**BAL3X Bal3x, Balta 76.53 321** P **P** **15 24 47.4 +0.8**
**V12A Nelson 76.57 55** IAmb IAmb 15 24 49.8
comp=Z,115nm,1.6s
**GMRC Granite Mounta 76.60 56** P **P** **15 24 48.2 +0.8**
baz=307,SNR=21
**MZR Muzera 76.68 289** *i* P **P** **15 24 47.4 -0.5**
SNR=6.6
**MZR Muzera 76.68 289** P **P** **15 24 47.6 -0.3**
SNR=13
MZR S **S** **15 34 28.5 -4.8**
**NE56 Odesa 76.72 319** P **P** **15 24 47.1 -0.6**
**109C Camp Elliot, M 76.77 59** IAmb IAmb 15 24 50.5
comp=Z,145nm,1.6s
109C IAMs_20 IAMs_20 15 50 29.3
comp=Z,1µm,22.0s
**109C Camp Elliot, M 76.77 59** P **P** **15 24 48.3 +0.1**
baz=307
**ANGG Ammassalik, Gr 76.77 1** IAmb IAmb 15 24 48.9
comp=Z,67nm,0.9s
ANGG IAMs_20 IAMs_20 16 01 49.3
comp=Z,1µm,18.0s
**PFO Pinyon Flats O 76.77 58** P **P** **15 24 48.5 +0.1**
**PFO Pinyon Flats O 76.77 58** LR LR 15 54 40.7
comp=Z,1µm,19.2s,baz=292,slow=33
**PFO Pinyon Flats O 76.77 58** P **P** **15 24 48.8 +0.4**
baz=307,SNR=19
**PFO Pinyon Flats O 76.77 58** P **P** **15 24 48.5 +0.1**
**TPFO Pinon Flats 76.78 58** P **P** **15 24 49.0 +0.6**
baz=307,SNR=16
**ISOG Isortoq, Green 76.82 1** *i* P **P** **15 24 46.9 -1.0**
ISOG IAmb IAmb 15 24 49.1
comp=Z,141nm,1.1s
**LCMT Little Creek M 76.82 53** IAmb IAmb 15 24 51.4
comp=Z,106nm,1.4s
**BLS5 Blasjo 76.85 339** *eP* **P** **15 24 49.1 +0.9**
**BELC Belle Mtn. Jos 76.85 57** P **P** **15 24 48.9 0.0**
baz=307
**MTPU Mount Pierson 76.86 52** IAmb IAmb 15 24 52.2
comp=Z,186nm,1.8s
**P17A Butcher Ranch, 76.86 50** IAmb IAmb 15 24 51.4
comp=Z,76nm,1.0s
**RDMU Red Mountain 76.88 49** IAmb IAmb 15 24 51.5
comp=Z,118nm,1.0s
**SHMA Al-Shehemyia 76.89 293** P **P** **15 24 48.5 -0.4**
SNR=5.2
SHMA S **S** **15 34 31.0 -4.4**
**Q16A Castle Valley 76.94 51** IAmb IAmb 15 24 52.2
comp=Z,144nm,1.5s
Q16A IAMs_20 IAMs_20 15 55 17.4
comp=Z,721nm,20.0s
**BORG Borgarnes 77.01 354** P **P** **15 24 50.6 +1.6**
BORG IAmb IAmb 15 24 52.4
comp=Z,120nm,1.0s
**BORG Borgarnes 77.01 354** P **P** **15 24 50.6 +1.6**
BORG pmax pmax
comp=Z,120nm,1.0s
**SORM Soroca 77.02 322** ⇑P **P** **15 24 49.8 +0.5**
**SORM Soroca 77.02 322** P **P** **15 24 49.8 +0.5**
**P18A Preston Nutter 77.06 50** IAmb IAmb 15 24 52.9
comp=Z,192nm,1.7s
P18A IAMs_20 IAMs_20 15 55 51.6
comp=Z,724nm,21.0s
**KNB Kanab 77.08 53** IAmb IAmb 15 24 53.2
comp=Z,205nm,1.5s
KNB IAMs_20 IAMs_20 16 03 24.3
comp=Z,753nm,18.0s
**SAKB Bahrain 77.13 293** P **P** **15 24 47.5 -2.8**
SAKB S **S** **15 34 33.7 -4.4**
**PKCU Pink Cliffs 77.14 53** IAmb IAmb 15 24 54.0
comp=Z,206nm,2.0s
**HORU Horodok 77.20 323** P **P** **15 24 50.8 +0.5**
**HORU Horodok 77.20 323** P **P** **15 24 50.8 +0.5**
**HOMB Homborsund 77.21 338** *eP* **P** **15 24 50.4 +0.2**
**SRU San Rafael Swe 77.22 50** IAMs_20 IAMs_20 16 04 25.7
comp=Z,599nm,19.0s
**MONP2 Monument Peak 77.23 58** P **P** **15 24 51.5 +0.4**
baz=307,SNR=14
**KBD Kabd 77.29 297** P **P** **15 24 51.3 +0.1**
**NEE2 Needles Airpor 77.30 56** P **P** **15 24 51.5 +0.3**
baz=308
**TKX Tecate 77.30 59** IAmb IAmb 15 26 40.2
comp=Z,57nm,0.5s
**IRM Iron Mountain 77.32 57** P **P** **15 24 52.0 +0.7**
baz=307,SNR=26
**K22A Casper 77.32 46** IAmb IAmb 15 24 53.3
comp=Z,131nm,1.3s
**K22A Casper 77.32 46** P **P** **15 24 51.8 +0.4**
baz=310,SNR=33
**PURM Purcari 77.34 320** P **P** **15 24 51.7 +0.5**
**TRNA Turayna 77.36 291** P **P** **15 24 51.3 -0.4**
**KMY Karmoy 77.36 340** *eP* **P** **15 24 52.0 +0.9**
**SLWR Sila 77.39 291** P **P** **15 24 51.3 -0.5**
SLWR S **S** **15 34 36.6 -4.4**
**CBX Cerro Bola 77.41 59** IAmb IAmb 15 24 54.2
comp=Z,151nm,1.4s
**BC3 Big Chuckawall 77.42 57** P **P** **15 24 52.7 +0.6**
baz=307,SNR=23

**ARPR Arapgir-MALATY 77.43 310** IAMs_20 IAMs_20 16 03 03.1
comp=Z,1µm,20.0s
**NUUK Nuuk 77.45 7** *i* P **P** **15 24 50.9 -0.6**
NUUK IAmb IAmb 15 24 53.5
comp=Z,148nm,1.0s
**MDND Maddock 77.51 38** IAMs_20 IAMs_20 15 55 58.6
comp=Z,945nm,20.0s
**MDND Maddock 77.51 38** P **P** **15 24 52.4 +0.2**
baz=314,SNR=18
**SNART Snartemo 77.54 338** *eP* **P** **15 24 53.4 +1.3**
**RWWY Rawlins 77.55 47** IAmb IAmb 15 24 54.7
comp=Z,86nm,1.2s
RWWY IAMs_20 IAMs_20 16 05 21.3
comp=Z,983nm,19.0s
**KIS Kishinev 77.56 321** *eP* **P** **15 24 52.0 -0.4**
**KIS Kishinev 77.56 321** *ePP* PP 15 27 49.0 +2.2
**KIS Kishinev 77.56 321** *eP* **P** **15 24 52.0 -0.4**
KIS *e* 15 27 49.0
KIS *eS* **S** **15 34 40.0 -2.1**
KIS MLR MLR
comp=Z,1µm,16.0s
**KIS Kishinev 77.56 321** P **P** **15 24 52.7 +0.3**
comp=Z,54nm,0.5s
**ULM Lac du Bonnet 77.57 35** IAmb IAmb 15 24 53.8
comp=Z,116nm,1.4s
**ULM Lac du Bonnet 77.57 35** P **P** **15 24 52.2 -0.2**
comp=Z,47nm,1.2s,baz=318,slow=6.4,SNR=29
ULM LR LR 16 02 11.7
comp=Z,321nm,20.2s,baz=329,slow=38
comp=Z,47nm,1.2s
**IKP In-Ko-Pah, Jac 77.58 58** P **P** **15 24 53.7 +0.8**
baz=307,SNR=12
**SWSC Sam W. Stewart 77.62 58** P **P** **15 24 53.5 +0.5**
baz=307,SNR=7.1
**MILM Milestii Mici 77.62 321** ⇓ *i* P **P** **15 24 52.0 -0.7**
comp=Z,260nm,1.7s
**MILM Milestii Mici 77.62 321** *i* PcP **PcP** **15 25 01.0 -1.9**
**MILM Milestii Mici 77.62 321** *ePP* PP 15 27 49.0 +1.7
**MILM Milestii Mici 77.62 321** *d* P **P** **15 24 52.0 -0.7**
MILM *i* 15 25 01.0
MILM *e* 15 27 49.0
MILM *ePPP* PPP 15 29 43.0
MILM *i* S **S** **15 34 39.0 -3.7**
MILM *ePS* **PnS** **15 35 30.0 +6.0**
MILM pmax pmax
comp=Z,260nm,1.7s
MILM smax smax
comp=E,520nm,12.1s
**BSD Bornholm Skovb 77.63 333** *eP* **P** **15 24 52.6 0.0**
**BSD Bornholm Skovb 77.63 333** *i* P **P** **15 24 52.0 -0.6**
BSD IAmb IAmb 15 24 54.0
comp=Z,107nm,1.1s
**DIKM Dikmen 77.63 313** ⇑P **P** **15 24 55.0 +2.1**
**KMPD K-Podol'skiy 77.63 323** P **P** **15 24 52.9 +0.2**
KMPD P **P** **15 24 53.0 +0.2**
**RMX La Rumorosa 77.64 58** IAMs_20 IAMs_20 15 52 33.7
comp=Z,1µm,20.0s
**SMRA Abu-Samra 77.64 292** P **P** **15 24 52.7 -0.5**
SNR=6.4
**CCX Cicese 77.68 59** IAMs_20 IAMs_20 15 55 01.3
comp=Z,886nm,20.0s
**YUH Yuha Desert 77.71 58** IAMs_20 IAMs_20 15 52 35.1
comp=Z,1µm,20.0s
**RSSD Black Hills 77.74 43** P **P** **15 24 53.3 -0.5**
RSSD IAmb IAmb 15 24 55.3
comp=Z,90nm,1.4s
**RSSD Black Hills 77.74 43** IAMs_20 IAMs_20 15 55 00.1
comp=Z,669nm,21.0s
**RSSD Black Hills 77.74 43** P **P** **15 24 53.8 +0.1**
baz=311
**RSSD Black Hills 77.74 43** P **P** **15 24 53.3 -0.5**
RSSD pmax pmax
comp=Z,90nm,1.4s
**U15A North Rim 77.78 53** IAmb IAmb 15 24 57.0
comp=Z,181nm,1.7s
**HMU Henry Mountain 77.81 51** IAmb IAmb 15 24 56.6
comp=Z,56nm,0.8s
HMU IAMs_20 IAMs_20 16 02 08.5
comp=Z,663nm,19.0s
**E28A Huff 77.84 40** IAMs_20 IAMs_20 15 55 29.5
comp=Z,1µm,22.0s
**LVV L'vov 77.88 325** *eP* **P** **15 24 54.4 +0.3**
LVV *e* 15 27 47.4
LVV *ePPP* PPP 15 29 42.8
LVV *eS* **S** **15 34 45.2 -0.3**
LVV *ePS* PnS 15 35 51.8 +25
LVV *eSS* **SS** **15 39 47.3 +2.1**
LVV *eSSS* SSS 15 43 00.4
LVV pmax pmax
comp=Z,310nm,1.4s
LVV MLR MLR
comp=E,2µm,18.0s
LVV MLR MLR
comp=Z,3µm,18.0s
LVV MLR MLR
comp=N,2µm,17.0s
**LVV L'vov 77.88 325** P **P** **15 24 55.1 +1.0**
**PDMCI Parker Dam,Lak 77.89 56** P **P** **15 24 55.2 +0.7**
baz=308,SNR=10.0
**O20A White River Ci 77.94 48** P **P** **15 24 55.0 +0.1**
baz=310,SNR=24
**GOET G??ttrup 78.01 337** *i* P **P** **15 24 54.2 -0.5**
GOET IAmb IAmb 15 24 56.9
comp=Z,139nm,1.0s
**COP Copenhagen 78.05 334** *i* P **P** **15 24 54.2 -0.8**
COP IAmb IAmb 15 24 56.7
comp=Z,178nm,1.0s
**CHRU Chernivtsi 78.08 323** P **P** **15 24 55.6 +0.3**
**ESJX Sierra Juarez 78.08 59** IAmb IAmb 15 24 58.2
comp=Z,97nm,1.4s
ESJX IAMs_20 IAMs_20 15 54 21.0
comp=Z,866nm,20.0s
**BZK Bozkurt 78.14 314** ⇑P **P** **15 24 57.0 +1.3**
**GLA Glamis 78.20 57** IAmb IAmb 15 24 58.7
comp=Z,128nm,1.6s
**GLA Glamis 78.20 57** P **P** **15 24 56.8 +0.5**
baz=308,SNR=8.6
**MORS Morshin 78.43 325** P **P** **15 24 57.9 +0.7**
**MORS Morshin 78.43 325** P **P** **15 24 57.9 +0.7**
**STNU Starunia 78.45 324** P **P** **15 24 57.7 +0.3**
**KSV Kosov 78.47 323** P **P** **15 24 56.4 -1.1**
**KSV Kosov 78.47 323** P **P** **15 24 56.4 -1.1**
**GUVIX Guadalupe Vict 78.49 58** IAMs_20 IAMs_20 15 53 07.7
comp=Z,1µm,20.0s
**MUD Monsted U'grnd 78.50 336** *i* P **P** **15 24 56.7 -0.7**
MUD IAmb IAmb 15 24 59.3
comp=Z,65nm,1.1s
**VTX Valle De La Tr 78.56 59** IAMs_20 IAMs_20 15 53 34.7
comp=Z,944nm,20.0s
**KWP Kalwaria Pacla 78.61 326** P **P** **15 24 59.5 +1.3**
**KWP Kalwaria Pacla 78.61 326** P **P** **15 24 59.5 +1.3**
comp=Z,258nm,1.5s,comp=Z,3µm
**SHIU Shidnytsya 78.61 325** P **P** **15 24 59.6 +1.4**
**RGN Rugen 78.65 333** *eP* **P** **15 24 58.6 +0.3**
**RGN Rugen 78.65 333** *eP* **P** **15 24 59.7 +1.5**
comp=Z,39nm,0.4s,baz=35,slow=5.1
**VLDR Vladesti 78.72 320** ⇑P **P** **15 25 00.3 +1.5**
**N23A Red Feather La 78.79 47** IAmb IAmb 15 25 02.3
comp=Z,90nm,1.1s
**N23A Red Feather La 78.79 47** P **P** **15 25 00.8 +1.1**
baz=311,SNR=61
**TLCR 78.80 319** ⇓P **P** **15 25 00.4 +1.1**
**TLCR 78.80 319** P **P** **15 25 00.4 +1.1**
**Y14A Wickenburg 78.86 56** IAMs_20 IAMs_20 16 02 02.4
comp=Z,623nm,20.0s
**SCTR Scanteiesti 78.88 320** ⇓P **P** **15 25 01.9 +2.2**
**BURAR Bucovina Array 78.89 323** P **P** **15 25 00.2 +0.3**
**BURAR Bucovina Array 78.89 323** ⇓P **P** **15 25 00.7 +0.7**
**BURAR Bucovina Array 78.89 323** P **P** **15 25 00.2 +0.3**
BURAR pmax pmax
comp=Z,57nm,0.8s
**GHRR 78.91 321** ⇑P **P** **15 25 02.0 +2.1**
**GHRR 78.91 321** P **P** **15 25 00.9 +1.0**
**TESR Tescani 78.97 321** ⇓P **P** **15 25 01.9 +1.6**
**TESR Tescani 78.97 321** P **P** **15 25 00.7 +0.4**
comp=Z,173nm,1.4s,comp=Z,2µm
**AGMN Agassiz Nation 78.98 36** IAMs_20 IAMs_20 15 57 56.6
comp=Z,1µm,21.0s
**AGMN Agassiz Nation 78.98 36** P **P** **15 24 59.8 -0.5**
baz=316,SNR=18
**RAR Rarotonga 79.01 128** LR LR 15 56 04.9
comp=Z,926nm,19.6s,baz=286,slow=33
**NEGRR Negrea 79.04 320** ⇓P **P** **15 25 01.9 +1.3**
**MEZ Mezhgor'ye 79.05 324** P **P** **15 25 01.4 +0.7**
**SLCR Slobozia Conac 79.06 320** ⇑P **P** **15 25 02.5 +1.9**

**113A Mohawk Valley, 79.08 57** IAMs_20 IAMs_20 15 56 01.2
comp=Z,1µm,20.0s
**SCHL Schela 79.09 320** ⇑P **P** **15 25 02.6 +1.7**
**IZVR Izvoarele 79.09 320** ⇓P **P** **15 25 02.4 +1.5**
**RAKU Rahkiv 79.10 324** P **P** **15 25 00.7 -0.2**
**CFR Carcaliu 79.15 320** ⇑P **P** **15 25 02.6 +1.3**
**CFR Carcaliu 79.15 320** P **P** **15 25 02.5 +1.3**
**SSRD Sdr. Stenderup 79.16 336** *i* P **P** **15 25 00.7 -0.3**
SSRD IAmb IAmb 15 25 03.1
comp=Z,409nm,1.4s
**PANC Panciu 79.17 321** ⇑P **P** **15 25 03.8 +2.4**
**ONER Baraj Valea Uz 79.22 321** ⇑P **P** **15 25 03.1 +1.5**
**TPGR Topolog 79.23 319** ⇓P **P** **15 25 03.0 +1.3**
**ODBI Odobesti 79.30 321** ⇑P **P** **15 25 04.8 +2.8**
**ODBI Odobesti 79.30 321** P **P** **15 25 03.9 +1.9**
comp=Z,92nm,1.1s,comp=Z,883nm
**KOLS Kolonicke sedl 79.31 325** *eP* **P** **15 25 03.1 +1.0**
KOLS pmax pmax
comp=Z,50nm,0.9s
**KOLS Kolonicke sedl 79.31 325** *eP* **P** **15 25 03.1 +1.0**
**GAZ Gaziantep 79.33 309** IAmb IAmb 15 25 05.4
comp=Z,97nm,1.2s
**VRI Vrincioaia 79.39 321** ⇑P **P** **15 25 03.9 +1.3**
**VRI Vrincioaia 79.39 321** P **P** **15 25 03.8 +1.3**
**VRI Vrincioaia 79.39 321** P **P** **15 25 03.9 +1.3**
comp=Z,56nm,1.5s,comp=Z,609nm
**BRIU Brid 79.41 324** P **P** **15 25 03.0 +0.4**
**PLOR5 Plostina Array 79.43 321** P **P** **15 25 03.7 +0.9**
comp=Z,54nm,1.2s,comp=Z,1µm
**PLOR Plostina 79.44 321** ⇓P **P** **15 25 04.4 +1.5**
**PLOR Plostina 79.44 321** P **P** **15 25 04.3 +1.5**
**PLOR3 Plostina Array 79.44 321** P **P** **15 25 03.6 +0.7**
comp=Z,49nm,1.3s
**OJC Ojcow 79.45 327** IAmb IAmb 15 25 05.1
comp=Z,170nm,1.1s
**OJC Ojcow 79.45 327** P **P** **15 25 03.3 +0.5**
**OJC Ojcow 79.45 327** P **P** **15 25 03.3 +0.5**
comp=Z,156nm,1.5s,comp=Z,2µm
**MUKU Mukachevo 79.47 325** P **P** **15 25 03.7 +0.8**
**KORU Korolevo 79.48 324** P **P** **15 25 04.3 +1.3**
**UZHM Uzhgorod 79.53 325** P **P** **15 25 04.3 +1.1**
**HOLU Holmets 79.56 325** P **P** **15 25 04.1 +0.7**
**HARR Harsova 79.60 319** ⇓P **P** **15 25 05.0 +1.3**
**HARR Harsova 79.60 319** P **P** **15 25 04.9 +1.3**
**TURR Turia 79.61 321** ⇑P **P** **15 25 05.9 +2.1**
**TRSU Trosnyk 79.61 324** P **P** **15 25 05.3 +1.6**
**TRSU Trosnyk 79.61 324** P **P** **15 25 05.3 +1.6**
**BISRR Bisoca 79.62 321** ⇑P **P** **15 25 05.8 +1.9**
**TLBR Topalu 79.64 319** ⇑P **P** **15 25 05.4 +1.5**
**BERU Beregovo 79.65 325** P **P** **15 25 04.4 +0.5**
**MVCO Mesa Verde 79.65 51** IAmb IAmb 15 25 06.8
comp=Z,135nm,1.6s
**MVCO Mesa Verde 79.65 51** P **P** **15 25 05.3 +0.9**
baz=310,SNR=19
**COVR Voineasa-Covas 79.66 321** ⇓P **P** **15 25 06.2 +2.1**
**ARCR ARCALIA 79.68 323** ⇑P **P** **15 25 06.3 +2.2**
**OZUR 79.69 321** ⇑P **P** **15 25 06.6 +2.3**
**MFTR Murfatlar 79.69 319** ⇓P **P** **15 25 05.5 +1.3**
**ISCO Idaho Springs 79.70 47** IAMs_20 IAMs_20 16 00 22.1
comp=Z,762nm,21.0s
**ISCO Idaho Springs 79.70 47** P **P** **15 25 05.4 +0.6**
baz=311,SNR=13
**ISCO Idaho Springs 79.70 47** P **P** **15 25 05.3 +0.6**
**CRVS Cervenica-Dubn 79.70 326** *eP* **P** **15 25 05.2 +1.0**
CRVS pmax pmax
comp=Z,280nm,1.7s
**CRVS Cervenica-Dubn 79.70 326** *eP* **P** **15 25 05.2 +1.0**
**BR131 Keskin Array S 79.82 313** P **P** **15 25 05.8 +0.6**
SNR=22
BR131 S **S** **15 35 07.3 +0.5**
**BR131 Keskin Array S 79.82 313** *d* P **P** **15 25 05.5 +0.3**
**BRTR Keskin Array B 79.82 313** P **P** **15 25 05.0 -0.2**
**BRTR Keskin Array B 79.82 313** P **P** **15 25 05.3 +0.1**
comp=Z,16nm,0.9s,baz=101,slow=3.9,SNR=54
BRTR LR LR 16 07 36.5
comp=Z,1µm,18.4s,baz=36,slow=41
comp=Z,16nm,0.9s
**BRTR Keskin Array B 79.82 313** *i* P **P** **15 25 06.3 +1.1**
BRTR pmax pmax
comp=Z,17nm,0.9s
**BR106 Keskin Array S 79.82 313** P **P** **15 25 06.0 +0.8**
comp=Z,56nm,1.1s,comp=Z,272nm
**BR104 Keskin Array S 79.83 313** P **P** **15 25 06.0 +0.8**
comp=Z,32nm,1.3s,comp=Z,303nm
**NIE Niedzica 79.83 327** P **P** **15 25 05.4 +0.5**
**NIE Niedzica 79.83 327** P **P** **15 25 05.4 +0.5**
**BRIGG Briggsdale 79.92 46** IAmb IAmb 15 25 08.1
comp=Z,92nm,1.1s
BRIGG IAMs_20 IAMs_20 16 06 59.1
comp=Z,587nm,19.0s
**DOPR Dopca 79.98 322** ⇓P **P** **15 25 08.3 +2.5**
**ISR Istrita 80.00 320** ⇑P **P** **15 25 08.2 +2.2**
**ISR Istrita 80.00 320** P **P** **15 25 08.1 +2.2**
**MLR Muntele Rosu 80.04 321** IAmb IAmb 15 25 09.3
comp=Z,172nm,1.4s
**MLR Muntele Rosu 80.04 321** LR LR 16 03 45.8
comp=Z,3µm,19.3s,baz=49,slow=38
**MLR Muntele Rosu 80.04 321** ⇓P **P** **15 25 07.0 +0.7**
**MLR Muntele Rosu 80.04 321** P **P** **15 25 06.9 +0.7**
**ICOR Ion Corvin 80.06 319** ⇓P **P** **15 25 08.6 +2.4**
**RUE Ruedersdorf 80.12 332** *eP* **P** **15 25 06.7 +0.4**
**ABTO Aybut 80.14 284** P **P** **15 25 05.8 -1.3**
**BSEG Bad Segeberg 80.19 334** *eP* **P** **15 25 07.9 +1.3**
comp=Z,58nm,0.9s,baz=35,slow=5.1
BSEG *ePP* **PP** **15 28 11.0 +2.6**
baz=37,slow=8.1
**SUSD Miller 80.19 40** IAMs_20 IAMs_20 16 01 51.8
comp=Z,851nm,20.0s
**SUSD Miller 80.19 40** P **P** **15 25 06.8 -0.2**
baz=314
**ANTO Ankara 80.21 313** P **P** **15 25 07.9 +0.7**
ANTO IAmb IAmb 15 25 09.6
comp=Z,86nm,1.0s
**ANTO Ankara 80.21 313** IAMs_20 IAMs_20 16 06 09.5
comp=Z,602nm,18.0s
**ANTO Ankara 80.21 313** P **P** **15 25 08.3 +1.1**
ANTO S **S** **15 35 09.9 -0.9**
**ANTO Ankara 80.21 313** ⇓P **P** **15 25 08.9 +1.7**
**ANTO Ankara 80.21 313** P **P** **15 25 07.9 +0.7**
ANTO pmax pmax
comp=Z,86nm,1.0s
**214A Organ Pipe Nat 80.22 57** IAMs_20 IAMs_20 15 56 24.4
comp=Z,941nm,20.0s
**214A Organ Pipe Nat 80.22 57** P **P** **15 25 07.9 +0.6**
baz=309,SNR=7.7
**PSN Preselentsi 80.22 319** *i* P **P** **15 25 08.0 +0.9**
**W18A Petrified Fore 80.22 53** IAMs_20 IAMs_20 16 06 20.3
comp=Z,670nm,18.0s
**W18A Petrified Fore 80.22 53** P **P** **15 25 08.0 +0.5**
baz=310
**MESR Meseseni 80.30 324** ⇑P **P** **15 25 09.7 +2.2**
**CJR Cluj-Napoca 80.31 323** ⇓P **P** **15 25 10.0 +2.4**
**CJR Cluj-Napoca 80.31 323** P **P** **15 25 10.0 +2.4**
**S22A 4UR Ranch, Cre 80.32 49** P **P** **15 25 09.3 +1.1**
baz=311,SNR=45
**LANS Liptovska Anna 80.39 327** *eP* **P** **15 25 10.0 +2.0**
LANS pmax pmax
comp=Z,56nm,1.2s
**LANS Liptovska Anna 80.39 327** *eP* **P** **15 25 10.0 +2.0**
**OKC Ostrava-Krasne 80.44 328** *eP* **P** **15 25 09.5 +1.4**
OKC AMS AMS 16 03 40.0
comp=Z,3µm,17.5s
**OKC Ostrava-Krasne 80.44 328** *eP* **P** **15 25 09.5 +1.4**
OKC MLR MLR
comp=Z,3µm,17.5s
**KECS Kecovo 80.44 326** *eP* **P** **15 25 09.8 +1.6**
KECS pmax pmax
comp=Z,59nm,1.5s
**KECS Kecovo 80.44 326** *eP* **P** **15 25 09.8 +1.6**
**SULR 80.46 320** ⇓P **P** **15 25 09.9 +1.6**
**X18A Snowflake 80.46 54** IAMs_20 IAMs_20 16 05 03.6
comp=Z,577nm,19.0s
**Q24A Divide 80.52 48** IAMs_20 IAMs_20 16 02 24.8
comp=Z,612nm,20.0s
**Q24A Divide 80.52 48** P **P** **15 25 09.6 +0.4**
baz=312,SNR=11
**VOIR 80.52 321** ⇓P **P** **15 25 10.2 +1.3**
**VOIR 80.52 321** P **P** **15 25 10.1 +1.3**
**F33A 5 Mile Ranch, 80.53 38** IAmb IAmb 15 25 10.3
comp=Z,149nm,1.3s
F33A IAMs_20 IAMs_20 15 58 42.7
comp=Z,1µm,21.0s
**MARR Marisel-Cluj 80.56 323** ⇑P **P** **15 25 10.8 +1.8**
**GORT1 Trebel 80.61 333** *eP* **P** **15 25 10.3 +1.4**

comp=Z,163nm,1.4s,baz=35,slow=5.1
**DRGR** 80.67 324 ⇑P P 15 25 10.8 +1.2
**DRGR** 80.67 324 P P 15 25 10.7 +1.2
**OSTC Ostas** 80.68 329 eP P 15 25 09.2 -0.3
OSTC eSKS S 15 35 13.6 -1.6
OSTC AMS AMS 16 03 20.0
comp=Z,2µm,18.7s
**OSTC Ostas** 80.68 329 eP P 15 25 09.2 -0.3
OSTC e 15 35 13.6
OSTC MLR MLR
comp=Z,2µm,18.7s
**IVI Ivigtut** 80.70 6 IAmb IAmb 15 25 11.0
comp=Z,108nm,1.2s
**IVI Ivigtut** 80.70 6 *i* P P 15 25 09.4 +0.1
IVI IAmb IAmb 15 25 10.8
comp=Z,106nm,1.2s
**CHVC Chvalec** 80.72 329 eP P 15 25 10.8 +1.1
CHVC AMS AMS 16 03 40.0
comp=Z,2µm,16.8s
**CHVC Chvalec** 80.72 329 eP P 15 25 10.8 +1.1
CHVC MLR MLR
comp=Z,2µm,16.8s
**MORC Moravsky Berou** 80.73 328 IAmb IAmb 15 25 12.2
comp=Z,122nm,1.2s
**MORC Moravsky Berou** 80.73 328 eP P 15 25 10.3 +0.5
**MORC Moravsky Berou** 80.73 328 P P 15 25 09.1 -0.7
**ARR Arges** 80.78 322 ⇓P P 15 25 12.1 +1.9
**DPC Dobruska-Polom** 80.80 329 eP P 15 25 11.8 +1.7
DPC eS S 15 35 16.1 -0.4
DPC AMS AMS 16 03 30.0
comp=Z,2µm,17.1s
**DPC Dobruska-Polom** 80.80 329 eP P 15 25 11.8 +1.7
DPC e 15 35 16.1
DPC MLR MLR
comp=Z,2µm,17.1s
**HLG Helgoland** 80.80 336 eP P 15 25 11.1 +1.2
comp=Z,34nm,0.8s,baz=35,slow=5.1
**UPC Upice** 80.80 329 AMS AMS 16 03 40.0
comp=Z,2µm,18.1s
**KRLC Kraliky** 80.82 329 eP P 15 25 11.2 +0.9
KRLC eS S 15 35 14.2 -2.6
KRLC AMS AMS 16 03 20.0
comp=Z,2µm,16.8s
**KRLC Kraliky** 80.82 329 eP P 15 25 11.2 +0.9
KRLC e 15 35 14.2
KRLC MLR MLR
comp=Z,2µm,16.8s
**NEF NEVSHA** 80.93 319 *i* P P 15 25 11.7 +0.8
**MAUC Maruska** 80.93 328 eP P 15 25 12.3 +1.5
MAUC eS S 15 35 16.8 -1.1
**PRD Provadia** 80.93 319 *i* P P 15 25 11.7 +0.8
**NRS Narsarsuaq** 80.95 5 IAMs_20 IAMs_20 16 01 52.8
comp=Z,948nm,21.0s
**NRS Narsarsuaq** 80.95 5 *i* P P 15 25 08.6 -2.0
NRS IAmb IAmb 15 25 20.2
comp=Z,66nm,1.2s
**MCD Coleburn Disti** 80.95 343 eP P 15 25 11.0 +0.3
**OGNE Ogallala** 80.96 45 IAmb IAmb 15 25 13.7
comp=Z,152nm,1.2s
OGNE IAMs_20 IAMs_20 16 03 41.5
comp=Z,649nm,19.0s
**OGNE Ogallala** 80.96 45 P P 15 25 11.3 +0.1
baz=313,SNR=11
**SDCO Great Sand Dun** 81.11 49 IAMs_20 IAMs_20 16 03 33.8
comp=Z,750nm,19.0s
**SDCO Great Sand Dun** 81.11 49 P P 15 25 13.2 +0.8
baz=312,SNR=42
**PSZ Piszkesteto** 81.13 326 IAmb IAmb 15 25 14.5
comp=Z,182nm,1.2s
**PSZ Piszkesteto** 81.13 326 ⇑P P 15 25 14.0 +2.0
**PSZ Piszkesteto** 81.13 326 P P 15 25 13.9 +2.0
**LOT Lotru** 81.14 322 ⇑P P 15 25 13.6 +1.5
**VYHS Vyhne** 81.16 327 eP P 15 25 13.0 +0.9
VYHS pmax pmax
comp=Z,124nm,1.4s
**VYHS Vyhne** 81.16 327 eP P 15 25 13.0 +0.9
**FLTG Flechtingen** 81.17 333 eP P 15 25 12.6 +0.6
comp=Z,42nm,0.8s,baz=35,slow=5.1
**HUMR Humele** 81.21 321 ⇑P P 15 25 13.8 +1.5
**EYMN Ely** 81.22 34 IAMs_20 IAMs_20 15 58 49.8
comp=Z,643nm,22.0s
**EYMN Ely** 81.22 34 P P 15 25 12.1 -0.3
baz=319,SNR=19
**DEV Deva** 81.25 323 ⇑P P 15 25 14.2 +1.7
**DEV Deva** 81.25 323 P P 15 25 14.2 +1.7
**BRG Berggiesshubel** 81.33 331 eP P 15 25 13.3 +0.4
BRG Amp 15 25 14.9
comp=Z,35nm,1.0s
**BRG Berggiesshubel** 81.33 331 P P 15 25 22.5 +10
BRG Amp 15 25 26.1
comp=Z,11nm,0.8s
**BRG Berggiesshubel** 81.33 331 S S 15 35 23.0 +1.1
BRG PKKP 15 43 53.2
BRG Amp 15 43 53.5
comp=Z,1.6nm,0.7s
**BRG Berggiesshubel** 81.33 331 eP P 15 25 13.8 +1.0
comp=Z,26nm,0.8s,baz=35,slow=5.1
BRG ePP PP 15 28 19.6 +1.6
baz=37,slow=8.1
**TUC Tucson** 81.33 56 P P 15 25 13.3 0.0
**TUC Tucson** 81.33 56 P P 15 25 14.0 +0.6
baz=310
**TUC Tucson** 81.33 56 P P 15 25 13.3 0.0
TUC pmax pmax
comp=Z,63nm,1.7s
**CLL Collm** 81.34 331 IAmb IAmb 15 25 14.6
comp=Z,82nm,0.9s
**CLL Collm** 81.34 331 *i* P P 15 25 13.0 +0.1
CLL eS S 15 35 20.0 -2.1
CLL pmax pmax
comp=Z,102nm,1.0s
CLL MLR MLR
comp=Z,2µm,19.1s
**CLL Collm** 81.34 331 eP P 15 25 13.7 +0.8
comp=Z,50nm,0.8s,baz=35,slow=5.1
**PVCC Panska Ves** 81.36 330 eP P 15 25 14.2 +1.2
PVCC AMS AMS 16 04 30.0
comp=Z,2µm,17.0s
**PVCC Panska Ves** 81.36 330 eP P 15 25 14.2 +1.2
PVCC MLR MLR
comp=Z,2µm,17.0s
**COPA Copaceanca** 81.37 320 ⇓P P 15 25 15.1 +1.9
**JAVC Velka Javorina** 81.38 327 eP P 15 25 14.9 +1.6
**NRDL Niedersach Rie** 81.44 334 eP P 15 25 14.5 +1.2
comp=Z,17nm,0.8s,baz=35,slow=5.1
NRDL ePP PP 15 28 21.1 +2.3
baz=37,slow=8.1
**VRAC Vranov** 81.49 328 eP P 15 25 14.6 +0.8
**VRAC Vranov** 81.49 328 LR LR 16 04 54.9
comp=Z,2µm,18.4s,baz=32,slow=38
**VRAC Vranov** 81.49 328 ⇑P P 15 25 15.3 +1.5
**VRAC Vranov** 81.49 328 P P 15 25 15.3 +1.5
**ISK Istanbul-Kandi** 81.50 316 P P 15 25 14.1 +0.2
**RETH Rethem/Aller,** 81.50 334 eP P 15 25 14.8 +1.2
comp=Z,87nm,1.2s,baz=35,slow=5.1
**RICC Richard** 81.53 330 eP P 15 25 15.5 +1.6
RICC AMS AMS 16 05 30.0
comp=Z,3µm,16.8s
**SIRR Siria** 81.55 324 ⇑P P 15 25 15.6 +1.4
**SZH Strazhitsa** 81.60 319 *i* P P 15 25 14.9 +0.4
**GZR Gura Zlata** 81.66 323 ⇑P P 15 25 16.2 +1.3
**GZR Gura Zlata** 81.66 323 P P 15 25 16.1 +1.3
**URZ Urewera** 81.70 154 LR LR 15 58 50.7
comp=Z,1µm,18.8s,baz=51,slow=34
**SURR Surduc** 81.71 323 ⇓P P 15 25 17.0 +2.1
**KPL Plockton** 81.71 344 ⇓eP P 15 25 15.6 +0.9
KPL IAmb IAmb 15 25 17.0
comp=Z,141nm,1.0s
**HSKC Hora Svate Kat** 81.74 331 eP P 15 25 15.7 +0.6
HSKC AMS AMS 16 05 40.0
comp=Z,3µm,17.2s
**SMOL Smolenice** 81.75 327 eP P 15 25 17.0 +1.8
SMOL pmax pmax
comp=Z,63nm,1.2s
**GOPC GO Pecny, Ondr** 81.75 330 eP P 15 25 16.3 +1.1
GOPC AMS AMS 16 02 30.0
comp=Z,2µm,19.0s
**GOPC GO Pecny, Ondr** 81.75 330 eP P 15 25 16.3 +1.1
GOPC MLR MLR
comp=Z,2µm,19.0s
**KRUC Moravsky** 81.76 328 eP P 15 25 15.7 +0.5
**PRA Prague** 81.77 330 eP P 15 25 15.9 +0.7
PRA eS S 15 35 19.7 -6.8
PRA AMS AMS 16 05 20.0
comp=Z,2µm,19.0s
**PRA Prague** 81.77 330 eP P 15 25 15.9 +0.7
PRA e 15 35 19.7
PRA MLR MLR
comp=Z,2µm,19.0s
**PRU Pruhonice** 81.79 330 eP P 15 25 16.1 +0.8
PRU eS S 15 35 21.2 -5.6
PRU AMS AMS 16 03 30.0
comp=Z,2µm,22.4s
**PRU Pruhonice** 81.79 330 eP P 15 25 16.1 +0.8
PRU e 15 35 21.2
PRU MLR MLR
comp=Z,2µm,22.4s
**BUD Budapest** 81.84 326 P P 15 25 16.5 +0.9
**JMB Yambol** 81.86 319 *i* P P 15 25 16.8 +1.0
**CLZ Clausthal** 81.88 333 eP P 15 25 17.1 +1.3
comp=Z,53nm,1.0s,baz=35,slow=5.1
**NEUB Neuenburg** 81.88 332 eP P 15 25 16.8 +1.0
comp=Z,52nm,0.7s,baz=35,slow=5.1
**ECSD EROS Data Cent** 81.89 40 P P 15 25 15.9 -0.1
baz=316,SNR=31
**ELND Elena** 81.89 319 ⇓P P 15 25 17.9 +1.9
**SRO Srobarova** 81.91 326 eP P 15 25 17.7 +1.7
SRO pmax pmax
comp=Z,199nm,1.5s
**SRO Srobarova** 81.91 326 eP P 15 25 17.7 +1.7
**MODS Modra-Piesok** 81.92 327 eP P 15 25 17.3 +1.2
MODS pmax pmax
comp=Z,294nm,1.4s
**MODS Modra-Piesok** 81.92 327 eP P 15 25 17.3 +1.2
**KSCO Kaye Shedlock'** 81.94 46 IAmb IAmb 15 25 18.2
comp=Z,171nm,1.6s
**KSCO Kaye Shedlock'** 81.94 46 P P 15 25 16.8 +0.3
baz=313,SNR=5.7
**TREC Trest** 81.96 329 AMS AMS 16 04 40.0
comp=Z,2µm,16.7s
**BZS Buzias** 82.05 323 ⇑P P 15 25 17.5 +0.7
**BZS Buzias** 82.05 323 P P 15 25 17.4 +0.7
**ZST Bratislava** 82.14 327 eP P 15 25 18.4 +1.2
ZST pmax pmax
comp=Z,377nm,1.7s
**ZST Bratislava** 82.14 327 eP P 15 25 18.4 +1.2
**T25A Trinidad** 82.17 49 IAMs_20 IAMs_20 16 08 46.5
comp=Z,680nm,19.0s
**T25A Trinidad** 82.17 49 P P 15 25 18.6 +0.7
baz=312,SNR=42
**INVG Invergeldie, C** 82.18 343 eP P 15 25 17.7 +0.4
INVG IAmb IAmb 15 25 18.6
comp=Z,14nm,0.8s
**E38A The Farm, Brul** 82.20 35 IAmb IAmb 15 25 18.4
comp=Z,71nm,1.1s
E38A IAMs_20 IAMs_20 16 01 45.9
comp=Z,777nm,20.0s
**EDRB Edirne** 82.20 318 P P 15 25 18.2 +0.6
**HERR Herculane** 82.21 322 ⇑P P 15 25 18.6 +1.0
**RAYN Ar Rayn** 82.25 294 P P 15 25 17.7 -0.6
**RAYN Ar Rayn** 82.25 294 *i* P P 15 25 18.5 +0.2
SNR=8.5
**RAYN Ar Rayn** 82.25 294 P P 15 25 18.5 +0.2
**RAYN Ar Rayn** 82.25 294 P P 15 25 17.7 -0.6
RAYN pmax pmax
comp=Z,59nm,1.0s
**TANN Tannenbergstha** 82.27 331 eP P 15 25 18.9 +1.0
comp=Z,16nm,0.9s,baz=35,slow=5.1
**GTTG Gottingen** 82.27 333 eP P 15 25 18.9 +1.1
comp=Z,58nm,1.0s,baz=35,slow=5.1
**BKZ Black Stump Fm** 82.31 155 P P 15 25 20.8 +2.8
**PLN Plauen** 82.32 331 eP P 15 25 19.2 +1.0
comp=Z,50nm,1.2s,baz=35,slow=5.1
**ZVC Zvikov** 82.37 330 eP P 15 25 18.8 +0.4
ZVC eS S 15 35 29.5 -3.2
ZVC AMS AMS 16 04 00.0
comp=Z,2µm,20.0s
**ANMO Albuquerque** 82.38 51 P P 15 25 19.2 +0.2
**ANMO Albuquerque** 82.38 51 P P 15 25 19.6 +0.7
baz=311
**ANMO Albuquerque** 82.38 51 *d i* P P 15 25 19.7 +0.7
ANMO pmax pmax
comp=Z,31nm,1.4s
ANMO MLR MLR
comp=Z,169nm,17.0s
**MOX Moxa** 82.40 332 eP P 15 25 19.5 +1.0
comp=Z,27nm,0.9s,baz=35,slow=5.1
MOX eL L 16 05 46.6
comp=Z,2µm,21.2s
**PUNG Punghina** 82.40 322 ⇓P P 15 25 19.8 +1.1
**IBBN Ibbenburen** 82.41 335 eP P 15 25 19.4 +0.9
comp=Z,142nm,1.2s,baz=35,slow=5.1
**VALD Valchedram** 82.58 321 *i* P P 15 25 20.5 +0.9
**MDVR Moldovita** 82.62 323 ⇑P P 15 25 21.0 +1.1
**LAWE Loch Awe, Argy** 82.65 343 ⇓eP P 15 25 20.2 +0.5
LAWE IAmb IAmb 15 25 21.7
comp=Z,303nm,1.5s
**SPMN Marine on St.** 82.66 37 IAmb IAmb 15 25 21.2
comp=Z,130nm,1.6s
SPMN IAMs_20 IAMs_20 15 59 23.0
comp=Z,1µm,22.0s
**SPMN Marine on St.** 82.66 37 P P 15 25 19.7 -0.3
baz=318
**Y22D IRIS PASSCAL I** 82.66 52 IAMs_20 IAMs_20 16 00 42.0
comp=Z,739nm,20.0s
**Y22D IRIS PASSCAL I** 82.66 52 P P 15 25 21.4 +1.0
baz=311
**DIM Dimitrovgrad** 82.67 319 *i* P P 15 25 21.1 +1.0
**MANZ Manzenberg** 82.75 331 eP P 15 25 21.4 +1.1
comp=Z,5.3nm,0.8s,baz=35,slow=5.1
**BGNE Belgrade** 82.75 42 IAMs_20 IAMs_20 15 59 48.6
comp=Z,648nm,20.0s
**BGNE Belgrade** 82.75 42 P P 15 25 20.4 -0.2
baz=315,SNR=10
**SOP Sopron** 82.76 327 P P 15 25 21.6 +1.1
**CKRC Cesky Krumlov** 82.81 329 eP P 15 25 21.2 +0.5
CKRC eS S 15 35 34.0 -3.3
CKRC AMS AMS 16 03 00.0
comp=Z,2µm,21.9s
**CKRC Cesky Krumlov** 82.81 329 eP P 15 25 21.2 +0.5
CKRC e 15 35 34.0
CKRC MLR MLR
comp=Z,2µm,21.9s
**PGBU Glenifferbraes** 82.85 343 ⇓eP P 15 25 21.7 +1.0
PGBU IAmb IAmb 15 25 22.9
comp=Z,371nm,1.3s
**UBBA Unterbreizbach** 82.85 333 eP P 15 25 21.6 +0.9
comp=Z,3.1nm,0.3s,baz=35,slow=5.1
**KHC Kasperske Hory** 82.86 330 IAmb IAmb 15 25 23.2
comp=Z,51nm,0.8s
**KHC Kasperske Hory** 82.86 330 eP P 15 25 20.1 -0.9
KHC eS S 15 35 34.5 -3.3
KHC AMS AMS 16 04 30.0
comp=Z,2µm,23.1s
**KHC Kasperske Hory** 82.86 330 *d* iP P 15 25 21.6 +0.6
KHC pmax pmax
comp=Z,214nm,1.4s
KHC MLR MLR
comp=Z,4µm,19.0s
**RONA Rosalia, Austr** 82.86 327 epP P 15 25 22.0 +1.0
comp=Z,206nm,1.7s,SNR=64
**CONA Conrad Observa** 82.87 328 *i* pP P 15 25 22.0 +0.8
comp=Z,73nm,1.0s
**ROTZ Rotzenmuhle** 82.88 331 eP P 15 25 22.5 +1.4
comp=Z,6.3nm,0.8s,baz=35,slow=5.1
**319A Douglas** 82.91 56 IAmb IAmb 15 25 29.9
comp=Z,75nm,1.4s
**EKA Eskdalemuir Ar** 82.96 342 P P 15 25 22.6 +1.2
comp=Z,8.7nm,0.6s,baz=21,slow=5.2,SNR=34
comp=Z,8.7nm,0.6s
**MORH Mrgy, Hungar** 82.98 325 ⇑P P 15 25 22.3 +0.8
**ESK Eskdalemuir** 82.99 342 P P 15 25 22.4 +0.9
**ESK Eskdalemuir** 82.99 342 P P 15 25 22.4 +0.9
ESK pmax pmax
comp=Z,310nm,1.9s
**PLD Plovdiv** 83.03 319 *i* P P 15 25 22.5 +0.5
**GEC2 GERESS Array S** 83.03 330 IAmb IAmb 15 25 23.7
comp=Z,137nm,1.6s
**GEC2 GERESS Array S** 83.03 330 eP P 15 25 22.7 +0.7
comp=Z,17nm,0.6s,baz=35,slow=5.1
**GERES GERESS Array B** 83.03 330 P P 15 25 21.9 -0.1
**GERES GERESS Array B** 83.03 330 P P 15 25 22.3 +0.3
comp=Z,10nm,0.6s,baz=142,slow=6.8,SNR=49
comp=Z,10nm,0.6s
**GERES GERESS Array B** 83.03 330 P P 15 25 21.9 -0.1
**PGB Panagyurishte** 83.06 320 *i* P P 15 25 22.9 +0.7
**KASTN Kahler Asten** 83.10 334 eP P 15 25 23.1 +0.9
comp=Z,19nm,0.8s,baz=35,slow=5.1
**WET Wettzell** 83.12 330 eP P 15 25 23.7 +1.3
comp=Z,25nm,0.9s,baz=35,slow=5.1
**121A Cookes Peak, D** 83.12 54 IAMs_20 IAMs_20 16 04 17.3
comp=Z,704nm,19.0s
**121A Cookes Peak, D** 83.12 54 P P 15 25 23.9 +1.0
baz=311,SNR=21
**MMAI Mount Meron Ar** 83.15 307 P P 15 25 24.2 +1.4
comp=Z,142nm,1.0s,baz=42,slow=6.0,SNR=19
MMAI LR LR 16 07 18.4
comp=Z,440nm,18.5s,slow=39
comp=Z,142nm,1.0s
**CSS Mathiatis** 83.15 309 IAMs_20 IAMs_20 16 09 27.6
comp=Z,900nm,20.0s
**PPT Papeete** 83.17 118 LR LR 15 55 19.1
comp=Z,808nm,20.0s,baz=279,slow=31
**PPT2 Papeete2** 83.19 118 eP P 15 25 21.0 -2.1
comp=Z,312nm,26.8s
**PPT2 Papeete2** 83.19 118 eS S 15 35 39.2 -2.7
comp=Z,400nm,26.2s
PPT2 eSS SS 15 41 05.9 -1.2
comp=Z,226nm,24.8s
PPT2 eLQ LQ 15 47 59.1
comp=Z,624nm,27.0s
PPT2 eLR LR 15 51 26.7
comp=Z,3µm,24.8s
PPT2 eLR LR 15 51 27.4
comp=Z,2µm,25.2s
**FRGS Fruska Gora** 83.24 324 ⇑*i* P P 15 25 24.0 +1.0
**FRGS Fruska Gora** 83.24 324 ⇑P P 15 25 24.1 +1.0
**ALN Alexandroupoli** 83.25 318 P P 15 25 23.5 +0.4
**BUG Bochum--Univer** 83.30 334 eP P 15 25 23.9 +0.8
comp=Z,20nm,0.7s,baz=35,slow=5.1
**ENEZ Enez** 83.30 317 P P 15 25 24.0 +0.6
**GRF Grafenberg Arr** 83.32 331 eP P 15 25 24.9 +1.5
comp=Z,46nm,0.8s,baz=35,slow=5.1
GRF eL L 16 06 05.3
comp=Z,2µm,19.4s
**GRFO Grafenberg** 83.32 331 P P 15 25 23.5 +0.2
GRFO IAmb IAmb 15 25 25.7
comp=Z,122nm,1.1s
**GRFO Grafenberg** 83.32 331 P P 15 25 23.5 +0.2
GRFO pmax pmax
comp=Z,121nm,1.1s
GRFO MLR MLR
comp=Z,2µm,19.0s
**RDO Rodhopi** 83.34 318 P P 15 25 24.2 +0.7
**RZN Rozhen** 83.36 319 *i* P P 15 25 24.9 +1.0
**MRZ Mangatainoka R** 83.37 156 P P 15 25 22.3 -1.1
**MRZ Mangatainoka R** 83.37 156 P P 15 25 21.9 -1.4
**NEWG New Galloway** 83.42 342 ⇓eP P 15 25 24.1 +0.4
NEWG IAmb IAmb 15 25 25.5
comp=Z,182nm,1.4s
**VTS Vitosha** 83.46 320 *i* P P 15 25 25.4 +1.0
**BOVS Bovan** 83.47 322 ⇑P P 15 25 24.8 +0.6
**KULA Kula-Manisa** 83.48 315 P P 15 25 24.8 +0.3
**ARSA Arzberg** 83.54 328 *i* P P 15 25 24.9 +0.3
comp=Z,32nm,0.6s,SNR=32
**MOA Molln** 83.60 329 eP P 15 25 25.2 +0.4
comp=Z,79nm,1.3s,SNR=43
**KESW Keswick, Cumbr** 83.62 341 ⇓eP P 15 25 25.4 +0.6
KESW IAmb IAmb 15 25 27.0
comp=Z,492nm,1.5s
**RTBA Rita Blanca** 83.63 48 IAmb IAmb 15 25 27.2
comp=Z,113nm,1.4s
**COWI Conover** 83.67 34 IAmb IAmb 15 25 26.3
comp=Z,98nm,1.6s
COWI IAMs_20 IAMs_20 16 00 27.7
comp=Z,712nm,22.0s
**CBKS Cedar Bluff** 83.71 45 IAmb IAmb 15 25 26.4
comp=Z,93nm,1.4s
**CBKS Cedar Bluff** 83.71 45 P P 15 25 25.1 -0.5
baz=315,SNR=6.6
**GAL1 Galloway** 83.76 342 ⇓eP P 15 25 25.9 +0.5
GAL1 IAmb IAmb 15 25 27.3
comp=Z,169nm,1.1s
**HPK Haverah Park** 83.81 340 ⇓eP P 15 25 26.4 +0.6
HPK IAmb IAmb 15 25 27.8
comp=Z,597nm,1.8s
**SMTH Samothraki Isl** 83.82 318 P P 15 25 25.9 -0.2
**G40A Rib Lake** 83.83 35 IAmb IAmb 15 25 27.2
comp=Z,62nm,1.2s
G40A IAMs_20 IAMs_20 16 01 39.0
comp=Z,775nm,20.0s
**TEKS Tekeris** 83.83 324 ⇑*i* P P 15 25 26.3 +0.2
**EZN Ezine** 83.86 317 P P 15 25 26.6 +0.4
**KOGS Kog** 83.86 327 *i* P P 15 25 26.1 -0.1
KOGS *i* pP sP 15 25 34.9 +0.9
**SCHQ Schefferville** 83.87 17 IAmb IAmb 15 25 26.9
comp=Z,164nm,1.7s
**SCHQ Schefferville** 83.87 17 P P 15 25 26.3 +0.2
comp=Z,38nm,1.1s,baz=4.5,slow=6.4,SNR=14
SCHQ LR LR 16 03 54.7
comp=Z,918nm,21.6s,baz=348,slow=36
comp=Z,38nm,1.1s
**CLGH Cloghs, Cushen** 83.89 343 ⇓eP P 15 25 26.5 +0.4
CLGH IAmb IAmb 15 25 28.2
comp=Z,275nm,1.3s
**LMK Market Rasen** 83.90 340 ⇓eP P 15 25 26.9 +0.7
LMK IAmb IAmb 15 25 28.2
comp=Z,517nm,1.8s
**TNS Taunus Mts** 83.91 333 eP P 15 25 27.3 +1.0
comp=Z,21nm,0.8s,baz=35,slow=5.1
**BIOA Bad Ischl, Aus** 83.98 329 eP P 15 25 27.1 +0.4
comp=Z,57nm,0.9s,SNR=41
**KAVA Kavala** 83.98 319 P P 15 25 27.4 +0.5
**NVR Nevrokopi** 84.07 319 P P 15 25 28.7 +1.3
**KKB Krupnik** 84.08 320 *i* P P 15 25 28.3 +0.9
**AHRW Bad Neuenahr-A** 84.12 334 eP P 15 25 28.5 +1.1
comp=Z,26nm,0.8s,baz=35,slow=5.1
**THAS Thassos island** 84.16 318 P P 15 25 27.8 +0.1
**SOKA Soboth** 84.20 327 eP P 15 25 28.2 +0.2
comp=Z,134nm,1.3s,SNR=87
**IDGL Inch Island, C** 84.21 344 eP P 15 25 28.6 +0.8
**PEHC Pehcevo** 84.25 320 *i* P P 15 25 28.3 -0.1
**IOMK Kirk Michael** 84.28 342 ⇓eP P 15 25 28.6 +0.4
IOMK IAmb IAmb 15 25 29.9
comp=Z,490nm,1.3s
**WACR West Acre** 84.28 339 eP P 15 25 28.1 -0.1
WACR IAmb IAmb 15 25 29.9
comp=Z,366nm,1.9s
**RJOB Jochberg** 84.28 329 eP P 15 25 29.7 +1.3
comp=Z,64nm,1.0s,baz=35,slow=5.1
**PRK Paraskevi** 84.30 316 P P 15 25 28.6 +0.1
**LBWR Ladybower, Pea** 84.33 340 ⇓eP P 15 25 28.7 +0.3
LBWR IAmb IAmb 15 25 30.4
comp=Z,440nm,1.3s
**TAOE Nuku Hiva Isla** 84.36 106 eS SKSac 15 35 51.4 -0.2
comp=Z,362nm,30.1s
TAOE eSS SS 15 41 09.6 -15
comp=Z,289nm,23.9s
**TAOE Nuku Hiva Isla** 84.36 106 eLR LR 15 51 54.2
comp=Z,2µm,23.4s
**F42A Maple Grove Fa** 84.38 34 IAMs_20 IAMs_20 16 04 22.4
comp=Z,563nm,20.0s
**BEBN Eben Emael** 84.38 335 *d* P P 15 25 28.9 +0.3
**BTNL Ternell** 84.41 335 *d* P P 15 25 29.2 +0.3
comp=Z,27nm,1.2s
**BBLS Lazi&#263i** 84.41 323 ⇑*i* P P 15 25 29.0 -0.1
**WIM Isle of Man** 84.41 342 ⇓eP P 15 25 29.3 +0.5
**LIA Limnos Island** 84.42 317 P P 15 25 29.1 0.0
**MEM Membach** 84.43 335 *d* P P 15 25 29.4 +0.5
comp=Z,35nm,1.2s
**EPT El Paso** 84.44 54 IAMs_20 IAMs_20 16 07 42.1
comp=Z,598nm,19.0s
**HAPS Han Pijesak,Bl** 84.45 324 ⇑*i* P P 15 25 30.1 +0.7
**OBKA Obir** 84.54 328 eP P 15 25 29.5 -0.2
comp=Z,23nm,0.8s,SNR=22
**FUR Furstenfeldbru** 84.54 330 eP P 15 25 31.1 +1.5
comp=Z,81nm,0.7s,baz=35,slow=5.1
**SIGR SIGRI** 84.55 317 P P 15 25 29.7 -0.1
**LESA Schwarzleotal** 84.58 329 eP P 15 25 30.2 +0.3
comp=Z,138nm,1.6s
**KBA Koelnbreinsper** 84.59 329 eP P 15 25 30.1 0.0
comp=Z,52nm,0.8s,SNR=44
**SJES Sjenica** 84.59 323 ⇑*i* P P 15 25 30.9 +0.8
**BSTI Sart Tilman** 84.60 335 *d* P P 15 25 30.5 +0.7
**RUDO Rudo** 84.61 323 ⇑*i* P P 15 25 30.0 0.0
**BHOU Houvegnez** 84.65 335 *d* P P 15 25 30.2 +0.1
comp=Z,31nm,1.2s
**A051A Mrakovica** 84.68 325 ⇑*i* P P 15 25 30.3 -0.1
**CRES Cresnjev** 84.69 327 ⇑*i* P P 15 25 29.9 -0.5
**KNT Kendrikon** 84.70 320 P P 15 25 30.8 +0.3
**SOH Sokhos** 84.71 319 P P 15 25 30.3 -0.4
**ELMS Elmsett, Ipswi** 84.73 338 ⇓eP P 15 25 30.7 +0.3
**OUR Ouranopolis** 84.74 318 P P 15 25 30.8 +0.1
**VAY Valandovo** 84.75 320 *i* P P 15 25 31.2 +0.5
**BLY Banja Luka** 84.76 325 ⇑*i* P P 15 25 31.2 +0.5
**OXZ Oxford** 84.78 160 IAmb IAmb 15 25 46.0
comp=Z,69nm,0.9s

**CWF Charnwood Fore 84.81 340⇓ eP P 15 25 31.1 +0.3**
CWF IAmb IAmb 15 25 32.6
comp=Z,227nm,1.4s
**PLE Pljevlja 84.82 323⇓ iP P 15 25 31.7 +0.5**
**MYKA Terra Mystica 84.82 328 i P P 15 25 30.7 -0.5**
comp=Z,39nm,0.7s,SNR=33
**BCLA Clavier 84.83 335 dP P 15 25 30.6 -0.3**
comp=Z,36nm,1.2s
**STU Stuttgart 84.84 332 P P 15 25 31.5 +0.4**
**STU Stuttgart 84.84 332 eP P 15 25 32.1 +1.1**
comp=Z,246nm,0.9s,baz=35,slow=5.1
**RPZ Rata Peaks 84.87 161 LR LR 16 00 07.3**
comp=Z,1μm,19.7s,baz=328,slow=33
**ILTH Belurgan, Co L 84.91 343⇓ eP P 15 25 31.0 -0.3**
**LJU Ljubljana 84.92 327 i P P 15 25 31.1 -0.4**
LJU *i* pP **sP 15 25 39.7 +0.3**
LJU *i* 15 25 46.7
LJU *e*PP **PP 15 28 50.0 +2.6**
LJU *i* SKSac **SKSac 15 35 56.1 +1.8**
**IVA Berane 84.92 322⇓ iP P 15 25 32.1 +0.4**
**SCIA State Center 84.93 39 IAmb IAmb 15 25 33.4**
comp=Z,98nm,1.1s
SCIA IAMs_20 IAMs_20 15 59 38.2
comp=Z,1μm,22.0s
**SCIA State Center 84.93 39 P P 15 25 31.9 +0.3**
baz=318
**BGES Gesves 84.93 335 dP P 15 25 31.2 -0.3**
comp=Z,29nm,1.2s
**PRED Cave del Predi 85.00 328 IAmb IAmb 15 25 32.7**
comp=Z,39nm,0.7s
**WME Myndd Eilian 85.00 342⇓ eP P 15 25 32.1 +0.3**
**HORT Hortiatis 85.01 319 P P 15 25 31.9 -0.3**
**CHOS Chios island 85.03 316 P P 15 25 32.3 0.0**
**BOJS Bojanci 85.03 327⇑ iP P 15 25 31.4 -0.7**
**WPS Cemaes, Angles 85.05 342⇓ eP P 15 25 32.1 +0.1**
WPS IAmb IAmb 15 25 33.6
comp=Z,194nm,1.6s
**THE Thessaloniki 85.05 319 P P 15 25 31.5 -0.8**
**MGRS Mrkonjic Grad 85.06 325⇑ iP P 15 25 33.1 +0.8**
**RCHB Rochefort 85.08 335 dP P 15 25 32.5 +0.3**
comp=Z,47nm,1.2s
**WATA Walderalm 85.10 330 i P P 15 25 32.5 0.0**
comp=Z,110nm,2.0s,SNR=18
**BMRD Maredsous 85.11 335 dP P 15 25 32.3 0.0**
comp=Z,47nm,1.1s
**KOME Kolasin 85.12 323⇓ iP P 15 25 33.1 +0.4**
**WLF1 Llynfaes 85.12 342⇓ eP P 15 25 32.6 +0.2**
WLF1 IAmb IAmb 15 25 34.2
comp=Z,379nm,1.4s
**WTTA Wattenberg 85.13 330 i P P 15 25 32.7 -0.1**
comp=Z,38nm,0.8s,SNR=19
**UPM Unac-Piva 85.15 323⇑ iP P 15 25 32.7 -0.3**
**UPM Unac-Piva 85.15 323⇓ iP P 15 25 32.5 -0.5**
**WLF Walferdange 85.18 334 dP P 15 25 33.9 +1.2**
comp=Z,37nm,1.3s
**WLF Walferdange 85.18 334 eP P 15 25 34.1 +1.3**
comp=Z,44nm,1.0s,baz=35,slow=5.1
**FOEL Foel Wylfa 85.18 341⇓ eP P 15 25 33.5 +0.7**
FOEL IAmb IAmb 15 25 34.8
comp=Z,255nm,1.0s
**ABTA Abfaltersbach 85.19 329 eP P 15 25 32.2 -0.8**
comp=Z,35nm,1.2s,SNR=19
**CEY Cerknica 85.20 327 i P P 15 25 32.4 -0.6**
**CEY Cerknica 85.20 327⇑ iP P 15 25 32.7 -0.3**
**VLL Llanberis 85.20 341 eP P 15 25 33.2 +0.5**
**MNTX Cornudas Mount 85.20 53 P P 15 25 33.6 +0.3**
baz=312,SNR=21
**KSU1 Kansas State U 85.22 43 IAmb IAmb 15 25 34.0**
comp=Z,56nm,1.1s
KSU1 IAMs_20 IAMs_20 16 04 55.2
comp=Z,779nm,21.0s
**KSU1 Kansas State U 85.22 43 P P 15 25 32.3 -0.8**
baz=316,SNR=5.1
**A050A Klekovaca 85.26 325⇑ iP P 15 25 33.5 +0.1**
**BODT Bodrum 85.26 314 P P 15 25 33.5 +0.1**
**MOTA Moosalm 85.28 330 eP P 15 25 33.4 -0.1**
comp=Z,121nm,1.3s
**MSTX Muleshoe 85.29 50 IAMs_20 IAMs_20 16 02 40.3**
comp=Z,627nm,19.0s
**MSTX Muleshoe 85.29 50 P P 15 25 33.7 0.0**
baz=313
**RETA Reutte 85.30 330 i P P 15 25 33.8 +0.4**
comp=Z,124nm,0.9s,SNR=81
**AMTX Amarillo 85.32 49 IAmb IAmb 15 25 35.9**
comp=Z,101nm,1.1s
AMTX IAMs_20 IAMs_20 16 10 39.0
comp=Z,678nm,20.0s
**AMTX Amarillo 85.32 49 P P 15 25 34.3 +0.4**
baz=314
**SQTA Sankt Quirin 85.34 330 i P P 15 25 33.8 0.0**
comp=Z,43nm,0.7s,SNR=24
**DOU Dourbes 85.34 335 dP P 15 25 33.4 -0.1**
comp=Z,21nm,1.3s
**LLW Llanuwchllyn 85.34 341⇓ eP P 15 25 33.1 -0.3**
**SABO M.te Sabotino 85.36 328 IAmb IAmb 15 25 34.2**
comp=Z,52nm,1.1s
SABO IAMs_20 IAMs_20 16 07 49.5
comp=Z,2μm,18.0s
**UBR Ueberruh 85.39 331 eP P 15 25 34.7 +0.8**
comp=Z,20nm,0.7s,baz=35,slow=5.1
**ARG Arkhangelos 85.39 313 P P 15 25 34.4 +0.3**
**HLM1 Long Mynd 85.44 340⇓ eP P 15 25 34.4 +0.4**
HLM1 IAmb IAmb 15 25 35.8
comp=Z,187nm,1.6s
**NKME Niksic 85.46 323⇓ iP P 15 25 34.1 -0.2**
**I42A Draeger Farm, 85.48 35 IAmb IAmb 15 25 35.7**
comp=Z,181nm,1.7s
**STAL STALIGIAL 85.50 329 IAmb IAmb 15 25 34.7**
comp=Z,60nm,0.7s
**ELSH Elham, Standar 85.52 338⇓ eP P 15 25 35.0 +0.6**
ELSH IAmb IAmb 15 25 36.1
comp=Z,223nm,1.2s
**BFO Black Forest 85.52 332 P P 15 25 34.4 -0.1**
**BFO Black Forest 85.52 332 P P 15 25 34.4 -0.1**
BFO pmax pmax
comp=Z,128nm,1.0s
**BFO Black Forest 85.52 332 eP P 15 25 35.5 +1.0**
comp=Z,81nm,0.9s,baz=35,slow=5.1
**E46A Sault Ste Mari 85.53 31 IAMs_20 IAMs_20 16 03 15.6**
comp=Z,637nm,19.0s
**SKDS Skadanscina 85.53 327⇑ iP P 15 25 33.9 -0.7**
**H43A Windswept, Lux 85.55 34 IAmb IAmb 15 25 36.1**
comp=Z,107nm,1.1s
**BRY Bratogost 85.55 323⇑ iP P 15 25 34.3 -0.7**
**BRY Bratogost 85.55 323⇓ iP P 15 25 34.2 -0.7**
**PUK Puka 85.55 322 IAmb IAmb 15 25 42.4**
comp=Z,146nm,1.4s
**PDG Podgorica 85.57 322⇑ iP P 15 25 35.3 +0.5**
**PDG Podgorica 85.57 322⇓ iP P 15 25 34.9 +0.1**
**JFWS Jewell Farm 85.61 37 P P 15 25 34.4 -0.6**
baz=320,SNR=5.2
**EIL Elat 85.64 304 LR LR 16 08 13.8**
comp=Z,1μm,19.5s,baz=57,slow=39
**CEME Cevo 85.64 323⇓ iP P 15 25 35.0 -0.3**
**FETA Feichten 85.69 330 i P P 15 25 35.6 0.0**
comp=Z,36nm,0.8s,SNR=35
**N38A Joes South For 85.75 40 IAmb IAmb 15 25 37.2**
comp=Z,116nm,1.1s
N38A IAMs_20 IAMs_20 16 08 07.7
comp=Z,625nm,19.0s
**FNA Florina 85.75 320 IAmb IAmb 15 25 37.1**
comp=Z,106nm,1.1s
**FNA Florina 85.75 320 P P 15 25 35.4 -0.5**
**TREB Trebinje 85.78 323⇑ iP P 15 25 36.4 +0.5**
**DRME Dracevica, Mon 85.79 322⇑ iP P 15 25 36.4 +0.5**
**DRME Dracevica, Mon 85.79 322⇓ iP P 15 25 36.1 +0.2**
**L40A Anamosa 85.79 38 IAmb IAmb 15 25 37.0**
comp=Z,82nm,1.1s
L40A IAMs_20 IAMs_20 16 01 53.8
comp=Z,1μm,21.0s
**DAVA Damuels 85.80 331 iP P 15 25 36.2 +0.1**
comp=Z,86nm,0.8s,SNR=53
**OHR Ohrid 85.80 321 iP P 15 25 36.3 +0.2**
**KAN08 Anthony NE Sta 85.82 45 IAmb IAmb 15 25 37.6**
comp=Z,73nm,0.9s
**ELIS Ellis County 85.82 47 IAmb IAmb 15 25 38.3**
comp=Z,103nm,1.1s
**U32A Winter Ranch, 85.84 46 IAmb IAmb 15 25 38.1**
comp=Z,67nm,1.1s
**BUM Brajici-Budva 85.84 323⇓ iP P 15 25 36.2 -0.1**
**KZN Kozani 85.91 320 P P 15 25 35.9 -0.8**
**STRD Stroud 85.91 340⇓ eP P 15 25 36.9 +0.5**
STRD IAmb IAmb 15 25 38.7
comp=Z,1μm,1.9s
**KYMI Kymi, Euboea I 85.91 317 P P 15 25 35.8 -0.8**
**OK038 West end E0370 85.92 46 IAmb IAmb 15 25 38.5**
comp=Z,90nm,1.1s
**SLE Schleitheim 85.94 332 eP P 15 25 37.0 +0.4**
comp=Z,124nm,1.0s,baz=35,slow=5.1
**STON Ston 85.97 324⇑ iP P 15 25 35.5 -1.3**
**OK032 Salt Plains WL 85.98 45 IAmb IAmb 15 25 38.7**
comp=Z,113nm,1.0s
OK032 IAMs_20 IAMs_20 16 07 08.5
comp=Z,668nm,19.0s
**KAN01 Argonia South 85.99 45 IAmb IAmb 15 25 38.6**
comp=Z,124nm,1.2s
**HMNX Herstmonceux 86.01 338⇓ eP P 15 25 37.5 +0.7**
HMNX IAmb IAmb 15 25 39.1
comp=Z,366nm,1.2s
**KAN14 Manchester OK 86.02 45 IAmb IAmb 15 25 38.6**
comp=Z,61nm,1.1s
**SMWD Samnorwood 86.02 48 IAmb IAmb 15 25 39.3**
comp=Z,86nm,1.2s
**MONM Monmouth 86.03 340⇓ eP P 15 25 37.0 +0.1**
MONM IAmb IAmb 15 25 38.7
comp=Z,162nm,1.2s
**SWN1 Swindon 86.05 339⇓ eP P 15 25 37.7 +0.7**
SWN1 IAmb IAmb 15 25 39.0
comp=Z,685nm,1.5s
**ECH Echery 86.05 333 IAmb IAmb 15 25 38.8**
comp=Z,83nm,1.0s
**WOL Wolverton 86.06 339⇓ eP P 15 25 37.1 0.0**
**WILA Wila 86.07 331 eP P 15 25 37.9 +0.6**
comp=Z,24nm,0.7s,baz=35,slow=5.1
**TIR Tirane 86.09 321 IAmb IAmb 15 25 39.1**
comp=Z,124nm,1.1s
**TIR Tirane 86.09 321 P P 15 25 37.2 -0.2**
**KBN Korca 86.17 320 P P 15 25 37.8 -0.2**
**PLONS Plons/SG 86.19 331 eP P 15 25 38.6 +0.6**
comp=Z,43nm,0.8s,baz=35,slow=5.1
**NEST Nestorio 86.20 320 P P 15 25 37.9 -0.2**
**DAVOX Davos/Dischmat 86.22 330 LR LR 16 08 19.0**
comp=Z,2μm,18.1s,baz=74,slow=38
**SULZ Cheisacher 86.28 332 eP P 15 25 39.0 +0.7**
comp=Z,124nm,1.0s,baz=35,slow=5.1
**CROK Carrier 86.33 45 IAmb IAmb 15 25 40.3**
comp=Z,91nm,1.1s
CROK IAMs_20 IAMs_20 16 06 21.5
comp=Z,646nm,20.0s
**THL Klokotos Trika 86.33 319 P P 15 25 36.9 -1.7**
**RSBS Rosebush, Pemb 86.43 341⇓ eP P 15 25 38.8 -0.1**
RSBS IAmb IAmb 15 25 41.3
comp=Z,172nm,1.7s
**P38A Dawn 86.46 41 IAMs_20 IAMs_20 16 01 38.8**
comp=Z,659nm,21.0s
**HAU Haudompre 86.52 333 eP P 15 25 39.1 -0.4**
HAU pmax pmax
comp=Z,47nm,0.9s
**IWEX Carrickbyrne, 86.54 343 eP P 15 25 39.3 -0.1**
**I45A Fountain 86.57 34 IAMs_20 IAMs_20 16 05 47.3**
comp=Z,649nm,19.0s
**L42A Oliver, Polo 86.58 37 IAMs_20 IAMs_20 16 01 52.9**
comp=Z,1μm,22.0s
**AXAR Agios Charalam 86.58 318 P P 15 25 38.3 -1.7**
**BALST Balsthal 86.59 332 eP P 15 25 40.7 +0.8**
comp=Z,57nm,0.8s,baz=35,slow=5.1
**DKNS Dickens 86.61 49 IAmb IAmb 15 25 42.2**
comp=Z,186nm,1.9s
**GLMI Grayling 86.64 32 IAMs_20 IAMs_20 16 06 17.9**
comp=Z,648nm,20.0s
**TEOL Teolo 86.66 329 IAmb IAmb 15 25 41.4**
comp=Z,52nm,1.0s
**TUE Stuetta 86.68 331 IAmb IAmb 15 25 42.2**
comp=Z,57nm,1.0s
**VLDQ Val d'Or 86.69 26 IAmb IAmb 15 25 40.5**
comp=Z,97nm,1.2s
VLDQ IAMs_20 IAMs_20 16 11 31.7
comp=Z,893nm,20.0s
**LPIG La Paz 86.90 62 LR LR 16 06 16.8**
comp=Z,622nm,18.0s,baz=296,slow=37
**EVR Evrytania 86.92 319 P P 15 25 41.6 -0.1**
**OK051 E0350 and S346 86.97 45 IAMs_20 IAMs_20 16 12 16.5**
comp=Z,594nm,20.0s
**OK048 Pawnee Station 86.97 45 IAmb IAmb 15 25 43.4**
comp=Z,85nm,1.3s
**N41A Harden Midland 87.00 39 IAmb IAmb 15 25 43.2**
comp=Z,135nm,1.3s
**ANX Ano Chora 87.10 318 P P 15 25 41.6 -1.0**
**WMOK Wichita Mounta 87.12 47 IAmb IAmb 15 25 44.2**
comp=Z,74nm,1.4s
**WMOK Wichita Mounta 87.12 47 IAMs_20 IAMs_20 16 04 20.8**
comp=Z,522nm,19.0s
**WMOK Wichita Mounta 87.12 47 P P 15 25 42.5 -0.2**
baz=315,SNR=33
**SRN Sarande 87.13 320 P P 15 25 42.1 -0.4**
**OK029 Liberty Lake 87.13 46 IAmb IAmb 15 25 44.3**
comp=Z,97nm,1.1s
**KALE Kalithea 87.14 318 P P 15 25 41.3 -1.4**
**TBI Tubuai 87.20 122 eS S 15 36 25.2 +4.0**
comp=Z,1μm,29.2s
TBI *e*SS **SS 15 42 04.2 -1.7**
comp=Z,2μm,31.2s
**TBI Tubuai 87.20 122 e**LR LR 15 53 13.7
comp=Z,2μm,22.5s
TBI *e*LR LR 15 53 17.9
comp=Z,8μm,22.2s
**EFP Efpalio 87.23 318 P P 15 25 42.6 -0.5**
**L44A Lake County Fo 87.27 36 IAmb IAmb 15 25 44.4**
comp=Z,89nm,1.2s
**L44A Lake County Fo 87.27 36 P P 15 25 43.0 -0.2**
baz=322
**QUOK Quay 87.28 45 IAmb IAmb 15 25 44.9**
comp=Z,114nm,1.4s
**PVO Paravola 87.29 319 P P 15 25 42.8 -0.6**
**P40A Paris 87.29 40 IAMs_20 IAMs_20 16 02 36.7**
comp=Z,538nm,20.0s
**APMT Aspermont 87.33 49 IAmb IAmb 15 25 45.2**
comp=Z,121nm,1.6s
**KEK Kerkira 87.36 320 P P 15 25 43.0 -0.7**
**OK052 Battle Ridge R 87.36 45 IAmb IAmb 15 25 45.2**
comp=Z,114nm,1.3s
OK052 IAMs_20 IAMs_20 16 09 47.8
comp=Z,547nm,20.0s
**GUR Goura 87.36 318 P P 15 25 42.3 -1.6**
**OK031 S. Brethren Rd 87.36 45 IAmb IAmb 15 25 45.3**
comp=Z,113nm,1.4s
OK031 IAMs_20 IAMs_20 16 09 47.0
comp=Z,572nm,19.0s
**KLV Kalavryta, Ach 87.39 318 P P 15 25 42.2 -1.7**
**SLBS Sierra La Lagu 87.42 62 P P 15 25 44.5 +0.1**
SLBS IAmb IAmb 15 25 46.8
comp=Z,110nm,1.8s
**FNO Franklin 87.55 46 IAmb IAmb 15 25 46.5**
comp=Z,58nm,1.4s
**LKD2 Lefkada island 87.61 319 P P 15 25 44.3 -0.7**
**DEOK Depew 87.64 45 IAmb IAmb 15 25 46.6**
comp=Z,77nm,1.1s
**RLS Riolos of Patr 87.74 318 P P 15 25 45.2 -0.3**
**EVGI Lefkada island 87.74 319 P P 15 25 44.9 -0.6**
**J47A Sunmer 87.82 33 IAMs_20 IAMs_20 16 10 54.5**
comp=Z,699nm,18.0s
**HDIL Hopedale 87.88 38 IAMs_20 IAMs_20 16 02 05.2**
comp=Z,994nm,21.0s
**HDIL Hopedale 87.88 38 P P 15 25 46.0 -0.1**
baz=321
**TXAR Lajitas Array 87.89 54 P P 15 25 46.0 -0.6**
**TXAR Lajitas Array 87.89 54 P P 15 25 46.7 +0.2**
comp=Z,2.7nm,0.5s,baz=304,slow=3.4,SNR=21
TXAR LR LR 16 02 36.6
comp=Z,496nm,19.0s,baz=304,slow=34
comp=Z,2.7nm,0.5s
**TXAR Lajitas Array 87.89 54 P P 15 25 46.0 -0.6**
**IDI Anoyia 87.90 314 IAmb IAmb 15 25 49.2**
comp=Z,39nm,0.8s
**IDI Anoyia 87.90 314 P P 15 25 45.5 -0.9**
**IDI Anoyia 87.90 314 LR LR 16 09 58.7**
comp=Z,837nm,19.1s,baz=53,slow=39
**FSK Fiskardo 87.91 319 P P 15 25 45.1 -1.2**
**W35A Tecumseh 87.92 46 IAmb IAmb 15 25 48.0**
comp=Z,114nm,1.4s
W35A IAMs_20 IAMs_20 16 12 22.7
comp=Z,624nm,19.0s
**TUL3 Leonard 87.98 45 IAmb IAmb 15 25 48.2**
comp=Z,64nm,1.2s
TUL3 IAMs_20 IAMs_20 16 09 36.2
comp=Z,601nm,20.0s
**TUL3 Leonard 87.98 45 P P 15 25 46.6 -0.2**
baz=317
**WTFS Witchita Falls 88.00 48 IAmb IAmb 15 25 48.2**
comp=Z,92nm,1.5s
**S39A Bolivar 88.01 42 IAmb IAmb 15 25 47.4**
comp=Z,68nm,1.4s
S39A IAMs_20 IAMs_20 16 07 19.8
comp=Z,759nm,20.0s
**LOR Lormes 88.02 334 eP P 15 25 46.6 -0.1**
LOR pmax pmax
comp=Z,111nm,1.2s
**NRCA Norcia 88.08 326 IAmb IAmb 15 25 48.9**
comp=Z,100nm,1.2s
**I49A Point Hope 88.11 32 IAMs_20 IAMs_20 16 09 50.9**
comp=Z,675nm,20.0s
**VLS Valsamata 88.11 319 P P 15 25 46.7 -0.6**
**ABTX Abilene, Hawle 88.11 49 IAmb IAmb 15 25 49.1**
comp=Z,83nm,1.6s
ABTX IAMs_20 IAMs_20 16 10 03.9
comp=Z,721nm,18.0s
**ABTX Abilene, Hawle 88.11 49 P P 15 25 47.1 -0.3**
baz=315
**R40A Maddies Statio 88.11 41 IAMs_20 IAMs_20 16 07 22.4**
comp=Z,602nm,20.0s
**L46A Eue Claire 88.14 35 IAmb IAmb 15 25 48.6**
comp=Z,90nm,1.1s
L46A IAMs_20 IAMs_20 16 13 14.1
comp=Z,750nm,18.0s
**ITM Ithomi 88.14 317 P P 15 25 46.5 -1.0**
**PSDA Pessada-Kefalo 88.16 319 P P 15 25 46.7 -0.8**
**KTHA Kythira Island 88.21 316 P P 15 25 46.5 -1.3**
**RLO Rose Lookout 88.22 44 IAmb IAmb 15 25 49.3**
comp=Z,106nm,1.5s
**IMMV Iera Moni Meta 88.28 315 P P 15 25 47.5 -0.7**
**OSSC Osservatorio P 88.33 328 IAmb IAmb 15 25 49.0**
comp=Z,118nm,1.9s
**U38A Gravette 88.37 43 IAmb IAmb 15 25 49.7**
comp=Z,94nm,1.6s
U38A IAMs_20 IAMs_20 16 03 54.3
comp=Z,788nm,22.0s
**PYL PYLOS 88.45 317 P P 15 25 47.4 -1.6**
**P43A Skaggs, Pawnee 88.47 38 IAMs_20 IAMs_20 16 01 58.9**
comp=Z,836nm,22.0s
**LPL La Plagne 88.48 332 eP P 15 25 49.2 0.0**
LPL pmax pmax
comp=Z,38nm,0.9s
**LPG La Plagne 88.49 332 eP P 15 25 49.6 +0.3**
LPG pmax pmax
comp=Z,49nm,0.9s
**CESX Cesi 88.50 326 IAmb IAmb 15 25 49.8**
comp=Z,52nm,1.3s
**ICQ Pointe Anglais 88.61 20 IAmb IAmb 15 25 50.9**
comp=Z,60nm,1.2s
**AVF Avril sur Loir 88.61 334 eP P 15 25 49.4 -0.1**
AVF pmax pmax
comp=Z,117nm,1.2s
**HHAR Hobbs 88.72 43 IAMs_20 IAMs_20 16 07 09.9**
comp=Z,710nm,20.0s
**FW03 Perrin-Whitt E 88.75 48 IAmb IAmb 15 25 51.9**
comp=Z,130nm,1.8s
**PLPT Palo Pinto 88.76 48 IAmb IAmb 15 25 52.1**
comp=Z,111nm,1.7s
**CCM Cathedral Cave 88.82 40 P P 15 25 49.6 -1.1**
**CCM Cathedral Cave 88.82 40 IAMs_20 IAMs_20 16 08 27.2**
comp=Z,587nm,20.0s
**CCM Cathedral Cave 88.82 40 P P 15 25 50.7 0.0**
baz=320
**CCM Cathedral Cave 88.82 40 P P 15 25 49.6 -1.1**
CCM pmax pmax
comp=Z,125nm,1.3s
CCM MLR MLR
comp=Z,600nm,20.0s
**LDAQ Lac Daran 88.87 23 IAmb IAmb 15 25 52.0**
comp=Z,56nm,0.9s
LDAQ IAMs_20 IAMs_20 16 06 33.7
comp=Z,624nm,22.0s
**SLM Saint Louis 88.89 40 IAMs_20 IAMs_20 16 01 37.0**
comp=Z,905nm,22.0s
**SADO Sadowa 88.90 29 IAmb IAmb 15 25 51.9**
comp=Z,61nm,1.4s
SADO IAMs_20 IAMs_20 16 04 49.8
comp=Z,597nm,21.0s
**SADO Sadowa 88.90 29 LR LR 16 07 39.0**
comp=Z,301nm,21.4s,baz=339,slow=37
**MGMO Mountain Grove 88.97 42 IAmb IAmb 15 25 52.3**
comp=Z,83nm,1.3s
MGMO IAMs_20 IAMs_20 16 07 46.2
comp=Z,740nm,21.0s
**Z35A Perchaven, San 89.02 47 IAmb IAmb 15 25 52.7**
comp=Z,63nm,1.1s
Z35A IAMs_20 IAMs_20 16 13 46.8
comp=Z,906nm,20.0s
**L48A N Adams 89.03 34 IAmb IAmb 15 25 53.1**
comp=Z,82nm,1.0s
L48A IAMs_20 IAMs_20 16 12 32.6
comp=Z,655nm,20.0s
**SFIN Lafayette 89.06 37 IAmb IAmb 15 25 53.1**
comp=Z,90nm,1.2s
**SFIN Lafayette 89.06 37 P P 15 25 51.4 -0.3**
baz=322,SNR=14
**AAM Ann Arbor 89.08 33 IAMs_20 IAMs_20 16 09 44.9**
comp=Z,766nm,20.0s
**AAM Ann Arbor 89.08 33 P P 15 25 51.6 -0.2**
baz=324
**MBDF Montbardon 89.13 331 eP P 15 25 52.5 +0.3**
MBDF pmax pmax
comp=Z,11nm,0.8s
**K50A Casco 89.14 32 IAMs_20 IAMs_20 16 05 31.4**
comp=Z,674nm,20.0s
**FW07 Weatherford 89.15 48 IAMs_20 IAMs_20 16 12 02.5**
comp=Z,699nm,19.0s
**X37A Clayton 89.18 45 IAMs_20 IAMs_20 16 10 39.0**
comp=Z,762nm,19.0s
**TIP Timpagrande 89.28 322 IAmb IAmb 15 25 54.4**
comp=Z,132nm,1.5s
**FVM French Village 89.29 40 IAmb IAmb 15 25 54.3**
comp=Z,100nm,1.4s
FVM IAMs_20 IAMs_20 16 04 10.7
comp=Z,645nm,21.0s
**Q44A Meyer Farm, Va 89.29 39 IAmb IAmb 15 25 54.2**
comp=Z,86nm,1.1s
Q44A IAMs_20 IAMs_20 16 02 34.5
comp=Z,936nm,22.0s
**ORIF Oris-en-Rattie 89.31 332 eP P 15 25 53.9 +1.0**
ORIF pmax pmax
comp=Z,14nm,0.7s
**N47A Urbana 89.32 35 IAmb IAmb 15 25 54.0**
comp=Z,82nm,1.1s
**TRQ Mont Tremblant 89.33 26 IAmb IAmb 15 25 54.0**
comp=Z,110nm,1.2s
**TCF Toulx Ste Croi 89.44 335 eP P 15 25 53.6 +0.2**
TCF pmax pmax
comp=Z,65nm,1.4s
**JCT Junction City 89.52 51 IAMs_20 IAMs_20 16 02 54.3**
comp=Z,691nm,20.0s
**JCT Junction City 89.52 51 P P 15 25 53.8 -0.3**
baz=315
**LMQ La Malbaie 89.52 23 IAMs_20 IAMs_20 16 07 23.9**
comp=Z,865nm,22.0s
**SBF Sospel 89.60 330 eP P 15 25 54.0 -0.3**
SBF pmax pmax
comp=Z,25nm,0.8s
**QUIF Quistinic 89.67 339 eP P 15 25 54.0 -0.4**
QUIF pmax pmax
comp=Z,36nm,1.3s
**T42A Van Buren 89.67 41 IAmb IAmb 15 25 55.9**
comp=Z,77nm,1.3s
**DELO Deloro Mine 89.69 28 IAmb IAmb 15 25 55.8**
comp=Z,69nm,1.1s
DELO IAMs_20 IAMs_20 16 06 47.7
comp=Z,715nm,20.0s
**VIVF Saint-Julien-l 89.81 332 eP P 15 25 55.1 -0.1**
VIVF pmax pmax
comp=Z,17nm,0.8s
**WHTX Lake Whitney, 89.86 48 IAmb IAmb 15 25 57.2**
comp=Z,49nm,1.0s
WHTX IAMs_20 IAMs_20 16 11 15.1
comp=Z,835nm,21.0s
**WHTX Lake Whitney, 89.86 48 P P 15 25 55.6 0.0**
baz=316,SNR=6.0
**OLIL Olney 89.87 38 IAMs_20 IAMs_20 16 03 04.0**
comp=Z,768nm,21.0s
**N49A Columbus Grove 89.97 34 IAmb IAmb 15 25 57.4**
comp=Z,56nm,1.1s
N49A IAMs_20 IAMs_20 16 05 19.3
comp=Z,502nm,20.0s
**FCAR Ozark Folk Cen 89.99 42 IAmb IAmb 15 25 57.0**
comp=Z,56nm,1.1s
FCAR IAMs_20 IAMs_20 16 08 22.4
comp=Z,657nm,22.0s
**O48B Farmland 90.06 35 IAmb IAmb 15 25 57.5**
comp=Z,43nm,0.9s
**O48B Farmland 90.06 35 P P 15 25 56.0 -0.5**
baz=323

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PGF** | **Pioggiola** | **90.07** | **329** | *eP* | **P** | **15 25 55.6** | **-1.0** |
| PGF | | | | pmax | pmax | | |
| | comp=Z,44nm,1.1s | | | | | | |
| **M50A** | **Fremont** | **90.08** | **33** | IAMs_20 | IAMs_20 | 16 05 47.3 | |
| | comp=Z,688nm,21.0s | | | | | | |
| **S44A** | **Carbondale** | **90.11** | **40** | IAmb | IAmb | 15 25 58.1 | |
| | comp=Z,67nm,1.1s | | | | | | |
| S44A | | | | IAMs_20 | IAMs_20 | 16 02 13.1 | |
| | comp=Z,758nm,22.0s | | | | | | |
| **WBO** | **Williamsburg** | **90.14** | **27** | IAmb | IAmb | 15 25 57.6 | |
| | comp=Z,54nm,1.0s | | | | | | |
| **CGM3** | **Cape Girardeau** | **90.21** | **40** | IAmb | IAmb | 15 25 58.5 | |
| | comp=Z,106nm,1.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **90.21** | **41** | IAmb | IAmb | 15 25 58.6 | |
| | comp=Z,95nm,1.2s | | | | | | |
| PBMO | | | | IAMs_20 | IAMs_20 | 16 08 54.1 | |
| | comp=Z,626nm,22.0s | | | | | | |
| **MIAR** | **Mount Ida** | **90.21** | **44** | IAmb | IAmb | 15 25 58.8 | |
| | comp=Z,72nm,1.1s | | | | | | |
| MIAR | | | | IAMs_20 | IAMs_20 | 16 05 06.3 | |
| | comp=Z,768nm,21.0s | | | | | | |
| **MIAR** | **Mount Ida** | **90.21** | **44** | P | **P** | **15 25 57.2** | **0.0** |
| | baz=318,SNR=34 | | | | | | |
| **MNTQ** | **Montreal, Queb** | **90.28** | **25** | IAmb | IAmb | 15 25 58.5 | |
| | comp=Z,76nm,1.1s | | | | | | |
| **D62A** | **Allapoint, All** | **90.32** | **22** | IAMs_20 | IAMs_20 | 16 08 41.1 | |
| | comp=Z,851nm,19.0s | | | | | | |
| **J54A** | **Appleton** | **90.35** | **30** | IAmb | IAmb | 15 25 59.3 | |
| | comp=Z,63nm,1.1s | | | | | | |
| **WHAR** | **Wooly Hollow** | **90.36** | **43** | IAmb | IAmb | 15 25 59.0 | |
| | comp=Z,106nm,1.2s | | | | | | |
| WHAR | | | | IAMs_20 | IAMs_20 | 16 08 15.1 | |
| | comp=Z,680nm,19.0s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **90.37** | **46** | IAMs_20 | IAMs_20 | 16 12 11.6 | |
| | comp=Z,717nm,19.0s | | | | | | |
| **LCAR** | **Lake Charles** | **90.37** | **42** | IAmb | IAmb | 15 25 59.0 | |
| | comp=Z,93nm,1.6s | | | | | | |
| LCAR | | | | IAMs_20 | IAMs_20 | 16 03 24.4 | |
| | comp=Z,534nm,20.0s | | | | | | |
| **CEL** | **Celeste** | **90.42** | **322** | IAmb | IAmb | 15 25 59.9 | |
| | comp=Z,71nm,1.2s | | | | | | |
| **PECO** | **Prince Edward** | **90.42** | **28** | IAmb | IAmb | 15 25 59.2 | |
| | comp=Z,65nm,1.1s | | | | | | |
| **O49A** | **Covington** | **90.49** | **35** | IAMs_20 | IAMs_20 | 16 03 48.2 | |
| | comp=Z,891nm,21.0s | | | | | | |
| **RJF** | **Les Rejaudoux** | **90.53** | **335** | *eP* | **P** | **15 25 58.8** | **+0.3** |
| RJF | | | | pmax | pmax | | |
| | comp=Z,60nm,1.2s | | | | | | |
| **P48A** | **Milroy** | **90.57** | **36** | IAmb | IAmb | 15 26 00.0 | |
| | comp=Z,82nm,1.6s | | | | | | |
| **E62A** | **Clayton Lake** | **90.60** | **22** | IAMs_20 | IAMs_20 | 16 14 10.4 | |
| | comp=Z,672nm,22.0s | | | | | | |
| **435B** | **Jarrell** | **90.65** | **49** | IAMs_20 | IAMs_20 | 16 08 40.1 | |
| | comp=Z,667nm,19.0s | | | | | | |
| **435B** | **Jarrell** | **90.65** | **49** | P | **P** | **15 25 59.2** | **-0.2** |
| | baz=316 | | | | | | |
| **PARMO** | **Parma** | **90.65** | **40** | IAMs_20 | IAMs_20 | 16 09 20.6 | |
| | comp=Z,656nm,21.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **90.66** | **44** | IAMs_20 | IAMs_20 | 16 08 23.2 | |
| | comp=Z,618nm,21.0s | | | | | | |
| **CAF** | **Calviac** | **90.68** | **334** | *eP* | **P** | **15 25 59.9** | **+0.6** |
| CAF | | | | pmax | pmax | | |
| | comp=Z,94nm,1.2s | | | | | | |
| **J55A** | **Hilton** | **90.68** | **29** | IAmb | IAmb | 15 26 00.5 | |
| | comp=Z,72nm,1.1s | | | | | | |
| J55A | | | | IAMs_20 | IAMs_20 | 16 05 53.9 | |
| | comp=Z,880nm,22.0s | | | | | | |
| **USIN** | **University of** | **90.68** | **38** | IAMs_20 | IAMs_20 | 16 14 17.5 | |
| | comp=Z,743nm,20.0s | | | | | | |
| **M52A** | **Chesterland** | **90.69** | **32** | IAMs_20 | IAMs_20 | 16 05 00.4 | |
| | comp=Z,712nm,22.0s | | | | | | |
| **LONY** | **Lake Ozonia** | **90.71** | **26** | IAMs_20 | IAMs_20 | 16 09 37.6 | |
| | comp=Z,787nm,20.0s | | | | | | |
| **LONY** | **Lake Ozonia** | **90.71** | **26** | P | **P** | **15 25 58.8** | **-0.6** |
| | baz=330 | | | | | | |
| **UALR** | **University of** | **90.71** | **43** | IAMs_20 | IAMs_20 | 16 06 23.6 | |
| | comp=Z,799nm,21.0s | | | | | | |
| **N51A** | **Ashland** | **90.77** | **33** | IAMs_20 | IAMs_20 | 16 08 48.5 | |
| | comp=Z,792nm,21.0s | | | | | | |
| **ERPA** | **Erie** | **90.78** | **31** | IAmb | IAmb | 15 26 01.4 | |
| | comp=Z,103nm,1.3s | | | | | | |
| ERPA | | | | IAMs_20 | IAMs_20 | 16 09 37.7 | |
| | comp=Z,774nm,20.0s | | | | | | |
| **ERPA** | **Erie** | **90.78** | **31** | P | **P** | **15 25 59.5** | **-0.3** |
| | baz=327 | | | | | | |
| **237A** | **Washetta, Mont** | **90.81** | **47** | IAMs_20 | IAMs_20 | 16 11 38.4 | |
| | comp=Z,663nm,21.0s | | | | | | |
| **P49A** | **Miami Univ. Ec** | **90.84** | **36** | IAmb | IAmb | 15 26 01.3 | |
| | comp=Z,69nm,1.2s | | | | | | |
| **P49A** | **Miami Univ. Ec** | **90.84** | **36** | P | **P** | **15 25 59.6** | **-0.5** |
| | baz=324 | | | | | | |
| **PVMO** | **Portageville** | **90.86** | **41** | IAMs_20 | IAMs_20 | 16 04 23.4 | |
| | comp=Z,641nm,21.0s | | | | | | |
| **T45A** | **Paducah** | **90.94** | **40** | IAMs_20 | IAMs_20 | 16 05 09.1 | |
| | comp=Z,740nm,22.0s | | | | | | |
| **BATG** | **Bathurst New B** | **90.99** | **20** | IAmb | IAmb | 15 26 02.4 | |
| | comp=Z,56nm,1.0s | | | | | | |
| **HICK** | **Hickman** | **91.01** | **40** | IAMs_20 | IAMs_20 | 16 10 01.2 | |
| | comp=Z,690nm,21.0s | | | | | | |
| **J56A** | **Wolcott** | **91.04** | **29** | IAmb | IAmb | 15 26 02.0 | |
| | comp=Z,64nm,1.2s | | | | | | |
| J56A | | | | IAMs_20 | IAMs_20 | 16 09 22.3 | |
| | comp=Z,963nm,22.0s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **91.06** | **34** | IAmb | IAmb | 15 26 02.5 | |
| | comp=Z,39nm,1.1s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **91.06** | **34** | P | **P** | **15 26 00.7** | **-0.4** |
| | baz=325 | | | | | | |
| **M53A** | **WI Miller and** | **91.06** | **32** | IAmb | IAmb | 15 26 02.6 | |
| | comp=Z,78nm,1.5s | | | | | | |
| M53A | | | | IAMs_20 | IAMs_20 | 16 08 54.2 | |
| | comp=Z,640nm,20.0s | | | | | | |
| **M53A** | **WI Miller and** | **91.06** | **32** | P | **P** | **15 26 00.7** | **-0.4** |
| | baz=326 | | | | | | |
| **WVNY** | **West Valley, N** | **91.10** | **30** | IAMs_20 | IAMs_20 | 16 09 07.0 | |
| | comp=Z,667nm,21.0s | | | | | | |
| **DRLN** | **Deer Lake** | **91.10** | **14** | IAmb | IAmb | 15 26 02.5 | |
| | comp=Z,117nm,1.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **91.11** | **44** | IAmb | IAmb | 15 26 03.0 | |
| | comp=Z,87nm,1.1s | | | | | | |
| WLAR | | | | IAMs_20 | IAMs_20 | 16 11 12.0 | |
| | comp=Z,708nm,19.0s | | | | | | |
| **ALLY** | **Alegheny Colle** | **91.11** | **32** | IAMs_20 | IAMs_20 | 16 11 27.4 | |
| | comp=Z,704nm,19.0s | | | | | | |
| **F62A** | **Pittston Farm,** | **91.11** | **23** | IAmb | IAmb | 15 26 03.0 | |
| | comp=Z,86nm,1.1s | | | | | | |
| **WCI** | **Wyandotte Cave** | **91.14** | **37** | P | **P** | **15 26 01.2** | **-0.3** |
| WCI | | | | IAmb | IAmb | 15 26 02.9 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **WCI** | **Wyandotte Cave** | **91.14** | **37** | IAMs_20 | IAMs_20 | 16 10 51.6 | |
| | comp=Z,803nm,21.0s | | | | | | |
| **WCI** | **Wyandotte Cave** | **91.14** | **37** | P | **P** | **15 26 01.4** | **-0.1** |
| | baz=323 | | | | | | |
| **WCI** | **Wyandotte Cave** | **91.14** | **37** | P | **P** | **15 26 01.2** | **-0.3** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,44nm,1.1s | | | | | | |
| WCI | | | | MLR | MLR | | |
| | comp=Z,800nm,21.0s | | | | | | |
| **LNXT** | **Lenox** | **91.21** | **41** | IAMs_20 | IAMs_20 | 16 10 25.6 | |
| | comp=Z,634nm,22.0s | | | | | | |
| **833A** | **Chaparral WMA,** | **91.29** | **52** | P | **P** | **15 26 02.3** | **0.0** |
| | baz=315 | | | | | | |
| **UTMT** | **University of** | **91.35** | **40** | IAMs_20 | IAMs_20 | 16 10 00.0 | |
| | comp=Z,706nm,19.0s | | | | | | |
| **NCB** | **Newcomb** | **91.40** | **27** | IAmb | IAmb | 15 26 04.0 | |
| | comp=Z,63nm,1.1s | | | | | | |
| NCB | | | | IAMs_20 | IAMs_20 | 16 08 49.8 | |
| | comp=Z,809nm,21.0s | | | | | | |
| **HALT** | **Halls** | **91.44** | **41** | IAMs_20 | IAMs_20 | 16 11 53.6 | |
| | comp=Z,646nm,18.0s | | | | | | |
| **N53A** | **Lisbon** | **91.52** | **32** | IAmb | IAmb | 15 26 04.7 | |
| | comp=Z,65nm,1.5s | | | | | | |
| N53A | | | | IAMs_20 | IAMs_20 | 16 05 37.3 | |
| | comp=Z,843nm,20.0s | | | | | | |
| **F63A** | **Nahmakanta, Br** | **91.55** | **23** | IAMs_20 | IAMs_20 | 16 12 41.6 | |
| | comp=Z,597nm,21.0s | | | | | | |
| **J58A** | **Remsen** | **91.55** | **28** | IAmb | IAmb | 15 26 04.6 | |
| | comp=Z,84nm,1.4s | | | | | | |
| J58A | | | | IAMs_20 | IAMs_20 | 16 11 40.9 | |
| | comp=Z,720nm,21.0s | | | | | | |
| **VT1** | **Waterbury** | **91.60** | **25** | IAmb | IAmb | 15 26 05.2 | |
| | comp=Z,85nm,1.3s | | | | | | |
| VT1 | | | | IAMs_20 | IAMs_20 | 16 08 12.3 | |
| | comp=Z,702nm,21.0s | | | | | | |
| **Z41A** | **Richland Creek** | **91.60** | **45** | IAMs_20 | IAMs_20 | 16 09 30.0 | |
| | comp=Z,651nm,20.0s | | | | | | |
| **F64A** | **Sherman** | **91.63** | **22** | IAmb | IAmb | 15 26 05.1 | |
| | comp=Z,35nm,1.0s | | | | | | |
| F64A | | | | IAMs_20 | IAMs_20 | 16 09 29.7 | |
| | comp=Z,803nm,21.0s | | | | | | |
| **K57A** | **Scipio Center** | **91.63** | **29** | IAmb | IAmb | 15 26 05.0 | |
| | comp=Z,115nm,1.5s | | | | | | |
| K57A | | | | IAMs_20 | IAMs_20 | 16 09 40.1 | |
| | comp=Z,779nm,21.0s | | | | | | |
| **NATX** | **Nacogdoches** | **91.66** | **47** | IAMs_20 | IAMs_20 | 16 12 57.7 | |
| | comp=Z,795nm,19.0s | | | | | | |
| **NATX** | **Nacogdoches** | **91.66** | **47** | P | **P** | **15 26 03.8** | **-0.2** |
| | baz=316 | | | | | | |
| **O52A** | **Adamsville** | **91.66** | **33** | IAmb | IAmb | 15 26 05.2 | |
| | comp=Z,118nm,1.8s | | | | | | |
| O52A | | | | IAMs_20 | IAMs_20 | 16 09 24.1 | |
| | comp=Z,654nm,20.0s | | | | | | |
| **CCAR** | **Cane Creek** | **91.67** | **44** | IAMs_20 | IAMs_20 | 16 10 12.9 | |
| | comp=Z,818nm,20.0s | | | | | | |
| **ATD** | **Arta Tunnel** | **91.68** | **286** | IAmb | IAmb | 15 26 06.7 | |
| | comp=Z,72nm,1.1s | | | | | | |
| ATD | | | | IAMs_20 | IAMs_20 | 16 12 37.5 | |
| | comp=Z,539nm,19.0s | | | | | | |
| **ATD** | **Arta Tunnel** | **91.68** | **286** | LR | LR | 16 12 49.1 | |
| | comp=Z,24nm,18.0s,baz=40,slow=39 | | | | | | |
| **T47A** | **Sharon Grove** | **91.73** | **39** | IAmb | IAmb | 15 26 05.7 | |
| | comp=Z,46nm,1.1s | | | | | | |
| T47A | | | | IAMs_20 | IAMs_20 | 16 03 60.0 | |
| | comp=Z,872nm,22.0s | | | | | | |
| **L56A** | **Greenwood** | **91.74** | **30** | IAmb | IAmb | 15 26 05.8 | |
| | comp=Z,108nm,1.6s | | | | | | |
| **VAE** | **Valguarnera** | **91.75** | **322** | LR | LR | 16 12 57.6 | |
| | comp=Z,2µm,18.9s,baz=76,slow=39 | | | | | | |
| **O53A** | **New Philadelph** | **91.82** | **33** | IAmb | IAmb | 15 26 06.0 | |
| | comp=Z,62nm,1.4s | | | | | | |
| O53A | | | | IAMs_20 | IAMs_20 | 16 07 03.3 | |
| | comp=Z,800nm,20.0s | | | | | | |
| **O53A** | **New Philadelph** | **91.82** | **33** | P | **P** | **15 26 04.7** | **+0.1** |
| | baz=326,SNR=5.9 | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **91.89** | **23** | IAmb | IAmb | 15 26 06.7 | |
| | comp=Z,62nm,1.1s | | | | | | |
| PKME | | | | IAMs_20 | IAMs_20 | 16 12 21.6 | |
| | comp=Z,840nm,21.0s | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **91.89** | **23** | P | **P** | **15 26 05.3** | **+0.5** |
| | baz=334 | | | | | | |
| **P52A** | **Corning** | **91.93** | **34** | IAmb | IAmb | 15 26 06.0 | |
| | comp=Z,56nm,1.4s | | | | | | |
| P52A | | | | IAMs_20 | IAMs_20 | 16 11 52.1 | |
| | comp=Z,598nm,19.0s | | | | | | |
| **P52A** | **Corning** | **91.93** | **34** | P | **P** | **15 26 04.5** | **-0.6** |
| | baz=325 | | | | | | |
| **LBNH** | **Lisbon** | **91.96** | **25** | IAmb | IAmb | 15 26 07.2 | |
| | comp=Z,53nm,1.4s | | | | | | |
| LBNH | | | | IAMs_20 | IAMs_20 | 16 12 31.5 | |
| | comp=Z,577nm,19.0s | | | | | | |
| **LBNH** | **Lisbon** | **91.96** | **25** | P | **P** | **15 26 05.1** | **-0.1** |
| | baz=332 | | | | | | |
| **MTLF** | **Montolieu** | **92.01** | **333** | *eP* | **P** | **15 26 05.7** | **+0.3** |
| MTLF | | | | pmax | pmax | | |
| | comp=Z,53nm,1.2s | | | | | | |
| **R50A** | **Paris** | **92.03** | **36** | IAmb | IAmb | 15 26 07.0 | |
| | comp=Z,46nm,1.3s | | | | | | |
| **WVT** | **Waverly** | **92.04** | **40** | P | **P** | **15 26 05.0** | **-0.7** |
| **WVT** | **Waverly** | **92.04** | **40** | IAMs_20 | IAMs_20 | 16 05 42.4 | |
| | comp=Z,839nm,22.0s | | | | | | |
| **WVT** | **Waverly** | **92.04** | **40** | P | **P** | **15 26 05.3** | **-0.3** |
| | baz=322 | | | | | | |
| **WVT** | **Waverly** | **92.04** | **40** | P | **P** | **15 26 05.0** | **-0.7** |
| WVT | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | |
| WVT | | | | MLR | MLR | | |
| | comp=Z,800nm,22.0s | | | | | | |
| **ACCN** | **Adirondack Com** | **92.11** | **27** | IAmb | IAmb | 15 26 07.4 | |
| | comp=Z,82nm,1.4s | | | | | | |
| **SSFO** | **Shawnee State** | **92.22** | **35** | IAmb | IAmb | 15 26 07.8 | |
| | comp=Z,43nm,1.0s | | | | | | |
| **O54A** | **Avella** | **92.23** | **32** | IAMs_20 | IAMs_20 | 16 09 42.2 | |
| | comp=Z,832nm,20.0s | | | | | | |
| **BINY** | **Binghamton** | **92.29** | **29** | IAmb | IAmb | 15 26 08.2 | |
| | comp=Z,86nm,1.6s | | | | | | |
| BINY | | | | IAMs_20 | IAMs_20 | 16 10 20.5 | |
| | comp=Z,594nm,20.0s | | | | | | |
| **BINY** | **Binghamton** | **92.29** | **29** | P | **P** | **15 26 06.3** | **-0.4** |
| | baz=330 | | | | | | |
| **HKT** | **Hockley** | **92.29** | **49** | IAMs_20 | IAMs_20 | 16 11 40.3 | |
| | comp=Z,811nm,20.0s | | | | | | |
| **HKT** | **Hockley** | **92.29** | **49** | *deP* | **P** | **15 26 06.9** | **0.0** |
| HKT | | | | pmax | pmax | | |
| | comp=Z,49nm,1.7s | | | | | | |
| **HNH** | **Hanover** | **92.31** | **25** | IAmb | IAmb | 15 26 08.8 | |
| | comp=Z,42nm,1.3s | | | | | | |
| HNH | | | | IAMs_20 | IAMs_20 | 16 11 33.8 | |
| | comp=Z,601nm,20.0s | | | | | | |
| **P53A** | **Whipple** | **92.37** | **34** | IAMs_20 | IAMs_20 | 16 14 08.9 | |
| | comp=Z,658nm,20.0s | | | | | | |
| **WVL** | **Waterville** | **92.40** | **23** | IAmb | IAmb | 15 26 08.9 | |
| | comp=Z,104nm,1.5s | | | | | | |
| WVL | | | | IAMs_20 | IAMs_20 | 16 08 43.2 | |
| | comp=Z,813nm,21.0s | | | | | | |
| **Q52A** | **Bidwell** | **92.42** | **34** | IAmb | IAmb | 15 26 08.3 | |
| | comp=Z,88nm,1.8s | | | | | | |
| Q52A | | | | IAMs_20 | IAMs_20 | 16 14 53.2 | |
| | comp=Z,793nm,18.0s | | | | | | |
| **G65A** | **Princeton** | **92.46** | **22** | IAmb | IAmb | 15 26 09.2 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **I62A** | **Tamworth** | **92.48** | **25** | IAMs_20 | IAMs_20 | 16 07 51.3 | |
| | comp=Z,764nm,21.0s | | | | | | |
| **OXF** | **Oxford** | **92.48** | **42** | IAMs_20 | IAMs_20 | 16 16 00.2 | |
| | comp=Z,774nm,18.0s | | | | | | |
| **OXF** | **Oxford** | **92.48** | **42** | P | **P** | **15 26 07.4** | **-0.3** |
| | baz=321 | | | | | | |
| **J61A** | **Chester** | **92.53** | **26** | IAmb | IAmb | 15 26 09.7 | |
| | comp=Z,66nm,1.6s | | | | | | |
| J61A | | | | IAMs_20 | IAMs_20 | 16 08 52.8 | |
| | comp=Z,656nm,19.0s | | | | | | |
| **I63A** | **Otisfield** | **92.57** | **24** | IAmb | IAmb | 15 26 10.3 | |
| | comp=Z,83nm,1.2s | | | | | | |
| I63A | | | | IAMs_20 | IAMs_20 | 16 09 20.6 | |
| | comp=Z,891nm,21.0s | | | | | | |
| **M57A** | **Sunshine Farm,** | **92.59** | **30** | IAmb | IAmb | 15 26 09.8 | |
| | comp=Z,32nm,1.0s | | | | | | |
| M57A | | | | IAMs_20 | IAMs_20 | 16 06 26.4 | |
| | comp=Z,805nm,21.0s | | | | | | |
| **HBVL** | **Hebbronville** | **92.63** | **53** | IAmb | IAmb | 15 26 11.3 | |
| | comp=Z,90nm,1.5s | | | | | | |
| **LMN** | **Caledonia Moun** | **92.64** | **20** | IAmb | IAmb | 15 26 09.8 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **L59A** | **Walton** | **92.65** | **28** | IAMs_20 | IAMs_20 | 16 14 41.0 | |
| | comp=Z,884nm,20.0s | | | | | | |
| **GGN** | **Saint George** | **92.75** | **21** | IAmb | IAmb | 15 26 10.2 | |
| | comp=Z,34nm,1.1s | | | | | | |
| GGN | | | | IAMs_20 | IAMs_20 | 16 14 05.3 | |
| | comp=Z,860nm,20.0s | | | | | | |
| **U49A** | **Red Boiling Sp** | **92.75** | **38** | IAMs_20 | IAMs_20 | 16 04 33.1 | |
| | comp=Z,874nm,22.0s | | | | | | |
| **143A** | **Socs Landing,** | **92.79** | **44** | IAMs_20 | IAMs_20 | 16 11 10.4 | |
| | comp=Z,611nm,18.0s | | | | | | |
| **CLTN** | **Cedars of Leba** | **92.82** | **39** | IAMs_20 | IAMs_20 | 16 04 33.0 | |
| | comp=Z,822nm,22.0s | | | | | | |
| **V48A** | **Smith Brothers** | **92.85** | **39** | IAMs_20 | IAMs_20 | 16 06 28.7 | |
| | comp=Z,707nm,22.0s | | | | | | |
| **SSPA** | **Standing Stone** | **92.88** | **31** | IAMs_20 | IAMs_20 | 16 15 11.3 | |
| | comp=Z,621nm,19.0s | | | | | | |
| **SSPA** | **Standing Stone** | **92.88** | **31** | P | **P** | **15 26 09.1** | **-0.4** |
| | baz=328 | | | | | | |
| **MCWV** | **Mont Chateau** | **92.90** | **32** | IAmb | IAmb | 15 26 11.2 | |
| | comp=Z,44nm,1.3s | | | | | | |
| MCWV | | | | IAMs_20 | IAMs_20 | 16 05 32.7 | |
| | comp=Z,888nm,22.0s | | | | | | |
| **MCWV** | **Mont Chateau** | **92.90** | **32** | P | **P** | **15 26 09.4** | **-0.2** |
| | baz=327 | | | | | | |
| **Y45A** | **Yeager Farm, C** | **92.91** | **42** | IAMs_20 | IAMs_20 | 16 07 20.4 | |
| | comp=Z,771nm,21.0s | | | | | | |
| **KSPA** | **Keystone Colle** | **92.93** | **29** | IAMs_20 | IAMs_20 | 16 07 23.3 | |
| | comp=Z,784nm,21.0s | | | | | | |
| **EMMW** | **East Machias** | **92.94** | **22** | IAmb | IAmb | 15 26 11.3 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **CEST** | **Esterri de Car** | **93.00** | **333** | IAMs_20 | IAMs_20 | 16 12 51.0 | |
| | comp=Z,2µm,20.0s | | | | | | |
| **Q54A** | **Coxs Mills** | **93.03** | **33** | IAMs_20 | IAMs_20 | 16 13 38.4 | |
| | comp=Z,656nm,19.0s | | | | | | |
| **N58A** | **Sunbury** | **93.17** | **30** | IAmb | IAmb | 15 26 11.2 | |
| | comp=Z,105nm,2.0s | | | | | | |
| N58A | | | | IAMs_20 | IAMs_20 | 16 12 58.0 | |
| | comp=Z,618nm,19.0s | | | | | | |
| **441A** | **DeRidder** | **93.25** | **46** | IAMs_20 | IAMs_20 | 16 09 31.8 | |
| | comp=Z,695nm,20.0s | | | | | | |
| **L61B** | **Northampton** | **93.28** | **26** | P | **P** | **15 26 10.7** | **-0.6** |
| | baz=332 | | | | | | |
| **ETSF** | **Etsaut** | **93.36** | **335** | *eP* | **P** | **15 26 12.6** | **+0.9** |
| ETSF | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **HRV** | **Adam Dziewonsk** | **93.62** | **26** | IAMs_20 | IAMs_20 | 16 14 07.4 | |
| | comp=Z,719nm,20.0s | | | | | | |
| **HRV** | **Adam Dziewonsk** | **93.62** | **26** | P | **P** | **15 26 13.3** | **+0.5** |
| | baz=333 | | | | | | |
| **Q56A** | **Snyder Ridge,** | **93.69** | **32** | IAMs_20 | IAMs_20 | 16 08 02.8 | |
| | comp=Z,630nm,19.0s | | | | | | |
| **SWET** | **Sewanee** | **93.71** | **39** | IAMs_20 | IAMs_20 | 16 10 11.6 | |
| | comp=Z,734nm,19.0s | | | | | | |
| **X48A** | **Hartselle** | **93.75** | **40** | IAMs_20 | IAMs_20 | 16 06 33.6 | |
| | comp=Z,597nm,22.0s | | | | | | |
| **TZTN** | **Tazewell** | **93.80** | **37** | P | **P** | **15 26 13.1** | **-0.7** |
| | baz=324 | | | | | | |
| **S54A** | **Dingess, Beckl** | **93.80** | **34** | IAMs_20 | IAMs_20 | 16 07 49.7 | |
| | comp=Z,893nm,22.0s | | | | | | |
| **WES** | **Weston** | **93.81** | **25** | IAMs_20 | IAMs_20 | 16 08 58.4 | |
| | comp=Z,747nm,20.0s | | | | | | |
| **P57A** | **Homestead Farm** | **93.81** | **31** | IAMs_20 | IAMs_20 | 16 12 15.8 | |
| | comp=Z,744nm,20.0s | | | | | | |
| **GBN** | **Guysborough** | **93.89** | **18** | IAmb | IAmb | 15 26 16.1 | |
| | comp=Z,74nm,1.2s | | | | | | |
| GBN | | | | IAMs_20 | IAMs_20 | 16 13 17.4 | |
| | comp=Z,788nm,21.0s | | | | | | |
| **R55A** | **Marlinton** | **93.92** | **33** | IAMs_20 | IAMs_20 | 16 10 06.0 | |
| | comp=Z,697nm,21.0s | | | | | | |
| **UCCT** | **U. Connecticut** | **94.02** | **26** | IAMs_20 | IAMs_20 | 16 10 26.0 | |
| | comp=Z,820nm,21.0s | | | | | | |
| **MVL** | **Millersville** | **94.04** | **30** | IAMs_20 | IAMs_20 | 16 09 22.8 | |
| | comp=Z,771nm,20.0s | | | | | | |
| **PAL** | **Palisades** | **94.10** | **28** | IAMs_20 | IAMs_20 | 16 14 29.4 | |
| | comp=Z,552nm,20.0s | | | | | | |
| **PAL** | **Palisades** | **94.10** | **28** | P | **P** | **15 26 13.5** | **-1.6** |
| | baz=331 | | | | | | |
| **146A** | **Union** | **94.11** | **43** | IAMs_20 | IAMs_20 | 16 12 47.4 | |
| | comp=Z,586nm,20.0s | | | | | | |
| **Z47A** | **Carrollton** | **94.20** | **42** | IAMs_20 | IAMs_20 | 16 13 10.6 | |
| | comp=Z,823nm,20.0s | | | | | | |
| **CPCT** | **Cooper Cave** | **94.21** | **38** | IAMs_20 | IAMs_20 | 16 05 50.9 | |
| | comp=Z,881nm,22.0s | | | | | | |
| **N62A** | **Caumsett State** | **94.33** | **28** | IAMs_20 | IAMs_20 | 16 07 47.4 | |
| | comp=Z,704nm,22.0s | | | | | | |
| **V52A** | **Sevierville** | **94.34** | **37** | IAMs_20 | IAMs_20 | 16 05 30.3 | |
| | comp=Z,827nm,21.0s | | | | | | |
| **L64A** | **Middleborough** | **94.37** | **25** | IAMs_20 | IAMs_20 | 16 14 15.3 | |
| | comp=Z,619nm,19.0s | | | | | | |
| **FPAL** | **Fort Paine** | **94.40** | **39** | IAMs_20 | IAMs_20 | 16 07 13.0 | |
| | comp=Z,763nm,22.0s | | | | | | |
| **Y49A** | **Blount Mountai** | **94.54** | **40** | IAMs_20 | IAMs_20 | 16 06 58.6 | |
| | comp=Z,827nm,21.0s | | | | | | |
| **BLA** | **Blacksburg** | **94.68** | **34** | IAMs_20 | IAMs_20 | 16 09 15.1 | |
| | comp=Z,830nm,20.0s | | | | | | |
| **BLA** | **Blacksburg** | **94.68** | **34** | P | **P** | **15 26 17.2** | **-0.7** |
| | baz=326 | | | | | | |
| **X51A** | **Calhoun** | **94.76** | **39** | IAMs_20 | IAMs_20 | 16 09 18.2 | |
| | comp=Z,823nm,22.0s | | | | | | |
| **M65A** | **Busby, Falmout** | **94.77** | **25** | IAMs_20 | IAMs_20 | 16 12 45.9 | |
| | comp=Z,678nm,20.0s | | | | | | |
| **W52A** | **Murphy** | **94.79** | **38** | IAMs_20 | IAMs_20 | 16 07 28.9 | |
| | comp=Z,684nm,20.0s | | | | | | |
| **346A** | **Big Creek Wild** | **94.85** | **44** | IAMs_20 | IAMs_20 | 16 11 17.1 | |
| | comp=Z,602nm,18.0s | | | | | | |
| **S57A** | **Dark Hollow, R** | **94.86** | **33** | IAMs_20 | IAMs_20 | 16 12 39.9 | |
| | comp=Z,736nm,21.0s | | | | | | |
| **LRAL** | **Lakeview Retre** | **94.89** | **41** | IAMs_20 | IAMs_20 | 16 12 13.8 | |
| | comp=Z,625nm,20.0s | | | | | | |
| **LRAL** | **Lakeview Retre** | **94.89** | **41** | P | **P** | **15 26 17.8** | **-1.0** |
| | baz=322 | | | | | | |
| **R58B** | **Mineral** | **95.15** | **32** | IAMs_20 | IAMs_20 | 16 16 40.3 | |
| | comp=Z,739nm,20.0s | | | | | | |
| **CBN** | **Corbin Frederi** | **95.16** | **32** | IAMs_20 | IAMs_20 | 16 07 51.5 | |
| | comp=Z,840nm,20.0s | | | | | | |
| **CBN** | **Corbin Frederi** | **95.16** | **32** | P | **P** | **15 26 18.4** | **-1.6** |
| | baz=328 | | | | | | |
| **BG3** | **Lake Jocassee** | **95.35** | **37** | IAMs_20 | IAMs_20 | 16 06 00.9 | |
| | comp=Z,873nm,21.0s | | | | | | |
| **KEST** | **Kesra** | **95.55** | **324** | P | **P** | **15 26 22.3** | **+0.3** |
| | comp=Z,11nm,0.9s,baz=277,slow=2.7,SNR=7.1 | | | | | | |
| KEST | | | | PP | **PP** | **15 30 12.9** | **+0.7** |
| | comp=Z,7.1nm,1.0s,baz=336,slow=6.9,SNR=5.9 | | | | | | |
| KEST | | | | LR | LR | 16 14 50.4 | |
| | comp=Z,3µm,18.4s,baz=344,slow=39 | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **R61A** | **Willards** | **95.87** | **30** | IAMs_20 | IAMs_20 | 16 09 43.4 | |
| | comp=Z,682nm,21.0s | | | | | | |
| **KMSC** | **Kings Mountain** | **95.98** | **36** | P | **P** | **15 26 23.1** | **-0.7** |
| | baz=326 | | | | | | |
| **250A** | **Grady** | **96.10** | **41** | IAMs_20 | IAMs_20 | 16 06 40.9 | |
| | comp=Z,754nm,20.0s | | | | | | |
| **T59A** | **Double "B" Far** | **96.13** | **32** | IAMs_20 | IAMs_20 | 16 11 27.2 | |
| | comp=Z,631nm,20.0s | | | | | | |
| **S61A** | **Accomac** | **96.30** | **31** | IAMs_20 | IAMs_20 | 16 09 45.7 | |
| | comp=Z,726nm,20.0s | | | | | | |
| **BRAL** | **Brewton** | **96.32** | **42** | P | **P** | **15 26 25.4** | **0.0** |
| | baz=322 | | | | | | |
| **152A** | **Waverly Hall** | **96.34** | **40** | IAMs_20 | IAMs_20 | 16 09 05.3 | |
| | comp=Z,510nm,20.0s | | | | | | |
| **GOGA** | **Godfrey** | **96.37** | **38** | IAmb | IAmb | 15 26 26.8 | |
| | comp=Z,49nm,1.7s | | | | | | |
| **GOGA** | **Godfrey** | **96.37** | **38** | IAMs_20 | IAMs_20 | 16 06 10.0 | |
| | comp=Z,796nm,20.0s | | | | | | |
| **GOGA** | **Godfrey** | **96.37** | **38** | P | **P** | **15 26 24.7** | **-0.9** |
| | baz=324 | | | | | | |
| **FURI** | **Furi** | **96.51** | **286** | IAMs_20 | IAMs_20 | 16 18 30.5 | |
| | comp=Z,667nm,19.0s | | | | | | |
| **FURI** | **Furi** | **96.51** | **286** | LR | LR | 16 16 28.4 | |
| | comp=Z,410nm,18.8s,baz=40,slow=40 | | | | | | |
| **352A** | **Blakely** | **97.19** | **41** | IAMs_20 | IAMs_20 | 16 06 50.6 | |
| | comp=Z,810nm,22.0s | | | | | | |
| **154A** | **Montrose** | **97.19** | **39** | IAMs_20 | IAMs_20 | 16 10 30.8 | |
| | comp=Z,679nm,22.0s | | | | | | |
| **ESDC** | **Sonseca Array** | **97.38** | **336** | P | **P** | **15 26 29.7** | **-0.4** |
| **ESDC** | **Sonseca Array** | **97.38** | **336** | P | Pdif | 15 26 30.3 | +0.1

comp=Z,26nm,1.2s,baz=44,slow=3.3,SNR=5.5
DBIC PKKP **PKKPdf 15 42 14.1 +1.0**
comp=Z,5.9nm,0.9s,baz=191,slow=5.6,SNR=3.4
**QSPA South Pole Qui 127.68 180** PKP **PKPdf 15 31 59.3 -1.6**
comp=Z,7.8nm,0.5s,baz=278,slow=0.9,SNR=49
**BOSA Boshof 128.81 261** PKhKP PKPpre 15 31 58.0
comp=Z,4.9nm,1.0s,baz=122,slow=7.3,SNR=3.8
**BOAV Boa Vista 133.86 35** *eP* **PKPdf 15 32 13.4 -0.7**
**BOAV Boa Vista 133.86 35** *eP* **PKPdf 15 32 13.5 -0.7**
**ELIB Princess Elisa 135.04 202** *d*PKPdf **PKPdf 15 32 15.3 +0.6**
**TEFE Tefe 136.84 45** *eP* **PKPdf 15 32 20.3 +0.6**
**NVL N'lazarevskaya 138.92 202** ||*i*PKIKP **PKPdf 15 32 18.0 -3.7**
**MCPB Macapa, AP 139.76 25** *eP* **PKPdf 15 32 25.8 +0.6**
**TROLL Troll, Antarti 140.74 198** ⇑PKPdf **PKPdf 15 32 18.9 -6.4**
comp=Z,762nm,0.9s
TROLL ⇑PP **PP 15 35 20.5 -5.3**
comp=Z,466nm,1.0s
**ETMB Extrema 140.95 52** *eP* **PKPdf 15 32 24.9 -2.3**
**SNAA Sanae 142.22 196** ⇑PKPdf **PKPdf 15 32 20.9 -6.9**
comp=Z,292nm,0.8s
SNAA ⇑PP **PP 15 35 33.1 -1.6**
comp=Z,338nm,1.1s
**SNAA Sanae 142.22 196** PKhKP PKPpre 15 32 21.0
comp=Z,5.0nm,0.6s,baz=187,slow=5.4,SNR=33
SNAA PP **PP 15 35 33.1 -1.6**
comp=Z,22nm,1.1s,baz=114,slow=5.0,SNR=10
**TMAB Tom-Au,PA,Br 142.88 20** *eP* **PKPdf 15 32 28.4 -2.3**
**VNA2 Neumayer--Watz 143.76 195** ⇑PKPdf PKPab 15 32 27.1 -0.3
comp=Z,85nm,0.7s,baz=146,slow=2.4
VNA2 ⇑PP **PP 15 35 42.2 -1.6**
comp=Z,13nm,1.0s,baz=146,slow=1.9
**VNA3 Neumayer Olymp 143.97 194** ⇑PKPdf PKPab 15 32 27.4 -0.8
comp=Z,44nm,0.8s
VNA3 ⇑PP **PP 15 35 42.8 -2.3**
comp=Z,12nm,0.8s
**VNA1 Neumayer--Stat 144.16 195** ⇑PKPdf **PKPab 15 32 28.5 -0.4**
comp=Z,119nm,1.0s
VNA1 ⇑PP **PP 15 35 42.6 -3.5**
comp=Z,19nm,1.2s
**ASCN Ascension 144.32 321** PKPbc 15 32 32.2 +0.8
**LPAZ La Paz 144.41 62** PKP **PKPab 15 32 31.5 -0.6**
comp=Z,11nm,0.9s,baz=332,slow=4.3,SNR=20
**LPAZ La Paz 144.41 62** *eP* **PKPab 15 32 32.2 0.0**
**NPGB Novo Progresso 144.56 35** *eP* **PKPab 15 32 31.4 -0.6**
**NBCL Cascavel-CE 146.38 4** *eP* **PKPdf 15 32 37.0 +0.2**
**VILB Vilhena 147.04 47** *eP* **PKPdf 15 32 38.5 +0.7**
**NBPB Pedra_Branca-C 147.59 7** *eP* **PKPdf 15 32 39.5 +0.8**
**CLDB Colider 147.69 39** *eP* **PKPdf 15 32 38.9 0.0**
**PDRB Porto dos Gac 147.85 41** *eP* **PKPdf 15 32 39.1 -0.1**
**LVC Limon Verde 147.88 71** **PKPdf 15 32 40.4 +1.0**
**LVC Limon Verde 147.88 71** PKIKP **PKPdf 15 32 40.4 +1.0**
**LVC Limon Verde 147.88 71** *eP* **PKPdf 15 32 40.2 +0.8**
**RCBR Riachuelo 148.04 360** PKPdf **PKPdf 15 32 39.1 -0.5**
**RCBR Riachuelo 148.04 360** PKIKP **PKPdf 15 32 39.1 -0.5**
**RCBR Riachuelo 148.04 360** *eP* **PKPdf 15 32 39.8 +0.2**
**PMSA Palmer Station 148.43 157** PKPdf **PKPdf 15 32 39.4 +0.9**
**PMSA Palmer Station 148.43 157** *eP* **PKPbc 15 32 40.5 -1.5**
**SMTB Santa Maria do 149.20 23** *eP* **PKPdf 15 32 41.9 +0.5**
**PTLB Pontes e Lacer 149.64 49** *eP* **PKPdf 15 32 42.0 0.0**
**LCO Las Campanas 149.80 83** **PKPbc 15 32 46.7 -0.3**
**LCO Las Campanas 149.80 83** PKP2 **PKPbc 15 32 46.7 -0.3**
**BBSD Serra de San D 150.06 53** *eP* **PKPdf 15 32 42.4 -0.2**
**NBCA Caruaru-PE 150.42 0** *eP* **PKPdf 15 32 42.9 -0.5**
**SNDB Serra Nova Dou 150.72 32** *eP* **PKPdf 15 32 44.3 +0.6**
**MG05 Puerto Natales 150.98 130** **PKPbc 15 32 48.3 -0.4**
**NBAN Anadia - AL 151.85 1** *eP* **PKPdf 15 32 45.1 -0.4**
**SALV Santo Antonio 151.97 44** *eP* **PKPdf 15 32 45.8 +0.2**
**NBLA Lagarto - SE 153.12 4** *eP* **PKPdf 15 32 47.2 -0.1**
**PLCA Paso Flores 153.18 107** PKP **PKPdf 15 32 46.1 -0.6**
comp=Z,3.4nm,1.1s,baz=263,slow=4.4,SNR=3.5
PLCA PKPbc **pPKPdf 15 32 53.2 +0.4**
comp=Z,8.8nm,0.8s,baz=260,slow=2.1,SNR=17
**PLCA Paso Flores 153.18 107** *eP* **PKPdf 15 32 46.1 -0.6**
**SDBA SAO DESIDERIO 153.34 20** *eP* **PKPdf 15 32 47.8 +0.1**
**ARAG Araguaiana, MT 153.79 37** *eP* **PKPdf 15 32 48.9 +0.7**
**MURT Porto Murtinho 155.25 55** *eP* **PKPdf 15 32 49.9 -0.2**
**BDFB Brasilia 155.36 29** PKP **PKPdf 15 32 49.5 -1.1**
comp=Z,6.2nm,0.9s,baz=42,slow=5.5,SNR=6.4
**AQDB Aquidauana 155.58 50** *eP* **PKPdf 15 32 50.8 +0.2**
**JANB Januaria 156.03 20** *eP* **PKPdf 15 32 51.0 -0.4**
**IPMB Ipameri, GO 157.40 32** *eP* **PKPdf 15 32 52.9 -0.2**
**ITRB Iturama 157.92 39** *eP* **PKPdf 15 32 54.3 +0.6**
**GUA01 Guaratinga, BA 158.48 10** *eP* **PKPdf 15 32 54.3 -0.1**
**CPUP Villa Florida 158.55 64** PKP **PKPdf 15 32 53.3 -0.9**
comp=Z,14nm,1.2s,baz=15,slow=1.3,SNR=7.6
CPUP PKPab **PKPab 15 33 28.2 -1.1**
comp=Z,4.0nm,0.8s,baz=97,slow=0.4,SNR=5.0
**CPUP Villa Florida 158.55 64** *eP* **PKPdf 15 32 53.5 -0.7**
**PCMB Pacaembu 159.03 43** *eP* **PKPdf 15 32 55.2 +0.3**
**DIAM Diamantina, MG 159.29 21** *eP* **PKPdf 15 32 55.4 -0.2**
**TRQA Tornquist 159.48 98** **PKPab 15 33 32.7 -0.5**
**TRQA Tornquist 159.48 98** PKP2 **PKPab 15 33 32.7 -0.5**
**BB19B Bebedouro 159.96 36** *eP* **PKPdf 15 32 56.6 +0.5**
**SJMB Sao Joao De Ma 160.29 15** *eP* **PKPdf 15 32 56.5 0.0**
**LDASE Londrina, Braz 160.52 46** *eP* **PKPdf 15 32 56.9 +0.3**
**PSAL Palomas, Salto 160.89 76** *eP* **PKPdf 15 32 56.3 -0.4**
**PTGB Pitanga 160.97 51** *eP* **PKPdf 15 32 56.3 -0.8**
**RIB01 Linhares ES 161.04 13** *eP* **PKPdf 15 32 57.2 -0.1**
**FRTB Fartura 161.34 43** *eP* **PKPdf 15 32 58.2 +0.6**
**BSCB Bom Sucesso 161.46 27** *eP* **PKPdf 15 32 58.3 +0.5**
**CRSM Crissiumal (Br 161.57 61** *eP* **PKPdf 15 32 57.7 +0.1**
**RCLB Rio Claro- Sao 161.59 36** *eP* **PKPdf 15 32 59.1 +1.3**
**RODS Rosario do Sul 162.36 70** *eP* **PKPdf 15 32 59.0 +0.7**
**ALGR Alto Alegre (B 163.08 62** *eP* **PKPdf 15 32 59.1 0.0**

**IDC 07 15:20:19.8±2.2,3.94S×150.45E, h0km, mb3.9/3, mbtmp4.0/3, MS3.5/3, Error ellipse: s-maj=150.3km s-min=31.3km az=123.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.34** | **211** | LR | LR | 15 24 25.5 | |
| | comp=Z,342nm,20.9s,baz=50,slow=39 | | | | | | |
| **CTA** | **Charters Tower** | **16.57** | **194** | LR | LR | 15 29 58.2 | |
| | comp=Z,28nm,20.9s,baz=303,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.36** | **223** | P | P | 15 25 19.1 | -0.5 |
| | 6.6nm,0.9s,baz=48,slow=10.0,SNR=2.0 | | | | | | |
| | 6.6nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **25.30** | **218** | P | P | 15 25 48.5 | +0.2 |
| | 4.4nm,0.8s,baz=55,slow=8.4,SNR=3.2 | | | | | | |
| | 4.4nm,0.8s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **38.22** | **345** | LR | LR | 15 40 17.6 | |
| | comp=Z,677nm,21.2s,baz=338,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **82.26** | **23** | P | P | 15 32 42.9 | +0.1 |
| | 0.4nm,0.8s,baz=250,slow=4.9,SNR=4.2 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.81** | **288** | PKPbc | PKPbc | 15 40 07.2 | -0.7 |
| | 0.7nm,0.6s,baz=57,slow=3.3,SNR=3.6 | | | | | | |

**WEL 07 15:24:54.6,41.5°S±9.°×17.°4E±1.°0, h85km±19km, M2.1/9, ML2.2/8, MLv2.1/9, Error ellipse: s-maj=0.0km s-min=0.0km az=126.6, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NNZ** | **Nelson** | **0.20** | **324** | P | Pn | 15 25 07.2 | +0.4 |
| **TUWZ** | **Tuamarina** | **0.31** | **100** | P | Pn | 15 25 08.6 | +1.2 |
| **BSWZ** | **Blackbirch Sta** | **0.42** | **143** | P | Pn | 15 25 09.0 | +0.8 |
| **TKNZ** | **Takaka Hill** | **0.55** | **308** | P | Pn | 15 25 09.3 | +0.1 |
| **MRNZ** | **Matariki Terra** | **0.58** | **268** | P | Pn | 15 25 09.6 | +0.1 |
| **TCW** | **Tory Channel** | **0.58** | **74** | P | Pn | 15 25 10.1 | +0.6 |
| **THZ** | **Tophouse** | **0.61** | **231** | P | Pn | 15 25 10.0 | +0.2 |
| **DUWZ** | **D'Urville Isla** | **0.65** | **27** | P | Pn | 15 25 10.9 | +0.8 |
| **QRZ** | **Quartz Range** | **0.94** | **306** | P | Pn | 15 25 12.8 | -0.3 |
| **BHW** | **Baring Head** | **1.01** | **92** | P | Pn | 15 25 13.8 | -0.2 |
| **KHZ** | **Kahutara** | **1.04** | **180** | P | Pn | 15 25 14.6 | +0.3 |
| **KIW** | **Kapiti Island** | **1.16** | **64** | P | Pn | 15 25 16.0 | +0.2 |
| **CAW** | **Cannon Point** | **1.19** | **77** | P | Pn | 15 25 16.0 | -0.1 |
| **PLWZ** | **Palliser** | **1.31** | **99** | P | Pn | 15 25 17.2 | -0.4 |
| **OGWZ** | **Otaki Gorge** | **1.36** | **66** | P | Pn | 15 25 18.1 | -0.1 |
| **LTZ** | **Lake Taylor** | **1.69** | **213** | P | Pn | 15 25 21.8 | -0.7 |

**JMA 07 15:39:36.8±0.3, 26°N±3°×12°3E±°, h265km, MV3.8/19, NW OFF ISHIGAKIJIMA IS, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YOJ** | **Yonaguni jima** | **1.43** | **194** | P | Pn | 15 40 16.9 | +0.8 |
| YOJ | | | | *e*S | S | 15 40 47.5 | +0.3 |
| **JYNG** | **Yonagunijimaku** | **1.46** | **197** | P | Pn | 15 40 16.1 | -0.2 |
| JYNG | | | | *e*S | S | 15 40 48.6 | +1.0 |
| **JISG** | **Ishigakijimahi** | **1.51** | **147** | P | Pn | 15 40 16.7 | +0.1 |
| JISG | | | | S | S | 15 40 47.4 | -0.8 |
| **IRIF** | **Iriomote-Funau** | **1.55** | **169** | P | Pn | 15 40 16.7 | -0.2 |
| **JIJ** | **Ishigaki jima** | **1.63** | **156** | P | Pn | 15 40 17.5 | -0.1 |
| JIJ | | | | S | S | 15 40 48.3 | -1.5 |
| **JTJ** | **Tarama** | **1.69** | **136** | P | Pn | 15 40 18.4 | +0.4 |
| JTJ | | | | S | S | 15 40 50.3 | -0.3 |
| **JKRS** | **Kuro-shima** | **1.71** | **161** | P | Pn | 15 40 18.5 | +0.4 |
| JKRS | | | | S | S | 15 40 50.8 | 0.0 |
| **HATJ** | **Hateruma jima** | **1.83** | **168** | P | Pn | 15 40 19.5 | +0.3 |
| **JIRB** | **Irabujima** | **1.90** | **122** | P | Pn | 15 40 19.7 | 0.0 |
| JIRB | | | | S | S | 15 40 52.1 | -1.6 |
| **JIKM** | **Ikemajima** | **1.91** | **119** | P | Pn | 15 40 20.0 | +0.2 |
| JIKM | | | | S | S | 15 40 52.9 | -0.9 |
| **JMJ2** | **Miyako jima3** | **2.07** | **122** | P | Pn | 15 40 21.6 | +0.4 |
| JMJ2 | | | | *e*S | S | 15 40 55.5 | -0.7 |
| **JOGS** | **Gusukube** | **2.12** | **121** | P | Pn | 15 40 22.0 | +0.4 |
| JOGS | | | | S | S | 15 40 56.4 | -0.6 |
| **JKE** | **Kume jima 2** | **3.08** | **81** | P | Pn | 15 40 29.1 | -2.0 |

**TAP 07 15:46:44.0,24.°34N×122.°03E, h20km, ML1.9, B, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS2** | **EOS2** | **0.20** | **66** | P | Pb | 15 46 50.0 | +0.4 |
| | baz=66 | | | | | | |
| EOS2 | | | | *e*S | Sb | 15 46 55.3 | +1.9 |
| | baz=66 | | | | | | |
| **EWUT** | **Wuta** | **0.25** | **295** | P | Pb | 15 46 50.6 | +0.5 |
| | baz=294 | | | | | | |
| EWUT | | | | *e*S | Sb | 15 46 55.8 | +1.5 |
| | baz=294 | | | | | | |
| **EOS3** | **EOS3** | **0.27** | **101** | *i* P | Pb | 15 46 50.8 | +0.7 |
| | baz=101 | | | | | | |
| EOS3 | | | | *e*S | Sn | 15 46 56.8 | -1.2 |
| | baz=101 | | | | | | |
| **ENA** | **Nanau** | **0.28** | **289** | *e*P | Pb | 15 46 50.3 | -0.1 |
| | baz=288 | | | | | | |
| ENA | | | | S | Sb | 15 46 55.5 | +0.7 |
| | baz=288 | | | | | | |
| **TWC** | **Suao** | **0.32** | **329** | P | Pb | 15 46 51.2 | +0.3 |
| | baz=330 | | | | | | |
| TWC | | | | *e*S | Sb | 15 46 55.7 | +0.1 |
| | baz=330 | | | | | | |
| **EOS4** | **EOS4** | **0.34** | **129** | *i* P | Pb | 15 46 52.0 | +1.0 |
| | baz=129 | | | | | | |
| EOS4 | | | | *e*S | Sb | 15 46 57.4 | +1.6 |
| | baz=129 | | | | | | |
| **ETL** | **Fush Village** | **0.41** | **244** | *i* P | Pb | 15 46 53.3 | +0.8 |
| | baz=244 | | | | | | |
| ETL | | | | *e*S | Sn | 15 47 00.8 | -1.1 |
| | baz=244 | | | | | | |
| **NACB** | **Ninganchiao** | **0.43** | **248** | *e*P | Pn | 15 46 56.4 | +1.4 |
| | baz=247 | | | | | | |
| NACB | | | | *e*S | Sn | 15 47 01.1 | -1.1 |
| | baz=247 | | | | | | |
| **TWD** | **Chiawan** | **0.47** | **237** | P | Pb | 15 46 54.0 | +0.4 |
| | baz=236 | | | | | | |
| TWD | | | | S | Sn | 15 47 01.9 | -1.4 |
| | baz=236 | | | | | | |
| **LATG** | **Datong** | **0.50** | **293** | *i* P | Pb | 15 46 54.7 | +0.5 |
| | baz=293 | | | | | | |
| LATG | | | | *e*S | Sn | 15 47 03.1 | -1.0 |
| | baz=293 | | | | | | |
| **EGS** | | **0.51** | **350** | *e*P | Pn | 15 46 55.5 | -0.6 |
| | baz=351 | | | | | | |
| EGS | | | | *e*S | Sb | 15 47 02.0 | +0.6 |
| | baz=351 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.52** | **255** | *i* P | Pb | 15 46 55.1 | +0.6 |
| | baz=255 | | | | | | |
| ETLH | | | | S | Sb | 15 47 03.0 | +1.4 |
| | baz=255 | | | | | | |
| **ENTT** | **Nioudou** | **0.52** | **306** | P | Pb | 15 46 54.8 | +0.3 |
| | baz=305 | | | | | | |
| ENTT | | | | *e*S | Sb | 15 47 02.2 | +0.7 |
| | baz=305 | | | | | | |
| **NDT** | **Datong Townshi** | **0.54** | **299** | *i* P | Pb | 15 46 55.4 | +0.5 |
| | baz=299 | | | | | | |
| NDT | | | | S | Sn | 15 47 04.0 | -1.0 |
| | baz=299 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.58** | **316** | P | Pb | 15 46 56.0 | +0.3 |
| | baz=316 | | | | | | |
| FUSB | | | | *e*S | Sn | 15 47 05.6 | -0.5 |
| | baz=316 | | | | | | |
| **NNSB** | **Datong** | **0.60** | **279** | P | Pb | 15 46 56.1 | +0.2 |
| | baz=278 | | | | | | |
| NNSB | | | | *i* S | Sb | 15 47 05.0 | +1.0 |
| | baz=278 | | | | | | |
| **ETM** | **Tongmen** | **0.61** | **233** | *e*P | Pb | 15 46 55.9 | -0.3 |
| | baz=232 | | | | | | |
| ETM | | | | *e*S | Sb | 15 47 05.6 | +1.2 |
| | baz=232 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.65** | **241** | *e*S | Sb | 15 47 06.5 | +1.1 |
| | baz=240 | | | | | | |
| **NWLT** | **Wulai** | **0.65** | **312** | P | Pb | 15 46 57.4 | +0.7 |
| | baz=312 | | | | | | |
| NWLT | | | | *e*S | Sb | 15 47 05.6 | +0.2 |
| | baz=312 | | | | | | |
| **TIPB** | **Shuangxi** | **0.66** | **344** | *e*P | Pn | 15 46 58.9 | +0.7 |
| | baz=343 | | | | | | |
| TIPB | | | | *e*S | Sb | 15 47 06.0 | +0.4 |
| | baz=343 | | | | | | |
| **YHNB** | **Yeheng** | **0.68** | **299** | P | Pb | 15 46 57.7 | +0.4 |
| | baz=298 | | | | | | |
| YHNB | | | | *i* S | Sn | 15 47 08.0 | -0.6 |
| | baz=298 | | | | | | |
| **NSK** | **Sanguang** | **0.70** | **299** | P | Pb | 15 46 57.8 | +0.2 |
| | baz=298 | | | | | | |
| NSK | | | | S | Sn | 15 47 08.4 | -0.6 |
| | baz=298 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.72** | **255** | *e*P | Pn | 15 46 59.5 | +0.1 |
| | baz=254 | | | | | | |
| WHF | | | | *e*S | Sn | 15 47 09.8 | -0.3 |
| | baz=254 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.77** | **350** | P | Pn | 15 46 59.4 | -0.3 |
| | baz=349 | | | | | | |
| SXI1 | | | | S | Sn | 15 47 10.7 | 0.0 |
| | baz=349 | | | | | | |
| **TDCB** | **Techi** | **0.80** | **264** | *e*P | Pn | 15 47 01.7 | +1.5 |
| | baz=263 | | | | | | |
| TDCB | | | | *e*S | Sn | 15 47 11.1 | -0.5 |
| | baz=263 | | | | | | |
| **CHGB** | **Renai** | **0.83** | **251** | *e*P | Pn | 15 47 04.2 | +3.5 |
| | baz=250 | | | | | | |
| CHGB | | | | *i* S | Sn | 15 47 12.3 | -0.2 |
| | baz=250 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.88** | **290** | P | Pn | 15 47 01.2 | 0.0 |
| | baz=289 | | | | | | |
| NFF | | | | *e*S | Sn | 15 47 14.5 | +1.0 |
| | baz=289 | | | | | | |
| **WUSB** | **Renai** | **0.90** | **248** | S | Sn | 15 47 13.9 | -0.2 |
| | baz=247 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.90** | **82** | *e*P | Pb | 15 47 00.4 | -0.6 |
| | baz=81 | | | | | | |
| YOJ | | | | *e*S | Sb | 15 47 13.0 | +0.5 |
| | baz=81 | | | | | | |
| **LIOB** | **Emei** | **0.97** | **289** | *i* P | Pn | 15 47 02.6 | +0.1 |
| | baz=288 | | | | | | |
| LIOB | | | | *e*S | Sn | 15 47 18.0 | +2.3 |
| | baz=288 | | | | | | |
| **NSTT** | **Nanjuang** | **0.98** | **288** | *i* P | Pn | 15 47 02.6 | 0.0 |
| | baz=287 | | | | | | |
| NSTT | | | | *e*S | Sn | 15 47 18.1 | +2.3 |
| | baz=287 | | | | | | |
| **WHP** | **Taichung City** | **0.99** | **267** | *e*P | Pn | 15 47 04.4 | +1.6 |
| | baz=266 | | | | | | |
| WHP | | | | *e*S | Sn | 15 47 17.3 | +1.1 |
| | baz=266 | | | | | | |
| **VWDT** | **VWDT** | **1.00** | **235** | *e*P | Pb | 15 47 01.8 | -0.8 |
| | baz=234 | | | | | | |
| VWDT | | | | *e*S | Sn | 15 47 15.8 | -0.4 |
| | baz=234 | | | | | | |
| **HGSD** | **Ruisui** | **1.01** | **213** | *e*P | Pb | 15 47 02.4 | -0.3 |
| | baz=213 | | | | | | |
| HGSD | | | | *e*S | Sn | 15 47 20.3 | +3.8 |
| | baz=213 | | | | | | |
| **SSLB** | **Suanglung** | **1.12** | **241** | *e*P | Pb | 15 47 07.4 | +2.6 |
| | baz=240 | | | | | | |
| SSLB | | | | *e*S | Sb | 15 47 18.8 | -0.2 |
| | baz=240 | | | | | | |
| **TYC** | **Yuchr** | **1.16** | **248** | *e*P | Pb | 15 47 06.8 | +1.5 |
| | baz=247 | | | | | | |
| TYC | | | | *e*S | Sn | 15 47 24.9 | +4.7 |
| | baz=247 | | | | | | |

*NEIC* ***07*** *15:47:58.5±1.1, 18.°1S±0.°1×177.°69W±0.°10, h599km±9km, mb4.6/34, Error ellipse: s-maj=22.9km s-min=9.7km az=152.0*

*IDC* ***07*** *15:48:01.9±1.5, 18.°17S×178.°12W, h609km±13km, mb3.4/6, mbtmp4.4/8, Error ellipse: s-maj=32.1km s-min=23.1km az=2.0*

**ISC 07 15:47:58.8±0.8, 18.°0S±0.°1×177.°8W±0.°1, h600km, n47, σ0.97/48, mb4.5/22, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.97** | **274** | | **P** | **15 49 24.2** | **0.0** |
| **MSVF** | **Nonsavu** | **3.97** | **274** | P | **P** | **15 49 24.7** | **+0.5** |
| | 84nm,0.7s,baz=121,slow=7.3,SNR=61 | | | | | | |
| MSVF | | | | S | **S** | **15 50 35.6** | **+1.8** |
| | 9.4nm,0.8s,baz=53,slow=23,SNR=5.5 | | | | | | |
| **AFI** | **Afiamalu** | **7.09** | **56** | P | **P** | **15 49 49.4** | **-0.4** |
| **PINNC** | **Pines Island,** | **14.57** | **249** | P | **P** | **15 51 01.4** | **-1.6** |
| **DZM** | **Mont Dzumac** | **15.35** | **252** | P | **P** | **15 51 09.5** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.35** | **252** | P | **P** | **15 51 09.1** | **-1.1** |
| | 5.7nm,0.7s,baz=123,slow=18,SNR=15 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.10** | **259** | P | **P** | **15 51 27.6** | **+1.3** |
| KOUNC | | | | IAmb | IAmb | 15 51 28.5 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **TOZ** | **Tahuroa Head** | **20.48** | **195** | P | **P** | **15 51 56.5** | **-0.2** |
| TOZ | | | | IAmb | IAmb | 15 51 57.2 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.26** | **193** | P | **P** | **15 52 19.4** | **-2.0** |
| **QRZ** | **Quartz Range** | **24.19** | **198** | P | **P** | **15 52 28.8** | **-0.9** |
| **MRNZ** | **Matariki Terra** | **24.66** | **197** | P | **P** | **15 52 31.5** | **-2.2** |
| **THZ** | **Tophouse** | **24.95** | **197** | P | **P** | **15 52 34.3** | **-2.1** |
| THZ | | | | IAmb | IAmb | 15 52 36.1 | |
| | comp=Z,38nm,1.4s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.49** | **200** | P | **P** | **15 52 57.5** | **-1.1** |
| **MLZ** | **Mavora Lakes** | **29.68** | **200** | P | **P** | **15 53 16.9** | **-0.6** |
| MLZ | | | | IAmb | IAmb | 15 53 18.1 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **29.78** | **250** | P | **P** | **15 53 18.0** | **-0.6** |
| EIDS | | | | IAmb | IAmb | 15 53 18.8 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.39** | **240** | P | **P** | **15 53 24.0** | **0.0** |
| ARMA | | | | IAmb | IAmb | 15 53 25.0 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **34.01** | **261** | P | **P** | **15 53 54.1** | **-0.5** |
| CTAO | | | | IAmb | IAmb | 15 53 55.2 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **34.09** | **233** | P | **P** | **15 53 55.0** | **-0.1** |
| CAN | | | | IAmb | IAmb | 15 53 55.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **37.55** | **231** | P | **P** | **15 54 23.8** | **+0.3** |
| TOO | | | | IAmb | IAmb | 15 54 24.6 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.69** | **270** | P | **P** | **15 54 25.7** | **+0.8** |
| COEN | | | | IAmb | IAmb | 15 54 26.5 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **39.09** | **241** | P | **P** | **15 54 35.7** | **-0.3** |
| **STKA** | **Stephens Creek** | **39.09** | **241** | P | **P** | **15 54 36.4** | **+0.4** |
| | comp=Z,13nm,0.8s,baz=94,slow=10.0,SNR=13 | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.86** | **241** | P | **P** | **15 55 13.2** | **-0.3** |
| **WR0** | **Warramunga Arr** | **45.00** | **260** | P | **P** | **15 55 21.9** | **-0.5** |
| **WB0** | **Warramunga Arr** | **45.16** | **260** | P | **P** | **15 55 22.9** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 15 55 23.8 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.18** | **260** | P | **P** | **15 55 23.1** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 15 55 24.0 | |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.18** | **260** | P | **P** | **15 55 23.1** | **-0.7** |
| **WRA** | **Warramunga Arr** | **45.19** | **260** | P | **P** | **15 55 23.1** | **-0.7** |
| **WRA** | **Warramunga Arr** | **45.19** | **260** | P | **P** | **15 55 23.4** | **-0.4** |
| | comp=Z,7.8nm,0.7s,baz=96,slow=7.2,SNR=180 | | | | | | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **45.32** | **254** | | **P** | **15 55 24.4** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 15 55 25.8 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.32** | **254** | | **P** | **15 55 24.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **45.32** | **254** | P | **P** | **15 55 25.1** | **+0.2** |
| | comp=Z,26nm,0.8s,baz=88,slow=8.8,SNR=306 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 56 52.1** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=102,slow=3.8,SNR=5.5 | | | | | | |
| | comp=Z,26nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **49.38** | **268** | P | **P** | **15 55 54.9** | **-0.3** |
| MTN | | | | IAmb | IAmb | 15 56 07.7 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **FORT** | **Forrest** | **50.48** | **245** | P | **P** | **15 56 02.3** | **-0.8** |
| FORT | | | | IAmb | IAmb | 15 56 28.0 | |
| | comp=Z,35nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **51.06** | **264** | P | **P** | **15 56 07.0** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 15 56 44.3 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.59** | **261** | P | **P** | **15 56 25.7** | **+0.3** |
| **SOEI** | **Soe** | **56.66** | **270** | P | **P** | **15 56 47.8** | **+0.8** |
| SOEI | | | | IAmb | IAmb | 15 56 49.5 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.45** | **255** | P | **P** | **15 56 58.1** | **-0.7** |
| **MBWA** | **Marble Bar** | **58.61** | **256** | P | **P** | **15 56 59.0** | **-0.9** |
| **VNDA** | **Vanda** | **60.37** | **185** | P | **P** | **15 57 11.6** | **+1.1** |
| **VNDA** | **Vanda** | **60.37** | **185** | P | **P** | **15 57 12.4** | **+1.9** |
| | comp=Z,0.3nm,0.3s,baz=31,slow=5.9,SNR=6.4 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **GIRL** | **Giralia** | **63.42** | **253** | P | **P** | **15 57 31.9** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **66.62** | **268** | P | **P** | **15 57 50.9** | **-0.6** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **15 58 24.1** | **+1.2** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **15 58 24.2** | **+1.3** |
| | comp=Z,0.7nm,0.6s,baz=354,slow=10,SNR=6.5 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **PLK4** | **Peulik 4** | **77.47** | **12** | P | **P** | **15 58 52.4** | **-0.7** |
| PLK4 | | | | IAmb | IAmb | 15 59 15.2 | |
| | comp=Z,44nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.57** | **57** | P | P | 15 59 39.5 | +4.4 |
| | comp=Z,0.5nm,0.5s,baz=212,slow=4.4,SNR=4.7 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |

*BJI* ***07*** *15:53:56.0±0.0, 6.°80N×73.°00W, h143km, mB5.4/7*

*MOS* ***07*** *15:53:58.1±0.9, 6.°79N×73.°06W, h152km, mb5.6/25, Error ellipse: s-maj=7.6km s-min=5.3km az=99.0*

*VAO* ***07*** *15:53:59.8±0.4, 6.°68N×73.°06W, h158km±4km, mb5.3*

*RSNC* ***07*** *15:53:59.6±0.1, 7.°1N±1.°×7.°3W±.°, h150km±1km, M5.6, mB6.0, mb5.8, ML5.3, Mw(mB)5.6, MwMwp5.3, Mwp5.5*

*IDC* ***07*** *15:53:59.8±0.3, 6.°78N×72.°97W, h157km±2km, mb4.7/26, mbtmp5.2/32, MS4.1/8, Error ellipse: s-maj=8.1km s-min=5.8km az=125.0*

*NEIC* ***07*** *15:53:59.2±1.6, 6.°78N±0.°06×73.°00W±0.°06, h146km±4km, mb5

BARC Barichara 0.26 213 P Pn 15 54 21.1 +0.3
BARC S Sn 15 54 36.3 -0.8
PAMC Pamplona, Colo 0.63 33 P Pn 15 54 24.0 +1.3
PAMC S Sn 15 54 41.1 +0.6
BRJC Barrancabermej 0.71 283 P Pn 15 54 22.8 +0.2
BRJC S Sn 15 54 39.9 -0.4
RUSI La Rusia 0.91 182 *i* P Pn 15 54 25.1 +0.5
RUSI *i* S Sn 15 54 44.4 +0.5
RUSI IAML 15 54 45.2
comp=Z,100µm,1.0s
RUSC La Rusia 0.91 182 P Pn 15 54 24.9 +0.3
RUSC S Sn 15 54 43.9 0.0
TAMC Tame, Arauca 1.30 107 P Pn 15 54 29.5 +2.1
TAMC S Sn 15 54 51.2 +2.3
PTBC PUERTO BERRIO, 1.43 259 P Pn 15 54 27.6 -1.1
PTBC S Sn 15 54 49.0 -2.1
OCAC Ocana 1.45 349 P Pn 15 54 29.0 0.0
OCAC S Sn 15 54 51.3 -0.5
SPBC San Pablo de B 1.54 222 P Pn 15 54 29.7 -0.2
SPBC S Sn 15 54 52.4 -0.9
ZARC Zaragoza, Cauc 1.93 291 P Pn 15 54 33.1 -0.9
ZARC S Sn 15 54 58.5 -2.1
NORC Norcasia 2.20 236 P Pn 15 54 36.8 -0.4
NORC S Sn 15 55 04.2 -2.2
CHIC Chingaza 2.27 198 P Pn 15 54 38.9 +0.5
CHIC S Sn 15 55 08.6 0.0
ROSC El Rosal 2.33 213 Pn Pn 15 54 40.3 +1.1
ROSC El Rosal 2.33 213 P Pn 15 54 40.7 +1.6
comp=Z,14µm,0.3s,baz=4.4,slow=3.4,SNR=2141
ROSC S Sn 15 55 11.6 +1.7
comp=Z,41µm,0.3s,baz=192,slow=21,SNR=29
ROSC El Rosal 2.33 213 P Pn 15 54 40.7 +1.6
ROSC S Sn 15 55 11.1 +1.3
ROSC El Rosal 2.33 213 P Pn 15 54 40.3 +1.1
BOG Bogota 2.40 205 P Pn 15 54 41.9 +2.0
BOG S Sn 15 55 13.5 +2.3
CVER Cruz Verde, Cu 2.49 204 P Pn 15 54 42.4 +1.2
CVER S Sn 15 55 14.4 +1.0
UREC San Jos de Ur 2.64 291 P Pn 15 54 40.5 -2.0
UREC S Sn 15 55 12.7 -3.2
UREC San Jos de Ur 2.64 291 *eP* Pn 15 54 40.8 -1.8
UREC *eS* Sn 15 55 10.2 -5.7
PTGC Puerto Gaitan, 2.75 161 P Pn 15 54 44.2 +0.4
PTGC S Sn 15 55 17.4 -0.9
VILC Villavicencio, 2.76 194 P Pn 15 54 44.3 +0.2
VILC S Sn 15 55 18.5 -0.2
RECRC Villamaria, Ca 2.94 231 P Pn 15 54 49.0 +2.2
RECRC S Sn 15 55 25.4 +2.0
CMAN1 Manizales, Cal 3.01 235 P Pn 15 54 49.7 +2.3
DBBC Dabeiba 3.15 274 P Pn 15 54 48.4 -0.5
DBBC S Sn 15 55 24.4 -2.9
SDV Santo Domingo 3.16 49 Pn Pn 15 54 50.4 +1.3
SDV Santo Domingo 3.16 49 P Pn 15 54 50.7 +1.6
comp=Z,11µm,0.3s,baz=229,slow=14,SNR=1821
SDV S Sn 15 55 27.9 +0.2
comp=Z,9µm,0.4s,baz=269,slow=23,SNR=18
SDV Santo Domingo 3.16 49 P Pn 15 54 50.5 +1.3
SDV S Sn 15 55 27.5 -0.2
SDV Santo Domingo 3.16 49 *eP* Pn 15 54 50.8 +1.6
ARGC Ariguani, Magd 3.25 339 P Pn 15 54 51.1 +0.9
ARGC S Sn 15 55 32.8 +3.1
ANIL Santa Ana 3.29 226 P Pn 15 54 51.0 +0.1
ANIL S Sn 15 55 31.6 +0.7
PRAC Prado 3.58 211 P Pn 15 54 54.0 -0.4
PRAC S Sn 15 55 37.1 -0.1
ORTC Ortega, Tolima 3.62 217 P Pn 15 54 54.8 -0.1
ORTC S Sn 15 55 38.0 -0.1
APAC Apartado, Choc 3.67 287 P Pn 15 54 54.9 -0.6
APAC S Sn 15 55 36.7 -2.5
SJCC San Jacinto, C 3.73 326 P Pn 15 54 54.7 -1.6
SJCC S Sn 15 55 37.1 -3.5
PLMC San Jos del P 3.74 240 P Pn 15 54 56.5 +0.1
PLMC S Sn 15 55 40.8 0.0
URMC La Uribe, Meta 3.78 201 P Pn 15 54 57.5 +0.5
URMC S Sn 15 55 41.4 -0.5
LCBC Los crdobas, 3.87 302 P Pn 15 54 56.1 -2.0
LCBC S Sn 15 55 43.7 -0.1
LCBC Los crdobas, 3.87 302⇑ *iP* Pn 15 54 56.0 -2.1
LCBC *eS* Sn 15 55 42.5 -1.3
CRJC Cerrejon, Guaj 4.19 2 P Pn 15 55 01.2 -1.1
CRJC S Sn 15 55 49.4 -2.0
GUVC San Jose del G 4.26 174 P Pn 15 55 02.9 -0.3
GUVC S Sn 15 55 53.2 +0.3
YOTC Yotoco, Valle 4.32 230 P Pn 15 55 03.3 -0.8
SOLC Bahia Solano 4.38 263 P Pn 15 55 04.7 0.0
SOLC S Sn 15 55 54.3 -1.3
SMRC Santa Marta, M 4.48 345 P Pn 15 55 05.6 -0.5
SMRC S Sn 15 55 54.4 -3.8
CAPC Capurgana 4.64 293 P Pn 15 55 04.6 -3.5
CAPC S Sn 15 55 57.1 -4.7
PIZC Pizarro, Choco 4.67 247 P Pn 15 55 09.8 +1.3
PIZC S Sn 15 56 02.6 +0.1
PTAC Punta Ardita, 4.74 274 P Pn 15 55 07.7 -1.8
PTAC S Sn 15 56 00.1 -4.1
BETC Betania 4.75 210 P Pn 15 55 08.6 -1.0
BETC S Sn 15 56 02.8 -1.6
URI Uribia 4.97 12 *i* P Pn 15 55 11.7 -0.8
URI IAML 15 55 12.3
comp=Z,8µm,1.0s
URI *i* S Sn 15 56 05.6 -4.1
URIC Uribia, Colomb 4.97 12 P Pn 15 55 11.4 -1.1
URIC S Sn 15 56 05.2 -4.5
JAMC Jamundi, Valle 5.08 226 P Pn 15 55 13.2 -1.0
comp=Z,2µm,0.7s,comp=Z,34µmcomp=Z,12µm
MALC Bahia Malaga 5.09 237 P Pn 15 55 15.0 +0.8
comp=Z,20µm,0.8s,comp=Z,388µmcomp=Z,2.6nm
MALC S Sn 15 56 14.2 +1.6
comp=Z,20µm,0.8s,comp=Z,388µmcomp=Z,2.6nm
GARC Garzon, Huila 5.20 208 P Pn 15 55 14.9 -0.9
UPD2 Meteti 5.22 290⇑ *iP* Pn 15 55 13.6 -2.2
UPD2 *i* S Sn 15 56 11.0 -4.5
BAUV El Baul 5.39 66 P Pn 15 55 17.3 -0.7
BAUV El Baul 5.39 66 *eP* Pn 15 55 17.5 -0.5
BAUV El Baul 5.39 66 *eS* Sn 15 56 12.5 -7.1
POPC Popayan, Colom 5.58 221 P Pn 15 55 20.5 -0.2
comp=Z,3µm,1.3s,comp=Z,33µmcomp=Z,13µm
POPC S Sn 15 56 27.3 +2.9
comp=Z,3µm,1.3s,comp=Z,33µmcomp=Z,13µm
TOTI Torti 5.63 292⇑ *iP* Pn 15 55 18.2 -2.9
TOTI *eS* Sn 15 56 19.7 -5.5
FLOC Florencia 5.81 207 P Pn 15 55 23.1 -0.5
comp=Z,5µm,1.1s,comp=Z,56µmcomp=Z,8µm
FLOC S Sn 15 56 30.0 +0.4
comp=Z,5µm,1.1s,comp=Z,56µmcomp=Z,8µm
CNTA3 Canitas, Panam 6.26 293 *eP* Pn 15 55 27.2 -2.5
CNTA3 *eS* Sn 15 56 30.0 -10
BBAC Balboa, Cauca 6.34 222 P Pn 15 55 30.0 -0.9
comp=Z,2µm,0.6s,comp=Z,32µmcomp=Z,12µm
BBAC S Sn 15 56 42.3 -0.2
comp=Z,2µm,0.6s,comp=Z,32µmcomp=Z,12µm
GR1C Gorgona, Isla 6.35 234 P Pn 15 55 29.1 -1.7
GR1C S Sn 15 56 40.0 -2.5
AUA1 Aruba 6.40 28 Pn 15 55 31.2 -0.3
AUA1 Aruba 6.40 28 P Pn 15 55 31.4 -0.1
comp=Z,3µm,0.4s,comp=Z,56µmcomp=Z,180µm
AUA1 S Sn 15 56 42.7 -1.0
comp=Z,3µm,0.4s,comp=Z,56µmcomp=Z,180µm
CHPO Chepo, Panama 6.45 292 *i* P Pn 15 55 29.5 -2.7
CHPO *eS* Sn 15 56 39.6 -5.4
CRUC La Cruz 6.50 217 P Pn 15 55 34.9 +1.7
CRUC S Sn 15 56 49.4 +2.7
HATO Hato, Curacao 6.69 37 Pn Pn 15 55 33.7 -1.6
FLAM Flamenco Islan 6.76 288 *i* P Pn 15 55 33.6 -2.7
FLAM *i* S Sn 15 56 47.2 -5.2
PTLC Puerto Leguiza 6.82 195 P Pn 15 55 40.0 +2.9
comp=Z,1µm,0.6s,comp=Z,16µm
ARRA3 Arraijan, Pana 6.89 289 *eP* Pn 15 55 35.4 -2.6
ARRA3 *i* S Sn 15 56 49.0 -6.4
GCUF Volcan Galeras 7.01 218 P Pn 15 55 40.4 +0.3
comp=Z,2µm,1.1s,comp=Z,17µm
FRIJ El Hiral 7.04 290 *i* P Pn 15 55 37.1 -2.8
PCRI3 Pocri, Los San 7.07 277⇓ *iP* Pn 15 55 39.3 -1.1
BCIP Isla Barro Col 7.12 290 Pn 15 55 38.4 -2.8
BCIP Isla Barro Col 7.12 290 P Pn 15 55 38.4 -2.8
comp=Z,688nm,0.7s,comp=Z,10µm
BCIP S Sn 15 56 57.8 -3.2
comp=Z,688nm,0.7s,comp=Z,10µm
BCIP Isla Barro Col 7.12 290 *i* P Pn 15 55 38.6 -2.5
BCIP *i* S Sn 15 56 57.8 -3.2
BCIP Isla Barro Col 7.12 290 P Pn 15 55 38.4 -2.8
BCIP Isla Barro Col 7.12 290⇑ *iP* Pn 15 55 38.3 -2.8
BCIP *eS* Sn 15 56 54.3 -6.7
AZU Azuero 7.24 278 P Pn 15 55 41.0 -1.6
comp=Z,394nm,0.5s,comp=Z,5µm
AZU S Sn 15 56 56.0 -7.8
comp=Z,394nm,0.5s,comp=Z,5µm
AZU Azuero 7.24 278⇑ *iP* Pn 15 55 40.7 -1.9
AZU *i* S Sn 15 56 57.9 -5.9
CHIT3 Chitre 7.40 279 *i* P Pn 15 55 43.6 -1.2
CHIT3 *i* S Sn 15 57 03.2 -4.5
TUMC Tumaco 7.52 229 P Pn 15 55 44.3 -2.2
comp=Z,1µm,0.8s,comp=Z,12µm
CMBC Cumbal 7.53 219 P Pn 15 55 48.1 +1.1
TULM Tulcn-Chalpat 7.68 218 Pn 15 55 49.2 +0.2
TULM Tulcn-Chalpat 7.68 218 P Pn 15 55 49.3 +0.3
comp=Z,2µm,0.8s,comp=Z,22µmcomp=Z,17µm
TULM S Sn 15 57 15.7 +0.5
comp=Z,2µm,0.8s,comp=Z,22µmcomp=Z,17µm
BONI La Bonita 7.74 216 P Pn 15 55 50.3 +0.7
comp=Z,2µm,1.0s,comp=Z,16µmcomp=Z,9µm
BONI S Sn 15 57 21.4 +5.2
comp=Z,2µm,1.0s,comp=Z,16µmcomp=Z,9µm
CALO3 Calobre, Verag 7.88 281 *i* P Pn 15 55 50.8 -0.4
MARI3 Mariato, Verag 7.93 277 *eP* Pn 15 55 51.5 -0.3
STIA3 Santiago, Vera 7.97 280 *eP* Pn 15 55 51.6 -0.7
RSUS3 Rio de Jesus, 8.13 279 *eP* Pn 15 55 54.5 -0.1
SAFE3 Santa Fe, Vera 8.14 283 *i* P Pn 15 55 54.4 -0.3
GMAL Guarumal, Vera 8.18 277 P Pn 15 55 55.3 +0.1
comp=Z,629nm,1.1s,comp=Z,11µm
GMAL S Sn 15 57 20.9 -5.5
comp=Z,629nm,1.1s,comp=Z,11µm
GMAL Guarumal, Vera 8.18 277 *i* P Pn 15 55 55.3 +0.1
GMAL *i* S Sn 15 57 20.8 -5.6
MESA3 La Mesa, Verag 8.18 280 *i* P Pn 15 55 55.3 +0.1
IMBA Imbabura, San 8.28 219 Pn 15 55 56.9 0.0
OTAV Otavalo 8.47 220 Pn Pn 15 55 58.2 -1.2
OTAV Otavalo 8.47 220 P Pn 15 55 58.4 -1.0
comp=Z,468nm,1.4s,comp=Z,6µmcomp=Z,6µm
OTAV Otavalo 8.47 220 P Pn 15 55 58.2 -1.2
OTAV Otavalo 8.47 220 *eP* Pn 15 55 58.2 -1.2
OTAV *eS* Sn 15 57 32.1 -1.9
PULU Pululahua 8.67 219 Pn 15 56 01.0 -1.1
PAC1 Pacto, Paraso 8.67 222 P Pn 15 55 59.7 -2.1
comp=Z,567nm,1.0s,comp=Z,12µm
ANTS Antisana-Sarah 8.88 215 Pn 15 56 04.9 -0.2
PCRV Puerto La Cruz 8.96 68 P Pn 15 56 04.9 -0.8
comp=Z,461nm,0.8s,baz=231,slow=6.0,SNR=105
PCRV S Sn 15 57 45.4 +0.1
comp=Z,567nm,0.7s,baz=201,slow=20,SNR=4.2
PCRV Puerto La Cruz 8.96 68 *eP* Pn 15 56 04.8 -0.8
PCRV Puerto La Cruz 8.96 68 *eS* Sn 15 57 45.0 -0.3
SLOR San Lorenzo - 9.26 216 Pn 15 56 09.7 -0.3
PIAT Ana Tenorio 9.34 214 P Pn 15 56 10.3 -0.7
comp=Z,136nm,1.3s,comp=Z,2µm
LOMA3 Las Lomas, Chi 9.40 280 *eP* Pn 15 56 11.8 +0.3
LOCO3 Loma Colorada, 9.43 280 *eP* Pn 15 56 12.8 +1.0
DVD David 9.46 280 *eP* Pn 15 56 12.7 +0.4
LNBQ3 Los Naranjos, 9.52 283 *eP* Pn 15 56 11.5 -1.6
LNBQ3 *eS* Sn 15 57 51.2 -7.7
PTAR3 Potrerillos Ar 9.55 282 *eP* Pn 15 56 14.8 +1.2
BCO2 Palmira 9.59 282 *eP* Pn 15 56 16.7 -0.4
BCO2 *eS* Sn 15 57 57.2 -3.4
BRU2 Volcan 9.76 282 *i* P Pn 15 56 16.5 +0.2
BRU2 IVmB_BB 15 56 17.8
comp=Z,12µm,1.0s
BRU2 IAmb IAmb 15 56 18.5
comp=Z,1µm,1.4s
BRU2 *i* S Sn 15 58 02.0 -2.7
BRU2 Volcan 9.76 282 *i* P Pn 15 56 15.9 -0.4
BRU2 *i* S Sn 15 57 59.9 -4.8
LIMO3 Limones 9.82 278 *eP* Pn 15 56 16.7 -0.3
PTPM Petroterminale 9.85 279 *eP* Pn 15 56 17.6 +0.2
MLIR3 Monte Lirio, C 9.89 282⇓ *eP* Pn 15 56 19.2 +1.2
DRK0 Durika 10.39 284 *i* P Pn 15 56 24.2 -0.5
DRK0 IAmb IAmb 15 56 30.4
comp=Z,470nm,0.7s
DRK0 *i* S Sn 15 58 15.8 -4.1
DRK0 Durika 10.39 284 *i* P Pn 15 56 24.4 -0.3
PRVC Isla de Provid 10.47 309 P Pn 15 56 22.1 -3.4
comp=Z,311nm,0.7s,comp=Z,6µmcomp=Z,3µm
PRVC S Sn 15 58 13.5 -8.0
comp=Z,311nm,0.7s,comp=Z,6µmcomp=Z,3µm
PRVC Isla de Provid 10.47 309 *i* P Pn 15 56 22.2 -3.3
PRVC IVmB_BB 15 56 22.4
comp=Z,2µm,1.0s
PRVC IAmb IAmb 15 56 26.2
comp=Z,150nm,0.6s
OCHAL Ojochal 10.74 283 *i* P Pn 15 56 30.9 +1.8
OCHAL IVmB_BB 15 56 31.2
comp=Z,4µm,1.0s
OCHAL IAmb IAmb 15 56 31.3
comp=Z,380nm,0.7s
LCR2 La Lucha 2 11.23 286 Pn 15 56 35.0 -0.7
LCR2 La Lucha 2 11.23 286 *i* P Pn 15 56 36.2 +0.5
LCR2 IVmB_BB 15 56 38.0
comp=Z,9µm,1.0s
LCR2 IAmb IAmb 15 56 38.4
comp=Z,990nm,1.2s
PPLP Puerto Lpez 11.33 223 P Pn 15 56 38.2 +1.3
comp=Z,94nm,1.2s,comp=Z,958nm
TBTG Tabatinga, AM 11.36 164 Pn Pn 15 56 35.3 -1.9
TBTG Tabatinga, AM 11.36 164 P Pn 15 56 34.9 -2.3
comp=Z,1µm,0.9s,comp=Z,11µm
TBTG S Sn 15 58 35.7 -7.3
comp=Z,1µm,0.9s,comp=Z,11µm
TBTG Tabatinga, AM 11.36 164 *eP* Pn 15 56 35.2 -2.1
HDC Heredia 11.40 287 *eP* Pn 15 56 39.4 +1.6
HDC *eS* Sn 15 58 45.6 +1.4
HOJ Hope 11.70 342 *i* P Pn 15 56 44.2 +2.6
STH Stony Hill 11.79 342 *eP* Pn 15 56 43.2 +0.4
STH *i* S Sn 15 58 30.5 -23
TCE Chacachacare 11.81 70 *eP* P 15 56 52.0 +2.2
COVE Coope Vega, Sa 11.88 290 *i* P Pn 15 56 44.9 +0.9
COVE IVmB_BB 15 56 45.2
comp=Z,10µm,1.0s
COVE IAmb IAmb 15 57 05.0
comp=Z,460nm,0.9s
TPP Pointe-a-Pierr 11.98 72 *eP* P 15 56 51.2 -0.5
SOCE Pocosol 11.98 288 Pn 15 56 45.6 +0.3
SOCE Pocosol 11.98 288 *i* P Pn 15 56 47.2 +1.8
SOCE IVmB_BB 15 56 52.4
comp=Z,5µm,1.0s
SOCE IAmb IAmb 15 56 52.6
comp=Z,490nm,0.5s
TRN Trinidad (W) 12.12 71 *eP* P 15 56 54.6 +1.4
TRN Trinidad (W) 12.12 71 *eS* S 15 59 15.2 -0.8
MTDJ Mount Denham 12.16 339 Pn Pn 15 56 46.9 -0.8
MTDJ Mount Denham 12.16 339 *i* P Pn 15 56 46.5 -1.2
MTDJ *eP* P 15 56 49.0 -4.8
MTDJ Mount Denham 12.16 339 *eP* Pn 15 56 47.5 -0.2
MTDJ Mount Denham 12.16 339 P Pn 15 56 48.6 +0.9
comp=Z,3µm,0.4s,comp=Z,35µm
MTDJ S Sn 15 58 52.1 -10
comp=Z,3µm,0.4s,comp=Z,35µm
SDDR Presa de Saban 12.22 8⇓ *iP* Pn 15 56 48.8 +0.4
SDDR Presa de Saban 12.22 8 P Pn 15 56 48.8 +0.4
comp=Z,847nm,1.0s,comp=Z,7µm
SDDR S Sn 15 58 55.8 -7.9
comp=Z,847nm,1.0s,comp=Z,7µm
JTS Las Juntas de 12.27 287 P Pn 15 56 49.4 +0.2
comp=Z,94nm,0.6s,baz=67,slow=7.9,SNR=33
JTS S Sn 15 59 04.9 -0.2
comp=Z,24nm,0.7s,baz=285,slow=20,SNR=1.2
JTS LR LR 16 03 03.0
comp=Z,500nm,18.1s,baz=80,slow=44
JTS Las Juntas de 12.27 287 P Pn 15 56 49.3 +0.2
comp=Z,773nm,0.7s,comp=Z,9µmcomp=Z,6µm
JTS Las Juntas de 12.27 287 *i* P Pn 15 56 49.2 +0.1
JTS *i* S Sn 15 59 09.0 +4.0
GRFF Grenada Fort F 12.31 64 *eP* P 15 56 53.9 -1.4
GRFF Grenada Fort F 12.31 64 *eS* Sn 15 59 09.1 +3.3
ESPN Las Esperanzas 12.32 297 Pn 15 56 47.5 -2.3
ESPN Las Esperanzas 12.32 297 *i* P Pn 15 56 48.4 -1.3
ESPN IAmb IAmb 15 56 50.5
comp=Z,430nm,0.9s
ESPN *i* S Sn 15 58 58.4 -7.8
TBH Brigand Hill 12.39 72 *eP* Pn 15 56 53.0 +2.4
GRGR Grenville 12.41 64 Pn 15 56 49.2 -1.7
GRGR Grenville 12.41 64 P Pn 15 56 50.5 -0.4
comp=Z,2µm,0.9s,comp=Z,17µm
GRGR S Sn 15 59 10.7 +2.3
comp=Z,2µm,0.9s,comp=Z,17µm
GRGR Grenville 12.41 64 *eP* Pn 15 56 50.9 0.0
GRGR Grenville 12.41 64 *eS* Sn 15 59 11.3 +2.9
GRW Mount Saint Ca 12.42 64 *eP* Pn 15 56 51.3 +0.3
GRW Mount Saint Ca 12.42 64 *eS* Sn 15 59 07.6 -1.1
ARNL Arenillas 12.45 214 Pn 15 56 51.0 -0.4
GRHS Sauteurs 12.46 64 *eP* Pn 15 56 51.1 -0.5
GRHS Sauteurs 12.46 64 *eS* Sn 15 59 13.5 +3.9
PCDR Punta Cana, DR 12.49 21 Pn 15 56 50.3 -1.5
GRSS Sisters 12.52 63 *eP* Pn 15 56 51.9 -0.4
GRSS Sisters 12.52 63 *eS* Sn 15 59 12.9 +2.0
MLPR Magueyes Islan 12.54 27 P Pn 15 56 48.3 -4.2
INDI Punta indio, G 12.70 285 *i* P P 15 57 00.5 +0.9
INDI IVmB_BB 15 57 02.0
comp=Z,4µm,1.0s
INDI IAmb IAmb 15 57 02.4
comp=Z,410nm,1.1s
GCMP Grenada, Carri 12.76 63 *eP* Pn 15 56 56.0 +0.7
GCMP Grenada, Carri 12.76 63 *eS* Sn 15 59 22.9 +6.2
TPR Prospect 12.87 69 *eP* Pn 15 56 56.4 -0.4
IGPR InterUniversit 12.99 31 Pn 15 56 55.5 -2.8
AOPR Arecibo Observ 13.00 28 Pn 15 56 55.6 -2.9
AOPR Arecibo Observ 13.00 28 *eP* Pn 15 56 56.4 -2.1
AOPR Arecibo Observ 13.00 28 *eS* Sn 15 59 11.3 -11
ACON Acoyapa 13.02 294 P Pn 15 56 57.7 -0.9
comp=Z,334nm,1.2s,comp=Z,4µm
ACON Acoyapa 13.02 294 *i* P Pn 15 56 57.9 -0.7
ACON IVmB_BB 15 56 59.4
comp=Z,6µm,1.0s
ACON IAmb IAmb 15 57 08.2
comp=Z,340nm,1.2s
MCRA Macar, Loja 13.07 212 P Pn 15 56 57.1 -2.3
comp=Z,228nm,1.0s,comp=Z,2µm
MCRA S S 15 59 33.5 -2.4
comp=Z,228nm,1.0s,comp=Z,2µm
GTBY Guantanamo Bay 13.19 351 Pn 15 57 01.6 +0.8
GTBY Guantanamo Bay 13.19 351 *eP* P 15 57 03.1 -2.0
GTBY *i* P Pn 15 57 04.7 +3.8
GTBY Guantanamo Bay 13.19 351 *eP* P 15 57 03.1 -2.0
GTBY IAmb IAmb 15 57 11.2
comp=Z,350nm,0.8s
GTBY *eS* Sn 15 59 10.4 -17
GTBY Guantanamo Bay 13.19 351 P Pn 15 57 02.2 +1.4
comp=Z,336nm,0.8s,comp=Z,4µm
GTBY S Sn 15 59 16.4 -11
comp=Z,336nm,0.8s,comp=Z,4µm
EMPR Esperanza - Ma 13.22 28 P Pn 15 56 59.9 -1.3
BOAV Boa Vista 13.23 109 Pn 15 56 59.0 -2.3
BOAV Boa Vista 13.23 109 P Pn 15 56 59.5 -1.8
comp=Z,196nm,0.7s,comp=Z,2µm
BOAV S Sn 15 59 23.2 -4.7
comp=Z,196nm,0.7s,comp=Z,2µm
BOAV Boa Vista 13.23 109 *eP* Pn 15 56 59.0 -2.3
SVT Saint Vincent 13.23 61 *eP* Pn 15 57 00.4 -0.9
SVT Saint Vincent 13.23 61 *eS* Sn 15 59 23.2 -4.7
SVOC Richmond Hill, 13.24 61 *eP* Pn 15 56 58.6 -2.8
TEFE Tefe 13.25 140 *eP* Pn 15 57 00.1 -1.5
SVB Belmont 13.27 60 *eP* Pn 15 57 00.8 -1.1
SVB Belmont 13.27 60 *eS* Sn 15 59 24.8 -4.0
GCPR Guaynabo City 13.29 30 P Pn 15 57 00.2 -1.9
MASC Masc 13.34 355 *eP* Pn 15 57 03.5 +0.8
MASC IAmb IAmb 15 57 10.8
comp=Z,800nm,0.9s
MASC *eS* Sn 15 59 16.3 -14
RCC Rio Carpintero 13.36 349 *eP* Pn 15 57 02.3 -0.7
MARVS Santiago de Cu 13.40 348 *eP* Pn 15 57 03.1 -0.4
MARVS IAmb IAmb 15 57 08.5
comp=Z,480nm,1.7s
QMBU Quimbuelo 13.42 353 *eP* Pn 15 57 03.3 -0.4
QMBU IAmb IAmb 15 57 11.2
comp=Z,410nm,0.8s
CHIV Chivirico 13.49 346 *eP* Pn 15 57 04.6 0.0
CHIV *i* P P 15 57 08.9 +0.5
CHIV IAmb IAmb 15 57 10.4
comp=Z,200nm,1.2s
BOAB BOACO BROADBAN 13.65 295 *i* P Pn 15 57 06.2 -0.4
BOAB IVmB_BB 15 57 06.3
comp=Z,3µm,1.0s
BOAB IAmb IAmb 15 57 15.7
comp=Z,380nm,1.2s
LMGC Las Mercedes 13.73 344 *eP* Pn 15 57 07.0 -0.6
LMGC IAmb IAmb 15 57 12.9
comp=Z,400nm,1.0s
NMDO Nuevo Mundo 13.80 352 P Pn 15 57 08.7 +0.1
NMDO Nuevo Mundo 13.80 352 *eP* Pn 15 57 08.6 +0.1
NMDO IAmb IAmb 15 57 18.4
comp=Z,230nm,0.6s
SLBI Saint Lucia, B 13.86 58 *eP* Pn 15 57 07.4 -2.0
SLBI Saint Lucia, B 13.86 58 *eS* S 15 59 53.9 +1.7
MOAC Moa 13.89 353 *eP* P 15 57 11.3 -1.6
BIM Bigot 14.03 56 *eP* Pn 15 57 12.6 +1.0
BIM Bigot 14.03 56 *eS* S 15 59 59.3 +3.5
HUEN 14.06 294 IVmB_BB 15 57 09.7
comp=Z,29µm,1.0s
HUEN *i* P Pn 15 57 12.5 +0.6
HUEN IAmb IAmb 15 57 17.4
comp=Z,350nm,1.0s
FDF Fort de France 14.08 55 P Pn 15 57 11.6 -0.6
FDF pmax pmax
comp=Z,1µm,0.8s
SVN Savane Anatole 14.13 55 *eP* Pn 15 57 12.4 -0.4
SVN Savane Anatole 14.13 55 *eS* S 15 59 58.4 +0.6
HLGC Holguin 14.30 349 *eP* P 15 57 16.8 -0.6
HLGC IAmb IAmb 15 57 23.2
comp=Z,620nm,1.0s
ILAM Ilet Lapin Mar 14.33 55 Pn 15 57 14.9 -0.4
ILAM Ilet Lapin Mar 14.33 55 *eP* Pn 15 57 16.4 +1.1
ILAM Ilet Lapin Mar 14.33 55 *eS* S 16 00 04.0 +1.9
TBG Guadaloupe-3 14.33 50 *eP* Pn 15 57 12.8 -2.4
MOM2 El Cardon 14.38 294 *i* P P 15 57 19.5 +1.1
COPN Copaltepe 14.39 293 *i* P Pn 15 57 17.4 +1.4
SABA Saba 14.39 41 Pn Pn 15 57 15.8 -0.2
CZSB Cruzeiro do Su 14.45 179 Pn 15 57 16.5 -0.2
CZSB Cruzeiro do Su 14.45 179 *eP* Pn 15 57 16.5 -0.2
MBFL Flemmings, Mon 14.48 46 *eP* Pn 15 57 15.8 -1.4
LIMN Finca el Limon 14.52 296 *i* P Pn 15 57 16.7 -1.0
LIMN IVmB_BB 15 57 17.4
comp=Z,4µm,1.0s
LIMN IAmb IAmb 15 57 21.4
comp=Z,220nm,1.1s
CNGN Cerro Negro 14.60 294 P Pn 15 57 17.8 -0.9
comp=Z,454nm,1.1s,comp=Z,6µm
CNGN Cerro Negro 14.60 294 *i* P Pn 15 57 18.1 -0.6
CNGN IVmB_BB 15 57 24.8
comp=Z,7µm,1.0s
CNGN IAmb IAmb 15 57 25.1
comp=Z,470nm,1.1s
BCHC Barbados, Cave 14.62 64 *eP* P 15 57 20.6 -0.5
BCHC Barbados, Cave 14.62 64 *eS* S 16 00 05.6 -2.7
BBGH Gun Hill 14.69 64 *eP* P 15 57 21.8 -0.1
BBGH Gun Hill 14.69 64 *eS* S 16 00 12.3 +2.5
GRTK Grand Turk 14.73 7 Pn 15 57 19.7 -0.5
GRTK Grand Turk 14.73 7 P Pn 15 57 19.4 -0.8
comp=Z,420nm,0.9s,comp=Z,4µm
GRTK S Sn 16 00 03.0 -1.0
comp=Z,420nm,0.9s,comp=Z,4µm
SMRT St. Maarten 14.81 40 Pn 15 57 21.1 -0.1
ATAH Atahualpa 14.84 201 P Pn 15 57 21.7 -0.4
comp=Z,72nm,0.8s,baz=42,slow=6.9,SNR=21
ATAH S S 16 00 12.6 -0.8
comp=Z,47nm,0.9s,baz=108,slow=6.4,SNR=1.8
SOMN Somoto 14.88 297 *i* P Pn 15 57 21.8 -0.5
SOMN IVmB_BB 15 57 26.5
comp=Z,1µm,1.0s
SOMN IAmb IAmb 15 57 26.8
comp=Z,91nm,1.0s
CRIN San Cristobal 14.99 294 P Pn 15 57 22.9 -0.7
comp=Z,486nm,0.7s,comp=Z,9µm
ANBD Bethesda, Anti 15.00 46 *eP* Pn 15 57 23.7 +0.1
ANBD Bethesda, Anti 15.00 46 *eS* Sn 16 00 10.7 +0.2
ANWB Willy Bob 15.40 44 P Pn 15 57 28.3 -0.2
comp=Z,935nm,1.1s,comp=Z,17µm
ANWB S S 16 00 22.0 -0.9
comp=Z,935nm,1.1s,comp=Z,17µm
ANWB Willy Bob 15.40 44 *eP* Pn 15 57 29.0 +0.4
TGUH Tegucigalpa,Un 15.73 298 P Pn 15 57 32.2 -0.6
comp=Z,952nm,1.2s,comp=Z,10µm
TGUH S S 16 00 29.8 +0.8
comp=Z,952nm,1.2s,comp=Z,10µm
MACA Manacapuru-AM 15.82 128 Pn 15 57 33.5 -0.3
MACA Manacapuru-AM 15.82 128 *eP* Pn 15 57 33.9 +0.2
CNCH Conchagua 15.91 295 *i* P Pn 15 57 34.4 -0.6
CNCH IVmB_BB 15 57 37.8
comp=Z,13µm,1.0s
CNCH IAmb IAmb 15 57 39.3
comp=Z,730nm,0.9s
MGV Manicaragua 16.62 337 *eP* Pn 15 57 43.7 +0.3
MGV IAmb IAmb 15 57 55.3

comp=Z,370nm,0.5s
**ETMB Extrema 17.86 158** P **P** **15 57 56.9 +0.2**
**ETMB Extrema 17.86 158** *e*P **P** **15 57 57.0 +0.2**
**SAML Samuel 18.48 148** P **P** **15 58 03.4 -0.1**
**SAML Samuel 18.48 148** P **P** **15 58 03.4 -0.1**
**SAML Samuel 18.48 148** *e*P **P** **15 58 03.5 -0.1**
**SOR Soroa 18.57 330** P **P** **15 58 05.0 +0.6**
**SOR Soroa 18.57 330** P **P** **15 58 05.0 +0.6**
**PAYG Puerto Ayora 18.74 247** **P** **15 58 08.4 +1.9**
**PAYG Puerto Ayora 18.74 247** P **P** **15 58 08.4 +1.9**
comp=Z,347nm,1.1s,comp=Z,5µm
**APG El Apazote 18.93 297** P **P** **15 58 08.4 -0.3**
comp=Z,22nm,0.7s,baz=131,slow=4.2,SNR=109
**NNA Nana 19.05 191** P **P** **15 58 09.7 -0.2**
**NNA Nana 19.05 191** P **P** **15 58 10.1 +0.3**
comp=Z,55nm,0.8s,baz=352,slow=7.2,SNR=20
NNA S **S** **16 01 42.3 +4.4**
comp=Z,62nm,1.0s,baz=135,slow=20,SNR=5.4
**NNA Nana 19.05 191** P **P** **15 58 10.0 +0.2**
comp=Z,82nm,0.8s,comp=Z,1µm
NNA S **S** **16 01 34.5 -3.4**
comp=Z,82nm,0.8s,comp=Z,1µm
**TEIG Tepich 19.91 314** P **P** **15 58 19.8 +0.9**
**TEIG Tepich 19.91 314** P **P** **15 58 20.3 +1.3**
comp=Z,691nm,0.7s,baz=125,slow=7.9,SNR=247
TEIG ScP **ScP** **16 05 53.3 +2.0**
comp=Z,8.6nm,0.6s,baz=57,slow=2.6,SNR=6.1
**TEIG Tepich 19.91 314** P **P** **15 58 20.0 +1.1**
comp=Z,2µm,0.9s,comp=Z,23µmcomp=Z,11µm
TEIG S **S** **16 01 58.1 +3.6**
comp=Z,2µm,0.9s,comp=Z,23µmcomp=Z,11µm
**MDP Montagnes des 20.36 94** P **P** **15 58 26.0 +2.1**
comp=Z,120nm,0.7s,baz=270,slow=11,SNR=44
MDP pP **pP** **15 58 51.1 -0.2**
comp=Z,116nm,0.8s,baz=267,slow=13,SNR=6.2
**061Z Ochoppi 20.38 339** P **P** **15 58 22.9 -1.1**
**ITTB Itaituba 20.54 122** *e*P **P** **15 58 27.1 +1.3**
**MAL2 Monte Alegre, 20.77 114** P **P** **15 58 29.2 +0.9**
**CCIG Comitan 20.92 298** P **P** **15 58 29.0 -1.1**
**MCPB Macapa, AP 22.12 108** *e*P **P** **15 58 43.2 +0.7**
**NPGB Novo Progresso 22.38 128** *e*P **P** **15 58 45.1 +0.1**
**DWPF Disney Wildern 22.63 340** P **P** **15 58 49.3 +2.2**
baz=158
**VILB Vilhena 23.41 147** P **P** **15 58 54.5 0.0**
**VILB Vilhena 23.41 147** *e*P **P** **15 58 54.4 -0.1**
**LPAZ La Paz 23.46 168** P **P** **15 58 55.0 -0.6**
**LPAZ La Paz 23.46 168** P **P** **15 58 55.5 -0.1**
comp=Z,22nm,0.7s,baz=346,slow=10.0,SNR=52
LPAZ S **S** **16 02 54.1 -3.8**
comp=Z,37nm,1.1s,baz=185,slow=18,SNR=3.9
comp=Z,22nm,0.7s
**LPAZ La Paz 23.46 168** P **P** **15 58 55.7 +0.1**
**LPAZ La Paz 23.46 168** *e*P **P** **15 58 54.4 -1.1**
**PDRB Porto dos Gac 24.46 138** *e*P **P** **15 59 03.9 -0.1**
**CLDB Colider 24.56 136** *e*P **P** **15 59 04.6 -0.3**
**SIV San Ignacio 25.57 152** LR LR 16 10 27.6
comp=Z,406nm,21.9s,baz=299,slow=39
**PTLB Pontes e Lacer 26.05 148** P **P** **15 59 17.8 -0.6**
**PTLB Pontes e Lacer 26.05 148** *e*P **P** **15 59 18.0 -0.4**
**257A Skidaway Islan 26.12 344** IAmb IAmb 15 59 21.9
comp=Z,232nm,0.8s
**TIGA Tifton 26.42 339** IAmb IAmb 15 59 24.8
comp=Z,201nm,1.0s
**TIGA Tifton 26.42 339** P **P** **15 59 23.9 +2.3**
baz=156,SNR=14
**255A Hazlehurst 26.50 342** IAmb IAmb 15 59 25.6
comp=Z,210nm,1.1s
**451A Vernon 26.52 335** IAmb IAmb 15 59 29.9
comp=Z,377nm,1.4s
**PRPB Parauapebas 26.52 119** *e*P **P** **15 59 23.2 +0.4**
**GO01 Chusmiza 26.58 172** P **P** **15 59 22.2 -1.4**
**BBSD Serra de San D 26.82 153** *e*P **P** **15 59 24.5 -0.9**
**NHSC New Hope 26.99 347** P **P** **15 59 27.0 +0.3**
NHSC IAmb IAmb 15 59 29.9
comp=Z,302nm,1.4s
**NHSC New Hope 26.99 347** P **P** **15 59 28.7 +2.0**
baz=164
**TLIG Tlapa 27.10 296** IAmb IAmb 15 59 36.6
comp=Z,222nm,1.2s
**BRAL Brewton 27.56 333** P **P** **15 59 34.2 +2.5**
baz=149,SNR=8.2
**GOGA Godfrey 28.18 341** IAmb IAmb 15 59 40.3
comp=Z,108nm,0.9s
**GOGA Godfrey 28.18 341** P **P** **15 59 39.2 +1.9**
baz=158,SNR=64
**GOGA Godfrey 28.18 341** P **P** **15 59 39.3 +2.1**
GOGA pmax pmax
comp=Z,150nm,1.0s
**SALV Santo Antonio 28.36 143** *e*P **P** **15 59 38.8 -0.2**
**JSC Jenkinsville 28.38 346** IAmb IAmb 15 59 41.8
comp=Z,143nm,0.9s
**BIRD Birdtown, Kers 28.54 347** IAmb IAmb 15 59 43.1
comp=Z,106nm,1.2s
**SNDB Serra Nova Dou 28.57 131** *e*P **P** **15 59 40.8 -0.1**
**HODGE Hodges 28.59 344** IAmb IAmb 15 59 43.7
comp=Z,106nm,0.8s
**CNNC Cliffs of the 28.64 352** P **P** **15 59 42.8 +1.5**
baz=170
**Y52A Lilburn 28.79 341** IAmb IAmb 15 59 45.3
comp=Z,105nm,0.7s
**PAULI Pauline 29.03 345** IAmb IAmb 15 59 47.6
comp=Z,94nm,0.8s
**V61A Roper 29.03 354** IAmb IAmb 15 59 47.6
comp=Z,237nm,1.3s
**LRAL Lakeview Retre 29.14 335** IAmb IAmb 15 59 48.8
comp=Z,184nm,1.1s
**LRAL Lakeview Retre 29.14 335** P **P** **15 59 47.8 +2.1**
baz=151,SNR=80
**KMSC Kings Mountain 29.21 346** IAmb IAmb 15 59 48.7
comp=Z,58nm,0.7s
**KMSC Kings Mountain 29.21 346** P **P** **15 59 48.2 +1.8**
baz=163,SNR=24
**BG3 Lake Jocassee 29.49 343** IAmb IAmb 15 59 52.3
comp=Z,160nm,1.2s
**LVC Limon Verde 29.52 172** P **P** **15 59 48.7 -0.9**
**LVC Limon Verde 29.52 172** S **S** **16 04 28.7 -4.4**
comp=Z,10nm,1.0s,baz=90,slow=11,SNR=3.1
LVC ScP **ScP** **16 06 18.1 -0.5**
comp=Z,18nm,1.0s,baz=48,slow=23,SNR=4.8
**LVC Limon Verde 29.52 172** P **P** **15 59 48.7 -0.9**
LVC pmax pmax
comp=Z,81nm,1.4s
**LVC Limon Verde 29.52 172** *e*P **P** **15 59 48.2 -1.3**
**X51A Calhoun 29.70 340** IAmb IAmb 15 59 53.4
comp=Z,110nm,0.8s
**SMTB Santa Maria do 29.77 121** *e*P **P** **15 59 51.8 +0.3**
**V55A Taylorsville 29.86 347** IAmb IAmb 15 59 55.4
comp=Z,102nm,0.8s
**FPAL Fort Paine 29.94 339** IAmb IAmb 15 59 55.7
comp=Z,173nm,1.0s
**VBMS Vicksburg 30.07 329** P **P** **15 59 55.9 +2.0**
baz=144,SNR=27
**V53A Saluda 30.09 344** IAmb IAmb 15 59 57.4
comp=Z,83nm,0.8s
**MOIG Morelia 30.17 298** IAmb IAmb 15 59 58.3
comp=Z,94nm,1.0s
**T59A Double "B" Far 30.30 353** IAmb IAmb 15 59 58.5
comp=Z,120nm,0.9s
**TKL Tuckaleechee C 30.36 343** IAmb IAmb 15 59 59.5
comp=Z,144nm,1.4s
**CPCT Cooper Cave 30.39 341** IAmb IAmb 16 00 00.0
comp=Z,165nm,0.9s
**441A DeRidder 30.40 324** IAmb IAmb 15 59 59.7
comp=Z,141nm,0.8s
**W50A Signal Mountai 30.43 340** IAmb IAmb 16 00 00.3
comp=Z,202nm,0.9s
**V52A Sevierville 30.48 343** IAmb IAmb 16 00 00.5
comp=Z,142nm,1.1s
**T57A Hurt 30.58 350** IAmb IAmb 16 00 00.9
comp=Z,122nm,0.8s
**SWET Sewanee 30.66 339** IAmb IAmb 16 00 01.9
comp=Z,118nm,1.0s
**ARAG Araguaiana, MT 30.70 137** *e*P **P** **15 59 59.4 -0.3**
**143A Socs Landing, 30.91 329** IAmb IAmb 16 00 06.3
comp=Z,171nm,0.8s
**BLA Blacksburg 31.00 349** IAmb IAmb 16 00 05.3
comp=Z,106nm,1.0s
**BLA Blacksburg 31.00 349** P **P** **16 00 04.2 +2.0**
baz=166,SNR=10
**TZTN Tazewell 31.12 343** IAmb IAmb 16 00 06.2
comp=Z,144nm,1.1s
**TZTN Tazewell 31.12 343** P **P** **16 00 05.1 +1.9**
baz=160,SNR=48
**S57A Dark Hollow, R 31.28 351** IAmb IAmb 16 00 07.2
comp=Z,109nm,0.8s
**KVTX Kingsville 31.32 314** P **P** **16 00 03.9 -1.1**
KVTX IAmb IAmb 16 00 07.1
comp=Z,182nm,0.9s
**OXF Oxford 31.44 334** IAmb IAmb 16 00 08.0
comp=Z,218nm,1.0s
**OXF Oxford 31.44 334** P **P** **16 00 06.9 +1.0**
baz=148,SNR=18
**HKT Hockley 31.45 320** P **P** **16 00 06.5 +0.4**
HKT IAmb IAmb 16 00 07.8
comp=Z,88nm,0.9s
**HKT Hockley 31.45 320** *c i*P **P** **16 00 07.1 +1.0**
HKT pmax pmax
comp=Z,104nm,0.9s
**HKT Hockley 31.45 320** P **P** **16 00 07.0 +0.9**
**CBN Corbin Frederi 31.50 353** IAmb IAmb 16 00 09.3
comp=Z,294nm,1.4s
**CBN Corbin Frederi 31.50 353** P **P** **16 00 08.2 +1.7**
baz=172,SNR=6.7
**S54A Dingess, Beckl 31.75 347** IAmb IAmb 16 00 11.9
comp=Z,199nm,0.8s
**U49A Red Boiling Sp 31.78 340** IAmb IAmb 16 00 11.7
comp=Z,138nm,1.2s
**T50A Nancy 31.94 342** IAmb IAmb 16 00 13.4
comp=Z,162nm,1.0s
**R55A Marlinton 31.98 349** IAmb IAmb 16 00 14.2
comp=Z,109nm,0.9s
**NATX Nacogdoches 32.00 324** P **P** **16 00 12.3 +1.4**
baz=136,SNR=20
**AQDB Aquidauana 32.03 148** P **P** **16 00 10.5 -0.8**
AQDB IAmb IAmb 16 00 47.8
comp=Z,107nm,0.9s
**AQDB Aquidauana 32.03 148** *e*P **P** **16 00 11.0 -0.3**
**MLDN Muldoon 32.15 318** IAmb IAmb 16 00 14.2
comp=Z,155nm,0.8s
**S51A Beattyville 32.16 344** IAmb IAmb 16 00 15.1
comp=Z,129nm,0.8s
**WVT Waverly 32.17 337** P **P** **16 00 13.5 +1.2**
**WVT Waverly 32.17 337** P **P** **16 00 13.8 +1.4**
baz=152
**WVT Waverly 32.17 337** P **P** **16 00 13.5 +1.2**
WVT pmax pmax
comp=Z,412nm,1.0s
**WVT Waverly 32.17 337** P **P** **16 00 13.6 +1.2**
**ZAIG Zacatecas 32.55 302** IAmb IAmb 16 00 19.4
comp=Z,82nm,1.0s
**Q56A Snyder Ridge, 32.57 351** IAmb IAmb 16 00 19.4
comp=Z,144nm,1.1s
**Q54A Coxs Mills 32.80 349** IAmb IAmb 16 00 21.0
comp=Z,110nm,0.9s
**P57A Homestead Farm 32.84 353** IAmb IAmb 16 00 21.9
comp=Z,161nm,1.2s
**833A Chaparral WMA, 32.85 314** IAmb IAmb 16 00 19.2
comp=Z,152nm,1.0s
**833A Chaparral WMA, 32.85 314** P **P** **16 00 18.2 -0.2**
baz=126,SNR=29
**UALR University of 33.03 330** IAmb IAmb 16 00 21.7
comp=Z,128nm,1.2s
**SSFO Shawnee State 33.05 345** IAmb IAmb 16 00 23.1
comp=Z,168nm,0.8s
**X40A Bass Creek Fa 33.05 329** IAmb IAmb 16 00 21.8
comp=Z,156nm,0.9s
**435B Jarrell 33.13 319** P **P** **16 00 21.7 +0.9**
baz=131
**MVL Millersville 33.18 355** IAmb IAmb 16 00 24.3
comp=Z,136nm,1.2s
**R49A Shelbyville 33.21 342** IAmb IAmb 16 00 24.0
comp=Z,78nm,0.8s
**MCWV Mont Chateau 33.27 350** IAmb IAmb 16 00 25.5
comp=Z,114nm,0.9s
**MCWV Mont Chateau 33.27 350** P **P** **16 00 24.5 +2.5**
baz=168,SNR=9.7
**BDFB Brasilia 33.35 132** IAmb IAmb 16 00 24.8
comp=Z,60nm,0.8s
**BDFB Brasilia 33.35 132** P **P**
comp=Z,57nm,0.8s,baz=300,slow=10,SNR=61
comp=Z,57nm,0.8s
**P53A Whipple 33.39 348** IAmb IAmb 16 00 26.2
comp=Z,184nm,1.2s
**WHAR Wooly Hollow 33.41 331** IAmb IAmb 16 00 25.0
comp=Z,209nm,0.9s
**MIAR Mount Ida 33.48 328** IAmb IAmb 16 00 25.0
comp=Z,77nm,0.8s
**MIAR Mount Ida 33.48 328** P **P** **16 00 24.0 +0.3**
baz=141,SNR=77
**MIAR Mount Ida 33.48 328** P **P** **16 00 24.1 +0.3**
MIAR pmax pmax
comp=Z,114nm,1.1s
**HNDO Hondo 33.48 316** IAmb IAmb 16 00 24.9
comp=Z,256nm,1.6s
**WCI Wyandotte Cave 33.51 341** P **P** **16 00 25.2 +1.2**
**WCI Wyandotte Cave 33.51 341** P **P** **16 00 25.6 +1.6**
baz=156
**WCI Wyandotte Cave 33.51 341** P **P** **16 00 25.2 +1.2**
WCI pmax pmax
comp=Z,237nm,0.7s
**WCI Wyandotte Cave 33.51 341** P **P** **16 00 25.5 +1.6**
**P52A Cornish 33.69 347** P **P** **16 00 27.5 +2.0**
baz=164,SNR=66
**CPNY Central Park 33.85 359** IAmb IAmb 16 00 29.4
comp=Z,58nm,0.7s
**WHTX Lake Whitney, 33.85 321** IAmb IAmb 16 00 29.0
comp=Z,161nm,0.8s
**WHTX Lake Whitney, 33.85 321** P **P** **16 00 28.0 +0.9**
baz=133,SNR=28
**SDBA SAO DESIDERIO 33.87 124** *e*P **P** **16 00 27.5 +0.1**
**PAPY Pozo Azul 33.94 155** *e*P **P** **16 00 26.3 -1.6**
**SSPA Standing Stone 33.96 353** P **P** **16 00 29.5 +1.6**
SSPA IAmb IAmb 16 00 31.3
comp=Z,178nm,1.2s
**SSPA Standing Stone 33.96 353** P **P** **16 00 30.2 +2.3**
baz=171
**SSPA Standing Stone 33.96 353** P **P** **16 00 30.1 +2.2**
SSPA PcP **PcP** **16 03 03.0 +0.5**
SSPA ScP **ScP** **16 06 34.5 +1.6**
**FW14 Alvarado 33.97 322** IAmb IAmb 16 00 29.9
comp=Z,168nm,0.9s
**N58A Sunbury 34.05 355** IAmb IAmb 16 00 32.2
comp=Z,82nm,0.8s
**PAL Palisades 34.06 359** IAmb IAmb 16 00 31.2
comp=Z,119nm,0.7s
**PAL Palisades 34.06 359** P **P** **16 00 30.3 +1.7**
baz=178,SNR=27
**O53A New Philadelph 34.09 349** IAmb IAmb 16 00 32.1
comp=Z,147nm,0.9s
**O53A New Philadelph 34.09 349** P **P** **16 00 31.1 +2.1**
baz=165,SNR=40
**ODNJ Ogdensburg 34.16 358** IAmb IAmb 16 00 32.3
comp=Z,52nm,0.6s
**TRNY Table Rock, Ra 34.21 358** IAmb IAmb 16 00 33.5
comp=Z,202nm,1.2s
**P49A Miami Univ. Ec 34.23 344** P **P** **16 00 31.4 +1.2**
baz=159,SNR=14
**DRIO Del Rio 34.36 314** IAmb IAmb 16 00 33.1
comp=Z,121nm,0.9s
**JCT Junction City 34.42 317** IAmb IAmb 16 00 33.2
comp=Z,107nm,1.2s
**JCT Junction City 34.42 317** P **P** **16 00 32.1 +0.1**
baz=128,SNR=15
**ACSO Alum Creek Sta 34.45 346** IAmb IAmb 16 00 35.2
comp=Z,166nm,0.8s
**ACSO Alum Creek Sta 34.45 346** P **P** **16 00 34.1 +2.0**
baz=162,SNR=31
**M63A Gales Ferry 34.46 1** IAmb IAmb 16 00 35.0
comp=Z,98nm,0.5s
**X37A Clayton 34.47 326** IAmb IAmb 16 00 34.1
comp=Z,168nm,1.1s
**ITRB Iturama 34.54 140** *e*P **P** **16 00 33.3 +0.2**
**N53A Lisbon 34.56 350** IAmb IAmb 16 00 36.1
comp=Z,96nm,1.1s
**M57A Sunshine Farm, 34.58 355** IAmb IAmb 16 00 36.7
comp=Z,213nm,1.1s
**O49A Covington 34.74 345** IAmb IAmb 16 00 37.2
comp=Z,438nm,1.9s
**IPMB Ipameri, GO 34.75 135** *e*P **P** **16 00 34.7 -0.3**
**UCCT U. Connecticut 34.85 1** IAmb IAmb 16 00 38.1
comp=Z,66nm,0.5s
**MGMO Mountain Grove 34.92 333** IAmb IAmb 16 00 38.0
comp=Z,208nm,0.9s
**N51A Ashland 34.97 348** IAmb IAmb 16 00 39.3
comp=Z,397nm,1.7s
**HHAR Hobbs 35.02 330** IAmb IAmb 16 00 38.2
comp=Z,141nm,0.9s
**O48B Farmland 35.03 344** IAmb IAmb 16 00 39.3
comp=Z,83nm,0.8s
**O48B Farmland 35.03 344** P **P** **16 00 38.2 +1.1**
baz=159,SNR=24
**Q44A Meyer Farm, Va 35.06 338** IAmb IAmb 16 00 39.7
comp=Z,135nm,0.8s
**M53A WI Miller and 35.15 350** IAmb IAmb 16 00 42.2
comp=Z,114nm,1.2s
**M53A WI Miller and 35.15 350** P **P** **16 00 40.0 +2.0**
baz=167,SNR=9.3
**CCM Cathedral Cave 35.22 335** P **P** **16 00 39.3 +0.6**
**CCM Cathedral Cave 35.22 335** P **P** **16 00 39.6 +0.9**
baz=148
**CCM Cathedral Cave 35.22 335** P **P** **16 00 39.3 +0.6**
CCM pmax pmax
comp=Z,634nm,0.8s
**CCM Cathedral Cave 35.22 335** P **P** **16 00 39.4 +0.8**
CCM pP **pP** **16 01 13.7 +1.6**
CCM PcP **PcP** **16 03 07.3 +1.1**
CCM ScP **ScP** **16 06 39.0 +1.6**
**ALLY Alegheny Colle 35.27 351** IAmb IAmb 16 00 42.2
comp=Z,172nm,0.9s
**L59A Walton 35.28 357** IAmb IAmb 16 00 42.6
comp=Z,88nm,0.7s
**BINY Binghamton 35.34 356** IAmb IAmb 16 00 43.0
comp=Z,170nm,0.9s
**BINY Binghamton 35.34 356** P **P** **16 00 41.8 +2.1**
baz=175,SNR=44
**U38A Gravette 35.36 330** IAmb IAmb 16 00 41.0
comp=Z,181nm,1.0s
**M52A Chesterland 35.37 349** IAmb IAmb 16 00 42.9
comp=Z,118nm,0.9s
**N49A Columbus Grove 35.40 345** IAmb IAmb 16 00 42.6
comp=Z,174nm,1.1s
**L56A Greenwood 35.41 354** IAmb IAmb 16 00 43.8
comp=Z,183nm,0.9s
**RLO Rose Lookout 35.48 329** IAmb IAmb 16 00 42.0
comp=Z,227nm,0.8s
**L61B Northampton 35.50 0** P **P** **16 00 42.5 +1.5**
baz=180,SNR=15
**HRV Adam Dziewonsk 35.58 2** P **P** **16 00 43.3 +1.6**
HRV IAmb IAmb 16 00 44.6
comp=Z,56nm,0.5s
**HRV Adam Dziewonsk 35.58 2** P **P** **16 00 43.7 +2.0**
baz=182
**HRV Adam Dziewonsk 35.58 2** P **P** **16 00 43.3 +1.6**
HRV pmax pmax
comp=Z,56nm,0.5s
**HRV Adam Dziewonsk 35.58 2** P **P** **16 00 43.7 +2.0**
HRV pP **pP** **16 01 17.8 +1.9**
**NBPB Pedra_Branca-C 35.58 109** *e*P **P** **16 00 41.5 -0.6**
**OZNA Ozona 35.60 316** IAmb IAmb 16 00 43.1
comp=Z,100nm,1.2s
**ABTX Abilene, Hawle 35.66 320** P **P** **16 00 43.4 +0.8**
baz=130,SNR=81
**LCO Las Campanas 35.68 176** P **P** **16 00 42.6 -0.5**
**LCO Las Campanas 35.68 176** P **P** **16 00 42.6 -0.5**
LCO pmax pmax
comp=Z,78nm,1.5s
**TUL3 Leonard 35.69 327** IAmb IAmb 16 00 43.9
comp=Z,173nm,0.8s
**TUL3 Leonard 35.69 327** P **P** **16 00 42.9 +0.1**
baz=139,SNR=22
**ERPA Erie 35.70 351** IAmb IAmb 16 00 45.6
comp=Z,79nm,0.7s
**ERPA Erie 35.70 351** P **P** **16 00 44.6 +1.9**
baz=168,SNR=7.4
**SFIN Lafayette 35.72 341** P **P** **16 00 44.3 +1.3**
baz=156,SNR=144
**W35A Tecumseh 35.72 325** IAmb IAmb 16 00 43.9
comp=Z,81nm,0.7s
**SAND Sanderson 35.74 314** IAmb IAmb 16 00 45.7
comp=Z,142nm,1.0s
**WVNY West Valley, N 35.79 353** IAmb IAmb 16 00 46.7
comp=Z,246nm,1.2s
**JANB Januaria 35.82 127** *e*P **P** **16 00 44.0 -0.2**
**K57A Scipio Center 35.91 356** IAmb IAmb 16 00 47.3
comp=Z,226nm,1.0s
**FNO Franklin 36.10 325** IAmb IAmb 16 00 47.9
comp=Z,144nm,0.8s
**SGCY Sterling City 36.19 317** IAmb IAmb 16 00 48.4
comp=Z,161nm,0.8s
**CPUP Villa Florida 36.30 156** P **P** **16 00 44.6 -3.4**
comp=Z,9.6nm,0.8s,baz=338,slow=8.1,SNR=21
CPUP ScP **ScP** **16 06 39.8 -1.8**
comp=Z,6.8nm,1.0s,baz=360,slow=5.6,SNR=4.9
CPUP LR LR 16 15 17.6
comp=Z,265nm,21.9s,baz=193,slow=35
**CPUP Villa Florida 36.30 156** P **P** **16 00 44.8 -3.2**
CPUP pmax pmax
comp=Z,12nm,0.9s
**J61A Chester 36.39 1** IAmb IAmb 16 00 51.8
comp=Z,53nm,0.7s
**L48A N Adams 36.42 346** IAmb IAmb 16 00 51.9
comp=Z,91nm,0.9s
**ACCN Adirondack Com 36.43 359** IAmb IAmb 16 00 52.0
comp=Z,65nm,0.7s
**J58A Remsen 36.46 357** IAmb IAmb 16 00 52.1
comp=Z,112nm,0.8s
**J56A Wolcott 36.48 355** IAmb IAmb 16 00 52.0
comp=Z,212nm,1.0s
**MEDO Medina 36.52 353** IAmb IAmb 16 00 53.1
comp=Z,53nm,0.6s
**TX31 Lajitas Ar. Si 36.53 312** IAmb IAmb 16 00 51.9
comp=Z,98nm,0.8s
**TXAR Lajitas Array 36.53 312** P **P** **16 00 50.6 +0.5**
comp=Z,87nm,0.8s,baz=128,slow=9.0,SNR=461
TXAR PcP **PcP** **16 03 12.2 +1.7**
comp=Z,21nm,0.8s,baz=126,slow=6.4,SNR=8.9
TXAR ScP **ScP** **16 06 43.1 +0.5**
comp=Z,3.7nm,0.8s,baz=134,slow=7.2,SNR=6.2
comp=Z,87nm,0.8s
**WMOK Wichita Mounta 36.53 323** IAmb IAmb 16 00 50.8
comp=Z,134nm,0.8s
**WMOK Wichita Mounta 36.53 323** P **P** **16 00 49.7 -0.3**
baz=134,SNR=168
**WMOK Wichita Mounta 36.53 323** P **P** **16 00 49.7 -0.3**
WMOK pmax pmax
comp=Z,194nm,0.9s
**J55A Hilton 36.55 354** IAmb IAmb 16 00 52.6
comp=Z,280nm,1.4s
**AAM Ann Arbor 36.58 347** P **P** **16 00 51.6 +1.4**
baz=162
**HDIL Hopedale 36.62 339** P **P** **16 00 50.8 +0.2**
baz=152
**J54A Appleton 36.65 353** IAmb IAmb 16 00 53.7
comp=Z,208nm,1.4s
**BB19B Bebedouro 36.70 140** *e*P **P** **16 00 51.1 -0.5**
**SN07 Snyder 07 36.77 319** IAmb IAmb 16 00 53.4
comp=Z,153nm,0.7s
**LDASE Londrina, Braz 36.88 145** *e*P **P** **16 00 52.3 -0.8**
**HPIG 36.90 307** IAmb IAmb 16 00 55.1
comp=Z,135nm,1.1s
**M44A Midewin, Midew 36.94 341** IAmb IAmb 16 00 54.6
comp=Z,164nm,1.0s
**MNHN Monahans 36.98 315** IAmb IAmb 16 00 54.6
comp=Z,106nm,0.6s
**NCB Newcomb 37.03 359** IAmb IAmb 16 00 57.9
comp=Z,123nm,1.2s
**ALPN Alpine 37.06 313** IAmb IAmb 16 00 56.5
comp=Z,67nm,0.8s
**PECO Prince Edward 37.14 355** IAmb IAmb 16 00 57.8
comp=Z,90nm,0.7s
**DKNS Dickens 37.15 320** IAmb IAmb 16 00 57.0
comp=Z,144nm,0.9s
**I63A Otisfield 37.16 3** IAmb IAmb 16 00 57.8
comp=Z,74nm,0.5s
**ODSA Odessa 37.28 316** IAmb IAmb 16 00 59.5
comp=Z,144nm,1.0s
**LBNH Lisbon 37.30 1** IAmb IAmb 16 00 59.1
comp=Z,80nm,0.6s
**LBNH Lisbon 37.30 1** P **P** **16 00 58.2 +1.9**
baz=182,SNR=20
**KAN09 Caldwell North 37.58 327** IAmb IAmb 16 00 59.9
comp=Z,207nm,0.9s
**L44A Lake County Fo 37.61 342** IAmb IAmb 16 01 00.2
comp=Z,207nm,1.0s
**L44A Lake County Fo 37.61 342** P **P** **16 00 59.3 +0.4**
baz=155,SNR=7.0
**KAN14 Manchester OK 37.64 326** IAmb IAmb 16 00 59.7
comp=Z,125nm,0.6s
**LONY Lake Ozonia 37.69 358** IAmb IAmb 16 01 02.4
comp=Z,118nm,1.3s
**LONY Lake Ozonia 37.69 358** P **P** **16 01 01.1 +1.5**
baz=177,SNR=11
**FRTB Fartura 37.74 143** *e*P **P** **16 00 59.9 -0.4**
**PECS Pecos 37.77 314** IAmb IAmb 16 01 02.1
comp=Z,120nm,1.2s
**DELO Deloro Mine 37.77 355** IAmb IAmb 16 01 03.2
comp=Z,109nm,0.5s
**L42A Oliver, Polo 38.03 340** IAmb IAmb 16 01 03.4
comp=Z,247nm,1.1s
**EMMW East Machias 38.07 6** P **P** **16 01 04.3 +1.7**

SADO Sadowa 38.19 353 IAmb IAmb 16 01 06.1
comp=Z,259nm,1.4s
DIAM Diamantina, MG 38.24 131 eP P 16 01 04.2 -0.4
VHRN Van Horn 38.26 313 IAmb IAmb 16 01 06.5
comp=Z,215nm,1.1s
RCLB Rio Claro- Sao 38.31 140 eP P 16 01 04.6 -0.5
G62A West of Eustis 38.33 3 P P 16 01 06.1 +1.2
G62A IAmb IAmb 16 01 07.9
comp=Z,92nm,0.6s
AMTX Amarillo 38.41 321 P P 16 01 06.6 +0.7
baz=130
PKME Peaks-Kenny Pk 38.45 4 IAmb IAmb 16 01 08.3
comp=Z,48nm,0.5s
PKME Peaks-Kenny Pk 38.45 4 P P 16 01 07.6 +1.7
baz=186,SNR=25
OTT Ottawa 38.51 357 P P 16 01 07.7 +1.3
KSU1 Kansas State U 38.54 330 P P 16 01 06.5 -0.3
baz=140,SNR=48
G65A Princeton 38.54 6 IAmb IAmb 16 01 09.4
comp=Z,58nm,0.5s
MSTX Muleshoe 38.54 319 P P 16 01 07.3 +0.3
baz=128,SNR=29
GGN Saint George 38.54 7 IAmb IAmb 16 01 09.4
comp=Z,82nm,0.6s
MNTQ Montreal, Queb 38.55 359 IAmb IAmb 16 01 10.0
comp=Z,152nm,0.8s
HAL Halifax 38.58 11 IAmb IAmb 16 01 09.1
comp=Z,61nm,0.6s
L40A Anamosa 38.63 338 IAmb IAmb 16 01 08.3
comp=Z,162nm,0.8s
CRSM Crissiumal (Br 38.74 152 eP P 16 01 05.9 -2.6
JFWS Jewell Farm 39.03 340 P P 16 01 11.3 +0.5
baz=152,SNR=21
MNTX Cornudas Mount 39.03 314 P P 16 01 11.9 +0.9
baz=123,SNR=407
VAO Valinhos 39.09 140 eP P 16 01 11.2 -0.5
R32A Long Quarter, 39.11 327 IAmb IAmb 16 01 12.6
comp=Z,199nm,1.2s
RCBR Riachuelo 39.13 108 P P 16 01 13.2 +1.1
BSCB Bom Sucesso 39.17 136 eP P 16 01 12.0 -0.3
SLBS Sierra La Lagu 39.19 299 P P 16 01 14.5 +2.0
SLBS IAmb IAmb 16 01 16.0
comp=Z,159nm,1.1s
SLBS Sierra La Lagu 39.19 299 P P 16 01 14.7 +2.2
SPB Sao Paulo 39.23 141 eP P 16 01 12.1 -0.5
SCIA State Center 39.27 336 P P 16 01 13.4 +0.6
baz=147,SNR=31
NBLA Lagarto - SE 39.29 116 eP P 16 01 12.8 -0.5
VA03 San Esteban 39.42 177 IAmb IAmb 16 01 54.4
comp=Z,135nm,1.6s
ITAB Concordia 39.44 150 eP P 16 01 12.0 -2.4
I42A Draeger Farm, 39.47 342 IAmb IAmb 16 01 16.0
comp=Z,204nm,0.9s
LMN Caledonia Moun 39.55 9 P P 16 01 16.0 +1.0
LMN IAmb IAmb 16 01 17.1
comp=Z,93nm,0.7s
ITQB Itaqui 39.56 157 P P 16 01 11.9 -3.4
ITQB Itaqui 39.56 157 eP P 16 01 12.2 -3.1
E62A Clayton Lake 39.78 4 IAmb IAmb 16 01 19.7
comp=Z,60nm,0.5s
PET01 Itanhaem-SP 39.84 142 eP P 16 01 17.1 -0.6
EPT El Paso 39.89 313 IAmb IAmb 16 01 19.3
comp=Z,145nm,1.4s
CBKS Cedar Bluff 39.95 327 P P 16 01 18.5 0.0
baz=136,SNR=24
RTBA Rita Blanca 40.07 322 P P 16 01 20.0 +0.3
NBAN Anadia - AL 40.12 114 eP P 16 01 20.1 -0.1
MT08 Bocatoma Ro 40.13 176 P P 16 01 19.9 -0.4
GUA01 Guaratinga, BA 40.27 126 eP P 16 01 21.2 -0.1
SJMB Sao Joao De Ma 40.37 129 eP P 16 01 21.9 -0.3
E46A Sault Ste Mari 40.59 348 IAmb IAmb 16 01 25.8
comp=Z,239nm,0.9s
LMQ La Malbaie 40.66 3 IAmb IAmb 16 01 27.0
comp=Z,113nm,0.6s
BATG Bathurst New B 40.76 7 P P 16 01 26.3 +1.3
VAS01 Vassouras-RJ 40.94 136 eP P 16 01 26.5 -0.4
F42A Maple Grove Fa 40.95 344 IAmb IAmb 16 01 28.2
comp=Z,216nm,1.1s
BGNE Belgrade 41.06 331 P P 16 01 27.3 -0.3
baz=140,SNR=17
I37A Lemond, Waseca 41.13 338 IAmb IAmb 16 01 29.1
comp=Z,287nm,1.4s
121A Cookes Peak, D 41.21 313 P P 16 01 31.1 +2.0
baz=121,SNR=106
RIB01 Linhares ES 41.33 130 eP P 16 01 29.8 -0.3
VLDQ Val d'Or 41.33 356 IAmb IAmb 16 01 32.8
comp=Z,107nm,0.9s
Y22D IRIS PASSCAL I 41.41 316 IAmb IAmb 16 01 40.0
comp=Z,128nm,1.0s
Y22D IRIS PASSCAL I 41.41 316 P P 16 01 32.1 +1.4
baz=123
COWI Conover 41.54 343 IAmb IAmb 16 01 34.0
comp=Z,187nm,0.9s
T25A Trinidad 41.55 321 IAmb IAmb 16 01 34.9
comp=Z,162nm,1.1s
T25A Trinidad 41.55 321 P P 16 01 33.8 +1.9
baz=129,SNR=88
DUB01 Friburgo-RJ 41.56 135 eP P 16 01 31.5 -0.5
ANMO Albuquerque 41.57 317 P P 16 01 32.7 +0.6
ANMO IAmb IAmb 16 01 34.6
comp=Z,145nm,1.4s
ANMO Albuquerque 41.57 317 LR LR 16 23 05.3
comp=Z,245nm,18.1s,baz=85,slow=42
ANMO Albuquerque 41.57 317 P P 16 01 33.3 +1.1
baz=125
ANMO Albuquerque 41.57 317 c iP P 16 01 33.1 +1.0
ANMO pmax pmax
comp=Z,51nm,1.3s
ANMO Albuquerque 41.57 317 P P 16 01 33.2 +1.1
ANMO PcP PcP 16 03 27.0 +0.6
KSCO Kaye Shedlock' 41.70 325 IAmb IAmb 16 01 34.8
comp=Z,138nm,0.7s
KSCO Kaye Shedlock' 41.70 325 P P 16 01 33.7 +0.7
baz=133,SNR=14
319A Douglas 41.75 311 IAmb IAmb 16 01 36.2
comp=Z,176nm,0.9s
SPMN Marine on St. 41.95 339 P P 16 01 34.7 0.0
baz=150,SNR=9.5
ECSD EROS Data Cent 42.19 334 P P 16 01 36.5 -0.3
baz=144,SNR=82
SDCO Great Sand Dun 42.61 321 IAmb IAmb 16 01 43.1
comp=Z,111nm,0.8s
SDCO Great Sand Dun 42.61 321 P P 16 01 42.1 +1.6
baz=128,SNR=261
PLTB Pedras Altas 42.61 155 P P 16 01 36.8 -3.5
OGNE Ogallala 42.70 327 IAmb IAmb 16 01 42.3
comp=Z,268nm,1.4s
OGNE Ogallala 42.70 327 P P 16 01 41.1 +0.1
baz=135,SNR=15
E38A The Farm, Brul 42.73 341 IAmb IAmb 16 01 42.4
comp=Z,88nm,0.8s
ICQ Pointe Anglais 42.85 6 P P 16 01 42.7 +0.8
ICQ IAmb IAmb 16 01 43.9
comp=Z,66nm,0.5s
Q24A Divide 43.15 323 P P 16 01 45.8 +0.9
baz=130,SNR=40
TUC Tucson 43.31 311 P P 16 01 46.5 +0.5
TUC IAmb IAmb 16 01 48.3
comp=Z,113nm,0.9s
TUC Tucson 43.31 311 P P 16 01 47.2 +1.1
baz=118
TUC Tucson 43.31 311 P P 16 01 46.5 +0.5
TUC pmax pmax
comp=Z,113nm,0.9s
TUC Tucson 43.31 311 P P 16 01 47.1 +1.1
TUC ScP ScP 16 07 10.3 +1.3
S22A 4UR Ranch, Cre 43.44 320 P P 16 01 48.9 +1.6
baz=127,SNR=218
BRIGG Briggsdale 43.72 325 IAmb IAmb 16 01 51.3
comp=Z,255nm,1.2s
F33A 5 Mile Ranch, 43.78 336 IAmb IAmb 16 01 50.2
comp=Z,156nm,0.9s
X18A Snowflake 43.78 314 IAmb IAmb 16 01 52.7
comp=Z,154nm,1.0s
SUSD Miller 43.78 333 IAmb IAmb 16 01 50.9
comp=Z,1µm,0.8s
SUSD Miller 43.78 333 P P 16 01 49.6 +0.1
baz=141,SNR=77
EYMN Ely 43.91 342 P P 16 01 50.5 +0.1
EYMN Ely 43.91 342 P P 16 01 50.9 +0.5
baz=153,SNR=172
W18A Petrified Fore 43.93 315 P P 16 01 52.7 +1.6
baz=121,SNR=159
ISCO Idaho Springs 43.96 323 IAmb IAmb 16 01 54.0
comp=Z,194nm,1.0s
ISCO Idaho Springs 43.96 323 P P 16 01 52.9 +1.5
baz=130,SNR=86
ISCO Idaho Springs 43.96 323 P P 16 01 52.9 +1.5
ISCO pmax pmax
comp=Z,201nm,1.0s
MVCO Mesa Verde 44.22 318 P P 16 01 54.1 +0.8
MVCO IAmb IAmb 16 01 55.8
comp=Z,269nm,1.3s
MVCO Mesa Verde 44.22 318 P P 16 01 54.6 +1.2
baz=124,SNR=88
DRLN Deer Lake 44.29 15 P P 16 01 53.6 +0.1
214A Organ Pipe Nat 44.70 309 IAmb IAmb 16 01 59.5
comp=Z,118nm,0.9s
214A Organ Pipe Nat 44.70 309 P P 16 01 58.4 +1.3
baz=116,SNR=40
X16A Lo Mia Camp, P 44.79 313 IAmb IAmb 16 02 00.5
comp=Z,97nm,0.9s
PHWY Pilot Hill 44.84 325 IAmb IAmb 16 02 00.2
comp=Z,360nm,1.9s
N23A Red Feather La 44.86 324 IAmb IAmb 16 02 01.7
comp=Z,223nm,1.1s
N23A Red Feather La 44.86 324 P P 16 01 59.9 +1.4
baz=130,SNR=162
AGMN Agassiz Nation 45.66 339 IAmb IAmb 16 02 05.2
comp=Z,134nm,0.6s
AGMN Agassiz Nation 45.66 339 P P 16 02 04.8 +0.5
baz=147,SNR=57
Y14A Wickenburg 45.71 312 IAmb IAmb 16 02 07.3
comp=Z,170nm,0.8s
O20A White River Ci 45.75 322 IAmb IAmb 16 02 07.9
comp=Z,90nm,0.9s
O20A White River Ci 45.75 322 P P 16 02 06.8 +1.4
baz=127,SNR=82
113A Mohawk Valley, 45.77 310 IAmb IAmb 16 02 07.6
comp=Z,99nm,1.0s
TRQA Tornquist 45.81 168 P P 16 02 03.5 -2.1
TRQA Tornquist 45.81 168 P P 16 02 03.5 -2.1
TRQA pmax pmax
comp=Z,50nm,1.8s
RSSD Black Hills 45.99 329 P P 16 02 07.7 +0.5
baz=135
RSSD Black Hills 45.99 329 P P 16 02 08.0 +0.8
RSSD pmax pmax
comp=Z,98nm,1.2s
RSSD Black Hills 45.99 329 P P 16 02 07.8 +0.5
RSSD PcP PcP 16 03 41.7 +0.4
RWWY Rawlins 46.10 324 IAmb IAmb 16 02 10.6
comp=Z,173nm,0.9s
K22A Casper 46.33 326 IAmb IAmb 16 02 11.9
comp=Z,106nm,0.9s
K22A Casper 46.33 326 P P 16 02 10.8 +1.0
baz=131,SNR=63
U15A North Rim 46.38 315 IAmb IAmb 16 02 13.3
comp=Z,225nm,1.0s
SRU San Rafael Swe 46.60 319 IAmb IAmb 16 02 14.3
comp=Z,187nm,0.9s
GLA Glamis 46.70 310 IAmb IAmb 16 02 15.1
comp=Z,167nm,0.8s
GLA Glamis, 46.70 310 P P 16 02 13.9 +1.2
baz=115,SNR=45
P18A Preston Nutter 46.71 320 IAmb IAmb 16 02 15.5
comp=Z,201nm,1.2s
PDMCI Parker Dam,Lak 46.72 312 P P 16 02 13.7 +0.9
baz=116,SNR=12
MDND Maddock 46.74 336 P P 16 02 13.5 +0.7
baz=142,SNR=58
RDMU Red Mountain 46.83 322 IAmb IAmb 16 02 15.8
comp=Z,190nm,1.2s
PKCU Pink Cliffs 46.91 316 IAmb IAmb 16 02 17.2
comp=Z,161nm,1.1s
Q16A Castle Valley 46.92 319 IAmb IAmb 16 02 16.7
comp=Z,309nm,1.9s
P17A Butcher Ranch, 46.94 320 IAmb IAmb 16 02 17.0
comp=Z,221nm,1.0s
MTPU Mount Pierson 47.13 317 IAmb IAmb 16 02 18.8
comp=Z,109nm,1.0s
TMUT Trail Mountain 47.15 319 IAmb IAmb 16 02 18.6
comp=Z,122nm,1.1s
NEE2 Needles Airpor 47.28 312 P P 16 02 17.9 +0.8
baz=116
ULM Lac du Bonnet 47.32 340 P P 16 02 17.2 0.0
comp=Z,258nm,0.8s,baz=151,slow=8.6,SNR=216
ULM S S 16 08 55.8 -3.1
comp=Z,7.6nm,0.9s,baz=18,slow=19,SNR=4.7
ULM LR LR 16 22 51.9
comp=Z,260nm,18.6s,baz=236,slow=37
LCMT Little Creek M 47.34 315 IAmb IAmb 16 02 20.4
comp=Z,239nm,1.0s
PLCA Paso Flores 47.36 177 P P 16 02 15.8 -1.9
PLCA Paso Flores 47.36 177 P P 16 02 16.2 -1.4
comp=Z,15nm,0.8s,baz=357,slow=8.8,SNR=24
PLCA pP pP 16 02 53.8 0.0
comp=Z,17nm,0.9s,baz=356,slow=11,SNR=4.7
PLCA ScP ScP 16 07 24.0 -1.5
comp=Z,14nm,0.8s,baz=351,slow=5.3,SNR=13
comp=Z,15nm,0.8s
PLCA Paso Flores 47.36 177 eP P 16 02 16.3 -1.4
PLCA Paso Flores 47.36 177 P P 16 02 16.1 -1.6
PLCA ScP ScP 16 07 23.6 -1.9
SWSC Sam W. Stewart 47.40 309 P P 16 02 19.4 +1.2
baz=114,SNR=23
IRM Iron Mountain 47.41 311 P P 16 02 19.4 +1.2
baz=115
BC3 Big Chuckawall 47.43 310 P P 16 02 19.4 +1.0
baz=115,SNR=40
SZCU Shurtz Canyon 47.52 316 IAmb IAmb 16 02 21.2
comp=Z,144nm,1.1s
IKP In-Ko-Pah, Jac 47.52 309 P P 16 02 20.4 +1.2
baz=113,SNR=11
CCX Cicese 47.66 307 IAmb IAmb 16 02 22.7
comp=Z,92nm,1.0s
MPU Maple Canyon 47.81 320 IAmb IAmb 16 02 23.6
comp=Z,209nm,1.0s
CBX Cerro Bola 47.83 308 IAmb IAmb 16 02 24.2
comp=Z,229nm,1.2s
MONP2 Monument Peak 47.86 309 P P 16 02 23.1 +1.2
baz=113,SNR=16
BELC Belle Mtn. Jos 47.98 310 P P 16 02 23.7 +1.0
baz=114,SNR=57
JLU Jordanelle 48.02 320 IAmb IAmb 16 02 25.2
comp=Z,102nm,1.0s
GMRC Granite Mounta 48.06 311 P P 16 02 24.3 +0.9
baz=115,SNR=42
NLU North Lily Min 48.07 319 IAmb IAmb 16 02 25.7
comp=Z,143nm,1.1s
BW06 Boulder Array 48.13 324 P P 16 02 24.4 +0.5
baz=128,SNR=189
PD31 Pinedale Array 48.13 324 IAmb IAmb 16 02 25.5
comp=Z,153nm,1.1s
PDAR Pinedale Array 48.13 324 P P 16 02 24.2 +0.3
comp=Z,44nm,0.6s,baz=127,slow=8.6,SNR=396
PDAR PcP PcP 16 03 49.6 +0.6
comp=Z,12nm,0.9s,baz=138,slow=4.3,SNR=2.3
PDAR ScP ScP 16 07 29.1 +0.1
comp=Z,5.1nm,0.9s,baz=122,slow=6.2,SNR=4.2
comp=Z,44nm,0.6s
SCHQ Schefferville 48.15 5 P P 16 02 24.6 +1.1
comp=Z,172nm,0.6s,baz=189,slow=6.7,SNR=394
SCHQ ScP ScP 16 07 28.6 +0.1
comp=Z,26nm,0.9s,baz=186,slow=7.0,SNR=8.1
TPFO Pinon Flats 48.17 310 P P 16 02 25.2 +1.1
baz=114,SNR=18
PFO Pinyon Flats O 48.18 310 P P 16 02 24.7 +0.5
PFO Pinyon Flats O 48.18 310 P P 16 02 25.2 +1.0
baz=114,SNR=20
PFO Pinyon Flats O 48.18 310 c iP P 16 02 25.2 +1.0
PFO pmax pmax
comp=Z,79nm,1.3s
PFO Pinyon Flats O 48.18 310 P P 16 02 24.9 +0.7
PFO ScP ScP 16 07 30.1 +0.9
CTU Camp Tracy 48.26 320 IAmb IAmb 16 02 26.9
comp=Z,97nm,1.1s
109C Camp Elliot, M 48.39 309 P P 16 02 26.6 +0.9
baz=113
PSUT Pine Spring 48.51 317 IAmb IAmb 16 02 29.3
comp=Z,108nm,1.0s
TUQ Turquoise Moun 48.53 312 P P 16 02 27.9 +1.0
baz=116,SNR=117
HEC Hector,Ludlow 48.58 311 P P 16 02 28.5 +1.3
baz=115,SNR=37
DUG Dugway, Tooele 48.67 319 IAmb IAmb 16 02 30.4
comp=Z,99nm,0.8s
DUG Dugway, Tooele 48.67 319 P P 16 02 29.3 +1.3
baz=122,SNR=95
DUG Dugway, Tooele 48.67 319 P P 16 02 29.2 +1.3
DUG pmax pmax
comp=Z,142nm,1.1s
MURC Murrieta 48.73 309 P P 16 02 29.5 +1.1
baz=113,SNR=11
BBRC Big Bear Solar 48.79 310 P P 16 02 30.5 +1.5
baz=114,SNR=6.7
LAO LASA Array 48.88 330 IAmb IAmb 16 02 30.9
comp=Z,130nm,1.1s
LAO LASA Array 48.88 330 P P 16 02 29.8 +0.4
baz=134,SNR=29
SHOC Shoshone, Teco 48.99 313 P P 16 02 31.6 +1.3
baz=116,SNR=12
SPUT South Promonto 49.04 321 IAmb IAmb 16 02 32.7
comp=Z,174nm,1.5s
AHID Auburn Hatcher 49.04 323 IAmb IAmb 16 02 32.4
comp=Z,136nm,0.9s
SPR3 Spring Creek 3 49.06 317 IAmb IAmb 16 02 33.3
comp=Z,150nm,1.1s
RRX Edison Barstow 49.09 311 P P 16 02 32.6 +1.5
baz=114
GSC Goldstone, Bar 49.13 312 P P 16 02 32.7 +1.3
baz=115,SNR=84
DGMT Dagmar 49.20 333 P P 16 02 32.9 +1.3
baz=137,SNR=60
SNOW Snow King Moun 49.25 324 IAmb IAmb 16 02 35.1
comp=Z,163nm,0.9s
LOHW Long Hollow 49.25 324 IAmb IAmb 16 02 34.3
comp=Z,110nm,0.7s
BFSC Mount Baldy Ra 49.34 310 P P 16 02 33.7 +0.6
baz=113,SNR=10
TPAW Teton Pass 49.38 324 IAmb IAmb 16 02 34.8
comp=Z,106nm,0.8s
S11A Rachel 49.39 315 IAmb IAmb 16 02 36.4
comp=Z,137nm,1.2s
Q12A Willow Creek R 49.42 317 IAmb IAmb 16 02 36.1
comp=Z,190nm,1.0s
TPNV Topopah Spring 49.43 314 P P 16 02 35.4 +1.6
baz=117,SNR=79
RLMT Red Lodge 49.43 327 P P 16 02 34.4 +0.7
baz=130,SNR=50
HVU Hansel Valley 49.51 321 IAmb IAmb 16 02 38.2
comp=Z,92nm,1.1s
FXWY Fox Creek 49.52 324 IAmb IAmb 16 02 36.1
comp=Z,74nm,0.9s
SCI2 San Clemente I 49.55 308 P P 16 02 35.8 +1.2
baz=112,SNR=10
CIS Catalina Islan 49.60 309 P P 16 02 36.3 +1.3
baz=112,SNR=11
R11B Troy Canyon, C 49.61 316 IAmb IAmb 16 02 37.5
comp=Z,75nm,0.9s
R11B Troy Canyon, C 49.61 316 P P 16 02 36.4 +1.2
baz=118,SNR=140
IMW Indian Meadow 49.62 324 IAmb IAmb 16 02 37.0
comp=Z,98nm,0.7s
FMP Fort Macarthur 49.62 309 P P 16 02 36.3 +1.2
baz=112
FURC Furnace Creek, 49.66 313 P P 16 02 36.9 +1.5
baz=116,SNR=33
YMP Mirror Lake Pl 49.69 326 IAmb IAmb 16 02 46.4
comp=Z,68nm,0.9s
H17A Grant Village 49.71 325 P P 16 02 37.1 +1.2
baz=128,SNR=18
PASC Pasadena Art C 49.72 310 IAmb IAmb 16 02 38.9
comp=Z,120nm,1.4s
EDW2 Edwards Air Fo 49.85 311 P P 16 02 37.7 +0.9
baz=114,SNR=33
LRMC Laurel Mtn Rad 49.85 311 P P 16 02 38.0 +1.0
baz=114,SNR=49
DECC Green Verdugo 49.86 310 P P 16 02 37.9 +1.0
baz=113
MPMC Manual Prospec 49.95 312 P P 16 02 38.5 +0.8
baz=115,SNR=20
YMR Madison River 50.10 325 IAmb IAmb 16 02 41.2
comp=Z,84nm,0.7s
GRAC Grapevine Rang 50.26 313 IAmb IAmb 16 02 42.6
comp=Z,102nm,1.1s
GRAC Grapevine Rang 50.26 313 P P 16 02 41.4 +1.5
baz=116,SNR=14
OSI Osito Audit: C 50.30 310 P P 16 02 40.7 +0.5
baz=113
GMN Gold Mountain 50.31 314 IAmb IAmb 16 02 42.7
comp=Z,82nm,1.0s
SNCC San Nicolas Is 50.41 308 IAmb IAmb 16 02 43.3
comp=Z,195nm,1.3s
SNCC San Nicolas Is 50.41 308 P P 16 02 42.3 +1.2
baz=111
ISA Isabella, Lake 50.52 311 P P 16 02 43.1 +1.2
baz=114,SNR=9.3
CWC Cottonwood Cre 50.54 312 P P 16 02 43.3 +1.1
baz=115
ARVC Arvin 50.57 310 P P 16 02 43.5 +1.2
baz=113,SNR=6.0
SCZ2 Santa Cruz Isl 50.77 309 P P 16 02 44.8 +1.0
baz=111
DSP Deep Springs 50.85 313 IAmb IAmb 16 02 47.0
comp=Z,159nm,1.0s
TIN Tinemaha, Big 50.91 313 P P 16 02 46.3 +1.5
baz=115,SNR=6.0
BCW Bitter Crk WRg 50.95 310 IAmb IAmb 16 02 47.4
comp=Z,95nm,1.1s
SBC Santa Barbara 50.99 309 P P 16 02 46.5 +1.2
baz=112
BOZ Bozeman (W) 51.03 326 IAmb IAmb 16 02 47.7
comp=Z,95nm,0.9s
BOZ Bozeman (W) 51.03 326 P P 16 02 46.7 +1.0
baz=127,SNR=150
VES Vestal, Richgr 51.04 311 P P 16 02 47.1 +1.3
baz=113,SNR=31
PKM Mcpherson Peak 51.23 310 P P 16 02 48.4 +1.0
baz=112,SNR=15
DLMT Dillon 51.44 325 IAmb IAmb 16 02 51.1
comp=Z,128nm,1.1s
VOG Valley Oaks Go 51.45 312 P P 16 02 49.0 +0.2
baz=113
HLID Hailey 51.49 322 IAmb IAmb 16 02 51.8
comp=Z,79nm,0.8s
HLID Hailey 51.49 322 P P 16 02 50.1 +1.0
baz=123,SNR=162
SMMC Simmler 51.53 310 P P 16 02 50.9 +1.5
baz=112,SNR=29
NVAR Mina Array Bea 51.55 315 P P 16 02 50.3 +0.6
NVAR Mina Array Bea 51.55 315 P P 16 02 50.5 +0.8
comp=Z,50nm,0.8s,baz=123,slow=7.1,SNR=92
NVAR PcP PcP 16 04 02.8 +1.2
comp=Z,16nm,0.8s,baz=150,slow=4.2,SNR=5.9
NVAR ScP ScP 16 07 43.6 -0.2
comp=Z,5.7nm,0.9s,baz=116,slow=4.5,SNR=5.8
comp=Z,50nm,0.8s
EGMT Eagleton 51.56 329 IAmb IAmb 16 02 51.6
comp=Z,249nm,1.4s
EGMT Eagleton 51.56 329 P P 16 02 50.3 +0.8
baz=131,SNR=54
MLAC Mammoth, Mammo 51.59 313 P P 16 02 51.4 +1.3
baz=115
LHV Little Huntoon 51.61 314 IAmb IAmb 16 02 52.7
comp=Z,160nm,1.3s
KVN Kaiserville 51.68 315 IAmb IAmb 16 02 52.5
comp=Z,86nm,0.9s
OMMB Old Mammoth Mi 51.70 313 IAmb IAmb 16 02 53.4
comp=Z,139nm,1.5s
BMN Battle Mountai 51.70 317 IAmb IAmb 16 02 52.6
comp=Z,108nm,1.0s
MDPB Devils Postpil 51.76 313 IAmb IAmb 16 02 53.8
comp=Z,99nm,0.9s
RYN Ryan 51.79 315 IAmb IAmb 16 02 53.4
comp=Z,70nm,0.9s
MFID Camas Ranch 52.28 321 IAmb IAmb 16 02 57.7
comp=Z,138nm,0.7s
WAKR Walker 52.38 314 IAmb IAmb 16 02 58.4
comp=Z,66nm,1.0s
YERR Yerington 52.45 315 IAmb IAmb 16 02 58.6
comp=Z,185nm,1.1s
PMPB Monarch Peak 52.47 311 IAmb IAmb 16 02 58.1
comp=Z,102nm,1.0s
PNTR Pine Nut 52.74 315 IAmb IAmb 16 03 00.9
comp=Z,115nm,0.8s
BBGB Big Mountain B 52.79 311 IAmb IAmb 16 03 06.1
comp=Z,133nm,0.9s
PAHR Pah Rah Range 52.86 316 IAmb IAmb 16 03 01.1
comp=Z,50nm,0.8s
EMB Emerald Bay 53.05 314 IAmb IAmb 16 03 06.0
comp=Z,119nm,0.9s
MSO Missoula 53.06 326 IAmb IAmb 16 03 02.3
comp=Z,68nm,1.1s
MSO Missoula 53.06 326 P P 16 03 01.2 +0.6
baz=126,SNR=38
FFC Flin Flon 53.12 339 P P 16 03 00.7 0.0
FFC IAmb IAmb 16 03 02.1
comp=Z,182nm,1.4s
FFC Flin Flon 53.12 339 P P 16 03 00.7 0.0
FFC pmax pmax
comp=Z,182nm,1.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FFC | Flin Flon | 53.12 | 339 | P | P | 16 03 00.8 | +0.1 |
| SAO | San Andreas Ge | 53.16 | 311 | IAmb | IAmb | 16 03 03.4 | |
| | comp=Z,189nm,1.7s | | | | | | |
| WVOR | Wild Horse Val | 53.59 | 319 | P | P | 16 03 05.4 | +0.9 |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,196nm,1.2s | | | | | | |
| J08A | Circle Bar Ran | 53.92 | 320 | IAmb | IAmb | 16 03 09.1 | |
| | comp=Z,110nm,1.1s | | | | | | |
| ORV | Oroville | 54.28 | 315 | IAmb | IAmb | 16 03 11.7 | |
| | comp=Z,74nm,0.9s | | | | | | |
| FCC | Fort Churchill | 54.30 | 347 | IAmb | IAmb | 16 03 10.4 | |
| | comp=Z,176nm,1.1s | | | | | | |
| F10A | Beach Ranch, E | 54.48 | 323 | IAmb | IAmb | 16 03 12.1 | |
| | comp=Z,81nm,0.7s | | | | | | |
| MCCM | Marconi Confer | 54.73 | 312 | IAmb | IAmb | 16 03 14.8 | |
| | comp=Z,121nm,0.9s | | | | | | |
| I07A | Izee | 54.93 | 320 | IAmb | IAmb | 16 03 16.6 | |
| | comp=Z,109nm,0.9s | | | | | | |
| HOPS | Hopland Field | 55.19 | 313 | IAmb | IAmb | 16 03 18.4 | |
| | comp=Z,81nm,1.1s | | | | | | |
| E09A | Wood Farm, Sta | 55.30 | 323 | IAmb | IAmb | 16 03 18.2 | |
| | comp=Z,150nm,1.0s | | | | | | |
| O02D | Mt. Diablo Mer | 55.44 | 315 | IAmb | IAmb | 16 03 18.1 | |
| | comp=Z,58nm,0.8s | | | | | | |
| NEW | Newport | 55.65 | 326 | IAmb | IAmb | 16 03 20.4 | |
| | comp=Z,98nm,1.2s | | | | | | |
| NEW | Newport | 55.65 | 326 | P | P | 16 03 19.3 | +0.2 |
| | baz=123,SNR=39 | | | | | | |
| NEW | Newport | 55.65 | 326 | P | P | 16 03 19.4 | +0.2 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,79nm,1.2s | | | | | | |
| YBH | Yreka Blue Hor | 56.00 | 317 | IAmb | IAmb | 16 03 22.0 | |
| | comp=Z,148nm,1.6s | | | | | | |
| YBH | Yreka Blue Hor | 56.00 | 317 | LR | LR | 16 32 28.5 | |
| | comp=Z,124nm,18.2s,baz=144,slow=41 | | | | | | |
| D08A | Wollman Farm, | 56.04 | 324 | IAmb | IAmb | 16 03 23.7 | |
| | comp=Z,53nm,0.8s | | | | | | |
| F07A | Phinny Hill Vi | 56.06 | 322 | IAmb | IAmb | 16 03 25.5 | |
| | comp=Z,80nm,0.6s | | | | | | |
| G06A | Carlson Farm, | 56.18 | 321 | IAmb | IAmb | 16 03 25.8 | |
| | comp=Z,168nm,1.1s | | | | | | |
| I05D | Terrebonne, OR | 56.22 | 320 | IAmb | IAmb | 16 03 25.8 | |
| | comp=Z,100nm,1.0s | | | | | | |
| E07A | Sunnyside | 56.34 | 323 | IAmb | IAmb | 16 03 25.9 | |
| | comp=Z,54nm,0.9s | | | | | | |
| G05A | Wamic | 56.61 | 321 | IAmb | IAmb | 16 03 30.2 | |
| | comp=Z,104nm,0.8s | | | | | | |
| MXC | Moxie City | 56.62 | 323 | IAmb | IAmb | 16 03 28.4 | |
| | comp=Z,77nm,1.2s | | | | | | |
| I04A | Tendick Farm, | 56.67 | 319 | IAmb | IAmb | 16 03 28.3 | |
| | comp=Z,121nm,1.0s | | | | | | |
| KRMB | Red Mountain | 56.74 | 316 | IAmb | IAmb | 16 03 29.0 | |
| | comp=Z,123nm,1.1s | | | | | | |
| FRB | Frobisher Bay | 56.92 | 2 | P | P | 16 03 28.1 | +0.3 |
| FRB | | | | pmax | pmax | | |
| | comp=Z,136nm,0.6s | | | | | | |
| B08A | Colville Reser | 56.95 | 325 | IAmb | IAmb | 16 03 29.8 | |
| | comp=Z,132nm,0.9s | | | | | | |
| H04D | Lebanon | 57.20 | 320 | IAmb | IAmb | 16 03 49.1 | |
| | comp=Z,85nm,0.8s | | | | | | |
| I03D | Drain, OR | 57.24 | 318 | IAmb | IAmb | 16 03 33.4 | |
| | comp=Z,108nm,0.9s | | | | | | |
| COR | Corvallis | 57.59 | 319 | P | P | 16 03 33.5 | +0.6 |
| COR | Corvallis | 57.59 | 319 | P | P | 16 03 33.5 | +0.6 |
| COR | | | | pmax | pmax | | |
| | comp=Z,218nm,1.1s | | | | | | |
| COR | Corvallis | 57.59 | 319 | P | P | 16 03 33.9 | +1.0 |
| F04A | Amboy | 57.62 | 321 | IAmb | IAmb | 16 03 34.4 | |
| | comp=Z,44nm,0.8s | | | | | | |
| LON | Longmire | 57.62 | 322 | IAmb | IAmb | 16 03 34.8 | |
| | comp=Z,50nm,0.8s | | | | | | |
| G03D | McMinnville, O | 57.83 | 320 | IAmb | IAmb | 16 03 36.9 | |
| | comp=Z,164nm,1.1s | | | | | | |
| NRS | Narsarsuaq | 58.02 | 15 | IAmb | IAmb | 16 03 37.8 | |
| | comp=Z,60nm,0.9s | | | | | | |
| NRS | Narsarsuaq | 58.02 | 15 | P | P | 16 03 36.2 | +0.7 |
| NRS | | | | pmax | pmax | | |
| | comp=Z,86nm,0.9s | | | | | | |
| NRS | Narsarsuaq | 58.02 | 15 *i* | P | P | 16 03 36.3 | +0.8 |
| NRS | | | | IAmb | IAmb | 16 03 38.5 | |
| | comp=Z,44nm,0.8s | | | | | | |
| GNW | Green Mountain | 58.61 | 323 | IAmb | IAmb | 16 03 41.0 | |
| | comp=Z,107nm,0.9s | | | | | | |
| NUUK | Nuuk | 59.27 | 11 *i* | P | P | 16 03 45.6 | +1.5 |
| NUUK | | | | IAmb | IAmb | 16 03 47.4 | |
| | comp=Z,26nm,0.7s | | | | | | |
| PGC | Sidney | 59.48 | 324 | IAmb | IAmb | 16 03 47.8 | |
| | comp=Z,145nm,1.3s | | | | | | |
| EFI | East Falkland | 59.66 | 169\|\| *e* | P | P | 16 03 45.9 | -1.0 |
| EFI | | | | pmax | pmax | | |
| | comp=Z,57nm,1.9s | | | | | | |
| SFJD | Kangerlussuaq | 62.03 | 10 | LR | LR | 16 27 13.4 | |
| | comp=Z,155nm,21.9s,baz=159,slow=32 | | | | | | |
| SFJD | Kangerlussuaq | 62.03 | 10 | P | P | 16 04 02.8 | +0.1 |
| DY2G | Dye2 | 62.37 | 12 *i* | P | P | 16 04 05.1 | -0.3 |
| DY2G | | | | IAmb | IAmb | 16 04 11.8 | |
| | comp=Z,60nm,0.6s | | | | | | |
| HOLB | Holberg | 63.08 | 324 | IAmb | IAmb | 16 04 12.3 | |
| | comp=Z,99nm,0.9s | | | | | | |
| ISOG | Isortoq, Green | 63.29 | 15 *i* | P | P | 16 04 11.2 | 0.0 |
| ISOG | | | | IAmb | IAmb | 16 04 13.6 | |
| | comp=Z,31nm,0.6s | | | | | | |
| YKA | Yellowknife Ar | 63.30 | 340 | P | P | 16 04 11.3 | +0.1 |
| YKA | Yellowknife Ar | 63.30 | 340 | P | P | 16 04 11.6 | +0.3 |
| | comp=Z,136nm,0.8s,baz=133,slow=7.1,SNR=308 | | | | | | |
| YKA | | | | pP | pP | 16 04 48.0 | -0.5 |
| | comp=Z,9.3nm,0.7s,baz=132,slow=5.8,SNR=1.3 | | | | | | |
| ANGG | Ammassalik, Gr | 63.69 | 16 | P | P | 16 04 14.0 | +0.2 |
| ANGG | | | | IAmb | IAmb | 16 04 15.3 | |
| | comp=Z,93nm,1.3s | | | | | | |
| ANGG | Ammassalik, Gr | 63.69 | 16 *i* | P | P | 16 04 13.2 | -0.6 |
| ANGG | | | | IAmb | IAmb | 16 04 15.5 | |
| | comp=Z,23nm,0.5s | | | | | | |
| BBB | Bella Bella | 63.71 | 326 | IAmb | IAmb | 16 04 16.5 | |
| | comp=Z,135nm,1.0s | | | | | | |
| TOAD | Toad River Com | 65.35 | 333 | P | P | 16 04 24.9 | +0.2 |
| | baz=120,SNR=98 | | | | | | |
| GRNB | Grenville Isla | 65.41 | 327 | IAmb | IAmb | 16 04 27.4 | |
| | comp=Z,92nm,0.9s | | | | | | |
| HG4B | Hotspring | 65.50 | 325 | IAmb | IAmb | 16 04 27.5 | |
| | comp=Z,83nm,0.9s | | | | | | |
| KOTAN | Kotaneelee Air | 65.50 | 335 | P | P | 16 04 26.5 | +0.8 |
| | baz=122,SNR=8.6 | | | | | | |
| ICESG | Greenland Ices | 65.95 | 12 *i* | P | P | 16 04 28.6 | -0.2 |
| ICESG | | | | IAmb | IAmb | 16 04 30.9 | |
| | comp=Z,44nm,0.7s | | | | | | |
| LIRD | Liard River Hi | 66.02 | 333 | P | P | 16 04 29.4 | +0.5 |
| | baz=120,SNR=16 | | | | | | |
| U35K | Hyder | 66.30 | 329 | P | P | 16 04 31.8 | +1.1 |
| | baz=115 | | | | | | |
| T35M | Bob Quinn | 66.86 | 330 | IAmb | IAmb | 16 04 37.2 | |
| | comp=Z,167nm,1.1s | | | | | | |
| T35M | Bob Quinn | 66.86 | 330 | P | P | 16 04 36.1 | +1.7 |
| | baz=115,SNR=63 | | | | | | |
| V35K | Ketchikan | 66.89 | 328 | IAmb | IAmb | 16 04 36.6 | |
| | comp=Z,92nm,1.1s | | | | | | |
| V35K | Ketchikan | 66.89 | 328 | P | P | 16 04 35.5 | +1.0 |
| | baz=113,SNR=34 | | | | | | |
| WRGLY | Wrigley | 66.95 | 338 | IAmb | IAmb | 16 04 36.2 | |
| | comp=Z,130nm,0.8s | | | | | | |
| WRGLY | Wrigley | 66.95 | 338 | P | P | 16 04 35.2 | +0.5 |
| | baz=124,SNR=50 | | | | | | |
| DLBC | Dease Lake | 67.37 | 331 | IAmb | IAmb | 16 04 40.2 | |
| | comp=Z,157nm,1.2s | | | | | | |
| DLBC | Dease Lake | 67.37 | 331 | P | P | 16 04 39.1 | +1.4 |
| | comp=Z,71nm,0.9s,baz=106,slow=3.5,SNR=76 | | | | | | |
| | comp=Z,71nm,0.9s | | | | | | |
| DLBC | Dease Lake | 67.37 | 331 | P | P | 16 04 39.0 | +1.4 |
| | baz=116,SNR=52 | | | | | | |
| WTLY | Watson Lake, Y | 67.55 | 333 | IAmb | IAmb | 16 04 40.8 | |
| | comp=Z,153nm,0.8s | | | | | | |
| WTLY | Watson Lake, Y | 67.55 | 333 | P | P | 16 04 39.9 | +1.1 |
| | baz=117,SNR=12 | | | | | | |
| DBIC | Dimbokro | 67.66 | 86 | P | P | 16 04 39.4 | -0.8 |
| DBIC | | | | IAmb | IAmb | 16 04 40.5 | |
| | comp=Z,53nm,0.7s | | | | | | |
| DBIC | Dimbokro | 67.66 | 86 | P | P | 16 04 39.7 | -0.5 |
| | comp=Z,50nm,0.6s,baz=273,slow=6.0,SNR=75 | | | | | | |
| DBIC | | | | S | S | 16 13 21.6 | -3.8 |
| | comp=Z,3.4nm,0.8s,baz=132,slow=21,SNR=6.9 | | | | | | |
| | comp=Z,50nm,0.6s | | | | | | |
| DBIC | Dimbokro | 67.66 | 86 | P | P | 16 04 39.6 | -0.5 |
| CRAG | Craig | 67.74 | 328 | P | P | 16 04 40.6 | +0.7 |
| CRAG | | | | IAmb | IAmb | 16 04 41.9 | |
| | comp=Z,69nm,1.1s | | | | | | |
| CRAG | Craig | 67.74 | 328 | P | P | 16 04 40.7 | +0.9 |
| | baz=112,SNR=18 | | | | | | |
| U33K | Whale Pass | 67.97 | 328 | IAmb | IAmb | 16 04 43.5 | |
| | comp=Z,96nm,1.1s | | | | | | |
| U33K | Whale Pass | 67.97 | 328 | P | P | 16 04 42.3 | +1.0 |
| | baz=112,SNR=29 | | | | | | |
| TGTN | Hyland Airport | 67.99 | 335 | P | P | 16 04 43.0 | +1.5 |
| | baz=118,SNR=20 | | | | | | |
| T33K | Petersburg | 68.15 | 329 | P | P | 16 04 43.8 | +1.4 |
| | baz=112 | | | | | | |
| R33M | Jennings River | 68.22 | 332 | IAmb | IAmb | 16 04 45.6 | |
| | comp=Z,105nm,0.9s | | | | | | |
| R33M | Jennings River | 68.22 | 332 | P | P | 16 04 44.5 | +1.4 |
| | baz=115,SNR=92 | | | | | | |
| Q32M | Nakina River | 68.65 | 331 | IAmb | IAmb | 16 04 48.6 | |
| | comp=Z,104nm,0.9s | | | | | | |
| Q32M | Nakina River | 68.65 | 331 | P | P | 16 04 47.3 | +1.5 |
| | baz=114,SNR=40 | | | | | | |
| SUMG | Summit | 68.99 | 11 | P | P | 16 04 48.1 | +0.2 |
| SUMG | Summit | 68.99 | 11 | P | P | 16 04 48.1 | +0.2 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,134nm,0.6s | | | | | | |
| SUMG | Summit | 68.99 | 11 *i* | P | P | 16 04 48.0 | +0.2 |
| SUMG | | | | IAmb | IAmb | 16 04 54.2 | |
| | comp=Z,120nm,0.6s | | | | | | |
| S32K | Killisnoo | 69.22 | 329 | IAmb | IAmb | 16 04 51.4 | |
| | comp=Z,123nm,1.1s | | | | | | |
| S32K | Killisnoo | 69.22 | 329 | P | P | 16 04 50.3 | +1.3 |
| | baz=111,SNR=13 | | | | | | |
| P33M | Teslin, Yukon | 69.41 | 333 | IAmb | IAmb | 16 04 52.9 | |
| | comp=Z,99nm,1.1s | | | | | | |
| P33M | Teslin, Yukon | 69.41 | 333 | P | P | 16 04 51.7 | +1.4 |
| | baz=114,SNR=55 | | | | | | |
| SIT | Sitka | 69.45 | 329 | IAmb | IAmb | 16 04 52.7 | |
| | comp=Z,56nm,0.9s | | | | | | |
| SIT | Sitka | 69.45 | 329 | P | P | 16 04 51.6 | +1.1 |
| | baz=110,SNR=6.6 | | | | | | |
| SIT | Sitka | 69.45 | 329 | P | P | 16 04 51.0 | +0.5 |
| R32K | Eaglecrest | 69.48 | 330 | IAmb | IAmb | 16 04 53.1 | |
| | comp=Z,76nm,1.0s | | | | | | |
| R32K | Eaglecrest | 69.48 | 330 | P | P | 16 04 52.1 | +1.4 |
| | baz=111,SNR=7.1 | | | | | | |
| P32M | Atlin | 69.58 | 332 | IAmb | IAmb | 16 04 53.9 | |
| | comp=Z,97nm,1.0s | | | | | | |
| P32M | Atlin | 69.58 | 332 | P | P | 16 04 52.7 | +1.3 |
| | baz=112,SNR=20 | | | | | | |
| ESDC | Sonseca Array | 69.60 | 50 | P | P | 16 04 51.0 | -0.8 |
| | comp=Z,1.8nm,0.6s,baz=268,slow=6.1,SNR=19 | | | | | | |
| ESDC | | | | pP | pP | 16 05 29.9 | -0.6 |
| | comp=Z,6.6nm,1.1s,baz=265,slow=6.1,SNR=4.7 | | | | | | |
| ESDC | | | | PKP2bc | | 16 32 54.9 | |
| | comp=Z,2.0nm,0.9s,baz=63,slow=2.5,SNR=9.1 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| N32M | Quiet Lake | 69.91 | 333 | P | P | 16 04 54.6 | +1.3 |
| | baz=114 | | | | | | |
| S31K | Pelican | 70.22 | 330 | IAmb | IAmb | 16 04 57.9 | |
| | comp=Z,141nm,1.2s | | | | | | |
| S31K | Pelican | 70.22 | 330 | P | P | 16 04 56.8 | +1.6 |
| | baz=110,SNR=13 | | | | | | |
| SKAG | Skagway | 70.30 | 331 | P | P | 16 04 57.0 | +1.4 |
| | baz=111,SNR=6.8 | | | | | | |
| FARO | Faro, Yukon | 70.46 | 334 | P | P | 16 04 57.8 | +1.2 |
| | baz=114,SNR=49 | | | | | | |
| WHY | Whitehorse | 70.53 | 333 | P | P | 16 04 58.0 | +0.8 |
| | baz=112,SNR=15 | | | | | | |
| C36M | Paulatuk | 70.63 | 343 | P | P | 16 04 56.3 | -1.1 |
| | baz=125,SNR=5.1 | | | | | | |
| PLBC | Pleasant Camp | 70.79 | 331 | P | P | 16 05 00.1 | +1.4 |
| | baz=110,SNR=6.8 | | | | | | |
| M31M | Drury Creek, Y | 70.90 | 334 | IAmb | IAmb | 16 05 01.9 | |
| | comp=Z,94nm,1.1s | | | | | | |
| M31M | Drury Creek, Y | 70.90 | 334 | P | P | 16 05 00.8 | +1.6 |
| | baz=113,SNR=51 | | | | | | |
| SBD | Saint Breward | 71.08 | 39 *e* | P | P | 16 04 59.9 | -0.6 |
| O30N | Mendenhall | 71.12 | 332 | IAmb | IAmb | 16 05 03.4 | |
| | comp=Z,186nm,1.0s | | | | | | |
| O30N | Mendenhall | 71.12 | 332 | P | P | 16 05 02.4 | +1.7 |
| | baz=111,SNR=71 | | | | | | |
| N31M | Braeburn, Yuko | 71.24 | 333 | P | P | 16 05 02.8 | +1.5 |
| | baz=111,SNR=49 | | | | | | |
| P30M | Million Dollar | 71.30 | 332 | P | P | 16 05 03.6 | +1.8 |
| | baz=110 | | | | | | |
| P29M | Windy Craggy | 71.51 | 331 | IAmb | IAmb | 16 05 05.6 | |
| | comp=Z,79nm,0.9s | | | | | | |
| P29M | Windy Craggy | 71.51 | 331 | P | P | 16 05 04.5 | +1.5 |
| | baz=109,SNR=20 | | | | | | |
| NEEM | North Greenlan | 71.56 | 5 *i* | P | P | 16 05 03.7 | +0.4 |
| NEEM | | | | IAmb | IAmb | 16 05 06.3 | |
| | comp=Z,173nm,0.7s | | | | | | |
| N30M | Aishikik Lake | 71.82 | 333 | IAmb | IAmb | 16 05 07.8 | |
| | comp=Z,128nm,1.0s | | | | | | |
| N30M | Aishikik Lake | 71.82 | 333 | P | P | 16 05 06.7 | +1.8 |
| | baz=110,SNR=93 | | | | | | |
| WIM | Isle of Man | 71.91 | 35 *e* | P | P | 16 05 04.9 | -0.5 |
| IOMK | Kirk Michael | 72.00 | 35 *e* | P | P | 16 05 05.7 | -0.2 |
| IOMK | | | | IAmb | IAmb | 16 05 08.4 | |
| | comp=Z,67nm,1.2s | | | | | | |
| GAL1 | Galloway | 72.06 | 34 *e* | P | P | 16 05 06.5 | +0.2 |
| GAL1 | | | | IAmb | IAmb | 16 05 12.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| O29M | Mount Kennedy | 72.13 | 332 | IAmb | IAmb | 16 05 09.4 | |
| | comp=Z,91nm,1.2s | | | | | | |
| O29M | Mount Kennedy | 72.13 | 332 | P | P | 16 05 08.3 | +1.5 |
| | baz=108,SNR=14 | | | | | | |
| YUK6 | Outpost Mounta | 72.23 | 332 | P | P | 16 05 09.5 | +2.0 |
| | baz=109,SNR=19 | | | | | | |
| PNL | Peninsula | 72.33 | 331 | P | P | 16 05 09.3 | +1.5 |
| | baz=107,SNR=6.7 | | | | | | |
| NEWG | New Galloway | 72.39 | 34 *e* | P | P | 16 05 08.2 | 0.0 |
| NEWG | | | | IAmb | IAmb | 16 05 14.6 | |
| | comp=Z,26nm,0.7s | | | | | | |
| A36M | Sachs Harbour | 72.47 | 345 | P | P | 16 05 09.0 | +0.6 |
| | baz=125,SNR=105 | | | | | | |
| FOEL | Foel Wylfa | 72.48 | 37 *e* | P | P | 16 05 08.1 | -0.8 |
| FOEL | | | | IAmb | IAmb | 16 05 14.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| YUK4 | Talbot Arm | 72.49 | 333 | P | P | 16 05 10.7 | +1.7 |
| | baz=109,SNR=33 | | | | | | |
| MONM | Monmouth | 72.50 | 38 *e* | P | P | 16 05 08.5 | -0.4 |
| MONM | | | | IAmb | IAmb | 16 05 15.3 | |
| | comp=Z,24nm,0.6s | | | | | | |
| BCPM | Bancas Point | 72.52 | 331 | IAmb | IAmb | 16 05 11.8 | |
| | comp=Z,154nm,1.0s | | | | | | |
| HLM1 | Long Mynd | 72.59 | 37 *e* | P | P | 16 05 08.9 | -0.7 |
| HLM1 | | | | IAmb | IAmb | 16 05 16.0 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| J30M | Hart River | 72.61 | 336 | P | P | 16 05 10.8 | +1.2 |
| | baz=112,SNR=22 | | | | | | |
| G31M | Satah River | 72.74 | 339 | IAmb | IAmb | 16 05 12.0 | |
| | comp=Z,105nm,0.9s | | | | | | |
| G31M | Satah River | 72.74 | 339 | P | P | 16 05 10.9 | +0.8 |
| | baz=114,SNR=56 | | | | | | |
| M29M | Somme Creek | 72.76 | 334 | P | P | 16 05 11.7 | +1.2 |
| | baz=109,SNR=33 | | | | | | |
| F31M | Tsiigehtchic | 72.77 | 339 | IAmb | IAmb | 16 05 12.1 | |
| | comp=Z,265nm,1.4s | | | | | | |
| F31M | Tsiigehtchic | 72.77 | 339 | P | P | 16 05 11.2 | +0.9 |
| | baz=115,SNR=54 | | | | | | |
| INVG | Invergeldie, C | 72.80 | 33 *e* | P | P | 16 05 10.6 | -0.1 |
| K29M | Barlow Dome | 72.83 | 335 | IAmb | IAmb | 16 05 13.0 | |
| | comp=Z,80nm,0.8s | | | | | | |
| K29M | Barlow Dome | 72.83 | 335 | P | P | 16 05 11.9 | +1.1 |
| | baz=110,SNR=80 | | | | | | |
| L29M | L29M | 72.84 | 334 | P | P | 16 05 11.7 | +0.8 |
| | baz=110,SNR=44 | | | | | | |
| I30M | Mount Dempster | 72.87 | 337 | IAmb | IAmb | 16 05 13.2 | |
| | comp=Z,91nm,1.0s | | | | | | |
| I30M | Mount Dempster | 72.87 | 337 | P | P | 16 05 12.1 | +1.0 |
| | baz=112,SNR=93 | | | | | | |
| KESW | Keswick, Cumbr | 72.90 | 35 *e* | P | P | 16 05 11.4 | +0.1 |
| YUK8 | Steele Glacier | 72.98 | 332 | P | P | 16 05 13.6 | +1.6 |
| | baz=107,SNR=6.0 | | | | | | |
| ESK | Eskdalemuir | 73.01 | 34 *e* | P | P | 16 05 12.0 | +0.1 |
| ESK | | | | IAmb | IAmb | 16 05 17.0 | |
| | comp=Z,30nm,1.3s | | | | | | |
| O28M | Mount Upton | 73.03 | 332 | P | P | 16 05 14.0 | +1.7 |
| | baz=107,SNR=7.6 | | | | | | |
| EKA | Eskdalemuir Ar | 73.03 | 34 | P | P | 16 05 11.9 | -0.2 |
| | comp=Z,1.6nm,0.4s,baz=269,slow=1.8,SNR=38 | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | |
| INK | Inuvik | 73.07 | 340 | P | P | 16 05 12.2 | +0.2 |
| INK | | | | IAmb | IAmb | 16 05 13.7 | |
| | comp=Z,277nm,1.7s | | | | | | |
| INK | Inuvik | 73.07 | 340 | P | P | 16 05 12.5 | +0.6 |
| | comp=Z,41nm,0.6s,baz=104,slow=6.4,SNR=70 | | | | | | |
| | comp=Z,41nm,0.6s | | | | | | |
| INK | Inuvik | 73.07 | 340 | P | P | 16 05 12.6 | +0.6 |
| | baz=115,SNR=34 | | | | | | |
| J29N | Klondike Camp | 73.33 | 336 | IAmb | IAmb | 16 05 16.2 | |
| | comp=Z,120nm,1.1s | | | | | | |
| J29N | Klondike Camp | 73.33 | 336 | P | P | 16 05 15.1 | +1.4 |
| | baz=110,SNR=6.6 | | | | | | |
| BIGH | Upper Bighouse | 73.38 | 31 *e* | P | P | 16 05 13.6 | -0.4 |
| TABL | Table Mountain | 73.39 | 331 | IAmb | IAmb | 16 05 16.9 | |
| | comp=Z,80nm,0.9s | | | | | | |
| EPYK | Eagle Plains | 73.42 | 338 | IAmb | IAmb | 16 05 16.2 | |
| | comp=Z,98nm,1.1s | | | | | | |
| EPYK | Eagle Plains | 73.42 | 338 | P | P | 16 05 15.1 | +0.9 |
| | baz=112,SNR=45 | | | | | | |
| LOGN | Logan Glacier | 73.43 | 332 | IAmb | IAmb | 16 05 17.3 | |
| | comp=Z,94nm,1.1s | | | | | | |
| YUK3 | Moose Creek | 73.45 | 333 | P | P | 16 05 16.2 | +1.5 |
| | baz=107,SNR=98 | | | | | | |
| LBWR | Ladybower, Pea | 73.45 | 36 *e* | P | P | 16 05 14.3 | -0.3 |
| LBWR | | | | IAmb | IAmb | 16 05 21.3 | |
| | comp=Z,36nm,0.6s | | | | | | |
| G30M | tAoh Zraii Nji | 73.47 | 339 | P | P | 16 05 15.0 | +0.5 |
| | baz=112,SNR=16 | | | | | | |
| MCD | Coleburn Disti | 73.50 | 32 *e* | P | P | 16 05 14.7 | -0.1 |
| MCD | | | | IAmb | IAmb | 16 05 15.8 | |
| | comp=Z,25nm,0.7s | | | | | | |
| F30M | Barrier River | 73.56 | 339 | P | P | 16 05 16.0 | +1.1 |
| | baz=113,SNR=59 | | | | | | |
| EDMD | Edmundbyers | 73.60 | 35 *e* | P | P | 16 05 15.2 | -0.2 |
| EDMD | | | | IAmb | IAmb | 16 05 22.2 | |
| | comp=Z,41nm,1.5s | | | | | | |
| CTGM | Chitina Glacie | 73.62 | 332 | IAmb | IAmb | 16 05 18.5 | |
| | comp=Z,81nm,0.9s | | | | | | |
| CTG | Chitna Glacier | 73.62 | 332 | P | P | 16 05 17.6 | +2.0 |
| | baz=106,SNR=17 | | | | | | |
| TORD | Torodi Ar. Bea | 73.67 | 78 | P | P | 16 05 15.1 | -1.4 |
| TORD | Torodi Ar. Bea | 73.67 | 78 | P | P | 16 05 15.4 | -1.2 |
| | comp=Z,3.8nm,0.5s,baz=286,slow=6.6,SNR=41 | | | | | | |
| TORD | | | | pP | pP | 16 05 55.6 | +0.5 |
| | comp=Z,3.2nm,0.5s,baz=285,slow=6.1,SNR=2.8 | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | |
| I29M | Ogilvie Camp, | 73.67 | 337 | IAmb | IAmb | 16 05 17.8 | |
| | comp=Z,147nm,1.9s | | | | | | |
| I29M | Ogilvie Camp, | 73.67 | 337 | P | P | 16 05 16.3 | +0.6 |
| | baz=110,SNR=16 | | | | | | |
| DAWY | Dawson | 73.68 | 335 | P | P | 16 05 16.2 | +0.5 |
| | baz=109,SNR=17 | | | | | | |
| MESA | MESA | 73.70 | 331 | P | P | 16 05 18.1 | +1.9 |
| | baz=105 | | | | | | |
| GRNC | Granite Creek | 73.75 | 332 | IAmb | IAmb | 16 05 19.1 | |
| | comp=Z,80nm,0.9s | | | | | | |
| DBG | Daneborg | 73.94 | 13 *i* | P | P | 16 05 14.7 | -2.3 |
| DBG | | | | IAmb | IAmb | 16 05 19.9 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| H29M | Whitestone | 73.99 | 337 | IAmb | IAmb | 16 05 19.5 | |
| | comp=Z,86nm,0.9s | | | | | | |
| H29M | Whitestone | 73.99 | 337 | P | P | 16 05 18.5 | +1.0 |
| | baz=110,SNR=45 | | | | | | |
| ISLE | Juniper Island | 74.00 | 331 | IAmb | IAmb | 16 05 20.3 | |
| | comp=Z,109nm,1.2s | | | | | | |
| G29M | Pine Creek | 74.11 | 338 | IAmb | IAmb | 16 05 20.0 | |
| | comp=Z,81nm,0.9s | | | | | | |
| G29M | Pine Creek | 74.11 | 338 | P | P | 16 05 18.9 | +0.8 |
| | baz=111,SNR=34 | | | | | | |
| GDLE | Glaisdale, N Y | 74.17 | 35 *e* | P | P | 16 05 18.3 | -0.4 |
| GDLE | | | | IAmb | IAmb | 16 05 25.3 | |
| | comp=Z,42nm,0.6s | | | | | | |
| WAX | Waxell Ridge | 74.21 | 331 | IAmb | IAmb | 16 05 21.8 | |
| | comp=Z,136nm,1.4s | | | | | | |
| M27K | Edge Creek, AK | 74.25 | 333 | IAmb | IAmb | 16 05 22.1 | |
| | comp=Z,220nm,1.1s | | | | | | |
| M27K | Edge Creek, AK | 74.25 | 333 | P | P | 16 05 21.1 | +1.8 |
| | baz=106,SNR=94 | | | | | | |
| TGL | Tana Glacier | 74.27 | 331 | IAmb | IAmb | 16 05 22.0 | |
| | comp=Z,119nm,1.0s | | | | | | |
| I28M | Miner Creek | 74.35 | 336 | P | P | 16 05 20.6 | +0.9 |
| | baz=108,SNR=70 | | | | | | |
| CRQE | Cirque | 74.40 | 331 | P | P | 16 05 21.6 | +1.5 |
| | baz=104,SNR=11 | | | | | | |
| BCAR | Beaver Creek A | 74.41 | 334 | P | P | 16 05 21.0 | +1.0 |
| CRQM | Cirque | 74.42 | 331 | IAmb | IAmb | 16 05 22.7 | |
| | comp=Z,92nm,1.1s | | | | | | |
| L27K | Beaver Creek, | 74.42 | 334 | IAmb | IAmb | 16 05 22.8 | |
| | comp=Z,122nm,1.1s | | | | | | |
| L27K | Beaver Creek, | 74.42 | 334 | P | P | 16 05 21.7 | +1.6 |
| | baz=106,SNR=98 | | | | | | |
| MCARA | McCarthy VSAT | 74.52 | 332 | IAmb | IAmb | 16 05 23.7 | |
| | comp=Z,105nm,1.0s | | | | | | |
| MCARA | McCarthy VSAT | 74.52 | 332 | P | P | 16 05 22.6 | +1.9 |
| | baz=104,SNR=16 | | | | | | |
| E29M | Blow River | 74.59 | 340 | IAmb | IAmb | 16 05 22.7 | |
| | comp=Z,124nm,0.8s | | | | | | |
| E29M | Blow River | 74.59 | 340 | P | P | 16 05 21.7 | +0.8 |
| | baz=111,SNR=21 | | | | | | |
| EGAK | Eagle | 74.63 | 336 | IAmb | IAmb | 16 05 23.4 | |
| | comp=Z,148nm,1.4s | | | | | | |
| EGAK | Eagle | 74.63 | 336 | P | P | 16 05 22.1 | +0.9 |
| | baz=107,SNR=63 | | | | | | |
| M26K | Nabesna, AK | 74.77 | 333 | P | P | 16 05 23.2 | +1.1 |
| | baz=105,SNR=27 | | | | | | |
| K27K | Chicken | 74.80 | 335 | P | P | 16 05 23.5 | +1.4 |
| | baz=106 | | | | | | |
| KAIM | Kayak Island | 74.84 | 330 | P | P | 16 05 24.3 | +1.8 |
| | baz=103 | | | | | | |
| HMT | Hamilton | 74.86 | 331 | IAmb | IAmb | 16 05 25.4 | |
| | comp=Z,159nm,1.1s | | | | | | |
| GLB | Gilahina Butte | 74.90 | 332 | IAmb | IAmb | 16 05 25.6 | |
| | comp=Z,135nm,1.3s | | | | | | |
| F28M | Old Crow | 75.02 | 339 | P | P | 16 05 23.8 | +0.4 |
| | baz=109,SNR=21 | | | | | | |
| I27K | Kandik River | 75.06 | 336 | P | P | 16 05 24.7 | +1.0 |
| | baz=107,SNR=77 | | | | | | |
| L26K | Log Cabin Wild | 75.08 | 334 | IAmb | IAmb | 16 05 26.6 | |
| | comp=Z,174nm,1.1s | | | | | | |
| L26K | Log Cabin Wild | 75.08 | 334 | P | P | 16 05 25.3 | +1.4 |
| | baz=105,SNR=46 | | | | | | |
| BMRM | Bremner River | 75.17 | 331 | P | P | 16 05 26.0 | +1.6 |
| | baz=103,SNR=42 | | | | | | |
| H27K | Steamboat Moun | 75.21 | 337 | P | P | 16 05 25.1 | +0.5 |
| | baz=107,SNR=20 | | | | | | |
| MENT | Mentasta | 75.22 | 333 | IAmb | IAmb | 16 05 27.3 | |
| | comp=Z,127nm,1.5s | | | | | | |
| E28M | Babbage River | 75.23 | 340 | P | P | 16 05 24.8 | +0.2 |
| | baz=110,SNR=18 | | | | | | |
| N25K | Chitina, Valde | 75.31 | 332 | P | P | 16 05 26.6 | +1.4 |
| | baz=103,SNR=26 | | | | | | |
| G27K | Doyon Strip | 75.43 | 338 | P | P | 16 05 25.9 | +0.1 |
| | baz=107,SNR=18 | | | | | | |
| J26L | Joseph Creek | 75.55 | 335 | P | P | 16 05 27.4 | +0.8 |
| | baz=105,SNR=32 | | | | | | |
| I26K | Coal Creek Min | 75.59 | 336 | P | P | 16 05 27.2 | +0.5 |
| | baz=105 | | | | | | |
| SCRK | Sand Creek | 75.60 | 335 | IAmb | IAmb | 16 05 29.4 | |
| | comp=Z,117nm,1.1s | | | | | | |
| SCRK | Sand Creek | 75.60 | 335 | P | P | 16 05 28.3 | +1.4 |
| | baz=104,SNR=115 | | | | | | |
| EYAK | Cordova Ski Ar | 75.62 | 331 | P | P | 16 05 28.2 | +1.2 |
| | baz=102,SNR=10 | | | | | | |
| DAG | Danmarks Havn | 75.66 | 11 

baz=103,SNR=29
**SCM Sheep Creek Mo** **76.63 332** IAmb IAmb 16 05 34.9
comp=Z,228nm,1.0s
**SCM Sheep Creek Mo** **76.63 332** P **P** **16 05 33.7 +1.0**
baz=101,SNR=68
**BMAR Burnt Mountain** **76.70 338** P **P** **16 05 33.7 +0.8**
**FYU Fort Yukon** **76.74 337** IAmb IAmb 16 05 35.2
comp=Z,143nm,1.3s
**M23K Glacier View** **76.81 332** P **P** **16 05 34.5 +0.9**
baz=100,SNR=44
**DOU Dourbes** **76.88 40** *d*P **P** **16 05 33.6 -0.7**
comp=Z,9.5nm,0.8s
**DHY Denali Highway** **76.88 333** P **P** **16 05 34.8 +0.6**
baz=101,SNR=39
**H25L Birch Creek** **76.90 337** P **P** **16 05 35.2 +1.3**
baz=103,SNR=11
**PWL Port Wells** **76.93 331** IAmb IAmb 16 05 36.0
comp=Z,134nm,0.9s
**PWL Port Wells** **76.93 331** P **P** **16 05 34.9 +0.6**
baz=100,SNR=44
**WAT6 Susitna Watana** **76.95 333** P **P** **16 05 35.4 +0.8**
baz=100,SNR=58
**HDA Harding Lake** **76.96 335** IAmb IAmb 16 05 36.0
comp=Z,102nm,1.0s
**HDA Harding Lake** **76.96 335** P **P** **16 05 35.1 +0.7**
baz=102,SNR=68
**C27K Jago River** **76.97 340** P **P** **16 05 35.4 +1.0**
baz=106,SNR=32
**ILAR Eielson Array** **77.01 335** P **P** **16 05 34.9 +0.2**
**ILAR Eielson Array** **77.01 335** P **P** **16 05 35.1 +0.4**
comp=Z,24nm,0.8s,baz=109,slow=4.1,SNR=185
ILAR pP **pP** **16 06 13.3 +0.2**
comp=Z,3.5nm,1.0s,baz=95,slow=4.1,SNR=2.1
ILAR PP **PP** **16 08 25.8 -4.2**
comp=Z,7.2nm,1.1s,baz=100,slow=5.2,SNR=3.7
ILAR LR LR 16 41 08.9
comp=Z,144nm,18.2s,baz=76,slow=37
comp=Z,24nm,0.8s
**BMRD Maredsous** **77.01 40** *d*P **P** **16 05 35.1 +0.2**
comp=Z,7.5nm,0.9s
**KNK Knik Glacier** **77.08 331** IAmb IAmb 16 05 37.3
comp=Z,129nm,0.8s
**KNK Knik Glacier** **77.08 331** P **P** **16 05 36.1 +0.9**
baz=100,SNR=30
**SML Sawmill** **77.09 332** IAmb IAmb 16 05 37.3
comp=Z,159nm,1.1s
**SML Sawmill** **77.09 332** P **P** **16 05 36.1 +0.9**
baz=100,SNR=37
**G25K Bearman Lake** **77.12 337** P **P** **16 05 36.7 +1.4**
baz=103,SNR=29
**F25K Christian Rive** **77.14 338** P **P** **16 05 36.8 +1.4**
baz=104,SNR=44
**BGES Gesves** **77.22 40** *d*P **P** **16 05 36.2 +0.1**
comp=Z,8.8nm,0.9s
**RCHB Rochefort** **77.29 40** *d*P **P** **16 05 36.4 -0.1**
comp=Z,15nm,0.8s
**POKR Poker Plat Res** **77.31 335** P **P** **16 05 37.2 +0.9**
baz=101,SNR=34
**BCLA Clavier** **77.36 40** *d*P **P** **16 05 37.0 +0.1**
comp=Z,5.0nm,0.9s
**SEW Seward** **77.36 330** P **P** **16 05 36.9 +0.3**
baz=98,SNR=18
**GHO Glory Hole Cre** **77.36 332** IAmb IAmb 16 05 39.2
comp=Z,204nm,0.9s
**WAT1 Susitna Watana** **77.37 333** P **P** **16 05 37.5 +0.7**
baz=100
**PMR Palmer** **77.43 332** IAmb IAmb 16 05 38.8
comp=Z,67nm,0.8s
**PMR Palmer** **77.43 332** P **P** **16 05 37.8 +0.8**
baz=99,SNR=14
**COLA College** **77.43 335** P **P** **16 05 37.5 +0.5**
**COLA College** **77.43 335** P **P** **16 05 37.5 +0.5**
baz=101
**COLA College** **77.43 335** P **P** **16 05 37.5 +0.5**
COLA pmax pmax
comp=Z,83nm,1.4s
**C26K Camden Bay** **77.45 340** P **P** **16 05 38.3 +1.3**
baz=105,SNR=14
**BSTI Sart Tilman** **77.54 40** *d*P **P** **16 05 38.6 +0.7**
**O22K Cooper Landing** **77.55 330** IAmb IAmb 16 05 45.7
comp=Z,97nm,0.7s
**O22K Cooper Landing** **77.55 330** P **P** **16 05 38.3 +0.6**
baz=98,SNR=7.5
**RND Reindeer** **77.60 333** IAmb IAmb 16 05 40.5
comp=Z,174nm,0.8s
**RND Reindeer** **77.60 333** P **P** **16 05 39.4 +1.3**
**MDM Murphy Dome** **77.61 335** IAmb IAmb 16 05 40.0
comp=Z,146nm,1.3s
**H24K Noodor Dome** **77.63 336** P **P** **16 05 39.1 +0.9**
baz=101,SNR=52
**G24K Hadweenzic Riv** **77.64 337** P **P** **16 05 39.5 +1.4**
baz=102,SNR=45
**RC01 Rabbit Creek A** **77.64 331** P **P** **16 05 39.1 +0.8**
baz=98,SNR=12
**MCK McKinley** **77.69 334** P **P** **16 05 39.4 +0.8**
baz=100,SNR=18
**MCK McKinley** **77.69 334** P **P** **16 05 39.6 +1.1**
**D25K Kavik River** **77.80 340** IAmb IAmb 16 05 41.0
comp=Z,113nm,1.1s
**D25K Kavik River** **77.80 340** P **P** **16 05 40.0 +0.9**
baz=103,SNR=103
**MEM Membach** **77.82 40** *d*P **P** **16 05 39.1 -0.4**
comp=Z,8.8nm,1.0s
**WLF Walferdange** **77.85 41** *d*P **P** **16 05 40.3 +0.6**
comp=Z,17nm,0.8s
**WLF Walferdange** **77.85 41** *e*P **P** **16 05 39.4 -0.2**
comp=Z,20nm,0.8s,baz=269,slow=5.4
**NEA2 Nenana** **77.90 335** IAmb IAmb 16 05 41.4
comp=Z,132nm,1.1s
**NEA2 Nenana** **77.90 335** P **P** **16 05 40.4 +0.8**
baz=100,SNR=81
**BTNL Ternell** **77.90 40** *d*P **P** **16 05 40.3 +0.4**
**M22K Willow** **77.92 332** P **P** **16 05 40.4 +0.7**
baz=98,SNR=11
**BRSE Bradley Lake S** **77.95 330** P **P** **16 05 40.6 +0.5**
baz=97,SNR=18
**BNI Bardonecchia** **77.96 45** P **P** **16 05 39.3 -1.2**
**F24K Squaw Lake** **77.96 338** P **P** **16 05 41.3 +1.3**
baz=101,SNR=47
**BWN Browne** **78.00 334** IAmb IAmb 16 05 41.9
comp=Z,163nm,1.0s
**BRLK Bradley Lake** **78.03 330** IAmb IAmb 16 05 42.0
comp=Z,118nm,1.1s
**CUT Chulitna** **78.08 332** IAmb IAmb 16 05 42.6
comp=Z,248nm,1.1s
**CUT Chulitna** **78.08 332** P **P** **16 05 41.5 +0.8**
baz=98,SNR=17
**I23K Minto, Yukon-K** **78.11 335** P **P** **16 05 41.7 +1.0**
baz=100,SNR=48
**CNPM China Poot** **78.18 329** IAmb IAmb 16 05 42.9
comp=Z,101nm,1.0s
**SUA Susitna One** **78.18 331** IAmb IAmb 16 05 43.4
comp=Z,138nm,0.8s
**SUA Susitna One** **78.18 331** P **P** **16 05 42.4 +1.0**
baz=98,SNR=49
**KMY Karmoy** **78.19 31** *e*P **P** **16 05 41.5 +0.2**
KMY IAmb IAmb 16 05 43.8
comp=Z,93nm,1.6s
**E24K Your Creek** **78.30 338** P **P** **16 05 43.0 +1.2**
baz=101,SNR=36
**H23K Yukon River** **78.30 336** P **P** **16 05 42.8 +0.9**
baz=100,SNR=51
**HOM Homer** **78.40 329** P **P** **16 05 43.2 +0.8**
baz=96
**ECH Echery** **78.43 42** P **P** **16 05 43.4 +0.5**
**AHRW Bad Neuenahr-A** **78.50 40** *e*P **P** **16 05 43.7 +0.5**
comp=Z,15nm,0.9s,baz=269,slow=5.4
AHRW *e*pP **pP** **16 06 25.6 +3.0**
baz=270,slow=5.0
**SKT Skwentna** **78.61 332** IAmb IAmb 16 05 45.5
comp=Z,105nm,0.9s
**SKT Skwentna** **78.61 332** P **P** **16 05 44.4 +0.8**
baz=97,SNR=66
**NOR Nord** **78.62 7** *i* P **P** **16 05 43.2 -0.1**
NOR IAmb IAmb 16 05 49.1
comp=Z,10.0nm,0.5s
**D24K Happy Valley** **78.62 339** P **P** **16 05 44.4 +0.8**
baz=101,SNR=9.1
**G23K Bananza Creek** **78.64 337** IAmb IAmb 16 05 46.3
comp=Z,116nm,1.1s
**G23K Bananza Creek** **78.64 337** P **P** **16 05 45.4 +1.6**
baz=99,SNR=122
**BPAW Bear Paw Mtn.** **78.64 334** IAmb IAmb 16 05 45.6
comp=Z,109nm,1.1s
**BPAW Bear Paw Mtn.** **78.64 334** P **P** **16 05 44.5 +0.7**
baz=98,SNR=90
**MLY Manley** **78.67 335** P **P** **16 05 44.6 +0.7**
baz=98,SNR=81

**BUG Bochum--Univer** **78.67 39** *e*P **P** **16 05 44.5 +0.4**
comp=Z,14nm,0.5s,baz=269,slow=5.4
**Q20K Shuyak Island** **78.67 328** P **P** **16 05 44.6 +0.6**
baz=96
**C24K Franklin Bluff** **78.69 340** P **P** **16 05 45.0 +1.1**
baz=101
**KDAK Kodiak Island** **78.70 328** P **P** **16 05 43.9 -0.2**
**KDAK Kodiak Island** **78.70 328** P **P** **16 05 44.3 +0.2**
comp=Z,21nm,0.7s,baz=190,slow=1.6,SNR=16
comp=Z,21nm,0.7s
**KDAK Kodiak Island** **78.70 328** P **P** **16 05 44.2 +0.2**
baz=95
**E23K Chandalar** **78.71 338** P **P** **16 05 45.3 +1.2**
baz=100,SNR=30
**COLD Coldfoot** **78.79 337** P **P** **16 05 46.1 +1.7**
baz=99,SNR=78
**TOLK Toolik Lake Re** **78.80 339** P **P** **16 05 45.3 +0.7**
baz=100,SNR=14
**BLS5 Blasjo** **78.83 31** *e*P **P** **16 05 45.8 +1.0**
BLS5 IAmb IAmb 16 05 46.7
comp=Z,7.0nm,0.9s
**N20K Mount Spurr** **78.85 331** P **P** **16 05 45.4 +0.4**
baz=96,SNR=22
**HYA Hoyanger** **78.88 29** *e*P **P** **16 05 46.2 +1.2**
HYA IAmb IAmb 16 05 46.7
comp=Z,0.1nm,0.2s
**O20K Skope Mountain** **78.94 330** P **P** **16 05 46.0 +0.6**
baz=106,SNR=10
**ODD1 Odda** **78.96 30** *e*P **P** **16 05 47.3 +1.7**
**IBBN Ibbenburen** **79.02 38** *e*P **P** **16 05 46.1 +0.1**
comp=Z,20nm,0.6s,baz=269,slow=5.4
**OHAK Old Harbor** **79.03 327** P **P** **16 05 46.1 +0.2**
baz=94,SNR=12
**PPLA Purkeypile** **79.03 333** P **P** **16 05 46.6 +0.5**
baz=96
**H22K Ishtalitna Cre** **79.06 336** P **P** **16 05 46.7 +0.7**
baz=98,SNR=29
**SNART Snartemo** **79.12 32** *e*P **P** **16 05 47.3 +0.9**
**ILSW Iliamna Southw** **79.19 330** IAmb IAmb 16 05 48.6
comp=Z,154nm,1.0s
**CHUM Lake Minchumin** **79.20 334** P **P** **16 05 47.3 +0.5**
baz=97
**P19K Oil Pt** **79.20 329** IAmb IAmb 16 05 48.2
comp=Z,97nm,0.8s
**P19K Oil Pt** **79.20 329** P **P** **16 05 47.3 +0.4**
baz=95,SNR=7.8
**HLG Helgoland** **79.20 36** *e*pP pP 16 06 29.3 +2.9
baz=270,slow=5.0
**BFO Black Forest** **79.22 42** P **P** **16 05 45.7 -1.5**
**BFO Black Forest** **79.22 42** *e*P **P** **16 05 47.0 -0.2**
comp=Z,5.2nm,0.8s,baz=269,slow=5.4
**D23K Nanushuk River** **79.25 339** P **P** **16 05 48.1 +1.1**
baz=99
**G22K Bettles** **79.25 337** P **P** **16 05 48.1 +1.1**
baz=98
**Q19K Cape Douglas,** **79.35 329** IAmb IAmb 16 05 54.6
comp=Z,84nm,0.8s
**Q19K Cape Douglas,** **79.35 329** P **P** **16 05 48.0 +0.2**
baz=94,SNR=5.4
**M20K Styx River** **79.36 332** IAmb IAmb 16 05 49.2
comp=Z,108nm,1.0s
**M20K Styx River** **79.36 332** P **P** **16 05 48.2 +0.5**
baz=96,SNR=56
**TNS Taunus Mts** **79.36 40** *e*P **P** **16 05 48.9 +0.9**
comp=Z,15nm,0.8s,baz=269,slow=5.4
**C23K Itkillik River** **79.36 340** IAmb IAmb 16 05 49.8
comp=Z,96nm,0.9s
**C23K Itkillik River** **79.36 340** P **P** **16 05 48.7 +1.2**
baz=99,SNR=45
**KASTN Kahler Asten** **79.38 39** *e*P **P** **16 05 48.6 +0.6**
comp=Z,6.5nm,0.9s,baz=269,slow=5.4
**SII Sitkinak Islan** **79.47 326** P **P** **16 05 48.5 +0.2**
baz=94
**F22K John River** **79.59 337** P **P** **16 05 50.0 +1.2**
baz=97,SNR=35
**H21K Melozitna Rive** **79.61 336** P **P** **16 05 49.5 +0.5**
baz=96,SNR=28
**R18K Karluk** **79.68 327** P **P** **16 05 49.5 +0.1**
baz=94
**L20K Farewell, AK** **79.76 332** P **P** **16 05 50.1 +0.2**
baz=95,SNR=46
**STU Stuttgart** **79.80 42** *e*P **P** **16 05 50.5 +0.1**
comp=Z,40nm,0.9s,baz=269,slow=5.4
**TUE Stuetta** **79.86 44** P **P** **16 05 50.3 -0.7**
**TUE Stuetta** **79.86 44** P **P** **16 05 51.1 +0.1**
comp=Z,51nm,1.2s
**KEST Kesra** **79.89 55** P **P** **16 05 50.9 -0.3**
comp=Z,3.6nm,0.7s,baz=263,slow=6.3,SNR=3.8
comp=Z,3.6nm,0.7s
**N19K Bonanza Creek** **79.92 331** P **P** **16 05 50.7 -0.1**
baz=94,SNR=27
**K20K Telida** **79.92 333** P **P** **16 05 51.1 +0.4**
baz=95,SNR=44
**D22K Ayikyak River** **79.95 339** IAmb IAmb 16 05 53.0
comp=Z,84nm,1.0s
**D22K Ayikyak River** **79.95 339** P **P** **16 05 52.0 +1.2**
baz=97,SNR=48
**M19K Big River Lodg** **79.95 332** P **P** **16 05 51.4 +0.5**
baz=94,SNR=22
**G21K Allakaket** **79.99 336** IAmb IAmb 16 05 53.4
comp=Z,84nm,1.1s
**G21K Allakaket** **79.99 336** P **P** **16 05 52.4 +1.4**
baz=93,SNR=61
**RETH Rethem/Aller,** **80.02 38** *e*P **P** **16 05 52.3 +0.9**
comp=Z,7.6nm,0.8s,baz=269,slow=5.4
**J20K Nowinta River** **80.03 334** IAmb IAmb 16 05 52.8
comp=Z,124nm,1.0s
**J20K Nowinta River** **80.03 334** P **P** **16 05 51.8 +0.6**
baz=95,SNR=115
**IMAR Indian Mountai** **80.03 336** P **P** **16 05 51.6 +0.4**
**Q18K Katmai Hardscr** **80.04 328** P **P** **16 05 51.6 0.0**
baz=93,SNR=11
**F21K Alatna River** **80.06 337** IAmb IAmb 16 05 53.9
comp=Z,77nm,0.9s
**F21K Alatna River** **80.06 337** P **P** **16 05 52.8 +1.4**
baz=96,SNR=106
**MUD Monsted U'grnd** **80.06 34** *i* P **P** **16 05 53.0 +1.5**
MUD *e* 16 05 58.1
**L19K White Mountain** **80.19 332** P **P** **16 05 52.4 +0.2**
baz=94,SNR=36
**P18K Big Mountain,** **80.20 329** P **P** **16 05 52.0 -0.3**
baz=93,SNR=9.1
**O18K Koktuh Hills** **80.21 330** IAmb IAmb 16 05 53.4
comp=Z,112nm,0.8s
**O18K Koktuh Hills** **80.21 330** P **P** **16 05 52.4 +0.1**
baz=93,SNR=24
**I20K Naaghedeneel** **80.23 335** P **P** **16 05 52.4 +0.2**
baz=95
**DAVOX Davos/Dischmat** **80.23 44** P **P** **16 05 53.7 +0.7**
comp=Z,9.4nm,0.7s,baz=260,slow=4.5,SNR=17
comp=Z,9.4nm,0.7s
**CHIR Chirikof Islan** **80.23 325** P **P** **16 05 52.9 +0.4**
baz=92
**DAVA Damuels** **80.24 43** *e*P **P** **16 05 52.2 -0.7**
comp=Z,12nm,0.8s,SNR=5.1
**DOMB Dombas** **80.32 28** *e*P **P** **16 05 54.0 +1.1**
**GTTG Gottingen** **80.36 39** *e*P **P** **16 05 54.0 +0.7**
comp=Z,4.9nm,0.7s,baz=269,slow=5.4
**UBBA Unterbreizbach** **80.37 40** *e*P **P** **16 05 54.0 +0.8**
comp=Z,1.5nm,0.6s,baz=269,slow=5.4
**E21K Killik River** **80.37 338** P **P** **16 05 53.7 +0.7**
baz=96,SNR=26
**B22K Teshekpuk Lake** **80.39 340** IAmb IAmb 16 05 55.2
comp=Z,131nm,1.0s
**B22K Teshekpuk Lake** **80.39 340** P **P** **16 05 54.1 +1.1**
baz=97,SNR=10
**UBR Ueberruh** **80.40 43** *e*P **P** **16 05 54.0 +0.3**
comp=Z,4.5nm,0.7s,baz=269,slow=5.4
**H20K Anotlenenega Mo** **80.45 335** P **P** **16 05 54.1 +0.6**
baz=95,SNR=30
**NRDL Niedersach Rie** **80.47 38** *e*P **P** **16 05 54.6 +0.9**
comp=Z,9.3nm,0.9s,baz=269,slow=5.4
NRDL *e*pP **pP** **16 06 35.2 +1.9**
baz=270,slow=5.0
**Q17K Contact Creek** **80.48 328** P **P** **16 05 53.9 0.0**
baz=92,SNR=14
**FUORN Ofenpass-Fuorn** **80.50 44** P **P** **16 05 54.0 -0.4**
**N18K Kilae Creek** **80.60 330** IAmb IAmb 16 05 55.5
comp=Z,135nm,1.1s
**N18K Kilae Creek** **80.60 330** P **P** **16 05 54.5 +0.2**
baz=93,SNR=41
**M18K Stony River** **80.61 331** P **P** **16 05 54.5 +0.1**
baz=93,SNR=40
**CLZ Clausthal** **80.62 39** *e*P **P** **16 05 55.1 +0.4**
comp=Z,10nm,0.8s,baz=269,slow=5.4
**BSEG Bad Segeberg** **80.63 37** *e*P **P** **16 05 55.2 +0.6**
comp=Z,22nm,0.9s,baz=269,slow=5.4
BSEG *e*pP **pP** **16 06 36.2 +2.0**

baz=270,slow=5.0
**J19K Poorman** **80.66 334** P **P** **16 05 54.7 +0.1**
baz=94,SNR=17
**PLK4 Peulik 4** **80.71 327** IAmb IAmb 16 05 56.3
comp=Z,103nm,0.9s
**R17L Mt. Peulik Vol** **80.71 327** P **P** **16 05 55.3 +0.3**
baz=92,SNR=9.6
**B21K Ikpikpuk River** **80.72 339** IAmb IAmb 16 05 56.8
comp=Z,112nm,0.9s
**B21K Ikpikpuk River** **80.72 339** P **P** **16 05 55.9 +1.1**
baz=96,SNR=43
**P17K Kvichak River** **80.81 329** P **P** **16 05 55.5 +0.1**
baz=92
**FETA Feichten** **80.82 44** *e*P **P** **16 05 55.6 -0.4**
comp=Z,16nm,1.1s,SNR=12
**Q16K King Salmon** **80.90 328** P **P** **16 05 56.2 +0.3**
baz=92
**F20K Avaraart Lake** **80.91 337** P **P** **16 05 57.0 +1.1**
baz=94,SNR=18
**TBLU Trondheim** **80.94 27** *e*P **P** **16 05 57.6 +1.5**
**A22K Sinclair Lake** **80.97 341** P **P** **16 05 57.5 +1.4**
baz=95
**L18K Granite Mounta** **81.05 332** P **P** **16 05 57.1 +0.4**
baz=92,SNR=20
**MOTA Moosalm** **81.07 43** *i* P **P** **16 05 56.8 -0.5**
comp=Z,3.6nm,0.7s
**H19K Roundabout Mou** **81.11 335** P **P** **16 05 58.0 +1.0**
baz=93,SNR=34
**J18K Innoko River** **81.12 333** P **P** **16 05 57.6 +0.5**
baz=93,SNR=21
**GRF Grafenberg Arr** **81.14 41** *e*P **P** **16 05 57.9 +0.4**
comp=Z,11nm,1.1s,baz=269,slow=5.4
**SQTA Sankt Quirin** **81.14 43** *e*P **P** **16 05 56.9 -0.8**
comp=Z,6.1nm,0.8s
**FLTG Flechtingen** **81.16 38** *e*P **P** **16 05 57.6 +0.1**
comp=Z,14nm,0.8s,baz=269,slow=5.4
**O17K Koliganek Bris** **81.16 329** P **P** **16 05 57.4 +0.1**
baz=92,SNR=22
**E20K Nigu River** **81.17 338** P **P** **16 05 58.9 +1.6**
baz=94,SNR=154
**N17K Nushagak Hills** **81.23 330** P **P** **16 05 57.8 +0.1**
baz=92,SNR=12
**GCSA Galena City Sc** **81.25 334** P **P** **16 05 58.8 +1.1**
baz=93
**NB2 NORSAR Subarra** **81.30 29** P **P** **16 05 58.9 +0.8**
comp=Z,13nm,0.6s,baz=268,slow=5.6
**NB2 NORSAR Subarra** **81.30 29** P **P** **16 05 58.9 +0.8**
baz=268,slow=5.6
**NB2 NORSAR Subarra** **81.30 29** P **P** **16 05 58.8 +0.7**
**NOA NORSAR Array B** **81.30 29** P **P** **16 05 58.9 +0.8**
comp=Z,9.6nm,0.6s,baz=268,slow=5.3,SNR=42
comp=Z,9.6nm,0.6s
**D20K Etivluk River** **81.36 338** P **P** **16 05 59.4 +1.2**
baz=94
**M17K Holitna River** **81.38 331** P **P** **16 05 58.8 +0.3**
baz=92,SNR=15
**MOX Moxa** **81.39 40** *e*P **P** **16 05 59.4 +0.6**
comp=Z,3.8nm,0.7s,baz=269,slow=5.4
**WATA Walderalm** **81.39 43** *e*P **P** **16 05 59.3 +0.3**
comp=Z,1.7nm,0.4s
**G19K Purcell Mounta** **81.40 336** P **P** **16 05 59.4 +0.9**
baz=93,SNR=46
**WTTA Wattenberg** **81.44 43** *e*P **P** **16 05 58.8 -0.4**
comp=Z,9.9nm,0.6s
**NC602 NORSAR Array S** **81.45 30** *e*P **P** **16 05 59.8 +0.9**
NC602 IAmb IAmb 16 06 00.9
comp=Z,10.0nm,0.8s
**NORES NORESS Array B** **81.45 30** P **P** **16 06 00.5 +1.6**
**CTI Castel Tesino** **81.46 45** P **P** **16 05 59.3 -0.1**
**CTI Castel Tesino** **81.46 45** P **P** **16 05 59.3 -0.1**
CTI pmax pmax
comp=Z,9.0nm,0.9s
**NEUB Neuenburg** **81.49 39** *e*P **P** **16 05 59.6 +0.3**
comp=Z,8.3nm,0.8s,baz=269,slow=5.4
**E19K Redstone River** **81.52 337** P **P** **16 06 00.0 +0.9**
baz=93
**A21K Barrow** **81.53 341** P **P** **16 05 59.4 +0.3**
baz=94
**ONAU Onsala** **81.59 33** *i* P **P** **16 06 01.1 +1.5**
**P16K Nushagak River** **81.60 329** P **P** **16 05 59.7 +0.1**
baz=91,SNR=6.8
**B20K Meade River** **81.63 340** IAmb IAmb 16 06 02.0
comp=Z,141nm,1.1s
**B20K Meade River** **81.63 340** P **P** **16 06 00.9 +1.3**
baz=93,SNR=19
**O16K Kokwok River B** **81.66 329** P **P** **16 05 59.6 -0.3**
baz=91,SNR=6.4
**F19K Shaleruckik Mo** **81.71 337** P **P** **16 06 00.7 +0.7**
baz=92,SNR=30
**MANZ Manzenberg** **81.71 41** *e*P **P** **16 06 01.0 +0.5**
comp=Z,2.1nm,0.8s,baz=269,slow=5.4
**PLN Plauen** **81.74 40** *e*P **P** **16 06 01.2 +0.6**
comp=Z,8.3nm,0.8s,baz=269,slow=5.4
PLN *e*pP **pP** **16 06 41.9 +1.7**
baz=270,slow=5.0
**NSS Namsos** **81.75 26** *e*P **P** **16 06 02.0 +1.7**
NSS IAmb IAmb 16 06 03.5
comp=Z,22nm,1.3s
**ROTZ Rotzenmuhle** **81.78 41** *e*P **P** **16 06 01.7 +0.9**
comp=Z,0.9nm,0.9s,baz=269,slow=5.4
**L17K Donlin** **81.80 332** P **P** **16 06 01.5 +0.8**
baz=91,SNR=22
**CHGN Chignik** **81.81 326** IAmb IAmb 16 06 01.7
comp=Z,122nm,0.9s
**CHGN Chignik** **81.81 326** P **P** **16 06 00.5 -0.2**
baz=90,SNR=8.6
**K17K Iditarod** **81.82 332** IAmb IAmb 16 06 02.6
comp=Z,74nm,0.8s
**K17K Iditarod** **81.82 332** P **P** **16 06 01.6 +0.8**
baz=91,SNR=25
**H18K Honhosa River** **81.90 335** P **P** **16 06 02.8 +1.7**
baz=91,SNR=19
**D19K Kuna River** **81.90 338** P **P** **16 06 02.6 +1.5**
baz=92
**TANN Tannenbergstha** **81.94 40** *e*P **P** **16 06 02.0 +0.3**
comp=Z,7.7nm,0.8s,baz=269,slow=5.4
TANN *e*pP **pP** **16 06 42.7 +1.3**
baz=270,slow=5.0
**N16K Nishlik Lake** **82.01 330** P **P** **16 06 02.3 +0.5**
baz=90
**FABU Falkenberg** **82.03 33** *e*P **P** **16 06 02.1 +0.2**
**G18K Tagagawik** **82.03 336** IAmb IAmb 16 06 04.1
comp=Z,91nm,1.1s
**G18K Tagagawik** **82.03 336** P **P** **16 06 03.1 +1.2**
baz=91,SNR=52
**ABTA Abfaltersbach** **82.04 44** *i* P **P** **16 06 01.9 -0.5**
comp=Z,8.5nm,0.8s,SNR=6.1
**BORU Boraas** **82.05 33** *e*P **P** **16 06 02.6 +0.6**
**M16K Timber Creek** **82.11 331** P **P** **16 06 03.3 +1.0**
baz=90,SNR=8.2
**LESA Schwarzleotal** **82.14 43** *e*P **P** **16 06 02.6 -0.3**
comp=Z,3.8nm,0.7s
**J17K VABM Dome** **82.18 333** IAmb IAmb 16 06 05.3
comp=Z,107nm,1.4s
**J17K VABM Dome** **82.18 333** P **P** **16 06 04.0 +1.4**
baz=90,SNR=18
**BJUU Bjuv** **82.20 34** *e*P **P** **16 06 04.0 +1.1**
**RJOB Jochberg** **82.21 43** *e*P **P** **16 06 03.8 +0.6**
comp=Z,6.8nm,0.6s,baz=269,slow=5.4
**STOK Stokkvaagen** **82.22 24** *e*P **P** **16 06 04.0 +1.3**
STOK IAmb IAmb 16 06 04.7
comp=Z,21nm,1.0s
**WET Wettzell** **82.23 41** *e*P **P** **16 06 03.8 +0.6**
comp=Z,9.3nm,1.1s,baz=269,slow=5.4
**CLL Collm** **82.26 39** P **P** **16 06 02.9 -0.4**
**CLL Collm** **82.26 39** *i* P **P** **16 06 03.3 0.0**
CLL *i* x x 16 06 07.2
comp=Z,6.0nm,0.8s
comp=Z,6.0nm,0.8s
CLL *i* pP **pP** **16 06 39.8 -3.2**
CLL *i* x x 16 06 44.3
CLL *es*P **sP** **16 06 55.0 -4.8**
**CLL Collm** **82.26 39** *i* P **P** **16 06 03.3 0.0**
CLL pmax pmax
comp=Z,6.0nm,0.8s
**CLL Collm** **82.26 39** P **P** **16 06 04.1 +0.8**
comp=Z,8.5nm,0.9s
**CLL Collm** **82.26 39** *e*P **P** **16 06 03.7 +0.4**
comp=Z,9.1nm,1.1s,baz=269,slow=5.4
**KONS Konsvik** **82.27 24** *e*P **P** **16 06 04.7 +1.7**
**L16K Owhat River** **82.36 331** P **P** **16 06 04.9 +1.3**
baz=90,SNR=25
**S14K Fog Glacier** **82.45 326** P **P** **16 06 04.7 +0.4**
baz=89
**F18K Selawik** **82.45 336** P **P** **16 06 04.8 +0.9**
baz=90,SNR=20
**C19K Lookout Ridge** **82.45 339** IAmb IAmb 16 06 06.8
comp=Z,145nm,1.1s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| C19K | Lookout Ridge | 82.45 | 339 | | P | | P | 16 06 05.8 | +1.8 | |
| | baz=91,SNR=37 | | | | | | | | | |
| CHNA | Chernabura Isl | 82.49 | 324 | | P | | P | 16 06 04.5 | +0.1 | |
| | baz=89 | | | | | | | | | |
| HFS | Hagfors | 82.52 | 30 | | P | | P | 16 06 04.3 | -0.1 | |
| | comp=Z,7.6nm,0.5s,baz=228,slow=1.8,SNR=63 | | | | | | | | | |
| | comp=Z,7.6nm,0.5s | | | | | | | | | |
| HSKC | Hora Svate Kat | 82.55 | 40 | *e*P | | P | | 16 06 04.6 | -0.2 | |
| O15K | Ungalikthiuk R | 82.55 | 329 | | P | | P | 16 06 03.4 | -1.2 | |
| | baz=89 | | | | | | | | | |
| H17K | Granite Mounta | 82.55 | 335 | | P | | P | 16 06 05.8 | +1.3 | |
| | baz=90,SNR=22 | | | | | | | | | |
| KBA | Koelnbreinsper | 82.60 | 43 | *e*P | | P | | 16 06 05.1 | -0.3 | |
| | comp=Z,5.7nm,0.8s | | | | | | | | | |
| DEL | Delary | 82.67 | 34 | *i* P | | P | | 16 06 05.5 | +0.3 | |
| N15K | Kwethluk River | 82.67 | 330 | | P | | P | 16 06 05.8 | +0.6 | |
| | baz=89 | | | | | | | | | |
| KHC | Kasperske Hory | 82.69 | 41 | *e*P | | P | | 16 06 06.2 | +0.6 | |
| KHC | | | | *e*pP | | pP | | 16 06 46.5 | +1.1 | |
| KHC | Kasperske Hory | 82.69 | 41 | *e*P | | P | | 16 06 06.2 | +0.6 | |
| KHC | | | | *e* | | | | 16 06 46.5 | | |
| KHC | Kasperske Hory | 82.69 | 41 | P | | P | | 16 06 06.4 | +0.8 | |
| | comp=Z,10nm,0.9s | | | | | | | | | |
| ROBS | Robic | 82.75 | 44 | *i* P | | P | | 16 06 06.0 | +0.1 | |
| GEC2 | GERESS Array S | 82.78 | 42 | *e*P | | P | | 16 06 06.2 | 0.0 | |
| | comp=Z,7.3nm,0.7s,baz=269,slow=5.4 | | | | | | | | | |
| GERES | GERESS Array B | 82.78 | 42 | P | | P | | 16 06 05.3 | -0.9 | |
| GERES | GERESS Array B | 82.78 | 42 | P | | P | | 16 06 05.6 | -0.5 | |
| | comp=Z,4.1nm,0.7s,baz=195,slow=9.7,SNR=16 | | | | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | | | | |
| MOR8 | Moi Rana | 82.80 | 24 | *e*P | | P | | 16 06 06.9 | +1.1 | |
| E18K | Tukpahlearik C | 82.82 | 337 | | P | | P | 16 06 06.7 | +0.8 | |
| | baz=90,SNR=8.7 | | | | | | | | | |
| SABO | M.te Sabotino | 82.82 | 45 | IAmb | | IAmb | | 16 06 24.2 | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| MYKA | Terra Mystica | 82.83 | 44 | *e*P | | P | | 16 06 05.7 | -0.7 | |
| | comp=Z,5.1nm,0.7s,SNR=5.5 | | | | | | | | | |
| G17K | Kiwalik Mounta | 82.86 | 335 | | P | | P | 16 06 07.5 | +1.4 | |
| | baz=89,SNR=19 | | | | | | | | | |
| BRG | Berggiesshubel | 82.87 | 40 | *e*P | | P | | 16 06 07.0 | +0.6 | |
| BRG | | | | Amp | | | | 16 06 13.0 | | |
| | comp=Z,4.9nm,0.8s | | | | | | | | | |
| BRG | Berggiesshubel | 82.87 | 40 | *e*P | | P | | 16 06 07.1 | +0.6 | |
| | comp=Z,4.9nm,0.8s,baz=269,slow=5.4 | | | | | | | | | |
| J16K | Anvik River | 82.87 | 333 | | P | | P | 16 06 07.9 | +1.7 | |
| | baz=89,SNR=14 | | | | | | | | | |
| KIP | Kipapa | 82.88 | 291 | ⇓*e*P | | P | | 16 06 05.8 | -1.3 | |
| KIP | | | | | pmax | pmax | | | | |
| | comp=Z,67nm,2.0s | | | | | | | | | |
| I17K | Unalakleet | 82.90 | 334 | | IAmb | IAmb | | 16 06 09.2 | | |
| | comp=Z,103nm,0.8s | | | | | | | | | |
| I17K | Unalakleet | 82.90 | 334 | | P | | P | 16 06 08.2 | +1.9 | |
| | baz=89,SNR=15 | | | | | | | | | |
| M15K | Kasigluk River | 82.96 | 330 | | P | | P | 16 06 07.6 | +1.0 | |
| | baz=89,SNR=16 | | | | | | | | | |
| A19K | Wainwright | 82.97 | 340 | | P | | P | 16 06 07.9 | +1.4 | |
| | baz=90 | | | | | | | | | |
| SDPT | Sand Point | 82.99 | 325 | | IAmb | | IAmb | 16 06 08.2 | | |
| | comp=Z,145nm,1.0s | | | | | | | | | |
| SDPT | Sand Point | 82.99 | 325 | | P | | P | 16 06 07.0 | +0.1 | |
| | baz=88 | | | | | | | | | |
| C18K | Utukok River | 83.03 | 338 | | P | | P | 16 06 07.9 | +0.9 | |
| | baz=89,SNR=14 | | | | | | | | | |
| F17K | Baldwin Pennin | 83.09 | 336 | | IAmb | | IAmb | 16 06 09.2 | | |
| | comp=Z,55nm,0.9s | | | | | | | | | |
| F17K | Baldwin Pennin | 83.09 | 336 | | P | | P | 16 06 08.2 | +1.0 | |
| | baz=89,SNR=10.0 | | | | | | | | | |
| STEI | Steigen | 83.09 | 22 | *e*P | | P | | 16 06 08.0 | +0.8 | |
| FAUS | Fauske | 83.12 | 23 | *e*P | | P | | 16 06 08.3 | +1.0 | |
| MOA | Molln | 83.20 | 43 | *e*P | | P | | 16 06 07.6 | -0.6 | |
| | comp=Z,3.5nm,0.7s | | | | | | | | | |
| B18K | Kokolik River | 83.24 | 339 | | P | | P | 16 06 09.5 | +1.6 | |
| | baz=89 | | | | | | | | | |
| PVCC | Panska Ves | 83.28 | 40 | *e*P | | P | | 16 06 09.4 | +0.9 | |
| PVCC | Panska Ves | 83.28 | 40 | *e*P | | P | | 16 06 09.4 | +0.9 | |
| O14K | Tigyukauivet M | 83.29 | 329 | | P | | P | 16 06 08.9 | +0.6 | |
| | baz=88 | | | | | | | | | |
| L15K | Ungalak Mounta | 83.32 | 331 | | P | | P | 16 06 09.8 | +1.3 | |
| | baz=88,SNR=11 | | | | | | | | | |
| K15K | Wolf Creek Mou | 83.32 | 332 | | P | | P | 16 06 10.2 | +1.7 | |
| | baz=88,SNR=15 | | | | | | | | | |
| CEY | Cerknica | 83.41 | 45 | *i* P | | P | | 16 06 09.5 | +0.1 | |
| OBKA | Obir | 83.46 | 44 | *i* P | | P | | 16 06 09.7 | 0.0 | |
| | comp=Z,3.5nm,0.8s | | | | | | | | | |
| LJU | Ljubljana | 83.47 | 44 | *i* P | | P | | 16 06 07.2 | -2.5 | |
| N14K | Kuskokwak Cree | 83.48 | 330 | | P | | P | 16 06 10.2 | +0.9 | |
| | baz=88,SNR=13 | | | | | | | | | |
| H16K | Elim | 83.55 | 334 | | P | | P | 16 06 11.1 | +1.5 | |
| | baz=88,SNR=7.4 | | | | | | | | | |
| G16K | Koyuk River | 83.57 | 335 | | IAmb | | IAmb | 16 06 12.3 | | |
| | comp=Z,68nm,1.0s | | | | | | | | | |
| G16K | Koyuk River | 83.57 | 335 | | P | | P | 16 06 11.4 | +1.7 | |
| | baz=88,SNR=16 | | | | | | | | | |
| M14K | Bethel | 83.58 | 330 | | P | | P | 16 06 10.9 | +1.0 | |
| | baz=88,SNR=7.3 | | | | | | | | | |
| RDOG | Red Dog Mine | 83.68 | 338 | | P | | P | 16 06 11.2 | +0.9 | |
| | baz=88,SNR=5.9 | | | | | | | | | |
| C17K | DeLong Mountai | 83.77 | 338 | | P | | P | 16 06 11.8 | +1.1 | |
| | baz=87,SNR=8.0 | | | | | | | | | |
| D17K | Noatak River | 83.77 | 337 | | P | | P | 16 06 11.6 | +1.0 | |
| | baz=87,SNR=8.8 | | | | | | | | | |
| SOKA | Soboth | 83.78 | 44 | *e*P | | P | | 16 06 10.2 | -1.1 | |
| | comp=Z,1.1nm,0.5s | | | | | | | | | |
| S12K | Black Hills | 83.87 | 325 | | IAmb | | IAmb | 16 06 12.8 | | |
| | comp=Z,152nm,1.2s | | | | | | | | | |
| S12K | Black Hills | 83.87 | 325 | | P | | P | 16 06 11.8 | +0.4 | |
| | baz=87,SNR=6.1 | | | | | | | | | |
| L14K | Kuka Creek | 83.90 | 331 | | P | | P | 16 06 12.2 | +0.7 | |
| | baz=87,SNR=8.4 | | | | | | | | | |
| ARSA | Arzberg | 84.08 | 43 | *e*P | | P | | 16 06 11.7 | -1.1 | |
| | comp=Z,2.2nm,0.5s | | | | | | | | | |
| UPC | Upice | 84.20 | 40 | *e*P | | P | | 16 06 14.5 | +1.3 | |
| UPC | Upice | 84.20 | 40 | *e*P | | P | | 16 06 14.5 | +1.3 | |
| CHVC | Chvalec | 84.22 | 40 | *e*P | | P | | 16 06 14.4 | +1.0 | |
| CHVC | Chvalec | 84.22 | 40 | *e*P | | P | | 16 06 14.4 | +1.0 | |
| J14K | Nanvaranak Lak | 84.23 | 332 | | IAmb | | IAmb | 16 06 16.2 | | |
| | comp=Z,101nm,1.0s | | | | | | | | | |
| J14K | Nanvaranak Lak | 84.23 | 332 | | P | | P | 16 06 14.9 | +1.8 | |
| | baz=86,SNR=16 | | | | | | | | | |
| CONA | Conrad Observa | 84.27 | 43 | *i* P | | P | | 16 06 14.1 | +0.3 | |
| | comp=Z,4.4nm,0.7s | | | | | | | | | |
| M13K | Dall Lake | 84.28 | 330 | | P | | P | 16 06 14.8 | +1.4 | |
| | baz=86 | | | | | | | | | |
| G15K | Niukluk | 84.30 | 335 | | P | | P | 16 06 15.0 | +1.5 | |
| | baz=86,SNR=12 | | | | | | | | | |
| KSP | Ksiaz | 84.36 | 40 | P | | P | | 16 06 15.3 | +1.3 | |
| KSP | Ksiaz | 84.36 | 40 | P | | P | | 16 06 15.3 | +1.3 | |
| DPC | Dobruska-Polom | 84.41 | 40 | *e*P | | P | | 16 06 14.4 | 0.0 | |
| DPC | Dobruska-Polom | 84.41 | 40 | *e*P | | P | | 16 06 14.4 | 0.0 | |
| DPC | Dobruska-Polom | 84.41 | 40 | P | | P | | 16 06 15.4 | +1.0 | |
| | comp=Z,12nm,0.9s | | | | | | | | | |
| F15K | North Star Dit | 84.51 | 335 | | P | | P | 16 06 16.2 | +1.7 | |
| | baz=86,SNR=8.7 | | | | | | | | | |
| KRUC | Moravsky | 84.54 | 41 | *e*P | | P | | 16 06 14.9 | -0.1 | |
| KRUC | | | | *e* | | | | 16 06 53.2 | | |
| RONA | Rosalia, Austr | 84.57 | 43 | *e*P | | P | | 16 06 14.1 | -1.2 | |
| | comp=Z,2.6nm,0.6s | | | | | | | | | |
| C16K | Lisburne Hills | 84.58 | 338 | | IAmb | | IAmb | 16 06 17.1 | | |
| | comp=Z,76nm,1.0s | | | | | | | | | |
| C16K | Lisburne Hills | 84.58 | 338 | | P | | P | 16 06 16.1 | +1.3 | |
| | baz=85,SNR=15 | | | | | | | | | |
| VRAC | Vranov | 84.66 | 41 | *e*P | | P | | 16 06 16.0 | +0.4 | |
| VRAC | | | | *e* | | | | 16 06 56.0 | | |
| VRAC | Vranov | 84.66 | 41 | P | | P | | 16 06 15.8 | +0.2 | |
| | comp=Z,2.7nm,0.6s,baz=306,slow=4.0,SNR=3.9 | | | | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | | | | |
| FALS | False Pass | 84.70 | 325 | | P | | P | 16 06 15.8 | +0.2 | |
| | baz=86,SNR=11 | | | | | | | | | |
| KRLC | Kraliky | 84.72 | 40 | *e*P | | P | | 16 06 17.1 | +1.2 | |
| KRLC | Kraliky | 84.72 | 40 | *e*P | | P | | 16 06 17.1 | +1.2 | |
| K13K | Kusilvak Mount | 84.81 | 332 | | IAmb | | IAmb | 16 06 18.0 | | |
| | comp=Z,46nm,0.7s | | | | | | | | | |
| K13K | Kusilvak Mount | 84.81 | 332 | | P | | P | 16 06 17.4 | +1.4 | |
| | baz=85 | | | | | | | | | |
| ANM | Nome | 84.91 | 334 | | P | | P | 16 06 17.3 | +0.8 | |
| | baz=85 | | | | | | | | | |
| MODS | Modra-Piesok | 85.18 | 42 | *e*P | | P | | 16 06 19.0 | +0.8 | |
| MODS | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| MODS | Modra-Piesok | 85.18 | 42 | *e*P | | P | | 16 06 19.0 | +0.8 | |
| F14K | Arctic Creek | 85.22 | 335 | | P | | P | 16 06 19.6 | +1.6 | |
| | baz=84 | | | | | | | | | |
| MORC | Moravsky Berou | 85.23 | 41 | *e*P | | P | | 16 06 19.3 | +0.8 | |
| MORC | | | | *e* | | | | 16 06 59.9 | | |
| MORC | Moravsky Berou | 85.23 | 41 | ⇑P | | P | | 16 06 19.7 | +1.1 | |
| MORC | Moravsky Berou | 85.23 | 41 | P | | P | | 16 06 19.6 | +1.1 | |
| MAUC | Maruska | 85.45 | 41 | *e*P | | P | | 16 06 21.2 | +1.6 | |
| M11K | Mekoryuk | 85.70 | 330 | | P | | P | 16 06 21.2 | +0.7 | |
| | baz=84 | | | | | | | | | |
| TNA | Tin City | 85.88 | 335 | | P | | P | 16 06 22.7 | +1.4 | |
| | baz=83 | | | | | | | | | |
| KTK1 | Kautokeino | 85.94 | 21 | *e*P | | P | | 16 06 22.1 | +0.5 | |
| KTK1 | | | | | IAmb | | IAmb | 16 06 23.0 | | |
| | comp=Z,27nm,0.8s | | | | | | | | | |
| VYHS | Vyhne | 86.20 | 42 | *e*P | | P | | 16 06 24.3 | +1.0 | |
| VYHS | | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | | |
| VYHS | Vyhne | 86.20 | 42 | *e*P | | P | | 16 06 24.3 | +1.0 | |
| LVA | Lava Point | 86.29 | 324 | | IAmb | | IAmb | 16 06 26.8 | | |
| | comp=Z,128nm,1.4s | | | | | | | | | |
| MORH | Mrgy, Hungar | 86.31 | 44 | ⇑P | | P | | 16 06 25.0 | +1.3 | |
| MORH | Mrgy, Hungar | 86.31 | 44 | P | | P | | 16 06 24.8 | +1.0 | |
| | comp=Z,5.8nm,0.8s | | | | | | | | | |
| UNV | Unalaska Valle | 86.60 | 324 | | P | | P | 16 06 25.7 | +0.7 | |
| | baz=83,SNR=25 | | | | | | | | | |
| ARCES | ARCESS Array B | 86.66 | 20 | P | | P | | 16 06 25.4 | +0.3 | |
| ARCES | ARCESS Array B | 86.66 | 20 | P | | P | | 16 06 25.6 | +0.6 | |
| | comp=Z,8.8nm,0.6s,baz=266,slow=3.6,SNR=31 | | | | | | | | | |
| ARCES | | | | | pP | | pP | 16 07 05.3 | 0.0 | |
| | comp=Z,4.2nm,0.5s,baz=270,slow=4.1,SNR=1.2 | | | | | | | | | |
| | comp=Z,8.8nm,0.6s | | | | | | | | | |
| SLIT | Slitere, Latvi | 87.16 | 32 | *e*P | | P | | 16 06 28.1 | +0.5 | |
| PBUR | Paburge | 87.18 | 34 | *e*P | | P | | 16 06 29.0 | +1.2 | |
| KECS | Kecovo | 87.29 | 42 | *e*P | | P | | 16 06 30.3 | +1.8 | |
| KECS | Kecovo | 87.29 | 42 | *e*P | | P | | 16 06 30.3 | +1.8 | |
| KEF | Keuruu | 87.72 | 28 | *e*P | | P | | 16 06 30.7 | +0.5 | |
| GAMB | Gambell | 87.76 | 334 | | P | | P | 16 06 31.8 | +1.5 | |
| | baz=79,SNR=10 | | | | | | | | | |
| MTSE | Matsula | 87.79 | 31 | *e*P | | P | | 16 06 31.3 | +0.7 | |
| P08K | Saint George I | 87.94 | 327 | | P | | P | 16 06 32.9 | +1.5 | |
| | baz=81 | | | | | | | | | |
| NIKH | Nikolski High | 88.11 | 323 | | P | | P | 16 06 32.8 | +0.5 | |
| | baz=81,SNR=11 | | | | | | | | | |
| VNA3 | Neumayer Olymp | 88.14 | 163 | ⇑P | | P | | 16 06 31.4 | -0.6 | |
| | comp=Z,25nm,0.6s | | | | | | | | | |
| SUW | Suwalki | 88.19 | 36 | *e*P | | P | | 16 06 34.0 | +1.3 | |
| SPIA | Saint Paul Isl | 88.23 | 327 | | P | | P | 16 06 33.7 | +1.0 | |
| | baz=80 | | | | | | | | | |
| VNA1 | Neumayer--Stat | 88.28 | 162 | ⇑P | | P | | 16 06 29.9 | -2.7 | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| PABE | Paberze | 88.40 | 34 | *e*P | | P | | 16 06 35.1 | +1.5 | |
| FINES | FINESS Array B | 88.42 | 28 | P | | P | | 16 06 33.7 | +0.2 | |
| | comp=Z,5.8nm,0.7s,baz=286,slow=3.7,SNR=17 | | | | | | | | | |
| | comp=Z,5.8nm,0.7s | | | | | | | | | |
| VNA2 | Neumayer--Watz | 88.66 | 163 | ⇑P | | P | | 16 06 29.8 | -4.6 | |
| | comp=Z,8.4nm,0.5s,baz=291,slow=5.8 | | | | | | | | | |
| MARR | Marisel-Cluj | 89.31 | 43 | ⇑P | | P | | 16 06 39.1 | +0.9 | |
| VSU | Vasula | 89.34 | 31 | *ce*P | | P | | 16 06 37.8 | -0.1 | |
| VSU | | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.2s | | | | | | | | | |
| SNAA | Sanae | 90.31 | 163 | P | | P | | 16 06 40.8 | -1.4 | |
| SNAA | Sanae | 90.31 | 163 | ⇑P | | P | | 16 06 41.6 | -0.6 | |
| | comp=Z,137nm,0.6s | | | | | | | | | |
| SNAA | Sanae | 90.31 | 163 | P | | P | | 16 06 41.6 | -0.6 | |
| | comp=Z,5.4nm,0.7s,baz=270,slow=7.5,SNR=28 | | | | | | | | | |
| SNAA | | | | | pP | | pP | 16 07 22.4 | 0.0 | |
| | comp=Z,6.4nm,1.0s,baz=255,slow=5.4,SNR=3.0 | | | | | | | | | |
| | comp=Z,5.4nm,0.7s | | | | | | | | | |
| SNAA | Sanae | 90.31 | 163 | *c* iP | | P | | 16 06 41.1 | -1.1 | |
| SNAA | | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.4s | | | | | | | | | |
| RNPP5 | Staryi Chortor | 90.31 | 38 | P | | P | | 16 06 43.3 | +0.7 | |
| JOF | Joensuu | 90.46 | 26 | *e*P | | P | | 16 06 43.8 | +0.8 | |
| BURAR | Bucovina Array | 90.56 | 42 | P | | P | | 16 06 43.5 | -0.5 | |
| BURAR | Bucovina Array | 90.56 | 42 | ⇑P | | P | | 16 06 46.5 | +2.5 | |
| BURAR | Bucovina Array | 90.56 | 42 | P | | P | | 16 06 46.5 | +2.5 | |
| ARR | Arges | 90.57 | 44 | ⇑P | | P | | 16 06 45.0 | +0.9 | |
| VOIR | | 90.85 | 44 | ⇓P | | P | | 16 06 46.7 | +1.3 | |
| VOIR | | 90.85 | 44 | P | | P | | 16 06 46.7 | +1.3 | |
| VOIR | | 90.85 | 44 | P | | P | | 16 06 46.2 | +0.8 | |
| MLR | Muntele Rosu | 91.46 | 44 | P | | P | | 16 06 49.6 | +1.3 | |
| | comp=Z,11nm,0.8s,baz=162,slow=8.8,SNR=7.0 | | | | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| MLR | Muntele Rosu | 91.46 | 44 | ⇓P | | P | | 16 06 49.9 | +1.7 | |
| COVR | Voineasa-Covas | 91.57 | 44 | ⇑P | | P | | 16 06 50.9 | +2.2 | |
| LUBAR | Lubar, Ukraine | 91.74 | 39 | P | | P | | 16 06 49.7 | +0.4 | |
| TROLL | Troll, Antarti | 92.01 | 162 | ⇑P | | P | | 16 06 50.1 | -0.1 | |
| | comp=Z,678nm,0.7s | | | | | | | | | |
| AKASG | Malin Array Be | 92.48 | 38 | P | | P | | 16 06 52.5 | -0.2 | |
| | comp=Z,0.4nm,0.3s,baz=290,slow=4.3,SNR=1.5 | | | | | | | | | |
| TSUM | Tsumeb | 92.80 | 109 | P | | P | | 16 06 55.0 | +0.1 | |
| | comp=Z,7.0nm,1.1s,baz=248,slow=4.8,SNR=4.3 | | | | | | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | | |
| ADK | Adak | 93.02 | 323 | | P | | P | 16 06 54.8 | -0.3 | |
| ADK | | | | | IAmb | | IAmb | 16 06 56.3 | | |
| | comp=Z,92nm,1.2s | | | | | | | | | |
| ADK | Adak | 93.02 | 323 | | P | | P | 16 06 54.8 | -0.3 | |
| ADK | | | | | pmax | | pmax | | | |
| | comp=Z,92nm,1.3s | | | | | | | | | |
| MILM | Milestii Mici | 93.10 | 42 | ⇑*i* P | | P | | 16 07 01.4 | +5.8 | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| MILM | Milestii Mici | 93.10 | 42 | *c* iP | | P | | 16 07 01.4 | +5.8 | |
| MILM | | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| BILL | Bilibino | 94.67 | 341 | *c* iP | | P | | 16 07 03.0 | +0.6 | |
| BILL | | | | *e* | | | | 16 10 49.7 | | |
| BILL | | | | *e*PPP | | PPP | | 16 12 55.2 | | |
| BILL | | | | pmax | | pmax | | | | |
| | comp=Z,39nm,1.1s | | | | | | | | | |
| OBN | Obninsk | 95.46 | 33 | ⇓*e*P | | P | | 16 07 06.7 | +0.5 | |
| OBN | | | | *e*SP | | pP | | 16 07 46.5 | -0.3 | |
| OBN | | | | *e* | | | | 16 10 56.5 | | |
| OBN | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | | | |
| QSPA | South Pole Qui | 96.82 | 180 | P | | P | | 16 07 12.1 | -0.2 | |
| | comp=Z,7.1nm,1.0s,baz=150,slow=2.2,SNR=12 | | | | | | | | | |
| | comp=Z,7.1nm,1.0s | | | | | | | | | |
| ELIB | Princess Elisa | 98.42 | 162 | *d*P | | P | | 16 07 19.1 | -0.3 | |
| | comp=Z,1.7nm,1.3s | | | | | | | | | |
| VSLR | Vesyoloye | 101.69 | 43 | *ce*P | | Pdif | | 16 07 32.9 | -1.6 | |
| VSLR | | | | | pmax | | pmax | | | |
| | comp=Z,33nm,1.2s | | | | | | | | | |
| SEY | Seymchan | 102.36 | 341 | ⇑*e*P | | Pdif | | 16 07 37.3 | +0.3 | |
| SEY | | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.4s | | | | | | | | | |
| BELG | Belogornoye | 102.55 | 33 | *de*P | | Pdif | | 16 07 37.7 | -0.3 | |
| BELG | | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | | |
| BRVK | Borovoye | 112.76 | 23 | ⇑*i* PKIKP | | PKiKP | | 16 12 17.5 | 0.0 | |
| KRAR | Krasnoyarsk | 116.33 | 9 | ⇓*i* PKIKP | | PKPdf | | 16 12 23.7 | -0.5 | |
| ZALV | Zalesovo Beam | 116.66 | 14 | | | PKPdf | | 16 12 24.6 | -0.3 | |
| ZALV | Zalesovo Beam | 116.66 | 14 | PKP | | PKPdf | | 16 12 24.8 | -0.1 | |
| | comp=Z,5.4nm,0.3s,baz=279,slow=1.9,SNR=37 | | | | | | | | | |
| ZALV | | | | | SKP | | | 16 15 45.6 | | |
| | comp=Z,5.5nm,0.8s,baz=276,slow=2.8,SNR=8.7 | | | | | | | | | |
| KURK | Kurchatov | 117.69 | 20 | | | PKPdf | | 16 12 26.6 | -0.4 | |
| KURK | Kurchatov | 117.69 | 20 | *d* iPKIKP | | PKPdf | | 16 12 27.4 | +0.4 | |
| KURK | | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| KURBB | Kurchatov Arra | 117.74 | 20 | PKP | | PKPdf | | 16 12 27.8 | +0.6 | |
| | comp=Z,4.8nm,0.8s,baz=330,slow=2.0,SNR=29 | | | | | | | | | |
| KURBB | | | | | SKP | | | 16 15 48.6 | | |
| | comp=Z,1.7nm,0.6s,baz=332,slow=2.3,SNR=6.0 | | | | | | | | | |
| YSS | Yuzh-Sakhalins | 117.77 | 333 | *e*PKiKP | | PKiKP | | 16 12 31.2 | +3.9 | |
| SEM | Semipalatinsk | 118.50 | 19 | *e*PKP | | PKPdf | | 16 12 28.1 | -0.8 | |
| | baz=19 | | | | | | | | | |
| SEM | Semipalatinsk | 118.50 | 19 | *e*PKIKP | | PKPdf | | 16 12 28.1 | -0.8 | |
| BRLS | Borolday | 120.04 | 31 | *e*PKP | | PKPdf | | 16 12 31.0 | -0.9 | |
| | baz=31 | | | | | | | | | |
| BRLS | | | | *e*PP | | PP | | 16 13 58.5 | +0.8 | |
| | baz=31 | | | | | | | | | |
| BRLS | Borolday | 120.04 | 31 | *e*PKIKP | | PKPdf | | 16 12 30.9 | -0.9 | |
| BRLS | | | | *e* | | | | 16 13 58.5 | | |
| KLR | Kul'dur | 120.14 | 341 | *d* iPKIKP | | PKPdf | | 16 12 31.8 | 0.0 | |
| CHM | Chimkent | 120.43 | 31 | *e*PKP | | PKPdf | | 16 12 31.7 | -0.9 | |
| | baz=32 | | | | | | | | | |
| CHM | Chimkent | 120.43 | 31 | *e*PKIKP | | PKPdf | | 16 12 31.7 | -0.9 | |
| HEH | HeiHe | 120.46 | 345 | *e*PKP | | PKPdf | | 16 12 31.1 | -1.3 | |
| BTLS | Baital | 120.53 | 27 | *e*PKP | | PKPdf | | 16 12 31.7 | -1.0 | |
| | baz=27 | | | | | | | | | |
| BTLS | | | | *e*PP | | PP | | 16 14 01.4 | +0.5 | |
| | baz=27 | | | | | | | | | |
| BTLS | Baital | 120.53 | 27 | *e*PKIKP | | PKPdf | | 16 12 31.7 | -1.0 | |
| BTLS | | | | *e* | | | | 16 14 01.4 | | |
| DGZ | Jazzator, Alta | 121.21 | 15 | ⇑*i* PKIKP | | PKPdf | | 16 12 34.2 | +0.1 | |
| SGDS | Sogindy | 122.03 | 27 | *e*PKP | | PKPdf | | 16 12 34.7 | -1.1 | |
| | baz=27 | | | | | | | | | |
| SGDS | Sogindy | 122.03 | 27 | *e*PKIKP | | PKPdf | | 16 12 34.6 | -1.1 | |
| MAKZ | Makanchi | 122.19 | 20 | | | PKPdf | | 16 12 35.2 | -0.6 | |
| MAKZ | Makanchi | 122.19 | 20 | PKIKP | | PKPdf | | 16 12 35.3 | -0.6 | |
| MK31 | Makanchi Array | 122.31 | 20 | *c* iPKIKP | | PKPdf | | 16 12 35.8 | -0.3 | |
| MKAR | Makanchi Array | 122.31 | 20 | | | PKPdf | | 16 12 35.5 | -0.6 | |
| MKAR | Makanchi Array | 122.31 | 20 | PKP | | PKPdf | | 16 12 36.0 | -0.1 | |
| | comp=Z,1.0nm,0.3s,baz=293,slow=2.9,SNR=72 | | | | | | | | | |
| MKAR | | | | | SKP | | | 16 15 56.8 | | |
| | comp=Z,1.8nm,0.6s,baz=316,slow=1.9,SNR=6.1 | | | | | | | | | |
| MKAR | Makanchi Array | 122.31 | 20 | PKIKP | | PKPdf | | 16 12 36.0 | -0.1 | |
| TDK | Taldyqorghan | 122.40 | 24 | *e*PKP | | PKPdf | | 16 12 35.5 | -0.9 | |
| | baz=24 | | | | | | | | | |
| TDK | Taldyqorghan | 122.40 | 24 | *e*PKIKP | | PKPdf | | 16 12 35.4 | -0.9 | |
| ZSN | Zaisan | 122.55 | 18 | *e*PKP | | PKPdf | | 16 12 36.1 | -0.5 | |
| | baz=18 | | | | | | | | | |
| ZSN | Zaisan | 122.55 | 18 | *e*PKIKP | | PKPdf | | 16 12 36.0 | -0.5 | |
| SIMJ | Simiganj | 122.67 | 35 | | | PKPdf | | 16 12 37.4 | +0.2 | |
| ZAK | Zakamensk | 122.95 | 3 | *e*PKIKP | | PKPdf | | 16 12 37.9 | +0.6 | |
| ZAK | | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | | | |
| AAA | Alma-Ata | 123.24 | 26 | *e*PKP | | PKPdf | | 16 12 37.5 | -0.6 | |
| | baz=26 | | | | | | | | | |
| AAA | Alma-Ata | 123.24 | 26 | *e*PKIKP | | PKPdf | | 16 12 37.4 | -0.6 | |
| MDOK | Medeo | 123.34 | 26 | *e*PKP | | PKPdf | | 16 12 37.5 | -0.9 | |
| | baz=26 | | | | | | | | | |
| MDOK | Medeo | 123.34 | 26 | *e*PKIKP | | PKPdf | | 16 12 37.4 | -0.9 | |
| KPKS | Kokpek | 123.78 | 25 | *e*PKP | | PKPdf | | 16 12 38.2 | -0.9 | |
| | baz=25 | | | | | | | | | |
| KPKS | Kokpek | 123.78 | 25 | *e*PKIKP | | PKPdf | | 16 12 38.2 | -0.9 | |
| SATY | Saty | 124.00 | 25 | *e*PKP | | PKPdf | | 16 12 38.7 | -0.9 | |
| | baz=25 | | | | | | | | | |
| SATY | | | | *e*PP | | PP | | 16 14 25.3 | +0.9 | |
| | baz=25 | | | | | | | | | |
| SATY | Saty | 124.00 | 25 | *e*PKIKP | | PKPdf | | 16 12 38.7 | -0.9 | |
| SATY | | | | *e* | | | | 16 14 25.3 | | |
| UZB | Uzynbulak | 124.19 | 24 | *e*PKP | | PKPdf | | 16 12 38.8 | -1.3 | |
| | baz=24 | | | | | | | | | |
| UZB | | | | *e*PP | | PP | | 16 14 26.3 | +0.6 | |
| | baz=24 | | | | | | | | | |
| UZB | Uzynbulak | 124.19 | 24 | *e*PKIKP | | PKPdf | | 16 12 38.7 | -1.3 | |
| UZB | | | | *e* | | | | 16 14 26.2 | | |
| SHLS | Shalkode | 124.36 | 24 | *e*PKP | | PKPdf | | 16 12 39.8 | -0.5 | |
| | baz=24 | | | | | | | | | |
| SHLS | Shalkode | 124.36 | 24 | *e*PKIKP | | PKPdf | | 16 12 39.8 | -0.5 | |
| USA0B | Ussuriysk Arra | 124.43 | 338 | | | PKPdf | | 16 12 40.3 | +0.1 | |
| USA0B | Ussuriysk Arra | 124.43 | 338 | | PKIKP | PKPdf | | 16 12 40.3 | +0.1 | |
| USRK | Ussuriysk Ar. | 124.43 | 338 | | | PKPdf | | 16 12 39.8 | -0.4 | |
| USRK | Ussuriysk Ar. | 124.43 | 338 | PKP | | PKPdf | | 16 12 40.3 | +0.1 | |
| | comp=Z,11nm,0.8s,baz=306,slow=1.0,SNR=26 | | | | | | | | | |
| USRK | | | | | pPKP | | pPKPdf | 16 13 23.4 | +1.7 | |
| | comp=Z,1.7nm,0.6s,baz=242,slow=3.4,SNR=1.7 | | | | | | | | | |
| USRK | | | | | PP | | PP | 16 14 26.3 | -0.7 | |
| | comp=Z,2.8nm,0.7s,baz=11,slow=10,SNR=6.2 | | | | | | | | | |
| USRK | | | | | SKP | | | 16 16 01.4 | | |
| | comp=Z,3.2nm,0.9s,baz=22,slow=1.6,SNR=4.8 | | | | | | | | | |
| BNX | BinXian | 124.58 | 343 | | PKP | | PKPdf | 16 12 40.1 | -0.3 | |
| MDJ | Mudanjiang | 124.90 | 340 | | PKP | | PKiKP | 16 12 42.6 | +1.2 | |
| KBL | Kabul | 125.47 | 39 | | | | PKPdf | 16 12 42.1 | -0.7 | |
| KBL | Kabul | 125.47 | 39 | | PKIKP | | PKPdf | 16 12 42.1 | -0.7 | |
| ULN | Ulaanbaatar | 125.56 | 360 | ⇑*e*PKIKP | | | PKPdf | 16 12 41.9 | -0.6 | |
| SONM | Songino Array | 125.59 | 0 | | | | PKPdf | 16 12 42.5 | 0.0 | |
| SONM | Songino Array | 125.59 | 0 | PKP | | | PKPdf | 16 12 43.1 | +0.6 | |
| | comp=Z,3.7nm,0.4s,baz=314,slow=1.1,SNR=27 | | | | | | | | | |
| SONM | | | | | PP | | PP | 16 14 34.9 | +0.3 | |
| | comp=Z,3.4nm,0.9s,baz=352,slow=4.7,SNR=6.1 | | | | | | | | | |
| SONM | | | | | SKP | | | 16 16 05.2 | | |
| | comp=Z,1.3nm,0.7s,baz=193,slow=0.2,SNR=4.2 | | | | | | | | | |
| K

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NMEZ** | **Namu Road** | **0.74** | **48** | P | **Pb** | **16 07 03.2** | **+0.6** |
| NMEZ | | | | S | **Sb** | **16 07 13.7** | **+1.3** |
| **NBEZ** | **Newall Road No** | **0.84** | **40** | P | **Pb** | **16 07 05.2** | **+0.8** |
| NBEZ | | | | S | **Sn** | **16 07 17.4** | **+0.3** |
| **KHEZ** | **Kahui Hut** | **0.90** | **47** | P | **Pb** | **16 07 06.1** | **+0.6** |
| **KHEZ** | **Kahui Hut** | **0.90** | **47** | P | **Pb** | **16 07 06.0** | **+0.6** |
| KHEZ | | | | S | **Sb** | **16 07 18.3** | **+1.2** |
| **PREZ** | **Palmer Road** | **0.95** | **54** | P | **Pb** | **16 07 07.1** | **+0.8** |
| PREZ | | | | S | **Sb** | **16 07 19.8** | **+1.2** |
| **PKE** | **Pukeiti** | **0.96** | **42** | P | **Pb** | **16 07 07.1** | **+0.7** |
| PKE | | | | S | **Sb** | **16 07 20.0** | **+1.3** |
| **NEZ** | **North Egmont** | **0.96** | **49** | P | **Pb** | **16 07 06.6** | **-0.5** |
| NEZ | | | | S | **Sb** | **16 07 19.6** | **+0.7** |
| **QRZ** | **Quartz Range** | **1.03** | **208** | P | **Pb** | **16 07 07.9** | **+0.2** |
| **QRZ** | **Quartz Range** | **1.03** | **208** | P | **Pb** | **16 07 08.1** | **+0.4** |
| **LREZ** | **Lake Rotokare** | **1.06** | **65** | P | **Pb** | **16 07 08.0** | **0.0** |
| LREZ | | | | S | **Sg** | **16 07 23.0** | **+0.3** |
| **DUWZ** | **D'Urville Isla** | **1.06** | **147** | P | **Pb** | **16 07 07.2** | **-1.0** |
| DUWZ | | | | S | **Sb** | **16 07 21.5** | **-0.2** |
| **DREZ** | **Durham Road** | **1.08** | **48** | P | **Pb** | **16 07 08.8** | **+0.4** |
| DREZ | | | | S | **Sn** | **16 07 23.8** | **+0.8** |
| **TKNZ** | **Takaka Hill** | **1.13** | **188** | P | **Pb** | **16 07 09.2** | **-0.1** |
| TKNZ | | | | S | **Sb** | **16 07 24.9** | **+1.1** |
| **MHEZ** | **Mangahewa** | **1.22** | **47** | P | **Pn** | **16 07 11.1** | **+0.6** |
| **NNZ** | **Nelson** | **1.31** | **173** | P | **Pn** | **16 07 11.4** | **-0.3** |
| NNZ | | | | S | **Sb** | **16 07 29.3** | **+0.3** |
| **WAZ** | **Wanganui** | **1.41** | **84** | P | **Pn** | **16 07 12.7** | **-0.4** |
| **VRZ** | **Vera Road** | **1.46** | **58** | P | **Pn** | **16 07 13.6** | **-0.2** |
| VRZ | | | | S | **Sn** | **16 07 32.1** | **-0.3** |
| **MRNZ** | **Matariki Terra** | **1.52** | **192** | P | **Pn** | **16 07 15.1** | **+0.6** |
| **TCW** | **Tory Channel** | **1.55** | **147** | P | **Pn** | **16 07 15.2** | **+0.2** |
| TCW | | | | S | **Sn** | **16 07 34.1** | **-0.4** |
| **TUWZ** | **Tuamarina** | **1.63** | **159** | P | **Pn** | **16 07 16.8** | **+0.8** |
| **KIW** | **Kapiti Island** | **1.64** | **126** | P | **Pn** | **16 07 16.0** | **-0.1** |
| KIW | | | | S | **Sn** | **16 07 35.2** | **-1.6** |
| **OHWZ** | **Ohakea** | **1.68** | **101** | P | **Pn** | **16 07 17.4** | **+0.7** |
| OHWZ | | | | S | **Sn** | **16 07 38.2** | **+0.6** |
| **OGWZ** | **Otaki Gorge** | **1.78** | **121** | P | **Pn** | **16 07 18.0** | **-0.1** |
| **SNZO** | **South Karori** | **1.82** | **141** | P | **Pn** | **16 07 20.4** | **+1.7** |
| **WEL** | **Wellington** | **1.84** | **139** | P | **Pn** | **16 07 20.3** | **+1.4** |
| WEL | | | | S | **Sn** | **16 07 43.1** | **+1.5** |
| **MTVZ** | **Mangateitei** | **1.86** | **74** | P | **Pn** | **16 07 19.3** | **0.0** |
| **THZ** | **Tophouse** | **1.86** | **186** | P | **Pn** | **16 07 20.1** | **+0.8** |
| THZ | | | | S | **Sb** | **16 07 46.4** | **+1.7** |
| **CAW** | **Cannon Point** | **1.88** | **130** | P | **Pn** | **16 07 19.7** | **+0.2** |
| **BSWZ** | **Blackbirch Sta** | **1.88** | **164** | P | **Pn** | **16 07 20.5** | **+1.0** |
| BSWZ | | | | S | **Sb** | **16 07 46.0** | **+0.7** |
| **HIZ** | **Hauiti** | **1.92** | **44** | P | **Pn** | **16 07 20.0** | **0.0** |
| **HIZ** | **Hauiti** | **1.92** | **44** | P | **Pn** | **16 07 19.8** | **-0.2** |
| HIZ | | | | S | **Sn** | **16 07 42.6** | **-1.0** |
| **TRVZ** | **Turoa** | **1.94** | **72** | P | **Pn** | **16 07 20.6** | **0.0** |
| TRVZ | | | | S | **Sn** | **16 07 46.5** | **+2.0** |
| **TWVZ** | **Taurewa** | **1.95** | **65** | P | **Pn** | **16 07 20.3** | **-0.2** |
| TWVZ | | | | S | **Sn** | **16 07 43.0** | **-1.6** |
| **FWVZ** | **Far West T-bar** | **1.96** | **71** | P | **Pn** | **16 07 20.7** | **-0.1** |
| **MAVZ** | **Matarangi** | **1.96** | **72** | P | **Pn** | **16 07 21.0** | **+0.1** |
| **WNVZ** | **Wahianoa** | **1.97** | **74** | P | **Pn** | **16 07 21.0** | **+0.1** |
| **COVZ** | **Chateau Observ** | **1.97** | **70** | P | **Pn** | **16 07 20.8** | **0.0** |
| **WHVZ** | **Whangaehu Hut** | **1.98** | **72** | P | **Pn** | **16 07 20.9** | **-0.1** |
| **BHW** | **Baring Head** | **1.98** | **140** | P | **Pn** | **16 07 22.0** | **+1.2** |
| BHW | | | | S | **Sn** | **16 07 46.8** | **+1.6** |
| **MRZ** | **Mangatainoka R** | **1.99** | **113** | P | **Pn** | **16 07 21.8** | **+0.7** |
| MRZ | | | | S | **Sn** | **16 07 46.9** | **+1.4** |
| **CMWZ** | **Cape Campbell** | **2.00** | **157** | P | **Pb** | **16 07 24.9** | **+0.7** |
| **NGZ** | **Ngauruhoe** | **2.02** | **69** | P | **Pn** | **16 07 21.7** | **+0.1** |
| **TUVZ** | **Tukino** | **2.03** | **72** | P | **Pn** | **16 07 22.4** | **+0.7** |
| **WTVZ** | **West Tongariro** | **2.04** | **68** | P | **Pn** | **16 07 21.8** | **0.0** |
| **SNVZ** | **South Ngauruho** | **2.05** | **70** | P | **Pn** | **16 07 22.2** | **+0.3** |
| **HOWZ** | **Holdsworth Sta** | **2.05** | **120** | P | **Pn** | **16 07 22.7** | **+0.9** |
| **NNVZ** | **North Ngauruho** | **2.05** | **68** | P | **Pn** | **16 07 22.0** | **0.0** |
| **POWZ** | **Post Office Ro** | **2.05** | **104** | P | **Pn** | **16 07 22.5** | **+0.6** |
| **MOVZ** | **Moawhango** | **2.06** | **77** | P | **Pn** | **16 07 22.2** | **+0.1** |
| **OTVZ** | **Oturere** | **2.07** | **70** | P | **Pn** | **16 07 22.5** | **+0.2** |
| **KRVZ** | **Karewarewa** | **2.08** | **68** | P | **Pn** | **16 07 22.3** | **-0.1** |
| **DSZ** | **Denniston Nort** | **2.10** | **209** | P | **Pn** | **16 07 23.4** | **+0.8** |
| **NTVZ** | **North Tongarir** | **2.10** | **68** | P | **Pn** | **16 07 22.6** | **-0.1** |
| **ETVZ** | **East Tongariro** | **2.12** | **69** | P | **Pn** | **16 07 23.3** | **+0.5** |
| **TMVZ** | **Te Maari** | **2.12** | **69** | P | **Pn** | **16 07 23.1** | **+0.2** |
| **TSZ** | **Takapari Road** | **2.15** | **95** | P | **Pn** | **16 07 23.9** | **+0.6** |
| **KATZ** | **Kakaramea** | **2.17** | **65** | P | **Pn** | **16 07 23.8** | **+0.2** |
| **MTW** | **Mount Morrison** | **2.17** | **126** | P | **Pn** | **16 07 24.6** | **+1.1** |
| **MSWZ** | **Moikau Station** | **2.18** | **134** | P | **Pn** | **16 07 24.4** | **+0.7** |
| **PRWZ** | **Pori Road** | **2.24** | **108** | P | **Pn** | **16 07 26.2** | **+1.7** |
| **TIWZ** | **Tintock** | **2.25** | **113** | P | **Pn** | **16 07 26.6** | **+2.0** |
| **PAWZ** | **Paruwai Farm** | **2.26** | **131** | P | **Pn** | **16 07 27.0** | **+2.2** |
| **RATZ** | **Rangitukua** | **2.27** | **64** | P | **Pn** | **16 07 25.5** | **+0.5** |
| **PLWZ** | **Palliser** | **2.29** | **137** | P | **Pb** | **16 07 28.0** | **-1.2** |
| **WATZ** | **Wairara** | **2.33** | **60** | P | **Pn** | **16 07 26.3** | **+0.7** |
| **DVHZ** | **Dannevirke** | **2.33** | **101** | P | **Pn** | **16 07 27.3** | **+1.5** |
| **PNHZ** | **Pukenui** | **2.33** | **91** | P | **Pn** | **16 07 26.8** | **+1.0** |
| **TMWZ** | **Te Maipa** | **2.40** | **121** | P | **Pn** | **16 07 29.2** | **+2.6** |
| **TRWZ** | **Traveller** | **2.43** | **129** | P | **Pb** | **16 07 31.4** | **0.0** |
| **TLZ** | **Tolley Road** | **2.43** | **50** | P | **Pn** | **16 07 27.0** | **-0.1** |
| **BFZ** | **Birch Farm** | **2.48** | **109** | P | **Pn** | **16 07 29.3** | **+1.6** |
| **BFZ** | **Birch Farm** | **2.48** | **109** | P | **Pn** | **16 07 29.3** | **+1.6** |
| **KRHZ** | **Kereru** | **2.48** | **85** | P | **Pn** | **16 07 29.2** | **+1.3** |
| **KUTZ** | **Kaahu Road** | **2.51** | **56** | P | **Pn** | **16 07 28.8** | **+0.6** |
| **KHZ** | **Kahutara** | **2.52** | **174** | P | **Pn** | **16 07 29.9** | **+1.6** |
| **KHZ** | **Kahutara** | **2.52** | **174** | P | **Pn** | **16 07 29.8** | **+1.6** |
| **WPHZ** | **Waipukurau** | **2.52** | **95** | P | **Pn** | **16 07 29.5** | **+1.2** |
| **KWHZ** | **Kaweka Forest** | **2.56** | **80** | P | **Pn** | **16 07 31.1** | **+2.1** |
| **ANWZ** | **Angora Road** | **2.59** | **103** | P | **Pn** | **16 07 33.5** | **-0.7** |
| **BKZ** | **Black Stump Fm** | **2.68** | **75** | P | **Pn** | **16 07 30.4** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **2.68** | **75** | P | **Pn** | **16 07 30.7** | **+0.2** |
| **PRHZ** | **Porangahau** | **2.69** | **99** | P | **Pb** | **16 07 35.2** | **-0.6** |
| **MRHZ** | **Matea Rd** | **2.74** | **68** | P | **Pn** | **16 07 34.3** | **+2.9** |
| **MCHZ** | **McNeill Hill** | **2.77** | **81** | P | **Pn** | **16 07 33.5** | **+1.9** |
| **TOZ** | **Tahuroa Road** | **2.84** | **41** | P | **Pn** | **16 07 32.8** | **+0.1** |
| **PXZ** | **Pawanui** | **2.84** | **94** | P | **Pb** | **16 07 39.2** | **+0.7** |
| **NMHZ** | **Naumai** | **2.93** | **75** | P | **Pn** | **16 07 36.7** | **+2.6** |
| **LTZ** | **Lake Taylor** | **2.95** | **193** | P | **Pn** | **16 07 35.4** | **+1.2** |
| **MTHZ** | **Maungataniwha** | **3.04** | **71** | P | **Pn** | **16 07 35.5** | **+0.1** |
| **GVZ** | **Greta Valley S** | **3.06** | **182** | P | **Pn** | **16 07 37.2** | **+1.5** |
| **AWAZ** | **Awhitu Peninsu** | **3.07** | **23** | P | **Pn** | **16 07 36.7** | **+0.8** |
| **INZ** | **Inchbonnie** | **3.10** | **204** | P | **Pn** | **16 07 37.2** | **+1.0** |
| **WTAZ** | **Waiatarua** | **3.17** | **21** | P | **Pn** | **16 07 38.3** | **+1.0** |
| **RAHZ** | **Arahi** | **3.19** | **73** | P | **Pn** | **16 07 40.2** | **+2.6** |
| **MKAZ** | **Moumakai** | **3.21** | **30** | P | **Pn** | **16 07 38.7** | **+0.9** |
| **ETAZ** | **East Tamaki Re** | **3.26** | **26** | P | **Pn** | **16 07 39.2** | **+0.7** |
| **RVAZ** | **Riverhead Bore** | **3.33** | **20** | P | **Pn** | **16 07 39.8** | **+0.4** |
| **MBAZ** | **Motutapu North** | **3.42** | **24** | P | **Pn** | **16 07 41.8** | **+1.1** |
| **WIAZ** | **Waiheke Island** | **3.48** | **27** | P | **Pn** | **16 07 42.5** | **+1.1** |
| **URZ** | **Urewera** | **3.48** | **63** | P | **Pn** | **16 07 43.1** | **+1.5** |
| **URZ** | **Urewera** | **3.48** | **63** | P | **Pn** | **16 07 43.2** | **+1.7** |
| **OXZ** | **Oxford** | **3.52** | **194** | P | **Pn** | **16 07 42.9** | **+0.9** |
| **MWZ** | **Matawai** | **3.74** | **66** | P | **Pn** | **16 07 45.8** | **+0.7** |
| **KUZ** | **Kuaotunu** | **3.75** | **33** | P | **Pn** | **16 07 45.6** | **+0.4** |
| **MQZ** | **McQueen's Vall** | **3.81** | **186** | P | **Pn** | **16 07 45.3** | **-0.7** |
| **WCZ** | **Waipu Caves** | **4.07** | **14** | P | **Pn** | **16 07 50.3** | **+0.6** |
| **FOZ** | **Fox Glacier** | **4.40** | **214** | P | **Pn** | **16 07 55.4** | **+1.3** |
| **OUZ** | **Omahuta** | **4.70** | **4** | P | **Pn** | **16 07 59.5** | **+1.3** |
| **OUZ** | **Omahuta** | **4.70** | **4** | P | **Pn** | **16 07 59.2** | **+0.9** |
| **TMZ** | **Timaru** | **4.75** | **199** | P | **Pn** | **16 07 58.9** | **0.0** |
| **ODZ** | **Otahua Downs** | **5.46** | **199** | P | **Pn** | **16 08 09.0** | **+0.3** |
| **ODZ** | **Otahua Downs** | **5.46** | **199** | P | **Pn** | **16 08 08.3** | **-0.4** |
| **RIZ** | **Raoul Island** | **12.92** | **37** | P | **P** | **16 09 58.1** | **-3.4** |

*ISN **07** 16:17:04.2±1.0,35°.09N×46°.62E, h10km±22km, ML2.9*
*TEH **07** 16:17:05.0,35°.06N×46°.64E, h10km±47km, ML2.9*
**ISC 07 16:17:03.2**±1.4,**35°.16N**±0°.04×**46°.61E**±0°.04,**h4**km±13km,
**n13**,σ0°**95**/18,**Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.49** | **202** | Pg | **Pg** | **16 17 13.0** | **+0.3** |
| IDHR | | | | Sg | **Sb** | **16 17 20.9** | **-1.3** |
| **IGHG** | **Ghaleghazi** | **0.82** | **183** | Pg | **Pb** | **16 17 19.5** | **-0.8** |
| **SNQR** | **Sonqor, Kerman** | **0.88** | **109** | Pg | **Pb** | **16 17 20.3** | **-1.0** |
| SNQR | | | | Sg | **Sn** | **16 17 35.7** | **-0.5** |
| **GLG1** | **Gilan-e-Gharb** | **1.19** | **209** | Pg | **Pn** | **16 17 27.6** | **+0.9** |
| **ILBA** | **Ilam Banvizeh** | **1.56** | **193** | Pg | **Pg** | **16 17 33.7** | **+0.6** |
| **IKRK** | **Kirkuk** | **1.88** | **278** | *e*Pn | **Pg** | **16 17 39.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **16 18 03.0** | **-0.5** |
| IKRK | comp=N,188nm,0.6s | | | AML | AML | 16 18 08.2 | |
| IKRK | comp=E,144nm,0.4s | | | AML | AML | 16 18 13.3 | |
| **HSAM** | **Samen** | **1.89** | **119** | Pn | **Pg** | **16 17 39.9** | **+0.5** |
| **IKFM** | **Kafar-mosalman** | **1.92** | **148** | Pn | **Pg** | **16 17 40.7** | **+0.7** |
| **IBDR** | **Badra** | **2.12** | **196** | *e*Pn | **Pn** | **16 17 40.0** | **+0.6** |
| IBDR | | | | *e*Sn | **Sb** | **16 18 07.5** | **-1.3** |
| IBDR | comp=E,106nm,0.4s | | | AML | AML | 16 18 18.9 | |
| IBDR | comp=N,101nm,0.5s | | | AML | AML | 16 18 28.1 | |
| **QABG** | **Abgarm-Qazvin** | **2.49** | **76** | Pn | **Pb** | **16 17 48.3** | **-0.3** |
| **IAZR** | **Azarshahr** | **2.57** | **349** | Pn | **Pb** | **16 17 50.5** | **+0.5** |
| **BHD** | **Baghdad** | **2.64** | **225** | *e*Pn | **Pn** | **16 17 48.0** | **+1.5** |
| BHD | | | | *e*Sn | **Sn** | **16 18 20.0** | **+1.0** |
| **ISHB** | **Shabestar** | **3.22** | **346** | Pn | **Pb** | **16 17 59.8** | **-1.3** |

*JMA **07** 16:21:32.2±0.2, 43°.9N±0°.9×144°.7E±°, h39km, MV3.6/23, E OFF HOKKAIDO*
*SKHL **07** 16:21:33.1±0.1, 44°.00N×147°.50E, h54km±4km, mb4.5/3*
**ISC 07 16:21:32.0**±2.1,**44°.01N**±0°.10×**147°.5E**±0°.1,**h54**km±17km,
**n14**,σ0°**75**/26,**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.50** | **254** | *e*P | **Pn** | **16 21 44.0** | **+0.5** |
| SHO | | | | AMB | AMB | 16 21 45.5 | |
| SHO | 260nm,0.2s | | | *e*S | **Sn** | **16 21 52.1** | **+0.3** |
| SHO | 590nm,0.2s | | | A | A | 16 21 53.6 | |
| SHO | 1μm,0.2s | | | A | A | 16 21 53.6 | |
| **YUK** | **Yuzh-Kuril'sk** | **1.18** | **272** | *e*P | **Pn** | **16 21 51.8** | **-0.4** |
| YUK | | | | AMB | AMB | 16 21 53.9 | |
| YUK | 220nm,0.2s | | | *e*S | **Sn** | **16 22 05.7** | **-1.5** |
| YUK | 890nm,0.3s | | | A | A | 16 22 09.0 | |
| YUK | 1μm,0.3s | | | A | A | 16 22 09.0 | |
| **KUR** | **Kuril'sk** | **1.25** | **12** | *i* P | **Pn** | **16 21 53.3** | **+0.2** |
| KUR | | | | AMB | AMB | 16 21 53.5 | |
| KUR | 90nm,0.4s | | | *i* S | **Sn** | **16 22 08.4** | **-0.5** |
| KUR | 500nm,0.3s | | | A | A | 16 22 09.7 | |
| KUR | 380nm,0.3s | | | A | A | 16 22 09.7 | |
| **NEM2** | **Nemuro 2** | **1.43** | **244** | P | **Pn** | **16 21 55.5** | **0.0** |
| NEM2 | | | | S | **Sn** | **16 22 12.4** | **-0.8** |
| **NMR** | **Nemuro--Hokkai** | **1.44** | **244** | *e*P | **Pn** | **16 21 55.5** | **-0.1** |
| NMR | | | | *e*S | **Sn** | **16 22 12.4** | **-1.0** |
| **JRA** | **Rausu** | **1.72** | **268** | P | **Pn** | **16 21 60.0** | **+0.5** |
| JRA | | | | *e*S | **Sn** | **16 22 20.7** | **+0.5** |
| **JNSB** | **Nemuroshibetsu** | **1.82** | **263** | P | **Pn** | **16 22 01.4** | **+0.6** |
| JNSB | | | | *e*S | **Sn** | **16 22 22.4** | **-0.3** |
| **JKHN** | **Kushirohamanak** | **1.94** | **242** | P | **Pn** | **16 22 02.8** | **+0.4** |
| JKHN | | | | S | **Sn** | **16 22 25.6** | **0.0** |
| **JNK** | **Nakash** | **2.06** | **259** | P | **Pn** | **16 22 04.5** | **+0.4** |
| JNK | | | | S | **Sn** | **16 22 28.3** | **-0.3** |
| **AKK** | **Akkeshi** | **2.17** | **244** | *e*P | **Pn** | **16 22 05.6** | **-0.1** |
| AKK | | | | *e*S | **Sn** | **16 22 30.0** | **-1.4** |
| **JAK** | **Akkeshi** | **2.28** | **245** | P | **Pn** | **16 22 07.4** | **+0.4** |
| JAK | | | | S | **Sn** | **16 22 33.1** | **-0.8** |
| **JAR** | **Ashorobuto** | **2.80** | **257** | P | **Pn** | **16 22 15.5** | **+1.3** |
| **JOB** | **Onbets** | **2.89** | **249** | *e*P | **Pn** | **16 22 16.7** | **+1.3** |
| JOB | | | | *e*S | **Sn** | **16 22 48.6** | **-0.3** |
| **JMP** | **Maruseppu** | **2.99** | **271** | *e*P | **Pn** | **16 22 17.4** | **+0.6** |

*SJA **07** 16:24:24.3±0.8, 20°.02S×69°.15W, h115km±7km, ML3.8, MW3.7*
*GUC **07** 16:24:27.4±0.8, 20°.16S×69°.01W, h85km±5km, ML3.5*
*IDC **07** 16:24:28.2±1.5, 20°.08S×68°.78W, h119km±14km, mb3.2/4, mbtmp3.7/8, Error ellipse: s-maj=31.2km s-min=13.5km az=102.0*
**ISC 07 16:24:26.1**±0.8,**20°.06S**±0°.03×**69°.19W**±0°.07,**h103**km±6km,
**n33**,σ1°**52**/41,**mb3.5**/3,**2D**,**Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GO01** | **Chusmiza** | **0.39** | **360** | *e*P | **Pn** | **16 24 41.9** | **-0.3** |
| **GO01** | **Chusmiza** | **0.39** | **360** | *e*P | **Pn** | **16 24 41.8** | **-0.3** |
| GO01 | | | | *i* S | **Sn** | **16 24 53.5** | **-0.6** |
| **PX03** | **IPOC Station P** | **0.54** | **230** | *e*P | **Pn** | **16 24 41.9** | **-0.7** |
| PX03 | | | | *i* S | **Sn** | **16 24 54.8** | **-0.2** |
| PX03 | comp=N,2μm,0.4s | | | IAML | | 16 24 59.5 | |
| **TA02** | **Huaiquique** | **0.91** | **256** | *e*P | **Pn** | **16 24 45.9** | **+0.1** |
| TA02 | | | | *e*S | **Sn** | **16 25 02.3** | **+1.7** |
| TA02 | comp=Z,2μm,0.1s | | | IAML | | 16 25 03.0 | |
| **TA02** | **Huaiquique** | **0.91** | **256** | *e*P | **Pn** | **16 24 46.6** | **+0.8** |
| TA02 | | | | *i* S | **Sn** | **16 25 01.6** | **+1.0** |
| TA02 | comp=N,2μm,0.2s | | | IAML | | 16 25 03.2 | |
| **PB01** | **IPOC Station P** | **1.02** | **196** | *e*P | **Pn** | **16 24 47.9** | **+0.9** |
| PB01 | | | | *e*S | **Sn** | **16 25 04.7** | **+1.8** |
| PB01 | comp=Z,1μm,0.2s | | | IAML | | 16 25 05.1 | |
| **PB01** | **IPOC Station P** | **1.02** | **196** | ↓*i* P | **Pn** | **16 24 48.0** | **+0.9** |
| PB01 | | | | *i* S | **Sn** | **16 25 04.2** | **+1.3** |
| PB01 | comp=N,2μm,0.2s | | | IAML | | 16 25 05.4 | |
| **TA01** | **Diego Aracena** | **1.06** | **241** | *e*P | **Pn** | **16 24 47.8** | **+0.4** |
| TA01 | | | | *e*S | **Sn** | **16 25 05.5** | **+2.1** |
| **TA01** | **Diego Aracena** | **1.06** | **241** | ↓*i* P | **Pn** | **16 24 47.7** | **+0.4** |
| TA01 | | | | *i* S | **Sn** | **16 25 04.0** | **+0.6** |
| TA01 | comp=E,2μm,0.2s | | | IAML | | 16 25 04.8 | |
| **PX02** | **IPOC Station P** | **1.45** | **319** | *e*P | **Pn** | **16 24 51.1** | **-0.9** |
| PX02 | | | | *i* S | **Sn** | **16 25 11.0** | **-0.6** |
| **AP01** | **Chacalluta** | **2.00** | **327** | *e*P | **Pn** | **16 24 59.3** | **+0.5** |
| AP01 | comp=Z,678nm,0.4s | | | IAML | | 16 25 37.9 | |
| **AP01** | **Chacalluta** | **2.00** | **327** | *e*P | **Pn** | **16 24 58.8** | **0.0** |
| **PB04** | **IPOC Station P** | **2.44** | **201** | *e*P | **Pn** | **16 25 06.9** | **+2.2** |
| PB04 | | | | *e*S | **Sn** | **16 25 33.5** | **-0.7** |
| PB04 | comp=Z,222nm,0.2s | | | IAML | | 16 25 57.9 | |
| **PB18** | **Visviri** | **2.47** | **354** | *e*P | **Pn** | **16 25 08.2** | **+2.8** |
| PB18 | comp=E,174nm,0.4s | | | IAML | | 16 25 51.1 | |
| **LVC** | **Limon Verde** | **2.55** | **174** | *e*P | **Pn** | **16 25 08.0** | **+1.6** |
| LVC | | | | *e*S | **Sn** | **16 25 36.6** | **-0.7** |
| **LVC** | **Limon Verde** | **2.55** | **174** | P | **Pn** | **16 25 09.1** | **+2.7** |
| LVC | comp=E,112nm,0.4s,baz=10.0,slow=12,SNR=135 | | | S | **Sn** | **16 25 39.8** | **+2.6** |
| **PB05** | comp=E,164nm,0.5s,baz=105,slow=20,SNR=16 **IPOC Station P** | **2.94** | **199** | *e*P | **Pn** | **16 25 11.8** | **+0.6** |
| PB05 | | | | *e*S | **Sn** | **16 25 46.4** | **+0.4** |
| PB05 | comp=Z,186nm,0.6s | | | IAML | | 16 26 00.4 | |
| **PB05** | **IPOC Station P** | **2.94** | **199** | *e*P | **Pn** | **16 25 12.0** | **+0.7** |
| **LPAZ** | **La Paz** | **3.88** | **15** | P | **Pn** | **16 25 26.5** | **+2.1** |
| **PB14** | comp=Z,22nm,0.6s,baz=186,slow=7.1,SNR=85 **IPOC Station P** | **4.68** | **194** | *e*P | **Pn** | **16 25 31.1** | **-3.8** |
| PB14 | | | | *e*S | **Sn** | **16 26 27.5** | **-0.8** |
| PB14 | comp=Z,68nm,1.1s | | | IAML | | 16 26 52.0 | |
| **GO02** | **Mina Guanaco** | **5.09** | **184** | *e*P | **Pn** | **16 25 40.2** | **-0.2** |
| GO02 | | | | *e*S | **Sn** | **16 26 38.9** | **+0.6** |
| **SIV** | **San Ignacio** comp=Z,4.2nm,0.5s,baz=245,slow=12,SNR=24 | **8.72** | **64** | P | **Pn** | **16 26 26.8** | **-2.7** |
| **CPUP** | **Villa Florida** comp=Z,2.5nm,0.7s,baz=294,slow=12,SNR=5.2 | **12.56** | **122** | P | **Pn** | **16 27 19.5** | **-1.7** |
| **PLCA** | **Paso Flores** comp=Z,1.0nm,0.6s,baz=357,slow=14,SNR=4.7 comp=Z,1.0nm,0.6s | **20.64** | **183** | P | **P** | **16 28 58.9** | **+1.4** |
| **SNAA** | **Sanae** comp=Z,0.7nm,0.7s,baz=209,slow=4.0,SNR=2.2 comp=Z,0.7nm,0.7s | **63.72** | **161** | P | **P** | **16 34 46.9** | **+0.3** |
| **NVAR** | **Mina Array Bea** comp=Z,0.2nm,0.5s,baz=152,slow=9.9,SNR=1.8 comp=Z,0.2nm,0.5s | **74.20** | **322** | P | **P** | **16 35 53.6** | **+1.6** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.4nm,0.5s,baz=260,slow=5.8,SNR=3.6 comp=Z,0.4nm,0.5s | **77.13** | **71** | P | **P** | **16 36 06.0** | **-2.9** |
| **H11S2** | **WAKE ISLAND Hyd** baz=101,slow=74,SNR=15 | **27.42** | **278** | T | T | 19 03 02.0 | |
| **H11S1** | **WAKE ISLAND Hyd** baz=101,slow=74,SNR=15 | **27.43** | **278** | T | T | 19 03 04.1 | |
| **H11S3** | **WAKE ISLAND Hyd** baz=101,slow=74,SNR=12 | **27.44** | **278** | T | T | 19 03 09.1 | |
| **H11N3** | **WAKE ISLAND Hyd** baz=100,slow=74,SNR=7.6 | **27.47** | **280** | T | T | 19 03 09.2 | |
| **H11N2** | **WAKE ISLAND Hyd** baz=100,slow=74,SNR=8.7 | **27.48** | **280** | T | T | 19 03 11.4 | |
| **H11N1** | **WAKE ISLAND Hyd** baz=100,slow=74,SNR=7.1 | **27.48** | **280** | T | T | 19 03 13.2 | |

*IDC **07** 16:30:07.9±1.6, 74°.95N×8°.65E, h0km, mb3.5/2, mbtmp3.6/5, ML2.5/3, MS3.8/1, Error ellipse: s-maj=50.4km s-min=20.2km az=63.0*
*NEIC **07** 16:30:07.8±1.7, 74°.8N±0°.1×8°.2E±0°.6, h10km±2km, mb4.3/6, Error ellipse: s-maj=29.7km s-min=13.7km az=245.0*
**ISC 07 16:30:08.0**±1.0,**74°.79N**±0°.09×**8°.3E**±0°.2,**h10**km,**n15**,
σ0°**93**/14,**mb4.3**/5,**Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBS** | **Kingsbay** | **4.24** | **10** | Pn | **Pn** | **16 31 12.5** | **0.0** |
| **ARCES** | **ARCESS Array B** | **7.44** | **126** | Pn | **Pn** | **16 31 56.1** | **-0.3** |
| **ARCES** | **ARCESS Array B** | **7.44** | **126** | Pn | **Pn** | **16 31 56.5** | **+0.1** |
| ARCES | 0.2nm,0.3s,baz=326,slow=11,SNR=3.3 | | | Sn | Sn | 16 33 10.0 | -11 |
| **KEV** | 0.2nm,0.3s,baz=332,slow=24,SNR=1.5 6.1nm,0.8s **Kevo** | **7.59** | **122** | Pn | **Pn** | **16 31 58.1** | **-0.3** |
| **FINES** | **FINES Array B** | **14.84** | **145** | Pn | **Pn** | **16 33 38.2** | **+0.8** |
| **HFS** | baz=346,slow=14,SNR=2.1 1.3nm,0.9s **Hagfors** | **14.86** | **169** | Pn | **P** | **16 33 41.9** | **-1.7** |
| **GERES** | 0.1nm,0.3s,baz=336,slow=3.2,SNR=3.6 1.9nm,0.8s **GERESS Array B** | **26.14** | **172** | P | **P** | **16 35 43.8** | **+1.8** |
| **NRCA** | 0.7nm,0.7s,baz=342,slow=9.3,SNR=3.5 0.7nm,0.7s **Norcia** | **32.13** | **173** | P | **P** | **16 36 36.2** | **+1.0** |
| NRCA | comp=Z,7.3nm,1.4s | | | IAmb | IAmb | 16 36 44.1 | |
| **PUK** | **Puka** | **33.27** | **164** | P | **P** | **16 36 45.7** | **+0.6** |
| **VSL** | **Villasalto** | **35.39** | **179** | P | **P** | **16 37 03.3** | **-0.2** |
| **ILAR** | **Eielson Array** comp=Z,0.4nm,0.8s,baz=1.8,slow=7.8,SNR=5.9 comp=Z,0.4nm,0.8s | **39.76** | **344** | P | **P** | **16 37 40.6** | **+0.5** |
| **MKAR** | **Makanchi Array** | **41.34** | **89** | P | **P** | **16 37 53.9** | **+0.5** |
| **J17K** | **VABM Dome** | **41.82** | **352** | P | **P** | **16 37 57.2** | **0.0** |
| J17K | comp=Z,8.5nm,1.2s | | | IAmb | IAmb | 16 37 58.3 | |
| **M19K** | **Big River Lodg** | **43.09** | **348** | P | **P** | **16 38 06.6** | **-0.9** |
| M19K | comp=Z,8.9nm,1.3s | | | IAmb | IAmb | 16 38 07.4 | |
| **BBB** | **Bella Bella** comp=Z,105nm,19.5s,baz=360,slow=36 | **50.03** | **326** | LR | LR | 17 00 22.8 | |

*HEL **07** 16:40:15.9±0.2, 67°.66N×34°.20E, h0km, ML1.8, Explosion KOLA **07** 16:40:16.3, 67°.68N×34°.22E, h0km, ML2.2, Error ellipse: s-maj=3.6km s-min=1.4km az=130.0, Khibiny Mines*
*IDC **07** 16:40:20.7±2.6, 67°.60N×33°.16E, h0km, mb2.9/2, ML2.0/2, Error ellipse: s-maj=30.3km s-min=12.0km az=74.0*
**ISC 07 16:40:15.6**±0.9,**67°.67N**±0°.04×**34°.22E**±0°.04,**h0**km,**n30**,
σ1°**04**/52,**Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVZ** | **Lovozero** | **0.28** | **35** | P | **Pg** | **16 40 21.1** | **+0.1** |
| LVZ | | | | S | **Sg** | **16 40 24.8** | **+0.2** |
| **LVZ** | **Lovozero** | **0.28** | **35** | PG | **Pg** | **16 40 21.1** | **+0.1** |
| LVZ | | | | SG | **Sg** | **16 40 25.2** | **+0.6** |
| **APA** | **Apatity** | **0.33** | **252** | P | **Pg** | **16 40 21.9** | **0.0** |
| APA | | | | S | **Sg** | **16 40 26.6** | **+0.5** |
| **APA0** | **Apatity Array** | **0.47** | **263** | P | **Pg** | **16 40 24.2** | **-0.5** |
| APA0 | | | | S | **Sg** | **16 40 30.9** | **+0.1** |
| **TERR** | **Teriberka** | **1.57** | **12** | P | **Pn** | **16 40 44.0** | **-0.7** |
| TERR | | | | S | **Sn** | **16 41 05.0** | **-0.7** |
| **VRF** | **Varrio** | **1.76** | **275** | PG |

*-3.6050, Plg74.0000°, Azm11.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***07*** *16:55:48.8±2.5, 74.61N×8.0E×8.3, h10km±1km, mb4.6/107 Error ellipse: s-maj=16.5km s-min=10.7km az=53.0*

*BER* ***07*** *16:55:49.2±4.1, 74.75N×8.73E, h10km, mb(Pn)4.6, mb4.6(USGS), Confirmed Earthquake*

*FCIAR* ***07*** *16:55:52.0, 74.68N×9.93E, h10km, station KBS has station magnitude of 4.60*

*KOLA* ***07*** *16:55:52.8, 74.53N×9.84E, h0km, ML2.4, Error ellipse: s-maj=24.5km s-min=19.4km az=170.0, Norwegian sea, Knipovich ridge, south*

*DNK* ***07*** *16:55:53.5±4.3, 75.04N×7.64E, h19km±72km, ML2.6, MS3.9*

*BGR* ***07*** *16:56:02.5, 73.33N×10.37E, h10km, mb4.6*

**ISC 07 16:55:48.6±0.3, 74.65N±0.03×8.75E±0.04, h10km, n625, σ2ŝ26/562, mb4.6/158, MS4.0/63, 26C-23D, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BJO1** | **Bjornoya** | **2.74** | **88** | | *e*P | | **Pn** | **16 56 31.5** | **-1.0** |
| BJO1 | | | | | *e*S | | **Sn** | **16 57 01.1** | **-4.6** |
| BJO1 | | | | | IAML | | | 16 57 09.2 | |
| | comp=Z,89nm,0.6s | | | | | | | | |
| **BJO1** | **Bjornoya** | **2.74** | **88** | | Pn | | **Pn** | **16 56 31.0** | **-1.5** |
| BJO1 | | | | | Sn | | **Sn** | **16 57 00.6** | **-5.1** |
| **BJO1** | **Bjornoya** | **2.74** | **88** | | *e*P | | **Pn** | **16 56 31.3** | **-1.2** |
| BJO1 | | | | | *e*S | | **Sn** | **16 56 59.7** | **-5.9** |
| **HSPB** | **Hornsund (broa** | **2.89** | **32** | | Pn | | **Pn** | **16 56 33.1** | **-1.4** |
| HSPB | | | | | Sn | | **Sn** | **16 57 02.4** | **-6.9** |
| **HSPB** | **Hornsund (broa** | **2.89** | **32** | | P | | **Pn** | **16 56 33.3** | **-1.2** |
| **BRBA** | **Barentsburg A** | **3.66** | **18** | | *e*P | | **Pn** | **16 56 44.4** | **-0.7** |
| BRBA | | | | | IAML | | | 16 57 29.9 | |
| | comp=Z,42nm,0.5s | | | | | | | | |
| **BRBA** | **Barentsburg A** | **3.66** | **18** | | Pn | | **Pn** | **16 56 44.4** | **-0.7** |
| BRBA | | | | | Sn | | **Sn** | **16 57 25.6** | **-2.6** |
| **BRBB** | **Barentsburg B** | **3.69** | **18** | | *e*P | | **Pn** | **16 56 44.5** | **-1.0** |
| **BRBB** | **Barentsburg B** | **3.69** | **18** | | Pn | | **Pn** | **16 56 44.9** | **-0.7** |
| BRBB | | | | | Sn | | **Sn** | **16 57 27.6** | **-1.4** |
| **KBS** | **Kingsbay** | **4.36** | **8** | | | | **Pn** | **16 56 53.4** | **-1.3** |
| **KBS** | **Kingsbay** | **4.36** | **8** | | *e*P | | **Pn** | **16 56 53.9** | **-0.8** |
| KBS | | | | | *e*S | | **Sn** | **16 57 39.4** | **-6.0** |
| KBS | | | | | IAML | | | 16 57 46.8 | |
| | comp=Z,34nm,0.7s | | | | | | | | |
| **KBS** | **Kingsbay** | **4.36** | **8** | | Pn | | **Pn** | **16 56 53.4** | **-1.3** |
| KBS | | | | | Sn | | **Sn** | **16 57 40.4** | **-5.0** |
| **KBS** | **Kingsbay** | **4.36** | **8** | ↑ | *i*P | | **Pn** | **16 56 53.7** | **-1.0** |
| KBS | | | | | *e*S | | **Sn** | **16 57 42.4** | **-3.1** |
| **KBS** | **Kingsbay** | **4.36** | **8** | *d* | *i*P | | **Pn** | **16 56 53.2** | **-1.5** |
| KBS | | | | | pmax | | pmax | | |
| | comp=Z,67nm,1.0s | | | | | | | | |
| **KBS** | **Kingsbay** | **4.36** | **8** | | *i* P | | **Pn** | **16 56 53.7** | **-1.0** |
| **HOPEN** | **Hopen** | **4.46** | **58** | | *e*P | | **Pn** | **16 56 55.2** | **-0.9** |
| HOPEN | | | | | *e*S | | **Sn** | **16 57 41.5** | **-6.5** |
| HOPEN | | | | | IAML | | | 16 57 48.4 | |
| | comp=Z,46nm,0.3s | | | | | | | | |
| **HOPEN** | **Hopen** | **4.46** | **58** | | Pn | | **Pn** | **16 56 55.2** | **-0.9** |
| HOPEN | | | | | Sn | | **Sn** | **16 57 42.6** | **-5.4** |
| **HOPEN** | **Hopen** | **4.46** | **58** | | *e*P | | **Pn** | **16 56 55.2** | **-0.9** |
| HOPEN | | | | | *e*S | | **Sn** | **16 57 42.0** | **-6.0** |
| **TRO** | **Tromso** | **5.93** | **143** | | *e*P | | **Pn** | **16 57 15.6** | **-0.6** |
| TRO | | | | | IAML | | | 16 58 22.7 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **HAMF** | **Hammerfest** | **6.00** | **125** | | *e*P | | **Pn** | **16 57 15.3** | **-1.9** |
| HAMF | | | | | *e*S | | **Sn** | **16 58 17.7** | **-8.1** |
| HAMF | | | | | IAML | | | 16 58 20.9 | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| **HAMF** | **Hammerfest** | **6.00** | **125** | | Pn | | **Pn** | **16 57 15.2** | **-2.0** |
| HAMF | | | | | Sn | | **Sn** | **16 58 19.1** | **-6.7** |
| **JMIC** | **Jan Mayen** | **6.28** | **243** | | *e*P | | **Pn** | **16 57 19.4** | **-1.7** |
| JMIC | | | | | *e*S | | **Sn** | **16 58 27.4** | **-5.3** |
| JMIC | | | | | IAML | | | 16 58 34.0 | |
| | comp=Z,14nm,0.3s | | | | | | | | |
| **JMIC** | **Jan Mayen** | **6.28** | **243** | | Pn | | **Pn** | **16 57 19.4** | **-1.6** |
| JMIC | | | | | Sn | | **Sn** | **16 58 29.3** | **-3.4** |
| **JMIC** | **Jan Mayen** | **6.28** | **243** | | Pn | | **Pn** | **16 57 19.3** | **-1.7** |
| | comp=Z,38nm,0.3s,baz=69,slow=7.5,SNR=51 | | | | | | | | |
| JMIC | | | | | LR | | LR | 16 59 07.3 | |
| | comp=Z,2μm,18.8s,baz=40,slow=31 | | | | | | | | |
| **JMI** | **Jan Mayen** | **6.37** | **243** | | *e*P | | **Pn** | **16 57 21.0** | **-1.3** |
| JMI | | | | | *e*S | | **Sn** | **16 58 29.6** | **-5.3** |
| JMI | | | | | IAML | | | 16 58 34.9 | |
| | comp=Z,10nm,0.2s | | | | | | | | |
| **JMI** | **Jan Mayen** | **6.37** | **243** | | Pn | | **Pn** | **16 57 20.9** | **-1.4** |
| JMI | | | | | Sn | | **Sn** | **16 58 31.0** | **-3.9** |
| **LOF** | **Lofoten** | **6.73** | **164** | | *e*P | | **Pn** | **16 57 26.9** | **-0.3** |
| LOF | | | | | *e*S | | **Sn** | **16 58 37.9** | **-5.9** |
| LOF | | | | | IAML | | | 16 58 42.0 | |
| | comp=Z,9.8nm,0.8s | | | | | | | | |
| **LOF** | **Lofoten** | **6.73** | **164** | | Pn | | **Pn** | **16 57 26.9** | **-0.3** |
| **DAG** | **Danmarks Havn** | **7.06** | **300** | | *i* P | | Pn | 16 57 28.0 | -3.7 |
| DAG | | | | | *i* S | | Sn | 16 58 39.9 | -12 |
| DAG | | | | | IAML | | | 16 58 42.4 | |
| | comp=Z,31nm,0.3s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **7.06** | **300** | | *i* P | | Pn | 16 57 28.0 | -3.7 |
| DAG | | | | | *i* S | | Sn | 16 58 39.9 | -12 |
| DAG | | | | | IAML | | | 16 58 42.4 | |
| | comp=Z,31nm,0.3s | | | | | | | | |
| **STEI** | **Steigen** | **7.07** | **160** | | *e*P | | **Pn** | **16 57 32.2** | **+0.4** |
| STEI | | | | | *e*S | | **Sn** | **16 58 43.8** | **-8.3** |
| STEI | | | | | IAML | | | 16 58 51.4 | |
| | comp=Z,4.9nm,0.8s | | | | | | | | |
| **KTK1** | **Kautokeino** | **7.23** | **134** | | *e*P | | **Pn** | **16 57 34.1** | **0.0** |
| KTK1 | | | | | *e*S | | **Sn** | **16 58 47.7** | **-8.4** |
| KTK1 | | | | | IAML | | | 16 58 54.8 | |
| | comp=Z,6.6nm,0.6s | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.26** | **127** | | Pn | | **Pn** | **16 57 33.2** | **-1.3** |
| | baz=321,slow=12 | | | | | | | | |
| ARA0 | | | | | Sn | | Sn | 16 58 47.5 | -9.3 |
| | baz=313,slow=22 | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.26** | **127** | | Pn | | **Pn** | **16 57 33.2** | **-1.3** |
| | baz=321,slow=12 | | | | | | | | |
| ARA0 | | | | | Sn | | Sn | 16 58 47.5 | -9.3 |
| | baz=313,slow=22 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **7.26** | **127** | | | | **Pn** | **16 57 32.5** | **-1.9** |
| **ARCES** | **ARCESS Array B** | **7.26** | **127** | | Pn | | **Pn** | **16 57 32.6** | **-1.8** |
| | comp=Z,1.5nm,0.3s,baz=322,slow=12,SNR=30 | | | | | | | | |
| ARCES | | | | | Sn | | **Sn** | **16 58 51.0** | **-5.7** |
| | comp=Z,2.2nm,0.3s,baz=339,slow=25,SNR=7.5 | | | | | | | | |
| ARCES | | | | | LR | | LR | 17 00 37.2 | |
| | comp=Z,1μm,20.7s,baz=313,slow=40 | | | | | | | | |
| | comp=Z,5.0nm,0.4s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **7.26** | **127** | | P | | **Pn** | **16 57 35.7** | **+1.2** |
| ARCES | | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **KEV** | **Kevo** | **7.41** | **122** | | Pn | | **Pn** | **16 57 34.1** | **-2.5** |
| **KEV** | **Kevo** | **7.41** | **122** | | *e*P | | **Pn** | **16 57 34.9** | **-1.7** |
| KEV | | | | | *e*S | | Sn | 16 58 50.0 | -11 |
| **KEV** | **Kevo** | **7.41** | **122** | | Pn | | **Pn** | **16 57 34.5** | **-2.1** |
| KEV | | | | | Sn | | **Sn** | **16 58 52.7** | **-7.8** |
| **KEV** | **Kevo** | **7.41** | **122** | | P | | **Pn** | **16 57 38.2** | **+1.6** |
| **FAUS** | **Fauske** | **7.61** | **161** | | P | | **Pn** | **16 57 40.1** | **+0.9** |
| FAUS | | | | | S | | **Sn** | **16 58 60.0** | **-5.3** |
| **FAUS** | **Fauske** | **7.61** | **161** | | *e*P | | **Pn** | **16 57 40.1** | **+0.9** |
| FAUS | | | | | *e*S | | **Sn** | **16 58 57.2** | **-8.1** |
| FAUS | | | | | IAML | | | 16 59 06.1 | |
| | comp=Z,4.7nm,0.7s | | | | | | | | |
| **VADS** | **Vadso** | **7.69** | **116** | | P | | **Pn** | **16 57 38.8** | **-1.6** |
| VADS | | | | | S | | **Sn** | **16 58 59.1** | **-8.3** |
| **VADS** | **Vadso** | **7.69** | **116** | | *e*P | | **Pn** | **16 57 38.6** | **-1.8** |
| VADS | | | | | *e*S | | **Sn** | **16 58 58.8** | **-8.6** |
| VADS | | | | | IAML | | | 16 59 03.5 | |
| | comp=Z,34nm,0.5s | | | | | | | | |
| **DBG** | **Daneborg** | **7.73** | **281** | | *i* P | | Pn | 16 57 36.7 | -4.2 |
| DBG | | | | | *i* S | | Sn | 16 58 55.0 | -13 |
| DBG | | | | | IAML | | | 16 59 05.4 | |
| | comp=Z,13nm,0.5s | | | | | | | | |
| **DBG** | **Daneborg** | **7.73** | **281** | | Pn | | Pn | 16 57 36.2 | -4.7 |
| DBG | | | | | Sn | | Sn | 16 58 56.4 | -12 |
| **DBG** | **Daneborg** | **7.73** | **281** | | *i* P | | Pn | 16 57 36.7 | -4.2 |
| DBG | | | | | *i* S | | Sn | 16 58 55.0 | -13 |
| DBG | | | | | IAML | | | 16 59 05.4 | |
| | comp=Z,13nm,0.5s | | | | | | | | |
| **HEF** | **Hetta** | **7.83** | **136** | | *e*P | | **Pn** | **16 57 41.7** | **-0.6** |
| HEF | | | | | *e*S | | **Sn** | **16 59 03.1** | **-7.7** |
| **HEF** | **Hetta** | **7.83** | **136** | | Pn | | **Pn** | **16 57 43.0** | **+0.7** |
| **SALU** | **Saltoluokta** | **7.96** | **152** | | *e*P | | **Pn** | **16 57 45.3** | **+1.2** |
| **KONS** | **Konsvik** | **8.32** | **168** | | *e*P | | **Pn** | **16 57 49.1** | **+0.1** |
| **STOK** | **Stokkvaagen** | **8.48** | **168** | | *e*P | | **Pn** | **16 57 50.8** | **-0.4** |
| **NOR** | **Nord** | **8.59** | **335** | | *e* | | Pn | 16 57 42.1 | -11 |
| **MOR8** | **Moi Rana** | **8.73** | **165** | | *e*P | | **Pn** | **16 57 55.0** | **+0.4** |
| **TERR** | **Teriberka** | **9.76** | **111** | | P | | **Pn** | **16 58 06.0** | **-2.7** |
| TERR | | | | | S | | Sn | 16 59 48.6 | -9.4 |
| **SCO** | **Scoresbysund** | **10.01** | **261** | | Pn | | **Pn** | **16 58 09.1** | **-3.0** |
| **SCO** | **Scoresbysund** | **10.01** | **261** | | P | | **Pn** | **16 58 09.1** | **-3.0** |
| **SCO** | **Scoresbysund** | **10.01** | **261** | | *i* P | | **Pn** | **16 58 09.8** | **-2.3** |
| SCO | | | | | *e*S | | Sn | 16 59 51.5 | -13 |
| SCO | | | | | IAMs_20 | IAMs_20 | | 17 00 45.8 | |
| | comp=Z,2μm,18.3s | | | | | | | | |
| SCO | | | | | IVMs_BB | IVMs_BB | | 17 00 54.1 | |
| | comp=Z,588nm,4.8s | | | | | | | | |
| **ZFI2** | **Zemlya Franca-** | **10.05** | **35** | | *e*P | | **Pn** | **16 58 11.7** | **-0.9** |
| | comp=Z,73nm,1.2s | | | | | | | | |
| ZFI2 | | | | | *e*S | | Sn | 16 59 54.5 | -11 |
| **OMEGA** | **Omega** | **10.05** | **36** | | *e*P | | **Pn** | **16 58 12.0** | **-0.7** |
| | comp=Z,8.9nm,0.5s | | | | | | | | |
| OMEGA | | | | | *e*S | | Sn | 16 59 54.9 | -10 |
| **NSS** | **Namsos** | **10.23** | **172** | | *e*P | | **Pn** | **16 58 17.1** | **+1.9** |
| **APA0** | **Apatity Array** | **10.46** | **120** | | P | | **Pn** | **16 58 15.9** | **-2.4** |
| APA0 | | | | | S | | Sn | 17 00 04.3 | -11 |
| **APA0** | **Apatity Array** | **10.46** | **120** | | Pn | | **Pn** | **16 58 14.8** | **-3.5** |
| | baz=323,slow=11 | | | | | | | | |
| **APA0** | **Apatity Array** | **10.46** | **120** | | Pn | | **Pn** | **16 58 14.8** | **-3.5** |
| | baz=323,slow=11 | | | | | | | | |
| **LVZ** | **Lovozero** | **10.62** | **116** | | Pn | | **Pn** | **16 58 17.8** | **-2.8** |
| **LVZ** | **Lovozero** | **10.62** | **116** | *d* | *i*P | | **Pn** | **16 58 19.7** | **-0.9** |
| **LVZ** | **Lovozero** | **10.62** | **116** | | P | | **Pn** | **16 58 20.3** | **-0.3** |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **MSF** | **Maaselka** | **11.04** | **132** | | P | | **Pn** | **16 58 27.7** | **+1.4** |
| **NOD** | **Norderasen** | **11.46** | **166** | | *e*P | | **Pn** | **16 58 33.0** | **+1.0** |
| **MOL** | **Molde** | **12.15** | **183** | | *e*P | | **Pn** | **16 58 40.3** | **-1.1** |
| **VAF** | **Ylistaro** | **12.64** | **150** | | *e*P | | **Pn** | **16 58 49.3** | **+1.2** |
| **DOMB** | **Dombas** | **12.67** | **179** | | *e*P | | **Pn** | **16 58 48.4** | **-0.2** |
| **SUMG** | **Summit** | **13.19** | **284** | | Pn | | **Pn** | **16 58 55.3** | **-0.6** |
| **SUMG** | **Summit** | **13.19** | **284** | | P | | **Pn** | **16 58 55.3** | **-0.6** |
| **SUMG** | **Summit** | **13.19** | **284** | | *e*P | | **Pn** | **16 58 53.8** | **-2.1** |
| **NC204** | **NORSAR Array S** | **13.46** | **176** | | Pn | | **Pn** | **16 58 59.7** | **+0.3** |
| **NB201** | **NORSAR Array S** | **13.70** | **175** | | Pn | | Pn | 16 58 57.9 | -4.7 |
| **NOA** | **NORSAR Array B** | **13.71** | **175** | | Pn | | **Pn** | **16 59 03.1** | **+0.4** |
| | baz=352,slow=13,SNR=5.2 | | | | | | | | |
| NOA | | | | | LR | | LR | 17 03 52.6 | |
| | comp=Z,450nm,20.3s,baz=345,slow=35 | | | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | | | |
| **KEF** | **Keuruu** | **13.78** | **147** | | *e*P | | **Pn** | **16 59 03.5** | **-0.1** |
| **NAO01** | **NORSAR Array S** | **13.90** | **176** | | Pn | | **Pn** | **16 59 01.9** | **-3.4** |
| **NC602** | **NORSAR Array S** | **14.02** | **174** | | | | **Pn** | **16 59 04.4** | **-2.6** |
| **SOEG** | **Soedalen** | **14.02** | **263** | | IAMs_20 | IAMs_20 | | 17 03 10.7 | |
| | comp=Z,1μm,17.5s | | | | | | | | |
| **NEEM** | **North Greenlan** | **14.11** | **309** | | *e*P | | Pn | 16 59 04.5 | -3.8 |
| **JOF** | **Joensuu** | **14.17** | **134** | | *e*P | | **Pn** | **16 59 06.3** | **-2.7** |
| **FIA0** | **FINESS Array S** | **14.65** | **146** | | P | | **Pn** | **16 59 14.3** | **-1.2** |
| | baz=348,slow=14 | | | | | | | | |
| **FIA0** | **FINESS Array S** | **14.65** | **146** | | P | | **Pn** | **16 59 14.3** | **-1.2** |
| | baz=348,slow=14 | | | | | | | | |
| **FIA1** | **FINESS Array S** | **14.65** | **146** | | Pn | | **Pn** | **16 59 12.1** | **-3.4** |
| **FINES** | **FINESS Array B** | **14.65** | **146** | | Pn | | **Pn** | **16 59 13.2** | **-2.3** |
| **FINES** | **FINESS Array B** | **14.65** | **146** | | Pn | | **Pn** | **16 59 14.6** | **-0.9** |
| | comp=Z,0.7nm,0.3s,baz=350,slow=13,SNR=35 | | | | | | | | |
| | comp=Z,9.5nm,0.6s | | | | | | | | |
| **HFS** | **Hagfors** | **14.70** | **170** | | P | | **Pn** | **16 59 15.0** | **-1.2** |
| | slow=10 | | | | | | | | |
| **HFS** | **Hagfors** | **14.70** | **170** | | P | | **Pn** | **16 59 15.0** | **-1.2** |
| | slow=10 | | | | | | | | |
| **HFS** | **Hagfors** | **14.70** | **170** | | Pn | | **Pn** | **16 59 16.3** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=350,slow=7.9,SNR=5.5 | | | | | | | | |
| HFS | | | | | LR | | LR | 17 04 24.7 | |
| | comp=Z,589nm,21.5s,baz=354,slow=35 | | | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | | | |
| **KONO** | **Kongsberg** | **15.08** | **178** | | Pn | | **Pn** | **16 59 19.7** | **-1.6** |
| KONO | | | | | IAmb | | IAmb | 16 59 32.0 | |
| | comp=Z,37nm,1.2s | | | | | | | | |
| **KONO** | **Kongsberg** | **15.08** | **178** | ↑ | *e*P | | **Pn** | **16 59 24.6** | **+3.3** |
| KONO | | | | | pmax | | pmax | | |
| | comp=Z,26nm,1.2s | | | | | | | | |
| **VALR** | **Valaam** | **15.53** | **137** | ↓↓ | *e*P | | **P** | **16 59 29.7** | **-1.9** |
| VALR | | | | | pmax | | pmax | | |
| | comp=Z,65nm,1.2s | | | | | | | | |
| **MEF** | **Metsahovi** | **15.59** | **150** | | *e*P | | **P** | **16 59 30.9** | **-1.4** |
| **MTSE** | **Matsula** | **16.98** | **152** | | *e*P | | **P** | **16 59 49.1** | **+1.5** |
| **VSU** | **Vasula** | **17.61** | **148** | ↓↓ | *e*P | | **P** | **16 59 54.5** | **-0.1** |
| VSU | | | | | pmax | | pmax | | |
| | comp=Z,96nm,1.6s | | | | | | | | |
| **PRGR** | **Permogore** | **18.45** | **115** | | P | | **Pn** | **16 59 58.7** | **-5.2** |
| **EUNU** | **Eureka** | **19.08** | **328** | | | | **P** | **17 00 11.9** | **+1.1** |
| EUNU | | | | | IAmb | | IAmb | 17 00 16.0 | |
| | comp=Z,77nm,1.5s | | | | | | | | |
| **SVZ** | **Severnaya Zeml** | **19.21** | **35** | | *e*P | | **P** | **17 00 12.7** | **+0.5** |
| **EKA** | **Eskdalemuir Ar** | **19.96** | **200** | | P | | **P** | **17 00 20.8** | **+0.4** |
| | baz=12,slow=14 | | | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **20.01** | **279** | | | | **P** | **17 00 20.5** | **-0.3** |
| **SFJD** | **Kangerlussuaq** | **20.01** | **279** | | LR | | LR | 17 07 06.1 | |
| | comp=Z,991nm,18.5s,baz=38,slow=34 | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **20.01** | **279** | | P | | **P** | **17 00 20.5** | **-0.3** |
| SFJD | | | | | pmax | | pmax | | |
| | comp=Z,110nm,1.5s | | | | | | | | |
| **PABE** | **Paberze** | **20.13** | **154** | | P | | **P** | **17 00 22.6** | **+0.3** |
| PABE | | | | | IAmb | | IAmb | 17 00 37.4 | |
| | comp=Z,44nm,1.0s | | | | | | | | |
| **BSEG** | **Bad Segeberg** | **20.81** | **177** | | P | | Pn | 17 00 32.0 | -0.1 |
| BSEG | | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **BSEG** | **Bad Segeberg** | **20.81** | **177** | | *e*P | | **P** | **17 00 31.6** | **+1.9** |
| | comp=Z,166nm,2.3s,baz=1.5,slow=10 | | | | | | | | |
| **NACGM** | **Naroch** | **21.07** | **150** | | *e*P | | **P** | **17 00 33.0** | **+0.5** |
| | comp=N,5μm,1.3s,baz=347 | | | | | | | | |
| **SUW** | **Suwalki** | **21.51** | **156** | | P | | **P** | **17 00 36.4** | **-0.8** |
| **SUW** | **Suwalki** | **21.51** | **156** | | P | | **P** | **17 00 36.4** | **-0.8** |
| SUW | | | | | pmax | | pmax | | |
| | comp=Z,82nm,1.2s | | | | | | | | |
| **MNK** | **Minsk** | **21.61** | **149** | | *i* P | | **P** | **17 00 38.6** | **+0.3** |
| | comp=E,7.0nm,0.9s | | | | | | | | |
| MNK | | | | | *i* P | | **P** | **17 00 38.6** | **+0.3** |
| | comp=N,53nm,1.1s | | | | | | | | |
| MNK | | | | | *i* P | | **P** | **17 00 38.6** | **+0.3** |
| | comp=Z,40nm,1.1s,baz=346 | | | | | | | | |
| MNK | | | | | *i* PP | | **PnPn** | **17 00 58.9** | **+0.3** |
| MNK | | | | | *i* PPP | | PPP | 17 01 06.0 | |
| MNK | | | | | *i* S | | **S** | **17 04 38.6** | **+1.3** |
| MNK | | | | | *i* SS | | **SnSn** | **17 05 04.0** | **+3.4** |
| MNK | | | | | *i* SSS | | SSS | 17 05 17.4 | |
| MNK | | | | | *i* LQ | | LR | 17 07 08.3 | |
| MNK | | | | | *i* LR | | LR | 17 08 49.8 | |
| MNK | | | | | *i* LRM | | MLR | 17 10 07.9 | |
| | comp=Z,368nm,14.8s | | | | | | | | |
| MNK | | | | | *i* LRM | | MLR | 17 10 14.0 | |
| | comp=N,299nm,14.8s | | | | | | | | |
| MNK | | | | | *i* LRM | | MLR | 17 10 16.3 | |
| | comp=E,40nm,13.2s | | | | | | | | |
| **MNK** | **Minsk** | **21.61** | **149** | | *i* P | | **P** | **17 00 38.5** | **+0.3** |
| MNK | | | | | *i* PPP | | PPP | 17 01 05.9 | |
| MNK | | | | | *i* S | | **S** | **17 04 38.5** | **+1.3** |
| MNK | | | | | *i* SSS | | SSS | 17 05 17.3 | |
| MNK | | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | | | |
| MNK | | | | | pmax | | pmax | | |
| | comp=N,53nm,1.0s | | | | | | | | |
| MNK | | | | | pmax | | pmax | | |
| | comp=E,7.0nm,0.9s | | | | | | | | |
| MNK | | | | | MLR | | MLR | | |
| | comp=Z,368nm,15.0s | | | | | | | | |
| MNK | | | | | MLR | | MLR | | |
| | comp=N,299nm,15.0s | | | | | | | | |
| MNK | | | | | MLR | | MLR | | |
| | comp=E,40nm,13.0s | | | | | | | | |
| **GORT1** | **Trebel** | **21.77** | **176** | | *e*P | | **P** | **17 00 42.1** | **+2.1** |
| | comp=E,144nm,1.5s,baz=1.5,slow=10 | | | | | | | | |
| **RETH** | **Rethem/Aller,** | **22.00** | **179** | | *e*P | | **P** | **17 00 44.0** | **+1.6** |
| | comp=E,49nm,1.2s,baz=1.5,slow=10 | | | | | | | | |
| **KIRV** | **Kirov** | **22.05** | **115** | | P | | **P** | **17 00 43.2** | **+0.4** |
| | comp=E,28nm,1.0s,baz=334,slow=16,SNR=21 | | | | | | | | |
| KIRV | | | | | LR | | LR | 17 09 35.1 | |
| | comp=E,700nm,20.8s,baz=335,slow=38 | | | | | | | | |
| | comp=E,28nm,1.0s | | | | | | | | |
| **KIRV** | **Kirov** | **22.05** | **115** | *c* | *i*P | | **P** | **17 00 43.0** | **+0.2** |
| **MOS** | **Moscow** | **22.06** | **133** | | *e*P | | **P** | **17 00 42.3** | **-0.7** |
| MOS | | | | | *e* | | | 17 01 05.4 | |
| MOS | | | | | *e*S | | **S** | **17 04 49.4** | **+3.6** |
| MOS | | | | | pmax | | pmax | | |
| | comp=Z,49nm,0.7s | | | | | | | | |
| MOS | | | | | MLR | | MLR | | |
| | comp=Z,700nm,16.0s | | | | | | | | |
| **NRDL** | **Niedersach Rie** | **22.25** | **178** | | *e*P | | **P** | **17 00 46.4** | **+1.3** |
| | comp=Z,74nm,1.4s,baz=1.5,slow=10 | | | | | | | | |
| **RUE** | **Ruedersdorf** | **22.36** | **172** | | *e*P | | **P** | **17 00 47.1** | **+0.9** |
| | comp=Z,46nm,1.2s,baz=1.5,slow=10 | | | | | | | | |
| **FLTG** | **Flechtingen** | **22.43** | **176** | | *e*P | | **P** | **17 00 47.7** | **+0.6** |
| | comp=Z,44nm,1.2s,baz=1.5,slow=10 | | | | | | | | |
| **IBBN** | **Ibbenburen** | **22.44** | **182** | | *e*P | | **P** | **17 00 48.2** | **+1.1** |
| | comp=Z,10.0nm,0.9s,baz=1.5,slow=10 | | | | | | | | |
| **OBN** | **Obninsk** | **22.45** | **135** | | P | | **P** | **17 00 45.9** | **-1.3** |
| **OBN** | **Obninsk** | **22.45** | **135** | | P | | **P** | **17 00 48.0** | **+0.8** |
| | comp=Z,17nm,0.4s,baz=343,slow=17,SNR=6.9 | | | | | | | | |
| OBN | | | | | LR | | LR | 17 10 10.4 | |
| | comp=Z,648nm,18.8s,baz=356,slow=38 | | | | | | | | |
| | comp=Z,17nm,0.4s | | | | | | | | |
| **OBN** | **Obninsk** | **22.45** | **135** | | *e*P | | **P** | **17 00 48.2** | **+1.0** |
| OBN | | | | | *e*PPP | | PPP | 17 01 18.0 | |
| OBN | | | | | pmax | | pmax | | |
| | comp=Z,71nm,1.3s | | | | | | | | |
| OBN | | | | | MLR | | MLR | | |
| | comp=Z,594nm,19.0s | | | | | | | | |
| **OBN** | **Obninsk** | **22.45** | **135** | | P | | **P** | **17 00 48.2** | **+1.0** |
| | comp=Z,56nm,1.6s,comp=Z,1μm | | | | | | | | |
| **CLZ** | **Clausthal** | **22.91** | **177** | | *e*P | | **P** | **17 00 53.3** | **+1.1** |
| | comp=Z,24nm,1.1s,baz=1.5,slow=10 | | | | | | | | |
| **GTTG** | **Gottingen** | **23.20** | **178** | | *e*P | | **P** | **17 00 56.9** | **+1.7** |
| | comp=Z,17nm,1.0s,baz=1.5,slow=10 | | | | | | | | |
| **BUG** | **Bochum--Univer** | **23.31** | **182** | | P | | **P** | **17 00 58.2** | **+2.0** |
| BUG | | | | | pmax | | pmax | | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| **BUG** | **Bochum--Univer** | **23.31** | **182** | | *e*P | | **P** | **17 00 58.1** | **+1.9** |
| | comp=Z,40nm,1.4s,baz=1.5,slow=10 | | | | | | | | |
| **CLL** | **Collm** | **23.50** | **173** | | P | | **P** | **17 00 58.4** | **+0.3** |
| CLL | | | | | IAmb | | IAmb | 17 01 08.0 | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **CLL** | **Collm** | **23.50** | **173** | | *i* P | | **P** | **17 01 00.0** | **+1.9** |
| | comp=Z,68nm,2.0s | | | | | | | | |
| CLL | | | | | *i* PPP | | PPP | 17 01 32.4 | |
| CLL | | | | | *e*S | | **S** | **17 05 17.0** | **+5.5** |
| CLL | | | | | AMS | | AMS | 17 11 00.0 | |
| | comp=Z,400nm,19.1s | | | | | | | | |
| **CLL** | **Collm** | **23.50** | **173** | | P | | **P** | **17 00 58.4** | **+0.3** |
| CLL | | | | | pmax | | pmax | | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **CLL** | **Collm** | **23.50** | **173** | | P | | **P** | **17 00 59.1** | **+1.0** |
| | comp=Z,16nm,2.6s,comp=Z,374nm | | | | | | | | |
| **CLL** | **Collm** | **23.50** | **173** | | *e*P | | **P** | **17 00 59.3** | **+1.2** |
| | comp=Z,39nm,1.7s,baz=1.5,slow=10 | | | | | | | | |
| **KASTN** | **Kahler Asten** | **23.54** | **181** | | *e*P | | **P** | **17 01 00.8** | **+2.3** |
| | comp=Z,25nm,1.2s,baz=1.5,slow=10 | | | | | | | | |
| **NEUB** | **Neuenburg** | **23.57** | **175** | | *e*P | | **P** | **17 01 00.3** | **+1.6** |
| | comp=Z,44nm,1.1s,baz=1.5,slow=10 | | | | | | | | |
| **UBBA** | **Unterbreizbach** | **23.93** | **178** | | *e*P | | **P** | **17 01 03.7** | **+1.6** |
| | comp=Z,38nm,1.6s,baz=1.5,slow=10 | | | | | | | | |
| **BRG** | **Berggiesshubel** | **23.97** | **172** | | *e*P | | **P** | **17 01 04.8** | **+2.1** |
| BRG | | | | | Amp | | | 17 01 06.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **23.97** | **172** | | P | | **P** | **17 01 04.5** | **+1.9** |
| BRG | | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,2.1s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **23.97** | **172** | | *e*P | | **P** | **17 01 03.7** | **+1.1** |
| | comp=Z,23nm,1.7s,baz=1.5,slow=10 | | | | | | | | |
| **KSP** | **Ksiaz** | **24.11** | **168** | | P | | **P** | **17 01 05.8** | **+1.9** |
| KSP | | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **KSP** | **Ksiaz** | **24.11** | **168** | | P | | **P** | **17 01 05.4** | **+1.5** |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **MOX** | **Moxa** | **24.13** | **176** | | P | | **P** | **17 01 06.4** | **+2.2** |
| MOX | | | | | pmax | | pmax | | |
| | comp=Z,21nm,2.1s | | | | | | | | |
| **MOX** | **Moxa** | **24.13** | **176** | | *e*P | | **P** | **17 01 05.6** | **+1.5** |
| | comp=Z,94nm,2.0s,baz=1.5,slow=10 | | | | | | | | |
| **MEM** | **Membach** | **24.16** | **184** | | *dx* | | x | 17 01 12.0 | |
| **MEM** | **Membach** | **24.16** | **184** | | P | | **P** | **17 01 08.6** | **+4.2** |
| MEM | | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **BTNL** | **Ternell** | **24.18** | **184** | | *dx* | | x | 17 01 07.3 | |
| **AHRW** | **Bad Neuenahr-A** | **24.21** | **183** | | *e*P | | **P** | **17 01 07.2** | **+2.3** |
| | comp=Z,27nm,1.3s,baz

**ZVC Zvikov 25.41 172** *e*P **P** **17 01 18.3 +2.5**
ZVC AMS AMS 17 10 20.0
comp=Z,300nm,23.4s
**AK20 Malin Array Si 25.43 149** P **P** **17 01 16.3 +0.3**
**AK19 Malin Array Si 25.46 149** P **P** **17 01 16.5 +0.3**
**AK18 Malin Array Si 25.46 149** P **P** **17 01 16.2 0.0**
**AK04 Malin Array Si 25.48 149** P **P** **17 01 16.8 +0.5**
**AKASG Malin Array Be 25.50 149** P **P** **17 01 17.3 +0.7**
comp=Z,1.7nm,0.5s,baz=343,slow=9.6,SNR=17
AKASG LR LR 17 11 24.5
comp=Z,175nm,21.1s,baz=344,slow=37
comp=Z,1.7nm,0.5s
**AKASG Malin Array Be 25.50 149** *i* P **P** **17 01 17.6 +1.0**
AKASG pmax pmax
comp=Z,2.0nm,0.5s
**AKBB Malin Array Si 25.50 149** *ce*P **P** **17 01 17.0 +0.4**
AKBB pmax pmax
comp=Z,31nm,1.2s
**KIEV Kiev 25.51 149** P **P** **17 01 16.2 -0.4**
KIEV IAmb IAmb 17 01 27.5
comp=Z,23nm,1.1s
**KIEV Kiev 25.51 149** P **P** **17 01 16.2 -0.4**
KIEV pmax pmax
comp=Z,23nm,1.2s
**KIEV Kiev 25.51 149** P **P** **17 01 17.4 +0.8**
comp=Z,81nm,1.6s
**AK01 Malin Array Si 25.51 149** P **P** **17 01 17.5 +0.8**
**MI29 MI29, Kamyanyy 25.60 151** P **P** **17 01 18.8 +1.3**
**AK10 Malin Array Si 25.61 149** P **P** **17 01 17.7 +0.2**
**VRAC Vranov 25.65 168** *e*P **P** **17 01 19.9 +1.9**
**VRAC Vranov 25.65 168** P **P** **17 01 20.0 +2.0**
comp=Z,9.6nm,0.9s,baz=1.2,slow=9.1,SNR=15
VRAC LR LR 17 11 33.4
comp=Z,258nm,19.1s,baz=352,slow=37
comp=Z,9.6nm,0.9s
**VRAC Vranov 25.65 168** ⇑P **P** **17 01 21.0 +3.0**
**WET Wettzell 25.66 174** *e*P **P** **17 01 21.7 +3.6**
comp=Z,17nm,1.1s,baz=1.5,slow=10
**KHC Kasperske Hory 25.70 173** IAmb IAmb 17 01 30.1
comp=Z,16nm,1.3s
**KHC Kasperske Hory 25.70 173** *e*P **P** **17 01 23.3 +4.9**
KHC *e*S S 17 06 03.0 +16
KHC AMS AMS 17 10 50.0
comp=Z,400nm,19.7s
**KHC Kasperske Hory 25.70 173** *ce*P **P** **17 01 20.5 +2.1**
KHC pmax pmax
comp=Z,33nm,1.4s
**LVV L'vov 25.74 157** *e*P **P** **17 01 19.9 +1.1**
LVV *e*S **S** **17 05 45.3 -2.0**
LVV smax smax
comp=N,200nm,14.0s
LVV smax smax
comp=Z,200nm,14.0s
**NIE Niedzica 25.79 163** P **P** **17 01 20.3 +1.0**
**NIE Niedzica 25.79 163** P **P** **17 01 20.3 +1.0**
comp=Z,10nm,1.0s,comp=Z,223nm
**KWP Kalwaria Pacla 25.80 159** P **P** **17 01 20.3 +1.0**
**KWP Kalwaria Pacla 25.80 159** P **P** **17 01 20.3 +1.0**
comp=Z,44nm,1.6s,comp=Z,731nm
**KRUC Moravsky 25.89 168** *e*P **P** **17 01 22.1 +2.0**
**GEC2 GERESS Array S 25.99 173** *e*P **P** **17 01 23.1 +2.0**
comp=Z,22nm,1.0s,baz=1.5,slow=10
**GERES GERESS Array B 25.99 173** P **P** **17 01 22.7 +1.6**
**GERES GERESS Array B 25.99 173** P **P** **17 01 23.6 +2.5**
comp=Z,7.1nm,0.9s,baz=11,slow=1.4,SNR=14
comp=Z,7.1nm,0.9s
**GERES GERESS Array B 25.99 173** P **P** **17 01 22.7 +1.6**
**LANS Liptovska Anna 26.00 164** *e*P **P** **17 01 24.0 +2.8**
LANS pmax pmax
comp=Z,4.0nm,1.0s
**LANS Liptovska Anna 26.00 164** *e*P **P** **17 01 24.0 +2.8**
**CKRC Cesky Krumlov 26.03 172** AMS AMS 17 10 10.0
comp=Z,300nm,16.8s
**LUBAR Lubar, Ukraine 26.08 151** P **P** **17 01 21.8 0.0**
**JAVC Velka Javorina 26.16 167** *e*P **P** **17 01 27.4 +4.7**
**VORR Voronezh 26.22 134** *e*P **P** **17 01 28.1 +5.1**
VORR pmax pmax
comp=Z,42nm,0.4s
**ARU Arti 26.24 106** LR LR 17 12 28.4
comp=Z,409nm,19.7s,baz=330,slow=38
**ARU Arti 26.24 106** *c i*P **P** **17 01 25.4 +2.1**
ARU 17 02 04.3
ARU S **S** **17 06 01.6 +6.5**
ARU SS **SnSn** **17 07 06.7 +13**
ARU pmax pmax
comp=Z,46nm,2.5s
ARU MLR MLR
comp=Z,343nm,17.0s
**CRVS Cervenica-Dubn 26.40 161** *e*P **P** **17 01 27.6 +2.7**
CRVS pmax pmax
comp=Z,44nm,1.7s
**CRVS Cervenica-Dubn 26.40 161** *e*P **P** **17 01 27.5 +2.7**
**BFO Black Forest 26.42 181** P **P** **17 01 26.6 +1.7**
BFO IAmb IAmb 17 01 37.5
comp=Z,17nm,1.0s
**BFO Black Forest 26.42 181** P **P** **17 01 26.6 +1.7**
BFO pmax pmax
comp=Z,17nm,1.0s
**BFO Black Forest 26.42 181** *e*P **P** **17 01 28.8 +3.9**
comp=Z,19nm,1.0s,baz=1.5,slow=10
**SVE Sverdlovsk 26.42 104** *e*P P 17 01 34.1 +9.2
SVE pmax pmax
comp=Z,19nm,1.4s
**KOLS Kolonicke sedl 26.45 160** *e*P **P** **17 01 27.7 +2.5**
KOLS pmax pmax
comp=Z,7.0nm,0.9s
**KOLS Kolonicke sedl 26.45 160** *e*P **P** **17 01 27.7 +2.5**
**FUR Furstenfeldbru 26.60 176** *e*P **P** **17 01 30.9 +4.3**
comp=Z,18nm,0.9s,baz=1.5,slow=10
**VYHS Vyhne 26.60 165** *e*P **P** **17 01 28.8 +2.2**
VYHS pmax pmax
comp=Z,14nm,1.4s
**VYHS Vyhne 26.60 165** *e*P **P** **17 01 28.8 +2.2**
**MODS Modra-Piesok 26.62 167** *e*P **P** **17 01 29.7 +2.9**
MODS pmax pmax
comp=Z,56nm,1.3s
**MODS Modra-Piesok 26.62 167** *e*P **P** **17 01 29.7 +2.9**
**VSR Storozhevoye 26.64 135** *e*P **P** **17 01 23.9 -3.0**
VSR pmax pmax
comp=Z,20nm,1.5s
**CONA Conrad Observa 26.99 169** *ep*P pP 17 01 32.5 +0.1
comp=Z,7.1nm,1.1s
**MOA Molln 27.00 172** *ep*P pP 17 01 32.2 -0.2
comp=Z,8.4nm,1.6s
**RJOB Jochberg 27.07 174** *e*P **P** **17 01 33.7 +2.9**
comp=Z,10nm,1.0s,baz=1.5,slow=10
**UBR Ueberruh 27.07 178** *e*P **P** **17 01 34.5 +3.7**
comp=Z,1um,6.7s,baz=1.5,slow=10
**BIOA Bad Ischl, Aus 27.14 173** *ep*P pP 17 01 33.6 -0.1
comp=Z,5.2nm,1.0s
**VRH Novokhopyorsk 27.15 131** *e*P P 17 01 38.8 +7.3
VRH pmax pmax
comp=Z,16nm,0.6s
**BERU Beregovo 27.17 159** P **P** **17 01 32.9 +1.2**
**FRB Frobisher Bay 27.21 288** LR LR 17 11 49.4
comp=Z,296nm,18.1s,baz=27,slow=35
**RONA Rosalia, Austr 27.24 169** *ep*P pP 17 01 34.8 +0.2
comp=Z,6.2nm,0.9s
**KMPD K-Podol'skiy 27.25 154** P **P** **17 01 32.5 +0.1**
**BELG Belogornoye 27.28 123** P **P** **17 01 33.9 +1.2**
comp=Z,17nm,0.4s,baz=51,slow=4.3,SNR=1.6
BELG LR LR 17 12 25.5
comp=Z,722nm,21.6s,baz=324,slow=37
**BELG Belogornoye 27.28 123** *de*P **P** **17 01 34.3 +1.7**
BELG pmax pmax
comp=Z,7.0nm,1.5s
**LESA Schwarzleotal 27.38 174** *ep*P pP 17 01 36.2 +0.4
comp=Z,4.0nm,1.1s
**MOTA Moosalm 27.42 177** *ep*P pP 17 01 36.3 0.0
comp=Z,7.0nm,1.3s
**WATA Walderalm 27.44 176** *ep*P pP 17 01 36.5 0.0
comp=Z,3.4nm,0.7s
**DAVA Damuels 27.46 178** *ep*P **P** **17 01 36.4 +1.8**
comp=Z,1.7nm,0.6s
**WTTA Wattenberg 27.51 176** *ep*P pP 17 01 37.2 0.0
comp=Z,4.1nm,0.9s
**SQTA Sankt Quirin 27.55 176** *e*P **P** **17 01 38.7 +3.5**
comp=Z,2.6nm,0.8s
**ARSA Arzberg 27.65 170** *ep*P pP 17 01 38.5 +0.2
comp=Z,4.0nm,0.8s
**FETA Feichten 27.74 177** *e*P **P** **17 01 37.1 +0.1**
comp=Z,5.4nm,1.1s
**KBA Koelnbreinsper 27.74 173** *ep*P **P** **17 01 38.1 +1.1**
comp=Z,3.9nm,1.0s
**SORM Soroca 27.91 151** P **P** **17 01 38.6 +0.4**
**SORM Soroca 27.91 151** P **P** **17 01 38.6 +0.4**
comp=Z,12nm,0.9s
**DAVOX Davos/Dischmat 27.97 178** LR LR 17 14 21.9
comp=Z,287nm,18.8s,baz=4.0,slow=40
**BUR08 Bucovina Ar. S 28.02 156** IAmb IAmb 17 01 59.5
comp=Z,16nm,1.1s
**BURAR Bucovina Array 28.05 156** P **P** **17 01 39.8 +0.1**
BURAR IAmb IAmb 17 01 57.1
comp=Z,7.3nm,0.9s
**BURAR Bucovina Array 28.05 156** ⇑P **P** **17 01 42.2 +2.5**
**BURAR Bucovina Array 28.05 156** P **P** **17 01 39.8 +0.1**
BURAR pmax pmax
comp=Z,7.0nm,0.9s
**MYKA Terra Mystica 28.20 173** *e*P **P** **17 01 41.6 +0.7**
comp=Z,12nm,1.5s
**SOKA Soboth 28.20 171** *ep*P pP 17 01 42.9 -0.3
comp=Z,5.7nm,1.6s
**TUE Stuetta 28.28 179** IAmb IAmb 17 02 22.6
comp=Z,13nm,1.4s
**OBKA Obir 28.35 172** *ep*P pP 17 01 44.9 +0.4
comp=Z,7.8nm,1.4s
**STAL STALIGIAL 28.54 174** IAmb IAmb 17 01 54.4
comp=Z,8.2nm,1.0s
**CTI Castel Tesino 28.73 176** IAmb IAmb 17 01 56.1
comp=Z,8.4nm,1.0s
**MARR Marisel-Cluj 28.76 159** ⇓P **P** **17 01 48.4 +2.3**
**MORH Mrgy, Hungar 28.86 166** P **P** **17 01 48.1 +1.3**
comp=Z,2.4nm,0.8s
**SIRR Siria 29.04 161** ⇑P **P** **17 01 51.6 +3.3**
**MILM Milestii Mici 29.16 151** ⇑ *i*P P 17 01 43.6 -5.8
comp=Z,16nm,0.6s
MILM *e*L L 17 10 17.0
MILM LQM 17 10 46.0
comp=Z,300nm,17.0s
MILM LRM MLR 17 14 32.0
**MILM Milestii Mici 29.16 151** *c i*P P 17 01 43.6 -5.8
MILM pmax pmax
comp=Z,16nm,0.6s
MILM MLR MLR
comp=Z,400nm,14.5s
MILM MLR MLR
comp=N,300nm,16.0s
**SURR Surduc 29.59 161** ⇑P **P** **17 01 55.8 +2.6**
**VRI Vrincioaia 29.94 154** ⇓P **P** **17 01 59.7 +3.3**
**VRI Vrincioaia 29.94 154** ⇓P **P** **17 01 59.7 +3.3**
**PLOR3 Plostina Array 29.94 155** P **P** **17 01 58.1 +1.7**
comp=N,12nm,1.3s
**PLOR Plostina 29.95 155** ⇑P **P** **17 01 57.5 +1.1**
**PLOR Plostina 29.95 155** ⇑P **P** **17 01 57.5 +1.1**
**FRGS Fruska Gora 29.99 164** ⇓P **P** **17 01 59.8 +3.0**
**FRGS Fruska Gora 29.99 164** P **P** **17 01 59.2 +2.3**
comp=N,10nm,1.1s
**VOIR 30.18 157** ⇑P P 17 02 05.3 +6.7
**VOIR 30.18 157** ⇑P P 17 02 05.3 +6.7
**VOIR 30.18 157** P **P** **17 02 00.1 +1.5**
comp=N,5.2nm,1.9s
**MLR Muntele Rosu 30.22 156** P **P** **17 01 57.8 -1.2**
MLR IAmb IAmb 17 02 18.7
comp=Z,9.8nm,1.0s
**MLR Muntele Rosu 30.22 156** P **P** **17 02 00.8 +1.8**
comp=Z,1.1nm,0.6s,baz=313,slow=18,SNR=2.1
MLR LR LR 17 14 46.2
comp=Z,329nm,18.9s,baz=358,slow=38
comp=Z,1.1nm,0.6s
**MLR Muntele Rosu 30.22 156** ⇑P P 17 02 05.3 +6.3
**MLR Muntele Rosu 30.22 156** P **P** **17 01 59.9 +0.9**
comp=Z,9.8nm,1.1s
**MDVR Moldovita 30.52 162** ⇑P **P** **17 02 04.1 +2.6**
**BRVK Borovoye 32.31 97** P **P** **17 02 16.8 -0.4**
BRVK IAmb IAmb 17 02 28.6
comp=Z,6.3nm,1.1s
**BRVK Borovoye 32.31 97** ⇑ *i*P **P** **17 02 19.3 +2.1**
BRVK pmax pmax
comp=Z,8.0nm,1.2s
**ANN Anapa 32.52 141** *e*P **P** **17 02 17.2 -1.8**
ANN *e**PP **pP** **17 02 20.4 -0.9**
ANN *e* 17 03 24.8
ANN *e*S **S** **17 07 31.7 -2.0**
ANN *e*SS **SnSn** **17 09 28.8 +1.9**
ANN pmax pmax
comp=Z,57nm,1.1s
**INTR Introdacqua 32.82 173** P **P** **17 02 18.2 -3.6**
INTR IAmb IAmb 17 02 32.6
comp=Z,5.6nm,0.9s
**ABKAR Akbulak array 33.12 111** P **P** **17 02 23.5 -0.8**
ABKAR IAmb IAmb 17 02 38.3
comp=Z,7.8nm,1.1s
**ABKAR Akbulak array 33.12 111** P **P** **17 02 23.9 -0.4**
**GOF Gofitskoye 33.29 133** *ce*P P 17 02 33.9 +8.1
**SOC Sochi 34.09 138** *e*P **P** **17 02 31.7 -1.1**
SOC *e*PPP PPP 17 04 01.6
SOC *e*S **S** **17 07 57.9 -0.3**
SOC *e*SS **SnSn** **17 10 02.8 -2.4**
SOC *e*SSS SSS 17 10 29.2
SOC MLR MLR
comp=Z,573nm,21.0s
**A22K Sinclair Lake 34.21 351** P **P** **17 02 33.9 +0.4**
baz=7.6
**VSLR Vesyoloye 34.27 138** *i* P **P** **17 02 35.1 +0.8**
VSLR pmax pmax
comp=Z,19nm,1.1s
**KIV Kislovodsk 34.28 134** *e*P **P** **17 02 35.5 +0.9**
KIV pmax pmax
comp=Z,6.0nm,1.1s
KIV MLR MLR
comp=Z,256nm,16.0s
**KVAR Kislovodsk Arr 34.28 134** LR LR 17 16 36.5
comp=Z,403nm,21.1s,baz=256,slow=36
**SCHQ Schefferville 34.46 278** LR LR 17 15 19.1
comp=Z,538nm,19.8s,baz=38,slow=34
**FNA Florina 34.46 163** P P 17 02 41.2 +5.1
FNA pmax pmax
comp=Z,5.0nm,1.1s
**RDO Rodhopi 34.48 157** IAmb IAmb 17 02 46.3
comp=Z,15nm,1.2s
**SHA1 Shidzhatmaz 34.49 134** ⇑ *e*P **P** **17 02 37.6 +1.1**
**KBZ Khabaz 34.54 134** P **P** **17 02 38.0 +1.4**
comp=Z,1.4nm,0.6s,baz=19,slow=6.6,SNR=4.2
KBZ LR LR 17 17 11.6
comp=Z,537nm,21.9s,baz=342,slow=37
comp=Z,1.4nm,0.6s
**KBZ Khabaz 34.54 134** ⇓ *e*P **P** **17 02 38.4 +1.8**
KBZ pmax pmax
comp=Z,13nm,2.0s
**C26K Camden Bay 34.70 344** P **P** **17 02 38.5 +0.7**
baz=12
**C27K Jago River 34.90 344** P **P** **17 02 38.6 -0.9**
baz=12
**C23K Itkillik River 35.15 348** P **P** **17 02 40.6 -1.0**
**C23K Itkillik River 35.15 348** P **P** **17 02 41.2 -0.4**
baz=9.3,SNR=6.9
**A19K Wainwright 35.22 354** P **P** **17 02 41.5 -0.8**
baz=4.6
**INK Inuvik 35.27 337** P **P** **17 02 42.4 -0.3**
INK IAmb IAmb 17 02 51.9
comp=Z,16nm,1.4s
**INK Inuvik 35.27 337** LR LR 17 18 33.9
comp=Z,192nm,19.5s,baz=18,slow=39
**INK Inuvik 35.27 337** P **P** **17 02 42.4 -0.3**
INK pmax pmax
comp=Z,16nm,1.4s
**B20K Meade River 35.29 352** P **P** **17 02 42.6 -0.2**
baz=6.4
**ZALV Zalesovo Beam 35.38 82** P **P** **17 02 44.9 +1.1**
comp=Z,2.0nm,0.9s,baz=333,slow=12,SNR=6.2
comp=Z,2.0nm,0.9s
**ZALV Zalesovo Beam 35.38 82** *i* P **P** **17 02 45.7 +1.9**
ZALV pmax pmax
comp=Z,1.0nm,0.6s
**D25K Kavik River 35.39 345** IAmb IAmb 17 02 48.5
comp=Z,10nm,1.4s
**D25K Kavik River 35.39 345** P **P** **17 02 43.6 -0.2**
baz=11
**B21K Ikpikpuk River 35.57 350** P **P** **17 02 45.6 +0.4**
baz=7.5
**ESDC Sonseca Array 35.57 197** P **P** **17 02 47.5 +1.8**
comp=Z,0.8nm,0.7s,baz=4.4,slow=7.5,SNR=3.6
comp=Z,0.8nm,0.7s
**TIP Timpagrande 35.76 169** P **P** **17 02 44.7 -2.6**
TIP IAmb IAmb 17 03 05.0
comp=Z,11nm,1.2s
**D23K Nanushuk River 36.02 348** P **P** **17 02 48.9 -0.3**
baz=9.1
**F31M Tsiigehtchic 36.12 337** P **P** **17 02 50.5 +0.5**
**F31M Tsiigehtchic 36.12 337** P **P** **17 02 49.3 -0.7**
baz=16
**E27K Coleen River 36.14 342** P **P** **17 02 49.9 -0.4**
baz=13
**MAK Makhachkala 36.20 129** *e*P **P** **17 02 47.5 -3.4**
MAK *e*S **S** **17 08 25.0 -5.5**
MAK pmax pmax
comp=Z,80nm,1.1s
MAK MLR MLR
comp=Z,367nm,18.0s
**D22K Ayikyak River 36.21 349** IAmb IAmb 17 03 07.3
comp=Z,12nm,1.4s
**D22K Ayikyak River 36.21 349** P **P** **17 02 50.2 -0.7**
baz=8.2
**TOLK Toolik Lake Re 36.27 347** P **P** **17 02 50.9 -0.5**
baz=9.5
**C19K Lookout Ridge 36.28 353** P **P** **17 02 51.1 -0.3**
baz=5.2
**F28M Old Crow 36.56 340** P **P** **17 02 53.1 -0.6**
baz=13
**D20K Etivluk River 36.56 351** P **P** **17 02 54.0 +0.2**
baz=6.4
**KURK Kurchatov 36.65 91** P **P** **17 02 53.3 -1.4**
KURK IAmb IAmb 17 03 10.9
comp=Z,12nm,1.3s
**KURK Kurchatov 36.65 91** *ce*P **P** **17 02 56.6 +1.9**
KURK pmax pmax
comp=Z,21nm,1.8s
**G31M Satah River 36.68 337** P **P** **17 02 55.2 +0.5**
G31M IAmb IAmb 17 02 60.0
comp=Z,20nm,1.5s
**G31M Satah River 36.68 337** P **P** **17 02 54.1 -0.6**
baz=16
**KURBB Kurchatov Arra 36.71 91** P **P** **17 02 56.5 +1.3**
comp=Z,1.1nm,0.2s,baz=336,slow=7.4,SNR=8.6
comp=Z,1.1nm,0.2s
**E21K Killik River 36.71 349** P **P** **17 02 53.8 -1.3**
baz=7.5
**E24K Your Creek 36.77 346** P **P** **17 02 54.3 -1.3**
baz=9.9
**C18K Utukok River 36.78 354** P **P** **17 02 54.7 -1.1**
baz=4.4
**BILL Bilibino 36.82 14** *e*P **P** **17 02 57.2 +1.2**
BILL *e* 17 04 20.6
BILL pmax pmax
comp=Z,7.0nm,1.6s
BILL MLR MLR
comp=Z,110nm,18.0s
**G30M tAoh Zraii Nji 36.83 338** P **P** **17 02 56.1 0.0**
baz=15
**F26K Sheenjek River 36.83 343** P **P** **17 02 55.4 -0.7**
baz=12
**D19K Kuna River 36.84 352** P **P** **17 02 56.7 +0.5**
baz=5.7
**E23K Chandalar 36.85 347** P **P** **17 02 55.7 -0.6**
baz=9.4
**BRTR Keskin Array B 36.88 147** P **P** **17 02 56.0 -1.0**
**BRTR Keskin Array B 36.88 147** P **P** **17 02 59.4 +2.4**
comp=Z,2.3nm,1.1s,baz=322,slow=6.1,SNR=4.4
comp=Z,2.3nm,1.1s
**E20K Nigu River 37.00 351** P **P** **17 02 57.2 -0.4**
baz=6.5
**F25K Christian Rive 37.04 344** P **P** **17 02 57.4 -0.6**
baz=11
**G29M Pine Creek 37.07 339** P **P** **17 02 57.9 -0.3**
baz=14
**BMAR Burnt Mountain 37.13 343** P **P** **17 03 00.7 +2.0**
**C16K Lisburne Hills 37.25 356** P **P** **17 02 59.0 -0.7**
baz=2.5
**F24K Squaw Lake 37.28 345** P **P** **17 02 58.6 -1.3**
baz=10.0
**VAE Valguarnera 37.36 173** LR LR 17 19 23.1
comp=Z,298nm,18.8s,baz=306,slow=38
**EPYK Eagle Plains 37.47 338** IAmb IAmb 17 03 06.6
comp=Z,23nm,1.5s
**EPYK Eagle Plains 37.47 338** P **P** **17 03 02.7 +1.2**
baz=14
**G27K Doyon Strip 37.50 341** P **P** **17 03 01.2 -0.6**
baz=12
**G26K Porcupine Rive 37.54 343** P **P** **17 03 01.7 -0.4**
baz=12
**F22K John River 37.55 348** P **P** **17 03 01.7 -0.5**
baz=8.2
**COLD Coldfoot 37.71 347** P **P** **17 03 03.0 -0.6**
baz=8.9
**H29M Whitestone 37.78 339** P **P** **17 03 04.1 -0.1**
baz=14
**D17K Noatak River 37.79 355** P **P** **17 03 03.6 -0.6**
baz=3.5
**E19K Redstone River 37.84 351** IAmb IAmb 17 03 11.5
comp=Z,14nm,1.4s
**E19K Redstone River 37.84 351** P **P** **17 03 04.0 -0.6**
baz=6.0
**G25K Bearman Lake 37.90 344** P **P** **17 03 04.9 -0.2**
baz=11
**F21K Alatna River 37.90 349** P **P** **17 03 05.4 +0.2**
baz=7.5
**E18K Tukpahlearik C 38.00 353** P **P** **17 03 05.1 -0.8**
baz=4.5
**H27K Steamboat Moun 38.06 341** P **P** **17 03 06.2 -0.3**
baz=12
**G24K Hadweenzic Riv 38.06 345** IAmb IAmb 17 03 13.3
comp=Z,18nm,1.5s
**G24K Hadweenzic Riv 38.06 345** P **P** **17 03 06.1 -0.4**
baz=10.0,SNR=6.8
**G22K Bettles 38.09 348** P **P** **17 03 06.2 -0.6**
baz=8.3
**F20K Avaraart Lake 38.18 350** P **P** **17 03 06.5 -1.0**
baz=6.6
**G23K Bananza Creek 38.21 347** P **P** **17 03 07.3 -0.6**
baz=8.9
**YKA Yellowknife Ar 38.21 321** LR LR 17 19 08.6
comp=Z,140nm,19.3s,baz=360,slow=37
**YAK Yakutsk 38.23 41** LR LR 17 19 52.7
comp=Z,162nm,20.9s,baz=332,slow=38
**GNI Garni 38.35 133** LR LR 17 19 41.1
comp=Z,291nm,21.8s,baz=4.5,slow=37
**H25L Birch Creek 38.37 344** P **P** **17 03 08.4 -0.7**
baz=11
**F19K Shaleruckik Mo 38.48 351** P **P** **17 03 09.1 -0.9**
baz=5.7
**I30M Mount Dempster 38.55 337** IAmb IAmb 17 03 20.9
comp=Z,17nm,1.4s
**I30M Mount Dempster 38.55 337** P **P** **17 03 10.5 -0.3**
baz=14
**G21K Allakaket 38.61 349** P **P** **17 03 11.0 -0.1**
baz=7.4
**I29M Ogilvie Camp, 38.61 339** P **P** **17 03 10.3 -0.9**
baz=13
**I27K Kandik River 38.68 341** P **P** **17 03 11.1 -0.6**
baz=12,SNR=6.8
**I28M Miner Creek 38.68 340** P **P** **17 03 10.9 -0.9**
baz=13
**F18K Selawik 38.79 353** P **P** **17 03 12.0 -0.6**
baz=4.8
**H24K Noodor Dome 38.94 345** P **P** **17 03 13.2 -0.8**
baz=9.6,SNR=5.3
**F17K Baldwin Pennin 39.00 354** P **P** **17 03 13.8 -0.5**
baz=4.2
**H23K Yukon River 39.06 346** P **P** **17 03 14.4 -0.5**
baz=8.9
**PRP Porcupine Dome 39.08 343** P **P** **17 03 14.3 -1.0**
baz=10
**I26K Coal Creek Min 39.10 342** P **P** **17 03 13.9 -1.3**
baz=11
**H22K Ishtalitna Cre 39.11 347** P **P** **17 03 13.6 -1.7**
baz=8.2
**G19K Purcell Mounta 39.15 351** P **P** **17 03 14.3 -1.3**
baz=5.9
**IMAR Indian Mountai 39.15 349** P **P** **17 03 17.0 +1.4**
**J30M Hart River 39.18 337** IAmb IAmb 17 03 26.5
comp=Z,22nm,1.4s
**J30M Hart River 39.18 337** P **P** **17 03 14.9 -1.2**
baz=14,SNR=7.9
**H21K Melozitna Rive 39.42 348** P **P** **17 03 16.5 -1.4**
baz=7.6,SNR=6.8
**EGAK Eagle 39.45 340** P **P** **17 03 20.0 +1.9**
**EGAK Eagle 39.45 340** P **P** **17 03 18.1 0.0**
baz=12
**G18K Tagagawik 39.46 352** P **P** **17 03 17.1 -1.1**
baz=5.2
**POKR Poker Flat Res 39.62 344** P **P** **17 03 18.6 -1.0**
baz=9.7
**H20K Anotleneega Mo 39.70 349** P **P** **17 03 20.1 -0.1**
baz=6.7
**I23K Minto, Yukon-K 39.72 346** IAmb IAmb 17 03 28.0
comp=Z,20nm,1.5s
**I23K Minto, Yukon-K 39.72 346** P **P** **17 03 18.9 -1.5**
baz=8.9,SNR=5.8
**H19K Roundabout Mou 39.73 350** P **P** **17 03 19.7 -0.8**
baz=6.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| F15K | North Star Dit | 39.82 356 | P | | P | 17 03 21.0 | -0.2 | |
| | baz=2.7 | | | | | | | |
| COLA | College | 39.89 345 | ⇑e | P | P | 17 03 24.8 | +3.0 | |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.5s | | | | | | | |
| DGZ | Jazzator, Alta | 39.92 83 | ⇓e | P | P | 17 03 25.2 | +2.8 | |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| G17K | Kiwalik Mounta | 39.92 353 | P | | P | 17 03 21.3 | -0.8 | |
| | baz=4.3 | | | | | | | |
| ILAR | Eielson Array | 39.92 344 | P | | P | 17 03 23.9 | +1.8 | |
| ILAR | Eielson Array | 39.92 344 | P | | P | 17 03 24.7 | +2.6 | |
| | comp=Z,1.9nm,0.8s,baz=5.5,slow=6.8,SNR=20 | | | | | | | |
| ILAR | | | LR | | LR | 17 20 29.6 | | |
| | comp=Z,77nm,19.2s,baz=10.0,slow=37 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| ILAR | Eielson Array | 39.92 344 | P | | P | 17 03 23.9 | +1.8 | |
| MLY | Manley | 39.93 347 | P | | P | 17 03 21.4 | -0.8 | |
| | baz=8.3 | | | | | | | |
| J26L | Joseph Creek | 39.93 342 | P | | P | 17 03 21.7 | -0.6 | |
| | baz=11 | | | | | | | |
| J25K | Salcha River, | 39.97 343 | P | | P | 17 03 24.4 | +1.9 | |
| J25K | Salcha River, | 39.97 343 | P | | P | 17 03 22.3 | -0.3 | |
| | baz=10 | | | | | | | |
| DAWY | Dawson | 39.98 339 | P | | P | 17 03 22.3 | -0.4 | |
| | baz=13 | | | | | | | |
| K29M | Barlow Dome | 40.02 337 | IAmb | | IAmb | 17 03 29.9 | | |
| | comp=Z,31nm,1.5s | | | | | | | |
| K29M | Barlow Dome | 40.02 337 | P | | P | 17 03 22.9 | -0.2 | |
| | baz=13 | | | | | | | |
| G16K | Koyuk River | 40.08 354 | P | | P | 17 03 23.2 | -0.2 | |
| | baz=3.6 | | | | | | | |
| F14K | Arctic Creek | 40.08 357 | P | | P | 17 03 22.8 | -0.5 | |
| | baz=2.0 | | | | | | | |
| H18K | Honhosa River | 40.19 352 | P | | P | 17 03 23.7 | -0.6 | |
| | baz=5.2 | | | | | | | |
| K27K | Chicken | 40.27 341 | IAmb | | IAmb | 17 03 32.2 | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| K27K | Chicken | 40.27 341 | P | | P | 17 03 24.4 | -0.5 | |
| | baz=12 | | | | | | | |
| HDA | Harding Lake | 40.29 344 | P | | P | 17 03 24.6 | -0.5 | |
| | baz=9.7 | | | | | | | |
| I20K | Naaghedeneel | 40.37 349 | P | | P | 17 03 25.3 | -0.5 | |
| | baz=6.8 | | | | | | | |
| H17K | Granite Mounta | 40.46 353 | P | | P | 17 03 26.4 | -0.1 | |
| | baz=4.6 | | | | | | | |
| SCRK | Sand Creek | 40.48 342 | P | | P | 17 03 29.8 | +3.0 | |
| SCRK | Sand Creek | 40.48 342 | P | | P | 17 03 26.6 | -0.3 | |
| | baz=11 | | | | | | | |
| G15K | Niukluk | 40.52 355 | P | | P | 17 03 26.0 | -1.0 | |
| | baz=2.9 | | | | | | | |
| L29M | L29M | 40.80 338 | IAmb | | IAmb | 17 03 35.3 | | |
| | comp=Z,16nm,1.4s | | | | | | | |
| L29M | L29M | 40.80 338 | P | | P | 17 03 29.9 | +0.5 | |
| | baz=13 | | | | | | | |
| H16K | Elim | 40.83 354 | P | | P | 17 03 30.1 | +0.5 | |
| | baz=3.6 | | | | | | | |
| BPAW | Bear Paw Mtn. | 40.87 347 | IAmb | | IAmb | 17 03 36.5 | | |
| | comp=Z,16nm,1.5s | | | | | | | |
| BPAW | Bear Paw Mtn. | 40.87 347 | P | | P | 17 03 30.7 | +0.7 | |
| | baz=8.1 | | | | | | | |
| J20K | Nowinta River | 40.97 349 | P | | P | 17 03 30.3 | -0.4 | |
| | baz=6.8 | | | | | | | |
| MCK | McKinley | 41.10 345 | P | | P | 17 03 31.2 | -0.7 | |
| | baz=8.8 | | | | | | | |
| MAKZ | Makanchi | 41.12 90 | P | | P | 17 03 33.0 | +0.7 | |
| MAKZ | Makanchi | 41.12 90 | ⇓P | | P | 17 03 34.6 | +2.4 | |
| FARO | Faro, Yukon | 41.13 334 | P | | P | 17 03 30.4 | -1.7 | |
| | baz=14 | | | | | | | |
| CHUM | Lake Minchumin | 41.16 347 | P | | P | 17 03 31.9 | -0.4 | |
| | baz=7.5 | | | | | | | |
| BCAR | Beaver Creek A | 41.19 340 | P | | P | 17 03 34.5 | +1.9 | |
| L27K | Beaver Creek, | 41.20 340 | P | | P | 17 03 35.3 | +2.7 | |
| L27K | | | IAmb | | IAmb | 17 03 39.4 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| L27K | Beaver Creek, | 41.20 340 | P | | P | 17 03 31.6 | -1.1 | |
| | baz=11,SNR=6.1 | | | | | | | |
| MK31 | Makanchi Array | 41.22 89 | P | | P | 17 03 33.8 | +0.7 | |
| MK31 | Makanchi Array | 41.22 89 | c iP | | P | 17 03 34.9 | +1.9 | |
| MKAR | Makanchi Array | 41.22 89 | P | | P | 17 03 33.8 | +0.7 | |
| MKAR | Makanchi Array | 41.22 89 | P | | P | 17 03 34.9 | +1.8 | |
| | comp=Z,1.4nm,0.6s,baz=350,slow=7.3,SNR=17 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| J19K | Poorman | 41.23 350 | P | | P | 17 03 31.7 | -1.1 | |
| | baz=6.2 | | | | | | | |
| M29M | Somme Creek | 41.48 338 | IAmb | | IAmb | 17 03 41.8 | | |
| | comp=Z,16nm,1.5s | | | | | | | |
| M29M | Somme Creek | 41.48 338 | P | | P | 17 03 33.7 | -1.4 | |
| | baz=12 | | | | | | | |
| MENT | Mentasta | 41.48 341 | IAmb | | IAmb | 17 03 40.2 | | |
| | comp=Z,16nm,1.5s | | | | | | | |
| KKAR | Karatay Array | 41.53 103 | P | | P | 17 03 36.6 | +0.9 | |
| KKAR | Karatay Array | 41.53 103 | P | | P | 17 03 36.6 | +0.9 | |
| PAX | Paxson | 41.60 343 | P | | P | 17 03 35.0 | -1.0 | |
| | baz=10.0 | | | | | | | |
| MOY | Mondy | 41.62 70 | eP | | P | 17 03 39.6 | +3.3 | |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,33nm,1.8s | | | | | | | |
| DHY | Denali Highway | 41.64 344 | IAmb | | IAmb | 17 03 46.9 | | |
| | comp=Z,16nm,1.2s | | | | | | | |
| DHY | Denali Highway | 41.64 344 | P | | P | 17 03 35.5 | -0.9 | |
| | baz=9.3,SNR=5.8 | | | | | | | |
| K20K | Telida | 41.78 348 | P | | P | 17 03 36.6 | -0.8 | |
| | baz=6.7 | | | | | | | |
| J18K | Innoko River | 41.81 350 | P | | P | 17 03 36.3 | -1.4 | |
| | baz=5.7 | | | | | | | |
| M27K | Edge Creek, AK | 41.89 340 | P | | P | 17 03 37.3 | -1.3 | |
| | baz=11 | | | | | | | |
| M26K | Nabesna, AK | 41.95 341 | IAmb | | IAmb | 17 03 58.6 | | |
| | comp=Z,16nm,1.5s | | | | | | | |
| M26K | Nabesna, AK | 41.95 341 | P | | P | 17 03 38.1 | -0.8 | |
| | baz=11 | | | | | | | |
| J17K | VABM Dome | 41.97 352 | P | | P | 17 03 37.7 | -1.3 | |
| | baz=4.8 | | | | | | | |
| N31M | Braeburn, Yuko | 42.13 335 | P | | P | 17 03 39.9 | -0.4 | |
| | baz=13 | | | | | | | |
| HARP | HAARP | 42.14 342 | P | | P | 17 03 39.4 | -0.9 | |
| | baz=10.0 | | | | | | | |
| J16K | Anvik River | 42.14 353 | P | | P | 17 03 40.2 | -0.2 | |
| | baz=4.2 | | | | | | | |
| WAT6 | Susitna Watana | 42.16 344 | P | | P | 17 03 40.5 | -0.2 | |
| | baz=9.1 | | | | | | | |
| N30M | Aishikik Lake | 42.30 336 | P | | P | 17 03 42.2 | +0.4 | |
| | baz=13 | | | | | | | |
| M24K | Tolsona, Glenn | 42.51 343 | P | | P | 17 03 42.7 | -0.7 | |
| | baz=9.6 | | | | | | | |
| YUK4 | Talbot Arm | 42.58 337 | P | | P | 17 03 43.1 | -1.1 | |
| | baz=12 | | | | | | | |
| K17K | Iditarod | 42.62 351 | P | | P | 17 03 43.6 | -0.6 | |
| | baz=5.0 | | | | | | | |
| L20K | Farewell, AK | 42.65 348 | P | | P | 17 03 43.9 | -0.7 | |
| | baz=6.7 | | | | | | | |
| J14K | Nanvaranak Lak | 42.76 355 | P | | P | 17 03 45.2 | -0.1 | |
| | baz=3.0 | | | | | | | |
| SCM | Sheep Creek Mo | 42.87 344 | P | | P | 17 03 46.4 | +0.1 | |
| | baz=9.1 | | | | | | | |
| O30N | Mendenhall | 42.87 335 | IAmb | | IAmb | 17 03 51.2 | | |
| | comp=Z,10nm,1.1s | | | | | | | |
| O30N | Mendenhall | 42.87 335 | P | | P | 17 03 46.5 | +0.2 | |
| | baz=13 | | | | | | | |
| N25K | Chitina, Valde | 42.87 342 | P | | P | 17 03 45.8 | -0.7 | |
| | baz=10 | | | | | | | |
| YUK6 | Outpost Mounta | 42.94 337 | P | | P | 17 03 46.2 | -0.9 | |
| | baz=12 | | | | | | | |
| MCARA | McCarthy VSAT | 42.96 340 | P | | P | 17 03 46.2 | -0.8 | |
| | baz=11 | | | | | | | |
| SML | Sawmill | 42.97 344 | P | | P | 17 03 46.5 | -0.6 | |
| | baz=8.7 | | | | | | | |
| L19K | White Mountain | 43.00 349 | P | | P | 17 03 46.5 | -0.9 | |
| | baz=6.3 | | | | | | | |
| SKT | Skwentna | 43.01 346 | IAmb | | IAmb | 17 03 50.3 | | |
| | comp=Z,29nm,1.4s | | | | | | | |
| SKT | Skwentna | 43.01 346 | P | | P | 17 03 45.9 | -1.5 | |
| | baz=7.5,SNR=5.9 | | | | | | | |
| P33M | Teslin, Yukon | 43.03 333 | P | | P | 17 03 47.9 | +0.1 | |
| | baz=14 | | | | | | | |
| L18K | Granite Mounta | 43.05 350 | P | | P | 17 03 46.5 | -1.3 | |
| | baz=5.6 | | | | | | | |
| KLU | Klutina | 43.09 343 | P | | P | 17 03 47.1 | -1.1 | |
| | baz=9.6 | | | | | | | |
| M22K | Willow | 43.14 345 | P | | P | 17 03 48.1 | -0.4 | |
| | baz=8.0 | | | | | | | |
| M20K | Styx River | 43.20 348 | P | | P | 17 03 47.6 | -1.4 | |
| | baz=6.9 | | | | | | | |
| M19K | Big River Lodg | 43.25 348 | P | | P | 17 03 48.5 | -0.8 | |
| | baz=6.4 | | | | | | | |
| KNK | Knik Glacier | 43.37 344 | P | | P | 17 03 49.9 | -0.5 | |
| | baz=8.6 | | | | | | | |
| SUA | Susitna One | 43.47 346 | P | | P | 17 03 49.7 | -1.6 | |
| | baz=7.7,SNR=5.5 | | | | | | | |
| L16K | Owhat River | 43.67 352 | P | | P | 17 03 51.4 | -1.4 | |
| | baz=4.5 | | | | | | | |
| MA2 | Magadan | 43.71 27 | LR | | LR | 17 22 26.9 | | |
| | comp=Z,86nm,18.2s,baz=320,slow=37 | | | | | | | |
| M18K | Stony River | 43.74 349 | P | | P | 17 03 51.9 | -1.4 | |
| | baz=5.8 | | | | | | | |
| P32M | Atlin | 43.75 333 | P | | P | 17 03 52.3 | -1.1 | |
| | baz=14 | | | | | | | |
| L15K | Ungalak Mounta | 43.78 353 | P | | P | 17 03 52.9 | -0.7 | |
| | baz=3.7 | | | | | | | |
| RC01 | Rabbit Creek A | 43.78 345 | P | | P | 17 03 52.9 | -0.7 | |
| | baz=8.1 | | | | | | | |
| M17K | Holitna River | 43.90 350 | P | | P | 17 03 53.7 | -1.0 | |
| | baz=5.2 | | | | | | | |
| PWL | Port Wells | 43.91 344 | P | | P | 17 03 53.6 | -1.0 | |
| | baz=8.6 | | | | | | | |
| L14K | Kuka Creek | 44.15 354 | P | | P | 17 03 55.4 | -1.1 | |
| | baz=3.2 | | | | | | | |
| PLBC | Pleasant Camp | 44.18 335 | P | | P | 17 03 55.8 | -1.1 | |
| | baz=13 | | | | | | | |
| Q32M | Nakina River | 44.18 332 | P | | P | 17 03 55.6 | -1.5 | |
| | baz=14 | | | | | | | |
| DLBC | Dease Lake | 44.40 330 | LR | | LR | 17 22 45.2 | | |
| | comp=Z,142nm,20.5s,baz=64,slow=36 | | | | | | | |
| KAIM | Kayak Island | 44.52 341 | P | | P | 17 03 59.1 | -0.4 | |
| | baz=9.8 | | | | | | | |
| N18K | Kilae Creek | 44.55 349 | P | | P | 17 03 58.3 | -1.5 | |
| | baz=5.7 | | | | | | | |
| N17K | Nushagak Hills | 44.76 350 | P | | P | 17 03 59.7 | -1.8 | |
| | baz=5.2 | | | | | | | |
| N16K | Nishlik Lake | 44.88 351 | P | | P | 17 04 00.0 | -2.5 | |
| | baz=4.6 | | | | | | | |
| O20K | Slope Mountain | 44.97 347 | P | | P | 17 04 03.5 | +0.3 | |
| | baz=5.9 | | | | | | | |
| BRSE | Bradley Lake S | 45.19 346 | P | | P | 17 04 03.1 | -1.8 | |
| | baz=7.5 | | | | | | | |
| N15K | Kwethluk River | 45.24 352 | P | | P | 17 04 03.8 | -1.6 | |
| | baz=4.1 | | | | | | | |
| WMQ | Urumqi | 45.41 86 | eP | | P | 17 04 09.5 | +2.6 | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,670nm,16.3s | | | | | | | |
| O17K | Koliganek Bris | 45.51 350 | P | | P | 17 04 05.2 | -2.2 | |
| | baz=5.2 | | | | | | | |
| ZEA | Zeya | 45.58 47 | eP | | P | 17 04 12.6 | +4.5 | |
| O16K | Kokwok River B | 45.74 351 | P | | P | 17 04 08.1 | -1.1 | |
| | baz=4.8 | | | | | | | |
| P18K | Big Mountain, | 45.80 349 | P | | P | 17 04 08.1 | -1.7 | |
| | baz=5.8 | | | | | | | |
| ULM | Lac du Bonnet | 45.90 300 | LR | | LR | 17 23 33.5 | | |
| | comp=Z,452nm,19.1s,baz=50,slow=36 | | | | | | | |
| SONM | Songino Array | 46.50 67 | P | | P | 17 04 17.5 | +2.0 | |
| | comp=Z,0.5nm,0.7s,baz=333,slow=1.6,SNR=3.6 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| ULN | Ulaanbaatar | 46.63 66 | ⇑eP | | P | 17 04 18.8 | +2.2 | |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| SADO | Sadowa | 46.88 283 | LR | | LR | 17 22 59.2 | | |
| | comp=Z,240nm,18.2s,baz=34,slow=35 | | | | | | | |
| KDAK | Kodiak Island | 47.25 346 | LR | | LR | 17 23 43.7 | | |
| | comp=Z,103nm,21.7s,baz=43,slow=35 | | | | | | | |
| KDAK | Kodiak Island | 47.25 346 | P | | P | 17 04 20.2 | -0.9 | |
| | baz=6.6 | | | | | | | |
| BBB | Bella Bella | 50.22 327 | LR | | LR | 17 26 08.4 | | |
| | comp=Z,180nm,19.9s,baz=20,slow=36 | | | | | | | |
| CHNA | Chernabura Isl | 50.56 351 | P | | P | 17 04 45.4 | -1.1 | |
| | baz=4.0 | | | | | | | |
| KLR | Kul'dur | 50.74 45 | LR | | LR | 17 28 32.7 | | |
| | comp=Z,177nm,18.6s,baz=330,slow=39 | | | | | | | |
| KLR | Kul'dur | 50.74 45 | ⇓eP | | P | 17 04 49.4 | +1.4 | |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.6s | | | | | | | |
| JFWS | Jewell Farm | 51.44 292 | P | | P | 17 04 53.2 | -0.1 | |
| | baz=20 | | | | | | | |
| O53A | New Philadelph | 51.65 283 | P | | P | 17 04 54.2 | -0.7 | |
| | baz=20 | | | | | | | |
| UNV | Unalaska Valle | 51.74 356 | P | | P | 17 04 53.7 | -1.7 | |
| | baz=1.6 | | | | | | | |
| SUSD | Miller | 52.08 300 | P | | P | 17 04 57.0 | -1.1 | |
| | baz=19 | | | | | | | |
| ECSD | EROS Data Cent | 52.20 298 | P | | P | 17 04 58.9 | -0.1 | |
| ECSD | | | | IAmb | IAmb | 17 05 03.5 | | |
| | comp=Z,14nm,1.5s | | | | | | | |
| ECSD | EROS Data Cent | 52.20 298 | P | | P | 17 04 58.6 | -0.4 | |
| | baz=19 | | | | | | | |
| NEW | Newport | 52.20 317 | LR | | LR | 17 27 08.0 | | |
| | comp=Z,347nm,21.7s,baz=19,slow=36 | | | | | | | |
| NEW | Newport | 52.20 317 | P | | P | 17 04 57.5 | -1.5 | |
| | baz=16 | | | | | | | |
| SHEM | Shemya Is, Ala | 52.52 11 | LR | | LR | 17 28 09.3 | | |
| | comp=Z,52nm,18.3s,baz=277,slow=37 | | | | | | | |
| NIKH | Nikiski High | 52.65 358 | P | | P | 17 05 00.8 | -1.3 | |
| | baz=0.8 | | | | | | | |
| GTA | Gaotai | 52.73 77 | P | | P | 17 05 11.7 | +8.6 | |
| MSO | Missoula | 52.99 314 | P | | P | 17 05 03.9 | -1.0 | |
| | baz=16 | | | | | | | |
| HDIL | Hopedale | 53.42 290 | P | | P | 17 05 07.4 | -0.6 | |
| | baz=19 | | | | | | | |
| RSSD | Black Hills | 53.53 304 | P | | P | 17 05 08.5 | -0.6 | |
| | baz=18 | | | | | | | |
| RLMT | Red Lodge | 53.69 309 | P | | P | 17 05 09.5 | -0.7 | |
| | baz=17 | | | | | | | |
| BOZ | Bozeman (W) | 53.71 311 | P | | P | 17 05 10.5 | +0.2 | |
| | baz=16 | | | | | | | |
| HHC | Hu-ho-hao-te | 54.32 66 | eP | | P | 17 05 14.6 | -0.2 | |
| HHC | | | | sP | pwP | 17 05 23.8 | +3.2 | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.5s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,100nm,5.2s | | | | | | | |
| YHL | Hebgen Lake | 54.34 311 | IAmb | | IAmb | 17 05 34.2 | | |
| | comp=Z,9nm,1.3s | | | | | | | |
| RAYN | Ar Rayn | 54.66 138 | P | | P | 17 05 16.5 | -0.8 | |
| RAYN | Ar Rayn | 54.66 138 | P | | P | 17 05 16.5 | -0.8 | |
| RAYN | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.5s | | | | | | | |
| CN2 | Changchun | 54.68 52 | eP | | P | 17 05 16.0 | -1.1 | |
| BGNE | Belgrade | 54.77 298 | P | | P | 17 05 17.9 | 0.0 | |
| | baz=18 | | | | | | | |
| YPP | Pitchstone Pla | 54.82 310 | IAmb | | IAmb | 17 05 28.3 | | |
| | comp=Z,11nm,1.5s | | | | | | | |
| K22A | Casper | 55.47 306 | P | | P | 17 05 22.6 | -0.5 | |
| | baz=17 | | | | | | | |
| PDAR | Pinedale Array | 56.00 309 | P | | P | 17 05 26.7 | -0.3 | |
| PDAR | Pinedale Array | 56.00 309 | P | | P | 17 05 29.6 | +2.5 | |
| | comp=Z,0.5nm,0.6s,baz=33,slow=3.5,SNR=8.7 | | | | | | | |
| PDAR | | | | LR | LR | 17 30 05.3 | | |
| | comp=Z,266nm,18.0s,baz=8.0,slow=37 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| BW06 | Boulder Array | 56.01 309 | P | | P | 17 05 26.1 | -1.0 | |
| | baz=16 | | | | | | | |
| OGNE | Ogallala | 56.10 301 | P | | P | 17 05 27.3 | -0.2 | |
| | baz=17 | | | | | | | |
| HLID | Hailey | 56.22 313 | IAmb | | IAmb | 17 05 43.9 | | |
| | comp=Z,6.9nm,1.5s | | | | | | | |
| HLID | Hailey | 56.22 313 | P | | P | 17 05 27.3 | -1.1 | |
| | baz=16 | | | | | | | |
| CGM3 | Cape Girardeau | 56.60 289 | IAmb | | IAmb | 17 05 34.8 | | |
| | comp=Z,8.5nm,1.1s | | | | | | | |
| TKL | Tuckaleechee C | 56.64 283 | IAmb | | IAmb | 17 05 39.5 | | |
| | comp=Z,7.6nm,1.1s | | | | | | | |
| TKL | Tuckaleechee C | 56.64 283 | LR | | LR | 17 28 44.4 | | |
| | comp=Z,91nm,19.4s,baz=28,slow=35 | | | | | | | |
| N23A | Red Feather La | 57.02 305 | P | | P | 17 05 33.5 | -0.8 | |
| | baz=17 | | | | | | | |
| CBKS | Cedar Bluff | 57.61 299 | P | | P | 17 05 37.8 | -0.4 | |
| | baz=17 | | | | | | | |
| O20A | White River Ci | 58.25 307 | P | | P | 17 05 42.7 | -0.2 | |
| | baz=16 | | | | | | | |
| GOGA | Geofrey | 58.69 282 | P | | P | 17 05 46.2 | +0.5 | |
| | baz=18 | | | | | | | |
| Q24A | Divide | 58.70 303 | P | | P | 17 05 45.1 | -1.1 | |
| | baz=16 | | | | | | | |
| ELK | Elko | 59.10 313 | P | | P | 17 05 49.1 | +0.3 | |
| ELK | Elko | 59.10 313 | P | | P | 17 05 49.1 | +0.3 | |
| ELK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| YBH | Yreka Blue Hor | 59.52 319 | LR | | LR | 17 31 12.1 | | |
| | comp=Z,188nm,21.5s,baz=18,slow=36 | | | | | | | |
| BMN | Battle Mountai | 59.78 314 | IAmb | | IAmb | 17 06 23.2 | | |
| | comp=Z,3.9nm,0.7s | | | | | | | |
| SDCO | Great Sand Dun | 59.94 303 | P | | P | 17 05 53.4 | -1.3 | |
| | baz=16 | | | | | | | |
| MIAR | Mount Ida | 60.19 292 | P | | P | 17 05 56.2 | +0.1 | |
| MIAR | Mount Ida | 60.19 292 | P | | P | 17 05 55.7 | -0.4 | |
| | baz=17 | | | | | | | |
| MIAR | Mount Ida | 60.19 292 | P | | P | 17 05 56.2 | +0.1 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| MVCO | Mesa Verde | 61.11 306 | P | | P | 17 06 02.0 | -0.6 | |
| | baz=16 | | | | | | | |
| WMOK | Wichita Mounta | 61.27 296 | P | | P | 17 06 04.1 | +0.6 | |
| WMOK | | | | IAmb | IAmb | 17 06 08.3 | | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| WMOK | Wichita Mounta | 61.27 296 | P | | P | 17 06 03.3 | -0.2 | |
| | baz=17 | | | | | | | |
| WMOK | Wichita Mounta | 61.27 296 | P | | P | 17 06 04.1 | +0.6 | |
| WMOK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| R11B | Troy Canyon, C | 61.48 312 | P | | P | 17 06 06.5 | +1.4 | |
| R11B | Troy Canyon, C | 61.48 312 | P | | P | 17 06 04.8 | -0.2 | |
| | baz=14 | | | | | | | |
| TOA0 | Torodi Ar. Sit | 61.62 188 | P | | P | 17 06 05.2 | -0.8 | |
| TOA0 | | | | IAmb | IAmb | 17 06 15.1 | | |
| | comp=Z,6.3nm,1.0s | | | | | | | |
| TORD | Torodi Ar. Bea | 61.62 188 | P | | P | 17 06 05.2 | -0.8 | |
| TORD | | | | IAmb | IAmb | 17 06 15.7 | | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| TORD | Torodi Ar. Bea | 61.62 188 | P | | P | 17 06 07.7 | +1.7 | |
| | comp=Z,2.0nm,0.8s,baz=6.4,slow=9.5,SNR=8.9 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| CCUT | Cedar City | 61.81 310 | P | | P | 17 06 06.9 | -0.5 | |
| CCUT | | | | IAmb | IAmb | 17 06 13.1 | | |
| | comp=Z,6.9nm,1.5s | | | | | | | |
| NVAR | Mina Array Bea | 61.93 315 | LR | | LR | 17 34 26.3 | | |
| | comp=Z,326nm,18.3s,baz=20,slow=37 | | | | | | | |
| 451A | Vernon | 61.94 283 | P | | P | 17 06 07.7 | -0.3 | |
| ANMO | Albuquerque | 62.84 303 | LR | | LR | 17 34 12.3 | | |
| | comp=Z,316nm,18.3s,baz=126,slow=37 | | | | | | | |
| OMMB | Old Mammoth Mi | 62.85 315 | IAmb | | IAmb | 17 06 24.4 | | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| NJ2 | Nanjing | 64.45 62 | eP | | P | 17 06 24.7 | +0.1 | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| PZH | PanZhiHua | 65.46 80 | P | | P | 17 06 32.0 | +0.6 | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,130nm,5.7s | | | | | | | |
| BC3 | Big Chuckawall | 65.99 311 | P | | P | 17 06 35.6 | +0.8 | |
| | baz=14 | | | | | | | |
| JNU | Nakatsue | 66.09 51 | LR | | LR | 17 39 11.9 | | |
| | comp=Z,90nm,19.6s,baz=355,slow=39 | | | | | | | |
| PFO | Pinyon Flats O | 66.24 312 | LR | | LR | 17 36 34.8 | | |
| | comp=Z,265nm,18.1s,baz=24,slow=37 | | | | | | | |
| TUC | Tucson | 66.32 306 | P | | P | 17 06 38.1 | +1.2 | |
| | baz=15 | | | | | | | |
| GYA | Guiyang | 66.78 75 | P | | P | 17 06 41.8 | +1.9 | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| TXAR | Lajitas Array | 67.60 299 | P | | P | 17 06 46.0 | +1.0 | |
| | comp=Z,0.4nm,0.8s,baz=27,slow=8.1,SNR=4.3 | | | | | | | |
| TXAR | | | | LR | LR | 17 36 52.7 | | |
| | comp=Z,247nm,18.6s,baz=16,slow=36 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| TEIG | Tepich | 72.50 282 | LR | | LR | 17 38 39.2 | | |
| | comp=Z,243nm,19.1s,baz=44,slow=35 | | | | | | | |
| LPIG | La Paz | 74.14 304 | LR | | LR | 17 41 17.4 | | |
| | comp=Z,261nm,18.3s,baz=24,slow=37 | | | | | | | |
| PCRV | Puerto La Cruz | 75.87 257 | LR | | LR | 17 38 46.7 | | |
| | comp=Z,36nm,18.6s,slow=34 | | | | | | | |
| MBAR | Mbarara | 76.30 157 | ⇑eP | | P | 17 07 39.3 | +1.9 | |
| MBAR | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.4s | | | | | | | |
| MDP | Montagnes des | 77.75 243 | LR | | LR | 17 34 32.7 | | |
| | comp=Z,53nm,19.3s,baz=66,slow=30 | | | | | | | |
| APG | El Apazote | 78.07 283 | LR | | LR | 17 42 25.2 | | |
| | comp=Z,32nm,19.8s,baz=1.5,slow=36 | | | | | | | |
| PALK | Pallekele | 78.28 106 | iP | | P | 17 07 49.0 | +0.6 | |
| DAV | Davao City (W) | 90.08 62 | LR | | LR | 17 55 13.8 | | |
| | comp=Z,138nm,20.2s,baz=349,slow=40 | | | | | | | |
| ASAR | Alice Springs | 121.69 62 | PKP | | PKPdf | 17 14 41.7 | -0.2 | |
| | comp=Z,0.6nm,0.7s,baz=354,slow=1.7,SNR=11 | | | | | | | |
| NVL | N'lazarevskaya | 145.21 178 | ePKIKP | | PKiKP | 17 15 31.0 | +3.0 | |
| NVL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| MAW | Mawson | 146.15 146 | PKPbc | | PKPdf | 17 15 26.3 | +0.6 | |
| | comp=Z,3.9nm,0.9s,baz=303,slow=5.6,SNR=7.7 | | | | | | | |
| SNAA | Sanae | 146.29 187 | PKPbc | | PKPbc | 17 15 27.8 | +0.5 | |
| | comp=Z,2.9nm,1.0s,baz=334,slow=3.2,SNR=7.0 | | | | | | | |
| ELIB | Princess Elisa | 146.67 172 | dPKPdf | | PKPbc | 17 15 28.8 | +0.3 | |
| QSPA | South Pole Qui | 164.61 180 | PKPab | | PKPab | 17 16 47.3 | +1.3 | |
| | comp=Z,2.3nm,1.2s,baz=204,slow=2.5,SNR=3.8 | | | | | | | |

*IDC* ***07*** *16:56:44.0±2.2,6°.58S×129°.00E,h0km,mb3.6/1, mbtmp3.4/3,ML3.3/2, Error ellipse: s-maj=152.1km s-min=31.7km az=67.0*

**ISC 07 16:56:46.1±1.5,6.7S±0°.1×129°.06E±0°.07,h10km,n9,** σ2°89/6,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SAUI | Saumlaki | 2.55 | 120 | P | Pg | 16 57 36.9 | +1.8 |
| FAKI | Fak Fak | 4.94 | 40 | P | Pb | 16 58 04.5 | -8.3 |
| SOEI | Soe | 5.62 | 237 | P | Pg | 16 58 35.5 | +1.7 |
| DRS | Darwin Rock St | 5.96 | 162 | P | Pb | 16 58 25.6 | -4.5 |
| MTN | Manton Dam | 6.42 | 162 | P | Pb | 16 58 30.6 | -7.4 |
| KDU | Kakadu | 6.82 | 151 | P | Pn | 16 58 33.1 | +6.9 |
| WRA | Warramunga Arr | 14.11 | 159 | Pn | Pn | 17 00 06.7 | +0.5 |
| | 0.1nm,0.3s,baz=341,slow=13,SNR=1.8 | | | | | | |
| WRA | | | | Sn | Sn | 17 02 34.0 | -8.9 |
| | 0.3nm,0.3s,baz=345,slow=22,SNR=3.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| ASAR | Alice Springs | 17.48 | 165 | P | P | 17 00 51.7 | +0.3 |
| | 0.2nm,0.3s,baz=347,slow=11,SNR=15 | | | | | | |
| ASAR | | | | S | Sn | 17 04 00.9 | -4.1 |
| | 1.5nm,1.2s,baz=2.2,slow=27,SNR=1.8 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 67.48 | 327 | P | P | 17 07 41.0 | -1.4 |
| | 0.4nm,0.5s,baz=118,slow=8.1,SNR=5.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

*UPP* ***07*** *17:01:04.8±0.1,67°.07N×20°.95E,h0km,ML2.2, Unknown*
*IDC* ***07*** *17:01:05.6±0.9,67°.05N×21°.09E,h0km,mbtmp3.0/4, ML2.4/4, Error ellipse: s-maj=14.6km s-min=7.5km az=117.0*
*HEL* ***07*** *17:01:05.8±0.3,67°.10N×21°.03E,h0km,ML2.1, Explosion*

**ISC 07 17:01:04.6±0.8,67.08N±0°.02×20.91E±0°.03,h0km,n42,** σ1§31/54,**1C,Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DUNU | Dundret | 0.14 | 288 | ⇑P | Pg | 17 01 08.0 | +0.8 |
| DUNU | | | | S | Sg | 17 01 10.5 | +1.5 |
| MASU | Masugnsbyn | 0.57 | 48 | P | Pg | 17 01 15.6 | +0.1 |
| PAJU | Pajala | 0.87 | 93 | P | Pg | 17 01 20.7 | -0.4 |
| PAJU | Pajala | 0.87 | 93 | PG | Pg | 17 01 20.5 | -0.6 |
| | baz=272 | | | | | | |
| HARU | Harads | 0.92 | 178 | P | Pg | 17 01 21.9 | -0.3 |
| SALU | Saltoluokta | 0.98 | 289 | eP | Pg | 17 01 23.4 | +0.1 |
| SALU | Saltoluokta | 0.98 | 289 | P | Pg | 17 01 23.4 | +0.1 |
| LANU | Lannavaara | 1.06 | 23 | P | Pg | 17 01 24.2 | -0.6 |
| LANU | Lannavaara | 1.06 | 23 | PG | Pg | 17 01 24.0 | -0.8 |
| LANU | | | | SN | Sn | 17 01 42.2 | +0.2 |
| KOVU | Salmi | 1.18 | 346 | P | Pg | 17 01 26.7 | -0.5 |
| KLF | Kolari | 1.20 | 81 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OBF4 | | | | | MSG | | 17 02 29.2 | |
| | comp=Z,5.3nm,0.2s | | | | | | | |
| **OBF0** | **Syolatti, Pyha** | **2.93** | **151** | | PN | **Pn** | **17 01 53.9** | **+1.5** |
| OBF0 | | | | | MSG | | 17 02 32.1 | |
| | comp=Z,4.9nm,0.2s | | | | | | | |
| **OBF8** | **Ulkokalla** | **2.95** | **158** | | PB | **Pn** | **17 01 54.3** | **+1.7** |
| | baz=338 | | | | | | | |
| OBF8 | | | | | MSG | | 17 02 32.9 | |
| | comp=Z,8.0nm,0.2s | | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.00** | **33** | | PN | **Pn** | **17 01 53.7** | **+0.4** |
| ARA0 | | | | | SB | **Sb** | **17 02 33.6** | **-2.3** |
| **ARCES** | **ARCESS Array B** | **3.00** | **33** | | Pn | **Pn** | **17 01 53.7** | **+0.4** |
| | comp=Z,0.8nm,0.3s,baz=211,slow=17,SNR=16 | | | | | | | |
| ARCES | | | | | Sn | **Sn** | **17 02 31.9** | **+2.0** |
| | comp=Z,1.8nm,0.3s,baz=211,slow=20,SNR=10 | | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **3.14** | **60** | | PB | **Pn** | **17 01 56.8** | **+1.5** |
| **OUF** | **Merijarvi** | **3.15** | **148** | | PN | **Pn** | **17 01 56.5** | **+1.2** |
| | baz=332 | | | | | | | |
| OUF | | | | | MSG | | 17 02 38.0 | |
| | comp=Z,3.8nm,0.2s | | | | | | | |
| **UMAU** | **Umeaa** | **3.21** | **182** | | PN | **Pn** | **17 01 57.1** | **+0.9** |
| UMAU | | | | | SG | **Sg** | **17 02 45.5** | **-2.1** |
| **VRF** | **Varrio** | **3.42** | **75** | | PN | **Pn** | **17 01 59.9** | **+0.8** |
| **OLKF** | **Oulanka, Finla** | **3.46** | **99** | | PN | **Pn** | **17 02 00.7** | **+1.1** |
| **MSF** | **Maaselka** | **3.46** | **106** | | PB | **Pn** | **17 02 02.0** | **+2.4** |
| **KEV** | **Kevo** | **3.51** | **37** | | PN | **Pn** | **17 02 00.7** | **+0.5** |
| | baz=220 | | | | | | | |
| KEV | | | | | SN | **Sn** | **17 02 43.6** | **+1.3** |
| **KU6** | **Riekki** | **3.75** | **102** | | PN | **Pn** | **17 02 04.4** | **+0.9** |
| **HUSU** | **Husum** | **3.82** | **191** | | PN | **Pn** | **17 02 05.7** | **+1.2** |
| **VAF** | **Ylistaro** | **4.12** | **169** | | PN | **Pn** | **17 02 10.0** | **+1.4** |
| **HEMU** | **Hemsoen** | **4.59** | **197** | | PN | **Pn** | **17 02 15.9** | **+0.9** |
| | baz=19 | | | | | | | |
| **NIF** | **Nilsia** | **4.71** | **139** | | PN | **Pn** | **17 02 17.9** | **+1.2** |
| | baz=325 | | | | | | | |
| **RMF** | **Romuvaara** | **4.71** | **123** | | PN | **Pn** | **17 02 18.5** | **+1.7** |
| **FINES** | **FINESS Array B** | **6.09** | **156** | | Pn | **Pn** | **17 02 36.5** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=346,slow=13,SNR=12 | | | | | | | |
| FINES | | | | | Sn | **Sn** | **17 03 44.7** | **-1.2** |
| | comp=Z,0.7nm,0.3s,baz=346,slow=23,SNR=7.1 | | | | | | | |
| FINES | | | | | Lg | Lg | 17 04 14.8 | |
| | comp=Z,0.4nm,0.3s,baz=337,slow=32,SNR=2.1 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **NOA** | **NORSAR Array B** | **7.39** | **220** | | Pn | **Pn** | **17 02 53.7** | **+0.1** |
| | baz=26,slow=11,SNR=6.7 | | | | | | | |
| NOA | | | | | Sn | **Sn** | **17 04 16.2** | **-1.9** |
| | baz=46,slow=20,SNR=1.3 | | | | | | | |
| NOA | | | | | Lg | Lg | 17 04 54.5 | |
| | baz=46,slow=24,SNR=1.6 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **7.67** | **208** | | Pn | **Pn** | **17 02 57.3** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=26,slow=13,SNR=9.5 | | | | | | | |
| HFS | | | | | Sn | **Sn** | **17 04 20.7** | **-4.2** |
| | comp=Z,0.1nm,0.3s,baz=33,slow=24,SNR=1.3 | | | | | | | |
| HFS | | | | | Lg | Lg | 17 05 00.8 | |
| | comp=Z,0.3nm,0.3s,baz=28,slow=28,SNR=2.5 | | | | | | | |
| | comp=Z,0.6nm,0.2s | | | | | | | |

*BJI **07** 17:17:14.2±0.0, 41˚.45N×71˚.90E, h3km, mb4.4/39, mB4.9/22, ML4.6/7, Ms4.4/33, Ms7 4.3/31*
*ISU **07** 17:17:19.1, 41˚.35N×72˚.73E, h15km*
*IDC **07** 17:17:19.4±0.5, 41˚.24N×72˚.63E, h0km, mb4.5/32, mbtmp4.5/37, ML3.6/5, MS4.1/40, Error ellipse: s-maj=11.0km s-min=7.8km az=163.0*
*MOS **07** 17:17:20.2±1.2, 41˚.30N×72˚.46E, h29km, mb4.8/47, MS4.3/12, Error ellipse: s-maj=4.0km s-min=3.4km az=54.8*
*MOS Felt (V) at Sary-Bee; (IV-V) at Kara-Bulak; Mayluu-Suu, Uch-Bulak; (IV) at Arslanbob, Kara-Kul', Kochkor-Ata, Tash-Kumyr; (III-IV) at Dzhalal-Abad; (III) at Osh; (II) at Taraz, Shymkent.*
*KRNET **07** 17:17:21.3±0.1, 41˚.36N×72˚.61E, h20km, mb4.9*
*SOME **07** 17:17:21.8, 41˚.37N×72˚.67E, h20km, MS4.4*
*BGR **07** 17:17:22.5, 40˚.88N×73˚.12E, h33km, mb4.5*
*NEIC **07** 17:17:23.4±1.9, 41˚.31N±0˚.04×72˚.58E±0˚.05, h28km±4km, mb4.7/159, Mwr4.6/33, Error ellipse: s-maj=6.3km s-min=4.9km az=54.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-5.32; $M_{\theta\theta}$6.24; $M_{\phi\phi}$-0.91; $M_{r\theta}$-2.32; $M_{\theta\phi}$-6.12; $M_{r\phi}$1.93; Fault plane solution: $M_o$8.98000×$10^{15}$ NP1:$\phi_s$279.82000°, $\delta$37.35000°, $\lambda$-118.99000°. NP2:$\phi_s$134.71000°, $\delta$57.95000°, $\lambda$-69.70000°. Principal axes: T 10.3190, Plg11.0000°, Azm210.0000°; N -4.2713, Plg17.0000°, Azm304.0000°; P -6.0477, Plg70.0000°, Azm89.0000°;*
*KNET **07** 17:17:23.6±0.4, 41˚.41N×72˚.79E, h7km, 2km, ml4.5 Error ellipse: s-maj=6.7km s-min=3.0km az=130.0*
*NNC **07** 17:17:24.5±1.0, 41˚.46N×72˚.74E, h0km, mb5.1, mpv4.7, Error ellipse: s-maj=8.6km s-min=4.2km az=4.0*
*NEIC **07** 17:17:25.2, 41˚.26N×72˚.56E, h44km*

**ISC 07 17:17:21.7±0.6, 41˚.32N±0˚.02×72˚.61E±0˚.01, h13km±3km, n691, σ1$^s$85/763, mb4.7/184, MS4.2/66, 72C-51D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARSB** | **Arslanbob** | **0.28** | **90** | ⇓*i*P | | **Pb** | **17 17 27.2** | **-1.5** |
| | baz=98 | | | | | | | |
| ARSB | | | | ⇓*i*S | | **Sb** | **17 17 31.4** | **-2.0** |
| | baz=98 | | | | | | | |
| **ARK** | **Arkit** | **0.68** | **315** | ⇓*e*P | | **Pb** | **17 17 33.9** | **-1.5** |
| | baz=13 | | | | | | | |
| ARK | | | | ⇓*e*S | | **Sb** | **17 17 42.9** | **-1.8** |
| | baz=13 | | | | | | | |
| **NAM** | **Namangan** | **0.79** | **245** | P | | **Pb** | **17 17 35.8** | **-1.4** |
| NAM | | | | S | | **Sb** | **17 17 48.2** | **+0.4** |
| **KSNS** | **Kasansay** | **0.83** | **259** | P | | **Pb** | **17 17 36.7** | **-1.3** |
| KSNS | | | | S | | **Sb** | **17 17 49.7** | **+0.5** |
| **TRKS** | **Terek-Say** | **1.12** | **281** | ⇑*e*P | | **Pn** | **17 17 41.7** | **-1.5** |
| | baz=76 | | | | | | | |
| TRKS | | | | ⇑*e*S | | **Sb** | **17 17 56.7** | **-0.9** |
| | baz=76 | | | | | | | |
| **FRG** | **Fergana** | **1.14** | **214** | P | | **Pn** | **17 17 41.7** | **-1.5** |
| FRG | | | | S | | **Sn** | **17 17 58.5** | **-0.2** |
| **AML** | **Almayashu** | **1.15** | **45** | ⇑P | | **Pn** | **17 17 42.9** | **-0.8** |
| | 1μm,0.2s,SNR=262 | | | | | | | |
| AML | | | | ⇑S | | **Sb** | **17 17 58.0** | **-0.5** |
| | 14μm,0.5s | | | | | | | |
| **AML** | **Almayashu** | **1.15** | **45** | ⇑*i*P | | **Pn** | **17 17 42.1** | **-1.6** |
| | baz=46 | | | | | | | |
| AML | | | | ⇑*i*S | | **Sb** | **17 17 57.3** | **-1.2** |
| | baz=46 | | | | | | | |
| **AML** | **Almayashu** | **1.15** | **45** | ⇓*i*PG | | **Pn** | **17 17 42.9** | **-0.8** |
| AML | | | | *i* S | | **Sb** | **17 17 58.2** | **-0.3** |
| **MNAS** | **Manas** | **1.17** | **356** | ⇓*i*P | | **Pn** | **17 17 42.3** | **-1.5** |
| | baz=56 | | | | | | | |
| MNAS | | | | ⇓*i*S | | **Sb** | **17 17 57.5** | **-1.3** |
| | baz=56 | | | | | | | |
| **MNAS** | **Manas** | **1.17** | **356** | *i* PG | | **Pn** | **17 17 42.9** | **-0.9** |
| MNAS | | | | *i* S | | **Sb** | **17 17 58.1** | **-0.7** |
| **ARLS** | **Aral** | **1.40** | **67** | ⇓*i*P | | **Pn** | **17 17 46.8** | **-0.1** |
| | baz=69 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sn** | **17 18 05.3** | **0.0** |
| | baz=69 | | | | | | | |
| **ARLS** | **Aral** | **1.40** | **67** | ⇓*i*PG | | **Pn** | **17 17 47.1** | **+0.2** |
| ARLS | | | | *i* S | | **Sb** | **17 18 05.6** | **+0.2** |
| **CHDK** | **Chadak** | **1.44** | **257** | P | | **Pn** | **17 17 47.3** | **-0.2** |
| CHDK | | | | S | | **Sb** | **17 18 08.2** | **+1.5** |
| **SFK** | **Sufi-Kurgan** | **1.48** | **152** | ⇓*i*P | | **Pb** | **17 17 48.9** | **-0.2** |
| | baz=53 | | | | | | | |
| SFK | | | | ⇓*i*S | | **Sg** | **17 18 09.2** | **0.0** |
| | baz=53 | | | | | | | |
| **MRKS** | **Merke** | **1.49** | **18** | *e*P | | **Pn** | **17 17 48.8** | **+0.6** |
| | 421nm,0.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sb** | **17 18 08.8** | **+0.6** |
| | 6μm,0.4s | | | | | | | |
| **MRKS** | **Merke** | **1.49** | **18** | P | | **Pn** | **17 17 48.8** | **+0.6** |
| | 421nm,0.3s | | | | | | | |
| MRKS | | | | S | | **Sb** | **17 18 08.8** | **+0.6** |
| | 6μm,0.4s | | | | | | | |
| **MINT** | **Mingtut** | **1.50** | **236** | P | | **Pn** | **17 17 48.3** | **0.0** |
| MINT | | | | S | | **Sb** | **17 18 10.1** | **+1.7** |
| **EKS2** | **Erkin-Say** | **1.60** | **33** | ⇑P | | **Pb** | **17 17 50.9** | **-0.1** |
| | 285nm,0.3s,SNR=101 | | | | | | | |
| EKS2 | | | | ⇓S | | **Sb** | **17 18 11.7** | **+0.5** |
| | 2μm,0.3s | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.60** | **33** | ⇑*i*P | | **Pn** | **17 17 49.8** | **+0.1** |
| | baz=33 | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sn** | **17 18 10.8** | **+0.6** |
| | baz=33 | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.60** | **33** | ⇓*i*PN | | **Pn** | **17 17 50.2** | **+0.5** |
| EKS2 | | | | *i* S | | **Sb** | **17 18 11.0** | **-0.2** |
| **UCH** | **Uchtor** | **1.69** | **57** | ⇑P | | **Pb** | **17 17 52.7** | **-0.1** |
| | 48nm,0.1s,SNR=106 | | | | | | | |
| **UCH** | **Uchtor** | **1.69** | **57** | *i* P | | **Pn** | **17 17 51.9** | **+0.7** |
| | baz=58 | | | | | | | |
| UCH | | | | *i* S | | **Sb** | **17 18 14.2** | **+0.1** |
| | baz=58 | | | | | | | |
| **UCH** | **Uchtor** | **1.69** | **57** | *i* PN | | **Pn** | **17 17 52.2** | **+1.0** |
| UCH | | | | *i* S | | **Sb** | **17 18 14.3** | **+0.1** |
| **BTK** | **Batken** | **1.86** | **228** | Pn | | **Pb** | **17 17 54.9** | **-0.6** |
| **BTK** | **Batken** | **1.86** | **228** | ⇑*i*P | | **Pb** | **17 17 55.2** | **-0.3** |
| | baz=27 | | | | | | | |
| BTK | | | | ⇑*i*S | | **Sb** | **17 18 19.9** | **+1.3** |
| | baz=27 | | | | | | | |
| **BTK** | **Batken** | **1.86** | **228** | PN | | **Pb** | **17 17 54.9** | **-0.6** |
| **AAK** | **Ala-Archa** | **1.93** | **46** | ⇓P | | **Pb** | **17 17 56.7** | **+0.1** |
| | 1μm,0.5s,SNR=575 | | | | | | | |
| AAK | | | | ⇓S | | **Sb** | **17 18 21.6** | **+1.0** |
| | 2μm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **1.93** | **46** | | | **Pb** | **17 17 56.8** | **+0.1** |
| **AAK** | **Ala-Archa** | **1.93** | **46** | P | | **Pb** | **17 17 56.7** | **+0.1** |
| **AAK** | **Ala-Archa** | **1.93** | **46** | Pn | | **Pb** | **17 17 57.0** | **+0.3** |
| | 250nm,0.3s,baz=202,slow=5.3,SNR=269 | | | | | | | |
| AAK | | | | Sn | | **Sb** | **17 18 21.6** | **+1.0** |
| | 377nm,0.3s,baz=357,slow=23,SNR=18 | | | | | | | |
| AAK | | | | LR | | LR | 17 18 54.5 | |
| | comp=Z,4μm,18.2s,baz=198,slow=48 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.93** | **46** | P | | **Pb** | **17 17 57.1** | **+0.3** |
| AAK | | | | S | | **Sb** | **17 18 22.9** | **+2.2** |
| **AAK** | **Ala-Archa** | **1.93** | **46** | ⇑P | | **Pb** | **17 17 56.8** | **+0.1** |
| | 588nm,0.5s | | | | | | | |
| AAK | | | | ⇓S | | **Sb** | **17 18 22.3** | **+1.6** |
| | 1μm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | **1.93** | **46** | ⇑*i*P | | **Pn** | **17 17 55.6** | **+1.4** |
| | baz=47 | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sb** | **17 18 20.5** | **-0.2** |
| | baz=47 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.93** | **46** | PN | | **Pb** | **17 17 57.0** | **+0.3** |
| **DRK** | **Karamyk** | **1.94** | **199** | | | **Pb** | **17 17 56.6** | **-0.4** |
| **DRK** | **Karamyk** | **1.94** | **199** | PN | | **Pb** | **17 17 56.6** | **-0.4** |
| **CHMG** | **Chimgan** | **1.96** | **277** | P | | **Pn** | **17 17 56.2** | **+1.4** |
| CHMG | | | | S | | **Sb** | **17 18 23.7** | **+1.9** |
| **FRU1** | **Bishkek** | **2.12** | **45** | | | **Pb** | **17 18 00.7** | **+0.8** |
| **FRU1** | **Bishkek** | **2.12** | **45** | ⇑*i*P | | **Pn** | **17 17 58.2** | **+1.4** |
| | baz=45 | | | | | | | |
| FRU1 | | | | ⇑*i*S | | **Sb** | **17 18 25.1** | **-1.0** |
| | baz=45 | | | | | | | |
| **FRU1** | **Bishkek** | **2.12** | **45** | PN | | **Pb** | **17 18 00.7** | **+0.8** |
| **KBK** | **Karagaybulak** | **2.20** | **52** | ⇑P | | **Pb** | **17 18 01.8** | **+0.5** |
| | 383nm,0.1s,SNR=498 | | | | | | | |
| KBK | | | | ⇑S | | **Sb** | **17 18 29.9** | **+1.4** |
| | 4μm,0.3s | | | | | | | |
| **KBK** | **Karagaybulak** | **2.20** | **52** | ⇑*i*P | | **Pn** | **17 17 59.4** | **+1.4** |
| | baz=53 | | | | | | | |
| KBK | | | | ⇑*i*S | | **Sb** | **17 18 27.0** | **-1.5** |
| | baz=53 | | | | | | | |
| **KBK** | **Karagaybulak** | **2.20** | **52** | *i* PN | | **Pn** | **17 17 59.0** | **+1.0** |
| KBK | | | | *i* S | | **Sn** | **17 18 26.2** | **+1.1** |
| **CHMS** | **Chumysh** | **2.31** | **43** | ⇑P | | **Pb** | **17 18 02.7** | **-0.5** |
| | 536nm,0.3s,SNR=439 | | | | | | | |
| CHMS | | | | ⇓S | | **Sb** | **17 18 33.4** | **+1.7** |
| | 3μm,0.4s | | | | | | | |
| **CHMS** | **Chumysh** | **2.31** | **43** | ⇓*i*P | | **Pn** | **17 18 00.6** | **+1.1** |
| | baz=44 | | | | | | | |
| CHMS | | | | ⇓*i*S | | **Sn** | **17 18 29.6** | **+1.9** |
| | baz=44 | | | | | | | |
| **CHMS** | **Chumysh** | **2.31** | **43** | ⇓*i*PN | | **Pn** | **17 18 00.5** | **+1.1** |
| CHMS | | | | *i* S | | **Sn** | **17 18 28.6** | **+0.9** |
| **TGS** | **TashGRES** | **2.33** | **273** | P | | **Pb** | **17 18 03.5** | **+0.1** |
| TGS | | | | S | | **Sg** | **17 18 37.7** | **+1.3** |
| **KK31** | **Karatay Array** | **2.36** | **320** | | | **Pb** | **17 18 02.8** | **-1.3** |
| KK31 | | | | Sn | | **Sb** | **17 18 32.4** | **-0.7** |
| **KK31** | **Karatay Array** | **2.36** | **320** | ⇓Pn | | **Pb** | **17 18 02.9** | **-1.2** |
| | 399nm,0.4s,baz=128,slow=12,SNR=2648 | | | | | | | |
| KK31 | | | | ⇑Sn | | **Sb** | **17 18 35.4** | **+2.3** |
| | 2μm,0.3s,baz=146,slow=16,SNR=16 | | | | | | | |
| **KK31** | **Karatay Array** | **2.36** | **320** | *e*PN | | **Pb** | **17 18 02.9** | **-1.2** |
| KK31 | | | | | | | 17 18 35.3 | |
| **KKAR** | **Karatay Array** | **2.36** | **320** | | | **Pn** | **17 18 02.5** | **+2.4** |
| **KKAR** | **Karatay Array** | **2.36** | **320** | | | **Pn** | **17 18 02.7** | **+2.6** |
| KKAR | | | | | | **Sb** | **17 18 33.6** | **+0.4** |
| **KKAR** | **Karatay Array** | **2.36** | **320** | ⇓*i*P | | **Pn** | **17 18 01.4** | **+1.3** |
| | baz=19 | | | | | | | |
| KKAR | | | | ⇓*i*S | | **Sn** | **17 18 30.8** | **+1.8** |
| | baz=19 | | | | | | | |
| **KKAR** | **Karatay Array** | **2.36** | **320** | PN | | **Pn** | **17 18 02.7** | **+2.6** |
| KKAR | | | | | | | 17 18 33.6 | |
| **USP** | **Ospenovka** | **2.40** | **35** | ⇑P | | **Pb** | **17 18 03.8** | **-0.8** |
| | 348nm,0.2s,SNR=557 | | | | | | | |
| USP | | | | ⇑S | | **Sb** | **17 18 36.2** | **+2.1** |
| | 7μm,0.6s | | | | | | | |
| **USP** | **Ospenovka** | **2.40** | **35** | ⇑*i*P | | **Pn** | **17 18 02.0** | **+1.4** |
| | baz=36 | | | | | | | |
| USP | | | | ⇑*i*S | | **Sn** | **17 18 31.5** | **+1.7** |
| | baz=36 | | | | | | | |
| **USP** | **Ospenovka** | **2.40** | **35** | *i* PN | | **Pn** | **17 18 01.7** | **+1.1** |
| USP | | | | *i* S | | **Sn** | **17 18 30.6** | **+0.8** |
| **CHM** | **Chimkent** | **2.46** | **295** | *e*P | | **Pb** | **17 18 08.2** | **+2.6** |
| | 312nm,0.4s | | | | | | | |
| CHM | | | | *e*S | | **Sg** | **17 18 41.4** | **+0.9** |
| | 7μm,0.4s | | | | | | | |
| **TAS** | **Tashkent** | **2.49** | **271** | P | | **Pn** | **17 18 04.1** | **+2.2** |
| TAS | | | | S | | **Sb** | **17 18 38.7** | **+1.8** |
| **KUMR** | **Kumaryk** | **2.52** | **269** | P | | **Pn** | **17 18 04.5** | **+2.2** |
| KUMR | | | | S | | **Sb** | **17 18 39.5** | **+1.8** |
| **NRN** | **Naryn** | **2.56** | **86** | Pn | | **Pn** | **17 18 04.2** | **+1.2** |
| **NRN** | **Naryn** | **2.56** | **86** | ⇓*i*P | | **Pn** | **17 18 04.5** | **+1.4** |
| | baz=88 | | | | | | | |
| NRN | | | | ⇓*i*S | | **Sn** | **17 18 36.0** | **+1.8** |
| | baz=88 | | | | | | | |
| **NRN** | **Naryn** | **2.56** | **86** | *i* PN | | **Pn** | **17 18 04.2** | **+1.2** |
| NRN | | | | *i* S | | **Sn** | **17 18 34.8** | **+0.6** |
| **SGDS** | **Sogindy** | **2.60** | **34** | *e*Pn | | **Pb** | **17 18 06.8** | **-1.4** |
| | baz=34 | | | | | | | |
| SGDS | | | | *e*Pg | | **Pg** | **17 18 11.5** | **0.0** |
| | baz=34 | | | | | | | |
| **SGDS** | **Sogindy** | **2.60** | **34** | Pg | | **Pb** | **17 18 06.6** | **-1.6** |
| | 150nm,0.5s | | | | | | | |
| SGDS | | | | Lg | | Lg | 17 18 40.1 | |
| | 1μm,0.5s | | | | | | | |
| **SGDS** | **Sogindy** | **2.60** | **34** | *e*PN | | **Pb** | **17 18 06.8** | **-1.4** |
| SGDS | | | | *e* | | | 17 18 11.5 | |
| **BRLS** | **Borolday** | **2.67** | **311** | *e*Pn | | **Pn** | **17 18 05.9** | **+1.4** |
| | baz=305 | | | | | | | |
| BRLS | | | | *e*Pg | | **Pb** | **17 18 11.0** | **+1.6** |
| | baz=305 | | | | | | | |
| BRLS | | | | *e*Lg | | Lg | 17 18 46.0 | |
| | baz=305 | | | | | | | |
| **BRLS** | **Borolday** | **2.67** | **311** | *e*P | | **Pb** | **17 18 10.1** | **+0.7** |
| | 1μm,0.4s | | | | | | | |
| BRLS | | | | *e*S | | **Sb** | **17 18 45.1** | **+3.0** |
| | 3μm,0.3s | | | | | | | |
| **BRLS** | **Borolday** | **2.67** | **311** | *e*PN | | **Pn** | **17 18 05.8** | **+1.4** |
| BRLS | | | | *e* | | | 17 18 11.0 | |
| BRLS | | | | *e* | | | 17 18 46.0 | |
| **YNGY** | **Yangiyul** | **2.70** | **267** | P | | **Pn** | **17 18 07.0** | **+2.2** |
| YNGY | | | | S | | **Sb** | **17 18 44.3** | **+1.4** |
| **TKM2** | **Tokmak 2** | **2.74** | **53** | ⇑P | | **Pb** | **17 18 09.0** | **-1.6** |
| | 1μm,0.5s,SNR=448 | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.74** | **53** | ⇑Pn | | **Pb** | **17 18 09.3** | **-1.3** |
| | 1μm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 17 18 46.6 | |
| | 1μm,0.5s | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.74** | **53** | ⇑*i*P | | **Pn** | **17 18 06.9** | **+1.4** |
| | baz=54 | | | | | | | |
| TKM2 | | | | ⇑*i*S | | **Sn** | **17 18 40.2** | **+1.7** |
| | baz=54 | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.74** | **53** | *i* PN | | **Pb** | **17 18 08.5** | **-2.1** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.75** | **64** | Pn | | **Pb** | **17 18 08.6** | **-2.1** |
| **BOOM** | **Boomskoye usch** | **2.75** | **64** | ⇑*i*P | | **Pn** | **17 18 07.3** | **+1.7** |
| | baz=64 | | | | | | | |
| BOOM | | | | ⇑*i*S | | **Sn** | **17 18 40.6** | **+1.9** |
| | baz=64 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.75** | **64** | PN | | **Pb** | **17 18 08.6** | **-2.1** |
| **ULHL** | **Ulahol** | **2.87** | **70** | ⇑P | | **Pn** | **17 18 10.2** | **+2.9** |
| | comp=Z,142nm,0.2s,SNR=30 | | | | | | | |
| **ULHL** | **Ulahol** | **2.87** | **70** | ⇓*i*P | | **Pn** | **17 18 09.0** | **+1.7** |
| | baz=71 | | | | | | | |
| ULHL | | | | ⇓*i*S | | **Sn** | **17 18 43.6** | **+1.8** |
| | baz=71 | | | | | | | |
| **ULHL** | **Ulahol** | **2.87** | **70** | *i* PN | | **Pn** | **17 18 08.6** | **+1.3** |
| ULHL | | | | *i* S | | **Sn** | **17 18 42.7** | **+0.9** |
| **GAR** | **Garm** | **2.91** | **218** | Pn | | **Pn** | **17 18 10.2** | **+2.5** |
| **GAR** | **Garm** | **2.91** | **218** | ⇓*i*P | | **Pn** | **17 18 09.9** | **+2.2** |
| | baz=17 | | | | | | | |
| GAR | | | | ⇓*i*S | | **Sn** | **17 18 45.5** | **+2.9** |
| | baz=17 | | | | | | | |
| **KST** | **Kastek** | **3.03** | **54** | *e*P | | **Pb** | **17 18 16.7** | **+1.3** |
| | comp=Z,319nm,0.8s | | | | | | | |
| KST | | | | *e*S | | **Sg** | **17 18 56.4** | **-2.5** |
| | comp=Z,2μm,0.8s | | | | | | | |
| **KST** | **Kastek** | **3.03** | **54** | Pg | | **Pb** | **17 18 17.2** | **+1.7** |
| | comp=Z,323nm,0.6s | | | | | | | |
| KST | | | | Lg | | Lg | 17 18 56.4 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **DGS** | **Degeres** | **3.03** | **50** | *e*P | | **Pb** | **17 18 16.8** | **+1.3** |
| | comp=Z,648nm,0.6s | | | | | | | |
| DGS | | | | *e*S | | **Sb** | **17 18 56.2** | **+3.8** |
| | comp=Z,2μm,0.7s | | | | | | | |
| **DGS** | **Degeres** | **3.03** | **50** | Pg | | **Pb** | **17 18 16.8** | **+1.3** |
| | comp=Z,644nm,0.5s | | | | | | | |
| DGS | | | | Lg | | Lg | 17 18 55.9 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **KSH** | **Kashi** | **3.14** | **124** | Pn | | **Pn** | **17 18 13.4** | **+2.5** |
| KSH | | | | Sn | | **Sb** | **17 18 52.9** | **-2.7** |
| KSH | | | | smax | | smax | | |
| | comp=Z,2μm,0.7s | | | | | | | |
| KSH | | | | smax | | smax | | |
| | comp=Z,1μm,0.7s | | | | | | | |
| **KRBS** | **Karabastau** | **3.28** | **43** | *e*P | | **Pb** | **17 18 20.8** | **+1.1** |
| | comp=Z,106nm,0.5s | | | | | | | |
| KRBS | | | | *e*S | | **Sb** | **17 19 03.5** | **+3.8** |
| | comp=Z,700nm,0.6s | | | | | | | |
| **KRBS** | **Karabastau** | **3.28** | **43** | Pg | | **Pb** | **17 18 21.3** | **+1.5** |
| | comp=Z,111nm,0.5s | | | | | | | |
| KRBS | | | | Lg | | Lg | 17 19 03.5 | |
| | comp=Z,700nm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | **3.36** | **56** | *e*P | | **Pb** | **17 18 22.3** | **+1.1** |
| | comp=Z,167nm,0.7s | | | | | | | |
| MTBS | | | | *e*S | | **Sb** | **17 19 05.9** | **+3.9** |
| | comp=Z,1μm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | **3.36** | **56** | Pg | | **Pb** | **17 18 22.0** | **+0.9** |
| | comp=Z,168nm,0.8s | | | | | | | |
| MTBS | | | | Lg | | Lg | 17 19 05.9 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| **KDJ** | **Kajisay** | **3.52** | **75** | ⇑*i*P | | **Pn** | **17 18 18.0** | **+1.9** |
| | baz=76 | | | | | | | |
| KDJ | | | | ⇑*i*S | | **Sn** | **17 18 59.5** | **+1.8** |
| | baz=76 | | | | | | | |
| **KDJ** | **Kajisay** | **3.52** | **75** | ⇓*i*PN | | **Pn** | **17 18 17.8** | **+1.7** |
| KDJ | | | | *i* S | | **Sn** | **17 18 58.4** | **+0.7** |
| **TNSS** | **Tian-Shan** | **3.65** | **61** | *e*Pn | | **Pn** | **17 18 22.3** | **+4.1** |
| | baz=60 | | | | | | | |
| TNSS | | | | *e*Pg | | **Pg** | **17 18 30.3** | **-1.3** |
| | baz=60 | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.65** | **61** | *e*P | | **Pb** | **17 18 27.9** | **+1.6** |
| | comp=Z,80nm,0.4s | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **17 19 15.7** | **-3.3** |
| | comp=Z,382nm,0.4s | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.65** | **61** | Pg | | **Pb** | **17 18 27.3** | **+1.0** |
| | comp=Z,80nm,0.4s | | | | | | | |
| TNSS | | | | Lg | | Lg | 17 19 15.7 | |
| | comp=Z,263nm,0.5s | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.65** | **61** | *e*PN | | **Pn** | **17 18 22.3** | **+4.1** |
| TNSS | | | | *e* | | | 17 18 30.3 | |
| **AAA** | **Alma-Ata** | **3.71** | **58** | *e*Pn | | **Pn** | **17 18 23.0** | **+4.3** |
| | baz=58 | | | | | | | |
| AAA | | | | *e*Pg | | **Pg** | **17 18 31.2** | **-1.6** |
| | baz=58 | | | | | | | |
| **AAA** | **Alma-Ata** | **3.71** | **58** | *e*P | | **Pb** | **17 18 29.4** | **+2.3** |
| | comp=Z,157nm,0.3s | | | | | | | |
| AAA | | | | *e*S | | **Sg** | **17 19 17.7** | **-3.1** |
| | comp=Z,2μm,0.7s | | | | | | | |
| **AAA** | **Alma-Ata** | **3.71** | **58** | Pg | | **Pb** | **17 18 29.4** | **+2.3** |
| | comp=Z,160nm,0.5s | | | | | | | |
| AAA | | | | Lg | | Lg | 17 19 17.7 | |
| | comp=Z,2μm,0.7s | | | | | | | |
| **AAA** | **Alma-Ata** | **3.71** | **58** | *e*PN | | **Pn** | **17 18 23.0** | **+4.3** |
| AAA | | | | *e* | | | 17 18 31.2 | |
| **KNDC** | **Almaty** | **3.75** | **58** | ⇑Pn | | **Pn** | **17 18 22.9** | **+3.6** |
| | comp=Z,2μm,0.9s | | | | | | | |
| KNDC | | | | ⇑Lg | | Lg | 17 19 19.0 | |
| | comp=Z,4μm,1.1s | | | | | | | |
| **KNDC** | **Almaty** | **3.75** | **58** | PN | | **Pn** | **17 18 22.8** | **+3.6** |
| KNDC | | | | | | | 17 19 19.0 | |
| **CHGR** | **Chuyangaron** | **3.76** | **226** | Pn | | **Pn** | **17 18 21.8** | **+2.4** |
| **CHGR** | **Chuyangaron** | **3.76** | **226** | ⇑*i*P | | **Pn** | **17 18 21.7** | **+2.4** |
| | baz=26 | | | | | | | |
| CHGR | | | | ⇑*i*S | | **Sn** | **17 19 05.5** | **+2.1** |
| | baz=26 | | | | | | | |
| **CHGR** | **Chuyangaron** | **3.76** | **226** | PN | | **Pn** | **17 18 21.8** | **+2.4** |
| **KUU** | **Kurty** | **3.77** | **46** | *e*P | | **Pb** | **17 18 29.2** | **+1.2** |
| | comp=Z,3.0nm,0.1s | | | | | | | |
| KUU | | | | *e*S | | **Sb** | **17 19 17.4** | **+3.9** |
| | comp=Z,2μm,0.6s | | | | | | | |
| **KUU** | **Kurty** | **3.77** | **46** | Pg | | **Pb** | **17 18 29.5** | **+1.5** |
| | comp=Z,56nm,0.4s | | | | | | | |
| KUU | | | | Lg | | Lg | 17 19 17.4 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **3.77** | **59** | *e*Pn | | **Pn** | **17 18 23.4** | **+3.8** |
| | baz=59 | | | | | | | |
| MDOK | | | | *e*Pg | | **Pg** | **17 18 32.6** | **-1.3** |

baz=66
SATY eLg Lg 17 19 51.4
baz=66
**SATY Saty 4.64 66** *e*P **Pb 17 18 46.1 +3.1**
comp=Z,36nm,0.3s
SATY eS **Sg 17 19 47.0 -3.8**
comp=Z,636nm,0.6s
**SATY Saty 4.64 66** Pg **Pb 17 18 45.9 +2.9**
comp=Z,36nm,0.4s
SATY Lg Lg 17 19 44.8
comp=Z,381nm,0.5s
**SATY Saty 4.64 66** *e*PN Pn 17 18 36.7 +5.1
SATY *e* 17 18 48.4
**KURS Kuram 4.65 60** *e*P **Pb 17 18 46.1 +3.0**
comp=Z,70nm,0.6s
KURS eS **Sg 17 19 47.0 -3.9**
comp=Z,318nm,0.7s
**KURS Kuram 4.65 60** Pg **Pb 17 18 46.1 +3.0**
comp=Z,70nm,0.6s
KURS Lg Lg 17 19 46.0
comp=Z,302nm,0.5s
**ZHN Zhinishke 4.70 65** *e*Pn **Pn 17 18 34.7 +2.3**
baz=65
ZHN *e*Pg **Pg 17 18 49.4 -2.3**
baz=65
**ZHN Zhinishke 4.70 65** *e*P **Pb 17 18 46.9 +2.9**
comp=Z,43nm,0.6s
ZHN eS **Sg 17 19 47.8 -4.9**
comp=Z,252nm,0.4s
**ZHN Zhinishke 4.70 65** Pg **Pb 17 18 46.9 +2.9**
comp=Z,41nm,0.7s
ZHN Lg Lg 17 19 47.7
comp=Z,252nm,0.4s
**ZHN Zhinishke 4.70 65** *e*PN **Pn 17 18 34.7 +2.3**
ZHN *e* 17 18 49.3
**AGL Agalyk 4.73 249** P **Pn 17 18 36.0 +3.3**
AGL S **Sb 17 19 40.7 -0.5**
**ARXS Arharly 4.81 51** *e*P **Pb 17 18 48.0 +2.3**
comp=Z,39nm,0.5s
ARXS eS **Sb 17 19 49.7 +6.2**
comp=Z,479nm,0.6s
**ARXS Arharly 4.81 51** Pg **Pb 17 18 48.0 +2.3**
comp=Z,39nm,0.5s
ARXS Lg Lg 17 19 49.7
comp=Z,479nm,0.6s
**ARXS Arharly 4.81 51** *e*PN **Pb 17 18 44.9 -0.8**
**KTAB Kitab 4.89 245** P **Pn 17 18 38.4 +3.5**
KTAB S **Sb 17 19 45.3 -0.7**
**KPKS Kokpek 4.98 63** *e*Pn **Pn 17 18 39.2 +2.9**
baz=62
KPKS *e*Pg **Pg 17 18 53.9 -3.2**
baz=62
**KPKS Kokpek 4.98 63** *e*P **Pb 17 18 52.2 +3.5**
comp=Z,70nm,0.6s
KPKS eS **Sg 17 19 56.6 -5.0**
comp=Z,852nm,0.7s
**KPKS Kokpek 4.98 63** Pg **Pb 17 18 52.3 +3.5**
comp=Z,70nm,0.6s
KPKS Lg Lg 17 19 56.6
comp=Z,852nm,0.7s
**KPKS Kokpek 4.98 63** *e*PN **Pn 17 18 39.1 +2.9**
KPKS *e* 17 18 53.8
**UZB Uzynbulak 5.10 67** *e*Pn **Pn 17 18 41.3 +3.5**
baz=67
UZB *e*Pg **Pg 17 18 56.3 -3.0**
baz=67
**UZB Uzynbulak 5.10 67** *e*P **Pb 17 18 54.1 +3.3**
comp=Z,32nm,0.5s
UZB eS **Sg 17 20 00.1 -5.2**
comp=Z,142nm,0.6s
**UZB Uzynbulak 5.10 67** Pg **Pb 17 18 54.1 +3.3**
comp=Z,32nm,0.5s
UZB Lg Lg 17 20 00.1
comp=Z,142nm,0.6s
**UZB Uzynbulak 5.10 67** *e*PN **Pn 17 18 41.3 +3.5**
UZB *e* 17 18 56.3
**BLB Baldybastay 5.14 55** Pg **Pb 17 18 55.1 +3.7**
comp=Z,371nm,0.5s
BLB Lg Lg 17 20 01.9
comp=Z,767nm,0.4s
**BAYS Baysun 5.20 235** P **Pn 17 18 42.7 +3.6**
BAYS S **Sb 17 19 53.1 -1.6**
**NUT Nurota 5.30 264** P **Pn 17 18 44.1 +3.6**
NUT S **Sb 17 19 55.9 -1.8**
**SHLS Shalkode 5.41 68** *e*Pn **Pb 17 18 52.1 -4.0**
baz=69
SHLS *e*Pg **Pg 17 19 07.8 +2.6**
baz=69
**SHLS Shalkode 5.41 68** *e*P **Pg 17 19 05.6 +0.4**
comp=Z,46nm,0.7s
SHLS eS **Sg 17 20 19.7 +4.5**
comp=Z,311nm,0.6s
**SHLS Shalkode 5.41 68** Pg **Pg 17 19 05.6 +0.4**
comp=Z,46nm,0.7s
SHLS Lg Lg 17 20 19.7
comp=Z,312nm,0.6s
**SHLS Shalkode 5.41 68** *e*PN **Pb 17 18 52.0 -4.0**
SHLS *e* 17 19 07.8
**PDGK Podgornoye 5.48 66** Pg **Pb 17 19 01.0 +3.7**
comp=Z,19nm,0.5s
PDGK Lg Lg 17 20 12.1
comp=Z,213nm,0.6s
**PDGK Podgornoye 5.48 66** ⇑Pn **Pn 17 18 46.7 +3.5**
comp=Z,5.4nm,0.6s
PDGK ⇓Pg **Pg 17 19 08.8 +2.2**
comp=Z,108nm,0.7s
PDGK ⇑Lg Lg 17 20 12.1
comp=Z,533nm,0.8s
**PDGK Podgornoye 5.48 66** PN **Pn 17 18 46.6 +3.5**
PDGK 17 18 58.6
PDGK 17 20 10.7
**PKMR Pachkamar 5.53 242** P **Pn 17 18 47.4 +3.8**
PKMR S **Sb 17 20 02.2 -2.0**
**TDK Taldyqorghan 5.61 47** *e*Pn **Pn 17 18 48.0 +3.2**
baz=47
TDK *e*Pg **Pg 17 19 06.1 -3.0**
baz=47
**TDK Taldyqorghan 5.61 47** *e*PN **Pn 17 18 47.9 +3.2**
TDK *e* 17 19 06.1
**KNOS Konyrlen 5.71 56** Pg **Pb 17 19 05.4 +4.3**
comp=Z,1.1nm,0.6s
KNOS Lg Lg 17 20 19.1
comp=Z,1.5nm,0.2s
**ZRB Zarabog 5.84 239** P **Pn 17 18 50.8 +2.8**
ZRB S **Sb 17 20 08.5 -4.8**
**DJR Jarkent 6.08 58** *e*P **Pb 17 19 11.8 +4.4**
comp=Z,32nm,0.7s
DJR eS **Sg 17 20 30.1 -6.5**
comp=Z,107nm,0.5s
**DJR Jarkent 6.08 58** Pg **Pb 17 19 11.8 +4.4**
comp=Z,32nm,0.7s
DJR Lg Lg 17 20 30.1
comp=Z,107nm,0.5s
**OTUK Ortayu 6.92 359** Pg Pb 17 19 27.4 +5.6
comp=Z,19nm,0.6s
OTUK Lg Lg 17 20 57.6
comp=Z,224nm,0.6s
**OTUK Ortayu 6.92 359** ⇓Pn **Pn 17 19 03.8 +1.0**
comp=Z,58nm,0.7s
OTUK ⇑Lg Lg 17 20 58.7
comp=Z,769nm,0.7s
**OTUK Ortayu 6.92 359** PN **Pn 17 19 04.2 +1.4**
**KBL Kabul 7.33 204** Pn **Pn 17 19 10.4 +1.8**
**KBL Kabul 7.33 204** P **Pn 17 19 10.9 +2.3**
SNR=13
KBL S **Sn 17 20 35.2 +3.4**
**KBL Kabul 7.33 204** P **Pn 17 19 10.4 +1.8**
**NIL Nilore 7.68 176** Pn **Pn 17 19 15.0 +1.9**
**NIL Nilore 7.68 176** P **Pn 17 19 15.9 +2.8**
**NIL Nilore 7.68 176** P **Pn 17 19 15.0 +1.9**
**MAKZ Makanchi 8.69 48** Pn **Pn 17 19 29.7 +2.7**
**MAKZ Makanchi 8.69 48** P **Pn 17 19 29.7 +2.7**
**MK31 Makanchi Array 8.86 49** Pn **Pn 17 19 31.4 +2.1**
**MK31 Makanchi Array 8.86 49** ⇑Pn **Pn 17 19 31.1 +1.8**
comp=Z,15nm,0.6s,baz=232,slow=13,SNR=154
MK31 ⇑Lg Lg 17 21 59.7
comp=Z,114nm,0.8s,baz=232,slow=27,SNR=2.6
**MK31 Makanchi Array 8.86 49***c* iP **Pn 17 19 31.7 +2.4**
**MKAR Makanchi Array 8.86 49** Pn **Pn 17 19 31.5 +2.2**
**MKAR Makanchi Array 8.86 49** Pn **Pn 17 19 31.7 +2.4**
comp=Z,1.6nm,0.3s,baz=236,slow=14,SNR=68
MKAR Lg Lg 17 22 02.5
comp=Z,3.5nm,0.3s,baz=241,slow=28,SNR=4.1
comp=Z,6.6nm,0.5s
**MKAR Makanchi Array 8.86 49** P **Pn 17 19 31.5 +2.2**
**KURBB Kurchatov Arra 10.17 22** Pn **Pn 17 19 46.7 -0.5**
comp=Z,0.4nm,0.3s,baz=208,slow=12,SNR=37
KURBB Lg Lg 17 22 43.4
comp=Z,2.3nm,0.3s,baz=209,slow=30,SNR=6.2
comp=Z,6.3nm,0.7s
**KURK Kurchatov 10.28 22** Pn **Pn 17 19 48.3 -0.4**
**KURK Kurchatov 10.28 22***c* iP **Pn 17 19 48.4 -0.3**
KURK pmax pmax
comp=Z,9.0nm,1.0s
**HRA Herat 10.72 233** Pn **Pn 17 19 53.5 -1.5**
**BVA0 Borovoye Array 11.80 353** Pn **Pn 17 20 06.9 -2.7**
comp=Z,13nm,0.8s,baz=197,slow=38,SNR=96
BVA0 ⇑Sn Sn 17 22 32.7 +12
comp=Z,72nm,0.8s,baz=166,slow=24,SNR=3.6
BVA0 ⇑Lg Lg 17 23 29.3
comp=Z,195nm,0.9s,baz=170,slow=29,SNR=4.2
**BVA0 Borovoye Array 11.80 353** P **Pn 17 20 06.8 -2.7**
**BRVK Borovoye 11.85 353** Pn **Pn 17 20 09.7 -0.4**
**BRVK Borovoye 11.85 353***ce*P **Pn 17 20 12.3 +2.2**
**AB31 Akbulak array 11.92 316** Pn **Pn 17 20 10.8 -0.4**
comp=Z,43nm,0.7s,baz=134,slow=12,SNR=591
**AB31 Akbulak array 11.92 316** *i* P **Pn 17 20 10.8 -0.4**
**ABKAR Akbulak array 11.92 316** Pn **Pn 17 20 10.7 -0.5**
**ABKAR Akbulak array 11.92 316** **Pn 17 20 10.7 -0.5**
**DGZ Jazzator, Alta 13.33 46***de*P **Pn 17 20 32.5 +1.9**
**AKTO Aktyubinsk 13.63 317** Pn **Pn 17 20 34.4 -0.1**
comp=Z,1.0nm,0.3s,baz=130,slow=12,SNR=45
AKTO Sn **Sn 17 23 02.2 -3.4**
comp=Z,3.0nm,0.3s,baz=209,slow=12,SNR=6.8
AKTO LR LR 17 26 19.3
comp=Z,1μm,20.9s,baz=98,slow=39
comp=Z,24nm,0.9s
**ZAA0 Zalesovo Array 15.05 29** **Pn 17 20 54.0 +0.3**
ZAA0 IAmb IAmb 17 21 05.5
comp=Z,28nm,0.8s
**ZALV Zalesovo Beam 15.05 29** **Pn 17 20 53.3 -0.5**
**ZALV Zalesovo Beam 15.05 29** Pn **Pn 17 20 54.6 +0.9**
comp=Z,0.6nm,0.3s,baz=224,slow=13,SNR=48
ZALV Sn **Sn 17 23 42.8 +2.6**
comp=Z,0.4nm,0.3s,baz=218,slow=23,SNR=2.4
ZALV Lg Lg 17 25 20.8
baz=220,slow=24
ZALV LR LR 17 26 54.9
comp=Z,1μm,18.3s,baz=219,slow=38
comp=Z,12nm,0.8s
**SVE Sverdlovsk 17.34 338** *e*P **Pn 17 21 23.0 -0.2**
SVE *e*S **Sn 17 24 36.5 +0.7**
SVE pmax pmax
comp=Z,33nm,1.3s
SVE MLR MLR
comp=Z,2μm,12.0s
**ARU Arti 17.66 334** Pn **Pn 17 21 25.9 -1.2**
**ARU Arti 17.66 334** P **Pn 17 21 26.7 -0.4**
baz=129,slow=9.2,SNR=1.4
ARU S Sn 17 24 32.3 -11
comp=Z,5.1nm,0.5s,baz=149,slow=19,SNR=1.4
ARU LR LR 17 28 44.8
comp=Z,837nm,20.5s,baz=128,slow=39
comp=Z,6.2nm,0.2s
**ARU Arti 17.66 334***c* iP **Pn 17 21 27.3 +0.2**
ARU S **Sn 17 24 45.9 +2.4**
ARU pmax pmax
comp=Z,25nm,1.2s
ARU MLR MLR
comp=Z,761nm,10.0s
**GOMU GeErMu 18.04 99** P **Pn 17 21 32.2 -0.2**
GOMU pmax pmax
comp=Z,6.0nm,0.8s
GOMU LR LR
comp=Z,540nm,13.9s
GOMU LR LR
comp=Z,810nm,13.1s
GOMU LR LR
comp=Z,780nm,13.8s
**LKRN Lenkeran, Azer 18.43 270** P **P 17 21 35.4 -1.2**
**MAK Makhachkala 18.67 283** *e*P **P 17 21 35.6 -3.6**
MAK *e*S **Sn 17 25 05.2 -2.9**
MAK pmax pmax
comp=Z,171nm,1.2s
MAK MLR MLR
comp=Z,987nm,11.0s
**LSA Lhasa 18.99 122** P **Pn 17 21 45.9 +1.8**
**SEKA Sheki 19.09 278** P **P 17 21 44.2 +0.3**
**MNGR Mingechevir, A 19.24 277** P **Pn 17 21 46.5 0.0**
**KRAR Krasnoyarsk 19.77 35**⇑*e*P **Pn 17 21 54.3 +1.6**
**GANJ Ganja 19.84 277** P **P 17 21 52.1 0.0**
**BELG Belogornoye 20.25 312** P **P 17 21 56.8 +0.4**
comp=Z,75nm,1.0s,baz=270,slow=2.3,SNR=18
BELG S **S 17 25 40.6 -2.4**
comp=Z,11nm,0.4s,baz=131,slow=20,SNR=1.2
BELG LR LR 17 30 54.7
comp=Z,382nm,21.9s,baz=84,slow=40
comp=Z,75nm,1.0s
**BELG Belogornoye 20.25 312***d* iP **P 17 21 57.1 +0.7**
BELG pmax pmax
comp=Z,17nm,0.9s
**SHME Shamm 20.43 227** P **P 17 21 58.8 +0.1**
**SHME Shamm 20.43 227** P **P 17 21 59.4 +0.8**
**BANOM Banah 20.45 226** P Pn 17 22 02.3 +1.3
**NAX Nakhchivan 20.78 273** P **P 17 22 02.4 0.0**
**GTA Gaotai 20.79 86** *e*P Pn 17 22 04.0 -1.0
GTA S **S 17 25 53.0 -1.3**
GTA sS sS 17 26 02.8 +1.6
GTA pmax pmax
comp=Z,12nm,1.2s
GTA LR LR
comp=Z,420nm,17.4s
GTA LR LR
comp=Z,680nm,15.6s
GTA LR LR
comp=Z,960nm,16.0s
**MDH Madha 20.95 225** P **P 17 22 05.6 +1.4**
**MASF Masafi 20.96 226** P **P 17 22 04.9 +0.5**
SNR=6.1
**MSFE Esma-Masafi 20.97 226** P **P 17 22 04.7 +0.2**
**GNI Garni 21.12 276** P **P 17 22 04.4 -1.8**
**GNI Garni 21.12 276** P **P 17 22 08.4 +2.3**
**GNI Garni 21.12 276** P **P 17 22 07.2 +1.1**
comp=Z,51nm,0.9s,baz=34,slow=5.1,SNR=15
GNI LR LR 17 31 51.4
comp=Z,211nm,19.7s,baz=84,slow=41
comp=Z,51nm,0.9s
**GNI Garni 21.12 276** P **P 17 22 08.6 +2.5**
GNI S Sn 17 26 08.0 +0.6
**GNI Garni 21.12 276***d* iP **P 17 22 08.6 +2.5**
GNI pmax pmax
comp=Z,50nm,0.8s
**GNI Garni 21.12 276** P **P 17 22 08.7 +2.6**
comp=Z,65nm,1.4s,comp=Z,774nm
**UOSS Minazif 21.28 225** P **P 17 22 06.5 -1.3**
**UOSS Minazif 21.28 225** P **P 17 22 07.8 0.0**
**HATD Hatta, Dubai 21.42 225** P **P 17 22 10.0 +0.7**
**HATD Hatta, Dubai 21.42 225** P **P 17 22 10.2 +0.9**
**WSAR Wadi Sarin 21.51 217** P **P 17 22 10.5 +0.3**
comp=Z,10nm,0.6s,baz=66,slow=5.6,SNR=13
comp=Z,10nm,0.6s
**WSAR Wadi Sarin 21.51 217** P **P 17 22 10.8 +0.6**
**NAZ Nazwa, Dubai 21.54 226** *i* P **P 17 22 11.1 +0.5**
SNR=7.4
**NAZ Nazwa, Dubai 21.54 226** P **P 17 22 12.0 +1.4**
SNR=7.8
**ASHO Ashiyiah 21.57 225** *i* P **P 17 22 11.5 +0.5**
SNR=32
**ASHO Ashiyiah 21.57 225** P **P 17 22 11.8 +0.9**
SNR=12
**FAQ Al Faqa, Dubai 21.77 226** P **P 17 22 13.3 +0.3**
**FAQ Al Faqa, Dubai 21.77 226** P **P 17 22 13.4 +0.4**
**SOHO SOHO 21.77 223** P **P 17 22 13.0 0.0**
**SOHO SOHO 21.77 223** P **P 17 22 13.7 +0.7**
**GOF Gofitskoye 21.82 290***ce*P **P 17 22 17.5 +4.1**
**HOQ Hoqain 21.84 221** P **P 17 22 14.0 +0.2**
**WBK Wadi Bani Khal 21.90 216** P **P 17 22 16.1 +1.6**
**SMDO Samad 21.93 218** P **P 17 22 15.8 +0.9**
**KBZ Khabaz 21.98 286** P **P 17 22 16.3 +1.2**
comp=Z,4.2nm,0.6s,baz=103,slow=5.5,SNR=9.2
KBZ LR LR 17 32 49.5
comp=Z,281nm,20.0s,baz=92,slow=42
comp=Z,4.2nm,0.6s
**KBZ Khabaz 21.98 286***ce*P **P 17 22 17.4 +2.3**
KBZ pmax pmax
comp=Z,21nm,1.4s
**MOY Mondy 21.98 52** *e*P **P 17 22 17.1 +1.9**
MOY pmax pmax
comp=Z,38nm,1.6s
**ASUD Al Ashush, Dub 22.01 226** P **P 17 22 16.2 +0.6**
**ASUD Al Ashush, Dub 22.01 226** P **P 17 22 17.0 +1.4**
**KVAR Kislovodsk Arr 22.11 287** LR LR 17 31 11.1
comp=Z,276nm,19.6s,baz=280,slow=38
**KIV Kislovodsk 22.11 287** P **P 17 22 14.4 -2.3**
**KIV Kislovodsk 22.11 287** P **P 17 22 16.9 +0.2**
**KIV Kislovodsk 22.11 287** *e*P **P 17 22 16.3 -0.4**
KIV *e*S **S 17 26 20.6 +0.5**
KIV pmax pmax
comp=Z,21nm,1.0s
KIV MLR MLR
comp=Z,171nm,14.0s
**KIV Kislovodsk 22.11 287** P **P 17 22 16.8 +0.1**
comp=Z,37nm,0.9s,comp=Z,354nm
**SHA1 Shidzhatmaz 22.15 286***d* iP **P 17 22 20.0 +2.8**
**ALNE Al Ain 22.24 224** *i* P **P 17 22 19.5 +1.4**
SNR=14
**ALNE Al Ain 22.24 224** P **P 17 22 18.8 +0.7**
SNR=9.1
**AJN Ajban 22.25 227** P **P 17 22 18.9 +0.8**
**SHL Shillong 22.41 129** P **P 17 22 19.0 -1.1**
SHL IAmb IAmb 17 22 33.1
comp=Z,14nm,0.6s
**SHL Shillong 22.41 129** P **P 17 22 19.0 -1.1**
SHL pmax pmax
comp=Z,14nm,0.6s
**ARQ Araqi 22.44 222** P **P 17 22 22.3 +2.1**
**JMDO Jabal Madar 22.50 217** P **P 17 22 22.5 +1.6**
**KIRV Kirov 22.63 328** P **P 17 22 22.0 0.0**
comp=Z,5.4nm,0.5s,baz=183,slow=7.9,SNR=2.4
KIRV LR LR 17 31 52.9
comp=Z,1μm,19.4s,baz=149,slow=38
comp=Z,5.4nm,0.5s
**KIRV Kirov 22.63 328**⇑*e*P **P 17 22 22.7 +0.7**
**ZAK Zakamensk 23.07 56** *e*P **P 17 22 26.1 -0.7**
ZAK pmax pmax
comp=Z,21nm,1.4s
**VRH Novokhopyorsk 23.37 305** *e*P **P 17 22 32.4 +2.7**
VRH pmax pmax
comp=Z,130nm,0.8s
**MZWR Madinat Zayed 23.49 228** P **P 17 22 32.2 +1.1**
**GURO Guroymak-BITLI 23.55 273** P **P 17 22 33.1 +1.4**
GURO IAmb IAmb 17 22 36.1
comp=Z,18nm,1.0s
**KBD Kabd 23.59 247** P **P 17 22 33.2 +1.1**
**UMZA Um Al Zommool 23.65 224** P **P 17 22 34.1 +1.5**
**MHTO MHTO 23.77 216** P **P 17 22 36.4 +2.6**
**GHWR Ruwais 23.90 230** P **P 17 22 34.5 -0.6**
**VSLR Vesyoloye 24.07 286***ce*P **P 17 22 38.9 +2.3**
VSLR pmax pmax
comp=Z,24nm,0.9s
**IRK Irkutsk 24.09 52** *e*P **P 17 22 33.9 -2.7**
IRK pmax pmax
comp=Z,39nm,1.4s
**SOC Sochi 24.29 286** *e*P **P 17 22 37.7 -0.8**
SOC *e*PPP PPP 17 23 15.0
SOC *e*S **S 17 26 57.9 +1.0**
SOC *e*SS **SnSn 17 27 39.9 +0.4**
SOC pmax pmax
comp=Z,10.0nm,0.6s
SOC MLR MLR
comp=Z,231nm,12.0s
**TRNA Turayna 24.30 234** P **P 17 22 38.7 -0.1**
**MZR Muzera 24.32 227** *i* P **P 17 22 38.4 -0.6**
SNR=7.3
**MZR Muzera 24.32 227** P **P 17 22 39.5 +0.5**
SNR=5.3
**SLWR Sila 24.51 232** P **P 17 22 41.5 +0.9**
**SMRA Abu-Samra 24.53 234** P **P 17 22 41.9 +1.1**
**SONM Songino Array 24.79 63** P **P 17 22 43.5 +0.3**
**SONM Songino Array 24.79 63** P **P 17 22 43.8 +0.6**
comp=Z,5.2nm,1.0s,baz=276,slow=11,SNR=24
SONM LR LR 17 33 15.4
comp=Z,331nm,18.9s,baz=276,slow=38
comp=Z,5.2nm,1.0s
**SONM Songino Array 24.79 63** P **P 17 22 43.5 +0.3**
SONM pmax pmax
comp=Z,5.0nm,1.1s
**VORD Divnogorie 24.82 304** *e*P **P 17 22 45.2 +1.9**
VORD pmax pmax
comp=Z,80nm,0.3s
**LZH Lanzhou 24.85 92** *e*P **P 17 22 46.0 +2.1**
LZH pmax pmax
comp=Z,16nm,1.0s
LZH LR LR
comp=Z,550nm,12.7s
LZH LR LR
comp=Z,500nm,12.0s
LZH LR LR
comp=Z,810nm,16.3s
**VSR Storozhevoye 24.95 305** *e*P **P 17 22 44.0 -0.4**
VSR pmax pmax
comp=Z,10.0nm,0.9s
**VORR Voronezh 25.01 306** *e*P **P 17 22 48.3 +3.4**
VORR pmax pmax
comp=Z,52nm,0.4s
**ULN Ulaanbaatar 25.24 63** P **P 17 22 48.2 +0.9**
ULN IAmb IAmb 17 22 49.6
comp=Z,31nm,1.3s
**ULN Ulaanbaatar 25.24 63***c* iP **P 17 22 48.2 +0.9**
ULN pmax pmax
comp=Z,29nm,1.4s
**LPSR Galich'ya Gora 25.37 308** *e*P **P 17 22 48.6 +0.4**
LPSR pmax pmax
comp=Z,20nm,0.7s
**ANN Anapa 25.81 290** *e*P **P 17 22 52.9 +0.6**
ANN *e**PP **pP 17 22 57.5 +0.5**
ANN *e*S **S 17 27 23.6 +2.4**
ANN pmax pmax
comp=Z,23nm,0.6s
ANN MLR MLR
comp=E,522nm,13.0s
ANN MLR MLR
comp=N,498nm,13.0s
ANN MLR MLR
comp=Z,616nm,14.0s
**MOS Moscow 26.94 314** *e*P **P 17 23 02.0 -0.4**
MOS *e*S **S 17 27 37.4 -1.4**
MOS MLR MLR
comp=Z,1μm,16.0s
**TNCH TengChong 26.96 119** P **P 17 23 04.1 +1.0**
TNCH pP sP 17 23 12.5 +2.9
TNCH PP **PnPn 17 23 50.2 +5.0**
TNCH sS sS 17 27 52.6 +4.7
TNCH pmax pmax
comp=Z,7.0nm,1.4s
TNCH pmax pmax
comp=Z,81nm,4.1s
TNCH LR LR
comp=Z,260nm,15.3s
TNCH LR LR
comp=Z,270nm,15.7s
TNCH LR LR
comp=Z,380nm,12.7s
**OBN Obninsk 27.34 313** P **P 17 23 06.5 +0.5**
**OBN Obninsk 27.34 313** LR LR 17 34 52.4
comp=Z,277nm,19.3s,baz=148,slow=38
**OBN Obninsk 27.34 313** *e*P **P 17 23 08.2 +2.2**
OBN *e* 17 23 52.4
OBN *e*PPP PPP 17 24 01.1
OBN *e* 17 26 24.6
OBN pmax pmax
comp=Z,8.0nm,0.5s
OBN MLR MLR
comp=Z,605nm,15.0s
**DOK Doka 27.60 220** P **P 17 23 09.8 +1.2**
**GAZ Gaziantep 27.60 273** P **P 17 23 08.3 -0.3**
GAZ IAmb IAmb 17 23 12.5
comp=Z,16nm,0.8s
**SNOP Sinop 27.80 284** P **P 17 23 09.2 -1.1**
**BNN Bunyan 28.10 277** P **P 17 23 11.8 -1.4**
BNN IAmb IAmb 17 23 23.4
comp=Z,31nm,1.3s
**SIM Simferopol' 28.14 290** *e*P **P 17 23 14.5 +1.2**
**PZH PanZhiHua 28.18 112** P **P 17 23 16.2 +2.3**
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,180nm,5.9s
PZH LR LR
comp=Z,210nm,14.7s
PZH LR LR
comp=Z,330nm,12.9s
PZH LR LR
comp=Z,340nm,13.1s
**WHFO Wadi Hawf 28.37 220** P **P 17 23 15.9 +0.3**
**RBK Rabkut 28.52 219** P **P 17 23 19.1 +2.2**
**BZK Bozkurt 28.70 284** P **P 17 23 17.7 -0.5**

RAYN **Ar Rayn** 28.78 240 P **P** 17 23 18.5 -0.8
RAYN **Ar Rayn** 28.78 240 *i* P **P** 17 23 19.1 -0.1
SNR=9.8
RAYN **Ar Rayn** 28.78 240 P **P** 17 23 19.8 +0.6
HHC **Hu-ho-hao-te** 29.20 78 *eP* **P** 17 23 24.7 +1.8
HHC pP sP 17 23 34.0 +4.6
HHC PP **PnPn** 17 24 18.6 +3.0
HHC *eS* **S** 17 28 13.6 -1.4
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,110nm,4.5s
HHC LR LR
comp=Z,410nm,14.5s
HHC LR LR
comp=Z,480nm,12.0s
HHC LR LR
comp=Z,690nm,13.5s
BR131 **Keskin Array S** 29.50 280 P **P** 17 23 25.7 +0.1
BR131 IAmb IAmb 17 23 28.5
comp=Z,11nm,0.9s
BR131 **Keskin Array S** 29.50 280 P **P** 17 23 27.2 +1.6
SNR=6.0
BR131 **Keskin Array S** 29.50 280 *ce*P **P** 17 23 27.0 +1.4
BRTR **Keskin Array B** 29.50 280 P **P** 17 23 25.6 0.0
BRTR **Keskin Array B** 29.50 280 P **P** 17 23 27.1 +1.4
comp=Z,7.4nm,0.7s,baz=92,slow=7.7,SNR=26
BRTR LR LR 17 37 09.0
comp=Z,176nm,19.3s,baz=69,slow=40
comp=Z,7.4nm,0.7s
BR104 **Keskin Array S** 29.50 280 P **P** 17 23 27.7 +2.1
comp=Z,11nm,0.9s,comp=Z,75nm
BR106 **Keskin Array S** 29.51 280 P **P** 17 23 27.5 +1.8
comp=Z,12nm,0.8s,comp=Z,76nm
BR105 **Keskin Array S** 29.52 280 P **P** 17 23 27.5 +1.7
comp=Z,14nm,0.9s,comp=Z,101nm
MMAI **Mount Meron Ar** 30.60 266 P **P** 17 23 36.1 +0.8
comp=Z,7.8nm,1.0s,baz=74,slow=6.3,SNR=3.8
comp=Z,7.8nm,1.0s
BOD **Bodaibo** 30.90 44 *eP* **P** 17 23 38.1 +0.5
BOD pmax pmax
comp=Z,12nm,1.1s
MDUB **Mudurnu** 31.10 282 P **P** 17 23 40.2 +0.5
AK09 **Malin Array Si** 31.12 302 P **P** 17 23 40.3 +0.7
AK08 **Malin Array Si** 31.14 302 P **P** 17 23 40.3 +0.6
AKASG **Malin Array Be** 31.16 302 P **P** 17 23 40.1 +0.2
comp=Z,0.5nm,0.3s,baz=79,slow=8.7,SNR=1.9
AKASG LR LR 17 37 53.8
comp=Z,413nm,18.4s,baz=96,slow=40
comp=Z,0.5nm,0.3s
AKBB **Malin Array Si** 31.16 302 P **P** 17 23 39.9 0.0
AKBB **Malin Array Si** 31.16 302⇑ *eP* **P** 17 23 40.0 0.0
AKBB pmax pmax
comp=Z,5.0nm,0.6s
AKBB **Malin Array Si** 31.16 302 P **P** 17 23 40.5 +0.6
AK03 **Malin Array Si** 31.16 302 P **P** 17 23 40.3 +0.4
KIEV **Kiev** 31.16 302 P **P** 17 23 39.8 -0.2
KIEV **Kiev** 31.16 302 ⇓P **P** 17 23 40.8 +0.7
KIEV **Kiev** 31.16 302 P **P** 17 23 40.7 +0.7
AK07 **Malin Array Si** 31.17 302 P **P** 17 23 40.8 +0.8
CSS **Mathiatis** 31.34 271 P **P** 17 23 41.2 -0.5
CSS IAmb IAmb 17 23 51.1
comp=Z,19nm,1.0s
GYA **Guiyang** 31.69 107 P **P** 17 23 46.0 +1.0
GYA pmax pmax
comp=Z,9.0nm,1.2s
GYA LR LR
comp=Z,360nm,14.5s
GYA LR LR
comp=Z,320nm,18.3s
GYA LR LR
comp=Z,450nm,16.3s
CMAR **Chiang Mai Arr** 32.03 127 P **P** 17 23 49.0 +1.1
comp=Z,0.7nm,0.3s,baz=321,slow=9.6,SNR=1.5
CMAR PcP **PcP** 17 26 37.0 -0.5
comp=Z,0.5nm,0.4s,baz=302,slow=4.3,SNR=5.2
CMAR LR LR 17 39 47.7
comp=Z,132nm,18.8s,baz=300,slow=42
comp=Z,0.7nm,0.3s
MNK **Minsk** 32.17 310 *i* P **P** 17 23 49.0 +0.2
comp=E,8.0nm,0.9s
MNK *i* P **P** 17 23 49.0 +0.2
comp=N,13nm,0.8s
MNK *i* P **P** 17 23 49.0 +0.2
comp=Z,10.0nm,0.8s,baz=96
MNK *i* PP **PnPn** 17 24 55.1 +0.5
MNK *i* PPP PPP 17 25 05.0
MNK *i* S **S** 17 29 02.3 +1.3
MNK *i* SS **SnSn** 17 30 54.8 +3.2
MNK *i* SSS SSS 17 31 10.6
MNK *i* LQ LQ 17 34 24.3
MNK *i* LR LR 17 37 47.1
MNK *i* LRM MLR 17 39 52.6
comp=E,106nm,14.0s
MNK *i* LRM MLR 17 40 02.1
comp=Z,378nm,13.2s
MNK *i* LRM MLR 17 40 16.3
comp=N,222nm,14.9s
MNK **Minsk** 32.17 310 *i* P **P** 17 23 49.0 +0.2
MNK *i* 17 24 55.1
MNK *i* PPP PPP 17 25 04.9
MNK *i* S **S** 17 29 02.3 +1.3
MNK *i* SS **SnSn** 17 30 54.7 +3.2
MNK *i* SSS SSS 17 31 10.5
MNK 17 34 24.3
MNK pmax pmax
comp=N,13nm,0.9s
MNK pmax pmax
comp=E,8.0nm,0.9s
MNK pmax pmax
comp=Z,10.0nm,0.9s
MNK MLR MLR
comp=E,106nm,14.0s
MNK MLR MLR
comp=Z,378nm,13.0s
MNK MLR MLR
comp=N,222nm,15.0s
NDNU **Novodnistrovsk** 32.43 298 P **P** 17 23 52.5 +1.3
JOF **Joensuu** 32.45 326 *eP* **P** 17 23 52.4 +1.3
NACGM **Naroch** 32.84 310 *eP* **P** 17 23 52.0 -2.7
comp=N,522nm,0.9s,baz=95
KMPD **K-Podol'skiy** 33.04 299 P **pP** 17 23 56.9 -4.3
KMPD P **P** 17 23 56.3 -0.1
SLVN **Son La** 33.08 117 P **P** 17 23 55.6 -1.6
TESR **Tescani** 33.14 295 P **P** 17 23 59.3 +1.9
comp=N,10nm,1.3s
VRI **Vrincioaia** 33.18 294 ⇓P **P** 17 24 00.2 +2.4
VRI **Vrincioaia** 33.18 294 P **P** 17 24 00.2 +2.4
VRI **Vrincioaia** 33.18 294 P **P** 17 24 00.2 +2.4
comp=N,6.4nm,0.9s
PLOR5 **Plostina Array** 33.23 294 P **P** 17 24 00.4 +2.2
comp=N,19nm,0.8s
PLOR **Plostina** 33.23 294 ⇓P **P** 17 24 00.9 +2.5
PLOR **Plostina** 33.23 294 P **P** 17 24 00.8 +2.5
PLOR3 **Plostina Array** 33.24 294 P **P** 17 24 00.5 +2.2
comp=N,10nm,1.0s
RNPP9 **Sopachiv** 33.26 304 P **P** 17 23 59.5 +1.2
VSU **Vasula** 33.36 317⇓ *eP* **P** 17 24 00.2 +1.1
VSU pmax pmax
comp=Z,17nm,0.8s
ISR **Istrita** 33.43 292 P **P** 17 24 03.0 +3.0
ISR **Istrita** 33.43 292 P **P** 17 24 03.0 +3.0
comp=Z,14nm,0.7s
COVR **Voineasa-Covas** 33.54 294 ⇓P **P** 17 24 03.8 +2.8
TURR **Turia** 33.64 294 ⇓P **P** 17 24 04.8 +3.0
APA **Apatity** 33.76 334⇓ *iP* P 17 24 08.4 +5.9
APA pmax pmax
comp=Z,9.0nm,1.1s
APA MLR MLR
comp=Z,2µm,10.0s
MLR **Muntele Rosu** 33.78 293 P **P** 17 24 04.0 +0.8
MLR IAmb IAmb 17 24 12.8
comp=Z,14nm,0.8s
MLR **Muntele Rosu** 33.78 293 LR LR 17 40 22.5
comp=Z,685nm,19.0s,baz=74,slow=41
MLR **Muntele Rosu** 33.78 293 ⇑P **P** 17 24 06.3 +3.1
MLR **Muntele Rosu** 33.78 293 P **P** 17 24 04.0 +0.8
MLR pmax pmax
comp=Z,14nm,0.8s
MLR **Muntele Rosu** 33.78 293 P **P** 17 24 05.5 +2.3
comp=Z,18nm,1.0s
ARBE **Arbavere** 33.92 318 *eP* **P** 17 24 05.7 +1.6
BURAR **Bucovina Array** 33.97 297 P **P** 17 24 04.4 -0.3
BURAR **Bucovina Array** 33.97 297 ⇑P **P** 17 24 07.3 +2.6
BURAR **Bucovina Array** 33.97 297 P **P** 17 24 04.4 -0.3
BURAR pmax pmax
comp=Z,2.0nm,0.9s
BUR08 **Bucovina Ar. S** 33.97 297 P **P** 17 24 03.8 -1.0
DOPR **Dopca** 34.09 294 ⇑P **P** 17 24 08.2 +2.5
FIA1 **FINESS Array S** 34.32 322 P **P** 17 24 07.0 -0.5
FINES **FINESS Array B** 34.32 322 P **P** 17 24 06.9 -0.6
FINES **FINESS Array B** 34.32 322 P **P** 17 24 08.4 +0.9
comp=Z,7.7nm,0.5s,baz=111,slow=8.8,SNR=25
FINES LR LR 17 39 22.3
comp=Z,286nm,21.4s,baz=120,slow=38
comp=Z,7.7nm,0.5s
FINES **FINESS Array B** 34.32 322 *i* P **P** 17 24 08.3 +0.8
FINES pmax pmax
comp=Z,8.0nm,0.5s
VOIR 34.41 293 ⇑P **P** 17 24 10.7 +2.1
VOIR 34.41 293 P **P** 17 24 10.7 +2.1
PBA **Port Blair** 34.43 143 P **P** 17 24 08.2 -0.6
PABE **Paberze** 34.50 311 P **P** 17 24 08.7 -0.4
PALK **Pallekele** 34.66 166 P **P** 17 24 09.0 -1.9
PALK **Pallekele** 34.66 166 LR LR 17 38 39.2
comp=Z,415nm,19.4s,baz=92,slow=37
PALK **Pallekele** 34.66 166 P **P** 17 24 09.0 -1.9
PALK pmax pmax
comp=Z,28nm,1.2s
ARR **Arges** 34.71 293 ⇓P **P** 17 24 13.6 +2.4
ALN **Alexandroupoli** 34.76 285 P **P** 17 24 10.1 -1.4
ALN IAmb IAmb 17 24 54.0
comp=Z,6.6nm,0.5s
ALN **Alexandroupoli** 34.76 285 P **P** 17 24 10.1 -1.4
ALN pmax pmax
comp=Z,7.0nm,0.5s
ARG **Arkhangelos** 34.76 276 P **P** 17 24 10.4 -1.2
ARG **Arkhangelos** 34.76 276 P **P** 17 24 10.4 -1.2
ARG pmax pmax
comp=Z,43nm,1.1s
TIA **Tai'an** 34.79 84 P **P** 17 24 12.5 +0.6
TIA pmax pmax
comp=Z,8.0nm,1.0s
EZN **Ezine** 34.87 283 P **P** 17 24 14.4 +2.0
EZN **Ezine** 34.87 283 P **P** 17 24 14.4 +2.0
MTSE **Matsula** 34.91 317 *eP* **P** 17 24 13.5 +1.0
KEF **Keuruu** 35.05 323 *eP* **P** 17 24 14.9 +1.0
RDO **Rodhopi** 35.05 286 P **P** 17 24 13.5 -0.5
MARR **Marisel-Cluj** 35.52 296 ⇓P **P** 17 24 19.3 +1.2
KOLS **Kolonicke sedl** 35.75 300 *eP* P 17 24 26.1 +6.1
KOLS **Kolonicke sedl** 35.75 300 *eP* P 17 24 26.1 +6.1
GZR **Gura Zlata** 35.99 294 ⇑P **P** 17 24 24.1 +1.9
VAF **Vlistaro** 36.25 324 *eP* **P** 17 24 25.0 +1.0
VADS **Vadso** 36.31 337 *eP* **P** 17 24 25.9 +1.4
HERR **Herculane** 36.35 293 ⇑P **P** 17 24 26.4 +1.3
SURR **Surduc** 36.37 294 ⇑P **P** 17 24 28.1 +2.8
SIRR **Siria** 36.59 295 ⇑P **P** 17 24 29.8 +2.6
SANT **Santorini** 36.70 278 P **P** 17 24 25.9 -2.4
BZS **Buzias** 36.74 294 ⇓P **P** 17 24 29.8 +1.3
BZS **Buzias** 36.74 294 P **P** 17 24 29.7 +1.3
MDVR **Moldovita** 36.86 293 ⇓P **P** 17 24 31.7 +2.1
BOVS **Bovan** 37.13 291 ⇓P **P** 17 24 33.3 +1.5
OJC **Ojcow** 37.19 302 P **P** 17 24 30.5 -1.8
OJC IAmb IAmb 17 24 37.9
comp=Z,11nm,1.0s
OJC **Ojcow** 37.19 302 P **P** 17 24 30.5 -1.8
OJC pmax pmax
comp=Z,11nm,1.0s
ARCES **ARCESS Array B** 37.24 335 P **P** 17 24 33.4 +1.0
ARCES **ARCESS Array B** 37.24 335 P **P** 17 24 33.7 +1.2
comp=Z,6.5nm,0.5s,baz=112,slow=8.5,SNR=48
ARCES LR LR 17 41 13.0
comp=Z,179nm,19.5s,baz=123,slow=38
comp=Z,6.5nm,0.5s
ARCES **ARCESS Array B** 37.24 335 P **P** 17 24 33.4 +1.0
ARCES pmax pmax
comp=Z,30nm,1.4s
PSZ **Piszkesteto** 37.47 298 P **P** 17 24 33.2 -1.6
PSZ IAmb IAmb 17 24 44.6
comp=Z,13nm,1.5s
PSZ **Piszkesteto** 37.47 298 P **P** 17 24 33.2 -1.6
PSZ pmax pmax
comp=Z,13nm,1.5s
IDI **Anoyia** 37.55 277 P **P** 17 24 35.2 -0.3
IDI IAmb IAmb 17 24 39.9
comp=Z,22nm,1.1s
KTK1 **Kautokeino** 37.78 333 *eP* **P** 17 24 38.7 +1.6
NJ2 **Nanjing** 37.84 89 *eP* **P** 17 24 38.3 +0.4
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
NJ2 pmax pmax
comp=Z,160nm,8.1s
NJ2 LR LR
comp=Z,260nm,18.0s
NJ2 LR LR
comp=Z,260nm,15.6s
NJ2 LR LR
comp=Z,160nm,10.4s
ZEA **Zeya** 37.99 52⇑ *eP* **P** 17 24 41.0 +2.0
VYHS **Vyhne** 38.07 300 *eP* **P** 17 24 41.2 +1.5
VYHS **Vyhne** 38.07 300 *eP* **P** 17 24 41.2 +1.5
FNA **Florina** 38.17 287 P **P** 17 24 39.0 -1.8
FNA IAmb IAmb 17 24 42.4
comp=Z,11nm,1.2s
FNA **Florina** 38.17 287 P **P** 17 24 39.0 -1.8
FNA pmax pmax
comp=Z,11nm,1.2s
HAMF **Hammerfest** 38.26 336 *eP* **P** 17 24 42.8 +1.8
CN2 **Changchun** 38.45 68 *eP* **P** 17 24 43.3 +0.3
CN2 *es*S sS 17 30 53.8 +7.9
CN2 LR LR
comp=Z,180nm,13.0s
CN2 LR LR
comp=Z,210nm,13.0s
HEH **HeiHe** 38.46 58 *eP* **P** 17 24 43.8 +0.8
HEH pmax pmax
comp=Z,10.0nm,1.2s
MORH **Mrgy, Hungar** 38.64 296 ⇓P **P** 17 24 45.7 +1.2
MORH **Mrgy, Hungar** 38.64 296 P **P** 17 24 46.1 +1.6
comp=Z,3.5nm,0.8s
QIZ **Qiongzhong** 38.70 114 P **P** 17 24 48.3 +3.0
QIZ S **S** 17 30 44.9 +3.1
QIZ LR LR
comp=Z,190nm,17.8s
QIZ LR LR
comp=Z,250nm,14.7s
QIZ LR LR
comp=Z,230nm,15.6s
MORC **Moravsky Berou** 38.70 302 P **P** 17 24 43.4 -1.6
MORC **Moravsky Berou** 38.70 302 *eP* **P** 17 24 45.4 +0.4
MORC **Moravsky Berou** 38.70 302 ⇑P **P** 17 24 46.1 +1.0
MORC **Moravsky Berou** 38.70 302 P **P** 17 24 46.0 +1.0
JAVC **Velka Javorina** 38.77 300 *eP* **P** 17 24 47.1 +1.5
PUK **Puka** 38.85 289 P **P** 17 24 46.2 -0.3
PUK IAmb IAmb 17 24 48.5
comp=Z,19nm,1.1s
ITM **Ithomi** 39.01 281 P **P** 17 24 46.2 -1.6
ITM IAmb IAmb 17 24 47.7
comp=Z,9.8nm,0.9s
KRLC **Kraliky** 39.13 302 AMS AMS 17 42 10.0
comp=Z,600nm,12.9s
PDG **Podgorica** 39.19 290 P **P** 17 24 49.1 -0.1
PDG IAmb IAmb 17 24 51.1
comp=Z,18nm,0.7s
YAK **Yakutsk** 39.37 39 P **P** 17 24 50.1 -0.2
YAK IAmb IAmb 17 24 51.3
comp=Z,20nm,0.9s
YAK **Yakutsk** 39.37 39 LR LR 17 41 42.1
comp=Z,277nm,21.9s,baz=259,slow=37
YAK **Yakutsk** 39.37 39 *eP* **P** 17 24 50.2 -0.2
YAK pmax pmax
comp=Z,19nm,0.9s
YAK pmax pmax
comp=N,3.0nm,1.1s
YAK pmax pmax
comp=E,6.0nm,1.0s
DPC **Dobruska-Polom** 39.38 303 *eP* **P** 17 24 52.4 +1.6
DPC AMS AMS 17 42 20.0
comp=E,500nm,15.6s
DPC **Dobruska-Polom** 39.38 303 *eP* **P** 17 24 52.4 +1.6
DPC MLR MLR
comp=Z,500nm,15.6s
DPC **Dobruska-Polom** 39.38 303 P **P** 17 24 53.1 +2.3
comp=Z,4.8nm,0.8s
VRAC **Vranov** 39.38 301 *eP* **P** 17 24 51.8 +1.1
VRAC **Vranov** 39.38 301 LR LR 17 44 11.6
comp=Z,384nm,19.2s,baz=85,slow=41
OSTC **Ostas** 39.42 303 AMS AMS 17 42 20.0
comp=Z,600nm,13.1s
TRO **Tromso** 39.43 334 *eP* **P** 17 24 52.4 +1.6
ATD **Arta Tunnel** 39.51 230 P **P** 17 24 51.5 -0.7
UPC **Upice** 39.55 303 AMS AMS 17 42 20.0
comp=Z,700nm,14.2s
KRUC **Moravsky** 39.56 301 *eP* **P** 17 24 52.8 +0.6
KEK **Kerkira** 39.66 286 P **P** 17 24 51.4 -1.8
KEK IAmb IAmb 17 25 10.8
comp=Z,12nm,1.0s
CONA **Conrad Observa** 40.13 299 *eP* **P** 17 24 58.3 +1.2
comp=Z,5.8nm,1.0s
DEL **Delary** 40.17 313 *i* P **P** 17 24 57.8 +0.6
HFS **Hagfors** 40.17 318 P **P** 17 24 57.7 +0.6
comp=Z,14nm,0.5s,baz=104,slow=10,SNR=61
HFS LR LR 17 42 10.6
comp=Z,629nm,18.5s,baz=112,slow=37
comp=Z,14nm,0.5s
FAUS **Fauske** 40.19 330 *eP* **P** 17 24 59.2 +2.1
STEI **Steigen** 40.31 331 *eP* **P** 17 24 59.9 +1.7
MOR8 **Moi Rana** 40.32 328 *eP* **P** 17 24 59.5 +1.2
GOPC **GO Pecny, Ondr** 40.43 302 AMS AMS 17 42 50.0
comp=Z,500nm,13.3s
LUNU **Lund** 40.47 311 *eP* **P** 17 25 00.9 +1.3
SCTE **Santa Cesarea** 40.50 287 P **P** 17 24 58.5 -1.6
SCTE IAmb IAmb 17 25 07.3
comp=Z,14nm,0.9s
ARSA **Arzberg** 40.50 298 *eP* **P** 17 24 58.8 -1.3
comp=Z,1.4nm,0.7s
PRU **Pruhonice** 40.57 303 AMS AMS 17 43 10.0
comp=Z,500nm,13.4s
PRA **Prague** 40.63 303 AMS AMS 17 43 10.0
comp=Z,700nm,13.7s
BJUU **Bjuv** 40.67 312 *eP* **P** 17 25 02.3 +1.0
BORU **Boraas** 40.70 315 *eP* **P** 17 25 02.4 +0.9
RICC **Richard** 40.75 304 AMS AMS 17 43 10.0
comp=Z,600nm,13.5s
FABU **Falkenberg** 40.77 314 *eP* **P** 17 25 03.3 +1.2
BRG **Berggiesshubel** 40.79 304 *eP* **P** 17 25 03.6 +1.3
BRG Amp 17 25 05.2
comp=Z,2.4nm,0.7s
KONS **Konsvik** 40.89 328 *eP* **P** 17 25 05.3 +2.4
ZVC **Zvikov** 40.90 302 *eP* **P** 17 25 04.7 +1.4
ZVC AMS AMS 17 43 20.0
comp=Z,400nm,13.6s
STOK **Stokkvaagen** 40.91 328 *eP* **P** 17 25 06.4 +3.3
PERS **Pernice** 40.92 297 *iP* **P** 17 25 04.4 +0.8
CKRC **Cesky Krumlov** 40.95 301 *eP* **P** 17 25 05.8 +2.0
CKRC AMS AMS 17 43 30.0
comp=Z,400nm,16.6s
CKRC **Cesky Krumlov** 40.95 301 *eP* **P** 17 25 05.8 +2.0
CKRC MLR MLR
comp=Z,400nm,16.6s
SOKA **Soboth** 40.96 298 *i* P **P** 17 25 04.9 +0.9
comp=Z,1.2nm,0.5s
LOF **Lofoten** 40.98 331 *eP* **P** 17 25 07.3 +3.6
MDJ **Mudanjiang** 41.10 66 P **P** 17 25 07.1 +2.1
MDJ pmax pmax
comp=Z,6.0nm,0.8s
NC405 **NORSAR Array S** 41.15 320 P **P** 17 25 04.6 -0.6
NC405 IAmb IAmb 17 25 10.2
comp=Z,8.8nm,0.8s
HSKC **Hora Svate Kat** 41.16 304 AMS AMS 17 43 20.0
comp=Z,800nm,14.3s
ONAU **Onsala** 41.18 314 *eP* **P** 17 25 06.1 +0.7
MOA **Molln** 41.20 299 *eP* **P** 17 25 06.5 +0.8
comp=Z,3.2nm,1.1s
NC602 **NORSAR Array S** 41.24 319 P **P** 17 25 06.1 +0.1
NC602 IAmb IAmb 17 25 19.2
comp=Z,16nm,1.4s
NC602 **NORSAR Array S** 41.24 319 *eP* **P** 17 25 06.4 +0.5
NORES **NORESS Array B** 41.24 319 P **P** 17 25 10.4 +4.5
CLL **Collm** 41.30 305 P **P** 17 25 05.5 -1.0
CLL **Collm** 41.30 305 *iP* **P** 17 25 07.3 +0.8
comp=Z,5.0nm,0.8s
CLL *es*P **sP** 17 25 17.0 +3.6
CLL **Collm** 41.30 305 *iP* **P** 17 25 07.3 +0.8
CLL pmax pmax
comp=Z,5.0nm,0.8s
CLL MLR MLR
comp=Z,600nm,16.5s
CLL **Collm** 41.30 305 *eP* **P** 17 25 07.3 +0.8
comp=Z,4.4nm,0.5s,baz=81,slow=7.1
NC303 **NORSAR Array S** 41.32 320 P **P** 17 25 06.2 -0.4
NC303 IAmb IAmb 17 25 12.1
comp=Z,12nm,0.6s
OBKA **Obir** 41.33 297 *eP* **P** 17 25 07.4 +0.4
comp=Z,0.4nm,0.2s
GEC2 **GERESS Array S** 41.34 301 P **P** 17 25 05.4 -1.7
GEC2 **GERESS Array S** 41.34 301 *eP* **P** 17 25 08.3 +1.2
comp=Z,10nm,1.2s,baz=81,slow=7.1
GERES **GERESS Array B** 41.34 301 P **P** 17 25 05.2 -1.8
GERES **GERESS Array B** 41.34 301 *eP* **P** 17 25 07.8 +0.8
comp=Z,4.1nm,0.7s,baz=110,slow=8.5,SNR=17
comp=Z,4.1nm,0.7s
NB201 **NORSAR Array S** 41.36 320 P **P** 17 25 06.6 -0.3
NB201 IAmb IAmb 17 25 20.4
comp=Z,12nm,1.1s
KHC **Kasperske Hory** 41.36 302 P **P** 17 25 05.9 -1.2
KHC **Kasperske Hory** 41.36 302 *eP* **P** 17 25 07.7 +0.6
KHC AMS AMS 17 43 40.0
comp=Z,500nm,13.0s
KHC **Kasperske Hory** 41.36 302 *eP* **P** 17 25 07.7 +0.6
KHC MLR MLR
comp=Z,500nm,13.0s
KHC **Kasperske Hory** 41.36 302 P **P** 17 25 08.5 +1.4
comp=Z,5.3nm,1.2s
NB2 **NORSAR Subarra** 41.40 320 P **P** 17 25 07.4 +0.1
comp=Z,4.4nm,0.5s,baz=90,slow=8.6
NB2 **NORSAR Subarra** 41.40 320 P **P** 17 25 07.4 +0.1
baz=90,slow=8.6
NOA **NORSAR Array B** 41.40 320 P **P** 17 25 07.9 +0.6
comp=Z,4.7nm,0.5s,baz=91,slow=8.1,SNR=21
NOA LR LR 17 42 57.6
comp=Z,494nm,20.1s,baz=95,slow=37
comp=Z,4.7nm,0.5s
KLR **Kul'dur** 41.41 58 P **P** 17 25 07.3 -0.2
comp=Z,1.8nm,0.6s,baz=303,slow=10,SNR=4.9
KLR LR LR 17 43 55.0
comp=Z,233nm,18.0s,baz=288,slow=38
comp=Z,1.8nm,0.6s
KLR **Kul'dur** 41.41 58⇑ *iP* **P** 17 25 08.1 +0.6
KLR pmax pmax
comp=Z,5.0nm,0.8s
MOZS **Mozjanca** 41.45 297 *i* P **P** 17 25 09.0 +1.0
STRU **Stroemstad** 41.47 317 *eP* **P** 17 25 08.5 +0.7
NAO01 **NORSAR Array S** 41.56 319 P **P** 17 25 07.3 -1.2
NAO01 IAmb IAmb 17 25 13.5
comp=Z,7.4nm,0.7s
NBO00 **NORSAR Array S** 41.61 320 P **P** 17 25 08.5 -0.5
NC204 **NORSAR Array S** 41.61 320 P **P** 17 25 08.7 -0.3
NC204 IAmb IAmb 17 25 14.2
comp=Z,10.0nm,0.5s
CRNS **Crni Vrh** 41.63 297 *i* P **P** 17 25 10.2 +0.8
WET **Wettzell** 41.80 302 *eP* **P** 17 25 11.9 +1.2
comp=Z,3.1nm,0.7s,baz=81,slow=7.1
SGRT **San Giovanni R** 41.88 290 P **P** 17 25 10.4 -1.2
PLN **Plauen** 41.98 304 *eP* **P** 17 25 14.6 +2.5
comp=Z,5.0nm,1.1s,baz=81,slow=7.1
KBA **Koenlbreinsper** 41.99 299 *eP* **P** 17 25 12.8 +0.3
comp=Z,1.7nm,0.4s
PRED **Cave del Predi** 42.00 298 P **P** 17 25 10.6 -1.9
TIP **Timpagrande** 42.05 286 P **P** 17 25 10.2 -2.8
TIP **Timpagrande** 42.05 286 P **P** 17 25 14.1 +1.1
comp=Z,7.7nm,1.1s
NEUB **Neuenburg** 42.08 305 *eP* **P** 17 25 14.7 +1.8
comp=Z,7.7nm,0.8s,baz=81,slow=7.1
SABO **M.te Sabotino** 42.10 297 P **P** 17 25 11.4 -1.8
SABO IAmb IAmb 17 25 14.7
comp=Z,15nm,1.0s
FLTG **Flechtingen** 42.20 307 *eP* **P** 17 25 14.4 +0.6
comp=Z,5.2nm,0.7s,baz=81,slow=7.1
KONO **Kongsberg** 42.25 318 *eP* **P** 17 25 15.8 +1.6
MOX **Moxa** 42.28 304 *eP* **P** 17 25 15.7 +1.0
comp=Z,8.0nm,1.3s,baz=81,slow=7.1
KSAR **Wonju Array Be** 42.30 76 P **P** 17 25 12.9 -2.0
KSAR **Wonju Array Be** 42.30 76 P **P** 17 25 12.9 -2.0
KSRS **Korea Array** 42.32 76 P **P** 17 25 15.5 +0.4
comp=Z,2.3nm,1.2s,baz=280,slow=7.0,SNR=2.4
comp=Z,2.3nm,1.2s
LESA **Schwarzleotal** 42.34 299 *eP* **P** 17 25 15.4 +0.2
comp=Z,1.0nm,0.3s
DOMB **Dombas** 42.41 321 *eP* **P** 17 25 17.0 +1.5
CUC **Castrocucco** 42.44 288 P **P** 17 25 14.2 -1.8
CUC IAmb IAmb 17 25 19.3
comp=Z,16nm,0.9s
STAL **STALIGIAL** 42.62 298 P **P** 17 25 15.3 -2.1
GRA1 **Grafenberg Arr** 42.74 303 P **P** 17 25 16.4 -1.9

GRA1 IAmb IAmb 17 25 27.4
comp=Z,14nm,0.7s
**GRF Grafenberg Arr 42.74 303** P **P** **17 25 16.5 -1.9**
GRF pmax pmax
comp=Z,14nm,0.7s
**GRF Grafenberg Arr 42.74 303** *e*P **P** **17 25 20.3 +2.0**
comp=Z,14nm,0.7s,baz=81,slow=7.1
**GRFO Grafenberg 42.74 303** P **P** **17 25 16.7 -1.6**
GRFO IAmb IAmb 17 25 27.4
comp=Z,13nm,0.8s
**GRFO Grafenberg 42.74 303** P **P** **17 25 16.7 -1.6**
GRFO pmax pmax
comp=Z,13nm,0.8s
**CLZ Clausthal 42.81 306** *e*P **P** **17 25 20.3 +1.4**
comp=Z,5.2nm,1.0s,baz=81,slow=7.1
**NRDL Niedersach Rie 42.85 307** *e*P **P** **17 25 20.2 +1.1**
comp=Z,7.8nm,0.9s,baz=81,slow=7.1
**USRK Ussuriysk Ar. 42.87 65** P **P** **17 25 21.2 +1.8**
comp=Z,1.5nm,0.7s,baz=284,slow=10.0,SNR=2.0
comp=Z,1.5nm,0.7s
**CEL Celeste 43.02 285** P **P** **17 25 19.2 -1.7**
**CEL Celeste 43.02 285** P **P** **17 25 21.4 +0.5**
comp=Z,39nm,1.0s,comp=Z,330nm
**WTTA Wattenberg 43.06 299** *i* P **P** **17 25 21.4 +0.2**
comp=Z,3.0nm,0.4s
**INTR Introdacqua 43.10 291** P **P** **17 25 19.1 -2.4**
INTR IAmb IAmb 17 25 23.6
comp=Z,13nm,1.0s
**GTTG Gottingen 43.12 306** *e*P **P** **17 25 22.9 +1.6**
comp=Z,42nm,1.4s,baz=81,slow=7.1
**CAMP Campotosto 43.27 292** P **P** **17 25 20.7 -2.2**
CAMP IAmb IAmb 17 25 28.0
comp=Z,13nm,0.8s
**FDMO Fiordimonte 43.33 293** P **P** **17 25 21.4 -1.8**
FDMO IAmb IAmb 17 25 31.4
comp=Z,11nm,0.7s
**NRCA Norcia 43.38 293** P **P** **17 25 23.4 -0.3**
NRCA IAmb IAmb 17 25 27.0
comp=Z,16nm,0.9s
**CTI Castel Tesino 43.39 298** P **P** **17 25 22.7 -1.1**
**CTI Castel Tesino 43.39 298** P **P** **17 25 22.7 -1.1**
CTI pmax pmax
comp=Z,4.0nm,0.9s
**MOTA Moosalm 43.39 300** *e*P **P** **17 25 23.9 +0.1**
comp=Z,1.3nm,0.3s
**TEOL Teolo 43.58 297** P **P** **17 25 24.5 -0.7**
TEOL IAmb IAmb 17 25 30.6
comp=Z,16nm,0.7s
**SSLB Suanglung 43.75 98** P **P** **17 25 25.0 -1.8**
SSLB IAmb IAmb 17 25 52.1
comp=Z,8.4nm,0.9s
**CESX Cesi 43.82 293** P **P** **17 25 25.0 -2.2**
CESX IAmb IAmb 17 25 29.7
comp=Z,12nm,0.8s
**UBR Ueberruh 43.95 300** *e*P **P** **17 25 29.0 +0.7**
comp=Z,8.6nm,0.6s,baz=81,slow=7.1
**FURI Furi 44.06 232** LR LR 17 47 01.1
comp=Z,354nm,18.6s,baz=20,slow=40
**FUORN Ofenpass-Fuorn 44.15 299** P **P** **17 25 29.0 -1.0**
**DAVA Damuels 44.21 300** *e*P **P** **17 25 30.5 0.0**
comp=Z,5.1nm,0.4s
**STU Stuttgart 44.25 302** **P** **17 25 30.1 -0.4**
STU IAmb IAmb 17 25 39.4
comp=Z,14nm,0.8s
**STU Stuttgart 44.25 302** P **P** **17 25 30.1 -0.4**
STU pmax pmax
comp=Z,14nm,0.8s
**IBBN Ibbenburen 44.30 307** *e*P **P** **17 25 32.2 +1.4**
comp=Z,5.8nm,0.9s,baz=81,slow=7.1
**DAVOX Davos/Dischmat 44.35 299** LR LR 17 45 53.3
comp=Z,302nm,18.4s,baz=86,slow=39
**TUE Stuetta 44.80 299** P **P** **17 25 34.2 -1.0**
**TUE Stuetta 44.80 299** P **P** **17 25 35.8 +0.6**
comp=Z,35nm,0.9s
**BFO Black Forest 44.92 302** P **P** **17 25 34.6 -1.3**
**BFO Black Forest 44.92 302** P **P** **17 25 34.6 -1.3**
BFO pmax pmax
comp=Z,4.0nm,0.8s
**BFO Black Forest 44.92 302** *e*P **P** **17 25 40.1 +4.2**
comp=Z,3.6nm,0.8s,baz=81,slow=7.1
**CASP Castiglione de 44.95 293** P **P** **17 25 34.5 -1.7**
**ECH Echery 45.71 302** P **P** **17 25 41.1 -1.1**
**ECH Echery 45.71 302** P **P** **17 25 41.1 -1.1**
ECH pmax pmax
comp=Z,7.0nm,1.2s
**GSI Gunungsitoli 45.77 144** P **P** **17 25 41.1 -1.8**
**SENIN Lac Senin/Sane 46.18 299** P **P** **17 25 44.4 -1.7**
**BNI Bardonecchia 47.02 298** P **P** **17 25 51.4 -1.3**
BNI IAmb IAmb 17 26 01.1
comp=Z,15nm,1.1s
**BNI Bardonecchia 47.02 298** P **P** **17 25 51.4 -1.3**
BNI pmax pmax
comp=Z,15nm,1.2s
**JOW Kunigami 47.55 89** LR LR 17 46 47.8
comp=Z,186nm,19.7s,baz=344,slow=37
**SSB Saint Sauveur 48.36 299** P **P** **17 26 01.3 -1.6**
SSB IAmb IAmb 17 26 11.4
comp=Z,8.1nm,1.2s
**SSB Saint Sauveur 48.36 299** P **P** **17 26 01.3 -1.6**
SSB pmax pmax
comp=Z,8.0nm,1.2s
**JMIC Jan Mayen 48.73 334** LR LR 17 46 40.1
comp=Z,116nm,19.7s,baz=96,slow=36
**KEST Kesra 48.84 285** P **P** **17 26 05.5 -1.3**
KEST IAmb IAmb 17 26 08.8
comp=Z,14nm,1.1s
**KEST Kesra 48.84 285** P **P** **17 26 06.6 -0.2**
comp=Z,7.7nm,0.9s,baz=73,slow=1.4,SNR=6.2
comp=Z,7.7nm,0.9s
**KEST Kesra 48.84 285** P **P** **17 26 08.3 +1.5**
**CLF Chambon-Foret 48.88 303** P **P** **17 26 05.8 -1.0**
**YSS Yuzh-Sakhalins 49.12 58** P **P** **17 26 08.6 -0.1**
**TATN Tataouine 49.44 281** P **P** **17 26 09.7 -1.7**
**EKA Eskdalemuir Ar 49.78 314** P **P** **17 26 14.3 +0.7**
comp=Z,3.2nm,0.6s,baz=90,slow=8.1,SNR=25
comp=Z,3.2nm,0.6s
**ESK Eskdalemuir 49.81 313** P **P** **17 26 13.5 -0.3**
ESK IAmb IAmb 17 26 23.4
comp=Z,15nm,1.1s
**ESK Eskdalemuir 49.81 313** P **P** **17 26 13.5 -0.3**
ESK pmax pmax
comp=Z,15nm,1.2s
**ASAJ Asahikawa 50.06 62** LR LR 17 49 49.8
comp=Z,308nm,19.4s,baz=327,slow=39
**MJAR Matsushiro Arr 50.17 73** P **P** **17 26 18.9 +2.0**
comp=Z,6.0nm,0.9s,baz=285,slow=11,SNR=1.8
comp=Z,6.0nm,0.9s
**JMZ Minamidaito 2 50.32 89** P **P** **17 26 17.2 -0.9**
**LODK Lodwar 50.39 232** P **P** **17 26 17.2 -1.6**
**CEST Esterri de Car 51.58 297** P **P** **17 26 25.5 -2.0**
CEST IAmb IAmb 17 26 35.8
comp=Z,12nm,1.1s
**DSB Dublin 52.25 312** P **P** **17 26 31.7 -0.5**
**KMBO Kilima Mbogo 53.03 226** P **P** **17 26 36.8 -1.9**
**KMBO Kilima Mbogo 53.03 226** P **P** **17 26 36.8 -1.9**
KMBO pmax pmax
comp=Z,5.0nm,1.2s
**SCO Scoresbysund 53.17 335** P **P** **17 26 38.0 -0.7**
SCO IAmb IAmb 17 26 53.1
comp=Z,13nm,0.9s
**SCO Scoresbysund 53.17 335** P **P** **17 26 38.0 -0.7**
SCO pmax pmax
comp=Z,13nm,0.9s
**MNAI Manna 53.24 141** P **P** **17 26 38.1 -1.8**
**KIBK Kibwezi 53.62 225** P **P** **17 26 41.4 -1.5**
KIBK IAmb IAmb 17 26 44.3
comp=Z,10nm,1.3s
**BILL Bilibino 53.74 28** P **P** **17 26 43.1 +0.1**
BILL IAmb IAmb 17 27 18.0
comp=Z,5.4nm,0.5s
**BILL Bilibino 53.74 28** *e*P **P** **17 26 43.5 +0.5**
BILL *e**PP **pP** **17 26 47.8 -0.2**
BILL *e* 17 27 49.1
BILL *e* 17 28 46.8
BILL *e*PPP PPP 17 29 52.6
BILL pmax pmax
comp=Z,4.0nm,1.0s
BILL MLR MLR
comp=Z,359nm,16.0s
**BORG Borgarnes 55.11 329** LR LR 17 50 06.4
comp=Z,261nm,19.5s,baz=286,slow=36
**CART Cartagena 55.36 292** P **P** **17 26 54.2 -1.0**
**MBAR Mbarara 56.36 233** P **P** **17 27 01.4 -1.4**
**MBAR Mbarara 56.36 233** LR LR 17 53 08.0
comp=Z,135nm,19.8s,baz=13,slow=38
**MBAR Mbarara 56.36 233** P **P** **17 27 01.4 -1.4**
MBAR pmax pmax
comp=Z,4.0nm,1.0s
**ESBB Sonseca Array 56.41 296** P **P** **17 27 01.8 -0.9**
ESBB IAmb IAmb 17 27 03.8
comp=Z,5.8nm,0.9s
**ESDC Sonseca Array 56.41 296** P **P** **17 27 01.8 -0.9**
**ESDC Sonseca Array 56.41 296** P **P** **17 27 02.3 -0.5**
comp=Z,4.8nm,0.8s,baz=54,slow=7.2,SNR=31
ESDC LR LR 17 55 44.5
comp=Z,120nm,18.7s,baz=60,slow=41
comp=Z,4.8nm,0.8s
**PBRG Braganca 57.25 299** *e*P **P** **17 27 09.3 +0.6**
comp=Z,4.0nm,0.9s
**MVO Moncorvo 57.75 299** *e*P **P** **17 27 12.8 +0.6**
comp=Z,5.5nm,0.9s
**PGAV Gavieira, Arco 58.18 300** *e*LR LR 17 55 44.8
comp=Z,124nm,18.0s
**MTE Manteigas 58.46 298** *e*LR LR 17 55 16.6
comp=Z,126nm,20.0s
**PCBR Castelo Branco 58.69 297** *e*P **P** **17 27 20.6 +1.8**
comp=Z,4.2nm,0.7s
**PMRV Marv??o 58.84 297** *e*P **P** **17 27 19.7 -0.1**
comp=Z,9.6nm,0.8s
**PMRV Marv??o 58.84 297** *e*LR LR 17 54 39.7
comp=Z,127nm,18.0s
**PBAR Barrancos 59.23 296** *e*P **P** **17 27 23.1 +0.6**
comp=Z,8.3nm,0.9s
**PESTR Estremoz 59.26 296** *e*P **P** **17 27 23.9 +1.2**
comp=Z,5.8nm,0.9s
**PMTG Montargil 59.58 297** *e*P **P** **17 27 26.0 +1.1**
comp=Z,5.7nm,0.9s
**PVAQ Vaqueiros 60.09 295** *e*P **P** **17 27 29.4 +1.0**
comp=Z,7.6nm,1.0s
**PVAQ Vaqueiros 60.09 295** *e*LR LR 17 56 34.1
comp=Z,112nm,16.0s
**PBDV Barranco-do-Ve 60.32 295** *e*P **P** **17 27 30.9 +0.8**
comp=Z,15nm,0.9s
**B21K Ikpikpuk River 64.09 17** P **P** **17 27 54.1 -0.7**
B21K IAmb IAmb 17 28 01.4
comp=Z,9.5nm,1.1s
**D19K Kuna River 64.17 18** IAmb IAmb 17 27 56.7
comp=Z,8.7nm,1.1s
**E19K Redstone River 65.19 19** P **P** **17 28 01.4 -0.6**
E19K IAmb IAmb 17 28 03.8
comp=Z,5.8nm,1.1s
**D25K Kavik River 65.99 14** IAmb IAmb 17 28 09.0
comp=Z,8.9nm,1.1s
**G19K Purcell Mounta 66.25 20** P **P** **17 28 08.2 -0.7**
G19K IAmb IAmb 17 28 10.0
comp=Z,9.5nm,1.2s
**F21K Alatna River 66.27 18** IAmb IAmb 17 28 10.2
comp=Z,4.9nm,1.0s
**E24K Your Creek 66.64 16** IAmb IAmb 17 28 12.9
comp=Z,8.9nm,1.2s
**TOA0 Torodi Ar. Sit 67.13 268** P **P** **17 28 13.9 -1.3**
**TOA0 Torodi Ar. Sit 67.13 268** P **P** **17 28 14.7 -0.5**
**TORD Torodi Ar. Bea 67.13 268** P **P** **17 28 13.6 -1.7**
**TORD Torodi Ar. Bea 67.13 268** P **P** **17 28 14.4 -0.8**
comp=Z,14nm,0.8s,baz=41,slow=7.0,SNR=82
comp=Z,14nm,0.8s
**H21K Melozitna River 67.70 19** IAmb IAmb 17 28 19.2
comp=Z,5.4nm,1.1s
**G24K Hadweenzic Riv 68.02 16** P **P** **17 28 20.2 0.0**
G24K IAmb IAmb 17 28 21.8
comp=Z,7.0nm,1.1s
**I21K Tanana 68.29 19** IAmb IAmb 17 28 23.1
comp=Z,5.7nm,1.1s
**J20K Nowinta River 68.57 20** IAmb IAmb 17 28 25.1
comp=Z,6.1nm,1.1s
**I23K Minto, Yukon-K 68.93 18** IAmb IAmb 17 28 27.9
comp=Z,12nm,1.4s
**INK Inuvik 68.95 10** P **P** **17 28 26.2 +0.4**
INK IAmb IAmb 17 28 27.2
comp=Z,9.1nm,1.1s
**INK Inuvik 68.95 10** P **P** **17 28 26.2 +0.4**
INK pmax pmax
comp=Z,9.0nm,1.1s
**G27K Doyon Strip 69.05 14** IAmb IAmb 17 28 28.6
comp=Z,4.9nm,1.0s
**K20K Telida 69.26 21** IAmb IAmb 17 28 29.5
comp=Z,7.6nm,1.2s
**MDM Murphy Dome 69.35 17** IAmb IAmb 17 28 30.3
comp=Z,7.1nm,1.3s
**BPAW Bear Paw Mtn. 69.43 19** IAmb IAmb 17 28 30.3
comp=Z,9.5nm,1.3s
**NEA2 Nenana 69.47 18** IAmb IAmb 17 28 29.6
comp=Z,7.5nm,1.2s
**COLA College 69.50 17** P **P** **17 28 29.5 +0.2**
**IL31 69.81 17** IAmb IAmb 17 28 31.7
comp=Z,5.5nm,1.1s
**ILAR Eielson Array 69.81 17** P **P** **17 28 30.3 -0.9**
**ILAR Eielson Array 69.81 17** P **P** **17 28 30.9 -0.4**
comp=Z,3.0nm,0.9s,baz=315,slow=4.9,SNR=26
ILAR LR LR 18 02 24.1
comp=Z,120nm,19.6s,baz=326,slow=39
comp=Z,3.0nm,0.9s
**H29M Whitestone 70.16 13** P **P** **17 28 32.9 -0.5**
**I28M Miner Creek 70.59 14** P **P** **17 28 35.9 -0.2**
I28M IAmb IAmb 17 28 43.0
comp=Z,3.5nm,0.7s
**FRB Frobisher Bay 70.83 343** LR LR 18 03 02.9
comp=Z,96nm,20.1s,baz=12,slow=39
**I29M Ogilvie Camp, 70.95 13** IAmb IAmb 17 28 39.0
comp=Z,8.7nm,1.1s
**SCRK Sand Creek 71.12 16** IAmb IAmb 17 28 40.5
comp=Z,6.4nm,1.0s
**DHY Denali Highway 71.16 18** P **P** **17 28 38.7 -1.0**
DHY IAmb IAmb 17 28 48.5
comp=Z,4.5nm,1.0s
**I30M Mount Dempster 71.41 12** IAmb IAmb 17 28 42.1
comp=Z,6.6nm,0.9s
**K27K Chicken 71.46 15** IAmb IAmb 17 28 42.8
comp=Z,7.7nm,1.1s
**DAWY Dawson 71.95 14** IAmb IAmb 17 28 49.6
comp=Z,7.6nm,1.1s
**BCAR Beaver Creek A 72.39 16** P **P** **17 28 46.6 -0.3**
**L29M L29M 73.05 14** IAmb IAmb 17 28 53.1
comp=Z,18nm,1.3s
**KDAK Kodiak Island 74.27 23** LR LR 18 07 26.7
comp=Z,74nm,19.3s,baz=46,slow=40
**DBIC Dimbokro 76.21 267** P **P** **17 29 09.1 -0.9**
**DBIC Dimbokro 76.21 267** P **P** **17 29 09.3 -0.6**
comp=Z,13nm,1.0s,baz=44,slow=5.3,SNR=6.4
comp=Z,13nm,1.0s
**YKA Yellowknife A 76.37 3** P **P** **17 29 09.9 -0.1**
comp=Z,6.0nm,0.8s,baz=350,slow=5.5,SNR=16
YKA LR LR 18 06 25.4
comp=Z,216nm,19.4s,baz=336,slow=38
comp=Z,6.0nm,0.8s
**YKA Yellowknife Ar 76.37 3** *i* P **P** **17 29 09.8 -0.2**
YKA pmax pmax
comp=Z,7.0nm,0.9s
**SCHQ Schefferville 78.14 337** P **P** **17 29 20.0 -0.2**
comp=Z,4.6nm,0.9s,baz=32,slow=11,SNR=3.5
SCHQ LR LR 18 03 17.4
comp=Z,145nm,21.2s,baz=59,slow=35
comp=Z,4.6nm,0.9s
**BOSA Boshof 82.23 221** P **P** **17 29 41.9 -0.7**
comp=Z,8.6nm,1.0s,baz=14,slow=4.2,SNR=4.1
comp=Z,8.6nm,1.0s
**WRA Warramunga Arr 83.54 124** P **P** **17 29 48.9 -0.5**
**WRA Warramunga Arr 83.54 124** P **P** **17 29 48.3 -1.1**
comp=Z,2.5nm,1.0s,baz=326,slow=4.6,SNR=7.7
comp=Z,2.5nm,1.0s
**WRA Warramunga Arr 83.54 124** P **P** **17 29 48.9 -0.5**
WRA pmax pmax
comp=Z,1.0nm,1.5s
**FFC Flin Flon 84.21 357** P **P** **17 29 52.3 -0.1**
FFC IAmb IAmb 17 29 53.5
comp=Z,8.0nm,1.1s
**FFC Flin Flon 84.21 357** P **P** **17 29 52.3 -0.1**
FFC pmax pmax
comp=Z,8.0nm,1.1s
**BBB Bella Bella 85.15 13** LR LR 18 13 19.4
comp=Z,51nm,19.5s,baz=10.0,slow=39
**LMN Caledonia Moun 85.25 332** P **P** **17 29 57.6 -0.2**
**LDAQ Lac Daran 85.51 337** IAmb IAmb 17 30 00.9
comp=Z,7.8nm,0.9s
**D62A Allapoint, All 85.61 335** IAmb IAmb 17 30 01.5
comp=Z,7.1nm,0.9s
**AS31 Alice Springs 86.04 126** P **P** **17 30 00.4 -1.6**
**ASAR Alice Springs 86.04 126** P **P** **17 30 00.7 -1.3**
comp=Z,3.6nm,1.0s,baz=329,slow=5.5,SNR=13
comp=Z,3.6nm,1.0s
**ULM Lac du Bonnet 88.25 353** P **P** **17 30 11.0 -1.3**
comp=Z,2.5nm,0.8s,baz=8.1,slow=7.1,SNR=2.3
ULM LR LR 18 12 36.1
comp=Z,166nm,19.9s,baz=358,slow=38
comp=Z,2.5nm,0.8s
**EYMN Ely 90.00 349** P **P** **17 30 19.6 -1.1**
**J61A Chester 90.06 335** P **P** **17 30 19.9 -1.1**
**NEW Newport 90.38 6** LR LR 18 15 20.6
comp=Z,183nm,19.4s,baz=11,slow=38
**SADO Sadowa 90.62 340** LR LR 18 15 30.8
comp=Z,124nm,18.8s,baz=64,slow=38
**I07A Izee 94.28 9** IAmb IAmb 17 30 47.7
comp=Z,4.1nm,1.2s
**PDAR Pinedale Array 96.27 2** P **P** **17 30 49.2 -0.7**
comp=Z,0.6nm,0.9s,baz=48,slow=2.2,SNR=5.5
PDAR LR LR 18 19 11.0
comp=Z,62nm,18.5s,baz=3.0,slow=38
comp=Z,0.6nm,0.9s
**HWUT Hardware Ranch 97.36 3** P **P** **17 30 53.6 -1.2**
**QSPA South Pole Qui 131.11 180** PKP **PKPdf** **17 36 31.3 -0.8**
comp=Z,1.4nm,0.8s,baz=293,slow=1.5,SNR=4.3
**CPUP Villa Florida 136.39 274** PKP **PKPdf** **17 36 42.0 -1.1**
comp=Z,3.3nm,0.8s,baz=32,slow=1.9,SNR=9.1
**CPUP Villa Florida 136.39 274** PKIKP **PKPdf** **17 36 42.0 -1.1**
**LPAZ La Paz 138.02 295** PKP **PKPdf** **17 36 47.1 -0.1**
comp=Z,1.1nm,0.7s,baz=72,slow=3.3,SNR=4.2
**PLCA Paso Flores 152.33 259** PKPbc **PKPbc** **17 37 16.6 -0.4**
comp=Z,5.7nm,0.9s,baz=88,slow=2.0,SNR=3.9

*IDC **07** 17:23:32.9±2.0, 37.°77N×144.°30E, h0km, mb3.6/2, mbtmp3.7/6, ML3.6/4, Error ellipse: s-maj=38.4km s-min=26.9km az=61.0*
*JMA **07** 17:23:39.2±0.2, 37.°9N±0.°7×143.°9E±1.°0, h55km, MV4.0/28, FAR E OFF MIYAGI PREF*
**ISC 07 17:23:37.6±1.5, 37.°90N±0.°06×144.°12E±0.°09, h35km, n23, σ1s58/35, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **2.14** | **282** | *e*P | | | **Pn** | **17 24 10.6** | **-0.1** |
| JIKH | | | | *e*S | | | **Sn** | **17 24 33.7** | **-2.3** |
| **JIO** | **Ouri** | **2.26** | **285** | P | | | **Pn** | **17 24 12.4** | **+0.1** |
| JIO | | | | *e*S | | | **Sn** | **17 24 37.0** | **-2.0** |
| **OFUJ** | **Ofunato** | **2.26** | **302** | P | | | **Pn** | **17 24 12.6** | **+0.2** |
| OFUJ | | | | *e*S | | | **Sn** | **17 24 37.9** | **-1.2** |
| **JKMT** | **Kesennumamotoy** | **2.27** | **295** | *e*P | | | **Pn** | **17 24 12.7** | **+0.1** |
| JKMT | | | | *e*S | | | **Sn** | **17 24 37.7** | **-1.7** |
| **JMK** | **Ichinoseki** | **2.51** | **296** | *e*P | | | **Pn** | **17 24 16.2** | **+0.4** |
| JMK | | | | *e*S | | | **Sn** | **17 24 44.0** | **-1.2** |
| **JOM** | **Ohasama** | **2.72** | **306** | P | | | **Pn** | **17 24 19.4** | **+0.7** |
| JOM | | | | *e*S | | | **Sn** | **17 24 49.5** | **-0.9** |
| **JOTO** | **OTAMA OYAMA** | **3.02** | **265** | *e*P | | | **Pn** | **17 24 23.3** | **+0.3** |
| JOTO | | | | *e*S | | | **Sn** | **17 24 56.7** | **-1.2** |
| **JYK** | **Kaneyama** | **3.13** | **290** | *e*P | | | **Pn** | **17 24 25.3** | **+0.9** |
| JYK | | | | *e*S | | | **Sn** | **17 24 59.2** | **-1.3** |
| **JANG** | **Nango** | **3.20** | **321** | *e*P | | | **Pn** | **17 24 25.7** | **+0.4** |
| JANG | | | | *e*S | | | **Sn** | **17 25 00.1** | **-2.2** |
| **JAG** | **Ashikaga** | **4.01** | **250** | P | | | **Pn** | **17 24 36.7** | **+0.2** |
| JAG | | | | *e*S | | | **Sn** | **17 25 20.2** | **-2.0** |
| **BSO1** | **Boso 1** | **4.11** | **219** | *e*P | | | **Pn** | **17 24 37.1** | **-0.3** |
| **JOT** | **Ohata** | **4.21** | **327** | *e*S | | | **Sn** | **17 25 25.5** | **-1.8** |
| **JRY** | **Ryogami san** | **4.58** | **247** | P | | | **Pn** | **17 24 44.5** | **+0.1** |
| JRY | | | | *e*S | | | **Sn** | **17 25 32.2** | **-4.2** |
| **JSD** | **Sado** | **4.63** | **274** | P | | | Pn | 17 24 32.3 | -13 |
| **MJAR** | **Matsushiro Arr** | **4.91** | **256** | Pn | | | **Pn** | **17 24 50.0** | **+1.1** |
| | 1.4nm,0.3s,baz=78,slow=15,SNR=89 | | | | | | | | |
| MJAR | | | | Sn | | | **Sn** | **17 25 46.3** | **+1.8** |
| | 0.2nm,0.3s,baz=86,slow=26,SNR=5.7 | | | | | | | | |
| | 14nm,0.5s | | | | | | | | |
| **MAJO** | **Matsushiro** | **4.91** | **256** | P | | | **Pn** | **17 24 49.6** | **+0.7** |
| **JGF** | **Kuroka** | **5.89** | **249** | P | | | **Pn** | **17 25 04.4** | **+2.0** |
| **INU** | **Inuyama** | **6.25** | **248** | P | | | **Pn** | **17 25 09.7** | **+2.4** |
| **ASAJ** | **Asahikawa** | **6.32** | **350** | Pn | | | **Pn** | **17 25 09.4** | **+1.2** |
| | 4.2nm,0.3s,baz=147,slow=17,SNR=56 | | | | | | | | |
| ASAJ | | | | Sn | | | **Sn** | **17 26 17.8** | **-1.4** |
| | 1.0nm,0.3s,baz=277,slow=31,SNR=1.7 | | | | | | | | |
| | 9.1nm,0.3s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.11** | **308** | Pn | | | **Pn** | **17 26 14.8** | **+0.9** |
| | 0.1nm,0.3s,baz=116,slow=20,SNR=1.9 | | | | | | | | |
| | 0.9nm,0.6s | | | | | | | | |
| **KSRS** | **Korea Array** | **12.85** | **273** | Pn | | | **Pn** | **17 26 40.8** | **+3.2** |
| | 0.1nm,0.3s,baz=88,slow=14,SNR=3.1 | | | | | | | | |
| | 0.8nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **58.26** | **191** | P | | | **P** | **17 33 28.8** | **+0.2** |
| | 0.8nm,0.6s,baz=12,slow=7.2,SNR=7.7 | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **61.98** | **191** | P | | | **P** | **17 33 53.6** | **-0.5** |
| | 0.2nm,0.6s,baz=5.5,slow=6.0,SNR=1.5 | | | | | | | | |
| | 0.2nm,0.6s | | | | | | | | |

**IDC 07 17:25:16.3±4.1, 47.°63N×92.°89W, h0km, mbtmp2.3/1, ML0.7/1, Error ellipse: s-maj=63.2km s-min=26.9km az=54.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.28** | **324** | Pn | | | Pn | 17 26 07.1 | -1.8 |
| | 0.1nm,0.3s,baz=141,slow=15,SNR=1.6 | | | | | | | | |
| ULM | | | | Pg | | | Pb | 17 26 15.6 | +0.2 |
| | 0.1nm,0.3s,baz=144,slow=16,SNR=3.3 | | | | | | | | |
| ULM | | | | Sn | | | Sn | 17 26 46.2 | -2.4 |
| | 0.5nm,0.3s,baz=156,slow=20,SNR=2.4 | | | | | | | | |
| ULM | | | | Lg | | | Lg | 17 26 57.4 | |
| | 3.7nm,0.3s,baz=61,slow=19,SNR=30 | | | | | | | | |
| | 0.6nm,0.4s | | | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.30** | **322** | I | | | I | 17 45 40.0 | |
| | baz=139,slow=321,SNR=2.7 | | | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **16.24** | **281** | I | | | I | 19 03 05.0 | |
| | baz=87,slow=318 | | | | | | | | |

*TEH **07** 17:29:12.2, 34.°58N×46.°27E, h10km±81km, ML2.6*
*ISN **07** 17:29:13.1±1.3, 34.°60N×46.°22E, h16km±15km, ML2.6*
**ISC 07 17:29:12.4±1.1, 34.°59N±0.°04×46.°25E±0.°05, h9km±13km, n9, σ0s63/12, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.16** | **45** | Pg | | | **Pg** | **17 29 15.9** | **0.0** |
| IDHR | | | | Sg | | | **Sg** | **17 29 18.7** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.37** | **134** | Pg | | | **Pg** | **17 29 19.6** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **211** | Pg | | | **Pg** | **17 29 23.2** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **115** | Pg | | | **Pg** | **17 29 25.6** | **-0.8** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **182** | Pg | | | **Pb** | **17 29 30.9** | **-0.4** |
| **SNQR** | **Sonqor, Kerman** | **1.17** | **76** | Pg | | | **Pg** | **17 29 35.4** | **+0.6** |
| **IBZA** | **Bozab** | **1.34** | **95** | Pg | | | **Pb** | **17 29 37.6** | **-0.2** |
| **IBDR** | **Badra** | **1.50** | **190** | *e*Pg | | | **Pb** | **17 29 40.0** | **-0.3** |
| | baz=9.0 | | | | | | | | |
| IBDR | | | | *e*Sg | | | **Sg** | **17 30 01.0** | **+0.5** |
| **IKRK** | **Kirkuk** | **1.77** | **298** | *e*Pn | | | **Pb** | **17 29 44.0** | **-0.9** |
| IKRK | | | | *e*Sn | | | **Sb** | **17 30 08.0** | **+0.8** |
| IKRK | | | | AML | | | AML | 17 30 13.6 | |
| | comp=N,94nm,0.2s | | | | | | | | |
| IKRK | | | | AML | | | AML | 17 30 14.4 | |
| | comp=E,68nm,0.1s | | | | | | | | |

*VAO **07** 17.°55:22.7±1.4, 27.°80S×69.°32W, h10km, mb4.2*
*NEIC **07** 17.°55:34.5±2.4, 27.°37S±0.°05×69.°5W±0.°1, h118km±8km, mb4.1/5, ML4.2(GUC), Error ellipse: s-maj=15.1km s-min=6.5km az=97.0*
*SJA **07** 17.°55:34.7±0.7, 27.°42S×69.°29W, h71km±5km, ML4.0, MW4.0*
*IDC **07** 17.°55:35.6±0.8, 27.°28S×69.°39W, h115km±6km, mb3.9/3, mbtmp4.2/6, MS3.3/3, Error ellipse: s-maj=29.7km s-min=12.6km az=99.0*
*GUC **07** 17.°55:35.0±0.8, 27.°39S×69.°45W, h116km±5km, ML4.2*
**ISC 07 17.°55:34.0±0.5, 27.°35S±0.°03×69.°37W±0.°04, h114km±5km, h114km:pP-P, n110, σ1s71/144, mb4.0/4, 8C-1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GO03** | **Copiap** | **0.81** | **252** | | | | **Pn** | **17 55 54.1** | **+0.4** |
| GO03 | | | | Sn | | | **Sn** | **17 56 08.5** | **-0.2** |
| **GO03** | **Copiap** | **0.81** | **252** | *i*P | | | **Pn** | **17 55 54.3** | **+0.5** |
| GO03 | | | | *e*S | | | **Sn** | **17 56 08.6** | **0.0** |
| GO03 | | | | IAML | | | | 17 56 09.3 | |
| | comp=E,10μm,0.7s | | | | | | | | |
| **AC06** | **Mina Casimiro** | **0.88** | **269** | Pn | | | **Pn** | **17 55 54.8** | **+0.5** |
| AC06 | | | | Sn | | | **Sn** | **17 56 09.8** | **+0.1** |
| **AC06** | **Mina Casimiro** | **0.88** | **269** | *i*P | | | **Pn** | **17 55 54.9** | **+0.6** |
| AC06 | | | | *e*S | | | **Sn** | **17 56 09.7** | **+0.1** |
| AC06 | | | | IAML | | | | 17 56 10.4 | |
| | comp=N,5μm,0.3s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AC01** | **Pan de Azucar** | **1.62** | **317** | | | **Pn** | **17 56 04.1** | **+1.5** |
| AC01 | | | | Sn | | **Sn** | **17 56 25.0** | **+0.8** |
| **AC01** | **Pan de Azucar** | **1.62** | **317** | *eP* | | **Pn** | **17 56 04.0** | **+1.5** |
| AC01 | | | | *eS* | | **Sn** | **17 56 26.3** | **+2.1** |
| AC01 | | | | IAML | | | 17 56 28.0 | |
| | comp=Z,525nm,0.7s | | | | | | | |
| **AC01** | **Pan de Azucar** | **1.62** | **317** | ⇑*iP* | | **Pn** | **17 56 04.2** | **+1.7** |
| AC01 | | | | *eS* | | **Sn** | **17 56 25.6** | **+1.3** |
| AC01 | | | | IAML | | | 17 56 26.4 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **AC05** | **El Transito** | **1.69** | **208** | | | **Pn** | **17 56 03.9** | **+0.5** |
| AC05 | | | | Sn | | **Sn** | **17 56 26.1** | **+0.3** |
| **AC05** | **El Transito** | **1.69** | **208** | *eP* | | **Sn** | **17 56 03.3** | **-0.1** |
| AC05 | | | | *eS* | | **Sn** | **17 56 26.3** | **+0.5** |
| AC05 | | | | IAML | | | 17 56 30.2 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **AC05** | **El Transito** | **1.69** | **208** | ⇑*eP* | | **Pn** | **17 56 04.0** | **+0.6** |
| AC05 | | | | *eS* | | **Sn** | **17 56 26.1** | **+0.3** |
| AC05 | | | | IAML | | | 17 56 28.2 | |
| | comp=N,5μm,0.5s | | | | | | | |
| **VCA** | **Vinchina** | **1.73** | **144** | *eP* | | Pn | 17 55 47.1 | -17 |
| VCA | | | | *eS* | | **Sn** | **17 56 23.9** | **-2.8** |
| VCA | | | | IAML | | | 17 56 30.9 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| **VCA** | **Vinchina** | **1.73** | **144** | ⇑*eP* | | **Pn** | **17 56 05.5** | **+1.6** |
| VCA | | | | *eS* | | **Sn** | **17 56 28.2** | **+1.5** |
| **AC04** | **Llanos de Chal** | **1.73** | **240** | Pn | | **Pn** | **17 56 04.2** | **+0.4** |
| AC04 | | | | Sn | | **Sn** | **17 56 26.6** | **-0.1** |
| **AC04** | **Llanos de Chal** | **1.73** | **240** | *eP* | | **Pn** | **17 56 03.9** | **+0.1** |
| AC04 | | | | *eS* | | **Sn** | **17 56 26.8** | **+0.1** |
| AC04 | | | | IAML | | | 17 56 32.4 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.73** | **240** | ⇓*eP* | | **Pn** | **17 56 04.3** | **+0.5** |
| AC04 | | | | *eS* | | **Sn** | **17 56 26.4** | **-0.3** |
| AC04 | | | | IAML | | | 17 56 27.9 | |
| | comp=N,4μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **2.03** | **215** | | | **Pn** | **17 56 08.1** | **+0.3** |
| LCO | | | | Sn | | **Sn** | **17 56 32.9** | **-0.8** |
| **LCO** | **Las Campanas** | **2.03** | **215** | *eP* | | **Pn** | **17 56 08.2** | **+0.4** |
| LCO | | | | *eS* | | **Sn** | **17 56 33.8** | **+0.1** |
| **LCO** | **Las Campanas** | **2.03** | **215** | *eP* | | **Pn** | **17 56 08.1** | **+0.3** |
| LCO | | | | *eS* | | **Sn** | **17 56 33.7** | **0.0** |
| **GO02** | **Mina Guanaco** | **2.18** | **355** | | | **Pn** | **17 56 11.7** | **+1.9** |
| GO02 | | | | Sn | | **Sn** | **17 56 38.0** | **+0.9** |
| **GO02** | **Mina Guanaco** | **2.18** | **355** | ⇑*eP* | | **Pn** | **17 56 11.8** | **+1.9** |
| GO02 | | | | *eS* | | **Sn** | **17 56 40.0** | **+2.8** |
| **CO01** | **Juntas del Tor** | **2.70** | **193** | | | **Pn** | **17 56 17.4** | **+1.0** |
| **CO01** | **Juntas del Tor** | **2.70** | **193** | *eP* | | **Pn** | **17 56 17.0** | **+0.6** |
| CO01 | | | | *eS* | | **Sn** | **17 56 49.4** | **+0.4** |
| CO01 | | | | IAML | | | 17 56 52.9 | |
| | comp=Z,366nm,0.7s | | | | | | | |
| **CO01** | **Juntas del Tor** | **2.70** | **193** | ⇑*eP* | | **Pn** | **17 56 17.6** | **+1.3** |
| CO01 | | | | *eS* | | **Sn** | **17 56 49.7** | **+0.8** |
| CO01 | | | | IAML | | | 17 56 54.7 | |
| | comp=E,895nm,0.8s | | | | | | | |
| **AROD** | **Rodeo** | **2.81** | **182** | *eP* | | Pn | 17 56 08.3 | -10 |
| **ACDV** | **Cuesta del Vie** | **2.82** | **176** | *eP* | | **Pn** | **17 56 20.0** | **+2.1** |
| ACDV | | | | IAML | | | 17 56 57.6 | |
| | comp=Z,211nm,0.9s | | | | | | | |
| **PB14** | **IPOC Station P** | **2.86** | **341** | Pn | | **Pn** | **17 56 19.9** | **+1.3** |
| **PB14** | **IPOC Station P** | **2.86** | **341** | *eP* | | **Pn** | **17 56 20.0** | **+1.3** |
| PB14 | | | | *eS* | | **Sn** | **17 56 48.5** | **-4.4** |
| PB14 | | | | IAML | | | 17 56 59.4 | |
| | comp=Z,367nm,0.5s | | | | | | | |
| **PB14** | **IPOC Station P** | **2.86** | **341** | *eP* | | **Pn** | **17 56 20.1** | **+1.4** |
| **ACLC** | **CERRO LA CRUZ** | **2.97** | **135** | *eP* | | **Pn** | **17 56 20.6** | **+0.7** |
| ACLC | | | | *eS* | | **Sn** | **17 56 54.7** | **-0.5** |
| ACLC | | | | IAML | | | 17 56 55.9 | |
| | comp=Z,359nm,0.4s | | | | | | | |
| **CO05** | **La Serena** | **3.04** | **212** | | | **Pn** | **17 56 19.9** | **-0.7** |
| **CO05** | **La Serena** | **3.04** | **212** | *eP* | | **Pn** | **17 56 20.3** | **-0.3** |
| **GO04** | **Tololo Observa** | **3.08** | **204** | | | **Pn** | **17 56 20.9** | **-0.5** |
| **GO04** | **Tololo Observa** | **3.08** | **204** | *eP* | | **Pn** | **17 56 21.3** | **-0.1** |
| **ACCO** | **Cerro Coronel** | **3.24** | **175** | *eP* | | **Pn** | **17 56 25.1** | **+1.5** |
| ACCO | | | | *eS* | | **Sn** | **17 57 03.8** | **+2.0** |
| **FSA** | **Cafayete** | **3.27** | **69** | *eP* | | **Pn** | **17 56 26.7** | **+2.8** |
| FSA | | | | *eS* | | Sn | 17 56 43.1 | -19 |
| **CYA** | **Choya** | **3.34** | **110** | *eP* | | **Pn** | **17 56 25.0** | **+0.3** |
| CYA | | | | *eS* | | **Sn** | **17 57 01.9** | **-1.8** |
| CYA | | | | IAML | | | 17 57 02.6 | |
| | comp=Z,264nm,0.8s | | | | | | | |
| **DOCA** | **Reserva Natura** | **3.60** | **176** | *eP* | | **Pn** | **17 56 29.3** | **+0.9** |
| DOCA | | | | *eS* | | **Sn** | **17 57 10.3** | **-0.1** |
| DOCA | | | | IAML | | | 17 57 15.2 | |
| | comp=Z,678nm,0.5s | | | | | | | |
| **CO03** | **El Pedregal** | **3.67** | **198** | | | **Pn** | **17 56 28.6** | **-0.4** |
| **CO03** | **El Pedregal** | **3.67** | **198** | *eP* | | **Pn** | **17 56 29.6** | **+0.6** |
| CO03 | | | | *eS* | | **Sn** | **17 57 12.1** | **+0.5** |
| CO03 | | | | IAML | | | 17 57 14.5 | |
| | comp=Z,323nm,0.4s | | | | | | | |
| **CO03** | **El Pedregal** | **3.67** | **198** | ⇑*eP* | | **Pn** | **17 56 28.6** | **-0.4** |
| **AVFE** | **Valle Fertil** | **3.70** | **154** | *eP* | | **Pn** | **17 56 30.1** | **+0.6** |
| AVFE | | | | *eS* | | **Sn** | **17 57 10.7** | **-1.7** |
| AVFE | | | | IAML | | | 17 57 11.2 | |
| | comp=Z,568nm,0.4s | | | | | | | |
| **CO06** | **Fray Jorge** | **3.86** | **210** | | | **Pn** | **17 56 30.4** | **-1.2** |
| **CO06** | **Fray Jorge** | **3.86** | **210** | *eP* | | **Pn** | **17 56 30.3** | **-1.3** |
| **CO02** | **Combarbal** | **4.10** | **200** | Pn | | **Pn** | **17 56 33.6** | **-1.2** |
| **CO02** | **Combarbal** | **4.10** | **200** | *eP* | | **Pn** | **17 56 33.1** | **-1.7** |
| CO02 | | | | *eS* | | Sn | 17 57 03.9 | -18 |
| CO02 | | | | IAML | | | 17 57 51.7 | |
| | comp=Z,426nm,0.3s | | | | | | | |
| **ZON** | **Zonda** | **4.23** | **172** | Pn | | **Pn** | **17 56 36.9** | **+0.4** |
| **SLA** | **San Lorenzo** | **4.35** | **54** | *eP* | | **Pn** | **17 56 41.7** | **+3.4** |
| SLA | | | | *eS* | | **Sn** | **17 57 22.7** | **-5.5** |
| **RTLS** | **Leoncito** | **4.44** | **179** | *eP* | | **Pn** | **17 56 40.2** | **+0.7** |
| RTLS | | | | *eS* | | **Sn** | **17 57 31.7** | **+1.3** |
| RTLS | | | | IAML | | | 17 57 31.8 | |
| | comp=Z,419nm,0.4s | | | | | | | |
| **AF01** | **San Pedro de A** | **4.51** | **14** | | | **Pn** | **17 56 42.4** | **+1.8** |
| **PB05** | **IPOC Station P** | **4.54** | **350** | | | **Pn** | **17 56 40.2** | **-0.5** |
| **PB05** | **IPOC Station P** | **4.54** | **350** | *eP* | | **Pn** | **17 56 40.1** | **-0.5** |
| PB05 | | | | *eS* | | Sn | 17 57 42.9 | +10 |
| PB05 | | | | IAML | | | 17 57 48.8 | |
| | comp=Z,146nm,0.4s | | | | | | | |
| **PB05** | **IPOC Station P** | **4.54** | **350** | ⇑*iP* | | **Pn** | **17 56 40.3** | **-0.5** |
| **LVC** | **Limon Verde** | **4.73** | **5** | Pn | | **Pn** | **17 56 44.3** | **+0.7** |
| **LVC** | **Limon Verde** | **4.73** | **5** | *eP* | | **Pn** | **17 56 44.4** | **+0.8** |
| LVC | | | | *eS* | | **Sn** | **17 57 40.8** | **+3.1** |
| LVC | | | | IAML | | | 17 58 09.5 | |
| | comp=Z,68nm,1.6s | | | | | | | |
| **LVC** | **Limon Verde** | **4.73** | **5** | P | | **Pn** | **17 56 43.9** | **+0.3** |
| | comp=Z,117nm,0.3s,baz=180,slow=8.7,SNR=183 | | | | | | | |
| LVC | | | | S | | **Sn** | **17 57 37.2** | **-0.5** |
| | comp=Z,48nm,0.3s,baz=38,slow=22,SNR=11 | | | | | | | |
| LVC | | | | LR | | LR | 17 58 38.5 | |
| | comp=Z,82nm,20.3s,baz=177,slow=39 | | | | | | | |
| **AZAP** | **Zapla** | **4.97** | **52** | *eP* | | **Pn** | **17 56 43.2** | **-3.5** |
| AZAP | | | | IAML | | | 17 57 50.4 | |
| | comp=Z,50nm,1.0s | | | | | | | |
| **PB04** | **IPOC Station P** | **5.04** | **352** | Pn | | **Pn** | **17 56 46.9** | **-0.7** |
| **PB04** | **IPOC Station P** | **5.04** | **352** | *eP* | | **Pn** | **17 56 47.1** | **-0.5** |
| PB04 | | | | *eS* | | Sn | 17 57 56.3 | +11 |
| PB04 | | | | IAML | | | 17 58 08.6 | |
| | comp=Z,151nm,0.4s | | | | | | | |
| **ASAL** | **Salagasta** | **5.25** | **175** | *eP* | | **Pn** | **17 56 50.6** | **+0.4** |
| ASAL | | | | *eS* | | **Sn** | **17 57 51.7** | **+2.0** |
| **VA06** | **Catapilco** | **5.46** | **197** | | | **Pn** | **17 56 51.0** | **-2.0** |
| **VA03** | **San Esteban** | **5.50** | **190** | | | **Pn** | **17 56 52.5** | **-1.1** |
| **PB09** | **IPOC Station P** | **5.53** | **1** | | | **Pn** | **17 56 53.8** | **-0.4** |
| **PEL** | **Peldehue** | **5.89** | **191** | | | **Pn** | **17 56 57.0** | **-1.9** |
| **MT02** | **Curacav** | **6.09** | **194** | | | **Pn** | **17 56 58.5** | **-3.0** |
| **MT08** | **Bocatoma Ro** | **6.10** | **185** | Pn | | **Pn** | **17 57 01.8** | **-0.2** |
| **PB01** | **IPOC Station P** | **6.28** | **359** | | | **Pn** | **17 57 03.3** | **-0.9** |
| **MT13** | **San Alfonso** | **6.43** | **187** | | | **Pn** | **17 57 04.6** | **-1.6** |
| **LMEL** | **Las Melosas** | **6.52** | **186** | | | **Pn** | **17 57 04.5** | **-3.0** |
| **MT09** | **Talagante** | **6.56** | **192** | | | **Pn** | **17 57 04.3** | **-3.7** |
| **VA05** | **Santo Domingo** | **6.58** | **197** | | | **Pn** | **17 57 04.0** | **-4.1** |
| **MT01** | **Popeta** | **6.70** | **194** | | | **Pn** | **17 57 06.2** | **-3.5** |
| **BO04** | **La Punta** | **6.71** | **189** | | | **Pn** | **17 57 07.2** | **-2.7** |
| **HMBC** | **Humberstone** | **7.05** | **356** | | | **Pn** | **17 57 12.4** | **-2.4** |
| **BO01** | **Tunca** | **7.18** | **191** | Pn | | **Pn** | **17 57 11.9** | **-4.3** |
| **BO02** | **Sierra Bellavi** | **7.52** | **189** | | | **Pn** | **17 57 17.6** | **-3.4** |
| **BI02** | **San Fabin de** | **9.43** | **189** | Pn | | **Pn** | **17 57 43.6** | **-3.2** |
| **CPUP** | **Villa Florida** | **10.80** | **87** | P | | **Pn** | **17 58 06.8** | **+1.4** |
| | comp=Z,1.7nm,0.6s,baz=258,slow=14,SNR=2.8 | | | | | | | |
| **LPAZ** | **La Paz** | **11.06** | **6** | Pn | | **Pn** | **17 58 05.5** | **-4.0** |
| **LPAZ** | **La Paz** | **11.06** | **6** | P | | **Pn** | **17 58 08.8** | **-0.8** |
| | comp=Z,2.4nm,0.4s,baz=338,slow=2.7,SNR=4.2 | | | | | | | |
| **LPAZ** | **La Paz** | **11.06** | **6** | *eP* | | **Pn** | **17 58 05.6** | **-3.9** |
| **TRQA** | **Tornquist** | **12.36** | **152** | | | **Pn** | **17 58 23.8** | **-2.1** |
| **BBSD** | **Serra de San D** | **12.95** | **41** | *eP* | | **Pn** | **17 58 31.4** | **-2.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SIV** | **San Ignacio** | **13.67** | **36** | P | | **Pn** | **17 58 40.9** | **-2.3** |
| | comp=Z,3.2nm,0.6s,baz=248,slow=8.5,SNR=11 | | | | | | | |
| **PLTB** | **Pedras Altas** | **14.41** | **112** | *eP* | | Pn | 17 58 43.3 | -9.2 |
| **ETMB** | **Extrema** | **17.69** | **10** | | | **P** | **17 59 29.7** | **-2.7** |
| **ETMB** | **Extrema** | **17.69** | **10** | *eP* | | **Pn** | **17 59 34.6** | **+1.4** |
| **SAML** | **Samuel** | **19.21** | **19** | P | | **P** | **17 59 49.0** | **-0.1** |
| SAML | | | | IAmb | IAmb | | 17 59 53.0 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **SAML** | **Samuel** | **19.21** | **19** | *eP* | | **Pn** | **17 59 51.8** | **+0.5** |
| **PDRB** | **Porto dos Gac** | **19.65** | **40** | *eP* | | **Pn** | **17 59 56.3** | **-0.1** |
| **CZSB** | **Carneiro do Su** | **19.77** | **350** | *eP* | | **Pn** | **17 59 58.5** | **+1.1** |
| **IPMB** | **Ipameri, GO** | **21.61** | **69** | *eP* | | **P** | **18 00 15.4** | **+0.5** |
| **SNDB** | **Serra Nova Dou** | **22.83** | **51** | *eP* | | **P** | **18 00 27.2** | **-0.3** |
| **PMNB** | **Patos De Minas** | **22.84** | **72** | *eP* | | **P** | **18 00 27.8** | **+0.2** |
| **BDFB** | **Brasilia** | **22.99** | **64** | P | | **P** | **18 00 28.1** | **-1.0** |
| BDFB | | | | IAmb | IAmb | | 18 00 30.7 | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **BDFB** | **Brasilia** | **22.99** | **64** | P | | **P** | **18 00 29.4** | **+0.2** |
| | comp=Z,5.3nm,0.6s,baz=251,slow=7.4,SNR=7.3 | | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | | |
| **NPGB** | **Novo Progresso** | **24.18** | **36** | *eP* | | **P** | **18 00 41.8** | **+2.0** |
| **ITTB** | **Itaituba** | **26.30** | **32** | *eP* | | **P** | **18 01 02.8** | **+3.7** |
| **JANB** | **Januaria** | **26.31** | **67** | *eP* | | **P** | **18 00 59.9** | **+0.7** |
| **PRPB** | **Parauapebas** | **28.09** | **45** | *eP* | | **P** | **18 01 16.2** | **+1.2** |
| **BOAV** | **Boa Vista** | **30.77** | **17** | P | | **P** | **18 01 38.9** | **+0.2** |
| BOAV | | | | IAmb | IAmb | | 18 02 18.6 | |
| | comp=Z,2.8nm,1.0s | | | | | | | |
| **MDP** | **Montagnes des** | **36.08** | **29** | LR | LR | | 18 19 32.4 | |
| | comp=Z,60nm,19.2s,baz=11,slow=40 | | | | | | | |
| **TEIG** | **Tepich** | **50.71** | **337** | LR | LR | | 18 27 08.2 | |
| | comp=Z,67nm,18.8s,baz=36,slow=37 | | | | | | | |
| **QSPA** | **South Pole Qui** | **62.87** | **180** | P | | **P** | **18 05 49.6** | **+2.0** |
| QSPA | | | | pP | | **pP** | **18 06 17.1** | **+0.3** |
| **QSPA** | **South Pole Qui** | **62.87** | **180** | P | | **P** | **18 05 49.0** | **+1.3** |
| | comp=Z,1.7nm,0.5s,baz=351,slow=1.5,SNR=20 | | | | | | | |
| QSPA | | | | pP | | **pP** | **18 06 17.4** | **+0.6** |
| | comp=Z,1.8nm,0.8s,baz=107,slow=5.1,SNR=4.2 | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.75** | **69** | P | | **P** | **18 07 31.4** | **+1.6** |
| | comp=Z,1.4nm,0.6s,baz=280,slow=5.7,SNR=11 | | | | | | | |
| TORD | | | | pP | | **pP** | **18 08 01.6** | **+1.4** |
| | comp=Z,0.8nm,0.6s,baz=242,slow=3.1,SNR=3.3 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **124.53** | **206** | PKP | | **PKiKP** | **18 14 20.9** | **+0.1** |
| | comp=Z,0.4nm,0.9s,baz=134,slow=1.7,SNR=4.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **127.68** | **209** | PKP | | **PKiKP** | **18 14 27.8** | **+0.7** |
| | comp=Z,0.4nm,0.9s,baz=156,slow=1.8,SNR=4.6 | | | | | | | |
| WRA | | | | pPKP | | **pPKPdf** | **18 14 58.4** | **-0.4** |
| | comp=Z,0.5nm,0.9s,baz=160,slow=1.4,SNR=1.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **146.33** | **38** | PKPbc | | **PKiKP** | **18 15 03.0** | **-1.0** |
| | comp=Z,1.7nm,0.7s,baz=306,slow=3.0,SNR=8.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **147.34** | **28** | PKPbc | | **PKPab** | **18 15 05.7** | **-0.2** |
| | comp=Z,2.9nm,0.5s,baz=310,slow=3.8,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **150.45** | **41** | PKPbc | | **PKiKP** | **18 15 13.7** | **+1.1** |
| | comp=Z,2.0nm,0.7s,baz=310,slow=2.1,SNR=22 | | | | | | | |
| MKAR | | | | pPKPbc | | **pPKPbc** | **18 15 44.8** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=315,slow=2.1,SNR=3.1 | | | | | | | |

*IDC **07** 18:02:22.1±2.6, 10°.91S×112°.35E, h0km, mb3.8/8, mbtmp3.8/8, MS3.0/1, Error ellipse: s-maj=142.0km s-min=17.7km az=49.0*
*DJA **07** 18:02:28.5±1.1, 11°S×21°×11°2E±°, h65km±174km, M4.4/6, mb4.5/1, MLv4.4/6*

**ISC 07 18:02:28.3±1.0, 10°.84S±0°.10×112°.30E±0°.06, h50km, n19, σ1.973/20, mb3.8/8, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PWJI** | **Pagerwojo** | **2.84** | **350** | P | **Pn** | **18 03 09.6** | **-1.6** |
| PWJI | | | | S | **Sn** | **18 03 43.3** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.98** | **38** | P | **Pn** | **18 03 13.4** | **+0.3** |
| JAGI | | | | S | **Sn** | **18 03 46.1** | **-1.6** |
| **UGM** | **Wanagama** | **3.39** | **329** | P | **Pn** | **18 03 18.4** | **-0.5** |
| UGM | | | | S | **Sn** | **18 03 58.1** | **+0.2** |
| **KPJI** | **Karang Pucung** | **4.81** | **316** | P | **Pn** | **18 03 38.1** | **-0.2** |
| **CMJI** | **Cimerak** | **4.86** | **308** | P | **Pn** | **18 03 37.9** | **-1.1** |
| CMJI | | | | S | **Sn** | **18 04 29.6** | **-4.4** |
| **TWSI** | **Taliwang, Sumb** | **4.97** | **66** | P | **Pn** | **18 03 40.4** | **-0.1** |
| TWSI | | | | S | **Sn** | **18 04 33.4** | **-3.4** |
| **CNJI** | **Cibinong** | **6.19** | **304** | P | **Pn** | **18 03 56.2** | **-1.0** |
| **WRA** | **Warramunga Arr** | **23.07** | **116** | P | **P** | **18 07 28.6** | **-1.3** |
| | 1.3nm,0.8s,baz=289,slow=11,SNR=5.5 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **24.21** | **125** | P | **P** | **18 07 40.0** | **-0.5** |
| | 0.6nm,0.6s,baz=298,slow=9.1,SNR=11 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.95** | **336** | P | **P** | **18 08 51.6** | **+1.9** |
| | 0.6nm,0.4s,baz=171,slow=7.8,SNR=5.9 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **34.20** | **132** | P | **P** | **18 09 08.9** | **-0.3** |
| | 2.8nm,1.1s,baz=306,slow=14,SNR=1.4 | | | | | | |
| | 2.8nm,1.1s | | | | | | |
| **H08S2** | **Diego Garcia H** | **39.40** | **271** | T | T | 18 51 57.5 | |
| | baz=94 | | | | | | |
| **H08S3** | **Diego Garcia H** | **39.41** | **271** | T | T | 18 51 55.8 | |
| | baz=94 | | | | | | |
| **H08S1** | **Diego Garcia H** | **39.42** | **271** | T | T | 18 51 57.5 | |
| | baz=94 | | | | | | |
| **GUMO** | **Guam** | **40.41** | **54** | LR | LR | 18 29 08.6 | |
| | comp=Z,18nm,18.5s,baz=61,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **58.65** | **355** | P | **P** | **18 12 21.9** | **+1.4** |
| | 0.4nm,0.7s,baz=191,slow=5.3,SNR=2.4 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.34** | **337** | P | **P** | **18 12 53.5** | **+1.3** |
| | 0.8nm,0.5s,baz=145,slow=7.6,SNR=11 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.90** | **338** | P | **P** | **18 13 22.6** | **+1.0** |
| | 0.5nm,0.4s,baz=144,slow=5.5,SNR=3.2 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.62** | **343** | P | **P** | **18 13 27.0** | **+1.0** |
| | 2.5nm,0.5s,baz=154,slow=4.7,SNR=13 | | | | | | |
| | 2.5nm,0.5s | | | | | | |

*AEIC **07** 18:07:51.4±1.5, 51°.65N±0°.10×178°.50W±0°.02, h11km±5km, Error ellipse: s-maj=13.9km s-min=1.3km az=175.0*

**NEIC 07 18:07:53.1±2.6, 51°.70N±0°.07×178°.50W±0°.05, h35km±2km, ML3.6**(AEIC), **Error ellipse: s-maj=12.1km s-min=3.1km az=340.0, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GAEA** | **Gareloi East** | **0.17** | **300** | | Pn | 18 07 57.0 | -2.8 |
| **GANO** | **Gareloi North** | **0.22** | **304** | | Pn | 18 07 57.5 | -2.8 |
| **TASE** | **Tanaga Southea** | **0.32** | **64** | | Pn | 18 07 59.1 | -2.2 |
| **TANO** | **Tanaga North** | **0.32** | **47** | | Pn | 18 07 59.5 | -1.9 |
| **KICM** | **Kanaga Island** | **0.84** | **74** | | Pn | 18 08 07.7 | -0.8 |
| **KIWB** | **Kanaga Island** | **0.85** | **79** | | Pn | 18 08 08.1 | -1.2 |
| KIWB | | | | | Sn | 18 08 19.4 | -0.6 |
| **KINC** | **Kanaga Island** | **0.89** | **74** | | Pn | 18 08 08.2 | -0.9 |
| **KIRH** | **Kanaga Island** | **0.90** | **76** | | Pn | 18 08 08.5 | -0.8 |
| **ADK** | **Adak** | **1.15** | **80** | | Pn | 18 08 11.5 | -1.1 |
| **ADK** | **Adak** | **1.15** | **80** | | Sn | 18 08 27.9 | +0.8 |
| **CEPE** | **Semis' Perret** | **1.18** | **284** | | Pn | 18 08 13.0 | -0.1 |
| **CERB** | **Semis' Cerberu** | **1.18** | **282** | | Pn | 18 08 13.2 | 0.0 |
| CERB | | | | | Sn | 18 08 30.2 | +2.2 |
| **CESW** | **Semis' Southwe** | **1.22** | **280** | | Pn | 18 08 13.3 | -0.3 |
| **CEAP** | **Semis' Anvil P** | **1.23** | **285** | | Pn | 18 08 14.0 | +0.2 |
| **AMKA** | **Amchitka** | **1.41** | **258** | | Pn | 18 08 16.0 | -0.2 |
| **AMKA** | **Amchitka** | **1.41** | **258** | | Sn | 18 08 34.4 | +0.9 |
| **GSCK** | **Great Sitkin C** | **1.49** | **77** | | Pn | 18 08 17.9 | +0.6 |
| GSCK | | | | | Sn | 18 08 38.7 | +3.2 |
| **GSMY** | **Great Sitkin M** | **1.56** | **76** | | Pn | 18 08 18.6 | +0.3 |
| **GSTR** | **Great Sitkin T** | **1.57** | **74** | | Pn | 18 08 18.4 | 0.0 |
| **LSPA** | **Little Sitkin** | **1.83** | **279** | | Pn | 18 08 23.1 | +1.0 |
| **LSSE** | **Little Sitkin** | **1.83** | **279** | | Pn | 18 08 22.5 | +0.4 |
| **LSNW** | **Little Sitkin** | **1.87** | **280** | | Pn | 18 08 23.1 | +0.5 |
| **KOKL** | **Mount Kliuchef** | **2.73** | **75** | | Pn | 18 08 35.9 | +1.3 |
| **KOFP** | **Korovin Flat P** | **2.79** | **76** | | Pn | 18 08 37.4 | +2.2 |
| **CLES** | **Cleveland East** | **5.41** | **75** | Pn | Pn | 18 09 09.1 | -2.1 |
| **LVA** | **Lava Point** | **7.93** | **67** | Pn | Pn | 18 09 45.3 | -0.5 |
| **CNBA** | **Chernabura Isl** | **11.75** | **67** | Pn | Pn | 18 10 39.3 | +1.3 |

**JMA 07 18:12:41.8±0.3, 25°N±1°×123°.8E±0°.8, h7km, MV1.0/5, NW OFF ISHIGAKIJIMA IS, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.45** | **184** | *eP* | Pg | 18 12 50.5 | 0.0 |
| IRIF | | | | *eS* | Sg | 18 12 57.0 | +0.7 |
| **JISG** | **Ishigakijimahi** | **0.54** | **111** | *eP* | Pg | 18 12 52.3 | +0.1 |
| JISG | | | | *eS* | Sg | 18 12 58.9 | -0.2 |
| **JIJ** | **Ishigaki jima** | **0.54** | **140** | *eS* | Sg | 18 12 59.4 | +0.1 |
| **JKRS** | **Kuro-shima** | **0.59** | **158** | *eS* | Sg | 18 13 01.1 | +0.3 |

*NEIC **07** 18:13:00.9±2.7, 45°.96N±0°.05×107°.00W±0°.07, h0km±1km, ML2.7/34, Error ellipse: s-maj=9.9km s-min=7.4km az=141.0*
*IDC **07** 18:13:03.6±1.4, 45°.30N×106°.55W, h0km, mbtmp2.9/2, ML2.4/2, Error ellipse: s-maj=58.6km s-min=9.6km az=136.0*

**ISC 07 18:13:00.2±1.0, 45°.83N±0°.05×107°.12W±0°.05, h0km, n25, σ2.844/25, Montana**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAO** | **LASA Array** | **1.06** | **35** | | **Pn** | **18 13 22.9** | **+0.5** |
| **RLMT** | **Red Lodge** | **1.67** | **246** | | **Pg** | **18 13 34.6** | **+2.4** |
| RLMT | | | | IAML | | 18 14 00.7 | |
| | 77nm,0.7s | | | | | | |
| RLMT | | | | IAML | | 18 14 01.4 | |
| | 76nm,0.6s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **2.41** | **244** | | **Pg** | **18 13 46.0** | **-0.4** |
| YMP | | | | IAML | | 18 14 32.5 | |
| | comp=N,59nm,1.0s | | | | | | |
| **YNR** | **Norris Junctio** | **2.75** | **247** | | **Pn** | **18 13 48.0** | **+2.2** |
| YNR | | | | IAML | | 18 14 38.5 | |
| | comp=N,19nm,1.1s | | | | | | |
| YNR | | | | IAML | | 18 14 41.1 | |
| | comp=E,23nm,1.0s | | | | | | |
| **RSSD** | **Black Hills** | **2.77** | **127** | | **Pb** | **18 13 48.7** | **-2.1** |
| RSSD | | | | IAML | | 18 14 33.0 | |
| | comp=E,24nm,0.6s | | | | | | |
| RSSD | | | | IAML | | 18 14 38.9 | |
| | comp=E,27nm,0.7s | | | | | | |
| **YHH** | **Holmes Hill** | **2.83** | **250** | | **Pn** | **18 13 49.2** | **+2.2** |
| **EGMT** | **Eagleton** | **2.84** | **321** | | **Pb** | **18 13 49.8** | **-2.1** |
| EGMT | | | | IAML | | 18 14 37.8 | |
| | comp=E,47nm,1.2s | | | | | | |
| EGMT | | | | IAML | | 18 14 51.8 | |
| | comp=E,45nm,0.8s | | | | | | |
| **YHL** | **Hebgen Lake** | **3.03** | **253** | | **Pn** | **18 13 51.3** | **+1.5** |
| YHL | | | | IAML | | 18 14 48.4 | |
| | comp=E,33nm,1.4s | | | | | | |
| YHL | | | | IAML | | 18 14 56.4 | |
| | comp=N,26nm,1.4s | | | | | | |
| **YPP** | **Pitchstone Pla** | **3.04** | **241** | | **Pb** | **18 13 53.3** | **-2.2** |
| **YHB** | **Horse Butte** | **3.07** | **251** | | **Pb** | **18 13 54.0** | **-1.9** |
| **FLWY** | **Flagg Ranch** | **3.08** | **237** | | **Pn** | **18 13 52.8** | **+2.3** |
| FLWY | | | | IAML | | 18 14 58.7 | |
| | comp=N,24nm,1.9s | | | | | | |
| **BOZ** | **Bozeman (W)** | **3.17** | **267** | | **Pn** | **18 13 53.4** | **+1.9** |
| BOZ | | | | IAML | | 18 14 52.2 | |
| | comp=N,14nm,1.8s | | | | | | |
| **DGMT** | **Dagmar** | **3.31** | **36** | Pn | **Pn** | **18 13 52.7** | **-0.6** |
| **LOHW** | **Long Hollow** | **3.33** | **230** | | **Pn** | **18 13 56.3** | **+2.5** |
| LOHW | | | | IAML | | 18 15 04.5 | |
| | comp=N,12nm,2.4s | | | | | | |
| **IMW** | **Indian Meadow** | **3.33** | **236** | | **Pn** | **18 13 56.3** | **+2.4** |
| IMW | | | | IAML | | 18 14 48.8 | |
| | comp=N,20nm,0.5s | | | | | | |
| IMW | | | | IAML | | 18 14 59.3 | |
| | comp=N,14nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **3.53** | **211** | | **Pb** | **18 14 01.1** | **-2.6** |
| **PDAR** | **Pinedale Array** | **3.53** | **211** | Pn | **Pb** | **18 14 01.1** | **-2.6** |
| | comp=N,0.2nm,0.3s,baz=49,slow=13,SNR=7.1 | | | | | | |
| PDAR | | | | Pg | **Pg** | **18 14 07.2** | **-0.6** |
| | comp=N,0.7nm,0.3s,baz=48,slow=18,SNR=11 | | | | | | |
| PDAR | | | | Lg | Lg | 18 14 45.5 | |
| | comp=N,0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=245 | | | | | | | | |
| NDS | | | | S | | Sn | 18 13 45.4 | -0.5 | |
| | baz=245 | | | | | | | | |
| **TWE** | **Neicheng** | **0.55** | **262** | ⇑ | *i* P | Pn | 18 13 34.7 | +0.4 | |
| | baz=263 | | | | | | | | |
| TWE | | | | S | | Sn | 18 13 45.6 | -0.5 | |
| | baz=263 | | | | | | | | |
| **EWUT** | **Wuta** | **0.57** | **231** | | P | Pn | 18 13 35.0 | +0.5 | |
| | baz=228 | | | | | | | | |
| EWUT | | | | S | | Sn | 18 13 46.2 | -0.2 | |
| | baz=228 | | | | | | | | |
| **ENA** | **Nanau** | **0.60** | **232** | ⇑ | *i* P | Pn | 18 13 35.4 | +0.6 | |
| | baz=229 | | | | | | | | |
| ENA | | | | S | | Sn | 18 13 46.5 | -0.5 | |
| | baz=229 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.62** | **266** | ⇑ | *i* P | Pn | 18 13 35.3 | +0.3 | |
| | baz=269 | | | | | | | | |
| FUSB | | | | S | | Sn | 18 13 46.1 | -1.3 | |
| | baz=269 | | | | | | | | |
| **TWA** | **Mucha** | **0.64** | **286** | ⇑ | *i* P | Pn | 18 13 35.4 | +0.3 | |
| | baz=284 | | | | | | | | |
| TWA | | | | S | | Sn | 18 13 46.3 | -1.3 | |
| | baz=284 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.65** | **256** | ⇑ | *i* P | Pn | 18 13 35.9 | +0.6 | |
| | baz=257 | | | | | | | | |
| **EAHA** | **Aohua** | **0.67** | **226** | | P | Pn | 18 13 35.8 | +0.5 | |
| | baz=218 | | | | | | | | |
| EAHA | | | | S | | Sn | 18 13 48.3 | +0.3 | |
| | baz=218 | | | | | | | | |
| **EOS4** | **EOS4** | **0.68** | **176** | | *e*P | Pn | 18 13 35.8 | +0.8 | |
| | baz=181 | | | | | | | | |
| EOS4 | | | | | *e*S | Sn | 18 13 47.9 | +0.5 | |
| | baz=181 | | | | | | | | |
| **NWLT** | **Wulai** | **0.69** | **268** | ⇑ | *i* P | Pn | 18 13 35.8 | +0.2 | |
| | baz=271 | | | | | | | | |
| NWLT | | | | S | | Sn | 18 13 47.0 | -1.4 | |
| | baz=271 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.71** | **254** | | P | Pn | 18 13 36.6 | +0.8 | |
| | baz=251 | | | | | | | | |
| NDT | | | | S | | Sn | 18 13 49.3 | +0.6 | |
| | baz=251 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.71** | **119** | | P | Pn | 18 13 36.2 | +0.5 | |
| JYNG | | | | | *e*S | Sn | 18 13 48.7 | 0.0 | |
| **YM01** | **YM01** | **0.72** | **299** | ⇑ | *i* P | Pn | 18 13 36.2 | +0.4 | |
| | baz=291 | | | | | | | | |
| YM01 | | | | S | | Sn | 18 13 48.1 | -0.7 | |
| | baz=291 | | | | | | | | |
| **LATG** | **Datong** | **0.72** | **249** | ⇑ | *i* P | Pn | 18 13 37.0 | +1.0 | |
| | baz=246 | | | | | | | | |
| LATG | | | | S | | Sn | 18 13 49.2 | +0.1 | |
| | baz=246 | | | | | | | | |
| **YM08** | **YM08** | **0.72** | **302** | | *e*P | Pn | 18 13 36.0 | +0.2 | |
| | baz=301 | | | | | | | | |
| YM08 | | | | S | | Sn | 18 13 47.8 | -1.1 | |
| | baz=301 | | | | | | | | |
| **TATO** | **Taipei** | **0.72** | **284** | | P | Pn | 18 13 36.2 | +0.3 | |
| **TAP** | **Taipei** | **0.73** | **289** | | *e*P | Pn | 18 13 36.0 | +0.2 | |
| | baz=287 | | | | | | | | |
| TAP | | | | S | | Sn | 18 13 47.8 | -1.1 | |
| | baz=287 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.76** | **116** | | P | Pn | 18 13 36.0 | -0.2 | |
| **YOJ** | **Yonaguni jima** | **0.76** | **116** | ⇓ | *i* P | Pn | 18 13 36.7 | +0.5 | |
| | baz=118 | | | | | | | | |
| YOJ | | | | | *e*S | Sn | 18 13 49.5 | +0.1 | |
| | baz=118 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.76** | **116** | | P | Pn | 18 13 36.7 | +0.5 | |
| YOJ | | | | | *e*S | Sn | 18 13 49.7 | +0.3 | |
| **TWY** | **Chenhua** | **0.77** | **308** | | *e*P | Pn | 18 13 36.9 | +0.7 | |
| | baz=301 | | | | | | | | |
| TWY | | | | | *e*S | Sn | 18 13 49.1 | -0.4 | |
| | baz=301 | | | | | | | | |
| **ANP** | **Anpu** | **0.78** | **300** | | *e*P | Pn | 18 13 36.9 | +0.4 | |
| | baz=292 | | | | | | | | |
| ANP | | | | | *e*S | Sn | 18 13 49.2 | -0.7 | |
| | baz=292 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.82** | **261** | | P | Pn | 18 13 37.5 | +0.6 | |
| **YHNB** | **Yeheng** | **0.82** | **261** | | P | Pn | 18 13 37.2 | +0.4 | |
| | baz=263 | | | | | | | | |
| YHNB | | | | S | | Sn | 18 13 50.6 | -0.1 | |
| | baz=263 | | | | | | | | |
| **NTST** | **Danshui** | **0.82** | **296** | | *e*P | Pn | 18 13 37.4 | +0.6 | |
| | baz=295 | | | | | | | | |
| NTST | | | | S | | Sn | 18 13 50.5 | -0.1 | |
| | baz=295 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.82** | **291** | ⇑ | *i* P | Pn | 18 13 36.4 | -0.4 | |
| | baz=290 | | | | | | | | |
| TWS1 | | | | S | | Sn | 18 13 48.9 | -1.6 | |
| | baz=290 | | | | | | | | |
| **NSK** | **Sanguang** | **0.83** | **262** | ⇑ | *i* P | Pn | 18 13 37.4 | +0.4 | |
| | baz=263 | | | | | | | | |
| NSK | | | | S | | Sn | 18 13 50.5 | -0.4 | |
| | baz=263 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.84** | **348** | | *e*P | Pn | 18 13 37.7 | +0.6 | |
| | baz=343 | | | | | | | | |
| PCYT | | | | | *e*S | Sn | 18 13 50.9 | -0.1 | |
| | baz=343 | | | | | | | | |
| **ETL** | **Fush Village** | **0.87** | **222** | | P | Pn | 18 13 37.4 | +0.1 | |
| | baz=212 | | | | | | | | |
| ETL | | | | S | | Sn | 18 13 50.8 | -0.7 | |
| | baz=212 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.87** | **224** | | P | Pn | 18 13 37.6 | +0.2 | |
| **NACB** | **Ninganchiao** | **0.87** | **224** | | P | Pn | 18 13 37.3 | -0.1 | |
| | baz=214 | | | | | | | | |
| NACB | | | | | *e*S | Sn | 18 13 50.1 | -1.4 | |
| | baz=214 | | | | | | | | |
| **NNSB** | **Datong** | **0.88** | **245** | ⇑ | *i* P | Pn | 18 13 38.5 | +0.9 | |
| | baz=234 | | | | | | | | |
| NNSB | | | | S | | Sn | 18 13 52.0 | 0.0 | |
| | baz=234 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.89** | **246** | ⇑ | *i* P | Pn | 18 13 38.5 | +0.9 | |
| | baz=235 | | | | | | | | |
| NNS | | | | S | | Sn | 18 13 51.9 | -0.1 | |
| | baz=235 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.93** | **230** | | *e*P | Pn | 18 13 38.3 | +0.3 | |
| | baz=228 | | | | | | | | |
| ETLH | | | | | *e*S | Sn | 18 13 52.0 | -0.6 | |
| | baz=228 | | | | | | | | |
| **TWD** | **Chiawan** | **0.94** | **220** | | P | Pn | 18 13 38.4 | +0.3 | |
| | baz=213 | | | | | | | | |
| TWD | | | | S | | Sn | 18 13 52.4 | -0.3 | |
| | baz=213 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.99** | **280** | | *e*P | Pn | 18 13 39.5 | +0.9 | |
| | baz=285 | | | | | | | | |
| NCUH | | | | | *e*S | Sn | 18 13 54.4 | +0.7 | |
| | baz=285 | | | | | | | | |
| **HWA** | **Hwalien** | **1.02** | **216** | | *e*P | Pn | 18 13 39.5 | +0.6 | |
| | baz=207 | | | | | | | | |
| HWA | | | | | *e*S | Sn | 18 13 54.7 | +0.5 | |
| | baz=207 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.06** | **261** | | *e*P | Pn | 18 13 40.1 | +0.7 | |
| | baz=258 | | | | | | | | |
| NFF | | | | S | | Sn | 18 13 55.1 | 0.0 | |
| | baz=258 | | | | | | | | |
| **FUSS** | **Fushou** | **1.08** | **240** | ⇑ | P | Pn | 18 13 40.9 | +1.0 | |
| | baz=231 | | | | | | | | |
| FUSS | | | | | *e*S | Sn | 18 13 56.1 | +0.2 | |
| | baz=231 | | | | | | | | |
| **ETM** | **Tongmen** | **1.09** | **220** | | P | Pn | 18 13 39.8 | +0.1 | |
| | baz=227 | | | | | | | | |
| ETM | | | | S | | Sn | 18 13 54.6 | -1.1 | |
| | baz=227 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.10** | **225** | ⇑ | *i* P | Pn | 18 13 39.9 | -0.1 | |
| | baz=223 | | | | | | | | |
| LXIB | | | | S | | Sn | 18 13 55.5 | -0.6 | |
| | baz=223 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.11** | **213** | | P | Pn | 18 13 40.3 | +0.3 | |
| | baz=213 | | | | | | | | |
| TEYL | | | | S | | Sn | 18 13 55.8 | -0.3 | |
| | baz=213 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.12** | **235** | | *e*P | Pn | 18 13 41.3 | +0.8 | |
| | baz=226 | | | | | | | | |
| **TWT** | **Tachien** | **1.13** | **241** | ⇑ | P | Pn | 18 13 41.8 | +1.4 | |
| | baz=232 | | | | | | | | |
| TWT | | | | | *e*S | Sn | 18 13 57.2 | +0.3 | |
| | baz=232 | | | | | | | | |
| **LIOB** | **Emei** | **1.15** | **262** | | P | Pn | 18 13 41.2 | +0.8 | |
| | baz=259 | | | | | | | | |
| LIOB | | | | S | | Sn | 18 13 56.5 | -0.3 | |
| | baz=259 | | | | | | | | |
| **TDCB** | **Techi** | **1.15** | **242** | ⇑ | *i* P | Pn | 18 13 41.8 | +1.3 | |
| | baz=233 | | | | | | | | |
| TDCB | | | | | *e*S | Sn | 18 13 56.9 | -0.1 | |
| | baz=233 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.16** | **262** | ⇑ | P | Pn | 18 13 41.2 | +0.7 | |
| | baz=259 | | | | | | | | |
| NSTT | | | | | *e*S | Sn | 18 13 57.3 | +0.2 | |
| | baz=259 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.16** | **270** | | *e*P | Pn | 18 13 41.5 | +1.0 | |
| | baz=267 | | | | | | | | |
| SBCB | | | | | *e*S | Sn | 18 13 57.4 | +0.3 | |
| | baz=267 | | | | | | | | |
| **HSN** | **Hsinchu** | **1.18** | **270** | | S | Sn | 18 13 57.2 | -0.2 | |
| | baz=260 | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.20** | **212** | | *e*P | Pn | 18 13 41.3 | +0.4 | |
| | baz=212 | | | | | | | | |
| SHUL | | | | | *e*S | Sn | 18 13 57.6 | -0.2 | |
| | baz=212 | | | | | | | | |
| **CHGB** | **Renai** | **1.24** | **234** | ⇑ | *i* P | Pn | 18 13 42.6 | +1.0 | |
| | baz=224 | | | | | | | | |
| CHGB | | | | | S | Sn | 18 13 59.0 | -0.1 | |
| | baz=224 | | | | | | | | |
| **ESL** | **Shilin** | **1.24** | **218** | ⇑ | P | Pn | 18 13 41.1 | -0.4 | |
| | baz=223 | | | | | | | | |
| ESL | | | | | *e*S | Sn | 18 13 57.3 | -1.5 | |
| | baz=223 | | | | | | | | |
| **OWD** | **Renai** | **1.30** | **230** | | P | Pn | 18 13 43.1 | +0.8 | |
| | baz=222 | | | | | | | | |
| OWD | | | | | S | Sn | 18 14 00.2 | -0.1 | |
| | baz=222 | | | | | | | | |
| **WHP** | **Taichung City** | **1.31** | **247** | ⇑ | *i* P | Pn | 18 13 43.9 | +1.5 | |
| | baz=244 | | | | | | | | |
| WHP | | | | | S | Sn | 18 14 01.1 | +0.7 | |
| | baz=244 | | | | | | | | |
| **WUSB** | **Renai** | **1.32** | **233** | ⇑ | *i* P | Pn | 18 13 43.6 | +1.1 | |
| | baz=230 | | | | | | | | |
| WUSB | | | | | S | Sn | 18 14 00.7 | 0.0 | |
| | baz=230 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.34** | **217** | ⇑ | P | Pn | 18 13 42.2 | -0.5 | |
| | baz=222 | | | | | | | | |
| WARBT | | | | | S | Sn | 18 13 58.9 | -2.2 | |
| | baz=222 | | | | | | | | |
| **EGFH** | **Guangfu** | **1.36** | **214** | | *e*P | Pn | 18 13 42.7 | -0.2 | |
| | baz=213 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.36** | **259** | | *e*P | Pn | 18 13 43.7 | +0.7 | |
| | baz=256 | | | | | | | | |
| NMLH | | | | | *e*S | Sn | 18 14 00.9 | -0.6 | |
| | baz=256 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.41** | **109** | | *e*P | Pn | 18 13 44.0 | +0.5 | |
| **NSY** | **Sanyi** | **1.42** | **255** | | *e*P | Pn | 18 13 44.9 | +1.3 | |
| | baz=251 | | | | | | | | |
| NSY | | | | | *e*S | Sn | 18 14 03.3 | +0.6 | |
| | baz=251 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.43** | **252** | ⇑ | P | Pn | 18 13 44.7 | +0.9 | |
| | baz=248 | | | | | | | | |
| TWQ1 | | | | | *e*S | Sn | 18 14 03.0 | +0.1 | |
| | baz=248 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.44** | **239** | | *e*P | Pn | 18 13 45.3 | +1.5 | |
| | baz=245 | | | | | | | | |
| WCS | | | | | *e*S | Sn | 18 14 03.6 | +0.5 | |
| | baz=245 | | | | | | | | |
| **VWDT** | **VWDT** | **1.46** | **225** | ⇑ | *i* P | Pn | 18 13 45.1 | +1.0 | |
| | baz=218 | | | | | | | | |
| VWDT | | | | | S | Sn | 18 14 03.4 | -0.2 | |
| | baz=218 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.51** | **211** | | *e*P | Pn | 18 13 45.0 | +0.3 | |
| | baz=219 | | | | | | | | |
| HGSD | | | | | *e*S | Sn | 18 14 04.6 | -0.1 | |
| | baz=219 | | | | | | | | |
| **EHY** | **Hungye** | **1.55** | **214** | | *e*P | Pn | 18 13 44.7 | -0.6 | |
| | baz=214 | | | | | | | | |
| EHY | | | | | *e*S | Sn | 18 14 03.2 | -2.3 | |
| | baz=214 | | | | | | | | |
| **TYC** | **Yuchr** | **1.56** | **235** | | *e*P | Pn | 18 13 46.7 | +1.4 | |
| | baz=228 | | | | | | | | |
| TYC | | | | | *e*S | Sn | 18 14 07.4 | +1.7 | |
| | baz=228 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.56** | **230** | | P | Pn | 18 13 46.7 | +1.2 | |
| **SSLB** | **Suanglung** | **1.56** | **230** | | *e*P | Pn | 18 13 46.6 | +1.1 | |
| | baz=233 | | | | | | | | |
| SSLB | | | | | *e*S | Sn | 18 14 07.4 | +1.5 | |
| | baz=233 | | | | | | | | |
| **ECBN** | **Changbin** | **1.66** | **207** | | *e*P | Pn | 18 13 46.8 | +0.2 | |
| | baz=200 | | | | | | | | |
| ECBN | | | | | *e*S | Sn | 18 14 06.3 | -1.5 | |
| | baz=200 | | | | | | | | |
| **YULB** | **Yu-li** | **1.66** | **212** | | P | Pn | 18 13 46.5 | -0.1 | |
| **YULB** | **Yu-li** | **1.66** | **212** | | *e*P | Pn | 18 13 46.0 | -0.6 | |
| | baz=218 | | | | | | | | |
| YULB | | | | | *e*S | Sn | 18 14 05.7 | -2.2 | |
| | baz=218 | | | | | | | | |
| **EYUL** | **Yuli** | **1.69** | **211** | | *e*P | Pn | 18 13 47.0 | 0.0 | |
| | baz=218 | | | | | | | | |
| EYUL | | | | | *e*S | Sn | 18 14 09.6 | +1.0 | |
| | baz=218 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.69** | **109** | | *e*P | Pn | 18 13 48.0 | +1.0 | |
| **TWF1** | **Yuli** | **1.69** | **212** | | *e*P | Pn | 18 13 46.6 | -0.5 | |
| | baz=217 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.69** | **230** | | *e*P | Pn | 18 13 49.4 | +2.3 | |
| | baz=235 | | | | | | | | |
| WHYT | | | | | *e*S | Sn | 18 14 11.3 | +2.5 | |
| | baz=235 | | | | | | | | |
| **WJS** | **Zhushan** | **1.71** | **235** | | *e*P | Pn | 18 13 49.3 | +2.1 | |
| | baz=242 | | | | | | | | |
| WJS | | | | | *e*S | Sn | 18 14 11.1 | +2.0 | |
| | baz=242 | | | | | | | | |
| **WNT** | **Mingjian** | **1.71** | **238** | | *e*P | Pn | 18 13 48.6 | +1.4 | |
| | baz=244 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.71** | **246** | | *e*P | Pn | 18 13 48.0 | +0.8 | |
| | baz=242 | | | | | | | | |
| WCHH | | | | | *e*S | Sn | 18 14 09.4 | +0.3 | |
| | baz=242 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.77** | **104** | | *e*P | Pn | 18 13 48.7 | +0.7 | |
| JIJ | | | | | *e*S | Sn | 18 14 11.0 | +0.7 | |
| **CHKH** | **Chenggong** | **1.79** | **207** | | P | Pn | 18 13 48.6 | +0.3 | |
| | baz=199 | | | | | | | | |
| CHKH | | | | | *i* S | Sn | 18 14 09.2 | -1.7 | |
| | baz=199 | | | | | | | | |
| **FULB** | **Fuli** | **1.83** | **209** | | *e*P | Pn | 18 13 49.4 | +0.6 | |
| | baz=217 | | | | | | | | |
| FULB | | | | | *e*S | Sn | 18 14 11.2 | -0.6 | |
| | baz=217 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.87** | **96** | | *e*P | Pn | 18 13 50.6 | +1.3 | |
| **CHKT** | **Chengkung** | **1.88** | **206** | | *e*P | Pn | 18 13 49.4 | -0.1 | |
| | baz=200 | | | | | | | | |
| CHKT | | | | | *e*S | Sn | 18 14 10.9 | -2.1 | |
| | baz=200 | | | | | | | | |
| **WDLH** | **Douliu** | **1.93** | **235** | | *e*P | Pn | 18 13 51.5 | +1.5 | |
| | baz=232 | | | | | | | | |
| WDLH | | | | | *e*S | Sn | 18 14 15.4 | +1.4 | |
| | baz=232 | | | | | | | | |
| **ECS** | **Chishang** | **1.95** | **210** | | *e*P | Pn | 18 13 51.3 | +0.9 | |
| | baz=209 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.97** | **216** | | *e*P | Pn | 18 13 50.8 | +0.1 | |
| | baz=215 | | | | | | | | |
| ELDTW | | | | | *e*S | Sn | 18 14 14.3 | -0.9 | |
| | baz=215 | | | | | | | | |
| **EDH** | **Donghe** | **2.02** | **206** | | *e*P | Pn | 18 13 51.3 | +0.1 | |
| | baz=215 | | | | | | | | |
| EDH | | | | | *e*S | Sn | 18 14 14.5 | -1.7 | |
| | baz=215 | | | | | | | | |
| **WCKO** | **Fanlu** | **2.03** | **228** | | *e*P | Pn | 18 13 52.7 | +1.2 | |
| | baz=227 | | | | | | | | |
| WCKO | | | | | *e*S | Sn | 18 14 19.4 | +2.8 | |
| | baz=227 | | | | | | | | |
| **WTK** | **Tuku** | **2.04** | **237** | | *e*P | Pn | 18 13 52.5 | +1.0 | |
| | baz=234 | | | | | | | | |
| WTK | | | | | *e*S | Sn | 18 14 17.4 | +0.8 | |
| | baz=234 | | | | | | | | |
| **TPUB** | **Ta-pu** | **2.11** | **225** | | P | Pn | 18 13 53.3 | +0.8 | |
| **TPUB** | **Ta-pu** | **2.11** | **225** | | *e*P | Pn | 18 13 54.2 | +1.7 | |
| | baz=233 | | | | | | | | |
| **STYH** | **Taoyuan** | **2.12** | **220** | | *e*P | Pn | 18 13 53.8 | +1.3 | |
| | baz=219 | | | | | | | | |
| **WTP** | **Ta-pu** | **2.16** | **225** | | *e*P | Pn | 18 13 54.8 | +1.7 | |
| | baz=233 | | | | | | | | |
| **TWK** | **Hsinying** | **2.23** | **227** | | *e*P | Pn | 18 13 55.3 | +1.3 | |
| | baz=234 | | | | | | | | |
| **LDUT** | **Ludao** | **2.24** | **199** | | *e*P | Pn | 18 13 53.7 | -0.4 | |
| | baz=200 | | | | | | | | |
| LDUT | | | | | *e*S | Sn | 18 14 19.3 | -2.1 | |
| | baz=200 | | | | | | | | |
| **TWGBT** | **Beinan** | **2.25** | **209** | | P | Pn | 18 13 54.2 | -0.1 | |
| **TWGBT** | **Beinan** | **2.25** | **209** | | *e*P | Pn | 18 13 54.3 | 0.0 | |
| | baz=204 | | | | | | | | |
| TWGBT | | | | | *e*S | Sn | 18 14 19.9 | -1.8 | |
| | baz=204 | | | | | | | | |
| **TWG** | **Pinlang** | **2.25** | **209** | | *e*P | Pn | 18 13 54.3 | 0.0 | |
| | baz=204 | | | | | | | | |
| TWG | | | | | *e*S | Sn | 18 14 20.6 | -1.1 | |
| | baz=204 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.26** | **225** | | *e*P | Pn | 18 13 56.1 | +1.7 | |
| | baz=232 | | | | | | | | |
| **SGST** | **Jiashian** | **2.30** | **222** | | *e*P | Pn | 18 13 56.2 | +1.3 | |
| | baz=220 | | | | | | | | |
| **ICHU** | **Yijhu** | **2.31** | **232** | | *e*P | Pn | 18 13 56.2 | +1.1 | |
| | baz=229 | | | | | | | | |
| ICHU | | | | | *e*S | Sn | 18 14 24.1 | +1.1 | |
| | baz=229 | | | | | | | | |
| **SLGT** | **Liugui** | **2.33** | **220** | | *e*P | Pn | 18 13 57.6 | +2.3 | |
| | baz=218 | | | | | | | | |
| SLGT | | | | | *e*S | Sn | 18 14 25.6 | +2.1 | |
| | baz=218 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.49** | **303** | | *e*P | Pn | 18 13 57.5 | +0.1 | |
| | baz=301 | | | | | | | | |
| **ECL** | **Taimali** | **2.50** | **209** | | *e*P | Pn | 18 13 57.1 | -0.4 | |
| | baz=206 | | | | | | | | |
| ECL | | | | | *e*S | Sn | 18 14 25.3 | -2.2 | |
| | baz=206 | | | | | | | | |
| **TSMG** | **Majia** | **2.56** | **216** | | *e*P | Pn | 18 14 00.2 | +1.8 | |
| | baz=215 | | | | | | | | |
| **VWUC** | **VWUC** | **2.56** | **275** | | *e*P | Pn | 18 13 58.7 | +0.4 | |
| | baz=270 | | | | | | | | |
| VWUC | | | | | *e*S | Sn | 18 14 26.8 | -2.1 | |
| | baz=270 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.64** | **215** | | *e*P | Pn | 18 14 01.2 | +1.8 | |
| | baz=215 | | | | | | | | |
| MASBT | | | | | *e*S | Sn | 18 14 31.6 | +0.7 | |
| | baz=215 | | | | | | | | |
| **PNG** | **Penghu** | **2.76** | **244** | | *e*P | Pn | 18 14 00.7 | -0.3 | |
| | baz=241 | | | | | | | | |
| PNG | | | | | *e*S | Sn | 18 14 32.3 | -1.4 | |
| | baz=241 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.77** | **243** | | *e*P | Pn | 18 14 00.9 | -0.2 | |
| | baz=240 | | | | | | | | |
| PHUB | | | | | *e*S | Sn | 18 14 32.0 | -1.9 | |
| | baz=240 | | | | | | | | |
| **LAY** | **Lan-yu** | **2.83** | **194** | | *e*P | Pn | 18 14 01.6 | -0.3 | |
| | baz=198 | | | | | | | | |
| LAY | | | | | *e*S | Sn | 18 14 31.9 | -3.4 | |
| | baz=198 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.85** | **212** | | *e*P | Pn | 18 14 04.1 | +1.9 | |
| | baz=221 | | | | | | | | |
| SCZT | | | | | *e*S | Sn | 18 14 37.9 | +2.0 | |
| | baz=221 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.86** | **193** | | *e*P | Pn | 18 14 01.3 | -1.0 | |
| | baz=197 | | | | | | | | |
| LYUB | | | | | *e*S | Sn | 18 14 31.8 | -4.1 | |
| | baz=197 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.86** | **275** | | *e*P | Pn | 18 14 02.9 | +0.6 | |
| | baz=271 | | | | | | | | |
| PTMZ | | | | | *e*S | Sn | 18 14 33.9 | -2.2 | |
| | baz=271 | | | | | | | | |
| **VCHM** | **Qimei** | **3.04** | **239** | | *e*P | Pn | 18 14 05.0 | +0.3 | |
| | baz=236 | | | | | | | | |
| VCHM | | | | | *e*S | Sn | 18 14 39.2 | -1.1 | |
| | baz=236 | | | | | | | | |

*NEIC* ***07*** *18:36:54.2±1.2, 3.°1S±0.°2×137.°17E±0.°10, h56km±14km, mb4.3/18, Error ellipse: s-maj=25.3km s-min=13.1km az=192.0*
*IDC* ***07*** *18:37:01.9±5.9, 3.°41S×138.°02E, h117km±61km, mb3.9/4, mbtmp4.3/4, MS2.9/4, Error ellipse: s-maj=51.2km s-min=19.9km az=77.0*
**ISC 07 18:36:54.4±0.8, 3.°34S±0.°08×137.°09E±0.°08, h50km, n34, σ1°63/33, mb4.3/8, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **FAKI** | **Fak Fak** | **4.85** | **275** | | | **Pn** | **18 38 05.3** | **+0.4** |
| FAKI | | | | | Sn | **Sn** | **18 38 58.9** | **-1.0** |
| **MTN** | **Manton Dam** | **11.13** | **212** | | Pn | **Pn** | **18 39 34.0** | **+3.0** |
| **PMG** | **Port Moresby** | **11.68** | **122** | | LR | LR | 18 44 50.2 | |
| | comp=Z,78nm,19.5s,baz=328,slow=43 | | | | | | | |
| **COEN** | **Coen** | **12.14** | **151** | | Pn | **Pn** | **18 39 45.0** | **+0.2** |
| **KNRA** | **Kununurra** | **14.74** | **213** | | Pn | **Pn** | **18 40 19.6** | **-0.5** |
| **WB0** | **Warramunga Arr** | **16.54** | **189** | | | **Pn** | **18 40 42.4** | **-0.6** |
| WB0 | | | | | IAmb | IAmb | 18 40 51.4 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **16.70** | **188** | | | **Pn** | **18 40 45.5** | **+0.3** |
| WR0 | | | | | IAmb | IAmb | 18 40 52.2 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **WRAB** | **Tennant Creek** | **16.71** | **189** | | | **Pn** | **18 40 44.9** | **-0.3** |
| WRAB | | | | | IAmb | IAmb | 18 40 53.5 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **16.71** | **189** | | | **Pn** | **18 40 44.5** | **-0.8** |
| WB2 | | | | | IAmb | IAmb | 18 40 53.6 | |
| | comp=Z,17nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.72** | **189** | | | **Pn** | **18 40 44.4** | **-1.0** |
| **WRA** | **Warramunga Arr** | **16.72** | **189** | P | | **Pn** | **18 40 45.0** | **-0.3** |
| | comp=Z,5.8nm,0.4s,baz=12,slow=13,SNR=13 | | | | | | | |
| WRA | | | | S | | Sn | 18 43 44.6 | -5.6 |
| | comp=Z,3.6nm,0.9s,baz=6.8,slow=22,SNR=3.8 | | | | | | | |
| **TOLI2** | **Tolitoli** | **16.89** | **285** | | | **Pn** | **18 40 47.9** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **18.46** | **217** | | | **P** | **18 41 05.7** | **-0.5** |
| FITZ | | | | | | **Sn** | **18 44 28.5** | **-4.0** |
| **GUMO** | **Guam** | **18.51** | **24** | LR | | LR | 18 47 27.1 | |
| | comp=Z,48nm,19.6s,baz=208,slow=34 | | | | | | | |
| **CTA** | **Charters Tower** | **18.89** | **152** | P | | **P** | **18 41 07.8** | **-3.2** |
| | comp=Z,0.3nm,0.7s,baz=312,slow=14,SNR=3.0 | | | | | | | |
| **CTAO** | **Charters Tower** | **18.89** | **152** | P | | **P** | **18 41 10.2** | **-0.8** |
| CTAO | | | | | IAmb | IAmb | 18 41 15.0 | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **AS31** | **Alice Springs** | **20.44** | **188** | | | **P** | **18 41 31.0** | **+3.2** |
| AS31 | | | | | IAmb | IAmb | 18 41 33.4 | |
| | comp=Z,11nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **20.44** | **188** | | | **P** | **18 41 30.0** | **+2.2** |
| **ASAR** | **Alice Springs** | **20.44** | **188** | P | | **P** | **18 41 31.2** | **+3.4** |
| | comp=Z,14nm,0.5s,baz=14,slow=11,SNR=185 | | | | | | | |
| ASAR | | | | S | | **S** | **18 45 15.1** | **+1.0** |
| | comp=Z,0.7nm,0.8s,baz=10,slow=26,SNR=4.6 | | | | | | | |
| ASAR | | | | LR | | LR | 18 50 39.4 | |
| | comp=Z,28nm,20.4s,baz=42,slow=40 | | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | | |
| **HNR** | **Honiara** | **23.50** | **106** | P | | **P** | **18 41 58.4** | **-1.6** |
| **MBWA** | **Marble Bar** | **24.47** | **222** | P | | **P** | **18 42 10.4** | **+1.4** |
| **PSA00** | **Pilbara Seismi** | **24.68** | **221** | P | | **P** | **18 42 12.6** | **+1.7** |
| **PSA00** | **Pilbara Seismi** | **24.68** | **221** | P | | **P** | **18 42 12.0** | **+1.1** |
| PSA00 | | | | | IAmb | IAmb | 18 42 15.5 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **EIDS** | **Eidsvold** | **25.70** | **150** | P | | **P** | **18 42 20.8** | **+0.6** |
| EIDS | | | | | IAmb | IAmb | 18 42 22.5 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **28.70** | **172** | P | | **P** | **18 42 46.7** | **-0.2** |
| **STKA** | **Stephens Creek** | **28.70** | **172** | P | | **P** | **18 42 46.5** | **-0.4** |
| | comp=Z,3.0nm,0.7s,baz=334,slow=13,SNR=4.4 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.37** | **301** | P | | P | 18 44 59.4 | +7.2 |
| | comp=Z,0.4nm,0.3s,baz=116,slow=6.1,SNR=4.0 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **PZH** | **PanZhiHua** | **45.25** | **313** | P | | **P** | **18 45 07.4** | **0.0** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,150nm,5.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.78** | **335** | *e*P | | **P** | **18 45 42.8** | **+0.5** |
| HHC | | | | pP | | pP | 18 45 56.9 | +0.9 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,120nm,4.5s | | | | | | | |
| **LZH** | **Lanzhou** | **50.03** | **325** | *e*P | | **P** | **18 45 42.9** | **-1.5** |
| LZH | | | | pP | | pP | 18 45 56.8 | -1.2 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **52.56** | **356** | LR | | LR | 19 05 17.1 | |
| | comp=Z,14nm,21.9s,baz=176,slow=32 | | | | | | | |
| **VNDA** | **Vanda** | **75.30** | **175** | P | | **P** | **18 48 32.4** | **+0.6** |
| **QSPA** | **South Pole Qui** | **86.61** | **180** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.49** | **307** | P | | **Pg** | **18 56 17.2** | **-0.3** |
| | baz=308 | | | | | | | |
| TWB1 | | | | S | | **Sg** | **18 56 23.0** | **-1.1** |
| | baz=308 | | | | | | | |
| **TWC** | **Suao** | **0.53** | **258** | P | | **Pg** | **18 56 17.6** | **-0.7** |
| | baz=263 | | | | | | | |
| TWC | | | | S | | **Sb** | **18 56 26.4** | **0.0** |
| | baz=263 | | | | | | | |
| **ESAO** | **Su ao** | **0.54** | **255** | *e*P | | **Pg** | **18 56 18.2** | **-0.3** |
| | baz=246 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.55** | **119** | *e*P | | **Pg** | **18 56 18.9** | **+0.3** |
| JYNG | | | | *e*S | | **Sg** | **18 56 26.5** | **+0.6** |
| **TIPB** | **Shuangxi** | **0.59** | **295** | *e*P | | **Pg** | **18 56 19.4** | **-0.1** |
| | baz=295 | | | | | | | |
| TIPB | | | | *e*S | | **Sg** | **18 56 27.7** | **+0.2** |
| | baz=295 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.60** | **115** | ⇑*i*P | | **Pg** | **18 56 20.2** | **+0.6** |
| | baz=108 | | | | | | | |
| YOJ | | | | S | | **Sg** | **18 56 27.6** | **+0.1** |
| | baz=108 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.60** | **115** | *e*P | | **Pg** | **18 56 20.2** | **+0.6** |
| YOJ | | | | *e*S | | **Sg** | **18 56 27.8** | **+0.3** |
| **EOS4** | **EOS4** | **0.60** | **189** | P | | **Pb** | **18 56 20.6** | **+0.7** |
| | baz=177 | | | | | | | |
| EOS4 | | | | *e*S | | **Sb** | **18 56 29.0** | **+0.9** |
| | baz=177 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.62** | **307** | ⇑*e*P | | **Pg** | **18 56 20.1** | **0.0** |
| | baz=308 | | | | | | | |
| SXI1 | | | | *e*S | | **Sg** | **18 56 28.6** | **+0.3** |
| | baz=308 | | | | | | | |
| **EWUT** | **Wuta** | **0.64** | **245** | *e*P | | **Pg** | **18 56 20.0** | **-0.4** |
| | baz=252 | | | | | | | |
| EWUT | | | | S | | **Sb** | **18 56 28.6** | **-1.0** |
| | baz=252 | | | | | | | |
| **NDS** | **Dongshan** | **0.65** | **263** | *e*P | | **Pg** | **18 56 20.1** | **-0.4** |
| | baz=252 | | | | | | | |
| **ENA** | **Nanau** | **0.68** | **245** | *e*P | | **Pg** | **18 56 20.5** | **-0.7** |
| | baz=251 | | | | | | | |
| ENA | | | | *e*S | | **Sb** | **18 56 30.1** | **-0.7** |
| | baz=251 | | | | | | | |
| **TWE** | **Neicheng** | **0.68** | **270** | *e*P | | **Pg** | **18 56 20.5** | **-0.7** |
| | baz=261 | | | | | | | |
| TWE | | | | *e*S | | **Sb** | **18 56 31.2** | **+0.4** |
| | baz=261 | | | | | | | |
| **EAHA** | **Aohua** | **0.73** | **238** | *e*S | | **Sb** | **18 56 31.7** | **-0.4** |
| | baz=235 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.76** | **273** | ⇓P | | **Pg** | **18 56 22.0** | **-0.6** |
| | baz=272 | | | | | | | |
| FUSB | | | | *e*S | | **Sb** | **18 56 33.6** | **+0.6** |
| | baz=272 | | | | | | | |
| **ENTT** | **Nioudou** | **0.78** | **264** | *e*P | | **Pg** | **18 56 22.6** | **-0.4** |
| | baz=262 | | | | | | | |
| ENTT | | | | *e*S | | **Sb** | **18 56 33.7** | **0.0** |
| | baz=262 | | | | | | | |
| **TWA** | **Mucha** | **0.80** | **289** | *e*P | | **Pb** | **18 56 24.0** | **+0.4** |
| | baz=289 | | | | | | | |
| TWA | | | | *e*S | | **Sb** | **18 56 34.1** | **-0.2** |
| | baz=289 | | | | | | | |
| **LATG** | **Datong** | **0.83** | **258** | *e*P | | **Pg** | **18 56 23.3** | **-0.7** |
| | baz=255 | | | | | | | |
| LATG | | | | *e*S | | **Sb** | **18 56 35.4** | **+0.1** |
| | baz=255 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.83** | **262** | *e*P | | **Pb** | **18 56 23.9** | **-0.2** |
| | baz=260 | | | | | | | |
| **NWLT** | **Wulai** | **0.83** | **274** | *e*P | | **Pg** | **18 56 23.7** | **-0.4** |
| | baz=273 | | | | | | | |
| NWLT | | | | *e*S | | **Sb** | **18 56 35.6** | **+0.4** |
| | baz=273 | | | | | | | |
| **YM01** | **YM01** | **0.88** | **299** | *e*P | | **Pg** | **18 56 24.9** | **0.0** |
| | baz=299 | | | | | | | |
| YM01 | | | | S | | **Sb** | **18 56 36.6** | **0.0** |
| | baz=299 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.93** | **234** | *e*P | | **Pg** | **18 56 24.9** | **-0.9** |
| | baz=231 | | | | | | | |
| NACB | | | | *e*S | | **Sb** | **18 56 37.0** | **-0.8** |
| | baz=231 | | | | | | | |
| **YHNB** | **Yeheng** | **0.95** | **267** | ⇑P | | **Pg** | **18 56 25.8** | **-0.5** |
| | baz=265 | | | | | | | |
| YHNB | | | | *e*S | | **Sb** | **18 56 38.5** | **-0.1** |
| | baz=265 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.96** | **341** | *e*P | | **Pg** | **18 56 26.5** | **0.0** |
| | baz=343 | | | | | | | |
| **NSK** | **Sanguang** | **0.96** | **268** | *e*P | | **Pg** | **18 56 25.9** | **-0.7** |
| | baz=276 | | | | | | | |
| **NNSB** | **Datong** | **0.99** | **253** | *e*P | | **Pg** | **18 56 26.1** | **-0.8** |
| | baz=251 | | | | | | | |
| NNSB | | | | *e*S | | **Sb** | **18 56 39.9** | **+0.3** |
| | baz=251 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.99** | **239** | *e*P | | **Pg** | **18 56 26.6** | **-0.5** |
| | baz=236 | | | | | | | |
| ETLH | | | | *e*S | | **Sb** | **18 56 39.4** | **-0.4** |
| | baz=236 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.15** | **233** | *e*P | | **Pn** | **18 56 30.6** | **+0.9** |
| | baz=238 | | | | | | | |
| LXIB | | | | *e*S | | **Sn** | **18 56 46.1** | **+0.9** |
| | baz=238 | | | | | | | |
| **FUSS** | **Fushou** | **1.17** | **247** | *e*P | | **Pb** | **18 56 30.2** | **+0.2** |
| | baz=244 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **18 56 45.6** | **-0.2** |
| | baz=244 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.19** | **266** | *e*P | | **Pb** | **18 56 30.5** | **+0.3** |
| | baz=263 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.20** | **242** | *e*P | | **Pb** | **18 56 30.4** | **-0.1** |
| | baz=250 | | | | | | | |
| WHF | | | | *e*S | | **Sb** | **18 56 45.5** | **-0.5** |
| | baz=250 | | | | | | | |
| **TDCB** | **Techi** | **1.24** | **248** | *e*P | | **Pg** | **18 56 30.8** | **-1.0** |
| | baz=237 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.25** | **107** | *e*P | | **Pn** | **18 56 30.0** | **-0.9** |
| IRIF | | | | *e*S | | **Sb** | **18 56 45.9** | **-1.3** |
| **LIOB** | **Emei** | **1.28** | **267** | *e*P | | **Pn** | **18 56 32.0** | **+0.8** |
| | baz=264 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.29** | **266** | *e*P | | **Pn** | **18 56 32.6** | **+1.2** |
| | baz=264 | | | | | | | |
| **CHGB** | **Renai** | **1.31** | **240** | *e*P | | **Pn** | **18 56 32.5** | **+0.6** |
| | baz=231 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.37** | **224** | *e*P | | **Pn** | **18 56 32.8** | **+0.2** |
| | baz=204 | | | | | | | |
| **WUSB** | **Renai** | **1.39** | **239** | *e*P | | **Pg** | **18 56 33.9** | **-0.7** |
| | baz=236 | | | | | | | |
| **WHP** | **Taichung City** | **1.41** | **252** | *e*P | | **Pg** | **18 56 34.9** | **-0.1** |
| | baz=250 | | | | | | | |
| WHP | | | | *e*S | | **Sn** | **18 56 52.5** | **+0.9** |
| | baz=250 | | | | | | | |
| **VWDT** | **VWDT** | **1.51** | **231** | *e*P | | **Pg** | **18 56 36.1** | **-0.8** |
| | baz=213 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.53** | **108** | *e*P | | **Pn** | **18 56 34.3** | **-0.3** |
| JKRS | | | | *e*S | | **Sn** | **18 56 53.5** | **-0.8** |
| **JIJ** | **Ishigaki jima** | **1.61** | **102** | *e*S | | **Sn** | **18 56 54.9** | **-1.5** |
| **SSLB** | **Suanglung** | **1.63** | **236** | *e*P | | **Pb** | **18 56 37.8** | **+0.1** |
| | baz=217 | | | | | | | |
| **TYC** | **Yuchr** | **1.64** | **241** | *e*P | | **Pg** | **18 56 38.8** | **-0.6** |
| | baz=225 | | | | | | | |

*TIR* ***07*** *18:56:32.3,39˚.16N×21˚.63E,h21km±1km,MI3.7*
*THE* ***07*** *18:56:34.9,39˚.17N×21˚.43E,h0km±1km,ML3.3/22,Error ellipse: s-maj=1.0km s-min=0.3km az=249.0*
*ATH* ***07*** *18:56:35.2,39˚.17N×21˚.44E,h16km±1km,ML3.5/9,Error ellipse: s-maj=1.9km s-min=0.8km az=100.0*
*PDG* ***07*** *18:56:35.4±0.8,39˚.20N×21˚.48E,h9km±1km,ML3.6/11, Error ellipse: s-maj=0.9km s-min=1.2km az=0.0*
*BEO* ***07*** *18:56:36.7±0.7,39˚.25N×21˚.77E,h3km±4km,ML3.3/9*
*IDC* ***07*** *18:56:39.7±1.2,39˚.20N×21˚.36E,h49km±17km,mb3.5/8, mbtmp3.6/16,ML3.4/5,MS2.7/3,Error ellipse: s-maj=12.4km s-min=11.5km az=12.0*
*AFAD* ***07*** *18:56:39.3±0.0,39˚.20N×22˚.07E,h6km±4km,MW3.6*
*NAO* ***07*** *18:56:53.3,40˚.33N×20˚.28E,h33km,mb3.2*

**ISC 07 18:56:35.2±1.0,39˚.19N±0˚.01×21˚.46E±0˚.02,h10km±7km, n180,σ1§64/235,mb3.8/8,10C-15D,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EVR** | **Evrytania** | **0.39** | **135** | P | | **Pg** | **18 56 43.2** | **+0.4** |
| EVR | | | | S | | **Sg** | **18 56 48.7** | **+0.8** |
| | 7µm,0.4s | | | | | | | |
| **EVR** | **Evrytania** | **0.39** | **135** | P | | **Pg** | **18 56 43.3** | **+0.5** |
| EVR | | | | S | | **Sg** | **18 56 48.6** | **+0.7** |
| EVR | | | | AML | AML | | 18 56 50.6 | |
| | comp=E,16668µm,0.4s | | | | | | | |
| EVR | | | | AML | AML | | 18 56 50.6 | |
| | comp=N,13148µm,0.5s | | | | | | | |
| **THL** | **Klokotos Trika** | **0.57** | **49** | P | | **Pg** | **18 56 46.1** | **-0.2** |
| THL | | | | S | | **Sb** | **18 56 55.9** | **+0.3** |
| | comp=N,3µm,0.5s | | | | | | | |
| **THL** | **Klokotos Trika** | **0.57** | **49** | P | | **Pg** | **18 56 46.3** | **0.0** |
| THL | | | | S | | **Sb** | **18 56 55.3** | **-0.2** |
| THL | | | | AML | AML | | 18 56 59.2 | |
| | comp=N,5735µm,0.2s | | | | | | | |
| THL | | | | AML | AML | | 18 57 01.1 | |
| | comp=E,7880µm,0.6s | | | | | | | |
| **PVO** | **Paravola** | **0.57** | **175** | P | | **Pg** | **18 56 45.1** | **-1.2** |
| PVO | | | | S | | **Sg** | **18 56 54.3** | **+0.5** |
| **PVO** | **Paravola** | **0.57** | **175** | P | | **Pg** | **18 56 45.3** | **-1.0** |
| PVO | | | | S | | **Sg** | **18 56 53.9** | **+0.1** |
| **JAN** | **Janina** | **0.66** | **315** | P | | **Pg** | **18 56 47.3** | **-0.8** |
| JAN | | | | S | | **Sg** | **18 56 56.8** | **0.0** |
| | comp=E,3µm,0.4s | | | | | | | |
| **JAN** | **Janina** | **0.66** | **315** | P | | **Pg** | **18 56 48.0** | **-0.1** |
| JAN | | | | S | | **Sg** | **18 56 57.9** | **+1.1** |
| JAN | | | | AML | AML | | 18 57 00.0 | |
| | comp=E,5872µm,0.4s | | | | | | | |
| JAN | | | | AML | AML | | 18 57 00.1 | |
| | comp=N,7925µm,0.4s | | | | | | | |
| **ANX** | **Ano Chora** | **0.69** | **149** | P | | **Pg** | **18 56 47.6** | **-1.1** |
| ANX | | | | S | | **Sg** | **18 56 58.0** | **+0.2** |
| | comp=N,4µm,0.3s | | | | | | | |
| **ANX** | **Ano Chora** | **0.69** | **149** | P | | **Pg** | **18 56 47.9** | **-0.7** |
| ANX | | | | AML | AML | | 18 57 01.3 | |
| | comp=N,8455µm,0.3s | | | | | | | |
| ANX | | | | AML | AML | | 18 57 01.9 | |
| | comp=E,7728µm,0.4s | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.72** | **240** | P | | **Pg** | **18 56 48.5** | **-0.7** |
| **TSLK** | **Tsoukalades, L** | **0.72** | **240** | P | | **Pg** | **18 56 48.7** | **-0.5** |
| **LKD2** | **Lefkada island** | **0.74** | **238** | P | | **Pg** | **18 56 48.2** | **-1.3** |
| | baz=245 | | | | | | | |
| LKD2 | | | | S | | **Sb** | **18 57 01.4** | **+0.9** |
| | baz=245 | | | | | | | |
| LKD2 | | | | AMP | | | | |
| | comp=N,10.0nm,0.8s,baz=245 | | | | | | | |
| **LKD2** | **Lefkada island** | **0.74** | **238** | P | | **Pg** | **18 56 48.7** | **-0.8** |
| LKD2 | | | | S | | **Sg** | **18 56 59.0** | **-0.2** |
| | comp=N,4µm,0.7s | | | | | | | |
| **LKD2** | **Lefkada island** | **0.74** | **238** | P | | **Pg** | **18 56 48.8** | **-0.8** |
| **NYDR** | **Nydri-Lefkada** | **0.76** | **232** | P | | **Pg** | **18 56 48.9** | **-0.9** |
| NYDR | | | | S | | **Sg** | **18 56 59.7** | **0.0** |
| | comp=N,2µm,0.5s | | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.76** | **232** | P | | **Pg** | **18 56 49.0** | **-0.9** |
| **KPRO** | **Kipourio** | **0.77** | **355** | P | | **Pg** | **18 56 49.5** | **-0.6** |
| KPRO | | | | S | | **Sb** | **18 57 01.0** | **-0.4** |
| | comp=N,4µm,0.4s | | | | | | | |
| **KPRO** | **Kipourio** | **0.77** | **355** | P | | **Pg** | **18 56 49.5** | **-0.6** |
| KPRO | | | | S | | **Sb** | **18 57 01.1** | **-0.2** |
| KPRO | | | | AML | AML | | 18 57 05.2 | |
| | comp=E,7830µm,0.4s | | | | | | | |
| KPRO | | | | AML | AML | | 18 57 06.7 | |
| | comp=N,7990µm,0.5s | | | | | | | |
| **TYRN** | **Tyrnavos** | **0.80** | **49** | P | | **Pg** | **18 56 50.0** | **-0.5** |
| TYRN | | | | S | | **Sn** | **18 57 03.1** | **-1.4** |
| **TYRN** | **Tyrnavos** | **0.80** | **49** | P | | **Pg** | **18 56 50.3** | **-0.3** |
| TYRN | | | | AML | AML | | 18 57 04.4 | |
| | comp=E,12735µm,0.4s | | | | | | | |
| TYRN | | | | AML | AML | | 18 57 05.4 | |
| | comp=N,12223µm,0.4s | | | | | | | |
| **EFP** | **Efpalio** | **0.84** | **155** | P | | **Pg** | **18 56 50.4** | **-0.9** |
| EFP | | | | S | | **Sg** | **18 57 02.5** | **+0.3** |
| | comp=N,3µm,0.5s | | | | | | | |
| **EFP** | **Efpalio** | **0.84** | **155** | P | | **Pg** | **18 56 50.7** | **-0.6** |
| **EVGI** | **Lefkada island** | **0.84** | **228** | P | | **Pg** | **18 56 50.2** | **-1.3** |
| EVGI | | | | S | | **Sg** | **18 57 02.4** | **-0.1** |
| | comp=N,3µm,0.4s | | | | | | | |
| **EVGI** | **Lefkada island** | **0.84** | **228** | P | | **Pg** | **18 56 50.5** | **-1.0** |
| **LRSO** | **Larissa Observ** | **0.87** | **56** | P | | **Pg** | **18 56 51.5** | **-0.4** |
| LRSO | | | | S | | **Sn** | **18 57 05.3** | **-1.0** |
| **LRSO** | **Larissa Observ** | **0.87** | **56** | P | | **Pg** | **18 56 51.8** | **-0.1** |
| **UPR** | **University Cam** | **0.94** | **164** | P | | **Pg** | **18 56 53.1** | **-0.2** |
| **KALE** | **Kalithea** | **0.96** | **146** | P | | **Pg** | **18 56 52.1** | **-1.5** |
| KALE | | | | S | | **Sb** | **18 57 07.2** | **+0.5** |
| | comp=N,2µm,0.5s | | | | | | | |
| **KALE** | **Kalithea** | **0.96** | **146** | P | | **Pg** | **18 56 52.4** | **-1.2** |
| KALE | | | | S | | **Sg** | **18 57 06.2** | **+0.1** |
| KALE | | | | AML | AML | | 18 57 10.3 | |
| | comp=N,4838µm,0.6s | | | | | | | |
| KALE | | | | AML | AML | | 18 57 10.8 | |
| | comp=E,2811µm,0.5s | | | | | | | |
| **FSK** | **Fiskardo** | **1.01** | **224** | P | | **Pg** | **18 56 52.7** | **-1.9** |
| FSK | | | | S | | **Sg** | **18 57 07.5** | **-0.2** |
| | comp=E,1µm,0.9s | | | | | | | |
| **FSK** | **Fiskardo** | **1.01** | **224** | P | | **Pg** | **18 56 52.9** | **-1.7** |
| **AXAR** | **Agios Charalam** | **1.03** | **114** | P | | **Pg** | **18 56 54.4** | **-0.5** |
| AXAR | | | | S | | **Sb** | **18 57 09.2** | **+0.5** |
| **AXAR** | **Agios Charalam** | **1.03** | **114** | P | | **Pg** | **18 56 54.5** | **-0.5** |
| AXAR | | | | AML | AML | | 18 57 12.6 | |
| | comp=E,8683µm,0.3s | | | | | | | |
| AXAR | | | | AML | AML | | 18 57 13.3 | |
| | comp=N,9318µm,0.4s | | | | | | | |
| **PENT** | **Pentalofos** | **1.04** | **346** | P | | **Pg** | **18 56 54.9** | **-0.2** |
| **PENT** | **Pentalofos** | **1.04** | **346** | P | | **Pg** | **18 56 54.7** | **-0.5** |
| **ALIK** | **Aliki, Aigiali** | **1.06** | **151** | P | | **Pg** | **18 56 54.4** | **-1.1** |
| **RLS** | **Riolos of Patr** | **1.13** | **180** | P | | **Pb** | **18 56 55.7** | **-1.2** |
| **RLS** | **Riolos of Patr** | **1.13** | **180** | P | | **Pb** | **18 56 55.6** | **-1.2** |
| **KZN** | **Kozani** | **1.14** | **12** | P | | **Pg** | **18 56 56.0** | **-1.2** |
| KZN | | | | S | | **Sn** | **18 57 13.2** | **0.0** |
| | comp=N,2µm,0.4s | | | | | | | |
| **KZN** | **Kozani** | **1.14** | **12** | P | | **Pg** | **18 56 56.3** | **-0.8** |
| KZN | | | | AML | AML | | 18 57 16.4 | |
| | comp=N,2370µm,0.3s | | | | | | | |
| KZN | | | | AML | AML | | 18 57 17.7 | |
| | comp=E,5146µm,0.4s | | | | | | | |
| **KLV** | **Kalavryta, Ach** | **1.27** | **154** | P | | **Pn** | **18 56 58.2** | **-0.9** |
| KLV | | | | S | | **Sn** | **18 57 17.7** | **+1.5** |
| | comp=E,838nm,0.7s | | | | | | | |
| **NEST** | **Nestorio** | **1.27** | **346** | P | | **Pn** | **18 56 59.1** | **0.0** |
| **NEST** | **Nestorio** | **1.27** | **346** | P | | **Pn** | **18 56 58.9** | **-0.2** |
| **DMLN** | **Damoulianata-K** | **1.27** | **222** | P | | **Pn** | **18 56 57.3** | **-1.9** |
| **KTI** | **Kastanea** | **1.30** | **23** | P | | **Pn** | **18 56 59.3** | **-0.4** |
| **SRN** | **Sarande** | **1.32** | **302** | P | | **Pn** | **18 56 59.8** | **0.0** |
| | baz=301 | | | | | | | |
| SRN | | | | S | | **Sn** | **18 57 18.1** | **+0.6** |
| | baz=301 | | | | | | | |
| SRN | | | | AMP | | | | |
| | comp=N,1.8nm,0.5s,baz=301 | | | | | | | |
| **SRN** | **Sarande** | **1.32** | **302** | S | | **Sg** | **18 57 18.5** | **+0.7** |
| | comp=N,492nm,0.6s | | | | | | | |
| **SRN** | **Sarande** | **1.32** | **302** | P | | Pg | 18 58 00.0 | +59 |
| **NEO** | **Neokhori** | **1.38** | **85** | P | | **Pn** | **18 57 00.3** | **-0.3** |
| NEO | | | | S | | **Sg** | **18 57 21.0** | **+1.5** |
| **KEK** | **Kerkira** | **1.39** | **293** | P | | **Pn** | **18 57 00.3** | **-0.4** |
| **GUR** | **Goura** | **1.43** | **151** | P | | **Pn** | **18 57 00.8** | **-0.6** |
| **KBN** | **Korca** | **1.52** | **340** | P | | **Pn** | **18 57 03.0** | **+0.3** |
| | baz=337 | | | | | | | |
| KBN | | | | S | | **Sg** | **18 57 23.9** | **-0.3** |
| | baz=337 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=N,4.3nm,0.7s,baz=337 | | | | | | | |
| **KBN** | **Korca** | **1.52** | **340** | P | | **Pn** | **18 57 03.0** | **+0.3** |
| KBN | | | | S | | **Sg** | **18 57 24.5** | **+0.3** |
| | comp=N,965nm,0.7s | | | | | | | |
| **LTHK** | **Lithakia** | **1.56** | **198** | P | | **Pn** | **18 57 02.2** | **-0.8** |
| **FNA** | **Florina** | **1.59** | **358** | P | | **Pn** | **18 57 02.5** | **-1.1** |
| FNA | | | | S | | **Sn** | **18 57 21.7** | **-2.6** |
| **FNA** | **Florina** | **1.59** | **358** | P | | **Pn** | **18 57 02.7** | **-0.9** |
| | baz=354 | | | | | | | |
| FNA | | | | S | | **Sg** | **18 57 26.4** | **-0.1** |
| | baz=354 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=E,2.4nm,0.7s,baz=354 | | | | | | | |
| **FNA** | **Florina** | **1.59** | **358** | P | | **Pn** | **18 57 04.0** | **+0.4** |
| FNA | | | | S | | **Sg** | **18 57 26.1** | **-0.4** |
| | comp=E,2µm,0.6s | | | | | | | |
| **FNA** | **Florina** | **1.59** | **358** | *e*Pg | | **Pn** | **18 57 04.2** | **+0.6** |
| FNA | | | | *e*Sg | | **Sg** | **18 57 26.6** | **+0.1** |
| **LOUT** | **Loutraki** | **1.69** | **135** | P | | **Pn** | **18 57 05.4** | **+0.6** |
| LOUT | | | | S | | **Sb** | **18 57 28.6** | **+0.9** |
| | comp=E,562nm,0.4s | | | | | | | |
| **VILL** | **Villia** | **1.77** | **125** | P | | **Pn** | **18 57 06.8** | **+0.7** |
| **THE** | **Thessaloniki** | **1.85** | **38** | P | | **Pn** | **18 57 07.2** | **+0.2** |
| **HORT** | **Hortiatis** | **1.89** | **41** | P | | **Pn** | **18 57 07.6** | **-0.1** |
| HORT | | | | S | | **Sb** | **18 57 34.3** | **+0.7** |
| | comp=E,355nm,0.7s | | | | | | | |
| **VLO** | **Vlora** | **1.98** | **311** | P | | **Pb** | **18 57 11.8** | **+0.4** |
| | baz=310 | | | | | | | |
| VLO | | | | S | | **Sg** | **18 57 38.4** | **-0.4** |
| | baz=310 | | | | | | | |
| **OHR** | **Ohrid** | **1.99** | **345** | *i* Pn | | **Pb** | **18 57 11.5** | **0.0** |
| OHR | | | | *i* Sn | | **Sg** | **18 57 41.0** | **+2.0** |
| **KYMI** | **Kymi, Euboea I** | **2.13** | **104** | P | | **Pn** | **18 57 11.1** | **+0.1** |
| **ATH** | **Athens Observa** | **2.15** | **124** | P | | **Pn** | **18 57 12.0** | **+0.9** |
| **SOH** | **Sokhos** | **2.19** | **41** | P | | **Pn** | **18 57 12.4** | **+0.7** |
| **ATHU** | **Athens Univers** | **2.19** | **123** | P | | **Pn** | **18 57 12.3** | **+0.5** |
| **ATHU** | **Athens Univers** | **2.19** | **123** | P | | **Pn** | **18 57 12.1** | **+0.3** |
| **PTL** | **Penteli** | **2.20** | **120** | P | | **Pn** | **18 57 12.3** | **+0.4** |
| PTL | | | | S | | **Sb** | **18 57 41.1** | **-1.4** |
| | comp=E,275nm,0.9s | | | | | | | |
| **KRND** | **KRANIDI** | **2.24** | **143** | P | | **Pn** | **18 57 13.6** | **+1.2** |
| KRND | | | | S | | **Sn** | **18 57 41.8** | **+1.7** |
| | comp=E,425nm,0.7s | | | | | | | |
| **OUR** | **Ouranopolis** | **2.26** | **59** | P | | **Pn** | **18 57 12.7** | **+0.1** |
| **KNT** | **Kendrikon** | **2.26** | **29** | P | | **Pn** | **18 57 12.8** | **+0.1** |
| **VLY** | **Voula,Athens** | **2.27** | **125** | P | | **Pn** | **18 57 13.6** | **+0.8** |
| **VAY** | **Valandovo** | **2.29** | **21** | *i* Pn | | **Pn** | **18 57 14.1** | **+0.9** |
| VAY | | | | *i* Sn | | **Sn** | **18 57 42.3** | **+0.9** |
| **SKY** | **Skiros Island** | **2.43** | **96** | P | | **Pn** | **18 57 15.4** | **+0.4** |
| **SCTE** | **Santa Cesarea** | **2.47** | **292** | P | | **Pn** | **18 57 14.1** | **-1.5** |
| | baz=292 | | | | | | | |
| SCTE | | | | S | | **Sb** | **18 57 51.2** | **+0.9** |
| | baz=292 | | | | | | | |
| **TIR** | **Tirane** | **2.48** | **331** | ⇓P | | **Pb** | **18 57 19.0** | **-0.8** |
| **PEHC** | **Pehcevo** | **2.81** | **23** | *i* Pn | | **Pn** | **18 57 21.6** | **+1.2** |
| PEHC | | | | *i* Sn | | **Sn** | **18 57 55.3** | **+0.9** |
| **NVR** | **Nevrokopi** | **2.84** | **40** | P | | **Pn** | **18 57 21.8** | **+1.2** |
| NVR | | | | S | | **Sn** | **18 57 57.4** | **+2.5** |
| | comp=E,118nm,0.8s | | | | | | | |
| **PUK** | **Puka** | **3.09** | **338** | P | | **Pn** | **18 57 25.9** | **+1.7** |
| | baz=336 | | | | | | | |
| PUK | | | | S | | **Sb** | **18 58 05.7** | **-2.5** |
| | baz=336 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=N,0.6nm,0.5s,baz=336 | | | | | | | |
| **BCI** | **Bajram Curri** | **3.35** | **342** | P | | **Pn** | **18 57 29.1** | **+1.5** |
| | baz=341 | | | | | | | |
| BCI | | | | S | | **Sb** | **18 58 11.8** | **-3.6** |
| | baz=341 | | | | | | | |
| **BOSS** | **Bosilegrad** | **3.39** | **13** | *e*Pn | | **Pn** | **18 57 29.5** | **+1.2** |
| BOSS | | | | *e*Sn | | **Sn** | **18 58 09.1** | **+0.5** |
| **SIGR** | **SIGRI** | **3.42** | **88** | P | | **Pn** | **18 57 29.3** | **+0.7** |
| **DRME** | **Dracevica, Mon** | **3.46** | **331** | *e*Pn | | **Pn** | **18 57 31.2** | **+2.0** |
| **DRME** | **Dracevica, Mon** | **3.46** | **331** | ⇓*i*Pn | | **Pn** | **18 57 31.4** | **+2.2** |
| DRME | | | | *i* Sn | | **Sn** | **18 58 12.8** | **+2.6** |
| **GOAD** | **anakkale-G¶** | **3.57** | **73** | P | | Pn | 18 57 25.5 | -5.7 |
| **PVY** | **Plav** | **3.59** | **342** | ⇓*i*Pn | | **Pn** | **18 57 32.8** | **+1.7** |
| **BOZC** | **Bozcaada** | **3.61** | **78** | P | | Pn | 18 57 25.5 | -5.7 |
| **PDG** | **Podgorica** | **3.64** | **333** | *e*Pn | | **Pn** | **18 57 34.0** | **+2.3** |
| **PDG** | **Podgorica** | **3.64** | **333** | ⇑*i*Pn | | **Pn** | **18 57 33.3** | **+1.6** |
| PDG | | | | *i* Sn | | **Sn** | **18 58 17.3** | **+2.5** |
| **TIP** | **Timpagrande** | **3.65** | **271** | ⇑P | | **Pn** | **18 57 33.2** | **+1.3** |
| **BUM** | **Brajici-Budva** | **3.67** | **329** | ⇓*i*Pn | | **Pn** | **18 57 33.9** | **+1.8** |
| BUM | | | | *i* Sn | | **Sn** | **18 58 17.7** | **+2.2** |
| **CHOS** | **Chios island** | **3.68** | **101** | P | | **Pn** | **18 57 33.1** | **+0.8** |
| **PRK** | **Paraskevi** | **3.74** | **88** | P | | **Pn** | **18 57 34.0** | **+1.0** |
| **EZN** | **Ezine** | **3.82** | **79** | P | | Pn | 18 57 01.1 | -33 |
| **IVA** | **Berane** | **3.87** | **343** | ⇓*i*Pn | | **Pn** | **18 57 36.1** | **+1.3** |
| IVA | | | | *i* Sn | | **Sn** | **18 58 22.8** | **+2.4** |
| **CEME** | **Cevo** | **3.87** | **331** | ⇓*i*Pn | | **Pn** | **18 57 36.5** | **+1.6** |
| CEME | | | | *i* Sn | | **Sn** | **18 58 22.3** | **+1.9** |
| **ALN** | **Alexandroupoli** | **3.91** | **63** | P | | **Pn** | **18 57 34.2** | **-1.2** |
| **MATE** | **Matera** | **3.94** | **293** | ⇓P | | **Pn** | **18 57 36.5** | **+0.8** |
| **KOME** | **Kolasin** | **3.94** | **339** | ⇓*i*Pn | | **Pn** | **18 57 37.7** | **+1.8** |
| KOME | | | | *i* Sn | | **Sn** | **18 58 24.1** | **+1.8** |
| **BAYC** | **CANAKKALE_Bayr** | **3.98** | **80** | P | | **Pn** | **18 57 35.6** | **-0.7** |
| BAYC | | | | S | | **Sn** | **18 58 15.5** | **-7.5** |
| BAYC | | | | *i* AML | AML | | 18 58 22.0 | |
| | comp=N,17nm,0.4s | | | | | | | |
| **SELS** | **Selova** | **4.04** | **356** | *e*Pn | | **Pn** | **18 57 38.5** | **+1.4** |
| SELS | | | | *e*Sn | | **Sn** | **18 58 23.6** | **-0.9** |
| **NKME** | **Niksic** | **4.05** | **333** | ⇓*i*Pn | | **Pn** | **18 57 38.9** | **+1.6** |
| NKME | | | | *i* Sn | | **Sn** | **18 58 26.9** | **+2.1** |
| **ERIK** | **Erikli-Kesan** | **4.16** | **68** | P | | **Pn** | **18 57 36.6** | **-2.2** |
| ERIK | | | | S | | **Sn** | **18 58 19.8** | **-7.6** |
| ERIK | | | | *i* AML | AML | | 18 58 58.0 | |
| | comp=N,28nm,0.7s | | | | | | | |
| **ZAPS** | **Zavoj** | **4.18** | **12** | *e*Pn | | **Pn** | **18 57 40.6** | **+1.5** |
| ZAPS | | | | *e*Sn | | **Sn** | **18 58 27.5** | **-0.5** |
| **SJES** | **Sjenica** | **4.22** | **345** | *e*Pn | | **Pn** | **18 57 43.2** | **+3.5** |
| SJES | | | | *e*Sn | | **Sn** | **18 58 31.2** | **+2.0** |
| **SJES** | **Sjenica** | **4.22** | **345** | *e*Pn | | **Pn** | **18 57 42.7** | **+3.0** |
| **IMMV** | **Iera Moni Meta** | **4.23** | **151** | P | | **Pn** | **18 57 40.1** | **+0.3** |
| IMMV | | | | S | | **Sn** | **18 58 31.2** | **+2.0** |
| | comp=N,115nm,1.0s | | | | | | | |
| **TREB** | **Trebinje** | **4.24** | **327** | *e*Pn | | **Pn** | **18 57 40.5** | **+0.6** |
| **BRY** | **Bratogost** | **4.32** | **330** | *e*Pn | | **Pn** | **18 57 42.7** | **+1.6** |
| **BRY** | **Bratogost** | **4.32** | **330** | ⇑*i*Pn | | **Pn** | **18 57 42.7** | **+1.6** |
| BRY | | | | *i* Sn | | **Sn** | **18 58 33.4** | **+1.8** |
| **PLE** | **Pljevlja** | **4.42** | **340** | ⇑*i*Pn | | **Pn** | **18 57 44.1** | **+1.6** |
| PLE | | | | *i* Sn | | **Sn** | **18 58 36.1** | **+2.0** |
| **BOVS** | **Bovan** | **4.45** | **2** | *e*Pn | | **Pn** | **18 57 43.2** | **+0.5** |
| BOVS | | | | *e*Sn | | **Sn** | **18 58 33.3** | **-1.3** |
| **UPM** | **Unac-Piva** | **4.45** | **335** | *e*Pn | | **Pn** | **18 57 45.0** | **+2.0** |
| **UPM** | **Unac-Piva** | **4.45** | **335** | ⇑*i*Pn | | **Pn** | **18 57 44.5** | **+1.5** |
| UPM | | | | *i* Sn | | **Sn** | **18 58 37.0** | **+2

comp=N,0.1nm,0.3s,baz=56,slow=11,SNR=3.6
comp=N,2.4nm,0.8s
**GERES GERESS Array B 11.14 333** P **Pn** **18 59 16.8 +2.1**
comp=N,0.1nm,0.3s,baz=163,slow=7.2,SNR=1.8
comp=N,0.2nm,0.3s
**DAVOX Davos/Dischmat 11.37 316** P **Pn** **18 59 19.1 +1.3**
comp=N,0.1nm,0.3s,baz=135,slow=17,SNR=1.9
DAVOX S **Sn** **19 01 21.2 -3.8**
comp=N,0.6nm,0.4s,baz=137,slow=19,SNR=1.9
comp=N,1.0nm,0.8s
**LISJ El Lisan 13.93 120** P Pn 18 59 43.8 -8.8
**PRNI Paran 14.19 124** P Pn 18 59 45.3 -11
**SWQJ Swaqa 14.32 119** P Pn 18 59 46.6 -11
**AQBJ Aqaba 14.64 126** P Pn 18 59 51.4 -11
**OBN Obninsk 18.89 28** LR LR 19 09 28.2
comp=N,38nm,18.8s,baz=348,slow=41
**ESDC Sonseca Array 19.63 280** P **P** **19 01 03.7 -0.2**
comp=N,0.1nm,0.3s,baz=78,slow=12,SNR=4.3
comp=N,0.4nm,0.5s
**HFS Hagfors 21.53 349** P **P** **19 01 23.5 -0.8**
comp=N,0.8nm,0.5s,baz=172,slow=11,SNR=6.5
comp=N,0.8nm,0.5s
**FINES FINESS Array B 22.46 6** P **P** **19 01 33.2 -1.1**
comp=N,3.1nm,1.0s,baz=180,slow=11,SNR=4.5
comp=N,3.1nm,1.0s
**NB2 NORSAR Subarra 22.79 347** P **P** **19 01 38.7 +0.9**
comp=Z,1.3nm,0.9s,baz=161,slow=11
**NOA NORSAR Array B 22.79 347** P **P** **19 01 37.7 0.0**
comp=Z,0.5nm,0.9s,baz=163,slow=11,SNR=3.7
NOA LR LR 19 12 13.2
comp=Z,8.3nm,18.9s,baz=330,slow=41
comp=Z,0.5nm,0.9s
**EKA Eskdalemuir Ar 23.05 323** P **P** **19 01 40.1 -0.4**
comp=Z,0.8nm,0.6s,baz=118,slow=10,SNR=3.4
comp=Z,0.8nm,0.6s
**TORD Torodi Ar. Bea 31.28 219** P **P** **19 02 54.9 -0.5**
comp=Z,1.2nm,0.7s,baz=29,slow=9.3,SNR=8.4
comp=Z,1.2nm,0.7s
**KURBB Kurchatov Arra 41.04 55** P **P** **19 04 18.7 +0.1**
comp=Z,0.7nm,0.4s,baz=282,slow=9.1,SNR=6.6
comp=Z,0.7nm,0.4s
**MKAR Makanchi Array 44.15 59** P **P** **19 04 44.2 +0.2**
comp=Z,2.4nm,0.5s,baz=275,slow=7.8,SNR=50
comp=Z,2.4nm,0.5s
**ZALV Zalesovo Beam 44.47 49** P **P** **19 04 45.8 -0.5**
comp=Z,4.7nm,0.6s,baz=270,slow=8.6,SNR=19
comp=Z,4.7nm,0.6s

**TRN 07 19:10:48.6, 11.74N×61.11W, h40km, MD3.8, South-east of Grenada., Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TPR** | **Prospect** | **0.64** | **149** | *eP* | Pn | 19 11 01.4 | 0.0 |
| TPR | | | | *eS* | Sn | 19 11 11.6 | +1.2 |
| **GRGR** | **Grenville** | **0.66** | **306** | *eP* | Pn | 19 11 00.8 | -0.8 |
| GRGR | | | | *eS* | Sn | 19 11 11.3 | +0.6 |
| **GRW** | **Mount Saint Ca** | **0.68** | **308** | *eP* | Pn | 19 11 01.4 | -0.5 |
| GRW | | | | *eS* | Sn | 19 11 12.5 | +1.1 |
| **GRFF** | **Grenada Fort F** | **0.68** | **297** | *eP* | Pn | 19 11 01.3 | -0.6 |
| GRFF | | | | *eS* | Sn | 19 11 12.4 | +1.0 |
| **GRHS** | **Sauteurs** | **0.70** | **313** | *eP* | Pn | 19 11 01.4 | -0.8 |
| GRHS | | | | *eS* | Sn | 19 11 12.1 | +0.2 |
| **GRIC** | **Isle de Caille** | **0.71** | **320** | *eP* | Pn | 19 11 03.0 | +0.8 |
| GRIC | | | | *eS* | Sn | 19 11 12.4 | +0.3 |
| **GRSS** | **Sisters** | **0.74** | **319** | *eP* | Pn | 19 11 02.1 | -0.5 |
| GRSS | | | | *eS* | Sn | 19 11 13.4 | +0.7 |
| **GCMP** | **Grenada, Carri** | **0.80** | **338** | *eP* | Pn | 19 11 02.7 | -0.8 |
| GCMP | | | | *eS* | Sn | 19 11 14.6 | +0.4 |
| **TRN** | **Trinidad (W)** | **1.12** | **195** | *eP* | Pn | 19 11 08.0 | +0.1 |
| TRN | | | | *eS* | Sn | 19 11 23.3 | +1.2 |
| **TCE** | **Chacachacare** | **1.21** | **211** | *eP* | Pn | 19 11 08.2 | -0.9 |
| TCE | | | | *eS* | Sn | 19 11 24.5 | +0.1 |
| **TBH** | **Brigand Hill** | **1.25** | **178** | *eP* | Pn | 19 11 10.1 | +0.4 |
| **SVOC** | **Richmond Hill,** | **1.41** | **356** | *eP* | Pn | 19 11 12.0 | +0.1 |
| SVOC | | | | *eS* | Sn | 19 11 30.3 | +1.1 |
| **SVB** | **Belmont** | **1.53** | **355** | *eP* | Pn | 19 11 13.4 | -0.1 |
| SVB | | | | *eS* | Sn | 19 11 33.0 | +0.8 |
| **SLBI** | **Saint Lucia, B** | **2.27** | **3** | *eP* | Pn | 19 11 23.3 | -0.4 |
| SLBI | | | | *eS* | Sn | 19 11 50.9 | +0.4 |
| **BIM** | **Bigot** | **2.76** | **1** | *eP* | Pn | 19 11 30.4 | -0.1 |
| BIM | | | | *eS* | Sn | 19 12 02.9 | +0.3 |
| **ILAM** | **Ilet Lapin Mar** | **3.02** | **4** | *eP* | Pn | 19 11 34.0 | 0.0 |
| ILAM | | | | *eS* | Sn | 19 12 08.7 | -0.4 |
| **PCRV** | **Puerto La Cruz** | **3.79** | **246** | *eP* | Pn | 19 11 45.4 | +0.8 |
| PCRV | | | | *eS* | Sn | 19 12 27.6 | -0.5 |
| **TBG** | **Guadaloupe-3** | **4.12** | **353** | *eP* | Pn | 19 11 49.2 | +0.1 |
| **ANBD** | **Bethesda, Anti** | **5.31** | **353** | *eP* | Pn | 19 12 07.1 | +1.6 |
| ANBD | | | | *eS* | Sn | 19 13 04.3 | -1.2 |
| **ANWB** | **Willy Bob** | **5.93** | **354** | *eP* | Pn | 19 12 15.5 | +1.5 |
| ANWB | | | | *eS* | Sn | 19 13 17.8 | -2.9 |
| **BAUV** | **El Baul** | **7.36** | **248** | *eP* | Pn | 19 12 32.1 | -1.6 |
| BAUV | | | | *eS* | Sn | 19 13 52.1 | -3.8 |

*IDC **07** 19:13:43.9±0.6, 8°.75S×106°.75E, h0km, mb4.1/16, mbtmp4.1/16, MS2.8/2, Error ellipse: s-maj=25.6km s-min=13.2km az=70.0*
*DJA **07** 19:13:45.7±2.3, 9°S±3°×107°E±°, h14km±19km, M4.8/15, mb5.2/8, mB5.4/3, MLv4.5/15, Mw(mB)4.9/3*
*NEIC **07** 19:13:46±1.5, 8°.93S±0°.06×106°.60E±0°.07, h20km±4km, mb4.5/38, Error ellipse: s-maj=10.6km s-min=8.5km az=124.0*

**ISC 07 19:13:47.4±0.4, 8°.96S±0°.05×106°.74E±0°.06, h28km, n92, σ1§65/87, mb4.4/32, 1D, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNJI** | **Cibinong** | **1.68** | **13** | P | **Pn** | **19 14 13.3** | **-1.6** |
| **XMIS** | **Christmas Isla** | **1.86** | **215** | Pn | **Pn** | **19 14 16.0** | **-1.4** |
| **SKJI** | **Sukabumi** | **1.94** | **355** | P | **Pn** | **19 14 17.4** | **-1.2** |
| **CMJI** | **Cimerak** | **2.05** | **56** | P | **Pn** | **19 14 19.4** | **-0.7** |
| **DBJI** | **Dramaga** | **2.39** | **0** | P | **Pn** | **19 14 24.9** | **+0.2** |
| **SBJI** | **Serang** | **2.88** | **348** | P | **Pn** | **19 14 30.6** | **-0.9** |
| **UGM** | **Wanagama** | **3.88** | **75** | Pn | **Pn** | **19 14 45.8** | **+0.5** |
| **UGM** | **Wanagama** | **3.88** | **75** | P | **Pn** | **19 14 46.0** | **+0.7** |
| **KASI** | **Kota Agung** | **4.07** | **327** | P | **Pn** | **19 14 45.4** | **-2.4** |
| **SMRI** | **Semarang** | **4.13** | **63** | Pn | **Pn** | **19 14 50.2** | **+1.6** |
| **SMRI** | **Semarang** | **4.13** | **63** | P | **Pn** | **19 14 49.9** | **+1.3** |
| **LWLI** | **Liwa** | **4.73** | **326** | P | **Pn** | **19 14 55.2** | **-1.8** |
| **PWJI** | **Pagerwojo** | **5.10** | **80** | P | **Pn** | **19 15 02.6** | **+0.7** |
| | 74nm,0.5s,2μm0.7nm | | | | | | |
| **MNAI** | **Manna** | **5.91** | **320** | Pn | **Pn** | **19 15 10.5** | **-2.6** |
| **MNAI** | **Manna** | **5.91** | **320** | P | **Pn** | **19 15 10.9** | **-2.3** |
| | 315nm,0.8s,1.4nm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **7.34** | **87** | Pn | **Pn** | **19 15 34.2** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **7.34** | **87** | P | **Pn** | **19 15 34.8** | **+1.9** |
| **SRBI** | **Singaraja** | **8.43** | **85** | P | **Pn** | **19 15 48.7** | **+1.0** |
| | 80nm,0.7s | | | | | | |
| **PPSI** | **Pulau Pagai** | **9.09** | **312** | P | **Pn** | **19 15 55.2** | **-1.6** |
| | 148nm,1.0s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **10.03** | **90** | P | **Pn** | **19 16 10.4** | **+0.7** |
| **SBUM** | **Sibu** | **12.58** | **26** | Pn | **Pn** | **19 16 43.4** | **-1.2** |
| **GSI** | **Gunungsitoli** | **13.68** | **318** | Pn | Pn | 19 16 51.9 | -7.9 |
| **GIRL** | **Giralia** | **15.39** | **153** | Pn | **Pn** | **19 17 20.6** | **-2.1** |
| **TOLI2** | **Tolitoli** | **17.20** | **55** | Pn | **Pn** | **19 17 42.7** | **-3.1** |
| **SOEI** | **Soe** | **17.32** | **94** | Pn | **Pn** | **19 17 45.2** | **-2.2** |
| SOEI | | | | IAmb | IAmb | 19 18 21.3 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.79** | **136** | Pn | **Pn** | **19 17 51.4** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **17.79** | **136** | Pn | **Pn** | **19 17 51.8** | **-1.4** |
| PSA00 | | | | IAmb | IAmb | 19 18 20.4 | |
| | comp=Z,6.9nm,1.2s | | | | | | |
| **MYLDM** | **Lahad Datu** | **18.29** | **40** | P | **P** | **19 17 57.0** | **-2.2** |
| MYLDM | | | | IAmb | IAmb | 19 18 10.5 | |
| | comp=Z,64nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.48** | **118** | P | **P** | **19 18 24.5** | **+1.2** |
| **MORW** | **Morawa** | **21.83** | **158** | P | **P** | **19 18 35.2** | **-2.5** |
| MORW | | | | IAmb | IAmb | 19 19 07.4 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **22.52** | **109** | P | **P** | **19 18 43.5** | **-1.7** |
| KNRA | | | | IAmb | IAmb | 19 19 15.6 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **DAV** | **Davao City (W)** | **24.62** | **50** | LR | LR | 19 30 59.0 | |
| | comp=Z,44nm,18.1s,baz=156,slow=42 | | | | | | |
| **FAKI** | **Fak Fak** | **26.06** | **78** | P | **P** | **19 19 17.8** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **28.30** | **344** | P | **P** | **19 19 38.0** | **-0.9** |
| | comp=Z,0.6nm,0.6s,baz=178,slow=8.9,SNR=4.3 | | | | | | |
| CMAR | | | | LR | LR | 19 29 44.6 | |
| | comp=Z,10nm,21.5s,baz=175,slow=34 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **28.82** | **115** | P | **P** | **19 19 44.3** | **+0.8** |
| WB0 | | | | IAmb | IAmb | 19 20 01.8 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **28.82** | **115** | | **P** | **19 19 44.9** | **+1.5** |
| **WRA** | **Warramunga Arr** | **28.82** | **115** | P | **P** | **19 19 45.0** | **+1.5** |
| WRA | comp=Z,1.2nm,0.7s,baz=288,slow=12,SNR=7.2 | | | PcP | **PcP** | **19 22 54.3** | **+1.2** |
| | comp=Z,0.2nm,0.3s,baz=304,slow=1.9,SNR=1.6 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **28.84** | **115** | P | **P** | **19 19 44.0** | **+0.3** |
| **WR0** | **Warramunga Arr** | **29.01** | **115** | P | **P** | **19 19 46.4** | **+1.2** |
| WR0 | | | | IAmb | IAmb | 19 20 01.7 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **29.81** | **123** | P | **P** | **19 19 53.7** | **+1.4** |
| | comp=Z,1.3nm,0.8s,baz=307,slow=9.1,SNR=10.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 22 56.8** | **+1.3** |
| | comp=Z,0.2nm,0.5s,baz=328,slow=3.3,SNR=2.2 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **33.90** | **270** | T | T | 19 56 13.7 | |
| | baz=94,slow=74,SNR=19 | | | | | | |
| **H08S3** | **Diego Garcia H** | **33.91** | **270** | T | T | 19 56 14.2 | |
| | baz=94,slow=74,SNR=22 | | | | | | |
| **H08S1** | **Diego Carcia H** | **33.92** | **270** | T | T | 19 56 12.5 | |
| | baz=94,slow=74,SNR=16 | | | | | | |
| **TNCH** | **TengChong** | **34.72** | **347** | P | **P** | **19 20 35.9** | **+0.6** |
| TNCH | | | | pP | sP | 19 20 45.2 | -0.4 |
| TNCH | | | | sP | pwP | 19 20 48.0 | +1.5 |
| TNCH | | | | S | **S** | **19 26 07.8** | **+3.8** |
| TNCH | | | | sS | sS | 19 26 18.5 | +2.4 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,3.1s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,160nm,4.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=N,150nm,3.8s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,140nm,3.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,72nm,5.7s | | | | | | |
| **PZH** | **PanZhiHua** | **35.58** | **352** | P | **P** | **19 20 44.8** | **+2.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,170nm,5.3s | | | | | | |
| **COEN** | **Coen** | **36.03** | **101** | P | **P** | **19 20 45.9** | **-0.7** |
| COEN | | | | IAmb | IAmb | 19 20 52.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **37.24** | **338** | P | **P** | **19 20 54.8** | **-2.1** |
| **STKA** | **Stephens Creek** | **39.56** | **130** | P | **P** | **19 21 16.6** | **+0.4** |
| **STKA** | **Stephens Creek** | **39.56** | **130** | P | **P** | **19 21 18.2** | **+2.0** |
| | comp=Z,5.3nm,0.7s,baz=307,slow=9.1,SNR=7.9 | | | | | | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **LSA** | **Lhasa** | **41.26** | **339** | P | **P** | **19 21 28.0** | **-2.8** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **LSA** | **Lhasa** | **41.26** | **339** | P | **P** | **19 21 29.1** | **-1.7** |
| LSA | | | | IAmb | IAmb | 19 21 34.7 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **NJ2** | **Nanjing** | **42.39** | **15** | *eP* | **P** | **19 21 41.2** | **+1.8** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **CAN** | **Canberra** | **46.61** | **131** | P | **P** | **19 22 12.2** | **-1.2** |
| **GTA** | **Gaotai** | **48.55** | **353** | P | **P** | **19 22 31.5** | **+3.2** |
| GTA | | | | pP | pP | 19 22 35.9 | +0.1 |
| **HHC** | **Hu-ho-hao-te** | **49.76** | **5** | *eP* | **P** | **19 22 40.7** | **+3.2** |
| HHC | | | | pP | sP | 19 22 47.7 | -0.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,190nm,4.6s | | | | | | |
| **KSRS** | **Korea Array** | **50.25** | **22** | P | **P** | **19 22 41.2** | **0.0** |
| | comp=Z,1.4nm,0.8s,baz=218,slow=8.1,SNR=5.5 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **360** | P | **P** | **19 23 27.3** | **0.0** |
| SONM | | | | IAmb | IAmb | 19 23 35.6 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **360** | P | **P** | **19 23 27.4** | **+0.1** |
| | comp=Z,2.5nm,0.7s,baz=173,slow=7.5,SNR=22 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.57** | **0** | P | **P** | **19 23 27.0** | **-0.6** |
| ULN | | | | IAmb | IAmb | 19 23 35.6 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **CASY** | **Casey** | **57.30** | **178** | P | **P** | **19 23 29.9** | **-2.4** |
| CASY | | | | IAmb | IAmb | 19 23 43.6 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **BNX** | **BinXian** | **57.52** | **17** | ||P | **P** | **19 23 33.1** | **-1.1** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **57.64** | **21** | P | **P** | **19 23 32.8** | **-2.2** |
| USA0B | | | | IAmb | IAmb | 19 23 36.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **57.64** | **21** | P | **P** | **19 23 33.1** | **-1.9** |
| | comp=Z,1.5nm,0.6s,baz=196,slow=5.8,SNR=9.8 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **ARSB** | **Arslanbob** | **58.87** | **331** | P | **P** | **19 23 42.8** | **-1.1** |
| **H04N2** | **CROZET ISLANDS** | **59.62** | **221** | T | T | 20 28 36.5 | |
| | baz=69,slow=75,SNR=44 | | | | | | |
| **MK31** | **Makanchi Array** | **59.63** | **341** | P | **P** | **19 23 47.8** | **-1.1** |
| MK31 | | | | IAmb | IAmb | 19 23 57.3 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.63** | **341** | P | **P** | **19 23 48.1** | **-0.8** |
| **MKAR** | **Makanchi Array** | **59.63** | **341** | P | **P** | **19 23 48.5** | **-0.4** |
| | comp=Z,3.7nm,0.8s,baz=149,slow=8.7,SNR=34 | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **59.64** | **221** | T | T | 20 28 35.9 | |
| | baz=69,slow=75,SNR=40 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **59.64** | **221** | T | T | 20 28 35.9 | |
| | baz=69,slow=75,SNR=37 | | | | | | |
| **MAKZ** | **Makanchi** | **59.74** | **341** | P | **P** | **19 23 48.1** | **-1.6** |
| MAKZ | | | | IAmb | IAmb | 19 23 58.2 | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.19** | **340** | P | **P** | **19 24 19.0** | **-0.5** |
| | comp=Z,2.2nm,0.5s,baz=153,slow=5.9,SNR=13 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **64.24** | **341** | P | **P** | **19 24 18.8** | **-0.9** |
| **ZAA0** | **Zalesovo Array** | **65.35** | **346** | P | **P** | **19 24 25.7** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **65.35** | **346** | P | **P** | **19 24 25.6** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **65.35** | **346** | P | **P** | **19 24 25.9** | **-1.1** |
| | comp=Z,2.3nm,0.3s,baz=152,slow=6.2,SNR=18 | | | | | | |
| | comp=Z,2.3nm,0.3s | | | | | | |
| **MAW** | **Mawson** | **65.43** | **197** | P | **P** | **19 24 29.3** | **+2.0** |
| | comp=Z,0.6nm,0.6s,baz=32,slow=13,SNR=1.9 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **BKZ** | **Black Stump Fm** | **68.71** | **128** | P | **P** | **19 24 48.5** | **-0.3** |
| **RTZ** | **Ruatahuna** | **69.04** | **128** | P | **P** | **19 24 48.8** | **-2.1** |
| **BRVK** | **Borovoye** | **69.12** | **337** | P | **P** | **19 24 49.5** | **-1.4** |
| **ABKAR** | **Akbulak array** | **70.95** | **330** | P | **P** | **19 25 01.5** | **-0.7** |
| **ABKAR** | **Akbulak array** | **70.95** | **330** | P | **P** | **19 25 01.1** | **-1.1** |
| ABKAR | | | | IAmb | IAmb | 19 25 18.7 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **74.11** | **169** | P | **P** | **19 25 22.1** | **+1.5** |
| **VNDA** | **Vanda** | **74.11** | **169** | P | **P** | **19 25 22.0** | **+1.5** |
| | comp=Z,1.0nm,0.8s,baz=297,slow=5.9,SNR=5.7 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **79.53** | **306** | P | **P** | **19 25 53.1** | **+1.0** |
| | comp=Z,0.9nm,0.5s,baz=98,slow=8.9,SNR=1.6 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.05** | **180** | P | **P** | **19 26 01.6** | **+2.0** |
| QSPA | | | | IAmb | IAmb | 19 26 10.0 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.05** | **180** | P | **P** | **19 26 01.7** | **+2.0** |
| | comp=Z,1.4nm,0.6s,baz=280,slow=0.9,SNR=13 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **82.93** | **312** | P | **P** | **19 26 10.4** | **+0.3** |
| | comp=Z,0.8nm,0.8s,baz=112,slow=9.5,SNR=3.9 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **87.59** | **197** | P | **P** | **19 26 35.3** | **+2.6** |
| SNAA | | | | IAmb | IAmb | 19 26 36.5 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **87.59** | **197** | P | **P** | **19 26 35.3** | **+2.6** |
| | comp=Z,2.0nm,0.9s,baz=123,slow=7.7,SNR=6.0 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **145.03** | **50** | PKP | **PKPdf** | **19 33 24.0** | **+1.1** |
| | comp=Z,0.7nm,0.9s,baz=256,slow=2.3,SNR=4.5 | | | | | | |
| **BDFB** | **Brasilia** | **145.03** | **226** | PKPbc | **PKPdf** | **19 33 24.0** | **+0.7** |
| | comp=Z,1.4nm,0.4s,baz=145,slow=4.0,SNR=3.5 | | | | | | |

*NOU **07** 19:33:17.1, 21°.10S×178°.19W, h545km, mb4.2/14, Fiji Islands Region*
*NEIC **07** 19:33:24.7±2.3, 21°.5S±0°.1×178°.9W±0°.1, h567km±7km, mb4.5/42, Error ellipse: s-maj=18.7km s-min=16.3km az=101.0*
*IDC **07** 19:33:27.3±1.3, 21°.53S×179°.18W, h590km±13km, mb3.4/13, mbtmp4.3/15, Error ellipse: s-maj=18.3km s-min=12.7km az=97.0*
**ISC 07 19:33:27.5±0.4, 21°.55S±0°.07×179°.21W±0°.08, h600km,**

**n122, σ1§18/122, mb4.4/34, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.59** | **325** | P | **P** | **19 34 56.4** | **-1.1** |
| **MSVF** | **Nonsavu** | **4.59** | **325** | P | **P** | **19 34 56.0** | **-1.5** |
| | 28nm,0.7s,baz=148,slow=13,SNR=20 | | | | | | |
| MSVF | | | | S | **S** | **19 36 10.0** | **-0.7** |
| | 7.8nm,0.8s,baz=312,slow=23,SNR=3.6 | | | | | | |
| **MARNC** | **Mare, Loyalty** | **11.88** | **268** | P | **P** | **19 36 04.9** | **-0.2** |
| **PINNC** | **Pines Island,** | **12.42** | **263** | P | **P** | **19 36 10.2** | **-0.2** |
| **LIFNC** | **LIFOU** | **12.67** | **271** | P | **P** | **19 36 10.3** | **-2.7** |
| **YATNC** | **Mamie plateau,** | **12.92** | **265** | P | **P** | **19 36 15.4** | **-0.2** |
| **DZM** | **Mont Dzumac** | **13.34** | **265** | P | **P** | **19 36 19.3** | **-0.6** |
| **DZM** | **Mont Dzumac** | **13.34** | **265** | | **P** | **19 36 19.0** | **-0.9** |
| **DZM** | **Mont Dzumac** | **13.34** | **265** | P | **P** | **19 36 18.6** | **-1.3** |
| | 10nm,0.7s,baz=82,slow=19,SNR=18 | | | | | | |
| **NOUC** | **Port Laguerre** | **13.47** | **265** | P | **P** | **19 36 20.5** | **-0.6** |
| **KOUNC** | **Koumac, New Ca** | **15.44** | **271** | P | **P** | **19 36 43.8** | **+4.0** |
| **TOZ** | **Tahuroa Road** | **16.76** | **195** | P | **P** | **19 36 51.0** | **-0.6** |
| TOZ | | | | IAmb | IAmb | 19 37 22.8 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **16.95** | **190** | P | **P** | **19 36 50.9** | **-2.5** |
| **URZ** | **Urewera** | **16.95** | **190** | P | **P** | **19 36 50.9** | **-2.5** |
| | comp=Z,6.3nm,0.3s,baz=3.6,slow=3.5,SNR=7.6 | | | | | | |
| **QRZ** | **Quartz Range** | **20.45** | **198** | P | **P** | **19 37 24.5** | **-0.7** |
| **QRZ** | **Quartz Range** | **20.45** | **198** | P | **P** | **19 37 24.1** | **-1.1** |
| **KHZ** | **Kahutara** | **21.68** | **195** | P | **P** | **19 37 34.1** | **-2.0** |
| **WHZ** | **Wether Hill Ro** | **26.46** | **200** | P | **P** | **19 38 18.3** | **0.0** |
| **EIDS** | **Eidsvold** | **27.49** | **256** | P | **P** | **19 38 28.9** | **+1.2** |
| EIDS | | | | IAmb | IAmb | 19 39 01.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **27.60** | **245** | P | **P** | **19 38 30.7** | **+2.0** |
| **ARMA** | **Armidale** | **27.60** | **245** | P | **P** | **19 38 30.0** | **+1.4** |
| ARMA | | | | IAmb | IAmb | 19 39 08.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **CNB** | **Canberra Magne** | **30.70** | **237** | P | **P** | **19 38 56.6** | **+1.3** |
| **CTAO** | **Charters Tower** | **32.28** | **266** | P | **P** | **19 39 09.7** | **+0.9** |
| **CTAO** | **Charters Tower** | **32.28** | **266** | P | **P** | **19 39 09.5** | **+0.7** |
| CTAO | | | | IAmb | IAmb | 19 39 40.6 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **34.37** | **234** | P | **P** | **19 39 25.8** | **-0.3** |
| TOO | | | | IAmb | IAmb | 19 39 57.6 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **TAU** | **Tasmania Unive** | **35.09** | **225** | P | **P** | **19 39 32.0** | **+0.1** |
| **STKA** | **Stephens Creek** | **36.32** | **245** | P | **P** | **19 39 43.5** | **+1.2** |
| **STKA** | **Stephens Creek** | **36.32** | **245** | P | **P** | **19 39 43.1** | **+0.7** |
| **STKA** | **Stephens Creek** | **36.32** | **245** | P | **P** | **19 39 43.0** | **+0.7** |
| | comp=Z,2.4nm,0.4s,baz=101,slow=11,SNR=8.3 | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | |
| **COEN** | **Coen** | **36.54** | **276** | P | **P** | **19 39 45.2** | **+0.9** |
| COEN | | | | IAmb | IAmb | 19 39 47.5 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **HTT** | **Hallett** | **38.74** | **243** | P | **P** | **19 40 02.8** | **+0.8** |
| **LCRK** | **Leigh Creek** | **39.09** | **248** | P | **P** | **19 40 05.7** | **+0.9** |
| **BBOO** | **Buckleboo** | **41.07** | **244** | P | **P** | **19 40 20.5** | **0.0** |
| **AS31** | **Alice Springs** | **43.19** | **258** | P | **P** | **19 40 37.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **43.19** | **258** | P | **P** | **19 40 37.6** | **+0.4** |
| | comp=Z,8.0nm,0.6s,baz=97,slow=7.8,SNR=82 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 42 13.7** | **+0.9** |
| | comp=Z,2.4nm,0.6s,baz=110,slow=3.8,SNR=12 | | | | | | |
| ASAR | | | | S | **S** | **19 46 19.1** | **-2.8** |
| | comp=Z,2.1nm,0.9s,baz=94,slow=14,SNR=11 | | | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.34** | **263** | P | **P** | **19 40 38.2** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 19 40 39.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.35** | **263** | P | **P** | **19 40 37.8** | **-0.7** |
| **WRA** | **Warramunga Arr** | **43.35** | **263** | P | **P** | **19 40 38.4** | **-0.1** |
| | comp=Z,5.1nm,0.5s,baz=96,slow=7.6,SNR=145 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 42 14.4** | **+1.1** |
| | comp=Z,0.7nm,0.6s,baz=112,slow=2.6,SNR=3.2 | | | | | | |
| WRA | | | | S | **S** | **19 46 19.5** | **-4.6** |
| | comp=Z,1.0nm,0.9s,baz=96,slow=16,SNR=2.3 | | | | | | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **MWH** | **Moku'aweowe** | **46.87** | **31** | | pP | 19 42 41.2 | -11 |
| **FORT** | **Forrest** | **47.85** | **247** | P | **P** | **19 41 11.8** | **-0.7** |
| **MTN** | **Manton Dam** | **48.05** | **272** | P | **P** | **19 41 14.0** | **-0.2** |
| MTN | | | | IAmb | IAmb | 19 41 54.9 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **49.47** | **267** | P | **P** | **19 41 25.1** | **+0.5** |
| KNRA | | | | IAmb | IAmb | 19 41 31.7 | |
| | comp=Z,18nm,1.3s | | | | | | |
| KNRA | | | | PcP | **PcP** | **19 42 35.7** | **+0.3** |
| **FAKI** | **Fak Fak** | **50.65** | **285** | P | **P** | **19 41 33.6** | **+0.3** |
| FAKI | | | | IAmb | IAmb | 19 42 02.9 | |
| | comp=Z,51nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.78** | **263** | P | **P** | **19 41 42.1** | **+0.8** |
| **SOEI** | **Soe** | **55.41** | **273** | P | **P** | **19 42 08.9** | **+1.8** |
| SOEI | | | | IAmb | IAmb

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LYMT | Lyon Mountain | 90.93 | 39 | | pP | | 19 47 26.5 | -11 |
| SN07 | Snyder 07 | 92.30 | 55 | P | P | | 19 45 31.7 | -3.3 |
| MKAR | Makanchi Array | 111.09 | 313 | PKiKP | PKiKP | | 19 50 53.0 | -0.7 |
| | comp=Z,0.3nm,0.4s,baz=173,slow=1.3,SNR=7.9 | | | | | | | |
| KURBB | Kurchatov Array | 114.04 | 317 | PKP | PKPdf | | 19 50 58.8 | -0.5 |
| | comp=Z,0.4nm,0.5s,baz=118,slow=1.6,SNR=4.5 | | | | | | | |
| ARCES | ARCESS Array B | 129.74 | 349 | PKP | PKPdf | | 19 51 28.3 | -0.5 |
| | comp=Z,2.2nm,0.6s,baz=60,slow=2.4,SNR=8.7 | | | | | | | |
| FINES | FINESS Array B | 136.44 | 343 | PKhKP | PKPpre | | 19 51 31.1 | |
| | comp=Z,1.6nm,0.8s,baz=43,slow=3.4,SNR=4.3 | | | | | | | |
| FINES | | | | PKP | PKPdf | | 19 51 40.7 | -0.9 |
| | comp=Z,6.5nm,1.2s,baz=29,slow=3.2,SNR=6.7 | | | | | | | |
| NOA | NORSAR Array B | 139.87 | 352 | PKhKP | PKPpre | | 19 51 40.9 | |
| | comp=Z,0.1nm,0.5s,baz=51,slow=1.3,SNR=5.9 | | | | | | | |
| NOA | | | | PKP | PKiKP | | 19 51 50.0 | -0.5 |
| | comp=Z,0.2nm,0.5s,baz=21,slow=1.0,SNR=2.0 | | | | | | | |
| HFS | Hagfors | 140.38 | 350 | PKhKP | PKPpre | | 19 51 42.4 | |
| | comp=Z,1.3nm,0.3s,baz=66,slow=3.6,SNR=26 | | | | | | | |
| LODK | Lodwar | 141.89 | 247 | PKPdf | PKPdf | | 19 51 50.3 | -2.7 |
| AKASG | Malin Array Be | 143.36 | 330 | PKP | PKPab | | 19 51 52.6 | -0.3 |
| | comp=Z,3.0nm,0.3s,baz=43,slow=4.3,SNR=26 | | | | | | | |
| AKBB | Malin Array Si | 143.36 | 330 | PKPdf | PKPab | | 19 51 52.5 | -0.4 |
| KIEV | Kiev | 143.37 | 330 | PKPdf | PKPab | | 19 51 52.6 | -0.3 |
| MBAR | Mbarara | 143.40 | 237 | | PKPbc | | 19 51 54.6 | +0.1 |
| ARPR | Arapgir-MALATY | 143.49 | 307 | | PKPab | | 19 51 53.6 | -0.4 |
| EKA | Eskdalemuir Ar | 146.13 | 4 | PKPbc | PKPbc | | 19 52 01.1 | -0.1 |
| | comp=Z,3.0nm,0.7s,baz=333,slow=2.3,SNR=9.0 | | | | | | | |
| BR131 | Keskin Array S | 146.68 | 310 | | PKPbc | | 19 52 03.6 | +0.2 |
| BRTR | Keskin Array B | 146.68 | 310 | | PKPbc | | 19 52 03.5 | +0.1 |
| BRTR | Keskin Array B | 146.68 | 310 | PKPbc | PKPbc | | 19 52 03.8 | +0.4 |
| | comp=Z,2.1nm,0.6s,baz=140,slow=4.8,SNR=16 | | | | | | | |
| MMAI | Mount Meron Ar | 147.33 | 298 | PKPbc | PKiKP | | 19 52 06.2 | -0.6 |
| | comp=Z,2.5nm,0.4s,baz=77,slow=5.4,SNR=7.1 | | | | | | | |
| BURAR | Bucovina Array | 147.39 | 329 | | PKPbc | | 19 52 05.2 | +0.3 |
| MLR | Muntele Rosu | 148.46 | 325 | | PKPbc | | 19 52 06.7 | -1.0 |
| OSTC | Ostas | 148.61 | 341 | ePKP | PKiKP | | 19 52 08.9 | +0.1 |
| DPC | Dobruska-Polom | 148.76 | 341 | ePKP | PKiKP | | 19 52 09.4 | +0.2 |
| KRLC | Kraliky | 148.86 | 340 | ePKP | PKiKP | | 19 52 09.7 | +0.3 |
| KRLC | | | | ex | PKPab | | 19 52 16.1 | +1.2 |
| MORC | Moravsky Berou | 148.87 | 339 | | PKiKP | | 19 52 08.8 | -0.6 |
| PVCC | Panska Ves | 149.11 | 343 | ePKP | PKiKP | | 19 52 10.0 | +0.2 |
| MAUC | Maruska | 149.12 | 338 | ePKP | PKiKP | | 19 52 10.4 | +0.5 |
| HSKC | Hora Svate Kat | 149.34 | 344 | ePKP | PKiKP | | 19 52 10.4 | +0.1 |
| PRU | Pruhonice | 149.61 | 342 | ePKP | PKiKP | | 19 52 11.1 | +0.2 |
| KHC | Kasperske Hory | 150.65 | 343 | | PKPbc | | 19 52 11.9 | -0.8 |
| KHC | Kasperske Hory | 150.65 | 343 | ePKP | PKiKP | | 19 52 13.3 | +0.2 |
| KHC | | | | ex | PKPab | | 19 52 23.4 | +1.0 |
| CKRC | Cesky Krumlov | 150.72 | 342 | ePKP | PKiKP | | 19 52 13.8 | +0.6 |
| GEC2 | GERESS Array S | 150.88 | 342 | | PKiKP | | 19 52 13.3 | -0.3 |
| GERES | GERESS Array B | 150.88 | 342 | | PKPbc | | 19 52 13.0 | -0.3 |
| GERES | GERESS Array B | 150.88 | 342 | PKPbc | PKiKP | | 19 52 13.7 | +0.1 |
| | comp=Z,1.9nm,0.6s,baz=5.2,slow=12,SNR=12 | | | | | | | |
| CONA | Conrad Observa | 151.02 | 339 | ePKiKP | PKiKP | | 19 52 14.5 | +0.5 |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| RONA | Rosalia, Austr | 151.07 | 338 | *i* PKiKP | PKiKP | | 19 52 14.5 | +0.5 |
| | comp=Z,5.7nm,0.5s | | | | | | | |
| BIOA | Bad Ischl, Aus | 151.94 | 341 | ePKP | PKiKP | | 19 52 15.7 | -0.1 |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| SOKA | Soboth | 152.39 | 339 | *i* PKP | PKPbc | | 19 52 16.5 | -0.2 |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| LESA | Schwarzleotal | 152.46 | 342 | *i* PKP | PKPbc | | 19 52 16.6 | -0.2 |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| WTTA | Wattenberg | 152.89 | 344 | ePKP | PKiKP | | 19 52 18.2 | +0.2 |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| ABTA | Abfaltersbach | 153.12 | 342 | *i* PKP | PKiKP | | 19 52 18.1 | -0.3 |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| DBIC | Dimbokro | 164.23 | 159 | PKP | PKPdf | | 19 52 23.4 | -0.6 |
| | comp=Z,6.5nm,0.9s,baz=205,slow=4.0,SNR=3.8 | | | | | | | |
| TORD | Torodi Ar. Bea | 171.60 | 186 | PKP | PKPdf | | 19 52 27.9 | -1.1 |
| | comp=Z,1.0nm,0.9s,baz=202,slow=1.9,SNR=4.1 | | | | | | | |
| TORD | | | | PKPab | PKPab | | 19 53 54.4 | -0.1 |
| | comp=Z,0.7nm,0.7s,baz=179,slow=3.0,SNR=5.0 | | | | | | | |

*NEIC* ***07*** *19:37:46.8±0.9, 30.5°S±0.1°×179.4°W±0.2°, h329km±8km, mb4.1/6, Error ellipse: s-maj=29.3km s-min=8.6km az=120.0*

*IDC* ***07*** *19:37:47.7±3.0, 30.38°S×179.63°W, h338km±26km, mb3.4/3, mbtmp4.2/4, Error ellipse: s-maj=29.4km s-min=22.0km az=50.0*

*WEL* ***07*** *19:37:51.9±0.5, 31.5°S±10.1°×177.9°W±2.5°, h350km±7km, M4.2/19, mB4.7/19, ML5.3/10, MLv5.1/11, Mw(mB)4.0/19, Error ellipse: s-maj=0.0km s-min=0.0km az=110.7, confirmed*

**ISC 07 19:37:48.8±0.7, 30.72°S±0.07°×179.6°W±0.1°, h350km, n76, σ1.9s66/111°, mb3.8/7, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GLKZ | Green Lake | 2.05 | 45 | P | Pn | 19 38 40.6 | +0.1 |
| GLKZ | | | | S | S | 19 39 21.1 | -0.8 |
| RAO | Raoul Island | 2.06 | 45 | Pn | Pn | 19 38 34.6 | -5.9 |
| WMGZ | Waiomatatini S | 7.27 | 193 | P | Pn | 19 39 36.4 | +2.2 |
| WMGZ | | | | S | S | 19 41 02.0 | +2.1 |
| PKGZ | Pakihiroa | 7.38 | 195 | P | Pn | 19 39 37.5 | +1.9 |
| PKGZ | | | | S | S | 19 41 02.8 | +0.3 |
| PUZ | Puketiti | 7.54 | 193 | P | Pn | 19 39 39.3 | +1.9 |
| PUZ | | | | S | S | 19 41 05.2 | -0.8 |
| TWGZ | Tauwhareparae | 7.70 | 194 | P | Pn | 19 39 41.8 | +2.4 |
| TWGZ | | | | S | S | 19 41 10.4 | +0.9 |
| MWZ | Matawai | 7.96 | 197 | P | P | 19 39 44.4 | +2.0 |
| MWZ | | | | S | S | 19 41 14.9 | -0.1 |
| TKGZ | Te Karaka | 7.98 | 195 | P | Pn | 19 39 43.2 | +0.6 |
| TKGZ | | | | S | S | 19 41 16.4 | +0.9 |
| URZ | Urewera | 8.00 | 199 | P | Pn | 19 39 43.9 | +1.1 |
| | 17nm,0.3s,baz=351,slow=4.5,SNR=16 | | | | | | |
| URZ | | | | S | S | 19 41 17.7 | +2.0 |
| | 39nm,0.3s,baz=336,slow=21,SNR=16 | | | | | | |
| URZ | Urewera | 8.00 | 199 | P | Pn | 19 39 41.9 | -0.8 |
| URZ | | | | S | S | 19 41 17.0 | +1.3 |
| TOZ | Tahuroa Road | 8.09 | 209 | Pn | Pn | 19 39 44.6 | +0.7 |
| RIGZ | Rimuhau | 8.26 | 195 | P | Pn | 19 39 44.9 | -1.0 |
| RIGZ | | | | S | S | 19 41 20.9 | -0.6 |
| MUGZ | Murupara | 8.30 | 200 | P | Pn | 19 39 46.2 | -0.2 |
| MUGZ | | | | S | S | 19 41 23.4 | +1.1 |
| RTZ | Ruatahuna | 8.37 | 199 | Pn | Pn | 19 39 45.5 | -1.8 |
| SNGZ | Shannon Statio | 8.43 | 197 | P | P | 19 39 49.5 | -1.1 |
| SNGZ | | | | S | S | 19 41 25.1 | -0.1 |
| KNZ | Kokohu | 8.58 | 194 | P | Pn | 19 39 50.3 | +0.6 |
| KNZ | | | | S | S | 19 41 26.9 | -1.5 |
| RAHZ | Arahi | 8.62 | 198 | P | P | 19 39 52.7 | 0.0 |
| RAHZ | | | | S | S | 19 41 27.2 | -2.2 |
| MTHZ | Maungataniwha | 8.63 | 199 | P | P | 19 39 53.4 | +0.5 |
| MTHZ | | | | S | S | 19 41 30.0 | +0.4 |
| MRHZ | Matea Rd | 8.73 | 201 | P | P | 19 39 53.9 | -0.2 |
| MRHZ | | | | S | S | 19 41 31.8 | -0.1 |
| NMHZ | Naumai | 8.86 | 199 | P | P | 19 39 56.2 | +0.6 |
| ARHZ | Aropaoanui | 8.97 | 197 | P | P | 19 39 57.2 | +0.5 |
| ARHZ | | | | S | S | 19 41 37.0 | +0.1 |
| BKZ | Black Stump Fm | 9.02 | 200 | Pn | Pn | 19 39 52.5 | -2.5 |
| BKZ | Black Stump Fm | 9.02 | 200 | P | Pn | 19 39 56.1 | +1.2 |
| BKZ | | | | S | S | 19 41 36.2 | -1.9 |
| HIZ | Hauiti | 9.02 | 209 | P | P | 19 40 02.2 | +5.0 |
| NTVZ | North Tongarir | 9.22 | 204 | P | P | 19 40 00.9 | +1.4 |
| TMVZ | Te Maari | 9.22 | 204 | P | P | 19 40 00.3 | +0.7 |
| ETVZ | East Tongariro | 9.24 | 203 | P | P | 19 39 60.0 | +0.2 |
| NNVZ | North Ngauruho | 9.27 | 204 | P | P | 19 40 02.1 | +2.0 |
| KWHZ | Kaweka Forest | 9.28 | 200 | P | P | 19 39 59.6 | -0.5 |
| KWHZ | | | | S | S | 19 41 42.5 | -1.3 |
| CKHZ | Cape Kidnapper | 9.32 | 196 | P | P | 19 40 01.2 | +0.7 |
| CKHZ | | | | S | S | 19 41 43.3 | -1.4 |
| FWVZ | Far West T-bar | 9.40 | 204 | P | P | 19 40 01.6 | -0.1 |
| WNVZ | Wahianoa | 9.45 | 203 | P | P | 19 40 02.0 | -0.2 |
| WNVZ | | | | S | S | 19 41 49.7 | +1.9 |
| KRHZ | Kereru | 9.49 | 199 | P | Pn | 19 40 01.2 | +0.6 |
| KRHZ | | | | S | S | 19 41 46.9 | -1.6 |
| KAHZ | Kahuranaki | 9.50 | 197 | P | Pn | 19 39 60.0 | -0.7 |
| KAHZ | | | | S | S | 19 41 48.5 | -0.2 |
| VRZ | Vera Road | 9.58 | 207 | P | P | 19 40 06.5 | +3.0 |
| PXZ | Pawanui | 9.73 | 196 | P | P | 19 40 04.7 | -0.3 |
| PXZ | | | | S | S | 19 41 51.1 | -2.5 |
| PNHZ | Pukenui | 9.79 | 199 | P | Pn | 19 40 03.7 | -0.5 |
| PNHZ | | | | S | S | 19 41 52.1 | -3.1 |
| TSZ | Takapari Road | 10.00 | 200 | P | Pn | 19 40 05.9 | -0.7 |
| TSZ | | | | S | S | 19 41 56.4 | -3.2 |
| PRHZ | Porangahau | 10.01 | 197 | P | P | 19 40 08.7 | +0.6 |
| PRHZ | | | | S | S | 19 41 58.2 | -1.6 |
| DVHZ | Dannevirke | 10.16 | 199 | P | P | 19 40 09.6 | -0.3 |
| DVHZ | | | | S | S | 19 42 00.3 | -2.9 |
| ANWZ | Angora Road | 10.23 | 197 | P | P | 19 40 10.6 | 0.0 |
| ANWZ | | | | S | S | 19 42 03.1 | -1.6 |
| PRWZ | Pori Road | 10.45 | 199 | P | P | 19 40 13.5 | +0.4 |
| PRWZ | | | | S | S | 19 42 07.3 | -2.3 |
| BFZ | Birch Farm | 10.50 | 198 | P | Pn | 19 40 11.8 | -0.8 |
| BFZ | | | | S | S | 19 42 06.2 | -4.4 |
| MRZ | Mangatainoka R | 10.67 | 200 | Pn | Pn | 19 40 13.2 | -1.3 |
| MRZ | Mangatainoka R | 10.67 | 200 | P | Pn | 19 40 13.6 | -0.9 |
| MRZ | | | | S | S | 19 42 10.0 | -4.3 |
| TIWZ | Tintock | 10.68 | 199 | P | P | 19 40 15.4 | -0.3 |
| TIWZ | | | | S | S | 19 42 11.8 | -2.9 |
| HOWZ | Holdsworth Sta | 10.90 | 200 | P | Pn | 19 40 17.3 | -0.1 |
| HOWZ | | | | S | S | 19 42 14.1 | -5.4 |
| OGWZ | Otaki Gorge | 10.93 | 201 | P | Pn | 19 40 16.6 | -1.1 |
| OGWZ | | | | S | S | 19 42 17.1 | -3.1 |
| TMWZ | Te Maipa | 10.99 | 198 | P | P | 19 40 19.2 | +0.1 |
| MTW | Mount Morrison | 11.15 | 200 | P | Pn | 19 40 18.8 | -1.5 |
| MTW | | | | S | S | 19 42 21.2 | -3.7 |
| TRWZ | Traveller | 11.32 | 198 | P | P | 19 40 22.9 | +0.2 |
| BHW | Baring Head | 11.56 | 201 | Pn | Pn | 19 40 24.4 | -0.8 |
| TCW | Tory Channel | 11.58 | 204 | P | P | 19 40 25.6 | -0.1 |
| PLWZ | Palliser | 11.60 | 200 | P | P | 19 40 26.0 | +0.1 |
| TUWZ | Tuamarina | 11.89 | 204 | Pn | P | 19 40 28.2 | -0.9 |
| TUWZ | Tuamarina | 11.89 | 204 | P | Pn | 19 40 29.7 | +0.6 |
| DSZ | Dennistons Nort | 13.00 | 210 | P | Pn | 19 40 45.9 | +3.6 |
| GVZ | Greta Valley S | 13.57 | 204 | P | P | 19 40 48.0 | +0.4 |
| DZM | Mont Dzumac | 15.19 | 301 | P | Pn | 19 41 10.0 | +1.9 |
| | 4.1nm,0.7s,baz=160,slow=18,SNR=5.7 | | | | | | |
| CTAO | Charters Tower | 32.51 | 281 | P | P | 19 43 48.1 | -0.2 |
| CTAO | | | | IAmb | IAmb | 19 44 09.6 | |
| | comp=Z,17nm,1.4s | | | | | | |
| ASAR | Alice Springs | 41.73 | 268 | P | P | 19 45 04.5 | -0.6 |
| | comp=Z,0.5nm,0.5s,baz=104,slow=7.1,SNR=8.7 | | | | | | |
| ASAR | | | | ScP | ScP | 19 50 09.6 | -0.8 |
| | comp=Z,0.3nm,0.6s,baz=104,slow=4.0,SNR=4.5 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| WB2 | Warramunga Arr | 42.74 | 273 | P | P | 19 45 12.3 | -0.8 |
| WB2 | | | | IAmb | IAmb | 19 45 18.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 42.75 | 273 | P | P | 19 45 12.7 | -0.5 |
| | comp=Z,2.4nm,0.3s,baz=112,slow=7.8,SNR=40 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| WB0 | Warramunga Arr | 42.78 | 274 | P | P | 19 45 12.7 | -0.7 |
| WB0 | | | | IAmb | IAmb | 19 45 29.9 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| KNRA | Kununurra | 49.37 | 275 | P | P | 19 46 04.4 | +0.1 |
| KNRA | | | | IAmb | IAmb | 19 46 35.6 | |
| | comp=Z,27nm,1.4s | | | | | | |
| FITZ | Fitzroy Crossi | 51.00 | 271 | P | P | 19 46 16.8 | +0.5 |
| QSPA | South Pole Qui | 59.39 | 180 | P | P | 19 47 18.6 | +3.4 |
| QSPA | South Pole Qui | 59.39 | 180 | P | P | 19 47 17.9 | +2.7 |
| | comp=Z,1.3nm,0.6s,baz=301,slow=0.8,SNR=9.7 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| FINES | FINESS Array B | 144.97 | 339 | PKP | PKPab | 19 56 43.0 | -1.5 |
| | comp=Z,5.3nm,0.5s,baz=44,slow=3.7,SNR=61 | | | | | | |
| NB2 | NORSAR Subarra | 148.85 | 350 | PKP | PKPbc | 19 56 53.8 | -1.0 |
| | comp=Z,0.5nm,0.5s,baz=17,slow=2.6 | | | | | | |
| NOA | NORSAR Array B | 148.85 | 350 | PKPbc | PKPbc | 19 56 53.5 | -1.3 |
| | comp=Z,1.7nm,0.8s,baz=16,slow=4.1,SNR=6.7 | | | | | | |
| HFS | Hagfors | 149.27 | 347 | PKPbc | PKPbc | 19 56 54.0 | -1.8 |
| | comp=Z,0.8nm,0.4s,baz=72,slow=2.2,SNR=11 | | | | | | |
| MMAI | Mount Meron Ar | 150.28 | 284 | PKPbc | PKiKP | 19 56 59.8 | 0.0 |
| | comp=Z,0.7nm,0.3s,baz=86,slow=7.4,SNR=3.5 | | | | | | |
| BRTR | Keskin Array B | 151.55 | 298 | PKPbc | PKiKP | 19 57 01.2 | -1.1 |
| | comp=Z,0.4nm,0.4s,baz=130,slow=2.6,SNR=5.5 | | | | | | |
| EKA | Eskdalemuir Ar | 155.27 | 5 | PKPab | PKPab | 19 57 26.0 | -1.1 |
| | comp=Z,0.4nm,0.5s,baz=359,slow=3.5,SNR=2.3 | | | | | | |
| TORD | Torodi Ar. Bea | 162.47 | 184 | PKPab | PKPab | 19 58 00.2 | +0.9 |
| | comp=Z,0.3nm,0.5s,baz=180,slow=2.8,SNR=2.3 | | | | | | |

*NEIC* ***07*** *20:10:52.6±1.7, 18.8°S±0.1°×175.5°W±0.1°, h273km±8km, mb4.5/23, Error ellipse: s-maj=20.2km s-min=18.1km az=209.0*

*NOU* ***07*** *20:10:53.2, 20.00°S×175.73°W, h158km, mb4.8/8, Tonga Islands*

*IDC* ***07*** *20:10:56.7±2.8, 19.37°S×176.03°W, h279km±23km, mb3.8/7, mbtmp4.5/9, Error ellipse: s-maj=27.0km s-min=13.7km az=88.0*

**ISC 07 20:10:53.0±0.6, 18.85°S±0.09°×175.41°W±0.07°, h300km, n48, σ2.9s32/49°, mb4.3/16, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIUE | Niue | 5.19 | 93 | P | Pn | 20 12 13.7 | +0.9 |
| NIUE | Niue | 5.19 | 93 | | Pn | 20 12 13.9 | +1.1 |
| NIUE | | | | Sn | S | 20 13 14.6 | -2.3 |
| AFI | Afiamalu | 6.02 | 36 | Pn | Pn | 20 12 23.4 | +0.7 |
| AFI | | | | Sn | S | 20 13 29.2 | -5.8 |
| MSVF | Nonsavu | 6.31 | 279 | P | Pn | 20 12 24.5 | -1.7 |
| MSVF | Nonsavu | 6.31 | 279 | | Pn | 20 12 23.8 | -2.4 |
| MSVF | Nonsavu | 6.31 | 279 | P | Pn | 20 12 24.1 | -2.2 |
| | 54nm,0.7s,baz=139,slow=18,SNR=40 | | | | | | |
| FUNA | Funafuti | 11.52 | 332 | P | P | 20 13 45.0 | +13 |
| | 134nm,1.7s | | | | | | |
| DVP | Devils Point | 15.62 | 271 | P | Pn | 20 14 21.1 | +2.3 |
| LIFNC | LIFOU | 16.44 | 260 | | P | 20 14 25.5 | -0.4 |
| PINNC | Pines Island, | 16.47 | 254 | P | Pn | 20 14 26.3 | -2.3 |
| YATNC | Mamie plateau, | 16.89 | 256 | P | Pn | 20 14 33.4 | -0.3 |
| DZM | Mont Dzumac | 17.31 | 256 | P | Pn | 20 14 38.5 | -0.1 |
| DZM | Mont Dzumac | 17.31 | 256 | P | P | 20 14 35.5 | +0.1 |
| DZM | | | | IAmb | IAmb | 20 14 36.9 | |
| | comp=Z,18nm,0.8s | | | | | | |
| DZM | Mont Dzumac | 17.31 | 256 | P | P | 20 14 35.5 | +0.1 |
| | comp=Z,14nm,0.7s,baz=77,slow=21,SNR=19 | | | | | | |
| ONTNC | Ouen Toro | 17.33 | 255 | P | P | 20 14 34.8 | -0.8 |
| KOUNC | Koumac, New Ca | 19.20 | 262 | P | P | 20 14 57.8 | +2.2 |
| KOUNC | | | | IAmb | IAmb | 20 14 59.9 | |
| | comp=Z,45nm,1.2s | | | | | | |
| URZ | Urewera | 20.41 | 197 | P | P | 20 15 05.1 | -3.0 |
| URZ | Urewera | 20.41 | 197 | P | P | 20 15 05.4 | -2.6 |
| | comp=Z,11nm,0.4s,baz=46,slow=1.8,SNR=11 | | | | | | |
| URZ | | | | S | S | 20 18 32.7 | -5.3 |
| | comp=Z,4.2nm,0.5s,baz=106,slow=12,SNR=1.2 | | | | | | |
| RTZ | Ruatahuna | 20.78 | 197 | P | P | 20 15 10.1 | -1.7 |
| RTZ | | | | IAmb | IAmb | 20 15 22.4 | |
| | comp=Z,17nm,1.1s | | | | | | |
| PLWZ | Palliser | 24.01 | 197 | P | P | 20 15 40.9 | -0.3 |
| QRZ | Quartz Range | 24.23 | 203 | P | P | 20 15 45.1 | +2.0 |
| EIDS | Eidsvold | 31.66 | 252 | P | P | 20 16 48.5 | -0.6 |
| EIDS | | | | IAmb | IAmb | 20 17 10.1 | |
| | comp=Z,17nm,1.4s | | | | | | |
| ARMA | Armidale | 31.99 | 243 | P | P | 20 16 52.3 | +0.2 |
| ARMA | | | | IAmb | IAmb | 20 17 25.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| CTAO | Charters Tower | 36.12 | 262 | | P | 20 17 27.6 | +0.2 |
| CTAO | | | | IAmb | IAmb | 20 17 28.9 | |
| | comp=Z,35nm,1.0s | | | | | | |
| COEN | Coen | 39.96 | 271 | P | P | 20 18 00.5 | +1.1 |
| COEN | | | | IAmb | IAmb | 20 18 02.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| STKA | Stephens Creek | 40.71 | 243 | P | P | 20 18 05.4 | +0.2 |
| STKA | Stephens Creek | 40.71 | 243 | P | P | 20 18 04.7 | -0.6 |
| | comp=Z,6.6nm,1.1s,baz=99,slow=7.7,SNR=5.1 | | | | | | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| BBOO | Buckleboo | 45.47 | 242 | P | P | 20 18 43.2 | +0.1 |
| BBOO | | | | IAmb | IAmb | 20 19 09.1 | |
| | comp=Z,62nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 47.08 | 260 | P | P | 20 18 55.6 | -0.2 |
| WB0 | Warramunga Arr | 47.24 | 260 | P | P | 20 18 57.1 | +0.1 |
| WRA | Warramunga Arr | 47.27 | 260 | P | P | 20 18 57.1 | -0.1 |
| | comp=Z,3.8nm,0.6s,baz=97,slow=5.9,SNR=131 | | | | | | |
| WRA | | | | PcP | sP | 20 20 26.9 | -5.4 |
| | comp=Z,0.5nm,0.7s,baz=108,slow=3.2,SNR=1.9 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| AS31 | Alice Springs | 47.29 | 255 | P | P | 20 18 57.4 | 0.0 |
| ASAR | Alice Springs | 47.29 | 255 | P | P | 20 18 57.2 | -0.1 |
| ASAR | Alice Springs | 47.29 | 255 | P | P | 20 18 57.6 | +0.3 |
| | comp=Z,26nm,0.7s,baz=90,slow=8.5,SNR=151 | | | | | | |
| ASAR | | | | PcP | sP | 20 20 27.0 | -5.3 |
| | comp=Z,0.5nm,0.7s,baz=101,slow=5.0,SNR=1.5 | | | | | | |
| | comp=Z,26nm,0.7s | | | | | | |
| MTN | Manton Dam | 51.62 | 268 | P | P | 20 19 30.4 | +0.5 |
| MTN | | | | IAmb | IAmb | 20 19 32.0 | |
| | comp=Z,28nm,1.1s | | | | | | |
| FORT | Forrest | 52.20 | 245 | P | P | 20 19 35.1 | +1.1 |
| FORT | | | | IAmb | IAmb | 20 19 52.9 | |
| | comp=Z,42nm,1.2s | | | | | | |
| KNRA | Kununurra | 53.23 | 264 | P | P | 20 19 42.5 | +0.8 |
| KNRA | | | | IAmb | IAmb | 20 19 58.4 | |
| | comp=Z,23nm,1.5s | | | | | | |
| FAKI | Fak Fak | 53.55 | 281 | P | P | 20 19 44.6 | +0.6 |
| FITZ | Fitzroy Crossi | 55.69 | 261 | P | P | 20 20 00.7 | +1.5 |
| SOEI | Soe | 58.92 | 270 | P | P | 20 20 25.1 | +3.3 |
| MBWA | Marble Bar | 60.61 | 256 | P | P | 20 20 34.4 | +1.3 |
| MBWA | | | | IAmb | IAmb | 20 20 55.3 | |
| | comp=Z,19nm,1.3s | | | | | | |
| MJAR | Matsushiro Arr | 70.38 | 322 | P | P | 20 21 40.3 | +5.4 |
| | comp=Z,3.5nm,0.7s,baz=154,slow=6.3,SNR=9.6 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 71.22 | 180 | P | P | 20 21 41.2 | +1.6 |
| QSPA | | | | IAmb | IAmb | 20 21 47.2 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| QSPA | South Pole Qui | 71.22 | 180 | P | P | 20 21 43.4 | +3.7 |
| | comp=Z,2.1nm,0.7s,baz=27,slow=0.8,SNR=10 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| ILAR | Eielson Array | 86.18 | 12 | P | P | 20 23 08.1 | +7.8 |
| | comp=Z,0.5nm,0.8s,baz=243,slow=2.3,SNR=5.0 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 91.88 | 289 | P | P | 20 23 33.0 | +4.9 |
| | comp=Z,0.9nm,0.7s,baz=106,slow=2.3,SNR=6.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 111.83 | 314 | PKiKP | PKiKP | 20 28 57.4 | +5.0 |
| | comp=Z,0.2nm,0.5s,baz=119,slow=1.8,SNR=4.5 | | | | | | |
| BRTR | Keskin Array B | 147.45 | 316 | PKPbc | PKPab | 20 30 07.6 | +2.6 |
| | comp=Z,1.0nm,0.7s,baz=124,slow=4.8,SNR=5.7 | | | | | | |

**WEL 07 20:37:14.5±0.4, 43°S±3°×17°0E±°, h5km, M3.4/15, ML3.5/17, MLv3.4/15, Error ellipse: s-maj=0.0km s-min=0.0km az=160.1, confirmed, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WHFS | Whataroa Fire | 0.08 | 265 | P | Pg | 20 37 17.3 | +1.1 |
| WHFS | | | | S | Sg | 20 37 19.2 | +1.8 |
| GCSZ | Gaunt Creek Bo | 0.12 | 238 | P | Pg | 20 37 17.5 | +0.5 |
| GCSZ | | | | S | Sg | 20 37 19.8 | +1.2 |
| HAFS | Harihari Fire | 0.13 | 33 | P | Pg | 20 37 16.8 | -0.3 |
| FJDS | Franz Josef DO | 0.24 | 236 | P | Pg | 20 37 18.6 | -0.7 |
| FJDS | | | | S | Sg | 20 37 23.0 | +0.5 |
| WVZ | Waitaha Valley | 0.27 | 48 | P | Pg | 20 37 19.8 | +0.1 |
| WVZ | | | | S | Sg | 20 37 24.0 | +0.8 |
| WVAS | Waitaha Valley | 0.27 | 48 | P | Pg | 20 37 20.2 | +0.4 |
| FGPS | Fox Glacier Pa | 0.39 | 237 | P | Pg | 20 37 21.6 | -0.3 |
| FGPS | | | | S | Sg | 20 37 27.1 | +0.1 |
| FOZ | Fox Glacier | 0.55 | 239 | P | Pg | 20 37 25.2 | +0.2 |
| RPZ | Rata Peaks | 0.63 | 137 | P | Pg | 20 37 26.3 | -0.4 |
| RPZ | | | | S | Sg | 20 37 33.9 | -0.9 |
| MHCZ | Mount Hutt | 0.85 | 109 | P | Pg | 20 37 30.4 | -0.4 |
| ARCZ | Arundel | 0.86 | 143 | P | Pg | 20 37 30.4 | -0.8 |
| ARCZ | | | | S | Sg | 20 37 40.8 | -1.6 |
| INZ | Inchbonnie | 0.89 | 54 | P | Pg | 20 37 31.1 | -0.6 |
| LBZ | Lake Benmore | 1.15 | 190 | P | Pg | 20 37 35.5 | -1.1 |
| LBZ | | | | S | Sn | 20 37 52.8 | -0.6 |
| OXZ | Oxford | 1.15 | 94 | P | Pg | 20 37 36.4 | -0.2 |
| OXZ | | | | S | Sn | 20 37 53.5 | 0.0 |
| TMZ | Timaru | 1.20 | 161 | P | Pg | 20 37 36.3 | -1.2 |
| TMZ | | | | S | Sn | 20 37 54.2 | -0.3 |
| WACZ | Wakanui South | 1.21 | 125 | P | Pg | 20 37 37.5 | -0.3 |
| WACZ | | | | S | Sn | 20 37 54.9 | -0.1 |
| RACZ | Rakaia | 1.31 | 112 | P | Pn | 20 37 39.3 | -0.2 |
| LTZ | Lake Taylor | 1.41 | 71 | P | Pn | 20 37 40.7 | -0.2 |
| JCZ | Jackson Bay | 1.47 | 236 | P | Pn | 20 37 40.9 | -0.9 |
| JCZ | | | | S | Sb | 20 37 59.6 | -1.7 |
| AMCZ | Amberley | 1.60 | 88 | P | Pn | 20 37 43.5 | 0.0 |
| MQZ | McQueen's Vall | 1.66 | 107 | P | Pn | 20 37 43.3 | -0.9 |
| ODZ | Otahua Downs | 1.79 | 176 | P | Pn | 20 37 45.4 | -0.7 |
| ODZ | | | | S | Sn | 20 38 07.4 | -1.9 |
| DSZ | Denniston Nort | 1.81 | 34 | P | Pn | 20 37 46.2 | -0.1 |
| AKCZ | Akaroa Harbour | 1.88 | 110 | P | Pn | 20 37 46.9 | -0.4 |
| WKZ | Wanaka | 1.89 | 213 | P | Pn | 20 37 47.8 | +0.4 |
| GVZ | Greta Valley S | 1.91 | 82 | P | Pn | 20 37 48.0 | +0.3 |
| OKCZ | Okains Bay | 1.95 | 105 | P | Pn | 20 37 47.8 | -0.5 |
| EAZ | Earnscleugh | 2.14 | 202 | P | Pn | 20 37 50.2 | -0.7 |
| THZ | Tophouse | 2.34 | 51 | P | Pn | 20 37 55.3 | +1.6 |
| KHZ | Kahutara | 2.41 | 71 | P | Pn | 20 37 55.6 | +1.0 |
| TUZ | Tuapeka | 2.76 | 192 | P | Pn | 20 37 59.7 | +0.3 |
| QRZ | Quartz Range | 2.87 | 33 | P | Pn | 20 38 00.2 | -0.8 |
| TKNZ | Takaka Hill | 2.89 | 41 | P | Pn | 20 38 02.6 | +1.3 |
| NNZ | Nelson | 2.97 | 48 | P | Pn | 20 38 03.3 

0.8nm,0.6s
**ULN Ulaanbaatar 27.63 328 P P 20 45 36.3 -0.8**
ULN IAmb IAmb 20 45 48.4
comp=Z,3.4nm,1.1s
**SONM Songino Array 27.93 327 P P 20 45 39.7 -0.1**
**SONM Songino Array 27.93 327 P P 20 45 41.3 +1.5**
comp=Z,1.4nm,0.7s,baz=138,slow=11,SNR=11
comp=Z,1.4nm,0.7s
**CMAR Chiang Mai Arr 28.53 261 P P 20 45 48.1 +2.7**
comp=Z,0.3nm,0.3s,baz=97,slow=2.2,SNR=1.4
comp=Z,0.3nm,0.3s
**KNRA Kununurra 41.49 180 P P 20 47 34.2 -2.5**
**MK31 Makanchi Array 41.97 312 P P 20 47 39.4 -1.1**
**MKAR Makanchi Array 41.97 312 P P 20 47 39.9 -0.6**
**MKAR Makanchi Array 41.97 312 P P 20 47 40.0 -0.5**
comp=Z,0.6nm,0.5s,baz=99,slow=11,SNR=8.9
comp=Z,0.6nm,0.5s
**ZALV Zalesovo Beam 42.64 323 P P 20 47 45.3 -0.4**
comp=Z,0.3nm,0.4s,baz=108,slow=12,SNR=1.6
comp=Z,0.3nm,0.4s
**WB0 Warramunga Arr 45.89 173 P P 20 48 13.4 +1.3**
**WRA Warramunga Arr 46.06 173 P P 20 48 14.6 +1.2**
comp=Z,0.8nm,0.6s,baz=352,slow=8.4,SNR=8.8
comp=Z,0.8nm,0.6s
**WR0 Warramunga Arr 46.10 172 P P 20 48 14.8 +1.0**
WR0 IAmb IAmb 20 48 36.5
comp=Z,6.0nm,1.1s
**ASAR Alice Springs 49.69 174 P P 20 48 43.0 +1.4**
comp=Z,0.4nm,0.6s,baz=6.1,slow=14,SNR=7.8
comp=Z,0.4nm,0.6s
**ABKAR Akbulak array 57.08 313 P P 20 49 35.8 +0.2**
**ABKAR Akbulak array 57.08 313 P P 20 49 35.7 +0.1**
ABKAR IAmb IAmb 20 49 37.4
comp=Z,1.8nm,0.7s
**ARU Arti 57.79 322 LR LR** 21 14 35.7
comp=Z,27nm,18.4s,baz=10,slow=36
**AKTO Aktyubinsk 58.26 315 LR LR** 21 16 28.7
comp=Z,37nm,20.1s,baz=209,slow=38
**E19K Redstone River 60.09 25 P P 20 49 58.2 +1.8**
E19K IAmb IAmb 20 50 18.5
comp=Z,3.7nm,1.1s
**J20K Nowinta River 61.27 29 P P 20 50 06.0 +1.5**
**H23K Yukon River 63.16 27 P P 20 50 18.3 +1.2**
H23K IAmb IAmb 20 50 26.1
comp=Z,1.7nm,0.9s
**F24K Squaw Lake 63.69 25 P P 20 50 19.8 -0.9**
F24K IAmb IAmb 20 50 46.6
comp=Z,4.6nm,1.4s
**ILAR Eielson Array 64.37 28 P P 20 50 25.1 0.0**
comp=Z,0.2nm,0.7s,baz=281,slow=9.8,SNR=2.7
comp=Z,0.2nm,0.7s
**FINES FINESS Array B 73.22 331 P P 20 51 20.0 -0.2**
comp=Z,2.4nm,1.0s,baz=79,slow=4.1,SNR=4.8
comp=Z,2.4nm,1.0s
**AKASG Malin Array Be 75.94 320 P P 20 51 36.1 -0.1**
comp=Z,0.9nm,0.5s,baz=67,slow=6.2,SNR=2.4
comp=Z,0.9nm,0.5s
**BRTR Keskin Array B 77.48 308 P P 20 51 45.5 0.0**
comp=Z,0.9nm,0.8s,baz=96,slow=5.1,SNR=4.8
comp=Z,0.9nm,0.8s
**NOA NORSAR Array B 79.65 334 P P 20 51 56.4 -0.5**
comp=Z,0.6nm,0.8s,baz=54,slow=5.6,SNR=3.6
NOA LR LR 21 31 25.3
comp=Z,9.9nm,18.0s,baz=295,slow=39
comp=Z,0.6nm,0.8s

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*NEIC **07** 20:48:05.4±2.0,20.3°S±0.1°×177.6W±0.1°,h509km±9km, mb4.5/29, Error ellipse: s-maj=20.1km s-min=16.2km az=142.0*
*IDC **07** 20:48:10.0±1.9,19.55°S×178.24W,h542km±19km,mb3.3/6, mbtmp4.2/8, Error ellipse: s-maj=24.5km s-min=15.7km az=116.0*
**ISC 07 20:48:04.9±0.5,20.2S±0.1°×177.70W±0.09°,h500km,n54,** σ1§60/54, **mb4.4**/18, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.70** | **300** | P | **P** | **20 49 32.6** | **+3.2** |
| **MSVF** | **Nonsavu** | **4.70** | **300** | P | **P** | **20 49 32.2** | **+2.8** |
| | 2.3nm,0.3s,baz=133,slow=18,SNR=6.6 | | | | | | |
| **NIUE** | **Niue** | **7.41** | **83** | P | **P** | **20 49 55.7** | **+0.4** |
| **AFI** | **Afiamalu** | **8.42** | **43** | P | **P** | **20 50 04.8** | **-1.1** |
| **PINNC** | **Pines Island,** | **14.05** | **257** | P | **P** | **20 51 05.5** | **+0.4** |
| **LIFNC** | **LIFOU** | **14.13** | **265** | P | **P** | **20 51 04.6** | **-1.4** |
| **DZM** | **Mont Dzumac** | **14.92** | **260** | P | **P** | **20 51 14.7** | **+0.3** |
| **DZM** | **Mont Dzumac** | **14.92** | **260** | P | **P** | **20 51 14.2** | **-0.2** |
| | 4.5nm,0.6s,baz=81,slow=18,SNR=3.5 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.90** | **266** | P | **P** | **20 51 36.5** | **+1.6** |
| **TOZ** | **Tahuroa Road** | **18.46** | **197** | P | **P** | **20 51 50.0** | **+0.6** |
| **URZ** | **Urewera** | **18.57** | **193** | P | **P** | **20 51 57.1** | **+6.8** |
| | 7.9nm,0.6s,baz=346,slow=3.6,SNR=6.1 | | | | | | |
| URZ | | | | S | S | 20 55 05.2 | +11 |
| | 8.6nm,0.9s,baz=87,slow=19,SNR=1.2 | | | | | | |
| **RTZ** | **Ruatahuna** | **18.94** | **193** | P | **P** | **20 51 52.9** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **19.57** | **194** | P | **P** | **20 51 57.7** | **-1.9** |
| BKZ | | | | IAmb | IAmb | 20 52 39.4 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **MRZ** | **Mangatainoka R** | **21.21** | **194** | P | **P** | **20 52 12.0** | **-2.3** |
| **PLWZ** | **Palliser** | **22.15** | **194** | P | **P** | **20 52 21.1** | **-1.8** |
| **TUWZ** | **Tuamarina** | **22.34** | **197** | P | **P** | **20 52 22.9** | **-1.6** |
| **CMWZ** | **Cape Campbell** | **22.57** | **196** | P | **P** | **20 52 24.7** | **-1.9** |
| **MRNZ** | **Matariki Terra** | **22.66** | **199** | P | **P** | **20 52 25.9** | **-1.5** |
| **THZ** | **Tophouse** | **22.94** | **198** | P | **P** | **20 52 29.6** | **-0.5** |
| **DSZ** | **Denniston Nort** | **23.27** | **200** | P | **P** | **20 52 31.7** | **-1.2** |
| **KHZ** | **Kahutara** | **23.37** | **197** | P | **P** | **20 52 32.2** | **-1.5** |
| **GVZ** | **Greta Valley S** | **24.02** | **197** | P | **P** | **20 52 37.4** | **-2.1** |
| **CTAO** | **Charters Tower** | **33.80** | **264** | P | **P** | **20 54 05.0** | **0.0** |
| CTAO | | | | IAmb | IAmb | 20 54 05.7 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **36.31** | **234** | P | **P** | **20 54 26.0** | **+0.3** |
| TOO | | | | IAmb | IAmb | 20 54 41.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **TAU** | **Tasmania Unive** | **37.05** | **224** | P | **P** | **20 54 31.7** | **+0.1** |
| **COEN** | **Coen** | **37.84** | **273** | P | **P** | **20 54 38.8** | **+0.2** |
| COEN | | | | IAmb | IAmb | 20 55 10.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.18** | **244** | P | **P** | **20 54 41.0** | **-0.1** |
| **STKA** | **Stephens Creek** | **38.18** | **244** | P | **P** | **20 54 41.2** | **0.0** |
| | comp=Z,12nm,1.2s,baz=81,slow=8.0,SNR=5.7 | | | | | | |
| | comp=Z,12nm,1.2s | | | | | | |
| **BBOO** | **Buckleboo** | **42.94** | **243** | P | **P** | **20 55 19.0** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 20 55 28.1 | |
| | comp=Z,44nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.87** | **256** | P | **P** | **20 55 34.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.87** | **256** | P | **P** | **20 55 34.0** | **-0.4** |
| | comp=Z,9.9nm,0.8s,baz=99,slow=8.0,SNR=82 | | | | | | |
| ASAR | | | | PcP | PcP | 20 57 05.5 | -0.1 |
| | comp=Z,0.7nm,0.5s,baz=106,slow=4.0,SNR=5.1 | | | | | | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.92** | **262** | P | **P** | **20 55 33.6** | **-1.2** |
| | comp=Z,1.8nm,0.3s,baz=96,slow=7.7,SNR=130 | | | | | | |
| WRA | | | | PcP | PcP | 20 57 05.7 | -0.2 |
| | comp=Z,0.3nm,0.6s,baz=89,slow=1.8,SNR=1.4 | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **MTN** | **Manton Dam** | **49.44** | **270** | P | **P** | **20 56 08.1** | **-0.9** |
| MTN | | | | IAmb | IAmb | 20 56 09.5 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **49.68** | **246** | P | **P** | **20 56 09.4** | **-1.1** |
| FORT | | | | IAmb | IAmb | 20 56 18.6 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.96** | **266** | P | **P** | **20 56 19.3** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 20 56 45.7 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.35** | **262** | P | **P** | **20 56 36.9** | **-0.4** |
| **SOEI** | **Soe** | **56.77** | **271** | P | **P** | **20 57 01.8** | **+0.3** |
| SOEI | | | | IAmb | IAmb | 20 57 12.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.02** | **257** | P | **P** | **20 57 08.6** | **-1.2** |
| PSA00 | | | | IAmb | IAmb | 20 57 46.6 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **58.20** | **257** | P | **P** | **20 57 09.3** | **-1.6** |
| MBWA | | | | IAmb | IAmb | 20 57 31.4 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **58.25** | **185** | P | **P** | **20 57 11.6** | **+1.2** |
| **CASY** | **Casey** | **64.37** | **205** | P | **P** | **20 57 50.7** | **+0.1** |
| CASY | | | | IAmb | IAmb | 20 57 53.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.89** | **180** | P | **P** | **20 58 25.7** | **+0.8** |
| **QSPA** | **South Pole Qui** | **69.89** | **180** | P | **P** | **20 58 25.5** | **+0.6** |
| | comp=Z,3.3nm,0.7s,baz=303,slow=0.5,SNR=26 | | | | | | |
| **PINE** | **Pine Mountain** | **82.16** | **38** | P | **P** | **20 59 34.9** | **+1.7** |
| **BRLK** | **Bradley Lake** | **82.62** | **13** | P | **P** | **20 59 34.5** | **-0.4** |
| **BMO** | **Blue Mountains** | **84.89** | **38** | P | **P** | **20 59 44.6** | **-2.0** |
| **TXAR** | **Lajitas Array** | **86.65** | **57** | P | **P** | **20 59 56.5** | **+1.1** |

comp=Z,0.3nm,0.6s,baz=207,slow=5.2,SNR=3.6
comp=Z,0.3nm,0.6s
**ILAR Eielson Array 87.94 13 P P 21 00 00.1 -0.4**
comp=Z,0.6nm,0.7s,baz=213,slow=6.5,SNR=5.4
comp=Z,0.6nm,0.7s
**K27K Chicken 88.38 15 pP pP** 21 01 55.4 +2.3
**PDAR Pinedale Array 88.54 43 P P 21 00 04.6 +0.5**
comp=Z,0.4nm,0.6s,baz=202,slow=4.7,SNR=3.1
comp=Z,0.4nm,0.6s
**Z35A Perchaven, San 93.27 56 pP** 21 02 16.1 -0.6
**AKASG Malin Array Be 142.87 332 PKP PKPdf 21 06 37.8 -3.1**
comp=Z,1.2nm,0.4s,baz=45,slow=3.6,SNR=6.6
**EKA Eskdalemuir Ar 144.66 5 PKP PKPdf 21 06 43.5 -0.4**
comp=Z,0.2nm,0.4s,baz=305,slow=4.2,SNR=3.4
**GERES GERESS Array B 149.97 345 PKPbc PKPbc 21 06 58.2 -0.3**
comp=Z,0.3nm,0.7s,baz=343,slow=3.1,SNR=1.8

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*NEIC **07** 20:52:50.5±1.5,35.032°N±0.005°×97.61W±0.01°,h5km±1km, Error ellipse: s-maj=2.6km s-min=2.2km az=311.0*
**TUL 07 20:52:51.6±1.9,35.039°N±0.009°×97.59W±0.01°,h7km±4km, ML2.0,mb_Lg2.0**/9(NEIC),**ML1.9**/34(NEIC),**Error ellipse: s-maj=1.9km s-min=0.7km az=123.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FNO** | **Franklin** | **0.27** | **36** | Pg | Pg | 20 52 56.8 | -0.2 |
| FNO | | | | IAML | | 20 53 04.8 | |
| | comp=E,206nm,0.5s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.48** | **204** | Pg | Pg | 20 53 01.1 | +0.2 |
| X34A | | | | IAML | | 20 53 09.4 | |
| | comp=N,72nm,0.6s | | | | | | |
| **W35A** | **Tecumseh** | **0.60** | **79** | Pg | Pg | 20 53 02.9 | -0.2 |
| W35A | | | | Sg | Sg | 20 53 11.5 | +0.5 |
| **OK029** | **Liberty Lake** | **0.77** | **8** | Pg | Pg | 20 53 06.2 | -0.1 |
| OK029 | | | | Sg | Sg | 20 53 15.5 | -0.8 |
| OK029 | | | | IAML | | 20 53 24.7 | |
| | comp=N,32nm,0.3s | | | | | | |
| OK029 | | | | IAML | | 20 53 24.9 | |
| | comp=N,32nm,0.4s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.02** | **253** | Pg | Pg | 20 53 09.9 | -1.3 |
| **CSTR** | **Hydro, Custer** | **1.08** | **304** | Pg | Pg | 20 53 10.6 | -1.8 |
| **LOOK** | **Love County** | **1.10** | **162** | Pg | Pg | 20 53 11.2 | -1.4 |
| LOOK | | | | IAML | | 20 53 33.1 | |
| | comp=E,39nm,0.2s | | | | | | |
| LOOK | | | | IAML | | 20 53 33.4 | |
| | comp=N,22nm,0.2s | | | | | | |
| **OK031** | **S. Brethren Rd** | **1.10** | **34** | Pg | Pg | 20 53 11.2 | -1.5 |
| **OK052** | **Battle Ridge R** | **1.15** | **34** | Pg | Pg | 20 53 12.1 | -1.6 |
| **DEOK** | **Depew** | **1.20** | **48** | Pg | Pg | 20 53 13.0 | -1.7 |
| DEOK | | | | IAML | | 20 53 34.8 | |
| | comp=N,28nm,0.1s | | | | | | |
| **QUOK** | **Quay** | **1.34** | **32** | | Pn | 20 53 15.5 | -1.3 |
| **WTFS** | **Witchita Falls** | **1.46** | **210** | | Pn | 20 53 17.4 | -0.9 |
| **CROK** | **Carrier** | **1.50** | **348** | | Pn | 20 53 18.0 | -0.9 |
| **TUL3** | **Leonard** | **1.71** | **59** | | Pn | 20 53 21.9 | +0.1 |
| **OK038** | **West end E0370** | **1.71** | **327** | Pn | Pn | 20 53 21.4 | -0.5 |
| **Z35A** | **Perchaven, San** | **1.73** | **171** | Pn | Pn | 20 53 20.9 | -1.1 |
| **BLOK** | **Blackwell** | **1.75** | **10** | Pn | Pn | 20 53 21.6 | -0.7 |
| **ELIS** | **Ellis County** | **1.81** | **305** | Pn | Pn | 20 53 22.8 | -0.4 |
| **GC02** | **Grant County #** | **1.82** | **353** | Pn | Pn | 20 53 22.9 | -0.5 |
| **X37A** | **Clayton** | **1.88** | **103** | Pn | Pn | 20 53 22.9 | -1.3 |
| X37A | | | | IAmb_Lg | | 20 53 52.0 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **NOKA** | **Waynoka** | **1.93** | **326** | Pn | Pn | 20 53 24.0 | -0.9 |
| NOKA | | | | IAmb_Lg | | 20 53 52.7 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **KAN17** | **Caldwell West** | **2.01** | **356** | Pn | Pn | 20 53 25.0 | -0.9 |
| **FW03** | **Perrin-Whitt E** | **2.03** | **191** | Pn | Pn | 20 53 25.5 | -0.8 |
| FW03 | | | | IAmb_Lg | | 20 53 55.3 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **T35A** | **Sooner Cattle** | **2.07** | **25** | Pn | Pn | 20 53 26.3 | -0.5 |
| **KAN09** | **Caldwell North** | **2.09** | **359** | Pn | Pn | 20 53 26.4 | -0.8 |
| **PLPT** | **Palo Pinto** | **2.30** | **195** | Pn | Pn | 20 53 29.8 | -0.2 |
| **FW07** | **Weatherford** | **2.34** | **184** | Pn | Pn | 20 53 29.8 | -0.7 |
| **RLO** | **Rose Lookout** | **2.38** | **61** | Pn | Pn | 20 53 30.5 | -0.5 |
| **U38A** | **Gravette** | **2.96** | **61** | IAmb_Lg | | 20 54 33.8 | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **DKNS** | **Dickens** | **3.08** | **245** | Pn | Pn | 20 53 40.3 | -0.4 |
| **HHAR** | **Hobbs** | **3.22** | **66** | | Pb | 20 53 48.9 | -0.3 |
| **MIAR** | **Mount Ida** | **3.34** | **97** | Pn | Pn | 20 53 45.2 | +0.9 |
| **S39A** | **Bolivar** | **4.34** | **51** | Pn | Pn | 20 53 56.9 | -1.2 |
| **R40A** | **Maddies Statio** | **5.37** | **51** | IAmb_Lg | | 20 55 43.8 | |
| | comp=Z,3.7nm,0.8s | | | | | | |

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*IDC **07** 21:08:54.7±0.6,40.96S×16.52W,h0km,mb4.1/11, mbtmp4.1/11,MS4.4/48, Error ellipse: s-maj=24.8km s-min=17.5km az=100.0*
*NEIC **07** 21:08:54.3±3.0,41.5°S±0.1°×16.6W±0.2°,h10km±1km, mb4.8/25, Error ellipse: s-maj=22.1km s-min=17.9km az=129.0*
*GCMT **07** 21:08:59.3±0.1,41.18°S±0.01°×16.63W±0.01°,h12km, MW5.1/140, Moment Tensor Solution. s63,c88; s140,c226; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=5.25±.08; Mθθ 0.00±.09; Mϕϕ 5.24±.07; Mrθ -1.11±.31; Mθϕ -0.82±.07; Mϕr -0.53±.24; Best double couple: M₀5.44700×10¹⁶ NP1:ϕs 3.00000°, δ48.00000°, λ-73.00000°. NP2:ϕs 159.00000°, δ44.00000°, λ-108.00000°. Principal axes: T 5.3760, Plg2.0000°, Azm82.0000°; N 0.1330, Plg12.0000°, Azm172.0000°; P -5.5180, Plg78.0000°, Azm343.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 07 21:08:53.5±0.4,41.48S±0.09×16.43W±0.10,h10km,n103,** σ1§65/46, **mb4.7**/19, **MS4.5**/50, **4C, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ORCD** | **Orcadas** | **25.88** | **212** | P | **P** | **21 14 21.9** | **-3.1** |
| **VNA1** | **Neumayer--Stat** | **29.54** | **174** | ↑P | P | 21 15 06.6 | +8.9 |
| **VNA2** | **Neumayer--Watz** | **29.87** | **174** | ↑P | P | 21 15 08.4 | +7.7 |
| | baz=341,slow=9.7 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **30.03** | **176** | ↑P | P | 21 15 09.7 | +7.6 |
| **SUR** | **Sutherland** | **30.93** | **85** | LR | LR | 21 24 39.8 | |
| | comp=Z,2μm,20.9s,baz=232,slow=30 | | | | | | |
| **SNAA** | **Sanae** | **31.02** | **172** | P | **P** | **21 15 08.0** | **-2.8** |
| **SNAA** | **Sanae** | **31.02** | **172** | ↑P | **P** | **21 15 09.4** | **-1.5** |
| | comp=Z,46nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **31.02** | **172** | LR | LR | 21 24 44.4 | |
| | comp=Z,274nm,21.9s,baz=318,slow=30 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **32.42** | **3** | T | T | 21 49 04.8 | |
| | baz=183,slow=74,SNR=162 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **32.43** | **3** | T | T | 21 49 05.2 | |
| | baz=37,slow=74,SNR=168 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **33.54** | **3** | T | T | 21 50 24.4 | |
| | baz=190,slow=79,SNR=26 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **33.54** | **3** | T | T | 21 50 23.8 | |
| | baz=190,slow=79,SNR=105 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **33.55** | **3** | T | T | 21 50 23.9 | |
| | baz=190,slow=79,SNR=41 | | | | | | |
| **SOE** | **Somerset East** | **34.34** | **89** | P | **P** | **21 15 40.4** | **+0.1** |
| **PMSA** | **Palmer Station** | **35.59** | **213** | LR | LR | 21 27 53.2 | |
| | comp=Z,216nm,18.1s,baz=64,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **36.12** | **83** | P | **P** | **21 15 56.7** | **+0.9** |
| **BOSA** | **Boshof** | **36.12** | **83** | LR | LR | 21 27 29.3 | |
| | comp=Z,856nm,21.2s,baz=230,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **36.45** | **63** | P | **P** | **21 15 58.8** | **0.0** |
| TSUM | | | | IAmb | IAmb | 21 16 02.9 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TSUM** | **Tsumeb** | **36.45** | **63** | LR | LR | 21 27 43.3 | |
| | comp=Z,1μm,20.3s,baz=190,slow=31 | | | | | | |
| **CPUP** | **Villa Florida** | **36.80** | **281** | P | **P** | **21 16 01.9** | **+0.5** |
| | comp=Z,1.8nm,0.8s,baz=100,slow=4.6,SNR=4.1 | | | | | | |
| CPUP | | | | LR | LR | 21 29 26.2 | |
| | comp=Z,1μm,18.6s,baz=126,slow=34 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **37.27** | **186** | P | **P** | **21 16 04.3** | **-0.5** |
| BELA | | | | IAmb | IAmb | 21 16 23.8 | |
| | comp=Z,32nm,1.6s | | | | | | |
| **BDFB** | **Brasilia** | **37.49** | **304** | LR | LR | 21 28 54.8 | |
| | comp=Z,576nm,18.8s,baz=144,slow=32 | | | | | | |
| **SMAI** | **San Martin Ant** | **37.80** | **208** | P | **P** | **21 16 09.2** | **-0.3** |
| **LBTB** | **Lobatse** | **38.38** | **78** | LR | LR | 21 29 29.3 | |
| | comp=Z,1μm,19.2s,baz=226,slow=32 | | | | | | |
| **RCBR** | **Riachuelo** | **39.52** | **329** | LR | LR | 21 29 13.8 | |
| | comp=Z,161nm,19.6s,baz=152,slow=31 | | | | | | |
| **PLCA** | **Paso Flores** | **40.22** | **252** | P | **P** | **21 16 30.5** | **+0.3** |
| **PLCA** | **Paso Flores** | **40.22** | **252** | P | **P** | **21 16 34.7** | **+4.5** |
| | comp=Z,1.2nm,0.6s,baz=137,slow=5.8,SNR=4.8 | | | | | | |
| PLCA | | | | LR | LR | 21 32 01.1 | |
| | comp=Z,1μm,19.0s,baz=117,slow=34 | | | | | | |

comp=Z,1.2nm,0.6s
**LL02 Futaleuf 40.37 248 P P 21 16 31.4 +0.1**
**MATP Matopo 43.29 75 LR LR** 21 32 14.1
comp=Z,829nm,20.5s,baz=238,slow=32
**MT01 Popeta 43.43 262 P P 21 16 56.9 +0.5**
MT01 IAmb IAmb 21 17 17.3
comp=Z,30nm,1.4s
**MT02 Curacav 43.62 262 P P 21 16 57.9 -0.1**
**CO01 Juntas del Tor 44.41 267 P P 21 17 05.6 +0.9**
CO01 IAmb IAmb 21 17 05.8
comp=Z,21nm,1.6s
**SIV San Ignacio 45.98 290 LR LR** 21 33 48.1
comp=Z,457nm,20.7s,baz=119,slow=33
**AC01 Pan de Azucar 46.80 271 P P 21 17 24.0 +0.7**
**LVC Limon Verde 47.54 277 LR LR** 21 35 38.3
comp=Z,543nm,21.9s,baz=120,slow=34
**H04S2 CROZET ISLANDS 47.90 121 T T** 22 10 00.1
baz=252,slow=75,SNR=55
**H04S3 CROZET ISLANDS 47.90 121 T T** 22 09 58.8
baz=252,slow=75,SNR=49
**H04S1 CROZET ISLANDS 47.92 121 T T** 22 09 58.8
baz=252,slow=75,SNR=57
**MAW Mawson 48.48 150 P P** 21 17 42.2 +6.5
comp=Z,2.2nm,0.8s,baz=270,slow=9.0,SNR=8.8
MAW LR LR 21 34 03.3
comp=Z,415nm,21.9s,baz=277,slow=31
comp=Z,2.2nm,0.8s
**QSPA South Pole Qui 48.78 180 P P 21 17 39.5 +1.2**
QSPA IAmb IAmb 21 17 47.7
comp=Z,9.2nm,0.9s
**QSPA South Pole Qui 48.78 180 P P** 21 17 45.3 +7.0
comp=Z,4.4nm,0.8s,baz=210,slow=2.6,SNR=14
QSPA PcP **PcP 21 19 06.8 +3.8**
comp=Z,1.3nm,0.6s,baz=118,slow=1.0,SNR=5.1
QSPA LR LR 21 35 39.2
comp=Z,152nm,21.1s,baz=200,slow=32
comp=Z,4.4nm,0.8s
**DBIC Dimbokro 49.07 15 P P 21 17 38.9 -2.0**
DBIC IAmb IAmb 21 17 52.5
comp=Z,19nm,1.3s
**DBIC Dimbokro 49.07 15 P P 21 17 38.7 -2.2**
comp=Z,2.6nm,0.6s,baz=156,slow=6.9,SNR=4.4
DBIC LR LR 21 34 42.0
comp=Z,113nm,18.3s,baz=165,slow=32
comp=Z,2.6nm,0.6s
**LPAZ La Paz 50.87 284 P P 21 17 57.0 +1.7**
comp=Z,0.8nm,0.6s,baz=100,slow=6.1,SNR=2.1
LPAZ LR LR 21 39 11.5
comp=Z,614nm,19.1s,baz=126,slow=36
comp=Z,0.8nm,0.6s
**SAML Samuel 52.37 295 P P 21 18 04.8 -1.0**
**BBTS Babate 55.85 360 LR LR** 21 37 50.8
comp=Z,308nm,18.3s,baz=86,slow=31
**TORD Torodi Ar. Bea 56.87 21 P P 21 18 36.3 -2.1**
**TORD Torodi Ar. Bea 56.87 21 P P 21 18 37.7 -0.7**
comp=Z,1.8nm,0.7s,baz=197,slow=6.6,SNR=8.6
TORD LR LR 21 37 30.4
comp=Z,291nm,21.8s,baz=160,slow=30
comp=Z,1.8nm,0.7s
**MDP Montagnes des 56.93 315 LR LR** 21 40 49.2
comp=Z,490nm,18.1s,baz=146,slow=34
**OPO Ambohidratompo 58.29 87 LR LR** 21 41 28.3
comp=Z,270nm,19.3s,baz=14,slow=34
**MBAR Mbarara 58.82 59 P P 21 18 53.5 +1.0**
MBAR IAmb IAmb 21 19 05.0
comp=Z,7.6nm,1.3s
**MBAR Mbarara 58.82 59 LR LR** 21 41 56.4
comp=Z,498nm,18.1s,baz=212,slow=34
**NNA Nana 60.05 281 LR LR** 21 44 20.9
comp=Z,628nm,20.8s,baz=134,slow=36
**SBA Scott Base 60.93 181 P P 21 19 06.8 +0.9**
SBA IAmb IAmb 21 19 15.2
comp=Z,11nm,1.2s
**VNDA Vanda 61.27 180 P P 21 19 08.1 -0.2**
VNDA IAmb IAmb 21 19 22.5
comp=Z,11nm,1.5s
**VNDA Vanda 61.27 180 P P** 21 19 14.3 +6.1
comp=Z,2.2nm,1.1s,baz=203,slow=6.1,SNR=7.2
VNDA LR LR 21 42 37.0
comp=Z,102nm,21.1s,baz=168,slow=33
comp=Z,2.2nm,1.1s
**ATAH Atahualpa 64.41 284 LR LR** 21 47 30.9
comp=Z,428nm,20.9s,baz=149,slow=36
**TAM Tamanrasset 67.11 22 P P 21 19 46.7 -0.6**
TAM IAmb IAmb 21 19 50.0
comp=Z,12nm,1.6s
**PCRV Puerto La Cruz 67.84 308 LR LR** 21 47 24.9
comp=Z,376nm,18.8s,baz=34
**ROSC El Rosal 69.96 296 LR LR** 21 49 18.7
comp=Z,2μm,19.3s,baz=98,slow=35
**SDV Santo Domingo 70.55 302 LR LR** 21 49 39.2
comp=Z,370nm,18.3s,baz=102,slow=35
**FURI Furi 71.13 59 LR LR** 21 49 22.3
comp=Z,162nm,18.1s,baz=214,slow=34
**RPN Rapa Nui 74.61 247 LR LR** 21 47 14.3
comp=Z,220nm,19.9s,baz=188,slow=31
**MDT Midelt 74.72 10 LR LR** 21 49 23.1
comp=Z,205nm,18.7s,baz=184,slow=33
**ATD Arta Tunnel 75.81 60 LR LR** 21 51 10.1
comp=Z,20nm,21.3s,baz=198,slow=34
**KEST Kesra 80.39 21 P P 21 21 05.6 +0.7**
KEST IAmb IAmb 21 21 14.5
comp=Z,8.4nm,1.0s
**KEST Kesra 80.39 21 P P 21 21 06.1 +1.2**
comp=Z,4.3nm,0.8s,baz=229,slow=4.1,SNR=7.3
KEST LR LR 21 52 38.4
comp=Z,312nm,20.8s,baz=177,slow=33
comp=Z,4.3nm,0.8s
**JTS Las Juntas de 81.16 292 LR LR** 21 56 50.0
comp=Z,205nm,20.0s,baz=132,slow=36
**ESDC Sonseca Array 81.56 10 P P 21 21 11.3 +0.3**
**ESDC Sonseca Array 81.56 10 P P 21 21 11.8 +0.8**
comp=Z,1.7nm,0.8s,baz=181,slow=6.1,SNR=12
ESDC LR LR 21 55 26.3
comp=Z,61nm,18.3s,baz=179,slow=34
comp=Z,1.7nm,0.8s
**VAE Valguarnera 83.48 24 LR LR** 21 53 23.3
comp=Z,180nm,21.1s,baz=142,slow=32
**EIL Elat 85.23 43 LR LR** 21 58 01.4
comp=Z,500nm,18.0s,baz=248,slow=35
**MMAI Mount Meron Ar 86.15 41 LR LR** 21 58 54.2
comp=Z,176nm,20.3s,baz=171,slow=34
**ASF Jabal al Asfar 88.23 43 LR LR** 21 57 39.4
comp=Z,2μm,21.5s,baz=333,slow=33
**APG El Apazote 88.28 292 LR LR** 22 01 01.0
comp=Z,18nm,19.7s,baz=122,slow=36
**TEIG Tepich 90.40 297 LR LR** 22 03 00.5
comp=Z,101nm,21.2s,baz=174,slow=36
**DAVOX Davos/Dischmat 90.94 18 LR LR** 21 58 45.1
comp=Z,129nm,21.6s,baz=180,slow=33
**H01W2 Cape Leeuwin H 91.48 141 T T** 23 05 08.7
baz=215,slow=74
**H01W1 Cape Leeuwin H 91.49 141 T T** 23 05 10.7
baz=215,slow=74
**H01W3 Cape Leeuwin H 91.49 141 T T** 23 05 07.7
baz=215
**BFO Black Forest 92.07 16 P P 21 22 02.4 +0.1**
**BRTR Keskin Array B 92.75 36 P P 21 22 08.5 +2.8**
comp=Z,0.4nm,0.5s,baz=223,slow=5.9,SNR=2.3
BRTR LR LR 22 03 21.3
comp=Z,92nm,19.8s,baz=206,slow=35
comp=Z,0.4nm,0.5s
**CMIG Matias Romero 92.80 290 LR LR** 22 02 43.5
comp=Z,95nm,19.5s,baz=182,slow=35
**MLR Muntele Rosu 94.50 28 P P 21 22 13.7 0.0**
MLR IAmb IAmb 21 22 16.8
comp=Z,9.1nm,1.6s
**MLR Muntele Rosu 94.50 28 LR LR** 22 04 07.6
comp=Z,78nm,19.8s,baz=150,slow=35
**NWAO Narrogin (SRO) 94.55 142 LR LR** 21 57 41.9
comp=Z,128nm,18.6s,baz=54,slow=31
**WSAR Wadi Sarin 94.63 63 LR LR** 22 03 16.9
comp=Z,335nm,20.3s,baz=236,slow=34
**VRAC Vranov 94.96 21 LR LR** 22 03 18.1
com

comp=Z,0.4nm,0.7s,baz=238,slow=2.7,SNR=2.7
**ILAR Eielson Array 143.62 327** PKhKP PKPpre 21 28 24.2
comp=Z,0.6nm,0.8s,baz=103,slow=1.1,SNR=4.2
**B20K Meade River 145.05 338** PKPdf **PKiKP 21 28 30.8 -2.7**
**MLY Manley 145.11 328** **PKPdf 21 28 29.6 -0.5**
**F21K Alatna River 145.28 332** **PKiKP 21 28 31.0 -3.2**
**BPAW Bear Paw Mtn. 145.52 326** **PKPab 21 28 30.9 -0.3**
**H21K Melozitna Rive 145.68 330** **PKPab 21 28 31.6 -0.1**
**IMAR Indian Mountai 145.91 330** PKPdf **PKPab 21 28 31.6 -0.9**
**SKT Skwentna 146.41 323** PKPdf **PKPbc 21 28 32.9 -0.8**

**IDC 07 21:25:13.3±1.1, 13°.78N×125°.25E, h0km, mb3.7/7, mbtmp3.7/7, MS2.7/1, Error ellipse: s-maj=70.4km s-min=19.6km az=72.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOW** | **Kunigami** | **13.29** | **12** | LR | LR | 21 33 07.5 | |
| | comp=Z,32nm,18.1s,baz=170,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **30.86** | **9** | P | P | 21 31 31.3 | +0.1 |
| | 1.1nm,0.7s,baz=178,slow=7.4,SNR=4.1 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **34.69** | **165** | P | P | 21 32 04.3 | -0.7 |
| | 0.4nm,0.9s,baz=351,slow=8.5,SNR=1.8 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **37.40** | **339** | P | P | 21 32 27.9 | -0.2 |
| | 0.4nm,0.4s,baz=159,slow=13,SNR=4.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **38.17** | **167** | P | P | 21 32 35.1 | +0.3 |
| | 0.2nm,0.4s,baz=345,slow=8.0,SNR=5.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.02** | **78** | T | T | 22 16 40.0 | |
| | baz=270 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.03** | **78** | T | T | 22 16 40.7 | |
| | baz=270 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.03** | **78** | T | T | 22 16 40.6 | |
| | baz=270 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.23** | **76** | T | T | 22 16 49.1 | |
| | baz=266 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.24** | **76** | T | T | 22 16 50.2 | |
| | baz=266 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.25** | **76** | T | T | 22 16 55.3 | |
| | baz=266 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.66** | **321** | P | P | 21 33 59.1 | -0.1 |
| | 0.6nm,0.7s,baz=104,slow=9.1,SNR=5.3 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.09** | **330** | P | P | 21 34 17.1 | -0.4 |
| | 0.7nm,0.6s,baz=116,slow=6.7,SNR=2.4 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **52.64** | **324** | P | P | 21 34 29.2 | +0.1 |
| | 1.0nm,0.5s,baz=121,slow=8.5,SNR=7.2 | | | | | | |
| | 1.0nm,0.5s | | | | | | |

*RSNC **07** 21:27:02.9±0.6,5°.N±3°.×8°.3W±°., h0km, M3.8, mb4.2, mB5.2, ML3.2, Mw(mB)4.6*
*UPA **07** 21:27:05.7±2.1,5°.45N×82°.57W, h5km±36km, MW4.8*
**ISC 07 21:27:01.3±1.9, 5°.16N±0°.08×82°.7W±0°.1, h10km, n35, σ2ᵐ32/38, 1C, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CACAO** | **El Cacao, Vera** | **2.82** | **40** | P | **Pn** | **21 27 46.2** | **-0.3** |
| CACAO | | | | S | **Sn** | **21 28 17.7** | **-2.9** |
| **CACAO** | **El Cacao, Vera** | **2.82** | **40** | ↑↑*P* | **Pn** | **21 27 46.5** | **0.0** |
| CACAO | | | | *i* S | **Sn** | **21 28 18.1** | **-2.4** |
| **GMAL** | **Guarumal, Vera** | **2.95** | **29** | *i* P | **Pn** | **21 27 47.0** | **-1.4** |
| **GMAL** | **Guarumal, Vera** | **2.95** | **29** | *i* P | **Pn** | **21 27 46.9** | **-1.4** |
| GMAL | | | | *i* S | **Sn** | **21 28 21.0** | **-2.9** |
| **PTAR3** | **Potrerillos Ar** | **3.51** | **3** | *eP* | **Pn** | **21 27 57.4** | **+1.3** |
| **AZU** | **Azuero** | **3.54** | **42** | P | **Pn** | **21 27 56.9** | **+0.5** |
| **AZU** | **Azuero** | **3.54** | **42** | *i* P | **Pn** | **21 27 56.9** | **+0.5** |
| AZU | | | | *eS* | **Sn** | **21 28 35.8** | **-2.4** |
| **CHIT3** | **Chitre** | **3.57** | **39** | *eP* | **Pn** | **21 27 57.4** | **+0.6** |
| **BRU2** | **Volcan** | **3.61** | **360** | *eP* | **Pn** | **21 27 58.4** | **+0.9** |
| **CHGR2** | **Aguacate** | **3.79** | **8** | *i* P | **Pn** | **21 28 00.8** | **+1.0** |
| CHGR2 | | | | *i* S | **Sn** | **21 28 42.9** | **-1.6** |
| **DRK0** | **Durika** | **4.11** | **352** | *i* P | **Pn** | **21 28 04.9** | **+0.4** |
| DRK0 | | | | *i* S | **Sn** | **21 28 51.2** | **-1.6** |
| **BCIP** | **Isla Barro Col** | **4.87** | **35** | P | **Pn** | **21 28 16.7** | **+1.9** |
| **BCIP** | **Isla Barro Col** | **4.87** | **35** | *eP* | **Pn** | **21 28 16.2** | **+1.4** |
| **UPA** | **Univ. de Panam** | **4.91** | **39** | *eP* | **Pn** | **21 28 17.5** | **+2.2** |
| **GR1C** | **Gorgona, Isla** | **4.98** | **115** | P | **Pn** | **21 28 16.2** | **0.0** |
| GR1C | | | | S | **Sn** | **21 29 08.4** | **-5.6** |
| **PTAC** | **Punta Ardita,** | **5.22** | **68** | P | **Pn** | **21 28 22.0** | **+2.4** |
| **PTAC** | **Punta Ardita,** | **5.22** | **68** | *eP* | **Pn** | **21 28 21.9** | **+2.4** |
| **MALC** | **Bahia Malaga** | **5.44** | **102** | P | **Pn** | **21 28 24.6** | **+2.0** |
| **JTS** | **Las Juntas de** | **5.57** | **336** | P | **Pn** | **21 28 25.6** | **+1.2** |
| | 22nm,0.9s | | | | | | |
| **JTS** | **Las Juntas de** | **5.57** | **336** | *eP* | **Pn** | **21 28 25.3** | **+0.9** |
| **TOTI** | **Torti** | **5.72** | **49** | *i* P | Pn | 21 28 18.6 | -7.9 |
| TOTI | | | | *eS* | **Pg** | **21 28 52.0** | **+1.0** |
| **JAMC** | **Jamundi, Valle** | **6.29** | **108** | P | **Pn** | **21 28 36.0** | **+1.6** |
| | 6.3nm,0.5s | | | | | | |
| **CAPC** | **Capurgana** | **6.31** | **57** | P | Pn | 21 28 38.3 | +3.8 |
| **PLMC** | **San Jos del P** | **6.37** | **92** | P | **Pn** | **21 28 37.3** | **+1.9** |
| **CMBC** | **Cumbal** | **6.41** | **131** | P | **Pn** | **21 28 38.8** | **+2.6** |
| **YOTC** | **Yotoco, Valle** | **6.42** | **100** | P | **Pn** | **21 28 37.9** | **+1.8** |
| | 19nm,0.6s,302nm | | | | | | |
| **POPC** | **Popayan, Colom** | **6.53** | **113** | P | **Pn** | **21 28 38.4** | **+0.7** |
| | 6.3nm,0.5s | | | | | | |
| **APAC** | **Apartado, Choc** | **6.64** | **65** | P | Pn | 21 28 44.0 | +5.0 |
| APAC | | | | S | **Sn** | **21 29 51.8** | **-3.0** |
| **DBBC** | **Dabeiba** | **6.69** | **74** | P | Pn | 21 28 47.1 | +7.3 |
| **ANIL** | **Santa Ana** | **7.28** | **95** | P | **Pn** | **21 28 52.7** | **+4.6** |
| **ORTC** | **Ortega, Tolima** | **7.51** | **99** | P | **Pn** | **21 28 55.3** | **+4.3** |
| **PIAT** | **Ana Tenorio** | **7.54** | **144** | P | **Pn** | **21 28 54.3** | **+2.5** |
| **UREC** | **San Jos de Ur** | **7.55** | **70** | P | Pn | 21 28 55.8 | +4.2 |
| **UREC** | **San Jos de Ur** | **7.55** | **70** | *i* P | Pn | 21 28 55.8 | +4.2 |
| **PRAC** | **Prado** | **7.90** | **100** | P | **Pn** | **21 29 00.4** | **+4.0** |

*NDI **07** 21:29:48.2±1.2, 31°.40N×94°.99E, h5km, ML3.7, MW3.8, mb4.2(NEIC)*
*IDC **07** 21:29:50.9±0.8, 31°.13N×94°.97E, h0km, mb3.7/12, mbtmp3.7/16, ML3.8/3, MS3.4/8, Error ellipse: s-maj=33.8km s-min=16.0km az=55.0*
*BJI **07** 21:29:53.6±0.0, 31°.18N×95°.17E, h14km, mb4.2/11, ML3.5/5, Ms3.5/7, Ms7 3.4/4*
*NEIC **07** 21:29:53±1.1, 31°.10N±0°.10×95°.0E±0°.1, h10km±1km, mb4.2/21, Error ellipse: s-maj=18.5km s-min=14.0km az=49.0*
**ISC 07 21:29:52.8±0.5, 31°.08N±0°.05×94°.96E±0°.06, h10km, n59, σ1ᵍ76/61, mb3.9/19, MS3.5/6, 1C, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSA** | **Lhasa** | **3.57** | **248** | Pn | **Pn** | **21 30 53.3** | **+4.6** |
| LSA | | | | Sn | **Sn** | **21 31 35.0** | **+3.8** |
| LSA | | | | smax | smax | | |
| | comp=N,28nm,0.9s | | | | | | |
| LSA | | | | smax | smax | | |
| | comp=E,57nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **3.57** | **248** | | **Pn** | **21 30 48.6** | **-0.1** |
| **ZIRO** | **ZIRO** | **3.67** | **196** | *eP* | **Pn** | **21 30 51.0** | **+1.1** |
| ZIRO | | | | *eS* | **Sn** | **21 31 36.5** | **+3.2** |
| ZIRO | | | | IAML | | 21 31 52.3 | |
| | comp=N,894nm,0.5s | | | | | | |
| ZIRO | | | | IAML | | 21 31 53.0 | |
| | comp=E,772nm,0.4s | | | | | | |
| **LKP** | **Lekhapani** | **3.81** | **168** | *eP* | **Pn** | **21 30 52.3** | **+0.7** |
| LKP | | | | IAML | | 21 31 51.7 | |
| | comp=E,932nm,0.9s | | | | | | |
| LKP | | | | IAML | | 21 32 03.0 | |
| | comp=E,596nm,0.8s | | | | | | |
| **TAWA** | **Tawang** | **4.40** | **219** | *ex* | x | 21 32 02.6 | |
| TAWA | | | | IAML | | 21 32 17.7 | |
| | comp=E,266nm,0.7s | | | | | | |
| TAWA | | | | IAML | | 21 32 19.1 | |
| | comp=N,164nm,0.8s | | | | | | |
| **KOHI** | **KOHIMA** | **5.39** | **188** | *eP* | **Pn** | **21 31 13.8** | **+0.3** |
| KOHI | | | | *eS* | **Sn** | **21 32 15.5** | **-0.2** |
| KOHI | | | | IAML | | 21 32 19.9 | |
| | comp=N,82nm,1.0s | | | | | | |
| KOHI | | | | IAML | | 21 32 20.4 | |
| | comp=E,88nm,0.4s | | | | | | |
| **SHL** | **Shillong** | **6.12** | **207** | Pn | **Pn** | **21 31 23.2** | **-0.4** |
| **SHL** | **Shillong** | **6.12** | **207** | *eP* | **Pn** | **21 31 23.1** | **-0.5** |
| **IMP** | **Imphal** | **6.29** | **188** | *eP* | **Pn** | **21 31 25.1** | **-0.7** |
| IMP | | | | IAML | | 21 31 51.1 | |
| | comp=N,11nm,0.6s | | | | | | |
| IMP | | | | IAML | | 21 31 53.6 | |
| | comp=E,12nm,0.7s | | | | | | |
| IMP | | | | *eS* | **Sn** | **21 32 36.9** | **-0.9** |
| **CD2** | **Chengdu** | **7.55** | **89** | *ePn* | **Pn** | **21 31 42.9** | **-0.2** |
| **KMI** | **Kunming** | **9.07** | **129** | ↑↑P | Pn | 21 32 09.6 | +5.5 |
| KMI | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,400nm,11.6s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,120nm,6.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **13.08** | **163** | Pn | **Pn** | **21 32 59.1** | **+0.4** |
| | comp=E,0.6nm,0.5s,baz=334,slow=14,SNR=5.9 | | | | | | |
| **WMQ** | **Urumqi** | **13.96** | **338** | *eP* | **Pn** | **21 33 12.4** | **+1.7** |
| WMQ | | | | LR | LR | | |
| | comp=E,150nm,12.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **16.58** | **49** | *eP* | **P** | **21 33 46.6** | **-1.4** |
| HHC | | | | pP | pP | 21 33 51.0 | -1.0 |
| HHC | | | | sP | sP | 21 33 53.8 | -0.1 |
| HHC | | | | PP | **PnPn** | **21 34 03.4** | **+8.7** |
| HHC | | | | pmax | pmax | | |
| | comp=E,22nm,0.5s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **17.39** | **312** | | **Pn** | **21 33 55.1** | **-0.9** |
| **QIZ** | **Qiongzhong** | **18.02** | **128** | P | **P** | **21 34 05.8** | **+1.8** |
| QIZ | | | | S | **Sn** | **21 37 26.5** | **+1.8** |
| QIZ | | | | LR | LR | | |
| | comp=E,170nm,12.3s | | | | | | |
| **UBPT** | **Khong Chiam** | **18.44** | **146** | P | **P** | **21 34 07.7** | **-0.9** |
| UBPT | | | | IAmb | IAmb | 21 34 09.9 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **18.49** | **332** | P | **P** | **21 34 07.4** | **-1.6** |
| **MKAR** | **Makanchi Array** | **18.49** | **332** | P | **P** | **21 34 07.4** | **-1.6** |
| **MKAR** | **Makanchi Array** | **18.49** | **332** | P | **P** | **21 34 08.4** | **-0.6** |
| | comp=Z,0.1nm,0.3s,baz=142,slow=13,SNR=6.0 | | | | | | |
| MKAR | | | | LR | LR | 21 42 25.0 | |
| | comp=Z,30nm,21.1s,baz=239,slow=41 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **NIL** | **Nilore** | **18.51** | **284** | P | **P** | **21 34 06.8** | **-2.6** |
| NIL | | | | IAmb | IAmb | 21 34 18.5 | |
| | comp=E,11nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **18.88** | **24** | P | **P** | **21 34 10.7** | **-2.7** |
| **SONM** | **Songino Array** | **18.88** | **24** | P | **P** | **21 34 11.5** | **-1.9** |
| | comp=Z,0.4nm,0.3s,baz=208,slow=11,SNR=11 | | | | | | |
| SONM | | | | LR | LR | 21 42 19.8 | |
| | comp=Z,46nm,18.1s,baz=174,slow=40 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **19.15** | **25** | P | **P** | **21 34 16.3** | **-0.1** |
| **AAK** | **Ala-Archa** | **19.98** | **311** | P | **P** | **21 34 25.5** | **0.0** |
| AAK | | | | IAmb | IAmb | 21 34 30.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **19.98** | **311** | P | **P** | **21 34 24.9** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=88,slow=10,SNR=7.4 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **BTK** | **Batken** | **21.53** | **301** | P | **P** | **21 34 42.1** | **-0.1** |
| **GAR** | **Garm** | **21.62** | **298** | P | **P** | **21 34 42.4** | **-0.9** |
| GAR | | | | IAmb | IAmb | 21 34 49.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **KBL** | **Kabul** | **22.04** | **286** | P | **P** | **21 34 47.2** | **-0.6** |
| KBL | | | | IAmb | IAmb | 21 34 49.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **CHGR** | **Chuyangaron** | **22.43** | **297** | P | **P** | **21 34 50.8** | **-1.2** |
| **SIMJ** | **Simiganj** | **22.55** | **297** | P | **P** | **21 34 51.9** | **-1.3** |
| SIMJ | | | | IAmb | IAmb | 21 34 54.4 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **22.81** | **309** | P | **P** | **21 34 55.7** | **-0.2** |
| **KURBB** | **Kurchatov Arra** | **23.05** | **333** | P | **P** | **21 34 56.8** | **-1.4** |
| | comp=Z,0.7nm,0.3s,baz=140,slow=12,SNR=2.5 | | | | | | |
| KURBB | | | | LR | LR | 21 43 56.2 | |
| | comp=Z,70nm,21.9s,baz=176,slow=37 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **23.08** | **333** | P | **P** | **21 34 58.0** | **-0.5** |
| KURK | | | | IAmb | IAmb | 21 35 23.6 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **24.00** | **345** | P | **P** | **21 35 08.0** | **+0.5** |
| **ZALV** | **Zalesovo Beam** | **24.00** | **345** | P | **P** | **21 35 07.4** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **24.00** | **345** | P | **P** | **21 35 06.5** | **-1.0** |
| | comp=Z,1.0nm,0.8s,baz=160,slow=14,SNR=5.3 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **28.34** | **328** | P | **P** | **21 35 46.0** | **-0.8** |
| BRVK | | | | IAmb | IAmb | 21 35 50.6 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **46.56** | **35** | LR | LR | 21 59 09.7 | |
| | comp=Z,63nm,18.5s,baz=109,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **49.87** | **298** | P | **P** | **21 38 46.0** | **-0.5** |
| **BRTR** | **Keskin Array B** | **49.87** | **298** | P | **P** | **21 38 45.6** | **-1.0** |
| | comp=Z,0.7nm,0.8s,baz=91,slow=9.3,SNR=5.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **51.64** | **312** | P | **P** | **21 38 58.1** | **-1.4** |
| | comp=Z,0.6nm,0.4s,baz=75,slow=6.7,SNR=2.2 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **53.20** | **326** | P | **P** | **21 39 11.2** | **+0.3** |
| **FINES** | **FINESS Array B** | **53.20** | **326** | P | **P** | **21 39 09.6** | **-1.3** |
| | comp=Z,2.3nm,1.0s,baz=79,slow=9.9,SNR=4.9 | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | |
| **BURAR** | **Bucovina Array** | **54.60** | **309** | P | **P** | **21 39 20.5** | **-1.0** |
| BURAR | | | | IAmb | IAmb | 21 39 25.0 | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **59.34** | **325** | P | **P** | **21 39 55.1** | **+0.3** |
| | comp=Z,0.9nm,0.6s,baz=76,slow=6.1,SNR=2.1 | | | | | | |
| HFS | | | | LR | LR | 22 07 18.8 | |
| | comp=Z,149nm,19.6s,baz=220,slow=38 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **NC405** | **NORSAR Array S** | **60.13** | **326** | P | **P** | **21 40 00.5** | **+0.3** |
| **NB2** | **NORSAR Subarra** | **60.38** | **326** | P | **P** | **21 40 03.2** | **+1.2** |
| | comp=Z,1.0nm,0.7s,baz=79,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **60.38** | **326** | P | **P** | **21 40 02.7** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=79,slow=6.6,SNR=4.9 | | | | | | |
| NOA | | | | LR | LR | 22 08 07.4 | |
| | comp=Z,22nm,18.1s,baz=220,slow=38 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **61.85** | **312** | P | **P** | **21 40 12.0** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=71,slow=7.6,SNR=2.6 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **63.27** | **138** | P | **P** | **21 40 21.6** | **-0.4** |
| | comp=Z,0.5nm,0.7s,baz=323,slow=8.0,SNR=4.6 | | | | | | |
| WRA | | | | LR | LR | 22 10 18.9 | |
| | comp=Z,93nm,18.4s,baz=354,slow=38 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **64.73** | **311** | P | **P** | **21 40 31.8** | **+0.2** |
| FUORN | | | | IAmb | IAmb | 21 40 51.6 | |
| | comp=Z,3.2nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **66.00** | **141** | P | **P** | **21 40 39.8** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=323,slow=6.6,SNR=9.2 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **C19K** | **Lookout Ridge** | **66.58** | **22** | P | **P** | **21 40 42.7** | **-0.2** |
| **D19K** | **Kuna River** | **67.33** | **22** | P | **P** | **21 40 47.6** | **0.0** |
| **CTA** | **Charters Tower** | **70.80** | **129** | LR | LR | 22 15 50.0 | |
| | comp=Z,10nm,18.2s,baz=167,slow=39 | | | | | | |
| **BMAR** | **Burnt Mountain** | **72.18** | **20** | P | **P** | **21 41 17.6** | **0.0** |
| **ILAR** | **Eielson Array** | **73.11** | **23** | P | **P** | **21 41 22.8** | **-0.3** |
| | comp=Z,0.4nm,0.9s,baz=309,slow=4.3,SNR=2.6 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.07** | **283** | P | **P** | **21 42 33.4** | **-1.0** |
| | comp=Z,0.9nm,0.9s,baz=46,slow=6.4,SNR=3.6 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |

*CATAC **07** 21:38:31.6±0.4, 9°.68N×83°.93W, h8km±4km, ML3.3*
*UCR **07** 21:38:32.1±1.2, 9°.69N×83°.95W, h10km±2km, MW3.5*
**ISC 07 21:38:31.4±0.9, 9°.66N±0°.03×83°.95W±0°.03, h14km±6km, n41, σ0ᵍ39/48, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAZU** | **San Marcos de** | **0.07** | **273** | *eP* | **Pg** | **21 38 34.7** | **+0.2** |
| RAZU | | | | *eS* | **Sg** | **21 38 36.7** | **+0.1** |
| **LCR2** | **La Lucha 2** | **0.10** | **326** | *i* P | **Pg** | **21 38 34.9** | **0.0** |
| LCR2 | | | | *i* S | **Sg** | **21 38 36.6** | **-0.5** |
| LCR2 | | | | IAML | | 21 38 36.8 | |
| | comp=Z,16μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **0.10** | **326** | *eP* | **Pg** | **21 38 34.8** | **0.0** |
| LCR2 | | | | *eS* | **Sg** | **21 38 36.8** | **-0.4** |
| **ABE2** | **San Pablo** | **0.12** | **295** | *eP* | **Pg** | **21 38 35.2** | **+0.2** |
| **REPA** | **Paraso** | **0.19** | **24** | *eP* | **Pb** | **21 38 37.0** | **+0.3** |
| REPA | | | | *eS* | **Sb** | **21 38 39.9** | **-0.4** |
| **TAGO** | **Cartago** | **0.21** | **6** | *eP* | **Pb** | **21 38 37.5** | **+0.4** |
| **LLNJ** | **Naranjito** | **0.23** | **220** | *eP* | **Pb** | **21 38 38.4** | **+1.0** |
| **TRIO** | **Tres Rios** | **0.25** | **349** | *eP* | **Pg** | **21 38 37.0** | **0.0** |
| **ACOS** | **Acosta** | **0.26** | **303** | *eP* | **Pg** | **21 38 37.4** | **+0.4** |
| **PCAYA** | **Pacayas** | **0.29** | **27** | *eP* | **Pg** | **21 38 38.0** | **+0.3** |
| **LUJA** | **Lujan** | **0.30** | **335** | *eP* | **Pb** | **21 38 38.9** | **+0.3** |
| **CENT** | **San Jose** | **0.30** | **334** | *eP* | **Pb** | **21 38 39.1** | **+0.4** |
| **LUPE** | **Guadalupe** | **0.31** | **340** | *eP* | **Pg** | **21 38 38.3** | **+0.4** |
| **RAFA** | **San Farael, Vo** | **0.33** | **24** | *i* P | **Pg** | **21 38 38.6** | **+0.3** |
| RAFA | | | | *i* S | **Sg** | **21 38 43.3** | **+0.2** |
| RAFA | | | | IAML | | 21 38 44.2 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **VICA** | **Volcano Irazu** | **0.34** | **17** | *eP* | **Pg** | **21 38 38.8** | **+0.2** |
| **SANTA** | **Santa Ana** | **0.36** | **320** | *eP* | **Pg** | **21 38 39.0** | **+0.1** |
| **VERB** | **Verbena** | **0.38** | **41** | *eP* | **Pg** | **21 38 39.6** | **+0.4** |
| **HDC** | **Heredia** | **0.38** | **334** | *eP* | **Pg** | **21 38 39.6** | **+0.5** |
| **HDC3** | **Heredia 3** | **0.38** | **335** | *i* P | **Pg** | **21 38 39.4** | **+0.2** |
| HDC3 | | | | *i* S | **Sg** | **21 38 45.2** | **+0.7** |
| HDC3 | | | | IAML | | 21 38 46.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **VTLA** | **Turrialba Volc** | **0.39** | **26** | *eP* | **Pg** | **21 38 39.7** | **+0.4** |
| **CVTQ** | **Turrialba Volc** | **0.39** | **27** | *eP* | **Pg** | **21 38 39.8** | **+0.4** |
| **VTCV** | **VTCV, Calle Va** | **0.39** | **34** | *eP* | **Pg** | **21 38 39.8** | **+0.4** |
| **BELE** | **Belen** | **0.40** | **323** | *eP* | **Pg** | **21 38 39.6** | **+0.1** |
| **CVTV** | **Tajo** | **0.40** | **29** | *eP* | **Pg** | **21 38 40.0** | **+0.5** |
| **VTR0** | **Volcan Turrial** | **0.41** | **27** | *eP* | **Pg** | **21 38 40.2** | **+0.5** |
| **CVTR** | **Volcan Turrial** | **0.41** | **27** | *eP* | **Pg** | **21 38 40.1** | **+0.4** |
| **TCS1** | **Tacares** | **0.52** | **318** | *eP* | **Pb** | **21 38 42.1** | **-0.2** |
| **TRB2** | **Turrubares** | **0.56** | **298** | *eP* | **Pg** | **21 38 42.4** | **0.0** |
| **LCOCO** | **El Coco** | **0.57** | **42** | *eP* | **Pb** | **21 38 43.3** | **+0.1** |
| **OCHAL** | **Ojochal** | **0.63** | **152** | *i* P | **Pb** | **21 38 45.0** | **+0.9** |
| OCHAL | | | | IAML | | 21 39 00.0 | |
| | comp=Z,820nm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.79** | **119** | *i* P | **Pg** | **21 38 46.2** | **-0.7** |
| DRK0 | | | | IAML | | 21 38 59.1 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.79** | **119** | *eP* | **Pg** | **21 38 46.4** | **-0.5** |
| **SOCE** | **Pocosol** | **0.98** | **318** | *i* P | **Pb** | **21 38 50.1** | **-0.1** |
| SOCE | | | | *i* S | **Sg** | **21 39 03.6** | **+0.4** |
| SOCE | | | | IAML | | 21 39 05.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **0.98** | **318** | *eP* | **Pb** | **21 38 50.1** | **-0.1** |
| **ARE1** | **Arenal 1** | **1.10** | **317** | *eP* | **Pb** | **21 38 52.2** | **-0.1** |
| **CEDE** | **Laguna Cedeo** | **1.11** | **318** | *eP* | **Pb** | **21 38 52.5** | **+0.1** |
| **JTS** | **Las Juntas de** | **1.18** | **303** | *eP* | **Pn** | **21 38 53.1** | **-0.4** |
| **BRU2** | **Volcan** | **1.51** | **124** | *eP* | **Pb** | **21 38 59.3** | **+0.1** |
| **INDI** | **Punta indio, G** | **1.55** | **278** | *i* P | **Pb** | **21 38 59.7** | **-0.1** |
| INDI | | | | IAML | | 21 39 24.9 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **CUI** | **Cuipilapa** | **1.56** | **310** | *eP* | **Pb** | **21 38 59.8** | **-0.3** |
| **COLC** | **Colonia** | **1.59** | **309** | *eP* | **Pb** | **21 39 00.6** | **0.0** |

*NDI **07** 21:39:49.1±3.5, 23°.73N×96°.15E, h5km, ML3.5, MW3.9, mb4.4(NEIC)*
*IDC **07** 21:39:49.1±1.2, 23°.96N×96°.02E, h0km, mb3.6/7, mbtmp3.5/8, ML3.8/1, MS3.3/2, Error ellipse: s-maj=74.9km s-min=14.9km az=64.0*
*NEIC **07** 21:39:50.8±1.0, 24°.01N±0°.08×96°.19E±0°.03, h10km±1km, mb4.4/12, Error ellipse: s-maj=13.8km s-min=4.7km az=10.0*
**ISC 07 21:39:50.7±0.7, 24°.00N±0°.07×96°.13E±0°.06, h10km, n34, σ1ᵍ25/38, mb3.8/11, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IMP** | **Imphal** | **2.15** | **293** | *eP* | **Pn** | **21 40 28.5** | **+1.7** |
| IMP | | | | *eS* | **Sb** | **21 40 57.3** | **+0.6** |
| IMP | | | | IAML | | 21 41 02.4 | |
| | comp=E,272nm,0.7s | | | | | | |
| IMP | | | | IAML | | 21 41 12.6 | |
| | comp=E,467nm,0.6s | | | | | | |
| **KOHI** | **KOHIMA** | **2.51** | **314** | *eP* | **Pn** | **21 40 32.9** | **+1.1** |
| KOHI | | | | *eS* | **Sb** | **21 41 08.0** | **+1.0** |
| KOHI | | | | IAML | | 21 41 11.1 | |
| | comp=N,286nm,0.6s | | | | | | |
| KOHI | | | | IAML | | 21 41 16.2 | |
| | comp=N,336nm,0.5s | | | | | | |
| **LKP** | **Lekhapani** | **3.33** | **356** | *eP* | **Pn** | **21 40 46.4** | **+3.5** |
| LKP | | | | *eS* | **Sb** | **21 41 28.0** | **-2.5** |
| LKP | | | | IAML | | 21 41 42.7 | |
| | comp=E,111nm,0.7s | | | | | | |
| LKP | | | | IAML | | 21 41 52.8 | |
| | comp=E,184nm,0.7s | | | | | | |
| **ZIRO** | **ZIRO** | **4.07** | **330** | *eP* | **Pn** | **21 40 53.9** | **+0.7** |
| ZIRO | | | | *eS* | **Sn** | **21 41 42.1** | **+1.1** |
| ZIRO | | | | IAML | | 21 42 03.0 | |
| | comp=E,282nm,0.6s | | | | | | |
| ZIRO | | | | IAML | | 21 42 08.6 | |
| | comp=E,418nm,0.6s | | | | | | |
| **SHL** | **Shillong** | **4.16** | **293** | Pn | **Pn** | **21 40 53.6** | **-0.9** |
| **SHL** | **Shillong** | **4.16** | **293** | *eP* | **Pn** | **21 40 54.4** | **-0.1** |
| SHL | | | | *eS* | **Sn** | **21 41 41.7** | **-1.6** |
| SHL | | | | IAML | | 21 41 44.5 | |
| | comp=E,107nm,0.3s | | | | | | |
| SHL | | | | IAML | | 21 41 46.2 | |
| | comp=E,95nm,0.1s | | | | | | |
| **TAWA** | **Tawang** | **5.25** | **314** | IAML | | 21 43 14.5 | |
| TAWA | | | | IAML | | 21 43 15.5 | |
| | comp=E,108nm,0.3s | | | | | | |
| | comp=N,168nm,0.5s | | | | | | |
| **CRAI** | **Chiangrai** | **5.44** | **133** | | **Pn** | **21 41 11.2** | **-0.6** |
| **CM31** | **Chiang Mai Arr** | **6.10** | **154** | Pn | **Pn** | **21 41 21.1** | **+0.

*KRSC **07** 21:50:19.4±1.3,52.°55N×171.°39E,h61km±91km,Ml4.2*
**ISC 07 21:50:15.1±0.6,52.°5N±0.°1×172.°06E±0.°05,h28km,n129,**
**σ1ᵍ75/122,mb4.0/30,MS3.0/6,Near Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHEM** | **Shemya Is, Ala** | **1.26** | **80** | Pn | **Pn** | **21 50 35.4** | **-1.3** |
| | 315nm,0.3s,baz=242,slow=6.2,SNR=166 | | | | | | |
| SHEM | | | | Sn | **Sn** | **21 50 51.6** | **-1.1** |
| | 600nm,0.3s,baz=269,slow=18,SNR=11 | | | | | | |
| **AMKA** | **Amchitka** | **4.63** | **102** | | **Pn** | **21 51 24.1** | **+1.1** |
| **KBTR** | **Krutoberegovo** | **6.53** | **308** | *eP* | **Pn** | **21 51 52.7** | **+3.6** |
| **KBTR** | **Krutoberegovo** | **6.53** | **308** | P | **Pn** | **21 51 52.7** | **+3.6** |
| **KIWB** | **Kanaga Island** | **6.67** | **92** | Pn | **Pn** | **21 51 51.6** | **+0.5** |
| **ADK** | **Adak** | **6.95** | **91** | Pn | **Pn** | **21 51 55.7** | **+0.8** |
| **GSTR** | **Great Sitkin T** | **7.30** | **89** | Pn | **Pn** | **21 51 59.9** | **+0.2** |
| **TUMD** | **Tumrok D** | **7.39** | **296** | *eP* | **Pn** | **21 52 03.4** | **+2.3** |
| TUMD | | | | eS | **Sn** | **21 53 20.7** | **-3.2** |
| **BZGR** | **Bezymyannyi-Gr** | **7.48** | **302** | *eP* | **Pn** | **21 52 04.6** | **+2.3** |
| **BZGR** | **Bezymyannyi-Gr** | **7.48** | **302** | P | **Pn** | **21 52 04.5** | **+2.3** |
| **BZP** | **Bezymyannyi-Pe** | **7.55** | **301** | *eP* | **Pn** | **21 52 06.2** | **+2.9** |
| **TUMR** | **Tumrok** | **7.55** | **296** | *eP* | **Pn** | **21 52 06.2** | **+2.9** |
| **TUMR** | **Tumrok** | **7.55** | **296** | P | **Pn** | **21 52 06.2** | **+2.9** |
| **BZMR** | **Bezymyannaya** | **7.58** | **301** | *eP* | **Pn** | **21 52 06.7** | **+2.9** |
| **BZMR** | **Bezymyannaya** | **7.58** | **301** | P | **Pn** | **21 52 06.6** | **+2.9** |
| **BZWR** | **Bezymyannyi-We** | **7.59** | **301** | *eP* | **Pn** | **21 52 06.6** | **+2.6** |
| **BZWR** | **Bezymyannyi-We** | **7.59** | **301** | P | **Pn** | **21 52 06.5** | **+2.6** |
| **KLY** | **Klyuchi** | **7.65** | **304** | *eP* | **Pn** | **21 52 05.8** | **+1.2** |
| **KLY** | **Klyuchi** | **7.65** | **304** | P | **Pn** | **21 52 05.7** | **+1.2** |
| **KMNR** | **Kamenistaya** | **7.65** | **300** | *eP* | **Pn** | **21 52 06.5** | **+1.8** |
| **KMNR** | **Kamenistaya** | **7.65** | **300** | P | **Pn** | **21 52 06.5** | **+1.8** |
| **KIRR** | **Kirishev** | **7.67** | **301** | *eP* | **Pn** | **21 52 07.9** | **+3.0** |
| **KIRR** | **Kirishev** | **7.67** | **301** | P | **Pn** | **21 52 07.9** | **+3.0** |
| **KII** | **Karymskiy** | **7.71** | **286** | *eP* | **Pn** | **21 52 07.6** | **+2.2** |
| **KII** | **Karymskiy** | **7.71** | **286** | P | **Pn** | **21 52 07.6** | **+2.2** |
| **KPT** | **Kopyto** | **7.74** | **301** | *eP* | **Pn** | **21 52 08.3** | **+2.5** |
| **KPT** | **Kopyto** | **7.74** | **301** | P | **Pn** | **21 52 08.3** | **+2.5** |
| **UGLR** | **Uglovaya** | **8.04** | **280** | *eP* | **Pn** | **21 52 11.5** | **+1.4** |
| **UGLR** | **Uglovaya** | **8.04** | **280** | P | **Pn** | **21 52 11.4** | **+1.4** |
| **SMAR** | **Somma** | **8.05** | **280** | *eP* | **Pn** | **21 52 11.8** | **+1.5** |
| **SMAR** | **Somma** | **8.05** | **280** | P | **Pn** | **21 52 11.8** | **+1.5** |
| **AVH** | **Avacha** | **8.09** | **280** | *eP* | **Pn** | **21 52 12.5** | **+1.8** |
| **AVH** | **Avacha** | **8.09** | **280** | P | **Pn** | **21 52 12.4** | **+1.8** |
| **SRDR** | **Sredinnyy** | **8.13** | **303** | *eP* | **Pn** | **21 52 14.4** | **+3.2** |
| **SRDR** | **Sredinnyy** | **8.13** | **303** | P | **Pn** | **21 52 14.4** | **+3.2** |
| **KRX** | **Arik** | **8.14** | **281** | *eP* | **Pn** | **21 52 13.2** | **+1.7** |
| **KRX** | **Arik** | **8.14** | **281** | P | **Pn** | **21 52 13.2** | **+1.7** |
| **PET** | **Petropavlovsk** | **8.15** | **279** | Pn | **Pn** | **21 52 09.4** | **-1.9** |
| **KOK** | **Koryaka** | **8.15** | **281** | *eP* | **Pn** | **21 52 12.3** | **+0.8** |
| **KOK** | **Koryaka** | **8.15** | **281** | P | **Pn** | **21 52 12.3** | **+0.8** |
| **MTVR** | **Mutnovka** | **8.47** | **275** | *eP* | **Pn** | **21 52 18.5** | **+2.5** |
| MTVR | | | | eS | **Sn** | **21 53 46.6** | **-3.9** |
| **MTVR** | **Mutnovka** | **8.47** | **275** | P | **Pn** | **21 52 18.4** | **+2.5** |
| MTVR | | | | S | **Sn** | **21 53 46.6** | **-3.9** |
| **GRL** | **Gorelyy** | **8.53** | **276** | *eP* | **Pn** | **21 52 18.7** | **+2.0** |
| **GRL** | **Gorelyy** | **8.53** | **276** | P | **Pn** | **21 52 18.7** | **+2.0** |
| **GNL** | **Ganaly** | **8.57** | **283** | *eP* | **Pn** | **21 52 19.5** | **+2.1** |
| **GNL** | **Ganaly** | **8.57** | **283** | P | **Pn** | **21 52 19.4** | **+2.1** |
| **ASAK** | **Asacha** | **8.65** | **275** | *eP* | **Pn** | **21 52 20.6** | **+2.3** |
| **ASAK** | **Asacha** | **8.65** | **275** | P | **Pn** | **21 52 20.6** | **+2.3** |
| **LVA** | **Lava Point** | **13.18** | **74** | Pn | **Pn** | **21 53 21.3** | **+1.1** |
| **K13K** | **Kusilvak Mount** | **15.64** | **44** | Pn | **P** | **21 53 54.7** | **-2.4** |
| K13K | | | | IAmb | IAmb | 21 54 09.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **M14K** | **Bethel** | **16.39** | **50** | | **P** | **21 54 05.6** | **+0.2** |
| M14K | | | | IAmb | IAmb | 21 54 13.3 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **N15K** | **Kwethluk River** | **17.11** | **53** | P | **P** | **21 54 14.4** | **+1.0** |
| N15K | | | | IAmb | IAmb | 21 54 16.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **17.12** | **45** | P | **P** | **21 54 14.8** | **+1.3** |
| K15K | | | | IAmb | IAmb | 21 54 23.0 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **J16K** | **Anvik River** | **17.91** | **42** | P | **P** | **21 54 22.8** | **+0.6** |
| **J17K** | **VABM Dome** | **18.59** | **43** | P | **Pn** | **21 54 31.6** | **+1.6** |
| **N17K** | **Nushagak Hills** | **18.60** | **52** | P | **Pn** | **21 54 30.5** | **+0.3** |
| **N18K** | **Kilae Creek** | **19.26** | **52** | P | **Pn** | **21 54 38.7** | **+0.5** |
| **H18K** | **Honhosa River** | **19.59** | **38** | P | **P** | **21 54 40.4** | **-0.3** |
| **J18K** | **Innoko River** | **19.60** | **44** | P | **Pn** | **21 54 41.5** | **-0.8** |
| **G18K** | **Tagagawik** | **19.83** | **36** | P | **P** | **21 54 43.1** | **-0.1** |
| G18K | | | | IAmb | IAmb | 21 54 53.7 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **Q19K** | **Cape Douglas,** | **20.17** | **58** | P | **P** | **21 54 46.6** | **-0.4** |
| **J19K** | **Poorman** | **20.24** | **43** | P | **P** | **21 54 48.0** | **+0.3** |
| J19K | | | | IAmb | IAmb | 21 54 58.8 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **C18K** | **Utukok River** | **20.52** | **28** | P | **P** | **21 54 49.8** | **-1.0** |
| **KDAK** | **Kodiak Island** | **20.70** | **61** | P | **P** | **21 54 51.1** | **-1.6** |
| **KDAK** | **Kodiak Island** | **20.70** | **61** | P | **P** | **21 54 50.9** | **-1.7** |
| | comp=Z,4.3nm,0.3s,baz=293,slow=2.7,SNR=17 | | | | | | |
| KDAK | | | | LR | LR | 22 02 47.0 | |
| | comp=Z,104nm,19.1s,baz=273,slow=37 | | | | | | |
| | comp=Z,4.3nm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **20.70** | **61** | P | **P** | **21 54 51.1** | **-1.6** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | |
| **K20K** | **Telida** | **20.71** | **45** | P | **P** | **21 54 52.9** | **+0.1** |
| K20K | | | | IAmb | IAmb | 21 55 04.0 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **SYI** | **Shuyak Island** | **20.81** | **59** | P | **P** | **21 54 53.1** | **-0.7** |
| **J20K** | **Nowinta River** | **20.91** | **43** | P | **P** | **21 54 54.9** | **-0.1** |
| **C19K** | **Lookout Ridge** | **21.26** | **28** | P | **P** | **21 54 58.5** | **-0.2** |
| C19K | | | | IAmb | IAmb | 21 55 03.6 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **21.35** | **30** | P | **P** | **21 55 00.4** | **+0.8** |
| D19K | | | | IAmb | IAmb | 21 55 08.5 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **21.69** | **38** | P | **P** | **21 55 04.3** | **+1.0** |
| **H21K** | **Melozitna Rive** | **21.93** | **40** | P | **P** | **21 55 06.5** | **+0.5** |
| H21K | | | | IAmb | IAmb | 21 55 18.9 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **22.27** | **36** | | **P** | **21 55 10.0** | **+0.5** |
| F21K | | | | IAmb | IAmb | 21 55 17.8 | |
| | comp=Z,7.6nm,1.3s | | | | | | |
| **B20K** | **Meade River** | **22.49** | **27** | P | **P** | **21 55 11.8** | **0.0** |
| **I23K** | **Minto, Yukon-K** | **23.16** | **42** | P | **P** | **21 55 17.9** | **-0.9** |
| I23K | | | | IAmb | IAmb | 21 55 24.8 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **23.58** | **43** | P | **P** | **21 55 21.5** | **-1.6** |
| MDM | | | | IAmb | IAmb | 21 55 25.2 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **23.93** | **41** | | **P** | **21 55 25.8** | **-0.6** |
| H24K | | | | IAmb | IAmb | 21 55 33.0 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **23.95** | **43** | P | **P** | **21 55 25.8** | **-0.7** |
| **IL31** | | **24.11** | **44** | P | **P** | **21 55 26.2** | **-1.7** |
| IL31 | | | | IAmb | IAmb | 21 55 30.0 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **24.11** | **44** | P | **P** | **21 55 26.9** | **-1.1** |
| **ILAR** | **Eielson Array** | **24.11** | **44** | P | **P** | **21 55 26.6** | **-1.4** |
| | comp=Z,3.5nm,0.7s,baz=252,slow=8.2,SNR=33 | | | | | | |
| ILAR | | | | LR | LR | 22 05 17.8 | |
| | comp=Z,53nm,19.0s,baz=278,slow=38 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **24.11** | **44** | P | **P** | **21 55 26.9** | **-1.1** |
| **C23K** | **Ikiilik River** | **24.34** | **31** | P | **P** | **21 55 29.0** | **-1.0** |
| **SCRK** | **Sand Creek** | **25.23** | **46** | P | **P** | **21 55 37.7** | **-0.7** |
| **KLR** | **Kul'dur** | **25.41** | **279** | LR | LR | 22 06 05.7 | |
| | comp=Z,50nm,19.9s,baz=23,slow=38 | | | | | | |
| **D25K** | **Kavik River** | **25.51** | **33** | P | **P** | **21 55 39.8** | **-1.0** |
| **BMAR** | **Burnt Mountain** | **25.60** | **38** | P | **P** | **21 55 41.1** | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **27.59** | **269** | LR | LR | 22 08 11.4 | |
| | comp=Z,39nm,18.6s,baz=55,slow=39 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.99** | **189** | T | T | 22 32 04.8 | |
| | baz=6.1,slow=76,SNR=921 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.00** | **189** | T | T | 22 32 10.2 | |
| | baz=6.1,slow=76,SNR=1334 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.01** | **189** | T | T | 22 32 07.7 | |
| | baz=6.1,slow=76,SNR=1295 | | | | | | |
| **HG4B** | **Hotspring** | **33.84** | **67** | P | **P** | **21 56 54.2** | **-0.5** |
| **KSRS** | **Korea Array** | **34.08** | **262** | LR | LR | 22 12 24.5 | |
| | comp=Z,26nm,18.2s,baz=30,slow=39 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.22** | **189** | T | T | 22 33 43.2 | |
| | baz=5.9,slow=76,SNR=1394 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.23** | **189** | T | T | 22 33 41.9 | |
| | baz=5.9,slow=76,SNR=1382 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.24** | **189** | T | T | 22 33 41.7 | |
| | baz=5.9,slow=76,SNR=1061 | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.50** | **46** | P | **P** | **21 57 34.1** | **-0.2** |
| | comp=Z,1.1nm,0.7s,baz=294,slow=8.1,SNR=3.2 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **41.00** | **291** | P | **P** | **21 57 57.0** | **+1.5** |
| | comp=Z,0.6nm,0.5s,baz=63,slow=8.2,SNR=4.9 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **NEW** | **Newport** | **43.68** | **66** | P | **P** | **21 58 16.7** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=297,slow=10,SNR=4.4 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **44.22** | **77** | P | **P** | **21 58 20.8** | **-0.8** |
| | comp=Z,1.0nm,0.4s,baz=269,slow=7.0,SNR=5.0 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **48.92** | **78** | P | **P** | **21 58 58.5** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=290,slow=9.0,SNR=7.6 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **51.22** | **68** | P | **P** | **21 59 14.8** | **-1.3** |
| **PDAR** | **Pinedale Array** | **51.22** | **68** | P | **P** | **21 59 16.6** | **+0.5** |
| | comp=Z,3.4nm,0.8s,baz=289,slow=4.5,SNR=4.6 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **SNCC** | **San Nicolas Is** | **51.66** | **83** | P | **P** | **21 59 18.5** | **-0.7** |
| **ULM** | **Lac du Bonnet** | **53.63** | **53** | P | **P** | **21 59 32.4** | **-1.1** |
| | comp=Z,1.2nm,0.4s,baz=326,slow=1.7,SNR=1.6 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **53.99** | **308** | P | **P** | **21 59 37.0** | **+0.9** |
| **KURBB** | **Kurchatov Arra** | **54.10** | **308** | P | **P** | **21 59 37.0** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=55,slow=7.6,SNR=8.0 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **54.76** | **303** | P | **P** | **21 59 39.2** | **-2.6** |
| MK31 | | | | IAmb | IAmb | 22 00 00.4 | |
| | comp=Z,2.6nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **54.76** | **303** | P | **P** | **21 59 39.2** | **-2.6** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.76** | **303** | P | **P** | **21 59 39.7** | **-2.2** |
| **MKAR** | **Makanchi Array** | **54.76** | **303** | P | **P** | **21 59 41.6** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=52,slow=7.0,SNR=8.8 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **BRVK** | **Borovoye** | **56.22** | **315** | P | **P** | **21 59 51.4** | **-0.8** |
| BRVK | | | | IAmb | IAmb | 22 00 07.1 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **56.22** | **315** | P | **P** | **21 59 51.4** | **-0.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **63.18** | **342** | P | **P** | **22 00 40.1** | **+0.1** |
| | comp=Z,0.7nm,0.7s,baz=42,slow=5.9,SNR=3.5 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **63.42** | **317** | P | **P** | **22 00 41.6** | **-0.1** |
| **ABKAR** | **Akbulak array** | **63.42** | **317** | P | **P** | **22 00 42.0** | **+0.3** |
| ABKAR | | | | IAmb | IAmb | 22 00 43.4 | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **63.95** | **75** | P | **P** | **22 00 45.5** | **-0.2** |
| TX31 | | | | IAmb | IAmb | 22 00 47.7 | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.95** | **75** | P | **P** | **22 00 45.0** | **-0.7** |
| **TXAR** | **Lajitas Array** | **63.95** | **75** | P | **P** | **22 00 46.2** | **+0.5** |
| | comp=Z,0.9nm,0.6s,baz=300,slow=6.1,SNR=11 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.32** | **268** | P | **P** | **22 00 56.5** | **+1.9** |
| | comp=Z,0.5nm,0.3s,baz=26,slow=7.3,SNR=4.3 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **NB2** | **NORSAR Subarra** | **65.74** | **350** | P | **P** | **22 00 56.8** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=12,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.74** | **350** | P | **P** | **22 00 56.5** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=3.3,slow=5.1,SNR=4.0 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **66.34** | **348** | P | **P** | **22 00 59.2** | **-1.3** |
| | comp=Z,1.0nm,0.7s,baz=25,slow=3.9,SNR=6.5 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **TKL** | **Tuckaleechee C** | **70.26** | **57** | LR | LR | 22 33 35.9 | |
| | comp=Z,44nm,18.3s,baz=330,slow=37 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **72.42** | **357** | P | **P** | **22 01 37.9** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=17,slow=6.0,SNR=1.8 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.28** | **216** | P | **P** | **22 02 19.3** | **+1.6** |
| | comp=Z,1.3nm,0.9s,baz=30,slow=5.8,SNR=6.3 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **82.86** | **215** | P | **P** | **22 02 39.4** | **+2.7** |
| | comp=Z,0.9nm,0.9s,baz=29,slow=2.9,SNR=5.1 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **143.93** | **218** | PKP | PKPbc | 22 09 45.3 | +1.3 |
| | comp=Z,1.4nm,1.0s,baz=27,slow=2.3,SNR=3.9 | | | | | | |

**IDC 07 21:57:06.5±24.0,15.°92S×175.°79W,h250km±223km,**
**mb3.5/4,mbtmp4.1/4,Error ellipse: s-maj=164.1km**
**s-min=65.6km az=139.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **41.79** | **240** | P | P | 22 04 31.8 | -0.1 |
| | 1.0nm,0.6s,baz=58,slow=9.5,SNR=0.8 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.49** | **257** | P | P | 22 05 16.8 | -0.2 |
| | 2.7nm,0.6s,baz=93,slow=6.7,SNR=86 | | | | | | |
| | 2.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **47.76** | **252** | P | P | 22 05 19.1 | -0.1 |
| | 7.4nm,0.5s,baz=87,slow=8.0,SNR=128 | | | | | | |
| | 7.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **83.42** | **12** | P | P | 22 09 05.5 | 0.0 |
| | 0.2nm,0.5s,baz=191,slow=4.4,SNR=2.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.07** | **319** | PKPbc | PKPdf | 22 16 13.7 | -0.9 |
| | 0.7nm,0.7s,baz=73,slow=5.0,SNR=4.4 | | | | | | |

**IDC 07 22:16:32.3±28.0,26.°67S×71.°01E,h0km,mb3.8/3,**
**mbtmp3.8/3,MS3.5/5,Error ellipse: s-maj=934.7km**
**s-min=45.5km az=49.0,Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Garcia H** | **18.98** | **4** | T | T | 22 40 02.9 | |
| | baz=181 | | | | | | |
| **H08S2** | **Diego Garcia H** | **18.98** | **5** | T | T | 22 40 07.6 | |
| | baz=181 | | | | | | |
| **H08S3** | **Diego Garcia H** | **19.00** | **4** | T | T | 22 40 08.3 | |
| | baz=181 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **24.73** | **213** | T | T | 22 46 51.5 | |
| | baz=46 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **24.74** | **213** | T | T | 22 46 54.3 | |
| | baz=46,slow=75 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **24.75** | **213** | T | T | 22 46 48.0 | |
| | baz=46,slow=75 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.16** | **212** | T | T | 22 47 25.0 | |
| | baz=46 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **25.17** | **212** | T | T | 22 47 23.4 | |
| | baz=46 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **25.18** | **212** | T | T | 22 47 29.1 | |
| | baz=46 | | | | | | |
| **PALK** | **Pallekele** | **35.03** | **17** | LR | LR | 22 33 35.6 | |
| | comp=Z,65nm,20.6s,baz=302,slow=29 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **37.71** | **113** | T | T | 23 03 22.6 | |
| | baz=264 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **37.71** | **113** | T | T | 23 03 27.5 | |
| | baz=264 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **37.73** | **113** | T | T | 23 03 28.9 | |
| | baz=264 | | | | | | |
| **BOSA** | **Boshof** | **40.39** | **256** | LR | LR | 22 37 16.9 | |
| | comp=Z,98nm,20.0s,baz=78,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **40.74** | **262** | LR | LR | 22 37 48.0 | |
| | comp=Z,62nm,18.1s,baz=106,slow=31 | | | | | | |
| **SUR** | **Sutherland** | **43.73** | **250** | LR | LR | 22 39 23.9 | |
| | comp=Z,65nm,20.2s,baz=110,slow=31 | | | | | | |
| **TSUM** | **Tsumeb** | **49.47** | **267** | LR | LR | 22 43 52.7 | |
| | comp=Z,34nm,19.2s,baz=156,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **56.49** | **102** | P | P | 22 26 16.4 | -0.2 |
| | 1.1nm,1.0s,baz=250,slow=6.6,SNR=4.7 | | | | | | |
| | 1.1nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.05** | **98** | P | P | 22 26 27.6 | +0.1 |
| | 1.4nm,0.9s,baz=254,slow=6.9,SNR=5.0 | | | | | | |
| | 1.4nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **73.83** | **8** | P | P | 22 28 08.6 | +0.1 |
| | 0.8nm,0.8s,baz=190,slow=6.2,SNR=3.7 | | | | | | |
| | 0.8nm,0.8s | | | | | | |

*IDC **07** 22:31:37.0±0.7, 11.°26S×163.°91E, h0km, mb4.2/11, mbtmp4.2/12, ML4.4/1, MS3.5/16, Error ellipse: s-maj=27.1km s-min=18.6km az=93.0*

*NEIC **07** 22:31:38.6±1.2, 11.°22S±0.°08×164.°16E±0.°08, h10km±1km, mb4.7/24, Error ellipse: s-maj=18.7km s-min=4.7km az=42.0*

*NOU **07** 22:31:39.9, 10.°98S×164.°34E, h133km, mb4.9/10, Santa Cruz Islands Region*

**ISC 07 22:31:38.4±0.5,11.°28S±0.°07×164.°09E±0.°09,h10km,n77,**
**σ1ᵍ08/60,mb4.5/20,MS3.4/12,Santa Cruz Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **4.47** | **294** | P | **Pn** | **22 32 47.6** | **+1.3** |
| **HNR** | **Honiara** | **4.47** | **294** | | **Pn** | **22 32 47.0** | **+0.7** |
| **HNR** | **Honiara** | **4.47** | **294** | LR | LR | 22 34 05.4 | |
| | comp=Z,3μm,20.0s,baz=99,slow=34 | | | | | | |
| **DVP** | **Devils Point** | **7.53** | **149** | P | **Pn** | **22 33 29.7** | **+1.4** |
| **RTV** | **Rentapao** | **7.71** | **148** | P | **Pn** | **22 33 32.9** | **+2.1** |
| **KOUNC** | **Koumac, New Ca** | **9.22** | **179** | | **Pn** | **22 33 52.8** | **+1.3** |
| **LIFNC** | **LIFOU** | **9.91** | **163** | Pn | **Pn** | **22 34 00.5** | **-0.5** |
| **DZM** | **Mont Dzumac** | **10.96** | **168** | P | **Pn** | **22 34 17.4** | **+1.9** |
| **DZM** | **Mont Dzumac** | **10.96** | **168** | | **Pn** | **22 34 15.2** | **-0.2** |
| **DZM** | **Mont Dzumac** | **10.96** | **168** | Pn | **Pn** | **22 34 15.6** | **+0.2** |
| | 2.6nm,0.3s,baz=357,slow=19,SNR=24 | | | | | | |
| DZM | | | | Sn | **Sn** | **22 36 13.8** | **-4.5** |
| | 0.3nm,0.3s,baz=258,slow=22,SNR=1.2 | | | | | | |
| DZM | | | | LR | LR | 22 37 43.7 | |
| | comp=Z,226nm,19.0s,baz=45,slow=33 | | | | | | |
| | 11nm,0.6s | | | | | | |
| **NOUC** | **Port Laguerre** | **10.96** | **169** | P | **Pn** | **22 34 16.8** | **+1.4** |
| **YATNC** | **Mamie plateau,** | **11.05** | **166** | P | **Pn** | **22 34 16.7** | **+0.1** |
| **ONTNC** | **Ouen Toro** | **11.19** | **169** | Pn | **Pn** | **22 34 19.8** | **+1.2** |
| **PINNC** | **Pines Island,** | **11.71** | **165** | | **Pn** | **22 34 26.4** | **+0.8** |
| **MSVF** | **Nonsavu** | **14.95** | **117** | LR | LR | 22 40 15.5 | |
| | comp=Z,202nm,19.2s,baz=267,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **16.76** | **275** | LR | LR | 22 41 53.7 | |
| | comp=Z,248nm,19.1s,baz=127,slow=37 | | | | | | |
| **EIDS** | **Eidsvold** | **18.66** | **220** | P | **P** | **22 35 57.9** | **+1.3** |
| **CTA** | **Charters Tower** | **19.26** | **241** | P | **Pn** | **22 36 05.1** | **+0.8** |
| | 2.8nm,0.7s,baz=68,slow=11,SNR=32 | | | | | | |
| CTA | | | | LR | LR | 22 42 40.4 | |
| | comp=Z,8.2nm,18.5s,baz=55,slow=35 | | | | | | |
| **CTAO** | **Charters Tower** | **19.26** | **241** | P | **P** | **22 36 04.7** | **+1.4** |
| CTAO | | | | IAmb | IAmb | 22 36 06.3 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **COEN** | **Coen** | **20.58** | **260** | P | **P** | **22 36 17.8** | **+0.1** |
| COEN | | | | IAmb | IAmb | 22 36 41.0 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **22.29** | **209** | P | **P** | **22 36 36.7** | **+0.6** |
| ARMA | | | | IAmb | IAmb | 22 36 57.4 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **29.17** | **222** | P | **P** | **22 37 40.3** | **+0.3** |
| **URZ** | **Urewera** | **29.28** | **159** | LR | LR | 22 47 20.2 | |
| | comp=Z,86nm,18.7s,baz=37,slow=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.70** | **5** | T | T | 23 08 50.3 | |
| | baz=189,slow=76,SNR=14 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.70** | **5** | T | T | 23 08 57.7 | |
| | baz=189,slow=76,SNR=8.4 | | | | | | |
| **WR0** | **Warramunga Arr** | **29.70** | **249** | P | **P** | **22 37 44.5** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 22 37 45.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.71** | **5** | T | T | 23 09 03.0 | |
| | baz=189,slow=76,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **29.88** | **250** | P | **P** | **22 37 45.0** | **-1.5** |
| | comp=Z,13nm,0.8s,baz=79,slow=9.0,SNR=55 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 40 50.0** | **+0.3** |
| | comp=Z,3.3nm,1.0s,baz=77,slow=3.4,SNR=12 | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.92** | **5** | T | T | 23 10 31.6 | |
| | baz=184,slow=76,SNR=6.9 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.93** | **5** | T | T | 23 10 22.8 | |
| | baz=184,slow=76,SNR=4.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.94** | **5** | T | T | 23 10 31.2 | |
| | baz=184,slow=76,SNR=5.0 | | | | | | |
| **DSZ** | **Denniston Nort** | **31.09** | **169** | P | **P** | **22 37 58.3** | **+1.4** |
| **GUMO** | **Guam** | **31.21** | **322** | LR | LR | 22 49 24.9 | |
| | comp=Z,102nm,22.0s,baz=125,slow=34 | | | | | | |
| **AS31** | **Alice Springs** | **31.24** | **243** | P | **P** | **22 37 58.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **31.24** | **243** | P | **P** | **22 37 56.7** | **-1.8** |
| | comp=Z,1.9nm,0.8s,baz=63,slow=10,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 40 53.0** | **-0.2** |
| | comp=Z,2.3nm,0.7s,baz=71,slow=2.5,SNR=13 | | | | | | |
| ASAR | | | | LR | LR | 22 50 13.4 | |
| | comp=Z,78nm,18.4s,baz=72,slow=36 | | | | | | |
| | comp=Z,1.9nm

2.3nm,0.8s,baz=7.3,slow=18,SNR=1.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **31.66** | **251** | P | P | 22 45 12.9 | 0.0 |
| | 0.9nm,1.0s,baz=84,slow=9.1,SNR=3.0 | | | | | | |
| | 0.9nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **32.88** | **244** | P | P | 22 45 23.4 | -0.1 |
| | 0.8nm,0.8s,baz=74,slow=9.8,SNR=5.3 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **78.30** | **180** | P | P | 22 50 47.8 | +0.2 |
| | 1.2nm,0.8s,baz=229,slow=0.9,SNR=5.0 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **94.29** | **317** | P | P | 22 52 06.5 | -0.2 |
| | 0.3nm,0.5s,baz=100,slow=4.9,SNR=6.2 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**BUL 07 22:54:38.3±2.1, 11°.93S×28°.17E, h10km, MD4.9, Zaire**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSMZ** | **Kasama** | **3.47** | **60** | *i* P | Pg | 22 56 02.2 | +17 |
| KSMZ | | | | *i* | | 22 56 02.3 | |
| | baz=243,slow=9.3 | | | | | | |
| KSMZ | | | | *i* S | Sg | 22 56 53.3 | +24 |
| **KRI** | **Karoi** | **5.07** | **164** | *i* P | Pb | 22 56 03.3 | -4.0 |
| KRI | | | | *i* S | Sb | 22 57 04.8 | -3.6 |
| **KRI** | **Karoi** | **5.07** | **164** | *i* P | Pb | 22 56 03.3 | -4.0 |
| KRI | | | | *i* S | Sb | 22 57 04.8 | -3.6 |
| **MATP** | **Matopo** | **8.46** | **178** | *i* P | Pn | 22 56 39.6 | -1.5 |
| MATP | | | | *i* S | Sn | 22 58 07.6 | -9.1 |
| **MATP** | **Matopo** | **8.46** | **178** | *i* P | Pn | 22 56 39.6 | -1.5 |
| MATP | | | | *i* S | Sn | 22 58 07.6 | -9.1 |
| **CHIPN** | **CHIPINGE** | **9.31** | **153** | *i* P | Pn | 22 56 54.5 | +1.7 |
| CHIPN | | | | *i* S | Sn | 22 58 34.3 | -3.4 |
| **CHIPN** | **CHIPINGE** | **9.31** | **153** | *i* P | Pn | 22 56 54.5 | +1.7 |
| CHIPN | | | | *i* S | Sn | 22 58 34.3 | -3.4 |
| **MUSN** | **Musina, Limpop** | **10.43** | **171** | *i* P | Pn | 22 57 05.7 | -2.4 |
| MUSN | | | | *i* S | Sn | 22 58 52.6 | -13 |
| **MUSN** | **Musina, Limpop** | **10.43** | **171** | *i* P | Pn | 22 57 05.7 | -2.4 |
| MUSN | | | | *i* S | Sn | 22 58 52.6 | -13 |
| **MOPA** | **Mopani** | **11.93** | **166** | *i* P | Pn | 22 57 30.7 | +2.1 |
| MOPA | | | | *i* S | Sn | 22 59 36.0 | -5.9 |
| **MOPA** | **Mopani** | **11.93** | **166** | *i* P | Pn | 22 57 30.7 | +2.1 |
| MOPA | | | | *i* S | Sn | 22 59 36.0 | -5.9 |
| **LBTB** | **Lobatse** | **13.24** | **190** | *i* P | Pn | 22 57 42.8 | -3.8 |
| **LBTB** | **Lobatse** | **13.24** | **190** | *i* P | Pn | 22 57 42.8 | -3.8 |
| **BOSA** | **Boshof** | **16.83** | **189** | *i* P | Pn | 22 58 33.2 | -1.0 |
| **BOSA** | **Boshof** | **16.83** | **189** | *i* P | Pn | 22 58 33.2 | -1.0 |

**RSNC 07 23:23:16.3±0.0, 7°.N±2°.×7°.6W±°, h22km±2km, M2.2, mb4.2, ML2.2, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DBBC** | **Dabeiba** | **0.47** | **148** | P | Pb | 23 23 24.7 | -1.3 |
| DBBC | | | | S | Sb | 23 23 33.0 | +0.5 |
| **APAC** | **Apartado, Choc** | **0.49** | **346** | P | Pb | 23 23 24.8 | -1.5 |
| APAC | | | | S | Sb | 23 23 34.0 | +0.9 |
| **UREC** | **San Jos de Ur** | **0.98** | **70** | P | Pb | 23 23 31.8 | -2.8 |
| UREC | | | | S | Sb | 23 23 45.4 | -1.6 |
| **PTAC** | **Punta Ardita,** | **1.36** | **259** | P | Pn | 23 23 37.8 | -2.2 |
| PTAC | | | | S | Sn | 23 23 54.9 | -2.6 |
| **CAPC** | **Capurgana** | **1.50** | **324** | P | Pn | 23 23 38.4 | -3.5 |
| CAPC | | | | S | Sn | 23 23 59.1 | -1.6 |
| **ZARC** | **Zaragoza, Cauc** | **1.59** | **87** | P | Pn | 23 23 41.8 | -1.4 |
| ZARC | | | | S | Sn | 23 24 02.1 | -1.0 |
| **PTBC** | **PUERTO BERRIO,** | **2.17** | **114** | P | Pn | 23 23 49.5 | -1.7 |
| PTBC | | | | S | Sn | 23 24 17.9 | +0.4 |
| **NORC** | **Norcasia** | **2.43** | **139** | P | Pn | 23 23 56.1 | +1.3 |
| NORC | | | | S | Sb | 23 24 28.5 | -0.4 |
| **PLMC** | **San Jos del P** | **2.50** | **176** | P | Pn | 23 23 55.4 | -0.4 |
| PLMC | | | | S | Sn | 23 24 25.8 | +0.1 |
| **SJCC** | **San Jacinto, C** | **2.77** | **27** | P | Pn | 23 24 00.3 | +0.9 |
| SJCC | | | | S | Sn | 23 24 26.5 | -5.7 |
| **OCAC** | **Ocana** | **3.22** | **75** | P | Pn | 23 24 07.8 | +2.1 |
| OCAC | | | | S | Sn | 23 24 41.6 | -1.8 |
| **YOTC** | **Yotoco, Valle** | **3.42** | **178** | P | Pn | 23 24 06.4 | -2.0 |
| YOTC | | | | S | Sn | 23 24 48.4 | +0.1 |
| **RUSC** | **La Rusia** | **3.68** | **114** | P | Pn | 23 24 13.2 | +0.8 |
| RUSC | | | | S | Sn | 23 24 53.2 | -2.2 |
| **PAMC** | **Pamplona, Colo** | **3.73** | **91** | P | Pn | 23 24 14.5 | +1.5 |
| PAMC | | | | S | Sn | 23 24 54.3 | -2.3 |
| **PRAC** | **Prado** | **4.00** | **157** | P | Pn | 23 24 18.1 | +1.7 |
| **CRJC** | **Cerrejon, Guaj** | **5.03** | **44** | P | Pn | 23 24 30.7 | +0.2 |
| CRJC | | | | S | Sn | 23 25 19.4 | -8.6 |

*GCMT **07** 23:29:39.0±0.3, 16°.44S±0°.02×176°.67E±0°.02, h25km±1km, MW4.9/87, Moment Tensor Solution. s29,c33; s87,c113; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_rr$0.19±.13; $M_{\theta\theta}$-0.61±.12; $M_{\phi\phi}$0.42±.10; $M_r\theta$-0.55±.21; $M_{\theta\phi}$0.70±.09; $M_{\phi r}$0.22±.19; Best double couple: $M_o$2.80800×$10^{16}$ NP1:ϕs84.00000°,δ86.00000°,λ-10.00000°. NP2: ϕs175.00000°,δ80.00000°,λ-176.00000°. Principal axes: T 2.6700, Plg4.0000°, Azm130.0000°; N 0.2760, Plg79.0000°, Azm242.0000°; P -2.9460, Plg10.0000°, Azm39.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**IDC 07 23:29:31.3±5.3, 16°.17S×178°.50E, h136km±36km, mb3.9/3, mbtmp4.3/3, MS3.7/36 Error ellipse: s-maj=67.0km s-min=52.8km az=178.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **1.62** | **195** | P | Pn | 23 30 01.8 | +0.6 |
| | 673nm,0.3s,baz=321,slow=17,SNR=2130 | | | | | | |
| MSVF | | | | S | Sn | 23 30 24.3 | +0.3 |
| | 706nm,0.4s,baz=19,slow=21,SNR=24 | | | | | | |
| MSVF | | | | LR | LR | 23 30 36.5 | |
| | comp=Z,2µm,20.7s,baz=262,slow=40 | | | | | | |
| **RAO** | **Raoul Island** | **13.44** | **166** | LR | LR | 23 36 21.9 | |
| | comp=Z,377nm,18.4s,baz=112,slow=31 | | | | | | |
| **URZ** | **Urewera** | **22.04** | **183** | LR | LR | 23 41 22.0 | |
| | comp=Z,191nm,18.1s,baz=72,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **36.95** | **238** | P | P | 23 36 27.9 | +0.6 |
| | 6.6nm,0.8s,baz=64,slow=7.6,SNR=5.7 | | | | | | |
| STKA | | | | LR | LR | 23 49 36.5 | |
| | comp=Z,188nm,19.8s,baz=43,slow=33 | | | | | | |
| | 6.6nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.06** | **258** | P | P | 23 37 09.0 | -0.9 |
| | 2.2nm,0.7s,baz=91,slow=9.1,SNR=9.2 | | | | | | |
| | 2.2nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **42.45** | **253** | P | P | 23 37 13.1 | 0.0 |
| | 3.6nm,0.7s,baz=80,slow=9.2,SNR=19 | | | | | | |
| ASAR | | | | LR | LR | 23 53 06.4 | |
| | comp=Z,102nm,21.7s,baz=91,slow=33 | | | | | | |
| | 3.6nm,0.7s | | | | | | |
| **JCJ** | **Chichijima** | **55.60** | **320** | LR | LR | 23 57 45.2 | |
| | comp=Z,65nm,20.8s,baz=150,slow=30 | | | | | | |
| **DAV** | **Davao City (W)** | **57.23** | **290** | LR | LR | 00 03 23.4 | |
| | comp=Z,49nm,18.3s,baz=126,slow=36 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **57.44** | **241** | LR | LR | 00 01 13.9 | |
| | comp=Z,170nm,21.7s,baz=211,slow=33 | | | | | | |
| **KAPI** | **Kappang** | **58.62** | **274** | LR | LR | 00 02 37.6 | |
| | comp=Z,33nm,20.5s,baz=92,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **61.94** | **184** | LR | LR | 00 02 55.8 | |
| | comp=Z,55nm,19.3s,baz=20,slow=32 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **64.77** | **325** | LR | LR | 00 03 10.2 | |
| | comp=Z,36nm,20.7s,baz=145,slow=31 | | | | | | |
| **JOW** | **Kunigami** | **64.84** | **311** | LR | LR | 00 07 01.7 | |
| | comp=Z,47nm,18.1s,baz=156,slow=35 | | | | | | |
| **JNU** | **Nakatsue** | **66.85** | **318** | LR | LR | 00 02 13.3 | |
| | comp=Z,44nm,21.7s,baz=86,slow=29 | | | | | | |
| **ASAJ** | **Asahikawa** | **68.36** | **333** | LR | LR | 00 09 52.5 | |
| | comp=Z,40nm,18.1s,baz=166,slow=35 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **68.71** | **357** | LR | LR | 00 07 27.5 | |
| | comp=Z,27nm,19.3s,baz=345,slow=33 | | | | | | |
| **KSRS** | **Korea Array** | **71.45** | **320** | LR | LR | 00 05 28.8 | |
| | comp=Z,32nm,22.0s,baz=135,slow=30 | | | | | | |
| **KLR** | **Kul'dur** | **77.13** | **331** | LR | LR | 00 12 55.1 | |
| | comp=Z,32nm,18.6s,baz=169,slow=34 | | | | | | |
| **KDAK** | **Kodiak Island** | **77.47** | **15** | LR | LR | 00 11 13.8 | |
| | comp=Z,32nm,19.4s,baz=226,slow=32 | | | | | | |
| **MA2** | **Magadan** | **78.77** | **346** | LR | LR | 00 11 22.3 | |
| | comp=Z,25nm,20.7s,baz=128,slow=32 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **79.09** | **41** | LR | LR | 00 08 05.6 | |
| | comp=Z,55nm,21.2s,baz=287,slow=29 | | | | | | |
| **PFO** | **Pinyon Flats O** | **79.29** | **50** | LR | LR | 00 09 20.4 | |
| | comp=Z,56nm,19.1s,baz=240,slow=30 | | | | | | |
| **LPIG** | **La Paz** | **80.17** | **61** | LR | LR | 00 12 27.0 | |
| | comp=Z,85nm,18.0s,baz=210,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.27** | **45** | LR | LR | 00 10 00.9 | |
| | comp=Z,95nm,21.5s,baz=258,slow=30 | | | | | | |
| **BBB** | **Bella Bella** | **82.25** | **30** | LR | LR | 00 13 16.3 | |
| | comp=Z,54nm,18.1s,baz=185,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **84.90** | **14** | LR | LR | 00 13 02.4 | |
| | comp=Z,36nm,21.3s,baz=286,slow=31 | | | | | | |
| **DLBC** | **Dease Lake** | **85.44** | **24** | LR | LR | 00 21 41.1 | |
| | comp=Z,31nm,18.1s,baz=284,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **85.51** | **291** | LR | LR | 00 15 53.5 | |
| | comp=Z,22nm,21.7s,baz=125,slow=32 | | | | | | |
| **NEW** | **Newport** | **85.88** | **37** | LR | LR | 00 14 40.4 | |
| | comp=Z,44nm,18.6s,baz=216,slow=32 | | | | | | |
| **ANMO** | **Albuquerque** | **87.37** | **53** | LR | LR | 00 14 56.6 | |
| | comp=Z,36nm,18.7s,baz=334,slow=31 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.60** | **59** | LR | LR | 00 15 15.6 | |
| | comp=Z,41nm,18.3s,baz=242,slow=31 | | | | | | |
| **PDAR** | **Pinedale Array** | **88.16** | **44** | LR | LR | 00 15 01.2 | |
| | comp=Z,26nm,20.0s,baz=252,slow=31 | | | | | | |
| **SONM** | **Songino Array** | **90.32** | **320** | LR | LR | 00 18 23.8 | |
| | comp=Z,27nm,20.6s,baz=98,slow=32 | | | | | | |
| **INK** | **Inuvik** | **91.02** | **16** | LR | LR | 00 17 41.5 | |
| | comp=Z,19nm,19.8s,baz=305,slow=32 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.02** | **25** | LR | LR | 00 19 31.7 | |
| | comp=Z,26nm,21.5s,baz=330,slow=32 | | | | | | |
| **JTS** | **Las Juntas de** | **99.03** | **82** | LR | LR | 00 20 04.2 | |
| | comp=Z,26nm,20.2s,baz=225,slow=31 | | | | | | |
| **PALK** | **Pallekele** | **99.44** | **275** | LR | LR | 00 29 37.5 | |
| | comp=Z,26nm,18.5s,baz=223,slow=36 | | | | | | |
| **ULM** | **Lac du Bonnet** | **99.50** | **40** | LR | LR | 00 23 33.8 | |
| | comp=Z,43nm,18.2s,baz=247,slow=33 | | | | | | |

*IDC **07** 23:34:22.4±0.3, 29°.07S×178°.54W, h203km±3km, mb3.8/10, mbtmp4.3/12, MS3.4/5, Error ellipse: s-maj=17.1km s-min=14.7km az=80.0*
*NEIC **07** 23:34:23.3±1.9, 29°.2S±0°.1×178°.6W±0°.1, h197km±4km, mb4.1/11, Error ellipse: s-maj=19.6km s-min=14.2km az=65.0*

**ISC 07 23:34:22.5±0.4, 29°.24S±0°.06×178°.59W±0°.09, h200km, n86, σ1s42/85, mb4.1/21, 5C, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **0.58** | **92** | Pn | **Pn** | **23 34 49.5** | **-0.4** |
| RAO | | | | Sn | **Sn** | **23 35 11.0** | **0.0** |
| **RAO** | **Raoul Island** | **0.58** | **92** | P | **Pn** | **23 34 51.1** | **+1.2** |
| | 1µm,0.5s,baz=183,slow=1.6,SNR=18 | | | | | | |
| RAO | | | | S | **Sn** | **23 35 12.3** | **+1.3** |
| | 3µm,0.5s,baz=62,slow=23,SNR=26 | | | | | | |
| **URZ** | **Urewera** | **9.69** | **201** | P | **Pn** | **23 36 34.5** | **-3.0** |
| | 4.4nm,0.5s,baz=247,slow=15,SNR=1.5 | | | | | | |
| URZ | | | | S | **Sn** | **23 38 20.0** | **-5.8** |
| | 13nm,0.3s,baz=63,slow=24,SNR=10 | | | | | | |
| **BKZ** | **Black Stump Fm** | **10.71** | **201** | Pn | **Pn** | **23 36 48.6** | **-2.2** |
| **MSVF** | **Nonsavu** | **11.86** | **344** | Pn | **Pn** | **23 37 06.0** | **+0.3** |
| **MSVF** | **Nonsavu** | **11.86** | **344** | P | **Pn** | **23 37 05.1** | **-0.6** |
| | 129nm,0.9s,baz=151,slow=11,SNR=41 | | | | | | |
| MSVF | | | | LR | LR | 23 40 21.0 | |
| | comp=Z,64nm,18.3s,baz=353,slow=31 | | | | | | |
| **MRZ** | **Mangatainoka R** | **12.36** | **201** | Pn | Pn | 23 37 06.8 | -5.0 |
| **NIUE** | **Niue** | **12.83** | **40** | Pn | Pn | 23 37 13.5 | -4.4 |
| **MSWZ** | **Moikau Station** | **13.15** | **201** | | **Pn** | **23 37 24.0** | **+2.3** |
| **PLWZ** | **Palliser** | **13.29** | **201** | Pn | **Pn** | **23 37 24.4** | **+1.0** |
| **PINNC** | **Pines Island,** | **14.19** | **294** | Pn | **Pn** | **23 37 34.3** | **-0.5** |
| **DZM** | **Mont Dzumac** | **15.26** | **294** | P | **P** | **23 37 49.4** | **+1.0** |
| | 8.4nm,1.0s,baz=111,slow=17,SNR=7.8 | | | | | | |
| KOUNC | **Koumac, New Ca** | **17.77** | **295** | P | **P** | **23 38 17.1** | **+1.3** |
| **ARMA** | **Armidale** | **25.84** | **260** | | **P** | **23 39 38.1** | **+2.4** |
| ARMA | | | | IAmb | IAmb | 23 39 59.1 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **33.12** | **278** | P | **P** | **23 40 41.5** | **+1.6** |
| CTAO | | | | IAmb | IAmb | 23 40 48.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **42.67** | **266** | P | **P** | **23 41 59.1** | **-0.6** |
| | comp=Z,0.7nm,0.3s,baz=98,slow=7.1,SNR=12 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 43 49.3** | **+1.5** |
| | comp=Z,0.8nm,0.8s,baz=97,slow=4.8,SNR=2.4 | | | | | | |
| ASAR | | | | ScP | **ScP** | **23 47 17.4** | **-2.3** |
| | comp=Z,0.7nm,0.9s,baz=134,slow=4.0,SNR=2.7 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.37** | **271** | P | **P** | **23 42 05.4** | **0.0** |
| **WB2** | **Warramunga Ar** | **43.54** | **271** | P | **P** | **23 42 07.3** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 23 42 20.4 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.55** | **271** | P | **P** | **23 42 06.3** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=110,slow=7.6,SNR=5.9 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.57** | **272** | P | **P** | **23 42 06.6** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 23 42 09.3 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **SBA** | **Scott Base** | **49.16** | **184** | P | **P** | **23 42 52.6** | **+3.1** |
| SBA | | | | IAmb | IAmb | 23 42 55.7 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **49.20** | **186** | S | **S** | **23 49 40.9** | **+1.4** |
| | comp=Z,0.5nm,0.4s,baz=72,slow=17,SNR=5.9 | | | | | | |
| **QSPA** | **South Pole Qui** | **60.87** | **180** | P | **P** | **23 44 15.3** | **+1.6** |
| QSPA | | | | IAmb | IAmb | 23 44 18.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.87** | **180** | P | **P** | **23 44 15.2** | **+1.6** |
| | comp=Z,7.6nm,1.0s,baz=26,slow=3.0,SNR=13 | | | | | | |
| QSPA | | | | LR | LR | 00 08 05.1 | |
| | comp=Z,29nm,20.5s,baz=43,slow=33 | | | | | | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **BELA** | **Belgrano 2** | **71.00** | **172** | P | **P** | **23 45 18.3** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **77.00** | **326** | P | **P** | **23 45 51.8** | **-1.2** |
| | comp=Z,6.0nm,0.8s,baz=149,slow=5.8,SNR=7.5 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **79.03** | **180** | ⇑P | **P** | **23 46 02.9** | **-1.1** |
| | comp=Z,149nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **79.33** | **179** | P | **P** | **23 46 06.3** | **+0.8** |
| SNAA | | | | IAmb | IAmb | 23 46 09.2 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **79.33** | **179** | ⇑P | **P** | **23 46 06.2** | **+0.6** |
| | comp=Z,59nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **79.33** | **179** | P | **P** | **23 46 05.9** | **+0.3** |
| | comp=Z,2.8nm,1.0s,baz=217,slow=8.9,SNR=12 | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **79.50** | **176** | ⇑P | **P** | **23 46 07.0** | **+0.6** |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **79.92** | **177** | ⇑P | **P** | **23 46 09.6** | **+0.9** |
| | comp=Z,1.7nm,0.4s,baz=200,slow=7.2 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **80.16** | **177** | ⇑P | **P** | **23 46 10.0** | **+0.1** |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **LL06** | **Loncomilla** | **80.93** | **133** | P | **P** | **23 46 15.0** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **85.91** | **327** | P | **P** | **23 46 39.6** | **0.0** |
| | comp=Z,3.0nm,0.8s,baz=130,slow=3.9,SNR=8.9 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.73** | **43** | P | **P** | **23 46 48.3** | **-0.5** |
| | comp=Z,2.1nm,0.8s,baz=222,slow=8.4,SNR=15 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **TIA** | **Tai'an** | **88.81** | **313** | P | **P** | **23 46 54.5** | **+0.9** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **92.19** | **58** | P | **P** | **23 47 09.8** | **+0.1** |
| | comp=Z,0.6nm,0.9s,baz=218,slow=7.9,SNR=6.1 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **NNA** | **Nana** | **94.23** | **106** | LR | LR | 00 22 34.3 | |
| | comp=Z,14nm,18.3s,baz=226,slow=31 | | | | | | |
| **PZH** | **PanZhiHua** | **94.32** | **298** | P | **P** | **23 47 22.3** | **+2.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,180nm,5.1s | | | | | | |
| **LVC** | **Limon Verde** | **94.94** | **119** | LR | LR | 00 20 36.6 | |
| | comp=Z,39nm,21.6s,baz=238,slow=29 | | | | | | |
| **PDAR** | **Pinedale Array** | **95.64** | **44** | P | **P** | **23 47 24.3** | **-1.1** |
| | comp=Z,0.3nm,0.7s,baz=256,slow=7.2,SNR=3.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **96.91** | **13** | P | **P** | **23 47 28.6** | **-1.7** |
| | comp=Z,0.5nm,1.0s,baz=242,slow=5.0,SNR=2.8 | | | | | | |
| | comp=Z,0.5nm,1.0s | | | | | | |
| **LZH** | **Lanzhou** | **97.62** | **307** | *e*P | **P** | **23 47 33.2** | **-1.2** |
| LZH | | | | sP | sP | 23 48 43.2 | -0.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **99.08** | **114** | LR | LR | 00 22 12.1 | |
| | comp=Z,32nm,21.1s,baz=222,slow=29 | | | | | | |
| KURBB | **Kurchatov Arra** | **119.92** | **314** | PKP | **PKPdf** | **23 52 46.7** | **-1.9** |
| | comp=Z,1.4nm,0.7s,baz=101,slow=1.8,SNR=16 | | | | | | |
| **KKAR** | **Karatay Array** | **124.00** | **304** | PKPdf | **PKPdf** | **23 52 56.5** | **-0.2** |
| **FIA1** | **FINESS Array S** | **143.88** | **340** | PKPdf | PKPab | 23 53 30.0 | -0.8 |
| **FINES** | **FINESS Array B** | **143.88** | **340** | PKPdf | PKPab | 23 53 30.2 | -0.5 |
| **FINES** | **FINESS Array B** | **143.88** | **340** | PKP | PKPab | 23 53 29.8 | -1.0 |
| | comp=Z,11nm,0.9s,baz=52,slow=5.0,SNR=20 | | | | | | |
| **KBZ** | **Khabaz** | **144.03** | **305** | PKP | **PKPab** | **23 53 32.2** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=36,slow=11,SNR=3.2 | | | | | | |
| **NC303** | **NORSAR Array S** | **147.33** | **351** | PKPdf | **PKPdf** | **23 53 40.5** | **+1.4** |
| **NB2** | **NORSAR Subarra1** | **147.53** | **351** | PKP | **PKPdf** | **23 53 40.8** | **+1.3** |
| | comp=Z,19nm,1.2s,baz=11,slow=2.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **147.53** | **351** | PKPbc | **PKPdf** | **23 53 40.7** | **+1.3** |
| | comp=Z,5.8nm,1.0s,baz=14,slow=4.5,SNR=12 | | | | | | |
| **HFS** | **Hagfors** | **148.00** | **348** | PKPbc | **PKPdf** | **23 53 42.0** | **+1.8** |
| | comp=Z,8.3nm,0.9s,baz=351,slow=1.9,SNR=11 | | | | | | |
| AKASG | **Malin Array Be** | **150.07** | **324** | | **PKPbc** | **23 53 48.0** | **-1.0** |
| AKASG | **Malin Array Be** | **150.07** | **324** | PKPbc | **PKPbc** | **23 53 47.7** | **-1.2** |
| | comp=Z,13nm,0.9s,baz=49,slow=2.5,SNR=19 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **150.74** | **286** | PKPbc | **PKPbc** | **23 53 51.5** | **+0.2** |
| | comp=Z,11nm,0.7s,baz=74,slow=6.2,SNR=11 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.59** | **300** | | **PKPbc** | **23 53 52.1** | **-1.0** |
| **BRTR** | **Keskin Array B** | **151.59** | **300** | PKPbc | **PKPbc** | **23 53 51.9** | **-1.2** |
| | comp=Z,2.3nm,0.9s,baz=95,slow=2.7,SNR=10 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **153.71** | **6** | PKPab | **PKPab** | **23 54 08.2** | **-2.4** |
| | comp=Z,1.6nm,0.6s,baz=339,slow=3.6,SNR=6.8 | | | | | | |
| **KWP** | **Kalwaria Pacla** | **153.98** | **327** | PKPab | **PKPab** | **23 54 12.0** | **-0.1** |
| BURAR | **Bucovina Array** | **154.01** | **321** | PKPbc | **PKPbc** | **23 53 57.3** | **-0.8** |
| BURAR | | | | PKPab | **PKPab** | **23 54 12.5** | **+0.1** |
| **KHC** | **Kasperske Hory** | **158.06** | **338** | *e*PKPAB | **PKPab** | **23 54 29.0** | **-0.6** |
| **CONA** | **Conrad Observa** | **158.25** | **333** | *e*PKP | **PKPab** | **23 54 29.8** | **-0.7** |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **RONA** | **Rosalia, Austr** | **158.26** | **332** | *e*PKP | **PKPab** | **23 54 30.1** | **-0.4** |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **GEC2** | **GERESS Array S** | **158.27** | **338** | PKPab | **PKPab** | **23 54 30.3** | **-0.3** |
| **GERES** | **GERESS Array B** | **158.27** | **338** | PKPab | **PKPab** | **23 54 29.7** | **-0.9** |
| | comp=Z,0.9nm,0.7s,baz=101,slow=1.4,SNR=7.2 | | | | | | |
| **MOA** | **Molln** | **158.92** | **335** | *e*PKP | **PKPab** | **23 54 32.8** | **-0.6** |
| | comp=Z,2.5nm,1.0s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **159.28** | **336** | *e*PKP | **PKPab** | **23 54 34.8** | **-0.2** |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **SOKA** | **Soboth** | **159.59** | **332** | *e*PKP | **PKPab** | **23 54 35.2** | **-1.2** |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **LESA** | **Schwarzleotal** | **159.84** | **337** | *e*PKP | **PKPab** | **23 54 36.1** | **-1.3** |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **KBA** | **Koelnbreinsper** | **159.91** | **336** | *e*PKP | **PKPab** | **23 54 36.9** | **-1.0** |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **OBKA** | **Obir** | **159.93** | **333** | *e*PKP | **PKPab** | **23 54 35.1** | **-2.8** |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **MYKA** | **Terra Mystica** | **160.18** | **335** | *e*PKP | **PKPab** | **23 54 37.3** | **-1.6** |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **WATA** | **Walderalm** | **160.28** | **339** | *e*PKP | **PKPab** | **23 54 39.0** | **-0.5** |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **160.32** | **339** | *e*PKP | **PKPab** | **23 54 39.3** | **-0.4** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **PRED** | **Cave del Predi** | **160.36** | **334** | PKPab | **PKPab** | **23 54 38.5** | **-1.3** |
| **RETA** | **Reutte** | **160.38** | **341** | *i* PKP | **PKPab** | **23 54 39.5** | **-0.3** |
| | comp=Z,6.7nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **160.41** | **340** | *e*PKP | **PKPab** | **23 54 39.5** | **-0.6** |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **ABTA** | **Abfaltersbach** | **160.49** | **337** | *e*PKP | **PKPab** | **23 54 39.0** | **-1.4** |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **160.49** | **340** | *i* PKP | **PKPab** | **23 54 39.6** | **-0.8** |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **DAVA** | **Damuels** | **160.81** | **342** | *i* PKP | **PKPab** | **23 54 40.6** | **-1.2** |
| | comp=Z,6.8nm,1.3s | | | | | | |
| **FETA** | **Feichten** | **160.82** | **340** | *e*PKP | **PKPab** | **23 54 41.1** | **-0.8** |
| | comp=Z,3.4nm,1.2s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.99** | **181** | PKP | **PKPdf** | **23 54 01.8** | **-0.6** |
| | comp=Z,1.5nm,1.1s,baz=240,slow=3.4,SNR=4.4 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **23 54 56.1** | **-0.1** |
| | comp=Z,2.2nm,1.0s,baz=161,slow=2.8,SNR=7.1 | | | | | | |
| **ESDC** | **Sonseca Array** | **168.68** | **22** | PKPab | **PKPab** | **23 55 14.3** | **-2.2** |
| | comp=Z,0.5nm,0.8s,baz=338,slow=3.0,SNR=5.4 | | | | | | |

**IDC 07 23:58:41.3±1.9, 1.72N×124.97E, h0km, mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=194.0km s-min=25.7km az=64.0, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.41** | **157** | P | P | 00 03 52.6 | +0.4 |
| | 2.0nm,0.3s,

*az=147.0*

**ISC 08 00:17:14.9±0.9, 44°48N±0.05×105°54W±0.05, h0km, n25, σ1°54/25, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.14** | **108** | | **Pg** | **00 17 36.2** | **-0.5** |
| **K22A** | **Casper** | **1.96** | **202** | Pn | **Pb** | **00 17 50.4** | **-1.2** |
| **LAO** | **LASA Array** | **2.26** | **348** | Pn | **Pb** | **00 17 54.9** | **-1.7** |
| **RLMT** | **Red Lodge** | **2.73** | **285** | Pn | **Pb** | **00 18 02.5** | **-2.1** |
| RLMT | | | | IAML | | 00 18 51.1 | |
| | 16nm,0.5s | | | | | | |
| **RWWY** | **Rawlins** | **3.04** | **204** | Pn | **Pn** | **00 18 05.1** | **+0.6** |
| RWWY | | | | IAML | | 00 18 54.4 | |
| | 13nm,1.1s | | | | | | |
| RWWY | | | | IAML | | 00 18 56.8 | |
| | 14nm,1.1s | | | | | | |
| **PHWY** | **Pilot Hill** | **3.17** | **179** | Pn | **Pn** | **00 18 07.1** | **+0.7** |
| **YMP** | **Mirror Lake Pl** | **3.31** | **276** | Pn | **Pn** | **00 18 08.9** | **+0.8** |
| YMP | | | | IAML | | 00 19 07.7 | |
| | comp=N,20nm,0.6s | | | | | | |
| **PD31** | **Pinedale Array** | **3.38** | **241** | Pn | **Pn** | **00 18 07.5** | **-1.6** |
| **PDAR** | **Pinedale Array** | **3.38** | **241** | Pn | **Pn** | **00 18 08.7** | **-0.4** |
| **PDAR** | **Pinedale Array** | **3.38** | **241** | Pn | **Pn** | **00 18 11.8** | **+2.7** |
| | comp=N,0.7nm,0.3s,baz=65,slow=13,SNR=12 | | | | | | |
| PDAR | | | | Pg | **Pg** | **00 18 19.6** | **-0.1** |
| | comp=N,3.5nm,0.3s,baz=68,slow=20,SNR=42 | | | | | | |
| PDAR | | | | Lg | Lg | 00 18 59.2 | |
| | comp=N,2.2nm,0.3s,baz=68,slow=34,SNR=9.8 | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | |
| **N23A** | **Red Feather La** | **3.59** | **185** | Pn | **Pn** | **00 18 13.2** | **+1.1** |
| N23A | | | | IAML | | 00 19 17.0 | |
| | comp=E,11nm,0.6s | | | | | | |
| N23A | | | | IAML | | 00 19 24.1 | |
| | comp=N,13nm,0.6s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.73** | **266** | Pn | **Pn** | **00 18 15.0** | **+1.2** |
| FLWY | | | | IAML | | 00 18 55.6 | |
| | comp=N,8.5nm,3.6s | | | | | | |
| FLWY | | | | IAML | | 00 19 25.5 | |
| | comp=N,9.8nm,1.9s | | | | | | |
| **LOHW** | **Long Hollow** | **3.75** | **258** | Pn | **Pn** | **00 18 15.6** | **+1.5** |
| **YPP** | **Pitchstone Pla** | **3.78** | **269** | Pn | **Pn** | **00 18 16.4** | **+1.8** |
| **TPAW** | **Teton Pass** | **4.03** | **258** | Pn | **Pn** | **00 18 17.3** | **-0.7** |
| TPAW | | | | IAML | | 00 18 46.2 | |
| | comp=N,7.0nm,3.0s | | | | | | |
| **YHL** | **Hebgen Lake** | **4.04** | **277** | Pn | **Pn** | **00 18 19.4** | **+1.1** |
| YHL | | | | IAML | | 00 19 20.6 | |
| | comp=E,8.3nm,3.6s | | | | | | |
| YHL | | | | IAML | | 00 19 37.8 | |
| | comp=N,7.0nm,1.9s | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.46** | **287** | Pn | **Pn** | **00 18 24.8** | **+1.0** |
| BOZ | | | | IAML | | 00 19 19.3 | |
| | comp=N,3.8nm,4.1s | | | | | | |
| BOZ | | | | IAML | | 00 19 43.4 | |
| | comp=N,4.4nm,1.3s | | | | | | |
| **EGMT** | **Eagleton** | **4.60** | **322** | Pn | **Pn** | **00 18 25.8** | **+0.1** |
| **RDMU** | **Red Mountain** | **4.91** | **219** | Pn | **Pn** | **00 18 30.6** | **+0.5** |
| RDMU | | | | IAML | | 00 20 07.4 | |
| | comp=E,5.4nm,3.8s | | | | | | |
| RDMU | | | | IAML | | 00 21 35.6 | |
| | comp=N,6.0nm,4.9s | | | | | | |
| **HWUT** | **Hardware Ranch** | **5.26** | **239** | Pn | **Pn** | **00 18 36.8** | **+1.9** |
| HWUT | | | | IAML | | 00 20 19.1 | |
| | comp=N,4.6nm,3.1s | | | | | | |
| **BPMT** | **Black Pine Rid** | **5.90** | **292** | Pn | **Pn** | **00 18 46.4** | **+2.7** |
| **MSO** | **Missoula** | **6.34** | **295** | Pn | **Pn** | **00 18 52.2** | **+2.6** |
| **ECSD** | **EROS Data Cent** | **6.47** | **93** | Pn | **Pn** | **00 18 53.0** | **+1.7** |
| **ULM** | **Lac du Bonnet** | **8.74** | **45** | Pn | **Pn** | **00 19 22.6** | **+0.3** |
| | comp=N,0.3nm,0.3s,baz=243,slow=11,SNR=1.8 | | | | | | |
| ULM | | | | Lg | Lg | 00 21 52.0 | |
| | comp=N,0.3nm,0.3s,baz=137,slow=22,SNR=2.1 | | | | | | |
| | comp=N,1.1nm,0.6s | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **8.86** | **299** | I | I | 01 09 00.0 | |
| | baz=114,slow=316,SNR=1.0 | | | | | | |

*IDC **08** 00:50:00.1±2.7, 8°54S×115°67E, h0km, mb3.5/6, mbtmp3.6/6, Error ellipse: s-maj=160.6km s-min=21.2km az=51.0*

*DJA **08** 00:50:04.7±0.6, 8°S±5°×11°6E±°, h12km±6km, M4.3/8, mb4.7/1, MLv4.0/8*

**ISC 08 00:50:03.8±0.8, 8°20S±0.08×116°09E±0.04, h10km, n15, σ1°06/19, mb3.6/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRBI** | **Singaraja** | **0.88** | **278** | P | **Pg** | **00 50 21.5** | **+0.8** |
| SRBI | | | | S | **Sb** | **00 50 34.3** | **+1.3** |
| **TWSI** | **Taliwang, Sumb** | **0.94** | **124** | P | **Pg** | **00 50 21.7** | **-0.3** |
| TWSI | | | | S | **Sb** | **00 50 36.3** | **+1.5** |
| **DNP** | **Denpasar** | **0.99** | **242** | P | **Pn** | **00 50 24.8** | **+1.0** |
| DNP | | | | S | **Sn** | **00 50 38.4** | **+0.5** |
| **IGBI** | **Denpasar** | **1.12** | **237** | P | **Pb** | **00 50 24.7** | **-0.5** |
| IGBI | | | | S | **Sg** | **00 50 40.0** | **+0.1** |
| **PLAI** | **Plampang** | **1.78** | **111** | P | **Pn** | **00 50 36.1** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **1.94** | **262** | P | **Pn** | **00 50 36.5** | **-0.3** |
| **PWJI** | **Pagerwojo** | **4.25** | **272** | P | **Pn** | **00 51 09.6** | **+1.0** |
| **BSSI** | **Bau Bau, Buton** | **4.82** | **65** | P | **Pn** | **00 51 17.3** | **+0.9** |
| **UGM** | **Wanagama** | **5.53** | **273** | P | **Pn** | **00 51 26.2** | **0.0** |
| **WRA** | **Warramunga Arr** | **21.17** | **125** | P | **P** | **00 54 48.4** | **-1.0** |
| | 0.9nm,0.6s,baz=301,slow=12,SNR=10.0 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.97** | **134** | P | **P** | **00 55 07.5** | **-1.1** |
| | 1.4nm,0.8s,baz=308,slow=9.0,SNR=10 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.45** | **352** | P | **P** | **00 59 46.2** | **+0.4** |
| | 1.0nm,0.8s,baz=165,slow=8.9,SNR=4.6 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.47** | **334** | P | **P** | **01 00 26.7** | **-0.7** |
| | 0.4nm,0.7s,baz=131,slow=8.2,SNR=2.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.01** | **335** | P | **P** | **01 00 55.6** | **-1.2** |
| | 0.2nm,0.6s,baz=142,slow=4.7,SNR=1.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.31** | **341** | P | **P** | **01 00 56.9** | **-1.8** |
| | 0.7nm,0.7s,baz=146,slow=3.6,SNR=1.9 | | | | | | |
| | 0.7nm,0.7s | | | | | | |

**NAM 08 01:07:16.0±3.0, 19°75S×14°59E, h16km±15km, ML0.1, 5C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST1N** | **ST1** | **0.03** | **55⇑** | *i*P | Pg | 01 07 20.8 | +1.7 |
| ST1N | | | | *i* S | Sg | 01 07 21.9 | +0.8 |
| **ST1N** | **ST1** | **0.03** | **55** | *i* P | Pg | 01 07 16.9 | -2.2 |
| ST1N | | | | *i* S | Sg | 01 07 21.9 | +0.8 |
| ST1N | | | | IAML | | 01 07 22.0 | |
| | comp=Z,5.6nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.06** | **223⇓** | *i*P | Pg | 01 07 20.1 | +0.8 |
| ST9N | | | | *i* S | Sg | 01 07 20.6 | -0.9 |
| **ST9N** | **ST9** | **0.06** | **223** | *i* P | Pg | 01 07 19.9 | +0.6 |
| ST9N | | | | *i* S | Sg | 01 07 20.6 | -0.9 |
| ST9N | | | | IAML | | 01 07 21.1 | |
| | comp=Z,61nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.09** | **276⇓** | *i*P | Pg | 01 07 21.0 | +1.5 |
| ST3N | | | | *i* S | Sg | 01 07 22.4 | +0.5 |
| **ST3N** | **ST3** | **0.09** | **276** | *i* P | Pg | 01 07 20.8 | +1.3 |
| ST3N | | | | *i* S | Sg | 01 07 22.2 | +0.4 |
| ST3N | | | | IAML | | 01 07 23.9 | |
| | comp=Z,1.1nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.16** | **104⇓** | *i*P | Pb | 01 07 22.5 | +1.8 |
| ST5N | | | | *i* S | Sg | 01 07 22.7 | -0.5 |
| **ST2N** | **ST2** | **0.18** | **178⇑** | *i*P | Pb | 01 07 21.8 | +0.9 |
| ST2N | | | | *i* S | Sg | 01 07 23.3 | -0.3 |
| **ST2N** | **ST2** | **0.18** | **178** | *i* P | Pb | 01 07 21.9 | +0.9 |
| ST2N | | | | *i* S | Sg | 01 07 23.9 | +0.3 |
| ST2N | | | | IAML | | 01 07 25.1 | |
| | comp=Z,2.1nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.19** | **255⇑** | *i*P | Pb | 01 07 22.2 | +1.1 |
| ST6N | | | | *i* S | Sg | 01 07 22.3 | -1.7 |
| **ST10N** | **ST10** | **0.31** | **218⇑** | *i*P | Pg | 01 07 22.6 | 0.0 |
| ST10N | | | | *i* S | Sg | 01 07 27.6 | +0.4 |
| **ST10N** | **ST10** | **0.31** | **218** | *i* P | Pg | 01 07 21.4 | -1.3 |
| ST10N | | | | IAML | | 01 07 28.4 | |
| | comp=Z,1.4nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.39** | **111⇑** | *i*P | Pn | 01 07 25.8 | -1.2 |
| ST4N | | | | *i* S | Sb | 01 07 31.3 | +1.0 |

*IDC **08** 01:12:18.9±4.6, 5°48S×151°76E, h66km±39km, mb4.1/11, mbtmp4.4/12, ML2.4/2, MS3.8/31, Error ellipse: s-maj=31.6km s-min=19.2km az=83.0*

*NEIC **08** 01:12:19.4±1.9, 5°48S±0°08×151°7E±0°1, h59km±8km, mb4.8/50, Error ellipse: s-maj=18.8km s-min=8.9km az=115.0*

**ISC 08 01:12:17.6±0.4, 5°67S±0°05×151°91E±0°07, h50km, n136, σ1°50/117, mb4.8/41, MS3.8/32, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.49** | **10** | Pn | **Pn** | **01 12 40.9** | **-1.1** |
| RABL | | | | Sn | **Sn** | **01 12 59.6** | **-0.7** |
| **KAVG** | **Kavieng** | **3.26** | **340** | P | **Pn** | **01 13 07.2** | **+1.0** |
| **PMG** | **Port Moresby** | **6.00** | **231** | P | **Pn** | **01 13 44.9** | **+1.0** |
| **PMG** | **Port Moresby** | **6.00** | **231** | Pn | **Pn** | **01 13 44.9** | **+1.0** |
| **PMG** | **Port Moresby** | **6.00** | **231** | P | **Pn** | **01 13 45.2** | **+1.3** |
| | 5.8nm,0.3s,baz=32,slow=12,SNR=34 | | | | | | |
| PMG | | | | S | **Sn** | **01 14 49.2** | **-2.2** |
| | 38nm,0.4s,baz=132,slow=19,SNR=1.6 | | | | | | |
| | 157nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **8.80** | **116** | LR | LR | 01 17 23.2 | |
| | comp=Z,5μm,21.2s,baz=310,slow=34 | | | | | | |
| **COEN** | **Coen** | **11.91** | **226** | Pn | **Pn** | **01 15 03.4** | **-1.6** |
| **MTSU** | **Mount Surprise** | **14.44** | **210** | P | **Pn** | **01 15 40.5** | **+1.2** |
| **CTA** | **Charters Tower** | **15.36** | **200** | P | **P** | **01 15 55.2** | **+0.2** |
| | baz=12,slow=12,SNR=5.9 | | | | | | |
| CTA | | | | LR | LR | 01 21 27.9 | |
| | comp=Z,27nm,19.2s,baz=33,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **15.36** | **200** | | **P** | **01 15 55.2** | **+0.2** |
| **QIS** | **Mount Isa** | **19.02** | **218** | P | **P** | **01 16 36.7** | **+1.1** |
| **EIDS** | **Eidsvold** | **19.61** | **182** | P | **P** | **01 16 43.7** | **+1.8** |
| **EIDS** | **Eidsvold** | **19.61** | **182** | P | **P** | **01 16 43.0** | **+1.1** |
| **GUMO** | **Guam** | **20.37** | **340** | LR | LR | 01 23 15.1 | |
| | comp=Z,83nm,21.1s,baz=146,slow=33 | | | | | | |
| **KDU** | **Kakadu** | **20.41** | **249** | P | **P** | **01 16 52.2** | **+1.5** |
| **NOUC** | **Port Laguerre** | **21.46** | **141** | P | **P** | **01 17 05.0** | **+3.0** |
| **DZM** | **Mont Dzumac** | **21.53** | **141** | P | **P** | **01 17 05.9** | **+3.1** |
| **DZM** | **Mont Dzumac** | **21.53** | **141** | *e*P | **P** | **01 17 04.9** | **+2.1** |
| | 58nm,22.9s | | | | | | |
| DZM | | | | *e*S | **S** | **01 20 56.7** | **-2.3** |
| | 183nm,24.2s | | | | | | |
| DZM | | | | *e*LR | LR | 01 22 20.5 | |
| | 529nm,22.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.53** | **141** | LR | LR | 01 24 48.9 | |
| | comp=Z,372nm,19.7s,baz=320,slow=34 | | | | | | |
| **MTN** | **Manton Dam** | **21.70** | **249** | P | **P** | **01 17 05.1** | **+0.5** |
| MTN | | | | IAmb | IAmb | 01 17 16.2 | |
| | comp=Z,107nm,1.7s | | | | | | |
| **QLP** | **Quilpie** | **22.05** | **199** | P | **P** | **01 17 10.3** | **+2.0** |
| **WRAB** | **Tennant Creek** | **22.20** | **229** | P | **P** | **01 17 09.8** | **-0.2** |
| **INKA** | **Innaminka** | **24.39** | **205** | P | **P** | **01 17 33.0** | **+1.7** |
| **KNRA** | **Kununurra** | **24.80** | **245** | P | **P** | **01 17 34.3** | **-0.9** |
| **AS01** | **Alice Springs** | **24.89** | **222** | P | **P** | **01 17 38.0** | **+2.0** |
| | comp=Z,36nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **24.92** | **222** | P | **P** | **01 17 37.6** | **+1.4** |
| **ASAR** | **Alice Springs** | **24.92** | **222** | P | **P** | **01 17 36.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **24.92** | **222** | P | **P** | **01 17 36.3** | **0.0** |
| | comp=Z,18nm,0.8s,baz=56,slow=9.0,SNR=122 | | | | | | |
| ASAR | | | | LR | LR | 01 29 09.4 | |
| | comp=Z,170nm,18.3s,baz=65,slow=40 | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **27.81** | **199** | P | **P** | **01 18 03.5** | **+1.3** |
| **STKA** | **Stephens Creek** | **27.81** | **199** | P | **P** | **01 18 03.0** | **+0.8** |
| | comp=Z,2.8nm,0.7s,baz=353,slow=12,SNR=4.0 | | | | | | |
| STKA | | | | LR | LR | 01 29 39.3 | |
| | comp=Z,144nm,18.0s,baz=44,slow=37 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.47** | **242** | P | **P** | **01 18 10.3** | **+2.1** |
| | comp=Z,85nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.47** | **242** | P | **P** | **01 18 06.8** | **-1.4** |
| **DAV** | **Davao City (W)** | **29.17** | **295** | LR | LR | 01 29 30.4 | |
| | comp=Z,170nm,18.4s,baz=180,slow=36 | | | | | | |
| **MBWA** | **Marble Bar** | **34.78** | **241** | P | **P** | **01 19 03.8** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **34.83** | **240** | P | **P** | **01 19 03.3** | **-0.8** |
| **JOW** | **Kunigami** | **39.59** | **326** | LR | LR | 01 32 45.3 | |
| | comp=Z,180nm,21.8s,baz=354,slow=31 | | | | | | |
| **URZ** | **Urewera** | **39.70** | **148** | LR | LR | 01 34 06.1 | |
| | comp=Z,213nm,18.6s,baz=32,slow=33 | | | | | | |
| **MORW** | **Morawa** | **41.12** | **231** | P | **P** | **01 19 56.6** | **-0.4** |
| MORW | | | | IAmb | IAmb | 01 20 22.3 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **YULB** | **Yu-li** | **41.57** | **315** | P | **P** | **01 20 00.3** | **-0.4** |
| YULB | | | | IAmb | IAmb | 01 20 01.8 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.16** | **225** | LR | LR | 01 38 00.3 | |
| | comp=Z,153nm,20.6s,baz=296,slow=37 | | | | | | |
| **JNU** | **Nakatsue** | **43.44** | **334** | LR | LR | 01 36 53.3 | |
| | comp=Z,71nm,19.2s,baz=152,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.91** | **344** | LR | LR | 01 37 06.3 | |
| | comp=Z,131nm,21.1s,baz=176,slow=34 | | | | | | |
| **QIZ** | **Qiongzhong** | **48.16** | **302** | P | **P** | **01 20 52.4** | **-0.8** |
| QIZ | | | | S | **S** | **01 27 49.6** | **+0.6** |
| QIZ | | | | LR | LR | | |
| | comp=N,100nm,15.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,140nm,18.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,180nm,22.0s | | | | | | |
| **KSRS** | **Korea Array** | **48.38** | **334** | P | **P** | **01 20 52.8** | **-1.8** |
| | comp=Z,1.0nm,0.6s,baz=147,slow=8.7,SNR=4.5 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **50.26** | **351** | LR | LR | 01 43 09.6 | |
| | comp=Z,24nm,18.8s,baz=172,slow=37 | | | | | | |
| **GYA** | **Guiyang** | **54.23** | **308** | P | **P** | **01 21 39.2** | **+0.4** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **57.43** | **344** | LR | LR | 01 43 42.1 | |
| | comp=Z,65nm,22.0s,baz=192,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.45** | **296** | P | **P** | **01 21 59.8** | **-2.1** |
| | comp=Z,6.6nm,0.3s,baz=122,slow=6.0,SNR=1.7 | | | | | | |
| CMAR | | | | LR | LR | 01 46 36.2 | |
| | comp=Z,29nm,19.5s,baz=125,slow=36 | | | | | | |
| | comp=Z,6.6nm,0.3s | | | | | | |
| **PZH** | **PanZhiHua** | **58.15** | **306** | P | **P** | **01 22 08.0** | **+1.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,5.9s | | | | | | |
| **PPT2** | **Papeete2** | **58.31** | **107** | *e*LR | LR | 01 39 15.6 | |
| | comp=Z,91nm,25.0s | | | | | | |
| **CD2** | **Chengdu** | **58.64** | **311** | P | **P** | **01 22 09.0** | **-1.0** |
| **HHC** | **Hu-ho-hao-te** | **59.24** | **325** | *e*P | **P** | **01 22 15.7** | **+1.6** |
| HHC | | | | pP | pP | 01 22 24.7 | -3.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,63nm,4.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,120nm,15.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,130nm,14.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,140nm,15.0s | | | | | | |
| **BTO** | **Baotou** | **59.97** | **324** | *e*P | **P** | **01 22 22.7** | **+3.6** |
| BTO | | | | pP | **pP** | **01 22 30.3** | **-3.0** |
| BTO | | | | sP | **sP** | **01 22 35.9** | **-3.1** |
| BTO | | | | PP | **PP** | **01 24 36.1** | **+4.1** |
| BTO | | | | S | **S** | **01 30 35.1** | **+7.0** |
| **BTO** | **Baotou** | **59.97** | **324** | SS | SS | 01 34 20.6 | -4.9 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,140nm,3.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=N,240nm,4.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=E,360nm,4.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,310nm,5.7s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **61.15** | **15** | LR | LR | 01 44 36.8 | |
| | comp=Z,88nm,21.1s,baz=118,slow=32 | | | | | | |
| **MA2** | **Magadan** | **65.04** | **359** | LR | LR | 01 46 13.5 | |
| | comp=Z,44nm,21.9s,baz=133,slow=31 | | | | | | |
| **SONM** | **Songino Array** | **66.59** | **328** | P | **P** | **01 23 01.9** | **-0.9** |
| SONM | | | | IAmb | IAmb | 01 23 02.9 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **SONM** | **Songino Array** | **66.59** | **328** | P | **P** | **01 23 01.6** | **-1.3** |
| | comp=Z,3.5nm,0.7s,baz=142,slow=4.7,SNR=14 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **69.65** | **349** | LR | LR | 01 52 38.9 | |
| | comp=Z,20nm,20.6s,baz=158,slow=35 | | | | | | |
| **VNDA** | **Vanda** | **72.00** | **178** | LR | LR | 01 53 07.1 | |
| | comp=Z,38nm,19.4s,baz=18,slow=34 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **76.52** | **20** | P | **P** | **01 24 03.6** | **+1.4** |
| **M16K** | **Timber Creek** | **76.62** | **22** | P | **P** | **01 24 04.7** | **+2.0** |
| **KDAK** | **Kodiak Island** | **77.34** | **27** | LR | LR | 01 50 49.1 | |
| | comp=Z,54nm,21.8s,baz=238,slow=30 | | | | | | |
| **M17K** | **Holitna River** | **77.43** | **22** | P | **P** | **01 24 08.2** | **+0.9** |
| **J17K** | **VABM Dome** | **78.09** | **20** | P | **P** | **01 24 12.1** | **+1.2** |
| J17K | | | | IAmb | IAmb | 01 24 50.8 | |
| | comp=Z,24nm,1.8s | | | | | | |
| **L18K** | **Granite Mounta** | **78.21** | **22** | P | **P** | **01 24 12.5** | **+0.9** |
| L18K | | | | IAmb | IAmb | 01 26 29.9 | |
| | comp=Z,29nm,1.9s | | | | | | |
| **L19K** | **White Mountain** | **78.88** | **23** | P | **P** | **01 24 15.4** | **+0.1** |
| L19K | | | | IAmb | IAmb | 01 27 06.6 | |
| | comp=Z,15nm,1.6s | | | | | | |
| **J19K** | **Poorman** | **79.67** | **21** | P | **P** | **01 24 21.2** | **+1.6** |
| J19K | | | | IAmb | IAmb | 01 24 23.3 | |
| | comp=Z,22nm,2.0s | | | | | | |
| **K20K** | **Telida** | **79.86** | **22** | P | **P** | **01 24 21.3** | **+0.6** |
| K20K | | | | IAmb | IAmb | 01 26 39.0 | |
| | comp=Z,18nm,1.8s | | | | | | |
| **H19K** | **Roundabout Mou** | **80.32** | **19** | P | **P** | **01 24 22.8** | **-0.2** |
| **MKAR** | **Makanchi Array** | **80.40** | **319** | P | **P** | **01 24 22.2** | **-1.7** |
| **MKAR** | **Makanchi Array** | **80.40** | **319** | P | **P** | **01 24 21.6** | **-2.3** |
| | comp=Z,2.5nm,0.9s,baz=108,slow=5.4,SNR=12 | | | | | | |
| MKAR | | | | LR | LR | 01 59 56.5 | |
| | comp=Z,43nm,20.0s,baz=82,slow=36 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **PWL** | **Port Wells** | **80.80** | **25** | P | **P** | **01 24 25.3** | **-0.5** |
| PWL | | | | IAmb | IAmb | 01 24 27.1 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **81.27** | **18** | P | **P** | **01 24 27.3** | **-0.8** |
| **SML** | **Sawmill** | **81.27** | **25** | P | **P** | **01 24 29.0** | **+0.8** |
| SML | | | | IAmb | IAmb | 01 25 10.7 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **GLI** | **Glacier Island** | **81.34** | **26** | P | **P** | **01 24 28.2** | **-0.4** |
| GLI | | | | IAmb | IAmb | 01 24 55.3 | |
| | comp=Z,30nm,1.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.38** | **327** | P | **P** | **01 24 27.3** | **-1.6** |
| **ZALV** | **Zalesovo Beam** | **81.38** | **327** | P | **P** | **01 24 26.1** | **-2.9** |
| | comp=Z,2.3nm,0.6s,baz=103,slow=5.4,SNR=8.9 | | | | | | |
| ZALV | | | | LR | LR | 02 00 12.2 | |
| | comp=Z,44nm,20.3s,baz=102,slow=35 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **IMAR** | **Indian Mountai** | **81.49** | **20** | P | **P** | **01 24 28.5** | **-0.8** |
| **H21K** | **Melozitna Rive** | **81.62** | **20** | P | **P** | **01 24 29.5** | **-0.6** |
| **D19K** | **Kuna River** | **81.67** | **17** | P | **P** | **01 24 29.8** | **-0.4** |
| D19K | | | | IAmb | IAmb | 01 27 22.3 | |
| | comp=Z,14nm,1.6s | | | | | | |
| **MLY** | **Manley** | **82.00** | **21** | P | **P** | **01 24 31.5** | **-0.6** |
| MLY | | | | IAmb | IAmb | 01 24 56.2 | |
| | comp=Z,14nm,1.7s | | | | | | |
| **ILAR** | **Eielson Array** | **83.29** | **22** | P | **P** | **01 24 37.5** | **-1.2** |
| **ILAR** | **Eielson Array** | **83.29** | **22** | P | **P** | **01 24 36.5** | **-2.3** |
| | comp=Z,1.7nm,0.8s,baz=248,slow=5.6,SNR=16 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **83.79** | **23** | P | **P** | **01 24 40.6** | **-0.7** |
| **KURBB** | **Kurchatov Arra** | **83.93** | **322** | P | **P** | **01 24 40.2** | **-2.1** |
| | comp=Z,1.3nm,0.4s,baz=106,slow=4.6,SNR=8.1 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **M27K** | **Edge Creek, AK** | **84.23** | **25** | P | **P** | **01 24 44.6** | **+0.8** |
| **QSPA** | **South Pole Qui** | **84.30** | **180** | P | **P** | **01 24 44.8** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 01 25 13.1 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.30** | **180** | P | **P** | **01 24 43.5** | **-0.6** |
| | comp=Z,1.2nm,0.9s,baz=324,slow=1.8,SNR=2.4 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **84.44** | **203** | LR | LR | 01 58 54.6 | |
| | comp=Z,48nm,21.6s,baz=98,slow=33 | | | | | | |
| **BCAR** | **Beaver Creek A** | **84.56** | **25** | P | **P** | **01 24 45.7** | **+0.4** |
| **GRNB** | **Grenville Isla** | **87.58** | **35** | P | **P** | **01 25 01.3** | **+1.0** |
| **KKAR** | **Karatay Array** | **87.58** | **314** | P | **P** | **01 25 00.6** | **0.0** |
| **BBB** | **Bella Bella** | **88.32** | **37** | LR | LR | 02 00 49.6 | |
| | comp=Z,38nm,18.7s,baz=327,slow=33 | | | | | | |
| **DLBC** | **Dease Lake** | **88.57** | **31** | LR | LR | 01 58 36.4 | |
| | comp=Z,97nm,20.5s,baz=266,slow=31 | | | | | | |
| **BRVK** | **Borovoye** | **89.47** | **323** | P | **P** | **01 25 07.6** | **-1.7** |
| BRVK | | | | IAmb | IAmb | 01 25 08.5 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **HUMO** | **Hull Mountain** | **90.22** | **47** | P | **P** | **01 25 14.1** | **+1.1** |
| **YBH** | **Yreka Blue Hor** | **90.29** | **48** | P | **P** | **01 25 14.1** | **+0.6** |
| YBH | | | | IAmb | IAmb | 01 25 17.0 | |
| | comp=Z,6.9nm,1.3s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **90.29** | **48** | LR | LR | 01 58 40.2 | |
| | comp=Z,41nm,20.6s,baz=278,slow=31 | | | | | | |
| **J05D** | **Fort Rock, OR** | **91.55** | **47** | P | **P** | **01 25 19.8** | **+0.4** |
| **I05D** | **Terrebonne, OR** | **91.59** | **46** | P | **P** | **01 25 19.8** | **+0.4** |
| **PINE** | **Pine Mountain** | **91.82** | **46** | P | **P** | **01 25 20.6** | **-0.1** |
| **PAHR** | **Pah Rah Range** | **92.58** | **51** | P | **P** | **01 25 24.4** | **+0.2** |
| PAHR | | | | IAmb | IAmb | 01 25 26.2 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| **I07A** | **Izee** | **92.88** | **46** | P | **P** | **01 25 25.8** | **+0.3** |
| I07A | | | | IAmb | IAmb | 01 25 27.3 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.31** | **52** | P | **P** | **01 25 28.5** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **93.31** | **52** | P | **P** | **01 25 28.2** | **+0.5** |
| | comp=Z,2.6nm,0.9s,baz=264,slow=6.0,SNR=17 | | | | | | |
| NVAR | | | | LR | LR | 02 03 34.3 | |
| | comp=Z,77nm,18.5s,baz=270,slow=33 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **G08A** | **Pilot Rock** | **93.37** | **45** | P | **P** | **01 25 28.1** | **+0.5** |
| G08A | | | | IAmb | IAmb | 01 25 29.9 | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **93.37** | **48** | P | **P** | **01 25 28.8** | **+1.0** |
| WVOR | | | | IAmb | IAmb | 01 25 29.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **NV11** | **Mina Array Sit** | **93.43** | **52** | P | **P** | **01 25 29.2** | **+1.0** |
| NV11 | | | | IAmb | IAmb | 01 25 30.4 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **KVN** | **Kaiserville** | **93.52** | **51** | P | **P** | **01 25 27.9** | **-0.7** |
| KV

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.85** | **279** | I | I | 01 25 18.3 | |
| | 0.2nm,1.1s,baz=94,slow=318,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.85** | **279** | Pg | Pn | 01 13 11.4 | +0.7 |
| | 1.3nm,0.3s,baz=98,slow=12,SNR=21 | | | | | | |
| ZALV | | | | Lg | Lg | 01 13 35.7 | |
| | 1.7nm,0.3s,baz=100,slow=24,SNR=9.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.54** | **246** | Pn | Pn | 01 14 16.3 | +1.3 |
| | 0.1nm,0.3s,baz=64,slow=14,SNR=7.0 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.78** | **210** | Pn | Pn | 01 14 32.7 | +0.4 |
| | 0.1nm,0.3s,baz=29,slow=12,SNR=4.6 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **18.60** | **272** | I | I | 02 56 20.0 | |
| | baz=68,slow=314,SNR=2.8 | | | | | | |

*IDC **08** 01:24:16.1±1.1,8.˚48N×83.˚59W, h0km, mb3.8/7, mbtmp3.8/9, ML3.3/3, MS3.2/8, Error ellipse: s-maj=47.3km s-min=20.1km az=53.0*

*CATAC **08** 01:24:17.8±0.7,8.˚49N×83.˚53W, h3km±3km, MB4.9, mb4.8, ML4.6*

*UCR **08** 01:24:18.7±0.8,8.˚49N×83.˚53W, h23km±3km, MW4.7*

*UPA **08** 01:24:18.2±0.5,8.˚50N×83.˚45W, h4km±2km, MW4.6*

*NEIC **08** 01:24:20.7±2.0,8.˚7N±0.˚1×83.˚40W±0.˚07, h25km±10km, mb4.1/6, Error ellipse: s-maj=17.4km s-min=6.1km az=206.0*

**ISC 08 01:24:18.9±0.9,8.˚50N±0.˚04×83.˚53W±0.˚03, h22km±6km, n125, σ0≤92/146, mb3.8/9, MS3.2/4, 3C-18D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIME** | **Puerto Jimenez** | **0.21** | **79** | *e*P | **Pb** | **01 24 24.4** | **0.0** |
| JIME | | | | *e*S | **Sb** | **01 24 29.6** | **+1.5** |
| **EDAD** | **Golfito** | **0.39** | **67** | *e*P | **Pb** | **01 24 26.1** | **-1.1** |
| EDAD | | | | *e*S | **Sb** | **01 24 31.9** | **-1.1** |
| **FITO** | **Golfito** | **0.39** | **71** | *e*P | **Pb** | **01 24 26.1** | **-1.1** |
| FITO | | | | *e*S | **Sb** | **01 24 32.1** | **-0.8** |
| **EDPN** | **Palmar Norte** | **0.47** | **9** | *e*P | **Pb** | **01 24 27.7** | **-0.7** |
| EDPN | | | | *e*S | **Sb** | **01 24 34.8** | **-0.1** |
| **NELY** | **Ciudad Neily** | **0.60** | **75** | *e*P | **Pb** | **01 24 30.1** | **-0.7** |
| NELY | | | | *e*S | **Sb** | **01 24 38.9** | **+0.1** |
| **OCHAL** | **Ojochal** | **0.61** | **349** | *i*P | **Pb** | **01 24 29.9** | **-1.0** |
| OCHAL | | | | *i*S | **Sb** | **01 24 39.0** | **0.0** |
| OCHAL | | | | IAML | | 01 24 39.6 | |
| | comp=Z,25μm,1.0s | | | | | | |
| **EDP2** | **Potrero Grande** | **0.62** | **34** | *e*P | **Pb** | **01 24 30.5** | **-0.6** |
| **VITO** | **San Vito** | **0.64** | **60** | *e*P | **Pb** | **01 24 31.0** | **-0.5** |
| VITO | | | | *e*S | **Sb** | **01 24 40.9** | **+0.8** |
| **CDITO** | **Canoas** | **0.66** | **83** | *i*P | **Pb** | **01 24 30.8** | **-0.9** |
| CDITO | | | | *i*S | **Sb** | **01 24 40.5** | **+0.1** |
| CDITO | | | | IAML | | 01 24 45.3 | |
| | comp=Z,14μm,1.0s | | | | | | |
| **BURE** | **Buenos Aires** | **0.70** | **16** | *e*P | **Pb** | **01 24 31.8** | **-0.6** |
| BURE | | | | *e*S | **Sb** | **01 24 41.7** | **+0.1** |
| **EDBA** | **Buenos Aires** | **0.71** | **21** | *e*P | **Pb** | **01 24 31.6** | **-1.0** |
| **PTPM** | **Petroterminale** | **0.71** | **114** | *e*P | **Pb** | **01 24 31.8** | **-0.8** |
| PTPM | | | | *e*S | **Sb** | **01 24 41.5** | **-0.4** |
| **MLIR3** | **Monte Lirio, C** | **0.76** | **67** | *e*P | **Pb** | **01 24 32.6** | **-0.9** |
| **LIMO3** | **Limones** | **0.77** | **121** | *e*P | **Pb** | **01 24 32.5** | **-1.0** |
| **DRK0** | **Durika** | **0.81** | **20** | *i*P | **Pb** | **01 24 33.4** | **-1.1** |
| DRK0 | | | | IAML | | 01 24 33.6 | |
| | comp=Z,75μm,1.0s | | | | | | |
| DRK0 | | | | *i*S | **Sb** | **01 24 44.3** | **-0.7** |
| **DRK0** | **Durika** | **0.81** | **20** | *e*P | **Pb** | **01 24 33.3** | **-1.1** |
| **DRK0** | **Durika** | **0.81** | **20** | *e*P | **Pb** | **01 24 33.3** | **-1.1** |
| **BRU2** | **Volcan** | **0.88** | **70** | | **Pb** | **01 24 34.5** | **-1.1** |
| **BRU2** | **Volcan** | **0.88** | **70** | *i*P | **Pb** | **01 24 34.7** | **-0.9** |
| BRU2 | | | | *i*S | **Sb** | **01 24 46.7** | **-0.3** |
| BRU2 | | | | IAML | | 01 24 54.9 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.88** | **70** | *e*P | **Pb** | **01 24 34.7** | **-0.9** |
| BRU2 | | | | *e*S | **Sb** | **01 24 47.4** | **+0.3** |
| **BRU2** | **Volcan** | **0.88** | **70** | *e*P | **Pb** | **01 24 34.6** | **-0.9** |
| BRU2 | | | | *e*S | **Sb** | **01 24 47.2** | **+0.2** |
| **ZELE** | **Perez Zeledon** | **0.89** | **349** | *e*P | **Pb** | **01 24 34.9** | **-0.8** |
| ZELE | | | | *e*S | **Sb** | **01 24 47.7** | **+0.5** |
| **BCO2** | **Palmira** | **1.02** | **77** | *e*P | **Pb** | **01 24 36.9** | **-1.0** |
| BCO2 | | | | *e*S | **Sb** | **01 24 51.1** | **+0.2** |
| **PTAR3** | **Potrerillos Ar** | **1.04** | **79** | *e*P | **Pb** | **01 24 37.2** | **-1.1** |
| **DVD** | **David** | **1.07** | **93** | *e*P | **Pn** | **01 24 37.0** | **-1.5** |
| DVD | | | | *e*S | **Sb** | **01 24 51.6** | **-0.7** |
| **PEDE3** | **Pedregal, Chir** | **1.10** | **96** | *e*P | **Pn** | **01 24 38.1** | **-0.9** |
| **LNBQ3** | **Los Naranjos,** | **1.12** | **75** | *e*P | **Pn** | **01 24 37.8** | **-1.5** |
| **SVQ2** | **Quepos** | **1.12** | **326** | *e*P | **Pn** | **01 24 38.3** | **-0.9** |
| **LLNJ** | **Naranjito** | **1.12** | **330** | *e*P | **Pn** | **01 24 38.5** | **-0.8** |
| **LOMA3** | **Las Lomas, Chi** | **1.13** | **93** | *e*P | **Pn** | **01 24 38.1** | **-1.3** |
| **PSOM3** | **Paja de Sombre** | **1.21** | **81** | *e*P | **Pn** | **01 24 39.5** | **-1.0** |
| **RAZU** | **San Marcos de** | **1.25** | **337** | *e*P | **Pn** | **01 24 40.6** | **-0.6** |
| **ABJ2** | **San Pablo** | **1.30** | **337** | *e*P | **Pn** | **01 24 41.6** | **-0.4** |
| **BRIBI** | **Bribri** | **1.31** | **31** | *e*P | **Pb** | **01 24 42.5** | **-0.3** |
| **LCR2** | **La Lucha 2** | **1.32** | **339** | | **Pn** | **01 24 41.7** | **-0.5** |
| **LCR2** | **La Lucha 2** | **1.32** | **339** | *i*P | **Pn** | **01 24 42.1** | **-0.1** |
| LCR2 | | | | *i*S | **Sb** | **01 24 59.5** | **-0.2** |
| LCR2 | | | | IAML | | 01 25 01.1 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.32** | **339** | *e*P | **Pn** | **01 24 41.7** | **-0.5** |
| **REPA** | **Paraso** | **1.36** | **346** | *e*P | **Pb** | **01 24 43.5** | **-0.4** |
| **CNI2** | **El Empalme, Bo** | **1.40** | **49** | *e*P | **Pn** | **01 24 42.2** | **-0.8** |
| CNI2 | | | | *e*S | **Sn** | **01 24 59.9** | **-0.8** |
| **TAGO** | **Cartago** | **1.41** | **344** | *e*P | **Pb** | **01 24 44.4** | **-0.3** |
| **ACOS** | **Acosta** | **1.43** | **334** | *e*P | **Pn** | **01 24 43.5** | **-0.2** |
| **PCAYA** | **Pacayas** | **1.44** | **349** | *e*P | **Pn** | **01 24 43.9** | **+0.1** |
| **CHGR2** | **Aguacate** | **1.44** | **72** | *e*P | **Pn** | **01 24 42.7** | **-0.9** |
| CHGR2 | | | | *e*S | **Sn** | **01 25 01.7** | **-0.2** |
| **TRIO** | **Tres Rios** | **1.47** | **342** | *e*P | **Pn** | **01 24 44.2** | **0.0** |
| **RAFA** | **San Farael, Vo** | **1.48** | **349** | *i*P | **Pn** | **01 24 44.6** | **+0.2** |
| RAFA | | | | *i*S | **Sb** | **01 25 04.6** | **+0.3** |
| RAFA | | | | IAML | | 01 25 05.8 | |
| | comp=Z,58μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.48** | **349** | *e*P | **Pn** | **01 24 44.4** | **0.0** |
| **VTCV** | **VTCV, Calle Va** | **1.49** | **353** | *e*P | **Pn** | **01 24 44.4** | **-0.1** |
| **VICA** | **Volcano Irazu** | **1.51** | **348** | *e*P | **Pn** | **01 24 44.9** | **-0.1** |
| **CVTV** | **Tajo** | **1.51** | **352** | *e*P | **Pn** | **01 24 44.9** | **0.0** |
| **VTLA** | **Turrialba Volc** | **1.51** | **351** | *e*P | **Pn** | **01 24 45.0** | **0.0** |
| **CVTQ** | **Turrialba Volc** | **1.52** | **351** | *e*P | **Pn** | **01 24 44.9** | **-0.1** |
| **CORON** | **Coronado** | **1.54** | **342** | *e*P | **Pb** | **01 24 45.9** | **-1.0** |
| **CVIMO** | **Finca Echandi** | **1.57** | **345** | *e*P | **Pn** | **01 24 46.0** | **+0.4** |
| **LCOCO** | **El Coco** | **1.58** | **359** | *e*P | **Pn** | **01 24 45.7** | **+0.2** |
| **TAAN** | **Batan** | **1.59** | **7** | *e*P | **Pn** | **01 24 46.2** | **+0.5** |
| **IRES** | **Siquirres** | **1.59** | **1** | *e*P | **Pn** | **01 24 46.0** | **+0.3** |
| **HDC3** | **Heredia 3** | **1.60** | **339** | *i*P | **Pn** | **01 24 46.4** | **+0.4** |
| HDC3 | | | | *i*S | **Sb** | **01 25 08.1** | **+0.4** |
| HDC3 | | | | IAML | | 01 25 22.9 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **HDC** | **Heredia** | **1.60** | **339** | | **Pn** | **01 24 45.9** | **-0.1** |
| **HDC** | **Heredia** | **1.60** | **339** | *e*P | **Pn** | **01 24 46.2** | **+0.3** |
| **BELE** | **Belen** | **1.60** | **336** | *e*P | **Pn** | **01 24 46.0** | **0.0** |
| **TCS1** | **Tacares** | **1.71** | **334** | *i*P | **Pb** | **01 24 48.5** | **-1.2** |
| TCS1 | | | | IAML | | 01 25 17.2 | |
| | comp=Z,53μm,1.0s | | | | | | |
| **NANC3** | **Nancito, Chiri** | **1.80** | **98** | *e*P | **Pn** | **01 24 48.1** | **-0.4** |
| **CBL1** | **Cabuya** | **1.88** | **305** | *e*P | **Pn** | **01 24 49.1** | **-0.6** |
| **SOCE** | **Pocosol** | **2.16** | **330** | Pn | **Pn** | **01 24 53.8** | **+0.2** |
| **SOCE** | **Pocosol** | **2.16** | **330** | *i*P | **Pn** | **01 24 54.7** | **+1.1** |
| SOCE | | | | *i*S | **Sb** | **01 25 24.1** | **+0.4** |
| SOCE | | | | IAML | | 01 25 24.8 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **JTS** | **Las Juntas de** | **2.27** | **322** | Pn | **Pn** | **01 24 54.3** | **-0.7** |
| **JTS** | **Las Juntas de** | **2.27** | **322** | Pn | **Pn** | **01 24 54.5** | **-0.5** |
| | comp=Z,25nm,0.3s,baz=99,slow=13,SNR=59 | | | | | | |
| JTS | | | | Sn | **Sb** | **01 25 25.7** | **-1.1** |
| | comp=Z,63nm,0.3s,baz=326,slow=23,SNR=9.2 | | | | | | |
| | comp=Z,72nm,0.4s | | | | | | |
| **JTS** | **Las Juntas de** | **2.27** | **322** | *e*P | **Pn** | **01 24 56.8** | **+1.8** |
| **ARE1** | **Arenal 1** | **2.27** | **329** | *e*P | **Pb** | **01 24 57.5** | **-1.8** |
| **COVE** | **Coope Vega, Sa** | **2.37** | **339** | *i*P | **Pn** | **01 24 57.2** | **+0.8** |
| COVE | | | | *i*S | **Sb** | **01 25 29.3** | **-0.4** |
| COVE | | | | IAML | | 01 25 37.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **INDI** | **Punta indio, G** | **2.37** | **305** | *i*P | **Pn** | **01 24 56.3** | **-0.2** |
| INDI | | | | IAML | | 01 25 48.7 | |
| | comp=Z,430nm,1.0s | | | | | | |
| **GMAL** | **Guarumal, Vera** | **2.39** | **108** | *e*P | **Pn** | **01 24 56.5** | **-0.2** |
| **RSUS3** | **Rio de Jesus,** | **2.40** | **102** | *e*P | **Pn** | **01 24 56.8** | **-0.1** |
| **STIA3** | **Santiago, Vera** | **2.56** | **99** | *e*P | **Pn** | **01 24 59.2** | **+0.1** |
| **MARI3** | **Mariato, Verag** | **2.65** | **108** | *e*P | **Pn** | **01 25 00.6** | **+0.2** |
| **CACAO** | **El Cacao, Vera** | **2.88** | **113** | *e*P | **Pn** | **01 25 03.2** | **-0.3** |
| CACAO | | | | *e*S | **Sn** | **01 25 37.8** | **+0.3** |
| **CHIT3** | **Chitre** | **3.13** | **100** | *e*P | **Pn** | **01 25 06.9** | **0.0** |
| CHIT3 | | | | *e*S | **Sn** | **01 25 44.0** | **+0.4** |
| **AZU** | **Azuero** | **3.30** | **102** | *e*P | **Pn** | **01 25 08.8** | **-0.4** |
| AZU | | | | *e*S | **Sn** | **01 25 47.8** | **-0.1** |
| **PCRI3** | **Pocri, Los San** | **3.48** | **104** | *e*P | **Pn** | **01 25 11.3** | **-0.4** |
| **ZANG** | **Zanguenga, Cho** | **3.65** | **83** | *e*P | **Pn** | **01 25 13.3** | **-0.8** |
| **BCIP** | **Isla Barro Col** | **3.71** | **79** | Pn | **Pn** | **01 25 15.6** | **+0.7** |
| BCIP | | | | | **Pn** | **01 25 16.5** | **+1.7** |
| **BCIP** | **Isla Barro Col** | **3.71** | **79** | *i*P | **Pn** | **01 25 16.4** | **+1.5** |
| BCIP | | | | *i*S | **Sn** | **01 26 01.1** | **+3.1** |
| BCIP | | | | IAML | | 01 26 16.4 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.71** | **79** | *e*P | **Pn** | **01 25 14.7** | **-0.1** |
| **BCIP** | **Isla Barro Col** | **3.71** | **79** | *e*P | **Pn** | **01 25 15.9** | **+1.0** |
| **ACON** | **Acoyapa** | **3.81** | **335** | Pn | **Pn** | **01 25 17.2** | **+1.0** |
| **ACON** | **Acoyapa** | **3.81** | **335** | *i*P | **Pn** | **01 25 17.7** | **+1.5** |
| ACON | | | | IAML | | 01 25 40.8 | |
| | comp=Z,280nm,1.0s | | | | | | |
| **FRIJ** | **El Hiral** | **3.83** | **79** | *e*P | **Pn** | **01 25 16.5** | **0.0** |
| **ARRA3** | **Arraijan, Pana** | **3.86** | **83** | *e*P | **Pn** | **01 25 16.7** | **-0.2** |
| **UPA** | **Univ. de Panam** | **3.98** | **83** | *e*P | **Pn** | **01 25 18.6** | **0.0** |
| **NADN** | **Granada** | **4.06** | **323** | *i*P | **Pn** | **01 25 20.8** | **+1.1** |
| NADN | | | | IAML | | 01 27 15.6 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **CHPO** | **Chepo, Panama** | **4.42** | **81** | *e*P | **Pn** | **01 25 25.0** | **+0.4** |
| **BOAB** | **BOACO BROADBAN** | **4.45** | **332** | | **Pn** | **01 25 25.1** | **+0.1** |
| **BOAB** | **BOACO BROADBAN** | **4.45** | **332** | *i*P | **Pn** | **01 25 26.7** | **+1.6** |
| BOAB | | | | IAML | | 01 26 50.6 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **4.74** | **321** | *i*P | **Pn** | **01 25 30.2** | **+1.2** |
| COPN | | | | IAML | | 01 25 31.7 | |
| | comp=Z,100nm,1.0s | | | | | | |
| **MACN** | **El Madrono** | **5.01** | **322** | *i*P | **Pn** | **01 25 35.2** | **+2.4** |
| MACN | | | | IVmB_BB | | 01 25 36.1 | |
| | comp=Z,1μm,1.0s | | | | | | |
| MACN | | | | IAmb | IAmb | 01 25 36.1 | |
| | comp=Z,54nm,0.4s | | | | | | |
| MACN | | | | IAML | | 01 25 36.2 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **CNGA** | **Al SSO del Vol** | **5.05** | **322** | *i*P | **Pn** | **01 25 33.9** | **+0.6** |
| CNGA | | | | IAML | | 01 25 34.8 | |
| | comp=Z,160nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **5.05** | **322** | | **Pn** | **01 25 31.6** | **-1.7** |
| **UPD2** | **Meteti** | **5.46** | **89** | *e*P | **Pn** | **01 25 38.6** | **-0.3** |
| **MTO3** | **Montecristo** | **8.19** | **316** | Pn | **Pn** | **01 26 18.7** | **+2.1** |
| **APG** | **El Apazote** | **9.37** | **314** | Pn | **Pn** | **01 26 34.3** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=106,slow=12,SNR=3.8 | | | | | | |
| **TEIG** | **Tepich** | **12.53** | **339** | LR | LR | 01 32 18.9 | |
| | comp=Z,68nm,19.9s,baz=226,slow=38 | | | | | | |
| **SDV** | **Santo Domingo** | **12.76** | **87** | LR | LR | 01 32 56.0 | |
| | comp=Z,53nm,20.1s,baz=235,slow=41 | | | | | | |
| **CMIG** | **Matias Romero** | **13.97** | **309** | Pn | **Pn** | **01 27 36.5** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=126,slow=11,SNR=1.9 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **NMDO** | **Nuevo Mundo** | **14.56** | **34** | P | **P** | **01 27 47.9** | **-2.1** |
| **BAUV** | **El Baul** | **15.32** | **87** | Pn | **Pn** | **01 27 52.9** | **-1.0** |
| BAUV | | | | IAmb | IAmb | 01 28 19.8 | |
| | comp=Z,1nm,1.0s | | | | | | |
| **SDDR** | **Presa de Saban** | **15.80** | **47** | P | **Pn** | **01 28 00.3** | **+0.2** |
| SDDR | | | | IAmb | IAmb | 01 28 22.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **ATAH** | **Atahualpa** | **16.35** | **162** | LR | LR | 01 33 33.0 | |
| | comp=Z,90nm,19.1s,baz=322,slow=34 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **18.72** | **83** | LR | LR | 01 37 37.9 | |
| | comp=Z,64nm,20.1s,slow=43 | | | | | | |
| **ETMB** | **Extrema** | **25.07** | **136** | P | **P** | **01 29 42.8** | **+0.9** |
| ETMB | | | | IAmb | IAmb | 01 29 43.2 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **SAML** | **Samuel** | **26.67** | **130** | P | **P** | **01 29 57.8** | **+1.3** |
| **TKL** | **Tuckaleechee C** | **27.04** | **360** | LR | LR | 01 41 06.5 | |
| | comp=Z,59nm,18.7s,baz=172,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **28.06** | **320** | P | **P** | **01 30 07.8** | **-1.1** |
| | comp=Z,0.2nm,0.7s,baz=135,slow=12,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **29.22** | **348** | P | **P** | **01 30 17.9** | **-1.1** |
| T42A | | | | IAmb | IAmb | 01 30 18.9 | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **CCM** | **Cathedral Cave** | **30.24** | **348** | P | **P** | **01 30 27.6** | **-0.4** |
| **MDP** | **Montagnes des** | **30.85** | **94** | LR | LR | 01 43 17.5 | |
| | comp=Z,61nm,18.1s,baz=282,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **33.68** | **325** | LR | LR | 01 46 35.8 | |
| | comp=Z,20nm,18.2s,baz=196,slow=40 | | | | | | |
| **NVAR** | **Mina Array Bea** | **43.20** | **319** | P | **P** | **01 32 20.2** | **+1.6** |
| | comp=Z,0.7nm,0.6s,baz=123,slow=6.7,SNR=6.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **PLCA** | **Paso Flores** | **50.43** | **167** | P | **P** | **01 33 15.5** | **+0.7** |
| | comp=Z,1.4nm,0.6s,baz=328,slow=9.0,SNR=5.5 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **58.44** | **344** | P | **P** | **01 34 11.6** | **-1.1** |
| | comp=Z,0.7nm,0.9s,baz=131,slow=7.5,SNR=3.1 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **RES** | **Resolute Bay** | **66.47** | **357** | LR | LR | 02 03 45.3 | |
| | comp=Z,42nm,18.5s,baz=34,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **71.17** | **336** | P | **P** | **01 35 35.9** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=117,slow=4.4,SNR=8.3 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **KDAK** | **Kodiak Island** | **71.73** | **328** | P | **P** | **01 35 40.0** | **+0.9** |
| | comp=Z,6.6nm,1.2s,baz=118,slow=18,SNR=2.6 | | | | | | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **ESDC** | **Sonseca Array** | **76.61** | **51** | P | **P** | **01 36 10.4** | **+2.3** |
| | comp=Z,0.6nm,0.7s,baz=283,slow=6.4,SNR=5.1 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **141.15** | **243** | PKP | **PKPdf** | **01 43 47.4** | **-1.1** |
| | comp=Z,1.1nm,1.0s,baz=86,slow=2.9,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **141.66** | **249** | PKhKP | PKPpre | 01 43 43.4 | |
| | comp=Z,0.7nm,1.0s,baz=95,slow=2.6,SNR=2.3 | | | | | | |

**TRN 08 01:39:21.8, 17.˚38N×62.˚35W, h92km, MD3.5, East of St. Kitts., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANWB** | **Willy Bob** | **0.61** | **62** | *e*P | Pn | 01 39 39.0 | +1.3 |
| ANWB | | | | *e*S | Sn | 01 39 51.4 | +1.8 |
| **MBFL** | **Flemmings, Mon** | **0.65** | **168** | *e*P | Pn | 01 39 39.2 | +1.1 |
| MBFL | | | | *e*S | Sn | 01 39 51.9 | +1.7 |
| **ANBD** | **Bethesda, Anti** | **0.65** | **121** | *e*P | Pn | 01 39 39.2 | +1.1 |
| ANBD | | | | *e*S | Sn | 01 39 52.1 | +1.9 |
| **MLYT** | **Lee's Yard** | **0.68** | **167** | *e*P | Pn | 01 39 39.8 | +1.4 |
| MLYT | | | | *e*S | Sn | 01 39 52.5 | +1.9 |
| **ABD** | **La Joyeuse, An** | **1.22** | **137** | *e*P | Pn | 01 39 45.9 | +1.6 |
| **CBE** | **Ff, Capester** | **1.49** | **151** | *e*P | Pn | 01 39 49.3 | +1.7 |
| **TBG** | **Guadaloupe-3** | **1.67** | **156** | *e*P | Pn | 01 39 50.7 | +0.9 |
| **TDBA** | **Terre de Bas,** | **1.67** | **156** | *e*P | Pn | 01 39 51.9 | +2.0 |
| **MAGL** | **Barre de l'ile** | **1.75** | **144** | *e*P | Pn | 01 39 52.8 | +1.8 |

*NEIC **08** 01:42:10.4±2.0, 15.˚45S±0.˚10×176.˚64W±0.˚10, h362km±5km, mb4.9/364, Error ellipse: s-maj=14.3km s-min=13.8km az=180.0*

*NOU **08** 01:42:11.7, 15.˚52S×176.˚46W, h390km, mb5.3/71, Fiji Islands Region*

*IDC **08** 01:42:11.9±0.5, 15.˚38S×176.˚68W, h378km±4km, mb4.4/15, mbtmp5.1/17, Error ellipse: s-maj=12.6km s-min=9.0km az=134.0*

*BGR **08** 01:42:14.1, 15.˚22S×176.˚23W, h384km±1km*

*GCMT **08** 01:42:15.4±0.3, 15.˚52S±0.˚05×176.˚49W±0.˚03, h387km±2km, MW5.2/72, Moment Tensor Solution. s72,c104; Duration: 1s0 Moment tensor: Scale 10^17^Nm; Mrr0.24±.03; Mθθ0.47±.05; Mϕϕ-0.71±.04; Mrθ-0.31±.04; Mθϕ0.33±.04; Mϕr-0.46±.03; Best double couple: M=0.90200×10^17^ NP1:ϕ=205.00000°, δ79.00000°, λ138.00000°. NP2:ϕ=305.00000°, δ49.00000°, λ15.00000°. Principal axes: T 0.8720, Plg37.0000°, Azm156.0000°; N 0.0600, Plg47.0000°, Azm13.0000°; P -0.9320, Plg19.0000°, Azm261.0000°; nsta1 refers to body waves, cutoff=40s. Triangular moment-rate function*

**ISC 08 01:42:12.0±0.4, 15.˚50S±0.˚05×176.˚63W±0.˚05, h384km±3km, h385km; pP-P, n897, σ0≤86/803, mb4.8/225, 46C-32D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.95** | **72** | Pn | **Pn** | **01 43 29.9** | **-3.0** |
| **MSVF** | **Nonsavu** | **5.57** | **246** | P | **Pn** | **01 43 41.3** | **+1.9** |
| **MSVF** | **Nonsavu** | **5.57** | **246** | Pn | **Pn** | **01 43 41.1** | **+1.7** |
| **MSVF** | **Nonsavu** | **5.57** | **246** | P | **Pn** | **01 43 41.0** | **+1.6** |
| | 904nm,0.7s,baz=93,slow=14,SNR=426 | | | | | | |
| MSVF | | | | S | **S** | **01 44 49.7** | **-0.7** |
| | 56nm,0.7s,baz=87,slow=23,SNR=0.5 | | | | | | |
| **NIUE** | **Niue** | **7.32** | **120** | P | **Pn** | **01 43 58.8** | **-0.2** |
| **NIUE** | **Niue** | **7.32** | **120** | Pn | **Pn** | **01 43 57.9** | **-1.1** |
| **NIUE** | **Niue** | **7.32** | **120** | P | **Pn** | **01 43 58.7** | **-0.2** |
| | 1μm,0.9s,SNR=4.4 | | | | | | |
| **FUNA** | **Funafuti** | **8.04** | **329** | P | **Pn** | **01 44 06.1** | **-1.2** |
| **FUNA** | **Funafuti** | **8.04** | **329** | Pn | **Pn** | **01 44 05.6** | **-1.7** |
| **RAO** | **Raoul Island** | **13.74** | **185** | P | **P** | **01 45 09.3** | **-2.0** |
| | 267nm,0.2s,baz=58,slow=19,SNR=2.4 | | | | | | |
| RAO | | | | S | **S** | **01 47 34.0** | **-5.9** |
| | 349nm,0.3s,baz=76,slow=22,SNR=2.6 | | | | | | |
| **RTV** | **Rentapao** | **14.51** | **259** | P | **Pn** | **01 45 22.3** | **0.0** |
| **DVP** | **Devils Point** | **14.72** | **259** | P | **Pn** | **01 45 25.1** | **+0.3** |
| **MARNC** | **Mare, Loyalty** | **15.72** | **245** | P | **P** | **01 45 33.1** | **+0.2** |
| **LIFNC** | **LIFOU** | **16.20** | **249** | P | **P** | **01 45 37.2** | **-1.0** |
| **LIFNC** | **LIFOU** | **16.20** | **249** | P | **P** | **01 45 36.4** | **-1.8** |
| **PINNC** | **Pines Island,** | **16.63** | **242** | P | **P** | **01 45 42.0** | **-0.8** |
| **YATNC** | **Mamie plateau,** | **16.91** | **245** | P | **P** | **01 45 47.2** | **+1.4** |
| **DZM** | **Mont Dzumac** | **17.30** | **245** | P | **P** | **01 45 51.2** | **+1.1** |
| **DZM** | **Mont Dzumac** | **17.30** | **245** | P | **P** | **01 45 49.8** | **-0.2** |
| **DZM** | **Mont Dzumac** | **17.30** | **245** | P | **P** | **01 45 49.4** | **-0.6** |
| | 22nm,0.6s,baz=61,slow=19,SNR=52 | | | | | | |
| DZM | | | | S | **S** | **01 48 52.4** | **+1.7** |
| | 5.8nm,0.7s,baz=287,slow=22,SNR=1.0 | | | | | | |
| **ONTNC** | **Ouen Toro** | **17.37** | **244** | P | **Pn** | **01 45 53.1** | **-1.7** |
| **ONTNC** | **Ouen Toro** | **17.37** | **244** | P | **P** | **01 45 51.3** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **18.83** | **252** | P | **P** | **01 46 07.3** | **+1.1** |
| **KOUNC** | **Koumac, New Ca** | **18.83** | **252** | P | **P** | **01 46 05.9** | **-0.3** |
| **OUZ** | **Omahuta** | **21.51** | **202** | P | **P** | **01 46 32.3** | **+1.1** |
| **KUZ** | **Kuaotunu** | **22.23** | **196** | P | **P** | **01 46 38.6** | **+0.8** |
| **WMGZ** | **Waiomatatini S** | **22.66** | **190** | P | **P** | **01 46 41.9** | **+0.2** |
| **HAZ** | **Te Kaha** | **22.72** | **192** | P | **P** | **01 46 41.9** | **-0.3** |
| **PKGZ** | **Pakihiroa** | **22.77** | **191** | P | **P** | **01 46 45.5** | **+2.7** |
| **PUZ** | **Puketiti** | **22.94** | **190** | P | **P** | **01 46 44.3** | **+0.1** |
| **RUGZ** | **Raukumara Rang** | **22.94** | **192** | P | **P** | **01 46 43.9** | **-0.5** |
| **OPRZ** | **Ohinepanea** | **23.06** | **194** | P | **P** | **01 46 45.5** | **+0.2** |
| **TWGZ** | **Tauwhareparae** | **23.09** | **191** | P | **P** | **01 46 45.9** | **+0.2** |
| **TOZ** | **Tahuroa Road** | **23.22** | **196** | P | **P** | **01 46 46.2** | **-0.5** |
| **MWZ** | **Matawai** | **23.33** | **192** | P | **P** | **01 46 45.6** | **-2.2** |
| **URZ** | **Urewera** | **23.34** | **193** | P | **P** | **01 46 45.1** | **-2.7** |
| **URZ** | **Urewera** | **23.34** | **193** | P | **P** | **01 46 45.3** | **-2.5** |
| **TKGZ** | **Te Karaka** | **23.37** | **191** | P | **P** | **01 46 49.1** | **+1.0** |
| **RRRZ** | **Republican Roa** | **23.55** | **194** | P | **P** | **01 46 51.7** | **+2.0** |
| **HNR** | **Honiara** | **23.64** | **282** | P | **P** | **01 46 48.5** | **-2.4** |
| **RIGZ** | **Rimuhau** | **23.64** | **191** | P | **P** | **01 46 48.8** | **-1.8** |
| **RTZ** | **Ruatahuna** | **23.71** | **193** | P | **P** | **01 46 49.5** | **-1.8** |
| RTZ | | | | IAmb | IAmb | 01 47 11.2 | |
| | comp=Z,122nm,1.6s | | | | | | |
| **SNGZ** | **Shannon Statio** | **23.80** | **192** | P | **P** | **01 46 51.0** | **-1.0** |
| **KNZ** | **Kokohu** | **23.97** | **191** | P | **P** | **01 46 52.7** | **-0.7** |
| **RAHZ** | **Arahi** | **23.98** | **192** | P | **P** | **01 46 53.1** | **-0.5** |
| **HIZ** | **Hauiti** | **24.13** | **197** | P | **P** | **01 46 56.0** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **24.34** | **193** | P | **P** | **01 46 54.7** | **-2.2** |
| **BKZ** | **Black Stump Fm** | **24.34** | **193** | P | **P** | **01 46 54.0** | **-2.9** |
| BKZ | | | | IAmb | IAmb | 01 47 39.2 | |
| | comp=Z,80nm,1.6s | | | | | | |

comp=2,2.2nm,1.0s,baz=100,slow=3.6,SNR=2.6
WRA S **S** **01 56 22.1 -3.8**
comp=2,2.7nm,0.8s,baz=92,slow=14,SNR=6.3
comp=2,27nm,0.6s
**AS01 Alice Springs 47.08 252** P **P** **01 50 07.6 +0.2**
**AS31 Alice Springs 47.12 252** P **P** **01 50 07.8 +0.1**
**ASAR Alice Springs 47.12 252** P **P** **01 50 08.2 +0.5**
**ASAR Alice Springs 47.12 252** P **P** **01 50 08.1 +0.4**
comp=2,757nm,0.6s,baz=85,slow=8.3,SNR=5408
ASAR ScP **ScP** **01 54 47.5 -1.5**
comp=2,0.9nm,0.8s,baz=90,slow=5.6,SNR=1.7
ASAR S **S** **01 56 28.3 -2.3**
comp=2,7.8nm,0.8s,baz=80,slow=16,SNR=16
**ASPA Alice Springs 47.12 252** P **P** **01 50 07.9 +0.2**
comp=2,321nm,0.7s,SNR=367
**MULG Mulgathing 47.40 243** P **P** **01 50 09.8 +0.2**
**KDU Kakadu 49.36 266** P **P** **01 50 24.8 +0.2**
comp=2,184nm,0.6s,SNR=12
**MTN Manton Dam 50.62 266** P **P** **01 50 33.8 -0.2**
**MTN Manton Dam 50.62 266** P **P** **01 50 34.2 +0.2**
**MTN Manton Dam 50.62 266** P **P** **01 50 33.7 -0.2**
comp=2,139nm,0.8s,SNR=7.6
**DRS Darwin Rock St 50.91 266** P **P** **01 50 36.3 +0.2**
**FAKI Fak Fak 51.85 279** P **P** **01 50 43.2 +0.2**
**FAKI Fak Fak 51.85 279** P **P** **01 50 42.8 -0.2**
FAKI IAmb IAmb 01 51 04.3
comp=2,64nm,1.2s
**WRKA Warakurna 52.23 250** P **P** **01 50 45.9 +0.1**
**WRKA Warakurna 52.23 250** P **P** **01 50 46.1 +0.3**
comp=2,157nm,0.5s,SNR=20
**KNRA Kununurra 52.47 262** P **P** **01 50 47.0 -0.5**
**KNRA Kununurra 52.47 262** P **P** **01 50 47.3 -0.2**
comp=2,112nm,0.8s,SNR=9.1
**FORT Forrest 52.60 243** P **P** **01 50 48.0 -0.2**
**FORT Forrest 52.60 243** P **P** **01 50 47.5 -0.7**
**FORT Forrest 52.60 243** P **P** **01 50 47.9 -0.4**
comp=2,233nm,0.7s,SNR=9.9
**FITZ Fitzroy Crossi 55.14 259** P **P** **01 51 06.7 +0.1**
**SOEI Soe 57.81 268** P **P** **01 51 27.2 +1.8**
**SOEI Soe 57.81 268** P **P** **01 51 27.0 +1.6**
**KMBL Kambalda 57.92 243** P **P** **01 51 25.5 -0.3**
**KMBL Kambalda 57.92 243** P **P** **01 51 25.9 +0.1**
comp=2,61nm,1.8s,SNR=2.4
**DRV Dumont d'Urvil 58.48 199** P **P** **01 51 29.7 +0.8**
**PSA00 Pilbara Seismi 60.19 254** P **P** **01 51 41.3 -0.1**
**PSA00 Pilbara Seismi 60.19 254** P **P** **01 51 41.1 -0.3**
**PSA00 Pilbara Seismi 60.19 254** P **P** **01 51 41.2 -0.1**
comp=2,102nm,0.7s,SNR=9.5
**MBWA Marble Bar 60.34 254** P **P** **01 51 42.3 -0.1**
**MBWA Marble Bar 60.34 254** P **P** **01 51 41.2 -1.1**
**MBWA Marble Bar 60.34 254** P **P** **01 51 42.1 -0.2**
comp=2,66nm,1.4s,SNR=5.6
**MBWA Marble Bar 60.34 254** P **P** **01 51 42.2 -0.2**
**MEEK Meekatharra 60.90 248** P **P** **01 51 45.7 -0.3**
**KLBR Kellerberrin 61.44 242** P **P** **01 51 49.3 -0.2**
**KLBR Kellerberrin 61.44 242** P **P** **01 51 49.1 -0.4**
comp=2,103nm,0.6s,SNR=5.9
**NWAO Narrogin (SRO) 61.86 241** P **P** **01 51 52.3 0.0**
**NWAO Narrogin (SRO) 61.86 241** P **P** **01 51 52.1 -0.2**
**NWAO Narrogin (SRO) 61.86 241** P **P** **01 51 52.3 0.0**
**BLDU Ballidu 62.37 243** P **P** **01 51 55.3 -0.3**
**SBA Scott Base 62.92 184** P **P** **01 52 00.8 +2.4**
**SBA Scott Base 62.92 184** ⇑P **P** **01 52 01.4 +3.0**
**VNDA Vanda 62.98 185** P **P** **01 52 00.6 +1.7**
VNDA IAmb IAmb 01 52 02.1
comp=2,56nm,1.4s
**VNDA Vanda 62.98 185** P **P** **01 51 60.0 +1.2**
comp=2,15nm,0.7s,baz=358,slow=8.0,SNR=35
VNDA PcP **PcP** **01 52 33.6 +0.8**
comp=2,5.8nm,0.8s,baz=347,slow=5.4,SNR=4.1
comp=2,15nm,0.7s
**VNDA Vanda 62.98 185** ⇑P **P** **01 52 00.8 +2.0**
VNDA PcP **PcP** **01 52 34.4 +1.6**
**MORW Morawa 63.02 245** P **P** **01 51 59.7 -0.3**
**MORW Morawa 63.02 245** P **P** **01 51 59.6 -0.3**
**MORW Morawa 63.02 245** P **P** **01 51 59.6 -0.3**
comp=2,30nm,1.1s,SNR=2.0
**TOLI2 Tolitoli 63.98 279** P **P** **01 52 06.6 +0.2**
**TWSI Taliwang, Sumb 65.15 267** P **P** **01 52 13.9 +0.1**
comp=2,172nm,0.9s,comp=2,2um
**GIRL Giralia 65.24 252** P **P** **01 52 15.7 +1.4**
**GIRL Giralia 65.24 252** P **P** **01 52 15.4 +1.1**
**MJAR Matsushiro Arr 67.04 322** P **P** **01 52 23.8 -1.5**
comp=2,3.6nm,0.6s,baz=154,slow=6.2,SNR=7.2
comp=2,3.6nm,0.6s
**ADK Adak 67.09 360** P **P** **01 52 24.1 -1.1**
**GSTR Great Sitkin T 67.31 0** P **P** **01 52 25.8 -0.7**
**CCD Concordia, Ant 67.61 194** P **P** **01 52 29.8 +1.1**
CCD PcP **PcP** **01 52 53.3 +0.7**
**JAGI Jajag, Banyuwa 67.84 267** P **P** **01 52 29.9 -0.8**
**JMN Monobe 67.97 317** P **P** **01 52 31.7 +0.6**
JMN IAmb IAmb 01 53 56.4
comp=2,30nm,1.1s
**CASY Casey 69.03 204** P **P** **01 52 37.3 +0.3**
CASY IAmb IAmb 01 52 38.8
comp=2,34nm,1.1s
**CASY Casey 69.03 204** P **P** **01 52 37.6 +0.6**
**JNU Nakatsue 69.62 315** P **P** **01 52 40.6 -0.6**
JNU IAmb IAmb 01 52 41.9
comp=2,16nm,0.9s
**JNU Nakatsue 69.62 315** P **P** **01 52 40.6 -0.6**
comp=2,12nm,0.7s,baz=133,slow=19,SNR=7.6
comp=2,12nm,0.7s
**KKM Kota Kinabalu 69.85 283** P **P** **01 52 43.8 +0.8**
**UGM Wanagama 71.46 267** P **P** **01 52 53.0 +0.4**
**UGM Wanagama 71.46 267** P **P** **01 52 52.5 -0.2**
**S12K Black Hills 71.98 9** P **P** **01 52 53.2 -1.5**
S12K IAmb IAmb 01 55 17.0
comp=2,40nm,1.1s
**SSLB Suanglung 72.40 302** P **P** **01 52 56.9 -1.0**
**CHGN Chignik 73.14 10** P **P** **01 53 03.5 +2.1**
baz=198
**SAO San Andreas Ge 73.51 43** P **P** **01 53 04.9 +0.9**
SAO IAmb IAmb 01 53 06.3
comp=2,29nm,1.0s
**PKM Mcpherson Peak 73.58 46** P **P** **01 53 05.6 +0.9**
baz=237
**PMPB Monarch Peak 73.64 44** P **P** **01 53 05.5 +0.6**
**SMMC Simmler 73.69 45** P **P** **01 53 06.1 +1.0**
baz=237
**HOPS Hopland Field 73.74 41** P **P** **01 53 06.3 +1.0**
**KMPM Mount Pierce 73.94 39** IAmb IAmb 01 53 08.7
comp=2,21nm,0.9s
**KSRS Korea Array 74.08 317** P **P** **01 53 07.7 +0.5**
comp=2,1.5nm,0.7s,baz=136,slow=7.6,SNR=6.2
KSRS pP **pP** **01 54 32.0 -0.2**
comp=2,1.4nm,0.7s,baz=120,slow=7.6,SNR=3.1
**KMRM Mail Ridge 74.08 39** P **P** **01 53 08.6 +1.3**
**KSAR Wonju Array Be 74.09 317** P **P** **01 53 07.2 -0.1**
**KSM Kuching 74.10 276** IAmb IAmb 01 53 09.8
comp=2,23nm,0.8s
**BBJI Bungbulang 74.33 266** P **P** **01 53 09.5 +0.1**
**ARVC Arvin 74.39 46** P **P** **01 53 09.6 +0.4**
baz=238
**KRPM Rodgers 74.45 39** P **P** **01 53 10.4 +1.0**
**KHMM Horse Mountain 74.46 39** P **P** **01 53 10.2 +0.7**
KHMM IAmb IAmb 01 53 11.7
comp=2,24nm,1.0s
**109C Camp Elliot, M 74.46 49** P **P** **01 53 09.9 +0.3**
baz=240
**CBX Cerro Bola 74.49 50** IAmb IAmb 01 53 11.7
comp=2,41nm,1.3s
**QSPA South Pole Qui 74.55 180** P **P** **01 53 11.0 +1.4**
**QSPA South Pole Qui 74.55 180** P **P** **01 53 11.2 +1.6**
comp=2,73nm,0.7s,baz=48,slow=2.7,SNR=469
comp=2,73nm,0.7s
**VES Vestal, Richgr 74.60 45** P **P** **01 53 10.4 +0.2**
baz=238,SNR=7.8
**O02D Mt. Diablo Mer 74.62 40** IAmb IAmb 01 53 12.6
comp=2,15nm,0.8s
**KRMB Red Mountain 74.74 38** P **P** **01 53 12.3 +1.2**
KRMB IAmb IAmb 01 53 13.4
comp=2,16nm,0.9s
**BFSC Mount Baldy Ra 74.75 47** P **P** **01 53 11.5 +0.2**
baz=239,SNR=6.1
**MURC Murrieta 74.75 48** P **P** **01 53 11.7 +0.4**
baz=239
**R17L Mt. Peulik Vol 74.77 11** P **P** **01 53 10.4 -0.4**
baz=200
**PLK4 Peulik 4 74.77 11** P **P** **01 53 10.5 -0.3**
PLK4 IAmb IAmb 01 53 11.2
comp=2,21nm,0.7s
**EDW2 Edwards Air Fo 74.84 47** P **P** **01 53 12.5 +0.7**
baz=238,SNR=12
**ESJX Sierra Juarez 74.87 50** P **P** **01 53 13.2 +1.1**

**CMB Columbia Colle 74.92 43** P **P** **01 53 12.2 0.0**
CMB IAmb IAmb 01 53 13.5
comp=2,19nm,1.0s
**ISA Isabella, Lake 74.92 46** IAmb IAmb 01 53 14.0
comp=2,18nm,1.1s
**ISA Isabella, Lake 74.92 46** P **P** **01 53 13.1 +0.9**
baz=238,SNR=9.6
**MONP2 Monument Peak 74.96 49** P **P** **01 53 13.4 +0.7**
baz=240,SNR=15
**OHAK Old Harbor 75.00 13** P **P** **01 53 11.7 -0.3**
OHAK IAmb IAmb 01 53 13.1
comp=2,67nm,1.9s
**OHAK Old Harbor 75.00 13** P **P** **01 53 12.0 0.0**
baz=203
**AFDM Forest Hills D 75.05 42** P **P** **01 53 12.2 -0.7**
**IKP In-Ko-Pah, Jac 75.06 49** P **P** **01 53 14.1 +1.0**
baz=240,SNR=12
**R18K Karluk 75.08 12** P **P** **01 53 12.3 -0.2**
baz=202
**YUH Yuha Desert 75.20 50** IAmb IAmb 01 53 15.5
comp=2,18nm,0.9s
**PFO Pinyon Flats O 75.29 48** P **P** **01 53 14.3 -0.1**
**PFO Pinyon Flats O 75.29 48** P **P** **01 53 14.9 +0.5**
baz=240,SNR=5.3
**TPFO Pinon Flats 75.29 48** P **P** **01 53 15.1 +0.6**
baz=240,SNR=5.5
**LRMC Laurel Mtn Rad 75.38 46** P **P** **01 53 15.5 +0.6**
baz=238,SNR=6.1
**SWSC Sam W. Stewart 75.44 49** P **P** **01 53 15.9 +0.8**
baz=240,SNR=5.1
**Q17K Contact Creek 75.45 11** P **P** **01 53 14.0 -0.8**
baz=201
**O14K Tigyukauivet M 75.53 8** P **P** **01 53 17.5 +2.5**
baz=195
**MDPB Devils Postpil 75.56 44** P **P** **01 53 15.9 -0.1**
MDPB IAmb IAmb 01 53 17.6
comp=2,19nm,0.9s
**YBH Yreka Blue Hor 75.59 39** P **P** **01 53 16.5 +0.7**
YBH IAmb IAmb 01 53 17.9
comp=2,17nm,0.8s
**K02D Willamette Mer 75.60 37** P **P** **01 53 16.2 +0.3**
K02D IAmb IAmb 01 53 17.9
comp=2,23nm,1.2s
**CWC Cottonwood Cre 75.60 45** P **P** **01 53 17.2 +1.0**
baz=238
**USRK Ussuriysk Ar. 75.62 325** P **P** **01 53 16.7 +0.8**
comp=2,1.8nm,0.7s,baz=108,slow=4.7,SNR=3.9
USRK pP **pP** **01 54 41.4 +0.3**
comp=2,1.7nm,1.0s,baz=147,slow=6.7,SNR=1.5
**KDAK Kodiak Island 75.67 13** P **P** **01 53 15.5 -0.3**
KDAK IAmb IAmb 01 53 16.6
comp=2,22nm,0.8s
**KDAK Kodiak Island 75.67 13** P **P** **01 53 15.9 +0.1**
baz=204
**Q16K King Salmon 75.70 11** P **P** **01 53 16.1 +0.2**
baz=200
**WAKR Walker 75.80 43** P **P** **01 53 18.0 +0.7**
WAKR IAmb IAmb 01 53 18.6
comp=2,16nm,0.7s
**MPMC Manual Prospec 75.81 46** P **P** **01 53 18.2 +0.8**
baz=238,SNR=12
**HATC Hat Creek Radi 75.81 40** IAmb IAmb 01 53 19.1
comp=2,26nm,1.1s
**BELC Belle Mtn. Jos 75.81 48** P **P** **01 53 18.0 +0.6**
baz=240,SNR=11
**MPK Martis Peak 75.86 42** P **P** **01 53 18.9 +1.2**
**GSC Goldstone, Bar 75.90 47** P **P** **01 53 18.4 +0.6**
baz=235,SNR=7.7
**Q18K Katmai Hardscr 75.98 11** P **P** **01 53 16.7 -0.9**
baz=202
**HEC Hector,Ludlow 75.99 47** P **P** **01 53 18.8 +0.5**
baz=240,SNR=15
**BC3 Big Chuckawall 76.04 49** P **P** **01 53 19.5 +0.9**
baz=240,SNR=5.5
**L04D Klamath Falls 76.12 38** P **P** **01 53 19.3 +0.4**
L04D IAmb IAmb 01 53 20.5
comp=2,21nm,0.9s
**DSP Deep Springs 76.17 44** P **P** **01 53 19.6 +0.5**
DSP IAmb IAmb 01 53 21.1
comp=2,15nm,0.9s
**YERR Yerington 76.19 43** IAmb IAmb 01 53 20.9
comp=2,40nm,1.2s
**GLA Glamis 76.20 50** P **P** **01 53 20.7 +1.2**
baz=241,SNR=7.6
**P17K Kvichak River 76.23 11** P **P** **01 53 18.2 -0.6**
baz=200
**LHV Little Huntoon 76.28 43** IAmb IAmb 01 53 21.8
comp=2,26nm,1.0s
**O16K Kokwok River B 76.33 10** P **P** **01 53 17.8 -1.6**
O16K IAmb IAmb 01 53 19.1
comp=2,14nm,0.9s
**O16K Kokwok River B 76.33 10** P **P** **01 53 18.1 -1.3**
baz=198,SNR=5.4
**GRAC Grapevine Rang 76.38 45** P **P** **01 53 21.4 +1.0**
baz=238,SNR=7.5
**I03D Drain, OR 76.39 37** IAmb IAmb 01 55 00.7
comp=2,62nm,1.9s
**M13K Dall Lake 76.40 7** P **P** **01 53 21.0 +1.3**
baz=193
**GMRC Granite Mounta 76.45 48** P **P** **01 53 21.1 +0.2**
baz=240,SNR=9.8
**FURC Furnace Creek, 76.45 46** P **P** **01 53 21.3 +0.6**
baz=239
**RYN Ryan 76.47 43** IAmb IAmb 01 53 22.5
comp=2,18nm,1.1s
**IRM Iron Mountain 76.51 49** P **P** **01 53 21.7 +0.6**
baz=240,SNR=14
**NVAR Mina Array Bea 76.51 43** P **P** **01 53 21.2 0.0**
**NVAR Mina Array Bea 76.51 43** P **P** **01 53 21.9 +0.6**
comp=2,14nm,0.8s,baz=225,slow=8.8,SNR=106
NVAR pP **pP** **01 54 45.6 -0.2**
comp=2,1.4nm,1.0s,baz=221,slow=8.1,SNR=1.7
comp=2,14nm,0.8s
**SHOC Shoshone, Teco 76.57 47** P **P** **01 53 21.6 +0.2**
baz=239,SNR=5.6
**N15K Kwethluk River 76.58 8** P **P** **01 53 20.5 -0.4**
baz=196
**TUQ Turquoise Moun 76.58 47** P **P** **01 53 22.0 +0.4**
baz=240,SNR=7.1
**NV11 Mina Array Sit 76.61 43** IAmb IAmb 01 53 23.3
comp=2,30nm,1.2s
**P18K Big Mountain, 76.63 11** P **P** **01 53 20.5 -0.7**
baz=201
**O17K Koliganek Bris 76.66 10** P **P** **01 53 20.7 -0.5**
baz=199
**BLYC Blythe 76.76 49** IAmb IAmb 01 53 24.4
comp=2,22nm,0.9s
**WCT Wildcat Mounta 76.78 46** IAmb IAmb 01 53 24.3
comp=2,26nm,1.3s
**113A Mohawk Valley, 76.85 50** IAmb IAmb 01 53 24.9
comp=2,26nm,0.9s
**M14K Bethel 76.89 7** IAmb IAmb 01 53 23.8
comp=2,21nm,0.8s
**M14K Bethel 76.89 7** P **P** **01 53 22.8 +0.3**
baz=194
**KVN Kaiserville 76.98 43** IAmb IAmb 01 53 25.3
comp=2,25nm,1.2s
**I04A Tendick Farm, 76.99 37** P **P** **01 53 23.0 -0.6**
**M15K Kasigluk River 77.00 8** P **P** **01 53 23.2 +0.1**
baz=196,SNR=12
**N16K Nishlik Lake 77.06 9** P **P** **01 53 23.6 +0.1**
baz=198
**O18K Koktuh Hills 77.07 11** P **P** **01 53 22.9 -0.7**
O18K IAmb IAmb 01 53 24.7
comp=2,25nm,0.9s
**O18K Koktuh Hills 77.07 11** P **P** **01 53 23.2 -0.3**
baz=201
**TPNV Topopah Spring 77.12 46** P **P** **01 53 25.1 +0.5**
baz=239,SNR=24
**214A Organ Pipe Nat 77.19 51** IAmb IAmb 01 53 27.1
comp=2,25nm,1.1s
**214A Organ Pipe Nat 77.19 51** P **P** **01 53 26.0 +1.1**
baz=242,SNR=8.0
**PDMCI Parker Dam,Lak 77.31 49** P **P** **01 53 26.3 +0.9**
baz=241,SNR=15
**N17K Nushagak Hills 77.36 10** P **P** **01 53 26.6 +1.5**
baz=199
**L14K Kuka Creek 77.38 7** IAmb IAmb 01 53 26.6
comp=2,15nm,1.0s
**L14K Kuka Creek 77.38 7** P **P** **01 53 25.8 +0.6**
baz=194
**M16K Timber Creek 77.56 9** P **P** **01 53 27.1 +0.9**
M16K IAmb IAmb 01 53 27.9
comp=2,22nm,0.9s
**M16K Timber Creek 77.56 9** P **P** **01 53 26.9 +0.7**
baz=197,SNR=7.4
**H04A Detroit Lake 77.65 36** IAmb IAmb 01 53 28.2
comp=2,47nm,1.5s

**N18K Kilae Creek 77.72 10** P **P** **01 53 26.5 -0.6**
baz=200
**K13K Kusilvak Mount 77.75 6** P **P** **01 53 27.3 +0.1**
baz=192
**NJ2 Nanjing 77.76 308** *e*P **P** **01 53 29.7 +1.7**
NJ2 pmax pmax
comp=2,11nm,0.5s
**O20K Slope Mountain 77.77 12** P **P** **01 53 26.9 -0.6**
baz=204
**BRLK Bradley Lake 77.85 13** IAmb IAmb 01 53 28.4
comp=2,17nm,0.7s
**PINE Pine Mountain 77.85 38** IAmb IAmb 01 53 30.4
comp=2,31nm,1.1s
**L15K Ungalak Mounta 77.85 7** P **P** **01 53 27.8 +0.1**
baz=195
**BRSE Bradley Lake S 77.86 13** P **P** **01 53 27.8 -0.1**
baz=206
**I05D Terrebonne, OR 77.93 37** IAmb IAmb 01 53 30.3
comp=2,18nm,1.0s
**Y14A Wickenburg 77.96 50** IAmb IAmb 01 53 30.9
comp=2,20nm,0.8s
**E03A Lebam 78.01 34** P **P** **01 53 29.0 0.0**
E03A IAmb IAmb 01 53 30.6
comp=2,27nm,0.9s
**N19K Bonanza Creek 78.09 11** P **P** **01 53 28.4 -0.9**
baz=202
**L16K Owhat River 78.14 8** P **P** **01 53 29.9 +0.6**
baz=197
**M17K Holitna River 78.15 9** P **P** **01 53 29.9 +0.5**
M17K IAmb IAmb 01 53 31.2
comp=2,16nm,0.9s
**M17K Holitna River 78.15 9** P **P** **01 53 30.1 +0.7**
baz=199
**PRN Pahroc Range 78.18 46** IAmb IAmb 01 53 32.4
comp=2,21nm,1.0s
**BMN Battle Mountai 78.28 42** IAmb IAmb 01 53 32.4
comp=2,20nm,0.8s
**R11B Troy Canyon, C 78.29 45** P **P** **01 53 31.2 +0.2**
baz=239,SNR=20
**HOOD Mount Hood Mea 78.33 36** IAmb IAmb 01 53 32.2
comp=2,28nm,1.4s
**HOLB Holberg 78.34 29** P **P** **01 53 30.6 -0.2**
HOLB IAmb IAmb 01 53 32.1
comp=2,31nm,1.2s
**K15K Wolf Creek Mou 78.44 7** IAmb IAmb 01 53 32.2
comp=2,12nm,0.7s
**K15K Wolf Creek Mou 78.44 7** P **P** **01 53 31.6 +0.6**
baz=195,SNR=6.0
**SEW Seward 78.47 14** P **P** **01 53 30.6 -0.6**
baz=207
**WVOR Wild Horse Val 78.47 40** IAmb IAmb 01 53 33.4
comp=2,15nm,1.0s
**Q23K Middleton Isla 78.62 15** P **P** **01 53 33.6 +1.6**
baz=210
**L17K Donlin 78.72 9** P **P** **01 53 33.8 +1.3**
baz=198,SNR=12
**I07A Izee 78.87 38** P **P** **01 53 34.0 +0.2**
**TUC Tucson 78.88 52** P **P** **01 53 34.9 +0.7**
**TUC Tucson 78.88 52** P **P** **01 53 35.4 +1.2**
baz=244
**GNW Green Mountain 79.03 34** P **P** **01 53 33.5 -1.0**
GNW IAmb IAmb 01 53 36.0
comp=2,16nm,1.1s
**L18K Granite Mounta 79.04 9** IAmb IAmb 01 53 36.0
comp=2,21nm,0.9s
**L18K Granite Mounta 79.04 9** P **P** **01 53 35.2 +1.0**
baz=200,SNR=14
**J08A Circle Bar Ran 79.08 39** IAmb IAmb 01 53 36.6
comp=2,16nm,1.0s
**GAMB Gambell 79.11 2** P **P** **01 53 35.7 +1.2**
baz=185
**CLRS Cowichan Lake 79.12 32** IAmb IAmb 01 53 36.4
comp=2,16nm,0.9s
**M19K Big River Lodg 79.13 11** P **P** **01 53 34.2 -0.5**
baz=202
**BNX BinXian 79.14 324** ⇓P **P** **01 53 35.8 +0.7**
BNX pmax pmax
comp=2,10.0nm,1.6s
**Q12A Willow Creek R 79.15 44** P **P** **01 53 35.5 0.0**
Q12A IAmb IAmb 01 53 37.1
comp=2,20nm,0.9s
**CN2 Changchun 79.19 321** *e*P **P** **01 53 37.1 +1.7**
CN2 pmax pmax
comp=2,10.0nm,0.6s
**K17K Iditarod 79.27 8** IAmb IAmb 01 53 37.3
comp=2,24nm,1.2s
**K17K Iditarod 79.27 8** P **P** **01 53 36.4 +0.9**
baz=198,SNR=8.0
**CBB Campbell River 79.27 31** IAmb IAmb 01 53 37.3
comp=2,18nm,1.0s
**RC01 Rabbit Creek A 79.29 13** P **P** **01 53 35.1 -0.5**
baz=206
**L19K White Mountain 79.31 10** P **P** **01 53 35.5 -0.2**
baz=201
**X16A Lo Mia Camp, P 79.33 50** P **P** **01 53 37.6 +0.9**
X16A IAmb IAmb 01 53 39.0
comp=2,24nm,0.9s
**M20K Styx River 79.33 11** P **P** **01 53 36.3 +0.4**
baz=203
**PGC Sidney 79.37 33** IAmb IAmb 01 53 37.6
comp=2,16nm,0.8s
**PWL Port Wells 79.40 14** IAmb IAmb 01 53 36.4
comp=2,24nm,1.1s
**PWL Port Wells 79.40 14** P **P** **01 53 35.4 -0.8**
baz=208,SNR=6.3
**SUA Susitna One 79.42 12** P **P** **01 53 35.4 -1.0**
SUA IAmb IAmb 01 53 36.9
comp=2,16nm,0.7s
**SUA Susitna One 79.42 12** P **P** **01 53 35.6 -0.9**
baz=205,SNR=7.7
**CCUT Cedar City 79.42 46** IAmb IAmb 01 53 39.2
comp=2,13nm,0.9s
**SPR3 Spring Creek 3 79.46 45** IAmb IAmb 01 53 38.5
comp=2,21nm,1.4s
**J16K Anvik River 79.51 7** IAmb IAmb 01 53 38.6
comp=2,26nm,0.9s
**J16K Anvik River 79.51 7** P **P** **01 53 37.5 +0.8**
baz=196,SNR=8.4
**PSUT Pine Spring 79.56 45** IAmb IAmb 01 53 39.3
comp=2,12nm,0.7s
**GLI Glacier Island 79.70 14** P **P** **01 53 37.2 -0.6**
baz=209,SNR=11
**SKT Skwentna 79.73 12** P **P** **01 53 37.4 -0.5**
baz=205
**L20K Farewell, AK 79.75 11** P **P** **01 53 37.5 -0.5**
baz=202,SNR=7.4
**M22K Willow 79.81 12** P **P** **01 53 38.6 +0.3**
baz=206
**J17K VABM Dome 79.82 8** IAmb IAmb 01 53 40.1
comp=2,17nm,0.9s
**J17K VABM Dome 79.82 8** P **P** **01 53 39.0 +0.6**
baz=197,SNR=9.1
**MXC Moxie City 79.84 36** IAmb IAmb 01 53 40.2
comp=2,20nm,1.4s
**KNK Knik Glacier 79.86 13** P **P** **01 53 38.1 -0.6**
baz=208
**G08A Pilot Rock 79.87 37** P **P** **01 53 39.1 -0.1**
G08A IAmb IAmb 01 53 40.7
comp=2,21nm,1.1s
**PMR Palmer 79.88 13** P **P** **01 53 37.9 -0.8**
baz=207
**SIT Sitka 80.02 21** P **P** **01 53 39.4 -0.1**
baz=220
**E07A Sunnyside 80.07 36** IAmb IAmb 01 53 41.6
comp=2,20nm,0.9s
**GHO Glory Hole Cre 80.08 13** IAmb IAmb 01 53 40.3
comp=2,14nm,0.8s
**PKCU Pink Cliffs 80.11 47** P **P** **01 53 42.0 +1.1**
PKCU IAmb IAmb 01 53 43.7
comp=2,28nm,1.1s
**U33K Whale Pass 80.11 23** IAmb IAmb 01 53 41.6
comp=2,14nm,0.9s
**U33K Whale Pass 80.11 23** P **P** **01 53 40.4 +0.4**
baz=222
**V35K Ketchikan 80.12 24** P **P** **01 53 40.5 +0.4**
baz=224
**HAWA Hanford 80.16 36** IAmb IAmb 01 53 42.0
comp=2,18nm,0.9s
**J18K Innoko River 80.22 9** IAmb IAmb 01 53 41.8
comp=2,17nm,0.9s
**J18K Innoko River 80.22 9** P **P** **01 53 40.9 +0.4**
baz=200,SNR=13
**DUN6 Lazy B Ranch 80.28 52** P **P** **01 53 41.5 -0.2**
**BMRM Bremner River 80.39 15** P **P** **01 53 41.1 -0.4**
baz=211
**S31K Pelican 80.40 21** P **P** **01 53 42.0 +0.5**
baz=219
**MESA MESA 80.43 17** P **P** **01 53 41.8 -0.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MESA | **MESA** baz=214 | 80.43 | 17 | P | P | 01 53 41.8 | -0.1 | |
| MTPU | **Mount Pierson** comp=Z,19nm,1.3s | 80.47 | 46 | IAmb | IAmb | 01 53 45.5 | | |
| X18A | **Snowflake** comp=Z,16nm,1.1s | 80.48 | 50 | IAmb | IAmb | 01 53 45.0 | | |
| SCM | **Sheep Creek Mo** comp=Z,20nm,0.7s | 80.49 | 14 | IAmb | IAmb | 01 53 42.4 | | |
| SCM | **Sheep Creek Mo** baz=209,SNR=8.6 | 80.49 | 14 | P | P | 01 53 41.7 | -0.3 | |
| KLU | **Klutina** baz=210 | 80.52 | 14 | P | P | 01 53 42.0 | -0.2 | |
| K20K | **Telida** | 80.54 | 10 | P | P | 01 53 41.9 | -0.3 | |
| K20K | comp=Z,16nm,0.8s | | | IAmb | IAmb | 01 53 43.0 | | |
| K20K | **Telida** baz=202,SNR=15 | 80.54 | 10 | P | P | 01 53 42.1 | 0.0 | |
| CRQE | **Cirque** baz=213 | 80.60 | 16 | P | P | 01 53 42.5 | -0.1 | |
| H16K | **Elim** baz=194 | 80.64 | 6 | P | P | 01 53 42.9 | +0.2 | |
| MFID | **Camas Ranch** | 80.74 | 40 | P | P | 01 53 44.3 | +0.4 | |
| G15K | **Niukluk** baz=192 | 80.81 | 5 | P | P | 01 53 43.9 | +0.4 | |
| J19K | **Poorman** baz=200 | 80.88 | 9 | P | P | 01 53 44.1 | +0.2 | |
| D08A | **Wollman Farm,** comp=Z,20nm,1.1s | 80.89 | 36 | IAmb | IAmb | 01 53 45.8 | | |
| W18A | **Petrified Fore** baz=244 | 80.90 | 50 | P | P | 01 53 45.8 | +0.8 | |
| VRDI | **Verde Repeater** comp=Z,23nm,1.2s | 80.91 | 16 | IAmb | IAmb | 01 53 45.0 | | |
| TIA | **Tai'an** | 80.92 | 311 | P | P | 01 53 45.4 | +0.6 | |
| TIA | comp=Z,8.0nm,0.9s | | | pmax | pmax | | | |
| N25K | **Chitina, Valde** | 80.94 | 15 | P | P | 01 53 44.0 | -0.4 | |
| N25K | comp=Z,16nm,0.7s | | | IAmb | IAmb | 01 53 45.1 | | |
| N25K | **Chitina, Valde** baz=211,SNR=6.5 | 80.94 | 15 | P | P | 01 53 44.1 | -0.3 | |
| M24K | **Tolsona, Glenn** baz=210 | 80.99 | 14 | P | P | 01 53 44.9 | +0.3 | |
| WAT6 | **Susitna Watana** baz=208,SNR=11 | 81.06 | 13 | P | P | 01 53 44.5 | -0.6 | |
| DUG | **Dugway, Tooele** baz=241,SNR=12 | 81.07 | 44 | P | P | 01 53 46.1 | +0.4 | |
| TNA | **Tin City** baz=188 | 81.08 | 4 | P | P | 01 53 45.1 | +0.2 | |
| F14K | **Arctic Creek** baz=190 | 81.10 | 4 | P | P | 01 53 45.4 | +0.3 | |
| WAT1 | **Susitna Watana** baz=207 | 81.10 | 13 | P | P | 01 53 44.4 | -0.8 | |
| MCARA | **McCarthy VSAT** baz=213 | 81.15 | 16 | P | P | 01 53 45.1 | -0.3 | |
| H17K | **Granite Mounta** | 81.19 | 7 | P | P | 01 53 45.8 | +0.2 | |
| H17K | **Granite Mounta** baz=196 | 81.19 | 7 | P | P | 01 53 45.6 | +0.1 | |
| P29M | **Windy Craggy** baz=218 | 81.22 | 19 | P | P | 01 53 45.9 | +0.1 | |
| CTG | **Chitna Glacier** baz=214 | 81.25 | 17 | P | P | 01 53 45.9 | -0.2 | |
| CTGM | **Chitina Glacie** comp=Z,17nm,0.7s | 81.25 | 17 | IAmb | IAmb | 01 53 46.9 | | |
| F10A | **Beach Ranch, E** comp=Z,16nm,0.8s | 81.26 | 37 | IAmb | IAmb | 01 53 47.3 | | |
| 121A | **Cookes Peak, D** baz=245 | 81.27 | 53 | P | P | 01 53 48.5 | +1.6 | |
| BGU | **Big Grassy Mou** | 81.28 | 43 | P | P | 01 53 46.5 | -0.3 | |
| J20K | **Nowinta River** | 81.29 | 10 | P | P | 01 53 46.1 | +0.1 | |
| J20K | comp=Z,11nm,0.8s | | | IAmb | IAmb | 01 53 47.0 | | |
| J20K | **Nowinta River** baz=202,SNR=11 | 81.29 | 10 | P | P | 01 53 46.2 | +0.2 | |
| G16K | **Koyuk River** baz=194 | 81.37 | 6 | P | P | 01 53 46.7 | +0.3 | |
| O28M | **Mount Upton** baz=215 | 81.41 | 17 | P | P | 01 53 47.1 | -0.1 | |
| HMU | **Henry Mountain** comp=Z,40nm,1.7s | 81.44 | 47 | IAmb | IAmb | 01 53 49.5 | | |
| F15K | **North Star Dit** baz=192 | 81.46 | 5 | P | P | 01 53 47.1 | +0.2 | |
| HARP | **HAARP** baz=211 | 81.49 | 14 | P | P | 01 53 46.9 | -0.3 | |
| O29M | **Mount Kennedy** baz=217 | 81.50 | 18 | P | P | 01 53 47.5 | +0.1 | |
| PLBC | **Pleasant Camp** baz=219 | 81.52 | 19 | P | P | 01 53 47.8 | +0.5 | |
| RND | **Reindeer** comp=Z,18nm,0.8s | 81.56 | 12 | IAmb | IAmb | 01 53 48.1 | | |
| DHY | **Denali Highway** baz=208,SNR=5.4 | 81.57 | 13 | P | P | 01 53 47.3 | -0.5 | |
| H18K | **Honhosa River** baz=198 | 81.59 | 8 | P | P | 01 53 47.5 | -0.1 | |
| G17K | **Kiwalik Mounta** baz=196 | 81.65 | 7 | P | P | 01 53 48.0 | +0.1 | |
| HLID | **Hailey** | 81.70 | 41 | P | P | 01 53 49.4 | +0.5 | |
| HLID | comp=Z,17nm,0.8s | | | IAmb | IAmb | 01 53 50.8 | | |
| HLID | **Hailey** baz=240,SNR=46 | 81.70 | 41 | P | P | 01 53 49.7 | +0.8 | |
| BPAW | **Bear Paw Mtn.** baz=205,SNR=5.5 | 81.77 | 11 | P | P | 01 53 46.9 | -1.7 | |
| I20K | **Naaghedeneel** comp=Z,17nm,0.9s | 81.81 | 9 | IAmb | IAmb | 01 53 50.0 | | |
| I20K | **Naaghedeneel** baz=202 | 81.81 | 9 | P | P | 01 53 49.1 | +0.4 | |
| ZAIG | **Zacatecas** comp=Z,15nm,1.0s | 81.82 | 64 | IAmb | IAmb | 01 53 52.8 | | |
| MCK | **McKinley** baz=207,SNR=8.6 | 81.83 | 12 | P | P | 01 53 48.3 | -0.6 | |
| T35M | **Bob Quinn** baz=225 | 81.84 | 24 | P | P | 01 53 50.2 | +1.1 | |
| SPUT | **South Promonto** comp=Z,19nm,1.0s | 81.85 | 43 | IAmb | IAmb | 01 53 51.4 | | |
| P30M | **Million Dollar** baz=218 | 81.85 | 19 | P | P | 01 53 49.8 | +0.6 | |
| HVU | **Hansel Valley** | 81.86 | 43 | P | P | 01 53 49.5 | -0.2 | |
| HVU | comp=Z,18nm,0.8s | | | IAmb | IAmb | 01 53 51.3 | | |
| PAX | **Paxson** baz=210 | 81.91 | 14 | P | P | 01 53 48.6 | -0.8 | |
| M26K | **Nabesna, AK** comp=Z,20nm,0.8s | 82.02 | 15 | IAmb | IAmb | 01 53 50.8 | | |
| M26K | **Nabesna, AK** baz=213,SNR=13 | 82.02 | 15 | P | P | 01 53 49.7 | -0.3 | |
| CTU | **Camp Tracy** comp=Z,14nm,0.9s | 82.02 | 44 | IAmb | IAmb | 01 53 52.1 | | |
| SRU | **San Rafael Swe** comp=Z,26nm,0.9s | 82.12 | 46 | IAmb | IAmb | 01 53 52.8 | | |
| P17A | **Butcher Ranch,** comp=Z,23nm,1.2s | 82.14 | 45 | IAmb | IAmb | 01 53 53.3 | | |
| YUK3 | **Moose Creek** baz=215,SNR=6.9 | 82.16 | 16 | P | P | 01 53 50.6 | -0.2 | |
| JLU | **Jordanelle** | 82.18 | 44 | P | P | 01 53 51.5 | -0.1 | |
| JLU | comp=Z,18nm,0.9s | | | IAmb | IAmb | 01 53 53.0 | | |
| H19K | **Roundabout Mou** comp=Z,16nm,1.1s | 82.21 | 8 | IAmb | IAmb | 01 53 52.2 | | |
| H19K | **Roundabout Mou** baz=200,SNR=12 | 82.21 | 8 | P | P | 01 53 51.2 | +0.5 | |
| M27K | **Edge Creek, AK** comp=Z,28nm,1.1s | 82.26 | 16 | IAmb | IAmb | 01 53 52.6 | | |
| M27K | **Edge Creek, AK** baz=214,SNR=9.9 | 82.26 | 16 | P | P | 01 53 51.5 | +0.1 | |
| G18K | **Tagagawik** baz=198,SNR=7.7 | 82.27 | 7 | P | P | 01 53 50.9 | -0.2 | |
| H20K | **Anotleneega Mo** baz=201,SNR=11 | 82.40 | 9 | P | P | 01 53 52.0 | +0.2 | |
| L26K | **Log Cabin Wild** baz=212,SNR=6.7 | 82.46 | 15 | P | P | 01 53 52.3 | +0.1 | |
| Q32M | **Nakina River** baz=223 | 82.52 | 21 | P | P | 01 53 53.1 | +0.3 | |
| P18A | **Preston Nutter** | 82.55 | 46 | P | P | 01 53 53.8 | +0.2 | |
| K24K | **Donnelly Dome** baz=210,SNR=8.1 | 82.56 | 13 | P | P | 01 53 52.5 | -0.2 | |
| NEW | **Newport** baz=237,SNR=6.9 | 82.57 | 35 | P | P | 01 53 52.6 | -0.5 | |
| HWUT | **Hardware Ranch** comp=Z,12nm,0.8s | 82.58 | 43 | IAmb | IAmb | 01 53 54.6 | | |
| NEA2 | **Nenana** baz=207,SNR=8.1 | 82.58 | 12 | P | P | 01 53 51.6 | -1.1 | |
| O30N | **Mendenhall** | 82.63 | 19 | P | P | 01 53 52.9 | -0.2 | |
| O30N | comp=Z,12nm,0.8s | | | IAmb | IAmb | 01 53 54.3 | | |
| O30N | **Mendenhall** baz=219,SNR=6.0 | 82.63 | 19 | P | P | 01 53 53.5 | +0.3 | |
| MLY | **Manley** comp=Z,11nm,0.8s | 82.66 | 11 | IAmb | IAmb | 01 53 53.2 | | |
| MLY | **Manley** baz=205,SNR=19 | 82.66 | 11 | P | P | 01 53 52.2 | -1.0 | |
| WRH | **Wood River Hil** comp=Z,25nm,1.0s | 82.66 | 12 | IAmb | IAmb | 01 53 54.2 | | |
| G19K | **Purcell Mounta** comp=Z,15nm,0.8s | 82.70 | 8 | IAmb | IAmb | 01 53 54.5 | | |
| G19K | **Purcell Mounta** baz=199,SNR=13 | 82.70 | 8 | P | P | 01 53 53.6 | +0.3 | |
| MVCO | **Mesa Verde** baz=244,SNR=5.1 | 82.71 | 48 | P | P | 01 53 54.7 | +0.4 | |
| SMAI | **San Martin Ant** | 82.79 | 159 | P | P | 01 53 55.6 | +1.7 | |
| MNTX | **Cornudas Mount** baz=247,SNR=40 | 82.80 | 54 | P | P | 01 53 56.1 | +1.5 | |
| F18K | **Selawik** baz=196 | 82.83 | 7 | P | P | 01 53 53.7 | -0.2 | |
| HDA | **Harding Lake** comp=Z,16nm,0.8s | 82.84 | 13 | IAmb | IAmb | 01 53 54.8 | | |
| HDA | **Harding Lake** baz=209,SNR=13 | 82.84 | 13 | P | P | 01 53 53.4 | -0.6 | |
| L27K | **Beaver Creek,** baz=214,SNR=7.7 | 82.86 | 15 | P | P | 01 53 53.9 | -0.3 | |
| N30M | **Aishikik Lake** baz=218 | 82.86 | 18 | P | P | 01 53 54.1 | -0.3 | |
| H21K | **Melozitna Rive** baz=203,SNR=12 | 82.88 | 10 | P | P | 01 53 54.4 | +0.2 | |
| WHY | **Whitehorse** baz=220 | 82.92 | 19 | P | P | 01 53 55.0 | +0.3 | |
| DLBC | **Dease Lake** baz=225 | 82.96 | 23 | P | P | 01 53 55.2 | +0.4 | |
| I23K | **Minto, Yukon-K** baz=206,SNR=15 | 83.02 | 11 | P | P | 01 53 54.1 | -0.8 | |
| IMAR | **Indian Mountai** | 83.03 | 9 | P | P | 01 53 54.8 | -0.2 | |
| E17K | **Hotham Inlet** baz=194 | 83.06 | 6 | P | P | 01 53 55.1 | 0.0 | |
| COLA | **College** baz=208 | 83.07 | 12 | P | P | 01 53 54.3 | -0.8 | |
| MDM | **Muy Dome** comp=Z,34nm,1.2s | 83.07 | 12 | IAmb | IAmb | 01 53 55.4 | | |
| SCRK | **Sand Creek** baz=212,SNR=14 | 83.12 | 14 | P | P | 01 53 55.5 | -0.1 | |
| IL31 | comp=Z,19nm,0.9s | 83.17 | 12 | IAmb | IAmb | 01 53 56.5 | | |
| ILAR | **Eielson Array** | 83.17 | 12 | P | P | 01 53 54.4 | -1.3 | |
| ILAR | **Eielson Array** comp=Z,15nm,0.9s,baz=226,slow=5.8,SNR=94 | 83.17 | 12 | P | P | 01 53 54.9 | -0.9 | |
| ILAR | comp=Z,1.3nm,1.0s,baz=219,slow=5.6,SNR=2.3 comp=Z,15nm,0.9s | | | pP | pP | 01 55 21.6 | -1.4 | |
| M29M | **Somme Creek** baz=217 | 83.25 | 17 | P | P | 01 53 56.3 | 0.0 | |
| P33M | **Teslin, Yukon** baz=222 | 83.26 | 20 | P | P | 01 53 56.2 | -0.2 | |
| ANMO | **Albuquerque** | 83.27 | 51 | P | P | 01 53 57.2 | +0.1 | |
| ANMO | comp=Z,15nm,1.1s | | | IAmb | IAmb | 01 53 59.0 | | |
| ANMO | **Albuquerque** baz=246 | 83.27 | 51 | P | P | 01 53 57.6 | +0.5 | |
| TXAR | **Lajitas Array** | 83.27 | 57 | P | P | 01 53 58.3 | +1.2 | |
| TXAR | **Lajitas Array** comp=Z,20nm,0.9s,baz=218,slow=5.7,SNR=150 comp=Z,20nm,0.9s | 83.27 | 57 | P | P | 01 53 58.5 | +1.4 | |
| F19K | **Shaleruckik Mo** comp=Z,14nm,0.8s | 83.27 | 7 | IAmb | IAmb | 01 53 57.0 | | |
| F19K | **Shaleruckik Mo** baz=198,SNR=16 | 83.27 | 7 | P | P | 01 53 55.9 | -0.2 | |
| N31M | **Braeburn, Yuko** baz=219 | 83.28 | 18 | P | P | 01 53 56.5 | +0.1 | |
| BJI | **Beijing** | 83.30 | 315 | P | P | 01 53 57.6 | +0.7 | |
| BJI | comp=Z,4.0nm,0.7s | | | pmax | pmax | | | |
| R33M | **Jennings River** baz=224,SNR=5.0 | 83.30 | 22 | P | P | 01 53 57.1 | +0.5 | |
| H22K | **Ishtalitna Cre** baz=204,SNR=28 | 83.33 | 10 | P | P | 01 53 56.5 | 0.0 | |
| J25K | **Salcha River,** baz=210,SNR=37 | 83.36 | 13 | P | P | 01 53 56.5 | -0.2 | |
| POKR | **Poker Plat Res** baz=208,SNR=15 | 83.37 | 12 | P | P | 01 53 56.0 | -0.7 | |
| AHID | **Auburn Hatcher** comp=Z,13nm,0.9s | 83.42 | 42 | IAmb | IAmb | 01 54 00.0 | | |
| RDMU | **Red Mountain** comp=Z,12nm,0.7s | 83.44 | 45 | IAmb | IAmb | 01 53 58.7 | | |
| E18K | **Tukpahlearik C** comp=Z,13nm,0.8s | 83.52 | 6 | IAmb | IAmb | 01 53 58.5 | | |
| E18K | **Tukpahlearik C** baz=196,SNR=7.5 | 83.52 | 6 | P | P | 01 53 57.4 | 0.0 | |
| D17K | **Noatak River** baz=193 | 83.55 | 5 | P | P | 01 53 57.8 | +0.3 | |
| G21K | **Allakaket** | 83.56 | 9 | P | P | 01 53 57.6 | 0.0 | |
| G21K | comp=Z,14nm,0.9s | | | IAmb | IAmb | 01 53 58.8 | | |
| G21K | **Allakaket** baz=202,SNR=16 | 83.56 | 9 | P | P | 01 53 57.7 | +0.1 | |
| H23K | **Yukon River** baz=206,SNR=8.0 | 83.59 | 11 | P | P | 01 53 57.0 | -0.9 | |
| K27K | **Chicken** baz=213 | 83.61 | 15 | P | P | 01 53 58.1 | +0.2 | |
| MSO | **Missoula** baz=240,SNR=8.4 | 83.64 | 38 | P | P | 01 53 58.3 | -0.4 | |
| LYN | **LuoYang** | 83.66 | 308 | eP | P | 01 54 00.8 | +2.0 | |
| LYN | comp=Z,31nm,0.5s | | | pmax | pmax | | | |
| J26L | **Joseph Creek** baz=212,SNR=38 | 83.66 | 14 | P | P | 01 53 58.7 | +0.4 | |
| DLMT | **Dillon** | 83.72 | 40 | P | P | 01 53 59.8 | +0.7 | |
| F20K | **Avaraart Lake** baz=200 | 83.74 | 8 | P | P | 01 53 58.6 | +0.1 | |
| TPAW | **Teton Pass** comp=Z,16nm,0.8s | 83.86 | 42 | IAmb | IAmb | 01 54 01.8 | | |
| PECS | **Pecos** comp=Z,28nm,1.5s | 83.86 | 55 | IAmb | IAmb | 01 54 02.6 | | |
| L29M | **L29M** comp=Z,28nm,1.0s | 83.88 | 17 | IAmb | IAmb | 01 54 00.7 | | |
| L29M | **L29M** baz=217,SNR=18 | 83.88 | 17 | P | P | 01 53 59.9 | +0.5 | |
| FXWY | **Fox Creek** | 83.88 | 42 | P | P | 01 53 59.6 | -0.5 | |
| H24K | **Noodor Dome** baz=208 | 83.92 | 11 | P | P | 01 53 57.8 | -1.7 | |
| E19K | **Redstone River** baz=199,SNR=15 | 83.93 | 7 | P | P | 01 53 59.6 | +0.2 | |
| IMW | **Indian Meadow** comp=Z,21nm,0.8s | 84.06 | 41 | IAmb | IAmb | 01 54 02.8 | | |
| PRP | **Porcupine Dome** comp=Z,21nm,0.9s | 84.11 | 12 | IAmb | IAmb | 01 54 01.7 | | |
| PRP | **Porcupine Dome** baz=210,SNR=24 | 84.11 | 12 | P | P | 01 54 00.1 | -0.5 | |
| S22A | **4UR Ranch, Cre** | 84.14 | 48 | P | P | 01 54 01.6 | 0.0 | |
| S22A | comp=Z,33nm,1.6s | | | IAmb | IAmb | 01 54 03.5 | | |
| S22A | **4UR Ranch, Cre** baz=245,SNR=16 | 84.14 | 48 | P | P | 01 54 02.2 | +0.6 | |
| O20A | **White River Ci** comp=Z,20nm,1.3s | 84.16 | 46 | IAmb | IAmb | 01 54 03.0 | | |
| O20A | **White River Ci** baz=244,SNR=6.7 | 84.16 | 46 | P | P | 01 54 01.9 | +0.4 | |
| F21K | **Alatna River** baz=202,SNR=9.6 | 84.22 | 9 | P | P | 01 54 00.8 | -0.2 | |
| G22K | **Bettles** baz=204 | 84.25 | 10 | P | P | 01 54 01.1 | +0.1 | |
| M31M | **Drury Creek, Y** baz=221 | 84.25 | 18 | P | P | 01 54 00.7 | -0.5 | |
| FLWY | **Flagg Ranch** comp=Z,19nm,0.9s | 84.30 | 41 | IAmb | IAmb | 01 54 04.2 | | |
| G23K | **Bananza Creek** baz=206,SNR=18 | 84.31 | 10 | P | P | 01 54 01.3 | -0.1 | |
| DAWY | **Dawson** comp=Z,19nm,0.8s | 84.31 | 16 | IAmb | IAmb | 01 54 02.5 | | |
| DAWY | **Dawson** baz=216,SNR=16 | 84.31 | 16 | P | P | 01 54 01.6 | +0.1 | |
| YFT | **Old Faithful** comp=Z,14nm,1.0s | 84.39 | 41 | IAmb | IAmb | 01 54 05.5 | | |
| YMR | **Madison River** comp=Z,26nm,0.9s | 84.41 | 41 | IAmb | IAmb | 01 54 04.9 | | |
| BOZ | **Bozeman (W)** comp=Z,19nm,1.1s | 84.43 | 40 | IAmb | IAmb | 01 54 04.4 | | |
| BOZ | **Bozeman (W)** baz=241,SNR=25 | 84.43 | 40 | P | P | 01 54 03.2 | +0.6 | |
| BW06 | **Boulder Array** baz=243,SNR=10 | 84.43 | 43 | P | P | 01 54 02.7 | -0.2 | |
| PD31 | **Pinedale Array** comp=Z,26nm,1.6s | 84.43 | 43 | IAmb | IAmb | 01 54 03.8 | | |
| PDAR | **Pinedale Array** comp=Z,4.7nm,0.8s,baz=217,slow=2.8,SNR=43 | 84.43 | 43 | P | P | 01 54 02.8 | -0.1 | |
| PDAR | comp=Z,0.4nm,0.7s,baz=199,slow=5.3,SNR=1.9 | | | pP | pP | 01 55 30.8 | +0.8 | |
| PDAR | comp=Z,0.2nm,0.6s,baz=90,slow=4.4,SNR=3.4 comp=Z,4.7nm,0.8s | | | PKKPbc | PKKPbc | 02 12 11.1 | -2.7 | |
| I26K | **Coal Creek Min** baz=212 | 84.44 | 13 | P | P | 01 54 02.0 | -0.1 | |
| EGAK | **Eagle** comp=Z,17nm,0.9s | 84.46 | 14 | IAmb | IAmb | 01 54 03.0 | | |
| EGAK | **Eagle** baz=214,SNR=14 | 84.46 | 14 | P | P | 01 54 01.9 | -0.2 | |
| H17A | **Grant Village** comp=Z,14nm,0.8s | 84.52 | 41 | IAmb | IAmb | 01 54 06.1 | | |
| H17A | **Grant Village** baz=242,SNR=8.2 | 84.52 | 41 | P | P | 01 54 05.1 | +1.8 | |
| FARO | **Faro, Yukon** baz=222 | 84.60 | 19 | P | P | 01 54 03.1 | +0.1 | |
| K29M | **Barlow Dome** | 84.63 | 16 | P | P | 01 54 03.2 | 0.0 | |
| K29M | comp=Z,21nm,1.1s | | | IAmb | IAmb | 01 54 04.4 | | |
| K29M | **Barlow Dome** baz=218,SNR=17 | 84.63 | 16 | P | P | 01 54 03.5 | +0.4 | |
| C18K | **Utukok River** baz=195 | 84.65 | 6 | P | P | 01 54 03.6 | +0.5 | |
| F22K | **John River** baz=204 | 84.69 | 9 | P | P | 01 54 03.3 | +0.1 | |
| H25L | **Birch Creek** baz=210 | 84.70 | 12 | P | P | 01 54 02.6 | -0.7 | |
| LKWY | **Lake** comp=Z,24nm,0.9s | 84.71 | 41 | IAmb | IAmb | 01 54 07.1 | | |
| MNHN | **Monahans** comp=Z,21nm,1.2s | 84.73 | 56 | IAmb | IAmb | 01 54 06.0 | | |
| SAND | **Sanderson** comp=Z,25nm,1.2s | 84.74 | 57 | IAmb | IAmb | 01 54 06.3 | | |
| COLD | **Coldfoot** baz=206,SNR=14 | 84.75 | 10 | P | P | 01 54 03.7 | +0.2 | |
| G24K | **Hadweenzic Riv** baz=208 | 84.76 | 11 | P | P | 01 54 03.7 | +0.1 | |
| D19K | **Kuna River** | 84.82 | 7 | P | P | 01 54 03.1 | -0.8 | |
| D19K | **Kuna River** baz=198 | 84.82 | 7 | P | P | 01 54 04.0 | +0.1 | |
| E20K | **Nigu River** baz=200,SNR=16 | 84.82 | 8 | P | P | 01 54 04.1 | +0.1 | |
| J29N | **Klondike Camp** baz=217 | 84.93 | 16 | P | P | 01 54 05.2 | +0.6 | |
| I27K | **Kandik River** baz=214,SNR=6.1 | 85.04 | 14 | P | P | 01 54 05.1 | 0.0 | |
| TOAD | **Toad River Com** baz=229,SNR=11 | 85.07 | 24 | P | P | 01 54 05.4 | +0.1 | |
| G25K | **Bearman Lake** baz=209 | 85.08 | 12 | P | P | 01 54 05.8 | +0.7 | |
| SDCO | **Great Sand Dun** baz=246,SNR=7.3 | 85.10 | 49 | P | P | 01 54 06.3 | 0.0 | |
| LIRD | **Liard River Hi** baz=228 | 85.11 | 23 | P | P | 01 54 05.8 | +0.3 | |
| D20K | **Etivluk River** baz=199,SNR=5.8 | 85.20 | 7 | P | P | 01 54 06.0 | +0.2 | |
| C19K | **Lookout Ridge** baz=196 | 85.25 | 6 | P | P | 01 54 06.2 | +0.2 | |
| E21K | **Killik River** baz=202 | 85.29 | 8 | P | P | 01 54 06.0 | -0.2 | |
| I28M | **Miner Creek** | 85.31 | 15 | P | P | 01 54 05.8 | -0.6 | |
| I28M | **Miner Creek** baz=215,SNR=7.7 | 85.31 | 15 | P | P | 01 54 06.1 | -0.3 | |
| E22K | **Anaktuvuk Pass** baz=204 | 85.32 | 9 | P | P | 01 54 06.2 | -0.2 | |
| PMSA | **Palmer Station** | 85.34 | 157 | P | P | 01 54 07.8 | +1.2 | |
| GYA | **Guiyang** | 85.35 | 299 | P | P | 01 54 08.5 | +0.9 | |
| GYA | comp=Z,11nm,0.7s | | | pmax | pmax | | | |
| F24K | **Squaw Lake** baz=208 | 85.41 | 11 | P | P | 01 54 06.9 | 0.0 | |
| J30M | **Hart River** baz=219 | 85.53 | 16 | P | P | 01 54 07.5 | 0.0 | |
| H27K | **Steamboat Moun** baz=214,SNR=8.6 | 85.58 | 14 | P | P | 01 54 07.8 | 0.0 | |
| E23K | **Chandalar** baz=206 | 85.60 | 10 | P | P | 01 54 07.6 | -0.2 | |
| I29M | **Ogilvie Camp,** baz=217,SNR=6.5 | 85.64 | 15 | P | P | 01 54 07.6 | -0.4 | |
| T25A | **Trinidad** baz=247 | 85.66 | 50 | P | P | 01 54 08.8 | -0.1 | |
| RLMT | **Red Lodge** comp=Z,16nm,0.9s | 85.69 | 41 | IAmb | IAmb | 01 54 10.7 | | |
| RLMT | **Red Lodge** baz=243,SNR=16 | 85.69 | 41 | P | P | 01 54 09.6 | +0.6 | |
| MSTX | **Muleshoe** baz=248 | 85.69 | 53 | P | P | 01 54 09.0 | -0.1 | |
| G26K | **Porcupine Rive** baz=212,SNR=11 | 85.70 | 12 | P | P | 01 54 08.4 | +0.2 | |
| TGTN | **Hyland Airport** baz=226 | 85.76 | 21 | P | P | 01 54 09.1 | +0.5 | |
| E24K | **Your Creek** baz=207 | 85.80 | 10 | P | P | 01 54 08.5 | -0.2 | |
| Q24A | **Divide** baz=246 | 85.84 | 48 | P | P | 01 54 09.9 | -0.1 | |
| ISCO | **Idaho Springs** baz=246 | 85.85 | 47 | P | P | 01 54 10.0 | 0.0 | |
| D22K | **Ayikyak River** baz=203,SNR=8.5 | 85.88 | 8 | P | P | 01 54 09.3 | +0.2 | |
| OZNA | **Ozona** comp=Z,30nm,1.5s | 85.89 | 57 | IAmb | IAmb | 01 54 11.7 | | |
| F25K | **Christian Rive** baz=210 | 85.89 | 11 | P | P | 01 54 09.5 | +0.3 | |
| BMAR | **Burnt Mountain** | 85.95 | 12 | P | P | 01 54 09.3 | -0.2 | |
| I30M | **Mount Dempster** comp=Z,8.1nm,0.7s | 86.03 | 16 | IAmb | IAmb | 01 54 10.6 | | |
| I30M | **Mount Dempster** baz=219,SNR=13 | 86.03 | 16 | P | P | 01 54 09.7 | -0.3 | |
| G27K | **Doyon Strip** baz=214 | 86.04 | 13 | P | P | 01 54 09.7 | -0.2 | |
| N23A | **Red Feather La** baz=246 | 86.07 | 46 | P | P | 01 54 10.9 | 0.0 | |
| TOLK | **Toolik Lake Re** baz=206 | 86.13 | 10 | P | P | 01 54 10.4 | +0.1 | |
| XAN | **Xi'an** | 86.18 | 307 | ⇑P | P | 01 54 12.3 | +1.0 | |
| XAN | | | | pP | PcP | 01 54 16.4 | +3.1 | |
| XAN | comp=Z,16nm,0.8s | | | pmax | pmax | | | |
| D23K | **Nanushuk River** baz=205 | 86.25 | 9 | P | P | 01 54 10.8 | 0.0 | |
| F26K | **Sheenjek River** baz=211 | 86.27 | 12 | P | P | 01 54 11.1 | +0.2 | |
| B21K | **Ikpikpuk River** baz=201 | 86.31 | 8 | P | P | 01 54 10.6 | -0.4 | |
| H29M | **Whitestone** comp=Z,42nm,1.8s | 86.31 | 15 | IAmb | IAmb | 01 55 45.9 | | |
| H29M | **Whitestone** baz=217 | 86.31 | 15 | P | P | 01 54 11.3 | +0.1 | |
| POST | **Post** comp=Z,7.9nm,0.7s | 86.35 | 54 | IAmb | IAmb | 01 54 12.8 | | |
| 833A | **Chaparral WMA,** baz=250 | 86.42 | 59 | P | P | 01 54 13.4 | +0.9 | |
| MAW | **Mawson** comp=Z,46nm,0.8s,baz=114,slow=7.2,SNR=118 comp=Z,46nm,0.8s | 86.69 | 199 | P | P | 01 54 14.3 | +1.3 | |
| EGMT | **Eagleton** comp=Z,16nm,1.1s | 86.71 | 38 | IAmb | IAmb | 01 54 14.9 | | |
| EGMT | **Eagleton** baz=243,SNR=5.6 | 86.71 | 38 | P | P | 01 54 13.5 | -0.1 | |
| D24K | **Happy Valley** baz=207 | 86.71 | 10 | P | P | 01 54 13.1 | +0.1 | |
| JCT | **Junction City** baz=250 | 86.81 | 57 | P | P | 01 54 13.7 | -0.7 | |
| HHC | **Hu-ho-hao-te** | 86.83 | 314 | eP | P | 01 54 17.9 | +3.5 | |
| HHC | comp=Z,5.0nm,0.5s | | | pmax | pmax | | | |
| HHC | comp=Z,90nm,4.6s | | | pmax | pmax | | | |
| EPYK | **Eagle Plains** baz=218 | 86.84 | 15 | P | P | 01 54 14.3 | +0.6 | |
| AMTX | **Amarillo** baz=249 | 86.86 | 53 | P | P | 01 54 14.4 | -0.3 | |
| HNDO | **Hondo** | 86.91 | 58 | P | P | 01 54 15.7 | +0.8 | |
| G29M | **Pine Creek** baz=217 | 86.95 | 14 | P | P | 01 54 14.5 | +0.3 | |
| C23K | **Itkillik River** baz=205 | 87.05 | 9 | P | P | 01 54 14.6 | 0.0 | |
| F28M | **Old Crow** baz=215 | 87.10 | 13 | P | P | 01 54 15.1 | +0.2 | |
| B22K | **Teshekpuk Lake** baz=202 | 87.13 | 8 | P | P | 01 54 15.0 | +0.1 | |
| D25K | **Kavik River** baz=209 | 87.27 | 10 | P | P | 01 54 15.3 | -0.4 | |
| G30M | **tAoh Zraii Nji** baz=219 | 87.44 | 15 | P | P | 01 54 16.0 | -0.6 | |
| ABTX | **Abilene, Hawle** baz=250 | 87.66 | 55 | P | P | 01 54 18.4 | 0.0 | |
| BRDY | **Brady** | 87.73 | 57 | P | P | 01 54 18.4 | -0.3 | |
| G31M | **Satah River** comp=Z,12nm,0.7s | 87.89 | 15 | IAmb | IAmb | 01 54 19.5 | | |
| G31M | **Satah River** baz=220,SNR=9.6 | 87.89 | 15 | P | P | 01 54 18.4 | -0.2 | |

**E28M Babbage River 87.98 13** P **P** **01 54 18.9 -0.2**
baz=216
**C27K Jago River 88.01 11** P **P** **01 54 18.8 -0.3**
baz=212
**F30M Barrier River 88.04 15** P **P** **01 54 19.9 +0.6**
baz=219
**LAO LASA Array 88.28 40** P **P** **01 54 22.1 +1.1**
baz=245
**RSSD Black Hills 88.65 43** P **P** **01 54 22.2 -0.8**
RSSD IAmb IAmb 01 54 23.9
comp=Z,14nm,0.8s
**RSSD Black Hills 88.65 43** P **P** **01 54 23.0 0.0**
baz=247
**PLPT Palo Pinto 88.78 56** IAmb IAmb 01 54 24.9
comp=Z,33nm,1.4s
**COYC Coyhaique 88.92 137** P **P** **01 54 25.6 +1.6**
**WMOK Wichita Mounta 89.05 54** P **P** **01 54 25.0 +0.2**
baz=250
**INK Inuvik 89.13 15** P **P** **01 54 25.0 +0.6**
baz=221
**WHTX Lake Whitney, 89.20 57** P **P** **01 54 26.5 +0.9**
baz=251
**PZH PanZhiHua 89.55 298** P **P** **01 54 28.3 +0.8**
PZH pmax pmax
comp=Z,20nm,0.5s
PZH pmax pmax
comp=Z,130nm,5.7s
**CMAR Chiang Mai Arr 89.70 289** P **P** **01 54 29.2 +1.1**
comp=Z,1.7nm,0.3s,baz=98,slow=2.6,SNR=12
comp=Z,1.7nm,0.3s
**CBKS Cedar Bluff 89.71 50** P **P** **01 54 29.1 +1.3**
baz=250
**LL01 San Ignacio de 89.84 134** IAmb IAmb 01 54 31.0
comp=Z,14nm,1.0s
**HKT Hockley 89.89 59** P **P** **01 54 29.3 +0.6**
HKT IAmb IAmb 01 54 31.3
comp=Z,24nm,1.4s
**LL02 Futaleuf 89.93 135** P **P** **01 54 29.4 +0.5**
**OK032 Salt Plains WL 90.17 52** IAmb IAmb 01 54 32.1
comp=Z,13nm,0.8s
**DGMT Dagmar 90.26 39** P **P** **01 54 31.7 +1.5**
baz=247
**R32A Long Quarter, 90.33 50** IAmb IAmb 01 54 33.1
comp=Z,19nm,0.9s
**KAN09 Caldwell North 90.73 52** IAmb IAmb 01 54 34.8
comp=Z,12nm,1.1s
**LZH Lanzhou 90.79 307** *e*P P 01 54 41.8 +8.7
LZH pmax pmax
comp=Z,17nm,1.1s
**K30B Basset 91.12 46** P **P** **01 54 33.6 -0.6**
**MTO3 Montecristo 91.21 75** IAmb IAmb 01 54 37.8
comp=Z,13nm,0.9s
**NATX Nacogdoches 91.39 58** P **P** **01 54 36.5 +0.8**
baz=253
**YKA Yellowknife Ar 91.44 24** P **P** **01 54 34.9 -0.3**
comp=Z,0.9nm,0.6s,baz=242,slow=4.6,SNR=6.2
comp=Z,0.9nm,0.6s
**ELIB Princess Elisa 91.73 186** *d*P **P** **01 54 37.0 +0.2**
comp=Z,25nm,1.0s
**PLCA Paso Flores 91.74 133** P **P** **01 54 37.7 +0.3**
**PLCA Paso Flores 91.74 133** P **P** **01 54 39.0 +1.6**
comp=Z,5.5nm,0.8s,baz=223,slow=4.1,SNR=13
comp=Z,5.5nm,0.8s
**TUL3 Leonard 91.74 53** P **P** **01 54 37.7 +0.4**
baz=252
**KSU1 Kansas State U 92.11 50** IAmb IAmb 01 54 40.5
comp=Z,11nm,0.8s
**KSU1 Kansas State U 92.11 50** P **P** **01 54 39.3 +0.5**
baz=252
**SUSD Miller 92.17 44** P **P** **01 54 38.9 -0.1**
baz=250
**C36M Paulatuk 92.31 16** IAmb IAmb 01 54 39.4
comp=Z,13nm,1.0s
**C36M Paulatuk 92.31 16** P **P** **01 54 39.5 +0.4**
baz=230
**TROLL Troll, Antarti 92.71 180** ⇓P **P** **01 54 41.9 +0.6**
comp=Z,1μm,0.8s
**BI02 San Fabin de 92.72 129** IAmb IAmb 01 54 43.9
comp=Z,9.7nm,0.9s
**SONM Songino Array 92.86 319** P **P** **01 54 41.1 -1.2**
comp=Z,0.3nm,0.5s,baz=72,slow=1.8,SNR=1.9
SONM pP **pP** **01 56 11.1 0.0**
comp=Z,0.9nm,0.9s,baz=122,slow=2.7,SNR=3.2
**MDND Maddock 92.89 41** P **P** **01 54 42.2 -0.1**
baz=250
**SNAA Sanae 92.94 178** P **P** **01 54 41.8 -0.4**
**SNAA Sanae 92.94 178** ⇓P **P** **01 54 42.0 -0.3**
comp=Z,208nm,0.6s
**SNAA Sanae 92.94 178** P **P** **01 54 42.5 +0.3**
comp=Z,8.1nm,0.6s,baz=186,slow=14,SNR=52
comp=Z,8.1nm,0.6s
**VNA3 Neumayer Olymp 93.02 176** ⇓P **P** **01 54 43.2 +0.6**
comp=Z,46nm,0.6s
**MIAR Mount Ida 93.07 55** P **P** **01 54 43.7 +0.3**
baz=253
**VNA2 Neumayer--Watz 93.48 176** ⇓P **P** **01 54 45.6 +1.0**
comp=Z,13nm,0.5s,baz=194,slow=5.2
**ECSD EROS Data Cent 93.54 46** P **P** **01 54 44.2 -1.1**
ECSD IAmb IAmb 01 54 45.8
comp=Z,19nm,1.3s
**ECSD EROS Data Cent 93.54 46** P **P** **01 54 44.9 -0.4**
baz=252
**VNA1 Neumayer--Stat 93.69 176** ⇓P **P** **01 54 46.6 +1.0**
comp=Z,25nm,0.8s
**A36M Sachs Harbour 93.73 14** P **P** **01 54 45.0 -0.6**
baz=229
**S39A Bolivar 94.16 52** IAmb IAmb 01 54 49.2
comp=Z,9.8nm,0.8s
**F33A 5 Mile Ranch, 94.40 44** P **P** **01 54 47.9 -1.3**
F33A IAmb IAmb 01 54 49.5
comp=Z,14nm,1.4s
**P38A Dawn 94.54 50** IAmb IAmb 01 54 50.6
comp=Z,10nm,1.1s
**R40A Maddies Statio 95.12 52** IAmb IAmb 01 54 53.6
comp=Z,11nm,1.1s
**SCIA State Center 95.40 48** P **P** **01 54 53.7 -0.2**
baz=254
**CCM Cathedral Cave 95.84 52** P **P** **01 54 56.3 +0.3**
baz=255
**I37A Lemond, Waseca 95.84 46** P **P** **01 54 55.1 -0.7**
**OXF Oxford 96.38 56** P **P** **01 54 58.3 -0.1**
baz=256
**SPMN Marine on St. 96.58 45** P **P** **01 54 59.2 +0.1**
baz=255
**JFWS Jewell Farm 97.78 48** P **P** **01 55 04.3 -0.3**
**JFWS Jewell Farm 97.78 48** P **P** **01 55 04.3 -0.3**
baz=256
**O53A New Philadelph 103.92 52** P **Pdif** **01 55 31.8 -0.1**
baz=261
**ZALV Zalesovo Beam 107.39 322** PKiKP **PKiKP** **01 59 52.0 -1.3**
comp=Z,0.7nm,0.5s,baz=46,slow=4.3,SNR=3.6
**MKAR Makanchi Array 108.68 315** PKiKP **PKiKP** **01 59 55.1 -0.9**
comp=Z,1.4nm,0.5s,baz=109,slow=1.5,SNR=17
MKAR PKKPbc **PKKPbc** **02 11 06.8 -0.7**
comp=Z,2.2nm,0.8s,baz=274,slow=4.1,SNR=13
MKAR PKKPab **PKKPdf** **02 11 21.1 -0.4**
comp=Z,0.5nm,0.6s,baz=256,slow=5.9,SNR=3.7
**KURBB Kurchatov Arra 111.22 319** PKiKP **PKiKP** **01 59 59.6 -1.0**
comp=Z,1.1nm,0.6s,baz=87,slow=2.0,SNR=12
KURBB PKKPbc **PKKPbc** **02 10 59.0 -0.4**
comp=Z,2.4nm,0.8s,baz=262,slow=4.0,SNR=15
**PKME Peaks-Kenny Pk 113.01 47** P **PKiKP** **02 00 04.3 +0.1**
baz=271
**BRVK Borovoye 116.10 322** **PKPdf** **02 00 08.2 -1.8**
**BDFB Brasilia 120.57 119** PKPdf **PKiKP** **02 00 20.0 +0.1**
**BDFB Brasilia 120.57 119** PKP **PKPdf** **02 00 19.2 -0.5**
comp=Z,3.3nm,0.8s,baz=195,slow=6.5,SNR=5.0
**ARU Arti 121.77 328** PKPdf **PKPdf** **02 00 19.8 -0.9**
**ABKAR Akbulak array 123.27 319** PKPdf **PKPdf** **02 00 22.9 -0.9**
**ARCES ARCESS Array B 124.24 351** PKPdf **PKPdf** **02 00 24.1 -1.0**
**ARCES ARCESS Array B 124.24 351** PKP **PKPdf** **02 00 24.8 -0.3**
comp=Z,12nm,0.8s,baz=45,slow=4.0,SNR=24
**BOSA Boshof 131.31 206** PKP **PKiKP** **02 00 41.3 +0.3**
comp=Z,3.2nm,0.8s,baz=154,slow=3.7,SNR=7.6
**FINES FINESS Array B 131.31 346** PKhKP PKPpre 02 00 28.5
comp=Z,1.9nm,0.8s,baz=14,slow=3.9,SNR=4.3
FINES PKP **PKPdf** **02 00 38.6 -0.1**
comp=Z,2.3nm,0.6s,baz=20,slow=4.4,SNR=8.1
FINES SKPbc **SKPab** **02 03 27.8 -0.1**
comp=Z,9.3nm,1.0s,baz=20,slow=4.4,SNR=14
**NB2 NORSAR Subarra134.17 355** PKP **PKPdf** **02 00 44.0 -0.3**
comp=Z,0.8nm,0.5s,baz=17,slow=2.6
**NOA NORSAR Array B 134.17 355** PKP **PKPdf** **02 00 44.2 -0.1**
comp=Z,2.4nm,0.7s,baz=14,slow=3.9,SNR=10
NOA SKPbc **SKPbc** **02 03 36.5 -0.4**
comp=Z,1.7nm,1.1s,baz=3.2,slow=2.3,SNR=3.3
**HFS Hagfors 134.79 353** PKhKP PKPpre 02 00 35.8
comp=Z,0.8nm,0.5s,baz=70,slow=5.2,SNR=7.2
HFS PKP **PKPdf** **02 00 44.9 -0.5**
comp=Z,5.2nm,0.9s,baz=63,slow=6.6,SNR=6.5
HFS SKPbc **SKPbc** **02 03 38.6 -0.3**
comp=Z,2.2nm,0.8s,baz=244,slow=6.4,SNR=4.4
**KBZ Khabaz 136.22 318** SKPbc **SKPbc** **02 03 44.0 +0.2**
comp=Z,4.3nm,0.9s,baz=252,slow=3.2,SNR=5.7
**AKASG Malin Array Be 139.17 335** PKhKP PKPpre 02 00 42.3
comp=Z,0.9nm,0.4s,baz=39,slow=3.9,SNR=1.7
AKASG PKP **PKPdf** **02 00 52.9 -0.8**
comp=Z,1.2nm,0.5s,baz=37,slow=3.6,SNR=5.0
AKASG SKPbc **SKPbc** **02 03 53.4 +1.4**
comp=Z,1.3nm,0.8s,baz=37,slow=2.2,SNR=5.5
**AK11 Malin Array Si 139.21 335** PKP **PKPdf** **02 00 53.3 -0.5**
**EKA Eskdalemuir Ar 139.92 6** PKhKP PKPpre 02 00 47.3
comp=Z,1.2nm,0.6s,baz=330,slow=3.1,SNR=8.0
EKA PKP **PKiKP** **02 00 56.4 -1.1**
comp=Z,0.5nm,0.4s,baz=316,slow=1.8,SNR=5.3
EKA SKPbc **SKPbc** **02 03 53.3 -0.6**
comp=Z,2.0nm,0.9s,baz=298,slow=1.5,SNR=4.1
**RNPP5 Staryi Chortor 140.04 338** PKP **PKPdf** **02 00 55.3 0.0**
**LUBAR Lubar, Ukraine 140.37 335** PKP **PKPdf** **02 00 55.9 0.0**
**KMBO Kilima Mbogo 142.66 247** PKPdf **PKPdf** **02 00 59.0 -2.5**
**OJC Ojcow 142.89 342** *e*PKP **PKPdf** **02 01 01.3 +0.9**
**BURAR Bucovina Array 143.22 335** PKPbc 02 00 59.4 +0.3
**BURAR Bucovina Array 143.22 335** ⇑P **PKPdf** **02 01 00.6 -0.6**
**KOLS Kolonicke sedl 143.23 339** *e*PKP PKPbc 02 00 59.8 +0.9
**KSP Ksiaz 143.23 346** *e*PKP PKPbc 02 00 58.9 +0.1
**CLL Collm 143.45 350** *i* PKPdf PKPbc 02 00 59.4 0.0
comp=Z,11nm,1.0s
CLL *i* x x 02 03 32.7
CLL *i* SKPbc **SKiKP** **02 04 06.7 +2.9**
comp=Z,10.0nm,1.4s
**CLL Collm 143.45 350** *e*PKPbc PKPbc 02 00 59.5 +0.1
baz=13,slow=3.1
**NIE Niedzica 143.46 341** *e*PKP PKPbc 02 01 00.1 +0.5
**CHVC Chvalec 143.53 346** *e*PKP PKPbc 02 00 59.8 0.0
**CRVS Cervenica-Dubn 143.53 340** *e*PKP PKPbc 02 01 00.5 +0.7
**PCED Cedros 143.60 45** *e*PKP **PKPdf** **02 01 01.4 -0.7**
**UPC Upice 143.61 346** *e*PKP PKPbc 02 01 00.2 +0.2
**CALA Caldeira 143.63 45** *e*PKP PKPbc 02 01 01.2 +0.6
**GTTG Gottingen 143.65 353** *e*PKPbc PKPbc 02 00 59.9 -0.1
baz=13,slow=3.1
**DPC Dobruska-Polom 143.69 346** *e*PKP PKPbc 02 01 00.8 +0.5
**BRG Berggiesshubel 143.70 349** *e*PKP PKPbc 02 01 00.5 +0.2
BRG Amp 02 01 02.0
comp=Z,2.9nm,0.7s
**BRG Berggiesshubel 143.70 349** P **PKiKP** **02 01 06.0 +0.6**
BRG Amp 02 01 06.3
comp=Z,4.5nm,0.6s
**BRG Berggiesshubel 143.70 349** *e*PKPbc PKPbc 02 01 00.2 -0.1
baz=13,slow=3.1
**CFR Carcaliu 143.79 330** ⇓P **PKPdf** **02 01 01.8 -0.3**
**KRLC Kraliky 143.83 345** *e*PKP PKPbc 02 01 01.0 +0.2
**PCAN Candelaria 143.83 45** *e*PKP **PKPdf** **02 01 02.1 -0.4**
**SRBC Serra Branca 143.84 43** *e*PKP PKPab 02 01 00.8 -0.1
**BMR Baia Mare 143.85 337** ⇓P PKPbc 02 01 01.3 +0.5
**PICO Pico 143.86 45** *e*PKP PKPbc 02 01 01.8 +0.5
**ODBI Odobesti 143.87 332** ⇑P PKPab 02 01 00.8 0.0
**ROSA Rosais 143.87 44** *e*PKP PKPbc 02 01 01.8 +0.6
**TPGR Topolog 143.89 329** ⇓P **PKPdf** **02 01 01.9 -0.4**
**MORC Moravsky Berou 143.92 344** *e*PKP PKPab 02 01 00.9 +0.1
**MORC Moravsky Berou 143.92 344** ⇓P PKPab 02 01 00.0 -0.8
**VRI Vrincioaia 143.94 332** ⇑P PKPbc 02 01 01.8 +0.6
**LANS Liptovska Anna 143.95 342** *e*PKP **PKPdf** **02 01 02.0 -0.4**
**PLOR Plostina 143.99 332** ⇑P PKPbc 02 01 01.3 0.0
**ARCR ARCALIA 144.00 335** ⇑P **PKPdf** **02 01 01.9 -0.6**
**BUG Bochum--Univer 144.01 356** *e*PKPbc **PKPab** **02 01 00.9 -0.1**
baz=13,slow=3.1
**PMAN Manadas 144.01 44** *e*PKP **PKPdf** **02 01 02.5 -0.3**
**TURR Turia 144.11 333** ⇑P **PKPdf** **02 01 02.4 -0.4**
**KASTN Kahler Asten 144.15 355** *e*PKPbc **PKPab** **02 01 01.6 -0.1**
baz=13,slow=3.1
**COVR Voineasa-Covas 144.19 332** ⇑P **PKPab** **02 01 01.8 -0.2**
**BR131 Keskin Array S 144.21 318** PKPdf **PKPab** **02 01 01.9 -0.6**
**BRTR Keskin Array B 144.21 318** **PKPab** **02 01 02.0 -0.5**
**BRTR Keskin Array B 144.21 318** PKP **PKPab** **02 01 02.2 -0.2**
comp=Z,13nm,0.7s,baz=89,slow=2.2,SNR=88
BRTR pPKP **pPKPdf** **02 02 34.6 -2.4**
comp=Z,1.2nm,0.9s,baz=93,slow=5.8,SNR=2.2
BRTR SKPbc **SKiKP** **02 04 06.2 +0.2**
comp=Z,2.5nm,1.0s,baz=151,slow=2.8,SNR=5.7
**MAUC Maruska 144.22 344** *e*PKP **PKPdf** **02 01 02.7 -0.1**
**HARR Harsova 144.25 330** ⇑P **PKPdf** **02 01 03.3 +0.3**
**BOSR Bodos 144.25 333** ⇑P **PKPdf** **02 01 03.1 +0.1**
**TLBR Topalu 144.30 329** ⇑P **PKPab** **02 01 02.4 0.0**
**MOX Moxa 144.31 351** *e*PKPbc PKPbc 02 01 02.2 -0.1
baz=13,slow=3.1
**KIRS Kirsehir-Merke 144.36 317** ⇑P **PKPdf** **02 01 03.3 -0.2**
**UBBA Unterbreizbach 144.36 353** *e*PKPbc PKPbc 02 01 02.1 -0.1
baz=13,slow=3.1
**PRA Prague 144.36 348** *e*PKP **PKPab** **02 01 02.6 +0.2**
**PLN Plauen 144.38 350** *e*PKPbc PKPbc 02 01 02.2 -0.2
baz=13,slow=3.1
**TANN Tannenbergstha 144.40 350** *e*PKPbc PKPbc 02 01 02.3 -0.3
baz=13,slow=3.1
**PRU Pruhonice 144.42 348** *e*PKP **PKPdf** **02 01 02.9 -0.2**
**GOPC GO Pecny, Ondr 144.44 347** *e*PKP **PKPdf** **02 01 03.0 -0.2**
**PSBA Serra de Santa 144.45 43** *e*PKP **PKPab** **02 01 03.3 +0.1**
**DOPR Dopca 144.46 333** ⇓P **PKPdf** **02 01 04.2 +0.8**
**NEHR Nehoiu 144.47 332** ⇓P **PKPab** **02 01 03.1 +0.1**
**PAGU Agualva, Azore 144.55 43** *e*PKP **PKPdf** **02 01 03.9 +0.2**
**MLR Muntele Rosu 144.58 332** ⇓P **PKPab** **02 01 03.6 0.0**
**VRAC Vranov 144.59 345** *e*PKP PKPbc 02 01 03.2 +0.1
**VRAC Vranov 144.59 345** PKP PKPbc 02 01 03.1 -0.1
comp=Z,18nm,0.9s,baz=4.7,slow=5.0,SNR=23
**VRAC Vranov 144.59 345** ⇑P **PKPdf** **02 01 03.6 +0.2**
**ISR Istrita 144.59 331** ⇑P **PKPdf** **02 01 03.9 +0.2**
**PSCM Serra do Cume 144.63 43** *e*PKP **PKPdf** **02 01 04.4 +0.5**
**VYHS Vyhne 144.72 342** *e*PKP **PKPab** **02 01 03.9 0.0**
**JAVC Velka Javorina 144.72 344** *e*PKP **PKPab** **02 01 04.8 +0.9**
**MARR Marisel-Cluj 144.82 336** ⇑P **PKPab** **02 01 04.3 -0.1**
**KRUC Moravsky 144.87 345** *e*PKP PKPbc 02 01 04.1 +0.1
**TREC Trest 144.87 346** *e*PKP PKPbc 02 01 04.2 +0.2
**MANZ Manzenberg 144.87 350** *e*PKPbc PKPbc 02 01 04.0 0.0
baz=13,slow=3.1
**DRGR 144.88 337** ⇓P **PKPdf** **02 01 04.2 0.0**
**MEM Membach 144.91 357** *d*PKP **PKPdf** **02 01 03.8 -0.1**
**AHRW Bad Neuenahr-A 144.92 356** *e*PKPbc **PKPdf** **02 01 03.9 0.0**
baz=13,slow=3.1
**BTNL Ternell 144.93 357** *d*PKP **PKPdf** **02 01 03.8 -0.2**
**BSTI Sart Tilman 144.96 358** *d*PKP **PKPdf** **02 01 04.1 +0.1**
**ZVC Zvikov 145.01 348** *e*PKP **PKPab** **02 01 04.8 +0.1**
**VOIR 145.02 333** ⇓P **PKPab** **02 01 05.3 +0.2**
**ROTZ Rotzenmuhle 145.07 350** *e*PKPbc **PKPab** **02 01 04.9 -0.2**
baz=13,slow=3.1
**TNS Taunus Mts 145.12 354** *e*PKPbc **PKPbc** **02 01 04.9 +0.1**
baz=13,slow=3.1
**BHOU Houvegnez 145.17 357** *d*PKP **PKPab** **02 01 05.4 -0.1**
**BGES Gesves 145.17 358** *d*PKPdf **PKPdf** **02 01 04.6 +0.2**
BGES *d*PKP **PKPab** **02 01 05.9 +0.4**
**ARR Arges 145.25 333** ⇑P **PKPab** **02 01 06.2 +0.2**
**BMRD Maredsous 145.26 358** *d*PKP **PKPdf** **02 01 04.8 +0.2**
**MODS Modra-Piesok 145.27 344** *e*PKP **PKPab** **02 01 05.9 -0.1**
**GRF Grafenberg Arr 145.30 351** *e*PKPbc **PKPbc** **02 01 05.5 +0.2**
baz=13,slow=3.1
**GRFO Grafenberg 145.30 351** PKPdf **PKPdf** **02 01 03.9 -0.7**
**RCHB Rochefort 145.40 358** *d*PKP **PKPbc** **02 01 05.2 -0.3**
**KHC Kasperske Hory 145.43 348** *e*PKP **PKPbc** **02 01 05.7 -0.1**
**DOU Dourbes 145.48 359** *d*PKP **PKPbc** **02 01 05.8 0.0**
**ZST Bratislava 145.48 344** *e*PKP **PKiKP** **02 01 08.3 -0.8**
**SRO Srobarova 145.49 342** *e*PKP **PKPab** **02 01 07.4 +0.7**
**WET Wettzell 145.55 349** *e*PKPbc **PKPbc** **02 01 06.1 0.0**
baz=13,slow=3.1
**DEV Deva 145.56 336** ⇓P **PKPab** **02 01 06.7 -0.4**
**LOT Lotru 145.56 334** ⇑P **PKPdf** **02 01 05.3 -0.1**
**CKRC Cesky Krumlov 145.58 347** *e*PKP **PKPbc** **02 01 05.7 -0.5**
**GEC2 GERESS Array S 145.68 348** *e*PKPbc **PKPbc** **02 01 06.6 0.0**
baz=13,slow=3.1
**GERES GERESS Array B 145.68 348** PKPbc **PKPdf** **02 01 05.5 +0.1**
comp=Z,7.3nm,0.6s,baz=160,slow=8.2,SNR=35
**SIRR Siria 145.72 337** ⇑P **PKPab** **02 01 07.3 -0.5**
**HUMR Humele 145.76 332** ⇑P **PKPdf** **02 01 05.6 +0.1**
**WLF Walferdange 145.85 357** *d*PKP **PKPbc** **02 01 06.9 0.0**
**WLF Walferdange 145.85 357** *e*PKPbc **PKPab** **02 01 07.6 -0.5**
baz=13,slow=3.1
**SURR Surduc 145.97 336** ⇑P **PKPbc** **02 01 07.4 0.0**
**GZR Gura Zlata 146.01 335** ⇑P **PKPbc** **02 01 07.4 -0.2**
**CONA Conrad Observa 146.05 345** *i* PKP **PKPbc** **02 01 08.1 +0.4**
comp=Z,19nm,1.0s,SNR=21
CONA epPKiKP pPKPab 02 02 38.9 -0.8
comp=Z,5.9nm,1.1s
**RONA Rosalia, Austr 146.15 344** *i* PKP **PKPbc** **02 01 08.3 +0.3**
comp=Z,19nm,1.1s,SNR=12
RONA epPKiKP pPKPab 02 02 39.9 -0.1
comp=Z,6.2nm,1.2s
**MMAI Mount Meron Ar 146.17 307** PKPbc **PKPbc** **02 01 08.7 +0.2**
comp=Z,10.0nm,0.5s,baz=69,slow=6.4,SNR=16
**BZS Buzias 146.28 337** ⇑P **PKPdf** **02 01 06.3 -0.1**
**STU Stuttgart 146.47 353** *e*PKPbc **PKPbc** **02 01 09.1 +0.3**
baz=13,slow=3.1
**MOA Molln 146.50 347** *i* PKP **PKPbc** **02 01 09.0 +0.1**
comp=Z,11nm,0.6s,SNR=7.1
MOA epPKiKP pPKPbc 02 02 41.1 -0.1
comp=Z,16nm,1.5s
**ELND Elena 146.55 329** ⇓P **PKPdf** **02 01 05.4 -1.6**
**HERR Herculane 146.58 335** ⇑P **PKPbc** **02 01 09.1 -0.1**
**ARSA Arzberg 146.77 345** *i* PKP **PKPbc** **02 01 09.1 -0.6**
comp=Z,10.0nm,1.4s,SNR=5.4
ARSA epPKiKP **pPKPdf** **02 02 41.3 +0.2**
comp=Z,10nm,1.5s
**FUR Furstenfeldbru 146.78 350** *e*PKPbc **PKPbc** **02 01 09.9 +0.2**
baz=13,slow=3.1
FUR epPKPbc pPKPab 02 02 42.3 0.0
**BIOA Bad Ischl, Aus 146.79 347** *i* PKP **PKPbc** **02 01 09.5 -0.2**
comp=Z,5.4nm,0.6s,SNR=8.2
BIOA epPKiKP pPKPbc 02 02 42.0 -0.2
comp=Z,12nm,1.5s
**MORH Mrgy, Hungar 146.81 340** ⇓P **PKPdf** **02 01 07.6 +0.3**
**RJOB Jochberg 146.92 348** *e*PKPbc **PKPbc** **02 01 10.1 +0.1**
baz=13,slow=3.1
RJOB epPKPbc pPKPbc 02 02 42.5 -0.1
**MDVR Moldovita 146.94 336** ⇓P **PKPdf** **02 01 07.5 -0.1**
**BFO Black Forest 147.00 354** **PKPbc** **02 01 10.0 -0.3**
**BFO Black Forest 147.00 354** *e*PKPbc **PKPbc** **02 01 10.3 +0.1**
baz=13,slow=3.1
BFO epPKPbc **pPKPbc** **02 02 42.7 -0.1**
**LESA Schwarzleotal 147.24 348** *i* PKP **PKPbc** **02 01 10.6 -0.3**
comp=Z,5.1nm,0.6s
LESA epPKiKP **pPKPbc** **02 02 43.2 -0.4**
comp=Z,6.6nm,1.3s
**FRGS Fruska Gora 147.34 338** ⇑*i* P **PKPbc** **02 01 11.1 -0.1**
**FRGS Fruska Gora 147.34 338** ⇓P **PKPbc** **02 01 11.7 +0.5**
**SOKA Soboth 147.42 345** *i* PKP **PKPbc** **02 01 10.9 -0.6**
comp=Z,11nm,0.9s,SNR=11
SOKA epPKiKP **pPKPbc** **02 02 43.7 -0.4**
comp=Z,9.9nm,1.5s
**UBR Ueberruh 147.43 352** *e*PKPbc **PKPbc** **02 01 11.7 +0.2**
baz=13,slow=3.1
UBR epPKPbc **pPKPab** **02 02 44.6 -0.3**
**KBA Koelnbreinsper 147.43 347** *i* PKP **PKPbc** **02 01 10.8 -0.8**
comp=Z,10.0nm,0.6s,SNR=10
KBA epPKiKP **pPKPdf** **02 02 43.2 +0.6**
comp=Z,4.2nm,1.0s
**RETA Reutte 147.52 351** *i* PKP **PKPbc** **02 01 11.6 -0.1**
comp=Z,3.9nm,0.5s,SNR=7.5
RETA epPKiKP **pPKPbc** **02 02 44.1 -0.2**
comp=Z,19nm,1.4s
**WATA Walderalm 147.53 350** *e*PKP **PKPbc** **02 01 11.5 -0.3**
comp=Z,6.3nm,0.6s,SNR=8.6
WATA epPKiKP **pPKPbc** **02 02 43.9 -0.6**
comp=Z,11nm,1.3s
**CLF Chambon-Foret 147.55 1** PKPbc **PKPbc** **02 01 11.8 +0.2**
**WTTA Wattenberg 147.59 349** *i* PKP **PKPbc** **02 01 12.0 -0.1**
comp=Z,16nm,0.5s,SNR=12
WTTA epPKiKP **pPKPbc** **02 02 44.2 -0.5**
comp=Z,8.4nm,0.9s
**MOTA Moosalm 147.60 350** *i* PKP **PKPbc** **02 01 11.8 -0.3**
comp=Z,15nm,1.2s
MOTA epPKiKP **pPKPdf** **02 02 43.5 +0.7**
comp=Z,20nm,1.5s
**OBKA Obir 147.70 345** *i* PKP **PKPbc** **02 01 11.4 -0.8**
comp=Z,12nm,1.5s,SNR=5.7
OBKA epPKiKP **pPKPdf** **02 02 43.6 +0.7**
comp=Z,1.6nm,0.6s
**SQTA Sankt Quirin 147.70 350** *i* PKP **PKPbc** **02 01 12.1 -0.1**
comp=Z,7.3nm,0.6s,SNR=7.2
SQTA epPKiKP **pPKPdf** **02 02 43.6 +0.6**
comp=Z,9.1nm,1.4s
**MYKA Terra Mystica 147.79 347** *i* PKP **PKPbc** **02 01 11.6 -0.8**
comp=Z,11nm,0.7s,SNR=11
MYKA epPKiKP **pPKPdf** **02 02 44.0 +0.9**
comp=Z,11nm,1.5s
**DAVA Damuels 147.84 352** *i* PKP **PKPbc** **02 01 12.7 0.0**
comp=Z,13nm,0.6s,SNR=9.9
DAVA epPKiKP **pPKPbc** **02 02 44.8 -0.6**
comp=Z,7.7nm,0.9s
**BOVS Bovan 147.89 335** ⇑P **PKPbc** **02 01 12.0 -0.7**
**ABTA Abfaltersbach 147.92 348** *i* PKP **PKPbc** **02 01 12.1 -0.7**
comp=Z,5.9nm,0.7s,SNR=19
ABTA epPKiKP **pPKPbc** **02 02 44.8 -0.8**
comp=Z,5.1nm,1.0s
**TEKS Tekeris 147.97 338** ⇑*i* P **PKPbc** **02 01 12.7 -0.2**
**FETA Feichten 147.98 350** *i* PKP **PKPbc** **02 01 13.0 0.0**
comp=Z,18nm,1.2s
FETA epPKiKP **pPKPdf** **02 02 44.0 +0.5**
comp=Z,8.1nm,1.2s
**CRES Cresnjev 148.10 344** ⇑*i* P **PKPbc** **02 01 12.8 -0.4**
**LJU Ljubljana 148.14 345** *i* PKPdf **PKPdf** **02 01 09.7 +0.1**
LJU *i* PKPbc **PKPbc** **02 01 13.1 -0.2**
LJU epPKPbc **pPKPbc** **02 02 46.1 -0.1**
**DAVOX Davos/Dischmat 148.34 351** PKPbc **PKPbc** **02 01 14.1 +0.1**
comp=Z,23nm,0.6s,baz=357,slow=7.8,SNR=20
DAVOX pPKPbc **pPKPdf** **02 02 45.5 +1.3**
comp=Z,4.6nm,0.9s,baz=308,slow=6.3,SNR=2.9
**A051A Mrakovica 148.43 342** ⇑*i* P **PKPbc** **02 01 13.9 -0.2**
**CEY Cerknica 148.45 345** *i* PKPbc **PKPbc** **02 01 13.8 -0.3**
CEY *i* pPKPbc **pPKPbc** **02 02 46.9 0.0**
**CEY Cerknica 148.45 345** ⇑*i* P **PKPbc** **02 01 13.6 -0.5**
**BOJS Bojanci 148.46 344** *i* PKPdf **PKPdf** **02 01 10.2 +0.2**
BOJS *i* PKPbc **PKPbc** **02 01 14.1 0.0**
BOJS *i* pPKPbc **pPKPbc** **02 02 47.2 +0.2**
**BOJS Bojanci 148.46 344** ⇑*i* P **PKPdf** **02 01 10.0 0.0**
**HAPS Han Pijesak,Bl 148.57 338** ⇑*i* P **PKPbc** **02 01 14.9 +0.3**
**BLY Banja Luka 148.58 341** ⇑*i* P **PKPbc** **02 01 14.4 0.0**
**MBAR Mbarara 148.58 242** **PKPbc** **02 01 16.1 +0.5**
**BBLS Lazi&#263i 148.60 337** ⇑*i* P **PKPbc** **02 01 14.8 +0.2**
**SKDS Skadanscina 148.73 346** ⇑*i* P **PKPbc** **02 01 14.1 -0.7**
**RUDO Rudo 148.82 337** *e*P **PKPbc** **02 01 14.5 -0.6**
**PEHC Pehcevo 148.85 331** *i* P **PKPbc** **02 01 14.7 -0.6**
**SJES Sjenica 148.90 336** *e*P **PKPdf** **02 01 11.1 +0.1**
**MGRS Mrkonjic Grad 148.91 341** ⇑*i* P **PKPbc** **02 01 14.1 -1.2**
**A050A Klekovaca 149.03 342** ⇑*i* P **PKPbc** **02 01 14.5 -1.1**
**UPM Unac-Piva 149.35 337** ⇑*i* P **PKPbc** **02 01 15.9 -0.7**
**VAY Valandovo 149.37 331** *i* P **PKPbc** **02 01 16.8 +0.3**
**BRY Bratogost 149.75 338** ⇑*i* P **PKPbc** **02 01 16.9 -0.6**
**PDG Podgorica 149.88 336** ⇑*i* P **PKPbc** **02 01 16.8 -0.8**
**PDG Podgorica 149.88 336** ⇑P **PKPbc** **02 01 17.1 -0.6**
**TREB Trebinje 149.98 338** *e*P **PKPbc** **02 01 16.6 -1.3**
**STON Ston 150.08 339** ⇑*i* P **PKPbc** **02 01 17.1 -1.0**
**DRME Dracevica, Mon 150.12 336** ⇑*i* P **PKPbc** **02 01 16.9 -1.3**
**SSB Saint Sauveur 150.29 358** PKPbc **PKPbc** **02 01 17.8 -0.8**
**OHR Ohrid 150.34 333** *i* P **PKiKP** **02 01 19.6 +0.2**
**BNI Bardonecchia 150.40 355** PKPbc **PKiKP** **02 01 19.3 -0.3**
**TIR Tirane 150.55 334** ⇓P **PKPbc** **02 01 19.3 0.0**
**OSSC Osservatorio P 151.27 348** PKPbc **PKPbc** **02 01 19.3 -1.6**
**FDMO Fiordimonte 151.32 345** PKPbc **PKPbc** **02 01 20.2 -0.9**
**PGAV Gavieira, Arco 151.78 19** *e*PKPbc **PKPbc** **02 01 22.3 +0.1**
**CESX Cesi 151.84 346** PKPbc **PKPbc** **02 01 20.4 -1.8**
**INTR Introdacqua 152.06 343** PKPdf **PKPdf** **02 01 14.2 -1.6**
INTR PKPbc **PKPbc** **02 01 21.7 -1.1**
**PCAB Cabril 152.08 18** *e*PKPbc **PKiKP** **02 01 23.1 +0.1**
**PBRG Braganca 152.37 16** *e*PKPbc **PKPbc** **02 01 23.2 -0.2**
**MATE Matera 152.38 338** ⇑P **PKPbc** **02 01 23.3 -0.1**
**IDI Anoyia 152.43 320** PKPbc **PKPbc** **02 01 23.4 -0.4**
comp=Z,6.6nm,0.5s,baz=205,slow=22,SNR=17
**POLO Lamas de Olo 152.46 18** *e*PKPbc **PKPbc** **02 01 23.8 +0.1**
POLO epPKPab **pPKPbc** **02 03 00.3 +3.3**
**PVRL Vila Real 152.57 18** *e*PKPbc **PKiKP** **02 01 24.3 +0.2**
**MVO Moncorvo 152.88 17** *e*PKPbc **PKiKP** **02 01 24.8 +0.1**
MVO epPKPab **pPKPbc** **02 03 02.1 +4.2**
**PVIS Viseu 153.03 19** *e*PKPbc **PKiKP** **02 01 25.1 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MDT** | **Midelt** | **161.30** | **21** | PKP | **PKPdf** | **02 01 27.5** | **-0.4** |
| | comp=Z,4.4nm,0.7s,baz=2.3,slow=0.9,SNR=12 | | | | | | |
| MDT | | | | PKPab | **PKPab** | **02 02 12.7** | **-1.3** |
| | comp=Z,5.3nm,0.9s,baz=342,slow=5.6,SNR=6.1 | | | | | | |
| **DBIC** | **Dimbokro** | **168.08** | **136** | PKP | **PKPdf** | **02 01 33.1** | **-1.0** |
| | comp=Z,3.9nm,0.7s,baz=354,slow=13,SNR=2.4 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **02 02 43.5** | **-0.8** |
| | comp=Z,4.3nm,0.8s,baz=170,slow=4.0,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **177.16** | **145** | PKP | **PKPdf** | **02 01 36.2** | **-1.6** |
| | comp=Z,3.7nm,0.8s,baz=332,slow=2.4,SNR=12 | | | | | | |
| TORD | | | | PKPab | PKPab | 02 03 25.8 | +1.4 |
| | comp=Z,14nm,0.9s,baz=266,slow=4.6,SNR=33 | | | | | | |

**IDC 08 02:08:10.7±4.7, 74°54N×8°68E, h0km, mb3.8/3, mbtmp3.7/6, ML2.7/3, MS3.2/4, Error ellipse: s-maj=60.3km s-min=38.1km az=117.0, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARCES** | **ARCESS Array B** | **7.20** | **126** | Pn | Pn | 02 09 56.2 | -0.8 |
| | 0.4nm,0.3s,baz=326,slow=11,SNR=14 | | | | | | |
| ARCES | | | | Sn | Sn | 02 11 08.6 | -11 |
| | 0.1nm,0.3s,baz=303,slow=27,SNR=1.5 1.5nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **14.56** | **145** | Pn | Pn | 02 11 36.0 | -1.6 |
| | 0.1nm,0.3s,baz=337,slow=14,SNR=2.0 1.4nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **14.59** | **170** | Pn | Pn | 02 11 38.2 | +0.2 |
| | 0.1nm,0.3s,baz=359,slow=16,SNR=1.5 2.4nm,1.0s | | | | | | |
| **KIRV** | **Kirov** | **22.01** | **114** | P | P | 02 13 05.7 | -0.3 |
| | 7.5nm,0.4s,baz=333,slow=2.3,SNR=1.8 7.5nm,0.4s | | | | | | |
| **RES** | **Resolute Bay** | **24.22** | **321** | LR | LR | 02 22 38.7 | |
| | comp=Z,23nm,20.3s,baz=42,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **25.41** | **149** | P | P | 02 13 38.6 | -0.7 |
| | 0.5nm,0.4s,baz=347,slow=9.6,SNR=1.5 0.5nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **25.54** | **168** | LR | LR | 02 24 23.0 | |
| | comp=Z,50nm,20.9s,baz=55,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.41** | **82** | LR | LR | 02 32 37.2 | |
| | comp=Z,19nm,18.3s,baz=48,slow=41 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **36.73** | **90** | P | P | 02 15 19.3 | +0.3 |
| | 0.2nm,0.3s,baz=324,slow=7.1,SNR=1.4 0.2nm,0.3s | | | | | | |
| **MBAR** | **Mbarara** | **76.20** | **157** | LR | LR | 02 56 42.7 | |
| | comp=Z,49nm,18.2s,baz=170,slow=38 | | | | | | |

*NEIC **08** 02:10:53.2±2.3, 8°40S±0°09×116°13E±0°06, h10km±1km, mb4.6/20, Error ellipse: s-maj=15.1km s-min=10.2km az=179.0*

*DJA **08** 02:10:54.5±0.5, 8°S±6°×11°6E±°, h13km±4km, M4.6/9, MLv4.6/9*

*IDC **08** 02:10:56.0±2.6, 8°20S×116°21E, h35km±18km, mb4.1/17, mbtmp4.3/18, ML4.3/1, MS3.6/26, Error ellipse: s-maj=20.3km s-min=12.0km az=60.0*

**ISC 08 02:10:52.9±0.4, 8°32S±0°05×116°18E±0°03, h10km, n102, σ1℘70/92, mb4.6/30, MS3.7/27, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.81** | **121** | P | **Pg** | **02 11 09.9** | **+1.3** |
| TWSI | | | | S | **Sb** | **02 11 22.3** | **+2.1** |
| **SRBI** | **Singaraja** | **0.98** | **284** | P | **Pg** | **02 11 12.8** | **+0.9** |
| SRBI | | | | S | **Sb** | **02 11 26.5** | **+1.4** |
| **DNP** | **Denpasar** | **1.02** | **250** | P | **Pb** | **02 11 14.0** | **+1.3** |
| **IGBI** | **Denpasar** | **1.13** | **244** | P | **Pb** | **02 11 15.3** | **+0.7** |
| **PLAI** | **Plampang** | **1.66** | **108** | P | **Pn** | **02 11 24.0** | **+1.9** |
| PLAI | | | | S | **Sb** | **02 11 46.5** | **+1.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.01** | **266** | P | **Pn** | **02 11 27.5** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.01** | **266** | Pn | **Pn** | **02 11 27.3** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.01** | **266** | P | **Pn** | **02 11 27.5** | **+0.6** |
| JAGI | | | | S | **Sn** | **02 11 52.5** | **+0.3** |
| **PWJI** | **Pagerwojo** | **4.34** | **274** | P | **Pn** | **02 11 59.6** | **+0.6** |
| **BASI** | **Baing, Sumba** | **4.74** | **114** | P | **Pb** | **02 12 17.0** | **+0.9** |
| **NGJI** | **Ngawi** | **4.77** | **281** | P | **Pb** | **02 12 20.5** | **+3.9** |
| **BSSI** | **Bau Bau, Buton** | **4.79** | **63** | P | **Pn** | **02 12 05.7** | **+0.4** |
| **KAPI** | **Kappang** | **4.84** | **47** | P | **Pn** | **02 12 09.2** | **+3.4** |
| **KAPI** | **Kappang** | **4.84** | **47** | Pn | **Pn** | **02 12 08.8** | **+3.0** |
| **KAPI** | **Kappang** | **4.84** | **47** | Pn | **Pn** | **02 12 05.9** | **+0.1** |
| | 13nm,0.3s,baz=209,slow=9.2,SNR=22 | | | | | | |
| KAPI | | | | Sn | **Sn** | **02 12 59.1** | **-2.9** |
| | 17nm,0.3s,baz=64,slow=23,SNR=8.8 | | | | | | |
| KAPI | | | | LR | LR | 02 14 19.4 | |
| | comp=Z,1μm,18.1s,baz=299,slow=43 46nm,0.4s | | | | | | |
| **EDFI** | **Ende, Flores** | **5.47** | **95** | P | **Pn** | **02 12 17.4** | **+2.7** |
| **UGM** | **Wanagama** | **5.61** | **274** | P | **Pn** | **02 12 17.8** | **+1.2** |
| **UGM** | **Wanagama** | **5.61** | **274** | Pn | **Pn** | **02 12 16.9** | **+0.3** |
| **MMRI** | **Maumere** | **6.00** | **93** | Pn | **Pn** | **02 12 23.6** | **+1.7** |
| **SOEI** | **Soe** | **8.12** | **101** | Pn | **Pn** | **02 12 50.8** | **-0.3** |
| **SOEI** | **Soe** | **8.12** | **101** | P | Pn | 02 13 02.9 | +12 |
| **BBJI** | **Bungbulang** | **8.49** | **275** | P | **Pn** | **02 12 58.7** | **+2.6** |
| **MBWA** | **Marble Bar** | **13.22** | **165** | P | **Pn** | **02 13 59.9** | **-0.9** |
| **MBWA** | **Marble Bar** | **13.22** | **165** | Pn | **Pn** | **02 13 59.6** | **-1.2** |
| **FITZ** | **Fitzroy Crossi** | **13.38** | **138** | Pn | **Pn** | **02 14 01.5** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **165** | P | **Pn** | **02 14 07.0** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **165** | Pn | **Pn** | **02 14 04.8** | **-1.8** |
| **MNAI** | **Manna** | **13.71** | **286** | Pn | **Pn** | **02 14 07.1** | **-0.5** |
| **KNRA** | **Kununurra** | **14.31** | **122** | Pn | **Pn** | **02 14 15.8** | **0.0** |
| **GIRL** | **Giralia** | **14.36** | **187** | P | **Pn** | **02 14 15.3** | **-1.2** |
| **GIRL** | **Giralia** | **14.36** | **187** | Pn | **Pn** | **02 14 15.0** | **-1.4** |
| **MTN** | **Manton Dam** | **15.37** | **108** | Pn | **Pn** | **02 14 28.4** | **-1.7** |
| MTN | | | | IAmb | IAmb | 02 14 29.9 | |
| | comp=Z,45nm,1.2s | | | | | | |
| **MEEK** | **Meekatharra** | **18.36** | **173** | P | **Pn** | **02 15 08.4** | **+0.5** |
| **WRKA** | **Warakurna** | **20.25** | **147** | P | **P** | **02 15 29.8** | **+1.2** |
| **MORW** | **Morawa** | **20.64** | **180** | P | **P** | **02 15 34.5** | **+1.7** |
| **MORW** | **Morawa** | **20.64** | **180** | P | **P** | **02 15 31.5** | **-1.3** |
| **WB0** | **Warramunga Arr** | **20.99** | **125** | P | **P** | **02 15 36.6** | **0.0** |
| WB0 | | | | IAmb | IAmb | 02 15 37.7 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.04** | **125** | P | **P** | **02 15 37.0** | **-0.2** |
| | comp=Z,22nm,0.7s,baz=300,slow=12,SNR=202 | | | | | | |
| WRA | | | | ScP | **ScP** | **02 23 16.6** | **-4.7** |
| | comp=Z,2.0nm,0.9s,baz=290,slow=1.7,SNR=6.2 | | | | | | |
| WRA | | | | LR | LR | 02 24 50.4 | |
| | comp=Z,193nm,18.6s,baz=313,slow=40 comp=Z,22nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.04** | **125** | P | **P** | **02 15 36.3** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 02 15 38.3 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.05** | **125** | P | **P** | **02 15 37.2** | **0.0** |
| WB2 | | | | IAmb | IAmb | 02 15 38.3 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.21** | **125** | P | **P** | **02 15 39.2** | **+0.2** |
| **BLDU** | **Ballidu** | **22.19** | **179** | P | **P** | **02 15 51.1** | **+1.7** |
| **AS31** | **Alice Springs** | **22.83** | **134** | P | **P** | **02 15 56.4** | **0.0** |
| **ASAR** | **Alice Springs** | **22.83** | **134** | P | **P** | **02 15 56.7** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.83** | **134** | P | **P** | **02 15 56.5** | **+0.2** |
| | comp=Z,14nm,0.8s,baz=308,slow=9.0,SNR=55 | | | | | | |
| ASAR | | | | S | **S** | **02 20 05.1** | **-0.8** |
| | comp=Z,3.9nm,1.1s,baz=313,slow=20,SNR=5.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **02 23 23.3** | **-2.5** |
| | comp=Z,0.7nm,0.7s,baz=336,slow=2.0,SNR=5.2 | | | | | | |
| ASAR | | | | LR | LR | 02 24 56.2 | |
| | comp=Z,147nm,21.6s,baz=300,slow=37 comp=Z,14nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.50** | **178** | LR | LR | 02 26 22.7 | |
| | comp=Z,79nm,19.5s,baz=24,slow=38 | | | | | | |
| **FORT** | **Forrest** | **24.95** | **155** | P | **P** | **02 16 17.3** | **+0.7** |
| **QIS** | **Mount Isa** | **25.70** | **121** | P | **P** | **02 16 26.0** | **+2.5** |
| **QIS** | **Mount Isa** | **25.70** | **121** | P | **P** | **02 16 23.5** | **0.0** |
| | comp=Z,20nm,1.1s,SNR=3.8 | | | | | | |
| **COEN** | **Coen** | **27.06** | **104** | P | **P** | **02 16 35.9** | **0.0** |
| **QIZ** | **Qiongzhong** | **27.89** | **347** | P | **P** | **02 16 45.0** | **+1.8** |
| QIZ | | | | S | S | 02 21 09.8 | -17 |
| QIZ | | | | LR | LR | | |
| | comp=N,150nm,8.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,200nm,14.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,130nm,15.3s | | | | | | |
| **PMG** | **Port Moresby** | **30.63** | **94** | LR | LR | 02 31 59.0 | |
| | comp=Z,138nm,18.4s,baz=271,slow=41 | | | | | | |
| **CTA** | **Charters Tower** | **31.35** | **115** | LR | LR | 02 31 38.9 | |
| | comp=Z,20nm,18.9s,baz=286,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.58** | **328** | P | **P** | **02 17 16.2** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **31.58** | **328** | P | **P** | **02 17 16.4** | **+0.4** |
| | comp=Z,2.5nm,0.8s,baz=155,slow=6.8,SNR=14 | | | | | | |
| CMAR | | | | LR | LR | 02 31 46.3 | |
| | comp=Z,142nm,18.1s,baz=160,slow=40 comp=Z,2.5nm,0.8s | | | | | | |
| **CRAI** | **Chiangrai** | **32.35** | **331** | P | **P** | **02 17 24.5** | **+1.8** |
| CRAI | | | | IAmb | IAmb | 02 17 26.0 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **37.35** | **338** | P | **P** | **02 18 10.1** | **+4.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,5.7s | | | | | | |
| **PALK** | **Pallekele** | **38.61** | **293** | LR | LR | 02 35 57.7 | |
| | comp=Z,101nm,18.3s,baz=222,slow=39 | | | | | | |
| **ENH** | **Enshi** | **38.91** | **351** | P | **P** | **02 18 20.6** | **+1.7** |
| ENH | | | | IAmb | IAmb | 02 18 48.5 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **SHL** | **Shillong** | **41.15** | **326** | P | **P** | **02 18 38.0** | **+0.2** |
| SHL | | | | IAmb | IAmb | 02 18 39.5 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **HNR** | **Honiara** | **43.24** | **95** | LR | LR | 02 38 08.3 | |
| | comp=Z,1μm,19.4s,baz=12,slow=38 | | | | | | |
| **JNU** | **Nakatsue** | **43.52** | **18** | LR | LR | 02 40 24.8 | |
| | comp=Z,31nm,18.1s,baz=182,slow=41 | | | | | | |
| **LZH** | **Lanzhou** | **45.67** | **346** | *eP* | **P** | **02 19 16.1** | **+1.9** |
| LZH | | | | pP | sP | 02 19 24.9 | +6.3 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **46.84** | **13** | P | **P** | **02 19 20.2** | **-2.9** |
| | comp=Z,0.9nm,0.6s,baz=202,slow=9.2,SNR=4.8 | | | | | | |
| KSRS | | | | LR | LR | 02 41 19.6 | |
| | comp=Z,31nm,19.9s,baz=220,slow=39 comp=Z,0.9nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.11** | **355** | *eP* | **P** | **02 19 42.0** | **+1.2** |
| HHC | | | | pP | sP | 02 19 52.9 | +7.6 |
| HHC | | | | sP | pP | 02 19 58.1 | +14 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,77nm,6.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.19** | **24** | P | **P** | **02 19 41.0** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=199,slow=7.4,SNR=1.6 comp=Z,1.0nm,0.5s | | | | | | |
| **GTA** | **Gaotai** | **49.86** | **343** | *eP* | **P** | **02 19 48.6** | **+2.0** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **50.17** | **112** | LR | LR | 02 41 03.6 | |
| | comp=Z,73nm,18.9s,baz=271,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.20** | **14** | P | **P** | **02 20 18.2** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** | **54.20** | **14** | P | **P** | **02 20 16.4** | **-2.3** |
| | comp=Z,1.5nm,0.6s,baz=200,slow=7.7,SNR=2.2 comp=Z,1.5nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.52** | **353** | P | **P** | **02 20 35.0** | **-0.6** |
| ULN | | | | IAmb | IAmb | 02 20 36.8 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.58** | **352** | P | **P** | **02 20 35.6** | **-0.3** |
| SONM | | | | IAmb | IAmb | 02 20 37.2 | |
| | comp=Z,6.4nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **56.58** | **352** | P | **P** | **02 20 35.9** | **0.0** |
| | comp=Z,4.3nm,0.8s,baz=170,slow=8.2,SNR=21 comp=Z,4.3nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **58.91** | **12** | LR | LR | 02 48 28.2 | |
| | comp=Z,35nm,18.9s,baz=180,slow=38 | | | | | | |
| **HEH** | **HeiHe** | **59.15** | **8** | *eP* | **P** | **02 20 53.9** | **+0.2** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **62.15** | **129** | LR | LR | 02 49 10.3 | |
| | comp=Z,67nm,18.5s,baz=21,slow=37 | | | | | | |
| **MK31** | **Makanchi Array** | **62.62** | **334** | P | **P** | **02 21 15.8** | **-1.6** |
| **MKAR** | **Makanchi Array** | **62.62** | **334** | P | **P** | **02 21 15.7** | **-1.8** |
| **MKAR** | **Makanchi Array** | **62.62** | **334** | P | **P** | **02 21 15.9** | **-1.5** |
| | comp=Z,2.3nm,0.9s,baz=145,slow=8.0,SNR=12 comp=Z,2.3nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.15** | **335** | P | **P** | **02 21 44.4** | **-2.5** |
| | comp=Z,1.5nm,0.2s,baz=141,slow=5.2,SNR=6.0 comp=Z,1.5nm,0.2s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.45** | **341** | P | **P** | **02 21 45.7** | **-3.0** |
| ZAA0 | | | | IAmb | IAmb | 02 21 47.4 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.45** | **341** | P | **P** | **02 21 46.1** | **-2.6** |
| **ZALV** | **Zalesovo Beam** | **67.45** | **341** | P | **P** | **02 21 46.6** | **-2.1** |
| | comp=Z,2.2nm,0.7s,baz=134,slow=4.2,SNR=11 comp=Z,2.2nm,0.7s | | | | | | |
| **VOI** | **Vohitsoka** | **67.86** | **250** | P | **P** | **02 21 50.4** | **-1.8** |
| **MAW** | **Mawson** | **68.94** | **199** | P | **P** | **02 21 58.7** | **+0.9** |
| | comp=Z,5.7nm,1.0s,baz=30,slow=8.8,SNR=8.8 | | | | | | |
| MAW | | | | LR | LR | 02 46 57.9 | |
| | comp=Z,22nm,19.9s,baz=94,slow=31 comp=Z,5.7nm,1.0s | | | | | | |
| **BRVK** | **Borovoye** | **72.48** | **333** | P | **P** | **02 22 17.4** | **-2.2** |
| **ABKAR** | **Akbulak array** | **75.42** | **326** | P | **P** | **02 22 34.6** | **-2.4** |
| **AKTO** | **Aktyubinsk** | **77.10** | **326** | P | **P** | **02 22 44.3** | **-2.2** |
| | comp=Z,1.7nm,0.6s,baz=44,slow=3.6,SNR=4.9 | | | | | | |
| AKTO | | | | LR | LR | 03 01 25.4 | |
| | comp=Z,38nm,19.3s,baz=81,slow=39 comp=Z,1.7nm,0.6s | | | | | | |
| **FURI** | **Furi** | **79.07** | **281** | LR | LR | 02 55 07.2 | |
| | comp=Z,80nm,20.8s,baz=150,slow=34 | | | | | | |
| **ARU** | **Arti** | **79.93** | **332** | LR | LR | 03 02 10.7 | |
| | comp=Z,44nm,20.8s,baz=118,slow=38 | | | | | | |
| **QSPA** | **South Pole Qui** | **81.67** | **180** | P | **P** | **02 23 11.8** | **+0.4** |
| | comp=Z,1.6nm,0.9s,baz=308,slow=3.7,SNR=2.7 comp=Z,1.6nm,0.9s | | | | | | |
| **BELG** | **Belogornoye** | **83.79** | **325** | LR | LR | 03 05 58.1 | |
| | comp=Z,37nm,18.1s,baz=82,slow=39 | | | | | | |
| **KBZ** | **Khabaz** | **83.84** | **316** | P | **P** | **02 23 22.2** | **-0.6** |
| | comp=Z,1.5nm,0.8s,baz=116,slow=5.6,SNR=2.7 comp=Z,1.5nm,0.8s | | | | | | |
| **EIL** | **Elat** | **86.53** | **300** | LR | LR | 03 05 23.7 | |
| | comp=Z,45nm,18.4s,baz=74,slow=38 | | | | | | |
| **BOSA** | **Boshof** | **86.88** | **242** | P | **P** | **02 23 37.0** | **-1.6** |
| | comp=Z,4.3nm,1.2s,baz=135,slow=4.3,SNR=1.4 | | | | | | |
| BOSA | | | | LR | LR | 02 59 42.0 | |
| | comp=Z,54nm,18.2s,baz=134,slow=34 comp=Z,4.3nm,1.2s | | | | | | |
| **LBTB** | **Lobatse** | **87.06** | **245** | LR | LR | 02 54 06.5 | |
| | comp=Z,32nm,21.6s,baz=135,slow=30 | | | | | | |
| **BRTR** | **Keetmanshoop Array B** | **89.56** | **310** | P | **P** | **02 23 48.9** | **-2.3** |
| | comp=Z,0.9nm,0.8s,baz=144,slow=4.0,SNR=5.3 | | | | | | |
| BRTR | | | | LR | LR | 03 08 57.7 | |
| | comp=Z,29nm,18.6s,baz=110,slow=39 comp=Z,0.9nm,0.8s | | | | | | |
| **SUR** | **Sutherland** | **90.10** | **237** | LR | LR | 02 59 04.1 | |
| | comp=Z,30nm,18.2s,baz=92,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **90.89** | **196** | P | **P** | **02 23 56.1** | **-0.5** |
| | comp=Z,0.9nm,0.8s,baz=131,slow=20,SNR=3.0 | | | | | | |
| SNAA | | | | LR | LR | 03 00 03.0 | |
| | comp=Z,29nm,18.3s,baz=302,slow=32 comp=Z,0.9nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **94.44** | **320** | LR | LR | 03 12 53.5 | |
| | comp=Z,22nm,21.5s,baz=46,slow=39 | | | | | | |
| **FINES** | **FINESS Array B** | **97.29** | **331** | LR | LR | 03 12 13.7 | |
| | comp=Z,17nm,19.0s,baz=72,slow=38 | | | | | | |
| **CPUP** | **Villa Florida** | **144.98** | **190** | PKPbc | **PKPab** | **02 30 30.6** | **+0.1** |
| | comp=Z,4.0nm,0.9s,baz=168,slow=15,SNR=9.5 | | | | | | |

**RSNC 08 02:31:27.8±0.0, 11°N±2°×7°4W±°, h3km±3km, M2.8, mb4.2, ML2.8, Near north coast of Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMRC** | **Santa Marta, M** | **0.24** | **157** | P | Pg | 02 31 32.6 | +0.1 |
| SMRC | | | | S | Sg | 02 31 36.1 | +0.4 |
| **CRJC** | **Cerrejon, Guaj** | **1.46** | **104** | P | Pn | 02 31 52.8 | -2.3 |
| CRJC | | | | S | Sb | 02 32 11.9 | -2.8 |
| **ARGC** | **Ariguani, Magd** | **1.52** | **177** | P | Pn | 02 31 53.3 | -2.7 |
| ARGC | | | | S | Sn | 02 32 14.0 | -2.3 |
| **SJCC** | **San Jacinto, C** | **1.71** | **210** | P | Pn | 02 31 55.3 | -3.3 |
| SJCC | | | | S | Sn | 02 32 17.4 | -3.5 |
| **OCAC** | **Ocana** | **3.28** | **162** | P | Pn | 02 32 18.6 | -1.7 |
| OCAC | | | | S | Sn | 02 33 02.3 | +2.3 |
| **ZARC** | **Zaragoza, Cauc** | **3.91** | **188** | P | Pn | 02 32 29.7 | +0.9 |
| ZARC | | | | S | Sn | 02 33 14.6 | -0.7 |
| **CAPC** | **Capurgana** | **4.05** | **228** | P | Pn | 02 32 27.5 | -3.2 |
| CAPC | | | | S | Sn | 02 33 10.1 | -8.6 |
| **APAC** | **Apartado, Choc** | **4.12** | **213** | P | Pn | 02 32 30.7 | -1.0 |
| **DBBC** | **Dabeiba** | **4.73** | **203** | P | Pn | 02 32 38.1 | -2.0 |
| **PTBC** | **PUERTO BERRIO,** | **4.82** | **182** | P | Pn | 02 32 42.0 | +0.6 |
| **BARC** | **Barichara** | **4.90** | **167** | P | Pn | 02 32 41.9 | -0.7 |
| **RUSC** | **La Rusia** | **5.60** | **167** | P | Pn | 02 32 53.1 | +0.6 |
| | 19nm,0.9s | | | | | | |
| **SPBC** | **San Pablo de B** | **5.71** | **178** | P | Pn | 02 32 53.7 | +0.1 |

*PRE **08** 02:33:11.4±1.6, 14°28S×27°90E, h10km, ML3.4*

*LSZ **08** 02:33:17.9±0.3, 11°83S×26°52E, h10km, MD3.9*

*BUL **08** 02:33:19.9±7.7, 14°77S×28°56E, h32km±68km, MD4.3*

**ISC 08 02:33:10.9±0.8, 14°34S±0°05×27°93E±0°07, h10km, n34, σ3℘08/60, 1C-1D, Zambia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LSZ** | **Lusaka** | **0.97** | **165** | *i* P | **Pn** | **02 33 33.8** | **+3.0** |
| LSZ | | | | *i* S | **Sb** | **02 33 45.1** | **+2.3** |
| **LSZ** | **Lusaka** | **0.97** | **165** | *i* P | **Pn** | **02 33 33.4** | **+2.6** |
| **KRI** | **Karoi** | **2.97** | **147** | *i* P | **Pn** | **02 34 01.2** | **+3.0** |
| KRI | | | | *eS* | **Sn** | **02 34 36.9** | **+2.9** |
| **KRI** | **Karoi** | **2.97** | **147** | *i* P | **Pn** | **02 34 01.5** | **+3.2** |
| KRI | | | | *i* S | **Sn** | **02 34 37.6** | **+3.6** |
| **KRI** | **Karoi** | **2.97** | **147** | *i* P | **Pn** | **02 34 01.3** | **+3.0** |
| KRI | | | | *i* S | **Sn** | **02 34 34.1** | **+0.1** |
| **KSMZ** | **Kasama** | **5.25** | **38** | *i* P | **Pn** | **02 34 31.9** | **+2.2** |
| KSMZ | | | | *i* | | 02 34 32.0 | |
| | baz=250,slow=10 | | | | | | |
| KSMZ | | | | *i* S | **Sn** | **02 35 25.8** | **-4.5** |
| **MATP** | **Matopo** | **6.08** | **175** | *i* P | Pn | 02 34 46.2 | +5.1 |
| MATP | | | | *i* S | Sn | 02 35 43.6 | -7.2 |
| **MATP** | **Matopo** | **6.08** | **175** | *i* P | **Pn** | **02 34 40.4** | **-0.7** |
| MATP | | | | *i* S | Sn | 02 35 39.9 | -11 |
| **CHIPN** | **CHIPINGE** | **7.40** | **143** | *eP* | **Pn** | **02 35 00.5** | **+1.3** |
| CHIPN | | | | *eS* | **Sn** | **02 36 23.7** | **+0.5** |
| **CHIPN** | **CHIPINGE** | **7.40** | **143** | *i* P | **Pn** | **02 35 00.6** | **+1.4** |
| CHIPN | | | | *i* S | **Sn** | **02 36 18.3** | **-4.9** |
| **CHIPN** | **CHIPINGE** | **7.40** | **143** | *i* P | **Pn** | **02 35 00.3** | **+1.2** |
| CHIPN | | | | *i* S | Sn | 02 36 15.5 | -7.7 |
| **MUSN** | **Musina, Limpop** | **8.12** | **167** | *i* P | **Pn** | **02 35 10.5** | **+1.5** |
| MUSN | | | | *eS* | **Sn** | **02 36 38.4** | **-2.5** |
| MUSN | | | | IAML | | 02 37 34.0 | |
| | comp=Z,25nm,0.6s | | | | | | |
| **MUSN** | **Musina, Limpop** | **8.12** | **167** | *i* P | **Pn** | **02 35 08.3** | **-0.7** |
| **MUSN** | **Musina, Limpop** | **8.12** | **167** | *i* P | **Pn** | **02 35 06.9** | **-2.1** |
| MUSN | | | | *i* S | Sn | 02 36 27.1 | -14 |
| **MPHEP** | **Siloam, Limpop** | **8.79** | **166** | *eP* | **Pn** | **02 35 19.8** | **+1.6** |
| MPHEP | | | | *eS* | **Sn** | **02 36 55.0** | **-2.4** |
| MPHEP | | | | IAML | | 02 37 54.4 | |
| | comp=Z,40nm,0.6s | | | | | | |
| **LEPH** | **Lephalale, Lim** | **9.47** | **181** | *eP* | **Pn** | **02 35 31.5** | **+3.9** |
| LEPH | | | | *eS* | **Sn** | **02 37 12.2** | **-2.1** |
| LEPH | | | | IAML | | 02 38 23.5 | |
| | comp=Z,22nm,0.5s | | | | | | |
| **MOPA** | **Mopani** | **9.70** | **161** | *eP* | **Pn** | **02 35 31.1** | **+0.4** |
| MOPA | | | | *eS* | **Sn** | **02 37 18.9** | **-1.0** |
| MOPA | | | | IAML | | 02 38 15.4 | |
| | comp=Z,69nm,0.6s | | | | | | |
| **MOPA** | **Mopani** | **9.70** | **161** | *i* P | **Pn** | **02 35 33.7** | **+3.0** |
| MOPA | | | | *i* S | **Sn** | **02 37 13.4** | **-6.4** |
| **MOPA** | **Mopani** | **9.70** | **161** | *i* P | **Pn** | **02 35 33.3** | **+2.6** |
| MOPA | | | | *i* S | **Sn** | **02 37 14.5** | **-5.4** |
| **WTBG** | **Waterberg Wild** | **9.87** | **175** | *eP* | **Pn** | **02 35 36.1** | **+3.0** |
| WTBG | | | | *eS* | **Sn** | **02 37 22.2** | **-1.8** |
| WTBG | | | | IAML | | 02 38 27.3 | |
| | comp=Z,22nm,0.5s | | | | | | |
| **HOED** | **Hoedspruit, Li** | **10.42** | **165** | *eP* | **Pn** | **02 35 42.0** | **+1.5** |
| HOED | | | | *eS* | **Sn** | **02 37 34.0** | **-3.4** |
| HOED | | | | IAML | | 02 38 44.2 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **NHAM** | **Northam, North** | **10.54** | **183** | *eP* | **Pn** | **02 35 46.1** | **+3.9** |
| NHAM | | | | *eS* | **Sn** | **02 37 37.8** | **-2.7** |
| NHAM | | | | IAML | | 02 37 43.1 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **LBTB** | **Lobatse** | **10.85** | **191** | *eP* | **Pn** | **02 35 47.2** | **+0.7** |
| LBTB | | | | *eS* | **Sn** | **02 37 45.6** | **-2.4** |
| LBTB | | | | IAML | | 02 39 12.0 | |
| | comp=Z,9.1nm,0.6s | | | | | | |
| **LBTB** | **Lobatse** | **10.85** | **191** | *i* P | **Pn** | **02 35 49.0** | **+2.6** |
| LBTB | | | | *i* S | **Sn** | **02 37 45.2** | **-2.8** |
| **PILG** | **Pilgrimsrest,** | **10.86** | **166** | *eP* | **Pn** | **02 35 49.1** | **+2.3** |
| PILG | | | | *eS* | **Sn** | **02 37 45.3** | **-3.3** |
| PILG | | | | IAML | | 02 39 01.3 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **RUST** | **Rust De Winter** | **10.86** | **177** | *eP* | **Pn** | **02 35 49.9** | **+3.2** |
| RUST | | | | *eS* | **Sn** | **02 37 44.1** | **-4.3** |
| RUST | | | | IAML | | 02 38 55.9 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **NYAT** | **Nyati, Northwe** | **10.98** | **182** | *eP* | **Pn** | **02 35 51.9** | **+3.7** |
| NYAT | | | | *eS* | **Sn** | **02 37 46.5** | **-4.8** |
| NYAT | | | | IAML | | 02 39 13.0 | |
| | comp=Z,10nm,0.5s | | | | | | |
| **TSUM** | **Tsumeb** | **11.02** | **243** | *eP* | **Pn** | **02 35 50.2** | **+1.3** |
| TSUM | | | | *eS* | **Sn** | **02 37 50.1** | **-2.4** |
| TSUM | | | | IAML | | 02 39 19.9 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **TSWA** | **Tswaing Meteor** | **11.03** | **179** | *eP* | **Pn** | **02 35 50.9** | **+2.0** |
| TSWA | | | | *eS* | **Sn** | **02 37 49.2** | **-3.4** |
| TSWA | | | | IAML | | 02 37 51.6 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **HRAO** | **HartRAO** | **11.50** | **181** | *eP* | **Pn**

OK032 IAML 02 57 44.3
comp=E,12μm,0.2s
**KAN08 Anthony NE Sta 0.44 331 Pb 02 57 35.2 +0.6**
KAN08 Sg **Sg** **02 57 40.6 +0.2**
KAN08 IAML 02 57 43.6
comp=E,8μm,0.7s
**KS21 Milan North St 0.45 5 Pb 02 57 35.3 +0.5**
KS21 Sg **Sb** **02 57 41.6 +0.4**
**KAN12 Harper NE Stat 0.51 333 Pb 02 57 36.5 +0.6**
KAN12 Sg **Sb** **02 57 43.1 +0.2**
KAN12 IAML 02 57 45.8
comp=N,10μm,0.4s
**OK048 Pawnee Station 0.75 124 Pg Pg 02 57 40.6 +0.5**
OK048 Sg **Sg** **02 57 50.5 +0.5**
OK048 IAML 02 57 52.7
comp=N,4μm,0.5s
**OK051 E0350 and S346 0.78 115 Pg 02 57 41.1 +0.5**
OK051 Sg **Sg** **02 57 51.3 +0.4**
OK051 IAML 02 57 51.7
comp=N,3μm,0.3s
OK051 IAML 02 57 58.5
comp=N,3μm,0.2s
**OK038 West end E0370 0.91 247 Pg 02 57 43.4 +0.4**
**T35A Sooner Cattle 0.96 85 Pn 02 57 44.3 +0.3**
**NOKA Waynoka 1.00 259** Pg **Pg** **02 57 45.3 +0.3**
NOKA IAML 02 58 05.1
comp=N,5μm,0.2s
NOKA IAML 02 58 09.1
comp=E,3μm,0.3s
**QUOK Quay 1.05 129** Pg **Pg** **02 57 46.0 +0.3**
**OK029 Liberty Lake 1.06 169 Pg 02 57 46.3 +0.3**
OK029 IAML 02 58 05.2
comp=E,3μm,0.4s
OK029 IAML 02 58 05.3
comp=E,4μm,0.4s
**OK052 Battle Ridge R 1.12 139** Pg **Pg** **02 57 47.4 +0.4**
**OK031 S. Brethren Rd 1.13 141 Pg 02 57 47.5 +0.2**
OK031 IAML 02 58 03.4
comp=E,2μm,0.4s
OK031 IAML 02 58 03.7
comp=E,3μm,0.2s
**U32A Winter Ranch, 1.14 246 Pg 02 57 47.7 +0.3**
U32A IAML 02 58 03.9
comp=N,3μm,0.2s
U32A IAML 02 58 07.8
comp=E,3μm,0.1s
**ADOK Arcadia Dam 1.22 167 Pg 02 57 49.2 +0.2**
**DEOK Depew 1.40 135** Pg **Pg** **02 57 51.9 -0.4**
**CSTR Hydro, Custer 1.43 214** Pg **Pg** **02 57 52.8 -0.2**
**OKCSW OKLAHOMA CITY 1.45 171 Pg 02 57 53.0 -0.3**
**ELIS Ellis County 1.58 241** Pg **Pg** **02 57 55.5 -0.4**
**FNO Franklin 1.60 171 Pb 02 57 55.4 +0.9**
**R32A Winter Quarter, 1.77 334** Pn **Pb** **02 57 58.1 +0.8**
R32A **Pg** **02 57 58.4 -1.0**
**TUL3 Leonard 1.80 120 Pb 02 57 58.3 +0.4**
TUL3 IAmb_Lg 02 58 27.2
comp=Z,410nm,0.9s
**W35A Tecumseh 1.82 158** Pn **Pb** **02 57 58.1 0.0**
W35A IAmb_Lg 02 58 25.8
comp=Z,315nm,0.7s
**X34A Smith Ranch, M 2.24 183** Pn **Pb** **02 58 04.3 -1.0**
X34A IAmb_Lg 02 58 40.5
comp=Z,167nm,0.7s
**RLO Rose Lookout 2.27 107** Pn **Pb** **02 58 04.4 -1.4**
**WMOK Wichita Mounta 2.27 203** Pn **Pb** **02 58 04.6 -1.3**
**KSU1 Kansas State U 2.42 21** Pn **Pb** **02 58 06.5 -1.8**
KSU1 IAmb_Lg 02 58 45.5
comp=Z,159nm,0.7s
**CBKS Cedar Bluff 2.54 321** Pn **Pn** **02 58 08.2 +2.4**
**SMWD Samnorwood 2.69 231** Pn **Pn** **02 58 10.7 +2.9**
**U38A Gravette 2.70 98** Pn **Pn** **02 58 10.4 +2.4**
**LOOK Love County 2.88 171** Pn **Pn** **02 58 13.2 +2.8**
**X37A Clayton 2.94 139** Pn **Pn** **02 58 14.1 +2.9**
X37A IAmb_Lg 02 59 04.1
comp=Z,258nm,0.8s
**HHAR Hobbs 3.08 99** Pn **Pn** **02 58 16.2 +3.0**
HHAR IAmb_Lg 02 59 10.6
comp=Z,189nm,1.0s
**WTFS Witchita Falls 3.13 192** Pn **Pn** **02 58 16.6 +2.7**
**Z35A Perchaven, San 3.52 174** Pn **Pn** **02 58 21.1 +1.9**
Z35A IAmb_Lg 02 59 23.7
comp=Z,105nm,1.0s
**S39A Bolivar 3.60 75** Pn **Pn** **02 58 22.5 +2.2**
S39A IAmb_Lg 02 59 22.9
comp=Z,114nm,0.7s
**AMTX Amarillo 3.77 240** Pn **Pn** **02 58 25.5 +2.7**
**FW03 Perrin-Whitt E 3.81 185** Pn **Pn** **02 58 26.2 +3.1**
**FW06 Azle 3.86 178** Pn **Pn** **02 58 26.7 +2.8**
**APMT Aspermont 4.03 210** Pn **Pn** **02 58 28.9 +2.7**
**PLPT Palo Pinto 4.05 187** Pn **Pn** **02 58 29.5 +3.0**
**RTBA Rita Blanca 4.07 266** Pn **Pn** **02 58 30.0 +3.2**
RTBA IAmb_Lg 02 59 39.4
comp=Z,99nm,0.9s
**DKNS Dickens 4.12 221** Pn **Pn** **02 58 30.6 +3.1**
DKNS IAmb_Lg 02 59 39.8
comp=Z,133nm,0.7s
**FW07 Weatherford 4.13 181** Pn **Pn** **02 58 30.5 +2.9**
**Z38A Mt. Pleasant 4.21 147** Pn **Pn** **02 58 31.9 +3.2**
**P38A Dawn 4.30 49** Pn **Pn** **02 58 33.0 +3.0**
**TREL Terrell 4.31 162** Pn **Pn** **02 58 32.6 +2.5**
TREL IAmb_Lg 02 59 54.3
comp=Z,128nm,0.9s
**N35A Tabor 4.33 21** Pn **Pn** **02 58 33.2 +2.9**
**MGMO Mountain Grove 4.37 84** Pn **Pn** **02 58 33.5 +2.7**
MGMO IAmb_Lg 02 59 42.6
comp=Z,189nm,0.7s
**FW16 Waxahatchie 4.40 171** IAmb_Lg 02 59 53.4
comp=Z,144nm,0.8s
**FW14 Alvarado 4.45 174** Pn **Pn** **02 58 34.3 +2.3**
FW14 IAmb_Lg 02 59 49.2
comp=Z,102nm,0.8s
**KSCO Kaye Shedlock'** **4.45 301** Pn **Pn** **02 58 34.6 +2.5**
**FW13 Cleburne 4.49 177** Pn **Pn** **02 58 35.2 +2.8**
**ABTX Abilene, Hawle 4.50 201** Pn **Pn** **02 58 35.1 +2.4**
**R40A Maddies Statio 4.56 70** Pn **Pn** **02 58 35.6 +2.2**
R40A IAmb_Lg 02 59 56.3
comp=Z,105nm,0.9s
**SN07 Snyder 07 4.56 216** Pn **Pn** **02 58 36.0 +2.4**
SN07 IAmb_Lg 02 59 56.9
comp=Z,90nm,0.9s
**BGNE Belgrade 4.57 356** Pn **Pn** **02 58 35.8 +2.1**
**FCAR Ozark Folk Cen 4.61 100** Pn **Pn** **02 58 36.2 +2.1**
FCAR IAmb_Lg 02 59 51.2
comp=Z,175nm,1.0s
**X40A Basin Creek Fa 4.61 119** Pn **Pn** **02 58 36.5 +2.3**
X40A IAmb_Lg 03 00 04.2
comp=Z,114nm,1.0s
**WHAR Wooly Hollow 4.65 108** Pn **Pn** **02 58 36.2 +1.5**
WHAR IAmb_Lg 03 00 00.6
comp=Z,148nm,0.8s
**SN05 Snyder 5 4.74 214** Pn **Pn** **02 58 38.3 +2.3**
SN05 IAmb_Lg 03 00 02.0
comp=Z,111nm,0.8s
**UALR University of 4.82 114** Pn **Pn** **02 58 38.7 +1.6**
UALR IAmb_Lg 03 00 05.6
comp=Z,115nm,0.8s
**WHTX Lake Whitney, 4.84 177** Pn **Pn** **02 58 39.4 +2.1**
**POST Post 4.89 221** Pn **Pn** **02 58 40.1 +2.0**
POST IAmb_Lg 03 00 10.4
comp=Z,83nm,0.8s
**WLAR White Oak Lake 4.90 129** IAmb_Lg 03 00 13.4
comp=Z,75nm,0.7s
**MSTX Muleshoe 5.03 237** Pn **Pn** **02 58 41.9 +1.8**
MSTX IAmb_Lg 03 00 18.3
comp=Z,83nm,0.7s
**237A Washetta, Mont 5.08 161** Pn **Pn** **02 58 42.0 +1.4**
237A IAmb_Lg 03 00 14.7
comp=Z,85nm,1.1s
**P40A Paris 5.20 57** Pn **Pn** **02 58 43.8 +1.5**
P40A IAmb_Lg 03 00 17.0
comp=Z,106nm,0.9s
**L34A Svendsen Farm, 5.22 11** Pn **Pn** **02 58 43.6 +1.1**
L34A IAmb_Lg 03 00 23.6
comp=Z,119nm,0.8s
**N38A Joes South For 5.27 40** Pn **Pn** **02 58 44.7 +1.5**
N38A **Pn** **02 58 45.0 +1.8**
**CCM Cathedral Cave 5.28 75** Pn **Pn** **02 58 45.3 +1.9**
CCM IAmb_Lg 03 00 17.4
comp=Z,166nm,1.0s
**T42A Van Buren 5.30 86** Pn **Pn** **02 58 45.6 +2.0**
T42A IAmb_Lg 03 00 27.8
comp=Z,71nm,1.1s
**OGNE Ogallala 5.31 322** Pn **Pn** **02 58 46.9 +3.0**
OGNE IAmb_Lg 03 00 18.4
comp=Z,128nm,0.8s
**LCAR Lake Charles 5.34 96** Pn **Pn** **02 58 46.1 +2.0**
LCAR IAmb_Lg 03 00 20.9
comp=Z,91nm,1.2s
**T25A Trinidad 5.38 275** Pn **Pn** **02 58 47.5 +2.6**
T25A IAmb_Lg 03 00 17.3
comp=Z,91nm,0.8s
**Z41A Richland Creek 5.38 130** Pn **Pn** **02 58 46.6 +1.9**
**BRDY Brady 5.64 191** Pn **Pn** **02 58 49.8 +1.3**
BRDY IAmb_Lg 03 00 30.8
comp=E,58nm,0.8s
**CCAR Cane Creek 5.66 119** IAmb_Lg 03 00 36.1
comp=E,118nm,0.8s
**NATX Nacogdoches 5.66 153** IAmb_Lg 03 00 40.5
comp=E,112nm,0.8s
**SGCY Sterling City 5.67 211** Pn **Pn** **02 58 51.1 +2.3**
SGCY IAmb_Lg 03 00 40.7
comp=E,66nm,0.7s
**PBMO Poplar Bluff 5.84 88** Pn **Pn** **02 58 53.1 +2.1**
PBMO IAmb_Lg 03 00 41.7
comp=E,93nm,0.8s
**FVM French Village 5.91 77** Pn **Pn** **02 58 53.5 +1.5**
FVM IAmb_Lg 03 00 35.6
comp=E,85nm,0.8s
**K30B Basset 6.01 346** Pn **Pn** **02 58 55.1 +1.7**
**435B Jarrell 6.04 179** Pn **Pn** **02 58 55.8 +1.9**
435B IAmb_Lg 03 00 48.6
comp=E,124nm,0.8s
**SCIA State Center 6.14 33** Pn **Pn** **02 58 58.1 +2.9**
**ODSA Odessa 6.18 222** Pn **Pn** **02 58 58.1 +2.3**
**SLM Saint Louis 6.19 71** Pn **Pn** **02 58 55.8 0.0**
SLM IAmb_Lg 03 00 42.4
comp=E,109nm,0.7s
**Q24A Divide 6.25 292** Pn **Pn** **02 58 59.5 +2.5**
Q24A IAmb_Lg 03 00 51.8
comp=E,72nm,0.9s
**SDCO Great Sand Dun 6.28 281** Pn **Pn** **02 59 00.1 +2.8**
**PEBM Pemiscott Bayo 6.36 94** IAmb_Lg 03 00 58.8
comp=E,129nm,0.9s
**CGM3 Cape Girardeau 6.45 84** Pn **Pn** **02 59 02.2 +2.8**
CGM3 IAmb_Lg 03 00 52.2
comp=E,95nm,0.8s
**OZNA Ozona 6.55 207** Pn **Pn** **02 59 02.3 +1.4**
OZNA IAmb_Lg 03 01 10.4
comp=E,60nm,0.9s
**JCT Junction City 6.58 196** Pn **Pn** **02 59 02.8 +1.5**
**N41A Harden Midland 6.60 52** Pn **Pn** **02 59 02.9 +1.4**
**143A Socs Landing, 6.63 127** IAmb_Lg 03 01 02.8
comp=E,98nm,0.8s
**LNXT Lenox 6.66 94** Pn **Pn** **02 59 02.8 +0.5**
**S44A Carbondale 6.79 80** Pn **Pn** **02 59 05.3 +1.1**
**GLAT Glass 6.80 92** IAmb_Lg 03 01 12.9
comp=E,97nm,0.7s
**HALT Halls 6.81 95** IAmb_Lg 03 01 07.5
comp=E,99nm,0.9s
**HICK Hickman 6.82 90** Pn **Pn** **02 59 07.0 +2.5**
**ISCO Idaho Springs 6.88 298** Pn **Pn** **02 59 08.2 +2.5**
ISCO IAmb_Lg 03 01 08.7
comp=E,61nm,0.8s
**MNHN Monahans 6.91 219** Pn **Pn** **02 59 06.1 +0.3**
**ECSD EROS Data Cent 6.94 7** Pn **Pn** **02 59 07.2 +1.0**
**MLDN Muldoon 7.06 175** Pn **Pn** **02 59 09.1 +1.3**
**OXF Oxford 7.14 107** Pn **Pn** **02 59 10.1 +1.2**
OXF IAmb_Lg 03 01 27.2
comp=E,44nm,0.8s
**Q44A Meyer Farm, Va 7.17 71** Pn **Pn** **02 59 10.9 +1.6**
**L40A Anamosa 7.23 42** Pn **Pn** **02 59 10.2 +0.1**
**T45A Paducah 7.26 86** IAmb_Lg 03 01 23.5
comp=E,103nm,0.9s
**Y45A Yeager Farm, C 7.30 112** IAmb_Lg 03 01 20.1
comp=E,60nm,0.8s
**S22A 4UR Ranch, Cre 7.33 280** Pn **Pn** **02 59 13.5 +1.7**
**ANMO Albuquerque 7.35 258** Pn **Pn** **02 59 15.6 +3.6**
**ANMO Albuquerque 7.35 258** Pn **Pn** **02 59 11.8 -0.2**
comp=E,0.3nm,0.4s,baz=177,slow=15,SNR=1.6
ANMO Lg Lg 03 01 14.4
comp=E,2.7nm,0.3s,baz=54,slow=19,SNR=3.9
**HNDO Hondo 7.41 191** Pn **Pn** **02 59 13.0 +0.3**
**PECS Pecos 7.47 225** Pn **Pn** **02 59 15.4 +1.8**
PECS IAmb_Lg 03 01 34.4
comp=E,50nm,0.9s
**PHWY Pilot Hill 7.49 309** Pn **Pn** **02 59 16.9 +2.8**
PHWY IAmb_Lg 03 01 27.0
comp=E,59nm,0.8s
**HDIL Hopedale 7.55 58** Pn **Pn** **02 59 15.6 +1.0**
**N23A Red Feather La 7.59 305** Pn **Pn** **02 59 19.2 +3.8**
N23A IAmb_Lg 03 01 45.1
comp=E,84nm,0.7s
**SUSD Miller 7.65 353** IAmb_Lg 03 01 40.4
comp=E,73nm,0.9s
**SMCO Snowmass 7.68 290** Pn **Pn** **02 59 18.7 +2.0**
**DRIO Del Rio 7.79 199** Pn **Pn** **02 59 18.3 +0.4**
**SAND Sanderson 7.80 210** Pn **Pn** **02 59 17.7 -0.3**
SAND IAmb_Lg 03 01 47.2
comp=E,38nm,0.8s
**OLIL Olney 7.84 73** Pn **Pn** **02 59 20.2 +1.7**
**I37A Lemond, Waseca 7.88 23** IAmb_Lg 03 01 53.3
comp=E,47nm,0.8s
**735A Kenedy 7.96 181** Pn **Pn** **02 59 18.6 -1.6**
735A IAmb_Lg 03 01 57.6
comp=E,41nm,0.8s
**WVT Waverly 7.99 92** Pn **Pn** **02 59 21.7 +1.1**
**PLAL Pickwick Lake 8.03 101** Pn **Pn** **02 59 21.9 +0.7**
**L42A Oliver, Polo 8.08 48** Pn **Pn** **02 59 22.9 +1.2**
**ALPN Alpine 8.13 219** Pn **Pn** **02 59 23.9 +1.3**
ALPN IAmb_Lg 03 01 56.9
comp=E,45nm,0.9s
**JFWS Jewell Farm 8.34 41** Pn **Pn** **02 59 27.7 +2.3**
**T47A Sharon Grove 8.49 86** Pn **Pn** **02 59 29.2 +1.7**
**VHRN Van Horn 8.55 227** Pn **Pn** **02 59 30.2 +1.7**
**833A Chaparral WMA, 8.61 190** Pn **Pn** **02 59 30.3 +1.1**
**P46A Rosedale 8.71 68** Pn **Pn** **02 59 32.4 +1.8**
**RSSD Black Hills 8.72 328** Pn **Pn** **02 59 33.4 +2.6**
RSSD IAmb_Lg 03 02 21.0
comp=E,50nm,0.9s
**RWWY Rawlins 8.81 306** IAmb_Lg 03 02 18.5
comp=E,48nm,0.9s
**I40A Norwalk 8.88 35** Pn **Pn** **02 59 34.6 +1.8**
I40A IAmb_Lg 03 02 13.0
comp=E,44nm,0.8s
**K22A Casper 8.93 313** IAmb_Lg 03 02 25.1
comp=E,66nm,1.0s
**TXAR Lajitas Array 9.00 215** Pn **Pn** **02 59 35.2 +0.7**
**TXAR Lajitas Array 9.00 215** Pn **Pn** **02 59 34.2 -0.3**
comp=E,0.4nm,0.3s,baz=32,slow=10,SNR=26
TXAR Pg 03 00 02.1
comp=E,0.8nm,0.3s,baz=49,slow=10,SNR=7.9
TXAR Sn **Sn** **03 01 13.1 -2.4**
comp=E,0.9nm,0.3s,baz=33,slow=14,SNR=3.5
TXAR Lg Lg 03 02 06.3
comp=E,1.4nm,0.3s,baz=28,slow=27,SNR=2.7
comp=E,0.4nm,0.4s
**X48A Hartselle 9.00 102** Pn **Pn** **02 59 35.6 +1.1**
**TX31 Lajitas Ar. Si 9.00 215** Pn **Pn** **02 59 35.2 +0.7**
**SFIN Lafayette 9.02 64** Pn **Pn** **02 59 33.5 -1.2**
**F33A 5 Mile Ranch, 9.05 6** Pn **Pn** **02 59 35.2 +0.1**
F33A IAmb_Lg 03 02 21.2
comp=E,35nm,1.1s
**BLO Bloomington 9.13 72** Pn **Pn** **02 59 36.1 -0.1**
**SPMN Marine on St. 9.15 22** IAmb_Lg 03 02 19.6
comp=E,30nm,0.8s
**WCI Wyandotte Cave 9.17 78** Pn **Pn** **02 59 39.7 +2.9**
**K43A Burlington 9.29 48** Pn **Pn** **02 59 39.3 +0.9**
**U49A Red Boiling Sp 9.59 88** Pn **Pn** **02 59 45.0 +2.5**
**I42A Draeger Farm, 9.72 41** Pn **Pn** **02 59 43.5 -0.8**
I42A IAmb_Lg 03 02 43.1
comp=E,39nm,0.7s
**HBVL Hebbronville 9.78 185** Pn **Pn** **02 59 46.3 +1.1**
**E28A Huff 9.98 348** IAmb_Lg 03 02 50.6
comp=E,36nm,0.9s
**P48A Milroy 10.02 71** Pn **Pn** **02 59 47.9 -0.5**
**FPAL Fort Paine 10.10 100** Pn **Pn** **02 59 51.2 +1.6**
**G40A Rib Lake 10.14 32** Pn **Pn** **02 59 50.7 +0.6**
**T50A Nancy 10.30 85** Pn **Pn** **02 59 54.5 +2.2**
**H43A Windswept, Lux 10.72 42** Pn **Pn** **02 59 59.0 +1.0**
**R50A Paris 10.72 78** Pn **Pn** **02 59 58.1 +0.2**
**CPCT Cooper Cave 10.75 94** Pn **Pn** **03 00 00.0 +1.5**
**PDAR Pinedale Array 10.86 307** Pn **Pn** **02 59 59.9 -0.3**
comp=E,0.1nm,0.3s,baz=131,slow=18,SNR=1.8
PDAR Sn **Sn** **03 01 58.5 -2.9**
comp=E,0.4nm,0.3s,baz=124,slow=21,SNR=1.4
PDAR Lg Lg 03 02 54.7
comp=E,0.5nm,0.3s,baz=118,slow=14,SNR=4.7
comp=E,0.2nm,0.3s
**COWI Conover 11.26 32** Pn **Pn** **03 00 07.3 +2.0**
**S51A Beattyville 11.28 82** Pn **Pn** **03 00 06.8 +1.1**
**TKL Tuckaleechee C 11.31 92** Pn **Pn** **03 00 07.4 +1.2**
**TKL Tuckaleechee C 11.31 92** Pn **Pn** **03 00 07.2 +1.0**
comp=E,0.7nm,0.3s,baz=285,slow=16,SNR=12
TKL Lg Lg 03 03 17.0
comp=E,0.6nm,0.3s,baz=196,slow=20,SNR=3.4
comp=E,2.1nm,0.4s
**TZTN Tazewell 11.37 87** Pn **Pn** **03 00 09.2 +2.2**
**V52A Sevierville 11.43 91** Pn **Pn** **03 00 08.7 +1.0**
**AGMN Agassiz Nation 11.53 6** Pn **Pn** **03 00 08.6 -0.4**
**J47A Sunmer 11.76 53** Pn **Pn** **03 00 11.6 -0.5**
**TCRU Three Creeks R 11.81 283** Pn **Pn** **03 00 12.4 -0.7**
**EYMN Ely 12.00 20** Pn **Pn** **03 00 14.2 -1.3**
**FLWY Flagg Ranch 12.25 310** Pn **Pn** **03 00 21.1 +2.1**
**Q52A Bidwell 12.38 75** Pn **Pn** **03 00 21.4 +0.7**
**P52A Corning 12.56 72** Pn **Pn** **03 00 23.3 +0.2**
**U54A Nelsons Funny 12.76 87** Pn **Pn** **03 00 27.7 +1.7**
**ULM Lac du Bonnet 13.47 5** Pn **Pn** **03 00 34.1 -1.3**
**ULM Lac du Bonnet 13.47 5** Pn Pn 03 00 30.5 -5.0
comp=E,1.0nm,0.5s,baz=192,slow=14,SNR=2.4
ULM Sn Sn 03 02 54.9 -10
comp=Z,0.5nm,0.3s,baz=174,slow=19,SNR=1.9
ULM Lg Lg 03 04 16.4
baz=191,slow=9.1
**N53A Lisbon 13.73 68** Pn **Pn** **03 00 37.5 -1.6**
**E46A Sault Ste Mari 13.81 42** Pn **Pn** **03 00 39.8 -0.3**
**BLA Blacksburg 13.82 83** Pn **Pn** **03 00 40.0 -0.4**
**O54A Avella 13.97 71** Pn **Pn** **03 00 43.2 +0.7**
**R55A Marlinton 14.03 79** Pn **Pn** **03 00 43.0 -0.3**
**T57A Hurt 14.77 84** Pn **Pn** **03 00 52.5 -0.8**
**SADO Sadowa 16.11 55** Lg Lg 03 05 42.6
comp=Z,0.2nm,0.3s,baz=233,slow=5.1,SNR=3.0
**ILAR Eielson Array 40.17 330** P **P** **03 04 58.9 -1.3**
comp=Z,0.1nm,0.7s,baz=113,slow=6.7,SNR=1.6
comp=Z,0.1nm,0.7s

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*IDC **08** 03:06:07.6±0.5, 72.05N×134.53E, h0km, mb4.1/23, mbtmp4.1/24, ML3.5/1, MS3.3/26, Error ellipse: s-maj=15.3km s-min=11.9km az=168.0*
*YARS **08** 03:06:08.3, 71.92N×134.25E, h25km*
*MOS **08** 03:06:08.9±1.3, 72.12N×134.58E, h13km, mb4.7/29, Error ellipse: s-maj=19.2km s-min=7.2km az=93.7*
*NEIC **08** 03:06:10.8±1.0, 72.0N±0.2×134.5E±0.3, h15km±5km, mb4.4/108, Error ellipse: s-maj=22.7km s-min=14.4km az=179.0*

**ISC 08 03:06:10.4±0.5, 72.12N±0.04×134.52E±0.04, h12km±2km, h12km:pP-P, n236, σ1s55/248, mb4.4/94, MS3.3/26, 5C-5D, Laptev Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DEPR** | **Deputatskiy** | **3.27** | **144** | *e*Pn | | **Pn** | **03 06 59.1** | **-2.3** |
| | 35nm,0.5s | | | | | | | |
| DEPR | 247nm,0.3s | | | *i* Pg | | **Pb** | **03 07 06.0** | **-2.2** |
| DEPR | 709nm,0.3s | | | *i* Sn | | **Sn** | **03 07 34.6** | **-5.5** |
| DEPR | 939nm,0.2s | | | *i* Sg | | **Sb** | **03 07 48.0** | **0.0** |
| DEPR | 2μm,0.3s | | | *i* Sg | | **Sb** | **03 07 48.0** | **0.0** |
| | 3μm,0.3s | | | | | | | |
| **BTGS** | **Batagay** | **4.49** | **179** | *i* Pn | | Pn | 03 07 12.9 | -5.3 |
| | 2.7nm,0.5s | | | | | | | |
| BTGS | 66nm,0.5s | | | *i* Pg | | **Pb** | **03 07 25.9** | **-3.2** |
| BTGS | 69nm,0.3s | | | *e*Sn | | Sn | 03 08 01.2 | -9.0 |
| BTGS | 158nm,0.4s | | | *e*Sn | | Sn | 03 08 01.2 | -9.0 |
| BTGS | 886nm,0.9s | | | *e*Sg | | **Sb** | **03 08 23.2** | **+0.1** |
| BTGS | 607nm,0.8s | | | *e*Sg | | Sg | 03 08 23.2 | -11 |
| **BTGS** | **Batagay** | **4.49** | **179** | P | | Pn | 03 07 12.9 | -5.3 |
| BTGS | | | | | | | 03 08 01.3 | |
| **YBGR** | **Belaya Gora** | **5.33** | **127** | *e*Pn | | **Pn** | **03 07 28.1** | **-1.6** |
| | 34nm,0.5s | | | | | | | |
| YBGR | 551nm,0.3s | | | *i* Pg | | **Pb** | **03 07 43.7** | **+0.3** |
| YBGR | 438nm,0.3s | | | *e*Sn | | **Sn** | **03 08 25.3** | **-5.7** |
| YBGR | 409nm,0.5s | | | *e*Sn | | **Sn** | **03 08 25.3** | **-5.7** |
| YBGR | 3μm,0.7s | | | *i* Sg | | **Sb** | **03 08 54.1** | **+6.8** |
| YBGR | 462nm,0.3s | | | *i* Sg | | **Sb** | **03 08 54.1** | **+6.8** |
| **YBGR** | **Belaya Gora** | **5.33** | **127** | P | | **Pn** | **03 07 28.1** | **-1.6** |
| YBGR | | | | | | | 03 08 25.3 | |
| **YAK** | **Yakutsk** | **10.30** | **193** | Lg | | Lg | 03 11 29.1 | |
| | 7.9nm,0.3s,baz=304,slow=23,SNR=1.8 | | | | | | | |
| YAK | | | | LR | | LR | 03 13 13.6 | |
| | comp=Z,113nm,18.8s,baz=16,slow=42 | | | | | | | |
| **YAK** | **Yakutsk** | **10.30** | **193** | *e*P | | **Pn** | **03 08 40.5** | **+2.7** |
| YAK | | | | *e*S | | **Sn** | **03 10 38.4** | **+5.3** |
| YAK | comp=Z,11nm,0.8s | | | pmax | | pmax | | |
| YAK | comp=N,28nm,0.8s | | | smax | | smax | | |
| YAK | comp=E,13nm,0.8s | | | smax | | smax | | |
| YAK | comp=Z,173nm,9.0s | | | MLR | | MLR | | |
| YAK | comp=N,157nm,9.0s | | | MLR | | MLR | | |
| YAK | comp=E,77nm,10.0s | | | MLR | | MLR | | |
| **SVZ** | **Severnaya Zeml** | **10.62** | **327** | *e*P | | **Pn** | **03 08 45.3** | **+3.2** |
| | comp=E,0.4nm,0.2s | | | | | | | |
| SVZ | | | | *e*S | | **Sn** | **03 10 39.0** | **-1.8** |
| | comp=E,0.4nm,0.2s | | | | | | | |
| **SEY** | **Seymchan** | **11.41** | **135** | Pn | | **Pn** | **03 08 50.7** | **-2.2** |
| | comp=E,0.4nm,0.3s,baz=7.1,slow=19,SNR=1.6 | | | | | | | |
| SEY | | | | Lg | | Lg | 03 12 09.6 | |
| | comp=E,0.3nm,0.3s,baz=10,slow=23,SNR=1.3 | | | | | | | |
| | comp=E,3.9nm,0.2s | | | | | | | |
| **SEY** | **Seymchan** | **11.41** | **135** | *e*P | | **Pn** | **03 08 52.4** | **-0.5** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **BILL** | **Bilibino** | **11.46** | **95↑** | *e*P | | **Pn** | **03 08 57.5** | **+3.9** |
| BILL | | | | *e*S | | **Sn** | **03 11 03.3** | **+1.9** |
| BILL | comp=Z,13nm,1.0s | | | pmax | | pmax | | |
| BILL | comp=Z,192nm,14.0s | | | MLR | | MLR | | |
| **MA2** | **Magadan** | **14.15** | **144** | Lg | | Lg | 03 13 38.4 | |
| | comp=Z,1.2nm,0.3s,baz=137,slow=19,SNR=1.5 | | | | | | | |
| MA2 | | | | LR | | LR | 03 14 05.2 | |
| | comp=Z,21nm,21.7s,baz=274,slow=34 | | | | | | | |
| **ZEA** | **Zeya** | **18.72** | **194** | *e*P | | **Pn** | **03 10 31.2** | **+2.3** |
| **RDOG** | **Red Dog Mine** | **20.80** | **70** | P | | **P** | **03 10 52.1** | **+1.0** |
| RDOG | | | | IAmb | | IAmb | 03 10 56.5 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **C18K** | **Utukok River** | **20.91** | **68** | | | **P** | **03 10 53.4** | **+1.0** |
| C18K | | | | IAmb | | IAmb | 03 11 04.3 | |
| | comp=Z,23nm,1.3s | | | | | | | |
| **C19K** | **Lookout Ridge** | **21.08** | **66** | P | | **P** | **03 10 55.4** | **+1.2** |
| C19K | | | | IAmb | | IAmb | 03 11 05.2 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **B20K** | **Meade River** | **21.20** | **62** | P | | **P** | **03 10 55.9** | **+0.5** |
| B20K | | | | IAmb | | IAmb | 03 11 04.7 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **21.88** | **70** | | | **P** | **03 11 02.7** | **+0.1** |
| E18K | | | | IAmb | | IAmb | 03 11 17.0 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **D19K** | **Kuna River** | **21.89** | **66** | | | **P** | **03 11 03.1** | **+0.3** |
| D19K | | | | IAmb | | IAmb | 03 11 10.9 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **22.13** | **61** | P | | **P** | **03 11 06.1** | **+0.7** |
| B21K | | | | IAmb | | IAmb | 03 11 12.2 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **E19K** | **Redstone River** | **22.82** | **67** | P | | **P** | **03 11 12.6** | **-0.1** |
| E19K | | | | IAmb | | IAmb | 03 11 24.1 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **23.00** | **185↓** | *e*P | | **P** | **03 11 17.6** | **+2.9** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,12nm,2.5s | | | | | | | |
| **E21K** | **Killik River** | **23.08** | **63** | P | | **P** | **03 11 15.5** | **+0.1** |
| E21K | | | | IAmb | | IAmb | 03 11 26.1 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **23.09** | **69** | P | | **P** | **03 11 15.4** | **-0.1** |
| F19K | | | | IAmb | | IAmb | 03 11 26.0 | |

**D22K Ayikyak River** 23.14 62 P 03 11 17.6 +1.6
D22K IAmb IAmb 03 11 18.7
comp=Z,13nm,0.8s
**G18K Tagagawik** 23.49 71 P 03 11 19.9 +0.3
**F20K Avaraart Lake** 23.53 67 P P 03 11 20.1 +0.2
**SKR Severo-Kuril's** 23.57 144⇑ *i*P P 03 11 19.7 -0.7
**G19K Purcell Mounta** 23.77 70 P P 03 11 22.4 +0.1
**E22K Anaktuvuk Pass** 23.88 63 P P 03 11 23.5 +0.2
**D24K Happy Valley** 23.99 59 P P 03 11 25.4 +1.1
D24K IAmb IAmb 03 11 30.3
comp=Z,11nm,0.9s
**F21K Alatna River** 24.05 65 P 03 11 25.8 +0.9
F21K IAmb IAmb 03 11 26.3
comp=Z,8.2nm,0.8s
**H18K Honhosa River** 24.11 72 P 03 11 25.3 -0.2
H18K IAmb IAmb 03 11 27.9
comp=Z,15nm,1.2s
**TOLK Toolik Lake Re** 24.14 60 P 03 11 26.2 +0.4
**H19K Roundabout Mou** 24.40 70 P P 03 11 28.5 +0.4
H19K IAmb IAmb 03 11 34.8
comp=Z,9.7nm,0.9s
**D25K Kavik River** 24.52 57 P P 03 11 30.0 +0.8
**G21K Allakaket** 24.54 67 P P 03 11 29.6 +0.3
G21K IAmb IAmb 03 11 31.7
comp=Z,10nm,0.9s
**E24K Your Creek** 24.82 61 P P 03 11 31.2 -0.9
E24K IAmb IAmb 03 11 35.8
comp=Z,13nm,1.5s
**IMAR Indian Mountai** 24.85 68 P P 03 11 33.0 +0.8
**J17K VABM Dome** 25.19 76 P P 03 11 35.9 +0.7
J17K IAmb IAmb 03 11 37.1
comp=Z,12nm,1.0s
**K15K Wolf Creek Mou** 25.28 80 P P 03 11 36.3 +0.2
K15K IAmb IAmb 03 11 43.8
comp=Z,9.0nm,0.9s
**H21K Melozitna Rive** 25.35 68 P 03 11 37.6 +0.8
H21K IAmb IAmb 03 11 39.7
comp=Z,9.2nm,0.9s
**G23K Bananza Creek** 25.37 64 P P 03 11 36.9 0.0
**F24K Squaw Lake** 25.38 61 P 03 11 38.3 +1.2
F24K IAmb IAmb 03 11 43.5
comp=Z,7.6nm,0.8s
**YSS Yuzh-Sakhalins** 25.54 167 *e*P P 03 11 37.2 -1.3
YSS pmax pmax
comp=Z,30nm,1.0s
**J19K Poorman** 25.77 72 P P 03 11 41.5 +1.0
J19K IAmb IAmb 03 11 60.0
comp=Z,8.1nm,1.0s
**ZAK Zakamensk** 25.88 230 *e*P P 03 11 47.2 +5.4
ZAK pmax pmax
comp=Z,4.0nm,1.6s
**K17K Iditarod** 25.93 76 P P 03 11 42.6 +0.6
K17K IAmb IAmb 03 11 43.7
comp=Z,11nm,1.0s
**G24K Hadweenzic Riv** 26.08 62 P P 03 11 44.0 +0.6
G24K IAmb IAmb 03 11 49.8
comp=Z,13nm,1.4s
**H23K Yukon River** 26.15 65 P P 03 11 44.5 +0.5
**MLY Manley** 26.40 67 P P 03 11 46.7 +0.4
**H24K Noodor Dome** 26.61 64 P P 03 11 49.2 +1.0
H24K IAmb IAmb 03 11 58.1
comp=Z,6.2nm,0.8s
**I23K Minto, Yukon-K** 26.71 66 P P 03 11 49.9 +0.9
**FYU Fort Yukon** 26.79 61 P P 03 11 51.0 +1.3
FYU IAmb IAmb 03 11 51.9
comp=Z,10nm,1.0s
**MDM Murphy Dome** 27.17 65 P P 03 11 53.9 +0.7
**NEA2 Nenana** 27.21 67 P P 03 11 54.1 +0.6
**CCB Clear Creek Bu** 27.52 66 P P 03 11 56.8 +0.5
**G27K Doyon Strip** 27.56 58 P P 03 11 57.9 +1.1
**SONM Songino Array** 27.58 223 P P 03 11 56.4 -0.7
comp=Z,1.0nm,0.8s,baz=19,slow=9.2,SNR=7.1
SONM PcP PcP 03 15 13.3 -1.0
comp=Z,0.5nm,0.6s,baz=356,slow=5.9,SNR=1.8
SONM LR LR 03 22 18.3
comp=Z,40nm,19.3s,baz=10,slow=35
comp=Z,1.0nm,0.8s
**SONM Songino Array** 27.58 223 *e*P P 03 12 00.3 +3.2
SONM pmax pmax
comp=Z,1.0nm,0.6s
**IL31** 27.68 65 P P 03 11 58.4 +0.7
IL31 IAmb IAmb 03 11 59.5
comp=Z,7.1nm,1.1s
**ILAR Eielson Array** 27.68 65 P P 03 11 58.5 +0.8
**ILAR Eielson Array** 27.68 65 P P 03 11 57.9 +0.1
comp=Z,3.9nm,0.8s,baz=318,slow=8.9,SNR=66
ILAR PcP PcP 03 15 12.2 -1.9
comp=Z,0.4nm,0.7s,baz=289,slow=3.6,SNR=2.1
ILAR LR LR 03 24 41.6
comp=Z,53nm,19.0s,baz=73,slow=40
comp=Z,3.9nm,0.8s
**ILAR Eielson Array** 27.68 65 *e*P P 03 11 58.5 +0.8
ILAR pmax pmax
comp=Z,4.0nm,0.8s
**ZAA0 Zalesovo Array** 27.72 256 P P 03 11 58.0 -0.1
**ZALV Zalesovo Beam** 27.72 256 P P 03 11 58.9 +0.7
**ZALV Zalesovo Beam** 27.72 256 P P 03 11 58.6 +0.5
comp=Z,1.5nm,0.6s,baz=23,slow=7.8,SNR=7.0
ZALV PcP PcP 03 15 12.8 -1.6
comp=Z,2.6nm,0.5s,baz=34,slow=3.2,SNR=5.6
ZALV LR LR 03 23 37.4
comp=Z,61nm,19.6s,baz=44,slow=38
comp=Z,1.5nm,0.6s
**ZALV Zalesovo Beam** 27.72 256 *e*P P 03 12 01.3 +3.2
ZALV pmax pmax
comp=Z,1.0nm,0.4s
**J25K Salcha River,** 28.23 64 P P 03 12 03.3 +0.6
**I26K Coal Creek Min** 28.30 61 P P 03 12 03.2 0.0
**ASAJ Asahikawa** 28.35 168 LR LR 03 23 06.4
comp=Z,61nm,19.2s,baz=344,slow=36
**H29M Whitestone** 28.87 57 P P 03 12 09.3 +1.0
**G31M Satah River** 29.36 53 P P 03 12 13.7 +1.1
G31M IAmb IAmb 03 12 14.3
comp=Z,7.5nm,0.9s
**I30M Mount Dempster** 30.17 57 P P 03 12 20.4 +0.5
I30M IAmb IAmb 03 12 21.4
comp=Z,4.3nm,0.8s
**DAWY Dawson** 30.29 60 P P 03 12 21.8 +0.8
**DGZ Jazzator, Alta** 30.70 249⇓ *e*P P 03 12 24.2 -0.6
DGZ pmax pmax
comp=Z,7.0nm,0.6s
**ARCES ARCESS Array B** 31.25 320 LR LR 03 29 23.5
comp=Z,60nm,19.5s,baz=18,slow=45
**L29M L29M** 31.40 61 P P 03 12 31.4 +0.7
**KURK Kurchatov** 32.41 259⇓ *e*P P 03 12 40.2 +0.6
KURK pmax pmax
comp=Z,5.0nm,1.0s
**KURBB Kurchatov Arra** 32.52 259 P P 03 12 38.5 -2.1
comp=Z,0.9nm,0.4s,baz=36,slow=9.1,SNR=10
KURBB PcP PcP 03 15 24.8 -2.1
comp=Z,0.8nm,0.7s,baz=40,slow=3.0,SNR=1.8
KURBB LR LR 03 26 55.6
comp=Z,57nm,18.8s,baz=160,slow=38
comp=Z,0.9nm,0.4s
**BRVK Borovoye** 32.93 270 P P 03 12 43.2 -1.0
**BRVK Borovoye** 32.93 270 *de*P P 03 12 43.0 -1.2
BRVK *i* *PP pP 03 12 46.1 -1.6
BRVK *i* *SP sP 03 12 47.4 -1.8
BRVK pmax pmax
comp=Z,5.0nm,0.7s
**ARU Arti** 33.65 283 LR LR 03 28 55.4
comp=Z,64nm,18.1s,baz=41,slow=41
**BTO Baotou** 33.84 215 *e*P P 03 12 51.9 -0.4
BTO pP pP 03 12 56.3 +0.4
BTO sP sP 03 12 58.4 +1.1
BTO PP PP 03 14 06.8 -1.9
BTO S S 03 18 17.9 +1.9
BTO pmax pmax
comp=Z,18nm,0.6s
BTO pmax pmax
comp=Z,190nm,4.2s
BTO LR LR
comp=Z,410nm,7.2s
BTO LR LR
comp=Z,270nm,6.0s
BTO LR LR
comp=Z,370nm,5.7s
**KIRV Kirov** 34.51 293 LR LR 03 29 14.2
comp=Z,35nm,19.3s,baz=326,slow=40
**MK31 Makanchi Array** 34.81 252 P P 03 12 58.5 -2.1
**MK31 Makanchi Array** 34.81 252⇑ *i*P P 03 13 02.0 +1.4
**MKAR Makanchi Array** 34.81 252 P P 03 12 59.1 -1.5
**MKAR Makanchi Array** 34.81 252 P P 03 12 57.8 -2.8
comp=Z,1.6nm,0.7s,baz=45,slow=7.1,SNR=12
MKAR PcP PcP 03 15 31.8 -1.7
comp=Z,0.7nm,0.6s,baz=64,slow=6.6,SNR=1.8
MKAR LR LR 03 27 54.0
comp=Z,74nm,20.4s,baz=51,slow=38
comp=Z,1.6nm,0.7s
**MKAR Makanchi Array** 34.81 252 P P 03 12 59.1 -1.5
**KSRS Korea Array** 34.90 189 LR LR 03 28 34.7
comp=Z,40nm,18.4s,baz=85,slow=39
**MJAR Matsshiro Arr** 35.70 175 P P 03 13 08.0 -0.3
comp=Z,1.1nm,0.5s,baz=3.6,slow=7.8,SNR=2.1
comp=Z,1.1nm,0.5s
**R33M Jennings River** 36.41 59 P P 03 13 15.8 +1.4
R33M IAmb IAmb 03 13 16.2
comp=Z,5.5nm,0.8s
**YKA Yellowknife Ar** 37.70 45 P P 03 13 24.7 -0.3
comp=Z,2.0nm,0.6s,baz=339,slow=8.7,SNR=21
comp=Z,2.0nm,0.6s
**YKA Yellowknife Ar** 37.70 45 *e*P P 03 13 25.3 +0.3
YKA pmax pmax
comp=Z,2.0nm,0.6s
**FINES FINESS Array B** 38.08 312 P P 03 13 28.6 +0.3
comp=Z,5.0nm,0.6s,baz=31,slow=9.5,SNR=39
FINES PcP PcP 03 15 41.2 -1.8
comp=Z,0.7nm,0.5s,baz=36,slow=5.2,SNR=3.9
FINES LR LR 03 34 39.1
comp=Z,38nm,19.2s,baz=24,slow=45
comp=Z,5.0nm,0.6s
**AKTO Aktyubinsk** 38.99 279 LR LR 03 31 54.5
comp=Z,32nm,19.9s,baz=50,slow=40
**LYN LuoYang** 39.35 209 *e*P P 03 13 41.3 +2.1
LYN pmax pmax
comp=Z,160nm,4.2s
LYN LR LR
comp=Z,300nm,10.7s
LYN LR LR
comp=Z,230nm,11.3s
LYN LR LR
comp=Z,350nm,11.0s
**ABKAR Akbulak array** 39.44 276 P P 03 13 39.2 -0.5
**ABKAR Akbulak array** 39.44 276 P P 03 13 39.6 -0.2
ABKAR IAmb IAmb 03 13 44.3
comp=Z,9.9nm,1.1s
**BELG Belogornoye** 40.37 289 LR LR 03 32 51.2
comp=Z,46nm,18.7s,baz=21,slow=40
**BOOM Boomskoye usch** 40.61 256 P P 03 13 49.0 -0.8
BOOM IAmb IAmb 03 13 54.5
comp=Z,5.9nm,0.7s
**BOOM Boomskoye usch** 40.61 256 P P 03 13 49.0 -0.8
BOOM pmax pmax
comp=Z,6.0nm,0.7s
**AAK Ala-Archa** 40.91 257 P P 03 13 51.7 -0.6
**AAK Ala-Archa** 40.91 257 LR LR 03 30 07.5
comp=Z,14nm,19.1s,baz=110,slow=35
**AAK Ala-Archa** 40.91 257 P P 03 13 51.7 -0.6
AAK pmax pmax
comp=Z,12nm,0.9s
**NB2 NORSAR Subarra** 41.56 322 P P 03 13 57.0 -0.2
comp=Z,1.7nm,0.9s,baz=25,slow=8.6
**NOA NORSAR Array B** 41.56 322 P P 03 13 56.7 -0.5
comp=Z,0.8nm,0.6s,baz=24,slow=8.1,SNR=4.4
NOA LR LR 03 35 45.2
comp=Z,43nm,19.4s,baz=35,slow=43
comp=Z,0.8nm,0.6s
**NRN Naryn** 41.56 255 P P 03 13 57.7 -0.1
**NRN Naryn** 41.56 255 P P 03 13 57.7 -0.1
NRN pmax pmax
comp=Z,5.0nm,0.9s
**KK31 Karatay Array** 41.70 262 P P 03 13 58.1 -0.5
KK31 IAmb IAmb 03 14 02.9
comp=Z,11nm,1.4s
**KK31 Karatay Array** 41.70 262 P P 03 13 58.1 -0.5
KK31 pmax pmax
comp=Z,11nm,1.5s
**KKAR Karatay Array** 41.70 262 P P 03 13 57.4 -1.2
**KKAR Karatay Array** 41.70 262 P P 03 13 58.3 -0.2
KKAR IAmb IAmb 03 14 02.9
comp=Z,11nm,1.4s
**KKAR Karatay Array** 41.70 262 P P 03 13 57.4 -1.2
KKAR 03 13 58.3
**HFS Hagfors** 41.91 320 P P 03 13 59.3 -0.8
comp=Z,1.1nm,0.6s,baz=39,slow=9.3,SNR=6.6
HFS LR LR 03 36 00.5
comp=Z,42nm,18.4s,baz=32,slow=43
comp=Z,1.1nm,0.6s
**KONO Kongsberg** 43.15 322⇓ *e*P P 03 14 12.7 +2.5
KONO pmax pmax
comp=Z,7.0nm,1.0s
**KSH Kashi** 43.33 254 P P 03 14 14.7 +2.7
KSH sP sP 03 14 22.4 +5.4
KSH pmax pmax
comp=Z,3.0nm,0.8s
**NACGM Naroch** 43.77 307 *e*P P 03 14 11.7 -3.5
comp=N,531nm,0.8s,baz=24
**GAR Garm** 45.51 260 P P 03 14 28.8 -0.6
**CHGR Chuyangaron** 46.17 261 P P 03 14 33.5 -1.1
**CHGR Chuyangaron** 46.17 261 P P 03 14 33.6 -1.1
CHGR pmax pmax
comp=Z,35nm,1.0s
**SIMJ Simiganj** 46.22 261 P P 03 14 33.8 -1.2
**AKASG Malin Array Be** 46.98 303 P P 03 14 40.0 -0.7
comp=Z,3.0nm,0.5s,baz=29,slow=8.6,SNR=4.8
AKASG LR LR 03 37 02.9
comp=Z,42nm,18.7s,baz=21,slow=40
comp=Z,3.0nm,0.5s
**AKASG Malin Array Be** 46.98 303 *e*P P 03 14 40.5 -0.2
AKASG pmax pmax
comp=Z,2.0nm,0.4s
**AKBB Malin Array Si** 46.98 303⇑ *e*P P 03 14 40.4 -0.3
AKBB pmax pmax
comp=Z,5.0nm,0.9s
**BEL Belsk** 48.03 310 *e*P P 03 14 49.9 +1.0
**B08A Colville Reser** 49.35 58 P P 03 14 59.2 +0.1
**KIV Kislovodsk** 49.41 288 *e*P P 03 15 00.7 +1.1
KIV pmax pmax
comp=Z,8.0nm,1.1s
KIV MLR MLR
comp=Z,15nm,17.0s
**EKA Eskdalemuir Ar** 49.45 330 P P 03 14 58.4 -1.3
comp=Z,0.4nm,0.5s,baz=20,slow=6.8,SNR=2.1
comp=Z,0.4nm,0.5s
**KBZ Khabaz** 49.55 288 P P 03 15 00.7 +0.1
comp=Z,3.0nm,0.8s,baz=6.5,slow=4.3,SNR=7.0
comp=Z,3.0nm,0.8s
**KBZ Khabaz** 49.55 288⇑ *i*P P 03 15 01.2 +0.6
KBZ pmax pmax
comp=Z,6.0nm,0.9s
**KWP Kalwaria Pacla** 49.61 308 *e*P P 03 15 02.0 +1.0
**KWP Kalwaria Pacla** 49.61 308 P P 03 15 01.5 +0.5
**KWP Kalwaria Pacla** 49.61 308 P P 03 15 01.5 +0.5
KWP pmax pmax
comp=Z,12nm,0.9s
**OJC Ojcow** 49.77 310 *e*P P 03 15 02.9 +0.7
**OJC Ojcow** 49.77 310 P P 03 15 03.2 +1.0
**OJC Ojcow** 49.77 310 P P 03 15 03.2 +1.0
OJC pmax pmax
comp=Z,7.0nm,0.7s
**KSP Ksiaz** 49.99 313 *e*P P 03 15 04.6 +0.7
**NEW Newport** 50.01 56 LR LR 03 40 00.0
comp=Z,42nm,18.9s,baz=298,slow=41
**CLL Collm** 50.28 316 P P 03 15 06.1 +0.1
**CLL Collm** 50.28 316 *i* P P 03 15 06.1 +0.1
comp=Z,12nm,1.5s
CLL *i* pP sP 03 15 10.7 -0.4
comp=Z,6.0nm,0.6s
**CLL Collm** 50.28 316 *i* P P 03 15 06.1 +0.1
CLL pmax pmax
comp=Z,12nm,1.5s
**CHVC Chvalec** 50.28 313 *e*P P 03 15 06.7 +0.6
**CHVC Chvalec** 50.28 313 *e*P P 03 15 06.7 +0.6
**KOLS Kolonicke sedl** 50.37 308 *e*P P 03 15 07.3 +0.5
**NIE Niedzica** 50.39 309 *e*P P 03 15 08.2 +1.2
**DPC Dobruska-Polom** 50.45 313 *e*P P 03 15 08.1 +0.7
DPC epP sP 03 15 12.5 0.0
**DPC Dobruska-Polom** 50.45 313 *e*P P 03 15 08.1 +0.7
DPC *e* 03 15 12.5
**KRLC Kraliky** 50.60 312 *e*P P 03 15 09.2 +0.6
KRLC epP pP 03 15 12.8 +0.6
**KRLC Kraliky** 50.60 312 *e*P P 03 15 09.2 +0.6
KRLC *e* 03 15 12.8
**MORC Moravsky Berou** 50.70 312 P P 03 15 09.9 +0.6
MORC IAmb IAmb 03 15 15.4
comp=Z,3.4nm,0.8s
**MORC Moravsky Berou** 50.70 312 *e*P P 03 15 09.9 +0.6
**MORC Moravsky Berou** 50.70 312 P P 03 15 09.9 +0.6
MORC pmax pmax
comp=Z,3.0nm,0.8s
**BUR08 Bucovina Ar. S** 50.83 305 P P 03 15 10.3 -0.1
BUR08 IAmb IAmb 03 15 16.0
comp=Z,8.2nm,1.5s
**VRAC Vranov** 51.36 312 *e*P P 03 15 14.4 +0.1
**VRAC Vranov** 51.36 312 LR LR 03 40 32.5
comp=Z,24nm,18.5s,baz=10,slow=40
**HOOD Mount Hood Mea** 51.54 61 P P 03 15 15.9 +0.1
**VYHS Vyhne** 51.60 310 *e*P P 03 15 16.7 +0.6
VYHS *e* 03 15 21.3
**KRUC Moravsky** 51.64 312 *e*P P 03 15 16.7 +0.4
**PSZ Piszkesteto** 51.89 309 P P 03 15 18.5 +0.2
**PSZ Piszkesteto** 51.89 309 P P 03 15 18.5 +0.2
PSZ pmax pmax
comp=Z,6.0nm,0.9s
**MODS Modra-Piesok** 52.08 311 *e*P P 03 15 20.4 +0.8
**F10A Beach Ranch, E** 52.11 57 P P 03 15 20.6 +0.7
**MSO Missoula** 52.15 54 P P 03 15 20.7 +0.5
MSO IAmb IAmb 03 15 21.6
comp=Z,3.5nm,0.8s
**KHC Kasperske Hory** 52.21 315 P P 03 15 21.1 +0.5
**KHC Kasperske Hory** 52.21 315 *e*P P 03 15 21.4 +0.8
KHC epP pP 03 15 25.0 +0.8
**KHC Kasperske Hory** 52.21 315 *e*P P 03 15 21.4 +0.8
KHC *e* 03 15 25.0
**GNI Garni** 52.28 284 LR LR 03 41 31.7
comp=Z,21nm,18.5s,baz=30,slow=41
**GERES GERESS Array B** 52.45 314 P P 03 15 23.5 +1.0
**GERES GERESS Array B** 52.45 314 P P 03 15 23.1 +0.7
comp=Z,1.1nm,0.7s,baz=48,slow=1.5,SNR=5.7
comp=Z,1.1nm,0.7s
**GERES GERESS Array B** 52.45 314 *e*P P 03 15 23.4 +1.0
GERES pmax pmax
comp=Z,1.0nm,0.8s
**BPMT Black Pine Rid** 52.64 54 P P 03 15 24.5 +0.4
**MLR Muntele Rosu** 52.64 303 P P 03 15 25.2 +1.2
MLR IAmb IAmb 03 15 45.9
comp=Z,8.2nm,1.3s
**MLR Muntele Rosu** 52.64 303 P P 03 15 25.2 +1.2
MLR pmax pmax
comp=Z,8.0nm,1.3s
**ULM Lac du Bonnet** 52.93 38 P P 03 15 24.2 -1.6
comp=Z,2.1nm,0.6s,baz=311,slow=9.0,SNR=3.2
comp=Z,2.1nm,0.6s
**ULM Lac du Bonnet** 52.93 38 *e*P P 03 15 27.2 +1.4
ULM pmax pmax
comp=Z,2.0nm,0.8s
**I07A Izee** 53.27 60 P P 03 15 29.1 +0.6
I07A IAmb IAmb 03 15 30.8
comp=Z,3.8nm,0.9s
**BOZ Bozeman (W)** 53.87 53 P P 03 15 33.9 +0.8
BOZ IAmb IAmb 03 15 34.4
comp=Z,4.0nm,0.9s
**BOZ Bozeman (W)** 53.87 53 P P 03 15 33.9 +0.8
BOZ pmax pmax
comp=Z,4.0nm,0.9s
**YHL Hebgen Lake** 54.68 53 P P 03 15 39.7 +0.6
**YHH Holmes Hill** 54.82 52 P P 03 15 40.8 +0.7
**MFID Camas Ranch** 54.85 57 P P 03 15 40.6 +0.4
**RLMT Red Lodge** 54.89 51 P P 03 15 41.3 +0.8
**WVOR Wild Horse Val** 55.03 60 P P 03 15 41.9 +0.4
WVOR IAmb IAmb 03 15 43.4
comp=Z,4.9nm,1.2s
**WVOR Wild Horse Val** 55.03 60 P P 03 15 41.9 +0.4
WVOR pmax pmax
comp=Z,5.0nm,1.2s
**YMP Mirror Lake Pl** 55.04 52 P P 03 15 41.0 -0.7
**HLID Hailey** 55.08 56 P P 03 15 41.9 0.0
**DAVOX Davos/Dischmat** 55.23 317 LR LR 03 42 51.8
comp=Z,38nm,18.1s,baz=68,slow=40
**H17A Grant Village** 55.26 52 P P 03 15 43.7 +0.5
**YPP Pitchstone Pla** 55.32 53 P P 03 15 44.6 +0.9
YPP IAmb IAmb 03 15 46.5
comp=Z,4.5nm,1.0s
**FLWY Flagg Ranch** 55.52 53 P P 03 15 45.9 +0.8
**IMW Indian Meadow** 55.64 53 P P 03 15 46.4 +0.3
IMW IAmb IAmb 03 15 53.0
comp=Z,3.0nm,0.9s
**FXWY Fox Creek** 55.86 53 P P 03 15 48.0 +0.5
**BRTR Keskin Array B** 55.91 294 P P 03 15 47.8 -0.1
comp=Z,0.4nm,0.5s,baz=1.1,slow=7.2,SNR=2.1
comp=Z,0.4nm,0.5s
**EYMN Ely** 55.95 36 P P 03 15 47.5 -0.4
**LOHW Long Hollow** 55.99 53 P P 03 15 49.4 +1.0
LOHW IAmb IAmb 03 15 50.7
comp=Z,2.5nm,0.7s
**TPAW Teton Pass** 56.02 53 P P 03 15 49.5 +0.8
TPAW IAmb IAmb 03 15 56.9
comp=Z,4.5nm,1.1s
**REDW Red Top Meadow** 56.16 53 P P 03 15 50.0 +0.3
**PD31 Pinedale Array** 57.04 52 P P 03 15 56.1 +0.1
PD31 IAmb IAmb 03 15 56.5
comp=Z,2.4nm,0.7s
**PDAR Pinedale Array** 57.04 52 P P 03 15 55.2 -0.7
comp=Z,1.6nm,0.5s,baz=18,slow=3.8,SNR=21
comp=Z,1.6nm,0.5s
**BMN Battle Mountai** 57.28 60 P P 03 15 57.9 +0.3
BMN IAmb IAmb 03 15 59.5
comp=Z,3.0nm,0.9s
**BMN Battle Mountai** 57.28 60 P P 03 15 57.9 +0.3
BMN pmax pmax
comp=Z,3.0nm,0.9s
**CMAR Chiang Mai Arr** 57.47 221 *e*P P 03 16 02.1 +3.1
CMAR pmax pmax
comp=Z,2.0nm,0.3s
**ELK Elko** 57.51 58 P P 03 16 00.1 +0.8
ELK IAmb IAmb 03 16 01.3
comp=Z,5.0nm,1.1s
**ELK Elko** 57.51 58 P P 03 16 00.1 +0.8
ELK pmax pmax
comp=Z,5.0nm,1.2s
**K22A Casper** 57.88 50 P P 03 16 00.8 -1.0
**NRCA Norcia** 58.27 312 P P 03 16 04.9 +0.4
NRCA IAmb IAmb 03 16 12.7
comp=Z,3.5nm,0.8s
**KVN Kaiserville** 58.34 61 P P 03 16 05.7 +0.6
KVN IAmb IAmb 03 16 06.9
comp=Z,3.5nm,0.8s
**KVN Kaiserville** 58.34 61 P P 03 16 05.7 +0.6
KVN pmax pmax
comp=Z,3.0nm,0.8s
**DUG Dugway, Tooele** 58.65 56 P P 03 16 07.9 +0.7
DUG IAmb IAmb 03 16 08.8
comp=Z,4.4nm,1.1s
**DUG Dugway, Tooele** 58.65 56 P P 03 16 07.9 +0.7
DUG pmax pmax
comp=Z,4.0nm,1.1s
**NVAR Mina Array Bea** 58.86 61 P P 03 16 08.6 -0.2
comp=Z,1.2nm,0.8s,baz=335,slow=4.0,SNR=9.1
comp=Z,1.2nm,0.8s
**SPR3 Spring Creek 3** 59.38 58 P P 03 16 13.1 +0.6
SPR3 IAmb IAmb 03 16 15.0
comp=Z,3.2nm,0.9s
**R11B Troy Canyon, C** 59.67 59 P P 03 16 14.8 +0.5
R11B IAmb IAmb 03 16 15.6
comp=Z,2.7nm,0.8s
**P18A Preston Nutter** 59.83 54 P P 03 16 15.9 +0.3
**O20A White River Ci** 59.85 52 P P 03 16 15.5 -0.1
**SRU San Rafael Swe** 60.25 54 P P 03 16 18.3 0.0
**SRU San Rafael Swe** 60.25 54 P P 03 16 18.3 0.0
SRU pmax pmax
comp=Z,3.0nm,0.7s
**TIP Timpagrande** 60.88 308 P P 03 16 22.4 -0.1
TIP IAmb IAmb 03 16 28.1
comp=Z,3.9nm,1.0s
**SHPR Sheep Range** 61.51 59 P P 03 16 27.3 +0.4
**KNB Kanab** 61.65 57 P P 03 16 28.5 +0.7
**KNB Kanab** 61.65 57 P P 03 16 28.5 +0.7
KNB pmax pmax
comp=Z,3.0nm,0.8s
**KSU1 Kansas State U** 63.47 43 P P 03 16 38.8 -1.0
**PFO Pinyon Flats O** 63.89 61 LR LR 03 48 52.5
comp=Z,53nm,19.7s,baz=270,slow=40
**PFO Pinyon Flats O** 63.89 61 *i* P P 03 16 41.5 -1.3
**ESDC Sonseca Array** 64.77 326 P P 03 16 47.8 -0.5
comp=Z,0.5nm,0.5s,baz=8.3,slow=6.5,SNR=7.0
comp=Z,0.5nm,0.5s
**ANMO Albuquerque** 65.21 52 LR LR 03 48 46.0
comp=Z,24nm,18.7s,baz=338,slow=39
**S39A Bolivar** 65.50 40 P P 03 16 51.6 -1.4
**TXAR Lajitas Array** 71.25 52 P P 03 17 28.1 -1.1
comp=Z,1.3nm,0.8s,baz=6.2,slow=3.5,SNR=15
comp=Z,1.3nm,0.8s
**PALK Pallekele** 72.51 237 LR LR 03 51 03.9
comp=Z,16nm,18.4s,baz=315,slow=37
**TORD Torodi Ar. Bea** 89.40 314 P P 03 19 04.6 -2.1

comp=Z,1.8nm,1.0s,baz=17,slow=6.8,SNR=4.4
comp=Z,1.8nm,1.0s
**WRA Warramunga Arr 91.83 180** P **P** **03 19 15.3 -2.5**
comp=Z,1.7nm,0.9s,baz=356,slow=4.7,SNR=7.3
comp=Z,1.7nm,0.9s
**ASAR Alice Springs 95.53 181** P **P** **03 19 33.0 -1.7**
comp=Z,0.6nm,0.7s,baz=359,slow=4.6,SNR=2.9
comp=Z,0.6nm,0.7s
**PLCA Paso Flores 146.18 35** PKPbc **PKPdf** **03 25 48.5 0.0**
comp=Z,3.0nm,0.6s,baz=347,slow=5.8,SNR=8.5
**MAW Mawson 147.27 222** PKPbc **PKPdf** **03 25 50.3 +1.1**
comp=Z,2.4nm,0.8s,baz=1.2,slow=2.1,SNR=12

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*NNC **08** 03:24:18.4±2.4,53˚.41N×87˚.51E,h1km±20km,mb2.8, mpv2.5,Error ellipse: s-maj=22.8km s-min=7.6km az=63.0, Suspected Mining explosion.*
*IDC **08** 03:24:18.3±2.9,53˚.52N×87˚.53E,h0km,mbtmp2.9/2, ML2.5/2,Error ellipse: s-maj=25.5km s-min=13.9km az=64.0*
**ISC 08 03:24:17.2±3.3,53˚.5N±0˚.1×87˚.6E±0˚.2,h0km,n9,σ1§67/14, 8C-6D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.69** | **286** | I | I | | 03 35 20.0 | |
| | 0.1nm,0.9s,baz=101,slow=317,SNR=5.0 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.69** | **286** | ⇓P | **Pb** | | **03 24 48.3** | **-0.9** |
| | 0.2nm,0.4s | | | | | | | |
| ZAA0 | | | | ⇑S | **Sb** | | **03 25 11.7** | **+0.7** |
| | 7.1nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.69** | **286** | Pg | **Pn** | | **03 24 48.2** | **+0.2** |
| | 0.6nm,0.3s,baz=104,slow=13,SNR=18 | | | | | | | |
| ZALV | | | | Lg | Lg | | 03 25 11.2 | |
| | 4.0nm,0.3s,baz=104,slow=26,SNR=21 | | | | | | | |
| **KURK** | **Kurchatov** | **6.19** | **247** | ⇑Pn | **Pn** | | **03 25 50.7** | **+0.9** |
| | 0.4nm,0.5s | | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | | **03 27 02.4** | **+1.2** |
| | 0.7nm,0.6s | | | | | | | |
| KURK | | | | ⇓Lg | Lg | | 03 27 32.5 | |
| | 3.2nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.29** | **246** | Pn | **Pn** | | **03 25 52.5** | **+1.4** |
| | baz=64,slow=15,SNR=5.4 | | | | | | | |
| KURBB | | | | Lg | Lg | | 03 27 35.6 | |
| | 0.1nm,0.3s,baz=60,slow=38,SNR=4.7 | | | | | | | |
| | 1.0nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.29** | **246** | ⇓Pn | **Pn** | | **03 25 51.6** | **+0.5** |
| | 0.6nm,0.4s | | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | | **03 27 01.9** | **-1.7** |
| | 1.6nm,0.5s | | | | | | | |
| KURBB | | | | ⇑Lg | Lg | | 03 27 35.6 | |
| | 8.0nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **7.54** | **209** | ⇑Pn | **Pn** | | **03 26 09.0** | **+0.6** |
| | baz=32,slow=14,SNR=7.3 | | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | | **03 27 35.9** | **+1.3** |
| | 0.3nm,0.5s | | | | | | | |
| MK31 | | | | ⇓Lg | Lg | | 03 28 16.0 | |
| | 0.5nm,0.5s,baz=34,slow=30,SNR=3.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.54** | **209** | Pn | **Pn** | | **03 26 10.5** | **+2.1** |
| | 0.2nm,0.3s,baz=32,slow=13,SNR=7.1 | | | | | | | |
| MKAR | | | | Sn | **Sn** | | **03 27 35.1** | **+0.6** |
| | 0.1nm,0.3s,baz=30,slow=29,SNR=2.8 | | | | | | | |
| MKAR | | | | Lg | Lg | | 03 28 14.4 | |
| | 0.1nm,0.3s,baz=24,slow=31,SNR=6.6 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **7.62** | **210** | ⇑Pn | **Pn** | | **03 26 08.6** | **-0.9** |
| | 0.2nm,0.4s | | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | | **03 27 32.8** | **-3.8** |
| | 0.3nm,0.4s | | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | | 03 28 14.9 | |
| | 2.5nm,0.9s | | | | | | | |

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*NEIC **08** 03:40:30.7±1.6,31˚.84N±0˚.01×115˚.87W±0˚.02,h5km±1km, Error ellipse: s-maj=2.9km s-min=2.5km az=192.0*
*MEX **08** 03:40:31.9±0.6,31˚.86N×115˚.90W,h10km,MD3.1*
*ECX **08** 03:40:32.2±0.6,31˚.91N×115˚.83W,h1km±2km,MD2.9, ML3.2*
*PAS **08** 03:40:32.1±1.8,31˚.900N±0˚.008×115˚.84W±0˚.02, h6km±5km,ML3.1/90,ML2.9/40(NEIC),Error ellipse: s-maj=2.0km s-min=1.1km az=80.0*
**ISC 08 03:40:31.3±0.8,31˚.87N±0˚.02×115˚.86W±0˚.02,h12km±6km, n87,σ0§78/113,12C-3D,Baja California**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **SJX** | **San Joaquin** | **0.14** | **219** | ⇑*i*P | **Pg** | | **03 40 35.1** | **+0.6** |
| SJX | | | | *i* S | **Sg** | | **03 40 37.3** | **+0.5** |
| **ESJX** | **Sierra Juarez** | **0.15** | **331** | | **Pg** | | **03 40 35.1** | **+0.1** |
| **ESJX** | **Sierra Juarez** | **0.15** | **331** | IAML | | | 03 40 37.5 | |
| | comp=N,31μm,0.1s | | | | | | | |
| ESJX | | | | IAML | | | 03 40 37.5 | |
| | comp=E,56μm,0.1s | | | | | | | |
| **ALAMX** | **Rancho Alamar** | **0.19** | **43** | ⇑*i*P | **Pg** | | **03 40 34.9** | **-0.6** |
| ALAMX | | | | *e*S | **Sg** | | **03 40 36.9** | **-1.4** |
| ALAMX | | | | ⇓*e* | | | 03 40 38.3 | |
| ALAMX | | | | IAML | | | 03 40 38.3 | |
| | comp=N,14μm,0.4s | | | | | | | |
| **OJOX** | **Ej. Ojos Negro** | **0.20** | **267** | ⇑*i*P | **Pg** | | **03 40 35.8** | **+0.1** |
| **RACA** | **Rancho agua Ca** | **0.40** | **292** | ⇑*i*P | **Pb** | | **03 40 40.2** | **-0.3** |
| RACA | | | | *i* S | **Sb** | | **03 40 46.5** | **-0.2** |
| **VTX** | **Valle De La Tr** | **0.48** | **172** | | **Pb** | | **03 40 41.6** | **-0.1** |
| VTX | | | | | **Sb** | | **03 40 48.6** | **-0.2** |
| **VTX** | **Valle De La Tr** | **0.48** | **172** | IAML | | | 03 40 49.0 | |
| | comp=E,204nm,0.1s | | | | | | | |
| VTX | | | | IAML | | | 03 40 54.7 | |
| | comp=N,197nm,0.1s | | | | | | | |
| **VTX** | **Valle De La Tr** | **0.48** | **172** | *e*P | **Pb** | | **03 40 41.6** | **-0.1** |
| VTX | | | | *e*S | **Sb** | | **03 40 48.7** | **-0.1** |
| **RHX** | **Rio Hardy** | **0.56** | **61** | ⇑*i*P | **Pg** | | **03 40 41.7** | **-0.4** |
| RHX | | | | *e*S | **Sg** | | **03 40 49.6** | **+0.1** |
| **CCX** | **Cicese** | **0.69** | **270** | | **Pb** | | **03 40 45.5** | **+0.3** |
| CCX | | | | | **Sb** | | **03 40 55.2** | **+0.5** |
| **CCX** | **Cicese** | **0.69** | **270** | IAML | | | 03 40 55.6 | |
| | comp=E,746nm,0.3s | | | | | | | |
| CCX | | | | IAML | | | 03 40 56.0 | |
| | comp=N,758nm,0.3s | | | | | | | |
| **CCX** | **Cicese** | **0.69** | **270** | ⇑*i*P | **Pb** | | **03 40 45.5** | **+0.3** |
| CCX | | | | *e*S | **Sb** | | **03 40 55.2** | **+0.5** |
| **JARAX** | **Ej. Heriberto** | **0.71** | **19** | ⇑*e*P | **Pg** | | **03 40 44.5** | **-0.5** |
| JARAX | | | | *e*S | **Sg** | | **03 40 53.8** | **-0.5** |
| **CPBX** | **Cerro Prieto** | **0.72** | **40** | | **Pg** | | **03 40 45.6** | **+0.3** |
| **PBX** | **Punta Banda** | **0.75** | **260** | ⇑*i*P | **Pb** | | **03 40 46.7** | **+0.5** |
| PBX | | | | *e*S | **Sb** | | **03 40 57.1** | **+0.7** |
| **RMX** | **La Rumorosa** | **0.76** | **346** | | **Pg** | | **03 40 44.5** | **-1.4** |
| RMX | | | | | **Sg** | | **03 40 53.5** | **-2.4** |
| **RMX** | **La Rumorosa** | **0.76** | **346** | IAML | | | 03 40 57.9 | |
| | comp=E,353nm,0.2s | | | | | | | |
| RMX | | | | IAML | | | 03 40 58.6 | |
| | comp=N,440nm,0.1s | | | | | | | |
| **RMX** | **La Rumorosa** | **0.76** | **346** | *e*P | **Pg** | | **03 40 44.4** | **-1.5** |
| RMX | | | | *e*S | **Sg** | | **03 40 53.3** | **-2.6** |
| **MBIG** | **Mexicali** | **0.78** | **46** | *e*P | **Pb** | | **03 40 46.7** | **0.0** |
| MBIG | | | | *e*S | **Sb** | | **03 40 58.0** | **+0.7** |
| **YUH** | **Yuha Desert** | **0.78** | **356** | | **Pg** | | **03 40 45.6** | **-0.8** |
| YUH | | | | | **Sg** | | **03 40 55.5** | **-1.0** |
| **YUH** | **Yuha Desert** | **0.78** | **356** | IAML | | | 03 40 56.3 | |
| | comp=N,395nm,0.1s | | | | | | | |
| YUH | | | | IAML | | | 03 40 59.1 | |
| | comp=E,357nm,0.1s | | | | | | | |
| **YUH2** | **Yuha Desert** | **0.78** | **356** | ⇑*e*P | **Pg** | | **03 40 45.6** | **-0.8** |
| **SGL** | **Mount Signal** | **0.79** | **8** | | **Pg** | | **03 40 45.9** | **-0.6** |
| SGL | | | | | **Sg** | | **03 40 56.1** | **-0.7** |
| **ECBX** | **El Chinero** | **0.79** | **120** | ⇑*e*P | **Pb** | | **03 40 46.7** | **-0.4** |
| ECBX | | | | *e*S | **Sb** | | **03 40 57.7** | **-0.1** |
| **GUVIX** | **Guadalupe Vict** | **0.79** | **57** | | **Pb** | | **03 40 47.0** | **0.0** |
| GUVIX | | | | | **Sb** | | **03 40 58.3** | **+0.5** |
| **IKP** | **In-Ko-Pah, Jac** | **0.81** | **345** | | **Pg** | | **03 40 46.4** | **-0.6** |
| IKP | | | | | **Sg** | | **03 40 56.7** | **-0.8** |
| **IKP** | **In-Ko-Pah, Jac** | **0.81** | **345** | *e*P | **Pg** | | **03 40 46.4** | **-0.6** |
| **CBX** | **Cerro Bola** | **0.81** | **303** | | **Pb** | | **03 40 47.3** | **-0.1** |
| **CBX** | **Cerro Bola** | **0.81** | **303** | IAML | | | 03 40 59.3 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **CBX** | **Cerro Bola** | **0.81** | **303** | ⇑*e*P | **Pb** | | **03 40 47.3** | **-0.1** |
| CBX | | | | *e*S | **Sb** | | **03 40 58.3** | **-0.2** |
| CBX | | | | IAML | | | 03 40 59.3 | |
| | comp=N,875nm,0.2s | | | | | | | |
| CBX | | | | *e* | | | 03 40 59.3 | |
| CBX | | | | IAML | | | 03 40 59.4 | |
| | comp=E,844nm,0.2s | | | | | | | |
| CBX | | | | ⇓*e* | | | 03 40 59.4 | |
| **UABX** | **UABC, Campus M** | **0.84** | **25** | | **Pg** | | **03 40 47.5** | **0.0** |
| **5053** | **Calexico** | **0.86** | **21** | | **Pg** | | **03 40 47.9** | **+0.1** |
| 5053 | | | | | **Sg** | | **03 40 59.9** | **+0.8** |

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **SPIG** | **San Pedro Mart** | **0.89** | **158** | *e*P | **Pn** | | **03 40 49.2** | **-0.8** |
| SPIG | | | | *e*S | **Sb** | | **03 41 01.4** | **+0.6** |
| **TJIG** | **Tijuana** | **0.89** | **309** | *e*P | **Pg** | | **03 40 48.1** | **-0.4** |
| TJIG | | | | *e*S | **Sg** | | **03 40 59.6** | **-0.6** |
| **TJIG** | **Tijuana** | **0.89** | **309** | ⇑*e*P | **Pg** | | **03 40 48.1** | **-0.4** |
| TJIG | | | | *e*S | **Sb** | | **03 41 00.5** | **-0.1** |
| TJIG | | | | IAML | | | 03 41 01.5 | |
| | comp=E,679nm,0.1s | | | | | | | |
| TJIG | | | | ⇓*e* | | | 03 41 01.5 | |
| TJIG | | | | IAML | | | 03 41 01.7 | |
| | comp=N,631nm,0.1s | | | | | | | |
| TJIG | | | | *e* | | | 03 41 01.7 | |
| **WESC** | **Westside Schoo** | **0.89** | **7** | | **Pg** | | **03 40 48.2** | **-0.3** |
| WESC | | | | | **Sg** | | **03 41 00.1** | **-0.1** |
| **5054** | **Holtville Bond** | **0.93** | **28** | | **Pg** | | **03 40 49.2** | **-0.1** |
| **TKX** | **Tecate** | **0.94** | **318** | | **Pg** | | **03 40 48.6** | **-0.9** |
| TKX | | | | IAML | | | 03 41 03.4 | |
| | comp=N,569nm,0.2s | | | | | | | |
| TKX | | | | IAML | | | 03 41 03.4 | |
| | comp=E,1μm,0.1s | | | | | | | |
| **TKX** | **Tecate** | **0.94** | **318** | | **Sg** | | **03 41 01.3** | **-0.5** |
| **TKX** | **Tecate** | **0.94** | **318** | *e*P | **Pg** | | **03 40 48.8** | **-0.7** |
| **COK2** | **Cook Ranch 2** | **0.98** | **6** | | **Pg** | | **03 40 50.0** | **-0.3** |
| **DREC** | **Desert Rsrch C** | **1.00** | **20** | | **Pg** | | **03 40 50.4** | **-0.1** |
| DREC | | | | | **Sb** | | **03 41 04.6** | **+1.0** |
| **CRR** | **Carrizo Plain** | **1.02** | **355** | | **Pg** | | **03 40 50.3** | **-0.6** |
| **SNR** | **Schaffner Ranc** | **1.05** | **20** | | **Sb** | | **03 41 06.2** | **+1.0** |
| **IMPE** | **Imperial** | **1.06** | **14** | | **Pg** | | **03 40 51.5** | **-0.2** |
| IMPE | | | | | **Sb** | | **03 41 06.7** | **+1.2** |
| **BAR** | **Barrett** | **1.06** | **320** | | **Sg** | | **03 41 04.5** | **-1.1** |
| **DUZA** | **Dulzura** | **1.07** | **314** | | **Pg** | | **03 40 51.1** | **-0.8** |
| **MONP2** | **Monument Peak** | **1.13** | **335** | | **Pg** | | **03 40 52.3** | **-0.7** |
| **OLP** | **Otay Lakes Par** | **1.17** | **309** | | **Pg** | | **03 40 53.3** | **-0.5** |
| OLP | | | | | **Sg** | | **03 41 08.1** | **-0.9** |
| **SFX** | **San Felipe** | **1.20** | **134** | | **Pn** | | **03 40 54.0** | **+0.2** |
| SFX | | | | IAML | | | 03 41 11.4 | |
| | comp=N,168nm,0.7s | | | | | | | |
| SFX | | | | IAML | | | 03 41 13.6 | |
| | comp=E,166nm,0.6s | | | | | | | |
| **TJX** | **Tijuana** | **1.20** | **303** | | **Pn** | | **03 40 54.4** | **+0.4** |
| TJX | | | | IAML | | | 03 41 14.5 | |
| | comp=E,626nm,0.8s | | | | | | | |
| TJX | | | | IAML | | | 03 41 14.8 | |
| | comp=N,489nm,0.6s | | | | | | | |
| **TJX** | **Tijuana** | **1.20** | **303** | | **Sb** | | **03 41 09.9** | **+0.5** |
| **TJX** | **Tijuana** | **1.20** | **303** | *e*P | **Pg** | | **03 40 53.8** | **-0.6** |
| TJX | | | | *e*S | **Sb** | | **03 41 09.8** | **+0.5** |
| **ERRC** | **Elmore Ranch** | **1.25** | **1** | | **Sb** | | **03 41 12.0** | **+1.3** |
| **SDRC** | **San Diego Road** | **1.26** | **314** | | **Pg** | | **03 40 54.5** | **-1.1** |
| SDRC | | | | | **Sg** | | **03 41 10.3** | **-1.6** |
| **SDRC** | **San Diego Road** | **1.26** | **314** | *e*P | **Pg** | | **03 40 54.1** | **-1.4** |
| **CORX** | **Isla Coronado** | **1.30** | **295** | *e*P | **Pn** | | **03 40 55.4** | **+0.1** |
| **JUEM** | **Julian Eagle M** | **1.36** | **333** | | **Pn** | | **03 40 56.4** | **+0.1** |
| **SLH** | **Sleepy Hollow** | **1.36** | **346** | | **Pg** | | **03 40 57.4** | **-0.1** |
| **DPP** | **Dos Picos Cty** | **1.45** | **321** | | **Pg** | | **03 40 57.6** | **+0.2** |
| **109C** | **Camp Elliot, M** | **1.46** | **314** | | **Pn** | | **03 40 57.5** | **-0.1** |
| 109C | | | | IAML | | | 03 41 16.7 | |
| | comp=E,481nm,0.2s | | | | | | | |
| **CPE** | **Camp Elliot** | **1.46** | **314** | | **Pn** | | **03 40 58.0** | **+0.4** |
| CPE | | | | | **Sn** | | **03 41 16.2** | **-0.5** |
| **GLA** | **Glamis** | **1.47** | **36** | | **Pn** | | **03 40 56.3** | **-1.4** |
| GLA | | | | IAML | | | 03 41 17.1 | |
| | comp=E,97nm,0.6s | | | | | | | |
| GLA | | | | IAML | | | 03 41 17.6 | |
| | comp=N,159nm,0.4s | | | | | | | |
| **BORC** | **Borrego Spring** | **1.47** | **342** | | **Sn** | | **03 41 17.6** | **+0.7** |
| **MATG** | **Mataguay Scout** | **1.48** | **334** | | **Pn** | | **03 40 58.6** | **+0.6** |
| MATG | | | | | **Sn** | | **03 41 18.1** | **+0.7** |
| **PLM** | **Palomar** | **1.71** | **331** | | **Pn** | | **03 41 01.9** | **+0.9** |
| **GORC** | **Green Oak Ranc** | **1.73** | **318** | | **Sn** | | **03 41 23.9** | **+0.8** |
| **FRD** | **Ford Ranch, An** | **1.74** | **339** | | **Pb** | | **03 41 03.8** | **+0.5** |
| **FRD** | **Ford Ranch, An** | **1.74** | **339** | | **Pb** | | **03 41 03.9** | **+0.7** |
| **SNDA** | **J Saunders Pla** | **1.79** | **339** | | **Pn** | | **03 41 02.4** | **+0.1** |
| **PFO** | **Pinyon Flats O** | **1.81** | **344** | | **Pn** | | **03 41 02.1** | **-0.4** |
| **PMD** | **Palm Desert** | **1.83** | **346** | | **Pn** | | **03 41 02.3** | **-0.3** |
| PMD | | | | | **Sb** | | **03 41 28.7** | **+1.1** |
| **CRY** | **Cary Ranch** | **1.85** | **337** | | **Pg** | | **03 41 06.1** | **-0.7** |
| **113A** | **Mohawk Valley,** | **1.99** | **63** | | **Pn** | | **03 41 03.8** | **-0.9** |
| **DGR** | **Domenigoni Val** | **2.02** | **332** | | **Pb** | | **03 41 07.8** | **-0.2** |
| **BLYC** | **Blythe** | **2.19** | **31** | Pn | **Pn** | | **03 41 08.1** | **+0.6** |
| **ELS** | **Elsinore Mount** | **2.21** | **324** | | **Pn** | | **03 41 09.0** | **+1.1** |
| ELS | | | | IAML | | | 03 41 38.9 | |
| | comp=N,70nm,0.2s | | | | | | | |
| ELS | | | | IAML | | | 03 41 40.5 | |
| | comp=E,112nm,0.3s | | | | | | | |
| **BBSC** | **Beaumont Base** | **2.25** | **336** | | **Pb** | | **03 41 10.9** | **-1.1** |
| **214A** | **Organ Pipe Nat** | **2.59** | **87** | | **Pn** | | **03 41 12.1** | **-1.0** |
| **DJJ** | **Donna J Jenkin** | **3.12** | **316** | | **Pn** | | **03 41 21.9** | **+1.5** |
| **Y14A** | **Wickenburg** | **3.17** | **49** | | **Pn** | | **03 41 21.6** | **+0.6** |
| **GSC** | **Goldstone, Bar** | **3.51** | **347** | Pn | **Pn** | | **03 41 26.8** | **+0.9** |
| **W13A** | **Hualapai Mount** | **3.62** | **27** | Pn | **Pn** | | **03 41 28.4** | **+1.0** |
| **X16A** | **Lo Mia Camp, P** | **4.49** | **54** | | **Pn** | | **03 41 40.2** | **+0.7** |
| **U15A** | **North Rim** | **5.42** | **32** | | **Pn** | | **03 41 53.7** | **+1.4** |
| **KNB** | **Kanab** | **5.71** | **25** | | **Pn** | | **03 41 57.4** | **+1.2** |

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*IDC **08** 03:43:06.3±1.4,5˚.33S×152˚.41E,h0km,mb3.8/5, mbtmp3.9/5,Error ellipse: s-maj=58.1km s-min=27.5km az=118.0*
*NEIC **08** 03:43:09.9±1.7,5˚.65S±0˚.06×152˚.5E±0˚.1,h10km±1km, mb4.6/20, Error ellipse: s-maj=23.4km s-min=10.2km az=95.0*
**ISC 08 03:43:13.4±0.8,5˚.61S±0˚.08×152˚.3E±0˚.2,h40km,n30, σ1§22/31,mb4.3/15,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **RABL** | **Rabaul** | **1.42** | **353** | | **Pn** | | **03 43 36.5** | **-0.2** |
| RABL | | | | Sn | **Sn** | | **03 43 55.9** | **+1.7** |
| **PMG** | **Port Moresby** | **6.37** | **233** | Pn | **Pn** | | **03 44 43.8** | **-0.9** |
| **MTN** | **Manton Dam** | **22.11** | **250** | P | **P** | | **03 48 06.2** | **+0.7** |
| MTN | | | | IAmb | IAmb | | 03 48 13.6 | |
| | comp=Z,23nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **22.42** | **230** | P | **P** | | **03 48 09.9** | **+1.0** |
| **WR0** | **Warramunga Arr** | **22.42** | **229** | P | **P** | | **03 48 09.9** | **+1.0** |
| WR0 | | | | IAmb | IAmb | | 03 48 16.8 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **22.56** | **229** | P | **P** | | **03 48 11.0** | **+0.7** |
| WB2 | | | | IAmb | IAmb | | 03 48 13.4 | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.57** | **229** | P | **P** | | **03 48 10.6** | **+0.2** |
| | comp=Z,4.9nm,0.5s,baz=53,slow=10.0,SNR=35 | | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | | |
| **KNRA** | **Kununurra** | **25.20** | **245** | P | **P** | | **03 48 36.1** | **+0.6** |
| KNRA | | | | IAmb | IAmb | | 03 48 40.7 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **25.24** | **223** | P | **P** | | **03 48 36.4** | **+0.5** |
| **ASAR** | **Alice Springs** | **25.24** | **223** | P | **P** | | **03 48 39.0** | **+3.1** |
| **ASAR** | **Alice Springs** | **25.24** | **223** | P | **P** | | **03 48 36.3** | **+0.4** |
| | comp=Z,2.8nm,0.6s,baz=60,slow=8.7,SNR=28 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.87** | **242** | P | **P** | | **03 49 08.0** | **-0.5** |
| **BBOO** | **Buckleboo** | **31.03** | **207** | P | **P** | | **03 49 25.9** | **-1.5** |
| **MBWA** | **Marble Bar** | **35.17** | **241** | P | **P** | | **03 50 04.0** | **+0.2** |
| MBWA | | | | IAmb | IAmb | | 03 50 04.7 | |
| | comp=Z,25nm,1.5s | | | | | | | |
| **GIRL** | **Giralia** | **40.47** | **241** | P | **P** | | **03 50 48.9** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **42.49** | **226** | P | **P** | | **03 51 05.7** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **52.86** | **342** | P | **P** | | **03 52 23.9** | **-1.1** |
| **VNDA** | **Vanda** | **72.04** | **178** | P | **P** | | **03 54 33.4** | **+0.6** |
| **CNBA** | **Chernabura Isl** | **72.20** | **27** | P | **P** | | **03 54 33.2** | **-0.8** |
| **L19K** | **White Mountain** | **78.67** | **22** | P | **P** | | **03 55 10.9** | **-0.2** |
| L19K | | | | IAmb | IAmb | | 03 55 11.8 | |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **I20K** | **Naaghedeneel** | **80.35** | **20** | P | **P** | | **03 55 21.1** | **+1.0** |
| I20K | | | | IAmb | IAmb | | 03 55 22.7 | |
| | comp=Z,7.4nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.63** | **319** | P | **P** | | **03 55 20.4** | **-1.6** |
| | comp=Z,0.1nm,0.4s,baz=106,slow=4.8,SNR=1.8 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |
| **HIN** | **Hinchinbrook I** | **81.14** | **26** | P | **P** | | **03 55 24.1** | **-0.3** |
| HIN | | | | IAmb | IAmb | | 03 55 30.0 | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.08** | **22** | P | **P** | | **03 55 31.6** | **-2.9** |
| | comp=Z,0.3nm,0.7s,baz=256,slow=5.0,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **D22K** | **Ayikyak River** | **83.31** | **17** | P | **P** | | **03 55 36.7** | **+1.1** |
| D22K | | | | IAmb | IAmb | | 03 55 43.2 | |
| | comp=Z,2.6nm,1.1s | | | | | | | |
| **J25K** | **Salcha River,** | **83.58** | **23** | P | **P** | | **03 55 36.5** | **-0.7** |
| **M27K** | **Edge Creek, AK** | **84.00** | **25** | P | **P** | | **03 55 40.6** | **+1.1** |
| M27K | | | | IAmb | IAmb | | 03 55 46.3 | |
| | comp=Z,9.8nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.36** | **180** | P | **P** | | **03 55 42.7** | **+1.4** |
| QSPA | | | | IAmb | IAmb | | 03 55 44.4 | |
| | comp=Z,4.1nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.36** | **180** | P | **P** | | **03 55 42.3** | **+1.0** |
| | comp=Z,1.1nm,0.8s,baz=37,slow=1.0,SNR=5.5 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.10** | **287** | PKPbc | **PKPbc** | | **04 03 00.0** | **-0.9** |
| | baz=91,slow=2.4 | | | | | | | |

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*NEIC **08** 03:51:50.9±0.6,37˚.11N±0˚.01×97˚.59W±0˚.01,h5km±2km, mb_Lg2.1/24,ML2.6/43,ML2.3/14,Error ellipse: s-maj=2.0km s-min=1.4km az=178.0*
**NEIC 08 03:51:50.6±0.6,37˚.11N±0˚.01×97˚.59W±0˚.01,h5km±1km, Error ellipse: s-maj=1.7km s-min=1.5km az=159.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **KAN09** | **Caldwell North** | **0.03** | **323** | | **Pg** | | **03 51 53.0** | **+1.3** |
| **KAN13** | **South Haven SW** | **0.14** | **136** | | **Pg** | | **03 51 56.0** | **+2.6** |
| **KAN01** | **Argonia South** | **0.14** | **288** | | **Pg** | | **03 51 54.0** | **+0.6** |
| KAN01 | | | | | **Sg** | | **03 51 56.3** | **+1.0** |
| KAN01 | | | | IAML | | | 03 51 56.4 | |
| | comp=N,1μm,0.2s | | | | | | | |
| KAN01 | | | | IAML | | | 03 51 56.6 | |
| | comp=E,1μm,0.1s | | | | | | | |
| **KAN17** | **Caldwell West** | **0.15** | **244** | | **Pg** | | **03 51 54.2** | **+0.6** |
| KAN17 | | | | | **Sg** | | **03 51 56.7** | **+1.0** |
| KAN17 | | | | IAML | | | 03 51 56.8 | |
| | comp=N,3μm,0.3s | | | | | | | |
| KAN17 | | | | IAML | | | 03 51 56.8 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **KS21** | **Milan North St** | **0.18** | **343** | | **Pg** | | **03 51 54.8** | **+0.5** |
| KS21 | | | | | **Sg** | | **03 51 57.7** | **+0.9** |
| KS21 | | | | IAML | | | 03 51 57.8 | |
| | comp=E,1μm,0.2s | | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.32** | **291** | | **Pg** | | **03 51 57.5** | **+0.6** |
| KAN08 | | | | IAML | | | 03 52 02.4 | |
| | comp=N,522nm,0.2s | | | | | | | |
| **KAN14** | **Manchester OK** | **0.33** | **243** | | **Pg** | | **03 51 57.6** | **+0.5** |
| KAN14 | | | | | **Sg** | | **03 52 02.3** | **+0.9** |
| KAN14 | | | | IAML | | | 03 52 02.5 | |
| | comp=E,449nm,0.1s | | | | | | | |
| KAN14 | | | | IAML | | | 03 52 04.1 | |
| | comp=N,783nm,0.2s | | | | | | | |
| **GC02** | **Grant County #** | **0.34** | **219** | | **Pg** | | **03 51 57.6** | **+0.5** |
| GC02 | | | | | **Sg** | | **03 52 02.4** | **+0.9** |
| **KAN12** | **Harper NE Stat** | **0.37** | **300** | | **Pg** | | **03 51 58.4** | **+0.5** |
| KAN12 | | | | | **Sg** | | **03 52 03.8** | **+1.0** |
| KAN12 | | | | IAML | | | 03 52 05.6 | |
| | comp=N,528nm,0.4s | | | | | | | |
| KAN12 | | | | IAML | | | 03 52 07.3 | |
| | comp=E,758nm,0.3s | | | | | | | |
| **BLOK** | **Blackwell** | **0.46** | **139** | | **Pg** | | **03 51 59.9** | **+0.3** |
| BLOK | | | | | **Sg** | | **03 52 06.2** | **+0.7** |
| **OK032** | **Salt Plains WL** | **0.58** | **238** | | **Pg** | | **03 52 02.2** | **+0.4** |
| OK032 | | | | | **Sg** | | **03 52 10.3** | **+1.0** |
| OK032 | | | | IAML | | | 03 52 15.4 | |
| | comp=E,279nm,0.2s | | | | | | | |
| OK032 | | | | IAML | | | 03 52 15.9 | |
| | comp=E,230nm,0.1s | | | | | | | |
| **CROK** | **Carrier** | **0.68** | **207** | | **Pg** | | **03 52 04.0** | **+0.3** |
| CROK | | | | | **Sg** | | **03 52 13.4** | **+0.8** |
| CROK | | | | IAML | | | 03 52 16.2 | |
| | comp=N,208nm,0.3s | | | | | | | |
| CROK | | | | IAML | | | 03 52 18.9 | |
| | comp=E,234nm,0.4s | | | | | | | |
| **OK051** | **E0350 and S346** | **0.86** | **135** | | **Pg** | | **03 52 07.0** | **0.0** |
| OK051 | | | | IAML | | | 03 52 20.8 | |
| | comp=E,213nm,0.2s | | | | | | | |
| OK051 | | | | IAML | | | 03 52 20.9 | |
| | comp=E,225nm,0.2s | | | | | | | |
| **OK048** | **Pawnee Station** | **0.87** | **143** | Pg | Pg | | **03 52 07.2** | **-0.1** |
| OK048 | | | | IAML | | | 03 52 20.5 | |
| | comp=E,120nm,0.2s | | | | | | | |
| **T35A** | **Sooner Cattle** | **0.89** | **102** | | **Pg** | | **03 52 07.6** | **-0.1** |
| T35A | | | | | **Sg** | | **03 52 19.5** | **+0.3** |
| **OK038** | **West end E0370** | **1.12** | **236** | Pg | Pb | | **03 52 12.3** | **-0.1** |
| **QUOK** | **Quay** | **1.18** | **142** | Pg | Pg | | **03 52 12.9** | **-0.3** |
| **OK052** | **Battle Ridge R** | **1.28** | **150** | | Pn | | **03 52 14.8** | **-0.5** |
| OK052 | | | | IAML | | | 03 52 35.7 | |
| | comp=E,124nm,0.3s | | | | | | | |
| OK052 | | | | IAML | | | 03 52 36.0 | |
| | comp=E,148nm,0.3s | | | | | | | |
| **OK031** | **S. Brethren Rd** | **1.31** | **152** | | Pn | | **03 52 15.2** | **-0.4** |
| OK031 | | | | IAML | | | 03 52 33.3 | |
| | comp=E,126nm,0.3s | | | | | | | |
| OK031 | | | | IAML | | | 03 52 34.4 | |
| | comp=E,135nm,0.3s | | | | | | | |
| **OK029** | **Liberty Lake** | **1.32** | **175** | Pg | Pn | | **03 52 15.4** | **-0.3** |
| **DEO

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KNDR | | | | S | **Sb** | **04 12 22.9** | **-0.3** | |
| KNDR | | | | AML | AML | 04 12 28.4 | | |
| | comp=N,15452µm,0.6s | | | | | | | |
| KNDR | | | | AML | AML | 04 12 29.8 | | |
| | comp=E,12584µm,0.8s | | | | | | | |
| **RODP** | **Rodopos** | **0.79** | **52** | P | **Pn** | **04 12 18.8** | **+0.4** | |
| RODP | | | | S | **Sn** | **04 12 29.8** | **+0.5** | |
| **ANKY** | **Antikythira Is** | **0.83** | **18** | P | **Pn** | **04 12 18.9** | **0.0** | |
| ANKY | | | | S | **Sb** | **04 12 30.3** | **+0.3** | |
| | comp=E,2µm,0.6s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.83** | **18** | P | **Pn** | **04 12 18.9** | **0.0** | |
| ANKY | | | | S | **Sb** | **04 12 29.8** | **-0.1** | |
| ANKY | | | | AML | AML | 04 12 33.5 | | |
| | comp=N,5054µm,0.9s | | | | | | | |
| ANKY | | | | AML | AML | 04 12 34.5 | | |
| | comp=E,2438µm,0.3s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.90** | **64** | P | **Pn** | **04 12 20.4** | **+0.5** | |
| IMMV | | | | S | **Sn** | **04 12 33.7** | **+1.9** | |
| | comp=E,2µm,0.6s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.90** | **64** | P | **Pn** | **04 12 20.7** | **+0.9** | |
| IMMV | | | | S | **Sn** | **04 12 32.9** | **+1.1** | |
| IMMV | | | | AML | AML | 04 12 35.3 | | |
| | comp=E,3611µm,0.5s | | | | | | | |
| IMMV | | | | AML | AML | 04 12 35.8 | | |
| | comp=N,3239µm,0.7s | | | | | | | |
| **GVD** | **Gavdhos** | **0.93** | **104** | P | **Pn** | **04 12 21.8** | **+1.5** | |
| GVD | | | | S | **Sn** | **04 12 35.2** | **+2.5** | |
| | comp=N,1µm,0.4s | | | | | | | |
| **GVD** | **Gavdhos** | **0.93** | **104** | P | **Pn** | **04 12 22.0** | **+1.7** | |
| GVD | | | | S | **Sn** | **04 12 35.1** | **+2.4** | |
| GVD | | | | AML | AML | 04 12 47.6 | | |
| | comp=N,2983µm,0.5s | | | | | | | |
| GVD | | | | AML | AML | 04 12 48.8 | | |
| | comp=E,2099µm,0.4s | | | | | | | |
| **CHAN** | **Chania** | **0.97** | **62** | P | **Pn** | **04 12 22.4** | **+1.6** | |
| CHAN | | | | S | **Sn** | **04 12 35.3** | **+1.8** | |
| CHAN | | | | AML | AML | 04 12 41.9 | | |
| | comp=N,3660µm,0.8s | | | | | | | |
| CHAN | | | | AML | AML | 04 12 43.1 | | |
| | comp=E,3548µm,0.6s | | | | | | | |
| **KTHA** | **Kythira Island** | **1.18** | **3** | P | **Pb** | **04 12 25.5** | **+0.4** | |
| KTHA | | | | S | **Sn** | **04 12 42.0** | **+3.1** | |
| | comp=E,938nm,0.5s | | | | | | | |
| **KTHA** | **Kythira Island** | **1.18** | **3** | P | **Pb** | **04 12 25.4** | **+0.3** | |
| KTHA | | | | S | **Sn** | **04 12 39.8** | **+0.9** | |
| KTHA | | | | AML | AML | 04 12 48.0 | | |
| | comp=E,2852µm,0.4s | | | | | | | |
| KTHA | | | | AML | AML | 04 12 48.1 | | |
| | comp=N,886µm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **1.57** | **82** | P | **Pb** | **04 12 30.8** | **-0.9** | |
| IDI | | | | S | **Sb** | **04 12 52.6** | **+1.5** | |
| **IDI** | **Anoyia** | **1.57** | **82** | P | **Pb** | **04 12 30.8** | **-0.9** | |
| **VLI** | **Veliai** | **1.64** | **358** | P | **Pb** | **04 12 31.9** | **-0.9** | |
| VLI | | | | S | **Sb** | **04 12 53.2** | **+0.1** | |
| | comp=N,325nm,0.8s | | | | | | | |
| **VLI** | **Veliai** | **1.64** | **358** | P | **Pb** | **04 12 31.9** | **-0.9** | |
| **PYL** | **PYLOS** | **2.08** | **331** | P | **Pn** | **04 12 37.2** | **+1.0** | |
| **ITM** | **Ithomi** | **2.27** | **338** | P | **Pn** | **04 12 40.4** | **+1.6** | |
| **KRND** | **KRANIDI** | **2.31** | **3** | P | **Pn** | **04 12 41.0** | **+1.7** | |
| **KRND** | **KRANIDI** | **2.31** | **3** | P | **Pn** | **04 12 40.9** | **+1.6** | |
| **THR5** | **Thira Island,** | **2.34** | **54** | P | **Pn** | **04 12 40.2** | **+0.6** | |
| **THR6** | **Thira Island,** | **2.34** | **56** | P | **Pn** | **04 12 40.7** | **+1.0** | |
| **SNT5** | **Nea Kammeni, S** | **2.36** | **55** | P | **Pn** | **04 12 40.6** | **+0.6** | |
| **THR3** | **Thira Island,** | **2.37** | **55** | P | **Pn** | **04 12 40.5** | **+0.4** | |
| **SANT** | **Santorini** | **2.39** | **56** | P | **Pn** | **04 12 42.1** | **+1.7** | |
| **VLY** | **Voula,Athens** | **2.85** | **13** | P | **Pn** | **04 12 48.0** | **+1.3** | |
| **VLY** | **Voula,Athens** | **2.85** | **13** | P | **Pn** | **04 12 48.1** | **+1.3** | |
| **APE** | **Apeiranthos** | **2.86** | **45** | P | **Pn** | **04 12 46.9** | **0.0** | |
| **GUR** | **Goura** | **2.90** | **350** | P | **Pn** | **04 12 49.3** | **+1.7** | |
| **GUR** | **Goura** | **2.90** | **350** | P | **Pn** | **04 12 49.4** | **+1.9** | |
| **ATHU** | **Athens Univers** | **2.96** | **12** | P | **Pn** | **04 12 49.8** | **+1.6** | |
| **ATHU** | **Athens Univers** | **2.96** | **12** | P | **Pn** | **04 12 49.5** | **+1.4** | |
| **KLV** | **Kalavryta, Ach** | **3.04** | **347** | P | **Pn** | **04 12 51.5** | **+2.1** | |
| **KLV** | **Kalavryta, Ach** | **3.04** | **347** | P | **Pn** | **04 12 51.7** | **+2.3** | |
| **PTL** | **Penteli** | **3.05** | **13** | P | **Pn** | **04 12 51.0** | **+1.5** | |
| **DION** | **Dionisos Attik** | **3.09** | **14** | P | **Pn** | **04 12 52.3** | **+2.2** | |
| **DION** | **Dionisos Attik** | **3.09** | **14** | P | **Pn** | **04 12 52.3** | **+2.2** | |
| **VIL2** | **Platees** | **3.14** | **4** | P | **Pn** | **04 12 51.2** | **+0.5** | |
| **RLS** | **Riolos of Patr** | **3.22** | **338** | P | **Pn** | **04 12 54.2** | **+2.4** | |
| **RLS** | **Riolos of Patr** | **3.22** | **338** | P | **Pn** | **04 12 54.2** | **+2.4** | |
| **KALE** | **Kalithea** | **3.38** | **349** | P | **Pn** | **04 12 55.3** | **+1.3** | |
| **EFP** | **Efpalio** | **3.46** | **346** | P | **Pn** | **04 12 58.0** | **+3.0** | |
| **PSDA** | **Pessada-Kefalo** | **3.60** | **328** | P | **Pn** | **04 12 57.7** | **+0.7** | |
| **ANX** | **Ano Chora** | **3.62** | **347** | P | **Pn** | **04 12 59.1** | **+1.8** | |
| **ANX** | **Ano Chora** | **3.62** | **347** | P | **Pn** | **04 12 58.8** | **+1.4** | |
| **VLS** | **Valsamata** | **3.65** | **329** | P | **Pn** | **04 12 58.3** | **+0.5** | |
| **PVO** | **Paravola** | **3.73** | **342** | P | **Pn** | **04 13 00.1** | **+1.3** | |
| **DMLN** | **Damoulianata-K** | **3.79** | **327** | P | **Pn** | **04 13 00.1** | **+0.4** | |
| **FSK** | **Fiskardo** | **3.90** | **331** | P | **Pn** | **04 13 02.1** | **+0.9** | |
| **EVGI** | **Lefkada island** | **4.00** | **333** | P | **Pn** | **04 13 04.2** | **+1.6** | |
| **LKD2** | **Lefkada island** | **4.15** | **334** | P | **Pn** | **04 13 06.0** | **+1.3** | |
| **KPRO** | **Kipourio** | **5.04** | **346** | P | **Pn** | **04 13 18.6** | **+1.6** | |
| **HORT** | **Hortiatis** | **5.51** | **1** | P | **Pn** | **04 13 23.7** | **+0.3** | |
| **FNA** | **Florina** | **5.84** | **348** | P | **Pn** | **04 13 28.0** | **+0.1** | |
| **BRTR** | **Keskin Array B** | **9.66** | **58** | P | **Pn** | **04 14 20.7** | **+0.4** | |
| | comp=N,0.3nm,0.5s,baz=234,slow=12,SNR=2.0 | | | | | | | |
| BRTR | | | | LR | LR | 04 18 44.1 | | |
| | comp=N,35nm,18.1s,baz=291,slow=44 | | | | | | | |
| **GNI** | **Garni** | **17.95** | **67** | LR | LR | 04 24 10.0 | | |
| | comp=N,24nm,19.8s,baz=262,slow=42 | | | | | | | |
| **HFS** | **Hagfors** | **25.79** | **349** | P | **P** | **04 17 31.0** | **-0.4** | |
| | comp=N,1.1nm,0.4s,baz=146,slow=10,SNR=11 | | | | | | | |
| | comp=N,1.1nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **26.46** | **3** | P | **P** | **04 17 35.1** | **-2.3** | |
| | comp=N,3.1nm,1.0s,baz=162,slow=9.6,SNR=2.5 | | | | | | | |
| | comp=N,3.1nm,1.0s | | | | | | | |
| **NOA** | **NORSAR Array B** | **27.06** | **347** | P | **P** | **04 17 40.2** | **-2.7** | |
| | comp=N,0.2nm,0.6s,baz=170,slow=7.9,SNR=2.0 | | | | | | | |
| | comp=N,0.2nm,0.6s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **27.11** | **326** | P | **P** | **04 17 44.5** | **+1.2** | |
| | comp=N,0.3nm,0.4s,baz=128,slow=10.0,SNR=1.9 | | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.54** | **2** | P | P | 04 18 46.1 | -2.6 | |
| | comp=N,2.9nm,0.9s,baz=180,slow=8.2,SNR=1.8 | | | | | | | |
| | comp=N,2.9nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.55** | **51** | P | P | 04 19 53.6 | -2.5 | |
| | comp=N,0.3nm,0.4s,baz=282,slow=8.6,SNR=3.0 | | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.30** | **56** | P | **P** | **04 20 16.9** | **-1.4** | |
| | comp=N,0.3nm,0.3s,baz=269,slow=8.5,SNR=11 | | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.34** | **46** | P | P | 04 20 23.9 | -2.4 | |
| | comp=N,1.2nm,0.4s,baz=264,slow=8.6,SNR=4.8 | | | | | | | |
| | comp=N,1.2nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **60.91** | **50** | P | **P** | **04 22 12.4** | **-1.0** | |
| | comp=N,0.3nm,0.5s,baz=298,slow=6.9,SNR=1.7 | | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | | |

**IDC 08 04:15:54.2±3.0, 53.61N×87.93E, h0km, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=26.1km s-min=19.1km az=48.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.88** | **282** | I | I | 04 28 00.0 | |
| | 0.1nm,1.0s,baz=98,slow=317,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.88** | **282** | Pn | Pn | 04 16 28.1 | +0.6 |
| | 1.0nm,0.3s,baz=95,slow=16,SNR=7.5 | | | | | | |
| ZALV | | | | Lg | Lg | 04 16 54.0 | |
| | 2.5nm,0.3s,baz=102,slow=26,SNR=13 | | | | | | |
| ZALV | | | | I | I | 04 28 01.2 | |
| | baz=50,slow=27,SNR=9.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.51** | **246** | Pn | Pn | 04 17 31.1 | -0.1 |
| | 0.1nm,0.3s,baz=65,slow=15,SNR=6.0 | | | | | | |
| KURBB | | | | Sn | Sn | 04 18 46.1 | 0.0 |
| | baz=235,slow=40,SNR=2.0 | | | | | | |
| KURBB | | | | Lg | Lg | 04 19 19.0 | |
| | baz=50,slow=29 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.72** | **210** | Pn | Pn | 04 17 49.4 | +1.6 |
| | 0.1nm,0.3s,baz=26,slow=12,SNR=2.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*NOU **08** 04:16:31.6, 25.72S×179.46W, h551km, mb4.5/24, South of Fiji Islands*
*IDC **08** 04:16:33.6±1.8, 25.76S×179.73E, h496km±18km, mb3.6/15, mbtmp4.5/18, Error ellipse: s-maj=13.8km s-min=12.6km az=144.0*
*NEIC **08** 04:16:34.8±1.3, 25.85S±0.1×179.7E±0.1, h499km±8km, mb4.5/43, Error ellipse: s-maj=18.8km s-min=15.9km az=99.0*
**ISC 08 04:16:34.4±0.4, 25.86S±0.06×179.70E±0.07, h503km, n129, σ1§35/133, mb4.3/35, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **4.00** | **149** | P | **P** | **04 17 53.4** | **+0.5** |
| GLKZ | | | | S | **S** | **04 18 56.6** | **-0.4** |
| **MSVF** | **Nonsavu** | **8.23** | **349** | P | **P** | **04 18 32.3** | **-1.2** |
| **MSVF** | **Nonsavu** | **8.23** | **349** | | **P** | **04 18 32.8** | **-0.7** |
| **MSVF** | **Nonsavu** | **8.23** | **349** | P | **P** | **04 18 30.4** | **-3.0** |
| | 24nm,1.1s,baz=181,slow=14,SNR=9.6 | | | | | | |
| **WCZ** | **Waipu Caves** | **11.05** | **203** | P | **P** | **04 19 05.1** | **+2.3** |
| **KUZ** | **Kuaotunu** | **11.38** | **196** | P | **P** | **04 19 07.7** | **+1.5** |
| **KUZ** | **Kuaotunu** | **11.38** | **196** | P | **P** | **04 19 07.4** | **+1.3** |
| **PINNC** | **Pines Island,** | **11.64** | **284** | P | **P** | **04 19 10.5** | **+1.3** |
| **PINNC** | **Pines Island,** | **11.64** | **284** | P | **P** | **04 19 09.3** | **+0.1** |
| **MKAZ** | **Moumakai** | **11.86** | **198** | P | **P** | **04 19 12.3** | **+1.0** |
| **HAZ** | **Te Kaha** | **11.98** | **187** | P | **P** | **04 19 12.3** | **-0.2** |
| HAZ | | | | S | **S** | **04 21 22.4** | **-0.4** |
| **WMGZ** | **Waiomatatini S** | **11.98** | **185** | P | **P** | **04 19 12.7** | **+0.2** |
| WMGZ | | | | S | **S** | **04 21 24.3** | **+1.4** |
| **PKGZ** | **Pakihiroa** | **12.05** | **186** | P | **P** | **04 19 13.5** | **+0.1** |
| PKGZ | | | | S | **S** | **04 21 25.7** | **+1.2** |
| **PUZ** | **Puketiti** | **12.24** | **185** | S | **S** | **04 21 24.3** | **-3.7** |
| **YATNC** | **Mamie plateau,** | **12.31** | **285** | P | **P** | **04 19 17.5** | **+1.2** |
| **TOZ** | **Tahuroa Road** | **12.36** | **196** | P | **P** | **04 19 17.4** | **+0.8** |
| **TWGZ** | **Tauwhareparae** | **12.37** | **186** | P | **P** | **04 19 17.0** | **+0.3** |
| **URZ** | **Urewera** | **12.56** | **189** | P | **P** | **04 19 17.8** | **-0.9** |
| **URZ** | **Urewera** | **12.56** | **189** | P | **P** | **04 19 17.4** | **-1.3** |
| | 8.8nm,0.4s,baz=144,slow=5.4,SNR=9.6 | | | | | | |
| URZ | | | | S | **S** | **04 21 31.7** | **-2.4** |
| | 9.7nm,0.7s,baz=321,slow=14,SNR=2.0 | | | | | | |
| **MWZ** | **Matawai** | **12.58** | **188** | P | **P** | **04 19 18.3** | **-0.7** |
| **DZM** | **Mont Dzumac** | **12.69** | **284** | P | **P** | **04 19 21.7** | **+1.2** |
| **DZM** | **Mont Dzumac** | **12.69** | **284** | P | **P** | **04 19 21.0** | **+0.5** |
| **DZM** | **Mont Dzumac** | **12.69** | **284** | P | **P** | **04 19 20.9** | **+0.4** |
| | 27nm,0.7s,baz=105,slow=12,SNR=33 | | | | | | |
| **NOUC** | **Port Laguerre** | **12.80** | **284** | P | **P** | **04 19 22.7** | **+1.2** |
| **HIZ** | **Hauiti** | **13.27** | **197** | P | **P** | **04 19 26.7** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **13.54** | **191** | P | **P** | **04 19 29.5** | **+0.3** |
| **BFZ** | **Birch Farm** | **15.06** | **190** | P | **P** | **04 19 43.0** | **-2.0** |
| **KOUNC** | **Koumac, New Ca** | **15.12** | **287** | P | **P** | **04 19 46.6** | **+0.7** |
| KOUNC | | | | IAmb | IAmb | 04 19 50.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MRZ** | **Mangatainoka R** | **15.16** | **192** | P | **P** | **04 19 43.4** | **-2.6** |
| MRZ | | | | S | **S** | **04 22 18.9** | **-5.2** |
| **OGWZ** | **Otaki Gorge** | **15.39** | **193** | P | **P** | **04 19 46.1** | **-2.3** |
| **MSWZ** | **Moikau Station** | **15.95** | **192** | P | **P** | **04 19 50.9** | **-3.5** |
| MSWZ | | | | S | **S** | **04 22 34.3** | **-4.8** |
| **BHW** | **Baring Head** | **16.02** | **193** | P | **P** | **04 19 50.3** | **-4.7** |
| **QRZ** | **Quartz Range** | **16.08** | **200** | P | **P** | **04 19 55.3** | **-0.3** |
| **QRZ** | **Quartz Range** | **16.08** | **200** | P | **P** | **04 19 56.0** | **+0.4** |
| **MRNZ** | **Matariki Terra** | **16.54** | **199** | P | **P** | **04 19 59.8** | **-0.6** |
| **MRNZ** | **Matariki Terra** | **16.54** | **199** | P | **P** | **04 20 00.1** | **-0.3** |
| MRNZ | | | | S | **S** | **04 22 52.0** | **+2.4** |
| **THZ** | **Tophouse** | **16.83** | **198** | P | **P** | **04 20 03.6** | **+0.1** |
| **THZ** | **Tophouse** | **16.83** | **198** | P | **P** | **04 20 01.0** | **-2.5** |
| THZ | | | | S | **S** | **04 22 53.3** | **-1.5** |
| **KHZ** | **Kahutara** | **17.28** | **196** | P | **P** | **04 20 06.4** | **-1.3** |
| **KHZ** | **Kahutara** | **17.28** | **196** | P | **P** | **04 20 06.2** | **-1.5** |
| **GVZ** | **Greta Valley S** | **17.92** | **196** | P | **P** | **04 20 12.1** | **-1.7** |
| GVZ | | | | S | **S** | **04 23 02.6** | **-3.1** |
| **LTZ** | **Lake Taylor** | **17.95** | **198** | P | **P** | **04 20 13.0** | **-1.1** |
| **INZ** | **Inchbonnie** | **18.14** | **200** | P | **P** | **04 20 15.8** | **+0.1** |
| **ARMA** | **Armidale** | **25.14** | **253** | P | **P** | **04 21 20.8** | **+1.7** |
| | comp=Z,16nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **25.14** | **253** | P | **P** | **04 21 18.3** | **-0.9** |
| ARMA | | | | IAmb | IAmb | 04 21 22.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **25.79** | **265** | P | **P** | **04 21 25.5** | **+0.7** |
| **EIDS** | **Eidsvold** | **25.79** | **265** | P | **P** | **04 21 25.3** | **+0.4** |
| **RK1H** | **Rockhampton Ha** | **26.64** | **269** | P | **P** | **04 21 34.0** | **+1.7** |
| **CMSA** | **Cobar Meteorol** | **30.29** | **251** | P | **P** | **04 22 04.6** | **+0.5** |
| **TV1H** | **Townsville Har** | **31.03** | **275** | P | **P** | **04 22 10.8** | **+0.2** |
| **CTA** | **Charters Tower** | **31.27** | **274** | P | **P** | **04 22 13.0** | **+0.3** |
| | comp=Z,6nm,0.6s,baz=102,slon=10,SNR=25 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **31.27** | **274** | P | **P** | **04 22 13.2** | **+0.5** |
| **CTAO** | **Charters Tower** | **31.27** | **274** | P | **P** | **04 22 13.2** | **+0.5** |
| **QLP** | **Quilpie** | **31.77** | **261** | P | **P** | **04 22 17.2** | **+0.3** |
| **STKA** | **Stephens Creek** | **33.78** | **251** | P | **P** | **04 22 34.6** | **+0.6** |
| **STKA** | **Stephens Creek** | **33.78** | **251** | P | **P** | **04 22 34.5** | **+0.6** |
| **STKA** | **Stephens Creek** | **33.78** | **251** | P | **P** | **04 22 34.3** | **+0.4** |
| | comp=Z,5.3nm,0.6s,baz=93,slow=10,SNR=17 | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **INKA** | **Innaminka** | **34.73** | **258** | P | **P** | **04 22 42.8** | **+0.9** |
| **PMG** | **Port Moresby** | **34.92** | **292** | P | **P** | **04 22 43.1** | **-0.6** |
| PMG | | | | IAmb | IAmb | 04 22 44.5 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **34.92** | **292** | P | **P** | **04 22 43.5** | **-0.2** |
| | comp=Z,30nm,0.8s,baz=141,slow=8.3,SNR=6.2 | | | | | | |
| | comp=Z,30nm,0.8s | | | | | | |
| **HTT** | **Hallett** | **36.06** | **248** | P | **P** | **04 22 53.2** | **+0.2** |
| **COEN** | **Coen** | **36.20** | **282** | P | **P** | **04 22 54.7** | **+0.3** |
| **COEN** | **Coen** | **36.20** | **282** | P | **P** | **04 22 54.8** | **+0.4** |
| COEN | | | | IAmb | IAmb | 04 22 55.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **LCRK** | **Leigh Creek** | **36.72** | **253** | P | **P** | **04 22 58.5** | **+0.1** |
| **QIS** | **Mount Isa** | **37.12** | **270** | P | **P** | **04 23 01.6** | **-0.4** |
| **BBOO** | **Buckleboo** | **38.46** | **249** | P | **P** | **04 23 12.6** | **-0.1** |
| **BBOO** | **Buckleboo** | **38.46** | **249** | P | **P** | **04 23 12.4** | **-0.3** |
| **OOD** | **Oodnadatta** | **39.17** | **257** | P | **P** | **04 23 19.0** | **+0.5** |
| **MULG** | **Mulgathing** | **40.31** | **253** | P | **P** | **04 23 27.2** | **-0.5** |
| **AS31** | **Alice Springs** | **41.48** | **263** | P | **P** | **04 23 37.1** | **-0.1** |
| **ASAR** | **Alice Springs** | **41.48** | **263** | P | **P** | **04 23 36.3** | **-0.9** |
| **ASAR** | **Alice Springs** | **41.48** | **263** | P | **P** | **04 23 37.0** | **-0.2** |
| | comp=Z,5.5nm,0.4s,baz=105,slow=8.2,SNR=66 | | | | | | |
| ASAR | | | | S | **S** | **04 29 17.5** | **+1.4** |
| | comp=Z,1.0nm,0.7s,baz=97,slow=16,SNR=4.8 | | | | | | |
| | comp=Z,5.5nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **41.85** | **268** | P | **P** | **04 23 39.2** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 04 23 40.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.03** | **268** | P | **P** | **04 23 41.0** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 04 23 42.4 | |
| | comp=Z,17nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.04** | **268** | P | **P** | **04 23 40.6** | **-1.0** |
| | comp=Z,16nm,0.6s,baz=104,slow=8.0,SNR=78 | | | | | | |
| WRA | | | | S | **S** | **04 29 22.9** | **-1.3** |
| | comp=Z,4.0nm,0.9s,baz=98,slow=14,SNR=14 | | | | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.04** | **269** | P | **P** | **04 23 40.9** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 04 23 42.1 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **JOHN** | **Johnston Islan** | **43.61** | **15** | P | **P** | **04 23 54.0** | **+0.2** |
| **FORT** | **Forrest** | **45.40** | **251** | P | **P** | **04 24 05.8** | **-1.8** |
| **MTN** | **Manton Dam** | **47.37** | **276** | P | **P** | **04 24 21.8** | **-0.9** |
| **KNRA** | **Kununurra** | **48.44** | **272** | P | **P** | **04 24 30.8** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 04 24 32.9 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.44** | **267** | P | **P** | **04 24 45.1** | **-0.4** |
| **FAKI** | **Fak Fak** | **50.92** | **289** | P | **P** | **04 24 49.4** | **+0.3** |
| FAKI | | | | IAmb | IAmb | 04 25 24.1 | |
| | comp=Z,43nm,1.2s | | | | | | |
| **SBA** | **Scott Base** | **52.42** | **183** | P | **P** | **04 25 00.8** | **+1.9** |
| **MBWA** | **Marble Bar** | **54.79** | **262** | P | **P** | **04 25 15.9** | **-0.8** |
| MBWA | | | | IAmb | IAmb | 04 25 18.5 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **64.24** | **180** | P | **P** | **04 26 20.2** | **+1.0** |
| **QSPA** | **South Pole Qui** | **64.24** | **180** | P | **P** | **04 26 20.0** | **+0.8** |
| | comp=Z,4.8nm,0.8s,baz=334,slow=0.9,SNR=24 | | | | | | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **73.36** | **326** | P | **P** | **04 27 13.7** | **-0.9** |
| | comp=Z,6.3nm,0.9s,baz=155,slow=5.4,SNR=6.8 | | | | | | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **SMAI** | **San Martin Ant** | **74.38** | **159** | P | **P** | **04 27 21.6** | **+1.6** |
| **MAW** | **Mawson** | **75.83** | **201** | P | **P** | **04 27 28.6** | **+0.5** |
| | comp=Z,2.2nm,0.9s,baz=98,slow=9.3,SNR=4.8 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **79.57** | **321** | P | **P** | **04 27 49.0** | **+0.3** |
| | comp=Z,2.0nm,0.7s,baz=130,slow=5.1,SNR=8.2 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **82.72** | **179** | P | **P** | **04 28 04.3** | **-0.3** |
| | comp=Z,2.0nm,0.9s,baz=191,slow=7.8,SNR=8.5 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **84.72** | **40** | P | **P** | **04 28 15.9** | **+0.9** |
| O02D | | | | IAmb | IAmb | 04 28 17.9 | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **GMN** | **Gold Mountain** | **86.33** | **45** | P | **P** | **04 28 24.1** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **86.34** | **44** | P | **P** | **04 28 23.2** | **+0.1** |
| | comp=Z,1.5nm,0.7s,baz=220,slow=8.4,SNR=13 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **TPH** | **Tonopah** | **86.81** | **45** | P | **P** | **04 28 26.2** | **+1.0** |
| **J05D** | **Fort Rock, OR** | **87.60** | **39** | P | **P** | **04 28 29.1** | **+0.3** |
| J05D | | | | IAmb | IAmb | 04 28 31.6 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **PINE** | **Pine Mountain** | **88.08** | **39** | P | **P** | **04 28 31.8** | **+0.7** |
| PINE | | | | IAmb | IAmb | 04 28 33.6 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **WVOR** | **Wild Horse Val** | **88.56** | **41** | P | **P** | **04 28 33.6** | **+0.3** |
| **X16A** | **Lo Mia Camp, P** | **88.59** | **50** | P | **P** | **04 28 34.2** | **+0.6** |
| **I07A** | **Izee** | **89.08** | **39** | P | **P** | **04 28 36.2** | **+0.6** |
| I07A | | | | IAmb | IAmb | 04 28 37.9 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **U15A** | **North Rim** | **89.10** | **48** | P | **P** | **04 28 36.1** | **0.0** |
| U15A | | | | IAmb | IAmb | 04 28 39.4 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.95** | **290** | P | **P** | **04 28 40.0** | **-0.1** |
| | comp=Z,1.6nm,0.3s,baz=172,slow=2.6,SNR=4.1 | | | | | | |
| | comp=Z,1.6nm,0.3s | | | | | | |
| **MTPU** | **Mount Pierson** | **90.06** | **47** | P | **P** | **04 28 39.9** | **-0.7** |
| MTPU | | | | IAmb | IAmb | 04 28 43.4 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **TMUT** | **Trail Mountain** | **91.38** | **46** | P | **P** | **04 28 47.6** | **+1.0** |
| TMUT | | | | IAmb | IAmb | 04 28 49.0 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **F10A** | **Beach Ranch, E** | **91.50** | **38** | P | **P** | **04 28 46.0** | **-0.7** |
| F10A | | | | IAmb | IAmb | 04 28 48.6 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **91.69** | **58** | P | **P** | **04 28 48.8** | **+0.8** |
| | comp=Z,0.9nm,0.7s,baz=216,slow=6.7,SNR=10 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **SRU** | **San Rafael Swe** | **91.73** | **47** | P | **P** | **04 28 49.4** | **+1.3** |
| SRU | | | | IAmb | IAmb | 04 28 49.8 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **HVU** | **Hansel Valley** | **91.73** | **44** | P | **P** | **04 28 48.4** | **+0.4** |
| HVU | | | | IAmb | IAmb | 04 28 49.7 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **ALPN** | **Alpine** | **92.21** | **57** | P | **P** | **04 28 51.0** | **+0.6** |
| **ILAR** | **Eielson Array** | **93.99** | **14** | P | **P** | **04 28 56.0** | **-1.5** |
| | comp=Z,0.3nm,0.7s,baz=226,slow=5.9,SNR=4.3 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **J25K** | **Salcha River,** | **94.18** | **14** | P | **P** | **04 28 59.2** | **+0.7** |
| **PDAR** | **Pinedale Array** | **94.28** | **44** | P | **P** | **04 28 59.7** | **-0.1** |
| | comp=Z,0.2nm,0.6s,baz=248,slow=6.5,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **J26L** | **Joseph Creek** | **94.50** | **15** | P | **P** | **04 29 00.5** | **+0.5** |
| J26L | | | | IAmb | IAmb | 04 29 01.8 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **94.62** | **9** | P | **P** | **04 29 00.7** | **+0.3** |
| E19K | | | | IAmb | IAmb | 04 29 01.8 | |
| | comp=Z,6.4nm,1.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **116.46** | **316** | PKP | **PKPdf** | **04 34 19.3** | **-1.0** |
| | comp=Z,0.6nm,0.8s,baz=123,slow=2.6,SNR=7.3 | | | | | | |
| **NC303** | **NORSAR Array S** | **143.76** | **350** | | PKPab | 04 35 09.5 | -0.7 |
| **NC405** | **NORSAR Array S** | **143.81** | **350** | | PKPbc | 04 35 10.2 | -0.2 |
| **NB201** | **NORSAR Array S** | **143.94** | **350** | | PKPbc | 04 35 09.9 | -0.8 |
| **NB2** | **NORSAR Subarra** | **143.96** | **350** | PKP | PKPbc | 04 35 09.9 | -1.0 |
| | comp=Z,9.2nm,0.8s,baz=18,slow=3.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **143.96** | **350** | PKP | PKPbc | 04 35 09.4 | -1.5 |
| | comp=Z,8.5nm,0.8s,baz=16,slow=5.0,SNR=35 | | | | | | |
| **NBO00** | **NORSAR Array S** | **144.03** | **351** | | PKPbc | 04 35 10.5 | -0.6 |
| **NAO01** | **NORSAR Array S** | **144.19** | **351** | | PKPbc | 04 35 11.5 | -0.1 |
| **HFS** | **Hagfors** | **144.40** | **348** | PKP | PKPbc | 04 35 10.8 | -1.4 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **J20K** | **Nowinta River** | **79.75** | **21** | P | | **P** | **04 37 38.5** | **-0.5** |
| **MKAR** | **Makanchi Array** | **79.87** | **319** | P | | **P** | **04 37 40.9** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=123,slow=5.3,SNR=5.9 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.82** | **327** | P | | **P** | **04 37 45.6** | **+0.6** |
| | comp=Z,0.7nm,0.4s,baz=113,slow=6.5,SNR=2.8 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **RAGM** | **Ragged Mountai** | **81.66** | **27** | P | | **P** | **04 37 49.2** | **-0.2** |
| **F21K** | **Alatna River** | **81.73** | **19** | P | | **P** | **04 37 49.3** | **-0.3** |
| **CCB** | **Clear Creek Bu** | **82.34** | **22** | P | | **P** | **04 37 53.3** | **+0.5** |
| CCB | | | | IAmb | | IAmb | 04 38 01.0 | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **G23K** | **Bananza Creek** | **82.59** | **20** | P | | **P** | **04 37 53.3** | **-0.9** |
| **IL31** | | **82.74** | **22** | P | | **P** | **04 37 55.3** | **+0.4** |
| IL31 | | | | IAmb | | IAmb | 04 37 58.2 | |
| | comp=Z,2.8nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.74** | **22** | P | | **P** | **04 37 55.8** | **+0.8** |
| | comp=Z,0.8nm,0.7s,baz=248,slow=6.2,SNR=9.2 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **D22K** | **Ayikyak River** | **82.92** | **18** | P | | **P** | **04 37 55.1** | **-0.7** |
| D22K | | | | IAmb | | IAmb | 04 38 02.0 | |
| | comp=Z,3.8nm,1.2s | | | | | | | |
| **J25K** | **Salcha River,** | **83.25** | **23** | P | | **P** | **04 37 59.1** | **+1.5** |
| **KURBB** | **Kurchatov Arra** | **83.39** | **322** | P | | **P** | **04 37 59.1** | **+0.5** |
| | comp=Z,1.0nm,0.8s,baz=127,slow=5.0,SNR=4.0 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **83.46** | **20** | P | | **P** | **04 37 58.6** | **0.0** |
| G24K | | | | IAmb | | IAmb | 04 38 07.5 | |
| | comp=Z,4.2nm,1.4s | | | | | | | |
| **SCRK** | **Sand Creek** | **83.51** | **24** | P | | **P** | **04 37 59.6** | **+0.5** |
| SCRK | | | | IAmb | | IAmb | 04 38 00.0 | |
| | comp=Z,3.9nm,1.4s | | | | | | | |
| **PRP** | **Porcupine Dome** | **83.60** | **22** | P | | **P** | **04 38 00.2** | **+0.6** |
| **M27K** | **Edge Creek, AK** | **83.70** | **25** | P | | **P** | **04 37 59.1** | **-1.1** |
| **D24K** | **Happy Valley** | **84.24** | **18** | P | | **P** | **04 38 03.5** | **+0.9** |
| D24K | | | | IAmb | | IAmb | 04 38 06.8 | |
| | comp=Z,9.4nm,1.4s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **84.80** | **20** | P | | **P** | **04 38 06.3** | **+0.8** |
| **QSPA** | **South Pole Qui** | **84.92** | **180** | P | | **P** | **04 38 06.6** | **+0.3** |
| **QSPA** | **South Pole Qui** | **84.92** | **180** | P | | **P** | **04 38 03.7** | **-2.6** |
| | comp=Z,1.6nm,1.0s,baz=130,slow=2.9,SNR=3.8 | | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **89.93** | **48** | LR | | LR | 05 11 16.4 | |
| | comp=Z,24nm,21.4s,baz=290,slow=30 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.99** | **52** | P | | **P** | **04 38 48.1** | **+2.7** |
| | comp=Z,1.4nm,0.9s,baz=268,slow=5.4,SNR=7.8 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **99.72** | **48** | P | | **Pdif** | **04 39 16.6** | **+0.8** |
| | comp=Z,0.9nm,1.0s,baz=273,slow=5.2,SNR=4.4 | | | | | | | |
| PDAR | | | | LR | | LR | 05 19 38.6 | |
| | comp=Z,16nm,18.9s,baz=288,slow=32 | | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.46** | **287** | PKPbc | | **PKPbc** | **04 45 21.2** | **-0.5** |
| | comp=Z,4.3nm,0.8s,baz=80,slow=2.3,SNR=19 | | | | | | | |

**KRNET 08 04:29:10.4±0.1, 40.00N×72.79E, h11km, mb2.3, 10C-8D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHH** | **Osh** | **0.52** | **360** | ↑*e*P | Pg | 04 29 20.5 | -0.2 |
| | baz=60 | | | | | | |
| OHH | | | | ↑*e*S | Sg | 04 29 27.8 | +0.2 |
| | baz=60 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.55** | **88** | ↓*i*P | Pg | 04 29 21.5 | +0.3 |
| | baz=88 | | | | | | |
| SFK | | | | ↓*i*S | Sg | 04 29 28.9 | +0.3 |
| | baz=88 | | | | | | |
| **DRK** | **Karamyk** | **0.92** | **236** | ↑*e*P | Pg | 04 29 28.2 | 0.0 |
| | baz=36 | | | | | | |
| DRK | | | | ↑*e*S | Sb | 04 29 41.2 | +0.2 |
| | baz=36 | | | | | | |
| **BTK** | **Batken** | **1.51** | **273** | ↓*e*P | Pb | 04 29 39.0 | +0.4 |
| | baz=73 | | | | | | |
| BTK | | | | ↓*e*S | Sg | 04 29 59.4 | +0.3 |
| | baz=73 | | | | | | |
| **TRKS** | **Terek-Say** | **1.97** | **321** | ↓*e*P | Pb | 04 29 46.4 | -0.1 |
| | baz=21 | | | | | | |
| TRKS | | | | ↓*e*S | Sb | 04 30 12.3 | +1.1 |
| | baz=21 | | | | | | |
| **GAR** | **Garm** | **2.16** | **243** | ↑*e*P | Pb | 04 29 49.7 | +0.1 |
| | baz=43 | | | | | | |
| GAR | | | | ↑*i*S | Sg | 04 30 18.4 | -1.3 |
| | baz=43 | | | | | | |
| **ARLS** | **Aral** | **2.19** | **32** | ↑*e*P | Pb | 04 29 50.6 | +0.4 |
| | baz=32 | | | | | | |
| ARLS | | | | ↑*e*S | Sg | 04 30 19.3 | -1.6 |
| | baz=32 | | | | | | |
| **AML** | **Almayashu** | **2.24** | **18** | ↑*e*P | Pb | 04 29 51.1 | 0.0 |
| | baz=18 | | | | | | |
| AML | | | | ↑*e*S | Sg | 04 30 20.7 | -1.7 |
| | baz=18 | | | | | | |
| **MNAS** | **Manas** | **2.49** | **355** | ↓*e*P | Pb | 04 29 54.8 | -0.5 |
| | baz=55 | | | | | | |
| MNAS | | | | ↓*e*S | Sb | 04 30 27.0 | +0.9 |
| | baz=55 | | | | | | |

**ISU 08 04:29:33.1, 41.45N×71.72E, h8km, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRG** | **Fergana** | **1.07** | **177** | P | Pn | 04 29 54.3 | -0.2 |
| FRG | | | | S | Sn | 04 30 10.1 | +0.5 |
| **CHMI** | **Chimion** | **1.19** | **187** | P | Pg | 04 29 55.8 | -0.1 |
| CHMI | | | | S | Sn | 04 30 13.1 | +0.7 |

*IDC **08** 04:36:05.4±0.5, 5.88N×125.79E, h166km±4km, mb4.1/20, mbtmp4.6/21, MS3.3/3, Error ellipse: s-maj=16.8km s-min=7.2km az=70.0*

*GCMT **08** 04:36:06.3±0.4, 5.79N±0.03×125.98E±0.03, h150km±3km, MW5.0/67, Moment Tensor Solution. s30,c33; s67,c85; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.48±.17; $M_{\theta\theta}$3.79±.20; $M_{\phi\phi}$-3.30±.22; $M_{r\theta}$-0.19±.14; $M_{r\phi}$-2.18±.20; $M_{\theta\phi}$1.86±.15; Best double couple: $M_o$4.58000×$10^{16}$ NP1:$\phi_s$149.00000°,$\delta$80.00000°,$\lambda$-23.00000°. NP2: $\phi_s$243.00000°,$\delta$68.00000°,$\lambda$-169.00000°. Principal axes: T 4.5080, Plg8.0000°, Azm198.0000°; N 0.1500, Plg65.0000°, Azm306.0000°; P -4.6520, Plg23.0000°, Azm104.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **08** 04:36:06.3±1.4, 5.93N±0.07×125.88E±0.09, h159km±7km, mb4.5/81 Error ellipse: s-maj=13.3km s-min=9.6km az=72.0*

*DJA **08** 04:36:07.1±0.3, 6°N±2°×12°6E±°, h141km±4km, M5.1/15, mB5.4/14, mb5.3/15, MLv5.4/12, Mw(mB)4.9/14*

**ISC 08 04:36:06.2±0.4, 5.88N±0.03×125.91E±0.05, h165km±3km, h166km:pP-P, n456, σ1.91/4.73, mb4.6/82, 1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **1.23** | **345** | P | **Pn** | **04 36 35.8** | **+1.4** |
| **DAV** | **Davao City (W)** | **1.23** | **345** | | **Pn** | **04 36 33.2** | **-1.2** |
| DAV | | | | S | **Sn** | **04 36 51.8** | **-4.4** |
| **DAV** | **Davao City (W)** | **1.23** | **345** | P | **Pn** | **04 36 33.5** | **-0.9** |
| | 481nm,0.3s,baz=90,slow=1.1,SNR=11 | | | | | | |
| DAV | | | | S | **Sn** | **04 36 54.8** | **-1.4** |
| | 3µm,0.3s,baz=112,slow=8.7,SNR=15 | | | | | | |
| **SGSI** | **Sangihe** | **2.21** | **190** | P | **Pn** | **04 36 44.1** | **-0.6** |
| SGSI | | | | S | **Sn** | **04 37 13.4** | **-1.1** |
| **TNTI** | **Ternate** | **5.28** | **164** | P | **Pn** | **04 37 22.9** | **-0.7** |
| **TNTI** | **Ternate** | **5.28** | **164** | Pn | **Pn** | **04 37 21.3** | **-2.2** |
| **TNTI** | **Ternate** | **5.28** | **164** | P | **Pn** | **04 37 21.4** | **-2.2** |
| | 686nm,0.9s,10µm4.8nm | | | | | | |
| TNTI | | | | S | **Sn** | **04 38 20.0** | **-4.1** |
| | 686nm,0.9s,10µm4.8nm | | | | | | |
| **KMSI** | **Cibinong** | **5.61** | **200** | P | **Pn** | **04 37 28.8** | **+0.9** |
| **GTOI** | **Gorontalo** | **5.96** | **209** | P | **Pn** | **04 37 32.4** | **-0.1** |
| | 253nm,0.9s,3µm0.8nm | | | | | | |
| GTOI | | | | S | **Sn** | **04 38 37.5** | **-2.8** |
| | 253nm,0.9s,3µm0.8nm | | | | | | |
| **LBMI** | **Labuha** | **6.66** | **166** | P | **Pn** | **04 37 45.5** | **+3.6** |
| **TOLI2** | **Tolitoli** | **6.97** | **227** | P | **Pn** | **04 37 46.8** | **+0.8** |
| **TOLI2** | **Tolitoli** | **6.97** | **227** | Pn | **Pn** | **04 37 46.5** | **+0.5** |
| **MYLDM** | **Lahad Datu** | **7.41** | **265** | | **Pn** | **04 37 52.2** | **+0.5** |
| **LUWI** | **Luwuk** | **7.55** | **205** | P | **Pn** | **04 37 54.2** | **+0.5** |
| **LUWI** | **Luwuk** | **7.55** | **205** | Pn | **Pn** | **04 37 54.8** | **+1.1** |
| **LUWI** | **Luwuk** | **7.55** | **205** | P | **Pn** | **04 37 56.5** | **+2.8** |
| | 538nm,0.9s,6µm2.4nm | | | | | | |
| **SANI** | **Sanana** | **7.87** | **179** | P | **Pn** | **04 37 54.4** | **-3.6** |
| **MPSI** | **Mapaga** | **8.14** | **228** | P | Pn | 04 38 08.5 | +7.0 |
| **NLAI** | **Namlea** | **9.13** | **172** | P | **Pn** | **04 38 12.5** | **-2.1** |
| | 484nm,0.5s | | | | | | |
| **MSAI** | **Masohi** | **9.64** | **162** | P | Pn | 04 38 26.6 | +5.2 |
| **FAKI** | **Fak Fak** | **10.79** | **144** | P | **Pn** | **04 38 36.4** | **0.0** |
| **FAKI** | **Fak Fak** | **10.79** | **144** | Pn | **Pn** | **04 38 35.8** | **-0.6** |
| **FAKI** | **Fak Fak** | **10.79** | **144** | P | **Pn** | **04 38 37.2** | **+0.8** |
| | 101nm,1.1s,1µm | | | | | | |
| **SPSI** | **Sidrap Palu** | **11.54** | **212** | P | **Pn** | **04 38 48.1** | **+1.9** |
| | 91nm,1.0s,1µm | | | | | | |
| **BNSI** | **Bone** | **11.74** | **210** | P | **Pn** | **04 38 51.3** | **+2.5** |
| | 311nm,1.2s,4µm | | | | | | |
| **KAPI** | **Kappang** | **12.44** | **210** | Pn | **Pn** | **04 38 58.9** | **+1.0** |
| **KAPI** | **Kappang** | **12.44** | **210** | P | **Pn** | **04 38 58.1** | **+0.3** |
| | 67nm,0.8s,baz=20,slow=7.0,SNR=28 | | | | | | |
| **BKSI** | **Bulukumba** | **12.54** | **208** | P | **Pn** | **04 38 59.9** | **+0.9** |
| | 113nm,1.1s,1µm | | | | | | |
| **SBUM** | **Sibu** | **14.07** | **257** | | **Pn** | **04 39 20.9** | **+2.4** |
| **MMRI** | **Maumere** | **14.87** | **194** | P | **Pn** | **04 39 29.9** | **+1.4** |
| **MMRI** | **Maumere** | **14.87** | **194** | | **Pn** | **04 39 30.0** | **+1.5** |
| **MMRI** | **Maumere** | **14.87** | **194** | P | **P** | **04 39 33.2** | **+3.1** |
| **SOEI** | **Soe** | **15.61** | **186** | P | **Pn** | **04 39 38.2** | **+0.5** |
| **SOEI** | **Soe** | **15.61** | **186** | | **Pn** | **04 39 37.4** | **-0.3** |
| **SOEI** | **Soe** | **15.61** | **186** | P | **P** | **04 39 40.5** | **+2.1** |
| | 248nm,0.9s,3µm | | | | | | |
| **KSM** | **Kuching** | **16.17** | **255** | P | **P** | **04 39 47.1** | **+2.6** |
| **KSM** | **Kuching** | **16.17** | **255** | P | **Pn** | **04 39 45.4** | **+1.0** |
| KSM | | | | IAmb | IAmb | 04 39 55.8 | |
| | comp=Z,40nm,1.2s | | | | | | |
| **GENI** | **Genyem** | **16.54** | **120** | P | **Pn** | **04 39 50.4** | **+1.5** |
| **GENI** | **Genyem** | **16.54** | **120** | P | **Pn** | **04 39 51.3** | **+2.4** |
| **TPUB** | **Ta-pu** | **18.06** | **344** | P | **P** | **04 40 04.8** | **-0.3** |
| TPUB | | | | IAmb | IAmb | 04 40 24.3 | |
| | comp=Z,31nm,1.2s | | | | | | |
| **DLV** | **T Lat** | **18.23** | **291** | P | **Pn** | **04 40 11.3** | **+2.1** |
| **JAGI** | **Jajag, Banyuwa** | **18.45** | **220** | P | **Pn** | **04 40 11.8** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **18.45** | **220** | P | **P** | **04 40 10.1** | **+0.5** |
| **DRS** | **Darwin Rock St** | **18.85** | **165** | P | **P** | **04 40 14.8** | **+1.0** |
| **MTN** | **Manton Dam** | **19.31** | **164** | P | **P** | **04 40 20.2** | **+1.5** |
| **MTN** | **Manton Dam** | **19.31** | **164** | P | **P** | **04 40 19.6** | **+0.8** |
| **MTN** | **Manton Dam** | **19.31** | **164** | P | **P** | **04 40 19.2** | **+0.4** |
| | comp=Z,48nm,0.6s,SNR=2.7 | | | | | | |
| **KDU** | **Kakadu** | **19.56** | **161** | P | **P** | **04 40 22.3** | **+0.8** |
| **KDU** | **Kakadu** | **19.56** | **161** | P | **P** | **04 40 21.8** | **+0.4** |
| | comp=Z,123nm,0.7s,SNR=10 | | | | | | |
| **GUMO** | **Guam** | **20.18** | **66** | LR | LR | 04 49 25.8 | |
| | comp=Z,64nm,18.2s,baz=232,slow=39 | | | | | | |
| **QIZ** | **Qiongzhong** | **20.39** | **311** | P | **P** | **04 40 30.2** | **-0.2** |
| QIZ | | | | sP | **sP** | **04 41 16.7** | **-3.2** |
| QIZ | | | | S | **S** | **04 44 11.3** | **+1.3** |
| QIZ | | | | sS | **sS** | **04 44 56.4** | **-0.3** |
| QIZ | | | | LR | LR | | |
| | comp=Z,170nm,14.1s | | | | | | |
| **KNRA** | **Kununurra** | **21.60** | **173** | P | **P** | **04 40 43.5** | **+0.3** |
| **KNRA** | **Kununurra** | **21.60** | **173** | P | **P** | **04 40 43.4** | **+0.1** |
| | comp=Z,110nm,0.7s,SNR=9.7 | | | | | | |
| **BBJI** | **Bungbulang** | **22.53** | **234** | P | **P** | **04 40 53.2** | **+0.6** |
| **BTDF** | **Bukit Timah Da** | **22.54** | **259** | P | **P** | **04 40 54.6** | **+2.0** |
| **MANU** | **Manus Island** | **22.83** | **110** | P | **P** | **04 40 55.7** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **23.82** | **181** | P | **P** | **04 41 04.6** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **23.82** | **181** | P | **P** | **04 41 04.7** | **+0.5** |
| **PMG** | **Port Moresby** | **26.06** | **125** | P | **P** | **04 41 25.8** | **+1.3** |
| **PMG** | **Port Moresby** | **26.06** | **125** | P | **P** | **04 41 26.0** | **+1.5** |
| **PMG** | **Port Moresby** | **26.06** | **125** | P | **P** | **04 41 24.2** | **-0.3** |
| **PMG** | **Port Moresby** | **26.06** | **125** | P | **P** | **04 41 24.5** | **-0.1** |
| | comp=Z,53nm,0.8s,baz=302,slow=5.3,SNR=12 | | | | | | |
| PMG | | | | LR | LR | 04 53 25.2 | |
| | comp=Z,55nm,18.6s,baz=154,slow=40 | | | | | | |
| | comp=Z,53nm,0.8s | | | | | | |
| **COEN** | **Coen** | **26.11** | **139** | P | **P** | **04 41 25.0** | **0.0** |
| **COEN** | **Coen** | **26.11** | **139** | P | **P** | **04 41 25.2** | **+0.1** |
| **COEN** | **Coen** | **26.11** | **139** | P | **P** | **04 41 25.0** | **0.0** |
| | comp=Z,175nm,0.8s,SNR=18 | | | | | | |
| **NJ2** | **Nanjing** | **26.86** | **347** | *e*P | **P** | **04 41 34.7** | **+3.1** |
| NJ2 | | | | pP | **pP** | **04 42 05.4** | **-0.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **26.96** | **162** | P | **P** | **04 41 32.1** | **-0.5** |
| | comp=Z,4.2nm,0.6s,baz=342,slow=10,SNR=24 | | | | | | |
| WRA | | | | PcP | **PcP** | **04 44 49.2** | **-1.1** |
| | comp=Z,2.3nm,0.8s,baz=335,slow=3.1,SNR=3.3 | | | | | | |
| WRA | | | | S | **S** | **04 45 54.0** | **-3.8** |
| | comp=Z,3.3nm,0.7s,baz=345,slow=15,SNR=7.6 | | | | | | |
| WRA | | | | ScP | **ScP** | **04 48 14.4** | **-0.8** |
| | comp=Z,3.3nm,0.9s,baz=328,slow=3.6,SNR=5.1 | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **GYA** | **Guiyang** | **27.50** | **320** | P | **P** | **04 41 40.1** | **+2.6** |
| GYA | | | | pP | pP | 04 42 12.9 | +1.0 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,120nm,5.4s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,190nm,15.4s | | | | | | |
| **MBWA** | **Marble Bar** | **27.54** | **193** | P | **P** | **04 41 38.2** | **+0.5** |
| **MBWA** | **Marble Bar** | **27.54** | **193** | P | **P** | **04 41 36.8** | **-0.9** |
| **MBWA** | **Marble Bar** | **27.54** | **193** | P | **P** | **04 41 37.3** | **-0.4** |
| | comp=Z,37nm,2.5s,SNR=2.7 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.92** | **192** | P | **P** | **04 41 41.2** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **27.92** | **192** | P | **P** | **04 41 41.2** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **27.92** | **192** | P | **P** | **04 41 40.8** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 04 41 41.9 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.92** | **192** | P | **P** | **04 41 40.6** | **-0.4** |
| | comp=Z,53nm,1.3s,SNR=4.5 | | | | | | |
| **PHRA** | **Phrae** | **28.01** | **299** | P | **P** | **04 41 41.6** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **29.12** | **298** | P | **P** | **04 41 50.5** | **-1.4** |
| | comp=Z,4.4nm,0.3s,baz=121,slow=8.5,SNR=5.9 | | | | | | |
| CMAR | | | | ScP | **ScP** | **04 48 20.2** | **-1.8** |
| | comp=Z,1.8nm,0.3s,baz=128,slow=1.4,SNR=12 | | | | | | |
| CMAR | | | | LR | LR | 04 53 36.0 | |
| | comp=Z,60nm,21.6s,baz=110,slow=36 | | | | | | |
| | comp=Z,4.4nm,0.3s | | | | | | |
| **QIS** | **Mount Isa** | **29.52** | **153** | P | **P** | **04 41 57.0** | **+1.7** |
| **QIS** | **Mount Isa** | **29.52** | **153** | P | **P** | **04 41 55.5** | **+0.3** |
| | comp=Z,90nm,1.1s,SNR=18 | | | | | | |
| **MTSU** | **Mount Surprise** | **29.98** | **143** | P | **P** | **04 42 01.1** | **+1.7** |
| **AS31** | **Alice Springs** | **30.38** | **165** | P | **P** | **04 42 02.9** | **0.0** |
| AS31 | | | | | **S** | **04 46 52.1** | **+0.7** |
| **ASAR** | **Alice Springs** | **30.38** | **165** | P | **P** | **04 42 03.0** | **+0.1** |
| | comp=Z,8.6nm,0.6s,baz=344,slow=7.4,SNR=99 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 44 58.0** | **-0.9** |
| | comp=Z,2.7nm,0.6s,baz=342,slow=3.1,SNR=6.3 | | | | | | |
| ASAR | | | | S | **S** | **04 46 50.1** | **-1.4** |
| | comp=Z,8.6nm,0.9s,baz=350,slow=22,SNR=17 | | | | | | |
| ASAR | | | | ScP | **ScP** | **04 48 23.9** | **-2.0** |
| | comp=Z,1.5nm,0.6s,baz=347,slow=3.8,SNR=7.0 | | | | | | |
| | comp=Z,8.6nm,0.6s | | | | | | |
| **ASPA** | **Alice Springs** | **30.38** | **165** | P | **P** | **04 42 02.6** | **-0.3** |
| | comp=Z,5.4nm,0.5s,SNR=6.6 | | | | | | |
| **AS01** | **Alice Springs** | **30.39** | **165** | P | **P** | **04 42 03.5** | **+0.5** |
| **WRKA** | **Warakurna** | **30.81** | **176** | P | **P** | **04 42 07.1** | **+0.4** |
| **WRKA** | **Warakurna** | **30.81** | **176** | P | **P** | **04 42 06.9** | **+0.2** |
| | comp=Z,18nm,1.3s,SNR=2.0 | | | | | | |
| **PZH** | **PanZhiHua** | **30.86** | **314** | P | **P** | **04 42 09.6** | **+2.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.3s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.3s | | | | | | |
| **KSRS** | **Korea Array** | **31.48** | **3** | P | **P** | **04 42 10.9** | **-1.4** |
| | comp=Z,1.5nm,0.7s,baz=187,slow=8.9,SNR=5.7 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **TV1H** | **Townsville Har** | **32.36** | **141** | P | **P** | **04 42 21.7** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **32.54** | **19** | P | **P** | **04 42 20.7** | **-0.9** |
| | comp=Z,6.5nm,0.9s,baz=193,slow=9.1,SNR=7.6 | | | | | | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **32.65** | **143** | P | **P** | **04 42 23.3** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=325,slow=9.8,SNR=8.2 | | | | | | |
| **CTAO** | **Charters Tower** | **32.65** | **143** | P | **P** | **04 42 24.7** | **+1.9** |
| **CTAO** | **Charters Tower** | **32.65** | **143** | P | **P** | **04 42 24.4** | **+1.6** |
| CTAO | | | | IAmb | IAmb | 04 42 24.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MEEK** | **Meekatharra** | **33.09** | **192** | P | **P** | **04 42 26.2** | **-0.3** |
| **MEEK** | **Meekatharra** | **33.09** | **192** | P | **P** | **04 42 26.1** | **-0.3** |
| | comp=Z,63nm,0.9s,SNR=3.7 | | | | | | |
| **OOD** | **Oodnadatta** | **34.78** | **165** | P | **P** | **04 42 41.4** | **+0.3** |
| **MORW** | **Morawa** | **36.02** | **195** | P | **P** | **04 42 51.7** | **+0.1** |
| **MORW** | **Morawa** | **36.02** | **195** | P | **P** | **04 42 52.0** | **+0.3** |
| **LZH** | **Lanzhou** | **36.25** | **329** | *e*P | **P** | **04 42 55.8** | **+2.0** |
| LZH | | | | pP | pP | 04 43 33.6 | +4.3 |
| LZH | | | | sP | sP | 04 43 51.3 | +2.9 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,220nm,15.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,280nm,16.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,250nm,15.5s | | | | | | |
| **INKA** | **Innaminka** | **36.36** | **157** | P | **P** | **04 42 55.9** | **+1.3** |
| **FORT** | **Forrest** | **36.51** | **177** | P | **P** | **04 42 55.9** | **+0.2** |
| | comp=Z,63nm,1.1s,SNR=2.6 | | | | | | |
| **MULG** | **Mulgathing** | **36.79** | **168** | P | **P** | **04 42 59.2** | **+1.0** |
| **QLP** | **Quilpie** | **36.83** | **152** | P | **P** | **04 42 59.1** | **+0.5** |
| **HHC** | **Hu-ho-hao-te** | **37.12** | **342** | *e*P | **P** | **04 42 58.2** | **-2.8** |
| HHC | | | | *e*S | **S** | **04 48 35.2** | **+0.2** |
| HHC | | | | sS | sS | 04 49 36.7 | +1.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,68nm,4.5s | | | | | | |
| **KMBL** | **Kambalda** | **37.23** | **186** | P | **P** | **04 43 02.0** | **+0.1** |
| **KMBL** | **Kambalda** | **37.23** | **186** | P | **P** | **04 43 01.7** | **-0.2** |
| | comp=Z,60nm,0.9s,SNR=4.0 | | | | | | |
| **BLDU** | **Ballidu** | **37.34** | **193** | P | **P** | **04 43 03.3** | **+0.5** |
| **BLDU** | **Ballidu** | **37.34** | **193** | P | **P** | **04 43 02.5** | **-0.3** |
| | comp=Z,45nm,1.0s,SNR=1.9 | | | | | | |
| **BTO** | **Baotou** | **37.40** | **340** | *e*P | **P** | **04 43 06.4** | **+3.1** |
| BTO | | | | pP | **pP** | **04 43 40.3** | **+1.7** |
| BTO | | | | sP | **sP** | **04 43 59.2** | **+1.8** |
| BTO | | | | S | **S** | **04 48 45.6** | **+6.3** |
| BTO | | | | SS | **SS** | **04 51 23.7** | **-6.9** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,19nm,0.5s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,170nm,4.3s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,310nm,4.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,200nm,5.2s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,210nm,14.9s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **37.72** | **141** | P | **P** | **04 43 07.1** | **+1.1** |
| **CN2** | **Changchun** | **37.77** | **359** | *e*P | **P** | **04 43 08.6** | **+2.3** |
| CN2 | | | | *e*pP | pP | 04 43 42.5 | +1.0 |
| CN2 | | | | *e*S | **S** | **04 48 47.7** | **+3.1** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,100nm,4.0s | | | | | | |
| **LCRK** | **Leigh Creek** | **37.99** | **163** | P | **P** | **04 43 09.6** | **+1.3** |
| **KLBR** | **Kellerberrin** | **38.06** | **191** | P | **P** | **04 43 09.2** | **+0.4** |
| **KLBR** | **Kellerberrin** | **38.06** | **191** | P | **P** | **04 43 08.6** | **-0.3** |
| | comp=Z,87nm,0.8s,SNR=4.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **38.54** | **7** | P | **P** | **04 43 12.6** | **-0.1** |
| | comp=Z,2.5nm,0.8s,baz=157,slow=3.8,SNR=6.9 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **MUN** | **Mundaring** | **38.76** | **193** | P | **P** | **04 43 13.1** | **-1.6** |
| | comp=Z,48nm,0.2s,SNR=1.9 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **39.46** | **192** | P | **P** | **04 43 21.3** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **39.46** | **192** | P | **P** | **04 43 21.0** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **39.46** | **192** | P | **P** | **04 43 21.2** | **+0.8** |
| **EIDS** | **Eidsvold** | **39.54** | **143** | P | **P** | **04 43 21.5** | **+0.3** |
| **EIDS** | **Eidsvold** | **39.54** | **143** | P | **P** | **04 43 21.6** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 04 43 22.1 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **39.54** | **143** | P | **P** | **04 43 21.1** | **-0.1** |
| | comp=Z,20nm,1.2s,SNR=3.8 | | | | | | |
| **BBOO** | **Buckleboo** | **39.66** | **167** | P | **P** | **04 43 23.5** | **+1.3** |
| **BBOO** | **Buckleboo** | **39.66** | **167** | P | **P** | **04 43 22.9** | **+0.8** |
| **BBOO** | **Buckleboo** | **39.66** | **167** | P | **P** | **04 43 22.6** | **+0.4** |
| | comp=Z,60nm,0.8s,SNR=2.1 | | | | | | |
| **BNX** | **BinXian** | **39.73** | **2** | ↓P | **P** | **04 43 23.1** | **+0.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.8s | | | | | | |
| **WHYH** | **Whyalla** | **40.25** | **165** | P | **P** | **04 43 28.3** | **+1.4** |
| **STKA** | **Stephens Creek** | **40.41** | **159** | P | **P** | **04 43 29.5** | **+1.2** |
| **STKA** | **Stephens Creek** | **40.41** | **159** | P | **P** | **04 43 29.2** | **+0.8** |
| **STKA** | **Stephens Creek** | **40.41** | **159** | P | **P** | **04 43 29.0** | **+0.6** |
| | comp=Z,6.3nm,0.9s,SNR=3.1 | | | | | | |
| **STKA** | **Stephens Creek** | **40.41** | **159** | P | **P** | **04 43 28.8** | **+0.5** |
| | comp=Z,21nm,0.7s,baz=336,slow=8.7,SNR=28 | | | | | | |
| | comp=Z,21nm,0.7s | | | | | | |
| **RKGY** | **Rocky Gully** | **41.14** | **191** | P | **P** | **04 43 35.2** | **+0.9** |
| | comp=Z,181nm,0.8s,SNR=4.0 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **41.72** | **154** | P | **P** | **04 43 40.2** | **+1.2** |
| **ARMA** | **Armidale** | **43.70** | **147** | P | **P** | **04 43 56.5** | **+1.4** |
| **ARPS** | **Mount Arapiles** | **44.97** | **162** | P | **P** | **04 44 06.2** | **+1.2** |
| | comp=Z,65nm,0.8s,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **45.02** | **341** | P | **P** | **04 44 04.1** | **-1.3** |
| | comp=Z,0.6nm,0.6s,baz=145,slow=10,SNR=2.5 | | | | | | |
| SONM | | |

baz=254
L15K **Ungalak Mounta** 76.63 28 P P 04 47 39.1 +0.6
baz=257
K15K **Wolf Creek Mou** 76.75 27 P P 04 47 39.4 +0.3
baz=257
C16K **Lisburne Hills** 76.78 21 P P 04 47 39.5 +0.3
baz=252
M15K **Kasigluk River** 76.80 29 P P 04 47 39.3 -0.1
baz=258
O15K **Ungalikthiuk R** 76.93 31 P P 04 47 40.6 +0.4
baz=259
H16K **Elim** 76.98 25 P P 04 47 40.6 +0.2
baz=256
N15K **Kwethluk River** 76.99 30 P P 04 47 40.9 +0.4
baz=259
G16K **Koyuk River** 77.12 24 P P 04 47 42.3 +1.2
baz=256
J16K **Anvik River** 77.38 26 P P 04 47 43.5 +0.9
baz=258
D17K **Noatak River** 77.43 22 P P 04 47 43.1 +0.3
baz=254
I17K **Unalakleet** 77.47 26 P P 04 47 44.0 +0.9
baz=258
L16K **Owhat River** 77.58 28 P P 04 47 44.8 +1.1
baz=259
C17K **DeLong Mountai** 77.61 21 P P 04 47 44.3 +0.5
baz=254
N16K **Nishlik Lake** 77.69 29 P P 04 47 44.5 +0.1
baz=260
M16K **Timber Creek** 77.69 29 P P 04 47 44.4 0.0
baz=260
E17K **Hotham Inlet** 77.75 22 P P 04 47 46.0 +1.4
baz=256
G17K **Kiwalik Mounta** 77.84 24 P P 04 47 46.2 +1.1
baz=257
R16K **Pilot Point** 77.84 32 P P 04 47 46.0 +0.8
baz=262
P16K **Nushagak River** 77.84 31 P P 04 47 46.1 +0.9
baz=261
O16K **Kokwok River B** 77.88 30 P P 04 47 46.9 +1.5
baz=261
H17K **Granite Mounta** 78.02 25 P P 04 47 47.4 +1.2
baz=258
J17K **VABM Dome** 78.08 26 P P 04 47 47.4 +1.0
baz=259
L17K **Donlin** 78.20 28 P P 04 47 48.9 +1.7
baz=260
E18K **Tukpahlearik C** 78.29 22 P P 04 47 49.1 +1.5
baz=257
K17K **Iditarod** 78.30 27 P P 04 47 48.7 +1.0
K17K IAmb IAmb 04 47 50.5
comp=Z,11nm,0.9s
K17K **Iditarod** 78.30 27 P P 04 47 48.8 +1.0
baz=260
B18K **Kokolik River** 78.32 20 P P 04 47 48.8 +1.1
baz=255
C18K **Utukok River** 78.36 21 P P 04 47 49.1 +1.1
baz=256
O17K **Koliganek Bris** 78.41 30 P P 04 47 49.1 +0.8
baz=262
N17K **Nushagak Hills** 78.47 29 P P 04 47 48.9 +0.2
baz=261
F18K **Selawik** 78.47 23 P P 04 47 49.0 +0.5
baz=258
M17K **Holitna River** 78.48 29 P P 04 47 49.1 +0.3
baz=261
R17L **Mt. Peulik Vol** 78.50 32 P P 04 47 49.2 +0.3
baz=263
P17K **Kvichak River** 78.66 31 P P 04 47 49.1 -0.6
baz=262
CHIR **Chirikof Islan** 78.69 34 P P 04 47 49.8 -0.1
baz=264
H18K **Honhosa River** 78.71 25 P P 04 47 50.4 +0.5
baz=259
A19K **Wainwright** 78.78 19 P P 04 47 50.1 0.0
baz=256
Q17K **Contact Creek** 78.82 32 P P 04 47 50.1 -0.7
baz=263
RAYN **Ar Rayn** 78.90 293 P P 04 47 51.1 -0.8
L18K **Granite Mounta** 78.96 28 P P 04 47 51.8 +0.5
L18K **Granite Mounta** 78.96 28 P P 04 47 51.6 +0.2
baz=262
C19K **Lookout Ridge** 79.03 21 P P 04 47 52.9 +1.2
C19K IAmb IAmb 04 47 53.5
comp=Z,6.1nm,0.8s
C19K **Lookout Ridge** 79.03 21 P P 04 47 51.7 +0.1
baz=258
N18K **Kilae Creek** 79.13 29 P P 04 47 52.6 +0.3
baz=263
J18K **Innoko River** 79.13 27 P P 04 47 52.5 +0.2
baz=261
F19K **Shaleruckik Mo** 79.25 23 P P 04 47 53.5 +0.7
baz=260
M18K **Stony River** 79.26 29 P P 04 47 53.4 +0.4
baz=262
Q18K **Katmai Hardscr** 79.33 31 P P 04 47 53.6 +0.1
baz=264
O18K **Koktuh Hills** 79.36 30 P P 04 47 53.5 -0.1
baz=263
G19K **Purcell Mounta** 79.40 24 P P 04 47 54.4 +0.7
G19K **Purcell Mounta** 79.40 24 P P 04 47 53.6 -0.1
baz=260
D19K **Kuna River** 79.43 21 P P 04 47 54.3 +0.5
D19K IAmb IAmb 04 47 55.4
comp=Z,6.2nm,0.7s
D19K **Kuna River** 79.43 21 P P 04 47 54.2 +0.4
baz=259
H19K **Roundabout Mou** 79.56 24 P P 04 47 55.9 +1.4
H19K IAmb IAmb 04 47 56.5
comp=Z,6.6nm,0.7s
H19K **Roundabout Mou** 79.56 24 P P 04 47 54.4 -0.1
baz=261
E19K **Redstone River** 79.57 22 P P 04 47 55.4 +0.8
E19K IAmb IAmb 04 47 58.8
comp=Z,5.8nm,0.8s
E19K **Redstone River** 79.57 22 P P 04 47 54.4 -0.2
baz=260
J19K **Poorman** 79.69 26 P P 04 47 55.2 -0.1
baz=262
L19K **White Mountain** 79.81 28 P P 04 47 57.1 +1.1
L19K IAmb IAmb 04 47 58.5
comp=Z,13nm,1.4s
L19K **White Mountain** 79.81 28 P P 04 47 56.0 0.0
baz=263
N19K **Bonanza Creek** 79.83 29 P P 04 47 57.1 +0.9
N19K IAmb IAmb 04 47 59.6
comp=Z,25nm,1.5s
N19K **Bonanza Creek** 79.83 29 P P 04 47 56.1 -0.1
baz=264
M19K **Big River Lodg** 79.99 28 P P 04 47 57.3 +0.4
baz=264
D20K **Etivluk River** 80.01 21 P P 04 47 57.6 +0.6
baz=260
B20K **Meade River** 80.05 20 P P 04 47 57.7 +0.7
baz=260
Q19K **Cape Douglas,** 80.06 31 P P 04 47 57.7 +0.3
baz=265
F20K **Avaraart Lake** 80.08 23 P P 04 47 57.7 +0.4
baz=262
E20K **Nigu River** 80.09 22 P P 04 47 58.0 +0.6
baz=261,SNR=5.3
OHAK **Old Harbor** 80.11 33 P P 04 47 57.8 +0.2
baz=265
H20K **Anotleneega Mo** 80.20 25 P P 04 47 58.5 +0.4
baz=263,SNR=5.4
I20K **Naaghedeneel** 80.29 25 P P 04 47 59.6 +1.2
I20K IAmb IAmb 04 48 01.1
comp=Z,22nm,1.2s
I20K **Naaghedeneel** 80.29 25 P P 04 47 58.7 +0.3
baz=263
L20K **Farewell, AK** 80.29 28 P P 04 47 59.0 +0.5
baz=264
K20K **Telida** 80.30 27 P P 04 47 59.7 +1.1
K20K IAmb IAmb 04 48 01.3
comp=Z,8.9nm,1.1s
K20K **Telida** 80.30 27 P P 04 47 59.5 +1.0
baz=264
J20K **Nowinta River** 80.36 26 P P 04 47 59.8 +1.0
J20K **Nowinta River** 80.36 26 P P 04 47 59.4 +0.6
baz=264
KDAK **Kodiak Island** 80.53 32 P P 04 48 00.3 +0.5
comp=Z,8.2nm,0.7s,baz=271,slow=3.6,SNR=6.9
comp=Z,8.2nm,0.7s
KDAK **Kodiak Island** 80.53 32 P P 04 47 59.9 +0.1
baz=266
M20K **Styx River** 80.58 28 P P 04 48 00.4 +0.2
M20K IAmb IAmb 04 48 02.7
comp=Z,9.3nm,0.8s
M20K **Styx River** 80.58 28 P P 04 48 00.4 +0.2
baz=265
IMAR **Indian Mountai** 80.73 24 P P 04 48 01.6 +0.8
B21K **Ikpikpuk River** 80.86 20 P P 04 48 02.3 +1.0
B21K IAmb IAmb 04 48 03.2
comp=Z,6.7nm,0.8s
B21K **Ikpikpuk River** 80.86 20 P P 04 48 01.9 +0.6
baz=262
G21K **Allakaket** 80.89 24 P P 04 48 02.2 +0.5
G21K IAmb IAmb 04 48 05.5
comp=Z,8.6nm,1.1s
G21K **Allakaket** 80.89 24 P P 04 48 02.0 +0.3
baz=264,SNR=6.2
A22K **Sinclair Lake** 80.93 19 P P 04 48 02.3 +0.6
baz=262
E21K **Killik River** 80.93 22 P P 04 48 02.0 0.0
E21K **Killik River** 80.93 22 P P 04 48 01.9 0.0
baz=263
SPCR **Spurr Chakacha** 80.97 29 P P 04 48 02.6 +0.4
baz=266
N20K **Mount Spurr** 80.97 29 P P 04 48 02.6 +0.4
baz=266
F21K **Alatna River** 80.97 23 P P 04 48 02.4 +0.3
baz=264
H21K **Melozitna Rive** 81.08 25 P P 04 48 03.6 +0.9
H21K **Melozitna Rive** 81.08 25 P P 04 48 03.1 +0.4
baz=264
PPLA **Purkeypile** 81.11 27 P P 04 48 03.1 +0.1
baz=265
CHUM **Lake Minchumin** 81.13 26 P P 04 48 03.2 +0.3
baz=265
SKT **Skwentna** 81.34 28 P P 04 48 04.4 +0.2
baz=266
B22K **Teshekpuk Lake** 81.36 20 P P 04 48 04.6 +0.6
baz=263
D22K **Ayikyak River** 81.45 21 P P 04 48 05.5 +0.9
baz=264
F22K **John River** 81.50 23 P P 04 48 05.6 +0.7
baz=265
GURO **Guroymak-BITLI** 81.59 308 P P 04 48 05.9 -0.2
GURO IAmb IAmb 04 48 08.4
comp=Z,7.7nm,0.6s
BRSE **Bradley Lake S** 81.60 31 P P 04 48 05.4 -0.2
baz=267
SUA **Susitna One** 81.69 29 P P 04 48 06.1 0.0
SUA IAmb IAmb 04 48 07.1
comp=Z,12nm,0.8s
SUA **Susitna One** 81.69 29 P P 04 48 06.2 +0.1
baz=267,SNR=5.8
H22K **Ishtalitna Cre** 81.69 24 P P 04 48 06.3 +0.4
baz=266
E22K **Anaktuvuk Pass** 81.70 22 P P 04 48 06.9 +1.0
E22K **Anaktuvuk Pass** 81.70 22 P P 04 48 06.2 +0.3
baz=265
G22K **Bettles** 81.72 23 P P 04 48 07.0 +1.0
baz=266
BPAW **Bear Paw Mtn.** 81.73 26 P P 04 48 07.1 +0.9
BPAW IAmb IAmb 04 48 08.3
comp=Z,17nm,1.2s
BPAW **Bear Paw Mtn.** 81.73 26 P P 04 48 06.8 +0.7
baz=266,SNR=10
MLY **Manley** 81.90 25 P P 04 48 07.7 +0.6
MLY **Manley** 81.90 25 P P 04 48 07.5 +0.4
baz=266,SNR=7.3
M22K **Willow** 82.00 29 P P 04 48 07.6 +0.1
M22K **Willow** 82.00 29 P P 04 48 07.9 +0.4
baz=268
RC01 **Rabbit Creek A** 82.16 29 P P 04 48 08.6 +0.2
baz=268
D23K **Nanushuk River** 82.18 21 P P 04 48 09.3 +0.9
baz=266
COLD **Coldfoot** 82.25 23 P P 04 48 09.6 +0.9
baz=267
SEW **Seward** 82.27 30 P P 04 48 09.2 +0.2
baz=268
C23K **Itkillik River** 82.27 20 P P 04 48 09.9 +1.1
C23K IAmb IAmb 04 48 10.5
comp=Z,5.9nm,0.7s
C23K **Itkillik River** 82.27 20 P P 04 48 09.4 +0.6
baz=266
G23K **Bananza Creek** 82.29 24 P P 04 48 10.2 +1.1
G23K **Bananza Creek** 82.29 24 P P 04 48 10.3 +1.3
baz=267,SNR=7.2
H23K **Yukon River** 82.44 24 P P 04 48 11.1 +1.3
H23K IAmb IAmb 04 48 12.6
comp=Z,5.6nm,0.9s
H23K **Yukon River** 82.44 24 P P 04 48 10.6 +0.8
baz=267,SNR=5.1
PMR **Palmer** 82.47 29 P P 04 48 10.3 +0.4
PMR IAmb IAmb 04 48 11.2
comp=Z,11nm,1.0s
PMR **Palmer** 82.47 29 P P 04 48 10.1 +0.1
baz=268,SNR=5.5
I23K **Minto, Yukon-K** 82.48 25 P P 04 48 10.9 +0.9
I23K IAmb IAmb 04 48 12.5
comp=Z,7.8nm,0.8s
I23K **Minto, Yukon-K** 82.48 25 P P 04 48 10.5 +0.5
baz=268,SNR=9.6
E23K **Chandalar** 82.52 22 P P 04 48 11.2 +1.0
baz=267
TOLK **Toolik Lake Re** 82.56 22 P P 04 48 11.6 +1.2
TOLK **Toolik Lake Re** 82.56 22 P P 04 48 11.3 +0.8
baz=267
NEA2 **Nenana** 82.59 26 P P 04 48 11.0 +0.5
NEA2 IAmb IAmb 04 48 13.2
comp=Z,6.3nm,0.9s
NEA2 **Nenana** 82.59 26 P P 04 48 11.4 +0.8
baz=268,SNR=7.3
MCK **McKinley** 82.62 27 P P 04 48 11.3 +0.5
baz=268
WAT1 **Susitna Watana** 82.77 27 P P 04 48 11.5 -0.1
baz=269
KNK **Knik Glacier** 82.78 29 P P 04 48 12.2 +0.6
KNK **Knik Glacier** 82.78 29 P P 04 48 11.9 +0.3
baz=269
PWL **Port Wells** 82.83 29 P P 04 48 11.9 -0.1
PWL **Port Wells** 82.83 29 P P 04 48 11.9 -0.1
baz=269,SNR=6.2
SML **Sawmill** 82.85 29 P P 04 48 12.0 -0.1
SML IAmb IAmb 04 48 13.7
comp=Z,20nm,1.1s
SML **Sawmill** 82.85 29 P P 04 48 12.4 +0.4
baz=269
D24K **Happy Valley** 82.86 21 P P 04 48 12.6 +0.7
D24K IAmb IAmb 04 48 13.9
comp=Z,6.5nm,0.6s
D24K **Happy Valley** 82.86 21 P P 04 48 12.4 +0.6
baz=268
C24K **Franklin Bluff** 82.92 20 P P 04 48 12.7 +0.5
baz=268
E24K **Your Creek** 82.94 22 P P 04 48 13.2 +0.8
baz=268
WRH **Wood River Hil** 83.01 26 P P 04 48 12.3 -0.4
WRH IAmb IAmb 04 48 14.0
comp=Z,7.0nm,1.0s
H24K **Noodor Dome** 83.12 24 P P 04 48 14.2 +0.8
H24K IAmb IAmb 04 48 16.3
comp=Z,4.6nm,0.8s
H24K **Noodor Dome** 83.12 24 P P 04 48 13.9 +0.5
baz=269,SNR=5.8
CCB **Clear Creek Bu** 83.13 26 P P 04 48 13.6 +0.3
CCB IAmb IAmb 04 48 14.4
comp=Z,8.6nm,1.3s
M23K **Glacier View** 83.14 29 P P 04 48 14.0 +0.5
baz=270
WAT6 **Susitna Watana** 83.14 28 P P 04 48 14.1 +0.4
baz=270
F24K **Squaw Lake** 83.15 23 P P 04 48 14.5 +1.1
F24K **Squaw Lake** 83.15 23 P P 04 48 14.3 +0.8
baz=269,SNR=6.0
P23K **Montague Islan** 83.29 30 P P 04 48 14.9 +0.6
baz=270
POKR **Poker Plat Res** 83.30 25 P P 04 48 14.6 +0.3
baz=269
G24K **Hadweenzic Riv** 83.30 24 P P 04 48 15.5 +1.3
G24K IAmb IAmb 04 48 16.9
comp=Z,7.4nm,0.9s
G24K **Hadweenzic Riv** 83.30 24 P P 04 48 14.7 +0.5
baz=269,SNR=6.6
DHY **Denali Highway** 83.31 27 P P 04 48 14.8 +0.3
baz=270
SCM **Sheep Creek Mo** 83.33 28 P P 04 48 14.7 +0.2
baz=270
GLI **Glacier Island** 83.44 29 P P 04 48 15.5 +0.5
GLI IAmb IAmb 04 48 16.5
comp=Z,8.5nm,0.7s
GLI **Glacier Island** 83.44 29 P P 04 48 15.5 +0.5
baz=270
HDA **Harding Lake** 83.50 26 P P 04 48 15.3 0.0
HDA IAmb IAmb 04 48 15.7
comp=Z,8.0nm,0.8s
HDA **Harding Lake** 83.50 26 P P 04 48 15.3 0.0
baz=270,SNR=5.9
IL31 83.53 26 P P 04 48 15.0 -0.3
ILAR **Eielson Array** 83.53 26 P P 04 48 14.3 -1.1
ILAR **Eielson Array** 83.53 26 P P 04 48 13.8 -1.6
comp=Z,1.8nm,0.8s,baz=240,slow=5.2,SNR=16
comp=Z,1.8nm,0.8s
D25K **Kavik River** 83.73 21 P P 04 48 17.4 +1.0
D25K **Kavik River** 83.73 21 P P 04 48 17.0 +0.6
baz=270
G25K **Bearman Lake** 83.85 24 P P 04 48 17.7 +0.8
baz=270
M24K **Tolsona, Glenn** 83.87 28 P P 04 48 17.9 +0.7
baz=271
H25L **Birch Creek** 83.97 24 P P 04 48 18.6 +1.1
baz=271,SNR=6.9
F25K **Christian Rive** 84.02 23 P P 04 48 18.8 +0.9
baz=271
K24K **Donnelly Dome** 84.02 26 P P 04 48 18.6 +0.6
baz=271
PRP **Porcupine Dome** 84.10 25 P P 04 48 18.7 +0.3
baz=271
PAX **Paxson** 84.18 27 P P 04 48 19.0 +0.2
baz=271
J25K **Salcha River,** 84.18 26 P P 04 48 18.8 -0.1
J25K **Salcha River,** 84.18 26 P P 04 48 18.6 -0.2
baz=271
C26K **Camden Bay** 84.24 20 P P 04 48 18.9 0.0
baz=271
BMAR **Burnt Mountain** 84.43 23 P P 04 48 21.5 +1.6
F26K **Sheenjek River** 84.58 23 P P 04 48 21.3 +0.5
baz=272
N25K **Chitina, Valde** 84.63 29 P P 04 48 21.5 +0.4
baz=272
BMRM **Bremner River** 84.66 29 P P 04 48 21.5 +0.3
baz=272
C27K **Jago River** 84.67 21 P P 04 48 21.6 +0.5
baz=272
G26K **Porcupine Rive** 84.76 23 P P 04 48 21.8 +0.3
baz=273
KAIM **Kayak Island** 84.79 30 P P 04 48 22.3 +0.5
baz=273
SCRK **Sand Creek** 84.81 26 P P 04 48 22.6 +0.6
baz=273
J26L **Joseph Creek** 84.97 26 P P 04 48 23.0 +0.2
J26L **Joseph Creek** 84.97 26 P P 04 48 22.9 +0.2
baz=273
I26K **Coal Creek Min** 85.10 25 P P 04 48 24.0 +0.8
baz=273
BGLC **Bering Glacier** 85.35 30 P P 04 48 25.2 +0.6
baz=274
MCARA **McCarthy VSAT** 85.40 29 P P 04 48 25.5 +0.7
baz=274
CRQE **Cirque** 85.41 30 P P 04 48 25.5 +0.4
baz=274
MAW **Mawson** 85.47 200 P P 04 48 24.4 -0.5
comp=Z,1.8nm,0.7s,baz=83,slow=5.7,SNR=6.2
comp=Z,1.8nm,0.7s
E27K **Coleen River** 85.52 22 P P 04 48 25.8 +0.4
baz=274
G27K **Doyon Strip** 85.60 23 P P 04 48 26.6 +0.8
baz=275
K27K **Chicken** 85.65 26 P P 04 48 26.9 +0.8
baz=274
D27M **Malcolm River** 85.66 21 P P 04 48 26.7 +0.6
baz=275
H27K **Steamboat Moun** 85.70 24 P P 04 48 26.9 +0.6
baz=275
I27K **Kandik River** 85.72 25 P P 04 48 26.8 +0.3
baz=275
L27K **Beaver Creek,** 85.83 27 P P 04 48 27.6 +0.5
baz=275
EGAK **Eagle** 85.98 25 P P 04 48 28.3 +0.6
baz=275
F28M **Old Crow** 86.22 23 P P 04 48 29.2 +0.4
F28M IAmb IAmb 04 48 30.4
comp=Z,6.7nm,0.8s
F28M **Old Crow** 86.22 23 P P 04 48 29.2 +0.4
baz=276
E28M **Babbage River** 86.24 22 P P 04 48 29.3 +0.4
baz=276
I28M **Miner Creek** 86.43 25 P P 04 48 30.7 +0.8
I28M **Miner Creek** 86.43 25 P P 04 48 30.6 +0.6
baz=276
DAWY **Dawson** 86.82 26 P P 04 48 32.1 +0.3
baz=277
E29M **Blow River** 86.86 22 P P 04 48 32.3 +0.4
baz=278
YUK8 **Steele Glacier** 86.97 29 P P 04 48 32.8 -0.1
baz=277
H29M **Whitestone** 86.98 24 P P 04 48 33.0 +0.5
baz=278
G29M **Pine Creek** 87.02 23 P P 04 48 32.9 +0.1
G29M IAmb IAmb 04 48 34.5
comp=Z,7.5nm,0.8s
G29M **Pine Creek** 87.02 23 P P 04 48 33.2 +0.5
baz=278
I29M **Ogilvie Camp,** 87.12 25 P P 04 48 33.3 +0.1
baz=278
M29M **Somme Creek** 87.44 28 P P 04 48 34.8 -0.1
baz=278
L29M **L29M** 87.50 27 P P 04 48 35.1 0.0
baz=278
EPYK **Eagle Plains** 87.61 24 P P 04 48 35.9 +0.3
baz=279
K29M **Barlow Dome** 87.67 26 P P 04 48 35.9 -0.1
baz=278
F30M **Barrier River** 87.77 22 P P 04 48 36.6 +0.4
baz=280
BRTR **Keskin Array B** 88.03 310 P P 04 48 35.8 -2.5
comp=Z,1.6nm,0.8s,baz=169,slow=2.5,SNR=4.5
comp=Z,1.6nm,0.8s
J30M **Hart River** 88.07 25 P P 04 48 37.9 0.0
baz=280
ARCES **ARCESS Array B** 88.17 340 P P 04 48 35.6 -2.5
comp=Z,3.8nm,0.7s,baz=71,slow=9.1,SNR=4.1
comp=Z,3.8nm,0.7s
G31M **Satah River** 88.48 23 P P 04 48 40.4 +0.9
baz=281
FINES **FINESS Array B** 89.57 332 P P 04 48 42.5 -2.2
comp=Z,1.0nm,0.5s,baz=59,slow=4.0,SNR=10
comp=Z,1.0nm,0.5s
FARO **Faro, Yukon** 89.83 27 P P 04 48 46.3 +0.3
baz=282
S32K **Kilisnoo** 90.19 32 P P 04 48 47.8 +0.1
baz=281
A36M **Sachs Harbour** 90.19 17 P P 04 48 48.1 +0.7
baz=290
P32M **Atlin** 90.21 30 P P 04 48 48.0 +0.1
baz=282
Q32M **Nakina River** 91.07 30 P P 04 48 51.6 -0.5
baz=283
C36M **Paulatuk** 91.47 19 P P 04 48 53.6 +0.1
baz=291
DLBC **Dease Lake** 92.33 31 P P 04 48 57.7 0.0
baz=285
T35M **Bob Quinn** 92.59 32 P P 04 48 59.1 +0.1
baz=285
TOAD **Toad River Com** 94.60 30 P P 04 49 08.6 +0.4
baz=289
NB2 **NORSAR Subarra** 96.51 334 P P 04 49 14.6 -2.2
comp=Z,0.9nm,0.6s,baz=68,slow=4.4
NOA **NORSAR Array B** 96.51 334 P P 04 49 14.0 -2.8
comp=Z,0.9nm,0.7s,baz=66,slow=4.5,SNR=5.4
comp=Z,0.9nm,0.7s
OKC **Ostrava-Krasne** 96.83 322 AMS AMS 05 38 10.0
comp=Z,100nm,18.0s
DPC **Dobruska-Polom** 97.79 322 AMS AMS 05 38 10.0
comp=Z,100nm,16.5s
YKA **Yellowknife Ar** 97.89 24 P P 04 49 21.6 -1.2
comp=Z,0.7nm,0.7s,baz=302,slow=4.4,SNR=4.2
comp=Z,0.7nm,0.7s
GOPC **GO Pecny, Ondr** 98.87 322 AMS AMS 05 38 20.0
comp=Z,100nm,20.7s
PRU **Pruhonice** 98.99 323 AMS AMS 05 38 20.0
comp=Z,100nm,12.6s
ZVC **Zvikov** 99.40 322 AMS AMS 05 38 50.0
comp=Z,100nm,17.8s
HSKC **Hora Svate Kat** 99.44 323 AMS AMS 05 39 00.0
comp=Z,200nm,6.6s
KHC **Kasperske Hory** 99.88 322 AMS AMS 05 39 10.0
comp=Z,100nm,21.0s
HLID **Hailey** 106.75 41 P PKiKP 04 54 12.0 -0.5
baz=296

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SNCC | San Nicolas Is | 106.92 | 53 | P | | PKiKP | 04 54 12.4 | -0.4 |
| | baz=289 | | | | | | | |
| SWSC | Sam W. Stewart | 109.96 | 52 | P | | PKiKP | 04 54 18.2 | -0.3 |
| | baz=291 | | | | | | | |
| LAO | LASA Array | 110.28 | 35 | P | | PKiKP | 04 54 18.5 | -0.3 |
| | baz=303 | | | | | | | |
| MDND | Maddock | 113.23 | 32 | P | | PKiKP | 04 54 24.0 | -0.4 |
| | baz=310 | | | | | | | |
| EYMN | Ely | 117.13 | 27 | P | | PKPdf | 04 54 31.9 | 0.0 |
| | baz=317 | | | | | | | |
| ECSD | EROS Data Cent | 117.48 | 34 | P | | PKPdf | 04 54 32.7 | 0.0 |
| | baz=311 | | | | | | | |
| MNTX | Cornudas Mount | 118.50 | 49 | P | | PKPdf | 04 54 34.5 | -0.5 |
| | baz=298 | | | | | | | |
| AMTX | Amarillo | 119.58 | 44 | P | | PKPdf | 04 54 36.4 | -0.7 |
| | baz=302 | | | | | | | |
| KSU1 | Kansas State U | 120.44 | 38 | P | | PKPdf | 04 54 37.8 | -0.7 |
| | baz=309 | | | | | | | |
| TXAR | Lajitas Array | 120.91 | 51 | PKP | | PKPdf | 04 54 39.5 | -0.3 |
| | comp=Z,0.6nm,0.7s,baz=206,slow=0.8,SNR=10 | | | | | | | |
| JFWS | Jewell Farm | 121.41 | 31 | P | | PKPdf | 04 54 39.2 | -1.0 |
| | baz=317 | | | | | | | |
| TORD | Torodi Ar. Bea | 121.46 | 289 | PKP | | PKPdf | 04 54 40.4 | -0.6 |
| | comp=Z,2.8nm,0.7s,baz=36,slow=3.2,SNR=13 | | | | | | | |
| WMOK | Wichita Mounta | 121.65 | 43 | P | | PKPdf | 04 54 40.3 | -0.7 |
| | baz=305 | | | | | | | |
| ABTX | Abilene, Hawle | 122.23 | 45 | P | | PKPdf | 04 54 41.3 | -0.9 |
| | baz=303 | | | | | | | |
| JCT | Junction City | 123.25 | 48 | P | | PKPdf | 04 54 43.7 | -0.5 |
| | baz=302 | | | | | | | |
| CCM | Cathedral Cave | 124.30 | 35 | P | | PKPdf | 04 54 45.0 | -0.9 |
| | baz=314 | | | | | | | |
| 833A | Chaparral WMA, | 124.67 | 50 | P | | PKPdf | 04 54 46.2 | -0.7 |
| | baz=301 | | | | | | | |
| SFIN | Lafayette | 124.87 | 30 | P | | PKPdf | 04 54 46.2 | -0.7 |
| | baz=315 | | | | | | | |
| LONY | Lake Ozonia | 126.46 | 18 | P | | PKPdf | 04 54 49.3 | -0.6 |
| | baz=334 | | | | | | | |
| P49A | Miami Univ. Ec | 126.69 | 29 | P | | PKPdf | 04 54 49.9 | -0.5 |
| | baz=321 | | | | | | | |
| ERPA | Erie | 126.72 | 24 | P | | PKPdf | 04 54 49.9 | -0.5 |
| | baz=327 | | | | | | | |
| WCI | Wyandotte Cave | 126.89 | 32 | P | | PKPdf | 04 54 50.6 | -0.3 |
| | baz=319 | | | | | | | |
| M53A | WI Miller and | 127.00 | 25 | P | | PKPdf | 04 54 50.8 | -0.2 |
| | baz=326 | | | | | | | |
| PKME | Peaks-Kenny Pk | 127.30 | 13 | P | | PKPdf | 04 54 51.3 | -0.1 |
| | baz=341 | | | | | | | |
| LBNH | Lisbon | 127.59 | 16 | P | | PKPdf | 04 54 51.6 | -0.4 |
| | baz=337 | | | | | | | |
| WVT | Waverly | 127.59 | 35 | P | | PKPdf | 04 54 51.8 | -0.4 |
| | baz=316 | | | | | | | |
| OXF | Oxford | 127.80 | 37 | P | | PKPdf | 04 54 52.3 | -0.4 |
| | baz=313 | | | | | | | |
| P52A | Corning | 127.84 | 27 | P | | PKPdf | 04 54 52.1 | -0.5 |
| | baz=324 | | | | | | | |
| BINY | Binghamton | 128.16 | 21 | P | | PKPdf | 04 54 52.6 | -0.6 |
| | baz=332 | | | | | | | |
| SSPA | Standing Stone | 128.81 | 23 | P | | PKPdf | 04 54 54.2 | -0.3 |
| | baz=329 | | | | | | | |
| HRV | Adam Dziewonsk | 129.29 | 17 | P | | PKPdf | 04 54 54.7 | -0.6 |
| | baz=337 | | | | | | | |
| TZTN | Tazewell | 129.59 | 31 | P | | PKPdf | 04 54 55.1 | -1.0 |
| | baz=321 | | | | | | | |
| PAL | Palisades | 129.93 | 20 | P | | PKPdf | 04 54 55.8 | -0.7 |
| | baz=334 | | | | | | | |
| LRAL | Lakeview Retre | 130.27 | 37 | P | | PKPdf | 04 54 57.1 | -0.3 |
| | baz=315 | | | | | | | |
| KMSC | Kings Mountain | 131.80 | 30 | P | | PKPdf | 04 54 59.6 | -0.7 |
| | baz=322 | | | | | | | |
| GOGA | Godfrey | 132.02 | 34 | P | | PKPdf | 04 55 00.3 | -0.5 |
| | baz=319 | | | | | | | |
| LPAZ | La Paz | 162.78 | 128 | PKPab | | PKPab | 04 56 40.8 | +0.8 |
| | comp=Z,0.8nm,0.8s,baz=213,slow=2.8,SNR=5.3 | | | | | | | |
| BDFB | Brasilia | 168.61 | 211 | PKPab | | PKPab | 04 57 04.1 | -0.8 |
| | comp=Z,1.2nm,0.6s,baz=72,slow=4.8,SNR=3.7 | | | | | | | |

*IDC **08** 04:41:43.1±0.9,55˚.48S×25˚.70W,h0km,mb4.2/7, mbtmp4.2/8,ML3.8/1,MS3.2/5,Error ellipse: s-maj=29.0km s-min=19.0km az=70.0*

*NEIC **08** 04:41:44.6±1.5,55˚.52S±0˚.08×25˚.9W±0˚.2,h10km±1km, mb4.6/21,Error ellipse: s-maj=22.6km s-min=10.4km az=66.0*

**ISC 08 04:41:44.3±0.6,55˚49S±0˚09×25˚9W±0˚1,h10km,n45, σ0s87/36,mb4.5/15,MS3.1/5,5C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HOPE | Hope Point | 6.24 | 277 | Pn | Pn | 04 43 15.0 | -1.3 |
| ORCD | Orcadas | 11.25 | 234 | Pn | Pn | 04 44 17.1 | -7.8 |
| VNA1 | Neumayer--Stat | 17.05 | 160 | ⇑P | P | 04 45 44.2 | -0.1 |
| | comp=Z,12nm,0.3s | | | | | | |
| VNA3 | Neumayer Olymp | 17.29 | 162 | ⇑P | P | 04 45 46.5 | -0.4 |
| | comp=Z,6.0nm,0.3s | | | | | | |
| VNA2 | Neumayer--Watz | 17.45 | 160 | ⇑P | P | 04 45 48.8 | +0.2 |
| | comp=Z,7.9nm,0.4s,baz=320,slow=16 | | | | | | |
| SNAA | Sanae | 18.96 | 158 | P | P | 04 46 05.5 | +0.1 |
| SNAA | Sanae | 18.96 | 158 | ⇑P | P | 04 46 05.4 | 0.0 |
| | comp=Z,78nm,0.3s | | | | | | |
| SNAA | Sanae | 18.96 | 158 | P | P | 04 46 05.8 | +0.4 |
| | comp=Z,0.3nm,0.3s,baz=311,slow=10,SNR=31 | | | | | | |
| SNAA | | | | S | Sn | 04 49 24.2 | -14 |
| | comp=Z,0.3nm,0.4s,baz=317,slow=19,SNR=1.3 | | | | | | |
| | comp=Z,3.8nm,0.4s | | | | | | |
| TROLL | Troll, Antarti | 20.43 | 155 | ⇑P | P | 04 46 22.0 | +0.5 |
| | comp=Z,390nm,0.8s | | | | | | |
| PMSA | Palmer Station | 20.82 | 228 | P | P | 04 46 26.3 | +0.8 |
| PMSA | Palmer Station | 20.82 | 228 | P | P | 04 46 26.5 | +0.9 |
| | comp=Z,7.6nm,0.6s,baz=74,slow=5.8,SNR=14 | | | | | | |
| PMSA | | | | LR | LR | 04 53 45.9 | |
| | comp=Z,76nm,18.6s,baz=101,slow=35 | | | | | | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| SMAI | San Martin Ant | 22.67 | 220 | P | P | 04 46 45.3 | 0.0 |
| BELA | Belgrano 2 | 22.69 | 185 | P | P | 04 46 44.0 | -1.6 |
| MG01 | Puerto William | 23.57 | 254 | P | P | 04 46 55.7 | +1.0 |
| GO09 | Cerro Castillo | 27.62 | 259 | P | P | 04 47 28.9 | -2.7 |
| TRQA | Tornquist | 29.80 | 291 | P | P | 04 47 51.0 | -0.2 |
| TRQA | | | | IAmb | IAmb | 04 48 07.5 | |
| | comp=Z,29nm,1.5s | | | | | | |
| PLTB | Pedras Altas | 30.70 | 309 | P | P | 04 47 59.1 | 0.0 |
| PLTB | | | | IAmb | IAmb | 04 48 13.5 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| LL07 | Hotel Espejo d | 32.93 | 272 | P | P | 04 48 19.6 | +1.0 |
| QSPA | South Pole Qui | 34.76 | 180 | P | P | 04 48 34.6 | +0.1 |
| QSPA | | | | IAmb | IAmb | 04 48 35.5 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| QSPA | South Pole Qui | 34.76 | 180 | P | P | 04 48 34.4 | -0.1 |
| | comp=Z,3.6nm,0.6s,baz=266,slow=1.0,SNR=30 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| CPUP | Villa Florida | 37.02 | 309 | P | P | 04 48 55.6 | +1.7 |
| | comp=Z,1.1nm,0.7s,baz=29,slow=16,SNR=3.9 | | | | | | |
| CPUP | | | | LR | LR | 05 03 58.7 | |
| | comp=Z,30nm,20.1s,baz=215,slow=36 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| BO04 | La Punta | 37.48 | 286 | P | P | 04 48 58.1 | +0.1 |
| BO04 | | | | IAmb | IAmb | 04 49 10.5 | |
| | comp=Z,21nm,1.5s | | | | | | |
| MT09 | Talagante | 37.85 | 286 | P | P | 04 48 59.8 | -1.4 |
| MT09 | | | | IAmb | IAmb | 04 49 00.0 | |
| | comp=Z,18nm,1.5s | | | | | | |
| MAW | Mawson | 40.16 | 144 | P | P | 04 49 20.6 | +0.7 |
| | comp=Z,2.7nm,0.6s,baz=239,slow=6.9,SNR=5.8 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| AC05 | El Transito | 41.29 | 292 | P | P | 04 49 29.9 | 0.0 |
| AC05 | | | | IAmb | IAmb | 04 49 32.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| GO02 | Mina Guanaco | 43.90 | 295 | P | P | 04 49 52.2 | +0.8 |
| GO02 | | | | IAmb | IAmb | 04 50 00.0 | |
| | comp=Z,28nm,1.4s | | | | | | |
| LVC | Limon Verde | 45.67 | 298 | P | P | 04 50 05.7 | +0.1 |
| LVC | | | | IAmb | IAmb | 04 50 13.6 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| LVC | Limon Verde | 45.67 | 298 | LR | LR | 05 11 16.3 | |
| | comp=Z,16nm,18.5s,baz=174,slow=39 | | | | | | |
| H04S2 | CROZET ISLANDS | 47.10 | 114 | T | T | 05 41 44.1 | |
| | baz=230,slow=75 | | | | | | |
| H04S3 | CROZET ISLANDS | 47.11 | 114 | T | T | 05 41 44.3 | |
| | baz=230,slow=75 | | | | | | |
| H04S1 | CROZET ISLANDS | 47.12 | 114 | T | T | 05 41 44.1 | |
| | baz=230,slow=75 | | | | | | |
| VNDA | Vanda | 47.16 | 182 | P | P | 04 50 16.4 | +0.3 |
| | comp=Z,1.1nm,0.7s,baz=181,slow=9.3,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| PTLB | Pontes e Lacer | 47.42 | 314 | P | P | 04 50 17.9 | -0.9 |
| PTLB | | | | IAmb | IAmb | 04 50 33.5 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| H10N1 | ASCENSION HYDR | 48.38 | 15 | T | T | 05 42 38.8 | |
| | baz=195 | | | | | | |
| H10N3 | ASCENSION HYDR | 48.38 | 15 | T | T | 05 42 35.7 | |
| | baz=195 | | | | | | |
| H10N2 | ASCENSION HYDR | 48.40 | 15 | T | T | 05 42 37.4 | |
| | baz=195 | | | | | | |
| LPAZ | La Paz | 50.67 | 303 | P | P | 04 50 44.8 | +0.3 |
| LPAZ | La Paz | 50.67 | 303 | P | P | 04 50 45.2 | +0.7 |
| | comp=Z,1.5nm,0.6s,baz=112,slow=2.5,SNR=7.7 | | | | | | |
| LPAZ | | | | LR | LR | 05 12 20.8 | |
| | comp=Z,17nm,21.1s,baz=307,slow=36 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| DBIC | Dimbokro | 64.36 | 23 | P | P | 04 52 19.7 | -0.5 |
| DBIC | | | | IAmb | IAmb | 04 52 32.2 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| DBIC | Dimbokro | 64.36 | 23 | LR | LR | 05 13 54.3 | |
| | comp=Z,38nm,20.1s,baz=114,slow=30 | | | | | | |
| TORD | Torodi Ar. Bea | 72.21 | 28 | P | P | 04 53 09.2 | -0.1 |
| | comp=Z,2.6nm,0.6s,baz=204,slow=5.9,SNR=16 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| BAUV | El Baul | 73.15 | 316 | P | P | 04 53 15.7 | +0.7 |
| PAYG | Puerto Ayora | 75.20 | 291 | P | P | 04 53 27.2 | +0.2 |
| SABA | Saba | 79.40 | 324 | P | P | 04 53 50.2 | -0.2 |
| SONM | Songino Array | 149.95 | 85 | PKPbc | PKPbc | 05 01 32.9 | -1.1 |
| | comp=Z,0.4nm,0.3s,baz=260,slow=0.9,SNR=4.6 | | | | | | |

*MOS **08** 04:46:14.7±1.8,43˚.95N×148˚.53E,h64km,mb4.6/4,Error ellipse: s-maj=13.7km s-min=10.4km az=9.8*

*NEIC **08** 04:46:14.7±1.2,43˚.9N±0˚.1×148˚.3E±0˚.1,h35km±2km, mb4.3/48,Error ellipse: s-maj=20.8km s-min=15.9km az=137.0*

*JMA **08** 04:46:16.9±0.3,44˚.N±1˚×148˚.8E±˚,h0km,MV4.5/28,E OFF HOKKAIDO*

*SKHL **08** 04:46:16.5±0.4,43˚.90N×148˚.40E,h68km±7km,mb4.6/3*

*IDC **08** 04:46:22.4±3.6,44˚.15N×148˚.18E,h115km±32km, mb3.4/10,mbtmp3.8/12,Error ellipse: s-maj=28.0km s-min=24.2km az=177.0*

**ISC 08 04:46:16.0±1.5,43˚85N±0˚07×148˚36E±0˚09,h64km±13km, n99,σ1s25/116,mb4.3/35,2C-1D,East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SHO | Shikotan | 1.11 | 272 | eP | Pn | 04 46 36.2 | +0.7 |
| SHO | | | | AMB | AMB | 04 46 37.6 | |
| | 190nm,0.5s | | | | | | |
| SHO | | | | eS | Sn | 04 46 49.8 | -0.3 |
| SHO | | | | A | A | 04 46 52.2 | |
| | 3μm,0.4s | | | | | | |
| SHO | | | | A | A | 04 46 52.2 | |
| | 5μm,0.4s | | | | | | |
| SHO | Shikotan | 1.11 | 272 | ePN | Pn | 04 46 36.2 | +0.7 |
| SHO | | | | eS | Sn | 04 46 49.8 | -0.3 |
| SHO | | | | pmax | pmax | | |
| | comp=Z,192nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,119nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,184nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,5μm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,5μm,0.2s | | | | | | |
| KUR | Kuril'sk | 1.43 | 346 | eP | Pn | 04 46 39.8 | 0.0 |
| KUR | | | | AMB | AMB | 04 46 45.0 | |
| | comp=N,230nm,0.3s | | | | | | |
| KUR | | | | eS | Sn | 04 46 56.2 | -1.4 |
| KUR | | | | A | A | 04 46 58.5 | |
| | comp=N,870nm,0.2s | | | | | | |
| KUR | | | | A | A | 04 46 58.5 | |
| | comp=N,2μm,0.2s | | | | | | |
| KUR | Kuril'sk | 1.43 | 346 | ePN | Pn | 04 46 39.8 | 0.0 |
| KUR | | | | eS | Sn | 04 46 56.4 | -1.2 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,185nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,2μm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,1μm,0.2s | | | | | | |
| YUK | Yuzh-Kuril'sk | 1.81 | 277 | eP | Pn | 04 46 45.4 | +0.5 |
| YUK | | | | AMB | AMB | 04 46 49.7 | |
| | comp=E,310nm,0.3s | | | | | | |
| YUK | | | | eS | Sn | 04 47 06.1 | -0.8 |
| YUK | | | | A | A | 04 47 10.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| YUK | | | | A | A | 04 47 10.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| YUK | Yuzh-Kuril'sk | 1.81 | 277 | ePN | Pn | 04 46 45.4 | +0.5 |
| YUK | | | | eS | Sn | 04 47 06.0 | -0.8 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,408nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,4μm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| NEM2 | Nemuro 2 | 1.96 | 257 | P | Pn | 04 46 47.6 | +0.7 |
| NEM2 | | | | eS | Sn | 04 47 09.4 | -1.0 |
| NMR | Nemuro--Hokkai | 1.97 | 257 | eP | Pn | 04 46 47.5 | +0.5 |
| NMR | | | | eS | Sn | 04 47 09.6 | -1.1 |
| NMR | Nemuro--Hokkai | 1.97 | 257 | ePN | Pn | 04 46 47.5 | +0.5 |
| NMR | | | | eS | Sn | 04 47 09.6 | -1.1 |
| RUSJ | Misakicho | 2.26 | 278 | ePN | Pn | 04 46 52.9 | +1.9 |
| RUSJ | | | | eS | Sn | 04 47 18.3 | +0.6 |
| JRA | Rausu | 2.34 | 273 | P | Pn | 04 46 53.7 | +1.7 |
| JRA | | | | eS | Sn | 04 47 20.1 | +0.4 |
| JNSB | Nemuroshibetsu | 2.43 | 269 | P | Pn | 04 46 54.8 | +1.5 |
| JNSB | | | | eS | Sn | 04 47 22.2 | +0.4 |
| JKHN | Kushirohamanak | 2.45 | 253 | P | Pn | 04 46 54.7 | +1.2 |
| JKHN | | | | eS | Sn | 04 47 21.9 | -0.4 |
| JNK | Nakash | 2.65 | 266 | eP | Pn | 04 46 57.1 | +0.8 |
| JNK | | | | eS | Sn | 04 47 27.5 | +0.2 |
| AKK | Akkeshi | 2.69 | 253 | eP | Pn | 04 46 57.4 | +0.5 |
| AKK | | | | eS | Sn | 04 47 27.4 | -0.9 |
| JAK | Akkeshi | 2.80 | 254 | P | Pn | 04 46 59.2 | +0.8 |
| JAK | | | | eS | Sn | 04 47 29.9 | -1.1 |
| JTKR | Abashiri--Toko | 3.22 | 274 | eP | Pn | 04 47 05.7 | +1.7 |
| JAR | Ashorobuto | 3.38 | 262 | eP | Pn | 04 47 07.9 | +1.6 |
| JAR | | | | eS | Sn | 04 47 45.4 | +0.2 |
| JCH | Churui | 3.85 | 253 | eP | Pn | 04 47 13.6 | +0.9 |
| JCH | | | | eS | Sn | 04 47 55.1 | -1.6 |
| JKK2 | Kamakawa 2 | 4.06 | 272 | eP | Pn | 04 47 18.3 | +2.8 |
| JKA | Kamikawa-asahi | 4.16 | 276 | Pn | Pn | 04 47 14.8 | -2.2 |
| ASAJ | Asahikawa | 4.17 | 276 | P | Pn | 04 47 23.2 | +6.2 |
| | comp=E,5.3nm,0.4s,baz=72,slow=15,SNR=2.5 | | | | | | |
| ASAJ | | | | S | Sn | 04 48 14.3 | +10 |
| | comp=E,22nm,0.7s,baz=344,slow=20,SNR=5.8 | | | | | | |
| ERM | Erimo | 4.24 | 246 | Pn | Pn | 04 47 16.2 | -1.7 |
| ERM | Erimo | 4.24 | 246 | ePN | Pn | 04 47 21.3 | +3.4 |
| JNBK | Urakawa-nobuka | 4.40 | 251 | eP | Pn | 04 47 20.9 | +0.8 |
| JTM | Tenmabayashi | 6.21 | 243 | Pn | Pn | 04 47 43.4 | -1.5 |
| JMM | Marumori | 8.28 | 226 | Pn | Pn | 04 48 12.5 | -0.7 |
| MJAR | Matsushiro Arr | 10.65 | 230 | P | Pn | 04 48 46.1 | +0.4 |
| | comp=E,2.1nm,0.3s,baz=25,slow=14,SNR=3.7 | | | | | | |
| USA0B | Ussuriysk Arra | 11.79 | 277 | c iPN | Pn | 04 49 03.3 | +2.1 |
| USRK | Ussuriysk Ar. | 11.79 | 277 | P | Pn | 04 49 03.1 | +1.9 |
| | comp=E,2.6nm,0.3s,baz=93,slow=19,SNR=31 | | | | | | |
| JNU | Natsue | 17.34 | 238 | P | Pn | 04 50 12.8 | -0.8 |
| M16K | Timber Creek | 35.26 | 42 | P | P | 04 53 06.3 | +2.2 |
| E18K | Tukpahlearik C | 35.66 | 31 | P | P | 04 53 09.7 | +2.2 |
| E18K | | | | IAmb | IAmb | 04 53 22.9 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| M17K | Holitna River | 36.02 | 42 | P | P | 04 53 12.1 | +1.5 |
| H18K | Honhosa River | 36.05 | 35 | P | P | 04 53 11.8 | +0.9 |
| H18K | | | | IAmb | IAmb | 04 53 44.3 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| C19K | Lookout Ridge | 36.49 | 28 | P | P | 04 53 15.0 | +0.5 |
| F19K | Shaleruckik Mo | 36.60 | 32 | P | P | 04 53 15.8 | +0.3 |
| D19K | Kuna River | 36.84 | 30 | P | P | 04 53 17.9 | +0.4 |
| D19K | | | | IAmb | IAmb | 04 53 49.7 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| H19K | Roundabout Mou | 36.91 | 35 | P | P | 04 53 19.4 | +1.4 |
| E19K | Redstone River | 36.94 | 31 | P | P | 04 53 19.4 | +1.1 |
| E19K | | | | IAmb | IAmb | 04 53 20.1 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| J19K | Poorman | 37.07 | 37 | P | P | 04 53 20.1 | +0.7 |
| J19K | | | | IAmb | IAmb | 04 53 29.3 | |
| | comp=Z,4.6nm,1.3s | | | | | | |
| F20K | Avaraart Lake | 37.44 | 32 | P | P | 04 53 23.4 | +0.9 |
| F20K | | | | IAmb | IAmb | 04 53 24.0 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| B20K | Meade River | 37.55 | 27 | P | P | 04 53 23.6 | +0.2 |
| B20K | | | | IAmb | IAmb | 04 53 26.2 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| J20K | Nowinta River | 37.73 | 37 | P | P | 04 53 26.1 | +1.0 |
| J20K | | | | IAmb | IAmb | 04 54 07.6 | |
| | comp=Z,5.7nm,1.5s | | | | | | |
| IMAR | Indian Mountai | 38.07 | 34 | P | P | 04 53 29.2 | +1.4 |
| G21K | Allakaket | 38.23 | 33 | P | P | 04 53 29.5 | +0.3 |
| G21K | | | | IAmb | IAmb | 04 53 31.7 | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| B21K | Ikpikpuk River | 38.32 | 28 | P | P | 04 53 30.9 | +0.9 |
| B21K | | | | IAmb | IAmb | 04 53 33.3 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| F21K | Alatna River | 38.33 | 32 | P | P | 04 53 31.2 | +1.1 |
| F21K | | | | IAmb | IAmb | 04 53 32.1 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| H21K | Melozitna Rive | 38.42 | 35 | P | P | 04 53 31.9 | +1.1 |
| H21K | | | | IAmb | IAmb | 04 54 04.6 | |
| | comp=Z,5.9nm,1.5s | | | | | | |
| D22K | Ayikyak River | 38.87 | 30 | P | P | 04 53 35.6 | +1.1 |
| D22K | | | | IAmb | IAmb | 04 54 08.5 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| E22K | Anaktuvuk Pass | 39.08 | 31 | P | P | 04 53 37.2 | +0.8 |
| E22K | | | | IAmb | IAmb | 04 53 37.6 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| G23K | Bananza Creek | 39.63 | 33 | P | P | 04 53 42.2 | +1.2 |
| H23K | Yukon River | 39.78 | 35 | P | P | 04 53 43.7 | +1.5 |
| TOLK | Toolik Lake Re | 39.96 | 30 | P | P | 04 53 44.3 | +0.7 |
| TOLK | | | | IAmb | IAmb | 04 53 55.1 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| E24K | Your Creek | 40.31 | 31 | P | P | 04 53 47.9 | +1.3 |
| H24K | Noodor Dome | 40.47 | 35 | P | P | 04 53 49.3 | +1.4 |
| F24K | Squaw Lake | 40.51 | 32 | P | P | 04 53 49.5 | +1.3 |
| G24K | Hadweenzic Riv | 40.64 | 33 | P | P | 04 53 50.8 | +1.5 |
| ILAR | Eielson Array | 40.89 | 36 | P | P | 04 53 50.8 | -0.6 |
| | comp=Z,0.4nm,0.6s,baz=272,slow=7.8,SNR=6.9 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| ILAR | Eielson Array | 40.89 | 36 | eP | P | 04 53 52.0 | +0.7 |
| FYU | Fort Yukon | 41.54 | 34 | P | P | 04 53 58.5 | +1.9 |
| FYU | | | | IAmb | IAmb | 04 54 34.5 | |
| | comp=Z,11nm,1.4s | | | | | | |
| G27K | Doyon Strip | 42.95 | 33 | P | P | 04 54 10.0 | +1.8 |
| K27K | Chicken | 43.03 | 37 | P | P | 04 54 10.3 | +1.6 |
| K27K | | | | IAmb | IAmb | 04 54 11.3 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| L27K | Beaver Creek, | 43.26 | 39 | P | P | 04 54 12.4 | +1.8 |
| L27K | | | | IAmb | IAmb | 04 54 17.8 | |
| | comp=Z,7.6nm,1.5s | | | | | | |
| BCAR | Beaver Creek A | 43.28 | 39 | P | P | 04 54 12.3 | +1.5 |
| I28M | Miner Creek | 43.77 | 35 | P | P | 04 54 16.3 | +1.4 |
| E29M | Blow River | 44.26 | 31 | P | P | 04 54 20.1 | +1.6 |
| E29M | | | | IAmb | IAmb | 04 55 01.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| H29M | Whitestone | 44.32 | 34 | P | P | 04 54 20.9 | +1.8 |
| G29M | Pine Creek | 44.37 | 33 | P | P | 04 54 21.4 | +1.9 |
| G29M | | | | IAmb | IAmb | 04 54 38.0 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| G30M | tAoh Zraii Nji | 45.06 | 33 | P | P | 04 54 26.4 | +1.4 |
| G30M | | | | IAmb | IAmb | 04 54 27.3 | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| I30M | Mount Dempster | 45.28 | 35 | P | P | 04 54 28.2 | +1.3 |
| I30M | | | | IAmb | IAmb | 04 54 30.3 | |
| | comp=Z,4.3nm,1.3s | | | | | | |
| MK31 | Makanchi Array | 45.31 | 298 | eP | P | 04 54 27.7 | +0.4 |
| MKAR | Makanchi Array | 45.31 | 298 | P | P | 04 54 26.4 | -0.9 |
| MKAR | Makanchi Array | 45.31 | 298 | P | P | 04 54 26.8 | -0.5 |
| | comp=Z,0.3nm,0.5s,baz=75,slow=10,SNR=3.0 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| J30M | Hart River | 45.42 | 36 | P | P | 04 54 29.5 | +1.5 |
| J30M | | | | IAmb | IAmb | 04 54 39.2 | |
| | comp=Z,6.8nm,1.5s | | | | | | |
| G31M | Satah River | 45.83 | 32 | P | P | 04 54 32.0 | +1.0 |
| G31M | | | | IAmb | IAmb | 04 55 04.1 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| INK | Inuvik | 45.87 | 30 | P | P | 04 54 32.5 | +1.2 |
| INK | Inuvik | 45.87 | 30 | P | P | 04 54 32.5 | +1.2 |
| INK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| KURK | Kurchatov | 46.20 | 304 | P | P | 04 54 33.9 | -0.2 |
| KURBB | Kurchatov Arra | 46.28 | 304 | P | P | 04 54 33.9 | -0.9 |
| | comp=Z,0.2nm,0.3s,baz=72,slow=8.9,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| ABKAR | Akbulak array | 57.68 | 309 | P | P | 04 55 59.3 | -0.3 |
| ABKAR | Akbulak array | 57.68 | 309 | P | P | 04 55 59.0 | -0.5 |
| ABKAR | | | | IAmb | IAmb | 04 56 17.9 | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| NLWA | Neilton Lookou | 58.29 | 53 | P | P | 04 56 03.0 | -0.9 |
| ARCES | ARCESS Array B | 59.46 | 340 | P | P | 04 56 10.2 | -1.4 |
| | comp=Z,3.6nm,0.9s,baz=47,slow=7.6,SNR=1.6 | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| KBL | Kabul | 59.98 | 290 | P | P | 04 56 15.8 | -0.1 |
| KBL | Kabul | 59.98 | 290 | P | P | 04 56 15.8 | -0.1 |
| KBL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| SUMG | Summit | 63.78 | 2 | P | P | 04 56 41.1 | 0.0 |
| SUMG | Summit | 63.78 | 2 | P | P | 04 56 41.1 | 0.0 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| WRA | Warramunga Arr | 64.77 | 195 | P | P | 04 56 49.9 | +2.3 |
| | comp=Z,1.1nm,1.1s,baz=12,slow=6.6,SNR=2.9 | | | | | | |
| | comp=Z,1.1nm,1.1s | | | | | | |
| FIA1 | FINESS Array S | 65.18 | 333 | P | P | 04 56 48.1 | -1.7 |
| FINES | FINESS Array B | 65.18 | 333 | P | P | 04 56 49.1 | -0.8 |
| FINES | FINESS Array B | 65.18 | 333 | P | P | 04 56 48.8 | -1.1 |
| | comp=Z,2.9nm,0.7s,baz=41,slow=7.7,SNR=13 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| FINES | FINESS Array B | 65.18 | 333 | eP | P | 04 56 49.1 | -0.8 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 66.78 | 59 | P | P | 04 57 02.1 | +1.3 |
| | comp=Z,2.0nm,0.6s,baz=309,slow=7.6,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| NB201 | NORSAR Array S | 69.79 | 339 | P | P | 04 57 18.4 | -0.6 |
| NOA | NORSAR Array B | 69.82 | 339 | P | P | 04 57 18.2 | -1.0 |
| | comp=Z,0.4nm,0.6s,baz=29,slow=6.4,SNR=6.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| HFS | Hagfors | 69.93 | 338 | P | P | 04 57 18.0 | -1.8 |
| | comp=Z,0.5nm,0.3s,baz=44,slow=4.4,SNR=8.9 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| PSA00 | Pilbara Seismi | 70.16 | 208 | P | P | 04 57 19.4 | -2.2 |
| TXAR | Lajitas Array | 81.86 | 57 | P | P | 04 58 28.6 | +0.2 |
| | comp=Z,0.3nm,0.7s,baz=310,slow=4.6,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |

*NEIC **08** 04:48:16.0±1.9,44˚.29N±0˚.05×149˚.7E±0˚.1,h10km±1km, mb4.6/45,Error ellipse: s-maj=19.0km s-min=6.5km az=111.0*

*JMA **08** 04:48:18.3±0.7,44˚N±3˚×14˚9E±˚,h30km,MV4.4/13,SE OFF ETOROFU*

*NIED **08** 04:48:18.3,44˚.47N×149˚.49E,h30km,MW4.4,Moment Tensor Solution. s3 Moment tensor:

comp=N,2μm,0.5s
KUR smax smax
comp=E,2μm,0.4s
**SHO Shikotan 1.93 261** *e*P **Pn 04 48 49.9 -1.3**
SHO AMB AMB 04 48 51.3
comp=E,120nm,0.3s
SHO *e*S **Sn 04 49 12.7 -1.5**
SHO A A 04 49 25.9
comp=E,680nm,0.4s
SHO A A 04 49 25.9
comp=E,920nm,0.4s
**SHO Shikotan 1.93 261** *e*PN **Pn 04 48 49.7 -1.5**
SHO *e*S **Sn 04 49 11.9 -2.3**
SHO pmax pmax
comp=E,72nm,0.3s
SHO pmax pmax
comp=Z,120nm,0.3s
SHO pmax pmax
comp=N,63nm,0.2s
SHO smax smax
comp=E,811nm,0.4s
SHO smax smax
comp=N,724nm,0.3s
**YUK Yuzh-Kuril'sk 2.60 268** *e*P **Pn 04 48 59.6 -0.8**
YUK AMB AMB 04 49 04.0
comp=N,200nm,0.2s
YUK *e*S **Sn 04 49 29.1 -1.6**
YUK A A 04 49 42.2
comp=N,910nm,0.5s
YUK A A 04 49 42.2
comp=N,960nm,0.5s
**YUK Yuzh-Kuril'sk 2.60 268** *e*PN **Pn 04 48 59.6 -0.8**
YUK *e*S **Sn 04 49 29.1 -1.6**
YUK pmax pmax
comp=N,101nm,0.2s
YUK pmax pmax
comp=Z,199nm,0.2s
YUK smax smax
comp=E,956nm,0.4s
YUK smax smax
comp=N,908nm,0.5s
**NEM2 Nemuro 2 2.82 254** *e*P **Pn 04 49 01.7 -1.7**
NEM2 *e*S **Sn 04 49 33.3 -2.8**
**NMR Nemuro--Hokkai 2.83 254** *e*P **Pn 04 49 02.0 -1.5**
NMR *e*S **Sn 04 49 34.1 -2.3**
**NMR Nemuro--Hokkai 2.83 254** *e*PN **Pn 04 49 03.0 -0.5**
NMR *e*S **Sn 04 49 35.0 -1.4**
**RUSJ Misakicho 3.04 270** *e*PN **Pn 04 49 06.9 +0.5**
RUSJ *e*S **Sn 04 49 42.2 +0.7**
**JRA Rausu 3.14 267** *e*P **Pn 04 49 08.1 +0.3**
**JNK Nakash 3.48 261** *e*P **Pn 04 49 11.7 -0.8**
**AKK Akkeshi 3.56 252** *e*S **Sn 04 49 52.8 -1.5**
**JAK Akkeshi 3.67 252** *e*P **Pn 04 49 13.5 -1.5**
JAK *e*S **Sn 04 49 55.7 -1.2**
**JTKR Abashiri--Toko 4.01 269** *e*P **Pn 04 49 19.9 +0.2**
**JAR Ashorobuto 4.22 260** *e*P **Pn 04 49 22.9 +0.2**
**JCH Churui 4.72 252** *e*P **Pn 04 49 29.1 -0.4**
**JKK2 Kamakawa 2 4.85 268** *e*P **Pn 04 49 32.1 +0.8**
**JKA Kamikawa-asahi 4.94 271** **Pn 04 49 34.3 +1.8**
**JKA Kamikawa-asahi 4.94 271** *e*P **Pn 04 49 34.3 +1.8**
**ASAJ Asahikawa 4.94 271** P **Pn 04 49 36.1 +3.6**
comp=N,8.9nm,0.5s,baz=99,slow=8.4,SNR=2.2
ASAJ S **Sn 04 50 29.4 +1.1**
comp=N,18nm,0.5s,baz=104,slow=19,SNR=1.7
**ASAJ Asahikawa 4.94 271** PN **Pn 04 49 34.3 +1.8**
**ERM Erimo 5.11 247** Pn **Pn 04 49 36.3 +1.5**
**ERM Erimo 5.11 247** PN **Pn 04 49 36.3 +1.5**
**JNBK Urakawa-nobuka 5.26 251** *e*P **Pn 04 49 36.4 -0.5**
**YSS Yuzh-Sakhalins 5.45 303** *e*P **Pn 04 49 39.0 -0.5**
YSS AMB AMB 04 49 40.6
comp=N,10.0nm,0.4s
**YSS Yuzh-Sakhalins 5.45 303** *e*PN **Pn 04 49 38.3 -1.2**
YSS MLR MLR
comp=Z,1μm,16.0s
YSS MLR MLR
comp=E,1μm,12.0s
**JANG Nango 7.02 240** *e*S Sn 04 51 11.9 -7.6
**JTM Tenmabayashi 7.08 244** Pn **Pn 04 50 02.7 +0.8**
**SKR Severo-Kuril's 7.90 32**⇓ *e*PN **Pn 04 50 14.2 +1.2**
**MJAR Matsushiro Arr 11.49 232** P **Pn 04 51 06.5 +4.3**
comp=E,0.7nm,0.3s,baz=30,slow=13,SNR=1.8
**USA0B Ussuriysk Arra 12.54 276** Pn **Pn 04 51 16.6 +0.1**
**USA0B Ussuriysk Arra 12.54 276** *ce*PN **Pn 04 51 16.8 +0.3**
**USRK Ussuriysk Ar. 12.54 276** P **Pn 04 51 16.8 +0.3**
comp=E,3.7nm,0.7s,baz=84,slow=14,SNR=8.7
USRK LR LR 04 56 36.6
comp=E,466nm,18.1s,baz=93,slow=40
**KLR Kul'dur 13.15 299** P **Pn 04 51 25.1 +0.4**
comp=E,0.9nm,0.8s,baz=112,slow=12,SNR=1.8
**KLR Kul'dur 13.15 299** *e*PN **Pn 04 51 28.1 +3.4**
KLR pmax pmax
comp=Z,5.0nm,1.5s
**MA2 Magadan 15.42 2** LR LR 04 58 20.9
comp=Z,227nm,18.4s,baz=201,slow=39
**ZEA Zeya 17.36 311** *e*P Pn 04 52 04.3 -15
ZEA pmax pmax
comp=Z,10.0nm,0.6s
ZEA MLR MLR
comp=Z,200nm,16.0s
**SEY Seymchan 18.84 4** LR LR 04 59 52.1
comp=Z,361nm,20.2s,baz=142,slow=37
**SEY Seymchan 18.84 4**⇓ *i* P **Pn 04 52 35.6 -1.7**
SEY pmax pmax
comp=Z,7.0nm,1.0s
SEY MLR MLR
comp=Z,236nm,15.0s
**YAK Yakutsk 21.29 334** LR LR 05 01 52.7
comp=Z,179nm,19.2s,baz=134,slow=38
**BILL Bilibino 25.48 15** *e*P **P 04 53 43.1 -0.8**
**BILL Bilibino 25.48 15**⇑ *e*P **P 04 53 43.1 -0.8**
BILL *e* 04 54 20.2
BILL pmax pmax
comp=Z,4.0nm,1.7s
BILL MLR MLR
comp=Z,196nm,14.0s
**ULN Ulaanbaatar 29.40 292** *e*P **P 04 54 19.8 +0.4**
**ULN Ulaanbaatar 29.40 292**⇑ *e*P **P 04 54 19.8 +0.4**
ULN pmax pmax
comp=Z,5.0nm,1.3s
**SONM Songino Array 29.84 292** P **P 04 54 23.3 0.0**
comp=Z,0.8nm,0.4s,baz=84,slow=8.2,SNR=8.3
SONM LR LR 05 07 42.7
comp=Z,299nm,18.9s,baz=94,slow=39
comp=Z,0.8nm,0.4s
**C18K Utukok River 35.10 29** P **P 04 55 08.7 -0.3**
C18K IAmb IAmb 04 55 34.0
comp=Z,13nm,1.3s
**C19K Lookout Ridge 35.80 28** P **P 04 55 15.0 +0.1**
C19K IAmb IAmb 04 55 18.1
comp=Z,17nm,1.4s
**D19K Kuna River 36.14 30** **P 04 55 18.6 +0.7**
D19K IAmb IAmb 04 55 33.7
comp=Z,11nm,0.9s
**H19K Roundabout Mou 36.16 35** P **P 04 55 18.4 +0.4**
H19K IAmb IAmb 04 55 32.7
comp=Z,14nm,1.2s
**E19K Redstone River 36.22 32** **P 04 55 17.8 -0.6**
E19K IAmb IAmb 04 55 36.8
comp=Z,7.7nm,1.1s
**B20K Meade River 36.88 27** P **P 04 55 23.5 -0.4**
B20K IAmb IAmb 04 55 39.8
comp=Z,10nm,0.7s
**IMAR Indian Mountai 37.33 34** P **P 04 55 25.9 -2.0**
**F21K Alatna River 37.60 32** P **P 04 55 30.0 -0.3**
**B21K Ikpikpuk River 37.64 28** P **P 04 55 29.6 -0.8**
B21K IAmb IAmb 04 55 55.5
comp=Z,12nm,1.1s
**H21K Melozitna River 37.68 35** P **P 04 55 29.3 -1.6**
H21K IAmb IAmb 04 55 46.5
comp=Z,11nm,1.4s
**D22K Ayikyak River 38.17 30** P **P 04 55 34.0 -1.0**
D22K IAmb IAmb 04 56 06.0
comp=Z,12nm,1.4s
**E22K Anaktuvuk Pass 38.37 31** P **P 04 55 35.7 -0.9**
E22K IAmb IAmb 04 55 55.1
comp=Z,7.8nm,0.8s
**H23K Yukon River 39.04 35** P **P 04 55 40.7 -1.6**
**E24K Your Creek 39.60 31** P **P 04 55 47.9 +0.9**
**G24K Hadweenzic Riv 39.91 34** P **P 04 55 49.3 -0.2**
**ILAR Eielson Array 40.13 37** P **P 04 55 50.2 -1.2**
**ILAR Eielson Array 40.13 37** P **P 04 55 52.0 +0.6**
comp=Z,0.3nm,0.5s,baz=272,slow=8.3,SNR=3.2
ILAR LR LR 05 14 39.2
comp=Z,113nm,18.6s,baz=268,slow=39
comp=Z,0.3nm,0.5s

**ILAR Eielson Array 40.13 37** *e*P P 04 55 56.4 +5.0
ILAR pmax pmax
comp=Z,2.0nm,1.1s
**D25K Kavik River 40.47 30** P **P 04 55 54.6 +0.5**
**FYU Fort Yukon 40.80 34** P **P 04 55 54.7 -2.2**
FYU IAmb IAmb 04 56 17.7
comp=Z,8.6nm,0.9s
**DGZ Jazzator, Alta 41.63 300**⇓ *e*P **P 04 56 05.5 +1.4**
DGZ pmax pmax
comp=Z,2.0nm,1.0s
DGZ MLR MLR
comp=Z,205nm,16.0s
**SUCK Suckling Hills 41.98 44** P **P 04 56 04.3 -2.3**
**ZAA0 Zalesovo Array 42.06 307** P **P 04 56 06.1 -1.2**
**ZALV Zalesovo Beam 42.06 307** P **P 04 56 07.0 -0.3**
comp=Z,0.5nm,0.4s,baz=77,slow=7.6,SNR=2.3
comp=Z,0.5nm,0.4s
**ZALV Zalesovo Beam 42.06 307** P **P 04 56 07.0 -0.3**
**K27K Chicken 42.26 38** P **P 04 56 07.5 -1.4**
**E28M Babbage River 42.93 31** P **P 04 56 13.1 -1.2**
E28M IAmb IAmb 04 56 28.6
comp=Z,13nm,1.5s
**I30M Mount Dempster 44.54 35** P **P 04 56 26.8 -0.5**
**MK31 Makanchi Array 45.85 298** P **P 04 56 38.5 +0.6**
MK31 IAmb IAmb 04 56 39.6
comp=Z,8.0nm,1.1s
**MK31 Makanchi Array 45.85 298** *d i*P **P 04 56 37.7 -0.2**
**MKAR Makanchi Array 45.85 298** P **P 04 56 38.6 +0.7**
comp=Z,5.2nm,0.9s,baz=74,slow=8.9,SNR=27
comp=Z,5.2nm,0.9s
**MAKZ Makanchi 46.05 298** P **P 04 56 39.9 +0.5**
MAKZ IAmb IAmb 04 56 41.2
comp=Z,12nm,1.2s
**MAKZ Makanchi 46.05 298** P **P 04 56 39.9 +0.5**
MAKZ pmax pmax
comp=Z,12nm,1.3s
**KURK Kurchatov 46.66 304** *e*P **P 04 56 44.4 +0.3**
**KURK Kurchatov 46.66 304**⇓ *i*P **P 04 56 44.4 +0.3**
KURK pmax pmax
comp=Z,4.0nm,1.1s
**KURBB Kurchatov Arra 46.74 304** P **P 04 56 44.5 -0.3**
comp=Z,1.0nm,0.4s,baz=74,slow=8.8,SNR=4.2
comp=Z,1.0nm,0.4s
**CMAR Chiang Mai Arr 49.26 255** LR LR 05 21 09.9
comp=Z,63nm,18.7s,baz=65,slow=40
**TOLI2 Tolitoli 49.89 219** P **P 04 57 11.1 +1.7**
TOLI2 IAmb IAmb 04 57 12.4
comp=Z,6.6nm,0.9s
**BOOM Boomskoye usch 51.80 295** P **P 04 57 25.2 +1.6**
**BOOM Boomskoye usch 51.80 295** P **P 04 57 25.3 +1.6**
**HNR Honiara 54.22 167** LR LR 05 23 08.7
comp=Z,550nm,18.2s,baz=40,slow=38
**ARSB Arslanbob 54.29 296** P **P 04 57 43.6 +1.6**
**ARSB Arslanbob 54.29 296** P **P 04 57 43.6 +1.6**
**YKA Yellowknife Ar 54.49 35** P **P 04 57 43.7 +0.8**
comp=Z,0.2nm,0.5s,baz=305,slow=6.9,SNR=2.0
comp=Z,0.2nm,0.5s
**KBS Kingsbay 54.61 351** P **P 04 57 44.6 +1.0**
**KBS Kingsbay 54.61 351** P **P 04 57 44.6 +1.0**
KBS pmax pmax
comp=Z,23nm,1.3s
**KK31 Karatay Array 54.97 299** P **P 04 57 47.7 +0.9**
KK31 IAmb IAmb 04 57 48.6
comp=Z,8.5nm,1.2s
**KK31 Karatay Array 54.97 299** P **P 04 57 47.7 +0.9**
KK31 pmax pmax
comp=Z,9.0nm,1.3s
**KKAR Karatay Array 54.97 299** P **P 04 57 47.4 +0.7**
**KKAR Karatay Array 54.97 299** P **P 04 57 47.9 +1.1**
KKAR IAmb IAmb 04 57 48.6
comp=Z,8.5nm,1.2s
**KKAR Karatay Array 54.97 299** P **P 04 57 47.4 +0.7**
KKAR pmax pmax
comp=Z,8.0nm,1.3s
**ARU Arti 55.15 317** *e*P **P 04 57 48.2 +0.4**
**ARU Arti 55.15 317** *c i*P **P 04 57 48.2 +0.4**
ARU 04 59 48.4
ARU S **S 05 05 26.2 -0.7**
ARU SS **SS 05 09 05.5 -5.2**
ARU pmax pmax
comp=Z,15nm,2.6s
ARU MLR MLR
comp=Z,196nm,17.0s
**ABKAR Akbulak array 58.08 309** P **P 04 58 09.3 +0.6**
**ABKAR Akbulak array 58.08 309** P **P 04 58 08.9 +0.3**
ABKAR IAmb IAmb 04 58 10.4
comp=Z,8.5nm,1.2s
**CHGR Chuyangaron 58.19 295** P **P 04 58 10.8 +1.0**
**CHGR Chuyangaron 58.19 295** P **P 04 58 10.8 +1.0**
CHGR pmax pmax
comp=Z,26nm,1.3s
**SIMJ Simiganj 58.29 295** P **P 04 58 10.8 +0.2**
**ARCES ARCESS Array B 59.40 340** P **P 04 58 15.9 -1.7**
comp=Z,4.0nm,1.0s,baz=20,slow=6.7,SNR=1.3
comp=Z,4.0nm,1.0s
**BELG Belogornoye 62.70 318** *de*P **P 04 58 41.2 +1.0**
BELG pmax pmax
comp=Z,3.0nm,1.3s
**FINES FINESS Array B 65.22 334** P **P 04 58 55.7 -0.8**
**FINES FINESS Array B 65.22 334** P **P 04 58 55.3 -1.2**
comp=Z,3.1nm,0.7s,baz=33,slow=8.0,SNR=14
comp=Z,3.1nm,0.7s
**FINES FINESS Array B 65.22 334** *e*P **P 04 58 56.7 +0.2**
FINES pmax pmax
comp=Z,3.0nm,0.7s
**WRA Warramunga Arr 65.31 196** P **P 04 58 58.9 +1.3**
comp=Z,0.7nm,0.8s,baz=13,slow=6.5,SNR=4.6
comp=Z,0.7nm,0.8s
**KVN Kaiserville 65.66 59** P **P 04 58 58.9 -1.2**
KVN IAmb IAmb 04 59 34.0
comp=Z,5.1nm,1.3s
**KVN Kaiserville 65.66 59** P **P 04 58 58.9 -1.2**
KVN pmax pmax
comp=Z,5.0nm,1.3s
**FITZ Fitzroy Crossi 65.71 205** P **P 04 59 00.6 +0.4**
**NVAR Mina Array Bea 65.92 59** P **P 04 59 02.5 +0.8**
comp=Z,0.6nm,0.8s,baz=294,slow=4.7,SNR=4.6
comp=Z,0.6nm,0.8s
**OBN Obninsk 65.93 325** *e*P **P 04 59 01.0 -0.2**
**OBN Obninsk 65.93 325**⇑ *e*P **P 04 59 01.0 -0.2**
OBN *e* 04 59 36.8
OBN *e* 05 01 23.4
OBN *e*S **S 05 07 45.9 +1.5**
OBN pmax pmax
comp=Z,9.0nm,0.5s
OBN MLR MLR
comp=Z,83nm,17.0s
**VRH Novokhopyorsk 66.29 319** *e*P **P 04 59 02.2 -1.4**
VRH pmax pmax
comp=Z,10.0nm,0.8s
**LPSR Galich'ya Gora 66.63 322** *e*P **P 04 59 05.1 -0.6**
LPSR pmax pmax
comp=Z,9.0nm,0.6s
**VSR Storozhevoye 67.47 320** *e*P **P 04 59 09.3 -1.8**
VSR pmax pmax
comp=Z,8.0nm,0.5s
**VORD Divnogorie 67.58 320** *e*P **P 04 59 10.5 -1.3**
VORD pmax pmax
comp=Z,10.0nm,1.1s
**SFJD Kangerlussuaq 68.08 8** LR LR 05 31 35.4
comp=Z,64nm,19.0s,baz=336,slow=38
**FRB Frobisher Bay 68.27 17** LR LR 05 32 24.0
comp=Z,79nm,19.5s,baz=354,slow=39
**PDAR Pinedale Array 68.33 51** P **P 04 59 16.8 -0.2**
comp=Z,0.2nm,0.5s,baz=318,slow=1.2,SNR=3.0
comp=Z,0.2nm,0.5s
**ASAR Alice Springs 69.02 195** P **P 04 59 22.2 +1.1**
comp=Z,0.4nm,0.5s,baz=19,slow=5.9,SNR=2.2
comp=Z,0.4nm,0.5s
**NC405 NORSAR Array S 69.58 340** P **P 04 59 22.9 -1.3**
**NC204 NORSAR Array S 69.68 340** P **P 04 59 23.8 -1.0**
**NB201 NORSAR Array S 69.74 340** P **P 04 59 25.2 0.0**
**NB2 NORSAR Subarra 69.77 340** P **P 04 59 25.7 +0.3**
comp=Z,6.1nm,0.8s,baz=31,slow=6.5
**NOA NORSAR Array B 69.77 340** P **P 04 59 24.6 -0.7**
comp=Z,4.1nm,0.9s,baz=30,slow=6.3,SNR=15
comp=Z,4.1nm,0.9s
**NOA NORSAR Array B 69.77 340** *e*P **P 04 59 26.0 +0.6**
NOA pmax pmax
comp=Z,4.0nm,0.9s
**HFS Hagfors 69.91 338** P **P 04 59 26.2 +0.1**
comp=Z,3.2nm,0.5s,baz=66,slow=5.4,SNR=14
comp=Z,3.2nm,0.5s
**KIV Kislovodsk 70.69 313** *e*P **P 04 59 33.0 +1.6**
**KIV Kislovodsk 70.69 313** *e*P **P 04 59 33.0 +1.6**
KIV pmax pmax
comp=Z,7.0nm,1.1s
KIV MLR MLR
comp=Z,143nm,18.0s
**KBZ Khabaz 70.74 313** P **P 04 59 32.6 +1.1**
comp=Z,2.7nm,0.8s,baz=51,slow=3.6,SNR=5.8
KBZ LR LR 05 35 12.7
comp=Z,258nm,18.7s,baz=50,slow=40
comp=Z,2.7nm,0.8s
**KBZ Khabaz 70.74 313**⇑ *e*P **P 04 59 33.1 +1.6**
KBZ pmax pmax
comp=Z,5.0nm,1.0s
**BORG Borgarnes 71.15 356** *ce*P **P 04 59 33.9 +0.3**
**GNI Garni 72.17 309** LR LR 05 34 54.4
comp=Z,60nm,18.1s,baz=48,slow=39
**AKASG Malin Array Be 72.19 325** P **P 04 59 40.1 0.0**
comp=Z,2.2nm,0.7s,baz=40,slow=5.5,SNR=11
comp=Z,2.2nm,0.7s
**AKBB Malin Array Si 72.19 325** **P 04 59 40.0 -0.1**
**AKBB Malin Array Si 72.19 325**⇑ *e*P **P 04 59 40.5 +0.4**
AKBB pmax pmax
comp=Z,11nm,1.1s
AKBB MLR MLR
comp=Z,132nm,18.0s
**KIEV Kiev 72.20 325** **P 04 59 40.4 +0.2**
KIEV IAmb IAmb 04 59 41.6
comp=Z,7.9nm,1.0s
**KIEV Kiev 72.20 325** P **P 04 59 40.4 +0.2**
KIEV pmax pmax
comp=Z,8.0nm,1.0s
**319A Douglas 76.12 60** P **P 05 00 03.8 +0.2**
319A IAmb IAmb 05 00 24.4
comp=Z,4.6nm,1.0s
**BUR08 Bucovina Ar. S 76.23 325** P **P 05 00 04.2 +0.3**
BUR08 IAmb IAmb 05 00 20.6
comp=Z,3.2nm,0.8s
**I40A Norwalk 77.25 40** P **P 05 00 08.1 -1.5**
**CLL Collm 77.67 334** *i* P **P 05 00 13.7 +2.0**
CLL *i* Pmax 05 00 25.9
comp=Z,15nm,1.4s
CLL AMS AMS 05 39 00.0
comp=Z,100nm,18.1s
**CLL Collm 77.67 334** *i* P **P 05 00 13.7 +2.0**
CLL pmax pmax
comp=Z,15nm,1.4s
**KHC Kasperske Hory 79.36 332** **P 05 00 21.7 +0.6**
KHC IAmb IAmb 05 00 37.0
comp=Z,6.1nm,1.2s
**KHC Kasperske Hory 79.36 332**⇑ *e*P **P 05 00 22.2 +1.1**
KHC pmax pmax
comp=Z,8.0nm,1.0s
**TX31 Lajitas Ar. Si 81.00 58** P **P 05 00 28.4 -2.0**
**TXAR Lajitas Array 81.00 58** P **P 05 00 29.8 -0.6**
**TXAR Lajitas Array 81.00 58** P **P 05 00 31.6 +1.2**
comp=Z,0.7nm,0.6s,baz=306,slow=4.2,SNR=9.9
comp=Z,0.7nm,0.6s
**TXAR Lajitas Array 81.00 58** P **P 05 00 29.8 -0.6**
**PRED Cave del Predi 81.68 331** P **P 05 00 33.0 -0.7**
**TRQ Mont Tremblant 81.90 29** P **P 05 00 34.0 -0.8**
**DAVOX Davos/Dischmat 82.62 333** LR LR 05 41 47.1
comp=Z,50nm,18.7s,baz=84,slow=39
**NRCA Norcia 84.96 329** P **P 05 00 51.2 +0.6**
**KEST Kesra 92.58 329** LR LR 05 48 39.7
comp=Z,64nm,18.1s,baz=260,slow=39
**MDT Midelt 99.79 338** LR LR 05 55 05.8
comp=Z,24nm,18.4s,baz=24,slow=40

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*IDC **08** 04:57:28.9±1.1, 13.7°N×120.7°E, h0km, mb3.7/7, mbtmp3.8/7, MS3.3/6, Error ellipse: s-maj=58.8km s-min=17.8km az=62.0*

**ISC 08 04:57:32.8±1.2, 13.2°N±0.2°×120.4°E±0.3°, h27km, n13, σ0°93°/7, mb3.8/7, MS3.2/4, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOW** | **Kunigami** | **15.49** | **27** | LR | LR | 05 07 25.1 | |
| | comp=Z,208nm,18.2s,baz=322,slow=39 | | | | | | |
| **KAPI** | **Kappang** | **18.05** | **182** | LR | LR | 05 09 22.6 | |
| | comp=Z,56nm,19.0s,baz=32,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.31** | **287** | P | **P** | **05 02 17.9** | **+0.2** |
| | 2.8nm,0.3s,baz=99,slow=8.6,SNR=14 | | | | | | |
| | 2.8nm,0.3s | | | | | | |
| **JNU** | **Nakatsugawa** | **22.07** | **24** | LR | LR | 05 10 08.6 | |
| | comp=Z,54nm,19.4s,baz=142,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **25.12** | **14** | LR | LR | 05 14 16.0 | |
| | comp=Z,42nm,18.5s,baz=200,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.63** | **157** | P | **P** | **05 04 28.4** | **-0.2** |
| | 0.6nm,0.5s,baz=334,slow=9.8,SNR=12 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **36.51** | **344** | P | **P** | **05 04 35.4** | **-0.6** |
| | 0.9nm,0.6s,baz=168,slow=11,SNR=4.5 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **37.18** | **12** | LR | LR | 05 21 14.7 | |
| | comp=Z,49nm,18.0s,baz=20,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **38.90** | **160** | P | **P** | **05 04 56.5** | **+0.2** |
| | 1.0nm,0.6s,baz=340,slow=7.2,SNR=16 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.31** | **324** | P | **P** | **05 05 56.0** | **-0.3** |
| | 0.2nm,0.4s,baz=137,slow=9.1,SNR=2.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **YAK** | **Yakutsk** | **49.27** | **6** | LR | LR | 05 29 57.8 | |
| | comp=Z,39nm,18.5s,baz=157,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.42** | **333** | P | **P** | **05 06 21.8** | **+1.6** |
| | 0.7nm,0.7s,baz=130,slow=8.5,SNR=2.0 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.49** | **327** | P | **P** | **05 06 27.9** | **-0.5** |
| | 0.3nm,0.3s,baz=119,slow=8.4,SNR=1.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

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**IDC 08 05:02:43.4±2.9, 5.6°S×150.7°E, h0km, mb3.4/2, mbtmp3.6/4, ML2.5/2, MS3.9/1, Error ellipse: s-maj=99.0km s-min=36.7km az=118.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.12** | **223** | Pn | Pn | 05 04 01.8 | +0.5 |
| | 2.5nm,0.3s,baz=330,slow=16,SNR=1.6 | | | | | | |
| PMG | | | | Sn | Sn | 05 05 02.5 | +1.3 |
| | 2.2nm,0.3s,baz=217,slow=20,SNR=1.9 | | | | | | |
| | 6.0nm,0.3s | | | | | | |
| **CTA** | **Charters Tower** | **14.97** | **196** | Pn | Pn | 05 06 15.3 | -1.2 |
| | 0.1nm,0.3s,baz=40,slow=21,SNR=5.2 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.33** | **227** | P | P | 05 07 33.0 | +0.9 |
| | 0.5nm,0.3s,baz=53,slow=10,SNR=13 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **24.13** | **220** | P | P | 05 08 01.1 | -0.2 |
| | 1.0nm,0.6s,baz=52,slow=9.6,SNR=11 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **RPZ** | **Rata Peaks** | **41.91** | **158** | LR | LR | 05 26 48.4 | |
| | comp=Z,149nm,19.3s,baz=319,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.57** | **286** | PKPbc | PKPbc | 05 22 32.5 | -0.9 |
| | 0.6nm,0.6s,baz=52,slow=4.3,SNR=5.9 | | | | | | |

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*DNK **08** 05:30:52.2±2.0, 84.2°N×2.7°E, h15km*

**ISC 08 05:30:36.1±1.5, 84.0°N±0.1°×9.8°E±0.06, h10km, n7, σ1°96°/9, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NOR** | **Nord** | **4.02** | **248** | *i* P | **Pb** | **05 31 47.5** | **+0.6** |
| **KBS** | **Kingsbay** | **5.08** | **175** | *e*P | **Pg** | **05 32 11.0** | **-2.3** |
| KBS | | | | *e*S | **Sn** | **05 32 50.7** | **0.0** |
| **KBS** | **Kingsbay** | **5.08** | **175** | *i* P | **Pg** | **05 32 13.0** | **-0.2** |
| **ZFI2** | **Zemlya Franca-** | **5.83** | **102** | *e*P | **Pg** | **05 32 25.8** | **-1.8** |
| ZFI2 | | | | *e*S | **Sb** | **05 33 29.6** | **+2.2** |
| | 4.5nm,0.2s | | | | | | |
| **OMEGA** | **Omega** | **5.86** | **102** | *e*P | **Pg** | **05 32 26.2** | **-1.9** |
| OMEGA | | | | *e*S | **Sb** | **05 33 30.6** | **+2.4** |
| | 5.9nm,0.2s | | | | | | |
| **NEEM** | **North Greenlan** | **10.98** | **269** | *i* P | Pn | 05 33 16.2 | +2.9 |
| **SUMG** | **Summit** | **14.18** | **246** | *i* P | **P** | **05 34 04.6** | **0.0** |

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**AUST 08 05:35:57.3±1.1, 32.9°S×117.2°E, h10km, mb3.8/1, Mjma3.7/5, ML2.3/4, MLv2.7/5, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0, Western Australia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLBR** | **Kellerberrin** | **0.76** | **39** | P | Pg | 05 36 12.2 | +0.1 |
| | 0.2nm,SNR=5.7 | | | | | | |
| KLBR | | | | S | Sg | 05 36 21.9 | -0.1 |
| **MUN** | **Mundaring** | **0.86** | **284** | P | Pb | 05 36 14.3 | -0.1 |

0.1nm,SNR=1.5
MUN S Sg 05 36 24.9 -0.3
**BLDU Ballidu 1.62 345** P Pb 05 36 26.7 -0.7
0.1nm,SNR=1.4
BLDU S Sb 05 36 47.9 -0.1
**MORW Morawa 3.27 342** P Pn 05 36 48.9 +0.3
0.1nm,SNR=1.5
**MEEK Meekatharra 5.67 13** P Pn 05 37 22.3 +0.6
0.1nm,SNR=1.6

**JMA 08 05:42:09.6±0.1, 36°0N±0°2×137°6E±0°2, h8km±1km, MV0.8/23, WESTERN NAGANO PREF, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JGN** | **Niukaw** | **0.27** | **312** | P | Pg | 05 42 15.1 | +0.1 |
| **JNT** | **Takato** | **0.50** | **110** | *eP* | Pg | 05 42 19.3 | +0.1 |
| **JNG** | **Nsakai** | **0.56** | **50** | *eP* | Pg | 05 42 21.0 | +0.4 |

**JMA 08 05:42:19.3±0.0, 35°9N±0°1×137°7E±0°1, h7km, MV1.1/30, WESTERN NAGANO PREF, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JNT** | **Takato** | **0.35** | **97** | *eP* | Pg | 05 42 26.2 | 0.0 |
| **JNT** | **Takato** | **0.35** | **97** | *eS* | Sg | 05 42 26.1 | -4.7 |
| **JGN** | **Niukaw** | **0.44** | **314** | *eP* | Pg | 05 42 28.0 | +0.2 |
| **MAT** | **Matsushiro** | **0.74** | **33** | *eS* | Sg | 05 42 43.2 | 0.0 |
| **JYN** | **Shimob** | **0.80** | **122** | *eP* | Pg | 05 42 34.9 | +0.2 |
| **SHZ3** | **Shizuoka 3** | **0.95** | **154** | S | Sg | 05 42 49.9 | +0.2 |

*NOU **08** 05:47:47.7, 40°.89S×177°.24E, h6km, MLv4.4/7, Off E. Coast of N. Island, N.Z.*
*WEL **08** 05:47:55.0±0.5, 41°.3°×17°.7E±°, h17km±3km, M4.2/18, ML4.7/18, MLv4.2/18, Error ellipse: s-maj=0.0km s-min=0.0km az=120.8, confirmed*

**ISC 08 05:47:52.1±1.5, 40°.60S±0°.03×176°.76E±0°.05, h6km±11km, n84, σt=0.70/104, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANWZ** | **Angora Road** | **0.26** | **302** | P | **Pb** | **05 47 59.1** | **-0.1** |
| ANWZ | | | | S | **Sb** | **05 48 02.5** | **-1.5** |
| **PGFS** | **Porangahau Fir** | **0.32** | **339** | P | **Pb** | **05 48 00.8** | **+0.6** |
| PGFS | | | | S | **Sb** | **05 48 05.9** | **+0.3** |
| **PRHZ** | **Porangahau** | **0.35** | **344** | P | **Pb** | **05 48 01.6** | **+0.8** |
| PRHZ | | | | S | **Sb** | **05 48 07.4** | **+0.9** |
| **WBFS** | **Weber Fire Sta** | **0.40** | **300** | P | **Pg** | **05 47 60.0** | **+0.1** |
| WBFS | | | | S | **Sg** | **05 48 04.5** | **-0.5** |
| **BFZ** | **Birch Farm** | **0.40** | **258** | P | **Pb** | **05 48 02.9** | **+1.2** |
| **BFZ** | **Birch Farm** | **0.40** | **258** | P | **Pb** | **05 48 02.9** | **+1.2** |
| BFZ | | | | S | **Sb** | **05 48 08.9** | **+0.8** |
| **CPFS** | **Castlepoint Fi** | **0.51** | **234** | P | **Pn** | **05 48 06.2** | **+0.3** |
| CPFS | | | | S | **Sn** | **05 48 15.5** | **+0.5** |
| **CPWZ** | **Castlepoint** | **0.53** | **234** | P | **Pn** | **05 48 06.6** | **+0.4** |
| CPWZ | | | | S | **Sn** | **05 48 16.1** | **+0.6** |
| **DVHZ** | **Dannevirke** | **0.55** | **303** | P | **Pb** | **05 48 03.8** | **-0.4** |
| DVHZ | | | | S | **Sg** | **05 48 10.3** | **+0.6** |
| **PXZ** | **Pawanui** | **0.57** | **8** | P | **Pn** | **05 48 06.6** | **-0.3** |
| PXZ | | | | S | **Sn** | **05 48 16.4** | **-0.2** |
| **WPHZ** | **Waipukurau** | **0.59** | **335** | P | **Pb** | **05 48 05.7** | **+0.9** |
| **TRMS** | **Tiraumea** | **0.59** | **263** | P | **Pb** | **05 48 06.0** | **+1.1** |
| TRMS | | | | S | **Sb** | **05 48 14.0** | **+0.5** |
| **PRWZ** | **Pori Road** | **0.60** | **274** | P | **Pb** | **05 48 05.9** | **+0.7** |
| PRWZ | | | | S | **Sb** | **05 48 14.4** | **+0.4** |
| **DVHS** | **Dannevirke Hig** | **0.64** | **308** | P | **Pg** | **05 48 04.4** | **-0.1** |
| DVHS | | | | S | **Sg** | **05 48 12.8** | **0.0** |
| **WPWS** | **Waipawa Distri** | **0.67** | **348** | P | **Pn** | **05 48 07.2** | **-1.0** |
| WPWS | | | | S | **Sb** | **05 48 16.5** | **+0.8** |
| **TIWZ** | **Tintock** | **0.69** | **255** | P | **Pn** | **05 48 07.7** | **-0.8** |
| TIWZ | | | | S | **Sb** | **05 48 17.5** | **+1.1** |
| **WDPS** | **Woodville Poli** | **0.73** | **291** | P | **Pb** | **05 48 07.3** | **0.0** |
| WDPS | | | | S | **Sb** | **05 48 16.8** | **-0.7** |
| **POWZ** | **Post Office Ro** | **0.79** | **285** | P | **Pb** | **05 48 08.3** | **0.0** |
| **KAHZ** | **Kahuranaki** | **0.81** | **6** | P | **Pn** | **05 48 09.9** | **-0.3** |
| **PNHZ** | **Pukenui** | **0.81** | **328** | P | **Pb** | **05 48 08.8** | **+0.1** |
| PNHZ | | | | S | **Sb** | **05 48 19.7** | **-0.2** |
| **TSZ** | **Takapari Road** | **0.82** | **311** | P | **Pb** | **05 48 08.6** | **-0.2** |
| TSZ | | | | S | **Sg** | **05 48 19.0** | **+0.6** |
| **TMWZ** | **Te Maipa** | **0.83** | **232** | P | **Pn** | **05 48 10.0** | **-0.5** |
| **MRZ** | **Mangatainoka R** | **0.90** | **266** | P | **Pb** | **05 48 10.2** | **0.0** |
| MRZ | | | | S | **Sg** | **05 48 21.8** | **+0.6** |
| **CKHZ** | **Cape Kidnapper** | **0.97** | **14** | P | **Pn** | **05 48 14.0** | **+1.7** |
| **HOWZ** | **Holdsworth Sta** | **0.99** | **252** | P | **Pg** | **05 48 11.7** | **+0.5** |
| HOWZ | | | | S | **Sg** | **05 48 24.7** | **+0.7** |
| **KRHZ** | **Kereru** | **1.00** | **342** | P | **Pb** | **05 48 12.2** | **+0.3** |
| KRHZ | | | | S | **Sb** | **05 48 25.3** | **-0.1** |
| **MTW** | **Mount Morrison** | **1.11** | **239** | P | **Pg** | **05 48 13.1** | **-0.2** |
| **MCHZ** | **McNeill Hill** | **1.16** | **357** | P | **Pn** | **05 48 15.0** | **+0.2** |
| **OHWZ** | **Ohakea** | **1.17** | **289** | P | **Pn** | **05 48 15.1** | **0.0** |
| **KWHZ** | **Kaweka Forest** | **1.20** | **347** | P | **Pb** | **05 48 15.2** | **-0.1** |
| **OGWZ** | **Otaki Gorge** | **1.23** | **259** | P | **Pb** | **05 48 14.8** | **-0.9** |
| **ARHZ** | **Aropaoanui** | **1.35** | **8** | P | **Pg** | **05 48 17.7** | **-0.2** |
| **CAW** | **Cannon Point** | **1.38** | **248** | P | **Pn** | **05 48 16.9** | **-1.1** |
| **MSWZ** | **Moikau Station** | **1.41** | **234** | P | **Pn** | **05 48 17.0** | **-1.3** |
| **MOVZ** | **Moawhango** | **1.42** | **327** | P | **Pb** | **05 48 18.8** | **-0.4** |
| **KIW** | **Kapiti Island** | **1.43** | **259** | P | **Pn** | **05 48 17.8** | **-0.9** |
| **BKZ** | **Black Stump Fm** | **1.45** | **352** | P | **Pn** | **05 48 18.7** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **1.45** | **352** | P | **Pn** | **05 48 18.5** | **-0.4** |
| **PLWZ** | **Palliser** | **1.50** | **229** | P | **Pn** | **05 48 18.8** | **-0.8** |
| **NMHZ** | **Naumai** | **1.50** | **1** | P | **Pb** | **05 48 19.9** | **-0.5** |
| **WNVZ** | **Wahianoa** | **1.56** | **324** | P | **Pb** | **05 48 21.3** | **-0.1** |
| **WHHZ** | **Waihua** | **1.56** | **14** | P | **Pb** | **05 48 20.8** | **-0.7** |
| **MTVZ** | **Mangateitei** | **1.57** | **320** | P | **Pb** | **05 48 21.1** | **-0.5** |
| **TUVZ** | **Tukino** | **1.58** | **327** | P | **Pb** | **05 48 21.4** | **-0.5** |
| **WHVZ** | **Whangaehu Hut** | **1.60** | **325** | P | **Pb** | **05 48 21.5** | **-0.6** |
| **TRVZ** | **Turoa** | **1.60** | **324** | P | **Pb** | **05 48 21.6** | **-0.6** |
| **WAZ** | **Wanganui** | **1.60** | **301** | P | **Pb** | **05 48 21.9** | **-0.3** |
| **MAVZ** | **Matarangi** | **1.62** | **325** | P | **Pb** | **05 48 22.1** | **-0.4** |
| **FWVZ** | **Far West T-bar** | **1.63** | **325** | P | **Pn** | **05 48 21.8** | **+0.2** |
| **BHW** | **Baring Head** | **1.64** | **240** | P | **Pn** | **05 48 20.5** | **-1.1** |
| **SNVZ** | **South Ngauruho** | **1.66** | **328** | P | **Pb** | **05 48 22.5** | **-0.7** |
| **WEL** | **Wellington** | **1.66** | **245** | P | **Pn** | **05 48 21.3** | **-0.4** |
| **OTVZ** | **Oturere** | **1.67** | **329** | P | **Pb** | **05 48 22.7** | **-0.6** |
| **ETVZ** | **East Tongariro** | **1.67** | **331** | P | **Pb** | **05 48 22.9** | **-0.5** |
| **NGZ** | **Ngauruhoe** | **1.68** | **327** | P | **Pb** | **05 48 23.7** | **+0.1** |
| **COVZ** | **Chateau Observ** | **1.68** | **326** | P | **Pn** | **05 48 22.8** | **+0.6** |
| **TMVZ** | **Te Maari** | **1.69** | **331** | P | **Pn** | **05 48 22.9** | **+0.6** |
| **RAHZ** | **Arahi** | **1.70** | **9** | P | **Pn** | **05 48 22.3** | **-0.1** |
| **NNVZ** | **North Ngauruho** | **1.71** | **329** | P | **Pb** | **05 48 23.7** | **-0.4** |
| **SNZO** | **South Karori** | **1.71** | **245** | P | **Pn** | **05 48 21.8** | **-0.7** |
| **NTVZ** | **North Tongariro** | **1.72** | **330** | P | **Pb** | **05 48 23.3** | **-0.9** |
| **KNZ** | **Kokohu** | **1.73** | **24** | P | **Pn** | **05 48 22.2** | **-0.5** |
| **KRVZ** | **Karewarewa** | **1.73** | **330** | P | **Pb** | **05 48 24.0** | **-0.5** |
| **WTVZ** | **West Tongariro** | **1.74** | **328** | P | **Pb** | **05 48 24.0** | **-0.5** |
| **MTHZ** | **Maungataniwha** | **1.75** | **2** | P | **Pn** | **05 48 23.3** | **+0.2** |
| **HATZ** | **Hinemaiaia** | **1.78** | **343** | P | **Pn** | **05 48 24.1** | **+0.5** |
| **MRHZ** | **Matea Rd** | **1.78** | **351** | P | **Pn** | **05 48 23.9** | **+0.4** |
| **KATZ** | **Kakaramea** | **1.82** | **333** | P | **Pb** | **05 48 26.2** | **+0.3** |
| **TWVZ** | **Taurewa** | **1.84** | **326** | P | **Pb** | **05 48 25.7** | **-0.5** |
| **SNGZ** | **Shannon Statio** | **1.87** | **14** | P | **Pn** | **05 48 24.6** | **-0.1** |
| **PRGZ** | **Paritu Road** | **1.89** | **28** | P | **Pn** | **05 48 24.5** | **-0.4** |
| **RATZ** | **Rangitukua** | **1.89** | **336** | P | **Pb** | **05 48 27.1** | **-0.1** |
| **TCW** | **Tory Channel** | **1.98** | **251** | P | **Pn** | **05 48 25.0** | **-1.2** |
| **RIGZ** | **Rimuhau** | **2.04** | **23** | P | **Pn** | **05 48 27.0** | **-0.1** |
| **ALRZ** | **Allen Road** | **2.06** | **351** | P | **Pn** | **05 48 28.1** | **+0.8** |
| **RAGZ** | **Rawiri** | **2.16** | **14** | P | **Pn** | **05 48 29.1** | **+0.3** |
| **DUWZ** | **D'Urville Isla** | **2.17** | **264** | P | **Pn** | **05 48 28.0** | **-0.8** |
| **MWZ** | **Matawai** | **2.34** | **15** | P | **Pn** | **05 48 30.7** | **-0.5** |
| **URZ** | **Urewera** | **2.35** | **7** | P | **Pn** | **05 48 30.8** | **-0.5** |
| **URZ** | **Urewera** | **2.35** | **7** | P | **Pn** | **05 48 30.6** | **-0.7** |
| **BSWZ** | **Blackbirch Sta** | **2.45** | **242** | P | **Pn** | **05 48 30.9** | **-1.7** |
| **KHEZ** | **Kahui Hut** | **2.48** | **301** | P | **Pb** | **05 48 35.3** | **-1.9** |
| **HIZ** | **Hauiti** | **2.55** | **324** | P | **Pn** | **05 48 36.0** | **+1.9** |
| **QRZ** | **Quartz Range** | **3.23** | **265** | P | **Pn** | **05 48 42.8** | **-0.5** |

*IDC **08** 06:09:14.1±0.4, 8°.60S×112°.41E, h0km, mb4.8/24, mbtmp4.7/24, MS3.6/32, Error ellipse: s-maj=18.6km s-min=10.9km az=63.0*
*BJI **08** 06:09:22.0±0.0, 8°.90S×112°.40E, h71km, mb5.0/54, mB5.1/17, Ms4.5/10, Ms7 4.1/18*
*NEIC **08** 06:09:23.6±2.6, 8°.77S±0°.04×112°.47E±0°.06, h79km±5km, mb4.9/49, Error ellipse: s-maj=9.1km s-min=4.2km az=63.0*
*DJA **08** 06:09:24.4±0.2, 9°S±3°×11°2E±°, h64km±4km, M5.1/30, mb5.2/30, mB5.6/14, MLv5.3/18, Mw(mB)5.1/14, MwMwp4.7/1, Mwp5.0/1*
*GCMT **08** 06:09:25.5±0.2, 9°.00S±0°.02×112°.67E±0°.02, h79km±2km, MW4.9/93, Moment Tensor Solution. s41,c50; s93,c126; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.79±.11; $M_{\theta\theta}$-3.22±.11; $M_{\phi\phi}$1.43±.12; $M_{r\theta}$1.55±.07; $M_{\theta\phi}$-0.56±.11; $M_{r\phi}$-0.31±.07; Best double couple: $M_o$3.06800×$10^{16}$ NP1:$\phi_S$105.00000°, $\delta$65.00000°, $\lambda$118.00000°. NP2: $\phi_S$233.00000°, $\delta$37.00000°, $\lambda$45.00000°. Principal axes: T 2.4360, Plg60.0000°, Azm56.0000°; N 1.2640, Plg25.0000°, Azm272.0000°; P -3.7000, Plg15.0000°, Azm175.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 08 06:09:23.9±0.6, 8°.82S±0°.04×112°.48E±0°.04, h80km±5km, n263, σt=1.81/244, mb4.9/71, 5C, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PWJI** | **Pagerwojo** | **1.04** | **320** | P | **Pn** | **06 09 42.8** | **-0.6** |
| PWJI | | | | S | **Sn** | **06 09 56.7** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **1.69** | **78** | P | **Pn** | **06 09 51.9** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **1.69** | **78** | Pn | **Pn** | **06 09 51.7** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **1.69** | **78** | P | **Pn** | **06 09 51.7** | **0.0** |
| JAGI | | | | S | **Sn** | **06 10 11.9** | **-0.9** |
| **NGJI** | **Ngawi** | **1.76** | **325** | P | **Pn** | **06 09 54.9** | **+2.2** |
| NGJI | | | | S | **Sn** | **06 10 18.1** | **+3.6** |
| **GRJI** | **Gresik** | **1.89** | **360** | P | **Pn** | **06 09 54.9** | **+0.5** |
| GRJI | | | | S | **Sn** | **06 10 17.6** | **+0.1** |
| **UGM** | **Wanagama** | **2.14** | **295** | P | **Pn** | **06 09 58.5** | **+0.8** |
| **UGM** | **Wanagama** | **2.14** | **295** | Pn | **Pn** | **06 09 56.5** | **-1.2** |
| **UGM** | **Wanagama** | **2.14** | **295** | P | **Pn** | **06 09 58.0** | **+0.3** |
| **YOGI** | **Yogyakarta** | **2.38** | **295** | P | **Pn** | **06 10 00.8** | **-0.2** |
| **IGBI** | **Denpasar** | **2.63** | **90** | P | **Pn** | **06 10 05.1** | **+0.8** |
| **SMRI** | **Semarang** | **2.68** | **311** | P | **Pn** | **06 10 06.1** | **+1.1** |
| **SMRI** | **Semarang** | **2.68** | **311** | Pn | **Pn** | **06 10 05.9** | **+0.9** |
| **SMRI** | **Semarang** | **2.68** | **311** | P | **Pn** | **06 10 05.9** | **+0.9** |
| **DNP** | **Denpasar** | **2.70** | **87** | P | **Pn** | **06 10 08.0** | **+2.8** |
| DNP | | | | S | **Sn** | **06 10 40.3** | **+3.3** |
| **SRBI** | **Singaraja** | **2.80** | **75** | P | **Pn** | **06 10 07.8** | **+1.3** |
| **UWJI** | **Ujung Watu** | **2.83** | **327** | P | **Pn** | **06 10 07.1** | **+0.1** |
| UWJI | | | | S | **Sn** | **06 10 40.0** | **-0.1** |
| **BWJI** | **Bawean** | **2.95** | **3** | P | **Pn** | **06 10 09.7** | **+1.0** |
| **KPJI** | **Karang Pucung** | **3.81** | **292** | P | **Pn** | **06 10 22.0** | **+1.7** |
| **CMJI** | **Cimerak** | **4.12** | **284** | P | **Pn** | **06 10 24.2** | **-0.3** |
| CMJI | | | | S | **Sn** | **06 11 11.2** | **-0.4** |
| **TWSI** | **Taliwang, Sumb** | **4.35** | **89** | P | **Pn** | **06 10 28.3** | **+0.7** |
| TWSI | | | | S | **Sn** | **06 11 18.4** | **+1.2** |
| **BBJI** | **Bungbulang** | **4.97** | **285** | P | **Pn** | **06 10 37.2** | **+1.0** |
| **CNJI** | **Cibinong** | **5.51** | **285** | P | **Pn** | **06 10 43.7** | **+0.3** |
| | 148nm,0.7s,3μm2.0nm | | | | | | |
| **DBJI** | **Dramaga** | **6.11** | **291** | P | **Pn** | **06 10 53.9** | **+2.2** |
| | 297nm,1.0s,2.0nm | | | | | | |
| **SKJI** | **Sukabumi** | **6.14** | **287** | P | **Pn** | **06 10 53.1** | **+1.0** |
| | 410nm,0.9s,5μm | | | | | | |
| **XMI** | **Christmas Isla** | **6.89** | **256** | P | **Pn** | **06 11 01.4** | **-1.0** |
| **XMIS** | **Christmas Isla** | **6.94** | **256** | Pn | **Pn** | **06 11 01.5** | **-1.4** |
| **BASI** | **Bang, Sumba** | **8.11** | **101** | P | **Pn** | **06 11 20.6** | **+1.7** |
| | 205nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **8.14** | **63** | Pn | **Pn** | **06 11 19.4** | **-0.1** |
| **KAPI** | **Kappang** | **8.14** | **63** | Pn | **Pn** | **06 11 16.9** | **-2.6** |
| | 1.9nm,0.3s,baz=239,slow=14,SNR=1.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **06 12 45.0** | **-5.0** |
| | 0.9nm,0.3s,baz=60,slow=20,SNR=1.1 | | | | | | |
| KAPI | | | | LR | LR | 06 15 17.2 | |
| | comp=Z,136nm,20.8s,baz=200,slow=45 | | | | | | |
| **MTKI** | **Muara Teweh, K** | **8.18** | **17** | P | **Pn** | **06 11 23.3** | **+3.3** |
| **BSSI** | **Bau Bau, Buton** | **8.37** | **72** | P | **Pn** | **06 11 24.8** | **+2.2** |
| | 88nm,0.5s | | | | | | |
| **KASI** | **Kota Agung** | **8.57** | **292** | P | **Pn** | **06 11 29.5** | **+4.2** |
| **SPSI** | **Sidrap Palu** | **8.70** | **57** | P | **Pn** | **06 11 29.9** | **+2.9** |
| | 72nm,1.1s | | | | | | |
| **BNSI** | **Bone** | **8.75** | **60** | P | **Pn** | **06 11 31.4** | **+3.6** |
| | 60nm,1.0s,2μm | | | | | | |
| **STKI** | **Sintang** | **8.88** | **353** | P | **Pn** | **06 11 31.6** | **+2.1** |
| | 238nm,0.9s | | | | | | |
| **EDFI** | **Ende, Flores** | **9.10** | **90** | P | **Pn** | **06 11 32.8** | **+0.2** |
| | 113nm,0.6s,3μm | | | | | | |
| **PPBI** | **Pangkal Pinang** | **9.14** | **316** | P | **Pn** | **06 11 35.8** | **+2.7** |
| **LWLI** | **Liwa** | **9.17** | **294** | P | **Pn** | **06 11 34.6** | **+1.0** |
| | 240nm,0.8s | | | | | | |
| **MMRI** | **Maumere** | **9.64** | **90** | P | **Pn** | **06 11 40.3** | **+0.3** |
| **MMRI** | **Maumere** | **9.64** | **90** | Pn | **Pn** | **06 11 37.4** | **-2.6** |
| **MMRI** | **Maumere** | **9.64** | **90** | P | **Pn** | **06 11 41.5** | **+1.5** |
| | 102nm,0.6s | | | | | | |
| **KSM** | **Kuching** | **10.45** | **348** | P | **Pn** | **06 11 53.2** | **+2.3** |
| **KSM** | **Kuching** | **10.45** | **348** | | **Pn** | **06 11 52.2** | **+1.3** |
| **BATI** | **Baumata** | **11.11** | **98** | P | **Pn** | **06 12 00.1** | **+0.1** |
| | 64nm,0.5s | | | | | | |
| **SBUM** | **Sibu** | **11.20** | **359** | | **Pn** | **06 12 02.2** | **+1.1** |
| **SOEI** | **Soe** | **11.67** | **96** | P | **Pn** | **06 12 07.9** | **+0.2** |
| **SOEI** | **Soe** | **11.67** | **96** | Pn | **Pn** | **06 12 06.7** | **-1.0** |
| **SOEI** | **Soe** | **11.67** | **96** | P | **Pn** | **06 12 08.4** | **+0.7** |
| | 119nm,0.9s | | | | | | |
| **MPSI** | **Mapaga** | **11.72** | **39** | P | **Pn** | **06 12 11.3** | **+3.1** |
| | 27nm,0.6s | | | | | | |
| **TOLI2** | **Tolitoli** | **12.87** | **40** | P | **Pn** | **06 12 26.7** | **+2.9** |
| **TOLI2** | **Tolitoli** | **12.87** | **40** | Pn | **Pn** | **06 12 22.1** | **-1.7** |
| **MRSI** | **Marisa** | **13.19** | **46** | P | **P** | **06 12 33.8** | **-1.3** |
| **GIRL** | **Giralia** | **13.85** | **173** | Pn | **Pn** | **06 12 35.5** | **-1.2** |
| **GTOI** | **Gorontalo** | **14.08** | **49** | P | **P** | **06 12 43.1** | **-1.8** |
| | 48nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **14.12** | **151** | P | **Pn** | **06 12 37.8** | **-2.4** |
| **MBWA** | **Marble Bar** | **14.12** | **151** | Pn | **Pn** | **06 12 36.7** | **-3.5** |
| **MBWA** | **Marble Bar** | **14.12** | **151** | P | **Pn** | **06 12 36.7** | **-3.5** |
| | 69nm,0.7s,SNR=5.7 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **14.53** | **152** | P | **Pn** | **06 12 42.8** | **-2.8** |
| **PSA00** | **Pilbara Seismi** | **14.53** | **152** | | **Pn** | **06 12 43.8** | **-1.8** |
| **PSA00** | **Pilbara Seismi** | **14.53** | **152** | | **Pn** | **06 12 43.3** | **-2.3** |
| **PSA00** | **Pilbara Seismi** | **14.53** | **152** | P | **Pn** | **06 12 42.5** | **-3.0** |
| | 61nm,0.8s,SNR=5.7 | | | | | | |
| **SANI** | **Sanana** | **15.03** | **64** | P | **P** | **06 12 54.8** | **-0.7** |
| **SANI** | **Sanana** | **15.03** | **64** | P | **P** | **06 12 54.2** | **-1.3** |
| | 141nm,0.1s,1μm | | | | | | |
| **MYLDM** | **Lahad Datu** | **15.14** | **24** | Pn | **Pn** | **06 12 51.5** | **-2.0** |
| **FITZ** | **Fitzroy Crossi** | **15.77** | **127** | P | **Pn** | **06 13 01.3** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **15.77** | **127** | | **Pn** | **06 13 00.3** | **-1.0** |
| **LBMI** | **Labuha** | **17.02** | **62** | P | **P** | **06 13 19.2** | **+1.6** |
| | 160nm,1.2s,4μm | | | | | | |
| **MSAI** | **Masohi** | **17.23** | **73** | P | **P** | **06 13 21.3** | **+1.4** |
| **KNRA** | **Kununurra** | **17.30** | **115** | P | **P** | **06 13 21.6** | **+0.9** |
| **TNTI** | **Ternate** | **17.63** | **58** | P | **Pn** | **06 13 26.2** | **+1.8** |
| **TNTI** | **Ternate** | **17.63** | **58** | P | **Pn** | **06 13 24.6** | **+0.2** |
| **TNTI** | **Ternate** | **17.63** | **58** | P | **Pn** | **06 13 25.2** | **+0.8** |
| | 130nm,1.0s,2μm | | | | | | |
| **DRS** | **Darwin Rock St** | **18.45** | **103** | P | **Pn** | **06 13 35.6** | **+1.2** |
| **MEEK** | **Meekatharra** | **18.65** | **163** | P | **Pn** | **06 13 36.3** | **-0.4** |
| **MTN** | **Manton Dam** | **18.75** | **104** | P | **Pn** | **06 13 37.4** | **-0.5** |
| **MTN** | **Manton Dam** | **18.75** | **104** | P | **P** | **06 13 36.4** | **-0.2** |
| **KDU** | **Kakadu** | **20.01** | **103** | P | Pn | 06 13 52.7 | -0.1 |
| **SWI** | **Sorong** | **20.30** | **68** | P | Pn | 06 13 57.6 | +1.4 |
| | 87nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **20.42** | **171** | P | Pn | 06 13 54.8 | -2.7 |
| **DAV** | **Davao City (W)** | **20.48** | **40** | LR | LR | 06 22 13.1 | |
| | comp=Z,139nm,21.3s,baz=169,slow=38 | | | | | | |
| **FAKI** | **Fak Fak** | **20.51** | **75** | P | **P** | **06 13 54.8** | **-1.0** |
| **WRKA** | **Warakurna** | **22.07** | **139** | P | **P** | **06 14 14.2** | **+1.7** |
| **WRA** | **Warramunga Arr** | **23.85** | **120** | P | **P** | **06 14 30.9** | **+0.9** |
| | 4.8nm,0.4s,baz=296,slow=12,SNR=99 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 18 12.7** | **+1.3** |
| | 2.2nm,0.5s,baz=280,slow=1.9,SNR=4.8 | | | | | | |
| WRA | | | | LR | LR | 06 25 45.6 | |
| | comp=Z,88nm,19.4s,baz=18,slow=41 | | | | | | |
| | 4.8nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.86** | **120** | P | **P** | **06 14 31.0** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 06 14 50.2 | |
| | comp=Z,40nm,0.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.39** | **170** | LR | LR | 06 23 48.2 | |
| | comp=Z,263nm,21.8s,baz=9.5,slow=36 | | | | | | |
| **AS31** | **Alice Springs** | **25.26** | **128** | P | **P** | **06 14 42.9** | **0.0** |
| **ASAR** | **Alice Springs** | **25.26** | **128** | P | **P** | **06 14 43.7** | **+0.9** |
| **ASAR** | **Alice Springs** | **25.26** | **128** | P | **P** | **06 14 44.4** | **+1.5** |
| | comp=Z,6.6nm,0.4s,baz=304,slow=8.5,SNR=56 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 18 16.1** | **+1.7** |
| | comp=Z,2.9nm,0.6s,baz=313,slow=1.9,SNR=5.4 | | | | | | |
| | comp=Z,6.6nm,0.4s | | | | | | |
| **AS01** | **Alice Springs** | **25.30** | **128** | P | **P** | **06 14 44.6** | **+1.4** |
| **FORT** | **Forrest** | **26.25** | **148** | P | **P** | **06 14 54.2** | **+2.6** |
| **FORT** | **Forrest** | **26.25** | **148** | P | **P** | **06 14 53.8** | **+2.2** |
| FORT | | | | IAmb | IAmb | 06 15 26.8 | |
| | comp=Z,56nm,0.8s | | | | | | |
| **QIZ** | **Qiongzhong** | **27.79** | **355** | P | **P** | **06 15 07.2** | **+1.6** |
| QIZ | | | | S | **S** | **06 19 48.1** | **+5.3** |
| QIZ | | | | LR | LR | | |
| | comp=Z,210nm,18.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,180nm,15.0s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,320nm,33.1s | | | | | | |
| **OOD** | **Oodnadatta** | **28.91** | **134** | P | **P** | **06 15 17.4** | **+1.9** |
| **CMAR** | **Chiang Mai Arr** | **30.22** | **334** | P | **P** | **06 15 25.6** | **-1.4** |
| | comp=Z,4.8nm,0.7s,baz=169,slow=8.1,SNR=21 | | | | | | |
| CMAR | | | | PcP | **PcP** | **06 18 27.4** | **+0.9** |
| | comp=Z,2.3nm,0.5s,baz=173,slow=3.3,SNR=6.5 | | | | | | |
| CMAR | | | | LR | LR | 06 28 10.3 | |
| | comp=Z,156nm,20.6s,baz=155,slow=38 | | | | | | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **34.49** | **113** | P | **P** | **06 16 06.4** | **+1.8** |
| | comp=Z,0.3nm,0.6s,baz=286,slow=9.1,SNR=2.6 | | | | | | |
| CTA | | | | PcP | **PcP** | **06 18 39.5** | **+1.2** |
| | comp=Z,0.2nm,0.6s,baz=265,slow=2.8,SNR=1.4 | | | | | | |
| CTA | | | | LR | LR | 06 31 44.5 | |
| | comp=Z,8.0nm,18.5s,baz=284,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **35.45** | **134** | P | **P** | **06 16 15.1** | **+2.5** |
| **STKA** | **Stephens Creek** | **35.45** | **134** | P | **P** | **06 16 14.6** | **+1.9** |
| **STKA** | **Stephens Creek** | **35.45** | **134** | P | **P** | **06 16 14.6** | **+1.9** |
| | comp=Z,18nm,0.5s,baz=318,slow=8.7,SNR=50 | | | | | | |
| STKA | | | | PcP | **PcP** | **06 18 42.1** | **+1.3** |
| | comp=Z,8.4nm,0.5s,baz=316,slow=3.1,SNR=5.5 | | | | | | |
| STKA | | | | LR | LR | 06 31 23.4 | |
| | comp=Z,318nm,22.0s,baz=295,slow=37 | | | | | | |
| | comp=Z,18nm,0.5s | | | | | | |
| **GYA** | **Guiyang** | **35.52** | **351** | P | **P** | **06 16 17.5** | **+4.2** |
| GYA | | | | pP | pP | 06 16 35.1 | +2.7 |
| GYA | | | | S | **S** | **06 21 49.4** | **+6.2** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,150nm,3.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,220nm,22.5s | | | | | | |
| **PZH** | **PanZhiHua** | **36.63** | **344** | P | **P** | **06 16 26.8** | **+4.0** |
| PZH | | | | S | **S** | **06 22 04.3** | **+4.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,170nm,17.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,150nm,17.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,140nm,17.2s | | | | | | |
| **JOW** | **Kunigami** | **38.61** | **23** | LR | LR | 06 35 41.5 | |
| | comp=Z,67nm,18.9s,baz=126,slow=41 | | | | | | |
| **GUMO** | **Guam** | **39.10** | **56** | LR | LR | 06 31 38.5 | |
| | comp=Z,30nm,21.9s,baz=249,slow=34 | | | | | | |
| **H08S2** | **Diego Garcia H** | **39.58** | **269** | T | T | 06 58 53.8 | |
| | baz=95,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **39.59** | **269** | T | T | 06 58 54.4 | |
| | baz=95,slow=75 | | | | | | |
| **H08S1** | **Diego Carcia H** | **39.60** | **269** | T | T | 06 59 02.5 | |
| | baz=95,slow=75 | | | | | | |
| **SHL** | **Shillong** | **39.62** | **330** | P | **P** | **06 16 47.8** | **-0.3** |
| **CD2** | **Chengdu** | **40.38** | **348** | P | **P** | **06 16 53.7** | **-0.4** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| **NJ2** | **Nanjing** | **41.09** | **8** | *eP* | **P** | **06 17 02.2** | **+2.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **LYN** | **LuoYang** | **43.13** | **360** | P | **P** | **06 17 19.7** | **+3.2**

comp=Z,2.5nm,0.6s,baz=189,slow=2.6,SNR=4.0
SONM LR LR 06 46 08.0
comp=Z,134nm,18.5s,baz=154,slow=39
comp=Z,4.8nm,0.6s
**WMQ Urumqi 57.02 339** *eP* **P 06 19 03.8 +2.3**
WMQ LR LR
comp=Z,77nm,24.1s
**KSH Kashi 58.80 327** P P **06 19 12.1 -2.1**
KSH pmax pmax
comp=Z,7.0nm,0.8s
**TARG Taragay, Kyrgy 59.51 330** IAmb IAmb 06 19 21.5
comp=Z,5.9nm,0.8s
**SHLS Shalkode 59.83 333** *eP* **P 06 19 19.4 -1.7**
comp=Z,6.8nm,0.7s,baz=333
**UZB Uzynbulak 60.02 332** *eP* **P 06 19 21.8 -0.7**
comp=Z,8.8nm,0.6s,baz=332
**NRN Naryn 60.19 329** IAmb IAmb 06 19 23.5
comp=Z,7.4nm,0.9s
**SATY Saty 60.24 332** *eP* **P 06 19 23.3 -0.6**
comp=Z,4.6nm,0.6s,baz=332
**HEH HeiHe 60.25 11** *eP* **P 06 19 21.9 -1.8**
HEH pmax pmax
comp=Z,30nm,0.7s
**ZHN Zhinishke 60.31 332** *eP* **P 06 19 23.4 -1.0**
baz=332
**KPKS Kokpek 60.42 332** *eP* **P 06 19 24.3 -0.8**
comp=Z,6.6nm,0.7s,baz=332
**DRV Dumont d'Urvil 60.74 168** P P **06 19 29.5 +2.7**
**TNSS Tian-Shan 60.91 331** *eP* **P 06 19 27.7 -1.2**
baz=331
**MDOK Medeo 60.96 331** *eP* **P 06 19 28.0 -0.9**
baz=331
**BOOM Boomskoye usch 61.00 330** IAmb IAmb 06 19 29.8
comp=Z,10nm,1.0s
**AAA Alma-Ata 61.06 331** *eP* **P 06 19 28.6 -0.9**
baz=331
**TARA Tarawa 61.06 84** P P **06 19 30.2 +0.2**
**ZSN Zaisan 61.15 339** *eP* **P 06 19 29.2 -0.7**
baz=339
**TKM2 Tokmak 2 61.49 330** P P **06 19 31.8 -0.8**
SNR=17
**MK31 Makanchi Array 61.56 337** IAmb IAmb 06 19 32.5
comp=Z,6.5nm,0.7s
**MKAR Makanchi Array 61.56 337** P P **06 19 31.6 -1.1**
comp=Z,9.2nm,0.6s,baz=148,slow=7.0,SNR=114
MKAR LR LR 06 48 59.3
comp=Z,56nm,18.9s,baz=130,slow=39
comp=Z,9.2nm,0.6s
**KBK Karagaybulak 61.62 329** P P **06 19 33.2 -0.2**
SNR=11
**MAKZ Makanchi 61.69 337** P P **06 19 31.2 -2.3**
**MAKZ Makanchi 61.69 337** P P **06 19 32.6 -1.0**
**YSS Yuzh-Sakhalins 61.72 23** P P **06 19 33.0 -0.7**
**TDK Taldyqorghan 61.74 333** *eP* **P 06 19 33.0 -1.0**
comp=Z,5.7nm,0.4s,baz=333
**AAK Ala-Archa 61.83 329** P P **06 19 34.5 -0.3**
SNR=6.2
**AAK Ala-Archa 61.83 329** P P **06 19 33.8 -1.0**
AAK IAmb IAmb 06 19 36.2
comp=Z,12nm,0.9s
**AAK Ala-Archa 61.83 329** LR LR 06 49 32.6
comp=Z,43nm,19.2s,baz=106,slow=39
**AAK Ala-Archa 61.83 329** P P **06 19 34.6 -0.3**
**KUU Kurty 61.85 331** *eP* **P 06 19 33.7 -1.0**
baz=331
**AML Almayashu 61.88 328** P P **06 19 34.6 -0.9**
SNR=14
**CHGR Chuyangaron 62.08 323** IAmb IAmb 06 19 34.4
comp=Z,11nm,0.8s
**SIMJ Simiganj 62.17 322** P P **06 19 33.9 -3.2**
SIMJ IAmb IAmb 06 19 36.2
comp=Z,5.7nm,0.8s
**SIMJ Simiganj 62.17 322** P P **06 19 34.0 -3.1**
**EKS2 Erkin-Say 62.22 329** P P **06 19 36.9 -0.5**
SNR=18
**USP Ospenovka 62.29 329** P P **06 19 36.8 -0.9**
SNR=7.7
**SGDS Sogindy 62.36 330** *eP* **P 06 19 37.0 -1.2**
baz=330
**H04N2 CROZET ISLANDS 63.52 223** T T 07 29 39.4
baz=72
**H04N1 CROZET ISLANDS 63.54 223** T T 07 29 37.4
baz=72,slow=74
**H04N3 CROZET ISLANDS 63.54 223** T T 07 29 36.6
baz=72,slow=74
**BTLS Baital 63.80 331** *eP* **P 06 19 46.1 -1.5**
baz=331
**CHM Chimkent 64.22 326** *eP* **P 06 19 50.0 -0.5**
baz=326
**KKAR Karatay Array 64.25 327** P P **06 19 49.0 -1.6**
**KKAR Karatay Array 64.25 327** IAmb IAmb 06 19 51.0
comp=Z,5.7nm,0.7s
**UOSS Minazif 64.26 303** P P **06 19 50.1 -1.0**
**UOSS Minazif 64.26 303** P P **06 19 50.1 -1.0**
**BRLS Boroldday 64.56 327** *eP* **P 06 19 50.8 -1.9**
baz=326
**URZ Urewera 64.70 128** LR LR 06 49 53.3
comp=Z,122nm,19.0s,baz=23,slow=38
**SEM Semipalatinsk 65.30 338** *eP* **P 06 19 56.0 -1.6**
comp=Z,9.5nm,0.8s,baz=338
**KURBB Kurchatov Arra 66.12 337** P P **06 20 01.2 -1.3**
comp=Z,5.1nm,0.6s,baz=147,slow=6.3,SNR=34
comp=Z,5.1nm,0.6s
**KURK Kurchatov 66.16 337** P P **06 20 01.2 -1.6**
KURK IAmb IAmb 06 20 02.4
comp=Z,8.7nm,0.7s
**KURK Kurchatov 66.16 337** P P **06 20 01.5 -1.3**
**CCD Concordia, Ant 66.54 177** P P 06 20 09.2 +3.8
**ZAA0 Zalesovo Array 66.76 343** P P **06 20 04.7 -1.8**
ZAA0 IAmb IAmb 06 20 05.8
comp=Z,8.3nm,0.8s
**ZALV Zalesovo Beam 66.76 343** P P **06 20 05.1 -1.5**
**ZALV Zalesovo Beam 66.76 343** P P **06 20 04.9 -1.6**
comp=Z,7.6nm,0.5s,baz=153,slow=4.4,SNR=28
comp=Z,7.6nm,0.5s
**MAW Mawson 67.29 198** P P **06 20 10.8 +1.1**
comp=Z,1.1nm,0.4s,baz=69,slow=8.6,SNR=4.1
MAW LR LR 06 44 37.2
comp=Z,76nm,20.4s,baz=61,slow=32
comp=Z,1.1nm,0.4s
**BRVK Borovoye 71.31 335** P P **06 20 32.8 -2.0**
**YAK Yakutsk 71.89 8** P P **06 20 36.1 -2.0**
**YAK Yakutsk 71.89 8** P P **06 20 37.0 -1.0**
**RAYN Ar Rayn 72.88 298** P P **06 20 43.5 -1.3**
RAYN IAmb IAmb 06 23 15.1
comp=Z,17nm,0.7s
**VNDA Vanda 73.22 170** P P **06 20 46.8 +0.9**
comp=Z,0.7nm,0.4s,baz=310,slow=5.8,SNR=5.0
comp=Z,0.7nm,0.4s
**ABKAR Akbulak array 73.81 327** P P **06 20 48.7 -1.0**
**ABKAR Akbulak array 73.81 327** IAmb IAmb 06 20 49.7
comp=Z,26nm,0.7s
**KIBK Kibwezi 74.27 270** P P **06 20 51.8 -1.4**
**KMBO Kilima Mbogo 75.23 271** P P **06 20 58.7 -0.4**
**AKTO Aktyubinsk 75.51 327** LR LR 06 57 36.3
comp=Z,70nm,21.8s,baz=352,slow=38
**FURI Furi 75.58 282** LR LR 06 47 58.7
comp=Z,28nm,21.7s,baz=189,slow=31
**ARU Arti 78.65 333** P P **06 21 15.6 -1.3**
ARU IAmb IAmb 06 21 18.4
comp=Z,15nm,1.2s
**ARU Arti 78.65 333** LR LR 06 59 39.7
comp=Z,72nm,18.8s,baz=126,slow=39
**GNI Garni 79.10 314** LR LR 07 03 49.3
comp=Z,11nm,18.0s,baz=106,slow=42
**TIXI Tiksi 81.03 5** P P **06 21 27.9 -1.6**
TIXI IAmb IAmb 06 21 29.0
comp=Z,25nm,1.0s
**QSPA South Pole Qui 81.18 180** P P **06 21 31.8 +1.1**
QSPA IAmb IAmb 06 21 54.0
comp=Z,19nm,1.2s
**QSPA South Pole Qui 81.18 180** P P **06 21 32.7 +2.0**
comp=Z,3.4nm,0.9s,baz=319,slow=1.9,SNR=24
QSPA LR LR 06 56 03.9
comp=Z,81nm,20.6s,baz=360,slow=34
comp=Z,3.4nm,0.9s
**KBZ Khabaz 81.66 317** P P **06 21 33.0 -0.4**
comp=Z,11nm,0.9s,baz=121,slow=4.5,SNR=15
comp=Z,11nm,0.9s
**MBAR Mbarara 81.75 271** P P **06 21 34.4 -0.4**
MBAR IAmb IAmb 06 21 38.3
comp=Z,15nm,1.1s
**MBAR Mbarara 81.75 271** LR LR 06 53 10.0
comp=Z,21nm,19.3s,baz=216,slow=32
**BELG Belogornoye 82.13 326** LR LR 07 03 51.9
comp=Z,38nm,20.3s,baz=145,slow=40
**LSZ Lusaka 82.26 256** P P **06 21 37.8 +0.4**
LSZ IAmb IAmb 06 21 40.3
comp=Z,8.3nm,0.7s
**ASF Jabal al Asfar 82.65 304** P P **06 21 40.0 +1.0**
comp=Z,7.4nm,0.6s,baz=330,slow=0.2,SNR=5.2
comp=Z,7.4nm,0.6s
**BOSA Boshof 83.42 242** P P **06 21 44.8 +1.6**
comp=Z,9.5nm,1.0s,baz=127,slow=6.3,SNR=4.9
BOSA LR LR 06 53 19.7
comp=Z,55nm,18.1s,baz=74,slow=32
comp=Z,9.5nm,1.0s
**LBTB Lobatse 83.53 246** LR LR 06 55 32.4
comp=Z,42nm,18.5s,baz=124,slow=33
**EIL Elat 83.64 301** P P **06 21 44.3 +0.2**
comp=Z,17nm,1.0s,baz=314,slow=2.9,SNR=8.4
EIL LR LR 06 59 01.5
comp=Z,15nm,21.1s,baz=68,slow=36
comp=Z,17nm,1.0s
**MMAI Mount Meron Ar 84.08 305** P P **06 21 47.3 +1.0**
comp=Z,12nm,0.8s,baz=98,slow=5.7,SNR=5.7
comp=Z,12nm,0.8s
**SUR Sutherland 86.75 238** LR LR 06 54 32.0
comp=Z,51nm,20.2s,baz=105,slow=31
**BRTR Keskin Array B 87.10 311** P P **06 22 00.6 -0.7**
**BRTR Keskin Array B 87.10 311** P P **06 22 01.1 -0.1**
comp=Z,8.0nm,0.8s,baz=129,slow=7.2,SNR=25
comp=Z,8.0nm,0.8s
**BR131 Keskin Array S 87.10 311** IAmb IAmb 06 22 02.2
comp=Z,13nm,0.9s
**TROLL Troll, Antarti 87.71 197** ⇑Pdiff P 06 22 07.0 +3.4
comp=Z,69nm,0.6s
**SNAA Sanae 89.39 197** P P **06 22 12.7 +1.3**
SNAA IAmb IAmb 06 22 35.4
comp=Z,11nm,0.9s
**SNAA Sanae 89.39 197** ⇑Pdiff P **06 22 14.0 +2.5**
comp=Z,114nm,0.9s
**SNAA Sanae 89.39 197** P P **06 22 13.9 +2.5**
comp=Z,6.0nm,1.0s,baz=180,slow=3.1,SNR=26
SNAA LR LR 07 02 00.5
comp=Z,46nm,18.3s,baz=116,slow=35
comp=Z,6.0nm,1.0s
**VNA2 Neumayer--Watz 91.03 197** ⇑Pdiff P **06 22 21.6 +2.6**
comp=Z,3.2nm,0.7s,baz=108,slow=3.3
**VNA3 Neumayer Olymp 91.49 196** ⇑Pdiff P **06 22 23.7 +2.5**
comp=Z,3.8nm,0.9s
**BELA Belgrano 2 91.53 187** P P **06 22 20.4 -0.8**
**AK10 Malin Array Si 92.47 321** P P **06 22 25.0 -0.9**
**AKASG Malin Array Be 92.51 321** P P **06 22 25.2 -0.9**
comp=Z,1.6nm,0.5s,baz=87,slow=4.6,SNR=6.9
AKASG LR LR 07 10 43.0
comp=Z,14nm,19.3s,baz=78,slow=40
comp=Z,1.6nm,0.5s
**AKBB Malin Array Si 92.51 321** IAmb IAmb 06 22 25.8
comp=Z,5.3nm,0.7s
**AK01 Malin Array Si 92.51 321** P P **06 22 25.0 -1.1**
**KIEV Kiev 92.52 321** P P **06 22 24.7 -1.4**
KIEV IAmb IAmb 06 22 25.8
comp=Z,4.8nm,0.7s
**TBI Tubuai 93.86 114** *e*LR LR 06 52 47.2
comp=Z,990nm,29.5s
**PPT2 Papeete2 94.85 109** *e*LR LR 06 53 17.5
comp=Z,94nm,24.8s
**FINES FINESS Array B 95.96 331** P P **06 22 41.2 -0.5**
comp=Z,1.5nm,0.6s,baz=132,slow=5.7,SNR=8.3
FINES LR LR 07 11 13.6
comp=Z,30nm,18.2s,baz=83,slow=39
comp=Z,1.5nm,0.6s
**ARCES ARCESS Array B 97.14 339** LR LR 07 10 40.1
comp=Z,37nm,20.1s,baz=130,slow=38
**TAOE Nuku Hiva Isla 105.56 102** *e*LR LR 06 58 21.7
comp=Z,306nm,28.3s
**RKT Rikitea 106.82 117** *e*LR LR 06 58 55.5
comp=Z,1μm,39.0s
**YKA Yellowknife Ar 116.57 22** PKP **PKiKP 06 27 58.8 +0.5**
comp=Z,1.0nm,0.6s,baz=320,slow=2.1,SNR=17
**DBIC Dimbokro 117.93 273** PKP **PKiKP 06 28 02.9 +0.5**
comp=Z,3.5nm,0.6s,baz=189,slow=1.6,SNR=6.0
**B08A Colville Reser 121.40 38** **PKiKP 06 28 08.8 +0.5**
**MSO Missoula 125.34 38** PKPdf **PKPdf 06 28 13.1 -2.8**
**NVAR Mina Array Bea 125.80 49** PKP **PKiKP 06 28 19.1 +1.6**
comp=Z,1.5nm,0.8s,baz=256,slow=1.6,SNR=12
**CBX Cerro Bola 128.94 55** PKPdf **PKPdf 06 28 18.1 -5.0**
**PDAR Pinedale Array 130.06 40** PKP **PKiKP 06 28 26.6 +0.7**
comp=Z,0.4nm,0.5s,baz=214,slow=1.5,SNR=7.6
**ULM Lac du Bonnet 132.46 24** PKP **PKiKP 06 28 30.7 +0.5**
comp=Z,1.7nm,0.5s,baz=341,slow=2.2,SNR=5.3
**RSSD Black Hills 132.66 36** PKPdf **PKiKP 06 28 29.8 -1.4**
**SCHQ Schefferville 134.10 359** PKP **PKiKP 06 28 33.5 0.0**
comp=Z,2.6nm,0.6s,baz=37,slow=1.2,SNR=5.6
**TXAR Lajitas Array 140.45 54** PKhKP PKPpre 06 28 38.0
comp=Z,0.6nm,0.6s,baz=274,slow=2.5,SNR=8.2
**TRQ Mont Tremblant 142.24 8** **PKPdf 06 28 43.2 -4.1**
**BRDY Brady 143.16 48** PKPdf **PKPdf 06 28 47.3 -2.1**
**CPUP Villa Florida 143.69 196** PKP **PKiKP 06 28 50.8 -3.1**
comp=Z,3.2nm,0.6s,baz=144,slow=2.1,SNR=13
**H62A Milan 144.24 4** **PKPdf 06 28 49.5 -1.4**
**Y45A Yeager Farm, C 147.87 36** **PKiKP 06 29 01.4 -0.8**
**AQDB Aquidauana 148.66 202** PKPab **PKPab 06 29 04.1 -2.3**
**BDFB Brasilia 148.96 219** PKPab **PKiKP 06 29 04.2 -0.9**
**BDFB Brasilia 148.96 219** PKPbc **PKPab 06 29 05.5 -2.5**
comp=Z,7.4nm,0.6s,baz=178,slow=3.0,SNR=14
**LPAZ La Paz 155.05 179** PKP **PKPdf 06 29 11.1 +1.7**
comp=Z,0.8nm,0.9s,baz=187,slow=4.0,SNR=2.9
LPAZ PKPab **pPKPdf 06 29 36.0 +4.3**
comp=Z,1.3nm,0.6s,baz=104,slow=5.8,SNR=7.5

*NEIC **08** 06:10:25.9±1.8,6°.14S±0°.08×148°.7E±0°.1,h59km±7km, mb4.5/30,Error ellipse: s-maj=17.3km s-min=9.2km az=122.0*
*IDC **08** 06:10:26.7±4.5,6°.21S×148°.87E,h69km±41km,mb3.8/8, mbtmp4.2/10,ML2.6/2,MS3.7/2,Error ellipse: s-maj=31.6km s-min=27.4km az=87.0*
**ISC 08 06:10:26.1±0.5,6°.16S±0°.07×148°.70E±0°.10,h65km,n52, σ0§93/53,mb4.4/22,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.57** | **205** | | **Pn** | **06 11 19.7** | **+0.7** |
| PMG | | | | Sn | **Sn** | **06 11 59.0** | **-0.9** |
| **PMG** | **Port Moresby** | **3.57** | **205** | P | **Pn** | **06 11 20.3** | **+1.3** |
| | 34nm,0.3s,baz=65,slow=6.1,SNR=26 | | | | | | |
| PMG | | | | S | **Sn** | **06 11 59.8** | **-0.2** |
| | 396nm,0.8s,baz=184,slow=23,SNR=17 | | | | | | |
| PMG | | | | LR | LR | 06 12 41.8 | |
| | comp=Z,384nm,20.6s,baz=40,slow=38 | | | | | | |
| | 99nm,0.3s | | | | | | |
| **RABL** | **Rabaul** | **3.96** | **61** | | **Pn** | **06 11 23.5** | **-1.0** |
| **COEN** | **Coen** | **9.46** | **215** | Pn | **Pn** | **06 12 39.0** | **-0.8** |
| **HNR** | **Honiara** | **11.60** | **107** | LR | LR | 06 17 06.4 | |
| | comp=Z,1μm,20.1s,baz=101,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **14.05** | **190** | P | **Pn** | **06 13 43.9** | **+1.8** |
| | baz=230,slow=16,SNR=2.0 | | | | | | |
| CTA | | | | LR | LR | 06 18 57.6 | |
| | comp=Z,11nm,20.0s,baz=19,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **14.05** | **190** | Pn | **Pn** | **06 13 43.1** | **+1.0** |
| **EIDS** | **Eidsvold** | **19.23** | **173** | P | **P** | **06 14 44.8** | **-0.3** |
| **WRA** | **Warramunga Arr** | **19.56** | **224** | P | **P** | **06 14 49.2** | **+0.4** |
| | 11nm,0.4s,baz=51,slow=11,SNR=24 | | | | | | |
| **GUMO** | **Guam** | **19.99** | **349** | P | **P** | **06 14 52.7** | **-0.8** |
| **KNRA** | **Kununurra** | **21.72** | **243** | P | **P** | **06 15 11.9** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 06 15 28.7 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.48** | **218** | P | **P** | **06 15 20.3** | **0.0** |
| | comp=Z,7.3nm,0.5s,baz=53,slow=9.2,SNR=9.5 | | | | | | |
| | comp=Z,7.3nm,0.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.32** | **134** | P | **P** | **06 15 28.0** | **-0.8** |
| **DZM** | **Mont Dzumac** | **23.32** | **134** | P | **P** | **06 15 27.7** | **-1.1** |
| | comp=Z,2.9nm,0.7s,baz=300,slow=20,SNR=2.8 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **SOEI** | **Soe** | **24.46** | **260** | P | **P** | **06 15 38.5** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **25.44** | **240** | P | **P** | **06 15 46.6** | **-1.5** |
| **STKA** | **Stephens Creek** | **26.43** | **194** | P | **P** | **06 15 57.8** | **+0.9** |
| **STKA** | **Stephens Creek** | **26.43** | **194** | P | **P** | **06 15 58.2** | **+1.3** |
| | comp=Z,1.7nm,0.5s,baz=11,slow=14,SNR=3.0 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **WAKE** | **Wake Island** | **30.85** | **35** | P | **P** | **06 16 36.0** | **-0.3** |
| **FORT** | **Forrest** | **31.23** | **216** | P | **P** | **06 16 38.1** | **-1.4** |
| **LTZ** | **Lake Taylor** | **42.00** | **154** | P | **P** | **06 18 11.3** | **+0.3** |
| **USA0B** | **Ussuriysk Arra** | **52.35** | **345** | P | **P** | **06 19 30.6** | **-0.8** |
| **KIWB** | **Kanaga Island** | **64.74** | **23** | P | **P** | **06 20 57.6** | **+0.1** |
| **CASY** | **Casey** | **65.56** | **196** | P | **P** | **06 21 02.4** | **-0.2** |
| CASY | | | | IAmb | IAmb | 06 21 03.1 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **71.66** | **177** | P | **P** | **06 21 41.0** | **+0.6** |
| VNDA | | | | IAmb | IAmb | 06 21 42.3 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **O14K** | **Tigyukauivet M** | **76.31** | **24** | P | **P** | **06 22 06.9** | **-0.9** |
| **L14K** | **Kuka Creek** | **77.09** | **22** | P | **P** | **06 22 12.4** | **+0.3** |
| L14K | | | | IAmb | IAmb | 06 22 16.7 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **78.12** | **21** | P | **P** | **06 22 18.8** | **+0.9** |
| K15K | | | | IAmb | IAmb | 06 22 34.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **L16K** | **Owhat River** | **78.52** | **22** | P | **P** | **06 22 20.5** | **+0.4** |
| L16K | | | | IAmb | IAmb | 06 22 25.8 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **78.70** | **320** | P | **P** | **06 22 21.1** | **-0.3** |
| **MKAR** | **Makanchi Array** | **78.70** | **320** | P | **P** | **06 22 22.2** | **+0.7** |
| | comp=Z,0.4nm,0.5s,baz=101,slow=7.5,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **J17K** | **VABM Dome** | **79.69** | **21** | P | **P** | **06 22 27.4** | **+1.0** |
| J17K | | | | IAmb | IAmb | 06 22 33.0 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **L18K** | **Granite Mounta** | **79.89** | **23** | P | **P** | **06 22 29.0** | **+1.5** |
| L18K | | | | IAmb | IAmb | 06 22 41.4 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.06** | **327** | P | **P** | **06 22 30.4** | **+1.8** |
| | comp=Z,0.8nm,0.5s,baz=106,slow=5.7,SNR=2.2 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **L19K** | **White Mountain** | **80.58** | **23** | P | **P** | **06 22 32.1** | **+0.8** |
| L19K | | | | IAmb | IAmb | 06 22 49.5 | |
| | comp=Z,7.6nm,1.2s | | | | | | |
| **SUA** | **Susitna One** | **81.88** | **25** | P | **P** | **06 22 38.2** | **-0.2** |
| SUA | | | | IAmb | IAmb | 06 22 42.1 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.38** | **323** | P | **P** | **06 22 43.1** | **+2.1** |
| | comp=Z,0.3nm,0.4s,baz=134,slow=6.6,SNR=1.6 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **E19K** | **Redstone River** | **82.73** | **18** | P | **P** | **06 22 43.8** | **+1.3** |
| E19K | | | | IAmb | IAmb | 06 22 52.9 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **83.02** | **16** | P | **P** | **06 22 45.0** | **+1.0** |
| C19K | | | | IAmb | IAmb | 06 22 51.1 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **83.07** | **17** | P | **P** | **06 22 44.2** | **-0.1** |
| D19K | | | | IAmb | IAmb | 06 22 55.7 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.81** | **180** | P | **P** | **06 22 48.2** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 06 22 49.0 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.81** | **180** | P | **P** | **06 22 48.1** | **-0.2** |
| | comp=Z,3.5nm,0.7s,baz=315,slow=1.4,SNR=1.8 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **84.97** | **23** | P | **P** | **06 22 53.4** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=244,slow=4.5,SNR=16 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **J25K** | **Salcha River,** | **85.49** | **23** | P | **P** | **06 22 56.4** | **-0.2** |
| **M27K** | **Edge Creek, AK** | **86.06** | **26** | P | **P** | **06 23 01.2** | **+1.6** |
| **D25K** | **Kavik River** | **87.13** | **19** | P | **P** | **06 23 05.1** | **+0.5** |
| D25K | | | | IAmb | IAmb | 06 23 18.3 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **I28M** | **Miner Creek** | **87.94** | **23** | P | **P** | **06 23 08.1** | **-0.6** |
| **E27K** | **Coleen River** | **88.28** | **21** | P | **P** | **06 23 11.7** | **+1.6** |
| **SAML** | **Samuel** | **144.85** | **115** | | **PKPab** | **06 29 55.6** | **-0.4** |
| **PTLB** | **Pontes e Lacer** | **145.05** | **128** | | **PKPbc** | **06 29 56.4** | **-0.1** |
| **VILB** | **Vilhena** | **145.57** | **124** | | **PKPdf** | **06 29 57.7** | **-0.4** |
| **TORD** | **Torodi Ar, Bea** | **146.77** | **285** | PKPbc | **PKPbc** | **06 30 01.8** | **-0.1** |
| | comp=Z,2.9nm,0.8s,baz=78,slow=2.8,SNR=26 | | | | | | |

*TEH **08** 06:11:32.0,38°.70N×48°.90E,h13km±241km,ML2.7*
*AZER **08** 06:11:34.9,38°.76N×48°.67E,h34km,ml2.7*
**ISC 08 06:11:35.7±1.3,38.70N±0°.04×48.79E±0°.04,h41km±7km, n25,σ1§12/40,Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **0.01** | **322** | P | **Pn** | **06 11 42.0** | **-0.1** |
| LKRN | | | | S | **Sn** | **06 11 47.2** | **+0.5** |
| **ASTR** | **Astara** | **0.14** | **179** | P | **Pn** | **06 11 42.8** | **+0.2** |
| ASTR | | | | S | **Sn** | **06 11 48.7** | **+1.3** |
| **LRK** | **Lerik** | **0.36** | **261** | P | **Pn** | **06 11 44.1** | **-0.7** |
| LRK | | | | S | **Sn** | **06 11 50.9** | **-0.3** |
| **YRD** | **Yardimli** | **0.48** | **297** | P | **Pn** | **06 11 44.9** | **-1.5** |
| YRD | | | | S | **Sn** | **06 11 52.0** | **-1.9** |
| **GLBA** | **Clilabad** | **0.62** | **330** | P | **Pn** | **06 11 46.8** | **-1.3** |
| GLBA | | | | S | **Sn** | **06 11 56.2** | **-0.8** |
| **GRMI** | **Germi** | **0.71** | **279** | Pg | **Pn** | **06 11 47.9** | **-1.5** |
| **SAAT** | **Saatly** | **1.19** | **346** | P | **Pn** | **06 11 56.7** | **+0.8** |
| SAAT | | | | S | **Sn** | **06 12 12.5** | **+1.6** |
| **ISRB** | **Sarab** | **1.24** | **226** | Pg | **Pn** | **06 11 56.9** | **+0.1** |
| **QRD** | **Qoradiz** | **1.37** | **304** | P | **Pn** | **06 11 58.1** | **-0.3** |
| QRD | | | | S | **Sn** | **06 12 14.6** | **-0.8** |
| **BLQ** | **Beylaqan** | **1.40** | **317** | P | **Pn** | **06 11 58.0** | **-0.7** |
| BLQ | | | | S | **Sn** | **06 12 15.3** | **-0.6** |
| **IHRS** | **Heris** | **1.42** | **255** | Pg | **Pn** | **06 11 59.5** | **+0.2** |
| **KDMR** | **Kurdemir** | **1.74** | **345** | Sn | **Sn** | **06 12 23.7** | **-0.5** |
| **AGDM** | **Agdam** | **1.92** | **318** | Pn | **Pn** | **06 12 07.7** | **+1.8** |
| AGDM | | | | Sn | **Sn** | **06 12 29.2** | **+0.4** |
| **BRDA** | **Brd** | **2.00** | **322** | Pn | **Pn** | **06 12 07.4** | **+0.4** |
| BRDA | | | | Sn | **Sn** | **06 12 33.4** | **+2.7** |
| **JIR1** | **Jirandeh** | **2.15** | **158** | Pn | **Pn** | **06 12 08.9** | **-0.2** |
| **ORD** | **Ordubad** | **2.20** | **277** | Pn | **Pn** | **06 12 10.7** | **+1.0** |
| ORD | | | | Sn | **Sn** | **06 12 36.6** | **+0.9** |
| **XNQ** | **Khinaliq** | **2.52** | **349** | Pn | **Pn** | **06 12 15.8** | **+1.5** |
| XNQ | | | | Sn | **Sn** | **06 12 42.5** | **-1.4** |
| **SBZ** | **Shahbuz** | **2.61** | **286** | Pn | **Pn** | **06 12 17.0** | **+1.5** |
| SBZ | | | | Sn | **Sn** | **06 12 47.1** | **+1.0** |
| **GANJ** | **Ganja** | **2.72** | **316** | Pn | **Pn** | **06 12 16.1** | **-0.8** |
| GANJ | | | | Sn | **Sn** | **06 12 46.4** | **-2.2** |
| **SEKA** | **Sheki** | **2.79** | **334** | Pn | **Pn** | **06 12 17.9** | **+0.1** |
| SEKA | | | | Sn | **Sn** | **06 12 50.6** | **+0.3** |
| **KLST** | **Kelardasht - M** | **2.83** | **140** | Pn | **Pn** | **06 12 18.3** | **-0.3** |
| **GDB** | **GEDABAY** | **3.09** | **312** | Pn | **Pn** | **06 12 22.9** | **+0.7** |
| **MZPU** | **Pul - Mazandar** | **3.16** | **135** | Pn | **Pn** | **06 12 22.5** | **-0.6** |
| **IPRN** | **Peran** | **3.74** | **130** | Pn | **Pn** | **06 12 30.7** | **-0.3** |
| **MRVT** | **Maraveh tapeh** | **5.84** | **98** | Pn | **Pn** | **06 12 59.0** | **-0.9** |

*TEH **08** 06:22:17.7,32°.87N×46°.09E,h8km±72km,ML3.6*
*ISN **08** 06:22:17.7±0.6,32°.93N×46°.12E,h3km,2km,ML3.2*
**ISC 08 06:22:19.2±1.2,32.92N±0°.07×46.13E±0°.04,h10km,n21, σ1§42/24,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBDR** | **Badra** | **0.25** | **319** | *e*Pg | **Pg** | **06 22 23.0** | **-1.3** |
| IBDR | | | | *e*Sg | **Sg** | **06 22 26.0** | **-1.8** |
| IBDR | | | | AML | AML | 06 22 31.5 | |
| | comp=N,4μm,0.8s | | | | | | |
| IBDR | | | | AML | AML | 06 22 36.6 | |
| | comp=E,2μm,0.4s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **0.70** | **6** | Pg | **Pg** | **06 22 32.0** | **-0.9** |
| **GLG1** | **Gilan-e-Gharb** | **1.20** | **351** | Pg | **Pg** | **06 22 42.2** | **-0.2** |
| **IGHG** | **Ghaleghazi** | **1.45** | **15** | Pg | **Pb** | **06 22 46.1** | **-0.4** |
| **BHD** | **Baghdad** | **1.51** | **284** | *e*Pn | **Pg** | **06 22 47.0** | **-1.1** |
| BHD | | | | *e*Sn | **Sg** | **06 23 09.0** | **+1.3** |
| BHD | | | | AML | AML | 06 23 26.7 | |
| | comp=E,630nm,0.4s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **1.55** | **29** | Pg | **Pg** | **06 22 48.4** | **-0.5** |
| **IKFM** | **Kafar-mosalman** | **1.56** | **67** | Pg | **Pg** | **06 22 48.8** | **-0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **1.64** | **344** | Pg | **Pg** | **06 22 49.9** | **-0.8** |
| **IDHR** | **Dehrash** | **1.79** | **7** | Pn | **Pb** | **06 22 52.1** | **0.0** |
| **ILIN** | **Lien** | **2.11** | **19** | Pn | **Pb** | **06 22 56.2** | **-1.5** |
| **IBZA** | **Bozab** | **2.12** | **43** | Pn | **Pb** | **06 22 56.2** | **-1.6** |
| **SNQR** | **Sonqor, Kerman** | **2.30** | **32** | Pn | **Pb** | **06 22 59.9** | **-1.1** |
| **HSAM** | **Samen** | **2.44** | **57** | Pn | **Pb** | **06 23 00.8** | **-2.4** |
| **IKRK** | **Kirkuk** | **2.88** | **330** | *e*Pn | **Pn** | **06 23 06.2** | **+1.0** |
| IKRK | | | | *e*Sn | **Sn** | **06 23 42.0** | **+2.1** |
| IKRK | | | | AML | AML | 06 24 08.5 | |
| | comp=E,140nm,0.6s | | | | | | |
| IKRK | | | | AML | AML | 06 24 09.1 | |
| | comp=N,132nm,0.5s | | | | | | |
| **JHBN** | **Jahan bin** | **3.89** | **99** | Pn | **Pn** | **06 23 19.7** | **+0.3** |
| **IPIR** | **Pirpir** | **4.02** | **92** | P

baz=68,slow=316,SNR=2.3
**ZALV Zalesovo Beam 1.34 248** Pg Pg 06 24 53.1 -1.6
0.8nm,0.3s,baz=64,slow=17,SNR=8.3
ZALV Lg Lg 06 25 12.2
1.0nm,0.3s,baz=65,slow=26,SNR=4.4
**KURBB Kurchatov Arra 6.41 236** Pn Pn 06 26 05.4 +0.9
0.1nm,0.3s,baz=54,slow=14,SNR=7.2
KURBB Sn Sn 06 27 17.8 -0.6
baz=62,slow=43,SNR=2.1
1.0nm,0.6s
**MKAR Makanchi Array 8.23 203** Pn Pn 06 26 30.6 +1.0
0.1nm,0.3s,baz=17,slow=38,SNR=1.7
0.1nm,0.4s

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**IDC 08 06:55:17.1±2.6, 53°.89N×86°.56E, h0km, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=21.3km s-min=13.4km az=64.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.03** | **274** | I | I | 07 02 00.0 | |
| | baz=89,slow=316,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.03** | **274** | Pg | Pg | 06 55 35.8 | -1.1 |
| | 0.7nm,0.3s,baz=90,slow=15,SNR=3.8 | | | | | | |
| ZALV | | | | Lg | Lg | 06 55 52.0 | |
| | 2.1nm,0.3s,baz=96,slow=31,SNR=9.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **240** | Pn | Pn | 06 56 47.0 | +1.0 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=2.3 | | | | | | |
| KURBB | | | | Lg | Lg | 06 58 23.0 | |
| | baz=49,slow=31,SNR=1.5 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.61** | **203** | Pn | Pn | 06 57 10.4 | +1.1 |
| | 0.1nm,0.3s,baz=22,slow=12,SNR=6.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

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*IDC **08** 06:58:07.1±0.7, 44°.41N×149°.53E, h0km, mb4.0/19, mbtmp3.9/24, ML3.6/5, MS3.7/33, Error ellipse: s-maj=19.6km s-min=15.0km az=165.0*

*NIED **08** 06:58:09.9, 44°.48N×149°.55E, h30km, MW4.3, Moment Tensor Solution. s3 Moment tenso: Scale 10^15^Nm; Mrr2.55; Mθθ-1.26; Mφφ-1.30; Mrθ-0.02; Mθφ-1.61; Mφr1.87; Fault plane solution: M0 3.31000×10^15 NP1:θ=22.00000°, δ62.00000°, λ,66.00000°. NP2:θ=246.00000°, δ36.00000°, λ128.00000°.*

*JMA **08** 06:58:09.9±0.7, 44°.N±3°×15°.0E±°, h30km, MV4.5/14, SE OFF ETOROFU*

*SKHL **08** 06:58:09.6±0.4, 44°.10N×149°.80E, h40km±5km, mb5.0/5*

*BJI **08** 06:58:10.1±0.0, 44°.26N×149°.94E, h51km, mb4.8/15, mB5.0/5, Ms4.2/8, Ms7 4.2/9*

*MOS **08** 06:58:10.7±1.1, 44°.34N×149°.48E, h36km, mb4.6/16, Error ellipse: s-maj=7.9km s-min=7.0km az=132.9*

*NEIC **08** 06:58:15.9±1.2, 44°.6N±0°.2×149°.2E±0°.2, h44km±12km, mb4.5/36, Error ellipse: s-maj=23.8km s-min=16.2km az=150.0*

**ISC 08 06:58:07.9±1.2, 44°.21N±0°.07×149°.50E±0°.05, h6km±6km, n166, σ1$40/154, mb4.3/47, MS3.7/31, 8C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.55** | **312** | *i* P | **Pg** | **06 58 36.8** | **-0.8** |
| KUR | | | | AMB | AMB | 06 58 38.1 | |
| | 2μm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sg** | **06 58 57.1** | **-0.5** |
| KUR | | | | A | A | 06 59 06.1 | |
| | 1μm,0.4s | | | | | | |
| KUR | | | | A | A | 06 59 06.1 | |
| | 3μm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.55** | **312** | *c i* PN | **Pg** | **06 58 36.7** | **-0.8** |
| KUR | | | | *e*S | **Sg** | **06 58 58.2** | **+0.6** |
| KUR | | | | pmax | pmax | | |
| | comp=N,689nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,211nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,1μm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **261** | *e*P | **Pn** | **06 58 41.9** | **+0.4** |
| SHO | | | | AMB | AMB | 06 58 43.6 | |
| | comp=N,110nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **06 59 05.8** | **-0.5** |
| SHO | | | | A | A | 06 59 18.8 | |
| | comp=N,580nm,0.5s | | | | | | |
| SHO | | | | A | A | 06 59 18.8 | |
| | comp=N,800nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **261** | *e*PN | **Pn** | **06 58 42.5** | **+1.0** |
| SHO | | | | *e*S | **Sn** | **06 59 04.9** | **-1.4** |
| SHO | | | | pmax | pmax | | |
| | comp=E,72nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,110nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,48nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,797nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,626nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.62** | **267** | *e*P | **Pn** | **06 58 52.2** | **+1.5** |
| YUK | | | | AMB | AMB | 06 58 58.1 | |
| | comp=N,170nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **06 59 24.1** | **+1.2** |
| YUK | | | | A | A | 06 59 33.6 | |
| | comp=N,1μm,0.5s | | | | | | |
| YUK | | | | A | A | 06 59 33.6 | |
| | comp=N,980nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.62** | **267** | *e*PN | **Pn** | **06 58 52.2** | **+1.5** |
| YUK | | | | *e*S | **Sn** | **06 59 24.5** | **+1.6** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,174nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,134nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,93nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,1μm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.85** | **254** | *e*P | **Pn** | **06 58 54.1** | **+0.3** |
| NEM2 | | | | *e*S | **Sn** | **06 59 26.4** | **-2.0** |
| **NMR** | **Nemuro--Hokkai** | **2.86** | **254** | *e*P | **Pn** | **06 58 54.2** | **+0.3** |
| NMR | | | | *e*S | **Sn** | **06 59 27.7** | **-0.9** |
| **NMR** | **Nemuro--Hokkai** | **2.86** | **254** | *e*PN | **Pn** | **06 58 53.9** | **0.0** |
| NMR | | | | *e*S | **Sn** | **06 59 28.2** | **-0.4** |
| **RUSJ** | **Misakicho** | **3.06** | **269** | *e*PN | **Pn** | **06 58 58.9** | **+2.2** |
| RUSJ | | | | *e*S | **Sn** | **06 59 37.6** | **+4.0** |
| **JRA** | **Rausu** | **3.17** | **267** | *e*P | **Pn** | **06 59 00.4** | **+2.2** |
| **JNK** | **Nakash** | **3.51** | **261** | *e*P | **Pn** | **06 59 04.5** | **+1.6** |
| **AKK** | **Akkeshi** | **3.59** | **252** | *e*P | **Pn** | **06 59 05.2** | **+1.3** |
| AKK | | | | *e*S | **Sn** | **06 59 46.0** | **-0.6** |
| **JAK** | **Akkeshi** | **3.69** | **252** | *e*P | **Pn** | **06 59 05.8** | **+0.4** |
| JAK | | | | *e*S | **Sn** | **06 59 46.9** | **-2.3** |
| **JTKR** | **Abashiri--Toko** | **4.04** | **269** | *e*P | **Pn** | **06 59 12.1** | **+2.0** |
| **JAR** | **Ashorobuto** | **4.25** | **260** | *e*P | **Pn** | **06 59 15.2** | **+2.1** |
| **JOB** | **Onbets** | **4.32** | **254** | *e*P | **Pn** | **06 59 15.1** | **+1.0** |
| JOB | | | | *e*S | **Sn** | **07 00 04.1** | **-0.5** |
| **JCH** | **Churui** | **4.75** | **252** | *e*P | **Pn** | **06 59 21.2** | **+1.3** |
| **JKA** | **Kamikawa-asahi** | **4.96** | **271** | Pn | **Pn** | **06 59 27.0** | **+4.1** |
| **JKA** | **Kamikawa-asahi** | **4.96** | **271** | *e*P | **Pn** | **06 59 27.0** | **+4.1** |
| **ASAJ** | **Asahikawa** | **4.97** | **271** | Pn | **Pn** | **06 59 24.9** | **+2.0** |
| | comp=N,3.1nm,0.3s,baz=70,slow=12,SNR=7.4 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **07 00 21.9** | **+1.3** |
| | baz=273,slow=19 | | | | | | |
| ASAJ | | | | LR | LR | 07 01 46.1 | |
| | comp=N,1μm,18.9s,baz=144,slow=44 | | | | | | |
| | comp=N,9.7nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **4.97** | **271** | PN | **Pn** | **06 59 27.0** | **+4.1** |
| **ERM** | **Erimo** | **5.13** | **247** | | **Pn** | **06 59 27.8** | **+2.6** |
| **ERM** | **Erimo** | **5.13** | **247** | *i* PN | **Pn** | **06 59 27.7** | **+2.5** |
| **JNBK** | **Urakawa-nobuka** | **5.29** | **251** | *e*P | **Pn** | **06 59 28.1** | **+0.7** |
| **YSS** | **Yuzh-Sakhalins** | **5.47** | **302** | *e*P | **Pn** | **06 59 32.4** | **+2.6** |
| YSS | | | | AMB | AMB | 06 59 34.6 | |
| | comp=N,20nm,0.4s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.47** | **302** | *e*PN | **Pn** | **06 59 27.6** | **-2.2** |
| YSS | | | | MLR | MLR | | |
| | comp=Z,900nm,14.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,600nm,16.0s | | | | | | |
| **JANG** | **Nango** | **7.05** | **240** | *e*S | Sn | 07 01 04.6 | -7.4 |
| **JTH** | **Tanohata** | **7.10** | **236** | *e*S | Sn | 07 01 05.2 | -8.1 |
| **JTM** | **Tenmabayashi** | **7.11** | **244** | Pn | **Pn** | **06 59 53.4** | **+1.1** |
| **SKR** | **Severo-Kuril's** | **7.87** | **32** | *e*P | **Pn** | **07 00 03.2** | **+0.4** |
| SKR | | | | AMB | AMB | 07 00 06.3 | |
| | comp=N,600nm,4.0s | | | | | | |
| SKR | | | | AMB | AMB | 07 00 07.7 | |
| | comp=N,30nm,0.4s | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.87** | **32** | *e*PN | **Pn** | **07 00 03.2** | **+0.4** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,38nm,1.0s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,600nm,4.3s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,700nm,12.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=N,1μm,14.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=E,500nm,12.0s | | | | | | |
| **JMM** | **Marumori** | **9.13** | **229** | Pn | Pn | 07 00 30.0 | +10 |
| **PET** | **Petropavlovsk** | **10.69** | **31** | *e*P | **Pn** | **07 00 43.3** | **+1.9** |
| **PET** | **Petropavlovsk** | **10.69** | **31** | *i* PN | **Pn** | **07 00 43.3** | **+1.9** |
| PET | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.52** | **232** | Pn | **Pn** | **07 00 56.0** | **+3.2** |
| | comp=Z,0.1nm,0.3s,baz=28,slow=14,SNR=2.9 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.52** | **232** | PN | **Pn** | **07 00 56.0** | **+3.2** |
| **USA0B** | **Ussuriysk Arra** | **12.57** | **276** | Pn | **Pn** | **07 01 08.4** | **+1.3** |
| **USA0B** | **Ussuriysk Arra** | **12.57** | **276** | *i* PN | **Pn** | **07 01 07.8** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **12.57** | **276** | Pn | **Pn** | **07 01 09.1** | **+2.0** |
| **USRK** | **Ussuriysk Ar.** | **12.57** | **276** | Pn | **Pn** | **07 01 07.5** | **+0.4** |
| | comp=Z,0.8nm,0.3s,baz=82,slow=13,SNR=16 | | | | | | |
| USRK | | | | LR | LR | 07 06 28.8 | |
| | comp=Z,366nm,18.6s,baz=101,slow=40 | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.57** | **276** | PN | **Pn** | **07 01 09.1** | **+2.0** |
| **VLA** | **Vladivostok** | **12.80** | **271** | *i* PN | **Pn** | **07 01 13.5** | **+3.2** |
| **KLR** | **Kul'dur** | **13.16** | **299** | Pn | **Pn** | **07 01 15.6** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=97,slow=12,SNR=1.6 | | | | | | |
| KLR | | | | LR | LR | 07 06 53.0 | |
| | comp=Z,394nm,19.0s,baz=90,slow=40 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **KLR** | **Kul'dur** | **13.16** | **299** | *i* PN | **Pn** | **07 01 15.5** | **+0.3** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **15.41** | **2** | LR | LR | 07 07 53.7 | |
| | comp=Z,209nm,18.6s,baz=193,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **17.64** | **255** | LR | LR | 07 09 01.6 | |
| | comp=Z,114nm,18.3s,baz=60,slow=37 | | | | | | |
| **JNU** | **Nakatsue** | **18.23** | **239** | LR | LR | 07 08 13.5 | |
| | comp=Z,37nm,21.1s,baz=24,slow=33 | | | | | | |
| **SEY** | **Seymchan** | **18.83** | **4** | P | **P** | **07 02 25.8** | **-2.3** |
| | comp=Z,0.5nm,0.3s,baz=102,slow=6.5,SNR=5.0 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **SEY** | **Seymchan** | **18.83** | **4** | *e*P | **Pn** | **07 02 28.9** | **+0.4** |
| **SEY** | **Seymchan** | **18.83** | **4** | *ce*P | **Pn** | **07 02 28.9** | **+0.4** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **YAK** | **Yakutsk** | **21.29** | **334** | LR | LR | 07 11 44.0 | |
| | comp=Z,206nm,18.0s,baz=131,slow=39 | | | | | | |
| **YAK** | **Yakutsk** | **21.29** | **334** | *i* P | **P** | **07 02 54.2** | **-0.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **BILL** | **Bilibino** | **25.47** | **15** | *e*P | **P** | **07 03 37.5** | **+1.3** |
| **BILL** | **Bilibino** | **25.47** | **15** | *e*P | **P** | **07 03 37.5** | **+1.3** |
| BILL | | | | *e* | | 07 04 16.9 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,188nm,15.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.42** | **292** | *e*P | **P** | **07 04 13.9** | **+1.8** |
| **ULN** | **Ulaanbaatar** | **29.42** | **292** | *ce*P | **P** | **07 04 13.9** | **+1.8** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **29.86** | **292** | P | **P** | **07 04 16.0** | **+0.1** |
| | comp=Z,0.9nm,0.4s,baz=85,slow=6.7,SNR=7.1 | | | | | | |
| SONM | | | | LR | LR | 07 17 34.8 | |
| | comp=Z,240nm,18.4s,baz=87,slow=39 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **GUMO** | **Guam** | **30.77** | **189** | LR | LR | 07 18 59.4 | |
| | comp=Z,38nm,18.3s,baz=12,slow=40 | | | | | | |
| **C18K** | **Utukok River** | **35.08** | **29** | P | **P** | **07 05 02.0** | **+0.6** |
| C18K | | | | IAmb | IAmb | 07 05 05.8 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **G18K** | **Tagagawik** | **35.31** | **34** | P | **P** | **07 05 03.9** | **+0.6** |
| G18K | | | | IAmb | IAmb | 07 05 09.6 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **35.78** | **28** | P | **P** | **07 05 07.8** | **+0.5** |
| **D19K** | **Kuna River** | **36.12** | **30** | P | **P** | **07 05 10.5** | **+0.3** |
| **H19K** | **Roundabout Mou** | **36.14** | **35** | P | **P** | **07 05 11.6** | **+1.3** |
| **E19K** | **Redstone River** | **36.20** | **32** | P | **P** | **07 05 11.8** | **+1.0** |
| E19K | | | | IAmb | IAmb | 07 05 13.5 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **B20K** | **Meade River** | **36.85** | **27** | P | **P** | **07 05 16.3** | **-0.1** |
| **IMAR** | **Indian Mountai** | **37.31** | **34** | P | **P** | **07 05 20.6** | **+0.2** |
| **G21K** | **Allakaket** | **37.47** | **34** | P | **P** | **07 05 22.8** | **+1.1** |
| **B21K** | **Ikpikpuk River** | **37.62** | **28** | | **P** | **07 05 23.4** | **+0.5** |
| **H21K** | **Melozitna Rive** | **37.66** | **35** | P | **P** | **07 05 24.3** | **+1.0** |
| **D22K** | **Ayikyak River** | **38.14** | **30** | | **P** | **07 05 28.2** | **+0.8** |
| D22K | | | | IAmb | IAmb | 07 05 29.7 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **38.17** | **27** | P | **P** | **07 05 28.3** | **+0.7** |
| B22K | | | | IAmb | IAmb | 07 06 12.7 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **38.34** | **31** | P | **P** | **07 05 29.5** | **+0.4** |
| **H23K** | **Yukon River** | **39.01** | **35** | P | **P** | **07 05 36.1** | **+1.4** |
| H23K | | | | IAmb | IAmb | 07 06 17.4 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **39.02** | **28** | P | **P** | **07 05 34.9** | **+0.1** |
| C23K | | | | IAmb | IAmb | 07 05 36.9 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **39.06** | **36** | P | **P** | **07 05 36.5** | **+1.4** |
| **TOLK** | **Toolik Lake Re** | **39.23** | **30** | P | **P** | **07 05 37.2** | **+0.7** |
| TOLK | | | | IAmb | IAmb | 07 05 38.7 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **39.56** | **30** | P | **P** | **07 05 38.8** | **-0.5** |
| D24K | | | | IAmb | IAmb | 07 05 53.7 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **39.58** | **31** | IAmb | IAmb | 07 05 42.0 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **F24K** | **Squaw Lake** | **39.77** | **32** | P | **P** | **07 05 43.1** | **+2.1** |
| **G24K** | **Hadweenzic Riv** | **39.89** | **34** | P | **P** | **07 05 43.6** | **+1.6** |
| **ILAR** | **Eielson Array** | **40.11** | **37** | P | **P** | **07 05 46.1** | **+2.3** |
| **ILAR** | **Eielson Array** | **40.11** | **37** | P | **P** | **07 05 43.4** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=274,slow=8.5,SNR=7.3 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **40.44** | **30** | P | **P** | **07 05 47.1** | **+0.5** |
| D25K | | | | IAmb | IAmb | 07 05 53.1 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **41.04** | **32** | P | **P** | **07 05 53.4** | **+1.8** |
| **DGZ** | **Jazzator, Alta** | **41.65** | **300** | *i* P | **P** | **07 05 57.0** | **+0.1** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.07** | **307** | P | **P** | **07 05 59.4** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=77,slow=8.0,SNR=2.6 | | | | | | |
| ZALV | | | | LR | LR | 07 24 32.5 | |
| | comp=Z,121nm,19.1s,baz=62,slow=38 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **K27K** | **Chicken** | **42.24** | **38** | P | **P** | **07 06 01.9** | **+0.5** |
| **BCAR** | **Beaver Creek A** | **42.48** | **39** | P | **P** | **07 06 04.1** | **+0.7** |
| **I30M** | **Mount Dempster** | **44.52** | **35** | P | **P** | **07 06 20.3** | **+0.4** |
| I30M | | | | IAmb | IAmb | 07 06 47.2 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **45.87** | **298** | P | **P** | **07 06 30.8** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 07 06 32.5 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **45.87** | **298** | *ce*P | **P** | **07 06 30.8** | **+0.1** |
| **MKAR** | **Makanchi Array** | **45.87** | **298** | P | **P** | **07 06 30.9** | **+0.1** |
| **MKAR** | **Makanchi Array** | **45.87** | **298** | P | **P** | **07 06 30.1** | **-0.7** |
| | comp=Z,4.3nm,0.7s,baz=77,slow=8.2,SNR=32 | | | | | | |
| MKAR | | | | LR | LR | 07 27 11.0 | |
| | comp=Z,345nm,18.0s,baz=71,slow=38 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.87** | **298** | *e*P | **P** | **07 06 30.9** | **+0.1** |
| **MKAR** | **Makanchi Array** | **45.87** | **298** | *e*P | **P** | **07 06 30.9** | **+0.1** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **46.06** | **298** | P | **P** | **07 06 32.3** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 07 06 34.0 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **46.06** | **298** | P | **P** | **07 06 32.3** | **0.0** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.67** | **304** | P | **P** | **07 06 36.3** | **-0.6** |
| KURK | | | | IAmb | IAmb | 07 06 39.8 | |
| | comp=Z,5.8nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **46.67** | **304** | *e*P | **P** | **07 06 37.1** | **+0.1** |
| **KURK** | **Kurchatov** | **46.67** | **304** | *i* P | **P** | **07 06 37.1** | **+0.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.76** | **304** | P | **P** | **07 06 36.2** | **-1.5** |
| | comp=Z,1.2nm,0.2s,baz=74,slow=8.1,SNR=9.5 | | | | | | |
| KURBB | | | | LR | LR | 07 27 02.6 | |
| | comp=Z,58nm,20.8s,baz=164,slow=37 | | | | | | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| **DLBC** | **Dease Lake** | **49.19** | **43** | LR | LR | 07 28 23.0 | |
| | comp=Z,51nm,20.9s,baz=301,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.28** | **255** | LR | LR | 07 30 53.9 | |
| | comp=Z,56nm,19.6s,baz=75,slow=40 | | | | | | |
| **AAK** | **Ala-Archa** | **52.68** | **296** | LR | LR | 07 31 32.5 | |
| | comp=Z,61nm,18.9s,baz=30,slow=38 | | | | | | |
| **BBB** | **Bella Bella** | **52.68** | **50** | LR | LR | 07 29 47.5 | |
| | comp=Z,17nm,19.4s,baz=282,slow=36 | | | | | | |
| **RES** | **Resolute Bay** | **54.03** | **17** | LR | LR | 07 34 04.3 | |
| | comp=Z,58nm,19.6s,baz=16,slow=40 | | | | | | |
| **ARSB** | **Arslanbob** | **54.31** | **296** | P | **P** | **07 07 35.2** | **+0.2** |
| **ARSB** | **Arslanbob** | **54.31** | **296** | P | **P** | **07 07 35.2** | **+0.2** |
| ARSB | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.47** | **35** | P | **P** | **07 07 34.2** | **-1.4** |
| | comp=Z,0.3nm,0.7s,baz=301,slow=6.7,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **54.99** | **299** | P | **P** | **07 07 39.4** | **-0.4** |
| **KKAR** | **Karatay Array** | **54.99** | **299** | IAmb | IAmb | 07 07 40.1 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **54.99** | **299** | P | **P** | **07 07 39.4** | **-0.4** |
| **ARU** | **Arti** | **55.16** | **317** | LR | LR | 07 33 37.4 | |
| | comp=Z,181nm,18.5s,baz=53,slow=39 | | | | | | |
| **ARU** | **Arti** | **55.16** | **317** | *d i* P | **P** | **07 07 39.7** | **-1.1** |
| ARU | | | | | | 07 09 41.5 | |
| ARU | | | | S | **S** | **07 15 22.2** | **-1.7** |
| ARU | | | | SS | **SS** | **07 19 03.9** | **-3.3** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **BTK** | **Batken** | **56.37** | **295** | P | **P** | **07 07 49.9** | **+0.1** |
| BTK | | | | IAmb | IAmb | 07 07 52.8 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **BTK** | **Batken** | **56.37** | **295** | P | **P** | **07 07 49.9** | **+0.1** |
| BTK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.09** | **309** | P | **P** | **07 08 01.7** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 07 08 03.2 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.09** | **309** | P | **P** | **07 08 01.4** | **-0.3** |
| **SIMJ** | **Simiganj** | **58.31** | **295** | P | **P** | **07 08 03.4** | **-0.2** |
| **AKTO** | **Aktyubinsk** | **58.51** | **311** | LR | LR | 07 35 31.7 | |
| | comp=Z,95nm,18.1s,baz=40,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.40** | **340** | LR | LR | 07 39 02.9 | |
| | comp=Z,28nm,19.0s,baz=296,slow=42 | | | | | | |
| **BELG** | **Belogornoye** | **62.71** | **318** | LR | LR | 07 38 19.6 | |
| | comp=Z,106nm,18.7s,baz=63,slow=39 | | | | | | |
| **JMIC** | **Jan Mayen** | **64.03** | **352** | LR | LR | 07 36 20.1 | |
| | comp=Z,27nm,18.5s,baz=332,slow=36 | | | | | | |
| **FINES** | **FINESS Array B** | **65.22** | **334** | P | **P** | **07 08 48.4** | **-1.2** |
| | comp=Z,2.8nm,0.5s,baz=39,slow=8.6,SNR=19 | | | | | | |
| FINES | | | | LR | LR | 07 41 43.2 | |
| | comp=Z,62nm,18.1s,baz=12,slow=40 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **65.22** | **334** | *e*P | **P** | **07 08 48.8** | **-0.8** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.33** | **196** | P | **P** | **07 08 51.5** | **+0.8** |
| | comp=Z,0.7nm,0.8s,baz=15,slow=6.4,SNR=4.9 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.89** | **59** | P | **P** | **07 08 54.4** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=281,slow=8.0,SNR=3.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **OBN** | **Obninsk** | **65.93** | **325** | *e*P | **P** | **07 08 54.5** | **+0.2** |
| **OBN** | **Obninsk** | **65.93** | **325** | *e*P | **P** | **07 08 54.5** | **+0.2** |
| OBN | | | | *e* | | 07 09 27.6 | |
| OBN | | | | *e* | | 07 11 17.7 | |
| OBN | | | | *e*SS | SS | 07 21 49.3 | -6.4 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,68nm,17.0s | | | | | | |
| **ELK** | **Elko** | **66.32** | **56** | LR | LR | 07 33 55.8 | |
| | comp=Z,27nm,21.9s,baz=352,slow=32 | | | | | | |
| **PDAR** | **Pinedale Array** | **68.31** | **51** | P | **P** | **07 09 09.1** | **-0.8** |
| | comp=Z,0.3nm,0.7s,baz=240,slow=5.0,SNR=4.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **69.04** | **195** | P | **P** | **07 09 15.8** | **+1.6** |
| | comp=Z,0.5nm,0.8s,baz=24,slow=5.1,SNR=5.0 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **NC405** | **NORSAR Array S** | **69.58** | **340** | P | **P** | **07 09 15.6** | **-1.7** |
| **NB201** | **NORSAR Array S** | **69.74** | **340** | P | **P** | **07 09 17.8** | **-0.5** |
| **NB2** | **NORSAR Subarra** | **69.77** | **340** | P | **P** | **07 09 17.8** | **-0.6** |
| | comp=Z,1.5nm,0.5s,baz=29,slow=6.5 | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.77** | **340** | P | **P** | **07 09 15.6** | **-2.8** |
| **NOA** | **NORSAR Array B** | **69.77** | **340** | P | **P** | **07 09 17.2** | **-1.2** |
| | comp=Z,1.8nm,0.5s,baz=32,slow=6.6,SNR=15 | | | | | | |
| NOA | | | | LR | LR | 07 46 15.4 | |
| | comp=Z,21nm,18.1s,baz=25,slow=42 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **69.77** | **340** | *e*P | **P** | **07 09 17.9** | **-0.5** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **69.91** | **338** | P | **P** | **07 09 17.8** | **-1.5** |
| | comp=Z,4.7nm,0.6s,baz=46,slow=5.0,SNR=21 | | | | | | |
| HFS | | | | LR | LR | 07 43 04.6 | |
| | comp=Z,39nm,20.3s,baz=30,slow=39 | | | | | | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **NORES** | **NORESS Array B** | **69.95** | **339** | P | **P** | **07 09 19.1** | **-0.4** |
| **KIV** | **Kislovodsk** | **70.71** | **313** | *e*P | **P** | **07 09 25.2** | **+0.7** |
| **KIV** | **Kislovodsk** | **70.71** | **313** | *e*P | **P** | **07 09 25.2** | **+0.7** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,130nm,18.0s | | | | | | |
| **KBZ** | **Khabaz** | **70.

comp=Z,27nm,19.3s,baz=6.5,slow=39
**TEIG Tepich 96.97 53** LR LR 07 57 53.9
comp=Z,15nm,20.1s,baz=218,slow=37
**H03N2 Juan Fernandez 141.27 91** T T 09 55 44.1
baz=304,slow=77
**H03N3 Juan Fernandez 141.28 91** T T 09 55 45.2
baz=304,slow=77
**H03N1 Juan Fernandez 141.29 91** T T 09 55 41.7
baz=304,slow=77

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*IDC **08** 07:04:48.1±9.5, 12.°69S×166.°92E, h282km±107km, mb3.1/5, mbtmp3.7/6, Error ellipse: s-maj=84.1km s-min=25.7km az=163.0*
**ISC 08 07:04:42.6**±1.0, **12.°4S**±0.°1×**166.°8E**±0.°2, **h220**km, **n6**, σ1§**49**/**7**, **mb3.4**/5, **Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **9.63** | **182** | P | **Pn** | **07 06 58.9** | **+2.0** |
| DZM | 1.2nm,0.4s,baz=27,slow=18,SNR=12 | | | S | **S** | **07 08 43.0** | **-2.2** |
| | 3.2nm,1.0s,baz=38,slow=18,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.05** | **252** | P | **P** | **07 10 48.9** | **-0.2** |
| | 0.4nm,0.4s,baz=83,slow=9.0,SNR=6.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **33.17** | **246** | P | **P** | **07 10 58.8** | **-0.1** |
| | 0.4nm,0.6s,baz=73,slow=9.3,SNR=6.4 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.45** | **18** | P | **P** | **07 16 49.6** | **-0.5** |
| | 0.5nm,0.6s,baz=225,slow=5.9,SNR=12 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.08** | **49** | P | **P** | **07 16 59.0** | **-0.2** |
| | 0.2nm,0.6s,baz=214,slow=6.4,SNR=2.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **95.23** | **317** | P | **P** | **07 17 41.4** | **+0.1** |
| | 0.5nm,0.8s,baz=97,slow=5.6,SNR=4.8 | | | | | | |
| | 0.5nm,0.8s | | | | | | |

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*NEIC **08** 07:15:43.8±1.0, 16.°1S±0.°1×175.°8W±0.°1, h360km±7km, mb4.3/22, Error ellipse: s-maj=18.1km s-min=16.0km az=159.0*
*IDC **08** 07:15:46.6±2.8, 16.°11S×176.°01W, h381km±24km, mb3.6/5, mbtmp4.3/7, Error ellipse: s-maj=28.9km s-min=22.7km az=129.0*
**ISC 08 07:15:43.6**±0.6, **16.°10S**±0.°10×**175.°79W**±0.°07, **h360**km, **n37**, σ0§**82**/**42**, **mb4.2**/19, **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **4.44** | **61** | | **Pn** | **07 16 58.0** | **+0.1** |
| AFI | | | | Sn | **S** | **07 17 56.7** | **-1.2** |
| **MSVF** | **Nonsavu** | **6.12** | **254** | | **Pn** | **07 17 17.5** | **+1.3** |
| **MSVF** | **Nonsavu** | **6.12** | **254** | P | **Pn** | **07 17 17.7** | **+1.5** |
| | 16nm,0.6s,baz=62,slow=18,SNR=11 | | | | | | |
| MSVF | | | | S | **S** | **07 18 33.3** | **+2.0** |
| | 13nm,1.0s,baz=298,slow=20,SNR=2.1 | | | | | | |
| **NIUE** | **Niue** | **6.32** | **119** | Pn | **Pn** | **07 17 18.7** | **+0.2** |
| NIUE | | | | Sn | **S** | **07 18 35.8** | **+0.3** |
| **RAO** | **Raoul Island** | **13.24** | **188** | | **P** | **07 18 38.1** | **-0.3** |
| **LIFNC** | **LIFOU** | **16.76** | **251** | P | **P** | **07 19 16.1** | **-0.7** |
| **PINNC** | **Pines Island,** | **17.09** | **245** | P | **P** | **07 19 19.9** | **-0.5** |
| **DZM** | **Mont Dzumac** | **17.81** | **248** | P | **P** | **07 19 26.7** | **-1.5** |
| **DZM** | **Mont Dzumac** | **17.81** | **248** | P | **P** | **07 19 26.9** | **-1.2** |
| | 6.2nm,0.8s,baz=78,slow=20,SNR=5.7 | | | | | | |
| **MLZ** | **Mavora Lakes** | **32.16** | **202** | P | **P** | **07 21 38.4** | **-0.6** |
| MLZ | | | | IAmb | IAmb | 07 22 06.8 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **32.68** | **201** | P | **P** | **07 21 43.6** | **+0.3** |
| WHZ | | | | IAmb | IAmb | 07 21 44.8 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **33.02** | **239** | P | **P** | **07 21 46.4** | **-0.3** |
| ARMA | | | | IAmb | IAmb | 07 22 23.6 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **CTA** | **Charters Tower** | **36.25** | **258** | P | **P** | **07 22 12.3** | **-1.8** |
| | comp=Z,0.3nm,0.8s,baz=78,slow=11,SNR=2.2 | | | | | | |
| **CAN** | **Canberra** | **36.79** | **232** | P | **P** | **07 22 17.9** | **-0.6** |
| CAN | | | | IAmb | IAmb | 07 22 56.5 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **COEN** | **Coen** | **39.65** | **267** | P | **P** | **07 22 42.5** | **+0.2** |
| **TOO** | **Toolangi** | **40.25** | **230** | P | **P** | **07 22 47.1** | **+0.1** |
| TOO | | | | IAmb | IAmb | 07 22 49.1 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **41.70** | **240** | P | **P** | **07 22 57.6** | **-1.1** |
| **STKA** | **Stephens Creek** | **41.70** | **240** | P | **P** | **07 22 58.4** | **-0.2** |
| | comp=Z,1.8nm,0.3s,baz=108,slow=7.0,SNR=6.4 | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **BBOO** | **Buckleboo** | **46.48** | **240** | P | **P** | **07 23 35.5** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 07 24 01.2 | |
| | comp=Z,35nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **47.26** | **258** | P | **P** | **07 23 42.1** | **-0.2** |
| **WB0** | **Warramunga Arr** | **47.41** | **258** | P | **P** | **07 23 43.1** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 07 23 43.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **47.44** | **258** | P | **P** | **07 23 43.0** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 07 23 43.9 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.45** | **258** | P | **P** | **07 23 43.0** | **-0.8** |
| **WRA** | **Warramunga Arr** | **47.45** | **258** | P | **P** | **07 23 43.3** | **-0.5** |
| | comp=Z,6.9nm,0.5s,baz=92,slow=6.8,SNR=197 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 25 07.6** | **-0.2** |
| | comp=Z,0.5nm,0.5s,baz=97,slow=3.5,SNR=2.5 | | | | | | |
| | comp=Z,6.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **47.71** | **253** | P | **P** | **07 23 45.4** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 07 23 46.7 | |
| | comp=Z,9.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **47.71** | **253** | P | **P** | **07 23 45.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **47.71** | **253** | P | **P** | **07 23 45.4** | **-0.4** |
| | comp=Z,28nm,0.5s,baz=86,slow=8.0,SNR=524 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 25 08.8** | **+0.1** |
| | comp=Z,0.7nm,0.6s,baz=95,slow=4.9,SNR=2.6 | | | | | | |
| **MTN** | **Manton Dam** | **51.39** | **266** | P | **P** | **07 24 13.0** | **-0.3** |
| MTN | | | | IAmb | IAmb | 07 24 29.5 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **FORT** | **Forrest** | **53.05** | **243** | P | **P** | **07 24 24.2** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **55.82** | **259** | P | **P** | **07 24 44.6** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **60.80** | **254** | P | **P** | **07 25 18.7** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 07 25 19.7 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **60.96** | **254** | P | **P** | **07 25 19.7** | **-0.6** |
| MBWA | | | | IAmb | IAmb | 07 25 27.7 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **GIRL** | **Giralia** | **65.83** | **252** | P | **P** | **07 25 51.8** | **0.0** |
| **QSPA** | **South Pole Qui** | **73.95** | **180** | P | **P** | **07 26 41.1** | **+0.9** |
| | comp=Z,2.8nm,0.9s,baz=58,slow=3.2,SNR=14 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **83.59** | **12** | P | **P** | **07 27 32.4** | **+0.6** |
| | comp=Z,0.7nm,0.5s,baz=216,slow=5.2,SNR=26 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.66** | **24** | P | **P** | **07 28 11.2** | **+1.0** |
| | comp=Z,0.3nm,0.7s,baz=236,slow=4.4,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.20** | **318** | PKPbc | **PKPbc** | **07 34 40.1** | **+0.5** |
| | comp=Z,1.9nm,0.7s,baz=119,slow=1.7,SNR=4.8 | | | | | | |

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*IDC **08** 07:28:32.8±4.9, 12.°80S×75.°11W, h100km±40km, mb3.3/2, mbtmp3.9/4, Error ellipse: s-maj=74.3km s-min=32.7km az=45.0*
**ISC 08 07:28:31.8**±1.5, **12.°8S**±0.°3×**75.°2W**±0.°3, **h96**km, **n6**, σ1§**78**/**6**, **Central Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **7.67** | **118** | P | **Pn** | **07 30 21.7** | **+0.3** |
| | 1.4nm,0.3s,baz=292,slow=8.1,SNR=29 | | | | | | |
| **ROSC** | **El Rosal** | **17.55** | | 3 P | **P** | **07 32 29.3** | **-1.4** |
| | 6.9nm,0.4s,baz=158,slow=8.1,SNR=2.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **50.11** | **327** | P | **P** | **07 37 19.3** | **+1.8** |
| | 0.3nm,0.7s,baz=148,slow=8.6,SNR=2.8 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.46** | **74** | P | **P** | **07 40 34.1** | **+0.4** |
| | 1.2nm,0.8s,baz=280,slow=4.8,SNR=5.5 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **136.36** | **222** | PKP | **PKPdf** | **07 47 41.3** | **-2.0** |
| | 0.8nm,1.0s,baz=131,slow=2.1,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **145.06** | **358** | PKPbc | **PKPbc** | **07 47 57.2** | **-0.6** |
| | 0.5nm,0.6s,baz=336,slow=3.2,SNR=1.8 | | | | | | |

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**ISC 08 07:30:14.4**±1.2, **68.°09N**±0.°02×**136.°08W**±0.°02, **h5**km±9km, **n51**, σ1§**22**/**75**, **Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **F30M** | **Barrier River** | **0.49** | **167** | P | **Pg** | **07 30 23.8** | **0.0** |
| | baz=348,SNR=224 | | | | | | |
| F30M | | | | S | **Sg** | **07 30 31.0** | **+0.9** |
| | baz=348 | | | | | | |
| **E29M** | **Blow River** | **0.74** | **295** | P | **Pg** | **07 30 28.8** | **+0.2** |
| | baz=112,SNR=135 | | | | | | |
| E29M | | | | S | **Sb** | **07 30 39.8** | **-0.4** |
| | baz=112 | | | | | | |
| **INK** | **Inuvik** | **0.98** | **76** | P | **Pb** | **07 30 32.7** | **-1.1** |
| | baz=259,SNR=69 | | | | | | |
| INK | | | | S | **Sb** | **07 30 45.6** | **-1.4** |
| | baz=259 | | | | | | |
| **F31M** | **Tsiigehtchic** | **1.10** | **125** | P | **Pg** | **07 30 35.8** | **+0.3** |
| | baz=308,SNR=32 | | | | | | |
| F31M | | | | S | **Sn** | **07 30 50.8** | **-1.1** |
| | baz=308 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **1.11** | **183** | P | **Pb** | **07 30 35.6** | **-0.5** |
| | baz=2.9,SNR=132 | | | | | | |
| G30M | | | | S | **Sn** | **07 30 51.4** | **-0.9** |
| | baz=2.9 | | | | | | |
| **G31M** | **Satah River** | **1.36** | **148** | P | **Pb** | **07 30 40.2** | **-0.1** |
| | baz=331,SNR=165 | | | | | | |
| G31M | | | | S | **Sg** | **07 30 58.8** | **+0.8** |
| | baz=331 | | | | | | |
| **E28M** | **Babbage River** | **1.38** | **294** | P | **Pb** | **07 30 40.4** | **-0.4** |
| | baz=110,SNR=35 | | | | | | |
| E28M | | | | S | **Sg** | **07 30 59.7** | **+0.9** |
| | baz=110 | | | | | | |
| **G29M** | **Pine Creek** | **1.40** | **213** | P | **Pg** | **07 30 41.2** | **+0.1** |
| | baz=31,SNR=30 | | | | | | |
| G29M | | | | S | **Sg** | **07 31 01.1** | **+1.9** |
| | baz=31 | | | | | | |
| **F28M** | **Old Crow** | **1.52** | **253** | P | **Pb** | **07 30 42.7** | **-0.2** |
| | baz=69,SNR=73 | | | | | | |
| F28M | | | | S | **Sg** | **07 31 03.5** | **+0.5** |
| | baz=69 | | | | | | |
| **D28M** | **Stokes Point** | **1.58** | **323** | S | **Sg** | **07 31 06.1** | **+1.0** |
| | baz=140 | | | | | | |
| **EPYK** | **Eagle Plains** | **1.74** | **189** | S | **Sg** | **07 31 10.1** | **-0.2** |
| | baz=7.9 | | | | | | |
| **E27K** | **Coleen River** | **2.07** | **275** | P | **Pn** | **07 30 50.1** | **+0.3** |
| | baz=90,SNR=11 | | | | | | |
| E27K | | | | Sb | **Sg** | **07 31 20.6** | **-0.1** |
| | baz=90 | | | | | | |
| **H29M** | **Whitestone** | **2.08** | **207** | P | **Pb** | **07 30 51.0** | **-1.6** |
| | baz=24,SNR=56 | | | | | | |
| H29M | | | | Sb | **Sg** | **07 31 21.1** | **0.0** |
| | baz=24 | | | | | | |
| **D27M** | **Malcolm River** | **2.13** | **305** | P | **Pb** | **07 30 51.7** | **-1.8** |
| | baz=120 | | | | | | |
| D27M | | | | Sb | **Sg** | **07 31 22.3** | **-0.4** |
| | baz=120 | | | | | | |
| **G27K** | **Doyon Strip** | **2.50** | **242** | P | **Pn** | **07 30 56.5** | **+0.8** |
| | baz=56,SNR=9.1 | | | | | | |
| G27K | | | | S | **Sb** | **07 31 28.1** | **-2.8** |
| | baz=56 | | | | | | |
| **H27K** | **Steamboat Moun** | **2.83** | **231** | P | **Pn** | **07 31 01.4** | **+1.2** |
| | baz=46 | | | | | | |
| H27K | | | | S | **Sb** | **07 31 36.4** | **-3.8** |
| | baz=46 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **2.88** | **199** | Sb | **Sg** | **07 31 44.7** | **-2.0** |
| | baz=17 | | | | | | |
| **I30M** | **Mount Dempster** | **2.88** | **183** | P | **Pn** | **07 31 02.2** | **+1.2** |
| | baz=2.3,SNR=20 | | | | | | |
| I30M | | | | S | **Sn** | **07 31 37.3** | **+1.3** |
| | baz=2.3 | | | | | | |
| **I28M** | **Miner Creek** | **3.06** | **212** | P | **Pn** | **07 31 04.4** | **+1.0** |
| | baz=28,SNR=10 | | | | | | |
| **F26K** | **Sheenjek River** | **3.08** | **266** | P | **Pn** | **07 31 04.4** | **+0.8** |
| | baz=78 | | | | | | |
| **C27K** | **Jago River** | **3.17** | **303** | P | **Pn** | **07 31 06.0** | **+1.1** |
| | baz=115 | | | | | | |
| **G26K** | **Porcupine Rive** | **3.17** | **253** | P | **Pn** | **07 31 05.6** | **+0.7** |
| | baz=65 | | | | | | |
| **I27K** | **Kandik River** | **3.32** | **224** | P | **Pn** | **07 31 08.3** | **+1.4** |
| | baz=38 | | | | | | |
| **J30M** | **Hart River** | **3.53** | **182** | P | **Pn** | **07 31 11.2** | **+1.3** |
| | baz=1.6,SNR=5.4 | | | | | | |
| J30M | | | | S | **Sn** | **07 31 52.9** | **+0.8** |
| | baz=1.6 | | | | | | |
| **F25K** | **Christian Rive** | **3.66** | **267** | S | **Sn** | **07 31 56.4** | **+1.3** |
| | baz=77 | | | | | | |
| **C26K** | **Camden Bay** | **3.67** | **304** | P | **Pn** | **07 31 13.4** | **+1.6** |
| | baz=116 | | | | | | |
| **EGAK** | **Eagle** | **3.90** | **214** | P | **Pn** | **07 31 16.1** | **+1.3** |
| | baz=29 | | | | | | |
| EGAK | | | | S | **Sn** | **07 32 02.3** | **+1.4** |
| | baz=29 | | | | | | |
| **D25K** | **Kavik River** | **3.96** | **293** | P | **Pn** | **07 31 16.4** | **+0.7** |
| | baz=103 | | | | | | |
| D25K | | | | S | **Sn** | **07 32 04.2** | **+1.8** |
| | baz=103 | | | | | | |
| **I26K** | **Coal Creek Min** | **3.96** | **229** | S | **Sn** | **07 32 03.2** | **+0.8** |
| | baz=42 | | | | | | |
| **G25K** | **Bearman Lake** | **4.09** | **256** | P | **Pn** | **07 31 18.1** | **+0.8** |
| | baz=66 | | | | | | |
| G25K | | | | S | **Sn** | **07 32 06.8** | **+1.3** |
| | baz=66 | | | | | | |
| **DAWY** | **Dawson** | **4.26** | **200** | P | **Pn** | **07 31 21.3** | **+1.4** |
| | baz=17 | | | | | | |
| DAWY | | | | S | **Sn** | **07 32 11.5** | **+1.7** |
| | baz=17 | | | | | | |
| **K29M** | **Barlow Dome** | **4.30** | **189** | P | **Pn** | **07 31 22.5** | **+2.0** |
| | baz=7.2,SNR=13 | | | | | | |
| K29M | | | | S | **Sn** | **07 32 12.7** | **+1.7** |
| | baz=7.2 | | | | | | |
| **F24K** | **Squaw Lake** | **4.52** | **268** | S | **Sn** | **07 32 15.3** | **-0.9** |
| | baz=77 | | | | | | |
| **PRP** | **Porcupine Dome** | **4.54** | **240** | S | **Sn** | **07 32 18.1** | **+1.2** |
| | baz=51 | | | | | | |
| **C36M** | **Paulatuk** | **4.55** | **68** | P | **Pn** | **07 31 24.1** | **+0.3** |
| | baz=260 | | | | | | |
| C36M | | | | S | **Sn** | **07 32 16.3** | **-0.7** |
| | baz=260 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **4.61** | **258** | S | **Sn** | **07 32 19.5** | **+0.9** |
| | baz=67 | | | | | | |
| **E24K** | **Your Creek** | **4.65** | **276** | P | **Pn** | **07 31 26.4** | **+1.2** |
| | baz=84 | | | | | | |
| E24K | | | | S | **Sn** | **07 32 19.7** | **+0.2** |
| | baz=84 | | | | | | |
| **J26L** | **Joseph Creek** | **4.70** | **224** | S | **Sn** | **07 32 21.7** | **+1.0** |
| | baz=36 | | | | | | |
| **K27K** | **Chicken** | **4.75** | **214** | S | **Sn** | **07 32 23.3** | **+1.4** |
| | baz=28 | | | | | | |
| **C24K** | **Franklin Bluff** | **4.84** | **296** | S | **Sn** | **07 32 25.8** | **+1.6** |
| | baz=104 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **5.03** | **283** | S | **Sn** | **07 32 30.1** | **+1.4** |
| | baz=90 | | | | | | |
| **L29M** | **L29M** | **5.07** | **191** | S | **Sn** | **07 32 30.6** | **+0.7** |
| | baz=8.7 | | | | | | |
| **E23K** | **Chandalar** | **5.08** | **276** | P | **Pn** | **07 31 32.3** | **+1.2** |
| | baz=83 | | | | | | |
| **J25K** | **Salcha River,** | **5.11** | **231** | S | **Sn** | **07 32 31.8** | **+0.9** |
| | baz=43 | | | | | | |
| **H24K** | **Noodor Dome** | **5.15** | **250** | S | **Sn** | **07 32 32.7** | **+0.8** |
| | baz=58 | | | | | | |
| **A36M** | **Sachs Harbour** | **5.39** | **38** | P | **Pn** | **07 31 36.1** | **+0.9** |
| | baz=229,SNR=18 | | | | | | |
| **C23K** | **Itkillik River** | **5.52** | **295** | P | **Pn** | **07 31 38.0** | **+1.0** |
| | baz=101 | | | | | | |
| C23K | | | | S | **Sn** | **07 32 39.6** | **-1.2** |
| | baz=101 | | | | | | |
| **G23K** | **Bananza Creek** | **5.55** | **262** | S | **Sn** | **07 32 41.2** | **-0.5** |
| | baz=69 | | | | | | |
| **H23K** | **Yukon River** | **5.75** | **253** | S | **Sn** | **07 32 46.1** | **-0.5** |
| | baz=60 | | | | | | |
| **M29M** | **Somme Creek** | **5.75** | **191** | P | **Pn** | **07 31 41.7** | **+1.2** |
| | baz=8.9 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **6.56** | **298** | P | **Pn** | **07 31 52.2** | **+0.8** |
| | baz=102 | | | | | | |

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*IDC **08** 07:31:36.1±0.5, 13.°77N×146.°43E, h0km, mb4.9/33, mbtmp4.9/33, MS4.0/55, Error ellipse: s-maj=14.0km s-min=11.9km az=99.0*
*BJI **08** 07:31:39.0±0.0, 13.°82N×146.°66E, h38km, mb5.0/77, mB5.1/27, Ms4.5/43, Ms7 4.3/46*
*MOS **08** 07:31:41.1±1.1, 13.°84N×146.°35E, h44km, mb5.3/45, MS4.4/7, Error ellipse: s-maj=9.0km s-min=5.1km az=113.6*
*NEIC **08** 07:31:42.6±1.5, 13.°72N±0.°03×146.°37E±0.°09, h39km±4km, mb5.1/372, Error ellipse: s-maj=12.3km s-min=4.6km az=99.0*
*GCMT **08** 07:31:43.6±0.3, 13.°62N±0.°02×146.°59E±0.°02, h20km±1km, MW5.0/85, Moment Tensor Solution. s29,c32; s85,c118; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-2.04±.17; $M_{\theta\theta}$-0.13±.12; $M_{\phi\phi}$2.17±.13; $M_{r\theta}$1.78±.29; $M_{r\phi}$2.03±.09; $M_{\theta\phi}$1.30±.23; Best double couple: $M_0$3.57300×$10^{16}$ NP1:$\phi_s$232.00000°, δ67.00000°, λ-65.00000°. NP2: $\phi_s$1.00000°, δ33.00000°, λ-135.00000°. Principal axes: T 4.0390, Plg19.0000°, Azm303.0000°; N -0.9360, Plg23.0000°, Azm42.0000°; P -3.1070, Plg60.0000°, Azm178.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA **08** 07:31:44.2±2.0, 14.°N±5.°×14.°7E±.°, h75km±18km, M5.2/25, mB5.7/12, mb5.4/25, Mw(mB)5.2/12, MwMwp6.0/1, Mwp6.0/1*
**ISC 08 07:31:42.3**±0.3, **13.°78N**±0.°04×**146.°48E**±0.°04, **h45**km±2km, **h45**km:**pP-P**, **n870**, σ1§**28**/**753**, **mb5.1**/283, **MS4.1**/**77**, **16C-16D**, **South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.57** | **263** | P | **Pn** | **07 32 06.5** | **-1.2** |
| **GUMO** | **Guam** | **1.57** | **263** | Pn | **Pn** | **07 32 06.5** | **-1.2** |
| | 1µm,0.3s,baz=113,slow=5.0,SNR=337 | | | | | | |
| GUMO | | | | Sn | **Sn** | **07 32 26.1** | **-0.8** |
| | 3µm,0.3s,baz=54,slow=19,SNR=8.1 | | | | | | |
| **GUMO** | **Guam** | **1.57** | **263** | P | **Pn** | **07 32 06.6** | **-1.2** |
| **JCJ** | **Chichijima** | **13.84** | **344** | Pn | **Pn** | **07 34 54.7** | **-1.1** |
| **JCJ** | **Chichijima** | **13.84** | **344** | Pn | Pn | 07 34 49.6 | -6.2 |
| | 12nm,0.3s,baz=128,slow=19,SNR=2.3 | | | | | | |
| **JAY** | **Jayapura** | **17.17** | **200** | P | **P** | **07 35 41.8** | **+1.5** |
| | 175nm,1.2s,3µm | | | | | | |
| **JAY** | **Jayapura** | **17.17** | **200** | P | **P** | **07 35 41.7** | **+1.5** |
| JAY | | | | pmax | pmax | | |
| | comp=Z,175nm,1.2s | | | | | | |
| **GENI** | **Genyem** | **17.43** | **201** | P | **Pn** | **07 35 40.8** | **-1.5** |
| **GENI** | **Genyem** | **17.43** | **201** | P | **P** | **07 35 44.9** | **+1.8** |
| | comp=Z,201nm,1.3s,comp=Z,4µm | | | | | | |
| **JMZ** | **Minamidaito 2** | **18.67** | **312** | P | **P** | **07 35 56.3** | **-0.4** |
| **TABU** | **Tabubil** | **19.63** | **196** | P | **P** | **07 36 07.9** | **+0.6** |
| **SWI** | **Sorong** | **20.95** | **227** | P | **P** | **07 36 25.8** | **+4.2** |
| | comp=Z,156nm,1.0s | | | | | | |
| **SWI** | **Sorong** | **20.95** | **227** | P | **P** | **07 36 23.6** | **+2.0** |
| SWI | | | | pmax | pmax | | |
| | comp=Z,155nm,1.0s | | | | | | |
| **JOW** | **Kunigami** | **21.41** | **310** | P | **P** | **07 36 27.5** | **+1.1** |
| **JOW** | **Kunigami** | **21.41** | **310** | P | **P** | **07 36 27.1** | **+0.7** |
| **JOW** | **Kunigami** | **21.41** | **310** | P | **P** | **07 36 27.3** | **+0.9** |
| | comp=Z,111nm,0.5s,baz=131,slow=12,SNR=49 | | | | | | |
| JOW | | | | LR | LR | 07 43 23.2 | |
| | comp=Z,828nm,21.1s,baz=130,slow=33 | | | | | | |
| | comp=Z,111nm,0.5s | | | | | | |
| **DAV** | **Davao City (W)** | **21.59** | **254** | LR | LR | 07 44 27.8 | |
| | comp=Z,447nm,21.6s,baz=147,slow=36 | | | | | | |
| **FAKI** | **Fak Fak** | **21.78** | **221** | P | **P** | **07 36 30.6** | **+0.1** |
| **FAKI** | **Fak Fak** | **21.78** | **221** | P | **P** | **07 36 31.4** | **+0.9** |
| **FAKI** | **Fak Fak** | **21.78** | **221** | P | **P** | **07 36 31.6** | **+1.1** |
| | comp=Z,146nm,1.2s | | | | | | |
| **JMN** | **Monobe** | **22.92** | **332** | P | **P** | **07 36 42.9** | **+0.4** |
| **JMN** | **Monobe** | **22.92** | **332** | P | **P** | **07 36 42.1** | **-0.4** |
| JMN | | | | IAmb | IAmb | 07 36 51.5 | |
| | comp=Z,65nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **23.05** | **178** | P | **P** | **07 36 42.8** | **-1.1** |
| **PMG** | **Port Moresby** | **23.05** | **178** | P | **P** | **07 36 42.6** | **-1.4** |
| **PMG** | **Port Moresby** | **23.05** | **178** | P | **P** | **07 36 42.5** | **-1.4** |
| **PMG** | **Port Moresby** | **23.05** | **178** | *ce*P | **P** | **07 36 42.5** | **-1.4** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,194nm,1.3s | | | | | | |
| **INU** | **Inuyama** | **23.10** | **340** | P | **P** | **07 36 43.9** | **-0.4** |
| **INU** | **Inuyama** | **23.10** | **340** | P | **P** | **07 36 44.0** | **-0.4** |
| **JGF** | **Kuroka** | **23.22** | **341** | P | **P** | **07 36 44.9** | **-0.7** |
| **JGF** | **Kuroka** | **23.22** | **341** | P | **P** | **07 36 46.2** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **23.84** | **343** | P | **P** | **07 36 48.4** | **-3.0** |
| | comp=Z,6.3nm,0.6s,baz=163,slow=8.3,SNR=11 | | | | | | |
| MJAR | | | | LR | LR | 07 45 47.6 | |
| | comp=Z,438nm,20.0s,baz=156,slow=36 | | | | | | |
| **MAJO** | **Matsushiro** | **23.84** | **343** | P | **P** | **07 36 51.6** | **+0.2** |
| **MAJO** | **Matsushiro** | **23.84** | **343** | P | **P** | **07 36 49.5** | **-1.9** |
| **MAJO** | **Matsushiro** | **23.84** | **343** | *i* P | **P** | **07 36 50.2** | **-1.2** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,23nm,1.0s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **23.85** | **343** | P | **P** | **07 36 49.8** | **-1.6** |
| **JNU** | **Nakatsue** | **23.93** | **326** | P | **P** | **07 36 51.7** | **-0.6** |
| **JNU** | **Nakatsue** | **23.93** | **326** | P | **P** | **07 36 52.3** | **+0.1** |
| JNU | | | | IAmb | IAmb | 07 36 53.1 | |
| | comp=Z,102nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **23.93** | **326** | LR | LR | 07 44 40.6 | |
| | comp=Z,158nm,21.6s,baz=148,slow=33 | | | | | | |
| **MSAI** | **Masohi** | **24.34** | **227** | P | **P** | **07 36 57.8** | **+1.6** |
| | comp=Z,70nm,0.8s,comp=Z,4µm | | | | | | |
| **YOJ** | **Yonaguni jima** | **24.54** | **299** | P | **P** | **07 36 58.2** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **24.54** | **299** | P | **P** | **07 36 57.9** | **0.0** |
| **YOJ** | **Yonaguni jima** | **24.54** | **299** | P | **P** | **07 36 57.9** | **0.0** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,80nm,0.7s | | | | | | |
| **YULB** | **Yu-li** | **25.67** | **296** | P | **P** | **07 37 07.7** | **-0.5** |
| **YULB** | **Yu-li** | **25.67** | **296** | P | **P** | **07 37 07.6** | **-0.6** |
| YULB | | | | IAmb | IAmb | 07 37 10.4 | |
| | comp=Z,58nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **25.69** | **234** | P | P | 07 37 26.3 | +18 |
| **TWGBT** | **Beinan** | **25.70** | **294** | P | **P** | **07 37 08.4** | **0.0** |
| **TWG** | **Pinlang** | **25.70** | **294** | P | **P** | **07 37 08.0** | **-0.5** |
| TWG | | | | IAmb | IAmb | 07 37 12.4 | |
| | comp=Z,31nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **26.09** | **296** | P | **P** | **07 37 12.0** | **0.0** |
| **TPUB** | **Ta-pu** | **26.23** | **295** | P | **P** | **07 37 12.9** | **-0.4** |
| **TPUB** | **Ta-pu** | **26.23** | **295** | P | **P** | **07 37 11.7** | **-1.6** |
| TPUB | | | | IAmb | IAmb | 07 37 15.7 | |
| | comp=Z,177nm,1.9s | | | | | | |
| **GTOI** | **Gorontalo** | **26.65** | **243** | P | **P** | **07 37 20.1** | **+3.0** |
| **HNR** | **Honiara** | **26.66** | **149** | LR | LR | 07 46 53.3 | |
| | comp=Z,9µm,20.5s,baz=313,slow=34 | | | | | | |
| **MRSI** | **Marisa** | **27.65** | **243** | P | P | 07 37 34.1 | +8.0 |
| **LUWI** | **Luwuk** | **27.73** | **240** | P | **P** | **07 37 26.0** | **-0.8** |
| **LUWI** | **Luwuk** | **27.73** | **240** | P | **P** | **07 37 25.2** | **-1.5** |
| **LUWI** | **Luwuk** | **27.73** | **240** | P | **P** | **07 37 29.1** | **+2.3** |
| **COEN** | **Coen** | **27.75** | **187** | P | **P** | **07 37 25.8** | **-1.1** |
| **COEN** | **Coen** | **27.75** | **187** | P | **P** | **07 37 26.3** | **-0.6** |
| **COEN** | **Coen** | **27.75** | **187** | P | **P** | **07 37 25.9** | **-1.1** |
| | comp=Z,34nm,1.0s,SNR=4.5 | | | | | | |
| **TJN** | **Taejon** | **28.28** | **326** | P | **P** | **07 37 31.5** | **+0.1** |
|

**YSS Yuzh-Sakhalins 33.22 355** *e*P **P** **07 38 14.2 -0.6**
YSS *e*S **S** **07 43 30.2 -1.4**
YSS pmax pmax
comp=Z,10.0nm,0.7s
**DL2 Dalian 33.28 323** P P **07 38 16.0 +0.4**
DL2 S **S** **07 43 34.0 +1.1**
DL2 pmax pmax
comp=Z,120nm,0.7s
DL2 pmax pmax
comp=Z,450nm,5.3s
DL2 LR LR
comp=Z,350nm,10.4s
DL2 LR LR
comp=Z,470nm,13.0s
DL2 LR LR
comp=Z,450nm,18.7s
**CTA Charters Tower 33.66 180** LR LR 07 53 37.7
comp=Z,10nm,18.0s,baz=2.5,slow=39
**MDJ Mudanjiang 33.93 338** P **P** **07 38 21.4 +0.2**
MDJ sP pwP 07 38 38.6 +0.2
MDJ S **S** **07 43 43.9 +1.0**
MDJ pmax pmax
comp=Z,12nm,1.1s
MDJ LR LR
comp=Z,300nm,17.9s
MDJ LR LR
comp=Z,450nm,17.9s
MDJ LR LR
comp=Z,630nm,20.6s
**WHN Wuhan 33.95 305** P **P** **07 38 22.7 +1.3**
**KNRA Kununurra 34.11 212** P **P** **07 38 22.2 -0.7**
comp=Z,54nm,1.1s,SNR=4.0
**SNY Shenyang 34.29 329** ⇓P **P** **07 38 23.8 -0.5**
SNY pmax pmax
comp=Z,13nm,1.0s
**CNSH ChangSha 34.30 300** P **P** **07 38 25.9 +1.3**
CNSH S **S** **07 43 56.5 +7.5**
CNSH pmax pmax
comp=Z,27nm,1.2s
CNSH LR LR
comp=Z,310nm,16.0s
CNSH LR LR
comp=Z,240nm,17.3s
CNSH LR LR
comp=Z,370nm,22.1s
**TIA Tai'an 34.50 316** P P 07 38 22.4 -3.8
TIA pmax pmax
comp=Z,24nm,0.9s
TIA LR LR
comp=Z,350nm,16.1s
TIA LR LR
comp=Z,370nm,14.8s
TIA LR LR
comp=Z,480nm,17.5s
**QIS Mount Isa 34.79 191** P **P** **07 38 28.0 -0.8**
**QIS Mount Isa 34.79 191** P **P** **07 38 28.0 -0.8**
comp=Z,95nm,1.1s,SNR=19
**CN2 Changchun 34.92 333** *e*P **P** **07 38 32.1 +2.4**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**QIZ Qiongzhong 35.48 283** P **P** **07 38 34.5 -0.4**
QIZ S **S** **07 44 08.4 +1.1**
QIZ LR LR
comp=Z,290nm,20.0s
QIZ LR LR
comp=Z,430nm,19.0s
QIZ LR LR
comp=Z,430nm,19.2s
**WRAB Tennant Creek 35.57 200** P **P** **07 38 35.0 -0.5**
**WRAB Tennant Creek 35.57 200** *i* P **P** **07 38 35.7 +0.2**
WRAB pmax pmax
comp=Z,72nm,1.0s
**WB2 Warramunga Arr 35.57 200** P **P** **07 38 35.3 -0.3**
**WRA Warramunga Arr 35.58 200** P **P** **07 38 34.7 -0.9**
comp=Z,60nm,0.9s,baz=27,slow=9.5,SNR=83
WRA PcP **PcP** **07 41 04.6 +0.7**
comp=Z,7.6nm,0.6s,baz=18,slow=3.5,SNR=12
WRA ScP **ScP** **07 44 48.0 +1.5**
comp=Z,1.5nm,0.8s,baz=26,slow=4.7,SNR=4.9
WRA LR LR 07 54 33.3
comp=Z,230nm,18.7s,baz=38,slow=39
comp=Z,60nm,0.9s
**SBUM Sibu 35.67 255** P **P** **07 38 36.1 -0.4**
**BNX BinXian 35.70 337** ⇓P **P** **07 38 35.6 -0.8**
BNX pmax pmax
comp=Z,11nm,0.7s
**HNS HongShan 36.77 316** ⇑P **P** **07 38 45.7 0.0**
HNS S **S** **07 44 22.4 -4.2**
HNS pmax pmax
comp=Z,49nm,1.1s
HNS LR LR
comp=Z,340nm,16.3s
HNS LR LR
comp=Z,450nm,18.8s
**TWSI Taliwang, Sumb 36.92 234** P P 07 39 02.4 +15
**LYN LuoYang 37.02 310** P **P** **07 38 48.9 +1.1**
LYN sP pP 07 38 59.9 +1.4
LYN PcP **PcP** **07 41 09.6 +1.5**
LYN S **S** **07 44 29.0 -1.5**
LYN pmax pmax
comp=Z,69nm,0.7s
LYN pmax pmax
comp=Z,240nm,4.1s
LYN LR LR
comp=Z,330nm,16.1s
LYN LR LR
comp=Z,380nm,13.7s
LYN LR LR
comp=Z,590nm,19.6s
**TYV Tymovskoe 37.11 356** *e*P **P** **07 38 47.2 -1.1**
TYV pmax pmax
comp=Z,100nm,2.8s
TYV pmax pmax
comp=Z,9.0nm,0.8s
**BJT Baijiatuau 37.27 320** P **P** **07 38 49.6 -0.3**
**BJT Baijiatuau 37.27 320** P **P** **07 38 49.7 -0.1**
**BJI Beijing 37.28 320** P **P** **07 38 49.5 -0.4**
BJI pmax pmax
comp=Z,16nm,1.1s
BJI LR LR
comp=Z,150nm,20.0s
BJI LR LR
comp=Z,94nm,19.9s
BJI LR LR
comp=Z,190nm,16.7s
**KLR Kul'dur 37.37 344** LR LR 07 55 27.0
comp=Z,128nm,18.1s,baz=160,slow=38
**KLR Kul'dur 37.37 344***ce*P **P** **07 38 49.6 -0.9**
KLR pmax pmax
comp=Z,16nm,1.7s
**FITZ Fitzroy Crossi 37.76 214** P **P** **07 38 53.8 -0.4**
**FITZ Fitzroy Crossi 37.76 214** P **P** **07 38 53.5 -0.7**
**KSM Kuching 37.80 254** P **P** **07 38 54.6 -0.1**
**ENH Enshi 37.80 302** P **P** **07 38 55.3 +0.7**
**ENH Enshi 37.80 302** IAmb IAmb 07 38 56.2
comp=Z,32nm,0.8s
**KOUNC Koumac, New Ca 38.35 152** P **P** **07 38 59.3 +0.2**
**KOUNC Koumac, New Ca 38.35 152** P **P** **07 38 59.5 +0.3**
KOUNC IAmb IAmb 07 39 00.3
comp=Z,57nm,1.3s
**AS01 Alice Springs 39.18 198** P **P** **07 39 05.6 -0.5**
**ASAR Alice Springs 39.20 198** P **P** **07 39 05.8 -0.4**
**ASAR Alice Springs 39.20 198** P **P** **07 39 05.7 -0.6**
comp=Z,20nm,0.9s,baz=19,slow=10,SNR=86
ASAR PP **PP** **07 40 37.2 +0.3**
comp=Z,14nm,1.0s,baz=17,slow=11,SNR=9.5
ASAR PcP **PcP** **07 41 16.1 +1.1**
comp=Z,4.4nm,1.0s,baz=29,slow=3.3,SNR=4.1
ASAR LR LR 07 57 06.5
comp=Z,246nm,18.7s,baz=22,slow=39
comp=Z,20nm,0.9s
**ASAR Alice Springs 39.20 198** P **P** **07 39 05.9 -0.4**
**ASPA Alice Springs 39.20 198** P **P** **07 39 06.2 0.0**
comp=Z,4.0nm,SNR=4.0
**GYA Guiyang 39.29 295** P **P** **07 39 08.8 +1.6**
GYA pP pP 07 39 19.7 +2.0
GYA S **S** **07 45 11.4 +6.1**
GYA pmax pmax
comp=Z,24nm,1.1s
GYA pmax pmax
comp=Z,190nm,5.5s
GYA LR LR
comp=Z,230nm,16.0s
GYA LR LR
comp=Z,220nm,15.6s
GYA LR LR
comp=Z,430nm,19.9s
**XAN Xi'an 39.51 307** ⇑P **P** **07 39 08.2 -0.7**
XAN pmax pmax
comp=Z,22nm,1.2s
**HEH HeiHe 39.56 341** *e*P **P** **07 39 07.8 -1.1**
HEH pmax pmax
comp=Z,21nm,0.9s
**XLT XiLinHaoTe 39.70 325** *e*P **P** **07 39 09.1 -1.3**
XLT pmax pmax
comp=Z,40nm,0.7s
XLT pmax pmax
comp=Z,160nm,5.5s
**QLP Quilpie 40.18 183** P **P** **07 39 13.1 -1.2**
**QLP Quilpie 40.18 183** P **P** **07 39 12.8 -1.6**
comp=Z,99nm,1.3s,SNR=8.7
**NOUC Port Laguerre 40.62 151** P **P** **07 39 17.9 -0.1**
**NOUC Port Laguerre 40.62 151** P **P** **07 39 18.0 -0.1**
NOUC pP **sP** **07 39 33.8 +1.8**
**HHC Hu-ho-hao-te 40.66 318** ⇑*i*P **P** **07 39 18.8 +0.5**
HHC pP sP 07 39 32.2 -1.8
HHC PP **PnPn** **07 40 59.5 +2.7**
HHC *e*S S 07 45 33.9 +8.6
HHC SS **SS** **07 48 22.5 -4.3**
HHC ScS **ScS** **07 49 12.5 -7.7**
HHC pmax pmax
comp=Z,27nm,1.0s
HHC pmax pmax
comp=Z,140nm,4.7s
HHC LR LR
comp=Z,210nm,15.5s
HHC LR LR
comp=Z,270nm,17.3s
HHC LR LR
comp=Z,370nm,18.8s
**DZM Mont Dzumac 40.66 151** P **P** **07 39 18.6 +0.1**
**DZM Mont Dzumac 40.66 151** P **P** **07 39 17.8 -0.7**
DZM IAmb IAmb 07 39 19.6
comp=Z,36nm,1.2s
**DZM Mont Dzumac 40.66 151** *e*P **P** **07 39 14.8 -3.7**
comp=Z,58nm,1.1s
DZM *e*S **S** **07 45 25.4 -0.2**
comp=Z,98nm,27.6s
DZM *e*SS **SS** **07 48 24.6 -2.8**
comp=Z,176nm,24.9s
DZM *e*LR LR 07 50 34.8
comp=Z,553nm,20.8s
**DZM Mont Dzumac 40.66 151** LR LR 07 55 26.5
comp=Z,565nm,19.9s,baz=349,slow=35
**DZM Mont Dzumac 40.66 151** P **P** **07 39 18.4 -0.1**
DZM pP **sP** **07 39 34.2 +1.8**
**PWJI Pagerwojo 40.67 240** P **P** **07 39 20.9 +2.3**
comp=Z,141nm,0.8s
**YATNC Mamie plateau, 40.86 150** P **P** **07 39 20.6 +0.6**
**SLVN Son La 41.17 287** P **P** **07 39 22.5 -0.3**
**BTO Baotou 41.54 317** *e*P **P** **07 39 27.5 +1.9**
BTO pP **pP** **07 39 35.0 -1.6**
BTO sP **sP** **07 39 37.2 -4.1**
BTO PP **PP** **07 41 05.3 +3.1**
BTO S **S** **07 45 43.3 +4.8**
BTO pmax pmax
comp=Z,110nm,0.8s
BTO pmax pmax
comp=Z,240nm,4.7s
BTO LR LR
comp=Z,240nm,8.4s
BTO LR LR
comp=Z,220nm,7.5s
BTO LR LR
comp=Z,340nm,11.4s
**INKA Innaminka 41.65 188** P **P** **07 39 25.6 -0.8**
**NONG Nongkai 41.81 282** P **P** **07 39 28.7 +0.7**
**WRKA Warakurna 42.46 205** P **P** **07 39 32.7 -0.5**
**WRKA Warakurna 42.46 205** P **P** **07 39 32.3 -0.9**
comp=Z,50nm,1.1s,SNR=6.1
**OOD Oodnadatta 42.63 194** P **P** **07 39 33.8 -0.6**
**ZEA Zeya 42.66 343** *e*P **P** **07 39 36.0 +1.7**
ZEA pmax pmax
comp=Z,10.0nm,0.4s
ZEA MLR MLR
comp=N,300nm,16.0s
**CD2 Chengdu 42.73 301** P **P** **07 39 33.8 -1.6**
CD2 S **S** **07 45 55.4 -0.8**
CD2 sS sS 07 46 14.5 +1.4
CD2 pmax pmax
comp=N,20nm,0.8s
CD2 LR LR
comp=N,260nm,12.3s
CD2 LR LR
comp=N,310nm,17.6s
CD2 LR LR
comp=N,330nm,16.3s
**KPJI Karang Pucung 42.77 243** P P 07 39 51.9 +16
**AULRC Lightning Ridg 42.98 178** P **P** **07 39 36.4 -0.8**
**MBWA Marble Bar 43.54 218** P **P** **07 39 41.3 -0.6**
**MBWA Marble Bar 43.54 218** P **P** **07 39 41.0 -0.9**
comp=N,26nm,0.7s,SNR=1.8
**MBWA Marble Bar 43.54 218** P **P** **07 39 41.2 -0.6**
MBWA pP **sP** **07 39 56.9 +0.9**
**PZH PanZhiHua 43.65 294** P **P** **07 39 43.1 +0.1**
PZH S **S** **07 46 10.0 +0.1**
PZH SS **SS** **07 49 21.7 -4.6**
PZH pmax pmax
comp=N,30nm,0.7s
PZH pmax pmax
comp=N,130nm,4.3s
PZH LR LR
comp=N,170nm,17.6s
PZH LR LR
comp=N,200nm,17.1s
PZH LR LR
comp=N,270nm,15.3s
**PSA00 Pilbara Seismi 43.79 217** P **P** **07 39 43.4 -0.5**
**PSA00 Pilbara Seismi 43.79 217** P **P** **07 39 43.5 -0.5**
PSA00 IAmb IAmb 07 40 01.3
comp=Z,36nm,1.1s
**PSA00 Pilbara Seismi 43.79 217** P **P** **07 39 44.0 +0.1**
PSA00 IAmb IAmb 07 41 08.3
comp=Z,35nm,1.4s
**PSA00 Pilbara Seismi 43.79 217** P **P** **07 39 43.1 -0.8**
comp=Z,27nm,1.2s,SNR=2.4
**LZH Lanzhou 44.12 308** *e*P **P** **07 39 47.9 +1.2**
LZH sP sP 07 40 02.0 -0.4
LZH pmax pmax
comp=Z,40nm,1.0s
LZH LR LR
comp=Z,270nm,16.1s
LZH LR LR
comp=Z,300nm,17.9s
LZH LR LR
comp=Z,260nm,18.5s
**MSVF Nonsavu 44.17 134** P **P** **07 39 47.6 +0.4**
**MSVF Nonsavu 44.17 134** P **P** **07 39 47.5 +0.4**
MSVF IAmb IAmb 07 39 48.6
comp=Z,34nm,1.1s
**MSVF Nonsavu 44.17 134** LR LR 07 55 10.5
comp=Z,241nm,20.5s,baz=105,slow=32
**MSVF Nonsavu 44.17 134** P **P** **07 39 47.5 +0.4**
MSVF pmax pmax
comp=Z,34nm,1.2s
**MSVF Nonsavu 44.17 134** P **P** **07 39 47.6 +0.4**
MSVF pP **pwP** **07 40 03.5 -3.6**
**ARMA Armidale 44.22 174** P **P** **07 39 47.6 +0.2**
**ARMA Armidale 44.22 174** P **P** **07 39 47.2 -0.2**
ARMA IAmb IAmb 07 39 48.4
comp=Z,39nm,1.2s
**ARMA Armidale 44.22 174** P **P** **07 39 47.2 -0.2**
comp=Z,31nm,1.4s,SNR=3.7
**PHRA Phrae 44.58 282** P **P** **07 39 51.1 +0.7**
**SHEM Shemya Is, Ala 44.65 24** P **P** **07 39 53.4 +3.0**
comp=Z,29nm,0.6s,baz=200,slow=15,SNR=7.4
SHEM LR LR 07 56 20.2
comp=Z,168nm,19.2s,baz=278,slow=33
**LCRK Leigh Creek 44.69 190** P **P** **07 39 50.3 -0.6**
**CMSA Cobar Meteorol 45.07 181** P **P** **07 39 53.2 -0.7**
**CMSA Cobar Meteorol 45.07 181** P **P** **07 39 52.8 -1.1**
comp=Z,21nm,1.0s,SNR=2.3
**MULG Mulgathing 45.41 195** P **P** **07 39 55.8 -0.9**
**STKA Stephens Creek 45.64 186** P **P** **07 39 57.6 -0.8**
**STKA Stephens Creek 45.64 186** P **P** **07 39 57.8 -0.7**
**STKA Stephens Creek 45.64 186** P **P** **07 39 57.1 -1.3**
comp=Z,6.1nm,0.9s,SNR=3.4
**STKA Stephens Creek 45.64 186** P **P** **07 39 57.7 -0.8**
comp=Z,19nm,0.8s,baz=348,slow=9.3,SNR=23
STKA LR LR 08 02 06.6
comp=Z,253nm,18.1s,baz=11,slow=40
comp=Z,19nm,0.8s
**STKA Stephens Creek 45.64 186** P **P** **07 39 57.8 -0.7**
STKA pmax pmax
comp=Z,5.0nm,0.9s
**CMAR Chiang Mai Arr 45.80 282** P **P** **07 39 59.6 -0.4**
**CMAR Chiang Mai Arr 45.80 282** P **P** **07 40 00.5 +0.4**
comp=Z,7.9nm,0.6s,baz=81,slow=6.1,SNR=24
CMAR LR LR 07 58 48.7
comp=Z,143nm,19.9s,baz=95,slow=36
comp=Z,7.9nm,0.6s
**MA2 Magadan 45.82 3** P **P** **07 40 00.2 +0.6**
**MA2 Magadan 45.82 3** P **P** **07 39 59.5 -0.1**
comp=Z,12nm,0.5s,baz=168,slow=12,SNR=6.1
MA2 LR LR 07 57 07.2
comp=Z,159nm,21.8s,baz=200,slow=33
comp=Z,12nm,0.5s
**MA2 Magadan 45.82 3** P **P** **07 40 00.2 +0.6**
MA2 pmax pmax
comp=Z,44nm,0.9s
**SRIT Nakonsritamara 46.21 269** P **P** **07 40 04.3 +1.0**
**ULN Ulaanbaatar 47.12 324** P **P** **07 40 10.7 +0.5**
ULN IAmb IAmb 07 40 12.7
comp=Z,20nm,0.6s
**ULN Ulaanbaatar 47.12 324***ce*P **P** **07 40 10.8 +0.5**
ULN pmax pmax
comp=Z,15nm,0.6s
**WHYH Whyalla 47.32 190** P **P** **07 40 11.5 -0.1**
**BBOO Buckleboo 47.39 192** P **P** **07 40 11.7 -0.5**
**BBOO Buckleboo 47.39 192** P **P** **07 40 11.8 -0.3**
**BBOO Buckleboo 47.39 192** P **P** **07 40 09.0 -3.2**
comp=Z,11nm,SNR=11
**SONM Songino Array 47.48 324** P **P** **07 40 13.1 +0.2**
SONM IAmb IAmb 07 40 30.9
comp=Z,26nm,1.0s
**SONM Songino Array 47.48 324** P **P** **07 40 13.3 +0.4**
comp=Z,14nm,0.6s,baz=136,slow=9.8,SNR=41
SONM LR LR 08 00 36.4
comp=Z,256nm,20.6s,baz=113,slow=37
comp=Z,14nm,0.6s
**HTT Hallett 47.50 189** P **P** **07 40 12.6 -0.5**
**HTT Hallett 47.50 189** P **P** **07 40 12.4 -0.7**
comp=Z,37nm,1.1s,SNR=2.0
**FORT Forrest 47.72 202** P **P** **07 40 14.8 +0.1**
**FORT Forrest 47.72 202** P **P** **07 40 14.9 +0.1**
**FORT Forrest 47.72 202** P **P** **07 40 14.7 -0.1**
comp=Z,174nm,1.0s,SNR=8.4
**KIWB Kanaga Island 47.86 30** P **P** **07 40 17.4 +1.8**
**ADK Adak 48.11 30** P **P** **07 40 20.4 +2.9**
**GTA Gaotai 48.22 311** *e*P **P** **07 40 19.0 +0.2**
GTA pP pP 07 40 30.2 +0.2
GTA S **S** **07 47 14.4 -0.9**
GTA pmax pmax
comp=Z,7.0nm,1.0s
GTA LR LR
comp=Z,140nm,17.1s
GTA LR LR
comp=Z,220nm,18.2s
GTA LR LR
comp=Z,240nm,18.2s
**CAN Canberra 48.89 177** P **P** **07 40 24.2 +0.4**
**CNB Canberra Magne 48.91 177** P **P** **07 40 24.0 +0.1**
comp=Z,23nm,0.3s,SNR=2.0
**SEY Seymchan 49.26 4** P **P** **07 40 26.8 +0.5**
comp=Z,8.8nm,0.7s,baz=170,slow=9.7,SNR=12
comp=Z,8.8nm,0.7s
**SEY Seymchan 49.26 4***ce*P **P** **07 40 28.0 +1.8**
SEY pmax pmax
comp=Z,17nm,1.0s
**YAK Yakutsk 49.66 350** *e*P **P** **07 40 27.5 -1.8**
YAK *e**PP **pP** **07 40 38.6 -1.2**
YAK *e* 07 41 47.9
YAK *e* 07 42 18.2
YAK *e*S **S** **07 47 34.2 -0.3**
YAK *e**SS **sS** **07 47 55.9 +4.2**
YAK *e* 07 50 15.1
YAK *e*SS **SS** **07 51 03.4 -3.7**
YAK pmax pmax
comp=Z,22nm,0.9s
YAK pmax pmax
comp=E,3.0nm,1.3s
YAK pmax pmax
comp=N,4.0nm,1.1s
YAK pmax pmax
comp=Z,107nm,3.5s
YAK pmax pmax
comp=E,48nm,3.7s
YAK pmax pmax
comp=N,26nm,2.1s
YAK smax smax
comp=N,49nm,3.4s
YAK smax smax
comp=E,13nm,1.5s
**GSI Gunungsitoli 49.92 260** P **P** **07 40 31.8 -0.2**
**ARPS Mount Arapiles 50.47 185** P **P** **07 40 36.3 +0.6**
**ARPS Mount Arapiles 50.47 185** P **P** **07 40 35.5 -0.2**
comp=E,78nm,0.9s,SNR=4.3
**ZAK Zakamensk 50.56 325** *e*P **P** **07 40 36.1 -0.3**
ZAK pmax pmax
comp=Z,11nm,1.0s
**TOO Toolangi 51.09 181** P **P** **07 40 41.0 +0.6**
comp=Z,43nm,1.7s,SNR=2.5
**BRAT Ballarat 51.11 183** P **P** **07 40 41.7 +1.2**
**MORW Morawa 51.76 214** P **P** **07 40 45.1 -0.5**
comp=Z,74nm,1.0s
**MORW Morawa 51.76 214** P **P** **07 40 44.8 -0.8**
**MORW Morawa 51.76 214** P **P** **07 40 44.6 -1.0**
comp=Z,74nm,1.0s,SNR=5.2
**SHL Shillong 52.41 292** IAmb IAmb 07 40 52.5
comp=Z,24nm,0.7s
**MOY Mondy 52.45 326** *e*P **P** **07 40 51.4 +0.8**
MOY pmax pmax
comp=Z,17nm,1.7s
**BLDU Ballidu 52.62 213** P **P** **07 40 51.5 -0.4**
**BLDU Ballidu 52.62 213** P **P** **07 40 51.0 -0.9**
comp=Z,62nm,1.1s,SNR=2.3
**NIKH Nikolski High 52.67 32** P **P** **07 40 52.8 +0.8**
baz=239
**KLBR Kellerberrin 52.87 211** P **P** **07 40 53.1 -0.6**
**KLBR Kellerberrin 52.87 211** P **P** **07 40 52.6 -1.1**
comp=Z,73nm,0.9s,SNR=4.2
**LSA Lhasa 53.30 297** P **P** **07 40 57.2 -0.4**
LSA pmax pmax
comp=Z,8.0nm,0.4s
**NWAO Narrogin (SRO) 54.20 210** LR LR 08 06 05.6
comp=Z,157nm,18.4s,baz=192,slow=38
**P08K Saint George I 54.27 28** P **P** **07 41 04.7 +1.0**
baz=236
**UNV Unalaska Valle 54.33 32** P **P** **07 41 05.2 +1.1**
**UNV Unalaska Valle 54.33 32** P **P** **07 41 05.3 +1.1**
baz=241
**RAO Raoul Island 54.89 142** LR LR 08 04 22.0
comp=Z,97nm,18.1s,baz=60,slow=36
**BILL Bilibino 55.72 9** P **P** **07 41 16.2 +2.2**
BILL IAmb IAmb 07 41 23.9
comp=Z,29nm,1.0s
**BILL Bilibino 55.72 9***de*P **P** **07 41 14.8 +0.8**
BILL *e* 07 43 20.1
BILL *e*S **S** **07 48 48.9 -8.2**
BILL pmax pmax
comp=Z,46nm,1.7s
**FALS False Pass 56.40 32** P **P** **07 41 19.8 +0.9**
baz=244
**S12K Black Hills 57.47 32** P **P** **07 41 27.4 +0.8**
**S12K Black Hills 57.47 32** P **P** **07 41 27.3 +0.8**
baz=244
**GAMB Gambell 57.74 21** P **P** **07 41 29.6 +1.3**
baz=230
**M11K Mekoryuk 57.82 26** P **P** **07 41 30.3 +1.3**
baz=238
**SDPT Sand Point 58.14 33** P **P** **07 41 32.7 +1.4**
baz=246
**WMQ Urumqi 58.14 313** *e*P **P** **07 41 32.4 +0.8**
WMQ pP pP 07 41 43.5 +1.3
WMQ pmax pmax
comp=Z,29nm,1.1s
WMQ LR LR
comp=Z,260nm,21.1s
**CHNA Chernabura Isl 58.40 33** P **P** **07 41 34.2 +1.1**
baz=247
**TIXI Tiksi 58.81 354***ce*P **P** **07 41 38.6 +2.9**
TIXI pmax pmax
comp=Z,12nm,0.8s
**S14K Fog Glacier 58.99 32** P **P** **07 41 38.4 +1.0**
baz=246
**M13K Dall Lake 59.05 26** P **P** **07 41 38.0 +0.5**
baz=240

URZ **Urewera** 59.20 152 LR LR 08 04 11.3
comp=Z,139nm,21.4s,baz=52,slow=33
K13K **Kusilvak Mount** 59.28 24 IAmb IAmb 07 41 46.5
comp=Z,18nm,0.8s
K13K **Kusilvak Mount** 59.28 24 P **P** **07 41 40.3 +1.2**
baz=238
O14K **Tigyukauivet M** 59.43 28 P **P** **07 41 41.5 +1.3**
baz=243
RTZ **Ruatahuna** 59.43 152 P **P** **07 41 39.9 -0.7**
N14K **Kuskokwak Cree** 59.54 27 P **P** **07 41 42.0 +1.0**
baz=242
DGZ **Jazzator, Alta** 59.70 320 *i* P **P** **07 41 43.1 +0.6**
DGZ pmax pmax
comp=Z,23nm,0.7s
L14K **Kuka Creek** 59.79 26 P **P** **07 41 43.6 +1.0**
L14K **Kuka Creek** 59.79 26 P **P** **07 41 43.7 +1.0**
baz=241
M14K **Bethel** 59.81 26 IAmb IAmb 07 42 08.5
comp=Z,21nm,0.8s
M14K **Bethel** 59.81 26 P **P** **07 41 43.7 +0.9**
baz=242
O15K **Ungalikthiuk R** 60.06 29 P **P** **07 41 45.6 +1.1**
baz=245
TNA **Tin City** 60.13 20 P **P** **07 41 46.2 +1.3**
baz=233
J14K **Nanvaranak Lak** 60.14 24 IAmb IAmb 07 41 52.4
comp=Z,17nm,1.0s
J14K **Nanvaranak Lak** 60.14 24 P **P** **07 41 46.8 +1.8**
baz=239
M15K **Kasigluk River** 60.34 27 P **P** **07 41 47.1 +0.7**
baz=243
N15K **Kwethluk River** 60.37 28 P **P** **07 41 47.5 +0.8**
baz=244
ANM **Nome** 60.43 22 P **P** **07 41 48.1 +1.1**
baz=236
L15K **Ungalak Mounta** 60.45 26 P **P** **07 41 48.4 +1.2**
baz=242
R16K **Pilot Point** 60.49 31 P **P** **07 41 48.5 +1.1**
baz=248
F14K **Arctic Creek** 60.61 21 P **P** **07 41 48.9 +0.7**
baz=235
K15K **Wolf Creek Mou** 60.73 25 IAmb IAmb 07 41 59.3
comp=Z,14nm,0.8s
K15K **Wolf Creek Mou** 60.73 25 P **P** **07 41 50.2 +1.1**
baz=241
ZSN **Zaisan** 60.83 317 *e*P **P** **07 41 50.0 -0.1**
comp=Z,8.7nm,0.9s,baz=317
ZSN **Zaisan** 60.83 317 *e*P **P** **07 41 50.0 -0.1**
ZSN pmax pmax
comp=Z,9.0nm,0.9s
P16K **Nushagak River** 60.86 29 P **P** **07 41 50.9 +1.0**
baz=246
CHIR **Chirikof Islan** 60.87 33 P **P** **07 41 50.3 +0.2**
baz=250
O16K **Kokwok River B** 61.04 29 P **P** **07 41 51.7 +0.5**
baz=246
N16K **Nishlik Lake** 61.09 28 P **P** **07 41 52.2 +0.6**
baz=245
R17L **Mt. Peulik Vol** 61.12 31 P **P** **07 41 52.4 +0.5**
baz=249
G15K **Niukluk** 61.15 22 P **P** **07 41 52.5 +0.7**
baz=238
M16K **Timber Creek** 61.24 27 IAmb IAmb 07 42 13.9
comp=Z,15nm,0.8s
M16K **Timber Creek** 61.24 27 P **P** **07 41 53.4 +0.8**
baz=245
L16K **Owhat River** 61.32 26 P **P** **07 41 54.2 +1.1**
baz=244
F15K **North Star Dit** 61.32 21 P **P** **07 41 54.1 +1.0**
baz=237
Q16K **King Salmon** 61.36 30 P **P** **07 41 54.3 +1.0**
baz=248
O17K **Koliganek Bris** 61.57 29 P **P** **07 41 55.8 +1.0**
baz=247
J16K **Anvik River** 61.58 24 IAmb IAmb 07 41 59.8
comp=Z,14nm,0.9s
J16K **Anvik River** 61.58 24 P **P** **07 41 56.0 +1.2**
baz=242
Q17K **Contact Creek** 61.59 31 P **P** **07 41 55.8 +0.8**
baz=249
H16K **Elim** 61.62 22 P **P** **07 41 55.8 +0.8**
baz=240
P17K **Kvichak River** 61.66 29 P **P** **07 41 55.9 +0.5**
baz=248
N17K **Nushagak Hills** 61.83 28 IAmb IAmb 07 42 19.9
comp=Z,13nm,0.8s
N17K **Nushagak Hills** 61.83 28 P **P** **07 41 57.6 +1.1**
baz=247
I17K **Unalakleet** 61.83 24 P **P** **07 41 56.6 +0.1**
baz=242
SII **Sitkinak Islan** 61.87 33 P **P** **07 41 57.0 0.0**
baz=251
G16K **Koyuk River** 61.96 22 P **P** **07 41 57.1 -0.2**
baz=239
L17K **Donlin** 62.01 26 P **P** **07 41 57.3 -0.4**
baz=245
M17K **Holitna River** 62.07 27 IAmb IAmb 07 42 08.1
comp=Z,23nm,0.9s
M17K **Holitna River** 62.07 27 P **P** **07 41 58.5 +0.4**
baz=246
Q18K **Katmai Hardscr** 62.15 30 P **P** **07 41 59.3 +0.4**
baz=250
J17K **VABM Dome** 62.24 24 IAmb IAmb 07 42 16.3
comp=Z,26nm,1.1s
J17K **VABM Dome** 62.24 24 P **P** **07 42 00.2 +1.0**
baz=243
K17K **Iditarod** 62.26 25 P **P** **07 42 00.2 +0.8**
baz=244,SNR=9.5
P18K **Big Mountain,** 62.31 29 P **P** **07 42 00.3 +0.5**
baz=249
ZAA0 **Zalesovo Array** 62.38 324 P **P** **07 41 59.3 -1.0**
ZALV **Zalesovo Beam** 62.38 324 P **P** **07 42 00.0 -0.3**
comp=Z,21nm,0.6s,baz=106,slow=7.0,SNR=37
ZALV LR LR 08 09 31.6
comp=Z,152nm,20.9s,baz=100,slow=36
comp=Z,21nm,0.6s
MK31 **Makanchi Array** 62.44 316 P **P** **07 42 01.4 +0.5**
MK31 IAmb IAmb 07 42 18.3
comp=Z,12nm,0.7s
MK31 **Makanchi Array** 62.44 316 *ce*P **P** **07 42 01.2 +0.3**
MKAR **Makanchi Array** 62.44 316 P **P** **07 42 01.2 +0.3**
comp=Z,13nm,0.5s,baz=90,slow=8.2,SNR=105
MKAR LR LR 08 12 27.8
comp=Z,87nm,18.1s,baz=78,slow=39
comp=Z,13nm,0.5s
N18K **Kilae Creek** 62.48 28 IAmb IAmb 07 42 10.7
comp=Z,14nm,0.9s
N18K **Kilae Creek** 62.48 28 P **P** **07 42 01.5 +0.5**
baz=248
O18K **Koktuh Hills** 62.49 29 P **P** **07 42 02.0 +1.0**
baz=249
OHAK **Old Harbor** 62.55 32 P **P** **07 42 03.1 +1.7**
OHAK **Old Harbor** 62.55 32 P **P** **07 42 02.0 +0.7**
baz=252
C16K **Lisburne Hills** 62.55 18 P **P** **07 42 02.3 +1.1**
baz=235
G17K **Kiwalik Mounta** 62.63 22 P **P** **07 42 03.2 +1.3**
baz=241
H17K **Granite Mounta** 62.63 23 IAmb IAmb 07 42 04.4
comp=Z,14nm,0.7s
H17K **Granite Mounta** 62.63 23 P **P** **07 42 02.9 +1.1**
baz=242,SNR=5.9
MAKZ **Makanchi** 62.65 316 P **P** **07 42 02.9 +0.6**
MAKZ **Makanchi** 62.65 316 P **P** **07 42 02.9 +0.6**
MAKZ pmax pmax
comp=Z,23nm,0.6s
MAKZ **Makanchi** 62.65 316 P **P** **07 42 02.7 +0.4**
MAKZ pP **sP** **07 42 18.2 +0.8**
L18K **Granite Mounta** 62.73 26 IAmb IAmb 07 42 13.3
comp=Z,12nm,0.8s
L18K **Granite Mounta** 62.73 26 P **P** **07 42 04.2 +1.7**
baz=246
M18K **Stony River** 62.82 27 P **P** **07 42 04.1 +0.9**
baz=247
F17K **Baldwin Pennin** 62.89 21 P **P** **07 42 04.5 +1.0**
baz=240
Q19K **Cape Douglas,** 62.92 30 P **P** **07 42 05.4 +1.5**
baz=251
D17K **Noatak River** 62.94 19 P **P** **07 42 05.3 +1.5**
baz=237
E17K **Hotham Inlet** 63.02 20 P **P** **07 42 05.5 +1.1**
baz=239
KDAK **Kodiak Island** 63.08 32 P **P** **07 42 06.1 +1.2**
comp=Z,14nm,1.1s,baz=291,slow=4.3,SNR=7.5
KDAK LR LR 08 06 24.9
comp=Z,78nm,20.8s,baz=267,slow=33
comp=Z,14nm,1.1s
KDAK **Kodiak Island** 63.08 32 P **P** **07 42 05.7 +0.7**
baz=252
KDAK **Kodiak Island** 63.08 32 P **P** **07 42 06.3 +1.4**
N19K **Bonanza Creek** 63.17 28 IAmb IAmb 07 42 19.2
comp=Z,17nm,0.8s
N19K **Bonanza Creek** 63.17 28 P **P** **07 42 06.2 +0.6**
baz=249
RDOG **Red Dog Mine** 63.19 19 IAmb IAmb 07 42 14.5
comp=Z,19nm,0.7s
RAR **Rarotonga** 63.20 123 LR LR 08 04 30.2
comp=Z,101nm,21.7s,baz=291,slow=31
J18K **Innoko River** 63.23 25 P **P** **07 42 06.9 +1.0**
baz=246
H18K **Honhosa River** 63.31 23 IAmb IAmb 07 42 22.9
comp=Z,15nm,0.8s
H18K **Honhosa River** 63.31 23 P **P** **07 42 07.2 +0.8**
baz=243,SNR=6.8
C17K **DeLong Mountai** 63.33 19 P **P** **07 42 07.7 +1.2**
baz=237
P19K **Oil Pt** 63.36 30 P **P** **07 42 07.7 +0.9**
baz=251
Q20K **Shuyak Island** 63.43 31 P **P** **07 42 08.2 +1.0**
baz=252
L19K **White Mountain** 63.51 27 IAmb IAmb 07 42 18.1
comp=Z,15nm,0.9s
L19K **White Mountain** 63.51 27 P **P** **07 42 08.7 +1.0**
baz=248
F18K **Selawik** 63.52 21 P **P** **07 42 08.7 +1.0**
baz=241
G18K **Tagagawik** 63.55 22 IAmb IAmb 07 42 29.7
comp=Z,13nm,1.0s
G18K **Tagagawik** 63.55 22 P **P** **07 42 09.1 +1.2**
baz=243
E18K **Tukpahlearik C** 63.60 20 P **P** **07 42 09.3 +1.1**
baz=240,SNR=8.1
M19K **Big River Lodg** 63.61 27 P **P** **07 42 09.7 +1.3**
baz=249
O20K **Slope Mountain** 63.79 29 P **P** **07 42 10.8 +1.1**
baz=251
J19K **Poorman** 63.89 25 IAmb IAmb 07 42 27.3
comp=Z,12nm,0.8s
J19K **Poorman** 63.89 25 P **P** **07 42 11.5 +1.3**
baz=246,SNR=7.8
SHLS **Shalkode** 63.96 311 *e*P **P** **07 42 09.1 -2.2**
baz=312
SHLS **Shalkode** 63.96 311 *e*P **P** **07 42 09.0 -2.2**
C18K **Utukok River** 64.04 19 IAmb IAmb 07 42 19.7
comp=Z,18nm,0.7s
C18K **Utukok River** 64.04 19 P **P** **07 42 12.3 +1.1**
baz=239
L20K **Farewell, AK** 64.04 26 P **P** **07 42 12.2 +1.0**
baz=249
M20K **Styx River** 64.16 27 IAmb IAmb 07 42 39.4
comp=Z,31nm,1.3s
M20K **Styx River** 64.16 27 P **P** **07 42 12.9 +0.8**
baz=250
H19K **Roundabout Mou** 64.20 23 IAmb IAmb 07 42 18.3
comp=Z,15nm,0.9s
H19K **Roundabout Mou** 64.20 23 P **P** **07 42 13.1 +1.0**
baz=245,SNR=11
G19K **Purcell Mounta** 64.23 22 IAmb IAmb 07 42 22.2
comp=Z,15nm,0.7s
G19K **Purcell Mounta** 64.23 22 P **P** **07 42 13.1 +0.7**
baz=244,SNR=13
B18K **Kolilk River** 64.23 18 P **P** **07 42 12.9 +0.5**
baz=238
UZB **Uzynbulak** 64.28 311 *e*P **P** **07 42 13.1 -0.2**
baz=311
UZB **Uzynbulak** 64.28 311 *e*P **P** **07 42 13.1 -0.2**
K20K **Telida** 64.28 26 IAmb IAmb 07 42 32.6
comp=Z,18nm,0.9s
K20K **Telida** 64.28 26 P **P** **07 42 12.5 -0.3**
baz=248
F19K **Shaleruckik Mo** 64.29 21 P **P** **07 42 13.2 +0.4**
baz=243
SEM **Semipalatinsk** 64.37 319 *e*P **P** **07 42 13.0 -0.9**
baz=320
SEM **Semipalatinsk** 64.37 319 *e*P **P** **07 42 12.9 -0.9**
KPKS **Kokpek** 64.55 312 *e*P **P** **07 42 15.0 -0.1**
baz=312
KPKS **Kokpek** 64.55 312 *e*P **P** **07 42 14.9 -0.1**
J20K **Nowinta River** 64.56 25 IAmb IAmb 07 42 21.8
comp=Z,17nm,0.8s
J20K **Nowinta River** 64.56 25 P **P** **07 42 15.7 +1.1**
baz=248,SNR=19
BRSE **Bradley Lake S** 64.58 30 P **P** **07 42 15.9 +1.0**
baz=253
I20K **Naaghedeneel** 64.67 24 P **P** **07 42 15.9 +0.7**
baz=247,SNR=10
ZHN **Zhinishke** 64.71 311 *e*P **P** **07 42 15.6 -0.5**
baz=311
ZHN **Zhinishke** 64.71 311 *e*P **P** **07 42 15.6 -0.5**
SATY **Saty** 64.72 311 *e*P **P** **07 42 16.0 -0.3**
comp=Z,9.8nm,0.9s,baz=311
SATY **Saty** 64.72 311 *e*P **P** **07 42 15.9 -0.3**
SATY pmax pmax
comp=Z,10.0nm,0.9s
E19K **Redstone River** 64.77 21 IAmb IAmb 07 42 25.6
comp=Z,13nm,0.8s
E19K **Redstone River** 64.77 21 P **P** **07 42 16.7 +0.8**
baz=243,SNR=10
C19K **Lookout Ridge** 64.78 19 P **P** **07 42 17.0 +1.0**
baz=240,SNR=10
H20K **Anotlenegga Mo** 64.78 23 P **P** **07 42 17.0 +1.0**
baz=247,SNR=17
PALK **Pallekele** 64.83 272 LR LR 08 11 08.6
comp=Z,49nm,18.6s,baz=189,slow=37
A19K **Wainwright** 64.89 17 P **P** **07 42 17.9 +1.3**
baz=238
TDK **Taldyqorghan** 64.89 313 *e*P **P** **07 42 17.1 0.0**
comp=Z,15nm,0.7s,baz=313
TDK **Taldyqorghan** 64.89 313 *e*P **P** **07 42 17.1 0.0**
TDK pmax pmax
comp=Z,15nm,0.7s
SKT **Skwentna** 64.90 27 P **P** **07 42 17.8 +0.9**
SKT IAmb IAmb 07 42 38.6
comp=Z,15nm,1.0s
SKT **Skwentna** 64.90 27 P **P** **07 42 17.8 +0.9**
baz=251
PPLA **Purkeypile** 64.92 26 P **P** **07 42 17.7 +0.6**
baz=250
D19K **Kuna River** 64.95 20 IAmb IAmb 07 42 25.5
comp=Z,19nm,0.7s
D19K **Kuna River** 64.95 20 P **P** **07 42 17.9 +0.8**
baz=242,SNR=11
SUA **Susitna One** 65.10 28 P **P** **07 42 18.4 +0.1**
baz=252
F20K **Avaraart Lake** 65.11 21 P **P** **07 42 18.7 +0.6**
baz=245
CHUM **Lake Minchumin** 65.20 25 P **P** **07 42 19.5 +0.8**
baz=250
HYB **Hyderabad** 65.22 283 *e*P **P** **07 42 22.1 +2.3**
HYB *es*P **sP** **07 42 36.2 +1.2**
HYB *e*PP **PP** **07 44 43.0 -0.7**
HYB *e*S **S** **07 51 00.1 -0.2**
ARXS **Arharly** 65.24 312 *e*P **P** **07 42 18.6 -0.9**
O22K **Cooper Landing** 65.29 29 P **P** **07 42 20.2 +0.9**
baz=254
SEW **Seward** 65.31 30 P **P** **07 42 20.5 +1.0**
baz=254
IMAR **Indian Mountai** 65.41 23 P **P** **07 42 21.0 +1.0**
KURK **Kurchatov** 65.44 320 P **P** **07 42 20.4 -0.1**
KURK **Kurchatov** 65.44 320 *ce*P **P** **07 42 20.3 -0.3**
KURK pmax pmax
comp=Z,75nm,1.0s
KURK **Kurchatov** 65.44 320 P **P** **07 42 20.2 -0.3**
RC01 **Rabbit Creek A** 65.45 29 P **P** **07 42 21.6 +1.1**
RC01 **Rabbit Creek A** 65.45 29 P **P** **07 42 21.2 +0.8**
baz=253,SNR=10
E20K **Nigu River** 65.48 20 P **P** **07 42 21.4 +0.9**
baz=244,SNR=20
KURBB **Kurchatov Arra** 65.49 320 P **P** **07 42 20.6 -0.2**
comp=Z,44nm,0.7s,baz=100,slow=7.1,SNR=192
KURBB LR LR 08 10 59.0
comp=Z,269nm,21.6s,baz=169,slow=36
comp=Z,44nm,0.7s
D20K **Etivluk River** 65.54 20 P **P** **07 42 21.6 +0.7**
baz=244,SNR=18
CUT **Chulitna** 65.60 27 P **P** **07 42 22.5 +1.1**
baz=252
H21K **Melozitna Rive** 65.64 23 IAmb IAmb 07 42 38.7
comp=Z,10nm,0.8s
H21K **Melozitna Rive** 65.64 23 P **P** **07 42 22.5 +0.9**
baz=248,SNR=14
KTH **Kantishna Hill** 65.68 26 IAmb IAmb 07 42 28.4
comp=Z,28nm,1.0s
G21K **Allakaket** 65.70 22 P **P** **07 42 22.6 +0.7**
baz=248
MDOK **Medeo** 65.72 311 *e*P **P** **07 42 22.3 -0.4**
baz=311
MDOK **Medeo** 65.72 311 *e*P **P** **07 42 22.3 -0.4**
TNSS **Tian-Shan** 65.79 311 *e*P **P** **07 42 22.7 -0.8**
baz=311
TNSS **Tian-Shan** 65.79 311 *e*P **P** **07 42 22.6 -0.8**
AAA **Alma-Ata** 65.82 311 *e*P **P** **07 42 22.9 -0.3**
baz=311
AAA **Alma-Ata** 65.82 311 *e*P **P** **07 42 22.9 -0.3**
BPAW **Bear Paw Mtn.** 65.83 25 P **P** **07 42 24.2 +1.4**
BPAW **Bear Paw Mtn.** 65.83 25 P **P** **07 42 23.7 +0.8**
baz=251,SNR=17
PMR **Palmer** 65.88 28 P **P** **07 42 24.0 +0.8**
PMR **Palmer** 65.88 28 P **P** **07 42 23.9 +0.8**
PMR IAmb IAmb 07 42 46.9
comp=Z,13nm,0.7s
PMR **Palmer** 65.88 28 P **P** **07 42 24.0 +0.8**
baz=254,SNR=7.8
PMR **Palmer** 65.88 28 P **P** **07 42 23.9 +0.8**
PMR pmax pmax
comp=Z,13nm,0.7s
B20K **Meade River** 65.96 18 P **P** **07 42 24.6 +1.1**
baz=242
F21K **Alatna River** 65.98 22 P **P** **07 42 24.7 +0.9**
baz=247,SNR=6.5
GHO **Glory Hole Cre** 66.02 28 IAmb IAmb 07 42 46.3
comp=Z,20nm,0.8s
PWL **Port Wells** 66.05 29 P **P** **07 42 25.2 +0.9**
baz=255,SNR=13
KNK **Knik Glacier** 66.14 28 IAmb IAmb 07 42 49.0
comp=Z,21nm,0.7s
KNK **Knik Glacier** 66.14 28 P **P** **07 42 25.8 +0.9**
baz=254
MLY **Manley** 66.24 24 IAmb IAmb 07 42 42.3
comp=Z,14nm,0.7s
MLY **Manley** 66.24 24 P **P** **07 42 26.1 +0.7**
baz=251,SNR=20
P23K **Montague Islan** 66.28 30 P **P** **07 42 26.4 +0.7**
baz=256
H22K **Ishtalitna Cre** 66.28 23 P **P** **07 42 26.8 +1.1**
baz=250,SNR=6.7
KUU **Kurty** 66.28 312 *e*P **P** **07 42 26.0 -0.1**
comp=Z,9.0nm,0.8s,baz=312
KUU **Kurty** 66.28 312 *e*P **P** **07 42 26.0 -0.1**
KUU pmax pmax
comp=Z,9.0nm,0.8s
E21K **Killik River** 66.30 20 P **P** **07 42 26.8 +1.0**
baz=246
SML **Sawmill** 66.30 28 P **P** **07 42 26.2 +0.3**
SML **Sawmill** 66.30 28 P **P** **07 42 26.5 +0.5**
baz=254,SNR=9.9
KSH **Kashi** 66.37 307 P **P** **07 42 29.4 +2.5**
KSH pP pwP 07 42 45.6 -0.5
KSH pmax pmax
comp=Z,10.0nm,1.0s
WAT1 **Susitna Watana** 66.48 27 P **P** **07 42 28.0 +0.9**
baz=254
RND **Reindeer** 66.52 26 IAmb IAmb 07 42 36.4
comp=Z,17nm,0.8s
RND **Reindeer** 66.52 26 P **P** **07 42 28.3 +1.0**
F22K **John River** 66.56 22 P **P** **07 42 28.5 +1.0**
baz=248
M23K **Glacier View** 66.58 28 P **P** **07 42 28.2 +0.6**
baz=255
MCK **McKinley** 66.58 26 P **P** **07 42 28.4 +0.8**
baz=253
B21K **Ikpikpuk River** 66.58 19 IAmb IAmb 07 42 36.5
comp=Z,15nm,0.8s
B21K **Ikpikpuk River** 66.58 19 P **P** **07 42 28.3 +0.8**
baz=245,SNR=8.3
G22K **Bettles** 66.59 22 P **P** **07 42 28.9 +1.3**
baz=249
GLI **Glacier Island** 66.64 29 IAmb IAmb 07 42 50.6
comp=Z,13nm,0.7s
GLI **Glacier Island** 66.64 29 P **P** **07 42 29.0 +0.9**
baz=256
A21K **Barrow** 66.73 17 P **P** **07 42 29.5 +1.1**
baz=242
SCM **Sheep Creek Mo** 66.77 28 P **P** **07 42 29.9 +0.9**
baz=255,SNR=9.7
WAT6 **Susitna Watana** 66.78 27 P **P** **07 42 29.5 +0.4**
baz=255,SNR=8.8
NEA2 **Nenana** 66.78 25 P **P** **07 42 30.3 +1.4**
baz=253
I23K **Minto, Yukon-K** 66.83 24 P **P** **07 42 29.8 +0.7**
baz=252,SNR=20
D22K **Ayikyak River** 66.91 20 IAmb IAmb 07 42 48.4
comp=Z,15nm,0.7s
D22K **Ayikyak River** 66.91 20 P **P** **07 42 30.8 +1.1**
baz=247,SNR=13
E22K **Anaktuvuk Pass** 66.92 21 IAmb IAmb 07 42 48.1
comp=Z,13nm,0.8s
E22K **Anaktuvuk Pass** 66.92 21 P **P** **07 42 31.3 +1.5**
baz=248
H23K **Yukon River** 66.97 24 P **P** **07 42 31.0 +0.9**
baz=252,SNR=15
A22K **Sinclair Lake** 67.06 18 P **P** **07 42 31.0 +0.5**
baz=244
DHY **Denali Highway** 67.07 27 P **P** **07 42 32.5 +1.5**
DHY IAmb IAmb 07 42 42.1
comp=Z,13nm,0.8s
DHY **Denali Highway** 67.07 27 P **P** **07 42 31.4 +0.5**
baz=255,SNR=8.3
G23K **Bananza Creek** 67.07 23 IAmb IAmb 07 42 47.4
comp=Z,29nm,1.4s
G23K **Bananza Creek** 67.07 23 P **P** **07 42 31.3 +0.6**
baz=251,SNR=11
WRH **Wood River Hil** 67.15 25 IAmb IAmb 07 42 37.0
comp=Z,20nm,0.8s
COLD **Coldfoot** 67.18 22 P **P** **07 42 32.4 +1.0**
baz=250
EYAK **Cordova Ski Ar** 67.21 30 P **P** **07 42 32.8 +1.2**
EYAK **Cordova Ski Ar** 67.21 30 P **P** **07 42 32.1 +0.5**
baz=257
MDM **Murphy Dome** 67.23 25 IAmb IAmb 07 42 51.1
comp=Z,12nm,0.7s
B22K **Teshekpuk Lake** 67.25 19 P **P** **07 42 32.5 +0.8**
baz=246
KLU **Klutina** 67.34 29 IAmb IAmb 07 43 09.4
comp=Z,19nm,1.0s
KLU **Klutina** 67.34 29 P **P** **07 42 32.9 +0.3**
baz=257
COLA **College** 67.36 25 P **P** **07 42 33.8 +1.3**
COLA **College** 67.36 25 P **P** **07 42 33.9 +1.3**
COLA IAmb IAmb 07 42 58.2
comp=Z,16nm,0.8s
COLA **College** 67.36 25 P **P** **07 42 33.2 +0.7**
baz=254
COLA **College** 67.36 25 *i* P **P** **07 42 34.4 +1.9**
COLA pmax pmax
comp=Z,9.0nm,0.8s
COLA **College** 67.36 25 P **P** **07 42 33.1 +0.6**
COLA pP **pwP** **07 42 48.9 -2.7**
M24K **Tolsona, Glenn** 67.36 28 P **P** **07 42 33.5 +0.8**
baz=256
SGDS **Sogindy** 67.50 311 *e*P **P** **07 42 33.6 -0.4**
baz=312
SGDS **Sogindy** 67.50 311 *e*P **P** **07 42 33.5 -0.4**
AAK **Ala-Archa** 67.57 311 P **P** **07 42 32.3 -2.2**
AAK **Ala-Archa** 67.57 311 P **P** **07 42 35.1 +0.6**
comp=Z,2.4nm,0.4s,baz=115,slow=4.3,SNR=7.6
AAK LR LR 08 13 38.5
comp=Z,136nm,20.4s,baz=84,slow=37
comp=Z,2.4nm,0.4s
POKR **Poker Plat Res** 67.60 25 P **P** **07 42 34.5 +0.5**
baz=254
HDA **Harding Lake** 67.61 26 IAmb IAmb 07 42 51.9
comp=Z,16nm,1.0s
HDA **Harding Lake** 67.61 26 P **P** **07 42 34.5 +0.4**
baz=255
D23K **Nanushuk River** 67.61 20 P **P** **07 42 34.7 +0.6**
baz=249
H24K **Noodor Dome** 67.62 24 IAmb IAmb 07 42 52.4
comp=Z,15nm,0.9s
H24K **Noodor Dome** 67.62 24 P **P** **07 42 35.1 +0.8**
baz=253,SNR=18
E23K **Chandalar** 67.67 21 P **P** **07 42 35.4 +0.9**
baz=251,SNR=33
KAIM **Kayak Island** 67.73 31 P **P** **07 42 35.9 +0.9**
baz=259
IL31 67.73 25 IAmb IAmb 07 42 39.7
comp=Z,13nm,0.9s
ILAR **Eielson Array** 67.73 25 P **P** **07 42 34.7 -0.2**
ILAR **Eielson Array** 67.73 25 P **P** **07 42 34.5 -0.4**
comp=Z,5.6nm,0.7s,baz=252,slow=6.0,SNR=57
ILAR LR LR 08 10 35.7
comp=Z,126nm,20.8s,baz=258,slow=34

comp=Z,5,6nm,0.7s
**ILAR Eielson Array 67.73 25** P **P 07 42 34.7 -0.2**
**BMRM Bremner River 67.84 29** P **P 07 42 36.8 +1.0**
baz=258
**TOLK Toolik Lake Re 67.88 21** P **P 07 42 37.2 +1.4**
TOLK IAmb IAmb 07 42 40.4
comp=Z,12nm,0.6s
**TOLK Toolik Lake Re 67.88 21** P **P 07 42 36.5 +0.7**
baz=250,SNR=14
**PAX Paxson 67.88 27** P **P 07 42 36.1 +0.1**
baz=257,SNR=16
**HARP HAARP 67.89 28** P **P 07 42 36.3 +0.3**
baz=257
**C23K Itkillik River 67.95 19** P **P 07 42 36.8 +0.7**
baz=249,SNR=27
**K24K Donnelly Dome 67.95 26** P **P 07 42 36.9 +0.5**
baz=256
**N25K Chitina, Valde 67.98 29** P **P 07 42 36.7 +0.1**
baz=258
**BTLS Baital 67.98 313** *e*P **P 07 42 36.6 -0.3**
baz=313
**BTLS Baital 67.98 313** *e*P **P 07 42 36.5 -0.3**
**G24K Hadweenzic Riv 68.03 23** P **P 07 42 37.3 +0.5**
baz=253,SNR=11
**E24K Your Creek 68.08 22** IAmb IAmb 07 42 56.9
comp=Z,12nm,0.7s
**E24K Your Creek 68.08 22** P **P 07 42 38.1 +1.0**
baz=252
**F24K Squaw Lake 68.12 22** P **P 07 42 38.1 +0.8**
baz=253,SNR=12
**D24K Happy Valley 68.31 20** P **P 07 42 39.2 +0.8**
baz=251,SNR=20
**GLB Gilahina Butte 68.32 29** IAmb IAmb 07 42 57.0
comp=Z,20nm,1.0s
**J25K Salcha River, 68.32 26** P **P 07 42 39.0 +0.3**
baz=256,SNR=12
**BGLC Bering Glacier 68.32 30** P **P 07 42 39.6 +1.0**
baz=260
**VRDI Verde Repeater 68.44 29** P **P 07 42 40.3 +0.6**
VRDI IAmb IAmb 07 42 57.6
comp=Z,13nm,0.8s
**PRP Porcupine Dome 68.48 25** P **P 07 42 39.6 -0.1**
baz=256
**CRQM Cirque 68.51 30** IAmb IAmb 07 42 52.9
comp=Z,22nm,0.7s
**CRQE Cirque 68.53 30** P **P 07 42 40.6 +0.4**
baz=260
**C24K Franklin Bluff 68.53 20** P **P 07 42 40.5 +0.7**
baz=251
**H25L Birch Creek 68.55 24** P **P 07 42 40.7 +0.7**
baz=255,SNR=14
**G25K Bearman Lake 68.57 23** P **P 07 42 41.0 +0.9**
baz=255
**NIL Nilore 68.62 301** P **P 07 42 40.8 -0.3**
**NIL Nilore 68.62 301** P **P 07 42 40.8 -0.3**
NIL pmax pmax
comp=Z,36nm,0.7s
**NIL Nilore 68.62 301** P **P 07 42 41.8 +0.6**
NIL pP **sP 07 42 57.1 0.0**
**MENT Mentasta 68.66 27** P **P 07 42 42.4 +1.6**
**MENT Mentasta 68.66 27** IAmb IAmb 07 42 55.2
comp=Z,15nm,0.6s
**MCARA McCarthy VSAT 68.68 29** P **P 07 42 41.1 +0.2**
baz=260
**SCRK Sand Creek 68.76 26** P **P 07 42 41.9 +0.4**
baz=258,SNR=13
**L26K Log Cabin Wild 68.84 27** IAmb IAmb 07 42 51.6
comp=Z,13nm,0.8s
**L26K Log Cabin Wild 68.84 27** P **P 07 42 42.5 +0.6**
baz=259,SNR=11
**FYU Fort Yukon 68.86 23** P **P 07 42 43.7 +1.8**
**M26K Nabesna, AK 68.88 28** P **P 07 42 42.9 +0.7**
baz=259
**F25K Christian River 68.97 22** P **P 07 42 43.6 +1.0**
baz=255,SNR=17
**MESA MESA 68.99 31** P **P 07 42 44.0 +0.9**
baz=261
**J26L Joseph Creek 69.05 26** IAmb IAmb 07 43 02.9
comp=Z,15nm,0.8s
**J26L Joseph Creek 69.05 26** P **P 07 42 44.2 +1.0**
baz=258,SNR=18
**D25K Kavik River 69.19 20** IAmb IAmb 07 43 02.6
comp=Z,19nm,0.8s
**D25K Kavik River 69.19 20** P **P 07 42 44.8 +0.8**
baz=253,SNR=24
**BMAR Burnt Mountain 69.32 23** P **P 07 42 46.2 +1.3**
**M27K Edge Creek, AK 69.38 28** P **P 07 42 46.2 +0.8**
baz=260,SNR=6.9
**I26K Coal Creek Min 69.39 25** P **P 07 42 45.8 +0.6**
baz=258
**CTG Chitna Glacier 69.41 30** P **P 07 42 46.2 +0.5**
baz=261
**CTGM Chitina Glacie 69.41 30** IAmb IAmb 07 42 55.4
comp=Z,27nm,0.9s
**G26K Porcupine Rive 69.51 23** P **P 07 42 47.1 +1.2**
baz=257,SNR=7.4
**L27K Beaver Creek, 69.53 27** P **P 07 42 46.9 +0.7**
baz=260,SNR=11
**F26K Sheenjek River 69.55 22** P **P 07 42 47.4 +1.2**
baz=256,SNR=12
**BCAR Beaver Creek A 69.55 27** P **P 07 42 47.7 +1.3**
**K27K Chicken 69.59 26** P **P 07 42 47.4 +0.9**
baz=259
**C26K Camden Bay 69.85 20** P **P 07 42 49.3 +1.3**
baz=255,SNR=32
**O28M Mount Upton 69.94 30** P **P 07 42 49.8 +0.7**
baz=262
**YUK3 Moose Creek 69.95 29** P **P 07 42 50.2 +1.1**
baz=262
**I27K Kandik River 70.08 25** P **P 07 42 49.9 +0.4**
baz=259
**EGAK Eagle 70.12 26** IAmb IAmb 07 43 00.2
comp=Z,15nm,0.8s
**EGAK Eagle 70.12 26** P **P 07 42 50.5 +0.8**
baz=260,SNR=12
**C27K Jago River 70.17 20** P **P 07 42 50.7 +0.7**
baz=256,SNR=8.4
**YUK8 Steele Glacier 70.21 30** P **P 07 42 51.2 +0.5**
baz=262
**H27K Steamboat Moun 70.24 24** P **P 07 42 51.3 +0.8**
baz=259,SNR=20
**G27K Doyon Strip 70.30 24** P **P 07 42 52.1 +1.3**
baz=259
**PPT Papeete 70.37 115** LR LR 08 07 50.3
comp=Z,207nm,21.4s,baz=296,slow=31
**PPT2 Papeete2 70.37 115** *e*S **S 07 52 03.2 +1.3**
comp=Z,105nm,25.5s
**PPT2 Papeete2 70.37 115** *e*LR LR 08 03 49.7
PPT2 *e*LR LR 08 04 13.4
comp=Z,243nm,21.0s
**KK31 Karatay Array 70.50 311** IAmb IAmb 07 43 09.2
comp=Z,23nm,1.1s
**KKAR Karatay Array 70.50 311** P **P 07 42 52.6 +0.1**
**KKAR Karatay Array 70.50 311** IAmb IAmb 07 43 09.2
comp=Z,23nm,1.1s
**KKAR Karatay Array 70.50 311** P **P 07 42 52.6 +0.1**
**E27K Coleen River 70.60 22** IAmb IAmb 07 43 16.9
comp=Z,26nm,1.6s
**E27K Coleen River 70.60 22** P **P 07 42 53.4 +0.7**
baz=258
**O29M Mount Kennedy 70.67 31** P **P 07 42 54.0 +0.7**
baz=264
**I28M Miner Creek 70.75 25** IAmb IAmb 07 43 13.4
comp=Z,62nm,1.9s
**I28M Miner Creek 70.75 25** P **P 07 42 55.0 +1.3**
baz=261,SNR=12
**GAR Garm 70.76 307** IAmb IAmb 07 43 14.2
comp=Z,30nm,1.0s
**DAWY Dawson 70.77 27** P **P 07 42 54.6 +0.9**
DAWY IAmb IAmb 07 43 12.1
comp=Z,17nm,1.0s
**DAWY Dawson 70.77 27** P **P 07 42 54.9 +1.1**
baz=262,SNR=10
**BRVK Borovoye 70.81 322** P **P 07 42 54.1 -0.1**
**BRVK Borovoye 70.81 322** *ce*P **P 07 42 54.3 +0.1**
BRVK pmax pmax
comp=Z,37nm,1.0s
**BRVK Borovoye 70.81 322** P **P 07 42 54.1 -0.1**
BRVK pP **sP 07 43 09.4 -0.1**
**YUK6 Outpost Mounta 70.85 30** P **P 07 42 55.4 +0.8**
baz=264
**M29M Somme Creek 70.97 28** IAmb IAmb 07 43 13.9
comp=Z,16nm,0.8s
**M29M Somme Creek 70.97 28** P **P 07 42 56.4 +1.2**
baz=263,SNR=11
**BRLS Boroldaу 71.00 311** *e*P **P 07 42 55.9 +0.3**
baz=311
**BRLS Boroldaу 71.00 311** *e*P **P 07 42 55.9 +0.3**
**P29M Windy Craggy 71.03 31** P **P 07 42 56.5 +1.1**
baz=265
**D27M Malcolm River 71.03 21** P **P 07 42 56.5 +1.2**
baz=259
**F28M Old Crow 71.13 23** IAmb IAmb 07 43 18.9
comp=Z,17nm,0.9s
**F28M Old Crow 71.13 23** P **P 07 42 56.9 +1.1**
baz=260,SNR=8.9
**CHM Chimkent 71.19 310** *e*P **P 07 42 56.6 -0.1**
baz=310
**CHM Chimkent 71.19 310** *e*P **P 07 42 56.6 -0.1**
**L29M L29M 71.20 28** IAmb IAmb 07 43 06.5
comp=Z,21nm,0.8s
**L29M L29M 71.20 28** P **P 07 42 57.3 +0.9**
baz=263,SNR=13
**J29N Klondike Camp 71.33 26** P **P 07 42 58.0 +0.9**
baz=263
**I29M Ogilvie Camp, 71.41 25** P **P 07 42 58.3 +0.7**
baz=262,SNR=7.5
**E28M Babbage River 71.42 22** P **P 07 42 58.6 +1.0**
baz=260
**P30M Million Dollar 71.46 31** P **P 07 42 58.9 +0.8**
baz=265
**H29M Whitestone 71.50 24** P **P 07 42 59.2 +1.1**
baz=266
**N30M Aishikik Lake 71.51 29** IAmb IAmb 07 43 16.7
comp=Z,34nm,1.2s
**N30M Aishikik Lake 71.51 29** P **P 07 42 59.2 +0.8**
baz=265
**K29M Barlow Dome 71.56 27** IAmb IAmb 07 43 17.4
comp=Z,21nm,0.9s
**K29M Barlow Dome 71.56 27** P **P 07 42 59.5 +0.9**
baz=264,SNR=13
**CHGR Chuyangaron 71.68 306** P **P 07 42 59.5 -0.4**
**PLBC Pleasant Camp 71.71 32** P **P 07 43 00.4 +0.9**
baz=266
**G29M Pine Creek 71.73 24** IAmb IAmb 07 43 17.0
comp=Z,16nm,0.9s
**G29M Pine Creek 71.73 24** P **P 07 43 00.6 +1.0**
baz=262
**SIMJ Simiganj 71.80 306** P **P 07 43 00.8 +0.1**
SIMJ IAmb IAmb 07 43 20.5
comp=Z,25nm,0.9s
**O30N Mendenhall 71.94 30** P **P 07 43 02.2 +1.3**
baz=266
**E29M Blow River 71.99 22** P **P 07 43 01.9 +0.9**
baz=262
**KBL Kabul 72.05 302** P **P 07 43 02.6 +0.3**
**KBL Kabul 72.05 302** P **P 07 43 02.6 +0.3**
KBL pmax pmax
comp=Z,10.0nm,0.7s
**SIT Sitka 72.13 34** P **P 07 43 03.1 +1.1**
baz=268
**N31M Braeburn, Yuko 72.14 30** IAmb IAmb 07 43 12.1
comp=Z,18nm,0.9s
**N31M Braeburn, Yuko 72.14 30** P **P 07 43 02.9 +0.8**
baz=266
**J30M Hart River 72.15 26** IAmb IAmb 07 43 19.5
comp=Z,34nm,1.5s
**J30M Hart River 72.15 26** P **P 07 43 02.9 +0.7**
baz=264
**EPYK Eagle Plains 72.18 24** IAmb IAmb 07 43 24.1
comp=Z,59nm,1.6s
**EPYK Eagle Plains 72.18 24** P **P 07 43 02.4 +0.2**
baz=264
**I30M Mount Dempster 72.20 26** P **P 07 43 03.2 +0.8**
baz=264
**SKAG Skagway 72.24 32** P **P 07 43 03.3 +0.7**
baz=267
**G30M tAoh Zraii Nji 72.44 24** P **P 07 43 04.3 +0.5**
baz=264,SNR=6.9
**WHY Whitehorse 72.53 30** P **P 07 43 05.8 +1.3**
**WHY Whitehorse 72.53 30** P **P 07 43 05.0 +0.5**
baz=267
**R32K Eaglecrest 72.61 33** P **P 07 43 05.4 +0.5**
baz=268
**F30M Barrier River 72.68 23** P **P 07 43 05.9 +0.7**
baz=264
**TBI Tubuai 72.71 120** *e*LR LR 08 04 54.9
comp=Z,682nm,24.5s
**M31M Drury Creek, Y 72.84 29** P **P 07 43 07.0 +0.7**
baz=267
**P32M Atlin 73.07 32** P **P 07 43 08.3 +0.7**
baz=268
**G31M Satah River 73.20 24** IAmb IAmb 07 43 29.9
comp=Z,29nm,1.0s
**G31M Satah River 73.20 24** P **P 07 43 08.8 +0.6**
baz=266,SNR=11
**U33K Whale Pass 73.33 35** P **P 07 43 10.2 +1.1**
baz=270
**FARO Faro, Yukon 73.33 29** P **P 07 43 10.1 +0.9**
baz=268
**N32M Quiet Lake 73.42 30** P **P 07 43 11.3 +1.6**
baz=268
**F31M Tsiigehtchic 73.45 23** P **P 07 43 10.8 +1.2**
baz=266
**P33M Teslin, Yukon 73.53 31** P **P 07 43 11.7 +1.2**
baz=269
**INK Inuvik 73.59 22** P **P 07 43 10.4 0.0**
**INK Inuvik 73.59 22** P **P 07 43 10.8 +0.3**
comp=Z,9.7nm,1.0s,baz=266,slow=7.3,SNR=6.4
comp=Z,9.7nm,1.0s
**INK Inuvik 73.59 22** P **P 07 43 12.0 +1.5**
baz=266
**Q32M Nakina River 73.80 32** P **P 07 43 13.3 +1.1**
baz=270
**R33M Jennings River 74.47 32** IAmb IAmb 07 43 26.1
comp=Z,16nm,0.9s
**R33M Jennings River 74.47 32** P **P 07 43 17.3 +1.3**
baz=271,SNR=7.9
**T35M Bob Quinn 74.91 34** IAmb IAmb 07 43 41.4
comp=Z,34nm,1.4s
**T35M Bob Quinn 74.91 34** P **P 07 43 19.1 +0.7**
baz=272
**DLBC Dease Lake 74.98 33** IAmb IAmb 07 43 28.5
comp=Z,23nm,0.9s
**DLBC Dease Lake 74.98 33** P **P 07 43 20.9 +2.1**
comp=Z,10.0nm,0.8s,baz=286,slow=5.3,SNR=17
comp=Z,10.0nm,0.8s
**DLBC Dease Lake 74.98 33** P **P 07 43 20.0 +1.1**
baz=272,SNR=10
**GRNB Grenville Isla 75.21 38** IAmb IAmb 07 43 30.8
comp=Z,20nm,1.0s
**WTLY Watson Lake, Y 75.55 31** IAmb IAmb 07 43 32.0
comp=Z,24nm,0.7s
**WTLY Watson Lake, Y 75.55 31** P **P 07 43 23.1 +1.1**
baz=272
**TGTN Hyland Airport 75.74 30** P **P 07 43 24.2 +1.1**
baz=273
**SVE Sverdlovsk 76.32 326** *e*P **P 07 43 27.2 +0.8**
SVE pmax pmax
comp=Z,21nm,1.0s
**BBB Bella Bella 76.44 39** LR LR 08 13 06.2
comp=Z,95nm,19.7s,baz=272,slow=33
**A36M Sachs Harbour 76.46 19** P **P 07 43 27.1 +0.1**
A36M **sP 07 43 42.7 +0.3**
A36M IAmb IAmb 07 43 46.0
comp=Z,25nm,0.8s
**A36M Sachs Harbour 76.46 19** P **P 07 43 27.9 +0.9**
baz=273
**HOLB Holberg 76.57 41** IAmb IAmb 07 43 41.7
comp=Z,20nm,0.6s
**LIRD Liard River Hi 76.95 32** P **P 07 43 31.3 +1.3**
baz=275
**C36M Paulatuk 77.02 21** IAmb IAmb 07 43 47.4
comp=Z,20nm,0.9s
**C36M Paulatuk 77.02 21** P **P 07 43 30.9 +0.8**
baz=274
**ABKAR Akbulak array 77.45 318** P **P 07 43 32.7 -0.2**
**ABKAR Akbulak array 77.45 318** IAmb IAmb 07 43 49.9
comp=Z,19nm,0.9s
**TOAD Toad River Com 77.45 32** P **P 07 43 33.5 +0.7**
baz=276,SNR=8.4
**ARU Arti 77.50 325** P **P 07 43 32.8 -0.3**
ARU IAmb IAmb 07 43 50.1
comp=Z,14nm,0.7s
**ARU Arti 77.50 325** P **P 07 43 32.8 -0.3**
comp=Z,5.1nm,0.3s,baz=101,slow=16,SNR=15
ARU LR LR 08 19 25.4
comp=Z,192nm,20.4s,baz=117,slow=37
comp=Z,5.1nm,0.3s
**ARU Arti 77.50 325** *d i*P **P 07 43 33.2 +0.1**
ARU *PP **sP 07 43 46.8 -1.8**
ARU 07 46 22.8
ARU S **S 07 53 23.0 +2.3**
ARU SS **SS 07 58 21.1 +1.1**
ARU pmax pmax
comp=Z,19nm,1.2s
ARU MLR MLR
comp=Z,199nm,19.0s
**ARU Arti 77.50 325** P **P 07 43 32.6 -0.5**
comp=Z,20nm,0.7s
**HRA Herat 77.65 303** IAmb IAmb 07 43 52.7
comp=Z,14nm,0.8s
**WRGLY Wrigley 77.84 28** P **P 07 43 36.2 +1.3**
baz=276
**KOTAN Kotaneelee Air 77.91 31** P **P 07 43 36.2 +0.8**
baz=277
**AKTO Aktyubinsk 78.54 319** P **P 07 43 38.5 -0.5**
comp=Z,3.0nm,0.5s,baz=84,slow=5.4,SNR=13
AKTO LR LR 08 19 34.1
comp=Z,206nm,21.0s,baz=47,slow=37
comp=Z,3.0nm,0.5s
**CLRS Cowichan Lake 79.37 42** IAmb IAmb 07 44 05.4
comp=Z,19nm,1.0s
**E03A Lebam 80.11 44** IAmb IAmb 07 44 06.9
comp=Z,32nm,1.0s
**GNW Green Mountain 80.44 43** IAmb IAmb 07 44 11.5
comp=Z,21nm,1.1s
**KMPM Mount Pierce 80.76 51** P **P 07 43 51.3 -0.1**
KMPM IAmb IAmb 07 44 12.3
comp=Z,31nm,1.0s
**BUCK Buck Mountain 80.92 47** IAmb IAmb 07 44 02.6
comp=Z,30nm,1.0s
**KHMM Horse Mountain 80.97 50** IAmb IAmb 07 43 55.9
comp=Z,17nm,0.8s
**F04A Amboy 81.00 45** IAmb IAmb 07 43 59.9
comp=Z,18nm,0.9s
**H04D Lebanon 81.03 46** IAmb IAmb 07 44 03.5
comp=Z,17nm,0.9s
**D05A Enumclaw 81.06 44** IAmb IAmb 07 44 14.2
comp=Z,22nm,0.9s
**KMRM Mail Ridge 81.10 51** IAmb IAmb 07 44 24.2
comp=Z,34nm,1.2s
**HUMO Hull Mountain 81.22 48** P **P 07 43 55.6 +1.8**
HUMO IAmb IAmb 07 43 57.7
comp=Z,49nm,1.8s
**YBH Yreka Blue Hor 81.57 49** LR LR 08 14 31.5
comp=Z,80nm,19.8s,baz=286,slow=32
**HOOD Mount Hood Mea 81.64 45** IAmb IAmb 07 44 22.4
comp=Z,16nm,0.8s
**O02D Mt. Diablo Mer 81.80 51** P **P 07 43 59.0 +2.1**
O02D IAmb IAmb 07 44 00.3
comp=Z,36nm,1.6s
**G05A Wamic 81.89 45** IAmb IAmb 07 44 24.1
comp=Z,14nm,0.8s
**YKA Yellowknife Ar 81.97 28** P **P 07 43 57.6 +0.4**
**YKA Yellowknife Ar 81.97 28** P **P 07 43 57.9 +0.7**
comp=Z,1.9nm,0.7s,baz=289,slow=5.5,SNR=21
YKA LR LR 08 19 45.6
comp=Z,118nm,20.3s,baz=322,slow=35
comp=Z,1.9nm,0.7s
**KIRV Kirov 82.00 328** P **P 07 43 57.2 -0.2**
comp=Z,11nm,0.5s,baz=78,slow=5.5,SNR=6.4
KIRV LR LR 08 22 54.4
comp=Z,128nm,18.1s,baz=73,slow=38
comp=Z,11nm,0.5s
**KIRV Kirov 82.00 328** *ce*P **P 07 43 58.7 +1.3**
**GDXM Geysers 82.06 52** IAmb IAmb 07 44 20.4
comp=Z,16nm,1.0s
**G06A Carlson Farm, 82.36 45** IAmb IAmb 07 44 19.5
comp=Z,45nm,1.9s
**PINE Pine Mountain 82.44 47** P **P 07 44 01.6 +1.3**
**WSAR Wadi Sarin 82.73 292** LR LR 08 22 08.0
comp=Z,40nm,20.1s,baz=47,slow=37
**HAWA Hanford 82.87 44** IAmb IAmb 07 44 23.2
comp=Z,13nm,0.9s
**C09A Chrisman Ranch 83.40 43** P **P 07 44 05.4 +0.4**
**E09A Wood Farm, Sta 83.78 44** IAmb IAmb 07 44 27.8
comp=Z,12nm,0.8s
**RES Resolute Bay 84.00 14** IAmb IAmb 07 44 15.8
comp=Z,8.7nm,0.7s
**RES Resolute Bay 84.00 14** LR LR 08 21 01.5
comp=Z,66nm,21.3s,baz=18,slow=35
**NEW Newport 84.05 42** LR LR 08 16 52.6
comp=Z,46nm,20.0s,baz=296,slow=32
**NEW Newport 84.05 42** P **P 07 44 09.6 +1.3**
baz=284,SNR=11
**NEW Newport 84.05 42** P **P 07 44 08.6 +0.3**
**MPK Martis Peak 84.07 51** IAmb IAmb 07 44 30.9
comp=Z,32nm,1.2s
**CMB Columbia Colle 84.07 52** IAmb IAmb 07 44 11.2
comp=Z,11nm,0.9s
**CASY Casey 84.16 194** P **P 07 44 08.7 +0.5**
**J08A Circle Bar Ran 84.28 47** IAmb IAmb 07 44 12.3
comp=Z,11nm,0.9s
**WVOR Wild Horse Val 84.38 48** IAmb IAmb 07 44 31.7
comp=Z,14nm,1.1s
**WVOR Wild Horse Val 84.38 48** P **P 07 44 11.7 +1.4**
**PNTR Pine Nut 84.44 51** IAmb IAmb 07 44 21.9
comp=Z,16nm,0.7s
**PAHR Pah Rah Range 84.46 51** P **P 07 44 11.2 +0.5**
**BELG Belogornoye 84.52 323** P **P 07 44 11.5 +1.0**
comp=Z,21nm,0.7s,baz=141,slow=1.8,SNR=10.0
BELG LR LR 08 22 03.7
comp=Z,121nm,21.8s,baz=65,slow=36
comp=Z,21nm,0.7s
**BELG Belogornoye 84.52 323** *i*P **P 07 44 11.6 +1.1**
BELG pmax pmax
comp=Z,3.0nm,0.7s
**WAKR Walker 84.70 52** IAmb IAmb 07 44 15.0
comp=Z,42nm,1.9s
**BMO Blue Mountains 84.75 45** IAmb IAmb 07 44 33.4
comp=Z,23nm,1.4s
**SMMC Simmler 84.99 55** P **P 07 44 14.0 +0.7**
baz=283
**RKT Rikitea 85.12 115** *e*LR LR 08 10 43.2
comp=Z,816nm,26.5s
**PKM Mcpherson Peak 85.23 55** P **P 07 44 14.3 -0.5**
baz=283
**MLAC Mammoth, Mammo 85.36 53** P **P 07 44 14.7 -0.7**
baz=284
**RYN Ryan 85.36 52** IAmb IAmb 07 44 36.3
comp=Z,40nm,1.9s
**LHV Little Huntoon 85.47 52** IAmb IAmb 07 44 36.9
comp=Z,16nm,1.1s
**NVAR Mina Array Bea 85.58 52** P **P 07 44 17.4 +1.0**
**NVAR Mina Array Bea 85.58 52** P **P 07 44 18.1 +1.6**
comp=Z,7.4nm,0.6s,baz=268,slow=5.4,SNR=58
NVAR LR LR 08 21 03.7
comp=Z,53nm,19.4s,baz=288,slow=35
comp=Z,7.4nm,0.6s
**KVN Kaiserville 85.58 51** IAmb IAmb 07 44 18.9
comp=Z,18nm,1.4s
**VES Vestal, Richgr 85.59 54** P **P 07 44 16.4 +0.2**
baz=284,SNR=7.2
**NV11 Mina Array Sit 85.69 52** IAmb IAmb 07 44 38.9
comp=Z,28nm,1.6s
**APA Apatity 85.84 339** ⇓*i*P **P 07 44 17.7 +0.8**
APA pmax pmax
comp=Z,12nm,0.7s
**BMN Battle Mountai 85.90 50** IAmb IAmb 07 44 20.1
comp=Z,7.8nm,0.7s
**ARVC Arvin 85.96 55** P **P 07 44 18.6 +0.5**
baz=284
**DSP Deep Springs 86.09 53** IAmb IAmb 07 44 39.1
comp=Z,20nm,1.6s
**ISA Isabella, Lake 86.11 54** P **P 07 44 19.7 +0.7**
baz=284
**CWC Cottonwood Cre 86.23 54** P **P 07 44 19.9 +0.2**
baz=284
**MSO Missoula 86.50 43** P **P 07 44 20.9 +0.2**
baz=286
**GRAC Grapevine Rang 86.65 53** P **P 07 44 22.7 +1.1**
**GRAC Grapevine Rang 86.65 53** P **P 07 44 22.0 +0.4**
baz=285
**EDW2 Edwards Air Fo 86.69 55** P **P 07 44 21.8 0.0**
baz=284
**CIS Catalina Islan 86.71 57** P **P 07 44 22.1 +0.2**
baz=284
**MPMC Manual Prospec 86.79 54** P **P 07 44 22.8 +0.3**
baz=285,SNR=14
**HLID Hailey 87.09 46** IAmb IAmb 07 44 45.2
comp=Z,11nm,0.9s
**HLID Hailey 87.09 46** P **P 07 44 24.1 +0.4**
baz=286,SNR=13
**BFSC Mount Baldy Ra 87.12 56** P **P 07 44 24.6 +0.5**
baz=285
**MAK Makhachkala 87.16 313** *e*P **P 07 44 22.1 -1.7**
MAK *e* 07 54 45.6
MAK pmax pmax
comp=Z,98nm,1.2s
**FURC Furnace Creek, 87.18 53** P **P 07 44 25.3 +1.3**
baz=285

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ELK | Elko | 87.28 | 49 | IAmb | IAmb | 07 44 27.4 | |
| | comp=Z,16nm,0.9s | | | | | | |
| WCT | Wildcat Mounta | 87.28 | 53 | IAmb | IAmb | 07 44 45.3 | |
| | comp=Z,17nm,1.1s | | | | | | |
| ARCES | ARCESS Array B | 87.38 | 342 | P | P | 07 44 24.1 | -0.3 |
| | comp=Z,6.6nm,0.7s,baz=61,slow=9.4,SNR=11 | | | | | | |
| ARCES | | | | LR | LR | 08 27 55.7 | |
| | comp=Z,139nm,18.9s,baz=104,slow=39 | | | | | | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| GWY | Greenwater Val | 87.40 | 54 | IAmb | IAmb | 07 44 55.3 | |
| | comp=Z,13nm,1.2s | | | | | | |
| GSC | Goldstone, Bar | 87.52 | 54 | IAmb | IAmb | 07 44 46.5 | |
| | comp=Z,21nm,1.4s | | | | | | |
| GSC | Goldstone, Bar | 87.52 | 54 | P | P | 07 44 26.4 | +0.5 |
| | baz=285,SNR=7.6 | | | | | | |
| TPNV | Topopah Spring | 87.53 | 53 | P | P | 07 44 26.0 | 0.0 |
| | baz=285,SNR=8.1 | | | | | | |
| R11B | Troy Canyon, C | 87.66 | 51 | P | P | 07 44 27.1 | +0.4 |
| | baz=286,SNR=11 | | | | | | |
| SHOC | Shoshone, Teco | 87.78 | 54 | P | P | 07 44 28.0 | +1.0 |
| | baz=285 | | | | | | |
| DLMT | Dillon | 87.82 | 44 | IAmb | IAmb | 07 44 48.4 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| 109C | Camp Elliot, M | 87.91 | 57 | P | P | 07 44 28.6 | +1.0 |
| | baz=285 | | | | | | |
| HEC | Hector,Ludlow | 88.02 | 55 | P | P | 07 44 29.2 | +0.9 |
| | baz=285 | | | | | | |
| TUQ | Turquoise Moun | 88.18 | 54 | P | P | 07 44 29.7 | +0.6 |
| | baz=286 | | | | | | |
| PFO | Pinyon Flats O | 88.24 | 56 | P | P | 07 44 29.5 | +0.1 |
| PFO | | | | | pP | 07 44 39.1 | -1.5 |
| PFO | | | | IAmb | IAmb | 07 44 49.8 | |
| | comp=Z,18nm,1.4s | | | | | | |
| PFO | Pinyon Flats O | 88.24 | 56 | LR | LR | 08 23 28.4 | |
| | comp=Z,70nm,19.0s,baz=286,slow=35 | | | | | | |
| PFO | Pinyon Flats O | 88.24 | 56 | P | P | 07 44 30.1 | +0.7 |
| | baz=285 | | | | | | |
| PFO | Pinyon Flats O | 88.24 | 56 | P | P | 07 44 30.4 | +1.0 |
| TPFO | Pinon Flats | 88.25 | 56 | P | P | 07 44 30.0 | +0.6 |
| | baz=285 | | | | | | |
| VRH | Novokhopyorsk | 88.38 | 323 | *e*P | P | 07 44 23.3 | -6.1 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| BOZ | Bozeman (W) | 88.40 | 43 | IAmb | IAmb | 07 44 51.3 | |
| | comp=Z,11nm,1.1s | | | | | | |
| BOZ | Bozeman (W) | 88.40 | 43 | P | P | 07 44 30.2 | +0.3 |
| | baz=288,SNR=17 | | | | | | |
| SPR3 | Spring Creek 3 | 88.43 | 50 | IAmb | IAmb | 07 44 33.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| MONP2 | Monument Peak | 88.46 | 57 | P | P | 07 44 31.0 | +0.4 |
| | baz=285,SNR=6.8 | | | | | | |
| BELC | Belle Mtn. Jos | 88.51 | 55 | P | P | 07 44 31.1 | +0.4 |
| | baz=286 | | | | | | |
| GMRC | Granite Mounta | 88.57 | 55 | P | P | 07 44 31.6 | +0.7 |
| | baz=286,SNR=7.4 | | | | | | |
| IKP | In-Ko-Pah, Jac | 88.78 | 57 | P | P | 07 44 32.2 | +0.3 |
| | baz=286 | | | | | | |
| EGMT | Eagleton | 88.84 | 41 | IAmb | IAmb | 07 44 53.2 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| EGMT | Eagleton | 88.84 | 41 | P | P | 07 44 32.4 | +0.5 |
| | baz=289 | | | | | | |
| PSUT | Pine Spring | 88.92 | 51 | IAmb | IAmb | 07 44 35.1 | |
| | comp=Z,15nm,0.9s | | | | | | |
| YUH | Yuha Desert | 88.93 | 57 | IAmb | IAmb | 07 44 52.9 | |
| | comp=Z,18nm,1.3s | | | | | | |
| YHB | Horse Butte | 88.95 | 44 | IAmb | IAmb | 07 44 32.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| ESJX | Sierra Juarez | 89.08 | 57 | IAmb | IAmb | 07 44 54.2 | |
| | comp=Z,18nm,1.3s | | | | | | |
| SPUT | South Promonto | 89.14 | 48 | IAmb | IAmb | 07 44 55.1 | |
| | comp=Z,15nm,1.0s | | | | | | |
| DUG | Dugway, Tooele | 89.20 | 49 | IAmb | IAmb | 07 44 53.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| DUG | Dugway, Tooele | 89.20 | 49 | P | P | 07 44 33.7 | -0.1 |
| | baz=287,SNR=27 | | | | | | |
| IMW | Indian Meadow | 89.40 | 45 | IAmb | IAmb | 07 44 56.2 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| FXWY | Fox Creek | 89.42 | 45 | IAmb | IAmb | 07 44 56.1 | |
| | comp=Z,11nm,1.3s | | | | | | |
| H17A | Grant Village | 89.48 | 44 | IAmb | IAmb | 07 44 58.6 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| H17A | Grant Village | 89.48 | 44 | P | P | 07 44 36.1 | +0.9 |
| | baz=289,SNR=7.1 | | | | | | |
| FLWY | Flagg Ranch | 89.50 | 45 | P | P | 07 44 37.1 | +1.8 |
| FLWY | | | | IAmb | IAmb | 07 44 56.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| CCUT | Cedar City | 89.57 | 51 | IAmb | IAmb | 07 44 38.8 | |
| | comp=Z,8.1nm,1.0s | | | | | | |
| AHID | Auburn Hatcher | 89.64 | 46 | IAmb | IAmb | 07 44 57.4 | |
| | comp=Z,15nm,1.1s | | | | | | |
| HWUT | Hardware Ranch | 89.68 | 47 | IAmb | IAmb | 07 44 57.5 | |
| | comp=Z,19nm,1.1s | | | | | | |
| VALR | Valaam | 89.70 | 334 | *i* P | P | 07 44 36.7 | +1.3 |
| VALR | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| GLA | Glamis | 89.71 | 56 | P | P | 07 44 36.8 | +0.6 |
| | baz=286 | | | | | | |
| LOHW | Long Hollow | 89.72 | 45 | P | P | 07 44 37.3 | +1.1 |
| LOHW | | | | IAmb | IAmb | 07 44 57.3 | |
| | comp=Z,15nm,1.5s | | | | | | |
| BLYC | Blythe | 89.75 | 55 | IAmb | IAmb | 07 44 38.9 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| OBN | Obninsk | 89.79 | 327 | LR | LR | 08 27 30.7 | |
| | comp=Z,204nm,18.9s,baz=346,slow=37 | | | | | | |
| OBN | Obninsk | 89.79 | 327 | ‖ *e*P | P | 07 44 35.9 | -0.1 |
| OBN | | | | *e* | | 07 48 07.6 | |
| OBN | | | | *e*S | SKSac | 07 54 57.7 | -5.3 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,212nm,19.0s | | | | | | |
| NLU | North Lily Min | 89.82 | 49 | IAmb | IAmb | 07 44 39.3 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| CTU | Camp Tracy | 89.83 | 48 | IAmb | IAmb | 07 44 39.1 | |
| | comp=Z,9.5nm,1.0s | | | | | | |
| VSR | Storozhevoye | 89.87 | 323 | *e*P | P | 07 44 34.4 | -2.1 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| VORD | Divnogorie | 89.89 | 323 | *e*P | P | 07 44 33.4 | -3.2 |
| VORD | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| PDMCI | Parker Dam,Lak | 89.90 | 55 | P | P | 07 44 38.0 | +0.9 |
| | baz=287 | | | | | | |
| TCUT | Toone Canyon | 89.94 | 48 | IAmb | IAmb | 07 44 46.1 | |
| | comp=Z,12nm,0.7s | | | | | | |
| RLMT | Red Lodge | 90.13 | 43 | P | P | 07 44 38.4 | +0.3 |
| | baz=290,SNR=6.7 | | | | | | |
| KBZ | Khabaz | 90.13 | 315 | P | P | 07 44 37.2 | -0.6 |
| | comp=Z,4.8nm,1.0s,baz=121,slow=3.6,SNR=6.4 | | | | | | |
| KBZ | | | | LR | LR | 08 28 08.2 | |
| | comp=Z,83nm,21.5s,baz=68,slow=38 | | | | | | |
| | comp=Z,4.8nm,1.0s | | | | | | |
| KBZ | Khabaz | 90.13 | 315 | *ce*P | P | 07 44 38.3 | +0.5 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| KIV | Kislovodsk | 90.20 | 315 | *e*P | P | 07 44 38.5 | +0.2 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,136nm,20.0s | | | | | | |
| MTPU | Mount Pierson | 90.32 | 51 | P | P | 07 44 40.9 | +1.6 |
| MTPU | | | | IAmb | IAmb | 07 45 08.0 | |
| | comp=Z,18nm,1.8s | | | | | | |
| TMUT | Trail Mountain | 90.66 | 49 | IAmb | IAmb | 07 44 43.4 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| BW06 | Boulder Array | 90.72 | 46 | P | P | 07 44 40.9 | 0.0 |
| | baz=290 | | | | | | |
| PDAR | Pinedale Array | 90.72 | 46 | P | P | 07 44 40.9 | -0.1 |
| PDAR | Pinedale Array | 90.72 | 46 | P | P | 07 44 41.6 | +0.7 |
| | comp=Z,1.2nm,0.7s,baz=254,slow=2.0,SNR=12 | | | | | | |
| PDAR | | | | LR | LR | 08 17 52.8 | |
| | comp=Z,37nm,20.7s,baz=294,slow=31 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| U15A | North Rim | 90.73 | 52 | IAmb | IAmb | 07 44 44.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| Y14A | Wickenburg | 90.91 | 55 | IAmb | IAmb | 07 44 53.3 | |
| | comp=Z,11nm,1.0s | | | | | | |
| SRU | San Rafael Swe | 91.22 | 49 | IAmb | IAmb | 07 44 45.5 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| LAO | LASA Array | 91.56 | 41 | P | P | 07 44 45.0 | +0.4 |
| | baz=292,SNR=7.8 | | | | | | |
| VNDA | Vanda | 91.56 | 177 | P | P | 07 44 44.3 | +0.7 |
| VNDA | | | | IAmb | IAmb | 07 44 45.2 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| VNDA | Vanda | 91.56 | 177 | P | P | 07 44 44.0 | +0.3 |
| | comp=Z,5.3nm,0.9s,baz=316,slow=5.5,SNR=12 | | | | | | |
| VNDA | | | | LR | LR | 08 27 08.3 | |
| | comp=Z,47nm,18.1s,baz=352,slow=36 | | | | | | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| VNDA | Vanda | 91.56 | 177 | P | P | 07 44 44.3 | +0.7 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| FINES | FINESS Array B | 91.64 | 336 | P | P | 07 44 43.1 | -1.4 |
| FINES | FINESS Array B | 91.64 | 336 | P | P | 07 44 43.5 | -0.9 |
| | comp=Z,6.9nm,0.5s,baz=72,slow=4.5,SNR=31 | | | | | | |
| FINES | | | | LR | LR | 08 28 00.8 | |
| | comp=Z,95nm,20.8s,baz=54,slow=37 | | | | | | |
| | comp=Z,6.9nm,0.5s | | | | | | |
| 214A | Organ Pipe Nat | 91.65 | 57 | P | P | 07 44 45.5 | +0.2 |
| | baz=287 | | | | | | |
| SBA | Scott Base | 92.20 | 176 | P | P | 07 44 48.5 | +1.9 |
| SOC | Sochi | 92.35 | 316 | *e*P | P | 07 44 43.0 | -5.1 |
| SOC | | | | *e* | | 07 48 33.6 | |
| SOC | | | | *e*S | SKSac | 07 55 11.9 | -6.2 |
| O20A | White River Ci | 92.54 | 48 | IAmb | IAmb | 07 45 10.5 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| O20A | White River Ci | 92.54 | 48 | P | P | 07 44 49.1 | -0.3 |
| | baz=290 | | | | | | |
| RWWY | Rawlins | 92.73 | 46 | IAmb | IAmb | 07 45 10.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| K22A | Casper | 92.85 | 45 | IAmb | IAmb | 07 45 17.5 | |
| | comp=Z,13nm,1.1s | | | | | | |
| K22A | Casper | 92.85 | 45 | P | P | 07 44 50.5 | -0.2 |
| | baz=292 | | | | | | |
| VSU | Vasula | 92.98 | 333 | *i* P | P | 07 44 51.9 | +1.2 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| W18A | Petrified Fore | 93.11 | 53 | P | P | 07 44 52.4 | +0.3 |
| | baz=289 | | | | | | |
| MVCO | Mesa Verde | 93.36 | 51 | IAmb | IAmb | 07 45 13.2 | |
| | comp=Z,10nm,1.1s | | | | | | |
| MVCO | Mesa Verde | 93.36 | 51 | P | P | 07 44 53.6 | +0.3 |
| | baz=290,SNR=6.0 | | | | | | |
| JMIC | Jan Mayen | 93.72 | 352 | LR | LR | 08 29 29.4 | |
| | comp=Z,12nm,19.6s,baz=57,slow=37 | | | | | | |
| SMCO | Snowmass | 93.79 | 48 | IAmb | IAmb | 07 44 57.8 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| N23A | Red Feather La | 93.90 | 46 | P | P | 07 44 56.0 | +0.3 |
| | baz=292,SNR=7.2 | | | | | | |
| RSSD | Black Hills | 93.97 | 43 | P | P | 07 44 55.9 | 0.0 |
| RSSD | Black Hills | 93.97 | 43 | P | P | 07 44 56.8 | +0.9 |
| | baz=294 | | | | | | |
| RSSD | Black Hills | 93.97 | 43 | P | P | 07 44 55.9 | 0.0 |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| S22A | 4UR Ranch, Cre | 94.41 | 50 | IAmb | IAmb | 07 45 19.7 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| S22A | 4UR Ranch, Cre | 94.41 | 50 | P | P | 07 44 58.9 | +0.7 |
| | baz=291,SNR=8.2 | | | | | | |
| MNK | Minsk | 94.53 | 329 | *i* P | P | 07 44 55.2 | -2.7 |
| MNK | | | | *i* *PP | pP | 07 45 07.5 | -2.0 |
| MNK | | | | *i* | | 07 48 42.8 | |
| MNK | | | | *i* S | SKSac | 07 55 26.7 | -2.9 |
| MNK | | | | *i* SS | SS | 08 02 28.5 | -0.9 |
| MNK | | | | *i* SSS | SSS | 08 06 10.7 | |
| MNK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,17nm,0.9s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,194nm,20.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,78nm,19.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,57nm,16.0s | | | | | | |
| ISCO | Idaho Springs | 94.55 | 47 | P | P | 07 44 59.5 | +0.8 |
| | baz=292 | | | | | | |
| SDCO | Great Sand Dun | 95.39 | 49 | P | P | 07 45 02.9 | +0.2 |
| | baz=292 | | | | | | |
| 121A | Cookes Peak, D | 95.50 | 55 | P | P | 07 45 03.3 | +0.2 |
| | baz=290 | | | | | | |
| ANMO | Albuquerque | 95.70 | 52 | P | P | 07 45 04.5 | +0.5 |
| | baz=291 | | | | | | |
| AKASG | Malin Array Be | 95.75 | 325 | P | P | 07 45 05.4 | +1.8 |
| | comp=E,0.6nm,0.4s,baz=51,slow=5.0,SNR=6.9 | | | | | | |
| AKASG | | | | LR | LR | 08 31 26.4 | |
| | comp=E,154nm,19.0s,baz=56,slow=38 | | | | | | |
| | comp=E,0.6nm,0.4s | | | | | | |
| ULM | Lac du Bonnet | 96.20 | 35 | LR | LR | 08 32 06.6 | |
| | comp=E,55nm,18.1s,baz=273,slow=38 | | | | | | |
| T25A | Trinidad | 96.43 | 49 | P | P | 07 45 07.6 | +0.3 |
| | baz=293 | | | | | | |
| AGMN | Agassiz Nation | 97.18 | 37 | P | Pdif | 07 45 10.9 | +0.7 |
| | baz=300 | | | | | | |
| HFS | Hagfors | 97.20 | 338 | P | P | 07 45 10.3 | +0.3 |
| | comp=E,1.8nm,0.5s,baz=90,slow=5.8,SNR=12 | | | | | | |
| HFS | | | | LR | LR | 08 31 18.5 | |
| | comp=E,52nm,19.6s,baz=41,slow=37 | | | | | | |
| | comp=E,1.8nm,0.5s | | | | | | |
| NB2 | NORSAR Subarra | 97.42 | 340 | P | P | 07 45 09.6 | -1.4 |
| | comp=Z,3.5nm,1.2s,baz=44,slow=5.1 | | | | | | |
| NOA | NOAR Array B | 97.42 | 340 | P | P | 07 45 09.9 | -1.1 |
| | comp=Z,1.0nm,0.7s,baz=51,slow=4.2,SNR=4.3 | | | | | | |
| NOA | | | | LR | LR | 08 31 58.8 | |
| | comp=Z,43nm,20.4s,baz=40,slow=37 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| MNTX | Cornudas Mount | 97.71 | 55 | P | P | 07 45 12.9 | -0.1 |
| | baz=291,SNR=6.4 | | | | | | |
| BRTR | Keskin Array B | 98.05 | 314 | LR | LR | 08 34 08.2 | |
| | comp=Z,43nm,20.2s,baz=71,slow=38 | | | | | | |
| FRB | Frobisher Bay | 98.15 | 15 | LR | LR | 08 31 26.2 | |
| | comp=Z,72nm,20.2s,baz=358,slow=37 | | | | | | |
| SFJD | Kangerlussuaq | 98.47 | 7 | LR | LR | 08 29 04.1 | |
| | comp=Z,41nm,22.0s,baz=348,slow=35 | | | | | | |
| ECSD | EROS Data Cent | 98.96 | 41 | P | P | 07 45 18.0 | -0.3 |
| | baz=299 | | | | | | |
| TXAR | Lajitas Array | 99.95 | 56 | P | Pdif | 07 45 24.4 | +1.3 |
| | comp=Z,0.3nm,0.8s,baz=297,slow=6.0,SNR=3.4 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| KSU1 | Kansas State U | 101.16 | 45 | P | Pdif | 07 45 27.4 | -0.7 |
| | baz=298 | | | | | | |
| WMOK | Wichita Mounta | 101.57 | 50 | P | Pdif | 07 45 29.5 | -0.7 |
| | baz=296 | | | | | | |
| JCT | Junction City | 102.59 | 54 | P | Pdif | 07 45 33.7 | -1.0 |
| | baz=294 | | | | | | |
| TUL3 | Leonard | 103.23 | 48 | P | Pdif | 07 45 36.1 | -1.3 |
| | baz=298 | | | | | | |
| JFWS | Jewell Farm | 103.36 | 39 | P | Pdif | 07 45 37.7 | -0.2 |
| | baz=304 | | | | | | |
| WHTX | Lake Whitney, | 103.77 | 52 | P | Pdif | 07 45 40.4 | +0.5 |
| | baz=296 | | | | | | |
| O53A | New Philadelph | 110.38 | 37 | P | PKiKP | 07 50 09.5 | -0.4 |
| | baz=310 | | | | | | |
| LRAL | Lakeview Retre | 110.94 | 46 | P | PKiKP | 07 50 11.1 | -0.1 |
| | baz=304 | | | | | | |
| LONY | Lake Ozonia | 110.94 | 30 | P | PKiKP | 07 50 10.8 | -0.1 |
| | baz=317 | | | | | | |
| TZTN | Tazewell | 111.24 | 41 | P | PKiKP | 07 50 11.8 | +0.1 |
| | baz=307 | | | | | | |
| BELA | Belgrano 2 | 115.90 | 180 | | PKiKP | 07 50 17.2 | -2.1 |
| TROLL | Troll, Antarti | 117.98 | 192 | ‖ PKiKP | PKPdf | 07 50 23.9 | +0.2 |
| | comp=Z,220nm,0.7s | | | | | | |
| TROLL | | | | ‖ pPKiKP | sPKPdf | 07 50 39.8 | +0.9 |
| | comp=Z,181nm,0.9s | | | | | | |
| SNAA | Sanae | 119.27 | 191 | | PKPdf | 07 50 25.1 | -1.0 |
| SNAA | Sanae | 119.27 | 191 | ‖ PKiKP | PKPdf | 07 50 25.4 | -0.7 |
| | comp=Z,74nm,0.6s | | | | | | |
| SNAA | | | | ‖ pPKiKP | sPKPdf | 07 50 41.3 | 0.0 |
| | comp=Z,71nm,0.7s | | | | | | |
| SNAA | Sanae | 119.27 | 191 | PKP | PKPdf | 07 50 25.7 | -0.3 |
| | comp=Z,2.9nm,0.6s,baz=161,slow=4.5,SNR=39 | | | | | | |
| SNAA | Sanae | 119.27 | 191 | *c* PKiKP | PKPdf | 07 50 26.4 | +0.3 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.5s | | | | | | |
| VNA2 | Neumayer--Watz | 120.69 | 190 | ‖ PKiKP | PKPdf | 07 50 28.7 | 0.0 |
| | comp=Z,14nm,0.6s,baz=176,slow=1.1 | | | | | | |
| VNA2 | | | | ‖ pPKiKP | sPKPdf | 07 50 44.5 | +0.6 |
| | comp=Z,14nm,0.6s,baz=187,slow=0.8 | | | | | | |
| VNA3 | Neumayer Olymp | 120.76 | 189 | ‖ PKiKP | PKPdf | 07 50 28.8 | -0.1 |
| | comp=Z,6.1nm,0.6s | | | | | | |
| VNA3 | | | | ‖ pPKiKP | sPKPdf | 07 50 44.4 | +0.3 |
| | comp=Z,7.9nm,0.7s | | | | | | |
| VNA1 | Neumayer--Stat | 121.07 | 190 | ‖ PKiKP | PKPdf | 07 50 28.6 | -0.8 |
| | comp=Z,6.5nm,0.9s | | | | | | |
| VNA1 | | | | ‖ pPKiKP | sPKPdf | 07 50 45.5 | +0.9 |
| | comp=Z,9.7nm,1.0s | | | | | | |
| SMAI | Sant Martin Ant | 121.52 | 166 | | PKPdf | 07 50 29.1 | -1.3 |
| TULM | Tulcn-Chalpat | 133.85 | 75 | | PKPdf | 07 50 52.3 | -3.8 |
| TORD | Torodi Ar. Bea | 136.03 | 306 | PKP | PKPdf | 07 50 59.5 | 0.0 |
| | comp=Z,1.2nm,0.7s,baz=42,slow=2.0,SNR=7.9 | | | | | | |
| EFI | East Falkland | 137.36 | 158 | *c* PKiKP | PKiKP | 07 51 05.5 | +2.8 |
| EFI | | | | pmax | pmax | | |
| | comp=Z,39nm,1.7s | | | | | | |
| PLCA | Paso Flores | 138.02 | 137 | PKP | PKPdf | 07 51 03.6 | +1.0 |
| | comp=Z,4.7nm,0.9s,baz=190,slow=5.2,SNR=7.6 | | | | | | |
| TBTG | Tabatinga, AM | 142.87 | 79 | | PKPdf | 07 51 07.5 | -4.5 |
| PB04 | IPOC Station P | 144.23 | 109 | PKPdf | PKPab | 07 51 13.0 | +0.8 |
| GO02 | Mina Guanaco | 144.27 | 114 | PKPdf | PKPab | 07 51 13.2 | +0.7 |
| DBIC | Dimbokro | 145.03 | 304 | PKP | PKPbc | 07 51 15.8 | +0.6 |
| | comp=Z,29nm,0.8s,baz=44,slow=3.6,SNR=17 | | | | | | |
| LPAZ | La Paz | 146.51 | 99 | | PKPdf | 07 51 20.0 | +1.0 |
| LPAZ | La Paz | 146.51 | 99 | PKPbc | PKPbc | 07 51 21.6 | +1.1 |
| | comp=Z,8.9nm,0.5s,baz=332,slow=2.9,SNR=47 | | | | | | |
| LPAZ | La Paz | 146.51 | 99 | PKP2 | PKPdf | 07 51 20.0 | +1.0 |
| BOAV | Boa Vista | 148.77 | 61 | | PKPdf | 07 51 22.4 | +0.4 |
| MACA | Manacapuru-AM | 151.18 | 71 | PKPdf | PKPdf | 07 51 26.8 | +0.9 |
| MACA | | | | PKPbc | PKPbc | 07 51 31.9 | +0.1 |
| MACA | | | | PKPab | pPKPdf | 07 51 37.8 | +0.5 |
| PTLB | Pontes e Lacer | 155.16 | 97 | PKPdf | PKPdf | 07 51 30.7 | -0.8 |
| PTLB | | | | PKPbc | pPKPdf | 07 51 39.7 | -3.2 |
| PTLB | | | | | PKPab | 07 51 56.2 | -0.2 |

*NOU* ***08*** *07:51:50.2, 19.˚11S×167.˚78E, h0km, MLv3.8/11, Vanuatu Islands Region*
*NEIC* ***08*** *07:51:55.6±0.7, 19.˚3S±0.˚1×167.˚69E±0.˚08, h25km±7km, mb4.8/12, Error ellipse: s-maj=15.9km s-min=11.0km az=165.0*
*IDC* ***08*** *07:51:59.9±4.0, 19.˚49S×167.˚75E, h74km±46km, mb3.8/6, mbtmp4.1/8, ML4.4/2, MS3.4/3, Error ellipse: s-maj=52.5km s-min=18.5km az=152.0*

**ISC 08 07:51:55.3±0.7, 19.˚25S±0.˚08×167.˚66E±0.˚07, h26km, n40, σ0.˚88/37, mb4.5/12, MS3.9/3, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LIFNC | LIFOU | 1.57 | 195 | P | Pn | 07 52 20.4 | -1.0 |
| LIFNC | LIFOU | 1.57 | 195 | | Pn | 07 52 20.5 | -1.0 |
| DVP | Devils Point | 1.60 | 18 | P | Pn | 07 52 16.6 | -5.3 |
| RTV | Rentapao | 1.62 | 27 | P | Pn | 07 52 17.4 | -4.9 |
| MARNC | Mare, Loyalty | 2.24 | 171 | P | Pn | 07 52 30.2 | -0.6 |
| YATNC | Mamie plateau, | 2.88 | 194 | P | Pn | 07 52 39.4 | -0.2 |
| DZM | Mont Dzumac | 3.03 | 202 | P | Pn | 07 52 41.7 | 0.0 |
| DZM | Mont Dzumac | 3.03 | 202 | P | Pn | 07 52 41.9 | +0.3 |
| | 14nm,0.3s,baz=43,slow=19,SNR=217 | | | | | | |
| DZM | | | | S | Sn | 07 53 17.3 | +0.1 |
| | 73nm,0.4s,baz=158,slow=23,SNR=7.1 | | | | | | |
| | 33nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 3.10 | 204 | P | Pn | 07 52 43.2 | +0.6 |
| ONTNC | Ouen Toro | 3.24 | 200 | P | Pn | 07 52 45.4 | +0.9 |
| ONTNC | Ouen Toro | 3.24 | 200 | | Pn | 07 52 45.1 | +0.6 |
| PINNC | Pines Island, | 3.35 | 183 | | Pn | 07 52 46.6 | +0.7 |
| KOUNC | Koumac, New Ca | 3.43 | 247 | P | Pn | 07 52 47.4 | +0.3 |
| KOUNC | Koumac, New Ca | 3.43 | 247 | | Pn | 07 52 47.4 | +0.3 |
| MSVF | Nonsavu | 9.97 | 83 | Pn | Pn | 07 54 16.3 | -0.8 |
| MSVF | Nonsavu | 9.97 | 83 | P | Pn | 07 54 20.8 | +3.7 |
| | 0.3nm,0.3s,baz=270,slow=13,SNR=4.2 | | | | | | |
| MSVF | | | | S | Sn | 07 55 58.4 | -10 |
| | 1.1nm,0.3s,baz=270,slow=20,SNR=1.4 | | | | | | |
| | 6.5nm,0.8s | | | | | | |
| CTA | Charters Tower | 20.18 | 264 | P | P | 07 56 29.8 | +1.7 |
| | 0.7nm,1.0s,baz=91,slow=13,SNR=5.2 | | | | | | |
| CTA | | | | LR | LR | 08 03 40.8 | |
| | comp=Z,12nm,18.3s,baz=320,slow=35 | | | | | | |
| CTAO | Charters Tower | 20.18 | 264 | P | P | 07 56 28.0 | -0.1 |
| NIUE | Niue | 21.17 | 93 | P | P | 07 56 38.8 | 0.0 |
| COEN | Coen | 24.04 | 279 | P | P | 07 57 08.0 | -0.5 |
| COEN | | | | IAmb | IAmb | 07 57 19.8 | |
| | comp=Z,20nm,1.1s | | | | | | |
| STKA | Stephens Creek | 26.58 | 237 | P | P | 07 57 31.3 | -0.2 |
| BBOO | Buckleboo | 31.31 | 238 | P | P | 07 58 13.9 | +0.4 |
| WB0 | Warramunga Arr | 31.33 | 263 | P | P | 07 58 13.4 | -0.5 |
| WB2 | Warramunga Arr | 31.36 | 263 | P | P | 07 58 13.9 | -0.2 |
| WRA | Warramunga Arr | 31.37 | 263 | P | P | 07 58 14.1 | -0.1 |
| | comp=Z,0.5nm,0.7s,baz=102,slow=8.1,SNR=3.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| AS31 | Alice Springs | 31.68 | 256 | P | P | 07 58 16.5 | -0.4 |
| ASAR | Alice Springs | 31.68 | 256 | P | P | 07 58 16.4 | -0.5 |
| ASAR | Alice Springs | 31.68 | 256 | P | P | 07 58 16.7 | -0.2 |
| | comp=Z,3.0nm,0.5s,baz=84,slow=8.3,SNR=45 | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| KNRA | Kununurra | 37.22 | 269 | P | P | 07 59 04.4 | -0.5 |
| KNRA | | | | IAmb | IAmb | 07 59 28.6 | |
| | comp=Z,18nm,1.3s | | | | | | |
| FORT | Forrest | 37.49 | 244 | P | P | 07 59 07.1 | 0.0 |
| FORT | | | | IAmb | IAmb | 07 59 34.7 | |
| | comp=Z,29nm,1.3s | | | | | | |
| FITZ | Fitzroy Crossi | 39.76 | 265 | P | P | 07 59 26.1 | -0.1 |
| PSA00 | Pilbara Seismi | 44.74 | 258 | P | P | 08 00 06.9 | +0.1 |
| PSA00 | | | | IAmb | IAmb | 08 00 09.9 | |
| | comp=Z,14nm,1.2s | | | | | | |
| MBWA | Marble Bar | 44.89 | 259 | P | P | 08 00 07.4 | -0.6 |
| MBWA | | | | IAmb | IAmb | 08 00 09.1 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| MORW | Morawa | 47.78 | 248 | P | P | 08 00 30.8 | +0.1 |
| MORW | | | | IAmb | IAmb | 08 00 31.1 | |
| | comp=Z,20nm,1.2s | | | | | | |
| QSPA | South Pole Qui | 70.80 | 180 | LR | LR | 08 31 58.2 | |
| | comp=Z,67nm,19.2s,baz=31,slow=34 | | | | | | |
| CMAR | Chiang Mai Arr | 77.15 | 295 | P | P | 08 03 48.0 | +0.8 |
| | comp=Z,1.3nm,0.3s,baz=123,slow=5.3,SNR=2.1 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| SONM | Songino Array | 86.34 | 324 | P | P | 08 04 34.9 | -0.3 |
| | comp=Z,1.8nm,0.8s,baz=142,slow=4.2,SNR=8.0 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| PMSA | Palmer Station | 87.41 | 160 | LR | LR | 08 36 40.3 | |
| | comp=Z,50nm,19.9s,baz=273,slow=31 | | | | | | |
| NVAR | Mina Array Bea | 89.93 | 49 | P | P | 08 04 51.9 | -0.8 |
| | comp=Z,0.7nm,0.9s,baz=233,slow=7.5,SNR=5.4 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| ILAR | Eielson Array | 90.69 | 18 | P | P | 08 04 54.0 | -1.2 |
| | comp=Z,0.7nm,1.0s,baz=233,slow=5.8,SNR=5.4 | | | | | | |
| | comp=Z,0.7nm,1.0s | | | | | | |

**IDC 08 07:55:13.9±2.7, 53.˚93N×86.˚58E, h0km, mbtmp2.6/2, ML2.1/2, Error ellipse: s-maj=22.0km s-min=11.9km az=66.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 1.04 | 272 | I | I | 08 02 10.0 | |
| | baz=89,slow=319,SNR=3.6 | | | | | | |
| ZALV | Zalesovo Beam | 1.04 | 272 | Pg | Pg | 07 55 33.5 | -0.3 |
| | 0.4nm,0.3s,baz=93,slow=18,SNR=7.3 | | | | | | |
| ZALV | | | | Lg | Lg | 07 55 48.0 | |
| | 2.4nm,

*Error ellipse: s-maj=16.0km s-min=9.4km az=152.0, Suspected Mining explosion.*

*IDC **08** 08:24:44.6±2.7,54˚.71N×86˚.59E,h0km,mbtmp4.4/2, ML4.2/2,Error ellipse: s-maj=22.4km s-min=15.7km az=48.0*

**ISC 08 08:24:46.8**±3.5,**54˚.6N**±0˚.1×**86˚.5E**±0˚.2,**h0**km,**n11,** σ**0**s**78**/**17**,**8C-7D**,**Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.15** | **237** | | I | I | 08 33 20.0 | |
| | 0.1nm,0.8s,baz=53,slow=314,SNR=11 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.15** | **237** | ⇑ | P | **Pg** | **08 25 07.5** | **-1.3** |
| | 8.8nm,0.2s | | | | | | | |
| ZAA0 | | | | ⇑ | S | **Sb** | **08 25 25.6** | **+0.7** |
| | 11nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.15** | **237** | | Pg | **Pg** | **08 25 07.8** | **-1.0** |
| | 102nm,0.3s,baz=53,slow=17,SNR=511 | | | | | | | |
| ZALV | | | | | Lg | Lg | 08 25 26.1 | |
| | 64nm,0.3s,baz=51,slow=28,SNR=20 | | | | | | | |
| **KURK** | **Kurchatov** | **6.14** | **234** | ⇑ | Pn | **Pn** | **08 26 18.9** | **+0.3** |
| | 9.4nm,0.4s | | | | | | | |
| KURK | | | | ⇑ | Lg | Lg | 08 28 02.3 | |
| | 28nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.25** | **234** | | Pn | **Pn** | **08 26 20.8** | **+0.7** |
| | 2.6nm,0.3s,baz=52,slow=15,SNR=64 | | | | | | | |
| KURBB | | | | | Sn | **Sn** | **08 27 32.6** | **+0.5** |
| | baz=34,slow=18 | | | | | | | |
| KURBB | | | | | Lg | Lg | 08 28 06.4 | |
| | 0.2nm,0.3s,baz=54,slow=32,SNR=4.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.25** | **234** | ⇑ | Pn | **Pn** | **08 26 20.0** | **-0.1** |
| | 14nm,0.4s | | | | | | | |
| KURBB | | | | ⇓ | Lg | Lg | 08 28 01.4 | |
| | 18nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **8.23** | **200** | ⇑ | Pn | **Pn** | **08 26 47.7** | **+0.3** |
| | 56nm,0.8s | | | | | | | |
| MK31 | | | | ⇑ | Sn | **Sn** | **08 28 20.9** | **-0.1** |
| | 1.7nm,0.3s,baz=27,slow=14,SNR=163 | | | | | | | |
| MK31 | | | | | Lg | Lg | 08 29 09.9 | |
| | 1.6nm,0.5s,baz=32,slow=25,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.23** | **200** | | Pn | **Pn** | **08 26 48.0** | **+0.6** |
| | 10.0nm,0.8s,baz=30,slow=31,SNR=4.3 | | | | | | | |
| MKAR | | | | | Sn | **Sn** | **08 28 22.0** | **+0.9** |
| | 4.7nm,0.3s,baz=24,slow=13,SNR=121 | | | | | | | |
| MKAR | | | | | Lg | Lg | 08 29 10.0 | |
| | 0.6nm,0.3s,baz=20,slow=28,SNR=5.3 | | | | | | | |
| **MAKZ** | **Makanchi** | **8.29** | **202** | ⇓ | Pn | **Pn** | **08 26 48.0** | **-0.1** |
| | 0.3nm,0.3s,baz=23,slow=30,SNR=5.0 | | | | | | | |
| MAKZ | | | | ⇓ | Sn | **Sn** | **08 28 22.2** | **-0.2** |
| | 7.1nm,0.3s | | | | | | | |
| MAKZ | | | | ⇑ | Lg | Lg | 08 29 09.3 | |
| | 1.8nm,0.4s | | | | | | | |
| **BVA0** | **Borovoye Array** | **9.63** | **267** | ⇓ | Pn | **Pn** | **08 27 07.6** | **+1.1** |
| | 2.4nm,0.6s | | | | | | | |
| BVA0 | | | | ⇓ | Sn | **Sn** | **08 28 56.6** | **+1.2** |
| | 10nm,1.1s | | | | | | | |
| **BRVK** | **Borovoye** | **9.69** | **268** | ⇓ | Pn | **Pn** | **08 27 07.1** | **-0.1** |
| | 1.1nm,0.4s | | | | | | | |
| BRVK | | | | ⇓ | Sn | **Sn** | **08 28 55.8** | **-0.8** |
| | 5.1nm,1.1s,baz=70,slow=24,SNR=3.5 | | | | | | | |
| | 3.3nm,0.7s | | | | | | | |

*IDC **08** 08:25:53.5±0.5,44˚.29N×149˚.55E,h0km,mb4.4/26, mbtmp4.4/31,ML4.2/4,MS4.3/52,Error ellipse: s-maj=14.4km s-min=12.3km az=160.0*

*NIED **08** 08:25:55.7,44˚.45N×149˚.67E,h30km,MW4.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁶Nm; Mrr1.75; Mθθ-0.91; Mφφ-0.84; Mrθ-0.31; Mθφ-0.74; Mφr0.64; Fault plane solution: M₀1.80000×10¹⁶ NP1:φs29.00000°, δ52.00000°,λ.67.00000°. NP2:φs243.00000°,δ44.00000°, λ116.00000°.*

*JMA **08** 08:25:55.7±0.7,44˚N±3˚×15˚0E±˚,h30km,MV4.8/15,SE OFF ETOROFU*

*BJI **08** 08:25:57.9±0.0,44˚.31N×149˚.45E,h44km,mb4.8/62, mB5.0/30,Ms4.7/58,Ms7 4.5/55*

*SKHL **08** 08:25:57.2±0.1,44˚.10N×149˚.70E,h49km±6km,mb5.4/6, ms4.7/2*

*MOS **08** 08:25:58.3±1.0,44˚.24N×149˚.46E,h47km,mb5.0/27, MS4.5/12,Error ellipse: s-maj=7.2km s-min=5.7km az=134.9*

*NEIC **08** 08:26:00.2±1.9,44˚.3N±0˚.1×149˚.4E±0˚.1,h42km±7km, mb4.8/119,Error ellipse: s-maj=16.0km s-min=11.6km az=146.0*

*BGR **08** 08:26:01.9,44˚.56N×149˚.42E,h46km±3km,mb4.7,Ms4.3*

**ISC 08 08:25:59.5**±0.4,**44˚.22N**±0˚.04×**149˚.50E**±0˚.04,**h45**km±2km,**h44**km:**pP-P**,**n643,**σ**1**§**31**/631,**mb4.7**/160,**MS4.5**/**84, 23C-8D**,**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.54** | **312** | *i* | P | **Pn** | **08 26 23.5** | **-0.9** |
| KUR | | | | | AMB | AMB | 08 26 24.5 | |
| | 3μm,0.5s | | | | | | | |
| KUR | | | | *e* | S | **Sn** | **08 26 42.9** | **-0.4** |
| KUR | | | | | A | A | 08 26 58.8 | |
| | 2μm,0.6s | | | | | | | |
| KUR | | | | | A | A | 08 26 58.8 | |
| | 7μm,0.6s | | | | | | | |
| KUR | | | | | A | A | 08 26 58.9 | |
| | 8μm,2.0s | | | | | | | |
| KUR | | | | | A | A | 08 26 58.9 | |
| | 21μm,2.0s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.54** | **312** | *c i* | PN | **Pn** | **08 26 23.5** | **-0.9** |
| KUR | | | | *e* | S | **Sn** | **08 26 42.9** | **-0.4** |
| KUR | | | | | pmax | pmax | | |
| | comp=N,970nm,0.4s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,200nm,0.4s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,7μm,0.7s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,21μm,1.5s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,8μm,1.4s | | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **261** | *e* | P | **Pn** | **08 26 28.9** | **-1.2** |
| SHO | | | | | AMB | AMB | 08 26 30.7 | |
| | comp=N,420nm,0.3s | | | | | | | |
| SHO | | | | *e* | S | **Sn** | **08 26 52.2** | **-1.3** |
| SHO | | | | | A | A | 08 27 04.1 | |
| | comp=N,2μm,0.5s | | | | | | | |
| SHO | | | | | A | A | 08 27 04.1 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **261** | *e* | PN | **Pn** | **08 26 28.6** | **-1.5** |
| SHO | | | | *e* | S | **Sn** | **08 26 52.1** | **-1.4** |
| SHO | | | | | pmax | pmax | | |
| | comp=N,158nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,182nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,364nm,0.3s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.63** | **267** | *e* | P | **Pn** | **08 26 38.9** | **-0.4** |
| YUK | | | | | AMB | AMB | 08 26 41.5 | |
| | comp=E,530nm,0.3s | | | | | | | |
| YUK | | | | *e* | S | **Sn** | **08 27 10.1** | **+0.2** |
| YUK | | | | | A | A | 08 27 18.8 | |
| | comp=E,3μm,0.5s | | | | | | | |
| YUK | | | | | A | A | 08 27 18.8 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.63** | **267** | *e* | PN | **Pn** | **08 26 38.7** | **-0.6** |
| YUK | | | | *e* | S | **Sn** | **08 27 10.3** | **+0.4** |
| YUK | | | | | pmax | pmax | | |
| | comp=N,303nm,0.4s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=E,314nm,0.4s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,320nm,0.4s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,3μm,0.4s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.85** | **254** | | P | **Pn** | **08 26 40.5** | **-1.9** |
| NEM2 | | | | | S | **Sn** | **08 27 14.5** | **-1.0** |
| **NMR** | **Nemuro--Hokkai** | **2.86** | **254** | *e* | P | **Pn** | **08 26 40.9** | **-1.6** |
| NMR | | | | | S | **Sn** | **08 27 13.8** | **-1.9** |
| **NMR** | **Nemuro--Hokkai** | **2.86** | **254** | *e* | PN | **Pn** | **08 26 41.1** | **-1.4** |
| NMR | | | | | S | **Sn** | **08 27 13.2** | **-2.5** |
| **RUSJ** | **Misakicho** | **3.06** | **269** | *e* | PN | **Pn** | **08 26 45.9** | **+0.6** |
| RUSJ | | | | | S | **Sn** | **08 27 22.7** | **+2.0** |
| **JRA** | **Rausu** | **3.17** | **266** | | P | **Pn** | **08 26 47.0** | **+0.3** |
| JRA | | | | | S | **Sn** | **08 27 25.5** | **+2.3** |
| **JNK** | **Nakash** | **3.51** | **261** | *e* | P | **Pn** | **08 26 50.7** | **-0.8** |
| **JAK** | **Akkeshi** | **3.70** | **252** | | P | **Pn** | **08 26 52.8** | **-1.2** |
| JAK | | | | | S | **Sn** | **08 27 35.2** | **-1.1** |
| **JTKR** | **Abashiri--Toko** | **4.04** | **268** | *e* | P | **Pn** | **08 26 58.9** | **+0.3** |
| **JAR** | **Ashorobuto** | **4.25** | **259** | *e* | P | **Pn** | **08 27 01.4** | **-0.3** |
| **JCH** | **Churui** | **4.75** | **252** | | P | **Pn** | **08 27 08.1** | **-0.4** |
| JCH | | | | | S | **Sn** | **08 28 00.4** | **-1.9** |
| **JKK2** | **Kamakawa 2** | **4.88** | **268** | *e* | P | **Pn** | **08 27 11.1** | **+0.8** |
| **JKA** | **Kamikawa-asahi** | **4.96** | **271** | | Pn | **Pn** | **08 27 12.6** | **+1.1** |
| **JKA** | **Kamikawa-asahi** | **4.96** | **271** | *e* | P | **Pn** | **08 27 12.6** | **+1.1** |
| **ASAJ** | **Asahikawa** | **4.97** | **271** | | Pn | **Pn** | **08 27 11.6** | **+0.1** |
| | comp=E,8.6nm,0.3s,baz=94,slow=11,SNR=31 | | | | | | | |
| ASAJ | | | | | Sn | **Sn** | **08 28 07.3** | **-0.3** |
| | baz=219,slow=31 | | | | | | | |
| ASAJ | | | | | LR | LR | 08 29 24.1 | |
| | comp=E,4μm,19.4s,baz=130,slow=42 | | | | | | | |
| | comp=E,23nm,0.5s | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.97** | **271** | | PN | **Pn** | **08 27 12.6** | **+1.1** |
| **ERM** | **Erimo** | **5.14** | **247** | | Pn | **Pn** | **08 27 14.5** | **+0.7** |
| **ERM** | **Erimo** | **5.14** | **247** | *ce* | PN | **Pn** | **08 27 14.3** | **+0.5** |
| ERM | | | | | pmax | pmax | | |
| | comp=Z,174nm,1.3s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.30** | **251** | *e* | P | **Pn** | **08 27 14.8** | **-1.2** |
| **JAB** | **Ashibetsu** | **5.31** | **265** | *e* | P | **Pn** | **08 27 18.3** | **+2.2** |
| **YSS** | **Yuzh-Sakhalins** | **5.47** | **302** | | Pn | **Pn** | **08 27 18.6** | **+0.3** |
| **YSS** | **Yuzh-Sakhalins** | **5.47** | **302** | *e* | P | **Pn** | **08 27 19.0** | **+0.7** |
| YSS | | | | | AMB | AMB | 08 27 25.8 | |
| | comp=Z,300nm,4.0s | | | | | | | |
| YSS | | | | | AMB | AMB | 08 27 28.8 | |
| | comp=Z,30nm,0.5s | | | | | | | |
| YSS | | | | *e* | S | **Sn** | **08 28 20.5** | **+0.7** |
| YSS | | | | | A | A | 08 28 27.4 | |
| | comp=Z,100nm,0.6s | | | | | | | |
| YSS | | | | | A | A | 08 28 27.4 | |
| | comp=Z,100nm,0.6s | | | | | | | |
| YSS | | | | | AMS | AMS | 08 29 42.1 | |
| | comp=Z,2μm,16.0s | | | | | | | |
| YSS | | | | | AMS | AMS | 08 29 42.1 | |
| | comp=Z,4μm,16.0s | | | | | | | |
| YSS | | | | | AMS | AMS | 08 29 42.1 | |
| | comp=Z,4μm,16.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.47** | **302** | *e* | PN | **Pn** | **08 27 19.0** | **+0.7** |
| YSS | | | | *e* | S | **Sn** | **08 28 19.5** | **-0.3** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,300nm,3.7s | | | | | | | |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,30nm,0.5s | | | | | | | |
| YSS | | | | | smax | smax | | |
| | comp=N,100nm,0.6s | | | | | | | |
| YSS | | | | | smax | smax | | |
| | comp=E,100nm,0.6s | | | | | | | |
| YSS | | | | | MLR | MLR | | |
| | comp=N,2μm,16.0s | | | | | | | |
| YSS | | | | | MLR | MLR | | |
| | comp=Z,4μm,16.0s | | | | | | | |
| YSS | | | | | MLR | MLR | | |
| | comp=E,4μm,15.0s | | | | | | | |
| **UGL** | **Uglegorsk** | **7.05** | **316** | | PN | **Pn** | **08 27 35.9** | **-4.1** |
| UGL | | | | | MLR | MLR | | |
| | comp=Z,1μm,11.0s | | | | | | | |
| UGL | | | | | MLR | MLR | | |
| | comp=N,1μm,12.0s | | | | | | | |
| UGL | | | | | MLR | MLR | | |
| | comp=E,2μm,10.0s | | | | | | | |
| **JANG** | **Nango** | **7.06** | **240** | *e* | S | **Sn** | **08 28 51.1** | **-7.9** |
| **JTM** | **Tenmabayashi** | **7.11** | **244** | | Pn | **Pn** | **08 27 40.1** | **-0.8** |
| JTM | | | | | | **Sn** | **08 28 54.4** | **-6.0** |
| **SKR** | **Severo-Kuril's** | **7.87** | **32** | *e* | P | **Pn** | **08 27 50.1** | **-1.0** |
| SKR | | | | | AMB | AMB | 08 27 55.0 | |
| | comp=E,40nm,0.3s | | | | | | | |
| SKR | | | | *e* | S | **Sn** | **08 29 14.6** | **-4.1** |
| SKR | | | | | A | A | 08 29 21.3 | |
| | comp=E,50nm,0.4s | | | | | | | |
| SKR | | | | | A | A | 08 29 21.3 | |
| | comp=E,40nm,0.4s | | | | | | | |
| SKR | | | | | AMS | AMS | 08 30 51.0 | |
| | comp=E,5μm,17.0s | | | | | | | |
| SKR | | | | | AMS | AMS | 08 30 51.0 | |
| | comp=E,3μm,17.0s | | | | | | | |
| SKR | | | | | AMS | AMS | 08 30 51.0 | |
| | comp=E,2μm,17.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.87** | **32** | *e* | PN | **Pn** | **08 27 47.9** | **-3.2** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,31nm,1.3s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,400nm,4.6s | | | | | | | |
| **TYV** | **Tymovskoe** | **8.10** | **328** | *e* | P | **Pn** | **08 27 56.8** | **+2.5** |
| TYV | | | | | AMB | AMB | 08 28 02.0 | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| TYV | | | | | AMB | AMB | 08 28 02.8 | |
| | comp=Z,200nm,4.0s | | | | | | | |
| TYV | | | | *e* | S | **Sn** | **08 29 26.4** | **+2.0** |
| TYV | | | | | A | A | 08 29 31.5 | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| TYV | | | | | A | A | 08 29 31.5 | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| TYV | | | | | A | A | 08 29 33.2 | |
| | comp=Z,200nm,4.0s | | | | | | | |
| **TYV** | **Tymovskoe** | **8.10** | **328** | *e* | PN | **Pn** | **08 27 57.3** | **+3.0** |
| TYV | | | | *e* | S | **Sn** | **08 29 30.7** | **+6.3** |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,200nm,4.3s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=N,8.0nm,1.3s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=E,8.0nm,1.3s | | | | | | | |
| TYV | | | | | smax | smax | | |
| | comp=E,200nm,3.6s | | | | | | | |
| **OKH** | **Okha** | **10.28** | **338** | *e* | P | **Pn** | **08 28 27.1** | **+2.9** |
| OKH | | | | | AMB | AMB | 08 28 29.2 | |
| | comp=E,70nm,0.6s | | | | | | | |
| **OKH** | **Okha** | **10.28** | **338** | *c i* | PN | Pn | 08 28 32.7 | +8.5 |
| OKH | | | | | pmax | pmax | | |
| | comp=Z,200nm,10.7s | | | | | | | |
| OKH | | | | | MLR | MLR | | |
| | comp=Z,1μm,16.0s | | | | | | | |
| OKH | | | | | MLR | MLR | | |
| | comp=N,2μm,14.0s | | | | | | | |
| **NKL** | **Nikolayevsk** | **10.66** | **330** | *e* | P | **Pn** | **08 28 30.5** | **+1.1** |
| NKL | | | | | AMB | AMB | 08 28 34.9 | |
| **NKL** | **Nikolayevsk** | **10.66** | **330** | *e* | PN | **Pn** | **08 28 25.6** | **-3.8** |
| NKL | | | | | pmax | pmax | | |
| | comp=E,50nm,1.0s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=N,24nm,0.8s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=Z,61nm,1.2s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=E,9μm,20.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=N,5μm,14.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=Z,6μm,18.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **10.68** | **31** | *e* | P | **Pn** | **08 28 30.6** | **+0.9** |
| **PET** | **Petropavlovsk** | **10.68** | **31** | *i* | PN | **Pn** | **08 28 30.6** | **+0.9** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,991nm,12.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **11.52** | **232** | *i* | PN | **Pn** | **08 28 41.5** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **11.52** | **232** | | Pn | **Pn** | **08 28 39.2** | **-2.1** |
| | comp=Z,1.8nm,0.8s,baz=31,slow=15,SNR=4.3 | | | | | | | |
| MJAR | | | | | Sn | **Sn** | **08 30 49.6** | **+1.0** |
| | comp=Z,0.1nm,0.3s,baz=202,slow=31,SNR=1.1 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **12.57** | **276** | | Pn | **Pn** | **08 28 54.8** | **-0.8** |
| **USA0B** | **Ussuriysk Arra** | **12.57** | **276** | *i* | PN | **Pn** | **08 28 55.3** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **12.57** | **276** | | Pn | **Pn** | **08 28 54.5** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **12.57** | **276** | | Pn | **Pn** | **08 28 55.2** | **-0.3** |
| | comp=Z,2.4nm,0.3s,baz=82,slow=14,SNR=34 | | | | | | | |
| USRK | | | | | LR | LR | 08 34 15.8 | |
| | comp=Z,2μm,18.2s,baz=88,slow=40 | | | | | | | |
| | comp=Z,9.6nm,0.5s | | | | | | | |
| **VLA** | **Vladivostok** | **12.80** | **271** | *i* | PN | **Pn** | **08 28 59.2** | **+0.5** |
| VLA | | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **KLR** | **Kul'dur** | **13.16** | **299** | | Pn | **Pn** | **08 29 07.3** | **+3.7** |
| | comp=Z,0.4nm,0.3s,baz=106,slow=16,SNR=8.5 | | | | | | | |
| KLR | | | | | LR | LR | 08 34 49.0 | |
| | comp=Z,2μm,18.2s,baz=108,slow=41 | | | | | | | |
| **KLR** | **Kul'dur** | **13.16** | **299** | *e* | P | **Pn** | **08 29 03.9** | **+0.3** |
| **KLR** | **Kul'dur** | **13.16** | **299** | *e* | PN | **Pn** | **08 29 06.5** | **+3.0** |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **MSHR** | **Mys Shultsa** | **13.44** | **269** | *i* | PN | **Pn** | **08 29 06.8** | **-0.6** |
| MSHR | | | | | pmax | pmax | | |
| | comp=Z,24nm,1.4s | | | | | | | |
| MSHR | | | | | MLR | MLR | | |
| | comp=Z,696nm,17.0s | | | | | | | |
| **MDJ** | **Mudanjiang** | **14.24** | **279** | | P | **Pn** | **08 29 17.5** | **-0.7** |
| MDJ | | | | | sP | P | 08 29 31.6 | +7.0 |
| MDJ | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| MDJ | | | | | pmax | pmax | | |
| | comp=Z,370nm,5.7s | | | | | | | |
| MDJ | | | | | LR | LR | | |
| | comp=Z,2μm,14.4s | | | | | | | |
| MDJ | | | | | LR | LR | | |
| | comp=Z,1μm,19.9s | | | | | | | |
| MDJ | | | | | LR | LR | | |
| | comp=Z,3μm,15.8s | | | | | | | |
| **MA2** | **Magadan** | **15.40** | **2** | | LR | LR | 08 35 50.0 | |
| | comp=Z,897nm,18.4s,baz=190,slow=39 | | | | | | | |
| **BNX** | **BinXian** | **15.71** | **283** | ⇓ | P | **Pn** | **08 29 36.0** | **-1.5** |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **HEH** | **HeiHe** | **16.14** | **300** | *e* | P | **Pn** | **08 29 42.3** | **-0.7** |
| HEH | | | | | sP | **pP** | **08 29 56.9** | **+1.8** |
| HEH | | | | | S | **Sn** | **08 32 40.2** | **-0.6** |
| HEH | | | | | SS | **SnSn** | **08 32 58.3** | **+4.5** |
| HEH | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| HEH | | | | | pmax | pmax | | |
| | comp=Z,290nm,4.4s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,870nm,16.5s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,2μm,16.8s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,2μm,17.9s | | | | | | | |
| **ZEA** | **Zeya** | **17.37** | **311** | *e* | P | **Pn** | **08 29 56.8** | **-1.5** |
| ZEA | | | | | AMB | AMB | 08 30 01.1 | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **ZEA** | **Zeya** | **17.37** | **311** | *e* | P | **P** | **08 29 59.6** | **+0.4** |
| ZEA | | | | *e* | S | **Sn** | **08 33 01.3** | **-9.2** |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,100nm,4.1s | | | | | | | |
| ZEA | | | | | smax | smax | | |
| | comp=N,100nm,7.3s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=E,600nm,15.0s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=N,500nm,14.0s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=Z,800nm,16.0s | | | | | | | |
| **KSRS** | **Korea Array** | **17.65** | **255** | | P | **Pn** | **08 30 01.8** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=59,slow=11,SNR=9.8 | | | | | | | |
| KSRS | | | | | LR | LR | 08 36 39.5 | |
| | comp=Z,520nm,20.0s,baz=60,slow=36 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **18.32** | **54** | | LR | LR | 08 36 28.7 | |
| | comp=Z,359nm,20.2s,baz=268,slow=35 | | | | | | | |
| **TJN** | **Taejon** | **18.58** | **253** | *ce* | P | **Pn** | **08 30 13.8** | **+0.6** |
| **SEY** | **Seymchan** | **18.82** | **4** | | P | **P** | **08 30 13.1** | **-2.0** |
| | comp=Z,0.6nm,0.3s,baz=170,slow=6.9,SNR=16 | | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **SEY** | **Seymchan** | **18.82** | **4** | *ce* | P | **P** | **08 30 13.4** | **-1.7** |
| SEY | | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **SNY** | **Shenyang** | **19.08** | **272** | ⇓ | P | **P** | **08 30 11.7** | **-6.4** |
| SNY | | | | | S | Sn | 08 33 25.5 | -26 |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,35nm,1.1s | | | | | | | |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,180nm,3.5s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=N,220nm,10.5s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=E,420nm,11.8s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,610nm,14.9s | | | | | | | |
| **HIA** | **Hailar** | **20.93** | **294** | *i* | P | **P** | **08 30 38.9** | **+0.7** |
| HIA | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| HIA | | | | | MLR | MLR | | |
| | comp=Z,1μm,16.0s | | | | | | | |
| **YAK** | **Yakutsk** | **21.28** | **334** | | LR | LR | 08 39 40.1 | |
| | comp=Z,866nm,18.0s,baz=134,slow=39 | | | | | | | |
| **YAK** | **Yakutsk** | **21.28** | **334** | *e* | P | **P** | **08 30 39.0** | **-2.7** |
| YAK | | | | *e* | | | 08 30 58.4 | |
| YAK | | | | *e* | S | **S** | **08 34 33.3** | **-2.1** |
| YAK | | | | *e* | SS | **sS** | **08 34 48.9** | **-1.2** |
| YAK | | | | *e* | | | 08 42 05.2 | |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,6.0nm,1.1s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,3.0nm,1.0s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=N,106nm,3.0s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=E,46nm,2.2s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=Z,901nm,16.0s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=E,484nm,19.0s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=N,710nm,17.0s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **23.93** | **281** | *e* | P | **P** | **08 31 08.6** | **-0.7** |
| XLT | | | | | S | **S** | **08 35 22.0** | **-0.6** |
| XLT | | | | | pmax | pmax | | |
| | comp=N,18nm,1.5s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=N,840nm,17.5s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=N,1μm,15.6s | | | | | | | |
| **BJI** | **Beijing** | **24.96** | **272** | | P | **P** | **08 31 18.8** | **+0.2** |
| BJI | | | | | S | **S** | **08 35 41.9** | **+2.8** |
| BJI | | | | | pmax | pmax | | |
| | comp=N,9.0nm,1.8s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=N,190nm,17.3s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=N,460nm,16.9s | | | | | | | |
| BJI | | | | | LR | LR | | |
| | comp=N,590nm,18.2s | | | | | | | |
| **BILL** | **Bilibino** | **25.45** | **15** | *e* | P | **P** | **08 31 21.7** | **-1.1** |
| **BILL** | **Bilibino** | **25.45** | **15** | *e* | P | **P** | **08 31 21.7** | **-1.1** |
| BILL | | | | *e* | | | 08 32 04.1 | |
| BILL | | | | *e* | S | **S** | **08 35 42.0** | **-4.4** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,14nm,1.9s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,982nm,13.0s | | | | | | | |
| **SSE** | **Sheshan** | **25.82** | **249** | | P | **P** | **08 31 26.2** | **-0.2** |
| SSE | | | | | S | **S** | **08 35 52.8** | **0.0** |
| SSE | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| SSE | | | | | pmax | pmax | | |
| | comp=Z,91nm,4.7s | | | | | | | |
| SSE | | | | | LR | LR | | |
| | comp=Z,300nm,18.1s | | | | | | | |
| SSE | | | | | LR | LR | | |
| | comp=Z,290nm,18.1s | | | | | | | |
| **TIA** | **Tai'an** | **25.86** | **263** | | P | **P** | **08 31 28.1** | **+1.3** |
| TIA | | | | | S | **S** | **08 35 56.4** | **+3.0** |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,31nm,0.7s | | | | | | | |
| TIA | | | | | pmax | pmax | | |
| | comp=Z,200nm,5.3s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,480nm,16.8s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,740nm,16.9s | | | | | | | |
| TIA | | | | | LR | LR | | |
| | comp=Z,710nm,18.2s | | | | | | | |
| **NJ2** | **Nanjing** | **26.83** | **254** | *e* | P | **P** | **08 31 36.5** | **+0.9** |
| NJ2 | | | | | sP | **pwP** | **08 31 52.2** | **-0.3** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| NJ2 | | | | | LR | LR | | |

comp=Z,1µm,19.0s
NJ2 LR LR
comp=Z,1µm,18.9s
NJ2 LR LR
comp=Z,1µm,15.5s
**HNS HongShan 27.06 268 ⇑P P 08 31 38.2 +0.7**
HNS eS S 08 36 13.9 +1.7
HNS sS sS 08 36 29.1 -0.1
HNS pmax pmax
comp=Z,10.0nm,0.6s
HNS LR LR
comp=Z,290nm,15.1s
HNS LR LR
comp=Z,500nm,14.0s
HNS LR LR
comp=Z,550nm,17.9s
**HHC Hu-ho-hao-te 27.99 276 eP P 08 31 43.4 -2.6**
HHC sP sP 08 32 01.1 0.0
HHC PP PnPn 08 32 36.4 +1.9
HHC S S 08 36 29.1 +1.9
HHC sS sS 08 36 47.6 +3.4
HHC pmax pmax
comp=Z,7.0nm,0.6s
HHC pmax pmax
comp=Z,150nm,5.2s
HHC LR LR
comp=Z,430nm,13.5s
HHC LR LR
comp=Z,930nm,16.1s
HHC LR LR
comp=Z,1µm,16.4s
**BTO Baotou 29.18 277 eP P 08 31 57.1 +0.5**
BTO PP PnPn 08 32 49.4 -1.2
BTO S S 08 36 47.3 +1.5
BTO SS SnSn 08 38 18.5 +5.3
BTO pmax pmax
comp=Z,14nm,0.5s
BTO pmax pmax
comp=Z,210nm,3.7s
BTO LR LR
comp=Z,1µm,16.7s
BTO LR LR
comp=Z,2µm,16.9s
BTO LR LR
comp=Z,2µm,14.5s
**ULN Ulaanbaatar 29.41 292 P P 08 31 58.9 +0.3**
**ULN Ulaanbaatar 29.41 292 eP P 08 31 59.3 +0.6**
**ULN Ulaanbaatar 29.41 292 ceP P 08 31 59.3 +0.6**
ULN pmax pmax
comp=Z,16nm,1.3s
**SONM Songino Array 29.86 292 P P 08 32 02.7 +0.1**
**SONM Songino Array 29.86 292 P P 08 32 03.2 +0.7**
comp=Z,4.4nm,0.6s,baz=84,slow=8.7,SNR=29
SONM LR LR 08 45 21.9
comp=Z,1µm,18.5s,baz=91,slow=39
comp=Z,4.4nm,0.6s
**LYN LuoYang 29.99 264 P P 08 32 06.3 +2.6**
LYN S S 08 37 03.0 +4.6
LYN pmax pmax
comp=Z,20nm,0.6s
LYN pmax pmax
comp=Z,160nm,4.9s
LYN LR LR
comp=Z,370nm,13.7s
LYN LR LR
comp=Z,870nm,15.1s
LYN LR LR
comp=Z,720nm,15.8s
**K13K Kusilvak Mount 31.87 40 P P 08 32 20.3 +0.3**
baz=258
**J14K Nanvaranak Lak 32.55 39 P P 08 32 25.7 -0.2**
baz=258
**D17K Noatak River 34.10 30 P P 08 32 39.8 +0.5**
baz=251
**L16K Owhat River 34.26 41 P P 08 32 41.7 +0.9**
baz=263
**C17K DeLong Mountai 34.33 29 P P 08 32 41.7 +0.4**
baz=250
**E17K Hotham Inlet 34.37 31 P P 08 32 41.7 0.0**
baz=253
**F17K Baldwin Pennin 34.41 33 P 08 32 42.6 +0.7**
**F17K Baldwin Pennin 34.41 33 P P 08 32 41.6 -0.4**
baz=255
**G17K Kiwalik Mounta 34.41 34 P P 08 32 42.3 +0.2**
baz=257
**M16K Timber Creek 34.43 42 P P 08 32 42.1 -0.1**
baz=265
**N16K Nishlik Lake 34.48 43 P P 08 32 42.8 +0.1**
baz=266
**H17K Granite Mounta 34.59 35 P P 08 32 43.8 +0.2**
baz=258
**L17K Donlin 34.86 41 P P 08 32 46.4 +0.4**
baz=264
**E18K Tukpahlearik C 34.92 31 P P 08 32 47.0 +0.5**
baz=254
**K17K Iditarod 34.92 39 P P 08 32 47.1 +0.6**
baz=263
**F18K Selawik 35.07 33 P P 08 32 47.2 -0.4**
baz=256
**C18K Utukok River 35.07 29 P P 08 32 47.6 -0.2**
C18K IAmb IAmb 08 33 01.2
comp=Z,12nm,0.8s
**C18K Utukok River 35.07 29 P P 08 32 48.2 +0.4**
baz=252
**B18K Kokolik River 35.10 28 P P 08 32 47.8 -0.2**
baz=250
**M17K Holitna River 35.20 42 P P 08 32 48.8 -0.1**
baz=266
**N17K Nushagak Hills 35.26 43 P P 08 32 49.2 -0.3**
baz=267
**H18K Honhosa River 35.27 35 P P 08 32 49.3 -0.3**
baz=260
**O17K Koliganek Bris 35.28 45 P P 08 32 48.9 -0.7**
baz=268
**G18K Tagagawik 35.30 34 P P 08 32 49.2 -0.5**
G18K IAmb IAmb 08 33 05.6
comp=Z,10nm,0.8s
**G18K Tagagawik 35.30 34 P P 08 32 48.9 -0.8**
baz=258
**LZH Lanzhou 35.45 273 eP P 08 32 53.0 +1.5**
LZH sP pwP 08 33 10.6 +2.2
LZH pmax pmax
comp=Z,67nm,0.9s
LZH LR LR
comp=Z,600nm,15.1s
LZH LR LR
comp=Z,710nm,19.2s
LZH LR LR
comp=Z,780nm,16.1s
**P17K Kvichak River 35.60 46 P P 08 32 52.0 -0.3**
baz=270
**L18K Granite Mounta 35.62 40 P P 08 32 52.1 -0.4**
baz=265
**R17L Mt. Peulik Vol 35.66 48 P P 08 32 53.1 +0.2**
baz=272
**J18K Innoko River 35.73 38 P P 08 32 53.2 -0.2**
**J18K Innoko River 35.73 38 P P 08 32 53.6 +0.1**
baz=264
**C19K Lookout Ridge 35.77 28 P P 08 32 54.3 +0.5**
C19K IAmb IAmb 08 33 10.0
comp=Z,9.1nm,0.7s
**C19K Lookout Ridge 35.77 28 P P 08 32 54.1 +0.4**
baz=253
**GCSA Galena City Sc 35.83 36 P P 08 32 54.8 +0.5**
baz=262
**F19K Shaleruckik Mo 35.85 33 P P 08 32 53.7 -0.7**
F19K IAmb IAmb 08 33 07.7
comp=Z,9.4nm,0.8s
**F19K Shaleruckik Mo 35.85 33 P P 08 32 54.6 +0.2**
baz=258
**Q17K Contact Creek 35.90 47 P P 08 32 55.5 +0.5**
baz=272
**N18K Kilae Creek 35.91 43 P P 08 32 55.5 +0.5**
baz=268
**M18K Stony River 35.98 42 P P 08 32 55.8 +0.3**
baz=267
**G19K Purcell Mounta 35.98 34 P P 08 32 56.5 +0.9**
G19K IAmb IAmb 08 33 09.0
comp=Z,6.3nm,0.8s
**G19K Purcell Mounta 35.98 34 P P 08 32 55.5 -0.1**
baz=260
**D19K Kuna River 36.11 30 IAmb IAmb 08 33 17.4**
comp=Z,16nm,0.8s
**D19K Kuna River 36.11 30 P P 08 32 56.8 +0.1**
baz=255
**H19K Roundabout Mou 36.13 35 P P 08 32 56.7 0.0**
**H19K Roundabout Mou 36.13 35 P P 08 32 56.8 0.0**
baz=261,SNR=9.4
**E19K Redstone River 36.19 32 P P 08 32 57.6 +0.3**
E19K IAmb IAmb 08 33 15.9
comp=Z,14nm,0.7s
**E19K Redstone River 36.19 32 P P 08 32 57.6 +0.3**
baz=258,SNR=12
**J19K Poorman 36.27 38 P P 08 32 59.8 +1.7**
J19K IAmb IAmb 08 33 20.4
comp=Z,8.3nm,0.9s
**J19K Poorman 36.27 38 P P 08 32 58.3 +0.2**
baz=264
**Q18K Katmai Hardscr 36.35 47 P P 08 32 58.4 -0.5**
baz=272
**L19K White Mountain 36.47 41 P P 08 32 59.2 -0.6**
baz=267
**N19K Bonanza Creek 36.60 43 P P 08 33 00.9 -0.1**
baz=269
**M19K Big River Lodg 36.68 41 P P 08 33 02.3 +0.8**
baz=268
**F20K Avaraart Lake 36.68 32 P P 08 33 01.4 -0.1**
**F20K Avaraart Lake 36.68 32 P P 08 33 02.5 +1.0**
baz=260
**D20K Etivluk River 36.70 30 P P 08 33 02.4 +0.7**
baz=257,SNR=16
**E20K Nigu River 36.75 30 P P 08 33 02.9 +0.7**
baz=258,SNR=12
**H20K Anotleneega Mo 36.77 35 P P 08 33 03.3 +1.0**
baz=263
**B20K Meade River 36.84 27 P P 08 33 03.4 +0.6**
baz=254,SNR=9.4
**I20K Naaghedeneel 36.86 36 P P 08 33 02.8 -0.1**
baz=264
**GTA Gaotai 36.88 280 eP P 08 33 04.9 +1.2**
GTA S S 08 38 47.1 +1.7
GTA pmax pmax
comp=Z,13nm,0.6s
GTA LR LR
comp=Z,510nm,17.5s
GTA LR LR
comp=Z,400nm,16.0s
GTA LR LR
comp=Z,690nm,16.7s
**K20K Telida 36.91 39 P P 08 33 03.4 -0.1**
baz=266
**SII Sitkinak Islan 36.91 50 P P 08 33 03.7 +0.1**
baz=275
**J20K Nowinta River 36.94 37 P P 08 33 05.1 +1.4**
J20K IAmb IAmb 08 33 18.9
comp=Z,40nm,1.8s
**J20K Nowinta River 36.94 37 P P 08 33 03.6 -0.2**
baz=265
**L20K Farewell, AK 36.94 40 P P 08 33 03.6 -0.2**
baz=268
**P19K Oil Pt 37.23 45 P P 08 33 06.3 0.0**
baz=272
**M20K Styx River 37.27 41 P P 08 33 07.9 +1.1**
M20K IAmb IAmb 08 33 40.6
comp=Z,19nm,1.4s
**M20K Styx River 37.27 41 P P 08 33 06.8 +0.1**
baz=269
**IMAR Indian Mountai 37.30 34 P P 08 33 05.5 -1.3**
**OHAK Old Harbor 37.34 49 P P 08 33 06.6 -0.6**
baz=275
**G21K Allakaket 37.47 34 IAmb IAmb 08 33 22.3**
comp=Z,9.7nm,0.8s
**G21K Allakaket 37.47 34 P P 08 33 08.2 0.0**
baz=263,SNR=8.1
**F21K Alatna River 37.57 32 P P 08 33 09.3 +0.2**
baz=262
**E21K Killik River 37.59 30 IAmb IAmb 08 33 23.4**
comp=Z,9.0nm,0.8s
**E21K Killik River 37.59 30 P P 08 33 09.0 -0.3**
baz=260
**B21K Ikpikpuk River 37.60 28 P P 08 33 10.1 +0.8**
baz=258,SNR=18
**H21K Melozitna Rive 37.65 35 IAmb IAmb 08 33 23.8**
comp=Z,11nm,1.1s
**H21K Melozitna Rive 37.65 35 P P 08 33 10.2 +0.4**
baz=264,SNR=7.0
**KDAK Kodiak Island 37.68 48 LR LR 08 49 53.9**
comp=Z,220nm,19.8s,baz=283,slow=38
**PPLA Purkeypile 37.74 40 P P 08 33 11.1 +0.4**
baz=269
**A22K Sinclair Lake 37.82 26 P P 08 33 11.0 0.0**
baz=255
**F22K John River 38.11 32 P P 08 33 14.0 +0.4**
baz=263
**D22K Ayikyak River 38.13 30 IAmb IAmb 08 33 20.5**
comp=Z,8.8nm,0.7s
**D22K Ayikyak River 38.13 30 P P 08 33 14.0 +0.1**
baz=260
**CD2 Chengdu 38.14 265 P P 08 33 14.6 +0.3**
CD2 pP pP 08 33 24.9 -0.1
CD2 sP sP 08 33 29.6 -0.1
CD2 S S 08 39 01.5 -2.9
CD2 sS sS 08 39 23.9 +2.2
CD2 pmax pmax
comp=Z,20nm,0.6s
CD2 pmax pmax
comp=Z,100nm,4.8s
CD2 LR LR
comp=Z,370nm,11.8s
CD2 LR LR
comp=Z,460nm,12.9s
CD2 LR LR
comp=Z,380nm,16.9s
**B22K Teshekpuk Lake 38.16 27 IAmb IAmb 08 33 29.8**
comp=Z,12nm,0.8s
**B22K Teshekpuk Lake 38.16 27 P P 08 33 14.6 +0.7**
baz=258
**CAPN Captain Cook N 38.24 43 P P 08 33 14.9 +0.2**
baz=272
**H22K Ishtalitna Cre 38.26 35 P P 08 33 15.1 +0.2**
baz=266
**G22K Bettles 38.30 33 P P 08 33 15.9 +0.7**
baz=264
**BPAW Bear Paw Mtn. 38.31 38 P P 08 33 15.7 +0.3**
baz=268
**SUA Susitna One 38.41 42 P P 08 33 16.4 0.0**
baz=272
**MLY Manley 38.46 36 P P 08 33 17.3 +0.6**
**MLY Manley 38.46 36 P P 08 33 16.9 +0.2**
baz=267
**BRSE Bradley Lake S 38.49 45 P P 08 33 17.0 0.0**
baz=274
**GYA Guiyang 38.68 257 P P 08 33 17.6 -1.4**
GYA pmax pmax
comp=Z,8.0nm,0.6s
GYA LR LR
comp=Z,470nm,16.2s
GYA LR LR
comp=Z,460nm,16.8s
GYA LR LR
comp=Z,570nm,16.4s
**M22K Willow 38.70 41 P P 08 33 19.1 +0.5**
baz=272
**COLD Coldfoot 38.84 33 P P 08 33 19.9 +0.2**
baz=265
**D23K Nanushuk River 38.86 30 P P 08 33 20.5 +0.6**
baz=262
**G23K Bananza Creek 38.87 33 P P 08 33 20.8 +0.8**
baz=266
**RC01 Rabbit Creek A 38.91 42 P P 08 33 21.5 +1.0**
baz=273
**H23K Yukon River 39.00 35 P P 08 33 21.8 +0.6**
baz=267
**C23K Itkillik River 39.02 28 IAmb IAmb 08 33 35.1**
comp=Z,19nm,0.9s
**C23K Itkillik River 39.02 28 P P 08 33 21.7 +0.6**
baz=261
**I23K Minto, Yukon-K 39.05 36 IAmb IAmb 08 33 36.7**
comp=Z,16nm,1.4s
**I23K Minto, Yukon-K 39.05 36 P P 08 33 22.4 +0.9**
baz=268
**E23K Chandalar 39.15 31 P P 08 33 22.5 +0.1**
baz=264
**NEA2 Nenana 39.16 37 P P 08 33 22.1 -0.4**
baz=269
**PMR Palmer 39.18 42 P P 08 33 22.8 +0.2**
baz=273
**MCK McKinley 39.22 38 P P 08 33 23.6 +0.6**
baz=270
**TOLK Toolik Lake Re 39.22 30 IAmb IAmb 08 33 36.9**
comp=Z,8.9nm,0.8s
**TOLK Toolik Lake Re 39.22 30 P P 08 33 22.9 0.0**
baz=264,SNR=6.6
**MDM Murphy Dome 39.53 36 IAmb IAmb 08 33 46.5**
comp=Z,8.0nm,0.8s
**D24K Happy Valley 39.55 30 IAmb IAmb 08 33 32.2**
comp=Z,14nm,0.6s
**D24K Happy Valley 39.55 30 P P 08 33 25.3 -0.3**
baz=264
**SML Sawmill 39.55 41 P P 08 33 25.5 -0.3**
SML IAmb IAmb 08 33 46.7
comp=Z,21nm,1.0s
**SML Sawmill 39.55 41 P P 08 33 25.9 +0.2**
baz=273
**SML Sawmill 39.55 41 P P 08 33 25.5 -0.3**
SML pmax pmax
comp=Z,21nm,1.0s
**E24K Your Creek 39.57 31 P P 08 33 25.9 +0.1**
baz=266
**PWL Port Wells 39.61 43 P P 08 33 26.8 +0.5**
PWL IAmb IAmb 08 33 41.8
comp=Z,8.9nm,0.8s
**PWL Port Wells 39.61 43 P P 08 33 26.5 +0.2**
baz=274
**C24K Franklin Bluff 39.66 29 P P 08 33 26.9 +0.4**
baz=263
**COLA College 39.69 36 P P 08 33 28.6 +1.8**
COLA IAmb IAmb 08 33 42.4
comp=Z,15nm,0.8s
**COLA College 39.69 36 P P 08 33 27.1 +0.3**
baz=270
**COLA College 39.69 36 i P P 08 33 28.3 +1.5**
COLA pmax pmax
comp=Z,4.0nm,0.6s
**WAT6 Susitna Watana 39.79 40 P P 08 33 27.7 -0.2**
baz=273
**M23K Glacier View 39.84 41 P P 08 33 28.2 +0.1**
baz=274
**POKR Poker Plat Res 39.87 36 P P 08 33 28.5 +0.1**
baz=270
**G24K Hadweenzic Riv 39.88 34 P P 08 33 28.8 +0.4**
baz=268
**DHY Denali Highway 39.93 39 P P 08 33 28.6 -0.5**
baz=273
**SCM Sheep Creek Mo 40.02 41 P P 08 33 29.7 0.0**
baz=274
**HDA Harding Lake 40.08 37 P P 08 33 32.8 +2.7**
**HDA Harding Lake 40.08 37 P P 08 33 30.7 +0.6**
baz=271
**IL31 40.10 37 P P 08 33 32.7 +2.5**
**ILAR Eielson Array 40.10 37 P P 08 33 32.1 +1.8**
**ILAR Eielson Array 40.10 37 P P 08 33 29.5 -0.8**
comp=Z,1.0nm,0.6s,baz=262,slow=7.1,SNR=4.9
ILAR LR LR 08 52 08.1
comp=Z,379nm,18.7s,baz=262,slow=39
comp=Z,1.0nm,0.6s
**P23K Montague Islan 40.15 44 P P 08 33 30.8 +0.1**
baz=276
**GLI Glacier Island 40.21 43 P P 08 33 31.9 +0.7**
baz=275
**D25K Kavik River 40.43 30 P P 08 33 33.5 +0.5**
baz=266
**F25K Christian Rive 40.62 32 P P 08 33 34.4 -0.2**
baz=269
**KLU Klutina 40.72 42 P P 08 33 35.0 -0.5**
baz=276
**C26K Camden Bay 40.98 29 P P 08 33 37.8 +0.3**
baz=267
**BMAR Burnt Mountain 41.03 32 P P 08 33 40.0 +2.0**
**F26K Sheenjek River 41.20 32 P P 08 33 39.8 +0.5**
baz=270
**N25K Chitina, Valde 41.34 41 P P 08 33 40.6 -0.1**
baz=277
**G26K Porcupine Rive 41.34 33 P P 08 33 40.9 +0.5**
baz=271
**C27K Jago River 41.39 29 P P 08 33 40.6 -0.2**
baz=268,SNR=9.3
**SCRK Sand Creek 41.40 38 P P 08 33 41.3 +0.2**
**SCRK Sand Creek 41.40 38 P P 08 33 40.6 -0.5**
baz=274
**BMRM Bremner River 41.41 42 P P 08 33 40.7 -0.5**
baz=277
**QIZ Qiongzhong 41.50 246 P P 08 33 42.6 +0.3**
QIZ S S 08 39 55.6 +0.8
QIZ LR LR
comp=Z,380nm,15.3s
QIZ LR LR
comp=Z,450nm,16.7s
QIZ LR LR
comp=Z,490nm,16.5s
**J26L Joseph Creek 41.54 37 P P 08 33 42.0 -0.2**
baz=274
**DGZ Jazzator, Alta 41.65 300 i P P 08 33 44.3 +0.9**
DGZ pmax pmax
comp=Z,5.0nm,0.8s
**L26K Log Cabin Wild 41.77 39 P P 08 33 44.2 +0.2**
baz=276
**GOMU GeErMu 41.85 278 P P 08 33 46.7 +1.2**
GOMU pmax pmax
comp=Z,34nm,0.8s
GOMU LR LR
comp=Z,1µm,16.3s
GOMU LR LR
comp=Z,2µm,16.9s
GOMU LR LR
comp=Z,3µm,16.7s
**M26K Nabesna, AK 42.00 40 P P 08 33 47.3 +1.4**
**M26K Nabesna, AK 42.00 40 P P 08 33 46.2 +0.3**
baz=277
**ZALV Zalesovo Beam 42.07 307 P P 08 33 46.5 -0.1**
comp=Z,1.0nm,0.4s,baz=76,slow=6.7,SNR=4.7
ZALV PcP PcP 08 35 41.4 +0.9
comp=Z,5.8nm,0.8s,baz=70,slow=2.7,SNR=10
ZALV LR LR 08 52 38.8
comp=Z,550nm,18.6s,baz=62,slow=38
comp=Z,1.0nm,0.4s
**MCARA McCarthy VSAT 42.12 42 P P 08 33 46.9 0.0**
baz=278
**PZH PanZhiHua 42.13 261 P P 08 33 48.5 +1.0**
PZH S S 08 40 05.8 +1.6
PZH pmax pmax
comp=Z,30nm,0.8s
PZH pmax pmax
comp=Z,150nm,4.4s
PZH LR LR
comp=Z,250nm,16.9s
PZH LR LR
comp=Z,240nm,17.1s
PZH LR LR
comp=Z,240nm,16.7s
**E27K Coleen River 42.15 31 P P 08 33 46.9 -0.2**
baz=272
**CRQM Cirque 42.15 42 P P 08 33 49.6 +2.2**
**CRQE Cirque 42.18 42 P P 08 33 47.6 +0.1**
baz=279
**G27K Doyon Strip 42.19 33 P P 08 33 47.5 +0.1**
baz=273
**K27K Chicken 42.23 38 P P 08 33 47.5 -0.2**
baz=276
**H27K Steamboat Moun 42.27 34 P P 08 33 47.3 -0.8**
baz=274
**D27M Malcolm River 42.36 30 P P 08 33 49.0 +0.2**
baz=271
**L27K Beaver Creek, 42.45 39 IAmb IAmb 08 34 07.1**
comp=Z,8.2nm,0.7s
**L27K Beaver Creek, 42.45 39 P P 08 33 49.8 +0.2**
baz=277
**BCAR Beaver Creek A 42.47 39 P P 08 33 51.5 +1.7**
**M27K Edge Creek, AK 42.52 40 P P 08 33 50.9 +0.6**
baz=278
**EGAK Eagle 42.55 36 P P 08 33 50.2 -0.1**
baz=276
**MESA MESA 42.83 43 P P 08 33 52.7 -0.2**
baz=280
**F28M Old Crow 42.83 32 P P 08 33 52.7 +0.1**
baz=274
**E28M Babbage River 42.90 31 P P 08 33 53.5 +0.3**
baz=273
**CTG Chitna Glacier 42.99 42 P P 08 33 54.1 0.0**
baz=280
**I28M Miner Creek 42.99 35 P P 08 33 54.3 +0.3**
baz=276
**YUK3 Moose Creek 43.27 41 P P 08 33 56.4 0.0**
baz=280
**DAWY Dawson 43.40 37 P P 08 33 57.6 +0.3**
baz=278
**WMQ Urumqi 43.49 292 eP P 08 33 59.5 +1.2**
WMQ pP sP 08 34 12.4 -1.5
WMQ PP PcP 08 35 46.9 +1.3
WMQ pmax pmax
comp=Z,24nm,1.1s
WMQ LR LR

comp=Z,840nm,13.9s
WMQ LR LR
comp=Z,630nm,14.7s
WMQ LR LR
comp=Z,620nm,14.7s
**E29M Blow River 43.51 31** IAmb IAmb 08 34 13.0
comp=Z,13nm,0.8s
**E29M Blow River 43.51 31** P **P** **08 33 58.8 +0.7**
baz=275
**H29M Whitestone 43.55 34** P **P** **08 33 58.7 +0.2**
baz=277
**O28M Mount Upton 43.58 42** P **P** **08 33 59.5 +0.5**
baz=281
**G29M Pine Creek 43.61 33** P **P** **08 33 59.6 +0.7**
baz=276
**I29M Ogilvie Camp, 43.68 35** P **P** **08 34 00.4 +0.9**
baz=278
**YUK8 Steele Glacier 43.68 41** P **P** **08 33 59.9 0.0**
baz=281
**M29M Somme Creek 44.08 39** P **P** **08 34 03.5 +0.7**
baz=281
**L29M L29M 44.11 39** P **P** **08 34 04.0 +1.0**
baz=280
**PNL Peninsula 44.19 44** P **P** **08 34 04.4 +0.8**
baz=283
**EPYK Eagle Plains 44.19 34** P **P** **08 34 04.1 +0.5**
baz=279
**G30M tAoh Zraii Nji 44.30 33** P **P** **08 34 05.0 +0.5**
baz=278
**F30M Barrier River 44.39 32** P **P** **08 34 05.9 +0.8**
baz=278
**YUK6 Outpost Mounta 44.42 42** P **P** **08 34 06.2 +0.5**
baz=282
**I30M Mount Dempster 44.51 35** IAmb IAmb 08 34 49.6
comp=Z,11nm,1.0s
**I30M Mount Dempster 44.51 35** P **P** **08 34 06.5 +0.3**
baz=280
**N30M Aishikik Lake 44.91 41** P **P** **08 34 10.1 +0.7**
baz=283
**P29M Windy Craggy 45.02 43** P **P** **08 34 10.6 +0.4**
baz=284
**G31M Satah River 45.07 33** P **P** **08 34 11.6 +1.1**
baz=280
**INK Inuvik 45.13 31** P **P** **08 34 12.0 +1.1**
baz=279
**P30M Million Dollar 45.28 43** P **P** **08 34 12.7 +0.3**
baz=284
**MK31 Makanchi Array 45.87 298** IAmb IAmb 08 34 18.5
comp=Z,16nm,0.8s
**MK31 Makanchi Array 45.87 298** *ce*P **P** **08 34 17.5 +0.4**
**MKAR Makanchi Array 45.87 298** P **P** **08 34 17.1 0.0**
**MKAR Makanchi Array 45.87 298** P **P** **08 34 17.5 +0.3**
comp=Z,14nm,0.7s,baz=74,slow=8.1,SNR=86
MKAR LR LR 08 54 58.2
comp=Z,1µm,18.2s,baz=73,slow=38
comp=Z,14nm,0.7s
**M31M Drury Creek, Y 45.99 39** P **P** **08 34 18.4 +0.6**
baz=284
**MAKZ Makanchi 46.06 298** P **P** **08 34 18.5 -0.1**
MAKZ IAmb IAmb 08 34 20.0
comp=Z,15nm,0.8s
**MAKZ Makanchi 46.06 298** P **P** **08 34 18.5 -0.1**
MAKZ pmax pmax
comp=Z,15nm,0.8s
**MAKZ Makanchi 46.06 298** P **P** **08 34 19.0 +0.4**
**WHY Whitehorse 46.15 41** P **P** **08 34 19.1 -0.1**
baz=285
**S31K Pelican 46.21 45** P **P** **08 34 20.0 +0.4**
baz=287
**FARO Faro, Yukon 46.45 39** P **P** **08 34 21.8 +0.3**
baz=285
**KURK Kurchatov 46.67 304** P **P** **08 34 22.7 -0.6**
KURK IAmb IAmb 08 34 24.0
comp=Z,5.8nm,0.6s
**KURK Kurchatov 46.67 304** *eP* **P** **08 34 23.8 +0.5**
**KURK Kurchatov 46.67 304** *ce*P **P** **08 34 23.8 +0.5**
KURK pmax pmax
comp=Z,4.0nm,0.8s
**KURK Kurchatov 46.67 304** P **P** **08 34 22.8 -0.6**
KURK pP **pP** **08 34 35.2 +0.9**
**KURBB Kurchatov Arra 46.76 304** P **P** **08 34 23.9 0.0**
comp=Z,2.2nm,0.3s,baz=71,slow=8.4,SNR=10.0
KURBB PcP **PcP** **08 35 56.9 +0.2**
comp=Z,3.1nm,0.2s,baz=79,slow=3.9,SNR=5.4
KURBB LR LR 08 55 17.8
comp=Z,384nm,18.1s,baz=167,slow=38
comp=Z,2.2nm,0.3s
**A36M Sachs Harbour 47.23 25** IAmb IAmb 08 34 30.5
comp=Z,15nm,0.8s
**A36M Sachs Harbour 47.23 25** P **P** **08 34 27.4 0.0**
baz=283
**P33M Teslin, Yukon 47.25 42** P **P** **08 34 28.8 +1.0**
baz=287
**C36M Paulatuk 48.26 28** P **P** **08 34 35.2 -0.2**
baz=286
**PHRA Phrae 48.37 254** P **P** **08 34 37.2 +0.3**
**R33M Jennings River 48.40 42** P **P** **08 34 37.1 +0.3**
baz=289
**U33K Whale Pass 48.41 47** P **P** **08 34 37.4 +0.7**
baz=290
**DLBC Dease Lake 49.18 43** LR LR 08 58 38.0
comp=Z,171nm,18.8s,baz=314,slow=40
**DLBC Dease Lake 49.18 43** P **P** **08 34 42.2 -0.5**
baz=291
**CMAR Chiang Mai Arr 49.29 255** P **P** **08 34 45.7 +1.7**
comp=Z,1.2nm,0.3s,baz=39,slow=7.4,SNR=1.4
comp=Z,1.2nm,0.3s
**T35M Bob Quinn 49.59 45** P **P** **08 34 46.3 +0.5**
baz=292
**ARXS Arharly 49.79 297** *eP* **P** **08 34 47.5 -0.1**
**WUS Wushi 50.27 293** P **P** **08 34 52.5 +1.1**
WUS pP **pP** **08 35 04.7 +2.2**
**BRVK Borovoye 50.55 310** P **P** **08 34 52.8 -0.3**
**BRVK Borovoye 50.55 310** *eP* **P** **08 34 54.0 +0.9**
**BRVK Borovoye 50.55 310** *ce*P **P** **08 34 54.0 +0.9**
BRVK pmax pmax
comp=Z,3.0nm,0.7s
**BRVK Borovoye 50.55 310** P **P** **08 34 53.0 -0.1**
**TARG Taragay, Kyrgy 50.96 294** IAmb IAmb 08 35 17.7
comp=Z,9.9nm,0.7s
**TOAD Toad River Com 51.35 42** P **P** **08 34 59.0 -0.1**
baz=294
**AAK Ala-Archa 52.67 296** P **P** **08 35 10.0 +0.7**
AAK IAmb IAmb 08 35 10.7
comp=Z,8.6nm,0.7s
**AAK Ala-Archa 52.67 296** P **P** **08 35 10.2 +0.8**
comp=Z,5.0nm,0.5s,baz=104,slow=5.3,SNR=8.8
AAK LR LR 08 59 11.0
comp=Z,302nm,18.2s,baz=52,slow=38
comp=Z,5.0nm,0.5s
**AAK Ala-Archa 52.67 296** P **P** **08 35 10.1 +0.7**
AAK pP **pP** **08 35 22.3 +1.8**
**BBB Bella Bella 52.68 50** LR LR 08 55 35.9
comp=Z,94nm,21.2s,baz=298,slow=34
**KSH Kashi 53.26 292** P **P** **08 35 18.1 +4.4**
KSH pP pwP 08 35 30.1 -0.5
KSH pmax pmax
comp=Z,6.0nm,1.0s
KSH LR LR
comp=Z,440nm,15.8s
KSH LR LR
comp=Z,360nm,15.8s
KSH LR LR
comp=Z,610nm,18.6s
**RES Resolute Bay 54.02 17** LR LR 09 01 30.8
comp=Z,277nm,19.9s,baz=318,slow=40
**HNR Honiara 54.23 167** LR LR 08 59 24.7
comp=Z,2µm,18.9s,baz=346,slow=37
**ARSB Arslanbob 54.31 296** IAmb IAmb 08 35 35.9
comp=Z,8.6nm,0.9s
**YKA Yellowknife Ar 54.46 35** P **P** **08 35 22.6 +0.8**
comp=Z,1.4nm,0.7s,baz=299,slow=7.2,SNR=8.5
YKA LR LR 09 00 47.9
comp=Z,152nm,19.4s,baz=320,slow=38
comp=Z,1.4nm,0.7s
**KK31 Karatay Array 54.98 299** IAmb IAmb 08 35 27.0
comp=Z,9.1nm,0.7s
**KKAR Karatay Array 54.98 299** P **P** **08 35 26.3 +0.3**
**KKAR Karatay Array 54.98 299** IAmb IAmb 08 35 27.0
comp=Z,9.0nm,0.7s
**KKAR Karatay Array 54.98 299** P **P** **08 35 26.3 +0.3**
**ARU Arti 55.16 317** P **P** **08 35 26.7 -0.3**
ARU IAmb IAmb 08 35 29.3
comp=Z,6.2nm,0.5s
**ARU Arti 55.16 317** P **P** **08 35 26.8 -0.2**
comp=Z,4.4nm,0.4s,baz=216,slow=0.8,SNR=5.0
ARU LR LR 09 01 33.3
comp=Z,836nm,18.1s,baz=74,slow=39
comp=Z,4.4nm,0.4s
**ARU Arti 55.16 317** *eP* **P** **08 35 26.7 -0.3**
**ARU Arti 55.16 317** *d i*P **P** **08 35 26.7 -0.3**
ARU 08 37 27.9
ARU S **S** **08 43 08.2 +1.7**
ARU SS **SS** **08 46 49.0 -1.3**
ARU pmax pmax
comp=Z,5.0nm,0.6s
ARU MLR MLR
comp=Z,790nm,18.0s
**KAPI Kappang 55.84 217** LR LR 08 58 45.8
comp=Z,140nm,21.4s,baz=41,slow=35
**BTK Batken 56.37 295** IAmb IAmb 08 35 54.5
comp=Z,11nm,0.8s
**ABKAR Akbulak array 58.08 309** P **P** **08 35 47.6 -0.3**
**ABKAR Akbulak array 58.08 309** IAmb IAmb 08 35 49.2
comp=Z,14nm,0.9s
**KIRV Kirov 58.26 323** LR LR 09 03 07.2
comp=Z,424nm,19.5s,baz=50,slow=38
**NIL Nilore 58.27 288** P **P** **08 35 50.4 +0.9**
**NIL Nilore 58.27 288** P **P** **08 35 50.4 +0.9**
NIL pmax pmax
comp=Z,35nm,1.2s
**SIMJ Simiganj 58.31 295** P **P** **08 35 49.3 -0.6**
**SIMJ Simiganj 58.31 295** P **P** **08 35 50.1 +0.3**
SIMJ pP **pP** **08 36 02.4 +1.3**
**AKTO Aktyubinsk 58.51 311** P **P** **08 35 50.7 -0.1**
comp=Z,2.4nm,0.7s,baz=7.9,slow=2.6,SNR=6.7
AKTO LR LR 09 03 19.0
comp=Z,357nm,18.2s,baz=64,slow=38
comp=Z,2.4nm,0.7s
**APA Apatity 58.64 336** *j*P **P** **08 35 50.5 -1.0**
APA pmax pmax
comp=Z,8.0nm,0.8s
APA MLR MLR
comp=Z,500nm,15.0s
**ARCES ARCESS Array B 59.39 340** P **P** **08 35 56.2 -0.5**
comp=Z,9.1nm,1.1s,baz=57,slow=8.8,SNR=5.6
ARCES LR LR 09 06 50.0
comp=Z,150nm,18.1s,baz=21,slow=41
comp=Z,9.1nm,1.1s
**KTK1 Kautokeino 60.32 340** *eP* **P** **08 36 04.2 +1.2**
KTK1 IAmb IAmb 08 36 05.4
comp=Z,78nm,1.8s
**KBL Kabul 60.62 291** P **P** **08 36 05.4 -0.5**
KBL IAmb IAmb 08 36 18.7
comp=Z,11nm,0.9s
**KBL Kabul 60.62 291** P **P** **08 36 05.4 -0.5**
KBL pmax pmax
comp=Z,11nm,0.9s
**NEW Newport 60.74 50** P **P** **08 36 06.6 +0.3**
baz=305
**YBH Yreka Blue Hor 61.21 59** LR LR 08 57 53.9
comp=Z,84nm,21.9s,baz=311,slow=31
**JOF Joensuu 62.45 333** *eP* **P** **08 36 17.6 +0.1**
**BELG Belogornoye 62.71 318** LR LR 09 06 06.5
comp=Z,526nm,18.2s,baz=55,slow=38
**BELG Belogornoye 62.71 318** *i*P **P** **08 36 20.0 +0.6**
BELG pmax pmax
comp=Z,4.0nm,0.6s
**LOF Lofoten 63.21 343** *eP* **P** **08 36 22.5 +0.1**
LOF IAmb IAmb 08 36 24.2
comp=Z,6.4nm,0.5s
**MSO Missoula 63.33 50** P **P** **08 36 23.9 +0.1**
baz=307
**FAUS Fauske 63.45 342** *eP* **P** **08 36 23.7 -0.3**
**VALR Valaam 63.70 332** *i*P **P** **08 36 26.9 +1.1**
VALR pmax pmax
comp=Z,18nm,0.9s
**JMIC Jan Mayen 64.02 352** LR LR 09 04 07.2
comp=Z,118nm,18.6s,baz=54,slow=36
**FFC Flin Flon 64.30 38** P **P** **08 36 31.2 +1.3**
FFC IAmb IAmb 08 36 44.8
comp=Z,13nm,1.3s
**FFC Flin Flon 64.30 38** P **P** **08 36 31.2 +1.3**
FFC pmax pmax
comp=Z,13nm,1.3s
**FFC Flin Flon 64.30 38** P **P** **08 36 30.3 +0.4**
**MOR8 Moi Rana 64.64 341** *eP* **P** **08 36 29.8 -2.1**
MOR8 IAmb IAmb 08 36 31.1
comp=Z,9.2nm,0.8s
**EGMT Eagleton 64.84 47** P **P** **08 36 32.9 -0.7**
baz=309
**VAF Ylistaro 65.03 336** *eP* **P** **08 36 34.7 +0.2**
**KEF Keuruu 65.04 335** *eP* **P** **08 36 34.4 -0.2**
**HLID Hailey 65.05 53** P **P** **08 36 34.8 -0.4**
baz=308
**FIA1 FINESS Array S 65.21 334** P **P** **08 36 35.6 -0.1**
**FINES FINESS Array B 65.21 334** P **P** **08 36 34.7 -1.0**
**FINES FINESS Array B 65.21 334** P **P** **08 36 35.5 -0.2**
comp=Z,10nm,0.6s,baz=34,slow=7.7,SNR=55
FINES LR LR 09 09 20.7
comp=Z,308nm,18.8s,baz=28,slow=40
comp=Z,10nm,0.6s
**WRAB Tennant Creek 65.33 196** P **P** **08 36 38.8 +1.9**
WRAB IAmb IAmb 08 36 56.3
comp=Z,8.2nm,1.1s
**WRAB Tennant Creek 65.33 196** P **P** **08 36 38.8 +1.9**
WRAB pmax pmax
comp=Z,8.0nm,1.1s
**WB2 Warramunga Arr 65.34 196** P **P** **08 36 37.8 +0.8**
WB2 IAmb IAmb 08 36 38.8
comp=Z,6.5nm,0.9s
**WRA Warramunga Arr 65.34 196** P **P** **08 36 37.9 +0.9**
**WRA Warramunga Arr 65.34 196** P **P** **08 36 37.3 +0.3**
comp=Z,3.1nm,0.8s,baz=18,slow=6.9,SNR=17
comp=Z,3.1nm,0.8s
**WRA Warramunga Arr 65.34 196** P **P** **08 36 37.9 +0.9**
**BOZ Bozeman (W) 65.35 50** P **P** **08 36 37.8 +0.7**
**BOZ Bozeman (W) 65.35 50** P **P** **08 36 37.8 +0.7**
BOZ pmax pmax
comp=Z,3.0nm,0.7s
**KVN Kaiserville 65.63 59** P **P** **08 36 40.1 +1.0**
**KVN Kaiserville 65.63 59** P **P** **08 36 40.1 +1.0**
KVN pmax pmax
comp=Z,4.0nm,1.0s
**NVAR Mina Array Bea 65.89 59** P **P** **08 36 42.0 +1.2**
comp=Z,0.7nm,0.6s,baz=307,slow=5.6,SNR=14
comp=Z,0.7nm,0.6s
**OBN Obninsk 65.93 325** *eP* **P** **08 36 40.7 +0.3**
**OBN Obninsk 65.93 325** *de*P **P** **08 36 40.7 +0.3**
OBN *e* 08 37 14.2
OBN *e* 08 39 04.7
OBN *eS* **SKSac** **08 46 25.9 -6.3**
OBN pmax pmax
comp=Z,14nm,0.8s
OBN MLR MLR
comp=Z,336nm,18.0s
**VRH Novokhopyorsk 66.29 319** *eP* **P** **08 36 42.2 -0.6**
VRH pmax pmax
comp=Z,27nm,0.7s
**ELK Elko 66.31 56** LR LR 09 01 41.2
comp=Z,81nm,21.8s,baz=298,slow=32
**NSS Namsos 66.59 341** *eP* **P** **08 36 45.2 +0.7**
**LPSR Galich'ya Gora 66.63 322** *eP* **P** **08 36 43.1 -1.9**
LPSR pmax pmax
comp=Z,20nm,0.8s
**MEF Metsahovi 66.68 334** *eP* **P** **08 36 45.1 -0.1**
**RLMT Red Lodge 66.94 49** P **P** **08 36 47.1 -0.3**
baz=310
**VES Vestal, Richgr 67.00 62** P **P** **08 36 47.5 -0.1**
baz=309
**TPAW Teton Pass 67.06 51** P **P** **08 36 48.2 -0.1**
TPAW IAmb IAmb 08 37 05.6
comp=Z,5.3nm,0.9s
**PKM Mcpherson Peak 67.13 63** P **P** **08 36 48.1 -0.6**
baz=309
**VORR Voronezh 67.14 321** *eP* **P** **08 36 49.1 +0.9**
VORR pmax pmax
comp=Z,25nm,0.3s
**VSU Vasula 67.25 331** *ce*P **P** **08 36 47.6 -1.2**
VSU pmax pmax
comp=Z,14nm,0.8s
**GRAC Grapevine Rang 67.36 60** P **P** **08 36 50.1 +0.2**
baz=309
**DGMT Dagmar 67.39 44** P **P** **08 36 49.5 -0.5**
baz=312
**VSR Storozhevoye 67.47 320** *eP* **P** **08 36 48.2 -2.1**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**SBC Santa Barbara 67.47 63** P **P** **08 36 51.0 +0.4**
baz=309
**ISA Isabella, Lake 67.50 62** P **P** **08 36 51.1 +0.2**
baz=309
**LAO LASA Array 67.54 46** P **P** **08 36 51.0 +0.1**
baz=311
**VORD Divnogorie 67.58 320** *e*P **P** **08 36 49.0 -2.0**
VORD pmax pmax
comp=Z,20nm,0.8s
**R11B Troy Canyon, C 67.60 58** P **P** **08 36 51.5 -0.2**
baz=309
**ARVC Arvin 67.61 62** P **P** **08 36 51.5 0.0**
baz=309
**DZM Mont Dzumac 67.77 163** *e*LR LR 08 57 21.5
comp=Z,180nm,21.6s
**MPMC Manual Prospec 67.87 61** P **P** **08 36 53.2 -0.2**
baz=309
**FURC Furnace Creek, 68.00 60** P **P** **08 36 54.1 +0.2**
baz=310
**MTSE Matsula 68.04 333** *eP* **P** **08 36 54.2 +0.5**
**SFJD Kangerlussuaq 68.05 8** LR LR 09 09 04.8
comp=Z,212nm,19.0s,baz=339,slow=38
**TPNV Topopah Spring 68.08 59** P **P** **08 36 54.4 -0.2**
baz=310
**DUG Dugway, Tooele 68.09 55** P **P** **08 36 54.5 -0.2**
baz=310
**FRB Frobisher Bay 68.24 17** LR LR 09 10 02.8
comp=Z,277nm,19.5s,baz=359,slow=39
**EDW2 Edwards Air Fo 68.30 62** P **P** **08 36 55.7 -0.2**
baz=310
**BW06 Boulder Array 68.30 51** P **P** **08 36 55.0 -1.1**
baz=311
**PDAR Pinedale Array 68.30 51** P **P** **08 36 56.4 +0.3**
comp=Z,0.4nm,0.5s,baz=312,slow=5.3,SNR=8.2
comp=Z,0.4nm,0.5s
**SNCC San Nicolas Is 68.34 64** P **P** **08 36 55.7 -0.4**
baz=310
**GSC Goldstone, Bar 68.78 61** P **P** **08 36 58.7 -0.3**
baz=310
**ASAR Alice Springs 69.05 195** P **P** **08 37 01.7 +1.2**
comp=Z,2.2nm,0.7s,baz=13,slow=5.6,SNR=25
comp=Z,2.2nm,0.7s
**DOMB Dombas 69.40 341** *e*P **P** **08 37 02.4 +0.1**
DOMB IAmb IAmb 08 37 02.9
comp=Z,9.6nm,1.2s
**NC303 NORSAR Array S 69.56 340** IAmb IAmb 08 37 04.2
comp=Z,22nm,1.4s
**NC204 NORSAR Array S 69.67 340** IAmb IAmb 08 37 04.6
comp=Z,13nm,0.8s
**NB2 NORSAR Subarra 69.76 340** P **P** **08 37 04.1 -0.4**
comp=Z,13nm,0.8s,baz=30,slow=6.5
**NB2 NORSAR Subarra 69.76 340** P **P** **08 37 04.1 -0.4**
baz=30,slow=6.5
**NB2 NORSAR Subarra 69.76 340** P **P** **08 37 01.5 -3.0**
NB2 pmax pmax
comp=Z,2.0nm,0.7s
**NOA NORSAR Array B 69.76 340** P **P** **08 37 04.2 -0.4**
comp=Z,10nm,0.7s,baz=30,slow=6.3,SNR=45
NOA LR LR 09 12 45.9
comp=Z,98nm,18.1s,baz=25,slow=40
comp=Z,10nm,0.7s
**MNK Minsk 69.83 328** *i*P **P** **08 37 03.9 -1.1**
MNK *i* *PP **pP** **08 37 15.8 -0.8**
MNK *i* 08 39 38.2
MNK *i* PPP PPP 08 41 20.0
MNK *i* S **S** **08 46 10.5 -0.4**
MNK *i* *SS **sS** **08 46 30.9 +0.1**
MNK *i* SS **SS** **08 50 40.4 +1.3**
MNK pmax pmax
comp=E,6.0nm,0.7s
MNK pmax pmax
comp=N,10.0nm,0.7s
MNK pmax pmax
comp=Z,29nm,0.8s
MNK MLR MLR
comp=N,3µm,17.0s
MNK MLR MLR
comp=E,213nm,19.0s
MNK MLR MLR
comp=Z,439nm,21.0s
**HFS Hagfors 69.90 338** P **P** **08 37 05.2 -0.1**
comp=Z,15nm,0.6s,baz=57,slow=5.5,SNR=46
HFS LR LR 09 10 51.4
comp=Z,161nm,20.7s,baz=30,slow=39
comp=Z,15nm,0.6s
**NC602 NORSAR Array S 69.94 339** IAmb IAmb 08 38 24.0
comp=Z,19nm,1.4s
**NC602 NORSAR Array S 69.94 339** *eP* **P** **08 37 05.5 0.0**
**NORES NORESS Array B 69.94 339** P **P** **08 37 05.3 -0.3**
**NAO01 NORSAR Array S 70.01 340** IAmb IAmb 08 37 06.9
comp=Z,14nm,0.8s
**K22A Casper 70.06 50** P **P** **08 37 06.0 -0.8**
baz=312
**PFO Pinyon Flats O 70.08 62** LR LR 09 04 16.3
comp=Z,86nm,19.7s,baz=308,slow=33
**PFO Pinyon Flats O 70.08 62** P **P** **08 37 06.8 -0.2**
baz=310
**TPFO Pinon Flats 70.09 62** P **P** **08 37 06.0 -1.1**
baz=310
**ULM Lac du Bonnet 70.09 38** LR LR 09 10 19.3
comp=Z,115nm,19.4s,baz=334,slow=38
**109C Camp Elliot, M 70.14 63** P **P** **08 37 06.7 -0.5**
baz=310
**RSSD Black Hills 70.40 47** P **P** **08 37 08.1 -0.9**
baz=313
**NEE2 Needles Airpor 70.50 60** P **P** **08 37 09.4 0.0**
baz=311
**IRM Iron Mountain 70.56 61** P **P** **08 37 09.8 -0.1**
baz=311
**KIV Kislovodsk 70.70 313** *eP* **P** **08 37 11.8 +1.2**
**KIV Kislovodsk 70.70 313** *eP* **P** **08 37 11.8 +1.2**
KIV pmax pmax
comp=Z,21nm,1.0s
KIV MLR MLR
comp=Z,582nm,18.0s
**KBZ Khabaz 70.74 313** P **P** **08 37 11.8 +1.0**
comp=Z,7.6nm,0.7s,baz=72,slow=2.7,SNR=21
KBZ LR LR 09 12 51.7
comp=Z,1µm,18.8s,baz=44,slow=40
comp=Z,7.6nm,0.7s
**KBZ Khabaz 70.74 313** *eP* **P** **08 37 10.0 -0.7**
**KBZ Khabaz 70.74 313** *ce*P **P** **08 37 10.0 -0.7**
KBZ pmax pmax
comp=Z,11nm,0.9s
**O20A White River Ci 70.78 53** P **P** **08 37 10.6 -0.7**
baz=312
**HMU Henry Mountain 70.78 56** IAmb IAmb 08 37 29.1
comp=Z,5.7nm,0.9s
**HYA Hoyanger 70.83 342** *eP* **P** **08 37 11.8 +0.9**
**SHA1 Shidzhatmaz 70.86 313** *ce*P **P** **08 37 11.7 -0.1**
**AGMN Agassiz Nation 71.50 40** P **P** **08 37 14.8 -0.5**
baz=317
**N23A Red Feather La 71.56 51** P **P** **08 37 15.2 -0.9**
baz=313
**ASK Askoy 71.66 342** *eP* **P** **08 37 17.2 +1.3**
**BER Bergen 71.72 342** *eP* **P** **08 37 17.5 +1.2**
**GNI Garni 72.18 309** LR LR 09 12 33.6
comp=Z,220nm,18.6s,baz=21,slow=39
**AKASG Malin Array Be 72.19 325** P **P** **08 37 19.4 +0.1**
comp=Z,3.3nm,0.5s,baz=38,slow=5.9,SNR=14
AKASG LR LR 09 12 07.6
comp=Z,419nm,18.1s,baz=37,slow=38
comp=Z,3.3nm,0.5s
**AKBB Malin Array Si 72.19 325** *ce*P **P** **08 37 19.3 0.0**
AKBB pmax pmax
comp=Z,17nm,0.9s
**KIEV Kiev 72.20 325** P **P** **08 37 18.9 -0.5**
**KIEV Kiev 72.20 325** P **P** **08 37 18.9 -0.5**
KIEV pmax pmax
comp=Z,93nm,2.0s
**BLS5 Blasjo 72.33 341** *eP* **P** **08 37 20.0 -0.1**
**MVCO Mesa Verde 72.59 55** P **P** **08 37 21.9 -0.4**
baz=313
**SNART Snartemo 73.11 340** *eP* **P** **08 37 25.5 +0.8**
**Q24A Divide 73.33 52** P **P** **08 37 26.3 -0.5**
baz=314
**OGNE Ogallala 73.67 48** P **P** **08 37 27.9 -0.5**
baz=315
**EYMN Ely 73.73 38** P **P** **08 37 28.2 -0.3**
baz=319
**SDCO Great Sand Dun 73.97 53** P **P** **08 37 31.2 +0.8**
baz=314
**ECSD EROS Data Cent 74.47 43** P **P** **08 37 33.8 +0.9**
baz=317
**TUC Tucson 74.52 60** P **P** **08 37 34.7 +1.2**
baz=313
**LVV L'vov 74.97 327** *eP* **P** **08 37 35.7 0.0**
**T25A Trinidad 75.01 53** P **P** **08 37 37.3 +0.9**
baz=315
**SPMN Marine on St. 75.19 40** P **P** **08 37 37.9 +0.9**
baz=319
**ANMO Albuquerque 75.34 55** LR LR 09 07 24.0

comp=Z,69nm,21.9s,baz=68,slow=33
**ANMO Albuquerque 75.34 55** P **P 08 37 39.6 +1.2**
baz=314
**BGNE Belgrade 75.39 46** P **P 08 37 39.2 +1.0**
baz=317
**KWP Kalwaria Pacla 75.64 327** *eP* **P 08 37 40.6 +1.1**
**I37A Lemond, Waseca 75.82 41** IAmb IAmb 08 37 59.0
comp=Z,12nm,0.8s
**121A Cookes Peak, D 76.21 58** P **P 08 37 44.6 +1.3**
baz=314
**BUR08 Bucovina Ar. S 76.23 325** IAmb IAmb 08 37 58.4
comp=Z,10.0nm,0.9s
**OJC Ojcow 76.25 329** *eP* **P 08 37 44.0 +0.9**
**KOLS Kolonicke sedl 76.37 327** *eP* **P 08 37 45.3 +1.6**
KOLS *e* 08 37 57.6
**KOLS Kolonicke sedl 76.37 327** *eP* **P 08 37 45.3 +1.6**
KOLS *e* 08 37 57.6
**SCHQ Schefferville 76.60 21** P **P 08 37 44.9 0.0**
comp=Z,5.2nm,1.0s,baz=5.9,slow=2.2,SNR=4.2
SCHQ LR LR 09 14 40.7
comp=Z,176nm,20.3s,baz=284,slow=38
comp=Z,5.2nm,1.0s
**CRVS Cervenica-Dubn 76.71 328** *eP* **P 08 37 46.0 +0.4**
**CRVS Cervenica-Dubn 76.71 328** *eP* **P 08 37 46.0 +0.4**
**GORT1 Trebel 76.72 336** *eP* **P 08 37 46.9 +1.3**
comp=Z,28nm,1.1s,baz=30,slow=5.6
**NIE Niedzica 76.73 329** *eP* **P 08 37 47.4 +1.6**
**KSP Ksiaz 76.97 332** *eP* **P 08 37 47.6 +0.5**
**OKC Ostrava-Krasne 77.17 330** AMS AMS 09 15 50.0
comp=Z,300nm,16.9s
**OSTC Ostas 77.24 332** AMS AMS 09 16 20.0
comp=Z,300nm,14.1s
**LANS Liptovska Anna 77.26 329** *eP* **P 08 37 51.4 +2.6**
**LANS Liptovska Anna 77.26 329** *eP* **P 08 37 51.4 +2.6**
**CHVC Chvalec 77.27 332** AMS AMS 09 16 20.0
comp=Z,300nm,18.9s
**FLTG Flechtingen 77.32 335** *eP* **P 08 37 50.0 +1.0**
comp=Z,8.6nm,0.9s,baz=30,slow=5.6
**UPC Upice 77.35 332** AMS AMS 09 20 10.0
comp=Z,400nm,16.1s
**DPC Dobruska-Polom 77.38 331** AMS AMS 09 16 30.0
comp=Z,300nm,16.5s
**MORC Moravsky Berou 77.44 330** IAmb IAmb 08 38 11.3
comp=Z,13nm,1.0s
**MORC Moravsky Berou 77.44 330** *eP* **P 08 37 50.4 +0.6**
**KRLC Kraliky 77.45 331** AMS AMS 09 19 00.0
comp=Z,300nm,21.4s
**NRDL Niedersach Rie 77.51 336** *es*P *s*P 08 38 10.9 +4.8
baz=32,slow=6.4
**RETH Rethem/Aller, 77.51 336** *eP* **P 08 37 50.1 +0.2**
comp=Z,16nm,1.1s,baz=30,slow=5.6
RETH *ep*P **sP 08 38 03.9 -2.2**
baz=25,slow=5.4
**CLL Collm 77.66 334**⇑ *iP* **P 08 37 51.3 +0.4**
comp=Z,18nm,0.9s
CLL *i* pP **sP 08 38 04.9 -2.3**
comp=Z,22nm,1.2s
CLL *i* sP **pwP 08 38 10.2 +1.9**
comp=Z,20nm,1.0s
**CLL Collm 77.66 334**⇑ *iP* **P 08 37 51.3 +0.4**
CLL pmax pmax
comp=Z,18nm,0.9s
CLL MLR MLR
comp=Z,300nm,17.2s
**CLL Collm 77.66 334** *eP* **P 08 37 51.3 +0.4**
comp=Z,19nm,1.0s,baz=30,slow=5.6
CLL *es*P **pwP 08 38 10.3 +2.0**
baz=32,slow=6.4
**BRG Berggiesshubel 77.73 333** *eP* **P 08 37 52.1 +0.7**
BRG Amp 08 37 53.2
comp=Z,3.9nm,0.8s
**BRG Berggiesshubel 77.73 333** Amp 08 38 06.4
comp=Z,6.0nm,1.0s
**BRG Berggiesshubel 77.73 333** *eP* **P 08 37 51.8 +0.5**
comp=Z,20nm,1.7s,baz=30,slow=5.6
**BRG Berggiesshubel 77.73 333** P P 08 38 05.8 +14
**PVCC Panska Ves 77.82 332** AMS AMS 09 18 50.0
comp=Z,300nm,18.6s
**KSU1 Kansas State U 77.88 47** P **P 08 37 52.5 +0.2**
baz=318
**CLZ Clausthal 78.01 335** *eP* **P 08 37 53.9 +1.0**
comp=Z,15nm,1.1s,baz=30,slow=5.6
CLZ *ep*P **pP 08 38 06.4 +1.8**
baz=25,slow=5.4
CLZ *es*P **pwP 08 38 12.5 +1.9**
baz=32,slow=6.4
**HSKC Hora Svate Kat 78.13 333** *eP* **P 08 37 54.5 +0.9**
HSKC AMS AMS 09 16 50.0
comp=Z,400nm,16.4s
**EKA Eskdalemuir Ar 78.14 344** P **P 08 37 53.6 +0.1**
comp=Z,3.9nm,0.7s,baz=22,slow=4.8,SNR=11
comp=Z,3.9nm,0.7s
**JFWS Jewell Farm 78.14 40** P **P 08 37 54.0 +0.2**
baz=321
**JAVC Velka Javorina 78.16 330** *eP* **P 08 37 55.2 +1.4**
**VRAC Vranov 78.16 331** *eP* **P 08 37 54.4 +0.6**
**VRAC Vranov 78.16 331** LR LR 09 14 55.4
comp=Z,188nm,20.2s,baz=33,slow=38
**MSTX Muleshoe 78.19 54** P **P 08 37 53.9 -0.4**
baz=316
**MNTX Cornudas Mount 78.25 57** P **P 08 37 55.0 +0.4**
baz=315
**PRA Prague 78.26 332** AMS AMS 09 16 10.0
comp=Z,300nm,21.7s
**GOPC GO Pecny, Ondr 78.27 332** *eP* **P 08 37 55.3 +0.9**
GOPC *ep*P **pP 08 38 07.2 +1.1**
GOPC AMS AMS 09 16 10.0
comp=Z,300nm,18.5s
**GOPC GO Pecny, Ondr 78.27 332** *eP* **P 08 37 55.3 +0.9**
GOPC *e* 08 38 07.2
GOPC MLR MLR
comp=Z,300nm,18.5s
**PRU Pruhonice 78.29 332** AMS AMS 09 18 40.0
comp=Z,300nm,16.7s
**BRTR Keskin Array B 78.43 315** P **P 08 37 55.8 +0.2**
**BRTR Keskin Array B 78.43 315** P **P 08 37 56.8 +1.2**
comp=Z,1.7nm,0.7s,baz=116,slow=2.9,SNR=5.6
BRTR LR LR 09 18 40.3
comp=Z,130nm,18.1s,baz=42,slow=40
comp=Z,1.7nm,0.7s
**BRTR Keskin Array B 78.43 315** P **P 08 37 55.8 +0.2**
**KRUC Moravsky 78.44 331** *eP* **P 08 37 56.2 +0.9**
**TANN Tannenbergstha 78.61 334** *eP* **P 08 37 56.7 +0.5**
comp=Z,3.2nm,0.8s,baz=30,slow=5.6
TANN *ep*P **sP 08 38 10.3 -2.3**
baz=25,slow=5.4
**PLN Plauen 78.64 334** *eP* **P 08 37 58.0 +1.6**
comp=Z,5.1nm,0.9s,baz=30,slow=5.6
**MOX Moxa 78.67 334** *eP* **P 08 37 57.0 +0.5**
comp=Z,4.2nm,0.8s,baz=30,slow=5.6
MOX *es*P **pwP 08 38 16.9 +3.0**
baz=32,slow=6.4
MOX *eL* L 09 16 51.0
comp=Z,168nm,18.6s
**MODS Modra-Piesok 78.71 330** *eP* **P 08 37 58.1 +1.3**
**MODS Modra-Piesok 78.71 330** *eP* **P 08 37 58.1 +1.3**
**ZVC Zvikov 78.88 332** AMS AMS 09 16 20.0
comp=Z,300nm,19.7s
**UBBA Unterbreizbach 79.02 335** *eP* **P 08 37 59.6 +1.3**
comp=Z,2.7nm,0.8s,baz=30,slow=5.6
UBBA *ep*P **sP 08 38 12.0 -2.4**
baz=25,slow=5.4
**MANZ Manzenberg 79.09 334** *eP* **P 08 37 59.5 +0.6**
comp=Z,1.7nm,1.1s,baz=30,slow=5.6
MANZ *es*P **pwP 08 38 19.5 +3.2**
baz=32,slow=6.4
**KASTN Kahler Asten 79.15 336** *eP* **P 08 38 00.3 +1.1**
comp=Z,4.9nm,0.9s,baz=30,slow=5.6
KASTN *ep*P **sP 08 38 13.8 -1.5**
baz=25,slow=5.4
**ROTZ Rotzenmuhle 79.25 333** *eP* **P 08 38 01.7 +1.9**
comp=Z,1.5nm,1.0s,baz=30,slow=5.6
ROTZ *ep*P **sP 08 38 14.6 -1.4**
baz=25,slow=5.4
**KHC Kasperske Hory 79.35 332** IAmb IAmb 08 38 16.0
comp=Z,11nm,0.8s
**KHC Kasperske Hory 79.35 332** *eP* **P 08 38 01.2 +0.9**
KHC *ep*P **pP 08 38 13.7 +1.6**
KHC AMS AMS 09 17 00.0
comp=Z,400nm,15.6s
**KHC Kasperske Hory 79.35 332** *ceP* **P 08 38 01.4 +1.1**
KHC pmax pmax
comp=Z,17nm,0.6s
**CKRC Cesky Krumlov 79.37 332** *eP* **P 08 38 01.3 +0.9**
CKRC AMS AMS 09 21 40.0
comp=Z,200nm,15.8s
**CKRC Cesky Krumlov 79.37 332** *eP* **P 08 38 01.3 +0.9**
CKRC MLR MLR
comp=Z,200nm,15.8s
**GEC2 GERESS Array S 79.56 332** *eP* **P 08 38 02.2 +0.7**
comp=Z,4.0nm,0.7s,baz=30,slow=5.6
GEC2 *ep*P **sP 08 38 16.1 -1.8**
baz=25,slow=5.4
GEC2 *es*P **pwP 08 38 21.7 +2.8**
baz=32,slow=6.4
**GERES GERESS Array B 79.56 332** P **P 08 38 01.6 +0.1**
**GERES GERESS Array B 79.56 332** P **P 08 38 01.5 0.0**
comp=Z,3.2nm,0.8s,baz=129,slow=3.6,SNR=7.6
comp=Z,3.2nm,0.8s
**GERES GERESS Array B 79.56 332** P **P 08 38 01.6 +0.1**
**WET Wettzell 79.57 333** *eP* **P 08 38 02.3 +0.8**
comp=Z,7.0nm,1.0s,baz=30,slow=5.6
WET *ep*P **sP 08 38 16.2 -1.6**
baz=25,slow=5.4
WET *es*P **pwP 08 38 22.5 +3.6**
baz=32,slow=6.4
**CONA Conrad Observa 79.59 330** *eP* **P 08 38 02.7 +1.0**
comp=Z,4.4nm,0.7s
**GRF Grafenberg Arr 79.63 334** *eL* L 09 17 35.9
comp=Z,128nm,19.1s
**RONA Rosalia, Austr 79.63 330** *eP* **P 08 38 02.9 +1.0**
comp=Z,6.0nm,1.0s
**L44A Lake County Fo 79.80 40** P **P 08 38 02.9 +0.1**
baz=322
**WMOK Wichita Mounta 79.91 51** P **P 08 38 03.9 +0.3**
baz=318
**TNS Taunus Mts 80.01 336** *eP* **P 08 38 05.0 +1.1**
comp=Z,7.2nm,1.0s,baz=30,slow=5.6
**MOA Molln 80.22 331** *eP* **P 08 38 05.8 +0.7**
comp=Z,2.5nm,0.7s
**HDIL Hopedale 80.43 41** P **P 08 38 06.6 +0.3**
baz=322
**LPIG La Paz 80.45 66** LR LR 09 07 09.8
comp=Z,70nm,19.5s,baz=324,slow=31
**BIOA Bad Ischl, Aus 80.57 332** *i* P **P 08 38 07.6 +0.7**
comp=Z,3.8nm,0.7s
**TUL3 Leonard 80.68 48** P **P 08 38 08.2 +0.5**
baz=319
**RJOB Jochberg 80.82 332** *eP* **P 08 38 09.6 +1.3**
comp=Z,4.4nm,0.7s,baz=30,slow=5.6
**FUR Furstenfeldbru 80.95 333** *eP* **P 08 38 09.1 +0.2**
comp=Z,22nm,0.5s,baz=30,slow=5.6
**SOKA Sopron 80.95 330** *eP* **P 08 38 09.8 +0.7**
comp=Z,5.4nm,0.9s
**PERS Pernice 80.96 330** *eP* **P 08 38 09.6 +0.5**
**TXAR Lajitas Array 80.97 58** P **P 08 38 09.5 0.0**
**TXAR Lajitas Array 80.97 58** P **P 08 38 10.1 +0.6**
comp=Z,1.6nm,0.7s,baz=304,slow=4.0,SNR=27
comp=Z,1.6nm,0.7s
**TXAR Lajitas Array 80.97 58** P **P 08 38 09.5 0.0**
**ABTX Abilene, Hawle 80.97 53** P **P 08 38 09.4 +0.1**
baz=317
**BMRD Maredsous 80.97 338** *dP* **P 08 38 09.4 +0.4**
comp=Z,5.5nm,0.9s
BMRD *d*PcP **PcP 08 38 16.0 +0.7**
**LESA Schwarzleotal 81.13 332** *eP* **P 08 38 10.6 +0.6**
comp=Z,4.5nm,0.6s
**KBA Koelnbreinsper 81.20 331** *eP* **P 08 38 11.7 +1.2**
comp=Z,4.3nm,0.7s
**RDO Rodhopi 81.24 321** IAmb IAmb 08 38 24.6
comp=Z,5.7nm,0.8s
**CCM Cathedral Cave 81.42 44** P **P 08 38 11.8 +0.3**
baz=321
**MYKA Terra Mystica 81.48 331** *eP* **P 08 38 11.4 -0.5**
comp=Z,1.6nm,0.7s
**L48A N Adams 81.54 38** P **P 08 38 14.6 +2.4**
**WATA Walderalm 81.58 333** *eP* **P 08 38 12.4 -0.1**
comp=Z,3.2nm,0.4s
**SFIN Lafayette 81.60 40** P **P 08 38 12.0 -0.5**
baz=323
**WTTA Wattenberg 81.62 332** *eP* **P 08 38 13.1 +0.4**
comp=Z,7.3nm,0.8s
**PRED Cave del Predi 81.67 331** IAmb IAmb 08 38 25.5
comp=Z,5.3nm,0.8s
**RETA Reutte 81.71 333** *eP* **P 08 38 12.0 -1.1**
comp=Z,1.5nm,0.5s
**MOTA Moosalm 81.72 333** *eP* **P 08 38 13.9 +0.7**
comp=Z,6.5nm,0.8s
**SQTA Sankt Quirin 81.80 333** *eP* **P 08 38 14.6 +1.1**
comp=Z,6.1nm,0.8s
**GBRS Gornja Briga 82.01 330** *i* P **P 08 38 14.7 +0.1**
**FETA Feichten 82.13 333** *eP* **P 08 38 16.1 +0.7**
comp=Z,2.0nm,0.8s
**TAOE Nuku Hiva Isla 82.38 110** *e*LR LR 09 04 09.5
comp=Z,212nm,27.3s
**MMAI Mount Meron Ar 82.52 309** P **P 08 38 18.6 +1.1**
comp=Z,0.8nm,0.3s,baz=39,slow=7.8,SNR=2.5
MMAI LR LR 09 21 08.3
comp=Z,220nm,18.4s,baz=332,slow=40
comp=Z,0.8nm,0.3s
**O48B Farmland 82.58 39** P **P 08 38 17.1 -0.6**
baz=324
**FUORN Ofenpass-Fuorn 82.63 333** IAmb IAmb 08 38 30.2
comp=Z,8.7nm,1.1s
**WHTX Lake Whitney, 82.69 52** P **P 08 38 18.6 +0.2**
baz=318
**PPT Papeete 82.83 123** LR LR 09 13 44.2
comp=Z,178nm,18.6s,baz=279,slow=35
**PPT2 Papeete2 82.85 123** *e*LR LR 09 04 14.5
PPT2 comp=Z,134nm,25.8s *e*LR LR 09 04 20.7
comp=Z,162nm,23.0s
**PUK Puka 82.98 325** IAmb IAmb 08 38 35.6
comp=Z,5.6nm,0.9s
**LONY Lake Ozonia 83.24 30** P **P 08 38 20.2 -0.8**
baz=330
**ERPA Erie 83.29 35** P **P 08 38 20.6 -0.7**
baz=327
**FNA Florina 83.39 323** IAmb IAmb 08 38 24.2
comp=Z,5.8nm,0.8s
**435B Jarrell 83.51 53** P **P 08 38 22.6 0.0**
baz=318
**M53A WI Miller and 83.57 36** P **P 08 38 22.1 -0.6**
baz=326
**ACSO Alum Creek Sta 83.57 38** P **P 08 38 22.5 -0.3**
baz=325
**WCI Wyandotte Cave 83.69 41** P **P 08 38 23.7 +0.3**
baz=324
**833A Chaparral WMA, 84.27 56** P **P 08 38 27.2 +0.7**
baz=318
**O53A New Philadelph 84.33 37** P **P 08 38 26.6 0.0**
baz=326
**P52A Corning 84.44 37** P **P 08 38 27.0 -0.2**
baz=326
**PKME Peaks-Kenny Pk 84.47 26** P **P 08 38 26.8 -0.5**
baz=333
**LBNH Lisbon 84.51 29** P **P 08 38 27.3 -0.1**
baz=332
**WVT Waverly 84.62 43** P **P 08 38 29.0 +0.9**
**WVT Waverly 84.62 43** P **P 08 38 28.4 +0.3**
baz=323
**WVT Waverly 84.62 43** P **P 08 38 29.0 +0.9**
WVT pmax pmax
comp=Z,3.0nm,0.9s
**FDMO Fiordimonte 84.79 329** IAmb IAmb 08 38 54.5
comp=Z,14nm,1.1s
**BINY Binghamton 84.80 32** P **P 08 38 29.1 +0.1**
baz=329
**CAMP Campotosto 85.11 329** P **P 08 38 31.4 +0.7**
**EIL Elat 85.28 307** LR LR 09 22 09.3
comp=Z,211nm,19.2s,baz=70,slow=40
**U49A Red Boiling Sp 85.31 42** IAmb IAmb 08 38 49.5
comp=Z,5.6nm,0.8s
**T50A Nancy 85.34 41** IAmb IAmb 08 38 49.7
comp=Z,6.8nm,0.9s
**CLTN Cedars of Leba 85.38 42** IAmb IAmb 08 38 54.9
comp=Z,3.7nm,0.9s
**SSPA Standing Stone 85.39 34** P **P 08 38 32.0 +0.1**
baz=328
**MCWV Mont Chateau 85.40 36** P **P 08 38 31.6 -0.5**
baz=327
**URZ Urewera 85.82 159** LR LR 09 18 36.1
comp=Z,80nm,18.0s,baz=48,slow=37
**HRV Adam Dziewonsk 86.16 29** P **P 08 38 34.7 -1.0**
baz=332
**IDI Anoyia 86.24 318** LR LR 09 20 50.2
comp=Z,199nm,19.3s,baz=296,slow=38
**SWET Sewanee 86.27 43** P **P 08 38 36.1 -0.4**
**TZTN Tazewell 86.33 40** P **P 08 38 35.3 -1.4**
baz=325
**PAL Palisades 86.62 31** P **P 08 38 37.8 -0.2**
baz=330
**TKL Tuckaleechee C 86.95 41** LR LR 09 18 34.8
comp=Z,108nm,21.4s,baz=347,slow=36
**BLA Blacksburg 87.19 38** P **P 08 38 40.4 -0.6**
baz=327
**TBI Tubuai 87.36 126** *e*LR LR 09 06 24.7
comp=Z,620nm,24.0s
**VAE Valguarnera 89.08 326** LR LR 09 25 01.2
comp=Z,196nm,18.1s,baz=144,slow=40
**TIGA Tifton 90.48 43** P **P 08 38 56.7 +0.3**
baz=325
**NHSC New Hope 90.72 40** P **P 08 38 58.2 +0.6**
baz=327
**ESDC Sonseca Array 93.12 340** LR LR 09 26 31.7
comp=Z,141nm,19.4s,baz=17,slow=39
**DWPF Disney Wildern 94.27 43** P **P 08 39 14.7 +0.7**
baz=326
**RKT Rikitea 96.08 116** *e*LR LR 09 10 25.7
comp=Z,1μm,32.0s
**MDT Midelt 99.78 338** LR LR 09 31 28.5
comp=Z,58nm,20.0s,baz=28,slow=40
**TORD Torodi Ar. Bea 115.82 325** PKP **PKiKP 08 44 37.0 -0.4**
comp=Z,0.2nm,0.3s,baz=344,slow=2.1,SNR=2.3
**VNDA Vanda 121.71 177** PKP **PKPdf 08 44 47.0 +0.2**
comp=Z,0.8nm,0.7s,baz=135,slow=1.4,SNR=2.2
**QSPA South Pole Qui 133.96 180** PKP **PKiKP 08 45 12.3 +0.5**
comp=Z,1.1nm,0.7s,baz=141,slow=7.6,SNR=5.5
**ELIB Princess Elisa 142.43 204** *d*PKPdf **PKPdf 08 45 23.9 -2.1**
**BDFB Brasilia 147.87 33** PKPbc **PKPdf 08 45 38.4 +1.4**
comp=Z,1.5nm,0.5s,baz=124,slow=2.3,SNR=4.3
**TROLL Troll, Antarti 147.99 199**⇑PKiKP **PKiKP 08 45 40.1 -0.4**
comp=Z,8.0nm,0.4s
**SNAA Sanae 149.41 197**⇑PKiKP **PKPbc 08 45 43.1 +0.8**
comp=Z,26nm,0.6s
**SNAA Sanae 149.41 197** PKPbc **PKPbc 08 45 43.2 +1.0**
comp=Z,1.0nm,0.6s,baz=183,slow=8.2,SNR=12
**PLCA Paso Flores 150.46 97** PKPbc **PKPbc 08 45 45.5 -0.2**
comp=Z,1.7nm,0.6s,baz=82,slow=14,SNR=4.9
**VNA2 Neumayer--Watz 150.90 195**⇑PKiKP **PKiKP 08 45 46.5 +0.2**
comp=Z,8.7nm,0.7s,baz=145,slow=1.7
**VNA3 Neumayer Olymp 151.05 194**⇑PKiKP **PKiKP 08 45 47.6 +0.9**
comp=Z,5.4nm,0.7s
**VNA1 Neumayer--Stat 151.29 195**⇑PKiKP **PKiKP 08 45 48.5 +1.4**
comp=Z,2.2nm,0.7s
**CPUP Villa Florida 151.93 59** PKPbc **PKPbc 08 45 49.6 +0.1**
comp=Z,1.6nm,1.0s,baz=309,slow=7.7,SNR=2.7

*TEH **08** 08:31:35.6, 34°.83N×45°.88E, h10km±42km, ML2.6*
*ISN **08** 08:31:36.0±1.8, 34°.84N×45°.82E, h10km, ML2.6*
**ISC 08 08:31:36.0**±1.1, **34°.83N**±0°.07×**45°.87E**±0°.05, **h10**km, **n9,**
**s**0°**37**/10, **Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KGS1** | **Ghasr-e-Shirin** | **0.40** | **217** | Pg | **Pg** | **08 31 43.6** | **-0.3** |
| **IDHR** | **Dehrash** | **0.44** | **106** | Pg | **Pg** | **08 31 44.6** | **-0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.71** | **178** | Pg | **Pg** | **08 31 49.9** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.76** | **131** | Pg | **Pg** | **08 31 50.3** | **-0.4** |
| **KCHF** | **Cheshme Sefid,** | **1.11** | **119** | Pg | **Pg** | **08 31 57.2** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **1.23** | **167** | Pg | **Pn** | **08 31 59.1** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.38** | **295** | *e*Pg | **Pn** | **08 32 01.0** | **-0.4** |
| IKRK | baz=115 | | | *e*Sg | **Sg** | **08 32 21.0** | **+0.5** |
| IKRK | | | | AML | AML | 08 32 23.3 | |
| IKRK | comp=N,529nm,0.4s | | | AML | AML | 08 32 23.5 | |
| | comp=E,395nm,0.2s | | | | | | |
| **SNQR** | **Sonqor, Kerman** | **1.44** | **88** | Pg | **Pb** | **08 32 03.6** | **+0.4** |
| **IBZA** | **Bozab** | **1.68** | **102** | Pg | **Pb** | **08 32 07.5** | **+0.3** |

*IDC **08** 08:32:31.9±1.2, 35°.70N×141°.27E, h0km, mb3.7/7,*
*mbtmp3.7/8, ML2.7/1, Error ellipse: s-maj=32.4km*
*s-min=21.3km az=58.0*
*JMA **08** 08:32:34.2±0.3, 35°.8N±0°.7×14°1E±°, h14km±2km,*
*MV3.6/38, NEAR CHOSHI CITY*
**ISC 08 08:32:32.8**±1.7, **35°.74N**±0°.05×**141°.24E**±0°.07, **h6**km±10km,
**n20,** σ0°**58**/22, **mb3.9**/7, **Near east coast of eastern**
**Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIHU** | **Itakohorinouch** | **0.62** | **292** | P | **Pb** | **08 32 46.3** | **+0.2** |
| JIHU | | | | *e*S | **Sb** | **08 32 54.7** | **-0.3** |
| **JSMT** | **Sammumatsuo** | **0.65** | **262** | P | **Pb** | **08 32 46.8** | **+0.2** |
| JSMT | | | | S | **Sb** | **08 32 55.5** | **-0.3** |
| **JHYU** | **Hitachinakayam** | **0.80** | **319** | P | **Pb** | **08 32 49.0** | **-0.1** |
| JHYU | | | | S | **Sg** | **08 32 59.6** | **+1.0** |
| **JCN** | **Nagara** | **0.90** | **250** | P | **Pn** | **08 32 51.7** | **-0.4** |
| JCN | | | | *e*S | **Sn** | **08 33 04.2** | **-1.1** |
| **JYT** | **Yasato** | **0.98** | **300** | P | **Pg** | **08 32 51.2** | **-0.4** |
| **JHO** | **Hitachi** | **1.03** | **328** | *e*P | **Pg** | **08 32 52.0** | **-0.6** |
| **BSO4** | **Boso 4** | **1.05** | **225** | *e*P | **Pn** | **08 32 53.7** | **-0.2** |
| **BSO1** | **Boso 1** | **1.10** | **191** | P | **Pn** | **08 32 54.3** | **0.0** |
| **BSO3** | **Boso 3** | **1.10** | **213** | *e*P | **Pg** | **08 32 54.0** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **2.58** | **289** | Pn | **Pn** | **08 33 14.8** | **-0.4** |
| MJAR | 1.4nm,0.3s,baz=92,slow=8.7,SNR=41 | | | Sn | **Sn** | **08 33 48.2** | **+1.3** |
| | 0.8nm,0.3s,baz=208,slow=14,SNR=2.9 | | | | | | |
| | 5.8nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **28.41** | **306** | P | **P** | **08 38 28.5** | **+0.3** |
| | 0.4nm,0.4s,baz=96,slow=9.1,SNR=2.7 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.70** | **303** | P | **P** | **08 40 47.0** | **+0.4** |
| | 0.9nm,0.6s,baz=87,slow=10,SNR=8.7 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.70** | **309** | P | **P** | **08 41 02.1** | **-0.1** |
| | 0.6nm,0.3s,baz=84,slow=8.1,SNR=2.9 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **50.67** | **32** | P | **P** | **08 41 32.5** | **-0.2** |
| | 0.2nm,0.5s,baz=243,slow=4.0,SNR=2.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.76** | **188** | P | **P** | **08 42 10.5** | **0.0** |
| | 1.0nm,0.8s,baz=1.9,slow=7.1,SNR=7.9 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **59.48** | **188** | P | **P** | **08 42 36.1** | **-0.7** |
| | 0.1nm,0.4s,baz=358,slow=6.6,SNR=4.2 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **69.90** | **332** | P | **P** | **08 43 44.7** | **+0.5** |
| | 1.4nm,0.8s,baz=23,slow=7.5,SNR=2.1 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.01** | **98** | T | T | 11 36 28.8 | |
| | baz=289,slow=76,SNR=27 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.02** | **98** | T | T | 11 36 32.8 | |
| | baz=289,slow=76,SNR=39 | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.03** | **98** | T | T | 11 36 34.5 | |
| | baz=289,slow=76,SNR=25 | | | | | | |

**ROM 08 08:36:01.5**±0.1, **42°.932N**±0°.004×**13°.196E**±0°.006,
**h8**km, **ML1.5**/30, **2D, Error ellipse: s-maj=0.5km**
**s-min=0.3km az=255.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MC2** | **Monte Cornacci** | **0.02** | **191** | P | Pg | 08 36 03.0 | -0.2 |
| MC2 | | | | S | Sg | 08 36 03.8 | -0.7 |
| **MMO1** | **Montemonaco** | **0.10** | **108** | P | Pg | 08 36 04.2 | +0.2 |
| MMO1 | | | | S | Sg | 08 36 06.0 | +0.2 |
| **FEMA** | **Monte Fema** | **0.11** | **286** | P | Pg | 08 36 04.7 | +0.5 |
| FEMA | | | | S | Sg | 08 36 07.1 | +1.0 |
| **NRCA** | **Norcia** | **0.12** | **211** | P | Pg | 08 36 04.7 | +0.6 |
| NRCA | | | | S | Sg | 08 36 07.1 | +1.0 |
| NRCA | | | | AML | AML | | |
| | comp=E,856μm,1.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,856μm,0.9s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,929μm,0.1s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.13** | **323** | ⇓P | Pg | 08 36 04.8 | +0.4 |
| FDMO | | | | S | Sg | 08 36 07.3 | +0.8 |
| FDMO | | | | AML | AML | | |
| | comp=N,420μm,0.2s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=E,268μm,0.8s | | | | | | |
| **CSP1** | **Cessapalombo** | **0.16** | **2** | P | Pg | 08 36 05.2 | +0.3 |
| CSP1 | | | | S | Sg | 08 36 08.1 | +0.7 |
| CSP1 | | | | AML | AML | | |
| | comp=N,260μm,0.6s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=E,184μm,0.3s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=N,260μm,1.4s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=E,184μm,0.3s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.17** | **38** | P | Pg | 08 36 05.8 | +0.8 |
| GUMA | | | | S | Sg | 08 36 08.8 | +1.4 |
| GUMA | | | | AML | AML | | |
| | comp=E,941μm,0.4s | | | | | | |

GUMA AML AML
comp=N,774µm,0.3s
**MF5 Montefalcone A 0.20 73** ⇓P Pg 08 36 06.7 +1.0
MF5 S Sg 08 36 10.5 +2.0
MF5 AML AML
comp=E,218µm,0.2s
MF5 AML AML
comp=E,218µm,0.2s
MF5 AML AML
comp=N,262µm,0.5s
MF5 AML AML
comp=E,218µm,0.2s
MF5 AML AML
comp=E,218µm,1.8s
MF5 AML AML
comp=N,262µm,1.5s
**PF6 Pievefavera 0.22 359** P Pg 08 36 06.1 +0.2
PF6 S Sg 08 36 09.4 +0.5
**CESI CESI - Serrava 0.23 289** P Pg 08 36 06.8 +0.8
CESI S Sg 08 36 10.9 +1.7
CESI AML AML
comp=E,318µm,0.3s
CESI AML AML
comp=N,626µm,0.1s
**MTRA Matera 0.23 140** P Pg 08 36 06.8 +0.7
MTRA AML AML
comp=E,204µm,0.7s
MTRA AML AML
comp=E,204µm,0.7s
MTRA AML AML
comp=N,152µm,1.4s
MTRA AML AML
comp=E,204µm,1.3s
MTRA AML AML
comp=N,152µm,0.6s
**LNSS Leonessa 0.35 199** P Pg 08 36 09.0 +0.7
LNSS S Sb 08 36 14.9 -0.7
**SNTG Esanatoglia 0.37 330** P Pg 08 36 09.0 +0.1
SNTG S Sb 08 36 16.0 -0.4
**CAMP Campotosto 0.43 158** P Pg 08 36 10.1 +0.2
CAMP S Sb 08 36 16.9 -1.0
CAMP AML AML
comp=N,33µm,0.3s
CAMP AML AML
comp=E,35µm,0.3s
**GIGS Gran Sasso 0.55 150** P Pg 08 36 12.7 +0.5
GIGS S Sb 08 36 21.4 -0.2

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*BJI **08** 08:46:23.5±0.0, 11°.12N×125°.60E, h89km, mb4.7/43, mB5.0/14, Ms4.5/6, Ms7 4.2/8*
*NEIC **08** 08:46:23.5±1.6, 11°.4N±0°.1×125°.57E±0°.09, h50km±4km, mb4.7/85, Error ellipse: s-maj=15.2km s-min=12.0km az=200.0*
*IDC **08** 08:46:24.8±1.6, 11°.34N×125°.48E, h69km±14km, mb4.3/24, mbtmp4.6/26, MS3.4/10, Error ellipse: s-maj=20.9km s-min=8.0km az=75.0*

**ISC 08 08:46:23.1±0.4, 11°.33N±0°.05×125°.64E±0°.09, h53km, n365, σ1♀04/337, mb4.7/78, MS3.3/9, 2C-2D, Samar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **4.23** | **181** | P | **Pn** | **08 47 25.2** | **+0.1** |
| | 134nm,0.5s,baz=259,slow=19,SNR=1.2 | | | | | | |
| DAV | | | | S | **Sn** | **08 48 17.0** | **+3.7** |
| | 255nm,0.6s,baz=17,slow=22,SNR=1.4 | | | | | | |
| DAV | | | | LR | LR | 08 49 38.2 | |
| | comp=Z,1µm,19.4s,baz=352,slow=46 | | | | | | |
| MYLDM | **Lahad Datu** | **9.34** | **230** | Pn | **Pn** | **08 48 36.7** | **+1.6** |
| **KKM** | **Kota Kinabalu** | **10.69** | **241** | Pn | **Pn** | **08 48 56.0** | **+2.2** |
| **TPUB** | **Ta-pu** | **12.83** | **339** | | **Pn** | **08 49 26.4** | **+3.7** |
| **SSLB** | **Suanglung** | **13.17** | **341** | Pn | **Pn** | **08 49 32.0** | **+4.5** |
| **JOW** | **Kunigami** | **15.62** | **9** | | **Pn** | **08 50 01.5** | **+1.6** |
| **JOW** | **Kunigami** | **15.62** | **9** | P | **Pn** | **08 50 00.8** | **+0.9** |
| | 15nm,0.7s,baz=228,slow=16,SNR=2.3 | | | | | | |
| JOW | | | | LR | LR | 08 55 35.1 | |
| | comp=Z,143nm,18.6s,baz=340,slow=35 | | | | | | |
| **GUMO** | **Guam** | **18.91** | **81** | LR | LR | 08 56 23.8 | |
| | comp=Z,142nm,21.5s,baz=246,slow=31 | | | | | | |
| **UBPT** | **Khong Chiam** | **20.01** | **284** | P | **P** | **08 50 51.2** | **-0.4** |
| UBPT | | | | IAmb | IAmb | 08 51 10.6 | |
| | comp=Z,46nm,1.2s | | | | | | |
| **NJ2** | **Nanjing** | **21.55** | **344** | *e*P | **P** | **08 51 10.2** | **+2.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WHN** | **Wuhan** | **21.80** | **333** | ⇓P | **P** | **08 51 12.0** | **+1.2** |
| WHN | | | | pmax | pmax | | |
| | comp=Z,40nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **22.22** | **12** | LR | LR | 08 59 01.5 | |
| | comp=Z,123nm,21.1s,baz=170,slow=34 | | | | | | |
| **SLVN** | **Son La** | **23.08** | **298** | P | **P** | **08 51 23.0** | **-1.5** |
| **GYA** | **Guiyang** | **23.38** | **313** | P | **P** | **08 51 27.8** | **+0.4** |
| GYA | | | | sP | sP | 08 52 00.5 | +14 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **24.63** | **167** | P | **P** | **08 51 39.7** | **+0.9** |
| MTN | | | | IAmb | IAmb | 08 52 02.1 | |
| | comp=Z,52nm,1.5s | | | | | | |
| **PHRA** | **Phrae** | **25.55** | **289** | P | **P** | **08 51 46.5** | **-0.6** |
| **LYN** | **LuoYang** | **26.05** | **335** | P | **P** | **08 51 52.2** | **+0.7** |
| LYN | | | | SS | SS | 08 57 25.4 | -44 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,23nm,0.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **26.08** | **4** | P | **P** | **08 51 51.5** | **-0.2** |
| **KSRS** | **Korea Array** | **26.09** | **4** | P | **P** | **08 51 52.5** | **+0.6** |
| | comp=Z,6.0nm,0.9s,baz=184,slow=9.7,SNR=21 | | | | | | |
| KSRS | | | | LR | LR | 09 01 22.5 | |
| | comp=Z,74nm,20.9s,baz=185,slow=34 | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **26.73** | **289** | P | **P** | **08 51 57.4** | **-0.5** |
| CM31 | | | | IAmb | IAmb | 08 51 58.1 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.73** | **289** | P | **P** | **08 51 56.6** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **26.73** | **289** | P | **P** | **08 51 57.4** | **-0.6** |
| | comp=Z,7.2nm,0.8s,baz=102,slow=7.2,SNR=31 | | | | | | |
| CMAR | | | | PcP | **PcP** | **08 55 20.6** | **+0.2** |
| | comp=Z,1.2nm,0.3s,baz=80,slow=0.9,SNR=4.8 | | | | | | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **27.11** | **307** | P | **P** | **08 52 02.8** | **+1.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **27.55** | **22** | P | **P** | **08 52 04.2** | **-0.8** |
| | comp=Z,3.3nm,0.8s,baz=175,slow=7.9,SNR=5.4 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **HNS** | **HongShan** | **27.75** | **341** | ⇑P | **P** | **08 52 06.9** | **+0.1** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| **CD2** | **Chengdu** | **28.11** | **317** | P | **P** | **08 52 09.5** | **-0.7** |
| **PMG** | **Port Moresby** | **29.70** | **133** | LR | LR | 09 07 11.4 | |
| | comp=Z,60nm,18.1s,baz=126,slow=42 | | | | | | |
| **SNY** | **Shenyang** | **30.43** | **357** | ⇓P | **P** | **08 52 31.9** | **+1.4** |
| SNY | | | | S | **S** | **08 57 30.3** | **+2.6** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,29nm,1.1s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,130nm,7.1s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,360nm,11.9s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,820nm,12.9s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,1µm,13.5s | | | | | | |
| **LZH** | **Lanzhou** | **31.56** | **325** | *e*P | P | 08 52 46.3 | +5.5 |
| LZH | | | | pP | sP | 08 53 02.1 | +1.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.91** | **340** | *e*P | **P** | **08 52 44.9** | **+1.2** |
| HHC | | | | pP | sP | 08 53 05.6 | +2.2 |
| HHC | | | | PP | **PnPn** | **08 53 50.0** | **-0.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,86nm,4.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.23** | **165** | P | **P** | **08 52 45.8** | **-0.8** |
| | comp=Z,1.5nm,0.7s,baz=345,slow=8.1,SNR=15 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 55 34.4** | **+0.1** |
| | comp=Z,3.7nm,0.7s,baz=342,slow=3.1,SNR=16 | | | | | | |
| WRA | | | | ScP | **ScP** | **08 59 11.6** | **-2.1** |
| | comp=Z,1.0nm,0.8s,baz=345,slow=4.4,SNR=2.7 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **33.21** | **8** | P | **P** | **08 52 55.7** | **+0.8** |
| USA0B | | | | IAmb | IAmb | 08 52 58.2 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.21** | **8** | P | **P** | **08 52 54.8** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **33.21** | **8** | P | **P** | **08 52 55.3** | **+0.4** |
| | comp=Z,6.9nm,0.8s,baz=205,slow=8.0,SNR=16 | | | | | | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **MDJ** | **Mudanjiang** | **33.34** | **5** | P | **P** | **08 52 57.5** | **+1.5** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **BNX** | **BinXian** | **34.32** | **2** | ⇑P | **P** | **08 53 04.8** | **+0.2** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **SHL** | **Shillong** | **34.89** | **299** | P | **P** | **08 53 08.8** | **-1.2** |
| **AS31** | **Alice Springs** | **35.71** | **167** | P | **P** | **08 53 17.5** | **+0.7** |
| **ASAR** | **Alice Springs** | **35.71** | **167** | P | **P** | **08 53 17.3** | **+0.6** |
| **ASAR** | **Alice Springs** | **35.71** | **167** | P | **P** | **08 53 17.0** | **+0.2** |
| | comp=Z,4.4nm,0.6s,baz=351,slow=7.4,SNR=52 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 55 44.1** | **0.0** |
| | comp=Z,3.2nm,0.8s,baz=343,slow=2.4,SNR=12 | | | | | | |
| ASAR | | | | ScP | **ScP** | **08 59 24.4** | **-1.5** |
| | comp=Z,1.4nm,0.9s,baz=333,slow=4.0,SNR=4.9 | | | | | | |
| ASAR | | | | LR | LR | 09 10 06.7 | |
| | comp=Z,82nm,19.1s,baz=2.5,slow=40 | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **GTA** | **Gaotai** | **36.16** | **325** | *e*P | **P** | **08 53 21.1** | **+0.5** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **37.24** | **147** | LR | LR | 09 11 56.1 | |
| | comp=Z,5.2nm,18.1s,baz=314,slow=41 | | | | | | |
| **HEH** | **HeiHe** | **38.84** | **2** | *e*P | **P** | **08 53 43.5** | **+0.6** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| HEH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **39.62** | **340** | P | **P** | **08 53 50.4** | **+0.7** |
| **SONM** | **Songino Array** | **39.82** | **340** | P | **P** | **08 53 52.0** | **+0.7** |
| SONM | | | | IAmb | IAmb | 08 53 52.9 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **39.82** | **340** | P | **P** | **08 53 51.8** | **+0.5** |
| | comp=Z,10nm,0.8s,baz=160,slow=9.0,SNR=41 | | | | | | |
| SONM | | | | PcP | **PcP** | **08 55 56.4** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=167,slow=1.5,SNR=1.8 | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **39.87** | **120** | LR | LR | 09 09 26.6 | |
| | comp=Z,600nm,19.0s,baz=306,slow=34 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **44.73** | **190** | LR | LR | 09 16 58.6 | |
| | comp=Z,34nm,19.0s,baz=68,slow=41 | | | | | | |
| **STKA** | **Stephens Creek** | **45.60** | **161** | P | **P** | **08 54 38.8** | **+0.7** |
| **STKA** | **Stephens Creek** | **45.60** | **161** | P | **P** | **08 54 39.6** | **+1.5** |
| | comp=Z,11nm,0.6s,baz=336,slow=8.5,SNR=22 | | | | | | |
| STKA | | | | S | **S** | **09 01 16.4** | **-0.6** |
| | comp=Z,2.8nm,0.8s,baz=307,slow=18,SNR=3.1 | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **50.81** | **323** | IAmb | IAmb | 08 55 19.1 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.81** | **323** | P | **P** | **08 55 17.1** | **-1.2** |
| **MKAR** | **Makanchi Array** | **50.81** | **323** | P | **P** | **08 55 18.1** | **-0.2** |
| | comp=Z,3.1nm,0.3s,baz=118,slow=7.7,SNR=66 | | | | | | |
| MKAR | | | | PcP | **PcP** | **08 56 34.1** | **-0.5** |
| | comp=Z,1.8nm,0.7s,baz=110,slow=6.0,SNR=2.2 | | | | | | |
| | comp=Z,3.1nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **51.01** | **322** | P | **P** | **08 55 18.6** | **-1.1** |
| MAKZ | | | | IAmb | IAmb | 08 55 20.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.40** | **331** | IAmb | IAmb | 08 55 37.6 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.40** | **331** | P | **P** | **08 55 36.5** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **53.40** | **331** | P | **P** | **08 55 36.6** | **-0.7** |
| | comp=Z,8.3nm,0.8s,baz=117,slow=6.8,SNR=19 | | | | | | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **54.85** | **325** | P | **P** | **08 55 47.5** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **54.85** | **325** | P | **P** | **08 55 47.7** | **-0.3** |
| | comp=Z,3.3nm,0.3s,baz=123,slow=7.4,SNR=28 | | | | | | |
| | comp=Z,3.3nm,0.3s | | | | | | |
| **KBL** | **Kabul** | **56.23** | **304** | P | **P** | **08 55 57.3** | **-1.1** |
| **SIMJ** | **Simiganj** | **57.06** | **309** | P | **P** | **08 56 03.0** | **-1.2** |
| SIMJ | | | | IAmb | IAmb | 08 56 05.6 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array** | **57.07** | **314** | P | **P** | **08 56 03.3** | **-0.8** |
| **KKAR** | **Karatay Array** | **57.07** | **314** | P | **P** | **08 56 02.7** | **-1.4** |
| KKAR | | | | IAmb | IAmb | 08 56 05.2 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **60.52** | **325** | P | **P** | **08 56 26.9** | **-0.8** |
| **ABKAR** | **Akbulak array** | **65.67** | **319** | P | **P** | **08 57 00.7** | **-1.3** |
| ABKAR | | | | IAmb | IAmb | 08 57 02.0 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **67.12** | **320** | P | **P** | **08 57 10.2** | **-1.0** |
| | comp=Z,2.2nm,0.4s,baz=18,slow=6.0,SNR=8.1 | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **ARU** | **Arti** | **68.00** | **327** | P | **P** | **08 57 15.4** | **-1.3** |
| | comp=Z,5.8nm,0.2s,baz=191,slow=2.6,SNR=6.0 | | | | | | |
| | comp=Z,5.8nm,0.2s | | | | | | |
| **M11K** | **Mekoryuk** | **69.47** | **29** | P | **P** | **08 57 25.8** | **+0.1** |
| | baz=257 | | | | | | |
| **TNA** | **Tin City** | **70.09** | **24** | P | **P** | **08 57 30.5** | **+1.1** |
| | baz=253 | | | | | | |
| **K13K** | **Kusilvak Mount** | **70.56** | **28** | P | **P** | **08 57 33.1** | **+0.8** |
| | baz=257 | | | | | | |
| **F14K** | **Arctic Creek** | **70.70** | **24** | P | **P** | **08 57 34.6** | **+1.4** |
| | baz=255 | | | | | | |
| **S12K** | **Black Hills** | **70.75** | **35** | P | **P** | **08 57 33.5** | **-0.1** |
| | baz=262 | | | | | | |
| **ANM** | **Nome** | **70.86** | **25** | P | **P** | **08 57 35.8** | **+1.6** |
| | baz=256 | | | | | | |
| **M13K** | **Dall Lake** | **70.86** | **30** | P | **P** | **08 57 35.8** | **+1.6** |
| | baz=259 | | | | | | |
| **J14K** | **Nanvaranak Lak** | **71.23** | **27** | P | **P** | **08 57 37.6** | **+1.2** |
| | baz=258 | | | | | | |
| **L14K** | **Kuka Creek** | **71.36** | **29** | P | **P** | **08 57 37.5** | **+0.3** |
| | baz=259 | | | | | | |
| **F15K** | **North Star Dit** | **71.44** | **24** | P | **P** | **08 57 39.5** | **+1.8** |
| | baz=256 | | | | | | |
| **G15K** | **Niukluk** | **71.52** | **25** | P | **P** | **08 57 39.8** | **+1.7** |
| | baz=257 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **71.59** | **30** | P | **P** | **08 57 40.2** | **+1.5** |
| | baz=261 | | | | | | |
| **M14K** | **Bethel** | **71.60** | **30** | P | **P** | **08 57 39.8** | **+1.2** |
| | baz=260 | | | | | | |
| **C16K** | **Lisburne Hills** | **71.83** | **21** | P | **P** | **08 57 40.5** | **+0.6** |
| | baz=255 | | | | | | |
| **L15K** | **Ungalak Mounta** | **71.98** | **29** | P | **P** | **08 57 42.0** | **+1.0** |
| | baz=260 | | | | | | |
| **CHNA** | **Chernabura Isl** | **72.05** | **36** | P | **P** | **08 57 43.3** | **+1.8** |
| | baz=264 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **72.07** | **28** | P | **P** | **08 57 43.4** | **+1.9** |
| | baz=260 | | | | | | |
| **H16K** | **Elim** | **72.19** | **26** | P | **P** | **08 57 43.8** | **+1.6** |
| | baz=259 | | | | | | |
| **M15K** | **Kasigluk River** | **72.21** | **30** | P | **P** | **08 57 43.7** | **+1.4** |
| | baz=261 | | | | | | |
| **S14K** | **Fog Glacier** | **72.22** | **34** | P | **P** | **08 57 43.5** | **+0.9** |
| | baz=264 | | | | | | |
| **G16K** | **Koyuk River** | **72.30** | **25** | P | **P** | **08 57 43.8** | **+1.0** |
| | baz=258 | | | | | | |
| **N15K** | **Kwethluk River** | **72.42** | **30** | P | **P** | **08 57 45.4** | **+1.8** |
| | baz=262 | | | | | | |
| **D17K** | **Noatak River** | **72.51** | **22** | P | **P** | **08 57 45.0** | **+1.0** |
| | baz=257 | | | | | | |
| **C17K** | **DeLong Mountai** | **72.65** | **21** | P | **P** | **08 57 46.0** | **+1.1** |
| | baz=257 | | | | | | |
| **RDOG** | **Red Dog Mine** | **72.65** | **22** | P | **P** | **08 57 46.7** | **+1.8** |
| | baz=257 | | | | | | |
| **J16K** | **Anvik River** | **72.66** | **27** | P | **P** | **08 57 45.7** | **+0.8** |
| | baz=261 | | | | | | |
| **I17K** | **Unalakleet** | **72.72** | **26** | P | **P** | **08 57 45.3** | **0.0** |
| | baz=260 | | | | | | |
| **L16K** | **Owhat River** | **72.94** | **29** | P | **P** | **08 57 48.4** | **+1.8** |
| | baz=262 | | | | | | |
| **F17K** | **Baldwin Pennin** | **72.95** | **24** | P | **P** | **08 57 47.9** | **+1.3** |
| | baz=259 | | | | | | |
| **G17K** | **Kiwalik Mounta** | **73.01** | **25** | P | **P** | **08 57 48.6** | **+1.5** |
| | baz=260 | | | | | | |
| **M16K** | **Timber Creek** | **73.09** | **30** | P | **P** | **08 57 48.1** | **+0.5** |
| | baz=263 | | | | | | |
| **N16K** | **Nishlik Lake** | **73.11** | **30** | P | **P** | **08 57 48.8** | **+1.0** |
| | baz=263 | | | | | | |
| **H17K** | **Granite Mounta** | **73.22** | **25** | P | **P** | **08 57 48.9** | **+0.6** |
| | baz=261 | | | | | | |
| **KIRV** | **Kirov** | **73.22** | **328** | P | **P** | **08 57 47.3** | **-1.1** |
| | comp=Z,13nm,0.5s,baz=70,slow=3.6,SNR=4.7 | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **B18K** | **Kokolik River** | **73.34** | **21** | P | **P** | **08 57 49.5** | **+0.6** |
| | baz=258 | | | | | | |
| **J17K** | **VABM Dome** | **73.35** | **27** | P | **P** | **08 57 50.5** | **+1.4** |
| | baz=262 | | | | | | |
| **O16K** | **Kokwok River B** | **73.35** | **31** | P | **P** | **08 57 49.9** | **+0.7** |
| | baz=264 | | | | | | |
| **E18K** | **Tukpahlearik C** | **73.38** | **23** | P | **P** | **08 57 50.5** | **+1.3** |
| | baz=260 | | | | | | |
| **C18K** | **Utukok River** | **73.40** | **21** | P | **P** | **08 57 50.4** | **+1.0** |
| | baz=259 | | | | | | |
| **R16K** | **Pilot Point** | **73.43** | **33** | P | **P** | **08 57 50.8** | **+1.2** |
| | baz=265 | | | | | | |
| **L17K** | **Donlin** | **73.54** | **28** | P | **P** | **08 57 51.7** | **+1.5** |
| | baz=263 | | | | | | |
| **F18K** | **Selawik** | **73.61** | **24** | P | **P** | **08 57 51.4** | **+0.9** |
| | baz=261 | | | | | | |
| **K17K** | **Iditarod** | **73.61** | **28** | P | **P** | **08 57 51.4** | **+0.7** |
| | baz=263 | | | | | | |
| **A19K** | **Wainwright** | **73.76** | **20** | P | **P** | **08 57 52.2** | **+0.9** |
| | baz=258 | | | | | | |
| **BELG** | **Belogornoye** | **73.80** | **321** | P | **P** | **08 57 50.7** | **-1.2** |
| | comp=Z,20nm,0.6s,baz=103,slow=0.6,SNR=9.6 | | | | | | |
| | comp=Z,20nm,0.6s | | | | | | |
| **M17K** | **Holitna River** | **73.87** | **29** | P | **P** | **08 57 53.8** | **+1.6** |
| | baz=264 | | | | | | |
| **O17K** | **Koliganek Bris** | **73.87** | **31** | P | **P** | **08 57 53.3** | **+1.1** |
| | baz=265 | | | | | | |
| **G18K** | **Tagagawik** | **73.89** | **24** | P | **P** | **08 57 53.6** | **+1.4** |
| | baz=262 | | | | | | |
| **N17K** | **Nushagak Hills** | **73.90** | **30** | P | **P** | **08 57 53.6** | **+1.3** |
| | baz=265 | | | | | | |
| **H18K** | **Honhosa River** | **73.91** | **25** | P | **P** | **08 57 53.5** | **+1.1** |
| | baz=262 | | | | | | |
| **C19K** | **Lookout Ridge** | **74.06** | **21** | IAmb | IAmb | 08 57 56.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **74.06** | **21** | P | **P** | **08 57 54.4** | **+1.2** |
| | baz=260 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **74.08** | **33** | P | **P** | **08 57 54.5** | **+1.0** |
| | baz=266 | | | | | | |
| **P17K** | **Kvichak River** | **74.16** | **32** | P | **P** | **08 57 55.0** | **+1.2** |
| | baz=266 | | | | | | |
| **L18K** | **Granite Mounta** | **74.30** | **28** | P | **P** | **08 57 55.8** | **+1.1** |
| | baz=265 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **74.38** | **24** | P | **P** | **08 57 56.0** | **+1.0** |
| | baz=262 | | | | | | |
| **Q17K** | **Contact Creek** | **74.38** | **33** | P | **P** | **08 57 55.9** | **+0.5** |
| | baz=266 | | | | | | |
| **J18K** | **Innoko River** | **74.42** | **27** | P | **P** | **08 57 56.0** | **+0.7** |
| | baz=264 | | | | | | |
| **D19K** | **Kuna River** | **74.49** | **22** | IAmb | IAmb | 08 57 58.4 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **74.49** | **22** | P | **P** | **08 57 56.7** | **+1.0** |
| | baz=262 | | | | | | |
| **N18K** | **Kilae Creek** | **74.55** | **30** | P | **P** | **08 57 56.8** | **+0.6** |
| | baz=266 | | | | | | |
| **G19K** | **Purcell Mounta** | **74.56** | **24** | P | **P** | **08 57 56.7** | **+0.6** |
| | baz=263 | | | | | | |
| **M18K** | **Stony River** | **74.65** | **29** | P | **P** | **08 57 57.0** | **+0.3** |
| | baz=266 | | | | | | |
| **E19K** | **Redstone River** | **74.67** | **23** | IAmb | IAmb | 08 57 59.8 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **74.67** | **23** | P | **P** | **08 57 57.6** | **+0.9** |
| | baz=263 | | | | | | |
| **H19K** | **Roundabout Mou** | **74.75** | **25** | IAmb | IAmb | 08 58 00.2 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **H19K** | **Roundabout Mou** | **74.75** | **25** | P | **P** | **08 57 57.9** | **+0.7** |
| | baz=264,SNR=7.0 | | | | | | |
| **P18K** | **Big Mountain,** | **74.79** | **31** | P | **P** | **08 57 58.3** | **+0.7** |
| | baz=267 | | | | | | |
| **O18K** | **Koktuh Hills** | **74.83** | **31** | P | **P** | **08 57 58.7** | **+0.9** |
| | baz=266 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **74.86** | **32** | P | **P** | **08 57 59.4** | **+1.3** |
| | baz=267 | | | | | | |
| **J19K** | **Poorman** | **74.95** | **27** | P | **P** | **08 57 59.9** | **+1.5** |
| | baz=265 | | | | | | |
| **B20K** | **Meade River** | **75.05** | **20** | IAmb | IAmb | 08 58 01.7 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **75.05** | **20** | P | **P** | **08 57 59.6** | **+0.8** |
| | baz=262 | | | | | | |
| **D20K** | **Etivluk River** | **75.06** | **22** | P | **P** | **08 58 00.1** | **+1.1** |
| | baz=263,SNR=10 | | | | | | |
| **R18K** | **Karluk** | **75.11** | **33** | P | **P** | **08 58 00.0** | **+0.7** |
| | baz=268 | | | | | | |
| **L19K** | **White Mountain** | **75.16** | **29** | IAmb | IAmb | 08 58 09.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **L19K** | **White Mountain** | **75.16** | **29** | P | **P** | **08 58 00.4** | **+0.7** |
| | baz=266 | | | | | | |
| **E20K** | **Nigu River** | **75.17** | **22** | P | **P** | **08 58 00.3** | **+0.7** |
| | baz=263 | | | | | | |
| **F20K** | **Avaraart Lake** | **75.21** | **23** | IAmb | IAmb | 08 58 02.7 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **75.21** | **23** | P | **P** | **08 58 00.9** | **+1.2** |
| | baz=264,SNR=8.1 | | | | | | |
| **N19K** | **Bonanza Creek** | **75.25** | **30** | P | **P** | **08 58 01.0** | **+0.7** |
| | baz=267 | | | | | | |
| **M19K** | **Big River Lodg** | **75.36** | **29** | P | **P** | **08 58 01.8** | **+1.0** |
| | baz=267 | | | | | | |
| **H20K** | **Anotleneega Mo** | **75.40** | **25** | P | **P** | **08 58 01.6** | **+0.6** |
| | baz=265,SNR=9.3 | | | | | | |
| **I20K** | **Naaghedeneel** | **75.51** | **26** | P | **P** | **08 58 01.8** | **+0.2** |
| | baz=266 | | | | | | |
| **Q19K** | **Cape Douglas,** | **75.58** | **32** | P | **P** | **08 58 02.5** | **+0.3** |
| | baz=268 | | | | | | |
| **K20K** | **Telida** | **75.59** | **27** | P | **P** | **08 58 02.4** | **+0.3** |
| | baz=267 | | | | | | |
| **J20K** | **Nowinta River** | **75.61** | **26** | P | **P** | **08 58 02.7** | **+0.5** |
| | baz=266 | | | | | | |
| **L20K** | **Farewell, AK** | **75.63** | **28** | P | **P** | **08 58 02.8** | **+0.5** |
| | baz=267 | | | | | | |
| **OHAK** | **Old Harbor** | **75.72** | **34** | P | **P** | **08 58 03.2** | **+0.3** |
| | baz=269 | | | | | | |
| **P19K** | **Oil Pt** | **75.82** | **31** | P | **P** | **08 58 03.7** | **+0.2** |
| | baz=268 | | | | | | |
| **B21K** | **Ikpikpuk River** | **75.88** | **21** | IAmb | IAmb | 08 58 06.4 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **B21K** | **Ikpikpuk River** | **75.88** | **21** | P | **P** | **08 58 04.3** | **+0.7** |
| | baz=264,SNR=10 | | | | | | |
| **A22K** | **Sinclair Lake** | **75.90** | **19** | P | **P** | **08 58 04.7** | **+1.0** |
| | baz=264 | | | | | | |
| **IMAR** | **Indian Mountai** | **75.90** | **25** | P | **P** | **08 58 05.2** | **+1.3** |
| **M20K** | **Styx River** | **75.95** | **29** | P | **P** | **08 58 05.0** | **+0.7** |
| | baz=268 | | | | | | |
| **E21K** | **Killik River** | **76.00** | **22** | IAmb | IAmb | 08 58 20.5 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **E21K** | **Killik River** | **76.00** | **22** | P | **P** | **08 58 05.4** | **+1.0** |
| | baz=265 | | | | | | |
| **G21K** | **Allakaket** | **76.04** | **24** | IAmb | IAmb | 08 58 07.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **G21K** | **Allakaket** | **76.04** | **24** | P | **P** | **08 58 05.7** | **+1.1** |
| | baz=266,SNR=11 | | | | | | |
| **F21K** | **Alatna River** | **76.09** | **23** | P | **P** | **08 58 05.2** | **+0.2** |
| | baz=266 | | | | | | |
| **KDAK** | **Kodiak Island** | **76.12** | **33** | LR | LR | 09 30 32.2 | |
| | comp=Z,33nm,19.5s,baz=239,slow=35 | | | | | | |
| **KDAK** | **Kodiak Island** | **76.12** | **33** | P | **P** | **08 58 05.4** | **+0.3** |
| | baz=269 | | | | | | |
| **O20K** | **Slope Mountain** | **76.14** | **31** | P | **P** | **08 58 06.0** | **+0.6** |
| | baz=269 | | | | | | |
| **Q20K** | **Shuyak Island** | **76.23** | **32** | P | **P** | **08 58 06.9** | **+1.1** |
| | baz=269 | | | | | | |
| **H21K** | **Melozitna Rive** | **76.27** | **25** | P | **P** | **08 58 06.8** | **+0.8** |
| | baz=267,SNR=8.2 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **76.35** | **20** | P | **P** | **08 58 06.8** | **+0.5** |
| | baz=266 | | | | | | |
| **N20K** | **Mount Spurr** | **76.37** | **30** | P | **P** | **08 58 07.4** | **+0.7** |
| | baz=269 | | | | | | |
| **CHUM** | **Lake Minchumin** | **76.40** | **27** | P | **P** | **08 58 07.5** | **+0.9** |
| | baz=268 | | | | | | |
| **PPLA** | **Purkeypile** | **76.43** | **28** | P | **P** | **08 58 07.4** | **+0.4** |
| | baz=268 | | | | | | |
| **D22K** | **Ayikyak River** | **76.50** | **22** | IAmb | IAmb | 08 58 33.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **D22K** | **Ayikyak River** | **76.50** | **22** | P | **P** | **08 58 07.9** | **+0.7** |
| | baz=266 | | | | | | |
| **F22K** | **John River** | **76.61** |

| | | | | | | |
|---|---|---|---|---|---|---|
| D23K | **Nanushuk River** baz=268 | 77.23 | 22 | P | P | 08 58 12.0 +0.7 |
| C23K | **Itkillik River** baz=268,SNR=14 | 77.28 | 21 | P | P | 08 58 12.2 +0.7 |
| COLD | **Coldfoot** baz=269,SNR=6.1 | 77.37 | 23 | P | P | 08 58 12.8 +0.7 |
| M22K | **Willow** baz=270 | 77.38 | 29 | P | P | 08 58 13.3 +1.2 |
| G23K | **Bananza Creek** comp=Z,4.6nm,0.9s | 77.43 | 24 | IAmb | IAmb | 08 58 15.1 |
| G23K | **Bananza Creek** baz=270,SNR=6.4 | 77.43 | 24 | P | P | 08 58 13.2 +0.7 |
| RC01 | **Rabbit Creek A** baz=271 | 77.57 | 30 | P | P | 08 58 13.8 +0.5 |
| O22K | **Cooper Landing** baz=271 | 77.59 | 30 | P | P | 08 58 15.0 +1.6 |
| E23K | **Chandalar** baz=270,SNR=7.9 | 77.61 | 23 | P | P | 08 58 14.2 +0.7 |
| H23K | **Yukon River** comp=Z,11nm,1.4s | 77.62 | 25 | IAmb | IAmb | 08 58 30.9 |
| H23K | **Yukon River** baz=270,SNR=6.3 | 77.62 | 25 | P | P | 08 58 13.7 +0.2 |
| TOLK | **Toolik Lake Re** comp=Z,5.8nm,0.8s | 77.63 | 22 | IAmb | IAmb | 08 58 16.4 |
| TOLK | **Toolik Lake Re** baz=270 | 77.63 | 22 | P | P | 08 58 14.1 +0.5 |
| I23K | **Minto, Yukon-K** baz=270,SNR=6.8 | 77.70 | 26 | P | P | 08 58 14.4 +0.5 |
| SEW | **Seward** baz=272 | 77.73 | 31 | P | P | 08 58 14.4 +0.2 |
| NEA2 | **Nenana** comp=Z,6.4nm,0.8s | 77.83 | 26 | IAmb | IAmb | 08 58 17.4 |
| NEA2 | **Nenana** baz=271,SNR=6.8 | 77.83 | 26 | P | P | 08 58 15.1 +0.4 |
| PMR | **Palmer** | 77.85 | 29 | P | P | 08 58 13.9 -0.9 |
| PMR | comp=Z,6.5nm,0.9s | | | IAmb | IAmb | 08 58 16.3 |
| PMR | **Palmer** baz=271 | 77.85 | 29 | P | P | 08 58 15.9 +1.0 |
| MCK | **McKinley** baz=271 | 77.90 | 27 | P | P | 08 58 15.7 +0.6 |
| D24K | **Happy Valley** comp=Z,8.2nm,0.8s | 77.90 | 21 | IAmb | IAmb | 08 58 17.8 |
| D24K | **Happy Valley** baz=270 | 77.90 | 21 | P | P | 08 58 15.4 +0.4 |
| C24K | **Franklin Bluff** baz=270 | 77.95 | 21 | P | P | 08 58 16.0 +0.8 |
| E24K | **Your Creek** comp=Z,4.6nm,0.8s | 78.03 | 23 | IAmb | IAmb | 08 58 18.7 |
| E24K | **Your Creek** baz=271,SNR=8.0 | 78.03 | 23 | P | P | 08 58 16.5 +0.7 |
| WAT1 | **Susitna Watana** baz=272 | 78.09 | 28 | P | P | 08 58 17.5 +1.3 |
| KNK | **Knik Glacier** baz=272 | 78.18 | 29 | P | P | 08 58 17.9 +1.2 |
| SML | **Sawmill** comp=Z,10nm,1.0s | 78.23 | 29 | IAmb | IAmb | 08 58 19.0 |
| SML | **Sawmill** baz=272 | 78.23 | 29 | P | P | 08 58 17.6 +0.5 |
| PWL | **Port Wells** baz=272,SNR=5.7 | 78.26 | 30 | P | P | 08 58 17.7 +0.5 |
| F24K | **Squaw Lake** comp=Z,7.8nm,0.7s | 78.27 | 23 | IAmb | IAmb | 08 58 20.1 |
| F24K | **Squaw Lake** baz=271,SNR=15 | 78.27 | 23 | P | P | 08 58 17.7 +0.6 |
| H24K | **Noodor Dome** baz=272,SNR=6.3 | 78.31 | 25 | P | P | 08 58 17.9 +0.6 |
| COLA | **College** baz=272 | 78.35 | 26 | P | P | 08 58 18.2 +0.7 |
| G24K | **Hadweenzic Riv** comp=Z,8.3nm,0.9s | 78.45 | 24 | IAmb | IAmb | 08 58 21.1 |
| G24K | **Hadweenzic Riv** baz=272,SNR=9.6 | 78.45 | 24 | P | P | 08 58 19.2 +1.1 |
| WAT6 | **Susitna Watana** baz=272 | 78.48 | 28 | P | P | 08 58 18.4 -0.2 |
| M23K | **Glacier View** baz=273 | 78.52 | 29 | P | P | 08 58 18.8 +0.2 |
| POKR | **Poker Plat Res** baz=272 | 78.52 | 26 | P | P | 08 58 19.3 +0.8 |
| DHY | **Denali Highway** baz=273 | 78.62 | 28 | P | P | 08 58 19.3 0.0 |
| SCM | **Sheep Creek Mo** baz=273 | 78.70 | 29 | P | P | 08 58 19.6 -0.1 |
| HDA | **Harding Lake** baz=273 | 78.75 | 26 | P | P | 08 58 20.1 +0.3 |
| P23K | **Montague Islan** baz=273 | 78.76 | 31 | P | P | 08 58 20.3 +0.4 |
| IL31 | | 78.76 | 26 | P | P | 08 58 19.6 -0.2 |
| ILAR | **Eielson Array** comp=Z,1.6nm,0.8s,baz=242,slow=5.7,SNR=20 comp=Z,1.6nm,0.8s | 78.76 | 26 | P | P | 08 58 20.0 +0.2 |
| D25K | **Kavik River** comp=Z,7.5nm,0.8s | 78.77 | 21 | IAmb | IAmb | 08 58 22.4 |
| D25K | **Kavik River** baz=272,SNR=13 | 78.77 | 21 | P | P | 08 58 20.1 +0.2 |
| GLI | **Glacier Island** baz=273 | 78.86 | 30 | P | P | 08 58 21.0 +0.5 |
| G25K | **Bearman Lake** baz=273 | 78.99 | 24 | P | P | 08 58 22.0 +1.0 |
| F25K | **Christian Rive** baz=273,SNR=8.4 | 79.12 | 23 | P | P | 08 58 22.7 +0.9 |
| H25L | **Birch Creek** baz=273,SNR=8.3 | 79.13 | 24 | P | P | 08 58 22.8 +1.0 |
| M24K | **Tolsona, Glenn** baz=274 | 79.23 | 29 | P | P | 08 58 23.4 +0.8 |
| C26K | **Camden Bay** baz=274,SNR=8.9 | 79.25 | 21 | P | P | 08 58 23.0 +0.6 |
| PRP | **Porcupine Dome** baz=274 | 79.30 | 25 | P | P | 08 58 23.8 +0.9 |
| K24K | **Donnelly Dome** baz=274 | 79.30 | 27 | P | P | 08 58 23.6 +0.8 |
| KLU | **Klutina** baz=274 | 79.39 | 29 | P | P | 08 58 24.1 +0.7 |
| J25K | **Salcha River,** baz=274 | 79.42 | 26 | P | P | 08 58 23.6 0.0 |
| PAX | **Paxson** baz=274 | 79.50 | 28 | P | P | 08 58 24.0 0.0 |
| BMAR | **Burnt Mountain** | 79.54 | 23 | P | P | 08 58 26.3 +2.1 |
| EYAK | **Cordova Ski Ar** baz=275 | 79.55 | 30 | P | P | 08 58 24.3 +0.1 |
| HARP | **HAARP** baz=275 | 79.68 | 28 | P | P | 08 58 25.1 +0.2 |
| F26K | **Sheenjek River** baz=275,SNR=5.2 | 79.69 | 23 | P | P | 08 58 25.5 +0.6 |
| C27K | **Jago River** baz=275,SNR=7.0 | 79.69 | 21 | P | P | 08 58 25.4 +0.6 |
| G26K | **Porcupine Rive** baz=275 | 79.89 | 24 | P | P | 08 58 26.6 +0.7 |
| N25K | **Chitina, Valde** baz=275 | 80.02 | 29 | P | P | 08 58 27.1 +0.3 |
| BMRM | **Bremner River** baz=276 | 80.07 | 30 | P | P | 08 58 27.8 +0.7 |
| SCRK | **Sand Creek** comp=Z,9.6nm,1.5s | 80.08 | 27 | IAmb | IAmb | 08 58 43.5 |
| SCRK | **Sand Creek** baz=276 | 80.08 | 27 | P | P | 08 58 27.3 +0.1 |
| J26L | **Joseph Creek** baz=276 | 80.21 | 26 | P | P | 08 58 28.9 +1.1 |
| I26K | **Coal Creek Min** baz=276 | 80.30 | 25 | P | P | 08 58 29.2 +1.0 |
| L26K | **Log Cabin Wild** baz=276 | 80.46 | 28 | P | P | 08 58 29.8 +0.7 |
| E27K | **Coleen River** baz=277 | 80.60 | 22 | P | P | 08 58 30.0 +0.2 |
| M26K | **Nabesna, AK** baz=277 | 80.69 | 28 | P | P | 08 58 31.3 +0.9 |
| D27M | **Malcolm River** comp=Z,8.2nm,0.8s | 80.70 | 21 | IAmb | IAmb | 08 58 33.2 |
| D27M | **Malcolm River** baz=277 | 80.70 | 21 | P | P | 08 58 31.0 +0.7 |
| G27K | **Doyon Strip** baz=277 | 80.74 | 24 | P | P | 08 58 31.2 +0.6 |
| MCARA | **McCarthy VSAT** baz=277 | 80.79 | 29 | P | P | 08 58 31.2 +0.3 |
| BGLC | **Bering Glacier** baz=277 | 80.81 | 30 | P | P | 08 58 31.1 +0.1 |
| CRQE | **Cirque** baz=277 | 80.83 | 30 | P | P | 08 58 31.2 -0.1 |
| H27K | **Steamboat Moun** baz=277 | 80.86 | 24 | P | P | 08 58 31.4 +0.1 |
| I27K | **Kandik River** baz=277 | 80.91 | 25 | P | P | 08 58 31.8 +0.3 |
| K27K | **Chicken** comp=Z,10nm,1.1s | 80.91 | 26 | IAmb | IAmb | 08 58 34.7 |
| K27K | **Chicken** baz=277 | 80.91 | 26 | P | P | 08 58 32.1 +0.6 |
| L27K | **Beaver Creek,** baz=278 | 81.14 | 27 | P | P | 08 58 33.0 +0.2 |
| EGAK | **Eagle** baz=278 | 81.21 | 26 | P | P | 08 58 34.3 +1.3 |
| M27K | **Edge Creek, AK** baz=278 | 81.21 | 28 | P | P | 08 58 33.7 +0.4 |
| E28M | **Babbage River** | 81.30 | 22 | P | P | 08 58 34.8 +1.3 |
| E28M | **Babbage River** baz=279 | 81.30 | 22 | P | P | 08 58 33.8 +0.4 |
| F28M | **Old Crow** comp=Z,5.7nm,0.8s | 81.32 | 23 | IAmb | IAmb | 08 58 36.3 |
| F28M | **Old Crow** baz=279 | 81.32 | 23 | P | P | 08 58 33.9 +0.2 |
| MESA | **MESA** baz=278 | 81.46 | 30 | P | P | 08 58 35.4 +0.7 |
| D28M | **Stokes Point** baz=279 | 81.47 | 21 | P | P | 08 58 34.7 +0.4 |
| I28M | **Miner Creek** comp=Z,9.3nm,1.1s | 81.62 | 25 | IAmb | IAmb | 08 58 38.4 |
| I28M | **Miner Creek** baz=279 | 81.62 | 25 | P | P | 08 58 36.0 +0.7 |
| CTG | **Chitna Glacier** baz=278 | 81.65 | 29 | P | P | 08 58 35.5 -0.2 |
| E29M | **Blow River** baz=280 | 81.93 | 22 | P | P | 08 58 37.4 +0.6 |
| YUK3 | **Moose Creek** baz=279 | 81.95 | 29 | P | P | 08 58 37.5 +0.2 |
| DAWY | **Dawson** | 82.07 | 26 | P | P | 08 58 37.0 -0.6 |
| DAWY | comp=Z,5.9nm,1.1s | | | IAmb | IAmb | 08 58 40.3 |
| DAWY | **Dawson** baz=280 | 82.07 | 26 | P | P | 08 58 38.2 +0.5 |
| H29M | **Whitestone** baz=280 | 82.13 | 24 | P | P | 08 58 38.4 +0.5 |
| G29M | **Pine Creek** comp=Z,8.3nm,0.9s | 82.14 | 23 | IAmb | IAmb | 08 58 40.1 |
| G29M | **Pine Creek** baz=280 | 82.14 | 23 | P | P | 08 58 38.2 +0.2 |
| O28M | **Mount Upton** baz=279 | 82.24 | 30 | P | P | 08 58 39.0 +0.1 |
| I29M | **Ogilvie Camp,** baz=280 | 82.31 | 25 | P | P | 08 58 39.1 +0.3 |
| YUK8 | **Steele Glacier** baz=280 | 82.36 | 29 | P | P | 08 58 39.4 -0.1 |
| EPYK | **Eagle Plains** baz=282 | 82.76 | 24 | P | P | 08 58 41.2 0.0 |
| M29M | **Somme Creek** baz=281 | 82.77 | 28 | P | P | 08 58 42.0 +0.6 |
| L29M | **L29M** baz=281 | 82.79 | 27 | P | P | 08 58 42.0 +0.6 |
| G30M | **tAoh Zraii Nji** baz=282 | 82.83 | 23 | P | P | 08 58 41.6 0.0 |
| F30M | **Barrier River** baz=282 | 82.86 | 22 | P | P | 08 58 41.7 +0.1 |
| ABPO | **Ambohimpanom** | 82.92 | 249 | P | P | 08 58 42.2 -0.9 |
| ABPO | comp=Z,9.3nm,0.8s | | | IAmb | IAmb | 08 58 43.4 |
| ARCES | **ARCESS Array B** comp=Z,1.0nm,0.3s,baz=82,slow=5.9,SNR=18 comp=Z,1.0nm,0.3s | 82.99 | 340 | P | P | 08 58 41.4 -0.9 |
| YUK6 | **Outpost Mounta** baz=281 | 83.09 | 29 | P | P | 08 58 43.4 +0.1 |
| I30M | **Mount Dempster** baz=282 | 83.13 | 25 | P | P | 08 58 43.3 0.0 |
| J30M | **Hart River** baz=282 | 83.28 | 25 | P | P | 08 58 44.1 0.0 |
| INK | **Inuvik** baz=284 | 83.53 | 22 | P | P | 08 58 44.7 -0.4 |
| G31M | **Satah River** baz=284 | 83.59 | 23 | P | P | 08 58 45.8 +0.4 |
| N30M | **Aishikik Lake** baz=282 | 83.59 | 29 | P | P | 08 58 45.6 -0.1 |
| P30M | **Million Dollar** baz=282 | 83.93 | 30 | P | P | 08 58 48.0 +0.6 |
| N31M | **Braeburn, Yuko** baz=283 | 84.20 | 28 | P | P | 08 58 49.3 +0.6 |
| O30N | **Mendenhall** baz=283 | 84.21 | 29 | P | P | 08 58 49.4 +0.6 |
| PLBC | **Pleasant Camp** baz=283 | 84.37 | 31 | P | P | 08 58 49.9 +0.3 |
| FINES | **FINESS Array B** | 84.67 | 332 | P | P | 08 58 49.0 -2.0 |
| FINES | **FINESS Array B** comp=Z,3.1nm,0.3s,baz=74,slow=4.5,SNR=58 comp=Z,3.1nm,0.3s | 84.67 | 332 | P | P | 08 58 50.3 -0.7 |
| M31M | **Drury Creek, Y** baz=284 | 84.67 | 28 | P | P | 08 58 51.8 +0.7 |
| WHY | **Whitehorse** baz=284 | 84.82 | 29 | P | P | 08 58 52.6 +0.7 |
| NE56 | **Odesa** | 85.08 | 316 | P | P | 08 58 51.9 -1.5 |
| A36M | **Sachs Harbour** baz=292 | 85.09 | 17 | P | P | 08 58 53.3 +0.4 |
| FARO | **Faro, Yukon** baz=285 | 85.14 | 27 | P | P | 08 58 53.5 +0.1 |
| AK09 | **Malin Array Si** | 85.34 | 321 | P | P | 08 58 53.1 -1.5 |
| AK03 | **Malin Array Si** | 85.35 | 321 | P | P | 08 58 52.8 -1.8 |
| AKASG | **Malin Array Be** comp=Z,8.6nm,0.8s,baz=67,slow=5.2,SNR=12 comp=Z,8.6nm,0.8s | 85.36 | 321 | P | P | 08 58 53.0 -1.7 |
| AKBB | **Malin Array Si** | 85.36 | 321 | P | P | 08 58 53.0 -1.7 |
| AK10 | **Malin Array Si** | 85.36 | 321 | P | P | 08 58 52.9 -1.8 |
| KIEV | **Kiev** | 85.37 | 321 | P | P | 08 58 52.6 -2.1 |
| KIEV | **Kiev** | 85.37 | 321 | P | P | 08 58 52.8 -1.9 |
| SIT | **Sitka** baz=284 | 85.45 | 33 | P | P | 08 58 55.5 +0.5 |
| CSS | **Mathiatis** | 85.47 | 305 | P | P | 08 58 54.2 -1.4 |
| MI30 | **MI30,Zelenitsa** | 85.99 | 321 | P | P | 08 58 55.9 -1.9 |
| LUBAR | **Lubar, Ukraine** | 86.44 | 320 | P | P | 08 58 57.9 -2.2 |
| C36M | **Paulatuk** baz=293 | 86.45 | 19 | P | P | 08 59 00.2 +0.5 |
| R33M | **Jennings River** baz=287 | 87.05 | 30 | P | P | 08 59 02.8 -0.2 |
| RNPP9 | **Sopachiv** | 87.24 | 322 | P | P | 08 59 02.5 -1.4 |
| KMPD | **K-Podol'skiy** | 87.59 | 319 | P | P | 08 59 04.1 -1.6 |
| T35M | **Bob Quinn** baz=288 | 88.14 | 32 | P | P | 08 59 08.8 +0.6 |
| BURAR | **Bucovina Array** | 88.64 | 318 | P | P | 08 59 09.0 -1.8 |
| BURAR | comp=Z,4.4nm,0.8s | | | IAmb | IAmb | 08 59 11.0 |
| BUR08 | **Bucovina Ar. S** comp=Z,4.0nm,0.8s | 88.64 | 318 | IAmb | IAmb | 08 59 10.8 |
| HFS | **Hagfors** comp=Z,0.8nm,0.3s,baz=90,slow=5.9,SNR=11 comp=Z,0.8nm,0.3s | 90.83 | 332 | P | P | 08 59 19.9 -0.8 |
| VNDA | **Vanda** | 91.05 | 173 | P | P | 08 59 21.3 +0.1 |
| VNDA | **Vanda** comp=Z,2.9nm,0.8s,baz=224,slow=4.4,SNR=6.2 comp=Z,2.9nm,0.8s | 91.05 | 173 | P | P | 08 59 21.5 +0.3 |
| NOA | **NORSAR Array B** comp=Z,0.8nm,0.7s,baz=65,slow=4.8,SNR=4.4 comp=Z,0.8nm,0.7s | 91.54 | 334 | P | P | 08 59 22.1 -1.8 |
| YKA | **Yellowknife Ar** comp=Z,1.6nm,0.9s,baz=310,slow=4.9,SNR=9.5 comp=Z,1.6nm,0.9s | 93.05 | 24 | P | P | 08 59 32.0 +1.2 |
| SBC | **Santa Barbara** baz=294 | 103.19 | 50 | P | Pdif | 09 00 16.8 -0.4 |
| MONP2 | **Monument Peak** baz=296 | 106.33 | 51 | P | PKiKP | 09 04 41.7 -1.0 |
| IKP | **In-Ko-Pah, Jac** baz=296 | 106.67 | 51 | P | PKiKP | 09 04 42.7 -0.5 |
| TXAR | **Lajitas Array** comp=Z,0.5nm,0.7s,baz=327,slow=0.6,SNR=8.7 | 117.60 | 48 | PKP | PKiKP | 09 05 04.9 +0.8 |
| TORD | **Torodi Ar. Bea** comp=Z,0.5nm,0.3s,baz=53,slow=2.2,SNR=10 | 119.30 | 292 | PKP | PKPdf | 09 05 05.6 -1.9 |
| PKME | **Peaks-Kenny Pk** baz=343 | 122.08 | 12 | P | PKPdf | 09 05 11.1 -1.0 |
| M53A | **WI Miller and** baz=329 | 122.16 | 23 | P | PKPdf | 09 05 11.3 -1.0 |
| ACSO | **Alum Creek Sta** baz=327 | 122.24 | 26 | P | PKPdf | 09 05 11.8 -0.8 |
| O53A | **New Philadelph** baz=328 | 122.96 | 24 | P | PKPdf | 09 05 12.3 -1.6 |
| P52A | **Corning** baz=327 | 123.10 | 25 | P | PKPdf | 09 05 12.7 -1.5 |
| BINY | **Binghamton** baz=335 | 123.15 | 19 | P | PKPdf | 09 05 13.2 -1.1 |
| WVT | **Waverly** baz=320 | 123.21 | 32 | P | PKPdf | 09 05 13.3 -1.2 |
| SSPA | **Standing Stone** baz=332 | 123.90 | 21 | P | PKPdf | 09 05 14.5 -1.2 |
| L61B | **Northampton** baz=338 | 123.91 | 16 | P | PKPdf | 09 05 14.5 -1.2 |
| HRV | **Adam Dziewonsk** baz=340 | 124.15 | 15 | P | PKPdf | 09 05 14.7 -1.4 |
| LRAL | **Lakeview Retre** baz=320 | 126.00 | 34 | P | PKPdf | 09 05 18.8 -1.2 |
| KMSC | **Kings Mountain** baz=326 | 127.19 | 28 | P | PKPdf | 09 05 21.1 -1.1 |
| NHSC | **New Hope** baz=327 | 129.41 | 28 | P | PKPdf | 09 05 25.4 -1.0 |
| DWPF | **Disney Wildern** | 132.84 | 33 | P | PKPdf | 09 05 31.9 -1.1 |

baz=323

| | | | | | | |
|---|---|---|---|---|---|---|
| PLCA | **Paso Flores** comp=Z,5.8nm,0.7s,baz=209,slow=2.2,SNR=15 | 147.42 | 157 | PKPbc | PKPdf | 09 05 59.5 +0.5 |
| CPUP | **Villa Florida** comp=Z,2.3nm,0.9s,baz=168,slow=5.9,SNR=3.6 | 164.82 | 170 | PKPab | PKPab | 09 07 17.8 +0.1 |
| LPAZ | **La Paz** comp=Z,1.2nm,0.8s,baz=349,slow=3.9,SNR=4.8 | 165.75 | 112 | PKP | PKPdf | 09 06 24.3 +0.6 |

**IDC 08 09:03:52.4±2.9, 54°.05N×86°.54E, h0$^{km}$, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=24.6km s-min=14.5km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | **ZALESOVO INFRA** baz=83,slow=318,SNR=3.3 | 1.02 | 265 | I | I | 09 10 30.0 | |
| ZALV | **Zalesovo Beam** 0.5nm,0.3s,baz=85,slow=15,SNR=6.0 | 1.02 | 265 | Pg | Pg | 09 04 11.1 | -0.8 |
| ZALV | 0.7nm,0.3s,baz=85,slow=26,SNR=3.9 | | | Lg | Lg | 09 04 26.2 | |
| KURBB | **Kurchatov Arra** 0.1nm,0.3s,baz=56,slow=14,SNR=1.6 0.4nm,0.2s | 5.99 | 238 | Pn | Pn | 09 05 23.5 | +1.4 |
| MKAR | **Makanchi Array** 0.1nm,0.3s,baz=19,slow=12,SNR=7.3 0.1nm,0.3s | 7.75 | 202 | Pn | Pn | 09 05 47.2 | +0.8 |

*IDC **08** 09:06:44.1±8.0, 27°.27S×175°.09W, h0$^{km}$, mb4.0/3, mbtmp4.2/4, ML5.0/1, MS3.6/3, Error ellipse: s-maj=174.7km s-min=51.2km az=118.0*
*NEIC **08** 09:06:46.7±2.7, 27°.05S±0°.09×175°.2W±0°.1, h10$^{km}$±2$^{km}$, mb4.3/10, Error ellipse: s-maj=24.6km s-min=6.9km az=126.0*

**ISC 08 09:06:46.2±1.1, 27°.0S±0°.1×175°.2W±0°.2, h10$^{km}$, n20, σ1°17/19, mb4.2/8, MS3.6/3, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | **Raoul Island** | 3.23 | 226 | Pn | Pn | 09 07 36.7 | -0.2 |
| RAO | **Raoul Island** 174nm,0.3s,baz=56,slow=16,SNR=3.0 | 3.23 | 226 | Pn | Pn | 09 07 36.8 | -0.1 |
| RAO | 168nm,0.3s,baz=97,slow=19,SNR=2.6 327nm,0.3s | | | Sn | Sn | 09 08 13.2 | -2.2 |
| NIUE | **Niue** | 9.32 | 33 | Pn | Pn | 09 08 59.7 | -0.9 |
| MSVF | **Nonsavu** | 11.15 | 325 | Pn | Pn | 09 09 24.6 | -1.1 |
| CTAO | **Charters Tower** | 35.86 | 273 | P | P | 09 13 49.3 | +2.8 |
| STKA | **Stephens Creek** | 37.71 | 252 | P | P | 09 14 01.8 | -0.3 |
| STKA | **Stephens Creek** 1.3nm,0.5s,baz=113,slow=7.7,SNR=5.4 | 37.71 | 252 | P | P | 09 14 01.4 | -0.7 |
| STKA | comp=Z,42nm,18.3s,baz=26,slow=36 1.3nm,0.5s | | | LR | LR | 09 29 36.6 | |
| AS31 | **Alice Springs** | 45.83 | 262 | P | P | 09 15 09.2 | +0.5 |
| AS31 | comp=Z,1.0nm,0.6s | | | IAmb | IAmb | 09 15 11.5 | |
| ASAR | **Alice Springs** | 45.83 | 262 | P | P | 09 15 08.2 | -0.5 |
| ASAR | **Alice Springs** comp=Z,0.8nm,0.4s,baz=101,slow=7.2,SNR=32 comp=Z,0.8nm,0.4s | 45.83 | 262 | P | P | 09 15 09.0 | +0.3 |
| WR0 | **Warramunga Arr** | 46.35 | 268 | P | P | 09 15 13.6 | +0.9 |
| WR0 | comp=Z,1.3nm,0.8s | | | IAmb | IAmb | 09 15 30.0 | |
| WB2 | **Warramunga Arr** | 46.52 | 268 | P | P | 09 15 15.1 | +1.0 |
| WB2 | comp=Z,3.9nm,0.9s | | | IAmb | IAmb | 09 15 17.3 | |
| WRA | **Warramunga Arr** | 46.53 | 268 | P | P | 09 15 15.5 | +1.3 |
| WRA | **Warramunga Arr** comp=Z,1.7nm,0.5s,baz=108,slow=7.4,SNR=36 comp=Z,1.7nm,0.5s | 46.53 | 268 | P | P | 09 15 14.6 | +0.4 |
| WB0 | **Warramunga Arr** | 46.54 | 268 | P | P | 09 15 15.6 | +1.3 |
| WB0 | comp=Z,4.7nm,0.9s | | | IAmb | IAmb | 09 15 26.9 | |
| FORT | **Forrest** | 49.33 | 252 | P | P | 09 15 35.4 | -0.3 |
| NWAO | **Narrogin (SRO)** | 57.90 | 247 | P | P | 09 16 38.6 | 0.0 |
| QSPA | **South Pole Qui** | 63.05 | 180 | P | P | 09 17 13.8 | +0.4 |
| QSPA | comp=Z,2.5nm,0.9s | | | IAmb | IAmb | 09 17 35.9 | |
| YBH | **Yreka Blue Hor** comp=Z,26nm,19.9s,baz=286,slow=30 | 83.91 | 37 | LR | LR | 09 48 15.7 | |
| ATAH | **Atahualpa** comp=Z,58nm,21.2s,baz=11,slow=29 | 92.85 | 99 | LR | LR | 09 52 09.7 | |

*BJI **08** 09:07:15.2±0.0, 37°.26N×141°.68E, h15$^{km}$, mb4.7/47, mB4.9/16, Ms4.4/36, Ms7 4.1/38*
*IDC **08** 09:07:16.9±0.5, 37°.16N×141°.22E, h0$^{km}$, mb4.5/29, mbtmp4.5/35, ML3.9/6, MS3.7/38, Error ellipse: s-maj=13.2km s-min=11.5km az=95.0*
*MOS **08** 09:07:17.4±1.1, 37°.23N×141°.22E, h12$^{km}$, mb5.0/60, Error ellipse: s-maj=6.5km s-min=4.1km az=109.3*
*NEIC **08** 09:07:19.6±1.9, 37°.21N±0°.05×141°.26E±0°.07, h9$^{km}$±4$^{km}$, mb4.7/254, Error ellipse: s-maj=8.7km s-min=6.6km az=80.0*
*NIED **08** 09:07:20.1, 37°.19N×141°.20E, h21$^{km}$, MW4.5, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-6.04; $M_{\theta\theta}$5.04; $M_{\phi\phi}$ 1.00; $M_{r\theta}$2.50; $M_{\theta\phi}$2.96; $M_{r\phi}$1.99; Fault plane solution: $M_0$7.09000×$10^{15}$ NP1: $\phi_s$237.00000°, δ58.00000°, λ-96.00000°. NP2:$\phi_s$68.00000°, δ32.00000°, λ-81.00000°.*
*JMA **08** 09:07:20.1±0.1, 37°.2N±0°.2×141°.2E±0°.6, h21$^{km}$, MD4.9/40, MW4.6/40, E OFF FUKUSHIMA PREF*
*JMA Felt III J1 at E OFF FUKUSHIMA PREF .*
*BGR **08** 09:07:21.7, 37°.77N×142°.66E, h19$^{km}$, mb4.8*

**ISC 08 09:07:19.5±0.6, 37°.22N±0°.03×141°.29E±0°.04, h15$^{km}$±3$^{km}$, n810, σ1°13/658, mb4.7/217, MS3.9/47, 10C-9D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JFK | **Kawauchi** | 0.36 | 294 | *i* P | Pg | 09 07 26.8 | -0.1 |
| JFK | | | | S | Sg | 09 07 31.5 | -0.5 |
| JFK | **Kawauchi** comp=E,145nm,0.4s,comp=N,103nm,0.4s | 0.36 | 294 | A | A | 09 07 26.8 | |
| ONAJ | **Iwakimizuishiy** | 0.41 | 254 | P | Pg | 09 07 27.0 | -0.7 |
| ONAJ | | | | S | Sg | 09 07 32.0 | -1.4 |
| ONAJ | **Iwakimizuishiy** comp=E,321nm,0.3s,comp=N,214nm,0.3s | 0.41 | 254 | A | A | 09 07 27.0 | |
| JFFD | **Fukushimafurud** | 0.59 | 258 | *i* P | Pg | 09 07 30.4 | -0.8 |
| JFFD | | | | S | Sg | 09 07 37.4 | -1.8 |
| JFFD | **Fukushimafurud** comp=E,46nm,0.8s,comp=N,73nm,1.5s | 0.59 | 258 | A | A | 09 07 30.4 | |
| JMST | **Minamisoumatoc** | 0.60 | 328 | P | Pb | 09 07 31.2 | -0.5 |
| JMST | | | | S | Sb | 09 07 39.5 | -0.5 |
| JMST | **Minamisoumatoc** comp=E,66nm,0.3s,comp=N,339nm,0.2s | 0.60 | 328 | A | A | 09 07 31.2 | |
| JMM | **Marumori** | 0.76 | 329 | P | Pg | 09 07 33.8 | -0.4 |
| JMM | **Marumori** | 0.76 | 329 | | Pg | 09 07 33.9 | -0.4 |
| JMM | | | | | Sb | 09 07 44.3 | -0.3 |
| JMM | **Marumori** | 0.76 | 329 | P | Pg | 09 07 33.9 | -0.4 |
| JMM | | | | S | Sb | 09 07 43.9 | -0.6 |
| JMM | **Marumori** comp=E,86nm,0.3s,comp=N,126nm,0.4s | 0.76 | 329 | A | A | 09 07 33.9 | |
| JOTO | **OTAMA OYAMA** | 0.83 | 294 | *i* P | Pg | 09 07 35.2 | -0.5 |
| JOTO | | | | S | Sg | 09 07 45.3 | -1.4 |
| JOTO | **OTAMA OYAMA** comp=E,188nm,0.4s,comp=N,338nm,0.3s | 0.83 | 294 | A | A | 09 07 35.2 | |
| JHO | **Hitachi** | 0.84 | 224 | *i* P | Pb | 09 07 33.5 | -2.2 |
| JHO | **Hitachi** comp=E,13nm,1.5s,comp=N,22nm,0.8s | 0.84 | 224 | A | A | 09 07 33.5 | |
| JHYU | **Hitachinakayam** comp=E,29nm,1.5s,comp=N,24nm,1.0s | 1.04 | 213 | A | A | 09 07 38.1 | |
| JIKH | **Ishinomakikobu** comp=E,29nm,0.7s,comp=N,19nm,6.7s | 1.10 | 7 | A | A | 09 07 40.7 | |
| JSB | **Shiboa** | 1.12 | 258 | ⇓ *i* P | Pb | 09 07 40.1 | -0.6 |
| JSB | | | | ⇓S | Sb | 09 07 53.1 | -2.0 |
| JSB | **Shiboa** comp=E,100nm,0.9s,comp=N,97nm,0.7s | 1.12 | 258 | A | A | 09 07 40.1 | |
| JYAR | **Yonezawaarcadi** comp=E,265nm,0.6s,comp=N,406nm,0.4s | 1.14 | 308 | A | A | 09 07 40.1 | |
| JIO | **Ouri** comp=E,26nm,0.6s,comp=N,16nm,3.6s | 1.23 | 2 | A | A | 09 07 42.7 | |
| JOU | **Okura** comp=E,136nm,1.0s,comp=N,238nm,0.7s | 1.25 | 337 | A | A | 09 07 42.4 | |
| JFY | **Yanaizu** comp=E,99nm,0.4s,comp=N,68nm,0.4s | 1.28 | 279 | A | A | 09 07 41.8 | |
| JYT | **Yasato** comp=E,31nm,0.4s,comp=N,24nm,0.3s | 1.32 | 222 | A | A | 09 07 42.5 | |
| JIHU | **Itakohorinouch** comp=E,123nm,4.2s,comp=N,149nm,1.6s | 1.39 | 206 | A | A | 09 07 43.8 | |
| JYS | **Shirataka** | 1.39 | 316 | A | A | 09 07 44.2 | |

comp=E,130nm,0.8s,comp=N,109nm,0.7s
**JOFO Osakifurukawao 1.41 348** A A 09 07 45.1
comp=E,278nm,1.2s,comp=N,393nm,1.5s
**JKMT Kesennumamotoy 1.60 5** A A 09 07 48.2
comp=E,19nm,1.8s,comp=N,11nm,0.3s
**JAG Ashikaga 1.67 242** A A 09 07 47.6
comp=E,17nm,1.6s,comp=N,11nm,1.2s
**JNS Sasagawa 1.68 291** A A 09 07 48.1
comp=E,33nm,1.1s,comp=N,21nm,0.9s
**JKT Katashina 1.69 255** A A 09 07 48.0
comp=E,12nm,0.9s,comp=N,10.0nm,2.3s
**JMK Ichinoseki 1.73 358** A A 09 07 50.1
comp=E,33nm,0.4s,comp=N,15nm,0.3s
**JUON Uonuma 1.78 270** A A 09 07 49.3
comp=E,14nm,0.6s,comp=N,26nm,1.7s
**JYK Kaneyama 1.85 337** A A 09 07 51.4
comp=E,28nm,1.9s,comp=N,24nm,1.6s
**JYA Atsumi 1.85 318** A A 09 07 51.1
comp=E,58nm,0.7s,comp=N,65nm,0.8s
**OFUJ Ofunato 1.88 9** A A 09 07 52.5
comp=E,15nm,3.8s,comp=N,13nm,1.0s
**JAW Awa shima 2.03 308** A A 09 07 53.6
comp=E,9.0nm,5.6s,comp=N,12nm,2.6s
**JIZZ Izumozaki 2.08 279** A A 09 07 53.8
comp=E,64nm,0.7s,comp=N,65nm,0.5s
**JYYZ Yamagatayuza 2.09 330** A A 09 07 54.7
comp=E,59nm,2.5s,comp=N,62nm,1.9s
**JHU Hanno 2.12 230** A A 09 07 54.2
comp=E,7.0nm,0.7s,comp=N,10.0nm,1.3s
**JGK Kuni 2.22 254** A A 09 07 55.7
comp=E,19nm,1.2s,comp=N,16nm,4.4s
**JRG Rokugo 2.23 347** A A 09 07 57.2
comp=E,20nm,4.1s,comp=N,18nm,1.5s
**JKUC kamogawauchiur 2.24 204** A A 09 07 56.2
comp=E,17nm,5.5s,comp=N,16nm,1.7s
**JOM Ohasama 2.25 0** A A 09 07 57.7
comp=E,23nm,0.5s,comp=N,14nm,0.7s
**JRY Ryogami san 2.27 239** A A 09 07 56.3
comp=E,6.0nm,4.8s,comp=N,6.0nm,1.3s
**JSGW Sagamiharawaka 2.33 227** A A 09 07 57.3
comp=E,6.0nm,1.3s,comp=N,7.0nm,0.7s
**MIYJ Miyakonagasawa 2.39 10** A A 09 07 59.8
comp=E,13nm,1.5s,comp=N,11nm,1.4s
**JTB Tobi-shima 2.40 326** A A 09 07 59.2
comp=E,10.0nm,1.2s,comp=N,12nm,3.0s
**JYW Yuwa 2.47 340** A A 09 08 00.4
comp=E,30nm,0.7s,comp=N,34nm,3.0s
**JJN Nakama 2.50 268** A A 09 07 59.8
comp=E,19nm,1.0s,comp=N,24nm,2.0s
**JSZI Iwateshizukuis 2.53 354** A A 09 08 01.6
comp=E,24nm,1.8s,comp=N,24nm,1.2s
**JSD Sado 2.54 290** P **Pn** **09 08 00.1 -0.1**
**JSD Sado 2.54 290** **Pn** **09 07 59.8 -0.4**
**MJAR Matsushiro Arr 2.56 256** Pn **Pn** **09 08 00.2 -0.3**
comp=N,12nm,0.3s,baz=80,slow=16,SNR=158
MJAR Sn **Sn** **09 08 30.7 -0.8**
comp=N,14nm,0.3s,baz=123,slow=43,SNR=4.0
MJAR LR LR 09 08 36.0
comp=N,164nm,21.7s,baz=35,slow=32
comp=N,49nm,0.4s
**MAJO Matsushiro 2.56 256** P **Pn** **09 08 01.3 +0.8**
**MAJO Matsushiro 2.56 256** **Pn** **09 08 01.0 +0.5**
**MAJO Matsushiro 2.56 256** *i* P **Pn** **09 08 00.4 -0.1**
**MJB9 Matsu-Tunnel 2.56 256** **Pn** **09 08 01.0 +0.4**
**JOD2 Odawara 2 2.64 223** A A 09 08 01.8
comp=E,7.0nm,4.4s,comp=N,8.0nm,1.6s
**JTH Tanohata 2.75 9** A A 09 08 05.0
comp=E,10.0nm,2.2s,comp=N,7.0nm,0.5s
**JKZ Kuzumaki 2.76 1** A A 09 08 05.0
comp=E,12nm,2.2s,comp=N,8.0nm,4.1s
**JHTM Izuhatsuma 2.92 220** A A 09 08 05.7
comp=E,11nm,1.3s,comp=N,11nm,2.7s
**JKEN Kujiedanarisaw 3.00 6** A A 09 08 08.5
comp=E,33nm,0.7s,comp=N,34nm,0.9s
**JSZ Suzu 3.14 275** A A 09 08 08.9
comp=E,5.0nm,3.8s,comp=N,7.0nm,3.8s
**JANG Nango 3.15 3** A A 09 08 10.7
comp=E,9.0nm,2.5s,comp=N,5.0nm,2.1s
**JNTW Noshirotokiwa 3.17 344** A A 09 08 10.5
comp=E,35nm,4.2s,comp=N,38nm,2.1s
**JOG3 Oga3 3.20 328** A A 09 08 07.0
comp=E,13nm,2.2s,comp=N,19nm,2.5s
**JTT Ttatey 3.23 260** A A 09 08 10.1
comp=E,10.0nm,1.6s,comp=N,14nm,2.2s
**JHHS Hirosakihyakuz 3.50 348** A A 09 08 15.3
comp=E,13nm,1.6s,comp=N,14nm,1.8s
**JIW Iwasaki 3.51 344** A A 09 08 15.4
comp=E,7.0nm,3.6s,comp=N,8.0nm,1.7s
**JGF Kuroka 3.56 244** P **Pn** **09 08 15.5 +1.2**
**JGF Kuroka 3.56 244** Pn **Pn** **09 08 15.5 +1.2**
**JTM Tenmabayashi 3.57 357** P **Pn** **09 08 15.8 +1.5**
**JTM Tenmabayashi 3.57 357** **Pn** **09 08 16.0 +1.7**
**JTM Tenmabayashi 3.57 357** A A 09 08 16.4
comp=E,6.0nm,1.2s,comp=N,9.0nm,5.4s
**JSG Sagara 3.58 226** **Pb** **09 08 22.4 0.0**
**JJH Hakui 3.62 267** A A 09 08 15.6
comp=E,3.0nm,1.8s,comp=N,5.0nm,3.1s
**JARK Aomorirokkasho 3.78 1** A A 09 08 19.5
comp=E,12nm,1.2s,comp=N,8.0nm,0.9s
**JSI2 Shiura 2 3.89 350** A A 09 08 20.9
comp=E,8.0nm,5.2s,comp=N,7.0nm,2.4s
**INU Inuyama 3.92 243** P **Pn** **09 08 20.8 +1.6**
**INU Inuyama 3.92 243** Pn **Pn** **09 08 20.6 +1.4**
**JAHD Aomorihigashid 4.04 1** A A 09 08 23.1
comp=E,22nm,2.3s,comp=N,26nm,1.5s
**JOT Ohata 4.16 358** A A 09 08 24.8
comp=E,6.0nm,5.3s,comp=N,4.0nm,2.2s
**JHJ Hachijo jima 2 4.27 197** Pn **Pn** **09 08 22.3 -1.7**
comp=N,175nm,0.3s,baz=79,slow=24,SNR=9.9
JHJ Sn **Sn** **09 09 10.8 -2.8**
comp=N,278nm,0.3s,baz=62,slow=22,SNR=11
comp=N,303nm,0.3s
**JHJ2 Mitsune 4.27 197** P **Pn** **09 08 24.1 +0.1**
**ERM Erimo 5.00 16** P **Pn** **09 08 34.7 +0.7**
**ERM Erimo 5.00 16** **Pn** **09 08 35.0 +1.0**
**ERM Erimo 5.00 16** *i* P **Pn** **09 08 35.0 +1.0**
**JEM Erimo 5.00 16** P **Pn** **09 08 34.8 +0.8**
**ASAJ Asahikawa 6.96 8** Pn **Pn** **09 09 00.9 -0.1**
comp=N,8.5nm,0.3s,baz=222,slow=9.5,SNR=29
ASAJ Sn **Sn** **09 10 21.9 +2.1**
comp=N,3.0nm,0.3s,baz=185,slow=30,SNR=1.5
ASAJ LR LR 09 11 52.1
comp=N,337nm,18.8s,baz=229,slow=39
comp=N,16nm,0.3s
**ASAJ Asahikawa 6.96 8** P **Pn** **09 09 01.1 +0.1**
**JKA Kamikawa-asahi 6.96 8** **Pn** **09 09 01.1 +0.1**
**JMN Monobe 6.98 242** P **Pn** **09 09 01.7 +0.5**
**JMN Monobe 6.98 242** **Pn** **09 09 01.8 +0.6**
**NMR Nemuro--Hokkai 7.02 28** *e*P **Pn** **09 08 59.5 -2.2**
NMR *e*S **Sn** **09 10 15.6 -5.6**
**RUSJ Misakicho 7.51 22** *e*P **Pn** **09 09 07.9 -0.5**
RUSJ *e*S **Sn** **09 10 30.6 -2.6**
**YUK Yuzh-Kuril'sk 7.64 26** *e*P **Pn** **09 09 08.4 -1.9**
YUK *e*S **Sn** **09 10 31.7 -4.9**
YUK pmax pmax
comp=Z,177nm,0.4s
YUK pmax pmax
comp=N,72nm,0.3s
YUK pmax pmax
comp=E,112nm,0.3s
**SHO Shikotan 7.87 31** *e*P **Pn** **09 09 10.9 -2.5**
SHO pmax pmax
comp=Z,52nm,0.5s
SHO pmax pmax
comp=E,40nm,0.4s
SHO pmax pmax
comp=N,51nm,0.3s
**TEY Ternei 8.57 337**⇑ *e*P Pn 09 09 32.0 +9.0
TEY *e* 09 11 01.7
TEY pmax pmax
comp=E,10.0nm,1.1s
TEY pmax pmax
comp=N,30nm,1.0s
TEY pmax pmax
comp=Z,40nm,0.9s
**VLA Vladivostok 9.30 312** *e*P **Pn** **09 09 33.0 0.0**
VLA pmax pmax
comp=Z,20nm,0.9s
**KUR Kuril'sk 9.41 30** *e*P **Pn** **09 09 33.5 -1.0**
KUR *e*S **Sn** **09 11 15.7 -4.4**
KUR pmax pmax
comp=N,32nm,0.7s
KUR pmax pmax
comp=Z,71nm,0.7s
KUR pmax pmax
comp=E,26nm,0.6s
KUR smax smax
comp=N,121nm,0.5s
KUR smax smax
comp=E,24nm,0.5s
**MSHR Mys Shultsa 9.45 308** *i* P **Pn** **09 09 33.8 -1.2**
MSHR pmax pmax
comp=Z,19nm,0.9s
**JNU Nakatsue 9.45 247** P **Pn** **09 09 36.3 +1.1**
**JNU Nakatsue 9.45 247** **Pn** **09 09 39.4 +4.2**
**JNU Nakatsue 9.45 247** Pn **Pn** **09 09 33.6 -1.6**
comp=Z,0.3nm,0.3s,baz=339,slow=12,SNR=1.5
comp=Z,7.3nm,0.9s
**YSS Yuzh-Sakhalins 9.79 6** P **Pn** **09 09 41.4 +1.7**
**YSS Yuzh-Sakhalins 9.79 6** **Pn** **09 09 41.4 +1.7**
**YSS Yuzh-Sakhalins 9.79 6** *e*P **Pn** **09 09 41.9 +2.2**
YSS *e*S **Sn** **09 11 28.8 -0.5**
YSS pmax pmax
comp=Z,60nm,0.6s
YSS pmax pmax
comp=Z,100nm,3.0s
YSS MLR MLR
comp=N,400nm,14.0s
YSS MLR MLR
comp=E,700nm,14.0s
**USA0B Ussuriysk Arra 9.92 318** **Pn** **09 09 40.0 -1.5**
**USA0B Ussuriysk Arra 9.92 318** *i* P **Pn** **09 09 41.5 0.0**
**USRK Ussuriysk Ar. 9.92 318** Pn **Pn** **09 09 42.1 +0.6**
comp=E,1.2nm,0.3s,baz=132,slow=13,SNR=24
USRK LR LR 09 13 25.6
comp=E,561nm,18.3s,baz=126,slow=37
comp=E,9.1nm,0.6s
**JCJ Chichijima 10.12 175** P **Pn** **09 09 45.1 +0.7**
**JCJ Chichijima 10.12 175** Pn **Pn** **09 09 43.4 -1.0**
**JCJ Chichijima 10.12 175** Pn Pn 09 09 35.7 -8.6
comp=E,26nm,0.3s,baz=310,slow=20,SNR=6.1
JCJ Sn Sn 09 11 25.2 -12
comp=E,30nm,0.3s,baz=157,slow=23,SNR=5.7
**KSRS Korea Array 10.65 275** Pn **Pn** **09 09 53.6 +2.1**
comp=E,1.0nm,0.3s,baz=90,slow=14,SNR=21
KSRS LR LR 09 13 25.4
comp=E,171nm,20.5s,baz=80,slow=35
**KSAR Wonju Array Be 10.68 275** Pn 09 09 57.6 +5.7
**KSAR Wonju Array Be 10.68 275** P Pn 09 09 57.6 +5.7
**KS19 Wonju Array Si 10.69 276** **Pn** **09 09 50.9 -1.2**
**TJN Taejon 11.20 270** *i* P **Pn** **09 09 59.2 +0.2**
**MDJ Mudanjiang 11.52 314** P Pn 09 10 08.7 +5.3
MDJ pmax pmax
comp=E,14nm,1.1s
MDJ LR LR
comp=E,530nm,13.1s
MDJ LR LR
comp=E,430nm,15.1s
MDJ LR LR
comp=E,650nm,17.2s
**INCN Inchon 11.67 276** Pn **Pn** **09 10 05.6 +0.1**
**INCN Inchon 11.67 276** P **Pn** **09 10 05.6 +0.1**
**BNX BinXian 13.43 314**⇓ P **Pn** **09 10 28.5 -1.0**
BNX pmax pmax
comp=E,5.0nm,1.4s
**TYV Tymovskoe 13.68 4** *e*P **Pn** **09 10 35.6 +2.8**
TYV pmax pmax
comp=Z,200nm,4.2s
TYV pmax pmax
comp=Z,22nm,0.7s
TYV MLR MLR
comp=Z,400nm,14.0s
**KLR Kul'dur 13.86 333** Pn **Pn** **09 10 35.9 +0.6**
comp=Z,0.3nm,0.3s,baz=166,slow=8.3,SNR=2.7
KLR LR LR 09 16 01.8
comp=Z,289nm,18.9s,baz=146,slow=38
comp=Z,1.0nm,0.5s
**KLR Kul'dur 13.86 333** *e*P **P** **09 10 42.4 -1.2**
KLR pmax pmax
comp=Z,21nm,1.3s
**JMZ Minamidaito 2 14.23 220** Pn **Pn** **09 10 40.1 -0.4**
**DL2 Dalian 15.58 282** P **P** **09 11 04.3 +1.5**
DL2 S **S** **09 14 04.2 -2.1**
DL2 pmax pmax
comp=Z,24nm,0.7s
DL2 LR LR
comp=Z,380nm,10.6s
DL2 LR LR
comp=Z,470nm,10.5s
DL2 LR LR
comp=Z,730nm,10.5s
**OKH Okha 16.37 3***de*P **Pn** **09 11 08.6 0.0**
OKH MLR MLR
comp=N,500nm,15.0s
OKH MLR MLR
comp=Z,300nm,15.0s
**HEH HeiHe 16.40 327** *e*P **P** **09 11 14.6 +2.8**
HEH pmax pmax
comp=Z,6.0nm,0.8s
HEH pmax pmax
comp=Z,120nm,4.0s
HEH LR LR
comp=N,180nm,14.1s
HEH LR LR
comp=E,450nm,13.4s
HEH LR LR
comp=Z,370nm,13.1s
**NJ2 Nanjing 19.15 261** *e*P **P** **09 11 41.5 -0.8**
NJ2 pmax pmax
comp=Z,14nm,0.6s
**ZEA Zeya 19.17 334** *e*P **Pn** **09 11 48.5 +5.3**
ZEA pmax pmax
comp=E,10.0nm,0.7s
ZEA pmax pmax
comp=N,10.0nm,0.5s
ZEA pmax pmax
comp=Z,20nm,0.8s
ZEA MLR MLR
comp=N,200nm,14.0s
ZEA MLR MLR
comp=Z,200nm,12.0s
**TIA Tai'an 19.39 274** P **Pn** **09 11 48.6 +2.5**
TIA pmax pmax
comp=Z,19nm,0.8s
TIA LR LR
comp=Z,280nm,10.7s
TIA LR LR
comp=Z,430nm,13.0s
TIA LR LR
comp=Z,520nm,12.7s
**HIA Hailar 19.70 314** *i* P **P** **09 11 47.8 -0.5**
HIA pmax pmax
comp=Z,2.0nm,0.8s
**XLT XiLinHaoTe 20.24 297** *e*P **P** **09 11 54.2 0.0**
XLT pmax pmax
comp=Z,30nm,0.9s
XLT pmax pmax
comp=Z,160nm,5.8s
XLT LR LR
comp=Z,45nm,10.1s
XLT LR LR
comp=Z,400nm,16.6s
XLT LR LR
comp=Z,380nm,15.3s
**YHNB Yeheng 21.12 239** P **P** **09 12 05.4 +1.6**
**HNS HongShan 21.12 279**⇑ P **P** **09 12 01.0 -2.7**
HNS pmax pmax
comp=Z,63nm,0.8s
HNS LR LR
comp=Z,480nm,13.1s
HNS LR LR
comp=Z,630nm,13.3s
**NACB Ninganchiao 21.30 238** P **P** **09 12 07.0 +1.3**
**YULB Yu-li 22.03 237** P **P** **09 12 12.8 -0.8**
**MA2 Magadan 23.19 12** LR LR 09 21 07.7
comp=Z,116nm,20.6s,baz=211,slow=36
**WHN Wuhan 23.29 261** P **P** **09 12 29.2 +2.5**
WHN LR LR
comp=Z,2μm,15.2s
WHN LR LR
comp=Z,2μm,17.9s
WHN LR LR
comp=Z,1μm,13.5s
**HHC Hu-ho-hao-te 23.32 288** *e*P **P** **09 12 27.0 -0.1**
HHC pP pP 09 12 30.9 -0.5
HHC sP sP 09 12 34.9 +1.7
HHC S **S** **09 16 32.0 -7.3**
HHC SS SnSn 09 17 29.4 +16
HHC pmax pmax
comp=Z,12nm,0.5s
HHC pmax pmax
comp=Z,110nm,5.4s
HHC LR LR
comp=Z,250nm,10.8s
HHC LR LR
comp=Z,220nm,11.6s
HHC LR LR
comp=Z,250nm,10.4s
**YAK Yakutsk 25.87 347** P **P** **09 12 51.5 +1.2**
**YAK Yakutsk 25.87 347** LR LR 09 22 59.9
comp=Z,230nm,20.9s,baz=140,slow=36
**YAK Yakutsk 25.87 347** *e*P **P** **09 12 52.1 +1.8**
YAK *e* 09 13 28.0
YAK *e* 09 16 19.5
YAK *e*S **S** **09 17 19.0 -0.4**
YAK *e*SS **SnSn** **09 18 21.0 +5.5**
YAK *e* 09 23 48.1
YAK pmax pmax
comp=Z,57nm,0.9s
YAK pmax pmax
comp=N,15nm,0.9s
YAK pmax pmax
comp=E,5.0nm,0.9s
YAK pmax pmax
comp=Z,167nm,3.7s
YAK pmax pmax
comp=N,126nm,3.8s
YAK pmax pmax
comp=E,89nm,3.8s
YAK smax smax
comp=N,151nm,2.5s
YAK smax smax
comp=E,25nm,2.0s
**SEY Seymchan 26.63 11** *e*P **P** **09 12 59.1 +1.9**
SEY pmax pmax
comp=Z,37nm,1.1s
**SZP Santa 26.84 229** P **P** **09 13 00.7 +1.2**
**ULN Ulaanbaatar 27.17 304** P **P** **09 13 02.8 +0.4**
**ULN Ulaanbaatar 27.17 304***ce*P **P** **09 13 02.7 +0.2**
ULN pmax pmax
comp=Z,3.0nm,0.6s
**SONM Songino Array 27.60 304** P **P** **09 13 07.1 +0.8**
**SONM Songino Array 27.60 304** P **P** **09 13 05.7 -0.6**
comp=Z,2.8nm,0.5s,baz=106,slow=9.0,SNR=18
SONM PcP **PcP** **09 16 23.8 +0.2**
comp=Z,0.8nm,0.5s,baz=121,slow=3.5,SNR=2.5
comp=Z,2.8nm,0.5s
**SONM Songino Array 27.60 304** P **P** **09 13 07.1 +0.8**
**LZH Lanzhou 29.94 279** *e*P **P** **09 13 29.1 +1.9**
LZH sP sP 09 13 42.0 +8.5
LZH pmax pmax
comp=Z,25nm,1.0s
LZH LR LR
comp=Z,540nm,19.2s
LZH LR LR
comp=Z,300nm,15.1s
LZH LR LR
comp=Z,350nm,15.1s
**ZAK Zakamensk 30.08 308** *e*P **P** **09 13 28.1 -0.1**
ZAK pmax pmax
comp=Z,3.0nm,1.2s
**GYA Guiyang 31.15 260** P **P** **09 13 39.7 +1.7**
GYA S **S** **09 18 44.3 +0.8**
GYA pmax pmax
comp=Z,21nm,0.8s
GYA pmax pmax
comp=Z,160nm,5.1s
GYA LR LR
comp=Z,350nm,13.4s
GYA LR LR
comp=Z,290nm,15.7s
GYA LR LR
comp=Z,290nm,13.6s
**GTA Gaotai 32.41 287** P P 09 13 53.6 +4.6
GTA LR LR
comp=Z,53nm,13.8s
GTA LR LR
comp=Z,180nm,14.9s
GTA LR LR
comp=Z,200nm,14.2s
**QIZ Qiongzhong 32.91 245** P **P** **09 13 53.6 +0.2**
QIZ S **S** **09 19 12.3 +1.5**
QIZ LR LR
comp=Z,210nm,17.6s
QIZ LR LR
comp=Z,270nm,15.1s
QIZ LR LR
comp=Z,200nm,12.0s
**DAV Davao City (W) 33.24 209** LR LR 09 26 24.9
comp=Z,59nm,20.8s,baz=192,slow=35
**BILL Bilibino 33.88 17**⇓ *e*P **P** **09 14 03.3 +2.0**
BILL *e* 09 15 20.7
BILL pmax pmax
comp=Z,5.0nm,1.0s
BILL MLR MLR
comp=Z,83nm,17.0s
**PZH PanZhiHua 35.02 264** P **P** **09 14 14.4 +2.6**
PZH S **S** **09 19 43.5 -0.1**
PZH pmax pmax
comp=Z,30nm,0.8s
PZH pmax pmax
comp=Z,150nm,4.7s
PZH LR LR
comp=Z,290nm,15.1s
PZH LR LR
comp=Z,220nm,13.3s
PZH LR LR
comp=Z,180nm,11.3s
**TIXI Tiksi 35.09 353** *i* P **P** **09 14 13.0 +1.3**
TIXI pmax pmax
comp=Z,11nm,0.9s
**SPIA Saint Paul Isl 37.49 42** P **P** **09 14 32.6 +0.2**
baz=259
**NIKH Nikolski High 37.73 49** P **P** **09 14 34.8 +0.3**
baz=266
**TNTI Ternate 38.48 203** P **P** **09 14 42.2 +1.1**
**GAMB Gambell 38.61 31** P **P** **09 14 42.1 +0.4**
baz=249
**UNV Unalaska Valle 39.19 48** P **P** **09 14 46.3 -0.4**
baz=267
**M11K Mekoryuk 40.18 38** P **P** **09 14 55.1 +0.3**
baz=259
**DGZ Jazzator, Alta 40.20 306** *i* P **P** **09 14 55.3 -0.1**
**WMQ Urumqi 40.67 297** *e*P **P** **09 15 00.8 +1.6**
WMQ pmax pmax
comp=Z,16nm,0.7s
WMQ LR LR
comp=Z,540nm,17.9s
WMQ LR LR
comp=Z,210nm,10.9s
WMQ LR LR
comp=Z,120nm,15.7s
**FAKI Fak Fak 40.81 194** P **P** **09 15 01.7 +1.2**
**FAKI Fak Fak 40.81 194** P **P** **09 15 00.4 -0.1**
FAKI IAmb IAmb 09 15 07.3
comp=Z,23nm,0.8s
**CMAR Chiang Mai Arr 41.45 255** P **P** **09 15 05.0 -0.8**
comp=Z,1.5nm,0.3s,baz=50,slow=8.4,SNR=1.9
CMAR LR LR 09 34 22.3
comp=Z,49nm,18.7s,baz=255,slow=39
comp=Z,1.5nm,0.3s
**ZAA0 Zalesovo Array 41.72 312** P **P** **09 15 08.2 +0.5**
ZAA0 IAmb IAmb 09 15 13.4
comp=Z,9.8nm,0.6s
**ZALV Zalesovo Beam 41.72 312** P **P** **09 15 08.2 +0.6**
**ZALV Zalesovo Beam 41.72 312** P **P** **09 15 07.2 -0.4**
comp=Z,3.1nm,0.4s,baz=92,slow=7.0,SNR=18
ZALV PcP **PcP** **09 17 03.0 -0.9**
comp=Z,1.1nm,0.4s,baz=86,slow=4.5,SNR=1.8
ZALV LR LR 09 33 24.6
comp=Z,172nm,18.1s,baz=74,slow=38
comp=Z,3.1nm,0.4s
**ZALV Zalesovo Beam 41.72 312** P **P** **09 15 08.2 +0.6**
**S12K Black Hills 41.85 45** P **P** **09 15 08.5 -0.2**
baz=268
**L14K Kuka Creek 42.04 37** P **P** **09 15 09.7 -0.4**
baz=261
**G15K Niukluk 42.15 31** P **P** **09 15 10.6 -0.4**
baz=256
**N14K Kuskokwak Cree 42.34 39** P **P** **09 15 12.2 -0.4**
baz=264
**O14K Tigyukauivet M 42.49 40** P **P** **09 15 14.1 +0.3**
baz=265
**C16K Lisburne Hills 42.58 26** P **P** **09 15 14.5 0.0**
baz=251
**L15K Ungalak Mounta 42.65 36** P **P** **09 15 15.1 0.0**
baz=262
**K15K Wolf Creek Mou 42.72 35** P **P** **09 15 15.8 +0.1**
baz=261
**SDPT Sand Point 42.74 46** P P **09 15 15.3 -0.6**

baz=270
**H16K Elim** 42.82 32 P P 09 15 16.3 -0.2
baz=258
**M15K Kasigluk River** 42.92 38 P P 09 15 17.2 -0.1
baz=264
**N15K Kwethluk River** 43.16 39 P P 09 15 21.9 +2.6
N15K IAmb IAmb 09 15 27.0
comp=Z,17nm,1.1s
**N15K Kwethluk River** 43.16 39 P P 09 15 18.4 -0.9
baz=265
**D17K Noatak River** 43.22 27 P P 09 15 18.9 -0.8
baz=254
**O15K Ungalikthiuk R** 43.22 40 P P 09 15 19.3 -0.5
baz=266
**CHNA Chernabura Isl** 43.26 46 P P 09 15 18.7 -1.4
baz=271
**J16K Anvik River** 43.29 34 P P 09 15 19.6 -0.7
baz=261
**RDOG Red Dog Mine** 43.38 27 P P 09 15 20.9 -0.1
baz=254
**C17K DeLong Mountai** 43.41 26 P P 09 15 20.0 -1.2
baz=253
**E17K Hotham Inlet** 43.53 28 P P 09 15 21.7 -0.5
baz=256
**F17K Baldwin Pennin** 43.61 29 P P 09 15 22.0 -0.8
baz=257
**L16K Owhat River** 43.61 36 P P 09 15 21.5 -1.4
baz=264
**G17K Kiwalik Mounta** 43.65 31 P P 09 15 21.6 -1.6
baz=259
**M16K Timber Creek** 43.79 37 P P 09 15 22.8 -1.6
baz=265
**N16K Nishlik Lake** 43.84 38 P P 09 15 22.9 -1.9
baz=266
**H17K Granite Mounta** 43.86 32 P P 09 15 26.9 +2.1
**H17K Granite Mounta** 43.86 32 P P 09 15 22.2 -2.7
baz=260
**CHGN Chignik** 43.90 44 P P 09 15 22.8 -2.5
baz=271
**MK31 Makanchi Array** 43.94 302 P P 09 15 26.2 +0.4
MK31 IAmb IAmb 09 15 32.1
comp=Z,9.0nm,0.7s
**MK31 Makanchi Array** 43.94 302 *ce*P P 09 15 24.9 -0.9
**MKAR Makanchi Array** 43.94 302 P P 09 15 25.5 -0.3
**MKAR Makanchi Array** 43.94 302 P P 09 15 25.4 -0.4
comp=Z,4.2nm,0.6s,baz=88,slow=9.7,SNR=47
MKAR LR LR 09 34 14.8
comp=Z,73nm,18.1s,baz=88,slow=37
comp=Z,4.2nm,0.6s
**MKAR Makanchi Array** 43.94 302 P P 09 15 25.5 -0.3
**J17K VABM Dome** 43.99 34 P P 09 15 27.5 +1.6
**J17K VABM Dome** 43.99 34 P P 09 15 24.0 -1.9
baz=263
**E18K Tukpahlearik C** 44.08 28 P P 09 15 28.8 +2.3
E18K IAmb IAmb 09 15 45.0
comp=Z,16nm,1.0s
**E18K Tukpahlearik C** 44.08 28 P P 09 15 25.2 -1.3
baz=257
**O16K Kokwok River B** 44.13 40 P P 09 15 25.7 -1.3
baz=268
**B18K Kokolik River** 44.14 25 P P 09 15 26.5 -0.5
baz=254
**MAKZ Makanchi** 44.15 302 P P 09 15 27.8 +0.4
MAKZ IAmb IAmb 09 15 33.8
comp=Z,9.6nm,0.7s
**MAKZ Makanchi** 44.15 302 P P 09 15 27.8 +0.4
MAKZ pmax pmax
comp=Z,10.0nm,0.7s
**C18K Utukok River** 44.16 26 P P 09 15 28.7 +1.5
**C18K Utukok River** 44.16 26 P P 09 15 26.9 -0.4
baz=255,SNR=10.0
**L17K Donlin** 44.20 36 P P 09 15 26.6 -1.1
baz=265
**K17K Iditarod** 44.26 35 P P 09 15 30.4 +2.3
K17K IAmb IAmb 09 15 31.3
comp=Z,8.7nm,0.9s
**K17K Iditarod** 44.26 35 P P 09 15 27.0 -1.1
baz=264
**F18K Selawik** 44.27 29 P P 09 15 27.3 -0.8
baz=259
**R16K Pilot Point** 44.36 42 P P 09 15 27.9 -1.0
baz=270
**G18K Tagagawik** 44.54 30 P P 09 15 31.9 +1.6
G18K IAmb IAmb 09 15 32.8
comp=Z,11nm,1.1s
**G18K Tagagawik** 44.54 30 P P 09 15 28.9 -1.4
baz=260
**H18K Honhosa River** 44.54 32 P P 09 15 31.8 +1.5
H18K IAmb IAmb 09 15 32.9
comp=Z,11nm,1.1s
**H18K Honhosa River** 44.54 32 P P 09 15 28.6 -1.7
baz=262
**M17K Holitna River** 44.55 37 P P 09 15 32.9 +2.4
M17K IAmb IAmb 09 15 34.0
comp=Z,6.7nm,0.8s
**M17K Holitna River** 44.55 37 P P 09 15 28.8 -1.6
baz=266
**A19K Wainwright** 44.62 24 P P 09 15 29.2 -1.6
baz=254
**N17K Nushagak Hills** 44.63 38 P P 09 15 30.0 -1.1
baz=267
**O17K Koliganek Bris** 44.64 39 P P 09 15 30.4 -0.8
baz=268
**C19K Lookout Ridge** 44.83 26 P P 09 15 34.8 +2.1
**C19K Lookout Ridge** 44.83 26 P P 09 15 31.0 -1.7
baz=256,SNR=9.2
**Q16K King Salmon** 44.85 41 P P 09 15 31.5 -1.3
baz=270
**L18K Granite Mounta** 44.96 36 P P 09 15 33.2 -0.6
baz=266
**P17K Kvichak River** 44.96 40 P P 09 15 32.1 -1.6
baz=269
**F19K Shaleruckik Mo** 45.04 29 P P 09 15 35.8 +1.5
F19K IAmb IAmb 09 16 00.8
comp=Z,9.3nm,1.1s
**F19K Shaleruckik Mo** 45.04 29 P P 09 15 32.9 -1.4
baz=260
**J18K Innoko River** 45.05 34 P P 09 15 33.0 -1.4
baz=265
**G19K Purcell Mounta** 45.21 30 P P 09 15 37.2 +1.6
**G19K Purcell Mounta** 45.21 30 P P 09 15 34.8 -0.9
baz=262
**D19K Kuna River** 45.22 27 P P 09 15 35.3 -0.4
baz=258
**Q17K Contact Creek** 45.25 41 P P 09 15 33.6 -2.6
baz=271
**N18K Kilae Creek** 45.27 38 IAmb IAmb 09 15 39.5
comp=Z,9.4nm,0.9s
**N18K Kilae Creek** 45.27 38 P P 09 15 35.6 -0.6
baz=268
**M18K Stony River** 45.33 37 P P 09 15 36.1 -0.6
baz=268
**E19K Redstone River** 45.36 28 P P 09 15 36.1 -0.7
baz=260
**H19K Roundabout Mou** 45.39 31 IAmb IAmb 09 15 39.8
comp=Z,14nm,1.1s
**H19K Roundabout Mou** 45.39 31 P P 09 15 36.7 -0.3
baz=263,SNR=6.9
**CHIR Chirikof Islan** 45.48 45 P P 09 15 37.3 -0.6
baz=273
**J19K Poorman** 45.58 33 P P 09 15 40.3 +1.7
J19K IAmb IAmb 09 15 41.0
comp=Z,7.7nm,0.8s
**J19K Poorman** 45.58 33 P P 09 15 38.0 -0.6
baz=265,SNR=5.6
**P18K Big Mountain,** 45.59 40 P P 09 15 37.3 -1.4
baz=270
**KSM Kuching** 45.61 226 P P 09 15 39.9 +0.5
**Q18K Katmai Hardscr** 45.71 41 P P 09 15 39.1 -0.7
baz=271
**KURK Kurchatov** 45.74 308 P P 09 15 39.7 -0.3
**KURK Kurchatov** 45.74 308 *ce*P P 09 15 39.9 -0.1
KURK pmax pmax
comp=Z,40nm,1.7s
**D20K Etivluk River** 45.80 27 P P 09 15 40.2 -0.1
baz=260,SNR=11
**KURBB Kurchatov Arra** 45.81 308 P P 09 15 40.3 -0.3
comp=Z,5.5nm,0.5s,baz=84,slow=8.4,SNR=18
KURBB LR LR 09 35 37.4
comp=Z,98nm,18.4s,baz=175,slow=37
comp=Z,5.5nm,0.5s
**KURBB Kurchatov Arra** 45.81 308 P P 09 15 38.6 -2.0
**L19K White Mountain** 45.82 36 P P 09 15 40.0 -0.5
baz=268
**B20K Meade River** 45.87 25 P P 09 15 40.7 0.0
baz=258,SNR=11
**F20K Avaraart Lake** 45.87 29 P P 09 15 40.9 +0.1
baz=262
**E20K Nigu River** 45.88 27 P P 09 15 41.1 +0.1
baz=261,SNR=7.3
**N19K Bonanza Creek** 45.97 38 P P 09 15 42.7 +0.9
baz=269
**M19K Big River Lodg** 46.03 36 P P 09 15 42.4 +0.2
baz=268
**H20K Anotlenaega Mo** 46.03 31 P P 09 15 42.3 +0.2
baz=264
**R18K Karluk** 46.04 42 P P 09 15 42.0 -0.3
baz=273
**I20K Naaghedeneel** 46.14 32 P P 09 15 43.7 +0.8
baz=266
**K20K Telida** 46.23 34 IAmb IAmb 09 15 46.7
comp=Z,9.6nm,0.8s
**K20K Telida** 46.23 34 P P 09 15 43.9 +0.2
baz=267,SNR=10
**SII Sitkinak Islan** 46.24 44 P P 09 15 43.6 -0.4
baz=274
**J20K Nowinta River** 46.24 33 IAmb IAmb 09 15 46.7
comp=Z,9.3nm,0.9s
**J20K Nowinta River** 46.24 33 P P 09 15 43.4 -0.4
baz=266,SNR=8.9
**L20K Farewell, AK** 46.29 36 P P 09 15 43.6 -0.7
baz=268,SNR=5.1
**IMAR Indian Mountai** 46.54 31 P P 09 15 46.8 +0.6
**KAPI Kappang** 46.57 210 P P 09 15 47.5 +0.6
**KAPI Kappang** 46.57 210 LR LR 09 35 36.4
comp=Z,36nm,18.1s,baz=58,slow=37
**KAPI Kappang** 46.57 210 *i* P P 09 15 47.1 +0.2
KAPI pmax pmax
comp=Z,33nm,1.1s
**PDGK Podgornoye** 46.60 298 P P 09 15 45.4 -1.7
**M20K Styx River** 46.63 36 IAmb IAmb 09 15 56.5
comp=Z,6.6nm,0.9s
**M20K Styx River** 46.63 36 P P 09 15 45.7 -1.3
baz=270
**SHLS Shalkode** 46.66 298 *e*P P 09 15 44.8 -2.8
SHLS pmax pmax
comp=Z,47nm,3.8s
**B21K Ikpikpuk River** 46.66 26 P P 09 15 48.4 +1.3
**B21K Ikpikpuk River** 46.66 26 P P 09 15 46.7 -0.3
baz=261,SNR=19
**OHAK Old Harbor** 46.69 43 P P 09 15 49.7 +2.4
**OHAK Old Harbor** 46.69 43 P P 09 15 46.4 -0.9
baz=274
**G21K Allakaket** 46.69 30 P P 09 15 47.5 +0.1
G21K IAmb IAmb 09 16 14.8
comp=Z,6.0nm,0.9s
**G21K Allakaket** 46.69 30 P P 09 15 47.4 +0.1
baz=265,SNR=5.1
**E21K Killik River** 46.72 27 P P 09 15 48.0 +0.4
**E21K Killik River** 46.72 27 P P 09 15 47.4 -0.1
baz=263
**F21K Alatna River** 46.77 29 P P 09 15 48.8 +0.8
F21K IAmb IAmb 09 16 06.5
comp=Z,4.3nm,0.8s
**F21K Alatna River** 46.77 29 P P 09 15 47.2 -0.7
baz=264
**A22K Sinclair Lake** 46.78 24 P P 09 15 47.1 -0.9
baz=259
**O20K Slope Mountain** 46.89 39 P P 09 15 48.6 -0.4
baz=272
**H21K Melozitna Rive** 46.91 31 IAmb IAmb 09 15 51.6
comp=Z,4.9nm,1.0s
**H21K Melozitna Rive** 46.91 31 P P 09 15 48.6 -0.4
baz=266,SNR=5.9
**UZB Uzynbulak** 46.98 298 *e*P P 09 15 49.1 -1.0
**KDAK Kodiak Island** 47.03 42 P P 09 15 51.0 +1.0
**KDAK Kodiak Island** 47.03 42 P P 09 15 49.5 -0.5
baz=274
**KDAK Kodiak Island** 47.03 42 P P 09 15 51.0 +1.0
KDAK pmax pmax
comp=Z,17nm,0.7s
**CHUM Lake Minchumin** 47.03 34 P P 09 15 49.8 -0.2
baz=268,SNR=5.2
**N20K Mount Spurr** 47.07 37 P P 09 15 50.5 +0.1
baz=271
**PPLA Purkeypile** 47.07 35 P P 09 15 51.0 +0.5
baz=270
**KPKS Kokpek** 47.13 298 *e*P P 09 15 48.8 -2.4
KPKS pmax pmax
comp=Z,22nm,3.7s
**B22K Teshekpuk Lake** 47.18 25 P P 09 15 51.3 +0.3
baz=261,SNR=6.0
**D22K Ayikyak River** 47.24 27 P P 09 15 52.3 +0.7
baz=263,SNR=17
**F22K John River** 47.29 29 P P 09 15 52.4 +0.4
baz=265
**SKT Skwentna** 47.38 36 IAmb IAmb 09 16 03.4
comp=Z,4.5nm,0.8s
**SKT Skwentna** 47.38 36 P P 09 15 53.2 +0.4
baz=271
**HOM Homer** 47.41 39 P P 09 15 53.6 +0.7
baz=273
**H22K Ishtalitna Cre** 47.51 31 P P 09 15 54.1 +0.4
baz=267,SNR=6.4
**G22K Bettles** 47.51 30 P P 09 15 53.3 -0.4
baz=266,SNR=8.4
**ARXS Arharly** 47.55 299 *e*P P 09 15 53.1 -1.3
**BPAW Bear Paw Mtn.** 47.62 33 IAmb IAmb 09 16 04.0
comp=Z,3.7nm,0.6s
**BPAW Bear Paw Mtn.** 47.62 33 P P 09 15 54.3 -0.4
baz=269,SNR=6.7
**MLY Manley** 47.75 32 IAmb IAmb 09 15 58.4
comp=Z,7.3nm,0.9s
**MLY Manley** 47.75 32 P P 09 15 55.1 -0.5
baz=269,SNR=11
**SUA Susitna One** 47.77 37 IAmb IAmb 09 15 58.6
comp=Z,8.7nm,0.9s
**SUA Susitna One** 47.77 37 P P 09 15 54.9 -1.1
baz=272
**BRSE Bradley Lake S** 47.86 39 P P 09 15 55.8 -0.7
baz=274
**D23K Nanushuk River** 47.97 27 P P 09 15 57.1 -0.1
baz=265
**COLD Coldfoot** 48.04 29 P P 09 15 57.4 -0.4
baz=267
**C23K Itkillik River** 48.07 26 P P 09 15 58.2 +0.2
baz=265,SNR=22
**G23K Bananza Creek** 48.09 30 P P 09 15 58.3 +0.1
baz=268,SNR=5.3
**H23K Yukon River** 48.26 31 IAmb IAmb 09 16 02.7
comp=Z,9.6nm,0.8s
**H23K Yuh River** 48.26 31 P P 09 15 59.9 +0.4
baz=269,SNR=13
**RC01 Rabbit Creek A** 48.27 37 IAmb IAmb 09 16 08.4
comp=Z,9.5nm,0.8s
**RC01 Rabbit Creek A** 48.27 37 P P 09 15 59.3 -0.4
baz=273
**E23K Chandalar** 48.30 28 P P 09 15 59.5 -0.5
baz=267,SNR=15
**I23K Minto, Yukon-K** 48.33 32 P P 09 15 59.5 -0.5
baz=270
**TOLK Toolik Lake Re** 48.35 27 P P 09 15 59.5 -0.8
baz=267
**NEA2 Nenana** 48.46 33 IAmb IAmb 09 16 10.1
comp=Z,5.7nm,0.8s
**NEA2 Nenana** 48.46 33 P P 09 16 00.4 -0.7
baz=271,SNR=7.6
**SEW Seward** 48.48 39 P P 09 16 00.6 -0.6
baz=274
**MCK McKinley** 48.53 34 P P 09 16 01.3 -0.4
baz=272
**MCK McKinley** 48.53 34 P P 09 16 02.5 +0.8
**PMR Palmer** 48.54 37 IAmb IAmb 09 16 04.1
comp=Z,8.1nm,0.8s
**PMR Palmer** 48.54 37 P P 09 16 00.9 -0.8
baz=273,SNR=6.4
**RND Reindeer** 48.58 34 P P 09 16 02.3 +0.2
**D24K Happy Valley** 48.65 27 P P 09 16 02.6 +0.1
baz=267,SNR=7.7
**C24K Franklin Bluff** 48.73 26 P P 09 16 03.2 +0.1
baz=266
**E24K Your Creek** 48.73 28 IAmb IAmb 09 16 12.9
comp=Z,9.0nm,0.8s
**E24K Your Creek** 48.73 28 P P 09 16 02.7 -0.5
baz=268,SNR=7.2
**WAT1 Susitna Watana** 48.74 35 P P 09 16 02.1 -1.2
baz=273
**MDM Murphy Dome** 48.81 32 P P 09 16 05.5 +1.6
MDM IAmb IAmb 09 16 06.4
comp=Z,12nm,0.9s
**KNK Knik Glacier** 48.87 37 P P 09 16 03.9 -0.4
baz=274
**SML Sawmill** 48.90 36 P P 09 16 04.1 -0.5
baz=274,SNR=6.2
**F24K Squaw Lake** 48.94 29 P P 09 16 04.6 -0.2
baz=269
**H24K Noodor Dome** 48.95 31 IAmb IAmb 09 16 07.8
comp=Z,6.7nm,0.9s
**H24K Noodor Dome** 48.95 31 P P 09 16 04.9 0.0
baz=271,SNR=8.3
**PWL Port Wells** 48.97 38 IAmb IAmb 09 16 06.6
comp=Z,10nm,0.9s
**PWL Port Wells** 48.97 38 P P 09 16 04.4 -0.7
baz=275
**COLA College** 48.98 32 P P 09 16 07.7 +2.7
**COLA College** 48.98 32 P P 09 16 06.2 +1.2
COLA IAmb IAmb 09 16 07.3
comp=Z,8.3nm,0.7s
**COLA College** 48.98 32 P P 09 16 05.1 +0.1
baz=272
**COLA College** 48.98 32 *i* P P 09 16 06.1 +1.1
COLA pmax pmax
comp=Z,5.0nm,0.9s
**G24K Hadweenzic Riv** 49.10 30 IAmb IAmb 09 16 14.1
comp=Z,5.8nm,0.8s
**G24K Hadweenzic Riv** 49.10 30 P P 09 16 05.0 -1.0
baz=270,SNR=7.2
**WAT6 Susitna Watana** 49.13 35 P P 09 16 05.5 -0.9
baz=274
**POKR Poker Plat Res** 49.15 32 P P 09 16 06.2 -0.2
baz=272,SNR=6.5
**M23K Glacier View** 49.19 36 P P 09 16 06.3 -0.4
baz=274
**DHY Denali Highway** 49.27 35 P P 09 16 06.6 -0.9
baz=274
**SCM Sheep Creek Mo** 49.38 36 P P 09 16 07.4 -0.8
baz=275
**HDA Harding Lake** 49.38 33 IAmb IAmb 09 16 09.6
comp=Z,11nm,0.9s
**HDA Harding Lake** 49.38 33 P P 09 16 07.7 -0.4
baz=273,SNR=6.3
**IL31** 49.39 32 IAmb IAmb 09 16 16.8
comp=Z,9.9nm,0.8s
**ILAR Eielson Array** 49.39 32 P P 09 16 05.6 -2.6
**ILAR Eielson Array** 49.39 32 P P 09 16 08.8 +0.6
comp=Z,7.4nm,0.7s,baz=270,slow=6.5,SNR=96
ILAR LR LR 09 38 37.9
comp=Z,33nm,20.5s,baz=272,slow=38
comp=Z,7.4nm,0.7s
**TKM2 Tokmak 2** 49.45 298 P P 09 16 09.3 0.0
**P23K Montague Islan** 49.51 39 P P 09 16 08.2 -0.9
baz=276
**D25K Kavik River** 49.53 26 IAmb IAmb 09 16 11.7
comp=Z,11nm,0.8s
**D25K Kavik River** 49.53 26 P P 09 16 08.3 -1.0
baz=269,SNR=11
**GLI Glacier Island** 49.57 38 P P 09 16 09.8 +0.1
baz=276
**HNR Honiara** 49.59 156 LR LR 09 35 15.8
comp=Z,708nm,21.1s,baz=8.5,slow=34
**G25K Bearman Lake** 49.65 30 P P 09 16 10.5 +0.4
baz=272
**H25L Birch Creek** 49.77 30 P P 09 16 11.2 +0.1
baz=272,SNR=5.7
**F25K Christian Rive** 49.80 29 P P 09 16 12.2 +0.8
baz=271,SNR=9.4
**M24K Tolsona, Glenn** 49.90 36 P P 09 16 11.9 -0.2
baz=275
**PRP Porcupine Dome** 49.93 31 IAmb IAmb 09 16 14.9
comp=Z,6.8nm,0.8s
**PRP Porcupine Dome** 49.93 31 P P 09 16 12.7 +0.2
baz=273,SNR=12
**K24K Donnelly Dome** 49.93 34 P P 09 16 12.4 0.0
baz=274
**BTLS Baital** 49.93 301 *e*P P 09 16 11.9 -0.7
BTLS pmax pmax
comp=Z,20nm,3.8s
**SGDS Sogindy** 49.98 299 *e*P P 09 16 13.2 +0.1
SGDS pmax pmax
comp=Z,24nm,3.4s
**FYU Fort Yukon** 50.00 30 IAmb IAmb 09 16 22.5
comp=Z,11nm,1.0s
**C26K Camden Bay** 50.05 26 P P 09 16 13.8 +0.6
baz=270,SNR=7.7
**J25K Salcha River,** 50.05 33 P P 09 16 13.3 -0.1
baz=274
**KLU Klutina** 50.08 37 IAmb IAmb 09 16 28.2
comp=Z,6.9nm,0.9s
**KLU Klutina** 50.08 37 P P 09 16 13.4 -0.2
baz=276
**PAX Paxson** 50.14 35 P P 09 16 14.1 0.0
baz=275
**BMAR Burnt Mountain** 50.22 29 P P 09 16 15.6 +1.1
**EYAK Cordova Ski Ar** 50.27 38 P P 09 16 16.4 +1.5
EYAK IAmb IAmb 09 16 22.5
comp=Z,7.7nm,0.8s
**EYAK Cordova Ski Ar** 50.27 38 P P 09 16 15.2 +0.3
baz=277
**AAK Ala-Archa** 50.31 298 P P 09 16 16.0 +0.2
comp=Z,2.4nm,0.4s,baz=196,slow=0.4,SNR=2.3
AAK LR LR 09 38 35.9
comp=Z,197nm,18.4s,baz=78,slow=37
comp=Z,2.4nm,0.4s
**AAK Ala-Archa** 50.31 298 P P 09 16 16.0 +0.2
**KDU Kakadu** 50.33 191 P P 09 16 16.6 +0.8
**HARP HAARP** 50.34 35 P P 09 16 15.8 +0.3
baz=276
**BVA0 Borovoye Array** 50.37 312 P P 09 16 16.6 +0.7
**F26K Sheenjek River** 50.37 29 P P 09 16 15.2 -0.5
baz=272,SNR=14
**BRVK Borovoye** 50.43 312 P P 09 16 16.4 +0.2
BRVK IAmb IAmb 09 16 28.1
comp=Z,5.3nm,0.8s
**BRVK Borovoye** 50.43 312 *ce*P P 09 16 16.2 -0.1
BRVK pmax pmax
comp=Z,6.0nm,1.3s
**C27K Jago River** 50.47 26 P P 09 16 16.4 +0.1
baz=271,SNR=8.8
**G26K Porcupine Rive** 50.55 29 P P 09 16 17.1 +0.1
baz=274
**ARLS Aral** 50.67 297 P P 09 16 16.7 -1.8
ARLS pmax pmax
comp=Z,6.0nm,0.4s
**N25K Chitina, Valde** 50.69 36 P P 09 16 17.9 -0.3
baz=277
**MTN Manton Dam** 50.70 193 P P 09 16 18.3 -0.3
**SCRK Sand Creek** 50.71 33 P P 09 16 19.8 +1.4
SCRK IAmb IAmb 09 16 20.1
comp=Z,8.4nm,0.8s
**SCRK Sand Creek** 50.71 33 P P 09 16 18.1 -0.3
baz=276,SNR=13
**BMRM Bremner River** 50.77 37 P P 09 16 18.8 0.0
baz=278
**J26L Joseph Creek** 50.84 33 P P 09 16 18.7 -0.6
baz=276
**COEN Coen** 50.93 178 P P 09 16 22.0 +1.6
**I26K Coal Creek Min** 50.94 32 P P 09 16 19.5 -0.4
baz=275
**MENT Mentasta** 50.94 35 IAmb IAmb 09 16 29.4
comp=Z,8.5nm,0.8s
**KAIM Kayak Island** 51.01 39 P P 09 16 19.8 -0.7
baz=279
**L26K Log Cabin Wild** 51.10 35 IAmb IAmb 09 16 24.0
comp=Z,9.5nm,0.8s
**L26K Log Cabin Wild** 51.10 35 P P 09 16 20.9 -0.2
baz=277,SNR=10
**E27K Coleen River** 51.31 28 IAmb IAmb 09 16 31.0
comp=Z,6.5nm,0.6s
**E27K Coleen River** 51.31 28 P P 09 16 22.4 -0.3
baz=274,SNR=7.7
**M26K Nabesna, AK** 51.34 35 P P 09 16 23.6 +0.5
baz=278
**G27K Doyon Strip** 51.40 30 P P 09 16 23.1 -0.4
baz=276
**D27M Malcolm River** 51.46 26 P P 09 16 23.1 -0.8
baz=274
**H27K Steamboat Moun** 51.51 30 P P 09 16 23.5 -0.8
baz=276,SNR=5.8
**CRQE Cirque** 51.54 37 P P 09 16 23.5 -1.1
baz=279,SNR=7.9
**K27K Chicken** 51.54 33 P P 09 16 23.8 -0.7
baz=277
**I27K Kandik River** 51.54 31 P P 09 16 24.5 0.0
baz=276,SNR=5.5
**L27K Beaver Creek,** 51.78 34 IAmb IAmb 09 16 29.2
comp=Z,8.2nm,0.9s
**L27K Beaver Creek,** 51.78 34 P P 09 16 25.5 -0.8
baz=278,SNR=8.5
**BCAR Beaver Creek A** 51.80 34 P P 09 16 28.5 +2.0
**EGAK Eagle** 51.84 32 IAmb IAmb 09 16 34.8
comp=Z,5.5nm,0.8s

**EGAK Eagle** 51.84 32 P P 09 16 26.1 -0.5
baz=278
**M27K Edge Creek, AK** 51.86 35 IAmb IAmb 09 16 36.9
comp=Z,8.6nm,0.8s
**M27K Edge Creek, AK** 51.86 35 P P 09 16 26.9 -0.2
baz=279
**F28M Old Crow** 52.01 28 P P 09 16 27.9 0.0
baz=276
**E28M Babbage River** 52.03 27 IAmb IAmb 09 16 37.5
comp=Z,7.8nm,1.1s
**E28M Babbage River** 52.03 27 P P 09 16 28.3 +0.3
baz=276
**MESA MESA** 52.19 38 P P 09 16 27.9 -1.7
baz=280
**D28M Stokes Point** 52.24 26 P P 09 16 28.8 -0.7
baz=276
**I28M Miner Creek** 52.26 31 IAmb IAmb 09 16 39.1
comp=Z,11nm,0.8s
**I28M Miner Creek** 52.26 31 P P 09 16 29.4 -0.5
baz=278,SNR=15
**ARK Arkit** 52.36 298 P P 09 16 31.7 +0.6
ARK pmax pmax
comp=Z,8.0nm,1.2s
**E29M Blow River** 52.65 27 IAmb IAmb 09 16 59.3
comp=Z,10.0nm,1.1s
**E29M Blow River** 52.65 27 P P 09 16 32.5 -0.1
baz=278
**DAWY Dawson** 52.70 33 P P 09 16 32.3 -0.8
baz=280
**H29M Whitestone** 52.78 30 IAmb IAmb 09 16 36.7
comp=Z,7.9nm,1.1s
**H29M Whitestone** 52.78 30 P P 09 16 33.5 -0.2
baz=279
**G29M Pine Creek** 52.81 29 IAmb IAmb 09 16 43.7
comp=Z,14nm,0.9s
**G29M Pine Creek** 52.81 29 P P 09 16 34.2 +0.3
baz=279,SNR=6.4
**I29M Ogilvie Camp,** 52.95 31 P P 09 16 36.3 +1.4
I29M IAmb IAmb 09 16 37.5
comp=Z,13nm,0.8s
**I29M Ogilvie Camp,** 52.95 31 P P 09 16 34.6 -0.3
baz=280,SNR=11
**KK31 Karatay Array** 52.95 300 P P 09 16 34.8 -0.4
KK31 IAmb IAmb 09 16 42.5
comp=Z,8.0nm,1.0s
**KK31 Karatay Array** 52.95 300 *i* P P 09 16 35.0 -0.3
**KKAR Karatay Array** 52.95 300 P P 09 16 35.0 -0.2
**KKAR Karatay Array** 52.95 300 P P 09 16 35.0 -0.2
**M29M Somme Creek** 53.41 35 IAmb IAmb 09 16 41.6
comp=Z,7.5nm,0.8s
**M29M Somme Creek** 53.41 35 P P 09 16 37.8 -0.7
baz=282,SNR=7.2
**EPYK Eagle Plains** 53.41 30 P P 09 16 38.2 -0.2
baz=280,SNR=12
**L29M L29M** 53.43 34 P P 09 16 38.2 -0.3
baz=281,SNR=8.0
**BRLS Boroldaу** 53.44 300 *eP* P 09 16 40.5 +1.6
BRLS pmax pmax
comp=Z,9.0nm,2.3s
**G30M tAoh Zraii Nji** 53.50 29 IAmb IAmb 09 16 41.0
comp=Z,6.8nm,0.9s
**G30M tAoh Zraii Nji** 53.50 29 P P 09 16 38.7 -0.3
baz=280,SNR=9.8
**YUK4 Talbot Arm** 53.55 36 P P 09 16 39.6 0.0
baz=282
**K29M Barlow Dome** 53.55 33 IAmb IAmb 09 16 49.0
comp=Z,10nm,0.9s
**K29M Barlow Dome** 53.55 33 P P 09 16 39.4 -0.1
baz=281,SNR=7.6
**F30M Barrier River** 53.56 28 P P 09 16 39.4 0.0
baz=280,SNR=5.7
**I30M Mount Dempster** 53.77 31 P P 09 16 41.5 +0.4
baz=281,SNR=39
**BTK Batken** 53.78 296 P P 09 16 41.4 -0.1
BTK pmax pmax
comp=Z,6.0nm,0.7s
**GSI Gunungsitoli** 53.81 239 P P 09 16 41.6 -0.3
**J30M Hart River** 53.92 32 P P 09 16 42.3 +0.1
baz=282
**KNRA Kununurra** 53.92 195 P P 09 16 42.0 -0.5
**N30M Aishikik Lake** 54.26 36 P P 09 16 43.9 -0.7
baz=283
**INK Inuvik** 54.27 27 P P 09 16 45.4 +0.9
INK IAmb IAmb 09 16 53.0
comp=Z,4.9nm,0.6s
**INK Inuvik** 54.27 27 P P 09 16 44.4 0.0
baz=282
**INK Inuvik** 54.27 27 P P 09 16 45.4 +0.9
INK pmax pmax
comp=Z,5.0nm,0.6s
**G31M Satah River** 54.27 29 P P 09 16 44.0 -0.5
baz=282
**P29M Windy Craggy** 54.38 38 P P 09 16 45.2 -0.3
baz=284
**NIL Nilore** 54.46 288 P P 09 16 46.9 +0.4
**NIL Nilore** 54.46 288 P P 09 16 46.9 +0.4
NIL pmax pmax
comp=Z,20nm,0.8s
**GAR Garm** 54.53 295 P P 09 16 47.2 +0.1
**P30M Million Dollar** 54.64 37 P P 09 16 47.6 +0.2
baz=284
**N31M Braeburn, Yuko** 54.86 36 P P 09 16 48.4 -0.6
baz=284
**SVE Sverdlovsk** 54.94 318 *eP* P 09 16 54.8 +5.2
SVE pmax pmax
comp=Z,23nm,1.1s
**PLBC Pleasant Camp** 55.10 38 P P 09 16 50.3 -0.4
baz=285
**M31M Drury Creek, Y** 55.32 35 P P 09 16 51.3 -1.0
baz=285
**CHGR Chuyangaron** 55.50 295 P P 09 16 52.7 -1.3
**CHGR Chuyangaron** 55.50 295 P P 09 16 52.7 -1.3
CHGR pmax pmax
comp=Z,47nm,0.9s
**WHY Whitehorse** 55.50 36 P P 09 16 53.2 -0.4
baz=286
**SIMJ Simiganj** 55.60 295 P P 09 16 54.3 -0.5
**FARO Faro, Yukon** 55.78 34 P P 09 16 53.9 -1.7
baz=286
**A36M Sachs Harbour** 56.12 22 P P 09 16 57.5 -0.4
baz=286
**ARU Arti** 56.16 318 P P 09 16 57.8 -0.5
**ARU Arti** 56.16 318 P P 09 16 58.5 +0.2
comp=Z,5.9nm,0.5s,baz=44,slow=3.4,SNR=6.1
ARU LR LR 09 43 14.9
comp=Z,150nm,18.4s,baz=142,slow=38
comp=Z,5.9nm,0.5s
**ARU Arti** 56.16 318 *c i* P P 09 16 58.5 +0.2
ARU *PP **pP** 09 17 03.5 +0.5
ARU 09 19 01.2
ARU S S 09 24 47.0 +0.2
ARU SS SS 09 28 32.1 -0.6
ARU pmax pmax
comp=Z,7.0nm,0.7s
ARU MLR MLR
comp=Z,181nm,17.0s
**N32M Quiet Lake** 56.21 36 P P 09 16 57.2 -1.4
baz=287
**S32K Kilisnoo** 56.57 40 P P 09 17 00.7 -0.5
baz=288
**P33M Teslin, Yukon** 56.61 37 IAmb IAmb 09 17 04.0
comp=Z,9.7nm,1.1s
**P33M Teslin, Yukon** 56.61 37 P P 09 17 00.6 -1.0
baz=288
**WRAB Tennant Creek** 57.22 188 P P 09 17 05.1 -1.1
**WRAB Tennant Creek** 57.22 188 *i* P P 09 17 05.9 -0.3
WRAB pmax pmax
comp=Z,8.0nm,0.9s
**WRA Warramunga Arr** 57.23 188 P P 09 17 05.1 -1.2
**WRA Warramunga Arr** 57.23 188 P P 09 17 05.1 -1.2
comp=Z,8.8nm,0.6s,baz=4.8,slow=7.4,SNR=123
WRA PcP **PcP** 09 18 00.9 +0.3
comp=Z,5.4nm,0.7s,baz=0.7,slow=4.8,SNR=6.3
WRA LR LR 09 42 37.3
comp=Z,22nm,18.4s,baz=8.0,slow=37
comp=Z,8.8nm,0.6s
**KBL Kabul** 57.26 291 P P 09 17 06.1 -0.7
KBL IAmb IAmb 09 17 11.9
comp=Z,13nm,1.1s
**KBL Kabul** 57.26 291 P P 09 17 06.1 -0.7
KBL pmax pmax
comp=Z,13nm,1.2s
**Q32M Nakina River** 57.26 38 P P 09 17 05.3 -1.1
baz=289
**C36M Paulatuk** 57.30 25 P P 09 17 04.8 -1.4
baz=289
**QIS Mount Isa** 57.49 182 P P 09 17 09.2 +1.1

**AB31 Akbulak array** 57.74 310 *i* P P 09 17 09.0 -0.7
**ABKAR Akbulak array** 57.74 310 P P 09 17 09.0 -0.7
**R33M Jennings River** 57.75 37 P P 09 17 08.9 -0.8
baz=290
**U33K Whale Pass** 57.77 41 P P 09 17 09.0 -0.7
baz=290
**CRAG Craig** 57.99 42 P P 09 17 10.5 -0.8
baz=290
**AKTO Aktyubinsk** 58.48 312 P P 09 17 14.8 0.0
comp=Z,2.2nm,0.5s,baz=48,slow=2.8,SNR=9.4
AKTO LR LR 09 43 33.9
comp=Z,103nm,19.7s,baz=26,slow=37
comp=Z,2.2nm,0.5s
**DLBC Dease Lake** 58.54 38 P P 09 17 14.0 -1.2
baz=291
**V35K Ketchikan** 58.84 42 P P 09 17 16.4 -0.8
baz=291
**T35M Bob Quinn** 58.95 40 P P 09 17 17.4 -0.6
baz=291
**WRGLY Wrigley** 59.74 31 IAmb IAmb 09 17 25.6
comp=Z,6.5nm,0.8s
**WRGLY Wrigley** 59.74 31 P P 09 17 22.7 -0.6
baz=293
**KIRV Kirov** 60.04 323 P P 09 17 25.5 +0.1
comp=Z,19nm,0.5s,baz=104,slow=4.2,SNR=2.4
KIRV LR LR 09 46 07.5
comp=Z,83nm,18.1s,baz=75,slow=39
comp=Z,19nm,0.5s
**LIRD Liard River Hi** 60.07 36 P P 09 17 25.3 -0.4
baz=293
**TOAD Toad River Com** 60.70 37 P P 09 17 28.8 -1.2
baz=294
**NOR Nord** 60.86 356 P P 09 17 30.7 -0.1
NOR pmax pmax
comp=Z,9.0nm,1.0s
**AS01 Alice Springs** 60.95 188 P P 09 17 33.9 +1.9
**AS31 Alice Springs** 60.96 188 P P 09 17 31.9 -0.2
**ASAR Alice Springs** 60.96 188 P P 09 17 31.5 -0.6
**ASAR Alice Springs** 60.96 188 P P 09 17 31.3 -0.8
comp=Z,3.2nm,0.7s,baz=3.1,slow=6.4,SNR=38
comp=Z,3.2nm,0.7s
**ASAR Alice Springs** 60.96 188 P P 09 17 31.5 -0.6
**RES Resolute Bay** 62.45 14 LR LR 09 48 26.4
comp=Z,37nm,18.4s,baz=14,slow=40
**NOUC Port Laguerre** 63.54 154 P P 09 17 50.8 +1.4
**DZM Mont Dzumac** 63.56 154 P P 09 17 51.3 +1.7
**DZM Mont Dzumac** 63.56 154 P P 09 17 50.8 +1.2
**BELG Belogornoye** 63.60 317 LR LR 09 46 37.0
comp=Z,36nm,20.4s,baz=50,slow=37
**BELG Belogornoye** 63.60 317 *i* P P 09 17 49.9 +0.4
BELG pmax pmax
comp=Z,3.0nm,0.9s
**YKA Yellowknife Ar** 63.70 30 P P 09 17 50.2 +0.2
comp=Z,1.3nm,0.8s,baz=301,slow=7.0,SNR=7.3
comp=Z,1.3nm,0.8s
**YATNC Mamie plateau,** 63.71 153 P P 09 17 52.1 +1.6
**YKAB2 New Yellowknif** 63.73 30 P P 09 17 51.0 +0.8
**ARCES ARCESS Array B** 63.79 339 P P 09 17 50.0 -0.5
comp=Z,2.7nm,0.5s,baz=54,slow=7.8,SNR=15
ARCES LR LR 09 50 56.8
comp=Z,71nm,18.2s,baz=71,slow=41
comp=Z,2.7nm,0.5s
**ARCES ARCESS Array B** 63.79 339 P P 09 17 50.0 -0.5
**INKA Innaminka** 64.62 181 P P 09 17 57.6 +1.3
**MSVF Nonsavu** 64.71 141 LR LR 09 43 28.7
comp=Z,73nm,19.1s,baz=76,slow=34
**OOD Oodnadatta** 64.88 185 P P 09 17 59.7 +1.6
**LCRK Leigh Creek** 67.38 183 P P 09 18 15.8 +1.8
**VRH Novokhopyorsk** 67.38 318 *eP* P 09 18 12.6 -1.3
VRH pmax pmax
comp=Z,10.0nm,0.9s
**MULG Mulgathing** 67.49 187 P P 09 18 16.7 +1.9
**OBN Obninsk** 67.89 323 LR LR 09 51 50.0
comp=Z,48nm,21.9s,baz=346,slow=39
**OBN Obninsk** 67.89 323 *de* P P 09 18 17.5 +0.4
OBN *e* 09 18 45.2
OBN *e* 09 20 45.8
OBN *eS* **S** 09 27 15.2 +0.3
OBN pmax pmax
comp=Z,15nm,1.1s
OBN MLR MLR
comp=Z,126nm,15.0s
**LPSR Galich'ya Gora** 68.10 320 *eP* P 09 18 16.7 -1.8
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**VORR Voronezh** 68.46 319 *eP* P 09 18 23.0 +2.3
VORR pmax pmax
comp=Z,20nm,0.8s
**CMSA Cobar Meteorol** 68.52 176 P P 09 18 23.0 +1.8
**LTY Liberty** 68.60 46 P P 09 18 22.3 +0.5
**FIA1 FINESS Array S** 68.60 332 P P 09 18 21.7 +0.2
**FINES FINESS Array B** 68.60 332 P P 09 18 21.8 +0.3
**FINES FINESS Array B** 68.60 332 P P 09 18 21.4 -0.1
comp=Z,6.6nm,0.8s,baz=57,slow=7.0,SNR=18
FINES LR LR 09 50 47.4
comp=Z,70nm,18.8s,baz=38,slow=38
comp=Z,6.6nm,0.8s
**FINES FINESS Array B** 68.60 332 P P 09 18 21.8 +0.3
**VSR Storozhevoye** 68.73 319 *eP* P 09 18 24.6 +2.1
VSR pmax pmax
comp=Z,10.0nm,0.9s
**STKA Stephens Creek** 68.74 180 P P 09 18 23.1 +0.5
STKA IAmb IAmb 09 18 33.7
comp=Z,2.6nm,0.4s
**STKA Stephens Creek** 68.74 180 P P 09 18 21.7 -0.9
comp=Z,5.0nm,0.9s,baz=339,slow=5.7,SNR=8.1
STKA LR LR 09 47 56.2
comp=Z,38nm,20.8s,baz=22,slow=36
comp=Z,5.0nm,0.9s
**STKA Stephens Creek** 68.74 180 P P 09 18 23.1 +0.5
STKA pmax pmax
comp=Z,3.0nm,0.4s
**FORT Forrest** 68.77 192 P P 09 18 24.6 +1.8
**FORT Forrest** 68.77 192 P P 09 18 22.5 -0.2
**VORD Divnogorie** 68.80 318 *eP* P 09 18 24.5 +1.6
VORD pmax pmax
comp=Z,10.0nm,0.9s
**H04A Detroit Lake** 69.06 49 IAmb IAmb 09 18 27.1
comp=Z,9.3nm,1.0s
**MXC Moxie City** 69.18 47 IAmb IAmb 09 18 27.9
comp=Z,4.5nm,0.9s
**G06A Carlson Farm,** 69.70 48 IAmb IAmb 09 18 31.2
comp=Z,5.4nm,1.0s
**D08A Wolman Farm,** 69.71 46 IAmb IAmb 09 18 30.8
comp=Z,3.8nm,0.8s
**NEW Newport** 70.06 44 P P 09 18 29.7 -1.1
baz=304
**NEW Newport** 70.06 44 P P 09 18 32.0 +1.1
NEW pmax pmax
comp=Z,5.0nm,0.9s
**VSU Vasula** 70.24 329 *i* P P 09 18 31.6 -0.1
VSU pmax pmax
comp=Z,9.0nm,0.9s
**J05D Fort Rock, OR** 70.39 50 IAmb IAmb 09 18 36.0
comp=Z,8.2nm,1.1s
**SUMG Summit** 70.50 360 P P 09 18 33.7 +0.2
SUMG pmax pmax
comp=Z,22nm,1.1s
**KBZ Khabaz** 70.71 311 P P 09 18 34.2 -0.5
comp=Z,6.4nm,0.9s,baz=50,slow=4.3,SNR=12
KBZ LR LR 09 54 28.5
comp=Z,56nm,19.1s,baz=44,slow=40
comp=Z,6.4nm,0.9s
**KBZ Khabaz** 70.71 311 *ce* P P 09 18 34.0 -0.8
KBZ pmax pmax
comp=Z,18nm,0.9s
**KIV Kislovodsk** 70.71 311 P P 09 18 34.8 -0.2
**KIV Kislovodsk** 70.71 311 *eP* P 09 18 35.0 0.0
KIV pmax pmax
comp=Z,34nm,1.1s
KIV MLR MLR
comp=Z,39nm,17.0s
**SHA1 Shidzhatmaz** 70.85 311 *i* P P 09 18 35.3 -0.7
**GNI Garni** 71.52 307 LR LR 09 50 30.4
comp=Z,43nm,21.5s,baz=104,slow=36
**UOSS Minazif** 71.66 288 P P 09 18 40.6 -0.3
**BMO Blue Mountains** 71.88 47 IAmb IAmb 09 18 44.2
comp=Z,6.9nm,1.1s
**J08A Circle Bar Ran** 72.03 49 IAmb IAmb 09 18 45.1
comp=Z,3.7nm,0.7s
**MNK Minsk** 72.29 326 *i* P P 09 18 41.7 -2.4
MNK *i* 09 18 59.6
MNK *i* 09 21 22.0
MNK *i* PPP PPP 09 23 05.9
MNK *i* S **S** **09 28 04.0 -2.5**
MNK *i* 09 28 46.8

MNK *i* SS **SS** 09 32 42.8 -0.6
MNK pmax pmax
comp=Z,9.0nm,0.6s
MNK pmax pmax
comp=N,16nm,0.8s
MNK pmax pmax
comp=E,3.0nm,0.7s
MNK MLR MLR
comp=N,81nm,20.0s
MNK MLR MLR
comp=E,64nm,19.0s
MNK MLR MLR
comp=Z,66nm,13.0s
**MSO Missoula** 72.65 44 P P 09 18 45.2 -1.4
baz=306
**FFC Flin Flon** 73.60 33 P P 09 18 52.5 +0.5
FFC IAmb IAmb 09 18 53.5
comp=Z,5.8nm,0.9s
**FFC Flin Flon** 73.60 33 P P 09 18 52.5 +0.5
FFC pmax pmax
comp=Z,6.0nm,0.9s
**NC405 NORSAR Array S** 73.77 337 P P 09 18 53.0 +0.2
NC405 IAmb IAmb 09 18 59.6
comp=Z,11nm,0.8s
**HFS Hagfors** 73.88 336 P P 09 18 52.9 -0.5
comp=Z,1.6nm,0.4s,baz=62,slow=3.5,SNR=10.0
HFS LR LR 09 54 16.7
comp=Z,111nm,18.1s,baz=34,slow=38
comp=Z,1.6nm,0.4s
**NB201 NORSAR Array S** 73.94 337 IAmb IAmb 09 19 00.6
comp=Z,15nm,1.1s
**NB2 NORSAR Subarra** 73.98 337 P P 09 18 53.8 -0.3
comp=Z,7.9nm,0.7s,baz=40,slow=6.2
**NB2 NORSAR Subarra** 73.98 337 PKP 09 26 26.1
comp=Z,1.3nm,1.1s,baz=10,slow=3.2
**NB2 NORSAR Subarra** 73.98 337 P P 09 18 53.7 -0.3
**NOA NORSAR Array B** 73.98 337 P P 09 18 53.9 -0.3
comp=Z,3.2nm,0.8s,baz=38,slow=5.9,SNR=15
NOA LR LR 09 53 47.6
comp=Z,78nm,21.8s,baz=50,slow=38
comp=Z,3.2nm,0.8s
**YERR Yerington** 74.04 53 IAmb IAmb 09 19 02.5
comp=Z,8.0nm,1.1s
**AK03 Malin Array Si** 74.08 322 P P 09 18 54.0 -0.8
**AKASG Malin Array Be** 74.09 322 P P 09 18 54.1 -0.7
comp=Z,3.7nm,0.4s,baz=48,slow=6.2,SNR=30
AKASG LR LR 09 52 37.3
comp=Z,67nm,19.5s,baz=50,slow=37
comp=Z,3.7nm,0.4s
**AKBB Malin Array Si** 74.09 322 *ce* P P 09 18 53.4 -1.4
AKBB pmax pmax
comp=Z,14nm,1.3s
**AKBB Malin Array Si** 74.09 322 P P 09 18 54.2 -0.6
AKBB pP **pP** 09 18 58.9 -0.7
**AK01 Malin Array Si** 74.10 322 P P 09 18 54.2 -0.7
**KIEV Kiev** 74.10 322 P P 09 18 54.0 -0.9
KIEV IAmb IAmb 09 19 00.4
comp=Z,12nm,0.8s
**KIEV Kiev** 74.10 322 P P 09 18 54.0 -0.9
KIEV pmax pmax
comp=Z,12nm,0.9s
**KIEV Kiev** 74.10 322 P P 09 18 54.3 -0.6
**AK04 Malin Array Si** 74.11 322 P P 09 18 54.0 -0.9
**NORES NORESS Array B** 74.11 337 P P 09 18 55.7 +0.9
**AK08 Malin Array Si** 74.12 322 P P 09 18 54.5 -0.5
**NBO00 NORSAR Array S** 74.12 337 IAmb IAmb 09 19 02.0
comp=Z,7.9nm,0.9s
**AK07 Malin Array Si** 74.20 322 P P 09 18 54.7 -0.8
**EGMT Eagleton** 74.20 41 IAmb IAmb 09 18 57.6
comp=Z,7.8nm,0.9s
**EGMT Eagleton** 74.20 41 P P 09 18 54.6 -1.0
baz=308
**DLMT Dillon** 74.28 45 IAmb IAmb 09 18 58.5
comp=Z,9.3nm,0.8s
**HLID Hailey** 74.32 47 P P 09 18 55.7 -0.9
baz=307
**BOZ Bozeman (W)** 74.68 44 IAmb IAmb 09 19 00.7
comp=Z,6.0nm,0.8s
**BOZ Bozeman (W)** 74.68 44 P P 09 18 57.8 -0.8
baz=308
**LHV Little Huntoon** 74.93 53 IAmb IAmb 09 19 03.1
comp=Z,8.1nm,1.0s
**NVAR Mina Array Bea** 74.96 53 P P 09 19 01.6 +1.2
**NVAR Mina Array Bea** 74.96 53 P P 09 19 01.4 +0.9
comp=Z,3.0nm,0.8s,baz=285,slow=5.9,SNR=29
comp=Z,3.0nm,0.8s
**RNPP9 Sopachiv** 75.22 324 P P 09 19 01.2 -0.2
RNPP9 pP **pP** 09 19 06.6 +0.4
**RNPP8 Varash** 75.29 324 P P 09 19 01.4 -0.4
**LUBAR Lubar, Ukraine** 75.31 322 P P 09 19 00.8 -1.2
**YHL Hebgen Lake** 75.39 45 IAmb IAmb 09 19 05.3
comp=Z,5.3nm,0.8s
**YHB Horse Butte** 75.44 45 IAmb IAmb 09 19 02.1
comp=Z,6.2nm,0.8s
**YMR Madison River** 75.62 45 IAmb IAmb 09 19 06.7
comp=Z,5.3nm,0.8s
**SMMC Simmler** 75.66 57 P P 09 19 03.2 -1.1
baz=306
**SFJD Kangerlussuaq** 75.71 5 LR LR 09 55 41.6
comp=Z,36nm,18.1s,baz=24,slow=38
**DSP Deep Springs** 75.79 54 IAmb IAmb 09 19 07.8
comp=Z,5.9nm,1.1s
**YFT Old Faithful** 75.83 45 IAmb IAmb 09 19 09.9
comp=Z,5.5nm,0.8s
**H17A Grant Village** 76.01 45 IAmb IAmb 09 19 10.5
comp=Z,8.5nm,0.9s
**H17A Grant Village** 76.01 45 P P 09 19 05.1 -1.3
baz=309
**PKM Mcpherson Peak** 76.03 57 P P 09 19 05.0 -1.6
baz=306
**IMW Indian Meadow** 76.11 45 IAmb IAmb 09 19 10.1
comp=Z,6.6nm,0.9s
**CWC Cottonwood Cre** 76.27 55 P P 09 19 07.1 -0.8
baz=306
**RLMT Red Lodge** 76.28 43 P P 09 19 05.0 -2.9
baz=309
**TPAW Teton Pass** 76.36 45 IAmb IAmb 09 19 15.3
comp=Z,4.0nm,0.8s
**GRAC Grapevine Rang** 76.40 54 P P 09 19 08.4 -0.1
baz=306
**ISA Isabella, Lake** 76.46 56 P P 09 19 09.1 +0.1
baz=306
**SNOW Snow King Moun** 76.49 45 IAmb IAmb 09 19 11.9
comp=Z,3.5nm,0.7s
**ARVC Arvin** 76.54 56 P P 09 19 08.9 -0.4
baz=306
**R11B Troy Canyon, C** 76.73 52 P P 09 19 09.8 -0.7
baz=307
**DGMT Dagmar** 76.76 38 P P 09 19 09.0 -1.2
baz=312
**KMPD K-Podol'skiy** 76.85 322 P P 09 19 09.6 -1.1
**MPMC Manual Prospec** 76.88 55 P P 09 19 10.3 -1.1
baz=307
**LAO LASA Array** 76.90 41 IAmb IAmb 09 19 13.5
comp=Z,7.0nm,0.9s
**LAO LASA Array** 76.90 41 P P 09 19 09.8 -1.4
baz=311
**FURC Furnace Creek,** 77.04 54 P P 09 19 11.7 -0.3
baz=307
**TPNV Topopah Spring** 77.14 53 P P 09 19 12.2 -0.7
baz=307
**SNCC San Nicolas Is** 77.18 58 P P 09 19 12.5 -0.4
baz=306
**EDW2 Edwards Air Fo** 77.24 56 P P 09 19 12.1 -1.2
baz=307
**DUG Dugway, Tooele** 77.31 49 IAmb IAmb 09 19 16.1
comp=Z,4.2nm,0.8s
**DUG Dugway, Tooele** 77.31 49 P P 09 19 12.6 -1.1
baz=308
**DUG Dugway, Tooele** 77.31 49 P P 09 19 12.8 -0.9
DUG pmax pmax
comp=Z,7.0nm,0.8s
**TCUT Toone Canyon** 77.57 48 IAmb IAmb 09 19 17.7
comp=Z,5.2nm,0.7s
**BW06 Boulder Array** 77.61 45 P P 09 19 14.0 -1.4
baz=310
**PDAR Pinedale Array** 77.61 45 P P 09 19 15.9 +0.5
**PDAR Pinedale Array** 77.61 45 P P 09 19 16.1 +0.7
comp=Z,2.1nm,0.7s,baz=276,slow=1.9,SNR=24
comp=Z,2.1nm,0.7s
**FMP Fort Macarthur** 77.74 57 P P 09 19 14.7 -1.2
baz=307
**CIS Catalina Islan** 77.84 57 P P 09 19 16.0 -0.6
baz=307
**BFSC Mount Baldy Ra** 77.85 56 P P 09 19 15.7 -1.1
baz=307
**BUR08 Bucovina Ar. S** 78.09 322 IAmb IAmb 09 19 24.2

comp=Z,7.6nm,0.9s
**BURAR Bucovina Array 78.10 322 P P 09 19 17.8 -0.1**
BURAR IAmb IAmb 09 19 24.6
comp=Z,6.4nm,0.9s
**BURAR Bucovina Array 78.10 322 P P 09 19 17.8 -0.1**
BURAR pmax pmax
comp=Z,6.0nm,0.9s
**MPU Maple Canyon 78.13 49 IAmb IAmb** 09 19 25.7
comp=Z,4.4nm,0.8s
**TUQ Turquoise Moun 78.27 54 P P 09 19 19.7 +0.6**
baz=308
**BBRC Big Bear Solar 78.32 56 P P 09 19 19.2 -0.3**
baz=307
**HEC Hector,Ludlow 78.36 55 P P 09 19 19.4 -0.1**
baz=307
**MURC Murrieta 78.54 57 P P 09 19 20.2 -0.3**
baz=307
**BRTR Keskin Array B 78.66 311 P P 09 19 20.9 -0.3**
comp=Z,1.0nm,0.5s,baz=108,slow=4.0,SNR=3.6
comp=Z,1.0nm,0.5s
**MVU Marysvale 78.72 50 IAmb IAmb** 09 19 24.0
comp=Z,9.3nm,0.8s
**OJC Ojcow 78.83 326** *eP* **P 09 19 22.2 +0.4**
**OJC Ojcow 78.83 326 P P 09 19 22.5 +0.7**
OJC pmax pmax
comp=Z,19nm,1.1s
**GMRC Granite Mounta 78.83 55 P P 09 19 21.5 -0.7**
baz=308
**P17A Butcher Ranch, 79.01 49 IAmb IAmb** 09 19 25.1
comp=Z,4.8nm,0.7s
**PFO Pinyon Flats O 79.02 56 P P 09 19 23.4 +0.2**
baz=308
**109C Camp Elliot, M 79.03 57 P P 09 19 22.6 -0.5**
baz=307
**TPFO Pinon Flats 79.03 56 P P 09 19 22.6 -0.7**
baz=308
**BELC Belle Mtn. Jos 79.09 56 P P 09 19 23.0 -0.6**
baz=308
**MLR Muntele Rosu 79.18 320 LR LR** 09 57 36.4
comp=Z,101nm,19.1s,baz=60,slow=38
**NIE Niedzica 79.18 325** *eP* **P 09 19 24.8 +1.0**
**NIE Niedzica 79.18 325 P P 09 19 24.6 +0.9**
NIE pmax pmax
comp=Z,5.0nm,1.2s
**SRU San Rafael Swe 79.36 49 IAmb IAmb** 09 19 27.2
comp=Z,8.2nm,1.0s
**K22A Casper 79.39 44 P P 09 19 24.5 -0.7**
baz=311
**ULM Lac du Bonnet 79.40 33 P P 09 19 24.3 -0.6**
comp=Z,2.3nm,0.8s,baz=318,slow=5.9,SNR=3.4
comp=Z,2.3nm,0.8s
**MONP2 Monument Peak 79.48 57 P P 09 19 25.3 -0.6**
baz=308
**IRM Iron Mountain 79.55 55 P P 09 19 25.9 -0.2**
baz=308
**BC3 Big Chuckawall 79.66 56 P P 09 19 26.3 -0.5**
baz=308
**RSSD Black Hills 79.76 42 P P 09 19 26.7 -0.5**
baz=313
**IKP In-Ko-Pah, Jac 79.84 57 P P 09 19 27.5 -0.2**
baz=308
**SWSC Sam W. Stewart 79.86 56 P P 09 19 27.0 -0.7**
baz=308
**KSP Ksiaz 79.89 328** *eP* **P 09 19 27.6 +0.1**
**KSP Ksiaz 79.89 328 P P 09 19 27.9 +0.4**
KSP pmax pmax
comp=Z,17nm,1.0s
**HMU Henry Mountain 79.98 50 IAmb IAmb** 09 19 30.7
comp=Z,8.8nm,0.8s
**O20A White River Ci 80.06 47 P P 09 19 27.7 -1.2**
baz=311
**PDMCI Parker Dam,Lak 80.12 54 P P 09 19 28.5 -0.6**
baz=308
**MORC Moravsky Berou 80.15 327 IAmb IAmb** 09 19 35.7
comp=Z,8.1nm,0.9s
**MORC Moravsky Berou 80.15 327** *eP* **P 09 19 29.2 +0.2**
**MORC Moravsky Berou 80.15 327 P P 09 19 29.5 +0.5**
MORC pmax pmax
comp=Z,11nm,1.0s
**DPC Dobruska-Polom 80.25 328 P P 09 19 30.3 +0.8**
DPC pmax pmax
comp=Z,10.0nm,1.1s
**KRLC Kraliky 80.26 327 P P 09 19 29.9 +0.3**
KRLC pmax pmax
comp=Z,9.0nm,0.8s
**RAR Rarotonga 80.35 126 LR LR** 09 54 19.6
comp=Z,40nm,18.4s,baz=272,slow=35
**GLA Glamis 80.44 56 P P 09 19 30.8 -0.1**
baz=308
**PSZ Piszkesteto 80.45 324 P P 09 19 31.1 +0.4**
PSZ pmax pmax
comp=Z,15nm,1.3s
**VYHS Vyhne 80.52 325** *eP* **P** 09 19 37.5 +6.5
**JAVC Velka Javorina 80.77 326** *eP* **P 09 19 33.3 +0.9**
**FLTG Flechtingen 80.78 332** *eP* **P 09 19 31.6 -0.6**
comp=Z,26nm,1.4s,baz=41,slow=4.3
**AGMN Agassiz Nation 80.84 35 P P 09 19 32.0 -0.7**
baz=317
**BRG Berggiesshubel 80.84 329** *eP* **P 09 19 33.8 +1.2**
BRG Amp 09 19 34.2
comp=Z,3.6nm,0.7s
**BRG Berggiesshubel 80.84 329 P P** 09 19 38.4 +5.8
BRG Amp 09 19 39.1
comp=Z,6.4nm,0.8s
**BRG Berggiesshubel 80.84 329** *eP* **P 09 19 32.9 +0.3**
comp=Z,6.4nm,0.8s,baz=41,slow=4.3
**PVCC Panska Ves 80.85 329 P P 09 19 33.3 +0.6**
PVCC pmax pmax
comp=Z,18nm,0.8s
**N23A Red Feather La 80.88 45 IAmb IAmb** 09 19 35.9
comp=Z,6.1nm,1.0s
**N23A Red Feather La 80.88 45 P P 09 19 33.6 +0.2**
baz=312
**CLL Collm 80.89 330 IAmb IAmb** 09 19 38.9
comp=Z,11nm,0.9s
**CLL Collm 80.89 330** *i* P **P 09 19 32.9 0.0**
comp=Z,9.0nm,0.9s
CLL *i* Pmax 09 19 38.3
comp=Z,14nm,1.0s
**CLL Collm 80.89 330** *i* P **P 09 19 32.9 0.0**
CLL pmax pmax
comp=Z,14nm,1.0s
**CLL Collm 80.89 330** *eP* **P 09 19 32.8 0.0**
comp=Z,11nm,0.9s,baz=41,slow=4.3
**VRAC Vranov 80.91 327** *eP* **P 09 19 33.7 +0.6**
**VRAC Vranov 80.91 327 LR LR** 09 57 24.0
comp=Z,41nm,19.0s,baz=42,slow=37
**VRAC Vranov 80.91 327 P P 09 19 34.1 +1.0**
VRAC pmax pmax
comp=Z,10.0nm,1.6s
**KRUC Moravsky 81.18 327** *eP* **P 09 19 34.8 +0.3**
**KRUC Moravsky 81.18 327 P P 09 19 34.3 -0.2**
KRUC pmax pmax
comp=Z,10.0nm,1.1s
**PRU Pruhonice 81.27 328 P P 09 19 35.1 +0.2**
PRU pmax pmax
comp=Z,12nm,1.7s
**MODS Modra-Piesok 81.31 326** *eP* P 09 19 42.0 +6.8
**TREC Trest 81.40 328 P P 09 19 36.4 +0.7**
TREC pmax pmax
comp=Z,11nm,1.1s
**CLZ Clausthal 81.49 332** *eP* **P 09 19 35.8 -0.3**
comp=Z,6.2nm,0.9s,baz=41,slow=4.3
**MMAI Mount Meron Ar 81.78 305 P P 09 19 38.3 +0.3**
comp=Z,0.6nm,0.3s,baz=42,slow=3.8,SNR=1.9
MMAI LR LR 09 58 50.9
comp=Z,50nm,19.9s,baz=324,slow=38
comp=Z,0.6nm,0.3s
**MVCO Mesa Verde 81.81 49 IAmb IAmb** 09 19 40.6
comp=Z,4.7nm,0.9s
**MVCO Mesa Verde 81.81 49 P P 09 19 37.4 -0.9**
baz=311
**RONA Rosalia, Austr 82.25 326** *eP* **P 09 19 40.6 +0.4**
comp=Z,2.3nm,0.5s
**CONA Conrad Observa 82.27 326** *eP* **P 09 19 41.1 +0.8**
comp=Z,3.7nm,0.9s
**KHC Kasperske Hory 82.33 328** IAmb IAmb 09 19 47.2
comp=Z,9.7nm,1.0s
**KHC Kasperske Hory 82.33 328** *ceP* **P 09 19 40.2 -0.4**
KHC pmax pmax
comp=Z,13nm,1.3s
**ROTZ Rotzenmuhle 82.41 329** *eP* **P 09 19 41.2 +0.2**
comp=Z,6.3nm,1.7s,baz=41,slow=4.3
**F33A 5 Mile Ranch, 82.44 37** IAmb IAmb 09 19 42.6
comp=Z,10.0nm,1.1s
**214A Organ Pipe Nat 82.45 56 P P 09 19 40.9 -0.6**
baz=309

**S22A 4UR Ranch, Cre 82.45 48** IAmb IAmb 09 19 44.5
comp=Z,4.2nm,0.9s
**S22A 4UR Ranch, Cre 82.45 48 P P 09 19 41.5 -0.3**
baz=312
**GEC2 GERESS Array S 82.50 328** *eP* P 09 19 46.9 +5.3
comp=Z,4.1nm,0.8s,baz=41,slow=4.3
**GERES GERESS Array B 82.50 328 P P 09 19 41.2 -0.3**
comp=Z,1.1nm,0.4s,baz=148,slow=9.3,SNR=4.9
comp=Z,1.1nm,0.4s
**WET Wettzell 82.61 329 P P 09 19 42.8 +0.7**
WET pmax pmax
comp=Z,6.0nm,1.5s
**GRF Grafenberg Arr 82.86 330** *eP* **P 09 19 44.0 +0.7**
comp=Z,9.7nm,0.9s,baz=41,slow=4.3
GRF *eP* **sP 09 19 49.6 -0.3**
**EKA Eskdalemuir Ar 82.92 340 P P 09 19 43.2 -0.3**
comp=Z,0.9nm,0.5s,baz=33,slow=5.6,SNR=4.0
comp=Z,0.9nm,0.5s
**ARSA Arzberg 82.93 326** *eP* **P 09 19 42.1 -1.7**
comp=Z,1.4nm,0.6s
**EYMN Ely 83.04 33 P P 09 19 44.1 -0.1**
EYMN IAmb IAmb 09 19 45.3
comp=Z,7.7nm,1.1s
**EYMN Ely 83.04 33 P P 09 19 43.3 -0.9**
baz=320
**SDCO Great Sand Dun 83.24 47 P P 09 19 45.3 -0.6**
baz=312
**BIOA Bad Ischl, Aus 83.42 327** *eP* **P 09 19 46.2 0.0**
comp=Z,1.8nm,0.4s
**TUC Tucson 83.55 54 P P 09 19 46.8 -0.5**
baz=310
**SOKA Soboth 83.58 326** *eP* **P 09 19 47.5 +0.3**
comp=Z,4.9nm,0.7s
**ECSD EROS Data Cent 83.83 38 P P 09 19 48.7 +0.2**
ECSD IAmb IAmb 09 19 57.1
comp=Z,4.5nm,0.9s
**ECSD EROS Data Cent 83.83 38 P P 09 19 47.7 -0.7**
baz=317
**KBA Koelnbreinsper 84.02 327** *eP* **P 09 19 49.2 -0.3**
comp=Z,2.2nm,0.8s
**LESA Schwarzleotal 84.04 328** *eP* **P 09 19 48.7 -0.8**
comp=Z,5.4nm,1.0s
**E38A The Farm, Brul 84.04 34 P P 09 19 49.2 -0.2**
**BTNL Ternell 84.08 333** *dP* **P 09 19 46.5 -3.1**
**MEM Membach 84.10 333** *dP* **P 09 19 49.6 -0.1**
**MYKA Terra Mystica 84.24 327** *eP* **P 09 19 50.5 0.0**
comp=Z,1.5nm,0.5s
**T25A Trinidad 84.29 47 IAmb IAmb** 09 19 53.3
comp=Z,7.5nm,0.8s
**T25A Trinidad 84.29 47 P P 09 19 50.1 -1.0**
baz=313
**ANMO Albuquerque 84.54 50 P P 09 19 53.3 +0.9**
ANMO IAmb IAmb 09 20 00.6
comp=Z,3.9nm,1.0s
**ANMO Albuquerque 84.54 50 P P 09 19 52.0 -0.5**
baz=312
**ANMO Albuquerque 84.54 50 P P 09 19 53.3 +0.9**
ANMO pmax pmax
comp=Z,4.0nm,1.0s
**PUK Puka 84.72 320 IAmb IAmb** 09 20 04.2
comp=Z,10nm,1.2s
**BGNE Belgrade 84.75 41 P P 09 19 52.8 -0.4**
baz=316
**LENM Lemitar 84.75 51 P P 09 19 53.9 +0.4**
**MOTA Moosalm 84.76 329** *eP* **P 09 19 53.1 -0.2**
comp=Z,1.7nm,0.5s
**RETA Reutte 84.79 329** *eP* **P 09 19 53.2 -0.1**
comp=Z,7.4nm,1.1s
**SQTA Sankt Quirin 84.82 328** *i* P **P 09 19 53.3 -0.2**
comp=Z,1.5nm,0.4s
**FNA Florina 84.86 319 P P 09 19 53.4 -0.3**
FNA IAmb IAmb 09 19 59.2
comp=Z,6.2nm,1.0s
**FNA Florina 84.86 319 P P 09 19 53.4 -0.3**
FNA pmax pmax
comp=Z,6.0nm,1.0s
**BFO Black Forest 85.09 331 P P 09 19 54.3 -0.5**
**BFO Black Forest 85.09 331 P P 09 19 54.3 -0.5**
BFO pmax pmax
comp=Z,13nm,0.9s
**SCHQ Schefferville 85.19 16 P P 09 19 55.4 +0.3**
comp=Z,4.3nm,0.8s,baz=14,slow=6.2,SNR=4.0
comp=Z,4.3nm,0.8s
**DAVA Damuels 85.31 329** *eP* **P 09 19 54.9 -1.1**
comp=Z,7.8nm,0.6s
**121A Cookes Peak, D 85.33 52 P P 09 19 56.3 -0.1**
baz=312
**ECH Echery 85.64 331 IAmb IAmb** 09 20 03.4
comp=Z,7.2nm,0.8s
**ECH Echery 85.64 331 P P 09 19 57.5 0.0**
ECH pmax pmax
comp=Z,11nm,1.1s
**G40A Rib Lake 85.67 34 IAmb IAmb** 09 19 58.8
comp=Z,6.4nm,0.9s
**FUORN Ofenpass-Fuorn 85.69 329 IAmb IAmb** 09 20 04.4
comp=Z,7.9nm,0.9s
**RTBA Rita Blanca 85.74 47 IAmb IAmb** 09 20 00.1
comp=Z,5.8nm,1.0s
**KSU1 Kansas State U 87.24 41 P P 09 20 08.4 -0.7**
baz=318
**MNTX Cornudas Mount 87.39 52 P P 09 20 05.7 -0.7**
baz=313
**NRCA Norcia 87.42 325 IAmb IAmb** 09 20 12.5
comp=Z,8.4nm,1.0s
**AMTX Amarillo 87.44 47 P P 09 20 05.8 -0.9**
baz=315
**SMWD Samnorwood 88.12 46 IAmb IAmb** 09 20 17.4
comp=Z,7.0nm,1.0s
**WMOK Wichita Mounta 89.22 46 P P 09 20 14.0 -1.0**
baz=316
**P40A Paris 89.25 38 IAmb IAmb** 09 20 16.0
comp=Z,4.3nm,0.8s
**APMT Aspermont 89.45 47 IAmb IAmb** 09 20 17.7
comp=Z,4.9nm,0.8s
**TUL3 Leonard 90.03 43 P P 09 20 17.8 -0.9**
baz=318
**TXAR Lajitas Array 90.09 52 P P 09 20 19.9 +0.7**
**TXAR Lajitas Array 90.09 52 P P 09 20 20.0 +0.7**
comp=Z,2.0nm,0.7s,baz=300,slow=3.2,SNR=38
comp=Z,2.0nm,0.7s
**ABTX Abilene, Hawle 90.24 48 P P 09 20 19.0 -0.8**
baz=316
**HHAR Hobbs 90.75 42 IAmb IAmb** 09 20 22.9
comp=Z,3.3nm,1.1s
**CCM Cathedral Cave 90.78 39 P P 09 20 21.4 -0.8**
baz=321
**VAE Valguarnera 90.93 320 LR LR** 10 05 29.3
comp=Z,67nm,18.2s,baz=60,slow=38
**SFIN Lafayette 90.94 35 P P 09 20 22.7 -0.2**
baz=324
**JCT Junction City 91.67 49 IAmb IAmb** 09 20 27.8
comp=Z,3.0nm,0.7s
**JCT Junction City 91.67 49 P P 09 20 26.6 +0.1**
baz=316
**O48B Farmland 91.91 34 P P 09 20 27.3 -0.1**
baz=325
**FCAR Ozark Folk Cen 92.00 41 IAmb IAmb** 09 20 28.6
comp=Z,3.3nm,1.0s
**WHAR Wooly Hollow 92.37 41 IAmb IAmb** 09 20 30.6
comp=Z,4.4nm,0.8s
**ESDC Sonseca Array 97.08 334 LR LR** 10 11 04.5
comp=Z,39nm,19.0s,baz=8.5,slow=39
**TORD Torodi Ar. Bea 117.13 315 PKP PKPdf 09 26 03.1 -1.5**
comp=Z,0.4nm,0.5s,baz=30,slow=2.3,SNR=5.7
**QSPA South Pole Qui 126.96 180 PKP PKPdf 09 26 21.0 -0.9**
comp=Z,3.0nm,0.9s,baz=277,slow=1.3,SNR=9.1
**ELIB Princess Elisa 133.54 202** *d*PKPdf **PKiKP 09 26 35.2 -0.4**
**SNAA Sanae 140.90 197** PKhKP PKPpre 09 26 39.4
comp=Z,1.5nm,0.8s,baz=163,slow=5.4,SNR=12
**SAML Samuel 144.19 44** PKPdf PKPbc 09 26 53.6 +0.1
**SAML Samuel 144.19 44** PKIKP PKPbc 09 26 53.6 +0.2
**LPAZ La Paz 146.68 59** PKPbc **PKPbc 09 27 02.1 +0.2**
comp=Z,8.1nm,0.7s,baz=343,slow=2.7,SNR=45
**H03N2 Juan Fernandez 147.14 96** T T 12 11 53.9
baz=291,slow=76,SNR=206
**H03N3 Juan Fernandez 147.15 96** T T 12 11 55.0
baz=291,slow=76,SNR=256
**H03N1 Juan Fernandez 147.16 96** T T 12 11 53.2
baz=291,slow=76,SNR=231
**PTLB Pontes e Lacer 151.74 45 PKiKP 09 27 14.7 +0.3**
**AC05 El Transito 152.35 82 PKiKP 09 27 16.6 +1.1**

**IDC 08 09:22:53.4±12.0, 4°.04N×123°.87E, h251$^{km}_{\pm 159}$km, mb2.9/3, mbtmp3.7/4, Error ellipse: s-maj=321.9km s-min=19.8km az=67.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **3.46** | **29** | P | Pn | 09 23 50.9 | -0.1 |
| | 310nm,0.5s,baz=291,slow=8.6,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **25.96** | **157** | P | P | 09 28 03.5 | +0.1 |
| | 0.3nm,0.5s,baz=336,slow=9.5,SNR=8.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **29.22** | **161** | P | P | 09 28 32.1 | -0.2 |
| | 0.2nm,0.5s,baz=338,slow=7.3,SNR=4.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.70** | **326** | P | P | 09 32 04.0 | -0.1 |
| | 0.3nm,0.3s,baz=116,slow=8.8,SNR=4.7 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

**IDC 08 09:26:30.7±6.9, 47°.79N×80°.46E, h0$^{km}$, Error ellipse: s-maj=46.8km s-min=46.4km az=153.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **1.59** | **128** | Pg | Pn | 09 26 60.0 | -0.2 |
| | 0.3nm,0.3s,baz=322,slow=15,SNR=6.7 | | | | | | |
| MKAR | | | | Lg | Lg | 09 27 21.1 | |
| | 0.1nm,0.3s,baz=311,slow=27,SNR=2.9 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.76** | **22** | I | I | 10 10 00.0 | |
| | baz=208,slow=313,SNR=6.8 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **14.91** | **288** | I | I | 10 53 50.0 | |
| | baz=92,slow=316,SNR=0.8 | | | | | | |

*HEL **08** 09:43:07.8±0.2, 60°.95N×29°.06E, h0$^{km}$, ML1.7, Suspected explosion*
*IDC **08** 09:43:09.3±2.7, 60°.94N×28°.94E, h0$^{km}$, mbtmp3.7/1, ML2.8/1, Error ellipse: s-maj=23.7km s-min=14.0km az=173.0*
**ISC 08 09:43:05.4±1.2, 60°.92N±0°.05×29°.16E±0°.05, h0$^{km}$, n18, $_{\sigma}$0$^{\sigma}$71/29, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RUF** | **Ruokolahti** | **0.52** | **349** | PG | **Pb** | **09 43 16.8** | **-0.6** |
| | baz=172 | | | | | | |
| RUF | | | | SG | **Sg** | **09 43 22.4** | **+0.3** |
| RUF | | | | MSG | | 09 43 23.6 | |
| | comp=Z,7.8nm,0.2s | | | | | | |
| **VJF** | **Virojoki** | **0.88** | **245** | PB | **Pb** | **09 43 23.4** | **0.0** |
| VJF | | | | MSG | | 09 43 34.0 | |
| | comp=Z,9.5nm,0.2s | | | | | | |
| VJF | | | | SB | **Sb** | **09 43 35.1** | **-0.5** |
| **FIA0** | **FINESS Array S** | **1.59** | **291** | PG | **Pb** | **09 43 34.8** | **-0.7** |
| | baz=107 | | | | | | |
| FIA0 | | | | MSG | | 09 43 53.7 | |
| | comp=Z,7.4nm,0.2s | | | | | | |
| FIA0 | | | | SN | **Sg** | **09 43 56.2** | **0.0** |
| **FINES** | **FINESS Array B** | **1.59** | **291** | Pg | **Pb** | **09 43 35.1** | **-0.4** |
| | comp=Z,0.6nm,0.3s,baz=108,slow=16,SNR=25 | | | | | | |
| FINES | | | | Lg | Lg | 09 43 55.8 | |
| | comp=Z,2.7nm,0.3s,baz=105,slow=30,SNR=35 | | | | | | |
| FINES | | | | Rg | Rg | 09 44 02.7 | |
| | comp=Z,27nm,0.8s,baz=110,slow=24,SNR=18 | | | | | | |
| **PVF** | **Pernaja** | **1.66** | **258** | PG | **Pb** | **09 43 36.5** | **-0.3** |
| | baz=77 | | | | | | |
| PVF | | | | MSG | | 09 43 56.3 | |
| | comp=Z,8.6nm,0.2s | | | | | | |
| PVF | | | | SN | **Sg** | **09 43 59.0** | **+0.3** |
| **KAF** | **Kangasniemi** | **1.82** | **312** | PG | **Pg** | **09 43 40.0** | **-0.3** |
| KAF | | | | MSG | | 09 44 00.4 | |
| | comp=Z,8.8nm,0.2s | | | | | | |
| KAF | | | | SG | **Sb** | **09 44 02.6** | **-0.2** |
| **ARBE** | **Arbavere** | **2.17** | **228** | PG | **Pg** | **09 43 46.8** | **-0.2** |
| **HEL1** | **Helsinki** | **2.24** | **253** | PB | **Pn** | **09 43 43.5** | **-0.1** |
| **JOF** | **Joensuu** | **2.25** | **26** | PG | **Pg** | **09 43 48.0** | **-0.5** |
| JOF | | | | SG | **Sg** | **09 44 16.7** | **-0.9** |
| **NUR** | **Nurmijrvi** | **2.26** | **262** | PG | **Pg** | **09 43 47.4** | **-1.1** |
| | baz=79 | | | | | | |
| NUR | | | | MSG | | 09 44 13.4 | |
| | comp=Z,3.9nm,0.2s | | | | | | |
| NUR | | | | SG | **Sg** | **09 44 17.3** | **-0.5** |
| **SUF** | **Sumiainen** | **2.31** | **323** | PG | **Pb** | **09 43 48.2** | **+0.5** |
| | baz=142 | | | | | | |
| SUF | | | | MSG | | 09 44 14.4 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| SUF | | | | SG | **Sb** | **09 44 17.2** | **+0.4** |
| **KEF** | **Keuruu** | **2.41** | **303** | PG | **Pb** | **09 43 49.5** | **0.0** |
| | baz=117 | | | | | | |
| KEF | | | | MSG | | 09 44 17.2 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| KEF | | | | SG | **Sb** | **09 44 19.4** | **-0.3** |
| **MEF** | **Metsahovi** | **2.46** | **255** | PG | **Pb** | **09 43 50.6** | **+0.3** |
| MEF | | | | MSG | | 09 44 19.1 | |
| | comp=Z,2.9nm,0.2s | | | | | | |
| MEF | | | | SG | **Sg** | **09 44 23.7** | **-0.5** |
| **NIF** | **Nilsia** | **2.56** | **346** | PG | **Pb** | **09 43 52.1** | **0.0** |
| NIF | | | | SG | **Sb** | **09 44 24.4** | **+0.3** |
| **RMF** | **Romuvaara** | **3.33** | **6** | PB | **Pb** | **09 44 04.3** | **-0.9** |
| RMF | | | | SB | **Sb** | **09 44 45.7** | **-0.6** |
| **VAF** | **Ylistaro** | **3.73** | **308** | PB | **Pb** | **09 44 10.5** | **-1.6** |
| **ARCES** | **ARCESS Array B** | **8.79** | **352** | Pn | **Pn** | **09 45 15.6** | **+2.1** |
| | comp=Z,0.1nm,0.3s,baz=162,slow=15,SNR=2.3 | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **I37NO** | **I37NO** | **9.31** | **336** | I | I | 10 37 40.0 | |
| | baz=149,slow=324,SNR=3.9 | | | | | | |

*IDC **08** 09:58:32.5±1.1, 36°.34N×28°.84E, h0$^{km}$, mb3.8/4, mbtmp3.8/10, ML3.8/5, Error ellipse: s-maj=19.6km s-min=16.5km az=157.0*
*ISK **08** 09:58:33.9, 36°.44N×28°.75E, h8$^{km}$, ML3.6/26*
*GII **08** 09:58:34.9±0.2, 36°.234N±0°.002×28°.697E±0°.001, h16$^{km}$, Mws3.4, confirmed*
*AFAD **08** 09:58:34.2±0.0, 36°.41N×28°.72E, h11$^{km}_{\pm 2}$, MW3.7*
*THE **08** 09:58:35.5, 36°.45N×28°.69E, h0$^{km}_{\pm 2}$, ML3.3/3, Error ellipse: s-maj=6.0km s-min=1.9km az=112.0*
*NIC **08** 09:58:35.1, 36°.37N×28°.88E, h7$^{km}_{\pm 2}$, Ml3.1/8*
*ATH **08** 09:58:36.1, 36°.36N×28°.73E, h16$^{km}_{\pm 4}$, ML3.1/1, Error ellipse: s-maj=8.4km s-min=2.1km az=266.0*
**ISC 08 09:58:35.0±0.9, 36°.42N±0°.02×28°.76E±0°.01, h17$^{km}_{\pm 6}$km, n100, $_{\sigma}$1$^{\sigma}$58/152, mb3.8/4, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FETY** | **Fethiye** | **0.34** | **51** | Pg | **Pg** | **09 58 40.9** | **-1.2** |
| FETY | | | | Sg | **Sb** | **09 58 46.7** | **-1.0** |
| **FETY** | **Fethiye** | **0.34** | **51** | P | **Pg** | **09 58 41.0** | **-1.1** |
| FETY | | | | S | **Sb** | **09 58 47.3** | **-0.4** |
| **IZZE** | **Mula-Seydike** | **0.38** | **88** | P | **Pb** | **09 58 42.1** | **-1.2** |
| IZZE | | | | S | **Sb** | **09 58 48.8** | **-0.1** |
| **SABU** | **Mula-Dalaman** | **0.43** | **23** | P | **Pg** | **09 58 43.4** | **-0.4** |
| SABU | | | | S | **Sg** | **09 58 49.8** | **0.0** |
| **MRSB** | **Marmaris-Mugla** | **0.54** | **303** | Pg | **Pg** | **09 58 44.9** | **-0.8** |
| MRSB | | | | Sg | **Sg** | **09 58 52.4** | **-0.5** |
| **ARG** | **Arkhangelos** | **0.55** | **248** | Pg | **Pg** | **09 58 44.7** | **-1.2** |
| ARG | | | | Sg | **Sg** | **09 58 53.4** | **+0.1** |
| **ARG** | **Arkhangelos** | **0.55** | **248** | P | **Pg** | **09 58 44.4** | **-1.5** |
| ARG | | | | S | **Sg** | **09 58 54.3** | **+1.0** |
| | 3µm,0.4s | | | | | | |
| **ARG** | **Arkhangelos** | **0.55** | **248** | P | **Pg** | **09 58 44.5** | **-1.5** |
| ARG | | | | S | **Sg** | **09 58 54.2** | **+0.9** |
| ARG | | | | AML | AML | 09 58 54.2 | |
| | 6.1nm,0.4s | | | | | | |
| ARG | | | | AML | AML | 09 58 57.1 | |
| | 4.9nm,0.5s | | | | | | |
| **ARG** | **Arkhangelos** | **0.55** | **248** | P | **Pg** | **09 58 46.1** | **+0.2** |
| ARG | | | | S | **Sg** | **09 58 53.5** | **+0.1** |
| ARG | | | | AML | AML | 09 58 54.5 | |
| | comp=E,6037µm,0.4s | | | | | | |
| ARG | | | | AML | AML | 09 58 57.4 | |
| | comp=N,4820µm,0.5s | | | | | | |
| **CAME** | **Cameli-Denizli** | **0.68** | **40** | Pg | **Pg** | **09 58 47.2** | **-1.2** |
| CAME | | | | Sg | **Sb** | **09 58 57.3** | **-0.4** |
| **AKAS** | **Kas** | **0.71** | **105** | Pg | **Pb** | **09 58 48.7** | **-0.3** |
| **AKAS** | **Kas** | **0.71** | **105** | P | **Pb** | **09 58 48.7** | **-0.3** |
| AKAS | | | | S | **Sn** | **09 59 07.7** | **+6.7** |
| **KNIK** | **Mula-Seydike** | **0.78** | **57** | P | **Pb** | **09 58 49.6** | **-0.6** |
| KNIK | | | | S | **Sn** | **09 59 01.5** | **-1.2** |
| **CAEL** | **Denizli, Camel** | **0.83** | **33** | P | **Pb** | **09 58 49.8** | **-1.3** |
| CAEL | | | | S | **Sb** | **09 59 02.7** | **+0.6** |
| **DNZT** | **Denizli-Tavas-** | **0.88** | **14** | P | **Pb** | **09 58 51.2** | **-0.7** |
| DNZT | | | | S | **Sg** | **09 59 04.5** | **+0.7** |
| **MULA** | **Mugla, Merkez-** | **0.90** | **337** | P | **Pb** | **09 58 51.1** | **-1.1** |
| MULA | | | | S | **Sb** | **09 59 04.7** | **+0.7** |
| **DEMR** | **Demre-Antalya** | **0.95** | **101** | Pg | **Pn** | **09 58 52.7** | **-0.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ELL** | **Elmali** | **0.98** | **70** | Pg | **Pb** | **09 58 52.7** | **-0.9** |
| **ELL** | **Elmali** | **0.98** | **70** | P | **Pb** | **09 58 52.5** | **-1.1** |
| ELL | | | | AML | AML | 09 59 16.3 | |
| | comp=N,22nm,0.6s | | | | | | |
| ELL | | | | AML | AML | 09 59 20.9 | |
| | comp=N,10nm,0.9s | | | | | | |
| **DAT** | **Datca** | **1.00** | **288** | Pg | **Pb** | **09 58 53.3** | **-0.6** |
| **DAT** | **Datca** | **1.00** | **288** | P | **Pb** | **09 58 53.0** | **-0.8** |
| DAT | | | | S | **Sb** | **09 59 07.1** | **+0.3** |
| **DAT** | **Datca** | **1.00** | **288** | P | **Pb** | **09 58 53.4** | **-0.5** |
| DAT | | | | S | **Sg** | **09 59 08.6** | **+1.2** |
| **GOLH** | **Golhisar** | **1.04** | **38** | P | **Pb** | **09 58 53.9** | **-0.7** |
| GOLH | | | | S | **Sn** | **09 59 09.9** | **+0.9** |
| **TAVA** | **DENIZLI_Tavas** | **1.05** | **7** | P | **Pb** | **09 58 54.0** | **-0.7** |
| TAVA | | | | S | **Sn** | **09 59 12.9** | **+3.6** |
| **YAZI** | **Mula-Dat§a-** | **1.08** | **284** | P | **Pb** | **09 58 54.4** | **-0.8** |
| YAZI | | | | S | **Sb** | **09 59 10.2** | **+1.2** |
| **APMY** | **Acipayam-Deniz** | **1.13** | **23** | Pn | **Pb** | **09 58 55.5** | **-0.7** |
| **MLSB** | **Milas** | **1.17** | **318** | Pn | **Pn** | **09 58 56.8** | **+0.1** |
| **DNIZ** | **Denizli-Tavas-** | **1.22** | **11** | P | **Pb** | **09 58 57.8** | **+0.1** |
| DNIZ | | | | S | **Sg** | **09 59 18.0** | **+3.5** |
| **BDRM** | **Kayabasi** | **1.23** | **302** | P | **Pn** | **09 58 57.3** | **-0.1** |
| BDRM | | | | S | **Sb** | **09 59 14.6** | **+1.1** |
| **AKUM** | **Antalya-Kumluc** | **1.28** | **94** | P | **Pg** | **09 59 00.3** | **+0.5** |
| AKUM | | | | S | **Sg** | **09 59 21.8** | **+5.2** |
| **BODT** | **Bodrum** | **1.32** | **299** | Pn | **Pn** | **09 58 59.0** | **+0.3** |
| **BODT** | **Bodrum** | **1.32** | **299** | P | **Pn** | **09 58 58.2** | **-0.5** |
| BODT | | | | S | **Sn** | **09 59 17.1** | **+1.1** |
| **NISR** | **Nisiros** | **1.32** | **279** | P | **Pn** | **09 58 58.5** | **-0.2** |
| NISR | | | | S | **Sn** | **09 59 17.1** | **+1.2** |
| | comp=N,1µm,0.8s | | | | | | |
| **NISR** | **Nisiros** | **1.32** | **279** | P | **Pn** | **09 58 58.9** | **+0.2** |
| **YKAV** | **Yalikavak-Bodr** | **1.38** | **301** | Pn | **Pn** | **09 58 59.3** | **-0.1** |
| **KORT** | **Korkueli** | **1.41** | **65** | Pn | **Pg** | **09 59 00.7** | **-1.4** |
| **KORT** | **Korkueli** | **1.41** | **65** | P | **Pg** | **09 59 02.6** | **+0.5** |
| KORT | | | | S | **Sg** | **09 59 23.5** | **+3.1** |
| **ESEN** | **Aydn-Nazilli** | **1.41** | **347** | P | **Pn** | **09 59 00.3** | **+0.5** |
| ESEN | | | | S | **Sn** | **09 59 18.5** | **+0.5** |
| **INCE** | **Denizli-Bozkur** | **1.44** | **27** | P | **Pg** | **09 59 02.0** | **-0.8** |
| INCE | | | | S | **Sg** | **09 59 22.3** | **+0.7** |
| **KLNA** | **Kalymnos** | **1.53** | **291** | P | **Pn** | **09 59 02.3** | **+0.8** |
| **KARP** | **Karpathos** | **1.56** | **236** | Pn | **Pn** | **09 59 02.9** | **+0.9** |
| **KARP** | **Karpathos** | **1.56** | **236** | P | **Pb** | **09 59 03.8** | **+0.4** |
| KARP | | | | S | **Sb** | **09 59 24.5** | **+1.6** |
| | comp=N,1µm,0.6s | | | | | | |
| **KARP** | **Karpathos** | **1.56** | **236** | P | **Pb** | **09 59 03.7** | **+0.2** |
| KARP | | | | S | **Sg** | **09 59 26.1** | **+0.7** |
| KARP | | | | AML | AML | 09 59 28.5 | |
| | comp=N,3.4nm,0.4s | | | | | | |
| KARP | | | | AML | AML | 09 59 29.4 | |
| | comp=N,1.6nm,0.4s | | | | | | |
| **KARP** | **Karpathos** | **1.56** | **236** | P | **Pn** | **09 59 01.8** | **-0.2** |
| **NAZL** | **Nazilli-Aydin** | **1.58** | **347** | Pn | **Pn** | **09 59 02.8** | **+0.5** |
| **DDIM** | **Aydin, Didim** | **1.59** | **311** | P | **Pb** | **09 59 04.9** | **+0.9** |
| DDIM | | | | S | **Sb** | **09 59 26.2** | **+2.4** |
| **ANTB** | **Antalya** | **1.60** | **72** | Pn | **Pb** | **09 59 02.3** | **-0.6** |
| **BRDR** | **BURDUR-Merkez** | **1.65** | **39** | P | **Pb** | **09 59 05.3** | **+0.4** |
| BRDR | | | | S | **Sg** | **09 59 30.2** | **+2.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.67** | **336** | Pn | **Pn** | **09 59 04.3** | **+0.7** |
| **BUCA** | **Burdur, Bucak-** | **1.71** | **57** | P | **Pg** | **09 59 06.8** | **-1.0** |
| BUCA | | | | S | **Sg** | **09 59 33.0** | **+3.0** |
| **GCAM** | **G?zelcaml?** | **1.76** | **317** | Pn | **Pn** | **09 59 05.6** | **+0.9** |
| **GCAM** | **G?zelcaml?** | **1.76** | **317** | P | **Pn** | **09 59 05.4** | **+0.7** |
| GCAM | | | | S | **Sb** | **09 59 30.5** | **+1.8** |
| **KIRA** | **zmir-Kiraz** | **1.79** | **351** | P | **Pn** | **09 59 06.4** | **+1.2** |
| KIRA | | | | S | **Sn** | **09 59 29.1** | **+1.4** |
| **BCK** | **Bucak** | **1.80** | **54** | Pn | **Pb** | **09 59 05.9** | **-1.6** |
| **BASM** | **Basmaki-Afyon** | **1.82** | **34** | Pn | **Pn** | **09 59 05.8** | **+0.2** |
| **IZMR** | **zmir-demi** | **1.83** | **340** | P | **Pn** | **09 59 07.0** | **+1.4** |
| IZMR | | | | S | **Sb** | **09 59 30.8** | **+0.2** |
| **PASA** | **Karahalli, USA** | **2.01** | **17** | P | **Pb** | **09 59 09.9** | **-1.2** |
| PASA | | | | S | **Sb** | **09 59 35.4** | **-0.4** |
| **MANT** | **Manisa** | **2.07** | **356** | P | **Pn** | **09 59 10.2** | **+1.1** |
| MANT | | | | S | **Sn** | **09 59 36.4** | **+1.7** |
| **KULA** | **Kula-Manisa** | **2.09** | **358** | Pn | **Pn** | **09 59 09.9** | **+0.6** |
| **KULA** | **Kula-Manisa** | **2.09** | **358** | P | **Pn** | **09 59 10.1** | **+0.8** |
| KULA | | | | S | **Sb** | **09 59 37.2** | **-1.0** |
| **DGB** | **zmir** | **2.21** | **318** | P | **Pn** | **09 59 10.8** | **0.0** |
| DGB | | | | S | **Sb** | **09 59 41.1** | **-0.4** |
| **USAK** | **Uak-Merkez** | **2.30** | **5** | P | **Pn** | **09 59 13.1** | **+1.0** |
| USAK | | | | S | **Sn** | **09 59 42.4** | **+2.4** |
| **BNAZ** | **Uak-Banaz** | **2.42** | **21** | P | **Pb** | **09 59 16.8** | **-1.4** |
| BNAZ | | | | S | **Sb** | **09 59 49.5** | **+1.7** |
| **ZKR** | **Zakros** | **2.44** | **238** | P | **Pn** | **09 59 16.4** | **+2.4** |
| ZKR | | | | S | **Sb** | **09 59 49.2** | **+0.9** |
| ZKR | | | | AML | AML | 09 59 53.4 | |
| | comp=N,0.3nm,0.8s | | | | | | |
| ZKR | | | | AML | AML | 09 59 57.3 | |
| | comp=N,0.5nm,0.5s | | | | | | |
| **ZKR** | **Zakros** | **2.44** | **238** | P | **Pn** | **09 59 14.2** | **+0.1** |
| **SHUT** | **Suhut-Afyon** | **2.56** | **33** | Pn | **Pn** | **09 59 16.9** | **+1.1** |
| **SEDI** | **Konya, Seydise** | **2.61** | **66** | P | **Pb** | **09 59 20.2** | **-1.3** |
| SEDI | | | | S | **Sb** | **09 59 53.3** | **0.0** |
| **SEYD** | **Seydisehir-KON** | **2.66** | **67** | Pn | **Pn** | **09 59 18.5** | **+1.4** |
| **APE** | **Apeiranthos** | **2.67** | **285** | P | **Pn** | **09 59 17.2** | **0.0** |
| **GDZ** | **Gediz** | **2.72** | **12** | P | **Pn** | **09 59 18.9** | **+0.8** |
| GDZ | | | | S | **Sn** | **09 59 51.3** | **+0.7** |
| **DOGA** | **KONYA_Doganhis** | **2.87** | **53** | P | **Pb** | **09 59 23.5** | **-2.3** |
| **GAZI** | **Gazipasa** | **2.88** | **93** | Pn | **Pn** | **09 59 21.7** | **+1.6** |
| **KURO** | **Afyon-Bolvadin** | **2.88** | **36** | P | **Pb** | **09 59 23.8** | **-2.2** |
| **HDMB** | **Hadim** | **3.05** | **79** | Pn | **Pb** | **09 59 26.1** | **-2.8** |
| **AKMS** | **Akamas** | **3.23** | **115** | P | **Pn** | **09 59 24.6** | **-0.3** |
| AKMS | | | | S | **Sn** | **10 00 03.5** | **+0.5** |
| AKMS | | | | AML | AML | 10 00 10.7 | |
| | comp=N,0.1nm,0.4s | | | | | | |
| AKMS | | | | AML | AML | 10 00 11.8 | |
| | comp=N,0.2nm,0.8s | | | | | | |
| **IDI** | **Anoyia** | **3.34** | **251** | Pn | **Pn** | **09 59 27.7** | **+1.3** |
| | comp=N,24nm,0.4s,baz=70,slow=11,SNR=36 | | | | | | |
| IDI | | | | Sn | **Sn** | **10 00 07.7** | **+1.9** |
| | comp=N,3.6nm,0.3s,baz=272,slow=6.2,SNR=5.0 | | | | | | |
| **ALFC** | **Alefka** | **3.37** | **111** | P | **Pn** | **09 59 26.9** | **0.0** |
| ALFC | | | | S | **Sn** | **10 00 07.4** | **+0.9** |
| ALFC | | | | AML | AML | 10 00 13.3 | |
| | comp=N,0.1nm,0.6s | | | | | | |
| ALFC | | | | AML | AML | 10 00 16.6 | |
| | comp=N,0.1nm,0.3s | | | | | | |
| **NATA** | **Nata** | **3.51** | **117** | P | **Pn** | **09 59 28.9** | **0.0** |
| NATA | | | | AML | AML | 10 00 16.2 | |
| | comp=N,0.3nm,0.5s | | | | | | |
| NATA | | | | AML | AML | 10 00 21.2 | |
| | comp=N,0.2nm,0.5s | | | | | | |
| **TROD** | **Troodos** | **3.66** | **113** | P | **Pn** | **09 59 30.7** | **-0.3** |
| TROD | | | | AML | AML | 10 00 24.4 | |
| | comp=N,0.1nm,0.4s | | | | | | |
| TROD | | | | AML | AML | 10 00 27.2 | |
| | comp=N,0.1nm,0.6s | | | | | | |
| **ASGA** | **Asgata** | **4.01** | **113** | P | **Pn** | **09 59 35.7** | **0.0** |
| **MVOU** | **Mavrovouni** | **4.21** | **108** | P | **Pn** | **09 59 39.3** | **+0.9** |
| **BRTR** | **Keskin Array B** | **5.07** | **48** | Pn | **Pn** | **09 59 52.1** | **+1.8** |
| | comp=N,0.7nm,0.3s,baz=228,slow=14,SNR=19 | | | | | | |
| BRTR | | | | Sn | **Sn** | **10 00 52.3** | **+3.8** |
| | comp=N,0.5nm,0.3s,baz=226,slow=25,SNR=4.7 | | | | | | |
| | comp=N,4.0nm,0.6s | | | | | | |
| **MMA0B** | **Mount Meron ar** | **6.44** | **120** | P | **Pn** | **10 00 08.2** | **-0.9** |
| **MMAI** | **Mount Meron Ar** | **6.44** | **120** | Pn | **Pn** | **10 00 08.3** | **-0.8** |
| | comp=N,4.6nm,0.3s,baz=306,slow=11,SNR=7.8 | | | | | | |
| MMAI | | | | Sn | **Sn** | **10 01 20.5** | **-1.8** |
| | comp=N,2.2nm,0.3s,baz=303,slow=21,SNR=1.6 | | | | | | |
| | comp=N,2.9nm,0.3s | | | | | | |
| **GEM** | **Giv'at Ha'Em** | **6.52** | **117** | P | **Pn** | **10 00 09.9** | **-0.3** |
| **GEM** | **Giv'at Ha'Em** | **6.52** | **117** | S | **Sn** | **10 01 23.7** | **-0.5** |
| **YTIR** | **Yattir** | **7.31** | **132** | P | **Pn** | **10 00 20.2** | **-0.9** |
| **PRNI** | **Paran** | **8.00** | **137** | P | **Pn** | **10 00 29.4** | **-1.1** |
| **KRMI** | **Paran Flat** | **8.03** | **140** | S | **Sn** | **10 01 59.0** | **-2.4** |
| **KRMI** | **Paran Flat** | **8.03** | **140** | P | **Pn** | **10 00 29.1** | **-1.8** |
| **HRFI** | **Mount Harif** | **8.26** | **139** | P | **Pn** | **10 00 33.0** | **-1.1** |
| **MBRI** | **Mt Berech** | **8.39** | **140** | P | **Pn** | **10 00 34.7** | **-1.2** |
| **EIL** | **Elat** | **8.51** | **141** | Pn | **Pn** | **10 00 36.5** | **-0.9** |
| | comp=N,1.5nm,0.3s,baz=235,slow=8.8,SNR=16 | | | | | | |
| EIL | | | | Sn | **Sn** | **10 02 06.7** | **-6.4** |
| | comp=N,0.6nm,0.3s,baz=79,slow=21,SNR=2.1 | | | | | | |
| | comp=N,4.0nm,0.3s | | | | | | |
| **EIL** | **Elat** | **8.51** | **141** | P | **Pn** | **10 00 36.5** | **-0.9** |
| **MLR** | **Muntele Rosu** | **9.30** | **348** | Pn | **Pn** | **10 00 51.7** | **+3.3** |
| | comp=N,0.1nm,0.3s,baz=173,slow=8.1,SNR=2.9 | | | | | | |
| MLR | | | | Sn | **Sn** | **10 02 26.8** | **-5.9** |
| | comp=N,1.1nm,0.3s,baz=246,slow=21,SNR=7.0 | | | | | | |
| | comp=N,3.7nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **16.60** | **323** | Pn | **P** | **10 02 28.9** | **-0.4** |
| | comp=N,0.2nm,0.3s,baz=126,slow=12,SNR=1.6 | | | | | | |
| | comp=N,0.3nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **25.10** | **357** | P | **P** | **10 03 58.7** | **+0.2** |
| | comp=N,2.2nm,0.7s,baz=160,slow=11,SNR=8.7 | | | | | | |
| | comp=N,2.2nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.56** | **233** | P | **P** | **10 05 14.0** | **-0.2** |
| | comp=N,0.6nm,0.8s,baz=32,slow=9.8,SNR=4.8 | | | | | | |
| | comp=N,0.6nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.05** | **52** | P | **P** | **10 05 52.0** | **-0.3** |
| | comp=N,0.7nm,0.2s,baz=278,slow=8.3,SNR=4.5 | | | | | | |
| | comp=N,0.7nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **40.63** | **58** | P | **P** | **10 06 13.2** | **-0.7** |
| | comp=N,0.5nm,0.6s,baz=278,slow=9.2,SNR=6.1 | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | |

*NIED* ***08*** *10:23:37.6, 44˚.59N×149˚.71E, h30km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr1.15; Mϑϑ-0.29; Mϕϕ-0.86; Mrϑ-0.29; Mϑϕ-0.24; Mϕr0.30; Fault plane solution: M₀1.11000×10¹⁵ NP1:ϕs5.00000°, δ52.00000°, λ72.00000°. NP2:ϕs213.00000°, δ41.00000°, λ111.00000°.*

*JMA* ***08*** *10:23:37.6±1.1, 45˚N±6˚×15˚0E±˚, h30km, MV4.1/10, SE OFF ETOROFU*

*IDC* ***08*** *10:23:39.6±2.2, 44˚.79N×149˚.46E, h0km, mb3.9/8, mbtmp3.8/10, ML3.2/2, Error ellipse: s-maj=65.8km s-min=20.5km az=174.0*

*SKHL* ***08*** *10:23:40.0±0.4, 44˚.10N×149˚.70E, h47km±3km, mb4.5/3*

*MOS* ***08*** *10:23:41.1±0.9, 44˚.22N×149˚.43E, h47km, mb4.4/5, Error ellipse: s-maj=18.1km s-min=10.3km az=13.3*

*NEIC* ***08*** *10:23:47.6±1.3, 44˚.7N±0˚.2×149˚.1E±0˚.2, h54km±16km, mb4.1/20, Error ellipse: s-maj=30.3km s-min=14.2km az=158.0*

**ISC 08 10:23:44.0**±2.2, **44˚23N**±0˚.08×**149˚4E**±0˚.1, **h48**km±19km, **n64**,σ1**s25**/76, **mb4.1**/18, **1D**, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.46** | **314** | *i* P | **Pn** | **10 24 06.6** | **-1.3** |
| KUR | | | | AMB | AMB | 10 24 07.3 | |
| | 340nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **10 24 26.8** | **+0.9** |
| KUR | | | | A | A | 10 24 32.7 | |
| | 740nm,0.5s | | | | | | |
| KUR | | | | A | A | 10 24 32.7 | |
| | 940nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **1.46** | **314** | *i*PN | **Pn** | **10 24 06.8** | **-1.1** |
| KUR | | | | *e*S | **Sn** | **10 24 26.8** | **+0.9** |
| KUR | | | | pmax | pmax | | |
| | comp=N,138nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,339nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,28nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,926nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,787nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.85** | **260** | *e*P | **Pn** | **10 24 11.4** | **-1.9** |
| SHO | | | | AMB | AMB | 10 24 12.9 | |
| | comp=E,50nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **10 24 34.5** | **-1.0** |
| SHO | | | | A | A | 10 24 36.9 | |
| | comp=E,140nm,0.4s | | | | | | |
| SHO | | | | A | A | 10 24 36.9 | |
| | comp=E,300nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **1.85** | **260** | *e*PN | Pn | 10 24 11.2 | -2.1 |
| SHO | | | | *e*S | **Sn** | **10 24 34.3** | **-1.2** |
| SHO | | | | smax | smax | | |
| | comp=E,236nm,0.5s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,143nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.52** | **267** | *e*P | **Pn** | **10 24 21.0** | **-1.4** |
| YUK | | | | AMB | AMB | 10 24 22.9 | |
| | comp=N,80nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **10 24 51.7** | **-0.2** |
| YUK | | | | A | A | 10 24 58.3 | |
| | comp=N,250nm,0.5s | | | | | | |
| YUK | | | | A | A | 10 24 58.3 | |
| | comp=N,250nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.52** | **267** | *e*PN | **Pn** | **10 24 21.0** | **-1.4** |
| YUK | | | | *e*S | **Sn** | **10 24 51.6** | **-0.3** |
| YUK | | | | smax | smax | | |
| | comp=N,243nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,367nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.75** | **253** | *e*P | **Pn** | **10 24 24.1** | **-1.5** |
| NEM2 | | | | *e*S | **Sn** | **10 24 58.2** | **+0.6** |
| **NMR** | **Nemuro--Hokkai** | **2.76** | **253** | *e*P | Pn | 10 24 23.8 | -1.9 |
| NMR | | | | | **Sn** | **10 24 56.6** | **-1.2** |
| **NMR** | **Nemuro--Hokkai** | **2.76** | **253** | *e*PN | Pn | 10 24 23.8 | -1.9 |
| NMR | | | | *e*S | **Sn** | **10 24 56.6** | **-1.2** |
| **RUSJ** | **Misakicho** | **2.96** | **269** | *e*PN | **Pn** | **10 24 28.3** | **-0.1** |
| RUSJ | | | | *e*S | **Sn** | **10 25 04.8** | **+2.2** |
| **JRA** | **Rausu** | **3.06** | **266** | *e*P | **Pn** | **10 24 29.5** | **-0.4** |
| JRA | | | | *e*S | **Sn** | **10 25 08.4** | **+3.2** |
| **JNK** | **Nakash** | **3.41** | **261** | *e*S | **Sn** | **10 25 13.6** | **-0.3** |
| **AKK** | **Akkeshi** | **3.49** | **251** | *e*P | **Pn** | **10 24 35.4** | **-0.4** |
| AKK | | | | *e*S | **Sn** | **10 25 16.3** | **+0.5** |
| **JAK** | **Akkeshi** | **3.60** | **252** | *e*S | **Sn** | **10 25 18.1** | **-0.3** |
| **JAR** | **Ashorobuto** | **4.15** | **259** | *e*P | **Pn** | **10 24 43.4** | **-1.4** |
| JAR | | | | *e*S | **Sn** | **10 25 32.8** | **+0.7** |
| **JCH** | **Churui** | **4.65** | **252** | *e*P | **Pn** | **10 24 51.2** | **-0.4** |
| JCH | | | | *e*S | **Sn** | **10 25 43.8** | **-0.5** |
| **JKA** | **Kamikawa-asahi** | **4.86** | **271** | Pn | **Pn** | **10 24 56.6** | **+2.1** |
| **JKA** | **Kamikawa-asahi** | **4.86** | **271** | *e*P | **Pn** | **10 24 56.6** | **+2.1** |
| **ASAJ** | **Asahikawa** | **4.86** | **271** | Pn | **Pn** | **10 24 55.4** | **+0.9** |
| | comp=E,0.7nm,0.3s,baz=69,slow=8.9,SNR=5.0 | | | | | | |
| | comp=E,5.9nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **4.86** | **271** | PN | **Pn** | **10 24 56.6** | **+2.0** |
| **ERM** | **Erimo** | **5.04** | **246** | Pn | **Pn** | **10 25 01.5** | **+4.4** |
| ERM | | | | Sn | **Sn** | **10 25 58.5** | **+4.5** |
| **JNBK** | **Urakawa-nobuka** | **5.20** | **250** | *e*P | **Pn** | **10 24 59.1** | **0.0** |
| JNBK | | | | *e*S | **Sn** | **10 25 56.7** | **-1.1** |
| **JANG** | **Nango** | **6.97** | **239** | *e*S | Sn | 10 26 33.9 | -7.5 |
| **USA0B** | **Ussuriysk Arra** | **12.46** | **276** | Pn | **Pn** | **10 26 38.6** | **0.0** |
| **USA0B** | **Ussuriysk Arra** | **12.46** | **276** | PN | **Pn** | **10 26 38.6** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **12.46** | **276** | Pn | **Pn** | **10 26 38.8** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=84,slow=14,SNR=7.6 | | | | | | |
| | comp=E,1.5nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **29.76** | **292** | P | **P** | **10 29 46.5** | **+0.6** |
| | comp=E,0.8nm,0.6s,baz=74,slow=8.3,SNR=4.7 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| **D19K** | **Kuna River** | **36.16** | **30** | P | **P** | **10 30 40.6** | **-0.7** |
| **E19K** | **Redstone River** | **36.24** | **32** | | **P** | **10 30 42.1** | **+0.1** |
| E19K | | | | IAmb | IAmb | 10 31 02.0 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **B20K** | **Meade River** | **36.89** | **27** | P | **P** | **10 30 46.7** | **-0.7** |
| **IMAR** | **Indian Mountai** | **37.35** | **34** | P | **P** | **10 30 52.3** | **+0.9** |
| **E21K** | **Killik River** | **37.64** | **30** | P | **P** | **10 30 53.3** | **-0.5** |
| E21K | | | | IAmb | IAmb | 10 31 12.5 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **B21K** | **Ikpikpuk River** | **37.65** | **28** | P | **P** | **10 30 53.2** | **-0.6** |
| **D22K** | **Ayikyak River** | **38.18** | **30** | P | **P** | **10 30 58.1** | **-0.3** |
| D22K | | | | IAmb | IAmb | 10 31 13.4 | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **C23K** | **Itkillik River** | **39.06** | **28** | P | **P** | **10 31 05.5** | **-0.2** |
| C23K | | | | IAmb | IAmb | 10 31 07.6 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **39.27** | **30** | P | **P** | **10 31 08.5** | **+1.0** |
| **E24K** | **Your Creek** | **39.62** | **31** | P | **P** | **10 31 10.6** | **+0.2** |
| E24K | | | | IAmb | IAmb | 10 31 24.0 | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **39.93** | **34** | P | **P** | **10 31 14.2** | **+1.1** |
| **ILAR** | **Eielson Array** | **40.16** | **37** | P | **P** | **10 31 12.7** | **-2.3** |
| | comp=Z,0.2nm,0.3s,baz=271,slow=6.9,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **40.48** | **30** | P | **P** | **10 31 17.1** | **-0.5** |
| **BMAR** | **Burnt Mountain** | **41.08** | **32** | P | **P** | **10 31 23.7** | **+1.2** |
| **BCAR** | **Beaver Creek A** | **42.53** | **39** | P | **P** | **10 31 35.7** | **+1.3** |
| **I28M** | **Miner Creek** | **43.05** | **35** | P | **P** | **10 31 39.6** | **+0.9** |
| **I30M** | **Mount Dempster** | **44.56** | **35** | P | **P** | **10 31 51.4** | **+0.6** |
| **MK31** | **Makanchi Array** | **45.77** | **298** | P | **P** | **10 32 00.7** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 10 32 01.4 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **45.77** | **298** | P | **P** | **10 32 00.7** | **+0.1** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.77** | **298** | P | **P** | **10 32 00.5** | **0.0** |
| **MKAR** | **Makanchi Array** | **45.77** | **298** | P | **P** | **10 32 00.8** | **+0.2** |
| | comp=Z,2.3nm,0.7s,baz=76,slow=8.3,SNR=21 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **45.96** | **298** | P | **P** | **10 32 01.5** | **-0.6** |
| MAKZ | | | | IAmb | IAmb | 10 32 03.0 | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **45.96** | **298** | P | **P** | **10 32 01.5** | **-0.6** |
| | comp=Z,3.0nm,0.7s | | | pmax | pmax | | |
| **ARSB** | **Arslanbob** | **54.21** | **296** | P | **P** | **10 33 04.6** | **-0.2** |
| ARSB | | | | IAmb | IAmb | 10 33 06.6 | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **ARSB** | **Arslanbob** | **54.21** | **296** | P | **P** | **10 33 04.6** | **-0.2** |
| ARSB | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **KK31** | **Karatay Array** | **54.89** | **299** | P | **P** | **10 33 09.4** | **-0.1** |
| KK31 | | | | IAmb | IAmb | 10 33 10.3 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **54.89** | **299** | P | **P** | **10 33 09.4** | **-0.1** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **54.89** | **299** | P | **P** | **10 33 09.1** | **-0.4** |
| KKAR | | | | IAmb | IAmb | 10 33 10.3 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **54.89** | **299** | P | **P** | **10 33 09.1** | **-0.4** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **ARU** | **Arti** | **55.08** | **317** | P | **P** | **10 33 10.1** | **-0.5** |
| **ABKAR** | **Akbulak array** | **58.00** | **309** | P | **P** | **10 33 30.6** | **-0.9** |
| **FINES** | **FINESS Array B** | **65.16** | **334** | P | **P** | **10 34 18.7** | **-0.8** |
| | comp=Z,1.6nm,0.6s,baz=43,slow=8.6,SNR=9.4 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.97** | **59** | P | **P** | **10 34 26.1** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=302,slow=6.8,SNR=3.8 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.72** | **340** | P | **P** | **10 34 47.7** | **-0.7** |
| | comp=Z,1.1nm,0.6s,baz=29,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.72** | **340** | P | **P** | **10 34 48.1** | **-0.3** |
| | comp=Z,1.3nm,0.6s,baz=31,slow=6.2,SNR=8.0 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **69.85** | **338** | P | **P** | **10 34 48.4** | **-0.7** |
| | comp=Z,2.2nm,0.6s,baz=75,slow=6.3,SNR=7.0 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.06** | **58** | P | **P** | **10 35 54.4** | **+0.3** |
| | comp=Z,0.4nm,0.6s,baz=300,slow=3.9,SNR=8.0 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |

*SKO* ***08*** *10:24:16.5, 41˚.22N×19˚.62E, h0km, ML2.5*

*TIR* ***08*** *10:24:17.9, 41˚.40N×19˚.99E, h6km, Ml2.2*

*PDG* ***08*** *10:24:18.0±0.1, 41˚.39N×20˚.03E, h3km, ML2.4/11, Error ellipse: s-maj=0.3km s-min=0.6km az=0.0*

*BEO* ***08*** *10:24:19.5±0.5, 41˚.40N×19˚.98E, h0km, ML2.1/8*

**ISC 08 10:24:18.8**±0.9, **41˚40N**±0˚.02×**19˚98E**±0˚.03, **h5**km±8km, **n27**,σ1**s20**/50, **7C-4D**, **Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.10** | **239** | P | **Pg** | **10 24 20.8** | **-0.1** |
| TIR | baz=244 | | | S | **Sg** | **10 24 22.2** | **-0.1** |
| | baz=244 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,5.9nm,0.2s,baz=244 | | | | | | |
| **TIR** | **Tirane** | **0.10** | **239** | *e*Pg | **Pg** | **10 24 20.8** | **-0.1** |
| TIR | | | | *e*Sg | **Sg** | **10 24 23.3** | **+0.9** |
| **PUK** | **Puka** | **0.65** | **354** | P | **Pg** | **10 24 30.9** | **-0.3** |
| PUK | baz=354 | | | S | **Sg** | **10 24 40.5** | **+0.8** |
| | baz=354 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.5nm,0.4s,baz=354 | | | | | | |
| **OHR** | **Ohrid** | **0.68** | **115** | *i* Pg | **Pb** | **10 24 32.2** | **-1.0** |
| OHR | | | | *i* Sg | Sn | **10 24 44.7** | **-1.5** |
| OHR | | | | *e*Lg | Lg | 10 24 45.2 | |
| | comp=N,99nm,0.7s | | | | | | |
| **BCI** | **Bajram Curri** | **0.97** | **4** | P | **Pg** | **10 24 37.5** | **+0.1** |
| BCI | baz=3.0 | | | S | **Sb** | **10 24 51.7** | **+0.5** |
| | baz=3.0 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.99** | **323** | ↑*i*Pg | **Pg** | **10 24 36.5** | **-1.2** |
| DRME | | | | *i* Sg | **Sb** | **10 24 52.4** | **+0.7** |
| **PDG** | **Podgorica** | **1.16** | **333** | ↓*i*Pg | **Pb** | **10 24 39.9** | **-1.5** |
| PDG | | | | *i* Sg | **Sn** | **10 24 58.5** | **+0.5** |
| **PVY** | **Plav** | **1.20** | **359** | ↑*i*Pg | **Pg** | **10 24 40.2** | **-1.5** |
| PVY | | | | *i* Sg | **Sn** | **10 24 59.6** | **+0.6** |
| **BUM** | **Brajici-Budva** | **1.21** | **318** | ↑*i*Pg | **Pb** | **10 24 40.6** | **-1.7** |
| BUM | | | | *i* Sg | **Sn** | **10

comp=N,1μm,0.3s
**SHO Shikotan 1.89 261** *e*P **Pn 10 26 27.2 -1.1**
SHO AMB AMB 10 26 30.6
comp=N,50nm,0.4s
SHO *e*S **Sn 10 26 50.0 -0.9**
SHO A A 10 26 52.0
comp=N,390nm,0.5s
SHO A A 10 26 52.0
comp=N,560nm,0.5s
**SHO Shikotan 1.89 261** *e*PN **Pn 10 26 27.5 -0.8**
SHO *e*S **Sn 10 26 50.0 -0.9**
SHO smax smax
comp=E,399nm,0.6s
SHO smax smax
comp=N,348nm,0.3s
**YUK Yuzh-Kuril'sk 2.57 268** *e*P **Pn 10 26 37.7 +0.2**
YUK AMB AMB 10 26 42.9
comp=N,190nm,0.3s
YUK *e*S **Sn 10 27 07.8 +0.3**
YUK A A 10 27 18.9
comp=N,530nm,0.5s
YUK A A 10 27 18.9
comp=N,520nm,0.5s
**YUK Yuzh-Kuril'sk 2.57 268** *e*PN **Pn 10 26 38.4 +0.9**
YUK *e*S **Sn 10 27 07.8 +0.3**
YUK pmax pmax
comp=N,63nm,0.2s
YUK pmax pmax
comp=Z,124nm,0.2s
YUK pmax pmax
comp=E,67nm,0.1s
YUK smax smax
comp=E,375nm,0.5s
YUK smax smax
comp=N,359nm,0.4s
**NMR Nemuro--Hokkai 2.79 254** *e*P **Pn 10 26 40.9 +0.2**
NMR *e*S **Sn 10 27 11.7 -1.4**
**NMR Nemuro--Hokkai 2.79 254** *e*PN **Pn 10 26 41.9 +1.2**
NMR *e*S **Sn 10 27 11.1 -2.0**
**RUSJ Misakicho 3.00 270** *e*PN **Pn 10 26 44.1 +0.6**
RUSJ *e*S **Sn 10 27 17.3 -1.0**
**JKA Kamikawa-asahi 4.91 272** *e*P **Pn 10 27 10.1 +0.4**
**ASAJ Asahikawa 4.91 272** P **Pn 10 27 10.1 +0.3**
comp=N,0.4nm,0.3s,baz=282,slow=20,SNR=1.1
comp=N,5.5nm,0.7s
**ERM Erimo 5.07 247** *i* PN **Pn 10 27 13.2 +1.3**
**YSS Yuzh-Sakhalins 5.44 303** *e*P **Pn 10 27 18.0 +1.1**
YSS AMB AMB 10 27 23.4
comp=N,20nm,0.6s
YSS *e*S **Sn 10 28 19.5 +1.4**
YSS A A 10 28 32.4
comp=N,30nm,0.6s
YSS A A 10 28 32.4
comp=N,20nm,0.6s
**YSS Yuzh-Sakhalins 5.44 303** *e*PN **Pn 10 27 18.0 +1.1**
YSS *e*S **Sn 10 28 19.5 +1.4**
YSS pmax pmax
comp=Z,20nm,1.2s
YSS smax smax
comp=N,20nm,0.7s
YSS smax smax
comp=E,20nm,0.7s
**TYV Tymovskoe 8.10 328** *e*P **Pn 10 27 56.0 +2.7**
TYV AMB AMB 10 27 59.4
comp=E,10.0nm,0.6s
**TYV Tymovskoe 8.10 328** *e*PN Pn 10 28 01.5 +8.2
TYV pmax pmax
comp=Z,200nm,3.7s
TYV pmax pmax
comp=Z,8.0nm,1.0s
**PET Petropavlovsk 10.74 31** *i* PN **Pn 10 28 29.7 +0.2**
PET pmax pmax
comp=Z,8.0nm,1.0s
**MJAR Matsushiro Arr 11.46 232** P **Pn 10 28 42.6 +3.2**
baz=40,slow=12,SNR=2.7
comp=Z,2.3nm,0.9s
**USRK Ussuriysk Ar. 12.52 276** P **Pn 10 28 54.1 +0.2**
comp=Z,0.3nm,0.3s,baz=84,slow=15,SNR=9.8
USRK LR LR 10 34 13.7
comp=Z,185nm,18.1s,baz=104,slow=40
comp=Z,2.4nm,0.6s
**KLR Kul'dur 13.12 299** P **Pn 10 28 59.8 -2.3**
comp=Z,0.1nm,0.3s,baz=13,slow=13,SNR=1.5
comp=Z,0.3nm,0.3s
**KLR Kul'dur 13.12 299** *i* PN **Pn 10 28 59.4 -2.7**
**ZEA Zeya 17.35 311** *e*P **P 10 29 58.6 +0.4**
**SEY Seymchan 18.86 4** P **P 10 30 12.7 -2.1**
comp=Z,0.1nm,0.3s,baz=167,slow=6.5,SNR=4.7
comp=Z,3.5nm,0.9s
**SEY Seymchan 18.86 4***c**e*P **P 10 30 13.0 -1.7**
SEY pmax pmax
comp=Z,8.0nm,1.7s
**BILL Bilibino 25.50 15** *e*P **P 10 31 23.7 +1.2**
**BILL Bilibino 25.50 15**⇑ *e*P **P 10 31 23.7 +1.2**
BILL *e* 10 32 00.4
BILL pmax pmax
comp=Z,2.0nm,0.9s
BILL MLR MLR
comp=Z,121nm,16.0s
**ULN Ulaanbaatar 29.38 292** *e*P **P 10 31 57.3 -0.3**
**ULN Ulaanbaatar 29.38 292***c**e*P **P 10 31 57.3 -0.3**
ULN pmax pmax
comp=Z,4.0nm,1.0s
**SONM Songino Array 29.82 292** P **P 10 32 01.5 0.0**
comp=Z,1.3nm,0.6s,baz=86,slow=8.5,SNR=7.4
SONM LR LR 10 45 20.3
comp=Z,129nm,18.0s,baz=70,slow=39
comp=Z,1.3nm,0.6s
**SONM Songino Array 29.82 292** *e*P **P 10 32 02.9 +1.4**
SONM pmax pmax
comp=Z,1.0nm,0.3s
**ILAR Eielson Array 40.16 37** P **P 10 33 30.1 0.0**
comp=Z,0.3nm,0.8s,baz=260,slow=8.2,SNR=4.7
comp=Z,0.3nm,0.8s
**ILAR Eielson Array 40.16 37** *e*P **P 10 33 31.6 +1.5**
**DGZ Jazzator, Alta 41.61 300** *i* P **P 10 33 42.6 +0.2**
DGZ pmax pmax
comp=Z,11nm,3.4s
**ZALV Zalesovo Beam 42.04 307** PcP **PcP 10 35 39.8 0.0**
comp=Z,1.1nm,0.6s,baz=62,slow=3.4,SNR=3.9
ZALV LR LR 10 52 28.3
comp=Z,68nm,19.0s,baz=56,slow=38
**MK31 Makanchi Array 45.83 298***c**e*P **P 10 34 16.3 +0.1**
**MKAR Makanchi Array 45.83 298** P **P 10 34 15.9 -0.2**
comp=Z,4.5nm,0.7s,baz=74,slow=9.0,SNR=24
MKAR LR LR 10 54 57.0
comp=Z,171nm,18.1s,baz=71,slow=38
comp=Z,4.5nm,0.7s
**MKAR Makanchi Array 45.83 298** *e*P **P 10 34 16.2 0.0**
**MKAR Makanchi Array 45.83 298** *e*P **P 10 34 16.2 0.0**
MKAR pmax pmax
comp=Z,5.0nm,0.7s
**KURK Kurchatov 46.64 304** *e*P **P 10 34 22.5 +0.1**
**KURK Kurchatov 46.64 304***c**e*P **P 10 34 22.5 +0.1**
KURK pmax pmax
comp=Z,6.0nm,2.5s
**KURBB Kurchatov Arra 46.73 304** P **P 10 34 21.9 -1.2**
comp=Z,0.9nm,0.4s,baz=73,slow=8.8,SNR=4.8
comp=Z,0.9nm,0.4s
**HNR Honiara 54.21 167** LR LR 10 58 15.4
comp=Z,285nm,19.5s,baz=14,slow=36
**ARU Arti 55.14 317** *e*P **P 10 35 26.1 -0.1**
**ARU Arti 55.14 317***c* *i*P **P 10 35 26.1 -0.1**
ARU S **S 10 43 07.4 +1.5**
ARU SS **SS 10 46 49.1 -0.5**
ARU pmax pmax
comp=Z,9.0nm,1.4s
**VALR Valaam 63.70 332** *i* P **P 10 36 24.6 -0.5**
VALR pmax pmax
comp=Z,18nm,0.9s
**FINES FINESS Array B 65.22 334** P **P 10 36 34.2 -0.8**
comp=Z,4.7nm,0.7s,baz=59,slow=7.4,SNR=12
comp=Z,4.7nm,0.7s
**WRA Warramunga Arr 65.29 196** P **P 10 36 36.6 +0.6**
comp=Z,0.4nm,0.8s,baz=21,slow=7.0,SNR=1.7
comp=Z,0.4nm,0.8s
**OBN Obninsk 65.92 325** *e*P **P 10 36 39.2 -0.5**
**OBN Obninsk 65.92 325***de*P **P 10 36 39.2 -0.5**
OBN *e* 10 37 12.6
OBN *e* 10 39 03.0
OBN pmax pmax
comp=Z,5.0nm,0.7s
OBN MLR MLR
comp=Z,47nm,18.0s
**NVAR Mina Array Bea 65.95 59** P **P 10 36 39.8 -0.7**
comp=Z,0.2nm,0.5s,baz=309,slow=6.2,SNR=2.7
comp=Z,0.2nm,0.5s
**PDAR Pinedale Array 68.37 51** P **P 10 36 55.5 -0.3**
comp=Z,0.2nm,0.6s,baz=288,slow=2.3,SNR=2.6
comp=Z,0.2nm,0.6s
**ASAR Alice Springs 69.00 195** P **P 10 37 00.3 +0.9**
comp=Z,0.3nm,0.8s,baz=13,slow=7.1,SNR=2.3
comp=Z,0.3nm,0.8s
**NB2 NORSAR Subarra 69.77 340** P **P 10 37 03.1 -0.8**
comp=Z,4.3nm,0.7s,baz=32,slow=6.5
**NOA NORSAR Array B 69.77 340** P **P 10 37 03.1 -0.8**
comp=Z,4.3nm,0.8s,baz=31,slow=6.2,SNR=14
comp=Z,4.3nm,0.8s
**NOA NORSAR Array B 69.77 340** *e*P **P 10 37 03.4 -0.5**
NOA pmax pmax
comp=Z,5.0nm,0.8s
**HFS Hagfors 69.91 338** P **P 10 37 04.0 -0.7**
comp=Z,5.1nm,0.7s,baz=57,slow=5.5,SNR=10
HFS LR LR 11 13 00.3
comp=Z,29nm,18.3s,baz=18,slow=40
comp=Z,5.1nm,0.7s
**HFS Hagfors 69.91 338** P **P 10 37 04.0 -0.7**
**KIV Kislovodsk 70.68 313** *e*P **P 10 37 09.7 -0.1**
**KIV Kislovodsk 70.68 313** *e*P **P 10 37 09.7 -0.1**
KIV pmax pmax
comp=Z,6.0nm,1.0s
KIV MLR MLR
comp=Z,80nm,18.0s
**KBZ Khabaz 70.72 313** P **P 10 37 09.3 -0.6**
comp=Z,3.0nm,0.7s,baz=66,slow=4.7,SNR=5.7
comp=Z,3.0nm,0.7s
**KBZ Khabaz 70.72 313** *e*P **P 10 37 10.3 +0.4**
**KBZ Khabaz 70.72 313** *i* P **P 10 37 10.3 +0.4**
KBZ pmax pmax
comp=Z,4.0nm,0.9s
**SHA1 Shidzhatmaz 70.84 313** *i* P **P 10 37 11.5 +0.5**
**AKASG Malin Array Be 72.18 325** P **P 10 37 17.9 -0.7**
comp=Z,1.9nm,0.7s,baz=36,slow=6.4,SNR=4.5
comp=Z,1.9nm,0.7s
**AKASG Malin Array Be 72.18 325** *e*P **P 10 37 18.9 +0.3**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 72.18 325***ce*P **P 10 37 17.8 -0.8**
AKBB pmax pmax
comp=Z,9.0nm,1.1s
**SCHQ Schefferville 76.65 21** LR LR 11 16 23.4
comp=Z,29nm,18.2s,baz=238,slow=40
**CLL Collm 77.67 334** *i* P **P 10 37 49.6 -0.7**
CLL pmax pmax
comp=Z,5.0nm,1.0s
**EKA Eskdalemuir Ar 78.16 344** P **P 10 37 51.5 -1.4**
comp=Z,1.2nm,0.8s,baz=16,slow=5.3,SNR=2.5
comp=Z,1.2nm,0.8s
**KHC Kasperske Hory 79.36 332***ce*P **P 10 38 00.0 +0.3**
KHC pmax pmax
comp=Z,7.0nm,1.3s
**TXAR Lajitas Array 81.04 58** P **P 10 38 09.2 +0.1**
comp=Z,0.7nm,0.6s,baz=306,slow=4.3,SNR=9.6
comp=Z,0.7nm,0.6s

*SKHL **08** 10:27:57.0±0.3,44˚.10N×149˚.60E,h54km±5km,mb4.5/3*
*MOS **08** 10:27:58.3±1.1,44˚.22N×149˚.47E,h58km,mb4.2/1,Error ellipse: s-maj=20.0km s-min=12.8km az=5.7*
*IDC **08** 10:28:01.0±4.9,44˚.22N×149˚.51E,h64km±45km,mb3.4/9,mbtmp3.7/10,ML3.2/1,MS3.5/4,Error ellipse: s-maj=31.0km s-min=26.4km az=173.0*
**ISC 08 10:27:56.2±3.8,44˚.2N±0.1×149˚.57E±0˚.09,h24km±25km, n30,σ1ş69/36,mb3.8/9,MS3.6/4,1C,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.61** | **312** | *i* P | | **Pn** | | **10 28 23.7** | **+0.5** |
| KUR | | | | | | AMB | AMB | 10 28 24.7 | |
| | 370nm,0.4s | | | | | | | | |
| KUR | | | | *i* S | | **Sb** | | **10 28 43.9** | **-1.4** |
| KUR | | | | A | | A | | 10 28 50.6 | |
| | 980nm,0.5s | | | | | | | | |
| KUR | | | | A | | A | | 10 28 50.6 | |
| | 1μm,0.5s | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.61** | **312***c* | *i* PN | | **Pn** | | **10 28 23.5** | **+0.3** |
| KUR | | | | *i* S | | **Sb** | | **10 28 44.1** | **-1.2** |
| KUR | | | | pmax | pmax | | | | |
| | comp=Z,430nm,0.4s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=N,169nm,0.3s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=E,70nm,0.2s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=N,1μm,0.4s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=E,454nm,0.5s | | | | | | | | |
| **SHO** | **Shikotan** | **2.00** | **262** | *e*P | | **Pn** | | **10 28 28.0** | **-0.4** |
| SHO | | | | AMB | AMB | | | 10 28 29.7 | |
| | comp=E,70nm,0.4s | | | | | | | | |
| SHO | | | | *e*S | | **Sn** | | **10 28 51.0** | **-1.7** |
| SHO | | | | A | A | | | 10 28 53.7 | |
| | comp=E,390nm,0.4s | | | | | | | | |
| SHO | | | | A | A | | | 10 28 53.7 | |
| | comp=E,350nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **2.00** | **262** | *e*PN | | **Pn** | | **10 28 28.0** | **-0.4** |
| SHO | | | | *e*S | | **Sn** | | **10 28 50.9** | **-1.7** |
| SHO | | | | smax | smax | | | | |
| | comp=E,340nm,0.4s | | | | | | | | |
| SHO | | | | smax | smax | | | | |
| | comp=N,389nm,0.3s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.67** | **268** | *e*P | | **Pn** | | **10 28 39.3** | **+1.6** |
| YUK | | | | AMB | AMB | | | 10 28 40.7 | |
| | comp=N,130nm,0.4s | | | | | | | | |
| YUK | | | | *e*S | | **Sn** | | **10 29 09.1** | **-0.2** |
| YUK | | | | A | A | | | 10 29 17.1 | |
| | comp=N,350nm,0.4s | | | | | | | | |
| YUK | | | | A | A | | | 10 29 17.1 | |
| | comp=N,290nm,0.4s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.67** | **268** | *e*PN | | **Pn** | | **10 28 39.3** | **+1.6** |
| YUK | | | | *e*S | | **Sn** | | **10 29 09.1** | **-0.2** |
| YUK | | | | pmax | pmax | | | | |
| | comp=Z,163nm,0.2s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=E,323nm,0.4s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=N,459nm,0.3s | | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **2.89** | **255** | *e*P | | **Pn** | | **10 28 41.8** | **+1.1** |
| NMR | | | | *e*S | | **Sn** | | **10 29 12.7** | **-2.0** |
| **NMR** | **Nemuro--Hokkai** | **2.89** | **255** | *e*PN | | **Pn** | | **10 28 41.8** | **+1.1** |
| NMR | | | | *e*S | | **Sn** | | **10 29 11.7** | **-3.0** |
| **RUSJ** | **Misakicho** | **3.11** | **270** | *e*PN | | **Pn** | | **10 28 47.2** | **+3.5** |
| RUSJ | | | | *e*S | | **Sn** | | **10 29 22.9** | **+2.8** |
| **AKK** | **Akkeshi** | **3.62** | **253** | *e*P | | **Pn** | | **10 28 52.0** | **+1.3** |
| AKK | | | | *e*S | | **Sn** | | **10 29 31.4** | **-1.2** |
| **JKA** | **Kamikawa-asahi** | **5.01** | **272** | *e*P | | **Pn** | | **10 29 13.2** | **+3.3** |
| **ASAJ** | **Asahikawa** | **5.02** | **272** | P | | **Pn** | | **10 29 13.2** | **+3.3** |
| | comp=N,0.7nm,0.3s,baz=106,slow=11,SNR=1.0 | | | | | | | | |
| | comp=N,6.3nm,0.7s | | | | | | | | |
| **TEY** | **Ternei** | **9.29** | **280** | *e*P | | **Pn** | | **10 30 11.2** | **+2.6** |
| **TEY** | **Ternei** | **9.29** | **280** | *e*PN | | **Pn** | | **10 30 11.2** | **+2.6** |
| **GUMO** | **Guam** | **30.74** | **189** | LR | LR | | | 10 46 08.3 | |
| | comp=N,27nm,19.6s,baz=20,slow=35 | | | | | | | | |
| **ILAR** | **Eielson Array** | **40.12** | **37** | P | | **P** | | **10 35 30.0** | **+0.4** |
| | comp=N,0.1nm,0.4s,baz=266,slow=6.4,SNR=1.8 | | | | | | | | |
| | comp=N,0.1nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **40.12** | **37** | P | | **P** | | **10 35 30.0** | **+0.4** |
| **MKAR** | **Makanchi Array** | **45.93** | **298** | P | | **P** | | **10 36 16.5** | **-0.4** |
| | comp=N,0.9nm,0.8s,baz=73,slow=8.9,SNR=4.2 | | | | | | | | |
| | comp=N,0.9nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **46.74** | **304** | *e*P | | **P** | | **10 36 22.9** | **-0.2** |
| **KURK** | **Kurchatov** | **46.74** | **304** | P | | **P** | | **10 36 22.9** | **-0.2** |
| **KURBB** | **Kurchatov Arra** | **46.83** | **304** | P | | **P** | | **10 36 22.9** | **-0.9** |
| | comp=N,0.5nm,0.4s,baz=70,slow=8.1,SNR=3.2 | | | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | | | |
| **KIRV** | **Kirov** | **58.33** | **323** | LR | LR | | | 11 03 16.2 | |
| | comp=N,34nm,18.8s,baz=53,slow=36 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.58** | **311** | LR | LR | | | 11 03 17.3 | |
| | comp=N,54nm,18.4s,baz=208,slow=36 | | | | | | | | |
| **BELG** | **Belogornoye** | **62.78** | **318** | LR | LR | | | 11 07 46.3 | |
| | comp=N,56nm,18.5s,baz=166,slow=38 | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.28** | **334** | P | | **P** | | **10 38 35.6** | **0.0** |
| | comp=N,0.6nm,0.5s,baz=2.9,slow=7.6,SNR=4.6 | | | | | | | | |
| | comp=N,0.6nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.30** | **196** | P | | **P** | | **10 38 36.4** | **+0.3** |
| | comp=N,0.6nm,0.9s,baz=11,slow=6.3,SNR=2.7 | | | | | | | | |
| | comp=N,0.6nm,0.9s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **68.30** | **51** | P | | **P** | | **10 38 54.6** | **-0.8** |
| | comp=N,0.2nm,0.5s,baz=54,slow=0.9,SNR=5.1 | | | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.83** | **340** | P | | **P** | | **10 39 03.9** | **-0.4** |
| | comp=N,0.5nm,0.5s,baz=32,slow=6.6,SNR=4.3 | | | | | | | | |
| | comp=N,0.5nm,0.5s | | | | | | | | |
| **HFS** | **Hagfors** | **69.97** | **338** | P | | **P** | | **10 39 04.5** | **-0.6** |
| | comp=N,0.8nm,0.5s,baz=45,slow=8.6,SNR=4.7 | | | | | | | | |
| | comp=N,0.8nm,0.5s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.96** | **58** | P | | **P** | | **10 40 09.2** | **+0.3** |
| | comp=N,0.5nm,0.5s,baz=305,slow=4.2,SNR=6.4 | | | | | | | | |
| | comp=N,0.5nm,0.5s | | | | | | | | |

*JMA **08** 10:35:15.2±0.4,42˚.2N×13˚.4E±˚,h496km,MV3.6/15, NEAR VLADIVOSTOK*
*SKHL **08** 10:35:15.4±0.1,42˚.20N×134˚.01E,h468km±5km,mb4.1/10, msh3.9/1*
*IDC **08** 10:35:15.7±1.1,42˚.32N×133˚.68E,h462km±9km,mb3.1/6, mbtmp3.9/11,Error ellipse: s-maj=22.3km s-min=15.5km az=151.0*
**ISC 08 10:35:14.9±0.8,42˚.27N±0˚.09×134˚.00E±0˚.08,h450km±5km,n31, σ1ş71/35,mb3.4/5,Primorye**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GRTR** | **Gornotajezhnoj** | **1.97** | **317** | *e*P | | **P** | | **10 36 16.6** | **+1.5** |
| GRTR | | | | | | AMB | AMB | 10 36 16.9 | |
| | 9.0nm,0.7s | | | | | | | | |
| GRTR | | | | *e*S | | **S** | | **10 37 04.9** | **+0.7** |
| GRTR | | | | A | A | | | 10 37 05.2 | |
| | 21nm,0.8s | | | | | | | | |
| **PSTR** | **Posyet** | **2.39** | **280** | *e*P | | **P** | | **10 36 18.7** | **+1.1** |
| PSTR | | | | | | AMB | AMB | 10 36 19.1 | |
| | 25nm,0.3s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **2.42** | **323** | P | | **P** | | **10 36 19.3** | **+1.6** |
| | 13nm,0.3s,baz=152,slow=4.9,SNR=117 | | | | | | | | |
| USRK | | | | S | | **S** | | **10 37 09.8** | **+0.8** |
| | 1.4nm,0.7s,baz=131,slow=13,SNR=1.5 | | | | | | | | |
| **TEY** | **Ternei** | **3.35** | **33** | *e*P | | **P** | | **10 36 26.8** | **+2.4** |
| **JOSM** | **Okushiri--Mats** | **4.07** | **91** | *e*P | | **P** | | **10 36 33.0** | **+2.4** |
| **JHST** | **Hiyamasetana** | **4.36** | **86** | *e*P | | **P** | | **10 36 35.2** | **+2.1** |
| **JSH** | **Shimam** | **4.49** | **83** | P | | **P** | | **10 36 36.7** | **+2.4** |
| **JOMM** | **Oshimamatsumae** | **4.55** | **97** | P | | **P** | | **10 36 37.2** | **+2.3** |
| **JOT** | **Ohata** | **5.34** | **97** | *e*P | | **P** | | **10 36 44.0** | **+1.5** |
| **JMK** | **Ichinoseki** | **6.42** | **119** | P | | **P** | | **10 36 54.0** | **+0.6** |
| JMK | | | | *e*S | | **S** | | **10 38 12.7** | **-1.4** |
| **ASAJ** | **Asahikawa** | **6.55** | **71** | P | | **P** | | **10 36 56.4** | **+1.6** |
| | 15nm,0.3s,baz=262,slow=7.1,SNR=39 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **6.55** | **71** | *e*P | | **P** | | **10 36 56.4** | **+1.6** |
| ASAJ | | | | | | AMB | AMB | 10 36 57.4 | |
| | 15nm,0.3s | | | | | | | | |
| **KSRS** | **Korea Array** | **6.71** | **226** | P | | **P** | | **10 36 57.6** | **+1.2** |
| | 4.1nm,0.6s,baz=40,slow=11,SNR=17 | | | | | | | | |
| **KSRS** | **Korea Array** | **6.71** | **226** | *e*P | | **P** | | **10 36 57.7** | **+1.2** |
| KSRS | | | | | | AMB | AMB | 10 36 58.7 | |
| | 50nm,0.6s | | | | | | | | |
| **JCH** | **Churui** | **6.94** | **84** | P | | **P** | | **10 36 59.6** | **+0.8** |
| **KLR** | **Kul'dur** | **7.14** | **348** | P | | **P** | | **10 37 01.1** | **+0.3** |
| | 7.8nm,0.3s,baz=172,slow=9.5,SNR=30 | | | | | | | | |
| **KLR** | **Kul'dur** | **7.14** | **348** | *e*P | | **P** | | **10 37 01.2** | **+0.4** |
| KLR | | | | | | AMB | AMB | 10 37 01.8 | |
| | 8.0nm,0.3s | | | | | | | | |
| **JHS** | **Saijyo** | **7.29** | **186** | P | | **P** | | **10 37 04.8** | **+1.9** |
| **JTKR** | **Abashiri--Toko** | **7.45** | **73** | *e*P | | **P** | | **10 37 05.5** | **+1.3** |
| **AKK** | **Akkeshi** | **8.03** | **81** | *e*P | | **P** | | **10 37 10.7** | **+0.2** |
| AKK | | | | | | AMB | AMB | 10 37 11.7 | |
| | 10.0nm,0.4s | | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **8.69** | **79** | *e*P | | **P** | | **10 37 19.1** | **+1.5** |
| NMR | | | | | | AMB | AMB | 10 37 19.7 | |
| | 5.0nm,0.3s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **8.70** | **79** | P | | **P** | | **10 37 18.6** | **+0.8** |
| NEM2 | | | | *e*S | | **S** | | **10 38 55.1** | **-3.7** |
| **JNU** | **Nakatsue** | **9.46** | **196** | P | | **P** | | **10 37 27.0** | **+0.7** |
| | 3.5nm,0.4s,baz=174,slow=22,SNR=2.6 | | | | | | | | |
| **MA2** | **Magadan** | **20.19** | **25** | P | | **P** | | **10 39 18.4** | **+0.8** |
| | 18nm,1.1s,baz=204,slow=20,SNR=3.4 | | | | | | | | |
| | 18nm,1.1s | | | | | | | | |
| **MA2** | **Magadan** | **20.19** | **25** | *e*P | | **P** | | **10 39 18.4** | **+0.8** |
| MA2 | | | | | | AMB | AMB | 10 39 19.4 | |
| | 18nm,1.1s | | | | | | | | |
| **SEY** | **Seymchan** | **23.35** | **21** | P | | **P** | | **10 39 48.0** | **+2.0** |
| | 1.6nm,0.6s,baz=234,slow=19,SNR=4.7 | | | | | | | | |
| | 1.6nm,0.6s | | | | | | | | |
| **SEY** | **Seymchan** | **23.35** | **21** | *e*P | | **P** | | **10 39 48.1** | **+2.0** |
| SEY | | | | | | AMB | AMB | 10 39 48.6 | |
| | 2.0nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **36.59** | **295** | P | | **P** | | **10 41 39.0** | **-2.1** |
| | 0.6nm,0.5s,baz=78,slow=9.1,SNR=6.7 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.32** | **302** | P | | **P** | | **10 41 52.9** | **-2.3** |
| | 1.4nm,0.5s,baz=83,slow=8.8,SNR=8.9 | | | | | | | | |
| | 1.4nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **48.27** | **34** | P | | **P** | | **10 43 13.7** | **+0.6** |
| | 0.5nm,0.6s,baz=272,slow=5.8,SNR=10 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **FINES** | **FINESS Array B** | **61.45** | **329** | P | | **P** | | **10 44 43.7** | **-2.1** |
| | 0.8nm,0.7s,baz=62,slow=7.2,SNR=4.1 | | | | | | | | |
| | 0.8nm,0.7s | | | | | | | | |

*IDC **08** 10:36:36.9±1.5,11˚.62N×86˚.15W,h0km,mb3.5/4, mbtmp3.5/5,ML3.5/1,MS2.9/1,Error ellipse: s-maj=85.9km s-min=18.9km az=49.0*
*UCR **08** 10:36:37.4±0.6,10˚.87N×86˚.76W,h20km±11km,MW4.0*
*CATAC **08** 10:36:43.7±0.7,11˚.32N×86˚.78W,h24km±6km,ML3.2*
**ISC 08 10:36:40.2±0.9,11˚.12N±0˚.04×86˚.73W±0˚.05,h31km,n50, σ1ş51/55,mb3.3/4,Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NADN** | **Granada** | **0.93** | **47** | *i* P | | **Pb** | | **10 36 59.1** | **+1.2** |
| NADN | | | | | | IAML | | 10 37 27.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **CRUN** | **El Crucero** | **0.96** | **26** | *i* P | | **Pb** | | **10 36 59.8** | **+1.4** |
| CRUN | | | | | | IAML | | 10 37 26.0 | |
| | comp=Z,5.7nm,1.0s | | | | | | | | |
| **RA5A7** | **El Crucero** | **0.96** | **25** | *i* P | | **Pb** | | **10 36 59.4** | **+0.9** |
| RA5A7 | | | | | | IAML | | 10 37 25.9 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **MASN** | **Masaya** | **1.03** | **33** | *i* P | | **Pb** | | **10 37 01.0** | **+1.3** |
| MASN | | | | | | IAML | | 10 37 16.0 | |
| | comp=Z,200nm,1.0s | | | | | | | | |
| **MAS3** | **Al N del Volca** | **1.05** | **31** | *i* P | | **Pb** | | **10 37 00.4** | **+0.4** |
| MAS3 | | | | | | IAML | | 10 37 16.0 | |
| | comp=Z,670nm,1.0s | | | | | | | | |
| **COPN** | **Copaltepe** | **1.07** | **7** | *i* P | | **Pb** | | **10 37 01.1** | **+0.9** |
| COPN | | | | | | IAML | | 10 37 32.0 | |
| | comp=Z,350nm,1.0s | | | | | | | | |
| **LCRUZ** | **La Cruz** | **1.08** | **92** | *e*P | | **Pn** | | **10 36 58.6** | **-0.6** |
| **SAPS** | **Ciudad Sandino** | **1.09** | **17** | *i* P | | **Pb** | | **10 37 01.3** | **+0.7** |
| SAPS | | | | *i* S | | **Sn** | | **10 37 13.7** | **+0.1** |
| SAPS | | | | | | IAML | | 10 37 28.3 | |
| | comp=Z,580nm,1.0s | | | | | | | | |
| **JAPN** | **Al SSO del Vol** | **1.11** | **68** | *i* P | | **Pb** | | **10 37 01.2** | **+0.3** |
| JAPN | | | | | | IAML | | 10 37 08.5 | |
| | comp=Z,580nm,1.0s | | | | | | | | |
| JAPN | | | | *i* S | | **Sb** | | **10 37 18.8** | **+3.8** |
| **R0529** | **La Mascota** | **1.11** | **26** | *i* P | | **Pb** | | **10 37 01.8** | **+0.9** |
| R0529 | | | | | | IAML | | 10 37 01.9 | |
| | comp=Z,720nm,1.0s | | | | | | | | |
| **APQ2** | **Apoyeque** | **1.15** | **20** | *i* P | | **Pb** | | **10 37 01.8** | **+0.3** |
| APQ2 | | | | | | IAML | | 10 37 36.8 | |
| | comp=Z,510nm,1.0s | | | | | | | | |
| **WILN** | **Americas 2** | **1.17** | **27** | *i* P | | **Pb** | | **10 37 02.3** | **+0.5** |
| WILN | | | | | | IAML | | 10 37 39.8 | |
| | comp=Z,370nm,1.0s | | | | | | | | |
| **APQ3** | **Volcan Apoyequ** | **1.20** | **17** | *i* P | | **Pb** | | **10 37 02.4** | **-0.1** |
| APQ3 | | | | | | IAML | | 10 37 27.7 | |
| | comp=Z,600nm,1.0s | | | | | | | | |
| **ALIBA** | **Liberia Airpor** | **1.27** | **114** | *e*P | | **Pn** | | **10 37 00.2** | **-1.7** |
| **LEVN** | **Ruinas Leon Vi** | **1.28** | **5** | *i* P | | **Pb** | | **10 37 03.4** | **-0.4** |
| LEVN | | | | | | IAML | | 10 37 04.1 | |
| | comp=Z,580nm,1.0s | | | | | | | | |
| **HUEN** | | **1.33** | **24** | *i* P | | **Pb** | | **10 37 04.4** | **-0.2** |
| HUEN | | | | | | IAML | | 10 37 28.6 | |
| | comp=Z,230nm,1.0s | | | | | | | | |
| **DELF** | **Filadelfia** | **1.33** | **120** | *e*P | | **Pn** | | **10 37 01.0** | **-1.7** |
| **MOM2** | **El Cardon** | **1.33** | **10** | *i* P | | **Pb** | | **10 37 04.7** | **0.0** |
| MOM2 | | | | | | IAML | | 10 37 28.2 | |
| | comp=Z,270nm,1.0s | | | | | | | | |
| **MACN** | **El Madrono** | **1.34** | **2** | *i* P | | **Pb** | | **10 37 04.6** | **-0.3** |
| **CNGA** | **Al SSO del Vol** | **1.37** | **1** | *i* P | | **Pn** | | **10 37 02.7** | **-0.6** |
| CNGA | | | | *i* S | | **Sn** | | **10 37 19.8** | **-0.6** |
| CNGA | | | | | | IAML | | 10 37 32.0 | |
| | comp=Z,380nm,1.0s | | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.38** | **1** | *i* P | | **Pb** | | **10 37 05.2** | **-0.2** |
| CNGN | | | | | | IAML | | 10 37 12.7 | |
| | comp=Z,300nm,1.0s | | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CNGN** | **Cerro Negro** | **1.38** | **1** | *eP* | **Pb** | **10 37 05.0** | **-0.4** |
| **TEL3** | **Telica 3** | **1.45** | **356** | *i* P | **Pb** | **10 37 06.3** | **-0.4** |
| TEL3 | | | | IAML | | 10 37 43.9 | |
| | comp=Z,560nm,1.0s | | | | | | |
| **ILCN** | **San Idelfonso** | **1.45** | **1** | *i* P | **Pb** | **10 37 05.6** | **-1.1** |
| ILCN | | | | IAML | | 10 37 24.7 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **PKGN** | **Cerro Pekin** | **1.56** | **351** | *i* P | **Pb** | **10 37 07.6** | **-1.0** |
| PKGN | | | | *i* S | **Sn** | **10 37 24.6** | **-0.5** |
| PKGN | | | | IAML | | 10 37 34.6 | |
| | comp=Z,640nm,1.0s | | | | | | |
| **NICO** | **Nicoya** | **1.59** | **128** | *eP* | **Pn** | **10 37 02.8** | **-3.5** |
| **CUI** | **Cuipilapa** | **1.60** | **106** | *eP* | **Pn** | **10 37 05.0** | **-1.5** |
| **CRIN** | **San Cristobal** | **1.61** | **349** | *i* P | **Pb** | **10 37 08.2** | **-1.1** |
| CRIN | | | | IAML | | 10 37 42.1 | |
| | comp=Z,590nm,1.0s | | | | | | |
| **CRIN** | **San Cristobal** | **1.61** | **349** | *eP* | **Pb** | **10 37 08.1** | **-1.3** |
| **BRAN** | **Las Pilas** | **1.64** | **13** | *i* P | Pn | 10 37 01.6 | -5.3 |
| BRAN | | | | *i* S | Sn | 10 37 14.2 | -13 |
| BRAN | | | | IAML | | 10 37 50.7 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **1.69** | **38** | *i* P | **Pb** | **10 37 09.1** | **-1.5** |
| BOAB | | | | IAML | | 10 37 17.5 | |
| | comp=Z,160nm,1.0s | | | | | | |
| **INDI** | **Punta indio, G** | **1.73** | **136** | *i* P | **Pb** | **10 37 15.8** | **+4.4** |
| INDI | | | | IAML | | 10 38 08.9 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **1.74** | **61** | *i* P | **Pb** | **10 37 12.0** | **+0.4** |
| ACON | | | | *i* S | **Sb** | **10 37 33.7** | **+0.6** |
| ACON | | | | IAML | | 10 37 42.9 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **JTS** | **Las Juntas de** | **1.93** | **115** | Pn | **Pn** | **10 37 08.8** | **-2.2** |
| | comp=Z,1.9nm,0.3s,baz=305,slow=16,SNR=5.1 | | | | | | |
| JTS | | | | Sn | **Sn** | **10 37 32.9** | **-1.3** |
| | comp=Z,9.5nm,0.3s,baz=266,slow=21,SNR=3.9 | | | | | | |
| **JTS** | **Las Juntas de** | **1.93** | **115** | *eP* | **Pn** | **10 37 08.9** | **-2.1** |
| **LIMN** | **Finca el Limon** | **1.97** | **10** | *i* P | **Pn** | **10 37 13.4** | **+1.8** |
| LIMN | | | | IAML | | 10 37 34.4 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **2.20** | **109** | *i* P | **Pb** | **10 37 20.2** | **+0.8** |
| SOCE | | | | IAML | | 10 37 37.6 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **2.32** | **100** | *i* P | **Pb** | **10 37 21.8** | **+0.4** |
| COVE | | | | IAML | | 10 37 40.6 | |
| | comp=Z,150nm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **2.40** | **333** | *i* P | **Pn** | **10 37 18.7** | **+1.1** |
| CNCH | | | | IAML | | 10 37 29.8 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **2.61** | **65** | *i* P | **Pb** | **10 37 24.1** | **-2.3** |
| ESPN | | | | IAML | | 10 37 40.8 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **2.97** | **350** | *i* P | **Pn** | **10 37 27.7** | **+2.3** |
| TGUH | | | | IAML | | 10 37 36.4 | |
| | comp=Z,78nm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **3.07** | **325** | *i* P | **Pn** | **10 37 28.1** | **+1.5** |
| PQSS | | | | IAML | | 10 38 06.7 | |
| | comp=Z,41nm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **3.23** | **323** | *i* P | **Pn** | **10 37 29.9** | **+1.0** |
| SCLA | | | | IAML | | 10 38 10.6 | |
| | comp=Z,45nm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **4.07** | **313** | *i* P | **Pn** | **10 37 40.8** | **+0.3** |
| NUBE | | | | IAML | | 10 38 28.0 | |
| | comp=Z,70nm,1.0s | | | | | | |
| **CMIG** | **Matias Romero** | **9.89** | **308** | Pn | **Pn** | **10 39 01.4** | **+1.1** |
| | comp=Z,0.4nm,0.3s,baz=158,slow=12,SNR=6.7 | | | | | | |
| CMIG | | | | Sn | **Sn** | **10 40 48.9** | **-1.5** |
| | comp=Z,1.0nm,0.3s,baz=25,slow=16,SNR=9.6 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **24.05** | **321** | P | **P** | **10 41 53.6** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=134,slow=10.0,SNR=6.6 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **MDP** | **Montagnes des** | **34.25** | **97** | LR | LR | 10 59 46.7 | |
| | comp=Z,18nm,19.7s,baz=100,slow=41 | | | | | | |
| **PDAR** | **Pinedale Array** | **37.27** | **332** | P | **P** | **10 43 49.2** | **-0.4** |
| | comp=Z,0.3nm,0.5s,baz=134,slow=11,SNR=3.8 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **39.17** | **319** | P | **P** | **10 44 07.8** | **+2.2** |
| | comp=Z,0.2nm,0.6s,baz=151,slow=10.0,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **ULM** | **Lac du Bonnet** | **39.74** | **351** | P | **P** | **10 44 07.4** | **-2.5** |
| | comp=Z,1.6nm,0.6s,baz=220,slow=7.9,SNR=3.1 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |

**IDC 08 10:39:23.0±60.0, 14°28S×175°64W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=1131.0km s-min=179.5km az=76.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **42.75** | **238** | P | P | 10 47 22.8 | +0.4 |
| | 3.8nm,1.1s,baz=82,slow=15,SNR=3.9 | | | | | | |
| | 3.8nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.00** | **256** | P | P | 10 48 03.5 | -0.7 |
| | 0.3nm,0.5s,baz=92,slow=8.1,SNR=1.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **48.41** | **251** | P | P | 10 48 07.2 | -0.2 |
| | 1.4nm,0.4s,baz=84,slow=8.3,SNR=13 | | | | | | |
| | 1.4nm,0.4s | | | | | | |

*IDC **08** 10:43:14.5±9.4, 3°.62S×152°.43E, h138km±64km, mb3.6/2, mbtmp4.1/3, MS3.1/1, Error ellipse: s-maj=140.4km s-min=57.8km az=116.0*
*NEIC **08** 10:43:16.1±1.1, 3°.8S±0°.1×152°.8E±0°.1, h152km±10km, mb4.1/12, Error ellipse: s-maj=22.1km s-min=17.2km az=150.0*

**ISC 08 10:43:15.7±1.4, 3°.8S±0°.2×152°.6E±0°.2, h150km, n22, σ0s87/24, mb4.1/8, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.59** | **231** | | **Pn** | **10 43 38.7** | **+1.1** |
| **PMG** | **Port Moresby** | **7.77** | **224** | Pn | **Pn** | **10 45 07.2** | **+1.2** |
| PMG | | | | | **Sn** | **10 46 34.8** | **+2.0** |
| **PMG** | **Port Moresby** | **7.77** | **224** | P | **Pn** | **10 45 04.9** | **-1.1** |
| | 5.7nm,0.2s,baz=218,slow=16,SNR=2.3 | | | | | | |
| PMG | | | | S | **Sn** | **10 46 31.4** | **-1.4** |
| | 5.3nm,0.3s,baz=241,slow=16,SNR=1.6 | | | | | | |
| **COEN** | **Coen** | **13.73** | **222** | Pn | **Pn** | **10 46 23.6** | **-0.7** |
| **CTAO** | **Charters Tower** | **17.33** | **201** | P | **P** | **10 47 07.4** | **-0.3** |
| **MTN** | **Manton Dam** | **23.06** | **246** | P | **P** | **10 48 09.0** | **+0.8** |
| MTN | | | | IAmb | IAmb | 10 48 19.8 | |
| | comp=Z,8.1nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.83** | **227** | P | **P** | **10 48 15.8** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 10 48 33.9 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.84** | **226** | P | **P** | **10 48 15.9** | **+0.6** |
| **WRAB** | **Tennant Creek** | **23.96** | **227** | P | **P** | **10 48 17.1** | **+0.7** |
| **WB2** | **Warramunga Arr** | **23.97** | **227** | P | **P** | **10 48 17.1** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 10 48 17.2 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.98** | **227** | P | **P** | **10 48 16.3** | **-0.2** |
| **WRA** | **Warramunga Arr** | **23.98** | **227** | P | **P** | **10 48 16.9** | **+0.4** |
| | comp=Z,5.2nm,0.6s,baz=51,slow=9.5,SNR=81 | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **26.27** | **242** | P | **P** | **10 48 37.3** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 10 48 42.7 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **26.48** | **182** | P | **P** | **10 48 38.4** | **-0.7** |
| ARMA | | | | IAmb | IAmb | 10 48 55.8 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **26.77** | **221** | P | **P** | **10 48 41.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **26.77** | **221** | P | **P** | **10 48 41.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **26.77** | **221** | P | **P** | **10 48 41.5** | **-0.2** |
| | comp=Z,0.4nm,0.5s,baz=52,slow=8.9,SNR=5.2 | | | | | | |
| ASAR | | | | LR | LR | 11 00 13.8 | |
| | comp=Z,40nm,18.7s,baz=128,slow=38 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **CAN** | **Canberra** | **31.53** | **186** | P | **P** | **10 49 24.4** | **+0.6** |
| CAN | | | | IAmb | IAmb | 10 49 49.5 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **35.45** | **218** | P | **P** | **10 49 57.3** | **-0.3** |
| **TUWZ** | **Tuamarina** | **42.05** | **156** | P | **P** | **10 50 53.2** | **+0.6** |
| **QSPA** | **South Pole Qui** | **86.14** | **180** | P | **P** | **10 55 39.3** | **-0.5** |
| **TORD** | **Torodi Ar. Bea** | **149.82** | **290** | PKPbc | **PKPbc** | **11 02 48.1** | **-1.0** |
| | comp=Z,0.7nm,0.5s,baz=65,slow=2.9,SNR=9.2 | | | | | | |

*SOME **08** 10:56:14.8, 39°.57N×73°.55E, h15km*
*KRNET **08** 10:56:14.4±0.1, 39°.50N×73°.61E, mb3.3*
*NNC **08** 10:56:17.8±2.9, 39°.66N×73°.66E, h0km, mb3.8, mpv3.4, Error ellipse: s-maj=23.0km s-min=14.0km az=178.0*

**ISC 08 10:56:15.8±1.0, 39°.53N±0°.05×73°.62E±0°.03, h10km, n53, σ2s53/94, 41C-20D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.49** | **350** | ⇑*iP* | **Pg** | **10 56 24.6** | **-0.8** |
| | baz=51 | | | | | | |
| SFK | | | | ⇑*iS* | **Sg** | **10 56 32.0** | **+0.1** |
| | baz=51 | | | | | | |
| **DRK** | **Karamyk** | **1.41** | **268** | ⇓*eP* | **Pn** | **10 56 41.3** | **-0.4** |
| | baz=70 | | | | | | |
| DRK | | | | ⇓*eS* | **Sg** | **10 57 00.4** | **-0.6** |
| | baz=70 | | | | | | |
| **BTK** | **Batken** | **2.22** | **285** | ⇓*iP* | **Pb** | **10 56 54.3** | **-1.7** |
| | baz=85 | | | | | | |
| BTK | | | | ⇓*iS* | **Sb** | **10 57 24.0** | **+0.4** |
| | baz=85 | | | | | | |
| **ARLS** | **Aral** | **2.39** | **13** | ⇓*iP* | **Pb** | **10 56 57.2** | **-1.8** |
| | baz=13 | | | | | | |
| ARLS | | | | ⇓*iS* | **Sb** | **10 57 28.5** | **0.0** |
| | baz=13 | | | | | | |
| **ARK** | **Arkit** | **2.59** | **331** | ⇑*iP* | **Pb** | **10 57 00.0** | **-2.4** |
| | baz=32 | | | | | | |
| ARK | | | | ⇑*iS* | **Sb** | **10 57 33.3** | **-1.0** |
| | baz=32 | | | | | | |
| **AML** | **Almayashu** | **2.60** | **1** | ⇑*iP* | **Pb** | **10 57 00.3** | **-2.4** |
| | baz=1.0 | | | | | | |
| AML | | | | ⇑*iS* | **Sb** | **10 57 33.7** | **-1.1** |
| | baz=1.0 | | | | | | |
| **GAR** | **Garm** | **2.62** | **259** | ⇑*iP* | **Pn** | **10 56 59.9** | **+1.7** |
| | baz=60 | | | | | | |
| GAR | | | | ⇑*iS* | **Sb** | **10 57 33.1** | **-2.0** |
| | baz=60 | | | | | | |
| **NRN** | **Naryn** | **2.63** | **43** | ⇑*eP* | **Pn** | **10 57 00.3** | **+1.7** |
| | baz=42 | | | | | | |
| NRN | | | | ⇑*iS* | **Sb** | **10 57 33.7** | **-1.9** |
| | baz=42 | | | | | | |
| **TRKS** | **Terek-Say** | **2.75** | **317** | ⇑*eP* | **Pn** | **10 57 01.6** | **+1.6** |
| | baz=17 | | | | | | |
| TRKS | | | | ⇑*eS* | **Sb** | **10 57 36.6** | **-2.3** |
| | baz=17 | | | | | | |
| **MNAS** | **Manas** | **3.07** | **344** | ⇑*iP* | **Pn** | **10 57 06.8** | **+2.3** |
| | baz=45 | | | | | | |
| MNAS | | | | ⇑*iS* | **Sb** | **10 57 45.0** | **-3.1** |
| | baz=45 | | | | | | |
| **AAK** | **Ala-Archa** | **3.17** | **12** | ⇑Pg | **Pb** | **10 57 13.6** | **+1.3** |
| | 6.9nm,0.4s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 10 57 56.6 | |
| | 26nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.17** | **12** | ⇓*eP* | **Pn** | **10 57 08.1** | **+2.2** |
| | baz=12 | | | | | | |
| AAK | | | | ⇓*iS* | **Sb** | **10 57 47.4** | **-3.7** |
| | baz=12 | | | | | | |
| **MRKS** | **Merke** | **3.22** | **355** | *eP* | **Pb** | **10 57 11.0** | **-2.1** |
| | 7.0nm,0.3s | | | | | | |
| MRKS | | | | *eS* | **Sb** | **10 57 52.0** | **-0.5** |
| | 42nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **3.22** | **355** | Pg | **Pb** | **10 57 10.2** | **-3.0** |
| | 7.0nm,0.3s | | | | | | |
| MRKS | | | | Lg | Lg | 10 57 58.4 | |
| | 88nm,0.3s | | | | | | |
| **KBK** | **Karagaybulak** | **3.28** | **17** | ⇑*iP* | **Pn** | **10 57 09.6** | **+2.2** |
| | baz=17 | | | | | | |
| KBK | | | | ⇑*iS* | **Sn** | **10 57 50.1** | **+3.6** |
| | baz=17 | | | | | | |
| **FRU1** | **Bishkek** | **3.36** | **13** | ⇓*iP* | **Pn** | **10 57 11.2** | **+2.8** |
| | baz=13 | | | | | | |
| FRU1 | | | | ⇓*iS* | **Sb** | **10 57 52.4** | **-4.1** |
| | baz=13 | | | | | | |
| **ULHL** | **Ulahol** | **3.36** | **35** | ⇓*iP* | **Pn** | **10 57 11.0** | **+2.4** |
| | baz=35 | | | | | | |
| ULHL | | | | ⇓*iS* | **Sn** | **10 57 52.1** | **+3.4** |
| | baz=35 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.44** | **30** | ⇑*iP* | **Pn** | **10 57 12.0** | **+2.4** |
| | baz=30 | | | | | | |
| BOOM | | | | ⇑*iS* | **Sn** | **10 57 53.9** | **+3.4** |
| | baz=30 | | | | | | |
| **CHMS** | **Chumysh** | **3.57** | **14** | ⇑Pn | **Pn** | **10 57 14.9** | **+3.6** |
| | 4.6nm,0.5s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 10 58 08.7 | |
| | 32nm,0.8s | | | | | | |
| **CHMS** | **Chumysh** | **3.57** | **14** | ⇑*iP* | **Pn** | **10 57 13.4** | **+2.2** |
| | baz=13 | | | | | | |
| CHMS | | | | ⇑*iS* | **Sn** | **10 57 56.8** | **+3.4** |
| | baz=13 | | | | | | |
| **CHGR** | **Chuyangaron** | **3.58** | **257** | ⇑*iP* | **Pn** | **10 57 13.2** | **+1.8** |
| | baz=58 | | | | | | |
| CHGR | | | | ⇑*iS* | **Sn** | **10 57 56.2** | **+2.4** |
| | baz=58 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.70** | **23** | ⇑Pn | **Pn** | **10 57 17.1** | **+3.9** |
| | 3.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 10 58 13.5 | |
| | 33nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.70** | **23** | ⇑*iP* | **Pn** | **10 57 15.4** | **+2.2** |
| | baz=23 | | | | | | |
| TKM2 | | | | ⇑*iS* | **Sn** | **10 58 00.3** | **+3.3** |
| | baz=23 | | | | | | |
| **KDJ** | **Kajisay** | **3.75** | **45** | ⇓*iP* | **Pn** | **10 57 16.3** | **+2.5** |
| | baz=45 | | | | | | |
| KDJ | | | | ⇓*iS* | **Sn** | **10 58 01.3** | **+3.2** |
| | baz=45 | | | | | | |
| **USP** | **Ospenovka** | **3.79** | **10** | ⇑*iP* | **Pn** | **10 57 16.8** | **+2.5** |
| | baz=10.0 | | | | | | |
| USP | | | | ⇑*iS* | **Sn** | **10 58 02.2** | **+3.2** |
| | baz=10.0 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **3.87** | **54** | ⇑*iP* | **Pn** | **10 57 18.1** | **+2.4** |
| | baz=54 | | | | | | |
| TARG | | | | ⇑*iS* | **Sn** | **10 58 04.2** | **+2.8** |
| | baz=54 | | | | | | |
| **KST** | **Kastek** | **3.93** | **26** | *eP* | **Pb** | **10 57 27.6** | **+2.5** |
| | 7.4nm,0.4s | | | | | | |
| KST | | | | *eS* | **Sg** | **10 58 20.0** | **-1.9** |
| | 53nm,0.7s | | | | | | |
| **KST** | **Kastek** | **3.93** | **26** | Pg | **Pb** | **10 57 20.7** | **-4.5** |
| | 6.2nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 10 58 16.6 | |
| | 53nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.05** | **23** | *eP* | **Pb** | **10 57 29.9** | **+2.7** |
| | 13nm,0.9s | | | | | | |
| DGS | | | | *eS* | **Sg** | **10 58 24.2** | **-1.5** |
| | 39nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.05** | **23** | Pg | **Pb** | **10 57 24.9** | **-2.3** |
| | 6.2nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 10 58 23.5 | |
| | 39nm,0.7s | | | | | | |
| **MTBS** | **Maitube** | **4.17** | **30** | *eP* | **Pb** | **10 57 31.6** | **+2.3** |
| | 6.8nm,0.3s | | | | | | |
| MTBS | | | | *eS* | **Sg** | **10 58 27.0** | **-2.7** |
| | 22nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **4.17** | **30** | Pg | **Pb** | **10 57 27.2** | **-2.1** |
| | 3.5nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 10 58 26.6 | |
| | 22nm,0.3s | | | | | | |
| **KK31** | **Karatay Array** | **4.26** | **328** | Pn | **Pn** | **10 57 23.8** | **+3.0** |
| | 0.4nm,0.3s,baz=134,slow=12,SNR=28 | | | | | | |
| KK31 | | | | ⇑Pg | **Pg** | **10 57 38.2** | **+0.7** |
| | 1.7nm,0.4s,baz=149,slow=16,SNR=6.8 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **10 58 13.5** | **+2.9** |
| | 4.1nm,0.4s,baz=163,slow=24,SNR=4.6 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 10 58 29.3 | |
| | 9.1nm,0.7s,baz=155,slow=28,SNR=4.3 | | | | | | |
| **KKAR** | **Karatay Array** | **4.26** | **328** | ⇑*iP* | **Pn** | **10 57 23.1** | **+2.3** |
| | baz=28 | | | | | | |
| KKAR | | | | ⇑*iS* | **Sn** | **10 58 13.4** | **+2.8** |
| | baz=28 | | | | | | |
| **TNSS** | **Tian-Shan** | **4.31** | **35** | *eP* | **Pb** | **10 57 34.5** | **+2.7** |
| | 9.3nm,0.3s | | | | | | |
| TNSS | | | | *eS* | **Sg** | **10 58 31.9** | **-2.2** |
| | 12nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.31** | **35** | Pg | **Pb** | **10 57 30.7** | **-1.1** |
| | 2.8nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 10 58 32.6 | |
| | 12nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **4.44** | **20** | *eP* | **Pb** | **10 57 37.1** | **+3.3** |
| | 4.0nm,0.4s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **10 58 36.1** | **-2.1** |
| | 29nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **4.44** | **20** | Pg | **Pb** | **10 57 32.5** | **-1.4** |
| | 1.3nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 10 58 35.9 | |
| | 29nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **4.45** | **34** | *eP* | **Pb** | **10 57 37.1** | **+3.0** |
| | 8.5nm,0.5s | | | | | | |
| MDOK | | | | *eS* | **Sg** | **10 58 36.3** | **-2.5** |
| | 31nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **4.45** | **34** | ⇓Pn | **Pn** | **10 57 27.2** | **+3.7** |
| | 1.1nm,0.4s | | | | | | |
| MDOK | | | | Pg | **Pb** | **10 57 33.4** | **-0.7** |
| | 3.1nm,0.5s | | | | | | |
| MDOK | | | | ⇓Pg | **Pg** | **10 57 38.7** | **-2.4** |
| | 5.5nm,0.5s | | | | | | |
| MDOK | | | | Lg | Lg | 10 58 37.4 | |
| | 31nm,0.7s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 10 58 37.7 | |
| | 29nm,0.9s | | | | | | |
| **KNDC** | **Almaty** | **4.46** | **33** | ⇑Pg | **Pg** | **10 57 38.2** | **-3.1** |
| | 10nm,0.3s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 10 58 38.2 | |
| | 72nm,0.6s | | | | | | |
| **BRLS** | **Borolday** | **4.51** | **322** | *eP* | **Pb** | **10 57 34.9** | **-0.1** |
| | 2.5nm,0.3s | | | | | | |
| BRLS | | | | *eS* | **Sb** | **10 58 32.7** | **+3.3** |
| | 8.9nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **4.51** | **322** | Pg | **Pb** | **10 57 32.7** | **-2.3** |
| | 2.1nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 10 58 36.9 | |
| | 8.9nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.54** | **34** | *eP* | **Pg** | **10 57 39.6** | **-3.1** |
| | 4.9nm,0.4s | | | | | | |
| KOTS | | | | *eS* | **Sg** | **10 58 40.5** | **-1.0** |
| | 53nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **4.77** | **28** | *eP* | **Pg** | **10 57 43.5** | **-3.6** |
| | 3.8nm,0.4s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **10 58 47.2** | **-1.5** |
| | 37nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.77** | **28** | Pg | **Pb** | **10 57 39.5** | **+0.1** |
| | 4.6nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 10 58 47.8 | |
| | 37nm,0.6s | | | | | | |
| **CHKK** | **Chushkaly** | **5.00** | **29** | *eP* | **Pb** | **10 57 47.4** | **+3.9** |
| | 4.5nm,0.2s | | | | | | |
| CHKK | | | | *eS* | **Sg** | **10 58 54.0** | **-2.4** |
| | 17nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **5.00** | **29** | Pg | **Pb** | **10 57 41.8** | **-1.6** |
| | 4.0nm,0.1s | | | | | | |
| CHKK | | | | Lg | Lg | 10 58 51.8 | |
| | 17nm,0.5s | | | | | | |
| **SATY** | **Saty** | **5.04** | **44** | *eP* | **Pb** | **10 57 48.0** | **+3.8** |
| | 13nm,0.5s | | | | | | |
| SATY | | | | *eS* | **Sg** | **10 58 55.2** | **-2.4** |
| | 32nm,0.9s | | | | | | |
| **KURS** | **Kuram** | **5.22** | **39** | *eP* | **Pg** | **10 57 51.8** | **-4.0** |
| | 5.1nm,0.5s | | | | | | |
| KURS | | | | *eS* | **Sg** | **10 59 01.3** | **-2.2** |
| | 13nm,1.0s | | | | | | |
| **KURS** | **Kuram** | **5.22** | **39** | Pg | **Pb** | **10 57 44.6** | **-2.6** |
| | 2.1nm,0.7s | | | | | | |
| KURS | | | | Lg | Lg | 10 58 57.2 | |
| | 5.0nm,1.0s | | | | | | |
| **ARXS** | **Arharly** | **5.63** | **33** | *eP* | **Pg** | **10 58 00.5** | **-3.2** |
| | 6.1nm,0.6s | | | | | | |
| ARXS | | | | *eS* | **Sg** | **10 59 16.4** | **-0.2** |
| | 15nm,0.5s | | | | | | |
| **PDGK** | **Podgornoye** | **5.82** | **47** | ⇓Pn | **Pn** | **10 57 44.3** | **+2.1** |
| | 1.3nm,0.6s | | | | | | |
| PDGK | | | | ⇑Pg | **Pg** | **10 58 05.5** | **-1.7** |
| | 6.6nm,0.8s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 10 59 16.2 | |
| | 4.5nm,0.7s | | | | | | |

*NOU **08** 11:01:36.7, 35°.15S×139°.21E, h15km, MLv4.1/10, Near Coast of South Australia*
*NEIC **08** 11:01:38.3±1.4, 34°.94S±0°.08×139°.11E±0°.08, h10km±2km, Error ellipse: s-maj=15.3km s-min=6.5km az=36.0*
*AUST **08** 11:01:38.6±0.4, 34°.91S×139°.16E, h10km±2km, mb4.1/4, Mjma3.8/17, ML3.3/13, MLv3.7/16, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*IDC **08** 11:01:41.2±6.9, 34°.33S×138°.73E, h0km, mbtmp2.9/3, ML2.7/2, Error ellipse: s-maj=71.3km s-min=29.0km az=171.0*

**ISC 08 11:01:37.3±0.8, 34°.91S±0°.04×139°.14E±0°.05, h10km, n35, σ1s73/41, Near coast of South Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDAN** | **Sedan** | **0.44** | **23** | P | **Pb** | **11 01 48.2** | **+1.1** |
| | 0.6nm,SNR=33 | | | | | | |
| SDAN | | | | S | **Sb** | **11 01 54.1** | **+0.5** |
| **GHSS** | **Government Hou** | **0.44** | **269** | P | **Pb** | **11 01 48.4** | **+1.4** |
| **GHSS** | **Government Hou** | **0.44** | **269** | P | **Pb** | **11 01 48.5** | **+1.4** |
| | 4.2nm,SNR=30 | | | | | | |
| **HTT** | **Hallett** | **1.49** | **353** | P | **Pb** | **11 02 05.8** | **+0.8** |
| **HTT** | **Hallett** | **1.49** | **353** | P | **Pb** | **11 02 05.9** | **+0.8** |
| | 0.6nm,SNR=6.5 | | | | | | |
| HTT | | | | S | **Sg** | **11 02 25.6** | **+0.5** |
| **NAPP** | **Napperby** | **1.91** | **334** | P | **Pb** | **11 02 12.0** | **-0.1** |
| | 0.4nm,SNR=33 | | | | | | |
| **KELC** | **Kelly Hill Cav** | **2.11** | **239** | P | **Pn** | **11 02 14.6** | **+2.0** |
| | 0.5nm,SNR=8.5 | | | | | | |
| KELC | | | | S | **Sb** | **11 02 43.9** | **+2.1** |
| **WHYH** | **Whyalla** | **2.28** | **325** | P | **Pn** | **11 02 17.3** | **+2.4** |
| **ARPS** | **Mount Arapiles** | **2.88** | **131** | P | **Pn** | **11 02 24.5** | **+1.4** |
| | 0.3nm,SNR=12 | | | | | | |
| ARPS | | | | S | **Sn** | **11 02 56.6** | **-1.1** |
| **MGBR** | **Mount Gambier** | **3.04** | **158** | Pn | **Pn** | **11 02 26.9** | **+1.5** |
| **BBOO** | **Buckleboo** | **3.31** | **308** | P | **Pn** | **11 02 30.2** | **+1.1** |
| **BBOO** | **Buckleboo** | **3.31** | **308** | Pn | **Pn** | **11 02 30.3** | **+1.1** |
| **BBOO** | **Buckleboo** | **3.31** | **308** | P | **Pn** | **11 02 30.0** | **+0.9** |
| | 0.1nm,SNR=1.3 | | | | | | |
| **STKA** | **Stephens Creek** | **3.66** | **35** | P | **Pn** | **11 02 35.8** | **+1.8** |
| **STKA** | **Stephens Creek** | **3.66** | **35** | P | **Pn** | **11 02 35.8** | **+1.8** |
| | SNR=1.9 | | | | | | |
| **STKA** | **Stephens Creek** | **3.66** | **35** | Pn | **Pn** | **11 02 35.7** | **+1.8** |
| | 0.6nm,0.3s,baz=224,slow=12,SNR=18 | | | | | | |
| STKA | | | | Pg | **Pb** | **11 02 44.2** | **+2.2** |
| | 2.5nm,0.3s,baz=212,slow=14,SNR=8.8 | | | | | | |
| STKA | | | | Sn | **Sn** | **11 03 17.8** | **+0.6** |
| | 2.0nm,0.3s,baz=270,slow=14,SNR=4.4 | | | | | | |
| STKA | | | | Lg | Lg | 11 03 30.2 | |
| | 3.0nm,0.3s,baz=288,slow=20,SNR=4.3 | | | | | | |
| | 2.8nm,0.5s | | | | | | |
| **LCRK** | **Leigh Creek** | **4.52** | **350** | P | **Pn** | **11 02 47.7** | **+2.0** |
| **LCRK** | **Leigh Creek** | **4.52** | **350** | P | **Pn** | **11 02 47.4** | **+1.7** |
| | 0.1nm,SNR=1.4 | | | | | | |
| **BRAT** | **Ballarat** | **4.69** | **126** | P | **Pn** | **11 02 50.1** | **+2.0** |
| | SNR=3.3 | | | | | | |
| **TOO** | **Toolangi** | **5.78** | **119** | Pn | **Pn** | **11 03 03.8** | **+0.7** |
| **TOO** | **Toolangi** | **5.78** | **119** | P | **Pn** | **11 03 04.0** | **+0.8** |
| | 0.1nm,SNR=1.0 | | | | | | |
| **MULG** | **Mulgathing** | **6.30** | **316** | P | **Pn** | **11 03 12.1** | **+1.9** |
| **MULG** | **Mulgathing** | **6.30** | **316** | P | **Pn** | **11 03 11.4** | **+1.2** |
| | 0.1nm,SNR=2.2 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **6.44** | **60** | P | **Pn** | **11 03 11.8** | **-0.4** |
| **CMSA** | **Cobar Meteorol** | **6.44** | **60** | P | **Pn** | **11 03 11.6** | **-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MAKZ | | | | ⇓Sn | | Sg | 11 17 36.9 | +1.2 |
| | 5.2nm,0.6s | | | | | | | |
| **DJR** | **Jarkent** | **3.92** | **252** | *e*P | | **Pg** | **11 17 33.2** | **-1.0** |
| | 2.3nm,0.6s | | | | | | | |
| DJR | | | | *e*S | | **Sg** | **11 18 26.4** | **+1.4** |
| | 2.6nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.58** | **321** | ⇓Pg | | Pg | 11 18 17.9 | -7.2 |
| | 0.5nm,0.4s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 11 19 48.1 | |
| | 4.9nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **6.60** | **322** | ⇑Pg | | **Pb** | **11 18 14.9** | **+0.8** |
| | 0.7nm,0.5s | | | | | | | |
| KURK | | | | ⇑Lg | | Lg | 11 19 48.6 | |
| | 2.3nm,0.7s | | | | | | | |

*BJI* ***08*** *11:19:14.0±0.0, 44˚.19N×149˚.54E, h12km, mb4.9/73, mB5.2/52, Ms5.0/74, Ms7 4.9/71*

*SKHL* ***08*** *11:19:17.3±0.5, 44˚.00N×149˚.70E, h46km±4km, mb5.2/8, mbv5.3/2, ms4.9/4*

*NEIC* ***08*** *11:19:18.2±1.3, 44˚.17N±0˚.03×149˚.4E±0˚.1, h22km±5km, mb4.9/217, Error ellipse: s-maj=11.1km s-min=4.6km az=82.0*

*MOS* ***08*** *11:19:19.8±1.0, 44˚.16N×149˚.27E, h47km, mb5.1/69, MS4.9/22, Error ellipse: s-maj=6.1km s-min=4.0km az=132.0*

*NIED* ***08*** *11:19:19.1, 44˚.38N×149˚.40E, h30km, MW5.0, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁶Nm; Mrr2.78; Mθθ-1.54; Mϕϕ-1.24; Mrθ-0.13; Mθϕ-1.33; Mϕr2.09; Fault plane solution: M₀3.41000×10¹⁶ NP1:ϕs23.00000°, δ63.00000°, λ67.00000°. NP2:ϕs246.00000°, δ35.00000°, λ127.00000°.*

*JMA* ***08*** *11:19:19.1±0.9, 44˚.4˚×14˚.9E±˚, h30km, MD5.0/17, MV4.9/17, SE OFF ETOROFU*

*IDC* ***08*** *11:19:20.8±2.2, 44˚.32N×149˚.39E, h41km±18km, mb4.3/27, mbtmp4.5/34, ML3.7/7, MS4.6/61, Error ellipse: s-maj=14.2km s-min=11.4km az=124.0*

*GCMT* ***08*** *11:19:21.2±0.3, 44˚.25N±0˚.02×149˚.80E±0˚.03, h27km, MW5.0/82, Moment Tensor Solution. s49,c61; s82,c114; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr2.85±.15; Mθθ-1.14±.09; Mϕϕ-1.71±.09; Mrθ0.82±.15; Mθϕ-1.43±.06; Mϕr2.33±.16; Best double couple: M₀3.78300×10¹⁶ NP1:ϕs27.00000°, δ66.00000°, λ79.00000°. NP2: ϕs231.00000°, δ26.00000°, λ112.00000°. Principal axes: T 3.8390, Plg68.0000°, Azm277.0000°; N -0.1110, Plg10.0000°, Azm31.0000°; P -3.7280, Plg20.0000°, Azm125.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR* ***08*** *11:19:24.4, 44˚.70N×149˚.23E, h45km, mb4.9, Ms4.6*

**ISC 08 11:19:18.5±0.5, 44˚.14N±0˚.04×149˚.51E±0˚.03, h30km±2km, h30km:pP-P, n862, σ1ˢ35/820, mb4.9/257, MS4.8/105, 39C-31D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **KUR** | **Kuril'sk** | **1.60** | **313** | *i* P | | **Pn** | **11** | **19** | **44.5** | **-0.3** |
| KUR | | | | | AMB | AMB | 11 | 19 | 45.6 | |
| | 2μm,0.5s | | | | | | | | | |
| KUR | | | | | AMB | AMB | 11 | 19 | 52.8 | |
| | 15μm,5.0s | | | | | | | | | |
| KUR | | | | *i* S | | **Sb** | **11** | **20** | **06.5** | **-0.8** |
| KUR | | | | | A | A | 11 | 20 | 11.4 | |
| | 11μm,0.5s | | | | | | | | | |
| KUR | | | | | A | A | 11 | 20 | 11.4 | |
| | 5μm,0.5s | | | | | | | | | |
| KUR | | | | | A | A | 11 | 20 | 32.0 | |
| | 20μm,3.0s | | | | | | | | | |
| KUR | | | | | A | A | 11 | 20 | 32.0 | |
| | 34μm,3.0s | | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.60** | **313** | *c i* PN | | **Pn** | **11** | **19** | **44.2** | **-0.6** |
| KUR | | | | *i* S | | **Sb** | **11** | **20** | **07.4** | **+0.1** |
| KUR | | | | | pmax | pmax | | | | |
| | comp=Z,2μm,0.5s | | | | | | | | | |
| KUR | | | | | pmax | pmax | | | | |
| | comp=N,562nm,0.7s | | | | | | | | | |
| KUR | | | | | pmax | pmax | | | | |
| | comp=E,293nm,0.4s | | | | | | | | | |
| KUR | | | | | pmax | pmax | | | | |
| | comp=Z,15μm,4.8s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=N,10μm,0.5s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=E,34μm,2.1s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=N,20μm,3.4s | | | | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **263** | *e*P | | **Pn** | **11** | **19** | **49.0** | **-0.6** |
| SHO | | | | | AMB | AMB | 11 | 19 | 51.9 | |
| | comp=N,280nm,0.3s | | | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **11** | **20** | **12.4** | **-0.7** |
| SHO | | | | | A | A | 11 | 20 | 23.0 | |
| | comp=N,2μm,0.5s | | | | | | | | | |
| SHO | | | | | A | A | 11 | 20 | 23.0 | |
| | comp=N,2μm,0.5s | | | | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **263** | *e*PN | | **Pn** | **11** | **19** | **49.2** | **-0.4** |
| SHO | | | | *e*S | | **Sn** | **11** | **20** | **12.0** | **-1.1** |
| SHO | | | | | pmax | pmax | | | | |
| | comp=Z,300nm,0.4s | | | | | | | | | |
| SHO | | | | | pmax | pmax | | | | |
| | comp=N,118nm,0.3s | | | | | | | | | |
| SHO | | | | | pmax | pmax | | | | |
| | comp=E,202nm,0.3s | | | | | | | | | |
| SHO | | | | | smax | smax | | | | |
| | comp=N,2μm,0.4s | | | | | | | | | |
| SHO | | | | | smax | smax | | | | |
| | comp=E,2μm,0.4s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.63** | **269** | *e*P | | **Pn** | **11** | **19** | **58.7** | **-0.3** |
| YUK | | | | | AMB | AMB | 11 | 20 | 00.6 | |
| | comp=E,490nm,0.3s | | | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **11** | **20** | **30.2** | **+0.4** |
| YUK | | | | | A | A | 11 | 20 | 42.9 | |
| | comp=E,3μm,0.5s | | | | | | | | | |
| YUK | | | | | A | A | 11 | 20 | 42.9 | |
| | comp=E,1μm,0.5s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.63** | **269** | *e*PN | | **Pn** | **11** | **19** | **58.7** | **-0.3** |
| YUK | | | | *e*S | | **Sn** | **11** | **20** | **30.3** | **+0.4** |
| YUK | | | | | pmax | pmax | | | | |
| | comp=N,155nm,0.3s | | | | | | | | | |
| YUK | | | | | pmax | pmax | | | | |
| | comp=Z,511nm,0.3s | | | | | | | | | |
| YUK | | | | | pmax | pmax | | | | |
| | comp=E,285nm,0.4s | | | | | | | | | |
| YUK | | | | | smax | smax | | | | |
| | comp=N,2μm,0.5s | | | | | | | | | |
| YUK | | | | | smax | smax | | | | |
| | comp=E,4μm,0.5s | | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.84** | **255** | *e*P | | **Pn** | **11** | **20** | **01.1** | **-0.6** |
| NEM2 | | | | *e*S | | **Sn** | **11** | **20** | **31.0** | **-4.0** |
| **NMR** | **Nemuro--Hokkai** | **2.85** | **256** | *e*P | | **Pn** | **11** | **20** | **01.2** | **-0.7** |
| NMR | | | | *e*S | | **Sn** | **11** | **20** | **33.9** | **-1.3** |
| **NMR** | **Nemuro--Hokkai** | **2.85** | **256** | *e*PN | | **Pn** | **11** | **20** | **01.2** | **-0.7** |
| NMR | | | | *e*S | | **Sn** | **11** | **20** | **33.9** | **-1.3** |
| **RUSJ** | **Misakicho** | **3.07** | **271** | *e*PN | | **Pn** | **11** | **20** | **06.1** | **+1.1** |
| RUSJ | | | | *e*S | | **Sn** | **11** | **20** | **43.1** | **+2.4** |
| **JRA** | **Rausu** | **3.17** | **268** | P | | **Pn** | **11** | **20** | **07.5** | **+1.2** |
| JRA | | | | *e*S | | **Sn** | **11** | **20** | **43.9** | **+0.7** |
| **JNSB** | **Nemuroshibetsu** | **3.28** | **265** | A | | A | 11 | 20 | 06.7 | |
| | comp=E,13nm,2.5s,comp=N,16nm,4.8s | | | | | | | | | |
| **JKHN** | **Kushirohamanak** | **3.33** | **253** | A | | A | 11 | 20 | 08.3 | |
| | comp=E,11nm,4.8s,comp=N,13nm,5.5s | | | | | | | | | |
| **JNK** | **Nakash** | **3.51** | **263** | P | | **Pn** | **11** | **20** | **11.3** | **+0.3** |
| JNK | | | | *e*S | | **Sn** | **11** | **20** | **52.5** | **+0.9** |
| **AKK** | **Akkeshi** | **3.58** | **253** | *e*P | | **Pn** | **11** | **20** | **11.6** | **-0.3** |
| AKK | | | | *e*S | | **Sn** | **11** | **20** | **52.0** | **-1.1** |
| **JAK** | **Akkeshi** | **3.68** | **254** | *e*P | | **Pn** | **11** | **20** | **13.6** | **+0.2** |
| JAK | | | | *e*S | | **Sn** | **11** | **20** | **54.7** | **-1.1** |
| **JTKR** | **Abashiri--Toko** | **4.04** | **269** | *e*P | | **Pn** | **11** | **20** | **19.3** | **+1.0** |
| **JAR** | **Ashorobuto** | **4.25** | **260** | P | | **Pn** | **11** | **20** | **21.5** | **+0.4** |
| JAR | | | | *e*S | | **Sn** | **11** | **21** | **10.4** | **+0.7** |
| **JOB** | **Onbets** | **4.31** | **255** | *e*P | | **Pn** | **11** | **20** | **23.1** | **+1.0** |
| JOB | | | | *e*S | | **Sn** | **11** | **21** | **11.1** | **-0.2** |
| **JCH** | **Churui** | **4.74** | **253** | *e*P | | **Pn** | **11** | **20** | **28.2** | **+0.3** |
| JCH | | | | *e*S | | **Sn** | **11** | **21** | **20.9** | **-0.8** |
| **JKK2** | **Kamakawa 2** | **4.89** | **269** | *e*P | | **Pn** | **11** | **20** | **32.0** | **+2.0** |
| **JKA** | **Kamikawa-asahi** | **4.98** | **272** | Pn | | **Pn** | **11** | **20** | **30.3** | **-0.9** |
| **JKA** | **Kamikawa-asahi** | **4.98** | **272** | *e*P | | **Pn** | **11** | **20** | **32.8** | **+1.6** |
| **ASAJ** | **Asahikawa** | **4.98** | **272** | P | | **Pn** | **11** | **20** | **32.8** | **+1.6** |
| | comp=N,5.4nm,0.3s,baz=58,slow=14,SNR=28 | | | | | | | | | |
| ASAJ | | | | | LR | LR | 11 | 22 | 53.3 | |
| | comp=N,13μm,18.1s,baz=130,slow=44 | | | | | | | | | |
| | comp=N,13nm,0.4s | | | | | | | | | |
| **ERM** | **Erimo** | **5.12** | **248** | Pn | | **Pn** | **11** | **20** | **31.2** | **-1.9** |
| **ERM** | **Erimo** | **5.12** | **248** | *ce*PN | | **Pn** | **11** | **20** | **35.3** | **+2.2** |
| ERM | | | | | pmax | pmax | | | | |
| | comp=Z,325nm,1.3s | | | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.28** | **252** | *e*P | | **Pn** | **11** | **20** | **36.3** | **+0.9** |
| JNBK | | | | *e*S | | **Sn** | **11** | **21** | **35.6** | **+0.4** |
| **JAB** | **Ashibetsu** | **5.31** | **266** | *e*P | | **Pn** | **11** | **20** | **40.5** | **+4.7** |
| **YSS** | **Yuzh-Sakhalins** | **5.52** | **303** | Pn | | **Pn** | **11** | **20** | **36.1** | **-2.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.52** | **303** | *e*P | | **Pn** | **11** | **20** | **40.8** | **+2.3** |
| YSS | | | | | AMB | AMB | 11 | 20 | 42.1 | |
| | comp=Z,20nm,0.6s | | | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **11** | **21** | **41.8** | **+0.9** |
| YSS | | | | | A | A | 11 | 21 | 56.0 | |
| | comp=Z,30nm,0.5s | | | | | | | | | |
| YSS | | | | | A | A | 11 | 21 | 56.0 | |
| | comp=Z,50nm,0.5s | | | | | | | | | |
| YSS | | | | | AMS | AMS | 11 | 23 | 03.0 | |
| | comp=Z,4μm,15.0s | | | | | | | | | |
| YSS | | | | | AMS | AMS | 11 | 23 | 03.0 | |
| | comp=Z,9μm,15.0s | | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.52** | **303** | *e*PN | | **Pn** | **11** | **20** | **40.8** | **+2.3** |
| YSS | | | | *e*S | | **Sn** | **11** | **21** | **41.8** | **+0.9** |
| YSS | | | | | pmax | pmax | | | | |
| | comp=Z,30nm,0.9s | | | | | | | | | |
| YSS | | | | | smax | smax | | | | |
| | comp=N,90nm,0.7s | | | | | | | | | |
| YSS | | | | | MLR | MLR | | | | |
| | comp=Z,9μm,16.0s | | | | | | | | | |
| YSS | | | | | MLR | MLR | | | | |
| | comp=N,4μm,14.0s | | | | | | | | | |
| **JANG** | **Nango** | **7.03** | **240** | *e*S | | **Sn** | **11** | **22** | **09.9** | **-8.3** |
| **JTH** | **Tanohata** | **7.08** | **236** | *e*S | | Sn | 11 | 22 | 09.8 | -10 |
| **JTM** | **Tenmabayashi** | **7.09** | **245** | Pn | | **Pn** | **11** | **20** | **58.4** | **-1.8** |
| **UGL** | **Uglegorsk** | **7.12** | **317** | *e*P | | **Pn** | **11** | **21** | **03.7** | **+3.2** |
| UGL | | | | | AMB | AMB | 11 | 21 | 08.4 | |
| | comp=N,30nm,0.6s | | | | | | | | | |
| UGL | | | | | AMS | AMS | 11 | 25 | 02.0 | |
| | comp=N,4μm,16.0s | | | | | | | | | |
| UGL | | | | | AMS | AMS | 11 | 25 | 02.0 | |
| | comp=N,4μm,12.0s | | | | | | | | | |
| UGL | | | | | AMS | AMS | 11 | 25 | 02.0 | |
| | comp=N,2μm,12.0s | | | | | | | | | |
| **UGL** | **Uglegorsk** | **7.12** | **317** | *e*PN | | **Pn** | **11** | **21** | **03.7** | **+3.2** |
| UGL | | | | *e*S | | **Sn** | **11** | **22** | **28.1** | **+7.8** |
| UGL | | | | | MLR | MLR | | | | |
| | comp=Z,4μm,16.0s | | | | | | | | | |
| UGL | | | | | MLR | MLR | | | | |
| | comp=N,4μm,13.0s | | | | | | | | | |
| UGL | | | | | MLR | MLR | | | | |
| | comp=E,2μm,10.0s | | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.92** | **32** | *e*P | | **Pn** | **11** | **21** | **10.9** | **-0.7** |
| SKR | | | | | AMB | AMB | 11 | 21 | 15.0 | |
| | comp=E,30nm,0.4s | | | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **11** | **22** | **37.0** | **-3.1** |
| SKR | | | | | A | A | 11 | 22 | 42.2 | |
| | comp=E,60nm,0.3s | | | | | | | | | |
| SKR | | | | | A | A | 11 | 22 | 42.2 | |
| | comp=E,50nm,0.3s | | | | | | | | | |
| SKR | | | | | AMS | AMS | 11 | 24 | 05.1 | |
| | comp=E,4μm,15.0s | | | | | | | | | |
| SKR | | | | | AMS | AMS | 11 | 24 | 05.1 | |
| | comp=E,4μm,15.0s | | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.92** | **32** | *e*PN | | **Pn** | **11** | **21** | **11.1** | **-0.5** |
| SKR | | | | | pmax | pmax | | | | |
| | comp=Z,44nm,1.5s | | | | | | | | | |
| SKR | | | | | MLR | MLR | | | | |
| | comp=N,4μm,14.0s | | | | | | | | | |
| SKR | | | | | MLR | MLR | | | | |
| | comp=E,4μm,16.0s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **8.17** | **328** | *e*P | | **Pn** | **11** | **21** | **17.0** | **+2.1** |
| TYV | | | | | AMB | AMB | 11 | 21 | 18.4 | |
| | comp=E,500nm,6.0s | | | | | | | | | |
| TYV | | | | | AMB | AMB | 11 | 21 | 22.4 | |
| | comp=E,20nm,0.7s | | | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **11** | **22** | **45.3** | **-0.8** |
| TYV | | | | | A | A | 11 | 22 | 48.6 | |
| | comp=E,200nm,5.0s | | | | | | | | | |
| TYV | | | | | A | A | 11 | 22 | 58.9 | |
| | comp=E,10.0nm,0.8s | | | | | | | | | |
| TYV | | | | | A | A | 11 | 22 | 58.9 | |
| | comp=E,10.0nm,0.8s | | | | | | | | | |
| TYV | | | | | AMS | AMS | 11 | 24 | 34.9 | |
| | comp=E,4μm,16.0s | | | | | | | | | |
| TYV | | | | | AMS | AMS | 11 | 24 | 34.9 | |
| | comp=E,3μm,16.0s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **8.17** | **328** | *e*PN | | **Pn** | **11** | **21** | **17.4** | **+2.5** |
| TYV | | | | | pmax | pmax | | | | |
| | comp=Z,500nm,5.5s | | | | | | | | | |
| TYV | | | | | pmax | pmax | | | | |
| | comp=Z,19nm,0.8s | | | | | | | | | |
| TYV | | | | | MLR | MLR | | | | |
| | comp=E,4μm,16.0s | | | | | | | | | |
| TYV | | | | | MLR | MLR | | | | |
| | comp=Z,3μm,16.0s | | | | | | | | | |
| **TEY** | **Ternei** | **9.26** | **280** | *e*P | | **Pn** | **11** | **21** | **32.0** | **+2.1** |
| TEY | | | | | AMB | AMB | 11 | 21 | 32.8 | |
| | comp=Z,100nm,2.0s | | | | | | | | | |
| **TEY** | **Ternei** | **9.26** | **280** | *e*PN | | **Pn** | **11** | **21** | **32.0** | **+2.1** |
| TEY | | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.5s | | | | | | | | | |
| **OKH** | **Okha** | **10.36** | **338** | *c i* PN | | **Pn** | **11** | **21** | **47.0** | **+2.1** |
| OKH | | | | *e*S | | **Sn** | **11** | **23** | **48.4** | **+8.6** |
| OKH | | | | | pmax | pmax | | | | |
| | comp=Z,200nm,8.3s | | | | | | | | | |
| OKH | | | | | MLR | MLR | | | | |
| | comp=Z,2μm,15.0s | | | | | | | | | |
| OKH | | | | | MLR | MLR | | | | |
| | comp=E,2μm,16.0s | | | | | | | | | |
| OKH | | | | | MLR | MLR | | | | |
| | comp=N,3μm,15.0s | | | | | | | | | |
| **JSD** | **Sado** | **10.45** | **238** | Pn | | **Pn** | **11** | **21** | **44.6** | **-1.7** |
| **NKL** | **Nikolayevsk** | **10.73** | **330** | *e*P | | **Pn** | **11** | **21** | **51.4** | **+1.4** |
| NKL | | | | | AMB | AMB | 11 | 21 | 54.2 | |
| | comp=N,110nm,1.0s | | | | | | | | | |
| NKL | | | | *e*S | | **Sn** | **11** | **23** | **49.0** | **0.0** |
| NKL | | | | | AMS | AMS | 11 | 23 | 50.4 | |
| | comp=N,6μm,15.0s | | | | | | | | | |
| NKL | | | | | AMS | AMS | 11 | 23 | 50.4 | |
| | comp=N,5μm,15.0s | | | | | | | | | |
| NKL | | | | | AMS | AMS | 11 | 23 | 50.4 | |
| | comp=N,10μm,15.0s | | | | | | | | | |
| **NKL** | **Nikolayevsk** | **10.73** | **330** | *e*PN | | **Pn** | **11** | **21** | **47.2** | **-2.8** |
| NKL | | | | | pmax | pmax | | | | |
| | comp=N,25nm,1.5s | | | | | | | | | |
| NKL | | | | | pmax | pmax | | | | |
| | comp=E,26nm,1.5s | | | | | | | | | |
| NKL | | | | | pmax | pmax | | | | |
| | comp=Z,106nm,1.2s | | | | | | | | | |
| NKL | | | | | MLR | MLR | | | | |
| | comp=N,6μm,12.0s | | | | | | | | | |
| NKL | | | | | MLR | MLR | | | | |
| | comp=E,5μm,17.0s | | | | | | | | | |
| NKL | | | | | MLR | MLR | | | | |
| | comp=Z,10μm,17.0s | | | | | | | | | |
| **PET** | **Petropavlovsk** | **10.74** | **31** | Pn | | **Pn** | **11** | **21** | **50.0** | **-0.2** |
| **PET** | **Petropavlovsk** | **10.74** | **31** | *e*PN | | **Pn** | **11** | **21** | **46.6** | **-3.6** |
| PET | | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.3s | | | | | | | | | |
| **GRNR** | **Gornyy** | **11.06** | **311** | *e*P | | **Pn** | **11** | **21** | **56.5** | **+2.0** |
| GRNR | | | | | AMB | AMB | 11 | 21 | 58.2 | |
| **GRNR** | **Gornyy** | **11.06** | **311** | ⇑ *i* PN | | **Pn** | **11** | **21** | **56.5** | **+2.0** |
| GRNR | | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | | |
| GRNR | | | | | MLR | MLR | | | | |
| | comp=N,1μm,16.0s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **11.48** | **232** | Pn | | **Pn** | **11** | **21** | **58.9** | **-1.5** |
| **MAJO** | **Matsushiro** | **11.48** | **232** | *i* PN | | **Pn** | **11** | **22** | **00.5** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **11.48** | **232** | P | | **Pn** | **11** | **22** | **00.7** | **+0.2** |
| | comp=N,0.1nm,0.3s,baz=47,slow=14,SNR=8.6 | | | | | | | | | |
| MJAR | | | | | S | **Sn** | **11** | **24** | **08.8** | **+1.1** |
| | comp=N,2.1nm,0.8s,baz=50,slow=24,SNR=1.4 | | | | | | | | | |
| | comp=N,3.9nm,0.8s | | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **11.48** | **232** | Pn | | **Pn** | **11** | **21** | **59.2** | **-1.2** |
| **USA0B** | **Ussuriysk Arra** | **12.59** | **276** | Pn | | **Pn** | **11** | **22** | **13.8** | **-1.6** |
| **USA0B** | **Ussuriysk Arra** | **12.59** | **276** | *i* PN | | **Pn** | **11** | **22** | **15.1** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **12.59** | **276** | Pn | | **Pn** | **11** | **22** | **13.8** | **-1.6** |
| **USRK** | **Ussuriysk Ar.** | **12.59** | **276** | P | | **Pn** | **11** | **22** | **16.2** | **+0.8** |
| | comp=N,1.3nm,0.3s,baz=81,slow=12,SNR=23 | | | | | | | | | |
| USRK | | | | | LR | LR | 11 | 27 | 36.1 | |
| | comp=N,4μm,18.2s,baz=89,slow=40 | | | | | | | | | |
| | comp=N,6.2nm,0.5s | | | | | | | | | |
| **JGF** | **Kuroka** | **12.64** | **232** | Pn | | **Pn** | **11** | **22** | **15.2** | **-1.0** |
| **VLA** | **Vladivostok** | **12.82** | **272** | *i* PN | | **Pn** | **11** | **22** | **18.4** | **-0.2** |
| VLA | | | | | pmax | pmax | | | | |
| | comp=Z,62nm,1.7s | | | | | | | | | |
| **INU** | **Inuyama** | **13.01** | **232** | Pn | | **Pn** | **11** | **22** | **18.9** | **-2.4** |
| **KLR** | **Kul'dur** | **13.21** | **299** | P | | **Pn** | **11** | **22** | **25.3** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=94,slow=10.0,SNR=3.8 | | | | | | | | | |
| KLR | | | | | LR | LR | 11 | 28 | 10.0 | |
| | comp=Z,5μm,18.3s,baz=106,slow=41 | | | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | | | |
| **KLR** | **Kul'dur** | **13.21** | **299** | *e*P | | **Pn** | **11** | **22** | **24.9** | **+1.0** |
| **KLR** | **Kul'dur** | **13.21** | **299** | *e*PN | | **Pn** | **11** | **22** | **24.9** | **+1.0** |
| KLR | | | | | pmax | pmax | | | | |
| | comp=Z,21nm,1.7s | | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **13.37** | **218** | LR | | LR | 11 | 30 | 21.8 | |
| | comp=Z,1μm,18.1s,baz=64,slow=49 | | | | | | | | | |
| **PSTR** | **Posyet** | **13.69** | **270** | *i* P | | **Pn** | **11** | **22** | **31.1** | **+0.6** |
| **MDJ** | **Mudanjiang** | **14.26** | **279** | P | | **Pn** | **11** | **22** | **39.2** | **+1.0** |
| MDJ | | | | pP | | P | 11 | 22 | 43.6 | -1.6 |
| MDJ | | | | sP | | | 11 | 22 | 47.7 | |
| MDJ | | | | | pmax | pmax | | | | |
| | comp=Z,26nm,1.0s | | | | | | | | | |
| MDJ | | | | | pmax | pmax | | | | |
| | comp=Z,610nm,6.7s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,3μm,15.1s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,4μm,18.5s | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **14.26** | **279** | Pn | | **Pn** | **11** | **22** | **37.0** | **-1.2** |
| **MA2** | **Magadan** | **15.47** | **2** | LR | | LR | 11 | 29 | 21.5 | |
| | comp=Z,2μm,18.6s,baz=189,slow=39 | | | | | | | | | |
| **BNX** | **BinXian** | **15.73** | **284** | ⇓P | | **Pn** | **11** | **22** | **55.8** | **-2.0** |
| BNX | | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.1s | | | | | | | | | |
| BNX | | | | | pmax | pmax | | | | |
| | comp=Z,570nm,10.6s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,3μm,13.9s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,3μm,14.5s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,3μm,13.5s | | | | | | | | | |
| **HEH** | **HeiHe** | **16.19** | **300** | *e*P | | **Pn** | **11** | **23** | **04.4** | **+0.8** |
| HEH | | | | pP | | **P** | **11** | **23** | **09.6** | **+3.1** |
| HEH | | | | S | | **Sn** | **11** | **26** | **01.8** | **-0.3** |
| HEH | | | | sS | | **S** | **11** | **26** | **09.4** | **-5.1** |
| HEH | | | | SS | | **SnSn** | **11** | **26** | **15.9** | **+1.0** |
| HEH | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| HEH | | | | | pmax | pmax | | | | |
| | comp=Z,750nm,8.4s | | | | | | | | | |
| HEH | | | | | LR | LR | | | | |
| | comp=Z,1μm,16.1s | | | | | | | | | |
| HEH | | | | | LR | LR | | | | |
| | comp=Z,5μm,17.4s | | | | | | | | | |
| HEH | | | | | LR | LR | | | | |
| | comp=Z,6μm,17.1s | | | | | | | | | |
| **ZEA** | **Zeya** | **17.43** | **311** | *e*P | | **Pn** | **11** | **23** | **17.8** | **-1.4** |
| ZEA | | | | | AMB | AMB | 11 | 23 | 21.6 | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| ZEA | | | | | AMB | AMB | 11 | 23 | 26.7 | |
| | comp=Z,300nm,5.0s | | | | | | | | | |
| **ZEA** | **Zeya** | **17.43** | **311** | *e*P | | **Pn** | **11** | **23** | **17.8** | **-1.4** |
| ZEA | | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.1s | | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | | |
| | comp=Z,300nm,5.1s | | | | | | | | | |
| ZEA | | | | | MLR | MLR | | | | |
| | comp=E,2μm,16.0s | | | | | | | | | |
| **KSRS** | **Korea Array** | **17.64** | **255** | P | | **Pn** | **11** | **23** | **21.9** | **+0.1** |
| | comp=E,0.2nm,0.3s,baz=63,slow=11,SNR=14 | | | | | | | | | |
| KSRS | | | | | LR | LR | 11 | 29 | 59.6 | |
| | comp=E,1μm,20.1s,baz=60,slow=36 | | | | | | | | | |
| | comp=E,5.1nm,0.9s | | | | | | | | | |
| **KSRS** | **Korea Array** | **17.64** | **255** | P | | **Pn** | **11** | **23** | **22.0** | **+0.1** |
| **KS19** | **Wonju Array Si** | **17.65** | **255** | | | **Pn** | **11** | **23** | **18.2** | **-3.9** |
| **KSAR** | **Wonju Array Be** | **17.67** | **255** | P | | **Pn** | **11** | **23** | **19.9** | **-2.4** |
| **KSAR** | **Wonju Array Be** | **17.67** | **255** | P | | **Pn** | **11** | **23** | **19.9** | **-2.4** |
| **JCJ** | **Chichijima** | **18.01** | **202** | P | | **Pn** | **11** | **23** | **24.7** | **-1.8** |
| **JNU** | **Nakatsue** | **18.21** | **239** | P | | **Pn** | **11** | **23** | **28.0** | **-1.0** |
| JNU | | | | | IAmb | IAmb | 11 | 23 | 48.8 | |
| | comp=Z,118nm,1.5s | | | | | | | | | |
| **JNU** | **Nakatsue** | **18.21** | **239** | P | | **P** | **11** | **23** | **31.0** | **+2.0** |
| | comp=Z,0.2nm,0.3s,baz=54,slow=10,SNR=4.2 | | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | | |
| **SHEM** | **Shenya Is, Ala** | **18.36** | **53** | LR | | LR | 11 | 31 | 47.9 | |
| | comp=Z,946nm,18.3s,baz=262,slow=41 | | | | | | | | | |
| **INCN** | **Inchon** | **18.52** | **257** | P | | **P** | **11** | **23** | **31.3** | **-1.2** |
| **INCN** | **Inchon** | **18.52** | **257** | P | | **P** | **11** | **23** | **31.3** | **-1.2** |
| INCN | | | | | pmax | pmax | | | | |
| | comp=Z,67nm,1.4s | | | | | | | | | |
| **TJN** | **Taejon** | **18.56** | **253** | | | **P** | **11** | **23** | **31.9** | **-0.9** |
| TJN | | | | | IAmb | IAmb | 11 | 23 | 35.7 | |
| | comp=Z,174nm,1.2s | | | | | | | | | |
| **TJN** | **Taejon** | **18.56** | **253** | P | | **P** | **11** | **23** | **32.0** | **-0.9** |
| TJN | | | | | pmax | pmax | | | | |
| | comp=Z,174nm,1.2s | | | | | | | | | |
| **SEY** | **Seymchan** | **18.90** | **4** | P | | **P** | **11** | **23** | **34.6** | **-1.7** |
| | comp=Z,0.8nm,0.3s,baz=183,slow=9.2,SNR=20 | | | | | | | | | |
| SEY | | | | | LR | LR | 11 | 31 | 31.2 | |
| | comp=Z,3μm,18.5s,baz=180,slow=39 | | | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | | | |
| **SEY** | **Seymchan** | **18.90** | **4** | *ce*P | | **P** | **11** | **23** | **35.2** | **-1.1** |
| SEY | | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.3s | | | | | | | | | |
| **SNY** | **Shenyang** | **19.09** | **272** | ⇓P | | **Pn** | **11** | **23** | **39.4** | **-0.2** |
| SNY | | | | | pmax | pmax | | | | |
| | comp=Z,32nm,1.0s | | | | | | | | | |
| SNY | | | | | pmax | pmax | | | | |
| | comp=Z,280nm,8.6s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,320nm,13.7s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,620nm,14.9s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,880nm,13.9s | | | | | | | | | |
| **HIA** | **Hailar** | **20.97** | **295** | *i* P | | **P** | **11** | **23** | **59.1** | **0.0** |
| HIA | | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| **YAK** | **Yakutsk** | **21.35** | **334** | P | | **P** | **11** | **24** | **01.2** | **-1.7** |
| **YAK** | **Yakutsk** | **21.35** | **334** | P | | **P** | **11** | **24** | **01.3** | **-1.6** |
| | comp=Z,19nm,0.3s,baz=139,slow=4.8,SNR=7.0 | | | | | | | | | |
| YAK | | | | | LR | LR | 11 | 33 | 02.1 | |
| | comp=Z,2μm,18.3s,baz=134,slow=39 | | | | | | | | | |
| | comp=Z,19n

**JOW Kunigami** 24.33 232 P **P** **11 24 34.9 +1.3**
comp=Z,19nm,0.8s,baz=76,slow=8.4,SNR=3.6
comp=Z,19nm,0.8s
**BJI Beijing** 24.98 272 P **P** **11 24 39.0 -0.3**
BJI S **S** **11 29 04.6 +3.5**
BJI pmax pmax
comp=Z,19nm,1.9s
BJI pmax pmax
comp=Z,230nm,4.4s
BJI LR LR
comp=Z,400nm,16.4s
BJI LR LR
comp=Z,1µm,16.4s
BJI LR LR
comp=Z,1µm,17.5s
**BJT Baijiatuau** 24.99 272 P **P** **11 24 39.0 -0.4**
BJT IAmb IAmb 11 24 57.0
comp=Z,40nm,1.4s
**BJT Baijiatuau** 24.99 272 P **P** **11 24 39.0 -0.4**
BJT pmax pmax
comp=Z,40nm,1.4s
**BILL Bilibino** 25.53 15 P **P** **11 24 43.5 -0.6**
BILL IAmb IAmb 11 25 10.1
comp=Z,11nm,0.4s
**BILL Bilibino** 25.53 15⇓ *e*P **P** **11 24 42.7 -1.4**
BILL *e*S **S** **11 29 04.1 -5.3**
BILL pmax pmax
comp=Z,9.0nm,1.7s
BILL MLR MLR
comp=Z,2µm,14.0s
**SSE Sheshan** 25.80 249 P **P** **11 24 45.3 -1.6**
SSE S **S** **11 29 14.6 +0.3**
SSE pmax pmax
comp=Z,14nm,0.9s
SSE pmax pmax
comp=Z,44nm,3.6s
SSE LR LR
comp=Z,620nm,18.7s
SSE LR LR
comp=Z,630nm,18.8s
**TIA Tai'an** 25.86 263 P **P** **11 24 48.3 +0.9**
TIA S **S** **11 29 20.8 +5.6**
TIA pmax pmax
comp=Z,45nm,0.9s
TIA pmax pmax
comp=Z,340nm,6.5s
TIA LR LR
comp=Z,960nm,17.6s
TIA LR LR
comp=Z,1µm,16.4s
TIA LR LR
comp=Z,2µm,15.2s
**NJ2 Nanjing** 26.82 254 *e*P **P** **11 25 00.1 +4.0**
NJ2 S **S** **11 29 33.5 +3.1**
NJ2 pmax pmax
comp=Z,11nm,0.5s
NJ2 LR LR
comp=Z,2µm,15.2s
NJ2 LR LR
comp=Z,2µm,17.1s
NJ2 LR LR
comp=Z,3µm,17.1s
**HNS HongShan** 27.06 268 ⇑P **P** **11 24 59.1 +0.9**
HNS S **S** **11 29 39.6 +5.5**
HNS pmax pmax
comp=Z,14nm,1.0s
HNS LR LR
comp=Z,820nm,17.5s
HNS LR LR
comp=Z,980nm,17.1s
HNS LR LR
comp=Z,1µm,17.6s
**HHC Hu-ho-hao-te** 28.01 277 *e*P **P** **11 25 07.5 +0.7**
HHC pP pP 11 25 12.0 -1.9
HHC sP sP 11 25 17.0 +0.1
HHC S **S** **11 29 47.6 -1.7**
HHC sS pS 11 29 56.8 -0.6
HHC pmax pmax
comp=Z,49nm,1.3s
HHC pmax pmax
comp=Z,340nm,3.9s
HHC LR LR
comp=Z,1µm,14.5s
HHC LR LR
comp=Z,2µm,16.5s
HHC LR LR
comp=Z,3µm,16.8s
**BTO Baotou** 29.20 277 *e*P **P** **11 25 18.8 +1.4**
BTO pP **pP** **11 25 22.8 -1.7**
BTO sP **sP** **11 25 26.8 -0.6**
BTO PP **PP** **11 26 17.3 -6.1**
BTO S **S** **11 30 13.8 +5.9**
BTO pmax pmax
comp=Z,31nm,0.9s
BTO pmax pmax
comp=Z,230nm,4.1s
BTO LR LR
comp=Z,3µm,14.5s
BTO LR LR
comp=Z,5µm,16.7s
BTO LR LR
comp=Z,6µm,16.9s
**ULN Ulaanbaatar** 29.45 292 P **P** **11 25 18.8 -0.9**
ULN IAmb IAmb 11 25 21.1
comp=Z,17nm,1.0s
**ULN Ulaanbaatar** 29.45 292 *e*P **P** **11 25 20.0 +0.3**
**ULN Ulaanbaatar** 29.45 292 *ce*P **P** **11 25 20.0 +0.3**
ULN pmax pmax
comp=Z,25nm,1.3s
**SONM Songino Array** 29.90 292 P **P** **11 25 23.0 -0.5**
**SONM Songino Array** 29.90 292 P **P** **11 25 23.9 +0.3**
comp=Z,6.6nm,0.7s,baz=80,slow=8.1,SNR=39
SONM LR LR 11 38 42.6
comp=Z,3µm,18.7s,baz=86,slow=39
comp=Z,6.6nm,0.7s
**LYN LuoYang** 29.99 264 P P 11 25 29.6 +5.3
LYN pmax pmax
comp=Z,330nm,3.8s
LYN LR LR
comp=Z,1µm,19.2s
LYN LR LR
comp=Z,2µm,19.2s
LYN LR LR
comp=Z,2µm,16.5s
**GUMO Guam** 30.71 189 LR LR 11 39 38.3
comp=Z,401nm,18.6s,baz=14,slow=39
**IRK Irkutsk** 30.79 301 *e*P **P** **11 25 30.2 -1.1**
IRK pmax pmax
comp=Z,23nm,1.2s
**ZAK Zakamensk** 31.57 298 *e*P **P** **11 25 37.6 -0.7**
ZAK pmax pmax
comp=Z,9.0nm,1.2s
**XAN Xi'an** 32.79 266 ⇓P **P** **11 25 49.7 +0.7**
XAN pP pP 11 25 55.6 -0.6
XAN pmax pmax
comp=Z,19nm,0.8s
**MOY Mondy** 32.86 301 *e*P **P** **11 25 49.3 -0.3**
**MOY Mondy** 32.86 301 *e*P **P** **11 25 49.3 -0.3**
MOY pmax pmax
comp=Z,22nm,1.4s
**G15K Niukluk** 32.96 34 P **P** **11 25 50.3 +0.2**
baz=254
**O14K Tigyukauivet M** 33.17 45 P **P** **11 25 51.4 -0.6**
baz=265
**C16K Lisburne Hills** 33.57 29 P **P** **11 25 55.8 +0.4**
C16K IAmb IAmb 11 25 59.4
comp=Z,22nm,1.1s
**C16K Lisburne Hills** 33.57 29 P **P** **11 25 54.3 -1.1**
baz=248
**M15K Kasigluk River** 33.61 43 P **P** **11 25 55.5 -0.3**
baz=264
**N15K Kwethluk River** 33.85 44 P **P** **11 25 57.2 -0.8**
baz=265
**O15K Ungalikthiuk R** 33.91 46 P **P** **11 25 58.0 -0.4**
baz=267
**CHNA Chernabura Isl** 34.02 53 P **P** **11 25 59.8 +0.4**
baz=273
**D17K Noatak River** 34.16 30 P **P** **11 26 00.3 -0.2**
baz=251,SNR=5.3
**L16K Owhat River** 34.31 41 P **P** **11 26 03.5 +1.6**
L16K IAmb IAmb 11 26 20.0
comp=Z,16nm,1.5s
**L16K Owhat River** 34.31 41 P **P** **11 26 01.9 0.0**
baz=263
**C17K DeLong Mountai** 34.39 29 P **P** **11 26 02.4 -0.2**
baz=250
**F17K Baldwin Pennin** 34.47 33 P **P** **11 26 04.5 +1.3**
F17K IAmb IAmb 11 26 05.9
comp=Z,24nm,0.9s
**F17K Baldwin Pennin** 34.47 33 P **P** **11 26 03.3 +0.1**
baz=255
**G17K Kiwalik Mounta** 34.47 34 P **P** **11 26 03.3 +0.1**
baz=257
**M16K Timber Creek** 34.48 42 P **P** **11 26 05.0 +1.6**
M16K IAmb IAmb 11 26 24.2
comp=Z,18nm,1.4s
**M16K Timber Creek** 34.48 42 P **P** **11 26 02.7 -0.7**
baz=265
**N16K Nishlik Lake** 34.53 43 P **P** **11 26 03.8 0.0**
baz=266
**H17K Granite Mounta** 34.65 35 P **P** **11 26 04.7 0.0**
baz=258
**J17K VABM Dome** 34.72 38 P **P** **11 26 07.4 +2.0**
J17K IAmb IAmb 11 26 25.7
comp=Z,23nm,1.4s
**J17K VABM Dome** 34.72 38 P **P** **11 26 05.3 -0.2**
baz=261
**O16K Kokwok River B** 34.81 45 P **P** **11 26 06.9 +0.6**
baz=268
**L17K Donlin** 34.91 40 P **P** **11 26 07.3 +0.2**
baz=264
**K17K Iditarod** 34.98 39 P **P** **11 26 08.7 +1.0**
K17K IAmb IAmb 11 26 23.6
comp=Z,28nm,1.2s
**K17K Iditarod** 34.98 39 P **P** **11 26 07.7 0.0**
baz=263
**E18K Tukpahlearik C** 34.98 31 P **P** **11 26 09.0 +1.4**
baz=254
**F18K Selawik** 35.13 33 P **P** **11 26 09.5 +0.7**
baz=256
**C18K Utukok River** 35.14 29 P **P** **11 26 09.6 +0.6**
C18K IAmb IAmb 11 26 24.4
comp=Z,12nm,0.8s
**C18K Utukok River** 35.14 29 P **P** **11 26 08.5 -0.6**
baz=252
**B18K Kokolik River** 35.17 28 P **P** **11 26 09.0 -0.2**
baz=250
**M17K Holitna River** 35.25 42 P **P** **11 26 10.5 +0.5**
baz=266
**N17K Nushagak Hills** 35.31 43 P **P** **11 26 11.2 +0.7**
baz=267
**O17K Koliganek Bris** 35.33 45 P **P** **11 26 11.5 +0.8**
baz=268
**G18K Tagagawik** 35.36 34 P **P** **11 26 12.2 +1.2**
G18K IAmb IAmb 11 26 26.7
comp=Z,16nm,0.8s
**G18K Tagagawik** 35.36 34 P **P** **11 26 11.5 +0.6**
baz=258,SNR=5.8
**LZH Lanzhou** 35.46 273 P **P** **11 26 13.2 +0.9**
LZH sP sP 11 26 25.2 +2.7
LZH S **S** **11 31 48.6 +3.0**
LZH pmax pmax
comp=Z,110nm,1.1s
LZH pmax pmax
comp=Z,470nm,4.7s
LZH LR LR
comp=Z,1µm,15.5s
LZH LR LR
comp=Z,2µm,18.2s
LZH LR LR
comp=Z,2µm,16.8s
**L18K Granite Mounta** 35.67 40 P **P** **11 26 14.9 +1.3**
L18K IAmb IAmb 11 26 30.4
comp=Z,13nm,1.1s
**L18K Granite Mounta** 35.67 40 P **P** **11 26 14.0 +0.4**
baz=265
**R17L Mt. Peulik Vol** 35.71 48 P **P** **11 26 14.3 +0.3**
baz=272
**J18K Innoko River** 35.79 38 P **P** **11 26 16.3 +1.7**
J18K IAmb IAmb 11 26 30.6
comp=Z,10nm,0.9s
**J18K Innoko River** 35.79 38 P **P** **11 26 14.7 +0.1**
baz=263
**C19K Lookout Ridge** 35.83 28 P **P** **11 26 15.7 +0.7**
C19K IAmb IAmb 11 26 31.5
comp=Z,14nm,0.9s
**C19K Lookout Ridge** 35.83 28 P **P** **11 26 15.5 +0.5**
baz=253
**F19K Shaleruckik Mo** 35.91 32 P **P** **11 26 16.4 +0.9**
**F19K Shaleruckik Mo** 35.91 32 P **P** **11 26 15.7 +0.1**
baz=258,SNR=6.0
**Q17K Contact Creek** 35.94 47 P **P** **11 26 16.1 0.0**
baz=271
**N18K Kilae Creek** 35.96 43 P **P** **11 26 15.8 -0.3**
baz=268
**M18K Stony River** 36.03 42 P **P** **11 26 16.6 -0.1**
baz=267
**G19K Purcell Mounta** 36.04 34 P **P** **11 26 16.2 -0.5**
G19K IAmb IAmb 11 26 31.6
comp=Z,23nm,1.5s
**G19K Purcell Mounta** 36.04 34 P **P** **11 26 15.4 -1.4**
baz=259
**D19K Kuna River** 36.17 30 P **P** **11 26 18.1 +0.2**
baz=255
**H19K Roundabout Mou** 36.19 35 P **P** **11 26 19.1 +1.2**
**H19K Roundabout Mou** 36.19 35 P **P** **11 26 18.4 +0.4**
baz=261,SNR=10
**E19K Redstone River** 36.25 32 IAmb IAmb 11 26 36.5
comp=Z,36nm,1.4s
**E19K Redstone River** 36.25 32 P **P** **11 26 19.1 +0.6**
baz=258
**P18K Big Mountain,** 36.27 45 P **P** **11 26 19.2 +0.4**
baz=270
**O18K Koktuh Hills** 36.28 45 P **P** **11 26 19.9 +1.0**
baz=270
**J19K Poorman** 36.33 37 P **P** **11 26 19.7 +0.5**
J19K IAmb IAmb 11 26 34.3
comp=Z,24nm,1.1s
**J19K Poorman** 36.33 37 P **P** **11 26 20.2 +1.0**
baz=264
**Q18K Katmai Hardscr** 36.40 47 P **P** **11 26 20.1 +0.1**
baz=272
**L19K White Mountain** 36.53 41 P **P** **11 26 22.2 +1.2**
baz=267
**N19K Bonanza Creek** 36.65 43 P **P** **11 26 22.4 +0.2**
baz=269
**M19K Big River Lodg** 36.73 41 P **P** **11 26 23.2 +0.5**
baz=268
**R18K Karluk** 36.74 48 P **P** **11 26 22.9 +0.2**
baz=274
**F20K Avaraart Lake** 36.74 32 P **P** **11 26 23.5 +0.9**
**F20K Avaraart Lake** 36.74 32 P **P** **11 26 23.0 +0.3**
baz=260,SNR=6.1
**D20K Etivluk River** 36.76 30 P **P** **11 26 24.2 +1.3**
baz=256
**E20K Nigu River** 36.81 30 P **P** **11 26 24.2 +0.9**
baz=258
**H20K Anotleneega Mo** 36.83 35 P **P** **11 26 23.8 +0.3**
baz=262
**GTA Gaotai** 36.91 280 *e*P **P** **11 26 26.2 +1.6**
GTA sS sS 11 32 17.2 -2.7
GTA pmax pmax
comp=Z,18nm,0.9s
GTA pmax pmax
comp=Z,220nm,4.7s
GTA LR LR
comp=Z,1µm,17.5s
GTA LR LR
comp=Z,940nm,15.6s
GTA LR LR
comp=Z,2µm,16.4s
**B20K Meade River** 36.91 27 P **P** **11 26 24.8 +0.7**
B20K IAmb IAmb 11 26 49.6
comp=Z,26nm,0.8s
**B20K Meade River** 36.91 27 P **P** **11 26 23.7 -0.3**
baz=254,SNR=12
**I20K Naaghedeneel** 36.91 36 P **P** **11 26 24.6 +0.4**
baz=264
**SII Sitkinak Islan** 36.95 50 P **P** **11 26 24.8 +0.1**
baz=275
**K20K Telida** 36.96 39 IAmb IAmb 11 26 40.3
comp=Z,20nm,1.3s
**K20K Telida** 36.96 39 P **P** **11 26 24.3 -0.3**
baz=266
**J20K Nowinta River** 36.99 37 P **P** **11 26 24.7 -0.2**
baz=265
**L20K Farewell, AK** 36.99 40 P **P** **11 26 25.2 +0.3**
baz=267
**Q19K Cape Douglas,** 37.10 46 P **P** **11 26 26.2 +0.4**
baz=272
**P19K Oil Pt** 37.28 45 P **P** **11 26 28.2 +0.7**
baz=272
**M20K Styx River** 37.33 41 P **P** **11 26 28.5 +0.7**
baz=269
**IMAR Indian Mountai** 37.36 34 P **P** **11 26 29.4 +1.4**
**A21K Barrow** 37.46 25 P **P** **11 26 29.2 +0.5**
baz=253
**G21K Allakaket** 37.52 33 IAmb IAmb 11 26 45.3
comp=Z,16nm,0.9s
**O20K Slope Mountain** 37.58 44 P **P** **11 26 30.6 +0.6**
baz=272
**F21K Alatna River** 37.63 32 P **P** **11 26 30.4 +0.1**
baz=262,SNR=8.6
**E21K Killik River** 37.65 30 IAmb IAmb 11 26 53.0
comp=Z,14nm,0.9s
**E21K Killik River** 37.65 30 P **P** **11 26 31.0 +0.5**
baz=260
**B21K Ikpikpuk River** 37.67 28 P **P** **11 26 30.4 -0.1**
baz=257,SNR=37
**H21K Melozitna Rive** 37.71 35 IAmb IAmb 11 26 46.3
comp=Z,28nm,1.3s
**H21K Melozitna Rive** 37.71 35 P **P** **11 26 31.4 +0.5**
baz=264,SNR=8.5
**KDAK Kodiak Island** 37.72 48 P **P** **11 26 32.1 +1.0**
KDAK IAmb IAmb 11 26 41.1
comp=Z,25nm,1.1s
**KDAK Kodiak Island** 37.72 48 P **P** **11 26 32.1 +1.0**
KDAK pmax pmax
comp=Z,25nm,1.1s
**N20K Mount Spurr** 37.76 42 P **P** **11 26 32.7 +1.2**
baz=271
**Q20K Shuyak Island** 37.76 47 P **P** **11 26 32.9 +1.4**
baz=274
**CHUM Lake Minchumin** 37.78 38 P **P** **11 26 32.7 +1.2**
baz=267
**PPLA Purkeypile** 37.79 39 P **P** **11 26 32.6 +0.8**
baz=268
**A22K Sinclair Lake** 37.88 26 P **P** **11 26 32.8 +0.5**
baz=255
**SKT Skwentna** 38.08 41 P **P** **11 26 34.8 +0.6**
baz=270
**HOM Homer** 38.09 45 P **P** **11 26 34.5 +0.3**
baz=273
**CD2 Chengdu** 38.14 266 P **P** **11 26 35.9 +0.9**
CD2 pP pP 11 26 39.5 -2.8
CD2 sP sP 11 26 42.7 -2.6
CD2 S **S** **11 32 26.2 -0.1**
CD2 sS pS 11 32 35.6 +0.9
CD2 pmax pmax
comp=Z,40nm,0.8s
CD2 pmax pmax
comp=Z,150nm,4.5s
CD2 LR LR
comp=Z,840nm,16.9s
CD2 LR LR
comp=Z,1µm,14.3s
CD2 LR LR
comp=Z,870nm,16.8s
**F22K John River** 38.17 32 P **P** **11 26 35.0 +0.1**
baz=262
**D22K Ayikyak River** 38.20 30 P **P** **11 26 36.1 +1.1**
D22K IAmb IAmb 11 26 52.5
comp=Z,12nm,0.5s
**D22K Ayikyak River** 38.20 30 P **P** **11 26 35.2 +0.2**
baz=260,SNR=9.4
**B22K Teshekpuk Lake** 38.23 27 P **P** **11 26 35.4 +0.2**
baz=258
**CAPN Captain Cook N** 38.29 43 P **P** **11 26 36.6 +0.8**
baz=272
**H22K Ishtalitna Cre** 38.31 35 P **P** **11 26 36.8 +0.7**
baz=265
**G22K Bettles** 38.36 33 P **P** **11 26 37.7 +1.3**
baz=264
**BPAW Bear Paw Mtn.** 38.37 38 IAmb IAmb 11 27 02.9
comp=Z,23nm,1.4s
**BPAW Bear Paw Mtn.** 38.37 38 P **P** **11 26 36.9 +0.3**
baz=268
**KTH Kantishna Hill** 38.38 38 IAmb IAmb 11 26 58.7
comp=Z,41nm,1.3s
**SUA Susitna One** 38.46 42 P **P** **11 26 37.5 0.0**
baz=272
**MLY Manley** 38.52 36 P **P** **11 26 38.3 +0.4**
baz=267
**CUT Chulitna** 38.67 40 P **P** **11 26 39.5 +0.4**
baz=271
**GYA Guiyang** 38.67 257 P **P** **11 26 40.3 +0.7**
GYA sP pP 11 26 48.5 +1.5
GYA S **S** **11 32 34.7 +0.2**
GYA pmax pmax
comp=Z,14nm,0.9s
GYA pmax pmax
comp=Z,170nm,3.6s
GYA LR LR
comp=Z,730nm,18.6s
GYA LR LR
comp=Z,840nm,19.1s
GYA LR LR
comp=Z,1µm,17.7s
**M22K Willow** 38.76 41 P **P** **11 26 39.7 0.0**
baz=272
**COLD Coldfoot** 38.90 33 P **P** **11 26 40.6 -0.4**
baz=265
**D23K Nanushuk River** 38.93 30 P **P** **11 26 40.6 -0.5**
baz=262,SNR=9.0
**G23K Bananza Creek** 38.93 33 P **P** **11 26 40.9 -0.3**
baz=266,SNR=6.7
**RC01 Rabbit Creek A** 38.97 42 P **P** **11 26 40.9 -0.6**
baz=273
**O22K Cooper Landing** 39.00 43 P **P** **11 26 42.4 +0.6**
baz=274
**H23K Yukon River** 39.06 35 IAmb IAmb 11 26 58.2
comp=Z,36nm,1.5s
**H23K Yukon River** 39.06 35 P **P** **11 26 42.6 +0.2**
baz=267
**C23K Itkillik River** 39.08 28 IAmb IAmb 11 26 44.5
comp=Z,28nm,0.9s
**C23K Itkillik River** 39.08 28 P **P** **11 26 42.8 +0.5**
baz=261,SNR=18
**I23K Minto, Yukon-K** 39.11 36 P **P** **11 26 42.8 +0.1**
baz=268
**SEW Seward** 39.16 44 P **P** **11 26 43.9 +0.7**
baz=274
**E23K Chandalar** 39.21 31 P **P** **11 26 43.6 0.0**
baz=264,SNR=13
**NEA2 Nenana** 39.22 37 P **P** **11 26 43.8 +0.2**
baz=269
**PMR Palmer** 39.23 42 P **P** **11 26 44.1 +0.4**
baz=273
**TOLK Toolik Lake Re** 39.28 30 P **P** **11 26 44.4 +0.2**
baz=264,SNR=8.7
**WAT1 Susitna Watana** 39.46 40 P **P** **11 26 46.1 +0.4**
baz=272
**KNK Knik Glacier** 39.56 42 P **P** **11 26 46.9 +0.3**
baz=274
**SML Sawmill** 39.60 41 P **P** **11 26 47.6 +0.7**
SML IAmb IAmb 11 26 49.8
comp=Z,20nm,0.9s
**SML Sawmill** 39.60 41 P **P** **11 26 47.2 +0.3**
baz=273,SNR=7.1
**SML Sawmill** 39.60 41 P **P** **11 26 48.4 +1.5**
SML pmax pmax
comp=Z,20nm,0.9s
**D24K Happy Valley** 39.61 30 IAmb IAmb 11 27 06.5
comp=Z,20nm,0.8s
**D24K Happy Valley** 39.61 30 P **P** **11 26 47.0 +0.1**
baz=264,SNR=12
**E24K Your Creek** 39.63 31 IAmb IAmb 11 27 04.7
comp=Z,22nm,1.0s
**E24K Your Creek** 39.63 31 P **P** **11 26 47.2 +0.1**
baz=265,SNR=16
**PWL Port Wells** 39.66 43 P **P** **11 26 47.8 +0.5**
baz=274
**C24K Franklin Bluff** 39.72 29 P **P** **11 26 47.8 +0.1**
baz=263
**COLA College** 39.74 36 P **P** **11 26 49.1 +1.1**
COLA IAmb IAmb 11 27 03.3
comp=Z,44nm,1.4s
**COLA College** 39.74 36 P **P** **11 26 48.2 +0.3**
baz=270
**COLA College** 39.74 36 *i* P **P** **11 26 49.9 +1.9**
COLA pmax pmax
comp=Z,6.0nm,0.9s
**H24K Noodor Dome** 39.75 35 P **P** **11 26 48.4 +0.3**
baz=269
**F24K Squaw Lake** 39.82 32 P **P** **11 26 49.6 +1.0**
**F24K Squaw Lake** 39.82 32 P **P** **11 26 48.9 +0.2**
baz=267
**WAT6 Susitna Watana** 39.84 40 P **P** **11 26 48.6 -0.4**
baz=273
**M23K Glacier View** 39.89 41 P **P** **11 26 48.8 -0.5**
baz=274

**POKR Poker Plat Res 39.92 36** IAmb IAmb 11 27 05.2
comp=Z,27nm,1.1s
**POKR Poker Plat Res 39.92 36** P **P** **11 26 49.7 +0.2**
baz=270,SNR=11
**G24K Hadweenzic Riv 39.94 34** IAmb IAmb 11 27 06.1
comp=Z,16nm,0.8s
**G24K Hadweenzic Riv 39.94 34** P **P** **11 26 50.2 +0.6**
baz=268,SNR=13
**DHY Denali Highway 39.99 39** P **P** **11 26 51.3 +1.0**
**DHY Denali Highway 39.99 39** P **P** **11 26 50.2 0.0**
baz=272
**SCM Sheep Creek Mo 40.08 41** P **P** **11 26 51.6 +0.7**
baz=274
**HDA Harding Lake 40.14 37** P **P** **11 26 51.5 +0.2**
baz=271
**ILAR Eielson Array 40.16 37** P **P** **11 26 51.8 +0.3**
**ILAR Eielson Array 40.16 37** P **P** **11 26 50.3 -1.1**
comp=Z,1.9nm,0.9s,baz=262,slow=6.9,SNR=21
ILAR ScP **ScP** **11 32 40.2 -1.8**
comp=Z,0.5nm,1.0s,baz=264,slow=2.7,SNR=3.5
ILAR LR LR 11 45 30.6
comp=Z,958nm,18.9s,baz=260,slow=39
comp=Z,1.9nm,0.9s
**ILAR Eielson Array 40.16 37** P **P** **11 26 51.8 +0.3**
**GLI Glacier Island 40.26 43** P **P** **11 26 52.7 +0.3**
baz=275
**G25K Bearman Lake 40.49 33** P **P** **11 26 54.4 +0.3**
baz=269
**D25K Kavik River 40.50 29** IAmb IAmb 11 27 19.0
comp=Z,16nm,0.7s
**D25K Kavik River 40.50 29** P **P** **11 26 54.4 +0.2**
baz=266,SNR=29
**H25L Birch Creek 40.59 34** P **P** **11 26 55.3 +0.3**
baz=270
**M24K Tolsona, Glenn 40.60 41** P **P** **11 26 55.8 +0.6**
baz=275
**K24K Donnelly Dome 40.67 38** P **P** **11 26 56.1 +0.3**
baz=273
**F25K Christian Rive 40.68 32** P **P** **11 26 55.8 0.0**
baz=269
**PRP Porcupine Dome 40.72 35** P **P** **11 26 57.5 +1.3**
PRP IAmb IAmb 11 27 11.5
comp=Z,24nm,1.4s
**PRP Porcupine Dome 40.72 35** P **P** **11 26 56.1 -0.2**
baz=271,SNR=9.2
**KLU Klutina 40.77 42** P **P** **11 26 58.2 +1.5**
**KLU Klutina 40.77 42** P **P** **11 26 56.4 -0.2**
baz=276
**J25K Salcha River, 40.81 37** P **P** **11 26 57.0 0.0**
baz=272
**PAX Paxson 40.86 39** P **P** **11 26 57.9 +0.5**
baz=274
**EYAK Cordova Ski Ar 40.96 43** P **P** **11 26 58.3 +0.3**
baz=277
**C26K Camden Bay 41.05 29** P **P** **11 26 59.1 +0.4**
baz=267,SNR=15
**BMAR Burnt Mountain 41.09 32** P **P** **11 27 01.1 +2.0**
**F26K Sheenjek River 41.26 32** P **P** **11 27 00.8 +0.3**
baz=270,SNR=12
**N25K Chitina, Valde 41.39 41** P **P** **11 27 01.5 -0.3**
baz=276
**G26K Porcupine Rive 41.40 33** P **P** **11 27 01.9 +0.3**
baz=271,SNR=7.2
**C27K Jago River 41.45 29** P **P** **11 27 01.8 -0.3**
baz=268,SNR=18
**SCRK Sand Creek 41.45 38** P **P** **11 27 02.5 +0.2**
**SCRK Sand Creek 41.45 38** P **P** **11 27 01.5 -0.7**
baz=274
**BMRM Bremner River 41.46 42** P **P** **11 27 01.9 -0.5**
baz=277
**QIZ Qiongzhong 41.48 246** P **P** **11 27 04.0 +1.2**
QIZ S **S** **11 33 19.5 +3.1**
QIZ LR LR
comp=Z,720nm,19.0s
QIZ LR LR
comp=Z,960nm,20.0s
QIZ LR LR
comp=Z,880nm,16.1s
**J26L Joseph Creek 41.60 37** P **P** **11 27 03.8 +0.4**
baz=274
**DGZ Jazzator, Alta 41.69 300** *i* P **P** **11 27 05.1 +0.6**
DGZ pmax pmax
comp=Z,20nm,1.9s
**L26K Log Cabin Wild 41.82 39** P **P** **11 27 05.3 +0.1**
baz=276
**GOMU GeErMu 41.88 279** P **P** **11 27 07.7 +1.3**
GOMU S **S** **11 33 28.1 +5.4**
GOMU pmax pmax
comp=Z,50nm,0.8s
GOMU LR LR
comp=Z,3µm,17.1s
GOMU LR LR
comp=Z,3µm,17.5s
GOMU LR LR
comp=Z,6µm,17.8s
**M26K Nabesna, AK 42.05 40** IAmb IAmb 11 27 36.3
comp=Z,15nm,1.0s
**M26K Nabesna, AK 42.05 40** P **P** **11 27 07.5 +0.4**
baz=277
**ZALV Zalesovo Beam 42.12 307** P **P** **11 27 06.6 -1.1**
**ZALV Zalesovo Beam 42.12 307** P **P** **11 27 06.0 -1.7**
comp=Z,2.2nm,0.6s,baz=94,slow=6.6,SNR=7.4
ZALV PcP **PcP** **11 29 02.0 +0.3**
comp=Z,6.3nm,0.8s,baz=84,slow=3.1,SNR=14
ZALV LR LR 11 45 59.9
comp=Z,1µm,18.7s,baz=62,slow=38
comp=Z,2.2nm,0.6s
**ZALV Zalesovo Beam 42.12 307** P **P** **11 27 06.6 -1.1**
**PZH PanZhiHua 42.13 262** P **P** **11 27 09.0 +0.8**
PZH S **S** **11 33 26.1 0.0**
PZH pmax pmax
comp=Z,30nm,0.9s
PZH pmax pmax
comp=Z,150nm,6.5s
PZH LR LR
comp=Z,450nm,17.7s
PZH LR LR
comp=Z,460nm,16.2s
PZH LR LR
comp=Z,630nm,15.7s
**CRQM Cirque 42.20 42** IAmb IAmb 11 27 25.5
comp=Z,27nm,0.9s
**E27K Coleen River 42.21 31** P **P** **11 27 08.6 +0.3**
baz=272,SNR=8.9
**CRQE Cirque 42.23 42** P **P** **11 27 08.9 +0.2**
baz=279
**BGLC Bering Glacier 42.23 43** P **P** **11 27 09.4 +0.9**
baz=279
**G27K Doyon Strip 42.25 33** P **P** **11 27 08.2 -0.4**
baz=273
**KMI Kunming 42.27 259** ⇑P **P** **11 27 10.7 +1.2**
KMI S **S** **11 33 27.1 -1.3**
KMI pmax pmax
comp=Z,22nm,1.2s
KMI LR LR
comp=Z,710nm,17.0s
KMI LR LR
comp=Z,530nm,17.2s
KMI LR LR
comp=Z,750nm,16.7s
**K27K Chicken 42.29 37** IAmb IAmb 11 27 24.6
comp=Z,23nm,1.1s
**K27K Chicken 42.29 37** P **P** **11 27 10.2 +1.2**
baz=276
**H27K Steamboat Moun 42.33 34** P **P** **11 27 09.6 +0.3**
baz=274
**I27K Kandik River 42.34 35** P **P** **11 27 09.8 +0.3**
baz=275
**D27M Malcolm River 42.42 30** IAmb IAmb 11 27 30.1
comp=Z,26nm,1.4s
**D27M Malcolm River 42.42 30** P **P** **11 27 10.4 +0.4**
baz=271
**L27K Beaver Creek, 42.51 39** P **P** **11 27 11.2 +0.4**
baz=277,SNR=7.1
**BCAR Beaver Creek A 42.52 39** P **P** **11 27 12.2 +1.3**
**M27K Edge Creek, AK 42.57 40** P **P** **11 27 11.6 +0.2**
baz=278
**EGAK Eagle 42.61 36** P **P** **11 27 11.9 +0.4**
EGAK IAmb IAmb 11 27 26.3
comp=Z,38nm,1.5s
**EGAK Eagle 42.61 36** P **P** **11 27 12.2 +0.7**
baz=276,SNR=6.6
**F28M Old Crow 42.89 32** P **P** **11 27 13.5 -0.3**
baz=274
**E28M Babbage River 42.96 31** P **P** **11 27 14.5 +0.1**
baz=273,SNR=6.1
**CTG Chitna Glacier 43.04 42** P **P** **11 27 15.1 -0.2**
baz=280
**I28M Miner Creek 43.05 35** P **P** **11 27 15.5 +0.2**
baz=276,SNR=8.3
**DAWY Dawson 43.45 37** P **P** **11 27 18.6 +0.2**
baz=278
**WMQ Urumqi 43.53 292** ⇓P **P** **11 27 19.8 +0.4**
WMQ pP pP 11 27 26.3 -0.5
WMQ pmax pmax
comp=Z,30nm,0.9s
WMQ pmax pmax
comp=Z,340nm,3.7s
WMQ LR LR
comp=Z,3µm,14.1s
WMQ LR LR
comp=Z,2µm,15.9s
WMQ LR LR
comp=Z,2µm,17.7s
**E29M Blow River 43.58 31** IAmb IAmb 11 27 37.6
comp=Z,41nm,1.4s
**E29M Blow River 43.58 31** P **P** **11 27 20.0 +0.7**
baz=275,SNR=9.0
**H29M Whitestone 43.61 34** IAmb IAmb 11 27 46.4
comp=Z,22nm,1.2s
**H29M Whitestone 43.61 34** P **P** **11 27 19.7 +0.1**
baz=277
**O28M Mount Upton 43.63 42** P **P** **11 27 20.2 0.0**
baz=281
**G29M Pine Creek 43.67 33** IAmb IAmb 11 27 47.0
comp=Z,37nm,1.2s
**G29M Pine Creek 43.67 33** P **P** **11 27 20.6 +0.5**
baz=276
**I29M Ogilvie Camp, 43.74 35** IAmb IAmb 11 27 46.9
comp=Z,23nm,1.2s
**I29M Ogilvie Camp, 43.74 35** P **P** **11 27 21.0 +0.3**
baz=278,SNR=6.3
**ZSN Zaisan 44.03 298** *e*P **P** **11 27 23.2 -0.1**
comp=Z,13nm,1.0s,baz=298
**ZSN Zaisan 44.03 298** *e*P **P** **11 27 23.1 -0.1**
ZSN pmax pmax
comp=Z,13nm,1.0s
**M29M Somme Creek 44.13 39** P **P** **11 27 24.3 +0.3**
baz=281
**L29M L29M 44.16 38** P **P** **11 27 24.7 +0.5**
baz=280
**PNL Peninsula 44.24 43** P **P** **11 27 24.7 -0.1**
baz=283
**EPYK Eagle Plains 44.25 34** P **P** **11 27 25.3 +0.5**
baz=278
**YUK4 Talbot Arm 44.25 41** P **P** **11 27 25.8 +0.7**
baz=282
**K29M Barlow Dome 44.30 37** IAmb IAmb 11 27 52.1
comp=Z,21nm,1.4s
**K29M Barlow Dome 44.30 37** P **P** **11 27 25.3 0.0**
baz=280
**G30M tAoh Zraii Nji 44.37 33** IAmb IAmb 11 27 41.3
comp=Z,17nm,1.0s
**G30M tAoh Zraii Nji 44.37 33** P **P** **11 27 25.6 -0.1**
baz=278
**F30M Barrier River 44.45 32** P **P** **11 27 25.5 -0.8**
baz=278
**I30M Mount Dempster 44.56 35** IAmb IAmb 11 27 54.3
comp=Z,17nm,0.9s
**I30M Mount Dempster 44.56 35** P **P** **11 27 27.2 -0.2**
baz=280,SNR=14
**J30M Hart River 44.69 36** P **P** **11 27 28.0 -0.4**
baz=280
**P29M Windy Craggy 45.07 43** P **P** **11 27 32.5 +1.1**
baz=284
**G31M Satah River 45.13 33** P **P** **11 27 32.5 +0.8**
baz=280
**INK Inuvik 45.20 31** IAmb IAmb 11 27 47.7
comp=Z,9.7nm,0.9s
**INK Inuvik 45.20 31** P **P** **11 27 32.9 +0.7**
baz=279
**INK Inuvik 45.20 31** P **P** **11 27 34.1 +1.9**
INK pmax pmax
comp=Z,11nm,1.0s
**TNCH TengChong 45.33 262** *e*P **P** **11 27 34.4 +0.4**
TNCH PP **PP** **11 29 16.0 -4.2**
TNCH SS SS 11 37 28.9 -7.3
TNCH pmax pmax
comp=Z,160nm,4.2s
TNCH LR LR
comp=Z,420nm,17.3s
TNCH LR LR
comp=Z,300nm,13.6s
TNCH LR LR
comp=Z,340nm,15.1s
**SEM Semipalatinsk 45.85 303** *e*P **P** **11 27 37.3 -0.7**
comp=Z,5.6nm,0.5s,baz=303
SEM LR LR 11 47 19.7
comp=Z,482nm,16.4s,baz=303
**SEM Semipalatinsk 45.85 303** *e*P **P** **11 27 37.2 -0.7**
SEM pmax pmax
comp=Z,6.0nm,0.5s
SEM MLR MLR
comp=Z,482nm,16.0s
**MK31 Makanchi Array 45.91 298** P **P** **11 27 38.1 -0.1**
**MK31 Makanchi Array 45.91 298** *ce*P **P** **11 27 38.0 -0.2**
**MKAR Makanchi Array 45.91 298** P **P** **11 27 38.1 -0.1**
comp=Z,19nm,0.7s,baz=75,slow=7.7,SNR=132
MKAR PcP **PcP** **11 29 13.8 -1.0**
comp=Z,3.1nm,0.8s,baz=68,slow=3.7,SNR=1.9
MKAR LR LR 11 48 19.1
comp=Z,3µm,18.2s,baz=74,slow=38
comp=Z,19nm,0.7s
**MAKZ Makanchi 46.10 298** P **P** **11 27 39.7 0.0**
**MAKZ Makanchi 46.10 298** P **P** **11 27 39.7 0.0**
MAKZ pmax pmax
comp=Z,28nm,0.8s
**FARO Faro, Yukon 46.51 39** P **P** **11 27 43.0 +0.3**
baz=285
**KURK Kurchatov 46.72 304** P **P** **11 27 43.7 -0.8**
KURK IAmb IAmb 11 27 45.2
comp=Z,11nm,0.9s
**KURK Kurchatov 46.72 304** *e*P **P** **11 27 44.6 +0.1**
**KURK Kurchatov 46.72 304** *ce*P **P** **11 27 44.6 +0.1**
KURK pmax pmax
comp=Z,8.0nm,0.8s
**KURBB Kurchatov Arra 46.81 304** P **P** **11 27 44.2 -0.9**
comp=Z,5.5nm,0.6s,baz=73,slow=8.6,SNR=36
KURBB PcP **PcP** **11 29 17.8 -0.1**
comp=Z,2.6nm,0.7s,baz=77,slow=4.0,SNR=6.4
KURBB LR LR 11 48 29.7
comp=Z,844nm,18.5s,baz=158,slow=38
comp=Z,5.5nm,0.6s
**KURBB Kurchatov Arra 46.81 304** P **P** **11 27 43.8 -1.3**
**A36M Sachs Harbour 47.30 25** P **P** **11 27 49.1 +0.4**
baz=283
**P33M Teslin, Yukon 47.30 42** P **P** **11 27 50.8 +1.8**
P33M IAmb IAmb 11 28 05.2
comp=Z,13nm,1.0s
**P33M Teslin, Yukon 47.30 42** P **P** **11 27 49.4 +0.4**
baz=287
**Q32M Nakina River 47.95 43** P **P** **11 27 54.0 -0.2**
baz=288
**C36M Paulatuk 48.33 28** P **P** **11 27 56.5 -0.2**
baz=286
**PHRA Phrae 48.35 254** P **P** **11 27 57.3 -0.2**
**R33M Jennings River 48.45 42** P **P** **11 27 58.8 +0.8**
R33M IAmb IAmb 11 28 14.6
comp=Z,6.8nm,0.8s
**R33M Jennings River 48.45 42** P **P** **11 27 57.9 0.0**
baz=289
**U33K Whale Pass 48.46 47** P **P** **11 27 57.9 0.0**
baz=290
**TDK Taldyqorghan 49.12 297** *e*P **P** **11 28 03.0 -0.1**
baz=297
TDK LR LR 11 49 24.2
comp=Z,1µm,15.0s,baz=297
**TDK Taldyqorghan 49.12 297** *e*P **P** **11 28 03.0 -0.1**
TDK MLR MLR
comp=Z,1µm,15.0s
**PDGK Podgornoye 49.15 295** P **P** **11 28 02.7 -0.9**
**DLBC Dease Lake 49.23 43** LR LR 11 49 32.8
comp=Z,485nm,21.2s,baz=306,slow=37
**DLBC Dease Lake 49.23 43** P **P** **11 28 04.4 +0.5**
baz=290
**SHLS Shalkode 49.25 295** *e*P **P** **11 28 01.7 -2.7**
comp=Z,8.5nm,0.7s,baz=294
**SHLS Shalkode 49.25 295** *e*P **P** **11 28 01.6 -2.7**
SHLS pmax pmax
comp=Z,9.0nm,0.7s
**CMAR Chiang Mai Arr 49.27 255** P **P** **11 28 05.1 +0.5**
**CMAR Chiang Mai Arr 49.27 255** P **P** **11 28 05.8 +1.2**
comp=Z,1.4nm,0.7s,baz=33,slow=8.2,SNR=7.7
CMAR LR LR 11 51 60.0
comp=Z,682nm,18.2s,baz=50,slow=40
comp=Z,1.4nm,0.7s
**CMAR Chiang Mai Arr 49.27 255** P **P** **11 28 05.1 +0.5**
**V35K Ketchikan 49.54 47** P **P** **11 28 06.3 +0.1**
baz=292
**UZB Uzynbulak 49.54 295** *e*P **P** **11 28 06.1 -0.5**
comp=Z,12nm,1.0s,baz=295
**UZB Uzynbulak 49.54 295** *e*P **P** **11 28 06.1 -0.5**
UZB pmax pmax
comp=Z,12nm,1.0s
**KPKS Kokpek 49.62 295** *e*P **P** **11 28 06.9 -0.2**
baz=295
KPKS *e*S **S** **11 35 12.9 -0.6**
baz=295
**KPKS Kokpek 49.62 295** *e*P **P** **11 28 06.9 -0.2**
KPKS *e*S **S** **11 35 12.8 -0.6**
**T35M Bob Quinn 49.64 45** P **P** **11 28 07.1 +0.1**
baz=292
**SHL Shillong 49.76 268** P **P** **11 28 08.6 +0.1**
SHL pmax pmax
comp=Z,21nm,1.6s
**ARXS Arharly 49.84 297** *e*P **P** **11 28 07.6 -1.1**
**ZHN Zhinishke 49.91 295** *e*P **P** **11 28 09.2 -0.3**
comp=Z,12nm,0.9s,baz=295
**ZHN Zhinishke 49.91 295** *e*P **P** **11 28 09.1 -0.3**
ZHN pmax pmax
comp=Z,12nm,0.9s
**SATY Saty 49.98 295** *e*P **P** **11 28 09.4 -0.5**
comp=Z,13nm,0.9s,baz=295
SATY *e*S **S** **11 35 17.6 -1.1**
baz=295
**SATY Saty 49.98 295** *e*P **P** **11 28 09.4 -0.5**
SATY *e*S **S** **11 35 17.5 -1.1**
SATY pmax pmax
comp=Z,13nm,0.9s
**WRGLY Wrigley 50.53 36** P **P** **11 28 15.2 +1.7**
WRGLY IAmb IAmb 11 28 40.5
comp=Z,14nm,1.0s
**WRGLY Wrigley 50.53 36** P **P** **11 28 14.3 +0.8**
baz=292
**CHKK Chushkaly 50.54 297** *e*P **P** **11 28 13.5 -0.5**
baz=297
**CHKK Chushkaly 50.54 297** *e*P **P** **11 28 13.5 -0.5**
**BVA0 Borovoye Array 50.57 310** *i* P **P** **11 28 14.2 +0.2**
**BRVK Borovoye 50.61 310** P **P** **11 28 14.3 0.0**
**BRVK Borovoye 50.61 310** *e*P **P** **11 28 14.8 +0.4**
**BRVK Borovoye 50.61 310** *de*P **P** **11 28 14.8 +0.4**
BRVK pmax pmax
comp=Z,6.0nm,0.8s
**LIRD Liard River Hi 50.77 41** P **P** **11 28 16.1 +0.6**
baz=292
**MDOK Medeo 50.82 296** *e*P **P** **11 28 15.5 -0.7**
baz=296
MDOK *e*S **S** **11 35 28.9 -1.4**
baz=296
MDOK LR LR 11 50 55.0
comp=Z,519nm,14.8s,baz=296
**MDOK Medeo 50.82 296** *e*P **P** **11 28 15.5 -0.7**
MDOK *e*S **S** **11 35 28.8 -1.4**
MDOK MLR MLR
comp=Z,519nm,15.0s
**AAA Alma-Ata 50.88 296** *e*P **P** **11 28 16.2 -0.5**
baz=296
AAA LR LR 11 51 05.3
baz=296
**AAA Alma-Ata 50.88 296** *e*P **P** **11 28 16.1 -0.5**
**AAA Alma-Ata 50.88 296** *e*P **P** **11 28 16.1 -0.5**
**KUU Kurty 50.94 297** *e*P **P** **11 28 16.6 -0.5**
comp=Z,11nm,0.8s,baz=297
KUU LR LR 11 51 22.8
comp=Z,609nm,14.3s,baz=297
**KUU Kurty 50.94 297** *e*P **P** **11 28 16.5 -0.5**
KUU pmax pmax
comp=Z,11nm,0.8s
KUU MLR MLR
comp=Z,609nm,14.0s
**TNSS Tian-Shan 50.94 296** *e*P **P** **11 28 16.6 -1.0**
baz=296
**TNSS Tian-Shan 50.94 296** *e*P **P** **11 28 16.5 -1.0**
**TARG Taragay, Kyrgy 51.00 294** IAmb IAmb 11 28 20.4
comp=Z,27nm,1.2s
**TARG Taragay, Kyrgy 51.00 294** P **P** **11 28 19.7 +1.8**
TARG pmax pmax
comp=Z,22nm,1.6s
**TOAD Toad River Com 51.40 42** P **P** **11 28 20.9 +0.7**
baz=294
**OTUK Ortayu 51.46 304** P **P** **11 28 20.7 -0.2**
**ULHL Ulahol 51.77 295** P **P** **11 28 24.2 +0.7**
SNR=24
**BTLS Baital 51.86 299** *e*P **P** **11 28 23.7 -0.1**
baz=299
**BTLS Baital 51.86 299** *e*P **P** **11 28 23.7 -0.1**
**TKM2 Tokmak 2 51.87 296** P **P** **11 28 24.8 +0.6**
SNR=24
**SGDS Sogindy 52.24 297** *e*P **P** **11 28 26.6 -0.2**
comp=Z,12nm,0.9s,baz=297
**SGDS Sogindy 52.24 297** *e*P **P** **11 28 26.6 -0.2**
SGDS pmax pmax
comp=Z,12nm,0.9s
**USP Ospenovka 52.41 297** P **P** **11 28 28.0 -0.1**
SNR=30
**KBK Karagaybulak 52.42 296** P **P** **11 28 29.0 +0.8**
SNR=7.1
**AAK Ala-Archa 52.72 296** P **P** **11 28 31.7 +1.2**
SNR=7.3
**AAK Ala-Archa 52.72 296** P **P** **11 28 30.7 +0.3**
**AAK Ala-Archa 52.72 296** LR LR 11 52 31.8
comp=Z,704nm,18.7s,baz=57,slow=38
**AAK Ala-Archa 52.72 296** *e*P **P** **11 28 30.7 +0.3**
**AAK Ala-Archa 52.72 296** P **P** **11 28 30.7 +0.3**
AAK pmax pmax
comp=Z,34nm,1.3s
**BBB Bella Bella 52.72 50** LR LR 11 49 29.0
comp=Z,200nm,20.7s,baz=302,slow=34
**EKS2 Erkin-Say 53.17 297** P **P** **11 28 34.3 +0.6**
SNR=12
**KSH Kashi 53.30 292** P **P** **11 28 38.9 +4.2**
KSH pP sP 11 28 45.8 +0.4
KSH pmax pmax
comp=Z,15nm,1.4s
KSH LR LR
comp=Z,1µm,17.2s
KSH LR LR
comp=Z,1µm,19.2s
KSH LR LR
comp=Z,1µm,20.6s
**AML Almayashu 53.48 296** P **P** **11 28 38.1 +1.7**
SNR=16
**SVE Sverdlovsk 54.02 317** *e*P **P** **11 28 39.9 +0.3**
**SVE Sverdlovsk 54.02 317** *e*P **P** **11 28 39.9 +0.3**
SVE pmax pmax
comp=Z,26nm,1.3s
SVE MLR MLR
comp=Z,2µm,18.0s
**RES Resolute Bay 54.09 17** IAmb IAmb 11 28 41.5
comp=Z,12nm,0.8s
**RES Resolute Bay 54.09 17** LR LR 11 55 02.7
comp=Z,728nm,19.8s,baz=310,slow=40
**HNR Honiara 54.16 167** LR LR 11 53 22.7
comp=Z,6µm,18.6s,baz=341,slow=38
**ARSB Arslanbob 54.35 296** IAmb IAmb 11 28 44.9
comp=Z,15nm,1.0s
**YKA Yellowknife Ar 54.52 35** P **P** **11 28 44.1 +1.1**
comp=Z,2.5nm,0.8s,baz=302,slow=7.3,SNR=9.8
YKA LR LR 11 54 09.9
comp=Z,413nm,19.2s,baz=310,slow=38
comp=Z,2.5nm,0.8s
**KK31 Karatay Array 55.03 299** P **P** **11 28 46.8 -0.3**
**KK31 Karatay Array 55.03 299** *i* P **P** **11 28 46.5 -0.7**
**KKAR Karatay Array 55.03 299** P **P** **11 28 47.0 -0.2**
**KKAR Karatay Array 55.03 299** P **P** **11 28 47.0 -0.2**
**ARU Arti 55.22 317** P **P** **11 28 47.8 -0.5**
ARU IAmb IAmb 11 28 49.7
comp=Z,19nm,1.2s
**ARU Arti 55.22 317** LR LR 11 54 54.8
comp=Z,2µm,18.3s,baz=52,slow=39
**ARU Arti 55.22 317** *e*P **P** **11 28 48.1 -0.2**
**ARU Arti 55.22 317** *c i*P **P** **11 28 48.1 -0.2**
ARU 11 29 47.8
ARU S **S** **11 36 29.3 -0.1**
ARU SS **SS** **11 40 10.2 -2.9**
ARU pmax pmax
comp=Z,24nm,1.5s
ARU MLR MLR
comp=Z,2µm,18.0s
**BRLS Boroldaу 55.49 299** *e*P **P** **11 28 51.6 +1.0**

baz=299
**BRLS Borolday 55.49 299** *e*P **P 11 28 51.5 +1.0**
**CHM Chimkent 56.01 298** *e*P **P 11 28 53.8 -0.5**
baz=298
CHM LR LR 11 54 10.3
comp=Z,740nm,15.6s,baz=298
**CHM Chimkent 56.01 298** *e*P **P 11 28 53.7 -0.5**
CHM MLR MLR
comp=Z,740nm,16.0s
**LVZ Lovozero 58.14 336** *i* P **P 11 29 09.6 +0.7**
LVZ pmax pmax
comp=Z,13nm,0.9s
**AB31 Akbulak array 58.14 310** *i* P **P 11 29 08.5 -0.6**
**ABKAR Akbulak array 58.14 310** P **P 11 29 09.0 -0.1**
**CHGR Chuyangaron 58.25 295** P **P 11 29 10.4 +0.2**
**CHGR Chuyangaron 58.25 295** P **P 11 29 10.4 +0.2**
CHGR pmax pmax
comp=Z,137nm,1.5s
**KIRV Kirov 58.32 323** LR LR 11 56 37.9
comp=Z,1μm,18.9s,baz=50,slow=38
**KIRV Kirov 58.32 323** *ce*P **P 11 29 11.0 +0.8**
**SIMJ Simiganj 58.35 295** P **P 11 29 10.7 -0.3**
**AKTO Aktyubinsk 58.56 311** LR LR 11 56 40.1
comp=Z,834nm,18.1s,baz=60,slow=38
**APA Apatity 58.71 336** ⇓*i* P P 11 29 22.5 +10
APA *i* 11 30 07.0
APA *i* 11 31 28.1
APA pmax pmax
comp=Z,19nm,0.7s
APA MLR MLR
comp=Z,800nm,15.0s
**ARCES ARCESS Array B 59.46 340** P **P 11 29 17.5 -0.5**
comp=Z,5.9nm,1.0s,baz=37,slow=9.1,SNR=4.7
ARCES LR LR 12 00 11.7
comp=Z,274nm,18.6s,baz=41,slow=41
comp=Z,5.9nm,1.0s
**D08A Wollman Farm, 60.46 52** P **P 11 29 25.4 +0.2**
**KBL Kabul 60.65 291** P **P 11 29 26.3 -0.7**
**KBL Kabul 60.65 291** P **P 11 29 26.3 -0.7**
KBL pmax pmax
comp=Z,14nm,0.8s
**NEW Newport 60.78 50** P **P 11 29 27.8 +0.4**
baz=305
**NEW Newport 60.78 50** P P 11 29 34.0 +6.6
NEW pmax pmax
comp=Z,7.0nm,1.2s
**PINE Pine Mountain 61.13 56** IAmb IAmb 11 29 49.2
comp=Z,8.9nm,0.9s
**YBH Yreka Blue Hor 61.24 59** LR LR 11 57 04.4
comp=Z,172nm,18.4s,baz=315,slow=37
**BELG Belogornoye 62.77 318** LR LR 11 59 28.0
comp=Z,1μm,18.4s,baz=52,slow=38
**BELG Belogornoye 62.77 318** *d* /P **P 11 29 41.3 +0.7**
BELG pmax pmax
comp=Z,7.0nm,0.9s
**MSO Missoula 63.37 50** P **P 11 29 45.8 +0.9**
MSO IAmb IAmb 11 30 00.1
comp=Z,8.9nm,1.1s
**MSO Missoula 63.37 50** P **P 11 29 45.2 +0.3**
baz=307
**SUMG Summit 63.45 3** P **P 11 29 45.4 +0.1**
**SUMG Summit 63.45 3** P **P 11 29 45.4 +0.1**
SUMG pmax pmax
comp=Z,19nm,1.1s
**CTA Charters Tower 63.99 183** LR LR 11 59 32.8
comp=Z,7.7nm,18.7s,baz=3.0,slow=38
**JMIC Jan Mayen 64.09 352** LR LR 11 57 29.4
comp=Z,276nm,18.8s,baz=42,slow=36
**FFC Flin Flon 64.36 38** P **P 11 29 51.5 +0.4**
FFC IAmb IAmb 11 30 06.4
comp=Z,16nm,1.1s
**FFC Flin Flon 64.36 38** P **P 11 29 51.5 +0.4**
FFC pmax pmax
comp=Z,16nm,1.1s
**PAHR Pah Rah Range 64.47 59** IAmb IAmb 11 30 11.6
comp=Z,9.1nm,1.3s
**EGMT Eagleton 64.89 47** P **P 11 29 55.2 +0.4**
baz=309
**YERR Yerington 65.00 59** IAmb IAmb 11 30 17.9
comp=Z,10nm,1.1s
**HLID Hailey 65.09 53** P **P 11 29 56.9 +0.5**
baz=308
**MOS Moscow 65.13 325** *e*P **P 11 29 52.8 -3.3**
MOS MLR MLR
comp=Z,800nm,18.0s
**WRA Warramunga Arr 65.27 196** P **P 11 29 58.5 +1.1**
comp=Z,3.0nm,0.8s,baz=16,slow=6.8,SNR=15
comp=Z,3.0nm,0.8s
**FINES FINESS Array B 65.29 334** P **P 11 29 56.0 -1.1**
**FINES FINESS Array B 65.29 334** P **P 11 29 56.2 -0.9**
comp=Z,17nm,0.6s,baz=45,slow=8.4,SNR=50
FINES LR LR 12 02 51.7
comp=Z,816nm,18.3s,baz=30,slow=40
comp=Z,17nm,0.6s
**BOZ Bozeman (W) 65.39 50** IAmb IAmb 11 30 15.0
comp=Z,4.7nm,0.8s
**BOZ Bozeman (W) 65.39 50** P **P 11 29 59.2 +1.0**
baz=309
**KVN Kaiserville 65.66 59** P **P 11 30 01.5 +1.4**
KVN IAmb IAmb 11 30 19.5
comp=Z,14nm,1.3s
**KVN Kaiserville 65.66 59** P **P 11 30 01.5 +1.4**
KVN pmax pmax
comp=Z,14nm,1.3s
**LHV Little Huntoon 65.90 60** IAmb IAmb 11 30 24.1
comp=Z,14nm,1.0s
**NVAR Mina Array Bea 65.92 59** P **P 11 30 02.6 +0.8**
**NVAR Mina Array Bea 65.92 59** P **P 11 30 02.9 +1.1**
comp=Z,1.1nm,0.7s,baz=285,slow=7.0,SNR=12
comp=Z,1.1nm,0.7s
**OBN Obninsk 66.00 325** *e*P **P 11 30 01.9 +0.2**
**OBN Obninsk 66.00 325** *de*P **P 11 30 01.9 +0.2**
OBN *e* 11 30 29.9
OBN *e* 11 32 25.5
OBN *e*S **S 11 38 41.7 -5.4**
OBN pmax pmax
comp=Z,36nm,1.0s
OBN MLR MLR
comp=Z,756nm,17.0s
**YHL Hebgen Lake 66.11 50** IAmb IAmb 11 30 17.8
comp=Z,8.3nm,1.3s
**VRH Novokhopyorsk 66.35 319** *e*P **P 11 30 04.0 -0.1**
VRH pmax pmax
comp=Z,69nm,0.8s
**LPSR Galich'ya Gora 66.70 322** *e*P **P 11 30 03.2 -3.0**
LPSR pmax pmax
comp=Z,50nm,0.8s
**DSP Deep Springs 66.78 60** IAmb IAmb 11 30 31.2
comp=Z,11nm,1.2s
**IMW Indian Meadow 66.84 51** IAmb IAmb 11 30 26.7
comp=Z,6.5nm,1.0s
**MSVF Nonsavu 66.88 150** LR LR 11 54 08.1
comp=Z,188nm,19.8s,baz=320,slow=31
**RLMT Red Lodge 66.98 49** P **P 11 30 09.1 +0.6**
baz=310
**TPAW Teton Pass 67.10 51** IAmb IAmb 11 30 27.9
comp=Z,10nm,1.0s
**PKM Mcpherson Peak 67.16 63** P **P 11 30 11.0 +1.3**
baz=309
**VORR Voronezh 67.20 321** *e*P **P 11 30 10.3 +0.8**
VORR pmax pmax
comp=Z,41nm,0.4s
**LOHW Long Hollow 67.21 51** IAmb IAmb 11 30 28.8
comp=Z,7.3nm,1.1s
**VSU Vasula 67.32 331** *ce*P **P 11 30 10.9 +0.8**
VSU pmax pmax
comp=Z,70nm,2.5s
**VSR Storozhevoye 67.53 320** *e*P **P 11 30 09.4 -2.2**
VSR pmax pmax
comp=Z,60nm,1.2s
**LAO LASA Array 67.58 46** P **P 11 30 12.5 +0.4**
baz=311
**ARVC Arvin 67.64 62** P **P 11 30 13.5 +0.9**
baz=309
**R11B Troy Canyon, C 67.64 58** IAmb IAmb 11 30 31.2
comp=Z,10nm,1.4s
**R11B Troy Canyon, C 67.64 58** P **P 11 30 13.1 +0.4**
baz=309
**VORD Divnogorie 67.65 320** *e*P **P 11 30 10.9 -1.4**
VORD pmax pmax
comp=Z,50nm,1.0s
**DZM Mont Dzumac 67.69 163** *e*S **S 11 39 06.9 -1.5**
comp=Z,109nm,24.2s
**DZM Mont Dzumac 67.69 163** *e*LR LR 11 50 43.1
comp=Z,379nm,21.4s
**DZM Mont Dzumac 67.69 163** LR LR 11 57 08.4
comp=Z,342nm,19.3s,baz=358,slow=33
**MPMC Manual Prospec 67.90 61** P **P 11 30 15.4 +1.0**
baz=309
**FURC Furnace Creek, 68.03 60** P **P 11 30 15.9 +0.9**
baz=309
**TPNV Topopah Spring 68.11 59** P **P 11 30 17.0 +1.3**
baz=310
**DUG Dugway, Tooele 68.13 55** IAmb IAmb 11 30 34.3
comp=Z,7.3nm,1.1s
**DUG Dugway, Tooele 68.13 55** P **P 11 30 16.9 +1.2**
baz=310
**DUG Dugway, Tooele 68.13 55** P **P 11 30 17.1 +1.4**
**FRB Frobisher Bay 68.31 17** LR LR 12 03 34.7
comp=Z,682nm,19.4s,baz=353,slow=39
**EDW2 Edwards Air Fo 68.32 62** P **P 11 30 17.8 +0.9**
baz=310
**GWY Greenwater Val 68.33 60** IAmb IAmb 11 30 39.7
comp=Z,17nm,1.4s
**BW06 Boulder Array 68.34 51** P **P 11 30 17.6 +0.4**
baz=311
**PDAR Pinedale Array 68.34 51** P **P 11 30 17.8 +0.6**
**PDAR Pinedale Array 68.34 51** P **P 11 30 18.0 +0.8**
comp=Z,1.1nm,0.6s,baz=316,slow=5.4,SNR=15
comp=Z,1.1nm,0.6s
**MAK Makhachkala 68.82 310** *e*P **P 11 30 17.4 -2.4**
MAK *e* 11 32 54.7
MAK *e*PPP PPP 11 34 32.4
MAK *e*S **S 11 39 20.7 -0.7**
MAK *e*SS **SS 11 43 47.2 +1.3**
MAK pmax pmax
comp=Z,113nm,1.0s
MAK MLR MLR
comp=Z,725nm,16.0s
**FMP Fort Macarthur 68.87 63** P **P 11 30 21.4 +1.1**
baz=310
**BFSC Mount Baldy Ra 68.94 62** P **P 11 30 21.4 +0.5**
baz=310
**ASAR Alice Springs 68.98 195** P **P 11 30 22.8 +1.9**
comp=Z,2.1nm,0.7s,baz=9.8,slow=5.9,SNR=20
comp=Z,2.1nm,0.7s
**HEC Hector,Ludlow 69.41 61** P **P 11 30 24.5 +0.8**
baz=310
**CCUT Cedar City 69.50 57** IAmb IAmb 11 30 40.2
comp=Z,9.6nm,1.3s
**NC405 NORSAR Array S 69.65 340** P **P 11 30 24.4 -0.3**
**RDMU Red Mountain 69.77 53** IAmb IAmb 11 30 45.0
comp=Z,13nm,0.8s
**PALK Pallekele 69.79 260** LR LR 12 03 21.0
comp=Z,154nm,20.4s,baz=153,slow=38
**GOF Gofitskoye 69.82 314** *ce*P **P 11 30 26.3 +0.3**
**NB2 NORSAR Subarra 69.84 340** P **P 11 30 25.2 -0.6**
comp=Z,26nm,0.8s,baz=29,slow=6.5
**NB2 NORSAR Subarra 69.84 340** P **P 11 30 25.2 -0.6**
baz=29,slow=6.5
**NB2 NORSAR Subarra 69.84 340** P **P 11 30 22.7 -3.1**
NB2 pmax pmax
comp=Z,5.0nm,0.7s
**NOA NORSAR Array B 69.84 340** P **P 11 30 25.2 -0.6**
comp=Z,18nm,0.7s,baz=31,slow=6.2,SNR=64
NOA LR LR 12 05 59.2
comp=Z,244nm,18.4s,baz=25,slow=40
comp=Z,18nm,0.7s
**MNK Minsk 69.91 328** *i* P **P 11 30 26.7 +0.4**
MNK *i* *PP **sP 11 30 38.6 +1.7**
MNK *i* 11 30 48.8
MNK *i* 11 33 01.2
MNK *i* PPP PPP 11 34 43.2
MNK *i* S **S 11 39 33.8 -0.1**
MNK *i* *SS sS 11 39 54.3 +7.2
MNK *i* 11 40 25.1
MNK *i* SS **SS 11 44 04.0 +1.9**
MNK pmax pmax
comp=E,13nm,1.0s
MNK pmax pmax
comp=Z,71nm,0.9s
MNK pmax pmax
comp=N,34nm,0.9s
MNK MLR MLR
comp=Z,1μm,19.0s
MNK MLR MLR
comp=N,609nm,18.0s
MNK MLR MLR
comp=E,181nm,20.0s
**LCMT Little Creek M 69.92 58** IAmb IAmb 11 30 45.8
comp=Z,7.5nm,1.0s
**HFS Hagfors 69.97 338** P **P 11 30 26.2 -0.4**
comp=Z,28nm,0.7s,baz=46,slow=6.4,SNR=50
HFS LR LR 12 04 23.1
comp=Z,438nm,20.3s,baz=33,slow=39
comp=Z,28nm,0.7s
**NORES NORESS Array B 70.02 340** P **P 11 30 28.2 +1.3**
NORES pmax pmax
comp=Z,3.0nm,0.5s
**K22A Casper 70.10 50** P **P 11 30 28.3 +0.4**
baz=312
**PFO Pinyon Flats O 70.11 62** LR LR 11 57 38.0
comp=Z,213nm,19.6s,baz=316,slow=33
**ULM Lac du Bonnet 70.14 38** P **P 11 30 28.2 +0.4**
comp=Z,2.0nm,0.9s,baz=311,slow=8.2,SNR=3.4
comp=Z,2.0nm,0.9s
**SEKA Sheki 70.14 308** P **P 11 30 27.2 -0.9**
**KNB Kanab 70.17 57** IAmb IAmb 11 30 47.5
comp=Z,13nm,1.3s
**SRU San Rafael Swe 70.17 55** IAmb IAmb 11 30 46.7
comp=Z,7.5nm,0.8s
**ERBR Yeremizino-Bor 70.69 315** *e*P **P 11 30 29.6 -1.6**
ERBR *e**PP **pP 11 30 39.6 +0.7**
ERBR *e*S **S 11 39 39.9 -3.4**
ERBR pmax pmax
comp=Z,105nm,1.6s
**KVAR Kislovodsk Arr 70.75 313** LR LR 12 06 02.0
comp=Z,1μm,19.2s,baz=285,slow=40
**KIV Kislovodsk 70.76 313** P **P 11 30 32.7 +0.8**
**KIV Kislovodsk 70.76 313** *e*P **P 11 30 32.8 +0.9**
**KIV Kislovodsk 70.76 313** *e*P **P 11 30 32.8 +0.9**
KIV *e*S **S 11 39 44.8 +0.4**
KIV *e*SS **SS 11 44 18.4 +2.5**
KIV pmax pmax
comp=Z,26nm,1.1s
KIV MLR MLR
comp=Z,1μm,18.0s
**KBZ Khabaz 70.80 313** P **P 11 30 32.5 +0.6**
comp=Z,13nm,0.8s,baz=58,slow=5.1,SNR=31
KBZ LR LR 12 06 22.4
comp=Z,3μm,18.8s,baz=40,slow=40
comp=Z,13nm,0.8s
**KBZ Khabaz 70.80 313** *e*P **P 11 30 32.7 +0.8**
**KBZ Khabaz 70.80 313** *ce*P **P 11 30 32.7 +0.8**
KBZ pmax pmax
comp=Z,66nm,2.4s
**HMU Henry Mountain 70.82 56** IAmb IAmb 11 30 57.2
comp=Z,6.3nm,0.6s
**O20A White River Ci 70.82 52** P **P 11 30 32.5 +0.1**
baz=312
**U15A North Rim 70.88 58** IAmb IAmb 11 30 51.2
comp=Z,8.1nm,1.2s
**SHA1 Shidzhatmaz 70.92 313** *ce*P **P 11 30 33.5 +0.5**
**GANJ Ganja 71.02 308** P **P 11 30 33.3 -0.1**
**BORG Borgarnes 71.21 356** LR LR 12 02 40.3
comp=Z,102nm,18.2s,baz=357,slow=37
**LABN Labinsk 71.31 314** *e*P **P 11 30 32.9 -2.1**
LABN *e**PP **pP 11 30 43.8 +1.1**
LABN *e*S **S 11 39 46.4 -4.2**
LABN pmax pmax
comp=Z,39nm,0.4s
**KONO Kongsberg 71.45 340** *ce*P **P 11 30 36.0 +0.4**
KONO pmax pmax
comp=Z,7.0nm,0.7s
**N23A Red Feather La 71.60 51** P **P 11 30 36.4 -0.9**
baz=313
**SUW Suwalki 72.03 330** *e*P **P 11 30 39.6 +0.4**
**GNI Garni 72.24 309** LR LR 12 06 03.5
comp=Z,670nm,18.0s,baz=30,slow=39
**AK03 Malin Array Si 72.24 325** P **P 11 30 40.3 -0.2**
**AK23 Malin Array Si 72.25 325** P **P 11 30 40.4 -0.2**
**AKASG Malin Array Be 72.26 325** P **P 11 30 41.0 +0.4**
AKASG IAmb IAmb 11 30 42.0
comp=Z,24nm,1.2s
**AKASG Malin Array Be 72.26 325** P **P 11 30 40.0 -0.7**
comp=Z,10nm,0.7s,baz=38,slow=6.1,SNR=36
AKASG LR LR 12 05 47.1
comp=Z,892nm,18.1s,baz=38,slow=39
comp=Z,10nm,0.7s
**AKASG Malin Array Be 72.26 325** P **P 11 30 41.0 +0.4**
AKASG pmax pmax
comp=Z,24nm,1.3s
**AKBB Malin Array Si 72.26 325** *ce*P **P 11 30 40.2 -0.4**
AKBB pmax pmax
comp=Z,44nm,1.0s
**AKBB Malin Array Si 72.26 325** P **P 11 30 40.4 -0.2**
**KIEV Kiev 72.27 325** P **P 11 30 40.4 -0.3**
**KIEV Kiev 72.27 325** P **P 11 30 40.4 -0.3**
KIEV pmax pmax
comp=Z,32nm,1.0s
**AK05 Malin Array Si 72.33 325** P **P 11 30 40.5 -0.5**
**SOC Sochi 72.57 314** *e*P **P 11 30 40.8 -1.8**
SOC *e* 11 33 21.4
SOC *e*PPP PPP 11 35 06.0
SOC *e*S **S 11 40 02.7 -2.3**
SOC *e*SS **SS 11 44 42.6 -0.8**
**MVCO Mesa Verde 72.63 55** IAmb IAmb 11 31 06.1
comp=Z,9.4nm,1.2s
**MVCO Mesa Verde 72.63 55** P **P 11 30 43.3 -0.1**
baz=313
**ANN Anapa 72.86 316** *e*P **P 11 30 44.6 +0.3**
ANN *e**PP **sP 11 30 54.8 -0.1**
ANN *e*S **S 11 40 05.0 -3.3**
ANN pmax pmax
comp=Z,95nm,1.6s
**RNPP9 Sopachiv 73.06 327** P **P 11 30 45.2 -0.1**
RNPP9 pP **pP 11 30 52.4 -0.7**
**S22A 4UR Ranch, Cre 73.24 54** P **P 11 30 46.8 -0.3**
baz=313
**W18A Petrified Fore 73.30 57** P **P 11 30 48.0 +0.7**
baz=313
**Q24A Divide 73.37 52** P **P 11 30 47.6 -0.2**
baz=314
**LUBAR Lubar, Ukraine 73.46 325** P **P 11 30 47.6 -0.2**
**OGNE Ogallala 73.71 48** P **P 11 30 49.8 +0.2**
baz=315
**EYMN Ely 73.79 38** P **P 11 30 50.2 +0.4**
baz=319
**SDCO Great Sand Dun 74.01 53** P **P 11 30 51.9 +0.3**
baz=314
**SIM Simferopol' 74.37 318** *e*P **P 11 30 54.4 +1.2**
SIM *e* 11 31 10.0
SIM pmax pmax
comp=Z,10.0nm,0.7s
SIM MLR MLR
comp=Z,340nm,13.3s
**ECSD EROS Data Cent 74.52 43** P **P 11 30 54.7 +0.6**
baz=317
**TUC Tucson 74.55 60** P **P 11 30 55.0 +0.4**
baz=313
**LVV L'vov 75.04 327** *e*P **P 11 30 57.4 +0.4**
**KMPD K-Podol'skiy 75.05 325** P **P 11 30 56.5 -0.5**
**T25A Trinidad 75.05 53** P **P 11 30 58.1 +0.5**
baz=314
**ANMO Albuquerque 75.38 55** P **P 11 31 00.4 +0.9**
**ANMO Albuquerque 75.38 55** P **P 11 31 00.3 +0.8**
baz=314
**ANMO Albuquerque 75.38 55** P **P 11 31 00.4 +0.9**
ANMO pmax pmax
comp=Z,3.0nm,1.0s
**KWP Kalwaria Pacla 75.71 328** *e*P **P 11 31 01.8 +0.9**
**KWP Kalwaria Pacla 75.71 328** P **P 11 31 01.3 +0.4**
**KWP Kalwaria Pacla 75.71 328** P **P 11 31 01.3 +0.4**
KWP pmax pmax
comp=Z,124nm,1.4s
**STKA Stephens Creek 76.00 187** LR LR 12 09 58.6
comp=Z,142nm,18.1s,baz=23,slow=40
**121A Cookes Peak, D 76.25 58** IAmb IAmb 11 31 20.4
comp=Z,9.0nm,1.1s
**121A Cookes Peak, D 76.25 58** P **P 11 31 05.6 +1.2**
baz=314
**BSEG Bad Segeberg 76.26 337** *e*P **P 11 31 04.6 +0.7**
comp=Z,25nm,1.2s,baz=27,slow=4.7
**BUR08 Bucovina Ar. S 76.30 325** IAmb IAmb 11 31 18.7
comp=Z,22nm,1.3s
**BURAR Bucovina Array 76.31 325** P **P 11 31 04.2 -0.3**
BURAR IAmb IAmb 11 31 06.0
comp=Z,6.4nm,0.8s
**BURAR Bucovina Array 76.31 325** ⇓P **P 11 31 04.8 +0.4**
**BURAR Bucovina Array 76.31 325** ⇓P **P 11 31 04.8 +0.4**
**OJC Ojcow 76.33 329** *e*P **P 11 31 04.7 +0.4**
**KOLS Kolonicke sedl 76.44 327** *e*P **P 11 31 06.3 +1.3**
KOLS pmax pmax
comp=Z,8.0nm,0.8s
**KOLS Kolonicke sedl 76.44 327** *e*P **P 11 31 06.3 +1.3**
**CBKS Cedar Bluff 76.47 49** P **P 11 31 06.2 +0.7**
baz=316
**TESR Tescani 76.58 323** ⇑P **P 11 31 05.2 -0.6**
**SCHQ Schefferville 76.67 21** P **P 11 31 06.7 +0.5**
comp=Z,3.7nm,0.8s,baz=294,slow=10.0,SNR=3.3
SCHQ LR LR 12 08 12.5
comp=Z,432nm,19.8s,baz=352,slow=38
comp=Z,3.7nm,0.8s
**CRVS Cervenica-Dubn 76.78 328** *e*P **P 11 31 08.5 +1.6**
CRVS pmax pmax
comp=Z,139nm,2.2s
**CRVS Cervenica-Dubn 76.78 328** *e*P **P 11 31 08.5 +1.6**
**GORT1 Trebel 76.80 336** *e*P **P 11 31 07.3 +0.5**
comp=Z,91nm,1.6s,baz=27,slow=4.7
**NIE Niedzica 76.80 329** *e*P **P 11 31 08.1 +1.1**
**NIE Niedzica 76.80 329** P **P 11 31 08.9 +1.8**
NIE pmax pmax
comp=Z,8.0nm,1.6s
**CFR Carcaliu 76.97 322** ⇑P **P 11 31 07.4 -0.6**
**CFR Carcaliu 76.97 322** ⇑P **P 11 31 07.4 -0.6**
**KSP Ksiaz 77.05 332** *e*P **P 11 31 08.3 -0.1**
**KSP Ksiaz 77.05 332** P **P 11 31 08.9 +0.5**
KSP pmax pmax
comp=Z,19nm,1.4s
**VRI Vrincioaia 77.05 323** ⇓P **P 11 31 09.9 +1.4**
**VRI Vrincioaia 77.05 323** ⇓P **P 11 31 09.9 +1.4**
**TPGR Topolog 77.09 321** ⇓P **P 11 31 09.4 +0.6**
**OKC Ostrava-Krasne 77.24 330** AMS AMS 12 09 20.0
comp=Z,700nm,16.8s
**OZUR 77.28 324** ⇓P **P 11 31 11.7 +1.9**
**CHVC Chvalec 77.34 332** AMS AMS 12 10 00.0
comp=Z,700nm,18.5s
**FLTG Flechtingen 77.39 335** *e*P **P 11 31 10.5 +0.3**
comp=Z,9.5nm,0.8s,baz=27,slow=4.7
**UPC Upice 77.43 332** AMS AMS 12 10 00.0
comp=Z,900nm,16.0s
**DPC Dobruska-Polom 77.45 331** *e*P **P 11 31 11.9 +1.2**
DPC AMS AMS 12 09 50.0
comp=Z,800nm,17.4s
**DPC Dobruska-Polom 77.45 331** *e*P **P 11 31 11.9 +1.2**
DPC MLR MLR
comp=Z,800nm,17.4s
**MORC Moravsky Berou 77.51 330** IAmb IAmb 11 31 25.6
comp=Z,24nm,1.3s
**MORC Moravsky Berou 77.51 330** *e*P **P 11 31 12.0 +0.9**
**MORC Moravsky Berou 77.51 330** ⇓P **P 11 31 11.5 +0.5**
**MORC Moravsky Berou 77.51 330** ⇓P **P 11 31 11.5 +0.5**
**KRLC Kraliky 77.53 331** AMS AMS 12 12 50.0
comp=Z,600nm,19.4s
**SCIA State Center 77.55 43** P **P 11 31 12.5 +1.1**
baz=319
**NRDL Niedersach Rie 77.59 336** *e*P **P 11 31 12.1 +0.8**
comp=Z,14nm,1.3s,baz=27,slow=4.7
**RETH Rethem/Aller, 77.59 336** *e*P **P 11 31 11.7 +0.4**
comp=Z,120nm,2.0s,baz=27,slow=4.7
**MLR Muntele Rosu 77.68 323** IAmb IAmb 11 31 15.6
comp=Z,6.9nm,0.8s
**MLR Muntele Rosu 77.68 323** LR LR 12 08 35.6
comp=Z,602nm,18.3s,baz=39,slow=38
**MLR Muntele Rosu 77.68 323** ⇓P **P 11 31 14.4 +2.2**
**MLR Muntele Rosu 77.68 323** ⇓P **P 11 31 14.4 +2.2**
**ISR Istrita 77.72 323** ⇓P **P 11 31 13.9 +1.6**
**ISR Istrita 77.72 323** ⇓P **P 11 31 13.9 +1.6**
**CLL Collm 77.73 334** *i* P **P 11 31 12.5 +0.3**
comp=Z,119nm,2.1s
CLL *e*pP **pP 11 31 20.0 0.0**
CLL *e*sP **PcP 11 31 22.0 -0.2**
CLL *i* x x 11 31 25.5
comp=Z,20nm,1.0s
CLL *e*S **S 11 41 02.0 -0.2**
CLL *e*SKSac **ScS 11 41 29.0 +0.3**
CLL *e*SH **SS 11 46 06.0 +4.8**
CLL AMS AMS 12 03 00.0
comp=N,400nm,20.0s
CLL AMS AMS 12 03 00.0
comp=E,700nm,20.6s
**CLL Collm 77.73 334** *i* P **P 11 31 12.5 +0.3**
CLL *e*S SKSac 11 41 12.0 -11
CLL pmax pmax
comp=Z,119nm,2.1s
CLL MLR MLR
comp=Z,400nm,19.4s
**CLL Collm 77.73 334** *e*P **P 11 31 12.1 -0.1**

comp=Z,16nm,0.7s,baz=27,slow=4.7
**BRG Berggiesshubel 77.81 333** *e*P **P 11 31 13.4 +0.7**
BRG Amp 11 31 13.7
comp=Z,5.9nm,0.8s
**BRG Berggiesshubel 77.81 333** *e*P **P 11 31 13.0 +0.4**
comp=Z,5.9nm,0.8s,baz=27,slow=4.7
**PVCC Panska Ves 77.89 332** P **P 11 31 14.3 +1.2**
**KSU1 Kansas State U 77.92 47** P **P 11 31 14.1 +0.6**
baz=318
**MARR Marisel-Cluj 77.93 325** ⇑P **P 11 31 14.4 +0.9**
**RICC Richard 78.04 333** *e*P **P 11 31 15.9 +2.0**
**CLZ Clausthal 78.08 335** *e*P **P 11 31 15.1 +0.9**
comp=Z,14nm,1.0s,baz=27,slow=4.7
**VYHS Vyhne 78.11 329** *e*P **P 11 31 14.9 +0.5**
VYHS pmax pmax
comp=Z,112nm,2.6s
**VYHS Vyhne 78.11 329** *e*P **P 11 31 14.9 +0.5**
**VOIR 78.11 324** ⇑P **P 11 31 15.7 +1.1**
**VOIR 78.11 324** ⇑P **P 11 31 15.7 +1.1**
**PSZ Piszkesteto 78.19 328** ⇑P **P 11 31 16.9 +2.0**
**PSZ Piszkesteto 78.19 328** ⇑P **P 11 31 16.9 +2.0**
**JFWS Jewell Farm 78.20 40** P **P 11 31 15.7 +0.7**
baz=321
**HSKC Hora Svate Kat 78.20 333** *e*P **P 11 31 15.2 +0.3**
HSKC AMS AMS 12 10 10.0
comp=Z,800nm,15.4s
**NEUB Neuenburg 78.21 334** *e*P **P 11 31 15.0 +0.2**
comp=Z,14nm,0.8s,baz=27,slow=4.7
**AMTX Amarillo 78.21 53** P **P 11 31 15.4 +0.1**
baz=316
**EKA Eskdalemuir Ar 78.22 344** P **P 11 31 14.5 -0.3**
comp=Z,3.2nm,0.6s,baz=25,slow=5.1,SNR=9.4
comp=Z,3.2nm,0.6s
**JAVC Velka Javorina 78.23 330** *e*P **P 11 31 17.2 +2.1**
**MSTX Muleshoe 78.23 54** P **P 11 31 15.2 -0.2**
baz=316
**VRAC Vranov 78.24 331** *e*P **P 11 31 16.2 +1.1**
**VRAC Vranov 78.24 331** LR LR 12 08 26.4
comp=Z,464nm,19.2s,baz=32,slow=38
**MNTX Cornudas Mount 78.29 57** P **P 11 31 16.5 +0.8**
baz=315
**PRA Prague 78.33 332** AMS AMS 12 09 30.0
comp=Z,600nm,16.0s
**ARR Arges 78.34 324** ⇓P **P 11 31 17.2 +1.4**
**GOPC GO Pecny, Ondr 78.35 332** *e*P **P 11 31 16.8 +1.1**
GOPC AMS AMS 12 09 40.0
comp=Z,700nm,17.5s
**GOPC GO Pecny, Ondr 78.35 332** *e*P **P 11 31 16.8 +1.1**
GOPC MLR MLR
comp=Z,700nm,17.5s
**PRU Pruhonice 78.36 332** *e*P **P 11 31 16.4 +0.7**
PRU *e*S **S 11 41 11.4 +2.4**
PRU AMS AMS 12 09 30.0
comp=Z,600nm,17.1s
**PRU Pruhonice 78.36 332** *e*P **P 11 31 16.4 +0.7**
PRU *e*S **S 11 41 11.4 +2.4**
PRU MLR MLR
comp=Z,600nm,17.1s
**GTTG Gottingen 78.46 336** *e*P **P 11 31 17.1 +0.8**
comp=Z,10nm,0.8s,baz=27,slow=4.7
**BRTR Keskin Array B 78.49 315** P **P 11 31 16.4 -0.5**
**BRTR Keskin Array B 78.49 315** P **P 11 31 16.2 -0.6**
comp=Z,2.6nm,0.7s,baz=84,slow=5.1,SNR=6.8
BRTR LR LR 12 12 02.0
comp=Z,333nm,18.2s,baz=50,slow=40
comp=Z,2.6nm,0.7s
**BRTR Keskin Array B 78.49 315** P **P 11 31 16.4 -0.5**
**KRUC Moravsky 78.52 331** *e*P **P 11 31 17.5 +0.9**
**TREC Trest 78.64 331** AMS AMS 12 10 30.0
comp=Z,600nm,19.0s
**TANN Tannenbergstha 78.68 334** *e*P **P 11 31 18.2 +0.7**
comp=Z,7.2nm,1.1s,baz=27,slow=4.7
**PLN Plauen 78.72 334** *e*P **P 11 31 18.4 +0.7**
comp=Z,8.5nm,1.0s,baz=27,slow=4.7
**MOX Moxa 78.75 334** *e*P **P 11 31 18.1 +0.2**
comp=Z,14nm,1.3s,baz=27,slow=4.7
MOX *e*L L 12 05 15.0
comp=Z,288nm,21.7s
**MODS Modra-Piesok 78.78 330** *e*P **P 11 31 19.5 +1.4**
MODS pmax pmax
comp=Z,27nm,0.9s
**MODS Modra-Piesok 78.78 330** *e*P **P 11 31 19.5 +1.4**
**KIRS Kirsehir-Merke 78.79 314** ⇓P **P 11 31 19.9 +1.5**
**SIRR Siria 78.85 326** ⇑P **P 11 31 19.7 +1.1**
**SRO Srobarova 78.87 329** *e*P **P 11 31 20.3 +1.8**
SRO pmax pmax
comp=Z,24nm,1.0s
**SRO Srobarova 78.87 329** *e*P **P 11 31 20.3 +1.8**
**ZVC Zvikov 78.95 332** AMS AMS 12 09 50.0
comp=Z,800nm,16.5s
**SURR Surduc 79.08 325** ⇑P **P 11 31 20.6 +0.9**
**UBBA Unterbreizbach 79.09 335** *e*P **P 11 31 19.9 +0.3**
comp=Z,5.1nm,0.9s,baz=27,slow=4.7
**GZR Gura Zlata 79.10 325** ⇓P **P 11 31 20.8 +0.8**
**GZR Gura Zlata 79.10 325** ⇓P **P 11 31 20.8 +0.8**
**MANZ Manzenberg 79.17 334** *e*P **P 11 31 20.8 +0.6**
comp=Z,1.2nm,0.9s,baz=27,slow=4.7
**KASTN Kahler Asten 79.22 336** *e*P **P 11 31 22.1 +1.6**
comp=Z,12nm,1.1s,baz=27,slow=4.7
**ROTZ Rotzenmuhle 79.32 333** *e*P **P 11 31 22.1 +1.1**
comp=Z,1.9nm,0.8s,baz=27,slow=4.7
**BUG Bochum--Univer 79.34 337** *e*P **P 11 31 21.8 +0.8**
comp=Z,47nm,1.5s,baz=27,slow=4.7
**BZS Buzias 79.40 326** ⇑P **P 11 31 22.6 +1.1**
**BZS Buzias 79.40 326** ⇑P **P 11 31 22.6 +1.1**
**KHC Kasperske Hory 79.42 332** IAmb IAmb 11 31 24.4
comp=Z,17nm,1.0s
**KHC Kasperske Hory 79.42 332** *e*P **P 11 31 22.4 +0.8**
KHC *ep*P **sP 11 31 32.5 +0.2**
KHC *e*S **S 11 41 18.4 -2.1**
KHC AMS AMS 12 10 10.0
comp=Z,900nm,17.4s
**KHC Kasperske Hory 79.42 332** *e*P **P 11 31 22.4 +0.8**
KHC *e* 11 31 32.5
KHC *e*S **S 11 41 18.4 -2.1**
KHC MLR MLR
comp=Z,900nm,17.4s
**CKRC Cesky Krumlov 79.44 332** *e*P **P 11 31 22.8 +1.1**
CKRC AMS AMS 12 11 10.0
comp=Z,500nm,15.4s
**CKRC Cesky Krumlov 79.44 332** *e*P **P 11 31 22.8 +1.1**
CKRC MLR MLR
comp=Z,500nm,15.4s
**GEC2 GERESS Array S 79.63 332** *e*P **P 11 31 23.3 +0.4**
comp=Z,5.6nm,0.9s,baz=27,slow=4.7
**GERES GERESS Array B 79.63 332** P **P 11 31 22.9 +0.1**
comp=Z,4.2nm,0.8s,baz=45,slow=5.8,SNR=12
GERES LR LR 12 10 27.8
comp=Z,595nm,18.7s,baz=32,slow=39
comp=Z,4.2nm,0.8s
**WET Wettzell 79.64 333** *e*P **P 11 31 24.0 +1.1**
comp=Z,15nm,1.0s,baz=27,slow=4.7
**CONA Conrad Observa 79.66 330** *e*P **P 11 31 23.7 +0.7**
comp=Z,7.6nm,0.9s,SNR=8.1
**RONA Rosalia, Austr 79.70 330** *e*P **P 11 31 24.0 +0.8**
comp=Z,8.6nm,1.0s,SNR=6.0
**GRF Grafenberg Arr 79.70 334** *e*P **P 11 31 24.2 +1.1**
comp=Z,18nm,0.9s,baz=27,slow=4.7
GRF *ep*P **pwP 11 31 37.2 -0.6**
GRF *e*L L 12 05 42.9
comp=Z,285nm,21.4s
**RAR Rarotonga 79.88 133** LR LR 12 02 39.0
comp=Z,181nm,19.2s,baz=295,slow=32
**MORH Mrgy, Hungar 80.08 328** ⇑P **P 11 31 24.9 -0.2**
**TNS Taunus Mts 80.08 336** *e*P **P 11 31 26.4 +1.2**
comp=Z,13nm,1.1s,baz=27,slow=4.7
**AHRW Bad Neuenahr-A 80.20 337** *e*P **P 11 31 27.5 +1.8**
comp=Z,14nm,1.0s,baz=27,slow=4.7
**MOA Molln 80.29 331** *e*P **P 11 31 26.9 +0.6**
comp=Z,4.3nm,1.1s
**ARSA Arzberg 80.36 330** *e*P **P 11 31 27.4 +0.7**
comp=Z,7.2nm,1.3s
**BTNL Ternell 80.42 337** *d*P **P 11 31 26.3 -0.7**
**LPIG La Paz 80.47 66** LR LR 12 00 32.3
comp=Z,98nm,20.9s,baz=320,slow=31
**BIOA Bad Ischl, Aus 80.64 332** *e*P **P 11 31 29.0 +0.7**
comp=Z,13nm,1.2s
**BCLA Clavier 80.80 338** *d*P **P 11 31 29.0 0.0**
**BGES Gesves 80.89 338** *d*P **P 11 31 29.3 -0.1**
**RJOB Jochberg 80.89 332** *e*P **P 11 31 30.9 +1.3**
comp=Z,12nm,1.0s,baz=27,slow=4.7
**BOVS Bovan 80.98 324** ⇑P **P 11 31 29.6 -0.5**
**TXAR Lajitas Array 81.00 58** P **P 11 31 31.4 +0.8**
**TXAR Lajitas Array 81.00 58** P **P 11 31 31.6 +1.0**
comp=Z,3.2nm,0.6s,baz=302,slow=4.0,SNR=58
comp=Z,3.2nm,0.6s
**TXAR Lajitas Array 81.00 58** P **P 11 31 31.4 +0.8**
comp=Z,26nm,0.5s,baz=27,slow=4.7
**FUR Furstenfeldbru 81.02 333** *e*P **P 11 31 31.6 +1.4**
comp=Z,8.2nm,0.9s,SNR=14
**SOKA Soboth 81.03 330** *e*P **P 11 31 30.3 -0.1**
**PERS Pernice 81.03 330** *e*P **P 11 31 30.4 0.0**
**BMRD Maredsous 81.05 338** *d*P **P 11 31 30.1 -0.2**
**RCHB Rochefort 81.06 338** *d*P **P 11 31 31.2 +0.8**
**LESA Schwarzleotal 81.20 332** *e*P **P 11 31 31.5 +0.2**
comp=Z,12nm,0.9s
**GIVF Givet 81.22 338** *e*P **P 11 31 32.1 +0.9**
GIVF pmax pmax
comp=Z,14nm,1.0s
**WLF Walferdange 81.25 337** *e*P **P 11 31 34.7 +3.3**
comp=Z,8.4nm,0.9s,baz=27,slow=4.7
**KBA Koelnbreinsper 81.27 331** *e*P **P 11 31 32.1 +0.3**
comp=Z,12nm,1.0s,SNR=13
**RDO Rodhopi 81.31 321** IAmb IAmb 11 31 33.8
comp=Z,8.5nm,1.0s
**OBKA Obir 81.34 330** *e*P **P 11 31 32.0 0.0**
comp=Z,2.7nm,0.5s
**GOLS Golise 81.38 329** *i*P **P 11 31 32.5 +0.4**
**CCM Cathedral Cave 81.46 44** P **P 11 31 33.4 +0.7**
baz=321
**SADO Sadowa 81.47 33** LR LR 12 11 30.3
comp=Z,180nm,18.4s,baz=61,slow=38
**MYKA Terra Mystica 81.56 331** *e*P **P 11 31 31.4 -1.8**
comp=Z,1.2nm,0.5s
**MGMO Mountain Grove 81.64 45** P **P 11 31 34.2 +0.5**
**WATA Walderalm 81.65 333** *e*P **P 11 31 34.3 +0.5**
comp=Z,13nm,0.9s
**WTTA Wattenberg 81.69 333** *e*P **P 11 31 34.5 +0.5**
comp=Z,9.1nm,0.8s,SNR=6.9
**PRED Cave del Predi 81.75 331** IAmb IAmb 11 31 46.0
comp=Z,8.3nm,1.1s
**RETA Reutte 81.78 333** *e*P **P 11 31 34.9 +0.6**
comp=Z,11nm,1.1s
**MOTA Moosalm 81.80 333** *i*P **P 11 31 34.2 -0.4**
comp=Z,14nm,1.0s
**BFO Black Forest 81.80 335** P **P 11 31 34.4 0.0**
BFO IAmb IAmb 11 31 49.6
comp=Z,18nm,1.4s
**BFO Black Forest 81.80 335** P **P 11 31 34.4 0.0**
BFO pmax pmax
comp=Z,18nm,1.4s
**BFO Black Forest 81.80 335** *e*P **P 11 31 35.0 +0.6**
comp=Z,7.7nm,1.0s,baz=27,slow=4.7
**SQTA Sankt Quirin 81.87 333** *e*P **P 11 31 35.2 +0.3**
comp=Z,9.6nm,0.9s
**CDF Champ du Feu 82.05 336** *e*P **P 11 31 35.8 +0.1**
CDF pmax pmax
comp=Z,13nm,1.3s
**FETA Feichten 82.20 333** *e*P **P 11 31 37.3 +0.6**
comp=Z,5.3nm,1.0s
**DAVA Damuels 82.24 334** *e*P **P 11 31 36.9 0.0**
comp=Z,9.6nm,1.0s
**ECH Echery 82.26 336** IAmb IAmb 11 31 40.1
comp=Z,8.1nm,1.1s
**TAOE Nuku Hiva Isla 82.34 110** *e*LR LR 11 57 30.1
comp=Z,296nm,22.8s
**JCT Junction City 82.49 55** P **P 11 31 39.2 +0.9**
baz=317
**MMAI Mount Meron Ar 82.57 309** P **P 11 31 39.3 +0.5**
comp=Z,3.7nm,0.6s,baz=51,slow=7.8,SNR=3.5
MMAI LR LR 12 14 29.4
comp=Z,558nm,18.4s,baz=332,slow=40
comp=Z,3.7nm,0.6s
**O48B Farmland 82.64 39** P **P 11 31 39.2 +0.3**
baz=324
**FCAR Ozark Folk Cen 82.68 46** IAmb IAmb 11 31 56.3
comp=Z,7.7nm,1.0s
**HAU Haudompre 82.69 336** *e*P **P 11 31 41.2 +2.2**
HAU pmax pmax
comp=Z,4.0nm,0.7s
**FUORN Ofenpass-Fuorn 82.71 333** IAmb IAmb 11 31 42.5
comp=Z,12nm,1.1s
**CTI Castel Tesino 82.75 332** IAmb IAmb 11 31 41.0
comp=Z,11nm,1.2s
**DRIO Del Rio 82.78 56** IAmb IAmb 11 31 54.8
comp=Z,14nm,1.1s
**PPT Papeete 82.78 123** LR LR 12 06 57.4
comp=Z,450nm,18.1s,baz=324,slow=34
**PPT2 Papeete2 82.80 123** *e*LR LR 11 57 30.2
comp=Z,238nm,32.0s
PPT2 *e*LR LR 11 57 38.3
comp=Z,258nm,20.5s
PPT2 *e*LR LR 11 57 39.3
comp=Z,3µm,30.5s
**MIAR Mount Ida 82.94 48** P **P 11 31 41.8 +1.2**
baz=320
**PDG Podgorica 82.99 325** IAmb IAmb 11 31 43.0
comp=Z,13nm,1.0s
**LONY Lake Ozonia 83.30 30** P **P 11 31 43.1 +0.9**
baz=330
**FNA Florina 83.45 323** IAmb IAmb 11 31 44.1
comp=Z,8.7nm,0.9s
**FLN La Foliniere 83.81 341** *e*P **P 11 31 44.9 +0.2**
FLN pmax pmax
comp=Z,20nm,1.2s
**LOR Lormes 84.06 337** *e*P **P 11 31 46.2 +0.1**
LOR pmax pmax
comp=Z,14nm,1.2s
**GRR Gorron 84.25 341** *e*P **P 11 31 47.4 +0.4**
GRR pmax pmax
comp=Z,20nm,0.9s
**SSF Saint Saulge 84.35 337** *e*P **P 11 31 50.1 +2.6**
SSF pmax pmax
comp=Z,6.0nm,0.8s
**SMF Signal de Mont 84.64 337** *e*P **P 11 31 49.4 +0.4**
SMF pmax pmax
comp=Z,19nm,1.0s
**AVF Avril sur Loir 84.64 337** *e*P **P 11 31 49.5 +0.5**
AVF pmax pmax
comp=Z,22nm,1.4s
**WVT Waverly 84.67 43** P **P 11 31 48.9 -0.4**
baz=323
**LPL La Plagne 84.81 335** *e*P **P 11 31 50.8 +0.6**
LPL pmax pmax
comp=Z,6.0nm,0.7s
**LPG La Plagne 84.82 335** *e*P **P 11 31 51.0 +0.7**
LPG pmax pmax
comp=Z,8.0nm,0.8s
**EIL Elat 85.33 307** LR LR 12 16 31.5
comp=Z,530nm,18.9s,baz=71,slow=40
**T50A Nancy 85.39 41** IAmb IAmb 11 32 07.8
comp=Z,9.2nm,0.8s
**TCF Toulx Ste Croi 85.42 338** *e*P **P 11 31 53.7 +0.8**
TCF pmax pmax
comp=Z,14nm,1.4s
**INTR Introdacqua 85.45 328** IAmb IAmb 11 31 54.7
comp=Z,7.4nm,0.8s
**MBDF Montbardon 85.51 334** *e*P **P 11 31 55.8 +2.2**
MBDF pmax pmax
comp=Z,9.0nm,1.2s
**ORIF Oris-en-Rattie 85.61 335** *e*P **P 11 31 54.8 +0.8**
ORIF pmax pmax
comp=Z,7.0nm,0.7s
**MFF Saint Martin d 85.74 340** *e*P **P 11 31 55.2 +0.7**
MFF pmax pmax
comp=Z,15nm,0.9s
**URZ Urewera 85.74 159** LR LR 12 07 55.3
comp=Z,200nm,18.3s,baz=44,slow=34
**DGAR Diego Garcia 85.93 256** *ce*P **P 11 31 58.0 +2.1**
**VIVF Saint-Julien-l 86.03 336** *e*P **P 11 31 56.8 +0.8**
VIVF pmax pmax
comp=Z,8.0nm,1.0s
**RJF Les Rejaudoux 86.51 338** *e*P **P 11 31 59.2 +0.8**
RJF pmax pmax
comp=Z,26nm,1.4s
**CAF Calviac 86.71 337** *e*P **P 11 32 00.7 +1.3**
CAF pmax pmax
comp=Z,14nm,1.0s
**TIP Timpagrande 86.74 325** IAmb IAmb 11 32 02.8
comp=Z,11nm,1.2s
**TKL Tuckaleechee C 87.00 41** LR LR 12 15 38.5
comp=Z,220nm,18.0s,baz=347,slow=39
**LFF La Frestale 87.06 338** *e*P **P 11 32 02.2 +1.2**
LFF pmax pmax
comp=Z,24nm,1.2s
**TBI Tubuai 87.31 126** *e*LR LR 11 59 40.7
comp=Z,2µm,25.5s
**VAE Valguarnera 89.15 326** LR LR 12 18 14.1
comp=Z,444nm,18.0s,baz=123,slow=40
**ETSF Etsaut 89.30 338** *e*P **P 11 32 14.4 +2.6**
ETSF pmax pmax
comp=Z,3.0nm,0.7s
**PGAV Gavieira, Arco 91.99 344** *e*LQ LQ 11 57 11.5
PGAV *e*LR LR 12 04 32.6
comp=Z,379nm,18.0s
**MVO Moncorvo 92.50 342** *e*LQ LQ 12 07 42.5
MVO *e*LR LR 12 10 48.3
comp=Z,361nm,18.0s
**KEST Kesra 92.65 329** LR LR 12 17 50.0
comp=Z,555nm,19.6s,baz=336,slow=38
**ESDC Sonseca Array 93.20 340** P **P 11 32 30.0 +0.1**
comp=Z,0.3nm,0.4s,baz=27,slow=4.3,SNR=2.1
ESDC LR LR 12 21 22.2
comp=Z,423nm,18.1s,baz=30,slow=40
comp=Z,0.3nm,0.4s
**MTE Manteigas 93.34 343** *e*LR LR 12 11 14.5
comp=Z,365nm,20.0s
**ATD Arta Tunnel 93.70 290** LR LR 12 20 29.0
comp=Z,26nm,18.7s,baz=3.5,slow=39
**PMRV Marv??o 94.24 342** *e*LR LR 12 11 49.7
comp=Z,494nm,18.0s
**CMIG Matias Romero 95.44 60** LR LR 12 19 01.2
comp=Z,70nm,18.3s,baz=314,slow=38
**RKT Rikitea 96.04 116** *e*LR LR 12 03 40.1
comp=Z,1µm,35.8s
**PVAQ Vaqueiros 96.25 342** *e*LR LR 12 14 37.6
comp=Z,435nm,18.0s
**FURI Furi 98.42 291** LR LR 12 22 10.2
comp=Z,258nm,18.9s,baz=14,slow=38
**MDT Middelt 99.85 338** LR LR 12 24 50.1
comp=Z,154nm,19.6s,baz=30,slow=39
**TORD Torodi Ar. Bea 115.89 325** PKP **PKPdf 11 37 59.2 +0.6**
comp=Z,0.4nm,0.6s,baz=47,slow=1.2,SNR=2.7
**VNDA Vanda 121.63 177** PKP **PKiKP 11 38 09.2 +1.3**
comp=Z,1.0nm,0.8s,baz=352,slow=2.5,SNR=4.9
**DBIC Dimbokro 124.38 329** PKP **PKiKP 11 38 15.4 +0.2**
comp=Z,3.2nm,0.9s,baz=18,slow=3.7,SNR=1.8
**MAW Mawson 128.68 209** PKP **PKPdf 11 38 21.5 +0.1**
comp=Z,0.5nm,0.4s,baz=69,slow=14,SNR=1.6
**QSPA South Pole Qui 133.88 180** PKP **PKiKP 11 38 32.5 -0.2**
comp=Z,1.1nm,0.7s,baz=291,slow=2.3,SNR=8.5
**LPAZ La Paz 137.81 61** PKP **PKPdf 11 38 40.5 -0.4**
comp=Z,0.3nm,0.3s,baz=342,slow=3.2,SNR=1.6
**H03N2 Juan Fernandez 141.26 91** T T 14 16 44.9
baz=305,slow=77,SNR=4.2
**H03N3 Juan Fernandez 141.27 91** T T 14 16 44.9
baz=305,slow=77,SNR=4.7
**H03N1 Juan Fernandez 141.27 91** T T 14 16 46.6
baz=305,slow=77,SNR=4.7
**ELIB Princess Elisa 142.37 204** *d*PKPdf **PKPdf 11 38 44.6 -2.3**
**TROLL Troll, Antarti 147.92 199** ⇑PKiKP **PKiKP 11 39 01.4 0.0**
comp=Z,192nm,0.7s
**BDFB Brasilia 147.93 33** PKPbc **PKPbc 11 39 00.9 -0.3**
comp=Z,4.8nm,0.8s,baz=26,slow=1.7,SNR=5.2
**SNAA Sanae 149.34 197** ⇑PKiKP **PKPbc 11 39 03.5 +0.5**
comp=Z,40nm,0.8s
**SNAA Sanae 149.34 197** PKPbc **PKPbc 11 39 03.4 +0.3**
comp=Z,1.4nm,0.8s,baz=221,slow=1.1,SNR=9.5
**PLCA Paso Flores 150.44 97** PKPbc **PKiKP 11 39 07.4 -0.1**
comp=Z,2.0nm,0.7s,baz=263,slow=2.4,SNR=4.0
**VNA2 Neumayer--Watz 150.83 195** ⇑PKiKP **PKiKP 11 39 08.1 +0.8**
comp=Z,7.7nm,0.7s,baz=146,slow=1.2
**VNA3 Neumayer Olymp 150.98 194** ⇑PKiKP **PKiKP 11 39 08.2 +0.6**
comp=Z,7.6nm,0.8s
**VNA1 Neumayer--Stat 151.22 195** ⇑PKiKP **PKiKP 11 39 08.1 +0.1**
comp=Z,5.0nm,0.7s
**CPUP Villa Florida 151.96 60** PKPbc **PKiKP 11 39 11.2 +0.3**
comp=Z,0.6nm,0.3s,baz=161,slow=19,SNR=2.9

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*HEL **08** 11:30:25.8±0.1, 63°.97N×28°.12E, h0km, ML1.8, Suspected explosion*
*IDC **08** 11:30:26.6±1.9, 63°.96N×28°.27E, h0km, mbtmp2.8/2, ML1.8/1, Error ellipse: s-maj=40.5km s-min=9.4km az=94.0*
*UPP **08** 11:30:27.8±1.9, 63°.89N×27°.60E, h0km, ML1.6*

**ISC 08 11:30:25.3**±0.8, **63°.93N**±0°.02×**28°.03E**±0°.03, **h0km**, **n36,** σ**1°12/64, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIF** | **Nilsia** | **0.55** | **190** | PG | **Pg** | **11 30 36.5** | **+0.7** |
| NIF | | | | SG | **Sg** | **11 30 42.2** | **-0.7** |
| **RMF** | **Romuvaara** | **0.89** | **70** | PG | **Pg** | **11 30 41.4** | **-0.9** |
| RMF | | | | MSG | | 11 30 51.7 | |
| RMF | | | | SB | **Sg** | **11 30 52.4** | **-1.3** |
| **SUF** | **Sumiainen** | **1.48** | **216** | PG | **Pb** | **11 30 53.6** | **0.0** |
| SUF | | | | MSG | | 11 31 11.9 | |
| **OUF** | **Merijarvi** | **1.51** | **288** | PG | **Pn** | **11 30 53.4** | **-0.1** |
| OUF | | | | MSG | | 11 31 11.9 | |
| OUF | | | | SG | **Sg** | **11 31 13.8** | **+0.1** |
| **OBF4** | **Vikkela, Lumij** | **1.55** | **306** | PG | **Pn** | **11 30 54.0** | **-0.1** |
| OBF4 | | | | MSG | | 11 31 12.5 | |
| OBF4 | | | | SN | **Sn** | **11 31 14.7** | **-0.2** |
| **OBF0** | **Syolatti, Pyha** | **1.75** | **291** | PG | **Pn** | **11 30 57.7** | **+0.8** |
| OBF0 | | | | MSG | | 11 31 18.7 | |
| OBF0 | | | | SG | **Sb** | **11 31 20.7** | **0.0** |
| **JOF** | **Joensuu** | **1.79** | **123** | PG | **Pn** | **11 30 57.7** | **+0.3** |
| JOF | | | | SN | **Sn** | **11 31 21.2** | **+0.4** |
| **KAF** | **Kangasniemi** | **1.98** | **204** | PG | **Pb** | **11 31 02.1** | **-0.1** |
| KAF | | | | MSG | | 11 31 26.4 | |
| KAF | | | | SG | **Sg** | **11 31 29.2** | **+0.3** |
| **MSF** | **Maaselka** | **2.04** | **12** | PG | **Pn** | **11 31 01.1** | **+0.3** |
| MSF | | | | SG | **Sn** | **11 31 27.4** | **+0.5** |
| **OBF8** | **Ulkokalla** | **2.05** | **283** | PG | **Pb** | **11 31 02.8** | **-0.5** |
| OBF8 | | | | MSG | | 11 31 27.5 | |
| OBF8 | | | | SG | **Sg** | **11 31 31.3** | **+0.3** |
| **RANF** | **Ranua** | **2.16** | **346** | PG | **Pn** | **11 31 04.0** | **+1.6** |
| RANF | | | | SG | **Sn** | **11 31 31.2** | **+1.3** |
| **KU6** | **Riekki** | **2.25** | **20** | PG | **Pn** | **11 31 04.8** | **+1.1** |
| KU6 | | | | MSG | | 11 31 30.9 | |
| KU6 | | | | SG | **Sn** | **11 31 32.8** | **+0.6** |
| **KEF** | **Keuruu** | **2.28** | **221** | PG | **Pb** | **11 31 07.1** | **-0.1** |
| KEF | | | | MSG | | 11 31 35.0 | |
| KEF | | | | SG | **Sg** | **11 31 37.8** | **-0.6** |
| **OLKF** | **Oulanka, Finla** | **2.47** | **13** | PG | **Pn** | **11 31 08.5** | **+1.7** |
| OLKF | | | | MSG | | 11 31 37.3 | |
| OLKF | | | | SG | **Sn** | **11 31 40.4** | **+2.7** |
| **RUF** | **Ruokolahti** | **2.55** | **170** | PG | **Pb** | **11 31 11.2** | **-0.6** |
| RUF | | | | MSG | | 11 31 42.0 | |
| RUF | | | | SG | **Sg** | **11 31 46.7** | **-0.3** |
| **VAF** | **Ylistaro** | **2.56** | **252** | PB | **Pb** | **11 31 11.2** | **-0.8** |
| VAF | | | | MSG | | 11 31 43.0 | |
| VAF | | | | SB | **Sb** | **11 31 44.9** | **+0.9** |
| **FIA0** | **FINESS Array S** | **2.65** | **201** | PB | **Pb** | **11 31 12.5** | **-1.1** |
| FIA0 | | | | MSG | | 11 31 45.6 | |
| FIA0 | | | | SB | **Sb** | **11 31 46.2** | **-0.4** |
| **FINES** | **FINESS Array B** | **2.65** | **201** | Pn | **Pb** | **11 31 12.8** | **-0.8** |
| FINES | | | | Sn | **Sb** | **11 31 47.9** | **+1.3** |
| FINES | | | | Rg | Rg | 11 32 02.7 | |
| **TOF** | **Tornio** | **2.67** | **326** | PN | **Pn** | **11 31 10.4** | **+0.9** |
| TOF | | | | SN | **Sn** | **11 31 42.4** | **-0.1** |
| TOF | | | | MSG | | 11 31 44.1 | |
| **KALU** | **Kalix** | **2.78** | **316** | P | **Pn** | **11 31 11.8** | **+0.9** |
| KALU | | | | S | **Sn** | **11 31 45.5** | **+0.3** |
| **KALU** | **Kalix** | **2.78** | **316** | PG | **Pb** | **11 31 14.9** | **-0.9** |
| KALU | | | | SB | **Sn** | **11 31 47.1** | **+1.9** |
| **RNF** | **Rovaniemi** | **2.82** | **343** | PB | **Pn** | **11 31 14.7** | **+3.1** |
| RNF | | | | SB | **Sb** | **11 31 50.1** | **-1.4** |
| **SJUU** | **Sjulsmark** | **3.18** | **303** | P | **Pn** | **11 31 16.6** | **+0.1** |
| SJUU | | | | S | **Sn** | **11 31 55.8** | **+0.8** |
| **ODEU** | **Stanfors** | **3.24** | **282** | P | **Pn** | **11 31 17.4** | **+0.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ODEU | | | | S | Sn | 11 31 55.1 | -1.3 | | |
| **UMAU** | **Umeaa** | **3.25** | **273** | P | Pn | **11 31 17.6** | **+0.3** | | |
| **UMAU** | **Umeaa** | **3.25** | **273** | PN | Pn | **11 31 17.7** | **+0.3** | | |
| | baz=90 | | | | | | | | |
| **KPF** | **Kankaanpaa** | **3.44** | **235** | PB | Pb | **11 31 24.8** | **-2.3** | | |
| **PAJU** | **Pajala** | **3.72** | **329** | PN | Pn | **11 31 25.3** | **+1.4** | | |
| PAJU | | | | SN | Sn | **11 32 08.3** | **-0.2** | | |
| **KLF** | **Kolari** | **3.72** | **335** | PN | Pn | **11 31 25.1** | **+1.2** | | |
| | baz=146 | | | | | | | | |
| KLF | | | | SN | Sn | **11 32 07.6** | **-0.9** | | |
| **LILU** | **Lilltraesk** | **3.78** | **295** | P | Pn | **11 31 24.9** | **+0.3** | | |
| LILU | | | | S | Sn | **11 32 09.5** | **-0.2** | | |
| **HEMU** | **Hemsoen** | **4.68** | **259** | PN | Pn | **11 31 38.1** | **+1.0** | | |
| **LANU** | **Lannavaara** | **4.81** | **332** | P | Pn | **11 31 40.6** | **+1.7** | | |
| LANU | | | | S | Sn | **11 32 35.0** | **-0.3** | | |
| **SALU** | **Saltoluokta** | **5.24** | **316** | P | Pn | **11 31 45.7** | **+0.9** | | |
| **KOVU** | **Salmi** | **5.37** | **327** | P | Pn | **11 31 47.9** | **+1.3** | | |
| KOVU | | | | S | Sn | **11 32 48.9** | **-0.1** | | |
| **ARCES** | **ARCESS Array B** | **5.72** | **351** | Pn | Pn | **11 31 53.2** | **+1.9** | | |
| | comp=Z,1.7nm,0.8s,baz=158,slow=13,SNR=1.4 | | | | | | | | |
| ARCES | | | | Sn | Sn | **11 32 54.6** | **-3.0** | | |
| | comp=Z,0.3nm,0.3s,baz=171,slow=24,SNR=2.3 | | | | | | | | |
| ARCES | | | | Lg | Lg | 11 33 22.9 | | | |
| | comp=Z,0.2nm,0.3s,baz=171,slow=34,SNR=5.7 | | | | | | | | |
| **I37NO** | **I37NO** | **6.39** | **328** | I | I | 12 07 10.0 | | | |
| | baz=140,slow=322,SNR=3.0 | | | | | | | | |

*MOS **08** 11:37:39.9±0.8,36°.59N×70°.97E,h209km,mb4.4/20,Error ellipse: s-maj=7.5km s-min=4.0km az=85.5*

*BJI **08** 11:37:40.4±0.0,36°.76N×70°.97E,h200km,mb4.6/21, mB4.9/5*

*NEIC **08** 11:37:41.1±1.6,36°.58N±0°.03×70°.87E±0°.08,h207km±5km, mb4.4/75,Error ellipse: s-maj=9.6km s-min=3.7km az=82.0*

*IDC **08** 11:37:41.2±0.8,36°.50N×70°.99E,h216km±7km,mb3.8/21, mbtmp4.4/27,Error ellipse: s-maj=11.2km s-min=9.2km az=35.0*

*NNC **08** 11:37:44.7±3.5,36°.98N×70°.88E,h206km±36km,mb3.6, mpv4.6,Error ellipse: s-maj=30.4km s-min=18.0km az=10.0*

**ISC 08 11:37:39.5±0.4,36°.51N±0°.03×70°.98E±0°.04,h195km±4km, h195km:pP-P,n453,σ1943/469,mb4.4/77,21C-7D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KBL** | **Kabul** | **2.52** | **219** | Pn | | **Pn** | **11 38 25.7** | **+2.1** |
| **KBL** | **Kabul** | **2.52** | **219** | PN | | **Pn** | **11 38 25.7** | **+2.1** |
| **GAR** | **Garm** | **2.54** | **348** | Pn | | **Pn** | **11 38 25.0** | **+1.3** |
| GAR | | | | Sn | | **Sn** | **11 38 56.8** | **-1.5** |
| **CHGR** | **Chuyangaron** | **2.59** | **327** | Pn | | **Pn** | **11 38 25.0** | **+0.9** |
| **CHGR** | **Chuyangaron** | **2.59** | **327** | PN | | **Pn** | **11 38 25.0** | **+0.9** |
| **SIMJ** | **Simiganj** | **2.66** | **324** | Pn | | **Pn** | **11 38 26.1** | **+1.1** |
| **DRK** | **Karamyk** | **3.04** | **12** | | | **Pn** | **11 38 31.3** | **+1.7** |
| **DRK** | **Karamyk** | **3.04** | **12** | PN | | **Pn** | **11 38 31.3** | **+1.7** |
| **NIL** | **Nilore** | **3.40** | **146** | | | **Pn** | **11 38 37.1** | **+3.3** |
| **NIL** | **Nilore** | **3.40** | **146** | PN | | **Pn** | **11 38 37.1** | **+3.3** |
| **BTK** | **Batken** | **3.55** | **358** | | | **Pn** | **11 38 37.3** | **+1.8** |
| **BTK** | **Batken** | **3.55** | **358** | PN | | **Pn** | **11 38 37.3** | **+1.8** |
| **KSH** | **Kashi** | **4.96** | **51** | P | | **Pn** | **11 38 49.9** | **-3.4** |
| KSH | | | | S | | Sn | 11 39 41.1 | -10 |
| KSH | | | | smax | | smax | | |
| | comp=N,2μm,0.4s | | | | | | | |
| KSH | | | | smax | | smax | | |
| | comp=E,1μm,0.4s | | | | | | | |
| **JMU** | **Jammu** | **4.97** | **138** | *e*P | | **Pn** | **11 38 51.2** | **-2.2** |
| JMU | | | | *e*S | | **Sn** | **11 39 45.4** | **-6.2** |
| **ARSB** | **Arslanbob** | **5.06** | **17** | | | **Pn** | **11 38 51.3** | **+0.7** |
| **ARSB** | **Arslanbob** | **5.06** | **17** | PN | | **Pn** | **11 38 55.3** | **+0.7** |
| **THN** | **Thein Dam** | **5.64** | **135** | *e*P | | **Pn** | **11 39 02.1** | **+0.1** |
| THN | | | | *e*S | | **Sn** | **11 40 03.4** | **-3.6** |
| **AML** | **Almayashu** | **6.00** | **20** | P | | **Pn** | **11 39 07.6** | **+0.6** |
| | SNR=223 | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.11** | **132** | *e*P | | **Pn** | **11 39 10.1** | **+1.8** |
| DHRM | | | | *e*S | | **Sn** | **11 40 16.1** | **-2.4** |
| **NRN** | **Naryn** | **6.28** | **37** | | | **Pn** | **11 39 09.8** | **-0.8** |
| **NRN** | **Naryn** | **6.28** | **37** | PN | | **Pn** | **11 39 09.8** | **-0.8** |
| **EKS2** | **Erkin-Say** | **6.51** | **18** | P | | **Pn** | **11 39 14.0** | **+0.7** |
| | SNR=29 | | | | | | | |
| **BRLS** | **Borolday** | **6.58** | **353** | *e*PN | | **Pn** | **11 39 10.7** | **-3.4** |
| **KK31** | **Karatay Array** | **6.60** | **357** | Pn | | **Pn** | **11 39 14.9** | **+0.5** |
| **KK31** | **Karatay Array** | **6.60** | **357** | ⇑P | | **Pn** | **11 39 14.6** | **+0.2** |
| | 9.5nm,0.3s,baz=184,slow=13,SNR=19 | | | | | | | |
| KK31 | | | | ⇓S | | **Sn** | **11 40 24.2** | **-5.4** |
| | 94nm,0.3s,baz=181,slow=21,SNR=4.8 | | | | | | | |
| **KK31** | **Karatay Array** | **6.60** | **357** | PN | | **Pn** | **11 39 14.9** | **+0.5** |
| **KKAR** | **Karatay Array** | **6.60** | **357** | | | **Pn** | **11 39 14.7** | **+0.4** |
| **KKAR** | **Karatay Array** | **6.60** | **357** | Pn | | **Pn** | **11 39 14.7** | **+0.4** |
| **KKAR** | **Karatay Array** | **6.60** | **357** | PN | | **Pn** | **11 39 14.7** | **+0.4** |
| **AAK** | **Ala-Archa** | **6.70** | **23** | P | | **Pn** | **11 39 18.0** | **+2.2** |
| | SNR=9.5 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.70** | **23** | | | **Pn** | **11 39 16.6** | **+0.8** |
| **AAK** | **Ala-Archa** | **6.70** | **23** | P | | **Pn** | **11 39 16.2** | **+0.4** |
| **AAK** | **Ala-Archa** | **6.70** | **23** | P | | **Pn** | **11 39 16.9** | **+1.1** |
| | 45nm,0.3s,baz=245,slow=11,SNR=41 | | | | | | | |
| AAK | | | | S | | **Sn** | **11 40 30.9** | **-1.2** |
| | 39nm,0.4s,baz=139,slow=21,SNR=3.1 | | | | | | | |
| **BHK** | **Bhakra** | **6.79** | **137** | *e*P | | **Pn** | **11 39 18.4** | **+1.4** |
| BHK | | | | *e*S | | **Sn** | **11 40 32.6** | **-1.7** |
| BHK | | | | IAML | | | 11 40 35.7 | |
| | comp=N,673nm,0.7s | | | | | | | |
| BHK | | | | IAML | | | 11 40 37.5 | |
| | comp=E,535nm,0.6s | | | | | | | |
| **KBK** | **Karagaybulak** | **6.86** | **25** | P | | **Pn** | **11 39 19.8** | **+1.8** |
| | SNR=6.7 | | | | | | | |
| **FRU1** | **Bishkek** | **6.89** | **23** | | | **Pn** | **11 39 18.8** | **+0.5** |
| **FRU1** | **Bishkek** | **6.89** | **23** | PN | | **Pn** | **11 39 18.8** | **+0.5** |
| **SRGN** | **SRI GANGA NAGA** | **7.00** | **159** | *ex* | | x | 11 40 37.6 | |
| **ULHL** | **Ulahol** | **7.03** | **34** | P | | **Pn** | **11 39 20.8** | **+0.6** |
| | SNR=8.7 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **7.10** | **31** | | | **Pn** | **11 39 21.8** | **+0.8** |
| **BOOM** | **Boomskoye usch** | **7.10** | **31** | PN | | **Pn** | **11 39 21.8** | **+0.8** |
| **CHMS** | **Chumysh** | **7.10** | **23** | P | | **Pn** | **11 39 22.1** | **+1.1** |
| | SNR=20 | | | | | | | |
| **CHMS** | **Chumysh** | **7.10** | **23** | ⇑P | | **Pn** | **11 39 21.9** | **+1.0** |
| | comp=E,16nm,0.4s | | | | | | | |
| CHMS | | | | ⇑S | | **Sn** | **11 40 38.8** | **-2.7** |
| | comp=E,49nm,0.7s | | | | | | | |
| **CHMS** | **Chumysh** | **7.10** | **23** | PN | | **Pn** | **11 39 21.9** | **+1.0** |
| CHMS | | | | S | | **Sn** | **11 40 38.8** | **-2.7** |
| **USP** | **Ospenovka** | **7.27** | **21** | P | | **Pn** | **11 39 23.5** | **+0.4** |
| | SNR=30 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.33** | **28** | P | | **Pn** | **11 39 24.8** | **+0.8** |
| | SNR=83 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.33** | **28** | ⇓P | | **Pn** | **11 39 24.3** | **+0.3** |
| | comp=E,20nm,0.4s | | | | | | | |
| TKM2 | | | | ⇑S | | **Sn** | **11 40 43.6** | **-3.4** |
| | comp=E,22nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.33** | **28** | *i* PN | | **Pn** | **11 39 24.3** | **+0.3** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,65nm,0.6s | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **7.44** | **43** | Pn | | **Pn** | **11 39 26.1** | **+0.4** |
| **TARG** | **Taragay, Kyrgy** | **7.44** | **43** | PN | | **Pn** | **11 39 26.1** | **+0.4** |
| **HRA** | **Herat** | **7.44** | **256** | Pn | | **Pn** | **11 39 26.2** | **+0.6** |
| **SGDS** | **Sogindy** | **7.48** | **21** | *e*PN | | **Pn** | **11 39 25.3** | **-0.6** |
| **HNLY** | **HANLEY** | **7.56** | **117** | *e*P | | **Pn** | **11 39 28.7** | **+1.1** |
| HNLY | | | | *e*S | | **Sn** | **11 40 47.8** | **-5.3** |
| **KLP** | **Kalpa** | **7.81** | **127** | *e*P | | **Pn** | **11 39 30.7** | **+0.2** |
| KLP | | | | *e*S | | **Sn** | **11 40 50.9** | **-7.8** |
| **MDOK** | **Medeo** | **8.12** | **33** | P | | **Pn** | **11 39 34.6** | **+0.3** |
| | comp=Z,32nm,0.6s | | | | | | | |
| MDOK | | | | S | | **Sn** | **11 41 02.1** | **-3.6** |
| | comp=Z,13nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **8.12** | **33** | PN | | **Pn** | **11 39 34.6** | **+0.3** |
| **KKR** | **Kurukshetra** | **8.15** | **142** | *e*S | | **Sn** | **11 41 03.1** | **-3.4** |
| **PRZ** | **Przheval'sk** | **8.27** | **42** | | | **Pn** | **11 39 37.5** | **+1.2** |
| **PRZ** | **Przheval'sk** | **8.27** | **42** | PN | | **Pn** | **11 39 37.6** | **+1.2** |
| **BKNR** | **BIKANER** | **8.68** | **166** | *e*S | | **Sn** | **11 41 13.7** | **-5.4** |
| **BTLS** | **Baital** | **8.84** | **14** | *e*PN | | **Pn** | **11 39 44.2** | **+0.7** |
| **KPKS** | **Kokpek** | **9.12** | **38** | *e*P | | **Pn** | **11 39 47.0** | **-0.3** |
| **BHGR** | **Bahadurgarh** | **9.27** | **146** | *e*S | | **Sn** | **11 41 26.2** | **-6.9** |
| **JOSI** | **Joshimath** | **9.29** | **127** | *e*P | | **Pn** | **11 39 51.1** | **+1.3** |
| JOSI | | | | *e*S | | **Sn** | **11 41 30.0** | **-4.0** |
| **NDI** | **New Delhi** | **9.40** | **144** | *e*P | | **Pn** | **11 39 51.3** | **+0.2** |
| NDI | | | | *e*S | | **Sn** | **11 41 28.2** | **-8.1** |
| NDI | | | | IAML | | | 11 41 30.8 | |
| | comp=E,101nm,0.7s | | | | | | | |
| NDI | | | | IAML | | | 11 41 36.2 | |
| | comp=N,97nm,0.5s | | | | | | | |
| **KUDL** | **Kundal** | **9.55** | **149** | *e*P | | **Pn** | **11 39 52.6** | **-0.3** |
| KUDL | | | | *e*S | | **Sn** | **11 41 32.6** | **-7.1** |
| KUDL | | | | IAML | | | 11 41 34.6 | |
| | comp=E,299nm,1.0s | | | | | | | |
| KUDL | | | | IAML | | | 11 41 38.7 | |
| | comp=N,119nm,0.6s | | | | | | | |
| **JASL** | **Jaisalmer** | **9.55** | **180** | *e*S | | **Sn** | **11 41 33.9** | **-6.0** |
| **ASOR** | **Ausora** | **9.61** | **142** | *e*S | | **Sn** | **11 41 36.5** | **-4.8** |
| **PTH** | **Pithoragarh** | **10.40** | **129** | *e*P | | **Pn** | **11 40 03.3** | **-0.8** |
| PTH | | | | *e*S | | Sn | 11 41 51.6 | -8.6 |
| PTH | | | | IAML | | | 11 41 55.0 | |
| | comp=N,80nm,0.7s | | | | | | | |
| PTH | | | | IAML | | | 11 41 59.8 | |
| | comp=E,109nm,0.3s | | | | | | | |
| **AJM** | **Ajmer** | **10.47** | **162** | *e*P | | **Pn** | **11 40 03.9** | **-1.0** |
| AJM | | | | *e*S | | **Sn** | **11 41 58.2** | **-3.6** |
| **LGTI** | **Lohaghat** | **10.48** | **130** | *e*P | | **Pn** | **11 40 03.0** | **-2.1** |
| LGTI | | | | *e*S | | Sn | 11 41 53.1 | -8.9 |
| LGTI | | | | IAML | | | 11 41 57.7 | |
| | comp=E,154nm,0.5s | | | | | | | |
| LGTI | | | | IAML | | | 11 42 00.9 | |
| | comp=N,128nm,0.5s | | | | | | | |
| **OTUK** | **Ortayu** | **11.77** | **4** | ⇑P | | **Pn** | **11 40 20.4** | **-1.1** |
| | comp=N,5.2nm,0.8s | | | | | | | |
| **OTUK** | **Ortayu** | **11.77** | **4** | P | | **Pn** | **11 40 20.4** | **-1.1** |
| **JHNI** | **Jhansi** | **12.77** | **147** | *e*P | | **Pn** | **11 40 35.2** | **+1.0** |
| JHNI | | | | IAML | | | 11 42 47.2 | |
| | comp=N,36nm,0.8s | | | | | | | |
| JHNI | | | | *e*S | | Sn | 11 42 47.4 | -9.2 |
| JHNI | | | | IAML | | | 11 42 48.9 | |
| | comp=E,58nm,0.8s | | | | | | | |
| **GUNA** | **GUNA** | **13.02** | **153** | *e*P | | **P** | **11 40 42.2** | **+1.5** |
| GUNA | | | | *e*S | | Sn | 11 42 53.4 | -9.2 |
| **MAKZ** | **Makanchi** | **13.16** | **35** | | | **Pn** | **11 40 38.5** | **-0.4** |
| **MAKZ** | **Makanchi** | **13.16** | **35** | ⇑P | | **Pn** | **11 40 38.1** | **-0.9** |
| | comp=E,7.7nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **13.16** | **35** | P | | **Pn** | **11 40 38.5** | **-0.4** |
| **MK31** | **Makanchi Array** | **13.29** | **36** | | | **Pn** | **11 40 39.8** | **-0.8** |
| **MK31** | **Makanchi Array** | **13.29** | **36** | ⇓P | | **Pn** | **11 40 39.9** | **-0.8** |
| | comp=E,12nm,0.8s,baz=220,slow=13,SNR=49 | | | | | | | |
| **MK31** | **Makanchi Array** | **13.29** | **36** | *ce*P | | **Pn** | **11 40 39.9** | **-0.8** |
| **MKAR** | **Makanchi Array** | **13.29** | **36** | | | **Pn** | **11 40 40.2** | **-0.5** |
| **MKAR** | **Makanchi Array** | **13.29** | **36** | P | | **Pn** | **11 40 40.4** | **-0.2** |
| | comp=E,3.5nm,0.6s,baz=221,slow=11,SNR=26 | | | | | | | |
| MKAR | | | | S | | **S** | **11 43 08.9** | **-0.6** |
| | comp=E,0.8nm,0.5s,baz=214,slow=20,SNR=1.1 | | | | | | | |
| **BHPL** | **Bhopal** | **14.35** | **155** | *e*P | | **P** | **11 40 58.1** | **+2.6** |
| BHPL | | | | *ex* | | x | 11 43 21.9 | |
| BHPL | | | | IAML | | | 11 43 30.6 | |
| | comp=N,26nm,0.7s | | | | | | | |
| BHPL | | | | IAML | | | 11 43 32.8 | |
| | comp=E,104nm,0.8s | | | | | | | |
| **ALBI** | **Allahabad** | **14.51** | **137** | *ex* | | **Pn** | **11 40 56.1** | **+0.2** |
| ALBI | | | | *ex* | | Sn | 11 43 26.1 | -12 |
| **WMQ** | **Urumqi** | **14.70** | **55** | *e*P | | **Pn** | **11 40 57.5** | **-0.7** |
| WMQ | | | | pmax | | pmax | | |
| | comp=E,27nm,1.1s | | | | | | | |
| WMQ | | | | pmax | | pmax | | |
| | comp=E,91nm,3.7s | | | | | | | |
| WMQ | | | | LR | | LR | | |
| | comp=E,2μm,11.3s | | | | | | | |
| WMQ | | | | LR | | LR | | |
| | comp=E,2μm,13.9s | | | | | | | |
| WMQ | | | | LR | | LR | | |
| | comp=E,2μm,17.9s | | | | | | | |
| **AB31** | **Akbulak array** | **15.07** | **331** | ⇑P | | **Pn** | **11 41 01.1** | **-1.5** |
| | comp=E,7.4nm,0.5s,baz=146,slow=12,SNR=155 | | | | | | | |
| AB31 | | | | ⇓S | | **S** | **11 43 45.7** | **-4.4** |
| | comp=E,8.7nm,0.6s,baz=151,slow=23,SNR=5.9 | | | | | | | |
| **AB31** | **Akbulak array** | **15.07** | **331** | *i* P | | **Pn** | **11 41 01.0** | **-1.5** |
| **ABKAR** | **Akbulak array** | **15.07** | **331** | P | | **Pn** | **11 41 01.2** | **-1.3** |
| **KURBB** | **Kurchatov Arra** | **15.12** | **19** | P | | **Pn** | **11 41 02.0** | **-1.2** |
| | comp=E,4.2nm,0.5s,baz=208,slow=10,SNR=30 | | | | | | | |
| KURBB | | | | S | | **S** | **11 43 50.6** | **-0.6** |
| | comp=E,2.3nm,1.0s,baz=199,slow=22,SNR=3.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.12** | **19** | ⇑P | | **Pn** | **11 41 01.9** | **-1.2** |
| | comp=E,11nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.12** | **19** | P | | **Pn** | **11 41 01.9** | **-1.2** |
| **KURK** | **Kurchatov** | **15.23** | **19** | P | | **Pn** | **11 41 04.1** | **-0.3** |
| **KURK** | **Kurchatov** | **15.23** | **19** | ⇑P | | **Pn** | **11 41 04.5** | **+0.1** |
| | comp=E,5.7nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **15.23** | **19** | *de*P | | **P** | **11 41 05.3** | **+0.4** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.7s | | | | | | | |
| **SHME** | **Shamm** | **16.40** | **235** | P | | **Pn** | **11 41 18.8** | **-0.1** |
| **BVA0** | **Borovoye Array** | **16.52** | **359** | ⇓P | | **Pn** | **11 41 19.8** | **-0.2** |
| | comp=Z,10.0nm,0.5s,baz=157,slow=10,SNR=33 | | | | | | | |
| **BVA0** | **Borovoye Array** | **16.52** | **359** | *i* P | | **Pn** | **11 41 19.8** | **-0.2** |
| **BRVK** | **Borovoye** | **16.56** | **359** | P | | **Pn** | **11 41 20.4** | **0.0** |
| **BRVK** | **Borovoye** | **16.56** | **359** | ⇑P | | **Pn** | **11 41 20.1** | **-0.4** |
| | comp=Z,13nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **16.56** | **359** | *ce*P | | **Pn** | **11 41 20.4** | **0.0** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,43nm,1.7s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.77** | **330** | P | | **Pn** | **11 41 22.8** | **-0.2** |
| | comp=Z,44nm,0.7s,baz=140,slow=8.6,SNR=104 | | | | | | | |
| AKTO | | | | S | | **S** | **11 44 23.7** | **-3.1** |
| | comp=Z,7.5nm,0.8s,baz=156,slow=20,SNR=3.0 | | | | | | | |
| **MDH** | **Madha** | **16.82** | **232** | P | | **P** | **11 41 23.4** | **+0.7** |
| **MSFE** | **Esma-Masafi** | **16.86** | **233** | P | | **Pn** | **11 41 25.4** | **+0.9** |
| **WSAR** | **Wadi Sarin** | **17.00** | **222** | P | | **P** | **11 41 25.6** | **+0.9** |
| | comp=Z,10nm,1.0s,baz=64,slow=6.5,SNR=5.7 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **17.07** | **234** | P | | **Pn** | **11 41 27.9** | **+1.1** |
| **UOSS** | **Minazif** | **17.13** | **232** | P | | **Pn** | **11 41 27.8** | **+0.3** |
| **HATD** | **Hatta, Dubai** | **17.26** | **232** | P | | **Pn** | **11 41 29.0** | **-0.1** |
| **ASHO** | **Ashiyiah** | **17.41** | **232** | P | | **Pn** | **11 41 30.7** | **-0.1** |
| **GTK** | **Tadong** | **17.52** | **117** | *ex* | | x | 11 41 33.0 | |
| **FAQ** | **Al Faqa, Dubai** | **17.66** | **233** | P | | **Pn** | **11 41 33.1** | **-0.7** |
| **DGZ** | **Jazzator, Alta** | **17.78** | **37** | *i* P | | **Pn** | **11 41 34.9** | **-0.3** |
| DGZ | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **17.91** | **233** | P | | **Pn** | **11 41 36.4** | **-0.4** |
| **BOK** | **Bokaro** | **18.04** | **130** | *e*S | | **S** | **11 44 52.4** | **-0.4** |
| **LSA** | **Lhasa** | **18.19** | **106** | P | | **Pn** | **11 41 42.4** | **+1.9** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,41nm,0.8s | | | | | | | |
| LSA | | | | LR | | LR | | |
| | comp=Z,340nm,15.5s | | | | | | | |
| LSA | | | | LR | | LR | | |
| | comp=Z,520nm,18.3s | | | | | | | |
| LSA | | | | LR | | LR | | |
| | comp=Z,750nm,16.5s | | | | | | | |
| **LSA** | **Lhasa** | **18.19** | **106** | P | | **Pn** | **11 41 41.6** | **+1.1** |
| **LSA** | **Lhasa** | **18.19** | **106** | P | | **Pn** | **11 41 41.6** | **+1.1** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,31nm,0.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.91** | **25** | P | | **P** | **11 41 56.0** | **0.0** |
| ZAA0 | | | | IAmb | | IAmb | 11 41 56.9 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.91** | **25** | P | | **P** | **11 41 56.0** | **+0.1** |
| | comp=Z,12nm,0.4s,baz=221,slow=11,SNR=53 | | | | | | | |
| ZALV | | | | S | | **S** | **11 45 25.2** | **-3.8** |
| | comp=Z,5.6nm,0.7s,baz=216,slow=20,SNR=6.6 | | | | | | | |
| **GNI** | **Garni** | **20.88** | **288** | P | | **P** | **11 42 07.0** | **+0.4** |
| | comp=Z,9.6nm,0.9s,baz=288,slow=3.9,SNR=3.5 | | | | | | | |
| | comp=Z,9.6nm,0.9s | | | | | | | |
| **GNI** | **Garni** | **20.88** | **288** | *ce*P | | **P** | **11 42 06.1** | **-0.5** |
| GNI | | | | pmax | | pmax | | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **SHL** | **Shillong** | **20.92** | **116** | P | | **P** | **11 42 08.1** | **+0.9** |
| **SHL** | **Shillong** | **20.92** | **116** | P | | **P** | **11 42 08.1** | **+0.9** |
| SHL | | | | pmax | | pmax | | |
| | comp=Z,45nm,0.9s | | | | | | | |
| **SVE** | **Sverdlovsk** | **21.48** | **344** | *e*P | | **P** | **11 42 12.8** | **+0.2** |
| SVE | | | | pmax | | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **ARU** | **Arti** | **21.62** | **341** | P | | **P** | **11 42 13.7** | **-0.3** |
| **ARU** | **Arti** | **21.62** | **341** | P | | **P** | **11 42 14.4** | **+0.5** |
| | comp=Z,11nm,0.6s,baz=152,slow=7.5,SNR=16 | | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **21.62** | **341** | *c i* P | | **P** | **11 42 14.2** | **+0.2** |
| ARU | | | | *PP | | **pP** | **11 42 48.7** | **+0.7** |
| ARU | | | | S | | **S** | **11 46 00.2** | **+0.2** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **21.62** | **341** | P | | **P** | **11 42 13.5** | **-0.5** |
| | comp=Z,29nm,1.3s,comp=Z,444nm | | | | | | | |
| **KBZ** | **Khabaz** | **22.59** | **297** | P | | **P** | **11 42 23.8** | **+0.5** |
| | comp=Z,2.1nm,0.7s,baz=130,slow=9.5,SNR=5.2 | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **22.59** | **297** | *i* P | | **P** | **11 42 23.5** | **+0.2** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,12nm,2.4s | | | | | | | |
| **GOF** | **Gofitskoye** | **22.73** | **301** | *ce*P | | **P** | **11 42 26.8** | **+2.2** |
| **SHA1** | **Shidzhatmaz** | **22.76** | **297** | *i* P | | **P** | **11 42 25.1** | **-0.1** |
| **KIV** | **Kislovodsk** | **22.77** | **298** | *e*P | | **P** | **11 42 25.6** | **+0.5** |
| KIV | | | | *e*S | | **S** | **11 46 19.4** | **+0.4** |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **22.77** | **298** | P | | **P** | **11 42 24.5** | **-0.6** |
| | comp=Z,10nm,0.8s | | | | | | | |
| KIV | | | | pP | | **pP** | **11 43 00.8** | **+0.6** |
| | comp=Z,10nm,0.8s | | | | | | | |
| **BELG** | **Belogornoye** | **22.88** | **321** | *i* P | | **P** | **11 42 25.8** | **0.0** |
| BELG | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **GTA** | **Gaotai** | **22.88** | **74** | P | | **P** | **11 42 29.0** | **+2.9** |
| **RAYN** | **Ar Rayn** | **25.49** | **247** | P | | **P** | **11 42 48.9** | **-1.0** |
| RAYN | | | | IAmb | | IAmb | 11 42 51.6 | |
| | comp=Z,9.2nm,1.1s | | | | | | | |
| **RAYN** | **Ar Rayn** | **25.49** | **247** | P | | **P** | **11 42 50.5** | **+0.6** |
| **RAYN** | **Ar Rayn** | **25.49** | **247** | P | | **P** | **11 42 48.9** | **-1.0** |
| RAYN | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **KIRV** | **Kirov** | **26.23** | **334** | *ce*P | | **P** | **11 42 56.9** | **+0.9** |
| **PZH** | **PanZhiHua** | **27.95** | **102** | P | | **P** | **11 43 15.5** | **+3.6** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,170nm,6.8s | | | | | | | |
| **SONM** | **Songino Array** | **28.34** | **55** | P | | **P** | **11 43 15.7** | **+0.5** |
| | comp=Z,0.5nm,0.4s,baz=323,slow=25,SNR=2.6 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **BRTR** | **Keskin Array B** | **29.42** | **288** | P | | **P** | **11 43 25.7** | **+0.9** |
| | comp=Z,1.5nm,0.7s,baz=93,slow=8.8,SNR=4.7 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **OBN** | **Obninsk** | **29.92** | **319** | ⇑*e*P | | **P** | **11 43 29.2** | **+0.4** |
| OBN | | | | *e*PP | | **pP** | **11 44 07.8** | **-1.2** |
| OBN | | | | *e* | | | 11 44 33.7 | |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.47** | **119** | P | | **P** | **11 43 35.8** | **+1.7** |
| **CMAR** | **Chiang Mai Arr** | **30.47** | **119** | P | | **P** | **11 43 35.5** | **+1.4** |
| | comp=Z,3.4nm,0.9s,baz=302,slow=8.1,SNR=15 | | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.47** | **119** | P | | **P** | **11 43 35.8** | **+1.7** |
| **PHRA** | **Phrae** | **31.36** | **117** | P | | **P** | **11 43 43.0** | **+1.1** |
| **HHC** | **Hu-ho-hao-te** | **31.77** | **70** | *e*P | | **P** | **11 43 47.6** | **+2.2** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,250nm,6.6s | | | | | | | |
| **AK09** | **Malin Array Si** | **32.88** | **309** | P | | **P** | **11 43 54.2** | **-0.6** |
| **AK10** | **Malin Array Si** | **32.90** | **309** | P | | **P** | **11 43 54.5** | **-0.4** |
| **AK08** | **Malin Array Si** | **32.90** | **309** | P | | **P** | **11 43 54.6** | **-0.3** |
| **AK07** | **Malin Array Si** | **32.92** | **309** | P | | **P** | **11 43 54.7** | **-0.4** |
| **AK05** | **Malin Array Si** | **32.93** | **309** | P | | **P** | **11 43 54.8** | **-0.4** |
| **AKASG** | **Malin Array Be** | **32.93** | **309** | P | | **P** | **11 43 55.5** | **+0.3** |
| | comp=Z,2.1nm,0.6s,baz=85,slow=6.8,SNR=9.3 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **AKBB** | **Malin Array Si** | **32.93** | **309** | P | | **P** | **11 43 54.8** | **-0.4** |
| AKBB | | | | IAmb | | IAmb | 11 43 56.2 | |
| | comp=Z,8.2nm,1.0s | | | | | | | |
| **AKBB** | **Malin Array Si** | **32.93** | **309** | *ce*P | | **P** | **11 43 55.3** | **+0.1** |
| AKBB | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **AKBB** | **Malin Array Si** | **32.93** | **309** | P | | **P** | **11 43 54.8** | **-0.4** |
| **AK01** | **Malin Array Si** | **32.94** | **309** | P | | **P** | **11 43 54.8** | **-0.5** |
| **AK02** | **Malin Array Si** | **32.94** | **309** | P | | **P** | **11 43 54.8** | **-0.5** |
| **KIEV** | **Kiev** | **32.94** | **309** | P | | **P** | **11 43 54.8** | **-0.5** |
| **LUBAR** | **Lubar, Ukraine** | **33.75** | **307** | P | | **P** | **11 44 01.7** | **-0.6** |
| **NDNU** | **Novodnistrovsk** | **33.88** | **305** | P | | **P** | **11 44 03.0** | **-0.5** |
| **MNK** | **Minsk** | **34.49** | **315** | *i* P | | **P** | **11 44 07.9** | **-0.6** |
| | comp=E,9.0nm,0.8s,baz=103 | | | | | | | |
| MNK | | | | *i* P | | **P** | **11 44 07.9** | **-0.6** |
| | comp=N,22nm,0.8s,baz=103 | | | | | | | |
| MNK | | | | *i* P | | **P** | **11 44 07.9** | **-0.6** |
| | com

**NOA NORSAR Array B** 44.37 323 P **P** 11 45 29.6 -0.5
comp=Z,7.9nm,0.8s,baz=96,slow=7.8,SNR=33
comp=Z,7.9nm,0.8s
**KONS Konsvik** 44.40 331 *e*P **P** 11 45 30.4 +0.2
KONS IAmb IAmb 11 45 30.8
comp=Z,5.0nm,0.6s
**STOK Stokkvaagen** 44.40 331 *e*P **P** 11 45 30.3 +0.1
**NB00 NORSAR Array S** 44.58 323 IAmb IAmb 11 45 32.3
comp=Z,9.4nm,0.8s
**NC204 NORSAR Array S** 44.61 323 P **P** 11 45 31.7 -0.3
NC204 IAmb IAmb 11 45 32.7
comp=Z,11nm,0.9s
**TIXI Tiksi** 45.77 22 *i* P **P** 11 45 41.0 +0.1
TIXI pmax pmax
comp=Z,7.0nm,0.6s
**KBS Kingsbay** 48.60 347 *ce*P **P** 11 46 04.1 +1.4
KBS pmax pmax
comp=Z,24nm,1.7s
**KEST Kesra** 49.02 288 P **P** 11 46 07.2 +0.5
comp=Z,2.3nm,0.6s,baz=45,slow=4.3,SNR=2.6
comp=Z,2.3nm,0.6s
**EKA Eskdalemuir Ar** 52.27 316 P **P** 11 46 30.2 -0.3
comp=Z,4.3nm,1.1s,baz=78,slow=7.8,SNR=5.5
comp=Z,4.3nm,1.1s
**MBAR Mbarara** 52.50 235 *ce*P **P** 11 46 34.6 +1.7
MBAR pmax pmax
comp=Z,4.0nm,0.6s
**ESDC Sonseca Array** 57.44 298 P **P** 11 47 07.0 -0.8
comp=Z,1.3nm,0.8s,baz=62,slow=6.8,SNR=11
comp=Z,1.3nm,0.8s
**BILL Bilibino** 58.61 26 *de*P **P** 11 47 16.4 +1.0
BILL *e**PP **pP** 11 48 01.6 +0.8
BILL *e* 11 49 31.8
BILL *i* S **S** 11 55 09.4 +5.8
BILL pmax pmax
comp=Z,9.0nm,1.7s
**SUMG Summit** 61.05 341 P **P** 11 47 33.0 +0.6
SUMG IAmb IAmb 11 47 34.3
comp=Z,13nm,1.1s
**SUMG Summit** 61.05 341 P **P** 11 47 33.1 +0.6
SUMG pmax pmax
comp=Z,13nm,1.1s
**TOA0 Torodi Ar. Sit** 65.70 269 P **P** 11 48 01.6 -1.8
TOA0 IAmb IAmb 11 48 03.0
comp=Z,5.0nm,0.8s
**TORD Torodi Ar. Bea** 65.70 269 P **P** 11 48 01.8 -1.6
**TORD Torodi Ar. Bea** 65.70 269 P **P** 11 48 01.4 -2.0
comp=Z,5.2nm,0.7s,baz=48,slow=6.3,SNR=37
comp=Z,5.2nm,0.7s
**C16K Lisburne Hills** 67.45 20 P **P** 11 48 13.6 0.0
C16K IAmb IAmb 11 48 14.7
comp=Z,9.5nm,0.8s
**C16K Lisburne Hills** 67.45 20 P **P** 11 48 13.6 0.0
baz=314
**B18K Kokolik River** 67.60 18 P **P** 11 48 15.0 +0.5
baz=316
**C17K DeLong Mountai** 67.89 19 P **P** 11 48 16.4 0.0
baz=315
**B20K Meade River** 68.20 16 IAmb IAmb 11 48 19.8
comp=Z,11nm,0.8s
**B20K Meade River** 68.20 16 P **P** 11 48 18.3 0.0
baz=320
**C18K Utukok River** 68.27 18 P **P** 11 48 18.6 -0.2
baz=317
**C19K Lookout Ridge** 68.33 17 P **P** 11 48 20.0 +0.9
**C19K Lookout Ridge** 68.33 17 P **P** 11 48 19.3 +0.2
baz=318,SNR=8.6
**D17K Noatak River** 68.47 19 P **P** 11 48 19.9 0.0
baz=316,SNR=5.9
**GAMB Gambell** 68.51 25 P **P** 11 48 20.0 -0.2
baz=310
**B22K Teshekpuk Lake** 68.74 15 P **P** 11 48 21.4 -0.2
baz=323
**B21K Ikpikpuk River** 69.06 16 P **P** 11 48 24.2 +0.7
baz=322
**D19K Kuna River** 69.14 17 P **P** 11 48 24.1 0.0
baz=320
**E18K Tukpahlearik C** 69.33 19 P **P** 11 48 25.2 0.0
baz=318
**D20K Etivluk River** 69.33 17 P **P** 11 48 25.0 -0.3
baz=321
**F15K North Star Dit** 69.44 21 P **P** 11 48 26.4 +0.5
baz=315
**C23K Itkillik River** 69.72 14 P **P** 11 48 28.2 +0.7
baz=325,SNR=11
**E20K Nigu River** 69.78 17 P **P** 11 48 28.1 0.0
baz=321
**F17K Baldwin Pennin** 69.88 20 P **P** 11 48 29.0 +0.4
baz=317
**ANM Nome** 70.03 22 P **P** 11 48 30.9 +1.4
baz=315
**D22K Ayikyak River** 70.07 15 P **P** 11 48 30.2 +0.4
baz=324
**G15K Niukluk** 70.13 22 P **P** 11 48 30.2 +0.1
baz=316
**E21K Killik River** 70.14 16 P **P** 11 48 30.1 -0.2
baz=323
**E19K Redstone River** 70.15 18 P **P** 11 48 30.3 0.0
baz=320
**C24K Franklin Bluff** 70.19 14 P **P** 11 48 31.2 +0.8
baz=327
**F18K Selawik** 70.19 19 P **P** 11 48 31.2 +0.8
baz=319
**D23K Nanushuk River** 70.42 15 P **P** 11 48 32.6 +0.7
baz=326,SNR=5.4
**F19K Shaleruckik Mo** 70.50 18 P **P** 11 48 31.8 -0.5
baz=320
**D24K Happy Valley** 70.64 14 P **P** 11 48 33.9 +0.8
baz=327
**C26K Camden Bay** 70.70 12 P **P** 11 48 34.4 +0.8
baz=330
**G17K Kiwalik Mounta** 70.74 20 P **P** 11 48 34.2 +0.4
baz=318
**F20K Avaraart Lake** 70.84 18 P **P** 11 48 34.2 -0.2
baz=322
**TOLK Toolik Lake Re** 70.92 15 P **P** 11 48 35.6 +0.7
baz=326,SNR=14
**D25K Kavik River** 70.96 13 IAmb IAmb 11 48 37.0
comp=Z,6.6nm,0.8s
**D25K Kavik River** 70.96 13 P **P** 11 48 35.5 +0.3
baz=329,SNR=20
**G18K Tagagawik** 70.99 19 P **P** 11 48 35.3 0.0
baz=320
**C27K Jago River** 71.17 12 P **P** 11 48 36.7 +0.4
baz=331,SNR=8.7
**A36M Sachs Harbour** 71.20 5 P **P** 11 48 37.1 +0.6
baz=346
**G19K Purcell Mounta** 71.21 19 IAmb IAmb 11 48 37.6
comp=Z,8.4nm,0.7s
**G19K Purcell Mounta** 71.21 19 P **P** 11 48 36.9 +0.2
baz=321,SNR=7.8
**F21K Alatna River** 71.23 17 IAmb IAmb 11 48 39.0
comp=Z,6.1nm,0.8s
**F21K Alatna River** 71.23 17 P **P** 11 48 37.2 +0.4
baz=324,SNR=7.4
**F22K John River** 71.30 16 P **P** 11 48 38.0 +0.8
baz=325,SNR=11
**H17K Granite Mounta** 71.37 20 P **P** 11 48 37.4 -0.2
baz=319
**E23K Chandalar** 71.40 15 P **P** 11 48 38.6 +0.7
baz=327,SNR=6.8
**E24K Your Creek** 71.62 15 IAmb IAmb 11 48 40.1
comp=Z,4.6nm,0.7s
**E24K Your Creek** 71.62 15 P **P** 11 48 39.8 +0.7
baz=328,SNR=7.9
**H18K Honhosa River** 71.64 20 P **P** 11 48 39.2 0.0
baz=320
**G21K Allakaket** 71.80 17 P **P** 11 48 40.0 -0.2
baz=324
**H19K Roundabout Mou** 71.85 19 P **P** 11 48 41.2 +0.7
baz=322
**J14K Nanvaranak Lak** 71.90 23 P **P** 11 48 40.4 -0.4
baz=316
**G22K Bettles** 71.93 16 P **P** 11 48 40.9 0.0
baz=325
**D27M Malcolm River** 71.96 11 P **P** 11 48 40.8 -0.4
baz=334
**COLD Coldfoot** 71.97 16 P **P** 11 48 41.1 -0.1
baz=326,SNR=7.3
**IMAR Indian Mountai** 72.17 18 P **P** 11 48 42.2 -0.2
**F24K Squaw Lake** 72.21 15 P **P** 11 48 42.2 -0.5
baz=326
**D28M Stokes Point** 72.23 11 P **P** 11 48 42.0 -0.6
baz=335
**H20K Anotleneega Mo** 72.28 18 P **P** 11 48 43.2 +0.2
baz=323,SNR=9.2
**J16K Anvik River** 72.42 22 P **P** 11 48 44.7 +0.8
baz=319
**G23K Bananza Creek** 72.44 16 P **P** 11 48 44.8 +0.8
baz=326,SNR=7.2
**F25K Christian Rive** 72.59 14 P **P** 11 48 46.0 +1.1
baz=330,SNR=9.3
**H21K Melozitna Rive** 72.67 17 P **P** 11 48 45.9 +0.6
baz=324,SNR=6.1
**M11K Mekoryuk** 72.71 26 P **P** 11 48 46.3 +0.7
baz=315
**E28M Babbage River** 72.76 11 P **P** 11 48 46.7 +0.8
baz=335
**J17K VABM Dome** 72.78 21 P **P** 11 48 46.1 +0.1
baz=320
**F26K Sheenjek River** 72.79 13 P **P** 11 48 46.6 +0.6
baz=331,SNR=5.2
**E27K Coleen River** 72.80 12 P **P** 11 48 46.6 +0.4
baz=333
**H22K Ishtalitna Cre** 72.81 17 P **P** 11 48 46.9 +0.7
baz=326
**K15K Wolf Creek Mou** 72.87 23 P **P** 11 48 47.5 +0.9
baz=318
**BMAR Burnt Mountain** 72.94 14 P **P** 11 48 48.1 +1.2
**I20K Naaghedeneel** 72.94 19 P **P** 11 48 47.3 +0.4
baz=323
**G24K Hadweenzic Riv** 72.99 15 P **P** 11 48 47.8 +0.5
G24K IAmb IAmb 11 48 48.9
comp=Z,5.1nm,0.8s
**G24K Hadweenzic Riv** 72.99 15 P **P** 11 48 48.2 +0.9
baz=328,SNR=6.9
**E29M Blow River** 73.21 11 P **P** 11 48 49.3 +0.8
E29M IAmb IAmb 11 48 50.3
comp=Z,7.6nm,1.1s
**E29M Blow River** 73.21 11 P **P** 11 48 49.3 +0.8
baz=336
**L14K Kuka Creek** 73.21 24 P **P** 11 48 49.4 +0.9
baz=318
**G25K Bearman Lake** 73.22 14 P **P** 11 48 49.4 +0.9
baz=330
**J19K Poorman** 73.28 20 IAmb IAmb 11 48 50.5
comp=Z,8.4nm,0.9s
**J19K Poorman** 73.28 20 P **P** 11 48 49.8 +0.8
baz=322,SNR=7.3
**H23K Yukon River** 73.29 16 IAmb IAmb 11 48 50.4
comp=Z,5.0nm,0.8s
**H23K Yukon River** 73.29 16 P **P** 11 48 50.0 +1.0
baz=327,SNR=7.7
**J18K Innoko River** 73.40 20 IAmb IAmb 11 48 51.0
comp=Z,6.3nm,0.7s
**J18K Innoko River** 73.40 20 P **P** 11 48 49.9 +0.2
baz=322,SNR=6.0
**G26K Porcupine Rive** 73.51 14 P **P** 11 48 51.0 +0.7
baz=332
**J20K Nowinta River** 73.53 19 IAmb IAmb 11 48 51.8
comp=Z,6.9nm,0.7s
**J20K Nowinta River** 73.53 19 P **P** 11 48 51.2 +0.8
baz=324,SNR=6.5
**K17K Iditarod** 73.53 21 IAmb IAmb 11 48 52.0
comp=Z,9.0nm,0.8s
**K17K Iditarod** 73.53 21 P **P** 11 48 51.0 +0.6
baz=321
**F28M Old Crow** 73.61 12 P **P** 11 48 51.4 +0.5
baz=335
**H24K Noodor Dome** 73.65 16 P **P** 11 48 51.9 +0.8
baz=328,SNR=8.0
**M13K Dall Lake** 73.67 25 P **P** 11 48 51.9 +0.6
baz=317
**MLY Manley** 73.68 17 P **P** 11 48 51.9 +0.5
baz=326
**H25L Birch Creek** 73.71 15 P **P** 11 48 52.4 +1.0
baz=330
**C36M Paulatuk** 73.87 6 P **P** 11 48 52.3 +0.1
baz=348,SNR=6.3
**M14K Bethel** 73.89 24 P **P** 11 48 53.7 +1.3
baz=318
**I23K Minto, Yukon-K** 73.90 17 P **P** 11 48 53.5 +1.0
baz=327,SNR=5.4
**INK Inuvik** 73.90 9 P **P** 11 48 52.9 +0.4
INK IAmb IAmb 11 48 53.9
comp=Z,7.9nm,0.8s
**INK Inuvik** 73.90 9 P **P** 11 48 53.1 +0.7
baz=340,SNR=7.0
**INK Inuvik** 73.90 9 P **P** 11 48 52.9 +0.4
INK pmax pmax
comp=Z,8.0nm,0.8s
**L16K Owhat River** 73.95 22 IAmb IAmb 11 48 54.9
comp=Z,7.5nm,0.8s
**L16K Owhat River** 73.95 22 P **P** 11 48 53.5 +0.6
baz=320
**L17K Donlin** 73.98 22 P **P** 11 48 54.0 +0.9
baz=321
**G27K Doyon Strip** 74.03 13 IAmb IAmb 11 48 55.1
comp=Z,6.1nm,0.7s
**G27K Doyon Strip** 74.03 13 P **P** 11 48 54.2 +0.9
baz=333,SNR=12
**K20K Telida** 74.21 19 IAmb IAmb 11 48 55.8
comp=Z,7.7nm,0.8s
**K20K Telida** 74.21 19 P **P** 11 48 55.1 +0.7
baz=324,SNR=10
**CHUM Lake Minchumin** 74.24 18 P **P** 11 48 55.5 +1.0
baz=325
**F30M Barrier River** 74.24 10 P **P** 11 48 54.8 +0.3
baz=338
**MDM Murphy Dome** 74.32 16 IAmb IAmb 11 48 56.2
comp=Z,6.0nm,0.8s
**M15K Kasigluk River** 74.34 24 P **P** 11 48 55.6 +0.5
baz=319
**POKR Poker Plat Res** 74.36 16 P **P** 11 48 55.7 +0.5
baz=329
**L18K Granite Mounta** 74.39 21 P **P** 11 48 56.0 +0.5
baz=322
**BPAW Bear Paw Mtn.** 74.39 18 P **P** 11 48 55.4 0.0
baz=326,SNR=5.6
**PRP Porcupine Dome** 74.42 15 P **P** 11 48 56.4 +0.6
baz=330
**NEA2 Nenana** 74.44 17 P **P** 11 48 55.4 -0.2
NEA2 IAmb IAmb 11 48 56.5
comp=Z,8.9nm,0.8s
**NEA2 Nenana** 74.44 17 P **P** 11 48 55.5 -0.2
baz=328,SNR=7.8
**COLA College** 74.47 16 P **P** 11 48 56.0 +0.2
COLA IAmb IAmb 11 48 56.9
comp=Z,10nm,0.8s
**COLA College** 74.47 16 P **P** 11 48 55.9 +0.1
baz=328
**COLA College** 74.47 16 P **P** 11 48 56.0 +0.2
COLA pmax pmax
comp=Z,10.0nm,0.8s
**G29M Pine Creek** 74.55 11 P **P** 11 48 56.5 +0.2
baz=336
**H27K Steamboat Moun** 74.57 13 P **P** 11 48 57.2 +0.7
baz=333,SNR=8.0
**M16K Timber Creek** 74.64 23 P **P** 11 48 57.6 +0.7
baz=320
**F31M Tsiigehtchic** 74.69 10 P **P** 11 48 57.0 0.0
baz=340
**G30M tAoh Zraii Nji** 74.76 11 P **P** 11 48 58.2 +0.7
baz=338,SNR=6.0
**ILAR Eielson Array** 74.78 16 P **P** 11 48 56.8 -0.9
**ILAR Eielson Array** 74.78 16 P **P** 11 48 56.9 -0.7
comp=Z,2.5nm,0.9s,baz=318,slow=4.7,SNR=32
comp=Z,2.5nm,0.9s
**M17K Holitna River** 74.81 22 P **P** 11 48 58.7 +0.8
baz=322
**KTH Kantishna Hill** 74.86 18 IAmb IAmb 11 48 59.5
comp=Z,9.0nm,1.0s
**N15K Kwethluk River** 74.94 24 P **P** 11 48 58.9 +0.3
baz=320
**L19K White Mountain** 74.94 20 P **P** 11 48 59.6 +0.9
baz=323
**L20K Farewell, AK** 74.97 20 P **P** 11 48 59.3 +0.5
baz=324
**HDA Harding Lake** 75.08 16 P **P** 11 48 58.9 -0.4
baz=329
**PPLA Purkeypile** 75.08 19 P **P** 11 48 59.6 0.0
baz=325
**I26K Coal Creek Min** 75.08 14 P **P** 11 48 59.8 +0.5
baz=332
**G31M Satah River** 75.10 10 IAmb IAmb 11 49 00.0
comp=Z,5.7nm,0.7s
**G31M Satah River** 75.10 10 P **P** 11 48 59.6 +0.3
baz=339
**I27K Kandik River** 75.11 13 P **P** 11 48 59.9 +0.3
baz=333,SNR=5.4
**N16K Nishlik Lake** 75.12 23 P **P** 11 49 00.8 +1.1
baz=321
**H29M Whitestone** 75.13 12 IAmb IAmb 11 49 01.1
comp=Z,8.1nm,0.7s
**H29M Whitestone** 75.13 12 P **P** 11 49 00.4 +0.8
baz=336,SNR=7.5
**MCK McKinley** 75.20 17 P **P** 11 49 00.4 +0.3
baz=328
**M18K Stony River** 75.22 21 P **P** 11 49 01.1 +0.9
baz=323
**J25K Salcha River,** 75.24 15 P **P** 11 49 00.3 -0.1
baz=330,SNR=6.3
**EPYK Eagle Plains** 75.25 11 P **P** 11 48 60.0 -0.4
baz=337
**M19K Big River Lodg** 75.30 20 P **P** 11 49 00.7 0.0
baz=324
**I28M Miner Creek** 75.56 13 IAmb IAmb 11 49 03.1
comp=Z,5.5nm,0.7s
**I28M Miner Creek** 75.56 13 P **P** 11 49 02.3 +0.1
baz=335,SNR=12
**N17K Nushagak Hills** 75.58 22 P **P** 11 49 02.8 +0.5
baz=322
**M20K Styx River** 75.66 20 P **P** 11 49 03.2 +0.4
baz=325
**J26L Joseph Creek** 75.72 15 IAmb IAmb 11 49 04.0
comp=Z,5.1nm,0.7s
**J26L Joseph Creek** 75.72 15 P **P** 11 49 03.3 +0.2
baz=332,SNR=8.2
**N18K Kilae Creek** 75.85 22 P **P** 11 49 04.3 +0.5
baz=323
**K24K Donnelly Dome** 75.86 16 P **P** 11 49 03.8 -0.1
baz=330,SNR=6.0
**I29M Ogilvie Camp,** 75.93 12 P **P** 11 49 04.2 +0.1
baz=336,SNR=5.7
**EGAK Eagle** 75.94 14 P **P** 11 49 04.4 +0.1
baz=334
**SKT Skwentna** 76.02 19 IAmb IAmb 11 49 05.0
comp=Z,8.4nm,1.0s
**SKT Skwentna** 76.02 19 P **P** 11 49 04.5 -0.3
baz=326,SNR=5.9
**O16K Kokwok River B** 76.02 23 P **P** 11 49 05.2 +0.5
baz=321
**WAT1 Susitna Watana** 76.06 18 P **P** 11 49 03.7 -1.3
baz=328
**SCRK Sand Creek** 76.09 15 IAmb IAmb 11 49 05.9
comp=Z,4.5nm,0.6s
**SCRK Sand Creek** 76.09 15 P **P** 11 49 05.4 +0.2
baz=332,SNR=6.9
**DHY Denali Highway** 76.13 17 P **P** 11 49 05.1 -0.4
baz=329,SNR=7.6
**N19K Bonanza Creek** 76.15 21 P **P** 11 49 05.0 -0.6
baz=324
**O17K Koliganek Bris** 76.20 23 P **P** 11 49 05.2 -0.6
baz=322
**I30M Mount Dempster** 76.37 11 IAmb IAmb 11 49 07.8
comp=Z,5.3nm,0.8s
**I30M Mount Dempster** 76.37 11 P **P** 11 49 07.0 +0.1
baz=338,SNR=8.3
**K27K Chicken** 76.44 14 P **P** 11 49 07.3 +0.2
baz=333
**WAT6 Susitna Watana** 76.47 17 P **P** 11 49 06.7 -0.8
baz=329
**SUA Susitna One** 76.65 19 P **P** 11 49 07.2 -1.3
baz=327
**PAX Paxson** 76.66 16 P **P** 11 49 08.4 0.0
baz=331,SNR=7.0
**O18K Koktuh Hills** 76.71 22 P **P** 11 49 07.2 -1.4
baz=324
**P17K Kvichak River** 76.86 23 P **P** 11 49 09.3 -0.1
baz=323
**DAWY Dawson** 76.92 13 P **P** 11 49 09.7 -0.1
baz=335
**PMR Palmer** 76.97 18 P **P** 11 49 09.4 -0.6
baz=328
**J30M Hart River** 76.98 12 P **P** 11 49 10.4 +0.1
baz=338
**SML Sawmill** 76.98 18 P **P** 11 49 09.8 -0.4
baz=329
**L26K Log Cabin Wild** 77.07 15 P **P** 11 49 10.7 +0.1
baz=332
**P18K Big Mountain,** 77.08 22 P **P** 11 49 11.7 +0.9
baz=324
**CAPN Captain Cook N** 77.13 20 P **P** 11 49 11.6 +0.7
baz=326
**M23K Glacier View** 77.14 18 P **P** 11 49 11.0 -0.1
baz=329,SNR=5.7
**SCM Sheep Creek Mo** 77.21 18 P **P** 11 49 11.7 +0.3
baz=329
**HARP HAARP** 77.23 16 P **P** 11 49 12.2 +0.7
baz=331
**M24K Tolsona, Glenn** 77.25 17 P **P** 11 49 12.3 +0.6
baz=330
**UNV Unalaska Valle** 77.26 31 P **P** 11 49 12.6 +0.9
baz=316
**KNK Knik Glacier** 77.29 18 P **P** 11 49 12.8 +0.9
baz=328
**L27K Beaver Creek,** 77.36 15 P **P** 11 49 12.8 +0.5
baz=334,SNR=6.2
**K29M Barlow Dome** 77.46 13 P **P** 11 49 13.5 +0.6
baz=337
**P19K Oil Pt** 77.46 21 P **P** 11 49 13.7 +0.8
baz=325
**S12K Black Hills** 77.64 28 P **P** 11 49 14.6 +0.7
baz=319
**M26K Nabesna, AK** 77.70 15 P **P** 11 49 14.7 +0.5
baz=333
**BOSA Boshof** 77.74 220 P **P** 11 49 14.6 -0.3
comp=Z,4.3nm,0.8s,baz=1.2,slow=5.4,SNR=4.1
comp=Z,4.3nm,0.8s
**Q17K Contact Creek** 77.78 23 P **P** 11 49 14.1 -0.6
baz=323
**R16K Pilot Point** 77.78 24 P **P** 11 49 14.3 -0.3
baz=322
**PWL Port Wells** 77.79 18 P **P** 11 49 14.4 -0.2
baz=329
**KLU Klutina** 77.84 17 P **P** 11 49 15.6 +0.6
baz=330
**HOM Homer** 77.92 21 P **P** 11 49 16.8 +1.5
baz=326
**Q19K Cape Douglas,** 77.93 22 P **P** 11 49 16.3 +0.8
baz=325
**M27K Edge Creek, AK** 77.98 15 P **P** 11 49 16.3 +0.5
baz=334
**L29M L29M** 78.03 13 P **P** 11 49 16.4 +0.5
baz=336
**N25K Chitina, Valde** 78.05 17 P **P** 11 49 16.4 +0.2
baz=332
**GLI Glacier Island** 78.09 18 P **P** 11 49 15.5 -0.8
baz=330
**BRSE Bradley Lake S** 78.10 20 P **P** 11 49 15.8 -0.6
baz=327
**R17L Mt. Peulik Vol** 78.13 24 P **P** 11 49 14.8 -1.8
baz=323
**SEW Seward** 78.14 19 P **P** 11 49 15.7 -0.8
baz=328
**SDPT Sand Point** 78.49 27 P **P** 11 49 18.2 -0.3
baz=320
**Q20K Shuyak Island** 78.57 22 P **P** 11 49 18.3 -0.6
baz=326
**M29M Somme Creek** 78.58 13 P **P** 11 49 18.4 -0.7
baz=336
**MCARA McCarthy VSAT** 78.60 16 P **P** 11 49 18.8 -0.3
baz=333
**EYAK Cordova Ski Ar** 78.71 18 P **P** 11 49 19.5 -0.1
baz=331
**P23K Montague Islan** 78.77 19 P **P** 11 49 20.4 +0.4
baz=330
**CTG Chitna Glacier** 79.34 15 P **P** 11 49 23.1 -0.2
baz=334
**OHAK Old Harbor** 79.44 23 P **P** 11 49 23.4 -0.3
baz=325
**M31M Drury Creek, Y** 79.52 12 P **P** 11 49 24.0 -0.1
baz=340
**YUK4 Talbot Arm** 79.55 14 P **P** 11 49 24.5 0.0
baz=336
**FARO Faro, Yukon** 79.66 11 P **P** 11 49 24.7 -0.1
baz=340
**WRGLY Wrigley** 79.93 7 P **P** 11 49 26.1 -0.1
baz=348
**WHY Whitehorse** 80.88 13 P **P** 11 49 30.5 -1.0
baz=339
**PNL Peninsula** 80.93 15 P **P** 11 49 30.4 -1.2
baz=336
**P30M Million Dollar** 81.00 14 P **P** 11 49 31.1 -1.0
baz=338
**YKA Yellowknife Ar** 81.24 3 P **P** 11 49 33.4 +0.2
comp=Z,2.2nm,0.6s,baz=351,slow=5.8,SNR=17
YKA pP **pP** 11 50 24.4 +2.7
comp=Z,0.4nm,0.7s,baz=351,slow=7.7,SNR=1.6
comp=Z,2.2nm,0.6s
**P33M Teslin, Yukon** 81.66 12 P **P** 11 49 35.6 +0.1
baz=341
**PLBC Pleasant Camp** 81.73 14 P **P** 11 49 35.8 -0.1
baz=338
**WRA Warramunga Arr** 82.01 122 P **P** 11 49 36.6 -1.2

comp=Z,1.6nm,0.5s,baz=323,slow=4.9,SNR=34
WRA pP **pP** **11 50 29.2 +2.8**
comp=Z,0.6nm,0.7s,baz=323,slow=5.2,SNR=2.1
comp=Z,1.6nm,0.5s
**R33M Jennings River 82.73 11 P P 11 49 41.2 0.0**
baz=342
**Q32M Nakina River 82.93 12 P P 11 49 42.2 -0.2**
baz=341
**S31K Pelican 83.15 14 P P 11 49 42.9 -0.3**
baz=338
**R32K Eaglecrest 83.19 13 P P 11 49 43.4 0.0**
baz=340
**DLBC Dease Lake 83.79 11 P P 11 49 46.3 -0.2**
baz=343
**TOAD Toad River Com 84.04 8 P P 11 49 46.1 -1.6**
baz=347
**ASAR Alice Springs 84.27 125 P P 11 49 48.2 -1.1**
comp=Z,2.3nm,0.6s,baz=310,slow=5.0,SNR=51
ASAR pP **pP** **11 50 41.8 +3.3**
comp=Z,0.8nm,0.7s,baz=312,slow=5.2,SNR=3.4
comp=Z,2.3nm,0.6s
**CTA Charters Tower 90.56 115 P P 11 50 18.7 -0.9**
comp=Z,0.2nm,0.8s,baz=321,slow=6.5,SNR=1.8
comp=Z,0.2nm,0.8s
**L61B Northampton 94.71 334 P P 11 50 37.5 -0.9**
baz=29
**AGMN Agassiz Nation 94.76 351 P P 11 50 37.3 -1.2**
baz=11
**T25A Trinidad 106.60 356 P PKiKP 11 55 41.0 -0.5**
baz=3.9
**TPNV Topopah Spring 106.61 6 P PKiKP 11 55 40.9 -0.6**
baz=354
**CWC Cottonwood Cre 106.94 8 P PKiKP 11 55 41.2 -0.9**
baz=352
**QSPA South Pole Qui 126.30 180** PKP **PKPdf 11 56 16.9 -0.9**
comp=Z,1.6nm,1.1s,baz=43,slow=4.3,SNR=2.5
**CPUP Villa Florida 135.20 268** PKP **PKPdf 11 56 35.1 -0.7**
comp=Z,1.1nm,0.7s,baz=63,slow=17,SNR=3.6

*DJA **08** 11:41:31.7±0.6,8°S±12°×11°6E±°, h10km, M3.8/5, MLv3.8/5*
**ISC 08 11:41:31.9±1.0,8°4S±0°.1×116°.09E±0°.05,h10km,n12, σ0§65/15,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.85** | **112** | P | | **Pg** | **11 41 47.9** | **-0.3** |
| TWSI | | | | S | | **Sg** | **11 41 59.8** | **+0.5** |
| **DNP** | **Denpasar** | **0.91** | **253** | P | | **Pn** | **11 41 51.8** | **+1.1** |
| **SRBI** | **Singaraja** | **0.93** | **291** | P | | **Pg** | **11 41 49.6** | **-0.2** |
| SRBI | | | | S | | **Sb** | **11 42 03.0** | **+0.5** |
| **PLAI** | **Plampang** | **1.72** | **104** | P | | **Pn** | **11 42 02.3** | **+0.4** |
| PLAI | | | | S | | **Sn** | **11 42 23.8** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.92** | **268** | P | | **Pn** | **11 42 04.3** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **1.92** | **268** | P | | **Pn** | **11 42 04.2** | **-0.4** |
| **MBWA** | **Marble Bar** | **13.15** | **165** | P | | **Pn** | **11 44 38.4** | **-0.4** |
| **GIRL** | **Giralia** | **14.26** | **187** | P | | **Pn** | **11 44 53.2** | **-0.8** |
| **MEEK** | **Meekatharra** | **18.28** | **173** | P | | **P** | **11 45 46.8** | **+0.8** |
| **WRKA** | **Warakurna** | **20.22** | **146** | P | | **P** | **11 46 08.1** | **+0.9** |
| **AS01** | **Alice Springs** | **22.86** | **134** | P | | **P** | **11 46 35.2** | **-0.5** |
| **OOD** | **Oodnadatta** | **26.73** | **139** | P | | **P** | **11 47 11.2** | **-0.5** |

**NNC 08 11:48:56.2±4.7,43°.14N×88°.52E,h22km±24km,mb3.5, mpv3.2,7C-2D,Error ellipse: s-maj=32.1km s-min=26.9km az=87.0,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **5.73** | **312** | ⇓Pn | | Pn | 11 50 19.9 | 0.0 |
| | 0.5nm,0.3s,baz=120,slow=14,SNR=34 | | | | | | | |
| MK31 | | | | ⇑Sn | | Sn | 11 51 26.6 | +1.7 |
| | 2.0nm,0.5s,baz=220,slow=25,SNR=6.0 | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 11 52 02.4 | |
| | 10nm,0.7s,baz=115,slow=28,SNR=3.8 | | | | | | | |
| **MAKZ** | **Makanchi** | **5.91** | **311** | ⇑Pn | | Pn | 11 50 22.6 | +0.2 |
| | 1.8nm,0.5s | | | | | | | |
| MAKZ | | | | ⇑Sn | | Sn | 11 51 29.0 | -0.4 |
| | 2.7nm,0.5s | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 11 52 02.2 | |
| | 7.0nm,0.8s | | | | | | | |
| **PDGK** | **Podgornoye** | **6.59** | **275** | ⇑Pn | | Pn | 11 50 31.6 | -0.3 |
| | 0.7nm,0.4s | | | | | | | |
| PDGK | | | | ⇑Sn | | Sn | 11 51 47.7 | +1.2 |
| | 3.0nm,0.5s | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 11 52 22.9 | |
| | 4.9nm,0.6s | | | | | | | |

*NEIC **08** 11:49:16.5±1.4,5°.76S±0°.07×152°.23E±0°.07,h10km±1km, mb4.1/14,Error ellipse: s-maj=12.3km s-min=10.9km az=225.0*
*IDC **08** 11:49:23.2±5.2,5°.41S×151°.59E,h66km±46km,mb3.8/8, mbtmp4.1/9,ML2.0/1,MS3.5/6,Error ellipse: s-maj=41.7km s-min=27.8km az=122.0*
**ISC 08 11:49:20.3±0.7,5°.67S±0°.08×152°.1E±0°.1,h45km,n35, σ1§46/31,mb4.1/15,MS3.5/5,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.47** | **5** | | | **Pn** | **11 49 44.2** | **-0.2** |
| **MANU** | **Manus Island** | **5.90** | **307** | Pn | | **Pn** | **11 50 46.7** | **+1.5** |
| **PMG** | **Port Moresby** | **6.11** | **232** | | | **Pn** | **11 50 48.1** | **0.0** |
| **PMG** | **Port Moresby** | **6.11** | **232** | P | | **Pn** | **11 50 50.0** | **+1.9** |
| | 2.8nm,0.3s,baz=40,slow=11,SNR=10 | | | | | | | |
| PMG | | | | S | | **Sn** | **11 51 54.1** | **-2.6** |
| | 15nm,0.5s,baz=146,slow=23,SNR=1.6 | | | | | | | |
| PMG | | | | LR | | LR | 11 53 15.4 | |
| | comp=Z,331nm,21.1s,baz=26,slow=39 | | | | | | | |
| | 43nm,0.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **15.40** | **201** | Pn | | **Pn** | **11 52 53.2** | **-1.5** |
| CTAO | | | | IAmb | | IAmb | 11 53 15.4 | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **EIDS** | **Eidsvold** | **19.61** | **183** | P | | **P** | **11 53 43.6** | **-1.5** |
| **MTN** | **Manton Dam** | **21.83** | **249** | P | | **P** | **11 54 08.9** | **-0.1** |
| **WB0** | **Warramunga Arr** | **22.17** | **229** | P | | **P** | **11 54 12.4** | **-0.3** |
| WB0 | | | | IAmb | | IAmb | 11 54 22.1 | |
| | comp=Z,7.7nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **22.17** | **229** | P | | **P** | **11 54 12.3** | **-0.4** |
| WR0 | | | | IAmb | | IAmb | 11 54 15.3 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.30** | **229** | P | | **P** | **11 54 14.2** | **+0.1** |
| **WB2** | **Warramunga Arr** | **22.30** | **229** | P | | **P** | **11 54 13.3** | **-0.9** |
| WB2 | | | | IAmb | | IAmb | 11 54 29.8 | |
| | comp=Z,7.4nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.31** | **229** | P | | **P** | **11 54 13.9** | **-0.4** |
| **WRA** | **Warramunga Arr** | **22.31** | **229** | P | | **P** | **11 54 13.8** | **-0.4** |
| | comp=Z,4.7nm,0.8s,baz=52,slow=10,SNR=24 | | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **24.92** | **245** | | | **P** | **11 54 39.1** | **-0.4** |
| **AS31** | **Alice Springs** | **25.01** | **222** | P | | **P** | **11 54 41.1** | **+0.8** |
| **ASAR** | **Alice Springs** | **25.01** | **222** | P | | **P** | **11 54 41.0** | **+0.7** |
| **ASAR** | **Alice Springs** | **25.01** | **222** | P | | **P** | **11 54 40.1** | **-0.2** |
| | comp=Z,4.6nm,0.7s,baz=58,slow=8.5,SNR=56 | | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| **SBUM** | **Sibu** | **40.59** | **280** | P | | **P** | **11 56 57.0** | **+1.0** |
| SBUM | | | | IAmb | | IAmb | 11 57 15.8 | |
| | comp=Z,3.9nm,1.0s | | | | | | | |
| **MORW** | **Morawa** | **41.22** | **231** | P | | **P** | **11 57 04.0** | **+2.9** |
| MORW | | | | IAmb | | IAmb | 11 57 04.1 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.25** | **226** | LR | | LR | 12 16 13.7 | |
| | comp=Z,104nm,18.2s,baz=196,slow=38 | | | | | | | |
| **JNU** | **Nakatsue** | **43.49** | **334** | LR | | LR | 12 14 00.3 | |
| | comp=Z,54nm,19.5s,baz=66,slow=34 | | | | | | | |
| **KSRS** | **Korea Array** | **48.44** | **334** | LR | | LR | 12 16 32.6 | |
| | comp=Z,32nm,21.1s,baz=70,slow=34 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **61.11** | **15** | LR | | LR | 12 21 49.9 | |
| | comp=Z,37nm,19.4s,baz=68,slow=32 | | | | | | | |
| **SONM** | **Songino Array** | **66.66** | **328** | P | | **P** | **12 00 04.7** | **-1.9** |
| | comp=Z,1.4nm,0.6s,baz=137,slow=5.1 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.48** | **319** | P | | **P** | **12 01 25.4** | **-2.3** |
| | comp=Z,0.9nm,0.9s,baz=106,slow=5.3,SNR=6.8 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.45** | **327** | P | | **P** | **12 01 30.2** | **-2.5** |
| | comp=Z,1.3nm,0.7s,baz=112,slow=5.9,SNR=4.3 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.24** | **22** | P | | **P** | **12 01 40.9** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=251,slow=5.4,SNR=12 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **84.02** | **322** | P | | **P** | **12 01 44.1** | **-1.9** |
| | comp=Z,0.9nm,0.9s,baz=112,slow=5.0,SNR=5.7 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.30** | **180** | P | | **P** | **12 01 48.1** | **+0.7** |
| QSPA | | | | IAmb | | IAmb | 12 02 03.6 | |
| | comp=Z,1.5nm,1.0s | | | | | | | |
| **MAW** | **Mawson** | **84.49** | **203** | LR | | LR | 12 37 14.6 | |
| | comp=Z,53nm,20.0s,baz=66,slow=34 | | | | | | | |
| **C23K** | **Itkillik River** | **84.59** | **17** | P | | **P** | **12 01 49.9** | **+1.4** |
| C23K | | | | IAmb | | IAmb | 12 02 14.9 | |
| | comp=Z,1.1nm,0.9s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **85.31** | **20** | P | | **P** | **12 01 54.2** | **+1.9** |
| **NVAR** | **Mina Array Bea** | **93.21** | **52** | P | | **P** | **12 02 32.4** | **+1.8** |
| | comp=Z,1.1nm,0.8s,baz=263,slow=5.4,SNR=6.8 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **99.98** | **48** | P | | **Pdif** | **12 03 01.9** | **+0.7** |
| | comp=Z,0.2nm,0.4s,baz=249,slow=4.6,SNR=3.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.85** | **286** | PKPbc | | **PKPbc** | **12 09 05.7** | **-1.0** |
| | comp=Z,7.4nm,0.7s,baz=60,slow=3.6,SNR=38 | | | | | | | |

**IDC 08 11:56:24.7±5.1,18°.27S×173°.33W,h0km,mb3.6/3, mbtmp3.6/3,Error ellipse: s-maj=384.6km s-min=36.0km az=153.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **49.31** | **259** | P | | P | 12 05 15.6 | -0.5 |
| | 0.3nm,0.5s,baz=97,slow=7.5,SNR=5.5 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **49.34** | **254** | P | | P | 12 05 16.4 | +0.2 |
| | 0.5nm,0.5s,baz=94,slow=7.6,SNR=13 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **84.35** | **42** | P | | P | 12 08 59.1 | 0.0 |
| | 0.5nm,0.9s,baz=201,slow=4.8,SNR=3.8 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |

*JMA **08** 12:22:30.8±0.6,22°N±4°×12°2E±°, h123km, MV2.6/8, TAIWAN REGION*
*TAP **08** 12:22:30.7,22°.14N×121°.42E,h78km±1km,ML3.6,B*
**ISC 08 12:22:30.9±1.5,22°.12N±0°.05×121°.41E±0°.03,h79km±8km, n100,σ0§73/172,5C-1D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LAY** | **Lan-yu** | **0.15** | **121** | *i* P | | **Pn** | **12 22 42.2** | **-0.2** |
| LAY | baz=128 | | | *i* S | | **Sn** | **12 22 51.2** | **+0.3** |
| **LYUB** | **Lan-yu** | **0.20** | **126** | ⇑*i* P | | **Pn** | **12 22 42.0** | **-0.6** |
| LYUB | baz=131 | | | *i* S | | **Sn** | **12 22 50.4** | **-0.8** |
| **TAWH** | **Dawu Township** | **0.54** | **295** | P | | **Pn** | **12 22 44.7** | **-0.2** |
| TAWH | baz=291 | | | S | | **Sn** | **12 22 55.0** | **-0.3** |
| **TAW** | **Tawu** | **0.54** | **297** | *i* P | | **Pn** | **12 22 44.6** | **-0.2** |
| TAW | baz=294 | | | S | | **Sn** | **12 22 54.8** | **-0.4** |
| **SMST** | **Manzhou Townsh** | **0.54** | **260** | P | | **Pn** | **12 22 45.2** | **+0.3** |
| SMST | baz=257 | | | *i* S | | **Sn** | **12 22 55.8** | **+0.4** |
| **LDUT** | **Ludao** | **0.56** | **5** | P | | **Pn** | **12 22 45.0** | **-0.1** |
| LDUT | baz=5.0 | | | S | | **Sn** | **12 22 56.6** | **+1.1** |
| **SLIU** | **Shizi** | **0.58** | **280** | *i* P | | **Pn** | **12 22 45.5** | **+0.2** |
| SLIU | baz=277 | | | *i* S | | **Sn** | **12 22 56.8** | **+0.8** |
| **TWKBT** | **Hengchun** | **0.58** | **253** | ⇑*i* P | | **Pn** | **12 22 45.8** | **+0.4** |
| TWKBT | baz=250 | | | *i* S | | **Sn** | **12 22 57.1** | **+1.0** |
| **EAST** | **Anshuo** | **0.59** | **297** | *i* P | | **Pn** | **12 22 45.2** | **-0.2** |
| EAST | baz=294 | | | *i* S | | **Sn** | **12 22 56.6** | **+0.5** |
| **TWK1** | **Hengchun** | **0.59** | **253** | ⇑*i* P | | **Pn** | **12 22 45.8** | **+0.4** |
| TWK1 | baz=250 | | | *i* S | | **Sn** | **12 22 56.8** | **+0.7** |
| **HEN** | **Hengchun** | **0.64** | **260** | P | | **Pn** | **12 22 46.5** | **+0.6** |
| HEN | baz=257 | | | *e*S | | **Sn** | **12 22 57.9** | **+1.0** |
| **ECL** | **Taimali** | **0.64** | **319** | *i* P | | **Pn** | **12 22 45.3** | **-0.6** |
| ECL | baz=317 | | | *e*S | | **Sn** | **12 22 56.4** | **-0.6** |
| **TTN** | **Taitung** | **0.68** | **339** | *i* P | | **Pn** | **12 22 46.7** | **+0.4** |
| | baz=338 | | | | | | | |
| **TWGBT** | **Beinan** | **0.76** | **336** | P | | **Pn** | **12 22 46.9** | **-0.3** |
| **TWGBT** | **Beinan** | **0.76** | **336** | ⇑*i* P | | **Pn** | **12 22 46.7** | **-0.6** |
| | baz=335 | | | | | | | |
| TWGBT | | | | S | | **Sn** | **12 22 58.7** | **-0.6** |
| | baz=335 | | | | | | | |
| **TWG** | **Pinlang** | **0.77** | **336** | *i* P | | **Pn** | **12 22 46.8** | **-0.5** |
| | baz=335 | | | | | | | |
| TWG | | | | *i* S | | **Sn** | **12 22 58.3** | **-1.1** |
| | baz=335 | | | | | | | |
| **SCZT** | **Fangliau** | **0.78** | **289** | *i* P | | **Pn** | **12 22 47.2** | **-0.1** |
| | baz=287 | | | | | | | |
| SCZT | | | | *i* S | | **Sn** | **12 22 58.5** | **-1.1** |
| | baz=287 | | | | | | | |
| **LONT** | **Longtian** | **0.83** | **342** | *i* P | | **Pn** | **12 22 47.7** | **-0.3** |
| | baz=340 | | | | | | | |
| LONT | | | | *e*S | | **Sn** | **12 22 59.3** | **-1.3** |
| | baz=340 | | | | | | | |
| **EDH** | **Donghe** | **0.86** | **353** | *i* P | | **Pn** | **12 22 48.2** | **0.0** |
| | baz=352 | | | | | | | |
| EDH | | | | S | | **Sn** | **12 23 02.1** | **+0.9** |
| | baz=352 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.88** | **305** | ⇓*i* P | | **Pn** | **12 22 48.4** | **-0.1** |
| | baz=302 | | | | | | | |
| MASBT | | | | *i* S | | **Sn** | **12 23 01.0** | **-0.5** |
| | baz=302 | | | | | | | |
| **TSMG** | **Majia** | **0.92** | **310** | *e*P | | **Pn** | **12 22 49.4** | **+0.3** |
| | baz=308 | | | | | | | |
| TSMG | | | | *i* S | | **Sn** | **12 23 02.3** | **-0.2** |
| | baz=308 | | | | | | | |
| **CHKT** | **Chengkung** | **0.98** | **357** | *e*P | | **Pn** | **12 22 49.9** | **+0.2** |
| | baz=357 | | | | | | | |
| CHKT | | | | *i* S | | **Sn** | **12 23 04.1** | **+0.4** |
| | baz=357 | | | | | | | |
| **ECS** | **Chishang** | **0.99** | **350** | *e*P | | **Pn** | **12 22 49.4** | **-0.5** |
| | baz=349 | | | | | | | |
| ECS | | | | *e*S | | **Sn** | **12 23 05.0** | **+1.0** |
| | baz=349 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.00** | **283** | *e*P | | **Pn** | **12 22 49.9** | **0.0** |
| | baz=281 | | | | | | | |
| **EHD** | **Haiduan** | **1.05** | **349** | *e*P | | **Pn** | **12 22 49.0** | **-1.5** |
| | baz=349 | | | | | | | |
| EHD | | | | S | | **Sn** | **12 23 04.4** | **-0.7** |
| | baz=349 | | | | | | | |
| **SGLT** | **Jiouru** | **1.05** | **306** | *e*P | | **Pn** | **12 22 50.7** | **+0.2** |
| | baz=304 | | | | | | | |
| SGLT | | | | *e*S | | **Sn** | **12 23 04.3** | **-0.8** |
| | baz=304 | | | | | | | |
| **CHKH** | **Chenggong** | **1.07** | **359** | *e*P | | **Pn** | **12 22 50.8** | **0.0** |
| | baz=358 | | | | | | | |
| CHKH | | | | *i* S | | **Sn** | **12 23 05.7** | **0.0** |
| | baz=358 | | | | | | | |
| **FULB** | **Fuli** | **1.08** | **354** | P | | **Pn** | **12 22 51.4** | **+0.3** |
| | baz=353 | | | | | | | |
| FULB | | | | S | | **Sn** | **12 23 06.9** | **+0.9** |
| | baz=353 | | | | | | | |
| **SLGT** | **Liugui** | **1.12** | **321** | *e*P | | **Pn** | **12 22 51.7** | **+0.2** |
| | baz=319 | | | | | | | |
| SLGT | | | | *i* S | | **Sn** | **12 23 06.8** | **-0.1** |
| | baz=319 | | | | | | | |
| **ELDTW** | **Lidau** | **1.13** | **341** | *i* P | | **Pn** | **12 22 52.3** | **+0.6** |
| | baz=340 | | | | | | | |
| ELDTW | | | | S | | **Sn** | **12 23 07.8** | **+0.6** |
| | baz=340 | | | | | | | |
| **SCST** | **Cishan** | **1.15** | **312** | *e*P | | **Pn** | **12 22 52.2** | **+0.5** |
| | baz=310 | | | | | | | |
| SCST | | | | *i* S | | **Sn** | **12 23 07.0** | **-0.3** |
| | baz=310 | | | | | | | |
| **TWM1** | **Shoushan** | **1.16** | **308** | *e*P | | **Pn** | **12 22 52.8** | **+0.9** |
| | baz=306 | | | | | | | |
| TWM1 | | | | *e*S | | **Sn** | **12 23 09.4** | **+1.8** |
| | baz=306 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **1.18** | **303** | *e*P | | **Pn** | **12 22 53.2** | **+1.1** |
| | baz=301 | | | | | | | |
| SNJT | | | | *i* S | | **Sn** | **12 23 09.3** | **+1.2** |
| | baz=301 | | | | | | | |
| **ECBN** | **Changbin** | **1.20** | **2** | *e*P | | **Pn** | **12 22 52.1** | **-0.3** |
| | baz=1.0 | | | | | | | |
| ECBN | | | | *e*S | | **Sn** | **12 23 08.5** | **+0.1** |
| | baz=1.0 | | | | | | | |
| **STYH** | **Taoyuan** | **1.20** | **331** | *i* P | | **Pn** | **12 22 52.9** | **+0.4** |
| | baz=330 | | | | | | | |
| STYH | | | | S | | **Sn** | **12 23 09.1** | **+0.5** |
| | baz=330 | | | | | | | |
| **EYUL** | **Yuli** | **1.23** | **356** | *e*P | | **Pn** | **12 22 53.0** | **+0.2** |
| | baz=355 | | | | | | | |
| **SGST** | **Jiashian** | **1.23** | **322** | *e*P | | **Pn** | **12 22 52.2** | **-0.6** |
| | baz=320 | | | | | | | |
| SGST | | | | *i* S | | **Sn** | **12 23 08.0** | **-1.2** |
| | baz=320 | | | | | | | |
| **TWF1** | **Yuli** | **1.24** | **355** | *e*P | | **Pn** | **12 22 52.6** | **-0.3** |
| | baz=355 | | | | | | | |
| TWF1 | | | | *e*S | | **Sn** | **12 23 08.2** | **-1.1** |
| | baz=355 | | | | | | | |
| **YULB** | **Yu-li** | **1.27** | **355** | P | | **Pn** | **12 22 53.1** | **-0.3** |
| **YULB** | **Yu-li** | **1.27** | **355** | *e*P | | **Pn** | **12 22 52.7** | **-0.7** |
| | baz=354 | | | | | | | |
| YULB | | | | *e*S | | **Sn** | **12 23 08.5** | **-1.7** |
| | baz=354 | | | | | | | |
| **CHN1** | **Nanshi** | **1.34** | **323** | *e*P | | **Pn** | **12 22 54.3** | **+0.1** |
| | baz=321 | | | | | | | |
| CHN1 | | | | *i* S | | **Sn** | **12 23 11.5** | **-0.3** |
| | baz=321 | | | | | | | |
| **WTP** | **Ta-pu** | **1.35** | **327** | P | | **Pn** | **12 22 54.3** | **0.0** |
| | baz=326 | | | | | | | |
| WTP | | | | *i* S | | **Sn** | **12 23 12.2** | **+0.3** |
| | baz=326 | | | | | | | |
| **CHN3** | **Shinhua** | **1.36** | **315** | *e*S | | **Sn** | **12 23 13.8** | **+1.7** |
| | baz=313 | | | | | | | |
| **HGSD** | **Ruisui** | **1.37** | **0** | *e*P | | **Pn** | **12 22 54.5** | **-0.1** |
| HGSD | | | | *e*S | | **Sn** | **12 23 14.1** | **+1.8** |
| **TPUB** | **Ta-pu** | **1.38** | **329** | P | | **Pn** | **12 22 54.7** | **-0.1** |
| **TPUB** | **Ta-pu** | **1.38** | **329** | *i* P | | **Pn** | **12 22 54.7** | **-0.1** |
| | baz=327 | | | | | | | |
| TPUB | | | | *i* S | | **Sn** | **12 23 12.2** | **-0.5** |
| | baz=327 | | | | | | | |
| **EHY** | **Hungye** | **1.39** | **357** | *e*P | | **Pn** | **12 22 53.6** | **-1.2** |
| | baz=356 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **12 23 11.4** | **-1.3** |
| | baz=356 | | | | | | | |
| **SNST** | **Tainan City** | **1.39** | **323** | *e*P | | **Pn** | **12 22 54.7** | **0.0** |
| | baz=321 | | | | | | | |
| SNST | | | | *i* S | | **Sn** | **12 23 12.9** | **+0.2** |
| | baz=321 | | | | | | | |
| **TWK** | **Hsinying** | **1.43** | **323** | *e*P | | **Pn** | **12 22 55.3** | **-0.1** |
| | baz=322 | | | | | | | |
| TWK | | | | *e*S | | **Sn** | **12 23 13.8** | **0.0** |
| | baz=322 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.43** | **310** | *e*P | | **Pn** | **12 22 55.2** | **-0.1** |
| | baz=309 | | | | | | | |
| TAI1 | | | | *e*S | | **Sn** | **12 23 14.1** | **+0.5** |
| | baz=309 | | | | | | | |
| **SSHA** | **Shanhua** | **1.45** | **315** | *e*P | | **Pn** | **12 22 56.2** | **+0.6** |
| | baz=313 | | | | | | | |
| SSHA | | | | *i* S | | **Sn** | **12 23 14.9** | **+0.7** |
| | baz=313 | | | | | | | |
| **WCKO** | **Fanlu** | **1.51** | **331** | P | | **Pn** | **12 22 56.4** | **0.0** |
| | baz=329 | | | | | | | |
| WCKO | | | | *i* S | | **Sn** | **12 23 14.9** | **-0.7** |
| | baz=329 | | | | | | | |
| **SCLT** | **Jiali** | **1.54** | **313** | *e*P | | **Pn** | **12 22 56.5** | **-0.2** |
| | baz=312 | | | | | | | |
| SCLT | | | | *i* S | | **Sn** | **12 23 16.2** | **-0.1** |
| | baz=312 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.59** | **359** | *e*P | | **Pn** | **12 22 57.0** | **-0.5** |
| | baz=358 | | | | | | | |
| WARBT | | | | S | | **Sn** | **12 23 16.4** | **-1.2** |
| | baz=358 | | | | | | | |
| **TSCK** | **Chigu Township** | **1.60** | **310** | *i* P | | **Pn** | **12 22 57.1** | **-0.4** |
| | baz=309 | | | | | | | |
| TSCK | | | | *i* S | | **Sn** | **12 23 16.2** | **-1.5** |
| | baz=309 | | | | | | | |
| **ICHU** | **Yijhu** | **1.62** | **320** | *e*P | | **Pn** | **12 22 57.6** | **-0.2** |
| | baz=319 | | | | | | | |
| ICHU | | | | *e*S | | **Sn** | **12 23 17.7** | **-0.5** |
| | baz=319 | | | | | | | |
| **VWDT** | **VWDT** | **1.65** | **351** | *e*P | | **Pn** | **12 22 59.2** | **+1.0** |
| | baz=351 | | | | | | | |
| VWDT | | | | S | | **Sn** | **12 23 19.3** | **+0.5** |
| | baz=351 | | | | | | | |
| **CHN8** | **Yiju** | **1.65** | **318** | P | | **Pn** | **12 22 57.8** | **-0.4** |
| | baz=317 | | | | | | | |
| CHN8 | | | | *i* S | | **Sn** | **12 23 18.1** | **-0.8** |
| | baz=317 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.66** | **342** | *e*P | | **Pn** | **12 22 58.6** | **+0.3** |
| | baz=341 | | | | | | | |
| WHYT | | | | S | | **Sn** | **12 23 19.5** | **+0.5** |
| | baz=341 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.67** | **5** | *e*P | | **Pn** | **12 22 58.8** | **+0.3** |
| | baz=4.0 | | | | | | | |
| SHUL | | | | *i* S | | **Sn** | **12 23 20.5** | **+1.2** |
| | baz=4.0 | | | | | | | |
| **ESL** | **Shilin** | **1.69** | **1** | *e*P | | **Pn** | **12 22 59.6** | **+0.8** |
| **SSLB** | **Suanglung** | **1.72** | **346** | P | | **Pn** | **12 22 59.3** | **+0.2** |
| **SSLB** | **Suanglung** | **1.72** | **346** | *e*P | | **Pn** | **12 22 59.1** | **0.0** |
| | baz=345 | | | | | | | |
| SSLB | | | | *e*S | | **Sn** | **12 23 20.4** | **0.0** |
| | baz=345 | | | | | | | |
| **WDLH** | **Douliu** | **1.76** | **333** | *e*P | | **Pn** | **12 22 59.2** | **-0.4** |
| | baz=332 | | | | | | | |
| WDLH | | | | *e*S | | **Sn** | **12 23 21.3** | **-0.1** |
| | baz=332 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.78** | **322** | *e*P | | **Pn** | **12 22 59.5** | **-0.4** |
| | baz=321 | | | | | | | |
| WSL | | | | *i* S | | **Sn** | **12 23 20.9** | **-0.9** |
| | baz=321 | | | | | | | |
| **WJS** | **Zhushan** | **1.81** | **340** | *e*P | | **Pn** | **12 23 00.9** | **+0.5** |
| | baz=339 | | | | | | | |
| WJS | | | | S | | **Sn** | **12 23 24.0** | **+1.4** |
| | baz=339 | | | | | | | |
| **ETM** | **Tongmen** | **1.84** | **2** | *e*P | | **Pn** | **12 23 01.3** | **+0.6** |
| | baz=2.0 | | | | | | | |
| **OWD** | **Renai** | **1.84** | **353** | *e*P | | **Pn** | **12 23 01.3** | **+0.4** |
| | baz=353 | | | | | | | |
| **TYC** | **Yuchr** | **1.85** | **344** | *e*P | | **Pn** | **12 23 00.6** | **-0.3** |
| | baz=343 | | | | | | | |
| TYC | | | | *e*S | | **Sn** | **12 23 23.9** | **+0.4** |
| | baz=343 | | | | | | | |
| **WSF** | **Szhu** | **1.87** | **324** | *e*S | | **Sn** | **12 23 22.8** | **-1.2** |
| | baz=323 | | | | | | | |
| **WNT** | **Mingjian** | **1.88** | **339** | *e*P | | **Pn** | **12 23 00.6** | **-0.7** |
| | baz=338 | | | | | | | |
| WNT | | | | S | | **Sn** | **12 23 24.6** | **+0.4** |
| | baz=338 | | | | | | | |
| **WUSB** | **Renai** | **1.89** | **352** | *e*P | | **Pn** | **12 23 01.9** | **+0.4** |
| | baz=351 | | | | | | | |
| WUSB | | | | *i* S | | **Sn** | **12 23 25.3** | **+0.7** |
| | baz=351 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.90** | **360** | *e*P | | **Pn** | **12 23 01.9** | **+0.3** |
| | baz=359 | | | | | | | |
| LXIB | | | | *i* S | | **Sn** | **12 23 24.3** | **-0.5** |
| | baz=359 | | | | | | | |
| **CHGB** | **Renai** | **1.95** | **354** | *e*P | | **Pn** | **12 23 03.7** | **+1.4** |
| | baz=353 | | | | | | | |
| CHGB | | | | S | | **Sn** | **12 23 27.4** | **+1.2** |
| | baz=353 | | | | | | | |
| **TWD** | **Chiawan** | **1.96** | **5** | *e*P | | **Pn** | **12 23 02.5** | **+0.1** |
| | baz=5.0 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **12 23 26.9** | **+0.7** |
| | baz=5.0 | | | | | | | |
| **WDGT** | **Dungji** | **1.98** | **305** | *e*P | | **Pn** | **12 23 01.2** | **-1.4** |
| | baz=304 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.99** | **347** | *e*P | | **Pn** | **12 23 02.8** | **+0.1** |
| | baz=346 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **12 23 27.0** | **+0.3** |
| | baz=346 | | | | | | | |
| **WHF** | **Hehuan Shan** | **2.02** | **356** | *e*P | | **Pn** | **12 23 04.2** | **+0.6** |
| | baz=356 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **12 23 28.9** | **+0.6** |
| | baz=356 | | | | | | | |
| **NACB** | **Ninganchiao** | **2.06** | **5** | P | | **Pn** | **12 23 03.7** | **+0.1** |
| **NACB** | **Ninganchiao** | **2.06** | **5** | *e*P | | **Pn** | **12 23 03.7** | **+0.1** |
| | baz=4.0 | | | | | | | |
| NACB | | | | *e*S | | **Sn** | **12 23 27.9** | **-0.5** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WHP** | **Taichung City** baz=348 | **2.19** | **349** | *eP* | | **Pn** | **12 23 06.2** | **+0.7** |
| WHP | baz=348 | | | *i* S | | **Sn** | **12 23 32.4** | **+0.5** |
| **PNG** | **Penghu** baz=309 | **2.24** | **310** | *i* P | | **Pn** | **12 23 04.6** | **-1.5** |
| **NNSB** | **Datong** baz=359 | **2.30** | **359** | *eP* | | **Pn** | **12 23 07.3** | **+0.3** |
| **LATG** | **Datong** baz=2.0 | **2.41** | **2** | *eP* | | **Pn** | **12 23 09.0** | **+0.6** |
| **NDT** | **Datong Townshi** baz=2.0 | **2.48** | **2** | *eP* | | **Pn** | **12 23 09.2** | **0.0** |
| **ENTT** | **Nioudou** baz=3.0 | **2.52** | **3** | *eP* | | **Pn** | **12 23 10.2** | **+0.4** |
| **YHNB** | **Yeheng** baz=359 | **2.54** | **359** | *eP* | | **Pn** | **12 23 11.7** | **+1.5** |
| **NSK** | **Sanguang** baz=358 | **2.55** | **359** | *eP* | | **Pn** | **12 23 11.8** | **+1.5** |
| **JYNG** | **Yonagunijimaku** | **2.72** | **31** | *eP* | | **Pn** | **12 23 13.3** | **+0.9** |
| **HATJ** | **Hateruma jima** | **2.93** | **48** | *eS* | | **Sn** | **12 23 49.0** | **-0.4** |
| **IRIF** | **Iriomote-Funau** | **3.07** | **44** | P | | **Pn** | **12 23 17.0** | **-0.2** |
| IRIF | | | | *eS* | | **Sn** | **12 23 53.9** | **+1.0** |
| **JKRS** | **Kuro-shima** | **3.19** | **48** | P | | **Pn** | **12 23 19.0** | **+0.2** |
| JKRS | | | | *eS* | | **Sn** | **12 23 55.7** | **-0.1** |
| **JIJ** | **Ishigaki jima** | **3.36** | **48** | *eP* | | **Pn** | **12 23 21.0** | **-0.2** |
| JIJ | | | | S | | **Sn** | **12 23 58.5** | **-1.5** |
| **JISG** | **Ishigakijimahi** | **3.62** | **47** | P | | **Pn** | **12 23 24.1** | **-0.6** |
| JISG | | | | *eS* | | **Sn** | **12 24 05.6** | **-0.8** |
| **JTJ** | **Tarama** | **3.93** | **50** | *eP* | | **Pn** | **12 23 29.4** | **+0.5** |
| JTJ | | | | *eS* | | **Sn** | **12 24 13.1** | **-0.7** |

**IDC 08 12:24:06.0±8.4, 18°50S×179°84W, h517km±23km, mb2.5/3, mbtmp3.3/4, Error ellipse: s-maj=296.4km s-min=34.5km az=144.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** 3.4nm,0.5s,baz=158,slow=19,SNR=7.7 | **2.15** | **290** | P | P | 12 25 13.5 | 0.0 |
| **WRA** | **Warramunga Arr** 0.2nm,0.4s,baz=95,slow=7.7,SNR=9.4 0.2nm,0.4s | **43.19** | **260** | P | P | 12 31 21.5 | +0.2 |
| **ASAR** | **Alice Springs** 0.6nm,0.8s,baz=106,slow=6.2,SNR=5.6 0.6nm,0.8s | **43.33** | **255** | P | P | 12 31 21.8 | -0.6 |
| **ILAR** | **Eielson Array** 0.2nm,0.7s,baz=224,slow=3.8,SNR=2.2 0.2nm,0.7s | **86.77** | **14** | P | P | 12 35 54.5 | -0.1 |

*UCR **08** 12:32:16.2±1.0, 8°33N×83°13W, h8km±3km, MW3.7*
*CATAC **08** 12:32:16.5±0.8, 8°39N×83°17W, h6km±4km, ML3.5*
*UPA **08** 12:32:17.3±1.1, 8°42N×83°10W, h17km±3km, MW3.6*

**ISC 08 12:32:12.7±1.3, 8°25N±0°04×83°22W±0°03, h15km±9km, n51, σ0°64/78, 5C-14D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIME** | **Puerto Jimenez** | **0.30** | **340** | *eP* | **Pn** | **12 32 22.7** | **+0.1** |
| **PTPM** | **Petroterminale** | **0.34** | **98** | ⇓*iP* | **Pn** | **12 32 23.6** | **+0.5** |
| PTPM | | | | *i* S | **Sn** | **12 32 30.2** | **+0.5** |
| **FITO** | **Golfito** | **0.38** | **10** | ⇓*eP* | **Pb** | **12 32 21.9** | **+0.8** |
| FITO | | | | *eS* | **Sg** | **12 32 26.2** | **+0.5** |
| **LIMO3** | **Limones** | **0.38** | **113** | ⇑*iP* | **Pn** | **12 32 24.9** | **+1.2** |
| LIMO3 | | | | *i* S | **Sn** | **12 32 32.3** | **+1.5** |
| **EDAD** | **Golfito** | **0.40** | **7** | ⇓*iP* | **Pb** | **12 32 22.3** | **+0.7** |
| EDAD | | | | *eS* | **Sb** | **12 32 27.2** | **-0.4** |
| **CDITO** | **Canoas** | **0.47** | **47** | *iP* | **Pn** | **12 32 24.0** | **-0.9** |
| CDITO | | | | *i* S | **Sb** | **12 32 29.5** | **+0.1** |
| CDITO | comp=Z,4μm,1.0s | | | IAML | | 12 32 32.4 | |
| **NELY** | **Ciudad Neily** | **0.48** | **34** | ⇓*eP* | **Pb** | **12 32 23.8** | **+0.9** |
| NELY | | | | *eS* | **Sb** | **12 32 29.8** | **0.0** |
| **VITO** | **San Vito** | **0.61** | **23** | ⇑*iP* | **Pn** | **12 32 26.5** | **-0.6** |
| VITO | | | | *eS* | **Sb** | **12 32 34.9** | **+1.1** |
| **MLIR3** | **Monte Lirio, C** | **0.67** | **36** | *iP* | **Pn** | **12 32 27.3** | **-0.4** |
| MLIR3 | | | | *eS* | **Sb** | **12 32 35.8** | **+0.6** |
| **EDPN** | **Palmar Norte** | **0.74** | **342** | ⇑*eP* | **Pn** | **12 32 29.1** | **+0.4** |
| EDPN | | | | *eS* | **Sn** | **12 32 39.3** | **-0.5** |
| **BRU2** | **Volcan** | **0.75** | **44** | *iP* | **Pn** | **12 32 28.4** | **-0.5** |
| BRU2 | | | | *i* S | **Sb** | **12 32 37.8** | **+0.1** |
| BRU2 | comp=Z,2μm,1.0s | | | IAML | | 12 32 39.0 | |
| **BRU2** | **Volcan** | **0.75** | **44** | ⇓*iP* | **Pn** | **12 32 28.5** | **-0.5** |
| BRU2 | | | | *i* S | **Sb** | **12 32 37.8** | **+0.1** |
| **BRU2** | **Volcan** | **0.75** | **44** | ⇓*iP* | **Pn** | **12 32 28.4** | **-0.5** |
| BRU2 | | | | *eS* | **Sb** | **12 32 37.8** | **+0.1** |
| **EDP2** | **Potrero Grande** | **0.76** | **3** | ⇓*iP* | **Pn** | **12 32 29.1** | **+0.2** |
| EDP2 | | | | *eS* | **Sn** | **12 32 39.6** | **-0.6** |
| **DVD** | **David** | **0.78** | **76** | *eP* | **Pn** | **12 32 29.4** | **+0.2** |
| DVD | | | | *eS* | **Sb** | **12 32 38.1** | **-0.4** |
| **BCO2** | **Palmira** | **0.82** | **56** | ⇓*iP* | **Pn** | **12 32 29.8** | **-0.2** |
| BCO2 | | | | *i* S | **Sg** | **12 32 40.1** | **+0.4** |
| **LOMA3** | **Las Lomas, Chi** | **0.84** | **78** | *eP* | **Pn** | **12 32 29.9** | **-0.1** |
| LOMA3 | | | | *i* S | **Sg** | **12 32 40.8** | **+0.7** |
| **EDBA** | **Buenos Aires** | **0.91** | **356** | *eP* | **Pn** | **12 32 31.9** | **+0.9** |
| EDBA | | | | *eS* | **Sn** | **12 32 44.1** | **+0.2** |
| **BURE** | **Buenos Aires** | **0.92** | **353** | ⇓*eP* | **Pn** | **12 32 32.1** | **+0.9** |
| BURE | | | | *eS* | **Sn** | **12 32 44.3** | **+0.1** |
| **LNBQ3** | **Los Naranjos,** | **0.94** | **55** | *eP* | **Pn** | **12 32 31.3** | **-0.2** |
| **OCHAL** | **Ojochal** | **0.94** | **333** | *iP* | **Pn** | **12 32 32.4** | **+1.0** |
| OCHAL | | | | *i* S | **Sn** | **12 32 44.9** | **+0.3** |
| OCHAL | comp=Z,280nm,1.0s | | | IAML | | 12 32 50.6 | |
| **PSOM3** | **Paja de Sombre** | **0.99** | **64** | ⇓*eP* | **Pn** | **12 32 32.2** | **+0.1** |
| **DRK0** | **Durika** | **1.01** | **358** | *iP* | **Pn** | **12 32 32.9** | **+0.4** |
| DRK0 | comp=Z,5μm,1.0s | | | IAML | | 12 32 33.2 | |
| DRK0 | | | | *i* S | **Sg** | **12 32 46.0** | **+0.5** |
| **DRK0** | **Durika** | **1.01** | **358** | ⇓*iP* | **Pn** | **12 32 32.9** | **+0.4** |
| DRK0 | | | | *i* S | **Sg** | **12 32 45.8** | **+0.3** |
| **DRK0** | **Durika** | **1.01** | **358** | ⇓*iP* | **Pn** | **12 32 32.9** | **+0.4** |
| DRK0 | | | | *eS* | **Sg** | **12 32 45.9** | **+0.5** |
| **CHGR2** | **Aguacate** | **1.26** | **57** | ⇓*iP* | **Pb** | **12 32 36.3** | **0.0** |
| CHGR2 | | | | *i* S | **Sb** | **12 32 52.0** | **-0.3** |
| **CNI2** | **El Empalme, Bo** | **1.38** | **32** | *eP* | **Pb** | **12 32 38.0** | **-0.2** |
| **NANC3** | **Nancito, Chiri** | **1.47** | **90** | *eP* | **Pg** | **12 32 40.7** | **-0.3** |
| **ABE2** | **San Pablo** | **1.66** | **330** | *eP* | **Pg** | **12 32 45.1** | **+0.3** |
| **LCR2** | **La Lucha 2** | **1.67** | **332** | *iP* | **Pg** | **12 32 44.7** | **-0.3** |
| LCR2 | | | | *i* S | **Sg** | **12 33 06.2** | **-0.6** |
| LCR2 | comp=Z,210nm,1.0s | | | IAML | | 12 33 07.7 | |
| **LCR2** | **La Lucha 2** | **1.67** | **332** | ⇑*iP* | **Pg** | **12 32 45.1** | **+0.1** |
| **VERB** | **Verbena** | **1.75** | **344** | *eP* | **Pg** | **12 32 45.5** | **-0.8** |
| **VTCV** | **VTCV, Calle Va** | **1.79** | **344** | *eP* | **Pb** | **12 32 46.2** | **+0.8** |
| **RAFA** | **San Farael, Vo** | **1.79** | **341** | *iP* | **Pg** | **12 32 46.5** | **-0.8** |
| RAFA | | | | *i* S | **Sb** | **12 33 08.5** | **+0.5** |
| RAFA | comp=Z,1μm,1.0s | | | IAML | | 12 33 17.0 | |
| **CVTV** | **Tajo** | **1.82** | **343** | *eP* | **Pg** | **12 32 46.9** | **-0.9** |
| **CVTQ** | **Turrialba Volc** | **1.82** | **343** | *eP* | **Pg** | **12 32 47.0** | **-0.9** |
| **VTLA** | **Turrialba Volc** | **1.82** | **343** | ⇑*iP* | **Pg** | **12 32 47.5** | **-0.4** |
| **VTR0** | **Volcan Turrial** | **1.83** | **343** | *eP* | **Pg** | **12 32 47.4** | **-0.7** |
| **CVTR** | **Volcan Turrial** | **1.84** | **343** | *eP* | **Pg** | **12 32 47.5** | **-0.6** |
| **LCOCO** | **El Coco** | **1.85** | **350** | *eP* | **Pb** | **12 32 47.0** | **+0.7** |
| **HDC3** | **Heredia 3** | **1.95** | **333** | *iP* | **Pg** | **12 32 49.3** | **-1.0** |
| HDC3 | | | | *i* S | **Sb** | **12 33 12.3** | **0.0** |
| HDC3 | comp=Z,290nm,1.0s | | | IAML | | 12 33 29.0 | |
| **MESA3** | **La Mesa, Verag** | **2.02** | **93** | *eP* | **Pg** | **12 32 51.0** | **-0.4** |
| **GMAL** | **Guarumal, Vera** | **2.02** | **104** | *eP* | **Pb** | **12 32 48.8** | **-0.4** |
| **TCS1** | **Tacares** | **2.08** | **329** | *iP* | **Pb** | **12 32 50.2** | **0.0** |
| TCS1 | comp=Z,2μm,1.0s | | | IAML | | 12 33 31.6 | |
| **MARI3** | **Mariato, Verag** | **2.29** | **105** | *eP* | **Pb** | **12 32 53.7** | **-0.1** |
| **CACAO** | **El Cacao, Vera** | **2.50** | **111** | *iP* | **Pb** | **12 32 56.0** | **-1.4** |
| **SOCE** | **Pocosol** | **2.53** | **327** | *iP* | **Pb** | **12 32 57.3** | **-0.6** |
| SOCE | comp=Z,200nm,1.0s | | | IAML | | 12 33 38.4 | |
| **ARE1** | **Arenal 1** | **2.65** | **326** | *eP* | **Pb** | **12 33 00.4** | **+0.5** |
| **JTS** | **Las Juntas de** | **2.65** | **320** | ⇓*iP* | **Pb** | **12 33 00.4** | **+0.4** |
| JTS | | | | *i* S | **Sn** | **12 33 24.9** | **-2.1** |
| **JTS** | **Las Juntas de** | **2.65** | **320** | *eP* | **Pb** | **12 33 00.1** | **+0.1** |
| **CUI** | **Cuipilapa** | **3.07** | **321** | *eP* | **Pb** | **12 33 06.3** | **-0.8** |

*IDC **08** 12:33:15.5±0.8, 2°61N×128°51E, h0km, mb3.9/9, mbtmp3.9/9, MS3.1/5, Error ellipse: s-maj=67.0km s-min=15.5km az=74.0*
*DJA **08** 12:33:18.7±0.7, 2°N±6°×12°8E±°, h10km, M4.0/5, MLv4.0/5*
*NEIC **08** 12:33:22.4±0.9, 2°49N±0°09×128°1E±0°1, h39km±11km, mb4.0/9, Error ellipse: s-maj=17.4km s-min=10.9km az=64.0*

**ISC 08 12:33:22.5±0.7, 2°48N±0°08×128°1E±0°1, h51km, n27, σ1°00/25, mb3.9/13, MS3.0/4, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.84** | **202** | | **Pn** | **12 33 50.9** | **-0.8** |
| **TNTI** | **Ternate** | **1.84** | **202** | P | **Pn** | **12 33 51.0** | **-0.6** |
| **LUWI** | **Luwuk** | **6.34** | **237** | Pn | **Pn** | **12 34 53.3** | **-0.1** |
| **FAKI** | **Fak Fak** | **6.81** | **142** | Pn | **Pn** | **12 34 59.8** | **-0.1** |
| **TOLI2** | **Tolitoli** | **7.40** | **260** | | **Pn** | **12 35 07.6** | **-0.4** |
| **MTN** | **Manton Dam** | **15.53** | **169** | Pn | **Pn** | **12 36 58.3** | **0.0** |
| MTN | comp=Z,12nm,1.1s | | | IAmb | IAmb | 12 37 10.5 | |
| **KNRA** | **Kununurra** | **18.06** | **178** | | **P** | **12 37 29.0** | **-0.8** |
| **GUMO** | **Guam** comp=Z,38nm,18.8s,baz=254,slow=33 | **19.95** | **56** | LR | LR | 12 44 02.3 | |
| **FITZ** | **Fitzroy Crossi** | **20.59** | **187** | P | **P** | **12 37 57.2** | **-0.2** |
| **WB0** | **Warramunga Arr** | **22.97** | **165** | P | **P** | **12 38 22.9** | **0.0** |
| WB0 | comp=Z,5.7nm,0.7s | | | IAmb | IAmb | 12 38 26.3 | |
| **WRAB** | **Tennant Creek** | **23.12** | **165** | P | **P** | **12 38 25.6** | **+1.2** |
| WRAB | comp=Z,7.4nm,1.1s | | | IAmb | IAmb | 12 38 34.9 | |
| **WRA** | **Warramunga Arr** comp=Z,4.2nm,0.9s,baz=342,slow=10,SNR=23 comp=Z,4.2nm,0.9s | **23.12** | **165** | P | **P** | **12 38 23.3** | **-1.1** |
| **WB2** | **Warramunga Arr** | **23.13** | **165** | P | **P** | **12 38 25.0** | **+0.5** |
| **WR0** | **Warramunga Arr** | **23.19** | **164** | P | **P** | **12 38 25.3** | **+0.2** |
| WR0 | comp=Z,4.2nm,0.9s | | | IAmb | IAmb | 12 38 49.8 | |
| **JOW** | **Kunigami** comp=Z,31nm,21.3s,baz=320,slow=34 | **24.21** | **0** | LR | LR | 12 46 53.9 | |
| **ASAR** | **Alice Springs** comp=Z,0.9nm,0.9s,baz=354,slow=7.7,SNR=8.7 | **26.61** | **168** | P | **P** | **12 38 56.0** | **-0.3** |
| ASAR | comp=Z,0.3nm,0.6s,baz=359,slow=2.0,SNR=5.3 | | | PcP | **PcP** | **12 42 19.6** | **-0.1** |
| ASAR | comp=Z,0.9nm,0.9s | | | LR | LR | 12 50 03.3 | |
| **KSRS** | **Korea Array** comp=Z,0.7nm,0.5s,baz=171,slow=8.7,SNR=4.2 | **34.80** | **360** | P | **P** | **12 40 08.3** | **0.0** |
| KSRS | comp=Z,24nm,20.4s,baz=185,slow=35 comp=Z,0.7nm,0.5s | | | LR | LR | 12 53 25.7 | |
| **STKA** | **Stephens Creek** | **36.51** | **160** | P | **P** | **12 40 22.8** | **-0.3** |
| **STKA** | **Stephens Creek** comp=Z,2.5nm,0.7s,baz=359,slow=8.9,SNR=4.8 comp=Z,2.5nm,0.7s | **36.51** | **160** | P | **P** | **12 40 22.6** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** comp=Z,2.0nm,0.8s,baz=184,slow=9.8,SNR=5.9 comp=Z,2.0nm,0.8s | **41.69** | **4** | P | **P** | **12 41 02.9** | **-3.2** |
| **PALK** | **Pallekele** comp=Z,42nm,18.2s,baz=6.2,slow=40 | **47.40** | **278** | LR | LR | 13 05 27.3 | |
| **SONM** | **Songino Array** comp=Z,0.4nm,0.3s,baz=155,slow=4.8,SNR=2.4 comp=Z,0.4nm,0.3s | **46.90** | **341** | P | **P** | **12 42 03.7** | **+0.2** |
| **MKAR** | **Makanchi Array** comp=Z,0.4nm,0.4s,baz=115,slow=7.9,SNR=7.7 comp=Z,0.4nm,0.4s | **59.33** | **325** | P | **P** | **12 43 20.4** | **+1.1** |
| **ZALV** | **Zalesovo Beam** comp=Z,0.5nm,0.3s,baz=157,slow=7.8,SNR=5.8 comp=Z,0.5nm,0.3s | **62.29** | **333** | P | **P** | **12 43 40.2** | **+0.9** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.4nm,0.4s,baz=123,slow=6.5,SNR=2.8 comp=Z,0.4nm,0.4s | **63.50** | **327** | P | **P** | **12 43 48.0** | **+0.7** |
| **VNDA** | **Vanda** comp=Z,1.3nm,1.0s | **82.03** | **173** | P | **P** | **12 45 38.6** | **+1.9** |
| VNDA | | | | IAmb | IAmb | 12 45 41.2 | |
| **TXAR** | **Lajitas Array** comp=Z,0.3nm,0.7s,baz=205,slow=8.3,SNR=4.0 | **121.29** | **53** | PKP | **PKiKP** | **12 52 11.1** | **+0.2** |

*IDC **08** 12:40:06.3±1.8, 43°79N×128°05W, h0km, mb3.5/5, mbtmp3.5/13, ML3.4/7, MS3.3/18, Error ellipse: s-maj=31.3km s-min=12.7km az=52.0*
*NEIC **08** 12:40:09.5±1.8, 43°71N±0°07×127°82W±0°04, h10km±2km, ML3.2/70, Error ellipse: s-maj=13.0km s-min=4.7km az=160.0*

**ISC 08 12:40:07.5±1.3, 43°75N±0°08×128°1W±0°1, h10km, n65, σ1°22/59, mb3.6/4, MS3.3/10, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **J01E** | **Myrtle Point** | **3.10** | **100** | | **Pn** | **12 40 53.8** | **-2.7** |
| J01E | comp=N,118nm,0.4s | | | IAML | | 12 41 36.0 | |
| **K02D** | **Willamette Mer** | **3.42** | **107** | | **Pn** | **12 40 58.7** | **-2.3** |
| **HEBO** | **Mount Hebo** | **3.44** | **63** | | **Pn** | **12 41 00.2** | **-1.1** |
| HEBO | comp=N,75nm,2.6s | | | IAML | | 12 41 39.6 | |
| HEBO | comp=E,70nm,2.2s | | | IAML | | 12 41 46.7 | |
| **I03D** | **Drain, OR** | **3.45** | **89** | | **Pn** | **12 40 60.0** | **-1.3** |
| I03D | comp=N,50nm,1.0s | | | IAML | | 12 41 45.9 | |
| I03D | comp=E,44nm,0.5s | | | IAML | | 12 41 46.3 | |
| **COR** | **Corvallis** | **3.56** | **75** | | **Pn** | **12 41 02.2** | **-0.5** |
| **DBO** | **Dodson Butte** | **3.60** | **98** | | **Pn** | **12 41 02.1** | **-1.4** |
| DBO | comp=E,39nm,0.6s | | | IAML | | 12 41 49.2 | |
| DBO | comp=N,38nm,0.7s | | | IAML | | 12 41 49.8 | |
| **KSXB** | **Camp Six Broad** | **3.66** | **120** | Pn | **Pn** | **12 41 02.2** | **-2.1** |
| **L02F** | **Cave Junction** | **3.71** | **115** | | **Pn** | **12 41 03.5** | **-1.4** |
| **BUCK** | **Buck Mountain** | **3.73** | **81** | | **Pn** | **12 41 04.7** | **-0.5** |
| BUCK | comp=N,34nm,2.0s | | | IAML | | 12 42 02.3 | |
| **G03D** | **McMinnville, O** | **3.76** | **66** | | **Pn** | **12 41 05.5** | **-0.1** |
| G03D | comp=E,41nm,0.8s | | | IAML | | 12 41 56.0 | |
| G03D | comp=N,50nm,1.2s | | | IAML | | 12 41 58.7 | |
| **KRMB** | **Red Mountain** | **3.82** | **124** | Pn | **Pn** | **12 41 04.2** | **-2.3** |
| **F03A** | **Seaside** | **3.90** | **55** | | **Pn** | **12 41 07.2** | **-0.3** |
| **HUMO** | **Hull Mountain** | **3.94** | **105** | | **Pn** | **12 41 06.7** | **-1.4** |
| HUMO | comp=E,39nm,0.4s | | | IAML | | 12 41 55.8 | |
| HUMO | comp=N,40nm,0.8s | | | IAML | | 12 41 56.8 | |
| **H04D** | **Lebanon** | **3.94** | **77** | | **Pn** | **12 41 07.9** | **-0.1** |
| H04D | comp=N,30nm,0.5s | | | IAML | | 12 41 59.2 | |
| H04D | comp=E,43nm,0.7s | | | IAML | | 12 41 59.9 | |
| **RADR** | **Rader Ridge** | **4.05** | **47** | | **Pn** | **12 41 09.0** | **-0.6** |
| RADR | comp=E,34nm,2.5s | | | IAML | | 12 42 02.5 | |
| RADR | comp=N,39nm,1.8s | | | IAML | | 12 42 19.2 | |
| **I04A** | **Tendick Farm,** | **4.13** | **87** | | **Pn** | **12 41 10.3** | **-0.4** |
| I04A | comp=N,29nm,0.4s | | | IAML | | 12 42 04.7 | |
| I04A | comp=E,40nm,0.2s | | | IAML | | 12 42 05.8 | |
| **E03A** | **Lebam** | **4.26** | **47** | | **Pn** | **12 41 11.8** | **-0.6** |
| E03A | comp=N,37nm,0.3s | | | IAML | | 12 42 04.6 | |
| E03A | comp=E,31nm,0.5s | | | IAML | | 12 42 05.5 | |
| **F04D** | **Rainier, OR** | **4.31** | **55** | | **Pn** | **12 41 13.1** | **+0.1** |
| **H04A** | **Detroit Lake** | **4.36** | **76** | | **Pn** | **12 41 13.5** | **-0.3** |
| H04A | comp=N,32nm,0.4s | | | IAML | | 12 42 10.7 | |
| H04A | comp=E,32nm,0.4s | | | IAML | | 12 42 11.3 | |
| **YBH** | **Yreka Blue Hor** | **4.46** | **115** | | **Pn** | **12 41 15.2** | **-0.1** |
| **YBH** | **Yreka Blue Hor** | **4.46** | **115** | Pn | **Pn** | **12 41 14.8** | **-0.5** |
| YBH | comp=E,1.3nm,0.3s,baz=314,slow=11,SNR=27 comp=E,0.6nm,0.3s,baz=338,slow=16,SNR=1.9 | | | Sn | **Sn** | **12 42 07.2** | **-0.1** |
| YBH | comp=E,155nm,18.6s,baz=302,slow=37 comp=E,2.9nm,0.3s | | | LR | LR | 12 42 51.5 | |
| **WISH** | **Wishkah** | **4.54** | **41** | Pn | **Pn** | **12 41 16.8** | **+0.5** |
| **F04A** | **Amboy** | **4.60** | **60** | | **Pn** | **12 41 17.6** | **+0.6** |
| **NLWA** | **Neilton Lookou** | **4.70** | **38** | | **Pn** | **12 41 18.2** | **-0.3** |
| NLWA | comp=E,19nm,0.4s | | | IAML | | 12 42 16.9 | |
| **K04D** | **Chiloquin, OR** | **4.78** | **101** | Pn | **Pn** | **12 41 19.0** | **-0.7** |
| **HOOD** | **Mount Hood Mea** | **4.88** | **69** | | **Pn** | **12 41 21.6** | **+0.6** |
| HOOD | comp=E,25nm,1.0s | | | IAML | | 12 41 52.8 | |
| **I05D** | **Terrebonne, OR** | **4.92** | **81** | | **Pn** | **12 41 20.9** | **-0.6** |
| I05D | comp=E,18nm,2.2s | | | IAML | | 12 42 45.8 | |
| I05D | comp=N,19nm,3.2s | | | IAML | | 12 42 55.1 | |
| **J05D** | **Fort Rock, OR** | **5.02** | **93** | | **Pn** | **12 41 22.8** | **-0.3** |
| J05D | comp=N,13nm,4.7s | | | IAML | | 12 42 32.2 | |
| J05D | comp=E,14nm,3.3s | | | IAML | | 12 43 42.7 | |
| **G05A** | **Wamic** | **5.08** | **71** | | **Pn** | **12 41 24.4** | **+0.6** |
| G05A | comp=N,18nm,3.7s | | | IAML | | 12 42 37.0 | |
| **PINE** | **Pine Mountain** | **5.19** | **87** | | **Pn** | **12 41 25.2** | **-0.2** |
| PINE | comp=E,13nm,4.0s | | | IAML | | 12 43 06.8 | |
| **GNW** | **Green Mountain** | **5.31** | **42** | | **Pn** | **12 41 26.2** | **-0.7** |
| GNW | comp=E,10nm,0.3s | | | IAML | | 12 42 29.8 | |
| GNW | comp=N,14nm,0.3s | | | IAML | | 12 42 30.0 | |
| **LON** | **Longmire** | **5.36** | **54** | | **Pn** | **12 41 28.0** | **+0.4** |
| LON | comp=N,10.0nm,1.0s | | | IAML | | 12 42 36.7 | |
| **D05A** | **Enumclaw** | **5.51** | **49** | | **Pn** | **12 41 30.4** | **+0.8** |
| **G06A** | **Carlson Farm,** | **5.55** | **72** | | **Pn** | **12 41 29.8** | **-0.4** |
| G06A | comp=E,8.8nm,3.9s | | | IAML | | 12 42 37.4 | |
| **CLRS** | **Cowichan Lake** | **5.77** | **27** | | **Pn** | **12 41 33.9** | **+0.7** |
| **PGC** | **Sidney** | **5.87** | **32** | | **Pn** | **12 41 34.4** | **-0.1** |
| **F07A** | **Phinny Hill Vi** | **6.20** | **67** | | **Pn** | **12 41 38.9** | **-0.1** |
| **I07A** | **Izee** | **6.22** | **84** | | **Pn** | **12 41 39.5** | **-0.1** |
| **ORV** | **Oroville** | **6.49** | **128** | | **Pn** | **12 41 45.1** | **+2.0** |
| **CBB** | **Campbell River** | **6.56** | **16** | | **Pn** | **12 41 45.6** | **+1.6** |
| **HOLB** | **Holberg** | **6.89** | **360** | | **Pn** | **12 41 51.0** | **+2.5** |
| **BMO** | **Blue Mountains** | **7.83** | **78** | | **Pn** | **12 42 00.8** | **-0.8** |
| **C09A** | **Chrisman Ranch** | **7.98** | **56** | | **Pn** | **12 42 03.2** | **-0.3** |
| **BBB** | **Bella Bella** | **8.44** | **360** | | **Pn** | **12 42 11.7** | **+2.0** |
| **BBB** | **Bella Bella** comp=E,0.5nm,0.3s,baz=188,slow=11,SNR=8.3 | **8.44** | **360** | Pn | **Pn** | **12 42 10.4** | **+0.7** |
| BBB | baz=188,slow=23 | | | Sn | **Sn** | **12 43 42.8** | **-2.1** |
| BBB | comp=E,44nm,19.6s,baz=174,slow=31 comp=E,4.6nm,0.6s | | | LR | LR | 12 44 25.9 | |
| **NEW** | **Newport** comp=E,0.7nm,0.3s,baz=238,slow=14,SNR=7.0 | **8.88** | **56** | Pn | **Pn** | **12 42 15.8** | **0.0** |
| NEW | comp=E,255nm,21.1s,baz=251,slow=38 comp=E,1.7nm,0.3s | | | LR | LR | 12 45 39.9 | |
| **NVAR** | **Mina Array Bea** comp=E,0.1nm,0.3s,baz=300,slow=14,SNR=10 comp=E,1.4nm,0.7s | **9.11** | **122** | Pn | **Pn** | **12 42 21.6** | **+2.3** |
| **ELK** | **Elko** comp=E,0.1nm,0.3s,baz=309,slow=7.9,SNR=6.0 | **10.01** | **103** | Pn | **Pn** | **12 42 33.9** | **+2.3** |
| ELK | comp=E,94nm,18.2s,baz=288,slow=40 comp=E,1.1nm,0.7s | | | LR | LR | 12 46 46.1 | |
| **QLMT** | **Earthquake Lak** | **12.01** | **79** | Pn | **Pn** | **12 42 57.0** | **-1.9** |
| **PDAR** | **Pinedale Array** comp=E,0.5nm,0.7s,baz=303,slow=12,SNR=5.2 | **13.56** | **88** | Pn | **Pn** | **12 43 22.4** | **+2.3** |
| PDAR | comp=E,110nm,19.1s,baz=270,slow=39 | | | LR | LR | 12 48 50.5 | |
| **PFO** | **Pinyon Flats O** comp=E,167nm,19.8s,baz=310,slow=36 | **13.60** | **134** | LR | LR | 12 48 18.2 | |
| **DLBC** | **Dease Lake** comp=E,0.1nm,0.3s,baz=168,slow=15,SNR=2.3 | **14.75** | **356** | Pn | **Pn** | **12 43 36.6** | **+0.5** |
| DLBC | comp=E,34nm,21.3s,baz=330,slow=30 comp=E,1.1nm,0.7s | | | LR | LR | 12 47 35.7 | |
| **ANMO** | **Albuquerque** comp=E,0.1nm,0.3s,baz=29,slow=12,SNR=1.4 | **18.87** | **110** | P | **Pn** | **12 44 28.9** | **+0.3** |
| ANMO | comp=E,59nm,18.1s,baz=18,slow=37 comp=E,0.3nm,0.3s | | | LR | LR | 12 51 36.5 | |
| **YKA** | **Yellowknife Ar** comp=E,1.0nm,0.7s,baz=206,slow=9.4,SNR=4.2 comp=E,1.0nm,0.7s | **20.36** | **18** | P | **P** | **12 44 44.0** | **+0.1** |
| **KDAK** | **Kodiak Island** comp=E,114nm,18.7s,baz=132,slow=31 | **20.74** | **321** | LR | LR | 12 50 53.4 | |
| **ULM** | **Lac du Bonnet** comp=E,4.1nm,0.8s,baz=286,slow=12,SNR=5.5 | **22.80** | **62** | P | **P** | **12 45 10.9** | **+0.7** |
| ULM | comp=E,90nm,19.0s,baz=264,slow=37 comp=E,4.1nm,0.8s | | | LR | LR | 12 54 15.3 | |
| **ILAR** | **Eielson Array** comp=E,0.5nm,0.9s,baz=159,slow=8.1,SNR=5.1 | **23.56** | **340** | P | **P** | **12 45 17.6** | **-0.2** |
| ILAR | comp=E,100nm,19.6s,baz=100,slow=33 comp=E,0.5nm,0.9s | | | LR | LR | 12 52 55.6 | |
| **TXAR** | **Lajitas Array** comp=E,1.6nm,1.1s,baz=308,slow=6.2,SNR=9.5 | **24.23** | **118** | P | **P** | **12 45 25.5** | **+0.9** |
| TXAR | comp=E,54nm,19.7s,baz=302,slow=37 comp=E,1.6nm,1.1s | | | LR | LR | 12 54 54.2 | |
| **LPIG** | **La Paz** comp=E,67nm,19.5s,baz=320,slow=34 | **24.45** | **138** | LR | LR | 12 54 01.2 | |
| **INK** | **Inuvik** comp=E,97nm,19.3s,baz=346,slow=36 | **24.78** | **355** | LR | LR | 12 54 46.0 | |
| **SADO** | **Sadowa** comp=E,109nm,18.2s,baz=246,slow=37 | **34.66** | **71** | LR | LR | 13 01 26.0 | |
| **TKL** | **Tuckaleechee C** comp=E,129nm,18.3s,baz=300,slow=38 | **34.71** | **88** | LR | LR | 13 01 48.5 | |
| **CMIG** | **Matias Romero** comp=E,43nm,20.5s,baz=344,slow=37 | **38.65** | **123** | LR | LR | 13 03 59.7 | |
| **SFJD** | **Kangerlussuaq** comp=E,38nm,18.4s,baz=258,slow=38 | **45.94** | **32** | LR | LR | 13 09 02.4 | |
| **KURBB** | **Kurchatov Arra** comp=E,0.3nm,0.5s,baz=17,slow=5.8,SNR=2.4 comp=E,0.3nm,0.5s | **83.18** | **343** | P | **P** | **12 52 32.2** | **-1.4** |

*SOME **08** 12:42:34.1, 42°42N×86°58E, h15km*
*NNC **08** 12:43:07.2±7.8, 42°98N×85°70E, h12km±39km, mb3.3, mpv2.9, Error ellipse: s-maj=46.2km s-min=31.9km az=113.0*

**ISC 08 12:43:12.5±3.3, 42°9N±0°1×84°9E±0°1, h10km, n10, σ2°15/15, 6C-5D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DJR** | **Jarkent** 1.8nm,0.3s | **3.99** | **293** | *eP* | **Pn** | **12 44 11.6** | **-2.2** |
| DJR | 8.8nm,0.5s | | | *eS* | **Sg** | **12 45 21.5** | **+1.1** |
| **PDGK** | **Podgornoye** 1.1nm,0.3s | **4.00** | **278** | ⇓Pn | **Pn** | **12 44 14.6** | **+0.7** |
| PDGK | 31nm,0.9s | | | ⇓Lg | Lg | 12 45 28.8 | |
| **SHLS** | **Shalkode** 28nm,0.2s | **4.01** | **275** | *eP* | Pn | 12 44 06.7 | -7.4 |
|

*BER **08** 12:54:00.7±1.7, 74˚.68N×8˚.65E, h25km±29km, mb(Pn)4.0, Confirmed Earthquake*
*FCIAR **08** 12:54:02.0, 75˚.07N×10˚.14E, h10km, station BJO1 has station magnitude of 4.70 station HOPEN has station magnitude of 5.90*
**ISC 08 12:53:55.6±1.4, 74˚.70N±0˚.07×8˚.95E±0˚.08, h10km, n18, σ2s75/30, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BJO1** | **Bjornoya** | **2.69** | **89** | *eP* | | **Pb** | | **12 54 41.8** | **-1.9** |
| BJO1 | | | | *eS* | | **Sn** | | **12 55 10.7** | **-0.7** |
| BJO1 | | | | IAML | | | | 12 55 23.8 | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **BJO1** | **Bjornoya** | **2.69** | **89** | Pn | | **Pb** | | **12 54 43.9** | **+0.2** |
| **BJO1** | **Bjornoya** | **2.69** | **89** | *eP* | | **Pn** | | **12 54 39.5** | **+0.7** |
| BJO1 | | | | *eS* | | **Sn** | | **12 55 08.6** | **-2.8** |
| | comp=Z,3μm,0.2s | | | | | | | | |
| **HSPB** | **Hornsund (broa** | **2.82** | **32** | *eP* | | **Pn** | | **12 54 43.4** | **+2.7** |
| HSPB | | | | *eS* | | **Sn** | | **12 55 13.8** | **-0.9** |
| HSPB | | | | IAML | | | | 12 55 20.2 | |
| | comp=Z,5.8nm,0.3s | | | | | | | | |
| **HSPB** | **Hornsund (broa** | **2.82** | **32** | Pn | | **Pn** | | **12 54 43.2** | **+2.6** |
| **BRBB** | **Barentsburg B** | **3.63** | **17** | *eP* | | **Pn** | | **12 54 54.5** | **+2.7** |
| **BRBB** | **Barentsburg B** | **3.63** | **17** | Pn | | **Pn** | | **12 54 54.3** | **+2.5** |
| **KBS** | **Kingsbay** | **4.31** | **8** | *eP* | | **Pn** | | **12 55 03.3** | **+2.3** |
| KBS | | | | *eS* | | **Sn** | | **12 55 50.3** | **-1.0** |
| KBS | | | | IAML | | | | 12 55 58.5 | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| **KBS** | **Kingsbay** | **4.31** | **8** | Pn | | **Pn** | | **12 55 03.1** | **+2.1** |
| KBS | | | | Sn | | **Sn** | | **12 55 50.3** | **-1.0** |
| **KBS** | **Kingsbay** | **4.31** | **8** | *eP* | | **Pn** | | **12 55 03.0** | **+1.9** |
| KBS | | | | *eS* | | **Sn** | | **12 55 43.2** | **-8.0** |
| **HOPEN** | **Hopen** | **4.39** | **58** | *eP* | | **Pn** | | **12 55 05.8** | **+3.6** |
| HOPEN | | | | *eS* | | **Sn** | | **12 55 53.6** | **+0.2** |
| HOPEN | | | | IAML | | | | 12 56 04.7 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **HOPEN** | **Hopen** | **4.39** | **58** | Pn | | **Pn** | | **12 55 05.4** | **+3.1** |
| HOPEN | | | | Sn | | **Sn** | | **12 55 52.8** | **-0.6** |
| **HOPEN** | **Hopen** | **4.39** | **58** | *eP* | | **Pn** | | **12 55 05.8** | **+3.6** |
| HOPEN | | | | *eS* | | **Sn** | | **12 55 51.3** | **-2.0** |
| | comp=Z,14μm,0.2s | | | | | | | | |
| **JMIC** | **Jan Mayen** | **6.35** | **243** | *eP* | | **Pn** | | **12 55 29.1** | **+0.1** |
| JMIC | | | | IAML | | | | 12 56 46.2 | |
| | comp=Z,18nm,0.7s | | | | | | | | |
| **JMIC** | **Jan Mayen** | **6.35** | **243** | Pn | | **Pn** | | **12 55 28.2** | **-0.8** |
| **ARA0** | **ARCESS Array S** | **7.24** | **127** | Pn | | **Pn** | | **12 55 43.8** | **+2.5** |
| | baz=325,slow=11 | | | | | | | | |
| ARA0 | | | | Sn | | **Sn** | | **12 57 01.3** | **-2.1** |
| | baz=331,slow=18 | | | | | | | | |
| **ZFI2** | **Zemlya Franca-** | **9.98** | **35** | *eP* | | **Pn** | | **12 56 21.8** | **+3.0** |
| ZFI2 | | | | *eS* | | **Sn** | | **12 58 07.3** | **-3.2** |
| **OMEGA** | **Omega** | **9.98** | **36** | *eP* | | **Pn** | | **12 56 21.2** | **+2.4** |
| OMEGA | | | | *eS* | | **Sn** | | **12 58 07.9** | **-2.8** |

*IDC **08** 13:10:32.0±2.1, 8˚.10S×74˚.16W, h138km±21km, mb3.8/7, mbtmp4.2/11, Error ellipse: s-maj=23.9km s-min=16.1km az=52.0*
*VAO **08** 13:10:34.7±0.4, 8˚.39S×74˚.32W, h153km±3km, mb4.1*
**ISC 08 13:10:33.1±0.5, 8˚.27S±0˚.07×74˚.42W±0˚.05, h150km, n34, σ1s18/40, mb4.0/9, 3C, Peru-Brazil border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CZSB** | **Cruzeiro do Su** | **1.78** | **73** | *eP* | | **Pn** | | **13 11 07.5** | **+1.6** |
| CZSB | | | | *eS* | | **Sn** | | **13 11 32.9** | **+2.1** |
| **ATAH** | **Atahualpa** | **4.10** | **286** | P | | **Pn** | | **13 11 35.9** | **+0.8** |
| | 49nm,0.4s,baz=61,slow=4.6,SNR=132 | | | | | | | | |
| ATAH | | | | S | | **Sn** | | **13 12 22.3** | **-0.8** |
| | 113nm,0.6s,baz=116,slow=18,SNR=16 | | | | | | | | |
| **NNA** | **Nana** | **4.39** | **213** | P | | **Pn** | | **13 11 40.7** | **+2.1** |
| | 29nm,0.3s,baz=36,slow=4.6,SNR=20 | | | | | | | | |
| NNA | | | | S | | **Sn** | | **13 12 29.4** | **-0.2** |
| | 117nm,0.3s,baz=296,slow=22,SNR=18 | | | | | | | | |
| **ETMB** | **Extrema** | **8.25** | **101** | *eP* | | **Pn** | | **13 12 28.1** | **-1.8** |
| **LPAZ** | **La Paz** | **10.06** | **143** | P | | **Pn** | | **13 12 54.6** | **+0.1** |
| | 1.4nm,0.4s,baz=320,slow=14,SNR=4.2 | | | | | | | | |
| **LPAZ** | **La Paz** | **10.06** | **143** | *eP* | | **Pn** | | **13 12 54.1** | **-0.5** |
| **MACA** | **Manacapuru-AM** | **14.58** | **70** | *eP* | | **Pn** | | **13 13 52.6** | **+0.2** |
| **VILB** | **Vilhena** | **14.73** | **110** | *eP* | | **Pn** | | **13 13 54.2** | **-0.1** |
| **SIV** | **San Ignacio** | **15.13** | **122** | P | | **Pn** | | **13 13 58.5** | **-0.9** |
| | 1.6nm,0.3s,baz=295,slow=11,SNR=13 | | | | | | | | |
| **BBSD** | **Serra de San D** | **16.11** | **125** | *eP* | | **Pn** | | **13 14 10.6** | **-0.8** |
| **PTLB** | **Pontes e Lacer** | **16.56** | **117** | *eP* | | **P** | | **13 14 17.4** | **+0.7** |
| **BOAV** | **Boa Vista** | **17.45** | **53** | *eP* | | **P** | | **13 14 27.3** | **+0.8** |
| **SDV** | **Santo Domingo** | **17.46** | **13** | *eP* | | **Pn** | | **13 14 30.7** | **+2.9** |
| **PDRB** | **Porto dos Gac** | **17.74** | **102** | *eP* | | **P** | | **13 14 30.0** | **+0.3** |
| **CLDB** | **Colider** | **18.55** | **99** | *eP* | | **P** | | **13 14 39.0** | **+0.4** |
| **NPGB** | **Novo Progresso** | **18.93** | **88** | *eP* | | **P** | | **13 14 42.4** | **-0.4** |
| **ITTB** | **Itaituba** | **18.97** | **79** | *eP* | | **P** | | **13 14 43.4** | **+0.3** |
| **SNDB** | **Serra Nova Dou** | **23.06** | **101** | *eP* | | **P** | | **13 15 25.0** | **-0.6** |
| **ARAG** | **Araguaiana, MT** | **23.30** | **111** | *eP* | | **P** | | **13 15 26.8** | **-1.0** |
| **MCPB** | **Macapa, AP** | **23.63** | **72** | *eP* | | **P** | | **13 15 29.9** | **-1.0** |
| **CPUP** | **Villa Florida** | **24.21** | **140** | P | | **P** | | **13 15 35.2** | **-0.8** |
| | 4.2nm,0.6s,baz=325,slow=9.4,SNR=11 | | | | | | | | |
| | 4.2nm,0.6s | | | | | | | | |
| **CPUP** | **Villa Florida** | **24.21** | **140** | *eP* | | **P** | | **13 15 35.5** | **-0.5** |
| **PRPB** | **Parauapebas** | **24.50** | **87** | *eP* | | **P** | | **13 15 39.5** | **+0.7** |
| **IPMB** | **Ipameri, GO** | **27.25** | **113** | *eP* | | **P** | | **13 16 02.9** | **-0.7** |
| **TXAR** | **Lajitas Array** | **46.81** | **324** | P | | **P** | | **13 18 48.7** | **+0.7** |
| | 0.4nm,0.5s,baz=150,slow=7.9,SNR=8.9 | | | | | | | | |
| TXAR | | | | pP | | **pP** | | **13 19 21.0** | **-0.9** |
| | 0.3nm,0.6s,baz=145,slow=10,SNR=4.8 | | | | | | | | |
| TXAR | | | | PcP | | **PcP** | | **13 20 18.5** | **-0.2** |
| | 0.2nm,0.6s,baz=105,slow=6.8,SNR=1.7 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |
| **DBIC** | **Dimbokro** | **70.93** | **80** | P | | **P** | | **13 21 33.0** | **-1.8** |
| | 3.4nm,0.5s,baz=251,slow=4.6,SNR=7.4 | | | | | | | | |
| | 3.4nm,0.5s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **74.23** | **162** | ⇑P | | **P** | | **13 21 53.7** | **+0.5** |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **74.81** | **162** | ⇑P | | **P** | | **13 21 57.4** | **+0.8** |
| | comp=Z,2.1nm,0.6s,baz=279,slow=3.5 | | | | | | | | |
| **SNAA** | **Sanae** | **76.44** | **162** | ⇑P | | **P** | | **13 22 06.7** | **+0.8** |
| | comp=Z,28nm,0.4s | | | | | | | | |
| **SNAA** | **Sanae** | **76.44** | **162** | P | | **P** | | **13 22 06.9** | **+1.0** |
| | comp=Z,1.7nm,0.5s,baz=272,slow=7.8,SNR=16 | | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.52** | **75** | P | | **P** | | **13 22 16.7** | **-1.7** |
| | comp=Z,3.9nm,0.6s,baz=264,slow=3.9,SNR=25 | | | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **80.53** | **48** | P | | **P** | | **13 22 28.0** | **-0.9** |
| | comp=Z,0.7nm,0.7s,baz=249,slow=6.4,SNR=5.6 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.84** | **180** | P | | **P** | | **13 22 36.7** | **+1.3** |
| | comp=Z,1.2nm,0.6s,baz=125,slow=1.7,SNR=13 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **140.15** | **225** | PKP | | **PKPdf** | | **13 29 45.1** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=127,slow=2.1,SNR=10 | | | | | | | | |
| WRA | | | | pPKP | | **pPKPdf** | | **13 30 22.1** | **-2.7** |
| | comp=Z,0.4nm,1.0s,baz=120,slow=2.0,SNR=2.1 | | | | | | | | |

*ISN **08** 13:11:41.5±0.5, 34˚.62N×46˚.28E, h9km±6km, ML3.6*
*TEH **08** 13:11:42.2, 34˚.61N×46˚.27E, h7km±60km, ML3.5*
**ISC 08 13:11:42.4±1.2, 34˚.61N±0˚.03×46˚.24E±0˚.03, h3km±13km, n30, σ1s02/36, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **53** | Pg | | **Pg** | | **13 11 45.5** | **0.0** |
| IDHR | | | | Sg | | **Sg** | | **13 11 48.3** | **+0.7** |
| **IGHG** | **Ghaleghazi** | **0.39** | **135** | Pg | | **Pg** | | **13 11 50.6** | **+0.6** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **260** | Pg | | **Pg** | | **13 11 53.4** | **+0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **209** | Pg | | **Pg** | | **13 11 53.0** | **-0.2** |
| **ILIN** | **Lien** | **0.67** | **62** | Pg | | **Pg** | | **13 11 54.7** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.74** | **116** | Pg | | **Pg** | | **13 11 56.1** | **-0.5** |
| KCHF | | | | Sg | | **Sb** | | **13 12 07.9** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **181** | Pg | | **Pg** | | **13 12 01.1** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.17** | **77** | Pg | | **Pb** | | **13 12 04.6** | **-0.9** |
| SNQR | | | | Sg | | **Sb** | | **13 12 20.6** | **-0.7** |
| **IBZA** | **Bozab** | **1.35** | **95** | Pg | | **Pb** | | **13 12 07.8** | **-0.7** |
| **IBDR** | **Badra** | **1.52** | **190** | *ePn* | | **Pb** | | **13 12 11.0** | **-0.2** |
| IBDR | | | | *eSn* | | **Sg** | | **13 12 32.0** | **+0.9** |
| IBDR | | | | AML | | AML | | 13 12 44.0 | |
| | comp=N,661nm,0.9s | | | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.66** | **338** | Pg | | **Pb** | | **13 12 13.0** | **-0.7** |
| **IKFM** | **Kafar-mosalman** | **1.72** | **129** | Pg | | **Pg** | | **13 12 14.7** | **-0.6** |
| **IKRK** | **Kirkuk** | **1.75** | **297** | *ePn* | | **Pb** | | **13 12 14.0** | **-1.2** |
| IKRK | | | | *eSn* | | **Sg** | | **13 12 38.0** | **-0.6** |
| IKRK | | | | AML | | AML | | 13 12 43.2 | |
| | comp=N,1μm,0.5s | | | | | | | | |
| IKRK | | | | AML | | AML | | 13 12 44.9 | |
| | comp=E,952nm,0.6s | | | | | | | | |
| **HSAM** | **Samen** | **1.99** | **101** | Pn | | **Pb** | | **13 12 18.5** | **-1.0** |
| **BHD** | **Baghdad** | **2.04** | **230** | *ePn* | | **Pn** | | **13 12 18.0** | **+0.3** |
| BHD | | | | *eSn* | | **Sb** | | **13 12 45.0** | **-1.0** |
| BHD | | | | AML | | AML | | 13 12 59.4 | |
| | comp=E,449nm,0.5s | | | | | | | | |
| **MAHB** | **Mahabad** | **2.20** | **349** | Pn | | **Pb** | | **13 12 21.8** | **-1.1** |
| **QABG** | **Abgarm-Qazvin** | **2.95** | **67** | Pn | | **Pn** | | **13 12 32.1** | **+1.6** |
| **IAZR** | **Azarshahr** | **3.07** | **356** | Pn | | **Pn** | | **13 12 33.9** | **+1.8** |
| **IPIR** | **Pirpir** | **4.33** | **115** | Pn | | **Pn** | | **13 12 50.1** | **+0.6** |
| **QAMS** | **Qamsar** | **4.36** | **100** | Pn | | **Pn** | | **13 12 51.6** | **+1.6** |
| **JHBN** | **Jahan bin** | **4.40** | **121** | Pn | | **Pn** | | **13 12 51.5** | **+1.1** |
| **GRMI** | **Germi** | **4.40** | **17** | Pn | | **Pn** | | **13 12 52.1** | **+1.9** |
| **IVRN** | **Varamin** | **4.53** | **84** | Pn | | **Pn** | | **13 12 53.2** | **+1.2** |
| **ZNGN** | **Zangian** | **4.59** | **121** | Pn | | **Pn** | | **13 12 54.1** | **+1.0** |
| **IKLH** | **Kolahrood** | **4.62** | **105** | Pn | | **Pn** | | **13 12 54.5** | **+1.0** |
| **ISFB** | **Sefidab** | **4.96** | **91** | Pn | | **Pn** | | **13 12 58.7** | **+0.7** |
| **IZEF** | **Zefreh** | **5.35** | **107** | Pn | | **Pn** | | **13 13 05.1** | **+1.6** |
| **IFIR** | **Firoozkooh** | **5.44** | **77** | Pn | | **Pn** | | **13 13 05.6** | **+0.9** |
| **KLNJ** | **Kolanjah** | **5.76** | **127** | Pn | | **Pn** | | **13 13 10.1** | **+0.8** |
| **IRAM** | **Ramesheh** | **5.86** | **117** | Pn | | **Pn** | | **13 13 11.3** | **+0.9** |

*JMA **08** 13:18:36.9±0.2, 25˚.N±4˚×122˚.5E±0˚.8, h97km±1km, MV1.8/8, NW OFF ISHIGAKIJIMA IS*
*TAP **08** 13:18:37.1, 24˚.70N×122˚.33E, h101km, ML2.5, C*
**ISC 08 13:18:36.5±1.6, 24˚.63N±0˚.06×122˚.43E±0˚.03, h101km±10km, n51, σ0s70/81, 5C-4D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.27** | **220** | P | | **Pn** | | **13 18 51.5** | **+0.6** |
| | baz=213 | | | | | | | | |
| EOS2 | | | | S | | **Sn** | | **13 19 02.8** | **+1.2** |
| | baz=213 | | | | | | | | |
| **EOS3** | **EOS3** | **0.35** | **196** | P | | **Pn** | | **13 18 52.0** | **+0.8** |
| | baz=198 | | | | | | | | |
| EOS3 | | | | S | | **Sn** | | **13 19 03.7** | **+1.4** |
| | baz=198 | | | | | | | | |
| **JYNG** | **Yonaguunijimaku** | **0.51** | **110** | *eP* | | **Pn** | | **13 18 52.4** | **0.0** |
| **EOS4** | **EOS4** | **0.51** | **191** | *eP* | | **Pn** | | **13 18 52.2** | **+0.2** |
| | baz=189 | | | | | | | | |
| EOS4 | | | | S | | **Sn** | | **13 19 04.5** | **+0.9** |
| | baz=189 | | | | | | | | |
| **TWC** | **Suao** | **0.53** | **268** | P | | **Pn** | | **13 18 52.3** | **-0.2** |
| | baz=258 | | | | | | | | |
| TWC | | | | S | | **Sn** | | **13 19 03.1** | **-1.4** |
| | baz=258 | | | | | | | | |
| **ESAO** | **Su ao** | **0.53** | **265** | S | | **Sn** | | **13 19 03.7** | **-0.9** |
| | baz=254 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.56** | **107** | S | | **Sn** | | **13 19 04.5** | **-0.4** |
| | baz=117 | | | | | | | | |
| **EWUT** | **Wuta** | **0.62** | **253** | *eP* | | **Pn** | | **13 18 53.4** | **+0.2** |
| | baz=243 | | | | | | | | |
| EWUT | | | | *eS* | | **Sn** | | **13 19 05.5** | **-0.4** |
| | baz=243 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.64** | **302** | ⇓P | | **Pn** | | **13 18 53.6** | **0.0** |
| | baz=298 | | | | | | | | |
| TIPB | | | | S | | **Sn** | | **13 19 05.3** | **-1.0** |
| | baz=298 | | | | | | | | |
| **NDS** | **Dongshan** | **0.65** | **271** | *eP* | | **Pn** | | **13 18 53.9** | **+0.4** |
| | baz=263 | | | | | | | | |
| **ENA** | **Nanau** | **0.65** | **253** | P | | **Pn** | | **13 18 53.8** | **+0.2** |
| | baz=242 | | | | | | | | |
| ENA | | | | S | | **Sn** | | **13 19 06.3** | **0.0** |
| | baz=242 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.68** | **313** | *eP* | | **Pn** | | **13 18 53.8** | **-0.1** |
| | baz=316 | | | | | | | | |
| SXI1 | | | | S | | **Sn** | | **13 19 06.2** | **-0.8** |
| | baz=316 | | | | | | | | |
| **TWE** | **Neicheng** | **0.70** | **278** | *eP* | | **Pn** | | **13 18 54.1** | **+0.2** |
| | baz=274 | | | | | | | | |
| TWE | | | | S | | **Sn** | | **13 19 06.1** | **-1.0** |
| | baz=274 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.77** | **280** | P | | **Pn** | | **13 18 54.9** | **+0.2** |
| | baz=280 | | | | | | | | |
| FUSB | | | | S | | **Sn** | | **13 19 07.5** | **-1.0** |
| | baz=280 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.78** | **271** | ⇓P | | **Pn** | | **13 18 55.6** | **+0.8** |
| | baz=271 | | | | | | | | |
| **LATG** | **Datong** | **0.82** | **264** | P | | **Pn** | | **13 18 55.6** | **+0.4** |
| | baz=252 | | | | | | | | |
| LATG | | | | S | | **Sn** | | **13 19 09.5** | **+0.2** |
| | baz=252 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.83** | **269** | P | | **Pn** | | **13 18 55.9** | **+0.7** |
| | baz=262 | | | | | | | | |
| NDT | | | | S | | **Sn** | | **13 19 09.5** | **+0.2** |
| | baz=262 | | | | | | | | |
| **NWLT** | **Wulai** | **0.85** | **280** | *eP* | | **Pn** | | **13 18 56.1** | **+0.7** |
| | baz=281 | | | | | | | | |
| NWLT | | | | *eS* | | **Sn** | | **13 19 08.8** | **-0.9** |
| | baz=281 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.88** | **239** | ⇓*eP* | | **Pn** | | **13 18 55.5** | **-0.2** |
| | baz=227 | | | | | | | | |
| NACB | | | | *eS* | | **Sn** | | **13 19 09.4** | **-0.8** |
| | baz=227 | | | | | | | | |
| **YM01** | **YM01** | **0.93** | **304** | *eP* | | **Pn** | | **13 18 56.4** | **+0.1** |
| | baz=296 | | | | | | | | |
| YM01 | | | | *eS* | | **Sn** | | **13 19 10.1** | **-1.1** |
| | baz=296 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.96** | **273** | ⇑P | | **Pn** | | **13 18 57.1** | **+0.5** |
| | baz=275 | | | | | | | | |
| YHNB | | | | *eS* | | **Sn** | | **13 19 11.6** | **-0.1** |
| | baz=275 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.96** | **244** | *eP* | | **Pn** | | **13 18 56.6** | **0.0** |
| | baz=237 | | | | | | | | |
| ETLH | | | | S | | **Sn** | | **13 19 11.6** | **-0.2** |
| | baz=237 | | | | | | | | |
| **NNSB** | **Datong** | **0.97** | **258** | ⇓P | | **Pn** | | **13 18 57.1** | **+0.4** |
| | baz=248 | | | | | | | | |
| NNSB | | | | *eS* | | **Sn** | | **13 19 11.7** | **-0.3** |
| | baz=248 | | | | | | | | |
| **NSK** | **Sanguang** | **0.97** | **273** | P | | **Pn** | | **13 18 57.3** | **+0.5** |
| | baz=275 | | | | | | | | |
| NSK | | | | S | | **Sn** | | **13 19 11.9** | **-0.1** |
| | baz=275 | | | | | | | | |
| **ETM** | **Tongmen** | **1.08** | **232** | *eP* | | **Pn** | | **13 18 57.7** | **-0.1** |
| | baz=236 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.10** | **237** | ⇑P | | **Pn** | | **13 18 57.9** | **-0.3** |
| | baz=222 | | | | | | | | |
| LXIB | | | | *eS* | | **Sn** | | **13 19 13.4** | **-1.3** |
| | baz=222 | | | | | | | | |
| **FUSS** | **Fushou** | **1.14** | **251** | *eP* | | **Pn** | | **13 18 59.5** | **+0.7** |
| | baz=240 | | | | | | | | |
| FUSS | | | | *eS* | | **Sn** | | **13 19 15.4** | **-0.2** |
| | baz=240 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.16** | **246** | *eP* | | **Pn** | | **13 18 59.5** | **+0.2** |
| | baz=235 | | | | | | | | |
| WHF | | | | *eS* | | **Sn** | | **13 19 15.9** | **-0.4** |
| | baz=235 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.19** | **271** | *eP* | | **Pn** | | **13 18 59.6** | **+0.4** |
| | baz=276 | | | | | | | | |
| NFF | | | | *eS* | | **Sn** | | **13 19 16.2** | **-0.1** |
| | baz=276 | | | | | | | | |
| **TWT** | **Tachien** | **1.20** | **252** | *eP* | | **Pn** | | **13 19 00.1** | **+0.7** |
| | baz=241 | | | | | | | | |
| **TDCB** | **Techi** | **1.21** | **252** | *eP* | | **Pn** | | **13 19 00.4** | **+0.9** |
| | baz=241 | | | | | | | | |
| TDCB | | | | *eS* | | **Sn** | | **13 19 16.7** | **-0.2** |
| | baz=241 | | | | | | | | |
| **ESL** | **Shilin** | **1.22** | **228** | *eP* | | **Pn** | | **13 18 58.8** | **-0.6** |
| | baz=229 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.22** | **103** | *eP* | | **Pn** | | **13 18 59.6** | **+0.2** |
| IRIF | | | | *eS* | | **Sn** | | **13 19 16.6** | **-0.2** |
| **CHGB** | **Renai** | **1.27** | **244** | ⇑P | | **Pn** | | **13 19 00.8** | **+0.6** |
| | baz=233 | | | | | | | | |
| CHGB | | | | *eS* | | **Sn** | | **13 19 18.6** | **+0.3** |
| | baz=233 | | | | | | | | |
| **LIOB** | **Emei** | **1.28** | **271** | *eP* | | **Pn** | | **13 19 00.8** | **+0.7** |
| | baz=267 | | | | | | | | |
| LIOB | | | | *eS* | | **Sn** | | **13 19 18.2** | **+0.1** |
| | baz=267 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.31** | **227** | ⇑P | | **Pn** | | **13 18 59.8** | **-0.7** |
| | baz=227 | | | | | | | | |
| WARBT | | | | *eS* | | **Sn** | | **13 19 17.2** | **-1.5** |
| | baz=227 | | | | | | | | |
| **WUSB** | **Renai** | **1.35** | **242** | ⇑*iP* | | **Pn** | | **13 19 01.7** | **+0.6** |
| | baz=233 | | | | | | | | |
| WUSB | | | | *eS* | | **Sn** | | **13 19 19.2** | **-0.5** |
| | baz=233 | | | | | | | | |
| **WHP** | **Taichung City** | **1.39** | **256** | P | | **Pn** | | **13 19 02.9** | **+1.3** |
| | baz=260 | | | | | | | | |
| WHP | | | | *eS* | | **Sn** | | **13 19 21.1** | **+0.5** |
| | baz=260 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.45** | **219** | *eP* | | **Pn** | | **13 19 02.1** | **-0.1** |
| | baz=207 | | | | | | | | |
| **VWDT** | **VWDT** | **1.46** | **234** | *eP* | | **Pn** | | **13 19 02.8** | **+0.6** |
| | baz=222 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.49** | **248** | *eP* | | **Pn** | | **13 19 03.9** | **+1.2** |
| | baz=252 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.50** | **105** | *eS* | | **Sn** | | **13 19 22.6** | **+0.1** |
| **EHY** | **Hungye** | **1.50** | **222** | *eP* | | **Pn** | | **13 19 02.3** | **-0.5** |
| | baz=224 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.58** | **238** | *eP* | | **Pn** | | **13 19 05.3** | **+1.5** |
| | baz=234 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.59** | **99** | *eS* | | **Sn** | | **13 19 23.7** | **-0.9** |
| **TYC** | **Yuchr** | **1.60** | **244** | *eP* | | **Pn** | | **13 19 05.5** | **+1.5** |
| | baz=247 | | | | | | | | |
| **YULB** | **Yu-li** | **1.60** | **220** | *eP* | | **Pn** | | **13 19 03.3** | **-0.8** |
| | baz=222 | | | | | | | | |
| **EYUL** | **Yuli** | **1.63** | **219** | *eP* | | **Pn** | | **13 19 04.1** | **-0.3** |
| | baz=221 | | | | | | | | |
| **TWF1** | **Yuli** | **1.64** | **219** | *eP* | | **Pn** | | **13 19 03.7** | **-0.8** |
| | baz=222 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.72** | **91** | *eP* | | **Pn** | | **13 19 05.8** | **+0.4** |
| **JTJ** | **Tarama** | **2.07** | **89** | *eS* | | **Sn** | | **13 19 35.7** | **+0.1** |

*MOS **08** 13:18:47.6±0.7, 44˚.05N×149˚.77E, h39km, mb3.9/1, Error ellipse: s-maj=21.2km s-min=12.0km az=10.5*
*NEIC **08** 13:18:47.1±1.3, 44˚.0N±0˚.1×149˚.8E±0˚.2, h10km±2km, mb4.2/12, Error ellipse: s-maj=20.0km s-min=17.4km az=93.0*
*JMA **08** 13:18:48.4±0.6, 45˚.N±3˚×15˚.0E±˚, h30km, MV3.8/12, SE OFF ETOROFU*
*SKHL **08** 13:18:48.7±0.5, 44˚.00N×149˚.80E, h43km±2km, mb4.4/3*
*IDC **08** 13:18:48.4±20.0, 44˚.67N×149˚.46E, h0km, mb3.9/5, mbtmp3.8/6, ML3.0/1, Error ellipse: s-maj=460.2km s-min=49.6km az=156.0*
**ISC 08 13:18:49.8±0.9, 43˚.96N±0˚.07×149˚.65E±0˚.08, h35km, n49, σ1s28/64, mb4.2/10, 1C, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.80** | **315** | *i* P | | **Pn** | | **13 19 16.7** | **-1.6** |
| KUR | | | | AMB | | AMB | | 13 19 19.4 | |
| | 150nm,0.4s | | | | | | | | |
| KUR | | | | *i* S | | **Sn** | | **13 19 38.1** | **-1.8** |
| KUR | | | | A | | A | | 13 19 42.4 | |
| | 420nm,0.4s | | | | | | | | |
| KUR | | | | A | | A | | 13 19 42.4 | |
| | 450nm,0.4s | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.80** | **315** | *c i* PN | | **Pn** | | **13 19 16.2** | **-2.1** |
| KUR | | | | *i* S | | **Sn** | | **13 19 38.2** | **-1.7** |
| KUR | | | | pmax | | pmax | | | |
| | comp=Z,183nm,0.4s | | | | | | | | |
| KUR | | | | pmax | | pmax | | | |
| | comp=E,77nm,0.3s | | | | | | | | |
| KUR | | | | smax | | smax | | | |
| | comp=N,494nm,0.3s | | | | | | | | |
| KUR | | | | smax | | smax | | | |
| | comp=E,422nm,0.5s | | | | | | | | |
| **SHO** | **Shikotan** | **2.04** | **268** | *eP* | | **Pn** | | **13 19 21.2** | **-0.4** |
| SHO | | | | AMB | | AMB | | 13 19 23.0 | |
| | comp=E,30nm,0.3s | | | | | | | | |
| SHO | | | | *eS* | | **Sn** | | **13 19 44.7** | **-1.2** |
| SHO | | | | A | | A | | 13 19 47.4 | |
| | comp=E,90nm,0.3s | | | | | | | | |
| SHO | | | | A | | A | | 13 19 47.4 | |
| | comp=E,160nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **2.04** | **268** | *e*PN | | **Pn** | | **13 19 21.6** | **0.0** |
| SHO | | | | *eS* | | **Sn** | | **13 19 44.6** | **-1.3** |
| SHO | | | | smax | | smax | | | |
| | comp=N,116nm,0.2s | | | | | | | | |
| SHO | | | | smax | | smax | | | |
| | comp=E,166nm,0.3s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.74** | **273** | *eP* | | **Pn** | | **13 19 31.5** | **+0.3** |
| YUK | | | | AMB | | AMB | | 13 19 32.8 | |
| | comp=E,80nm,0.3s | | | | | | | | |
| YUK | | | | *eS* | | **Sn** | | **13 20 03.0** | **0.0** |
| YUK | | | | A | | A | | 13 20 07.1 | |
| | comp=E,140nm,0.4s | | | | | | | | |
| YUK | | | | A | | A | | 13 20 07.1 | |
| | comp=E,170nm,0.4s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.74** | **273** | *e*PN | | **Pn** | | **13 19 32.0** | **+0.8** |
| YUK | | | | *eS* | | **Sn** | | **13 20 03.3** | **+0.3** |
| YUK | | | | smax | | smax | | | |
| | comp=N,74nm,0.3s | | | | | | | | |
| YUK | | | | smax | | smax | | | |
| | comp=E,162nm,0.3s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.90** | **259** | *eP* | | **Pn** | | **13 19 32.7** | **-0.7** |
| NEM2 | | | | *eS* | | **Sn** | | **13 20 05.1** | **-1.9** |
| **NMR** | **Nemuro--Hokkai** | **2.91** | **260** | *eP* | | **Pn** | | **13 19 33.2** | **-0.3** |
| NMR | | | | *eS* | | **Sn** | | **13 20 06.2** | **-1.1** |
| **NMR** | **Nemuro--Hokkai** | **2.91** | **260** | *e*PN | | **Pn** | | **13 19 33.8** | **+0.3** |
| NMR | | | | *eS* | | **Sn** | | **13 20 06.0** | **-1.2** |
| **RUSJ** | **Misakicho** | **3.18** | **274** | *e*PN | | **Pn** | | **13 19 37.9** | **+0.6** |
| RUSJ | | | | *eS* | | **Sn** | |

*s-maj=13.5km s-min=12.0km az=134.0*

*NIED* ***08*** *13:26:58.5, 44˚.41N×149˚.48E, h30km, MW4.8, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁶Nm; Mrr1.18; Mθθ-0.69; Mϕϕ-0.49; Mrθ-0.07; Mθϕ-0.63; Mϕr0.96; Fault plane solution: M₀1.52000×10¹⁶ NP1:ϕs23.00000°, δ63.00000°, λ65.00000°. NP2:ϕs250.00000°, δ36.00000°, λ131.00000°.*

*JMA* ***08*** *13:26:58.5±1.1, 44˚N±4˚×14˚9E±˚, h30km, MV4.9/18, SE OFF ETOROFU*

*BJI* ***08*** *13:26:58.2±0.0, 44˚.32N×149˚.47E, h29km, mb5.0/51, mB5.0/20, Ms4.7/49, Ms7 4.6/47*

*SKHL* ***08*** *13:26:58.7±0.8, 44˚.10N×149˚.60E, h45km±2km, mb5.3/6, mbv5.3/3, ms4.6/6*

*MOS* ***08*** *13:27:00.3±1.0, 44˚.25N×149˚.34E, h38km, mb5.1/71, MS4.6/26, Error ellipse: s-maj=6.1km s-min=4.0km az=125.4*

*GCMT* ***08*** *13:27:00.7±0.5, 44˚.19N±0˚.03×149˚.70E±0˚.04, h26km±1km, MW4.8/64, Moment Tensor Solution. s24,c24; s64,c84; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr0.82±.15; Mθθ-0.44±.10; Mϕϕ-0.38±.10; Mrθ0.49±.19; Mϕθ-1.49±.07; Mϕr0.87±.18; Best double couple: M₀1.79000×10¹⁶ NP1:ϕs14.00000°, δ74.00000°, λ48.00000°. NP2: ϕs267.00000°, δ44.00000°, λ156.00000°. Principal axes: T 1.3710, Plg45.0000°, Azm243.0000°; N 0.8390, Plg40.0000°, Azm29.0000°; P -2.2100, Plg18.0000°, Azm134.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***08*** *13:27:01.7±1.7, 44˚.33N±0˚.10×149˚.3E±0˚.1, h31km±5km, mb4.9/112 Error ellipse: s-maj=16.8km s-min=11.1km az=132.0*

*BGR* ***08*** *13:27:04.8, 44˚.48N×148˚.62E, h33km, mb4.8, Ms4.3*

**ISC 08 13:26:59.6±0.5, 44˚.20N±0˚.04×149˚.35E±0˚.04, h24km±2km, h23km:pP-P, n857, σ1s49/801, mb4.9/208, MS4.5/92, 75C-6D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.48** | **315** | *e*P | | **Pn** | **13 27 25.0** | **+0.3** |
| KUR | | | | | AMB | AMB | 13 27 27.0 | |
| | 3μm,0.6s | | | | | | | |
| KUR | | | | | AMB | AMB | 13 27 33.6 | |
| | 10μm,4.0s | | | | | | | |
| KUR | | | | *i* S | | **Sb** | **13 27 45.9** | **+1.2** |
| KUR | | | | | A | A | 13 27 52.8 | |
| | 8μm,0.5s | | | | | | | |
| KUR | | | | | A | A | 13 27 52.8 | |
| | 6μm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.48** | **315** | *c i* PN | | **Pn** | **13 27 24.8** | **+0.1** |
| KUR | | | | *i* S | | **Sb** | **13 27 46.3** | **+1.6** |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,2μm,0.7s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=N,831nm,0.5s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,381nm,0.5s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,10μm,3.8s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,8μm,0.4s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,4μm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **1.84** | **261** | *e*P | | **Pn** | **13 27 29.9** | **+0.2** |
| SHO | | | | | AMB | AMB | 13 27 33.0 | |
| | comp=E,320nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **13 27 53.2** | **+1.0** |
| SHO | | | | | A | A | 13 28 05.2 | |
| | comp=E,4μm,0.5s | | | | | | | |
| SHO | | | | | A | A | 13 28 05.2 | |
| | comp=E,4μm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **1.84** | **261** | *e*PN | | **Pn** | **13 27 29.8** | **+0.1** |
| SHO | | | | *e*S | | **Sn** | **13 27 53.2** | **+1.0** |
| SHO | | | | | pmax | pmax | | |
| | comp=N,97nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,319nm,0.3s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=N,3μm,0.4s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.51** | **268** | *e*P | | **Pn** | **13 27 39.9** | **+1.0** |
| YUK | | | | | AMB | AMB | 13 27 41.4 | |
| | comp=E,560nm,0.4s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **13 28 10.9** | **+2.1** |
| YUK | | | | | A | A | 13 28 24.2 | |
| | comp=E,3μm,0.7s | | | | | | | |
| YUK | | | | | A | A | 13 28 24.2 | |
| | comp=E,4μm,0.7s | | | | | | | |
| YUK | | | | | AMS | AMS | 13 28 51.2 | |
| | comp=E,3μm,14.0s | | | | | | | |
| YUK | | | | | AMS | AMS | 13 28 51.2 | |
| | comp=E,4μm,14.0s | | | | | | | |
| YUK | | | | | AMS | AMS | 13 28 51.2 | |
| | comp=E,4μm,14.0s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.51** | **268** | *e*PN | | **Pn** | **13 27 39.9** | **+1.0** |
| YUK | | | | *e*S | | **Sn** | **13 28 10.9** | **+2.1** |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,545nm,0.4s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,3μm,0.5s | | | | | | | |
| YUK | | | | | MLR | MLR | | |
| | comp=E,4μm,12.0s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.74** | **254** | *e*P | | **Pn** | **13 27 41.3** | **-0.7** |
| NEM2 | | | | *e*S | | **Sn** | **13 28 13.0** | **-1.3** |
| **NEM2** | **Nemuro 2** | **2.74** | **254** | A | | A | 13 27 41.3 | |
| | comp=E,5.0nm,5.9s,comp=N,5.0nm,3.8s | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **2.75** | **254** | *e*P | | **Pn** | **13 27 42.3** | **+0.1** |
| NMR | | | | *e*S | | **Sn** | **13 28 14.9** | **+0.4** |
| **NMR** | **Nemuro--Hokkai** | **2.75** | **254** | *e*PN | | **Pn** | **13 27 42.2** | **+0.1** |
| NMR | | | | *e*S | | **Sn** | **13 28 14.3** | **-0.2** |
| **RUSJ** | **Misakicho** | **2.95** | **270** | *e*PN | | **Pn** | **13 27 47.1** | **+2.2** |
| RUSJ | | | | *e*S | | **Sn** | **13 28 22.5** | **+2.9** |
| **JRA** | **Rausu** | **3.06** | **267** | *e*P | | **Pn** | **13 27 47.4** | **+1.1** |
| **JNK** | **Nakash** | **3.40** | **261** | *e*P | | **Pn** | **13 27 52.0** | **+0.9** |
| JNK | | | | *e*S | | **Sn** | **13 28 31.9** | **+1.3** |
| **AKK** | **Akkeshi** | **3.48** | **252** | *e*P | | **Pn** | **13 27 52.7** | **+0.5** |
| AKK | | | | *e*S | | **Sn** | **13 28 32.9** | **+0.4** |
| **JAK** | **Akkeshi** | **3.58** | **252** | *e*P | | **Pn** | **13 27 53.9** | **+0.3** |
| JAK | | | | *e*S | | **Sn** | **13 28 35.7** | **+0.5** |
| **JTKR** | **Abashiri--Toko** | **3.92** | **269** | *e*P | | **Pn** | **13 27 60.0** | **+1.7** |
| **JAR** | **Ashorobuto** | **4.14** | **259** | *e*P | | **Pn** | **13 28 02.3** | **+1.1** |
| **JOB** | **Onbets** | **4.21** | **254** | *e*P | | **Pn** | **13 28 03.1** | **+0.9** |
| **JCH** | **Churui** | **4.64** | **252** | *e*P | | **Pn** | **13 28 08.9** | **+0.7** |
| **JKK2** | **Kamakawa 2** | **4.77** | **268** | *e*P | | **Pn** | **13 28 12.3** | **+2.4** |
| **JKA** | **Kamikawa-asahi** | **4.85** | **271** | Pn | | **Pn** | **13 28 13.7** | **+2.6** |
| **JKA** | **Kamikawa-asahi** | **4.85** | **271** | *e*P | | **Pn** | **13 28 13.7** | **+2.6** |
| **ASAJ** | **Asahikawa** | **4.86** | **271** | Pn | | **Pn** | **13 28 14.0** | **+2.9** |
| | comp=N,8.0nm,0.3s,baz=67,slow=15,SNR=42 | | | | | | | |
| ASAJ | | | | | LR | LR | 13 30 24.7 | |
| | comp=N,4μm,19.6s,baz=128,slow=42 | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.86** | **271** | PN | | **Pn** | **13 28 13.7** | **+2.6** |
| **ERM** | **Erimo** | **5.03** | **246** | Pn | | **Pn** | **13 28 16.2** | **+2.7** |
| **ERM** | **Erimo** | **5.03** | **246** | *ce*PN | | **Pn** | **13 28 16.0** | **+2.5** |
| ERM | | | | | pmax | pmax | | |
| | comp=Z,174nm,0.8s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.18** | **251** | *e*P | | **Pn** | **13 28 15.9** | **+0.3** |
| **JAB** | **Ashibetsu** | **5.20** | **265** | *e*P | | **Pn** | **13 28 19.3** | **+3.5** |
| **YSS** | **Yuzh-Sakhalins** | **5.38** | **303** | Pn | | **Pn** | **13 28 20.1** | **+1.7** |
| **YSS** | **Yuzh-Sakhalins** | **5.38** | **303** | *e*P | | **Pn** | **13 28 21.1** | **+2.7** |
| YSS | | | | | AMB | AMB | 13 28 23.7 | |
| | comp=Z,40nm,0.9s | | | | | | | |
| YSS | | | | | AMB | AMB | 13 28 26.4 | |
| | comp=Z,300nm,4.0s | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **13 29 22.4** | **+2.8** |
| YSS | | | | | A | A | 13 29 26.3 | |
| | comp=Z,70nm,1.0s | | | | | | | |
| YSS | | | | | A | A | 13 29 26.3 | |
| | comp=Z,70nm,1.0s | | | | | | | |
| YSS | | | | | AMS | AMS | 13 30 35.2 | |
| | comp=Z,1μm,16.0s | | | | | | | |
| YSS | | | | | AMS | AMS | 13 30 35.2 | |
| | comp=Z,3μm,16.0s | | | | | | | |
| YSS | | | | | AMS | AMS | 13 30 35.2 | |
| | comp=Z,4μm,16.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.38** | **303** | *e*PN | | **Pn** | **13 28 21.1** | **+2.7** |
| YSS | | | | *e*S | | **Sn** | **13 29 22.4** | **+2.8** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,40nm,0.9s | | | | | | | |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,300nm,3.7s | | | | | | | |
| YSS | | | | | smax | smax | | |
| | comp=N,70nm,0.9s | | | | | | | |
| YSS | | | | | smax | smax | | |
| | comp=E,70nm,1.0s | | | | | | | |
| **JRBN** | **Rebuntou** | **6.02** | **285** | *e*P | | **Pn** | **13 28 31.3** | **+4.2** |
| **JANG** | **Nango** | **6.95** | **239** | *e*P | | **Pn** | **13 28 39.0** | **-0.9** |
| JANG | | | | *e*S | | **Sn** | **13 29 52.7** | **-5.5** |
| **UGL** | **Uglegorsk** | **6.99** | **317** | *e*P | | **Pn** | **13 28 44.5** | **+4.0** |
| UGL | | | | | AMB | AMB | 13 28 47.3 | |
| | comp=E,30nm,0.7s | | | | | | | |
| UGL | | | | *e*S | | **Sn** | **13 30 02.8** | **+3.7** |
| UGL | | | | | A | A | 13 30 13.5 | |
| | comp=E,60nm,0.6s | | | | | | | |
| UGL | | | | | A | A | 13 30 13.5 | |
| | comp=E,80nm,0.6s | | | | | | | |
| UGL | | | | | AMS | AMS | 13 33 35.0 | |
| | comp=E,2μm,15.0s | | | | | | | |
| UGL | | | | | AMS | AMS | 13 33 35.0 | |
| | comp=E,1μm,15.0s | | | | | | | |
| UGL | | | | | AMS | AMS | 13 33 35.0 | |
| | comp=E,2μm,15.0s | | | | | | | |
| **UGL** | **Uglegorsk** | **6.99** | **317** | *e*PN | | **Pn** | **13 28 44.4** | **+4.0** |
| UGL | | | | *e*S | | Sn | 13 30 08.7 | +10 |
| UGL | | | | | MLR | MLR | | |
| | comp=N,2μm,15.0s | | | | | | | |
| UGL | | | | | MLR | MLR | | |
| | comp=Z,2μm,15.0s | | | | | | | |
| UGL | | | | | MLR | MLR | | |
| | comp=E,1μm,14.0s | | | | | | | |
| **JTM** | **Tenmabayashi** | **7.00** | **244** | Pn | | **Pn** | **13 28 41.1** | **+0.5** |
| **JTH** | **Tanohata** | **7.00** | **235** | *e*P | | **Pn** | **13 28 39.3** | **-1.4** |
| JTH | | | | *e*S | | **Sn** | **13 29 52.2** | **-7.3** |
| **SKR** | **Severo-Kuril's** | **7.95** | **33** | *e*P | | **Pn** | **13 28 52.4** | **-1.1** |
| SKR | | | | | AMB | AMB | 13 28 54.0 | |
| | comp=E,500nm,4.0s | | | | | | | |
| SKR | | | | | AMB | AMB | 13 28 55.2 | |
| | comp=E,70nm,0.4s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **13 30 17.4** | **-5.1** |
| SKR | | | | | A | A | 13 30 26.5 | |
| | comp=E,60nm,0.4s | | | | | | | |
| SKR | | | | | A | A | 13 30 26.5 | |
| | comp=E,60nm,0.4s | | | | | | | |
| SKR | | | | | AMS | AMS | 13 31 46.0 | |
| | comp=E,5μm,15.0s | | | | | | | |
| SKR | | | | | AMS | AMS | 13 31 46.0 | |
| | comp=E,2μm,15.0s | | | | | | | |
| SKR | | | | | AMS | AMS | 13 31 46.0 | |
| | comp=E,2μm,15.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.95** | **33** | *e*PN | | **Pn** | **13 28 52.3** | **-1.2** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,400nm,3.5s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,60nm,1.2s | | | | | | | |
| SKR | | | | | MLR | MLR | | |
| | comp=Z,2μm,16.0s | | | | | | | |
| SKR | | | | | MLR | MLR | | |
| | comp=E,2μm,12.0s | | | | | | | |
| **TYV** | **Tymovskoe** | **8.06** | **328** | *e*P | | **Pn** | **13 28 58.1** | **+3.1** |
| TYV | | | | | AMB | AMB | 13 28 59.9 | |
| | comp=E,200nm,3.0s | | | | | | | |
| TYV | | | | | AMB | AMB | 13 29 01.3 | |
| | comp=E,20nm,0.7s | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **13 30 25.6** | **+0.3** |
| TYV | | | | | A | A | 13 30 33.8 | |
| | comp=E,10.0nm,0.7s | | | | | | | |
| TYV | | | | | A | A | 13 30 33.8 | |
| | comp=E,10.0nm,0.7s | | | | | | | |
| TYV | | | | | AMS | AMS | 13 32 12.3 | |
| | comp=E,2μm,16.0s | | | | | | | |
| TYV | | | | | AMS | AMS | 13 32 12.3 | |
| | comp=E,1μm,16.0s | | | | | | | |
| **TYV** | **Tymovskoe** | **8.06** | **328** | *e*PN | | **Pn** | **13 28 58.1** | **+3.1** |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | | |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| TYV | | | | | MLR | MLR | | |
| | comp=E,2μm,15.0s | | | | | | | |
| TYV | | | | | MLR | MLR | | |
| | comp=Z,1μm,16.0s | | | | | | | |
| **JMM** | **Marumori** | **9.04** | **229** | Pn | | **Pn** | **13 29 06.7** | **-1.8** |
| **TEY** | **Ternei** | **9.13** | **280** | *e*P | | **Pn** | **13 29 13.1** | **+3.4** |
| **TEY** | **Ternei** | **9.13** | **280** | *e*PN | | **Pn** | **13 29 13.1** | **+3.4** |
| **OKH** | **Okha** | **10.26** | **338** | *e*P | | **Pn** | **13 29 25.9** | **+0.7** |
| OKH | | | | | AMB | AMB | 13 29 26.8 | |
| | comp=Z,80nm,0.7s | | | | | | | |
| **OKH** | **Okha** | **10.26** | **338** | *de*PN | | **Pn** | **13 29 25.9** | **+0.7** |
| OKH | | | | | MLR | MLR | | |
| | comp=Z,1μm,15.0s | | | | | | | |
| OKH | | | | | MLR | MLR | | |
| | comp=N,1μm,15.0s | | | | | | | |
| **NKL** | **Nikolayevsk** | **10.63** | **331** | *e*P | | **Pn** | **13 29 33.3** | **+3.1** |
| NKL | | | | | AMB | AMB | 13 29 39.1 | |
| | comp=N,20nm,0.7s | | | | | | | |
| NKL | | | | | AMS | AMS | 13 31 31.1 | |
| | comp=N,2μm,16.0s | | | | | | | |
| NKL | | | | | AMS | AMS | 13 31 31.1 | |
| | comp=N,5μm,16.0s | | | | | | | |
| NKL | | | | | AMS | AMS | 13 31 31.1 | |
| | comp=N,5μm,16.0s | | | | | | | |
| **NKL** | **Nikolayevsk** | **10.63** | **331** | *e*PN | | **Pn** | **13 29 28.0** | **-2.2** |
| NKL | | | | | pmax | pmax | | |
| | comp=E,39nm,0.8s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=N,22nm,0.9s | | | | | | | |
| NKL | | | | | pmax | pmax | | |
| | comp=Z,76nm,1.1s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=N,2μm,15.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=E,5μm,16.0s | | | | | | | |
| NKL | | | | | MLR | MLR | | |
| | comp=Z,5μm,16.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **10.76** | **32** | *e*P | | **Pn** | **13 29 33.5** | **+1.5** |
| PET | | | | | AMB | AMB | 13 29 35.7 | |
| **PET** | **Petropavlovsk** | **10.76** | **32** | *e*PN | | **Pn** | **13 29 34.4** | **+2.4** |
| **GRNR** | **Gornyy** | **10.93** | **312** | *e*P | | **Pn** | **13 29 37.9** | **+3.5** |
| **GRNR** | **Gornyy** | **10.93** | **312** | *i*PN | | **Pn** | **13 29 37.9** | **+3.5** |
| GRNR | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=E,950nm,15.0s | | | | | | | |
| GRNR | | | | | MLR | MLR | | |
| | comp=N,580nm,16.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.42** | **232** | Pn | | **Pn** | **13 29 40.7** | **-0.5** |
| | comp=N,0.1nm,0.3s,baz=26,slow=14,SNR=14 | | | | | | | |
| MJAR | | | | | Sn | **Sn** | **13 31 51.4** | **+3.4** |
| | comp=N,3.3nm,0.8s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **11.42** | **232** | Pn | | **Pn** | **13 29 40.8** | **-0.4** |
| **MAJO** | **Matsushiro** | **11.42** | **232** | | | **Pn** | **13 29 41.5** | **+0.3** |
| **MAJO** | **Matsushiro** | **11.42** | **232** | *i* PN | | **Pn** | **13 29 41.2** | **0.0** |
| **USA0B** | **Ussuriysk Arra** | **12.46** | **276** | Pn | | **Pn** | **13 29 56.1** | **+0.8** |
| **USA0B** | **Ussuriysk Arra** | **12.46** | **276** | *i* PN | | **Pn** | **13 29 56.4** | **+1.1** |
| **USRK** | **Ussuriysk Ar.** | **12.46** | **276** | Pn | | **Pn** | **13 29 56.9** | **+1.6** |
| **USRK** | **Ussuriysk Ar.** | **12.46** | **276** | Pn | | **Pn** | **13 29 56.3** | **+1.0** |
| | comp=N,2.1nm,0.3s,baz=82,slow=12,SNR=51 | | | | | | | |
| USRK | | | | | LR | LR | 13 35 16.7 | |
| | comp=N,2μm,18.1s,baz=89,slow=40 | | | | | | | |
| | comp=N,18nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.46** | **276** | PN | | **Pn** | **13 29 56.9** | **+1.6** |
| **JGF** | **Kuroka** | **12.57** | **231** | Pn | | **Pn** | **13 29 55.6** | **-1.4** |
| **VLA** | **Vladivostok** | **12.69** | **271** | *i* PN | | **Pn** | **13 30 01.6** | **+3.1** |
| VLA | | | | | pmax | pmax | | |
| | comp=Z,37nm,0.8s | | | | | | | |
| VLA | | | | | MLR | MLR | | |
| | comp=Z,2μm,17.6s | | | | | | | |
| **KLR** | **Kul'dur** | **13.07** | **299** | Pn | | **Pn** | **13 30 04.8** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=141,slow=16,SNR=1.5 | | | | | | | |
| KLR | | | | | LR | LR | 13 35 50.5 | |
| | comp=Z,2μm,18.2s,baz=106,slow=41 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **KLR** | **Kul'dur** | **13.07** | **299** | *e*P | | **Pn** | **13 30 06.5** | **+2.8** |
| **KLR** | **Kul'dur** | **13.07** | **299** | *e*PN | | P | 13 30 08.9 | -4.9 |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **PSTR** | **Posyet** | **13.57** | **270** | *i* P | | **Pn** | **13 30 13.2** | **+2.8** |
| **MDJ** | **Mudanjiang** | **14.13** | **279** | Pn | | **Pn** | **13 30 19.8** | **+1.7** |
| **MA2** | **Magadan** | **15.43** | **3** | Pn | | **Pn** | **13 30 34.4** | **-1.1** |
| MA2 | | | | | IAmb | IAmb | 13 30 41.3 | |
| | comp=Z,86nm,1.9s | | | | | | | |
| **MA2** | **Magadan** | **15.43** | **3** | Pn | | **Pn** | **13 30 33.2** | **-2.2** |
| | comp=Z,0.2nm,0.3s,baz=144,slow=18,SNR=2.5 | | | | | | | |
| MA2 | | | | | LR | LR | 13 37 02.4 | |
| | comp=Z,897nm,18.4s,baz=190,slow=40 | | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **MA2** | **Magadan** | **15.43** | **3** | *e*P | | **Pn** | **13 30 34.4** | **-1.1** |
| **MA2** | **Magadan** | **15.43** | **3** | P | | **Pn** | **13 30 34.4** | **-1.1** |
| MA2 | | | | | pmax | pmax | | |
| | comp=Z,86nm,1.9s | | | | | | | |
| **BNX** | **BinXian** | **15.60** | **283** | ⇑P | | **Pn** | **13 30 37.8** | **0.0** |
| BNX | | | | S | | **Sn** | **13 33 29.0** | **-0.9** |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| BNX | | | | | pmax | pmax | | |
| | comp=Z,230nm,6.2s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=Z,1μm,13.8s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=Z,2μm,15.3s | | | | | | | |
| BNX | | | | | LR | LR | | |
| | comp=Z,2μm,16.2s | | | | | | | |
| **HEH** | **HeiHe** | **16.05** | **300** | *e*P | | **Pn** | **13 30 44.4** | **+0.8** |
| HEH | | | | pP | | **P** | **13 30 47.0** | **+0.2** |
| HEH | | | | S | | **S** | **13 33 50.1** | **-3.9** |
| HEH | | | | sS | | **sS** | **13 33 57.8** | **-4.4** |
| HEH | | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| HEH | | | | | pmax | pmax | | |
| | comp=Z,420nm,5.8s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=E,650nm,16.2s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,2μm,17.0s | | | | | | | |
| HEH | | | | | LR | LR | | |
| | comp=Z,2μm,17.1s | | | | | | | |
| **CN2** | **Changchun** | **17.19** | **277** | ⇑P | | **P** | **13 30 59.6** | **+0.1** |
| CN2 | | | | *e*pP | | pP | 13 31 06.6 | +1.9 |
| CN2 | | | | *e*S | | **Sn** | **13 34 07.2** | **-1.2** |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,200nm,4.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,900nm,17.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,1μm,17.0s | | | | | | | |
| CN2 | | | | | LR | LR | | |
| | comp=Z,2μm,18.0s | | | | | | | |
| **ZEA** | **Zeya** | **17.30** | **311** | *e*P | | **Pn** | **13 30 59.5** | **+0.2** |
| ZEA | | | | | AMB | AMB | 13 31 03.7 | |
| | comp=E,60nm,0.8s | | | | | | | |
| **ZEA** | **Zeya** | **17.30** | **311** | *e*P | | **P** | **13 31 01.5** | **+0.9** |
| ZEA | | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,200nm,4.7s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=E,700nm,16.0s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=N,600nm,15.0s | | | | | | | |
| ZEA | | | | | MLR | MLR | | |
| | comp=Z,900nm,15.0s | | | | | | | |
| **KSRS** | **Korea Array** | **17.53** | **255** | P | | **Pn** | **13 31 02.4** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=61,slow=12,SNR=17 | | | | | | | |
| KSRS | | | | | LR | LR | 13 37 40.3 | |
| | comp=Z,594nm,20.0s,baz=55,slow=36 | | | | | | | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **KS19** | **Wonju Array Si** | **17.55** | **255** | P | | **Pn** | **13 31 02.9** | **+0.4** |
| **KSAR** | **Wonju Array Be** | **17.56** | **255** | P | | **P** | **13 31 04.0** | **+0.4** |
| **KSAR** | **Wonju Array Be** | **17.56** | **255** | P | | **P** | **13 31 04.0** | **+0.4** |
| **JNU** | **Nakatsue** | **18.13** | **239** | P | | **P** | **13 31 12.3** | **+2.3** |
| **JNU** | **Nakatsue** | **18.13** | **239** | P | | **Pn** | **13 31 10.1** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=75,slow=8.2,SNR=3.0 | | | | | | | |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| **INCN** | **Inchon** | **18.42** | **256** | P | | **Pn** | **13 31 14.2** | **+1.0** |
| **INCN** | **Inchon** | **18.42** | **256** | P | | **Pn** | **13 31 14.2** | **+1.0** |
| INCN | | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **18.43** | **54** | LR | | LR | 13 39 29.3 | |
| | comp=Z,390nm,18.6s,baz=282,slow=41 | | | | | | | |
| **TJN** | **Taejon** | **18.46** | **253** | P | | **P** | **13 31 13.8** | **+0.3** |
| TJN | | | | | IAmb | IAmb | 13 31 16.7 | |
| | comp=Z,114nm,1.0s | | | | | | | |
| **TJN** | **Taejon** | **18.46** | **253** | *ce*P | | **Pn** | **13 31 14.9** | **+1.2** |
| **SEY** | **Seymchan** | **18.85** | **4** | P | | **P** | **13 31 15.5** | **-2.2** |
| | comp=Z,0.4nm,0.3s,baz=170,slow=7.2,SNR=23 | | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **SEY** | **Seymchan** | **18.85** | **4** | *ce*P | | **P** | **13 31 16.4** | **-1.2** |
| SEY | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | | |
| SEY | | | | | MLR | MLR | | |
| | comp=Z,1μm,17.0s | | | | | | | |
| **SNY** | **Shenyang** | **18.97** | **272** | ⇓P | | **Pn** | **13 31 21.0** | **+1.2** |
| SNY | | | | S | | **Sn** | **13 34 42.4** | **-9.0** |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,48nm,1.0s | | | | | | | |
| SNY | | | | | pmax | pmax | | |
| | comp=Z,160nm,5.5s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,330nm,14.6s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,400nm,13.7s | | | | | | | |
| SNY | | | | | LR | LR | | |
| | comp=Z,470nm,12.9s | | | | | | | |
| **YAK** | **Yakutsk** | **21.25** | **334** | P | | **P** | **13 31 41.2** | **-2.5** |
| YAK | | | | | IAmb | IAmb | 13 31 57.4 | |
| | comp=Z,48nm,0.9s | | | | | | | |
| **YAK** | **Yakutsk** | **21.25** | **334** | P | | **P** | **13 31 41.9** | **-1.8** |
| | comp=Z,41nm,0.9s,baz=128,slow=4.9,SNR=13 | | | | | | | |
| YAK | | | | | LR | LR | 13 40 42.8 | |
| | comp=Z,818nm,18.0s,baz=132,slow=39 | | | | | | | |
| | comp=Z,41nm,0.9s | | | | | | | |
| **YAK** | **Yakutsk** | **21.25** | **334** | *e*P | | **P** | **13 31 41.8** | **-1.8** |
| YAK | | | | *e* | | | 13 32 01.8 | |
| YAK | | | | *e*S | | **S** | **13 35 35.3** | **-3.1** |
| YAK | | | | *e* | | | 13 35 45.2 | |
| YAK | | | | *e**SS | | **pS** | **13 35 50.2** | **+1.4** |
| YAK | | | | *e* | | | 13 43 05.4 | |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,38nm,0.9s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,6.0nm,1.0s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,9.0nm,1.1s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,49nm,1.0s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=N,127nm,2.8s | | | | | | | |
| YAK | | | | | smax | smax | | |
| | comp=E,48nm,2.5s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=Z,947nm,17.0s | | | | | | | |
| YAK | | | | | MLR | MLR | | |
| | comp=N,720nm,16.0s | | | | | | | |
| **DL2** | **Dalian** | **21.35** | **265** | P | | P | 13 31 36.5 | -8.5 |
| DL2 | | | | S | | **S** | **13 35 43.6** | **+2.8** |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,56nm,1.0s | | | | | | | |
| DL2 | | | | | pmax | pmax | | |
| | comp=Z,430nm,4.7s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=N,470nm,12.3s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=E,920nm,13.8s | | | | | | | |
| DL2 | | | | | LR | LR | | |
| | comp=Z,1μm,17.6s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **23.82** | **281** | *e*P | | **P** | **13 32 09.7** | **-1.0** |
| XLT | | | | S | | **S** | **13 36 24.8** | **-0.3** |
| XLT | | | | PcS | | **PcS** | **13 39 28.2** | **-4.8** |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,920nm,14.9s | | | | | | | |
| XLT | | | | | LR | LR | | |
| | comp=Z,1μm,16.0s | | | | | | | |
| **BJT** | **Baijiatuau** | **24.86** | **272** | P | | **P** | **13 32 20.6** | **+0.4** |
| BJT | | | | | IAmb | IAmb | 13 32 22.3 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **BJT** | **Baijiatuau** | **24.86** | **272** | P | | **P** | **13 32 20.6** | **+0.4** |
| BJT | | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **BILL** | **Bilibino** | **25.51** | **15** | *ce*P | | **P** | **13 32 23.8** | **-1.9** |
| BILL | | | | *e* | | | 13 33 02.0 | |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| BILL

comp=Z,848nm,16.0s
**SSE Sheshan 25.71 249** P **P** **13 32 28.4 +0.5**
SSE S **S** **13 36 56.8 +1.6**
SSE pmax pmax
comp=Z,10.0nm,0.7s
SSE pmax pmax
comp=Z,76nm,7.1s
SSE LR LR
comp=Z,300nm,19.6s
SSE LR LR
comp=Z,320nm,19.7s
**HNS HongShan 26.94 267** ⇑P **P** **13 32 40.1 +1.1**
HNS pmax pmax
comp=Z,16nm,0.7s
HNS LR LR
comp=Z,330nm,15.9s
HNS LR LR
comp=Z,490nm,15.1s
HNS LR LR
comp=Z,580nm,18.2s
**BTO Baotou 29.07 277** *e*P **P** **13 33 00.2 +2.1**
BTO pP **pP** **13 33 04.0 +0.1**
BTO sP **sP** **13 33 06.7 +0.5**
BTO PP **PnPn** **13 33 51.1 +0.6**
BTO S **S** **13 37 51.3 +3.0**
BTO SS **SnSn** **13 39 13.2 +0.6**
BTO pmax pmax
comp=Z,19nm,0.5s
BTO pmax pmax
comp=Z,190nm,4.4s
BTO LR LR
comp=Z,1µm,13.7s
BTO LR LR
comp=Z,2µm,14.2s
BTO LR LR
comp=Z,2µm,16.8s
**TIXI Tiksi 29.26 347** P **P** **13 32 56.1 -3.2**
**TIXI Tiksi 29.26 347** *i* P **P** **13 32 56.7 -2.7**
TIXI pmax pmax
comp=Z,10.0nm,0.9s
TIXI MLR MLR
comp=Z,601nm,15.0s
**ULN Ulaanbaatar 29.32 292** P **P** **13 33 00.0 -0.3**
ULN IAmb IAmb 13 33 02.2
comp=Z,13nm,0.8s
**ULN Ulaanbaatar 29.32 292** *e*P **P** **13 33 01.1 +0.7**
**ULN Ulaanbaatar 29.32 292** *ce*P **P** **13 33 01.1 +0.7**
ULN pmax pmax
comp=Z,15nm,0.8s
**SONM Songino Array 29.76 292** P **P** **13 33 04.0 -0.3**
SONM IAmb IAmb 13 33 06.1
comp=Z,11nm,0.8s
**SONM Songino Array 29.76 292** P **P** **13 33 04.2 -0.1**
comp=Z,9.7nm,0.8s,baz=82,slow=8.4,SNR=49
SONM LR LR 13 46 23.2
comp=Z,1µm,18.7s,baz=87,slow=39
comp=Z,9.7nm,0.8s
**LYN LuoYang 29.88 264** P P 13 33 11.2 +6.0
LYN S **S** **13 38 01.1 +0.3**
LYN pmax pmax
comp=Z,32nm,0.7s
LYN pmax pmax
comp=Z,180nm,4.7s
LYN LR LR
comp=Z,590nm,15.5s
LYN LR LR
comp=Z,820nm,14.1s
LYN LR LR
comp=Z,780nm,15.5s
**GUMO Guam 30.74 189** LR LR 13 47 46.9
comp=Z,156nm,18.4s,baz=13,slow=41
**J14K Nanvaranak Lak 32.64 39** P **P** **13 33 28.9 -0.2**
baz=258
**XAN Xi'an 32.67 266** ⇑P **P** **13 33 30.2 +0.3**
XAN pP pP 13 33 35.0 -0.7
XAN pmax pmax
comp=Z,27nm,0.9s
**L14K Kuka Creek 32.77 41** P **P** **13 33 32.2 +1.9**
**G15K Niukluk 32.98 35** P **P** **13 33 32.4 +0.2**
baz=254
**O14K Tigyukauivet M 33.22 45** P **P** **13 33 36.1 +1.8**
baz=266
**K15K Wolf Creek Mou 33.47 40** P **P** **13 33 37.0 +0.6**
baz=261
**C16K Lisburne Hills 33.58 29** P **P** **13 33 36.8 -0.6**
baz=248
**M15K Kasigluk River 33.65 43** P **P** **13 33 39.0 +1.0**
baz=264
**O15K Ungalikthiuk R 33.96 46** P **P** **13 33 42.8 +2.1**
baz=267
**CHNA Chernabura Isl 34.09 53** P P 13 33 46.8 +4.9
baz=274
**C17K DeLong Mountai 34.40 29** P **P** **13 33 44.0 -0.6**
baz=250
**F17K Baldwin Pennin 34.49 33** P **P** **13 33 45.6 +0.4**
baz=255
**G17K Kiwalik Mounta 34.49 34** P **P** **13 33 46.0 +0.7**
baz=257
**M16K Timber Creek 34.52 42** P **P** **13 33 47.7 +2.1**
baz=265
**N16K Nishlik Lake 34.57 43** P **P** **13 33 48.3 +2.2**
baz=266
**H17K Granite Mounta 34.67 35** P **P** **13 33 48.1 +1.2**
baz=258
**J17K VABM Dome 34.76 38** P **P** **13 33 48.8 +1.2**
baz=262
**O16K Kokwok River B 34.86 45** P **P** **13 33 51.2 +2.6**
baz=268
**P16K Nushagak River 34.90 46** P **P** **13 33 52.3 +3.5**
baz=269
**L17K Donlin 34.95 41** P **P** **13 33 49.4 +0.1**
baz=264
**R16K Pilot Point 35.11 49** P **P** **13 33 52.6 +1.9**
baz=271
**F18K Selawik 35.15 33** P **P** **13 33 50.5 -0.4**
baz=256
**C18K Utukok River 35.15 29** P **P** **13 33 51.1 +0.1**
C18K IAmb IAmb 13 34 06.5
comp=Z,13nm,0.8s
**C18K Utukok River 35.15 29** P **P** **13 33 50.6 -0.5**
baz=252
**B18K Kokolik River 35.18 28** P **P** **13 33 51.3 +0.1**
baz=250
**M17K Holitna River 35.29 42** P **P** **13 33 54.6 +2.4**
baz=266
**LZH Lanzhou 35.34 273** *e*P **P** **13 33 54.1 +1.0**
LZH pP pP 13 33 59.0 0.0
LZH pmax pmax
comp=Z,120nm,1.0s
LZH LR LR
comp=Z,540nm,14.8s
LZH LR LR
comp=Z,700nm,19.2s
LZH LR LR
comp=Z,860nm,18.6s
**N17K Nushagak Hills 35.36 43** P **P** **13 33 55.5 +2.7**
baz=267
**H18K Honhosa River 35.36 35** P **P** **13 33 54.4 +1.6**
H18K IAmb IAmb 13 34 06.5
comp=Z,16nm,0.8s
**H18K Honhosa River 35.36 35** P **P** **13 33 52.8 0.0**
baz=260
**G18K Tagagawik 35.38 34** P **P** **13 33 53.3 +0.3**
**G18K Tagagawik 35.38 34** P **P** **13 33 54.3 +1.3**
baz=258
**L18K Granite Mounta 35.71 40** P **P** **13 33 58.4 +2.6**
L18K IAmb IAmb 13 34 21.5
comp=Z,10nm,0.9s
**L18K Granite Mounta 35.71 40** P **P** **13 33 57.1 +1.2**
baz=266
**J18K Innoko River 35.82 38** **P** **13 33 56.4 -0.4**
J18K IAmb IAmb 13 34 10.4
comp=Z,9.9nm,0.9s
**J18K Innoko River 35.82 38** P **P** **13 33 58.1 +1.3**
baz=264
**C19K Lookout Ridge 35.84 28** P **P** **13 33 57.1 +0.2**
C19K IAmb IAmb 13 34 22.5
comp=Z,14nm,0.8s
**C19K Lookout Ridge 35.84 28** P **P** **13 33 57.1 +0.2**
baz=253
**F19K Shaleruckik Mo 35.93 33** P **P** **13 33 57.0 -0.6**
F19K IAmb IAmb 13 34 10.7
comp=Z,16nm,0.7s
**F19K Shaleruckik Mo 35.93 33** P **P** **13 33 57.7 +0.1**
baz=258,SNR=8.0
**G19K Purcell Mounta 36.06 34** P **P** **13 34 00.1 +1.3**
baz=260
**M18K Stony River 36.07 42** P **P** **13 34 01.7 +2.8**
baz=267
**D19K Kuna River 36.19 30** P **P** **13 33 59.6 -0.3**
**D19K Kuna River 36.19 30** P **P** **13 33 59.6 -0.3**
baz=255
**H19K Roundabout Mou 36.21 35** P **P** **13 34 00.6 +0.5**
**H19K Roundabout Mou 36.21 35** P **P** **13 34 00.9 +0.9**
baz=261,SNR=12
**E19K Redstone River 36.27 32** P **P** **13 34 00.7 +0.2**
**P18K Big Mountain, 36.32 45** P **P** **13 34 03.3 +2.2**
baz=271
**O18K Koktuh Hills 36.33 45** P **P** **13 34 02.7 +1.5**
baz=270
**J19K Poorman 36.36 38** P **P** **13 34 03.6 +2.2**
J19K IAmb IAmb 13 34 15.4
comp=Z,22nm,1.1s
**J19K Poorman 36.36 38** P **P** **13 34 03.3 +1.9**
baz=264
**L19K White Mountain 36.56 41** P **P** **13 34 04.6 +1.4**
baz=267
**N19K Bonanza Creek 36.70 43** P **P** **13 34 06.0 +1.6**
baz=269
**F20K Avaraart Lake 36.76 32** P **P** **13 34 04.5 -0.2**
**F20K Avaraart Lake 36.76 32** P **P** **13 34 05.5 +0.7**
baz=260
**D20K Etivluk River 36.78 30** P **P** **13 34 05.2 +0.3**
baz=257
**GTA Gaotai 36.78 280** P **P** **13 34 07.1 +1.7**
GTA sS sS 13 39 58.8 +1.3
GTA pmax pmax
comp=Z,18nm,0.7s
GTA LR LR
comp=Z,520nm,16.7s
GTA LR LR
comp=Z,390nm,15.6s
GTA LR LR
comp=Z,730nm,16.0s
**E20K Nigu River 36.83 30** P **P** **13 34 06.0 +0.6**
baz=258
**H20K Anotleneega Mo 36.86 35** P **P** **13 34 06.8 +1.2**
baz=263
**B20K Meade River 36.92 27** P **P** **13 34 05.6 -0.4**
**B20K Meade River 36.92 27** P **P** **13 34 05.6 -0.4**
baz=254,SNR=12
**I20K Naaghedeneel 36.94 36** P **P** **13 34 07.8 +1.5**
baz=264
**K20K Telida 36.99 39** P **P** **13 34 08.6 +1.8**
baz=266
**J20K Nowinta River 37.02 37** P **P** **13 34 08.3 +1.2**
J20K IAmb IAmb 13 34 21.4
comp=Z,11nm,0.8s
**J20K Nowinta River 37.02 37** P **P** **13 34 09.0 +2.0**
baz=265
**L20K Farewell, AK 37.03 40** P **P** **13 34 09.2 +2.0**
baz=268
**Q19K Cape Douglas, 37.15 46** P **P** **13 34 11.2 +3.1**
baz=273
**P19K Oil Pt 37.33 45** P **P** **13 34 12.6 +2.9**
baz=272
**M20K Styx River 37.37 41** P **P** **13 34 11.3 +1.2**
**M20K Styx River 37.37 41** P **P** **13 34 12.6 +2.6**
baz=269
**IMAR Indian Mountai 37.38 34** P **P** **13 34 11.0 +0.9**
**A21K Barrow 37.46 25** P **P** **13 34 11.4 +0.8**
baz=253
**G21K Allakaket 37.55 34** P **P** **13 34 11.7 +0.2**
**G21K Allakaket 37.55 34** P **P** **13 34 12.2 +0.8**
baz=263
**O20K Slope Mountain 37.62 44** P **P** **13 34 14.6 +2.4**
baz=272
**F21K Alatna River 37.65 32** P **P** **13 34 12.5 +0.2**
F21K IAmb IAmb 13 34 28.0
comp=Z,11nm,0.8s
**F21K Alatna River 37.65 32** P **P** **13 34 12.6 +0.2**
baz=262,SNR=9.1
**E21K Killik River 37.67 30** P **P** **13 34 12.2 -0.3**
E21K IAmb IAmb 13 34 26.3
comp=Z,17nm,0.8s
**E21K Killik River 37.67 30** P **P** **13 34 12.0 -0.5**
baz=260
**B21K Ikpikpuk River 37.68 28** P **P** **13 34 12.5 0.0**
**B21K Ikpikpuk River 37.68 28** P **P** **13 34 12.3 -0.2**
baz=258,SNR=23
**H21K Melozitna Rive 37.73 35** P **P** **13 34 13.3 +0.2**
H21K IAmb IAmb 13 34 27.3
comp=Z,30nm,1.2s
**H21K Melozitna Rive 37.73 35** P **P** **13 34 14.1 +1.1**
baz=264
**KDAK Kodiak Island 37.78 48** P **P** **13 34 13.7 +0.3**
**CHUM Lake Minchumin 37.81 38** P **P** **13 34 15.2 +1.5**
baz=267
**A22K Sinclair Lake 37.89 26** P **P** **13 34 13.0 -1.2**
baz=256
**CD2 Chengdu 38.02 265** *e*P **P** **13 34 16.7 +0.8**
**SKT Skwentna 38.12 41** P **P** **13 34 19.6 +3.2**
baz=270
**F22K John River 38.19 32** P **P** **13 34 17.4 +0.5**
baz=263,SNR=12
**D22K Ayikyak River 38.21 30** P **P** **13 34 16.6 -0.4**
D22K IAmb IAmb 13 34 30.6
comp=Z,14nm,0.6s
**D22K Ayikyak River 38.21 30** P **P** **13 34 17.6 +0.6**
baz=260,SNR=8.7
**B22K Teshekpuk Lake 38.24 27** P **P** **13 34 17.5 +0.4**
baz=258
**CAPN Captain Cook N 38.33 43** P **P** **13 34 19.7 +1.6**
baz=272
**H22K Ishtalitna Cre 38.34 35** P **P** **13 34 19.4 +1.2**
baz=266,SNR=6.2
**G22K Bettles 38.38 33** P **P** **13 34 18.7 +0.2**
baz=264
**BPAW Bear Paw Mtn. 38.40 38** P **P** **13 34 19.7 +0.9**
**BPAW Bear Paw Mtn. 38.40 38** P **P** **13 34 20.5 +1.8**
baz=268
**KTH Kantishna Hill 38.42 38** P **P** **13 34 18.6 -0.3**
KTH IAmb IAmb 13 34 33.6
comp=Z,20nm,1.0s
**SUA Susitna One 38.51 42** P **P** **13 34 21.7 +2.0**
baz=272
**MLY Manley 38.55 36** P **P** **13 34 20.4 +0.5**
**MLY Manley 38.55 36** P **P** **13 34 21.0 +1.0**
baz=267,SNR=5.3
**GYA Guiyang 38.57 257** P **P** **13 34 21.5 +0.9**
GYA pmax pmax
comp=Z,12nm,1.1s
GYA pmax pmax
comp=Z,170nm,3.2s
GYA LR LR
comp=Z,400nm,18.2s
GYA LR LR
comp=Z,420nm,19.0s
GYA LR LR
comp=Z,550nm,19.2s
**COLD Coldfoot 38.92 33** P **P** **13 34 23.8 +0.8**
baz=265,SNR=6.7
**D23K Nanushuk River 38.94 30** P **P** **13 34 24.2 +1.1**
baz=262,SNR=7.3
**G23K Bananza Creek 38.95 33** P **P** **13 34 24.6 +1.3**
G23K IAmb IAmb 13 34 37.4
comp=Z,12nm,0.9s
**G23K Bananza Creek 38.95 33** P **P** **13 34 23.5 +0.2**
baz=266
**RC01 Rabbit Creek A 39.01 42** P **P** **13 34 25.9 +2.1**
baz=273
**O22K Cooper Landing 39.05 43** P **P** **13 34 26.3 +2.2**
baz=274
**H23K Yukon River 39.09 35** P **P** **13 34 26.3 +1.9**
H23K IAmb IAmb 13 34 38.7
comp=Z,16nm,0.8s
**H23K Yukon River 39.09 35** P **P** **13 34 26.4 +1.9**
baz=267,SNR=8.7
**C23K Itkillik River 39.09 28** P **P** **13 34 23.7 -0.6**
C23K IAmb IAmb 13 34 40.3
comp=Z,33nm,0.9s
**C23K Itkillik River 39.09 28** P **P** **13 34 24.8 +0.4**
baz=261,SNR=17
**I23K Minto, Yukon-K 39.14 36** P **P** **13 34 26.6 +1.8**
baz=268
**SEW Seward 39.21 44** P **P** **13 34 28.5 +3.1**
baz=275
**E23K Chandalar 39.22 31** P **P** **13 34 26.0 +0.3**
baz=265,SNR=12
**NEA2 Nenana 39.25 37** P **P** **13 34 27.1 +1.3**
baz=269
**PMR Palmer 39.27 42** P **P** **13 34 28.1 +2.1**
baz=273
**TOLK Toolik Lake Re 39.30 30** P **P** **13 34 26.2 0.0**
TOLK IAmb IAmb 13 34 39.7
comp=Z,15nm,0.7s
**TOLK Toolik Lake Re 39.30 30** P **P** **13 34 26.7 +0.5**
baz=264,SNR=8.7
**MCK McKinley 39.30 38** P **P** **13 34 27.6 +1.3**
baz=270
**KNK Knik Glacier 39.61 42** P **P** **13 34 30.3 +1.5**
baz=274
**MDM Murphy Dome 39.61 36** P **P** **13 34 29.0 +0.1**
**D24K Happy Valley 39.63 30** P **P** **13 34 28.5 -0.4**
D24K IAmb IAmb 13 34 50.6
comp=Z,28nm,1.1s
**D24K Happy Valley 39.63 30** P **P** **13 34 28.5 -0.4**
baz=264,SNR=5.7
**SML Sawmill 39.64 41** P **P** **13 34 29.9 +0.7**
SML IAmb IAmb 13 34 53.9
comp=Z,29nm,0.9s
**SML Sawmill 39.64 41** P **P** **13 34 29.8 +0.7**
baz=273
**E24K Your Creek 39.65 31** P **P** **13 34 29.1 0.0**
E24K IAmb IAmb 13 34 43.0
comp=Z,26nm,0.8s
**E24K Your Creek 39.65 31** P **P** **13 34 28.9 -0.3**
baz=266,SNR=24
**PWL Port Wells 39.70 43** P **P** **13 34 29.6 0.0**
**PWL Port Wells 39.70 43** P **P** **13 34 31.6 +2.0**
baz=275
**C24K Franklin Bluff 39.73 29** P **P** **13 34 29.4 -0.3**
baz=263
**H24K Noodor Dome 39.77 35** P **P** **13 34 29.9 -0.3**
**H24K Noodor Dome 39.77 35** P **P** **13 34 30.7 +0.5**
baz=269
**COLA College 39.77 36** P **P** **13 34 31.7 +1.6**
baz=270
**COLA College 39.77 36** *i* P **P** **13 34 29.3 -0.8**
COLA pmax pmax
comp=Z,6.0nm,0.9s
**COLA College 39.77 36** P **P** **13 34 33.4 +3.3**
**CCB Clear Creek Bu 39.80 37** P **P** **13 34 30.9 +0.6**
**F24K Squaw Lake 39.84 32** P **P** **13 34 30.9 +0.2**
**F24K Squaw Lake 39.84 32** P **P** **13 34 31.2 +0.5**
baz=267
**WAT6 Susitna Watana 39.88 40** P **P** **13 34 32.7 +1.5**
baz=273
**M23K Glacier View 39.93 41** P **P** **13 34 33.5 +2.0**
baz=274
**POKR Poker Plat Res 39.95 36** P **P** **13 34 32.5 +0.8**
POKR IAmb IAmb 13 34 46.3
comp=Z,29nm,0.8s
**POKR Poker Plat Res 39.95 36** P **P** **13 34 32.8 +1.1**
baz=270
**G24K Hadweenzic Riv 39.96 34** P **P** **13 34 32.7 +1.1**
G24K IAmb IAmb 13 34 46.0
comp=Z,22nm,0.8s
**G24K Hadweenzic Riv 39.96 34** P **P** **13 34 32.3 +0.7**
baz=268,SNR=14
**DHY Denali Highway 40.02 39** P **P** **13 34 32.5 0.0**
**DHY Denali Highway 40.02 39** P **P** **13 34 33.8 +1.4**
baz=273
**SCM Sheep Creek Mo 40.12 41** P **P** **13 34 33.8 +0.7**
SCM IAmb IAmb 13 35 29.1
comp=Z,28nm,1.4s
**SCM Sheep Creek Mo 40.12 41** P **P** **13 34 34.8 +1.7**
baz=274
**SCM Sheep Creek Mo 40.12 41** P **P** **13 34 33.8 +0.7**
SCM pmax pmax
comp=Z,28nm,1.4s
**HDA Harding Lake 40.17 37** P **P** **13 34 34.5 +1.1**
baz=272
**IL31 40.19 37** P **P** **13 34 34.3 +0.8**
**ILAR Eielson Array 40.19 37** P **P** **13 34 33.3 -0.3**
**ILAR Eielson Array 40.19 37** P **P** **13 34 32.6 -1.0**
comp=Z,1.3nm,0.7s,baz=263,slow=8.9,SNR=18
ILAR LR LR 13 53 11.5
comp=Z,400nm,18.7s,baz=264,slow=39
comp=Z,1.3nm,0.7s
**ILAR Eielson Array 40.19 37** P **P** **13 34 33.3 -0.3**
**P23K Montague Islan 40.24 44** P **P** **13 34 37.2 +3.1**
baz=276
**GLI Glacier Island 40.31 43** P **P** **13 34 37.5 +2.9**
baz=276
**G25K Bearman Lake 40.51 33** P **P** **13 34 37.5 +1.3**
baz=270
**D25K Kavik River 40.51 30** P **P** **13 34 35.7 -0.5**
D25K IAmb IAmb 13 35 00.2
comp=Z,21nm,0.7s
**D25K Kavik River 40.51 30** P **P** **13 34 36.5 +0.3**
baz=266,SNR=33
**H25L Birch Creek 40.62 34** P **P** **13 34 38.6 +1.5**
baz=270
**M24K Tolsona, Glenn 40.64 41** P **P** **13 34 39.6 +2.1**
baz=275
**F25K Christian Rive 40.70 32** P **P** **13 34 38.9 +1.1**
baz=269
**K24K Donnelly Dome 40.70 38** P **P** **13 34 39.5 +1.6**
baz=273
**PRP Porcupine Dome 40.75 35** P **P** **13 34 39.2 +0.8**
baz=272
**KLU Klutina 40.81 42** P **P** **13 34 39.5 +0.6**
KLU IAmb IAmb 13 34 54.0
comp=Z,16nm,0.9s
**KLU Klutina 40.81 42** P **P** **13 34 41.2 +2.3**
baz=276
**Q23K Middleton Isla 40.84 45** P **P** **13 34 42.6 +3.6**
baz=278
**J25K Salcha River, 40.84 37** P **P** **13 34 38.9 -0.2**
**J25K Salcha River, 40.84 37** P **P** **13 34 40.6 +1.5**
baz=273
**FYU Fort Yukon 40.85 34** P **P** **13 34 40.7 +1.7**
FYU IAmb IAmb 13 34 54.2
comp=Z,32nm,1.0s
**PAX Paxson 40.90 39** P **P** **13 34 42.8 +3.2**
baz=274
**EYAK Cordova Ski Ar 41.00 43** P **P** **13 34 43.3 +3.0**
baz=277
**C26K Camden Bay 41.06 29** P **P** **13 34 42.0 +1.3**
baz=267,SNR=9.7
**HARP HAARP 41.09 40** P **P** **13 34 42.0 +0.9**
baz=276
**BMAR Burnt Mountain 41.11 32** P **P** **13 34 42.3 +1.1**
**F26K Sheenjek River 41.27 32** P **P** **13 34 43.2 +0.7**
baz=270,SNR=12
**QIZ Qiongzhong 41.39 246** P **P** **13 34 44.3 +0.3**
QIZ S **S** **13 40 58.2 +0.7**
QIZ LR LR
comp=Z,390nm,18.8s
QIZ LR LR
comp=Z,550nm,20.0s
QIZ LR LR
comp=Z,460nm,19.2s
**G26K Porcupine Rive 41.42 33** P **P** **13 34 43.8 +0.1**
baz=271
**N25K Chitina, Valde 41.43 41** P **P** **13 34 45.8 +1.9**
baz=277
**C27K Jago River 41.46 29** P **P** **13 34 43.7 -0.3**
baz=268,SNR=16
**SCRK Sand Creek 41.48 38** P **P** **13 34 44.9 +0.4**
**SCRK Sand Creek 41.48 38** P **P** **13 34 45.7 +1.3**
baz=275
**BMRM Bremner River 41.51 42** P **P** **13 34 46.6 +2.1**
baz=278
**DGZ Jazzator, Alta 41.56 300** *i* P **P** **13 34 46.2 +0.9**
DGZ pmax pmax
comp=Z,8.0nm,0.7s
DGZ MLR MLR
comp=Z,929nm,15.0s
**J26L Joseph Creek 41.63 37** P **P** **13 34 46.5 +0.9**
**J26L Joseph Creek 41.63 37** P **P** **13 34 47.3 +1.7**
baz=274
**GOMU GeErMu 41.75 278** P **P** **13 34 48.7 +1.5**
GOMU pmax pmax
comp=Z,59nm,0.8s
GOMU LR LR
comp=Z,1µm,16.7s
GOMU LR LR
comp=Z,2µm,16.5s
GOMU LR LR
comp=Z,3µm,17.1s
**L26K Log Cabin Wild 41.86 39** P **P** **13 34 49.5 +2.1**
baz=276
**ZALV Zalesovo Beam 41.99 307** P **P** **13 34 47.3 -1.2**
comp=Z,2.1nm,0.5s,baz=85,slow=9.1,SNR=11
ZALV PcP **PcP** **13 36 43.9 +0.6**
comp=Z,5.9nm,0.7s,baz=65,slow=3.0,SNR=15
ZALV LR LR 13 53 40.5
comp=Z,549nm,18.4s,baz=63,slow=38
comp=Z,2.1nm,0.5s

**PZH PanZhiHua 42.02 261** P **P** **13 34 51.7 +2.5**
PZH S **S** **13 41 09.8 +2.9**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,130nm,4.3s
PZH LR LR
comp=Z,260nm,15.7s
PZH LR LR
comp=Z,230nm,16.3s
PZH LR LR
comp=Z,270nm,15.9s
**M26K Nabesna, AK 42.09 40** P **P** **13 34 50.9 +1.6**
baz=277
**KMI Kunming 42.16 259** ⇑P **P** **13 34 51.7 +1.2**
KMI pP pwP 13 35 04.5 +2.2
KMI S **S** **13 41 10.6 +1.4**
KMI pmax pmax
comp=Z,16nm,1.1s
KMI LR LR
comp=Z,230nm,19.2s
KMI LR LR
comp=Z,300nm,16.2s
KMI LR LR
comp=Z,410nm,15.9s
**MCARA McCarthy VSAT 42.21 42** P **P** **13 34 52.5 +2.3**
baz=278
**E27K Coleen River 42.23 31** P **P** **13 34 51.5 +1.2**
**E27K Coleen River 42.23 31** P **P** **13 34 50.6 +0.3**
baz=272,SNR=5.7
**CRQM Cirque 42.25 42** P **P** **13 34 51.3 +0.5**
CRQM IAmb IAmb 13 35 06.0
comp=Z,31nm,0.8s
**CRQE Cirque 42.27 42** P **P** **13 34 53.4 +2.6**
baz=279
**G27K Doyon Strip 42.27 33** P **P** **13 34 52.0 +1.3**
baz=273
**K27K Chicken 42.32 38** P **P** **13 34 51.8 +0.8**
K27K IAmb IAmb 13 35 16.4
comp=Z,23nm,0.9s
**K27K Chicken 42.32 38** P **P** **13 34 51.7 +0.6**
baz=276
**H27K Steamboat Moun 42.36 34** P **P** **13 34 52.5 +1.1**
baz=274
**I27K Kandik River 42.37 35** P **P** **13 34 52.8 +1.3**
baz=275
**D27M Malcolm River 42.43 30** P **P** **13 34 52.2 +0.2**
baz=271
**L27K Beaver Creek, 42.54 39** P **P** **13 34 53.8 +0.9**
L27K IAmb IAmb 13 35 18.6
comp=Z,11nm,0.8s
**L27K Beaver Creek, 42.54 39** P **P** **13 34 54.6 +1.6**
baz=277,SNR=8.9
**BCAR Beaver Creek A 42.56 39** P **P** **13 34 53.7 +0.6**
**M27K Edge Creek, AK 42.61 40** P **P** **13 34 55.2 +1.6**
M27K IAmb IAmb 13 35 19.6
comp=Z,24nm,1.2s
**M27K Edge Creek, AK 42.61 40** P **P** **13 34 55.1 +1.4**
baz=278
**EGAK Eagle 42.64 36** P **P** **13 34 53.6 -0.1**
**EGAK Eagle 42.64 36** P **P** **13 34 54.7 +1.1**
baz=276
**F28M Old Crow 42.91 32** P **P** **13 34 56.7 +0.8**
baz=274
**GRNC Granite Creek 42.92 42** P **P** **13 34 58.4 +2.1**
GRNC IAmb IAmb 13 35 11.3
comp=Z,23nm,0.8s
**MESA MESA 42.92 43** P **P** **13 34 58.5 +2.2**
baz=280
**E28M Babbage River 42.97 31** P **P** **13 34 57.3 +0.9**
**E28M Babbage River 42.97 31** P **P** **13 34 57.0 +0.6**
baz=273
**I28M Miner Creek 43.08 35** P **P** **13 34 58.5 +1.1**
I28M IAmb IAmb 13 35 22.4
comp=Z,13nm,0.8s
**I28M Miner Creek 43.08 35** P **P** **13 34 58.1 +0.7**
baz=276,SNR=11
**CTG Chitna Glacier 43.08 42** P **P** **13 34 59.8 +2.3**
baz=280
**CTGM Chitina Glacie 43.09 42** P **P** **13 34 57.6 +0.1**
CTGM IAmb IAmb 13 35 12.6
comp=Z,19nm,0.7s
**D28M Stokes Point 43.22 30** P **P** **13 34 58.7 +0.4**
baz=273
**YUK3 Moose Creek 43.36 41** P **P** **13 35 01.8 +2.0**
baz=280
**DAWY Dawson 43.49 37** P **P** **13 35 01.8 +1.2**
baz=278
**E29M Blow River 43.59 31** P **P** **13 35 02.1 +0.8**
E29M IAmb IAmb 13 35 16.3
comp=Z,20nm,0.9s
**E29M Blow River 43.59 31** P **P** **13 35 02.3 +1.0**
baz=275,SNR=10
**H29M Whitestone 43.63 34** P **P** **13 35 03.0 +1.3**
**H29M Whitestone 43.63 34** P **P** **13 35 02.1 +0.4**
baz=277
**O28M Mount Upton 43.67 42** P **P** **13 35 04.0 +1.6**
baz=281
**G29M Pine Creek 43.69 33** P **P** **13 35 03.4 +1.2**
G29M IAmb IAmb 13 35 17.3
comp=Z,27nm,1.2s
**G29M Pine Creek 43.69 33** P **P** **13 35 02.8 +0.6**
baz=276
**I29M Ogilvie Camp, 43.77 35** P **P** **13 35 03.5 +0.7**
I29M IAmb IAmb 13 35 27.4
comp=Z,16nm,0.8s
**I29M Ogilvie Camp, 43.77 35** P **P** **13 35 04.0 +1.2**
baz=278
**YUK8 Steele Glacier 43.78 41** P **P** **13 35 05.1 +1.9**
baz=281
**ZSN Zaisan 43.90 298** *e*P **P** **13 35 04.3 +0.2**
baz=298
**ZSN Zaisan 43.90 298** *e*P **P** **13 35 04.3 +0.2**
**M29M Somme Creek 44.17 39** P **P** **13 35 07.7 +1.5**
baz=281
**L29M L29M 44.20 38** P **P** **13 35 07.4 +1.1**
baz=280
**EPYK Eagle Plains 44.27 34** P **P** **13 35 07.8 +1.0**
EPYK IAmb IAmb 13 35 21.6
comp=Z,32nm,1.2s
**EPYK Eagle Plains 44.27 34** P **P** **13 35 07.8 +1.0**
baz=278,SNR=5.7
**PNL Peninsula 44.28 43** P **P** **13 35 08.8 +1.7**
baz=283
**YUK4 Talbot Arm 44.29 41** P **P** **13 35 08.6 +1.3**
baz=282
**K29M Barlow Dome 44.34 37** P **P** **13 35 08.8 +1.3**
**K29M Barlow Dome 44.34 37** P **P** **13 35 08.0 +0.5**
baz=280
**G30M tAoh Zraii Nji 44.39 33** P **P** **13 35 08.1 +0.3**
baz=278
**F30M Barrier River 44.47 32** P **P** **13 35 08.7 +0.3**
baz=278
**YUK6 Outpost Mounta 44.51 42** P **P** **13 35 10.8 +1.7**
baz=282
**O29M Mount Kennedy 44.55 42** P **P** **13 35 11.5 +2.2**
baz=283
**I30M Mount Dempster 44.59 35** P **P** **13 35 09.6 0.0**
I30M IAmb IAmb 13 35 34.7
comp=Z,21nm,0.9s
**I30M Mount Dempster 44.59 35** P **P** **13 35 10.3 +0.8**
baz=280,SNR=11
**J30M Hart River 44.72 36** P **P** **13 35 10.6 +0.1**
**J30M Hart River 44.72 36** P **P** **13 35 11.6 +1.1**
baz=280
**N30M Aishikik Lake 45.00 41** P **P** **13 35 15.3 +2.5**
baz=283
**P29M Windy Craggy 45.11 43** P **P** **13 35 15.9 +2.3**
baz=284
**G31M Satah River 45.15 33** P **P** **13 35 13.2 -0.6**
G31M IAmb IAmb 13 35 29.4
comp=Z,7.6nm,0.7s
**G31M Satah River 45.15 33** P **P** **13 35 14.6 +0.8**
baz=280
**INK Inuvik 45.21 31** P **P** **13 35 16.1 +1.9**
INK IAmb IAmb 13 35 30.4
comp=Z,15nm,1.1s
**INK Inuvik 45.21 31** P **P** **13 35 15.1 +0.9**
baz=279
**INK Inuvik 45.21 31** P **P** **13 35 16.1 +1.9**
INK pmax pmax
comp=Z,15nm,1.1s
**TNCH TengChong 45.21 262** P **P** **13 35 16.9 +1.9**
TNCH pP sP 13 35 24.5 +1.2
TNCH sP pwP 13 35 30.7 +3.8
TNCH pmax pmax
comp=Z,19nm,0.9s

**P30M Million Dollar 45.37 42** P **P** **13 35 17.8 +2.1**
baz=284
**N31M Braeburn, Yuko 45.61 40** P **P** **13 35 19.2 +1.6**
baz=284
**MK31 Makanchi Array 45.78 298** P **P** **13 35 18.3 -0.8**
**MK31 Makanchi Array 45.78 298** *ce*P **P** **13 35 18.7 -0.4**
**MKAR Makanchi Array 45.78 298** P **P** **13 35 19.1 0.0**
comp=Z,25nm,0.7s,baz=76,slow=7.3,SNR=195
MKAR PcP **PcP** **13 36 56.9 +0.5**
comp=Z,2.8nm,0.8s,baz=89,slow=6.2,SNR=2.2
MKAR LR LR 13 55 59.7
comp=Z,1µm,18.1s,baz=75,slow=38
comp=Z,25nm,0.7s
**PLBC Pleasant Camp 45.83 43** P **P** **13 35 21.8 +2.5**
baz=285
**MAKZ Makanchi 45.97 298** P **P** **13 35 21.4 +0.8**
**MAKZ Makanchi 45.97 298** P **P** **13 35 21.3 +0.7**
**M31M Drury Creek, Y 46.08 39** P **P** **13 35 23.5 +2.3**
baz=284
**WHY Whitehorse 46.24 41** P **P** **13 35 24.8 +2.2**
baz=285
**FARO Faro, Yukon 46.54 39** P **P** **13 35 26.2 +1.3**
**FARO Faro, Yukon 46.54 39** P **P** **13 35 27.2 +2.3**
baz=285
**KURK Kurchatov 46.59 304** *ce*P **P** **13 35 23.6 -1.7**
KURK pmax pmax
comp=Z,12nm,0.8s
**KURK Kurchatov 46.59 304** P **P** **13 35 24.6 -0.7**
**KURBB Kurchatov Arra 46.68 304** P **P** **13 35 25.0 -1.0**
comp=Z,8.3nm,0.7s,baz=73,slow=8.5,SNR=48
KURBB PcP **PcP** **13 36 59.7 +0.3**
comp=Z,3.2nm,0.7s,baz=76,slow=3.7,SNR=8.2
KURBB LR LR 13 56 10.2
comp=Z,366nm,18.4s,baz=162,slow=38
comp=Z,8.3nm,0.7s
**KURBB Kurchatov Arra 46.68 304** P **P** **13 35 25.2 -0.8**
**A36M Sachs Harbour 47.30 25** P **P** **13 35 30.6 0.0**
baz=283
**S32K Killinioo 47.31 46** P **P** **13 35 33.5 +2.7**
baz=288
**P33M Teslin, Yukon 47.34 42** P **P** **13 35 32.4 +1.2**
baz=287
**Q32M Nakina River 47.99 43** P **P** **13 35 38.9 +2.4**
baz=289
**PHRA Phrae 48.25 254** P **P** **13 35 40.0 +1.4**
**C36M Paulatuk 48.34 28** P **P** **13 35 38.6 -0.1**
**C36M Paulatuk 48.34 28** P **P** **13 35 40.0 +1.3**
baz=286
**R33M Jennings River 48.49 42** P **P** **13 35 41.4 +1.3**
R33M IAmb IAmb 13 35 56.1
comp=Z,6.5nm,0.8s
**R33M Jennings River 48.49 42** P **P** **13 35 42.8 +2.7**
baz=289
**U33K Whale Pass 48.51 47** P P 13 35 45.0 +4.9
baz=291
**TDK Taldyqorghan 48.98 297** *e*P **P** **13 35 44.1 +0.1**
comp=Z,9.2nm,0.5s,baz=297
TDK LR LR 13 57 17.3
comp=Z,424nm,14.4s,baz=297
**TDK Taldyqorghan 48.98 297** *e*P **P** **13 35 44.1 +0.1**
TDK pmax pmax
comp=Z,9.0nm,0.5s
TDK MLR MLR
comp=Z,424nm,14.0s
**PDGK Podgornoye 49.02 295** P **P** **13 35 44.0 -0.5**
**SHLS Shalkode 49.12 295** *e*P **P** **13 35 43.2 -2.0**
comp=Z,9.4nm,0.7s,baz=294
**SHLS Shalkode 49.12 295** *e*P **P** **13 35 43.2 -2.0**
SHLS pmax pmax
comp=Z,9.0nm,0.7s
**CMAR Chiang Mai Arr 49.17 255** P **P** **13 35 46.5 +0.8**
comp=Z,1.8nm,0.8s,baz=41,slow=7.4,SNR=9.4
CMAR LR LR 13 59 49.9
comp=Z,226nm,18.8s,baz=70,slow=40
comp=Z,1.8nm,0.8s
**DLBC Dease Lake 49.27 43** LR LR 13 57 14.1
comp=Z,190nm,21.2s,baz=306,slow=37
**DLBC Dease Lake 49.27 43** P **P** **13 35 49.3 +3.2**
baz=291
**UZB Uzynbulak 49.41 295** *e*P **P** **13 35 47.7 +0.2**
comp=Z,6.8nm,0.7s,baz=295
**UZB Uzynbulak 49.41 295** *e*P **P** **13 35 47.6 +0.2**
UZB pmax pmax
comp=Z,7.0nm,0.7s
**KPKS Kokpek 49.48 295** *e*P **P** **13 35 48.1 +0.1**
comp=Z,7.6nm,0.8s,baz=295
**KPKS Kokpek 49.48 295** *e*P **P** **13 35 48.1 +0.1**
KPKS pmax pmax
comp=Z,8.0nm,0.8s
**V35K Ketchikan 49.59 47** P **P** **13 35 52.6 +4.2**
baz=292
**SHL Shillong 49.64 268** P **P** **13 35 49.7 +0.3**
**SHL Shillong 49.64 268** P **P** **13 35 49.7 +0.3**
SHL pmax pmax
comp=Z,20nm,0.9s
**T35M Bob Quinn 49.69 45** P **P** **13 35 53.1 +3.8**
baz=292
**ZHN Zhinishke 49.78 295** *e*P **P** **13 35 50.4 +0.1**
comp=Z,8.9nm,0.7s,baz=295
**ZHN Zhinishke 49.78 295** *e*P **P** **13 35 50.4 +0.1**
ZHN pmax pmax
comp=Z,9.0nm,0.7s
**SATY Saty 49.85 295** *e*P **P** **13 35 50.7 -0.1**
comp=Z,7.5nm,0.8s,baz=295
**SATY Saty 49.85 295** *e*P **P** **13 35 50.7 -0.1**
SATY pmax pmax
comp=Z,8.0nm,0.8s
**WUS Wushi 50.18 292** P **P** **13 35 54.7 +1.3**
**BRVK Borovoye 50.49 310** P **P** **13 35 55.1 -0.2**
BRVK IAmb IAmb 13 35 56.9
comp=Z,7.8nm,0.8s
**BRVK Borovoye 50.49 310** *ce*P **P** **13 35 54.1 -1.2**
BRVK pmax pmax
comp=Z,9.0nm,0.8s
**BRVK Borovoye 50.49 310** P **P** **13 35 55.9 +0.6**
**MDOK Medeo 50.69 296** *e*P **P** **13 35 57.3 +0.1**
baz=296
MDOK *e*S **S** **13 43 09.7 -1.2**
baz=296
MDOK LR LR 13 58 47.9
baz=296
**MDOK Medeo 50.69 296** *e*P **P** **13 35 57.2 +0.1**
MDOK *e*S **S** **13 43 09.7 -1.2**
**AAA Alma-Ata 50.75 296** *e*P **P** **13 35 57.5 0.0**
baz=296
AAA LR LR 13 59 11.8
baz=296
**AAA Alma-Ata 50.75 296** *e*P **P** **13 35 57.5 0.0**
**AAA Alma-Ata 50.75 296** *e*P **P** **13 35 57.5 0.0**
**KUU Kurty 50.80 297** *e*P **P** **13 35 58.1 +0.1**
comp=Z,12nm,0.8s,baz=297
KUU LR LR 13 59 11.8
comp=Z,421nm,14.5s,baz=297
**KUU Kurty 50.80 297** *e*P **P** **13 35 58.0 +0.1**
KUU pmax pmax
comp=Z,11nm,0.8s
KUU MLR MLR
comp=Z,421nm,14.0s
**TNSS Tian-Shan 50.81 296** *e*P **P** **13 35 58.1 -0.3**
baz=296
**TNSS Tian-Shan 50.81 296** *e*P **P** **13 35 58.1 -0.3**
**LIRD Liard River Hi 50.81 41** P **P** **13 36 00.5 +2.8**
baz=293
**TARG Taragay, Kyrgy 50.87 294** P **P** **13 35 58.6 -0.2**
TARG IAmb IAmb 13 36 01.4
comp=Z,18nm,1.1s
**TARG Taragay, Kyrgy 50.87 294** P **P** **13 35 58.6 -0.2**
TARG pmax pmax
comp=Z,18nm,1.1s
**OTUK Ortayu 51.33 303** P **P** **13 36 01.8 0.0**
**TOAD Toad River Com 51.44 42** P **P** **13 36 06.0 +3.6**
baz=294
**ULHL Ulahol 51.64 295** P **P** **13 36 05.2 +0.7**
SNR=17
**BTLS Baital 51.73 299** *e*P **P** **13 36 04.7 -0.1**
comp=Z,6.3nm,1.0s,baz=299
**BTLS Baital 51.73 299** *e*P **P** **13 36 04.6 -0.1**
BTLS pmax pmax
comp=Z,6.0nm,1.0s
**TKM2 Tokmak 2 51.74 296** P **P** **13 36 06.1 +1.0**
SNR=19
**TKM2 Tokmak 2 51.74 296** *i* P **P** **13 36 05.4 +0.3**
TKM2 pmax pmax
comp=Z,32nm,1.0s
**SGDS Sogindy 52.11 297** *e*P **P** **13 36 07.8 +0.1**
comp=Z,8.1nm,0.7s,baz=297
**SGDS Sogindy 52.11 297** *e*P **P** **13 36 07.8 +0.1**

SGDS pmax pmax
comp=Z,8.0nm,0.7s
**USP Ospenovka 52.28 297** P **P** **13 36 09.3 +0.4**
SNR=31
**KBK Karagaybulak 52.28 296** P **P** **13 36 10.6 +1.4**
SNR=8.2
**AAK Ala-Archa 52.59 296** P **P** **13 36 12.0 +0.6**
SNR=7.2
**AAK Ala-Archa 52.59 296** P **P** **13 36 11.5 +0.2**
comp=Z,8.1nm,0.5s,baz=106,slow=2.5,SNR=6.6
AAK LR LR 14 00 12.2
comp=Z,280nm,18.6s,baz=60,slow=38
comp=Z,8.1nm,0.5s
**AAK Ala-Archa 52.59 296** P **P** **13 36 12.3 +1.0**
**BBB Bella Bella 52.78 50** LR LR 13 57 00.2
comp=Z,89nm,20.5s,baz=298,slow=34
**EKS2 Erkin-Say 53.04 297** P **P** **13 36 15.9 +1.3**
SNR=20
**KSH Kashi 53.17 292** P P 13 36 20.7 +5.0
KSH pP pwP 13 36 27.6 -0.3
KSH pmax pmax
comp=Z,11nm,1.1s
KSH LR LR
comp=Z,570nm,18.6s
KSH LR LR
comp=Z,450nm,17.9s
KSH LR LR
comp=Z,630nm,18.5s
**AML Almayashu 53.35 296** P **P** **13 36 18.9 +1.6**
SNR=22
**PMG Port Moresby 53.38 183** LR LR 13 56 48.4
comp=Z,31nm,21.6s,baz=332,slow=34
**SVE Sverdlovsk 53.90 317** *e*P **P** **13 36 20.8 +0.2**
SVE pmax pmax
comp=Z,19nm,0.9s
SVE MLR MLR
comp=Z,896nm,18.0s
**RES Resolute Bay 54.08 17** LR LR 14 02 33.9
comp=Z,288nm,19.9s,baz=344,slow=40
**RES Resolute Bay 54.08 17** P **P** **13 36 21.8 +0.2**
RES pmax pmax
comp=Z,16nm,1.0s
**HNR Honiara 54.23 167** LR LR 14 00 54.2
comp=Z,3µm,18.7s,baz=357,slow=38
**YKA Yellowknife Ar 54.54 35** P **P** **13 36 24.5 -0.7**
comp=Z,2.2nm,0.8s,baz=301,slow=7.2,SNR=6.9
comp=Z,2.2nm,0.8s
**KK31 Karatay Array 54.90 299** *i* P **P** **13 36 28.0 -0.1**
**KKAR Karatay Array 54.90 299** P **P** **13 36 27.7 -0.5**
**KKAR Karatay Array 54.90 299** P **P** **13 36 27.8 -0.3**
KKAR IAmb IAmb 13 36 29.7
comp=Z,19nm,0.8s
**KKAR Karatay Array 54.90 299** P **P** **13 36 27.8 -0.3**
KKAR pmax pmax
comp=Z,19nm,0.8s
**ARU Arti 55.10 317** LR LR 14 02 35.5
comp=Z,847nm,18.1s,baz=52,slow=39
**ARU Arti 55.10 317** *e*P **P** **13 36 29.1 -0.2**
**ARU Arti 55.10 317** *d i*P **P** **13 36 29.1 -0.2**
ARU 13 38 29.9
ARU S **S** **13 44 11.7 +1.4**
ARU SS **SS** **13 47 55.0 +1.4**
ARU pmax pmax
comp=Z,12nm,1.0s
ARU MLR MLR
comp=Z,783nm,17.0s
**ARU Arti 55.10 317** P **P** **13 36 28.7 -0.6**
comp=Z,12nm,0.9s
**BRLS Boroldav 55.36 299** *e*P **P** **13 36 32.7 +1.2**
baz=299
**BRLS Boroldav 55.36 299** *e*P **P** **13 36 32.7 +1.2**
**CHM Chimkent 55.88 298** *e*P **P** **13 36 34.8 -0.3**
baz=298
CHM LR LR 14 01 59.9
comp=Z,376nm,16.1s,baz=298
**CHM Chimkent 55.88 298** *e*P **P** **13 36 34.8 -0.3**
CHM MLR MLR
comp=Z,376nm,16.0s
**GAR Garm 57.17 294** P **P** **13 36 44.6 0.0**
**KULM Kulim 57.56 242** P **P** **13 36 48.9 +1.5**
**AB31 Akbulak array 58.01 309** *i* P **P** **13 36 49.7 -0.4**
**ABKAR Akbulak array 58.01 309** P **P** **13 36 49.5 -0.6**
**ABKAR Akbulak array 58.01 309** P **P** **13 36 49.7 -0.5**
ABKAR IAmb IAmb 13 36 51.5
comp=Z,24nm,0.8s
**CHGR Chuyangaron 58.12 295** P **P** **13 36 50.7 -0.5**
**CHGR Chuyangaron 58.12 295** P **P** **13 36 50.7 -0.5**
CHGR pmax pmax
comp=Z,37nm,0.8s
**NIL Nilore 58.17 288** P **P** **13 36 52.8 +1.2**
**NIL Nilore 58.17 288** P **P** **13 36 52.8 +1.2**
NIL pmax pmax
comp=Z,45nm,1.0s
**NIL Nilore 58.17 288** P **P** **13 36 53.0 +1.5**
**KIRV Kirov 58.21 323** LR LR 14 04 09.3
comp=Z,452nm,19.5s,baz=50,slow=38
**SIMJ Simiganj 58.22 295** P **P** **13 36 51.8 -0.2**
**SIMJ Simiganj 58.22 295** P **P** **13 36 52.3 +0.3**
**AKTO Aktyubinsk 58.44 311** LR LR 14 03 52.0
comp=Z,357nm,18.6s,baz=85,slow=38
**ARCES ARCESS Array B 59.37 340** P **P** **13 36 58.4 -1.0**
comp=Z,4.2nm,0.9s,baz=23,slow=9.5,SNR=1.8
ARCES LR LR 14 07 52.6
comp=Z,105nm,19.1s,baz=38,slow=41
comp=Z,4.2nm,0.9s
**KBL Kabul 60.52 291** P **P** **13 37 07.4 -0.6**
**KBL Kabul 60.52 291** P **P** **13 37 07.4 -0.6**
KBL pmax pmax
comp=Z,19nm,0.8s
**YBH Yreka Blue Hor 61.31 59** LR LR 13 58 57.3
comp=Z,83nm,21.8s,baz=318,slow=31
**JOF Joensuu 62.42 333** *e*P **P** **13 37 20.1 0.0**
**BELG Belogornoye 62.65 318** LR LR 14 07 08.7
comp=Z,573nm,18.3s,baz=78,slow=38
**BELG Belogornoye 62.65 318** *i* P **P** **13 37 21.9 +0.1**
BELG pmax pmax
comp=Z,6.0nm,0.8s
BELG MLR MLR
comp=Z,96nm,18.0s
**STEI Steigen 63.00 342** *e*P **P** **13 37 23.4 -0.4**
STEI IAmb IAmb 13 37 24.9
comp=Z,12nm,1.1s
**LOF Lofoten 63.20 343** *e*P **P** **13 37 24.6 -0.5**
LOF IAmb IAmb 13 37 27.0
comp=Z,12nm,1.0s
**MSO Missoula 63.43 50** P P 13 37 33.4 +6.2
baz=307
**FAUS Fauske 63.44 342** *e*P **P** **13 37 26.1 -0.7**
FAUS IAmb IAmb 13 37 27.0
comp=Z,14nm,0.8s
**VALR Valaam 63.67 332** *i* P **P** **13 37 27.7 -0.7**
VALR pmax pmax
comp=Z,36nm,0.9s
VALR MLR MLR
comp=Z,189nm,15.0s
**JMIC Jan Mayen 64.02 352** LR LR 14 05 10.2
comp=Z,125nm,18.8s,baz=49,slow=36
**MOR8 Moi Rana 64.63 341** *e*P **P** **13 37 33.0 -1.7**
MOR8 IAmb IAmb 13 37 33.7
comp=Z,21nm,0.8s
**EGMT Eagleton 64.94 47** P P 13 37 43.3 +6.2
baz=309
**VAF Ylistaro 65.00 336** *e*P **P** **13 37 37.3 +0.2**
**KEF Keuruu 65.02 335** *e*P **P** **13 37 36.9 -0.3**
**HLID Hailey 65.15 53** P P 13 37 46.7 +8.1
baz=308
**FIA1 FINESS Array S 65.19 334** P **P** **13 37 37.8 -0.5**
**FINES FINESS Array B 65.19 334** P **P** **13 37 37.7 -0.6**
**FINES FINESS Array B 65.19 334** P **P** **13 37 37.6 -0.7**
comp=Z,24nm,0.7s,baz=42,slow=6.9,SNR=64
FINES LR LR 14 10 23.4
comp=Z,361nm,18.5s,baz=30,slow=40
comp=Z,24nm,0.7s
**FINES FINESS Array B 65.19 334** *e*P **P** **13 37 37.2 -1.1**
**WRA Warramunga Arr 65.29 196** P **P** **13 37 39.4 0.0**
comp=Z,2.2nm,0.7s,baz=17,slow=6.9,SNR=13
comp=Z,2.2nm,0.7s
**BMN Battle Mountai 65.42 57** P **P** **13 37 41.1 +0.7**
**BMN Battle Mountai 65.42 57** P **P** **13 37 41.2 +0.7**
BMN pmax pmax
comp=Z,4.0nm,0.9s
**BOZ Bozeman (W) 65.45 50** P **P** **13 37 40.2 -0.3**
BOZ IAmb IAmb 13 37 57.0
comp=Z,6.7nm,0.7s
**BOZ Bozeman (W) 65.45 50** P P 13 37 46.0 +5.4
baz=309

**BOZ Bozeman (W) 65.45 50** P **P** **13 37 40.2 -0.3**
BOZ pmax pmax
comp=Z,7.0nm,0.7s
**KVN Kaiserville 65.74 59** P **P** **13 37 43.2 +0.7**
KVN IAmb IAmb 13 37 57.4
comp=Z,5.1nm,0.9s
**KVN Kaiserville 65.74 59** P **P** **13 37 43.2 +0.7**
KVN pmax pmax
comp=Z,5.0nm,0.9s
**OBN Obninsk 65.88 325** LR LR 14 09 05.5
comp=Z,339nm,18.2s,baz=12,slow=38
**OBN Obninsk 65.88 325** *eP* **P** **13 37 42.8 -0.1**
**OBN Obninsk 65.88 325** *ceP* **P** **13 37 42.8 -0.1**
OBN *e* 13 38 10.1
OBN *e* 13 40 06.9
OBN pmax pmax
comp=Z,57nm,1.3s
OBN MLR MLR
comp=Z,400nm,18.0s
**NVAR Mina Array Bea 65.99 59** P **P** **13 37 43.6 -0.6**
comp=Z,1.1nm,0.7s,baz=291,slow=6.5,SNR=9.6
comp=Z,1.1nm,0.7s
**VRH Novokhopyorsk 66.23 319** *eP* **P** **13 37 44.8 -0.4**
VRH pmax pmax
comp=Z,61nm,0.7s
**ELK Elko 66.42 56** LR LR 14 02 44.2
comp=Z,87nm,21.7s,baz=333,slow=32
**NSS Namsos 66.58 341** *eP* **P** **13 37 45.5 -1.7**
NSS IAmb IAmb 13 37 47.4
comp=Z,9.3nm,0.6s
**LPSR Galich'ya Gora 66.58 321** *eP* **P** **13 37 46.5 -0.9**
LPSR pmax pmax
comp=Z,60nm,0.8s
**MEF Metsahovi 66.66 334** *eP* **P** **13 37 47.7 0.0**
**ARBE Arbavere 66.73 332** *eP* **P** **13 37 48.9 +0.6**
**H17A Grant Village 66.79 50** P P 13 37 57.1 +7.9
baz=310
**MSVF Nonsavu 66.98 150** LR LR 14 08 32.3
comp=Z,72nm,18.4s,baz=329,slow=37
**RLMT Red Lodge 67.04 49** P P 13 37 58.5 +7.7
baz=310
**VORR Voronezh 67.08 321** *eP* **P** **13 37 50.4 -0.3**
VORR pmax pmax
comp=Z,54nm,0.4s
**VSU Vasula 67.22 331** *ceP* **P** **13 37 51.4 0.0**
VSU pmax pmax
comp=Z,26nm,0.7s
VSU MLR MLR
comp=Z,194nm,16.0s
**PKM Mcpherson Peak 67.24 63** P P 13 38 02.7 +10
baz=309
**CWC Cottonwood Cre 67.37 61** P P 13 38 02.5 +10
baz=309
**VSR Storozhevoye 67.42 320** *eP* **P** **13 37 51.8 -1.0**
VSR pmax pmax
comp=Z,40nm,0.7s
**GRAC Grapevine Rang 67.47 60** P P 13 38 02.5 +9.1
baz=309
**VORD Divnogorie 67.53 320** *eP* **P** **13 37 52.7 -0.8**
VORD pmax pmax
comp=Z,30nm,0.8s
**SBC Santa Barbara 67.58 63** P P 13 38 04.2 +10
baz=309
**ISA Isabella, Lake 67.61 62** P P 13 38 05.0 +11
baz=309
**R11B Troy Canyon, C 67.71 58** P P 13 38 03.7 +8.6
baz=310
**ARVC Arvin 67.72 62** P P 13 38 04.8 +10
baz=309
**SCZ2 Santa Cruz Isl 67.91 64** P P 13 38 07.2 +11
baz=309
**MPMC Manual Prospec 67.98 61** P P 13 38 06.8 +10
baz=310
**MTSE Matsula 68.01 333** *eP* **P** **13 37 57.0 +0.7**
**SPR3 Spring Creek 3 68.06 57** P **P** **13 37 58.1 +0.6**
**S11A Rachel 68.06 59** P **P** **13 37 58.1 +0.8**
S11A IAmb IAmb 13 38 11.8
comp=Z,9.6nm,0.8s
**TBLU Trondheim 68.06 341** *eP* **P** **13 37 55.8 -0.9**
**SFJD Kangerlussuaq 68.09 8** LR LR 14 09 57.9
comp=Z,216nm,19.1s,baz=340,slow=38
**TPNV Topopah Spring 68.19 59** P P 13 38 07.4 +9.3
baz=310
**DUG Dugway, Tooele 68.20 55** P P 13 38 06.9 +8.8
baz=310
**BW06 Boulder Array 68.40 51** P P 13 38 06.7 +7.3
baz=311
**PDAR Pinedale Array 68.40 51** P **P** **13 37 58.1 -1.3**
comp=Z,0.6nm,0.5s,baz=222,slow=1.3,SNR=7.5
comp=Z,0.6nm,0.5s
**EDW2 Edwards Air Fo 68.41 62** P P 13 38 09.8 +10
baz=310
**SNCC San Nicolas Is 68.46 64** P P 13 38 10.4 +11
baz=310
**ASAR Alice Springs 69.00 195** P **P** **13 38 03.4 +0.5**
comp=Z,1.9nm,0.7s,baz=13,slow=6.0,SNR=21
comp=Z,1.9nm,0.7s
**BFSC Mount Baldy Ra 69.03 62** P P 13 38 13.6 +10
baz=310
**SCI2 San Clemente I 69.26 64** P P 13 38 16.6 +12
baz=310
**TUQ Turquoise Moun 69.36 60** P P 13 38 16.2 +11
baz=310
**DOMB Dombas 69.39 341** *eP* **P** **13 38 04.9 -0.1**
DOMB IAmb IAmb 13 38 05.5
comp=Z,22nm,0.8s
**GROC Groznyy 69.47 311** *eP* **P** **13 38 07.6 +1.8**
**HEC Hector,Ludlow 69.49 61** P P 13 38 17.2 +11
baz=310
**ISAL Salakas 69.64 330** *eP* **P** **13 38 08.0 +1.4**
**PALK Pallekele 69.68 260** LR LR 14 10 51.3
comp=Z,79nm,20.2s,baz=151,slow=38
**NB2 NORSAR Subarra 69.75 340** P **P** **13 38 06.2 -1.0**
comp=Z,23nm,0.7s,baz=29,slow=6.5
**NB2 NORSAR Subarra 69.75 340** P **P** **13 38 06.2 -1.0**
baz=29,slow=6.5
**NB2 NORSAR Subarra 69.75 340** P **P** **13 38 03.2 -4.0**
NB2 pmax pmax
comp=Z,4.0nm,0.6s
**NOA NORSAR Array B 69.75 340** P **P** **13 38 06.4 -0.8**
comp=Z,23nm,0.7s,baz=31,slow=6.2,SNR=98
NOA LR LR 14 13 40.3
comp=Z,102nm,18.3s,baz=30,slow=40
comp=Z,23nm,0.7s
**MNK Minsk 69.80 328** *eP* **P** **13 38 07.0 -0.6**
**HFS Hagfors 69.88 338** P **P** **13 38 07.1 -0.9**
comp=Z,29nm,0.6s,baz=47,slow=6.5,SNR=64
HFS LR LR 14 11 54.3
comp=Z,187nm,20.5s,baz=32,slow=39
comp=Z,29nm,0.6s
**NC602 NORSAR Array S 69.93 339** *eP* **P** **13 38 07.8 -0.5**
NC602 IAmb IAmb 13 38 08.6
comp=Z,15nm,0.8s
**NORES NORESS Array B 69.93 339** P **P** **13 38 07.6 -0.7**
NORES pmax pmax
comp=Z,3.0nm,0.8s
**GMRC Granite Mounta 69.94 61** P P 13 38 18.8 +10
baz=311
**VSVD Vaisvydziai 70.10 331** *eP* **P** **13 38 09.5 +0.1**
**K22A Casper 70.16 50** P P 13 38 17.7 +7.4
baz=312
**ULM Lac du Bonnet 70.18 38** LR LR 14 11 22.8
comp=Z,135nm,19.3s,baz=345,slow=38
**PFO Pinyon Flats O 70.19 62** LR LR 14 09 05.3
comp=Z,74nm,18.0s,baz=280,slow=36
**PFO Pinyon Flats O 70.19 62** P P 13 38 20.8 +10
baz=311
**TPFO Pinon Flats 70.20 62** P P 13 38 21.4 +11
baz=311
**PABE Paberze 70.46 331** *eP* **P** **13 38 12.0 +0.4**
**RSSD Black Hills 70.50 47** P P 13 38 19.4 +7.1
baz=313
**ERBR Yeremizino-Bor 70.56 315** *eP* **P** **13 38 12.1 -0.3**
ERBR *e**PP **sP** **13 38 22.5 +1.7**
ERBR *eS* **S** **13 47 20.3 -4.1**
ERBR pmax pmax
comp=Z,38nm,0.9s
**KVAR Kislovodsk Arr 70.63 313** LR LR 14 13 42.6
comp=Z,506nm,18.9s,baz=291,slow=40
**KIV Kislovodsk 70.63 313** ⇑P **P** **13 38 15.1 +2.0**
**KIV Kislovodsk 70.63 313** *eP* **P** **13 38 13.3 +0.3**
**KIV Kislovodsk 70.63 313** *eP* **P** **13 38 13.3 +0.3**
KIV pmax pmax
comp=Z,27nm,1.1s
KIV MLR MLR
comp=Z,558nm,18.0s
**IRM Iron Mountain 70.67 61** P P 13 38 24.3 +11
baz=311
**KBZ Khabaz 70.68 313** P **P** **13 38 13.7 +0.6**
comp=Z,18nm,0.8s,baz=59,slow=4.1,SNR=41
KBZ LR LR 14 13 53.7
comp=Z,1μm,18.8s,baz=40,slow=40
comp=Z,18nm,0.8s
**KBZ Khabaz 70.68 313** *i* P **P** **13 38 13.8 +0.6**
KBZ pmax pmax
comp=Z,22nm,0.8s
KBZ MLR MLR
comp=Z,1μm,19.0s
**MONP2 Monument Peak 70.68 63** P P 13 38 22.9 +9.2
baz=311
**PBUR Paburge 70.76 332** *eP* **P** **13 38 13.8 +0.4**
**SHA1 Shidzhatmaz 70.80 313** *ceP* **P** **13 38 14.6 +0.4**
**BC3 Big Chuckawall 70.80 62** P P 13 38 23.6 +9.3
baz=311
**HYA Hoyanger 70.82 342** *eP* **P** **13 38 13.1 -0.6**
HYA IAmb IAmb 13 38 14.9
comp=Z,32nm,0.9s
**O20A White River Ci 70.88 52** P P 13 38 23.4 +8.7
baz=312
**HMU Henry Mountain 70.89 56** P **P** **13 38 14.1 -0.8**
HMU IAmb IAmb 13 38 38.3
comp=Z,5.6nm,0.6s
**IKP In-Ko-Pah, Jac 71.04 63** P P 13 38 26.3 +11
baz=311
**SWSC Sam W. Stewart 71.05 62** P P 13 38 25.0 +9.4
baz=311
**BORG Borgarnes 71.15 356** LR LR 14 08 14.5
comp=Z,45nm,19.0s,baz=355,slow=35
**BORG Borgarnes 71.15 356** P **P** **13 38 17.5 +1.8**
**LABN Labinsk 71.18 314** *eP* **P** **13 38 12.2 -4.0**
LABN *eS* **S** **13 47 26.9 -4.7**
LABN pmax pmax
comp=Z,57nm,0.5s
**PDMCI Parker Dam,Lak 71.20 60** P P 13 38 25.9 +9.4
baz=311
**SUE Sulen 71.23 343** *eP* **P** **13 38 16.4 +0.2**
SUE IAmb IAmb 13 38 17.2
comp=Z,32nm,1.0s
**KONO Kongsberg 71.36 340** *eP* **P** **13 38 17.2 +0.2**
**KONO Kongsberg 71.36 340** *ceP* **P** **13 38 16.7 -0.3**
KONO pmax pmax
comp=Z,10.0nm,1.3s
**KONO Kongsberg 71.36 340** P **P** **13 38 17.2 +0.2**
**STRU Stroemstad 71.49 339** *eP* **P** **13 38 17.9 +0.1**
**GLA Glamis 71.59 62** P P 13 38 29.4 +10
baz=311
**AGMN Agassiz Nation 71.60 40** P P 13 38 25.0 +6.4
baz=317
**ASK Askoy 71.65 342** *eP* **P** **13 38 18.9 +0.2**
**N23A Red Feather La 71.66 51** P P 13 38 26.1 +6.5
baz=313
**BER Bergen 71.71 342** *eP* **P** **13 38 19.6 +0.5**
**ODD1 Odda 71.84 341** *eP* **P** **13 38 20.2 +0.2**
**SUW Suwalki 71.92 330** *eP* **P** **13 38 20.7 +0.2**
**GNI Garni 72.11 309** LR LR 14 13 35.2
comp=Z,226nm,18.6s,baz=30,slow=39
**GNI Garni 72.11 309** *i* P **P** **13 38 20.6 -1.5**
GNI pmax pmax
comp=Z,15nm,1.4s
GNI MLR MLR
comp=Z,300nm,18.0s
**AK03 Malin Array Si 72.13 325** P **P** **13 38 21.1 -0.7**
**AK23 Malin Array Si 72.14 325** P **P** **13 38 21.5 -0.3**
**AKASG Malin Array Be 72.14 325** P **P** **13 38 21.5 -0.4**
comp=Z,13nm,0.7s,baz=37,slow=5.9,SNR=34
AKASG LR LR 14 13 09.7
comp=Z,436nm,18.1s,baz=40,slow=38
comp=Z,13nm,0.7s
**AKBB Malin Array Si 72.14 325** P **P** **13 38 21.4 -0.6**
**AKBB Malin Array Si 72.14 325** *ceP* **P** **13 38 21.7 -0.2**
AKBB pmax pmax
comp=Z,26nm,0.9s
AKBB MLR MLR
comp=Z,493nm,17.0s
**AKBB Malin Array Si 72.14 325** P **P** **13 38 21.3 -0.6**
**AK04 Malin Array Si 72.15 325** P **P** **13 38 21.1 -0.8**
**KIEV Kiev 72.16 325** ⇑P **P** **13 38 21.7 -0.2**
**KIEV Kiev 72.16 325** P **P** **13 38 21.9 0.0**
**KIEV Kiev 72.16 325** P **P** **13 38 21.1 -0.8**
**KIEV Kiev 72.16 325** P **P** **13 38 21.5 -0.4**
**AK01 Malin Array Si 72.16 325** P **P** **13 38 21.8 -0.2**
**AK22 Malin Array Si 72.16 325** P **P** **13 38 21.5 -0.5**
**TJOU Tjoern 72.23 338** *eP* **P** **13 38 22.4 +0.1**
**SOC Sochi 72.44 314** *eP* **P** **13 38 22.2 -1.6**
SOC *e* 13 41 04.4
SOC *e*PPP PPP 13 42 47.4
SOC *eS* **S** **13 47 44.1 -2.0**
SOC *e*SSS SSS 13 55 41.5
SOC pmax pmax
comp=Z,23nm,0.7s
**MI30 MI30,Zelenitsa 72.54 325** P **P** **13 38 23.5 -0.7**
**MVCO Mesa Verde 72.70 55** P P 13 38 35.9 +10
baz=313
**ANN Anapa 72.74 316** *eP* **P** **13 38 22.8 -2.7**
ANN *e*PP **sP** **13 38 36.1 +2.2**
ANN *eS* **S** **13 47 45.7 -3.7**
ANN pmax pmax
comp=Z,24nm,0.7s
ANN MLR MLR
comp=Z,650nm,22.0s
**HOMB Homborsund 72.84 340** *eP* **P** **13 38 27.1 +1.2**
**BCA Borcka 72.93 311** ⇑P **P** **13 38 26.8 0.0**
**RNPP9 Sopachiv 72.95 327** P **P** **13 38 25.8 -0.8**
**SNART Snartemo 73.10 340** *eP* **P** **13 38 27.9 +0.4**
**SNART Snartemo 73.10 340** *eP* **P** **13 38 27.8 +0.3**
**S22A 4UR Ranch, Cre 73.31 53** P P 13 38 38.9 +9.5
baz=313
**LUBAR Lubar, Ukraine 73.35 325** P **P** **13 38 28.4 -0.7**
**W18A Petrified Fore 73.37 57** P P 13 38 39.6 +10
baz=313
**Q24A Divide 73.43 52** P P 13 38 38.8 +8.6
baz=314
**OGNE Ogallala 73.77 48** P P 13 38 39.6 +7.8
baz=315
**BSD Bornholm Skovb 73.78 335** *i* P **P** **13 38 31.5 0.0**
BSD IAmb IAmb 13 38 32.5
comp=Z,36nm,0.9s
**EYMN Ely 73.82 38** P P 13 38 38.7 +6.8
baz=319
**SDCO Great Sand Dun 74.07 53** P P 13 38 42.6 +8.6
baz=314
**SORM Soroca 74.47 323** ⇑P **P** **13 38 35.7 +0.1**
**SORM Soroca 74.47 323** ⇑P **P** **13 38 35.7 +0.1**
**NDNU Novodnistrovsk 74.54 324** P **P** **13 38 35.5 -0.5**
**ECSD EROS Data Cent 74.56 43** P P 13 38 44.1 +7.7
baz=317
**TUC Tucson 74.62 60** P P 13 38 47.5 +11
baz=313
**WSAR Wadi Sarin 74.67 288** LR LR 14 16 35.5
comp=Z,222nm,18.5s,baz=40,slow=40
**LVV L'vov 74.93 327** *eP* P 13 38 46.3 +8.0
**KMPD K-Podol'skiy 74.94 325** P **P** **13 38 37.6 -0.7**
KMPD P **pP** **13 38 37.9 -6.5**
**T25A Trinidad 75.12 53** P P 13 38 48.7 +8.8
baz=315
**MILM Milestii Mici 75.21 322** ⇑P **P** **13 38 41.2 +1.3**
**MILM Milestii Mici 75.21 322** ⇑P **P** **13 38 41.2 +1.3**
**ANMO Albuquerque 75.45 55** LR LR 14 08 27.4
comp=Z,69nm,21.7s,baz=70,slow=33
**ANMO Albuquerque 75.45 55** P P 13 38 50.9 +9.1
baz=314
**KWP Kalwaria Pacla 75.60 327** *eP* **P** **13 38 43.1 +1.0**
**KWP Kalwaria Pacla 75.60 327** P **P** **13 38 42.8 +0.6**
KWP pmax pmax
comp=Z,61nm,0.9s
**STKA Stephens Creek 76.04 187** P **P** **13 38 45.5 +0.9**
comp=Z,0.8nm,0.4s,baz=344,slow=18,SNR=1.7
comp=Z,0.8nm,0.4s
**DIKM Dikmen 76.12 315** ⇑P **P** **13 38 45.7 +0.5**
**BUR08 Bucovina Ar. S 76.18 325** P **P** **13 38 46.5 +0.8**
BUR08 IAmb IAmb 13 38 48.9
comp=Z,8.6nm,0.7s
**BURAR Bucovina Array 76.20 325** P **P** **13 38 46.4 +0.7**
BURAR IAmb IAmb 13 38 47.5
comp=Z,8.1nm,0.7s
**BURAR Bucovina Array 76.20 325** ⇑P **P** **13 38 46.1 +0.4**
**BURAR Bucovina Array 76.20 325** P **P** **13 38 46.4 +0.7**
**OJC Ojcow 76.22 329** *eP* **P** **13 38 46.6 +0.9**
**OJC Ojcow 76.22 329** P **P** **13 38 45.8 +0.1**
OJC pmax pmax
comp=Z,16nm,0.8s
**121A Cookes Peak, D 76.32 58** P P 13 38 56.1 +9.3
baz=314
**KOLS Kolonicke sedl 76.33 327** *eP* **P** **13 38 47.6 +1.2**
KOLS pmax pmax
comp=Z,9.0nm,0.7s
**KOLS Kolonicke sedl 76.33 327** *eP* **P** **13 38 47.6 +1.2**
**RUE Ruedersdorf 76.38 334** *eP* **P** **13 38 47.1 +0.6**
comp=Z,26nm,0.5s,baz=30,slow=5.5
**TESR Tescani 76.46 323** ⇑P **P** **13 38 47.3 +0.2**
**TLCR 76.54 321** ⇑P **P** **13 38 49.3 +1.7**
**TLCR 76.54 321** ⇑P **P** **13 38 49.3 +1.7**
**SCHQ Schefferville 76.66 21** P **P** **13 38 48.0 -0.2**
comp=Z,2.6nm,0.9s,baz=245,slow=6.1,SNR=2.2
SCHQ LR LR 14 15 43.7
comp=Z,172nm,20.0s,baz=343,slow=38
comp=Z,2.6nm,0.9s
**CRVS Cervenica-Dubn 76.67 328** *eP* **P** **13 38 48.5 +0.2**
CRVS pmax pmax
comp=Z,61nm,2.3s
**CRVS Cervenica-Dubn 76.67 328** *eP* **P** **13 38 48.5 +0.2**
**NIE Niedzica 76.69 329** *eP* **P** **13 38 49.8 +1.4**
**NIE Niedzica 76.69 329** P **P** **13 38 50.1 +1.7**
NIE pmax pmax
comp=Z,10.0nm,1.0s
**CFR Carcaliu 76.85 322** ⇑P **P** **13 38 49.8 +0.5**
**CFR Carcaliu 76.85 322** ⇑P **P** **13 38 49.8 +0.5**
**VRI Vrincioaia 76.94 323** ⇑P **P** **13 38 50.2 +0.4**
**VRI Vrincioaia 76.94 323** ⇑P **P** **13 38 50.2 +0.4**
**KSP Ksiaz 76.94 332** *eP* **P** **13 38 50.4 +0.7**
**TPGR Topolog 76.97 321** ⇑P **P** **13 38 51.4 +1.3**
**PLOR Plostina 76.98 323** ⇑P **P** **13 38 49.8 -0.3**
**PLOR Plostina 76.98 323** ⇑P **P** **13 38 49.8 -0.3**
**OKC Ostrava-Krasne 77.13 330** AMS AMS 14 16 50.0
comp=Z,300nm,17.4s
**OZUR 77.16 324** ⇑P **P** **13 38 53.2 +2.0**
**OSTC Ostas 77.21 331** AMS AMS 14 17 30.0
comp=Z,300nm,15.6s
**CHVC Chvalec 77.24 332** *eP* **P** **13 38 52.4 +0.9**
CHVC AMS AMS 14 17 30.0
comp=Z,300nm,14.3s
**CHVC Chvalec 77.24 332** *eP* **P** **13 38 52.4 +0.9**
CHVC MLR MLR
comp=Z,300nm,14.3s
**FLTG Flechtingen 77.30 335** *eP* **P** **13 38 51.7 0.0**
comp=Z,7.5nm,0.7s,baz=30,slow=5.5
**HARR Harsova 77.32 321** ⇑P **P** **13 38 53.1 +1.1**
**HARR Harsova 77.32 321** ⇑P **P** **13 38 53.1 +1.1**
**UPC Upice 77.32 332** AMS AMS 14 17 20.0
comp=Z,400nm,15.8s
**DPC Dobruska-Polom 77.35 331** *eP* **P** **13 38 52.9 +0.8**
DPC AMS AMS 14 17 20.0
comp=Z,300nm,17.1s
**DPC Dobruska-Polom 77.35 331** *eP* **P** **13 38 52.9 +0.8**
DPC MLR MLR
comp=Z,300nm,17.1s
**MORC Moravsky Berou 77.40 330** *eP* **P** **13 38 52.7 +0.3**
**MORC Moravsky Berou 77.40 330** ⇑P **P** **13 38 53.2 +0.8**
**MORC Moravsky Berou 77.40 330** ⇑P **P** **13 38 53.2 +0.8**
**KRLC Kraliky 77.42 331** *eP* **P** **13 38 53.5 +1.0**
**KRLC Kraliky 77.42 331** *eP* **P** **13 38 53.5 +1.0**
**DOPR Dopca 77.43 324** ⇑P **P** **13 38 54.6 +2.0**
**RETH Rethem/Aller, 77.49 336** *eP* **P** **13 38 53.2 +0.5**
comp=Z,6.5nm,0.9s,baz=30,slow=5.5
**MFTR Murfatlar 77.50 321** ⇑P **P** **13 38 54.4 +1.4**
**MLR Muntele Rosu 77.57 323** LR LR 14 16 07.2
comp=Z,276nm,18.6s,baz=42,slow=38
**MLR Muntele Rosu 77.57 323** ⇑P **P** **13 38 56.1 +2.5**
**MLR Muntele Rosu 77.57 323** ⇑P **P** **13 38 56.1 +2.5**
**ISR Istrita 77.60 322** ⇑P **P** **13 38 54.6 +1.0**
**ISR Istrita 77.60 322** ⇑P **P** **13 38 54.6 +1.0**
**CLL Collm 77.63 334** P **P** **13 38 53.5 -0.1**
**CLL Collm 77.63 334** ⇑ *i*P **P** **13 38 53.9 +0.3**
comp=Z,20nm,0.7s
CLL *i* x x 13 38 57.0
comp=Z,13nm,0.8s
CLL *i* pP **PcP** **13 39 03.4 -0.3**
CLL AMS AMS 14 11 00.0
comp=N,200nm,19.6s
CLL AMS AMS 14 11 00.0
comp=E,300nm,21.4s
**CLL Collm 77.63 334** ⇑ *i*P **P** **13 38 53.9 +0.3**
CLL pmax pmax
comp=Z,20nm,0.7s
CLL MLR MLR
comp=Z,300nm,17.0s
**CLL Collm 77.63 334** *eP* **P** **13 38 53.7 +0.1**
comp=Z,19nm,0.7s,baz=30,slow=5.5
**BRG Berggiesshubel 77.70 333** *eP* **P** **13 38 54.5 +0.5**
BRG Amp 13 38 55.2
comp=Z,4.4nm,0.6s
**BRG Berggiesshubel 77.70 333** *eP* **P** **13 38 54.1 +0.1**
comp=Z,4.4nm,0.6s,baz=30,slow=5.5
**PVCC Panska Ves 77.79 332** *eP* **P** **13 38 55.8 +1.3**
**PVCC Panska Ves 77.79 332** *eP* **P** **13 38 55.8 +1.3**
**ICOR Ion Corvin 77.83 321** ⇑P **P** **13 38 56.5 +1.8**
**DRGR 77.89 326** ⇑P **P** **13 38 55.9 +0.7**
**DRGR 77.89 326** ⇑P **P** **13 38 55.9 +0.7**
**CLZ Clausthal 77.98 335** *eP* **P** **13 38 56.3 +0.7**
comp=Z,9.0nm,0.9s,baz=30,slow=5.5
**VOIR 78.00 324** ⇑P **P** **13 38 56.8 +1.0**
**VOIR 78.00 324** P **P** **13 38 56.7 +0.8**
**VYHS Vyhne 78.00 329** *eP* **P** **13 38 56.5 +0.8**
VYHS pmax pmax
comp=Z,6.0nm,0.9s
**VYHS Vyhne 78.00 329** *eP* **P** **13 38 56.5 +0.8**
**PSZ Piszkesteto 78.08 328** ⇑P **P** **13 38 51.5 -4.8**
**PSZ Piszkesteto 78.08 328** P **P** **13 38 57.5 +1.3**
PSZ pmax pmax
comp=Z,14nm,0.8s
**HSKC Hora Svate Kat 78.10 333** *eP* **P** **13 38 57.0 +0.7**
**NEUB Neuenburg 78.11 334** *eP* **P** **13 38 56.9 +0.6**
comp=Z,15nm,0.8s,baz=30,slow=5.5
**JAVC Velka Javorina 78.12 330** *eP* **P** **13 38 57.7 +1.2**
**VRAC Vranov 78.13 331** *eP* **P** **13 38 57.1 +0.7**
**VRAC Vranov 78.13 331** LR LR 14 17 41.3
comp=Z,255nm,18.2s,baz=32,slow=39
**VRAC Vranov 78.13 331** ⇓P **P** **13 38 57.3 +0.9**
**VRAC Vranov 78.13 331** ⇓P **P** **13 38 57.3 +0.9**
**EKA Eskdalemuir Ar 78.14 344** P **P** **13 38 56.4 0.0**
comp=Z,4.1nm,0.7s,baz=24,slow=4.7,SNR=12
comp=Z,4.1nm,0.7s
**MTUR Matau 78.16 323** ⇑P P 13 39 08.8 +12
**PRA Prague 78.23 332** AMS AMS 14 17 10.0
comp=Z,300nm,18.8s
**ARR Arges 78.23 324** ⇑P **P** **13 39 00.2 +3.0**
**GOPC GO Pecny, Ondr 78.24 332** *eP* **P** **13 38 57.9 +0.8**
GOPC AMS AMS 14 17 00.0
comp=Z,300nm,15.5s
**GOPC GO Pecny, Ondr 78.24 332** *eP* **P** **13 38 57.9 +0.8**
GOPC MLR MLR
comp=Z,300nm,15.5s
**PRU Pruhonice 78.26 332** *eP* **P** **13 38 57.8 +0.7**
PRU AMS AMS 14 17 10.0
comp=Z,300nm,17.8s
**PRU Pruhonice 78.26 332** *eP* **P** **13 38 57.8 +0.7**
PRU MLR MLR
comp=Z,300nm,17.8s
**BRTR Keskin Array B 78.37 315** P **P** **13 38 59.0 +0.8**
**BRTR Keskin Array B 78.37 315** P **P** **13 38 58.6 +0.5**
comp=Z,3.4nm,0.8s,baz=87,slow=2.9,SNR=8.0
BRTR LR LR 14 19 42.6
comp=Z,143nm,18.0s,baz=54,slow=40
comp=Z,3.4nm,0.8s
**KRUC Moravsky 78.41 331** *eP* **P** **13 38 57.9 -0.1**
**KRUC Moravsky 78.41 331** P **P** **13 38 58.4 +0.4**
KRUC pmax pmax
comp=Z,16nm,0.9s
**SMOL Smolenice 78.50 330** *eP* **P** **13 38 59.8 +1.3**
**TANN Tannbergstha 78.58 334** *eP* **P** **13 38 59.6 +0.6**
comp=Z,3.1nm,0.7s,baz=30,slow=5.5
**PLN Plauen 78.61 334** *eP* **P** **13 38 59.5 +0.5**
comp=Z,5.3nm,0.8s,baz=30,slow=5.5
**MOX Moxa 78.65 334** *eP* **P** **13 38 59.5 +0.3**
comp=Z,3.3nm,0.7s,baz=30,slow=5.5
MOX *eL* L 14 17 35.5
comp=Z,155nm,18.0s
**MODS Modra-Piesok 78.67 330** *eP* **P** **13 39 00.7 +1.2**
MODS pmax pmax
comp=Z,20nm,0.9s
**MODS Modra-Piesok 78.67 330** *eP* **P** **13 39 00.7 +1.2**
**ANTO Ankara 78.69 315** ⇑P **P** **13 39 00.0 +0.2**
**ANTO Ankara 78.69 315** ⇑P **P** **13 39 00.0 +0.2**
**SIRR Siria 78.74 326** ⇑P **P** **13 39 01.2 +1.3**
**ZVC Zvikov 78.85 332** AMS AMS 14 17 30.0
comp=Z,400nm,18.0s
**SURR Surduc 78.97 325** ⇑P **P** **13 39 02.4 +1.3**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GZR** | **Gura Zlata** | **78.99** | **325** | ⇑P | | **P** | **13 39 01.7** | **+0.3** |
| **GZR** | **Gura Zlata** | **78.99** | **325** | P | | **P** | **13 39 02.1** | **+0.8** |
| **MANZ** | **Manzenberg** | **79.06** | **333** | *e*P | | **P** | **13 39 02.0** | **+0.4** |
| | comp=Z,1.2nm,0.8s,baz=30,slow=5.5 | | | | | | | |
| **KASTN** | **Kahler Asten** | **79.12** | **336** | *e*P | | **P** | **13 39 02.4** | **+0.5** |
| | comp=Z,6.0nm,0.8s,baz=30,slow=5.5 | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **79.22** | **333** | *e*P | | **P** | **13 39 03.0** | **+0.6** |
| | comp=Z,1.2nm,0.8s,baz=30,slow=5.5 | | | | | | | |
| **BUG** | **Bochum--Univer** | **79.24** | **337** | *e*P | | **P** | **13 39 03.3** | **+0.8** |
| | comp=Z,12nm,0.9s,baz=30,slow=5.5 | | | | | | | |
| **BZS** | **Buzias** | **79.28** | **326** | ⇑P | | **P** | **13 39 03.6** | **+0.8** |
| **BZS** | **Buzias** | **79.28** | **326** | ⇑P | | **P** | **13 39 03.6** | **+0.8** |
| **KHC** | **Kasperske Hory** | **79.32** | **332** | P | | **P** | **13 39 03.7** | **+0.6** |
| **KHC** | **Kasperske Hory** | **79.32** | **332** | *e*P | | **P** | **13 39 03.8** | **+0.8** |
| KHC | | | | *e*pP | | **sP** | **13 39 13.9** | **+2.4** |
| KHC | | | | AMS | AMS | | 14 17 50.0 | |
| | comp=Z,400nm,17.0s | | | | | | | |
| **KHC** | **Kasperske Hory** | **79.32** | **332** | *e*P | | **P** | **13 39 03.8** | **+0.8** |
| KHC | | | | *e* | | | 13 39 13.9 | |
| KHC | | | | MLR | MLR | | | |
| | comp=Z,400nm,17.0s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **79.34** | **332** | *e*P | | **P** | **13 39 04.0** | **+0.9** |
| CKRC | | | | AMS | AMS | | 14 18 50.0 | |
| | comp=Z,200nm,13.1s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **79.34** | **332** | *e*P | | **P** | **13 39 04.0** | **+0.9** |
| CKRC | | | | MLR | MLR | | | |
| | comp=Z,200nm,13.1s | | | | | | | |
| **GEC2** | **GERESS Array S** | **79.53** | **332** | *e*P | | **P** | **13 39 03.9** | **-0.3** |
| | comp=Z,6.1nm,0.9s,baz=30,slow=5.5 | | | | | | | |
| **GERES** | **GERESS Array B** | **79.53** | **332** | P | | **P** | **13 39 04.1** | **-0.1** |
| **GERES** | **GERESS Array B** | **79.53** | **332** | P | | **P** | **13 39 04.3** | **+0.1** |
| | comp=Z,4.4nm,0.8s,baz=108,slow=3.2,SNR=11 | | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **WET** | **Wettzell** | **79.54** | **333** | *e*P | | **P** | **13 39 05.0** | **+0.8** |
| | comp=Z,10nm,0.9s,baz=30,slow=5.5 | | | | | | | |
| **CONA** | **Conrad Observa** | **79.56** | **330** | *i* pP | | **P** | **13 39 05.5** | **+1.1** |
| | comp=Z,12nm,1.0s,SNR=7.1 | | | | | | | |
| **RONA** | **Rosalia, Austr** | **79.59** | **330** | *i* pP | | **P** | **13 39 05.7** | **+1.2** |
| | comp=Z,13nm,0.9s,SNR=7.2 | | | | | | | |
| **GRF** | **Grafenberg Arr** | **79.60** | **334** | *e*P | | **P** | **13 39 04.6** | **+0.1** |
| | comp=Z,13nm,0.7s,baz=30,slow=5.5 | | | | | | | |
| GRF | | | | *e*L | | L | 14 13 24.0 | |
| | comp=Z,126nm,21.6s | | | | | | | |
| **MDVR** | **Moldovita** | **79.93** | **325** | ⇑P | | **P** | **13 39 06.3** | **-0.1** |
| **MORH** | **Mrgy, Hungar** | **79.97** | **328** | ⇑P | | **P** | **13 39 05.7** | **-0.8** |
| **RAR** | **Rarotonga** | **80.01** | **133** | LR | | LR | 14 09 40.4 | |
| | comp=Z,71nm,20.4s,baz=290,slow=32 | | | | | | | |
| **MOA** | **Molln** | **80.19** | **331** | *e*pP | | **P** | **13 39 08.7** | **+0.9** |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **FRGS** | **Fruska Gora** | **80.39** | **326** | ⇑P | | **P** | **13 39 09.7** | **+0.9** |
| **BIOA** | **Bad Ischl, Aus** | **80.54** | **331** | *i* P | | **P** | **13 39 10.3** | **+0.7** |
| | comp=Z,11nm,0.9s | | | | | | | |
| **RJOB** | **Jochberg** | **80.79** | **332** | *e*P | | **P** | **13 39 11.2** | **+0.2** |
| | comp=Z,6.4nm,0.7s,baz=30,slow=5.5 | | | | | | | |
| **BOVS** | **Bovan** | **80.86** | **324** | ⇑P | | **P** | **13 39 10.8** | **-0.6** |
| **SOKA** | **Soboth** | **80.92** | **330** | *i* P | | **P** | **13 39 11.9** | **+0.1** |
| | comp=Z,11nm,1.0s,SNR=9.6 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **81.08** | **58** | P | | **P** | **13 39 12.3** | **-0.6** |
| **TXAR** | **Lajitas Array** | **81.08** | **58** | P | | **P** | **13 39 12.4** | **-0.5** |
| | comp=Z,3.1nm,0.7s,baz=301,slow=3.7,SNR=26 | | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | | |
| **LESA** | **Schwarzleotal** | **81.10** | **332** | *i* P | | **P** | **13 39 13.5** | **+0.8** |
| | comp=Z,13nm,0.9s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **81.17** | **331** | *i* pP | | **P** | **13 39 14.1** | **+0.9** |
| | comp=Z,14nm,0.9s,SNR=13 | | | | | | | |
| **CCM** | **Cathedral Cave** | **81.51** | **44** | P | | P | 13 39 23.1 | +8.2 |
| | baz=321 | | | | | | | |
| **WATA** | **Walderalm** | **81.55** | **332** | *i* P | | **P** | **13 39 15.7** | **+0.6** |
| | comp=Z,13nm,0.9s | | | | | | | |
| **WTTA** | **Wattenberg** | **81.59** | **332** | *i* P | | **P** | **13 39 16.1** | **+0.7** |
| | comp=Z,13nm,0.7s,SNR=5.4 | | | | | | | |
| **RETA** | **Reutte** | **81.68** | **333** | *e*P | | **P** | **13 39 16.6** | **+0.8** |
| | comp=Z,11nm,1.1s | | | | | | | |
| **MOTA** | **Moosalm** | **81.69** | **333** | *i* P | | **P** | **13 39 16.4** | **+0.5** |
| | comp=Z,20nm,1.1s | | | | | | | |
| **BFO** | **Black Forest** | **81.70** | **335** | *e*P | | **P** | **13 39 16.0** | **+0.1** |
| | comp=Z,4.9nm,0.9s,baz=30,slow=5.5 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **81.74** | **332** | *i* P | | **P** | **13 39 16.6** | **+0.5** |
| | comp=Z,3.9nm,1.0s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **81.77** | **333** | *e*P | | **P** | **13 39 16.9** | **+0.6** |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| **CDF** | **Champ du Feu** | **81.95** | **336** | *e*P | | **P** | **13 39 16.5** | **-0.7** |
| CDF | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **FETA** | **Feichten** | **82.10** | **333** | *i* P | | **P** | **13 39 17.9** | **-0.2** |
| | comp=Z,7.1nm,0.9s,SNR=5.8 | | | | | | | |
| **DAVA** | **Damuels** | **82.14** | **333** | *e*P | | **P** | **13 39 18.8** | **+0.5** |
| | comp=Z,10nm,1.0s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **82.44** | **309** | P | | **P** | **13 39 20.9** | **+0.8** |
| | comp=Z,3.6nm,0.5s,baz=39,slow=9.7,SNR=3.6 | | | | | | | |
| MMAI | | | | LR | | LR | 14 22 10.3 | |
| | comp=Z,244nm,18.1s,baz=330,slow=40 | | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| **JCT** | **Junction City** | **82.56** | **54** | P | | P | 13 39 31.6 | +11 |
| | baz=318 | | | | | | | |
| **HAU** | **Haudompre** | **82.59** | **336** | *e*P | | **P** | **13 39 24.1** | **+3.6** |
| HAU | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **WHTX** | **Lake Whitney,** | **82.79** | **52** | P | | P | 13 39 32.1 | +10 |
| | baz=318 | | | | | | | |
| **PPT** | **Papeete** | **82.91** | **123** | LR | | LR | 14 15 24.4 | |
| | comp=Z,190nm,18.6s,baz=254,slow=35 | | | | | | | |
| **MIAR** | **Mount Ida** | **83.00** | **48** | P | | P | 13 39 32.4 | +10 |
| | baz=320 | | | | | | | |
| **RAYN** | **Ar Rayn** | **83.24** | **296** | ⇑P | | **P** | **13 39 25.0** | **+0.7** |
| **LONY** | **Lake Ozonia** | **83.32** | **30** | P | | P | 13 39 32.3 | +8.0 |
| | baz=330 | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **83.46** | **39** | P | | P | 13 39 33.9 | +8.9 |
| | baz=324 | | | | | | | |
| **FLN** | **La Foliniere** | **83.72** | **340** | *e*P | | **P** | **13 39 25.5** | **-0.7** |
| FLN | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **LOR** | **Lormes** | **83.97** | **337** | *e*P | | **P** | **13 39 26.8** | **-0.8** |
| LOR | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **GRR** | **Gorron** | **84.16** | **341** | *e*P | | **P** | **13 39 28.0** | **-0.5** |
| GRR | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **SSF** | **Saint Saulge** | **84.25** | **337** | *e*P | | **P** | **13 39 30.0** | **+1.0** |
| SSF | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **SMF** | **Signal de Mont** | **84.54** | **337** | *e*P | | **P** | **13 39 30.0** | **-0.5** |
| SMF | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **84.55** | **26** | P | | P | 13 39 38.3 | +7.8 |
| | baz=333 | | | | | | | |
| **AVF** | **Avril sur Loir** | **84.55** | **337** | *e*P | | **P** | **13 39 30.0** | **-0.5** |
| AVF | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **LPL** | **La Plagne** | **84.71** | **335** | *e*P | | **P** | **13 39 31.5** | **-0.1** |
| LPL | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **WVT** | **Waverly** | **84.71** | **43** | P | | P | 13 39 41.2 | +10 |
| | baz=323 | | | | | | | |
| **LPG** | **La Plagne** | **84.72** | **335** | *e*P | | **P** | **13 39 31.6** | **-0.2** |
| LPG | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.2s | | | | | | | |
| **NRCA** | **Norcia** | **84.92** | **329** | P | | **P** | **13 39 32.7** | **+0.2** |
| **BNI** | **Bardonecchia** | **85.14** | **334** | P | | P | 13 39 38.5 | +4.8 |
| BNI | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.0s | | | | | | | |
| **EIL** | **Elat** | **85.20** | **307** | LR | | LR | 14 24 12.2 | |
| | comp=Z,224nm,18.4s,baz=72,slow=40 | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **85.32** | **338** | *e*P | | **P** | **13 39 36.0** | **+1.6** |
| TCF | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **MBDF** | **Montbardon** | **85.41** | **334** | *e*P | | **P** | **13 39 36.4** | **+1.3** |
| MBDF | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **85.51** | **335** | *e*P | | **P** | **13 39 35.4** | **-0.1** |
| ORIF | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **MFF** | **Saint Martin d** | **85.65** | **339** | *e*P | | **P** | **13 39 35.9** | **-0.1** |
| MFF | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **85.93** | **336** | *e*P | | **P** | **13 39 39.3** | **+1.8** |
| VIVF | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **IDI** | **Anoyia** | **86.18** | **317** | LR | | LR | 14 22 26.7 | |
| | comp=Z,71nm,19.1s,baz=309,slow=39 | | | | | | | |
| **RJF** | **Les Rejaudoux** | **86.42** | **338** | *e*P | | **P** | **13 39 40.7** | **+0.8** |
| RJF | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **CAF** | **Calviac** | **86.61** | **337** | *e*P | | **P** | **13 39 41.3** | **+0.4** |
| CAF | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **LMR** | **La Mourre** | **86.74** | **334** | *e*P | | **P** | **13 39 41.8** | **+0.3** |
| LMR | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **LFF** | **La Frestale** | **86.96** | **338** | *e*P | | **P** | **13 39 42.7** | **+0.2** |
| LFF | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **87.04** | **41** | LR | | LR | 14 19 38.8 | |
| | comp=Z,103nm,21.4s,baz=348,slow=36 | | | | | | | |
| **MTLF** | **Montolieu** | **88.03** | **337** | *e*P | | **P** | **13 39 51.1** | **+3.4** |
| MTLF | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **VAE** | **Valguarnera** | **89.04** | **326** | LR | | LR | 14 25 45.7 | |
| | comp=Z,157nm,18.6s,baz=130,slow=40 | | | | | | | |
| **ETSF** | **Etsaut** | **89.20** | **338** | *e*P | | **P** | **13 39 55.6** | **+2.3** |
| ETSF | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **KEST** | **Kesra** | **92.54** | **328** | LR | | LR | 14 25 30.8 | |
| | comp=Z,218nm,19.5s,baz=312,slow=38 | | | | | | | |
| **ESDC** | **Sonseca Array** | **93.11** | **340** | P | | **P** | **13 40 11.2** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=15,slow=5.2,SNR=3.0 | | | | | | | |
| ESDC | | | | LR | | LR | 14 29 03.0 | |
| | comp=Z,198nm,18.0s,baz=4.5,slow=40 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **CMIG** | **Matias Romero** | **95.52** | **60** | LR | | LR | 14 27 01.1 | |
| | comp=Z,31nm,18.2s,baz=342,slow=38 | | | | | | | |
| **FURI** | **Furi** | **98.29** | **291** | LR | | LR | 14 31 02.2 | |
| | comp=Z,92nm,18.3s,baz=81,slow=39 | | | | | | | |
| **MDT** | **Midelt** | **99.76** | **338** | LR | | LR | 14 32 31.4 | |
| | comp=Z,57nm,19.3s,baz=348,slow=40 | | | | | | | |
| **VNDA** | **Vanda** | **121.69** | **177** | PKP | | **PKPdf** | **13 45 49.5** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=357,slow=2.3,SNR=2.2 | | | | | | | |
| **QSPA** | **South Pole Qui** | **133.93** | **180** | PKP | | **PKPdf** | **13 46 13.5** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=1.1,slow=1.0,SNR=6.2 | | | | | | | |
| **LPAZ** | **La Paz** | **137.89** | **61** | PKP | | **PKPdf** | **13 46 23.3** | **+0.3** |
| | comp=Z,0.7nm,0.3s,baz=252,slow=3.2,SNR=1.8 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **141.38** | **91** | T | | T | 16 24 34.6 | |
| | baz=304,slow=77,SNR=3.3 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **141.40** | **91** | T | | T | 16 24 45.8 | |
| | baz=304,slow=77,SNR=3.9 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **141.40** | **91** | T | | T | 16 24 34.5 | |
| | baz=304,slow=77,SNR=3.2 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **147.93** | **199** | ⇑PKiKP | | **PKPbc** | **13 46 41.9** | **+0.3** |
| | comp=Z,159nm,0.6s | | | | | | | |
| **BDFB** | **Brasilia** | **147.95** | **33** | PKPbc | | **PKPbc** | **13 46 43.4** | **+0.2** |
| | comp=Z,1.7nm,0.4s,baz=304,slow=3.6,SNR=3.4 | | | | | | | |
| **SNAA** | **Sanae** | **149.35** | **197** | ⇑PKiKP | | **PKPbc** | **13 46 45.0** | **-0.1** |
| | comp=Z,34nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **149.35** | **197** | PKPbc | | **PKPbc** | **13 46 44.9** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=174,slow=12,SNR=8.5 | | | | | | | |
| **PLCA** | **Paso Flores** | **150.57** | **97** | PKPbc | | **PKPbc** | **13 46 49.0** | **0.0** |
| | comp=Z,2.3nm,0.8s,baz=285,slow=1.7,SNR=5.5 | | | | | | | |
| **PLCA** | **Paso Flores** | **150.57** | **97** | PKIKP | | **PKPbc** | **13 46 49.0** | **0.0** |
| **VNA2** | **Neumayer--Watz** | **150.85** | **195** | ⇑PKiKP | | **PKiKP** | **13 46 49.8** | **+0.5** |
| | comp=Z,7.3nm,0.7s,baz=134,slow=1.4 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **151.00** | **194** | ⇑PKiKP | | **PKPbc** | **13 46 49.1** | **+0.1** |
| | comp=Z,6.9nm,0.7s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **151.24** | **195** | ⇑PKiKP | | **PKPbc** | **13 46 49.5** | **0.0** |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **CPUP** | **Villa Florida** | **152.04** | **59** | PKPab | | **PKPab** | **13 47 00.5** | **-1.8** |
| | comp=Z,0.6nm,0.4s,baz=27,slow=9.0,SNR=1.4 | | | | | | | |

*TIR **08** 13:37:45.5, 40.38N×21.38E, h18km, Md2.5, Ml2.2*
*SKO **08** 13:37:45.8, 40.30N×21.45E, h0km, ML2.2*
*ATH **08** 13:37:47.0, 40.39N×21.40E, h7km±3km, ML2.3/7, Error ellipse: s-maj=3.0km s-min=1.5km az=327.0*

**THE 08 13:37:46.3, 40.39N×21.35E, h17km, ML2.2/5, Error ellipse: s-maj=0.8km s-min=0.4km az=268.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NEST** | **Nestorio** | **0.23** | **277** | P | Pg | 13 37 51.5 | -0.2 |
| NEST | | | | S | Sg | 13 37 55.6 | +0.2 |
| | 862nm,0.2s | | | | | | |
| **NEST** | **Nestorio** | **0.23** | **277** | P | Pg | 13 37 51.6 | -0.1 |
| NEST | | | | S | Sb | 13 37 56.1 | 0.0 |
| NEST | | | | AML | AML | 13 37 58.2 | |
| | comp=E,2514μm,0.3s | | | | | | |
| NEST | | | | AML | AML | 13 37 59.2 | |
| | comp=N,2153μm,0.2s | | | | | | |
| **PENT** | **Pentalofos** | **0.25** | **221** | P | Pg | 13 37 51.8 | -0.2 |
| PENT | | | | S | Sb | 13 37 56.3 | -0.2 |
| **PENT** | **Pentalofos** | **0.25** | **221** | P | Pg | 13 37 51.8 | -0.1 |
| PENT | | | | S | Sb | 13 37 56.6 | +0.1 |
| **KZN** | **Kozani** | **0.33** | **104** | P | Pg | 13 37 53.3 | 0.0 |
| KZN | | | | S | Sb | 13 37 58.9 | 0.0 |
| **KZN** | **Kozani** | **0.33** | **104** | P | Pg | 13 37 53.3 | -0.1 |
| KZN | | | | S | Sg | 13 37 58.0 | -0.1 |
| KZN | | | | AML | AML | 13 37 59.8 | |
| | comp=N,4199μm,0.2s | | | | | | |
| KZN | | | | AML | AML | 13 37 59.9 | |
| | comp=E,4494μm,0.2s | | | | | | |
| **FNA** | **Florina** | **0.40** | **3** | P | Pg | 13 37 54.4 | -0.2 |
| | baz=0.0 | | | | | | |
| FNA | | | | S | Sg | 13 38 00.4 | +0.3 |
| | baz=0.0 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=N,1.0nm,0.1s,baz=0.0 | | | | | | |
| **FNA** | **Florina** | **0.40** | **3** | P | Pg | 13 37 54.3 | -0.2 |
| FNA | | | | S | Sg | 13 38 00.2 | +0.1 |
| | comp=N,560nm,0.2s | | | | | | |
| **FNA** | **Florina** | **0.40** | **3** | *i* Pg | Pg | 13 37 54.4 | -0.1 |
| FNA | | | | *i* Sg | Sb | 13 38 01.0 | +0.2 |
| **FNA** | **Florina** | **0.40** | **3** | P | Pg | 13 37 54.4 | -0.1 |
| FNA | | | | S | Sg | 13 38 00.3 | +0.2 |
| **KPRO** | **Kipourio** | **0.43** | **179** | P | Pg | 13 37 54.2 | -0.9 |
| KPRO | | | | S | Sb | 13 38 01.6 | -0.1 |
| | comp=N,325nm,0.3s | | | | | | |
| **KPRO** | **Kipourio** | **0.43** | **179** | P | Pg | 13 37 54.7 | -0.3 |
| KPRO | | | | AML | AML | 13 38 05.0 | |
| | comp=N,605μm,0.3s | | | | | | |
| KPRO | | | | AML | AML | 13 38 06.2 | |
| | comp=E,692μm,0.2s | | | | | | |
| **KBN** | **Korca** | **0.49** | **299** | P | Pg | 13 37 56.1 | -0.1 |
| | baz=299 | | | | | | |
| KBN | | | | S | Sb | 13 38 03.9 | +0.4 |
| | baz=299 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,3.0nm,0.4s,baz=299 | | | | | | |
| **KBN** | **Korca** | **0.49** | **299** | P | Pg | 13 37 55.5 | -0.7 |
| **KTI** | **Kastanea** | **0.59** | **89** | P | Pg | 13 37 57.7 | -0.3 |
| **OHR** | **Ohrid** | **0.84** | **330** | *i* Pg | Pg | 13 38 02.6 | 0.0 |
| OHR | | | | *i* Sg | Sn | 13 38 16.1 | +0.7 |
| OHR | | | | *e*Lg | Lg | 13 38 16.6 | |
| | comp=E,97nm,0.3s | | | | | | |
| OHR | | | | *e*Lg | Lg | 13 38 18.0 | |
| | comp=N,85nm,0.3s | | | | | | |
| **TYRN** | **Tyrnavos** | **0.95** | **135** | P | Pb | 13 38 03.8 | -0.6 |
| TYRN | | | | S | Sg | 13 38 17.4 | 0.0 |
| | comp=N,202nm,0.5s | | | | | | |
| **TYRN** | **Tyrnavos** | **0.95** | **135** | P | Pb | 13 38 03.9 | -0.5 |
| TYRN | | | | AML | AML | 13 38 20.5 | |
| | comp=N,365μm,0.4s | | | | | | |
| TYRN | | | | AML | AML | 13 38 21.1 | |
| | comp=E,446μm,0.5s | | | | | | |
| **THL** | **Klokotos Trika** | **0.97** | **148** | P | Pb | 13 38 03.6 | -1.0 |
| THL | | | | S | Sg | 13 38 17.8 | +0.1 |
| | comp=E,152nm,0.2s | | | | | | |
| **THL** | **Klokotos Trika** | **0.97** | **148** | P | Pb | 13 38 03.7 | -0.8 |
| THL | | | | AML | AML | 13 38 21.2 | |
| | comp=E,306μm,0.3s | | | | | | |
| THL | | | | AML | AML | 13 38 21.3 | |
| | comp=N,301μm,0.2s | | | | | | |
| **SRN** | **Sarande** | **1.15** | **244** | P | Pg | 13 38 08.8 | +0.2 |
| | baz=246 | | | | | | |
| SRN | | | | S | Sg | 13 38 25.1 | +1.6 |
| | baz=246 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,0.2nm,0.5s,baz=246 | | | | | | |
| **SRN** | **Sarande** | **1.15** | **244** | P | Pn | 13 38 07.1 | -0.5 |
| **THE** | **Thessaloniki** | **1.26** | **78** | *i* Pg | Pg | 13 38 10.6 | +0.1 |
| **VAY** | **Valandovo** | **1.32** | **44** | *i* Pg | Pn | 13 38 10.0 | +0.1 |
| VAY | | | | *i* Sg | Sg | 13 38 31.1 | +2.2 |
| VAY | | | | *e*Lg | Lg | 13 38 34.9 | |
| | comp=E,28nm,0.9s | | | | | | |
| VAY | | | | *e*Lg | Lg | 13 38 37.6 | |
| | comp=N,25nm,0.7s | | | | | | |
| **HORT** | **Hortiatis** | **1.35** | **80** | P | Pn | 13 38 10.1 | -0.4 |
| HORT | | | | S | Sn | 13 38 27.9 | -0.2 |
| **HORT** | **Hortiatis** | **1.35** | **80** | P | Pn | 13 38 10.2 | -0.3 |
| **KEK** | **Kerkira** | **1.37** | **241** | P | Pg | 13 38 12.2 | -0.5 |
| KEK | | | | AML | AML | 13 38 37.3 | |
| | comp=E,96μm,0.6s | | | | | | |
| KEK | | | | AML | AML | 13 38 37.6 | |
| | comp=N,98μm,0.3s | | | | | | |
| **KNT** | **Kendrikon** | **1.41** | **56** | P | Pn | 13 38 10.2 | -1.0 |
| KNT | | | | S | Sn | 13 38 29.4 | 0.0 |
| **KNT** | **Kendrikon** | **1.41** | **56** | *i* Pg | Pn | 13 38 11.0 | -0.2 |
| KNT | | | | *i* Sg | Sg | 13 38 33.1 | +1.3 |
| **AGG** | **Agios Georgios** | **1.56** | **151** | P | Pn | 13 38 13.8 | +0.5 |
| AGG | | | | AML | AML | 13 38 41.0 | |
| | comp=E,169μm,0.3s | | | | | | |
| AGG | | | | AML | AML | 13 38 41.2 | |
| | comp=N,260μm,0.4s | | | | | | |
| **LKD2** | **Lefkada island** | **1.68** | **199** | P | Pb | 13 38 17.3 | +0.5 |
| | baz=200 | | | | | | |
| LKD2 | | | | S | Sg | 13 38 40.3 | -0.2 |
| | baz=200 | | | | | | |
| **LKD2** | **Lefkada island** | **1.68** | **199** | P | Pb | 13 38 17.3 | +0.5 |
| **ANX** | **Ano Chora** | **1.84** | **166** | P | Pb | 13 38 19.0 | -0.7 |
| **PUK** | **Puka** | **1.99** | **327** | P | Pb | 13 38 22.0 | -0.1 |
| | baz=327 | | | | | | |
| PUK | | | | S | Sg | 13 38 49.3 | -1.0 |
| | baz=327 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.1nm,0.5s,baz=327 | | | | | | |
| **BCI** | **Bajram Curri** | **2.20** | **334** | P | Pb | 13 38 25.2 | -0.5 |
| | baz=334 | | | | | | |
| **SCTE** | **Santa Cesarea** | **2.23** | **263** | P | Pn | 13 38 23.6 | +1.1 |
| | baz=264 | | | | | | |

*AEIC **08** 13:49:21.9±1.6, 56.24N±0.09×149.2W±0.1, h11km±7km, Error ellipse: s-maj=14.2km s-min=7.8km az=162.0*

**NEIC 08 13:49:18.4±1.6, 56.23N±0.09×149.2W±0.1, h23km±10km, ML3.6/62, ML3.4(AEIC), Error ellipse: s-maj=13.6km s-min=7.9km az=161.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDAK** | **Kodiak Island** | **2.42** | **311** | Pn | Pn | 13 49 56.0 | -0.5 |
| **KDAK** | **Kodiak Island** | **2.42** | **311** | | Sn | 13 50 23.1 | -2.2 |
| **OHAK** | **Old Harbor** | **2.46** | **296** | | Pn | 13 49 56.0 | -1.1 |
| **OHAK** | **Old Harbor** | **2.46** | **296** | | Sn | 13 50 23.9 | -2.5 |
| **SII** | **Sitkinak Islan** | **2.79** | **279** | Pn | Pn | 13 50 01.0 | -0.6 |
| SII | | | | IAML | | 13 50 35.3 | |
| | comp=E,205nm,0.9s | | | | | | |
| SII | | | | IAML | | 13 50 38.4 | |
| | comp=N,196nm,1.2s | | | | | | |
| **SYI** | **Shuyak Island** | **2.95** | **325** | | Pn | 13 50 03.6 | -0.1 |
| SYI | | | | | Sn | 13 50 37.6 | -0.7 |
| **SYI** | **Shuyak Island** | **2.95** | **325** | IAML | | 13 50 39.0 | |
| | comp=E,138nm,0.6s | | | | | | |
| **R18K** | **Karluk** | **3.18** | **297** | | Pn | 13 50 06.4 | -0.5 |
| R18K | | | | | Sn | 13 50 41.5 | -2.5 |
| **R18K** | **Karluk** | **3.18** | **297** | IAML | | 13 50 48.0 | |
| | comp=N,101nm,0.5s | | | | | | |
| R18K | | | | IAML | | 13 50 50.8 | |
| | comp=E,121nm,0.4s | | | | | | |
| **CNPM** | **China Poot** | **3.48** | **343** | | Pn | 13 50 10.1 | -1.0 |
| CNPM | | | | IAML | | 13 50 58.3 | |
| | comp=E,77nm,0.8s | | | | | | |
| **CNPM** | **China Poot** | **3.48** | **343** | | Sn | 13 50 49.6 | -1.9 |
| **Q23K** | **Middleton Isla** | **3.55** | **24** | | Pn | 13 50 11.4 | -0.6 |
| Q23K | | | | | Sn | 13 50 51.1 | -2.2 |
| **Q23K** | **Middleton Isla** | **3.55** | **24** | IAML | | 13 50 58.5 | |
| | comp=N,88nm,1.3s | | | | | | |
| Q23K | | | | IAML | | 13 50 58.6 | |
| | comp=E,74nm,1.3s | | | | | | |
| **MID** | **Middleton Isla** | **3.55** | **24** | | Pn | 13 50 11.3 | -0.7 |
| **MID** | **Middleton Isla** | **3.55** | **24** | IAML | | 13 50 58.5 | |
| | comp=E,74nm,1.3s | | | | | | |
| MID | | | | IAML | | 13 50 59.3 | |
| | comp=N,86nm,1.2s | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.61** | **320** | | Pn | 13 50 13.4 | +0.5 |
| Q19K | | | | | Sn | 13 50 53.2 | -1.6 |
| **Q19K** | **Cape Douglas,** | **3.61** | **320** | IAML | | 13 51 07.1 | |
| | comp=N,165nm,0.9s | | | | | | |
| **BRSE** | **Bradley Lake S** | **3.62** | **348** | | Pn | 13 50 12.5 | -0.5 |
| BRSE | | | | | Sn | 13 50 52.9 | -2.0 |
| **BRLK** | **Bradley Lake** | **3.66** | **346** | | Pn | 13 50 12.6 | -0.9 |
| BRLK | | | | IAML | | 13 50 58.6 | |
| | comp=E,83nm,0.5s | | | | | | |
| **BRLK** | **Bradley Lake** | **3.66** | **346** | | Sn | 13 50 53.7 | -2.2 |
| **KAPH** | **Katmai Pasha** | **3.66** | **313** | | Pn | 13 50 14.5 | +0.9 |
| **HOM** | **Homer** | **3.68** | **340** | | Pn | 13 50 14.0 | +0.2 |
| HOM | | | | | Sn | 13 50 55.5 | -0.8 |
| **KAHG** | **Katmai Hook Gl** | **3.68** | **310** | | Pn | 13 50 14.6 | +0.8 |
| **AUCH** | **Augustine Cone** | **3.88** | **326** | | Pn | 13 50 16.8 | +0.2 |
| **ACHA** | **Angle Creek He** | **3.88** | **303** | | Pn | 13 50 17.3 | +0.7 |
| **SEW** | **Seward** | **3.89** | **358** | | Pn | 13 50 15.8 | -0.9 |
| **P23K** | **Montague Islan** | **3.90** | **13** | | Pn | 13 50 16.1 | -0.7 |
| **KVTA** | **Katmai Vly 10** | **3.95** | **306** | | Pn | 13 50 18.9 | +1.4 |
| **ANCK** | **Angle Creek** | **3.95** | **303** | | Pn | 13 50 19.0 | +1.4 |
| **KAHC** | **Katmai Hardscr** | **3.97** | **310** | | Pn | 13 50 18.8 | +0.9 |
| **P19K** | **Oil Pt** | **4.05** | **330** | | Pn | 13 50 19.2 | +0.3 |
| **P19K** | **Oil Pt** | **4.05** | **330** | IAML | | 13 51 07.7 | |
| | comp=E,108nm,0.5s | | | | | | |
| P19K | | | | IAML | | 13 51 07.8 | |
| | comp=N,120nm,0.5s | | | | | | |
| **PLK3** | **Peulik 3** | **4.14** | **294** | | Pn | 13 50 21.0 | +0.9 |
| **CNTC** | **Contact Creek** | **4.17** | **302** | | Pn | 13 50 21.5 | +0.9 |
| **PLK4** | **Peulik 4** | **4.17** | **293** | | Pn | 13 50 21.3 | +0.8 |
| **PLK4** | **Peulik 4** | **4.17** | **293** | IAML | | 13 51 13.1 | |
| | comp=E,52nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SUA | | | | IAML | | | 13 51 38.4 | |
| | comp=E,29nm,1.0s | | | | | | | |
| **BMRM** | **Bremner River** | **5.32** | **25** | | | Pn | 13 50 36.4 | 0.0 |
| **N19K** | **Bonanza Creek** | **5.37** | **331** | | | Pn | 13 50 36.4 | -0.6 |
| **PMR** | **Palmer** | **5.38** | **0** | | | Pn | 13 50 37.2 | +0.1 |
| **WAX** | **Waxell Ridge** | **5.39** | **36** | | | Pn | 13 50 37.4 | 0.0 |
| **STLK** | **Strandline Lak** | **5.46** | **347** | | | Pn | 13 50 37.9 | -0.4 |
| **BARK** | **Barkley Ridge** | **5.48** | **37** | | | Pn | 13 50 38.7 | +0.1 |
| **P16K** | **Nushagak River** | **5.50** | **304** | | | Pn | 13 50 39.7 | +1.0 |
| **O17K** | **Koliganek Bris** | **5.50** | **314** | | | Pn | 13 50 39.1 | +0.4 |
| **CRQM** | **Cirque** | **5.54** | **32** | | | Pn | 13 50 39.8 | +0.3 |
| **KLU** | **Klutina** | **5.55** | **16** | | | Pn | 13 50 39.1 | -0.4 |
| **GHO** | **Glory Hole Cre** | **5.56** | **1** | | | Pn | 13 50 39.1 | -0.7 |
| **SML** | **Sawmill** | **5.61** | **4** | | | Pn | 13 50 40.7 | +0.3 |
| **TGL** | **Tana Glacier** | **5.63** | **34** | | | Pn | 13 50 40.4 | -0.4 |
| **ISLE** | **Juniper Island** | **5.68** | **37** | | | Pn | 13 50 41.4 | +0.1 |
| **BAGL** | **Bagley Icefiel** | **5.68** | **38** | | | Pn | 13 50 41.5 | +0.3 |
| **N18K** | **Kilae Creek** | **5.68** | **325** | Pn | | Pn | 13 50 40.1 | -1.1 |
| **SCM** | **Sheep Creek Mo** | **5.70** | **9** | | | Pn | 13 50 41.0 | -0.6 |
| **RKAV** | **Rock Avalanche** | **5.81** | **42** | | | Pn | 13 50 43.6 | +0.3 |
| **O16K** | **Kokwok River B** | **5.82** | **309** | Pn | | Pn | 13 50 43.4 | +0.3 |
| **VRDI** | **Verde Repeater** | **5.84** | **28** | | | Pn | 13 50 44.1 | +0.6 |
| **SKT** | **Skwentna** | **5.89** | **349** | Pn | | Pn | 13 50 44.0 | -0.2 |
| **N25K** | **Chitina, Valde** | **5.89** | **22** | Pn | | Pn | 13 50 44.2 | -0.1 |
| **KIAG** | **Kiagna River** | **5.91** | **34** | | | Pn | 13 50 44.7 | +0.1 |
| **SAMH** | **Samovar Hills** | **5.92** | **45** | | | Pn | 13 50 45.1 | +0.4 |
| **GLB** | **Gilahina Butte** | **5.93** | **26** | | | Pn | 13 50 44.5 | -0.2 |
| **GRNC** | **Granite Creek** | **5.97** | **38** | | | Pn | 13 50 44.9 | -0.5 |
| **TABL** | **Table Mountain** | **5.98** | **42** | | | Pn | 13 50 45.2 | -0.5 |
| **BALM** | **Baldy** | **6.00** | **34** | | | Pn | 13 50 45.8 | 0.0 |
| **N17K** | **Nushagak Hills** | **6.02** | **319** | | | Pn | 13 50 45.7 | -0.2 |
| **M20K** | **Styx River** | **6.02** | **342** | | | Pn | 13 50 45.5 | -0.5 |
| **MCARA** | **McCarthy VSAT** | **6.08** | **29** | | | Pn | 13 50 47.6 | +0.8 |
| **PTPK** | **Patty Peak** | **6.08** | **32** | | | Pn | 13 50 47.2 | +0.3 |
| **M24K** | **Tolsona, Glenn** | **6.10** | **14** | | | Pn | 13 50 47.8 | +0.8 |
| **PNL** | **Peninsula** | **6.25** | **52** | | | Pn | 13 50 49.3 | +0.2 |
| **CTGM** | **Chitina Glacie** | **6.28** | **38** | | | Pn | 13 50 49.5 | -0.1 |
| **M19K** | **Big River Lodg** | **6.29** | **337** | | | Pn | 13 50 49.3 | -0.3 |
| **M18K** | **Stony River** | **6.29** | **330** | | | Pn | 13 50 48.9 | -0.8 |
| **LOGN** | **Logan Glacier** | **6.29** | **40** | | | Pn | 13 50 49.7 | -0.1 |
| **BCPM** | **Bancas Point** | **6.30** | **50** | | | Pn | 13 50 50.2 | +0.5 |
| **O15K** | **Ungalikthiuk R** | **6.42** | **302** | | | Pn | 13 50 52.5 | +1.2 |
| **HARP** | **HAARP** | **6.52** | **17** | | | Pn | 13 50 53.9 | +1.0 |
| **O28M** | **Mount Upton** | **6.56** | **42** | | | Pn | 13 50 53.8 | +0.2 |
| **N16K** | **Nishlik Lake** | **6.59** | **314** | | | Pn | 13 50 54.4 | +0.6 |
| **WAT7** | **Susitna Watana** | **6.63** | **1** | | | Pn | 13 50 55.0 | +0.7 |
| **L19K** | **White Mountain** | **6.64** | **336** | | | Pn | 13 50 53.5 | -0.9 |
| **M17K** | **Holitna River** | **6.72** | **324** | | | Pn | 13 50 55.3 | -0.2 |
| **DHY** | **Denali Highway** | **6.93** | **7** | | | Pn | 13 50 59.2 | +0.6 |
| **O29M** | **Mount Kennedy** | **6.93** | **50** | | | Pn | 13 50 58.9 | +0.4 |
| **N15K** | **Kwethluk River** | **6.98** | **309** | | | Pn | 13 50 59.5 | +0.5 |
| **P29M** | **Windy Craggy** | **6.99** | **56** | | | Pn | 13 50 59.1 | -0.2 |
| **M16K** | **Timber Creek** | **7.00** | **317** | | | Pn | 13 50 59.8 | +0.4 |
| **PAX** | **Paxson** | **7.02** | **14** | | | Pn | 13 51 00.6 | +0.9 |
| **PS1A** | **Pavlof South-1** | **7.11** | **269** | | | Pn | 13 51 02.0 | +1.1 |
| **L18K** | **Granite Mounta** | **7.13** | **331** | | | Pn | 13 51 00.2 | -0.9 |
| **O14K** | **Tigyukauivet M** | **7.13** | **300** | Pn | | Pn | 13 51 03.0 | +1.8 |
| **MENT** | **Mentasta** | **7.28** | **20** | | | Pn | 13 51 01.7 | -1.5 |
| **L16K** | **Owhat River** | **7.64** | **320** | Pn | | Pn | 13 51 07.4 | -0.7 |
| **L27K** | **Beaver Creek,** | **7.80** | **26** | | | Pn | 13 51 10.8 | +0.4 |
| **BCAR** | **Beaver Creek A** | **7.81** | **26** | Pn | | Pn | 13 51 12.3 | +1.8 |
| **BPAW** | **Bear Paw Mtn.** | **7.95** | **354** | | | Pn | 13 51 11.2 | -1.1 |
| **K17K** | **Iditarod** | **7.98** | **328** | Pn | | Pn | 13 51 11.7 | -1.1 |
| **SCRK** | **Sand Creek** | **8.19** | **16** | Pn | | Pn | 13 51 15.7 | -0.1 |
| **M29M** | **Somme Creek** | **8.29** | **37** | Pn | | Pn | 13 51 17.7 | +0.5 |
| **J20K** | **Nowinta River** | **8.34** | **345** | Pn | | Pn | 13 51 17.4 | -0.4 |
| **CCB** | **Clear Creek Bu** | **8.47** | **4** | | | Pn | 13 51 20.1 | +0.5 |
| **K27K** | **Chicken** | **8.59** | **21** | Pn | | Pn | 13 51 22.2 | +1.1 |
| **J25K** | **Salcha River,** | **8.62** | **11** | | | Pn | 13 51 20.2 | -1.4 |
| **ILAR** | **Eielson Array** | **8.65** | **7** | Pn | | Pn | 13 51 21.9 | -0.1 |
| **J26L** | **Joseph Creek** | **8.75** | **16** | Pn | | Pn | 13 51 23.8 | +0.3 |
| **MDM** | **Murphy Dome** | **8.77** | **3** | | | Pn | 13 51 23.3 | -0.4 |
| **L29M** | **L29M** | **8.88** | **34** | Pn | | Pn | 13 51 25.5 | +0.4 |
| **P32M** | **Atlin** | **8.90** | **61** | Pn | | Pn | 13 51 25.2 | -0.3 |
| **I23K** | **Minto, Yukon-K** | **8.95** | **360** | | | Pn | 13 51 25.9 | -0.2 |
| **DAWY** | **Dawson** | **9.24** | **28** | | | Pn | 13 51 30.1 | -0.1 |
| **P33M** | **Teslin, Yukon** | **9.51** | **58** | Pn | | Pn | 13 51 33.7 | -0.1 |
| **K29M** | **Barlow Dome** | **9.60** | **33** | Pn | | Pn | 13 51 35.5 | +0.4 |

*IDC **08** 14:00:19.1±5.3, 11°.95S×166°.53E, h161km±48km, mb3.3/6, mbtmp3.8/7, Error ellipse: s-maj=30.3km s-min=29.9km az=101.0*

**ISC 08 14:00:12.3±1.2, 11°.8S±0°.1×166°.6E±0°.3, h100km, n7, σ0s71/8, mb3.6/6, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **10.22** | **181** | P | | | Pn | 14 02 41.4 | +5.3 |
| | 5.8nm,1.2s,baz=299,slow=23,SNR=2.2 | | | | | | | | |
| DZM | | | | S | | | **Sn** | **14 04 29.5** | **+0.7** |
| | 2.4nm,0.8s,baz=308,slow=19,SNR=1.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.01** | **251** | P | | | **P** | **14 06 29.4** | **0.0** |
| | 0.3nm,0.6s,baz=82,slow=8.7,SNR=5.8 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **14 09 16.3** | **-0.9** |
| | 0.6nm,0.9s,baz=76,slow=3.7,SNR=2.4 | | | | | | | | |
| | 0.3nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **33.20** | **245** | P | | | **P** | **14 06 40.0** | **+0.1** |
| | 0.7nm,0.7s,baz=68,slow=10,SNR=12 | | | | | | | | |
| | 0.7nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **78.21** | **180** | P | | | **P** | **14 11 59.9** | **-0.9** |
| | 1.0nm,0.7s,baz=74,slow=5.3,SNR=6.7 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **79.75** | **324** | P | | | **P** | **14 12 09.6** | **+0.1** |
| | 0.3nm,0.4s,baz=126,slow=7.3,SNR=1.9 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.96** | **18** | P | | | **P** | **14 12 31.4** | **+0.5** |
| | 0.5nm,0.7s,baz=241,slow=5.0,SNR=6.6 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **94.63** | **317** | P | | | **P** | **14 13 22.5** | **+0.4** |
| | 0.4nm,0.6s,baz=88,slow=5.9,SNR=5.8 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |

*JMA **08** 14:08:48.2±0.2, 25°.N±1°.×122°.2E±0°.5, h145km±2km, MV2.4/15, TAIWAN REGION*
*TAP **08** 14:08:48.3, 25°.07N×122°.24E, h142km, ML3.1, D*

**ISC 08 14:08:47.6±1.9, 25°.02N±0°.06×122°.24E±0°.03, h150km±10km, n75, σ0s64/137, 2C-21D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.23** | **267** | ⇓*i*P | | | **Pn** | **14 09 08.1** | **+0.3** |
| | baz=251 | | | | | | | | |
| **EGS** | | **0.33** | **238** | *e*P | | | **Pn** | **14 09 07.3** | **-0.9** |
| | baz=217 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.34** | **283** | ⇓*i*P | | | **Pn** | **14 09 08.4** | **+0.1** |
| | baz=259 | | | | | | | | |
| SXI1 | | | | S | | | **Sn** | **14 09 23.7** | **-0.4** |
| | baz=259 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.38** | **263** | ⇓P | | | **Pn** | **14 09 08.6** | **+0.2** |
| | baz=253 | | | | | | | | |
| TIPB | | | | *e*S | | | **Sn** | **14 09 23.4** | **-0.8** |
| | baz=253 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.42** | **277** | *e*P | | | **Pn** | **14 09 08.9** | **+0.3** |
| | baz=259 | | | | | | | | |
| NWF | | | | *e*S | | | **Sn** | **14 09 24.5** | **-0.1** |
| | baz=259 | | | | | | | | |
| **TNOU** | **National Taiwa** | **0.44** | **287** | *e*P | | | **Pn** | **14 09 08.8** | **+0.2** |
| | baz=270 | | | | | | | | |
| **TWC** | **Suao** | **0.54** | **221** | ⇓P | | | **Pn** | **14 09 09.1** | **-0.1** |
| | baz=215 | | | | | | | | |
| TWC | | | | *e*S | | | **Sn** | **14 09 24.2** | **-1.2** |
| | baz=215 | | | | | | | | |
| **ESAO** | **Su ao** | **0.57** | **219** | *e*P | | | **Pn** | **14 09 09.5** | **+0.2** |
| | baz=214 | | | | | | | | |
| **TWA** | **Mucha** | **0.59** | **266** | P | | | **Pn** | **14 09 09.4** | **0.0** |
| | baz=255 | | | | | | | | |
| TWA | | | | S | | | **Sn** | **14 09 27.0** | **+1.0** |
| | baz=255 | | | | | | | | |
| **TWE** | **Neicheng** | **0.60** | **240** | P | | | **Pn** | **14 09 10.2** | **+0.7** |
| | baz=229 | | | | | | | | |
| **EOS2** | **EOS2** | **0.60** | **180** | *e*P | | | **Pn** | **14 09 10.0** | **+0.7** |
| | baz=188 | | | | | | | | |
| EOS2 | | | | *e*S | | | **Sn** | **14 09 26.7** | **+0.9** |
| | baz=188 | | | | | | | | |
| **NDS** | **Dongshan** | **0.61** | **231** | ⇑*i*P | | | **Pn** | **14 09 10.7** | **+1.2** |
| | baz=228 | | | | | | | | |
| NDS | | | | S | | | **Sn** | **14 09 27.0** | **+0.8** |
| | baz=228 | | | | | | | | |
| **YM01** | **YM01** | **0.62** | **282** | P | | | **Pn** | **14 09 09.6** | **+0.1** |
| | baz=270 | | | | | | | | |
| YM01 | | | | *e*S | | | **Sn** | **14 09 25.6** | **-0.7** |
| | baz=270 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.65** | **246** | ⇓*i*P | | | **Pn** | **14 09 09.8** | **0.0** |
| | baz=243 | | | | | | | | |
| FUSB | | | | S | | | **Sn** | **14 09 26.8** | **+0.1** |
| | baz=243 | | | | | | | | |
| **EWUT** | **Wuta** | **0.71** | **216** | *e*P | | | **Pn** | **14 09 10.7** | **+0.5** |
| | baz=212 | | | | | | | | |
| EWUT | | | | *e*S | | | **Sn** | **14 09 27.8** | **+0.5** |
| | baz=212 | | | | | | | | |
| **NWLT** | **Wulai** | **0.71** | **250** | *e*P | | | **Pn** | **14 09 10.0** | **-0.2** |
| | baz=244 | | | | | | | | |
| NWLT | | | | S | | | **Sn** | **14 09 26.6** | **-0.7** |
| | baz=244 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.72** | **238** | ⇓P | | | **Pn** | **14 09 10.5** | **+0.3** |
| | baz=232 | | | | | | | | |
| ENTT | | | | S | | | **Sn** | **14 09 27.6** | **+0.2** |
| | baz=232 | | | | | | | | |
| **EOS3** | **EOS3** | **0.74** | **174** | *e*P | | | **Pn** | **14 09 11.0** | **+0.8** |
| | baz=187 | | | | | | | | |
| EOS3 | | | | *e*S | | | **Sn** | **14 09 28.5** | **+1.2** |
| | baz=187 | | | | | | | | |
| **ENA** | **Nanau** | **0.74** | **217** | *e*P | | | **Pn** | **14 09 10.8** | **+0.4** |
| | baz=209 | | | | | | | | |
| ENA | | | | *e*S | | | **Sn** | **14 09 27.7** | **0.0** |
| | baz=209 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.75** | **276** | *e*S | | | **Sn** | **14 09 26.7** | **-1.0** |
| | baz=271 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.78** | **238** | P | | | **Pn** | **14 09 11.3** | **+0.6** |
| | baz=226 | | | | | | | | |
| NDT | | | | *e*S | | | **Sn** | **14 09 28.0** | **-0.2** |
| | baz=226 | | | | | | | | |
| **LATG** | **Datong** | **0.81** | **233** | ⇓*i*P | | | **Pn** | **14 09 11.6** | **+0.7** |
| | baz=224 | | | | | | | | |
| LATG | | | | *e*S | | | **Sn** | **14 09 28.9** | **+0.2** |
| | baz=224 | | | | | | | | |
| **EAHA** | **Aohua** | **0.82** | **213** | *e*P | | | **Pn** | **14 09 11.3** | **+0.3** |
| | baz=210 | | | | | | | | |
| EAHA | | | | *e*S | | | **Sn** | **14 09 29.2** | **+0.5** |
| | baz=210 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.86** | **246** | ⇓*i*P | | | **Pn** | **14 09 11.4** | **+0.1** |
| | baz=241 | | | | | | | | |
| YHNB | | | | *e*S | | | **Sn** | **14 09 28.1** | **-1.2** |
| | baz=241 | | | | | | | | |
| **JYNG** | **Yonaguniijimaku** | **0.86** | **131** | P | | | **Pn** | **14 09 11.4** | **+0.2** |
| JYNG | | | | *e*S | | | **Sn** | **14 09 28.4** | **-0.7** |
| **NSK** | **Sanguang** | **0.87** | **247** | ⇓P | | | **Pn** | **14 09 11.5** | **+0.1** |
| | baz=242 | | | | | | | | |
| NSK | | | | S | | | **Sn** | **14 09 28.2** | **-1.2** |
| | baz=242 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.90** | **128** | ⇓P | | | **Pn** | **14 09 11.6** | **+0.1** |
| | baz=138 | | | | | | | | |
| YOJ | | | | *e*S | | | **Sn** | **14 09 29.3** | **-0.4** |
| | baz=138 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.90** | **128** | *e*P | | | **Pn** | **14 09 11.8** | **+0.3** |
| YOJ | | | | *e*S | | | **Sn** | **14 09 29.2** | **-0.5** |
| **EOS4** | **EOS4** | **0.90** | **175** | *e*P | | | **Pn** | **14 09 11.3** | **+0.2** |
| | baz=180 | | | | | | | | |
| EOS4 | | | | *e*S | | | **Sn** | **14 09 29.4** | **+0.3** |
| | baz=180 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.96** | **267** | *e*S | | | **Sn** | **14 09 30.3** | **-0.2** |
| | baz=271 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.98** | **234** | ⇑P | | | **Pn** | **14 09 12.8** | **+0.5** |
| | baz=223 | | | | | | | | |
| NNS | | | | *e*S | | | **Sn** | **14 09 30.7** | **-0.4** |
| | baz=223 | | | | | | | | |
| **NNSB** | **Datong** | **0.98** | **233** | ⇓P | | | **Pn** | **14 09 12.7** | **+0.4** |
| | baz=223 | | | | | | | | |
| NNSB | | | | *e*S | | | **Sn** | **14 09 30.6** | **-0.5** |
| | baz=223 | | | | | | | | |
| **ETL** | **Fush Village** | **1.02** | **213** | *e*P | | | **Pn** | **14 09 12.6** | **0.0** |
| | baz=219 | | | | | | | | |
| ETL | | | | *e*S | | | **Sn** | **14 09 31.2** | **-0.5** |
| | baz=219 | | | | | | | | |
| **NACB** | **Ninganchiao** | **1.03** | **215** | ⇓*i*P | | | **Pn** | **14 09 12.4** | **-0.2** |
| | baz=219 | | | | | | | | |
| NACB | | | | *e*S | | | **Sn** | **14 09 30.6** | **-1.0** |
| | baz=219 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.06** | **220** | P | | | **Pn** | **14 09 13.2** | **+0.2** |
| | baz=222 | | | | | | | | |
| ETLH | | | | S | | | **Sn** | **14 09 31.9** | **-0.5** |
| | baz=222 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.09** | **249** | *e*P | | | **Pn** | **14 09 13.3** | **+0.1** |
| | baz=239 | | | | | | | | |
| NFF | | | | *e*S | | | **Sn** | **14 09 31.7** | **-1.0** |
| | baz=239 | | | | | | | | |
| **TWD** | **Chiawan** | **1.10** | **212** | *e*P | | | **Pn** | **14 09 13.2** | **-0.1** |
| | baz=218 | | | | | | | | |
| TWD | | | | *e*S | | | **Sn** | **14 09 32.0** | **-0.9** |
| | baz=218 | | | | | | | | |
| **LIOB** | **Emei** | **1.17** | **252** | *e*P | | | **Pn** | **14 09 14.3** | **+0.4** |
| | baz=242 | | | | | | | | |
| LIOB | | | | *e*S | | | **Sn** | **14 09 33.4** | **-0.5** |
| | baz=242 | | | | | | | | |
| **FUSS** | **Fushou** | **1.19** | **230** | *e*P | | | **Pn** | **14 09 15.2** | **+0.9** |
| | baz=221 | | | | | | | | |
| FUSS | | | | *e*S | | | **Sn** | **14 09 35.0** | **+0.3** |
| | baz=221 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.19** | **251** | ⇓P | | | **Pn** | **14 09 14.3** | **+0.3** |
| | baz=241 | | | | | | | | |
| NSTT | | | | *e*S | | | **Sn** | **14 09 33.5** | **-0.7** |
| | baz=241 | | | | | | | | |
| **TWT** | **Tachien** | **1.23** | **232** | P | | | **Pn** | **14 09 15.7** | **+1.1** |
| | baz=224 | | | | | | | | |
| TWT | | | | S | | | **Sn** | **14 09 35.5** | **+0.2** |
| | baz=224 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.24** | **226** | ⇓P | | | **Pn** | **14 09 15.6** | **+0.6** |
| | baz=218 | | | | | | | | |
| WHF | | | | S | | | **Sn** | **14 09 35.8** | **-0.2** |
| | baz=218 | | | | | | | | |
| **TDCB** | **Techi** | **1.24** | **232** | ⇓P | | | **Pn** | **14 09 15.6** | **+0.9** |
| | baz=229 | | | | | | | | |
| TDCB | | | | S | | | **Sn** | **14 09 34.9** | **-0.5** |
| | baz=229 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.25** | **217** | P | | | **Pn** | **14 09 14.4** | **-0.3** |
| | baz=208 | | | | | | | | |
| LXIB | | | | S | | | **Sn** | **14 09 34.7** | **-0.8** |
| | baz=208 | | | | | | | | |
| **ETM** | **Tongmen** | **1.25** | **213** | *e*P | | | **Pn** | **14 09 14.3** | **-0.3** |
| | baz=216 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.29** | **207** | P | | | **Pn** | **14 09 15.3** | **+0.3** |
| | baz=205 | | | | | | | | |
| TEYL | | | | S | | | **Sn** | **14 09 35.9** | **0.0** |
| | baz=205 | | | | | | | | |
| **CHGB** | **Renai** | **1.36** | **226** | ⇓P | | | **Pn** | **14 09 17.1** | **+1.1** |
| | baz=218 | | | | | | | | |
| CHGB | | | | *e*S | | | **Sn** | **14 09 37.8** | **+0.1** |
| | baz=218 | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.37** | **207** | ⇓P | | | **Pn** | **14 09 16.2** | **+0.3** |
| | baz=204 | | | | | | | | |
| SHUL | | | | S | | | **Sn** | **14 09 37.4** | **0.0** |
| | baz=204 | | | | | | | | |
| **WHP** | **Taichung City** | **1.39** | **238** | *e*P | | | **Pn** | **14 09 16.9** | **+0.8** |
| | baz=235 | | | | | | | | |
| WHP | | | | *e*S | | | **Sn** | **14 09 37.7** | **-0.1** |
| | baz=235 | | | | | | | | |
| **ESL** | **Shilin** | **1.41** | **212** | *e*P | | | **Pn** | **14 09 15.6** | **-0.6** |
| | baz=213 | | | | | | | | |
| ESL | | | | *e*S | | | **Sn** | **14 09 36.1** | **-1.9** |
| | baz=213 | | | | | | | | |
| **OWD** | **Renai** | **1.44** | **223** | *e*P | | | **Pn** | **14 09 17.5** | **+0.9** |
| | baz=218 | | | | | | | | |
| OWD | | | | *e*S | | | **Sn** | **14 09 39.2** | **+0.4** |
| | baz=218 | | | | | | | | |
| **WUSB** | **Renai** | **1.45** | **225** | ⇓*e*P | | | **Pn** | **14 09 17.7** | **+1.0** |
| | baz=219 | | | | | | | | |
| WUSB | | | | *e*S | | | **Sn** | **14 09 39.2** | **+0.2** |
| | baz=219 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.49** | **244** | *e*P | | | **Pn** | **14 09 17.5** | **+0.4** |
| | baz=233 | | | | | | | | |
| TWQ1 | | | | S | | | **Sn** | **14 09 38.9** | **-0.7** |
| | baz=233 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.51** | **211** | ⇓P | | | **Pn** | **14 09 16.5** | **-0.8** |
| | baz=212 | | | | | | | | |
| WARBT | | | | *e*S | | | **Sn** | **14 09 38.3** | **-1.8** |
| | baz=212 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.52** | **116** | *e*P | | | **Pn** | **14 09 17.6** | **+0.3** |
| IRIF | | | | *e*S | | | **Sn** | **14 09 39.7** | **-0.4** |
| **WCS** | **Beigang Elemen** | **1.54** | **232** | ⇓P | | | **Pn** | **14 09 18.4** | **+0.8** |
| | baz=234 | | | | | | | | |
| WCS | | | | S | | | **Sn** | **14 09 40.6** | **+0.1** |
| | baz=234 | | | | | | | | |
| **VWDT** | **VWDT** | **1.61** | **219** | ⇓P | | | **Pn** | **14 09 19.3** | **+1.0** |
| | baz=212 | | | | | | | | |
| VWDT | | | | *e*S | | | **Sn** | **14 09 41.7** | **-0.1** |
| | baz=212 | | | | | | | | |
| **TYC** | **Yuchr** | **1.68** | **229** | *e*P | | | **Pn** | **14 09 19.9** | **+0.8** |
| | baz=233 | | | | | | | | |
| TYC | | | | *e*S | | | **Sn** | **14 09 43.3** | **+0.2** |
| | baz=233 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.69** | **206** | *e*P | | | **Pn** | **14 09 19.5** | **+0.2** |
| | baz=211 | | | | | | | | |
| HGSD | | | | *e*S | | | **Sn** | **14 09 44.1** | **+0.6** |
| | baz=211 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.70** | **224** | *e*P | | | **Pn** | **14 09 20.1** | **+0.8** |
| | baz=216 | | | | | | | | |
| SSLB | | | | *e*S | | | **Sn** | **14 09 43.7** | **+0.1** |
| | baz=216 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.72** | **124** | *e*S | | | **Sn** | **14 09 44.6** | **+0.7** |
| **EHY** | **Hungye** | **1.72** | **209** | *e*P | | | **Pn** | **14 09 20.1** | **+0.5** |
| | baz=205 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.79** | **115** | *e*P | | | **Pn** | **14 09 20.8** | **+0.5** |
| JKRS | | | | *e*S | | | **Sn** | **14 09 45.0** | **-0.4** |
| **WHYT** | **Xinyi Township** | **1.83** | **224** | *e*P | | | **Pn** | **14 09 21.4** | **+0.7** |
| | baz=221 | | | | | | | | |
| WHYT | | | | *e*S | | | **Sn** | **14 09 46.2** | **0.0** |
| | baz=221 | | | | | | | | |
| **YULB** | **Yu-li** | **1.83** | **208** | *e*P | | | **Pn** | **14 09 20.0** | **-0.8** |
| | baz=206 | | | | | | | | |
| YULB | | | | *e*S | | | **Sn** | **14 09 44.8** | **-1.6** |
| | baz=206 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.85** | **110** | *e*P | | | **Pn** | **14 09 21.3** | **+0.3** |
| JIJ | | | | *e*S | | | **Sn** | **14 09 45.3** | **-1.4** |
| **JISG** | **Ishigakijimahi** | **1.93** | **102** | *e*P | | | **Pn** | **14 09 22.4** | **+0.5** |
| JISG | | | | *e*S | | | **Sn** | **14 09 47.4** | **-0.8** |
| **FULB** | **Fuli** | **2.01** | **206** | *e*P | | | **Pn** | **14 09 23.1** | **+0.3** |
| | baz=211 | | | | | | | | |
| FULB | | | | *e*S | | | **Sn** | **14 09 50.3** | **+0.4** |
| | baz=211 | | | | | | | | |
| **CHKT** | **Chengkung** | **2.07** | **203** | *e*P | | | **Pn** | **14 09 23.3** | **-0.2** |
| | baz=193 | | | | | | | | |
| CHKT | | | | *e*S | | | **Sn** | **14 09 50.5** | **-0.7** |
| | baz=193 | | | | | | | | |
| **ELDTW** | **Lidau** | **2.14** | **212** | *e*P | | | **Pn** | **14 09 24.5** | **0.0** |
| | baz=205 | | | | | | | | |
| ELDTW | | | | *e*S | | | **Sn** | **14 09 52.6** | **-0.2** |
| | baz=205 | | | | | | | | |
| **EDH** | **Donghe** | **2.21** | **203** | *e*P | | | **Pn** | **14 09 25.3** | **+0.1** |
| | baz=207 | | | | | | | | |
| EDH | | | | *e*S | | | **Sn** | **14 09 53.6** | **-0.6** |
| | baz=207 | | | | | | | | |
| **TPUB** | **Ta-pu** | **2.26** | **221** | *e*S | | | **Sn** | **14 09 55.0** | **-0.1** |
| | baz=218 | | | | | | | | |
| **JTJ** | **Tarama** | **2.27** | **99** | *e*P | | | **Pn** | **14 09 26.6** | **+0.7** |
| JTJ | | | | *e*S | | | **Sn** | **14 09 54.6** | **-0.7** |
| **LDUT** | **Ludao** | **2.44** | **197** | *e*P | | | **Pn** | **14 09 27.5** | **-0.5** |
| | baz=193 | | | | | | | | |
| **JMJ2** | **Miyako jima3** | **2.82** | **95** | *e*P | | | **Pn** | **14 09 33.4** | **+0.8** |

*IDC **08** 14:17:20.2±0.6, 5°.89S×151°.46E, h0km, mb4.1/13, mbtmp4.1/14, ML2.4/2, MS3.5/27, Error ellipse: s-maj=24.5km s-min=16.9km az=99.0*
*NEIC **08** 14:17:22.6±1.8, 5°.90S±0°.08×151°.5E±0°.1, h10km±1km, mb4.6/31, Error ellipse: s-maj=18.3km s-min=10.9km az=117.0*

**ISC 08 14:17:26.4±0.5, 5°.93S±0°.08×151°.37E±0°.10, h41km, n75, σ0s73/54, mb4.5/29, MS3.7/25, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.90** | **25** | | | | **Pn** | **14 17 56.0** | **-0.4** |
| **PMG** | **Port Moresby** | **5.42** | **230** | | | | **Pn** | **14 18 46.4** | **+1.7** |
| **PMG** | **Port Moresby** | **5.42** | **230** | Pn | | | **Pn** | **14 18 45.7** | **+1.0** |
| | 10nm,0.3s,baz=62,slow=6.8,SNR=27 | | | | | | | | |
| PMG | | | | Sn | | | **Sn** | **14 19 45.6** | **-0.3** |
| | 8.7nm,0.3s,baz=47,slow=19,SNR=8.8 | | | | | | | | |
| PMG | | | | LR | | LR | | 14 20 46.8 | |
| | comp=Z,268nm,20.8s,baz=41,slow=37 | | | | | | | | |
| | 32nm,0.4s | | | | | | | | |
| **MANU** | **Manus Island** | **5.56** | **314** | Pn | | Pn | | 14 18 52.0 | +5.3 |
| **HNR** | **Honiara** | **9.18** | **113** | LR | | LR | | 14 22 44.6 | |
| | comp=Z,4µm,20.9s,baz=279,slow=36 | | | | | | | | |
| **COEN** | **Coen** | **11.34** | **225** | Pn | | **Pn** | | **14 20 05.3** | **-0.8** |
| **CTA** | **Charters Tower** | **14.93** | **199** | Pn | | **Pn** | | **14 20 55.1** | **+0.3** |
| | baz=22,slow=14,SNR=1.7 | | | | | | | | |
| CTA | | | | LR | | LR | | 14 26 48.1 | |
| | comp=Z,19nm,18.1s,baz=22,slow=38 | | | | | | | | |
| **FAKI** | **Fak Fak** | **19.30** | **278** | P | | P | | 14 21 38.0 | -10 |
| **EIDS** | **Eidsvold** | **19.33** | **181** | P | | **P** | | **14 21 48.3** | **-0.1** |
| **GUMO** | **Guam** | **20.44** | **342** | LR | | LR | | 14 30 09.5 | |
| | comp=Z,109nm,18.7s,baz=176,slow=38 | | | | | | | | |
| **MTN** | **Manton Dam** | **21.10** | **250** | P | | **P** | | **14 22 07.3** | **-0.5** |
| MTN | | | | IAmb | | IAmb | | 14 22 27.4 | |
| | comp=Z,42nm,1.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.49** | **229** | P | | **P** | | **14 22 11.2** | **-0.7** |
| WB0 | | | | IAmb | | IAmb | | 14 22 31.8 | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.63** | **228** | P | | **P** | | **14 22 12.8** | **-0.6** |
| | comp=Z,5.2nm,0.5s,baz=54,slow=11,SNR=63 | | | | | | | | |
| | comp=Z,5.2nm,0.5s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.67** | **139** | P | | **P** | | **14 22 13.4** | **-0.5** |
| **DZM** | **Mont Dzumac** | **21.67** | **139** | P | | **P** | | **14 22 13.4** | **-0.5** |
| | comp=Z,4.2nm,0.7s,baz=348,slow=15,SNR=6.4 | | | | | | | | |
| DZM | | | | LR | | LR | | 14 29 06.9 | |
| | comp=Z,241nm,21.7s,baz=304,slow=33 | | | | | |

comp=Z,27nm,19.0s,baz=134,slow=37
comp=Z,0.4nm,0.4s
**E19K** **Redstone River** **81.69** **18** P **P** **14 29 40.0 -0.2**
E19K IAmb IAmb 14 29 44.2
comp=Z,4.7nm,0.8s
**F20K** **Avaraart Lake** **81.90** **18** P **P** **14 29 42.0 +0.8**
**C19K** **Lookout Ridge** **82.06** **16** P **P** **14 29 42.5 +0.3**
**D19K** **Kuna River** **82.08** **17** P **P** **14 29 42.7 +0.4**
D19K IAmb IAmb 14 30 10.8
comp=Z,9.5nm,1.4s
**MLY** **Manley** **82.44** **21** P **P** **14 29 44.5 +0.2**
MLY IAmb IAmb 14 29 46.1
comp=Z,3.4nm,0.6s
**CCB** **Clear Creek Bu** **83.33** **22** P **P** **14 29 47.9 -0.9**
CCB IAmb IAmb 14 29 50.1
comp=Z,3.4nm,1.0s
**IL31** **83.74** **22** P **P** **14 29 50.2 -0.6**
IL31 IAmb IAmb 14 29 51.9
comp=Z,2.3nm,0.8s
**ILAR** **Eielson Array** **83.74** **22** P **P** **14 29 50.1 -0.8**
comp=Z,2.6nm,0.9s,baz=252,slow=5.2,SNR=22
ILAR LR LR 15 03 12.2
comp=Z,35nm,19.6s,baz=240,slow=33
comp=Z,2.6nm,0.9s
**KURBB** **Kurchatov Arra** **83.81** **322** P **P** **14 29 51.3 -0.3**
comp=Z,0.3nm,0.2s,baz=104,slow=7.7,SNR=2.4
comp=Z,0.3nm,0.2s
**MAW** **Mawson** **83.98** **203** LR LR 15 03 49.3
comp=Z,39nm,22.0s,baz=88,slow=33
**QSPA** **South Pole Qui** **84.04** **180** P **P** **14 29 52.5 -0.1**
QSPA IAmb IAmb 14 30 00.4
comp=Z,4.3nm,1.0s
**QSPA** **South Pole Qui** **84.04** **180** P **P** **14 29 51.3 -1.3**
comp=Z,2.7nm,0.7s,baz=313,slow=1.2,SNR=10
comp=Z,2.7nm,0.7s
**J25K** **Salcha River,** **84.24** **23** P **P** **14 29 53.8 +0.3**
**SCRK** **Sand Creek** **84.50** **24** P **P** **14 29 54.5 -0.4**
SCRK IAmb IAmb 14 30 23.7
comp=Z,3.9nm,1.3s
**F24K** **Squaw Lake** **84.71** **20** P **P** **14 29 56.0 +0.2**
F24K IAmb IAmb 14 29 59.2
comp=Z,3.5nm,0.9s
**EGAK** **Eagle** **85.95** **23** P **P** **14 30 02.6 +0.6**
EGAK IAmb IAmb 14 30 26.0
comp=Z,6.6nm,1.1s
**K29M** **Barlow Dome** **87.09** **25** P **P** **14 30 09.8 +2.0**
**E27K** **Coleen River** **87.14** **20** P **P** **14 30 08.6 +0.7**
E27K IAmb IAmb 14 30 10.7
comp=Z,3.2nm,0.8s
**BBB** **Bella Bella** **88.85** **37** LR LR 15 04 11.0
comp=Z,34nm,19.1s,baz=274,slow=32
**DLBC** **Dease Lake** **89.08** **31** LR LR 15 02 38.7
comp=Z,65nm,21.1s,baz=276,slow=30
**YBH** **Yreka Blue Hor** **90.86** **48** LR LR 15 03 44.3
comp=Z,53nm,20.7s,baz=282,slow=31
**NVAR** **Mina Array Bea** **93.90** **52** P **P** **14 30 40.4 +0.1**
comp=Z,1.0nm,0.7s,baz=249,slow=7.3,SNR=6.2
comp=Z,1.0nm,0.7s
**NEW** **Newport** **95.39** **42** LR LR 15 09 53.9
comp=Z,31nm,18.3s,baz=266,slow=33
**ELK** **Elko** **96.40** **50** LR LR 15 10 27.3
comp=Z,64nm,19.1s,baz=280,slow=33
**ARU** **Arti** **96.46** **326** LR LR 15 13 57.3
comp=Z,29nm,21.2s,baz=96,slow=35
**YKA** **Yellowknife Ar** **97.08** **28** P **P** **14 30 54.0 0.0**
comp=Z,0.8nm,0.8s,baz=266,slow=4.3,SNR=2.6
comp=Z,0.8nm,0.8s
**PDAR** **Pinedale Array** **100.66** **48** P **Pdif** **14 31 10.0 -0.8**
comp=Z,0.1nm,0.4s,baz=256,slow=1.9,SNR=2.0
**GERES** **GERESS Array B** **124.25** **327** PKP **PKiKP** **14 36 21.5 +0.1**
comp=Z,0.7nm,0.4s,baz=326,slow=4.7,SNR=4.9
**TORD** **Torodi Ar. Bea** **149.27** **286** PKPbc **PKPbc** **14 37 12.0 +0.1**
comp=Z,4.1nm,0.7s,baz=71,slow=2.9,SNR=15
**BDFB** **Brasilia** **151.22** **138** PKPbc **PKiKP** **14 37 17.4 +0.2**
comp=Z,1.5nm,0.3s,baz=318,slow=2.8,SNR=4.6

*IDC **08** 14:19:13.9±1.6,32°.25S×122°.35E,h0km,mb3.9/1, mbtmp4.1/5,ML4.1/3,MS2.6/1,Error ellipse: s-maj=38.7km s-min=18.4km az=154.0*
*NOU **08** 14:19:15.9,32°.43S×122°.35E,h0km,mb4.4/23,Western Australia*
*AUST **08** 14:19:15.7±0.3,32°.54S×122°.41E,h10km,mb4.3/10, Mjma4.8/14,ML4.3/8,MLv5.4/8,Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*NEIC **08** 14:19:15.9±1.5,32°.4S±0°.1×122°.44E±0°.05,h10km±6km, mb4.1/8,Error ellipse: s-maj=15.7km s-min=5.6km az=194.0*
*CUPWA **08** 14:19:19.2±9.3,32°.55S×122°.33E,h11km±46km,ML4.3, Region: WESTERN AUSTRALIA*
**ISC 08 14:19:17.1±0.6,32°.47S±0°.05×122°.38E±0°.04,h19km,n76, σ1s96/92,mb5.0/3,Western Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMBL** | **Kambalda** | **1.18** | **339** | P | **Pn** | **14 19 39.9** | **+1.3** |
| **KMBL** | **Kambalda** | **1.18** | **339** | P | **Pb** | **14 19 40.4** | **+1.5** |
| | 7.8nm,SNR=95 | | | | | | |
| KMBL | | | | S | **Sg** | **14 19 56.9** | **+1.6** |
| **KMBL** | **Kambalda** | **1.18** | **339** | P | **Pb** | **14 19 40.4** | **+1.5** |
| KMBL | | | | S | **Sg** | **14 19 56.9** | **+1.6** |
| **KLLS** | **Kalgoorlie Lon** | **1.42** | **335** | P | **Pb** | **14 19 44.8** | **+1.8** |
| KLLS | | | | SG | **Sg** | **14 20 04.4** | **+1.3** |
| **KLCE** | **Kalgoorlie Che** | **1.88** | **335** | P | **Pb** | **14 19 52.6** | **+1.8** |
| KLCE | | | | SG | **Sg** | **14 20 17.1** | **-0.5** |
| **CORI2** | **Corrigin** | **3.93** | **274** | P | **Pn** | **14 20 17.4** | **+0.9** |
| **CORI2** | **Corrigin** | **3.93** | **274** | SG | **Sn** | **14 21 05.2** | **+3.0** |
| **KLBR** | **Kellerberrin** | **4.02** | **281** | P | **Pn** | **14 20 18.1** | **+0.4** |
| **KLBR** | **Kellerberrin** | **4.02** | **281** | P | **Pn** | **14 20 18.0** | **+0.2** |
| | 4.5nm,SNR=103 | | | | | | |
| KLBR | | | | S | **Sn** | **14 21 02.0** | **-2.4** |
| **KLBR** | **Kellerberrin** | **4.02** | **281** | P | **Pn** | **14 20 18.0** | **+0.2** |
| **NWAO** | **Narrogin (SRO)** | **4.36** | **263** | P | **Pn** | **14 20 23.3** | **+0.9** |
| **NWAO** | **Narrogin (SRO)** | **4.36** | **263** | P | **Pn** | **14 20 22.9** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **4.36** | **263** | Pn | **Pn** | **14 20 22.8** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **4.36** | **263** | Pn | **Pn** | **14 20 22.4** | **0.0** |
| | 18nm,0.3s,baz=91,slow=6.9,SNR=53 | | | | | | |
| NWAO | | | | Pg | **Pb** | **14 20 31.7** | **-1.5** |
| | 9.9nm,0.3s,baz=85,slow=8.1,SNR=6.6 | | | | | | |
| NWAO | | | | Sn | **Sn** | **14 21 13.4** | **+0.7** |
| | 29nm,0.3s,baz=102,slow=19,SNR=3.9 | | | | | | |
| NWAO | | | | LR | LR | 14 21 20.9 | |
| | comp=Z,82nm,21.9s,baz=46,slow=29 | | | | | | |
| NWAO | | | | Lg | Lg | 14 21 27.2 | |
| | 77nm,0.3s,baz=100,slow=16,SNR=24 | | | | | | |
| **KOO6** | **Koorda** | **4.48** | **290** | P | **Pn** | **14 20 24.3** | **+0.2** |
| KOO6 | | | | SN | **Sn** | **14 21 13.4** | **-2.4** |
| **PING** | **Pingelly** | **4.55** | **268** | P | **Pn** | **14 20 25.4** | **+0.4** |
| **PING** | **Pingelly** | **4.55** | **268** | SG | **Sn** | **14 21 21.2** | **+3.8** |
| **RKGY** | **Rocky Gully** | **4.99** | **243** | P | **Pn** | **14 20 32.4** | **+1.4** |
| **RKGY** | **Rocky Gully** | **4.99** | **243** | P | **Pn** | **14 20 32.0** | **+1.0** |
| | 7.6nm,SNR=79 | | | | | | |
| RKGY | | | | S | **Sn** | **14 21 27.4** | **-0.8** |
| **RKGY** | **Rocky Gully** | **4.99** | **243** | P | **Pn** | **14 20 32.0** | **+1.0** |
| **FORT** | **Forrest** | **5.13** | **72** | P | **Pn** | **14 20 34.8** | **+1.8** |
| **FORT** | **Forrest** | **5.13** | **72** | Pn | **Pn** | **14 20 34.2** | **+1.2** |
| **FORT** | **Forrest** | **5.13** | **72** | P | **Pn** | **14 20 34.4** | **+1.4** |
| | 1.6nm,SNR=26 | | | | | | |
| FORT | | | | S | **Sn** | **14 21 31.7** | **0.0** |
| **BLDU** | **Ballidu** | **5.18** | **289** | P | **Pn** | **14 20 32.5** | **-1.2** |
| **BLDU** | **Ballidu** | **5.18** | **289** | P | **Pn** | **14 20 32.4** | **-1.3** |
| | 1.3nm,SNR=14 | | | | | | |
| BLDU | | | | S | **Sn** | **14 21 29.7** | **-3.2** |
| **BLDU** | **Ballidu** | **5.18** | **289** | P | **Pn** | **14 20 32.4** | **-1.3** |
| **MUN** | **Mundaring** | **5.25** | **274** | P | **Pn** | **14 20 34.3** | **-0.3** |
| **MUN** | **Mundaring** | **5.25** | **274** | P | **Pn** | **14 20 34.0** | **-0.6** |
| | 1.0nm,SNR=9.6 | | | | | | |
| MUN | | | | S | **Sn** | **14 21 31.0** | **-3.6** |
| **MUN** | **Mundaring** | **5.25** | **274** | P | **Pn** | **14 20 34.0** | **-0.6** |
| **MORW** | **Morawa** | **6.42** | **300** | P | **Pn** | **14 20 50.7** | **-0.1** |
| **MORW** | **Morawa** | **6.42** | **300** | Pn | **Pn** | **14 20 50.2** | **-0.5** |
| **MORW** | **Morawa** | **6.42** | **300** | P | **Pn** | **14 20 50.6** | **-0.1** |
| | 0.8nm,SNR=12 | | | | | | |
| MORW | | | | S | **Sn** | **14 21 59.8** | **-3.7** |
| **MORW** | **Morawa** | **6.42** | **300** | P | **Pn** | **14 20 50.6** | **-0.1** |
| **MEEK** | **Meekatharra** | **6.67** | **330** | P | **Pn** | **14 20 54.8** | **+0.6** |
| **MEEK** | **Meekatharra** | **6.67** | **330** | P | **Pn** | **14 20 54.7** | **+0.6** |
| | 1.1nm,SNR=18 | | | | | | |
| MEEK | | | | S | **Sn** | **14 22 05.1** | **-4.6** |
| **MEEK** | **Meekatharra** | **6.67** | **330** | P | **Pn** | **14 20 54.8** | **+0.6** |
| **WRKA** | **Warakurna** | **9.04** | **37** | P | **Pn** | **14 21 29.0** | **+2.2** |
| **WRKA** | **Warakurna** | **9.04** | **37** | P | **Pn** | **14 21 28.7** | **+2.0** |
| WRKA | | | | S | **Sn** | **14 23 07.3** | **-0.8** |
| **MULG** | **Mulgathing** | **10.22** | **81** | P | **Pn** | **14 21 43.5** | **+0.7** |
| **MULG** | **Mulgathing** | **10.22** | **81** | P | **Pn** | **14 21 43.0** | **+0.1** |
| | 0.1nm,SNR=1.3 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **11.09** | **348** | P | **Pn** | **14 21 53.5** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **11.09** | **348** | Pn | **Pn** | **14 21 53.3** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **11.09** | **348** | P | **Pn** | **14 21 53.0** | **-1.7** |
| | 0.1nm,SNR=2.3 | | | | | | |
| **MBWA** | **Marble Bar** | **11.51** | **348** | P | **Pn** | **14 21 59.1** | **-1.4** |
| **MBWA** | **Marble Bar** | **11.51** | **348** | Pn | **Pn** | **14 21 58.5** | **-2.0** |
| **BBOO** | **Buckleboo** | **11.54** | **95** | P | **Pn** | **14 22 02.5** | **+1.6** |
| **BBOO** | **Buckleboo** | **11.54** | **95** | Pn | **Pn** | **14 21 59.8** | **-1.1** |
| **BBOO** | **Buckleboo** | **11.54** | **95** | P | **Pn** | **14 22 00.5** | **-0.4** |
| | 21nm,1.5s,SNR=1.2 | | | | | | |
| **GIRL** | **Giralia** | **12.16** | **322** | P | **Pn** | **14 22 11.3** | **+1.9** |
| **GIRL** | **Giralia** | **12.16** | **322** | Pn | **Pn** | **14 22 08.1** | **-1.3** |
| **OOD** | **Oodnadatta** | **12.43** | **71** | P | **Pn** | **14 22 11.9** | **-1.1** |
| **OOD** | **Oodnadatta** | **12.43** | **71** | P | **Pn** | **14 22 11.3** | **-1.7** |
| | 25nm,0.5s,SNR=2.2 | | | | | | |
| **NAPP** | **Napperby** | **13.29** | **97** | P | **Pn** | **14 22 24.6** | **-0.1** |
| | 10nm,0.8s,SNR=1.5 | | | | | | |
| **ASAR** | **Alice Springs** | **13.43** | **52** | Pn | **Pn** | **14 22 25.6** | **-1.1** |
| **ASAR** | **Alice Springs** | **13.43** | **52** | Pn | **Pn** | **14 22 25.3** | **-1.4** |
| | 1.3nm,0.3s,baz=230,slow=11,SNR=64 | | | | | | |
| ASAR | | | | Sn | Sn | 14 24 47.2 | -8.2 |
| | 1.9nm,0.3s,baz=233,slow=22,SNR=13 | | | | | | |
| ASAR | | | | Lg | Lg | 14 26 15.3 | |
| | 2.2nm,0.3s,baz=226,slow=24,SNR=6.0 | | | | | | |
| | 5.3nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **13.43** | **52** | Pn | **Pn** | **14 22 25.3** | **-1.5** |
| **AS01** | **Alice Springs** | **13.46** | **52** | P | **Pn** | **14 22 25.3** | **-1.9** |
| | 22nm,0.8s | | | | | | |
| **LCRK** | **Leigh Creek** | **13.67** | **86** | P | **Pn** | **14 22 29.6** | **-0.4** |
| **HTT** | **Hallett** | **13.93** | **98** | P | **Pn** | **14 22 35.1** | **+1.5** |
| **FITZ** | **Fitzroy Crossi** | **14.61** | **12** | Pn | **Pn** | **14 22 39.7** | **-3.2** |
| **STKA** | **Stephens Creek** | **16.29** | **93** | P | **Pn** | **14 23 08.2** | **+3.4** |
| **STKA** | **Stephens Creek** | **16.29** | **93** | Pn | **Pn** | **14 22 59.9** | **-4.9** |
| **STKA** | **Stephens Creek** | **16.29** | **93** | Pn | **Pn** | **14 23 04.0** | **-0.9** |
| | 0.3nm,0.3s,baz=272,slow=12,SNR=5.1 | | | | | | |
| STKA | | | | Sn | **Sn** | **14 25 58.1** | **-6.9** |
| | 0.7nm,0.3s,baz=300,slow=20,SNR=2.8 | | | | | | |
| STKA | | | | Lg | Lg | 14 27 46.9 | |
| | 0.3nm,0.3s,baz=337,slow=20,SNR=1.8 | | | | | | |
| | 4.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.44** | **44** | Pn | **Pn** | **14 23 04.9** | **-2.0** |
| | 1.0nm,0.3s,baz=225,slow=12,SNR=15 | | | | | | |
| WRA | | | | Sn | Sn | 14 25 59.2 | -10 |
| | 1.0nm,0.3s,baz=218,slow=23,SNR=8.6 | | | | | | |
| WRA | | | | Lg | Lg | 14 27 49.2 | |
| | baz=216,slow=34 | | | | | | |
| | 2.7nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **16.45** | **44** | Pn | **Pn** | **14 23 03.6** | **-3.3** |
| WB2 | | | | IAmb | IAmb | 14 23 08.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **16.45** | **44** | Pn | **Pn** | **14 23 04.3** | **-2.7** |
| **WR0** | **Warramunga Arr** | **16.54** | **44** | Pn | **Pn** | **14 23 06.1** | **-2.1** |
| WR0 | | | | IAmb | IAmb | 14 23 15.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **16.61** | **43** | Pn | **Pn** | **14 23 07.1** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 14 23 28.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **17.70** | **21** | | **Pn** | **14 23 21.1** | **-1.5** |
| KNRA | | | | IAmb | IAmb | 14 23 21.3 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **QIS** | **Mount Isa** | **19.42** | **57** | P | **P** | **14 23 44.4** | **+2.0** |
| **CMSA** | **Colar Meteorol** | **19.79** | **94** | P | **P** | **14 23 49.0** | **+2.6** |
| **CTAO** | **Charters Tower** | **24.64** | **66** | P | **P** | **14 24 34.3** | **-2.4** |
| **QSPA** | **South Pole Qui** | **57.64** | **180** | P | **P** | **14 29 07.2** | **+1.4** |
| **QSPA** | **South Pole Qui** | **57.64** | **180** | P | **P** | **14 29 07.3** | **+1.4** |
| | comp=Z,1.2nm,0.8s,baz=316,slow=8.5,SNR=6.1 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **61.85** | **339** | P | **P** | **14 29 38.1** | **+2.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,5.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **73.64** | **351** | *eP* | **P** | **14 30 50.3** | **+1.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,79nm,5.7s | | | | | | |

*IDC **08** 14:35:02.6±7.9,18°.15N×147°.00E,h61km±59km,mb3.4/9, mbtmp3.7/9,ML4.3/1,Error ellipse: s-maj=90.4km s-min=20.5km az=82.0*
**ISC 08 14:35:01.3±2.0,18°.2N±0°.1×147°.1E±0°.4,h50km,n10, σ0s84/11,mb3.5/9,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.06** | **205** | P | **Pn** | **14 36 16.0** | **+1.3** |
| | 11nm,0.3s,baz=18,slow=6.4,SNR=5.9 | | | | | | |
| GUMO | | | | S | **Sn** | **14 37 10.9** | **-1.0** |
| | 26nm,0.3s,baz=0.0,slow=20,SNR=1.9 | | | | | | |
| **KSRS** | **Korea Array** | **25.48** | **323** | P | **P** | **14 40 24.5** | **-0.3** |
| | 0.3nm,0.4s,baz=152,slow=8.3,SNR=1.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.93** | **199** | P | **P** | **14 42 30.4** | **-0.3** |
| | 0.2nm,0.3s,baz=21,slow=8.2,SNR=5.4 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **43.57** | **198** | P | **P** | **14 42 59.8** | **-0.8** |
| | 0.2nm,0.6s,baz=16,slow=6.5,SNR=5.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **44.34** | **321** | P | **P** | **14 43 06.0** | **-0.7** |
| | 0.3nm,0.3s,baz=122,slow=1.9,SNR=1.1 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.19** | **322** | P | **P** | **14 44 57.8** | **+0.7** |
| | 0.7nm,0.5s,baz=109,slow=7.1,SNR=3.7 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.74** | **314** | P | **P** | **14 45 01.6** | **+0.6** |
| | 0.1nm,0.4s,baz=73,slow=8.4,SNR=4.6 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.55** | **318** | P | **P** | **14 45 20.8** | **+0.8** |
| | 0.7nm,0.4s,baz=92,slow=7.5,SNR=5.8 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.35** | **342** | P | **P** | **14 47 22.7** | **0.0** |
| | 1.0nm,0.5s,baz=78,slow=7.8,SNR=4.1 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **87.86** | **336** | P | **P** | **14 47 44.8** | **-0.4** |
| | 0.7nm,0.4s,baz=67,slow=3.8,SNR=10 | | | | | | |
| | 0.7nm,0.4s | | | | | | |

*IDC **08** 14:38:56.3±1.1,29°.42S×176°.14W,h0km,mb4.2/5, mbtmp4.2/6,ML3.4/1,MS2.9/4,Error ellipse: s-maj=31.8km s-min=21.9km az=14.0*
*NEIC **08** 14:39:00.3±1.7,29°.64S±0°.05×176°.6W±0°.1,h10km±2km, mb4.6/10,Error ellipse: s-maj=17.4km s-min=4.2km az=117.0*
**ISC 08 14:39:01.5±0.9,29°.67S±0°.09×176°.2W±0°.1,h35km,n36, σ1s34/34,mb4.5/10,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.54** | **285** | Pn | **Pn** | **14 39 23.9** | **-2.5** |
| **RAO** | **Raoul Island** | **1.54** | **285** | Pn | **Pn** | **14 39 27.2** | **+0.8** |
| | 141nm,0.3s,baz=11,slow=16,SNR=6.3 | | | | | | |
| RAO | | | | Sn | **Sn** | **14 39 48.1** | **+2.9** |
| | 948nm,0.3s,baz=107,slow=23,SNR=11 | | | | | | |
| **URZ** | **Urewera** | **10.20** | **211** | Pn | **Pn** | **14 41 25.6** | **+0.2** |
| | 0.3nm,0.3s,baz=47,slow=19,SNR=1.4 | | | | | | |
| URZ | | | | Sn | **Sn** | **14 43 16.6** | **-1.9** |
| | 1.7nm,0.3s,baz=324,slow=17,SNR=7.5 | | | | | | |
| | 7.5nm,0.8s | | | | | | |
| **RTZ** | **Ruatahuna** | **10.55** | **210** | Pn | **Pn** | **14 41 29.6** | **-0.7** |
| **BKZ** | **Black Stump Fm** | **11.22** | **210** | Pn | **Pn** | **14 41 37.7** | **-1.8** |
| **MRZ** | **Mangatainoka R** | **12.85** | **209** | Pn | **Pn** | **14 42 00.9** | **-0.8** |
| **MSWZ** | **Moikau Station** | **13.62** | **208** | Pn | **Pn** | **14 42 10.8** | **-1.3** |
| **SNZO** | **South Karori** | **13.76** | **210** | Pn | **Pn** | **14 42 13.0** | **-1.1** |
| **BHW** | **Baring Head** | **13.77** | **209** | Pn | **Pn** | **14 42 13.2** | **-1.0** |
| **TCW** | **Tory Channel** | **13.87** | **211** | Pn | **Pn** | **14 42 15.4** | **-0.2** |
| **TUWZ** | **Tuamarina** | **14.20** | **212** | Pn | **Pn** | **14 42 18.9** | **-1.1** |
| **NNZ** | **Nelson** | **14.29** | **213** | Pn | **Pn** | **14 42 22.5** | **+1.2** |
| **THZ** | **Tophouse** | **14.94** | **213** | Pn | **Pn** | **14 42 30.1** | **-0.1** |
| **RAR** | **Rarotonga** | **17.06** | **64** | LR | LR | 14 47 41.1 | |
| | comp=Z,66nm,19.9s,baz=146,slow=31 | | | | | | |
| **RPZ** | **Rata Peaks** | **17.31** | **212** | P | **Pn** | **14 42 58.4** | **-2.0** |
| | 9.6nm,1.0s,baz=27,slow=16,SNR=1.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **17.32** | **292** | LR | LR | 14 49 05.1 | |
| | comp=Z,81nm,18.6s,baz=167,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **35.22** | **277** | LR | LR | 14 59 06.2 | |
| | comp=Z,5.1nm,18.7s,baz=83,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **35.22** | **277** | P | **P** | **14 45 52.1** | **-0.7** |
| CTAO | | | | IAmb | IAmb | 14 45 52.8 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **36.15** | **256** | P | **P** | **14 46 00.4** | **-0.2** |
| **STKA** | **Stephens Creek** | **36.15** | **256** | P | **P** | **14 46 01.1** | **+0.5** |
| | comp=Z,4.0nm,0.6s,baz=98,slow=10,SNR=6.1 | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **44.70** | **265** | P | **P** | **14 47 12.1** | **+0.6** |
| AS31 | | | | IAmb | IAmb | 14 47 28.4 | |
| | comp=Z,2.3nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.70** | **265** | P | **P** | **14 47 11.7** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=105,slow=7.8,SNR=29 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.44** | **271** | P | **P** | **14 47 17.1** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 14 47 37.8 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.62** | **270** | P | **P** | **14 47 17.7** | **-1.0** |
| **WRA** | **Warramunga Arr** | **45.62** | **270** | P | **P** | **14 47 18.1** | **-0.7** |
| | comp=Z,2.2nm,0.6s,baz=111,slow=6.2,SNR=27 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.64** | **271** | P | **P** | **14 47 18.7** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 14 47 20.7 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **52.20** | **273** | P | **P** | **14 48 09.6** | **+0.4** |
| **CASY** | **Casey** | **56.51** | **208** | P | **P** | **14 48 41.3** | **+1.5** |
| CASY | | | | IAmb | IAmb | 14 48 42.9 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.44** | **180** | P | **P** | **14 49 10.1** | **+2.6** |
| QSPA | | | | IAmb | IAmb | 14 49 17.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.44** | **180** | P | **P** | **14 49 09.9** | **+2.5** |
| | comp=Z,2.0nm,0.8s,baz=90,slow=4.0,SNR=11 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **DAV** | **Davao City (W)** | **66.73** | **293** | LR | LR | 15 19 43.5 | |
| | comp=Z,11nm,18.0s,baz=43,slow=37 | | | | | | |
| **YULB** | **Yu-li** | **79.92** | **304** | P | **P** | **14 51 06.1** | **-0.9** |
| **ILAR** | **Eielson Array** | **96.88** | **12** | P | **P** | **14 52 27.5** | **-0.9** |
| | comp=Z,0.5nm,0.9s,baz=219,slow=4.2,SNR=4.1 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **144.96** | **341** | PKP | **PKPdf** | **14 58 33.3** | **-0.9** |
| | comp=Z,9.0nm,0.5s,baz=79,slow=3.0,SNR=10 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.62** | **325** | PKPbc | **PKiKP** | **14 58 51.6** | **-0.5** |
| | comp=Z,0.9nm,0.4s,baz=47,slow=2.1,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.45** | **173** | PKPab | **PKPab** | **14 59 53.2** | **+1.0** |
| | comp=Z,0.5nm,0.6s,baz=188,slow=1.4,SNR=4.0 | | | | | | |

**IDC 08 14:46:09.6±290.0,52°.87N×33°.03E,h0km,Error ellipse: s-maj=121.7km s-min=97.6km az=16.0,Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **4.56** | **30** | I | I | 15 15 30.0 | |
| | 0.1nm,0.8s,baz=213,slow=320,SNR=2.7 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **12.84** | **259** | I | I | 16 05 50.0 | |
| | baz=61,slow=341,SNR=0.3 | | | | | | |
| **I48TN** | **KESRA INFRASON** | **23.88** | **234** | I | I | 17 10 30.0 | |
| | baz=37,slow=316,SNR=1.5 | | | | | | |

*IDC **08** 15:09:49.6±9.1,43°.37N×150°.24E,h0km,mb3.7/7, mbtmp3.7/8,ML3.0/1,Error ellipse: s-maj=227.0km s-min=27.8km az=168.0*
*JMA **08** 15:09:59.9±0.6,45°.N±3°×14°.9E±°,h30km,MV3.7/13,SE OFF ETOROFU*
*SKHL **08** 15:10:00.4±0.6,44°.00N×149°.60E,h44km±2km,mb4.4/3*
**ISC 08 15:09:57.5±1.3,43°.86N±0°.09×149°.89E±0°.09,h35km,n23, σ2s38/35,mb3.9/7,East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.00** | **314** | *eP* | **Pn** | **15 10 27.0** | **-1.7** |
| KUR | | | | AMB | AMB | 15 10 30.5 | |
| | 220nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **15 10 48.2** | **-4.2** |
| KUR | | | | A | A | 15 10 53.2 | |
| | 570nm,0.6s | | | | | | |
| KUR | | | | A | A | 15 10 53.2 | |
| | 490nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.21** | **271** | *eP* | **Pn** | **15 10 31.2** | **-0.5** |
| SHO | | | | AMB | AMB | 15 10 33.3 | |
| | 60nm,0.5s | | | | | | |
| SHO | | | | *eS* | **Sn** | **15 10 54.7** | **-3.1** |
| SHO | | | | A | A | 15 10 58.1 | |
| | 230nm,0.4s | | | | | | |
| SHO | | | | A | A | 15 10 58.1 | |
| | 140nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.92** | **275** | *eP* | **Pn** | **15 10 42.3** | **+1.0** |
| YUK | | | | AMB | AMB | 15 10 45.5 | |
| | 100nm,0.5s | | | | | | |
| YUK | | | | *eS* | **Sn** | **15 11 13.2** | **-1.9** |
| YUK | | | | A | A | 15 11 17.6 | |
| | 150nm,0.4s | | | | | | |
| YUK | | | | A | A | 15 11 17.6 | |
| | 230nm,0.4s | | | | | | |
| **NEM2** | **Nemuro 2** | **3.05** | **262** | P | **Pn** | **15 10 43.5** | **+0.3** |
| NEM2 | | | | S | **Sn** | **15 11 16.3** | **-2.2** |
| **NMR** | **Nemuro--Hokkai** | **3.06** | **262** | *eP* | **Pn** | **15 10 44.1** | **+0.8** |
| NMR | | | | *eS* | **Sn** | **15 11 16.4** | **-2.3** |
| **JRA** | **Rausu** | **3.45** | **273** | P | **Pn** | **15 10 49.7** | **+1.1** |
| JRA | | | | *eS* | **Sn** | **15 11 26.6** | **-1.6** |
| **JNK** | **Nakash** | **3.76** | **268** | *eP* | **Pn** | **15 10 53.6** | **+0.7** |
| JNK | | | | S | **Sn** | **15 11 33.9** | **-2.0** |
| **JAK** | **Akkeshi** | **3.88** | **259** | P | **Pn** | **15 10 55.9** | **+1.3** |
| JAK | | | | *eS* | **Sn** | **15 11 37.9** | **-1.0** |
| **JTKR** | **Abashiri--Toko** | **4.33** | **274** | *eP* | **Pn** | **15 11 01.9** | **+1.3** |
| **JAR** | **Ashorobuto** | **4.48** | **265** | P | **Pn** | **15 11 04.5** | **+1.7** |
| JAR | | | | *eS* | **Sn** | **15 11 53.0** | **-0.8** |
| **JCH** | **Churui** | **4.93** | **258** | P | **Pn** | **15 11 10.9** | **+1.9** |
| JC

comp=Z,2µm,0.3s
LVC Limon Verde 0.94 201 eP Pn 15 11 06.7 +0.6
PB01 IPOC Station P 1.11 308 eP Pn 15 11 08.0 +0.6
PB01 eS Sn 15 11 26.5 +1.0
PB01 IAML 15 11 28.1
comp=Z,447nm,0.2s
PB01 IPOC Station P 1.11 308⇑iP Pn 15 11 08.0 +0.6
PB01 iS Sn 15 11 25.2 -0.3
PB01 IAML 15 11 28.8
comp=N,667nm,0.2s
AF01 San Pedro de A 1.26 165 eP Pn 15 11 11.4 +2.2
AF01 eS Sn 15 11 40.9 +12
AF01 IAML 15 11 46.0
comp=Z,594nm,1.2s
PB04 IPOC Station P 1.61 248 eP Pn 15 11 13.8 +1.0
PB04 eS Sn 15 11 34.6 -0.6
PB04 IAML 15 11 38.5
comp=Z,245nm,0.6s
PB04 IPOC Station P 1.61 248⇑iP Pn 15 11 13.7 +0.8
PB04 iS Sn 15 11 35.9 +0.7
PB04 IAML 15 11 37.4
comp=E,307nm,0.3s
PX03 IPOC Station P 1.67 322 eP Pn 15 11 13.6 +0.1
PX03 eS Sn 15 11 36.6 +0.3
PB05 IPOC Station P 1.90 234 eP Pn 15 11 17.3 +1.0
PB05 eS Sn 15 11 37.1 -4.2
PB05 IAML 15 11 47.6
comp=Z,164nm,0.4s
PB05 IPOC Station P 1.90 234⇑iP Pn 15 11 17.1 +0.8
PB05 eS Sn 15 11 41.2 -0.1
PB05 IAML 15 11 51.8
comp=E,188nm,0.2s
TA01 Diego Aracena 1.92 307 eP Pn 15 11 17.5 +1.1
TA01 eS Sn 15 11 42.3 +0.9
TA01 IAML 15 11 43.3
comp=Z,185nm,0.4s
TA01 Diego Aracena 1.92 307 eP Pn 15 11 17.4 +1.0
TA01 eS Sn 15 11 41.1 -0.3
TA01 IAML 15 11 43.5
comp=N,512nm,0.4s
TA02 Huaiquique 2.08 314 eP Pn 15 11 20.1 +1.8
TA02 eS Sn 15 11 44.4 -0.5
TA02 IAML 15 11 46.7
comp=Z,162nm,0.2s
GO01 Chusmiza 2.14 343 eP Pn 15 11 21.1 +1.5
GO01 eS Sn 15 11 49.0 +1.9
GO01 Chusmiza 2.14 343 eP Pn 15 11 21.0 +1.5
GO01 eS Sn 15 11 49.5 +2.4
GO01 IAML 15 11 51.7
comp=N,240nm,0.1s
YJA Yavi 2.84 100 eP Pn 15 11 31.2 +2.7
YJA eS Sn 15 12 02.1 -0.9
PB14 IPOC Station P 3.35 210 eP Pn 15 11 36.4 +1.5
PB14 eS Sn 15 12 15.6 +0.8
PB14 IAML 15 12 24.5
comp=Z,132nm,0.9s
GO02 Mina Guanaco 3.55 196 eP Pn 15 11 39.4 +1.9
GO02 eS Sn 15 12 21.0 +1.6
BBSD Serra de San D 8.74 60 eP Pn 15 12 44.4 -2.6
MURT Porto Murtinho 10.16 92 eP Pn 15 13 04.2 -2.0
PTLB Pontes e Lacer 10.88 57 eP Pn 15 13 14.4 -1.4
PDRB Porto dos Gac 15.13 50 eP Pn 15 14 10.5 -0.3
SNDB Serra Nova Dou 19.13 62 eP P 15 14 57.0 +0.2
NPGB Novo Progresso 19.37 43 eP P 15 14 59.0 -0.4
ITTB Itaituba 21.27 38 eP P 15 15 19.7 -0.2

**IDC 08 15:13:41.7±2.8, 16°32S×74°51W, h0km, mb3.6/2, mbtmp3.6/3, ML3.8/1, Error ellipse: s-maj=70.8km s-min=44.3km az=127.0, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 6.13 | 91 | Pn | Pn | 15 15 13.2 | -1.0 |
| | 1.2nm,0.3s,baz=276,slow=7.2,SNR=12 | | | | | | |
| | 3.4nm,0.3s | | | | | | |
| H03N1 | Juan Fernandez | 17.50 | 192 | T | T | 15 35 32.1 | |
| | baz=25,slow=73,SNR=11 | | | | | | |
| H03N2 | Juan Fernandez | 17.51 | 192 | T | T | 15 35 29.3 | |
| | baz=25,slow=73,SNR=7.2 | | | | | | |
| H03N3 | Juan Fernandez | 17.52 | 192 | T | T | 15 35 21.4 | |
| | baz=25,slow=73,SNR=6.8 | | | | | | |
| PLCA | Paso Flores | 24.57 | 173 | P | P | 15 19 03.5 | +0.1 |
| | 2.1nm,1.0s,baz=6.3,slow=9.2,SNR=2.3 | | | | | | |
| | 2.1nm,1.0s | | | | | | |
| TORD | Torodi Ar. Bea | 80.80 | 73 | P | P | 15 25 59.0 | +1.0 |
| | 0.2nm,0.5s,baz=235,slow=5.1,SNR=2.9 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 144.03 | 27 | PKP | PKPbc | 15 33 17.1 | -0.2 |
| | 0.2nm,0.5s,baz=338,slow=1.6,SNR=5.8 | | | | | | |

**IDC 08 15:22:26.4±10.0, 4°35S×142°42E, h151km±104km, mb3.0/2, mbtmp3.7/4, Error ellipse: s-maj=87.3km s-min=29.8km az=139.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.88 | 137 | P | Pn | 15 24 05.9 | +1.0 |
| | 18nm,0.6s,baz=39,slow=6.5,SNR=6.9 | | | | | | |
| PMG | | | | S | Sn | 15 25 21.6 | -0.5 |
| | 9.8nm,0.9s,baz=158,slow=17,SNR=1.6 | | | | | | |
| WRA | Warramunga Arr | 17.38 | 206 | P | P | 15 26 18.2 | -0.7 |
| | 1.1nm,0.5s,baz=24,slow=12,SNR=21 | | | | | | |
| ASAR | Alice Springs | 20.88 | 202 | P | P | 15 26 57.1 | +0.3 |
| | 0.7nm,0.6s,baz=30,slow=11,SNR=14 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| ILAR | Eielson Array | 85.81 | 24 | P | P | 15 34 48.4 | -0.1 |
| | 0.2nm,0.6s,baz=267,slow=4.5,SNR=2.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**IDC 08 15:28:58.5±4.7, 47°61N×92°95W, h0km, mbtmp2.2/1, ML0.7/1, Error ellipse: s-maj=71.3km s-min=28.8km az=55.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULM | Lac du Bonnet | 3.27 | 325 | Pn | Pn | 15 29 49.9 | -1.1 |
| | 0.1nm,0.3s,baz=146,slow=11,SNR=1.5 | | | | | | |
| ULM | | | | Sn | Sn | 15 30 28.6 | -2.0 |
| | 0.2nm,0.3s,baz=134,slow=14,SNR=4.3 | | | | | | |
| ULM | | | | Lg | Lg | 15 30 39.5 | |
| | 0.7nm,0.3s,baz=231,slow=22,SNR=7.1 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| I10CA | LAC DU BONNET | 3.30 | 323 | I | I | 15 49 50.0 | |
| | 0.1nm,1.0s,baz=141,slow=330,SNR=8.3 | | | | | | |
| PDAR | Pinedale Array | 12.67 | 254 | Lg | Lg | 15 35 29.6 | |
| | 0.1nm,0.3s,baz=65,slow=37,SNR=3.8 | | | | | | |
| I56US | NEWPORT INFRASI | 16.20 | 281 | I | I | 17 06 50.0 | |
| | baz=85,slow=314,SNR=3.8 | | | | | | |

*ISN 08 15:38:46.3±0.3, 33°02N×46°23E, h12km, ML2.4*
*TEH 08 15:38:47.5, 33°02N×46°20E, h12km±150km, ML2.6*
**ISC 08 15:38:47.6±2.2, 33°0N±0°1×46°16E±0°06, h10km, n6, σ0s76/8, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IBDR | Badra | 0.23 | 304 | ePg | Pg | 15 38 52.0 | -0.4 |
| | baz=110 | | | | | | |
| IBDR | | | | eSg | Sg | 15 38 56.0 | +0.3 |
| IBDR | | | | AML | AML | 15 38 59.8 | |
| | comp=N,384nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 15 39 01.5 | |
| | comp=E,378nm,0.7s | | | | | | |
| ILBA | Ilam Banvizeh | 0.65 | 3 | Pg | Pg | 15 38 59.3 | -0.8 |
| ILBA | | | | Sg | Sb | 15 39 10.0 | -0.2 |
| GLG1 | Gilan-e-Gharb | 1.15 | 350 | Pg | Pn | 15 39 10.9 | +1.0 |
| IGHG | Ghaleghazi | 1.39 | 14 | Pg | Pg | 15 39 14.9 | +0.6 |
| IKFM | Kafar-mosalman | 1.51 | 68 | Pg | Pg | 15 39 16.4 | -0.3 |
| IDHR | Dehrash | 1.73 | 6 | Pg | Pb | 15 39 18.8 | -0.7 |

**IDC 08 16:00:12.7±4.8, 47°56N×93°09W, h0km, mbtmp2.3/1, ML0.8/1, Error ellipse: s-maj=73.6km s-min=30.5km az=57.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULM | Lac du Bonnet | 3.26 | 327 | Pn | Pn | 16 01 03.9 | -1.1 |
| | 0.2nm,0.3s,baz=140,slow=7.9,SNR=1.7 | | | | | | |
| ULM | | | | Lg | Lg | 16 01 53.3 | |
| | 0.5nm,0.3s,baz=60,slow=18,SNR=7.7 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| I10CA | LAC DU BONNET | 3.28 | 325 | I | I | 16 20 30.0 | |
| | baz=144,slow=331,SNR=6.5 | | | | | | |
| I56US | NEWPORT INFRASI | 6.12 | 281 | I | I | 17 43 00.0 | |
| | baz=82,slow=296,SNR=1.1 | | | | | | |

*ISN 08 16:06:41.8±0.7, 33°25N×46°13E, h10km±11km, ML2.6*
*TEH 08 16:06:42.4, 33°29N×46°14E, h10km, ML2.6*
**ISC 08 16:06:42.3±1.2, 33°24N±0°06×46°15E±0°05, h10km, n8, σ1s14/12, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IBDR | Badra | 0.23 | 234 | ePg | Pg | 16 06 46.0 | -1.0 |
| IBDR | | | | eSg | Sg | 16 06 50.0 | -0.2 |
| IBDR | | | | AML | AML | 16 06 55.0 | |
| | comp=E,524nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 16 06 59.3 | |
| | comp=N,1µm,0.4s | | | | | | |
| ILBA | Ilam Banvizeh | 0.38 | 7 | Pg | Pg | 16 06 48.6 | -1.3 |
| ILBA | | | | Sg | Sb | 16 06 55.6 | -1.8 |
| GLG1 | Gilan-e-Gharb | 0.89 | 347 | Pg | Pg | 16 06 58.7 | -0.9 |
| IGHG | Ghaleghazi | 1.14 | 18 | Pg | Pn | 16 07 05.7 | +1.1 |
| IKFM | Kafar-mosalman | 1.45 | 78 | Pg | Pb | 16 07 09.6 | +0.2 |
| IDHR | Dehrash | 1.47 | 8 | Pg | Pg | 16 07 10.1 | -0.4 |
| BHD | Baghdad | 1.48 | 272 | ePg | Pb | 16 07 10.0 | 0.0 |
| BHD | | | | eSg | Sg | 16 07 30.0 | -0.1 |
| IKRK | Kirkuk | 2.62 | 326 | ePn | Pn | 16 07 26.0 | +1.2 |
| IKRK | | | | eSn | Sn | 16 07 58.0 | +1.3 |

**IDC 08 16:23:31.6±9.1, 5°54S×150°69E, h86km±65km, mb2.6/2, mbtmp3.1/3, ML1.5/1, Error ellipse: s-maj=127.6km s-min=59.2km az=120.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 5.20 | 222 | P | Pn | 16 24 47.1 | +0.3 |
| | 1.2nm,0.3s,baz=17,slow=11,SNR=1.5 | | | | | | |
| PMG | | | | S | Sn | 16 25 46.3 | +0.7 |
| | 12nm,0.6s,baz=18,slow=20,SNR=2.9 | | | | | | |
| | 4.4nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 21.40 | 227 | P | P | 16 28 12.1 | -0.4 |
| | 0.4nm,0.6s,baz=53,slow=10,SNR=2.0 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| ASAR | Alice Springs | 24.21 | 220 | P | P | 16 28 40.4 | +0.1 |
| | 0.2nm,0.8s,baz=53,slow=9.5,SNR=6.7 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 148.51 | 286 | PKPbc | PKPbc | 16 43 08.9 | -0.5 |
| | 0.6nm,0.4s,baz=80,slow=2.6,SNR=8.2 | | | | | | |

*IDC 08 16:45:28.9±2.1, 7°98S×127°63E, h0km, mb3.7/1, mbtmp3.3/3, ML3.3/2, Error ellipse: s-maj=297.0km s-min=34.5km az=66.0*
**ISC 08 16:45:33.9±1.2, 8°8S±0°2×126°3E±0°2, h35km, n10, σ1s78/10, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DRS | Darwin Rock St | 5.80 | 129 | P | Pn | 16 46 57.3 | -0.2 |
| MTN | Manton Dam | 6.24 | 131 | P | Pn | 16 47 02.8 | -0.7 |
| KAPI | Kappang | 7.50 | 299 | P | Pn | 16 47 21.1 | +0.2 |
| WRA | Warramunga Arr | 13.56 | 146 | Pn | Pn | 16 48 41.2 | -2.7 |
| | 0.1nm,0.3s,baz=329,slow=13,SNR=2.4 | | | | | | |
| WRA | | | | Sn | Sn | 16 51 04.6 | -8.9 |
| | 0.2nm,0.3s,baz=319,slow=26,SNR=8.3 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| WRKA | Warakurna | 16.30 | 174 | P | P | 16 49 36.1 | +13 |
| ASAR | Alice Springs | 16.51 | 155 | Pn | P | 16 49 26.1 | +0.8 |
| | 0.1nm,0.3s,baz=334,slow=9.2,SNR=9.6 | | | | | | |
| ASAR | | | | Sn | Sn | 16 52 26.0 | +0.7 |
| | baz=345,slow=25,SNR=1.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| AS01 | Alice Springs | 16.53 | 155 | P | P | 16 49 28.8 | +3.3 |
| OOD | Oodnadatta | 20.91 | 156 | P | P | 16 50 14.7 | +1.3 |
| MULG | Mulgathing | 22.61 | 162 | P | P | 16 50 31.9 | +0.2 |
| ZALV | Zalesovo Beam | 71.60 | 336 | P | P | 16 56 51.1 | -0.4 |
| | 0.4nm,0.5s,baz=121,slow=5.4,SNR=1.8 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

*NOU 08 16:47:31.5, 41°.99S×174°.65E, h2km, MLv4.0/8, Cook Strait, New Zealand*
*WEL 08 16:47:32.4±0.2, 42°S±2°×174°4E±°, h16km±2km, M3.2/25, ML3.5/26, MLv3.2/25, Error ellipse: s-maj=0.0km s-min=0.0km az=132.9, confirmed*
**ISC 08 16:47:32.4±0.9, 41°79S±0°02×174°23E±0°02, h19km±2km, n90, σ1s21/108, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMWZ | Cape Campbell | 0.04 | 344 | P | Pg | 16 47 36.0 | +0.3 |
| WDFS | Ward Fire Stat | 0.08 | 242 | P | Pg | 16 47 36.7 | +0.8 |
| WDFS | | | | S | Sg | 16 47 39.6 | +1.3 |
| SEDS | Seddon Fire St | 0.17 | 316 | P | Pb | 16 47 36.2 | +0.5 |
| SEDS | | | | S | Sg | 16 47 39.1 | -0.8 |
| KEKS | Kekerengu Vall | 0.25 | 228 | P | Pg | 16 47 39.3 | +1.1 |
| KEKS | | | | S | Sg | 16 47 43.8 | +1.7 |
| BSWZ | Blackbirch Sta | 0.28 | 286 | P | Pg | 16 47 38.0 | -0.5 |
| BSWZ | | | | S | Sg | 16 47 42.1 | -0.7 |
| TUWZ | Tuamarina | 0.42 | 329 | P | Pg | 16 47 41.0 | 0.0 |
| TUWZ | | | | S | Sg | 16 47 46.5 | -0.3 |
| BWRS | Waikakaho Road | 0.43 | 325 | P | Pg | 16 47 40.2 | -0.9 |
| BWRS | | | | S | Sg | 16 47 45.8 | -1.3 |
| TCW | Tory Channel | 0.58 | 3 | P | Pb | 16 47 43.1 | -0.7 |
| TCW | | | | S | Sb | 16 47 50.2 | -1.4 |
| SNZO | South Karori | 0.60 | 37 | P | Pg | 16 47 44.5 | +0.2 |
| BHW | Baring Head | 0.61 | 52 | P | Pn | 16 47 45.3 | -0.8 |
| BHW | | | | S | Sn | 16 47 56.4 | +1.0 |
| WEL | Wellington | 0.65 | 39 | P | Pg | 16 47 45.5 | +0.3 |
| PLWZ | Palliser | 0.80 | 74 | P | Pn | 16 47 49.3 | +0.6 |
| KHZ | Kahutara | 0.81 | 219 | P | Pn | 16 47 49.7 | +0.9 |
| KHZ | Kahutara | 0.81 | 219 | P | Pn | 16 47 49.6 | +0.9 |
| KHZ | | | | S | Sn | 16 48 02.7 | +2.4 |
| MSWZ | Moikau Station | 0.85 | 64 | P | Pn | 16 47 50.0 | +0.7 |
| MSWZ | | | | S | Sn | 16 48 03.2 | +1.8 |
| NNZ | Nelson | 0.86 | 312 | P | Pb | 16 47 47.8 | -0.8 |
| NNZ | | | | S | Sb | 16 47 59.1 | -0.6 |
| CAW | Cannon Point | 0.93 | 43 | P | Pn | 16 47 50.4 | -0.1 |
| PAWZ | Paruwai Farm | 0.99 | 66 | P | Pg | 16 47 51.7 | +0.2 |
| THZ | Tophouse | 0.99 | 271 | P | Pb | 16 47 51.0 | 0.0 |
| DUWZ | D'Urville Isla | 1.01 | 347 | P | Pb | 16 47 50.5 | -0.9 |
| DUWZ | | | | S | Sb | 16 48 03.8 | -0.5 |
| KIW | Kapiti Island | 1.06 | 29 | P | Pn | 16 47 52.2 | -0.1 |
| MTW | Mount Morrison | 1.15 | 57 | P | Pb | 16 47 53.7 | +0.1 |
| TRWZ | Traveller | 1.16 | 71 | P | Pb | 16 47 53.9 | 0.0 |
| MRNZ | Matariki Terra | 1.17 | 289 | P | Pb | 16 47 54.1 | +0.1 |
| MRNZ | | | | S | Sn | 16 48 09.4 | +0.2 |
| OGWZ | Otaki Gorge | 1.20 | 36 | P | Pb | 16 47 54.9 | +0.4 |
| TKNZ | Takaka Hill | 1.22 | 308 | P | Pn | 16 47 54.2 | -0.2 |
| HOWZ | Holdsworth Sta | 1.32 | 48 | P | Pb | 16 47 56.1 | -0.4 |
| TMWZ | Te Maipa | 1.42 | 62 | P | Pn | 16 47 57.6 | +0.3 |
| GVZ | Greta Valley S | 1.47 | 217 | P | Pb | 16 47 58.9 | -0.3 |
| MRZ | Mangatainoka R | 1.52 | 42 | P | Pn | 16 47 58.9 | +0.4 |
| QRZ | Quartz Range | 1.60 | 306 | P | Pb | 16 48 00.8 | -0.5 |
| QRZ | | | | S | Sb | 16 48 20.9 | -0.4 |
| TIWZ | Tintock | 1.61 | 51 | P | Pn | 16 48 00.0 | +0.2 |
| LTZ | Lake Taylor | 1.76 | 235 | P | Pn | 16 48 02.7 | +0.8 |
| PRWZ | Pori Road | 1.80 | 47 | P | Pn | 16 48 02.6 | +0.1 |
| AMCZ | Amberley | 1.81 | 220 | P | Pn | 16 48 02.9 | +0.3 |
| DSZ | Denniston Nort | 1.81 | 271 | P | Pb | 16 48 04.5 | -0.6 |
| POWZ | Post Office Ro | 1.82 | 40 | P | Pn | 16 48 03.1 | +0.5 |
| BFZ | Birch Farm | 1.88 | 55 | P | Pn | 16 48 03.3 | -0.2 |
| BFZ | Birch Farm | 1.88 | 55 | P | Pn | 16 48 03.1 | -0.4 |
| WAZ | Wanganui | 2.11 | 16 | P | Pn | 16 48 08.2 | +1.5 |
| OKCZ | Okains Bay | 2.12 | 204 | P | Pn | 16 48 07.5 | +0.7 |
| OKCZ | | | | S | Sn | 16 48 33.1 | +0.5 |
| ANWZ | Angora Road | 2.15 | 53 | P | Pn | 16 48 06.5 | -0.8 |
| TSZ | Takapari Road | 2.17 | 38 | P | Pn | 16 48 07.6 | 0.0 |
| OXZ | Oxford | 2.23 | 226 | P | Pn | 16 48 08.0 | -0.3 |
| OXZ | | | | S | Sn | 16 48 34.5 | -0.9 |
| MQZ | McQueen's Vall | 2.24 | 211 | P | Pn | 16 48 07.7 | -0.7 |
| MQZ | | | | S | Sn | 16 48 33.8 | -1.8 |
| INZ | Inchbonnie | 2.27 | 245 | P | Pn | 16 48 10.5 | +1.7 |
| AKCZ | Akaroa Harbour | 2.30 | 205 | P | Pn | 16 48 09.3 | +0.1 |
| AKCZ | | | | S | Sn | 16 48 36.2 | -0.8 |
| LREZ | Lake Rotokare | 2.33 | 3 | P | Pb | 16 48 12.1 | -1.7 |
| PRHZ | Porangahau | 2.37 | 51 | P | Pn | 16 48 09.3 | -1.0 |
| PNHZ | Pukenui | 2.40 | 39 | P | Pn | 16 48 10.5 | -0.2 |
| WPHZ | Waipukurau | 2.40 | 45 | P | Pn | 16 48 10.6 | -0.1 |
| RACZ | Rakaia | 2.47 | 218 | P | Pn | 16 48 11.7 | +0.1 |
| KHEZ | Kahui Hut | 2.50 | 356 | P | Pb | 16 48 16.4 | -0.3 |
| KHEZ | Kahui Hut | 2.50 | 356 | P | Pb | 16 48 16.7 | 0.0 |
| NBEZ | Newall Road No | 2.54 | 354 | P | Pg | 16 48 19.3 | -1.7 |
| PKE | Pukeiti | 2.60 | 356 | P | Pb | 16 48 19.9 | +1.5 |
| MHCZ | Mount Hutt | 2.62 | 228 | P | Pn | 16 48 13.5 | -0.3 |
| PKVZ | Pokaka | 2.64 | 19 | P | Pb | 16 48 19.2 | +0.1 |
| MOVZ | Moawhango | 2.65 | 26 | P | Pb | 16 48 18.5 | -0.7 |
| WNVZ | Wahianoa | 2.67 | 23 | P | Pb | 16 48 19.0 | -0.7 |
| KRHZ | Kereru | 2.69 | 38 | P | Pn | 16 48 14.3 | -0.4 |
| VRZ | Vera Road | 2.69 | 9 | P | Pn | 16 48 16.9 | +2.2 |
| WHVZ | Whangaehu Hut | 2.71 | 23 | P | Pb | 16 48 18.6 | -1.8 |
| MAVZ | Matarangi | 2.72 | 22 | P | Pb | 16 48 21.3 | +0.8 |
| FWVZ | Far West T-bar | 2.73 | 22 | P | Pb | 16 48 20.1 | -0.6 |
| TUVZ | Tukino | 2.74 | 24 | P | Pb | 16 48 18.0 | +2.4 |
| COVZ | Chateau Observ | 2.77 | 22 | P | Pb | 16 48 22.4 | +1.0 |
| WACZ | Wakanui South | 2.78 | 218 | P | Pn | 16 48 16.2 | +0.4 |
| NGZ | Ngauruhoe | 2.81 | 22 | P | Pb | 16 48 22.3 | +0.2 |
| OTVZ | Oturere | 2.84 | 23 | P | Pb | 16 48 23.0 | +0.4 |
| NNVZ | North Ngauruho | 2.86 | 22 | P | Pb | 16 48 23.7 | +0.9 |
| WTVZ | West Tongariro | 2.87 | 22 | P | Pb | 16 48 23.3 | +0.3 |
| TWVZ | Taurewa | 2.87 | 19 | P | Pb | 16 48 22.6 | -0.4 |
| ETVZ | East Tongariro | 2.88 | 24 | P | Pb | 16 48 22.4 | -0.9 |
| WVZ | Waitaha Valley | 2.89 | 242 | P | Pb | 16 48 22.2 | -1.0 |
| TMVZ | Te Maari | 2.90 | 23 | P | Pb | 16 48 23.1 | -0.4 |
| KRVZ | Karewarewa | 2.90 | 22 | P | Pb | 16 48 23.2 | -0.3 |
| NTVZ | North Tongarir | 2.91 | 23 | P | Pb | 16 48 24.9 | +1.2 |
| RPZ | Rata Peaks | 3.03 | 230 | P | Pn | 16 48 22.0 | +2.7 |
| RPZ | Rata Peaks | 3.03 | 230 | P | Pn | 16 48 19.2 | -0.1 |
| ARCZ | Arundel | 3.11 | 225 | P | Pn | 16 48 20.3 | -0.1 |
| HIZ | Hauiti | 3.31 | 9 | P | Pn | 16 48 26.7 | +3.5 |
| HIZ | Hauiti | 3.31 | 9 | P | Pn | 16 48 26.6 | +3.4 |
| MRHZ | Matea Rd | 3.39 | 30 | P | Pn | 16 48 25.0 | +0.6 |
| TMZ | Timaru | 3.51 | 221 | P | Pn | 16 48 25.8 | -0.1 |
| FOZ | Fox Glacier | 3.69 | 240 | P | Pn | 16 48 33.0 | -4.0 |
| ODZ | Otahua Downs | 4.17 | 218 | P | Pn | 16 48 36.2 | +1.2 |
| ODZ | Otahua Downs | 4.17 | 218 | P | Pn | 16 48 34.6 | -0.4 |
| JCZ | Jackson Bay | 4.60 | 238 | P | Pn | 16 48 44.6 | +3.6 |
| JCZ | Jackson Bay | 4.60 | 238 | P | Pn | 16 48 44.9 | +3.9 |

*AFAD 08 16:53:13.5±0.0, 35°.80N×33°.53E, h7km±2km, ML2.0*
*ISK 08 16:53:13.7, 35°.83N×33°.67E, h18km, ML2.7/19*
*NIC 08 16:53:14.8, 35°.66N×33°.66E, h28km±1km, MI1.7/6*
**ISC 08 16:53:13.3±0.9, 35°.78N±0°.02×33°.66E±0°.03, h17km±8km, n36, σ0s58/52, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKK1 | Akkuyu-Mersin | 0.38 | 345 | Pg | Pg | 16 53 21.1 | +0.1 |
| AKK1 | | | | Sg | Sg | 16 53 26.4 | +0.1 |
| TISA | Tisan-Mersin | 0.38 | 2 | Pg | Pg | 16 53 20.8 | -0.3 |
| TISA | | | | Sg | Sg | 16 53 26.4 | -0.1 |
| AKKU | Akkuyu-Mersin | 0.39 | 346 | Pg | Pg | 16 53 21.2 | -0.1 |
| AKKU | | | | Sg | Sg | 16 53 26.9 | +0.2 |
| GULN | MERSIN_Gulnar | 0.41 | 346 | P | Pg | 16 53 21.6 | -0.1 |
| GULN | | | | i AML | AML | 16 53 27.0 | |
| | comp=E,161nm,0.1s | | | | | | |
| GULN | | | | S | Sg | 16 53 27.2 | -0.3 |
| YESI | Yesilovacik-Me | 0.41 | 358 | Pg | Pg | 16 53 21.6 | -0.1 |
| YESI | | | | Sg | Sg | 16 53 27.4 | -0.1 |
| KARG | Kargicak-Mersi | 0.42 | 5 | Pg | Pg | 16 53 21.8 | -0.1 |
| YORU | Yoruktepe-Mers | 0.43 | 331 | Pg | Pg | 16 53 22.0 | -0.1 |
| TEPK | Tepekoy-MERSIN | 0.45 | 348 | Pg | Pg | 16 53 22.3 | -0.2 |
| IKL | Isikli | 0.46 | 2 | Pg | Pg | 16 53 22.2 | -0.3 |
| OREN | Orenkoy-Mersin | 0.46 | 339 | Pg | Pg | 16 53 22.4 | -0.1 |
| EREN | Erenkoy | 0.48 | 121 | Pg | Pb | 16 53 24.3 | +1.0 |
| EREN | Erenkoy | 0.48 | 121 | P | Pn | 16 53 25.5 | +0.1 |
| EREN | | | | S | Sn | 16 53 33.6 | +0.2 |
| EREN | | | | i AML | AML | 16 53 45.0 | |
| | comp=E,156nm,0.6s | | | | | | |
| EREN | | | | i AML | AML | 16 53 46.0 | |
| | comp=N,131nm,0.7s | | | | | | |
| TEKE | Tekeli-Mersin | 0.57 | 309 | Pg | Pg | 16 53 24.9 | +0.2 |
| SILI | Silifke-Mersin | 0.62 | 20 | Pg | Pg | 16 53 25.5 | -0.1 |
| SLFK | Silifke-Mersin | 0.65 | 21 | Pg | Pg | 16 53 25.5 | -0.2 |
| KEBE | Keben-Mersin | 0.67 | 3 | Pg | Pg | 16 53 26.2 | -0.2 |
| ATHAL | Athalassa | 0.67 | 199 | S | Sb | 16 53 35.5 | -0.1 |
| ATHAL | | | | AML | AML | 16 53 42.5 | |
| | 0.2nm,0.4s | | | | | | |
| ATHAL | | | | AML | AML | 16 53 43.6 | |
| | 0.3nm,0.5s | | | | | | |
| TEVE | Tevekalti-Mers | 0.68 | 345 | Pg | Pg | 16 53 26.5 | -0.1 |
| AKDN | Akdeniz- Kıbrı | 0.74 | 230 | Pg | Pn | 16 53 29.3 | +0.3 |
| MVOU | Mavrovouni | 0.76 | 182 | P | Pb | 16 53 28.1 | 0.0 |
| MVOU | | | | S | Sb | 16 53 37.6 | -0.6 |
| MVOU | | | | AML | AML | 16 53 38.8 | |
| | 0.2nm,0.2s | | | | | | |
| MVOU | | | | AML | AML | 16 53 39.1 | |
| | 0.2nm,0.3s | | | | | | |
| KIZK | Mersin | 0.80 | 29 | Pg | Pb | 16 53 28.8 | +0.1 |
| KIZK | Mersin | 0.80 | 29 | P | Pb | 16 53 28.8 | +0.1 |
| KIZK | | | | S | Sb | 16 53 39.0 | -0.2 |
| KIZK | | | | i AML | AML | 16 53 43.0 | |
| | comp=N,54nm,0.2s | | | | | | |
| KIZK | | | | i AML | AML | 16 53 45.0 | |
| | comp=E,72nm,0.4s | | | | | | |
| PARAL | Paralimni | 0.84 | 158 | P | Pb | 16 53 29.9 | +0.5 |
| PARAL | | | | S | Sb | 16 53 40.0 | -0.5 |
| PARAL | | | | AML | AML | 16 53 41.9 | |
| | 0.1nm,0.9s | | | | | | |
| PARAL | | | | AML | AML | 16 53 43.0 | |
| | 0.1nm,0.9s | | | | | | |
| CSS | Mathiatis | 0.86 | 199 | S | Sb | 16 53 40.8 | -0.2 |
| LEF | Lefka | 0.91 | 224 | Pg | Pn | 16 53 33.2 | +1.9 |
| LEF | Lefka | 0.91 | 224 | P | Pb | 16 53 31.1 | +0.5 |
| LEF | | | | S | Sg | 16 53 43.6 | +0.6 |
| ASGA | Asgata | 1.05 | 199 | S | Sb | 16 53 45.3 | -1.1 |
| ERMK | Ermenek | 1.05 | 325 | P | Pg | 16 53 34.3 | +0.7 |
| ERMK | | | | S | Sn | 16 53 47.8 | -0.1 |
| TROD | Troodos | 1.06 | 218 | P | Pb | 16 53 32.3 | -1.0 |
| TROD | | | | S | Sb | 16 53 45.5 | -1.3 |
| TROD | | | | AML | AML | 16 53 47.0 | |
| TROD | | | | AML | AML | 16 53 47.9 | |
| ALFC | Alefka | 1.07 | 235 | P | Pb | 16 53 32.6 | -0.8 |
| ALFC | | | | S | Sb | 16 53 47.0 | 0.0 |
| ALFC | | | | AML | AML | 16 53 49.8 | |
| | 0.1nm,0.3s | | | | | | |
| ALFC | | | | AML | AML | 16 53 50.8 | |
| | 0.1nm,0.2s | | | | | | |
| GAZI | Gazipasa | 1.18 | 293 | Pn | Pb | 16 53 35.7 | +0.4 |
| GAZI | Gazipasa | 1.18 | 293 | P | Pb | 16 53 35.7 | +0.4 |
| AKMS | Akamas | 1.32 | 235 | P | Pn | 16 53 37.7 | +0.7 |
| AKMS | | | | AML | AML | 16 53 51.4 | |
| AKMS | | | | S | Sn | 16 53 52.8 | -1.5 |
| KKBE | Karaman, Kazim | 1.55 | 338 | P | Pb | 16 53 41.5 | -0.1 |
| KKBE | | | | S | Sb | 16 54 01.4 | +0.5 |
| KERG | Konya-Eregli | 1.67 | 13 | P | Pb | 16 53 43.4 | -0.3 |
| KERG | | | | S | Sg | 16 54 06.4 | -0.9 |
| KERG | | | | i AML | AML | 16 54 09.0 | |
| | comp=N,19nm,0.6s | | | | | | |
| KERG | | | | i AML | AML | 16 54 15.0 | |
| | comp=E,18nm,0.5s | | | | | | |
| GULE | Gulek | 1.75 | 31 | P | Pb | 16 53 45.0 | 0.0 |

*CATAC 08 17:07:33.8±0.8, 8°17N×82°73W, h11km±3km, ML3.6*
*UPA 08 17:07:37.5±1.5, 8°35N×82°80W, h20km±8km, MD3.5, ML3.3, MW3.6*
*UCR 08 17:07:38.4±0.8, 8°36N×82°87W, h8km±6km, MW3.6*
**ISC 08 17:07:36.7±0.9, 8°34N±0°04×82°74W±0°03, h29km±8km, n49, σ0s98/69, 10C-13D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BCO2** | **Palmira** | **0.43** | **29**⇓ | *i* P | **Pn** | **17 07 47.6** | **+0.5** |
| BCO2 | | | | *i* S | **Sn** | **17 07 53.9** | **-0.2** |
| **BRU2** | **Volcan** | **0.45** | **6** | *i* P | **Pn** | **17 07 47.6** | **+0.2** |
| BRU2 | | | | *i* S | **Sn** | **17 07 55.5** | **+0.9** |
| BRU2 | | | | IAML | | 17 07 59.3 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.45** | **6**⇓ | *i* P | **Pn** | **17 07 47.6** | **+0.2** |
| BRU2 | | | | AMP | | 17 07 47.8 | |
| | comp=Z,3μm,0.2s | | | | | | |
| BRU2 | | | | *i* S | **Sn** | **17 07 54.8** | **+0.2** |
| **BRU2** | **Volcan** | **0.45** | **6** | *e*P | **Pn** | **17 07 47.4** | **0.0** |
| BRU2 | | | | eS | **Sn** | **17 07 55.6** | **+0.9** |
| **MLIR3** | **Monte Lirio, C** | **0.46** | **349**⇓ | *e*P | **Pb** | **17 07 46.0** | **-0.5** |
| **FITO** | **Golfito** | **0.50** | **304** | *e*P | **Pb** | **17 07 45.7** | **-1.3** |
| **LNBQ3** | **Los Naranjos,** | **0.54** | **33**⇓ | *i* P | **Pn** | **17 07 48.8** | **+0.3** |
| LNBQ3 | | | | *i* S | **Sn** | **17 07 56.9** | **+0.2** |
| **PSOM3** | **Paja de Sombre** | **0.54** | **50**⇓ | *i* P | **Pn** | **17 07 48.9** | **+0.4** |
| PSOM3 | | | | *i* S | **Sn** | **17 07 56.9** | **+0.4** |
| **PTJ1** | **Puerto Jimnez** | **0.59** | **289** | *i* P | **Pb** | **17 07 47.9** | **-0.7** |
| PTJ1 | | | | IAML | | 17 07 48.5 | |
| | comp=Z,5μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | **Sb** | **17 07 57.2** | **+0.5** |
| **PTJ1** | **Puerto Jimnez** | **0.59** | **289**⇑ | *i* P | **Pb** | **17 07 48.3** | **-0.3** |
| **PTJ1** | **Puerto Jimnez** | **0.59** | **289** | *e*P | **Pb** | **17 07 47.8** | **-0.8** |
| **JIME** | **Puerto Jimenez** | **0.61** | **289** | *e*P | **Pb** | **17 07 48.3** | **-0.7** |
| **EDP2** | **Potrero Grande** | **0.80** | **327** | *e*P | **Pb** | **17 07 51.7** | **-0.3** |
| **CHGR2** | **Aguacate** | **0.83** | **45**⇓ | *i* P | **Pn** | **17 07 53.3** | **+0.7** |
| CHGR2 | | | | *i* S | **Sn** | **17 08 03.9** | **+0.1** |
| **NANC3** | **Nancito, Chiri** | **1.00** | **96**⇓ | *e*P | **Pn** | **17 07 55.8** | **+1.0** |
| **DRK0** | **Durika** | **1.04** | **331** | *i* P | **Pn** | **17 07 55.4** | **-0.2** |
| DRK0 | | | | *i* S | **Sn** | **17 08 10.0** | **+0.7** |
| DRK0 | | | | IAML | | 17 08 12.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **1.04** | **331**⇑ | *i* P | **Pn** | **17 07 56.0** | **+0.4** |
| DRK0 | | | | *i* S | **Sb** | **17 08 08.2** | **-1.5** |
| **DRK0** | **Durika** | **1.04** | **331** | *e*P | **Pn** | **17 07 55.9** | **+0.4** |
| **OCHAL** | **Ojochal** | **1.17** | **310** | *i* P | **Pn** | **17 07 57.0** | **-0.1** |
| OCHAL | | | | *i* S | **Sb** | **17 08 13.4** | **+0.2** |
| OCHAL | | | | IAML | | 17 08 17.0 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **MESA3** | **La Mesa, Verag** | **1.55** | **97**⇑ | *i* P | **Pb** | **17 08 04.1** | **-0.6** |
| **GMAL** | **Guarumal, Vera** | **1.60** | **111**⇓ | *e*P | **Pn** | **17 08 03.8** | **+0.8** |
| GMAL | | | | *i* S | **Sn** | **17 08 23.5** | **+0.8** |
| **RSUS3** | **Rio de Jesus,** | **1.60** | **103**⇑ | *e*P | **Pn** | **17 08 04.3** | **+1.2** |
| **SFRA3** | **San Francisco,** | **1.75** | **93**⇑ | *e*P | **Pb** | **17 08 07.1** | **-1.1** |
| **STIA3** | **Santiago, Vera** | **1.76** | **98**⇑ | *e*P | **Pn** | **17 08 05.9** | **+0.6** |
| **MARI3** | **Mariato, Verag** | **1.86** | **112**⇓ | *e*P | **Pb** | **17 08 08.9** | **-1.1** |
| **LCR2** | **La Lucha 2** | **1.87** | **318** | *i* P | **Pb** | **17 08 09.1** | **-1.3** |
| LCR2 | | | | *i* S | **Sb** | **17 08 33.3** | **-0.2** |
| LCR2 | | | | IAML | | 17 08 35.5 | |
| | comp=Z,310nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.87** | **318** | *e*P | **Pb** | **17 08 09.0** | **-1.3** |
| **ABE2** | **San Pablo** | **1.88** | **316** | *e*P | **Pb** | **17 08 09.9** | **-0.6** |
| **CVTV** | **Tajo** | **1.93** | **329** | *e*P | **Pb** | **17 08 10.2** | **-1.2** |
| **CVTQ** | **Turrialba Volc** | **1.94** | **328** | *e*P | **Pb** | **17 08 10.4** | **-1.3** |
| **CACA0** | **El Cacao, Vera** | **2.11** | **118**⇓ | *e*P | **Pb** | **17 08 12.7** | **-1.5** |
| **HDC3** | **Heredia 3** | **2.14** | **321** | *i* P | **Pn** | **17 08 12.0** | **+1.4** |
| HDC3 | | | | *i* S | **Sb** | **17 08 41.9** | **+0.9** |
| HDC3 | | | | IAML | | 17 08 50.3 | |
| | comp=Z,470nm,1.0s | | | | | | |
| **HDC** | **Heredia** | **2.14** | **321** | *i* P | **Pn** | **17 08 12.5** | **+1.9** |
| HDC | | | | *i* S | **Sb** | **17 08 42.1** | **+1.1** |
| HDC | | | | IAML | | 17 08 50.2 | |
| | comp=Z,460nm,1.0s | | | | | | |
| **CHIT3** | **Chitre** | **2.33** | **99** | *e*P | **Pb** | **17 08 15.7** | **-2.3** |
| **AZU** | **Azuero** | **2.50** | **102** | *i* P | **Pb** | **17 08 19.4** | **-1.5** |
| **SOCE** | **Pocosol** | **2.75** | **318** | *i* P | Pn | 17 08 13.7 | -5.2 |
| SOCE | | | | IAML | | 17 08 24.6 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **2.88** | **325** | *i* P | **Pn** | **17 08 20.7** | **+0.1** |
| COVE | | | | IAML | | 17 09 13.8 | |
| | comp=Z,93nm,1.0s | | | | | | |
| **ZANG** | **Zanguenga, Cho** | **2.90** | **78** | *e*P | **Pb** | **17 08 29.8** | **+2.0** |
| **JTS** | **Las Juntas de** | **2.92** | **312**⇑ | *e*P | **Pb** | **17 08 25.4** | **-2.7** |
| **INDI** | **Punta indio, G** | **3.12** | **299** | *i* P | **Pn** | **17 08 25.2** | **+1.2** |
| INDI | | | | IAML | | 17 09 23.0 | |
| | comp=Z,64nm,1.0s | | | | | | |
| **UPA** | **Univ. de Panam** | **3.23** | **78** | *e*P | **Pb** | **17 08 31.1** | **-2.3** |

**IDC 08 17:30:58.3±4.0, 5°42.5S×150°85.E, h0km, mb2.9/2, mbtmp2.9/2, MS2.2/1, Error ellipse: s-maj=174.3km s-min=50.0km az=117.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.39** | **222** | LR | LR | 17 34 15.0 | |
| | comp=Z,24nm,21.1s,baz=70,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.60** | **227** | P | P | 17 35 50.5 | +0.5 |
| | 0.3nm,0.6s,baz=53,slow=10,SNR=1.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **24.41** | **220** | P | P | 17 36 18.8 | 0.0 |
| | 0.2nm,0.7s,baz=54,slow=9.7,SNR=7.7 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.63** | **286** | PKPbc | PKPbc | 17 50 47.6 | -0.9 |
| | 0.8nm,0.6s,baz=79,slow=1.9,SNR=7.5 | | | | | | |

*NEIC **08** 17:35:54.7±1.5, 45°.94N±0°.06×106°.61W±0°.09, h0km±1km, ML2.8/34, Error ellipse: s-maj=10.1km s-min=9.4km az=295.0*
*IDC **08** 17:35:56.8±1.6, 45°.64N×106°.42W, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=65.8km s-min=9.7km az=135.0*

**ISC 08 17:35:56.3±1.2, 45°.93N±0°.06×106°.56W±0°.06, h0km, n30, σ0s80/31, Montana**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RLMT** | **Red Lodge** | **2.07** | **248** | Pn | **Pn** | **17 36 32.5** | **0.0** |
| RLMT | | | | IAML | | 17 37 06.3 | |
| | 76nm,0.3s | | | | | | |
| RLMT | | | | IAML | | 17 37 09.9 | |
| | 45nm,0.4s | | | | | | |
| **RSSD** | **Black Hills** | **2.55** | **134** | Pn | **Pn** | **17 36 39.3** | **+0.2** |
| RSSD | | | | | **Sb** | **17 37 14.6** | **-0.4** |
| RSSD | | | | IAML | | 17 37 20.8 | |
| | 55nm,0.5s | | | | | | |
| RSSD | | | | IAML | | 17 37 23.1 | |
| | 48nm,0.6s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **2.80** | **246** | | **Pn** | **17 36 42.8** | **+0.1** |
| **DGMT** | **Dagmar** | **3.01** | **32** | Pn | **Pn** | **17 36 44.7** | **-0.6** |
| **EGMT** | **Eagleton** | **3.03** | **315** | | **Pn** | **17 36 45.2** | **-0.3** |
| EGMT | | | | IAML | | 17 37 41.0 | |
| | 38nm,0.6s | | | | | | |
| **YHH** | **Holmes Hill** | **3.23** | **251** | | **Pn** | **17 36 48.8** | **+0.2** |
| **K22A** | **Casper** | **3.28** | **180** | | **Pn** | **17 36 48.8** | **-0.3** |
| K22A | | | | IAML | | 17 37 40.6 | |
| | comp=E,35nm,0.3s | | | | | | |
| K22A | | | | IAML | | 17 37 44.8 | |
| | comp=N,37nm,0.4s | | | | | | |
| **YHL** | **Hebgen Lake** | **3.43** | **253** | Pn | **Pn** | **17 36 50.1** | **-1.3** |
| YHL | | | | IAML | | 17 37 47.0 | |
| | comp=E,26nm,0.7s | | | | | | |
| YHL | | | | IAML | | 17 37 55.6 | |
| | comp=N,15nm,0.9s | | | | | | |
| **YPP** | **Pitchstone Pla** | **3.43** | **243** | | **Pn** | **17 36 51.4** | **0.0** |
| **FLWY** | **Flagg Ranch** | **3.47** | **239** | | **Pn** | **17 36 50.9** | **-0.8** |
| FLWY | | | | IAML | | 17 37 52.9 | |
| | comp=N,26nm,2.0s | | | | | | |
| FLWY | | | | IAML | | 17 37 55.2 | |
| | comp=N,19nm,1.0s | | | | | | |
| **YHB** | **Horse Butte** | **3.47** | **252** | | **Pn** | **17 36 51.4** | **-0.5** |
| **BOZ** | **Bozeman (W)** | **3.56** | **266** | Pn | **Pn** | **17 36 52.6** | **-0.4** |
| BOZ | | | | IAML | | 17 37 51.0 | |
| | comp=N,19nm,1.5s | | | | | | |
| **IMW** | **Indian Meadow** | **3.72** | **238** | Pn | **Pn** | **17 36 55.4** | **+0.1** |
| IMW | | | | IAML | | 17 37 59.1 | |
| | comp=N,23nm,0.5s | | | | | | |
| IMW | | | | IAML | | 17 38 01.6 | |
| | comp=N,16nm,0.7s | | | | | | |
| **PD31** | **Pinedale Array** | **3.83** | **215** | | **Pn** | **17 36 57.5** | **+0.8** |
| **PDAR** | **Pinedale Array** | **3.83** | **215** | Pn | **Pn** | **17 36 56.8** | **+0.1** |
| **PDAR** | **Pinedale Array** | **3.83** | **215** | Pn | **Pn** | **17 36 57.4** | **+0.8** |
| | comp=N,0.3nm,0.3s,baz=48,slow=15,SNR=5.7 | | | | | | |
| PDAR | | | | Pg | **Pb** | **17 37 05.2** | **+0.4** |
| | comp=N,1.5nm,0.3s,baz=41,slow=18,SNR=13 | | | | | | |
| PDAR | | | | Lg | Lg | 17 37 50.7 | |
| | comp=N,1.7nm,0.3s,baz=45,slow=32,SNR=12 | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | |
| **FXWY** | **Fox Creek** | **3.92** | **236** | | **Pn** | **17 36 56.2** | **-1.8** |
| **TPAW** | **Teton Pass** | **3.97** | **234** | Pn | **Pn** | **17 36 57.7** | **-1.0** |
| TPAW | | | | IAML | | 17 38 57.8 | |
| | comp=N,9.3nm,4.2s | | | | | | |
| **REDW** | **Red Top Meadow** | **4.00** | **232** | Pn | **Pn** | **17 36 59.2** | **+0.2** |
| **LYMT** | **Lyon Mountain** | **4.09** | **287** | | **Pn** | **17 36 59.9** | **-0.4** |
| **RWWY** | **Rawlins** | **4.27** | **187** | Pn | **Pn** | **17 37 00.9** | **-1.9** |
| RWWY | | | | IAML | | 17 38 12.1 | |
| | comp=N,17nm,0.8s | | | | | | |
| **DLMT** | **Dillon** | **4.27** | **264** | Pn | **Pn** | **17 37 01.3** | **-1.4** |
| DLMT | | | | IAML | | 17 38 22.5 | |
| | comp=N,10.0nm,3.0s | | | | | | |
| DLMT | | | | IAML | | 17 39 32.2 | |
| | comp=N,9.3nm,3.4s | | | | | | |
| **OVMT** | **Ovando** | **4.59** | **287** | Pn | **Pn** | **17 37 06.6** | **-0.4** |
| **BPMT** | **Black Pine Rid** | **4.81** | **278** | Pn | **Pn** | **17 37 09.4** | **-0.8** |
| **N23A** | **Red Feather La** | **5.06** | **175** | Pn | **Pn** | **17 37 12.8** | **-0.8** |
| **HWUT** | **Hardware Ranch** | **5.64** | **222** | Pn | **Pn** | **17 37 21.4** | **-0.2** |
| **P18A** | **Preston Nutter** | **6.86** | **205** | | **Pn** | **17 37 38.9** | **+0.4** |
| **SRU** | **San Rafael Swe** | **7.42** | **205** | Pn | **Pn** | **17 37 45.3** | **-0.7** |
| **I56US** | **NEWPORT INFRAS** | **7.58** | **292** | I | I | 18 22 00.0 | |
| | baz=106,slow=310,SNR=2.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **8.36** | **55** | Pn | **Pn** | **17 37 59.5** | **+0.9** |
| | comp=N,0.2nm,0.3s,baz=248,slow=11,SNR=1.6 | | | Lg | Lg | | |
| ULM | | | | | | 17 40 14.2 | |
| | comp=N,0.3nm,0.3s,baz=338,slow=22,SNR=1.7 | | | | | | |
| | comp=N,0.9nm,0.4s | | | | | | |

**DJA 08 17:35:56.5±0.5, 9°S±8°×117°E±°, h61km±8km, M4.1/8, mb4.2/3, MLv4.1/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.23** | **127** | P | Pn | 17 36 07.3 | +1.1 |
| TWSI | | | | S | Sn | 17 36 16.3 | +3.0 |
| **SRBI** | **Singaraja** | **1.56** | **289** | P | Pn | 17 36 21.2 | -0.8 |
| **BASI** | **Baing, Sumba** | **4.15** | **113** | P | Pn | 17 36 51.3 | -6.1 |
| **BSSI** | **Bau Bau, Buton** | **4.48** | **57** | P | Pn | 17 37 02.9 | +0.9 |
| **GRJI** | **Gresik** | **4.50** | **292** | P | Pn | 17 37 01.5 | -0.7 |
| **NGJI** | **Ngawi** | **5.33** | **283** | P | Pn | 17 37 13.3 | -0.3 |
| | 36nm,1.8s,0.4nm | | | | | | |
| **BNSI** | **Bone** | **5.37** | **39** | P | Pn | 17 37 16.4 | +2.3 |
| **MMRI** | **Maumere** | **5.48** | **91** | P | Pn | 17 37 13.8 | -1.8 |

*NEIC **08** 17:41:55.4±1.3, 20°.9S±0°.2×178°.9W±0°.1, h591km±15km, mb4.5/24, Error ellipse: s-maj=25.1km s-min=17.1km az=176.0*
*IDC **08** 17:41:55.5±4.5, 19°.84S×178°.87W, h628km±30km, mb3.1/3, mbtmp4.2/5, Error ellipse: s-maj=112.2km s-min=58.7km az=143.0*

**ISC 08 17:41:55.1±0.7, 20°.7S±0°.1×178°.87W±0°.09, h600km, n34, σ1s05/35, mb4.4/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.16** | **315** | | **P** | **17 43 20.5** | **-1.4** |
| **MSVF** | **Nonsavu** | **4.16** | **315** | P | **P** | **17 43 20.4** | **-1.5** |
| | 33nm,0.5s,baz=147,slow=5.0,SNR=35 | | | | | | |
| **NIUE** | **Niue** | **8.57** | **81** | P | **P** | **17 44 00.8** | **+0.9** |
| **PINNC** | **Pines Island,** | **12.86** | **259** | P | **P** | **17 44 43.1** | **+0.6** |
| **DZM** | **Mont Dzumac** | **13.74** | **262** | P | **P** | **17 44 51.0** | **-0.6** |
| **DZM** | **Mont Dzumac** | **13.74** | **262** | P | **P** | **17 44 54.2** | **+2.6** |
| | 5.2nm,0.5s,baz=96,slow=19,SNR=14 | | | | | | |
| **BKZ** | **Black Stump Fm** | **18.81** | **191** | P | **P** | **17 45 36.0** | **-2.0** |
| BKZ | | | | IAmb | IAmb | 17 46 13.4 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **THZ** | **Tophouse** | **22.10** | **197** | P | **P** | **17 46 06.5** | **-1.0** |
| THZ | | | | IAmb | IAmb | 17 46 17.7 | |
| | comp=Z,31nm,1.2s | | | | | | |
| **LTZ** | **Lake Taylor** | **23.22** | **197** | P | **P** | **17 46 15.8** | **-1.6** |
| **MLZ** | **Mavora Lakes** | **26.81** | **201** | P | **P** | **17 46 47.7** | **-1.4** |
| MLZ | | | | IAmb | IAmb | 17 47 31.4 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **27.34** | **200** | P | **P** | **17 46 52.6** | **-0.9** |
| **ARMA** | **Armidale** | **28.23** | **244** | P | **P** | **17 47 02.6** | **+0.8** |
| ARMA | | | | IAmb | IAmb | 17 47 12.9 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **32.66** | **265** | P | **P** | **17 47 40.5** | **+0.9** |
| CTAO | | | | IAmb | IAmb | 17 47 41.2 | |
| | comp=Z,6.8nm,0.6s | | | | | | |
| **COEN** | **Coen** | **36.78** | **274** | P | **P** | **17 48 14.8** | **+0.9** |
| COEN | | | | IAmb | IAmb | 17 48 42.1 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **36.95** | **244** | P | **P** | **17 48 16.2** | **+1.1** |
| **STKA** | **Stephens Creek** | **36.95** | **244** | P | **P** | **17 48 16.5** | **+1.4** |
| | comp=Z,1.2nm,0.4s,baz=79,slow=13,SNR=6.3 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **39.15** | **78** | P | **P** | **17 48 33.4** | **+0.2** |
| **BBOO** | **Buckleboo** | **41.72** | **244** | P | **P** | **17 48 54.0** | **+0.8** |
| **WR0** | **Warramunga Arr** | **43.57** | **262** | P | **P** | **17 49 07.8** | **0.0** |
| **AS31** | **Alice Springs** | **43.67** | **257** | P | **P** | **17 49 08.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **43.67** | **257** | P | **P** | **17 49 08.5** | **-0.1** |
| **ASAR** | **Alice Springs** | **43.67** | **257** | P | **P** | **17 49 09.0** | **+0.4** |
| | comp=Z,3.9nm,0.7s,baz=90,slow=7.8,SNR=107 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 50 40.4** | **-1.7** |
| | comp=Z,0.4nm,0.6s,baz=94,slow=5.0,SNR=4.8 | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.74** | **263** | P | **P** | **17 49 08.8** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 17 49 50.9 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.75** | **262** | P | **P** | **17 49 08.6** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 17 49 31.1 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.76** | **262** | P | **P** | **17 49 08.8** | **-0.4** |
| **WRA** | **Warramunga Arr** | **43.76** | **262** | P | **P** | **17 49 08.7** | **-0.6** |
| | comp=Z,1.0nm,0.3s,baz=97,slow=7.6,SNR=56 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **MTN** | **Manton Dam** | **48.35** | **271** | P | **P** | **17 49 43.6** | **-0.3** |
| MTN | | | | IAmb | IAmb | 17 50 25.9 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **48.46** | **247** | P | **P** | **17 49 44.3** | **-0.2** |
| FORT | | | | IAmb | IAmb | 17 50 12.9 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **49.83** | **267** | P | **P** | **17 49 54.0** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 17 50 13.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.19** | **263** | P | **P** | **17 50 12.2** | **+0.4** |
| **MBWA** | **Marble Bar** | **57.01** | **258** | P | **P** | **17 50 44.9** | **-0.5** |
| MBWA | | | | IAmb | IAmb | 17 51 14.5 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **57.62** | **185** | P | **P** | **17 50 49.2** | **+0.7** |
| **GIRL** | **Giralia** | **61.70** | **255** | P | **P** | **17 51 16.3** | **-0.3** |
| **CASY** | **Casey** | **63.41** | **205** | P | **P** | **17 51 27.1** | **+0.3** |

*BER **08** 17:43:22.0±1.8, 74°.62N×8°.88E, h10km, mb(Pn)4.1, Confirmed Earthquake*
*FCIAR **08** 17:43:30.0, 75°.07N×10°.68E, h10km, station BJO1 has station magnitude of 4.50 station HOPEN has station magnitude of 6.10*

**ISC 08 17:43:18.8±1.2, 74°.69N±0°.07×9°.09E±0°.06, h10km, n13, σ2s63/23, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BJO1** | **Bjornoya** | **2.65** | **89** | *e*P | **Pb** | **17 44 04.1** | **-2.2** |
| BJO1 | | | | *e*S | **Sn** | **17 44 34.0** | **+0.3** |
| BJO1 | | | | IAML | | 17 44 37.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **BJO1** | **Bjornoya** | **2.65** | **89** | *e*P | **Pb** | **17 44 04.1** | **-2.2** |
| BJO1 | | | | *e*S | **Sn** | **17 44 33.3** | **-0.4** |
| | comp=Z,2μm,0.2s | | | | | | |
| **HSPB** | **Hornsund (broa** | **2.81** | **31** | *e*P | **Pb** | **17 44 06.6** | **-2.4** |
| HSPB | | | | *e*S | **Sn** | **17 44 37.7** | **+0.1** |
| HSPB | | | | IAML | | 17 44 42.1 | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **BRBA** | **Barentsburg A** | **3.60** | **17** | *e*P | **Pn** | **17 44 17.6** | **+3.1** |
| BRBA | | | | *e*S | **Sn** | **17 44 58.9** | **+2.0** |
| BRBA | | | | IAML | | 17 45 02.1 | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **BRBB** | **Barentsburg B** | **3.63** | **17** | *e*P | **Pn** | **17 44 18.1** | **+3.2** |
| **KBS** | **Kingsbay** | **4.31** | **7** | *e*P | **Pn** | **17 44 26.8** | **+2.5** |
| KBS | | | | *e*S | **Sn** | **17 45 13.4** | **-1.1** |
| KBS | | | | IAML | | 17 45 19.9 | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **4.31** | **7** | *e*P | **Pn** | **17 44 26.8** | **+2.5** |
| KBS | | | | *e*S | **Sn** | **17 45 13.6** | **-0.9** |
| **HOPEN** | **Hopen** | **4.37** | **58** | *e*P | **Pn** | **17 44 29.1** | **+4.0** |
| HOPEN | | | | *e*S | **Sn** | **17 45 15.6** | **-0.3** |
| HOPEN | | | | IAML | | 17 45 17.3 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **HOPEN** | **Hopen** | **4.37** | **58** | *e*P | **Pn** | **17 44 28.5** | **+3.4** |
| | comp=Z,26μm,0.2s | | | | | | |
| HOPEN | | | | *e*S | **Sn** | **17 45 13.6** | **-2.3** |
| **JMIC** | **Jan Mayen** | **6.38** | **243** | *e*P | **Pn** | **17 44 51.8** | **-0.8** |
| JMIC | | | | IAML | | 17 46 16.2 | |
| | comp=Z,19nm,0.5s | | | | | | |
| **JMI** | **Jan Mayen** | **6.47** | **243** | *e*P | **Pn** | **17 44 53.2** | **-0.7** |
| JMI | | | | IAML | | 17 46 15.2 | |
| | comp=Z,28nm,0.4s | | | | | | |
| **ZFI2** | **Zemlya Franca-** | **9.96** | **35** | *e*P | **Pn** | **17 45 45.7** | **+4.0** |
| | comp=Z,0.4nm,0.2s | | | | | | |
| ZFI2 | | | | *e*S | **Sn** | **17 47 29.8** | **-3.5** |
| **OMEGA** | **Omega** | **9.97** | **36** | *e*P | **Pn** | **17 45 45.1** | **+3.3** |
| OMEGA | | | | *e*S | **Sn** | **17 47 30.1** | **-3.3** |

**IDC 08 17:43:52.1±7.6, 30°.95S×177°.81W, h0km, mb3.4/2, mbtmp3.4/2, Error ellipse: s-maj=314.9km s-min=63.9km az=156.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **8.40** | **208** | Sn | Sn | 17 47 27.2 | -3.6 |
| | 0.1nm,0.3s,baz=237,slow=23,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **43.25** | **267** | P | P | 17 51 55.1 | -0.4 |
| | 0.2nm,0.5s,baz=105,slow=7.4,SNR=4.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.28** | **273** | P | P | 17 52 03.9 | 0.0 |
| | 0.4nm,0.5s,baz=112,slow=8.0,SNR=7.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **145.72** | **340** | PKPbc | PKPdf | 18 03 31.4 | -0.4 |
| | 2.1nm,0.9s,baz=60,slow=6.6,SNR=2.7 | | | | | | |

*IDC **08** 18:02:52.4±0.7, 6°.72N×72°.92W, h169km±9km, mb3.4/5, mbtmp4.1/8, Error ellipse: s-maj=26.5km s-min=8.4km az=133.0*
*NEIC **08** 18:02:52.2±1.6, 6°.86N±0°.05×73°.0W±0°.1, h148km±7km, mb4.3/25, Error ellipse: s-maj=15.0km s-min=5.6km az=106.0*
*RSNC **08** 18:02:54.7±0.0, 7°N±1°×7°3W±°, h147km±2km, M3.9, mb4.4, mB4.7, ML3.7, Mw(mB)3.9*

**ISC 08 18:02:52.2±0.6, 6°.83N±0°.03×73°.09W±0°.04, h156km±5km, n87, σ1s34/126, mb4.2/16, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.26** | **201** | P | **Pn** | **18 03 13.9** | **+0.2** |
| BARC | | | | S | **Sn** | **18 03 29.3** | **-0.8** |
| **PAMC** | **Pamplona, Colo** | **0.63** | **38** | P | **Pn** | **18 03 16.6** | **+1.0** |
| PAMC | | | | S | **Sn** | **18 03 33.8** | **+0.4** |
| **BRJC** | **Barrancabermej** | **0.67** | **282** | P | **Pn** | **18 03 15.7** | **+0.5** |
| BRJC | | | | S | **Sn** | **18 03 33.1** | **+0.5** |
| **RUSC** | **La Rusia** | **0.94** | **180** | P | **Pn** | **18 03 17.7** | **0.0** |
| RUSC | | | | S | **Sn** | **18 03 36.4** | **-0.7** |
| **TAMC** | **Tame, Arauca** | **1.35** | **107** | P | **Pn** | **18 03 22.0** | **+1.2** |
| TAMC | | | | S | **Sn** | **18 03 43.4** | **+0.7** |
| **PTBC** | **PUERTO BERRIO,** | **1.39** | **258** | P | **Pn** | **18 03 20.2** | **-1.0** |
| PTBC | | | | S | **Sn** | **18 03 41.5** | **-1.8** |
| **OCAC** | **Ocana** | **1.41** | **351** | P | **Pn** | **18 03 21.9** | **+0.3** |
| OCAC | | | | S | **Sn** | **18 03 45.1** | **+1.0** |
| **SPBC** | **San Pablo de B** | **1.53** | **220** | P | **Pn** | **18 03 22.6** | **-0.1** |
| SPBC | | | | S | **Sn** | **18 03 45.1** | **-0.9** |
| SPBC | | | | S | **Sn** | **18 03 45.1** | **-0.9** |
| **ZARC** | **Zaragoza, Cauc** | **1.87** | **291** | P | **Pn** | **18 03 26.3** | **0.0** |
| ZARC | | | | S | **Sn** | **18 03 51.6** | **-0.9** |
| **NORC** | **Norcasia** | **2.17** | **235** | P | **Pn** | **18 03 29.6** | **-0.2** |
| NORC | | | | S | **Sn** | **18 03 57.0** | **-1.8** |
| **CHIC** | **Chingaza** | **2.28** | **196** | P | **Pn** | **18 03 31.4** | **-0.1** |
| CHIC | | | | S | **Sn** | **18 04 01.1** | **-0.6** |
| **ROSC** | **El Rosal** | **2.33** | **212** | | **Pn** | **18 03 33.2** | **+1.2** |
| **ROSC** | **El Rosal** | **2.33** | **212** | P | **Pn** | **18 03 33.5** | **+1.4** |
| | 405nm,0.3s,baz=80,slow=10.0,SNR=96 | | | | | | |
| ROSC | | | | S | **Sn** | **18 04 04.5** | **+1.8** |
| | 648nm,0.3s,baz=141,slow=23,SNR=9.4 | | | | | | |
| **ROSC** | **El Rosal** | **2.33** | **212** | P | **Pn** | **18 03 33.4** | **+1.4** |
| ROSC | | | | S | **Sn** | **18 04 04.4** | **+1.8** |
| **CVER** | **Cruz Verde, Cu** | **2.50** | **203** | P | **Pn** | **18 03 35.0** | **+0.9** |
| **UREC** | **San Jos de Ur** | **2.59** | **291** | P | **Pn** | **18 03 33.8** | **-1.0** |
| UREC | | | | S | **Sn** | **18 04 05.2** | **-2.4** |
| **VILC** | **Villavicencio,** | **2.77** | **193** | P | **Pn** | **18 03 36.8** | **-0.3** |
| VILC | | | | S | **Sn** | **18 04 11.6** | **-0.3** |
| **PTGC** | **Puerto Gaitan,** | **2.79** | **160** | P | **Pn** | **18 03 36.7** | **-0.5** |
| PTGC | | | | S | **Sn** | **18 04 09.4** | **-2.6** |
| **DBBC** | **Dabeiba** | **3.10** | **274** | P | **Pn** | **18 03 41.0** | **-0.2** |
| DBBC | | | | S | **Sn** | **18 04 17.3** | **-1.9** |
| **SDV** | **Santo Domingo** | **3.17** | **50** | Pn | **Pn** | **18 03 40.1** | **-2.1** |
| **SDV** | **Santo Domingo** | **3.17** | **50** | P | **Pn** | **18 03 43.0** | **+0.8** |
| | 280nm,0.3s,baz=255,slow=4.6,SNR=10.0 | | | | | | |
| SDV | | | | S | **Sn** | **18 04 21.3** | **+0.3** |
| | 126nm,0.4s,baz=52,slow=13,SNR=2.5 | | | | | | |
| **SDV** | **Santo Domingo** | **3.17** | **50** | P | **Pn** | **18 03 43.0** | **+0.8** |
| SDV | | | | S | **Sn** | **18 04 21.3** | **+0.3** |
| **ARGC** | **Ariguani, Magd** | **3.21** | **339** | P | **Pn** | **18 03 43.6** | **+1.0** |
| ARGC | | | | S | **Sn** | **18 04 23.0** | **+1.3** |
| **ANIL** | **Santa Ana** | **3.27** | **225** | P | **Pn** | **18 03 45.0** | **+1.4** |
| ANIL | | | | S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ICQ** | **Pointe Anglais** | **42.82** | **6** | P | **P** | **18 10 35.3** | **+0.8** |
| ICQ | | | | IAmb | IAmb | 18 11 08.5 | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **EYMN** | **Ely** | **43.87** | **342** | P | **P** | **18 10 43.1** | **+0.1** |
| EYMN | | | | IAmb | IAmb | 18 10 43.8 | | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **ESJX** | **Sierra Juarez** | **47.10** | **308** | P | **P** | **18 11 08.9** | **+0.1** |
| ESJX | | | | IAmb | IAmb | 18 11 09.2 | | |
| | comp=Z,4.5nm,1.2s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **47.28** | **340** | P | **P** | **18 11 09.3** | **-0.5** |
| ULM | | | | IAmb | IAmb | 18 11 10.7 | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **47.28** | **340** | P | **P** | **18 11 09.5** | **-0.3** |
| | comp=Z,3.7nm,0.6s,baz=144,slow=6.8,SNR=6.9 | | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.09** | **324** | P | **P** | **18 11 17.2** | **+0.8** |
| **PDAR** | **Pinedale Array** | **48.09** | **324** | P | **P** | **18 11 16.5** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=128,slow=9.5,SNR=5.1 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **SCHQ** | **Schefferville** | **48.12** | **5** | P | **P** | **18 11 17.1** | **+0.9** |
| SCHQ | | | | IAmb | IAmb | 18 11 17.8 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **SCHQ** | **Schefferville** | **48.12** | **5** | P | **P** | **18 11 16.1** | **-0.1** |
| | comp=Z,3.2nm,0.8s,baz=208,slow=5.5,SNR=3.9 | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **BGU** | **Big Grassy Mou** | **49.15** | **320** | P | **P** | **18 11 24.1** | **-0.4** |
| **REDW** | **Red Top Meadow** | **49.20** | **324** | P | **P** | **18 11 25.3** | **+0.4** |
| **FCC** | **Fort Churchill** | **54.27** | **347** | P | **P** | **18 12 03.3** | **+1.5** |
| **YKA** | **Yellowknife Ar** | **63.26** | **340** | P | **P** | **18 13 04.7** | **+0.8** |
| **A36M** | **Sachs Harbour** | **72.43** | **345** | P | **P** | **18 14 01.3** | **+0.2** |
| A36M | | | | IAmb | IAmb | 18 14 13.7 | | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| **CEST** | **Esterri de Car** | **73.88** | **48** | | **P** | **18 14 12.0** | **+1.6** |
| CEST | | | | IAmb | IAmb | 18 14 51.6 | | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **H29M** | **Whitestone** | **73.95** | **337** | P | **P** | **18 14 10.7** | **+0.6** |
| **M27K** | **Edge Creek, AK** | **74.21** | **333** | P | **P** | **18 14 13.8** | **+1.9** |
| M27K | | | | IAmb | IAmb | 18 14 45.5 | | |
| | comp=Z,9.9nm,1.4s | | | | | | | |
| **E29M** | **Blow River** | **74.55** | **340** | P | **P** | **18 14 14.2** | **+0.6** |
| E29M | | | | IAmb | IAmb | 18 14 17.5 | | |
| | comp=Z,5.8nm,1.3s | | | | | | | |
| **E28M** | **Babbage River** | **75.19** | **340** | P | **P** | **18 14 16.6** | **-0.6** |
| **ILAR** | **Eielson Array** | **76.96** | **335** | P | **P** | **18 14 27.2** | **-0.1** |
| | comp=Z,0.3nm,0.8s,baz=109,slow=4.0,SNR=2.6 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **149.14** | **234** | PKPbc | **PKPbc** | **18 22 22.4** | **-0.6** |
| **ASAR** | **Alice Springs** | **149.14** | **234** | PKPdf | **PKPdf** | **18 22 16.6** | **-2.1** |
| ASAR | | | | PKPbc | **PKPbc** | **18 22 21.2** | **-1.8** |
| **ASAR** | **Alice Springs** | **149.14** | **234** | PKPbc | **PKPbc** | **18 22 21.5** | **-1.6** |
| | comp=Z,1.1nm,0.7s,baz=116,slow=3.7,SNR=20 | | | | | | | |
| **WB2** | **Warramunga Arr** | **150.36** | **241** | PKPbc | **PKPdf** | **18 22 22.5** | **+1.8** |
| **WRA** | **Warramunga Arr** | **150.37** | **241** | PKPbc | **PKPbc** | **18 22 24.6** | **-1.5** |
| | comp=Z,0.6nm,0.5s,baz=108,slow=2.6,SNR=16 | | | | | | | |
| **WB0** | **Warramunga Arr** | **150.39** | **242** | PKPbc | **PKPbc** | **18 22 23.9** | **-2.3** |

*IDC **08** 18:02:54.4±2.1,4.2°S×152.8°E,h0km,mb3.9/2, mbtmp3.9/2,MS2.7/1,Error ellipse: s-maj=115.9km s-min=40.0km az=126.0*
*NEIC **08** 18:02:56±1.5,4.4°S±0.0°×153.0°E±0.0°,h10km±1km, mb4.5/10,Error ellipse: s-maj=10.7km s-min=5.7km az=341.0*

**ISC 08 18:03:02.9**±1.4,**4.4S**±0.2°×**152.7E**±0.2°,**h58**km,**n18, σ0s58/20,mb4.2/8,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.56** | **290** | Pg | **Pn** | **18 03 14.2** | **-1.2** |
| RABL | | | | Sg | **Sn** | **18 03 24.6** | **0.0** |
| **MANU** | **Manus Island** | **5.80** | **293** | Pn | **Pn** | **18 04 26.8** | **+0.3** |
| **PMG** | **Port Moresby** | **7.42** | **227** | LR | LR | 18 07 42.1 | |
| | comp=Z,50nm,19.5s,baz=57,slow=38 | | | | | | |
| **WB0** | **Warramunga Arr** | **23.50** | **228** | P | **P** | **18 08 07.4** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 18 08 10.0 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.51** | **227** | P | **P** | **18 08 07.6** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 18 08 47.9 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.63** | **228** | P | **P** | **18 08 09.7** | **+0.7** |
| WRAB | | | | IAmb | IAmb | 18 08 10.7 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.64** | **228** | P | **P** | **18 08 09.1** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 18 08 10.8 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.64** | **228** | P | **P** | **18 08 08.7** | **-0.5** |
| **WRA** | **Warramunga Arr** | **23.64** | **228** | P | **P** | **18 08 09.2** | **+0.1** |
| | comp=Z,3.9nm,0.6s,baz=55,slow=10,SNR=38 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 11 52.8** | **+0.2** |
| | comp=Z,0.3nm,0.9s,baz=45,slow=2.6,SNR=1.9 | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **26.07** | **243** | P | **P** | **18 08 32.2** | **+1.1** |
| KNRA | | | | IAmb | IAmb | 18 09 11.8 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **26.39** | **222** | P | **P** | **18 08 34.3** | **+0.2** |
| **ASAR** | **Alice Springs** | **26.39** | **222** | P | **P** | **18 08 33.8** | **-0.3** |
| **ASAR** | **Alice Springs** | **26.39** | **222** | P | **P** | **18 08 34.5** | **+0.4** |
| | comp=Z,0.6nm,0.5s,baz=54,slow=9.0,SNR=43 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 11 59.0** | **+0.3** |
| | comp=Z,0.6nm,1.1s,baz=51,slow=2.2,SNR=1.3 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.77** | **241** | P | **P** | **18 09 04.2** | **0.0** |
| **FORT** | **Forrest** | **35.05** | **219** | P | **P** | **18 09 50.6** | **+0.3** |
| FORT | | | | IAmb | IAmb | 18 10 05.7 | |
| | comp=Z,78nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.82** | **341** | P | **P** | **18 12 05.5** | **+0.5** |
| **TORD** | **Torodi Ar. Bea** | **150.07** | **289** | PKPbc | **PKPbc** | **18 22 47.3** | **-0.9** |
| **TORD** | **Torodi Ar. Bea** | **150.07** | **289** | PKPbc | **PKPbc** | **18 22 47.4** | **-0.8** |
| | comp=Z,0.5nm,0.3s,baz=80,slow=2.6,SNR=8.2 | | | | | | |

*NEIC **08** 18:06:11.8±2.0,14.0°N±0.1°×145.2°E±0.2°,h123km±7km, mb4.5/21,Error ellipse: s-maj=29.8km s-min=6.5km az=116.0*
*IDC **08** 18:06:11.0±1.0,14.0°N×145.30E,h117km±7km,mb3.5/7, mbtmp3.9/7,Error ellipse: s-maj=38.9km s-min=16.3km az=97.0*

**ISC 08 18:06:09.4**±0.7,**14.0N**±0.1°×**145.6E**±0.1°,**h100**km,**n32, σ1s46/32,mb4.2/18,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.78** | **238** | Pn | Pn | 18 06 31.2 | +3.6 |
| GUMO | | | | Sn | **Sn** | **18 06 43.9** | **+2.6** |
| **GUMO** | **Guam** | **0.78** | **238** | P | Pn | 18 06 31.2 | +3.6 |
| | 1μm,0.4s,baz=103,slow=1.7,SNR=189 | | | | | | |
| GUMO | | | | S | **Sn** | **18 06 44.8** | **+3.5** |
| | 3μm,0.3s,baz=23,slow=22,SNR=26 | | | | | | |
| **KSRS** | **Korea Array** | **28.14** | **329** | P | **P** | **18 11 51.1** | **-1.0** |
| | 1.1nm,0.6s,baz=146,slow=9.3,SNR=6.4 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **35.48** | **198** | P | **P** | **18 12 55.7** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 18 12 57.4 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.50** | **198** | P | **P** | **18 12 56.2** | **-0.5** |
| | comp=Z,2.3nm,0.7s,baz=17,slow=8.4,SNR=11 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **39.14** | **197** | P | **P** | **18 13 25.7** | **-1.8** |
| **ASAR** | **Alice Springs** | **39.14** | **197** | P | **P** | **18 13 24.8** | **-2.7** |
| **ASAR** | **Alice Springs** | **39.14** | **197** | P | **P** | **18 13 27.6** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=24,slow=9.7,SNR=11 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **39.51** | **172** | P | **P** | **18 13 29.7** | **-0.8** |
| EIDS | | | | IAmb | IAmb | 18 14 08.7 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **45.78** | **185** | P | **P** | **18 14 21.3** | **+0.2** |
| | comp=Z,1.1nm,0.4s,baz=4.9,slow=7.2,SNR=3.3 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **47.43** | **191** | P | **P** | **18 14 32.9** | **-1.1** |
| **ADK** | **Adak** | **48.37** | **31** | P | **P** | **18 14 41.8** | **+0.8** |
| **YAK** | **Yakutsk** | **49.28** | **350** | P | **P** | **18 14 46.6** | **-1.3** |
| YAK | | | | IAmb | IAmb | 18 14 48.5 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **CLES** | **Cleveland East** | **52.34** | **33** | P | **P** | **18 15 11.7** | **+0.8** |
| **N15K** | **Kwethluk River** | **60.59** | **28** | P | **P** | **18 16 10.9** | **+1.5** |
| **K15K** | **Wolf Creek Mou** | **60.91** | **25** | P | **P** | **18 16 11.7** | **+0.2** |
| K15K | | | | IAmb | IAmb | 18 16 34.5 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **N17K** | **Nushagak Hills** | **62.05** | **28** | P | **P** | **18 16 20.6** | **+1.4** |
| **K17K** | **Iditarod** | **62.44** | **26** | P | **P** | **18 16 22.7** | **+0.9** |
| K17K | | | | IAmb | IAmb | 18 17 01.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.74** | **320** | P | **P** | **18 16 35.3** | **-1.7** |
| | comp=Z,0.6nm,0.4s,baz=90,slow=2.2,SNR=2.2 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **PWL** | **Port Wells** | **66.29** | **29** | P | **P** | **18 16 47.3** | **+0.4** |
| PWL | | | | IAmb | IAmb | 18 16 49.3 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **MLY** | **Manley** | **66.40** | **25** | P | **P** | **18 16 48.1** | **+0.5** |
| **IL31** | | **67.91** | **25** | P | **P** | **18 16 56.9** | **-0.1** |
| **ILAR** | **Eielson Array** | **67.91** | **25** | P | **P** | **18 16 56.0** | **-1.1** |
| | comp=Z,0.7nm,0.5s,baz=249,slow=6.0,SNR=13 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **SCRK** | **Sand Creek** | **68.96** | **26** | P | **P** | **18 17 05.2** | **+1.4** |
| SCRK | | | | IAmb | IAmb | 18 17 37.6 | |
| | comp=Z,5.7nm,1.5s | | | | | | |
| **J26L** | **Joseph Creek** | **69.24** | **26** | P | **P** | **18 17 05.2** | **-0.3** |
| **D25K** | **Kavik River** | **69.29** | **21** | P | **P** | **18 17 05.5** | **-0.1** |
| **BMAR** | **Burnt Mountain** | **69.46** | **23** | P | **P** | **18 17 06.5** | **-0.2** |
| **I28M** | **Miner Creek** | **70.92** | **25** | P | **P** | **18 17 16.9** | **+1.2** |
| I28M | | | | IAmb | IAmb | 18 17 52.5 | |
| | comp=Z,4.2nm,1.5s | | | | | | |
| **J05D** | **Fort Rock, OR** | **82.84** | **47** | P | **P** | **18 18 24.8** | **+1.6** |
| J05D | | | | IAmb | IAmb | 18 18 44.5 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **PINE** | **Pine Mountain** | **82.94** | **47** | P | **P** | **18 18 26.1** | **+2.3** |
| PINE | | | | IAmb | IAmb | 18 18 27.3 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.14** | **52** | P | **P** | **18 18 42.0** | **+2.0** |
| | comp=Z,0.4nm,0.6s,baz=282,slow=4.5,SNR=2.7 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **ELK** | **Elko** | **87.80** | **49** | P | **P** | **18 18 47.8** | **-0.2** |
| ELK | | | | IAmb | IAmb | 18 18 51.2 | |
| | comp=Z,2.5nm,0.8s | | | | | | |

**DJA 08 18:08:06.8**±0.8,**8°S**±6°×**117°E**±°,**h10**km,**M3.5**/4,**MLv3.5**/4, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.80** | **154** | P | Pg | 18 08 20.5 | -1.8 |
| TWSI | | | | S | Sb | 18 08 33.5 | -0.3 |
| **SRBI** | **Singaraja** | **1.31** | **267** | P | Pn | 18 08 29.4 | -1.7 |
| SRBI | | | | S | Sb | 18 08 46.9 | -1.4 |
| **DNP** | **Denpasar** | **1.47** | **243** | P | Pg | 18 08 35.1 | +0.2 |
| DNP | | | | S | Sg | 18 08 53.9 | -0.1 |
| **PLAI** | **Plampang** | **1.48** | **123** | P | Pn | 18 08 33.8 | +0.3 |
| PLAI | | | | S | Sb | 18 08 53.7 | +0.5 |
| **JAGI** | **Jajag, Banyuwa** | **2.40** | **259** | P | Pn | 18 08 44.2 | -2.0 |
| **BSSI** | **Bau Bau, Buton** | **4.35** | **65** | P | Pn | 18 09 14.2 | +1.2 |
| **PWJI** | **Pagerwojo** | **4.68** | **270** | P | Pb | 18 09 23.4 | -5.6 |
| **EDFI** | **Ende, Flores** | **5.16** | **99** | P | Pn | 18 09 19.6 | -4.6 |

*IDC **08** 18:18:44.2±1.1,36.7°N×141.32E,h0km,mb3.5/7, mbtmp3.5/9,ML3.0/2,Error ellipse: s-maj=23.5km s-min=22.9km az=17.0*
*JMA **08** 18:18:44.2±0.2,36.3°N±0.4×14.1°E±°,h49km±3km, MV3.3/31,FAR E OFF IBARAKI PREF*

**ISC 08 18:18:46.6**±0.9,**36.3°N**±0.05°×**141.3°E**±0.07,**h26**km,**n21, σ1s77/25,mb3.4/7,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHYU** | **Hitachinakayam** | **0.62** | **268** | P | **Pb** | **18 18 58.3** | **-0.6** |
| JHYU | | | | *e*S | **Sb** | **18 19 08.3** | **+1.0** |
| **JHO** | **Hitachi** | **0.68** | **292** | P | **Pb** | **18 18 58.9** | **-1.0** |
| **JIHU** | **Itakohorinouch** | **0.78** | **240** | P | **Pb** | **18 19 00.1** | **-1.5** |
| **ONAJ** | **Iwakimizuishiy** | **0.86** | **329** | *e*P | **Pb** | **18 19 01.7** | **-1.3** |
| **JYT** | **Yasato** | **0.95** | **262** | P | **Pn** | **18 19 02.3** | **-1.9** |
| **JFK** | **Kawauchi** | **1.07** | **339** | *e*P | **Pn** | **18 19 04.5** | **-1.5** |
| **JOTO** | **OTAMA OYAMA** | **1.45** | **326** | P | **Pn** | **18 19 11.0** | **-0.2** |
| JOTO | | | | S | **Sb** | **18 19 30.2** | **-0.7** |
| **JAG** | **Ashikaga** | **1.54** | **273** | *i* P | **Pn** | **18 19 11.0** | **-1.3** |
| **JMM** | **Marumori** | **1.57** | **343** | *e*P | **Pn** | **18 19 11.8** | **-1.0** |
| **JKT** | **Katashina** | **1.75** | **284** | P | **Pn** | **18 19 15.0** | **-0.2** |
| JKT | | | | *e*S | **Sn** | **18 19 37.5** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **2.54** | **275** | Pn | **Pn** | **18 19 25.7** | **-0.5** |
| | 1.0nm,0.3s,baz=169,slow=4.6,SNR=37 | | | | | | |
| MJAR | | | | Sn | **Sn** | **18 19 58.0** | **+1.6** |
| | 0.6nm,0.3s,baz=96,slow=11,SNR=4.7 | | | | | | |
| | 15nm,0.7s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **3.48** | **202** | Pn | **Pn** | **18 19 38.5** | **-0.6** |
| | 7.2nm,0.3s,baz=80,slow=21,SNR=1.8 | | | | | | |
| JHJ | | | | Sn | **Sn** | **18 20 15.4** | **-4.1** |
| | 23nm,0.3s,baz=235,slow=22,SNR=1.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **7.80** | **7** | Pn | Pn | 18 20 33.8 | -4.6 |
| | 0.4nm,0.3s,baz=340,slow=19,SNR=1.9 | | | | | | |
| | 7.6nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **28.13** | **305** | P | **P** | **18 24 36.0** | **-0.5** |
| | 0.5nm,0.6s,baz=112,slow=8.0,SNR=3.6 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.34** | **313** | P | **P** | **18 26 37.3** | **-0.8** |
| | 0.3nm,0.4s,baz=90,slow=10,SNR=2.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.44** | **303** | P | **P** | **18 26 55.0** | **-0.3** |
| | 0.3nm,0.7s,baz=87,slow=10,SNR=4.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.38** | **308** | P | **P** | **18 27 09.9** | **-0.6** |
| | 0.5nm,0.4s,baz=87,slow=8.4,SNR=6.6 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **50.09** | **32** | P | **P** | **18 27 37.9** | **-1.1** |
| | 0.5nm,0.7s,baz=266,slow=7.1,SNR=5.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **56.39** | **188** | P | **P** | **18 28 29.7** | **+4.0** |
| | 0.5nm,0.7s,baz=1.6,slow=7.5,SNR=2.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **60.12** | **188** | P | **P** | **18 28 55.3** | **+3.6** |
| | 0.3nm,0.9s,baz=23,slow=11,SNR=1.5 | | | | | | |
| | 0.3nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **147.07** | **60** | PKPbc | **PKPbc** | **18 38 29.8** | **+1.5** |
| | 1.0nm,0.5s,baz=12,slow=20,SNR=6.2 | | | | | | |

*IDC **08** 18:21:18.5±1.7,8.7°S×112.2°E,h0km,mb3.7/7, mbtmp3.7/7,Error ellipse: s-maj=70.8km s-min=19.0km az=60.0*
*DJA **08** 18:21:29.7±0.4,9°S±4°×112°E±°,h32km,M4.1/11,mb4.3/1, MLv4.0/11*

**ISC 08 18:21:28.5**±0.8,**8.7°S**±0.08°×**112.4°E**±0.05°,**h71**km,**n20, σ1s71/23,mb3.7/7,Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PWJI** | **Pagerwojo** | **1.02** | **318** | P | **Pn** | **18 21 47.8** | **+0.5** |
| PWJI | | | | S | **Sn** | **18 22 01.2** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.67** | **79** | P | **Pn** | **18 21 56.8** | **+1.0** |
| JAGI | | | | S | **Sn** | **18 22 16.8** | **+0.3** |
| **NGJI** | **Ngawi** | **1.74** | **324** | P | **Pn** | **18 21 59.9** | **+3.2** |
| **GRJI** | **Gresik** | **1.86** | **360** | P | **Pn** | **18 22 00.1** | **+1.7** |
| GRJI | | | | S | **Sn** | **18 22 22.6** | **+1.6** |
| **UGM** | **Wanagama** | **2.13** | **294** | P | **Pn** | **18 22 03.4** | **+1.4** |
| UGM | | | | S | **Sn** | **18 22 28.3** | **+0.7** |
| **YOGI** | **Yogyakarta** | **2.38** | **294** | P | **Pn** | **18 22 09.4** | **+4.1** |
| **SMRI** | **Semarang** | **2.67** | **310** | P | **Pn** | **18 22 10.9** | **+1.7** |
| **SRBI** | **Singaraja** | **2.78** | **76** | P | **Pn** | **18 22 12.9** | **+2.2** |
| **CMJI** | **Cimerak** | **4.12** | **284** | P | **Pn** | **18 22 29.6** | **+0.5** |
| **CNJI** | **Cibinong** | **5.51** | **285** | P | **Pn** | **18 22 48.9** | **+0.9** |
| **WRA** | **Warramunga Arr** | **23.86** | **120** | P | **P** | **18 26 35.9** | **+0.3** |
| | 0.6nm,0.3s,baz=292,slow=10,SNR=24 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 30 17.3** | **+0.2** |
| | 0.4nm,1.0s,baz=298,slow=3.7,SNR=1.8 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **25.27** | **128** | P | **P** | **18 26 49.2** | **+0.8** |
| | 0.5nm,0.4s,baz=304,slow=9.1,SNR=25 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 30 20.4** | **+0.2** |
| | 0.4nm,0.8s,baz=303,slow=2.0,SNR=2.3 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **35.46** | **134** | P | **P** | **18 28 19.3** | **+1.1** |
| | 2.2nm,0.5s,baz=309,slow=8.3,SNR=8.5 | | | | | | |
| | 2.2nm,0.5s | | | | | | |
| **H08S2** | **Diego Garcia H** | **39.59** | **269** | T | T | 19 10 54.5 | |
| | baz=95 | | | | | | |
| **H08S3** | **Diego Garcia H** | **39.60** | **269** | T | T | 19 10 53.4 | |
| | baz=95 | | | | | | |
| **H08S1** | **Diego Carcia H** | **39.61** | **269** | T | T | 19 10 45.9 | |
| | baz=95 | | | | | | |
| **KSRS** | **Korea Array** | **48.22** | **16** | P | **P** | **18 30 01.3** | **-0.7** |
| | 0.5nm,0.5s,baz=198,slow=8.2,SNR=2.3 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.62** | **17** | P | **P** | **18 30 56.1** | **-0.9** |
| | 0.7nm,0.5s,baz=228,slow=5.2,SNR=4.1 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **56.63** | **355** | P | **P** | **18 31 01.5** | **-2.8** |
| | 0.2nm,0.6s,baz=166,slow=8.9,SNR=2.2 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.53** | **337** | P | **P** | **18 31 36.5** | **-1.7** |
| | 0.3nm,0.5s,baz=156,slow=7.3,SNR=5.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**IDC 08 18:30:55.5**±0.9,**5.73S**×**150.85E**,**h60**km±64km,**mb3.3**/2, **mbtmp3.7**/3,**ML2.1**/1,**MS2.7**/1,**Error ellipse: s-maj=112.8km s-min=56.0km az=124.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.17** | **225** | P | Pn | 18 32 10.5 | +0.2 |
| | 4.6nm,0.3s,baz=42,slow=15,SNR=17 | | | | | | |
| PMG | | | | S | Sn | 18 33 09.9 | +1.2 |
| | 20nm,0.3s,baz=105,slow=12,SNR=9.1 | | | | | | |
| PMG | | | | LR | LR | 18 34 21.2 | |
| | comp=Z,71nm,19.1s,baz=305,slow=40 | | | | | | |
| | 15nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.38** | **227** | P | P | 18 35 37.7 | -0.6 |
| | 1.4nm,0.5s,baz=52,slow=10,SNR=21 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.17** | **221** | P | P | 18 36 06.0 | -0.3 |
| | 1.1nm,0.7s,baz=55,slow=9.0,SNR=26 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.72** | **286** | PKPbc | PKPbc | 18 50 37.1 | 0.0 |
| | 0.3nm,0.5s,baz=68,slow=2.2,SNR=2.2 | | | | | | |

*IDC **08** 18:35:41.9±1.7,56.07°N×149.26W,h0km,mb3.9/8, mbtmp3.8/12,ML3.6/4,MS3.0/16,Error ellipse: s-maj=35.2km s-min=24.8km az=157.0*
*NEIC **08** 18:35:45.5±1.9,56.38°N±0.08°×149.3°W±0.1°,h23km±7km, ML3.7/72,ML3.5(AEIC),Error ellipse: s-maj=11.7km s-min=7.5km az=155.0*
*AEIC **08** 18:35:48.3±2.4,56.33°N±0.08°×149.3°W±0.1°,h12km±6km, Error ellipse: s-maj=11.9km s-min=8.5km az=160.0*

**ISC 08 18:35:45.5**±1.0,**56.47N**±0.09°×**149.45W**±0.06°,**h10**km, **n192,σ0s86/155,mb3.9**/8,**MS3.0**/11,**Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **2.16** | **309** | | **Sn** | **18 36 46.5** | **-1.9** |
| **KDAK** | **Kodiak Island** | **2.16** | **309** | Pn | **Pn** | **18 36 21.0** | **-0.5** |
| **KDAK** | **Kodiak Island** | **2.16** | **309** | IAML | | 18 36 54.2 | |
| | 121nm,0.5s | | | | | | |
| KDAK | | | | IAML | | 18 37 02.0 | |
| | 103nm,0.7s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.16** | **309** | Pn | **Pn** | **18 36 20.8** | **-0.7** |
| | 3.9nm,0.3s,baz=134,slow=4.2,SNR=47 | | | | | | |
| KDAK | | | | Sn | **Sn** | **18 36 46.9** | **-1.4** |
| | 16nm,0.3s,baz=131,slow=22,SNR=21 | | | | | | |
| KDAK | | | | LR | LR | 18 37 17.9 | |
| | comp=Z,84nm,21.2s,baz=123,slow=38 | | | | | | |
| | 14nm,0.3s | | | | | | |
| **OHAK** | **Old Harbor** | **2.24** | **291** | P | **Pn** | **18 36 22.0** | **-0.6** |
| **OHAK** | **Old Harbor** | **2.24** | **291** | | **Sn** | **18 36 48.6** | **-1.7** |
| **OHAK** | **Old Harbor** | **2.24** | **291** | | **Pn** | **18 36 21.8** | **-0.9** |
| **OHAK** | **Old Harbor** | **2.24** | **291** | IAML | | 18 36 49.1 | |
| | comp=E,182nm,0.7s | | | | | | |
| OHAK | | | | IAML | | 18 36 49.1 | |
| | comp=N,276nm,0.7s | | | | | | |
| **SII** | **Sitkinak Islan** | **2.63** | **274** | P | **Pn** | **18 36 27.5** | **-0.5** |
| **SII** | **Sitkinak Islan** | **2.63** | **274** | | **Pn** | **18 36 28.2** | **+0.2** |
| SII | | | | | **Sn** | **18 36 57.8** | **-2.2** |
| **SII** | **Sitkinak Islan** | **2.63** | **274** | IAML | | 18 37 05.8 | |
| | comp=E,178nm,0.9s | | | | | | |
| SII | | | | IAML | | 18 37 08.3 | |
| | comp=N,210nm,0.7s | | | | | | |
| **SYI** | **Shuyak Island** | **2.67** | **325** | | **Sn** | **18 37 01.1** | **+0.2** |
| **SYI** | **Shuyak Island** | **2.67** | **325** | Pn | **Pn** | **18 36 27.5** | **-1.1** |
| **SYI** | **Shuyak Island** | **2.67** | **325** | IAML | | 18 37 02.1 | |
| | comp=N,130nm,0.6s | | | | | | |
| SYI | | | | IAML | | 18 37 10.1 | |
| | comp=E,118nm,0.8s | | | | | | |
| **R18K** | **Karluk** | **2.95** | **294** | | **Pn** | **18 36 32.1** | **-0.2** |
| R18K | | | | | **Sn** | **18 37 06.3** | **-1.5** |
| **R18K** | **Karluk** | **2.95** | **294** | IAML | | 18 37 08.6 | |
| | comp=E,309nm,0.4s | | | | | | |
| **CNPM** | **China Poot** | **3.21** | **344** | | **Sn** | **18 37 13.1** | **-1.3** |
| **CNPM** | **China Poot** | **3.21** | **344** | Pn | **Pn** | **18 36 35.3** | **-0.8** |
| **Q19K** | **Cape Douglas,** | **3.34** | **319** | | **Pn** | **18 36 38.8** | **+1.0** |
| **BRSE** | **Bradley Lake S** | **3.36** | **349** | | **Pn** | **18 36 37.3** | **-0.7** |
| **BRLK** | **Bradley Lake** | **3.40** | **348** | | **Pn** | **18 36 37.5** | **-1.0** |
| **Q23K** | **Middleton Isla** | **3.40** | **28** | | **Pn** | **18 36 37.1** | **-1.5** |
| **Q23K** | **Middleton Isla** | **3.40** | **28** | IAML | | 18 37 15.4 | |
| | comp=N,118nm,1.1s | | | | | | |
| Q23K | | | | IAML | | 18 37 22.7 | |
| | comp=E,113nm,1.1s | | | | | | |
| **MID** | **Middleton Isla** | **3.40** | **28** | P | **Pn** | **18 36 37.3** | **-1.2** |
| **MID** | **Middleton Isla** | **3.40** | **28** | | **Pn** | **18 36 37.0** | **-1.6** |
| **MID** | **Middleton Isla** | **3.40** | **28** | IAML | | 18 37 15.8 | |
| | comp=N,127nm,1.2s | | | | | | |
| MID | | | | IAML | | 18 37 22.6 | |
| | comp=E,100nm,1.1s | | | | | | |
| **HOM** | **Homer** | **3.41** | **341** | Pn | **Pn** | **18 36 38.8** | **+0.1** |
| HOM | | | | IAML | | 18 37 26.5 | |
| | comp=N,232n

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SPCR | Spurr Chakacha | 4.96 | 344 | | | Pn | 18 37 00.3 | +0.2 |
| CKL | Chakachamna La | 4.98 | 344 | | | Pn | 18 37 00.2 | -0.1 |
| CHGN | Chignik | 4.99 | 272 | | Pn | Pn | 18 37 00.2 | -0.1 |
| KNK | Knik Glacier | 4.99 | 5 | | | Pn | 18 37 00.8 | +0.4 |
| KNK | Knik Glacier | 4.99 | 5 | IAML | | | 18 38 02.5 | |
| | comp=E,32nm,0.8s | | | | | | | |
| DIV | Divide | 5.05 | 21 | | | Pn | 18 37 00.7 | -0.7 |
| SUA | Susitna One | 5.06 | 353 | | | Pn | 18 37 00.8 | -0.6 |
| SUA | Susitna One | 5.06 | 353 | IAML | | | 18 40 08.6 | |
| | comp=N,70nm,0.7s | | | | | | | |
| SUA | | | | IAML | | | 18 40 10.0 | |
| | comp=E,57nm,1.0s | | | | | | | |
| SPWE | Spurr West | 5.09 | 343 | | | Pn | 18 37 01.5 | -0.3 |
| N19K | Bonanza Creek | 5.09 | 331 | | | Pn | 18 37 01.2 | -0.7 |
| SNH | Sunshine Point | 5.10 | 40 | | | Pn | 18 37 00.9 | -1.0 |
| SNH | Sunshine Point | 5.10 | 40 | IAML | | | 18 38 05.1 | |
| | comp=N,47nm,0.9s | | | | | | | |
| SNH | | | | IAML | | | 18 38 05.1 | |
| | comp=E,48nm,1.2s | | | | | | | |
| PMR | Palmer | 5.15 | 2 | P | | Pn | 18 37 03.2 | +0.7 |
| PMR | Palmer | 5.15 | 2 | Pn | | Pn | 18 37 01.3 | -1.2 |
| WAX | Waxell Ridge | 5.29 | 38 | | | Pn | 18 37 04.0 | -0.5 |
| WAX | Waxell Ridge | 5.29 | 38 | IAML | | | 18 38 06.9 | |
| | comp=E,76nm,0.5s | | | | | | | |
| GHO | Glory Hole Cre | 5.33 | 3 | | | Pn | 18 37 05.3 | +0.2 |
| BARK | Barkley Ridge | 5.38 | 40 | | | Pn | 18 37 04.8 | -1.0 |
| N18K | Kilae Creek | 5.41 | 324 | | | Pn | 18 37 05.5 | -0.6 |
| MESA | MESA | 5.43 | 44 | Pn | | Pn | 18 37 05.3 | -1.3 |
| O16K | Kokwok River B | 5.56 | 308 | | | Pn | 18 37 08.9 | +0.7 |
| ISLE | Juniper Island | 5.57 | 39 | | | Pn | 18 37 07.5 | -1.1 |
| SVW2 | Sparrevohn | 5.63 | 328 | Pn | | Pn | 18 37 08.4 | -0.8 |
| SKT | Skwentna | 5.63 | 350 | | | Pn | 18 37 08.1 | -1.2 |
| VRDI | Verde Repeater | 5.70 | 31 | | | Pn | 18 37 09.2 | -1.1 |
| RKAV | Rock Avalanche | 5.74 | 45 | | | Pn | 18 37 10.2 | -0.6 |
| GLB | Gilahina Butte | 5.78 | 28 | | | Pn | 18 37 10.4 | -0.9 |
| GRNC | Granite Creek | 5.87 | 40 | | | Pn | 18 37 11.9 | -0.8 |
| TABL | Table Mountain | 5.91 | 44 | | | Pn | 18 37 12.1 | -1.1 |
| MCARA | McCarthy VSAT | 5.95 | 31 | | | Pn | 18 37 13.2 | -0.4 |
| CNBA | Chernabura Isl | 5.98 | 258 | | | Pn | 18 37 13.0 | -0.9 |
| M19K | Big River Lodg | 6.02 | 337 | | | Pn | 18 37 13.5 | -1.0 |
| WASW | Wrangell South | 6.11 | 24 | | | Pn | 18 37 15.8 | -0.1 |
| WACK | Wrangell Chich | 6.13 | 23 | | | Pn | 18 37 16.3 | +0.1 |
| O15K | Ungalikthiuk R | 6.17 | 300 | | | Pn | 18 37 17.7 | +1.0 |
| CTGM | Chitina Glacie | 6.18 | 40 | | | Pn | 18 37 16.1 | -0.8 |
| LOGN | Logan Glacier | 6.21 | 42 | | | Pn | 18 37 16.1 | -1.1 |
| PNL | Peninsula | 6.22 | 55 | P | | Pn | 18 37 16.9 | -0.4 |
| BCPM | Bancas Point | 6.25 | 52 | Pn | | Pn | 18 37 16.7 | -1.0 |
| SDPT | Sand Point | 6.30 | 264 | P | | Pn | 18 37 18.7 | +0.3 |
| SDPT | Sand Point | 6.30 | 264 | | | Pn | 18 37 18.3 | -0.1 |
| N16K | Nishlik Lake | 6.33 | 313 | | | Pn | 18 37 19.1 | +0.4 |
| M17K | Holitna River | 6.45 | 323 | | | Pn | 18 37 20.2 | -0.1 |
| M16K | Timber Creek | 6.73 | 317 | | | Pn | 18 37 24.9 | +0.6 |
| M26K | Nabesna, AK | 6.80 | 26 | Pn | | Pn | 18 37 25.2 | -0.1 |
| L18K | Granite Mounta | 6.85 | 330 | | | Pn | 18 37 25.1 | -0.8 |
| O29M | Mount Kennedy | 6.89 | 52 | | | Pn | 18 37 25.9 | -0.7 |
| RND | Reindeer | 6.97 | 2 | | | Pn | 18 37 27.9 | +0.3 |
| P29M | Windy Craggy | 6.98 | 58 | | | Pn | 18 37 24.4 | -3.3 |
| PS1A | Pavlof South-1 | 6.99 | 267 | | | Pn | 18 37 27.7 | -0.1 |
| S12K | Black Hills | 7.10 | 269 | | | Pn | 18 37 29.4 | 0.0 |
| PN7A | Pavlof North-7 | 7.13 | 267 | | | Pn | 18 37 29.9 | +0.1 |
| S31K | Pelican | 7.33 | 73 | Pn | | Pn | 18 37 29.4 | -3.1 |
| L16K | Owhat River | 7.37 | 320 | | | Pn | 18 37 32.8 | -0.2 |
| BCAR | Beaver Creek A | 7.66 | 27 | Pn | | Pn | 18 37 37.2 | +0.1 |
| BPAW | Bear Paw Mtn. | 7.70 | 355 | | | Pn | 18 37 36.5 | -1.1 |
| J20K | Nowinta River | 8.08 | 345 | | | Pn | 18 37 42.3 | -0.4 |
| N30M | Aishikik Lake | 8.11 | 47 | Pn | | Pn | 18 37 42.8 | -0.4 |
| J19K | Poorman | 8.15 | 340 | Pn | | Pn | 18 37 42.8 | -0.9 |
| NEA2 | Nenana | 8.16 | 1 | | | Pn | 18 37 42.9 | -0.9 |
| S32K | Killisnoo | 8.19 | 77 | Pn | | Pn | 18 37 42.5 | -1.8 |
| O30N | Mendenhall | 8.19 | 53 | Pn | | Pn | 18 37 43.0 | -1.3 |
| CCB | Clear Creek Bu | 8.25 | 5 | | | Pn | 18 37 45.0 | -0.1 |
| L14K | Kuka Creek | 8.41 | 311 | | | Pn | 18 37 48.9 | +1.6 |
| K27K | Chicken | 8.42 | 23 | Pn | | Pn | 18 37 46.8 | -0.6 |
| ILAR | Eielson Array | 8.43 | 8 | Pn | | Pn | 18 37 47.5 | -0.1 |
| ILAR | Eielson Array | 8.43 | 8 | Pn | | Pn | 18 37 47.9 | +0.3 |
| | comp=E,0.4nm,0.3s,baz=197,slow=13,SNR=14 | | | | | | | |
| ILAR | | | | Sn | | Sn | 18 39 21.7 | -0.9 |
| | comp=E,0.2nm,0.3s,baz=193,slow=23,SNR=3.1 | | | | | | | |
| ILAR | | | | LR | | LR | 18 41 14.4 | |
| | comp=E,90nm,18.6s,baz=108,slow=38 | | | | | | | |
| | comp=E,1.5nm,0.7s | | | | | | | |
| COLA | College | 8.47 | 5 | P | | Pn | 18 37 48.0 | -0.1 |
| K15K | Wolf Creek Mou | 8.49 | 318 | Pn | | Pn | 18 37 48.1 | -0.2 |
| MDM | Murphy Dome | 8.54 | 3 | | | Pn | 18 37 49.0 | -0.2 |
| J26L | Joseph Creek | 8.56 | 17 | | | Pn | 18 37 49.6 | +0.1 |
| WHY | Whitehorse | 8.69 | 55 | | | Pn | 18 37 50.9 | -0.4 |
| I23K | Minto, Yukon-K | 8.71 | 0 | | | Pn | 18 37 51.3 | -0.1 |
| WESE | West Dahl East | 8.83 | 263 | | | Pn | 18 37 52.2 | -1.0 |
| J16K | Anvik River | 8.83 | 325 | Pn | | Pn | 18 37 52.3 | -0.8 |
| U33K | Whale Pass | 9.09 | 85 | Pn | | Pn | 18 37 52.3 | -4.3 |
| DAWY | Dawson | 9.10 | 29 | Pn | | Pn | 18 37 54.6 | -2.2 |
| CRAG | Craig | 9.21 | 89 | P | | Pn | 18 37 55.1 | -3.1 |
| PRP | Porcupine Dome | 9.28 | 10 | Pn | | Pn | 18 37 58.7 | -0.6 |
| I26K | Coal Creek Min | 9.38 | 16 | Pn | | Pn | 18 37 59.9 | -0.7 |
| H23K | Yukon River | 9.39 | 360 | Pn | | Pn | 18 38 00.4 | -0.4 |
| H24K | Noodor Dome | 9.44 | 4 | Pn | | Pn | 18 38 01.1 | -0.3 |
| K29M | Barlow Dome | 9.48 | 34 | Pn | | Pn | 18 38 00.3 | -1.7 |
| P33M | Teslin, Yukon | 9.51 | 60 | Pn | | Pn | 18 38 00.9 | -1.6 |
| Q32M | Nakina River | 9.52 | 68 | Pn | | Pn | 18 38 01.6 | -1.1 |
| M31M | Drury Creek, Y | 9.59 | 47 | Pn | | Pn | 18 38 03.2 | -0.3 |
| H19K | Roundabout Mou | 9.70 | 342 | Pn | | Pn | 18 38 05.1 | +0.2 |
| LVA | Lava Point | 9.73 | 263 | Pn | | Pn | 18 38 05.4 | -0.1 |
| IMAR | Indian Mountai | 9.77 | 350 | Pn | | Pn | 18 38 04.1 | -1.8 |
| H17K | Granite Mounta | 9.91 | 333 | Pn | | Pn | 18 38 06.5 | -1.4 |
| I28M | Miner Creek | 10.11 | 23 | Pn | | Pn | 18 38 10.5 | -0.2 |
| R33M | Jennings River | 10.25 | 66 | Pn | | Pn | 18 38 10.1 | -2.5 |
| G21K | Allakaket | 10.27 | 351 | Pn | | Pn | 18 38 10.9 | -1.8 |
| G23K | Bananza Creek | 10.29 | 359 | Pn | | Pn | 18 38 11.8 | -1.2 |
| G24K | Hadweenzic Riv | 10.31 | 4 | Pn | | Pn | 18 38 13.5 | +0.1 |
| FYU | Fort Yukon | 10.33 | 9 | Pn | | Pn | 18 38 13.5 | -0.1 |
| J30M | Hart River | 10.37 | 33 | Pn | | Pn | 18 38 15.2 | +1.0 |
| DLBC | Dease Lake | 10.64 | 71 | Pn | | Pn | 18 38 16.8 | -1.2 |
| DLBC | Dease Lake | 10.64 | 71 | Pn | | Pn | 18 38 15.7 | -2.2 |
| | comp=E,0.4nm,0.3s,baz=278,slow=13,SNR=2.3 | | | | | | | |
| DLBC | | | | LR | | LR | 18 41 49.8 | |
| | comp=E,136nm,18.9s,baz=276,slow=34 | | | | | | | |
| | comp=E,1.6nm,0.4s | | | | | | | |
| F21K | Alatna River | 10.96 | 352 | Pn | | Pn | 18 38 21.7 | -0.5 |
| F20K | Avaraart Lake | 11.02 | 347 | Pn | | Pn | 18 38 23.6 | +0.6 |
| MMPY | Sheldon Lake, | 11.07 | 49 | Pn | | Pn | 18 38 23.1 | -0.6 |
| F19K | Shaleruckik Mo | 11.12 | 343 | Pn | | Pn | 18 38 24.1 | -0.1 |
| BMAR | Burnt Mountain | 11.23 | 10 | Pn | | Pn | 18 38 24.4 | -1.5 |
| SPIA | Saint Paul Isl | 11.41 | 282 | P | | Pn | 18 38 28.2 | -0.2 |
| E19K | Redstone River | 11.61 | 345 | Pn | | Pn | 18 38 32.2 | +1.1 |
| NIKH | Nikolski High | 11.75 | 261 | P | | Pn | 18 38 32.6 | -0.4 |
| E21K | Killik River | 12.20 | 352 | Pn | | Pn | 18 38 38.6 | -0.5 |
| D22K | Ayikyak River | 12.55 | 355 | Pn | | Pn | 18 38 43.3 | -0.6 |
| E28M | Babbage River | 12.98 | 16 | Pn | | Pn | 18 38 49.8 | -0.1 |
| BBB | Bella Bella | 13.15 | 100 | LR | | LR | 18 42 32.1 | |
| | comp=E,65nm,21.9s,baz=268,slow=32 | | | | | | | |
| C23K | Itkillik River | 13.43 | 358 | Pn | | Pn | 18 38 56.8 | +0.9 |
| INK | Inuvik | 13.92 | 25 | Pn | | Pn | 18 39 04.1 | +1.6 |
| | comp=E,0.3nm,0.3s,baz=273,slow=12,SNR=3.3 | | | | | | | |
| | comp=E,1.3nm,0.4s | | | | | | | |
| YKA | Yellowknife Ar | 18.52 | 57 | LR | | LR | 18 46 33.1 | |
| | comp=E,45nm,19.5s,baz=202,slow=35 | | | | | | | |
| NEW | Newport | 21.21 | 99 | LR | | LR | 18 47 26.0 | |
| | comp=E,34nm,21.2s,baz=282,slow=33 | | | | | | | |
| SHEM | Shemya Is, Ala | 21.28 | 275 | LR | | LR | 18 49 34.2 | |
| | comp=E,43nm,18.2s,baz=77,slow=39 | | | | | | | |
| YBH | Yreka Blue Hor | 22.68 | 119 | LR | | LR | 18 47 12.1 | |
| | comp=E,47nm,18.2s,baz=325,slow=31 | | | | | | | |
| ELK | Elko | 27.18 | 111 | LR | | LR | 18 50 31.3 | |
| | comp=E,38nm,18.4s,baz=289,slow=33 | | | | | | | |
| PDAR | Pinedale Array | 28.79 | 101 | LR | | LR | 18 51 22.3 | |
| | comp=E,11nm,19.4s,baz=267,slow=33 | | | | | | | |
| MA2 | Magadan | 30.89 | 301 | LR | | LR | 18 55 37.1 | |
| | comp=E,30nm,18.9s,baz=137,slow=38 | | | | | | | |
| ULM | Lac du Bonnet | 31.82 | 78 | LR | | LR | 18 54 37.5 | |
| | comp=E,52nm,19.2s,baz=299,slow=36 | | | | | | | |
| FRB | Frobisher Bay | 38.36 | 45 | LR | | LR | 18 57 52.5 | |
| | comp=E,35nm,18.3s,baz=348,slow=34 | | | | | | | |
| ASAJ | Asahikawa | 43.36 | 283 | LR | | LR | 19 03 25.8 | |
| | comp=E,23nm,18.5s,baz=319,slow=38 | | | | | | | |
| MJAR | Matsushiro Arr | 51.05 | 279 | LR | | LR | 19 10 18.3 | |
| | comp=E,8.9nm,18.1s,baz=94,slow=40 | | | | | | | |
| SONM | Songino Array | 58.45 | 310 | P | | P | 18 45 42.7 | +1.4 |
| | comp=E,0.7nm,0.8s,baz=46,slow=8.5,SNR=6.7 | | | | | | | |
| | comp=E,0.7nm,0.8s | | | | | | | |
| ZALV | Zalesovo Beam | 61.36 | 327 | P | | P | 18 46 01.6 | +0.6 |
| | comp=E,1.2nm,0.7s,baz=45,slow=8.6,SNR=5.2 | | | | | | | |
| ZALV | | | | LR | | LR | 19 15 21.4 | |
| | comp=E,10nm,19.2s,baz=76,slow=38 | | | | | | | |
| | comp=E,1.2nm,0.7s | | | | | | | |
| FINES | FINESS Array B | 62.38 | 2 | P | | P | 18 46 08.1 | +0.4 |
| | comp=E,1.9nm,0.8s,baz=18,slow=13,SNR=4.0 | | | | | | | |
| | comp=E,1.9nm,0.8s | | | | | | | |
| KURBB | Kurchatov Arra | 66.14 | 329 | P | | P | 18 46 32.7 | +0.2 |
| | comp=E,0.4nm,0.7s,baz=35,slow=6.4,SNR=3.2 | | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | | |
| MKAR | Makanchi Array | 68.39 | 325 | P | | P | 18 46 47.4 | +0.4 |
| | comp=E,0.5nm,0.5s,baz=26,slow=5.2,SNR=9.8 | | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | | |
| AKASG | Malin Array Be | 73.19 | 1 | P | | P | 18 47 16.3 | +0.3 |
| | comp=E,1.6nm,0.5s,baz=2.4,slow=6.1,SNR=3.0 | | | | | | | |
| | comp=E,1.6nm,0.5s | | | | | | | |
| ESDC | Sonseca Array | 79.86 | 26 | P | | P | 18 47 54.4 | +0.3 |
| | comp=E,0.6nm,0.7s,baz=344,slow=6.6,SNR=4.9 | | | | | | | |
| | comp=E,0.6nm,0.7s | | | | | | | |
| CMAR | Chiang Mai Arr | 86.12 | 298 | P | | P | 18 48 24.5 | -2.2 |
| | comp=E,0.4nm,0.5s,baz=14,slow=6.8,SNR=4.1 | | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | | |

*NOU **08** 18:36:04.5, 38°.23S×176°.23E, h191km, MLv3.6/8, North Island, New Zealand*
*WEL **08** 18:36:09.7±0.6, 38°.S±4°.×17°.6E±°, h144km±6km, M2.7/24, ML2.6/7, MLv2.7/24, Error ellipse: s-maj=0.0km s-min=0.0km az=128.7, confirmed*
**ISC 08 18:36:05.1**±1.7, **38°.32S**±0°.05×**176°.11E**±0°.05, **h181**km±9km, **n90**, σ1°**53**/101, **North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TLZ | Tolley Road | 0.45 | 268 | P | Pn | 18 36 31.0 | +1.1 |
| MRHZ | Matea Rd | 0.57 | 155 | P | Pn | 18 36 31.3 | +0.9 |
| MRHZ | | | | S | Sn | 18 36 47.5 | -2.5 |
| RTZ | Ruatahuna | 0.74 | 114 | P | Pn | 18 36 32.4 | +1.1 |
| RTZ | | | | S | Sn | 18 36 49.6 | -2.0 |
| TOZ | Tahuroa Road | 0.76 | 320 | P | Pn | 18 36 32.4 | +1.1 |
| MTHZ | Maungataniwha | 0.78 | 133 | P | Pn | 18 36 32.8 | +1.3 |
| MTHZ | | | | S | Sn | 18 36 50.3 | -1.7 |
| URZ | Urewera | 0.79 | 86 | P | Pn | 18 36 31.8 | +0.3 |
| URZ | Urewera | 0.79 | 86 | P | Pn | 18 36 32.0 | +0.5 |
| TMVZ | Te Maari | 0.86 | 202 | P | Pn | 18 36 33.5 | +1.4 |
| TMVZ | | | | S | Sn | 18 36 52.3 | -0.8 |
| ETVZ | East Tongariro | 0.88 | 201 | P | Pn | 18 36 33.6 | +1.4 |
| ETVZ | | | | S | Sn | 18 36 53.0 | -0.2 |
| BKZ | Black Stump Fm | 0.90 | 161 | P | Pn | 18 36 33.3 | +1.0 |
| BKZ | Black Stump Fm | 0.90 | 161 | P | Pn | 18 36 33.5 | +1.3 |
| BKZ | | | | S | Sn | 18 36 51.4 | -2.0 |
| TWVZ | Taurewa | 0.92 | 215 | P | Pn | 18 36 33.9 | +1.5 |
| COVZ | Chateau Observ | 0.99 | 207 | P | Pn | 18 36 34.5 | +1.6 |
| HIZ | Hauiti | 1.01 | 258 | P | Pn | 18 36 34.5 | +1.6 |
| HIZ | Hauiti | 1.01 | 258 | P | Pn | 18 36 34.5 | +1.6 |
| TUVZ | Tukino | 1.01 | 200 | P | Pn | 18 36 34.9 | +1.7 |
| FWVZ | Far West T-bar | 1.03 | 205 | P | Pn | 18 36 35.1 | +1.7 |
| RAGZ | Rawiri | 1.04 | 100 | P | Pn | 18 36 34.6 | +1.3 |
| WHVZ | Whangaehu Hut | 1.05 | 203 | P | Pn | 18 36 35.0 | +1.4 |
| SNGZ | Shannon Statio | 1.07 | 116 | P | Pn | 18 36 35.3 | +1.8 |
| TRVZ | Turoa | 1.07 | 204 | P | Pn | 18 36 35.5 | +1.8 |
| WNVZ | Wahianoa | 1.09 | 202 | P | Pn | 18 36 35.4 | +1.6 |
| MWZ | Matawai | 1.11 | 91 | P | Pn | 18 36 34.9 | +1.1 |
| MWZ | | | | S | Sn | 18 36 54.0 | -2.0 |
| MOWZ | Moawhango | 1.12 | 194 | P | Pn | 18 36 35.2 | +1.3 |
| KWHZ | Kaweka Forest | 1.13 | 168 | P | Pn | 18 36 35.7 | +1.7 |
| PKVZ | Pokaka | 1.14 | 211 | P | Pn | 18 36 35.7 | +1.7 |
| WHHZ | Waihua | 1.16 | 131 | P | Pn | 18 36 36.1 | +2.0 |
| ARHZ | Aropaoanui | 1.17 | 144 | P | Pn | 18 36 36.4 | +2.2 |
| MCHZ | McNeill Hill | 1.22 | 158 | P | Pn | 18 36 37.0 | +2.4 |
| VRZ | Vera Road | 1.33 | 232 | P | Pn | 18 36 37.8 | +2.2 |
| KRHZ | Kereru | 1.34 | 171 | P | Pn | 18 36 37.5 | +1.8 |
| KRHZ | | | | S | Sn | 18 36 58.9 | -0.6 |
| RIGZ | Rimuhau | 1.35 | 107 | P | Pn | 18 36 37.8 | +2.0 |
| KNZ | Kokohu | 1.41 | 120 | P | Pn | 18 36 38.0 | +1.7 |
| KNZ | | | | S | Sn | 18 36 59.2 | -1.3 |
| MKAZ | Moumakai | 1.43 | 328 | P | Pn | 18 36 38.0 | +1.5 |
| HAZ | Te Kaha | 1.43 | 68 | P | Pn | 18 36 37.6 | +1.1 |
| HAZ | | | | S | Sn | 18 36 58.0 | -2.8 |
| CKHZ | Cape Kidnapper | 1.54 | 151 | P | Pn | 18 36 39.9 | +2.4 |
| CKHZ | | | | S | Sn | 18 37 02.0 | -0.6 |
| KAHZ | Kahuranaki | 1.59 | 158 | P | Pn | 18 36 40.3 | +2.3 |
| PNHZ | Pukenui | 1.60 | 178 | P | Pn | 18 36 39.8 | +1.7 |
| PKGZ | Pakihiroa | 1.62 | 74 | P | Pn | 18 36 39.6 | +1.3 |
| MHGZ | Mahia Peninsul | 1.63 | 121 | P | Pn | 18 36 40.6 | +2.2 |
| WIAZ | Waiheke Island | 1.71 | 333 | P | Pn | 18 36 40.9 | +1.7 |
| AWAZ | Awhitu Peninsu | 1.71 | 317 | P | Pn | 18 36 40.9 | +1.7 |
| PUZ | Puketiti | 1.71 | 82 | P | Pn | 18 36 41.9 | +2.7 |
| TSZ | Takapari Road | 1.74 | 184 | P | Pn | 18 36 41.3 | +1.7 |
| LREZ | Lake Rotokare | 1.75 | 229 | P | Pn | 18 36 42.4 | +2.8 |
| WPHZ | Waipukurau | 1.76 | 172 | P | Pn | 18 36 41.7 | +1.9 |
| PXZ | Pawanui | 1.81 | 161 | P | Pn | 18 36 42.2 | +2.0 |
| MBAZ | Motutapu North | 1.82 | 328 | P | Pn | 18 36 42.1 | +1.8 |
| DVHZ | Dannevirke | 1.98 | 179 | P | Pn | 18 36 43.6 | +1.6 |
| PRHZ | Porangahau | 1.99 | 168 | P | Pn | 18 36 43.9 | +1.8 |
| POWZ | Post Office Ro | 2.09 | 187 | P | Pn | 18 36 44.6 | +1.4 |
| ANWZ | Angora Road | 2.16 | 173 | P | Pn | 18 36 45.9 | +2.0 |
| PRWZ | Pori Road | 2.24 | 183 | P | Pn | 18 36 46.6 | +1.8 |
| BFZ | Birch Farm | 2.36 | 178 | P | Pn | 18 36 47.0 | +1.7 |
| BFZ | Birch Farm | 2.36 | 178 | P | Pn | 18 36 47.8 | +1.5 |
| MRZ | Mangatainoka R | 2.38 | 190 | P | Pn | 18 36 47.7 | +1.3 |
| TIWZ | Tintock | 2.46 | 184 | P | Pn | 18 36 48.9 | +1.5 |
| CPWZ | Castlepoint | 2.59 | 178 | P | Pn | 18 36 50.9 | +2.1 |
| OGWZ | Otaki Gorge | 2.60 | 196 | P | Pn | 18 36 50.3 | +1.4 |
| HOWZ | Holdsworth Sta | 2.62 | 190 | P | Pn | 18 36 50.3 | +1.1 |
| KIW | Kapiti Island | 2.71 | 200 | P | Pn | 18 36 51.1 | +0.9 |
| TMWZ | Te Maipa | 2.79 | 183 | P | Pn | 18 36 52.4 | +1.1 |
| MTW | Mount Morrison | 2.88 | 189 | P | Pn | 18 36 53.0 | +0.8 |
| CAW | Cannon Point | 2.90 | 196 | P | Pn | 18 36 53.6 | +1.0 |
| DUWZ | D'Urville Isla | 3.00 | 214 | P | Pn | 18 36 54.8 | +1.0 |
| TRWZ | Traveller | 3.10 | 186 | P | Pn | 18 36 55.8 | +0.9 |
| PAWZ | Paruwai Farm | 3.11 | 190 | P | Pn | 18 36 55.8 | +0.7 |
| WEL | Wellington | 3.14 | 199 | P | Pn | 18 36 56.6 | +1.1 |
| MSWZ | Moikau Station | 3.17 | 192 | P | Pn | 18 36 56.4 | +0.6 |
| SNZO | South Karori | 3.18 | 199 | P | Pn | 18 36 56.6 | +0.7 |
| TCW | Tory Channel | 3.22 | 205 | P | Pn | 18 36 57.2 | +0.8 |
| BHW | Baring Head | 3.23 | 197 | P | Pn | 18 36 57.1 | +0.5 |
| PLWZ | Palliser | 3.31 | 191 | P | Pn | 18 36 58.2 | +0.5 |
| TUWZ | Tuamarina | 3.53 | 208 | P | Pn | 18 37 01.7 | +1.5 |
| NNZ | Nelson | 3.58 | 215 | P | Pn | 18 37 01.6 | +0.7 |
| TKNZ | Takaka Hill | 3.64 | 221 | P | Pn | 18 37 02.2 | +0.5 |
| QRZ | Quartz Range | 3.73 | 227 | P | Pn | 18 37 03.9 | +1.1 |
| QRZ | Quartz Range | 3.73 | 227 | P | Pn | 18 37 03.0 | +0.2 |
| BSWZ | Blackbirch Sta | 3.80 | 206 | P | Pn | 18 37 04.5 | +0.8 |
| MRNZ | Matariki Terra | 4.02 | 219 | P | Pn | 18 37 06.7 | +0.3 |
| THZ | Tophouse | 4.23 | 215 | P | Pn | 18 37 10.1 | +0.9 |
| KHZ | Kahutara | 4.54 | 205 | P | Pn | 18 37 13.7 | +0.7 |
| KHZ | Kahutara | 4.54 | 205 | P | Pn | 18 37 13.7 | +0.7 |
| GVZ | Greta Valley S | 5.20 | 206 | P | Pn | 18 37 21.7 | +0.1 |
| LTZ | Lake Taylor | 5.33 | 212 | P | Pn | 18 37 24.1 | +0.7 |
| OKCZ | Okains Bay | 5.87 | 202 | P | Pn | 18 37 30.6 | +0.2 |
| MQZ | McQueen's Vall | 5.99 | 205 | P | Pn | 18 37 30.8 | -1.0 |
| RPZ | Rata Peaks | 6.61 | 214 | P | Pn | 18 37 41.9 | +1.9 |
| | 23nm,2.1s | | | | | | |
| RPZ | Rata Peaks | 6.61 | 214 | P | Pn | 18 37 42.0 | +1.9 |
| TMZ | Timaru | 7.17 | 211 | P | Pn | 18 37 47.0 | -0.5 |

*IPEC **08** 18:39:57.5±0.2, 50°.06N×18°.49E, h1km, ML2.9/4, Error ellipse: s-maj=2.0km s-min=1.0km az=163.0*
*BGR **08** 18:39:58.2±0.4, 50°.07N×18°.42E, h1km, ML3.1/14, Error ellipse: s-maj=6.7km s-min=5.6km az=22.0*
*MCSM **08** 18:39:59.2±0.2, 50°.N±3°.×1°.8E±°, h9km, mb4.3, MLv3.2*
*PRU **08** 18:39:59.7, 50°.07N×18°.34E, h0km*
**ISC 08 18:39:57.3**±0.7, **50°.07N**±0°.02×**18°.39E**±0°.02, **h0**km, **n78**, σ1°**49**/125, **Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RAC | Raciborz | 0.13 | 278 | *e*PG | Pg | 18 40 02.0 | +2.3 |
| RAC | | | | *e*SG | Sg | 18 40 05.1 | +3.7 |
| OKC | Ostrava-Krasne | 0.28 | 215 | *e*PG | Pb | 18 40 04.0 | -1.1 |
| OKC | | | | *e*SG | Sb | 18 40 08.9 | -1.5 |
| | comp=Z,654nm,0.6s | | | | | | |
| OKC | Ostrava-Krasne | 0.28 | 215 | *e*Pg | Pb | 18 40 04.0 | -1.1 |
| OKC | | | | *e*Sg | Sb | 18 40 08.8 | -1.5 |
| MORC | Moravsky Berou | 0.62 | 243 | *e*Pg | Pb | 18 40 10.1 | -0.9 |
| | baz=65 | | | | | | |
| MORC | | | | *e*Sg | Sb | 18 40 18.7 | -1.6 |
| | 266nm,0.7s,baz=65 | | | | | | |
| MORC | Moravsky Berou | 0.62 | 243 | *e*PG | Pb | 18 40 10.2 | -0.9 |
| MORC | | | | *e*SG | Sb | 18 40 18.8 | -1.6 |
| MORC | Moravsky Berou | 0.62 | 243 | *e*Pg | Pb | 18 40 10.1 | -0.9 |
| MORC | | | | *e*Sg | Sb | 18 40 19.9 | -0.4 |
| MAUC | Maruska | 0.79 | 208 | *e*PG | Pb | 18 40 13.8 | -0.1 |
| OJC | Ojcow | 0.92 | 80 | *e*Pg | Pg | 18 40 14.2 | -0.6 |
| OJC | | | | *e*Sg | Sg | 18 40 26.0 | -0.6 |
| OJC | Ojcow | 0.92 | 80 | *e*Pg | Pg | 18 40 14.2 | -0.6 |
| KRLC | Kraliky | 1.04 | 271 | *e*SG | Sg | 18 40 30.1 | -0.5 |
| | comp=Z,206nm,0.4s | | | | | | |
| JAVC | Velka Javorina | 1.30 | 202 | *e*Pg | Pb | 18 40 22.3 | -0.2 |
| | baz=24 | | | | | | |
| DPC | Dobruska-Polom | 1.36 | 283 | *e*PG | Pb | 18 40 23.9 | +0.3 |
| DPC | | | | *e*SG | Sn | 18 40 43.1 | +0.7 |
| | comp=Z,229nm,0.6s | | | | | | |
| DPC | Dobruska-Polom | 1.36 | 283 | *e*Pg | Pb | 18 40 23.8 | +0.2 |
| DPC | | | | *e*Sg | Sn | 18 40 43.0 | +0.7 |
| DPC | Dobruska-Polom | 1.36 | 283 | P | Pb | 18 40 23.8 | +0.2 |
| DPC | | | | S | Sn | 18 40 42.7 | +0.4 |
| VRAC | Vranov | 1.39 | 238 | *e*Pg | Pn | 18 40 23.7 | -0.2 |
| | baz=58 | | | | | | |
| VRAC | | | | *e*Sg | Sn | 18 40 42.9 | -0.1 |
| | 83nm,0.5s,baz=58 | | | | | | |
| VRAC | Vranov | 1.39 | 238 | *e*PG | Pn | 18 40 23.8 | -0.2 |
| VRAC | | | | *e*SG | Sn | 18 40 43.0 | -0.1 |
| NIE | Niedzica | 1.40 | 117 | *e*Pg | Pg | 18 40 23.2 | -0.8 |
| NIE | | | | *e*Sg | Sg | 18 40 42.0 | -0.1 |
| NIE | Niedzica | 1.40 | 117 | P | Pg | 18 40 23.0 | -1.0 |
| NIE | | | | S | Sn | 18 40 43.8 | +0.6 |
| OSTC | Ostas | 1.48 | 290 | *e*PG | Sn | 18 40 25.3 | +0.1 |
| OSTC | | | | *e*SG | Sn | 18 40 46.9 | +1.7 |
| | comp=Z,123nm,0.7s | | | | | | |
| KSP | Ksiaz | 1.55 | 301 | *e*Pg | Pn | 18 40 25.8 | -0.3 |
| KSP | | | | *e*Sg | Sn | 18 40 46.4 | -0.5 |
| KSP | Ksiaz | 1.55 | 301 | *e*Pn | Pn | 18 40 26.1 | -0.1 |
| KSP | | | | *e*Sg | Sg | 18 40 48.4 | +1.3 |
| KSP | Ksiaz | 1.55 | 301 | P | Pn | 18 40 25.7 | -0.4 |
| KSP | | | | S | Sg | 18 40 49.3 | +2.2 |
| CHVC | Chvalec | 1.59 | 290 | *e*PG | Pb | 18 40 27.2 | -0.3 |
| CHVC | | | | *e*SG | Sn | 18 40 46.0 | -1.9 |
| UPC | Upice | 1.59 | 287 | *e*PG | Pb | 18 40 27.2 | -0.3 |
| VYHS | Vyhne | 1.60 | 169 | *e*PG | Pn | 18 40 26.2 | -0.8 |
| VYHS | | | | *e*SG | Sg | 18 40 48.9 | +0.3 |
| KRUC | Moravsky | 1.65 | 233 | *e*Pn | Pb | 18 40 28.0 | -0.4 |
| | baz=53 | | | | | | |
| KRUC | | | | *e*Sg | Sg | 18 40 50.7 | +0.6 |
| | 91nm,0.7s,baz=53 | | | | | | |
| MODS | Modra-Piesok | 1.85 | 204 | *e*PN | Pn | 18 40 30.1 | -0.1 |
| MODS | | | | *e*LG | Lg | 18 41 04.3 | |
| TREC | Trest | 2.04 | 249 | *e*SG | Sg | 18 41 03.7 | +0.9 |
| KECS | Kecovo | 2.09 | 138 | *e*PN | Pn | 18 40 32.8 | -0.8 |
| KECS | | | | *e*SN | Sn | 18 40 58.8 | -1.5 |
| KECS | | | | *e*LG | Lg | 18 41 03.8 | |
| CRVS | Cervenica-Dubn | 2.31 | 119 | *e*PG | Pb | 18 40 39.7 | -0.2 |
| CRVS | | | | *e*SG | Sg | 18 41 11.3 | -0.3 |
| GOPC | GO Pecny, Ondr | 2.33 | 268 | *e*PG | Pb | 18 40 40.1 | -0.1 |
| GOPC | | | | *e*SG | Sg | 18 41 10.8 | -1.4 |
| | comp=Z,33nm,0.5s | | | | | | |
| PRU | Pruhonice | 2.49 | 270 | *e*PG | Pb | 18 40 42.8 | 0.0 |
| PRU | | | | *e*SG | Sg | 18 41 16.0 | -1.1 |
| | comp=Z,29nm,0.4s | | | | | | |
| PVCC | Panska 

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKRK** | **Kirkuk** | **0.14** | **304** | *e*Pg | **Pg** | **18 49 55.3** | **+0.3** |
| IKRK | | | | *e*Sg | **Sg** | **18 49 57.0** | **-0.1** |
| **IDHR** | **Dehrash** | **1.69** | **111** | Pg | **Pg** | **18 50 23.3** | **-1.1** |
| IDHR | | | | Sg | **Sg** | **18 50 47.8** | **+1.6** |
| **GLG1** | **Gilan-e-Gharb** | **1.69** | **135** | Pg | **Pb** | **18 50 22.9** | **-0.4** |
| **MAHB** | **Mahabad** | **1.75** | **34** | Pg | **Pg** | **18 50 24.7** | **-0.9** |
| **IGHG** | **Ghaleghazi** | **1.98** | **119** | Pn | **Pb** | **18 50 28.4** | **-0.1** |
| **BHD** | **Baghdad** | **2.05** | **182** | *e*Pn | **Pb** | **18 50 28.0** | **-1.4** |
| BHD | | | | *e*Sn | **Sb** | **18 50 55.0** | **-0.1** |
| **ILIN** | **Lien** | **2.08** | **101** | Pn | **Pb** | **18 50 29.3** | **-0.7** |
| **IBDR** | **Badra** | **2.51** | **151** | *e*Pn | **Pn** | **18 50 34.4** | **+1.3** |

*IDC **08** 18:57:09.5±8.6,22°.46S×178°.80E,h624km±68km,mb2.8/2, mbtmp3.8/4,Error ellipse: s-maj=230.3km s-min=40.6km az=152.0*

**ISC 08 18:57:06.2±2.7,23°.0S±0°.4×179°.2E±0°.3,h600km,n6, σ0991/7,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.38** | **349** | P | **P** | **18 58 42.4** | **0.0** |
| | 2.4nm,0.5s,baz=108,slow=20,SNR=0.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **11.78** | **272** | P | **P** | **18 59 42.3** | **-0.5** |
| | 4.5nm,0.7s,baz=90,slow=19,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **41.41** | **260** | P | **P** | **19 04 01.1** | **-0.9** |
| | 0.6nm,0.5s,baz=91,slow=7.0,SNR=26 | | | | | | |
| ASAR | | | | PcP | **pP** | **19 05 45.2** | **+1.1** |
| | 0.1nm,0.4s,baz=110,slow=4.2,SNR=1.2 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.69** | **265** | P | **P** | **19 04 05.0** | **+0.7** |
| | 1.2nm,0.6s,baz=98,slow=6.8,SNR=11 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **141.11** | **351** | PKP | **PKPdf** | **19 15 28.3** | **-0.5** |
| | 1.1nm,0.9s,baz=15,slow=5.0,SNR=3.9 | | | | | | |
| **HFS** | **Hagfors** | **141.55** | **348** | PKP | **PKPdf** | **19 15 29.8** | **+0.3** |
| | 2.3nm,0.6s,baz=29,slow=3.3,SNR=8.1 | | | | | | |

**JMA 08 19:04:23.3±0.4,25°.N±3°.×122°.3E±°.,h158km,MV2.1/9,NW OFF ISHIGAKIJIMA IS,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.89** | **156** | *e*P | Pn | 19 04 48.1 | +0.2 |
| **IRIF** | **Iriomote-Funau** | **1.41** | **131** | *e*P | Pn | 19 04 52.6 | 0.0 |
| **JKRS** | **Kuro-shima** | **1.67** | **127** | P | Pn | 19 04 55.8 | +0.5 |
| JKRS | | | | *e*S | Sn | 19 05 20.6 | +0.7 |
| **JIJ** | **Ishigaki jima** | **1.70** | **122** | *e*P | Pn | 19 04 55.6 | 0.0 |
| JIJ | | | | *e*S | Sn | 19 05 20.0 | -0.4 |
| **JISG** | **Ishigakijimahi** | **1.73** | **113** | *e*P | Pn | 19 04 56.1 | +0.2 |
| JISG | | | | *e*S | Sn | 19 05 21.9 | +0.9 |
| **JTJ** | **Tarama** | **2.05** | **107** | *e*P | Pn | 19 05 00.1 | +0.6 |
| JTJ | | | | *i* S | Sn | 19 05 27.9 | +0.7 |

**TAP 08 19:05:03.3,24°.11N×121°.46E,h2km,ML1.0,C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LXIB** | **Xiulin Townshi** | **0.09** | **205** | *e*P | Pg | 19 05 06.4 | +1.2 |
| | baz=204 | | | | | | |
| LXIB | | | | S | Sg | 19 05 08.1 | +1.8 |
| | baz=204 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.10** | **14** | *i* P | Pg | 19 05 06.3 | +0.9 |
| | baz=14 | | | | | | |
| ETLH | | | | *e*S | Sg | 19 05 08.2 | +1.4 |
| | baz=14 | | | | | | |
| **TWD** | **Chiawan** | **0.13** | **101** | *e*P | Pg | 19 05 07.4 | +1.5 |
| | baz=99 | | | | | | |
| TWD | | | | *e*S | Sg | 19 05 09.6 | +2.0 |
| | baz=99 | | | | | | |
| **ETM** | **Tongmen** | **0.14** | **166** | *e*P | Pg | 19 05 07.5 | +1.5 |
| | baz=174 | | | | | | |
| ETM | | | | S | Sg | 19 05 09.7 | +1.8 |
| | baz=174 | | | | | | |
| **NACB** | **Ninganchiao** | **0.14** | **62** | P | Pg | 19 05 07.2 | +1.1 |
| | baz=53 | | | | | | |
| NACB | | | | *e*S | Sg | 19 05 09.7 | +1.7 |
| | baz=53 | | | | | | |
| **ETL** | **Fush Village** | **0.16** | **71** | *e*P | Pg | 19 05 07.8 | +1.4 |
| | baz=63 | | | | | | |
| ETL | | | | S | Sg | 19 05 10.6 | +2.0 |
| | baz=63 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.18** | **283** | *i* P | Pg | 19 05 07.8 | +0.9 |
| | baz=284 | | | | | | |
| WHF | | | | *e*S | Sg | 19 05 10.4 | +1.1 |
| | baz=284 | | | | | | |
| **HWA** | **Hwalien** | **0.19** | **133** | *e*P | Pg | 19 05 09.0 | +2.1 |
| | baz=126 | | | | | | |
| **FUSS** | **Fushou** | **0.24** | **306** | *e*P | Pg | 19 05 09.2 | +1.3 |
| | baz=306 | | | | | | |
| FUSS | | | | *e*S | Sg | 19 05 13.2 | +2.1 |
| | baz=306 | | | | | | |
| **CHGB** | **Renai** | **0.26** | **260** | *e*P | Pb | 19 05 09.7 | -1.2 |
| | baz=263 | | | | | | |
| CHGB | | | | S | Sg | 19 05 13.6 | +1.9 |
| | baz=263 | | | | | | |
| **ESL** | **Shilin** | **0.29** | **184** | *e*P | Pb | 19 05 10.3 | -1.0 |
| | baz=183 | | | | | | |
| ESL | | | | *e*S | Sb | 19 05 14.9 | -1.6 |
| | baz=183 | | | | | | |
| **TWT** | **Tachien** | **0.29** | **300** | *e*P | Pb | 19 05 10.2 | -1.2 |
| | baz=299 | | | | | | |
| TWT | | | | *e*S | Sb | 19 05 15.0 | -1.8 |
| | baz=299 | | | | | | |
| **OWD** | **Renai** | **0.30** | **240** | *i* P | Pb | 19 05 10.3 | -1.1 |
| | baz=241 | | | | | | |
| OWD | | | | *e*S | Sg | 19 05 14.0 | +1.1 |
| | baz=241 | | | | | | |
| **TDCB** | **Techi** | **0.31** | **299** | *e*P | Pb | 19 05 10.8 | -0.9 |
| | baz=299 | | | | | | |
| TDCB | | | | *i* S | Sg | 19 05 15.2 | +1.9 |
| | baz=299 | | | | | | |
| **WUSB** | **Renai** | **0.33** | **250** | P | Pb | 19 05 11.2 | -0.8 |
| | baz=252 | | | | | | |
| WUSB | | | | S | Sg | 19 05 15.5 | +1.6 |
| | baz=252 | | | | | | |
| **NNSB** | **Datong** | **0.33** | **348** | *e*P | Pb | 19 05 11.5 | -0.5 |
| | baz=348 | | | | | | |
| NNSB | | | | *e*S | Sg | 19 05 15.3 | +1.3 |
| | baz=348 | | | | | | |
| **LATG** | **Datong** | **0.43** | **9** | P | Pb | 19 05 13.1 | -0.7 |
| | baz=349 | | | | | | |
| **LIOB** | **Emei** | **0.67** | **323** | *e*P | Pb | 19 05 17.1 | -0.6 |
| | baz=324 | | | | | | |
| LIOB | | | | *e*S | Sb | 19 05 27.7 | +0.1 |
| | baz=324 | | | | | | |

*TEH **08** 19:13:38.3,32°.97N×46°.17E,h14km±45km,ML3.3*
*ISN **08** 19:13:38.8±0.5,32°.95N×46°.12E,h4km±2km,ML3.2*

**ISC 08 19:13:39.2±1.2,33°.00N±0°.07×46°.13E±0°.04,h10km,n17, σ1827/21,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.20** | **304** | *e*Pg | **Pg** | **19 13 43.7** | **+0.2** |
| IBDR | | | | *e*Sg | **Sg** | **19 13 46.8** | **+0.4** |
| IBDR | | | | AML | AML | 19 13 51.4 | |
| | comp=N,5μm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 19 13 52.0 | |
| | comp=E,2μm,0.6s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **0.63** | **6** | Pg | **Pg** | **19 13 51.4** | **-0.1** |
| ILBA | | | | Sg | **Sb** | **19 14 01.7** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **1.13** | **351** | Pg | **Pn** | **19 14 01.6** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **1.38** | **15** | Pg | **Pg** | **19 14 06.6** | **+0.8** |
| **KCHF** | **Cheshme Sefid,** | **1.48** | **30** | Pg | **Pg** | **19 14 08.1** | **+0.3** |
| **BHD** | **Baghdad** | **1.50** | **281** | *e*Pn | **Pg** | **19 14 08.0** | **+0.1** |
| BHD | | | | *e*Sn | **Sg** | **19 14 30.0** | **+2.6** |
| **IKFM** | **Kafar-mosalman** | **1.53** | **69** | Pg | **Pg** | **19 14 08.4** | **-0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **1.57** | **343** | Pg | **Pg** | **19 14 10.0** | **+0.6** |
| **IDHR** | **Dehrash** | **1.71** | **7** | Pg | **Pg** | **19 14 12.0** | **-0.1** |
| **ILIN** | **Lien** | **2.04** | **20** | Pn | **Pb** | **19 14 16.3** | **-0.2** |
| **IBZA** | **Bozab** | **2.06** | **44** | Pn | **Pb** | **19 14 16.3** | **-0.5** |
| **SNQR** | **Sonqor, Kerman** | **2.23** | **33** | Pn | **Pb** | **19 14 19.2** | **-0.7** |
| **HSAM** | **Samen** | **2.39** | **59** | Pn | **Pb** | **19 14 20.0** | **-2.6** |
| **IKRK** | **Kirkuk** | **2.82** | **329** | *e*Pn | **Pb** | **19 14 27.3** | **-2.4** |
| IKRK | | | | *e*Sn | **Sb** | **19 15 02.5** | **-1.8** |
| **ZNGN** | **Zangian** | **4.08** | **101** | Pn | **Pn** | **19 14 42.2** | **+0.2** |
| **QAMS** | **Qamsar** | **4.47** | **79** | Pn | **Pn** | **19 14 48.8** | **+1.5** |
| **KRSH** | **Karshahi** | **5.11** | **77** | Pn | **Pn** | **19 14 57.3** | **+1.3** |

*IDC **08** 19:14:50.7±0.6,60°.64S×41°.42W,h0km,mb4.2/11, mbtmp4.3/14,ML4.2/3,MS3.8/30,Error ellipse: s-maj=22.9km s-min=15.3km az=68.0*
*NEIC **08** 19:14:52.1±1.4,60°.70S±0°.09×41°.4W±0°.2,h10km±1km, mb5.0/50,Error ellipse: s-maj=16.3km s-min=13.9km az=121.0*
*GCMT **08** 19:14:56.1±0.3,60°.82S±0°.02×41°.18W±0°.03,h15km±1km, MW5.0/98,Moment Tensor Solution. s28,c30; s98,c129; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr0.77±.11; Mθθ-0.27±.11; Mφφ-0.50±.10; Mrθ0.54±.36; Mθφ2.99±.11; Mφr1.60±.39; Best double couple: Mo3.49900×10¹⁶ NP1:φs358.00000°,δ78.00000°,λ150.00000°. NP2: φs95.00000°,δ61.00000°,λ14.00000°. Principal axes: T 3.4680, Plg30.0000°, Azm312.0000°; N 0.0630, Plg58.0000°, Azm157.0000°; P -3.5300, Plg11.0000°, Azm49.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 08 19:14:52.0±0.3,60°.69S±0°.06×41°.48W±0°.06,h10km,n281, σ1916/240,mb4.8/31,MS3.8/28,9C-1D,Scotia Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ORCD** | **Orcadas** | **1.60** | **267** | | Pn | 19 15 09.9 | -10 |
| ORCD | | | | Sn | **Sn** | **19 15 33.2** | **-7.8** |
| **HOPE** | **Hope Point** | **6.96** | **25** | Pn | **Pn** | **19 16 32.8** | **-1.1** |
| HOPE | | | | Sn | **Sn** | **19 17 48.9** | **-4.0** |
| **PMSA** | **Palmer Station** | **11.10** | **239** | Pn | **Pn** | **19 17 31.4** | **+0.9** |
| **PMSA** | **Palmer Station** | **11.10** | **239** | Pn | **Pn** | **19 17 31.7** | **+1.2** |
| | 1.7nm,0.3s,baz=74,slow=11,SNR=19 | | | | | | |
| PMSA | | | | LR | LR | 19 22 08.8 | |
| | comp=Z,1μm,18.9s,baz=70,slow=39 | | | | | | |
| | 29nm,0.7s | | | | | | |
| **EFI** | **East Falkland** | **12.88** | **307** | Pn | **Pn** | **19 17 56.3** | **+1.4** |
| **SMAI** | **San Martin Ant** | **13.25** | **225** | Pn | **Pn** | **19 18 00.3** | **+0.5** |
| **USHA** | **Ushuaia** | **15.46** | **280** | Pn | **Pn** | **19 18 31.3** | **+1.5** |
| | 1.7nm,0.3s,baz=1.7,slow=4.8,SNR=2.6 | | | | | | |
| | 5.8nm,0.4s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.46** | **143** | ⇑P | **Pn** | **19 18 39.5** | **-3.2** |
| | comp=Z,35nm,0.8s | | | | | | |
| VNA3 | | | | ⇑S | Sn | 19 21 21.4 | -24 |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **16.67** | **140** | ⇑P | **Pn** | **19 18 42.7** | **-2.5** |
| | comp=Z,50nm,1.0s | | | | | | |
| VNA1 | | | | ⇑S | Sn | 19 21 36.6 | -13 |
| | comp=Z,4.3nm,0.2s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **17.03** | **141** | ⇑P | **Pn** | **19 18 45.0** | **-4.8** |
| | comp=Z,21nm,0.8s,baz=292,slow=15 | | | | | | |
| VNA2 | | | | ⇑S | Sn | 19 21 41.9 | -17 |
| | comp=Z,5.8nm,0.7s,baz=274,slow=17 | | | | | | |
| **BELA** | **Belgrano 2** | **17.41** | **175** | | **P** | **19 18 55.4** | **-0.4** |
| **MG04** | **Isla Riesco** | **18.12** | **282** | Pn | **Pn** | **19 19 02.8** | **-0.6** |
| MG04 | | | | IAmb | IAmb | 19 19 07.3 | |
| | comp=Z,131nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **18.66** | **142** | P | **P** | **19 19 09.5** | **-0.2** |
| **SNAA** | **Sanae** | **18.66** | **142** | ⇑P | **P** | **19 19 09.7** | **+0.1** |
| | comp=Z,266nm,0.8s | | | | | | |
| SNAA | | | | ⇑S | Sn | 19 22 22.9 | -15 |
| | comp=Z,54nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **18.66** | **142** | P | **P** | **19 19 10.0** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=305,slow=12,SNR=14 | | | | | | |
| SNAA | | | | S | Sn | 19 22 24.4 | -14 |
| | comp=Z,1.0nm,0.5s,baz=355,slow=23,SNR=1.2 | | | | | | |
| SNAA | | | | LR | LR | 19 24 44.5 | |
| | comp=Z,535nm,20.6s,baz=276,slow=32 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **MG05** | **Puerto Natales** | **19.30** | **284** | P | **P** | **19 19 17.5** | **+0.7** |
| MG05 | | | | IAmb | IAmb | 19 19 18.8 | |
| | comp=Z,86nm,1.1s | | | | | | |
| **MG05** | **Puerto Natales** | **19.30** | **284** | *e*P | **P** | **19 19 16.7** | **0.0** |
| **GO09** | **Cerro Castillo** | **19.49** | **285** | P | **P** | **19 19 19.6** | **+0.7** |
| GO09 | | | | IAmb | IAmb | 19 19 21.2 | |
| | comp=Z,116nm,0.9s | | | | | | |
| **GO09** | **Cerro Castillo** | **19.49** | **285** | *i* P | **Pn** | **19 19 19.9** | **-0.2** |
| **TROLL** | **Troll, Antarti** | **20.38** | **142** | ⇑P | **P** | **19 19 28.4** | **-0.1** |
| | comp=Z,1μm,0.9s | | | | | | |
| **GO08** | **Villa O'Higgin** | **21.53** | **291** | P | **P** | **19 19 41.7** | **+0.8** |
| **COYC** | **Coyhaique** | **23.49** | **296** | P | **P** | **19 20 01.6** | **+0.1** |
| COYC | | | | IAmb | IAmb | 19 20 03.9 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **LL02** | **Futaleuf** | **25.28** | **300** | P | **P** | **19 20 18.6** | **+0.4** |
| LL02 | | | | IAmb | IAmb | 19 20 42.7 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **LL02** | **Futaleuf** | **25.28** | **300** | *e*P | **P** | **19 20 16.1** | **-2.1** |
| **TRQA** | **Tornquist** | **26.07** | **321** | P | **P** | **19 20 25.9** | **+0.5** |
| **PLCA** | **Paso Flores** | **26.79** | **305** | P | **P** | **19 20 32.0** | **+0.1** |
| **PLCA** | **Paso Flores** | **26.79** | **305** | P | **P** | **19 20 31.1** | **-0.8** |
| | comp=Z,2.2nm,0.7s,baz=152,slow=8.8,SNR=7.8 | | | | | | |
| PLCA | | | | LR | LR | 19 31 09.7 | |
| | comp=Z,330nm,19.0s,baz=160,slow=37 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **ELIB** | **Princess Elisa** | **26.82** | **141** | *d*P | **P** | **19 20 31.6** | **-0.4** |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **GO06** | **Curarrehue** | **28.13** | **305** | P | **P** | **19 20 44.2** | **+0.1** |
| **LR04** | **Corral** | **28.68** | **302** | P | **P** | **19 20 47.6** | **-1.1** |
| **LR04** | **Corral** | **28.68** | **302** | *e*P | **P** | **19 20 49.6** | **+0.8** |
| **QSPA** | **South Pole Qui** | **29.55** | **180** | P | **P** | **19 20 58.9** | **+2.4** |
| QSPA | | | | IAmb | IAmb | 19 21 11.5 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **29.55** | **180** | P | **P** | **19 20 57.6** | **+1.1** |
| | comp=Z,1.8nm,0.7s,baz=173,slow=3.0,SNR=15 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **BI02** | **San Fabin de** | **30.58** | **308** | P | **P** | **19 21 04.8** | **-0.9** |
| **BO02** | **Sierra Bellavi** | **32.04** | **311** | P | **P** | **19 21 19.1** | **+0.5** |
| BO02 | | | | IAmb | IAmb | 19 21 53.2 | |
| | comp=Z,50nm,1.8s | | | | | | |
| **GO05** | **Huala** | **32.28** | **309** | P | **P** | **19 21 21.0** | **+0.4** |
| GO05 | | | | IAmb | IAmb | 19 22 27.7 | |
| | comp=Z,29nm,1.3s | | | | | | |
| **BO01** | **Tunca** | **32.51** | **311** | P | **P** | **19 21 21.7** | **-1.0** |
| BO01 | | | | IAmb | IAmb | 19 21 44.7 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **BO04** | **La Punta** | **32.70** | **312** | P | **P** | **19 21 24.8** | **+0.5** |
| BO04 | | | | IAmb | IAmb | 19 21 41.0 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **MT09** | **Talagante** | **33.02** | **311** | P | **P** | **19 21 26.7** | **-0.5** |
| **MT01** | **Popeta** | **33.04** | **311** | P | **P** | **19 21 27.0** | **-0.3** |
| MT01 | | | | IAmb | IAmb | 19 21 53.0 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **MT02** | **Curacav** | **33.54** | **311** | P | **P** | **19 21 30.3** | **-1.4** |
| MT02 | | | | IAmb | IAmb | 19 21 48.4 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **VA03** | **San Esteban** | **33.77** | **313** | P | **P** | **19 21 34.4** | **+0.7** |
| **VA06** | **Catapilco** | **34.23** | **312** | P | **P** | **19 21 36.5** | **-1.1** |
| **CO02** | **Combarbal** | **35.34** | **313** | P | **P** | **19 21 47.6** | **+0.3** |
| **CPUP** | **Villa Florida** | **36.02** | **335** | P | **P** | **19 21 52.0** | **-1.0** |
| | comp=Z,1.8nm,0.7s,baz=162,slow=6.4,SNR=3.9 | | | | | | |
| CPUP | | | | LR | LR | 19 36 52.6 | |
| | comp=Z,62nm,20.0s,baz=168,slow=37 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **CO06** | **Fray Jorge** | **36.05** | **313** | | **P** | **19 21 52.6** | **-0.8** |
| **CO01** | **Juntas del Tor** | **36.14** | **315** | P | **P** | **19 21 55.6** | **+1.3** |
| CO01 | | | | IAmb | IAmb | 19 22 15.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **AC05** | **El Transito** | **37.24** | **316** | P | **P** | **19 22 03.1** | **-0.5** |
| **AC04** | **Llanos de Chal** | **38.10** | **315** | P | **P** | **19 22 11.1** | **+0.4** |
| AC04 | | | | IAmb | IAmb | 19 22 37.7 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **GO02** | **Mina Guanaco** | **40.41** | **319** | | **P** | **19 22 31.0** | **+0.6** |
| GO02 | | | | IAmb | IAmb | 19 22 57.7 | |
| | comp=Z,42nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **40.63** | **189** | P | **P** | **19 22 32.2** | **+0.9** |
| SBA | | | | IAmb | IAmb | 19 22 44.3 | |
| | comp=Z,41nm,1.6s | | | | | | |
| **MAW** | **Mawson** | **40.77** | **145** | P | **P** | **19 22 33.0** | **+0.5** |
| | comp=Z,3.2nm,0.7s,baz=234,slow=4.9,SNR=5.1 | | | | | | |
| MAW | | | | LR | LR | 19 38 49.8 | |
| | comp=Z,143nm,19.1s,baz=210,slow=35 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **41.29** | **188** | P | **P** | **19 22 37.1** | **+0.4** |
| **VNDA** | **Vanda** | **41.29** | **188** | P | **P** | **19 22 38.6** | **+1.9** |
| | comp=Z,1.0nm,1.1s,baz=175,slow=12,SNR=1.9 | | | | | | |
| VNDA | | | | LR | LR | 19 41 16.8 | |
| | comp=Z,97nm,18.1s,baz=159,slow=38 | | | | | | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| **LVC** | **Limon Verde** | **42.58** | **321** | P | **P** | **19 22 48.0** | **-0.2** |
| **LVC** | **Limon Verde** | **42.58** | **321** | LR | LR | 19 42 33.0 | |
| | comp=Z,90nm,18.3s,baz=186,slow=39 | | | | | | |
| **PB05** | **IPOC Station P** | **42.76** | **319** | P | **P** | **19 22 49.5** | **0.0** |
| PB05 | | | | IAmb | IAmb | 19 23 18.4 | |
| | comp=Z,42nm,1.5s | | | | | | |
| **PB01** | **IPOC Station P** | **44.23** | **321** | P | **P** | **19 22 59.6** | **-1.7** |
| PB01 | | | | IAmb | IAmb | 19 23 03.4 | |
| | comp=Z,13nm,0.8s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **45.23** | **351** | P | **P** | **19 23 08.9** | **-0.4** |
| BDFB | | | | IAmb | IAmb | 19 23 29.4 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **BDFB** | **Brasilia** | **45.23** | **351** | P | **P** | **19 23 09.7** | **+0.3** |
| | comp=Z,2.4nm,0.5s,baz=164,slow=15,SNR=4.3 | | | | | | |
| BDFB | | | | LR | LR | 19 39 13.7 | |
| | comp=Z,46nm,21.7s,baz=153,slow=32 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **SIV** | **San Ignacio** | **46.83** | **334** | LR | LR | 19 43 15.0 | |
| | comp=Z,64nm,20.2s,baz=111,slow=36 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **46.95** | **336** | P | **P** | **19 23 22.8** | **+0.1** |
| **PB18** | **Visviri** | **47.48** | **323** | P | **P** | **19 23 27.4** | **-0.1** |
| **LPAZ** | **La Paz** | **48.32** | **325** | P | **P** | **19 23 34.9** | **+0.8** |
| **LPAZ** | **La Paz** | **48.32** | **325** | P | **P** | **19 23 34.3** | **+0.2** |
| | comp=Z,2.6nm,0.4s,baz=137,slow=5.9,SNR=12 | | | | | | |
| LPAZ | | | | LR | LR | 19 44 59.6 | |
| | comp=Z,131nm,21.1s,baz=166,slow=38 | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **SUR** | **Sutherland** | **48.88** | **84** | LR | LR | 19 40 32.5 | |
| | comp=Z,250nm,18.7s,baz=236,slow=32 | | | | | | |
| **VILB** | **Vilhena** | **49.59** | **336** | P | **P** | **19 23 43.5** | **+0.3** |
| **H04S2** | **CROZET ISLANDS** | **52.17** | **120** | T | T | 20 21 02.9 | |
| | baz=220,slow=75,SNR=27 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **52.18** | **120** | T | T | 20 21 04.7 | |
| | baz=220,slow=75,SNR=26 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **52.19** | **120** | T | T | 20 21 01.9 | |
| | baz=220,slow=75,SNR=17 | | | | | | |
| **ETMB** | **Extrema** | **53.99** | **329** | P | **P** | **19 24 16.3** | **+0.3** |
| ETMB | | | | IAmb | IAmb | 19 24 17.9 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **SAML** | **Samuel** | **54.11** | **333** | P | **P** | **19 24 17.8** | **+0.9** |
| SAML | | | | IAmb | IAmb | 19 24 36.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **54.15** | **85** | LR | LR | 19 42 40.7 | |
| | comp=Z,251nm,19.9s,baz=211,slow=31 | | | | | | |
| **NNA** | **Nana** | **55.09** | **316** | LR | LR | 19 49 01.9 | |
| | comp=Z,38nm,18.2s,baz=178,slow=37 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **55.35** | **33** | T | T | 20 25 02.0 | |
| | baz=194,slow=74,SNR=9.1 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **55.36** | **33** | T | T | 20 25 04.3 | |
| | baz=26,slow=74,SNR=10 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **56.46** | **33** | T | T | 20 26 28.9 | |
| | baz=194,slow=75,SNR=11 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **56.47** | **33** | T | T | 20 26 30.6 | |
| | baz=194,slow=75,SNR=7.3 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **56.48** | **33** | T | T | 20 26 28.9 | |
| | baz=194,slow=75,SNR=10 | | | | | | |
| **LBTB** | **Lobatse** | **57.32** | **83** | LR | LR | 19 44 43.1 | |
| | comp=Z,136nm,19.8s,baz=206,slow=31 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **57.77** | **323** | P | **P** | **19 24 42.6** | **-0.5** |
| **TSUM** | **Tsumeb** | **58.42** | **72** | LR | LR | 19 46 15.7 | |
| | comp=Z,91nm,18.1s,baz=200,slow=32 | | | | | | |
| **ATAH** | **Atahualpa** | **60.14** | **317** | LR | LR | 19 51 17.4 | |
| | comp=Z,57nm,18.5s,baz=159,slow=36 | | | | | | |
| **BOAV** | **Boa Vista** | **64.62** | **339** | P | **P** | **19 25 29.4** | **0.0** |
| **MDP** | **Montagnes des** | **66.17** | **348** | LR | LR | 19 55 28.8 | |
| | comp=Z,40nm,19.4s,baz=170,slow=37 | | | | | | |
| **LSZ** | **Lusaka** | **66.86** | **80** | P | **P** | **19 25 43.6** | **-0.5** |
| LSZ | | | | IAmb | IAmb | 19 25 44.9 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **OTAV** | **Otavalo** | **67.07** | **319** | P | **P** | **19 25 45.4** | **-0.4** |
| OTAV | | | | IAmb | IAmb | 19 26 07.1 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **ROSC** | **El Rosal** | **70.18** | **325** | LR | LR | 19 57 07.9 | |
| | comp=Z,71nm,21.2s,baz=184,slow=36 | | | | | | |
| **RKT** | **Rikitea** | **71.80** | **255** | *e*LR | LR | 19 48 07.5 | |
| | comp=Z,1μm,28.5s | | | | | | |
| **BAUV** | **El Baul** | **72.52** | **332** | P | **P** | **19 26 18.5** | **-0.2** |
| BAUV | | | | IAmb | IAmb | 19 26 27.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **73.03** | **38** | P | **P** | **19 26 22.7** | **+0.9** |
| | comp=Z,2.9nm,0.7s,baz=191,slow=5.2,SNR=4.1 | | | | | | |
| DBIC | | | | LR | LR | 19 52 40.9 | |
| | comp=Z,46nm,19.2s,baz=182,slow=31 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **SDV** | **Santo Domingo** | **73.08** | **330** | LR | LR | 19 59 40.7 | |
| | comp=Z,52nm,21.2s,baz=246,slow=37 | | | | | | |
| **BBTS** | **Babate** | **77.71** | **25** | LR | LR | 19 56 59.8 | |
| | comp=Z,29nm,19.5s,baz=130,slow=33 | | | | | | |
| **TBI** | **Tubuai** | **78.26** | **243** | *e*LR | LR | 19 51 08.2 | |
| | comp=Z,1μm,23.8s | | | | | | |
| **JTS** | **Las Juntas de** | **78.64** | **316** | LR | LR | 20 00 06.8 | |
| | comp=Z,36nm,20.7s,baz=226,slow=34 | | | | | | |
| **ANWB** | **Willy Bob** | **79.78** | **340** | P | **P** | **19 27 00.6** | **+0.7** |
| **MBAR** | **Mbarara** | **80.83** | **75** | LR | LR | 19 59 09.5 | |
| | comp=Z,145nm,19.5s,baz=210,slow=33 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **81.21** | **42** | P | **P** | **19 27 08.8** | **+1.1** |
| TOA0 | | | | IAmb | IAmb | 19 27 10.1 | |
| | comp=Z,43nm,1.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.21** | **42** | P | **P** | **19 27 08.7** | **+1.0** |
| TORD | | | | IAmb | IAmb | 19 27 10.1 | |
| | comp=Z,43nm,1.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.21** | **42** | P | **P** | **19 27 08.6** | **+0.8** |
| | comp=Z,5.3nm,0.9s,baz=202,slow=4.4,SNR=22 | | | | | | |
| TORD | | | | LR | LR | 19 55 28.2 | |
| | comp=Z,93nm,19.9s,baz=161,slow=30 | | | | | | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **PPT2** | **Papeete2** | **83.36** | **246** | *e*LR | LR | 19 53 25.6 | |
| | comp=Z,222nm,31.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 19 53 34.3 | |
| | comp=Z,389nm,28.2s | | | | | | |
| **PPT** | **Papeete** | **83.38** | **246** | LR | LR | 19 56 48.3 | |
| | comp=Z,58nm,19.4s,baz=216,slow=30 | | | | | | |
| **RAO** | **Raoul Island** | **83.59** | **217** | LR | LR | 20 01 08.7 | |
| | comp=Z,26nm,18.1s,baz=88,slow=33 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **86.57** | **258** | *e*LR | LR | 19 54 59.5 | |
| | comp=Z,147nm,25.3s | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| F30M | Barrier River | 144.91 | 318 | P | | PKPab | 19 34 27.3 | +0.6 | | |
| | baz=121,SNR=6.6 | | | | | | | | | |
| MAKZ | Makanchi | 144.99 | 87 | | | PKPbc | 19 34 27.1 | -0.5 | | |
| H29M | Whitestone | 145.06 | 315 | P | | PKPbc | 19 34 27.4 | +0.2 | | |
| | baz=121,SNR=5.8 | | | | | | | | | |
| MK31 | Makanchi Array | 145.13 | 87 | | | PKPbc | 19 34 26.8 | -1.3 | | |
| MKAR | Makanchi Array | 145.13 | 87 | | | PKPbc | 19 34 26.8 | -1.3 | | |
| MKAR | Makanchi Array | 145.13 | 87 | PKPbc | | PKPbc | 19 34 27.5 | -0.6 | | |
| | comp=Z,1.8nm,0.7s,baz=249,slow=2.1,SNR=22 | | | | | | | | | |
| P23K | Montague Islan | 145.13 | 302 | P | | PKPbc | 19 34 28.1 | +0.5 | | |
| | baz=124 | | | | | | | | | |
| L26K | Log Cabin Wild | 145.18 | 309 | P | | PKPbc | 19 34 28.1 | +0.3 | | |
| | baz=122 | | | | | | | | | |
| I28M | Miner Creek | 145.20 | 314 | P | | PKPbc | 19 34 28.0 | +0.2 | | |
| | baz=122 | | | | | | | | | |
| K27K | Chicken | 145.23 | 311 | P | | PKPbc | 19 34 28.2 | +0.4 | | |
| | baz=122 | | | | | | | | | |
| EGAK | Eagle | 145.29 | 312 | P | | PKPbc | 19 34 28.3 | +0.3 | | |
| | baz=122 | | | | | | | | | |
| G29M | Pine Creek | 145.30 | 317 | P | | PKPbc | 19 34 28.4 | +0.4 | | |
| | baz=121,SNR=6.6 | | | | | | | | | |
| KLU | Klutina | 145.36 | 305 | P | | PKPab | 19 34 29.2 | +0.6 | | |
| | baz=123 | | | | | | | | | |
| GLI | Glacier Island | 145.50 | 304 | P | | PKPdf | 19 34 28.3 | -0.3 | | |
| | baz=123 | | | | | | | | | |
| HARP | HAARP | 145.54 | 307 | P | | PKPdf | 19 34 29.0 | +0.3 | | |
| | baz=122 | | | | | | | | | |
| M24K | Tolsona, Glenn | 145.79 | 306 | P | | PKPab | 19 34 31.0 | +0.8 | | |
| | baz=122 | | | | | | | | | |
| KURBB | Kurchatov Arra | 145.88 | 80 | PKPbc | | PKPdf | 19 34 30.0 | +0.4 | | |
| | comp=Z,2.1nm,0.6s,baz=233,slow=3.4,SNR=24 | | | | | | | | | |
| I27K | Kandik River | 145.88 | 313 | P | | PKPbc | 19 34 30.8 | +0.8 | | |
| | baz=120 | | | | | | | | | |
| SCRK | Sand Creek | 145.92 | 310 | P | | PKPbc | 19 34 30.8 | +0.6 | | |
| | baz=121,SNR=5.8 | | | | | | | | | |
| PAX | Paxson | 145.97 | 308 | P | | PKPab | 19 34 31.3 | +0.4 | | |
| | baz=121 | | | | | | | | | |
| KURK | Kurchatov | 145.98 | 79 | | | PKPdf | 19 34 30.0 | +0.2 | | |
| PWL | Port Wells | 146.00 | 303 | P | | PKPab | 19 34 31.3 | +0.4 | | |
| | baz=123 | | | | | | | | | |
| E29M | Blow River | 146.00 | 319 | | | PKPdf | 19 34 29.6 | +0.4 | | |
| E29M | Blow River | 146.00 | 319 | P | | PKPab | 19 34 31.5 | +0.8 | | |
| | baz=119,SNR=6.1 | | | | | | | | | |
| J26L | Joseph Creek | 146.03 | 311 | P | | PKPbc | 19 34 31.1 | +0.7 | | |
| | baz=120,SNR=8.1 | | | | | | | | | |
| KDAK | Kodiak Island | 146.10 | 296 | P | | PKPab | 19 34 32.5 | +1.1 | | |
| | baz=125 | | | | | | | | | |
| SCM | Sheep Creek Mo | 146.11 | 305 | P | | PKPab | 19 34 32.1 | +0.6 | | |
| | baz=122 | | | | | | | | | |
| H27K | Steamboat Moun | 146.16 | 314 | P | | PKPab | 19 34 31.9 | +0.4 | | |
| | baz=120 | | | | | | | | | |
| M23K | Glacier View | 146.25 | 305 | P | | PKPab | 19 34 32.3 | +0.4 | | |
| | baz=122 | | | | | | | | | |
| F28M | Old Crow | 146.27 | 317 | P | | PKPab | 19 34 32.2 | +0.4 | | |
| | baz=119,SNR=7.8 | | | | | | | | | |
| CHIR | Chirikof Islan | 146.33 | 292 | P | | PKPab | 19 34 32.8 | +0.4 | | |
| | baz=126 | | | | | | | | | |
| KNK | Knik Glacier | 146.34 | 304 | P | | PKPab | 19 34 32.8 | +0.5 | | |
| | baz=122 | | | | | | | | | |
| G27K | Doyon Strip | 146.49 | 315 | P | | PKPbc | 19 34 32.8 | +1.1 | | |
| | baz=119 | | | | | | | | | |
| SML | Sawmill | 146.50 | 305 | P | | PKPbc | 19 34 32.9 | +1.0 | | |
| | baz=121 | | | | | | | | | |
| E28M | Babbage River | 146.63 | 319 | P | | PKPbc | 19 34 32.7 | +0.7 | | |
| | baz=116 | | | | | | | | | |
| WAT6 | Susitna Watana | 146.66 | 306 | P | | PKPbc | 19 34 33.2 | +0.7 | | |
| | baz=121 | | | | | | | | | |
| RC01 | Rabbit Creek A | 146.70 | 303 | P | | PKPbc | 19 34 33.4 | +1.0 | | |
| | baz=122 | | | | | | | | | |
| J25K | Salcha River, | 146.77 | 310 | P | | PKPbc | 19 34 33.8 | +1.2 | | |
| | baz=119,SNR=9.5 | | | | | | | | | |
| DHY | Denali Highway | 146.77 | 307 | P | | PKPbc | 19 34 33.7 | +1.0 | | |
| | baz=120 | | | | | | | | | |
| E27K | Coleen River | 147.12 | 317 | P | | PKPbc | 19 34 34.4 | +1.0 | | |
| | baz=117 | | | | | | | | | |
| PRP | Porcupine Dome | 147.26 | 312 | P | | PKPbc | 19 34 35.1 | +1.0 | | |
| | baz=118 | | | | | | | | | |
| HDA | Harding Lake | 147.26 | 309 | P | | PKPbc | 19 34 35.2 | +1.3 | | |
| | baz=119 | | | | | | | | | |
| G26K | Porcupine Rive | 147.30 | 315 | P | | PKPab | 19 34 35.5 | -0.3 | | |
| | baz=117 | | | | | | | | | |
| D27M | Malcolm River | 147.38 | 319 | P | | PKPab | 19 34 36.0 | -0.2 | | |
| | baz=116 | | | | | | | | | |
| ILAR | Eielson Array | 147.41 | 310 | | | PKPbc | 19 34 34.0 | -0.3 | | |
| ILAR | Eielson Array | 147.41 | 310 | PKPbc | | PKPbc | 19 34 34.5 | +0.1 | | |
| | comp=Z,1.7nm,0.7s,baz=100,slow=3.7,SNR=21 | | | | | | | | | |
| Q18K | Katmai Hardscr | 147.65 | 296 | P | | PKPbc | 19 34 36.2 | +0.9 | | |
| | baz=122 | | | | | | | | | |
| MCK | McKinley | 147.71 | 307 | P | | PKPbc | 19 34 36.3 | +1.1 | | |
| | baz=118 | | | | | | | | | |
| H25L | Birch Creek | 147.71 | 313 | P | | PKPbc | 19 34 36.1 | +1.0 | | |
| | baz=117 | | | | | | | | | |
| F26K | Sheenjek River | 147.76 | 316 | P | | PKPbc | 19 34 36.0 | +0.8 | | |
| | baz=116 | | | | | | | | | |
| POKR | Poker Plat Res | 147.78 | 310 | P | | PKPbc | 19 34 35.7 | +0.4 | | |
| | baz=117 | | | | | | | | | |
| BMAR | Burnt Mountain | 147.79 | 315 | | | PKPdf | 19 34 33.1 | +0.7 | | |
| Q17K | Contact Creek | 147.83 | 295 | P | | PKPbc | 19 34 36.0 | +0.3 | | |
| | baz=123 | | | | | | | | | |
| SKT | Skwentna | 147.89 | 303 | P | | PKPbc | 19 34 36.1 | +0.4 | | |
| | baz=120 | | | | | | | | | |
| G25K | Bearman Lake | 148.04 | 314 | P | | PKPbc | 19 34 37.2 | +1.3 | | |
| | baz=116 | | | | | | | | | |
| P18K | Big Mountain, | 148.14 | 297 | P | | PKPbc | 19 34 37.5 | +1.1 | | |
| | baz=121 | | | | | | | | | |
| NEA2 | Nenana | 148.16 | 309 | P | | PKPbc | 19 34 37.0 | +0.7 | | |
| | baz=117 | | | | | | | | | |
| F25K | Christian Rive | 148.23 | 315 | P | | PKPbc | 19 34 37.6 | +1.1 | | |
| | baz=115 | | | | | | | | | |
| H24K | Noodor Dome | 148.27 | 311 | P | | PKPbc | 19 34 37.5 | +0.9 | | |
| | baz=116 | | | | | | | | | |
| SDPT | Sand Point | 148.30 | 288 | P | | PKPbc | 19 34 37.3 | +0.4 | | |
| | baz=125 | | | | | | | | | |
| O18K | Koktuh Hills | 148.37 | 298 | P | | PKPbc | 19 34 37.3 | +0.3 | | |
| | baz=121 | | | | | | | | | |
| C27K | Jago River | 148.42 | 319 | P | | PKPbc | 19 34 37.9 | +1.0 | | |
| | baz=113 | | | | | | | | | |
| G24K | Hadweenzic Riv | 148.50 | 313 | P | | PKiKP | 19 34 38.7 | 0.0 | | |
| | baz=115 | | | | | | | | | |
| M20K | Styx River | 148.50 | 303 | P | | PKiKP | 19 34 38.8 | -0.1 | | |
| | baz=119 | | | | | | | | | |
| I23K | Minto, Yukon-K | 148.52 | 310 | P | | PKiKP | 19 34 39.0 | +0.3 | | |
| | baz=116 | | | | | | | | | |
| N19K | Bonanza Creek | 148.55 | 300 | P | | PKPbc | 19 34 38.8 | +1.3 | | |
| | baz=120 | | | | | | | | | |
| BPAW | Bear Paw Mtn. | 148.68 | 307 | P | | PKiKP | 19 34 39.3 | +0.2 | | |
| | baz=117 | | | | | | | | | |
| H23K | Yukon River | 148.89 | 311 | P | | PKiKP | 19 34 40.2 | +0.7 | | |
| | baz=115 | | | | | | | | | |
| C26K | Camden Bay | 148.92 | 319 | P | | PKiKP | 19 34 40.3 | +0.9 | | |
| | baz=112 | | | | | | | | | |
| F24K | Squaw Lake | 148.99 | 314 | P | | PKiKP | 19 34 40.6 | +0.9 | | |
| | baz=114 | | | | | | | | | |
| MLY | Manley | 149.00 | 309 | P | | PKiKP | 19 34 40.7 | +0.9 | | |
| | baz=116 | | | | | | | | | |
| M19K | Big River Lodg | 149.04 | 302 | P | | PKPbc | 19 34 39.1 | +0.4 | | |
| | baz=118 | | | | | | | | | |
| N18K | Kilae Creek | 149.08 | 299 | P | | PKPbc | 19 34 39.0 | +0.2 | | |
| | baz=119 | | | | | | | | | |
| L20K | Farewell, AK | 149.10 | 303 | P | | PKPbc | 19 34 39.1 | +0.3 | | |
| | baz=118 | | | | | | | | | |
| D25K | Kavik River | 149.17 | 318 | P | | PKPbc | 19 34 39.5 | +0.7 | | |
| | baz=112 | | | | | | | | | |
| S12K | Black Hills | 149.25 | 288 | P | | PKPbc | 19 34 40.0 | +0.6 | | |
| | baz=124 | | | | | | | | | |
| L19K | White Mountain | 149.36 | 302 | P | | PKPbc | 19 34 40.4 | +0.9 | | |
| | baz=118 | | | | | | | | | |
| E24K | Your Creek | 149.42 | 315 | P | | PKiKP | 19 34 40.7 | +0.1 | | |
| | baz=112 | | | | | | | | | |
| G23K | Bananza Creek | 149.43 | 312 | P | | PKPbc | 19 34 40.5 | +1.0 | | |
| | baz=113 | | | | | | | | | |
| M18K | Stony River | 149.44 | 301 | P | | PKiKP | 19 34 41.7 | +0.9 | | |
| | baz=118 | | | | | | | | | |
| O16K | Kokwok River B | 149.50 | 296 | P | | PKiKP | 19 34 41.9 | +1.0 | | |
| | baz=120 | | | | | | | | | |
| N17K | Nushagak Hills | 149.57 | 298 | P | | PKiKP | 19 34 42.1 | +1.1 | | |
| | baz=119 | | | | | | | | | |
| H22K | Ishtalitna Cre | 149.60 | 310 | P | | PKiKP | 19 34 42.4 | +1.5 | | |
| | baz=114 | | | | | | | | | |
| COLD | Coldfoot | 149.70 | 313 | P | | PKiKP | 19 34 42.5 | +1.4 | | |
| | baz=112 | | | | | | | | | |
| E23K | Chandalar | 149.80 | 315 | P | | PKiKP | 19 34 43.0 | +1.6 | | |
| | baz=112 | | | | | | | | | |
| D24K | Happy Valley | 149.93 | 317 | P | | PKiKP | 19 34 43.3 | +1.8 | | |
| | baz=110 | | | | | | | | | |
| J20K | Nowinta River | 149.96 | 306 | P | | PKiKP | 19 34 43.8 | +2.1 | | |
| | baz=115 | | | | | | | | | |
| TOLK | Toolik Lake Re | 150.00 | 316 | P | | PKiKP | 19 34 43.0 | +1.2 | | |
| | baz=111 | | | | | | | | | |
| H21K | Melozitna Rive | 150.05 | 309 | P | | PKiKP | 19 34 43.5 | +1.6 | | |
| | baz=113 | | | | | | | | | |
| O15K | Ungalikthiuk R | 150.06 | 295 | P | | PKiKP | 19 34 43.2 | +1.1 | | |
| | baz=120 | | | | | | | | | |
| L18K | Granite Mounta | 150.15 | 302 | P | | PKiKP | 19 34 43.5 | +1.4 | | |
| | baz=117 | | | | | | | | | |
| I20K | Naaghedeneel | 150.35 | 307 | P | | PKiKP | 19 34 43.6 | +1.2 | | |
| | baz=114 | | | | | | | | | |
| J19K | Poorman | 150.47 | 305 | P | | PKiKP | 19 34 43.1 | +0.4 | | |
| | baz=114 | | | | | | | | | |
| D23K | Nanushuk River | 150.49 | 316 | P | | PKiKP | 19 34 43.3 | +0.6 | | |
| | baz=109 | | | | | | | | | |
| F22K | John River | 150.51 | 313 | P | | PKiKP | 19 34 43.1 | +0.3 | | |
| | baz=111 | | | | | | | | | |
| IMAR | Indian Mountai | 150.53 | 310 | | | PKPdf | 19 34 37.5 | +0.7 | | |
| M16K | Timber Creek | 150.57 | 298 | P | | PKiKP | 19 34 43.4 | +0.3 | | |
| | baz=117 | | | | | | | | | |
| G21K | Allakaket | 150.64 | 311 | P | | PKPbc | 19 34 43.1 | +0.7 | | |
| | baz=112 | | | | | | | | | |
| N15K | Kwethluk River | 150.66 | 296 | P | | PKPbc | 19 34 43.5 | +0.9 | | |
| | baz=118 | | | | | | | | | |
| J18K | Innoko River | 150.70 | 304 | P | | PKiKP | 19 34 43.6 | +0.3 | | |
| | baz=115 | | | | | | | | | |
| O14K | Tigyukauivet M | 150.75 | 294 | P | | PKPbc | 19 34 43.6 | +0.7 | | |
| | baz=119 | | | | | | | | | |
| C23K | Itkillik River | 150.75 | 318 | P | | PKiKP | 19 34 43.9 | +0.7 | | |
| | baz=108 | | | | | | | | | |
| H20K | Anotleneega Mo | 150.78 | 308 | P | | PKPbc | 19 34 43.6 | +0.8 | | |
| | baz=112 | | | | | | | | | |
| L17K | Donlin | 150.78 | 301 | P | | PKPbc | 19 34 43.5 | +0.7 | | |
| | baz=116 | | | | | | | | | |
| F21K | Alatna River | 150.88 | 312 | P | | PKPbc | 19 34 43.3 | +0.3 | | |
| | baz=110 | | | | | | | | | |
| NIKH | Nikolski High | 150.92 | 279 | P | | PKPbc | 19 34 43.5 | 0.0 | | |
| | baz=126 | | | | | | | | | |
| ZALV | Zalesovo Beam | 150.97 | 79 | | | PKPbc | 19 34 42.2 | -1.3 | | |
| ZALV | Zalesovo Beam | 150.97 | 79 | PKPbc | | PKPbc | 19 34 42.9 | -0.6 | | |
| | comp=Z,2.3nm,0.7s,baz=243,slow=3.7,SNR=9.2 | | | | | | | | | |
| K17K | Iditarod | 151.04 | 302 | P | | PKPbc | 19 34 43.9 | +0.5 | | |
| | baz=115 | | | | | | | | | |
| L16K | Owhat River | 151.10 | 299 | P | | PKPbc | 19 34 43.8 | +0.2 | | |
| | baz=116 | | | | | | | | | |
| D22K | Ayikyak River | 151.15 | 316 | P | | PKiKP | 19 34 45.3 | +1.3 | | |
| | baz=108 | | | | | | | | | |
| M15K | Kasigluk River | 151.17 | 297 | P | | PKiKP | 19 34 45.3 | +1.0 | | |
| | baz=117 | | | | | | | | | |
| N14K | Kuskokwak Cree | 151.25 | 295 | P | | PKiKP | 19 34 45.0 | +0.5 | | |
| | baz=118 | | | | | | | | | |
| H19K | Roundabout Mou | 151.40 | 308 | P | | PKiKP | 19 34 46.1 | +1.5 | | |
| | baz=111 | | | | | | | | | |
| E21K | Killik River | 151.46 | 314 | P | | PKiKP | 19 34 45.9 | +1.1 | | |
| | baz=108 | | | | | | | | | |
| J17K | VABM Dome | 151.64 | 303 | P | | PKiKP | 19 34 45.9 | +0.7 | | |
| | baz=113 | | | | | | | | | |
| F20K | Avaraart Lake | 151.65 | 311 | P | | PKiKP | 19 34 46.2 | +1.1 | | |
| | baz=109 | | | | | | | | | |
| M14K | Bethel | 151.75 | 297 | P | | PKiKP | 19 34 46.4 | +1.0 | | |
| | baz=116 | | | | | | | | | |
| B22K | Teshekpuk Lake | 151.81 | 318 | P | | PKPbc | 19 34 45.5 | +0.5 | | |
| | baz=105 | | | | | | | | | |
| G19K | Purcell Mounta | 151.86 | 309 | P | | PKPbc | 19 34 45.8 | +0.6 | | |
| | baz=110 | | | | | | | | | |
| L15K | Umiaksak Mounta | 151.95 | 299 | P | | PKiKP | 19 34 46.5 | +0.7 | | |
| | baz=115 | | | | | | | | | |
| H18K | Honhosa River | 152.01 | 307 | P | | PKiKP | 19 34 46.6 | +0.7 | | |
| | baz=111 | | | | | | | | | |
| B21K | Ikpikpuk River | 152.02 | 317 | P | | PKiKP | 19 34 46.6 | +0.8 | | |
| | baz=105 | | | | | | | | | |
| E20K | Nigu River | 152.19 | 313 | P | | PKPbc | 19 34 46.6 | +0.6 | | |
| | baz=107 | | | | | | | | | |
| K15K | Wolf Creek Mou | 152.23 | 300 | P | | PKiKP | 19 34 47.1 | +0.7 | | |
| | baz=114 | | | | | | | | | |
| J16K | Anvik River | 152.23 | 302 | P | | PKiKP | 19 34 47.1 | +0.7 | | |
| | baz=113 | | | | | | | | | |
| E19K | Redstone River | 152.34 | 312 | P | | PKiKP | 19 34 47.3 | +0.7 | | |
| | baz=107 | | | | | | | | | |
| F19K | Shaleruckik Mo | 152.35 | 310 | P | | PKiKP | 19 34 47.4 | +0.9 | | |
| | baz=108 | | | | | | | | | |
| G18K | Tagagawik | 152.38 | 308 | P | | PKiKP | 19 34 47.9 | +1.2 | | |
| | baz=109 | | | | | | | | | |
| D20K | Ettuk River | 152.47 | 314 | P | | PKiKP | 19 34 48.2 | +1.4 | | |
| | baz=105 | | | | | | | | | |
| H17K | Granite Mounta | 152.55 | 306 | P | | PKiKP | 19 34 48.8 | +1.7 | | |
| | baz=110 | | | | | | | | | |
| F18K | Selawik | 152.99 | 309 | P | | PKiKP | 19 34 49.8 | +2.0 | | |
| | baz=107 | | | | | | | | | |
| J14K | Nanvaranak Lak | 153.27 | 300 | P | | PKiKP | 19 34 49.8 | +1.2 | | |
| | baz=112 | | | | | | | | | |
| H16K | Elim | 153.39 | 304 | P | | PKiKP | 19 34 50.5 | +1.8 | | |
| | baz=109 | | | | | | | | | |
| F17K | Baldwin Pennin | 153.55 | 308 | P | | PKiKP | 19 34 50.8 | +1.8 | | |
| | baz=106 | | | | | | | | | |
| E18K | Tukpahlearik C | 153.57 | 311 | P | | PKiKP | 19 34 50.3 | +1.2 | | |
| | baz=105 | | | | | | | | | |
| G16K | Koyuk River | 153.68 | 306 | P | | PKiKP | 19 34 51.2 | +1.9 | | |
| | baz=108 | | | | | | | | | |
| C18K | Utukok River | 154.08 | 313 | P | | PKiKP | 19 34 52.0 | +1.8 | | |
| | baz=102 | | | | | | | | | |
| A19K | Wainwright | 154.32 | 317 | P | | PKiKP | 19 34 52.7 | +2.2 | | |
| | baz=99 | | | | | | | | | |
| B18K | Kokolik River | 154.43 | 315 | P | | PKiKP | 19 34 52.8 | +2.0 | | |
| | baz=100 | | | | | | | | | |
| ANM | Nome | 154.65 | 303 | P | | PKiKP | 19 34 53.4 | +2.0 | | |
| | baz=107 | | | | | | | | | |
| F15K | North Star Dit | 154.68 | 306 | P | | PKiKP | 19 34 53.5 | +2.0 | | |
| | baz=106 | | | | | | | | | |
| C17K | DeLong Mountai | 154.76 | 313 | P | | PKiKP | 19 34 53.8 | +2.3 | | |
| | baz=101 | | | | | | | | | |
| F14K | Arctic Creek | 155.29 | 305 | P | | PKPab | 19 34 57.2 | -12 | | |
| | baz=105 | | | | | | | | | |
| TNA | Tin City | 155.96 | 305 | P | | PKPab | 19 34 58.9 | -13 | | |
| | baz=104 | | | | | | | | | |
| SONM | Songino Array | 157.53 | 110 | PKPab | | PKPab | 19 35 16.9 | -2.4 | | |
| | comp=Z,0.5nm,0.8s,baz=250,slow=4.3,SNR=3.2 | | | | | | | | | |

*JMA **08** 19:18:11.4±0.1,22°N×2°×12°1E±°,h18km±2km,MV3.2/10, TAIWAN REGION*
*TAP **08** 19:18:12.3,22.62N×120.65E,h20km,ML3.4,B*
**ISC 08 19:18:12.4±0.9,22.58N±0.02×120.65E±0.02,h19km±2km, n111,g095/185,9C-5D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MASBT | Mashibuluo | 0.04 | 335 | ⇑*i* | P | | Pg | 19 18 15.9 | +0.1 |
| | baz=238 | | | | | | | | |
| MASBT | | | | *i* | S | | Sg | 19 18 18.7 | +0.6 |
| | baz=238 | | | | | | | | |
| TSMG | Majia | 0.12 | 358 | ⇑*i* | P | | Pg | 19 18 16.3 | -0.2 |
| | baz=355 | | | | | | | | |
| TSMG | | | | *i* | S | | Sg | 19 18 19.3 | 0.0 |
| | baz=355 | | | | | | | | |
| TSPT | Pingtung City | 0.17 | 304 | ⇑*i* | P | | Pg | 19 18 17.7 | +0.6 |
| | baz=290 | | | | | | | | |
| SGLT | Jiouru | 0.20 | 315 | ⇑*i* | P | | Pg | 19 18 18.1 | +0.6 |
| | baz=304 | | | | | | | | |
| SGLT | | | | *i* | S | | Sg | 19 18 23.7 | +2.7 |
| | baz=304 | | | | | | | | |
| SCZT | Fangliau | 0.21 | 187 | ⇓*i* | P | | Pg | 19 18 18.2 | +0.6 |
| | baz=185 | | | | | | | | |
| SCZT | | | | *i* | S | | Sg | 19 18 22.6 | +1.5 |
| | baz=185 | | | | | | | | |
| EAST | Anshuo | 0.27 | 137 | ⇑*i* | P | | Pg | 19 18 19.5 | +0.9 |
| | baz=138 | | | | | | | | |
| EAST | | | | *i* | S | | Sg | 19 18 24.8 | +2.0 |
| | baz=138 | | | | | | | | |
| ECL | Taimali | 0.28 | 87 | ⇓*i* | P | | Pb | 19 18 19.1 | +0.3 |
| | baz=96 | | | | | | | | |
| ECL | | | | *i* | S | | Sg | 19 18 23.9 | +0.8 |
| | baz=96 | | | | | | | | |
| KAU | Kaohsiung | 0.32 | 268 | P | | | Pn | 19 18 21.7 | -0.3 |
| | baz=255 | | | | | | | | |
| TAW | Tawu | 0.32 | 134 | *i* | P | | Pn | 19 18 19.9 | -2.1 |
| | baz=132 | | | | | | | | |
| TAW | | | | *i* | S | | Sn | 19 18 25.9 | -2.2 |
| | baz=132 | | | | | | | | |
| TWM1 | Shoushan | 0.32 | 319 | ⇑*i* | P | | Pb | 19 18 20.3 | +0.8 |
| | baz=319 | | | | | | | | |
| TWM1 | | | | | S | | Sn | 19 18 26.4 | -1.9 |
| | baz=319 | | | | | | | | |
| TAWH | Dawu Township | 0.33 | 137 | ⇑*i* | P | | Pn | 19 18 20.2 | -1.9 |
| | baz=136 | | | | | | | | |
| TAWH | | | | *i* | S | | Sn | 19 18 26.0 | -2.3 |
| | baz=136 | | | | | | | | |
| SCST | Cishan | 0.34 | 335 | *i* | P | | Pb | 19 18 20.3 | +0.4 |
| | baz=335 | | | | | | | | |
| SCST | | | | | S | | Sb | 19 18 26.2 | +1.4 |
| | baz=335 | | | | | | | | |
| SNJT | Kaohsiung City | 0.34 | 301 | *e*P | | | Pn | 19 18 21.1 | -1.2 |
| | baz=294 | | | | | | | | |
| SNJT | | | | *e*S | | | Sn | 19 18 28.2 | -0.4 |
| | baz=294 | | | | | | | | |
| TWP | Hsiaoliuchiu | 0.35 | 229 | *i* P | | | Pn | 19 18 22.7 | +0.2 |
| | baz=223 | | | | | | | | |
| SLIU | Shizi | 0.39 | 159 | P | | | Pn | 19 18 21.4 | -1.6 |
| | baz=162 | | | | | | | | |
| SLIU | | | | | S | | Sn | 19 18 28.9 | -1.0 |
| | baz=162 | | | | | | | | |
| SLGT | Liugui | 0.41 | 360 | *i* P | | | Pg | 19 18 20.4 | -0.5 |
| | baz=359 | | | | | | | | |
| SLGT | | | | *i* | S | | Sg | 19 18 26.4 | -0.4 |
| | baz=359 | | | | | | | | |
| TWG | Pinlang | 0.46 | 58 | ⇓*i* | P | | Pb | 19 18 22.0 | +0.1 |
| | baz=67 | | | | | | | | |
| TWG | | | | *i* | S | | Sb | 19 18 28.1 | -0.2 |
| | baz=67 | | | | | | | | |
| TWGBT | Beinan | 0.46 | 59 | P | | | Pb | 19 18 21.9 | -0.1 |
| TWGBT | Beinan | 0.46 | 59 | ⇓*i* | P | | Pb | 19 18 22.0 | -0.1 |
| | baz=67 | | | | | | | | |
| TWGBT | | | | *i* | S | | Sb | 19 18 28.2 | -0.3 |
| | baz=67 | | | | | | | | |
| TTN | Taitung | 0.49 | 69 | ⇓*i* | P | | Pn | 19 18 23.4 | -1.0 |
| | baz=75 | | | | | | | | |
| SGST | Jiashian | 0.50 | 353 | *i* P | | | Pb | 19 18 22.0 | -0.7 |
| | baz=353 | | | | | | | | |
| SGST | | | | *i* | S | | Sb | 19 18 29.9 | +0.3 |
| | baz=353 | | | | | | | | |
| LONT | Longtian | 0.55 | 54 | *i* P | | | Pg | 19 18 23.3 | -0.1 |
| | baz=60 | | | | | | | | |
| LONT | | | | *i* | S | | Sg | 19 18 30.8 | -0.1 |
| | baz=60 | | | | | | | | |
| CHN3 | Shinhua | 0.56 | 332 | P | | | Pn | 19 18 25.3 | 0.0 |
| | baz=329 | | | | | | | | |
| CHN3 | | | | | S | | Sn | 19 18 35.4 | +1.3 |
| | baz=329 | | | | | | | | |
| HEN | Hengchun | 0.58 | 172 | *i* P | | | Pn | 19 18 25.7 | +0.2 |
| | baz=161 | | | | | | | | |
| HEN | | | | *i* | S | | Sn | 19 18 35.7 | +1.2 |
| | baz=161 | | | | | | | | |
| SMST | Manzhou Townsh | 0.58 | 163 | *e*P | | | Pn | 19 18 25.4 | -0.3 |
| | baz=164 | | | | | | | | |
| SMST | | | | *e*S | | | Sn | 19 18 34.9 | +0.2 |
| | baz=164 | | | | | | | | |
| STYH | Taoyuan | 0.60 | 11 | P | | | Pg | 19 18 24.1 | -0.2 |
| | baz=14 | | | | | | | | |
| STYH | | | | | S | | Sg | 19 18 32.7 | +0.3 |
| | baz=14 | | | | | | | | |
| TAI1 | Yung-k'ang | 0.60 | 320 | S | | | Sn | 19 18 35.2 | +0.1 |
| | baz=317 | | | | | | | | |
| CHN1 | Nanshi | 0.61 | 350 | *i* P | | | Pg | 19 18 25.1 | +0.5 |
| | baz=348 | | | | | | | | |
| CHN1 | | | | *i* | S | | Sn | 19 18 34.7 | -0.8 |
| | baz=348 | | | | | | | | |
| SSHA | Shanhua | 0.65 | 329 | *i* P | | | Pn | 19 18 26.5 | -0.1 |
| | baz=340 | | | | | | | | |
| SSHA | | | | | S | | Sn | 19 18 37.0 | +0.8 |
| | baz=340 | | | | | | | | |
| TWK1 | Hengchun | 0.65 | 167 | ⇑*i* P | | | Pn | 19 18 26.8 | +0.2 |
| | baz=168 | | | | | | | | |
| TWK1 | | | | *i* | S | | Sn | 19 18 37.7 | +1.4 |
| | baz=168 | | | | | | | | |
| SNST | Tainan City | 0.65 | 348 | P | | | Pg | 19 18 25.7 | +0.4 |
| | baz=346 | | | | | | | | |
| SNST | | | | *i* | S | | Sn | 19 18 36.2 | -0.2 |
| | baz=346 | | | | | | | | |
| TWKBT | Hengchun | 0.65 | 167 | ⇑*i* P | | | Pn | 19 18 26.7 | +0.1 |
| | baz=168 | | | | | | | | |
| TWKBT | | | | | S | | Sn | 19 18 37.7 | +1.3 |
| | baz=168 | | | | | | | | |
| WTP | Ta-pu | 0.66 | 357 | *i* P | | | Pg | 19 18 25.5 | -0.1 |
| | baz=357 | | | | | | | | |
| WTP | | | | *i* | S | | Sn | 19 18 36.0 | -0.8 |
| | baz=357 | | | | | | | | |
| ELDTW | Lidau | 0.69 | 29 | P | | | Pg | 19 18 25.8 | -0.4 |
| | baz=31 | | | | | | | | |
| ELDTW | | | | *i* | S | | Sg | 19 18 35.6 | +0.2 |
| | baz=31 | | | | | | | | |
| TWK | Hsinying | 0.70 | 348 | *i* P | | | Pg | 19 18 26.3 | +0.1 |
| | baz=348 | | | | | | | | |
| TWK | | | | *e*S | | | Sg | 19 18 36.2 | +0.6 |
| | baz=348 | | | | | | | | |
| TPUB | Ta-pu | 0.72 | 359 | P | | | Pb | 19 18 26.2 | -0.1 |
| TPUB | Ta-pu | 0.72 | 359 | P | | | Pg | 19 18 26.4 | -0.2 |
| | baz=358 | | | | | | | | |
| TPUB | | | | | S | | Sg | 19 18 37.0 | +0.8 |
| | baz=358 | | | | | | | | |
| EDH | Donghe | 0.72 | 57 | P | | | Pg | 19 18 26.5 | -0.1 |
| | baz=60 | | | | | | | | |
| EDH | | | | *i* | S | | Sn | 19 18 38.1 | 0.0 |
| | baz=60 | | | | | | | | |
| SCLT | Jiali | 0.73 | 325 | P | | | Pn | 19 18 27.0 | -0.6 |
| | baz=323 | | | | | | | | |
| SCLT | | | | *i* | S | | Sn | 19 18 38.5 | +0.3 |
| | baz=323 | | | | | | | | |
| ECS | Chishang | 0.73 | 46 | *i* P | | | Pn | 19 18 27.1 | -0.7 |
| | baz=48 | | | | | | | | |
| LDUT | Ludao | 0.76 | 83 | *e*P | | | Pn | 19 18 27.2 | -0.9 |
| | baz=98 | | | | | | | | |
| EHD | Haiduan | 0.77 | 42 | *e*P | | | Pg | 19 18 27.0 | -0.5 |
| | baz=52 | | | | | | | | |
| EHD | | | | *e*S | | | Sb | 19 18 37.1 | 0.0 |
| | baz=52 | | | | | | | | |
| TSCK | Chigu Township | 0.77 | 318 | *e*P | | | Pn | 19 18 27.8 | -0.4 |
| | baz=315 | | | | | | | | |
| TSCK | | | | | S | | Sn | 19 18 39.0 | -0.2 |
| | baz=315 | | | | | | | | |
| CHKT | Chengkung | 0.84 | 52 | *i* P | | | Pg | 19 18 28.5 | -0.4 |
| | baz=65 | | | | | | | | |
| CHKT | | | | | S | | Sn | 19 18 41.1 | +0.1 |
| | baz=65 | | | | | | | | |
| ICHU | Yijhu | 0.85 | 336 | P | | | Pb | 19 18 28.5 | -0.1 |
| | baz=335 | | | | | | | | |
| ICHU | | | | | S | | Sn | 19 18 42.1 | +0.9 |
| | baz=335 | | | | | | | | |
| WCKO | Fanlu | 0.85 | 357 | P | | | Pg | 19 18 28.8 | -0.4 |
| | baz=357 | | | | | | | | |
| WCKO | | | | *i* | S | | Sn | 19 18 41.8 | +0.3 |
| | baz=357 | | | | | | | | |
| FULB | Fuli | 0.86 | 44 | P | | | Pn | 19 18 29.1 | -0.4 |
| | baz=46 | | | | | | | | |
| CHN8 | Yiju | 0.86 | 332 | *e*P | | | Pg | 19 18 29.1 | -0.1 |
| | baz=331 | | | | | | | | |
| CHN8 | | | | *i* | S | | Sn | 19 18 41.3 | -0.3 |
| | baz=331 | | | | | | | | |
| CHKH | Chenggong | 0.92 | 48 | *e*P | | | Pg | 19 18 30.0 | -0.4 |
| | baz=61 | | | | | | | | |
| CHY | Chiayi | 0.94 | 347 | *e*P | | | Pg | 19 18 30.7 | 0.0 |
| | baz=347 | | | | | | | | |
| CHY | | | | | S | | Sn | 19 18 44.4 | +0.9 |
| | baz=347 | | | | | | | | |
| CHN2 | Minshiung | 0.96 | 350 | P | | | Pn | 19 18 30.5 | -0.3 |
| | baz=350 | | | | | | | | |
| CHN2 | | | | *e*S | | | Sn | 19 18 45.0 | +1.0 |
| | baz=350 | | | | | | | | |
| TWF1 | Yuli | 0.97 | 38 | *i* P | | | Pg | 19 18 31.0 | -0.4 |
| | baz=40 | | | | | | | | |
| TWF1 | | | | *e*S | | | Sb | 19 18 43.4 | +0.3 |
| | baz

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **EHY** | **Hungye** | **1.11** | **34** | P | **Pb** | **19 18 32.9** | **-0.2** |
| | baz=35 | | | | | | |
| EHY | | | | S | **Sg** | 19 18 48.2 | -0.4 |
| | baz=35 | | | | | | |
| **EHYH** | **Wanrong** | **1.11** | **35** | *eP* | **Pg** | **19 18 33.4** | **-0.6** |
| | baz=36 | | | | | | |
| EHYH | | | | *eS* | **Sg** | 19 18 49.3 | +0.6 |
| | baz=36 | | | | | | |
| **WSF** | **Szhu** | **1.12** | **340** | P | **Pn** | **19 18 32.3** | **-0.8** |
| | baz=339 | | | | | | |
| WSF | | | | *eS* | **Sb** | 19 18 47.0 | -0.5 |
| | baz=339 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.13** | **10** | P | **Pb** | **19 18 33.2** | **-0.1** |
| | baz=353 | | | | | | |
| WHYT | | | | S | **Sg** | 19 18 48.8 | -0.3 |
| | baz=353 | | | | | | |
| **WTK** | **Tuku** | **1.13** | **348** | *eP* | **Pn** | **19 18 32.1** | **-1.1** |
| | baz=347 | | | | | | |
| WTK | | | | *i* S | **Sb** | 19 18 47.6 | 0.0 |
| | baz=347 | | | | | | |
| **WDGT** | **Dungji** | **1.14** | **307** | P | **Pn** | **19 18 31.8** | **-1.5** |
| | baz=305 | | | | | | |
| WDGT | | | | S | **Sb** | 19 18 46.6 | -1.2 |
| | baz=305 | | | | | | |
| **HGSD** | **Ruisui** | **1.16** | **38** | *eP* | **Pg** | **19 18 34.2** | **-0.6** |
| | baz=39 | | | | | | |
| HGSD | | | | S | **Sg** | 19 18 51.5 | +1.6 |
| | baz=39 | | | | | | |
| **SSLB** | **Suanglung** | **1.23** | **13** | P | **Pb** | **19 18 34.9** | **-0.2** |
| **SSLB** | **Suanglung** | **1.23** | **13** | *eP* | **Pb** | **19 18 34.8** | **-0.4** |
| | baz=13 | | | | | | |
| SSLB | | | | *eS* | **Sg** | 19 18 52.4 | -0.2 |
| | baz=13 | | | | | | |
| **WJS** | **Zhushan** | **1.24** | **3** | *eP* | **Pn** | **19 18 34.4** | **-0.3** |
| | baz=350 | | | | | | |
| WJS | | | | *eS* | **Sg** | 19 18 53.6 | +1.0 |
| | baz=350 | | | | | | |
| **VWDT** | **VWDT** | **1.25** | **21** | *eP* | **Pb** | **19 18 35.6** | **+0.2** |
| | baz=23 | | | | | | |
| **VCHM** | **Qimei** | **1.29** | **299** | *eP* | **Pn** | **19 18 33.8** | **-1.6** |
| | baz=297 | | | | | | |
| VCHM | | | | *eS* | **Sn** | 19 18 49.6 | -2.5 |
| | baz=297 | | | | | | |
| **WNT** | **Mingjian** | **1.29** | **1** | *eP* | **Pb** | **19 18 35.9** | **-0.2** |
| | baz=2.0 | | | | | | |
| WNT | | | | *eS* | **Sb** | 19 18 52.4 | +0.1 |
| | baz=2.0 | | | | | | |
| **EGFH** | **Guangfu** | **1.30** | **33** | *eP* | **Pb** | **19 18 35.6** | **-0.6** |
| | baz=34 | | | | | | |
| EGFH | | | | *eS* | **Sb** | 19 18 52.5 | -0.1 |
| | baz=34 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.32** | **31** | *i* P | **Pb** | **19 18 36.5** | **-0.1** |
| | baz=40 | | | | | | |
| WARBT | | | | S | **Sg** | 19 18 54.3 | -1.0 |
| | baz=40 | | | | | | |
| **TYC** | **Yuchr** | **1.33** | **8** | *eP* | **Pg** | **19 18 37.9** | **-0.3** |
| | baz=352 | | | | | | |
| TYC | | | | S | **Sg** | 19 18 55.0 | -0.6 |
| | baz=352 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.36** | **313** | *i* P | **Pn** | **19 18 34.6** | **-1.7** |
| | baz=312 | | | | | | |
| PHUB | | | | *i* S | **Sn** | 19 18 51.2 | -2.6 |
| | baz=312 | | | | | | |
| **PNG** | **Penghu** | **1.41** | **315** | P | **Pn** | **19 18 35.2** | **-1.8** |
| | baz=313 | | | | | | |
| PNG | | | | *eS* | **Sn** | 19 18 52.7 | -2.3 |
| | baz=313 | | | | | | |
| **ESL** | **Shilin** | **1.43** | **30** | *eP* | **Pb** | **19 18 37.9** | **-0.4** |
| | baz=48 | | | | | | |
| **OWD** | **Renai** | **1.45** | **19** | *eP* | **Pb** | **19 18 38.3** | **-0.6** |
| | baz=20 | | | | | | |
| OWD | | | | *eS* | **Sg** | 19 18 58.7 | -0.8 |
| | baz=20 | | | | | | |
| **SHUL** | **Shoufeng** | **1.47** | **35** | *eP* | **Pb** | **19 18 39.3** | **+0.2** |
| | baz=36 | | | | | | |
| SHUL | | | | *eS* | **Sg** | 19 18 59.7 | -0.2 |
| | baz=36 | | | | | | |
| **WUSB** | **Renai** | **1.47** | **17** | *i* P | **Pn** | **19 18 38.2** | **+0.2** |
| | baz=17 | | | | | | |
| WUSB | | | | *eS* | **Sb** | 19 18 57.2 | -0.3 |
| | baz=17 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.49** | **9** | P | **Pn** | **19 18 38.2** | **0.0** |
| | baz=9.0 | | | | | | |
| WCS | | | | S | **Sn** | 19 18 57.5 | +0.5 |
| | baz=9.0 | | | | | | |
| **WCHH** | **Zhanghua** | **1.50** | **357** | *eS* | **Sb** | **19 18 59.0** | **+0.8** |
| | baz=356 | | | | | | |
| **CHGB** | **Renai** | **1.55** | **18** | *eP* | **Pb** | **19 18 39.8** | **-0.8** |
| | baz=2.0 | | | | | | |
| **ETM** | **Tongmen** | **1.58** | **29** | *eP* | **Pb** | **19 18 40.6** | **-0.5** |
| | baz=31 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.60** | **26** | *eP* | **Pb** | **19 18 41.4** | **0.0** |
| | baz=34 | | | | | | |
| LXIB | | | | *eS* | **Sg** | 19 19 03.0 | -1.1 |
| | baz=34 | | | | | | |
| **HWA** | **Hwalien** | **1.65** | **32** | *eP* | **Pb** | **19 18 41.3** | **-0.8** |
| | baz=36 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.66** | **20** | *eP* | **Pb** | **19 18 42.0** | **-0.6** |
| | baz=26 | | | | | | |
| **WHP** | **Taichung City** | **1.71** | **9** | *eP* | **Pn** | **19 18 42.0** | **+0.7** |
| | baz=355 | | | | | | |
| WHP | | | | *eS* | **Sb** | 19 19 03.6 | -0.8 |
| | baz=355 | | | | | | |
| **TWD** | **Chiawan** | **1.73** | **30** | *eP* | **Pb** | **19 18 42.9** | **-0.6** |
| | baz=46 | | | | | | |
| **TDCB** | **Techi** | **1.73** | **16** | P | **Pn** | **19 18 41.5** | **-0.1** |
| | baz=16 | | | | | | |
| TDCB | | | | *eS* | **Sb** | 19 19 04.7 | -0.4 |
| | baz=16 | | | | | | |
| **TWT** | **Tachien** | **1.73** | **16** | *eP* | **Pn** | **19 18 42.0** | **+0.3** |
| | baz=16 | | | | | | |
| TWT | | | | *eS* | **Sb** | 19 19 05.1 | -0.2 |
| | baz=16 | | | | | | |
| **FUSS** | **Fushou** | **1.75** | **18** | *eP* | **Pn** | **19 18 42.5** | **+0.6** |
| | baz=4.0 | | | | | | |
| **WDJ** | **Dajia District** | **1.76** | **360** | *eS* | **Sb** | **19 19 06.0** | **+0.2** |
| | baz=360 | | | | | | |
| **TWQ1** | **Liyutan** | **1.76** | **4** | *eP* | **Pn** | **19 18 41.5** | **-0.5** |
| | baz=4.0 | | | | | | |
| TWQ1 | | | | *eS* | **Sn** | 19 19 04.7 | +0.8 |
| | baz=4.0 | | | | | | |
| **NACB** | **Ninganchiao** | **1.81** | **29** | P | **Pn** | **19 18 43.0** | **+0.5** |
| **NNSB** | **Datong** | **1.96** | **20** | *eP* | **Pn** | **19 18 45.7** | **+1.0** |
| | baz=6.0 | | | | | | |
| **NNS** | **Nan Shan** | **1.97** | **20** | *eP* | **Pn** | **19 18 45.7** | **+0.9** |
| | baz=5.0 | | | | | | |
| **LATG** | **Datong** | **2.11** | **22** | *eP* | **Pn** | **19 18 47.3** | **+0.6** |
| | baz=8.0 | | | | | | |
| **NDT** | **Datong Townshi** | **2.16** | **21** | *eP* | **Pb** | **19 18 49.5** | **-1.5** |
| | baz=7.0 | | | | | | |
| **YHNB** | **Yeheng** | **2.18** | **18** | P | **Pb** | **19 18 50.1** | **-1.2** |
| **YHNB** | **Yeheng** | **2.18** | **18** | *eP* | **Pb** | **19 18 50.2** | **-1.2** |
| | baz=3.0 | | | | | | |
| **TATO** | **Taipei** | **2.50** | **18** | P | **Pn** | **19 18 54.1** | **+2.0** |
| **JYNG** | **Yonagunijimaku** | **2.81** | **48** | *eP* | **Pn** | **19 18 57.4** | **+1.1** |
| JYNG | | | | *eS* | **Sn** | 19 19 31.6 | +1.9 |
| **YOJ** | **Yonaguni jima** | **2.87** | **49** | P | **Pn** | **19 18 59.0** | **+1.9** |
| **YOJ** | **Yonaguni jima** | **2.87** | **49** | *eP* | **Pn** | **19 18 59.0** | **+2.0** |
| **HATJ** | **Hateruma jima** | **3.25** | **63** | *eS* | **Sn** | **19 19 41.5** | **+0.9** |
| **IRIF** | **Iriomote-Funau** | **3.33** | **58** | *eP* | **Pn** | **19 19 05.0** | **+1.6** |
| IRIF | | | | *eS* | **Sn** | **19 19 44.1** | **+1.7** |
| **JKRS** | **Kuro-shima** | **3.50** | **61** | *eS* | **Sn** | **19 19 48.5** | **+1.8** |
| **JMJ** | **Miyako jima 2** | **4.80** | **62** | P | **Pn** | **19 19 26.0** | **+2.3** |

**TAP 08 19:18:28.5,24°71N×121°14E,h11km,ML1.7,2C-3D,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NJD** | **Zhudong** | **0.05** | **299** | ⇑*i*P | Pg | 19 18 31.2 | +0.6 |
| | baz=299 | | | | | | |
| NJD | | | | *i* S | Sg | 19 18 33.3 | +1.1 |
| | baz=299 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.08** | **194** | ⇓*i*P | Pg | 19 18 31.4 | +0.4 |
| | baz=191 | | | | | | |
| NFF | | | | *i* S | Sg | 19 18 33.4 | +0.7 |
| | baz=191 | | | | | | |
| **HSN1** | **Hsinchu** | **0.13** | **302** | *i* P | Pb | 19 18 32.4 | -0.6 |
| | baz=302 | | | | | | |
| HSN1 | | | | *i* S | Sg | 19 18 35.3 | +1.6 |
| | baz=302 | | | | | | |
| **LIOB** | **Emei** | **0.13** | **240** | ⇓*i*P | Pb | 19 18 32.3 | -0.7 |
| | baz=231 | | | | | | |
| LIOB | | | | *i* S | Sg | 19 18 35.2 | +1.4 |
| | baz=231 | | | | | | |
| **NSTT** | **Nanjuang** | **0.15** | **238** | ⇑*i*P | Pg | 19 18 32.6 | +0.7 |
| | baz=236 | | | | | | |
| NSTT | | | | *i* S | Sg | 19 18 35.4 | +1.1 |
| | baz=236 | | | | | | |
| **NSK** | **Sanguang** | **0.20** | **100** | *i* P | Pb | 19 18 33.6 | -0.7 |
| | baz=107 | | | | | | |
| NSK | | | | *i* S | Sg | 19 18 36.7 | +0.9 |
| | baz=107 | | | | | | |
| **YHNB** | **Yeheng** | **0.22** | **101** | ⇓*i*P | Pg | 19 18 33.8 | +0.7 |
| | baz=108 | | | | | | |
| YHNB | | | | *i* S | Sg | 19 18 37.0 | +0.8 |
| | baz=108 | | | | | | |
| **NWLT** | **Wulai** | **0.34** | **78** | P | Pg | 19 18 35.9 | +0.6 |
| | baz=84 | | | | | | |
| NWLT | | | | *eS* | Sg | 19 18 40.2 | +0.5 |
| | baz=84 | | | | | | |
| **NNS** | **Nan Shan** | **0.34** | **142** | *i* P | Pb | 19 18 36.3 | -0.4 |
| | baz=141 | | | | | | |
| NNS | | | | S | Sb | 19 18 41.5 | -0.8 |
| | baz=141 | | | | | | |
| **NDT** | **Datong Townshi** | **0.36** | **107** | P | Pg | 19 18 36.2 | +0.6 |
| | baz=109 | | | | | | |
| NDT | | | | S | Sg | 19 18 40.8 | +0.5 |
| | baz=109 | | | | | | |
| **NNSB** | **Datong** | **0.36** | **142** | *i* P | Pb | 19 18 36.5 | -0.5 |
| | baz=142 | | | | | | |
| NNSB | | | | *i* S | Sg | 19 18 41.2 | +0.7 |
| | baz=142 | | | | | | |
| **NMLH** | **Miaoli** | **0.36** | **242** | *eP* | Pb | 19 18 36.5 | -0.5 |
| | baz=242 | | | | | | |
| **LATG** | **Datong** | **0.39** | **116** | *i* P | Pb | 19 18 37.2 | -0.3 |
| | baz=128 | | | | | | |
| LATG | | | | *i* S | Sg | 19 18 42.5 | +0.9 |
| | baz=128 | | | | | | |
| **ENTT** | **Nioudou** | **0.40** | **100** | *i* P | Pb | 19 18 37.2 | -0.4 |
| | baz=102 | | | | | | |
| ENTT | | | | S | Sg | 19 18 42.1 | +0.5 |
| | baz=102 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.41** | **83** | P | Pb | 19 18 37.7 | -0.2 |
| | baz=92 | | | | | | |
| FUSB | | | | S | Sg | 19 18 43.0 | +0.9 |
| | baz=92 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.43** | **54** | *eP* | Pg | 19 18 37.4 | +0.4 |
| | baz=55 | | | | | | |
| **NSY** | **Sanyi** | **0.45** | **230** | *eP* | Pb | 19 18 38.8 | +0.3 |
| | baz=229 | | | | | | |
| **TDCB** | **Techi** | **0.46** | **178** | P | Pg | 19 18 38.0 | +0.5 |
| | baz=177 | | | | | | |
| **TWT** | **Tachien** | **0.46** | **176** | *eP* | Pg | 19 18 37.9 | +0.4 |
| | baz=176 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.46** | **33** | *eP* | Pb | 19 18 38.2 | -0.5 |
| | baz=34 | | | | | | |
| **WHP** | **Taichung City** | **0.47** | **202** | *eP* | Pb | 19 18 38.4 | -0.4 |
| | baz=192 | | | | | | |
| **FUSS** | **Fushou** | **0.47** | **168** | P | Pb | 19 18 38.4 | -0.5 |
| | baz=173 | | | | | | |
| **TWE** | **Neicheng** | **0.48** | **89** | *eP* | Pb | 19 18 38.5 | -0.5 |
| | baz=90 | | | | | | |

*IDC **08** 19:46:20.1±9.8,45°.70N×26°.14E,h96km±74km,mb3.2/3, mbtmp3.6/4,ML3.0/2, Error ellipse: s-maj=76.4km s-min=73.5km az=115.0*
*SIGU **08** 19:46:22.7,45°.54N×26°.45E,h130km,mb3.3*
*BUC **08** 19:46:23.3±0.2,45°.52N×26°.48E,h120km±1km,ml3.8/70, Error ellipse: s-maj=1.3km s-min=1.1km az=11.0*
*MOLD **08** 19:46:23.1,45°.53N×26°.37E,h110km,MB3.0,Mb3.2*
*CFUSG **08** 19:46:23.1,45°.50N×26°.40E,h100km,mb3.0/3,Romania Magtype MSH 3.2 from 1 stations*
*BEO **08** 19:46:24.6±1.7,45°.57N×26°.31E,h49km±2km,ML3.3/13*
*MCSM **08** 19:46:24.1±0.6,46°.N±5°×2°.7E±°,h112km±5km,MLv3.2*
*SOF **08** 19:46:25.2,45°.41N±0°.02×26°.33E±0°.02,h100km±6km, MD3.6/9*

**ISC 08 19:46:22.4±0.8,45°.52N±0°.02×26°.43E±0°.02,h133km±4km, n161,σ1§38/246,mb3.4/3,92C-45D,Romania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NEHR** | **Nehoiu** | **0.13** | **226** | ⇓P | **Pn** | **19 46 40.6** | **+0.1** |
| NEHR | | | | ⇑S | **Sn** | **19 46 52.9** | **-1.2** |
| **BISRR** | **Bisoca** | **0.20** | **81** | ⇓P | **Pn** | **19 46 40.7** | **+0.1** |
| BISRR | | | | ⇑S | **Sn** | **19 46 52.8** | **-1.6** |
| **BISRR** | **Bisoca** | **0.20** | **81** | P | **Pn** | **19 46 40.8** | **+0.1** |
| **SPBR** | **Spulber** | **0.33** | **44** | ⇑P | **Pn** | **19 46 41.2** | **+0.2** |
| SPBR | | | | ⇑S | **Sn** | **19 46 53.8** | **-1.3** |
| **MLR** | **Muntele Rosu** | **0.34** | **266** | ⇑P | **Pn** | **19 46 41.4** | **+0.2** |
| MLR | | | | ⇓S | **Sn** | **19 46 54.4** | **-1.0** |
| **MLR** | **Muntele Rosu** | **0.34** | **266** | P | **Pn** | **19 46 41.6** | **+0.4** |
| MLR | | | | S | **Sn** | **19 46 55.4** | **0.0** |
| **COVR** | **Voineasa-Covas** | **0.36** | **335** | ⇑P | **Pn** | **19 46 41.1** | **-0.1** |
| COVR | | | | ⇑S | **Sn** | **19 46 53.9** | **-1.5** |
| **PLOR5** | **Plostina Array** | **0.37** | **27** | P | **Pn** | **19 46 41.1** | **-0.1** |
| PLOR5 | | | | S | **Sn** | **19 46 54.4** | **-1.1** |
| **PLOR** | **Plostina** | **0.37** | **25** | ⇑P | **Pn** | **19 46 41.1** | **-0.1** |
| PLOR | | | | ⇑S | **Sn** | **19 46 54.4** | **-1.0** |
| **PLOR3** | **Plostina Array** | **0.37** | **24** | P | **Pn** | **19 46 41.1** | **-0.1** |
| **ISR** | **Istrita** | **0.41** | **168** | ⇑P | **Pn** | **19 46 41.6** | **+0.2** |
| ISR | | | | ⇑S | **Sn** | **19 46 54.4** | **-1.3** |
| **ISR** | **Istrita** | **0.41** | **168** | P | **Pn** | **19 46 41.3** | **-0.1** |
| **VRI** | **Vrincioaia** | **0.41** | **31** | ⇑P | **Pn** | **19 46 41.4** | **+0.1** |
| VRI | | | | ⇓S | **Sn** | **19 46 54.7** | **-1.0** |
| **VRI** | **Vrincioaia** | **0.41** | **31** | P | **Pn** | **19 46 41.5** | **+0.1** |
| **ODBI** | **Odobesti** | **0.51** | **60** | P | **Pn** | **19 46 42.6** | **+0.8** |
| **TURR** | **Turia** | **0.61** | **332** | ⇑P | **Pn** | **19 46 42.6** | **+0.1** |
| TURR | | | | ⇑S | **Sn** | **19 46 56.5** | **-1.3** |
| **PANC** | **Panciu** | **0.62** | **55** | ⇑P | **Pn** | **19 46 42.7** | **+0.3** |
| PANC | | | | ⇓S | **Sn** | **19 46 56.4** | **-1.3** |
| **PLAR** | **PLOIESTI** | **0.66** | **205** | ⇓P | **Pn** | **19 46 43.6** | **+0.8** |
| PLAR | | | | ⇑S | **Sn** | **19 46 58.9** | **+0.7** |
| **COSR** | **Cosmesti PH** | **0.71** | **61** | ⇑P | **Pn** | **19 46 42.5** | **-0.5** |
| COSR | | | | ⇓S | **Sn** | **19 46 57.2** | **-1.5** |
| **OZUR** | | **0.73** | **323** | ⇓P | **Pn** | **19 46 43.2** | **-0.1** |
| OZUR | | | | ⇓S | **Sn** | **19 46 57.6** | **-1.7** |
| **BOSR** | **Bodos** | **0.78** | **317** | ⇑S | **Sn** | **19 46 58.6** | **-1.2** |
| **ONER** | **Baraj Valea Uz** | **0.82** | **358** | ⇑P | **Pn** | **19 46 44.2** | **+0.2** |
| ONER | | | | ⇓S | **Sn** | **19 46 59.4** | **-1.1** |
| **SULR** | | **0.85** | **188** | ⇓P | **Pn** | **19 46 44.7** | **+0.5** |
| SULR | | | | ⇑S | **Sn** | **19 47 00.8** | **+0.1** |
| **DOPR** | **Dopca** | **0.86** | **302** | ⇑P | **Pn** | **19 46 44.4** | **+0.1** |
| DOPR | | | | ⇑S | **Sn** | **19 46 59.8** | **-1.1** |
| **GHRR** | | **0.88** | **51** | ⇓P | **Pn** | **19 46 44.6** | **+0.1** |
| GHRR | | | | ⇑S | **Sn** | **19 47 00.4** | **-0.7** |
| **GHRR** | | **0.88** | **51** | P | **Pn** | **19 46 44.8** | **+0.4** |
| **TUDR** | | **0.88** | **84** | ⇑P | **Pn** | **19 46 44.0** | **-0.4** |
| TUDR | | | | ⇑S | **Sn** | **19 46 59.6** | **-1.5** |
| **IZVR** | **Izvoarele** | **0.94** | **88** | ⇑P | **Pn** | **19 46 44.5** | **-0.5** |
| IZVR | | | | ⇓S | **Sn** | **19 47 00.0** | **-2.1** |
| **SLCR** | **Slobozia Conac** | **0.95** | **85** | ⇑P | **Pn** | **19 46 44.7** | **-0.4** |
| SLCR | | | | ⇑S | **Sn** | **19 47 00.2** | **-2.0** |
| **VOIR** | | **0.97** | **266** | ⇑P | **Pn** | **19 46 45.7** | **+0.2** |
| VOIR | | | | ⇓S | **Sn** | **19 47 01.9** | **-0.9** |
| **VOIR** | | **0.97** | **266** | P | **Pn** | **19 46 45.6** | **+0.2** |
| **SCHL** | **Schela** | **0.99** | **90** | ⇑P | **Pn** | **19 46 44.9** | **-0.5** |
| SCHL | | | | ⇑S | **Sn** | **19 47 00.9** | **-1.9** |
| **SCHLR** | **Schela** | **0.99** | **92** | ⇑P | **Pn** | **19 46 44.9** | **-0.5** |
| SCHLR | | | | ⇑S | **Sn** | **19 47 00.9** | **-2.0** |
| **SCHLR** | **Schela** | **0.99** | **92** | ⇑P | **Pn** | **19 46 44.9** | **-0.5** |
| SCHLR | | | | ⇑S | **Sn** | **19 47 00.9** | **-2.0** |
| **TESR** | **Tescani** | **1.01** | **9** | ⇑P | **Pn** | **19 46 45.4** | **-0.2** |
| TESR | | | | ⇑S | **Sn** | **19 47 01.7** | **-1.6** |
| **TESR** | **Tescani** | **1.01** | **9** | P | **Pn** | **19 46 45.5** | **-0.2** |
| **NEGRR** | **Negrea** | **1.02** | **88** | ⇑P | **Pn** | **19 46 45.6** | **-0.1** |
| NEGRR | | | | ⇑S | **Sn** | **19 47 01.9** | **-1.5** |
| **INCR** | **INCERC-Sediu C** | **1.09** | **190** | ⇑S | **Sn** | **19 47 04.2** | **-0.4** |
| **AMRR** | **Amara** | **1.11** | **144** | ⇓P | **Pn** | **19 46 46.9** | **+0.3** |
| AMRR | | | | ⇑S | **Sn** | **19 47 04.9** | **-0.1** |
| **SCTR** | **Scanteiesti** | **1.11** | **81** | ⇑S | **Sn** | **19 47 04.2** | **-0.8** |
| **BIR** | **Birlad** | **1.12** | **48** | ⇓P | **Pn** | **19 46 46.9** | **+0.2** |
| BIR | | | | ⇑S | **Sn** | **19 47 04.0** | **-1.2** |
| **CIOR** | **Ciorogarla** | **1.14** | **200** | ⇑P | **Pn** | **19 46 47.4** | **+0.5** |
| CIOR | | | | ⇓S | **Sn** | **19 47 05.2** | **-0.2** |
| **GISR** | **Galati** | **1.15** | **93** | ⇑S | **Sn** | **19 47 04.2** | **-1.3** |
| **BUC1** | **Bucharest** | **1.20** | **194** | ⇑P | **Pn** | **19 46 48.1** | **+0.6** |
| BUC1 | | | | ⇑S | **Sn** | **19 47 06.4** | **-0.1** |
| **VLDR** | **Vladesti** | **1.21** | **74** | ⇓P | **Pn** | **19 46 47.7** | **+0.2** |
| VLDR | | | | ⇓S | **Sn** | **19 47 05.2** | **-1.4** |
| **CFR** | **Carcaliu** | **1.25** | **105** | ⇑P | **Pn** | **19 46 47.8** | **-0.2** |
| CFR | | | | ⇑S | **Sn** | **19 47 05.4** | **-2.0** |
| **GIUM** | **Giurgiulesti** | **1.25** | **91** | P | **Pn** | **19 46 48.5** | **+0.5** |
| GIUM | | | | *eS* | **Sn** | **19 47 06.6** | **-0.8** |
| | 45µm,0.1s | | | | | | |
| **ARR** | **Arges** | **1.27** | **264** | ⇓P | **Pn** | **19 46 48.8** | **+0.5** |
| ARR | | | | ⇑S | **Sn** | **19 47 07.4** | **-0.6** |
| **SGRR** | **Singureni** | **1.33** | **194** | ⇑P | **Pn** | **19 46 49.3** | **+0.5** |
| SGRR | | | | ⇑S | **Sn** | **19 47 08.4** | **-0.5** |
| **HARR** | **Harsova** | **1.35** | **127** | ⇑P | **Pn** | **19 46 49.1** | **+0.1** |
| **JOSR** | **Joseni** | **1.35** | **332** | ⇑P | **Pn** | **19 46 48.9** | **-0.2** |
| JOSR | | | | ⇓S | **Sn** | **19 47 08.1** | **-1.4** |
| **HUMR** | **Humele** | **1.42** | **227** | ⇑P | **Pn** | **19 46 50.4** | **+0.5** |
| HUMR | | | | ⇑S | **Sn** | **19 47 10.4** | **-0.3** |
| **BIZ** | **Bicaz** | **1.44** | **351** | ⇓S | **Sn** | **19 47 11.4** | **+0.2** |
| **TLBR** | **Topalu** | **1.50** | **130** | ⇓P | **Pn** | **19 46 51.1** | **+0.3** |
| TLBR | | | | ⇑S | **Sn** | **19 47 11.0** | **-1.3** |
| **TPGR** | **Topolog** | **1.56** | **114** | ⇓P | **Pn** | **19 46 51.1** | **-0.2** |
| TPGR | | | | ⇑S | **Sn** | **19 47 12.1** | **-1.3** |
| **MDB** | **Medias** | **1.56** | **294** | ⇓P | **Pn** | **19 46 52.6** | **+1.3** |
| MDB | | | | ⇓S | **Sn** | **19 47 14.8** | **+1.3** |
| **LEOM** | **Leova** | **1.59** | **52** | P | **Pn** | **19 46 51.8** | **+0.2** |
| LEOM | | | | S | **Sn** | **19 47 12.8** | **-1.2** |
| **COPA** | **Copaceanca** | **1.63** | **212** | ⇑P | **Pn** | **19 46 52.6** | **+0.5** |
| COPA | | | | ⇓S | **Sn** | **19 47 14.3** | **-0.4** |
| **CVDA** | **Cernavoda** | **1.65** | **135** | ⇑P | **Pn** | **19 46 52.9** | **+0.6** |
| CVDA | | | | ⇓S | **Sn** | **19 47 13.6** | **-1.5** |
| **ICOR** | **Ion Corvin** | **1.71** | **145** | ⇑P | **Pn** | **19 46 53.8** | **+0.8** |
| ICOR | | | | ⇓S | **Sn** | **19 47 15.3** | **-1.0** |
| **TLCR** | | **1.72** | **100** | ⇓P | **Pn** | **19 46 53.2** | **+0.1** |
| TLCR | | | | ⇑S | **Sn** | **19 47 15.3** | **-1.3** |
| **IAS** | **Iasi** | **1.85** | **25** | ⇑P | **Pn** | **19 46 54.6** | **-0.1** |
| IAS | | | | ⇑S | **Sn** | **19 47 17.9** | **-1.5** |
| **LOT** | **Lotru** | **1.87** | **269** | ⇓P | **Pn** | **19 46 55.3** | **+0.2** |
| LOT | | | | ⇑S | **Sn** | **19 47 20.1** | **0.0** |
| **JURR** | **Jurilovca** | **1.89** | **113** | ⇑P | **Pn** | **19 46 55.3** | **+0.2** |
| **MFTR** | **Murfatlar** | **1.95** | **133** | ⇓P | **Pn** | **19 46 56.2** | **+0.3** |
| MFTR | | | | ⇓S | **Sn** | **19 47 20.5** | **-1.0** |
| **ZIMR** | | **2.01** | **203** | ⇑P | **Pn** | **19 46 57.2** | **+0.6** |
| **TSCT** | **Constanta Port** | **2.09** | **130** | ⇑P | **Pn** | **19 46 58.0** | **+0.5** |
| TSCT | | | | ⇑S | **Sn** | **19 47 23.0** | **-1.4** |
| **VLAD** | **Vladila** | **2.09** | **224** | ⇑P | **Pn** | **19 46 57.9** | **+0.3** |
| **EFOR** | **EFORIE** | **2.13** | **132** | ⇓S | **Sn** | **19 47 24.3** | **-1.1** |
| **ARCR** | **ARCALIA** | **2.13** | **318** | ⇓P | **Pn** | **19 46 58.4** | **+0.4** |
| **MILM** | **Milestii Mici** | **2.17** | **49** | ⇑P | **Pn** | **19 46 58.6** | **0.0** |
| **MILM** | **Milestii Mici** | **2.17** | **49** | ⇓*i*P | **Pn** | **19 46 58.6** | **0.0** |
| | 3µm,0.1s | | | | | | |
| MILM | | | | *i* S | **Sn** | **19 47 24.0** | **-2.3** |
| | 4µm,0.1s | | | | | | |
| **MILM** | **Milestii Mici** | **2.17** | **49** | ⇑*i*P | **Pn** | **19 46 58.6** | **0.0** |
| MILM | | | | Pm | | 19 46 59.0 | |
| MILM | | | | *eS* | **Sn** | **19 47 24.0** | **-2.3** |
| MILM | | | | Sm | | 19 47 24.1 | |
| MILM | | | | m | | 19 47 25.5 | |
| **KIS** | **Kishinev** | **2.23** | **47** | ⇑P | **Pn** | **19 46 59.5** | **+0.3** |
| KIS | | | | ⇑S | **Sn** | **19 47 25.9** | **-1.6** |
| **KIS** | **Kishinev** | **2.23** | **47** | ⇑*i*P | **Pn** | **19 46 59.6** | **+0.3** |
| | 5µm,0.1s | | | | | | |
| KIS | | | | *i* S | **Sn** | **19 47 25.6** | **-1.9** |
| | 4µm,0.2s | | | | | | |
| **KIS** | **Kishinev** | **2.23** | **47** | ⇓*i*P | **Pn** | **19 46 59.6** | **+0.3** |
| KIS | | | | Pm | | 19 46 59.7 | |
| KIS | | | | *i* S | **Sn** | **19 47 25.7** | **-1.8** |
| KIS | | | | Sm | | 19 47 25.8 | |
| KIS | | | | m | | 19 47 26.3 | |
| **PSN** | **Preselentsi** | **2.24** | **146** | P | **Pn** | **19 47 00.1** | **+0.6** |
| PSN | | | | S | **Sn** | **19 47 27.7** | **-0.2** |
| **BURAR** | **Bucovina Array** | **2.26** | **339** | ⇑P | **Pn** | **19 47 01.5** | **+1.7** |
| BURAR | | | | ⇑S | **Sn** | **19 47 29.7** | **+1.2** |
| **SZH** | **Strazhitsa** | **2.27** | **188** | P | **Pn** | **19 47 00.4** | **+0.5** |
| SZH | | | | S | **Sn** | **19 47 27.2** | **-1.4** |
| **CJR** | **Cluj-Napoca** | **2.30** | **302** | ⇑P | **Pn** | **19 47 00.5** | **+0.2** |
| **PRD** | **Provadia** | **2.46** | **163** | P | **Pn** | **19 47 02.9** | **+0.7** |
| PRD | | | | S | **Sn** | **19 47 32.4** | **-0.3** |
| **PVL** | **Pavlikeni** | **2.56** | **201** | P | **Pn** | **19 47 04.2** | **+0.8** |
| PVL | | | | S | **Sn** | **19 47 33.2** | **-1.8** |
| **GZR** | **Gura Zlata** | **2.57** | **269** | ⇑P | **Pn** | **19 47 04.5** | **+0.8** |
| GZR | | | | ⇑S | **Sn** | **19 47 36.3** | **+0.9** |
| **MARR** | **Marisel-Cluj** | **2.58** | **298** | ⇑P | **Pn** | **19 47 04.5** | **+0.7** |
| MARR | | | | ⇑S | **Sn** | **19 47 36.2** | **+0.6** |
| **PURM** | **Purcari** | **2.61** | **66** | ⇑P | **Pn** | **19 47 04.2** | **+0.2** |
| PURM | | | | ⇓S | **Sn** | **19 47 34.6** | **-1.5** |
| **PURM** | **Purcari** | **2.61** | **66** | ⇓*i*P | **Pn** | **19 47 04.1** | **+0.2** |
| | 2µm,0.1s | | | | | | |
| PURM | | | | *i* S | **Sn** | **19 47 34.0** | **-2.0** |
| | 3µm,0.5s | | | | | | |
| **PURM** | **Purcari** | **2.61** | **66** | P | **Pn** | **19 47 04.2** | **+0.2** |
| **ELND** | **Elena** | **2.62** | **189** | ⇓P | **Pn** | **19 47 04.9** | **+0.6** |
| ELND | | | | ⇑S | **Sn** | **19 47 36.4** | **+0.1** |
| **RMGR** | **Halanga-Turnu** | **2.78** | **253** | ⇑P | **Pn** | **19 47 06.6** | **+0.4** |
| **VALD** | **Valchedram** | **2.81** | **231** | ⇑*i*P | **Pn** | **19 47 06.8** | **+0.1** |
| **DRGR** | | **2.88** | **298** | *ePn* | **Pn** | **19 47 06.6** | **-1.0** |
| **MPEP** | **Malo Peshtene** | **2.89** | **223** | ⇑*i*P | **Pn** | **19 47 08.3** | **+0.6** |
| MPEP | | | | S | **Sn** | **19 47 40.3** | **-2.4** |
| **HERR** | **Herculane** | **2.91** | **259** | ⇑P | **Pn** | **19 47 07.9** | **0.0** |
| **SORM** | **Soroca** | **2.93** | **26** | ⇑P | **Pn** | **19 47 07.8** | **-0.4** |
| **SORM** | **Soroca** | **2.93** | **26** | ⇓*i*P | **Pn** | **19 47 07.8** | **-0.4** |
| | 2µm,0.1s | | | | | | |
| SORM | | | | *i* S | **Sn** | **19 47 40.0** | **-3.6** |
| | 5µm,0.2s | | | | | | |
| **SORM** | **Soroca** | **2.93** | **26** | P | **Pn** | **19 47 07.6** | **-0.6** |
| **KSV** | **Kosov** | **2.95** | **342** | ⇓*i*P | **Pn** | **19 47 09.8** | **+1.3** |
| KSV | | | | Pm |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SJES** | **Sjenica** | **5.14** | **246** | *e*Pn | | **Pn** | **19 47 38.2** | **+0.6** |
| SJES | | | | *e*Sn | | **Sn** | **19 48 32.6** | **-3.5** |
| **SEV** | **Sevastopol'** | **5.22** | **98** | *e*P | | **Pn** | **19 47 37.6** | **-0.9** |
| SEV | | | | Pm | | | 19 47 39.2 | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| SEV | | | | *e*S | | **Sn** | **19 48 36.0** | **-1.7** |
| SEV | | | | Sm | | | 19 48 38.0 | |
| | comp=N,11nm,0.5s | | | | | | | |
| SEV | | | | Sm | | | 19 48 38.0 | |
| | comp=E,5.0nm,0.4s | | | | | | | |
| **SEV** | **Sevastopol'** | **5.22** | **98** | *e*P | | **Pn** | **19 47 37.6** | **-0.9** |
| SEV | | | | Pm | | | 19 47 39.2 | |
| SEV | | | | *e*S | | **Sn** | **19 48 36.0** | **-1.7** |
| SEV | | | | Sm | | | 19 48 38.0 | |
| **AK07** | **Malin Array Si** | **5.37** | **19** | P | | **Pn** | **19 47 40.9** | **+0.5** |
| **AK13** | **Malin Array Si** | **5.40** | **18** | P | | **Pn** | **19 47 41.5** | **+0.8** |
| **AK14** | **Malin Array Si** | **5.42** | **18** | P | | **Pn** | **19 47 42.0** | **+0.9** |
| **AK10** | **Malin Array Si** | **5.43** | **19** | P | | **Pn** | **19 47 41.7** | **+0.5** |
| **AK12** | **Malin Array Si** | **5.45** | **19** | P | | **Pn** | **19 47 41.5** | **+0.1** |
| **AK09** | **Malin Array Si** | **5.45** | **20** | P | | **Pn** | **19 47 41.9** | **+0.4** |
| **AK08** | **Malin Array Si** | **5.46** | **19** | P | | **Pn** | **19 47 41.2** | **-0.4** |
| **AK02** | **Malin Array Si** | **5.47** | **19** | P | | **Pn** | **19 47 42.1** | **+0.4** |
| **AK11** | **Malin Array Si** | **5.48** | **19** | P | | **Pn** | **19 47 41.8** | **-0.1** |
| **MI28** | **Mi28,Pidlybu** | **5.48** | **8** | P | | **Pn** | **19 47 42.4** | **+0.5** |
| **AK01** | **Malin Array Si** | **5.50** | **19** | P | | **Pn** | **19 47 42.2** | **0.0** |
| **AKASG** | **Malin Array Be** | **5.52** | **19** | P | | **Pn** | **19 47 38.4** | **-4.0** |
| | comp=E,0.9nm,0.3s,baz=205,slow=12,SNR=1.6 | | | | | | | |
| AKASG | | | | S | | **Sn** | **19 48 40.0** | **-4.7** |
| | comp=E,0.8nm,0.3s,baz=205,slow=22,SNR=2.3 | | | | | | | |
| **AK04** | **Malin Array Si** | **5.52** | **18** | P | | **Pn** | **19 47 42.7** | **+0.3** |
| **AK23** | **Malin Array Si** | **5.55** | **18** | P | | **Pn** | **19 47 42.0** | **-0.8** |
| **YAL** | **Yalta** | **5.58** | **98** | *e*P | | **Pn** | **19 47 43.2** | **0.0** |
| YAL | | | | Pm | | | 19 47 43.5 | |
| | comp=Z,4.0nm,0.4s | | | | | | | |
| **YAL** | **Yalta** | **5.58** | **98** | *e*P | | **Pn** | **19 47 43.2** | **0.0** |
| YAL | | | | Pm | | | 19 47 43.5 | |
| **NACGM** | **Naroch** | **9.40** | **1** | *e*P | | **Pn** | **19 48 32.9** | **-1.6** |
| | comp=E,550nm,0.9s,baz=182 | | | | | | | |
| **FINES** | **FINESS Array B** | **15.96** | **359** | P | | **Pn** | **19 49 56.5** | **-2.7** |
| | comp=E,0.1nm,0.3s,baz=168,slow=14,SNR=6.1 | | | | | | | |
| | comp=E,2.0nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **37.69** | **55** | P | | **P** | **19 53 25.4** | **+0.8** |
| | comp=E,0.5nm,0.5s,baz=289,slow=9.0,SNR=2.7 | | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.02** | **67** | P | | **P** | **19 53 29.6** | **+2.0** |
| | comp=E,0.3nm,0.4s,baz=277,slow=7.4,SNR=7.9 | | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **52.56** | **57** | P | | **P** | **19 55 24.8** | **+2.7** |
| | comp=E,0.4nm,0.7s,baz=291,slow=6.0,SNR=2.9 | | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | | |

*JMA* ***08*** *19:55:23.1±0.9,45°N±5°×15°0E±°, h30km, MV3.8/10, SE OFF ETOROFU*

*IDC* ***08*** *19:55:24.5±1.3,45°21N×149°59E, h0km, mb3.7/6, mbtmp3.7/7, ML2.5/1, MS3.6/2, Error ellipse: s-maj=34.4km s-min=32.7km az=133.0*

*SKHL* ***08*** *19:55:24.6±0.5,44°10N×149°70E, h45km±5km, mb4.2/3*

**ISC 08 19:55:24.7±1.3, 44°09N±0'09×149°62E±0'10, h35km, n21, σ1§75/25, mb3.9/6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.70** | **313** | *e*P | **Pn** | **19 55 50.6** | **-1.2** |
| KUR | | | | AMB | AMB | 19 55 51.6 | |
| | 120nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **19 56 10.6** | **-1.6** |
| KUR | | | | A | A | 19 56 17.2 | |
| | 290nm,0.5s | | | | | | |
| KUR | | | | A | A | 19 56 17.2 | |
| | 220nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **2.02** | **265** | *e*P | **Pn** | **19 55 55.7** | **-0.6** |
| SHO | | | | AMB | AMB | 19 55 57.2 | |
| | 30nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **19 56 18.8** | **-1.5** |
| SHO | | | | A | A | 19 56 22.3 | |
| | 130nm,0.4s | | | | | | |
| SHO | | | | A | A | 19 56 22.3 | |
| | 80nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.71** | **270** | *e*P | **Pn** | **19 56 06.7** | **+1.0** |
| YUK | | | | AMB | AMB | 19 56 07.9 | |
| | 40nm,0.4s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.90** | **257** | *e*P | **Pn** | **19 56 08.0** | **-0.3** |
| NEM2 | | | | *e*S | **Sn** | **19 56 41.9** | **-0.1** |
| **NMR** | **Nemuro--Hokkai** | **2.91** | **257** | *e*P | **Pn** | **19 56 08.6** | **+0.1** |
| NMR | | | | *e*S | **Sn** | **19 56 41.7** | **-0.5** |
| **JRA** | **Rausu** | **3.25** | **269** | P | **Pn** | **19 56 14.2** | **+1.1** |
| JRA | | | | *e*S | **Sn** | **19 56 52.3** | **+1.8** |
| **JAK** | **Akkeshi** | **3.74** | **255** | *e*P | **Pn** | **19 56 19.7** | **-0.2** |
| **JTKR** | **Abashiri--Toko** | **4.12** | **270** | *e*P | **Pn** | **19 56 26.0** | **+0.9** |
| **JCH** | **Churui** | **4.79** | **254** | *e*P | **Pn** | **19 56 35.5** | **+1.1** |
| JCH | | | | *e*S | **Sn** | **19 57 27.4** | **-1.3** |
| **ASAJ** | **Asahikawa** | **5.06** | **273** | Pn | **Pn** | **19 56 40.7** | **+2.7** |
| | 0.2nm,0.3s,baz=304,slow=30,SNR=1.5 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **19 57 36.7** | **+1.5** |
| | 1.0nm,0.3s,baz=95,slow=26,SNR=1.5 | | | | | | |
| | 3.3nm,0.6s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.33** | **253** | *e*P | **Pn** | **19 56 44.3** | **+2.5** |
| **JANG** | **Nango** | **7.06** | **241** | *e*S | **Sn** | **19 58 19.2** | **-5.4** |
| **JCJ** | **Chichijima** | **17.98** | **202** | LR | LR | 20 08 11.3 | |
| | comp=Z,91nm,18.6s,baz=110,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.00** | **298** | P | **P** | **20 03 44.7** | **+0.3** |
| | 1.0nm,0.8s,baz=70,slow=7.7,SNR=10 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.23** | **196** | P | P | 20 06 15.3 | +13 |
| | 0.3nm,0.7s,baz=19,slow=6.7,SNR=1.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **65.37** | **334** | P | **P** | **20 06 02.2** | **-0.8** |
| | 0.9nm,0.7s,baz=38,slow=9.3,SNR=3.4 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.92** | **340** | P | **P** | **20 06 31.6** | **-0.2** |
| | comp=Z,2.4nm,1.0s,baz=31,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.92** | **340** | P | **P** | **20 06 31.0** | **-0.8** |
| | comp=Z,0.5nm,0.6s,baz=30,slow=6.4,SNR=4.5 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **70.05** | **338** | P | **P** | **20 06 31.2** | **-1.4** |
| | comp=Z,1.6nm,0.8s,baz=27,slow=13,SNR=1.9 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.97** | **58** | P | **P** | **20 07 37.2** | **+1.3** |
| | comp=Z,0.3nm,0.7s,baz=295,slow=3.8,SNR=4.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **82.67** | **309** | LR | LR | 20 46 30.7 | |
| | comp=Z,57nm,19.0s,baz=88,slow=37 | | | | | | |

*NEIC* ***08*** *19:59:50.7±1.7,43°8N±0°2×149°7E±0°2, h10km±2km, mb4.2/17, Error ellipse: s-maj=33.5km s-min=16.8km az=162.0*

*JMA* ***08*** *19:59:54.5±0.9,45°N±5°×15°0E±°, h30km, MV3.8/9, SE OFF ETOROFU*

*NIED* ***08*** *19:59:54.5, 44°59N×149°54E, h30km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr=4.43; Mθθ-0.47; Mφφ-3.96; Mrθ 0.82; Mθφ-1.60; Mφr 2.34; Fault plane solution: M₀5.15000×10¹⁴ NP1:φs20.00000°, δ59.00000°, λ89.00000°. NP2:φs202.00000°, δ31.00000°, λ92.00000°.*

*IDC* ***08*** *19:59:55.8±1.2,45°16N×149°44E, h0km, mb3.8/9, mbtmp3.7/11, ML3.3/2, MS3.2/5 Error ellipse: s-maj=32.1km s-min=22.8km az=165.0*

*SKHL* ***08*** *19:59:55.3±0.5,44°10N×149°60E, h55km±4km, mb4.4/3*

**ISC 08 19:59:57.3±2.5, 44°11N±0'09×149°5E±0'1, h47km±21km, n54, σ1§34/54, mb4.1/18, MS3.4/3, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.62** | **315** | *e*P | **Pn** | **20 00 22.0** | **-1.4** |
| KUR | | | | AMB | AMB | 20 00 22.9 | |
| | 320nm,0.6s | | | | | | |
| KUR | | | | *i* S | **Sn** | **20 00 42.4** | **-0.7** |
| KUR | | | | A | A | 20 00 47.6 | |
| | 660nm,0.5s | | | | | | |
| KUR | | | | A | A | 20 00 47.6 | |
| | 450nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.94** | **264** | *e*P | **Pn** | **20 00 26.6** | **-1.2** |
| SHO | | | | AMB | AMB | 20 00 28.3 | |
| | 40nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **20 00 50.1** | **-0.9** |
| SHO | | | | A | A | 20 00 53.1 | |
| | 220nm,0.4s | | | | | | |
| SHO | | | | A | A | 20 00 53.1 | |
| | 140nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.63** | **270** | *e*P | **Pn** | **20 00 36.6** | **-0.6** |
| YUK | | | | AMB | AMB | 20 00 36.7 | |
| | 70nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **20 01 07.1** | **-0.7** |
| YUK | | | | A | A | 20 01 11.9 | |
| | 260nm,0.6s | | | | | | |
| YUK | | | | A | A | 20 01 11.9 | |
| | 200nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.82** | **256** | *e*P | **Pn** | **20 00 38.8** | **-1.1** |
| NEM2 | | | | *e*S | **Sn** | **20 01 11.4** | **-1.3** |
| **NMR** | **Nemuro--Hokkai** | **2.83** | **256** | *e*P | **Pn** | **20 00 39.0** | **-1.0** |
| NMR | | | | *e*S | **Sn** | **20 01 11.8** | **-1.1** |
| **JRA** | **Rausu** | **3.17** | **268** | P | **Pn** | **20 00 45.1** | **+0.5** |
| JRA | | | | *e*S | **Sn** | **20 01 23.2** | **+2.1** |
| **AKK** | **Akkeshi** | **3.56** | **254** | *e*S | **Sn** | **20 01 30.0** | **-0.7** |
| **JAK** | **Akkeshi** | **3.67** | **254** | *e*S | **Sn** | **20 01 33.1** | **-0.3** |
| **JTKR** | **Abashiri--Toko** | **4.04** | **270** | P | **Pn** | **20 00 57.1** | **+0.6** |
| **JAR** | **Ashorobuto** | **4.24** | **261** | *e*P | **Pn** | **20 01 00.6** | **+1.3** |
| JAR | | | | *e*S | **Sn** | **20 01 50.2** | **+2.7** |
| **JCH** | **Churui** | **4.72** | **254** | P | **Pn** | **20 01 05.0** | **-0.9** |
| JCH | | | | S | **Sn** | **20 01 59.0** | **-0.3** |
| **JKA** | **Kamikawa-asahi** | **4.97** | **273** | Pn | **Pn** | **20 01 11.6** | **+2.3** |
| **ASAJ** | **Asahikawa** | **4.97** | **273** | Pn | **Pn** | **20 01 12.3** | **+3.0** |
| | 1.2nm,0.3s,baz=126,slow=18,SNR=2.2 | | | | | | |
| | 2.6nm,0.3s | | | | | | |
| **ERM** | **Erimo** | **5.10** | **248** | Pn | **Pn** | **20 01 14.4** | **+3.3** |
| **JNBK** | **Urakawa-nobuka** | **5.26** | **252** | P | **Pn** | **20 01 15.3** | **+2.0** |
| **JANG** | **Nango** | **7.00** | **241** | *e*S | Sn | 20 02 49.6 | -5.9 |
| **JTM** | **Tenmabayashi** | **7.07** | **245** | Pn | Pn | 20 01 35.3 | -2.8 |
| JTM | | | | | **Sn** | **20 02 53.1** | **-3.9** |
| **USRK** | **Ussuriysk Ar.** | **12.58** | **277** | Pn | **Pn** | **20 02 54.7** | **+1.2** |
| | 0.2nm,0.3s,baz=82,slow=15,SNR=1.5 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **13.22** | **299** | LR | LR | 20 08 45.8 | |
| | comp=Z,70nm,18.4s,baz=104,slow=42 | | | | | | |
| **KSRS** | **Korea Array** | **17.62** | **255** | LR | LR | 20 10 17.6 | |
| | comp=Z,34nm,19.2s,baz=110,slow=35 | | | | | | |
| **YAK** | **Yakutsk** | **21.38** | **334** | LR | LR | 20 13 20.1 | |
| | comp=Z,35nm,18.4s,baz=134,slow=39 | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.46** | **292** | P | **P** | **20 05 55.6** | **-1.1** |
| **SONM** | **Songino Array** | **29.90** | **293** | P | **P** | **20 06 00.9** | **+0.4** |
| **SONM** | **Songino Array** | **29.90** | **293** | P | **P** | **20 06 00.1** | **-0.4** |
| | 0.7nm,0.8s,baz=74,slow=6.2,SNR=4.7 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **B20K** | **Meade River** | **36.95** | **27** | P | **P** | **20 07 01.0** | **-0.3** |
| B20K | | | | IAmb | IAmb | 20 07 30.8 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **IMAR** | **Indian Mountai** | **37.39** | **34** | P | **P** | **20 07 04.4** | **-0.8** |
| **B21K** | **Ikpikpuk River** | **37.70** | **28** | P | **P** | **20 07 07.7** | **-0.1** |
| B21K | | | | IAmb | IAmb | 20 07 10.8 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **39.12** | **28** | P | **P** | **20 07 19.8** | **+0.2** |
| C23K | | | | IAmb | IAmb | 20 07 51.0 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **39.32** | **30** | P | **P** | **20 07 22.1** | **+0.8** |
| TOLK | | | | IAmb | IAmb | 20 07 28.0 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **E24K** | **Your Creek** | **39.67** | **31** | P | **P** | **20 07 24.9** | **+0.6** |
| **ILAR** | **Eielson Array** | **40.19** | **37** | P | **P** | **20 07 26.9** | **-1.7** |
| | comp=Z,0.1nm,0.5s,baz=268,slow=9.0,SNR=2.1 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **40.53** | **29** | P | **P** | **20 07 31.1** | **-0.3** |
| **BMAR** | **Burnt Mountain** | **41.12** | **32** | P | **P** | **20 07 35.4** | **-0.9** |
| **BCPM** | **Bancas Point** | **44.09** | **43** | P | **P** | **20 08 02.0** | **+1.6** |
| **MK31** | **Makanchi Array** | **45.92** | **298** | P | **P** | **20 08 15.2** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 20 08 16.5 | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.92** | **298** | P | **P** | **20 08 15.5** | **+0.3** |
| | comp=Z,1.7nm,0.8s,baz=74,slow=7.7,SNR=16 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **46.11** | **298** | P | **P** | **20 08 17.2** | **+0.5** |
| MAKZ | | | | IAmb | IAmb | 20 08 28.4 | |
| | comp=Z,5.2nm,1.5s | | | | | | |
| **KURK** | **Kurchatov** | **46.73** | **304** | P | **P** | **20 08 21.3** | **-0.1** |
| KURK | | | | IAmb | IAmb | 20 08 56.2 | |
| | comp=Z,1.9nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.82** | **304** | P | **P** | **20 08 21.4** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=72,slow=7.9,SNR=3.1 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.86** | **296** | P | **P** | **20 09 02.1** | **+1.2** |
| BOOM | | | | IAmb | IAmb | 20 09 03.2 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.16** | **310** | P | **P** | **20 09 45.0** | **-1.0** |
| **WRA** | **Warramunga Arr** | **65.23** | **196** | P | P | 20 10 46.2 | +12 |
| | comp=Z,0.5nm,0.8s,baz=14,slow=6.5,SNR=3.0 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **65.32** | **334** | P | **P** | **20 10 32.8** | **-1.2** |
| **FINES** | **FINESS Array B** | **65.32** | **334** | P | **P** | **20 10 33.5** | **-0.4** |
| | comp=Z,1.7nm,0.9s,baz=41,slow=10,SNR=6.2 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **NC405** | **NORSAR Array S** | **69.68** | **340** | P | **P** | **20 11 01.5** | **0.0** |
| **NC204** | **NORSAR Array S** | **69.78** | **340** | P | **P** | **20 11 02.5** | **+0.3** |
| **NB201** | **NORSAR Array S** | **69.84** | **340** | P | **P** | **20 11 02.2** | **-0.4** |
| **NB2** | **NORSAR Subarra** | **69.87** | **340** | P | **P** | **20 11 02.7** | **0.0** |
| | comp=Z,3.9nm,1.1s,baz=30,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.87** | **340** | P | **P** | **20 11 02.8** | **0.0** |
| | comp=Z,1.4nm,0.8s,baz=30,slow=6.3,SNR=6.7 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **LCMT** | **Little Creek M** | **69.94** | **58** | P | P | 20 11 01.3 | -2.5 |
| LCMT | | | | IAmb | IAmb | 20 11 01.9 | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **70.00** | **338** | P | **P** | **20 11 02.6** | **-0.9** |
| | comp=Z,1.7nm,0.6s,baz=55,slow=11,SNR=5.5 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **ANMO** | **Albuquerque** | **75.41** | **55** | LR | LR | 20 44 30.5 | |
| | comp=Z,19nm,18.7s,baz=297,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **79.66** | **332** | LR | LR | 20 49 47.8 | |
| | comp=Z,39nm,19.4s,baz=162,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **81.03** | **58** | P | **P** | **20 12 08.7** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=308,slow=3.4,SNR=6.1 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |

*BJI* ***08*** *20:11:51.9±0.0,20°24S×66°20E, h5km, mb4.7/39, mB5.0/13, Ms4.6/11, Ms7 4.4/12*

*IDC* ***08*** *20:11:54.4±0.5,20°07S×66°55E, h0km, mb4.4/26, mbtmp4.4/27, MS3.9/38, Error ellipse: s-maj=15.9km s-min=13.4km az=83.0*

*NEIC* ***08*** *20:11:56.2±1.4,20°2S±0°1×66°26E±0°09, h10km±1km, mb4.9/40, Error ellipse: s-maj=19.0km s-min=14.8km az=175.0*

*GCMT* ***08*** *20:12:00.2±0.2,20°13S±0°01×66°43E±0°01, h16km±1km, MW5.0/111, Moment Tensor Solution. s38,c42; s111,c181; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-0.77±.10; Mθθ 3.28±.10; Mφφ-2.51±.09; Mrθ 0.71±.25; Mθφ-1.75±.07; Mφr 0.46±.24; Best double couple: M₀3.50300×10¹⁶ NP1:φs242.00000°, δ84.00000°, λ-164.00000°. NP2:φs150.00000°, δ74.00000°, λ-6.00000°. Principal axes: T 3.8360, Plg7.0000°, Azm15.0000°; N -0.6630, Plg73.0000°, Azm261.0000°; P -3.1690, Plg15.0000°, Azm107.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 08 20:11:57.2±0.4, 20°12S±0°07×66°38E±0°07, h16km, n170, σ1§53/137, mb4.7/80, MS4.0/45, 7C-1D, Mauritius-Reunion region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ROCAM** | **Rodrigues Isla** | **2.86** | **277** | | **Pn** | **20 12 38.6** | **-3.5** |
| **RER** | **Riviere de l'E** | **10.01** | **262** | Pn | **Pn** | **20 14 18.2** | **-2.3** |
| **H08S1** | **Diego Garcia H** | **13.74** | **26** | T | T | 20 29 04.2 | |
| | baz=204,slow=76,SNR=504 | | | | | | |
| **H08S2** | **Diego Garcia H** | **13.75** | **26** | T | T | 20 29 04.3 | |
| | baz=204,slow=76,SNR=448 | | | | | | |
| **H08S3** | **Diego Garcia H** | **13.76** | **26** | T | T | 20 29 05.7 | |
| | baz=204,slow=76,SNR=490 | | | | | | |
| **OPO** | **Ambohidratompo** | **18.18** | **272** | P | **P** | **20 16 10.3** | **+0.9** |
| | 3.8nm,0.9s,baz=76,slow=13,SNR=4.3 | | | | | | |
| **VOI** | **Vohitsoka** | **18.37** | **261** | P | **Pn** | **20 16 17.2** | **+5.6** |
| **FOMA** | **Nahampoana Res** | **18.55** | **251** | P | **P** | **20 16 09.4** | **-3.9** |
| **KAAM** | **Kaadhehdhoo** | **21.49** | **18** | P | **P** | **20 16 44.9** | **-0.4** |
| **H04N2** | **CROZET ISLANDS** | **28.60** | **201** | T | T | 20 48 02.6 | |
| | baz=30,slow=75 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **28.61** | **201** | T | T | 20 48 03.5 | |
| | baz=30,slow=75 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **28.62** | **201** | T | T | 20 48 09.5 | |
| | baz=30,slow=75 | | | | | | |
| **PALK** | **Pallekele** | **30.66** | **29** | LR | LR | 20 27 33.2 | |
| | comp=Z,450nm,20.3s,baz=316,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **38.25** | **249** | P | **P** | **20 19 18.2** | **+1.3** |
| | 2.3nm,0.9s,baz=182,slow=16,SNR=1.7 | | | | | | |
| | 2.3nm,0.9s | | | | | | |
| **LODK** | **Lodwar** | **38.41** | **304** | | **P** | **20 19 20.3** | **+2.0** |
| **ATD** | **Arta Tunnel** | **39.06** | **322** | LR | LR | 20 32 34.3 | |
| | comp=Z,5.3nm,20.9s,baz=124,slow=32 | | | | | | |
| **FURI** | **Furi** | **39.69** | **314** | LR | LR | 20 34 26.4 | |
| | comp=Z,267nm,18.9s,baz=144,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **39.90** | **295** | P | **P** | **20 19 33.0** | **+2.1** |
| | 0.8nm,0.3s,baz=133,slow=21,SNR=1.5 | | | | | | |
| MBAR | | | | LR | LR | 20 33 18.7 | |
| | comp=Z,136nm,19.0s,baz=106,slow=32 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **WSAR** | **Wadi Sarin** | **43.76** | **350** | LR | LR | 20 34 57.9 | |
| | comp=Z,143nm,18.4s,baz=178,slow=32 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **44.43** | **120** | T | T | 21 07 31.1 | |
| | baz=275,slow=75,SNR=5.4 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **44.43** | **120** | T | T | 21 07 20.8 | |
| | baz=275,slow=75,SNR=4.4 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **44.45** | **120** | T | T | 21 07 28.0 | |
| | baz=275,slow=75,SNR=5.4 | | | | | | |
| **MAW** | **Mawson** | **47.52** | **182** | P | **P** | **20 20 31.9** | **+0.6** |
| | 6.6nm,0.7s,baz=14,slow=7.0,SNR=9.4 | | | | | | |
| MAW | | | | LR | LR | 20 35 36.8 | |
| | comp=Z,224nm,20.6s,baz=15,slow=30 | | | | | | |
| | 6.6nm,0.7s | | | | | | |
| **RAYN** | **Ar Rayn** | **47.92** | **334** | P | **P** | **20 20 35.7** | **+0.7** |
| **CM31** | **Chiang Mai Arr** | **49.90** | **42** | P | **P** | **20 20 50.7** | **+0.4** |
| CM31 | | | | IAmb | IAmb | 20 20 51.7 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.90** | **42** | P | **P** | **20 20 50.1** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **49.90** | **42** | P | **P** | **20 20 50.2** | **0.0** |
| | comp=Z,11nm,0.9s,baz=236,slow=8.5,SNR=56 | | | | | | |
| CMAR | | | | LR | LR | 20 39 00.9 | |
| | comp=Z,154nm,20.9s,baz=220,slow=33 | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SHL** | **Shillong** | **51.74** | **30** | P | **P** | **20 21 04.4** | **+0.2** |
| **UBPT** | **Khong Chiam** | **52.10** | **50** | P | **P** | **20 21 06.6** | **-0.2** |
| **CRAI** | **Chiangrai** | **52.12** | **42** | P | **P** | **20 21 06.5** | **-0.4** |
| **TNCH** | **TengChong** | **54.69** | **36** | ⇑P | **P** | **20 21 25.8** | **-0.2** |
| TNCH | | | | pP | sP | 20 21 31.9 | +0.3 |
| TNCH | | | | S | **S** | **20 29 02.2** | **-3.7** |
| TNCH | | | | sS | sS | 20 29 20.1 | +7.1 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,93nm,4.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,130nm,15.0s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,150nm,14.7s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,170nm,17.9s | | | | | | |
| **LSA** | **Lhasa** | **54.99** | **26** | P | **P** | **20 21 29.5** | **+1.1** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **54.99** | **26** | P | **P** | **20 21 29.2** | **+0.9** |
| LSA | | | | IAmb | IAmb | 20 21 37.0 | |
| | comp=Z,9.5nm,1.0s | | | | | | |
| **SLVN** | **Son La** | **55.17** | **44** | P | **P** | **20 21 29.4** | **0.0** |
| SLVN | | | | IAmb | IAmb | 20 21 31.0 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.77** | **99** | P | **P** | **20 21 33.4** | **-0.4** |
| **TOLI2** | **Tolitoli** | **57.30** | **75** | P | **P** | **20 21 44.5** | **-0.1** |
| TOLI2 | | | | IAmb | IAmb | 20 21 51.6 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **ELIB** | **Princess Elisa** | **57.38** | **195** | *d*P | **P** | **20 21 43.0** | **-1.6** |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **PZH** | **PanZhiHua** | **57.66** | **38** | P | **P** | **20 21 50.9** | **+3.8** |
| PZH | | | | S | **S** | **20 29 49.2** | **+4.0** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,130nm,4.9s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,130nm,12.3s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,130nm,12.3s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,140nm,21.8s | | | | | | |
| **GYA** | **Guiyang** | **60.59** | **42** | P | **P** | **20 22 07.3** | **-0.1** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **GOMU** | **GeErMu** | **62.14** | **26** | P | **P** | **20 22 18.0** | **0.0** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **CD2** | **Chengdu** | **62.16** | **36** | P | **P** | **20 22 17.1** | **-0.8** |
| CD2 | | | | pP | sP | 20 22 23.2 | -0.3 |
| CD2 | | | | sP | pwP | 20 22 24.9 | -1.6 |
| CD2 | | | | S | **S** | **20 30 47.9** | **+5.0** |
| CD2 | | | | sS | sS | 20 30 53.6 | +3.5 |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,220nm,15.6s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,210nm,15.5s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,200nm,13.9s | | | | | | |
| **ASAR** | **Alice Springs** | **62.23** | **107** | P | **P** | **20 22 17.8** | **-0.8** |
| **ASAR** | **Alice Springs** | **62.23** | **107** | P | **P** | **20 22 17.5** | **-1.2** |
| | comp=Z,7.1nm,0.8s,baz=262,slow=5.8,SNR=24 | | | | | | |
| ASAR | | | | LR | LR | 20 45 14.5 | |
| | comp=Z,291nm,21.3s,baz=276,slow=32 | | | | | | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **62.23** | **107** | P | **P** | **20 22 17.0** | **-1.6** |
| **GURO** | **Guroymak-BITLI** | **62.68** | **339** | P | **P** | **20 22 21.6** | **+0.3** |
| GURO | | | | IAmb | IAmb | 20 22 31.3 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **62.89** | **7** | LR | LR | 20 48 22.8 | |
| | comp=Z,138nm,18.2s,baz=197,slow=35 | | | | | | |
| **TROLL** | **

comp=Z,2.2nm,0.7s,baz=210,slow=1.6,SNR=5.2
KBZ LR LR 20 50 58.7
comp=Z,38nm,21.0s,baz=168,slow=35
comp=Z,2.2nm,0.7s
**KIV Kislovodsk 67.36 342** P **P** **20 22 51.8 +0.2**
KIV lAmb lAmb 20 25 17.5
comp=Z,9.2nm,0.7s
**KIV Kislovodsk 67.36 342** P **P** **20 22 51.4 -0.2**
comp=Z,10nm,1.2s
**STKA Stephens Creek 67.43 117** LR LR 20 48 17.1
comp=Z,102nm,20.6s,baz=213,slow=32
**MKAR Makanchi Array 68.14 12** LR LR 20 52 03.1
comp=Z,130nm,18.1s,baz=233,slow=35
**LYN LuoYang 69.83 39** *eP* P 20 23 12.3 +5.2
LYN pmax pmax
comp=Z,20nm,0.4s
LYN pmax pmax
comp=Z,270nm,4.5s
LYN LR LR
comp=N,190nm,9.3s
LYN LR LR
comp=E,200nm,10.3s
LYN LR LR
comp=Z,320nm,16.5s
**QSPA South Pole Qui 69.99 180** P **P** **20 23 07.6 -0.2**
QSPA lAmb lAmb 20 23 19.8
comp=Z,12nm,1.1s
**QSPA South Pole Qui 69.99 180** P **P** **20 23 07.8 -0.1**
comp=Z,3.7nm,1.0s,baz=275,slow=3.4,SNR=16
QSPA LR LR 20 49 04.3
comp=Z,106nm,21.1s,baz=276,slow=32
comp=Z,3.7nm,1.0s
**AKTO Aktyubinsk 70.63 354** LR LR 20 51 59.8
comp=Z,46nm,20.9s,baz=292,slow=34
**KURBB Kurchatov Arra 71.25 8** P **P** **20 23 14.5 -0.9**
comp=Z,4.6nm,0.9s,baz=201,slow=6.7,SNR=18
KURBB LR LR 20 51 49.9
comp=Z,141nm,20.6s,baz=170,slow=34
comp=Z,4.6nm,0.9s
**KURK Kurchatov 71.35 8** P **P** **20 23 15.0 -0.9**
**VNDA Vanda 71.68 167** P **P** **20 23 18.4 +0.6**
VNDA lAmb lAmb 20 23 36.0
comp=Z,19nm,1.9s
**VNDA Vanda 71.68 167** P **P** **20 23 17.8 0.0**
comp=Z,1.1nm,0.7s,baz=306,slow=6.7,SNR=5.5
VNDA LR LR 20 51 08.7
comp=Z,66nm,21.0s,baz=250,slow=33
comp=Z,1.1nm,0.7s
**TORD Torodi Ar. Bea 71.69 292** P **P** **20 23 19.0 +0.1**
**TORD Torodi Ar. Bea 71.69 292** P **P** **20 23 19.0 +0.1**
comp=Z,1.3nm,0.9s,baz=74,slow=6.6,SNR=4.8
TORD LR LR 20 52 28.3
comp=Z,134nm,20.3s,baz=125,slow=34
comp=Z,1.3nm,0.9s
**NJ2 Nanjing 72.22 45** *eP* **P** **20 23 24.2 +2.6**
NJ2 pP **pwP** **20 23 28.6 -1.6**
NJ2 pmax pmax
comp=Z,10.0nm,0.6s
**BELA Belgrano 2 72.76 193** P **P** **20 23 23.6 -0.6**
**BTO Baotou 72.78 33** *eP* **P** **20 23 24.1 -0.9**
BTO pP **pP** **20 23 29.1 0.0**
BTO sP **pwP** **20 23 31.8 -1.8**
BTO S **S** **20 32 49.9 -0.3**
BTO SS **SS** **20 37 32.3 +1.5**
BTO pmax pmax
comp=Z,17nm,0.5s
BTO LR LR
comp=Z,140nm,5.4s
BTO LR LR
comp=Z,240nm,5.9s
BTO LR LR
comp=Z,340nm,9.2s
**HNS HongShan 73.10 38** ⇑P **P** **20 23 26.8 +0.1**
HNS pmax pmax
comp=Z,7.0nm,1.0s
**HHC Hu-ho-hao-te 73.76 34** *eP* **P** **20 23 31.2 +0.4**
HHC pP sP 20 23 36.3 -0.1
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,67nm,3.7s
**BELG Belogornoye 74.04 348** P **P** **20 23 31.6 -0.3**
comp=Z,22nm,0.9s,baz=82,slow=9.3,SNR=4.0
BELG LR LR 20 56 04.8
comp=Z,83nm,20.9s,baz=129,slow=36
comp=Z,22nm,0.9s
**CTA Charters Tower 74.21 106** LR LR 20 53 41.2
comp=Z,11nm,18.7s,baz=263,slow=34
**VRI Vrincioaia 74.88 332** P **P** **20 23 36.4 -0.6**
comp=Z,7.6nm,1.0s
**DBIC Dimbokro 74.88 283** P **P** **20 23 38.9 +1.2**
comp=Z,2.7nm,0.7s,baz=153,slow=6.8,SNR=1.9
DBIC LR LR 20 55 35.4
comp=Z,147nm,18.4s,baz=134,slow=35
comp=Z,2.7nm,0.7s
**PLOR5 Plostina Array 74.89 332** P **P** **20 23 38.0 +0.9**
comp=Z,12nm,0.7s
**PLOR3 Plostina Array 74.91 332** P **P** **20 23 37.7 +0.5**
comp=Z,8.6nm,1.0s
**MLR Muntele Rosu 74.93 332** P **P** **20 23 36.4 -1.1**
MLR lAmb lAmb 20 23 43.3
comp=Z,16nm,1.5s
**MLR Muntele Rosu 74.93 332** P **P** **20 23 38.4 +0.9**
comp=Z,7.4nm,1.4s
**VOIR 75.29 331** P **P** **20 23 37.9 -1.6**
comp=Z,4.6nm,1.1s
**PUK Puka 75.30 326** P **P** **20 23 39.0 -0.6**
PUK lAmb lAmb 20 23 59.7
comp=Z,7.9nm,0.9s
**ZALV Zalesovo Beam 75.46 11** P **P** **20 23 39.6 -0.5**
comp=Z,8.1nm,0.8s,baz=197,slow=4.6,SNR=15
ZALV LR LR 20 55 39.1
comp=Z,71nm,19.0s,baz=211,slow=35
comp=Z,8.1nm,0.8s
**JOW Kunigami 75.99 54** LR LR 20 56 13.3
comp=Z,30nm,18.2s,baz=134,slow=35
**SORM Soroca 76.00 335** P **P** **20 23 41.6 -1.8**
comp=Z,6.0nm,2.2s,comp=Z,775nm
**ARU Arti 76.54 356** P **P** **20 23 45.7 -0.5**
comp=Z,5.1nm,0.8s,baz=158,slow=3.3,SNR=8.9
comp=Z,5.1nm,0.8s
**ARU Arti 76.54 356** P **P** **20 23 45.7 -0.5**
comp=Z,8.0nm,0.9s
**SONM Songino Array 76.58 26** P **P** **20 23 46.6 -0.3**
comp=Z,3.7nm,0.8s,baz=216,slow=6.1,SNR=26
SONM LR LR 20 56 44.1
comp=Z,96nm,19.9s,baz=209,slow=35
comp=Z,3.7nm,0.8s
**NDNU Novodnistrovsk 76.77 335** P **P** **20 23 47.2 -0.5**
**BUR08 Bucovina Ar. S 76.92 333** lAmb lAmb 20 24 10.1
comp=Z,18nm,1.9s
**KMPD K-Podol'skiy 77.11 334** P **P** **20 23 48.3 -1.3**
KMPD P **pP** **20 23 48.6 -5.3**
**AK07 Malin Array Si 77.63 337** P **P** **20 23 52.1 -0.4**
**AK09 Malin Array Si 77.65 337** P **P** **20 23 52.4 -0.2**
**AK10 Malin Array Si 77.65 337** P **P** **20 23 52.4 -0.2**
**LUBAR Lubar, Ukraine 77.67 336** P **P** **20 23 52.4 -0.3**
**AK08 Malin Array Si 77.68 337** P **P** **20 23 52.3 -0.4**
**AK05 Malin Array Si 77.68 337** P **P** **20 23 51.6 -1.2**
**AK02 Malin Array Si 77.71 337** P **P** **20 23 52.1 -0.9**
**AK12 Malin Array Si 77.72 337** P **P** **20 23 52.8 -0.2**
**AKASG Malin Array Be 77.74 337** P **P** **20 23 52.4 -0.8**
comp=Z,1.2nm,0.6s,baz=147,slow=4.7,SNR=5.6
comp=Z,1.2nm,0.6s
**AKBB Malin Array Si 77.74 337** P **P** **20 23 52.7 -0.4**
AKBB lAmb lAmb 20 24 01.4
comp=Z,7.6nm,0.8s
**AKBB Malin Array Si 77.74 337** P **P** **20 23 52.9 -0.2**
**KIEV Kiev 77.74 337** P **P** **20 23 52.9 -0.2**
KIEV lAmb lAmb 20 24 01.4
comp=Z,6.8nm,0.8s
**MI30 MI30,Zelenitsa 78.17 336** P **P** **20 23 53.5 -2.0**
**PMG Port Moresby 78.22 96** LR LR 20 55 08.8
comp=Z,104nm,21.1s,baz=267,slow=33
**XLT XiLinHaoTe 78.28 34** *eP* **P** **20 23 56.8 +0.4**
XLT pmax pmax
comp=Z,8.0nm,1.1s
**MI28 MI28,Pidlybu 78.51 336** P **P** **20 23 57.7 +0.3**
**MORS Morshin 78.62 333** P **P** **20 23 58.5 +0.4**
**HOLU Holmets 78.82 332** P **P** **20 24 00.7 +1.6**
**KOLS Kolonicke sedl 79.17 332** *eP* P 20 24 06.6 +5.5
**RNPP5 Staryi Chortor 79.43 335** P **P** **20 24 02.1 -0.3**
**KWP Kalwaria Pacla 79.51 333** P **P** **20 24 02.3 -0.6**
comp=Z,10nm,2.5s
**CRVS Cervenica-Dubn 79.51 332** *eP* P 20 24 08.0 +5.0
**KIRV Kirov 79.66 351** LR LR 20 59 02.2
comp=Z,61nm,21.2s,baz=167,slow=36

**MPLH Magyarpolny 80.10 329** P **P** **20 24 06.0 -0.2**
**VYHS Vyhne 80.41 330** *eP* **P** **20 24 08.7 +0.9**
VYHS *e* 20 24 15.4
**SOKA Soboth 81.02 327** *eP* **P** **20 24 12.6 +1.3**
comp=Z,3.2nm,1.1s
**RONA Rosalia, Austr 81.08 328** *eP* **P** **20 24 12.2 +0.7**
comp=Z,2.6nm,0.7s
**OBKA Obir 81.16 327** *eP* **P** **20 24 12.7 +0.7**
comp=Z,2.6nm,1.0s
**ARSA Arzberg 81.16 328** *eP* **P** **20 24 13.5 +1.6**
comp=Z,4.3nm,1.2s
**JNU Nakatsue 81.17 50** LR LR 21 01 27.7
comp=Z,55nm,18.1s,baz=214,slow=37
**KSRS Korea Array 81.42 45** P **P** **20 24 12.4 -1.0**
comp=Z,2.2nm,0.9s,baz=238,slow=5.8,SNR=7.8
KSRS LR LR 20 59 31.7
comp=Z,69nm,20.1s,baz=235,slow=35
comp=Z,2.2nm,0.9s
**CONA Conrad Observa 81.45 328** *eP* **P** **20 24 13.9 +0.4**
comp=Z,6.0nm,1.8s
**MOA Molln 82.19 328** *eP* **P** **20 24 16.7 -0.6**
comp=Z,3.3nm,1.3s
**ABTA Abfaltersbach 82.37 326** *epP* pP 20 24 22.8 +0.1
comp=Z,5.8nm,1.0s
**LESA Schwarzleotal 82.72 327** *eP* **P** **20 24 20.8 +0.6**
comp=Z,4.3nm,1.2s
**WTTA Wattenberg 83.17 326** *eP* **P** **20 24 21.8 -0.8**
comp=Z,5.2nm,1.8s
**FETA Feichten 83.49 325** *epP* pP 20 24 28.3 -0.3
comp=Z,5.5nm,1.1s
**FUORN Ofenpass-Fuorn 83.50 325** P **P** **20 24 21.9 -2.5**
**MOTA Moosalm 83.50 326** *epP* pP 20 24 27.9 -0.7
comp=Z,4.2nm,1.0s
**DAVA Damuels 84.11 325** *epP* pP 20 24 31.5 -0.2
comp=Z,4.4nm,1.0s
**GUMO Guam 84.12 73** LR LR 20 56 30.9
comp=Z,18nm,21.9s,baz=260,slow=32
**CLL Illm 85.09 330** *i* P P 20 24 27.2 -4.9
**BNX BinXian 85.72 38** P **P** **20 24 34.1 -1.2**
BNX pmax pmax
comp=Z,7.0nm,2.3s
**FINES FINESS Array B 87.45 342** P **P** **20 24 43.3 -0.1**
comp=Z,1.3nm,0.9s,baz=144,slow=6.1,SNR=3.5
comp=Z,1.3nm,0.9s
**USRK Ussuriysk Ar. 87.62 41** P **P** **20 24 42.9 -1.8**
comp=Z,1.6nm,0.7s,baz=228,slow=5.5,SNR=1.8
comp=Z,1.6nm,0.7s
**MJAR Matsushiro Arr 88.09 50** P **P** **20 24 45.3 -1.9**
comp=Z,4.0nm,0.9s,baz=232,slow=4.4,SNR=6.5
MJAR LR LR 21 02 22.4
comp=Z,37nm,21.4s,baz=254,slow=34
comp=Z,4.0nm,0.9s
**ESDC Sonseca Array 88.48 313** P **P** **20 24 48.3 -0.7**
comp=Z,0.8nm,0.8s,baz=100,slow=3.1,SNR=2.9
ESDC LR LR 21 05 53.1
comp=Z,46nm,18.2s,baz=124,slow=37
comp=Z,0.8nm,0.8s
**BBTS Babate 88.50 286** LR LR 21 02 44.9
comp=Z,91nm,20.8s,baz=330,slow=34
**KLR Kul'dur 90.09 37** LR LR 21 04 22.5
comp=Z,85nm,21.6s,baz=237,slow=35
**HNR Honiara 90.11 100** LR LR 21 02 51.1
comp=Z,840nm,19.2s,baz=140,slow=34
**HFS Hagfors 90.63 337** P **P** **20 24 57.9 -0.6**
comp=Z,2.6nm,0.9s,baz=191,slow=7.0,SNR=2.8
comp=Z,2.6nm,0.9s
**DZM Mont Dzumac 91.41 114** *e*LR LR 20 54 11.3
comp=Z,244nm,24.1s
**DZM Mont Dzumac 91.41 114** LR LR 21 03 16.7
comp=Z,120nm,19.1s,baz=259,slow=34
**URZ Urewera 92.92 133** LR LR 21 00 43.5
comp=Z,53nm,18.5s,baz=26,slow=32
**ARCES ARESS Array B 94.03 347** LR LR 21 08 51.2
comp=Z,33nm,18.0s,baz=96,slow=36
**ASAJ Asahikawa 94.36 45** LR LR 21 05 45.1
comp=Z,41nm,21.2s,baz=311,slow=34
**YAK Yakutsk 95.89 25** LR LR 21 08 27.1
comp=Z,69nm,19.9s,baz=237,slow=35
**PPT2 Papeete2 128.52 134** *e*LR LR 21 11 30.6
comp=Z,206nm,26.8s
**ULM Lac du Bonnet 146.80 339** PKPbc **PKPdf** **20 31 37.1 +0.5**
comp=Z,5.5nm,0.7s,baz=0.6,slow=5.9,SNR=5.8
**NVAR Mina Array Bea 161.31 12** PKPab **PKPab** **20 32 41.1 -0.3**
comp=Z,0.8nm,0.9s,baz=285,slow=2.3,SNR=4.0
**TXAR Lajitas Array 167.13 317** PKP **PKPdf** **20 32 00.9 -2.1**
comp=Z,0.2nm,0.8s,baz=115,slow=1.3,SNR=2.1
TXAR PKPab **PKPab** **20 33 08.4 +1.3**
comp=Z,2.3nm,0.9s,baz=76,slow=4.2,SNR=6.4

*PRE **08** 20:17:11.9±1.9,21°.48S×33°.74E, h10km,ML3.5*
*IDC **08** 20:17:13.5±1.5,21°.62S×33°.46E, h0km,mb3.8/2, mbtmp4.0/8,ML3.8/5, Error ellipse: s-maj=36.0km s-min=24.9km az=174.0*
*NEIC **08** 20:17:15.1±1.3,21°.67S±0°.09×33°.45E±0°.10, h10km±2km, mb4.3/5, Error ellipse: s-maj=16.5km s-min=13.8km az=40.0*
*BUL **08** 20:17:17.1±1.6,21°.86S×33°.60E, h10km, MD3.8*
**ISC 08 20:17:14.1**±0.7,**21°.61S**±0°.04×**33°.50E**±0°.05,**h13**km,**n51,**
**σ2s72/85,mb3.8/3,1C-6D,Mozambique**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CHIPN** | **CHIPINGE** | **1.58** | **330** | ⇑*i* | P | **Pn** | **20 17 42.1** | **+0.2** |
| CHIPN | | | | *e* | S | **Sn** | **20 18 02.9** | **+0.5** |
| **CHIPN** | **CHIPINGE** | **1.58** | **330** | *i* | P | **Pn** | **20 17 43.4** | **+1.5** |
| CHIPN | | | | *i* | S | **Sn** | **20 18 03.6** | **+1.3** |
| **CHIPN** | **CHIPINGE** | **1.58** | **330** | *i* | P | **Pn** | **20 17 43.4** | **+1.5** |
| CHIPN | | | | *i* | S | **Sn** | **20 18 03.6** | **+1.3** |
| **MOPA** | **Mopani** | **2.71** | **225** | ⇓*i* | P | **Pn** | **20 17 59.3** | **+1.9** |
| MOPA | | | | *e* | S | **Sb** | **20 18 36.5** | **+0.8** |
| MOPA | | | | | IAML | | 20 18 47.0 | |
| | comp=Z,680nm,0.6s | | | | | | | |
| **MOPA** | **Mopani** | **2.71** | **225** | *i* | P | **Pn** | **20 18 00.1** | **+2.7** |
| MOPA | | | | *i* | S | **Sn** | **20 18 31.6** | **+1.4** |
| **MOPA** | **Mopani** | **2.71** | **225** | *i* | P | **Pn** | **20 18 00.1** | **+2.7** |
| MOPA | | | | *i* | S | **Sn** | **20 18 31.6** | **+1.4** |
| **MPHEP** | **Siloam, Limpop** | **3.33** | **247** | ⇓*i* | P | **Pn** | **20 18 08.5** | **+2.5** |
| MPHEP | | | | *e* | S | **Sn** | **20 18 50.3** | **+4.8** |
| MPHEP | | | | | IAML | | 20 19 04.0 | |
| | comp=Z,274nm,0.5s | | | | | | | |
| **MUSN** | **Musina, Limpop** | **3.44** | **258** | ⇓*i* | P | **Pn** | **20 18 09.8** | **+2.3** |
| MUSN | | | | *e* | S | **Sn** | **20 18 51.6** | **+3.5** |
| MUSN | | | | | IAML | | 20 19 05.5 | |
| | comp=Z,310nm,0.4s | | | | | | | |
| **MUSN** | **Musina, Limpop** | **3.44** | **258** | *i* | P | **Pn** | **20 18 10.2** | **+2.7** |
| MUSN | | | | *i* | S | **Sn** | **20 18 50.7** | **+2.6** |
| **MUSN** | **Musina, Limpop** | **3.44** | **258** | *i* | P | **Pn** | **20 18 10.2** | **+2.7** |
| MUSN | | | | *i* | S | **Sn** | **20 18 50.7** | **+2.6** |
| **PILG** | **Pilgrimsrest,** | **4.18** | **217** | ⇓*i* | P | **Pn** | **20 18 19.7** | **+1.9** |
| PILG | | | | *e* | S | **Sn** | **20 19 10.2** | **+3.5** |
| PILG | | | | | IAML | | 20 19 30.5 | |
| | comp=Z,96nm,0.8s | | | | | | | |
| **MATP** | **Matopo** | **4.81** | **283** | | Pn | **Pn** | **20 18 29.0** | **+2.6** |
| | comp=Z,1.7nm,0.3s,baz=100,slow=15,SNR=70 | | | | | | | |
| MATP | | | | | Sn | **Sn** | **20 19 21.0** | **-1.1** |
| | comp=Z,9.8nm,0.3s,baz=86,slow=10,SNR=9.2 | | | | | | | |
| MATP | | | | | Lg | Lg | 20 19 41.1 | |
| | comp=Z,15nm,0.3s,baz=179,slow=22,SNR=17 | | | | | | | |
| | comp=Z,7.4nm,0.4s | | | | | | | |
| **MATP** | **Matopo** | **4.81** | **283** | *i* | P | **Pn** | **20 18 29.3** | **+2.9** |
| MATP | | | | *i* | S | **Sn** | **20 19 25.4** | **+3.3** |
| **MATP** | **Matopo** | **4.81** | **283** | *i* | P | **Pn** | **20 18 29.3** | **+2.9** |
| MATP | | | | *i* | S | **Sn** | **20 19 25.4** | **+3.3** |
| **LEPH** | **Lephalale, Lim** | **5.72** | **246** | *e* | P | **Pn** | **20 18 40.1** | **+1.3** |
| LEPH | | | | *e* | S | **Sn** | **20 19 48.5** | **+4.2** |
| LEPH | | | | | IAML | | 20 20 18.9 | |
| | comp=Z,158nm,0.6s | | | | | | | |
| **BROLN** | **Tlhalogang** | **5.76** | **274** | *i* | P | **Pn** | **20 18 40.5** | **+1.1** |
| BROLN | | | | *e* | S | **Sn** | **20 19 48.5** | **+2.9** |
| BROLN | | | | | IAML | | 20 20 24.6 | |
| | comp=Z,173nm,0.5s | | | | | | | |
| **POGA** | **Pongola** | **5.94** | **196** | | | **Pn** | **20 18 43.4** | **+1.7** |
| POGA | | | | | Sn | **Sn** | **20 19 48.5** | **-1.1** |
| **POGA** | **Pongola** | **5.94** | **196** | *e* | P | **Pn** | **20 18 44.2** | **+2.5** |
| POGA | | | | *e* | S | **Sn** | **20 19 52.5** | **+2.9** |
| POGA | | | | | IAML | | 20 20 51.0 | |
| | comp=Z,37nm,0.7s | | | | | | | |
| **KRI** | **Karoi** | **6.00** | **322** | *e* | P | **Pn** | **20 18 42.4** | **-0.4** |
| KRI | | | | *e* | S | **Sn** | **20 19 48.8** | **-2.7** |
| **KRI** | **Karoi** | **6.00** | **322** | *i* | P | **Pn** | **20 18 41.6** | **-1.2** |
| KRI | | | | *i* | S | Sn | 20 19 40.5 | -11 |
| **KRI** | **Karoi** | **6.00** | **322** | *i* | P | **Pn** | **20 18 41.6** | **-1.2** |
| KRI | | | | *i* | S | Sn | 20 19 40.5 | -11 |
| **MTLB** | **Matlabas, Limp** | **6.34** | **249** | ⇓*i* | P | **Pn** | **20 18 49.4** | **+2.1** |
| MTLB | | | | *e* | S | **Sn** | **20 20 00.8** | **+1.2** |
| MTLB | | | | | IAML | | 20 20 46.1 | |
| | comp=Z,123nm,0.8s | | | | | | | |
| **NYAT** | **Nyati, Northwe** | **6.60** | **234** | *e* | P | **Pn** | **20 18 54.0** | **+3.0** |
| NYAT | | | | *e* | S | **Sn** | **20 20 08.9** | **+2.7** |
| NYAT | | | | | IAML | | 20 20 47.3 | |
| | comp=Z,36nm,0.6s | | | | | | | |
| **SOOWA** | **Sowa** | **6.88** | **277** | *i* | P | **Pn** | **20 18 53.9** | **-0.8** |
| SOOWA | | | | *e* | S | **Sn** | **20 20 09.9** | **-3.0** |
| SOOWA | | | | | IAML | | 20 20 56.6 | |
| | comp=Z,243nm,0.4s | | | | | | | |
| **LBTB** | **Lobatse** | **8.01** | **243** | | | **Pn** | **20 19 10.7** | **+0.4** |
| **LBTB** | **Lobatse** | **8.01** | **243** | ⇓*i* | P | **Pn** | **20 19 11.4** | **+1.1** |
| LBTB | | | | *e* | S | **Sn** | **20 20 41.4** | **+0.6** |
| LBTB | | | | | IAML | | 20 21 33.9 | |
| | comp=Z,42nm,0.6s | | | | | | | |
| **LBTB** | **Lobatse** | **8.01** | **243** | | Pn | **Pn** | **20 19 11.2** | **+0.9** |
| | comp=Z,2.0nm,0.3s,baz=61,slow=14,SNR=32 | | | | | | | |
| LBTB | | | | | Sn | **Sn** | **20 20 37.2** | **-3.6** |
| | comp=Z,3.4nm,0.3s,baz=138,slow=15,SNR=8.1 | | | | | | | |
| LBTB | | | | | Lg | Lg | 20 21 18.6 | |
| | comp=Z,4.7nm,0.3s,baz=336,slow=23,SNR=8.3 | | | | | | | |
| | comp=Z,9.0nm,0.4s | | | | | | | |
| **LBTB** | **Lobatse** | **8.01** | **243** | *i* | P | **Pn** | **20 19 11.8** | **+1.5** |
| LBTB | | | | *i* | S | **Sn** | **20 20 35.8** | **-5.1** |
| **LBTB** | **Lobatse** | **8.01** | **243** | *i* | P | **Pn** | **20 19 11.8** | **+1.5** |
| LBTB | | | | *i* | S | **Sn** | **20 20 35.8** | **-5.1** |
| **LSZ** | **Lusaka** | **8.06** | **320** | | Pn | **Pn** | **20 19 10.5** | **-0.6** |
| **PMBG** | **Pietermaritzbu** | **8.32** | **198** | *eP* | | **Pn** | **20 19 16.6** | **+2.1** |
| PMBG | | | | *e* | S | **Sn** | **20 20 46.8** | **-1.5** |
| PMBG | | | | | IAML | | 20 21 46.4 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **PHDHD** | **Phuduhudu** | **8.49** | **278** | *i* | P | **Pn** | **20 19 18.5** | **+1.5** |
| PHDHD | | | | *e* | S | **Sn** | **20 20 47.4** | **-5.4** |
| PHDHD | | | | | IAML | | 20 21 47.8 | |
| | comp=Z,145nm,0.8s | | | | | | | |
| **KSANE** | **Kasane** | **8.72** | **294** | *i* | P | **Pn** | **20 19 20.4** | **+0.4** |
| KSANE | | | | *e* | S | Sn | 20 20 48.6 | -10 |
| KSANE | | | | | IAML | | 20 21 50.3 | |
| | comp=Z,70nm,0.7s | | | | | | | |
| **SKOMA** | **Sekoma** | **9.27** | **250** | *i* | P | **Pn** | **20 19 29.3** | **+1.8** |
| SKOMA | | | | *e* | S | **Sn** | **20 21 08.0** | **-3.7** |
| SKOMA | | | | | IAML | | 20 22 19.6 | |
| | comp=Z,46nm,0.7s | | | | | | | |
| **BOSA** | **Boshof** | **10.21** | **225** | | | **Pn** | **20 19 40.4** | **-0.1** |
| **BOSA** | **Boshof** | **10.21** | **225** | *eP* | | **Pn** | **20 19 40.4** | **-0.1** |
| BOSA | | | | *e* | S | **Sn** | **20 21 34.1** | **-0.9** |
| BOSA | | | | | IAML | | 20 22 54.2 | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **BOSA** | **Boshof** | **10.21** | **225** | | Pn | **Pn** | **20 19 40.2** | **-0.3** |
| | comp=Z,0.6nm,0.3s,baz=50,slow=13,SNR=18 | | | | | | | |
| BOSA | | | | | Sn | **Sn** | **20 21 29.0** | **-6.0** |
| | comp=Z,1.1nm,0.3s,baz=75,slow=20,SNR=5.3 | | | | | | | |
| BOSA | | | | | Lg | Lg | 20 22 28.9 | |
| | comp=Z,0.8nm,0.3s,baz=137,slow=18,SNR=4.7 | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **BOSA** | **Boshof** | **10.21** | **225** | *i* | P | **Pn** | **20 19 40.0** | **-0.5** |
| BOSA | | | | *i* | S | Sn | 20 21 24.7 | -10 |
| **BOSA** | **Boshof** | **10.21** | **225** | *i* | P | **Pn** | **20 19 40.0** | **-0.5** |
| BOSA | | | | *i* | S | Sn | 20 21 24.7 | -10 |
| **VOI** | **Vohitsoka** | **12.36** | **94** | | Pn | **Pn** | **20 20 11.3** | **+1.3** |
| **SOE** | **Somerset East** | **13.11** | **211** | | Pn | **Pn** | **20 20 19.3** | **-0.8** |
| **OPO** | **Ambohidratompo** | **13.21** | **79** | | Pn | **Pn** | **20 20 23.6** | **+1.9** |
| | baz=261,slow=12,SNR=1.6 | | | | | | | |
| OPO | | | | | Sn | **Sn** | **20 22 41.0** | **-7.7** |
| | comp=Z,0.1nm,0.3s,baz=334,slow=17,SNR=2.1 | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **TSUM** | **Tsumeb** | **15.11** | **276** | | Pn | **Pn** | **20 20 47.8** | **+0.4** |
| TSUM | | | | | lAmb | lAmb | 20 21 02.8 | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **TSUM** | **Tsumeb** | **15.11** | **276** | | Pn | **Pn** | **20 20 47.4** | **0.0** |
| | comp=Z,2.7nm,0.7s,baz=102,slow=9.3,SNR=2.1 | | | | | | | |
| TSUM | | | | | Sn | **Sn** | **20 23 29.8** | **-5.1** |
| | comp=Z,0.1nm,0.3s,baz=131,slow=20,SNR=2.4 | | | | | | | |
| TSUM | | | | | Lg | Lg | 20 25 04.9 | |
| | comp=Z,0.7nm,0.3s,baz=190,slow=14,SNR=3.6 | | | | | | | |
| **SUR** | **Sutherland** | **15.57** | **224** | | Pn | **Pn** | **20 20 52.4** | **-1.1** |
| SUR | | | | | lAmb | lAmb | 20 21 01.0 | |
| | comp=Z,26nm,1.2s | | | | | | | |
| **SUR** | **Sutherland** | **15.57** | **224** | | Pn | **Pn** | **20 20 53.7** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=51,slow=16,SNR=7.0 | | | | | | | |
| SUR | | | | | Sn | **Sn** | **20 23 36.8** | **-9.2** |
| | comp=Z,0.3nm,0.3s,baz=12,slow=20,SNR=1.3 | | | | | | | |
| SUR | | | | | Lg | Lg | 20 25 19.1 | |
| | comp=Z,0.6nm,0.3s,baz=132,slow=20,SNR=1.5 | | | | | | | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.56** | **315** | | P | **P** | **20 25 43.3** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** | **46.56** | **315** | | P | **P** | **20 25 42.5** | **+0.7** |
| | comp=Z,0.8nm,0.8s,baz=122,slow=6.6,SNR=7.2 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **TIP** | **Timpagrande** | **62.47** | **345** | | P | **P** | **20 27 38.2** | **+1.1** |
| **CUC** | **Castrocucco** | **63.47** | **345** | | P | **P** | **20 27 44.8** | **+1.1** |
| CUC | | | | | lAmb | lAmb | 20 27 56.4 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **90.46** | **116** | | P | **P** | **20 30 18.1** | **+1.9** |
| | comp=Z,0.5nm,0.8s,baz=237,slow=4.1,SNR=4.8 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |

*IDC **08** 20:19:28.9±0.7,39°.12N×74°.12E, h0km, mb3.9/21, mbtmp3.9/26, ML3.0/4, MS3.2/4, Error ellipse: s-maj=13.0km s-min=11.8km az=114.0*
*BJI **08** 20:19:29.7±0.0,39°.11N×74°.04E, h15km, mb4.0/13, ML3.8/7, Ms3.7/6, Ms7 3.4/4*
*KRNET **08** 20:19:30.5±0.1,39°.29N×74°.19E, h14km, mb4.4*
*NEIC **08** 20:19:32.7±2.0,39°.18N±0°.06×74°.14E±0°.08, h10km±2km, mb4.3/12, Error ellipse: s-maj=10.7km s-min=9.1km az=124.0*
*NNC **08** 20:19:35.2±1.5,39°.41N×74°.23E, h0km, mb4.7, mpv4.4, Error ellipse: s-maj=13.8km s-min=8.3km az=164.0*
**ISC 08 20:19:32.6**±1.2,**39°.16N**±0°.03×**74°.16E**±0°.03,**h19**km±7km,
**n138,σ1s91/158,mb4.1/26,MS3.3/3,45C-31D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.99** | **329** | ⇓*i* | P | **Pg** | **20 19 47.8** | **-4.0** |
| | baz=24 | | | | | | | |
| SFK | | | | ⇓*i* | S | **Sg** | **20 20 00.6** | **-4.3** |
| | baz=24 | | | | | | | |
| **OHH** | **Osh** | **1.72** | **323** | ⇑*e* | P | **Pn** | **20 20 01.4** | **-0.2** |
| | baz=19 | | | | | | | |
| OHH | | | | ⇑*e* | S | **Sn** | **20 20 23.7** | **+0.6** |
| | baz=19 | | | | | | | |
| **DRK** | **Karamyk** | **1.85** | **281** | | | **Pn** | **20 20 02.8** | **-0.9** |
| **DRK** | **Karamyk** | **1.85** | **281** | ⇓*i* | P | **Pn** | **20 20 05.0** | **+1.3** |
| | baz=77 | | | | | | | |
| DRK | | | | ⇓*i* | S | **Sb** | **20 20 30.7** | **+1.7** |
| | baz=77 | | | | | | | |
| **ARSB** | **Arslanbob** | **2.34** | **338** | | | **Pn** | **20 20 11.7** | **+1.6** |
| **ARSB** | **Arslanbob** | **2.34** | **338** | ⇓*i* | P | **Pn** | **20 20 10.8** | **+0.6** |
| | baz=36 | | | | | | | |
| ARSB | | | | ⇓*i* | S | **Sn** | **20 20 40.3** | **+1.9** |
| | baz=36 | | | | | | | |
| **NRN** | **Naryn** | **2.67** | **31** | | | **Pn** | **20 20 15.4** | **+0.5** |
| **NRN** | **Naryn** | **2.67** | **31** | ⇑*i* | P | **Pn** | **20 20 14.8** | **-0.1** |
| | baz=32 | | | | | | | |
| NRN | | | | ⇑*i* | S | **Sn** | **20 20 47.5** | **+0.6** |
| | baz=32 | | | | | | | |
| **ARLS** | **Aral** | **2.70** | **3** | ⇑*i* | P | **Pn** | **20 20 15.4** | **+0.3** |
| | baz=2.0 | | | | | | | |
| ARLS | | | | ⇑*i* | S | **Sn** | **20 20 48.3** | **+0.9** |
| | baz=2.0 | | | | | | | |
| **BTK** | **Batken** | **2.73** | **290** | | | **Pn** | **20 20 18.4** | **+2.9** |
| **BTK** | **Batken** | **2.73** | **290** | ⇓*i* | P | **Pn** | **20 20 17.4** | **+1.9** |
| | baz=88 | | | | | | | |
| BTK | | | | ⇓*i* | S | **Sn** | **20 20 51.7** | **+3.7** |
| | baz=88 | | | | | | | |
| **AML** | **Almayashu** | **2.98** | **353** | | P | **Pn** | **20 20 21.3** | **+2.0** |
| | SNR=272 | | | | | | | |
| **AML** | **Almayashu** | **2.98** | **353** | ⇓*i* | P | **Pn** | **20 20 19.8** | **+0.5** |
| | baz=53 | | | | | | | |
| AML | | | | ⇓*i* | S | **Sn** | **20 20 55.8** | **+1.0** |
| | baz=53 | | | | | | | |
| **GAR** | **Garm** | **2.99** | **268** | | | **Pn** | **20 20 22.0** | **+2.9** |
| **GAR** | **Garm** | **2.99** | **268** | ⇑*i* | P | **Pn** | **20 20 21.7** | **+2.6** |
| | baz=66 | | | | | | | |
| GAR | | | | ⇑*i* | S | **Sb** | **20 20 59.3** | **-2.3** |
| | baz=66 | | | | | | | |
| **UCH** | **Uchtor** | **3.07** | **5** | P | | **Pn** | **20 20 23.1**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ARK** | **Arkit** | **3.12** | **328** | ⇑*i*P | | **Pn** | **20 20 22.0** | **+1.1** |
| | baz=27 | | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sn** | **20 20 59.2** | **+1.6** |
| | baz=27 | | | | | | | | |
| **TRKS** | **Terek-Say** | **3.30** | **317** | ⇑*e*P | | **Pn** | **20 20 24.1** | **+0.7** |
| | baz=14 | | | | | | | | |
| TRKS | | | | ⇑*e*S | | **Sn** | **20 21 02.5** | **+0.3** |
| | baz=14 | | | | | | | | |
| **ULHL** | **Ulahol** | **3.46** | **27** | P | | **Pn** | **20 20 29.1** | **+3.4** |
| | SNR=18 | | | | | | | | |
| **ULHL** | **Ulahol** | **3.46** | **27** | ⇑*e*P | | **Pn** | **20 20 26.2** | **+0.5** |
| | baz=27 | | | | | | | | |
| ULHL | | | | ⇑*i*S | | **Sn** | **20 21 06.7** | **+0.4** |
| | baz=27 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.48** | **4** | P | | **Pn** | **20 20 28.8** | **+2.9** |
| | SNR=89 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.48** | **4** | Pn | | **Pn** | **20 20 28.5** | **+2.6** |
| | 141nm,0.6s,baz=185,slow=9.1,SNR=122 | | | | | | | | |
| AAK | | | | Sn | | **Sb** | **20 21 13.4** | **-2.2** |
| | 13nm,0.3s,baz=90,slow=20,SNR=1.1 | | | | | | | | |
| AAK | | | | LR | | LR | 20 22 01.5 | | |
| | comp=Z,237nm,18.3s,baz=220,slow=43 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.48** | **4** | Pn | | **Pn** | **20 20 28.9** | **+3.1** |
| | 104nm,0.5s | | | | | | | | |
| AAK | | | | Lg | | Lg | 20 21 18.3 | | |
| | 397nm,1.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.48** | **4** | ⇓*e*P | | **Pn** | **20 20 26.2** | **+0.3** |
| | baz=4.0 | | | | | | | | |
| AAK | | | | ⇓*i*S | | **Sn** | **20 21 07.0** | **+0.4** |
| | baz=4.0 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.51** | **355** | P | | **Pn** | **20 20 28.8** | **+2.6** |
| | SNR=151 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.51** | **355** | ⇑*e*P | | **Pn** | **20 20 26.5** | **+0.3** |
| | baz=55 | | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sn** | **20 21 07.8** | **+0.6** |
| | baz=55 | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.54** | **10** | P | | **Pn** | **20 20 29.8** | **+3.0** |
| | SNR=161 | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.54** | **10** | ⇓*i*P | | **Pn** | **20 20 27.3** | **+0.6** |
| | baz=9.0 | | | | | | | | |
| KBK | | | | ⇓*i*S | | **Sn** | **20 21 08.4** | **+0.2** |
| | baz=9.0 | | | | | | | | |
| **MNAS** | **Manas** | **3.55** | **340** | ⇑*i*P | | **Pn** | **20 20 27.7** | **+0.9** |
| | baz=39 | | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sn** | **20 21 09.5** | **+1.2** |
| | baz=39 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.59** | **22** | ⇓*i*P | | **Pn** | **20 20 27.8** | **+0.4** |
| | baz=22 | | | | | | | | |
| BOOM | | | | ⇓*i*S | | **Sn** | **20 21 09.7** | **+0.4** |
| | baz=22 | | | | | | | | |
| **MRKS** | **Merke** | **3.65** | **349** | Pg | | **Pn** | **20 20 30.2** | **+2.1** |
| | 126nm,0.7s | | | | | | | | |
| MRKS | | | | Lg | | Lg | 20 21 25.3 | | |
| | 266nm,0.6s | | | | | | | | |
| **FRU1** | **Bishkek** | **3.66** | **5** | | | **Pn** | **20 20 31.0** | **+2.7** |
| **FRU1** | **Bishkek** | **3.66** | **5** | ⇓*i*P | | **Pn** | **20 20 29.0** | **+0.7** |
| | baz=5.0 | | | | | | | | |
| FRU1 | | | | ⇓*e*S | | **Sn** | **20 21 11.7** | **+0.7** |
| | baz=5.0 | | | | | | | | |
| **KDJ** | **Kajisay** | **3.75** | **37** | ⇓*i*P | | **Pn** | **20 20 30.2** | **+0.6** |
| | baz=38 | | | | | | | | |
| KDJ | | | | ⇓*i*S | | **Sn** | **20 21 14.0** | **+0.6** |
| | baz=38 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.86** | **7** | P | | **Pn** | **20 20 33.3** | **+2.4** |
| | SNR=53 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.86** | **7** | ⇑Pn | | **Pn** | **20 20 33.5** | **+2.5** |
| | 33nm,0.5s | | | | | | | | |
| CHMS | | | | Pg | | Pg | 20 20 51.9 | +5.4 | |
| | 68nm,0.2s | | | | | | | | |
| CHMS | | | | Pg | | Pg | 20 20 56.0 | +10 | |
| | 84nm,0.2s | | | | | | | | |
| CHMS | | | | ⇑Lg | | Lg | 20 21 31.9 | | |
| | 262nm,0.9s | | | | | | | | |
| CHMS | | | | Lg | | Lg | 20 21 57.2 | | |
| | 466nm,0.5s | | | | | | | | |
| CHMS | | | | Lg | | Lg | 20 22 03.8 | | |
| | 478nm,0.6s | | | | | | | | |
| **CHMS** | **Chumysh** | **3.86** | **7** | ⇑*e*P | | **Pn** | **20 20 31.4** | **+0.4** |
| | baz=6.0 | | | | | | | | |
| CHMS | | | | ⇑*i*S | | **Sn** | **20 21 16.1** | **+0.3** |
| | baz=6.0 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.91** | **16** | P | | **Pn** | **20 20 35.1** | **+3.3** |
| | SNR=12 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.91** | **16** | ⇑Pn | | **Pn** | **20 20 34.2** | **+2.4** |
| | 28nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | 20 21 33.3 | | |
| | 249nm,1.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.91** | **16** | ⇑*e*P | | **Pn** | **20 20 32.4** | **+0.6** |
| | baz=16 | | | | | | | | |
| TKM2 | | | | ⇑*i*S | | **Sn** | **20 21 17.5** | **+0.2** |
| | baz=16 | | | | | | | | |
| **CHGR** | **Chuyangaron** | **3.93** | **264** | | | **Pn** | **20 20 34.0** | **+2.0** |
| **SIMJ** | **Simiganj** | **4.05** | **264** | Pn | | **Pn** | **20 20 35.1** | **+1.5** |
| **USP** | **Ospenovka** | **4.11** | **4** | P | | **Pn** | **20 20 37.6** | **+3.2** |
| | SNR=32 | | | | | | | | |
| **USP** | **Ospenovka** | **4.11** | **4** | ⇑*i*P | | **Pn** | **20 20 35.1** | **+0.7** |
| | baz=3.0 | | | | | | | | |
| USP | | | | ⇑*i*S | | **Sn** | **20 21 22.4** | **+0.4** |
| | baz=3.0 | | | | | | | | |
| **KST** | **Kastek** | **4.11** | **19** | Pg | | **Pn** | **20 20 37.8** | **+3.3** |
| | 31nm,0.6s | | | | | | | | |
| KST | | | | Pg | | **Pb** | **20 20 46.3** | **+1.9** |
| | 137nm,0.8s | | | | | | | | |
| KST | | | | Lg | | Lg | 20 21 39.3 | | |
| | 364nm,0.9s | | | | | | | | |
| KST | | | | Lg | | Lg | 20 21 41.4 | | |
| | 364nm,0.9s | | | | | | | | |
| **MTBS** | **Maitube** | **4.32** | **23** | Pg | | **Pn** | **20 20 40.9** | **+3.6** |
| | 56nm,0.6s | | | | | | | | |
| MTBS | | | | Lg | | Lg | 20 21 45.4 | | |
| | 127nm,0.8s | | | | | | | | |
| **IUG** | **Iuzhnay** | **4.33** | **315** | Pg | | Pn | 20 20 43.4 | +5.9 | |
| | 287nm,0.6s | | | | | | | | |
| IUG | | | | Pg | | **Pb** | **20 20 50.3** | **+2.2** |
| | 448nm,0.6s | | | | | | | | |
| IUG | | | | Lg | | Lg | 20 21 48.0 | | |
| | 456nm,0.9s | | | | | | | | |
| IUG | | | | Lg | | Lg | 20 21 49.7 | | |
| | 882nm,1.1s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.41** | **28** | Pg | | Pn | 20 20 43.0 | +4.2 | |
| | 73nm,0.6s | | | | | | | | |
| TNSS | | | | Lg | | Lg | 20 21 48.4 | | |
| | 69nm,1.1s | | | | | | | | |
| **KASK** | **Kaskelen** | **4.46** | **24** | ⇑Pn | | Pn | 20 20 43.4 | +4.1 | |
| KASK | | | | ⇓Lg | | Lg | 20 21 51.9 | | |
| **MDOK** | **Medeo** | **4.55** | **28** | Pn | | **Pn** | **20 20 43.2** | **+2.6** |
| | 10.0nm,0.5s | | | | | | | | |
| MDOK | | | | Pg | | Pb | 20 20 46.0 | -6.0 | |
| | 44nm,0.7s | | | | | | | | |
| MDOK | | | | Pg | | Pg | 20 20 53.2 | -6.6 | |
| | 45nm,0.6s | | | | | | | | |
| MDOK | | | | Lg | | Lg | 20 21 52.4 | | |
| | 153nm,1.5s | | | | | | | | |
| MDOK | | | | Lg | | Lg | 20 21 52.5 | | |
| | 269nm,1.2s | | | | | | | | |
| **KNDC** | **Almaty** | **4.57** | **27** | ⇓Pn | | Pn | 20 20 45.2 | +4.4 | |
| | 16nm,0.3s | | | | | | | | |
| KNDC | | | | ⇓Pg | | **Pb** | **20 20 54.1** | **+1.9** |
| | 198nm,0.6s | | | | | | | | |
| KNDC | | | | ⇓Lg | | Lg | 20 21 55.2 | | |
| | 394nm,0.8s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **4.62** | **43** | | | **Pn** | **20 20 43.2** | **+1.6** |
| **PRZ** | **Przheval'sk** | **4.62** | **43** | ⇑*e*P | | **Pn** | **20 20 42.7** | **+1.1** |
| | baz=43 | | | | | | | | |
| PRZ | | | | ⇑*e*S | | **Sn** | **20 21 35.6** | **+0.8** |
| | baz=43 | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.64** | **28** | Pg | | Pn | 20 20 47.7 | +5.9 | |
| | 65nm,1.1s | | | | | | | | |
| KOTS | | | | Lg | | Lg | 20 21 55.8 | | |
| | 418nm,0.7s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.67** | **14** | Pg | | Pn | 20 20 47.4 | +5.3 | |
| | 59nm,0.7s | | | | | | | | |
| KRBS | | | | Lg | | Lg | 20 21 55.4 | | |
| | 126nm,0.8s | | | | | | | | |
| **KK31** | **Karatay Array** | **4.80** | **326** | | | **Pn** | **20 20 45.1** | **+1.2** |
| **KK31** | **Karatay Array** | **4.80** | **326** | ⇑Pn | | **Pn** | **20 20 45.7** | **+1.8** |
| | 13nm,0.4s,baz=135,slow=12,SNR=214 | | | | | | | | |
| KK31 | | | | ⇓Pg | | **Pb** | **20 20 57.6** | **+1.5** |
| | 29nm,0.6s,baz=136,slow=16,SNR=3.5 | | | | | | | | |
| KK31 | | | | ⇑Lg | | Lg | 20 22 00.9 | | |
| | 78nm,0.7s,baz=135,slow=26,SNR=3.8 | | | | | | | | |
| **KKAR** | **Karatay Array** | **4.80** | **326** | | | **Pn** | **20 20 45.2** | **+1.3** |
| **KKAR** | **Karatay Array** | **4.80** | **326** | | | **Pn** | **20 20 45.3** | **+1.3** |
| **KKAR** | **Karatay Array** | **4.80** | **326** | ⇑*i*P | | **Pn** | **20 20 45.0** | **+1.1** |
| | baz=25 | | | | | | | | |
| KKAR | | | | ⇑*i*S | | **Sn** | **20 21 39.6** | **+0.6** |
| | baz=25 | | | | | | | | |
| **KTBS** | **Karatobe** | **4.92** | **22** | Pg | | Pb | 20 20 53.0 | -5.3 | |
| | 142nm,0.7s | | | | | | | | |
| KTBS | | | | Pg | | Pg | 20 21 00.0 | -6.8 | |
| | 142nm,0.7s | | | | | | | | |
| KTBS | | | | Lg | | Lg | 20 22 04.7 | | |
| | 302nm,0.9s | | | | | | | | |
| KTBS | | | | Lg | | Lg | 20 22 04.9 | | |
| | 307nm,0.8s | | | | | | | | |
| **KUU** | **Kurty** | **5.00** | **18** | Pg | | Pb | 20 20 54.2 | -5.3 | |
| | 8.1nm,0.1s | | | | | | | | |
| KUU | | | | Pg | | Pg | 20 21 01.0 | -7.3 | |
| | 20nm,0.6s | | | | | | | | |
| KUU | | | | Lg | | Lg | 20 22 06.5 | | |
| | 206nm,0.9s | | | | | | | | |
| KUU | | | | Lg | | Lg | 20 22 06.6 | | |
| | 104nm,0.6s | | | | | | | | |
| **SATY** | **Saty** | **5.04** | **38** | Pg | | **Pb** | **20 21 00.3** | **0.0** | |
| | 52nm,0.6s | | | | | | | | |
| SATY | | | | Lg | | Lg | 20 22 07.2 | | |
| | 148nm,1.1s | | | | | | | | |
| **BRLS** | **Boroldav** | **5.06** | **321** | Pg | | Pb | 20 20 54.8 | -5.7 | |
| | 24nm,0.6s | | | | | | | | |
| BRLS | | | | Pg | | Pg | 20 21 00.2 | -9.2 | |
| | 30nm,0.3s | | | | | | | | |
| BRLS | | | | Lg | | Lg | 20 22 05.9 | | |
| | 96nm,0.6s | | | | | | | | |
| BRLS | | | | Lg | | Lg | 20 22 09.6 | | |
| | 103nm,0.7s | | | | | | | | |
| **ZHN** | **Zhinishke** | **5.14** | **38** | Pg | | **Pb** | **20 21 02.2** | **+0.3** | |
| | 19nm,0.5s | | | | | | | | |
| ZHN | | | | Lg | | Lg | 20 22 09.0 | | |
| | 75nm,1.1s | | | | | | | | |
| **CHKK** | **Chushkaly** | **5.15** | **23** | Pg | | Pb | 20 20 56.2 | -5.8 | |
| | 30nm,0.7s | | | | | | | | |
| CHKK | | | | Pg | | Pg | 20 21 05.3 | -5.8 | |
| | 33nm,0.6s | | | | | | | | |
| CHKK | | | | Lg | | Lg | 20 22 12.1 | | |
| | 72nm,0.8s | | | | | | | | |
| CHKK | | | | Lg | | Lg | 20 22 14.5 | | |
| | 75nm,0.7s | | | | | | | | |
| **KURS** | **Kuram** | **5.27** | **34** | Pg | | **Pb** | **20 21 05.4** | **+1.3** | |
| | 29nm,1.0s | | | | | | | | |
| KURS | | | | Lg | | Lg | 20 22 14.9 | | |
| | 79nm,2.2s | | | | | | | | |
| **UZB** | **Uzynbulak** | **5.42** | **41** | Pg | | **Pb** | **20 21 08.5** | **+1.8** | |
| | 23nm,0.5s | | | | | | | | |
| UZB | | | | Lg | | Lg | 20 22 19.4 | | |
| | 39nm,1.2s | | | | | | | | |
| **KPKS** | **Kokpek** | **5.49** | **37** | Pg | | **Pb** | **20 21 08.9** | **+1.0** | |
| | 56nm,0.9s | | | | | | | | |
| KPKS | | | | Lg | | Lg | 20 22 20.3 | | |
| | 83nm,0.6s | | | | | | | | |
| **NIL** | **Nilore** | **5.55** | **188** | | | **Pn** | **20 20 54.9** | **+0.6** | |
| **SHLS** | **Shalkode** | **5.65** | **43** | Pg | | Pb | 20 21 15.3 | +4.6 | |
| | 61nm,0.7s | | | | | | | | |
| SHLS | | | | Lg | | Lg | 20 22 31.0 | | |
| | 127nm,1.0s | | | | | | | | |
| **ARXS** | **Arharly** | **5.74** | **27** | Pg | | Pb | 20 21 15.9 | +3.7 | |
| | 52nm,0.7s | | | | | | | | |
| ARXS | | | | Lg | | Lg | 20 22 32.1 | | |
| | 82nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.79** | **42** | Pg | | **Pb** | **20 21 12.8** | **-0.1** | |
| | 10nm,1.1s | | | | | | | | |
| PDGK | | | | Lg | | Lg | 20 22 28.3 | | |
| | 49nm,1.1s | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.79** | **42** | ⇓Pn | | **Pn** | **20 20 59.2** | **+1.7** | |
| | 6.4nm,0.6s | | | | | | | | |
| PDGK | | | | ⇑Pg | | **Pg** | **20 21 19.5** | **-3.8** | |
| | 26nm,0.6s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 20 22 30.3 | | |
| | 143nm,1.1s | | | | | | | | |
| **BTLS** | **Baital** | **5.87** | **359** | Pg | | **Pb** | **20 21 16.7** | **+2.4** | |
| | 14nm,0.9s | | | | | | | | |
| BTLS | | | | Lg | | Lg | 20 22 34.5 | | |
| | 9.1nm,0.8s | | | | | | | | |
| **BLB** | **Baldybastay** | **5.90** | **32** | Pg | | **Pb** | **20 21 17.4** | **+2.5** | |
| | 94nm,0.6s | | | | | | | | |
| BLB | | | | Lg | | Lg | 20 22 35.0 | | |
| | 58nm,0.8s | | | | | | | | |
| **KBL** | **Kabul** | **6.17** | **223** | Pn | | **Pn** | **20 21 04.9** | **+2.0** | |
| **KTMS** | **Ketmen** | **6.33** | **45** | Pg | | **Pb** | **20 21 23.9** | **+1.7** | |
| | 7.9nm,0.7s | | | | | | | | |
| KTMS | | | | Lg | | Lg | 20 22 47.8 | | |
| | 25nm,0.9s | | | | | | | | |
| **KNOS** | **Konyrlen** | **6.41** | **34** | Pg | | **Pb** | **20 21 25.9** | **+2.3** | |
| | 1.9nm,0.6s | | | | | | | | |
| KNOS | | | | Lg | | Lg | 20 22 49.4 | | |
| | 32nm,1.4s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **6.63** | **27** | Pg | | Pg | 20 21 34.2 | -5.4 | |
| | 109nm,0.6s | | | | | | | | |
| TDK | | | | Lg | | Lg | 20 23 04.6 | | |
| | 302nm,1.2s | | | | | | | | |
| **OTUK** | **Ortayu** | **9.17** | **352** | ⇓Pn | | **Pn** | **20 21 44.1** | **+0.2** | |
| | 7.5nm,0.6s | | | | | | | | |
| OTUK | | | | ⇓Lg | | Lg | 20 24 16.8 | | |
| | 64nm,0.9s | | | | | | | | |
| **MAKZ** | **Makanchi** | **9.55** | **34** | | | **Pn** | **20 21 51.7** | **+2.7** | |
| **MAKZ** | **Makanchi** | **9.55** | **34** | ⇑Pn | | **Pn** | **20 21 51.3** | **+2.3** | |
| | 0.7nm,0.6s | | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 20 24 29.2 | | |
| | 19nm,1.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **9.67** | **35** | | | **Pn** | **20 21 51.5** | **+0.7** | |
| **MK31** | **Makanchi Array** | **9.67** | **35** | ⇓Pn | | **Pn** | **20 21 52.9** | **+2.1** | |
| | 1.0nm,0.6s,baz=205,slow=12,SNR=12 | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 20 24 34.4 | | |
| | 4.7nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.67** | **35** | | | **Pn** | **20 21 51.7** | **+1.0** | |
| **MKAR** | **Makanchi Array** | **9.67** | **35** | Pn | | **Pn** | **20 21 51.5** | **+0.7** | |
| | 0.2nm,0.3s,baz=214,slow=12,SNR=9.3 | | | | | | | | |
| MKAR | | | | Lg | | Lg | 20 24 29.9 | | |
| | 0.1nm,0.3s,baz=229,slow=24,SNR=1.6 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |
| **WMQ** | **Urumqi** | **11.17** | **61** | *e*P | | **Pn** | **20 22 14.5** | **+3.2** | |
| **KURBB** | **Kurchatov Arra** | **11.87** | **14** | Pn | | **Pn** | **20 22 19.3** | **-1.4** | |
| | baz=202,slow=12,SNR=5.8 | | | | | | | | |
| KURBB | | | | Sn | | **Sn** | **20 24 29.9** | **-2.6** | |
| | baz=215,slow=32,SNR=1.4 | | | | | | | | |
| KURBB | | | | Lg | | Lg | 20 25 38.5 | | |
| | 0.1nm,0.3s,baz=209,slow=29,SNR=4.5 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **11.87** | **14** | ⇑Pn | | **Pn** | **20 22 21.0** | **+0.3** | |
| | 2.2nm,0.6s | | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 20 25 43.7 | | |
| | 86nm,1.4s | | | | | | | | |
| **KURK** | **Kurchatov** | **11.97** | **14** | ⇑Pn | | **Pn** | **20 22 22.7** | **+0.6** | |
| | 0.7nm,0.5s | | | | | | | | |
| KURK | | | | ⇑Lg | | Lg | 20 25 46.1 | | |
| | 84nm,1.4s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **14.11** | **351** | P | | **Pn** | **20 22 50.4** | **-0.9** | |
| | 8.5nm,0.6s,baz=223,slow=39,SNR=23 | | | | | | | | |
| **BRVK** | **Borovoye** | **14.15** | **350** | | | **Pn** | **20 22 50.5** | **-1.4** | |
| **BRVK** | **Borovoye** | **14.15** | **350** | ⇓P | | **Pn** | **20 22 51.4** | **-0.5** | |
| | 14nm,0.7s | | | | | | | | |
| **AB31** | **Akbulak array** | **14.32** | **319** | P | | **Pn** | **20 22 52.0** | **-2.2** | |
| | 6.3nm,0.5s,baz=127,slow=13,SNR=175 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **14.32** | **319** | | | **Pn** | **20 22 51.2** | **-3.0** | |
| **ABKAR** | **Akbulak array** | **14.32** | **319** | | | **Sn** | **20 25 25.5** | **-6.8** | |
| **AKTO** | **Aktyubinsk** | **16.03** | **320** | Pn | | **Pn** | **20 23 11.6** | **-5.3** | |
| | 0.2nm,0.3s,baz=179,slow=2.4,SNR=11 | | | | | | | | |
| AKTO | | | | Sn | | **Sn** | **20 26 07.5** | **-6.4** | |
| | 0.1nm,0.3s,baz=144,slow=14,SNR=1.5 | | | | | | | | |
| AKTO | | | | Lg | | Lg | 20 27 55.0 | | |
| | 0.2nm,0.3s,baz=110,slow=12,SNR=1.4 | | | | | | | | |
| AKTO | | | | LR | | LR | 20 30 06.5 | | |
| | comp=Z,136nm,18.8s,baz=202,slow=40 | | | | | | | | |
| | 4.6nm,0.8s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **16.48** | **23** | | | **Pn** | **20 23 20.6** | **-1.9** | |
| **ZALV** | **Zalesovo Beam** | **16.48** | **23** | Pn | | **Pn** | **20 23 21.8** | **-0.7** | |
| | 0.4nm,0.3s,baz=200,slow=11,SNR=7.8 | | | | | | | | |
| ZALV | | | | Lg | | Lg | 20 28 09.3 | | |
| | 0.1nm,0.3s,baz=217,slow=21,SNR=1.8 | | | | | | | | |
| | 1.4nm,0.4s | | | | | | | | |
| **GOMU** | **GeErMu** | **16.62** | **94** | P | | P | 20 23 35.5 | +8.3 | |
| GOMU | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **GTA** | **Gaotai** | **19.85** | **81** | *e*P | | **P** | **20 24 03.5** | **+1.0** | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **ARU** | **Arti** | **20.12** | **334** | P | | **P** | **20 24 04.7** | **-0.5** | |
| | comp=Z,4.1nm,0.6s,baz=167,slow=8.2,SNR=5.8 | | | | | | | | |
| | comp=Z,4.1nm,0.6s | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **20.65** | **224** | P | | **P** | **20 24 10.6** | **-0.6** | |
| | comp=Z,10nm,0.8s,baz=104,slow=2.8,SNR=5.6 | | | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **BELG** | **Belogornoye** | **22.59** | **315** | P | | **P** | **20 24 31.5** | **-0.2** | |
| | comp=Z,16nm,1.0s,baz=104,slow=15,SNR=1.5 | | | | | | | | |
| BELG | | | | LR | | LR | 20 33 10.0 | | |
| | comp=Z,51nm,20.3s,baz=229,slow=36 | | | | | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GNI** | **Garni** | **22.62** | **282** | P | | **P** | **20 24 34.2** | **+1.7** | |
| | comp=Z,4.9nm,0.7s,baz=45,slow=1.4,SNR=1.7 | | | | | | | | |
| **LZH** | **Lanzhou** | **23.67** | **88** | *e*P | | **P** | **20 24 46.4** | **+3.3** | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,34nm,1.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **23.79** | **291** | P | | **P** | **20 24 43.8** | **-0.2** | |
| | comp=Z,1.6nm,0.6s,baz=164,slow=12,SNR=3.0 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **SONM** | **Songino Array** | **24.79** | **59** | P | | **P** | **20 24 53.0** | **-0.4** | |
| | comp=Z,0.7nm,0.8s,baz=262,slow=11,SNR=1.2 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| **PZH** | **PanZhiHua** | **26.28** | **110** | P | | **P** | **20 25 08.9** | **+1.9** | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **28.57** | **75** | *e*P | | **P** | **20 25 27.3** | **-0.1** | |
| HHC | | | | pP | | sP | 20 25 37.9 | +0.5 | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **28.86** | **246** | P | | **P** | **20 25 30.4** | **+0.4** | |
| **CMAR** | **Chiang Mai Arr** | **29.79** | **127** | P | | **P** | **20 25 39.2** | **+0.9** | |
| | comp=Z,0.3nm,0.3s,baz=311,slow=8.2,SNR=2.0 | | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **31.11** | **284** | P | | **P** | **20 25 50.7** | **+0.8** | |
| | comp=Z,1.2nm,0.7s,baz=120,slow=4.2,SNR=2.9 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.34** | **305** | P | | **P** | **20 26 08.8** | **-0.4** | |
| | comp=Z,0.5nm,0.4s,baz=80,slow=7.7,SNR=3.4 | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **33.34** | **305** | P | | **P** | **20 26 09.5** | **+0.3** | |
| AKBB | | | | IAmb | | IAmb | 20 26 23.4 | | |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **KIEV** | **Kiev** | **33.35** | **305** | P | | **P** | **20 26 09.6** | **+0.3** | |
| KIEV | | | | IAmb | | IAmb | 20 26 23.4 | | |
| | comp=Z,3.9nm,1.1s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **35.76** | **296** | P | | **P** | **20 26 31.4** | **+1.1** | |
| MLR | | | | IAmb | | IAmb | 20 26 36.7 | | |
| | comp=Z,4.3nm,0.8s | | | | | | | | |
| **FIA1** | **FINESS Array S** | **36.76** | **323** | P | | **P** | **20 26 38.1** | **-0.3** | |
| **FINES** | **FINESS Array B** | **36.76** | **323** | P | | **P** | **20 26 37.7** | **-0.8** | |
| **FINES** | **FINESS Array B** | **36.76** | **323** | P | | **P** | **20 26 37.9** | **-0.6** | |
| | comp=Z,2.2nm,0.5s,baz=107,slow=8.9,SNR=18 | | | | | | | | |
| FINES | | | | LR | | LR | 20 42 10.3 | | |
| | comp=Z,47nm,19.1s,baz=87,slow=37 | | | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **36.76** | **113** | P | | **P** | **20 26 37.9** | **-1.1** | |
| QIZ | | | | S | | **S** | **20 32 23.7** | **+1.7** | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,260nm,22.0s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,220nm,19.4s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,260nm,21.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.70** | **336** | P | | **P** | **20 27 04.3** | **+1.1** | |
| **ARCES** | **ARCESS Array B** | **39.70** | **336** | P | | **P** | **20 27 02.4** | **-0.7** | |
| | comp=Z,3.6nm,1.0s,baz=104,slow=7.9,SNR=9.9 | | | | | | | | |
| | comp=Z,3.6nm,1.0s | | | | | | | | |
| **PUK** | **Puka** | **40.72** | **292** | P | | **P** | **20 27 11.5** | **-0.6** | |
| **HFS** | **Hagfors** | **42.58** | **320** | P | | **P** | **20 27 26.4** | **-0.6** | |
| | comp=Z,4.9nm,0.6s,baz=98,slow=11,SNR=9.0 | | | | | | | | |
| | comp=Z,4.9nm,0.6s | | | | | | | | |
| **GERES** | **GERESS Array B** | **43.49** | **303** | P | | **P** | **20 27 34.7** | **0.0** | |
| | comp=Z,1.0nm,0.8s,baz=108,slow=9.4,SNR=2.8 | | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **43.81** | **321** | P | | **P** | **20 27 35.8** | **-1.2** | |
| | comp=Z,3.0nm,0.6s,baz=91,slow=8.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **43.81** | **321** | P | | **P** | **20 27 35.6** | **-1.4** | |
| | comp=Z,2.6nm,0.6s,baz=91,slow=7.9,SNR=11 | | | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.70** | **72** | P | | **P** | **20 28 24.2** | **+0.8** | |
| | comp=Z,0.5nm,0.4s,baz=237,slow=8.1,SNR=1.9 | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.14** | **315** | P | | **P** | **20 28 40.2** | **-1.2** | |
| | comp=Z,1.2nm,0.7s,baz=87,slow=6.8,SNR=5.0 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **58.43** | **298** | P | | **P** | **20 29 25.9** | **-1.3** | |
| | comp=Z,0.7nm,0.5s,baz=56,slow=7.2,SNR=11 | | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.26** | **269** | P | | **P** | **20 30 31.4** | **-1.1** | |
| | comp=Z,1.4nm,0.4s,baz=51,slow=6.4,SNR=25 | | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **71.52** | **17** | P | | **P** | **20 30 49.8** | **-1.9** | |
| | comp=Z,0.3nm,0.7s,baz=298,slow=3.8,SNR=2.9 | | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | | |
| **DBIC** | **Dimbokro** | **77.30** | **268** | P | | **P** | **20 31 25.8** | **-0.4** | |
| | comp=Z,2.4nm,0.7s,baz=90,slow=3.0,SNR=1.9 | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.35** | **124** | P | | **P** | **20 31 46.7** | **-1.4** | |
| | comp=Z,0.6nm,1.0s,baz=322,slow=4.6,SNR=6.3 | | | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **83.80** | **127** | P | | **P** | **20 31 59.1** | **-1.6** | |
| | comp=Z,0.6nm,1.1s,baz=318,slow=5.7,SNR=1.9 | | | | | | | | |
| | comp=Z,0.6nm,1.1s | | | | | | | | |

*MDD **08** 20:39:27.9₅0.8, 35°.42N×1°.56E, h3$^{km}_{\pm}$12$^{km}$, Mb4.4/18, M_mb3.9/18, Error ellipse: s-maj=15.4km s-min=3.8km az=144.0*

*CRAAG **08** 20:39:27.6, 35°.54N×1°.50E, Ml4.4, Algerie 08km NW Sidi-Hosni*

*IDC **08** 20:39:28.6₅1.1, 35°.55N×1°.42E, h0$^{km}$, mb3.4/5, mbtmp3.7/11, ML3.9/6, MS2.7/3, Error ellipse: s-maj=27.5km s-min=16.5km az=143.0*

*CNRM **08** 20:39:31.7, 35°.74N×1°.32E, h21$^{km}$, ML4.0*

*LDG **08** 20:39:31.4₂0.4, 35°.51N×1°.46E, h10$^{km}$, Ml3.4/21, Error ellip

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ETOB** | **Tobarra** | **3.86** | **322** | P | | **Pn** | **20 40 30.0** | **+0.8** |
| **ETOB** | **Tobarra** | **3.86** | **322** | Pn | | **Pn** | **20 40 30.0** | **+0.8** |
| ETOB | | | | ⇑*i*Vmb_V | | | 20 40 39.8 | |
| | 918nm,SNR=13 | | | | | | | |
| ETOB | | | | Sn | | **Sn** | **20 41 14.8** | **+0.3** |
| **EVIV** | **Cofrentes, Val** | **4.17** | **331** | Pn | | **Pn** | **20 40 34.7** | **+1.2** |
| EVIV | | | | ⇑*i*Vmb_V | | | 20 40 37.7 | |
| | 319nm,SNR=2.4 | | | | | | | |
| EVIV | | | | Sn | | **Sn** | **20 41 21.5** | **-0.6** |
| **FIGM** | **Figuig** | **4.20** | **214** | P | | **Pn** | **20 40 33.8** | **-0.2** |
| **FIGM** | **Figuig** | **4.20** | **214** | S | | **Sn** | **20 41 25.1** | **+2.1** |
| **ETOS** | **Mallorca** | **4.24** | **14** | P | | **Pn** | **20 40 35.0** | **+0.7** |
| ETOS | | | | S | | **Sn** | **20 41 21.5** | **-2.0** |
| **ETOS** | **Mallorca** | **4.24** | **14** | Pn | | **Pn** | **20 40 34.6** | **+0.3** |
| ETOS | | | | ⇑*i*Vmb_V | | | 20 40 38.5 | |
| | 307nm,SNR=1.7 | | | | | | | |
| ETOS | | | | Sn | | **Sn** | **20 41 22.8** | **-0.7** |
| **EQUE** | **Quentar** | **4.29** | **293** | Pn | | **Pn** | **20 40 35.5** | **+0.4** |
| EQUE | | | | ⇑*i*Vmb_V | | | 20 40 36.4 | |
| | 887nm,SNR=15 | | | | | | | |
| **ECOL** | **Islas Columbre** | **4.29** | **351** | Pn | | **Pn** | **20 40 35.5** | **+0.5** |
| ECOL | | | | Sn | | **Sn** | **20 41 30.0** | **+5.2** |
| **EQTA** | **Presa de Quent** | **4.29** | **293** | P | | **Pn** | **20 40 35.2** | **+0.1** |
| **ELGU** | **Los Guajares,** | **4.33** | **288** | P | | **Pn** | **20 40 33.8** | **-1.9** |
| ELGU | | | | S | | **Sn** | **20 41 26.2** | **-2.8** |
| **ELGU** | **Los Guajares,** | **4.33** | **288** | Pn | | **Pn** | **20 40 34.1** | **-1.6** |
| ELGU | | | | ⇑*i*Vmb_V | | | 20 40 42.2 | |
| | 551nm,SNR=13 | | | | | | | |
| ELGU | | | | Sn | | **Sn** | **20 41 24.0** | **-2.1** |
| **ECHE** | **Chera** | **4.40** | **334** | P | | **Pn** | **20 40 37.9** | **+1.4** |
| ECHE | | | | S | | **Sn** | **20 41 27.5** | **-0.2** |
| **ECHE** | **Chera** | **4.40** | **334** | Pn | | **Pn** | **20 40 38.2** | **+1.6** |
| ECHE | | | | ⇑*i*Vmb_V | | | 20 40 43.4 | |
| | 338nm,SNR=2.6 | | | | | | | |
| ECHE | | | | Sn | | **Sn** | **20 41 29.9** | **+2.3** |
| **PALE** | **Palemas** | **4.48** | **266** | P | | **Pn** | **20 40 36.6** | **-1.1** |
| **PALE** | **Palemas** | **4.48** | **266** | S | | **Sn** | **20 41 26.2** | **-3.3** |
| **AKLM** | **AKL** | **4.56** | **257** | P | | **Pn** | **20 40 39.4** | **+0.6** |
| **EG02** | **Ubeda,Jaen** | **4.59** | **303** | Sn | | **Sn** | **20 40 34.0** | **+1.7** |
| **EGOR** | **Sierra Gorda,** | **4.77** | **289** | P | | **Pn** | **20 40 41.5** | **-0.3** |
| EGOR | | | | S | | **Sn** | **20 41 36.6** | **-0.3** |
| **EGOR** | **Sierra Gorda,** | **4.77** | **289** | Pn | | **Pn** | **20 40 41.9** | **+0.1** |
| EGOR | | | | ⇑*i*Vmb_V | | | 20 40 50.1 | |
| | 158nm,SNR=4.3 | | | | | | | |
| EGOR | | | | Sn | | **Sn** | **20 41 37.7** | **+0.8** |
| **EMOS** | **Mosqueruela** | **4.96** | **342** | Pn | | **Pn** | **20 40 45.8** | **+1.4** |
| EMOS | | | | ⇑*i*Vmb_V | | | 20 40 48.1 | |
| | 325nm,SNR=2.3 | | | | | | | |
| EMOS | | | | Sn | | **Sn** | **20 41 40.7** | **-1.0** |
| **ERTA** | **Horta de San J** | **5.38** | **350** | Pn | | **Pn** | **20 40 51.5** | **+1.5** |
| ERTA | | | | ⇑*i*Vmb_V | | | 20 40 57.8 | |
| | 284nm,SNR=2.1 | | | | | | | |
| ERTA | | | | Sn | | **Sn** | **20 41 50.5** | **-1.3** |
| **EADA** | **Adamuz** | **5.49** | **299** | P | | **Pn** | **20 40 50.3** | **-1.3** |
| EADA | | | | S | | **Sn** | **20 41 52.0** | **-2.5** |
| **EADA** | **Adamuz** | **5.49** | **299** | Pn | | **Pn** | **20 40 50.2** | **-1.3** |
| EADA | | | | ⇑*i*Vmb_V | | | 20 40 59.6 | |
| | 127nm,SNR=2.8 | | | | | | | |
| EADA | | | | Sn | | **Sn** | **20 41 52.5** | **-2.1** |
| **EPOB** | **Poblet** | **5.70** | **357** | Pn | | **Pn** | **20 40 55.5** | **+1.0** |
| EPOB | | | | ⇑*i*Vmb_V | | | 20 40 59.3 | |
| | 181nm,SNR=2.4 | | | | | | | |
| EPOB | | | | Sn | | **Sn** | **20 41 58.9** | **-0.9** |
| **LIJA** | **Lijar** | **5.73** | **285** | P | | **Pn** | **20 40 57.7** | **+2.8** |
| **MDT** | **Midelt** | **5.81** | **243** | Pn | | **Pn** | **20 40 55.8** | **-0.2** |
| | 1.4nm,0.3s,baz=56,slow=15,SNR=65 | | | | | | | |
| MDT | | | | Lg | | Lg | 20 42 28.7 | |
| | 2.3nm,0.3s,baz=42,slow=16,SNR=2.2 | | | | | | | |
| MDT | | | | LR | | LR | 20 42 32.2 | |
| | comp=Z,19nm,19.1s,baz=88,slow=32 | | | | | | | |
| | 5.4nm,0.4s | | | | | | | |
| **MDT** | **Midelt** | **5.81** | **243** | P | | **Pn** | **20 40 56.3** | **+0.2** |
| **IFR** | **Ifrane** | **5.88** | **251** | P | | **Pn** | **20 40 59.1** | **+2.1** |
| **MD31** | **MD31** | **5.89** | **244** | P | | **Pn** | **20 40 56.7** | **-0.5** |
| **ESDC** | **Sonseca Array** | **5.92** | **314** | Sn | | **Sn** | **20 42 03.8** | **-1.3** |
| **ESDC** | **Sonseca Array** | **5.92** | **314** | Pn | | **Pn** | **20 40 57.1** | **-0.3** |
| | 1.2nm,0.3s,baz=129,slow=13,SNR=52 | | | | | | | |
| ESDC | | | | Sn | | **Sn** | **20 42 02.0** | **-3.1** |
| | 0.7nm,0.3s,baz=135,slow=20,SNR=4.3 | | | | | | | |
| ESDC | | | | LR | | LR | 20 43 14.9 | |
| | comp=Z,105nm,21.7s,baz=156,slow=38 | | | | | | | |
| | 4.1nm,0.5s | | | | | | | |
| **UCM** | **Universidad Co** | **5.98** | **322** | P | | **Pn** | **20 40 59.1** | **+0.8** |
| UCM | | | | S | | **Sn** | **20 42 06.6** | **0.0** |
| **ECAB** | **El Cabril** | **6.07** | **296** | P | | **Pn** | **20 40 58.5** | **-0.9** |
| ECAB | | | | S | | **Sn** | **20 42 04.1** | **-4.6** |
| **PAB** | **San Pablo** | **6.07** | **312** | Pn | | **Pn** | **20 40 59.3** | **-0.2** |
| PAB | | | | Sn | | **Sn** | **20 42 05.7** | **-3.1** |
| **ESPR** | **Espera** | **6.08** | **284** | P | | **Pn** | **20 41 01.4** | **+1.7** |
| **ESAC** | **San Caprasio** | **6.26** | **346** | Pn | | **Pn** | **20 41 03.9** | **+1.8** |
| **KEST** | **Kesra** | **6.37** | **87** | Pn | | **Pn** | **20 41 05.6** | **+2.0** |
| | 1.3nm,0.3s,baz=250,slow=2.1,SNR=28 | | | | | | | |
| KEST | | | | Sn | | **Sn** | **20 42 19.3** | **+3.1** |
| | 0.6nm,0.3s,baz=198,slow=21,SNR=1.3 | | | | | | | |
| | 19nm,0.7s | | | | | | | |
| **GOLM** | **Goulmima** | **6.68** | **236** | P | | **Pn** | **20 41 08.4** | **+0.5** |
| **ZHG** | **ZHG** | **7.08** | **254** | P | | **Pn** | **20 41 14.0** | **+0.5** |
| **PBAR** | **Barrancos** | **7.30** | **293** | *e*P | | **Pn** | **20 41 15.5** | **-0.9** |
| **ETSF** | **Etsaut** | **7.41** | **348** | *e*Pn | | **Pn** | **20 41 21.5** | **+3.5** |
| ETSF | | | | *e*Sn | | **Sn** | **20 42 40.3** | **-1.6** |
| | 3.6nm,0.4s | | | | | | | |
| **EPF** | **Esparros** | **7.42** | **353** | *e*Pn | | **Pn** | **20 41 20.9** | **+2.8** |
| EPF | | | | *e*Sn | | **Sn** | **20 42 40.1** | **-2.1** |
| | 5.3nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **7.64** | **286** | P | | **Pn** | **20 41 19.1** | **-1.9** |
| **MTLF** | **Montolieu** | **7.70** | **4** | *e*Sn | | **Sn** | **20 42 45.7** | **-3.1** |
| | 7.5nm,0.8s | | | | | | | |
| **TISM** | **Timmit** | **7.71** | **242** | P | | **Pn** | **20 41 21.8** | **-0.1** |
| **SJPF** | **Ste Jean** | **7.75** | **345** | *e*Pn | | **Pn** | **20 41 24.8** | **+2.3** |
| SJPF | | | | *e*Sn | | **Sn** | **20 42 48.0** | **-2.0** |
| | 2.1nm,0.5s | | | | | | | |
| **PESTR** | **Estremoz** | **7.94** | **297** | P | | **Pn** | **20 41 24.2** | **-1.0** |
| **PCBR** | **Castelo Branco** | **8.26** | **303** | *e*P | | **Pn** | **20 41 29.7** | **+0.2** |
| **LMR** | **La Mourre** | **8.58** | **25** | *e*Pn | | **Pn** | **20 41 35.6** | **+1.7** |
| LMR | | | | *e*Sn | | **Sn** | **20 43 06.1** | **-4.5** |
| | 2.5nm,0.3s | | | | | | | |
| **LASF** | **Ste Croix** | **8.60** | **11** | *e*Pn | | **Pn** | **20 41 37.0** | **+2.8** |
| LASF | | | | *e*Sn | | **Sn** | **20 43 06.1** | **-5.0** |
| | 2.0nm,0.5s | | | | | | | |
| **MVO** | **Moncorvo** | **8.68** | **312** | *e*P | | **Pn** | **20 41 36.6** | **+1.3** |
| **TIO** | **Tiouine** | **8.73** | **240** | P | | **Pn** | **20 41 31.6** | **-4.5** |
| **SMRF** | **Simiane la Rot** | **8.88** | **19** | *e*Pn | | **Pn** | **20 41 38.9** | **+0.9** |
| SMRF | | | | *e*Sn | | **Sn** | **20 43 12.7** | **-5.1** |
| | 48nm,1.7s | | | | | | | |
| **PBRG** | **Braganca** | **8.91** | **316** | *e*P | | **Pn** | **20 41 39.1** | **+0.6** |
| **PVIS** | **Viseu** | **8.97** | **307** | *e*P | | **Pn** | **20 41 41.0** | **+1.7** |
| **PGF** | **Pioggiola** | **9.01** | **38** | *e*Pn | | **Pn** | **20 41 40.4** | **+0.5** |
| PGF | | | | *e*Sn | | **Sn** | **20 43 16.2** | **-5.0** |
| | 7.4nm,0.4s | | | | | | | |
| **CAF** | **Calviac** | **9.27** | **2** | *e*Pn | | **Pn** | **20 41 46.0** | **+2.6** |
| CAF | | | | *e*Sn | | **Sn** | **20 43 25.7** | **-1.8** |
| | 0.7nm,0.2s | | | | | | | |
| **LFF** | **La Frestale** | **9.30** | **357** | *e*Pn | | **Pn** | **20 41 47.0** | **+3.3** |
| LFF | | | | *e*Sn | | **Sn** | **20 43 26.2** | **-1.8** |
| | 6.2nm,0.6s | | | | | | | |
| **SBF** | **Sospel** | **9.38** | **27** | *e*Sn | | **Sn** | **20 43 22.6** | **-7.5** |
| | 1.7nm,0.3s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **9.50** | **14** | *e*Pn | | **Pn** | **20 41 48.7** | **+2.1** |
| VIVF | | | | *e*Sn | | **Sn** | **20 43 28.0** | **-5.2** |
| | 0.7nm,0.3s | | | | | | | |
| **RJF** | **Les Rejaudoux** | **9.64** | **360** | *e*Pn | | **Pn** | **20 41 50.2** | **+1.7** |
| RJF | | | | *e*Sn | | **Sn** | **20 43 31.6** | **-5.0** |
| | 0.9nm,0.3s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **9.83** | **18** | *e*Pn | | **Pn** | **20 41 51.9** | **+0.7** |
| **MBDF** | **Montbardon** | **9.91** | **22** | *e*Pn | | **Pn** | **20 41 54.5** | **+2.2** |
| MBDF | | | | *e*Sn | | **Sn** | **20 43 37.2** | **-6.2** |
| | 2.1nm,0.6s | | | | | | | |
| **LPG** | **La Plagne** | **10.61** | **20** | *e*Pn | | **Pn** | **20 42 03.5** | **+1.6** |
| **LPL** | **La Plagne** | **10.62** | **20** | *e*Pn | | **Pn** | **20 42 03.5** | **+1.5** |
| **TCF** | **Toulx Ste Croi** | **10.64** | **3** | *e*Pn | | **Pn** | **20 42 04.3** | **+2.2** |
| TCF | | | | *e*Sn | | **Sn** | **20 43 55.2** | **-5.8** |
| | 0.9nm,0.4s | | | | | | | |
| **BGF** | **Bois d'Agland** | **10.94** | **5** | *e*P | | Pn | 20 42 12.1 | +5.9 |
| BGF | | | | *e*Sn | | **Sn** | **20 44 03.6** | **-4.8** |
| | 1.6nm,0.3s | | | | | | | |
| **MFF** | **Saint Martin d** | **11.01** | **354** | *e*Pn | | **Pn** | **20 42 08.6** | **+1.4** |
| MFF | | | | *e*Sn | | **Sn** | **20 44 03.0** | **-7.1** |
| | 5.9nm,0.7s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **12.77** | **27** | Pn | | **Pn** | **20 42 35.1** | **+3.8** |
| | 0.2nm,0.3s,baz=201,slow=9.2,SNR=2.7 | | | | | | | |
| DAVOX | | | | LR | | LR | 20 47 14.7 | |
| | comp=Z,98nm,20.1s,baz=289,slow=36 | | | | | | | |
| | 0.6nm,0.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **13.64** | **29** | *e*P | | **P** | **20 42 52.1** | **0.0** |
| | 4.4nm,0.9s | | | | | | | |
| **MOTA** | **Moosalm** | **13.70** | **29** | *e*P | | **P** | **20 42 53.0** | **+0.3** |
| | 5.4nm,1.7s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **13.82** | **33** | *e*P | | **P** | **20 42 55.5** | **+1.5** |
| | 1.9nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **13.85** | **30** | *e*P | | **P** | **20 42 55.9** | **+1.5** |
| | 5.2nm,1.5s | | | | | | | |
| **MYKA** | **Terra Mystica** | **14.25** | **36** | *e*pP | | P | 20 43 04.4 | +5.6 |
| | 6.3nm,1.1s | | | | | | | |
| **LESA** | **Schwarzleotal** | **14.41** | **32** | *e*P | | **P** | **20 43 01.4** | **+0.9** |
| | 6.2nm,1.0s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **14.44** | **34** | *e*P | | **P** | **20 43 02.5** | **+1.5** |
| | 2.5nm,0.6s | | | | | | | |
| **OBKA** | **Obir** | **14.61** | **38** | *e*P | | **P** | **20 43 03.3** | **+0.4** |
| | 3.3nm,1.2s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **15.03** | **33** | *e*pP | | pP | 20 43 11.4 | -0.3 |
| | 1.9nm,0.6s | | | | | | | |
| **MOA** | **Molln** | **15.43** | **34** | *e*P | | **P** | **20 43 13.8** | **+1.9** |
| | 6.9nm,1.4s | | | | | | | |
| **ARSA** | **Arzberg** | **15.61** | **38** | *e*pP | | pP | 20 43 18.2 | +0.2 |
| | 8.2nm,1.1s | | | | | | | |
| **GERES** | **GERESS Array B** | **15.95** | **30** | Pn | | **P** | **20 43 17.6** | **0.0** |
| | 0.2nm,0.3s,baz=192,slow=19,SNR=6.1 | | | | | | | |
| | 1.6nm,0.9s | | | | | | | |
| **KHC** | **Kasperske Hory** | **16.12** | **30** | *e*P | | **P** | **20 43 21.0** | **+1.5** |
| **CKRC** | **Cesky Krumlov** | **16.18** | **32** | *e*P | | **P** | **20 43 22.3** | **+2.1** |
| **CONA** | **Conrad Observa** | **16.24** | **37** | *e*pP | | pP | 20 43 24.3 | -0.8 |
| | 3.4nm,1.1s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **16.30** | **38** | *e*pP | | pP | 20 43 27.1 | +1.4 |
| | 6.6nm,1.6s | | | | | | | |
| **MODS** | **Modra-Piesok** | **17.24** | **38** | *e*P | | **P** | **20 43 35.7** | **+3.8** |
| **VRAC** | **Vranov** | **17.56** | **34** | P | | **P** | **20 43 37.7** | **+2.3** |
| | 0.5nm,0.3s,baz=215,slow=7.8,SNR=4.8 | | | | | | | |
| | 1.5nm,0.3s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.41** | **180** | P | | **P** | **20 44 27.9** | **-0.5** |
| | 1.0nm,0.7s,baz=1.2,slow=11,SNR=8.6 | | | | | | | |
| | 1.0nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **24.99** | **44** | P | | **P** | **20 44 54.4** | **+1.1** |
| | 0.5nm,0.4s,baz=248,slow=9.9,SNR=1.8 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.67** | **49** | P | | **P** | **20 49 05.3** | **-0.4** |
| | 0.1nm,0.3s,baz=285,slow=7.3,SNR=2.8 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.38** | **44** | P | | **P** | **20 49 26.1** | **+1.3** |
| | 0.2nm,0.4s,baz=293,slow=7.9,SNR=1.2 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.24** | **52** | P | | **P** | **20 49 33.4** | **+2.3** |
| | 0.5nm,0.7s,baz=287,slow=6.1,SNR=6.2 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |

***IDC 08** 20:41:42.6±6.9,**35°.17S**×**178°.91E**,**h202**km±73km,**mb3.5/2,mbtmp3.9/3,Error ellipse: s-maj=95.5km s-min=46.7km az=0.0,Off east coast of North Island*

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **3.41** | **205** | P | | Pn | 20 42 38.3 | +1.1 |
| | 7.1nm,0.4s,baz=38,slow=20,SNR=20 | | | | | | | |
| URZ | | | | S | | S | 20 43 20.0 | +0.6 |
| | 16nm,0.3s,baz=54,slow=19,SNR=23 | | | | | | | |
| **ASAR** | **Alice Springs** | **40.54** | **274** | P | | P | 20 49 02.5 | +0.1 |
| | 1.4nm,0.5s,baz=114,slow=8.0,SNR=36 | | | | | | | |
| | 1.4nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **41.97** | **279** | P | | P | 20 49 13.6 | -0.5 |
| | 1.4nm,0.7s,baz=118,slow=7.6,SNR=8.5 | | | | | | | |
| | 1.4nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **148.55** | **335** | PKPbc | | PKPbc | 21 01 04.0 | -0.7 |
| | 1.9nm,1.0s,baz=18,slow=4.8,SNR=3.7 | | | | | | | |

*IDC **08** 21:07:20.3±0.9,3°.90S×35°.66E,h0km,mb3.8/9, mbtmp3.8/11,ML3.4/2,MS3.5/12,Error ellipse: s-maj=18.9km s-min=14.9km az=121.0*
*NEIC **08** 21:07:22.3±2.2,3°.73S±0°.08×35°.63E±0°.05,h10km±1km, mb4.2/6,Error ellipse: s-maj=13.4km s-min=7.6km az=192.0*
*LSZ **08** 21:07:24.4±0.3,3°.40S×34°.96E,h10km,MD5.2*
**ISC 08 21:07:21.7±0.5,3°.78S±0°.04×35°.63E±0°.05,h10km,n40,σ1s62/38,mb4.1/12,MS3.5/10,Tanzania**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **DODT** | **Dodoma, Tanzan** | **2.40** | **177** | *i* P | | **Pn** | **21 08 01.6** | **+0.4** |
| DODT | | | | *i* S | | **Sn** | **21 08 29.1** | **-1.7** |
| **KIBK** | **Kibwezi** | **2.80** | **59** | | | **Pn** | **21 08 06.7** | **-0.1** |
| KIBK | | | | | Sn | **Sn** | **21 08 39.3** | **-1.4** |
| **KMBO** | **Kilima Mbogo** | **3.09** | **32** | | | **Pn** | **21 08 10.6** | **-0.3** |
| KMBO | | | | | Sn | **Sn** | **21 08 46.1** | **-2.0** |
| **KMBO** | **Kilima Mbogo** | **3.09** | **32** | Pn | | **Pn** | **21 08 10.8** | **-0.1** |
| | 0.1nm,0.3s,baz=287,slow=1.8,SNR=49 | | | | | | | |
| KMBO | | | | Pg | | **Pg** | **21 08 19.9** | **-1.1** |
| | 0.2nm,0.3s,baz=297,slow=0.2,SNR=8.6 | | | | | | | |
| KMBO | | | | Lg | | Lg | 21 09 00.1 | |
| | 0.8nm,0.3s,baz=269,slow=2.9,SNR=8.7 | | | | | | | |
| **PDHT** | **Panda Hill** | **5.69** | **205** | *i* P | | **Pn** | **21 08 47.7** | **+1.1** |
| PDHT | | | | *i* S | | **Sn** | **21 09 50.4** | **-1.7** |
| **MBAR** | **Mbarara** | **5.82** | **303** | | | **Pn** | **21 08 48.4** | **+0.1** |
| MBAR | | | | | Sn | **Sn** | **21 09 52.9** | **-2.3** |
| **MBAR** | **Mbarara** | **5.82** | **303** | Pn | | **Pn** | **21 08 49.4** | **+1.1** |
| | 154nm,0.3s,baz=145,slow=2.0,SNR=518 | | | | | | | |
| MBAR | | | | | Sn | **Sn** | **21 09 52.2** | **-3.1** |
| | 400nm,0.3s,baz=38,slow=19,SNR=12 | | | | | | | |
| MBAR | | | | | Lg | Lg | 21 10 27.2 | |
| | 472nm,0.3s,baz=197,slow=19,SNR=7.5 | | | | | | | |
| **LODK** | **Lodwar** | **7.16** | **358** | | | **Pn** | **21 09 06.7** | **0.0** |
| **KSMZ** | **Kasama** | **7.71** | **214** | *i* P | | **Pn** | **21 09 15.7** | **+1.4** |
| KSMZ | | | | *i* | | | 21 09 15.9 | |
| | baz=29,slow=14 | | | | | | | |
| KSMZ | | | | *i* S | | **Sn** | **21 10 37.0** | **-4.9** |
| **FURI** | **Furi** | **12.95** | **14** | LR | | LR | 21 15 40.5 | |
| | comp=Z,157nm,19.2s,baz=192,slow=38 | | | | | | | |
| **LSZ** | **Lusaka** | **13.57** | **212** | Pn | | **Pn** | **21 10 36.0** | **+1.4** |
| **MATP** | **Matopo** | **17.95** | **202** | Pn | | **Pn** | **21 11 31.9** | **+0.2** |
| | 0.1nm,0.3s,baz=53,slow=16,SNR=2.7 | | | | | | | |
| MATP | | | | Lg | | Lg | 21 16 44.6 | |
| | 0.1nm,0.3s,baz=120,slow=20,SNR=4.0 | | | | | | | |
| | 2.1nm,1.1s | | | | | | | |
| **OPO** | **Ambohidratompo** | **18.55** | **143** | P | | **P** | **21 11 35.7** | **-3.2** |
| | baz=345,slow=11,SNR=2.8 | | | | | | | |
| OPO | | | | LR | | LR | 21 18 36.2 | |
| | comp=Z,59nm,18.5s,baz=162,slow=37 | | | | | | | |
| | 2.3nm,0.8s | | | | | | | |
| **ABPO** | **Ambohimpanom** | **18.92** | **144** | | | **Pn** | **21 11 44.4** | **+0.8** |
| **LBTB** | **Lobatse** | **23.22** | **204** | P | | **P** | **21 12 29.9** | **+0.7** |
| LBTB | | | | IAmb | | IAmb | 21 12 39.2 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **LBTB** | **Lobatse** | **23.22** | **204** | LR | | LR | 21 21 34.3 | |
| | comp=Z,136nm,18.7s,baz=24,slow=37 | | | | | | | |
| **TSUM** | **Tsumeb** | **23.36** | **228** | LR | | LR | 21 22 00.0 | |
| | comp=Z,216nm,18.9s,baz=334,slow=38 | | | | | | | |
| **BOSA** | **Boshof** | **26.60** | **201** | P | | **P** | **21 12 59.4** | **-1.1** |
| BOSA | | | | IAmb | | IAmb | 21 13 22.4 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **BOSA** | **Boshof** | **26.60** | **201** | P | | **P** | **21 12 59.9** | **-0.6** |
| | comp=Z,2.3nm,1.0s,baz=30,slow=14,SNR=1.3 | | | | | | | |
| BOSA | | | | LR | | LR | 21 23 10.5 | |
| | comp=Z,90nm,18.4s,baz=30,slow=36 | | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| **SUR** | **Sutherland** | **31.67** | **204** | LR | | LR | 21 26 40.4 | |
| | comp=Z,77nm,20.4s,baz=334,slow=37 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **37.66** | **297** | P | | **P** | **21 14 37.4** | **-0.1** |
| | comp=Z,0.6nm,0.9s,baz=104,slow=9.9,SNR=1.6 | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **DBIC** | **Dimbokro** | **41.73** | **284** | LR | | LR | 21 32 47.8 | |
| | comp=Z,44nm,19.2s,baz=156,slow=37 | | | | | | | |
| **VAE** | **Valguarnera** | **45.54** | **336** | LR | | LR | 21 34 50.0 | |
| | comp=Z,44nm,20.6s,baz=138,slow=36 | | | | | | | |
| **PUK** | **Puka** | **47.80** | **344** | P | | **P** | **21 16 01.4** | **+1.9** |
| PUK | | | | IAmb | | IAmb | 21 16 11.3 | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **54.54** | **355** | P | | **P** | **21 16 51.0** | **+1.2** |
| | comp=Z,1.1nm,0.6s,baz=185,slow=6.5,SNR=4.1 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **AKBB** | **Malin Array Si** | **54.54** | **355** | P | | **P** | **21 16 49.8** | **-0.1** |
| **BBTS** | **Babate** | **54.83** | **291** | LR | | LR | 21 41 17.0 | |
| | comp=Z,84nm,18.3s,baz=316,slow=37 | | | | | | | |
| **KKAR** | **Karatay Array** | **56.29** | **30** | P | | **P** | **21 17 02.3** | **-0.4** |
| **ESDC** | **Sonseca Array** | **56.51** | **324** | P | | **P** | **21 17 05.5** | **+1.2** |
| | comp=Z,0.4nm,0.8s,baz=160,slow=6.9,SNR=2.5 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **64.98** | **33** | P | | **P** | **21 18 01.3** | **-0.6** |
| MK31 | | | | IAmb | | IAmb | 21 18 03.2 | |
| | comp=Z,1.6nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.98** | **33** | P | | **P** | **21 17 59.4** | **-2.5** |
| **MKAR** | **Makanchi Array** | **64.98** | **33** | P | | **P** | **21 18 02.1** | **+0.2** |
| | comp=Z,0.4nm,0.5s,baz=230,slow=5.3,SNR=5.4 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.45** | **355** | P | | **P** | **21 18 05.3** | **+0.7** |
| **FINES** | **FINESS Array B** | **65.45** | **355** | P | | **P** | **21 18 06.2** | **+1.5** |
| | comp=Z,1.4nm,0.8s,baz=156,slow=7.3,SNR=1.8 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.47** | **28** | P | | **P** | **21 18 05.4** | **+0.5** |
| | comp=Z,0.3nm,0.3s,baz=233,slow=7.5,SNR=2.5 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **66.12** | **68** | P | | **P** | **21 18 10.2** | **+0.4** |
| | comp=Z,1.3nm,0.8s,baz=257,slow=7.4,SNR=9.7 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **71.98** | **192** | LR | | LR | 21 47 11.7 | |
| | comp=Z,27nm,19.3s,baz=37,slow=33 | | | | | | | |
| **SONM** | **Songino Array** | **80.03** | **40** | P | | **P** | **21 19 33.7** | **+2.0** |
| | comp=Z,0.6nm,0.8s,baz=252,slow=3.0,SNR=4.4 | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | |
| **KAPI** | **Kappang** | **83.83** | **95** | LR | | LR | 21 50 51.1 | |
| | comp=Z,42nm,21.5s,baz=32,slow=31 | | | | | | | |
| **KLR** | **Kul'dur** | **96.84** | **41** | LR | | LR | 22 09 04.1 | |
| | comp=Z,18nm,18.7s,baz=9.5,slow=38 | | | | | | | |

*OSPL **08** 21:10:16.6±2.0,18°.79N×70°.35W,h91km±15km,ML2.3*
*SDD **08** 21:10:17.0±2.4,18°.93N×70°.38W,h87km±14km,MD3.0, ML2.6,MW3.0*
**ISC 08 21:10:17.5±1.6,18°.81N±0°.05×70°.32W±0°.03,h73km±12km,n15,σ1s52/28,14C-3D,Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **ABDR** | **Alto Bandera** | **0.29** | **271** | ⇑*e*Pg | | **Pn** | **21 10 28.4** | **-1.0** |
| ABDR | | | | ⇑*e*Sg | | **Sn** | **21 10 38.8** | **+0.6** |
| ABDR | | | | IAML | | | 21 10 40.5 | |
| | comp=N,175nm,0.3s | | | | | | | |
| ABDR | | | | IAML | | | 21 10 41.3 | |
| | comp=E,224nm,0.3s | | | | | | | |
| **BANI** | **BANI** | **0.41** | **186** | ⇓*e*Pg | | **Pn** | **21 10 30.2** | **+0.1** |
| BANI | | | | ⇑*e*Sg | | **Sn** | **21 10 42.0** | **+2.8** |
| BANI | | | | IAML | | | 21 10 42.8 | |
| | comp=N,411nm,0.2s | | | | | | | |
| BANI | | | | IAML | | | 21 10 44.5 | |
| | comp=E,192nm,0.1s | | | | | | | |
| **SDD** | **Santo Domingo** | **0.52** | **132** | *i* P | | **Pn** | **21 10 29.6** | **-1.1** |
| SDD | | | | ⇑*e*S | | **Sn** | **21 10 41.0** | **+0.5** |
| **NADR** | **Nagua** | **0.70** | **39** | ⇑*e*Pg | | **Pn** | **21 10 30.8** | **-1.9** |
| NADR | | | | IAML | | | 21 10 46.8 | |
| | comp=N,3μm,0.2s | | | | | | | |
| NADR | | | | IAML | | | 21 10 46.8 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **0.71** | **37** | *i* P | | **Pn** | **21 10 32.0** | **-0.8** |
| LONA1 | | | | *e*S | | **Sn** | **21 10 45.5** | **+1.3** |
| LONA1 | | | | IAML | | | 21 10 48.3 | |
| | comp=Z,2μm,4.9s | | | | | | | |
| **SC01** | **Santiago de lo** | **0.73** | **328** | *i* P | | **Pn** | **21 10 32.5** | **-0.5** |
| SC01 | | | | *e*S | | **Sn** | **21 10 44.6** | **+0.2** |
| SC01 | | | | IAML | | | 21 10 46.9 | |
| | comp=Z,64nm,0.3s | | | | | | | |
| **SDDR** | **Presa de Saban** | **0.94** | **281** | ⇑*e*Pg | | **Pn** | **21 10 34.0** | **-1.5** |
| SDDR | | | | ⇓*e*Sg | | **Sn** | **21 10 47.9** | **-0.9** |
| SDDR | | | | IAML | | | 21 10 52.8 | |
| | comp=E,49nm,0.7s | | | | | | | |
| SDDR | | | | IAML | | | 21 10 53.1 | |
| | comp=N,62nm,0.5s | | | | | | | |
| **SDDR** | **Presa de Saban** | **0.94** | **281** | *i* P | | **Pn** | **21 10 34.0** | **-1.5** |
| SDDR | | | | *e*S | | **Sn** | **21 10 47.6** | **-1.2** |
| SDDR | | | | IAML | | | 21 10 53.2 | |
| | comp=Z,28nm,0.2s | | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **1.03** | **226** | ⇑*e*Pg | | **Pn** | **21 10 35.3** | **-1.3** |
| LOBA2 | | | | ⇓*e*Sg | | **Sn** | **21

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **MBWA** | **Marble Bar** | **55.55** | **260** | P | **P** | **21 23 17.3** | **-1.3** |
| MBWA | | | | IAmb | IAmb | 21 23 19.0 | |
| | comp=Z,9.5nm,1.1s | | | | | | | |
| **MORW** | **Morawa** | **57.12** | **250** | P | **P** | **21 23 28.4** | **-0.9** |
| MORW | | | | IAmb | IAmb | 21 23 46.9 | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **TOLI2** | **Tolitoli** | **62.58** | **284** | P | **P** | **21 24 05.8** | **0.0** |
| TOLI2 | | | | IAmb | IAmb | 21 24 13.1 | |
| | comp=Z,9.4nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **66.59** | **180** | P | **P** | **21 24 31.1** | **+0.6** |
| | comp=Z,1.5nm,0.8s,baz=0.0,slow=3.0,SNR=3.7 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.38** | **44** | P | **P** | **21 26 10.0** | **+0.1** |
| | comp=Z,0.2nm,0.4s,baz=230,slow=8.1,SNR=3.6 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **90.12** | **58** | P | **P** | **21 26 37.3** | **+0.3** |
| | comp=Z,0.5nm,0.6s,baz=216,slow=6.2,SNR=6.5 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **94.38** | **13** | P | **P** | **21 26 55.2** | **-0.4** |
| **HFS** | **Hagfors** | **142.16** | **349** | PKhKP | PKPpre | 21 32 59.4 | |
| | comp=Z,0.7nm,0.3s,baz=22,slow=1.6,SNR=12 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **148.10** | **4** | PKPbc | **PKPbc** | **21 33 17.6** | **-1.1** |
| | comp=Z,0.9nm,0.7s,baz=354,slow=2.3,SNR=3.5 | | | | | | | |

*NNC **08** 21:32:25.6±7.4, 41.82N×83.25E, h0km, mb3.1, mpv2.7, Error ellipse: s-maj=62.1km s-min=40.9km az=147.0*

**SOME 08 21:31:52.7, 40.20N×83.23E, h0km, 3C-3D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **3.89** | **327** | *eP* | Pg | 21 33 06.9 | -0.4 |
| | 4.0nm,0.4s | | | | | | |
| KTMS | | | | *eS* | Sg | 21 34 02.6 | +4.9 |
| | 6.3nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **4.09** | **318** | *eP* | Pb | 21 33 03.9 | -1.7 |
| | 2.1nm,0.3s | | | | | | |
| SHLS | | | | *eS* | Sb | 21 33 56.7 | +1.1 |
| | 28nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **4.20** | **319** | ⇓Pn | Pg | 21 33 17.2 | +4.1 |
| | 3.9nm,0.5s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 21 34 04.9 | |
| | 21nm,1.1s | | | | | | |
| **UZB** | **Uzynbulak** | **4.31** | **314** | *eP* | Pg | 21 33 14.2 | -1.2 |
| | 2.1nm,0.4s | | | | | | |
| UZB | | | | *eS* | Sg | 21 34 14.6 | +3.3 |
| | 7.9nm,0.5s | | | | | | |
| **SATY** | **Saty** | **4.61** | **310** | *eP* | Pg | 21 33 18.9 | -2.1 |
| | 1.2nm,0.2s | | | | | | |
| SATY | | | | *eS* | Sg | 21 34 22.5 | +1.7 |
| | 7.3nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **4.71** | **315** | *eP* | Pb | 21 33 18.7 | +2.5 |
| | 1.6nm,0.2s | | | | | | |
| KPKS | | | | *eS* | Sg | 21 34 22.5 | -1.5 |
| | 14nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **5.01** | **313** | *eP* | Pg | 21 33 26.1 | -2.5 |
| | 2.2nm,0.5s | | | | | | |
| KURS | | | | *eS* | Sg | 21 34 35.0 | +1.4 |
| | 2.6nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **5.67** | **317** | *eP* | Pg | 21 33 38.4 | -3.0 |
| | 1.0nm,0.4s | | | | | | |
| ARXS | | | | *eS* | Sg | 21 34 58.0 | +3.1 |
| | 4.2nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **6.63** | **354** | ⇑Pg | Pg | 21 33 57.2 | -2.5 |
| | 0.4nm,0.6s,baz=164,slow=16,SNR=5.0 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 21 35 07.4 | |
| | 4.0nm,0.8s,baz=174,slow=27,SNR=3.8 | | | | | | |
| **MAKZ** | **Makanchi** | **6.67** | **353** | ⇑Pg | Pg | 21 33 56.4 | -4.0 |
| | 0.3nm,0.6s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 21 35 09.2 | |
| | 4.0nm,0.8s | | | | | | |

**NDI 08 21:33:52.3±4.5, 20.77N×85.03E, h16km±34km, ML3.5, Southern India**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHSG** | **JHARSUGUGA** | **1.54** | **310** | *eP* | Pn | 21 34 17.9 | -1.1 |
| JHSG | | | | *eS* | Sn | 21 34 38.1 | -0.6 |
| JHSG | | | | IAML | | 21 34 41.3 | |
| | comp=N,3μm,0.3s | | | | | | |
| JHSG | | | | IAML | | 21 34 42.8 | |
| | comp=E,3μm,0.2s | | | | | | |
| **BLSP** | **Bilaspur** | **3.02** | **297** | *eP* | Pn | 21 34 37.2 | -2.3 |
| BLSP | | | | *eS* | Sn | 21 35 16.0 | +0.6 |
| BLSP | | | | IAML | | 21 35 23.6 | |
| | comp=N,519nm,0.3s | | | | | | |
| BLSP | | | | IAML | | 21 35 23.7 | |
| | comp=E,512nm,0.2s | | | | | | |
| **BOK** | **Bokaro** | **3.12** | **15** | *eP* | Pn | 21 34 43.2 | +2.4 |
| BOK | | | | *eS* | Sn | 21 35 16.0 | -1.6 |
| BOK | | | | IAML | | 21 35 17.9 | |
| | comp=N,63nm,0.1s | | | | | | |
| BOK | | | | IAML | | 21 35 19.2 | |
| | comp=E,53nm,0.2s | | | | | | |
| **ALBI** | **Allahabad** | **5.41** | **327** | IAML | | 21 36 40.8 | |
| | comp=N,220nm,0.5s | | | | | | |
| ALBI | | | | IAML | | 21 36 41.4 | |
| | comp=E,155nm,0.7s | | | | | | |
| **NGP** | **Nagpur** | **5.60** | **275** | *eP* | Pn | 21 35 14.3 | -0.7 |
| NGP | | | | IAML | | 21 36 43.7 | |
| | comp=E,78nm,0.4s | | | | | | |
| NGP | | | | IAML | | 21 36 45.0 | |
| | comp=N,128nm,0.5s | | | | | | |
| **BHPL** | **Bhopal** | **7.48** | **291** | *ex* | Pn | 21 35 45.2 | +4.5 |
| BHPL | | | | *eS* | Sn | 21 36 59.8 | -5.5 |
| BHPL | | | | IAML | | 21 37 05.9 | |
| | comp=N,18nm,0.3s | | | | | | |
| BHPL | | | | IAML | | 21 37 07.0 | |
| | comp=E,17nm,0.3s | | | | | | |
| **AKL** | **Akola** | **7.50** | **271** | IAML | | 21 37 52.7 | |
| | comp=E,52nm,0.4s | | | | | | |
| **AKL** | **Akola** | **7.50** | **271** | *eS* | Sn | 21 36 57.8 | -8.1 |
| **AKL** | **Akola** | **7.50** | **271** | *eS* | Sn | 21 36 58.6 | -7.3 |
| **AKL** | **Akola** | **7.50** | **271** | IAML | | 21 37 44.3 | |
| | comp=N,56nm,0.6s | | | | | | |
| **NRDN** | **NARMADA NAGAR** | **7.56** | **286** | *eP* | Pn | 21 35 44.1 | +2.1 |
| NRDN | | | | IAML | | 21 38 03.2 | |
| | comp=E,19nm,0.6s | | | | | | |
| NRDN | | | | IAML | | 21 38 03.5 | |
| | comp=N,46nm,0.6s | | | | | | |
| **JHNI** | **Jhansi** | **7.59** | **309** | *eP* | Pn | 21 35 43.2 | +0.9 |
| JHNI | | | | *eS* | Sn | 21 37 00.4 | -7.5 |
| JHNI | | | | IAML | | 21 37 02.6 | |
| | comp=N,10nm,0.5s | | | | | | |
| JHNI | | | | IAML | | 21 37 02.7 | |
| | comp=E,11nm,0.2s | | | | | | |
| **GUNA** | **GUNA** | **8.09** | **300** | *eP* | Pn | 21 35 49.3 | +0.1 |
| GUNA | | | | *eS* | Sn | 21 37 13.1 | -7.2 |
| GUNA | | | | IAML | | 21 37 19.5 | |
| | comp=N,24nm,0.5s | | | | | | |
| GUNA | | | | IAML | | 21 37 22.9 | |
| | comp=E,34nm,0.5s | | | | | | |
| **LATR** | **Latur** | **8.32** | **255** | *eS* | Sn | 21 37 19.3 | -6.7 |
| LATR | | | | *eS* | Sb | 21 38 00.6 | +5.7 |
| **LGTI** | **Lohaghat** | **9.67** | **334** | *eP* | Pn | 21 36 08.1 | -2.7 |
| **PTH** | **Pithoragarh** | **9.77** | **334** | *eP* | Pn | 21 36 10.2 | -2.2 |
| PTH | | | | IAML | | 21 39 06.0 | |
| | comp=E,20nm,1.3s | | | | | | |
| PTH | | | | IAML | | 21 39 06.5 | |
| | comp=N,12nm,0.4s | | | | | | |

*SOME **08** 21:34:07.5, 38.92N×72.82E, h15km*
*NNC **08** 21:34:23.9±9.8, 39.55N×72.48E, h0km, mb3.1, mpv2.8, Error ellipse: s-maj=100.5km s-min=56.1km az=155.0*
*IDC **08** 21:34:27.7±15.0, 38.46N×74.94E, h346km±191km, mb3.0/4, mbtmp3.7/6, Error ellipse: s-maj=125.3km s-min=69.6km az=87.0*

**ISC 08 21:34:05.0±1.9, 38.9N±0.1×73.02E±0.08, h10km, n13, σ2.557/14, mb3.7/4, 2C-6D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRKS** | **Merke** | **3.87** | **2** | *eP* | **Pb** | **21 35 17.2** | **+3.8** |
| | 7.8nm,0.3s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **21 36 06.5** | **-2.8** |
| | 79nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.92** | **16** | ⇓Pn | **Pb** | **21 35 19.1** | **+4.8** |
| | 1.5nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 21 36 11.0 | |
| | 8.4nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **IUG** | **Iuzhnay** | **3.98** | **326** | *eP* | **Pg** | **21 35 21.2** | **-0.1** |
| | 8.1nm,0.3s | | | | | | | |
| IUG | | | | *eS* | **Sg** | **21 36 12.8** | **-0.1** |
| | 134nm,0.3s | | | | | | | |
| **CHMS** | **Chumysh** | **4.33** | **17** | ⇑Pn | Pb | 21 35 26.3 | +5.2 |
| | 1.0nm,0.6s | | | | | | | |
| CHMS | | | | ⇓Lg | Lg | 21 36 26.6 | | |
| | 7.2nm,0.7s | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.49** | **25** | ⇓Pn | **Pb** | **21 35 26.5** | **+2.5** |
| | 1.1nm,0.5s | | | | | | | |
| TKM2 | | | | ⇓Sn | **Sb** | **21 36 15.3** | **-3.0** |
| | 8.7nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **4.63** | **337** | ⇓Pn | **Pb** | **21 35 27.2** | **+0.9** |
| | 0.8nm,0.4s,baz=172,slow=18,SNR=18 | | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 21 36 27.6 | | |
| | 6.6nm,0.5s,baz=164,slow=26,SNR=14 | | | | | | | |
| **BRLS** | **Borolday** | **4.80** | **331** | *eP* | **Pb** | **21 35 30.4** | **+1.2** |
| | 1.6nm,0.1s | | | | | | | |
| BRLS | | | | *eS* | **Sb** | **21 36 29.2** | **+2.2** |
| | 8.6nm,0.2s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.38** | **17** | P | Pn | 21 37 12.9 | +12 |
| | 0.9nm,0.7s,baz=203,slow=9.9,SNR=7.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.10** | **24** | P | **Pn** | **21 38 03.2** | **-0.7** |
| | 0.7nm,0.3s,baz=214,slow=12,SNR=4.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **36.46** | **324** | P | **P** | **21 41 10.8** | **+1.0** |
| | 1.0nm,0.7s,baz=116,slow=8.7,SNR=5.3 | | | | | | | |
| | 1.0nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.60** | **336** | P | **P** | **21 41 34.0** | **-2.1** |
| | 1.0nm,0.5s,baz=106,slow=8.9,SNR=6.8 | | | | | | | |
| | 1.0nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **42.23** | **320** | P | **P** | **21 41 57.6** | **-0.3** |
| | 0.8nm,0.5s,baz=91,slow=14,SNR=4.4 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.37** | **269** | P | P | 21 44 56.0 | -4.7 |
| | 0.1nm,0.3s,baz=59,slow=5.7,SNR=3.2 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |

**KRSC 08 21:36:00.2±1.8, 53.41N×167.94E, h38km±107km, MI4.2, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BZGR** | **Bezymyannyi-Gr** | **4.91** | **304** | *eS* | Sn | 21 38 11.2 | +4.1 |
| **SRKR** | **Sorokina** | **5.08** | **313** | *eP* | Pn | 21 37 18.0 | +4.3 |
| **KPT** | **Kopyto** | **5.16** | **303** | *eP* | Pn | 21 37 19.9 | +5.0 |
| **UGLR** | **Uglovaya** | **5.47** | **272** | *eP* | Pn | 21 37 24.1 | +4.9 |
| **KRX** | **Arik** | **5.56** | **273** | *eP* | Pn | 21 37 24.4 | +3.9 |
| **SRDR** | **Sredinnyy** | **5.57** | **305** | *eP* | Pn | 21 37 26.3 | +5.8 |
| **KOK** | **Koryaka** | **5.58** | **273** | *eP* | Pn | 21 37 24.8 | +4.1 |
| **MTVR** | **Mutnovka** | **5.97** | **265** | *eP* | Pn | 21 37 31.6 | +5.5 |
| MTVR | | | | *eS* | Sn | 21 38 38.9 | +5.6 |
| **ASAK** | **Asacha** | **6.17** | **264** | *eP* | Pn | 21 37 34.1 | +5.4 |
| ASAK | | | | *eS* | Sn | 21 38 44.7 | +6.8 |
| **KDTR** | **Khodutka, Kamc** | **6.22** | **259** | *eS* | Sn | 21 38 43.5 | +4.4 |

**IDC 08 21:44:35.6±7.2, 28.80N×138.23E, h284km±89km, mb3.5/4, mbtmp4.2/5, MS3.2/2, Error ellipse: s-maj=133.9km s-min=19.5km az=86.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.89** | **115** | P | Pn | 21 45 41.6 | +1.8 |
| | 51nm,0.4s,baz=17,slow=20,SNR=7.6 | | | | | | |
| JCJ | | | | S | S | 21 46 30.5 | -0.6 |
| | 137nm,0.3s,baz=294,slow=19,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.60** | **185** | P | P | 21 52 51.2 | 0.0 |
| | 1.3nm,0.3s,baz=1.2,slow=7.8,SNR=7.3 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **52.33** | **185** | P | P | 21 53 18.7 | -0.2 |
| | 0.8nm,0.5s,baz=358,slow=6.0,SNR=7.7 | | | | | | |
| ASAR | | | | LR | LR | 22 13 29.5 | |
| | comp=Z,17nm,21.2s,baz=188,slow=33 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **DLBC** | **Dease Lake** | **66.82** | **35** | LR | LR | 22 24 33.0 | |
| | comp=Z,28nm,19.1s,baz=116,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **70.76** | **340** | P | P | 21 55 20.9 | 0.0 |
| | 3.7nm,1.0s,baz=73,slow=8.1,SNR=4.0 | | | | | | |
| | 3.7nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **74.85** | **333** | P | P | 21 55 44.8 | -0.1 |
| | 0.4nm,0.3s,baz=76,slow=5.9,SNR=6.8 | | | | | | |
| | 0.4nm,0.3s | | | | | | |

*IDC **08** 21:45:41.2±1.2, 43.11N×138.04E, h252km±19km, mb3.7/7, mbtmp3.8/9, Error ellipse: s-maj=31.1km s-min=19.1km az=155.0*
*JMA **08** 21:45:42.8±0.7, 43°N1.1°×13°8E±.°, h259km±4km, MV3.1/36, EASTERN SEA OF JAPAN*

**ISC 08 21:45:41.9±0.8, 42.91N±0.06×138.53E±0.07, h300km, n28, σ1.948/36, mb3.6/7, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOSM** | **Okushiri--Mats** | **1.08** | **139** | P | **Pn** | **21 46 20.4** | **-2.3** |
| **JHST** | **Hiyamasetana** | **1.11** | **116** | *eP* | **Pn** | **21 46 20.9** | **-1.9** |
| **JSH** | **Shimam** | **1.15** | **103** | P | **Pn** | **21 46 20.9** | **-2.1** |
| **JSK** | **Shakotan** | **1.49** | **72** | P | **Pn** | **21 46 23.0** | **-1.9** |
| **JYM2** | **Yakumo 2** | **1.58** | **120** | P | **Pn** | **21 46 24.7** | **-0.8** |
| **JOMM** | **Oshimamatsumae** | **1.77** | **141** | P | **Pn** | **21 46 26.1** | **-0.8** |
| **JKB** | **Kayabe** | **2.12** | **118** | P | **Pn** | **21 46 29.4** | **-0.2** |
| **JOT** | **Ohata** | **2.42** | **128** | P | **Pn** | **21 46 32.1** | **-0.1** |
| **JIW** | **Iwasaki** | **2.57** | **154** | P | **Pn** | **21 46 33.6** | **0.0** |
| **JNBK** | **Urakawa-nobuka** | **3.18** | **100** | P | **Pn** | **21 46 40.3** | **+0.9** |
| **ASAJ** | **Asahikawa** | **3.20** | **66** | P | **Pn** | **21 46 39.7** | **+0.2** |
| | 8.3nm,0.5s,baz=252,slow=7.7,SNR=7.8 | | | | | | |
| ASAJ | | | | S | **S** | **21 47 24.4** | **-1.2** |
| | 8.0nm,0.9s,baz=285,slow=19,SNR=1.8 | | | | | | |
| **JKK2** | **Kamakawa 2** | **3.22** | **71** | P | **Pn** | **21 46 40.7** | **+0.9** |
| JKK2 | | | | S | **S** | **21 47 26.5** | **+0.4** |
| **JANG** | **Nango** | **3.38** | **138** | P | **Pn** | **21 46 43.0** | **+1.5** |
| JANG | | | | S | **S** | **21 47 28.8** | **-0.5** |
| **JCH** | **Churui** | **3.57** | **93** | P | **Pn** | **21 46 43.4** | **0.0** |
| JCH | | | | S | **S** | **21 47 30.5** | **-2.2** |
| **JAR** | **Ashorobuto** | **3.86** | **82** | P | **Pn** | **21 46 47.5** | **+1.0** |
| JAR | | | | *eS* | **S** | **21 47 36.2** | **-2.1** |
| **JMK** | **Ichinoseki** | **4.45** | **152** | P | **Pn** | **21 46 53.8** | **+0.7** |
| JMK | | | | S | **S** | **21 47 50.3** | **-0.1** |
| **JAK** | **Akkeshi** | **4.53** | **87** | *eP* | **Pn** | **21 46 54.8** | **+0.8** |
| JAK | | | | S | **S** | **21 47 49.4** | **-2.4** |
| **USRK** | **Ussuriysk Ar.** | **4.92** | **287** | P | Pn | 21 46 51.6 | -6.8 |
| | 1.0nm,0.6s,baz=96,slow=10,SNR=2.0 | | | | | | |
| **NEM2** | **Nemuro 2** | **5.30** | **83** | P | **Pn** | **21 47 03.2** | **+0.4** |
| NEM2 | | | | *eS* | **S** | **21 48 05.8** | **-2.1** |
| **MJAR** | **Matsushiro Arr** | **6.37** | **182** | P | **Pn** | **21 47 16.6** | **+0.9** |
| | 1.4nm,0.4s,baz=7.8,slow=12,SNR=6.0 | | | | | | |
| **JHO** | **Hitachi** | **6.49** | **165** | P | **Pn** | **21 47 17.4** | **+0.3** |
| JHO | | | | S | **S** | **21 48 30.7** | **-3.3** |
| **SONM** | **Songino Array** | **23.00** | **294** | P | **P** | **21 50 19.6** | **-1.3** |
| | 0.5nm,0.5s,baz=81,slow=8.5,SNR=3.9 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **36.46** | **307** | P | **P** | **21 52 18.2** | **-0.4** |
| | 1.0nm,0.3s,baz=95,slow=7.8,SNR=5.0 | | | | | | |
| | 1.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **39.33** | **296** | P | **P** | **21 52 42.7** | **+0.2** |
| | 0.7nm,0.7s,baz=81,slow=11,SNR=6.2 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **40.80** | **302** | P | **P** | **21 52 54.5** | **+0.2** |
| | 1.9nm,0.2s,baz=80,slow=9.4,SNR=1.9 | | | | | | |
| | 1.9nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **62.60** | **330** | P | **P** | **21 55 35.8** | **+1.6** |
| | 1.8nm,0.9s,baz=19,slow=12,SNR=4.8 | | | | | | |
| | 1.8nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **67.83** | **334** | P | **P** | **21 56 10.2** | **+2.5** |
| | 0.4nm,0.3s,baz=45,slow=6.3,SNR=1.2 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **67.92** | **335** | P | **P** | **21 56 10.4** | **+2.2** |
| | 0.2nm,0.5s,baz=53,slow=7.0,SNR=1.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*NEIC **08** 21:45:48.4±1.1, 0.96N±0.07×123.88E±0.08, h252km±5km, mb4.5/34, Error ellipse: s-maj=12.0km s-min=9.2km az=67.0*
*DJA **08** 21:45:48.8±0.5, 1°N±.5°×12°4E±.°, h255km±4km, M4.1/12, mB4.8/1, MLv4.1/12, Mw(mB)4.0/1*
*IDC **08** 21:45:49.7±1.4, 1.00N×124.03E, h273km±13km, mb3.7/17, mbtmp4.4/18, Error ellipse: s-maj=21.2km s-min=7.5km az=76.0*

**ISC 08 21:45:47.4±0.4, 0.96N±0.05×123.99E±0.06, h250km, n78, σ1.945/91, mb4.3/35, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **0.39** | **181** | P | **Pn** | **21 46 22.3** | **+2.3** |
| KMSI | | | | S | **S** | **21 46 49.2** | **+3.5** |
| **GTOI** | **Gorontalo** | **1.03** | **252** | P | **Pn** | **21 46 24.8** | **+2.2** |
| GTOI | | | | S | **S** | **21 46 51.9** | **+1.7** |
| **MRSI** | **Marisa** | **2.10** | **257** | P | **Pn** | **21 46 31.6** | **+0.8** |
| **LUWI** | **Luwuk** | **2.33** | **211** | Pn | **Pn** | **21 46 32.9** | **-0.1** |
| **LUWI** | **Luwuk** | **2.33** | **211** | P | **Pn** | **21 46 33.4** | **+0.4** |
| LUWI | | | | S | **S** | **21 47 06.8** | **-2.3** |
| **TOLI2** | **Tolitoli** | **3.21** | **273** | | **Pn** | **21 46 42.3** | **+0.1** |
| **TNTI** | **Ternate** | **3.39** | **93** | | **Pn** | **21 46 46.1** | **+1.9** |
| **TNTI** | **Ternate** | **3.39** | **93** | P | **Pn** | **21 46 46.3** | **+2.1** |
| **SANI** | **Sanana** | **3.60** | **146** | P | **Pn** | **21 46 47.1** | **+0.5** |
| SANI | | | | S | **S** | **21 47 30.7** | **-2.9** |
| **LBMI** | **Labuha** | **3.86** | **114** | P | **Pn** | **21 46 51.4** | **+1.8** |
| **MPSI** | **Mapaga** | **4.13** | **261** | P | **Pn** | **21 46 53.6** | **+0.8** |
| **NLAI** | **Namlea** | **5.21** | **143** | P | **Pn** | **21 47 08.6** | **+2.8** |
| **BNSI** | **Bone** | **6.59** | **216** | P | **Pn** | **21 47 26.4** | **+3.5** |
| **MYLDM** | **Lahad Datu** | **6.89** | **308** | | **Pn** | **21 47 28.9** | **+2.1** |
| **KAPI** | **Kappang** | **7.29** | **215** | P | **Pn** | **21 47 34.1** | **+2.3** |
| | 7.7nm,0.6s,baz=32,slow=9.9,SNR=4.6 | | | | | | |
| **FAKI** | **Fak Fak** | **9.12** | **115** | Pn | **Pn** | **21 47 56.7** | **+1.8** |
| **SBUM** | **Sibu** | **11.85** | **277** | P | **P** | **21 48 32.5** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **13.56** | **226** | P | **P** | **21 48 52.8** | **+1.4** |
| **KSM** | **Kuching** | **13.68** | **272** | P | **Pn** | **21 48 52.1** | **+0.3** |
| **MTN** | **Manton Dam** | **15.44** | **153** | P | **Pn** | **21 49 13.2** | **+0.2** |
| **KNRA** | **Kununurra** | **17.19** | **164** | P | **P** | **21 49 32.9** | **+1.5** |
| KNRA | | | | IAmb | IAmb | 21 49 47.0 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.01** | **175** | P | **P** | **21 49 51.0** | **0.0** |
| **MBWA** | **Marble Bar** | **22.38** | **190** | P | **P** | **21 50 24.6** | **-0.4** |
| MBWA | | | | IAmb | IAmb | 21 50 25.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **TPUB** | **Ta-pu** | **22.44** | **352** | P | **P** | **21 50 25.6** | **0.0** |
| **YULB** | **Yu-li** | **22.45** | **354** | P | **P** | **21 50 24.4** | **-1.2** |
| YULB | | | | IAmb | IAmb | 21 50 31.9 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **22.76** | **190** | P | **P** | **21 50 28.1** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 21 50 29.3 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.99** | **154** | P | **P** | **21 50 31.2** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 21 50 34.0 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.12** | **154** | P | **P** | **21 50 31.1** | **-0.7** |
| **WRA** | **Warramunga Arr** | **23.12** | **154** | P | **P** | **21 50 32.3** | **+0.5** |
| | comp=Z,7.8nm,0.5s,baz=335,slow=9.9,SNR=111 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 54 12.6** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=335,slow=2.1,SNR=1.7 | | | | | | |
| WRA | | | | S | **S** | **21 54 20.8** | **-3.5** |
| | comp=Z,6.0nm,1.0s,baz=333,slow=17,SNR=8.9 | | | | | | |
| | comp=Z,7.8nm,0.5s | | | | | | |
| **YOJ** | **Yonaguni jima** | **23.38** | **358** | P | **P** | **21 50 35.2** | **+1.2** |
| YOJ | | | | IAmb | IAmb | 21 50 38.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **YHNB** | **Yeheng** | **23.70** | **354** | P | **P** | **21 50 37.0** | **-0.1** |
| YHNB | | | | IAmb | IAmb | 21 50 57.2 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **JOW** | **Kunigami** | **26.05** | **9** | P | **P** | **21 51 00.7** | **+2.5** |
| | comp=Z,11nm,0.7s,baz=220,slow=7.5,SNR=4.1 | | | | | | |
| **AS31** | **Alice Springs** | **26.31** | **159** | P | **P** | **21 51 01.3** | **+0.8** |
| **ASAR** | **Alice Springs** | **26.31** | **159** | P | **P** | **21 51 01.5** | **+1.0** |
| **ASAR** | **Alice Springs** | **26.31** | **159** | P | **P** | **21 51 01.4** | **+0.8** |
| | comp=Z,1.6nm,0.6s,baz=336,slow=7.2,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 54 19.7** | **-0.2** |
| | comp=Z,1.0nm,0.4s,baz=344,slow=2.3,SNR=9.2 | | | | | | |
| ASAR | | | | S | **S** | **21 55 12.6** | **-2.0** |
| | comp=Z,2.7nm,0.9s,baz=342,slow=16,SNR=11 | | | | | | |
| ASAR | | | | ScP | **ScP** | **21 57 33.7** | **-2.1** |
| | comp=Z,0.3nm,0.6s,baz=336,slow=2.9,SNR=4.9 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **GSI** | **Gunungsitoli** | **26.41** | **271** | P | **P** | **21 50 59.8** | **-1.7** |
| GSI | | | | IAmb | IAmb | 21 51 00.8 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.11** | **307** | P | **P** | **21 51 34.2** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=150,slow=6.2,SNR=2.3 | | | | | | |
| CMAR | | | | PcP | **PcP** | **21 54 29.2** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=148,slow=2.1,SNR=4.7 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **FORT** | **Forrest** | **31.80** | **173** | P | **P** | **21 51 49.5** | **+0.6** |
| **JMN** | **Monobe** | **33.89** | **15** | P | **P** | **21 52 07.3** | **+0.4** |
| JMN | | | | IAmb | IAmb | 21 52 08.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.30** | **190** | P | **P** | **21 52 10.3** | **-0.1** |
| **BBOO** | **Buckleboo** | **35.47** | **162** | P | **P** | **21 52 20.9** | **+0.4** |
| **KSRS** | **Korea Array** | **36.49** | **5** | P | **P** | **21 52 29.1** | **+0.1** |
| | comp=Z,1.5nm,0.6s,baz=187,slow=9.6,SNR=7.9 | | | | | | |
| KSRS | | | | ScP | **ScP** | **21 58 07.4** | **-2.2** |
| | comp=Z,1.1nm,0.7s,baz=186,slow=4.0,SNR=4.4 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **36.68** | **154** | P | **P** | **21 52 31.7** | **+1.0** |
| **STKA** | **Stephens Creek** | **36.68** | **154** | P | **P** | **21 52 31.5** | **+0.9** |
| | comp=Z,5.2nm,0.6s,baz=328,slow=8.0,SNR=16 | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **37.77** | **19** | P | **P** | **21 52 38.3** | **-1.5** |
| | comp=Z,2.6nm,0.8s,baz=189,slow=8.2,SNR=5.8 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **43.00** | **150** | P | **P** | **21 53 24.6** | **+2.1** |
| CAN | | | | IAmb | IAmb | 21 53 43.7 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **TOO** | **Toolangi** | **43.20** | **155** | P | **P** | **21 53 25.4** | **+1.3** |
| TOO | | | | IAmb | IAmb | 21 53 30.6 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **43.64** | **8** | P | **P** | **21 53 27.5** | **+0.1** |
| USA0B | | | | IAmb | IAmb | 21 53 33.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **43.64** | **8** | P | **P** | **21 53 27.4** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **43.64** | **8** | P | **P** | **21 53 26.6** | **-0.8** |
| | comp=Z,1.7nm,0.4s,baz=191,slow=5.6,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **D19K** | **Kuna River** | **84.68** | **21** | P | **P** | **21 57 54.0** | **+1.1** |
| D19K | | | | IAmb | IAmb | 21 58 07.2 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **90.89** | **180** | P | **P** | **21 58 22.6** | **0.0** |
| | comp=Z,1.3nm,0.6s,baz=12,slow=3.3,SNR=3.8 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.10** | **286** | PKP | **PKPdf** | **22 04 09.8** | **-1.6** |
| | comp=Z,1.2nm,0.7s,baz=77,slow=2.7,SNR=6.2 | | | | | | |

*IDC **08** 21:53:48.1±22.0, 36°.92N×71°.19E, h163km±139km, mb3.4/3, mbtmp3.8/6, ML3.3/3, Error ellipse: s-maj=272.6km s-min=80.2km az=166.0*
*NNC **08** 21:53:55.2±4.2, 37°.39N×71°.22E, h245km±63km, mb2.7, mpv4.0, Error ellipse: s-maj=42.0km s-min=27.2km az=15.0*

**ISC 08 21:53:54.0**±2.1,**37°.3N**±0°.2×**71°.1E**±0°.1,**h200**km,**n17,** σ1°**09**/22,**mb3.6**/3,**6C-4D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **5.23** | **21** | P | **Pn** | **21 55 12.1** | **+0.4** |
| | SNR=45 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.75** | **20** | P | **Pn** | **21 55 18.8** | **+0.8** |
| | SNR=17 | | | | | | |
| **KK31** | **Karatay Array** | **5.84** | **356** | ⇑P | **Pn** | **21 55 20.6** | **+1.5** |
| | 2.7nm,0.2s,baz=171,slow=12,SNR=76 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **21 56 28.1** | **+1.7** |
| | 19nm,0.6s,baz=178,slow=23,SNR=32 | | | | | | |
| **AAK** | **Ala-Archa** | **5.94** | **25** | ⇑P | **Pn** | **21 55 21.4** | **+0.8** |
| | SNR=10 | | | | | | |
| **AAK** | **Ala-Archa** | **5.94** | **25** | ⇑P | **Pn** | **21 55 20.7** | **+0.2** |
| | 12nm,0.4s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **21 56 31.0** | **+1.9** |
| | 25nm,0.6s | | | | | | |
| **ULHL** | **Ulahol** | **6.33** | **37** | P | **Pn** | **21 55 25.9** | **+0.2** |
| | SNR=5.3 | | | | | | |
| **CHMS** | **Chumysh** | **6.35** | **25** | P | **Pn** | **21 55 26.1** | **+0.4** |
| | SNR=11 | | | | | | |
| **CHMS** | **Chumysh** | **6.35** | **25** | ⇓P | **Pn** | **21 55 25.5** | **-0.2** |
| | 5.4nm,0.4s | | | | | | |
| CHMS | | | | ⇓S | **Sn** | **21 56 38.6** | **+0.2** |
| | 9.1nm,0.8s | | | | | | |
| **USP** | **Ospenovka** | **6.51** | **22** | P | **Pn** | **21 55 27.6** | **-0.2** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.59** | **30** | ⇑P | **Pn** | **21 55 28.7** | **-0.4** |
| | 3.8nm,0.4s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **21 56 43.4** | **-1.0** |
| | 8.6nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.61** | **38** | P | **Pn** | **21 56 45.2** | **-1.2** |
| | 0.2nm,0.3s,baz=220,slow=14,SNR=4.1 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.35** | **19** | P | **Pn** | **21 57 07.4** | **-0.7** |
| | 0.1nm,0.3s,baz=202,slow=11,SNR=5.3 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| **AB31** | **Akbulak array** | **14.46** | **329** | ⇑P | **Pn** | **21 57 09.7** | **+0.3** |
| | 0.3nm,0.3s | | | | | | |
| AB31 | | | | ⇓S | **S** | **21 59 47.1** | **-3.0** |
| | 1.5nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.17** | **25** | P | **P** | **21 58 02.1** | **-0.1** |
| | 0.9nm,0.3s,baz=220,slow=11,SNR=11 | | | | | | |
| | 2.1nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **36.90** | **326** | P | **P** | **22 00 43.4** | **+0.3** |
| | 1.5nm,0.9s,baz=115,slow=9.3,SNR=3.4 | | | | | | |
| | 1.5nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.47** | **337** | P | **P** | **22 01 13.1** | **+0.5** |
| | 2.8nm,0.9s,baz=116,slow=8.3,SNR=1.9 | | | | | | |
| | 2.8nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **42.52** | **321** | P | **P** | **22 01 29.3** | **-0.1** |
| | 0.6nm,0.5s,baz=133,slow=12,SNR=1.2 | | | | | | |
| | 0.6nm,0.5s | | | | | | |

*NEIC **08** 22:09:36.4±1.8, 18°.62N±0°.08×145°.8E±0°.1, h185km±7km, mb4.4/37, Error ellipse: s-maj=17.5km s-min=11.4km az=91.0*
*IDC **08** 22:09:37.1±2.0, 18°.67N×145°.82E, h200km±20km, mb3.5/17, mbtmp4.1/20, MS3.2/2, Error ellipse: s-maj=18.3km s-min=10.6km az=79.0*

**ISC 08 22:09:32.3**±0.5,**18.78N**±0°.05×**145.86E**±0°.10,**h150**km,**n67,** σ1°**25**/67,**mb4.2**/32,**Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.25** | **191** | Pn | **Pn** | **22 10 52.0** | **+2.9** |
| GUMO | | | | Sn | **Sn** | **22 11 51.9** | **+2.9** |
| **GUMO** | **Guam** | **5.25** | **191** | P | **Pn** | **22 10 51.6** | **+2.5** |
| | 53nm,0.2s,baz=180,slow=22,SNR=1.8 | | | | | | |
| GUMO | | | | S | **Sn** | **22 11 52.1** | **+3.1** |
| | 46nm,0.3s,baz=133,slow=21,SNR=3.5 | | | | | | |
| **PATS** | **Pohnpei** | **16.97** | **133** | P | **Pn** | **22 13 22.0** | **+1.1** |
| PATS | | | | IAmb | IAmb | 22 13 27.4 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **JOW** | **Kunigami** | **18.07** | **300** | P | **Pn** | **22 13 35.6** | **+1.6** |
| **JOW** | **Kunigami** | **18.07** | **300** | P | **Pn** | **22 13 35.6** | **+1.6** |
| | comp=Z,16nm,0.4s,baz=130,slow=11,SNR=12 | | | | | | |
| **JGF** | **Kuroka** | **18.36** | **338** | P | **Pn** | **22 13 38.8** | **+1.4** |
| JGF | | | | IAmb | IAmb | 22 14 06.2 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.93** | **341** | P | **Pn** | **22 13 45.4** | **+1.4** |
| | comp=Z,3.7nm,0.6s,baz=170,slow=10.0,SNR=10.0 | | | | | | |
| **MAJO** | **Matsushiro** | **18.93** | **341** | P | **Pn** | **22 13 44.8** | **+0.8** |
| MAJO | | | | IAmb | IAmb | 22 13 48.1 | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| **JSD** | **Sado** | **20.30** | **342** | P | Pn | 22 13 59.3 | -0.7 |
| JSD | | | | IAmb | IAmb | 22 14 07.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **SSLB** | **Suanglung** | **23.72** | **286** | P | **P** | **22 14 31.1** | **+0.3** |
| SSLB | | | | IAmb | IAmb | 22 14 42.9 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **24.34** | **324** | P | **P** | **22 14 36.9** | **+0.7** |
| | comp=Z,0.4nm,0.3s,baz=148,slow=9.4,SNR=2.2 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **FAKI** | **Fak Fak** | **25.39** | **213** | P | **P** | **22 14 45.4** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** | **27.88** | **338** | P | **P** | **22 15 09.3** | **+1.3** |
| | comp=Z,1.2nm,0.6s,baz=107,slow=7.7,SNR=3.2 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **COEN** | **Coen** | **32.64** | **185** | P | **P** | **22 15 48.9** | **-1.3** |
| COEN | | | | IAmb | IAmb | 22 16 06.3 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **MTN** | **Manton Dam** | **34.62** | **206** | P | **P** | **22 16 06.5** | **-0.8** |
| **KNRA** | **Kununurra** | **38.15** | **207** | P | **P** | **22 16 35.9** | **-1.3** |
| KNRA | | | | IAmb | IAmb | 22 16 37.4 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **39.93** | **197** | P | **P** | **22 16 51.3** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 22 16 53.1 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.11** | **197** | P | **P** | **22 16 52.2** | **-1.3** |
| **WRA** | **Warramunga Arr** | **40.11** | **197** | P | **P** | **22 16 52.5** | **-0.9** |
| | comp=Z,3.0nm,0.4s,baz=17,slow=8.2,SNR=61 | | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **43.17** | **321** | P | **P** | **22 17 18.6** | **+0.3** |
| **SONM** | **Songino Array** | **43.17** | **321** | P | **P** | **22 17 18.2** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=124,slow=7.8,SNR=4.3 | | | | | | |
| SONM | | | | LR | LR | 22 34 17.2 | |
| | comp=Z,12nm,21.0s,baz=140,slow=34 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **43.77** | **196** | P | **P** | **22 17 22.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **43.77** | **196** | P | **P** | **22 17 22.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **43.77** | **196** | P | **P** | **22 17 22.9** | **-0.4** |
| | comp=Z,1.7nm,0.5s,baz=14,slow=6.5,SNR=31 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.35** | **277** | P | **P** | **22 17 28.6** | **+0.6** |
| | comp=Z,0.5nm,0.3s,baz=128,slow=8.1,SNR=2.6 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **45.32** | **153** | P | **P** | **22 17 35.1** | **-0.5** |
| DZM | | | | IAmb | IAmb | 22 17 39.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **47.23** | **214** | P | **P** | **22 17 48.7** | **-1.7** |
| MBWA | | | | IAmb | IAmb | 22 18 01.5 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **GSI** | **Gunungsitoli** | **50.39** | **256** | P | **P** | **22 18 14.3** | **-0.4** |
| **STKA** | **Stephens Creek** | **50.54** | **185** | P | **P** | **22 18 14.1** | **-1.3** |
| **STKA** | **Stephens Creek** | **50.54** | **185** | P | **P** | **22 18 14.1** | **-1.3** |
| | comp=Z,0.7nm,0.3s,baz=5.2,slow=9.9,SNR=2.9 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **LVA** | **Lava Point** | **50.89** | **34** | P | **P** | **22 18 19.1** | **+1.3** |
| **BBOO** | **Buckleboo** | **52.15** | **190** | P | **P** | **22 18 27.5** | **+0.1** |
| **FORT** | **Forrest** | **52.16** | **199** | P | **P** | **22 18 26.8** | **-0.7** |
| **K13K** | **Kusilvak Mount** | **55.04** | **26** | P | **P** | **22 18 50.0** | **+1.9** |
| K13K | | | | IAmb | IAmb | 22 18 51.8 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **F15K** | **North Star Dit** | **56.91** | **22** | P | **P** | **22 19 03.0** | **+1.6** |
| F15K | | | | IAmb | IAmb | 22 19 18.4 | |
| | comp=Z,11nm,1.2s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **58.04** | **322** | P | **P** | **22 19 09.1** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **58.04** | **322** | P | **P** | **22 19 08.5** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=94,slow=12,SNR=3.5 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **58.51** | **314** | P | **P** | **22 19 13.0** | **+0.1** |
| **MKAR** | **Makanchi Array** | **58.51** | **314** | P | **P** | **22 19 12.9** | **-0.1** |
| **MKAR** | **Makanchi Array** | **58.51** | **314** | P | **P** | **22 19 13.2** | **+0.3** |
| | comp=Z,1.4nm,0.6s,baz=93,slow=8.8,SNR=15 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **58.73** | **314** | P | **P** | **22 19 14.3** | **-0.1** |
| **CNPM** | **China Poot** | **60.31** | **31** | P | **P** | **22 19 25.7** | **+0.7** |
| CNPM | | | | IAmb | IAmb | 22 19 39.7 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **SKT** | **Skwentna** | **60.80** | **29** | P | **P** | **22 19 28.9** | **+0.7** |
| SKT | | | | IAmb | IAmb | 22 19 36.8 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **KURK** | **Kurchatov** | **61.31** | **318** | | **P** | **22 19 31.4** | **-0.4** |
| KURK | | | | IAmb | IAmb | 22 19 33.5 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.36** | **318** | P | **P** | **22 19 31.4** | **-0.7** |
| | comp=Z,1.2nm,0.2s,baz=98,slow=7.8,SNR=20 | | | | | | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| **BOOM** | **Boomskoye usch** | **62.87** | **309** | P | **P** | **22 19 42.5** | **-0.2** |
| **WRH** | **Wood River Hil** | **62.93** | **26** | P | **P** | **22 19 42.8** | **+0.4** |
| WRH | | | | IAmb | IAmb | 22 19 47.8 | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **63.50** | **26** | P | **P** | **22 19 46.4** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=254,slow=5.9,SNR=10 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **URZ** | **Urewera** | **63.88** | **153** | LR | LR | 22 44 57.4 | |
| | comp=Z,36nm,19.3s,baz=26,slow=33 | | | | | | |
| **RTZ** | **Ruatahuna** | **64.12** | **153** | P | **P** | **22 19 49.4** | **-1.3** |
| **BMAR** | **Burnt Mountain** | **64.98** | **24** | P | **P** | **22 19 57.4** | **+1.5** |
| **ARSB** | **Arslanbob** | **65.12** | **307** | P | **P** | **22 19 57.0** | **-0.4** |
| **KKAR** | **Karatay Array** | **66.83** | **310** | P | **P** | **22 20 08.2** | **+0.1** |
| **ARU** | **Arti** | **73.08** | **325** | P | **P** | **22 20 46.0** | **0.0** |
| ARU | | | | IAmb | IAmb | 22 21 12.3 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.38** | **317** | P | **P** | **22 20 46.7** | **-1.1** |
| ABKAR | | | | IAmb | IAmb | 22 20 48.2 | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.38** | **317** | P | **P** | **22 20 46.8** | **-1.1** |
| **YBH** | **Yreka Blue Hor** | **78.78** | **50** | P | **P** | **22 21 18.7** | **0.0** |
| | comp=Z,0.9nm,0.3s,baz=318,slow=5.0,SNR=7.2 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **J05D** | **Fort Rock, OR** | **79.42** | **48** | P | **P** | **22 21 23.0** | **+0.8** |
| J05D | | | | IAmb | IAmb | 22 21 40.6 | |
| | comp=Z,7.7nm,1.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.46** | **342** | P | **P** | **22 21 37.5** | **-0.1** |
| | comp=Z,1.3nm,0.7s,baz=89,slow=8.4,SNR=6.6 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.97** | **52** | P | **P** | **22 21 42.0** | **+0.8** |
| | comp=Z,0.5nm,0.5s,baz=264,slow=5.5,SNR=4.9 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **FIA1** | **FINESS Array S** | **86.87** | **335** | P | **P** | **22 21 57.5** | **-2.3** |
| **FINES** | **FINESS Array B** | **86.87** | **335** | P | **P** | **22 21 57.8** | **-2.0** |
| | comp=Z,1.5nm,0.3s,baz=65,slow=5.1,SNR=29 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **PD31** | **Pinedale Array** | **87.66** | **46** | P | **P** | **22 22 04.1** | **-0.2** |
| **PDAR** | **Pinedale Array** | **87.66** | **46** | P | **P** | **22 22 04.2** | **-0.2** |
| **PDAR** | **Pinedale Array** | **87.66** | **46** | P | **P** | **22 22 04.5** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=169,slow=0.7,SNR=4.8 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **92.36** | **338** | P | **P** | **22 22 23.5** | **-2.1** |
| | comp=Z,1.1nm,0.7s,baz=58,slow=3.6,SNR=5.7 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.52** | **309** | PKP | **PKPdf** | **22 28 27.6** | **-2.3** |
| | comp=Z,0.3nm,0.6s,baz=50,slow=1.9,SNR=4.1 | | | | | | |

*NEIC **08** 22:25:54.5±1.6, 17°.67S±0°.08×178°.9W±0°.2, h545km±9km, mb4.1/21, Error ellipse: s-maj=21.7km s-min=12.0km az=81.0*
*IDC **08** 22:25:55.3±1.8, 17°.46S×179°.05W, h552km±11km, mb3.2/7, mbtmp4.1/8, Error ellipse: s-maj=76.5km s-min=16.2km az=148.0*

**ISC 08 22:25:53.6**±0.7,**17.7S**±0°.1×**178.9W**±0°.1,**h539**km,**n48,** σ0°**78**/48,**mb3.9**/17,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.94** | **269** | P | **P** | **22 27 08.2** | **+0.8** |
| **MSVF** | **Nonsavu** | **2.94** | **269** | P | **P** | **22 27 09.3** | **+1.9** |
| | 3.0nm,0.4s,baz=140,slow=17,SNR=5.7 | | | | | | |
| MSVF | | | | S | **S** | **22 28 10.1** | **+2.7** |
| | 4.3nm,0.7s,baz=162,slow=18,SNR=5.7 | | | | | | |
| **PINNC** | **Pines Island,** | **13.74** | **247** | P | **P** | **22 28 50.0** | **-0.2** |
| **DZM** | **Mont Dzumac** | **14.48** | **250** | P | **P** | **22 28 56.4** | **-1.5** |
| **DZM** | **Mont Dzumac** | **14.48** | **250** | P | **P** | **22 28 56.8** | **-1.1** |
| | 1.8nm,0.5s,baz=99,slow=19,SNR=3.1 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.17** | **257** | P | **P** | **22 29 14.9** | **-0.1** |
| KOUNC | | | | IAmb | IAmb | 22 29 18.3 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.11** | **195** | P | **P** | **22 30 44.2** | **-0.3** |
| **EIDS** | **Eidsvold** | **28.93** | **249** | P | **P** | **22 31 09.6** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 22 31 19.8 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.65** | **199** | P | **P** | **22 31 14.6** | **-0.8** |
| **ARMA** | **Armidale** | **29.66** | **239** | P | **P** | **22 31 16.2** | **+0.3** |
| ARMA | | | | IAmb | IAmb | 22 31 18.0 | |
| | comp=Z,6.1nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **36.96** | **230** | P | **P** | **22 32 17.9** | **+0.6** |
| TOO | | | | IAmb | IAmb | 22 32 21.7 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.34** | **241** | P | **P** | **22 32 29.0** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.34** | **241** | P | **P** | **22 32 29.1** | **+0.5** |
| | comp=Z,2.9nm,0.5s,baz=96,slow=11,SNR=9.5 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.12** | **241** | P | **P** | **22 33 06.6** | **0.0** |
| BBOO | | | | IAmb | IAmb | 22 33 10.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.20** | **260** | P | **P** | **22 33 15.2** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.24** | **259** | P | **P** | **22 33 14.9** | **-0.5** |
| | comp=Z,1.0nm,0.6s,baz=96,slow=7.3,SNR=17 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **44.42** | **254** | P | **P** | **22 33 16.5** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 22 33 17.7 | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.42** | **254** | P | **P** | **22 33 16.3** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.42** | **254** | P | **P** | **22 33 17.1** | **+0.3** |
| | comp=Z,8.5nm,0.4s,baz=89,slow=8.1,SNR=147 | | | | | | |
| | comp=Z,8.5nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **49.70** | **244** | P | **P** | **22 33 55.6** | **-0.8** |
| **JCJ** | **Chichijima** | **58.40** | **319** | P | **P** | **22 34 55.6** | **-2.1** |
| **QSPA** | **South Pole Qui** | **72.35** | **180** | P | **P** | **22 36 24.8** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **79.58** | **44** | P | **P** | **22 37 05.4** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=209,slow=9.1,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **M16K** | **Timber Creek** | **80.07** | **10** | P | **P** | **22 37 07.5** | **+0.7** |
| M16K | | | | IAmb | IAmb | 22 37 26.8 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **COCO** | **West Island** | **81.02** | **260** | P | **P** | **22 37 13.1** | **+0.2** |
| **L18K** | **Granite Mounta** | **81.57** | **10** | P | **P** | **22 37 15.2** | **+0.6** |
| **K17K** | **Iditarod** | **81.78** | **9** | P | **P** | **22 37 16.2** | **+0.5** |
| K17K | | | | IAmb | IAmb | 22 37 32.8 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **J16K** | **Anvik River** | **81.98** | **8** | P | **P** | **22 37 16.6** | **0.0** |
| J16K | | | | IAmb | IAmb | 22 37 44.4 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **J17K** | **VABM Dome** | **82.30** | **9** | P | **P** | **22 37 18.7** | **+0.4** |
| J17K | | | | IAmb | IAmb | 22 37 19.7 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.79** | **13** | P | **P** | **22 37 34.5** | **-1.0** |
| | comp=Z,0.4nm,0.4s,baz=224,slow=5.6,SNR=5.5 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.26** | **58** | P | **P** | **22 37 39.4** | **+0.7** |
| | comp=Z,0.7nm,0.8s,baz=220,slow=6.2,SNR=6.6 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **86.40** | **8** | P | **P** | **22 37 38.0** | **-0.4** |
| E19K | | | | IAmb | IAmb | 22 37 48.4 | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **PD31** | **Pinedale Array** | **87.51** | **44** | P | **P** | **22 37 44.5** | **+0.1** |
| **PDAR** | **Pinedale Array** | **87.51** | **44** | P | **P** | **22 37 44.5** | **+0.1** |
| **PDAR** | **Pinedale Array** | **87.51** | **44** | P | **P** | **22 37 44.4** | **-0.1** |
| | comp=Z,0.4nm,0.6s,baz=226,slow=4.2,SNR=5.8 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **88.56** | **13** | P | **P** | **22 37 48.6** | **+0.2** |
| **KWP** | **Kalwaria Pacla** | **143.71** | **336** | PKPbc | PKPbc | 22 44 26.5 | +0.3 |
| **BUR08** | **Bucovina Ar. S** | **144.21** | **332** | PKPbc | **PKPdf** | **22 44 28.3** | **0.0** |
| **BURAR** | **Bucovina Array** | **144.23** | **332** | PKPbc | **PKPab** | **22 44 28.2** | **-0.1** |
| **CLL** | **Collm** | **145.17** | **347** | | **PKPbc** | **22 44 30.8** | **+0.2** |
| **GERES** | **GERESS Array B** | **147.30** | **345** | PKPbc | **PKPbc** | **22 44 36.7** | **-0.1** |
| | comp=Z,0.7nm,0.5s,baz=34,slow=7.1,SNR=4.2 | | | | | | |
| **LESA** | **Schwarzleotal** | **148.88** | **345** | *e*PKP | **PKPbc** | **22 44 41.2** | **+0.5** |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **WATA** | **Walderalm** | **149.22** | **346** | *e*PKP | **PKPbc** | **22 44 42.0** | **+0.3** |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **149.28** | **346** | *e*PKP | **PKPbc** | **22 44 42.0** | **+0.2** |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **PRED** | **Cave del Predi** | **149.55** | **343** | PKPbc | **PKPbc** | **22 44 41.9** | **-0.5** |
| **ABTA** | **Abfaltersbach** | **149.55** | **344** | *e*PKP | **PKPbc** | **22 44 42.1** | **-0.3** |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.19** | **347** | PKPbc | **PKiKP** | **22 44 44.5** | **-0.2** |
| **FNA** | **Florina** | **151.14** | **327** | | **PKPbc** | **22 44 45.3** | **-0.9** |

*NEIC **08** 22:26:56.7±0.9, 36°.50N±0°.02×98°.99W±0°.02, h5km±1km, Error ellipse: s-maj=4.1km s-min=2.6km az=306.0*
**TUL 08 22:26:57**±0.9,**36°.52N**±0°.02×**99°.00W**±0°.03,**h5**km±4km,
**ML2.4, mb_Lg2.2**/27(NEIC),**ML2.5**/10(NEIC),**Error ellipse: s-maj=4.1km s-min=2.0km az=120.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOKA** | **Waynoka** | **0.13** | **23** | | Pg | 22 27 00.1 | +0.4 |
| NOKA | | | | Sg | Sg | 22 27 02.5 | +1.0 |
| NOKA | | | | IAML | | 22 27 02.7 | |
| | comp=E,2μm,0.3s | | | | | | |
| NOKA | | | | IAML | | 22 27 02.7 | |
| | comp=N,2μm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **0.21** | **100** | Pg | Pg | 22 27 01.6 | +0.5 |
| OK038 | | | | Sg | Sg | 22 27 04.8 | +0.9 |
| OK038 | | | | IAML | | 22 27 07.0 | |
| | comp=N,944nm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **0.56** | **217** | | Pg | 22 27 07.8 | 0.0 |
| ELIS | | | | Sg | Sg | 22 27 15.8 | +0.6 |
| ELIS | | | | IAML | | 22 27 27.3 | |
| | comp=N,196nm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.69** | **65** | Pg | Pg | 22 27 10.1 | -0.2 |
| OK032 | | | | Sg | Sg | 22 27 19.7 | +0.4 |
| OK032 | | | | IAML | | 22 27 30.4 | |
| | comp=N,320nm,0.1s | | | | | | |
| **CROK** | **Carrier** | **0.82** | **91** | Pg | Pg | 22 27 12.5 | -0.2 |
| CROK | | | | Sg | Sg | 22 27 23.4 | +0.1 |
| **CSTR** | **Hydro, Custer** | **0.90** | **164** | Pg | Pg | 22 27 14.2 | -0.1 |
| **KAN14** | **Manchester OK** | **0.94** | **62** | Pg | Pg | 22 27 14.9 | -0.2 |
| **GC02** | **Grant County #** | **0.97** | **70** | | Pg | 22 27 15.3 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.08** | **49** | Pg | Pg | 22 27 17.3 | -0.5 |
| **KAN12** | **Harper NE Stat** | **1.12** | **45** | Pg | Pg | 22 27 17.9 | -0.6 |
| **KAN17** | **Caldwell West** | **1.12** | **62** | Pg | Pg | 22 27 17.9 | -0.6 |
| **KAN01** | **Argonia South** | **1.18** | **57** | Pg | Pg | 22 27 19.0 | -0.6 |
| **KAN09** | **Caldwell North** | **1.27** | **60** | Pg | Pg | 22 27 20.3 | -1.0 |
| **KAN13** | **South Haven SW** | **1.32** | **67** | | Pn | 22 27 21.2 | -0.8 |
| **KS21** | **Milan North St** | **1.32** | **54** | | Pn | 22 27 21.7 | -0.3 |
| **BLOK** | **Blackwell** | **1.45** | **80** | | Pn | 22 27 23.8 | -0.1 |
| **OK048** | **Pawnee Station** | **1.66** | **93** | | Pn | 22 27 27.1 | +0.4 |
| **SMWD** | **Samnorwood** | **1.73** | **216** | | Pn | 22 27 28.3 | +0.5 |
| SMWD | | | | IAmb_Lg | | 22 27 53.9 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **OK051** | **E0350 and S346** | **1.74** | **90** | | Pn | 22 27 28.2 | +0.3 |
| **WMOK** | **Wichita Mounta** | **1.78** | **174** | | Pn | 22 27 28.2 | -0.3 |
| **FNO** | **Franklin** | **1.80** | **134** | IAmb_Lg | | 22 27 56.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **OK031** | **S. Brethren Rd** | **1.83** | **107** | | Pn | 22 27 29.1 | 0.0 |
| **OK052** | **Battle Ridge R** | **1.85** | **106** | Pn | Pn | 22 27 29.3 | 0.0 |
| **R32A** | **Long Quarter,** | **1.92** | **7** | | Pn | 22 27 31.0 | +0.7 |
| **T35A** | **Sooner Cattle** | **2.04** | **78** | Pn | Pn | 22 27 32.7 | +0.8 |
| **DEOK** | **Depew** | **2.13** | **108** | Pn | Pn | 22 27 33.2 | 0.0 |
| **X34A** | **Smith Ranch, M** | **2.13** | **153** | Pn | Pn | 22 27 33.9 | +0.6 |
| **W35A** | **Tecumseh** | **2.20** | **128** | Pn | Pn | 22 27 34.0 | -0.1 |
| **CBKS** | **Cedar Bluff** | **2.37** | **346** | Pn | Pn | 22 27 37.7 | +1.1 |
| **TUL3** | **Leonard** | **2.66** | **102** | IAmb_Lg | | 22 28 22.2 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.02** | **270** | | Pn | 22 27 46.2 | +0.7 |
| **DKNS** | **Dickens** | **3.25** | **210** | | Pn | 22 27 49.5 | +0.7 |
| **X37A** | **Clayton** | **3.52** | **122** | | Pn | 22 27 52.3 | -0.1 |
| **KSCO** | **Kaye Shedlock'** | **3.81** | **312** | IAmb_Lg | | 22 29 07.4 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **4.08** | **92** | IAmb_Lg | | 22 29 10.2 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **4.39** | **280** | IAmb_Lg | | 22 29 18.2 | |
| | comp=Z,4.6nm,0.8s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PWL | **Port Wells** | **13.69** | **48** | Pn | **Pn** | **22 36 18.9** | **-3.1** |
| KNK | **Knik Glacier** | **13.88** | **45** | Pn | **Pn** | **22 36 22.3** | **-2.1** |
| HIN | **Hinchinbrook I** | **14.35** | **51** | Pn | **Pn** | **22 36 27.9** | **-2.4** |
| BPAW | **Bear Paw Mtn.** | **14.41** | **34** | | **Pn** | **22 36 32.1** | **+1.0** |
| H21K | **Melozitna Rive** | **14.96** | **27** | | **Pn** | **22 36 38.8** | **+0.9** |
| MLY | **Manley** | **15.12** | **31** | | **P** | **22 36 41.2** | **-0.4** |
| M24K | **Tolsona, Glenn** | **15.16** | **45** | Pn | **Pn** | **22 36 39.9** | **-0.5** |
| G21K | **Allakaket** | **15.45** | **24** | | **Pn** | **22 36 44.1** | **+0.3** |
| I23K | **Minto, Yukon-K** | **15.63** | **32** | | **Pn** | **22 36 46.0** | **-0.1** |
| I23K | comp=Z,1.7nm,0.6s | | | IAmb | IAmb | 22 36 49.1 | |
| WRH | **Wood River Hil** | **15.63** | **36** | | **Pn** | **22 36 45.5** | **-0.8** |
| GLB | **Gilahina Butte** | **15.94** | **49** | Pn | **Pn** | **22 36 48.2** | **-1.9** |
| GLB | comp=Z,4.1nm,1.0s | | | IAmb | IAmb | 22 37 14.6 | |
| D19K | **Kuna River** | **16.23** | **15** | | **Pn** | **22 36 53.8** | **+0.3** |
| D19K | comp=Z,4.9nm,1.3s | | | IAmb | IAmb | 22 37 20.2 | |
| ILAR | **Eielson Array** | **16.23** | **36** | Pn | **Pn** | **22 36 52.0** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=231,slow=12,SNR=4.3 comp=Z,0.2nm,0.4s | | | | | | |
| H24K | **Noodor Dome** | **16.55** | **32** | | **Pn** | **22 36 57.3** | **-0.1** |
| H24K | comp=Z,5.1nm,1.4s | | | IAmb | IAmb | 22 37 01.9 | |
| J25K | **Salcha River,** | **16.69** | **37** | P | **P** | **22 36 57.7** | **-1.3** |
| J25K | comp=Z,2.3nm,0.6s | | | IAmb | IAmb | 22 36 58.8 | |
| EGAK | **Eagle** | **18.35** | **40** | P | **P** | **22 37 17.0** | **-0.1** |
| EGAK | comp=Z,2.2nm,0.4s | | | IAmb | IAmb | 22 37 19.1 | |
| BMAR | **Burnt Mountain** | **18.58** | **30** | P | **P** | **22 37 19.4** | **-0.2** |
| I28M | **Miner Creek** | **19.11** | **39** | P | **P** | **22 37 24.4** | **-1.1** |
| I28M | comp=Z,2.3nm,0.7s | | | IAmb | IAmb | 22 37 26.8 | |
| G29M | **Pine Creek** | **20.46** | **36** | P | **P** | **22 37 38.7** | **-1.2** |
| PDAR | **Pinedale Array** | **40.20** | **80** | P | **P** | **22 40 37.4** | **+1.2** |
| PDAR | **Pinedale Array** | **40.20** | **80** | P | **P** | **22 40 38.6** | **+2.4** |
| | comp=Z,0.4nm,0.6s,baz=286,slow=6.0,SNR=4.5 comp=Z,0.4nm,0.6s | | | | | | |
| TXAR | **Lajitas Array** | **52.68** | **90** | P | **P** | **22 42 15.4** | **+1.9** |
| | comp=Z,0.2nm,0.5s,baz=316,slow=6.3,SNR=2.0 comp=Z,0.2nm,0.5s | | | | | | |
| HFS | **Hagfors** | **66.99** | **358** | P | **P** | **22 43 50.4** | **-0.2** |
| | comp=Z,0.5nm,0.3s,baz=15,slow=6.1,SNR=5.9 comp=Z,0.5nm,0.3s | | | | | | |
| ABKAR | **Akbulak array** | **69.75** | **328** | P | **P** | **22 44 07.7** | **-0.3** |
| ABKAR | **Akbulak array** | **69.75** | **328** | P | **P** | **22 44 07.7** | **-0.3** |

*IDC **08** 22:49:03.8±10.0, 21˚.21N×146˚.00E, h143km±103km, mb3.3/9, mbtmp3.7/9, MS2.8/1, Error ellipse: s-maj=40.3km s-min=17.0km az=86.0*

**ISC 08 22:48:52.1±1.0, 21˚.2N±0˚.2×146˚.2E±0˚.2, h34km, n10, σ1§35/9, mb3.6/9, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | **Guam** | **7.67** | **189** | LR | LR | 22 53 24.9 | |
| | comp=Z,74nm,19.8s,baz=101,slow=34 | | | | | | |
| KSRS | **Korea Array** | **22.63** | **320** | P | **P** | **22 53 51.2** | **+1.2** |
| | 0.8nm,0.6s,baz=150,slow=10,SNR=4.6 0.8nm,0.6s | | | | | | |
| USRK | **Ussuriysk Ar.** | **25.77** | **336** | P | **P** | **22 54 20.9** | **+1.3** |
| | 1.0nm,0.6s,baz=128,slow=19,SNR=2.9 1.0nm,0.6s | | | | | | |
| WRA | **Warramunga Arr** | **42.50** | **197** | P | **P** | **22 56 45.3** | **+1.0** |
| | 0.7nm,0.5s,baz=15,slow=8.9,SNR=9.5 0.7nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | **46.17** | **196** | P | **P** | **22 57 13.3** | **-0.3** |
| | 0.8nm,0.6s,baz=13,slow=9.2,SNR=6.8 0.8nm,0.6s | | | | | | |
| MKAR | **Makanchi Array** | **57.07** | **313** | P | **P** | **22 58 34.2** | **-0.8** |
| | 0.1nm,0.3s,baz=82,slow=9.9,SNR=1.9 0.1nm,0.3s | | | | | | |
| KURBB | **Kurchatov Arra** | **59.77** | **317** | P | **P** | **22 58 54.4** | **+0.8** |
| | 0.5nm,0.3s,baz=104,slow=7.7,SNR=1.8 0.5nm,0.3s | | | | | | |
| ILAR | **Eielson Array** | **61.22** | **27** | P | **P** | **22 59 03.8** | **+0.5** |
| | 0.3nm,0.6s,baz=270,slow=4.5,SNR=2.4 0.3nm,0.6s | | | | | | |
| NVAR | **Mina Array Bea** | **81.26** | **52** | P | **P** | **23 01 05.4** | **+0.2** |
| | 0.4nm,0.6s,baz=255,slow=6.3,SNR=2.4 0.4nm,0.6s | | | | | | |
| FINES | **FINESS Array B** | **84.80** | **335** | P | **P** | **23 01 20.4** | **-2.4** |
| | 1.0nm,0.7s,baz=31,slow=3.2,SNR=6.7 1.0nm,0.7s | | | | | | |

*ISN **08** 22:55:00.7±0.4, 33˚.17N×46˚.16E, h6km±3km, ML3.3*
*TEH **08** 22:55:00.1, 33˚.21N×46˚.22E, h8km±45km, ML3.2*

**ISC 08 22:55:00.9±0.9, 33˚.22N±0˚.04×46˚.19E±0˚.03, h10km, n23, σ1§66/27, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IBDR | **Badra** | **0.24** | **243** | *e*Pg | **Pg** | **22 55 05.0** | **-0.9** |
| IBDR | | | | *e*Sg | **Sg** | **22 55 08.0** | **-1.2** |
| IBDR | | | | AML | AML | 22 55 19.3 | |
| IBDR | comp=N,4μm,0.3s | | | AML | AML | 22 55 23.7 | |
| | comp=E,8μm,0.9s | | | | | | |
| ILBA | **Ilam Banvizeh** | **0.40** | **2** | Pg | **Pg** | **22 55 08.5** | **-0.4** |
| GLG1 | **Gilan-e-Ghazi** | **0.92** | **345** | Pg | **Pb** | **22 55 18.6** | **-0.5** |
| GLG1 | | | | Sg | **Sn** | **22 55 33.1** | **-0.3** |
| IGHG | **Ghaleghazi** | **1.15** | **16** | Pg | **Pn** | **22 55 23.6** | **+0.3** |
| KCHF | **Cheshme Sefid,** | **1.27** | **34** | Pg | **Pg** | **22 55 26.0** | **+0.7** |
| KGS1 | **Ghasr-e-Shirin** | **1.38** | **339** | Pg | **Pg** | **22 55 28.2** | **+0.8** |
| IKFM | **Kafar-mosalman** | **1.42** | **77** | Pg | **Pg** | **22 55 27.0** | **-1.2** |
| IDHR | **Dehrash** | **1.48** | **6** | Pg | **Pg** | **22 55 29.8** | **+0.4** |
| BHD | **Baghdad** | **1.52** | **272** | *e*Pn | **Pg** | **22 55 30.0** | **0.0** |
| BHD | | | | *e*Sn | **Sg** | **22 55 51.0** | **+1.3** |
| BHD | comp=E,643nm,0.6s | | | AML | AML | 22 55 58.6 | |
| ILIN | **Lien** | **1.81** | **21** | Pn | **Pg** | **22 55 34.5** | **-1.2** |
| IBZA | **Bozab** | **1.87** | **48** | Pn | **Pg** | **22 55 35.5** | **-1.3** |
| SNQR | **Sonqor, Kerman** | **2.02** | **36** | Pn | **Pg** | **22 55 38.0** | **-1.8** |
| HSAM | **Samen** | **2.24** | **63** | Pn | **Pb** | **22 55 40.5** | **-1.1** |
| IKRK | **Kirkuk** | **2.66** | **325** | *e*Pn | **Pb** | **22 55 46.2** | **-2.4** |
| IKRK | | | | *e*Sn | **Sb** | **22 56 20.0** | **-1.3** |
| IKRK | comp=E,90nm,0.8s | | | AML | AML | 22 56 34.0 | |
| IKRK | comp=N,127nm,0.3s | | | AML | AML | 22 56 44.2 | |
| SDS1 | **Sardasht. Az.** | **2.98** | **349** | Pn | **Pn** | **22 55 49.9** | **+1.6** |
| IRAZ | **Razeghan** | **3.79** | **54** | Pn | **Pn** | **22 56 02.4** | **+2.9** |
| JHBN | **Jahan bin** | **3.90** | **103** | Pn | **Pn** | **22 56 03.4** | **+2.2** |
| IPIR | **Pirpir** | **3.99** | **96** | Pn | **Pn** | **22 56 04.6** | **+2.2** |
| ZNGN | **Zangian** | **4.09** | **104** | Pn | **Pn** | **22 56 05.7** | **+2.0** |
| IKLH | **Kolahrood** | **4.52** | **87** | Pn | **Pn** | **22 56 12.1** | **+2.4** |
| KRSH | **Karshahi** | **5.02** | **80** | Pn | **Pn** | **22 56 18.4** | **+1.9** |
| ISHB | **Shabestar** | **5.07** | **355** | Pn | **Pn** | **22 56 19.8** | **+2.6** |
| KLNJ | **Kolanjah** | **5.09** | **114** | Pn | **Pn** | **22 56 19.6** | **+2.1** |

*NEIC **08** 23:07:42.8±0.6, 36˚.209N±0˚.006×97˚.56W±0˚.02, h3km±5km, Error ellipse: s-maj=2.0km s-min=0.3km az=65.0*

**TUL 08 23:07:43.2±0.5, 36˚.21N±0˚.01×97˚.55W±0˚.02, h7km±5km, ML3.0, mb_Lg2.7/87(NEIC), ML3.0/66(NEIC), Error ellipse: s-maj=2.0km s-min=1.4km az=47.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OK029 | **Liberty Lake** | **0.42** | **169** | | Pg | 23 07 51.6 | +0.2 |
| CROK | **Carrier** | **0.45** | **310** | | Pg | 23 07 52.0 | 0.0 |
| OK048 | **Pawnee Station** | **0.53** | **67** | | Pg | 23 07 53.6 | +0.1 |
| ADOK | **Arcadia Dam** | **0.58** | **165** | Pg | Pg | 23 07 54.5 | +0.1 |
| BLOK | **Blackwell** | **0.61** | **26** | | Pg | 23 07 55.1 | +0.2 |
| OK031 | **S. Brethren Rd** | **0.63** | **114** | | Pg | 23 07 55.4 | 0.0 |
| OK031 | 941nm,0.5s | | | IAML | | 23 08 06.6 | |
| OK031 | 552nm,0.5s | | | IAML | | 23 08 08.4 | |
| OK052 | **Battle Ridge R** | **0.65** | **110** | | Pg | 23 07 55.7 | +0.1 |
| OK052 | | | | Sg | Sg | 23 08 04.7 | +0.7 |
| OK052 | 584nm,0.4s | | | IAML | | 23 08 07.0 | |
| OK051 | **E0350 and S346** | **0.65** | **63** | | Pg | 23 07 55.7 | +0.1 |
| OK051 | 861nm,0.2s | | | IAML | | 23 08 10.9 | |
| OK051 | 1μm,0.2s | | | IAML | | 23 08 11.5 | |
| GC02 | **Grant County #** | **0.68** | **339** | Pg | Pg | 23 07 56.3 | -0.1 |
| GC02 | | | | Sg | Sg | 23 08 05.8 | +0.5 |
| QUOK | **Quay** | **0.68** | **93** | | Pg | 23 07 56.4 | +0.1 |
| QUOK | | | | Sg | Sg | 23 08 05.7 | +0.4 |
| QUOK | comp=N,518nm,0.3s | | | IAML | | 23 08 07.9 | |
| QUOK | comp=E,486nm,0.2s | | | IAML | | 23 08 12.4 | |
| OK032 | **Salt Plains WL** | **0.79** | **318** | | Pg | 23 07 58.1 | -0.3 |
| OK032 | | | | Sg | Sg | 23 08 08.6 | -0.1 |
| OK032 | comp=E,769nm,0.2s | | | IAML | | 23 08 18.9 | |
| KAN13 | **South Haven SW** | **0.80** | **4** | | Pg | 23 07 58.5 | -0.1 |
| KAN13 | | | | Sg | Sg | 23 08 09.6 | +0.6 |
| KAN13 | comp=N,737nm,0.3s | | | IAML | | 23 08 15.7 | |
| KAN14 | **Manchester OK** | **0.81** | **336** | | Pg | 23 07 58.5 | -0.3 |
| KAN14 | | | | Sg | Sg | 23 08 10.1 | +0.7 |
| KAN14 | comp=N,715nm,0.1s | | | IAML | | 23 08 15.0 | |
| OKCSW | **OKLAHOMA CITY** | **0.81** | **173** | Pg | Pg | 23 07 58.6 | -0.2 |
| OKCSW | comp=N,641nm,0.2s | | | IAML | | 23 08 10.8 | |
| OKCSW | comp=E,691nm,0.2s | | | IAML | | 23 08 11.0 | |
| KAN17 | **Caldwell West** | **0.85** | **348** | | Pg | 23 07 59.2 | -0.3 |
| KAN17 | comp=E,551nm,0.3s | | | IAML | | 23 08 16.8 | |
| KAN09 | **Caldwell North** | **0.92** | **357** | | Pg | 23 08 00.6 | -0.3 |
| DEOK | **Depew** | **0.93** | **113** | Pg | Pg | 23 08 00.8 | -0.3 |
| DEOK | comp=N,560nm,0.2s | | | IAML | | 23 08 15.6 | |
| KAN01 | **Argonia South** | **0.95** | **350** | | Pg | 23 08 01.2 | -0.3 |
| KAN01 | comp=E,480nm,0.3s | | | IAML | | 23 08 16.5 | |
| KAN01 | comp=N,426nm,0.1s | | | IAML | | 23 08 19.6 | |
| FNO | **Franklin** | **0.96** | **173** | Pg | Pg | 23 08 01.3 | -0.4 |
| FNO | comp=E,262nm,0.2s | | | IAML | | 23 08 17.6 | |
| OK038 | **West end E0370** | **1.00** | **286** | | Pg | 23 08 01.8 | -0.5 |
| KAN08 | **Anthony NE Sta** | **1.07** | **342** | | Pg | 23 08 03.2 | -0.4 |
| KAN08 | comp=E,367nm,0.1s | | | IAML | | 23 08 22.5 | |
| KAN08 | comp=N,422nm,0.1s | | | IAML | | 23 08 22.6 | |
| KS21 | **Milan North St** | **1.07** | **355** | IAML | | 23 08 23.3 | |
| KS21 | **Milan North St** | **1.07** | **355** | | Pg | 23 08 03.2 | -0.6 |
| CSTR | **Hydro, Custer** | **1.08** | **239** | | Pg | 23 08 03.5 | -0.5 |
| T35A | **Sooner Cattle** | **1.09** | **50** | | Pg | 23 08 03.8 | -0.4 |
| T35A | comp=E,369nm,0.4s | | | IAML | | 23 08 23.4 | |
| KAN12 | **Harper NE Stat** | **1.14** | **342** | | Pg | 23 08 04.6 | -0.5 |
| W35A | **Tecumseh** | **1.19** | **152** | | Pg | 23 08 05.0 | -1.1 |
| W35A | comp=N,261nm,0.4s | | | IAML | | 23 08 26.9 | |
| W35A | comp=E,347nm,0.5s | | | IAML | | 23 08 29.1 | |
| TUL3 | **Leonard** | **1.46** | **101** | | Pn | 23 08 09.5 | -0.5 |
| ELIS | **Ellis County** | **1.52** | **265** | Pg | Pn | 23 08 10.8 | -0.1 |
| X34A | **Smith Ranch, M** | **1.62** | **188** | | Pb | 23 08 13.2 | -0.3 |
| WMOK | **Wichita Mounta** | **1.78** | **215** | | Pn | 23 08 14.7 | +0.2 |
| RLO | **Rose Lookout** | **2.05** | **91** | | Pn | 23 08 18.9 | +0.8 |
| LOOK | **Love County** | **2.24** | **172** | | Pn | 23 08 21.8 | +1.1 |
| R32A | **Long Quarter,** | **2.39** | **338** | | Pn | 23 08 23.5 | +0.6 |
| X37A | **Clayton** | **2.41** | **132** | | Pn | 23 08 23.9 | +0.9 |
| SMWD | **Samnorwood** | **2.45** | **244** | | Pn | 23 08 23.7 | -0.1 |
| SMWD | comp=Z,24nm,0.8s | | | IAmb_Lg | | 23 09 01.7 | |
| WTFS | **Witchita Falls** | **2.55** | **197** | Pn | Pn | 23 08 26.1 | +1.1 |
| U38A | **Gravette** | **2.57** | **84** | | Pn | 23 08 26.1 | +0.8 |
| Z35A | **Perchaven, San** | **2.89** | **175** | Pn | Pn | 23 08 30.0 | +0.3 |
| HHAR | **Hobbs** | **2.92** | **88** | | Pn | 23 08 31.3 | +1.2 |
| KSU1 | **Kansas State U** | **2.98** | **14** | | Pn | 23 08 31.0 | +0.1 |
| CBKS | **Cedar Bluff** | **3.12** | **327** | | Pn | 23 08 33.5 | +0.5 |
| PLPT | **Palo Pinto** | **3.45** | **191** | | Pn | 23 08 38.7 | +1.3 |
| FW07 | **Weatherford** | **3.51** | **183** | | Pn | 23 08 38.1 | -0.1 |
| APMT | **Aspermont** | **3.57** | **217** | | Pn | 23 08 40.0 | +0.9 |
| AMTX | **Amarillo** | **3.62** | **250** | | Pn | 23 08 40.6 | +0.8 |
| AMTX | comp=Z,23nm,0.9s | | | IAmb_Lg | | 23 09 47.8 | |
| Z38A | **Mt. Pleasant** | **3.63** | **144** | | Pn | 23 08 39.0 | -0.8 |
| Z38A | comp=Z,22nm,0.8s | | | IAmb_Lg | | 23 09 47.5 | |
| MIAR | **Mount Ida** | **3.65** | **116** | Pn | Pn | 23 08 41.0 | +0.9 |
| S39A | **Bolivar** | **3.69** | **65** | | Pn | 23 08 41.9 | +1.1 |
| S39A | comp=Z,24nm,0.8s | | | IAmb_Lg | | 23 09 43.8 | |
| DKNS | **Dickens** | **3.76** | **228** | IAmb_Lg | | 23 09 49.9 | |
| ABTX | comp=Z,14nm,0.8s **Abilene, Hawle** | **3.98** | **206** | IAmb_Lg | | 23 09 49.4 | |
| RTBA | comp=Z,22nm,1.2s **Rita Blanca** | **4.19** | **275** | | Pn | 23 08 47.6 | -0.1 |
| X40A | **Basin Creek Fa** | **4.22** | **113** | | Pn | 23 08 48.3 | +0.3 |
| X40A | comp=Z,22nm,0.9s | | | IAmb_Lg | | 23 09 59.2 | |
| SN05 | **Snyder 5** comp=Z,22nm,0.8s | **4.32** | **221** | IAmb_Lg | | 23 10 03.6 | |
| MGMO | **Mountain Grove** comp=Z,20nm,1.0s | **4.35** | **76** | IAmb_Lg | | 23 09 59.7 | |
| WHAR | **Wooly Hollow** comp=Z,19nm,1.0s | **4.38** | **101** | IAmb_Lg | | 23 10 05.5 | |
| FCAR | **Ozark Folk Cen** comp=Z,11nm,0.8s | **4.41** | **93** | IAmb_Lg | | 23 10 09.0 | |
| WLAR | **White Oak Lake** comp=Z,18nm,0.8s | **4.43** | **123** | IAmb_Lg | | 23 10 15.3 | |
| POST | **Post** comp=Z,14nm,0.9s | **4.52** | **227** | IAmb_Lg | | 23 10 06.3 | |
| P38A | **Dawn** comp=Z,19nm,0.7s | **4.66** | **42** | IAmb_Lg | | 23 10 16.4 | |
| R40A | **Maddies Statio** | **4.70** | **62** | Pn | Pn | 23 08 54.8 | +0.2 |
| R40A | comp=Z,14nm,0.7s | | | IAmb_Lg | | 23 10 10.1 | |
| KSCO | **Kaye Shedlock˚** comp=Z,13nm,0.8s | **4.90** | **306** | IAmb_Lg | | 23 10 27.8 | |
| T42A | **Van Buren** comp=Z,14nm,1.0s | **5.26** | **79** | IAmb_Lg | | 23 10 30.4 | |
| CCM | **Cathedral Cave** comp=Z,18nm,0.8s | **5.36** | **68** | IAmb_Lg | | 23 10 38.9 | |
| 435B | **Jarrell** comp=Z,9.4nm,0.8s | **5.42** | **180** | IAmb_Lg | | 23 10 41.0 | |
| P40A | **Paris** comp=Z,18nm,0.9s | **5.47** | **51** | IAmb_Lg | | 23 10 42.1 | |
| T25A | **Trinidad** comp=Z,12nm,0.9s | **5.59** | **282** | IAmb_Lg | | 23 10 50.5 | |
| PBMO | **Poplar Bluff** comp=Z,14nm,0.8s | **5.77** | **82** | IAmb_Lg | | 23 10 54.6 | |
| FVM | **French Village** comp=Z,9.3nm,0.7s | **5.96** | **71** | IAmb_Lg | | 23 10 53.8 | |
| CGM3 | **Cape Girardeau** comp=Z,9.5nm,0.8s | **6.43** | **78** | IAmb_Lg | | 23 11 16.2 | |
| Q24A | **Divide** comp=Z,9.7nm,0.8s | **6.63** | **297** | IAmb_Lg | | 23 11 16.9 | |
| HNDO | **Hondo** comp=Z,14nm,1.0s | **6.82** | **193** | IAmb_Lg | | 23 11 25.1 | |
| DRIO | **Del Rio** comp=Z,6.5nm,0.7s | **7.25** | **202** | IAmb_Lg | | 23 11 42.0 | |
| SAND | **Sanderson** comp=Z,7.1nm,0.7s | **7.33** | **213** | IAmb_Lg | | 23 11 41.3 | |
| ALPN | **Alpine** comp=Z,11nm,1.2s | **7.74** | **223** | IAmb_Lg | | 23 12 01.0 | |
| OLIL | **Olney** comp=Z,9.1nm,0.8s | **7.93** | **69** | IAmb_Lg | | 23 11 59.1 | |
| PHWY | **Pilot Hill** comp=Z,6.2nm,0.7s | **8.00** | **312** | IAmb_Lg | | 23 12 03.2 | |
| N23A | **Red Feather La** comp=Z,7.0nm,0.7s | **8.06** | **308** | IAmb_Lg | | 23 12 08.3 | |
| RSSD | **Black Hills** comp=Z,5.6nm,1.1s | **9.32** | **330** | IAmb_Lg | | 23 12 44.8 | |

*NNC **08** 23:11:33.2±0.8, 45˚.98N×79˚.62E, h3km±7km, mb3.7, mpv3.4, Error ellipse: s-maj=8.3km s-min=4.3km az=124.0*
*SOME **08** 23:11:34.2, 45˚.88N×79˚.65E, h10km*
*ASRS **08** 23:11:35.8±1.2, 46˚N±5˚×8˚0E±˚, h9km, MLh3.4/2, Error ellipse: s-maj=12.0km s-min=5.6km az=30.0, confirmed*

**ISC 08 23:11:30.7±0.9, 46˚.01N±0˚.03×79˚.65E±0˚.03, h10km, n62, σ1§21/89, 14C-10D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TDK | **Taldyqorghan** | **1.33** | **222** | *e*P | **Pg** | **23 11 57.9** | **+1.6** |
| TDK | 148nm,0.3s | | | *e*S | **Sg** | **23 12 14.6** | **+1.0** |
| TDK | 147nm,0.2s **Taldyqorghan** 148nm,0.3s | **1.33** | **222** | P | **Pg** | **23 11 58.3** | **+2.0** |
| TDK | | | | S | **Sg** | **23 12 15.2** | **+1.6** |
| KNOS | 147nm,0.2s **Konyrlen** 1.2nm,0.3s | **1.68** | **192** | P | **Pg** | **23 12 04.4** | **+1.4** |
| KNOS | 50nm,0.3s | | | S | **Sg** | **23 12 25.8** | **+1.0** |
| MAKZ | **Makanchi** 9.8nm,0.3s | **1.80** | **63** | ⇓Pn | **Pg** | **23 12 05.7** | **+0.5** |
| MAKZ | 66nm,0.4s | | | ⇑Sn | **Sg** | **23 12 29.3** | **+0.8** |
| MAKZ | **Makanchi** | **1.80** | **63** | Pg | **Pg** | **23 12 05.6** | **+0.5** |
| MAKZ | | | | Sg | **Sg** | **23 12 29.4** | **+0.9** |
| MK31 | **Makanchi Array** 6.1nm,0.2s,baz=239,slow=14,SNR=664 | **1.99** | **66** | ⇑Pn | **Pg** | **23 12 08.8** | **0.0** |
| MK31 | 31nm,0.5s,baz=242,slow=23,SNR=12 | | | ⇑Sn | **Sg** | **23 12 34.6** | **0.0** |
| MKAR | **Makanchi Array** | **1.99** | **66** | Pg | **Pg** | **23 12 08.6** | **-0.3** |
| MKAR | | | | Sg | **Sg** | **23 12 34.9** | **+0.3** |
| BLB | **Baldybastay** 80nm,0.3s | **2.08** | **204** | Pg | **Pg** | **23 12 10.8** | **+0.1** |
| BLB | 450nm,0.3s | | | Lg | Lg | 23 12 37.9 | |
| ARXS | **Arharly** 21nm,0.2s | **2.21** | **216** | *e*P | **Pg** | **23 12 13.1** | **0.0** |
| ARXS | 90nm,0.4s | | | *e*S | **Sg** | **23 12 40.8** | **-1.0** |
| ARXS | **Arharly** 21nm,0.2s | **2.21** | **216** | Pg | **Pg** | **23 12 13.6** | **+0.5** |
| ARXS | 90nm,0.4s | | | Lg | Lg | 23 12 41.4 | |
| KTMS | **Ketmen** 0.7nm,0.1s | **2.61** | **169** | *e*P | **Pg** | **23 12 20.3** | **-0.4** |
| KTMS | 20nm,0.2s | | | *e*S | **Sg** | **23 12 53.0** | **-1.5** |
| KTMS | **Ketmen** 0.7nm,0.1s | **2.61** | **169** | Pg | **Pg** | **23 12 20.3** | **-0.4** |
| KTMS | 20nm,0.2s | | | Lg | Lg | 23 12 53.0 | |
| KPKS | **Kokpek** 4.6nm,0.2s | **2.63** | **196** | *e*P | **Pg** | **23 12 20.6** | **-0.5** |
| KPKS | 51nm,0.4s | | | *e*S | **Sg** | **23 12 53.7** | **-1.6** |
| KPKS | **Kokpek** 4.6nm,0.2s | **2.63** | **196** | Pg | **Pg** | **23 12 20.6** | **-0.5** |
| KPKS | 51nm,0.4s | | | Lg | Lg | 23 12 53.7 | |
| PDGK | **Podgornoye** 1.0nm,0.2s | **2.68** | **183** | Pg | **Pg** | **23 12 21.7** | **-0.4** |
| PDGK | 10nm,0.4s | | | Lg | Lg | 23 12 55.6 | |
| PDGK | **Podgornoye** 3.3nm,0.5s | **2.68** | **183** | ⇑Pn | **Pg** | **23 12 21.4** | **-0.7** |
| PDGK | 27nm,0.6s | | | ⇑Lg | Lg | 23 12 54.9 | |
| KURS | **Kuram** 7.3nm,0.3s | **2.73** | **203** | *e*P | **Pg** | **23 12 23.3** | **+0.3** |
| KURS | 28nm,0.3s | | | *e*S | **Sg** | **23 12 58.4** | **0.0** |
| KURS | **Kuram** 7.3nm,0.3s | **2.73** | **203** | Pg | **Pg** | **23 12 23.3** | **+0.3** |
| KURS | 28nm,0.3s | | | Lg | Lg | 23 12 58.4 | |
| SHLS | **Shalkode** 3.2nm,0.1s | **2.85** | **183** | *e*P | **Pg** | **23 12 24.8** | **-0.6** |
| SHLS | 37nm,0.3s | | | *e*S | **Sg** | **23 13 00.7** | **-1.6** |
| SHLS | **Shalkode** 3.2nm,0.1s | **2.85** | **183** | Pg | **Pg** | **23 12 24.8** | **-0.6** |
| SHLS | 37nm,0.3s | | | Lg | Lg | 23 13 00.7 | |
| CHKK | **Chushkaly** 12nm,0.3s | **2.87** | **222** | *e*P | **Pg** | **23 12 25.3** | **-0.3** |
| CHKK | 81nm,0.3s | | | *e*S | **Sg** | **23 13 02.0** | **-0.7** |
| CHKK | **Chushkaly** 12nm,0.3s | **2.87** | **222** | Pg | **Pg** | **23 12 25.3** | **-0.3** |
| CHKK | 81nm,0.3s | | | Lg | Lg | 23 13 02.0 | |
| UZB | **Uzynbulak** 2.8nm,0.2s | **2.89** | **189** | *e*P | **Pg** | **23 12 25.4** | **-0.8** |
| UZB | 29nm,0.3s | | | *e*S | **Sg** | **23 13 01.6** | **-2.1** |
| UZB | **Uzynbulak** 2.8nm,0.2s | **2.89** | **189** | Pg | **Pg** | **23 12 25.3** | **-0.8** |
| UZB | 29nm,0.3s | | | Lg | Lg | 23 13 01.6 | |
| ZHN | **Zhinishke** 12nm,0.5s | **2.97** | **197** | *e*P | **Pg** | **23 12 26.5** | **-1.1** |
| ZHN | 61nm,0.2s | | | *e*S | **Sg** | **23 13 03.6** | **-2.4** |
| ZHN | **Zhinishke** 12nm,0.5s | **2.97** | **197** | Pg | **Pg** | **23 12 26.5** | **-1.1** |
| ZHN | 61nm,0.2s | | | Lg | Lg | 23 13 03.6 | |
| SATY | **Saty** 4.4nm,0.1s | **3.08** | **197** | *e*P | **Pg** | **23 12 29.5** | **-0.2** |
| SATY | 50nm,0.1s | | | *e*S | **Sg** | **23 13 08.7** | **-0.9** |
| SATY | **Saty** 4.4nm,0.1s | **3.08** | **197** | Pg | **Pg** | **23 12 30.6** | **+0.9** |
| SATY | 50nm,0.1s | | | Lg | Lg | 23 13 10.8 | |
| KTBS | **Karatobe** 12nm,0.2s | **3.12** | **224** | *e*P | **Pg** | **23 12 30.1** | **-0.3** |
| KTBS | 119nm,0.4s | | | *e*S | **Sg** | **23 13 09.7** | **-1.2** |
| KTBS | **Karatobe** 12nm,0.2s | **3.12** | **224** | Pg | **Pg** | **23 12 30.1** | **-0.3** |
| KTBS | 119nm,0.4s | | | Lg | Lg | 23 13 09.7 | |
| KUU | **Kurty** 6.5nm,0.1s | **3.16** | **229** | *e*P | **Pg** | **23 12 30.9** | **-0.4** |
| KUU | 75nm,0.2s | | | *e*S | **Sg** | **23 13 11.1** | **-1.1** |
| KUU | **Kurty** 6.5nm,0.1s | **3.16** | **229** | Pg | **Pg** | **23 12 30.9** | **-0.4** |
| KUU | 75nm,0.2s | | | Lg | Lg | 23 13 11.1 | |
| KOTS | **Kotyrbulak** 4.9nm,0.3s | **3.31** | **214** | *e*P | **Pg** | **23 12 34.1** | **0.0** |
| KOTS | 63nm,0.3s | | | *e*S | **Sg** | **23 13 16.5** | **-0.6** |
| KOTS | **Kotyrbulak** 11nm,0.3s | **3.31** | **214** | Pg | **Pg** | **23 12 35.5** | **+1.3** |
| KOTS | 63nm,0.3s | | | Lg | Lg | 23 13 18.9 | |
| KNDC | **Almaty** 10nm,0.3s | **3.38** | **215** | ⇑Pg | **Pg** | **23 12 33.6** | **-1.9** |
| KNDC | 44nm,0.6s | | | ⇓Lg | Lg | 23 13 19.9 | |
| MDOK | **Medeo** 6.8nm,0.4s | **3.40** | **214** | *e*P | **Pg** | **23 12 35.5** | **-0.4** |
| MDOK | 17nm,0.3s | | | *e*S | **Sg** | **23 13 18.8** | **-1.0** |
| MDOK | **Medeo** 5.5nm,0.4s | **3.40** | **214** | Pg | **Pg** | **23 12 34.8** | **-1.1** |
| MDOK | 6.8nm,0.4s | | | Pg | **Pg** | **23 12 35.5** | **-0.4** |
| MDOK | 18nm,0.7s | | | Lg | Lg | 23 13 18.8 | |
| MDOK | 17nm,0.3s | | | Lg | Lg | 23 13 18.8 | |
| KASK | **Kaskelen** | **3.52** | **219** | ⇓Pg | **Pb** | **23 12 32.3** | **-0.8** |
| KASK | | | | ⇑Lg | Lg | 23 13 26.6 | |
| TNSS | **Tian-Shan** 8.3nm,0.5s | **3.54** | **214** | *e*P | **Pg** | **23 12 37.9** | **-0.7** |
| TNSS | 5.1nm,0.3s | | | *e*S | **Sg** | **23 13 23.4** | **-1.2** |
| TNSS | **Tian-Shan** 8.3nm,0.5s | **3.54** | **214** | Pg | **Pg** | **23 12 38.6** | **-0.1** |
| TNSS | 5.1nm,0.3s | | | Lg | Lg | 23 13 24.2 | |
| KRBS | **Karabastau** 7.7nm,0.3s | **3.65** | **232** | *e*P | **Pg** | **23 12 39.5** | **-1.2** |
| KRBS | 17nm,0.3s | | | *e*S | **Sg** | **23 13 25.7** | **-2.3** |
| KRBS | **Karabastau** 7.7nm,0.3s | **3.65** | **232** | Pg | **Pg** | **23 12 39.5** | **-1.2** |
| KRBS | 17nm,0.3s | | | Lg | Lg | 23 13 25.7 | |
| MTBS | **Maitube** 2.5nm,0.2s | **3.68** | **220** | *e*P | **Pg** | **23 12 40.4** | **-0.9** |
| MTBS | 29nm,0.4s | | | *e*S | **Sg** | **23 13 27.4** | **-1.6** |
| MTBS | **Maitube** 2.5nm,0.2s | **3.68** | **220** | Pg | **Pg** | **23 12 40.4** | **-0.9** |
| MTBS | 29nm,0.4s | | | Lg | Lg | 23 13 27.4 | |
| ZSN | **Zaisan** | **3.87** | **66** | *e*P | **Pg** | **23 12 43.2** | **-1.6** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 5.3nm,0.4s | | | | | | | | |
| ZSN | | | | *e*S | | **Sg** | **23 13 33.2** | **-1.6** | |
| | 13nm,0.5s | | | | | | | | |
| **ZSN** | **Zaisan** | **3.87** | **66** | Pg | | **Pg** | **23 12 43.8** | **-1.0** | |
| | 5.3nm,0.4s | | | | | | | | |
| ZSN | | | | Lg | | Lg | 23 13 33.2 | | |
| | 13nm,0.5s | | | | | | | | |
| **DGS** | **Degeres** | **3.91** | **226** | *e*P | | **Pg** | **23 12 44.3** | **-1.4** | |
| | 4.9nm,0.3s | | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **23 13 33.9** | **-2.5** | |
| | 28nm,0.4s | | | | | | | | |
| **DGS** | **Degeres** | **3.91** | **226** | Pg | | **Pg** | **23 12 42.4** | **-3.2** | |
| | 4.9nm,0.3s | | | | | | | | |
| DGS | | | | Lg | | Lg | 23 13 31.3 | | |
| | 28nm,0.4s | | | | | | | | |
| **KST** | **Kastek** | **3.97** | **223** | *e*P | | **Pg** | **23 12 45.2** | **-1.5** | |
| | 4.5nm,0.5s | | | | | | | | |
| KST | | | | *e*S | | **Sg** | **23 13 35.9** | **-2.2** | |
| | 18nm,0.4s | | | | | | | | |
| **KST** | **Kastek** | **3.97** | **223** | Pg | | **Pg** | **23 12 45.2** | **-1.5** | |
| | 4.5nm,0.5s | | | | | | | | |
| KST | | | | Lg | | Lg | 23 13 35.9 | | |
| | 18nm,0.4s | | | | | | | | |
| **BTLS** | **Baital** | **4.06** | **258** | *e*P | | **Pg** | **23 12 47.9** | **-0.5** | |
| | 4.0nm,0.2s | | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **23 13 40.0** | **-1.0** | |
| | 9.8nm,0.3s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.24** | **225** | ⇓Pg | | **Pb** | **23 12 46.6** | **+1.1** | |
| | 1.6nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 23 13 47.8 | | |
| | 12nm,0.8s | | | | | | | | |
| **CHMS** | **Chumysh** | **4.62** | **231** | ⇑Pg | | **Pg** | **23 12 57.0** | **-2.1** | |
| | 2.8nm,0.6s | | | | | | | | |
| CHMS | | | | ⇓Lg | | Lg | 23 13 59.5 | | |
| | 11nm,0.6s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **4.68** | **351** | ⇓Pg | | **Pg** | **23 13 00.0** | **-0.3** | |
| | 0.4nm,0.3s | | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 23 13 58.7 | | |
| | 24nm,0.7s | | | | | | | | |
| **KURK** | **Kurchatov** | **4.76** | **352** | ⇓Pg | | **Pg** | **23 12 59.6** | **-2.3** | |
| | 0.2nm,0.3s | | | | | | | | |
| KURK | | | | ⇓Lg | | Lg | 23 14 00.7 | | |
| | 16nm,1.1s | | | | | | | | |
| **KURK** | **Kurchatov** | **4.76** | **352** | Pg | | **Pg** | **23 13 00.8** | **-1.1** | |
| KURK | | | | Sg | | **Sg** | **23 14 02.4** | **-1.2** | |
| **AAK** | **Ala-Archa** | **5.00** | **230** | ⇑Pg | | **Pg** | **23 13 05.8** | **-0.7** | |
| | 1.2nm,0.3s | | | | | | | | |
| AAK | | | | ⇓Lg | | Lg | 23 14 10.0 | | |
| | 12nm,0.6s | | | | | | | | |
| **OTUK** | **Ortayu** | **5.47** | **297** | ⇑Pn | | **Pn** | **23 12 54.9** | **+2.6** | |
| | 0.4nm,0.3s | | | | | | | | |
| OTUK | | | | ⇑Lg | | Lg | 23 14 25.0 | | |
| | 10nm,0.7s | | | | | | | | |
| **UKR** | **Ust'-Kan** | **5.99** | **33** | Sg | | **Sg** | **23 14 42.0** | **-1.0** | |
| **DGZ** | **Jazzator, Alta** | **6.41** | **52** | Sg | | **Sg** | **23 14 55.9** | **-0.4** | |
| **BVA0** | **Borovoye Array** | **9.25** | **323** | ⇑Lg | | Lg | 23 16 23.1 | | |
| | 2.8nm,0.8s,baz=136,slow=32,SNR=5.3 | | | | | | | | |
| **BRVK** | **Borovoye** | **9.32** | **323** | ⇓Lg | | Lg | 23 16 28.2 | | |
| | 3.9nm,1.0s | | | | | | | | |

**IDC 08 23:32:46.2±2.1, 8°23'S×116°01'E, h0km, mb3.8/3, mbtmp3.9/4, ML3.3/1, MS2.9/1, Error ellipse: s-maj=35.1km s-min=25.5km az=90.0, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.90** | **50** | Pn | Pn | 23 33 59.8 | -1.4 |
| | 1.1nm,0.3s,baz=54,slow=16,SNR=1.6 | | | | | | |
| KAPI | | | | Lg | Lg | 23 35 22.0 | |
| | 1.9nm,0.3s,baz=262,slow=23,SNR=4.1 | | | | | | |
| | 4.6nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.23** | **125** | P | P | 23 37 33.7 | -0.2 |
| | 4.6nm,0.6s,baz=301,slow=12,SNR=52 | | | | | | |
| | 4.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **23.01** | **134** | P | P | 23 37 52.9 | -0.1 |
| | 3.3nm,0.8s,baz=306,slow=8.7,SNR=20 | | | | | | |
| | 3.3nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.41** | **328** | LR | LR | 23 53 31.2 | |
| | comp=Z,19nm,18.7s,baz=205,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **56.46** | **352** | P | P | 23 42 30.6 | +0.6 |
| | 0.4nm,0.5s,baz=169,slow=8.5,SNR=2.0 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

*NEIC **08** 23:37:38.0±0.5, 36°.214N×0°.005×97°.56W±0°.02, h6km±5km, Error ellipse: s-maj=1.8km s-min=0.6km az=103.0*

**TUL 08 23:37:38±0.5, 36°.21N×0°.01×97°.55W±0°.02, h4km±3km, ML2.9, mb_Lg2.8/96(NEIC), ML3.0/69(NEIC), Error ellipse: s-maj=1.9km s-min=1.6km az=61.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK029** | **Liberty Lake** | **0.42** | **169** | | Pg | 23 37 46.6 | +0.4 |
| OK029 | | | | Sg | Sg | 23 37 52.4 | +0.7 |
| **CROK** | **Carrier** | **0.45** | **310** | | Pg | 23 37 47.1 | +0.4 |
| **OK048** | **Pawnee Station** | **0.53** | **68** | | Pg | 23 37 48.6 | +0.4 |
| OK048 | | | | Sg | Sg | 23 37 55.7 | +0.5 |
| **ADOK** | **Arcadia Dam** | **0.58** | **165** | Pg | Pg | 23 37 49.5 | +0.3 |
| **BLOK** | **Blackwell** | **0.61** | **27** | | Pg | 23 37 50.1 | +0.4 |
| BLOK | | | | IAML | | 23 37 58.8 | |
| | comp=E,1μm,0.3s | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.64** | **114** | | Pg | 23 37 50.5 | +0.3 |
| OK031 | | | | IAML | | 23 38 01.4 | |
| | comp=E,714nm,0.4s | | | | | | |
| OK031 | | | | IAML | | 23 38 01.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **OK052** | **Battle Ridge R** | **0.65** | **110** | | Pg | 23 37 50.8 | +0.4 |
| OK052 | | | | IAML | | 23 38 02.1 | |
| | comp=E,862nm,0.2s | | | | | | |
| **OK051** | **E0350 and S346** | **0.65** | **63** | | Pg | 23 37 50.7 | +0.2 |
| OK051 | | | | IAML | | 23 38 05.9 | |
| | comp=E,830nm,0.2s | | | | | | |
| OK051 | | | | IAML | | 23 38 06.5 | |
| | comp=E,1μm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **0.68** | **339** | Pg | Pg | 23 37 51.2 | +0.1 |
| **QUOK** | **Quay** | **0.69** | **93** | Pg | Pg | 23 37 51.4 | +0.2 |
| QUOK | | | | IAML | | 23 38 02.9 | |
| | comp=N,609nm,0.3s | | | | | | |
| QUOK | | | | IAML | | 23 38 04.6 | |
| | comp=E,680nm,0.2s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.79** | **318** | | Pg | 23 37 53.2 | 0.0 |
| OK032 | | | | IAML | | 23 38 06.4 | |
| | comp=E,636nm,0.4s | | | | | | |
| OK032 | | | | IAML | | 23 38 08.2 | |
| | comp=E,862nm,0.3s | | | | | | |
| **KAN13** | **South Haven SW** | **0.80** | **4** | | Pg | 23 37 53.4 | +0.1 |
| **KAN14** | **Manchester OK** | **0.81** | **336** | Pg | Pg | 23 37 53.4 | -0.1 |
| KAN14 | | | | IAML | | 23 38 11.5 | |
| | comp=N,505nm,0.1s | | | | | | |
| KAN14 | | | | IAML | | 23 38 11.6 | |
| | comp=E,613nm,0.1s | | | | | | |
| OKCSW | **OKLAHOMA CITY** | **0.81** | **173** | Pg | Pg | 23 37 53.7 | +0.1 |
| OKCSW | | | | IAML | | 23 38 05.9 | |
| | comp=N,624nm,0.1s | | | | | | |
| OKCSW | | | | IAML | | 23 38 16.4 | |
| | comp=E,700nm,0.6s | | | | | | |
| **KAN17** | **Caldwell West** | **0.84** | **348** | | Pg | 23 37 54.1 | -0.2 |
| KAN17 | | | | IAML | | 23 38 11.2 | |
| | comp=E,573nm,0.3s | | | | | | |
| **KAN09** | **Caldwell North** | **0.92** | **357** | | Pg | 23 37 55.4 | -0.3 |
| **DEOK** | **Depew** | **0.93** | **113** | Pg | Pg | 23 37 55.6 | -0.3 |
| DEOK | | | | IAML | | 23 38 09.6 | |
| | comp=E,406nm,0.2s | | | | | | |
| DEOK | | | | IAML | | 23 38 10.9 | |
| | comp=N,730nm,0.3s | | | | | | |
| **KAN01** | **Argonia South** | **0.95** | **350** | | Pg | 23 37 55.8 | -0.5 |
| KAN01 | | | | IAML | | 23 38 11.5 | |
| | comp=E,383nm,0.4s | | | | | | |
| KAN01 | | | | IAML | | 23 38 16.3 | |
| | comp=N,345nm,0.1s | | | | | | |
| **FNO** | **Franklin** | **0.96** | **173** | Pg | Pg | 23 37 56.0 | -0.4 |
| FNO | | | | IAML | | 23 38 14.7 | |
| | comp=E,346nm,0.1s | | | | | | |
| **OK038** | **West end E0370** | **0.99** | **286** | | Pg | 23 37 56.7 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.06** | **342** | | Pg | 23 37 58.0 | -0.4 |
| KAN08 | | | | IAML | | 23 38 19.0 | |
| | comp=N,266nm,0.1s | | | | | | |
| **KS21** | **Milan North St** | **1.07** | **355** | IAML | | 23 38 18.4 | |
| | comp=N,466nm,0.1s | | | | | | |
| KS21 | | | | IAML | | 23 38 19.0 | |
| | comp=N,509nm,0.2s | | | | | | |
| **KS21** | **Milan North St** | **1.07** | **355** | Pg | Pg | 23 37 58.0 | -0.6 |
| **CSTR** | **Hydro, Custer** | **1.08** | **239** | Pg | Pg | 23 37 58.3 | -0.5 |
| **T35A** | **Sooner Cattle** | **1.09** | **50** | | Pg | 23 37 58.7 | -0.3 |
| T35A | | | | IAML | | 23 38 18.4 | |
| | comp=E,490nm,0.4s | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.14** | **342** | | Pg | 23 37 59.4 | -0.5 |
| **NOKA** | **Waynoka** | **1.19** | **291** | Pg | Pg | 23 38 00.2 | -0.6 |
| **W35A** | **Tecumseh** | **1.20** | **152** | | Pg | 23 38 00.0 | -0.9 |
| W35A | | | | IAML | | 23 38 22.0 | |
| | comp=N,238nm,0.3s | | | | | | |
| W35A | | | | IAML | | 23 38 24.1 | |
| | comp=E,348nm,0.3s | | | | | | |
| **TUL3** | **Leonard** | **1.46** | **101** | | Pn | 23 38 04.6 | -0.5 |
| **ELIS** | **Ellis County** | **1.52** | **265** | | Pn | 23 38 05.9 | 0.0 |
| **X34A** | **Smith Ranch, M** | **1.63** | **188** | | Pn | 23 38 08.0 | -0.5 |
| **WMOK** | **Wichita Mounta** | **1.78** | **215** | Pn | Pn | 23 38 09.7 | +0.2 |
| **RLO** | **Rose Lookout** | **2.05** | **91** | Pn | Pn | 23 38 13.5 | +0.3 |
| **LOOK** | **Love County** | **2.24** | **172** | | Pn | 23 38 16.7 | +0.9 |
| **R32A** | **Long Quarter,** | **2.39** | **338** | | Pn | 23 38 19.3 | +1.4 |
| **X37A** | **Clayton** | **2.41** | **132** | | Pn | 23 38 18.9 | +0.8 |
| X37A | | | | IAmb_Lg | | 23 38 57.8 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **SMWD** | **Samnorwood** | **2.45** | **244** | | Pn | 23 38 19.2 | +0.4 |
| SMWD | | | | IAmb_Lg | | 23 38 56.4 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **WTFS** | **Witchita Falls** | **2.55** | **197** | Pn | Pn | 23 38 21.6 | +1.5 |
| **U38A** | **Gravette** | **2.57** | **84** | | Pn | 23 38 21.5 | +1.1 |
| **Z35A** | **Perchaven, San** | **2.89** | **175** | Pn | Pn | 23 38 25.3 | +0.6 |
| **HHAR** | **Hobbs** | **2.92** | **88** | | Pn | 23 38 25.7 | +0.5 |
| **KSU1** | **Kansas State U** | **2.98** | **14** | | Pn | 23 38 26.2 | +0.2 |
| **PLPT** | **Palo Pinto** | **3.45** | **191** | | Pn | 23 38 33.5 | +1.0 |
| **APMT** | **Aspermont** | **3.57** | **217** | | Pn | 23 38 35.4 | +1.2 |
| **AMTX** | **Amarillo** | **3.62** | **250** | | Pn | 23 38 35.4 | +0.5 |
| AMTX | | | | IAmb_Lg | | 23 39 42.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.63** | **144** | | Pn | 23 38 35.9 | +1.0 |
| Z38A | | | | IAmb_Lg | | 23 39 42.5 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **3.65** | **116** | | Pn | 23 38 35.7 | +0.4 |
| MIAR | | | | IAmb_Lg | | 23 39 43.6 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.70** | **65** | | Pn | 23 38 36.5 | +0.6 |
| S39A | | | | IAmb_Lg | | 23 39 37.3 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **3.76** | **228** | | Pn | 23 38 38.0 | +1.2 |
| **ABTX** | **Abilene, Hawle** | **3.98** | **206** | IAmb_Lg | | 23 39 44.4 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **SN07** | **Snyder 07** | **4.16** | **222** | IAmb_Lg | | 23 39 52.8 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.19** | **275** | | Pn | 23 38 43.1 | +0.3 |
| **WHTX** | **Lake Whitney,** | **4.21** | **179** | Pn | Pn | 23 38 43.3 | +0.3 |
| **X40A** | **Basin Creek Fa** | **4.22** | **113** | | Pn | 23 38 44.5 | +1.4 |
| X40A | | | | IAmb_Lg | | 23 39 53.6 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **4.32** | **221** | IAmb_Lg | | 23 39 57.0 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.35** | **76** | Pn | Pn | 23 38 46.5 | +1.6 |
| MGMO | | | | IAmb_Lg | | 23 39 58.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.38** | **101** | | Pn | 23 38 45.1 | -0.1 |
| WHAR | | | | IAmb_Lg | | 23 39 58.5 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **4.43** | **123** | IAmb_Lg | | 23 40 09.0 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **POST** | **Post** | **4.52** | **227** | IAmb_Lg | | 23 40 10.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.70** | **62** | | Pn | 23 38 49.8 | +0.1 |
| R40A | | | | IAmb_Lg | | 23 40 17.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **4.90** | **126** | IAmb_Lg | | 23 40 22.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.90** | **306** | IAmb_Lg | | 23 40 26.7 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **5.06** | **194** | | Pn | 23 38 54.8 | +0.1 |
| **LCAR** | **Lake Charles** | **5.18** | **90** | Pn | Pn | 23 38 56.4 | +0.1 |
| LCAR | | | | IAmb_Lg | | 23 40 26.0 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **T42A** | **Van Buren** | **5.26** | **79** | IAmb_Lg | | 23 40 36.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.37** | **68** | IAmb_Lg | | 23 40 32.6 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **5.42** | **180** | IAmb_Lg | | 23 40 29.9 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **P40A** | **Paris** | **5.47** | **51** | IAmb_Lg | | 23 40 37.9 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.59** | **282** | IAmb_Lg | | 23 40 45.8 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **OZNA** | **Ozona** | **6.06** | **210** | IAmb_Lg | | 23 41 00.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.43** | **78** | IAmb_Lg | | 23 41 07.1 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **6.63** | **297** | IAmb_Lg | | 23 41 10.2 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **K30B** | **Basset** | **6.64** | **347** | IAmb_Lg | | 23 41 14.4 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **S44A** | **Carbondale** | **6.81** | **75** | IAmb_Lg | | 23 41 19.3 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **HNDO** | **Hondo** | **6.82** | **193** | IAmb_Lg | | 23 41 21.6 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **DRIO** | **Del Rio** | **7.25** | **202** | IAmb_Lg | | 23 41 47.2 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **SAND** | **Sanderson** | **7.33** | **213** | IAmb_Lg | | 23 41 40.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **L40A** | **Anamosa** | **7.63** | **38** | IAmb_Lg | | 23 41 44.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **8.06** | **308** | IAmb_Lg | | 23 42 04.3 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.75** | **38** | IAmb_Lg | | 23 42 15.1 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **I40A** | **Norwalk** | **9.33** | **33** | IAmb_Lg | | 23 42 39.1 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **K22A** | **Casper** | **9.45** | **316** | IAmb_Lg | | 23 43 05.1 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **SPMN** | **Marine on St.** | **9.69** | **20** | IAmb_Lg | | 23 42 58.3 | |
| | comp=Z,8.1nm,0.9s | | | | | | |

**TAP 08 23:47:58.3, 24°.45N×121°.87E, h21km, ML1.5, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EWUT** | **Wuta** | **0.08** | **267** | *i* P | Pb | 23 48 02.9 | +0.6 |
| | baz=267 | | | | | | |
| EWUT | | | | *i* S | Sb | 23 48 05.7 | +0.8 |
| | baz=267 | | | | | | |
| **ENA** | **Nanau** | **0.12** | **260** | P | Pb | 23 48 02.5 | -2.3 |
| | baz=258 | | | | | | |
| ENA | | | | *i* S | Sb | 23 48 06.4 | -3.0 |
| | baz=258 | | | | | | |
| **ESAO** | **Su ao** | **0.13** | **350** | *e*P | Pb | 23 48 02.9 | -1.8 |
| | baz=349 | | | | | | |
| ESAO | | | | *e*S | Sb | 23 48 06.3 | -2.9 |
| | baz=349 | | | | | | |
| **TWC** | **Suao** | **0.16** | **353** | *i* P | Pb | 23 48 03.5 | -0.8 |
| | baz=356 | | | | | | |
| TWC | | | | *i* S | Sb | 23 48 06.8 | -1.8 |
| | baz=356 | | | | | | |
| **NDS** | **Dongshan** | **0.23** | **323** | *e*P | Pb | 23 48 03.6 | -0.8 |
| | baz=323 | | | | | | |
| NDS | | | | *i* S | Sb | 23 48 09.2 | +0.6 |
| | baz=323 | | | | | | |
| **LATG** | **Datong** | **0.32** | **285** | *e*P | Pb | 23 48 05.3 | -0.2 |
| | baz=285 | | | | | | |
| LATG | | | | *e*S | Sb | 23 48 11.8 | +1.5 |
| | baz=285 | | | | | | |
| **TWE** | **Neicheng** | **0.33** | **326** | *e*P | Pb | 23 48 05.8 | +0.3 |
| | baz=327 | | | | | | |
| TWE | | | | *e*S | Sn | 23 48 12.3 | -1.7 |
| | baz=327 | | | | | | |
| **EOS2** | **EOS2** | **0.33** | **95** | *e*P | Pb | 23 48 06.2 | +0.8 |
| | baz=95 | | | | | | |
| EOS2 | | | | *e*S | Sb | 23 48 11.7 | +1.6 |
| | baz=95 | | | | | | |
| **ENTT** | **Nioudou** | **0.34** | **305** | *i* P | Pb | 23 48 06.6 | +1.1 |
| | baz=305 | | | | | | |
| ENTT | | | | *i* S | Sb | 23 48 11.6 | +1.1 |
| | baz=305 | | | | | | |
| **NDT** | **Datong Townshi** | **0.36** | **295** | *i* P | Pb | 23 48 07.1 | +1.2 |
| | baz=295 | | | | | | |
| NDT | | | | *e*S | Sn | 23 48 13.0 | -1.8 |
| | baz=295 | | | | | | |
| **NACB** | **Ninganchiao** | **0.37** | **222** | *e*P | Pb | 23 48 05.6 | -0.5 |
| | baz=222 | | | | | | |
| NACB | | | | S | Sb | 23 48 12.7 | +1.4 |
| | baz=222 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.40** | **320** | *i* P | Pn | 23 48 07.9 | -1.1 |
| | baz=320 | | | | | | |
| FUSB | | | | S | Sb | 23 48 14.0 | +1.6 |
| | baz=320 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.43** | **236** | *i* P | Pb | 23 48 07.6 | +0.5 |
| | baz=235 | | | | | | |
| ETLH | | | | *i* S | Sb | 23 48 14.3 | +1.2 |
| | baz=235 | | | | | | |
| **EOS3** | **EOS3** | **0.44** | **112** | *e*P | Pb | 23 48 07.8 | +0.6 |
| | baz=111 | | | | | | |
| EOS3 | | | | *e*S | Sn | 23 48 15.1 | -1.5 |
| | baz=111 | | | | | | |
| **NNSB** | **Datong** | **0.44** | **267** | *i* P | Pb | 23 48 08.3 | +0.9 |
| | baz=267 | | | | | | |
| NNSB | | | | S | Sb | 23 48 14.9 | +1.2 |
| | baz=267 | | | | | | |
| **NWLT** | **Wulai** | **0.47** | **314** | *i* P | Pb | 23 48 08.5 | +0.7 |
| | baz=314 | | | | | | |
| NWLT | | | | *i* S | Sb | 23 48 15.2 | +0.9 |
| | baz=314 | | | | | | |
| **YHNB** | **Yeheng** | **0.50** | **296** | *e*P | Pb | 23 48 09.2 | +0.7 |
| | baz=296 | | | | | | |
| YHNB | | | | S | Sb | 23 48 16.7 | +1.3 |
| | baz=296 | | | | | | |
| **NSK** | **Sanguang** | **0.52** | **296** | *i* P | Pb | 23 48 09.3 | +0.5 |
| | baz=296 | | | | | | |
| NSK | | | | *i* S | Sb | 23 48 16.9 | +1.0 |
| | baz=296 | | | | | | |
| **TIPB** | **Shuangxi** | **0.52** | **356** | *i* P | Pb | 23 48 09.3 | +0.4 |
| | baz=355 | | | | | | |
| TIPB | | | | *i* S | Sb | 23 48 16.8 | +0.8 |
| | baz=355 | | | | | | |

**JMA 08 23:48:14.5±0.2, 25°N±1°×123°.5E±0°.3, h0km, MV1.6/9, NW OFF ISHIGAKIJIMA IS, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.44** | **149** | P | Pg | 23 48 23.4 | +0.5 |
| **YOJ** | **Yonaguni jima** | **0.50** | **240** | *e*P | Pg | 23 48 24.6 | +0.5 |
| **JYNG** | **Yonagunijimaku** | **0.55** | **242** | *e*S | Sb | 23 48 34.5 | -1.1 |
| **JKRS** | **Kuro-shima** | **0.67** | **134** | *e*P | Pg | 23 48 28.0 | +0.7 |
| JKRS | | | | *e*S | Sg | 23 48 37.1 | +1.0 |
| **JIJ** | **Ishigaki jima** | **0.69** | **120** | *e*S | Sg | 23 48 37.3 | +0.6 |
| **HATJ** | **Hateruma jima** | **0.71** | **156** | *e*S | Sg | 23 48 38.2 | +0.8 |
| **JISG** | **Ishigakijimahi** | **0.76** | **99** | *e*S | Sg | 23 48 40.2 | +1.2 |

*NEIC **08** 23:50:25.6±1.0, 32°.92N±0°.03×109°.65W±0°.06, h0km±1km, ML3.0/38, Error ellipse: s-maj=8.7km s-min=4.0km az=251.0*

*IDC **08** 23:50:30.3±2.4, 32°.97N×109°.41W, h0km, mbtmp2.5/3, ML3.0/3, Error ellipse: s-maj=29.5km s-min=13.5km az=66.0*

**ISC 08 23:50:26.6±1.1, 32°.91N±0°.05×109°.63W±0°.05, h0km, n21, σ0°.83/19, Eastern Arizona**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DUN6** | **Lazy B Ranch** | **0.58** | **128** | | **Pg** | **23 50 52.2** | **+0.5** |
| **TUC** | **Tucson** | **1.14** | **239** | | **Pb** | **23 50 48.7** | **-0.6** |
| TUC | | | | IAML | | 23 51 08.7 | |
| | 368nm,0.5s | | | | | | |
| TUC | | | | IAML | | 23 51 09.3 | |
| | 380nm,0.4s | | | | | | |
| **319A** | **Douglas** | **1.56** | **169** | | **Pn** | **23 50 55.4** | **-0.3** |
| **121A** | **Cookes Peak, D** | **1.60** | **103** | | **Pn** | **23 50 55.6** | **-0.8** |
| 121A | | | | IAML | | 23 51 22.9 | |
| | comp=N,238nm,0.6s | | | | | | |
| **X18A** | **Snowflake** | **1.64** | **351** | | **Pn** | **23 50 56.5** | **-0.4** |
| X18A | | | | IAML | | 23 51 20.5 | |
| | comp=N,200nm,0.8s | | | | | | |
| X18A | | | | IAML | | 23 51 24.5 | |
| | comp=E,97nm,0.7s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **2.13** | **315** | | **Pn** | **23 51 04.0** | **+0.3** |
| X16A | | | | IAML | | 23 51 43.1 | |
| | comp=E,47nm,0.5s | | | | | | |
| **W18A** | **Petrified Fore** | **2.20** | **358** | Pn | **Pn** | **23 51 04.8** | **+0.1** |
| W18A | | | | IAML | | 23 51 41.3 | |
| | comp=N,86nm,0.4s | | | | | | |
| W18A | | | | IAML | | 23 51 42.3 | |
| | comp=E,91nm,0.5s | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **2.54** | **62** | | **Pn** | **23 51 08.5** | **-0.9** |
| **214A** | **Organ Pipe Nat** | **2.85** | **251** | Pn | **Pn** | **23 51 12.8** | **-0.7** |
| 214A | | | | IAML | | 23 52 01.8 | |
| | comp=N,30nm,0.5s | | | | | | |
| 214A | | | | IAML | | 23 52 07.6 | |
| | comp=E,54nm,0.6s | | | | | | |
| **WUAZ** | **Wupatki** | **2.97** | **331** | | **Pn** | **23 51 15.5** | **+0.3** |
| WUAZ | | | | IAML | | 23 52 06.0 | |
| | comp=E,76nm,0.6s | | | | | | |
| WUAZ | | | | IAML | | 23 52 08.7 | |
| | comp=E,77nm,0.5s | | | | | | |
| **Y14A** | **Wickenburg** | **3.00** | **291** | | **Pn** | **23 51 15.2** | **-0.3** |
| Y14A | | | | IAML | | 23 52 06.4 | |
| | comp=E,40nm,0.4s | | | | | | |
| Y14A | | | | IAML | | 23 52 07.9 | |
| | comp=N,28nm,0.4s | | | | | | |
| **ANMO** | **Albuquerque** | **3.33** | **52** | Pn | **Pn** | **23 51 19.4** | **-0.8** |
| **ANMO** | **Albuquerque** | **3.33** | **52** | Pn | **Pn** | **23 51 19.6** | **-0.5** |
| | comp=N,0.4nm,0.3s,baz=326,slow=18,SNR=7.9 | | | | | | |
| ANMO | | | | Lg | Lg | 23 52 11.5 | |
| | comp=N,0.5nm,0.3s,baz=55,slow=17,SNR=1.9 | | | | | | |
| | comp=N,1.5nm,0.5s | | | | | | |
| **PIX** | **Pinacate** | **3.51** | **248** | Pn | **Pn** | **23 51 22.0** | **-0.4** |
| PIX | | | | IAML | | 23 52 43.7 | |
| | comp=E,15nm,4.4s | | | | | | |
| **W13A** | **Hualapai Mount** | **4.15** | **303** | | **Pn** | **23 51 31.8** | **+0.3** |
| **BLYC** | **Blythe** | **4.18** | **283** | Pn | **Pn** | **23 51 32.0** | **+0.3** |
| BLYC | | | | IAML | | 23 52 41.4 | |
| | comp=N,15nm,0.5s | | | | | | |
| BLYC | | | | IAML | | 23 52 56.5 | |
| | comp=E,11nm,0.6s | | | | | | |
| **GLA** | **Glamis** | **4.37** | **273** | Pn | **Pn** | **23 51 34.5** | **+0.3** |
| GLA | | | | IAML | | 23 52 55.9 | |
| | comp=E,22nm,0.5s | | | | | | |
| GLA | | | | IAML | | 23 53 10.0 | |
| | comp=N,18nm,0.7s | | | | | | |
| **VHRN** | **Van Horn** | **4.49** | **117** | Pn | **Pn** | **23 51 36.2** | **+0.2** |
| **I57US** | **PINON FLAT INF** | **5.76** | **279** | I | I | 00 26 00.0 | |
| | baz=95,slow=313,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.23** | **123** | Pn | **Pn** | **23 52 02.6** | **+2.6** |
| | comp=N,0.2nm,0.3s,baz=301,slow=12,SNR=5.6 | | | | | | |
| TXAR | | | | Lg | Lg | 23 53 43.1 | |
| | baz=307,slow=36 | | | | | | |
| | comp=N,0.2nm,0.3s | | | | | | |
| **PDAR** | **Pinedale Array** | **9.84** | **0** | Pn | Pn | 23 52 56.3 | +6.7 |
| | baz=171,slow=12,SNR=1.8 | | | | | | |
| PDAR | | | | Lg | Lg | 23 55 36.1 | |
| | comp=N,0.1nm,0.3s,baz=175,slow=22,SNR=2.4 | | | | | | |
| | comp=N,0.1nm,0.4s | | | | | | |

*TEH **09** 00:10:23.2, 32°.97N×46°.15E, h12km±25km, ML3.2*

*ISN **09** 00:10:26.5±1.5, 33°.00N×46°.14E, h18km±13km, ML3.3*

**ISC 09 00:10:24.6±1.2, 33°.02N±0°.06×46°.12E±0°.04, h10km, n20, σ1°.40/23, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ILBA** | **Ilam Banvizeh** | **0.60** | **7** | Pg | **Pg** | **00 10 36.2** | **-0.2** |
| **GLG1** | **Gilan-e-Gharb** | **1.10** | **351** | Pg | **Pn** | **00 10 46.4** | **+0.3** |
| GLG1 | | | | Sg | **Sn** | **00 11 03.4** | **+1.9** |
| **IGHG** | **Ghaleghazi** | **1.36** | **16** | Pg | **Pg** | **00 10 51.5** | **+0.8** |
| **KCHF** | **Cheshme Sefid,** | **1.47** | **31** | Pg | **Pg** | **00 

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GARC** | **Garzon, Huila** | **0.49** | **66** | P | Pg | 00 13 13.3 | -0.8 |
| GARC | | | | S | Sg | 00 13 20.6 | 0.0 |
| **FLOC** | **Florencia** | **0.50** | **145** | P | Pg | 00 13 13.3 | -0.9 |
| FLOC | | | | S | Sg | 00 13 20.8 | 0.0 |
| **BETC** | **Betania** | **0.85** | **36** | P | Pg | 00 13 20.1 | -0.7 |
| BETC | | | | S | Sb | 00 13 32.8 | +0.3 |
| **POPC** | **Popayan, Colom** | **0.92** | **307** | P | Pg | 00 13 21.3 | -0.9 |
| POPC | | | | S | Sg | 00 13 33.8 | -0.4 |
| **YOTC** | **Yotoco, Valle** | **2.02** | **348** | P | Pn | 00 13 37.3 | -1.2 |
| **ORTC** | **Ortega, Tolima** | **2.03** | **20** | P | Pn | 00 13 39.1 | +0.6 |
| ORTC | | | | S | Sb | 00 14 05.8 | -0.7 |
| **ORTC** | **Ortega, Tolima** | **2.03** | **20** | P | Pn | 00 13 39.2 | +0.7 |
| ORTC | | | | S | Sb | 00 14 05.8 | -0.7 |

**RSNC 09 00:13:05.8±0.6, 6°N±1°×7°4W±°, h3km±3km, M2.0, ML2.0, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPBC** | **San Pablo de B** | **0.46** | **157** | P | Pg | 00 13 13.9 | -0.8 |
| SPBC | | | | S | Sg | 00 13 20.3 | -0.4 |
| **PTBC** | **PUERTO BERRIO,** | **0.50** | **336** | P | Pg | 00 13 15.2 | -0.2 |
| PTBC | | | | S | Sg | 00 13 22.5 | +0.5 |
| **NORC** | **Norcasia** | **0.80** | **230** | P | Pg | 00 13 19.5 | -1.7 |
| NORC | | | | S | Sg | 00 13 29.8 | -1.8 |
| **BRJC** | **Barrancabermej** | **1.02** | **29** | P | Pg | 00 13 23.7 | -1.7 |
| BRJC | | | | S | Sg | 00 13 38.1 | -0.5 |
| **RUSC** | **La Rusia** | **1.18** | **99** | P | Pg | 00 13 26.2 | -2.2 |
| RUSC | | | | S | Sg | 00 13 41.5 | -2.2 |
| **BARC** | **Barichara** | **1.18** | **64** | P | Pg | 00 13 26.7 | -1.7 |
| BARC | | | | S | Sg | 00 13 41.6 | -2.1 |
| **ROSC** | **El Rosal** | **1.23** | **183** | P | Pg | 00 13 28.0 | -1.5 |
| ROSC | | | | S | Sg | 00 13 44.9 | -0.6 |
| **ZARC** | **Zaragoza, Cauc** | **1.53** | **337** | P | Pn | 00 13 31.5 | -2.5 |
| ZARC | | | | S | Sn | 00 13 50.2 | -4.2 |
| **CHIC** | **Chingaza** | **1.53** | **160** | P | Pn | 00 13 33.4 | -1.0 |
| CHIC | | | | S | Sb | 00 13 54.1 | -0.9 |
| **RECRC** | **Villamaria, Ca** | **1.56** | **225** | P | Pn | 00 13 33.8 | -1.2 |
| RECRC | | | | S | Sn | 00 13 52.9 | -3.1 |
| **ANIL** | **Santa Ana** | **1.95** | **216** | P | Pn | 00 13 39.1 | -1.0 |
| ANIL | | | | S | Sn | 00 14 03.0 | -2.3 |
| **PAMC** | **Pamplona, Colo** | **1.98** | **51** | P | Pn | 00 13 40.6 | -0.1 |
| PAMC | | | | S | Sn | 00 14 04.8 | -1.6 |

*MOS **09** 00:15:32.9±1.1, 86°.26N×38°.28E, h10km, mb4.3/15, Error ellipse: s-maj=99.9km s-min=8.0km az=90.2*
*IDC **09** 00:15:33.8±0.7, 86°.29N×39°.68E, h0km, mb3.9/12, mbtmp3.9/13, ML4.0/1, MS2.9/13, Error ellipse: s-maj=24.6km s-min=14.0km az=72.0*
*NEIC **09** 00:15:34.6±1.3, 86°.24N±0°.04×3°9E±°, h10km±1km, mb4.2/26, Error ellipse: s-maj=22.5km s-min=4.2km az=73.0*
*FCIAR **09** 00:15:36.0, 85°.75N×38°.71E, h10km, station ZFI2 has station magnitude of 3.40 station OMEGA has station magnitude of 3.20*
*KOLA **09** 00:15:37.3, 86°.56N×27°.91E, h0km, ML2.8, Error ellipse: s-maj=376.9km s-min=74.7km az=100.0, Arctic Ocean, Gakkel ridge*

**ISC 09 00:15:34.6±0.5, 86°.15N±0°.05×37°.88E±0°.06, h10km, n102, σ1§95/98, mb4.2/34, MS2.9/14, 2D, North of Franz Josef Land**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZFI2** | **Zemlya Franca-** | **5.47** | **163** | *eP* | **Pn** | **00 16 55.3** | **-0.6** |
| ZFI2 | | | | *eS* | Sn | 00 17 51.6 | -7.1 |
| | 22nm,0.2s | | | | | | |
| ZFI2 | | | | *etx* | tx | 00 20 54.8 | |
| **OMEGA** | **Omega** | **5.50** | **163** | *eP* | **Pn** | **00 16 55.8** | **-0.5** |
| OMEGA | | | | *eS* | Sn | 00 17 52.7 | -6.8 |
| | 14nm,0.2s | | | | | | |
| OMEGA | | | | *etx* | tx | 00 20 52.8 | |
| **NOR** | **Nord** | **6.96** | **261** | *eP* | **Pn** | **00 17 18.9** | **+2.6** |
| **NOR** | **Nord** | **6.96** | **261** | *i* P | **Pn** | **00 17 20.0** | **+3.6** |
| **KBS** | **Kingsbay** | **7.84** | **218** | Pn | **Pn** | **00 17 28.6** | **+0.1** |
| **KBS** | **Kingsbay** | **7.84** | **218** | P | **Pn** | **00 17 27.0** | **-1.5** |
| KBS | | | | S | **Sn** | **00 18 51.7** | **-5.4** |
| **KBS** | **Kingsbay** | **7.84** | **218** | *eP* | **Pn** | **00 17 28.9** | **+0.4** |
| KBS | | | | *eS* | **Sn** | **00 18 51.8** | **-5.3** |
| KBS | | | | IAML | | 00 18 57.5 | |
| | comp=Z,8.3nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **7.84** | **218** | *eP* | **Pn** | **00 17 28.3** | **-0.1** |
| KBS | | | | *eS* | **Sn** | **00 18 51.5** | **-5.6** |
| **KBS** | **Kingsbay** | **7.84** | **218** | *i* P | **Pn** | **00 17 29.3** | **+0.8** |
| KBS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| **KBS** | **Kingsbay** | **7.84** | **218** | *i* P | **Pn** | **00 17 28.4** | **-0.1** |
| **BRBB** | **Barentsburg B** | **8.57** | **214** | P | **Pn** | **00 17 39.3** | **+0.9** |
| BRBB | | | | S | **Sn** | **00 19 09.7** | **-5.3** |
| **BRBB** | **Barentsburg B** | **8.57** | **214** | *eP* | **Pn** | **00 17 39.2** | **+0.7** |
| BRBB | | | | *eS* | Sn | 00 19 07.2 | -7.8 |
| **BRBA** | **Barentsburg A** | **8.61** | **214** | *eP* | **Pn** | **00 17 39.7** | **+0.8** |
| BRBA | | | | *eS* | **Sn** | **00 19 11.9** | **-4.0** |
| BRBA | | | | IAML | | 00 20 34.3 | |
| | comp=Z,6.9nm,0.3s | | | | | | |
| **HSPB** | **Hornsund (broa** | **9.61** | **211** | P | **Pn** | **00 17 54.0** | **+1.4** |
| HSPB | | | | S | **Sn** | **00 19 37.2** | **-3.2** |
| **HSPB** | **Hornsund (broa** | **9.61** | **211** | *eP* | **Pn** | **00 17 54.5** | **+1.9** |
| HSPB | | | | *eS* | **Sn** | **00 19 34.9** | **-5.5** |
| HSPB | | | | IAML | | 00 19 41.4 | |
| | comp=Z,3.4nm,0.4s | | | | | | |
| **SVZ** | **Severnaya Zeml** | **9.72** | **95** | *eP* | **Pn** | **00 17 50.8** | **-3.3** |
| **HOPEN** | **Hopen** | **9.84** | **198** | *eP* | **Pn** | **00 17 56.2** | **+0.5** |
| HOPEN | | | | *eS* | Sn | 00 19 39.8 | -6.2 |
| HOPEN | | | | IAML | | 00 20 16.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **HOPEN** | **Hopen** | **9.84** | **198** | *eP* | **Pn** | **00 17 55.5** | **-0.3** |
| HOPEN | | | | *eS* | Sn | 00 19 37.5 | -8.5 |
| **DAG** | **Danmarks Havn** | **11.63** | **252** | *eP* | **Pn** | **00 18 22.3** | **+2.1** |
| **DAG** | **Danmarks Havn** | **11.63** | **252** | *i* P | **Pn** | **00 18 24.6** | **+4.4** |
| **BJO1** | **Bjornoya** | **11.99** | **205** | *eP* | **Pn** | **00 18 24.6** | **-0.5** |
| BJO1 | | | | IAML | | 00 20 28.1 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| BJO1 | | | | *eS* | Sn | 00 20 28.6 | -10 |
| **NEEM** | **North Greenlan** | **13.14** | **286** | *i* P | Pn | 00 18 36.2 | -4.9 |
| **TULEG** | **Thule** | **15.12** | **301** | Pn | **Pn** | **00 19 04.9** | **-2.8** |
| **KULLO** | **Kullorsuaq** | **16.32** | **288** | *i* P | Pn | 00 19 11.3 | -12 |
| **KEV** | **Kevo** | **16.58** | **193** | Pn | **Pn** | **00 19 23.8** | **-2.8** |
| KEV | | | | IAmb | IAmb | 00 19 49.0 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **KEV** | **Kevo** | **16.58** | **193** | P | **Pn** | **00 19 23.8** | **-2.8** |
| KEV | | | | pmax | pmax | | |
| | comp=Z,22nm,1.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **16.82** | **195** | Pn | **Pn** | **00 19 29.9** | **+0.1** |
| ARCES | | | | IAmb | IAmb | 00 19 55.5 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **16.82** | **195** | Pn | **Pn** | **00 19 30.6** | **+0.8** |
| | comp=Z,0.5nm,0.3s,baz=356,slow=11,SNR=35 | | | | | | |
| ARCES | | | | Sn | Sn | 00 22 25.6 | -11 |
| | comp=Z,0.1nm,0.3s,baz=20,slow=19,SNR=1.7 | | | | | | |
| ARCES | | | | LR | LR | 00 26 09.2 | |
| | comp=Z,22nm,18.5s,baz=276,slow=37 | | | | | | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **16.82** | **195** | *eP* | **Pn** | **00 19 30.0** | **+0.2** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **SUMG** | **Summit** | **17.03** | **269** | | **Pn** | **00 19 33.0** | **+0.4** |
| **SUMG** | **Summit** | **17.03** | **269** | P | **Pn** | **00 19 33.1** | **+0.4** |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **RES** | **Resolute Bay** | **18.26** | **322** | Pn | **Pn** | **00 19 45.3** | **-2.2** |
| **RES** | **Resolute Bay** | **18.26** | **322** | P | **Pn** | **00 19 45.3** | **-2.2** |
| RES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| **LVZ** | **Lovozero** | **18.37** | **184** | P | **P** | **00 19 49.8** | **+0.9** |
| LVZ | | | | IAmb | IAmb | 00 19 53.9 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **LVZ** | **Lovozero** | **18.37** | **184** | *i* P | **Pn** | **00 19 50.7** | **+1.8** |
| LVZ | | | | pmax | pmax | | |
| | comp=Z,22nm,1.2s | | | | | | |
| **TIXI** | **Tiksi** | **18.92** | **78** | *i* P | **P** | **00 19 52.6** | **-2.3** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **24.13** | **7** | P | **P** | **00 20 48.4** | **-1.6** |
| C23K | | | | IAmb | IAmb | 00 21 14.2 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **D25K** | **Kavik River** | **24.67** | **4** | P | **P** | **00 20 54.8** | **-0.2** |
| **FIA1** | **FINESS Array S** | **24.93** | **193** | P | **P** | **00 20 58.2** | **+0.9** |
| **FINES** | **FINESS Array B** | **24.94** | **193** | P | **P** | **00 20 58.6** | **+1.3** |
| **FINES** | **FINESS Array B** | **24.94** | **193** | P | **P** | **00 20 59.7** | **+2.4** |
| | comp=Z,2.8nm,0.7s,baz=12,slow=9.9,SNR=6.7 | | | | | | |
| FINES | | | | LR | LR | 00 31 21.2 | |
| | comp=Z,18nm,19.5s,baz=44,slow=38 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **25.07** | **9** | P | **P** | **00 20 58.4** | **-0.1** |
| D22K | | | | IAmb | IAmb | 00 21 01.8 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **25.61** | **356** | P | **P** | **00 21 03.2** | **-0.2** |
| **INK** | **Inuvik** | **25.66** | **353** | P | **P** | **00 21 02.7** | **-1.2** |
| INK | | | | IAmb | IAmb | 00 21 05.5 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **25.66** | **353** | LR | LR | 00 32 09.2 | |
| | comp=Z,29nm,19.8s,baz=354,slow=39 | | | | | | |
| **INK** | **Inuvik** | **25.66** | **353** | P | **P** | **00 21 02.7** | **-1.2** |
| INK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **25.71** | **210** | P | **P** | **00 21 06.9** | **+2.4** |
| | comp=Z,0.4nm,0.8s,baz=3.0,slow=10,SNR=2.5 | | | | | | |
| NOA | | | | LR | LR | 00 31 24.3 | |
| | comp=Z,9.1nm,19.0s,baz=250,slow=37 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **25.91** | **5** | P | **P** | **00 21 05.3** | **-1.0** |
| **F28M** | **Old Crow** | **26.40** | **358** | P | **P** | **00 21 10.6** | **0.0** |
| **BMAR** | **Burnt Mountain** | **26.58** | **2** | P | **P** | **00 21 11.1** | **-1.2** |
| **G31M** | **Satah River** | **27.06** | **353** | P | **P** | **00 21 15.2** | **-1.2** |
| G31M | | | | IAmb | IAmb | 00 21 19.3 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **KIRV** | **Kirov** | **27.80** | **167** | LR | LR | 00 34 06.9 | |
| | comp=Z,25nm,21.5s,baz=5.9,slow=40 | | | | | | |
| **YAK** | **Yakutsk** | **28.49** | **81** | LR | LR | 00 33 23.6 | |
| | comp=Z,27nm,18.1s,baz=342,slow=38 | | | | | | |
| **I30M** | **Mount Dempster** | **28.78** | **355** | P | **P** | **00 21 31.3** | **-0.8** |
| I30M | | | | IAmb | IAmb | 00 21 32.4 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **29.24** | **4** | *eP* | **P** | **00 21 36.7** | **+0.7** |
| | comp=Z,0.4nm,0.8s,baz=359,slow=7.8,SNR=6.5 | | | | | | |
| | comp=Z,4nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **29.24** | **4** | *eP* | **P** | **00 21 37.6** | **+1.6** |
| **ARU** | **Arti** | **30.15** | **157** | LR | LR | 00 35 12.1 | |
| | comp=Z,16nm,18.4s,baz=0.5,slow=39 | | | | | | |
| **ARU** | **Arti** | **30.15** | **157** | *d* P | **P** | **00 21 42.4** | **-1.7** |
| ARU | | | | S | **S** | **00 26 43.2** | **+0.7** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **OBN** | **Obninsk** | **31.19** | **181** | *eP* | **P** | **00 21 54.2** | **+1.0** |
| OBN | | | | *e* | | 00 21 56.0 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,20nm,15.0s | | | | | | |
| **NACGM** | **Naroch** | **31.48** | **192** | *eP* | P | 00 21 43.5 | -12 |
| | comp=E,708nm,0.7s,baz=2.0 | | | | | | |
| **M29M** | **Somme Creek** | **31.58** | **357** | P | **P** | **00 21 56.9** | **0.0** |
| M29M | | | | IAmb | IAmb | 00 21 58.8 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.69** | **129** | P | **P** | **00 22 15.1** | **-0.1** |
| | comp=Z,1.3nm,0.6s,baz=355,slow=8.1,SNR=6.4 | | | | | | |
| ZALV | | | | LR | LR | 00 38 16.9 | |
| | comp=Z,13nm,18.4s,baz=353,slow=40 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.69** | **129** | *eP* | **P** | **00 22 16.1** | **+0.9** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **33.91** | **145** | *i* P | **P** | **00 22 18.2** | **+1.1** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **BELG** | **Belogornoye** | **33.98** | **169** | LR | LR | 00 41 29.9 | |
| | comp=Z,13nm,18.2s,baz=62,slow=46 | | | | | | |
| **AKASG** | **Malin Array Be** | **35.66** | **189** | LR | LR | 00 37 30.8 | |
| | comp=Z,21nm,18.1s,baz=348,slow=37 | | | | | | |
| **AKBB** | **Malin Array Si** | **35.66** | **189** | *i* P | **P** | **00 22 34.0** | **+1.8** |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **36.61** | **136** | P | **P** | **00 22 40.6** | **+0.3** |
| KURK | | | | IAmb | IAmb | 00 22 55.2 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **KURK** | **Kurchatov** | **36.61** | **136** | P | **P** | **00 22 41.5** | **+1.2** |
| **KURBB** | **Kurchatov Arra** | **36.70** | **136** | P | **P** | **00 22 41.5** | **+0.4** |
| | comp=Z,1.2nm,0.2s,baz=359,slow=8.1,SNR=6.5 | | | | | | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| **MOY** | **Mondy** | **36.91** | **112** | *eP* | **P** | **00 22 43.9** | **+0.9** |
| **ABKAR** | **Akbulak array** | **37.37** | **156** | | **P** | **00 22 47.1** | **+0.4** |
| **KHC** | **Kasperske Hory** | **37.55** | **206** | *i* P | **P** | **00 22 49.9** | **+1.5** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,13nm,2.3s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **38.07** | **127** | *i* P | **P** | **00 22 53.4** | **+0.5** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **MAKZ** | **Makanchi** | **40.67** | **133** | | **P** | **00 23 14.4** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 00 23 15.8 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **40.67** | **133** | P | **P** | **00 23 14.4** | **-0.1** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **40.70** | **133** | | **P** | **00 23 14.8** | **+0.1** |
| **MK31** | **Makanchi Array** | **40.70** | **133** | *i* P | **P** | **00 23 15.0** | **+0.3** |
| **MKAR** | **Makanchi Array** | **40.70** | **133** | P | **P** | **00 23 15.2** | **+0.4** |
| | comp=Z,0.9nm,0.5s,baz=354,slow=8.1,SNR=16 | | | | | | |
| MKAR | | | | LR | LR | 00 41 45.9 | |
| | comp=Z,21nm,21.4s,baz=346,slow=39 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **MLR** | **Muntele Rosu** | **40.91** | **193** | LR | LR | 00 40 30.8 | |
| | comp=Z,28nm,19.1s,baz=26,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **41.07** | **107** | P | **P** | **00 23 18.1** | **+0.3** |
| | comp=Z,0.7nm,0.6s,baz=341,slow=8.0,SNR=4.8 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **41.07** | **107** | *eP* | **P** | **00 23 18.4** | **+0.6** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **41.08** | **107** | *i* P | **P** | **00 23 18.8** | **+0.8** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **41.37** | **82** | *i* P | **P** | **00 23 17.9** | **-2.3** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.8s | | | | | | |
| **KIV** | **Kislovodsk** | **42.38** | **175** | *eP* | **P** | **00 23 31.0** | **+2.5** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,16nm,16.0s | | | | | | |
| **KBZ** | **Khabaz** | **42.60** | **175** | P | **P** | **00 23 32.3** | **+2.0** |
| | comp=Z,4.2nm,0.8s,baz=356,slow=4.0,SNR=6.9 | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **42.60** | **175** | *eP* | **P** | **00 23 32.2** | **+2.0** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **44.49** | **141** | LR | LR | 00 44 02.3 | |
| | comp=Z,23nm,19.1s,baz=294,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **46.60** | **185** | | **P** | **00 24 03.5** | **+1.1** |
| **BRTR** | **Keskin Array B** | **46.60** | **185** | P | **P** | **00 24 05.4** | **+3.0** |
| | comp=Z,3.0nm,0.9s,baz=8.5,slow=8.2,SNR=6.2 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **MSO** | **Missoula** | **46.81** | **334** | P | **P** | **00 24 04.1** | **+0.2** |
| MSO | | | | IAmb | IAmb | 00 24 05.5 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **KSH** | **Kashi** | **47.66** | **140** | P | P | 00 24 15.8 | +5.1 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **48.36** | **103** | *eP* | **P** | **00 24 17.0** | **+1.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,4.4s | | | | | | |
| **ECSD** | **EROS Data Cent** | **49.23** | **317** | P | **P** | **00 24 23.0** | **+0.4** |
| **PDAR** | **Pinedale Array** | **50.73** | **329** | P | **P** | **00 24 34.5** | **+0.3** |
| | comp=Z,0.8nm,0.8s,baz=32,slow=5.6,SNR=7.1 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **55.32** | **337** | P | **P** | **00 25 08.1** | **0.0** |
| | comp=Z,0.6nm,0.8s,baz=19,slow=4.5,SNR=4.6 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **VHRN** | **Van Horn** | **62.50** | **324** | P | **P** | **00 25 58.1** | **+0.2** |
| **TX31** | **Lajitas Ar. Si** | **63.89** | **323** | P | **P** | **00 26 07.0** | **-0.1** |
| TX31 | | | | IAmb | IAmb | 00 26 09.0 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.89** | **323** | P | **P** | **00 26 07.1** | **0.0** |
| **TXAR** | **Lajitas Array** | **63.89** | **323** | P | **P** | **00 26 06.8** | **-0.4** |
| | comp=Z,1.5nm,0.7s,baz=19,slow=3.6,SNR=20 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.89** | **323** | P | **P** | **00 26 07.1** | **0.0** |
| **TOA0** | **Torodi Ar. Sit** | **73.82** | **217** | P | **P** | **00 27 10.2** | **+1.4** |
| TOA0 | | | | IAmb | IAmb | 00 27 36.6 | |
| | comp=Z,2.7nm,1.1s | | | | | | |

*UCR **09** 00:25:55.0±1.2, 12°.66N×89°.79W, h33km, 308km, MW4.9*
*IDC **09** 00:25:56.0±0.5, 12°.33N×89°.15W, h0km, mb4.6/19, mbtmp4.6/21, ML3.8/3, MS3.8/49, Error ellipse: s-maj=23.8km s-min=11.2km az=57.0*
*NEIC **09** 00:25:58.6±1.8, 12°.30N±0°.05×89°.37W±0°.06, h13km±3km, mb5.0/186, Mww5.0/29, Error ellipse: s-maj=8.5km s-min=6.9km az=59.0*
*PPT **09** 00:25:59.8±0.2, 12°.27N×89°.43W, h10km, mb5.0/23, MLv5.0/7, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*MOS **09** 00:25:59.3±1.2, 12°.28N×89°.42W, h33km, mb5.1/40, Error ellipse: s-maj=9.4km s-min=5.1km az=111.6*
*CATAC **09** 00:25:59.3±1.1, 12°.24N×89°.44W, h18km±11km, MB5.1, mb5.1, ML4.8*
*SNET **09** 00:26:00.0±0.9, 13°.25N×89°.45W, h22km±44km, ML4.8*
*GCMT **09** 00:26:00.6±0.2, 12°.20N±0°.01×89°.68W±0°.02, h12km, MW5.0/113, Moment Tensor Solution. s59,c78; s113,c172; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-3.22±.11; Mθθ1.92±.07; Mϕϕ1.31±.08; Mrθ0.77±.19; Mθϕ-1.51±.05; Mϕr1.04±.22; Best double couple: Ms3.41200×10^16 NP1:ϕs147.00000°, δ49.00000°, λ-64.00000°. NP2:ϕs291.00000°, δ47.00000°, λ-116.00000°. Principal axes: T 3.1560, Plg1.0000°, Azm220.0000°; N 0.5220, Plg19.0000°, Azm310.0000°; P -3.6680, Plg71.0000°, Azm128.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **09** 00:26:01.8, 12°.22N×89°.77W, h16km, Moment Tensor Solution. Duration: 1§8 Moment tensor: Scale 10^16Nm; Mrr-3.46; Mθθ2.17; Mϕϕ1.30; Mrθ1.25; Mθϕ-1.57; Mϕr1.04; Fault plane solution: Ms3.73000×1016 NP1: ϕs287.10000°, δ51.78000°, λ-116.61000°. NP2: ϕs146.10000°, δ45.38000°, λ-60.37000°. Principal axes: T 3.3804, Plg3.0000°, Azm36.0000°; N 0.7000, Plg21.0000°, Azm304.0000°; P -4.0804, Plg69.0000°, Azm135.0000°;*
*NEIC **09** 00:26:01.8, 12°.32N×89°.36W, h16km*
*RSNC **09** 00:26:02.0±0.7, 12°N±4°×8°9W±°, h38km, M5.1, mB5.2, mb4.9, ML4.0, Mw(mB)4.6, MwMwp4.9, Mwp5.2*
*BGR **09** 00:26:02.3, 12°.29N×89°.46W, h28km, mb4.7, Ms4.0*
*UPA **09** 00:26:04.1±0.4, 12°.60N×89°.20W, h41km±26km, MW4.7*

**ISC 09 00:26:00.2±0.5, 12°.27N±0°.03×89°.39W±0°.04, h28km±3km, h28km:pP-P, n860, σ1§18/856, mb4.9/130, MS3.8/51, 25C-10D, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LALI** | **Alcalda de L** | **1.21** | **3** | *iP* | **Pn** | **00 26 21.6** | **+0.3** |
| LALI | | | | *eS* | **Sb** | **00 26 37.8** | **0.0** |
| **LALI** | **Alcalda de L** | **1.21** | **3** | *i* P | **Pn** | **00 26 21.6** | **+0.3** |
| LALI | | | | IAML | | 00 26 30.2 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **PANCS** | **Alcalda de** | **1.35** | **9** | *i* P | **Pn** | **00 26 23.8** | **+0.6** |
| PANCS | | | | IAML | | 00 26 23.9 | |
| | comp=Z,13μm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.38** | **358** | *eP* | **Pn** | **00 26 23.6** | **0.0** |
| **JAYA** | **Jayaque - finc** | **1.38** | **358** | *i* P | **Pn** | **00 26 23.7** | **0.0** |
| JAYA | | | | IAML | | 00 26 44.0 | |
| | comp=Z,20μm,1.0s | | | | | | |
| **LFRS** | **El Faro** | **1.38** | **13** | *iP* | **Pn** | **00 26 24.1** | **+0.4** |
| **LOMA** | **Loma Larga** | **1.38** | **9** | *eP* | **Pn** | **00 26 24.2** | **+0.4** |
| **LOMA** | **Loma Larga** | **1.38** | **9** | *i* P | **Pn** | **00 26 24.3** | **+0.6** |
| LOMA | | | | IAML | | 00 26 45.5 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **1.39** | **25** | *eP* | **Pn** | **00 26 24.0** | **+0.2** |
| **TECO** | **Alcaldia de Te** | **1.39** | **25** | *i* P | **Pn** | **00 26 23.8** | **0.0** |
| TECO | | | | IAML | | 00 26 39.8 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **1.40** | **4** | *i* P | **Pn** | **00 26 24.7** | **+0.8** |
| ITCA | | | | IAML | | 00 26 35.6 | |
| | comp=Z,22μm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.42** | **6** | Pn | **Pn** | **00 26 24.4** | **+0.2** |
| **SNET** | **Serv Nac Est T** | **1.42** | **6** | *eP* | **Pn** | **00 26 24.6** | **+0.4** |
| **SNET** | **Serv Nac Est T** | **1.42** | **6** | *i* P | **Pn** | **00 26 24.5** | **+0.3** |
| SNET | | | | IAML | | 00 26 49.7 | |
| | comp=Z,18μm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **1.43** | **20** | *eP* | **Pn** | **00 26 24.7** | **+0.3** |
| **COEG** | **Centro de Oper** | **1.43** | **20** | *i* P | **Pn** | **00 26 24.7** | **+0.3** |
| COEG | | | | IAML | | 00 26 26.0 | |
| | comp=Z,4μm,1.0s | | | | | | |
| COEG | | | | *i* S | **Sb** | **00 26 45.3** | **+1.2** |
| **PMON** | **Piamonte** | **1.43** | **3** | *i* P | **Pn** | **00 26 24.6** | **+0.1** |
| PMON | | | | IAML | | 00 26 51.0 | |
| | comp=Z,15μm,1.0s | | | | | | |
| **SNVI** | **San Vicente** | **1.44** | **22** | *eP* | **Pn** | **00 26 25.3** | **+0.7** |
| **UEES** | **Universidad Ev** | **1.44** | **6** | *eP* | **Pn** | **00 26 25.1** | **+0.5** |
| **UEES** | **Universidad Ev** | **1.44** | **6** | *i* P | **Pn** | **00 26 25.0** | **+0.5** |
| UEES | | | | IAML | | 00 26 49.3 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **1.45** | **9** | *i* P | **Pn** | **00 26 25.2** | **+0.5** |
| UDBS | | | | IAML | | 00 26 26.4 | |
| | comp=Z,10μm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **1.46** | **4** | *eP* | **Pn** | **00 26 25.4** | **+0.5** |
| **UESV** | **Universidad de** | **1.48** | **23** | *i* P | **Pn** | **00 26 25.3** | **+0.3** |
| UESV | | | | IAML | | 00 26 49.7 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **COEB** | **Comit de Eme** | **1.48** | **34** | *eP* | **Pn** | **00 26 25.7** | **+0.7** |
| **COEB** | **Comit de Eme** | **1.48** | **34** | *i* P | **Pn** | **00 26 25.9** | **+0.8** |
| COEB | | | | IAML | | 00 26 44.3 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **LFU** | **La Fuente** | **1.49** | **10** | *eP* | **Pn** | **00 26 26.1** | **+0.9** |
| **TECA** | **Tecapa** | **1.49** | **35** | *eP* | **Pn** | **00 26 25.9** | **+0.6** |
| **CEDA** | **San Andres** | **1.52** | **360** | *eP* | **Pn** | **00 26 25.9** | **+0.3** |
| **C

LLGN IAML 00 26 59.9
comp=Z,4µm,1.0s
**MTO3 Montecristo 2.12 1** Pn **Pn 00 26 34.9 +0.9**
**MTO3 Montecristo 2.12 1**⇑ *i*P **Pn 00 26 35.0 +1.1**
**MTO3 Montecristo 2.12 1** *i* P **Pn 00 26 35.0 +1.1**
MTO3 IAML 00 26 35.6
comp=Z,3µm,1.0s
**ESQI Esquipulas 2.28 1 Pn 00 26 37.3 +1.2**
**ESQI Esquipulas 2.28 1**⇑ *e*P **Pn 00 26 37.5 +1.5**
**CRIN San Cristobal 2.32 79 Pn 00 26 37.3 +0.4**
**CRIN San Cristobal 2.32 79** P **Pn 00 26 37.2 +0.6**
**CRIN San Cristobal 2.32 79** *i* P **Pn 00 26 37.8 +1.1**
CRIN IAML 00 27 16.4
comp=Z,9µm,1.0s
**CRIN San Cristobal 2.32 79**⇑ *i*P **Pn 00 26 36.7 +0.1**
CRIN *e*S **Sb 00 27 09.0 -0.8**
**PKGN Cerro Pekin 2.39 80** *i* P **Pn 00 26 38.2 +0.7**
PKGN IAML 00 27 14.2
comp=Z,16µm,1.0s
**CNGA Al SSO del Vol 2.64 85** *i* P **Pn 00 26 39.1 -1.8**
CNGA IAML 00 27 21.5
comp=Z,2µm,1.0s
**CNGN Cerro Negro 2.64 85 Pn 00 26 40.6 -0.3**
**CNGN Cerro Negro 2.64 85** P **Pn 00 26 40.9 -0.1**
**CNGN Cerro Negro 2.64 85** *i* P **Pn 00 26 41.1 +0.1**
CNGN IAML 00 27 24.1
comp=Z,3µm,1.0s
**CNGN Cerro Negro 2.64 85**⇑ *i*P **Pn 00 26 40.8 -0.2**
**ILCN San Idelfonso 2.65 83** *i* P **Pn 00 26 41.2 +0.2**
ILCN IAML 00 26 42.3
comp=Z,2µm,1.0s
**TGUH Tegucigalpa,Un 2.72 49 Pn 00 26 43.6 +1.4**
**TGUH Tegucigalpa,Un 2.72 49** P **Pn 00 26 43.6 +1.4**
**COPN Copaltepe 2.74 92** *i* P **Pn 00 26 42.7 +0.4**
COPN IAML 00 26 43.9
comp=Z,2µm,1.0s
**MOM2 El Cardon 2.84 86** *i* P **Pn 00 26 44.2 +0.5**
MOM2 IAML 00 27 21.9
comp=Z,3µm,1.0s
**APG El Apazote 2.91 339** Pn **Pn 00 26 45.7 +0.8**
comp=Z,2.3nm,0.3s,baz=171,slow=5.0,SNR=126
APG Sn **Sn 00 27 19.9 +0.9**
comp=Z,11nm,0.3s,baz=68,slow=19,SNR=12
**SAPS Ciudad Sandino 2.92 92** *i* P **Pn 00 26 45.2 +0.4**
SAPS IAML 00 27 29.5
comp=Z,5µm,1.0s
**APQ3 Volcan Apoyequ 2.95 90** *i* P **Pn 00 26 46.2 +1.0**
APQ3 IAML 00 27 30.5
comp=Z,2µm,1.0s
**APYN Apoyeque 2.97 90** *i* P **Pn 00 26 46.9 +1.4**
APYN IAML 00 27 26.2
comp=Z,30nm,1.0s
**APQ2 Apoyeque 3.00 91** *i* P **Pn 00 26 46.4 +0.6**
APQ2 IAML 00 27 25.4
comp=Z,4µm,1.0s
**LIMN Finca el Limon 3.05 75** *i* P **Pn 00 26 47.0 +0.3**
LIMN IAML 00 27 29.4
comp=Z,2µm,1.0s
**R4DEC Barrio San Lui 3.07 92** *i* P **Pn 00 26 47.8 +0.9**
R4DEC *i* P Pb 00 26 47.9 -6.3
R4DEC IAML 00 26 49.4
comp=Z,3µm,1.0s
R4DEC IAML 00 26 49.6
comp=Z,2µm,1.0s
**WILN Americas 2 3.13 92** *i* P **Pn 00 26 48.5 +0.8**
WILN IAML 00 27 30.9
comp=Z,3µm,1.0s
**HUEN 3.15 88** *i* P **Pn 00 26 48.4 +0.5**
HUEN IAML 00 27 27.5
comp=Z,2µm,1.0s
**MAS3 Al N del Volca 3.15 94** *i* P **Pn 00 26 48.6 +0.6**
MAS3 IAML 00 27 29.4
comp=Z,4µm,1.0s
**RTAL Retalhuleu 3.17 315 Pn 00 26 46.8 -1.4**
**RTAL Retalhuleu 3.17 315** *i* P **Pn 00 26 47.1 -1.1**
RTAL IAML 00 27 26.9
comp=Z,1µm,1.0s
**SOKI Kika Raxquin 3.20 323** *i* P **Pn 00 26 49.0 0.0**
SOKI IAML 00 27 29.3
comp=Z,2µm,1.0s
**BOAB BOACO BROADBAN 3.64 87 Pn 00 26 54.6 -0.1**
**BOAB BOACO BROADBAN 3.64 87** *i* P **Pn 00 26 54.9 +0.2**
BOAB IAML 00 28 00.0
comp=Z,800nm,1.0s
**HUEH Huehuetenango 3.66 326 Pn 00 26 54.9 -0.2**
**JAPN Al SSO del Vol 3.71 101** *i* P **Pn 00 26 57.1 +1.5**
JAPN IAML 00 27 47.1
comp=Z,1µm,1.0s
**LCRUZ La Cruz 3.87 107** *e*P **Pn 00 27 00.2 +2.3**
**ELI1 Hacienda Flor 4.09 113** *e*P **Pn 00 27 03.5 +2.6**
**ALIBA Liberia Airpor 4.12 113**⇑ *i*P **Pn 00 27 03.5 +2.2**
**ACON Acoyapa 4.13 94 Pn 00 27 01.5 +0.2**
**ACON Acoyapa 4.13 94** P **Pn 00 27 01.5 0.0**
**ACON Acoyapa 4.13 94** *i* P **Pn 00 27 02.1 +0.6**
ACON IAML 00 28 01.5
comp=Z,440nm,1.0s
**VRLE La Escondida, 4.21 110** *e*P **Pn 00 27 04.1 +1.5**
**GPS2 Hotel Rincn d 4.24 110**⇓ *i*P **Pn 00 27 04.9 +2.0**
**COLC Colonia 4.40 111**⇓ *i*P **Pn 00 27 07.4 +2.2**
**NICO Nicoya 4.41 118** *e*P **Pn 00 27 06.7 +1.3**
**CUI Cuipilapa 4.44 111** *e*P **Pn 00 27 08.0 +2.2**
**INDI Punta indio, G 4.50 122** *i* P **Pn 00 27 07.8 +1.2**
INDI IAML 00 27 19.0
comp=Z,330nm,1.0s
**PETF Flores 4.64 354 Pn 00 27 10.7 +2.2**
**VERA Finca Concepci 4.65 107** *e*P **Pn 00 27 09.6 +1.1**
**JUNT Juntas 4.77 114** *e*P **Pn 00 27 12.1 +1.8**
**JTS Las Juntas de 4.78 114** Pn **Pn 00 27 12.2 +1.9**
**JTS Las Juntas de 4.78 114** Pn **Pn 00 27 11.6 +1.2**
comp=Z,19nm,0.3s,baz=306,slow=10,SNR=39
JTS Sn **Sn 00 28 01.2 -3.6**
comp=Z,9.1nm,0.3s,baz=304,slow=20,SNR=1.4
**JTS Las Juntas de 4.78 114** P **Pn 00 27 12.0 +1.6**
**JTS Las Juntas de 4.78 114** P **Pn 00 27 12.2 +1.9**
**JTS Las Juntas de 4.78 114** *e*P **Pn 00 27 12.6 +2.3**
JTS *e*S **Sn 00 28 06.0 +1.2**
**JTS Las Juntas de 4.78 114** *e*P **Pn 00 27 11.7 +1.3**
**CCIG Comitan 4.79 327** Pn **Pn 00 27 12.5 +1.7**
**ARE1 Arenal 1 4.92 111**⇑ *i*P **Pn 00 27 14.6 +2.2**
**CEDE Laguna Cedeo 4.92 111** *e*P **Pn 00 27 14.1 +1.6**
**VACR Volcan Arenal 4.95 111** *e*P **Pn 00 27 14.8 +2.0**
**ESPN Las Esperanzas 4.98 90 Pn 00 27 14.1 +1.0**
**ESPN Las Esperanzas 4.98 90** *e*P **Pn 00 27 13.7 +0.7**
**CBL1 Cabuya 4.99 122** *e*P **Pn 00 27 14.8 +1.5**
**SOCE Pocosol 5.04 111 Pn 00 27 16.0 +2.0**
**SOCE Pocosol 5.04 111** *i* P **Pn 00 27 16.4 +2.4**
SOCE IVmB_BB 00 27 24.5
comp=Z,2µm,1.0s
SOCE IAmb IAmb 00 27 36.3
comp=Z,120nm,0.6s
SOCE IAML 00 28 23.6
comp=Z,240nm,1.0s
**SOCE Pocosol 5.04 111** *e*P **Pn 00 27 15.1 +1.1**
**TRB2 Turrubares 5.39 115** *e*P **Pn 00 27 21.1 +2.4**
**TCS1 Tacares 5.46 113** *e*P **Pn 00 27 21.8 +1.9**
**BELE Belen 5.59 114** *e*P **Pn 00 27 24.8 +3.2**
**HDC Heredia 5.65 113 Pn 00 27 22.4 0.0**
**HDC Heredia 5.65 113** *e*P **Pn 00 27 26.8 +4.3**
**ACOS Acosta 5.69 115** *e*P **Pn 00 27 24.8 +1.8**
**CVIMO Finca Echandi 5.79 112** *e*P **Pn 00 27 26.9 +2.4**
**ABE2 San Pablo 5.83 115** *e*P **Pn 00 27 28.9 +3.9**
**LCR2 La Lucha 2 5.85 115** Pn **Pn 00 27 27.6 +2.2**
**LCR2 La Lucha 2 5.85 115** *e*P **Pn 00 27 28.3 +3.0**
**RAFA San Farael, Vo 5.94 112** *e*P **Pn 00 27 29.2 +2.6**
**DRK0 Durika 6.74 116** *e*P **Pn 00 27 40.3 +2.9**
DRK0 *e*S **Sn 00 28 53.3 -0.1**
**PTJ1 Puerto Jimnez 7.04 121** *e*P **Pn 00 27 44.6 +3.1**
**CMIG Matias Romero 7.16 313** Pn **Pn 00 27 42.6 -0.4**
comp=Z,4.5nm,0.3s,baz=98,slow=12,SNR=34
CMIG Sn **Sn 00 28 59.6 -3.9**
comp=Z,1.6nm,0.3s,baz=103,slow=19,SNR=1.6
comp=Z,15nm,0.5s
**BRU2 Volcan 7.44 117 Pn 00 27 49.4 +2.3**
**BRU2 Volcan 7.44 117** *e*P **Pn 00 27 50.2 +3.1**
BRU2 *e*S **Sn 00 29 10.5 -0.1**
**PTPM Petroterminale 7.58 122** *e*P **Pn 00 27 52.2 +3.4**
**BCO2 Palmira 7.61 117** *e*P **Pn 00 27 52.3 +2.8**
BCO2 *e*S **Sn 00 29 14.7 -0.3**
**DVD David 7.82 119** *e*P **Pn 00 27 54.6 +2.5**
DVD *e*S **Sn 00 29 19.2 -0.5**
**CHGR2 Aguacate 7.85 114** *e*P **Pn 00 27 55.1 +2.4**
CHGR2 *e*S **Sn 00 29 19.2 -1.5**
**PRVC Isla de Provid 7.91 81** P **Pn 00 27 54.6 +1.3**
comp=Z,210nm,1.5s
**TEIG Tepich 7.98 8** Pn **Pn 00 27 56.4 +2.0**
**TEIG Tepich 7.98 8** Pn **Pn 00 27 56.9 +2.6**
comp=Z,10.0nm,0.3s,baz=174,slow=1.1,SNR=60
TEIG Sn **Sn 00 29 24.3 +0.5**
baz=359,slow=20
TEIG LR LR 00 31 08.8
comp=Z,1µm,21.4s,baz=191,slow=40
**TEIG Tepich 7.98 8** P **Pn 00 27 56.6 +2.2**
comp=Z,601nm,1.3s,comp=Z,5µm
**BCIP Isla Barro Col 9.88 107** Pn **Pn 00 28 22.1 +1.7**
**BCIP Isla Barro Col 9.88 107** P **Pn 00 28 22.1 +1.7**
**TLIG Tlapa 10.31 302** Pn **Pn 00 28 27.4 +1.0**
**UNM Universidad Na 11.74 308** Pn **Pn 00 28 48.2 +2.0**
**UNM Universidad Na 11.74 308** P **Pn 00 28 48.2 +2.0**
**SOR Soroa 12.10 29** Pn **Pn 00 28 52.9 +2.1**
**SOR Soroa 12.10 29** P **Pn 00 28 52.9 +2.1**
**MTDJ Mount Denham 12.88 61** Pn **Pn 00 29 02.4 +0.8**
**PAYG Puerto Ayora 12.89 184 Pn 00 29 04.9 +3.2**
**PAYG Puerto Ayora 12.89 184** P **Pn 00 29 04.9 +3.2**
comp=Z,104nm,0.9s
**CAMR Camarioca 13.17 34 Pn 00 29 07.9 +2.6**
**JRQG Juriquilla Cam 13.51 310** Pn **Pn 00 29 09.5 -0.8**
**MOIG Morelia 13.52 304** Pn **Pn 00 29 10.0 -0.4**
**SJCC San Jacinto, C 14.14 98** P **Pn 00 29 20.1 +1.3**
comp=Z,106nm,1.0s,comp=Z,1µm
**UREC San Jos de Ur 14.36 107** P **Pn 00 29 22.2 +0.4**
comp=Z,29nm,0.9s
**PLMC San Jos del P 14.88 118** P **Pn 00 29 31.1 +2.3**
comp=Z,22nm,1.0s,comp=Z,1µm
**ZARC Zaragoza, Cauc 15.08 107** P **Pn 00 29 33.5 +2.0**
comp=Z,59nm,0.9s,comp=Z,762nm
**YOTC Yotoco, Valle 15.31 121** P **P 00 29 38.4 -0.7**
comp=Z,21nm,0.9s,comp=Z,358nm
**JAMC Jamundi, Valle 15.47 125** P **P 00 29 42.2 +1.1**
comp=Z,46nm,0.9s,comp=Z,867nm
**BBAC Balboa, Cauca 15.76 129** P **P 00 29 45.5 +1.2**
comp=Z,43nm,0.7s,comp=Z,594nm
**PTBC PUERTO BERRIO, 15.79 110** P **P 00 29 43.1 -1.3**
comp=Z,52nm,1.1s,comp=Z,736nm
**OTAV Otavalo 16.15 137** P **Pn 00 29 47.1 +1.4**
**OTAV Otavalo 16.15 137** P **P 00 29 50.6 +1.8**
comp=Z,28nm,1.2s,comp=Z,430nm
**OTAV Otavalo 16.15 137** P **Pn 00 29 47.1 +1.4**
OTAV pmax pmax
comp=Z,17nm,1.1s
**OTAV Otavalo 16.15 137** *e*P **P 00 29 48.3 -0.5**
**CRJC Cerrejon, Guaj 16.22 93** P **P 00 29 49.2 0.0**
comp=Z,135nm,0.7s,comp=Z,1µm
**TULM Tulcn-Chalpat 16.26 134 Pn 00 29 47.9 +0.8**
**ORTC Ortega, Tolima 16.27 120** P **P 00 29 53.5 +3.8**
comp=Z,84nm,1.0s,comp=Z,923nm
**PULU Pululahua 16.27 138 P P 00 29 48.8 -1.4**
**IMBA Imbabura, San 16.29 136** P **P 00 29 49.5 -0.8**
IMBA IAmb IAmb 00 29 55.5
comp=Z,137nm,1.3s
**ZAIG Zacatecas 16.32 312** P **Pn 00 29 48.7 +0.9**
**SPBC San Pablo de B 16.49 112** P **P 00 29 53.2 +1.0**
comp=Z,72nm,1.0s,comp=Z,831nm
**ROSC El Rosal 16.62 115** P **P 00 29 53.2 -0.8**
ROSC IAmb IAmb 00 29 59.1
comp=Z,220nm,1.9s
**ROSC El Rosal 16.62 115** Pn **P 00 29 56.2 +2.2**
comp=Z,1.5nm,0.3s,baz=11,slow=2.7,SNR=16
**ROSC El Rosal 16.62 115** P **P 00 29 56.8 +2.8**
comp=Z,121nm,1.7s,comp=Z,1µm
**ROSC El Rosal 16.62 115** P **P 00 29 53.2 -0.8**
ROSC pmax pmax
comp=Z,220nm,1.9s
**PRAC Prado 16.68 119** P **P 00 29 56.1 +1.8**
comp=Z,58nm,1.4s,comp=Z,742nm
**SLOR San Lorenzo - 16.85 139** P **P 00 29 57.0 +0.5**
**BARC Barichara 16.95 108** P **P 00 30 00.7 +3.2**
**060A Indiantown 16.96 29** P **Pn 00 29 55.7 +0.2**
060A IAmb IAmb 00 30 00.2
comp=Z,136nm,0.8s
**HBVL Hebbronville 17.10 331** P **Pn 00 29 57.8 +0.5**
**PAMC Pamplona, Colo 17.16 105** P **P 00 30 01.1 +1.1**
**CHIC Chingaza 17.24 115** P **P 00 30 04.2 +3.3**
comp=Z,76nm,1.8s,comp=Z,1µm
CHIC P **pP 00 30 05.0 -2.3**
comp=Z,76nm,1.8s,comp=Z,1µm
CHIC P **pP 00 30 05.0 -2.3**
comp=Z,76nm,1.8s,comp=Z,1µm
**FLOC Florencia 17.27 127** P **P 00 30 04.7 +3.9**
comp=Z,111nm,1.5s,comp=Z,1µm
**RUSC La Rusia 17.30 110** P **P 00 30 03.6 +2.0**
comp=Z,73nm,1.4s,comp=Z,825nm
**URMC La Uribe, Meta 17.35 120** P **P 00 30 05.8 +4.0**
comp=Z,44nm,1.1s
**DWPF Disney Wildern 17.43 24** P **Pn 00 30 00.9 -0.4**
DWPF IAmb IAmb 00 30 05.7
comp=Z,68nm,0.8s
**DWPF Disney Wildern 17.43 24** P **P 00 30 02.8 +0.5**
baz=207
**VILC Villavicencio, 17.51 116** P **P 00 30 05.9 +2.3**
**656A Willston 18.17 20** P **Pn 00 30 10.0 -0.4**
656A IAmb IAmb 00 30 15.0
comp=Z,174nm,1.1s
**833A Chaparral WMA, 18.50 331** P **Pn 00 30 14.9 +0.3**
**833A Chaparral WMA, 18.50 331** P **Pn 00 30 15.6 +1.0**
baz=148,SNR=8.1
**HKT Hockley 18.58 342** P **Pn 00 30 15.3 -0.1**
**HKT Hockley 18.58 342** *i* P **P 00 30 14.8 -0.2**
HKT pmax pmax
comp=Z,40nm,2.1s
**SDDR Presa de Saban 18.66 67** P **Pn 00 30 17.2 +0.6**
**SDDR Presa de Saban 18.66 67** P **Pn 00 30 17.7 +1.1**
comp=Z,50nm,1.0s
**441A DeRidder 18.72 350** P **Pn 00 30 17.1 0.0**
441A IAmb IAmb 00 30 27.8
comp=Z,69nm,0.7s
**SDV Santo Domingo 18.74 99** P **P 00 30 16.2 -1.0**
comp=Z,7.0nm,0.3s,baz=297,slow=3.8,SNR=3.8
SDV LR LR 00 38 41.5
comp=Z,239nm,21.0s,baz=314,slow=41
comp=Z,22nm,0.3s
**SDV Santo Domingo 18.74 99** *e*P **Pn 00 30 18.7 +1.0**
**MLDN Muldoon 18.83 339** P **P 00 30 17.4 -0.4**
MLDN IAmb IAmb 00 30 22.6
comp=Z,76nm,0.9s
**PTGC Puerto Gaitan, 18.86 114** P **Pn 00 30 19.9 +1.0**
**346A Big Creek Wild 19.03 360** P **P 00 30 19.8 -0.2**
346A IAmb IAmb 00 30 30.3
comp=Z,54nm,0.7s
**HNDO Hondo 19.48 333** P **P 00 30 24.1 -0.9**
**352A Blakely 19.55 11** P **P 00 30 26.1 +0.3**
**GRTK Grand Turk 19.72 60** P **P 00 30 28.4 +0.7**
GRTK IAmb IAmb 00 30 34.2
comp=Z,76nm,0.8s
**TIGA Tifton 19.81 15** P **Pn 00 30 30.2 0.0**
baz=197,SNR=17
**VBMS Vicksburg 19.88 357** P **Pn 00 30 30.3 -0.7**
**VBMS Vicksburg 19.88 357** P **Pn 00 30 30.6 -0.5**
baz=177,SNR=10.0
**435B Jarrell 19.92 339** P **P 00 30 30.0 +0.2**
baz=156
**NATX Nacogdoches 20.00 347** P **P 00 30 30.8 +0.2**
NATX IAmb IAmb 00 30 43.9
comp=Z,85nm,0.8s
**NATX Nacogdoches 20.00 347** P **P 00 30 31.3 +0.7**
baz=165,SNR=7.7
**DRIO Del Rio 20.01 330** P **P 00 30 30.1 -0.7**
**237A Washetta, Mont 20.51 344** P **P 00 30 36.3 +0.2**
237A IAmb IAmb 00 30 51.6
comp=Z,55nm,0.7s
**JCT Junction City 20.53 334** P **P 00 30 35.8 -0.6**
**JCT Junction City 20.53 334** P **P 00 30 37.0 +0.6**
baz=150,SNR=9.7
**JCT Junction City 20.53 334** P **P 00 30 35.8 -0.6**
JCT pmax pmax
comp=Z,35nm,1.0s
**LRAL Lakeview Retre 20.78 6** P **P 00 30 39.1 0.0**
LRAL IAmb IAmb 00 30 43.7
comp=Z,48nm,0.8s
**LRAL Lakeview Retre 20.78 6** P **P 00 30 39.9 +0.8**
baz=186,SNR=43
**WHTX Lake Whitney, 20.98 341** P **P 00 30 40.5 -0.8**
**WHTX Lake Whitney, 20.98 341** P **P 00 30 41.5 +0.2**
baz=157,SNR=45
**Z41A Richland Creek 21.12 352** P **P 00 30 43.9 +1.2**
**HPIG 21.13 316** P **P 00 30 43.6 +0.5**
**BAUV El Baul 21.24 97** P **P 00 30 43.5 -0.7**
**FW14 Alvarado 21.28 342** P **P 00 30 43.9 -0.6**
**Y45A Yeager Farm, C 21.50 360** P **P 00 30 47.4 +0.6**
**TXAR Lajitas Array 21.56 324** P **P 00 30 48.2 +0.6**
**TXAR Lajitas Array 21.56 324** P **P 00 30 49.3 +1.7**
comp=Z,13nm,0.8s,baz=145,slow=11,SNR=76
TXAR PcP **PcP 00 34 48.5 -1.0**
comp=Z,2.4nm,0.9s,baz=176,slow=3.8,SNR=6.7
comp=Z,13nm,0.8s
**TXAR Lajitas Array 21.56 324** P **P 00 30 48.2 +0.6**
**TX31 Lajitas Ar. Si 21.56 324** P **P 00 30 48.4 +0.7**
**WLAR White Oak Lake 21.59 352** P **P 00 30 48.5 +0.7**
**CCAR Cane Creek 21.66 355** P **P 00 30 48.4 -0.1**
**GOGA Godfrey 21.73 13** P **P 00 30 49.0 -0.3**
GOGA IAmb IAmb 00 30 52.8
comp=Z,64nm,0.9s
**GOGA Godfrey 21.73 13** P **P 00 30 49.9 +0.6**
baz=196,SNR=49
**GOGA Godfrey 21.73 13** P **P 00 30 49.0 -0.3**
GOGA pmax pmax
comp=Z,64nm,0.9s
**Y52A Lilburn 22.04 12** P **P 00 30 51.9 -0.7**
Y52A IAmb IAmb 00 30 55.6
comp=Z,53nm,0.8s
**OXF Oxford 22.14 360** P **P 00 30 53.8 +0.1**
**OXF Oxford 22.14 360** P **P 00 30 54.3 +0.6**
baz=180,SNR=81
**OXF Oxford 22.14 360** P **P 00 30 53.8 +0.1**
OXF pmax pmax
comp=Z,441nm,1.0s
**ATAH Atahualpa 22.16 150** LR LR 00 36 50.0
comp=Z,238nm,19.7s,baz=326,slow=30
**CRPR Cabo Rojo, PR 22.24 72** P **P 00 30 55.1 +0.2**
**MLPR Magueyes Islan 22.29 73** P **P 00 30 54.2 -1.3**
MLPR IAmb IAmb 00 30 56.1
comp=Z,27nm,0.8s
**ABTX Abilene, Hawle 22.34 337** P **P 00 30 54.8 -1.1**
ABTX IAmb IAmb 00 31 14.3
comp=Z,41nm,0.9s
**ABTX Abilene, Hawle 22.34 337** P **P 00 30 55.5 -0.4**
baz=153,SNR=18
**NHSC New Hope 22.39 21** P **P 00 30 56.2 -0.2**
**NHSC New Hope 22.39 21** P **P 00 30 56.6 +0.2**
baz=204,SNR=15
**FPAL Fort Paine 22.43 8** P **P 00 30 56.0 -0.9**
**MIAR Mount Ida 22.50 351** P **P 00 30 57.1 -0.4**
**MIAR Mount Ida 22.50 351** P **P 00 30 58.0 +0.5**
baz=169,SNR=90
**MIAR Mount Ida 22.50 351** P **P 00 30 57.1 -0.4**
MIAR pmax pmax
comp=Z,97nm,0.9s
**UALR University of 22.56 354** P **P 00 30 58.2 0.0**
**MNHN Monahans 22.64 329** P **P 00 30 58.1 -1.1**
**AOPR Arecibo Observ 22.64 72** P **P 00 30 58.0 -1.3**
AOPR IAmb IAmb 00 31 00.5
comp=Z,50nm,1.1s
**UUPR Utuado, UPR, P 22.65 72** P **P 00 30 57.8 -1.5**
UUPR IAmb IAmb 00 31 02.1
comp=Z,40nm,0.7s
**CELP Cerrillos 22.75 73** P **P 00 30 59.3 -1.1**
**X37A Clayton 22.87 347 P 00 31 01.9 +0.4**
X37A IAmb IAmb 00 31 22.8
comp=Z,80nm,1.1s
**SWET Sewanee 23.06 7** P **P 00 31 02.5 -0.9**
SWET IAmb IAmb 00 31 04.8
comp=Z,25nm,0.7s
**JSC Jenkinsville 23.13 17** P **P 00 31 03.6 -0.5**
JSC IAmb IAmb 00 31 07.8
comp=Z,58nm,0.9s
**JSC Jenkinsville 23.13 17** P **P 00 31 03.6 -0.5**
JSC pmax pmax
comp=Z,59nm,0.9s
**HBAR Harrisburg 23.21 357** P **P 00 31 05.1 +0.2**
**BG3 Lake Jocassee 23.37 13** P **P 00 31 05.9 -0.6**
BG3 IAmb IAmb 00 31 09.8
comp=Z,72nm,1.3s
**CPCT Cooper Cave 23.49 10** P **P 00 31 06.9 -0.9**
CPCT IAmb IAmb 00 31 17.8
comp=Z,37nm,1.1s
**HALT Halls 23.54 0** P **P 00 31 06.9 -1.2**
**WVT Waverly 23.80 3** P **P 00 31 09.7 -0.9**
**WVT Waverly 23.80 3** P **P 00 31 10.3 -0.3**
baz=184
**WVT Waverly 23.80 3** P **P 00 31 09.7 -0.9**
WVT pmax pmax
comp=Z,15nm,0.8s
**TKL Tuckaleechee C 23.83 11** P **P 00 31 10.2 -0.8**
TKL IAmb IAmb 00 31 13.8
comp=Z,38nm,0.8s
**TKL Tuckaleechee C 23.83 11** LR LR 00 41 41.5
comp=Z,159nm,19.2s,baz=210,slow=40
**TKL Tuckaleechee C 23.83 11** P **P 00 31 10.2 -0.8**
TKL pmax pmax
comp=Z,38nm,0.8s
**KMSC Kings Mountain 23.91 16** P **P 00 31 11.4 -0.3**
KMSC IAmb IAmb 00 31 14.9
comp=Z,60nm,0.8s
**KMSC Kings Mountain 23.91 16** P **P 00 31 11.1 -0.6**
baz=200,SNR=18
**WMOK Wichita Mounta 23.94 341 P 00 31 10.2 -1.8**
WMOK IAmb IAmb 00 31 13.6
comp=Z,52nm,1.0s
**WMOK Wichita Mounta 23.94 341** P **P 00 31 10.6 -1.4**
baz=157,SNR=82
**WMOK Wichita Mounta 23.94 341** P **P 00 31 10.2 -1.8**
WMOK pmax pmax
comp=Z,52nm,1.0s
**TUL3 Leonard 24.24 347** P **P 00 31 14.0 -0.7**
baz=165
**MNTX Cornudas Mount 24.31 325** P **P 00 31 14.6 -0.9**
baz=139,SNR=15
**TZTN Tazewell 24.73 11** P **P 00 31 18.0 -1.3**
TZTN IAmb IAmb 00 31 29.1
comp=Z,19nm,0.8s
**TZTN Tazewell 24.73 11** P **P 00 31 18.2 -1.0**
baz=194
**MSTX Muleshoe 24.81 333** P **P 00 31 18.4 -1.7**
MSTX IAmb IAmb 00 31 30.9
comp=Z,24nm,0.9s
**MSTX Muleshoe 24.81 333** P **P 00 31 19.4 -0.7**
baz=147
**AMTX Amarillo 25.13 336** P **P 00 31 22.7 -0.2**
AMTX IAmb IAmb 00 31 26.6
comp=Z,39nm,0.8s
**AMTX Amarillo 25.13 336** P **P 00 31 22.4 -0.5**
baz=151
**CNNC Cliffs of the 25.13 23** P **P 00 31 22.3 -0.6**
**CNNC Cliffs of the 25.13 23** P **P 00 31 22.0 -0.8**
baz=207
**TBTG Tabatinga, AM 25.34 129** P **P 00 31 24.8 -0.2**
**TBTG Tabatinga, AM 25.34 129** *e*P **P 00 31 26.4 +1.4**
**CCM Cathedral Cave 25.73 357** P **P 00 31 27.2 -1.0**
**CCM Cathedral Cave 25.73 357** P **P 00 31 27.8 -0.5**
baz=176
**CCM Cathedral Cave 25.73 357** P **P 00 31 27.2 -1.0**
CCM pmax pmax
comp=Z,90nm,0.7s
**CZSB Cruzeiro do Su 25.88 139** P **P 00 31 31.1 +1.2**
**CZSB Cruzeiro do Su 25.88 139** *e*P **P 00 31 30.6 +0.8**
**WCI Wyandotte Cave 26.00 6** P **P 00 31 29.6 -1.1**
**WCI Wyandotte Cave 26.00 6** P **P 00 31 29.8 -0.9**
baz=187
**WCI Wyandotte Cave 26.00 6** P **P 00 31 29.6 -1.1**
WCI pmax pmax
comp=Z,62nm,0.8s
**BLA Blacksburg 26.11 16** P **P 00 31 30.2 -1.5**
BLA IAmb IAmb 00 31 35.2
comp=Z,34nm,0.8s
**BLA Blacksburg 26.11 16** P **P 00 31 31.4 -0.3**
baz=200,SNR=13
**BLA Blacksburg 26.11 16** P **P 00 31 30.2 -1.5**
BLA pmax pmax
comp=Z,34nm,0.8s
**SRIG Santa Rosalia 26.13 308** P **P 00 31 32.5 +0.5**
SRIG IAmb IAmb 00 31 39.6
comp=Z,58nm,1.1s
**121A Cookes Peak, D 26.30 323** P **P 00 31 34.2 +0.5**
121A IAmb IAmb 00 31 40.9
comp=Z,21nm,0.9s
**121A Cookes Peak, D 26.30 323** P **P 00 31 34.4 +0.7**
baz=136,SNR=10
**319A Douglas 26.42 319** P **P 00 31 35.1 +0.3**
319A IAmb IAmb 00 32 07.2
comp=Z,28nm,1.3s
**NNA Nana 27.13 152** LR LR 00 39 56.6
comp=Z,107nm,21.1s,baz=306,slow=31
**NNA Nana 27.13 152** *i* P **P 00 31 40.4 -0.7**
NNA pmax pmax

comp=Z,47nm,1.6s
ANMO Albuquerque 27.38 328 P P 00 31 43.4 0.0
ANMO Albuquerque 27.38 328 *i* P P 00 31 41.7 -1.7
P49A Miami Univ. Ec 27.47 8 P P 00 31 42.1 -1.8
P49A IAmb IAmb 00 31 45.2
comp=Z,59nm,1.6s
P49A Miami Univ. Ec 27.47 8 P P 00 31 42.4 -1.5
baz=190,SNR=7.3
KSU1 Kansas State U 27.48 348 P P 00 31 43.2 -0.9
KSU1 Kansas State U 27.48 348 P P 00 31 43.8 -0.3
baz=164,SNR=19
CBN Corbin Frederi 27.96 20 P P 00 31 48.1 -0.3
baz=206
CBKS Cedar Bluff 27.99 343 P P 00 31 48.5 -0.1
baz=158
TUC Tucson 28.00 319 P P 00 31 49.5 +0.6
TUC Tucson 28.00 319 P P 00 31 50.5 +1.7
baz=131
TUC Tucson 28.00 319 P P 00 31 49.5 +0.6
TUC pmax pmax
comp=Z,9.0nm,0.9s
P52A Corning 28.00 12 P P 00 31 47.2 -1.5
baz=195
SFIN Lafayette 28.07 4 P P 00 31 48.0 -1.3
baz=185
O48B Farmland 28.12 7 P P 00 31 48.3 -1.5
baz=189,SNR=6.0
HDIL Hopedale 28.18 0 P P 00 31 48.9 -1.4
HDIL IAmb IAmb 00 32 43.1
comp=Z,49nm,1.0s
HDIL Hopedale 28.18 0 P P 00 31 49.7 -0.5
baz=180
T25A Trinidad 28.19 334 P P 00 31 50.0 -0.7
T25A IAmb IAmb 00 31 55.6
comp=Z,13nm,0.8s
T25A Trinidad 28.19 334 P P 00 31 50.5 -0.2
baz=148,SNR=13
ACSO Alum Creek Sta 28.42 10 P P 00 31 51.1 -1.3
ACSO IAmb IAmb 00 31 54.6
comp=Z,19nm,0.8s
ACSO Alum Creek Sta 28.42 10 P P 00 31 51.5 -0.9
baz=193,SNR=7.6
MCWV Mont Chateau 28.56 16 P P 00 31 53.0 -0.7
MCWV IAmb IAmb 00 31 56.3
comp=Z,24nm,0.8s
MCWV Mont Chateau 28.56 16 P P 00 31 52.6 -1.0
baz=200,SNR=8.5
O53A New Philadelph 28.79 13 P P 00 31 54.4 -1.3
baz=197,SNR=7.9
KSCO Kaye Shedlock' 29.11 338 P P 00 31 58.1 -0.7
KSCO IAmb IAmb 00 32 01.5
comp=Z,32nm,0.8s
KSCO Kaye Shedlock' 29.11 338 P P 00 31 59.3 +0.5
baz=153
214A Organ Pipe Nat 29.11 316 P P 00 31 59.7 +0.9
baz=127,SNR=5.8
TEFE Tefe 29.17 121 *eP* P 00 31 59.5 +0.1
SDCO Great Sand Dun 29.18 333 P P 00 31 59.3 -0.2
baz=146
SDMD Soldier's Deli 29.23 20 P P 00 31 58.7 -0.9
SDMD IAmb IAmb 00 32 09.8
comp=Z,12nm,0.7s
W18A Petrified Fore 29.28 324 P P 00 32 00.8 +0.4
baz=136
SCIA State Center 29.71 354 P P 00 32 03.0 -0.9
SCIA IAmb IAmb 00 32 05.6
comp=Z,24nm,0.6s
SCIA State Center 29.71 354 P P 00 32 04.1 +0.2
baz=172
S22A 4UR Ranch, Cre 29.78 331 P P 00 32 05.2 +0.4
baz=144,SNR=16
X16A Lo Mia Camp, P 29.80 321 P P 00 32 05.3 +0.3
L44A Lake County Fo 29.82 2 P P 00 32 04.6 -0.3
baz=183
SSPA Standing Stone 30.01 18 P P 00 32 05.4 -1.1
SSPA Standing Stone 30.01 18 P P 00 32 06.2 -0.3
baz=203
BGNE Belgrade 30.02 347 P P 00 32 07.6 +0.9
baz=163,SNR=6.0
M53A WI Miller and 30.04 13 P P 00 32 05.9 -0.9
M53A IAmb IAmb 00 32 16.1
comp=Z,26nm,0.9s
M53A WI Miller and 30.04 13 P P 00 32 06.9 +0.1
baz=197
Q24A Divide 30.05 335 P P 00 32 06.6 -0.7
Q24A Divide 30.05 335 P P 00 32 08.2 +1.0
baz=148
MVCO Mesa Verde 30.17 329 P P 00 32 08.2 -0.1
MVCO IAmb IAmb 00 32 33.9
comp=Z,41nm,1.9s
MVCO Mesa Verde 30.17 329 P P 00 32 09.3 +1.0
baz=140
BBSR BB Station 30.23 45 P P 00 32 08.2 -0.3
BOAV Boa Vista 30.23 107 P P 00 32 08.2 -0.6
BOAV IAmb IAmb 00 32 21.0
comp=Z,19nm,0.9s
BOAV Boa Vista 30.23 107 *eP* P 00 32 10.0 +1.2
AAM Ann Arbor 30.33 8 P P 00 32 09.1 -0.2
baz=191
WUAZ Wupatki 30.51 323 P P 00 32 11.9 +0.7
WUAZ Wupatki 30.51 323 P P 00 32 12.2 +1.0
baz=134
JFWS Jewell Farm 30.54 359 P P 00 32 11.9 +0.7
baz=178,SNR=14
OGNE Ogallala 30.65 341 P P 00 32 13.4 +1.2
baz=155
ERPA Erie 30.84 14 P P 00 32 15.5 +1.6
baz=198
ISCO Idaho Springs 30.94 335 P P 00 32 16.6 +1.4
baz=148
ISCO Idaho Springs 30.94 335 P P 00 32 17.5 +2.3
GLA Glamis 31.14 316 P P 00 32 16.4 -0.2
GLA IAmb IAmb 00 32 19.7
comp=Z,31nm,1.3s
GLA Glamis 31.14 316 P P 00 32 18.1 +1.4
baz=126,SNR=5.3
GLA Glamis 31.14 316 P P 00 32 16.4 -0.2
GLA pmax pmax
comp=Z,31nm,1.3s
PDMCI Parker Dam,Lak 31.43 318 P P 00 32 20.6 +1.4
baz=128,SNR=7.7
ODNJ Ogdensburg 31.50 22 P P 00 32 18.6 -1.0
PAL Palisades 31.69 23 P P 00 32 21.1 -0.2
baz=210
SWSC Sam W. Stewart 31.74 315 P P 00 32 23.6 +1.7
baz=124,SNR=5.5
IKP In-Ko-Pah, Jac 31.80 314 P P 00 32 24.2 +1.7
baz=124
ETMB Extrema 31.81 133 P P 00 32 22.1 -0.6
ETMB Extrema 31.81 133 *eP* P 00 32 22.7 +0.1
HMU Henry Mountain 31.89 327 P P 00 32 23.8 +0.3
BC3 Big Chuckawall 31.91 316 P P 00 32 25.5 +2.0
baz=126,SNR=15
ECSD EROS Data Cent 31.96 350 P P 00 32 22.8 -1.0
ECSD IAmb IAmb 00 32 26.8
comp=Z,16nm,0.9s
ECSD EROS Data Cent 31.96 350 P P 00 32 23.9 +0.2
baz=167,SNR=15
IRM Iron Mountain 32.00 317 P P 00 32 26.1 +1.9
baz=127,SNR=11
N23A Red Feather La 32.01 336 P P 00 32 26.0 +1.6
baz=148
BINY Binghamton 32.02 19 P P 00 32 23.6 -0.6
baz=205,SNR=5.4
MONP2 Monument Peak 32.15 314 P P 00 32 27.2 +1.4
baz=123,SNR=5.8
O20A White River Ci 32.35 332 P P 00 32 29.2 +1.7
baz=144,SNR=9.2
MACA Manacapuru-AM 32.39 116 P P 00 32 27.7 -0.1
MACA IAmb IAmb 00 32 41.3
comp=Z,28nm,0.8s
MACA Manacapuru-AM 32.39 116 *eP* P 00 32 28.9 +1.1
BELC Belle Mtn. Jos 32.48 316 P P 00 32 30.3 +1.7
baz=125,SNR=6.7
TPFO Pinon Flats 32.57 315 P P 00 32 31.2 +1.9
baz=124
PFO Pinyon Flats O 32.57 315 LR LR 00 47 23.3
comp=Z,203nm,19.0s,baz=134,slow=39
PFO Pinyon Flats O 32.57 315 P P 00 32 30.4 +1.1
baz=124
PFO Pinyon Flats O 32.57 315 *i* P P 00 32 28.3 -1.1
PFO pmax pmax
comp=Z,7.0nm,1.0s
GMRC Granite Mounta 32.72 318 P P 00 32 32.6 +2.0
baz=127,SNR=6.9
V12A Nelson 32.77 320 P P 00 32 31.5 +0.4
V12A IAmb IAmb 00 32 45.9
comp=Z,11nm,0.9s
SPMN Marine on St. 32.97 356 P P 00 32 31.1 -1.5
SPMN Marine on St. 32.97 356 P P 00 32 33.0 +0.5
baz=174,SNR=19
SUSD Miller 33.09 347 P P 00 32 33.1 -0.6
SUSD Miller 33.09 347 P P 00 32 34.8 +1.1
baz=163,SNR=8.4
J57A Williamstown 33.12 18 P P 00 32 32.7 -1.1
J57A IAmb IAmb 00 32 43.2
comp=Z,23nm,0.9s
HEC Hector,Ludlow 33.19 317 P P 00 32 34.7 0.0
baz=126
TUQ Turquoise Moun 33.28 318 P P 00 32 36.9 +1.3
baz=127
L61B Northampton 33.40 23 P P 00 32 35.7 -0.6
baz=211
SAML Samuel 33.51 128 P P 00 32 37.0 -0.6
SAML IAmb IAmb 00 32 49.3
comp=Z,31nm,1.1s
SAML Samuel 33.51 128 P P 00 32 37.0 -0.6
SAML pmax pmax
comp=Z,31nm,1.1s
SAML Samuel 33.51 128 *eP* P 00 32 37.5 0.0
SADO Sadowa 33.55 13 P P 00 32 36.1 -1.5
SADO IAmb IAmb 00 32 39.8
comp=Z,21nm,0.7s
SADO Sadowa 33.55 13 LR LR 00 46 37.3
comp=Z,185nm,21.3s,baz=226,slow=37
K22A Casper 33.73 337 P P 00 32 40.8 +1.4
baz=149,SNR=5.8
BFSC Mount Baldy Ra 33.75 315 P P 00 32 40.6 +0.9
baz=124
GSC Goldstone, Bar 33.78 317 P P 00 32 41.5 +1.7
baz=126
SHOC Shoshone, Teco 33.79 319 P P 00 32 40.2 +0.4
baz=127
HRV Adam Dziewonsk 33.88 24 P P 00 32 40.9 +0.4
baz=212
RSSD Black Hills 34.15 341 P P 00 32 43.2 +0.1
RSSD IAmb IAmb 00 32 46.2
comp=Z,9.3nm,0.7s
RSSD Black Hills 34.15 341 P P 00 32 44.7 +1.6
baz=154
RSSD Black Hills 34.15 341 P P 00 32 43.2 +0.1
RSSD pmax pmax
comp=Z,9.0nm,0.7s
EDW2 Edwards Air Fo 34.34 316 P P 00 32 46.2 +1.5
baz=124,SNR=5.0
TPNV Topopah Spring 34.42 320 P P 00 32 47.3 +1.8
baz=129
LRMC Laurel Mtn Rad 34.47 317 P P 00 32 47.0 +1.1
baz=125
FURC Furnace Creek, 34.51 319 P P 00 32 47.6 +1.6
baz=127
DUG Dugway, Tooele 34.64 328 P P 00 32 46.8 -0.5
DUG Dugway, Tooele 34.64 328 P P 00 32 47.8 +0.5
baz=137
DUG Dugway, Tooele 34.64 328 P P 00 32 46.8 -0.5
DUG pmax pmax
comp=Z,5.0nm,1.1s
LONY Lake Ozonia 34.65 19 P P 00 32 46.3 -0.8
baz=206,SNR=6.7
MPMC Manual Prospec 34.67 318 P P 00 32 48.4 +0.7
baz=126,SNR=13
WBO Williamsburg 34.78 18 P P 00 32 46.5 -1.7
WBO IAmb IAmb 00 32 57.5
comp=Z,12nm,0.8s
R11B Troy Canyon, C 34.91 323 P P 00 32 51.4 +1.7
baz=131
ARVC Arvin 35.05 315 P P 00 32 52.1 +1.4
baz=123
BW06 Boulder Array 35.06 334 P P 00 32 53.1 +2.1
baz=144
PD31 Pinedale Array 35.06 334 P P 00 32 51.1 +0.1
PDAR Pinedale Array 35.06 334 P P 00 32 50.7 -0.3
PDAR Pinedale Array 35.06 334 P P 00 32 51.6 +0.6
comp=Z,1.7nm,0.6s,baz=125,slow=9.3,SNR=17
PDAR PcP PcP 00 35 22.4 -0.1
comp=Z,1.0nm,0.6s,baz=134,slow=4.3,SNR=4.9
PDAR ScP ScP 00 39 11.9 +5.5
comp=Z,1.4nm,0.9s,baz=146,slow=5.0,SNR=7.6
comp=Z,1.7nm,0.6s
ISA Isabella, Lake 35.10 316 P P 00 32 52.8 +1.5
baz=124
GRAC Grapevine Rang 35.15 319 P P 00 32 51.4 -0.2
baz=127
LBNH Lisbon 35.22 22 P P 00 32 51.5 -0.5
baz=210
CWC Cottonwood Cre 35.28 318 P P 00 32 52.2 -0.7
baz=126
LPAZ La Paz 35.32 143 P P 00 32 52.9 -1.0
LPAZ La Paz 35.32 143 P P 00 32 53.4 -0.5
comp=Z,5.0nm,0.8s,baz=337,slow=8.1,SNR=21
LPAZ LR LR 00 45 07.7
comp=Z,112nm,21.8s,baz=296,slow=33
comp=Z,5.0nm,0.8s
LPAZ La Paz 35.32 143 *eP* P 00 32 53.2 -0.6
EYMN Ely 35.61 358 P P 00 32 55.6 +0.3
baz=176,SNR=25
VES Vestal, Richgr 35.61 316 P P 00 32 57.4 +1.9
baz=124,SNR=7.7
TPH Tonopah 35.72 321 P P 00 32 56.6 -0.1
TPH IAmb IAmb 00 33 22.8
comp=Z,25nm,1.1s
TPH Tonopah 35.72 321 P P 00 32 56.6 -0.1
TPH pmax pmax
comp=Z,25nm,1.1s
MNTQ Montreal, Queb 35.74 19 P P 00 32 55.3 -1.2
TRQ Mont Tremblant 36.10 18 P P 00 32 57.8 -1.9
REDW Red Top Meadow 36.11 333 P P 00 32 59.4 -0.6
REDW IAmb IAmb 00 33 04.0
comp=Z,29nm,0.7s
AGMN Agassiz Nation 36.32 353 P P 00 33 00.3 -1.2
AGMN Agassiz Nation 36.32 353 P P 00 33 01.9 +0.5
baz=169,SNR=27
ELK Elko 36.33 326 LR LR 00 51 30.0
comp=Z,176nm,18.7s,baz=116,slow=42
ELK Elko 36.33 326 P P 00 33 03.5 +1.6
MDND Maddock 36.48 348 P P 00 33 04.7 +1.9
baz=163,SNR=7.8
NV11 Mina Array Sit 36.52 321 P P 00 33 04.3 +0.8
IMW Indian Meadow 36.57 334 P P 00 33 04.0 0.0
NVAR Mina Array Bea 36.61 320 P P 00 33 04.8 +0.4
NVAR Mina Array Bea 36.61 320 P P 00 33 06.3 +2.0
comp=Z,7.2nm,0.9s,baz=139,slow=8.4,SNR=48
NVAR PcP PcP 00 35 28.7 +1.4
comp=Z,4.9nm,0.7s,baz=134,slow=4.1,SNR=15
NVAR ScP ScP 00 39 18.8 +6.6
comp=Z,0.9nm,0.8s,baz=121,slow=4.8,SNR=5.1
comp=Z,7.2nm,0.9s
MDPB Devils Postpil 36.63 319 P P 00 33 05.0 +0.5
LHV Little Huntoon 36.63 320 P P 00 33 05.7 +1.5
LHV IAmb IAmb 00 33 19.9
comp=Z,15nm,0.8s
H17A Grant Village 36.81 334 P P 00 33 08.4 +2.4
baz=144
RLMT Red Lodge 36.88 336 P P 00 33 09.0 +2.5
baz=146,SNR=15
MDP Montagnes des 36.98 98 LR LR 00 50 56.9
comp=Z,136nm,18.1s,baz=310,slow=41
PKME Peaks-Kenny Pk 37.08 24 P P 00 33 07.3 -0.7
baz=214,SNR=5.7
LAO LASA Array 37.13 341 P P 00 33 08.9 +0.4
baz=152,SNR=7.0
BMN Battle Mountai 37.23 324 P P 00 33 09.7 +0.2
BMN Battle Mountai 37.23 324 P P 00 33 09.7 +0.2
BMN pmax pmax
comp=Z,6.0nm,1.1s
YHH Holmes Hill 37.25 335 P P 00 33 10.4 +0.7
ITTB Itaituba 37.31 114 *eP* P 00 33 10.7 +0.4
HLID Hailey 37.92 330 P P 00 33 15.9 +0.6
baz=138,SNR=7.1
GGN Saint George 37.98 26 P P 00 33 14.6 -0.9
DGMT Dagmar 38.14 344 P P 00 33 16.1 -0.9
DGMT Dagmar 38.14 344 P P 00 33 18.6 +1.7
baz=156,SNR=12
BOZ Bozeman (W) 38.23 335 P P 00 33 19.9 +2.0
baz=143,SNR=9.3
ULM Lac du Bonnet 38.24 353 P P 00 33 16.3 -1.4
ULM IAmb IAmb 00 33 18.6
comp=Z,22nm,0.8s
ULM Lac du Bonnet 38.24 353 P P 00 33 16.6 -1.1
comp=Z,24nm,0.8s,baz=171,slow=8.5,SNR=32
ULM LR LR 00 51 56.7
comp=Z,121nm,18.3s,baz=158,slow=41
comp=Z,24nm,0.8s
VILB Vilhena 38.29 130 P P 00 33 18.2 -0.4
VILB Vilhena 38.29 130 *eP* P 00 33 18.8 +0.2
NPGB Novo Progresso 38.90 118 *eP* P 00 33 24.1 +0.3
MCPB Macapa, AP 39.12 106 *eP* P 00 33 25.5 -0.1
EGMT Eagleton 39.50 338 P P 00 33 29.7 +1.3
baz=148,SNR=14
BPMT Black Pine Rid 39.66 334 P P 00 33 29.4 -0.6
SIV San Ignacio 39.66 134 LR LR 00 48 48.7
comp=Z,134nm,18.9s,baz=297,slow=35
J08A Circle Bar Ran 39.87 326 P P 00 33 31.6 0.0
BATG Bathurst New B 40.02 25 P P 00 33 31.5 -1.2
BATG IAmb IAmb 00 33 34.5
comp=Z,20nm,0.9s
LVC Limon Verde 40.06 150 LR LR 00 48 40.8
comp=Z,51nm,18.6s,baz=316,slow=34
LVC Limon Verde 40.06 150 *eP* P 00 33 34.0 +0.4
PDRB Porto dos Gac 40.18 125 *eP* P 00 33 34.0 -0.4
MSO Missoula 40.18 334 P P 00 33 33.4 -0.7
MSO Missoula 40.18 334 P P 00 33 34.5 +0.3
baz=141
O02D Mt. Diablo Mer 40.45 319 P P 00 33 36.0 -0.5
CLDB Colider 40.52 123 *eP* P 00 33 37.4 +0.2
PTLB Pontes e Lacer 40.69 132 P P 00 33 37.5 -1.0
PTLB IAmb IAmb 00 33 40.2
comp=Z,40nm,2.0s
PTLB Pontes e Lacer 40.69 132 *eP* P 00 33 38.6 +0.1
BBSD Serra de San D 40.81 135 *eP* P 00 33 39.7 +0.2
F10A Beach Ranch, E 41.05 330 P P 00 33 41.1 -0.2
PB14 IPOC Station P 41.09 153 P P 00 33 42.2 +0.2
YBH Yreka Blue Hor 41.29 321 LR LR 00 54 37.9
comp=Z,117nm,18.4s,baz=144,slow=42
ICQ Pointe Anglais 41.38 22 P P 00 33 41.8 -2.0
ICQ IAmb IAmb 00 33 45.1
comp=Z,21nm,0.8s
PINE Pine Muntain 41.51 325 P P 00 33 44.6 -0.6
NEW Newport 42.68 333 LR LR 00 54 35.0
comp=Z,113nm,18.7s,baz=136,slow=40
NEW Newport 42.68 333 P P 00 33 55.0 +0.5
baz=138
PRPB Parauapebas 43.40 113 *eP* P 00 33 59.2 -1.6
FFC Flin Flon 43.50 349 P P 00 34 00.1 -0.9
FFC Flin Flon 43.50 349 P P 00 34 00.1 -0.9
FFC pmax pmax
comp=Z,11nm,0.7s
TMAB Tom-Au,PA,Br 43.52 107 *eP* P 00 34 02.9 +1.1
SALV Santo Antonio 43.53 129 *eP* P 00 34 01.7 0.0
RPN Rapa Nui 43.69 206 LR LR 00 48 20.0
comp=Z,104nm,20.2s,baz=23,slow=31
SNDB Serra Nova Dou 44.83 121 *eP* P 00 34 12.4 +0.2
LCO Las Campanas 44.84 157 P P 00 34 11.5 -0.8
LCO IAmb IAmb 00 34 13.6
comp=Z,26nm,1.1s
LCO Las Campanas 44.84 157 P P 00 34 11.5 -0.8
LCO pmax pmax
comp=Z,26nm,1.2s
DRLN Deer Lake 45.31 29 P P 00 34 14.3 -1.2
MURT Porto Murtinho 45.94 137 *eP* P 00 34 20.4 -0.4
SCHQ Schefferville 46.01 18 P P 00 34 19.6 -1.5
comp=Z,40nm,1.0s,baz=221,slow=7.3,SNR=28
SCHQ PcP PcP 00 35 58.0 +0.8
comp=Z,11nm,0.8s,baz=227,slow=1.4,SNR=5.3
SCHQ LR LR 00 53 44.9
comp=Z,79nm,21.5s,baz=239,slow=36
comp=Z,40nm,1.0s
ARAG Araguaiana, MT 46.43 126 *eP* P 00 34 24.4 -0.4
AQDB Aquidauana 46.44 134 P P 00 34 24.3 -0.6
AQDB IAmb IAmb 00 34 33.7
comp=Z,25nm,1.0s
AQDB Aquidauana 46.44 134 *eP* P 00 34 25.1 +0.3
FCC Fort Churchill 46.53 357 P P 00 34 24.9 -0.1
FCC IAmb IAmb 00 34 26.8
comp=Z,17nm,0.7s
FCC Fort Churchill 46.53 357 P P 00 34 24.9 -0.1
FCC pmax pmax
comp=Z,17nm,0.7s
SMTB Santa Maria do 46.55 115 *eP* P 00 34 25.3 -0.5
PAPY Pozo Azul 47.26 140 *eP* P 00 34 31.6 +0.5
ZON Zonda 47.88 156 P P 00 34 36.1 +0.1
ZON Zonda 47.88 156 P P 00 34 36.1 +0.1
ZON pmax pmax
comp=Z,39nm,1.3s
VA03 San Esteban 48.26 159 P P 00 34 39.0 0.0
MT08 Bocatoma Ro 49.07 158 P P 00 34 45.3 0.0
MT08 IAmb IAmb 00 34 47.7
comp=Z,27nm,0.9s
LMEL Las Melosas 49.37 159 P P 00 34 47.7 +0.3
LMEL IAmb IAmb 00 35 04.4
comp=Z,33nm,1.5s
CPUP Villa Florida 49.44 141 P P 00 34 47.0 -0.9
CPUP IAmb IAmb 00 34 48.5
comp=Z,12nm,1.1s
CPUP Villa Florida 49.44 141 P P 00 34 46.8 -1.2
comp=Z,7.0nm,1.0s,baz=349,slow=7.0,SNR=8.2
CPUP LR LR 00 54 47.8
comp=Z,57nm,20.8s,baz=336,slow=35
comp=Z,7.0nm,1.0s
CPUP Villa Florida 49.44 141 P P 00 34 47.0 -0.9
CPUP pmax pmax
comp=Z,12nm,1.1s
CPUP Villa Florida 49.44 141 *eP* P 00 34 47.2 -0.8
BDFB Brasilia 49.45 123 P P 00 34 48.2 -0.2
BDFB IAmb IAmb 00 34 54.4
comp=Z,10nm,0.9s
BDFB Brasilia 49.45 123 P P 00 34 47.5 -0.9
comp=Z,4.1nm,0.6s,baz=274,slow=9.6,SNR=12
BDFB PcP PcP 00 36 11.3 +0.9
comp=Z,3.5nm,0.8s,baz=28,slow=11,SNR=2.2
BDFB LR LR 00 57 28.3
comp=Z,175nm,18.2s,baz=323,slow=38
comp=Z,4.1nm,0.6s
BDFB Brasilia 49.45 123 P P 00 34 48.2 -0.2
BDFB pmax pmax
comp=Z,10.0nm,0.9s
BO01 Tunca 49.56 160 P P 00 34 48.0 -0.7
BO01 IAmb IAmb 00 34 50.0
comp=Z,20nm,1.1s
ITRB Iturama 49.87 129 *eP* P 00 34 51.6 +0.2
BO02 Sierra Bellavi 50.02 160 P P 00 34 52.0 -0.3
BO02 IAmb IAmb 00 34 53.7
comp=Z,16nm,1.0s
TRCB Terra Rica 50.11 134 *eP* P 00 34 52.8 -0.3
PCMB Pacaembu 50.34 132 *eP* P 00 34 54.4 -0.5
SDBA SAO DESIDERIO 50.49 117 *eP* P 00 34 55.5 -0.7
BBB Bella Bella 50.51 330 LR LR 00 59 29.1
comp=Z,61nm,19.2s,baz=150,slow=40
IPMB Ipameri, GO 50.55 126 *eP* P 00 34 56.1 -0.5
ML02 Panimavida 50.71 161 P P 00 34 56.8 -0.6
LDASE Londrina, Braz 51.56 133 *eP* P 00 35 03.3 -0.8
BI02 San Fabin de 51.58 161 P P 00 35 03.2 -0.8
BI02 IAmb IAmb 00 35 07.5
comp=Z,11nm,0.9s
BB19B Bebedouro 52.05 129 *eP* P 00 35 07.0 -0.8
PMNB Patos De Minas 52.26 125 *eP* P 00 35 10.4 +0.9
ITQB Itaqui 52.31 143 P P 00 35 09.0 -0.6
ITQB Itaqui 52.31 143 *eP* P 00 35 09.8 +0.3
CRSM Crissiumal (Br 52.32 140 *eP* P 00 35 08.7 -0.9
FRTB Fartura 52.65 132 *eP* P 00 35 12.1 0.0
YKA Yellowknife Ar 53.30 346 P P 00 35 16.4 0.0
YKA Yellowknife Ar 53.30 346 P P 00 35 16.3 -0.1
comp=Z,16nm,0.8s,baz=144,slow=7.4,SNR=21
YKA PcP PcP 00 36 24.2 +0.5
comp=Z,5.2nm,0.8s,baz=148,slow=3.7,SNR=5.1
YKA LR LR 01 01 35.8
comp=Z,110nm,18.3s,baz=148,slow=40
comp=Z,16nm,0.8s
YKA Yellowknife Ar 53.30 346 *eP* P 00 35 17.7 +1.3
YKA pmax pmax
comp=Z,17nm,0.9s
ITAB Concordia 53.38 138 P P 00 35 16.2 -1.2
ITAB Concordia 53.38 138 *eP* P 00 35 16.9 -0.5
FRB Frobisher Bay 53.46 11 LR LR 00 57 44.6
comp=Z,181nm,21.9s,baz=198,slow=36
RODS Rosario do Sul 53.65 143 *eP* P 00 35 19.3 -0.1
TOAD Toad River Com 53.68 338 P P 00 35 19.7 +0.4
baz=135
ALGR Alto Alegre (B 53.87 140 *eP* P 00 35 19.8 -1.3
GO06 Curarrehue 54.22 163 P P 00 35 22.9 -0.6
GO06 IAmb IAmb 00 35 24.1
comp=Z,12nm,1.1s
SPB Sao Paulo 54.35 131 *eP* P 00 35 24.3 -0.4
VAO Valinhos 54.35 130 P P 00 35 23.9 -0.9
VAO IAmb IAmb 00 35 31.8
comp=Z,13nm,0.7s
VAO Valinhos 54.35 130 *eP* P 00 35 24.6 -0.2

DIAM Diamantina, MG 54.38 123 eP P 00 35 25.0 -0.1
TAOE Nuku Hiva Isla 54.64 250 eLR LR 00 51 10.6
comp=Z,152nm,23.0s
LR05 Currie 54.67 164 P P 00 35 26.4 -0.3
LR05 IAmb IAmb 00 35 33.3
comp=Z,31nm,1.1s
CPSB Cacapava Do Su 54.74 142 eP P 00 35 27.1 -0.2
PET01 Itanhaem-SP 54.88 132 eP P 00 35 28.5 0.0
BSCB Bom Sucesso 54.91 127 eP P 00 35 28.7 -0.1
LL04 Puerto Octay 55.20 164 P P 00 35 30.8 +0.3
PLCA Paso Flores 55.55 163 P P 00 35 32.7 -0.4
PLCA IAmb IAmb 00 35 34.3
comp=Z,17nm,1.1s
PLCA Paso Flores 55.55 163 P P 00 35 33.0 0.0
comp=Z,9.9nm,0.9s,baz=341,slow=8.8,SNR=16
PLCA LR LR 00 54 03.2
comp=Z,65nm,19.8s,baz=342,slow=30
comp=Z,9.9nm,0.9s
PLCA Paso Flores 55.55 163 eP P 00 35 31.6 -1.5
PLTB Pedras Altas 55.61 143 P P 00 35 32.8 -0.9
PLTB Pedras Altas 55.61 143 eP P 00 35 33.2 -0.4
RCBR Riachuelo 56.13 106 P P 00 35 37.9 +0.1
RCBR IAmb IAmb 00 35 51.2
comp=Z,24nm,1.1s
RCBR Riachuelo 56.13 106 LR LR 01 03 37.8
comp=Z,43nm,18.3s,baz=333,slow=40
RCBR Riachuelo 56.13 106 P P 00 35 37.9 +0.1
RCBR pmax pmax
comp=Z,24nm,1.2s
RCBR Riachuelo 56.13 106 eP P 00 35 37.6 -0.1
TRQA Tornquist 56.27 154 P P 00 35 37.9 -0.3
TRQA IAmb IAmb 00 35 39.1
comp=Z,30nm,1.4s
TRQA Tornquist 56.27 154 P P 00 35 37.9 -0.3
TRQA pmax pmax
comp=Z,30nm,1.4s
LL01 San Ignacio de 56.57 165 P P 00 35 40.1 -0.2
LL01 IAmb IAmb 00 35 44.4
comp=Z,23nm,1.1s
RKT Rikitea 56.81 232 eS S 00 43 32.0 -2.2
comp=Z,622nm,31.2s
RKT eLR LR 00 52 21.7
comp=Z,2µm,39.0s
NBAN Anadia - AL 57.10 110 eP P 00 35 44.9 +0.3
IVI Ivigtut 57.27 22 P P 00 35 43.8 -1.1
IVI IAmb IAmb 00 35 48.3
comp=Z,17nm,0.8s
IVI Ivigtut 57.27 22 eP P 00 35 43.9 -1.1
IVI IAmb IAmb 00 35 45.9
comp=Z,13nm,0.6s
LL02 Futaleuf 57.48 165 P P 00 35 46.3 -0.4
LL02 IAmb IAmb 00 35 48.2
comp=Z,32nm,1.2s
RIB01 Linhares ES 57.57 122 eP P 00 35 47.6 -0.2
NUUK Nuuk 58.08 18 eP P 00 35 51.4 +0.8
MMPY Sheldon Lake, 58.41 339 P P 00 35 52.8 -0.3
MMPY IAmb IAmb 00 37 01.9
comp=Z,17nm,1.6s
MMPY Sheldon Lake, 58.41 339 P P 00 35 53.3 +0.2
baz=130
O30N Mendenhall 59.14 335 P P 00 35 58.2 0.0
baz=124
COYC Coyhaique 59.66 166 P P 00 36 01.9 +0.1
SFJD Kangerlussuaq 60.42 16 LR LR 01 02 14.5
comp=Z,62nm,21.9s,baz=216,slow=36
YUK8 Steele Glacier 60.92 335 P P 00 36 10.7 0.0
baz=120
M29M Somme Creek 61.00 336 P P 00 36 11.4 +0.4
baz=122
I30M Mount Dempster 61.80 340 P P 00 36 15.5 -0.9
I30M Mount Dempster 61.80 340 P P 00 36 16.8 +0.4
baz=126
G31M Satah River 62.15 342 P P 00 36 18.1 -0.4
baz=129
GO08 Villa O'Higgin 62.28 167 P P 00 36 19.3 -0.3
M27K Edge Creek, AK 62.33 335 P P 00 36 19.8 -0.2
M27K Edge Creek, AK 62.33 335 P P 00 36 20.0 0.0
baz=119
RES Resolute Bay 62.48 358 P P 00 36 20.4 -0.1
RES IAmb IAmb 00 36 23.4
comp=Z,6.8nm,0.8s
RES Resolute Bay 62.48 358 LR LR 01 04 06.6
comp=Z,68nm,20.1s,baz=193,slow=37
RES Resolute Bay 62.48 358 P P 00 36 20.4 -0.1
RES pmax pmax
comp=Z,7.0nm,0.8s
EPYK Eagle Plains 62.59 340 P P 00 36 21.7 +0.2
baz=126
BCAR Beaver Creek A 62.64 336 P P 00 36 21.8 -0.2
L27K Beaver Creek, 62.65 336 P P 00 36 22.5 +0.5
baz=119,SNR=5.2
G30M tAoh Zraii Nji 62.80 341 P P 00 36 23.5 +0.6
baz=127
M26K Nabesna, AK 62.81 335 P P 00 36 23.2 +0.1
baz=118
INK Inuvik 62.82 343 P P 00 36 23.1 +0.2
INK IAmb IAmb 00 36 25.7
comp=Z,11nm,0.8s
INK Inuvik 62.82 343 LR LR 01 09 23.2
comp=Z,62nm,18.5s,baz=118,slow=42
INK Inuvik 62.82 343 P P 00 36 23.3 +0.4
baz=130,SNR=6.3
INK Inuvik 62.82 343 P P 00 36 23.1 +0.2
INK pmax pmax
comp=Z,11nm,0.9s
BMRM Bremner River 62.85 333 P P 00 36 23.5 +0.1
baz=116
F30M Barrier River 63.04 342 P P 00 36 24.7 +0.2
baz=127,SNR=6.4
H29M Whitestone 63.05 340 P P 00 36 25.0 +0.4
baz=124
N25K Chitina, Valde 63.12 334 P P 00 36 25.2 0.0
baz=116
NUUG Nuugaatsiaq 63.16 12 iP P 00 36 23.7 -1.5
I28M Miner Creek 63.17 339 P P 00 36 25.6 +0.1
baz=122
EYAK Cordova Ski Ar 63.18 333 P P 00 36 26.0 +0.5
baz=114
K27K Chicken 63.23 337 P P 00 36 25.8 0.0
baz=119
L26K Log Cabin Wild 63.24 336 P P 00 36 26.0 +0.1
baz=118
EGAK Eagle 63.26 338 P P 00 36 26.2 +0.3
EGAK Eagle 63.26 338 P P 00 36 25.1 -0.8
baz=121
G29M Pine Creek 63.33 341 P P 00 36 26.0 -0.4
baz=125
KLU Klutina 63.65 333 P P 00 36 28.9 +0.2
baz=114
I27K Kandik River 63.85 339 P P 00 36 29.5 -0.4
baz=121
J26L Joseph Creek 64.02 337 P P 00 36 30.7 -0.5
baz=118,SNR=8.1
PAX Paxson 64.08 335 P P 00 36 31.0 -0.6
baz=116
H27K Steamboat Moun 64.14 339 P P 00 36 32.7 +0.9
baz=121,SNR=7.7
E29M Blow River 64.15 342 P P 00 36 33.2 +1.4
baz=126,SNR=6.5
I26K Coal Creek Min 64.26 338 P P 00 36 32.7 +0.2
baz=119
F28M Old Crow 64.32 341 P P 00 36 33.8 +0.8
baz=123,SNR=17
G27K Doyon Strip 64.48 340 P P 00 36 34.9 +0.9
baz=121,SNR=9.1
M23K Glacier View 64.56 333 P P 00 36 35.3 +0.7
baz=113
K24K Donnelly Dome 64.57 336 P P 00 36 35.4 +0.7
baz=116
SEW Seward 64.72 331 P P 00 36 36.0 +0.5
baz=110
KNK Knik Glacier 64.74 333 P P 00 36 35.8 +0.1
baz=112
E28M Babbage River 64.77 342 P P 00 36 35.7 -0.1
baz=124
J25K Salcha River, 64.77 337 P P 00 36 36.3 +0.3
baz=116,SNR=8.2
SML Sawmill 64.83 333 P P 00 36 36.4 0.0
baz=112
WAT6 Susitna Watana 64.87 334 P P 00 36 36.9 +0.1
baz=113
DHY Denali Highway 64.92 335 P P 00 36 37.5 +0.4
baz=114
ICESG Greenland Ices 64.92 18 iP P 00 36 35.0 -2.2
GHO Glory Hole Cre 65.08 333 P P 00 36 37.7 -0.3
GHO IAmb IAmb 00 36 41.7
comp=Z,8.5nm,0.7s
E27K Coleen River 65.18 341 P P 00 36 39.4 +0.8
baz=122,SNR=6.9
RC01 Rabbit Creek A 65.19 332 P P 00 36 39.5 +0.8
baz=111
BRSE Bradley Lake S 65.20 331 P P 00 36 39.5 +0.7
baz=109
G26K Porcupine Rive 65.28 339 P P 00 36 39.2 0.0
baz=119
HDA Harding Lake 65.30 336 P P 00 36 39.2 -0.1
HDA IAmb IAmb 00 36 42.1
comp=Z,5.5nm,0.8s
HDA Harding Lake 65.30 336 P P 00 36 39.4 +0.1
baz=115
ILAR Eielson Array 65.42 337 P P 00 36 40.0 -0.1
ILAR Eielson Array 65.42 337 P P 00 36 39.7 -0.4
comp=Z,5.9nm,1.0s,baz=118,slow=4.5,SNR=33
ILAR PP PP 00 39 06.0 +1.9
comp=Z,0.7nm,1.0s,baz=123,slow=7.6,SNR=4.3
ILAR LR LR 01 07 47.6
comp=Z,70nm,21.1s,baz=47,slow=38
comp=Z,5.9nm,1.0s
ILAR Eielson Array 65.42 337 eP P 00 36 40.9 +0.8
ILAR pmax pmax
comp=Z,8.0nm,1.1s
KDAK Kodiak Island 65.52 328 LR LR 01 04 31.0
comp=Z,38nm,21.3s,baz=140,slow=35
KDAK Kodiak Island 65.52 328 iP P 00 36 40.8 0.0
KDAK pmax pmax
comp=Z,26nm,1.5s
D27M Malcolm River 65.55 342 P P 00 36 41.8 +0.9
baz=123
H25L Birch Creek 65.68 338 P P 00 36 42.8 +1.0
baz=117
OHAK Old Harbor 65.72 328 P P 00 36 43.4 +1.2
baz=106
F26K Shenjek River 65.76 340 P P 00 36 43.9 +1.5
baz=119,SNR=8.5
POKR Poker Plat Res 65.78 337 P P 00 36 41.9 -0.5
baz=115
BMAR Burnt Mountain 65.78 340 P P 00 36 42.4 -0.1
MCK McKinley 65.82 335 P P 00 36 43.0 +0.2
baz=112
COLA College 65.84 336 iP P 00 36 42.8 0.0
COLA pmax pmax
comp=Z,7.0nm,0.9s
G25K Bearman Lake 66.00 339 P P 00 36 44.8 +1.0
baz=116,SNR=5.9
NEA2 Nenana 66.21 336 P P 00 36 46.2 +1.0
baz=113
F25K Christian Rive 66.22 340 P P 00 36 46.5 +1.2
baz=117,SNR=11
H24K Noodor Dome 66.25 337 P P 00 36 46.0 +0.5
baz=114,SNR=5.3
SKT Skwentna 66.31 333 P P 00 36 45.9 0.0
SKT IAmb IAmb 00 36 47.2
comp=Z,7.0nm,1.0s
SKT Skwentna 66.31 333 P P 00 36 46.6 +0.7
baz=109,SNR=7.2
PPT Papeete 66.41 245 LR LR 00 58 16.1
comp=Z,147nm,18.7s,baz=234,slow=29
PPT2 Papeete2 66.42 245 eLR LR 00 56 29.4
comp=Z,248nm,28.5s
PPT2 eLR LR 00 56 30.3
comp=Z,347nm,26.0s
R18K Kaviuk 66.42 328 P P 00 36 47.4 +0.8
baz=105
G24K Hadweenzic Riv 66.47 338 P P 00 36 47.5 +0.6
baz=115
I23K Minto, Yukon-K 66.54 336 P P 00 36 47.5 +0.3
baz=113,SNR=12
C27K Jago River 66.58 342 P P 00 36 48.4 +0.9
baz=120
BPAW Bear Paw Mtn. 66.80 335 P P 00 36 48.5 -0.6
BPAW IAmb IAmb 00 36 51.8
comp=Z,7.1nm,0.8s
BPAW Bear Paw Mtn. 66.80 335 P P 00 36 49.3 +0.2
baz=111,SNR=10
H23K Yukon River 66.87 337 P P 00 36 49.8 +0.4
baz=113
F24K Squaw Lake 66.96 339 P P 00 36 51.1 +1.0
baz=115
Q18K Katmai Hardscr 66.98 329 P P 00 36 51.1 +0.7
baz=105
M20K Styx River 66.99 333 P P 00 36 50.8 +0.4
baz=108
MLY Manley 67.04 336 P P 00 36 50.6 0.0
baz=111,SNR=22
C26K Camden Bay 67.09 342 P P 00 36 52.5 +1.9
baz=119
SUMG Summit 67.24 15 P P 00 36 51.3 -0.8
SUMG IAmb IAmb 00 36 56.2
comp=Z,16nm,1.1s
SUMG Summit 67.24 15 P P 00 36 51.3 -0.8
SUMG pmax pmax
comp=Z,16nm,1.1s
SUMG Summit 67.24 15 iP P 00 36 51.0 -1.1
D25K Kavik River 67.26 341 P P 00 36 53.1 +1.2
baz=117,SNR=14
N19K Bonanza Creek 67.31 331 P P 00 36 52.7 +0.3
baz=106,SNR=6.2
Q17K Contact Creek 67.34 328 P P 00 36 53.2 +0.5
baz=104
O18K Koktuh Hills 67.39 330 P P 00 36 53.7 +0.8
baz=105
G23K Bananza Creek 67.40 338 P P 00 36 53.7 +0.9
baz=113,SNR=6.9
E24K Your Creek 67.40 340 P P 00 36 53.6 +0.7
baz=115
L20K Farewell, AK 67.51 333 P P 00 36 54.3 +0.7
baz=107,SNR=6.0
M19K Big River Lodg 67.57 332 P P 00 36 54.0 +0.1
baz=107
H22K Ishtalitna Cre 67.60 337 P P 00 36 53.8 -0.3
baz=111
COLD Coldfoot 67.66 338 P P 00 36 55.5 +1.2
baz=113
E23K Chandalar 67.78 339 P P 00 36 56.3 +1.0
baz=114,SNR=12
P17K Kvichak River 67.84 329 P P 00 36 55.2 -0.4
baz=104
K20K Telida 67.86 334 P P 00 36 56.2 +0.5
baz=107,SNR=5.7
L19K White Mountain 67.86 333 P P 00 36 55.7 0.0
baz=106
N18K Kilae Creek 67.94 331 P P 00 36 56.4 +0.1
baz=105
D24K Happy Valley 67.97 341 P P 00 36 56.6 +0.3
baz=115
TOLK Toolik Lake Re 68.00 340 P P 00 36 57.1 +0.5
baz=114
G22K Bettles 68.02 338 P P 00 36 57.8 +1.2
baz=111
NEEM North Greenlan 68.05 8 eP P 00 36 56.8 -0.3
H21K Melozitna Rive 68.07 336 P P 00 36 57.2 +0.2
baz=110
M18K Stony River 68.11 332 P P 00 36 57.0 -0.3
baz=105
J20K Nowinta River 68.14 335 P P 00 36 57.2 -0.2
baz=108
O17K Koliganek Bris 68.30 330 P P 00 36 59.2 +0.8
baz=103
I20K Naaghedeneel 68.46 335 P P 00 36 59.9 +0.4
baz=108
F22K John River 68.48 338 P P 00 37 01.0 +1.4
baz=111
D23K Nanushuk River 68.50 340 P P 00 37 00.8 +1.1
baz=113
N17K Nushagak Hills 68.52 331 P P 00 37 00.7 +0.8
baz=103
TBI Tubuai 68.59 239 eLR LR 00 57 43.5
comp=Z,1µm,28.8s
G21K Allakaket 68.62 337 P P 00 37 01.3 +0.8
baz=109,SNR=8.4
L18K Granite Mounta 68.70 332 P P 00 37 01.2 +0.2
baz=104
J19K Poorman 68.70 334 P P 00 37 01.5 +0.5
baz=106,SNR=7.0
C23K Itkillik River 68.82 341 P P 00 37 03.5 +1.9
baz=113,SNR=8.6
H20K Anotleneega Mo 68.83 336 P P 00 37 02.5 +0.7
baz=108
M17K Holitna River 68.84 331 P P 00 37 02.6 +0.7
baz=104
F21K Alatna River 68.85 338 P P 00 37 02.4 +0.6
baz=110,SNR=32
J18K Innoko River 69.03 334 P P 00 37 03.0 -0.1
baz=105
D22K Ayikyak River 69.14 340 P P 00 37 05.2 +1.5
baz=111
EFI East Falkland 69.23 160 iP P 00 37 02.7 -1.6
EFI pmax pmax
comp=Z,7.0nm,1.0s
N16K Nishlik Lake 69.27 330 P P 00 37 05.2 +0.6
baz=102
L17K Donlin 69.41 332 P P 00 37 05.7 +0.3
baz=103
E21K Killik River 69.44 339 P P 00 37 06.6 +1.1
baz=109
H19K Roundabout Mou 69.47 336 P P 00 37 06.8 +1.2
baz=106,SNR=6.8
F20K Avaraart Lake 69.63 337 P P 00 37 07.4 +0.8
baz=107
BORG Borgarnes 69.67 25 LR LR 01 06 38.7
comp=Z,22nm,18.4s,baz=272,slow=35
L16K Owhat River 69.86 332 P P 00 37 09.0 +0.9
baz=102
G19K Purcell Mounta 69.89 336 P P 00 37 09.0 +0.7
baz=106
B22K Teshekpuk Lake 69.91 341 P P 00 37 09.6 +1.3
baz=111
B21K Ikpikpuk River 70.05 340 P P 00 37 10.3 +1.2
baz=109,SNR=5.6
H18K Honhosa River 70.15 335 P P 00 37 10.9 +1.0
baz=104
E20K Nigu River 70.16 339 P P 00 37 10.7 +0.7
baz=107,SNR=14
E19K Redstone River 70.31 338 P P 00 37 11.8 +1.0
baz=106
F19K Shaleruckik Mo 70.34 337 P P 00 37 11.9 +0.9
baz=105,SNR=6.3
D20K Etivluk River 70.44 339 P P 00 37 13.4 +1.7
baz=107,SNR=9.8
G18K Tagagawik 70.45 336 P P 00 37 13.0 +1.3
baz=104
BBTS Babate 70.61 79 LR LR 01 03 24.4
comp=Z,43nm,18.9s,baz=154,slow=32
J16K Anvik River 70.69 333 P P 00 37 14.8 +1.6
baz=101,SNR=6.9
H17K Granite Mounta 70.74 335 P P 00 37 14.7 +1.2
baz=102
L15K Ungalak Mounta 70.80 331 P P 00 37 14.9 +1.0
baz=100
I17K Unalakleet 70.85 334 P P 00 37 14.6 +0.4
baz=101
M14K Bethel 70.87 330 P P 00 37 14.4 +0.1
M14K Bethel 70.87 330 P P 00 37 15.9 +1.6
baz=99,SNR=7.0
D19K Kuna River 70.91 339 P P 00 37 16.2 +1.6
baz=105
K15K Wolf Creek Mou 70.93 332 P P 00 37 16.4 +1.7
baz=100
B20K Meade River 71.01 340 P P 00 37 16.5 +1.5
baz=107
G17K Kiwalik Mounta 71.16 335 P P 00 37 17.3 +1.2
baz=102
L14K Kuka Creek 71.31 331 P P 00 37 16.9 0.0
baz=99
M13K Dall Lake 71.50 330 P P 00 37 19.5 +1.4
baz=98
C19K Lookout Ridge 71.58 339 P P 00 37 20.3 +1.7
baz=104
J14K Nanvaranak Lak 71.93 332 P P 00 37 22.3 +1.6
baz=98
E17K Hotham Inlet 71.95 337 P P 00 37 22.1 +1.3
baz=101
C18K Utukok River 72.04 339 P P 00 37 22.5 +1.1
baz=102
A19K Wainwright 72.35 340 P P 00 37 24.1 +1.0
baz=103
B18K Kokolik River 72.41 339 P P 00 37 24.6 +1.1
baz=102
G15K Niukluk 72.47 335 P P 00 37 25.3 +1.4
baz=99
D17K Noatak River 72.55 337 P P 00 37 25.5 +1.2
baz=100
UNV Unalaska Valle 72.59 323 P P 00 37 25.3 +0.5
baz=93
C17K DeLong Mountai 72.72 338 P P 00 37 26.4 +1.0
baz=101
F15K North Star Dit 72.83 335 P P 00 37 27.2 +1.1
baz=98
C16K Lisburne Hills 73.48 338 P P 00 37 31.9 +2.1
baz=98
F14K Arctic Creek 73.50 335 P P 00 37 31.8 +1.8
baz=97
DAG Danmarks Havn 73.75 13 P P 00 37 30.6 -0.7
DAG Danmarks Havn 73.75 13 iP P 00 37 28.0 -3.3
NIKH Nikolski High 73.96 322 P P 00 37 33.7 +0.7
baz=91
SPIA Saint Paul Isl 74.83 326 P P 00 37 39.0 +1.1
baz=91
NOR Nord 75.43 8 iP P 00 37 39.7 -1.3
JMIC Jan Mayen 75.51 20 LR LR 01 11 31.3
comp=Z,25nm,18.1s,baz=253,slow=36
RAR Rarotonga 76.69 245 LR LR 01 02 32.7
comp=Z,92nm,21.5s,baz=352,slow=29
EKA Eskdalemuir Ar 77.88 36 P P 00 37 53.4 -1.9
comp=Z,3.1nm,0.8s,baz=266,slow=5.5,SNR=6.9
comp=Z,3.1nm,0.8s
ESDC Sonseca Array 78.79 52 P P 00 37 59.4 -1.3
comp=Z,1.4nm,0.7s,baz=286,slow=5.1,SNR=15
ESDC LR LR 01 09 12.2
comp=Z,81nm,18.4s,baz=276,slow=33
comp=Z,1.4nm,0.7s
ESBB Sonseca Array 78.79 52 P P 00 37 59.4 -1.4
ESBB IAmb IAmb 00 40 38.9
comp=Z,17nm,1.4s
MDT Midelt 79.12 59 LR LR 01 07 52.4
comp=Z,95nm,21.5s,baz=312,slow=32
PMSA Palmer Station 79.18 169 eP P 00 37 59.1 -2.9
SMAI San Martin Ant 81.78 172 P P 00 38 16.2 +0.3
SMAI IAmb IAmb 00 38 17.9
comp=Z,25nm,1.3s
DBIC Dimbokro 83.29 85 P P 00 38 24.6 -0.5
DBIC Dimbokro 83.29 85 P P 00 38 24.4 -0.7
comp=Z,12nm,0.9s,baz=92,slow=23,SNR=4.1
DBIC LR LR 01 11 50.9
comp=Z,64nm,21.3s,baz=296,slow=33
comp=Z,12nm,0.9s
BGES Gesves 83.49 40 dP P 00 38 26.0 +0.6
comp=Z,5.4nm,1.0s
BCLA Clavier 83.62 40 dP P 00 38 26.5 +0.4
BILL Bilibino 84.00 339 diP P 00 38 28.5 +0.9
BILL *PP pwP 00 38 39.0 -0.9
BILL *SP sP 00 38 42.0 +3.8
BILL pmax pmax
comp=Z,29nm,1.3s
NB2 NORSAR Subarra 84.44 29 P P 00 38 31.1 +1.0
comp=Z,0.6nm,0.7s,baz=287,slow=5.1
NOA NORSAR Array B 84.44 29 P P 00 38 30.2 +0.1
comp=Z,0.8nm,0.7s,baz=288,slow=4.9,SNR=5.9
NOA LR LR 01 18 12.6
comp=Z,11nm,18.4s,baz=275,slow=37
comp=Z,0.8nm,0.7s
NOA NORSAR Array B 84.44 29 eP P 00 38 31.0 +1.0
NOA pmax pmax
comp=Z,1.0nm,0.7s
ECH Echery 85.27 42 P P 00 38 33.6 -0.9
ECH Echery 85.27 42 P P 00 38 33.6 -0.9
ECH pmax pmax
comp=Z,5.0nm,1.0s
SENIN Lac Senin/Sane 85.78 44 P P 00 38 36.0 -1.3
HFS Hagfors 85.87 29 P P 00 38 37.6 +0.4
comp=Z,3.4nm,0.9s,baz=235,slow=5.1,SNR=3.8
HFS LR LR 01 14 50.0
comp=Z,19nm,20.9s,baz=296,slow=34
comp=Z,3.4nm,0.9s
ARCES ARCSS Array B 86.96 19 P P 00 38 41.8 -0.6
ARCES ARCESS Array B 86.96 19 P P 00 38 42.4 -0.1
comp=Z,3.6nm,0.9s,baz=303,slow=6.8,SNR=4.6
ARCES LR LR 01 18 23.1
comp=Z,29nm,18.4s,baz=280,slow=36
comp=Z,3.6nm,0.9s
ARCES ARCESS Array B 86.96 19 eP P 00 38 43.3 +0.9
ARCES pmax pmax
comp=Z,4.0nm,0.9s
DAVA Damuels 87.28 42 eP P 00 38 43.7 -0.9
comp=Z,6.9nm,1.0s
DAVOX Davos/Dischmat 87.41 43 LR LR 01 13 20.2
comp=Z,51nm,19.6s,baz=269,slow=33
MOX Moxa 87.48 39 eL L 01 16 36.8
comp=Z,41nm,21.1s
GRF Grafenberg Arr 87.50 40 eP P 00 38 46.6 +1.2
comp=Z,3.8nm,1.0s,baz=276,slow=5.6
GRF epP sP 00 38 54.8 -1.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GRF | | | | *e*L | | L | 01 15 28.3 | |
| | comp=Z,106nm,19.4s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **87.71** | **43** | P | | **P** | **00 38 46.0** | **-0.8** |
| FUORN | | | | IAmb | | IAmb | 00 38 49.3 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **RETA** | **Reutte** | **87.80** | **42** | *e*P | | **P** | **00 38 46.4** | **-0.6** |
| | comp=Z,7.8nm,1.0s | | | | | | | |
| **FETA** | **Feichten** | **87.91** | **42** | *e*P | | **P** | **00 38 47.2** | **-0.5** |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **MOTA** | **Moosalm** | **88.06** | **42** | *e*P | | **P** | **00 38 47.8** | **-0.6** |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **CLL** | **Collm** | **88.12** | **38** | *i* P | | **P** | **00 38 49.8** | **+1.5** |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| CLL | | | | *i* x | | x | 00 38 57.2 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| CLL | | | | *e*SKSac | | **SKSac** | **00 49 18.0** | **+2.9** |
| CLL | | | | *e*PS | | **PS** | **00 50 40.0** | **+3.3** |
| CLL | | | | L | | L | 01 13 00.0 | |
| | comp=Z,100nm,18.4s | | | | | | | |
| **CLL** | **Collm** | **88.12** | **38** | *i* P | | **P** | **00 38 49.8** | **+1.5** |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **88.17** | **42** | *e*P | | **P** | **00 38 48.0** | **-0.8** |
| | comp=Z,3.3nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **88.30** | **77** | P | | **P** | **00 38 48.8** | **-1.1** |
| **TORD** | **Torodi Ar. Bea** | **88.30** | **77** | P | | **P** | **00 38 49.0** | **-0.8** |
| | comp=Z,1.4nm,0.7s,baz=301,slow=4.3,SNR=7.3 | | | | | | | |
| TORD | | | | LR | | LR | 01 15 33.1 | |
| | comp=Z,66nm,20.4s,baz=302,slow=34 | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **88.59** | **38** | *e*P | | **P** | **00 38 52.6** | **+2.0** |
| **TEOL** | **Teolo** | **88.99** | **44** | P | | **P** | **00 38 51.3** | **-1.3** |
| TEOL | | | | IAmb | | IAmb | 00 38 54.8 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **KHC** | **Kasperske Hory** | **89.13** | **40** | *e*P | | **P** | **00 38 54.7** | **+1.5** |
| KHC | | | | AMS | | AMS | 01 16 00.0 | |
| | comp=Z,100nm,15.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **89.13** | **40** | *i* P | | **P** | **00 38 53.5** | **+0.3** |
| KHC | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **89.16** | **42** | *e*P | | **P** | **00 38 52.8** | **-0.6** |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **GERES** | **GERESS Array B** | **89.30** | **40** | LR | | LR | 01 17 25.6 | |
| | comp=Z,31nm,18.1s,baz=302,slow=35 | | | | | | | |
| **KBA** | **Koelnbreinsper** | **89.60** | **42** | *e*P | | **P** | **00 38 55.0** | **-0.6** |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **KEST** | **Kesra** | **89.89** | **54** | LR | | LR | 01 13 35.4 | |
| | comp=Z,38nm,19.2s,baz=188,slow=32 | | | | | | | |
| **MYKA** | **Terra Mystica** | **89.94** | **42** | *e*P | | **P** | **00 38 56.4** | **-0.7** |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **PRED** | **Cave del Predi** | **89.94** | **42** | P | | **P** | **00 38 56.0** | **-1.1** |
| PRED | | | | IAmb | | IAmb | 00 38 59.8 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **UPC** | **Upice** | **90.19** | **38** | *e*P | | **P** | **00 39 00.4** | **+2.3** |
| **UPC** | **Upice** | **90.19** | **38** | *e*P | | **P** | **00 39 00.4** | **+2.3** |
| **SOKA** | **Soboth** | **90.83** | **42** | *e*P | | **P** | **00 39 00.6** | **-0.7** |
| | comp=Z,2.6nm,1.2s | | | | | | | |
| **VRAC** | **Vranov** | **90.94** | **39** | LR | | LR | 01 17 44.4 | |
| | comp=Z,69nm,18.3s,baz=288,slow=34 | | | | | | | |
| **CONA** | **Conrad Observa** | **90.95** | **40** | *e*P | | **P** | **00 39 01.1** | **-0.7** |
| | comp=Z,2.5nm,1.0s | | | | | | | |
| **FINES** | **FINESS Array B** | **90.96** | **26** | P | | **P** | **00 39 01.8** | **+0.4** |
| | comp=Z,2.2nm,0.9s,baz=331,slow=5.4,SNR=2.7 | | | | | | | |
| FINES | | | | LR | | LR | 01 20 01.3 | |
| | comp=Z,24nm,20.7s,baz=254,slow=36 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **91.31** | **41** | *e*PcP | | **PcP** | **00 39 04.0** | **-0.3** |
| | comp=Z,2.9nm,1.1s | | | | | | | |
| **SEY** | **Seymchan** | **91.36** | **336** | *e*P | | **P** | **00 39 02.8** | **-0.4** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **VSU** | **Vasula** | **92.67** | **28** | *i* P | | **P** | **00 39 09.1** | **-0.2** |
| VSU | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **VAE** | **Valguarnera** | **93.30** | **51** | LR | | LR | 01 17 10.0 | |
| | comp=Z,114nm,19.5s,baz=312,slow=33 | | | | | | | |
| **AKASG** | **Malin Array Be** | **97.74** | **34** | LR | | LR | 01 22 29.1 | |
| | comp=Z,57nm,19.7s,baz=293,slow=35 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **98.24** | **161** | ⇓Pdiff | | **P** | **00 39 33.9** | **-0.6** |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **98.90** | **161** | ⇑Pdiff | | **P** | **00 39 36.2** | **-1.1** |
| | comp=Z,2.1nm,0.8s,baz=305,slow=5.1 | | | | | | | |
| **OBN** | **Obninsk** | **99.03** | **28** | ⇓*e*P | | **Pdif** | **00 39 38.5** | **+0.2** |
| OBN | | | | *e**PP | | **sP** | **00 39 49.0** | **+0.1** |
| OBN | | | | SS | | SS | 00 58 06.0 | +12 |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,42nm,17.0s | | | | | | | |
| **YAK** | **Yakutsk** | **99.88** | **342** | LR | | LR | 01 29 16.4 | |
| | comp=Z,32nm,21.9s,baz=14,slow=38 | | | | | | | |
| **SNAA** | **Sanae** | **100.47** | **161** | ⇓Pdiff | | **Pdif** | **00 39 43.8** | **-0.7** |
| | comp=Z,3.2nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **100.47** | **161** | P | | **Pdif** | **00 39 43.6** | **-0.8** |
| | comp=Z,1.1nm,0.9s,baz=339,slow=22,SNR=5.2 | | | | | | | |
| **DZM** | **Mont Dzumac** | **107.50** | **251** | *e*LR | | LR | 01 15 48.8 | |
| | comp=Z,131nm,28.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **113.86** | **4** | PKiKP | | **PKiKP** | **00 44 36.1** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=253,slow=1.5,SNR=4.5 | | | | | | | |
| **KURK** | **Kurchatov** | **116.41** | **8** | PKiKP | | **PKiKP** | **00 44 41.1** | **-0.2** |
| **KURBB** | **Kurchatov Arra** | **116.49** | **9** | PKP | | **PKiKP** | **00 44 41.1** | **-0.4** |
| | comp=Z,0.9nm,0.7s,baz=0.8,slow=1.9,SNR=13 | | | | | | | |
| **SONM** | **Songino Array** | **118.53** | **348** | PKP | | **PKPdf** | **00 44 45.5** | **-0.2** |
| | comp=Z,1.0nm,0.7s,baz=340,slow=2.8,SNR=6.2 | | | | | | | |
| SONM | | | | PKKPbc | | **PKKPbc** | **00 55 01.6** | **-2.5** |
| | comp=Z,0.7nm,0.8s,baz=153,slow=1.6,SNR=3.7 | | | | | | | |
| **SONM** | **Songino Array** | **118.53** | **348** | *e*PKiKP | | **PKiKP** | **00 44 46.1** | **+0.4** |
| SONM | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **120.73** | **7** | PKP | | **PKPdf** | **00 44 49.1** | **-0.7** |
| | comp=Z,0.9nm,0.7s,baz=48,slow=1.8,SNR=7.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **120.73** | **7** | *e*PKiKP | | **PKPdf** | **00 44 49.5** | **-0.3** |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **MAW** | **Mawson** | **121.77** | **168** | PKP | | **PKPdf** | **00 44 50.7** | **-0.3** |
| | comp=Z,3.4nm,0.9s,baz=287,slow=14,SNR=2.9 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **123.70** | **341** | *e*PKP | | **PKPdf** | **00 44 54.8** | **-1.0** |
| **WMQ** | **Urumqi** | **124.12** | **3** | *e*PKP | | **PKiKP** | **00 44 57.6** | **+0.9** |
| WMQ | | | | LR | | LR | | |
| | comp=Z,150nm,21.9s | | | | | | | |
| **KSH** | **Kashi** | **126.71** | **14** | PKP | | **PKiKP** | **00 45 03.0** | **+0.9** |
| **NJ2** | **Nanjing** | **128.29** | **329** | *e*PKP | | **PKPdf** | **00 45 04.4** | **-0.3** |
| **STKA** | **Stephens Creek** | **129.38** | **239** | PKP | | **PKPdf** | **00 45 06.5** | **-0.3** |
| | comp=Z,5.1nm,0.8s,baz=319,slow=5.8,SNR=5.7 | | | | | | | |
| **LZH** | **Lanzhou** | **130.31** | **346** | *e*PKP | | **PKiKP** | **00 45 10.2** | **+0.7** |
| LZH | | | | sPKP | | | 00 45 22.0 | |
| **WRA** | **Warramunga Arr** | **137.40** | **254** | PKPdf | | **PKPdf** | **00 45 21.0** | **-1.1** |
| **WRA** | **Warramunga Arr** | **137.40** | **254** | PKP | | **PKPdf** | **00 45 22.1** | **0.0** |
| | comp=Z,4.1nm,0.8s,baz=94,slow=1.6,SNR=18 | | | | | | | |
| **WRA** | **Warramunga Arr** | **137.40** | **254** | *e*PKiKP | | **PKPdf** | **00 45 22.7** | **+0.6** |
| WRA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **137.44** | **248** | PKhKP | | PKPpre | 00 45 11.2 | |
| | comp=Z,0.4nm,0.4s,baz=90,slow=3.8,SNR=5.0 | | | | | | | |
| ASAR | | | | PKP | | **PKPdf** | **00 45 21.9** | **-0.2** |
| | comp=Z,3.1nm,0.8s,baz=108,slow=2.3,SNR=17 | | | | | | | |
| **ASAR** | **Alice Springs** | **137.44** | **248** | PKiKP | | **PKPdf** | **00 45 22.0** | **-0.2** |
| **PZH** | **PanZhiHua** | **139.97** | **344** | PKP | | **PKPdf** | **00 45 24.5** | **-2.4** |
| **FITZ** | **Fitzroy Crossi** | **145.74** | **256** | PKPdf | | **PKPdf** | **00 45 36.6** | **-0.4** |
| **TOLI2** | **Tolitoli** | **147.22** | **292** | | | **PKPdf** | **00 45 39.7** | **0.0** |
| **PHRA** | **Phrae** | **147.99** | **343** | | | **PKPbc** | **00 45 43.6** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **148.38** | **345** | | | **PKPdf** | **00 45 42.2** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** | **148.38** | **345** | PKPbc | | **PKPbc** | **00 45 45.3** | **+0.4** |
| | comp=Z,7.0nm,0.6s,baz=337,slow=3.3,SNR=27 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **148.38** | **345** | PKiKP | | **PKPdf** | **00 45 42.3** | **+0.8** |
| **UBPT** | **Khong Chiam** | **148.92** | **331** | | | **PKiKP** | **00 45 47.2** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **150.59** | **248** | | | **PKPbc** | **00 45 49.5** | **-0.8** |
| **MBWA** | **Marble Bar** | **150.79** | **249** | | | **PKPbc** | **00 45 50.0** | **-0.9** |

*IDC* ***09*** *00:47:13.0±4.0, 5.36S×150.32E, h0km, mb3.2/2, mbtmp3.3/2, Error ellipse: s-maj=153.5km s-min=52.5km az=116.0, New Britain region*

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.26** | **226** | P | | P | 00 52 02.0 | +0.9 |
| | 0.4nm,0.5s,baz=52,slow=11,SNR=7.2 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **24.12** | **219** | P | | P | 00 52 30.2 | -0.5 |
| | 0.5nm,0.6s,baz=50,slow=9.3,SNR=1.9 | | | | | | | |
| | 0.5nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.11** | **286** | PKPbc | | PKPbc | 01 07 00.8 | -1.0 |
| | 0.3nm,0.6s,baz=92,slow=2.6,SNR=4.1 | | | | | | | |

*AEIC* ***09*** *00:50:44.1±1.9, 56.0N±0.1×149.9W±0.1, h7km±8km, Error ellipse: s-maj=15.6km s-min=9.0km az=160.0*

**NEIC 09 00:50:40.4±1.5, 56.1N±0.1×149.9W±0.1, h22km±11km, ML3.2/28, ML2.8(AEIC), Error ellipse: s-maj=16.1km s-min=9.5km az=168.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.22** | **304** | | | Pn | 00 51 15.8 | 0.0 |
| OHAK | | | | | | Sn | 00 51 41.5 | -1.0 |
| **KDAK** | **Kodiak Island** | **2.28** | **321** | | | Pn | 00 51 17.0 | +0.3 |
| KDAK | | | | | | Sn | 00 51 43.1 | -1.1 |
| **SII** | **Sitkinak Islan** | **2.45** | **284** | Pn | | Pn | 00 51 18.6 | -0.4 |
| **SYI** | **Shuyak Island** | **2.91** | **333** | | | Pn | 00 51 25.6 | +0.3 |
| SYI | | | | | | Sn | 00 51 58.9 | -0.6 |
| **Q19K** | **Cape Douglas,** | **3.53** | **327** | | | Pn | 00 51 34.6 | +0.7 |
| **CNPM** | **China Poot** | **3.56** | **349** | | | Pn | 00 51 33.9 | -0.4 |
| CNPM | | | | | | Sn | 00 52 14.3 | -1.5 |
| **ANCK** | **Angle Creek** | **3.74** | **308** | | | Pn | 00 51 38.0 | +1.2 |
| **KAHC** | **Katmai Hardscr** | **3.81** | **315** | | | Pn | 00 51 39.1 | +1.3 |
| **MID** | **Middleton Isla** | **3.89** | **28** | Pn | | Pn | 00 51 37.6 | -1.1 |
| MID | | | | IAML | | | 00 53 31.9 | |
| | comp=N,45nm,1.3s | | | | | | | |
| MID | | | | IAML | | | 00 53 32.6 | |
| | comp=E,61nm,1.2s | | | | | | | |
| **CNTC** | **Contact Creek** | **3.95** | **307** | | | Pn | 00 51 40.5 | +0.8 |
| **P19K** | **Oil Pt** | **4.03** | **335** | | | Pn | 00 51 41.2 | +0.4 |
| **HIN** | **Hinchinbrook I** | **4.72** | **21** | | | Pn | 00 51 49.6 | -0.5 |
| **KAIM** | **Kayak Island** | **4.86** | **35** | Pn | | Pn | 00 51 51.3 | -0.8 |
| **PWL** | **Port Wells** | **4.90** | **9** | Pn | | Pn | 00 51 51.5 | -1.1 |
| **GLI** | **Glacier Island** | **5.06** | **16** | Pn | | Pn | 00 51 55.0 | +0.1 |
| **SUCK** | **Suckling Hills** | **5.18** | **36** | Pn | | Pn | 00 51 55.9 | -0.6 |
| **N19K** | **Bonanza Creek** | **5.36** | **335** | Pn | | Pn | 00 51 59.1 | +0.1 |
| N19K | | | | IAML | | | 00 54 09.1 | |
| | comp=E,7.4nm,0.8s | | | | | | | |
| **WAX** | **Waxell Ridge** | **5.77** | **37** | Pn | | Pn | 00 52 04.4 | -0.3 |
| **KLU** | **Klutina** | **5.84** | **19** | Pn | | Pn | 00 52 05.2 | -0.4 |
| **N25K** | **Chitina, Valde** | **6.21** | **24** | Pn | | Pn | 00 52 11.0 | +0.2 |
| **BCPM** | **Bancas Point** | **6.71** | **50** | Pn | | Pn | 00 52 17.4 | -0.1 |
| **N15K** | **Kwethluk River** | **6.80** | **312** | Pn | | Pn | 00 52 19.9 | +1.1 |
| **S12K** | **Black Hills** | **6.86** | **272** | Pn | | Pn | 00 52 19.5 | 0.0 |
| **M16K** | **Timber Creek** | **6.88** | **320** | Pn | | Pn | 00 52 20.9 | +1.1 |

*SNET* ***09*** *01:16:01.2±0.5, 12.51N×87.15W, h190km±15km, ML4.0*
*IDC* ***09*** *01:16:04.8±1.0, 12.85N×87.07W, h162km±19km, mb3.3/4, mbtmp3.7/7, Error ellipse: s-maj=36.7km s-min=13.5km az=43.0.*
*CATAC* ***09*** *01:16:06.4±0.2, 12.79N×87.24W, h162km, mb4.2, ML3.5*

**ISC 09 01:16:05.2±0.8, 12.76N±0.08×87.30W±0.06, h174km±5km, n52, σ1°32/67, mb3.5/4, 1C, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **0.25** | **103** | *i* P | | **Pn** | **01 16 28.4** | **-0.1** |
| CRIN | | | | IAML | | | 01 16 29.0 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **PKGN** | **Cerro Pekin** | **0.33** | **105** | *i* P | | **Pn** | **01 16 28.4** | **-0.2** |
| PKGN | | | | IAML | | | 01 16 34.5 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **ILCN** | **San Idelfonso** | **0.61** | **107** | *i* P | | **Pn** | **01 16 29.4** | **-0.4** |
| ILCN | | | | IAML | | | 01 16 29.8 | |
| | comp=Z,660nm,1.0s | | | | | | | |
| ILCN | | | | *i* S | | **Sn** | **01 16 49.7** | **+1.0** |
| **CNGN** | **Cerro Negro** | **0.64** | **113** | *i* P | | **Pn** | **01 16 29.5** | **-0.5** |
| CNGN | | | | IAML | | | 01 16 58.5 | |
| | comp=Z,710nm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **0.73** | **315** | *i* P | | **Pn** | **01 16 30.5** | **-0.1** |
| CNCH | | | | IAML | | | 01 16 35.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **0.75** | **118** | *i* S | | **Sn** | **01 16 49.3** | **-0.8** |
| **LCND** | **La Caada** | **0.80** | **314** | *e*P | | **Pn** | **01 16 30.7** | **-0.1** |
| LCND | | | | IAML | | | 01 16 32.0 | |
| | comp=Z,716nm,0.2s | | | | | | | |
| LCND | | | | *e*S | | **Sn** | **01 16 53.9** | **+3.2** |
| **LCND** | **La Caada** | **0.80** | **314** | *i* P | | **Pn** | **01 16 30.8** | **-0.1** |
| LCND | | | | IAML | | | 01 16 31.9 | |
| | comp=Z,650nm,1.0s | | | | | | | |
| **MOM2** | **El Cardon** | **0.86** | **112** | *i* S | | **Sn** | **01 16 50.6** | **-0.7** |
| **COPN** | **Copaltepe** | **0.90** | **130** | *i* P | | **Pn** | **01 16 31.3** | **-0.2** |
| COPN | | | | IAML | | | 01 16 31.9 | |
| | comp=Z,710nm,1.0s | | | | | | | |
| **LIMN** | **Finca el Limon** | **0.96** | **71** | *i* P | | **Pn** | **01 16 31.9** | **-0.2** |
| LIMN | | | | IAML | | | 01 16 56.1 | |
| | comp=Z,520nm,1.0s | | | | | | | |
| **APQ3** | **Volcan Apoyequ** | **1.03** | **118** | *i* P | | **Pn** | **01 16 32.5** | **0.0** |
| APQ3 | | | | IAML | | | 01 16 33.0 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| APQ3 | | | | *i* S | | **Sn** | **01 16 52.7** | **-0.8** |
| **JUCU** | **Jucuarįn** | **1.05** | **298** | *e*P | | **Pn** | **01 16 32.8** | **+0.1** |
| JUCU | | | | IAML | | | 01 16 58.8 | |
| | comp=Z,722nm,0.2s | | | | | | | |
| **JUCU** | **Jucuarįn** | **1.05** | **298** | *i* P | | **Pn** | **01 16 32.8** | **+0.1** |
| JUCU | | | | *i* S | | **Sn** | **01 16 54.2** | **+0.2** |
| JUCU | | | | IAML | | | 01 16 58.6 | |
| | comp=Z,790nm,1.0s | | | | | | | |
| **SAPS** | **Ciudad Sandino** | **1.05** | **124** | *i* P | | **Pn** | **01 16 32.5** | **-0.2** |
| SAPS | | | | *i* S | | **Sn** | **01 16 52.9** | **-1.0** |
| SAPS | | | | IAML | | | 01 17 01.4 | |
| | comp=Z,880nm,1.0s | | | | | | | |
| **APQ2** | **Apoyeque** | **1.10** | **120** | *i* P | | **Pn** | **01 16 32.9** | **-0.2** |
| APQ2 | | | | IAML | | | 01 16 58.8 | |
| | comp=Z,510nm,1.0s | | | | | | | |
| **RANC** | **El Ranchito** | **1.18** | **305** | *i* P | | **Pn** | **01 16 34.6** | **+0.7** |
| RANC | | | | IAML | | | 01 16 34.8 | |
| | comp=Z,770nm,1.0s | | | | | | | |
| **HUEN** | | **1.18** | **111** | *i* P | | **Pn** | **01 16 33.9** | **+0.2** |
| HUEN | | | | IAML | | | 01 16 34.5 | |
| | comp=Z,380nm,1.0s | | | | | | | |
| HUEN | | | | *i* S | | **Sn** | **01 16 54.7** | **-0.9** |
| **PACA** | **Pacayal** | **1.22** | **306** | *i* P | | **Pn** | **01 16 34.9** | **+0.7** |
| PACA | | | | IAML | | | 01 16 59.0 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **1.29** | **1** | *i* P | | **Pn** | **01 16 35.2** | **+0.3** |
| TGUH | | | | IAML | | | 01 16 35.5 | |
| | comp=Z,540nm,1.0s | | | | | | | |
| **COEB** | **Comit de Eme** | **1.41** | **302** | *e*P | | **Pn** | **01 16 36.9** | **+1.0** |
| **COEB** | **Comit de Eme** | **1.41** | **302** | *i* P | | **Pn** | **01 16 36.5** | **+0.6** |
| COEB | | | | *i* S | | **Sn** | **01 17 00.5** | **+0.9** |
| COEB | | | | IAML | | | 01 17 06.1 | |
| | comp=Z,330nm,1.0s | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **1.62** | **101** | *i* P | | **Pn** | **01 16 37.9** | **+0.1** |
| BOAB | | | | IAML | | | 01 17 10.1 | |
| | comp=Z,66nm,1.0s | | | | | | | |
| **TECO** | **Alcaldia de Te** | **1.64** | **298** | *e*P | | **Pn** | **01 16 38.6** | **+0.6** |
| **TECO** | **Alcaldia de Te** | **1.64** | **298** | *i* P | | **Pn** | **01 16 38.6** | **+0.6** |
| TECO | | | | IAML | | | 01 16 39.1 | |
| | comp=Z,660nm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.68** | **304** | *e*P | | **Pn** | **01 16 39.4** | **+0.9** |
| **SCLA** | **Alcaldia de Sa** | **1.68** | **304** | *i* P | | **Pn** | **01 16 39.3** | **+0.9** |
| SCLA | | | | IAML | | | 01 16 41.9 | |
| | comp=Z,150nm,1.0s | | | | | | | |
| SCLA | | | | *i* S | | **Sn** | **01 17 05.8** | **+1.5** |
| **COEG** | **Centro de Oper** | **1.76** | **299** | ⇓*e*P | | **Pn** | **01 16 40.2** | **+0.9** |
| COEG | | | | IAML | | | 01 16 41.2 | |
| | comp=Z,561nm,0.3s | | | | | | | |
| **COEG** | **Centro de Oper** | **1.76** | **299** | *i* P | | **Pn** | **01 16 40.2** | **+0.9** |
| COEG | | | | IAML | | | 01 16 41.1 | |
| | comp=Z,480nm,1.0s | | | | | | | |
| **LOMA** | **Loma Larga** | **2.03** | **296** | *e*P | | **Pn** | **01 16 43.1** | **+0.8** |
| **LOMA** | **Loma Larga** | **2.03** | **296** | *i* P | | **Pn** | **01 16 42.9** | **+0.7** |
| LOMA | | | | IAML | | | 01 17 17.6 | |
| | comp=Z,510nm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **2.18** | **296** | *i* P | | **Pn** | **01 16 44.9** | **+1.0** |
| PMON | | | | *i* S | | **Sn** | **01 17 15.1** | **+1.1** |
| PMON | | | | IAML | | | 01 17 24.3 | |
| | comp=Z,500nm,1.0s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.28** | **293** | *e*P | | **Pn** | **01 16 45.3** | **+0.2** |
| JAYA | | | | IAML | | | 01 17 20.8 | |
| | comp=Z,757nm,0.2s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.28** | **293** | *i* P | | **Pn** | **01 16 45.6** | **+0.5** |
| JAYA | | | | *i* S | | **Sn** | **01 17 16.6** | **+0.6** |
| JAYA | | | | IAML | | | 01 17 20.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CEVE** | **Cerro Verde** | **2.50** | **295** | *e*P | | **Pn** | **01 16 48.9** | **+1.0** |
| CEVE | | | | IAML | | | 01 17 29.8 | |
| | comp=Z,760nm,0.3s | | | | | | | |
| **CEVE** | **Cerro Verde** | **2.50** | **295** | *i* P | | **Pn** | **01 16 48.8** | **+1.0** |
| CEVE | | | | IAML | | | 01 17 29.6 | |
| | comp=Z,650nm,1.0s | | | | | | | |
| **MTO3** | **Montecristo** | **2.58** | **309** | *i* P | | **Pn** | **01 16 49.9** | **+1.1** |
| MTO3 | | | | IAML | | | 01 16 50.6 | |
| | comp=Z,60nm,1.0s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NUBE** | **Las Nubes** | **2.67** | **296** | *i* P | | **Pn** | **01 16 50.3** | **+0.6** |
| NUBE | | | | *i* S | | **Sn** | **01 17 24.9** | **+0.6** |
| NUBE | | | | IAML | | | 01 17 28.6 | |
| | comp=Z,260nm,1.0s | | | | | | | |
| **JTS** | **Las Juntas de** | **3.36** | **137** | P | | **Pn** | **01 16 57.4** | **-0.7** |
| | comp=Z,10nm,0.3s,baz=104,slow=21,SNR=22 | | | | | | | |
| JTS | | | | S | | **Sn** | **01 17 36.3** | **-3.0** |
| | comp=Z,28nm,0.3s,baz=290,slow=22,SNR=13 | | | | | | | |
| **INDI** | **Punta indio, G** | **3.37** | **148** | *i* P | | **Pn** | **01 16 58.8** | **+0.7** |
| INDI | | | | IAML | | | 01 17 40.8 | |
| | comp=Z,270nm,1.0s | | | | | | | |
| **APG** | **El Apazote** | **3.80** | **306** | P | | **Pn** | **01 17 05.0** | **+1.3** |
| | comp=Z,0.4nm,0.5s,baz=106,slow=4.6,SNR=6.8 | | | | | | | |
| APG | | | | S | | **Sn** | **01 17 48.6** | **-0.9** |
| | comp=Z,0.8nm,0.7s,baz=199,slow=16,SNR=3.7 | | | | | | | |
| **LCR2** | **La Lucha 2** | **4.41** | **132** | *i* P | | **Pn** | **01 17 13.0** | **+1.4** |
| LCR2 | | | | *i* S | | **Sn** | **01 18 04.0** | **+0.5** |
| LCR2 | | | | IAML | | | 01 18 08.2 | |
| | comp=Z,75nm,1.0s | | | | | | | |
| **OCHAL** | **Ojochal** | **5.11** | **135** | *i* P | | **Pn** | **01 17 22.6** | **+2.1** |
| OCHAL | | | | IAML | | | 01 17 23.2 | |
| | comp=Z,94nm,1.0s | | | | | | | |
| OCHAL | | | | IAmb | | IAmb | 01 17 23.3 | |
| | comp=Z,51nm,1.1s | | | | | | | |
| **DRK0** | **Durika** | **5.28** | **131** | *i* P | | **Pn** | **01 17 24.7** | **+1.8** |
| DRK0 | | | | *i* S | | **Sn** | **01 18 23.1** | **-0.8** |
| DRK0 | | | | IAML | | | 01 18 26.0 | |
| | comp=Z,520nm,1.0s | | | | | | | |
| **TEIG** | **Tepich** | **7.49** | **353** | P | | Pn | 01 17 49.6 | -2.1 |
| | comp=Z,11nm,0.9s,baz=166,slow=19,SNR=3.6 | | | | | | | |
| **CMIG** | **Matias Romero** | **8.50** | **301** | P | | **Pn** | **01 18 06.2** | **+1.1** |
| | comp=Z,1.3nm,0.3s,baz=144,slow=11,SNR=6.4 | | | | | | | |
| CMIG | | | | S | | **Sn** | **01 19 33.6** | **-6.6** |
| | comp=Z,1.3nm,0.5s,baz=58,slow=16,SNR=1.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **22.43** | **320** | P | | **P** | **01 20 51.1** | **+1.3** |
| | comp=Z,0.4nm,0.5s,baz=143,slow=9.3,SNR=6.8 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.02** | **7** | P | | **P** | **01 20 55.3** | **+0.4** |
| | comp=Z,1.6nm,0.4s,baz=57,slow=5.5,SNR=6.1 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **35.58** | **331** | P | | **P** | **01 22 47.0** | **+0.9** |
| | comp=Z,0.2nm,0.5s,baz=137,slow=9.7,SNR=2.5 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **SCHQ** | **Schefferville** | **44.95** | **17** | P | | **P** | **01 24 01.8** | **-0.8** |
| | comp=Z,3.0nm,0.5s,baz=220,slow=5.6,SNR=8.9 | | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **139.49** | **254** | PKP | | **PKiKP** | **01 35 14.1** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=96,slow=2.1,SNR=7.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **139.52** | **248** | PKP | | **PKiKP** | **01 35 13.1** | **-2.1** |
| | comp=Z,0.5nm,0.5s,baz=111,slow=2.1,SNR=1.7 | | | | | | | |

*NIC* ***09*** *01:16:55.8, 35.68N×28.02E, h32km±26km, Ml3.3/11*
*GII* ***09*** *01:16:55.8±0.7, 35.51N±0.004×27.918E±0.001, h60km, Mws3.2, confirmed*
*ISK* ***09*** *01:16:55.4, 35.88N×27.81E, h56km±1km, ML3.1/25*
*AFAD* ***09*** *01:16:57.0±0.0, 35.94N×28.09E, h27km±2km, MW3.3*
*ATH* ***09*** *01:16:58.0, 35.94N×27.66E, h29km±3km, ML3.0/6, Error ellipse: s-maj=4.7km s-min=1.2km az=124.0*
*THE* ***09*** *01:16:58.3, 35.95N×27.65E, h17km±2km, ML2.9/5, Error ellipse: s-maj=3.0km s-min=0.5km az=123.0*

**ISC 09 01:16:54.1±1.1, 35.77N±0.03×27.96E±0.02, h31km±11km, n136, σ1°49/175, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ARG** | **Arkhangelos** | **0.47** | **17** | Pg | | **Pn** | **01 17 06.5** | **+1.8** |
| ARG | | | | Sg | | **Sn** | **01 17 15.3** | **+3.4** |
| **ARG** | **Arkhangelos** | **0.47** | **17** | P | | **Pn** | **01 17 07.2** | **+2.5** |
| ARG | | | | S | | **Sn** | **01 17 15.3** | **+3.4** |
| | 3μm,0.2s | | | | | | | |
| **ARG** | **Arkhangelos** | **0.47** | **17** | P | | **Pn** | **01 17 07.2** | **+2.5** |
| ARG | | | | S | | **Sn** | **01 17 15.4** | **+3.4** |
| ARG | | | | AML | | AML | 01 17 16.0 | |
| | 5.9nm

ZKR AML AML 01 17 46.5
comp=N,199μm,0.5s
ZKR AML AML 01 17 47.5
comp=E,613μm,0.5s
**CAME Cameli-Denizli 1.60 42** Pn **Pb 01 17 22.6 -0.5**
**DEMR Demre-Antalya 1.65 73** Pn **Pb 01 17 24.1 +0.3**
**KNIK Mula-Seydike 1.69 50** P **Pb 01 17 24.2 -0.4**
KNIK S **Sb 01 17 44.5 -1.0**
KNIK *i* AML AML 01 17 47.0
comp=E,83nm,0.5s
KNIK *i* AML AML 01 17 49.0
comp=E,69nm,0.4s
**DNZT Denizli-Tavas- 1.74 29** P **Pb 01 17 24.4 -0.9**
DNZT S **Sn 01 17 43.1 -0.3**
DNZT *i* AML AML 01 17 47.0
comp=E,44nm,0.5s
DNZT *i* AML AML 01 17 48.0
comp=E,63nm,0.3s
**CAEL Denizli, Camel 1.74 39** P **Pb 01 17 24.8 -0.8**
CAEL S **Sb 01 17 46.0 -1.1**
CAEL *i* AML AML 01 17 53.0
comp=E,242nm,0.4s
CAEL *i* AML AML 01 17 55.0
comp=E,190nm,0.6s
**ELL Elmali 1.86 58** Pn **Pb 01 17 27.0 -0.4**
**ELL Elmali 1.86 58** P **Pb 01 17 27.2 -0.3**
ELL S **Sn 01 17 48.7 +2.3**
ELL AML AML 01 17 53.6
comp=E,0.8nm,0.5s
ELL AML AML 01 17 53.6
comp=E,1.2nm,0.4s
**TAVA DENIZLI_Tavas 1.86 24** P **Pn 01 17 25.7 +1.8**
TAVA *i* AML AML 01 17 49.0
comp=E,57nm,0.3s
TAVA *i* AML AML 01 17 56.0
comp=E,56nm,0.8s
**GOLH Golhisar 1.96 41** P **Pb 01 17 28.1 -1.0**
GOLH S **Sb 01 17 52.2 -0.9**
GOLH *i* AML AML 01 17 55.0
comp=E,83nm,0.3s
GOLH *i* AML AML 01 17 55.0
comp=E,112nm,0.4s
**AKUM Antalya-Kumluc 2.01 73** P **Pn 01 17 28.5 +2.6**
AKUM S **Sn 01 17 52.2 +2.2**
AKUM *i* AML AML 01 17 54.0
comp=E,47nm,0.6s
AKUM *i* AML AML 01 17 57.0
comp=E,62nm,0.3s
**GCAM G?zelcaml? 2.02 343** Pn **Pn 01 17 26.1 +0.2**
**APMY Acipayam-Deniz 2.02 32** Pn **Pn 01 17 27.8 +1.7**
**THR8 Santorini-Mono 2.11 288** P **Pn 01 17 26.9 -0.3**
**THR8 Santorini-Mono 2.11 288** P **Pn 01 17 26.8 -0.3**
**SANT Santorini 2.11 287** Pn **Pn 01 17 28.0 +0.7**
**THR2 Thira island, 2.15 289** P **Pn 01 17 27.6 -0.2**
**THR6 Thira Island, 2.15 287** P **Pn 01 17 27.7 -0.2**
**THR6 Thira Island, 2.15 287** P **Pn 01 17 27.9 0.0**
**THR3 Thira Island, 2.17 288** P **Pn 01 17 27.8 -0.2**
**SNT5 Nea Kammeni, S 2.17 288** P **Pn 01 17 27.9 -0.2**
**AYDB Zeytinkoy-Aydi 2.18 359** Pn **Pn 01 17 28.9 +0.6**
**CMBO Columbo, Santo 2.18 290** P **Pn 01 17 28.0 -0.2**
**NAZL Nazilli-Aydin 2.21 7** Pn **Pn 01 17 29.8 +1.1**
**THR5 Thira Island, 2.21 288** P **Pn 01 17 29.0 +0.4**
**KORT Korkueli 2.29 57** Pn **Pn 01 17 32.9 +3.0**
**KORT Korkueli 2.29 57** P **Pb 01 17 33.4 -1.4**
KORT S **Sb 01 18 01.4 -1.3**
KORT *i* AML AML 01 18 03.0
comp=E,63nm,0.3s
KORT *i* AML AML 01 18 04.0
comp=E,91nm,0.4s
**APE Apeiranthos 2.35 304** Pn **Pn 01 17 30.3 -0.3**
**APE Apeiranthos 2.35 304** P **Pn 01 17 30.5 -0.1**
APE S **Sn 01 17 55.6 -2.8**
comp=E,145nm,0.4s
**APE Apeiranthos 2.35 304** P **Pn 01 17 30.2 -0.4**
**APE Apeiranthos 2.35 304** P **Pn 01 17 30.3 -0.3**
APE S **Sn 01 17 53.2 -5.2**
APE AML AML 01 17 57.6
comp=N,353μm,0.3s
APE AML AML 01 17 58.2
comp=E,231μm,0.4s
**KSTL Kastelli Herak 2.40 260** P **Pn 01 17 30.0 -1.2**
**GMLD Gumuldur 2.45 340** Pn **Pn 01 17 32.6 +0.7**
**IDI Anoyia 2.55 260** P **Pn 01 17 33.5 +0.2**
**KULA Kula-Manisa 2.80 11** Pn **Pn 01 17 37.5 +0.7**
**URLA Izmir 2.81 338** Pn **Pn 01 17 36.6 -0.3**
**CHOS Chios island 3.02 330** Pn **Pn 01 17 40.4 +0.5**
**GORD Gordes-Manisa 3.14 3** Pn **Pn 01 17 41.9 +0.4**
**IMMV Iera Moni Meta 3.25 266** P **Pn 01 17 43.4 +0.4**
**GVD Gavdhos 3.30 255** P **Pn 01 17 45.3 +1.7**
GVD S **Sn 01 18 22.1 +0.4**
comp=E,90nm,0.5s
**RODP Rodopos 3.42 268** P **Pn 01 17 45.7 +0.4**
**AKMS Akamas 3.65 101** P **Pn 01 17 49.9 +1.4**
AKMS S **Sn 01 18 31.6 +1.1**
AKMS AML AML 01 18 34.0
comp=E,0.4nm,0.4s
AKMS AML AML 01 18 34.7
comp=E,0.3nm,0.2s
**SIGR SIGRI 3.82 335** P **Pn 01 17 51.0 +0.2**
**ALFC Alefka 3.84 98** P **Pn 01 17 52.3 +1.2**
ALFC S **Sn 01 18 35.7 +0.6**
ALFC AML AML 01 18 39.1
comp=E,0.4nm,0.2s
ALFC AML AML 01 18 40.4
comp=E,0.4nm,0.2s
**NATA Nata 3.90 103** P **Pn 01 17 53.3 +1.4**
NATA S **Sn 01 18 37.8 +1.1**
NATA AML AML 01 18 39.4
comp=E,0.6nm,0.5s
NATA AML AML 01 18 40.3
comp=E,0.4nm,0.7s
**VLY Voula,Athens 3.94 303** P **Pn 01 17 53.1 +0.8**
**KTHA Kythira Island 4.00 278** P **Pn 01 17 53.7 +0.5**
**ATHU Athens Univers 4.00 305** P **Pn 01 17 54.2 +0.9**
**TROD Troodos 4.09 100** P **Pn 01 17 55.6 +0.9**
TROD AML AML 01 18 47.5
comp=E,0.2nm,0.4s
TROD AML AML 01 18 51.0
comp=E,0.2nm,0.5s
**VLI Veliai 4.17 285** P **Pn 01 17 56.0 +0.5**
**KRND KRANIDI 4.19 294** P **Pn 01 17 56.9 +1.1**
**KYMI Kymi, Euboea I 4.20 314** P **Pn 01 17 56.7 +0.7**
**ASGA Asgata 4.44 101** P **Pn 01 18 00.6 +1.3**
ASGA S **Sn 01 18 50.6 +0.7**
ASGA AML AML 01 18 56.5
comp=E,0.1nm,0.3s
ASGA AML AML 01 18 58.8
comp=E,0.1nm,0.2s
**CSS Mathiatis 4.46 99** P **Pn 01 18 00.7 +1.1**
**CSS Mathiatis 4.46 99** P **Pn 01 18 00.6 +1.0**
**CSS Mathiatis 4.46 99** P **Pn 01 18 00.7 +1.1**
CSS S **Sn 01 18 52.6 +2.1**
CSS AML AML 01 18 53.5
comp=E,0.1nm,0.3s
CSS AML AML 01 18 57.2
comp=E,0.1nm,0.4s
**LOUT Loutraki 4.57 300** P **Pn 01 18 02.0 +1.0**
**MVOU Mavrovouni 4.70 98** P **Pn 01 18 03.9 +1.1**
MVOU S **Sn 01 18 57.9 +1.7**
MVOU AML AML 01 19 01.6
comp=E,0.1nm,0.4s
MVOU AML AML 01 19 04.9
comp=E,0.1nm,0.4s
**PYL PYLOS 5.14 284** P **Pn 01 18 09.5 +0.6**
**KLV Kalavryta, Ach 5.18 298** P **Pn 01 18 10.2 +0.7**
**ALN Alexandroupoli 5.34 344** P **Pn 01 18 12.2 +0.6**
**HNTI Hanita 6.54 112** P **Pn 01 18 29.1 +1.0**
**HNTI Hanita 6.54 112** P **Pn 01 18 27.6 -0.5**
**HNTI Hanita 6.54 112** S **Sn 01 19 40.2 -1.4**
**MMA0 Mount Meron ar 6.74 112** P **Pn 01 18 31.1 +0.2**
**MMA0 Mount Meron ar 6.74 112** P **Pn 01 18 31.1 +0.2**
**MMA0B Mount Meron ar 6.74 112** P **Pn 01 18 31.0 +0.1**
**MMA0B Mount Meron ar 6.74 112** S **Sn 01 19 46.1 -0.6**
**SLTI Sal'it 6.85 119** P **Pn 01 18 32.0 -0.5**
**SLTI Sal'it 6.85 119** S **Sn 01 19 48.1 -1.3**
**GEM Giv'at Ha'Em 6.86 110** P **Pn 01 18 32.1 -0.4**
**GEM Giv'at Ha'Em 6.86 110** S **Sn 01 19 48.6 -0.8**
**GEM Giv'at Ha'Em 6.86 110** P **Pn 01 18 32.9 +0.4**
**NATI Neve Ativ 6.89 109** P **Pn 01 18 32.0 -0.9**
**NATI Neve Ativ 6.89 109** P **Pn 01 18 33.2 +0.3**
**MMLI Mount Malkishu 7.03 116** S **Sn 01 19 52.1 -1.6**
**MMLI Mount Malkishu 7.03 116** P **Pn 01 18 35.2 +0.3**
**KSHT Keshet 7.06 111** P **Pn 01 18 36.2 +0.8**
**KSHT Keshet 7.06 111** S **Sn 01 19 53.7 -0.9**
**AMAZ Amatzia 7.17 124** P **Pn 01 18 37.9 +1.0**
**HMDT Nahal Hemdat 7.20 117** P **Pn 01 18 38.2 +1.1**
**HMDT Nahal Hemdat 7.20 117** P **Pn 01 18 37.3 +0.1**
**HMDT Nahal Hemdat 7.20 117** S **Sn 01 19 57.0 -0.9**
**KZIT Kziot 7.25 130** P **Pn 01 18 39.9 +2.0**
KZIT S **Sn 01 19 54.2 -4.9**
**KZIT Kziot 7.25 130** S **Sn 01 19 56.0 -3.2**
**KZIT Kziot 7.25 130** P **Pn 01 18 38.1 +0.2**
**YTIR Yattir 7.41 124** P **Pn 01 18 40.4 +0.2**
**YTIR Yattir 7.41 124** S **Sn 01 20 01.4 -2.0**
**DSI Dead Sea 7.47 122** P **Pn 01 18 41.1 +0.2**
**DSI Dead Sea 7.47 122** P **Pn 01 18 41.0 +0.1**
**MSBI Mazada 7.61 124** P **Pn 01 18 43.1 +0.3**
**MSBI Mazada 7.61 124** P **Pn 01 18 42.1 -0.7**
**LISJ El Lisan 7.74 124** P **Pn 01 18 45.6 +1.1**
**GHAJ Ghor Haditha 7.76 123** P **Pn 01 18 45.2 +0.4**
**GHAJ Ghor Haditha 7.76 123** P **Pn 01 18 44.3 -0.5**
**KRMI Paran Flat 8.00 133** P **Pn 01 18 48.5 +0.2**
**KRMI Paran Flat 8.00 133** P **Pn 01 18 47.0 -1.3**
**KRMI Paran Flat 8.00 133** S **Sn 01 20 13.5 -4.3**
**PRNI Paran 8.01 130** P **Pn 01 18 48.6 +0.3**
**PRNI Paran 8.01 130** P **Pn 01 18 47.5 -0.8**
**HRFI Mount Harif 8.25 132** P **Pn 01 18 51.7 +0.1**
**HRFI Mount Harif 8.25 132** P **Pn 01 18 50.4 -1.2**
**HRFI Mount Harif 8.25 132** S **Sn 01 20 20.8 -3.0**
**MBRI Mt Berech 8.35 134** P **Pn 01 18 53.1 0.0**
**MBRI Mt Berech 8.35 134** P **Pn 01 18 51.9 -1.2**
**EIL Elat 8.46 134** P **Pn 01 18 53.9 -0.6**
**EIL Elat 8.46 134** P **Pn 01 18 54.0 -0.6**
**EIL Elat 8.46 134** S **Sn 01 20 25.0 -4.1**

*IDC **09** 01:24:32.2± 1.1, 60.38S×51.75W, h0km, mb4.0/5, mbtmp4.1/6, ML3.2/1, MS3.4/3, Error ellipse: s-maj=30.4km s-min=24.3km azm=92.0*

**ISC 09 01:24:33.7±0.9, 60.3S±0.1×51.7W±0.1, h10km, n17, σ1§29/13, mb3.9/4, MS3.2/3, 3C, Scotia Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMSA** | **Palmer Station** | **7.26** | **227** | Pn | | **Pn** | **Pn** | **01 26 19.6** | **0.0** |
| | 0.4nm,0.3s,baz=51,slow=9.6,SNR=7.1 | | | | | | | | |
| PMSA | | | | Sn | | **Sn** | **Sn** | **01 27 43.0** | **+1.0** |
| | 0.6nm,0.3s,baz=70,slow=17,SNR=1.6 11nm,0.8s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **19.90** | **141** | ⇑P | | **P** | **P** | **01 29 05.0** | **+0.1** |
| | comp=Z,2.2nm,0.7s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **20.57** | **139** | ⇑P | | **P** | **P** | **01 29 13.2** | **+1.1** |
| | comp=Z,1.8nm,0.8s,baz=276,slow=12 | | | | | | | | |
| **SNAA** | **Sanae** | **22.12** | **141** | ⇑P | | **P** | **P** | **01 29 29.6** | **+0.7** |
| | comp=Z,46nm,0.8s | | | | | | | | |
| **SNAA** | **Sanae** | **22.12** | **141** | P | | **P** | **P** | **01 29 28.7** | **-0.2** |
| | comp=Z,2.0nm,0.8s,baz=288,slow=9.3,SNR=11 | | | | | | | | |
| SNAA | | | | LR | | LR | LR | 01 36 47.1 | |
| | comp=Z,28nm,19.9s,baz=246,slow=33 comp=Z,2.0nm,0.8s | | | | | | | | |
| **PLCA** | **Paso Flores** | **22.82** | **321** | P | | **P** | **P** | **01 29 36.9** | **+0.3** |
| | comp=Z,2.4nm,1.0s,baz=120,slow=8.1,SNR=3.0 comp=Z,2.4nm,1.0s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **29.93** | **180** | P | | **P** | **P** | **01 30 41.0** | **-0.5** |
| | comp=Z,2.4nm,0.7s,baz=165,slow=3.0,SNR=26 comp=Z,2.4nm,0.7s | | | | | | | | |
| **BDFB** | **Brasilia** | **44.68** | **5** | LR | | LR | LR | 01 50 27.5 | |
| | comp=Z,34nm,20.8s,baz=148,slow=35 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.64** | **52** | P | | **P** | **P** | **01 37 09.4** | **+2.2** |
| | comp=Z,1.3nm,0.9s,baz=197,slow=4.9,SNR=5.6 comp=Z,1.3nm,0.9s | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **99.20** | **334** | LR | | LR | LR | 02 25 39.2 | |
| | comp=Z,104nm,20.5s,baz=280,slow=37 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **99.35** | **124** | T | | T | T | 03 29 51.6 | |
| | baz=204,slow=76,SNR=12 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **99.36** | **124** | T | | T | T | 03 29 48.7 | |
| | baz=204,slow=76,SNR=9.4 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **99.37** | **124** | T | | T | T | 03 29 53.1 | |
| | baz=204,slow=76,SNR=29 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **99.89** | **186** | P | | **Pdif** | **P** | **01 38 16.8** | **-1.7** |
| | comp=Z,0.4nm,0.5s,baz=180,slow=4.1,SNR=5.9 comp=Z,0.4nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **143.41** | **314** | PKP | | **PKPdf** | **P** | **01 44 04.9** | **-1.7** |
| | comp=Z,0.3nm,0.7s,baz=114,slow=2.2,SNR=4.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **150.18** | **96** | PKPbc | | **PKPbc** | **P** | **01 44 22.2** | **-1.5** |
| | comp=Z,0.3nm,0.7s,baz=219,slow=3.1,SNR=3.1 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.84** | **87** | PKPbc | | **PKiKP** | **P** | **01 44 24.7** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=226,slow=2.8,SNR=2.3 | | | | | | | | |

*GCMT **09** 01:26:28.9± 0.2, 11.40S±0.02×166.11E±0.01, h53km±1km, MW5.0/94, Moment Tensor Solution. s51,c68; s94,c129; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$2.29±.17; $M_{\theta\theta}$-1.69±.13; $M_{\phi\phi}$-0.60±.13; $M_{r\theta}$-0.61±.12; $M_{\theta\phi}$3.08±.11; $M_{\phi r}$-2.43±.10; Best double couple: M=4.47200×$10^{16}$ NP1:ϕs164.00000°, δ67.00000°, λ135.00000°. NP2: ϕs276.00000°, δ50.00000°, λ31.00000°. Principal axes: T 4.4720, Plg48.0000°, Azm122.0000°; N -0.0010, Plg41.0000°, Azm323.0000°; P -4.4720, Plg10.0000°, Azm224.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*IDC **09** 01:26:30.4± 4.3, 11.46S×166.31E, h84km±38km, mb4.0/15, mbtmp4.3/16, MS3.9/45 Error ellipse: s-maj=20.7km s-min=18.9km azm=144.0*

*NEIC **09** 01:26:30.9± 1.1, 11.49S±0.09×166.17E±0.10, h79km±7km, mb4.6/62, Error ellipse: s-maj=15.1km s-min=11.8km az=53.0*

**ISC 09 01:26:27.8±0.4, 11.45S±0.06×166.25E±0.06, h50km, n153, σ1§17/123, mb4.7/52, MS4.0/46, 2D, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **6.51** | **287** | Pn | | **Pn** | **Pn** | **01 28 02.3** | **+1.2** |
| HNR | | | | | | **Sn** | **Sn** | **01 29 15.0** | **+0.9** |
| **KOUNC** | **Koumac, New Ca** | **9.24** | **192** | Pn | | **Pn** | **Pn** | **01 28 40.2** | **+1.7** |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | Pn | | **Pn** | **Pn** | **01 28 56.7** | **+0.1** |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | *e*Pn | | **Pn** | **Pn** | **01 28 56.8** | **+0.1** |
| | 140nm,1.4s | | | | | | | | |
| DZM | | | | *e*LR | | LR | LR | 01 31 24.9 | |
| | 541nm,23.6s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | P | | **Pn** | **Pn** | **01 28 58.6** | **+1.9** |
| | 6.9nm,0.3s,baz=13,slow=12,SNR=18 | | | | | | | | |
| DZM | | | | S | | **Sn** | **Sn** | **01 30 51.7** | **-1.9** |
| | 11nm,0.8s,baz=294,slow=23,SNR=1.4 | | | | | | | | |
| DZM | | | | LR | | LR | LR | 01 32 43.2 | |
| | comp=Z,314nm,21.8s,baz=90,slow=35 | | | | | | | | |
| **ONTNC** | **Ouen Toro** | **10.80** | **179** | | | **Pn** | **Pn** | **01 29 02.5** | **+2.7** |
| **PINNC** | **Pines Island,** | **11.16** | **174** | | | **Pn** | **Pn** | **01 29 05.8** | **+1.1** |
| **MSVF** | **Nonsavu** | **13.02** | **120** | Pn | | **Pn** | **Pn** | **01 29 33.0** | **+2.9** |
| **MSVF** | **Nonsavu** | **13.02** | **120** | P | | **P** | **P** | **01 29 37.6** | **-1.7** |
| | 77nm,1.1s,baz=283,slow=7.7,SNR=20 | | | | | | | | |
| MSVF | | | | LR | | LR | LR | 01 33 36.4 | |
| | comp=Z,2μm,20.4s,baz=317,slow=33 | | | | | | | | |
| **PMG** | **Port Moresby** | **18.88** | **274** | LR | | LR | LR | 01 37 29.2 | |
| | comp=Z,1μm,20.7s,baz=111,slow=35 | | | | | | | | |
| **EIDS** | **Eidsvold** | **19.94** | **224** | | | | **Pn** | **01 30 57.7** | **0.0** |
| EIDS | | | | | | IAmb | IAmb | 01 31 00.1 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **EIDS** | **Eidsvold** | **19.94** | **224** | P | | **Pn** | **Pn** | **01 30 58.1** | **+0.4** |
| | comp=Z,33nm,1.1s,SNR=6.6 | | | | | | | | |
| **CTA** | **Charters Tower** | **21.05** | **243** | P | | **P** | **P** | **01 31 08.9** | **+1.1** |
| | comp=Z,1.9nm,0.7s,baz=81,slow=10,SNR=17 | | | | | | | | |
| CTA | | | | LR | | LR | LR | 01 38 25.3 | |
| | comp=Z,45nm,18.9s,baz=60,slow=34 comp=Z,1.9nm,0.7s | | | | | | | | |
| **CTAO** | **Charters Tower** | **21.05** | **243** | P | | **P** | **P** | **01 31 08.5** | **+0.7** |
| CTAO | | | | IAmb | | IAmb | IAmb | 01 31 12.9 | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **RAO** | **Raoul Island** | **23.06** | **143** | LR | | LR | LR | 01 38 45.7 | |
| | comp=Z,371nm,19.3s,baz=314,slow=32 | | | | | | | | |
| **ARMA** | **Armidale** | **23.25** | **214** | P | | **P** | **P** | **01 31 32.2** | **+1.2** |
| ARMA | | | | IAmb | | IAmb | IAmb | 01 31 55.2 | |
| | comp=Z,29nm,1.0s | | | | | | | | |
| **ARMA** | **Armidale** | **23.25** | **214** | P | | **P** | **P** | **01 31 32.2** | **+1.2** |
| | comp=Z,29nm,1.0s,SNR=3.9 | | | | | | | | |
| **QLP** | **Quilpie** | **25.62** | **231** | P | | **P** | **P** | **01 31 53.6** | **+0.9** |
| | comp=Z,30nm,1.1s,SNR=2.8 | | | | | | | | |
| **QIS** | **Mount Isa** | **27.13** | **247** | P | | **P** | **P** | **01 32 04.8** | **-1.7** |
| | comp=Z,11nm,0.9s,SNR=2.0 | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.57** | **220** | P | | **P** | **P** | **01 32 10.7** | **+0.4** |
| | comp=Z,17nm,3.4s,SNR=2.3 | | | | | | | | |
| **YNG** | **Young** | **27.97** | **213** | P | | **P** | **P** | **01 32 12.6** | **-1.2** |
| | comp=Z,56nm,1.9s,SNR=1.6 | | | | | | | | |
| **URZ** | **Urewera** | **28.41** | **162** | P | | **P** | **P** | **01 32 17.3** | **-0.3** |
| | comp=Z,3.1nm,0.4s,baz=169,slow=8.6,SNR=1.5 | | | | | | | | |
| URZ | | | | LR | | LR | LR | 01 42 00.3 | |
| | comp=Z,349nm,21.2s,baz=60,slow=33 comp=Z,3.1nm,0.4s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **29.07** | **163** | P | | **P** | **P** | **01 32 23.4** | **-0.1** |
| BKZ | | | | IAmb | | IAmb | IAmb | 01 32 25.3 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **BHHZ** | **Black Hill Sta** | **29.25** | **164** | P | | P | P | 01 32 40.8 | +16 |
| **MRZ** | **Mangatainoka R** | **30.24** | **166** | P | | **P** | **P** | **01 32 34.7** | **+0.9** |
| **MRNZ** | **Matariki Terra** | **30.38** | **170** | P | | **P** | **P** | **01 32 35.9** | **+0.8** |
| **BFZ** | **Birch Farm** | **30.42** | **165** | P | | **P** | **P** | **01 32 33.3** | **-2.1** |
| **HOWZ** | **Holdsworth Sta** | **30.45** | **166** | P | | **P** | **P** | **01 32 35.0** | **-0.7** |
| **STKA** | **Stephens Creek** | **30.49** | **224** | P | | **P** | **P** | **01 32 36.8** | **+0.6** |
| | comp=Z,6.1nm,0.8s,baz=26,slow=7.9,SNR=6.5 | | | | | | | | |
| STKA | | | | LR | | LR | LR | 01 44 08.7 | |
| | comp=Z,515nm,21.4s,baz=39,slow=35 comp=Z,6.1nm,0.8s | | | | | | | | |
| **MTW** | **Mount Morrison** | **30.69** | **166** | P | | **P** | **P** | **01 32 37.4** | **-0.4** |
| **THZ** | **Tophouse** | **30.75** | **170** | P | | **P** | **P** | **01 32 39.6** | **+1.1** |
| **MSWZ** | **Moikau Station** | **30.88** | **167** | P | | **P** | **P** | **01 32 38.0** | **-1.4** |
| **PAWZ** | **Paruwai Farm** | **30.89** | **166** | P | | **P** | **P** | **01 32 38.7** | **-0.8** |
| **TRWZ** | **Traveller** | **30.96** | **166** | P | | **P** | **P** | **01 32 39.6** | **-0.6** |
| **PLWZ** | **Palliser** | **31.02** | **167** | P | | **P** | **P** | **01 32 40.3** | **-0.5** |
| **LTZ** | **Lake Taylor** | **31.65** | **172** | P | | **P** | **P** | **01 32 46.5** | **+0.2** |
| **WB0** | **Warramunga Arr** | **31.73** | **251** | P | | **P** | **P** | **01 32 46.7** | **-0.6** |
| **WB2** | **Warramunga Arr** | **31.80** | **251** | P | | **P** | **P** | **01 32 47.5** | **-0.4** |
| WB2 | | | | IAmb | | IAmb | IAmb | 01 33 07.8 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.81** | **251** | P | | **P** | **P** | **01 32 47.4** | **-0.6** |
| | comp=Z,7.9nm,0.8s,baz=81,slow=9.1,SNR=29 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **PcP** | **01 35 37.7** | **-0.6** |
| | comp=Z,0.7nm,0.8s,baz=86,slow=2.9,SNR=2.5 | | | | | | | | |
| WRA | | | | LR | | LR | LR | 01 44 27.8 | |
| | comp=Z,361nm,19.9s,baz=66,slow=34 comp=Z,7.9nm,0.8s | | | | | | | | |
| **TOO** | **Toolangi** | **31.99** | **212** | P | | **P** | **P** | **01 32 48.6** | **-0.7** |
| **GUMO** | **Guam** | **32.69** | **319** | LR | | LR | LR | 01 45 52.5 | |
| | comp=Z,147nm,20.8s,baz=120,slow=36 | | | | | | | | |
| **AS31** | **Alice Springs** | **33.05** | **244** | P | | **P** | **P** | **01 32 57.6** | **-1.2** |
| **ASAR** | **Alice Springs** | **33.05** | **244** | P | | **P** | **P** | **01 32 58.0** | **-0.9** |
| | comp=Z,8.8nm,0.8s,baz=75,slow=9.4,SNR=54 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **PcP** | **01 35 40.1** | **-1.6** |
| | comp=Z,0.9nm,0.6s,baz=70,slow=2.6,SNR=3.6 | | | | | | | | |
| ASAR | | | | LR | | LR | LR | 01 45 01.0 | |
| | comp=Z,474nm,21.6s,baz=74,slow=34 comp=Z,8.8nm,0.8s | | | | | | | | |
| **ASPA** | **Alice Springs** | **33.06** | **244** | P | | **P** | **P** | **01 32 57.9** | **-0.9** |
| | comp=Z,3.8nm,0.2s,SNR=4.7 | | | | | | | | |
| **RAR** | **Rarotonga** | **33.95** | **111** | LR | | LR | LR | 01 44 10.8 | |
| | comp=Z,180nm,18.5s,baz=284,slow=31 | | | | | | | | |
| **PPT** | **Papeete** | **43.12** | **103** | LR | | LR | LR | 01 48 47.1 | |
| | comp=Z,199nm,20.9s,baz=279,slow=31 | | | | | | | | |
| **PPT2** | **Papete2** | **43.12** | **103** | *e*S | | **S** | **S** | **01 40 50.7** | **+3.9** |
| | comp=Z,92nm,24.0s | | | | | | | | |
| PPT2 | | | | *e*LQ | | LQ | LQ | 01 44 42.1 | |
| | comp=Z,1μm,30.2s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | LR | 01 46 28.7 | |
| | comp=Z,444nm,29.0s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | LR | 01 46 29.3 | |
| | comp=Z,789nm,29.2s | | | | | | | | |
| **TBI** | **Tubuai** | **43.72** | **112** | *e*LQ | | LQ | LQ | 01 44 57.6 | |
| | comp=Z,2μm,29.2s | | | | | | | | |
| TBI | | | | *e*LR | | LR | LR | 01 46 43.8 | |
| | comp=Z,5μm,29.8s | | | | | | | | |
| TBI | | | | *e*LR | | LR | LR | 01 46 45.8 | |
| | comp=Z,1μm,31.0s | | | | | | | | |
| **DAV** | **Davao City (W)** | **44.45** | **293** | LR | | LR | LR | 01 50 32.1 | |
| | comp=Z,242nm,20.7s,baz=150,slow=32 | | | | | | | | |
| **KAPI** | **Kappang** | **46.41** | **274** | P | | **P** | **P** | **01 34 48.5** | **-1.4** |
| **KAPI** | **Kappang** | **46.41** | **274** | LR | | LR | LR | 01 52 46.7 | |
| | comp=Z,66nm,22.0s,baz=90,slow=34 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **49.65** | **236** | LR | | LR | LR | 01 56 22.9 | |
| | comp=Z,517nm,19.6s,baz=91,slow=36 | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **52.77** | **92** | *e*LR | | LR | LR | 01 50 51.4 | |
| | comp=Z,273nm,25.4s | | | | | | | | |
| **JOW** | **Kunigami** | **52.99** | **316** | LR | | LR | LR | 01 57 47.7 | |
| | comp=Z,161nm,19.6s,baz=9.0,slow=35 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **54.56** | **332** | LR | | LR | LR | 01 58 26.0 | |
| | comp=Z,50nm,20.1s,baz=148,slow=35 | | | | | | | | |
| **JNU** | **Nakatsue** | **55.70** | **324** | LR | | LR | LR | 01 57 38.6 | |
| | comp=Z,65nm,20.5s,baz=170,slow=34 | | | | | | | | |
| **RKT** | **Rikitea** | **56.99** | **110** | *e*LR | | LR | LR | 01 52 53.3 | |
| | comp=Z,4μm,28.2s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **59.34** | **340** | LR | | LR | LR | 01 57 04.0 | |
| | comp=Z,134nm,21.9s,baz=170,slow=31 | | | | | | | | |
| **QIZ** | **Qiongzhong** | **63.30** | **298** | P | | **P** | **P** | **01 36 53.3** | **+1.3** |
| QIZ | | | | S | | **S** | **S** | **01 45 20.4** | **-0.5** |
| QIZ | | | | LR | | LR | | | |
| | comp=N,290nm,18.1s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=E,390nm,20.6s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,460nm,21.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **63.53** | **333** | P | | **P** | **P** | **01 36 53.6** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **63.53** | **333** | P | | **P** | **P** | **01 36 52.5** | **-0.4** |
| | comp=Z,1.0nm,0.7s,baz=143,slow=8.1,SNR=2.4 | | | | | | | | |
| USRK | | | | LR | | LR | LR | 02 02 03.7 | |
| | comp=Z,60nm,21.6s,baz=164,slow=34 comp=Z,1.0nm,0.7s | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **64.28** | **5** | LR | | LR | LR | 01 58 38.9 | |
| | comp=Z,121nm,21.9s,baz=120,slow=30 | | | | | | | | |
| **VNDA** | **Vanda** | **66.10** | **181** | P | | **P** | **P** | **01 37 08.5** | **-0.7** |
| **VNDA** | **Vanda** | **66.10** | **181** | P | | **P** | **P** | **01 37 08.2** | **-1.0** |
| | comp=Z,0.9nm,0.6s,baz=349,slow=6.2,SNR=5.0 | | | | | | | | |
| VNDA | | | | LR | | LR | LR | 02 01 45.8 | |
| | comp=Z,73nm,21.2s,baz=349,slow=32 comp=Z,0.9nm,0.6s | | | | | | | | |
| **CASY** | **Casey** | **66.18** | **201** | P | | **P** | **P** | **01 37 09.6** | **-0.3** |
| CASY | | | | IAmb | | IAmb | IAmb | 01 37 26.4 | |
| | comp=Z,9.1nm,1.1s | | | | | | | | |
| **SBA** | **Scott Base** | **66.39** | **180** | P | | **P** | **P** | **01 37 10.8** | **-0.3** |
| SBA | | | | IAmb | | IAmb | IAmb | 01 37 43.0 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **KLR** | **Kul'dur** | **67.62** | **336** | LR | | LR | LR | 02 02 57.5 | |
| | comp=Z,47nm,20.7s,baz=174,slow=32 | | | | | | | | |
| **GYA** | **Guiyang** | **69.05** | **304** | ⇓P | | **P** | **P** | **01 37 29.9** | **+1.0** |
| GYA | | | | pmax | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | | | |
| **KMI** | **Kunming** | **71.75** | **301** | ⇓P | | **P** | **P** | **01 37 46.0** | **+0.5** |
| KMI | | | | pP | | pwP | pwP | 01 38 02.3 | +0.8 |
| KMI | | | | pmax | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| KMI | | | | LR | | LR | LR | | |
| | comp=Z,270nm,28.1s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **72.46** | **320** | *e*P | | **P** | **P** | **01 37 52.3** | **+3.0** |
| HHC | | | | pmax | | pmax | pmax | | |
| | comp=Z,12nm,0.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J16K** | **Anvik River** | **78.75** | **15** | P | **P** | **01 38 24.2** | **-0.5** |
| J16K | | | | IAmb | IAmb | 01 38 51.3 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **K17K** | **Iditarod** | **78.87** | **16** | P | **P** | **01 38 24.8** | **-0.5** |
| **L18K** | **Granite Mounta** | **78.92** | **17** | P | **P** | **01 38 24.1** | **-1.5** |
| **SONM** | **Songino Array** | **79.28** | **324** | LR | LR | 02 11 36.1 | |
| | comp=Z,52nm,21.8s,baz=104,slow=34 | | | | | | |
| **L19K** | **White Mountain** | **79.41** | **17** | P | **P** | **01 38 27.8** | **-0.6** |
| L19K | | | | IAmb | IAmb | 01 38 30.8 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **M20K** | **Styx River** | **79.70** | **18** | P | **P** | **01 38 29.5** | **-0.5** |
| **J20K** | **Nowinta River** | **81.17** | **16** | P | **P** | **01 38 38.4** | **+0.7** |
| **N25K** | **Chitina, Valde** | **82.34** | **21** | P | **P** | **01 38 44.3** | **+0.2** |
| N25K | | | | IAmb | IAmb | 01 39 10.6 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **82.37** | **14** | P | **P** | **01 38 44.4** | **+0.4** |
| F19K | | | | IAmb | IAmb | 01 39 07.3 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **83.00** | **13** | P | **P** | **01 38 46.2** | **-1.1** |
| E19K | | | | IAmb | IAmb | 01 39 11.0 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **WRH** | **Wood River Hil** | **83.16** | **18** | P | **P** | **01 38 47.0** | **-1.1** |
| WRH | | | | IAmb | IAmb | 01 39 02.6 | |
| | comp=Z,7.3nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **83.27** | **17** | P | **P** | **01 38 48.5** | **-0.2** |
| **CCB** | **Clear Creek Bu** | **83.37** | **18** | P | **P** | **01 38 48.8** | **-0.4** |
| **MDM** | **Murphy Dome** | **83.46** | **18** | P | **P** | **01 38 49.4** | **-0.3** |
| MDM | | | | IAmb | IAmb | 01 39 03.7 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **HDA** | **Harding Lake** | **83.47** | **19** | P | **P** | **01 38 49.5** | **-0.2** |
| **D19K** | **Kuna River** | **83.66** | **12** | P | **P** | **01 38 50.7** | **0.0** |
| D19K | | | | IAmb | IAmb | 01 39 16.7 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **H23K** | **Yukon River** | **83.70** | **17** | P | **P** | **01 38 51.1** | **+0.2** |
| **IL31** | | **83.74** | **18** | P | **P** | **01 38 51.4** | **+0.3** |
| IL31 | | | | IAmb | IAmb | 01 39 19.1 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **83.74** | **18** | P | **P** | **01 38 49.1** | **-2.0** |
| | comp=Z,1.7nm,0.7s,baz=257,slow=4.8,SNR=16 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **M27K** | **Edge Creek, AK** | **83.81** | **22** | P | **P** | **01 38 51.6** | **-0.1** |
| M27K | | | | IAmb | IAmb | 01 39 20.6 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **83.82** | **45** | P | **P** | **01 38 50.3** | **-1.8** |
| | comp=Z,2.3nm,0.8s,baz=306,slow=2.3,SNR=8.1 | | | | | | |
| YBH | | | | LR | LR | 02 09 17.4 | |
| | comp=Z,80nm,20.0s,baz=264,slow=31 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **84.11** | **19** | P | **P** | **01 38 51.1** | **-2.0** |
| **SCRK** | **Sand Creek** | **84.13** | **20** | P | **P** | **01 38 51.7** | **-1.6** |
| **G23K** | **Bananza Creek** | **84.22** | **16** | P | **P** | **01 38 52.6** | **-0.9** |
| **L27K** | **Beaver Creek,** | **84.28** | **21** | P | **P** | **01 38 53.6** | **-0.4** |
| L27K | | | | IAmb | IAmb | 01 39 08.6 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **84.61** | **20** | P | **P** | **01 38 55.6** | **0.0** |
| J26L | | | | IAmb | IAmb | 01 39 10.5 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **BBB** | **Bella Bella** | **84.63** | **34** | LR | LR | 02 09 08.2 | |
| | comp=Z,111nm,21.2s,baz=253,slow=30 | | | | | | |
| **K27K** | **Chicken** | **84.80** | **20** | P | **P** | **01 38 55.8** | **-0.7** |
| K27K | | | | IAmb | IAmb | 01 39 12.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **84.92** | **17** | P | **P** | **01 38 56.2** | **-0.9** |
| **WAKR** | **Walker** | **85.09** | **49** | P | **P** | **01 38 58.6** | **-0.2** |
| WAKR | | | | IAmb | IAmb | 01 39 20.7 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **85.13** | **50** | P | **P** | **01 38 58.8** | **-0.4** |
| **I26K** | **Coal Creek Min** | **85.27** | **19** | P | **P** | **01 38 58.1** | **-0.7** |
| **J05D** | **Fort Rock, OR** | **85.39** | **44** | P | **P** | **01 38 59.9** | **-0.2** |
| J05D | | | | IAmb | IAmb | 01 39 30.5 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **85.59** | **20** | P | **P** | **01 39 00.5** | **+0.1** |
| EGAK | | | | IAmb | IAmb | 01 39 15.7 | |
| | comp=Z,9.4nm,1.0s | | | | | | |
| **DAWY** | **Dawson** | **85.75** | **21** | P | **P** | **01 39 01.3** | **0.0** |
| **RYN** | **Ryan** | **85.81** | **49** | P | **P** | **01 39 01.8** | **-0.6** |
| **DSP** | **Deep Springs** | **85.84** | **51** | P | **P** | **01 39 01.7** | **-0.5** |
| DSP | | | | IAmb | IAmb | 01 39 25.0 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.91** | **50** | P | **P** | **01 39 02.5** | **-0.4** |
| **NVAR** | **Mina Array Bea** | **85.91** | **50** | P | **P** | **01 39 02.1** | **-0.8** |
| | comp=Z,1.5nm,0.9s,baz=228,slow=7.9,SNR=9.8 | | | | | | |
| NVAR | | | | LR | LR | 02 09 22.4 | |
| | comp=Z,203nm,21.3s,baz=266,slow=30 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.91** | **55** | LR | LR | 02 09 08.5 | |
| | comp=Z,143nm,21.1s,baz=244,slow=30 | | | | | | |
| **NV11** | **Mina Array Sit** | **86.02** | **50** | P | **P** | **01 39 02.9** | **-0.5** |
| NV11 | | | | IAmb | IAmb | 01 39 24.2 | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **BMAR** | **Burnt Mountain** | **86.25** | **17** | P | **P** | **01 39 04.1** | **+0.4** |
| **KVN** | **Kaiserville** | **86.25** | **49** | P | **P** | **01 39 03.9** | **-0.7** |
| **I28M** | **Miner Creek** | **86.41** | **20** | P | **P** | **01 39 03.4** | **-1.2** |
| **DLBC** | **Dease Lake** | **86.53** | **28** | LR | LR | 02 09 31.0 | |
| | comp=Z,58nm,21.3s,baz=288,slow=30 | | | | | | |
| **I07A** | **Izee** | **86.84** | **44** | P | **P** | **01 39 06.8** | **-0.4** |
| I07A | | | | IAmb | IAmb | 01 39 37.5 | |
| | comp=Z,6.7nm,1.3s | | | | | | |
| **D25K** | **Kavik River** | **87.05** | **15** | P | **P** | **01 39 07.8** | **+0.2** |
| **E27K** | **Coleen River** | **87.60** | **17** | P | **P** | **01 39 10.2** | **-0.1** |
| E27K | | | | IAmb | IAmb | 01 39 44.1 | |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **LPIG** | **La Paz** | **88.73** | **65** | LR | LR | 02 10 58.0 | |
| | comp=Z,60nm,20.4s,baz=238,slow=30 | | | | | | |
| **SPR3** | **Spring Creek 3** | **89.05** | **50** | P | **P** | **01 39 17.5** | **-0.6** |
| SPR3 | | | | IAmb | IAmb | 01 39 40.6 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **CCUT** | **Cedar City** | **89.41** | **52** | P | **P** | **01 39 19.4** | **-0.4** |
| **NEW** | **Newport** | **89.73** | **41** | LR | LR | 02 11 50.2 | |
| | comp=Z,73nm,21.1s,baz=262,slow=30 | | | | | | |
| **U15A** | **North Rim** | **89.95** | **53** | P | **P** | **01 39 22.7** | **+0.3** |
| U15A | | | | IAmb | IAmb | 01 39 51.1 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **90.12** | **19** | LR | LR | 02 16 31.7 | |
| | comp=Z,51nm,19.0s,baz=212,slow=33 | | | | | | |
| **HLID** | **Hailey** | **90.21** | **46** | P | **P** | **01 39 23.1** | **-0.1** |
| **MSU** | **Marysvale** | **90.55** | **51** | P | **P** | **01 39 23.2** | **-1.8** |
| **HVU** | **Hansel Valley** | **90.91** | **48** | P | **P** | **01 39 25.7** | **-0.9** |
| **SPUT** | **South Promonto** | **91.03** | **48** | P | **P** | **01 39 26.9** | **-0.2** |
| SPUT | | | | IAmb | IAmb | 01 39 55.0 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **DLMT** | **Dillon** | **91.93** | **44** | P | **P** | **01 39 30.4** | **-0.8** |
| **OVMT** | **Ovando** | **92.08** | **42** | P | **P** | **01 39 30.4** | **-1.4** |
| **PDAR** | **Pinedale Array** | **93.46** | **47** | LR | LR | 02 15 02.1 | |
| | comp=Z,28nm,20.9s,baz=256,slow=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **94.15** | **317** | P | **P** | **01 39 40.0** | **-1.3** |
| | comp=Z,0.8nm,0.4s,baz=96,slow=5.3,SNR=2.3 | | | | | | |
| MKAR | | | | LR | LR | 02 24 00.7 | |
| | comp=Z,23nm,18.4s,baz=91,slow=37 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **94.17** | **324** | P | **P** | **01 39 39.9** | **-1.2** |
| | comp=Z,0.6nm,0.5s,baz=96,slow=4.3,SNR=1.8 | | | | | | |
| ZALV | | | | LR | LR | 02 21 34.4 | |
| | comp=Z,45nm,20.6s,baz=82,slow=35 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ANMO** | **Albuquerque** | **94.27** | **55** | LR | LR | 02 13 07.9 | |
| | comp=Z,94nm,21.7s,baz=352,slow=30 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.11** | **27** | LR | LR | 02 15 09.7 | |
| | comp=Z,53nm,21.6s,baz=300,slow=31 | | | | | | |
| **PMSA** | **Palmer Station** | **95.17** | **161** | LR | LR | 02 19 23.3 | |
| | comp=Z,26nm,18.8s,baz=210,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **95.59** | **61** | P | **P** | **01 39 47.1** | **-1.2** |
| | comp=Z,0.5nm,1.0s,baz=235,slow=4.3,SNR=2.5 | | | | | | |
| | comp=Z,0.5nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **96.74** | **183** | LR | LR | 02 21 57.4 | |
| | comp=Z,74nm,20.5s,baz=198,slow=34 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **97.31** | **320** | LR | LR | 02 22 47.6 | |
| | comp=Z,76nm,22.0s,baz=166,slow=35 | | | | | | |
| **AAK** | **Ala-Archa** | **98.19** | **312** | LR | LR | 02 28 07.3 | |
| | comp=Z,24nm,18.2s,baz=90,slow=37 | | | | | | |
| **ARCES** | **ARCESS Array B** | **116.85** | **346** | PKP | **PKPdf** | **01 45 04.3** | **-2.0** |
| | comp=Z,1.6nm,0.7s,baz=90,slow=2.4,SNR=5.1 | | | | | | |
| **FINES** | **FINESS Array B** | **122.33** | **339** | PKP | **PKPdf** | **01 45 15.3** | **-1.7** |
| | comp=Z,1.9nm,1.0s,baz=27,slow=3.4,SNR=4.8 | | | | | | |
| **KEST** | **Kesra** | **148.03** | **323** | PKPbc | **PKPdf** | **01 46 06.1** | **+0.9** |
| | comp=Z,3.1nm,1.1s,baz=333,slow=11,SNR=2.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **150.58** | **345** | PKPbc | **PKPdf** | **01 46 12.3** | **+3.1** |
| | comp=Z,0.8nm,0.9s,baz=12,slow=3.2,SNR=3.3 | | | | | | |

*SOME **09** 01:38:07.2, 44˚.85N×80˚.95E, h10km*
*NNC **09** 01:38:07.7±0.3, 44˚.84N×80˚.89E, h0km, mb3.2, mpv3.0, Error ellipse: s-maj=5.7km s-min=1.9km az=122.0*
**ISC 09 01:38:07.0±0.9, 44˚.83N±0˚.04×80˚.99E±0˚.04, h10km, n30, σ1ᵎ24/50, 5C-1D, Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DJR** | **Jarkent** | **0.99** | **240** | *eP* | **Pb** | **01 38 26.2** | **-0.1** |
| DJR | | | | *eS* | **Sb** | **01 38 39.8** | **+0.4** |
| **KNOS** | **Konyrlen** | **1.37** | **251** | P | **Pg** | **01 38 33.0** | **-0.3** |
| | 2.1nm,0.2s | | | | | | |
| KNOS | | | | S | **Sg** | **01 38 51.4** | **+0.2** |
| | 10nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.46** | **199** | *eP* | **Pb** | **01 38 34.4** | **+0.1** |
| | 1.6nm,0.1s | | | | | | |
| KTMS | | | | *eS* | **Sb** | **01 38 53.6** | **+0.7** |
| | 12nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.46** | **199** | P | **Pb** | **01 38 34.4** | **+0.1** |
| | 1.6nm,0.1s | | | | | | |
| KTMS | | | | S | **Sb** | **01 38 53.6** | **+0.7** |
| | 9.0nm,0.2s | | | | | | |
| **TDK** | **Taldyqorghan** | **1.84** | **276** | *eP* | **Pb** | **01 38 41.1** | **+0.3** |
| | 19nm,0.1s | | | | | | |
| TDK | | | | *eS* | **Sg** | **01 39 05.4** | **-0.8** |
| | 18nm,0.1s | | | | | | |
| **PDGK** | **Podgornoye** | **1.85** | **216** | P | **Pb** | **01 38 41.3** | **+0.4** |
| | 1.3nm,0.1s | | | | | | |
| PDGK | | | | S | **Sb** | **01 39 05.4** | **+1.3** |
| | 15nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **1.85** | **216** | ⇑P | **Pb** | **01 38 40.7** | **-0.2** |
| | 0.8nm,0.3s | | | | | | |
| PDGK | | | | ⇑S | **Sb** | **01 39 05.0** | **+0.9** |
| | 15nm,0.6s | | | | | | |
| **BLB** | **Baldybastay** | **1.94** | **249** | Pg | **Pb** | **01 38 43.2** | **+0.7** |
| | 31nm,0.4s | | | | | | |
| BLB | | | | Lg | Lg | 01 39 09.2 | |
| | 53nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **2.00** | **214** | *eP* | **Pn** | **01 38 41.5** | **+0.5** |
| | 6.4nm,0.3s | | | | | | |
| SHLS | | | | *eS* | **Sn** | **01 39 05.9** | **-0.2** |
| **SHLS** | **Shalkode** | **2.00** | **214** | P | **Pn** | **01 38 41.4** | **+0.4** |
| | 38nm,0.3s | | | | | | |
| SHLS | | | | S | **Sn** | **01 39 05.9** | **-0.2** |
| **MAKZ** | **Makanchi** | **2.10** | **19** | ⇑Pn | **Pb** | **01 38 45.0** | **-0.2** |
| | 2.9nm,1.1s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sb** | **01 39 11.7** | **+0.5** |
| | 2.4nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **2.15** | **231** | *eP* | **Pb** | **01 38 46.3** | **+0.3** |
| | 5.5nm,0.2s | | | | | | |
| KPKS | | | | *eS* | **Sb** | **01 39 14.1** | **+1.4** |
| | 35nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.15** | **231** | Pg | **Pb** | **01 38 46.3** | **+0.3** |
| | 5.5nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 01 39 14.1 | |
| | 35nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **2.17** | **24** | ⇓Pn | **Pb** | **01 38 45.6** | **-0.7** |
| | 0.5nm,0.3s,baz=205,slow=13,SNR=21 | | | | | | |
| MK31 | | | | ⇑Sn | **Sb** | **01 39 14.1** | **+0.8** |
| | 1.0nm,0.3s,baz=205,slow=27,SNR=14 | | | | | | |
| **UZB** | **Uzynbulak** | **2.20** | **221** | *eP* | **Pb** | **01 38 46.5** | **-0.5** |
| | 1.2nm,0.2s | | | | | | |
| UZB | | | | *eS* | **Sb** | **01 39 14.2** | **-0.1** |
| | 25nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **2.20** | **221** | Pg | **Pb** | **01 38 46.5** | **-0.5** |
| | 2.2nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 01 39 14.2 | |
| | 25nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **2.34** | **256** | *eP* | **Pb** | **01 38 50.1** | **+0.7** |
| | 2.1nm,0.2s | | | | | | |
| ARXS | | | | *eS* | **Sg** | **01 39 20.5** | **-1.7** |
| | 10nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **2.34** | **256** | Pg | **Pb** | **01 38 49.9** | **+0.6** |
| | 2.6nm,0.3s | | | | | | |
| ARXS | | | | Lg | Lg | 01 39 20.5 | |
| | 9.7nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **2.43** | **238** | *eP* | **Pb** | **01 38 51.6** | **+0.8** |
| | 3.5nm,0.6s | | | | | | |
| KURS | | | | *eS* | **Sg** | **01 39 22.9** | **-2.1** |
| | 6.5nm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **2.48** | **229** | *eP* | **Pb** | **01 38 52.1** | **+0.4** |
| | 3.1nm,0.1s | | | | | | |
| ZHN | | | | *eS* | **Sb** | **01 39 23.9** | **+1.6** |
| | 47nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.48** | **229** | Pg | **Pb** | **01 38 52.1** | **+0.4** |
| | 4.6nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 01 39 23.9 | |
| | 47nm,0.2s | | | | | | |
| **SATY** | **Saty** | **2.57** | **227** | *eP* | **Pb** | **01 38 54.2** | **+0.9** |
| | 3.2nm,0.1s | | | | | | |
| SATY | | | | *eS* | **Sg** | **01 39 27.4** | **-2.1** |
| | 41nm,0.2s | | | | | | |
| **SATY** | **Saty** | **2.57** | **227** | Pg | **Pb** | **01 38 54.2** | **+0.9** |
| | 3.3nm,0.2s | | | | | | |
| SATY | | | | Lg | Lg | 01 39 27.4 | |
| | 41nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.22** | **242** | *eP* | **Pb** | **01 39 05.3** | **+1.0** |
| | 2.2nm,0.2s | | | | | | |
| KOTS | | | | *eS* | **Sg** | **01 39 47.0** | **-3.3** |
| | 9.5nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.22** | **242** | Pg | **Pb** | **01 39 05.3** | **+1.0** |
| | 3.3nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 01 39 47.0 | |
| | 9.5nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **3.29** | **252** | *eP* | **Pb** | **01 39 06.0** | **+0.6** |
| | 1.1nm,0.4s | | | | | | |
| KTBS | | | | *eS* | **Sb** | **01 39 47.8** | **+2.3** |
| | 7.7nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **3.29** | **252** | Pg | **Pb** | **01 39 06.0** | **+0.6** |
| | 1.1nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 01 39 47.8 | |
| | 7.7nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **3.98** | **255** | *eP* | **Pb** | **01 39 19.2** | **+2.0** |
| | 0.5nm,0.2s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **01 40 10.3** | **-4.4** |
| | 0.8nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **3.98** | **255** | Pg | **Pb** | **01 39 17.8** | **+0.5** |
| | 0.5nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 01 40 08.0 | |
| | 0.8nm,0.2s | | | | | | |
| **WMQ** | **Urumqi** | **4.92** | **99** | *eP* | **Pn** | **01 39 22.4** | **+1.4** |
| WMQ | | | | LR | LR | | |
| | comp=Z,130nm,20.9s | | | | | | |

*IDC **09** 01:49:09.2±2.0, 7˚.19S×123˚.61E, h0km, mb3.2/1, mbtmp3.5/3, ML3.7/2, Error ellipse: s-maj=291.3km s-min=30.6km az=58.0*
*DJA **09** 01:49:21.7±4.2, 8˚.S±19˚×12˚.3E±˚, h259km±42km, M3.7/7, MLv3.7/7*
**ISC 09 01:49:29.0±1.3, 8˚.2S±0˚.1×123˚.3E±0˚.1, h200km, n15, σ2ᵎ54/17, Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDFI** | **Ende, Flores** | **1.72** | **250** | P | **Pn** | **01 50 03.9** | **-0.9** |
| **SOEI** | **Soe** | **1.84** | **150** | P | **Pn** | **01 50 06.3** | **+0.3** |
| **SOEI** | **Soe** | **1.84** | **150** | P | **Pn** | **01 50 06.5** | **+0.5** |
| **BATI** | **Baumata** | **2.06** | **171** | P | **Pn** | **01 50 08.5** | **+0.3** |
| **BASI** | **Baing, Sumba** | **3.40** | **233** | P | **Pn** | **01 50 21.7** | **-1.7** |
| **DRS** | **Darwin Rock St** | **8.58** | **120** | P | **Pn** | **01 51 29.1** | **-0.7** |
| **MTN** | **Manton Dam** | **8.98** | **122** | P | **Pn** | **01 51 34.0** | **-1.0** |
| **KDU** | **Kakadu** | **10.06** | **117** | P | **Pn** | **01 51 47.9** | **-1.1** |
| **WRA** | **Warramunga Arr** | **15.84** | **139** | Pn | **P** | **01 53 00.3** | **-1.0** |
| | 0.2nm,0.3s,baz=315,slow=13,SNR=11 | | | | | | |
| WRA | | | | Sn | **S** | **01 55 50.5** | **-6.8** |
| | 0.4nm,0.3s,baz=316,slow=26,SNR=7.0 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **WRKA** | **Warakurna** | **17.44** | **165** | P | **P** | **01 53 18.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **18.46** | **148** | P | **Pn** | **01 53 34.6** | **+2.1** |
| | 0.4nm,0.3s,baz=332,slow=13,SNR=22 | | | | | | |
| ASAR | | | | S | **S** | **01 56 55.3** | **+5.2** |
| | 0.5nm,0.7s,baz=328,slow=22,SNR=3.3 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **MEEK** | **Meekatharra** | **18.92** | **193** | P | **P** | **01 53 35.0** | **+0.2** |
| **QIS** | **Mount Isa** | **19.99** | **130** | P | **P** | **01 53 47.0** | **+0.6** |
| **COEN** | **Coen** | **20.31** | **108** | P | **P** | **01 53 51.7** | **+1.9** |
| **MKAR** | **Makanchi Array** | **65.75** | **330** | P | **P** | **01 59 51.5** | **-0.9** |
| | 0.2nm,0.6s,baz=117,slow=8.3,SNR=2.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **09** 02:03:11.8±2.4, 44˚.30N×149˚.61E, h0km, mb3.9/10, mbtmp3.9/11, ML3.2/1, MS2.8/1, Error ellipse: s-maj=70.3km s-min=22.4km az=178.0*
*SKHL **09** 02:03:12.7±0.4, 44˚.00N×149˚.90E, h35km±4km, mb4.3/3*
*NEIC **09** 02:03:13.4±1.6, 44˚.2N±0˚.1×149˚.7E±0˚.2, h10km±1km, mb4.2/29, Error ellipse: s-maj=25.8km s-min=18.3km az=148.0*
*JMA **09** 02:03:14.5±1.2, 45˚N±5˚×15˚0E±˚, h30km, MV4.3/12, SE OFF ETOROFU*

**ISC 09 02:03:16.4±0.8, 44˚.02N±0˚.08×149˚.6E±0˚.1, h38km±3km, n60, σ1ᵎ03/67, mb4.1/25, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.75** | **315** | *eP* | **Pn** | **02 03 42.9** | **-1.2** |
| KUR | | | | AMB | AMB | 02 03 43.1 | |
| | 130nm,0.4s | | | | | | |
| KUR | | | | *eS* | **Sn** | **02 04 05.9** | **+0.8** |
| KUR | | | | A | A | 02 04 12.5 | |
| | 220nm,0.6s | | | | | | |
| KUR | | | | A | A | 02 04 12.5 | |
| | 320nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.02** | **267** | *eP* | **Pn** | **02 03 47.0** | **-0.9** |
| SHO | | | | AMB | AMB | 02 03 48.2 | |
| | 20nm,0.3s | | | | | | |
| SHO | | | | *eS* | **Sn** | **02 04 12.3** | **+0.4** |
| SHO | | | | A | A | 02 04 13.2 | |
| | 130nm,0.4s | | | | | | |
| SHO | | | | A | A | 02 04 13.2 | |
| | 110nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.72** | **272** | *eP* | **Pn** | **02 03 56.8** | **-0.6** |
| YUK | | | | AMB | AMB | 02 04 00.2 | |
| | 90nm,0.5s | | | | | | |
| YUK | | | | *eS* | **Sn** | **02 04 30.2** | **+1.3** |
| YUK | | | | A | A | 02 04 37.2 | |
| | 110nm,0.6s | | | | | | |
| YUK | | | | A | A | 02 04 37.2 | |
| | 220nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.89** | **258** | *eP* | **Pn** | **02 03 59.4** | **-0.4** |
| NEM2 | | | | *eS* | **Sn** | **02 04 32.8** | **-0.5** |
| **NMR** | **Nemuro--Hokkai** | **2.90** | **258** | *eP* | **Pn** | **02 03 59.4** | **-0.5** |
| NMR | | | | *eS* | **Sn** | **02 04 34.4** | **+0.9** |
| **JRA** | **Rausu** | **3.25** | **270** | *eP* | **Pn** | **02 04 04.8** | **+0.1** |
| **JNK** | **Nakash** | **3.58** | **265** | *eP* | **Pn** | **02 04 09.8** | **+0.6** |
| **JAK** | **Akkeshi** | **3.73** | **256** | *eP* | **Pn** | **02 04 11.7** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **4.13** | **271** | *eP* | **Pn** | **02 04 17.9** | **+1.1** |
| **JAR** | **Ashorobuto** | **4.31** | **262** | P | **Pn** | **02 04 20.2** | **+0.9** |
| JAR | | | | *eS* | **Sn** | **02 05 10.2** | **+1.9** |
| **JOB** | **Onbets** | **4.36** | **257** | *eP* | **Pn** | **02 04 20.9** | **+0.9** |
| **JCH** | **Churui** | **4.78** | **255** | P | **Pn** | **02 04 27.3** | **+1.6** |
| JCH | | | | *eS* | **Sn** | **02 05 20.6** | **+0.8** |
| **JNBK** | **Urakawa-nobuka** | **5.32** | **253** | *eP* | **Pn** | **02 04 34.0** | **+0.9** |
| **JANG** | **Nango** | **7.04** | **242** | *eS* | **Sn** | **02 06 10.2** | **-5.2** |
| **JTM** | **Tenmabayashi** | **7.11** | **246** | Pn | **Pn** | **02 04 58.5** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **12.68** | **277** | Pn | **Pn** | **02 06 14.7** | **+0.7** |
| | 0.1nm,0.3s,baz=81,slow=16,SNR=2.7 | | | | | | |
| USRK | | | | LR | LR | 02 10 46.6 | |
| | comp=Z,40nm,19.5s,baz=182,slow=36 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **30.02** | **293** | P | **P** | **02 09 21.2** | **-0.3** |
| | 0.5nm,0.5s,baz=90,slow=8.4,SNR=3.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **35.91** | **28** | P | **P** | **02 10 12.8** | **+0.3** |
| C19K | | | | IAmb | IAmb | 02 10 27.9 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **36.25** | **30** | P | **P** | **02 10 15.8** | **+0.4** |
| D19K | | | | IAmb | IAmb | 02 10 21.5 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **H19K** | **Roundabout Mou** | **36.25** | **35** | P | **P** | **02 10 14.8** | **-0.6** |
| H19K | | | | IAmb | IAmb | 02 10 15.8 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **B20K** | **Meade River** | **36.99** | **27** | P | **P** | **02 10 21.6** | **0.0** |
| B20K | | | | IAmb | IAmb | 02 10 25.7 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| **K20K** | **Telida** | **37.01** | **39** | P | **P** | **02 10 22.3** | **+0.3** |
| K20K | | | | IAmb | IAmb | 02 10 25.8 | |
| | comp=Z,4.9nm,1.4s | | | | | | |
| **D22K** | **Ayikyak River** | **38.27** | **30** | P | **P** | **02 10 32.2** | **-0.3** |
| **E22K** | **Anaktuvuk Pass** | **38.47** | **31** | P | **P** | **02 10 34.4** | **+0.2** |
| **H23K** | **Yukon River** | **39.12** | **35** | P | **P** | **02 10 39.5** | **-0.2** |
| **C23K** | **Itkillik River** | **39.15** | **28** | P | **P** | **02 10 40.3** | **+0.5** |
| C23K | | | | IAmb | IAmb | 02 10 41.4 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **WRH** | **Wood River Hil** | **39.70** | **37** | P | **P** | **02 10 44.5** | **+0.1** |
| **E24K** | **Your Creek** | **39.70** | **31** | P | **P** | **02 10 44.8** | **+0.2** |
| **ILAR** | **Eielson Array** | **40.21** | **36** | P | **P** | **02 10 49.0** | **+0.3** |
| | comp=Z,0.1nm,0.5s,baz=279,slow=7.2,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **40.57** | **29** | P | **P** | **02 10 52.5** | **+0.7** |
| **FYU** | **Fort Yukon** | **40.89** | **34** | P | **P** | **02 10 54.1** | **-0.2** |
| FYU | | | | IAmb | IAmb | 02 10 57.8 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **BMAR** | **Burnt Mountain** | **41.15** | **32** | P | **P** | **02 10 57.5** | **+0.9** |
| **I30M** | **Mount Dempster** | **44.62** | **35** | P | **P** | **02 11 23.9** | **-0.8** |
| **MK31** | **Makanchi Array** | **46.04** | **298** | P | **P** | **02 11 36.5** | **+0.4** |
| MK31 | | | | IAmb | IAmb | 02 11 37.6 | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.04** | **298** | P | **P** | **02 11 36.1** | **0.0** |
| **MKAR** | **Makanchi Array** | **46.04** | **298** | P | **P** | **02 11 36.5** | **+0.4** |
| | comp=Z,1.8nm,0.8s,baz=71,slow=8.6,SNR=16 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.86** | **305** | P | **P** | **02 11 41.4** | **-1.1** |
| KURK | | | | IAmb | IAmb | 02 11 56.0 | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.95** | **304** | P | **P** | **02 11 42.3** | **-0.7** |
| | comp=Z,0.6nm,0.2s,baz=74,slow=8.0,SNR=3.6 | | | | | | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.98** | **296** | P | **P** | **02 

**IDC 09 02:27:17.6±3.0, 18°93S×175°37W, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=327.8km s-min=33.5km az=159.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **47.29** | **260** | P | P | 02 35 52.7 | -0.5 |
| | 0.2nm,0.4s,baz=98,slow=6.7,SNR=8.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **47.30** | **255** | P | P | 02 35 53.5 | +0.2 |
| | 0.3nm,0.6s,baz=88,slow=8.1,SNR=5.2 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.13** | **56** | P | P | 02 39 51.0 | +0.1 |
| | 0.4nm,0.7s,baz=242,slow=5.7,SNR=5.1 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*IDC **09** 02:37:58.2±1.4, 41.69N×19.37E, h0km, mb3.8/5, mbtmp3.6/11, ML3.4/5, Error ellipse: s-maj=18.7km s-min=13.1km az=9.0*

*RHSSO **09** 02:37:59.7±0.5, 41.36N×19.45E, h5km±2km, ML3.7/17*

*TIR **09** 02:37:59.4, 41.55N×19.46E, h46km±2km, Md4.0, Ml3.6*

*PDG **09** 02:37:59.5±0.5, 41.44N×19.54E, h17km±1km, MD3.8/8, ML3.7/11, Error ellipse: s-maj=1.0km s-min=1.6km az=0.0*

*THE **09** 02:38:01.6, 41.47N×19.54E, h7km, ML3.1/10, Error ellipse: s-maj=1.1km s-min=0.6km az=322.0*

*BEO **09** 02:38:01.0±0.4, 41.46N×19.56E, h17km±2km, ML3.3/23*

*LDG **09** 02:38:01.0±0.0, 41.49N×19.52E, h10km, Ml3.6/17, Error ellipse: s-maj=9999.9km s-min=9999.9km az=99.0*

*ATH **09** 02:38:02.0, 41.46N×19.41E, h12km±5km, ML3.1/9, Error ellipse: s-maj=6.7km s-min=1.5km az=357.0*

**ISC 09 02:38:00.2±0.9, 41.46N±0.02×19.50E±0.02, h17km±5km, n225, σ1§87/358, mb4.1/4, 39C-13D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.30** | **112** | P | **Pg** | **02 38 06.5** | **-0.2** |
| | baz=123 | | | | | | |
| TIR | | | | S | **Sg** | **02 38 11.2** | **+0.1** |
| | baz=123 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=N,65nm,0.1s,baz=123 | | | | | | |
| **TIR** | **Tirane** | **0.30** | **112** | P | **Pg** | **02 38 06.5** | **-0.2** |
| TIR | | | | S | **Sg** | **02 38 10.9** | **-0.2** |
| **TIR** | **Tirane** | **0.30** | **112** | *e*Pg | **Pg** | **02 38 06.4** | **-0.2** |
| TIR | | | | *e*Sg | **Sg** | **02 38 11.2** | **+0.1** |
| **TIR** | **Tirane** | **0.30** | **112** | ⇓P | **Pg** | **02 38 06.5** | **-0.2** |
| **PUK** | **Puka** | **0.65** | **27** | P | **Pg** | **02 38 12.0** | **-1.2** |
| | baz=33 | | | | | | |
| PUK | | | | S | **Sg** | **02 38 22.1** | **+0.3** |
| | baz=33 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,17nm,0.2s,baz=33 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.76** | **342** | *i*Pg | **Pg** | **02 38 14.8** | **-0.4** |
| DRME | | | | *e*Sg | **Sb** | **02 38 27.4** | **+2.3** |
| **DRME** | **Dracevica, Mon** | **0.76** | **342** | ⇑*i*Pg | **Pg** | **02 38 14.8** | **-0.4** |
| DRME | | | | *i* Sg | **Sb** | **02 38 27.0** | **+1.9** |
| **BUM** | **Brajici-Budva** | **0.95** | **332** | ⇓*i*Pg | **Pg** | **02 38 19.2** | **+0.4** |
| BUM | | | | *i* Sg | **Sn** | **02 38 34.2** | **+2.1** |
| **PDG** | **Podgorica** | **0.98** | **350** | *e*Pg | **Pb** | **02 38 19.9** | **+1.1** |
| PDG | | | | *e*Sg | **Sn** | **02 38 35.1** | **+2.3** |
| **PDG** | **Podgorica** | **0.98** | **350** | ⇑*i*Pg | **Pg** | **02 38 18.3** | **-1.0** |
| PDG | | | | *e*Sg | **Sn** | **02 38 33.9** | **+1.1** |
| **PDG** | **Podgorica** | **0.98** | **350** | ⇑P | **Pg** | **02 38 18.3** | **-1.0** |
| **PDG** | **Podgorica** | **0.98** | **350** | ⇑*i*Pg | **Pg** | **02 38 18.3** | **-1.0** |
| PDG | | | | *i* Sg | **Sn** | **02 38 36.2** | **+3.4** |
| **VLO** | **Vlora** | **0.99** | **180** | P | **Pn** | **02 38 21.5** | **+2.2** |
| | baz=178 | | | | | | |
| VLO | | | | S | **Sn** | **02 38 36.0** | **+3.1** |
| | baz=178 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=E,8.5nm,0.2s,baz=178 | | | | | | |
| **VLO** | **Vlora** | **0.99** | **180** | P | **Pn** | **02 38 20.8** | **+1.5** |
| VLO | | | | S | **Sn** | **02 38 35.1** | **+2.2** |
| **BCI** | **Bajram Curri** | **1.00** | **25** | P | **Pg** | **02 38 17.9** | **-1.8** |
| | baz=29 | | | | | | |
| BCI | | | | S | **Sg** | **02 38 31.6** | **-1.2** |
| | baz=29 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,5.8nm,0.4s,baz=29 | | | | | | |
| **OHR** | **Ohrid** | **1.04** | **109** | *i* Pg | **Pb** | **02 38 19.4** | **-0.4** |
| OHR | | | | *i* Sg | **Sn** | **02 38 35.8** | **+1.5** |
| **CEME** | **Cevo** | **1.17** | **339** | ⇑*i*Pg | **Pb** | **02 38 23.1** | **+1.1** |
| CEME | | | | *i* Sg | **Sn** | **02 38 40.0** | **+2.6** |
| **PVY** | **Plav** | **1.18** | **17** | ⇑*i*Pg | **Pb** | **02 38 21.7** | **-0.6** |
| PVY | | | | *i* Sg | **Sn** | **02 38 41.1** | **+3.2** |
| **KBN** | **Korca** | **1.29** | **130** | P | **Pn** | **02 38 24.6** | **+1.1** |
| | baz=132 | | | | | | |
| KBN | | | | S | **Sg** | **02 38 43.2** | **+1.3** |
| | baz=132 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,3.5nm,0.5s,baz=132 | | | | | | |
| **KBN** | **Korca** | **1.29** | **130** | P | **Pn** | **02 38 24.5** | **+1.0** |
| KBN | | | | S | **Sg** | **02 38 43.2** | **+1.3** |
| | comp=E,805nm,0.7s | | | | | | |
| **NKME** | **Niksic** | **1.37** | **343** | ⇓*i*Pg | **Pn** | **02 38 25.7** | **+1.1** |
| NKME | | | | *i* Sg | **Sg** | **02 38 46.7** | **+2.3** |
| **KOME** | **Kolasin** | **1.39** | **1** | ⇓*i*Pg | **Pn** | **02 38 25.4** | **+0.5** |
| KOME | | | | *i* Sg | **Sg** | **02 38 47.6** | **+2.4** |
| **IVA** | **Berane** | **1.44** | **12** | ⇓*i*Pg | **Pn** | **02 38 26.3** | **+0.7** |
| IVA | | | | *i* Sg | **Sg** | **02 38 48.7** | **+1.9** |
| **TREB** | **Trebinje** | **1.52** | **326** | ⇑*i*Pn | **Pn** | **02 38 28.0** | **+1.4** |
| TREB | | | | *e*Sn | **Sg** | **02 38 49.6** | **+0.4** |
| **DBRK** | **Dubrovnik** | **1.57** | **321** | *e*Pn | **Pb** | **02 38 29.6** | **+0.8** |
| DBRK | | | | Sg | **Sb** | **02 38 49.5** | **+1.1** |
| **FNA** | **Florina** | **1.57** | **115** | P | **Pn** | **02 38 28.3** | **+0.9** |
| | baz=117 | | | | | | |
| FNA | | | | S | **Sb** | **02 38 49.9** | **+1.4** |
| | baz=117 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,1.6nm,0.4s,baz=117 | | | | | | |
| **FNA** | **Florina** | **1.57** | **115** | P | **Pn** | **02 38 28.3** | **+0.9** |
| FNA | | | | S | **Sb** | **02 38 49.9** | **+1.4** |
| | comp=E,915nm,0.4s | | | | | | |
| **FNA** | **Florina** | **1.57** | **115** | *e*Pn | **Pn** | **02 38 28.5** | **+1.1** |
| FNA | | | | *e*Sn | **Sn** | **02 38 48.4** | **+1.0** |
| **FNA** | **Florina** | **1.57** | **115** | P | **Pn** | **02 38 29.0** | **+1.6** |
| **NEST** | **Nestorio** | **1.57** | **131** | P | **Pb** | **02 38 29.5** | **+0.6** |
| NEST | | | | S | **Sb** | **02 38 50.6** | **+2.0** |
| | comp=E,435nm,0.7s | | | | | | |
| **NEST** | **Nestorio** | **1.57** | **131** | P | **Pb** | **02 38 30.2** | **+1.2** |
| NEST | | | | S | **Sb** | **02 38 50.0** | **+1.4** |
| NEST | | | | AML | AML | 02 38 54.2 | |
| | comp=E,820μm,1.1s | | | | | | |
| NEST | | | | AML | AML | 02 38 59.9 | |
| | comp=N,1092μm,0.5s | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.59** | **210** | P | **Pn** | **02 38 28.3** | **+0.7** |
| | baz=208 | | | | | | |
| SCTE | | | | S | **Sb** | **02 38 50.5** | **+1.6** |
| | baz=208 | | | | | | |
| SCTE | | | | AMP | | | |
| | comp=E,1.0nm,0.3s,baz=208 | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.59** | **210** | P | **Pn** | **02 38 28.5** | **+0.9** |
| SCTE | | | | S | **Sn** | **02 38 48.2** | **+0.4** |
| SCTE | | | | AML | AML | 02 38 53.4 | |
| | comp=N,725μm,0.5s | | | | | | |
| SCTE | | | | AML | AML | 02 38 54.1 | |
| | comp=E,544μm,0.5s | | | | | | |
| **BRY** | **Bratogost** | **1.61** | **334** | ⇑*i*Pn | **Pb** | **02 38 30.0** | **+0.5** |
| BRY | | | | *e*Sn | **Sb** | **02 38 51.1** | **+1.5** |
| **BRY** | **Bratogost** | **1.61** | **334** | ⇑*i*Pn | **Pb** | **02 38 30.1** | **+0.5** |
| BRY | | | | *i* Sn | **Sg** | **02 38 53.2** | **+1.1** |
| **SRN** | **Sarande** | **1.62** | **166** | P | **Pn** | **02 38 30.1** | **+2.1** |
| | baz=165 | | | | | | |
| SRN | | | | S | **Sb** | **02 38 52.0** | **+2.1** |
| | baz=165 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,1.0nm,0.6s,baz=165 | | | | | | |
| **SRN** | **Sarande** | **1.62** | **166** | P | **Pn** | **02 38 30.1** | **+2.1** |
| SRN | | | | S | **Sb** | **02 38 51.5** | **+1.6** |
| | comp=N,265nm,0.6s | | | | | | |
| **KASA** | **Kassiopi** | **1.75** | **169** | P | **Pn** | **02 38 31.3** | **+1.6** |
| KASA | | | | S | **Sn** | **02 38 53.1** | **+1.6** |
| KASA | | | | AML | AML | 02 39 02.0 | |
| | comp=E,1273μm,0.6s | | | | | | |
| KASA | | | | AML | AML | 02 39 04.0 | |
| | comp=N,618μm,0.2s | | | | | | |
| **KEK** | **Kerkira** | **1.76** | **172** | P | **Pn** | **02 38 31.6** | **+1.6** |
| KEK | | | | S | **Sb** | **02 38 54.7** | **+0.8** |
| | comp=N,602nm,0.5s | | | | | | |
| **KEK** | **Kerkira** | **1.76** | **172** | P | **Pn** | **02 38 31.8** | **+1.8** |
| KEK | | | | S | **Sn** | **02 38 53.3** | **+1.4** |
| KEK | | | | AML | AML | 02 39 03.1 | |
| | comp=E,853μm,0.4s | | | | | | |
| KEK | | | | AML | AML | 02 39 04.7 | |
| | comp=N,687μm,0.6s | | | | | | |
| **PENT** | **Pentalofos** | **1.77** | **135** | P | **Pb** | **02 38 33.0** | **+0.6** |
| **UPM** | **Unac-Piva** | **1.79** | **346** | *e*Pn | **Pb** | **02 38 32.9** | **+0.1** |
| UPM | | | | *e*Sn | **Sb** | **02 38 56.9** | **+1.8** |
| **UPM** | **Unac-Piva** | **1.79** | **346** | ⇑*i*Pn | **Pb** | **02 38 33.5** | **+0.7** |
| UPM | | | | *i* Sn | **Sg** | **02 38 57.8** | **-0.3** |
| **SJES** | **Sjenica** | **1.83** | **11** | *e*Pn | **Pb** | **02 38 33.5** | **+0.1** |
| SJES | | | | *e*Sn | **Sb** | **02 38 56.5** | **+0.4** |
| **SJES** | **Sjenica** | **1.83** | **11** | *e*Pn | **Pn** | **02 38 32.9** | **+1.8** |
| SJES | | | | *e*Sn | **Sg** | **02 38 58.4** | **-0.9** |
| **KLINJ** | **Klinje** | **1.84** | **339** | *e*Pn | **Pn** | **02 38 33.4** | **+2.3** |
| KLINJ | | | | *e*Sn | **Sb** | **02 38 57.4** | **+1.3** |
| **PLE** | **Pljevlja** | **1.87** | **358** | ⇑*i*Pn | **Pb** | **02 38 34.3** | **+0.3** |
| PLE | | | | *i* Sn | **Sb** | **02 38 59.3** | **+2.2** |
| **STON** | **Ston** | **1.94** | **317** | *i* Pn | **Pn** | **02 38 34.0** | **+1.6** |
| STON | | | | Sn | **Sn** | **02 38 57.5** | **+1.1** |
| **STON** | **Ston** | **1.94** | **317** | ⇑*i*Pn | **Pn** | **02 38 33.8** | **+1.4** |
| STON | | | | *e*Sn | **Sn** | **02 38 58.7** | **+2.3** |
| **NOCI** | **Noci** | **1.96** | **251** | P | **Pn** | **02 38 33.7** | **+1.0** |
| | baz=248 | | | | | | |
| NOCI | | | | S | **Sn** | **02 38 57.9** | **+1.1** |
| | baz=248 | | | | | | |
| **KPRO** | **Kipourio** | **2.07** | **136** | P | **Pn** | **02 38 36.5** | **+2.3** |
| KPRO | | | | S | **Sb** | **02 39 02.9** | **+0.1** |
| | comp=N,275nm,0.8s | | | | | | |
| **KPRO** | **Kipourio** | **2.07** | **136** | P | **Pn** | **02 38 36.8** | **+2.6** |
| KPRO | | | | S | **Sn** | **02 39 01.8** | **+2.1** |
| KPRO | | | | AML | AML | 02 39 09.1 | |
| | comp=E,420μm,0.4s | | | | | | |
| KPRO | | | | AML | AML | 02 39 12.0 | |
| | comp=N,515μm,0.6s | | | | | | |
| **KZN** | **Kozani** | **2.08** | **123** | P | **Pn** | **02 38 36.5** | **+2.2** |
| KZN | | | | S | **Sb** | **02 39 03.4** | **+0.4** |
| | comp=N,328nm,0.6s | | | | | | |
| **KZN** | **Kozani** | **2.08** | **123** | P | **Pn** | **02 38 36.3** | **+2.0** |
| KZN | | | | S | **Sn** | **02 39 02.5** | **+2.7** |
| KZN | | | | AML | AML | 02 39 13.2 | |
| | comp=E,621μm,0.5s | | | | | | |
| KZN | | | | AML | AML | 02 39 16.2 | |
| | comp=N,688μm,0.6s | | | | | | |
| **JAN** | **Janina** | **2.08** | **150** | P | **Pn** | **02 38 36.4** | **+2.1** |
| JAN | | | | S | **Sb** | **02 39 03.2** | **+0.2** |
| | comp=N,350nm,0.5s | | | | | | |
| **JAN** | **Janina** | **2.08** | **150** | P | **Pn** | **02 38 36.9** | **+2.6** |
| JAN | | | | S | **Sn** | **02 39 01.9** | **+2.1** |
| JAN | | | | AML | AML | 02 39 19.6 | |
| | comp=N,722μm,0.5s | | | | | | |
| JAN | | | | AML | AML | 02 39 20.2 | |
| | comp=E,534μm,0.4s | | | | | | |
| **SELS** | **Selova** | **2.13** | **34** | *e*Pn | **Pn** | **02 38 36.3** | **+1.2** |
| SELS | | | | *e*Sn | **Sn** | **02 39 03.3** | **+2.2** |
| **RUDO** | **Rudo** | **2.16** | **358** | ⇑*i*Pn | **Pn** | **02 38 37.9** | **+2.5** |
| RUDO | | | | *e*Sn | **Sb** | **02 39 05.7** | **+0.4** |
| **BARS** | **Barje** | **2.19** | **51** | *e*Pn | **Pn** | **02 38 36.8** | **+0.9** |
| BARS | | | | *e*Sn | **Sn** | **02 39 03.6** | **+0.9** |
| **KTI** | **Kastanea** | **2.25** | **117** | P | **Pn** | **02 38 38.7** | **+1.8** |
| **MATE** | **Matera** | **2.26** | **250** | ⇑P | **Pn** | **02 38 38.8** | **+2.0** |
| **VAY** | **Valandovo** | **2.32** | **92** | *i* Pn | **Pn** | **02 38 39.3** | **+1.7** |
| VAY | | | | *i* Sn | **Sn** | **02 39 08.5** | **+2.8** |
| **LSTV** | **Lastovo** | **2.34** | **305** | *e*Pn | **Pn** | **02 38 39.2** | **+1.4** |
| LSTV | | | | Sn | **Sn** | **02 39 08.1** | **+1.9** |
| **BBLS** | **Lazi&#263i** | **2.41** | **358** | *e*Pn | **Pn** | **02 38 40.9** | **+2.0** |
| BBLS | | | | *e*Sn | **Sn** | **02 39 11.0** | **+3.0** |
| **BBLS** | **Lazi&#263i** | **2.41** | **358** | *e*Pn | **Pn** | **02 38 40.7** | **+1.8** |
| BBLS | | | | *e*Sn | **Sb** | **02 39 12.1** | **-0.4** |
| **BOSS** | **Bosilegrad** | **2.45** | **64** | *e*Pn | **Pn** | **02 38 40.0** | **+0.5** |
| BOSS | | | | *e*Sn | **Sn** | **02 39 09.7** | **+0.6** |
| **KNT** | **Kendrikon** | **2.58** | **96** | P | **Pn** | **02 38 42.6** | **+1.4** |
| KNT | | | | S | **Sn** | **02 39 14.4** | **+2.2** |
| **GRUS** | **Gruza** | **2.59** | **20** | *e*Pn | **Pn** | **02 38 43.0** | **+1.7** |
| GRUS | | | | *e*Sn | **Sn** | **02 39 14.7** | **+2.3** |
| **MAKA** | **Makarska** | **2.59** | **316** | *i* Pn | **Pn** | **02 38 43.1** | **+1.8** |
| MAKA | | | | Sn | **Sn** | **02 39 13.8** | **+1.4** |
| **HAPS** | **Han Pijesak,BI** | **2.65** | **351** | *e*Pn | **Pn** | **02 38 44.4** | **+2.1** |
| HAPS | | | | *e*Sn | **Sb** | **02 39 18.3** | **-1.4** |
| **DIVS** | **Divibare** | **2.66** | **8** | *e*Pn | **Pn** | **02 38 43.5** | **+1.1** |
| **RICI** | **Ricice** | **2.68** | **320** | *i* Pn | **Pn** | **02 38 44.2** | **+1.6** |
| RICI | | | | Sn | **Sn** | **02 39 16.2** | **+1.6** |
| **THL** | **Klokotos Trika** | **2.70** | **134** | P | **Pn** | **02 38 45.0** | **+2.2** |
| THL | | | | S | **Sn** | **02 39 17.9** | **+2.9** |
| | comp=E,92nm,0.5s | | | | | | |
| **THL** | **Klokotos Trika** | **2.70** | **134** | P | **Pn** | **02 38 45.3** | **+2.5** |
| THL | | | | S | **Sn** | **02 39 16.9** | **+1.9** |
| THL | | | | AML | AML | 02 39 26.4 | |
| | comp=E,147μm,0.6s | | | | | | |
| THL | | | | AML | AML | 02 39 30.3 | |
| | comp=N,127μm,0.6s | | | | | | |
| **BOVS** | **Bovan** | **2.72** | **36** | *e*Pn | **Pn** | **02 38 44.0** | **+0.9** |
| BOVS | | | | *e*Sn | **Sn** | **02 39 16.8** | **+1.2** |
| **BOVS** | **Bovan** | **2.72** | **36** | ⇑P | **Pn** | **02 38 44.4** | **+1.3** |
| **TYRN** | **Tyrnavos** | **2.72** | **129** | P | **Pn** | **02 38 45.3** | **+2.2** |
| TYRN | | | | S | **Sn** | **02 39 18.5** | **+2.9** |
| | comp=N,138nm,0.9s | | | | | | |
| **TYRN** | **Tyrnavos** | **2.72** | **129** | P | **Pn** | **02 38 45.5** | **+2.4** |
| **THE** | **Thessaloniki** | **2.75** | **106** | P | **Pn** | **02 38 45.2** | **+1.7** |
| **TSLK** | **Tsoukalades, L** | **2.78** | **161** | P | **Pn** | **02 38 45.6** | **+1.7** |
| **LKD2** | **Lefkada island** | **2.81** | **161** | P | **Pn** | **02 38 46.0** | **+1.5** |
| | baz=161 | | | | | | |
| **LKD2** | **Lefkada island** | **2.81** | **161** | P | **Pn** | **02 38 45.8** | **+1.3** |
| **LKD2** | **Lefkada island** | **2.81** | **161** | P | **Pn** | **02 38 45.9** | **+1.5** |
| **SGRT** | **San Giovanni R** | **2.83** | **277** | P | **Pn** | **02 38 45.5** | **+0.8** |
| | baz=276 | | | | | | |
| SGRT | | | | S | **Sn** | **02 39 18.1** | **-0.3** |
| | baz=276 | | | | | | |
| **HVAR** | **Hvar** | **2.84** | **308** | *e*Pn | **Pn** | **02 38 46.7** | **+2.0** |
| HVAR | | | | Sn | **Sn** | **02 39 20.2** | **+1.7** |
| **TRUS** | **Trudelj** | **2.84** | **13** | *e*Pn | **Pn** | **02 38 45.9** | **+1.1** |
| TRUS | | | | *e*Sn | **Sn** | **02 39 20.3** | **+1.7** |
| **HORT** | **Hortiatis** | **2.86** | **106** | P | **Pn** | **02 38 46.3** | **+1.2** |
| **ZAPS** | **Zavoj** | **2.95** | **51** | *e*Pn | **Pn** | **02 38 47.8** | **+1.5** |
| ZAPS | | | | *e*Sn | **Sn** | **02 39 21.8** | **+0.5** |
| **SOH** | **Sokhos** | **2.98** | **101** | P | **Pn** | **02 38 48.0** | **+1.2** |
| **SVIS** | **Svilajnac** | **3.08** | **24** | *e*Pn | **Pn** | **02 38 50.5** | **+2.5** |
| SVIS | | | | *e*Sn | **Sn** | **02 39 25.6** | **+1.2** |
| **TEKS** | **Tekeris** | **3.09** | **0** | *e*Pn | **Pn** | **02 38 49.3** | **+1.1** |
| TEKS | | | | *e*Sn | **Sn** | **02 39 25.0** | **+1.3** |
| **TEKS** | **Tekeris** | **3.09** | **0** | *e*Pn | **Pn** | **02 38 49.7** | **+1.5** |
| **TIP** | **Timpagrande** | **3.09** | **223** | ⇑P | **Pn** | **02 38 49.5** | **+1.2** |
| **ZAGS** | **Zajecar** | **3.10** | **40** | *e*Pn | **Pn** | **02 38 49.1** | **+0.8** |
| ZAGS | | | | *e*Sn | **Sn** | **02 39 25.3** | **+0.3** |
| **CUC** | **Castrocucco** | **3.16** | **244** | P | **Pn** | **02 38 51.0** | **+1.8** |
| CUC | | | | S | **Sn** | **02 39 25.5** | **-0.9** |
| CUC | | | | AML | AML | 02 39 33.3 | |
| | comp=N,335μm,0.6s | | | | | | |
| CUC | | | | AML | AML | 02 39 33.5 | |
| | comp=E,239μm,0.6s | | | | | | |
| **PVO** | **Paravola** | **3.24** | **151** | P | **Pn** | **02 38 52.3** | **+2.0** |
| **AGG** | **Agios Georgios** | **3.26** | **137** | P | **Pn** | **02 38 52.6** | **+2.0** |
| **NVR** | **Nevrokopi** | **3.29** | **90** | P | **Pn** | **02 38 53.6** | **+2.6** |
| NVR | | | | S | **Sn** | **02 39 33.5** | **+3.3** |
| **AVAS** | **Avala Beograd** | **3.32** | **13** | *e*Pn | **Pn** | **02 38 51.7** | **+0.3** |
| AVAS | | | | *e*Sn | **Sn** | **02 39 31.5** | **+1.1** |
| **KUBS** | **Kucevo** | **3.36** | **28** | *e*Pn | **Pn** | **02 38 51.7** | **-0.2** |
| KUBS | | | | *e*Sn | **Sn** | **02 39 30.8** | **-0.5** |
| **KIJV** | **Kijevo** | **3.41** | **319** | *i* Pn | **Pn** | **02 38 54.9** | **+2.2** |
| KIJV | | | | Sn | **Sn** | **02 39 34.0** | **+1.3** |
| **ANX** | **Ano Chora** | **3.42** | **146** | P | **Pn** | **02 38 55.3** | **+2.5** |
| **DOB** | **Doboj** | **3.43** | **343** | *e*Pn | **Pn** | **02 38 54.3** | **+1.5** |
| DOB | | | | *e*Sn | **Sn** | **02 39 36.1** | **+3.1** |
| **MGRS** | **Mrkonjic Grad** | **3.44** | **330** | ⇓*i*Pn | **Pn** | **02 38 55.4** | **+2.3** |
| MGRS | | | | *e*Sn | **Sn** | **02 39 36.6** | **+3.1** |
| **KOKK** | **Kokkinochori,** | **3.46** | **99** | P | **Pn** | **02 38 55.1** | **+1.8** |
| **NEO** | **Neokhori** | **3.57** | **126** | P | **Pn** | **02 38 56.7** | **+1.9** |
| **OUR** | **Ouranopolis** | **3.58** | **107** | P | **Pn** | **02 38 56.7** | **+1.7** |
| **ZIRJ** | **Zirje** | **3.59** | **309** | *i* Pn | **Pn** | **02 38 57.0** | **+1.9** |
| ZIRJ | | | | Sn | **Sn** | **02 39 38.0** | **+0.9** |
| **AXAR** | **Agios Charalam** | **3.62** | **137** | P | **Pn** | **02 38 58.0** | **+2.4** |
| **MORI** | **Morici** | **3.69** | **312** | *i* Pn | **Pn** | **02 38 58.4** | **+2.1** |
| MORI | | | | Sn | **Sn** | **02 39 40.5** | **+1.1** |
| **MDVR** | **Moldovita** | **3.69** | **25** | ⇑P | **Pn** | **02 38 58.2** | **+1.6** |
| **BLY** | **Banja Luka** | **3.70** | **334** | ⇑*i*Pn | **Pn** | **02 38 58.5** | **+2.0** |
| BLY | | | | *e*Sn | **Sn** | **02 39 42.3** | **+2.6** |
| **FRGS** | **Fruska Gora** | **3.70** | **3** | *e*Pn | **Pn** | **02 38 56.7** | **0.0** |
| FRGS | | | | *e*Sn | **Sn** | **02 39 40.6** | **+0.7** |
| **FRGS** | **Fruska Gora** | **3.70** | **3** | *e*Pn | **Pn** | **02 38 58.3** | **+1.6** |
| FRGS | | | | *e*Sn | **Sn** | **02 39 43.4** | **+3.5** |
| **FRGS** | **Fruska Gora** | **3.70** | **3** | ⇑P | **Pn** | **02 38 57.6** | **+0.9** |
| **A050A** | **Klekovaca** | **3.72** | **325** | ⇑*i*Pn | **Pn** | **02 38 59.0** | **+2.0** |
| A050A | | | | *e*Sn | **Sn** | **02 39 43.1** | **+2.7** |
| **RLS** | **Riolos of Patr** | **3.72** | **155** | P | **Pn** | **02 38 58.8** | **+1.9** |
| **ALIK** | **Aliki, Aigiali** | **3.78** | **147** | P | **Pn** | **02 39 00.4** | **+2.8** |
| **KAVA** | **Kavala** | **3.81** | **95** | P | **Pn** | **02 39 00.0** | **+1.9** |
| **VRSS** | **Vrsac** | **3.90** | **19** | *e*Pn | **Pn** | **02 39 00.8** | **+1.5** |
| **KLV** | **Kalavryta, Ach** | **3.98** | **148** | P | **Pn** | **02 39 02.5** | **+2.0** |
| **A051A** | **Mrakovica** | **4.02** | **333** | ⇑*i*Pn | **Pn** | **02 39 02.9** | **+1.8** |
| A051A | | | | *e*Sn | **Sn** | **02 39 49.9** | **+2.1** |
| **HERR** | **Herculane** | **4.03** | **31** | ⇑P | **Pn** | **02 39 02.4** | **+1.2** |
| **PRIJ** | **Prijedor** | **4.06** | **331** | *e*Pn | **Pn** | **02 39 02.3** | **+0.8** |
| PRIJ | | | | *e*Sn | **Sn** | **02 39 50.8** | **+2.2** |
| **UDBI** | **Udbina** | **4.11** | **319** | *e*Pn | **Pn** | **02 39 05.1** | **+2.8** |
| UDBI | | | | Sn | **Sn** | **02 39 49.8** | **-0.2** |
| **DUGI** | **Dugi Otok** | **4.13** | **309** | *e*Pn | **Pn** | **02 39 04.8** | **+2.3** |
| DUGI | | | | Sn | **Sn** | **02 39 51.1** | **+0.7** |
| **SRE** | **Strehaia** | **4.20** | **39** | ⇑P | **Pn** | **02 39 03.0** | **-0.5** |
| **BZS** | **Buzias** | **4.43** | **20** | ⇑P | **Pn** | **02 39 08.2** | **+1.5** |
| **PLIT** | **Plitvice** | **4.44** | **322** | *e*Pn | **Pn** | **02 39 09.1** | **+2.3** |
| PLIT | | | | Sn | **Sn** | **02 39 58.8** | **+0.8** |
| **RDO** | **Rodhopi** | **4.56** | **92** | P | **Pn** | **02 39 10.1** | **+1.7** |
| **NVLJ** | **Novalja** | **4.59** | **314** | *e*Pn | **Pn** | **02 39 10.2** | **+1.3** |
| NVLJ | | | | Sn | **Sn** | **02 40 01.8** | **0.0** |
| **GZR** | **Gura Zlata** | **4.60** | **30** | ⇑P | **Pn** | **02 39 10.4** | **+1.4** |
| **MOSL** | **Moslavina** | **4.60** | **335** | *e*Pn | **Pn** | **02 39 10.8** | **+1.8** |
| MOSL | | | | Sn | **Sn** | **02 40 02.3** | **+0.2** |
| **SURR** | **Surduc** | **4.70** | **23** | ⇑P | **Pn** | **02 39 11.4** | **+1.1** |
| **RABC** | **Rab** | **4.77** | **315** | *e*Pn | **Pn** | **02 39 12.7** | **+1.5** |
| RABC | | | | Sn | **Sn** | **02 40 06.4** | **+0.4** |
| **MORH** | **Mrgy, Hungar** | **4.79** | **353** | *e*Pn | **Pn** | **02 39 12.8** | **+1.2** |
| MORH | | | | *e*Sn | **Sn** | **02 40 08.4** | **+1.7** |
| **MORH** | **Mrgy, Hungar** | **4.79** | **353** | ⇑P | **Pn** | **02 39 12.3** | **+0.7** |
| **ELND** | **Elena** | **4.96** | **71** | ⇑P | **Pn** | **02 39 15.8** | **+1.9** |
| **SIRR** | **Siria** | **5.05** | **17** | ⇓P | **Pn** | **02 39 17.6** | **+2.3** |
| **LOT** | **Lotru** | **5.06** | **37** | ⇑P | **Pn** | **02 39 17.1** | **+1.7** |
| **HUMR** | **Humele** | **5.06** | **51** | ⇑P | **Pn** | **02 39 12.7** | **-2.5** |
| **OZLJ** | **Ozalj** | **5.08** | **326** | *i* Pn | **Pn** | **02 39 17.8** | **+2.3** |
| OZLJ | | | | Sn | **Sn** | **02 40 13.8** | **0.0** |
| **BOJS** | **Bojanci** | **5.08** | **324** | ⇑*i*Pn | **Pn** | **02 39 17.1** | **+1.5** |
| BOJS | | | | *e*Sn | **Sn** | **02 40 14.4** | **+0.5** |
| **PTJ** | **Puntijarka** | **5.13** | **331** | *e*Pn | **Pn** | **02 39 17.8** | **+1.5** |
| PTJ | | | | Sn | **Sn** | **02 40 16.1** | **+1.0** |
| **KALN** | **Kalnik** | **5.16** | **336** | *e*Pn | **Pn** | **02 39 18.0** | **+1.3** |
| KALN | | | | Sn | **Sn** | **02 40 14.9** | **-0.9** |
| **GCIS** | **Gornji Cirnik** | **5.22** | **329** | *i* Pn | **Pn** | **02 39 19.0** | **+1.5** |
| GCIS | | | | *i* Sn | **Sn** | **02 40 16.7** | **-0.6** |
| **CRES** | **Cresnjev** | **5.25** | **327** | *e*Pn | **Pn** | **02 39 19.0** | **+1.0** |
| CRES | | | | *e*Sn | **Sn** | **02 40 18.7** | **+0.6** |
| **SMRN** | **Sveta Marina** | **5.29** | **314** | *e*Pn | **Pn** | **02 39 20.2** | **+1.8** |
| SMRN | | | | Sn | **Sn** | **02 40 18.4** | **-0.6** |
| **LOBO** | **Lobor** | **5.31** | **333** | *e*Pn | **Pn** | **02 39 21.2** | **+2.5** |
| LOBO | | | | Sn | **Sn** | **02 40 19.0** | **-0.4** |
| **RIY** | **Rijeka** | **5.32** | **318** | *e*Pn | **Pn** | **02 39 20.2** | **+1.4** |
| RIY | | | | Sn | **Sn** | **02 40 20.0** | **+0.4** |
| **BEHE** | **Becsehely** | **5.38** | **340** | *e*Pn | **Pn** | **02 39 21.7** | **+2.0** |
| BEHE | | | | *e*Sn | **Sn** | **02 40 21.7** | **+0.6** |
| **ARR** | **Arges** | **5.41** | **42** | ⇓P | **Pn** | **02 39 21.0** | **+0.8** |
| **BRJN** | **Brijuni** | **5.43** | **311** | *e*Pn | **Pn** | **02 39 22.3** | **+2.0** |
| BRJN | | | | Sn | **Sn** | **02 40 22.4** | **+0.1** |
| **VAE** | **Valguarnera** | **5.59** | **226** | Pn | **Pn** | **02 39 24.9** | **+2.2** |
| | comp=E,4.9nm,0.9s,baz=105,slow=13,SNR=1.9 | | | | | | |
| VAE | | | | Sn | **Sn** | **02 40 32.7** | **+6.1** |
| | comp=E,0.4nm,0.3s,baz=129,slow=18,SNR=1.3 | | | | | | |
| **CEY** | **Cerknica** | **5.64** | **321** | *e*Pn | **Pn** | **02 39 24.8** | **+1.5** |
| CEY | | | | *e*Sn | **Sn** | **02 40 27.9** | **+0.2** |
| **VOIR** | | **5.67** | **44** | ⇑P | **Pn** | **02 39 27.2** | **+3.5** |
| **SKDS** | **Skadanscina** | **5.71** | **318** | ⇑*i*Pn | **Pn** | **02 39 24.7** | **+0.5** |
| SKDS | | | | *e*Sn | **Sn** | **02 40 29.0** | **-0.3** |
| **MARR** | **Marisel-

RETA *i* Sn **Sn** **02 41 43.3 +1.0**
comp=E,3.6nm,0.4s
**DAVOX** **Davos/Dischmat** **8.72 311** Pn **Pn** 02 40 02.3 -3.4
comp=E,0.1nm,0.3s,baz=99,slow=13,SNR=2.2
DAVOX Sn **Sn** **02 41 40.3 -3.4**
comp=E,0.3nm,0.3s,baz=297,slow=22,SNR=1.3
comp=E,0.4nm,0.4s
**KHC** **Kasperske Hory** **8.73 333** *e*Pn **Pn** 02 40 15.8 +10
KHC *e*Sn **Sn** **02 41 44.8 +1.2**
**DAVA** **Damuels** **9.02 313** *i* Pn **Pn** **02 40 12.0 +2.3**
comp=E,0.5nm,0.2s
DAVA *i* Sn **Sn** **02 41 51.1 +0.2**
comp=E,3.3nm,0.6s
**SBF** **Sospel** **9.21 289** *e*Pn **Pn** **02 40 10.4 -1.8**
SBF *e*Sn Sn 02 41 48.0 -7.4
comp=E,2.4nm,0.3s
**LMR** **La Mourre** **9.79 285** *e*Pn **Pn** **02 40 18.4 -1.8**
**LMR** **La Mourre** **9.79 285** *e*P **Pn** **02 40 23.9 +3.7**
LMR *e*Sn Sn 02 42 01.5 -8.1
comp=E,1.9nm,0.5s
**MBDF** **Montbardon** **9.86 294** *e*Pn **Pn** **02 40 19.5 -1.8**
MBDF *e*Sn Sn 02 42 03.8 -7.9
comp=E,3.6nm,0.5s
**LPG** **La Plagne** **10.10 298** *e*Pn **Pn** **02 40 23.8 -0.9**
LPG *e*Sn Sn 02 42 09.8 -7.9
comp=E,3.0nm,0.4s
**LPL** **La Plagne** **10.12 298** *e*Pn **Pn** **02 40 22.9 -2.0**
**ORIF** **Oris-en-Rattie** **10.53 294** *e*Pn **Pn** **02 40 28.5 -1.8**
**ORIF** **Oris-en-Rattie** **10.53 294** *e*P **Pn** **02 40 33.7 +3.4**
ORIF *e*Sn Sn 02 42 19.6 -8.2
comp=E,0.4nm,0.2s
**SMRF** **Simiane la Rot** **10.55 288** *e*Pn **Pn** **02 40 29.1 -1.5**
SMRF *e*Sn Sn 02 42 20.1 -8.2
comp=E,1.1nm,0.6s
**CABF** **La Chapelle** **10.94 303** *e*Pn **Pn** **02 40 34.0 -1.9**
CABF *e*Sn Sn 02 42 29.2 -8.7
comp=E,0.5nm,0.2s
**HINF** **Hinteralfeld** **11.02 309** *e*Pn **Pn** **02 40 35.1 -1.9**
HINF *e*Sn Sn 02 42 30.9 -8.9
comp=E,3.7nm,0.4s
**CDF** **Champ du Feu** **11.10 313** *e*Pn **Pn** **02 40 36.2 -1.9**
**VIVF** **Saint-Julien-l** **11.35 292** *e*Pn **Pn** **02 40 42.5 +1.0**
VIVF *e*Sn Sn 02 42 37.9 -10
comp=E,57nm,1.9s
**HAU** **Haudompre** **11.40 309** *e*Pn **Pn** **02 40 41.1 -1.2**
HAU *e*Sn Sn 02 42 41.4 -7.8
comp=E,6.0nm,0.6s
**SFTF** **Sexfontaines** **12.27 308** *e*Pn **Pn** **02 40 52.4 -1.7**
**SMF** **Signal de Mont** **12.39 300** *e*Pn **Pn** **02 40 53.6 -2.2**
SMF *e*Sn Sn 02 43 04.1 -9.3
comp=E,1.4nm,0.3s
**MEZF** **Maizieres J'vi** **12.40 309** *e*Pn **Pn** **02 40 54.4 -1.5**
**MEZF** **Maizieres J'vi** **12.40 309** *e*P **Pn** **02 40 59.7 +3.8**
**LOR** **Lormes** **12.60 303** *e*Pn **Pn** **02 40 56.5 -2.1**
baz=114
LOR *e*Sn Sn 02 43 08.5 -10
comp=E,3.0nm,0.4s
**SSF** **Saint Saulge** **12.75 301** *e*Pn **Pn** **02 40 58.6 -2.0**
SSF *e*Sn Sn 02 43 12.6 -9.5
comp=E,1.4nm,0.4s
**AVF** **Avril sur Loir** **12.76 300** *e*Pn **Pn** **02 40 58.6 -2.1**
**BGF** **Bois d'Agland** **13.02 299** *e*Pn **Pn** **02 41 02.3 -2.0**
**BGF** **Bois d'Agland** **13.02 299** *e*P **Pn** **02 41 05.5 +1.2**
**HFS** **Hagfors** **19.04 351** P **P** **02 42 19.7 -1.5**
comp=E,0.2nm,0.3s,baz=174,slow=14,SNR=7.0
comp=E,1.3nm,0.5s
**NOA** **NORSAR Array B** **20.25 348** P **P** **02 42 32.7 -1.8**
comp=E,0.4nm,0.8s,baz=260,slow=20,SNR=1.7
**EKA** **Eskdalemuir Ar** **20.34 321** P **P** **02 42 34.2 -1.2**
comp=E,1.2nm,0.8s,baz=114,slow=9.0,SNR=4.8
comp=E,1.2nm,0.8s
**FINES** **FINESS Array B** **20.41 9** P **P** **02 42 35.0 -1.1**
comp=E,2.6nm,0.6s,baz=184,slow=9.4,SNR=20
comp=E,2.6nm,0.6s
**ZALV** **Zalesovo Beam** **44.15 50** P **P** **02 46 06.9 -0.7**
comp=E,1.5nm,0.4s,baz=278,slow=7.7,SNR=5.4
comp=E,1.5nm,0.4s
**MKAR** **Makanchi Array** **44.33 61** P **P** **02 46 09.1 -0.2**
comp=E,2.4nm,0.6s,baz=280,slow=7.3,SNR=23
comp=E,2.4nm,0.6s
**SONM** **Songino Array** **59.02 52** P **P** **02 47 58.5 -0.5**
comp=E,0.4nm,0.6s,baz=280,slow=8.3,SNR=2.5
comp=E,0.4nm,0.6s
**YKA** **Yellowknife Ar** **70.04 339** P P 02 49 06.8 -3.8
comp=E,0.7nm,0.7s,baz=40,slow=9.0,SNR=2.0

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*IDC* ***09*** *02:45:17.5±0.7, 44˚.29N×149˚.52E, h0km, mb4.2/23, mbtmp4.1/29, ML3.7/5, MS3.4/13, Error ellipse: s-maj=16.6km s-min=15.8km az=179.0*
*SKHL* ***09*** *02:45:21.1±0.2, 44˚.20N×149˚.60E, h40km±4km, mb4.9/6*
*NIED* ***09*** *02:45:21.4, 44˚.42N×149˚.47E, h30km, MW4.1, Moment Tensor Solution. s3 Moment tenso: Scale 10¹⁵Nm; Mrr1.65; Mθθ-0.62; Mφφ-1.03; Mrθ-0.13; Mθφ-0.64; Mφr0.76; Fault plane solution: M₀1.74000×10¹⁵ NP1:φs20.00000°, δ57.00000°, λ73.00000°. NP2:φs229.00000°, δ37.00000°, λ114.00000°.*
*JMA* ***09*** *02:45:21.4±0.6, 44˚N±2˚×14˚9E±˚, h30km, MV4.4/13, SE OFF ETOROFU*
*MOS* ***09*** *02:45:21.5±0.9, 44˚.17N×149˚.48E, h38km, mb4.6/27, Error ellipse: s-maj=8.7km s-min=6.6km az=38.5*
*NEIC* ***09*** *02:45:25.3±1.1, 44˚.3N±0˚.1×149˚.3E±0˚.1, h46km±7km, mb4.5/70, Error ellipse: s-maj=17.5km s-min=12.9km az=148.0*
**ISC 09 02:45:22.4**±0.9,**44˚27N**±0˚.05×**149˚45E**±0˚.05,**h29**km±5km**, n215,** σ1§**27**/229**, mb4.4**/83**, MS3.5**/13**, 10C-2D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.48** | **311** | *i* P | **Pn** | **02 45 47.9** | **+0.8** |
| KUR | | | | AMB | AMB | 02 45 48.6 | |
| | 850nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sb** | **02 46 08.0** | **+0.2** |
| KUR | | | | A | A | 02 46 13.8 | |
| | 1μm,0.4s | | | | | | |
| KUR | | | | A | A | 02 46 13.8 | |
| | 2μm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.48** | **311** | *c i*PN | **Pn** | **02 45 47.8** | **+0.7** |
| KUR | | | | *e*S | **Sb** | **02 46 09.7** | **+1.9** |
| KUR | | | | pmax | pmax | | |
| | comp=E,162nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,811nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,244nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,3μm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.93** | **259** | *e*P | **Pn** | **02 45 52.2** | **-1.0** |
| SHO | | | | AMB | AMB | 02 45 53.6 | |
| | comp=E,140nm,0.5s | | | | | | |
| SHO | | | | *e*S | **Sn** | **02 46 15.3** | **-1.2** |
| SHO | | | | A | A | 02 46 17.2 | |
| | comp=E,950nm,0.3s | | | | | | |
| SHO | | | | A | A | 02 46 17.2 | |
| | comp=E,710nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.93** | **259** | *e*PN | **Pn** | **02 45 52.2** | **-1.0** |
| SHO | | | | *e*S | **Sn** | **02 46 15.3** | **-1.2** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,119nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,773nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.59** | **266** | *e*P | **Pn** | **02 46 02.2** | **-0.1** |
| YUK | | | | AMB | AMB | 02 46 03.5 | |
| | comp=N,290nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **02 46 33.3** | **+0.5** |
| YUK | | | | A | A | 02 46 42.6 | |
| | comp=N,740nm,0.5s | | | | | | |
| YUK | | | | A | A | 02 46 42.6 | |
| | comp=N,760nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.59** | **266** | *e*PN | **Pn** | **02 46 02.0** | **-0.3** |
| YUK | | | | *e*S | **Sn** | **02 46 33.3** | **+0.5** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,302nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,805nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,920nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.83** | **253** | P | **Pn** | **02 46 04.5** | **-1.1** |
| NEM2 | | | | *e*S | **Sn** | **02 46 36.0** | **-2.6** |
| **NMR** | **Nemuro--Hokkai** | **2.84** | **253** | *e*P | **Pn** | **02 46 04.7** | **-1.0** |
| NMR | | | | *e*S | **Sn** | **02 46 37.4** | **-1.5** |
| **NMR** | **Nemuro--Hokkai** | **2.84** | **253** | *e*PN | **Pn** | **02 46 04.7** | **-1.0** |
| NMR | | | | *e*S | **Sn** | **02 46 37.3** | **-1.6** |
| **RUSJ** | **Misakicho** | **3.03** | **268** | *e*PN | **Pn** | **02 46 09.6** | **+1.3** |
| RUSJ | | | | *e*S | **Sn** | **02 46 46.1** | **+2.6** |
| **JRA** | **Rausu** | **3.13** | **265** | P | **Pn** | **02 46 10.8** | **+1.0** |
| JRA | | | | *e*S | **Sn** | **02 46 47.9** | **+1.7** |
| **JNK** | **Nakash** | **3.48** | **260** | P | **Pn** | **02 46 14.6** | **0.0** |
| JNK | | | | *e*S | **Sn** | **02 46 55.0** | **+0.2** |
| **AKK** | **Akkeshi** | **3.57** | **251** | *e*P | **Pn** | **02 46 15.5** | **-0.3** |
| AKK | | | | *e*S | **Sn** | **02 46 56.1** | **-0.8** |
| **JAK** | **Akkeshi** | **3.68** | **251** | *e*P | **Pn** | **02 46 16.0** | **-1.2** |
| **JTKR** | **Abashiri--Toko** | **4.00** | **268** | P | **Pn** | **02 46 22.7** | **+1.0** |
| **JAR** | **Ashorobuto** | **4.22** | **259** | P | **Pn** | **02 46 25.2** | **+0.4** |
| **JCH** | **Churui** | **4.73** | **252** | P | **Pn** | **02 46 31.7** | **0.0** |
| JCH | | | | *e*S | **Sn** | **02 47 25.8** | **+0.3** |
| **JKK2** | **Kamakawa 2** | **4.84** | **268** | P | **Pn** | **02 46 35.3** | **+2.0** |
| **JKA** | **Kamikawa-asahi** | **4.93** | **271** | | **Pn** | **02 46 36.4** | **+1.9** |
| **JKA** | **Kamikawa-asahi** | **4.93** | **271** | *e*P | **Pn** | **02 46 36.4** | **+1.9** |
| **ASAJ** | **Asahikawa** | **4.93** | **271** | Pn | **Pn** | **02 46 35.2** | **+0.7** |
| | comp=N,3.8nm,0.3s,baz=108,slow=14,SNR=11 | | | | | | |
| ASAJ | | | | LR | LR | 02 48 55.4 | |
| | comp=N,582nm,18.8s,baz=135,slow=44 | | | | | | |
| | comp=N,10nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **4.93** | **271** | PN | **Pn** | **02 46 36.4** | **+1.9** |
| **ERM** | **Erimo** | **5.12** | **246** | | **Pn** | **02 46 38.4** | **+1.3** |
| **ERM** | **Erimo** | **5.12** | **246** | *ce*PN | **Pn** | **02 46 37.8** | **+0.7** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,32nm,0.6s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.28** | **250** | *e*P | **Pn** | **02 46 39.3** | **0.0** |
| **YSS** | **Yuzh-Sakhalins** | **5.41** | **302** | *e*P | **Pn** | **02 46 42.2** | **+1.2** |
| YSS | | | | AMB | AMB | 02 46 44.9 | |
| | comp=Z,50nm,0.5s | | | | | | |
| YSS | | | | *e*S | **Sn** | **02 47 42.3** | **0.0** |
| YSS | | | | A | A | 02 47 55.8 | |
| | comp=Z,40nm,0.5s | | | | | | |
| YSS | | | | A | A | 02 47 55.8 | |
| | comp=Z,40nm,0.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.41** | **302** | *e*PN | **Pn** | **02 46 41.6** | **+0.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,0.4s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,500nm,14.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,300nm,13.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,500nm,15.0s | | | | | | |
| **JANG** | **Nango** | **7.05** | **239** | *e*S | Sn | 02 48 14.1 | -8.6 |
| **JTM** | **Tenmabayashi** | **7.10** | **244** | Pn | **Pn** | **02 47 02.7** | **-1.5** |
| **SKR** | **Severo-Kuril's** | **7.85** | **33** | *e*P | **Pn** | **02 47 13.6** | **-0.9** |
| SKR | | | | AMB | AMB | 02 47 22.0 | |
| | comp=E,80nm,0.6s | | | | | | |
| SKR | | | | *e*S | **Sn** | **02 48 38.0** | **-4.2** |
| SKR | | | | A | A | 02 48 48.7 | |
| | comp=E,70nm,0.5s | | | | | | |
| SKR | | | | A | A | 02 48 48.7 | |
| | comp=E,100nm,0.5s | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.85** | **33** | *i*PN | **Pn** | **02 47 10.5** | **-4.0** |
| SKR | | | | MLR | MLR | | |
| | comp=Z,1μm,15.0s | | | | | | |
| **TYV** | **Tymovskoe** | **8.04** | **328** | *e*P | **Pn** | **02 47 19.4** | **+2.3** |
| TYV | | | | AMB | AMB | 02 47 25.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| TYV | | | | *e*S | **Sn** | **02 48 46.6** | **-0.3** |
| TYV | | | | A | A | 02 48 50.6 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| TYV | | | | A | A | 02 48 50.6 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **TYV** | **Tymovskoe** | **8.04** | **328** | *e*PN | Pn | 02 47 22.2 | +5.1 |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| TYV | | | | MLR | MLR | | |
| | comp=Z,200nm,14.0s | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **11.50** | **232** | *e*PN | Pn | 02 48 09.4 | +4.8 |
| **MAJO** | **Matsushiro** | **11.52** | **232** | Pn | **Pn** | **02 48 05.6** | **+0.7** |
| **MAJO** | **Matsushiro** | **11.52** | **232** | *i* PN | **Pn** | **02 48 07.6** | **+2.7** |
| **MJAR** | **Matsushiro Arr** | **11.52** | **232** | Pn | **Pn** | **02 48 05.5** | **+0.5** |
| | comp=Z,4.2nm,1.1s,baz=18,slow=14,SNR=5.0 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **12.53** | **276** | Pn | **Pn** | **02 48 19.8** | **+1.2** |
| **USA0B** | **Ussuriysk Arra** | **12.53** | **276** | PN | **Pn** | **02 48 19.8** | **+1.2** |
| **USRK** | **Ussuriysk Ar.** | **12.53** | **276** | Pn | **Pn** | **02 48 19.3** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **12.53** | **276** | Pn | **Pn** | **02 48 18.0** | **-0.5** |
| | comp=Z,1.0nm,0.3s,baz=80,slow=13,SNR=16 | | | | | | |
| USRK | | | | LR | LR | 02 53 29.7 | |
| | comp=Z,183nm,19.5s,baz=115,slow=39 | | | | | | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.53** | **276** | PN | **Pn** | **02 48 19.3** | **+0.7** |
| **KLR** | **Kul'dur** | **13.11** | **298** | Pn | **Pn** | **02 48 26.1** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=338,slow=24,SNR=1.3 | | | | | | |
| KLR | | | | LR | LR | 02 54 13.0 | |
| | comp=Z,195nm,18.9s,baz=95,slow=41 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **13.11** | **298** | *e*PN | **P** | **02 48 33.7** | **-2.6** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **13.44** | **217** | LR | LR | 02 53 23.5 | |
| | comp=Z,40nm,21.7s,baz=330,slow=36 | | | | | | |
| **ZEA** | **Zeya** | **17.31** | **311** | *e*P | **Pn** | **02 49 21.0** | **-0.7** |
| ZEA | | | | AMB | AMB | 02 49 39.0 | |
| | comp=Z,100nm,0.4s | | | | | | |
| **ZEA** | **Zeya** | **17.31** | **311** | *e*P | **P** | **02 49 24.2** | **+1.3** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| ZEA | | | | MLR | MLR | | |
| | comp=Z,100nm,16.0s | | | | | | |
| **KSRS** | **Korea Array** | **17.62** | **255** | P | **Pn** | **02 49 26.0** | **+0.3** |
| | comp=Z,0.4nm,0.3s,baz=63,slow=10,SNR=5.0 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **17.62** | **255** | *e*P | **P** | **02 49 27.1** | **+0.7** |
| **SEY** | **Seymchan** | **18.78** | **4** | P | **P** | **02 49 36.5** | **-2.5** |
| | comp=Z,0.3nm,0.3s,baz=171,slow=13,SNR=3.7 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **YAK** | **Yakutsk** | **21.22** | **334** | LR | LR | 02 59 05.3 | |
| | comp=Z,84nm,18.4s,baz=140,slow=39 | | | | | | |
| **YAK** | **Yakutsk** | **21.22** | **334** | *i* P | **P** | **02 50 03.9** | **-1.6** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| **BILL** | **Bilibino** | **25.42** | **15** | *e*P | **P** | **02 50 50.0** | **+2.9** |
| **BILL** | **Bilibino** | **25.42** | **15** | *e*P | **P** | **02 50 50.0** | **+2.9** |
| BILL | | | | *PP | **pwP** | **02 50 59.0** | **-1.6** |
| BILL | | | | *SP | sP | 02 51 04.0 | +6.7 |
| BILL | | | | | | 02 51 29.0 | |
| BILL | | | | PPP | PPP | 02 51 34.0 | |
| BILL | | | | | | 02 54 19.0 | |
| BILL | | | | S | **S** | **02 55 11.0** | **-0.7** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,109nm,16.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.36** | **292** | *e*P | **P** | **02 51 23.1** | **+0.3** |
| **ULN** | **Ulaanbaatar** | **29.36** | **292** | *ce*P | **P** | **02 51 23.1** | **+0.3** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **29.81** | **292** | P | **P** | **02 51 25.8** | **-0.9** |
| | comp=Z,1.8nm,0.6s,baz=88,slow=8.6,SNR=10 | | | | | | |
| SONM | | | | LR | LR | 03 04 44.8 | |
| | comp=Z,161nm,18.0s,baz=85,slow=39 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **29.81** | **292** | *e*P | **P** | **02 51 27.1** | **+0.4** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **35.83** | **33** | P | **P** | **02 52 20.0** | **+1.1** |
| F19K | | | | IAmb | IAmb | 02 52 32.7 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **36.09** | **30** | P | **P** | **02 52 22.2** | **+1.0** |
| D19K | | | | IAmb | IAmb | 02 52 26.3 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **H19K** | **Roundabout Mou** | **36.11** | **35** | P | **P** | **02 52 23.2** | **+1.9** |
| **E19K** | **Redstone River** | **36.17** | **32** | P | **P** | **02 52 23.4** | **+1.6** |
| **B20K** | **Meade River** | **36.82** | **27** | P | **P** | **02 52 28.3** | **+1.0** |
| **SII** | **Sitkinak Islan** | **36.91** | **50** | P | **P** | **02 52 29.6** | **+1.3** |
| **IMAR** | **Indian Mountai** | **37.28** | **34** | P | **P** | **02 52 33.6** | **+2.3** |
| **G21K** | **Allakaket** | **37.45** | **34** | P | **P** | **02 52 34.4** | **+1.7** |
| G21K | | | | IAmb | IAmb | 02 52 49.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **37.55** | **32** | P | **P** | **02 52 33.9** | **+0.2** |
| F21K | | | | IAmb | IAmb | 02 52 50.1 | |
| | comp=Z,6.2nm,1.2s | | | | | | |
| **B21K** | **Ikpikpuk River** | **37.58** | **28** | P | **P** | **02 52 35.2** | **+1.4** |
| B21K | | | | IAmb | IAmb | 02 52 55.8 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **37.63** | **35** | P | **P** | **02 52 36.2** | **+1.9** |
| H21K | | | | IAmb | IAmb | 02 52 49.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **D22K** | **Ayikyak River** | **38.11** | **30** | P | **P** | **02 52 39.6** | **+1.3** |
| D22K | | | | IAmb | IAmb | 02 52 52.7 | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **38.30** | **38** | P | **P** | **02 52 42.0** | **+2.0** |
| **E22K** | **Anaktuvuk Pass** | **38.32** | **31** | P | **P** | **02 52 41.5** | **+1.4** |
| **C23K** | **Itkillik River** | **38.99** | **28** | P | **P** | **02 52 46.5** | **+0.8** |
| C23K | | | | IAmb | IAmb | 02 53 00.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **39.20** | **30** | P | **P** | **02 52 48.2** | **+0.7** |
| TOLK | | | | IAmb | IAmb | 02 53 01.8 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **39.53** | **30** | P | **P** | **02 52 51.2** | **+1.1** |
| D24K | | | | IAmb | IAmb | 02 53 04.4 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **E24K** | **Your Creek** | **39.55** | **31** | P | **P** | **02 52 52.1** | **+1.7** |
| E24K | | | | IAmb | IAmb | 02 53 05.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **F24K** | **Squaw Lake** | **39.74** | **32** | P | **P** | **02 52 52.6** | **+0.7** |
| **G24K** | **Hadweenzic Riv** | **39.86** | **34** | P | **P** | **02 52 54.8** | **+1.9** |
| G24K | | | | IAmb | IAmb | 02 53 08.6 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **DHY** | **Denali Highway** | **39.92** | **39** | P | **P** | **02 52 55.2** | **+1.5** |
| **ILAR** | **Eielson Array** | **40.09** | **37** | P | **P** | **02 52 53.5** | **-1.3** |
| | comp=Z,0.4nm,0.8s,baz=269,slow=6.5,SNR=3.8 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **40.41** | **30** | P | **P** | **02 52 58.2** | **+0.7** |
| D25K | | | | IAmb | IAmb | 02 53 11.7 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **PRP** | **Porcupine Dome** | **40.65** | **35** | P | **P** | **02 53 00.2** | **+0.5** |
| **J25K** | **Salcha River,** | **40.74** | **37** | P | **P** | **02 53 02.6** | **+2.2** |
| **BMAR** | **Burnt Mountain** | **41.01** | **33** | P | **P** | **02 53 04.6** | **+2.2** |
| **SCRK** | **Sand Creek** | **41.38** | **38** | P | **P** | **02 53 07.0** | **+1.3** |
| **RAGM** | **Ragged Mountai** | **41.45** | **43** | P | **P** | **02 53 08.3** | **+2.2** |
| RAGM | | | | IAmb | IAmb | 02 53 29.2 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **J26L** | **Joseph Creek** | **41.53** | **37** | P | **P** | **02 53 08.2** | **+1.3** |
| **DGZ** | **Jazzator, Alta** | **41.59** | **300** | *i* P | **P** | **02 53 07.6** | **0.0** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.9s | | | | | | |
| DGZ | | | | MLR | MLR | | |
| | comp=Z,96nm,17.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.01** | **307** | P | **P** | **02 53 09.6** | **-1.1** |
| | comp=Z,1.2nm,0.5s,baz=79,slow=8.0,SNR=3.8 | | | | | | |
| ZALV | | | | PcP | **PcP** | **02 55 05.5** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=85,slow=1.8,SNR=4.4 | | | | | | |
| ZALV | | | | LR | LR | 03 11 54.7 | |
| | comp=Z,56nm,18.2s,baz=72,slow=38 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.01** | **307** | *e*P | **P** | **02 53 11.5** | **+0.7** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **42.13** | **31** | P | **P** | **02 53 14.9** | **+3.2** |
| **K27K** | **Chicken** | **42.22** | **38** | P | **P** | **02 53 13.9** | **+1.6** |
| **L27K** | **Beaver Creek,** | **42.44** | **39** | P | **P** | **02 53 15.7** | **+1.4** |
| **BCAR** | **Beaver Creek A** | **42.46** | **39** | P | **P** | **02 53 17.1** | **+2.7** |
| **I28M** | **Miner Creek** | **42.98** | **35** | P | **P** | **02 53 21.1** | **+2.4** |
| **E29M** | **Blow River** | **43.49** | **31** | P | **P** | **02 53 24.7** | **+2.0** |
| E29M | | | | IAmb | IAmb | 02 53 38.0 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **43.59** | **33** | P | **P** | **02 53 24.8** | **+1.3** |
| **I29M** | **Ogilvie Camp,** | **43.67** | **35** | P | **P** | **02 53 26.1** | **+2.0** |
| **G30M** | **tAoh Zrail Nji** | **44.29** | **33** | P | **P** | **02 53 31.5** | **+2.4** |
| G30M | | | | IAmb | IAmb | 02 54 02.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **I30M** | **Mount Dempster** | **44.49** | **35** | P | **P** | **02 53 31.9** | **+1.1** |
| I30M | | | | IAmb | IAmb | 02 53 59.4 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **45.81** | **298** | P | **P** | **02 53 41.8** | **+0.4** |
| MK31 | | | | IAmb | IAmb | 02 53 42.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **45.81** | **298** | *ce*P | **P** | **02 53 41.8** | **+0.4** |
| **MKAR** | **Makanchi Array** | **45.81** | **298** | P | **P** | **02 53 41.5** | **+0.1** |
| **MKAR** | **Makanchi Array** | **45.81** | **298** | P | **P** | **02 53 41.2** | **-0.2** |
| | comp=Z,5.0nm,0.7s,baz=74,slow=8.3,SNR=52 | | | | | | |
| MKAR | | | | LR | LR | 03 14 04.2 | |
| | comp=Z,109nm,18.1s,baz=72,slow=38 | | | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.81** | **298** | *e*P | **P** | **02 53 41.7** | **+0.3** |
| **MKAR** | **Makanchi Array** | **45.81** | **298** | *e*P | **P** | **02 53 41.7** | **+0.3** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **46.00** | **298** | P | **P** | **02 53 43.2** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 02 53 44.2 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **46.00** | **298** | P | **P** | **02 53 43.2** | **+0.2** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.61** | **304** | P | **P** | **02 53 47.5** | **-0.1** |
| **KURK** | **Kurchatov** | **46.61** | **304** | *e*P | **P** | **02 53 47.8** | **+0.2** |
| **KURK** | **Kurchatov** | **46.61** | **304** | *ce*P | **P** | **02 53 47.8** | **+0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.70** | **304** | P | **P** | **02 53 47.4** | **-0.9** |
| | comp=Z,2.4nm,0.4s,baz=73,slow=8.0,SNR=20 | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.26** | **255** | LR | LR | 03 17 53.4 | |
| | comp=Z,36nm,18.0s,baz=195,slow=40 | | | | | | |
| **BRVK** | **Borovoye** | **50.50** | **310** | P | **P** | **02 54 18.1** | **+0.6** |
| BRVK | | | | IAmb | IAmb | 02 54 18.8 | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **50.50** | **310** | *e*P | **P** | **02 54 18.7** | **+1.2** |
| **BRVK** | **Borovoye** | **50.50** | **310** | *ce*P | **P** | **02 54 18.7** | **+1.2** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.76** | **295** | P | **P** | **02 54 27.8** | **+0.5** |
| **BOOM** | **Boomskoye usch** | **51.76** | **295** | P | **P** | **02 54 27.8** | **+0.5** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **52.62** | **296** | *e*P | **P** | **02 54 34.4** | **+0.7** |
| **AAK** | **Ala-Archa** | **52.62** | **296** | *ce*P | **P** | **02 54 34.4** | **+0.7** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **RES** | **Resolute Bay** | **53.99** | **17** | P | **P** | **02 54 43.9** | **+0.8** |
| RES | | | | IAmb | IAmb | 02 55 17.7 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **RES** | **Resolute Bay** | **53.99** | **17** | P | **P** | **02 54 43.9** | **+0.8** |
| RES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **ARSB** | **Arslanbob** | **54.25** | **296** | P | **P** | **02 54 45.2** | **-0.5** |
| ARSB | | | | IAmb | IAmb |

comp=Z,2.3nm,0.8s,baz=46,slow=8.7,SNR=6.0
comp=Z,2.3nm,0.8s
**ARCES ARCESS Array B 59.33 340** *eP* **P 02 55 20.6 -0.5**
ARCES pmax pmax
comp=Z,2.0nm,0.8s
**PAHR Pah Rah Range 64.45 59** P **P 02 55 57.6 +1.5**
**FIA1 FINESS Array S 65.16 334** P **P 02 55 59.3 -0.9**
**FINES FINESS Array B 65.16 334** P **P 02 55 59.2 -1.0**
**FINES FINESS Array B 65.16 334** P **P 02 55 59.4 -0.7**
comp=Z,4.8nm,0.6s,baz=35,slow=8.1,SNR=33
comp=Z,4.8nm,0.6s
**FINES FINESS Array B 65.16 334** *eP* **P 02 56 00.1 -0.1**
FINES pmax pmax
comp=Z,5.0nm,0.6s
**BOZ Bozeman (W) 65.35 50** P **P 02 56 02.9 +1.0**
BOZ IAmb IAmb 02 56 19.6
comp=Z,3.5nm,1.2s
**BOZ Bozeman (W) 65.35 50** P **P 02 56 02.9 +1.0**
BOZ pmax pmax
comp=Z,4.0nm,1.2s
**WB2 Warramunga Arr 65.37 196** P **P 02 56 01.7 -0.4**
WB2 IAmb IAmb 02 56 45.3
comp=Z,7.2nm,1.1s
**WRA Warramunga Arr 65.38 196** P **P 02 56 02.5 +0.4**
**WRA Warramunga Arr 65.38 196** P **P 02 56 01.7 -0.4**
comp=Z,0.6nm,0.7s,baz=10.0,slow=6.5,SNR=3.5
WRA LR LR 03 27 10.4
comp=Z,16nm,18.1s,baz=25,slow=38
comp=Z,0.6nm,0.7s
**OBN Obninsk 65.87 325** *eP* **P 02 56 04.0 -0.8**
**OBN Obninsk 65.87 325** *i* P **P 02 56 04.0 -0.8**
OBN *PP **sP** 02 56 16.0 +0.5
OBN
OBN pmax pmax 02 56 37.0
comp=Z,5.0nm,0.5s
OBN MLR MLR
comp=Z,33nm,16.0s
**NVAR Mina Array Bea 65.89 59** P **P 02 56 05.2 -0.4**
comp=Z,0.2nm,0.5s,baz=261,slow=3.6,SNR=1.6
comp=Z,0.2nm,0.5s
**DZM Mont Dzumac 67.82 163** P **P 02 56 16.3 -1.4**
comp=Z,3.2nm,0.7s,baz=81,slow=17,SNR=3.6
comp=Z,3.2nm,0.7s
**PDAR Pinedale Array 68.30 51** P **P 02 56 20.1 -0.8**
comp=Z,0.3nm,0.5s,baz=354,slow=1.7,SNR=2.8
comp=Z,0.3nm,0.5s
**ASAR Alice Springs 69.08 195** P **P 02 56 25.3 -0.2**
comp=Z,0.8nm,0.7s,baz=14,slow=5.7,SNR=6.4
comp=Z,0.8nm,0.7s
**NC405 NORSAR Array S 69.52 340** P **P 02 56 28.4 +0.6**
**NB201 NORSAR Array S 69.68 340** P **P 02 56 29.0 +0.2**
**NB2 NORSAR Subarra 69.71 340** P **P 02 56 28.7 -0.3**
comp=Z,5.2nm,0.5s,baz=31,slow=6.5
**NOA NORSAR Array B 69.71 340** P **P 02 56 28.8 -0.3**
comp=Z,6.2nm,0.7s,baz=33,slow=6.6,SNR=48
NOA LR LR 03 32 24.7
comp=Z,8.5nm,18.5s,baz=270,slow=41
comp=Z,6.2nm,0.7s
**NOA NORSAR Array B 69.71 340** *eP* **P 02 56 28.7 -0.3**
NOA pmax pmax
comp=Z,4.0nm,0.5s
**HFS Hagfors 69.84 338** P **P 02 56 29.8 0.0**
comp=Z,7.0nm,0.5s,baz=39,slow=5.7,SNR=48
HFS LR LR 03 30 06.0
comp=Z,27nm,21.4s,baz=234,slow=38
comp=Z,7.0nm,0.5s
**KIV Kislovodsk 70.64 313** *eP* **P 02 56 35.7 +0.6**
**KIV Kislovodsk 70.64 313** *eP* **P 02 56 35.7 +0.6**
KIV pmax pmax
comp=Z,7.0nm,1.1s
KIV MLR MLR
comp=Z,68nm,18.0s
**KBZ Khabaz 70.69 313** P **P 02 56 34.9 -0.3**
comp=Z,4.1nm,0.7s,baz=43,slow=11,SNR=8.2
KBZ LR LR 03 32 34.6
comp=Z,114nm,18.2s,baz=40,slow=40
comp=Z,4.1nm,0.7s
**KBZ Khabaz 70.69 313** *eP* **P 02 56 36.0 +0.8**
**KBZ Khabaz 70.69 313** *i* P **P 02 56 36.0 +0.8**
KBZ pmax pmax
comp=Z,3.0nm,0.9s
**SHA1 Shidzhatmaz 70.81 313** *i* P **P 02 56 36.7 +0.4**
**AKASG Malin Array Be 72.13 325** P **P 02 56 43.3 -0.5**
comp=Z,2.0nm,0.6s,baz=38,slow=6.1,SNR=7.4
comp=Z,2.0nm,0.6s
**AKASG Malin Array Be 72.13 325** *eP* **P 02 56 44.1 +0.3**
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**AKBB Malin Array Si 72.13 325** P **P 02 56 44.1 +0.3**
AKBB IAmb IAmb 02 56 44.8
comp=Z,7.2nm,0.9s
**AKBB Malin Array Si 72.13 325** *ce* **P 02 56 44.4 +0.6**
**KIEV Kiev 72.14 325** P **P 02 56 44.0 +0.1**
KIEV IAmb IAmb 02 56 44.8
comp=Z,6.1nm,0.8s
**KIEV Kiev 72.14 325** P **P 02 56 44.0 +0.1**
KIEV pmax pmax
comp=Z,6.0nm,0.9s
**BUR08 Bucovina Ar. S 76.17 325** P **P 02 57 07.8 +0.2**
BUR08 IAmb IAmb 02 57 09.2
comp=Z,3.5nm,0.9s
**BURAR Bucovina Array 76.19 325** P **P 02 57 08.2 +0.5**
**MORC Moravsky Berou 77.38 330** P **P 02 57 15.1 +0.8**
MORC IAmb IAmb 02 57 20.6
comp=Z,3.0nm,0.9s
**MORC Moravsky Berou 77.38 330** P **P 02 57 15.1 +0.8**
MORC pmax pmax
comp=Z,3.0nm,0.9s
**CLL Collm 77.60 334** P **P 02 57 15.5 +0.1**
CLL IAmb IAmb 02 57 17.5
comp=Z,4.7nm,0.7s
**CLL Collm 77.60 334** *i* P **P 02 57 15.9 +0.4**
comp=Z,5.0nm,0.8s
**CLL Collm 77.60 334** *i* P **P 02 57 15.9 +0.4**
CLL pmax pmax
comp=Z,5.0nm,0.8s
**EKA Eskdalemuir Ar 78.09 344** P **P 02 57 18.2 +0.1**
comp=Z,0.7nm,0.4s,baz=17,slow=4.6,SNR=7.3
comp=Z,0.7nm,0.4s
**BRTR Keskin Array B 78.37 315** P **P 02 57 20.1 0.0**
comp=Z,1.0nm,0.7s,baz=89,slow=4.0,SNR=2.8
comp=Z,1.0nm,0.7s
**KHC Kasperske Hory 79.29 332** P **P 02 57 25.5 +0.6**
KHC IAmb IAmb 02 57 26.7
comp=Z,3.1nm,0.7s
**KHC Kasperske Hory 79.29 332** *eP* **P 02 57 26.0 +1.1**
KHC *ex* x 02 57 36.5
**KHC Kasperske Hory 79.29 332** *eP* **P 02 57 26.0 +1.1**
KHC *e* 02 57 36.5
**GERES GERESS Array B 79.50 332** P **P 02 57 26.4 +0.3**
comp=Z,1.0nm,0.6s,baz=151,slow=23,SNR=4.8
comp=Z,1.0nm,0.6s
**CONA Conrad Observa 79.53 330** *i* P **P 02 57 27.5 +1.1**
comp=Z,2.4nm,1.1s
**RONA Rosalia, Austr 79.57 330** *i* P **P 02 57 28.0 +1.5**
comp=Z,3.2nm,1.2s
**ARSA Arzberg 80.23 330** *i* P **P 02 57 31.5 +1.5**
comp=Z,1.7nm,0.5s
**BIOA Bad Ischl, Aus 80.51 331** *eP* **P 02 57 33.7 +2.1**
comp=Z,2.7nm,0.7s
**SOKA Soboth 80.89 330** *eP* **P 02 57 34.0 +0.3**
comp=Z,2.8nm,1.0s
**TX31 Lajitas Ar. Si 80.98 58** P **P 02 57 35.3 +0.9**
**TXAR Lajitas Array 80.98 58** P **P 02 57 34.9 +0.5**
comp=Z,0.7nm,0.5s,baz=310,slow=3.7,SNR=10.0
comp=Z,0.7nm,0.5s
**LESA Schwarzleotal 81.07 332** *i* P **P 02 57 35.6 +1.0**
comp=Z,1.7nm,0.8s
**KBA Koelnbreinsper 81.14 331** *i* P **P 02 57 36.8 +1.7**
comp=Z,4.1nm,0.7s
**OBKA Obir 81.21 330** *i* P **P 02 57 37.9 +2.5**
comp=Z,1.4nm,0.7s
**WATA Walderalm 81.52 333** *i* P **P 02 57 38.3 +1.3**
comp=Z,1.9nm,0.6s
**WTTA Wattenberg 81.56 332** *i* P **P 02 57 38.1 +0.8**
comp=Z,1.4nm,0.5s
**RETA Reute 81.65 333** *i* P **P 02 57 38.5 +0.8**
comp=Z,1.4nm,0.6s
**MOTA Moosalm 81.67 333** *i* P **P 02 57 38.6 +0.8**
comp=Z,3.9nm,0.9s
**ABTA Abfaltersbach 81.72 332** *i* P **P 02 57 40.2 +2.2**
comp=Z,3.1nm,1.6s
**SQTA Sankt Quirin 81.74 333** *eP* **P 02 57 39.1 +0.9**
comp=Z,4.6nm,0.9s
**FETA Feichten 82.07 333** *eP* **P 02 57 40.1 +0.2**
comp=Z,4.0nm,1.2s
**DAVA Damuels 82.11 334** *i* P **P 02 57 42.0 +1.8**
comp=Z,3.7nm,1.2s
**MMAI Mount Meron Ar 82.46 309** P **P 02 57 42.4 +0.2**
comp=Z,1.0nm,0.4s,baz=72,slow=4.7,SNR=1.9
comp=Z,1.0nm,0.4s
**FUORN Ofenpass-Fuorn 82.58 333** P **P 02 57 42.6 -0.2**
**DRIO Del Rio 82.75 56** P **P 02 57 43.9 +0.2**
DRIO IAmb IAmb 02 57 45.0
comp=Z,3.6nm,0.8s
**NRCA Norcia 84.90 329** P **P 02 57 54.9 +0.4**
NRCA IAmb IAmb 02 58 16.9
comp=Z,5.2nm,1.0s
**H03N2 Juan Fernandez 141.31 91** T T 05 42 53.9
baz=304
**H03N3 Juan Fernandez 141.32 91** T T 05 42 52.5
baz=304
**H03N1 Juan Fernandez 141.32 91** T T 05 43 00.1
baz=304

*UCR **09** 02:48:02.3±0.7, 10°.10N×86°.13W, h17km±5km, MW4.4*
*CATAC **09** 02:48:03.3±0.7, 10°.17N×85°.98W, h13km±4km, ML3.7*
**ISC 09 02:48:03.2±1.6, 10°.10N±0°.06×86°.06W±0°.08, h24km, n66, σ0.90/70, 11C-1D, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SACU** | **Santa Cruz** | **0.49** | **71** | *eP* | | **Pb** | | **02 48 13.6** | **+0.3** |
| **INDI** | **Punta indio, G** | **0.60** | **113** | *i* P | | **Pb** | | **02 48 14.8** | **-0.3** |
| INDI | | | | *i* S | | **Sb** | | **02 48 22.7** | **-0.4** |
| INDI | | | | IAML | | | | 02 48 32.1 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **NICO** | **Nicoya** | **0.60** | **87** | *eP* | | **Pb** | | **02 48 15.2** | **0.0** |
| **DELF** | **Filadelfia** | **0.61** | **55** | *eP* | | **Pn** | | **02 48 16.5** | **+0.1** |
| **ALIBA** | **Liberia Airpor** | **0.70** | **46** | *eP* | | **Pn** | | **02 48 17.6** | **0.0** |
| **ELI1** | **Hacienda Flor** | **0.73** | **43** | *eP* | | **Pn** | | **02 48 18.3** | **+0.2** |
| **ERIA** | **Liberia** | **0.81** | **49** | *eP* | | **Pn** | | **02 48 19.2** | **+0.1** |
| **GPS3** | **Bodega del ICE** | **0.94** | **46** | ↑*iP* | | **Pn** | | **02 48 21.2** | **+0.2** |
| **GPS2** | **Hotel Rincn d** | **0.95** | **47** | ↑*iP* | | **Pb** | | **02 48 20.9** | **-0.1** |
| **VRLE** | **La Escondida,** | **0.96** | **45** | *eP* | | **Pb** | | **02 48 21.0** | **-0.3** |
| **VORI** | **VORI** | **1.00** | **45** | *eP* | | **Pn** | | **02 48 21.6** | **-0.3** |
| **CNAS** | **Canas** | **1.01** | **71** | *eP* | | **Pb** | | **02 48 22.0** | **0.0** |
| **COLC** | **Colonia** | **1.01** | **56** | *eP* | | **Pn** | | **02 48 21.8** | **-0.1** |
| **CUI** | **Cuipilapa** | **1.04** | **58** | ↑*iP* | | **Pn** | | **02 48 22.4** | **0.0** |
| **LCRUZ** | **La Cruz** | **1.06** | **24** | *eP* | | **Pn** | | **02 48 22.6** | **0.0** |
| **CBL1** | **Cabuya** | **1.08** | **118** | *eP* | | **Pn** | | **02 48 21.8** | **-1.1** |
| **JUNT** | **Juntas** | **1.10** | **81** | *eP* | | **Pn** | | **02 48 22.8** | **-0.3** |
| **JTS** | **Las Juntas de** | **1.11** | **80** | ↑*iP* | | **Pn** | | **02 48 22.9** | **-0.3** |
| **MTEVE** | **Monteverde** | **1.23** | **80** | ↑*iP* | | **Pn** | | **02 48 26.0** | **+0.1** |
| **ARE1** | **Arenal 1** | **1.37** | **75** | ↑*iP* | | **Pb** | | **02 48 27.6** | **-0.6** |
| **CEDE** | **Laguna Cedeo** | **1.39** | **74** | *eP* | | **Pb** | | **02 48 28.1** | **-0.5** |
| **VERA** | **Finca Concepci** | **1.39** | **57** | ↑*iP* | | **Pb** | | **02 48 28.0** | **-0.5** |
| **VACR** | **Volcan Arenal** | **1.41** | **75** | ↑*eP* | | **Pn** | | **02 48 28.1** | **+0.6** |
| **SOCE** | **Pocosol** | **1.45** | **79** | *i* P | | **Pn** | | **02 48 28.0** | **0.0** |
| SOCE | | | | IAML | | | | 02 49 05.3 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **SOCE** | **Pocosol** | **1.45** | **79** | ↓*iP* | | **Pn** | | **02 48 28.5** | **+0.6** |
| **JAPN** | **Al SSO del Vol** | **1.46** | **15** | *i* P | | **Pn** | | **02 48 28.4** | **+0.2** |
| JAPN | | | | IAML | | | | 02 48 35.9 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **SRA1** | **San Ramn** | **1.56** | **91** | *eP* | | **Pn** | | **02 48 28.7** | **-0.8** |
| **RAMO** | **San Ramon** | **1.57** | **90** | *eP* | | **Pb** | | **02 48 31.2** | **-0.5** |
| **TRB2** | **Turrubares** | **1.60** | **97** | *eP* | | **Pn** | | **02 48 30.4** | **+0.3** |
| **NARAN** | **Naranjo de Ala** | **1.66** | **90** | *eP* | | **Pb** | | **02 48 33.0** | **-0.1** |
| **TCS1** | **Tacares** | **1.73** | **92** | *i* P | | **Pn** | | **02 48 32.6** | **+0.6** |
| TCS1 | | | | IAML | | | | 02 49 07.9 | |
| | comp=Z,6μm,1.0s | | | | | | | | |
| **TCS1** | **Tacares** | **1.73** | **92** | *eP* | | **Pn** | | **02 48 32.8** | **+0.8** |
| **ITAL** | **Pital** | **1.79** | **79** | *eP* | | **Pb** | | **02 48 34.5** | **-0.9** |
| **VPS6** | **Volcano Poas** | **1.80** | **87** | *eP* | | **Pb** | | **02 48 34.6** | **-1.2** |
| **BELE** | **Belen** | **1.85** | **94** | *eP* | | **Pn** | | **02 48 34.1** | **+0.5** |
| **HDC** | **Heredia** | **1.92** | **93** | *eP* | | **Pn** | | **02 48 35.5** | **+1.0** |
| **ABE2** | **San Pablo** | **2.02** | **101** | *eP* | | **Pn** | | **02 48 36.6** | **+0.7** |
| **ACON** | **Acoyapa** | **2.05** | **25** | *i* P | | **Pn** | | **02 48 36.1** | **-0.1** |
| ACON | | | | IAML | | | | 02 48 36.8 | |
| | comp=Z,500nm,1.0s | | | | | | | | |
| **ACON** | **Acoyapa** | **2.05** | **25** | ↑*iP* | | **Pn** | | **02 48 36.5** | **+0.3** |
| **LCR2** | **La Lucha 2** | **2.06** | **100** | *i* P | | **Pn** | | **02 48 36.7** | **+0.2** |
| LCR2 | | | | *i* S | | **Sn** | | **02 49 01.9** | **+0.4** |
| LCR2 | | | | IAML | | | | 02 49 21.2 | |
| | comp=Z,340nm,1.0s | | | | | | | | |
| **LCR2** | **La Lucha 2** | **2.06** | **100** | ↑*eP* | | **Pn** | | **02 48 36.8** | **+0.2** |
| **SAPS** | **Ciudad Sandino** | **2.08** | **351** | *i* P | | **Pn** | | **02 48 37.3** | **+0.6** |
| SAPS | | | | IAML | | | | 02 48 49.9 | |
| | comp=Z,430nm,1.0s | | | | | | | | |
| **CVIMO** | **Finca Echandi** | **2.09** | **92** | *eP* | | **Pn** | | **02 48 37.7** | **+0.8** |
| **COPN** | **Copaltepe** | **2.13** | **346** | *i* P | | **Pn** | | **02 48 36.7** | **-0.6** |
| COPN | | | | IAML | | | | 02 49 37.2 | |
| | comp=Z,290nm,1.0s | | | | | | | | |
| **VICA** | **Volcano Irazu** | **2.19** | **93** | *eP* | | **Pn** | | **02 48 39.8** | **+1.3** |
| **RAFA** | **San Farael, Vo** | **2.22** | **94** | *eP* | | **Pn** | | **02 48 40.8** | **+2.0** |
| **PCAYA** | **Pacayas** | **2.22** | **95** | *eP* | | **Pn** | | **02 48 40.4** | **+1.6** |
| **HUEN** | | **2.22** | **357** | *i* P | | **Pn** | | **02 48 39.3** | **+0.7** |
| HUEN | | | | IAML | | | | 02 48 46.7 | |
| | comp=Z,260nm,1.0s | | | | | | | | |
| **VTLA** | **Turrialba Volc** | **2.25** | **92** | *eP* | | **Pn** | | **02 48 41.0** | **+1.6** |
| **CVTQ** | **Turrialba Volc** | **2.26** | **92** | *eP* | | **Pn** | | **02 48 41.2** | **+1.8** |
| **CVTR** | **Volcan Turrial** | **2.27** | **92** | *eP* | | **Pn** | | **02 48 41.5** | **+1.9** |
| **CVTV** | **Tajo** | **2.28** | **92** | *eP* | | **Pn** | | **02 48 41.6** | **+1.9** |
| **VINA** | **Juan Vinas** | **2.29** | **95** | *eP* | | **Pn** | | **02 48 40.2** | **+0.6** |
| **VTCV** | **VTCV, Calle Va** | **2.30** | **93** | *eP* | | **Pb** | | **02 48 42.2** | **-2.0** |
| **VERB** | **Verbena** | **2.33** | **94** | ↑*iP* | | **Pb** | | **02 48 42.7** | **-2.1** |
| **BOAB** | **BOACO BROADBAN** | **2.36** | **9** | *i* P | | **Pn** | | **02 48 40.8** | **+0.3** |
| BOAB | | | | IAML | | | | 02 48 50.5 | |
| | comp=Z,200nm,1.0s | | | | | | | | |
| BOAB | | | | *i* S | | **Sn** | | **02 49 09.8** | **+1.0** |
| **RVLA** | **Villa Bonita** | **2.43** | **90** | *eP* | | **Pn** | | **02 48 43.3** | **+1.8** |
| **LCOCO** | **El Coco** | **2.46** | **90** | *eP* | | **Pb** | | **02 48 45.0** | **-1.9** |
| **ILCN** | **San Idelfonso** | **2.54** | **346** | *i* P | | **Pn** | | **02 48 43.2** | **+0.2** |
| ILCN | | | | IAML | | | | 02 48 57.4 | |
| | comp=Z,91nm,1.0s | | | | | | | | |
| **OCHAL** | **Ojochal** | **2.58** | **113** | *i* P | | **Pn** | | **02 48 45.0** | **+1.5** |
| OCHAL | | | | IAML | | | | 02 49 44.2 | |
| | comp=Z,180nm,1.0s | | | | | | | | |
| **ESPN** | **Las Esperanzas** | **2.70** | **40** | *eP* | | **Pn** | | **02 48 45.9** | **+0.7** |
| **DRK0** | **Durika** | **2.90** | **106** | *i* P | | **Pn** | | **02 48 49.1** | **+1.0** |
| DRK0 | | | | *i* S | | **Sn** | | **02 49 22.0** | **-0.3** |
| DRK0 | | | | IAML | | | | 02 49 24.8 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **DRK0** | **Durika** | **2.90** | **106** | *eP* | | **Pn** | | **02 48 48.9** | **+0.8** |
| **EDBA** | **Buenos Aires** | **2.90** | **109** | *eP* | | **Pb** | | **02 48 54.8** | **+0.5** |
| **BLUN** | **Bluefields** | **2.93** | **50** | *i* P | | **Pn** | | **02 48 47.9** | **-0.5** |
| BLUN | | | | IAML | | | | 02 49 06.9 | |
| | comp=Z,280nm,1.0s | | | | | | | | |
| **LIMN** | **Finca el Limon** | **2.96** | **354** | *i* P | | **Pn** | | **02 48 48.9** | **+0.1** |
| LIMN | | | | IAML | | | | 02 49 49.5 | |
| | comp=Z,110nm,1.0s | | | | | | | | |

**IDC 09 02:51:53.7±6.6, 21°.95S×173°.81W, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=286.7km s-min=56.3km az=149.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **37.25** | **265** | P | | P | | 02 59 08.3 | +1.0 |
| | 0.1nm,0.4s,baz=102,slow=9.3,SNR=1.7 | | | | | | | | |
| | 0.1nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.00** | **257** | P | | P | | 03 00 33.9 | -0.9 |
| | 0.2nm,0.4s,baz=92,slow=7.7,SNR=4.2 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.27** | **262** | P | | P | | 03 00 36.7 | -0.3 |
| | 0.9nm,0.5s,baz=100,slow=8.2,SNR=16 | | | | | | | | |
| | 0.9nm,0.5s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **146.11** | **333** | PKPbc | | PKPdf | | 03 11 34.7 | +0.1 |
| | 0.4nm,0.3s,baz=45,slow=1.4,SNR=5.3 | | | | | | | | |

**RSNC 09 02:58:46.5±0.0, 7°N±2°×7°6W±°, h-2km±4km, M2.2, mb4.0, ML2.2, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DBBC** | **Dabeiba** | **0.47** | **23** | P | | Pg | | 02 58 55.7 | +0.1 |
| DBBC | | | | S | | Sg | | 02 59 03.4 | +1.6 |
| **SOLC** | **Bahia Solano** | **1.06** | **251** | P | | Pg | | 02 59 07.1 | +0.2 |
| SOLC | | | | S | | Sg | | 02 59 20.4 | -0.3 |
| **APAC** | **Apartado, Choc** | **1.32** | **352** | P | | Pn | | 02 59 12.8 | +0.5 |
| APAC | | | | S | | Sn | | 02 59 32.9 | +2.3 |
| **UREC** | **San Jos de Ur** | **1.45** | **36** | P | | Pn | | 02 59 11.8 | -2.2 |
| UREC | | | | S | | Sg | | 02 59 31.3 | -1.8 |
| **PTAC** | **Punta Ardita,** | **1.51** | **292** | P | | Pn | | 02 59 12.1 | -2.7 |
| PTAC | | | | S | | Sg | | 02 59 32.5 | -2.5 |
| **PLMC** | **San Jos del P** | **1.67** | **176** | P | | Pn | | 02 59 13.4 | -3.7 |
| PLMC | | | | S | | Sn | | 02 59 38.8 | -0.4 |
| **ZARC** | **Zaragoza, Cauc** | **1.78** | **59** | P | | Pn | | 02 59 16.8 | -1.7 |
| ZARC | | | | S | | Sn | | 02 59 39.8 | -2.1 |
| **NORC** | **Norcasia** | **1.83** | **123** | P | | Pn | | 02 59 17.1 | -2.1 |
| NORC | | | | S | | Sn | | 02 59 40.4 | -2.7 |
| **PTBC** | **PUERTO BERRIO,** | **1.93** | **91** | P | | Pn | | 02 59 18.7 | -2.0 |
| PTBC | | | | S | | Sn | | 02 59 42.3 | -3.4 |
| **CAPC** | **Capurgana** | **2.25** | **335** | P | | Pn | | 02 59 26.0 | +1.0 |
| **LCBC** | **Los crdobas,** | **2.26** | **1** | P | | Pn | | 02 59 24.4 | -0.8 |
| LCBC | | | | S | | Sn | | 02 59 55.0 | +1.2 |
| **YOTC** | **Yotoco, Valle** | **2.58** | **179** | P | | Pn | | 02 59 26.6 | -3.1 |
| YOTC | | | | S | | Sn | | 02 59 56.2 | -5.6 |
| **ROSC** | **El Rosal** | **2.70** | **130** | P | | Pb | | 02 59 34.7 | -1.2 |
| **ORTC** | **Ortega, Tolima** | **2.89** | **157** | P | | Pn | | 02 59 35.9 | +2.0 |
| ORTC | | | | S | | Sb | | 03 00 14.2 | -0.8 |
| **BARC** | **Barichara** | **3.20** | **90** | P | | Pn | | 02 59 36.4 | -1.9 |
| **PRAC** | **Prado** | **3.22** | **152** | P | | Pn | | 02 59 39.2 | +0.8 |
| **RUSC** | **La Rusia** | **3.37** | **102** | P | | Pn | | 02 59 39.9 | -0.9 |
| RUSC | | | | S | | Sn | | 03 00 20.7 | -1.1 |
| **OCAC** | **Ocana** | **3.47** | **61** | P | | Pn | | 02 59 40.1 | -1.9 |
| OCAC | | | | S | | Sn | | 03 00 17.1 | -6.8 |
| **SJCC** | **San Jacinto, C** | **3.51** | **20** | P | | Pn | | 02 59 41.8 | -0.6 |
| SJCC | | | | S | | Sn | | 03 00 20.2 | -4.5 |
| **POPC** | **Popayan, Colom** | **4.02** | **184** | P | | Pn | | 02 59 44.1 | -5.5 |
| **CRJC** | **Cerrejon, Guaj** | **5.62** | **38** | P | | Pn | | 03 00 09.7 | -1.7 |

*IDC **09** 03:07:50.8±0.7, 29°.23N×142°.25E, h0km, mb3.9/13, mbtmp3.8/16, ML3.2/2, Error ellipse: s-maj=25.3km s-min=17.0km az=71.0*
*NEIC **09** 03:07:55.7±1.6, 29°.24N±0°.07×142°.54E±0°.09, h33km±5km, mb4.5/17, Error ellipse: s-maj=12.0km s-min=9.1km az=117.0*
**ISC 09 03:07:54.3±0.5, 29°.17N±0°.05×142°.3E±0°.1, h27km, n45, σ1.42/48, mb4.3/22, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **2.07** | **183** | P | | Pn | | **03 08 28.5** | **+1.2** |
| **JCJ** | **Chichijima** | **2.07** | **183** | Pn | | **Pn** | | **03 08 23.5** | **-3.8** |
| | 14nm,0.3s,baz=282,slow=16,SNR=2.3 | | | | | | | | |
| JCJ | | | | Sn | | **Sn** | | **03 08 49.1** | **-3.1** |
| | 19nm,0.3s,baz=294,slow=24,SNR=2.1 | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **4.49** | **332** | Pn | | **Pn** | | **03 08 57.8** | **-2.7** |
| | 6.1nm,0.3s,baz=90,slow=21,SNR=0.9 | | | | | | | | |
| JHJ | | | | Sn | | **Sn** | | **03 09 52.6** | **+0.8** |
| | 5.0nm,0.3s,baz=257,slow=23,SNR=1.9 | | | | | | | | |
| | 52nm,0.8s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **8.11** | **336** | Pn | | **Pn** | | **03 09 48.2** | **-2.1** |
| | 0.2nm,0.3s,baz=156,slow=11,SNR=12 | | | | | | | | |
| | 2.9nm,0.6s | | | | | | | | |
| **MAJO** | **Matsushiro** | **8.11** | **336** | | | **Pn** | | **03 09 50.4** | **+0.1** |
| **MJB9** | **Matsu-Tunnel** | **8.12** | **336** | | | **Pn** | | **03 09 50.4** | **+0.1** |
| **KSRS** | **Korea Array** | **14.57** | **308** | Pn | | **P** | | **03 11 22.1** | **-2.7** |
| | 0.1nm,0.3s,baz=101,slow=12,SNR=1.0 | | | | | | | | |
| **USRK** | **Usuriysk Ar.** | **17.10** | **334** | P | | **Pn** | | **03 11 50.7** | **-0.7** |
| | 1.1nm,0.8s,baz=148,slow=10,SNR=2.4 | | | | | | | | |
| **SONM** | **Songino Array** | **33.32** | **314** | P | | **P** | | **03 14 29.3** | **-0.6** |
| | 0.5nm,0.4s,baz=111,slow=8.3,SNR=4.8 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **49.25** | **190** | P | | **P** | | **03 16 41.5** | **+0.9** |
| WB0 | | | | IAmb | IAmb | | | 03 16 51.7 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **49.25** | **308** | P | | **P** | | **03 16 41.8** | **+1.3** |
| **MKAR** | **Makanchi Array** | **49.25** | **308** | P | | **P** | | **03 16 39.9** | **-0.6** |
| | comp=Z,0.5nm,0.7s,baz=94,slow=9.4,SNR=5.6 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **49.42** | **190** | P | | **P** | | **03 16 42.7** | **+0.8** |
| WR0 | | | | IAmb | IAmb | | | 03 16 44.3 | |
| | comp=Z,6.4nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **49.43** | **190** | P | | **P** | | **03 16 42.9** | **+0.9** |
| WB2 | | | | IAmb | IAmb | | | 03 16 59.3 | |
| | comp=Z,7.7nm,1.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.43** | **190** | P | | **P** | | **03 16 42.3** | **+0.3** |
| **WRA** | **Warramunga Arr** | **49.43** | **190** | P | | **P** | | **03 16 42.7** | **+0.7** |
| | comp=Z,3.4nm,0.8s,baz=9.2,slow=8.1,SNR=13 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **03 18 06.1** | **+2.1** |
| | comp=Z,0.5nm,0.6s,baz=358,slow=3.5,SNR=2.8 | | | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | | | |
| **N18K** | **Kilae Creek** | **51.28** | **34** | P | | **P** | | **03 16 54.4** | **-1.3** |
| **O18K** | **Koktuh Hills** | **51.50** | **35** | P | | **P** | | **03 16 55.4** | **-1.8** |
| **KURK** | **Kurchatov** | **51.62** | **313** | P | | **P** | | **03 16 58.1** | **-0.1** |
| KURK | | | | IAmb | IAmb | | | 03 17 17.3 | |
| | comp=Z,3.7nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.68** | **313** | P | | **P** | | **03 16 59.8** | **+1.1** |
| | comp=Z,2.7nm,0.5s,baz=90,slow=7.0,SNR=9.5 | | | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | | | |
| **D19K** | **Kuna River** | **52.12** | **24** | P | | **P** | | **03 17 01.3** | **-0.5** |
| D19K | | | | IAmb | IAmb | | | 03 17 07.6 | |
| | comp=Z,6.6nm,1.2s | | | | | | | | |
| **E19K** | **Redstone River** | **52.14** | **25** | P | | **P** | | **03 17 01.4** | **-0.6** |
| **M19K** | **Big River Lodg** | **52.18** | **32** | P | | **P** | | **03 17 00.9** | **-1.5** |
| M19K | | | | IAmb | IAmb | | | 03 17 01.9 | |
| | comp=Z,9.9nm,1.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **53.15** | **190** | P | | **P** | | **03 17 09.9** | **0.0** |
| | comp=Z,3.9nm,0.4s,baz=0.2,slow=3.9,SNR=4.9 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **53.15** | **27** | P | | **P** | | **03 17 10.1** | **+0.6** |
| **ILAR** | **Eielson Array** | **55.85** | **29** | P | | **P** | | **03 17 28.9** | **-0.1** |
| | comp=Z,0.2nm,0.7s,baz=268,slow=6.3,SNR=5.5 | | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **56.95** | **26** | P | | **P** | | **03 17 38.0** | **+1.1** |
| **KKAR** | **Karatay Array** | **57.97** | **305** | P | | **P** | | **03 17 46.2** | **+1.8** |
| **P32M** | **Atlin** | **62.34** | **35** | P | | **P** | | **03 18 12.7** | **-1.5** |
| **ABKAR** | **Akbulak array** | **63.73** | **314** | P | | **P** | | **03 18 24.4** | **+0.9** |
| ABKAR | | | | IAmb | IAmb | | | 03 18 25.6 | |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **63.73** | **314** | P | | **P** | | **03 18 24.6** | **+1.1** |
| **NWAO** | **Narrogin (SRO)** | **66.18** | **203** | P | | **P** | | **03 18 40.4** | **+0.9** |
| **KRMB** | **Red Mountain** | **73.93** | **51** | P | | **P** | | **03 19 24.8** | **-2.5** |
| KRMB | | | | IAmb | IAmb | | | 03 19 35.8 | |
| | comp=Z,7.2nm,1.4s | | | | | | | | |
| **KHMM** | **Horse Mountain** | **74.32** | **52** | P | | **P** | | **03 19 27.8** | **-1.8** |
| KHMM | | | | IAmb | IAmb | | |

*Error ellipse: s-maj=18.2km s-min=8.5km az=168.0*
**ISC 09 03:18:33.6±1.4,39°66N±0°06×74°25E±0°03,h10km,n34,**
**σ2s38/57,19C-10D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **0.68** | **302** | ⇑*i* | **Pg** | **03 18 46.0** | **-0.7** |
| | baz=7.0 | | | | | | |
| SFK | | | | ⇑*i* | **Sg** | **03 18 56.0** | **+0.4** |
| | baz=7.0 | | | | | | |
| **OHH** | **Osh** | **1.42** | **308** | ⇑*e* | **Pb** | **03 18 59.4** | **-0.8** |
| | baz=10.0 | | | | | | |
| OHH | | | | ⇑*e* | **Sg** | **03 19 19.7** | **+0.5** |
| | baz=10.0 | | | | | | |
| **DRK** | **Karamyk** | **1.90** | **265** | ⇓*i* | **Pb** | **03 19 07.1** | **-1.4** |
| | baz=68 | | | | | | |
| DRK | | | | ⇓*i* | **Sg** | **03 19 33.0** | **-1.7** |
| | baz=68 | | | | | | |
| **ARSB** | **Arslanbob** | **1.93** | **330** | ⇓*i* | **Pb** | **03 19 08.8** | **-0.1** |
| | baz=31 | | | | | | |
| ARSB | | | | ⇓*i* | **Sg** | **03 19 35.7** | **+0.2** |
| | baz=31 | | | | | | |
| **ARLS** | **Aral** | **2.20** | **1** | ⇑*i* | **Pb** | **03 19 12.8** | **-0.8** |
| | baz=1.0 | | | | | | |
| ARLS | | | | ⇑*i* | **Sb** | **03 19 42.5** | **+1.4** |
| | baz=1.0 | | | | | | |
| **NRN** | **Naryn** | **2.22** | **36** | ⇑*i* | **Pb** | **03 19 12.8** | **-1.2** |
| | baz=35 | | | | | | |
| NRN | | | | ⇑*i* | **Sb** | **03 19 42.5** | **+0.8** |
| | baz=35 | | | | | | |
| **BTK** | **Batken** | **2.67** | **280** | ⇓*e* | **Pb** | **03 19 18.2** | **-3.3** |
| | baz=81 | | | | | | |
| BTK | | | | ⇓*e* | **Sb** | **03 19 52.4** | **-2.0** |
| | baz=81 | | | | | | |
| **ARK** | **Arkit** | **2.76** | **322** | ⇓*i* | **Pb** | **03 19 20.4** | **-2.6** |
| | baz=23 | | | | | | |
| ARK | | | | ⇓*i* | **Sb** | **03 19 55.5** | **-1.4** |
| | baz=23 | | | | | | |
| **AAK** | **Ala-Archa** | **2.98** | **3** | Pg | **Pb** | **03 19 27.2** | **+0.3** |
| | 4.3nm,0.6s | | | | | | |
| AAK | | | | Lg | Lg | 03 20 06.3 | |
| | 5.2nm,0.5s | | | | | | |
| **TRKS** | **Terek-Say** | **3.02** | **309** | ⇑*e* | **Pn** | **03 19 23.1** | **+1.5** |
| | baz=10.0 | | | | | | |
| TRKS | | | | ⇑*e* | **Sn** | **03 20 00.3** | **+2.4** |
| | baz=10.0 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.11** | **24** | ⇑*i* | **Pb** | **03 19 25.4** | **-3.6** |
| | baz=23 | | | | | | |
| BOOM | | | | ⇑*i* | **Sb** | **03 20 04.4** | **-2.6** |
| | baz=23 | | | | | | |
| **MNAS** | **Manas** | **3.12** | **336** | ⇑*i* | **Pb** | **03 19 25.6** | **-3.6** |
| | baz=36 | | | | | | |
| MNAS | | | | ⇑*i* | **Sb** | **03 20 04.8** | **-2.6** |
| | baz=36 | | | | | | |
| **MRKS** | **Merke** | **3.18** | **346** | *e* | **Pb** | **03 19 28.4** | **-1.9** |
| | 2.0nm,0.2s | | | | | | |
| MRKS | | | | *e* | **Sb** | **03 20 08.8** | **-0.3** |
| | 6.9nm,0.5s | | | | | | |
| **KDJ** | **Kajisay** | **3.32** | **41** | ⇑*e* | **Pn** | **03 19 28.4** | **+2.6** |
| | baz=40 | | | | | | |
| KDJ | | | | ⇑*e* | **Sb** | **03 20 09.3** | **-4.0** |
| | baz=40 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.42** | **17** | ⇑Pg | **Pb** | **03 19 31.6** | **-2.7** |
| | 1.9nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 03 20 19.6 | |
| | 3.4nm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.62** | **20** | *e* | **Pb** | **03 19 37.1** | **-0.7** |
| | 4.1nm,0.4s | | | | | | |
| KST | | | | *e* | **Sb** | **03 20 23.9** | **+2.0** |
| | 7.0nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **3.76** | **17** | *e* | **Pb** | **03 19 41.7** | **+1.5** |
| | 2.1nm,0.5s | | | | | | |
| DGS | | | | *e* | **Sg** | **03 20 31.7** | **-2.6** |
| | 12nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.76** | **17** | Pg | **Pb** | **03 19 41.6** | **+1.5** |
| | 3.5nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 03 20 31.6 | |
| | 10nm,0.6s | | | | | | |
| **SGDS** | **Sogindy** | **3.80** | **4** | Pg | **Pb** | **03 19 42.3** | **+1.4** |
| | 1.7nm,0.9s | | | | | | |
| SGDS | | | | Lg | Lg | 03 20 32.1 | |
| | 5.4nm,0.7s | | | | | | |
| **MTBS** | **Maitube** | **3.84** | **25** | *e* | **Pb** | **03 19 43.4** | **+2.0** |
| | 3.5nm,0.2s | | | | | | |
| MTBS | | | | *e* | **Sg** | **03 20 34.5** | **-2.4** |
| | 11nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.94** | **30** | *e* | **Pb** | **03 19 45.1** | **+1.7** |
| | 4.7nm,0.4s | | | | | | |
| TNSS | | | | *e* | **Sg** | **03 20 37.5** | **-2.6** |
| | 2.6nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.94** | **30** | Pg | **Pb** | **03 19 45.1** | **+1.7** |
| | 4.8nm,0.5s | | | | | | |
| TNSS | | | | Lg | Lg | 03 20 37.5 | |
| | 3.3nm,0.6s | | | | | | |
| **IUG** | **Iuzhnay** | **4.05** | **309** | *e* | **Pb** | **03 19 46.7** | **+1.7** |
| | 2.7nm,0.1s | | | | | | |
| IUG | | | | *e* | **Sg** | **03 20 40.4** | **-3.3** |
| | 24nm,0.5s | | | | | | |
| **IUG** | **Iuzhnay** | **4.05** | **309** | Pg | **Pb** | **03 19 46.7** | **+1.7** |
| | 7.1nm,0.3s | | | | | | |
| IUG | | | | Lg | Lg | 03 20 40.3 | |
| | 20nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **4.18** | **14** | *e* | **Pb** | **03 19 48.2** | **+1.0** |
| | 0.8nm,0.3s | | | | | | |
| KRBS | | | | *e* | **Sg** | **03 20 43.1** | **-4.6** |
| | 7.5nm,0.9s | | | | | | |
| **KRBS** | **Karabastau** | **4.18** | **14** | Pg | **Pb** | **03 19 48.2** | **+1.0** |
| | 0.8nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 03 20 43.1 | |
| | 4.6nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **4.44** | **23** | *e* | **Pb** | **03 19 53.4** | **+1.6** |
| | 2.3nm,0.4s | | | | | | |
| KTBS | | | | *e* | **Sg** | **03 20 51.6** | **-4.7** |
| | 17nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **4.44** | **23** | Pg | **Pb** | **03 19 53.3** | **+1.6** |
| | 2.3nm,0.6s | | | | | | |
| KTBS | | | | Lg | Lg | 03 20 51.6 | |
| | 18nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **4.45** | **322** | ⇑Pg | **Pb** | **03 19 51.9** | **+0.2** |
| | 0.8nm,0.5s,baz=130,slow=15,SNR=4.9 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **03 20 35.0** | **+2.1** |
| | 1.3nm,0.4s | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 03 20 53.3 | |
| | 3.4nm,0.6s,baz=130,slow=28,SNR=4.6 | | | | | | |
| **BRLS** | **Borolday** | **4.73** | **317** | *e* | **Pb** | **03 19 57.2** | **+0.6** |
| | 1.1nm,0.3s | | | | | | |
| BRLS | | | | *e* | **Sb** | **03 20 58.1** | **+4.5** |
| | 3.7nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **4.73** | **317** | Pg | **Pb** | **03 19 57.2** | **+0.6** |
| | 1.2nm,0.5s | | | | | | |
| BRLS | | | | Lg | Lg | 03 20 58.1 | |
| | 2.4nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **5.28** | **29** | *e* | **Pb** | **03 20 08.6** | **+2.6** |
| | 1.8nm,0.8s | | | | | | |
| ARXS | | | | *e* | **Sg** | **03 21 17.9** | **-5.1** |
| | 3.1nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **5.28** | **29** | Pg | **Pb** | **03 20 08.9** | **+3.0** |
| | 1.8nm,0.7s | | | | | | |
| ARXS | | | | Lg | Lg | 03 21 17.9 | |
| | 3.1nm,0.7s | | | | | | |
| **BLB** | **Baldybastay** | **5.45** | **34** | Pg | **Pb** | **03 20 12.6** | **+3.8** |
| | 8.1nm,0.9s | | | | | | |
| BLB | | | | Lg | Lg | 03 21 24.3 | |
| | 3.8nm,0.6s | | | | | | |

*AFAD **09** 04:09:43.8±0.0,37.60N×37.99E,h7km±2km,ML1.8*
**ISK 09 04:09:31.9,38.41N×37.77E,h4km,ML2.0/6,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DARE** | **Darende-Malaty** | **0.27** | **305** | Pg | **Pg** | 04 09 37.7 | +0.5 |
| DARE | | | | Sg | Sg | 04 09 42.6 | +1.7 |
| **AKCA** | **Adyaman/G¶l** | **0.62** | **186** | P | Pn | 04 09 50.4 | +2.8 |
| AKCA | | | | S | Sb | 04 09 55.0 | +0.5 |
| AKCA | | | | *i* AML | AML | 04 09 55.0 | |
| | comp=N,152nm,0.3s | | | | | | |
| AKCA | | | | *i* AML | AML | 04 09 57.0 | |
| | comp=E,123nm,0.3s | | | | | | |
| **AZEY** | **Adyaman-Merk** | **0.71** | **148** | P | Pn | 04 09 50.0 | +1.2 |
| AZEY | | | | S | Sg | 04 09 53.8 | -1.0 |
| AZEY | | | | *i* AML | AML | 04 09 55.0 | |
| | comp=E,103nm,0.4s | | | | | | |
| **ATAB** | **Bozova** | **1.03** | **156** | P | Pg | 04 09 49.8 | -1.9 |
| ATAB | | | | S | Sg | 04 09 53.5 | -12 |
| ATAB | | | | *i* AML | AML | 04 09 54.0 | |
| | comp=E,180nm,0.2s | | | | | | |
| ATAB | | | | *i* AML | AML | 04 09 55.0 | |
| | comp=N,165nm,0.4s | | | | | | |
| **GZT** | **Gaziantep** | **1.07** | **189** | P | Pg | 04 09 52.4 | 0.0 |
| GZT | | | | S | Sg | 04 09 58.9 | -7.4 |
| GZT | | | | *i* AML | AML | 04 09 59.0 | |
| | comp=N,97nm,0.4s | | | | | | |
| GZT | | | | *i* AML | AML | 04 10 05.0 | |
| | comp=E,72nm,0.4s | | | | | | |
| **KHMN** | **Narli-Kahraman** | **1.13** | **206** | Pn | Pb | 04 09 54.2 | +0.2 |
| KHMN | | | | Sn | Sn | 04 10 09.8 | -0.7 |
| **KMRS** | **Kahramanmaras** | **1.14** | **217** | Pn | Pn | 04 09 54.9 | +0.3 |
| **HANM** | **anlurfa/Hi** | **1.21** | **133** | P | Pn | 04 09 57.5 | +1.9 |
| HANM | | | | *i* AML | AML | 04 10 11.0 | |
| | comp=N,42nm,0.4s | | | | | | |
| **URFA** | **Urfa** | **1.28** | **139** | Pn | Pn | 04 09 56.9 | +0.3 |
| **GAZ** | **Gaziantep** | **1.32** | **200** | Pn | Pb | 04 09 57.6 | +0.4 |
| **PTK** | **Pertek** | **1.36** | **69** | Pn | Pb | 04 09 58.2 | +0.2 |
| **SURC** | **SANLIURFA_SURC** | **1.67** | **156** | P | Pn | 04 10 01.4 | -0.6 |
| SURC | | | | S | Sn | 04 10 12.1 | -12 |

*SJA **09** 04:36:08.4±0.6,27.90S×71.61W,h8km,ML3.5,MW3.3*
*GUC **09** 04:36:13.8±0.7,28.04S×71.34W,h25km±3km,ML3.4*
**ISC 09 04:36:14.6±1.2,28.05S±0.02×71.24W±0.05,h23km±8km,**
**n32,σ2s59/60,1C-4D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AC04** | **Llanos de Chal** | **0.22** | **137** | *e*P | **Pb** | **04 36 19.6** | **-0.7** |
| AC04 | | | | IAML | | 04 36 28.8 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **AC04** | **Llanos de Chal** | **0.22** | **137** | ⇓*i*P | **Pb** | **04 36 19.9** | **-0.3** |
| AC04 | | | | *e*S | **Sb** | **04 36 24.5** | **+0.4** |
| **GO03** | **Copiap** | **1.00** | **63** | *e*P | **Pn** | **04 36 31.8** | **-1.5** |
| GO03 | | | | *e*S | Sb | 04 36 32.5 | -14 |
| **GO03** | **Copiap** | **1.00** | **63** | ⇓*i*P | **Pn** | **04 36 32.4** | **-0.9** |
| GO03 | | | | *e*S | **Sb** | **04 36 47.1** | **+1.1** |
| GO03 | | | | IAML | | 04 36 51.8 | |
| | comp=E,2μm,0.4s | | | | | | |
| **AC06** | **Mina Casimiro** | **1.04** | **49** | *i* P | **Pn** | **04 36 32.4** | **-1.5** |
| AC06 | | | | *e*S | **Sn** | **04 36 47.7** | **-0.1** |
| AC06 | | | | IAML | | 04 36 52.9 | |
| | comp=E,1μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.07** | **154** | *e*P | **Pn** | **04 36 33.3** | **-1.2** |
| LCO | | | | *e*S | **Sb** | **04 36 49.5** | **+1.1** |
| LCO | | | | IAML | | 04 36 51.2 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **LCO** | **Las Campanas** | **1.07** | **154** | *e*P | **Pn** | **04 36 33.3** | **-1.2** |
| LCO | | | | *e*S | **Sn** | **04 36 48.5** | **-0.4** |
| **AC05** | **El Transito** | **1.16** | **133** | *e*P | **Pn** | **04 36 34.5** | **-1.1** |
| AC05 | | | | *e*S | **Sn** | **04 36 51.7** | **+0.8** |
| AC05 | | | | IAML | | 04 36 52.6 | |
| | comp=Z,353nm,0.3s | | | | | | |
| **AC05** | **El Transito** | **1.16** | **133** | ⇓*i*P | **Pn** | **04 36 35.2** | **-0.3** |
| AC05 | | | | *e*S | **Sn** | **04 36 51.1** | **+0.3** |
| AC05 | | | | IAML | | 04 36 55.0 | |
| | comp=N,553nm,0.4s | | | | | | |
| **CO05** | **La Serena** | **1.87** | **180** | *e*P | **Pn** | **04 36 45.3** | **+0.1** |
| CO05 | | | | *e*S | **Sb** | **04 37 09.5** | **-1.4** |
| CO05 | | | | IAML | | 04 37 18.6 | |
| | comp=N,582nm,0.3s | | | | | | |
| **AC01** | **Pan de Azucar** | **1.98** | **17** | *e*P | **Pn** | **04 36 44.5** | **-2.2** |
| AC01 | | | | *e*S | **Sb** | **04 37 17.8** | **+3.7** |
| AC01 | | | | IAML | | 04 37 22.7 | |
| | comp=Z,175nm,0.5s | | | | | | |
| **AC01** | **Pan de Azucar** | **1.98** | **17** | ⇑*i*P | **Pn** | **04 36 44.5** | **-2.2** |
| AC01 | | | | *e*S | **Sb** | **04 37 13.1** | **-1.0** |
| AC01 | | | | IAML | | 04 37 20.0 | |
| | comp=E,192nm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **2.15** | **170** | *e*P | **Pn** | **04 36 50.0** | **+0.7** |
| GO04 | | | | *e*S | **Sb** | **04 37 20.9** | **+1.5** |
| **GO04** | **Tololo Observa** | **2.15** | **170** | ⇓*e*P | **Pb** | **04 36 51.1** | **-2.0** |
| GO04 | | | | *e*S | **Sb** | **04 37 19.8** | **+0.4** |
| GO04 | | | | IAML | | 04 37 29.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **CO01** | **Juntas del Tor** | **2.17** | **153** | *e*P | **Pn** | **04 36 51.0** | **+1.4** |
| CO01 | | | | *e*S | **Sb** | **04 37 21.5** | **+1.6** |
| CO01 | | | | IAML | | 04 37 23.1 | |
| | comp=Z,191nm,0.5s | | | | | | |
| **CO01** | **Juntas del Tor** | **2.17** | **153** | *e*P | **Pn** | **04 36 50.9** | **+1.3** |
| CO01 | | | | *e*S | **Sb** | **04 37 19.9** | **-0.1** |
| CO01 | | | | IAML | | 04 37 23.0 | |
| | comp=E,269nm,0.3s | | | | | | |
| **AROD** | **Rodeo** | **2.62** | **144** | *e*P | **Pb** | **04 36 59.0** | **-2.1** |
| AROD | | | | *e*S | **Sn** | **04 37 29.3** | **+2.2** |
| **ACDV** | **Cuesta del Vie** | **2.81** | **139** | *e*P | **Pb** | **04 37 02.3** | **-2.0** |
| ACDV | | | | *e*S | **Sn** | **04 37 32.9** | **+1.2** |
| ACDV | | | | IAML | | 04 37 48.1 | |
| | comp=Z,88nm,0.4s | | | | | | |
| **CO03** | **El Pedregal** | **2.82** | **170** | *e*S | **Sb** | **04 37 37.6** | **-1.0** |
| CO03 | | | | IAML | | 04 37 42.4 | |
| | comp=Z,98nm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **2.82** | **170** | *e*P | **Pn** | **04 36 58.0** | **-0.5** |
| CO03 | | | | *e*S | **Sb** | **04 37 36.4** | **-2.2** |
| CO03 | | | | IAML | | 04 37 42.1 | |
| | comp=E,222nm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **3.15** | **176** | *e*P | **Pn** | **04 37 01.8** | **-1.3** |
| CO02 | | | | *e*S | **Sb** | **04 37 52.3** | **+4.2** |
| CO02 | | | | IAML | | 04 37 57.1 | |
| | comp=Z,170nm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **3.15** | **176** | *e*P | **Pn** | **04 37 01.7** | **-1.3** |
| CO02 | | | | *e*S | **Sn** | **04 37 43.2** | **+3.2** |
| **ACCO** | **Cerro Coronel** | **3.17** | **144** | *e*P | **Pb** | **04 37 07.2** | **-3.2** |
| ACCO | | | | *e*S | **Sb** | **04 37 47.5** | **-1.2** |
| ACCO | | | | IAML | | 04 37 59.3 | |
| | comp=Z,133nm,0.4s | | | | | | |
| **GO02** | **Mina Guanaco** | **3.23** | **28** | *e*P | **Pn** | **04 37 03.2** | **-1.0** |
| GO02 | | | | *e*S | Sb | 04 38 00.1 | +10 |
| **DOCA** | **Reserva Natura** | **3.45** | **147** | *e*P | **Pn** | **04 37 10.8** | **+3.4** |
| DOCA | | | | *e*S | **Sb** | **04 37 57.6** | **+0.7** |
| DOCA | | | | IAML | | 04 38 10.3 | |
| | comp=Z,274nm,0.6s | | | | | | |
| **PB14** | **IPOC Station P** | **3.49** | **13** | *e*P | **Pn** | **04 37 04.6** | **-3.2** |
| PB14 | | | | *e*S | **Sb** | **04 38 05.9** | **+7.9** |
| PB14 | | | | IAML | | 04 38 21.1 | |
| | comp=Z,65nm,0.4s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.01** | **111** | *e*P | **Pn** | **04 37 18.2** | **+3.4** |
| ACLC | | | | *e*S | **Sb** | **04 38 11.0** | **-1.8** |
| ACLC | | | | IAML | | 04 38 16.5 | |
| | comp=Z,37nm,0.6s | | | | | | |
| **RTLS** | **Leoncito** | **4.10** | **156** | *e*P | **Pn** | **04 37 19.6** | **+3.4** |
| RTLS | | | | *e*S | **Sb** | **04 38 12.0** | **-3.6** |
| RTLS | | | | IAML | | 04 38 24.8 | |
| | comp=Z,190nm,0.7s | | | | | | |
| **AVFE** | **Valle Fertil** | **4.21** | **129** | *e*P | **Pn** | **04 37 20.3** | **+2.8** |
| AVFE | | | | *e*S | **Sn** | **04 38 08.5** | **+2.6** |
| AVFE | | | | IAML | | 04 38 21.8 | |
| | comp=Z,73nm,0.9s | | | | | | |
| **CYA** | **Choya** | **4.81** | **96** | *e*P | **Pn** | **04 37 28.5** | **+2.7** |
| CYA | | | | *e*S | **Sb** | **04 38 29.9** | **-5.9** |
| CYA | | | | IAML | | 04 38 33.7 | |
| | comp=Z,35nm,0.5s | | | | | | |
| **ASAL** | **Salagasta** | **4.98** | **156** | *e*P | **Pn** | **04 37 31.4** | **+3.3** |
| ASAL | | | | *e*S | **Sb** | **04 38 34.0** | **-6.8** |
| ASAL | | | | IAML | | 04 38 56.7 | |
| | comp=Z,25nm,0.6s | | | | | | |
| **ACHE** | **Chepes** | **5.05** | **129** | *e*P | **Pn** | **04 37 32.2** | **+3.1** |
| ACHE | | | | *e*S | **Sn** | **04 38 30.2** | **+3.3** |

**IDC 09 05:08:31.8±7.8,28.93N×81.58E,h0km,mb3.6/3,**
**mbtmp3.5/4,MS2.7/1,Error ellipse: s-maj=327.4km**
**s-min=30.6km az=71.0,Nepal-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **14.82** | **339** | LR | LR | 05 19 01.4 | |
| | comp=Z,30nm,18.6s,baz=236,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **17.84** | **2** | P | P | 05 12 42.4 | +0.1 |
| | 0.3nm,0.6s,baz=192,slow=13,SNR=2.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.79** | **355** | P | P | 05 13 24.8 | -0.4 |
| | 1.4nm,0.7s,baz=177,slow=10.0,SNR=15 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.11** | **5** | P | P | 05 13 58.2 | +0.1 |
| | 1.0nm,0.6s,baz=201,slow=7.7,SNR=2.7 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **70.38** | **127** | P | P | 05 19 47.8 | 0.0 |
| | 0.5nm,0.9s,baz=322,slow=6.3,SNR=2.1 | | | | | | |
| | 0.5nm,0.9s | | | | | | |

**RSNC 09 05:11:52.7±0.0,7°N±1°×7°3W±°,h139km±2km,M2.9,mB4.8,**
**mb3.5,ML2.9,Mw(mB)4.1,MwMwp4.4,Mwp4.8,Northern**
**Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.21** | **194** | P | Pn | 05 12 10.8 | -1.2 |
| BARC | | | | S | Sn | 05 12 25.4 | -1.2 |
| **BRJC** | **Barrancabermej** | **0.63** | **286** | P | Pn | 05 12 12.6 | -1.0 |
| BRJC | | | | S | Sn | 05 12 29.4 | 0.0 |
| **PAMC** | **Pamplona, Colo** | **0.69** | **39** | P | Pn | 05 12 13.6 | -0.9 |
| PAMC | | | | S | Sn | 05 12 30.6 | -0.4 |
| **RUSC** | **La Rusia** | **0.90** | **177** | P | Pn | 05 12 14.8 | -1.4 |
| RUSC | | | | S | Sn | 05 12 32.5 | -1.5 |
| **PTBC** | **PUERTO BERRIO,** | **1.34** | **259** | P | Pn | 05 12 17.9 | -1.9 |
| PTBC | | | | S | Sn | 05 12 38.4 | -2.0 |
| **TAMC** | **Tame, Arauca** | **1.38** | **105** | P | Pn | 05 12 19.2 | -1.0 |
| TAMC | | | | S | Sn | 05 12 40.5 | -0.6 |
| **OCAC** | **Ocana** | **1.44** | **353** | P | Pn | 05 12 19.1 | -1.9 |
| OCAC | | | | S | Sn | 05 12 40.9 | -1.7 |
| **SPBC** | **San Pablo de B** | **1.48** | **219** | P | Pn | 05 12 19.8 | -1.5 |
| SPBC | | | | S | Sn | 05 12 41.3 | -1.8 |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **292** | P | Pn | 05 12 24.1 | -1.3 |
| ZARC | | | | S | Sn | 05 12 49.6 | -0.8 |
| **NORC** | **Norcasia** | **2.12** | **235** | P | Pn | 05 12 27.5 | -1.2 |
| NORC | | | | S | Sn | 05 12 54.6 | -1.7 |
| **CHIC** | **Chingaza** | **2.24** | **196** | P | Pn | 05 12 29.1 | -1.4 |
| CHIC | | | | S | Sn | 05 12 57.9 | -1.6 |
| **ROSC** | **El Rosal** | **2.28** | **211** | P | Pn | 05 12 30.7 | -0.3 |
| ROSC | | | | S | Sn | 05 13 00.5 | +0.2 |
| **URMC** | **San Jos de Ur** | **2.56** | **292** | P | Pn | 05 12 31.5 | -2.6 |
| URMC | | | | S | Sn | 05 13 02.2 | -3.8 |
| **VILC** | **Villavicencio,** | **2.73** | **192** | P | Pn | 05 12 34.2 | -2.2 |
| VILC | | | | S | Sn | 05 13 08.2 | -1.8 |
| **PTGC** | **Puerto Gaitan,** | **2.77** | **159** | P | Pn | 05 12 34.0 | -2.7 |
| PTGC | | | | S | Sn | 05 13 07.0 | -3.7 |
| **DBBC** | **Dabeiba** | **3.06** | **274** | P | Pn | 05 12 39.0 | -1.6 |
| DBBC | | | | S | Sn | 05 13 14.9 | -2.6 |
| **ANIL** | **Santa Ana** | **3.22** | **225** | P | Pn | 05 12 42.1 | -0.7 |
| ANIL | | | | S | Sn | 05 13 21.7 | +0.2 |
| **SDV** | **Santo Domingo** | **3.23** | **50** | P | Pn | 05 12 40.8 | -2.0 |
| SDV | | | | S | Sn | 05 13 17.8 | -3.7 |
| **ARGC** | **Ariguani, Magd** | **3.23** | **340** | P | Pn | 05 12 41.9 | -0.8 |
| ARGC | | | | S | Sn | 05 13 20.2 | -1.2 |
| **PRAC** | **Prado** | **3.53** | **210** | P | Pn | 05 12 44.4 | -2.2 |
| PRAC | | | | S | Sn | 05 13 26.6 | -1.7 |
| **ORTC** | **Ortega, Tolima** | **3.56** | **216** | P | Pn | 05 12 45.9 | -1.1 |
| ORTC | | | | S | Sn | 05 13 28.3 | -0.8 |
| **APAC** | **Apartado, Choc** | **3.59** | **288** | P | Pn | 05 12 45.5 | -1.8 |
| APAC | | | | S | Sn | 05 13 26.8 | -2.9 |
| **PLMC** | **San Jos del P** | **3.66** | **239** | P | Pn | 05 12 47.1 | -1.2 |
| PLMC | | | | S | Sn | 05 13 29.3 | -2.0 |
| **SJCC** | **San Jacinto, C** | **3.69** | **327** | P | Pn | 05 12 45.1 | -3.5 |
| SJCC | | | | S | Sn | 05 13 27.1 | -4.9 |
| **URMC** | **La Uribe, Meta** | **3.74** | **199** | P | Pn | 05 12 48.0 | -1.4 |
| URMC | | | | S | Sn | 05 13 33.4 | 0.0 |
| **LCBC** | **Los crdobas,** | **3.80** | **303** | P | Pn | 05 12 49.5 | -0.6 |
| LCBC | | | | S | Sn | 05 13 34.4 | -0.2 |
| **CRJC** | **Cerrejon, Guaj** | **4.20** | **3** | P | Pn | 05 12 51.4 | -4.0 |
| CRJC | | | | S | Sn | 05 13 38.6 | -5.6 |
| **YOTC** | **Yotoco, Valle** | **4.25** | **229** | P | Pn | 05 12 54.1 | -2.0 |
| YOTC | | | | S | Sn | 05 13 47.4 | +2.0 |
| **GUVC** | **San Jose del G** | **4.26** | **173** | P | Pn | 05 12 53.2 | -2.9 |
| GUVC | | | | S | Sn | 05 13 42.8 | -2.6 |
| **SMRC** | **Santa Marta, M** | **4.47** | **346** | P | Pn | 05 12 55.9 | -3.0 |
| SMRC | | | | S | Sn | 05 13 44.7 | -5.7 |
| **CAPC** | **Capurgana** | **4.56** | **294** | P | Pn | 05 13 01.1 | +0.9 |
| CAPC | | | | S | Sn | 05 13 47.9 | -4.7 |
| **URIC** | **Uribia, Colomb** | **5.00** | **13** | P | Pn | 05 13 01.4 | -4.5 |
| URIC | | | | S | Sn | 05 13 57.3 | -5.7 |
| **JAMC** | **Jamundi, Valle** | **5.01** | **225** | P | Pn | 05 13 07.4 | +1.0 |
| | 6.9nm,1.2s | | | | | | |
| JAMC | | | | S | Sn | 05 14 06.9 | +3.2 |
| | 6.9nm,1.2s | | | | | | |
| **GARC** | **Garzon, Huila** | **5.15** | **207** | P | Pn | 05 13 05.4 | -2.9 |
| GARC | | | | S | Sn | 05 14 02.6 | -4.5 |
| **POPC** | **Popayan, Colom** | **5.51** | **220** | P | Pn | 05 13 11.6 | -1.5 |
| | 2.4nm,0.4s | | | | | | |
| POPC | | | | S | Sn | 05 14 15.3 | -0.4 |
| | 2.4nm,0.4s | | | | | | |
| **FLOC** | **Florencia** | **5.76** | **206** | P | Pn | 05 13 14.0 | -2.2 |
| FLOC | | | | S | Sn | 05 14 20.6 | -0.8 |

*IDC **09** 05:25:29.1±0.3,8.19S×116.20E,h0km,mb5.5/19,*
*mbtmp5.5/20,ML5.1/1,MS5.3/58,Error ellipse:*
*s-maj=15.7km s-min=11.1km az=66.0*
*BJI **09** 05:25:30.0±0.0,8.40S×116.20E,h12km,mb5.5/94,*
*mB6.0/81,Ms5.8/99,Ms7 5.6/98*
*NEIC **09** 05:25:31.6,8.55S×116.22E,h26km,Moment Tensor*
*Solution. Duration: 4s7 Moment tensor: Scale 10¹⁸Nm;*
*Mrr0.69; Mθθ-0.73; Mφφ0.05; Mrθ-0.71; Mθφ-0.06; Mφr-0.03;*
*Fault plane solution: M0 1.01000×10¹⁸ NP1:*
*φs267.17000°,δ67.54000°,λ91.25000°. NP2:φs83.92000°,*
*δ22.50000°,λ86.99000°. Principal axes: T 0.9809,*
*Plg67.0000°, Azm179.0000°; N 0.0506, Plg1.0000°,*
*Azm87.0000°; P -1.0315, Plg23.0000°, Azm356.0000°;*
*IPGP **09** 05:25:31.0,8.39S×116.21E,h16km,Mw5.9,Fault plane*
*solution: NP1:φs259.00000°,δ59.00000°,λ89.00000°.*
*NP2:φs81.00000°,δ31.00000°,λ91.00000°.*
*NEIC **09** 05:25:31.6,8.34S×116.22E,h10km*
*NEIC **09** 05:25:31.6,8.35S×116.22E,h26km*
*DJA **09** 05:25:32.6±0.1,8.5S±1×11.6E±°,h14km±1km,M5.8/129,*
*mb5.9/129,mB6.3/107,MLv6.3/27,Mw5.8/158,*
*Mw(mB)6.0/107,MwMwp5.7/88,Mwp5.8/88*
*MOS **09** 05:25:32.4±1.2,8.22S×116.14E,h35km,mb5.8/68,*
*MS5.4/32,Error ellipse: s-maj=6.8km s-min=4.3km*
*az=114.2*
*NEIC **09** 05:25:32.4±2.1,8.31S±0.06×116.23E±0.05,h15km±1km,*
*mb5.8/233,Ms_20 5.5/556,Mwb5.8/69,Mww5.9/49,Error*
*ellipse: s-maj=10.7km s-min=8.8km az=172.0,Moment*
*Tensor Solution. Moment tensor: Scale 10¹⁷Nm;*
*Mrr4.11; Mθθ-4.00; Mφφ-0.11; Mrθ-3.99; Mθφ-1.26; Mφr0.84;*
*Fault plane solution: M0 5.89000×10¹⁷ NP1:φs56.38000°,*
*δ27.05000°,λ57.21000°. NP2:φs272.26000°,δ67.52000°,*
*λ105.46000°. Principal axes: T 6.0050, Plg64.0000°,*
*Azm208.0000°; N -0.2421, Plg14.0000°, Azm86.0000°; P*
*-5.7628, Plg21.0000°, Azm351.0000°;*
*GCMT **09** 05:25:34.4±0.1,8.38S×116.20E,h22km,MW5.9/155,*
*Moment Tensor Solution. s153,c315; s155,c524;*
*Duration: 2s2 Moment tensor: Scale 10¹⁸Nm;*
*Mrr0.68±.01; Mθθ-0.70±.00; Mφφ0.02±.00; Mrθ-0.58±.01;*
*Mθφ-0.11±.00; Mφr-0.08±.01; Best double couple:*
*M0 0.90900×10¹⁸ NP1:φs262.00000°,δ65.00000°,*
*λ90.00000°. NP2:φs82.00000°,δ25.00000°,λ90.00000°.*
*Principal axes: T 0.8890, Plg70.0000°, Azm172.0000°; N*
*0.0400, Plg0.0000°, Azm82.0000°; P

KAPI **Kappang** 4.81 47 P Pn 05 26 44.8 +0.8
KAPI S Sn 05 27 38.1 -0.8
**KAPI Kappang** 4.81 47 P Pn 05 26 44.5 +0.5
**NGJI Ngawi** 4.82 281 Pn Pn 05 26 46.4 +2.3
**EDFI Ende, Flores** 5.42 95 Pn Pn 05 26 52.8 +0.3
**BNSI Bone** 5.49 45 Pn Pn 05 26 54.7 +1.4
983nm,0.8s,41µm95µm14nm
**UWJI Ujung Watu** 5.57 290 Pn Pn 05 26 54.9 +0.4
1µm,0.8s,33µm67µm12nm
**SPSI Sidrap Palu** 5.59 39 Pn Pn 05 26 55.0 +0.3
259nm,0.6s,28µm8.6nm
**UGM Wanagama** 5.66 274 P Pn 05 26 57.4 +1.6
**UGM Wanagama** 5.66 274 Pn Pn 05 26 56.5 +0.8
**UGM Wanagama** 5.66 274 Pn Pn 05 26 56.3 +0.5
**SMRI Semarang** 5.88 282 P Pn 05 27 01.2 +2.5
**SMRI Semarang** 5.88 282 Pn Pn 05 26 59.1 +0.4
**SMRI Semarang** 5.88 282 ⇑P Pn 05 27 00.6 +1.9
**SMRI Semarang** 5.88 282 Pn Pn 05 27 00.3 +1.6
**YOGI Yogyakarta** 5.90 275 Pn Pn 05 26 59.8 +0.8
2µm,0.8s,26µm
**MMRI Maumere** 5.95 93 P Pn 05 27 00.5 +0.8
9µm,0.9s
**MMRI Maumere** 5.95 93 Pn Pn 05 26 59.4 -0.3
**MMRI Maumere** 5.95 93 ⇑P Pn 05 26 59.8 0.0
**MMRI Maumere** 5.95 93 Pn Pn 05 26 59.6 -0.1
**BBSI Bau Bau** 6.90 66 Pn Pn 05 27 15.2 +2.4
1µm,0.9s,15µm29µm5.2nm
**BKB Balikpapan** 7.06 5 Pn 05 27 16.9 +2.0
**BKB Balikpapan** 7.06 5 ⇑P Pn 05 27 19.4 +4.5
**BKB Balikpapan** 7.06 5 Pn Pn 05 27 18.6 +3.7
310nm,0.7s,34µm9.1nm
**KPJI Karang Pucung** 7.30 277 Pn Pn 05 27 19.1 +0.9
1µm,0.7s,17µm62µm12nm
**MTKI Muara Teweh, K** 7.46 350 Pn Pn 05 27 21.9 +1.4
**BATI Baumata** 7.57 105 Pn Pn 05 27 22.9 +0.9
**CMJI Cimerak** 7.72 274 Pn Pn 05 27 23.3 -0.7
1µm,1.0s,12µm23µm9.6nm
**SMKI Samarinda** 7.90 7 P Pn 05 27 30.1 +3.7
360nm,0.9s,19µm
**SOEI Soe** 8.06 101 P Pn 05 27 31.2 +2.3
**SOEI Soe** 8.06 101 Pn Pn 05 27 28.7 -0.2
**SOEI Soe** 8.06 101 P Pn 05 27 29.4 +0.6
**SOEI Soe** 8.06 101 ⇑P Pn 05 27 30.3 +1.4
**SOEI Soe** 8.06 101 Pn Pn 05 27 30.0 +1.1
**JCJI Jatiwangi** 8.10 283 Pn Pn 05 27 31.1 +1.9
1µm,0.9s,17µm43µm
**BBJI Bungbulang** 8.54 275 P Pn 05 27 36.2 +0.9
**CNJI Cibinong** 9.07 276 Pn Pn 05 27 43.7 +1.1
686nm,0.9s,6µm
**DBJI Dramaga** 9.56 280 P Pn 05 27 51.8 +2.5
1µm,1.0s,21µm32µm
**STKI Sintang** 9.59 330 P Pn 05 27 51.6 +1.9
466nm,0.9s,44µm
**SKJI Sukabumi** 9.68 277 P Pn 05 27 53.1 +2.2
**LUWI Luwuk** 9.74 42 P Pn 05 27 54.0 +2.2
**LUWI Luwuk** 9.74 42 P Pn 05 27 52.3 +0.5
**LUWI Luwuk** 9.74 42 ⇑P Pn 05 27 53.6 +1.8
**LUWI Luwuk** 9.74 42 P Pn 05 27 53.2 +1.4
233nm,1.4s,7µm34µm
**TNG Tangerang** 9.74 282 P Pn 05 27 54.0 +2.2
1µm,0.9s
TNG P 05 27 54.6
**SBJI Serang** 10.26 282 P Pn 05 28 01.2 +2.4
1µm,1.0s,19µm
**TOLI2 Tolitoli** 10.42 26 P Pn 05 28 03.8 +2.7
**TOLI2 Tolitoli** 10.42 26 Pn 05 28 00.3 -0.8
**MRSI Marisa** 10.44 33 P Pn 05 28 04.3 +2.9
**XMI Christmas Isla** 10.61 258 P Pn 05 28 03.9 +0.2
**XMI Christmas Isla** 10.61 258 ⇑P Pn 05 28 01.9 -1.8
**XMIS Christmas Isla** 10.65 258 P Pn 05 28 04.6 +0.4
**XMIS Christmas Isla** 10.65 258 Pn Pn 05 28 02.4 -1.8
**GTOI Gorontalo** 11.19 38 P Pn 05 28 12.6 +1.1
**BLSI Bandar Lampung** 11.29 284 P Pn 05 28 16.4 +3.3
**KSM Kuching** 11.39 329 P Pn 05 28 17.9 +3.5
**KSM Kuching** 11.39 329 Pn 05 28 13.8 -0.5
**KSM Kuching** 11.39 329 ⇑P Pn 05 28 15.9 +1.6
**SBUM Sibu** 11.43 339 Pn 05 28 15.3 +0.3
**SBUM Sibu** 11.43 339 ⇑P Pn 05 28 17.6 +2.6
**SANI Sanana** 11.55 58 P Pn 05 28 17.9 +1.4
**SANI Sanana** 11.55 58 P Pn 05 28 17.9 +1.4
**SANI Sanana** 11.55 58 ⇑P Pn 05 28 19.2 +2.6
**SANI Sanana** 11.55 58 P Pn 05 28 17.8 +1.3
420nm,1.3s,6µm
**PPBI Pangkal Pinang** 11.77 301 P Pn 05 28 20.0 +0.5
291nm,1.1s,19µm
**NLAI Namlea** 11.94 66 P Pn 05 28 21.4 -0.5
188nm,1.3s,11µm
**KASI Kota Agung** 11.97 283 P Pn 05 28 21.7 -0.6
534nm,0.8s,10µm
**LWLI Liwa** 12.53 284 P Pn 05 28 30.6 +0.6
1µm,0.9s,19µm21µm
**PMBI Palembang** 12.60 295 P Pn 05 28 36.0 +5.1
**PMBI Palembang** 12.60 295 P Pn 05 28 34.9 +4.0
**MBWA Marble Bar** 13.19 166 P Pn 05 28 36.5 -2.5
**MBWA Marble Bar** 13.19 166 Pn Pn 05 28 35.5 -3.5
**MBWA Marble Bar** 13.19 166 P Pn 05 28 35.0 -4.0
**MBWA Marble Bar** 13.19 166 ⇑P Pn 05 28 35.2 -3.7
**MBWA Marble Bar** 13.19 166 P Pn 05 28 38.0 -1.0
MBWA P Pn 05 28 38.0 -1.0
MBWA P Pn 05 28 38.0 -1.0
MBWA S Sn 05 30 53.3 -12
MBWA S Sn 05 30 53.3 -12
MBWA S Sn 05 30 53.3 -12
**FITZ Fitzroy Crossi** 13.34 138 P Pn 05 28 39.6 -1.4
1µm,1.3s
**FITZ Fitzroy Crossi** 13.34 138 Pn 05 28 38.7 -2.3
**MSAI Masohi** 13.57 69 P Pn 05 28 46.7 +2.5
150nm,0.7s
**LBMI Labuha** 13.59 56 P Pn 05 28 48.3 +3.9
575nm,1.6s,9µm
MYLDM **Lahad Datu** 13.61 10 Pn 05 28 46.1 +1.4
MYLDM **Lahad Datu** 13.61 10 ⇑P P 05 28 49.3 -4.1
**PSA00 Pilbara Seismi** 13.62 166 P Pn 05 28 42.1 -2.7
**PSA00 Pilbara Seismi** 13.62 166 Pn Pn 05 28 41.3 -3.5
**PSA00 Pilbara Seismi** 13.62 166 P Pn 05 28 41.6 -3.2
**MNAI Manna** 13.77 286 P Pn 05 28 48.4 +1.5
**MNAI Manna** 13.77 286 Pn 05 28 45.8 -1.1
**MNAI Manna** 13.77 286 ⇑P Pn 05 28 47.5 +0.7
**MNAI Manna** 13.77 286 P Pn 05 28 45.3 -1.6
**BNDI Bandanaira** 14.11 75 P Pn 05 28 52.9 +1.4
**BNDI Bandanaira** 14.11 75 ⇑P Pn 05 28 54.1 +2.6
**BNDI Bandanaira** 14.11 75 P Pn 05 28 52.8 +1.3
**JMBI JAMBI** 14.19 297 P Pn 05 28 56.0 +3.4
345nm,1.1s,7µm
**KNRA Kununurra** 14.26 122 Pn Pn 05 28 51.9 -1.7
**KNRA Kununurra** 14.26 122 P Pn 05 28 52.1 -1.6
**TNTI Ternate** 14.32 51 Pn 05 28 55.1 +0.7
**TNTI Ternate** 14.32 51 ⇑P Pn 05 28 55.6 +1.1
**TNTI Ternate** 14.32 51 P P 05 28 58.9 -2.4
296nm,1.2s,6µm
**GIRL Giralia** 14.36 187 P Pn 05 28 53.8 -1.1
**GIRL Giralia** 14.36 187 Pn 05 28 52.0 -2.9
**GIRL Giralia** 14.36 187 ⇑P Pn 05 28 52.3 -2.6
**TPRI Tanjung Pinang** 14.85 308 P P 05 29 06.4 -0.8
285nm,1.0s,8µm16µm
**SAUI Saumlaki** 14.93 90 Pn Pn 05 29 00.9 -1.7
**SAUI Saumlaki** 14.93 90 P Pn 05 29 02.0 -0.6
1µm,1.2s
**DRS Darwin Rock St** 14.99 107 P Pn 05 29 02.3 -1.2
399nm,1.0s
**SGSI Sangihe** 15.12 38 P P 05 29 08.0 -2.2
1µm,1.3s,15µm18µm
**MTN Manton Dam** 15.32 108 P Pn 05 29 06.8 -1.1
**MTN Manton Dam** 15.32 108 Pn 05 29 06.3 -1.6
MTN IAmb IAmb 05 29 13.2
comp=Z,269nm,0.8s
**MTN Manton Dam** 15.32 108 P Pn 05 29 05.7 -2.1
**MTN Manton Dam** 15.32 108 ⇑P Pn 05 29 05.2 -2.6
**BTDF Bukit Timah Da** 15.71 307 P P 05 29 17.7 +0.9
**KDU Kakadu** 16.55 107 P Pn 05 29 22.3 -1.3
**KDU Kakadu** 16.55 107 P Pn 05 29 21.1 -2.5
**KDU Kakadu** 16.55 107 ⇑P Pn 05 29 20.6 -3.0
**SWI Sorong** 16.71 64 P P 05 29 27.1 -0.8
comp=Z,613nm,1.1s,comp=Z,7µmcomp=Z,10µm
**FAKI Fak Fak** 16.82 72 P P 05 29 28.5 -0.6
**FAKI Fak Fak** 16.82 72 Pn 05 29 25.4 -1.8
FAKI IAmb IAmb 05 29 32.3
comp=Z,358nm,0.7s
**FAKI Fak Fak** 16.82 72 ⇑P Pn 05 29 26.3 -0.8
**FAKI Fak Fak** 16.82 72 P Pn 05 29 26.0 -1.1
comp=Z,532nm,1.6s,comp=Z,8µm
**PPSI Pulau Pagai** 17.06 288 P Pn 05 29 28.9 -1.2
comp=Z,566nm,0.9s,comp=Z,10µm

**PDSI Padang** 17.35 294 P Pn 05 29 33.5 -0.3
**BKNI Bangkinang** 17.41 299 P P 05 29 38.5 +2.9
**BKNI Bangkinang** 17.41 299 P P 05 29 36.6 +1.0
BKNI IAmb IAmb 05 29 44.6
comp=Z,807nm,1.3s
**BKNI Bangkinang** 17.41 299 P P 05 29 35.6 0.0
**BKNI Bangkinang** 17.41 299 ⇑P P 05 29 36.6 +1.0
**BKNI Bangkinang** 17.41 299 P P 05 29 37.1 +1.5
comp=Z,520nm,1.0s,comp=Z,15µmcomp=Z,22µm
**DAV Davao City (W)** 17.92 32 P P 05 29 44.9 +3.7
**DAV Davao City (W)** 17.92 32 ⇑P P 05 29 43.9 +2.7
**DAV Davao City (W)** 17.92 32 P P 05 29 44.5 +3.3
comp=Z,213nm,0.4s,baz=198,slow=2.2,SNR=8.7
DAV S Sn 05 32 58.9 -1.1
comp=Z,149nm,0.3s,baz=233,slow=10,SNR=1.1
DAV LR LR 05 38 05.9
comp=Z,17µm,19.0s,baz=202,slow=42
**DAV Davao City (W)** 17.92 32 P P 05 29 44.0 +2.8
**KMPI Kaimana, Papua** 17.99 76 P Pn 05 29 39.6 -2.0
comp=Z,767nm,0.7s,comp=Z,8µmcomp=Z,9µm
**MEEK Meekatharra** 18.34 173 P P 05 29 45.6 -0.3
**MEEK Meekatharra** 18.34 173 P Pn 05 29 46.1 +0.1
comp=Z,36µm,SNR=17
**SISI Saibi** 18.43 291 P P 05 29 45.7 -1.2
comp=Z,220nm,0.9s
**COCO West Island** 19.46 257 P Pn 05 30 01.8 +2.3
**COCO West Island** 19.46 257 P P 05 29 56.9 -1.3
**COCO West Island** 19.46 257 P P 05 29 56.9 -1.3
**COCO West Island** 19.46 257 P P 05 29 56.9 -1.3
COCO pmax pmax
comp=Z,357nm,1.1s
**PBSI Pulau Batu** 19.68 294 P P 05 29 59.9 -0.7
**WRKA Warakurna** 20.21 147 P Pn 05 30 08.2 -0.2
**WRKA Warakurna** 20.21 147 P Pn 05 30 07.6 -0.7
comp=Z,1µm,1.3s,SNR=81
**WRKA Warakurna** 20.21 147 ⇑P Pn 05 30 07.6 -0.8
**KULM Kulim** 20.60 311 P P 05 30 11.1 +0.5
**KULM Kulim** 20.60 311 ⇑P Pn 05 30 12.9 -0.1
**MORW Morawa** 20.63 180 P P 05 30 11.7 +0.9
**MORW Morawa** 20.63 180 P P 05 30 10.8 0.0
MORW IAmb IAmb 05 30 19.5
comp=Z,878nm,1.1s
**MORW Morawa** 20.63 180 P Pn 05 30 12.1 -1.0
comp=Z,826nm,1.1s,SNR=31
**MORW Morawa** 20.63 180 ⇑P Pn 05 30 12.1 -1.1
**GSI Gunungsitoli** 20.91 296 P Pn 05 30 17.8 +1.2
**GSI Gunungsitoli** 20.91 296 P P 05 30 13.9 -0.1
GSI IAMs_20 IAMs_20 05 39 22.8
comp=Z,23µm,19.0s
**GSI Gunungsitoli** 20.91 296 P P 05 30 15.1 +1.1
comp=Z,207nm,0.9s,comp=Z,6µmcomp=Z,12µm
**WB0 Warramunga Arr** 20.94 125 P P 05 30 13.9 -0.4
**WRA Warramunga Arr** 20.99 125 P P 05 30 14.6 -0.2
**WRA Warramunga Arr** 20.99 125 P P 05 30 14.5 -0.2
comp=Z,994nm,0.8s,baz=300,slow=12,SNR=973
WRA S S 05 34 05.0 -2.5
comp=Z,50nm,1.0s,baz=300,slow=19,SNR=6.0
WRA LR LR 05 39 01.9
comp=Z,10µm,18.6s,baz=300,slow=38
**WRA Warramunga Arr** 20.99 125 P P 05 30 14.6 -0.2
WRA pmax pmax
comp=Z,129nm,0.9s
**WRAB Tennant Creek** 20.99 125 P P 05 30 14.7 -0.2
**WRAB Tennant Creek** 20.99 125 *c* iP P 05 30 14.5 -0.3
WRAB pmax pmax
comp=Z,1µm,0.9s
WRAB MLR MLR
comp=Z,13µm,14.0s
**WB2 Warramunga Arr** 21.00 125 P P 05 30 14.6 -0.3
**WR0 Warramunga Arr** 21.16 125 P P 05 30 16.7 +0.1
**KCSI Kotacane, Aceh** 21.85 302 P P 05 30 23.5 -0.6
comp=Z,260nm,1.0s,comp=Z,6µm
**BLDU Ballidu** 22.17 179 P P 05 30 28.5 +1.1
**BLDU Ballidu** 22.17 179 P P 05 30 28.4 +1.0
comp=Z,819nm,1.0s,SNR=22
**SNSI Sinabang, Aceh** 22.53 297 P P 05 30 31.7 +0.3
comp=Z,575nm,1.0s,comp=Z,10µm
**ASPA Alice Springs** 22.78 134 P P 05 30 33.9 -0.2
comp=Z,362nm,SNR=8.5
**AS31 Alice Springs** 22.79 134 P P 05 30 34.1 +0.1
AS31 IAmb IAmb 05 30 39.6
comp=Z,265nm,1.1s
**ASAR Alice Springs** 22.79 134 P P 05 30 33.6 -0.5
**ASAR Alice Springs** 22.79 134 P P 05 30 33.9 -0.2
comp=Z,472nm,0.8s,baz=308,slow=9.1,SNR=813
ASAR PcP PcP 05 34 24.6 -0.7
comp=Z,32nm,0.8s,baz=336,slow=1.6,SNR=4.7
ASAR S S 05 34 42.7 +1.0
comp=Z,23nm,0.9s,baz=308,slow=14,SNR=2.2
ASAR LR LR 05 39 26.1
comp=Z,12µm,21.3s,baz=304,slow=36
ASAR P3KP 06 04 41.1
comp=Z,1.0nm,0.9s,baz=151,slow=2.1,SNR=4.5
comp=Z,472nm,0.8s
**ASAR Alice Springs** 22.79 134 P P 05 30 33.6 -0.5
**AS01 Alice Springs** 22.82 134 P P 05 30 34.5 +0.1
**KLBR Kellerberrin** 23.18 177 P P 05 30 39.1 +1.1
**KLBR Kellerberrin** 23.18 177 P P 05 30 38.3 +0.2
comp=Z,1µm,1.0s,SNR=45
**MLSI Meulaboh, Aceh** 23.40 302 P P 05 30 40.3 0.0
comp=Z,504nm,0.9s
**LHMI Lhok Sumawe** 23.48 304 P P 05 30 42.6 +1.5
**LHMI Lhok Sumawe** 23.48 304 P P 05 30 41.8 +0.8
**LHMI Lhok Sumawe** 23.48 304 ⇑P P 05 30 42.0 +0.9
**LHMI Lhok Sumawe** 23.48 304 P P 05 30 41.9 +0.8
comp=Z,959nm,1.0s,comp=Z,15µmcomp=Z,15µm
**MTKN Mount Kenneth** 23.49 181 P P 05 30 44.2 +3.2
**MTKN Mount Kenneth** 23.49 181 P P 05 30 41.2 +0.3
comp=Z,2µm,0.9s,SNR=8.3
**KMBL Kambalda** 23.52 168 P P 05 30 40.8 -0.5
**KMBL Kambalda** 23.52 168 P P 05 30 41.1 -0.2
comp=Z,22µm,SNR=4.4
**MUN Mundaring** 23.53 180 P P 05 30 42.0 +0.6
**MUN Mundaring** 23.53 180 P P 05 30 41.9 +0.6
comp=Z,24µm,SNR=8.7
**SRIT Nakonsritamara** 23.61 315 P P 05 30 44.4 +2.1
**SRIT Nakonsritamara** 23.61 315 IAmb IAmb 05 30 50.5
comp=Z,268nm,1.1s
**MMPI Merauke** 23.90 92 P P 05 30 43.7 -1.4
comp=Z,1µm,1.8s
**SURA Surathani** 23.99 316 P P 05 30 49.3 +3.3
**NWAO Narrogin (SRO)** 24.49 178 P P 05 30 51.0 +0.6
**NWAO Narrogin (SRO)** 24.49 178 P P 05 30 51.4 +1.0
**NWAO Narrogin (SRO)** 24.49 178 P P 05 30 50.1 -0.3
**NWAO Narrogin (SRO)** 24.49 178 IAMs_20 IAMs_20 05 40 58.9
comp=Z,18µm,18.0s
**NWAO Narrogin (SRO)** 24.49 178 P P 05 30 50.7 +0.3
comp=Z,195nm,0.7s,baz=353,slow=8.2,SNR=56
NWAO S S 05 35 16.1 +6.8
comp=Z,68nm,0.5s,baz=90,slow=20,SNR=2.0
NWAO LR LR 05 40 50.8
comp=Z,17µm,20.1s,baz=348,slow=37
comp=Z,195nm,0.7s
**NWAO Narrogin (SRO)** 24.49 178 P P 05 30 51.4 +1.0
NWAO P P 05 30 51.4 +1.0
NWAO S S 05 35 15.5 +6.2
NWAO S S 05 35 15.5 +6.2
**NWAO Narrogin (SRO)** 24.49 178 P P 05 30 50.1 -0.3
NWAO pmax pmax
comp=Z,1µm,1.2s
NWAO MLR MLR
comp=Z,18µm,18.0s
**GENI Genyem** 24.50 78 P P 05 30 50.1 -0.6
**GENI Genyem** 24.50 78 ⇑P P 05 30 49.0 -1.7
**GENI Genyem** 24.50 78 P P 05 30 50.0 -0.6
comp=Z,542nm,0.9s,comp=Z,11µmcomp=Z,6µm
AUHAR **St Anne's Scho** 24.64 181 P P 05 30 54.2 +2.5
comp=Z,1µm,1.0s
**FORT Forrest** 24.92 155 P P 05 30 55.5 +1.2
**FORT Forrest** 24.92 155 P P 05 30 54.4 +0.1
**FORT Forrest** 24.92 155 P P 05 30 54.8 +0.5
comp=Z,1µm,1.0s,SNR=33
**FORT Forrest** 24.92 155 ⇑P P 05 30 54.5 +0.2
**TABU Tabubil** 25.00 85 P P 05 30 54.9 -0.4
**JAY Jayapura** 25.03 78 P P 05 30 53.7 -1.9
comp=Z,191nm,0.9s
**QIS Mount Isa** 25.65 121 P P 05 31 01.7 +0.6
**QIS Mount Isa** 25.65 121 P P 05 31 01.1 0.0
comp=Z,348nm,1.1s,SNR=66
**UBPT Khong Chiam** 25.77 336 IAmb IAmb 05 31 16.8
comp=Z,204nm,1.4s
**RKGY Rocky Gully** 26.16 179 P P 05 31 06.5 +1.0
**RKGY Rocky Gully** 26.16 179 P P 05 31 07.1 +1.6
comp=Z,712nm,1.2s,SNR=12
**H01W3 Cape Leeuwin H** 26.49 184 P P 05 31 11.0 +2.7

**H01W1 Cape Leeuwin H** 26.50 184 P P 05 31 10.7 +2.3
**H01W2 Cape Leeuwin H** 26.51 184 P P 05 31 10.7 +2.3
**AUALB St Joseph's Co** 26.59 177 P P 05 31 10.7 +1.4
**OOD Oodnadatta** 26.70 139 P P 05 31 11.5 +1.0
**NAYO Nakonayok** 26.93 327 P P 05 31 15.8 +3.2
**COEN Coen** 27.01 104 P P 05 31 14.4 +1.0
**COEN Coen** 27.01 104 P P 05 31 13.2 -0.3
**COEN Coen** 27.01 104 P P 05 31 13.9 +0.5
comp=Z,561nm,1.6s,SNR=36
**COEN Coen** 27.01 104 ⇑P P 05 31 13.4 0.0
**MULG Mulgathing** 27.48 145 P P 05 31 18.2 +0.7
**QIZ Qiongzhong** 27.91 347 P P 05 31 25.8 +4.4
**QIZ Qiongzhong** 27.91 347 P P 05 31 23.3 +1.9
QIZ PP PnPn 05 32 14.5 +5.8
QIZ S S 05 36 09.3 +5.6
QIZ PcS PcS 05 38 22.9 +3.9
QIZ pmax pmax
comp=Z,130nm,2.3s
QIZ pmax pmax
comp=Z,3µm,9.0s
QIZ LR LR
comp=Z,9µm,14.8s
QIZ LR LR
comp=Z,5µm,16.3s
QIZ LR LR
comp=Z,10µm,14.7s
**SRDT SRDT** 28.21 323 P P 05 31 27.6 +3.5
**MTSU Mount Surprise** 28.99 112 P P 05 31 32.3 +1.2
**LCRK Leigh Creek** 30.11 140 P P 05 31 41.5 +0.6
**INKA Innaminka** 30.15 133 P P 05 31 42.0 +0.7
**BBOO Buckleboo** 30.51 146 P P 05 31 44.5 +0.1
**BBOO Buckleboo** 30.51 146 P P 05 31 44.1 -0.2
BBOO IAmb IAmb 05 31 48.4
comp=Z,254nm,0.9s
**BBOO Buckleboo** 30.51 146 P P 05 31 44.7 +0.4
comp=Z,331nm,1.0s,SNR=11
**PMG Port Moresby** 30.58 94 P P 05 31 45.7 +0.5
**PMG Port Moresby** 30.58 94 P P 05 31 44.4 -0.9
PMG IAmb IAmb 05 32 27.5
comp=Z,97nm,1.1s
**PMG Port Moresby** 30.58 94 ⇑P P 05 31 44.3 -0.9
**PMG Port Moresby** 30.58 94 P P 05 31 44.1 -1.1
comp=Z,67nm,1.0s,baz=297,slow=9.5,SNR=10.0
PMG LR LR 05 45 07.5
comp=Z,5µm,21.7s,baz=265,slow=38
comp=Z,67nm,1.0s
**PMG Port Moresby** 30.58 94 *c* iP P 05 31 43.6 -1.6
PMG pmax pmax
comp=Z,62nm,1.0s
PMG MLR MLR
comp=Z,6µm,16.0s
**PBA Port Blair** 30.66 310 IAMs_20 IAMs_20 05 47 48.0
comp=Z,14µm,16.5s
**CTA Charters Tower** 31.30 115 P P 05 31 52.8 +1.3
**CTA Charters Tower** 31.30 115 P P 05 31 51.9 +0.3
comp=Z,6.9nm,0.9s,baz=284,slow=11,SNR=45
CTA LR LR 05 46 19.4
comp=Z,909nm,19.4s,baz=282,slow=40
comp=Z,6.9nm,0.9s
**CTAO Charters Tower** 31.30 115 P P 05 31 52.9 +1.4
**CTAO Charters Tower** 31.30 115 P P 05 31 51.8 +0.3
CTAO IAmb IAmb 05 32 04.4
comp=Z,160nm,1.1s
**CTAO Charters Tower** 31.30 115 IAMs_20 IAMs_20 05 46 17.2
comp=Z,13µm,20.0s
**CTAO Charters Tower** 31.30 115 ⇑P P 05 31 52.3 +0.8
**CTAO Charters Tower** 31.30 115 P P 05 31 51.8 +0.3
CTAO pmax pmax
comp=Z,160nm,1.2s
CTAO MLR MLR
comp=Z,13µm,20.0s
TWGBT **Beinan** 31.32 9 P P 05 31 55.6 +4.0
**WHYH Whyalla** 31.53 144 P P 05 31 54.4 +1.0
**TV1H Townsville Har** 31.55 113 P P 05 31 55.2 +1.5
**CM31 Chiang Mai Arr** 31.62 327 P P 05 31 55.1 +0.8
CM31 IAmb IAmb 05 32 25.3
comp=Z,175nm,1.5s
**CMAR Chiang Mai Arr** 31.62 327 P P 05 31 54.3 0.0
**CMAR Chiang Mai Arr** 31.62 327 P P 05 31 55.1 +0.9
comp=Z,20nm,0.8s,baz=156,slow=7.2,SNR=61
CMAR LR LR 05 46 49.6
comp=Z,17µm,18.1s,baz=140,slow=41
CMAR P3KPbc 06 03 32.7
comp=Z,1.6nm,0.4s,baz=323,slow=5.7,SNR=13
**CMAR Chiang Mai Arr** 31.62 327 *i* P P 05 31 57.2 +2.9
CMAR pmax pmax
comp=Z,20nm,0.8s
**MANU Manus Island** 31.62 80 P P 05 31 54.1 -0.3
MANU IAmb IAmb 05 31 55.7
comp=Z,189nm,1.1s
**TPUB Ta-pu** 31.73 8 P P 05 31 58.6 +3.4
**TPUB Ta-pu** 31.73 8 IAmb IAmb 05 32 13.6
comp=Z,109nm,1.1s
**SLVN Son La** 31.87 338 P P 05 31 56.9 +0.4
SLVN IAmb IAmb 05 32 10.4
comp=Z,115nm,1.3s
**PTPS Port Pirie** 31.88 144 P P 05 31 57.5 +1.1
**YULB Yu-li** 31.92 9 P P 05 31 58.7 +1.9
**QLP Quilpie** 32.17 128 P P 05 31 59.8 +0.7
**QLP Quilpie** 32.17 128 P P 05 32 00.2 +1.1
comp=Z,587nm,1.1s,SNR=48
**QLP Quilpie** 32.17 128 ⇑P P 05 32 00.2 +1.1
AUAYR **Ayr State High** 32.20 114 P P 05 32 01.5 +2.1
**SSLB Suanglung** 32.26 8 P P 05 32 03.1 +3.3
**SSLB Suanglung** 32.26 8 P P 05 31 59.8 0.0
SSLB IAmb IAmb 05 32 15.3
comp=Z,77nm,0.8s
**HTT Hallett** 32.60 143 P P 05 32 03.8 +0.9
**HTT Hallett** 32.60 143 P P 05 32 03.6 +0.8
comp=Z,260nm,1.2s,SNR=16
**HTT Hallett** 32.60 143 ⇑P P 05 32 03.5 +0.6
**HTT Hallett** 32.60 143 P P 05 32 03.9 +1.0
**KNMB Chin-men Tao** 32.67 4 IAmb IAmb 05 32 08.2
comp=Z,204nm,1.4s
**NACB Ninganchiao** 32.73 9 P P 05 32 06.8 +2.9
**NACB Ninganchiao** 32.73 9 P P 05 32 04.5 +0.6
NACB IAmb IAmb 05 32 24.5
comp=Z,156nm,1.0s
**QZH Quanzhou** 33.16 4⇑ *i* P P 05 32 10.8 +3.2
QZH S S 05 37 29.5 +3.8
QZH pmax pmax
comp=Z,91nm,1.4s
QZH pmax pmax
comp=Z,1µm,8.9s
QZH LR LR
comp=Z,6µm,15.5s
QZH LR LR
comp=Z,5µm,14.8s
QZH LR LR
comp=Z,8µm,15.1s
**YHNB Yeheng** 33.19 9 P P 05 32 10.9 +2.9
**YHNB Yeheng** 33.19 9 IAmb IAmb 05 32 26.8
comp=Z,282nm,1.2s
**STKA Stephens Creek** 33.24 138 P P 05 32 09.2 +0.8
**STKA Stephens Creek** 33.24 138 P P 05 32 08.0 -0.4
**STKA Stephens Creek** 33.24 138 P P 05 32 08.9 +0.6
comp=Z,2µm,SNR=3.4
**STKA Stephens Creek** 33.24 138 P P 05 32 09.2 +0.8
comp=Z,61nm,0.7s,baz=312,slow=9.1,SNR=48
STKA PcP PcP 05 34 50.8 +0.1
comp=Z,59nm,0.9s,baz=309,slow=6.5,SNR=3.0
STKA LR LR 05 46 11.4
comp=Z,16µm,21.4s,baz=304,slow=37
comp=Z,61nm,0.7s
**STKA Stephens Creek** 33.24 138 *c* iP P 05 32 08.7 +0.3
**YOJ Yonaguni jima** 33.26 11 P P 05 32 11.9 +3.3
**YOJ Yonaguni jima** 33.26 11 P P 05 32 08.9 +0.3
YOJ IAmb IAmb 05 32 28.0
comp=Z,89nm,1.0s
**YOJ Yonaguni jima** 33.26 11 P P 05 32 08.9 +0.3
YOJ pmax pmax
comp=Z,89nm,1.0s
**TATO Taipei** 33.50 9 P P 05 32 13.2 +2.5
**TATO Taipei** 33.50 9 P P 05 32 11.2 +0.6
**TATO Taipei** 33.50 9 P P 05 32 12.5 +1.9
TATO P P 05 32 12.5 +1.9
TATO S S 05 37 32.3 +1.2
TATO S S 05 37 32.3 +1.2
**GULI GuiLin** 33.91 350 P P 05 32 20.3 +6.1
GULI S S 05 37 45.1 +7.7
GULI LR LR
comp=Z,6µm,15.1s
GULI LR LR
comp=Z,5µm,16.3s
GULI LR LR

comp=Z,8µm,15.5s
**KAVG Kavieng 34.88 83 P P 05 32 23.0 +0.2**
**RMQ Roma 35.75 124 P P 05 32 32.9 +2.7**
**RMQ Roma 35.75 124 P P 05 32 32.6 +2.4**
comp=Z,50nm,1.2s,SNR=2.7
**KMI Kunming 35.76 339 ⇑P P 05 32 34.1 +3.6**
KMI PP **PP** 05 33 54.3 +2.3
KMI S **S** 05 38 12.0 +5.6
KMI pmax pmax
comp=Z,92nm,1.4s
KMI pmax pmax
comp=Z,3µm,6.6s
KMI LR LR
comp=Z,6µm,15.1s
KMI LR LR
comp=Z,6µm,13.7s
KMI LR LR
comp=Z,8µm,17.3s
**GYA Guiyang 35.81 345 ⇓P P 05 32 34.8 +4.0**
GYA S **S** 05 38 11.0 +4.0
GYA pmax pmax
comp=Z,120nm,1.1s
GYA pmax pmax
comp=Z,3µm,6.8s
GYA LR LR
comp=Z,3µm,18.1s
GYA LR LR
comp=Z,6µm,18.4s
GYA LR LR
comp=Z,4µm,21.0s
**GUMO Guam 35.82 53 P P 05 32 32.3 +1.4**
**GUMO Guam 35.82 53** LR LR 05 46 14.1
comp=Z,2µm,21.1s,baz=226,slow=35
**CMSA Cobar Meteorol 35.84 134 P P 05 32 32.2 +1.3**
**CMSA Cobar Meteorol 35.84 134 P P 05 32 31.9 +1.0**
comp=Z,124nm,1.9s,SNR=16
**RABL Rabaul 35.95 86 P P 05 32 31.2 -0.9**
RABL IAmb IAmb 05 32 37.5
comp=Z,161nm,1.1s
**RK1H Rockhampton Ha 36.08 119 P P 05 32 33.8 +0.8**
**CNSH ChangSha 36.44 355 P P 05 32 38.5 +2.5**
CNSH PP **PP** 05 34 02.7 +3.4
CNSH S **S** 05 38 24.2 +7.9
CNSH pmax pmax
comp=Z,71nm,1.3s
CNSH LR LR
comp=Z,4µm,21.9s
CNSH LR LR
comp=Z,4µm,15.2s
CNSH LR LR
comp=Z,6µm,19.1s
**ARPS Mount Arapiles 36.64 144 P P 05 32 38.9 +1.2**
**ARPS Mount Arapiles 36.64 144 P P 05 32 38.6 +0.9**
comp=Z,235nm,0.9s,SNR=26
**GD1S Gladstone Soft 36.81 119 P P 05 32 41.1 +1.8**
**JOW Kunigami 36.86 18 P P 05 32 43.1 +3.5**
**JOW Kunigami 36.86 18** LR LR 05 50 19.9
comp=Z,2µm,18.6s,baz=210,slow=41
**JMZ Minamidaito 2 36.95 23 P P 05 32 43.8 +3.4**
**EIDS Eidsvold 37.25 121 P P 05 32 44.2 +1.2**
**EIDS Eidsvold 37.25 121 P P 05 32 42.6 -0.4**
EIDS IAMs_20 IAMs_20 05 49 13.9
comp=Z,9µm,19.0s
**EIDS Eidsvold 37.25 121 P P 05 32 44.4 +1.4**
comp=Z,6µm,SNR=5.7
**EIDS Eidsvold 37.25 121 ⇑P P 05 32 43.4 +0.4**
**PZH PanZhiHua 37.38 338 P P 05 32 47.1 +3.0**
PZH PP **PnPn** 05 34 17.6 +7.1
PZH S **S** 05 38 35.0 +4.1
PZH pmax pmax
comp=Z,70nm,1.1s
PZH pmax pmax
comp=Z,3µm,9.0s
PZH LR LR
comp=Z,4µm,17.5s
PZH LR LR
comp=Z,9µm,18.0s
PZH LR LR
comp=Z,6µm,18.8s
**TNCH TengChong 37.38 333 P P 05 32 46.5 +2.2**
TNCH pP pP 05 32 50.0 -1.8
TNCH sP sP 05 32 52.0 -2.8
TNCH PP **PnPn** 05 34 15.6 +5.0
TNCH S **S** 05 38 31.2 0.0
TNCH sS pS 05 38 40.8 +1.2
TNCH pmax pmax
comp=Z,97nm,1.0s
TNCH pmax pmax
comp=Z,800nm,3.1s
TNCH LR LR
comp=Z,8µm,13.1s
TNCH LR LR
comp=Z,8µm,14.7s
TNCH LR LR
comp=Z,16µm,14.6s
**HALK Hakmana 38.23 291 ⇑P P 05 32 51.4 -0.1**
**BRAT Ballarat 38.40 143 P P 05 32 54.2 +1.7**
**PALK Pallekele 38.66 293 P P 05 32 54.2 -0.9**
PALK IAmb IAmb 05 32 56.0
comp=Z,197nm,1.4s
**PALK Pallekele 38.66 293** IAMs_20 IAMs_20 05 48 23.2
comp=Z,8µm,21.0s
**PALK Pallekele 38.66 293 ⇑P P 05 32 55.0 -0.1**
**PALK Pallekele 38.66 293** LR LR 05 48 34.1
comp=Z,7µm,20.8s,baz=222,slow=36
**PALK Pallekele 38.66 293 P P 05 32 55.1 -0.1**
**PALK Pallekele 38.66 293 P P 05 32 54.2 -0.9**
PALK pmax pmax
comp=Z,197nm,1.4s
PALK MLR MLR
comp=Z,8µm,21.0s
**WHN Wuhan 38.70 357 ⇑P P 05 32 58.0 +3.0**
WHN pP **pP** 05 33 01.7 -0.8
WHN PP **PnPn** 05 34 30.8 +4.6
WHN S **S** 05 38 53.0 +2.5
WHN pmax pmax
comp=Z,370nm,1.2s
WHN pmax pmax
comp=Z,5µm,7.6s
WHN LR LR
comp=Z,11µm,15.8s
WHN LR LR
comp=Z,6µm,13.5s
WHN LR LR
comp=Z,26µm,16.4s
**ENH Enshi 38.93 351 P P 05 33 00.2 +3.2**
**ENH Enshi 38.93 351 P P 05 32 58.4 +1.3**
ENH IAmb IAmb 05 33 09.4
comp=Z,209nm,1.0s
ENH IAMs_20 IAMs_20 05 50 55.0
comp=Z,5µm,18.0s
**GEXS Deakin Univers 39.04 144 P P 05 33 00.3 +2.4**
**MLBS Spotswood, Mel 39.15 143 P P 05 33 01.3 +2.5**
**MALK Mahakanadarawa 39.25 294 P P 05 32 58.4 -1.6**
**MALK Mahakanadarawa 39.25 294 ⇑P P 05 32 59.8 -0.2**
**YNG Young 39.26 136 P P 05 33 00.9 +1.0**
**YNG Young 39.26 136 P P 05 33 01.2 +1.3**
comp=Z,1µm,1.2s,SNR=41
**TOO Toolangi 39.34 142 P P 05 33 02.4 +1.9**
**TOO Toolangi 39.34 142 P P 05 33 01.0 +0.5**
TOO IAmb IAmb 05 33 04.0
comp=Z,204nm,1.0s
**TOO Toolangi 39.34 142 P P 05 33 02.6 +2.1**
comp=Z,8µm,SNR=4.9
**TOO Toolangi 39.34 142 ⇑P P 05 33 02.3 +1.8**
**TOO Toolangi 39.34 142 P P 05 33 01.0 +0.5**
TOO pmax pmax
comp=Z,204nm,1.0s
TOO MLR MLR
comp=Z,22µm,20.0s
**IMP Imphal 39.48 327 eP P 05 33 02.0 +0.2**
IMP IAmb IAmb 05 33 18.6
comp=Z,88nm,1.2s
**SSE Sheshan 39.49 7 P P 05 33 05.6 +3.9**
SSE S **S** 05 39 07.4 +4.9
SSE pmax pmax
comp=Z,58nm,1.5s
SSE pmax pmax
comp=Z,1µm,7.3s
SSE LR LR
comp=Z,1µm,15.8s
**ARMA Armidale 39.71 128 P P 05 33 04.9 +1.1**
**ARMA Armidale 39.71 128** IAmb IAmb 05 33 07.7
comp=Z,792nm,1.9s
**ARMA Armidale 39.71 128 P P 05 33 06.1 +2.3**
comp=Z,195nm,1.6s,SNR=26
**ARMA Armidale 39.71 128 ⇑P P 05 33 06.0 +2.3**
**KOHI KOHIMA 40.11 328 eP P 05 33 07.6 +0.4**
KOHI IAmb IAmb 05 33 23.9
comp=Z,450nm,1.7s
**NJ2 Nanjing 40.24 3 ⇑P P 05 33 11.1 +3.2**
NJ2 pP **sP** 05 33 17.6 -0.7
NJ2 ScP **ScP** 05 38 59.2 -0.1
NJ2 S **S** 05 39 19.2 +5.6
NJ2 pmax pmax
comp=Z,140nm,1.4s
NJ2 pmax pmax
comp=Z,3µm,6.6s
NJ2 LR LR
comp=Z,3µm,16.6s
NJ2 LR LR
comp=Z,2µm,15.6s
NJ2 LR LR
comp=Z,6µm,16.7s
**CAN Canberra 40.24 137 P P 05 33 09.3 +1.2**
**CAN Canberra 40.24 137 P P 05 33 08.7 +0.6**
**CAN Canberra 40.24 137 P P 05 33 09.3 +1.2**
comp=Z,158nm,1.2s,SNR=15
**CAN Canberra 40.24 137 ⇑P P 05 33 09.2 +1.2**
**CAN Canberra 40.24 137 P P 05 33 08.7 +0.6**
CAN pmax pmax
comp=Z,124nm,1.0s
CAN MLR MLR
comp=Z,13µm,20.0s
**AGT Agartala 40.26 323 eP P 05 33 11.2 +3.0**
**GC1S Gold Coast 1 S 40.29 124 P P 05 33 10.7 +2.2**
**MOKO MOKOCHONG 40.39 329 eP P 05 33 10.6 +1.1**
MOKO IAmb IAmb 05 33 28.1
comp=Z,443nm,1.4s
**CNB Canberra Magne 40.49 136 P P 05 33 11.2 +1.1**
**CNB Canberra Magne 40.49 136 P P 05 33 11.4 +1.3**
comp=Z,119nm,1.1s,SNR=12
**LKP Lekhapani 40.58 332 eP P 05 33 12.6 +1.8**
**SYDH Sydney Hard Ro 40.63 134 P P 05 33 13.2 +2.0**
**CD2 Chengdu 40.81 344 P P 05 33 14.6 +1.9**
CD2 pP pP 05 33 17.5 -2.8
CD2 sP sP 05 33 19.2 -4.1
CD2 PP **PP** 05 34 49.1 +1.9
CD2 S **S** 05 39 25.8 +3.4
CD2 sS sS 05 39 34.1 -0.3
CD2 pmax pmax
comp=Z,250nm,0.8s
CD2 pmax pmax
comp=Z,2µm,7.4s
CD2 LR LR
comp=Z,3µm,17.9s
CD2 LR LR
comp=Z,4µm,13.5s
CD2 LR LR
comp=Z,7µm,16.9s
**JORH JORHAT 40.87 329 eP P 05 33 12.8 -0.4**
**NTLH Newcastle Hard 40.90 132 P P 05 33 15.7 +2.2**
**RIV Riverview 40.96 133 P P 05 33 16.0 +2.1**
**RIV Riverview 40.96 133 P P 05 33 16.2 +2.2**
comp=Z,334nm,1.1s,SNR=14
**RIV Riverview 40.96 133 ⇑P P 05 33 16.4 +2.4**
**RIV Riverview 40.96 133 ⇑P P 05 33 16.4 +2.4**
**DIBR DIBRUGARH 41.14 331 eP P 05 33 15.9 +0.4**
**SHL Shillong 41.19 326 P P 05 33 16.6 +0.5**
SHL IAmb IAmb 05 33 42.2
comp=Z,245nm,1.2s
**SHL Shillong 41.19 326 eP P 05 33 17.0 +0.9**
SHL IAmb IAmb 05 33 21.7
comp=Z,63nm,0.7s
SHL IAMs_20 IAMs_20 05 53 22.8
comp=Z,3µm,19.5s
**SHL Shillong 41.19 326** P P **05 33 17.5 +1.4**
SNR=27
**SHL Shillong 41.19 326 P P 05 33 16.6 +0.5**
SHL pmax pmax
comp=Z,245nm,1.2s
**MILA Mila 41.33 139 P P 05 33 18.3 +1.2**
**MILA Mila 41.33 139 P P 05 33 16.7 -0.3**
comp=Z,65nm,1.3s,SNR=4.9
**MILA Mila 41.33 139 ⇑P P 05 33 18.6 +1.5**
**ITAN ITANAGAR 41.47 329 eP P 05 33 18.7 +0.6**
ITAN IAmb IAmb 05 33 30.7
comp=Z,218nm,1.2s
**VIS Vishakhapatnam 41.55 309 eP P 05 33 18.0 -1.0**
VIS IAmb IAmb 05 33 26.0
comp=Z,100nm,1.0s
**MDRS Chennai 41.59 300 eP P 05 33 19.0 -0.3**
MDRS IAmb IAmb 05 33 25.4
comp=Z,112nm,1.1s
MDRS IAMs_20 IAMs_20 05 54 13.8
comp=Z,4µm,17.8s
**ZIRO ZIRO 41.72 329 eP P 05 33 18.8 -1.6**
**RAGD RAYAGADA 42.36 311 eP P 05 33 25.5 -0.1**
**XAN Xi'an 42.71 351 ⇑P P 05 33 29.6 +1.4**
XAN pP sP 05 33 39.8 +1.1
XAN PcP **PcP** **05 35 21.3 +1.6**
XAN S **S** **05 39 52.2 +1.9**
XAN pmax pmax
comp=Z,280nm,1.3s
XAN pmax pmax
comp=Z,3µm,7.9s
XAN LR LR
comp=Z,10µm,14.4s
XAN LR LR
comp=Z,8µm,17.2s
XAN LR LR
comp=Z,16µm,15.9s
**SALM Salem 42.71 297 eP P 05 33 28.1 -0.4**
**KOD Kodaikanal 42.77 295 eP P 05 33 28.6 -0.7**
**LYN LuoYang 42.80 355 ⇑P P 05 33 31.0 +2.1**
LYN pP pP 05 33 35.2 -1.2
LYN sP sP 05 33 38.0 -1.4
LYN PP **PcP** **05 35 16.0 -4.0**
LYN S **S** **05 39 54.9 +3.3**
LYN pmax pmax
comp=Z,120nm,1.7s
LYN pmax pmax
comp=Z,4µm,7.2s
LYN LR LR
comp=Z,8µm,17.2s
LYN LR LR
comp=Z,4µm,14.4s
LYN LR LR
comp=Z,10µm,17.2s
**PASG PASIGHAT 42.84 327 eP P** 05 33 19.2 -10
**GLAD Gladstone 43.04 144 P P 05 33 33.1 +2.3**
**HNR Honiara 43.19 95 P P 05 33 32.3 -0.1**
**HNR Honiara 43.19 95 P P 05 33 31.6 -0.8**
**HNR Honiara 43.19 95 ⇑P P 05 33 31.8 -0.7**
**HNR Honiara 43.19 95** LR LR 05 53 36.3
comp=Z,54µm,19.0s,baz=258,slow=39
**HNR Honiara 43.19 95 P P 05 33 31.6 -0.8**
HNR pmax pmax
comp=Z,1µm,1.0s
HNR MLR MLR
comp=Z,4µm,20.0s
**JCJ Chichijima 43.28 35 P P 05 33 33.0 0.0**
**JCJ Chichijima 43.28 35** LR LR 05 51 39.5
comp=Z,1µm,20.7s,baz=319,slow=36
**DGAR Diego Garcia 43.36 268** *ceP* **P 05 33 33.4 -0.4**
DGAR pmax pmax
comp=Z,272nm,1.0s
DGAR MLR MLR
comp=Z,4µm,15.0s
**JNU Nakatsue 43.52 18 P P 05 33 36.2 +1.4**
**JNU Nakatsue 43.52 18** LR LR 05 56 03.2
comp=Z,2µm,18.1s,baz=183,slow=42
**MOO Moorlands 43.54 146 P P 05 33 37.9 +3.1**
**MOO Moorlands 43.54 146 P P 05 33 37.0 +2.2**
comp=Z,152nm,2.4s,SNR=3.3
**BOK Bokaro 43.57 318 eP P 05 33 35.8 +0.5**
BOK IAMs_20 IAMs_20 05 54 09.2
comp=Z,10µm,21.5s
**JHSG JHARSUGUGA 43.68 314 eP P 05 33 36.8 +0.5**
JHSG IAmb IAmb 05 33 47.8
comp=Z,245nm,1.3s
**KAAM Kaadhehdhoo 43.97 279 P P 05 33 38.2 -0.5**
KAAM IAmb IAmb 05 33 40.3
comp=Z,352nm,1.1s
**KAAM Kaadhehdhoo 43.97 279 ⇑P P 05 33 39.1 +0.4**
**KAAM Kaadhehdhoo 43.97 279 P P 05 33 38.8 +0.1**
**TIA Tai'an 44.31 1 P P 05 33 42.4 +1.3**
TIA PP **PP** **05 35 24.4 -0.4**
TIA S **S** **05 40 10.3 -3.4**
TIA SS **SS** **05 43 27.8 -5.2**
TIA pmax pmax
comp=Z,80nm,1.2s
TIA pmax pmax
comp=Z,3µm,6.9s
TIA LR LR
comp=Z,7µm,16.7s
TIA LR LR
comp=Z,5µm,15.2s
TIA LR LR
comp=Z,10µm,16.2s
**GTK Tadong 44.41 324** *eP* **P 05 33 43.2 +1.1**
GTK IAmb IAmb 05 33 58.6
comp=Z,92nm,1.1s
**JTU Tsushima 44.41 16 ⇑P P 05 33 44.7 +2.8**
**PATS Pohnpei 44.58 71 P P 05 33 44.1 +0.5**
**PATS Pohnpei 44.58 71 P P 05 33 42.8 -0.8**
PATS IAmb IAmb 05 33 56.7
comp=Z,238nm,1.1s
**PATS Pohnpei 44.58 71** P P **05 33 43.2 -0.4**
comp=Z,269nm,1.5s,SNR=3.0
**PATS Pohnpei 44.58 71 ⇑P P 05 33 44.3 +0.7**
**LSA Lhasa 44.86 328 P P 05 33 47.6 +1.5**
LSA S **S** **05 40 25.8 +3.0**
LSA pmax pmax
comp=Z,37nm,0.9s
LSA LR LR
comp=Z,3µm,19.8s
LSA LR LR
comp=Z,3µm,14.7s
LSA LR LR
comp=Z,4µm,20.5s
**LSA Lhasa 44.86 328 P P 05 33 46.9 +0.8**
**LSA Lhasa 44.86 328 P P 05 33 47.0 +0.9**
**LSA Lhasa 44.86 328 P P 05 33 45.1 -1.0**
LSA P **P** **05 33 45.1 -1.0**
LSA P **P** **05 33 45.1 -1.0**
**LSA Lhasa 44.86 328 P P 05 33 46.9 +0.8**
LSA pmax pmax
comp=Z,55nm,0.8s
**JMN Monobe 45.06 21 P P 05 33 49.4 +2.2**
**JMN Monobe 45.06 21** IAmb IAmb 05 34 00.3
comp=Z,213nm,1.2s
**JMN Monobe 45.06 21 ⇑P P 05 33 49.3 +2.1**
**BLSP Bilaspur 45.10 313 eP P 05 33 47.0 -0.6**
**HYB Hyderabad 45.17 305 eP P 05 33 47.2 -1.1**
HYB *e*pP **pP** **05 33 52.9 -3.1**
HYB *e*PcP **PcP** **05 35 28.3 -0.2**
HYB *e*S **S** **05 40 28.7 +1.8**
**HNS HongShan 45.52 358 ⇑P P 05 33 52.1 +1.5**
HNS PP **PP** **05 35 38.3 +0.8**
HNS S **S** **05 40 34.0 +3.0**
HNS pmax pmax
comp=Z,70nm,1.6s
HNS pmax pmax
comp=Z,2µm,8.8s
HNS LR LR
comp=Z,8µm,17.2s
HNS LR LR
comp=Z,3µm,19.6s
HNS LR LR
comp=Z,8µm,17.2s
**TJN Taejon 45.69 13 P P 05 33 53.8 +1.8**
**TJN Taejon 45.69 13** *ce*P **P 05 33 53.7 +1.8**
**LZH Lanzhou 45.70 346 ⇑P P 05 33 54.7 +2.4**
LZH sP sP 05 34 02.3 -0.5
LZH S **S** **05 40 30.8 -3.3**
LZH pmax pmax
comp=Z,150nm,1.7s
LZH pmax pmax
comp=Z,3µm,6.9s
LZH LR LR
comp=Z,6µm,17.2s
LZH LR LR
comp=Z,6µm,18.6s
LZH LR LR
comp=Z,6µm,17.5s
**TIY Taiyuan 45.94 356 ⇑P P 05 33 55.8 +1.7**
TIY PcP **PcP** **05 35 35.1 +4.3**
TIY S **S** **05 40 35.3 -2.1**
TIY pmax pmax
comp=Z,71nm,0.7s
TIY pmax pmax
comp=Z,2µm,7.4s
TIY LR LR
comp=Z,2µm,17.7s
TIY LR LR
comp=Z,1µm,15.2s
TIY LR LR
comp=Z,3µm,16.5s
**LHI Lord Howe Isla 46.00 126 P P 05 33 55.2 +0.6**
**LHI Lord Howe Isla 46.00 126 ⇑P P 05 33 56.2 +1.5**
**INCN Inchon 46.61 11 P P 05 33 59.5 +0.2**
**INCN Inchon 46.61 11 ⇑P P 05 34 01.9 +2.6**
**INCN Inchon 46.61 11 P P 05 33 59.5 +0.2**
INCN pmax pmax
comp=Z,23nm,0.9s
**NGP Nagpur 46.82 309** *eP* **P 05 34 00.2 -0.9**
NGP IAmb IAmb 05 34 07.2
comp=Z,140nm,0.8s
**KSAR Wonju Array Be 46.83 13 P P 05 34 02.6 +1.7**
**KSAR Wonju Array Be 46.83 13 P P 05 34 02.6 +1.7**
**KSRS Korea Array 46.84 13 P P 05 34 03.1 +2.1**
comp=Z,40nm,0.9s,baz=192,slow=8.3,SNR=115
KSRS LR LR 05 57 35.0
comp=Z,1µm,18.9s,baz=200,slow=41
**KS19 Wonju Array Si 46.88 13 P P 05 34 02.6 +1.3**
KS19 IAmb IAmb 05 34 04.7
comp=Z,150nm,1.4s
**JHJ Hachijo jima 2 46.92 27** LR LR 05 52 00.5
comp=Z,2µm,21.1s,baz=282,slow=34
**HJU Haeju 46.98 10 P P 05 34 04.0 +1.9**
HJU S **S** **05 40 54.7 +2.7**
HJU AmB
comp=Z,1µm,1.9s
HJU AMS AMS
comp=Z,2µm,15.8s
**DL2 Dalian 47.27 6 ⇑*i*P P 05 34 05.7 +1.4**
DL2 S **S** **05 40 59.8 +3.7**
DL2 pmax pmax
comp=Z,160nm,1.3s
DL2 pmax pmax
comp=Z,3µm,7.5s
DL2 LR LR
comp=Z,5µm,14.7s
DL2 LR LR
comp=Z,2µm,13.7s
DL2 LR LR
comp=Z,5µm,15.5s
**ALBI Allahabad 47.34 316** *eP* **P 05 34 04.2 -0.9**
ALBI IAmb IAmb 05 34 13.8
comp=Z,129nm,1.0s
**INU Inuyama 47.67 23 P P 05 34 10.1 +2.5**
**INU Inuyama 47.67 23 P P 05 34 08.1 +0.6**
INU IAmb IAmb 05 34 11.9
comp=Z,149nm,1.1s
**INU Inuyama 47.67 23 ⇑P P 05 34 09.2 +1.6**
**KOUNC Koumac, New Ca 47.93 110 P P 05 34 11.9 +2.1**
**KOUNC Koumac, New Ca 47.93 110 P P 05 34 10.5 +0.6**
KOUNC IAMs_20 IAMs_20 05 55 22.2
comp=Z,6µm,18.0s
**KOUNC Koumac, New Ca 47.93 110 ⇑P P 05 34 11.0 +1.2**
**PYAG Pyongyang 47.97 10 P P 05 34 11.6 +1.8**
PYAG AmB
comp=Z,751nm,1.8s
**JGF Kuroka 48.03 23** IAmb IAmb 05 34 21.4
comp=Z,115nm,1.1s
**BJT Baijiatuan 48.11 360 P P 05 34 12.1 +1.3**
BJT IAmb IAmb 05 34 13.9
comp=Z,188nm,1.4s
**BJT Baijiatuan 48.11 360 P P 05 34 12.1 +1.3**
BJT pmax pmax
comp=Z,188nm,1.4s
**BJI Beijing 48.13 360 P P 05 34 12.0 +1.0**
BJI S **S** **05 41 06.0 -2.3**
BJI sS **sS** **05 41 21.6 +1.1**
BJI pmax pmax
comp=Z,51nm,1.2s
BJI pmax pmax
comp=Z,1µm,7.2s
BJI LR LR
comp=Z,2µm,16.7s
BJI LR LR
comp=Z,2µm,16.3s
BJI LR LR
comp=Z,3µm,17.2s

**AKL Akola** 48.15 307 *e*P P 05 34 09.9 -1.6
AKL IAmb IAmb 05 34 25.8
comp=Z,70nm,1.1s
**GOMU GeErMu** 48.66 337 P P 05 34 16.8 +1.1
GOMU S S 05 41 15.8 -1.0
GOMU pmax pmax
comp=Z,30nm,1.0s
GOMU LR LR
comp=Z,11μm,19.2s
GOMU LR LR
comp=Z,5μm,19.0s
GOMU LR LR
comp=Z,16μm,19.0s
**KAD Karad** 48.74 302 *e*P P 05 34 13.6 -2.6
**SUJ Sinuiju** 48.80 8 P P 05 34 16.8 +0.7
SUJ S S 05 41 19.3 +1.6
SUJ AmB
comp=Z,1μm,2.2s
SUJ AMS AMS
comp=Z,1μm,11.2s
**BTO Baotou** 49.03 354 *e*P P 05 34 20.4 +2.3
BTO pP pP 05 34 25.4 -0.3
BTO sP sP 05 34 27.7 -0.9
BTO PP PP 05 36 12.2 +0.3
BTO S S 05 41 26.4 +5.1
BTO pmax pmax
comp=Z,260nm,1.1s
BTO pmax pmax
comp=Z,660nm,7.5s
BTO LR LR
comp=Z,8μm,15.8s
BTO LR LR
comp=Z,6μm,13.9s
BTO LR LR
comp=Z,9μm,20.0s
**HHC Hu-ho-hao-te** 49.13 355⇑ *i*P P 05 34 20.0 +1.2
HHC pP pP 05 34 24.9 -1.5
HHC sP sP 05 34 26.7 -2.7
HHC PP PP 05 36 14.2 +1.4
HHC S S 05 41 21.2 -1.4
HHC sS pS 05 41 31.7 +0.3
HHC ScS ScS 05 44 10.0 +0.5
HHC pmax pmax
comp=Z,50nm,1.1s
HHC LR LR
comp=Z,3μm,14.5s
HHC LR LR
comp=Z,2μm,13.8s
HHC LR LR
comp=Z,3μm,13.3s
**NRDN NARMADA NAGAR** 49.14 310 *e*P P 05 34 19.8 +0.6
NRDN IAmb IAmb 05 34 26.5
comp=Z,70nm,0.9s
**MAJO Matsushiro** 49.18 23 P P 05 34 19.7 +0.5
**MAJO Matsushiro** 49.18 23 P P 05 34 19.2 0.0
**MAJO Matsushiro** 49.18 23⇑ P P 05 34 19.4 +0.2
**MAJO Matsushiro** 49.18 23 *c i*P P 05 34 18.8 -0.4
MAJO pmax pmax
comp=Z,307nm,1.3s
**MJAR Matsushiro Arr** 49.18 23 P P 05 34 20.0 +0.8
comp=Z,153nm,1.1s,baz=196,slow=6.9,SNR=92
MJAR LR LR 05 57 05.9
comp=Z,1μm,18.3s,baz=208,slow=39
comp=Z,153nm,1.1s
**MJAR Matsushiro Arr** 49.18 23 P P 05 34 20.0 +0.8
**BHPL Bhopal** 49.24 310 *e*P P 05 34 18.8 -1.1
BHPL IAmb IAmb 05 34 25.7
comp=Z,41nm,0.8s
BHPL IAMs_20 IAMs_20 05 52 41.3
comp=Z,3μm,21.6s
**POO Poona** 49.60 303 *e*P P 05 34 21.1 -1.7
**JHNI Jhansi** 49.73 314 *e*P P 05 34 21.5 -2.1
JHNI IAmb IAmb 05 34 31.0
comp=Z,126nm,0.4s
**GTA Gaotai** 49.88 343 ⇑P P 05 34 26.3 +1.6
GTA S S 05 41 33.8 +0.5
GTA sS pS 05 41 41.8 -0.4
GTA pmax pmax
comp=Z,60nm,1.5s
GTA pmax pmax
comp=Z,2μm,9.8s
GTA LR LR
comp=Z,4μm,19.3s
GTA LR LR
comp=Z,5μm,19.3s
GTA LR LR
comp=Z,5μm,19.3s
**NOUC Port Laguerre** 50.00 112 P P 05 34 27.1 +1.4
**DZM Mont Dzumac** 50.12 112 P P 05 34 28.4 +1.6
**DZM Mont Dzumac** 50.12 112 IAmb IAmb 05 34 33.5
comp=Z,176nm,1.0s
DZM IAMs_20 IAMs_20 05 56 11.2
comp=Z,6μm,19.0s
**DZM Mont Dzumac** 50.12 112 ⇑P P 05 34 28.4 +1.6
**DZM Mont Dzumac** 50.12 112 *e*P P 05 34 25.8 -1.0
comp=Z,414nm,1.1s
**DZM Mont Dzumac** 50.12 112 *e*PP PP 05 36 18.5 -3.6
comp=Z,810nm,23.2s
DZM *e*S S 05 41 38.2 +1.0
comp=Z,3μm,32.8s
DZM *e*SS SS 05 45 15.0 +4.2
comp=Z,3μm,25.6s
DZM *e*LQ LQ 05 46 33.5
comp=Z,5μm,27.1s
DZM *e*LR LR 05 48 50.9
comp=Z,6μm,21.9s
**DZM Mont Dzumac** 50.12 112 LR LR 05 56 31.9
comp=Z,6μm,19.3s,baz=278,slow=37
**GUNA GUNA** 50.13 312 *e*P P 05 34 25.4 -1.3
GUNA IAmb IAmb 05 34 35.1
comp=Z,56nm,0.9s
**ONTNC Ouen Toro** 50.16 112 P P 05 34 28.8 +1.8
**ONTNC Ouen Toro** 50.16 112 ⇑P P 05 34 28.5 +1.5
**SNY Shenyang** 50.37 7 ⇑P P 05 34 29.2 +1.1
SNY S S 05 41 40.2 +0.5
SNY pmax pmax
comp=Z,140nm,1.2s
SNY pmax pmax
comp=Z,2μm,4.2s
SNY LR LR
comp=Z,2μm,21.6s
SNY LR LR
comp=Z,2μm,15.6s
SNY LR LR
comp=Z,2μm,19.1s
**JSD Sado** 50.51 23 P P 05 34 30.3 +1.1
**JSD Sado** 50.51 23 P P 05 34 29.6 +0.3
JSD IAmb IAmb 05 34 33.6
comp=Z,211nm,1.1s
**JSD Sado** 50.51 23 ⇑P P 05 34 30.1 +0.9
**YATNC Mamie plateau,** 50.53 112 P P 05 34 31.9 +2.1
**LIFNC LIFOU** 50.70 110 P P 05 34 33.5 +2.5
**LGTI Lohaghat** 51.10 319 *e*P P 05 34 32.6 -1.2
LGTI IAmb IAmb 05 34 57.5
comp=Z,89nm,1.1s
**PINNC Pines Island,** 51.11 112 P P 05 34 36.2 +2.1
**PINNC Pines Island,** 51.11 112 IAmb IAmb 05 34 37.7
comp=Z,478nm,1.9s
PINNC IAMs_20 IAMs_20 05 56 32.6
comp=Z,6μm,21.0s
**PTH Pithoragarh** 51.18 319 *e*P P 05 34 32.9 -1.8
**DVP Devils Point** 51.33 106 P P 05 34 38.0 +2.2
**JMM Marumori** 51.37 25 P P 05 34 37.9 +2.2
**JMM Marumori** 51.37 25 P P 05 34 36.2 +0.5
**JMM Marumori** 51.37 25 ⇑P P 05 34 37.1 +1.4
**MARNC Mare, Loyalty** 51.51 111 P P 05 34 40.0 +2.9
**MARNC Mare, Loyalty** 51.51 111 ⇑P P 05 34 39.1 +2.0
**XLT XiLinHaoTe** 51.99 360⇑ *i*P P 05 34 41.1 +0.8
XLT pP pP 05 34 46.2 -1.8
XLT sP sP 05 34 49.2 -1.7
XLT S S 05 42 02.0 -0.2
XLT SS SS 05 45 38.3 -1.4
XLT pmax pmax
comp=Z,97nm,1.0s
XLT pmax pmax
comp=Z,2μm,5.5s
XLT LR LR
comp=Z,500nm,17.4s
XLT LR LR
comp=Z,3μm,16.2s
XLT LR LR
comp=Z,8μm,17.4s
**ROCAM Rodrigues Isla** 52.33 252 P P 05 34 45.6 +2.4
**ROCAM Rodrigues Isla** 52.33 252 ⇑P P 05 34 45.8 +2.6
**PSTR Posyet** 52.46 14 *i*P P 05 34 42.5 -1.2

**SONA Sohna** 52.46 315 *e*P P 05 34 41.9 -2.1
**MSHR Mys Shultsa** 52.47 14 *ce*P P 05 34 44.6 +0.8
MSHR pmax pmax
comp=Z,109nm,1.2s
MSHR MLR MLR
comp=Z,1μm,18.0s
**CN2 Changchun** 52.56 8 ⇓P P 05 34 45.2 +0.7
CN2 *es*P pP 05 34 52.0 -0.1
CN2 *e*S S 05 42 12.2 +2.3
CN2 pmax pmax
comp=Z,90nm,1.3s
CN2 pmax pmax
comp=Z,200nm,3.0s
CN2 LR LR
comp=Z,2μm,16.0s
CN2 LR LR
comp=Z,3μm,16.0s
CN2 LR LR
comp=Z,3μm,18.0s
**NDI New Delhi** 52.64 316 *e*P P 05 34 42.8 -2.6
NDI IAmb IAmb 05 34 49.8
comp=Z,58nm,1.0s
**NPLP NPLP New Delhi** 52.64 316 *e*P P 05 34 43.0 -2.4
**NFK Norfolk Island** 52.67 120 P P 05 34 47.9 +2.2
comp=Z,340nm,1.1s,SNR=2.4
**KUDL Kundal** 52.81 315 *e*P P 05 34 44.1 -2.6
KUDL IAmb IAmb 05 34 52.5
comp=Z,56nm,0.9s
**VLA Vladivostok** 53.16 14 *i* P P 05 34 50.3 +1.4
VLA pmax pmax
comp=Z,209nm,1.6s
**AJM Ajmer** 53.16 312 *e*P P 05 34 47.8 -1.6
AJM IAmb IAmb 05 34 54.4
comp=Z,47nm,1.1s
**JTM Tenmabayashi** 53.97 23 P P 05 34 57.0 +2.1
**JTM Tenmabayashi** 53.97 23 IAMs_20 IAMs_20 05 56 08.6
comp=Z,4μm,22.0s
**JTM Tenmabayashi** 53.97 23 ⇑P P 05 34 55.8 +0.9
**MDJ Mudanjiang** 54.07 12 P P 05 34 55.9 +0.3
MDJ pP pP 05 35 01.6 -1.6
MDJ S S 05 42 31.9 +1.5
MDJ SS SS 05 46 17.8 +5.4
MDJ pmax pmax
comp=Z,240nm,1.4s
MDJ pmax pmax
comp=Z,3μm,7.0s
MDJ LR LR
comp=Z,4μm,37.1s
**MDJ Mudanjiang** 54.07 12 P P 05 34 56.2 +0.7
**HNLY HANLEY** 54.13 321 *e*P P 05 34 56.5 -0.4
**USA0B Ussuriysk Arra** 54.20 14 P P 05 34 57.5 +0.9
USA0B IAmb IAmb 05 35 00.7
comp=Z,234nm,1.1s
**USA0B Ussuriysk Arra** 54.20 14 *c i*P P 05 34 56.8 +0.3
**USRK Ussuriysk Ar.** 54.20 14 P P 05 34 57.2 +0.7
**USRK Ussuriysk Ar.** 54.20 14 ⇑P P 05 34 58.1 +1.6
comp=Z,144nm,1.0s,baz=199,slow=4.0,SNR=95
USRK PKP2ab 06 05 47.9
comp=Z,0.8nm,0.3s,baz=260,slow=3.5,SNR=4.4
**USRK Ussuriysk Ar.** 54.20 14 P P 05 34 57.2 +0.7
**SMLA Simla** 54.21 318 *e*P P 05 34 55.3 -1.6
SMLA IAmb IAmb 05 35 09.6
comp=Z,72nm,1.1s
**BNX BinXian** 54.75 10 P P 05 35 01.6 +1.1
BNX S S 05 42 39.5 -0.1
BNX pmax pmax
comp=Z,130nm,1.6s
BNX pmax pmax
comp=Z,2μm,7.5s
BNX LR LR
comp=Z,2μm,18.8s
BNX LR LR
comp=Z,2μm,16.6s
BNX LR LR
comp=Z,3μm,18.1s
**DHRM DHARAMSHALA** 55.49 319 *e*P P 05 35 04.8 -1.7
DHRM IAmb IAmb 05 35 12.3
comp=Z,83nm,0.8s
DHRM IAMs_20 IAMs_20 05 53 50.2
comp=Z,2μm,21.4s
**ERM Erimo** 55.84 24 P P 05 35 10.5 +2.1
**ERM Erimo** 55.84 24 P P 05 35 09.4 +0.9
ERM IAmb IAmb 05 35 11.0
comp=Z,99nm,0.9s
**ERM Erimo** 55.84 24 ⇑P P 05 35 10.6 +2.1
**ERM Erimo** 55.84 24 *ce*P P 05 35 09.2 +0.8
ERM pmax pmax
comp=Z,193nm,1.7s
**THN Thein Dam** 55.99 318 *e*P P 05 35 08.0 -1.6
THN IAmb IAmb 05 35 16.4
comp=Z,117nm,0.9s
**TEY Ternei** 56.21 17⇓ *e*P P 05 35 10.7 -0.3
TEY *e* 05 42 54.1
TEY pmax pmax
comp=Z,30nm,2.3s
TEY pmax pmax
comp=E,10.0nm,1.0s
TEY pmax pmax
comp=N,20nm,1.2s
TEY pmax pmax
comp=E,200nm,7.5s
TEY pmax pmax
comp=Z,200nm,7.9s
TEY pmax pmax
comp=N,300nm,7.1s
**ULN Ulaanbaatar** 56.54 353 P P 05 35 14.0 +0.5
ULN IAmb IAmb 05 35 15.9
comp=Z,87nm,1.2s
**ULN Ulaanbaatar** 56.54 353 IAMs_20 IAMs_20 06 03 16.1
comp=Z,4μm,19.0s
**ULN Ulaanbaatar** 56.54 353 ⇑P P 05 35 14.1 +0.5
**ULN Ulaanbaatar** 56.54 353 P P 05 35 14.6 +1.1
ULN P P 05 35 14.6 +1.1
ULN S S 05 43 05.3 +1.6
ULN S S 05 43 05.3 +1.6
**ULN Ulaanbaatar** 56.54 353 *ce*P P 05 35 14.2 +0.7
ULN pmax pmax
comp=Z,118nm,1.7s
**SONM Songino Array** 56.60 352 P P 05 35 14.7 +0.7
SONM IAmb IAmb 05 35 16.2
comp=Z,148nm,1.3s
**SONM Songino Array** 56.60 352 P P 05 35 14.4 +0.5
comp=Z,41nm,0.9s,baz=171,slow=7.2,SNR=172
SONM LR LR 06 02 14.7
comp=Z,3μm,19.3s,baz=184,slow=39
comp=Z,41nm,0.9s
**PYZ Puysegur Point** 57.22 140 P P 05 35 20.2 +1.9
**PYZ Puysegur Point** 57.22 140 IAmb IAmb 05 35 21.4
comp=Z,168nm,0.9s
**DCZ Deep Cove** 57.23 139 IAmb IAmb 05 35 21.5
comp=Z,209nm,1.1s
**MCQ Macquarie Isla** 57.25 152 P P 05 35 20.2 +1.9
**MCQ Macquarie Isla** 57.25 152 P P 05 35 20.1 +1.8
comp=Z,301nm,1.2s,SNR=2.9
**MCQ Macquarie Isla** 57.25 152 ⇑P P 05 35 21.1 +2.8
**TARA Tarawa** 57.33 83 P P 05 35 19.9 +0.3
TARA IAmb IAmb 05 35 21.9
comp=Z,124nm,1.1s
TARA IAMs_20 IAMs_20 06 02 58.0
comp=Z,3μm,20.0s
**ASAJ Asahikawa** 57.41 22 LR LR 06 00 35.3
comp=Z,1μm,21.2s,baz=201,slow=37
**JKA Kamikawa-asahi** 57.41 22 IAmb IAmb 05 35 21.9
comp=Z,157nm,1.0s
**JKA Kamikawa-asahi** 57.41 22 ⇑P P 05 35 20.7 +1.2
**HIA Hailar** 57.44 3 P P 05 35 20.0 +0.3
HIA IAmb IAmb 05 35 23.8
comp=Z,118nm,1.6s
**HIA Hailar** 57.44 3 P P 05 35 20.0 +0.3
HIA pmax pmax
comp=Z,118nm,1.6s
**JCZ Jackson Bay** 57.76 137 P P 05 35 23.7 +1.4
**MLZ Mavora Lakes** 57.81 139 IAmb IAmb 05 35 25.2
comp=Z,160nm,0.9s
**CASY Casey** 57.99 183 P P 05 35 23.4 +0.1
CASY IAmb IAmb 05 35 25.2
comp=Z,197nm,1.1s
**CASY Casey** 57.99 183 ⇑P P 05 35 23.5 +0.1
**WMQ Urumqi** 58.00 336 *e*P P 05 35 24.8 +1.0
WMQ pP pP 05 35 28.4 -3.5
WMQ PP PP 05 37 38.9 +6.3
WMQ ScP ScP 05 40 17.2 +2.8
WMQ S S 05 43 23.7 +0.8
WMQ pmax pmax
comp=Z,140nm,0.9s
WMQ pmax pmax
comp=Z,1μm,5.9s
WMQ LR LR
comp=Z,4μm,15.9s
WMQ LR LR
comp=Z,3μm,20.3s
WMQ LR LR
comp=Z,4μm,20.3s
**OUZ Omahuta** 58.70 126 ⇑P P 05 35 31.6 +2.8
**KLR Kul'dur** 58.91 12 LR LR 06 04 12.7
comp=Z,2μm,18.9s,baz=194,slow=40
KLR PKP2bc 06 05 14.6
comp=Z,1.5nm,0.7s,baz=23,slow=3.1,SNR=5.2
KLR PKP2ab 06 05 30.4
comp=Z,5.0nm,1.0s,baz=14,slow=5.2,SNR=3.9
**KLR Kul'dur** 58.91 12 *ce*P P 05 35 29.9 -0.1
KLR pmax pmax
comp=Z,144nm,1.7s
KLR MLR MLR
comp=Z,2μm,17.0s
**SYZ Scrubby Hill** 58.93 140 P P 05 35 31.6 +1.4
**HEH HeiHe** 59.15 8 *e*P P 05 35 32.0 +0.4
HEH pP pP 05 35 38.2 -1.1
HEH PP PP 05 37 40.9 -1.7
HEH S S 05 43 38.0 +0.6
HEH SS SS 05 47 32.5 +0.2
HEH pmax pmax
comp=Z,260nm,1.5s
HEH pmax pmax
comp=Z,2μm,3.8s
HEH LR LR
comp=Z,2μm,17.3s
HEH LR LR
comp=Z,2μm,17.4s
HEH LR LR
comp=Z,4μm,18.1s
**RPZ Rata Peaks** 59.17 136 P P 05 35 32.6 +0.6
**RPZ Rata Peaks** 59.17 136 LR LR 06 00 52.4
comp=Z,14μm,21.0s,baz=286,slow=36
**ODZ Otahua Downs** 59.35 138 IAmb IAmb 05 35 59.6
comp=Z,176nm,1.9s
**ODZ Otahua Downs** 59.35 138 ⇑P P 05 35 34.0 +0.8
**ZAK Zakamensk** 59.55 350 *e*P P 05 35 33.8 -0.7
ZAK pmax pmax
comp=Z,44nm,1.6s
**RER Riviere de l'E** 59.55 250 P P 05 35 35.2 +0.1
**RER Riviere de l'E** 59.55 250 ⇑P P 05 35 36.8 +1.7
**RER Riviere de l'E** 59.55 250 P P 05 35 36.6 +1.5
SNR=13
**LTZ Lake Taylor** 59.71 135 IAmb IAmb 05 35 46.6
comp=Z,147nm,1.4s
**OXZ Oxford** 59.72 136 IAmb IAmb 05 35 37.3
comp=Z,104nm,0.8s
**YSS Yuzh-Sakhalins** 59.89 21 P P 05 35 37.8 +1.0
**YSS Yuzh-Sakhalins** 59.89 21 P P 05 35 37.7 +1.0
**YSS Yuzh-Sakhalins** 59.89 21 ⇑P P 05 35 36.4 -0.4
**YSS Yuzh-Sakhalins** 59.89 21 *c i*P P 05 35 37.9 +1.1
YSS *e**SP **sP** 05 35 46.8 -1.3
YSS *e* 05 37 48.5
YSS *e*S S 05 43 48.0 +0.9
YSS *e*PS PnS 05 44 04.3 +2.4
YSS pmax pmax
comp=Z,140nm,1.0s
YSS pmax pmax
comp=Z,2μm,5.0s
YSS pmax pmax
comp=N,800nm,4.7s
YSS pmax pmax
comp=E,700nm,4.4s
YSS pmax pmax
comp=N,200nm,5.2s
YSS pmax pmax
comp=E,400nm,4.5s
YSS smax smax
comp=N,1μm,7.5s
YSS smax smax
comp=E,2μm,6.7s
**CIT Chita** 60.16 358 *e*P P 05 35 40.1 +1.5
CIT *e* 05 35 54.9
CIT *e* 05 36 19.6
CIT pmax pmax
comp=Z,286nm,2.0s
**MQZ McQueen's Vall** 60.26 136 P P 05 35 39.5 +0.1
**KSH Kashi** 60.47 325 P P 05 35 40.1 -1.0
KSH S S 05 43 52.0 -3.1
KSH pmax pmax
comp=Z,920nm,9.6s
KSH LR LR
comp=Z,3μm,17.9s
KSH LR LR
comp=Z,2μm,19.2s
KSH LR LR
comp=Z,4μm,19.2s
**KHZ Kahutara** 60.49 134 ⇑P P 05 35 41.0 -0.1
**KUZ Kuaotunu** 60.71 127 P P 05 35 44.8 +2.1
**MSVF Nonsavu** 60.73 106 P P 05 35 44.9 +1.7
**MSVF Nonsavu** 60.73 106 P P 05 35 43.6 +0.4
**MSVF Nonsavu** 60.73 106 ⇑P P 05 35 44.7 +1.4
**MSVF Nonsavu** 60.73 106 *c i*P P 05 35 43.6 +0.4
MSVF pmax pmax
comp=Z,15nm,0.6s
**SNZO South Karori** 61.02 133 P P 05 35 45.0 +0.2
**SNZO South Karori** 61.02 133 P P 05 35 44.7 0.0
**SNZO South Karori** 61.02 133 ⇑P P 05 35 44.9 +0.2
**BHW Baring Head** 61.17 133 IAmb IAmb 05 35 47.1
comp=Z,126nm,1.1s
**MOY Mondy** 61.18 349 *e*P P 05 35 46.2 +0.5
MOY pmax pmax
comp=Z,157nm,1.9s
**SHLS Shalkode** 61.19 330 *e*P P 05 35 43.5 -2.5
comp=Z,17nm,0.7s,baz=330
SHLS *e*S S 05 44 02.1 -2.1
baz=330
**SHLS Shalkode** 61.19 330 *e*P P 05 35 43.4 -2.5
SHLS *e*S S 05 44 02.0 -2.1
SHLS pmax pmax
comp=Z,17nm,0.7s
**IRK Irkutsk** 61.20 352 *e*P P 05 35 36.3 -9.4
IRK *e*S S 05 44 02.2 -1.6
IRK pmax pmax
comp=Z,190nm,2.3s
**PRZ Przheval'sk** 61.23 329 IAmb IAmb 05 36 03.4
comp=Z,65nm,1.1s
PRZ IAMs_20 IAMs_20 06 06 31.7
comp=Z,4μm,20.0s
**PDGK Podgornoye** 61.30 330 P P 05 35 45.8 -0.9
**UZB Uzynbulak** 61.40 330 *e*P P 05 35 46.3 -1.0
comp=Z,17nm,0.9s,baz=330
UZB *e*S S 05 44 07.3 +0.3
baz=330
**UZB Uzynbulak** 61.40 330 *e*P P 05 35 46.3 -1.0
UZB *e*S S 05 44 07.2 +0.3
UZB pmax pmax
comp=Z,17nm,0.9s
**GRNR Gornyy** 61.41 14⇑ *i*P P 05 35 48.0 +0.9
GRNR pmax pmax
comp=Z,40nm,1.1s
**MRZ Mangatainoka R** 61.50 132 P P 05 35 48.0 0.0
**SATY Saty** 61.64 329 *e*P P 05 35 47.9 -1.1
comp=Z,24nm,0.9s,baz=329
SATY *e*S S 05 44 10.3 +0.3
baz=329
**SATY Saty** 61.64 329 *e*P P 05 35 47.9 -1.1
SATY *e*S S 05 44 10.2 +0.3
SATY pmax pmax
comp=Z,25nm,0.9s
**ZHN Zhinishke** 61.71 329 *e*P P 05 35 48.2 -1.3
comp=Z,19nm,1.2s,baz=329
**ZHN Zhinishke** 61.71 329 *e*P P 05 35 48.1 -1.3
ZHN pmax pmax
comp=Z,19nm,1.2s
**KBL Kabul** 61.71 317 P P 05 35 47.2 -2.5
**KBL Kabul** 61.71 317 P P 05 35 48.0 -1.7
SNR=13
KBL P P 05 35 48.0 -1.7
SNR=13
KBL P P 05 35 48.0 -1.7
SNR=13
**KBL Kabul** 61.71 317 P P 05 35 47.2 -2.5
KBL pmax pmax
comp=Z,27nm,0.9s
**KPKS Kokpek** 61.80 330 *e*P P 05 35 48.7 -1.3
comp=Z,43nm,1.1s,baz=330
KPKS *e*S S 05 44 12.0 +0.2
baz=330

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KPKS | **Kokpek** | **61.80** | **330** | *e*P | **P** | **05** | **35** | **48.7** | **-1.3** |
| KPKS | | | | *e*S | **S** | **05** | **44** | **12.0** | **+0.2** |
| KPKS | | | | pmax | pmax | | | | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **61.83** | **130** | P | **P** | **05** | **35** | **50.8** | **+0.5** |
| **BFZ** | **Birch Farm** | **61.99** | **132** | P | **P** | **05** | **35** | **52.8** | **+1.5** |
| **URZ** | **Urewera** | **62.10** | **129** | ⇑P | **P** | **05** | **35** | **52.3** | **+0.2** |
| **URZ** | **Urewera** | **62.10** | **129** | LR | LR | 06 | 05 | 05.9 | |
| | comp=Z,12µm,18.3s,baz=8.5,slow=38 | | | | | | | | |
| **ZSN** | **Zaisan** | **62.11** | **336** | *e*P | **P** | **05** | **35** | **51.3** | **-0.7** |
| | comp=Z,23nm,1.0s,baz=336 | | | | | | | | |
| ZSN | | | | *e*S | **S** | **05** | **44** | **16.4** | **+0.8** |
| | baz=336 | | | | | | | | |
| **ZSN** | **Zaisan** | **62.11** | **336** | *e*P | **P** | **05** | **35** | **51.2** | **-0.7** |
| ZSN | | | | *e*S | **S** | **05** | **44** | **16.3** | **+0.8** |
| ZSN | | | | pmax | pmax | | | | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **62.37** | **328** | *e*P | **P** | **05** | **35** | **53.0** | **-1.3** |
| | baz=328 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **62.37** | **328** | *e*P | **P** | **05** | **35** | **52.9** | **-1.3** |
| **MDOK** | **Medeo** | **62.41** | **329** | *e*P | **P** | **05** | **35** | **53.2** | **-1.0** |
| | baz=329 | | | | | | | | |
| MDOK | | | | *e*S | **S** | **05** | **44** | **19.6** | **-0.1** |
| | baz=329 | | | | | | | | |
| MDOK | | | | LR | LR | 06 | 05 | 24.1 | |
| | comp=Z,1µm,17.1s,baz=329 | | | | | | | | |
| **MDOK** | **Medeo** | **62.41** | **329** | P | **P** | **05** | **35** | **53.8** | **-0.4** |
| **AAA** | **Alma-Ata** | **62.51** | **329** | *e*P | **P** | **05** | **35** | **53.9** | **-0.8** |
| | baz=328 | | | | | | | | |
| **AAA** | **Alma-Ata** | **62.51** | **329** | *e*P | **P** | **05** | **35** | **53.9** | **-0.8** |
| **BOOM** | **Boomskoye usch** | **62.52** | **327** | P | **P** | **05** | **35** | **54.0** | **-0.9** |
| BOOM | | | | IAmb | IAmb | 05 | 36 | 14.7 | |
| | comp=Z,78nm,1.0s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **62.52** | **327** | P | **P** | **05** | **35** | **54.0** | **-0.9** |
| BOOM | | | | pmax | pmax | | | | |
| | comp=Z,79nm,1.0s | | | | | | | | |
| **ZEA** | **Zeya** | **62.54** | **7** | *e*P | **P** | **05** | **35** | **55.0** | **+0.4** |
| ZEA | | | | *e*S | **S** | **05** | **44** | **16.6** | **-3.9** |
| ZEA | | | | *e*SS | **SS** | **05** | **48** | **26.0** | **+0.8** |
| ZEA | | | | pmax | pmax | | | | |
| | comp=E,20nm,1.4s | | | | | | | | |
| ZEA | | | | pmax | pmax | | | | |
| | comp=N,50nm,1.3s | | | | | | | | |
| ZEA | | | | pmax | pmax | | | | |
| | comp=Z,130nm,1.1s | | | | | | | | |
| ZEA | | | | pmax | pmax | | | | |
| | comp=N,400nm,5.7s | | | | | | | | |
| ZEA | | | | pmax | pmax | | | | |
| | comp=Z,1µm,5.3s | | | | | | | | |
| ZEA | | | | smax | smax | | | | |
| | comp=E,700nm,8.1s | | | | | | | | |
| ZEA | | | | smax | smax | | | | |
| | comp=N,2µm,7.5s | | | | | | | | |
| **MK31** | **Makanchi Array** | **62.65** | **334** | P | **P** | **05** | **35** | **54.5** | **-1.0** |
| MK31 | | | | IAmb | IAmb | 05 | 36 | 11.4 | |
| | comp=Z,56nm,1.2s | | | | | | | | |
| **MK31** | **Makanchi Array** | **62.65** | **334** | *i* P | **P** | **05** | **35** | **55.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | **P** | **05** | **35** | **54.3** | **-1.2** |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | **P** | **05** | **35** | **54.5** | **-1.0** |
| | comp=Z,9.3nm,0.6s,baz=140,slow=7.7,SNR=90 | | | | | | | | |
| MKAR | | | | PKPPKP | P'P'df | 06 | 04 | 47.5 | -10 |
| | comp=Z,1.1nm,0.9s,baz=286,slow=4.5,SNR=6.8 | | | | | | | | |
| MKAR | | | | PKP2bc | | 06 | 05 | 05.8 | |
| | comp=Z,3.9nm,0.9s,baz=315,slow=1.5,SNR=9.5 | | | | | | | | |
| MKAR | | | | LR | LR | 06 | 07 | 21.3 | |
| | comp=Z,2µm,18.1s,baz=174,slow=40 | | | | | | | | |
| | comp=Z,9.3nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **62.77** | **330** | *e*P | **P** | **05** | **35** | **54.8** | **-1.6** |
| **MAKZ** | **Makanchi** | **62.79** | **334** | P | **P** | **05** | **35** | **55.6** | **-0.9** |
| MAKZ | | | | IAMs_20 | IAMs_20 | 06 | 08 | 05.4 | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **MAKZ** | **Makanchi** | **62.79** | **334** | ⇑P | **P** | **05** | **35** | **55.6** | **-0.9** |
| **MAKZ** | **Makanchi** | **62.79** | **334** | P | **P** | **05** | **35** | **55.6** | **-0.9** |
| MAKZ | | | | pmax | pmax | | | | |
| | comp=Z,38nm,1.3s | | | | | | | | |
| MAKZ | | | | MLR | MLR | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **MXZ** | **Matakaoa Point** | **62.89** | **128** | P | **P** | **05** | **35** | **59.2** | **+1.8** |
| **CHKK** | **Chushkaly** | **62.93** | **329** | *e*P | **P** | **05** | **35** | **56.0** | **-1.5** |
| | baz=329 | | | | | | | | |
| **CHKK** | **Chushkaly** | **62.93** | **329** | *e*P | **P** | **05** | **35** | **55.9** | **-1.5** |
| **TKM2** | **Tokmak 2** | **63.00** | **328** | P | **P** | **05** | **35** | **57.8** | **-0.4** |
| | SNR=8.2 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **63.00** | **328** | *i* P | **P** | **05** | **35** | **57.5** | **-0.7** |
| TKM2 | | | | pmax | pmax | | | | |
| | comp=Z,64nm,1.1s | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **63.03** | **339** | *c i* P | **P** | **05** | **35** | **57.6** | **-0.5** |
| DGZ | | | | pmax | pmax | | | | |
| | comp=Z,120nm,1.2s | | | | | | | | |
| DGZ | | | | MLR | MLR | | | | |
| | comp=Z,4µm,17.0s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **63.06** | **331** | *e*P | **P** | **05** | **35** | **57.5** | **-0.8** |
| | baz=331 | | | | | | | | |
| TDK | | | | LR | LR | 06 | 05 | 45.3 | |
| | comp=Z,2µm,14.9s,baz=331 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **63.06** | **331** | *e*P | **P** | **05** | **35** | **57.5** | **-0.8** |
| TDK | | | | MLR | MLR | | | | |
| | comp=Z,2µm,15.0s | | | | | | | | |
| **KBK** | **Karagaybulak** | **63.17** | **327** | P | **P** | **05** | **35** | **59.3** | **+0.1** |
| | SNR=8.3 | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.40** | **327** | P | **P** | **05** | **36** | **00.5** | **-0.3** |
| | SNR=6.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.40** | **327** | P | **P** | **05** | **35** | **59.9** | **-0.9** |
| AAK | | | | IAmb | IAmb | 05 | 36 | 21.4 | |
| | comp=Z,68nm,1.0s | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.40** | **327** | IAMs_20 | IAMs_20 | 06 | 07 | 35.5 | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.40** | **327** | P | **P** | **05** | **35** | **59.4** | **-1.4** |
| **AAK** | **Ala-Archa** | **63.40** | **327** | ⇑P | **P** | **05** | **35** | **59.9** | **-0.9** |
| **AAK** | **Ala-Archa** | **63.40** | **327** | LR | LR | 06 | 07 | 38.7 | |
| | comp=Z,3µm,19.9s,baz=132,slow=40 | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.40** | **327** | P | **P** | **05** | **36** | **00.9** | **+0.1** |
| AAK | | | | P | **P** | **05** | **36** | **00.9** | **+0.1** |
| AAK | | | | P | **P** | **05** | **36** | **00.9** | **+0.1** |
| AAK | | | | S | **S** | **05** | **44** | **32.8** | **+0.6** |
| AAK | | | | S | **S** | **05** | **44** | **32.8** | **+0.6** |
| AAK | | | | S | **S** | **05** | **44** | **32.8** | **+0.6** |
| **AAK** | **Ala-Archa** | **63.40** | **327** | *c e* P | **P** | **05** | **35** | **59.4** | **-1.4** |
| AAK | | | | pmax | pmax | | | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| AAK | | | | MLR | MLR | | | | |
| | comp=Z,3µm,23.0s | | | | | | | | |
| **FRU1** | **Bishkek** | **63.44** | **327** | IAMs_20 | IAMs_20 | 06 | 08 | 13.1 | |
| | comp=Z,4µm,22.0s | | | | | | | | |
| **AML** | **Almayashu** | **63.50** | **326** | P | **P** | **05** | **36** | **00.2** | **-1.5** |
| | SNR=10 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **63.81** | **326** | P | **P** | **05** | **36** | **03.4** | **0.0** |
| | SNR=15 | | | | | | | | |
| **USP** | **Ospenovka** | **63.82** | **327** | P | **P** | **05** | **36** | **02.1** | **-1.3** |
| | SNR=11 | | | | | | | | |
| **BTK** | **Batken** | **63.84** | **322** | IAmb | IAmb | 05 | 36 | 45.9 | |
| | comp=Z,50nm,0.9s | | | | | | | | |
| **SGDS** | **Sogindy** | **63.88** | **327** | *e*P | **P** | **05** | **36** | **02.6** | **-1.3** |
| | comp=Z,26nm,1.0s,baz=327 | | | | | | | | |
| **SGDS** | **Sogindy** | **63.88** | **327** | *e*P | **P** | **05** | **36** | **02.5** | **-1.3** |
| SGDS | | | | pmax | pmax | | | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| **WBK** | **Wadi Bani Khal** | **63.93** | **300** | P | **P** | **05** | **36** | **03.7** | **-0.8** |
| WBK | | | | P | **P** | **05** | **36** | **03.7** | **-0.8** |
| WBK | | | | S | **S** | **05** | **44** | **35.2** | **-3.9** |
| WBK | | | | S | **S** | **05** | **44** | **35.2** | **-3.9** |
| **CHGR** | **Chuyangaron** | **64.02** | **320** | IAmb | IAmb | 05 | 36 | 58.7 | |
| | comp=Z,165nm,1.5s | | | | | | | | |
| **CHGR** | **Chuyangaron** | **64.02** | **320** | P | **P** | **05** | **36** | **02.5** | **-2.3** |
| **SIMJ** | **Simiganj** | **64.11** | **320** | P | **P** | **05** | **36** | **02.8** | **-2.8** |
| SIMJ | | | | IAmb | IAmb | 05 | 37 | 28.0 | |
| | comp=Z,54nm,1.1s | | | | | | | | |
| **MHTO** | **MHTO** | **64.20** | **298** | P | **P** | **05** | **36** | **04.6** | **-1.7** |
| MHTO | | | | P | **P** | **05** | **36** | **04.6** | **-1.7** |
| MHTO | | | | P | pP | 05 | 36 | 04.7 | -9.5 |
| | SNR=9.4 | | | | | | | | |
| MHTO | | | | P | pP | 05 | 36 | 04.7 | -9.5 |
| | SNR=9.4 | | | | | | | | |
| **DQM** | **DQM** | **64.21** | **297** | P | **P** | **05** | **36** | **05.6** | **-0.8** |
| DQM | | | | P | **P** | **05** | **36** | **05.6** | **-0.8** |
| **WSAR** | **Wadi Sarin** | **64.45** | **301** | LR | LR | 06 | 03 | 33.4 | |
| | comp=Z,2µm,21.8s,baz=136,slow=36 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **64.45** | **301** | P | **P** | **05** | **36** | **07.2** | **-0.7** |
| | SNR=10 | | | | | | | | |
| **JMDO** | **Jabal Madar** | **64.58** | **300** | P | **P** | **05** | **36** | **08.0** | **-0.7** |
| | SNR=5.7 | | | | | | | | |
| JMDO | | | | P | **P** | **05** | **36** | **08.0** | **-0.7** |
| | SNR=5.7 | | | | | | | | |
| **NKL** | **Nikolayevsk** | **64.68** | **16** | *e*P | **P** | **05** | **36** | **05.8** | **-2.9** |
| NKL | | | | pmax | pmax | | | | |
| | comp=N,117nm,1.3s | | | | | | | | |
| NKL | | | | pmax | pmax | | | | |
| | comp=E,112nm,1.4s | | | | | | | | |
| NKL | | | | pmax | pmax | | | | |
| | comp=Z,340nm,1.4s | | | | | | | | |
| NKL | | | | MLR | MLR | | | | |
| | comp=E,12µm,24.0s | | | | | | | | |
| NKL | | | | MLR | MLR | | | | |
| | comp=N,14µm,27.0s | | | | | | | | |
| NKL | | | | MLR | MLR | | | | |
| | comp=Z,10µm,23.0s | | | | | | | | |
| **SMDO** | **Samad** | **64.88** | **300** | P | **P** | **05** | **36** | **10.0** | **-0.8** |
| | SNR=6.9 | | | | | | | | |
| SMDO | | | | P | **P** | **05** | **36** | **10.0** | **-0.8** |
| | SNR=6.9 | | | | | | | | |
| **RAO** | **Raoul Island** | **64.93** | **118** | LR | LR | 06 | 05 | 23.3 | |
| | comp=Z,5µm,18.2s,baz=259,slow=37 | | | | | | | | |
| **BIDO** | **Bidbid** | **64.99** | **301** | P | **P** | **05** | **36** | **10.7** | **-0.6** |
| | SNR=12 | | | | | | | | |
| BIDO | | | | P | **P** | **05** | **36** | **10.7** | **-0.6** |
| | SNR=12 | | | | | | | | |
| **SBV** | **Sambava** | **65.15** | **259** | ⇑ *i* P | **P** | **05** | **36** | **12.3** | **-0.3** |
| **SBV** | **Sambava** | **65.15** | **259** | ⇑P | **P** | **05** | **36** | **12.8** | **+0.2** |
| **SBV** | **Sambava** | **65.15** | **259** | P | **P** | **05** | **36** | **12.4** | **-0.3** |
| **BTLS** | **Baital** | **65.27** | **328** | *e*P | **P** | **05** | **36** | **11.2** | **-1.6** |
| | baz=328 | | | | | | | | |
| **BTLS** | **Baital** | **65.27** | **328** | *e*P | **P** | **05** | **36** | **11.1** | **-1.6** |
| **IUG** | **Iuzhnay** | **65.60** | **324** | *e*P | **P** | **05** | **36** | **14.1** | **-1.0** |
| | comp=Z,35nm,1.0s,baz=324 | | | | | | | | |
| **IUG** | **Iuzhnay** | **65.60** | **324** | *e*P | **P** | **05** | **36** | **14.1** | **-1.0** |
| IUG | | | | pmax | pmax | | | | |
| | comp=Z,35nm,1.0s | | | | | | | | |
| **HOQ** | **Hoqain** | **65.70** | **300** | P | **P** | **05** | **36** | **15.3** | **-0.7** |
| | SNR=9.9 | | | | | | | | |
| HOQ | | | | P | **P** | **05** | **36** | **15.3** | **-0.7** |
| | SNR=9.9 | | | | | | | | |
| HOQ | | | | P | **P** | **05** | **36** | **15.3** | **-0.7** |
| | SNR=9.9 | | | | | | | | |
| **DMTO** | **DMTO** | **65.81** | **294** | P | **P** | **05** | **36** | **16.0** | **-0.8** |
| DMTO | | | | P | **P** | **05** | **36** | **16.0** | **-0.8** |
| **KK31** | **Karatay Array** | **65.92** | **325** | P | **P** | **05** | **36** | **15.2** | **-1.8** |
| **KK31** | **Karatay Array** | **65.92** | **325** | *i* P | **P** | **05** | **36** | **15.3** | **-1.8** |
| **KKAR** | **Karatay Array** | **65.92** | **325** | P | **P** | **05** | **36** | **15.5** | **-1.5** |
| **KKAR** | **Karatay Array** | **65.92** | **325** | ⇑P | **P** | **05** | **36** | **15.3** | **-1.7** |
| **KKAR** | **Karatay Array** | **65.92** | **325** | P | **P** | **05** | **36** | **15.5** | **-1.5** |
| **BOD** | **Bodaibo** | **65.95** | **359** | *e*P | **P** | **05** | **36** | **16.0** | **-0.9** |
| BOD | | | | pmax | pmax | | | | |
| | comp=Z,118nm,1.8s | | | | | | | | |
| **BRLS** | **Borolday** | **66.26** | **325** | *e*P | **P** | **05** | **36** | **17.4** | **-1.8** |
| | comp=Z,22nm,1.2s,baz=324 | | | | | | | | |
| **BRLS** | **Borolday** | **66.26** | **325** | *e*P | **P** | **05** | **36** | **17.4** | **-1.8** |
| BRLS | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.2s | | | | | | | | |
| **ARQ** | **Araqi** | **66.29** | **300** | P | **P** | **05** | **36** | **19.7** | **-0.2** |
| ARQ | | | | P | **P** | **05** | **36** | **19.7** | **-0.2** |
| **SEM** | **Semipalatinsk** | **66.31** | **336** | *e*P | **P** | **05** | **36** | **18.5** | **-1.2** |
| | comp=Z,39nm,1.1s,baz=336 | | | | | | | | |
| SEM | | | | LR | LR | 06 | 07 | 45.1 | |
| | comp=Z,2µm,17.6s,baz=336 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **66.31** | **336** | *e*P | **P** | **05** | **36** | **18.4** | **-1.2** |
| SEM | | | | pmax | pmax | | | | |
| | comp=Z,39nm,1.1s | | | | | | | | |
| SEM | | | | MLR | MLR | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.39** | **223** | P | **P** | **05** | **36** | **23.3** | **+3.5** |
| | baz=263,slow=24,SNR=8.7 | | | | | | | | |
| H04N2 | | | | T | T | 06 | 48 | 14.2 | |
| | baz=75,slow=75,SNR=154 | | | | | | | | |
| **HRA** | **Herat** | **66.41** | **313** | P | **P** | **05** | **36** | **17.8** | **-2.8** |
| **H04N1** | **CROZET ISLANDS** | **66.41** | **223** | P | **P** | **05** | **36** | **23.3** | **+3.5** |
| | baz=263,slow=24,SNR=8.0 | | | | | | | | |
| H04N1 | | | | T | T | 06 | 48 | 16.0 | |
| | baz=75,slow=75,SNR=159 | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.41** | **223** | P | **P** | **05** | **36** | **23.2** | **+3.3** |
| | baz=263,slow=24,SNR=6.1 | | | | | | | | |
| H04N3 | | | | T | T | 06 | 48 | 13.0 | |
| | baz=75,slow=75,SNR=136 | | | | | | | | |
| **CRZF** | **Crozet Islands** | **66.42** | **223** | P | **P** | **05** | **36** | **19.9** | **-0.3** |
| CRZF | | | | IAMs_20 | IAMs_20 | 06 | 04 | 46.2 | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **CRZF** | **Crozet Islands** | **66.42** | **223** | ⇑P | **P** | **05** | **36** | **21.8** | **+1.6** |
| **RBK** | **Rabkut** | **66.42** | **293** | P | **P** | **05** | **36** | **20.0** | **-0.8** |
| | SNR=6.1 | | | | | | | | |
| RBK | | | | P | **P** | **05** | **36** | **20.0** | **-0.8** |
| | SNR=6.1 | | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **66.47** | **222** | P | **P** | **05** | **36** | **23.0** | **+2.7** |
| | baz=66,slow=5.9,SNR=4.1 | | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **66.49** | **222** | P | **P** | **05** | **36** | **23.2** | **+2.7** |
| | baz=66,slow=5.9,SNR=6.3 | | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **66.49** | **222** | P | **P** | **05** | **36** | **23.0** | **+2.6** |
| | baz=66,slow=5.9,SNR=6.4 | | | | | | | | |
| **SOHO** | **SOHO** | **66.57** | **301** | P | **P** | **05** | **36** | **19.5** | **-2.1** |
| **SOHO** | **SOHO** | **66.57** | **301** | P | **P** | **05** | **36** | **20.2** | **-1.3** |
| SOHO | | | | P | **P** | **05** | **36** | **20.2** | **-1.3** |
| SOHO | | | | P | **P** | **05** | **36** | **20.2** | **-1.3** |
| **DOK** | **Doka** | **66.83** | **294** | P | **P** | **05** | **36** | **22.1** | **-1.2** |
| DOK | | | | P | **P** | **05** | **36** | **22.1** | **-1.2** |
| **WHFO** | **Wadi Hawf** | **66.94** | **293** | P | **P** | **05** | **36** | **22.8** | **-1.3** |
| WHFO | | | | P | **P** | **05** | **36** | **22.8** | **-1.3** |
| **UOSS** | **Minazif** | **67.14** | **301** | P | **P** | **05** | **36** | **23.4** | **-1.8** |
| UOSS | | | | IAmb | IAmb | 05 | 36 | 50.0 | |
| | comp=Z,91nm,1.3s | | | | | | | | |
| **UOSS** | **Minazif** | **67.14** | **301** | ⇑P | **P** | **05** | **36** | **23.0** | **-2.2** |
| **UOSS** | **Minazif** | **67.14** | **301** | P | **P** | **05** | **36** | **23.8** | **-1.4** |
| UOSS | | | | P | **P** | **05** | **36** | **23.8** | **-1.4** |
| **HATD** | **Hatta, Dubai** | **67.16** | **301** | P | **P** | **05** | **36** | **23.5** | **-1.8** |
| **HATD** | **Hatta, Dubai** | **67.16** | **301** | P | **P** | **05** | **36** | **24.6** | **-0.7** |
| | SNR=5.0 | | | | | | | | |
| HATD | | | | P | **P** | **05** | **36** | **24.6** | **-0.7** |
| | SNR=5.0 | | | | | | | | |
| HATD | | | | P | **P** | **05** | **36** | **24.6** | **-0.7** |
| | SNR=5.0 | | | | | | | | |
| **ASHO** | **Ashiyiah** | **67.17** | **301** | P | **P** | **05** | **36** | **23.3** | **-2.2** |
| **ASHO** | **Ashiyiah** | **67.17** | **301** | P | **P** | **05** | **36** | **24.6** | **-0.8** |
| ASHO | | | | P | **P** | **05** | **36** | **24.6** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **67.19** | **335** | P | **P** | **05** | **36** | **23.5** | **-1.4** |
| | comp=Z,5.6nm,0.6s,baz=148,slow=5.9,SNR=57 | | | | | | | | |
| KURBB | | | | PKPPKP | **P'P'df** | **06** | **04** | **45.7** | **-3.7** |
| | comp=Z,0.7nm,0.3s,baz=315,slow=2.7,SNR=8.0 | | | | | | | | |
| KURBB | | | | LR | LR | 06 | 09 | 02.5 | |
| | comp=Z,4µm,19.9s,baz=148,slow=39 | | | | | | | | |
| | comp=Z,5.6nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.19** | **335** | P | **P** | **05** | **36** | **23.7** | **-1.2** |
| **ALNE** | **Al Ain** | **67.21** | **300** | P | **P** | **05** | **36** | **24.9** | **-0.7** |
| | SNR=6.7 | | | | | | | | |
| ALNE | | | | P | **P** | **05** | **36** | **24.9** | **-0.7** |
| | SNR=6.7 | | | | | | | | |
| **ABTO** | **Aybut** | **67.21** | **293** | P | **P** | **05** | **36** | **25.0** | **-0.8** |
| | SNR=6.1 | | | | | | | | |
| ABTO | | | | P | **P** | **05** | **36** | **25.0** | **-0.8** |
| | SNR=6.1 | | | | | | | | |
| **KURK** | **Kurchatov** | **67.22** | **335** | P | **P** | **05** | **36** | **24.0** | **-1.1** |
| KURK | | | | IAmb | IAmb | 05 | 36 | 25.6 | |
| | comp=Z,95nm,1.4s | | | | | | | | |
| **KURK** | **Kurchatov** | **67.22** | **335** | IAMs_20 | IAMs_20 | 06 | 08 | 49.7 | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **KURK** | **Kurchatov** | **67.22** | **335** | ⇑P | **P** | **05** | **36** | **23.9** | **-1.2** |
| **KURK** | **Kurchatov** | **67.22** | **335** | P | **P** | **05** | **36** | **24.6** | **-0.6** |
| KURK | | | | P | **P** | **05** | **36** | **24.6** | **-0.6** |
| KURK | | | | P | **P** | **05** | **36** | **24.6** | **-0.6** |
| **KURK** | **Kurchatov** | **67.22** | **335** | *c e* P | **P** | **05** | **36** | **23.4** | **-1.7** |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,86nm,1.7s | | | | | | | | |
| KURK | | | | MLR | MLR | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **MASF** | **Masafi** | **67.34** | **302** | P | **P** | **05** | **36** | **25.7** | **-0.7** |
| MASF | | | | P | **P** | **05** | **36** | **25.7** | **-0.7** |
| **ZAA0** | **Zalesovo Array** | **67.47** | **341** | P | **P** | **05** | **36** | **24.9** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **67.47** | **341** | P | **P** | **05** | **36** | **24.9** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **67.47** | **341** | P | **P** | **05** | **36** | **25.7** | **-0.9** |
| | comp=Z,16nm,0.5s,baz=146,slow=4.8,SNR=85 | | | | | | | | |
| ZALV | | | | PKPPKP | **P'P'df** | **06** | **04** | **41.5** | **-7.2** |
| | comp=Z,1.0nm,0.6s,baz=347,slow=4.0,SNR=4.5 | | | | | | | | |
| ZALV | | | | LR | LR | 06 | 08 | 44.5 | |
| | comp=Z,2µm,18.5s,baz=156,slow=38 | | | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| **ABPO** | **Ambohimpanom** | **67.53** | **253** | P | **P** | **05** | **36** | **28.6** | **+0.5** |
| ABPO | | | | IAmb | IAmb | 05 | 36 | 30.3 | |
| | comp=Z,176nm,1.2s | | | | | | | | |
| **ABPO** | **Ambohimpanom** | **67.53** | **253** | ⇑ *i* P | **P** | **05** | **36** | **28.5** | **+0.5** |
| ABPO | | | | IAmb | IAmb | 05 | 36 | 29.9 | |
| | comp=Z,186nm,1.3s | | | | | | | | |
| **ABPO** | **Ambohimpanom** | **67.53** | **253** | ⇑P | **P** | **05** | **36** | **28.5** | **+0.5** |
| **ABPO** | **Ambohimpanom** | **67.53** | **253** | P | **P** | **05** | **36** | **28.6** | **+0.5** |
| ABPO | | | | pmax | pmax | | | | |
| | comp=Z,176nm,1.3s | | | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **67.59** | **301** | P | **P** | **05** | **36** | **25.8** | **-2.2** |
| | SNR=5.9 | | | | | | | | |
| FAQ | | | | P | **P** | **05** | **36** | **26.8** | **-1.2** |
| | SNR=5.9 | | | | | | | | |
| **SHME** | **Shamm** | **67.60** | **303** | P | **P** | **05** | **36** | **27.3** | **-0.7** |
| SHME | | | | P | **P** | **05** | **36** | **27.3** | **-0.7** |
| **FOMA** | **Nahampoana Res** | **67.75** | **246** | P | **P** | **05** | **36** | **29.9** | **+0.8** |
| **FOMA** | **Nahampoana Res** | **67.75** | **246** | ⇑P | **P** | **05** | **36** | **30.6** | **+1.6** |
| **FOMA** | **Nahampoana Res** | **67.75** | **246** | P | **P** | **05** | **36** | **30.7** | **+1.6** |
| | SNR=12 | | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **67.77** | **301** | P | **P** | **05** | **36** | **27.6** | **-1.6** |
| **ASUD** | **Al Ashush, Dub** | **67.77** | **301** | P | **P** | **05** | **36** | **28.3** | **-0.8** |
| ASUD | | | | P | **P** | **05** | **36** | **28.3** | **-0.8** |
| **VOI** | **Vohitsoka** | **67.90** | **250** | ⇑ *i* P | **P** | **05** | **36** | **30.6** | **+0.3** |
| **VOI** | **Vohitsoka** | **67.90** | **250** | ⇑P | **P** | **05** | **36** | **30.9** | **+0.6** |
| **VOI** | **Vohitsoka** | **67.90** | **250** | P | **P** | **05** | **36** | **31.5** | **+1.2** |
| | SNR=19 | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **68.17** | **26** | *c e* P | **P** | **05** | **36** | **30.9** | **-0.2** |
| **OTUK** | **Ortayu** | **68.31** | **330** | P | **P** | **05** | **36** | **30.4** | **-1.7** |
| **MZR** | **Muzera** | **68.80** | **299** | P | **P** | **05** | **36** | **34.0** | **-1.7** |
| **MZR** | **Muzera** | **68.80** | **299** | P | **P** | **05** | **36** | **34.5** | **-1.2** |
| | SNR=6.9 | | | | | | | | |
| MZR | | | | P | **P** | **05** | **36** | **34.5** | **-1.2** |
| | SNR=6.9 | | | | | | | | |
| **MAW** | **Mawson** | **68.94** | **199** | P | **P** | **05** | **36** | **37.4** | **+1.7** |
| | comp=Z,362nm,1.0s,baz=58,slow=7.1,SNR=187 | | | | | | | | |
| MAW | | | | LR | LR | 06 | 00 | 40.3 | |
| | comp=Z,4µm,21.6s,baz=56,slow=31 | | | | | | | | |
| MAW | | | | PKP2bc | | 06 | 04 | 44.7 | |
| | comp=Z,9.8nm,1.1s,baz=222,slow=4.0,SNR=4.9 | | | | | | | | |
| | comp=Z,362nm,1.0s | | | | | | | | |
| **GHWR** | **Ruwais** | **69.64** | **299** | P | **P** | **05** | **36** | **39.6** | **-1.3** |
| GHWR | | | | P | **P** | **05** | **36** | **39.6** | **-1.3** |
| **JRN** | **Qarnain Island** | **69.99** | **300** | P | **P** | **05** | **36** | **41.4** | **-1.6** |
| JRN | | | | P | **P** | **05** | **36** | **41.4** | **-1.6** |
| **SLWR** | **Sila** | **70.70** | **299** | P | **P** | **05** | **36** | **46.0** | **-1.3** |
| SLWR | | | | P | **P** | **05** | **36** | **46.0** | **-1.3** |
| **YAK** | **Yakutsk** | **70.93** | **7** | P | **P** | **05** | **36** | **47.1** | **-0.7** |
| YAK | | | | IAmb | IAmb | 05 | 37 | 02.2 | |
| | comp=Z,84nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | **70.93** | **7** | ⇑P | **P** | **05** | **36** | **47.0** | **-0.9** |
| **YAK** | **Yakutsk** | **70.93** | **7** | PKPPKP | | 06 | 04 | 44.0 | |
| | comp=Z,15nm,0.4s,baz=105,slow=1.5,SNR=6.2 | | | | | | | | |
| **YAK** | **Yakutsk** | **70.93** | **7** | *c i* P | **P** | **05** | **36** | **47.2** | **-0.7** |
| YAK | | | | *e*PP | **pP** | **05** | **36** | **57.5** | **+1.5** |
| YAK | | | | *e* | | 05 | 37 | 09.4 | |
| YAK | | | | *e* | | 05 | 39 | 22.0 | |
| YAK | | | | *e*S | **S** | **05** | **45** | **58.3** | **-3.4** |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,93nm,1.0s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=E,18nm,1.3s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=N,54nm,1.1s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.4s | | | | | | | | |
| YAK | | | | smax | smax | | | | |
| | comp=E,252nm,2.7s | | | | | | | | |
| YAK | | | | smax | smax | | | | |
| | comp=N,438nm,3.5s | | | | | | | | |
| **PET** | **Petropavlovsk** | **70.94** | **26** | P | **P** | **05** | **36** | **48.9** | **+0.7** |
| PET | | | | IAmb | IAmb | 05 | 37 | 08.7 | |
| | comp=Z,112nm,1.3s | | | | | | | | |
| **PET** | **Petropavlovsk** | **70.94** | **26** | ⇑P | **P** | **05** | **36** | **48.3** | **+0.1** |
| **PET** | **Petropavlovsk** | **70.94** | **26** | *c i* P | **P** | **05** | **36** | **47.9** | **-0.3** |
| PET | | | | *e* | | 05 | 39 | 28.0 | |
| PET | | | | *i* S | **S** | **05** | **46** | **03.5** | **+1.3** |
| PET | | | | *e*PS | **PnS** | **05** | **46** | **29.0** | **-3.4** |
| PET | | | | *e*PPS | PPS | 05 | 46 | 47.8 | |
| PET | | | | *e*SS | **SS** | **05** | **50** | **28.9** | **-6.7** |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,45nm,1.6s | | | | | | | | |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,1µm,5.2s | | | | | | | | |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,1µm,9.8s | | | | | | | | |
| PET | | | | MLR | MLR | | | | |
| | comp=Z,700nm,19.0s | | | | | | | | |
| **TRNA** | **Turayna** | **71.33** | **300** | P | **P** | **05** | **36** | **49.6** | **-1.5** |
| **SMRA** | **Abu-Samra** | **71.67** | **299** | P | **P** | **05** | **36** | **51.4** | **-1.7** |
| | SNR=6.9 | | | | | | | | |
| **SHMA** | **Al-Shehemyia** | **71.90** | **301** | P | **P** | **05** | **36** | **53.2** | **-1.4** |
| **BVA0** | **Borovoye Array** | **72.44** | **333**

KMBO *e*S **S** **05 47 34.0 +0.7**
KMBO IAMs_20 IAMs_20 06 08 14.8
comp=Z,2µm,18.8s
**KMBO Kilima Mbogo 78.93 270** P **P** **05 37 35.5 -0.1**
KMBO pmax pmax
comp=Z,94nm,1.2s
**FURI Furi 79.12 281** IAMs_20 IAMs_20 06 08 42.3
comp=Z,2µm,21.0s
**FURI Furi 79.12 281** ⇑P **P** **05 37 38.8 +2.1**
**FURI Furi 79.12 281** LR LR 06 09 04.5
comp=Z,2µm,21.6s,baz=96,slow=33
**FURI Furi 79.12 281** *e*P **P** **05 37 38.2 +1.6**
FURI *e*S **S** **05 47 36.2 +0.7**
**SVE Sverdlovsk 79.21 333** *de*P **P** **05 37 34.3 -1.5**
SVE *e*S **S** **05 47 33.2 -0.9**
SVE pmax pmax
comp=Z,81nm,1.4s
**ARU Arti 79.96 332** P **P** **05 37 37.8 -2.2**
ARU IAMs_20 IAMs_20 06 17 14.9
comp=Z,2µm,20.0s
**ARU Arti 79.96 332** LR LR 06 17 28.5
comp=Z,2µm,19.3s,baz=121,slow=39
**ARU Arti 79.96 332** *ce*P **P** **05 37 38.1 -1.8**
ARU pmax pmax
comp=Z,59nm,1.3s
ARU MLR MLR
comp=Z,2µm,19.0s
**TIXI Tiksi 80.25 4** P **P** **05 37 39.3 -1.9**
**TIXI Tiksi 80.25 4** IAMs_20 IAMs_20 06 19 14.8
comp=Z,3µm,18.0s
**TIXI Tiksi 80.25 4** ⇑P **P** **05 37 39.1 -2.1**
**TIXI Tiksi 80.25 4** *ce*P **P** **05 37 38.9 -2.3**
TIXI pmax pmax
comp=Z,43nm,1.3s
TIXI MLR MLR
comp=Z,2µm,21.0s
**AMKA Amchitka 80.29 35** P **P** **05 37 41.8 0.0**
**MAK Makhachkala 80.45 316** *c* iP **P** **05 37 40.4 -2.5**
MAK *e*PPP PPP 05 42 38.8
MAK *e*S **S** **05 47 45.1 -2.7**
MAK *e*SSS SSS 05 56 16.8
MAK pmax pmax
comp=Z,108nm,0.7s
MAK MLR MLR
comp=Z,2µm,19.0s
**CHIPN CHIPINGE 81.18 251** ⇑*i*P **P** **05 37 47.4 0.0**
**POGA Pongola 81.38 244** IAMs_20 IAMs_20 06 10 28.3
comp=Z,2µm,19.0s
**POGA Pongola 81.38 244** ⇑*i*P **P** **05 37 49.5 +1.2**
POGA IAmb IAmb 05 37 56.0
comp=Z,256nm,0.8s
**POGA Pongola 81.38 244** ⇑P **P** **05 37 49.2 +1.0**
**GNI Garni 81.47 313** P **P** **05 37 47.0 -1.6**
**GNI Garni 81.47 313** ⇑P **P** **05 37 47.7 -0.9**
**GNI Garni 81.47 313** LR LR 06 19 18.8
comp=Z,2µm,19.0s,baz=109,slow=40
**GNI Garni 81.47 313** *ce*P **P** **05 37 47.4 -1.2**
GNI pmax pmax
comp=Z,24nm,1.3s
**LODK Lodwar 81.47 275** IAMs_20 IAMs_20 06 11 19.6
comp=Z,2µm,20.0s
**LODK Lodwar 81.47 275** P **P** **05 37 49.4 +0.4**
SNR=24
**LODK Lodwar 81.47 275** *e*P **P** **05 37 49.1 0.0**
LODK *e*S **S** **05 48 00.4 +0.7**
**QSPA South Pole Qui 81.66 180** P **P** **05 37 49.6 +0.5**
comp=Z,225nm,1.1s,baz=318,slow=3.0,SNR=208
QSPA S **S** **05 48 04.4 +4.5**
comp=Z,3.2nm,1.0s,baz=120,slow=19,SNR=11
QSPA LR LR 06 10 17.8
comp=Z,7µm,21.9s,baz=334,slow=33
comp=Z,225nm,1.1s
**GROC Groznyy 81.71 316** *e*P **P** **05 37 52.1 +2.5**
GROC *e*S **SKSac** **05 48 07.8 -0.2**
**MOPA Mopani 82.01 247** ⇑*i*P **P** **05 37 52.4 +0.7**
MOPA IAmb IAmb 05 37 53.6
comp=Z,479nm,1.1s
**GEVA Gevas 82.15 311** P **P** **05 37 51.9 -0.4**
GEVA IAmb IAmb 05 38 49.6
comp=Z,80nm,1.2s
**PMBG Pietermaritzbu 82.24 241** ⇑*i*P **P** **05 37 54.0 +1.1**
PMBG IAmb IAmb 05 37 55.3
comp=Z,256nm,1.3s
**HOED Hoedspruit, Li 82.35 246** ⇑*i*P **P** **05 37 53.5 0.0**
HOED IAmb IAmb 05 37 54.6
comp=Z,133nm,1.1s
**TRLG Trialeti 82.36 314** P **P** **05 37 52.2 -1.1**
**PILG Pilgrimsrest, 82.50 246** ⇑*i*P **P** **05 37 54.3 -0.2**
PILG IAmb IAmb 05 37 56.1
comp=Z,150nm,1.2s
**ADK Adak 82.77 35** P **P** **05 37 54.2 -0.7**
ADK IAmb IAmb 05 37 56.6
comp=Z,208nm,1.6s
**ADK Adak 82.77 35** ⇑P **P** **05 37 53.9 -1.0**
**ADK Adak 82.77 35** P **P** **05 37 54.2 -0.7**
ADK pmax pmax
comp=Z,208nm,1.6s
**NWCL Newcastle 82.95 243** ⇑*i*P **P** **05 37 57.2 +0.6**
NWCL IAmb IAmb 05 38 03.3
comp=Z,75nm,0.8s
**CRLN Carolina, Mapu 83.01 245** ⇑*i*P **P** **05 37 56.3 -0.7**
CRLN IAmb IAmb 05 37 58.2
comp=Z,54nm,1.1s
**ELIB Princess Elisa 83.03 198** *d*P **P** **05 37 57.6 +1.4**
comp=Z,138nm,1.2s
ELIB *d*PKiKP **PKiKP** **05 43 16.9 +2.0**
**KSTD Kokstad 83.18 240** ⇑*i*P **P** **05 37 58.9 +1.1**
KSTD IAmb IAmb 05 38 00.4
comp=Z,202nm,1.3s
**MPHEP Siloam, Limpop 83.19 248** ⇑*i*P **P** **05 37 58.6 +0.7**
MPHEP IAmb IAmb 05 37 59.1
comp=Z,107nm,0.9s
**MUSN Musina, Limpop 83.55 248** ⇑*i*P **P** **05 38 00.1 +0.3**
MUSN IAmb IAmb 05 38 01.4
comp=Z,162nm,1.0s
**MARD Mardin 83.61 309** P **P** **05 37 59.3 -0.5**
**BELG Belogornoye 83.83 325** LR LR 06 20 15.2
comp=Z,2µm,18.4s,baz=103,slow=39
**BELG Belogornoye 83.83 325** *c* iP **P** **05 37 57.2 -3.1**
BELG pmax pmax
comp=Z,10.0nm,1.1s
**KBZ Khabaz 83.88 316** P **P** **05 38 00.7 -0.1**
comp=Z,8.4nm,0.9s,baz=113,slow=4.3,SNR=9.0
KBZ PKPPKP **P'P'df** **06 04 20.6 -0.9**
comp=Z,1.2nm,0.5s,baz=342,slow=6.4,SNR=3.5
KBZ LR LR 06 22 00.1
comp=Z,776nm,19.1s,baz=107,slow=40
comp=Z,8.4nm,0.9s
**KBZ Khabaz 83.88 316** *ce*P **P** **05 37 58.8 -2.0**
KBZ pmax pmax
comp=Z,12nm,1.0s
**BILL Bilibino 83.94 17** *c* iP **P** **05 37 59.3 -1.3**
BILL *i* 05 38 06.5
BILL *i* 05 38 16.2
BILL *e* 05 41 21.6
BILL PPP PPP 05 43 13.0
BILL S **SKSac** **05 48 22.0 +0.3**
BILL *e*PS **PnS** **05 49 22.3 +4.7**
BILL *e*SS **SS** **05 53 51.1 +0.1**
BILL pmax pmax
comp=Z,15nm,1.3s
BILL MLR MLR
comp=Z,993nm,20.0s
**SHA1 Shidzhatmaz 84.05 316** *ce*P **P** **05 38 00.8 -1.2**
**KVAR Kislovodsk Arr 84.09 316** LR LR 06 21 10.3
comp=Z,780nm,18.9s,baz=202,slow=40
**KIV Kislovodsk 84.09 316** ⇑P **P** **05 38 00.7 -1.4**
**KIV Kislovodsk 84.09 316** *e*P **P** **05 38 00.4 -1.7**
KIV *e* 05 41 14.1
KIV *e*S **SKSac** **05 48 22.7 -1.3**
KIV *e*SSS SSS 05 57 23.5
KIV pmax pmax
comp=Z,13nm,1.1s
**GOF Gofitskoye 84.19 317** *ce*P **P** **05 38 00.6 -1.8**
**KRI Karoi 84.41 254** ⇑*i*P **P** **05 38 03.0 -1.3**
**RUST Rust De Winter 84.44 245** ⇑*i*P **P** **05 38 04.4 +0.2**
RUST IAmb IAmb 05 38 11.6
comp=Z,96nm,0.8s
**SNKL Senekal, Frees 84.76 242** ⇑*i*P **P** **05 38 06.4 +0.5**
SNKL IAmb IAmb 05 38 07.7
comp=Z,677nm,2.0s
**TSWA Tswaing Meteor 84.81 245** ⇑*i*P **P** **05 38 06.1 -0.1**
TSWA IAmb IAmb 05 38 13.4
comp=Z,86nm,0.8s
**MATP Matopo 85.02 250** LR LR 06 12 20.7
comp=Z,559nm,19.8s,baz=88,slow=33
**HRAO HartRAO 85.11 245** ⇑*i*P **P** **05 38 08.2 +0.5**
**LEPH Lephalale, Lim 85.25 247** ⇑*i*P **P** **05 38 08.2 -0.2**
LEPH IAmb IAmb 05 38 10.0
comp=Z,110nm,1.1s
**PRYS Parys 85.28 244** ⇑*i*P **P** **05 38 08.5 0.0**
PRYS IAmb IAmb 05 38 09.5
comp=Z,346nm,1.5s
**WDLM Western Deep L 85.28 244** ⇓*i*P **P** **05 38 08.8 +0.2**
WDLM IAmb IAmb 05 38 10.2
comp=Z,176nm,1.5s
**KIRV Kirov 85.33 331** LR LR 06 22 04.5
comp=Z,3µm,19.9s,baz=122,slow=40
**KIRV Kirov 85.33 331** *c* iP **P** **05 38 05.4 -2.4**
**GRHM Grahamstown, E 85.37 237** P **P** **05 38 10.7 +1.9**
**GRHM Grahamstown, E 85.37 237** ⇑*i*P **P** **05 38 10.1 +1.3**
GRHM IAmb IAmb 05 38 11.3
comp=Z,285nm,1.1s
**GRHM Grahamstown, E 85.37 237** ⇑P **P** **05 38 09.8 +1.1**
**MBAR Mbarara 85.45 270** P **P** **05 38 09.6 -0.1**
**MBAR Mbarara 85.45 270** IAMs_20 IAMs_20 06 21 43.0
comp=Z,1µm,18.0s
**MBAR Mbarara 85.45 270** ⇑*i*P **P** **05 38 09.0 -0.6**
MBAR IAmb IAmb 05 38 11.1
comp=Z,220nm,1.4s
**MBAR Mbarara 85.45 270** ⇑P **P** **05 38 09.5 -0.1**
**MBAR Mbarara 85.45 270** P **P** **05 38 10.0 +0.3**
MBAR P **P** **05 38 10.0 +0.3**
**MBAR Mbarara 85.45 270** *e*P **P** **05 38 09.8 +0.2**
MBAR *e*S **SKSac** **05 48 34.7 +0.6**
**MBAR Mbarara 85.45 270** *c* iP **P** **05 38 09.5 -0.1**
MBAR pmax pmax
comp=Z,166nm,1.4s
**LABN Labinsk 85.64 316** *e*P **P** **05 38 06.6 -3.1**
LABN *e*S **SKSac** **05 48 30.8 -2.8**
LABN pmax pmax
comp=Z,42nm,0.6s
**ARPR Arapgir-MALATY 85.92 310** IAmb IAmb 05 38 34.9
comp=Z,102nm,1.1s
**MTLB Matlabas, Limp 85.93 247** ⇑*i*P **P** **05 38 12.8 +1.0**
MTLB IAmb IAmb 05 38 13.5
comp=Z,221nm,0.8s
**LSZ Lusaka 85.96 255** P **P** **05 38 11.1 -1.0**
LSZ IAMs_20 IAMs_20 06 17 40.2
comp=Z,2µm,19.0s
**LSZ Lusaka 85.96 255** ⇑P **P** **05 38 12.1 0.0**
**LSZ Lusaka 85.96 255** P **P** **05 38 12.7 +0.6**
LSZ P **P** **05 38 12.7 +0.6**
**LSZ Lusaka 85.96 255** P **P** **05 38 11.1 -1.0**
LSZ pmax pmax
comp=Z,218nm,1.1s
LSZ MLR MLR
comp=Z,2µm,19.0s
**SOC Sochi 86.05 315** *e*P **P** **05 38 08.9 -2.9**
SOC *e*PPP PPP 05 43 32.5
SOC *e*S **SKSac** **05 48 34.0 -2.2**
SOC *e*SS **SS** **05 54 17.6 -5.7**
SOC *e*SSS SSS 05 57 48.6
SOC pmax pmax
comp=Z,48nm,0.9s
SOC MLR MLR
comp=Z,673nm,18.0s
**ERBR Yeremizino-Bor 86.10 317** *e*P P 05 38 07.0 -5.0
**SOE Somerset East 86.11 238** IAmb IAmb 05 38 15.5
comp=Z,255nm,1.3s
**SOE Somerset East 86.11 238** ⇓*i*P **P** **05 38 14.0 +1.5**
SOE IAmb IAmb 05 38 15.2
comp=Z,253nm,1.3s
**SOE Somerset East 86.11 238** ⇑P **P** **05 38 13.8 +1.4**
**MRCO Marico , North 86.31 245** ⇑*i*P **P** **05 38 14.1 +0.4**
MRCO IAmb IAmb 05 38 15.3
comp=Z,197nm,1.1s
**GAZ Gaziantep 86.33 308** P **P** **05 38 12.9 -0.5**
GAZ IAmb IAmb 05 38 49.8
comp=Z,57nm,1.2s
**GAZ Gaziantep 86.33 308** ⇑P **P** **05 38 12.8 -0.6**
**GHAJ Ghor Haditha 86.39 302** P **P** **05 38 13.5 -0.2**
GHAJ IAmb IAmb 05 38 23.2
comp=Z,82nm,0.6s
**HVD Gariep Dam 86.44 240** ⇑*i*P **P** **05 38 14.5 +0.3**
HVD IAmb IAmb 05 38 16.3
comp=Z,218nm,1.4s
**BALJ Balqa 86.49 303** IAMs_20 IAMs_20 06 17 56.8
comp=Z,2µm,20.0s
**EIL Elat 86.58 300** ⇑P **P** **05 38 14.2 -0.5**
**EIL Elat 86.58 300** LR LR 06 20 14.8
comp=Z,2µm,18.8s,baz=98,slow=38
**BUFB Buffelsbos 86.61 236** *e*P **P** **05 38 16.2 +1.4**
BUFB IAmb IAmb 05 38 26.0
comp=Z,88nm,1.1s
**GEM Giv'at Ha'Em 86.70 304** ⇑P **P** **05 38 15.5 +0.3**
**SALP Salfit 86.86 303** ⇑P **P** **05 38 16.0 0.0**
**MMAI Mount Meron Ar 86.88 304** P **P** **05 38 16.7 +0.5**
comp=Z,25nm,0.9s,baz=98,slow=8.9,SNR=7.0
MMAI LR LR 06 21 32.0
comp=Z,2µm,19.8s,baz=52,slow=39
comp=Z,25nm,0.9s
**VRH Novokhopyorsk 86.88 323** *e*P **P** **05 38 14.1 -1.5**
VRH pmax pmax
comp=Z,93nm,1.4s
**NVL N'lazarevskaya 86.89 199** ⇑*i*P **P** **05 38 15.5 +0.2**
NVL *e*S **SKSac** **05 48 40.5 0.0**
NVL pmax pmax
comp=Z,161nm,1.2s
NVL MLR MLR
comp=Z,2µm,18.0s
**BOSA Boshof 86.91 242** P **P** **05 38 16.1 -0.5**
**BOSA Boshof 86.91 242** ⇑*i*P **P** **05 38 17.2 +0.7**
BOSA IAmb IAmb 05 38 23.8
comp=Z,233nm,1.0s
**BOSA Boshof 86.91 242** ⇑P **P** **05 38 16.8 +0.2**
**BOSA Boshof 86.91 242** P **P** **05 38 16.1 -0.5**
comp=Z,91nm,1.0s,baz=107,slow=4.1,SNR=61
BOSA LR LR 06 14 54.7
comp=Z,2µm,18.1s,baz=105,slow=34
comp=Z,91nm,1.0s
**AMAZ Amatzia 86.98 302** ⇑P **P** **05 38 16.8 +0.1**
**SWZ Schweizer 87.04 243** ⇓*i*P **P** **05 38 17.6 +0.3**
SWZ IAmb IAmb 05 38 24.5
comp=Z,221nm,1.1s
**GRAF Camdeboo Natio 87.07 238** ⇑*i*P **P** **05 38 18.3 +1.1**
GRAF IAmb IAmb 05 38 18.7
comp=Z,110nm,1.4s
**LBTB Lobatse 87.09 245** P **P** **05 38 16.9 -0.6**
**LBTB Lobatse 87.09 245** ⇑*i*P **P** **05 38 17.9 +0.4**
LBTB IAmb IAmb 05 38 19.2
comp=Z,153nm,0.9s
**LBTB Lobatse 87.09 245** ⇑P **P** **05 38 17.8 +0.4**
**LBTB Lobatse 87.09 245** LR LR 06 14 29.4
comp=Z,801nm,18.6s,baz=101,slow=34
**LBTB Lobatse 87.09 245** P **P** **05 38 16.9 -0.6**
LBTB pmax pmax
comp=Z,160nm,1.0s
**KZIT Kziot 87.29 302** ⇑P **P** **05 38 17.7 -0.5**
**NIKH Nikolski High 87.65 36** P **P** **05 38 17.7 -1.5**
baz=253
**ROOI Rooidraai Farm 87.83 238** ⇑*i*P **P** **05 38 22.0 +1.2**
ROOI IAmb IAmb 05 38 23.0
comp=Z,258nm,1.9s
**ANN Anapa 87.95 316** *e*P **P** **05 38 20.1 -0.8**
ANN *e*S **SKSac** **05 48 48.8 +1.1**
ANN pmax pmax
comp=Z,33nm,0.8s
**SPIA Saint Paul Isl 88.16 32** P **P** **05 38 21.1 -0.5**
baz=252
**VORD Divnogorie 88.29 322** *e*P **P** **05 38 18.8 -3.6**
VORD pmax pmax
comp=Z,40nm,1.0s
**P08K Saint George I 88.35 32** P **P** **05 38 21.6 -0.9**
baz=252
**VSR Storozhevoye 88.43 322** *e*P **P** **05 38 19.0 -4.1**
VSR pmax pmax
comp=Z,70nm,1.3s
**BRAK Brakfontein 88.48 238** ⇑*i*P **P** **05 38 24.6 +0.7**
BRAK IAmb IAmb 05 38 25.1
comp=Z,630nm,2.5s
**VORR Voronezh 88.52 323** *e*P **P** **05 38 22.2 -1.3**
VORR pmax pmax
comp=Z,71nm,0.4s
**LPSR Galich'ya Gora 88.94 323** *e*P **P** **05 38 21.5 -3.9**
LPSR pmax pmax
comp=Z,40nm,1.1s
**CSS Mathiatis 88.95 305** IAMs_20 IAMs_20 06 20 36.8
comp=Z,2µm,22.0s
**CSS Mathiatis 88.95 305** ⇑P **P** **05 38 24.9 -1.0**
**GRAN Grantham 89.01 238** *e*P **P** **05 38 27.9 +1.5**
GRAN IAmb IAmb 05 38 34.3
comp=Z,14nm,0.9s
**HON Honolulu 89.08 68** P **P** **05 38 29.9 +3.1**
**TROLL Troll, Antarti 89.24 197** ⇓P **P** **05 38 28.5 +1.7**
comp=Z,3µm,0.8s
TROLL ⇓SKSac **SKSac** **05 48 50.0 -5.0**
comp=Z,7.3nm,0.1s
**UNV Unalaska Valle 89.24 35** P **P** **05 38 25.3 -1.4**
baz=255
**MERW Merweville 89.49 237** *e*P **P** **05 38 29.6 +0.8**
MERW IAmb IAmb 05 38 35.9
comp=Z,50nm,1.1s
**BR104 Keskin Array S 89.61 310** P **P** **05 38 27.0 -2.1**
comp=Z,13nm,1.0s,comp=Z,210nm
**BR131 Keskin Array S 89.61 310** P **P** **05 38 27.5 -1.6**
**BR131 Keskin Array S 89.61 310** P **P** **05 38 27.5 -1.6**
BR131 pmax pmax
comp=Z,29nm,1.0s
**BRTR Keskin Array B 89.61 310** P **P** **05 38 26.7 -2.4**
**BRTR Keskin Array B 89.61 310** P **P** **05 38 27.3 -1.8**
comp=Z,8.9nm,0.9s,baz=126,slow=6.4,SNR=16
BRTR LR LR 06 25 24.7
comp=Z,645nm,18.3s,baz=117,slow=40
comp=Z,8.9nm,0.9s
**BRTR Keskin Array B 89.61 310** *i* P **P** **05 38 27.6 -1.6**
BRTR pmax pmax
comp=Z,9.0nm,0.9s
**GAMB Gambell 89.64 25** P **P** **05 38 27.6 -0.8**
baz=250
**FRAZ Fraserburg 89.71 238** ⇑*i*P **P** **05 38 31.1 +1.3**
FRAZ IAmb IAmb 05 38 32.2
comp=Z,126nm,1.4s
**SUR Sutherland 90.13 237** P **P** **05 38 34.4 +2.5**
SUR IAmb IAmb 05 38 34.8
comp=Z,130nm,1.4s
SUR IAMs_20 IAMs_20 06 16 52.6
comp=Z,2µm,19.0s
**SUR Sutherland 90.13 237** ⇑P **P** **05 38 33.8 +2.0**
**SUR Sutherland 90.13 237** LR LR 06 14 01.4
comp=Z,2µm,19.3s,baz=108,slow=32
**MATJ Matjiesfontein 90.17 236** *e*P **P** **05 38 33.1 +1.2**
MATJ IAmb IAmb 05 38 39.8
comp=Z,159nm,1.1s
**UPI Upington 90.43 241** ⇑*i*P **P** **05 38 33.4 +0.2**
UPI IAmb IAmb 05 38 35.5
comp=Z,155nm,1.7s
**MOS Moscow 90.47 326** *e*P **P** **05 38 29.1 -3.4**
MOS *e* 05 42 03.6
MOS *e* 05 48 54.0
MOS *e*S **S** **05 49 18.0 -7.9**
MOS pmax pmax
comp=Z,34nm,0.7s
**KEIM Keimoes 90.62 241** ⇓*i*P **P** **05 38 36.0 +1.9**
KEIM IAmb IAmb 05 38 41.7
comp=Z,65nm,1.0s
**TBI Tubuai 90.67 114** *e*P **P** **05 38 32.6 -1.6**
comp=Z,1µm,25.8s
**TBI Tubuai 90.67 114** *e*PP **PP** **05 42 10.5 +0.9**
comp=Z,2µm,33.0s
TBI *e*S **S** **05 49 24.3 -4.8**
comp=Z,6µm,27.5s
TBI *e*SS **SS** **05 55 34.6 +3.5**
comp=Z,5µm,36.2s
TBI *e*LQ LQ 06 03 17.1
comp=Z,15µm,40.2s
TBI *e*LR LR 06 07 32.6
comp=Z,4µm,22.0s
TBI *e*LR LR 06 07 36.1
comp=Z,14µm,21.8s
**SNAA Sanae 90.89 196** P **P** **05 38 35.0 +0.6**
**SNAA Sanae 90.89 196** ⇑*i*P **P** **05 38 35.9 +1.6**
**SNAA Sanae 90.89 196** ⇑P **P** **05 38 35.7 +1.3**
comp=Z,364nm,0.5s
SNAA ⇓SKSac **SKSac** **05 49 01.7 -2.7**
comp=Z,22µm,0.1s
**SNAA Sanae 90.89 196** ⇑P **P** **05 38 35.5 +1.1**
**SNAA Sanae 90.89 196** P **P** **05 38 35.6 +1.3**
comp=Z,145nm,1.1s,baz=161,slow=3.8,SNR=144
SNAA PKKP **PKKPdf** **05 55 56.8 -0.8**
comp=Z,5.1nm,1.2s,baz=212,slow=3.5,SNR=6.3
SNAA LR LR 06 13 36.9
comp=Z,7µm,21.9s,baz=102,slow=32
comp=Z,145nm,1.1s
**SNAA Sanae 90.89 196** *c* iP **P** **05 38 35.5 +1.1**
SNAA pmax pmax
comp=Z,251nm,1.4s
**OBN Obninsk 90.91 326** IAMs_20 IAMs_20 06 26 31.5
comp=Z,2µm,19.0s
**OBN Obninsk 90.91 326** ⇑P **P** **05 38 35.8 +1.3**
**OBN Obninsk 90.91 326** LR LR 06 26 26.5
comp=Z,2µm,18.3s,baz=103,slow=40
**OBN Obninsk 90.91 326** *d* iP **P** **05 38 33.1 -1.4**
OBN *SP **sP** **05 38 45.2 -0.6**
OBN *e* 05 42 13.0
OBN PPP PPP 05 44 11.0
OBN *i* S **SKSac** **05 49 03.5 -1.1**
OBN PS **PnS** **05 50 44.0 +2.7**
OBN PPS PPS 05 51 18.0
OBN SS **SS** **05 55 38.0 +4.8**
OBN pmax pmax
comp=Z,36nm,1.3s
**M11K Mekoryuk 91.10 29** P **P** **05 38 35.1 -0.2**
baz=255
**CVNA Calvinia 91.17 238** ⇑*i*P **P** **05 38 37.7 +1.2**
CVNA IAmb IAmb 05 38 39.0
comp=Z,134nm,1.3s
**AUGR Augrabies 91.19 241** *e*P **P** **05 38 38.4 +1.8**
AUGR IAmb IAmb 05 38 47.8
comp=Z,191nm,1.9s
**CER Ceres 91.21 236** ⇑*i*P **P** **05 38 37.8 +1.1**
CER IAmb IAmb 05 38 39.3
comp=Z,75nm,1.1s
**FALS False Pass 91.24 35** P **P** **05 38 34.5 -1.6**
baz=257
**PRTV Porterville,We 91.43 236** ⇑*i*P **P** **05 38 39.6 +1.9**
PRTV IAmb IAmb 05 38 40.6
comp=Z,85nm,1.1s
**PPT2 Papeete2 91.48 108** *e*P P 05 38 31.2 -7.0
comp=Z,308nm,24.5s
**PPT2 Papeete2 91.48 108** *e*PP **PP** **05 42 13.8 -2.5**
comp=Z,246nm,26.0s
PPT2 *e*S **S** **05 49 36.7 -0.2**
comp=Z,718nm,25.2s
PPT2 *e*SS **SS** **05 55 49.1 +5.9**
comp=Z,670nm,29.5s
PPT2 *e*LQ LQ 06 04 01.3
comp=Z,5µm,37.8s
PPT2 *e*LR LR 06 07 56.8
comp=Z,2µm,26.8s
PPT2 *e*LR LR 06 07 59.1
comp=Z,2µm,27.5s
**PPT Papeete 91.48 108** P **P** **05 38 41.1 +3.0**
comp=Z,70nm,0.9s,baz=326,slow=5.3,SNR=6.2
PPT LR LR 06 15 44.8
comp=Z,408nm,21.8s,baz=248,slow=33
**TNA Tin City 91.73 24** P **P** **05 38 36.9 -1.2**
baz=254
**S12K Black Hills 92.17 34** P **P** **05 38 38.5 -2.0**
baz=258
**K13K Kusilvak Mount 92.21 28** IAmb IAmb 05 38 41.5
comp=Z,72nm,1.4s
**K13K Kusilvak Mount 92.21 28** P **P** **05 38 39.7 -0.8**
baz=256,SNR=8.0
**F14K Arctic Creek 92.35 24** P **P** **05 38 40.3 -0.7**
baz=255,SNR=5.8
**BELA Belgrano 2 92.41 186** P **P** **05 38 41.6 +0.4**
**M13K Dall Lake 92.48 29** P **P** **05 38 41.5 -0.2**
baz=258
**ANM Nome 92.52 25** P **P** **05 38 40.9 -1.0**
baz=256
**VNA2 Neumayer--Watz 92.53 196** ⇑P **P** **05 38 43.1 +1.2**
comp=Z,47nm,0.7s,baz=122,slow=3.9
**J14K Nanvaranak Lak 92.89 27** IAmb IAmb 05 38 44.5
comp=Z,49nm,1.4s
**J14K Nanvaranak Lak 92.89 27** P **P** **05 38 42.4 -1.1**
baz=258,SNR=6.1
**VNA1 Neumayer--Stat 92.92 196** ⇑P **P** **05 38 45.0 +1.3**
comp=Z,80nm,1.2s
**VNA3 Neumayer Olymp 92.95 195** ⇑P **P** **05 38 44.8 +0.9**
comp=Z,55nm,0.8s
**SDPT Sand Point 92.99 35** P **P** **05 38 42.4 -1.8**
baz=260
**L14K Kuka Creek 93.00 28** P **P** **05 38 43.3 -0.8**
baz=258
**F15K North Star Dit 93.09 24** IAmb IAmb 05 38 45.6
comp=Z,32nm,1.2s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F15K | North Star Dit | 93.09 | 24 | P | | P | 05 38 44.1 | -0.3 | |
| | baz=257,SNR=7.3 | | | | | | | | |
| G15K | Niukluk | 93.17 | 25 | P | | P | 05 38 43.9 | -1.0 | |
| | baz=257 | | | | | | | | |
| N14K | Kuskokwak Cree | 93.20 | 30 | P | | P | 05 38 44.2 | -0.8 | |
| | baz=259 | | | | | | | | |
| M14K | Bethel | 93.22 | 29 | P | | P | 05 38 44.4 | -0.7 | |
| | baz=259 | | | | | | | | |
| O14K | Tigyukauivet M | 93.28 | 31 | P | | P | 05 38 44.4 | -1.0 | |
| | baz=259 | | | | | | | | |
| CHNA | Chernabura Isl | 93.41 | 35 | P | | P | 05 38 45.3 | -0.8 | |
| | baz=260 | | | | | | | | |
| C16K | Lisburne Hills | 93.42 | 21 | IAmb | | IAmb | 05 38 47.1 | | |
| | comp=Z,75nm,1.1s | | | | | | | | |
| C16K | Lisburne Hills | 93.42 | 21 | P | | P | 05 38 45.5 | -0.4 | |
| | baz=256 | | | | | | | | |
| L15K | Ungalak Mounta | 93.62 | 28 | P | | P | 05 38 45.9 | -1.1 | |
| | baz=259,SNR=5.7 | | | | | | | | |
| K15K | Wolf Creek Mou | 93.72 | 28 | P | | P | 05 38 46.7 | -0.8 | |
| | baz=259 | | | | | | | | |
| M15K | Kasigluk River | 93.83 | 29 | P | | P | 05 38 46.6 | -1.3 | |
| | baz=260 | | | | | | | | |
| H16K | Elim | 93.85 | 25 | P | | P | 05 38 47.1 | -0.9 | |
| | baz=259,SNR=13 | | | | | | | | |
| G16K | Koyuk River | 93.95 | 25 | IAmb | | IAmb | 05 38 49.3 | | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| G16K | Koyuk River | 93.95 | 25 | P | | P | 05 38 47.9 | -0.5 | |
| | baz=259,SNR=12 | | | | | | | | |
| O15K | Ungalikthiuk R | 94.00 | 31 | P | | P | 05 38 47.7 | -1.1 | |
| | baz=261 | | | | | | | | |
| KARP | Karpathos | 94.03 | 305 | IAMs_20 | | IAMs_20 | 06 23 41.2 | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| N15K | Kwethluk River | 94.03 | 30 | P | | P | 05 38 47.8 | -1.1 | |
| | baz=260,SNR=5.5 | | | | | | | | |
| D17K | Noatak River | 94.13 | 22 | P | | P | 05 38 49.2 | +0.1 | |
| | baz=258 | | | | | | | | |
| C17K | DeLong Mountai | 94.25 | 21 | P | | P | 05 38 49.5 | -0.3 | |
| | baz=258,SNR=7.8 | | | | | | | | |
| MILM | Milestii Mici | 94.26 | 317 | eP | | P | 05 38 47.0 | -3.2 | |
| MILM | Milestii Mici | 94.26 | 317 | ePP | | PP | 05 42 36.0 | -1.4 | |
| | comp=Z,540nm,10.8s | | | | | | | | |
| MILM | | | | eSKS | | SKSac | 05 49 16.0 | -7.7 | |
| MILM | Milestii Mici | 94.26 | 317 | eP | | P | 05 38 47.0 | -3.2 | |
| MILM | | | | e | | | 05 42 36.0 | | |
| MILM | | | | e | | | 05 49 16.0 | | |
| MILM | | | | e | | | 05 49 58.0 | | |
| KIS | Kishinev | 94.27 | 317 | ePP | | PP | 05 42 36.0 | -1.4 | |
| | comp=Z,210nm,9.8s | | | | | | | | |
| KIS | | | | eL | | L | 06 25 39.0 | | |
| KIS | | | | LRM | | MLR | 06 27 30.0 | | |
| | comp=Z,250nm,20.0s | | | | | | | | |
| RDOG | Red Dog Mine | 94.27 | 22 | P | | P | 05 38 49.5 | -0.3 | |
| | baz=258 | | | | | | | | |
| CHGN | Chignik | 94.30 | 34 | P | | P | 05 38 48.9 | -1.2 | |
| | baz=262 | | | | | | | | |
| J16K | Anvik River | 94.32 | 27 | IAmb | | IAmb | 05 38 51.3 | | |
| | comp=Z,55nm,1.1s | | | | | | | | |
| J16K | Anvik River | 94.32 | 27 | P | | P | 05 38 49.8 | -0.3 | |
| | baz=260,SNR=20 | | | | | | | | |
| I17K | Unalakleet | 94.38 | 26 | IAmb | | IAmb | 05 38 51.7 | | |
| | comp=Z,52nm,1.1s | | | | | | | | |
| I17K | Unalakleet | 94.38 | 26 | P | | P | 05 38 50.0 | -0.4 | |
| | baz=260,SNR=13 | | | | | | | | |
| E17K | Hotham Inlet | 94.48 | 23 | P | | P | 05 38 50.3 | -0.5 | |
| | baz=259 | | | | | | | | |
| AKASG | Malin Array Be | 94.49 | 320 | P | | P | 05 38 48.4 | -2.8 | |
| | comp=Z,0.6nm,0.4s,baz=86,slow=3.8,SNR=7.8 | | | | | | | | |
| AKASG | | | | LR | | LR | 06 28 15.5 | | |
| | comp=Z,842nm,18.1s,baz=84,slow=40 | | | | | | | | |
| AKASG | Malin Array Be | 94.49 | 320 | i P | | P | 05 38 54.5 | +3.3 | |
| AKBB | Malin Array Si | 94.49 | 320 | ceP | | P | 05 38 48.3 | -2.9 | |
| AKBB | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.5s | | | | | | | | |
| KIEV | Kiev | 94.50 | 320 | IAMs_20 | | IAMs_20 | 06 27 15.5 | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| KIEV | Kiev | 94.50 | 320 | P | | P | 05 38 48.7 | -2.5 | |
| L16K | Owhat River | 94.58 | 28 | P | | P | 05 38 50.6 | -0.8 | |
| | baz=261 | | | | | | | | |
| F17K | Baldwin Pennin | 94.59 | 24 | P | | P | 05 38 50.8 | -0.5 | |
| | baz=260 | | | | | | | | |
| G17K | Kiwalik Mounta | 94.67 | 25 | P | | P | 05 38 51.2 | -0.5 | |
| | baz=260,SNR=16 | | | | | | | | |
| M16K | Timber Creek | 94.72 | 29 | P | | P | 05 38 51.3 | -0.7 | |
| | baz=261 | | | | | | | | |
| N16K | Nishlik Lake | 94.73 | 30 | P | | P | 05 38 51.4 | -0.8 | |
| | baz=262,SNR=6.3 | | | | | | | | |
| H17K | Granite Mounta | 94.89 | 25 | IAmb | | IAmb | 05 38 53.8 | | |
| | comp=Z,52nm,1.1s | | | | | | | | |
| H17K | Granite Mounta | 94.89 | 25 | P | | P | 05 38 52.6 | -0.2 | |
| | baz=261,SNR=25 | | | | | | | | |
| APA | Apatity | 94.91 | 338 | ⇓i P | | P | 05 38 46.7 | -6.0 | |
| APA | | | | i | | | 05 42 44.0 | | |
| APA | | | | i PPP | | PPP | 05 44 52.0 | | |
| APA | | | | i | | | 05 49 22.0 | | |
| APA | | | | i | | | 05 49 54.0 | | |
| APA | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| B18K | Kokolik River | 94.91 | 21 | P | | P | 05 38 53.0 | +0.3 | |
| | baz=260,SNR=6.5 | | | | | | | | |
| O16K | Kokwok River B | 94.94 | 31 | P | | P | 05 38 52.1 | -1.0 | |
| | baz=262 | | | | | | | | |
| C18K | Utukok River | 95.00 | 21 | P | | P | 05 38 53.0 | -0.3 | |
| | baz=260 | | | | | | | | |
| E18K | Tukpahlearik C | 95.01 | 23 | IAmb | | IAmb | 05 38 54.5 | | |
| | comp=Z,28nm,1.1s | | | | | | | | |
| E18K | Tukpahlearik C | 95.01 | 23 | P | | P | 05 38 52.9 | -0.4 | |
| | baz=260,SNR=9.3 | | | | | | | | |
| J17K | VABM Dome | 95.01 | 27 | IAmb | | IAmb | 05 38 54.4 | | |
| | comp=Z,48nm,1.4s | | | | | | | | |
| J17K | VABM Dome | 95.01 | 27 | P | | P | 05 38 52.7 | -0.7 | |
| | baz=262,SNR=12 | | | | | | | | |
| L17K | Donlin | 95.19 | 28 | P | | P | 05 38 53.9 | -0.3 | |
| | baz=262 | | | | | | | | |
| F18K | Selawik | 95.25 | 24 | P | | P | 05 38 53.5 | -0.8 | |
| | baz=261 | | | | | | | | |
| K17K | Iditarod | 95.27 | 27 | IAmb | | IAmb | 05 38 55.5 | | |
| | comp=Z,72nm,1.4s | | | | | | | | |
| K17K | Iditarod | 95.27 | 27 | P | | P | 05 38 53.9 | -0.6 | |
| | baz=262,SNR=13 | | | | | | | | |
| A19K | Wainwright | 95.31 | 20 | P | | P | 05 38 54.1 | -0.4 | |
| | baz=260 | | | | | | | | |
| TSUM | Tsumeb | 95.36 | 250 | P | | P | 05 38 55.8 | -0.3 | |
| TSUM | Tsumeb | 95.36 | 250 | IAMs_20 | | IAMs_20 | 06 29 53.0 | | |
| | comp=Z,1µm,18.0s | | | | | | | | |
| TSUM | Tsumeb | 95.36 | 250 | ⇑i P | | P | 05 38 56.9 | +0.7 | |
| TSUM | Tsumeb | 95.36 | 250 | ⇑i P | | P | 05 38 56.8 | +0.7 | |
| TSUM | Tsumeb | 95.36 | 250 | LR | | LR | 06 16 26.4 | | |
| | comp=Z,854nm,21.7s,baz=101,slow=32 | | | | | | | | |
| O17K | Koliganek Bris | 95.46 | 30 | P | | P | 05 38 54.1 | -1.3 | |
| | baz=263 | | | | | | | | |
| M17K | Holitna River | 95.50 | 29 | P | | P | 05 38 55.0 | -0.6 | |
| | baz=263 | | | | | | | | |
| N17K | Nushagak Hills | 95.51 | 30 | P | | P | 05 38 55.2 | -0.4 | |
| | baz=263 | | | | | | | | |
| G18K | Tagagawik | 95.55 | 24 | IAmb | | IAmb | 05 38 56.3 | | |
| | comp=Z,60nm,1.9s | | | | | | | | |
| G18K | Tagagawik | 95.55 | 24 | P | | P | 05 38 55.0 | -0.8 | |
| | baz=262,SNR=6.6 | | | | | | | | |
| VRI | Vrincioaia | 95.56 | 315 | P | | P | 05 38 54.3 | -2.0 | |
| VRI | Vrincioaia | 95.56 | 315 | P | | P | 05 38 54.3 | -2.0 | |
| H18K | Honhosa River | 95.57 | 25 | IAmb | | IAmb | 05 38 56.6 | | |
| | comp=Z,38nm,1.3s | | | | | | | | |
| H18K | Honhosa River | 95.57 | 25 | P | | P | 05 38 55.0 | -0.9 | |
| | baz=262,SNR=9.5 | | | | | | | | |
| R17L | Mt. Peulik Vol | 95.59 | 33 | P | | P | 05 38 55.7 | -0.4 | |
| | baz=263 | | | | | | | | |
| C19K | Lookout Ridge | 95.65 | 21 | IAmb | | IAmb | 05 38 57.8 | | |
| | comp=Z,38nm,1.1s | | | | | | | | |
| C19K | Lookout Ridge | 95.65 | 21 | P | | P | 05 38 55.9 | -0.3 | |
| | baz=262,SNR=8.8 | | | | | | | | |
| P17K | Kvichak River | 95.73 | 31 | P | | P | 05 38 55.0 | -1.7 | |
| | baz=263 | | | | | | | | |
| MNK | Minsk | 95.76 | 324 | i P | | P | 05 38 53.6 | -3.3 | |
| MNK | | | | i | | | 05 42 44.7 | | |
| MNK | | | | i PPP | | PPP | 05 44 47.0 | | |
| MNK | | | | i S | | SKSac | 05 49 29.5 | -1.9 | |
| MNK | | | | i | | | 05 49 57.8 | | |
| MNK | | | | i SSS | | SSS | 06 00 24.4 | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=N,16nm,0.9s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=E,5.0nm,0.9s | | | | | | | | |
| CHIR | Chirikof Islan | 95.79 | 35 | P | | P | 05 38 55.9 | -1.1 | |
| | baz=264 | | | | | | | | |
| IDI | Anoyia | 95.84 | 305 | LR | | LR | 06 25 55.2 | | |
| | comp=E,645nm,21.8s,baz=83,slow=38 | | | | | | | | |
| Q17K | Contact Creek | 95.91 | 32 | P | | P | 05 38 56.9 | -0.8 | |
| | baz=264 | | | | | | | | |
| L18K | Granite Mounta | 95.95 | 28 | IAmb | | IAmb | 05 38 58.5 | | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| L18K | Granite Mounta | 95.95 | 28 | P | | P | 05 38 56.9 | -0.8 | |
| | baz=264,SNR=8.5 | | | | | | | | |
| F19K | Shaleruckik Mo | 96.02 | 23 | IAmb | | IAmb | 05 38 57.6 | | |
| | comp=Z,45nm,2.0s | | | | | | | | |
| F19K | Shaleruckik Mo | 96.02 | 23 | P | | P | 05 38 56.7 | -1.2 | |
| | baz=263,SNR=8.0 | | | | | | | | |
| MLR | Muntele Rosu | 96.07 | 315 | LR | | LR | 06 28 50.6 | | |
| | comp=Z,2µm,20.1s,baz=78,slow=40 | | | | | | | | |
| J18K | Innoko River | 96.08 | 27 | IAmb | | IAmb | 05 38 58.7 | | |
| | comp=Z,38nm,1.3s | | | | | | | | |
| J18K | Innoko River | 96.08 | 27 | P | | P | 05 38 56.9 | -1.3 | |
| | baz=264,SNR=16 | | | | | | | | |
| D19K | Kuna River | 96.10 | 22 | P | | P | 05 38 57.8 | -0.4 | |
| D19K | | | | IAmb | | IAmb | 05 38 59.1 | | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| D19K | Kuna River | 96.10 | 22 | P | | P | 05 38 57.6 | -0.7 | |
| | baz=263,SNR=14 | | | | | | | | |
| GCSA | Galena City Sc | 96.15 | 26 | P | | P | 05 38 57.8 | -0.7 | |
| | baz=264 | | | | | | | | |
| N18K | Kilae Creek | 96.16 | 30 | IAmb | | IAmb | 05 39 00.3 | | |
| | comp=Z,50nm,1.8s | | | | | | | | |
| N18K | Kilae Creek | 96.16 | 30 | P | | P | 05 38 57.8 | -0.8 | |
| | baz=264 | | | | | | | | |
| G19K | Purcell Mounta | 96.22 | 24 | IAmb | | IAmb | 05 38 59.7 | | |
| | comp=Z,32nm,1.1s | | | | | | | | |
| G19K | Purcell Mounta | 96.22 | 24 | P | | P | 05 38 58.0 | -0.8 | |
| | baz=264,SNR=24 | | | | | | | | |
| M18K | Stony River | 96.28 | 29 | P | | P | 05 38 58.5 | -0.7 | |
| | baz=264,SNR=6.2 | | | | | | | | |
| E19K | Redstone River | 96.31 | 23 | IAmb | | IAmb | 05 39 01.3 | | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| E19K | Redstone River | 96.31 | 23 | P | | P | 05 38 58.8 | -0.3 | |
| | baz=264,SNR=18 | | | | | | | | |
| P18K | Big Mountain, | 96.36 | 31 | P | | P | 05 38 58.8 | -0.8 | |
| | baz=264 | | | | | | | | |
| Q18K | Katmai Hardscr | 96.41 | 32 | P | | P | 05 38 57.8 | -2.2 | |
| | baz=265 | | | | | | | | |
| H19K | Roundabout Mou | 96.41 | 25 | IAmb | | IAmb | 05 39 00.8 | | |
| | comp=Z,49nm,1.2s | | | | | | | | |
| H19K | Roundabout Mou | 96.41 | 25 | P | | P | 05 38 59.2 | -0.4 | |
| | baz=264,SNR=27 | | | | | | | | |
| O18K | Koktuh Hills | 96.42 | 31 | P | | P | 05 38 58.5 | -1.3 | |
| | baz=265 | | | | | | | | |
| R18K | Karluk | 96.60 | 33 | P | | P | 05 38 58.8 | -1.9 | |
| | baz=265 | | | | | | | | |
| B20K | Meade River | 96.61 | 20 | IAmb | | IAmb | 05 39 01.8 | | |
| | comp=Z,39nm,1.4s | | | | | | | | |
| B20K | Meade River | 96.61 | 20 | P | | P | 05 39 00.1 | -0.4 | |
| | baz=264 | | | | | | | | |
| J19K | Poorman | 96.61 | 26 | IAmb | | IAmb | 05 39 01.5 | | |
| | comp=Z,32nm,1.2s | | | | | | | | |
| J19K | Poorman | 96.61 | 26 | P | | P | 05 38 59.9 | -0.8 | |
| | baz=265,SNR=16 | | | | | | | | |
| SII | Sitkinak Islan | 96.66 | 34 | IAMs_20 | | IAMs_20 | 06 17 03.0 | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| SII | Sitkinak Islan | 96.66 | 34 | P | | P | 05 39 00.3 | -0.7 | |
| | baz=265 | | | | | | | | |
| D20K | Etivluk River | 96.67 | 22 | P | | P | 05 39 00.1 | -0.7 | |
| | baz=264,SNR=16 | | | | | | | | |
| VSU | Vasula | 96.77 | 328 | i P | | P | 05 39 01.0 | -0.4 | |
| VSU | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| E20K | Nigu River | 96.78 | 22 | P | | P | 05 39 01.1 | -0.3 | |
| | baz=265 | | | | | | | | |
| L19K | White Mountain | 96.80 | 28 | IAmb | | IAmb | 05 39 02.3 | | |
| | comp=Z,32nm,1.6s | | | | | | | | |
| L19K | White Mountain | 96.80 | 28 | P | | P | 05 39 00.7 | -0.9 | |
| | baz=265,SNR=5.8 | | | | | | | | |
| F20K | Avaraart Lake | 96.85 | 23 | P | | P | 05 39 01.3 | -0.3 | |
| | baz=265 | | | | | | | | |
| N19K | Bonanza Creek | 96.86 | 30 | IAmb | | IAmb | 05 39 02.5 | | |
| | comp=Z,33nm,1.1s | | | | | | | | |
| N19K | Bonanza Creek | 96.86 | 30 | P | | P | 05 39 00.9 | -1.1 | |
| | baz=265,SNR=8.7 | | | | | | | | |
| O19K | Port Alsworth | 96.89 | 30 | P | | P | 05 39 01.6 | -0.4 | |
| | baz=265 | | | | | | | | |
| A21K | Barrow | 96.92 | 19 | P | | P | 05 39 01.4 | -0.5 | |
| | baz=265 | | | | | | | | |
| M19K | Big River Lodg | 97.00 | 28 | IAmb | | IAmb | 05 39 03.5 | | |
| | comp=Z,54nm,2.0s | | | | | | | | |
| M19K | Big River Lodg | 97.00 | 28 | P | | P | 05 39 02.2 | -0.2 | |
| | baz=266 | | | | | | | | |
| H20K | Anotleneega Mo | 97.06 | 25 | P | | P | 05 39 01.6 | -1.0 | |
| | baz=266,SNR=7.3 | | | | | | | | |
| I20K | Naaghedeneel | 97.17 | 26 | IAmb | | IAmb | 05 39 04.2 | | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| I20K | Naaghedeneel | 97.17 | 26 | P | | P | 05 39 02.7 | -0.4 | |
| | baz=266,SNR=5.7 | | | | | | | | |
| OHAK | Old Harbor | 97.20 | 33 | P | | P | 05 39 02.1 | -1.3 | |
| | baz=266 | | | | | | | | |
| K20K | Telida | 97.25 | 27 | IAmb | | IAmb | 05 39 04.6 | | |
| | comp=Z,44nm,1.6s | | | | | | | | |
| K20K | Telida | 97.25 | 27 | P | | P | 05 39 02.9 | -0.6 | |
| | baz=266,SNR=10 | | | | | | | | |
| J20K | Nowinta River | 97.27 | 26 | IAmb | | IAmb | 05 39 04.7 | | |
| | comp=Z,51nm,1.6s | | | | | | | | |
| J20K | Nowinta River | 97.27 | 26 | P | | P | 05 39 02.9 | -0.7 | |
| | baz=266,SNR=17 | | | | | | | | |
| L20K | Farewell, AK | 97.28 | 28 | P | | P | 05 39 02.9 | -0.8 | |
| | baz=266,SNR=5.5 | | | | | | | | |
| FINES | FINESS Array B | 97.33 | 331 | P | | P | 05 39 01.3 | -2.5 | |
| | comp=Z,3.5nm,0.9s,baz=212,slow=6.8,SNR=5.6 | | | | | | | | |
| FINES | | | | PKiKP | | PKiKP | 05 43 38.3 | -0.6 | |
| | comp=Z,2.5nm,0.8s,baz=318,slow=1.9,SNR=3.6 | | | | | | | | |
| FINES | | | | LR | | LR | 06 29 27.8 | | |
| | comp=Z,1µm,18.2s,baz=96,slow=40 | | | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | | | |
| P19K | Oil Pt | 97.40 | 31 | P | | P | 05 39 03.8 | -0.5 | |
| | baz=266 | | | | | | | | |
| A22K | Sinclair Lake | 97.43 | 19 | P | | P | 05 39 04.1 | -0.1 | |
| | baz=266 | | | | | | | | |
| B21K | Ikpikpuk River | 97.46 | 21 | P | | P | 05 39 04.0 | -0.3 | |
| | baz=266 | | | | | | | | |
| KEV | Kevo | 97.49 | 339 | IAMs_20 | | IAMs_20 | 06 27 48.0 | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| IMAR | Indian Mountai | 97.56 | 24 | P | | P | 05 39 03.9 | -1.0 | |
| M20K | Styx River | 97.59 | 29 | IAmb | | IAmb | 05 39 05.7 | | |
| | comp=Z,59nm,1.9s | | | | | | | | |
| M20K | Styx River | 97.59 | 29 | P | | P | 05 39 04.3 | -0.9 | |
| | baz=267 | | | | | | | | |
| E21K | Killik River | 97.61 | 22 | P | | P | 05 39 04.3 | -0.8 | |
| | baz=267 | | | | | | | | |
| KDAK | Kodiak Island | 97.62 | 33 | LR | | LR | 06 18 24.3 | | |
| | comp=Z,388nm,21.3s,baz=260,slow=33 | | | | | | | | |
| KDAK | Kodiak Island | 97.62 | 33 | P | | P | 05 39 04.0 | -1.3 | |
| | baz=266 | | | | | | | | |
| G21K | Allakaket | 97.69 | 24 | P | | P | 05 39 04.8 | -0.7 | |
| | baz=267,SNR=8.6 | | | | | | | | |
| O20K | Slope Mountain | 97.73 | 30 | P | | P | 05 39 05.3 | -0.6 | |
| | baz=267 | | | | | | | | |
| F21K | Alatna River | 97.73 | 23 | P | | P | 05 39 05.0 | -0.7 | |
| | baz=267 | | | | | | | | |
| Q20K | Shuyak Island | 97.77 | 32 | P | | P | 05 39 04.5 | -1.4 | |
| | baz=267 | | | | | | | | |
| B22K | Teshekpuk Lake | 97.91 | 20 | P | | P | 05 39 05.6 | -0.7 | |
| | baz=268 | | | | | | | | |
| H21K | Melozitna Rive | 97.93 | 25 | IAmb | | IAmb | 05 39 07.7 | | |
| | comp=Z,28nm,1.6s | | | | | | | | |
| H21K | Melozitna Rive | 97.93 | 25 | P | | P | 05 39 05.7 | -0.8 | |
| | baz=267,SNR=12 | | | | | | | | |
| SPCR | Spurr Chakacha | 97.99 | 29 | P | | P | 05 39 06.1 | -0.9 | |
| | baz=267 | | | | | | | | |
| N20K | Mount Spurr | 97.99 | 29 | P | | P | 05 39 04.9 | -2.2 | |
| | baz=267 | | | | | | | | |
| ARCES | ARCESS Array B | 98.00 | 339 | LR | | LR | 06 30 45.8 | | |
| | comp=Z,3µm,18.0s,baz=106,slow=40 | | | | | | | | |
| PABE | Paberze | 98.08 | 325 | IAMs_20 | | IAMs_20 | 06 31 49.5 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| D22K | Ayikyak River | 98.11 | 21 | P | | P | 05 39 06.3 | -1.0 | |
| | baz=268 | | | | | | | | |
| HOM | Homer | 98.21 | 31 | P | | P | 05 39 05.8 | -2.1 | |
| | baz=268 | | | | | | | | |
| F22K | John River | 98.25 | 23 | P | | P | 05 39 07.6 | -0.4 | |
| | baz=268 | | | | | | | | |
| SKT | Skwentna | 98.35 | 28 | P | | P | 05 39 06.5 | -2.0 | |
| | baz=268,SNR=7.8 | | | | | | | | |
| E22K | Anaktuvuk Pass | 98.41 | 22 | P | | P | 05 39 08.2 | -0.5 | |
| | baz=269 | | | | | | | | |
| SUW | Suwalki | 98.47 | 323 | IAMs_20 | | IAMs_20 | 06 28 33.7 | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| CAPN | Captain Cook N | 98.49 | 30 | P | | P | 05 39 08.6 | -0.5 | |
| | baz=268 | | | | | | | | |
| G22K | Bettles | 98.50 | 23 | P | | P | 05 39 08.5 | -0.6 | |
| | baz=269 | | | | | | | | |
| H22K | Ishtalitna Cre | 98.53 | 25 | P | | P | 05 39 08.8 | -0.4 | |
| | baz=269,SNR=8.6 | | | | | | | | |
| BRLK | Bradley Lake | 98.59 | 31 | IAmb | | IAmb | 05 39 11.9 | | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| BPAW | Bear Paw Mtn. | 98.66 | 26 | P | | P | 05 39 08.6 | -1.3 | |
| | baz=269,SNR=7.0 | | | | | | | | |
| BRSE | Bradley Lake S | 98.67 | 31 | P | | P | 05 39 09.6 | -0.3 | |
| | baz=268 | | | | | | | | |
| SUA | Susitna One | 98.71 | 29 | IAmb | | IAmb | 05 39 09.5 | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| SUA | Susitna One | 98.71 | 29 | P | | P | 05 39 08.9 | -1.3 | |
| | baz=269,SNR=7.1 | | | | | | | | |
| MLY | Manley | 98.78 | 25 | P | | P | 05 39 09.6 | -0.9 | |
| | baz=269,SNR=9.7 | | | | | | | | |
| KOLS | Kolonicke sedl | 98.81 | 318 | eP | | Pdif | 05 39 15.1 | +4.2 | |
| KOLS | Kolonicke sedl | 98.81 | 318 | ePDIFF | | Pdif | 05 39 15.1 | +4.2 | |
| D23K | Nanushuk River | 98.83 | 21 | P | | P | 05 39 10.3 | -0.2 | |
| | baz=270 | | | | | | | | |
| C23K | Itkillik River | 98.86 | 21 | P | | P | 05 39 10.3 | -0.3 | |
| | baz=270,SNR=7.1 | | | | | | | | |
| COLD | Coldfoot | 99.01 | 23 | P | | Pdif | 05 39 10.7 | -0.6 | |
| | baz=270,SNR=11 | | | | | | | | |
| M22K | Willow | 99.01 | 29 | IAmb | | IAmb | 05 39 52.3 | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| M22K | Willow | 99.01 | 29 | P | | Pdif | 05 39 09.5 | -1.9 | |
| | baz=269 | | | | | | | | |
| G23K | Bananza Creek | 99.08 | 24 | P | | Pdif | 05 39 11.0 | -0.7 | |
| | baz=270,SNR=17 | | | | | | | | |
| O22K | Cooper Landing | 99.19 | 30 | P | | Pdif | 05 39 12.1 | -0.2 | |
| | baz=269 | | | | | | | | |
| RC01 | Rabbit Creek A | 99.19 | 29 | P | | Pdif | 05 39 10.6 | -1.7 | |
| | baz=270 | | | | | | | | |
| E23K | Chandalar | 99.23 | 22 | P | | Pdif | 05 39 12.1 | -0.3 | |
| | baz=271,SNR=17 | | | | | | | | |
| TOLK | Toolik Lake Re | 99.24 | 22 | P | | Pdif | 05 39 12.1 | -0.3 | |
| | baz=271,SNR=5.6 | | | | | | | | |
| H23K | Yukon River | 99.28 | 25 | P | | Pdif | 05 39 12.3 | -0.4 | |
| | baz=270,SNR=11 | | | | | | | | |
| SEW | Seward | 99.32 | 30 | P | | Pdif | 05 39 12.9 | 0.0 | |
| | baz=270 | | | | | | | | |
| CRVS | Cervenica-Dubn | 99.35 | 318 | ePP | | PP | 05 43 24.0 | +7.4 | |
| I23K | Minto, Yukon-K | 99.36 | 25 | IAmb | | IAmb | 05 39 13.9 | | |
| | comp=Z,75nm,1.6s | | | | | | | | |
| I23K | Minto, Yukon-K | 99.36 | 25 | P | | Pdif | 05 39 12.4 | -0.5 | |
| | baz=270,SNR=21 | | | | | | | | |
| PMR | Palmer | 99.48 | 29 | IAmb | | IAmb | 05 39 13.2 | | |
| | comp=Z,41nm,1.7s | | | | | | | | |
| PMR | Palmer | 99.48 | 29 | P | | Pdif | 05 39 12.0 | -1.5 | |
| | baz=270 | | | | | | | | |
| NEA2 | Nenana | 99.49 | 26 | P | | Pdif | 05 39 12.7 | -0.8 | |
| | baz=271 | | | | | | | | |
| D24K | Happy Valley | 99.50 | 21 | P | | Pdif | 05 39 13.3 | -0.2 | |
| | baz=272 | | | | | | | | |
| C24K | Franklin Bluff | 99.52 | 21 | P | | Pdif | 05 39 12.5 | -1.0 | |
| | baz=272 | | | | | | | | |
| MCK | McKinley | 99.56 | 27 | P | | Pdif | 05 39 12.6 | -1.3 | |
| | baz=271 | | | | | | | | |
| RND | Reindeer | 99.60 | 27 | IAmb | | IAmb | 05 39 13.6 | | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| E24K | Your Creek | 99.65 | 22 | P | | Pdif | 05 39 12.8 | -1.5 | |
| | baz=272 | | | | | | | | |
| WAT1 | Susitna Watana | 99.75 | 28 | P | | Pdif | 05 39 12.6 | -2.2 | |
| | baz=271 | | | | | | | | |
| KNK | Knik Glacier | 99.81 | 29 | P | | Pdif | 05 39 13.3 | -1.7 | |
| | baz=271 | | | | | | | | |
| SML | Sawmill | 99.86 | 29 | P | | Pdif | 05 39 13.6 | -1.8 | |
| | baz=271,SNR=6.7 | | | | | | | | |
| PWL | Port Wells | 99.87 | 30 | P | | Pdif | 05 39 14.2 | -1.2 | |
| | baz=271 | | | | | | | | |
| F24K | Squaw Lake | 99.90 | 23 | P | | Pdif | 05 39 14.4 | -1.0 | |
| | baz=272,SNR=7.0 | | | | | | | | |
| H24K | Hoodoo Dome | 99.97 | 25 | P | | Pdif | 05 39 15.1 | -0.7 | |
| | baz=272,SNR=11 | | | | | | | | |
| G24K | Hadweenzic Riv | 100.09 | 24 | P | | Pdif | 05 39 15.4 | -0.8 | |
| | baz=272,SNR=8.4 | | | | | | | | |
| WAT6 | Susitna Watana | 100.12 | 28 | P | | Pdif | 05 39 15.2 | -1.4 | |
| | baz=272,SNR=9.9 | | | | | | | | |
| M23K | Glacier View | 100.15 | 29 | P | | Pdif | 05 39 15.3 | -1.3 | |
| | baz=271 | | | | | | | | |
| POKR | Poker Flat Res | 100.18 | 25 | P | | Pdif | 05 39 15.8 | -0.9 | |
| | baz=272 | | | | | | | | |
| DHY | Denali Highway | 100.28 | 27 | P | | Pdif | 05 39 16.1 | -1.2 | |
| | baz=272 | | | | | | | | |
| SCM | Sheep Creek Mo | 100.34 | 29 | P | | Pdif | 05 39 15.9 | -1.6 | |
| | baz=272 | | | | | | | | |
| P23K | Montague Islan | 100.35 | 31 | P | | Pdif | 05 39 16.9 | -0.6 | |
| | baz=271 | | | | | | | | |
| D25K | Kavik River | 100.36 | 21 | P | | Pdif | 05 39 16.9 | -0.5 | |
| | baz=274 | | | | | | | | |
| HDA | Harding Lake | 100.42 | 26 | P | | Pdif | 05 39 16.6 | -1.1 | |
| | baz=272 | | | | | | | | |
| ILAR | Eielson Array | 100.42 | 26 | | | Pdif | 05 39 15.5 | -2.2 | |
| ILAR | Eielson Array | 100.42 | 26 | P | | Pdif | 05 39 14.6 | -3.1 | |
| | comp=Z,0.8nm,0.6s,baz=255,slow=3.8,SNR=10 | | | | | | | | |
| ILAR | | | | PP | | PP | 05 43 20.8 | -3.5 | |
| | comp=Z,1.3nm,1.0s,baz=280,slow=7.9,SNR=4.7 | | | | | | | | |
| ILAR | | | | PKKPbc | | PKKPbc | 05 55 33.5 | -2.6 | |
| | comp=Z,2.6nm,1.0s,baz=92,slow=2.4,SNR=12 | | | | | | | | |
| GLI | Glacier Island | 100.48 | 30 | P | | Pdif | 05 39 16.9 | -1.2 | |
| | baz=272 | | | | | | | | |
| G25K | Bearman Lake | 100.64 | 24 | P | | Pdif | 05 39 18.4 | -0.2 | |
| | baz=274 | | | | | | | | |
| F25K | Christian Rive | 100.76 | 23 | P | | Pdif | 05 39 19.2 | 0.0 | |
| | baz=274,SNR=5.9 | | | | | | | | |
| H25L | Birch Creek | 100.78 | 24 | P | | Pdif | 05 39 18.7 | -0.6 | |
| | baz=274,SNR=9.9 | | | | | | | | |
| C26K | Camden Bay | 100.82 | 20 | P | | Pdif | 05 39 19.5 | +0.2 | |
| | baz=276 | | | | | | | | |
| KBS | Kingsbay | 100.86 | 349 | IAMs_20 | | IAMs_20 | 06 32 50.9 | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| M24K | Tolsona, Glenn | 100.87 | 28 | P | | Pdif | 05 39 19.3 | -0.6 | |
| | baz=273 | | | | | | | | |
| Q23K | Middleton Isla | 100.90 | 31 | P | | Pdif | 05 39 19.0 | -0.9 | |
| | baz=272 | | | | | | | | |
| PRP | Porcupine Dome | 100.96 | 25 | P | | Pdif | 05 39 19.6 | -0.6 | |
| | baz=274 | | | | | | | | |
| K24K | Donnelly Dome | 100.96 | 27 | P | | Pdif | 05 39 19.3 | -0.8 | |
| | baz=274 | | | | | | | | |
| KLU | Klutina | 101.02 | 29 | P | | Pdif | 05 39 19.4 | -1.2 | |
| | baz=273 | | | | | | | | |
| J25K | Salcha River, | 101.08 | 26 | P | | Pdif | 05 39 19.8 | -1.0 | |
| | baz=274,SNR=10.0 | | | | | | | | |
| PAX | Paxson | 101.15 | 27 | P | | Pdif | 05 39 20.2 | -0.9 | |
| | baz=274,SNR=6.4 | | | | | | | | |
| EYAK | Cordova Ski Ar | 101.15 | 30 | P | | Pdif | 05 39 20.2 | -0.8 | |

MODS Modra-Piesok 102.12 318 ePDIFF Pdif 05 39 32.0 +6.4
E27K Coleen River 102.22 22 P Pdif 05 39 25.0 -0.7
baz=278,SNR=8.7
D27M Malcolm River 102.28 21 P Pdif 05 39 25.3 -0.7
baz=279
M26K Nabesna, AK 102.33 28 P Pdif 05 39 25.4 -0.9
baz=276
G27K Doyon Strip 102.39 23 P Pdif 05 39 26.3 -0.1
baz=278,SNR=9.3
KRLC Kraliky 102.40 319 AMS AMS 06 31 30.0
comp=Z,1µm,20.1s
MCARA McCarthy VSAT 102.42 29 P Pdif 05 39 26.4 -0.2
baz=275
CRQE Cirque 102.44 30 P Pdif 05 39 26.2 -0.7
baz=275
H27K Steamboat Moun 102.52 24 P Pdif 05 39 27.1 +0.1
baz=278,SNR=6.8
VRAC Vranov 102.55 319 ePP PP 05 43 37.5 -3.3
VRAC e 05 55 50.4
I27K Kandik River 102.56 25 P Pdif 05 39 26.5 -0.8
baz=278,SNR=17
K27K Chicken 102.57 26 P Pdif 05 39 27.0 -0.3
baz=277
KRUC Moravsky 102.69 318 ePP PP 05 43 40.5 -1.3
KRUC ePKKP PKKPbc 05 55 27.8 -1.3
KRUC e 05 55 49.7
DPC Dobruska-Polom 102.69 320 ePDIFF Pdif 05 39 25.5 -2.7
DPC eSKS SKSac 05 50 01.3 -5.0
DPC AMS AMS 06 31 40.0
comp=Z,2µm,19.9s
DPC Dobruska-Polom 102.69 320 eP Pdif 05 39 25.5 -2.7
DPC e 05 50 01.3
DPC MLR MLR
comp=Z,2µm,19.9s
OSTC Ostas 102.75 320 AMS AMS 06 34 10.0
comp=Z,2µm,17.1s
RONA Rosalia, Austr 102.80 317 i PP PP 05 43 43.3 +0.6
comp=Z,8.2nm,1.8s
RONA i PKKP PKKPbc 05 55 28.4 -0.3
comp=Z,6.8nm,1.4s
L27K Beaver Creek, 102.80 27 Pdif 05 39 28.3 0.0
L27K Beaver Creek, 102.80 27 P Pdif 05 39 28.2 -0.1
baz=277,SNR=12
BCAR Beaver Creek A 102.81 27 Pdif 05 39 27.9 -0.5
CHVC Chvalec 102.85 320 ePDIFF Pdif 05 39 28.8 0.0
CHVC eSKS SKSac 05 50 01.9 -5.1
CHVC AMS AMS 06 34 10.0
comp=Z,2µm,18.5s
CHVC Chvalec 102.85 320 eP Pdif 05 39 28.8 0.0
CHVC e 05 50 01.9
CHVC MLR MLR
comp=Z,2µm,18.5s
M27K Edge Creek, AK 102.86 28 P Pdif 05 39 28.5 -0.3
baz=277
EGAK Eagle 102.87 25 P Pdif 05 39 28.4 -0.1
baz=278
UPC Upice 102.88 320 AMS AMS 06 34 20.0
comp=Z,2µm,17.3s
E28M Babbage River 102.90 21 P Pdif 05 39 28.3 -0.3
baz=280,SNR=9.4
F28M Old Crow 102.95 22 P Pdif 05 39 28.0 -0.9
baz=280,SNR=8.3
MESA MESA 103.06 30 P Pdif 05 39 28.8 -1.0
baz=276
CONA Conrad Observa 103.08 317 i PP PP 05 43 44.0 -0.9
comp=Z,16nm,1.7s
CONA ePKKP PKKPbc 05 55 27.5 -0.5
comp=Z,4.4nm,0.9s
TREC Trest 103.27 319 ePDIFF Pdif 05 39 31.0 +0.2
TREC eSKS SKSac 05 50 07.2 -1.9
TREC Trest 103.27 319 eP Pdif 05 39 31.0 +0.2
TREC e 05 50 07.2
CTG Chitna Glacier 103.28 29 P Pdif 05 39 30.2 -0.4
baz=277
I28M Miner Creek 103.28 25 P Pdif 05 39 30.1 -0.4
baz=279,SNR=6.3
ARSA Arzberg 103.33 317 i PP PP 05 43 46.0 -0.7
comp=Z,11nm,1.7s
ARSA ePKKP PKKPbc 05 55 27.0 -0.2
comp=Z,3.1nm,0.7s
E29M Blow River 103.53 22 P Pdif 05 39 30.8 -0.7
baz=282
YUK3 Moose Creek 103.59 28 P Pdif 05 39 31.6 -0.5
baz=278
SOKA Soboth 103.69 316 i pPKiKP PKiKP 05 43 54.3 +3.4
comp=Z,5.6nm,1.4s
SOKA ePKKP PKKPbc 05 55 25.6 -0.5
comp=Z,2.0nm,0.7s
GOPC GO Pecny, Ondr 103.69 319 eSKS SKSac 05 50 07.7 -3.3
RKT Rikitea 103.73 116 ePP PP 05 43 45.4 -4.7
comp=Z,980nm,27.2s
RKT eS Sdif 05 51 21.7 +0.1
comp=Z,3µm,26.0s
RKT eSS SS 05 58 37.0 +1.7
comp=Z,4µm,32.0s
RKT Rikitea 103.73 116 eLQ LQ 06 09 06.5
comp=Z,11µm,36.0s
RKT eLR LR 06 13 30.4
comp=Z,13µm,21.8s
DAWY Dawson 103.73 26 P Pdif 05 39 31.9 -0.6
baz=279,SNR=5.4
H29M Whitestone 103.78 24 P Pdif 05 39 32.2 -0.4
baz=281,SNR=7.1
G29M Pine Creek 103.78 23 P Pdif 05 39 32.1 -0.5
baz=281,SNR=12
PVCC Panska Ves 103.80 320 AMS AMS 06 32 30.0
comp=Z,2µm,20.6s
PRU Pruhonice 103.85 319 ePDIFF Pdif 05 39 31.0 -2.3
PRU eSKS SKSac 05 50 07.5 -4.1
PRU AMS AMS 06 32 20.0
comp=Z,2µm,19.2s
PRU Pruhonice 103.85 319 eP Pdif 05 39 31.0 -2.3
PRU e 05 50 07.5
PRU MLR MLR
comp=Z,2µm,19.2s
O28M Mount Upton 103.86 29 P Pdif 05 39 32.7 -0.7
baz=278
PRA Prague 103.91 319 AMS AMS 06 32 20.0
comp=Z,2µm,19.7s
I29M Ogilvie Camp, 103.97 25 P Pdif 05 39 33.4 -0.1
baz=281
OBKA Obir 104.03 316 i PKiKP PKiKP 05 43 50.6 -1.0
comp=Z,10nm,1.4s
OBKA ePKKP PKKPbc 05 55 25.0 -0.1
comp=Z,2.7nm,0.7s
CKRC Cesky Krumlov 104.07 318 eSKS SKSac 05 50 09.2 -3.6
CKRC AMS AMS 06 35 10.0
comp=Z,1µm,19.5s
RICC Richard 104.10 320 AMS AMS 06 32 40.0
comp=Z,2µm,19.4s
ZVC Zvikov 104.11 319 eSKS SKSac 05 50 10.0 -2.9
ZVC AMS AMS 06 32 40.0
comp=Z,2µm,20.8s
RUE Ruedersdorf 104.14 322 ePP PKiKP 05 43 52.3 +0.9
MOA Molln 104.16 317 ePKiKP PKiKP 05 43 49.9 -1.8
comp=Z,9.8nm,1.3s
MOA ePKKP PKKPbc 05 55 24.1 -0.6
comp=Z,7.9nm,1.2s
BRG Berggiesshubel 104.17 320 P Pdif 05 39 31.0 -3.7
BRG Berggiesshubel 104.17 320 ePKP PKiKP 05 43 51.2 -0.3
BRG Amp 05 43 52.8
comp=Z,3.1nm,0.7s
BRG Berggiesshubel 104.17 320 ePP PKiKP 05 43 52.6 +1.1
RGN Rugen 104.23 324 IAMs_20 IAMs_20 06 34 23.1
comp=Z,1µm,20.0s
RGN Rugen 104.23 324 ePP PP 05 43 54.0 +1.0
EPYK Eagle Plains 104.40 23 P Pdif 05 39 34.8 -0.7
baz=282,SNR=7.4
PNL Peninsula 104.40 31 P Pdif 05 39 35.4 -0.1
baz=278
M29M Somme Creek 104.42 28 Pdif 05 39 36.1 +0.4
M29M Somme Creek 104.42 28 P Pdif 05 39 35.6 0.0
baz=280
L29M L29M 104.45 27 Pdif 05 39 35.7 0.0
L29M L29M 104.45 27 P Pdif 05 39 35.8 0.0
baz=280,SNR=5.2
G30M tAoh Zraii Nji 104.46 23 P Pdif 05 39 35.0 -0.7
baz=283
GEC2 GERESS Array S 104.47 318 ePP PP 05 43 55.1 -0.2
GERES GERESS Array B 104.47 318 PKKPbc PKKPbc 05 55 23.5 -0.4
comp=Z,2.7nm,0.8s,baz=180,slow=8.8,SNR=8.4
F30M Barrier River 104.48 22 P Pdif 05 39 35.8 +0.1
baz=284
HSKC Hora Svate Kat 104.52 320 ePDIFF Pdif 05 39 37.6 +1.3
HSKC eSKS SKSac 05 50 10.5 -4.2
HSKC AMS AMS 06 32 50.0
comp=Z,2µm,21.9s
YUK4 Talbot Arm 104.52 29 P Pdif 05 39 35.4 -0.8
baz=280
KHC Kasperske Hory 104.53 319 IAMs_20 IAMs_20 06 33 05.6
comp=Z,1µm,21.0s
KHC Kasperske Hory 104.53 319 ePDIFF Pdif 05 39 34.3 -2.1
KHC eSKS SKSac 05 50 10.3 -4.6
KHC ePKKP PKKPbc 05 55 22.5 -1.1
KHC ex x 05 55 40.5
KHC Kasperske Hory 104.53 319 eP Pdif 05 39 34.3 -2.1
KHC e 05 50 10.3
K29M Barlow Dome 104.59 26 P Pdif 05 39 35.9 -0.5
baz=281
BIOA Bad Ischl, Aus 104.59 317 ePP PP 05 44 00.2 +4.2
comp=Z,1.5nm,0.5s
BIOA i PKKP PKKPbc 05 55 23.2 -0.2
comp=Z,3.4nm,0.6s
MYKA Terra Mystica 104.65 316 i PKiKP PKiKP 05 43 53.9 +1.2
comp=Z,3.0nm,1.1s
MYKA ePKKP PKKPbc 05 55 22.8 -0.4
comp=Z,6.3nm,0.9s
PRED Cave del Predi 104.72 316 IAMs_20 IAMs_20 06 34 41.6
comp=Z,1µm,22.0s
CLL Collm 104.73 321 IAMs_20 IAMs_20 06 33 22.5
comp=Z,1µm,19.0s
CLL Collm 104.73 321 eP Pdif 05 39 40.0 +2.9
CLL e 05 50 13.0
CLL pmax pmax
comp=Z,8.0nm,1.0s
CLL MLR MLR
comp=Z,1µm,23.6s
CLL Collm 104.73 321 ePP PKiKP 05 43 55.1 +2.6
I30M Mount Dempster 104.79 25 P Pdif 05 39 36.8 -0.5
baz=282
KBA Koelnbreinsper 104.83 316 i PKiKP PKiKP 05 43 48.3 -4.9
comp=Z,5.9nm,1.3s
KBA ePKKP PKKPbc 05 55 21.7 -1.1
comp=Z,6.5nm,1.1s
J30M Hart River 104.95 25 P PKiKP 05 43 52.4 -0.3
baz=282
WET Wettzell 104.99 319 ePP PKiKP 05 43 56.3 +3.2
INK Inuvik 105.13 21 P PKiKP 05 43 53.2 +0.4
baz=286
TANN Tannenbergstha 105.15 320 ePP PP 05 43 59.2 -0.9
RJOB Jochberg 105.15 317 ePP PKiKP 05 43 55.9 +2.3
G31M Satah River 105.22 23 P PKiKP 05 43 53.1 +0.1
baz=285
LESA Schwarzleotal 105.26 317 i PKiKP PKiKP 05 43 52.7 -1.1
comp=Z,4.4nm,0.9s
LESA ePKKP PKKPbc 05 55 20.8 -0.7
comp=Z,7.8nm,1.0s
LESA ePKKP PKKPab 05 55 38.8 +1.7
comp=Z,14nm,1.5s
STAL STALIGIAL 105.32 316 IAMs_20 IAMs_20 06 35 22.6
comp=Z,1µm,22.0s
PLN Plauen 105.33 320 ePP PP 05 44 00.3 -1.2
ROTZ Rotzenmuhle 105.37 319 ePP PP 05 43 59.9 -1.8
MANZ Manzenberg 105.41 320 ePP PP 05 44 00.6 -1.5
ABTA Abfaltersbach 105.42 316 ePKiKP PKiKP 05 43 53.7 -0.4
comp=Z,1.4nm,0.4s
ABTA ePKKP PKKPbc 05 55 20.4 -0.5
comp=Z,9.3nm,1.0s
ABTA ePKKP PKKPab 05 55 38.5 +2.1
comp=Z,17nm,1.4s
CIMO Cimolais 105.50 316 IAMs_20 IAMs_20 06 35 27.1
comp=Z,1µm,22.0s
NEUB Neuenburg 105.50 321 ePP PP 05 44 02.1 -0.6
GORT1 Trebel 105.59 323 ePP PP 05 44 02.7 -0.4
MOX Moxa 105.66 320 ePP PP 05 44 02.1 -1.7
MOX eL L 06 33 54.2
comp=Z,1µm,19.8s
FLTG Flechtingen 105.71 322 ePP PP 05 44 02.9 -1.2
WTTA Wattenberg 105.97 317 ePKiKP PKiKP 05 43 55.2 0.0
comp=Z,7.8nm,1.4s
WTTA i PKKP PKKPbc 05 55 19.2 -0.1
comp=Z,13nm,1.0s
WTTA i PKKP PKKPab 05 55 35.9 +1.8
comp=Z,18nm,1.2s
WATA Walderalm 106.01 317 ePKiKP PKiKP 05 43 55.2 -0.1
WATA ePKKP PKKPbc 05 55 19.1 -0.1
comp=Z,16nm,1.5s
WATA i PKKP PKKPab 05 55 35.2 +1.3
comp=Z,15nm,1.1s
GRA1 Grafenberg Arr 106.02 319 IAMs_20 IAMs_20 06 34 22.7
comp=Z,2µm,20.0s
GRF Grafenberg Arr 106.02 319 ePP PP 05 44 04.5 -2.0
GRF eL L 06 34 12.3
comp=Z,2µm,21.5s
GRFO Grafenberg 106.02 319 IAMs_20 IAMs_20 06 34 21.8
comp=Z,2µm,20.0s
BSEG Bad Segeberg 106.05 324 ePP PP 05 44 07.0 +0.4
FUR Furstenfeldbru 106.13 318 ePP PP 05 44 02.4 -5.1
SQTA Sankt Quirin 106.27 317 ePKiKP PKiKP 05 43 56.5 +0.7
comp=Z,2.2nm,0.5s
SQTA ePKKP PKKPbc 05 55 18.2 -0.2
comp=Z,5.6nm,1.0s
SQTA ePKKP PKKPab 05 55 34.7 +2.1
comp=Z,13nm,1.0s
CLZ Clausthal 106.30 322 ePP PP 05 44 07.4 -1.2
MOTA Moosalm 106.33 317 ePKiKP PKiKP 05 43 56.4 +0.6
comp=Z,6.0nm,1.0s
MOTA ePKKP PKKPbc 05 55 17.3 -0.9
comp=Z,12nm,1.3s
MOTA ePKKP PKKPab 05 55 34.3 +1.8
comp=Z,17nm,1.4s
NRDL Niedersach Rie 106.38 322 ePP PP 05 44 08.3 -0.6
RETA Reutte 106.55 317 ePKiKP PKiKP 05 43 57.2 +1.1
comp=Z,0.7nm,0.4s
RETA i PKKP PKKPbc 05 55 17.8 +0.4
comp=Z,5.6nm,1.2s
RETA i PKKP PKKPab 05 55 33.1 +1.7
comp=Z,9.8nm,1.2s
GTTG Gottingen 106.59 321 ePP PP 05 44 09.7 -1.0
FETA Feichten 106.61 317 ePKiKP PKiKP 05 43 57.4 +1.0
comp=Z,5.9nm,1.2s
FETA ePKKP PKKPbc 05 55 17.5 +0.2
comp=Z,9.6nm,1.1s
FETA ePKKP PKKPab 05 55 33.3 +2.1
comp=Z,17nm,1.3s
UBBA Unterbreizbach 106.66 321 ePP PP 05 44 09.5 -1.5
RETH Rethem/Aller, 106.79 323 ePP PP 05 44 11.7 -0.3
UBR Ueberruh 106.97 317 ePP PP 05 44 07.6 -6.0
DAVA Damuels 107.16 317 ePKiKP PKiKP 05 43 56.7 -0.8
comp=Z,15nm,1.6s
DAVA i PKKP PKKPbc 05 55 15.4 -0.2
comp=Z,11nm,1.1s
DAVA i PKKP PKKPab 05 55 31.0 +2.2
comp=Z,11nm,1.0s
HLG Helgoland 107.43 324 ePP PP 05 44 14.9 -1.8
STU Stuttgart 107.44 318 IAMs_20 IAMs_20 06 35 09.6
comp=Z,2µm,20.0s
STU Stuttgart 107.44 318 ePP PP 05 44 13.6 -3.4
KASTN Kahler Asten 107.60 321 ePP PP 05 44 16.7 -1.4
TATN Tataouine 107.65 301 IAMs_20 IAMs_20 06 30 53.5
comp=Z,1µm,20.0s
TNS Taunus Mts 107.73 320 ePP PP 05 44 17.5 -1.6
IBBN Ibbenburen 107.83 322 ePP PP 05 44 19.2 -0.5
BFO Black Forest 108.07 318 IAMs_20 IAMs_20 06 35 50.2
comp=Z,1µm,20.0s
BFO Black Forest 108.07 318 ePP PP 05 44 17.8 -3.9
BUG Bochum--Univer 108.27 321 ePP PP 05 44 21.4 -1.5
KEST Kesra 108.51 305 PKKPbc PKKPbc 05 55 10.2 -0.6
comp=Z,2.4nm,0.7s,baz=284,slow=8.5,SNR=3.6
AHRW Bad Neuenahr-A 108.54 321 ePP PP 05 44 22.7 -2.3
WLF Walferdange 109.28 320 IAMs_20 IAMs_20 06 36 15.0
comp=Z,1µm,20.0s
WLF Walferdange 109.28 320 ePP PP 05 44 28.8 -1.5
DLBC Dease Lake 109.39 31 P PKiKP 05 44 01.1 0.0
baz=286
BNI Bardonecchia 109.65 315 IAMs_20 IAMs_20 06 40 09.3
comp=Z,1µm,20.0s
RES Resolute Bay 111.34 8 PKKPbc PKKPbc 05 54 59.3 -3.3
comp=Z,3.5nm,1.0s,baz=194,slow=6.3,SNR=3.6
TULEG Thule 111.77 1 IAMs_20 IAMs_20 06 34 42.0
comp=Z,1µm,20.0s
CLF Chambon-Foret 112.12 319 IAMs_20 IAMs_20 06 40 15.3
comp=Z,2µm,21.0s
SCO Scoresbysund 112.55 346 IAMs_20 IAMs_20 06 36 39.7
comp=Z,1µm,20.0s
EKA Eskdalemuir Ar 113.31 327 PKKPbc PKKPbc 05 54 54.3 -1.4
comp=Z,2.3nm,0.7s,baz=253,slow=3.2,SNR=6.9
ESK Eskdalemuir 113.34 327 IAMs_20 IAMs_20 06 41 06.7
comp=Z,2µm,19.0s
SUMG Summit 114.00 352 IAMs_20 IAMs_20 06 39 20.0
comp=Z,2µm,21.0s
SUMG Summit 114.00 352 PP PP 05 45 01.6 -2.2
YKA Yellowknife Ar 114.69 23 PKP PKiKP 05 44 08.8 -2.1
comp=Z,3.5nm,0.8s,baz=309,slow=2.1,SNR=12
YKA PKKPab PKKPab 05 54 57.4 +2.6
comp=Z,1.6nm,0.8s,baz=105,slow=3.9,SNR=4.2
YKA SKKPbc SKKPbc 05 58 35.9 -0.6
comp=Z,1.3nm,0.9s,baz=140,slow=3.9,SNR=3.8
CLRS Cowichan Lake 115.56 40 PKiKP 05 44 12.4 -0.7
TORD Torodi Ar. Bea 115.64 281 PKP PKPdf 05 44 12.8 -1.4
comp=Z,8.2nm,1.0s,baz=78,slow=1.9,SNR=21
TORD PKKPbc PKKPbc 05 54 46.2 -0.3
comp=Z,1.2nm,0.9s,baz=320,slow=2.1,SNR=6.2
DSB Dublin 115.82 326 IAMs_20 IAMs_20 06 38 18.5
comp=Z,1µm,22.0s
F04D Rainier, OR 117.11 42 IAMs_20 IAMs_20 06 26 14.7
comp=Z,1µm,22.0s
H04D Lebanon 117.75 44 PKPdf 05 44 17.2 -0.2
HUMO Hull Mountain 118.12 46 PKPdf 05 44 17.7 -0.6
ESDC Sonseca Array 118.40 311 PKPdf 05 44 18.2 -0.7
ESDC Sonseca Array 118.40 311 PKP PKPdf 05 44 17.9 -1.0
comp=Z,3.1nm,1.1s,baz=65,slow=3.0,SNR=10
ESDC PKKPbc PKKPbc 05 54 36.8 -0.7
comp=Z,6.9nm,1.2s,baz=270,slow=5.6,SNR=13
ESDC SKKPbc SKKPbc 05 58 26.4 +2.5
comp=Z,1.4nm,0.9s,baz=274,slow=6.0,SNR=4.3
YBH Yreka Blue Hor 118.53 47 PKKPbc PKKPbc 05 54 36.8 -0.4
comp=Z,0.4nm,0.4s,baz=90,slow=3.0,SNR=2.4
O02D Mt. Diablo Mer 118.87 49 IAMs_20 IAMs_20 06 31 27.0
comp=Z,2µm,21.0s
HOPS Hopland Field 118.94 50 IAMs_20 IAMs_20 06 25 04.0
comp=Z,1µm,21.0s
E08A Dider Farm, El 119.57 41 PKPdf 05 44 20.5 -0.4
ANGG Ammassalik, Gr 119.99 348 IAMs_20 IAMs_20 06 44 50.2
comp=Z,1µm,18.0s
NEW Newport 120.12 38 P PKPdf 05 44 21.5 -0.4
baz=293
SFJD Kangerlussuaq 120.74 354 IAMs_20 IAMs_20 06 46 16.9
comp=Z,1µm,20.0s
EMB Emerald Bay 121.19 49 IAMs_20 IAMs_20 06 26 02.4
comp=Z,1µm,22.0s
PNTR Pine Nut 121.53 49 IAMs_20 IAMs_20 06 47 28.5
comp=Z,932nm,20.0s
DBIC Dimbokro 121.61 273 PKPdf 05 44 24.4 -1.3
DBIC Dimbokro 121.61 273 PKP PKPdf 05 44 24.5 -1.2
comp=Z,16nm,1.1s,baz=188,slow=1.0,SNR=7.7
DBIC PKKPab PKKPab 05 54 26.6 +0.7
comp=Z,8.6nm,0.9s,baz=230,slow=1.2,SNR=6.4
DBIC Dimbokro 121.61 273 PKIKP PKPdf 05 44 24.4 -1.3
PVAQ Vaqueiros 121.81 309 IAMs_20 IAMs_20 06 45 35.7
comp=Z,904nm,21.0s
WAKR Walker 121.82 50 IAMs_20 IAMs_20 06 26 46.0
comp=Z,1µm,22.0s
MESJ Messejana 122.08 310 IAMs_20 IAMs_20 06 44 58.8
comp=Z,842nm,19.0s
PKM Mcpherson Peak 122.44 54 P PKPdf 05 44 26.5 -0.6
baz=284,SNR=8.2
AVE Averroes 122.53 304 IAMs_20 IAMs_20 06 37 56.3
comp=Z,2µm,22.0s
MORF Marmelete 122.56 309 IAMs_20 IAMs_20 06 46 36.4
comp=Z,858nm,19.0s
LHV Little Huntoon 122.59 50 IAMs_20 IAMs_20 06 27 20.6
comp=Z,942nm,21.0s
MSO Missoula 122.68 39 P PKPdf 05 44 26.0 -1.0
baz=296
NVAR Mina Array Bea 122.69 49 PKPdf 05 44 26.9 -0.6
NVAR Mina Array Bea 122.69 49 PKP PKPdf 05 44 27.4 0.0
comp=Z,7.0nm,0.8s,baz=247,slow=2.1,SNR=50
NVAR PKKPbc PKKPbc 05 54 22.2 +0.6
comp=Z,2.2nm,0.9s,baz=133,slow=4.6,SNR=9.3
NVAR SKKPbc SKKPbc 05 58 04.6 -5.6
comp=Z,1.9nm,0.9s,baz=101,slow=3.2,SNR=4.5
PFVI Vila Bisbo 122.74 309 IAMs_20 IAMs_20 06 46 41.2
comp=Z,1µm,20.0s
SCZ2 Santa Cruz Isl 122.79 55 P PKPdf 05 44 26.8 -0.7
baz=283
VES Vestal, Richgr 122.79 53 P PKPdf 05 44 26.1 -1.3
baz=285,SNR=5.4
SNCC San Nicolas Is 123.04 56 P PKPdf 05 44 27.4 -0.6
baz=283
ARVC Arvin 123.17 53 P PKPdf 05 44 27.7 -0.4
baz=284
ISA Isabella, Lake 123.31 53 IAMs_20 IAMs_20 06 39 06.0
comp=Z,982nm,18.0s
ISA Isabella, Lake 123.31 53 P PKPdf 05 44 27.8 -0.7
baz=285,SNR=6.8
OSI Oslo Audit: C 123.38 54 P PKPdf 05 44 28.2 -0.4
baz=284
CWC Cottonwood Cre 123.42 52 P PKPdf 05 44 28.2 -0.6
baz=286
LYMT Lyon Mountain 123.63 38 PKPdf 05 44 28.5 -0.5
HLID Hailey 123.72 43 P PKPdf 05 44 28.7 -0.5
baz=293,SNR=42
DECC Green Verdugo 123.78 54 P PKPdf 05 44 28.5 -0.8
baz=284
GRAC Grapevine Rang 123.81 51 P PKPdf 05 44 29.0 -0.5
baz=285,SNR=18
EDW2 Edwards Air Fo 123.89 53 P PKPdf 05 44 29.3 -0.3
baz=285,SNR=17
SCI2 San Clemente I 123.90 56 P PKPdf 05 44 29.1 -0.5
baz=283
CIS Catalina Islan 123.91 55 P PKPdf 05 44 29.4 -0.3
baz=284
MPMC Manual Prospec 123.98 52 P PKPdf 05 44 30.0 0.0
baz=286,SNR=26
LRMC Laurel Mtn Rad 123.98 53 P PKPdf 05 44 29.5 -0.4
baz=285
ELK Elko 124.19 46 IAMs_20 IAMs_20 06 35 23.6
comp=Z,962nm,21.0s
ELK Elko 124.19 46 PKKPbc PKKPbc 05 54 15.6 -0.2
comp=Z,1.8nm,0.9s,baz=99,slow=2.9,SNR=7.4
BFSC Mount Baldy Ra 124.32 54 P PKPdf 05 44 30.3 -0.3
baz=285,SNR=6.5
FURC Furnace Creek, 124.35 51 P PKPdf 05 44 30.4 +0.1
baz=287,SNR=18
EGMT Eagleton 124.63 36 P PKPdf 05 44 30.2 -0.5
baz=300
FFC Flin Flon 124.64 26 PKPdf 05 44 29.4 -1.0
FFC Flin Flon 124.64 26 PKIKP PKPdf 05 44 29.4 -1.0
ELS Elsinore Mount 124.66 55 IAMs_20 IAMs_20 06 41 51.7
comp=Z,896nm,19.0s
BOZ Bozeman (W) 124.66 39 P PKPdf 05 44 30.4 -0.5
baz=297,SNR=48
TPNV Topopah Spring 124.68 51 P PKPdf 05 44 31.1 -0.2
baz=287,SNR=9.0
RRX Edison Barstow 124.69 53 P PKPdf 05 44 31.1 0.0
baz=286
GSC Goldstone, Bar 124.72 53 IAMs_20 IAMs_20 06 28 34.2
comp=Z,940nm,20.0s
GSC Goldstone, Bar 124.72 53 P PKiKP 05 44 31.5 -0.1
baz=286,SNR=16
R11B Troy Canyon, C 124.75 49 P PKPdf 05 44 31.3 -0.1
baz=289,SNR=23
MURC Murrieta 124.85 55 P PKPdf 05 44 31.4 -0.1
baz=284
BBRC Big Bear Solar 124.91 54 P PKPdf 05 44 31.9 +0.1
baz=285
SHOC Shoshone, Teco 124.97 52 P PKPdf 05 44 31.7 +0.1
baz=287,SNR=16
Q12A Willow Creek R 125.08 48 IAMs_20 IAMs_20 06 27 18.2
comp=Z,944nm,20.0s
109C Camp Elliot, M 125.10 56 P PKPdf 05 44 31.9 0.0
baz=284
HEC Hector,Ludlow 125.22 53 P PKPdf 05 44 32.2 0.0
baz=286
TUQ Turquoise Moun 125.38 52 P PKPdf 05 44 32.7 +0.2
baz=287
PFO Pinyon Flats O 125.44 55 PKiKP 05 44 33.2 +0.1
PFO Pinyon Flats O 125.44 55 P PKPdf 05 44 32.7 0.0
baz=285,SNR=17
PFO Pinyon Flats O 125.44 55 PKIKP PKiKP 05 44 33.2 +0.1
TPFO Pinon Flats 125.45 55 P PKPdf 05 44 32.5 -0.2
baz=285,SNR=16
NRS Narsarsuaq 125.55 349 IAMs_20 IAMs_20 06 43 27.1
comp=Z,2µm,21.0s
MONP2 Monument Peak 125.66 55 P PKPdf 05 44 33.1 -0.1
baz=285,SNR=13
BELC Belle Mtn. Jos 125.71 54 P PKiKP 05 44 33.6 -0.1
baz=286,SNR=20
GMRC Granite Mounta 125.77 53 P PKiKP 05 44 33.8 +0.1
baz=286,SNR=28
COYC Coyhaique 125.82 173 PKiKP 05 44 33.8 +0.5
H17A Grant Village 125.87 40 IAMs_20 IAMs_20 06 42 30.3
comp=Z,925nm,22.0s
H17A Grant Village 125.87 40 P PKiKP 05 44 34.0 +0.1
baz=297,SNR=9.8
IKP In-Ko-Pah, Jac 125.97 56 P PKPdf 05 44 33.9 +0.1
baz=285,SNR=8.3
IVI Ivigtut 125.98 351 IAMs_20 IAMs_20 06 50 00.2
comp=Z,1µm,19.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DUG | Dugway, Tooele | 126.12 | 46 | P | | PKPdf | 05 44 33.8 | -0.1 |
| | baz=292 | | | | | | | |
| SWSC | Sam W. Stewart | 126.15 | 55 | P | | PKPdf | 05 44 34.1 | +0.2 |
| | baz=285,SNR=7.8 | | | | | | | |
| BC3 | Big Chuckawall | 126.24 | 54 | P | | PKPdf | 05 44 34.3 | 0.0 |
| | baz=286,SNR=15 | | | | | | | |
| ESJX | Sierra Juarez | 126.27 | 56 | IAMs_20 | IAMs_20 | | 06 49 15.6 | |
| | comp=Z,791nm,19.0s | | | | | | | |
| IRM | Iron Mountain | 126.35 | 54 | P | | PKPdf | 05 44 34.5 | +0.1 |
| | baz=286,SNR=12 | | | | | | | |
| RLMT | Red Lodge | 126.36 | 39 | P | | PKiKP | 05 44 34.6 | -0.1 |
| | baz=299,SNR=8.6 | | | | | | | |
| UABX | UABC, Campus M | 126.52 | 55 | IAMs_20 | IAMs_20 | | 06 23 56.2 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| CCUT | Cedar City | 126.67 | 49 | IAMs_20 | IAMs_20 | | 06 37 33.5 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| TCUT | Toone Canyon | 126.74 | 44 | IAMs_20 | IAMs_20 | | 06 34 18.7 | |
| | comp=Z,859nm,21.0s | | | | | | | |
| GLA | Glamis | 126.91 | 55 | P | | PKiKP | 05 44 35.8 | -0.2 |
| | baz=286,SNR=5.6 | | | | | | | |
| TCRU | Three Creeks R | 126.97 | 47 | IAMs_20 | IAMs_20 | | 06 48 18.3 | |
| | comp=Z,818nm,20.0s | | | | | | | |
| PDMCI | Parker Dam,Lak | 127.11 | 53 | P | | PKPdf | 05 44 35.5 | -0.2 |
| | baz=287,SNR=6.2 | | | | | | | |
| BW06 | Boulder Array | 127.27 | 42 | P | | PKPdf | 05 44 35.0 | -1.1 |
| | baz=297 | | | | | | | |
| PD31 | Pinedale Array | 127.27 | 42 | | | PKPdf | 05 44 35.2 | -0.9 |
| PDAR | Pinedale Array | 127.27 | 42 | | | PKPdf | 05 44 35.2 | -0.9 |
| PDAR | Pinedale Array | 127.27 | 42 | PKP | | PKPdf | 05 44 35.0 | -1.1 |
| | comp=Z,6.1nm,1.0s,baz=225,slow=1.0,SNR=42 | | | | | | | |
| PDAR | | | | | PKKPab | PKKPdf | 05 54 03.6 | -47 |
| | comp=Z,0.3nm,0.6s,baz=117,slow=5.2,SNR=3.8 | | | | | | | |
| PDAR | | | | | SKKPbc | SKKPbc | 05 57 33.8 | -21 |
| | comp=Z,1.9nm,1.0s,baz=116,slow=2.1,SNR=4.4 | | | | | | | |
| LAO | LASA Array | 127.38 | 36 | P | | PKPdf | 05 44 36.0 | 0.0 |
| | baz=303,SNR=33 | | | | | | | |
| DGMT | Dagmar | 127.50 | 33 | P | | PKPdf | 05 44 35.4 | -0.7 |
| | baz=306,SNR=5.2 | | | | | | | |
| LL02 | Futaleuf | 128.20 | 172 | | | PKiKP | 05 44 37.9 | -0.3 |
| 214A | Organ Pipe Nat | 128.85 | 56 | IAMs_20 | IAMs_20 | | 06 44 12.9 | |
| | comp=Z,1μm,19.0s | | | | | | | |
| 214A | Organ Pipe Nat | 128.85 | 56 | P | | PKPdf | 05 44 38.7 | -0.4 |
| | baz=286 | | | | | | | |
| WUAZ | Wupatki | 128.88 | 51 | P | | PKPdf | 05 44 39.3 | 0.0 |
| | baz=290,SNR=7.9 | | | | | | | |
| K22A | Casper | 129.29 | 40 | P | | PKPdf | 05 44 39.2 | -0.7 |
| | baz=300 | | | | | | | |
| RWWY | Rawlins | 129.32 | 42 | | | PKPdf | 05 44 39.5 | -0.6 |
| O20A | White River Ci | 129.34 | 44 | P | | PKPdf | 05 44 39.6 | -0.5 |
| | baz=296,SNR=25 | | | | | | | |
| RSSD | Black Hills | 130.07 | 37 | | | PKPdf | 05 44 39.9 | -1.5 |
| RSSD | Black Hills | 130.07 | 37 | P | | PKPdf | 05 44 40.2 | -1.2 |
| | baz=303 | | | | | | | |
| RSSD | Black Hills | 130.07 | 37 | PKiKP | | PKPdf | 05 44 39.9 | -1.5 |
| W18A | Petrified Fore | 130.27 | 51 | P | | PKPdf | 05 44 41.8 | -0.1 |
| | baz=291,SNR=7.6 | | | | | | | |
| MDND | Maddock | 130.30 | 31 | P | | PKPdf | 05 44 41.8 | +0.4 |
| | baz=311 | | | | | | | |
| TUC | Tucson | 130.39 | 54 | | | PKPdf | 05 44 42.1 | 0.0 |
| TUC | Tucson | 130.39 | 54 | P | | PKPdf | 05 44 42.4 | +0.3 |
| | baz=288 | | | | | | | |
| TUC | Tucson | 130.39 | 54 | PKiKP | | PKPdf | 05 44 42.1 | 0.0 |
| MVCO | Mesa Verde | 130.39 | 48 | IAMs_20 | IAMs_20 | | 06 37 07.1 | |
| | comp=Z,810nm,19.0s | | | | | | | |
| MVCO | Mesa Verde | 130.39 | 48 | P | | PKPdf | 05 44 42.4 | +0.2 |
| | baz=294,SNR=12 | | | | | | | |
| ULM | Lac du Bonnet | 130.43 | 27 | PKP | | PKPdf | 05 44 39.7 | -1.8 |
| | comp=Z,8.0nm,0.9s,baz=251,slow=0.9,SNR=12 | | | | | | | |
| ULM | | | | | SKPab | SKPab | 05 48 00.2 | -3.1 |
| | comp=Z,6.3nm,0.9s,baz=310,slow=6.0,SNR=7.2 | | | | | | | |
| N23A | Red Feather La | 130.53 | 42 | P | | PKPdf | 05 44 42.0 | -0.5 |
| | baz=299,SNR=7.6 | | | | | | | |
| PLCA | Paso Flores | 130.78 | 173 | | | PKiKP | 05 44 43.3 | -0.3 |
| PLCA | Paso Flores | 130.78 | 173 | PKhKP | | PKPpre | 05 44 36.7 | |
| | comp=Z,1.6nm,0.8s,baz=272,slow=4.3,SNR=4.0 | | | | | | | |
| PLCA | | | | PKP | | PKPdf | 05 44 43.1 | +0.4 |
| | comp=Z,13nm,0.9s,baz=241,slow=2.2,SNR=14 | | | | | | | |
| PLCA | | | | PP | | PP | 05 46 55.4 | -1.6 |
| | comp=Z,9.6nm,1.1s,baz=192,slow=15,SNR=3.7 | | | | | | | |
| PLCA | | | | SKPbc | | SKPab | 05 48 09.1 | +3.8 |
| | comp=Z,14nm,1.1s,baz=270,slow=5.1,SNR=4.2 | | | | | | | |
| ISCO | Idaho Springs | 131.28 | 43 | IAMs_20 | IAMs_20 | | 06 36 58.9 | |
| | comp=Z,928nm,20.0s | | | | | | | |
| ISCO | Idaho Springs | 131.28 | 43 | P | | PKPdf | 05 44 43.0 | -0.9 |
| | baz=299,SNR=8.0 | | | | | | | |
| S22A | 4UR Ranch, Cre | 131.37 | 46 | IAMs_20 | IAMs_20 | | 06 40 53.6 | |
| | comp=Z,962nm,20.0s | | | | | | | |
| S22A | 4UR Ranch, Cre | 131.37 | 46 | P | | PKPdf | 05 44 44.0 | -0.1 |
| | baz=296,SNR=13 | | | | | | | |
| GO06 | Curarrehue | 131.79 | 172 | | | PKiKP | 05 44 45.5 | -0.3 |
| AGMN | Agassiz Nation | 131.84 | 28 | IAMs_20 | IAMs_20 | | 06 55 07.9 | |
| | comp=Z,779nm,19.0s | | | | | | | |
| AGMN | Agassiz Nation | 131.84 | 28 | P | | PKPdf | 05 44 44.2 | 0.0 |
| | baz=315 | | | | | | | |
| SDCO | Great Sand Dun | 132.32 | 46 | IAMs_20 | IAMs_20 | | 06 55 11.5 | |
| | comp=Z,762nm,20.0s | | | | | | | |
| SDCO | Great Sand Dun | 132.32 | 46 | P | | PKPdf | 05 44 45.6 | -0.4 |
| | baz=297 | | | | | | | |
| 121A | Cookes Peak, D | 132.71 | 53 | P | | PKPdf | 05 44 46.6 | 0.0 |
| | baz=291,SNR=6.8 | | | | | | | |
| Y22D | IRIS PASSCAL I | 132.81 | 51 | IAMs_20 | IAMs_20 | | 06 40 17.3 | |
| | comp=Z,904nm,20.0s | | | | | | | |
| Y22D | IRIS PASSCAL I | 132.81 | 51 | P | | PKPdf | 05 44 45.9 | -0.8 |
| | baz=293 | | | | | | | |
| ANMO | Albuquerque | 132.82 | 49 | SKPbc | | SKPbc | 05 48 11.0 | -1.8 |
| | comp=Z,4.2nm,0.8s,baz=344,slow=5.0,SNR=6.9 | | | | | | | |
| ANMO | Albuquerque | 132.82 | 49 | P | | PKPdf | 05 44 46.2 | -0.7 |
| | baz=294 | | | | | | | |
| SUSD | Miller | 132.83 | 34 | P | | PKPdf | 05 44 45.1 | -1.2 |
| | baz=309 | | | | | | | |
| F33A | 5 Mile Ranch, | 133.34 | 31 | IAMs_20 | IAMs_20 | | 06 53 54.8 | |
| | comp=Z,952nm,20.0s | | | | | | | |
| T25A | Trinidad | 133.37 | 46 | IAMs_20 | IAMs_20 | | 06 38 43.3 | |
| | comp=Z,796nm,22.0s | | | | | | | |
| T25A | Trinidad | 133.37 | 46 | P | | PKPdf | 05 44 46.8 | -1.0 |
| | baz=298,SNR=7.0 | | | | | | | |
| SCHQ | Schefferville | 133.56 | 2 | PKP | | PKPdf | 05 44 46.2 | -1.2 |
| | comp=Z,9.3nm,1.0s,baz=147,slow=2.1,SNR=6.0 | | | | | | | |
| SCHQ | | | | SKPbc | | SKPbc | 05 48 12.4 | -1.9 |
| | comp=Z,13nm,1.1s,baz=15,slow=6.1,SNR=4.4 | | | | | | | |
| KSCO | Kaye Shedlock' | 133.68 | 43 | P | | PKPdf | 05 44 46.9 | -1.3 |
| | baz=301 | | | | | | | |
| EPT | El Paso | 133.99 | 53 | IAMs_20 | IAMs_20 | | 06 37 22.8 | |
| | comp=Z,886nm,21.0s | | | | | | | |
| EYMN | Ely | 134.07 | 26 | IAMs_20 | IAMs_20 | | 06 50 34.6 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| EYMN | Ely | 134.07 | 26 | P | | PKPdf | 05 44 47.6 | -0.9 |
| | baz=320 | | | | | | | |
| ECSD | EROS Data Cent | 134.58 | 33 | IAMs_20 | IAMs_20 | | 06 39 53.9 | |
| | comp=Z,872nm,21.0s | | | | | | | |
| ECSD | EROS Data Cent | 134.58 | 33 | P | | PKPdf | 05 44 48.2 | -1.4 |
| | baz=311,SNR=12 | | | | | | | |
| MNTX | Cornudas Mount | 134.91 | 53 | P | | PKPdf | 05 44 49.9 | -0.7 |
| | baz=292,SNR=9.4 | | | | | | | |
| E38A | The Farm, Brul | 135.07 | 27 | IAMs_20 | IAMs_20 | | 06 52 43.1 | |
| | comp=Z,749nm,20.0s | | | | | | | |
| BGNE | Belgrade | 135.17 | 37 | P | | PKPdf | 05 44 50.2 | -0.6 |
| | baz=308,SNR=5.7 | | | | | | | |
| SPMN | Marine on St. | 135.51 | 29 | P | | PKPdf | 05 44 50.0 | -1.2 |
| | baz=317,SNR=5.5 | | | | | | | |
| CBKS | Cedar Bluff | 135.69 | 41 | IAMs_20 | IAMs_20 | | 06 57 21.4 | |
| | comp=Z,855nm,20.0s | | | | | | | |
| CBKS | Cedar Bluff | 135.69 | 41 | P | | PKPdf | 05 44 50.8 | -1.1 |
| | baz=304 | | | | | | | |
| L34A | Svendsen Farm, | 135.86 | 35 | IAMs_20 | IAMs_20 | | 06 58 34.0 | |
| | comp=Z,818nm,19.0s | | | | | | | |
| MSTX | Muleshoe | 135.99 | 49 | IAMs_20 | IAMs_20 | | 06 56 23.2 | |
| | comp=Z,828nm,20.0s | | | | | | | |
| MSTX | Muleshoe | 135.99 | 49 | P | | PKPdf | 05 44 52.1 | -0.5 |
| | baz=296 | | | | | | | |
| I37A | Lemond, Waseca | 136.08 | 31 | IAMs_20 | IAMs_20 | | 06 56 16.4 | |
| | comp=Z,898nm,21.0s | | | | | | | |
| HPIG | | 136.26 | 60 | IAMs_20 | IAMs_20 | | 06 40 41.7 | |
| | comp=Z,905nm,21.0s | | | | | | | |
| AMTX | Amarillo | 136.37 | 47 | IAMs_20 | IAMs_20 | | 06 58 30.1 | |
| | comp=Z,935nm,19.0s | | | | | | | |
| AMTX | Amarillo | 136.37 | 47 | P | | PKPdf | 05 44 53.2 | -0.2 |
| | baz=298 | | | | | | | |
| COWI | Conover | 136.52 | 26 | IAMs_20 | IAMs_20 | | 06 55 52.4 | |
| | comp=Z,861nm,21.0s | | | | | | | |
| R32A | Long Quarter, | 136.58 | 41 | IAMs_20 | IAMs_20 | | 06 54 56.8 | |
| | comp=Z,891nm,20.0s | | | | | | | |
| G40A | Rib Lake | 136.70 | 27 | IAMs_20 | IAMs_20 | | 06 52 29.3 | |
| | comp=Z,820nm,20.0s | | | | | | | |
| N35A | Tabor | 136.99 | 36 | IAMs_20 | IAMs_20 | | 06 54 01.1 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| TXAR | Lajitas Array | 137.15 | 55 | | | PKPpre | 05 44 44.5 | |
| TXAR | Lajitas Array | 137.15 | 55 | PKhKP | | PKPpre | 05 44 43.0 | |
| | comp=Z,2.8nm,0.9s,baz=217,slow=2.3,SNR=24 | | | | | | | |
| TXAR | | | | | SKPbc | SKPbc | 05 48 24.9 | -1.7 |
| | comp=Z,1.9nm,1.0s,baz=279,slow=1.7,SNR=3.8 | | | | | | | |
| TXAR | Lajitas Array | 137.15 | 55 | PKHKP | PKPpre | | 05 44 44.5 | |
| F42A | Maple Grove Fa | 137.22 | 25 | IAMs_20 | IAMs_20 | | 06 56 56.8 | |
| | comp=Z,806nm,21.0s | | | | | | | |
| KSU1 | Kansas State U | 137.51 | 39 | IAMs_20 | IAMs_20 | | 06 59 14.2 | |
| | comp=Z,873nm,20.0s | | | | | | | |
| KSU1 | Kansas State U | 137.51 | 39 | P | | PKPdf | 05 44 54.2 | -1.0 |
| | baz=308 | | | | | | | |
| I40A | Norwalk | 137.55 | 29 | IAMs_20 | IAMs_20 | | 06 44 16.9 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| CROK | Carrier | 138.13 | 43 | IAMs_20 | IAMs_20 | | 06 52 09.0 | |
| | comp=Z,732nm,19.0s | | | | | | | |
| E46A | Sault Ste Mari | 138.21 | 21 | IAMs_20 | IAMs_20 | | 06 58 07.7 | |
| | comp=Z,777nm,20.0s | | | | | | | |
| N38A | Joes South For | 138.41 | 34 | IAMs_20 | IAMs_20 | | 06 57 05.3 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| WMOK | Wichita Mounta | 138.52 | 46 | IAMs_20 | IAMs_20 | | 06 53 17.8 | |
| | comp=Z,863nm,19.0s | | | | | | | |
| L40A | Anamosa | 138.59 | 31 | IAMs_20 | IAMs_20 | | 07 00 21.9 | |
| | comp=Z,982nm,21.0s | | | | | | | |
| OK048 | Pawnee Station | 138.87 | 42 | IAMs_20 | IAMs_20 | | 06 59 07.7 | |
| | comp=Z,874nm,19.0s | | | | | | | |
| OK029 | Liberty Lake | 138.88 | 43 | IAMs_20 | IAMs_20 | | 06 57 42.9 | |
| | comp=Z,661nm,19.0s | | | | | | | |
| ABTX | Abilene, Hardi | 138.93 | 49 | IAMs_20 | IAMs_20 | | 07 00 09.2 | |
| | comp=Z,1μm,19.0s | | | | | | | |
| OK031 | S. Brethren Rd | 139.20 | 43 | IAMs_20 | IAMs_20 | | 06 56 01.5 | |
| | comp=Z,742nm,21.0s | | | | | | | |
| I45A | Fountain | 139.40 | 25 | IAMs_20 | IAMs_20 | | 06 56 51.7 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| L42A | Oliver, Polo | 139.42 | 30 | IAMs_20 | IAMs_20 | | 06 47 02.7 | |
| | comp=Z,832nm,21.0s | | | | | | | |
| K43A | Burlington | 139.53 | 28 | IAMs_20 | IAMs_20 | | 06 54 15.4 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| N41A | Harden Midland | 139.76 | 32 | IAMs_20 | IAMs_20 | | 07 00 32.9 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| JCT | Junction City | 139.78 | 52 | IAMs_20 | IAMs_20 | | 06 56 24.9 | |
| | comp=Z,745nm,19.0s | | | | | | | |
| JCT | Junction City | 139.78 | 52 | P | | PKPdf | 05 44 58.9 | -0.7 |
| | baz=296,SNR=6.1 | | | | | | | |
| FW03 | Perrin-Whitt E | 139.89 | 47 | IAMs_20 | IAMs_20 | | 06 58 23.4 | |
| | comp=Z,845nm,20.0s | | | | | | | |
| LDAQ | La Daran | 140.00 | 8 | IAMs_20 | IAMs_20 | | 06 59 34.2 | |
| | comp=Z,883nm,19.0s | | | | | | | |
| ZAIG | Zacatecas | 140.11 | 64 | IAMs_20 | IAMs_20 | | 06 54 35.2 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| L44A | Lake County Fo | 140.13 | 28 | IAMs_20 | IAMs_20 | | 06 48 01.4 | |
| | comp=Z,827nm,22.0s | | | | | | | |
| Z35A | Perchaven, San | 140.33 | 46 | IAMs_20 | IAMs_20 | | 06 59 15.8 | |
| | comp=Z,759nm,20.0s | | | | | | | |
| HQIL | Hanson Quary C | 140.46 | 29 | IAMs_20 | IAMs_20 | | 06 47 14.9 | |
| | comp=Z,862nm,22.0s | | | | | | | |
| U38A | Grittsette | 140.53 | 40 | IAMs_20 | IAMs_20 | | 06 43 48.2 | |
| | comp=Z,856nm,21.0s | | | | | | | |
| J47A | Sunmer | 140.64 | 24 | IAMs_20 | IAMs_20 | | 06 44 32.4 | |
| | comp=Z,883nm,22.0s | | | | | | | |
| M44A | Midewin, Midew | 140.68 | 29 | IAMs_20 | IAMs_20 | | 06 55 04.9 | |
| | comp=Z,835nm,21.0s | | | | | | | |
| I49A | Point Hope | 140.83 | 22 | IAMs_20 | IAMs_20 | | 07 01 03.1 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| WHTX | Lake Whitney, | 140.86 | 48 | IAMs_20 | IAMs_20 | | 07 01 29.1 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| HHAR | Hobbs | 140.91 | 40 | IAMs_20 | IAMs_20 | | 06 59 49.2 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| D62A | Allapoint, All | 141.13 | 6 | IAMs_20 | IAMs_20 | | 06 56 48.9 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| TRQ | Mont Tremblant | 141.13 | 12 | IAMs_20 | IAMs_20 | | 06 59 04.3 | |
| | comp=Z,936nm,19.0s | | | | | | | |
| P43A | Skaggs, Pawnee | 141.24 | 32 | IAMs_20 | IAMs_20 | | 07 01 24.0 | |
| | comp=Z,666nm,20.0s | | | | | | | |
| SADO | Sadowa | 141.33 | 18 | IAMs_20 | IAMs_20 | | 06 58 52.9 | |
| | comp=Z,1μm,19.0s | | | | | | | |
| SADO | Sadowa | 141.33 | 18 | SKP | | | 05 48 35.4 | |
| | comp=Z,8.4nm,0.9s,baz=357,slow=2.8,SNR=3.6 | | | | | | | |
| 435B | Jarrell | 141.35 | 50 | IAMs_20 | IAMs_20 | | 07 02 17.2 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| MGMO | Mountain Grove | 141.39 | 38 | IAMs_20 | IAMs_20 | | 06 59 42.8 | |
| | comp=Z,787nm,22.0s | | | | | | | |
| CCM | Cathedral Cave | 141.40 | 36 | | | PKPpre | 05 44 55.2 | |
| CCM | Cathedral Cave | 141.40 | 36 | IAMs_20 | IAMs_20 | | 06 59 45.7 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| CCM | Cathedral Cave | 141.40 | 36 | PKHKP | PKPpre | | 05 44 55.3 | |
| SLM | Saint Louis | 141.57 | 34 | IAMs_20 | IAMs_20 | | 07 02 28.0 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| L48A | N Adams | 141.88 | 25 | IAMs_20 | IAMs_20 | | 06 56 14.1 | |
| | comp=Z,965nm,20.0s | | | | | | | |
| AAM | Ann Arbor | 141.90 | 24 | IAMs_20 | IAMs_20 | | 06 55 51.6 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| SFIN | Lafayette | 141.91 | 29 | IAMs_20 | IAMs_20 | | 06 56 47.6 | |
| | comp=Z,891nm,20.0s | | | | | | | |
| FVM | French Village | 141.92 | 35 | IAMs_20 | IAMs_20 | | 07 01 29.3 | |
| | comp=Z,780nm,19.0s | | | | | | | |
| Z38A | Mt. Pleasant | 141.97 | 45 | IAMs_20 | IAMs_20 | | 07 00 43.1 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| DELO | Deloro Mine | 142.00 | 16 | IAMs_20 | IAMs_20 | | 06 58 03.5 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| MNTQ | Montreal, Queb | 142.01 | 11 | IAMs_20 | IAMs_20 | | 06 56 34.4 | |
| | comp=Z,890nm,20.0s | | | | | | | |
| Q44A | Meyer Farm, Va | 142.04 | 33 | IAMs_20 | IAMs_20 | | 07 02 44.3 | |
| | comp=Z,856nm,21.0s | | | | | | | |
| 735A | Kenedy | 142.04 | 53 | IAMs_20 | IAMs_20 | | 06 57 19.0 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| T42A | Van Buren | 142.18 | 37 | IAMs_20 | IAMs_20 | | 06 55 39.5 | |
| | comp=Z,951nm,21.0s | | | | | | | |
| N47A | Urbana | 142.18 | 27 | IAMs_20 | IAMs_20 | | 06 59 15.5 | |
| | comp=Z,800nm,20.0s | | | | | | | |
| MIAR | Mount Ida | 142.19 | 42 | IAMs_20 | IAMs_20 | | 06 59 03.6 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| F62A | Pittston Farm, | 142.20 | 7 | IAMs_20 | IAMs_20 | | 06 56 56.2 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| LCO | Las Campanas | 142.28 | 170 | | | PKPpre | 05 45 00.1 | |
| LCO | Las Campanas | 142.28 | 170 | PKiKP | | PKPdf | 05 45 00.1 | -4.4 |
| FCAR | Ozark Folk Cen | 142.30 | 39 | IAMs_20 | IAMs_20 | | 07 02 50.9 | |
| | comp=Z,1μm,19.0s | | | | | | | |
| F64A | Sherman | 142.40 | 5 | IAMs_20 | IAMs_20 | | 06 59 10.6 | |
| | comp=Z,1μm,19.0s | | | | | | | |
| P46A | Rosedale | 142.44 | 30 | IAMs_20 | IAMs_20 | | 06 56 04.7 | |
| | comp=Z,892nm,19.0s | | | | | | | |
| F63A | Nahnanta, Br | 142.49 | 6 | IAMs_20 | IAMs_20 | | 06 55 49.9 | |
| | comp=Z,770nm,22.0s | | | | | | | |
| WHAR | Wooly Hollow | 142.57 | 40 | IAMs_20 | IAMs_20 | | 06 45 10.4 | |
| | comp=Z,902nm,22.0s | | | | | | | |
| LONY | Lake Ozonia | 142.65 | 13 | IAMs_20 | IAMs_20 | | 06 56 14.6 | |
| | comp=Z,804nm,20.0s | | | | | | | |
| PECO | Prince Edward | 142.71 | 16 | IAMs_20 | IAMs_20 | | 06 53 29.2 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| X40A | Basin Creek Fa | 142.72 | 41 | IAMs_20 | IAMs_20 | | 06 57 04.4 | |
| | comp=Z,697nm,20.0s | | | | | | | |
| PBMO | Poplar Bluff | 142.74 | 37 | IAMs_20 | IAMs_20 | | 06 56 12.3 | |
| | comp=Z,945nm,19.0s | | | | | | | |
| S44A | Carbondale | 142.78 | 34 | IAMs_20 | IAMs_20 | | 07 01 44.1 | |
| | comp=Z,888nm,20.0s | | | | | | | |
| LCAR | Lake Charles | 142.78 | 38 | IAMs_20 | IAMs_20 | | 07 02 02.6 | |
| | comp=Z,930nm,21.0s | | | | | | | |
| N49A | Columbus Grove | 142.82 | 26 | IAMs_20 | IAMs_20 | | 07 03 12.2 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| CGM3 | Cape Girardeau | 142.83 | 35 | IAMs_20 | IAMs_20 | | 07 01 44.5 | |
| | comp=Z,761nm,22.0s | | | | | | | |
| UALR | University of | 142.86 | 41 | IAMs_20 | IAMs_20 | | 07 03 24.0 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| PKME | Peaks-Kenny Pk | 142.90 | 6 | IAMs_20 | IAMs_20 | | 06 57 24.8 | |
| | comp=Z,994nm,20.0s | | | | | | | |
| M50A | Fremont | 142.90 | 24 | IAMs_20 | IAMs_20 | | 07 02 49.1 | |
| | comp=Z,876nm,20.0s | | | | | | | |
| O48B | Farmland | 142.93 | 28 | IAMs_20 | IAMs_20 | | 06 59 47.2 | |
| | comp=Z,808nm,19.0s | | | | | | | |
| GBN | Guysborough | 143.01 | 357 | | | PKPdf | 05 45 04.1 | -0.8 |
| GBN | | | | | IAMs_20 | IAMs_20 | 06 55 37.7 | |
| | comp=Z,803nm,20.0s | | | | | | | |
| WLAR | White Oak Lake | 143.01 | 43 | IAMs_20 | IAMs_20 | | 07 00 32.3 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| HKT | Hockley | 143.07 | 50 | | | PKPbc | 05 45 02.7 | +0.4 |
| HKT | Hockley | 143.07 | 50 | IAMs_20 | IAMs_20 | | 06 57 29.6 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| HKT | Hockley | 143.07 | 50 | PKiKP | | PKPbc | 05 45 02.7 | +0.4 |
| J55A | Hilton | 143.09 | 17 | IAMs_20 | IAMs_20 | | 06 58 09.5 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| G65A | Princeton | 143.12 | 4 | IAMs_20 | IAMs_20 | | 06 59 11.7 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| GGN | Saint George | 143.26 | 4 | IAMs_20 | IAMs_20 | | 07 00 28.2 | |
| | comp=Z,913nm,20.0s | | | | | | | |
| VT1 | Waterbury | 143.30 | 11 | IAMs_20 | IAMs_20 | | 06 57 29.8 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| NCB | Newcomb | 143.35 | 13 | IAMs_20 | IAMs_20 | | 06 58 37.9 | |
| | comp=Z,825nm,21.0s | | | | | | | |
| J56A | Wolcott | 143.35 | 16 | IAMs_20 | IAMs_20 | | 06 57 37.4 | |
| | comp=Z,772nm,20.0s | | | | | | | |
| O49A | Covington | 143.35 | 27 | IAMs_20 | IAMs_20 | | 06 59 23.4 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| P48A | Milroy | 143.43 | 29 | IAMs_20 | IAMs_20 | | 07 01 59.7 | |
| | comp=Z,713nm,21.0s | | | | | | | |
| M52A | Chesterland | 143.44 | 22 | IAMs_20 | IAMs_20 | | 06 58 09.3 | |
| | comp=Z,955nm,21.0s | | | | | | | |
| USIN | University of | 143.45 | 33 | IAMs_20 | IAMs_20 | | 06 52 45.6 | |
| | comp=Z,705nm,21.0s | | | | | | | |
| J57A | Williamstown | 143.46 | 15 | IAMs_20 | IAMs_20 | | 06 54 30.0 | |
| | comp=Z,859nm,21.0s | | | | | | | |
| Z41A | Richland Creek | 143.47 | 43 | IAMs_20 | IAMs_20 | | 06 58 05.6 | |
| | comp=Z,902nm,19.0s | | | | | | | |
| PEBM | Pemiscott Bayo | 143.53 | 37 | IAMs_20 | IAMs_20 | | 07 00 15.2 | |
| | comp=Z,845nm,20.0s | | | | | | | |
| GNAR | Gosnell | 143.53 | 37 | IAMs_20 | IAMs_20 | | 07 02 34.4 | |
| | comp=Z,959nm,21.0s | | | | | | | |
| WVL | Waterville | 143.55 | 7 | IAMs_20 | IAMs_20 | | 07 02 56.9 | |
| | comp=Z,905nm,20.0s | | | | | | | |
| N51A | Ashland | 143.58 | 24 | IAMs_20 | IAMs_20 | | 07 03 44.1 | |
| | comp=Z,867nm,21.0s | | | | | | | |
| T45A | Paducah | 143.60 | 35 | IAMs_20 | IAMs_20 | | 06 57 15.9 | |
| | comp=Z,876nm,20.0s | | | | | | | |
| HICK | Hickman | 143.60 | 36 | IAMs_20 | IAMs_20 | | 06 57 44.1 | |
| | comp=Z,988nm,21.0s | | | | | | | |
| EMMW | East Machias | 143.62 | 4 | IAMs_20 | IAMs_20 | | 06 59 24.9 | |
| | comp=Z,910nm,20.0s | | | | | | | |
| J58A | Remsen | 143.68 | 14 | IAMs_20 | IAMs_20 | | 06 56 41.9 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| P49A | Miami Univ. Ec | 143.71 | 28 | IAMs_20 | IAMs_20 | | 06 59 41.9 | |
| | comp=Z,914nm,22.0s | | | | | | | |
| LNXT | Lenox | 143.75 | 36 | IAMs_20 | IAMs_20 | | 07 02 49.2 | |
| | comp=Z,909nm,20.0s | | | | | | | |
| CCAR | Cane Creek | 143.76 | 41 | IAMs_20 | IAMs_20 | | 07 02 19.0 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| J59A | Piesco | 143.77 | 13 | IAMs_20 | IAMs_20 | | 06 56 39.1 | |
| | comp=Z,1μm,19.0s | | | | | | | |
| M53A | WI Miller and | 143.79 | 22 | IAMs_20 | IAMs_20 | | 06 59 02.3 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| HAL | Halifax | 143.83 | 360 | IAMs_20 | IAMs_20 | | 06 57 50.4 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| ACSO | Alum Creek Sta | 143.91 | 25 | IAMs_20 | IAMs_20 | | 06 58 08.8 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| I63A | Otisfield | 143.93 | 8 | IAMs_20 | IAMs_20 | | 06 59 04.1 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| K57A | Scipio Center | 143.95 | 16 | IAMs_20 | IAMs_20 | | 06 59 12.2 | |
| | comp=Z,901nm,21.0s | | | | | | | |
| UTMT | University of | 143.95 | 36 | IAMs_20 | IAMs_20 | | 07 00 48.2 | |
| | comp=Z,836nm,19.0s | | | | | | | |
| WCI | Wyandotte Cave | 143.96 | 31 | IAMs_20 | IAMs_20 | | 06 49 54.0 | |
| | comp=Z,926nm,21.0s | | | | | | | |
| HALT | Halls | 143.97 | 37 | IAMs_20 | IAMs_20 | | 06 56 32.0 | |
| | comp=Z,758nm,20.0s | | | | | | | |
| I62A | Tamworth | 143.99 | 9 | IAMs_20 | IAMs_20 | | 06 58 37.7 | |
| | comp=Z,903nm,20.0s | | | | | | | |
| HNH | Hanover | 143.99 | 11 | IAMs_20 | IAMs_20 | | 06 59 42.8 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| UNM | Universidad Na | 144.00 | 69 | | | PKPbc | 05 45 06.1 | +0.4 |
| UNM | | | | IAMs_20 | IAMs_20 | | 06 50 57.7 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| UNM | Universidad Na | 144.00 | 69 | PKiKP | | PKPbc | 05 45 06.1 | +0.4 |
| UNM | | | | MLR | MLR | | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| MET | Memphis--Engin | 144.15 | 38 | IAMs_20 | IAMs_20 | | 07 00 54.9 | |
| | comp=Z,1μm,20.0s | | | | | | | |
| T47A | Sharon Grove | 144.47 | 33 | IAMs_20 | IAMs_20 | | 07 02 19.7 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| R49A | Shelbyville | 144.47 | 30 | IAMs_20 | IAMs_20 | | 06 59 36.4 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| SPB | Sao Paulo | 144.47 | 206 | | | PKPbc | 05 45 07.3 | +0.7 |
| O52A | Adamsville | 144.48 | 24 | IAMs_20 | IAMs_20 | | 07 04 05.9 | |
| | comp=Z,839nm,19.0s | | | | | | | |
| P51A | Williamsport | 144.49 | 26 | IAMs_20 | IAMs_20 | | 06 58 30.6 | |
| | comp=Z,1μm,22.0s | | | | | | | |
| BINY | Binghamton | 144.59 | 16 | IAMs_20 | IAMs_20 | | 07 00 09.1 | |
| | comp=Z,1μm,21.0s | | | | | | | |
| O53A | New Philadelph | 144.61 | 23 | IAMs_20 | IAMs_20 | | 07 04 31.3 | |
| | comp=Z,866nm,20.0s | | | | | | | |
| WVT | Waver

baz=328,SNR=22
**CBN Corbin Frederi 147.83 20** P **PKPbc 05 45 15.1 -1.2**
baz=334,SNR=6.3
**R58B Mineral 147.86 21** IAMs_20 IAMs_20 07 02 23.2
comp=Z,1μm,20.0s
**Y52A Lilburn 148.45 33** IAMs_20 IAMs_20 06 58 08.1
comp=Z,1μm,22.0s
**250A Grady 148.53 39** IAMs_20 IAMs_20 07 06 54.8
comp=Z,835nm,20.0s
**BRAL Brewton 148.58 41** P **PKPbc 05 45 17.9 -0.6**
baz=312,SNR=9.5
**LVC Limon Verde 148.84 171 PKPdf 05 45 17.0 +1.0**
**LVC Limon Verde 148.84 171** PKP **PKPdf 05 45 17.8 +1.7**
comp=Z,135nm,1.1s,baz=207,slow=2.3,SNR=54
LVC PKPbc **PKiKP 05 45 21.7 +0.4**
comp=Z,265nm,1.0s,baz=239,slow=2.4,SNR=54
**LVC Limon Verde 148.84 171** PKIKP **PKPdf 05 45 17.0 +1.0**
**KMSC Kings Mountain 148.84 29** P **PKPbc 05 45 17.7 -1.4**
baz=325,SNR=34
**RCBR Riachuelo 148.85 244** PKPdf **PKPdf 05 45 13.4 -2.4**
**RCBR Riachuelo 148.85 244** PKP **PKPdf 05 45 15.9 +0.1**
comp=Z,16nm,1.2s,baz=63,slow=6.1,SNR=3.8
RCBR PKPbc **PKPbc 05 45 20.1 +0.3**
comp=Z,9.4nm,1.0s,baz=63,slow=4.8,SNR=6.0
**RCBR Riachuelo 148.85 244** PKIKP **PKPdf 05 45 13.4 -2.4**
**S61A Accomac 148.86 18** IAMs_20 IAMs_20 06 57 27.3
comp=Z,1μm,21.0s
**T59A Double "B" Far 148.86 22 PKPdf 05 45 14.2 -1.0**
T59A PKPbc **PKPbc 05 45 18.9 -0.1**
**PB04 IPOC Station P 148.89 169** PKPdf **PKPdf 05 45 15.3 -0.6**
PB04 PKPbc **PKiKP 05 45 20.6 -0.6**
PB04 PKPab **pPKPdf 05 45 25.5 +1.0**
**152A Waverly Hall 148.97 36** IAMs_20 IAMs_20 07 01 01.0
comp=Z,1μm,20.0s
**GOGA Godfrey 149.12 33** P **PKPbc 05 45 18.8 -1.0**
baz=320,SNR=42
**451A Vernon 149.78 40** IAMs_20 IAMs_20 07 04 41.1
comp=Z,1μm,22.0s
**CNNC Cliffs of the 150.26 24** P **PKPbc 05 45 21.4 -1.2**
baz=331,SNR=6.5
**TIGA Tifton 150.51 36** IAMs_20 IAMs_20 07 06 56.1
comp=Z,1μm,20.0s
**TIGA Tifton 150.51 36** P **PKPbc 05 45 22.8 -0.4**
baz=317,SNR=15
**255A Hazlehurst 150.79 34** IAMs_20 IAMs_20 07 05 06.0
comp=Z,1μm,21.0s
**553A Crawfordville 150.90 39** IAMs_20 IAMs_20 07 03 13.6
comp=Z,1μm,22.0s
**NHSC New Hope 151.05 29** P **PKPbc 05 45 23.9 -0.6**
baz=325,SNR=6.0
**Y60A Bolivia 151.19 25** IAMs_20 IAMs_20 07 02 36.8
comp=Z,1μm,20.0s
**BDFB Brasilia 151.52 213** PKP **PKPdf 05 45 20.4 +0.3**
comp=Z,12nm,0.9s,baz=132,slow=1.2,SNR=20
BDFB PKPbc **PKiKP 05 45 26.4 -0.2**
comp=Z,27nm,0.5s,baz=36,slow=2.3,SNR=40
**TEIG Tepich 153.52 61** IAMs_20 IAMs_20 06 55 59.0
comp=Z,1μm,20.0s
**DWPF Disney Wildern 154.22 38** P **PKPbc 05 45 30.2 -1.5**
baz=316
**LPAZ La Paz 155.16 170** PKP **PKPdf 05 45 26.2 +0.3**
comp=Z,16nm,1.0s,baz=54,slow=0.9,SNR=35
LPAZ PKPab **PKPab 05 45 51.1 +0.8**
comp=Z,108nm,0.8s,baz=178,slow=2.7,SNR=45
**SIV San Ignacio 155.68 186** PKP **PKPdf 05 45 26.3 +0.4**
comp=Z,15nm,1.0s,baz=219,slow=1.2,SNR=41
SIV PKPab **PKPab 05 45 53.4 +1.5**
comp=Z,75nm,1.0s,baz=162,slow=2.8,SNR=7.0
SIV PP **PP 05 49 26.9 0.0**
comp=Z,24nm,1.0s,baz=171,slow=3.3,SNR=8.5
**BBSR BB Station 156.07 2 PKPdf 05 45 25.1 -0.8**
**BBSR BB Station 156.07 2** IAMs_20 IAMs_20 07 10 03.0
comp=Z,846nm,21.0s
**TGUH Tegucigalpa,Un 156.27 74** IAMs_20 IAMs_20 06 50 17.0
comp=Z,687nm,21.0s
**CRIN San Cristobal 156.71 77** IAMs_20 IAMs_20 07 04 43.1
comp=Z,874nm,21.0s
**CAMR Camaricoa 157.65 47** IAMs_20 IAMs_20 07 00 18.6
comp=Z,2μm,22.0s
**JTS Las Juntas de 159.01 83 PKPdf 05 45 29.3 -0.8**
**JTS Las Juntas de 159.01 83** PKIKP **PKPdf 05 45 29.3 -0.8**
**ESPN Las Esperanzas 159.44 78** IAMs_20 IAMs_20 06 52 26.5
comp=Z,884nm,21.0s
**ETMB Extrema 161.81 172 PKPdf 05 45 32.6 -0.6**
ETMB PKPab **PKPab 05 46 18.6 +0.2**
**SAML Samuel 162.82 182 PKPdf 05 45 32.8 -1.4**
SAML PKPab **PKPab 05 46 23.0 +0.2**
**SAML Samuel 162.82 182** PKP2 **PKPab 05 46 23.0 +0.2**
SAML 06 45 32.8
**OTAV Otavalo 163.31 118** PKIKP **PKPdf 05 45 35.9 +0.6**
**MDP Montagnes des 168.49 255** PKPab **PKPab 05 46 47.0 -1.2**
comp=Z,15nm,0.9s,baz=124,slow=5.0,SNR=3.8
**ROSC El Rosal 168.96 108** PKP **PKPdf 05 45 39.4 -0.3**
ROSC comp=Z,3.5nm,0.4s,baz=41,slow=1.1,SNR=18 PKPab **PKPab 05 46 51.6 +0.8**
comp=Z,14nm,0.7s,baz=86,slow=4.6,SNR=5.9
**SMRT St. Maarten 170.32 356 PKPdf 05 45 39.1 -0.7**
**BOAV Boa Vista 173.27 209 PKPdf 05 45 40.1 -1.3**
BOAV **PKPab 05 47 10.3 +1.2**

**DJA 09 05:28:49.5±0.7,11°S±8°×11°9E±°,h10km,M5.7/16, mb5.8/6,MLv5.7/16,MwMwp6.4/2,Mwp6.3/2,South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BASI** | **Baing, Sumba** | **2.27** | **62** | P | Pn | 05 29 26.9 | -0.2 |
| BASI | | | | Pg | Pb | 05 29 30.5 | -0.1 |
| BASI | | | | S | Sn | 05 29 54.7 | -0.5 |
| **PLAI** | **Plampang** | **2.57** | **343** | P | Pn | 05 29 31.0 | -0.2 |
| PLAI | | | | S | Sn | 05 29 56.7 | -5.9 |
| **TWSI** | **Taliwang, Sumb** | **3.02** | **327** | P | Pn | 05 29 36.8 | -0.7 |
| TWSI | | | | S | Sn | 05 30 07.9 | -5.9 |
| **EDFI** | **Ende, Flores** | **4.01** | **51** | P | Pn | 05 29 50.1 | -1.0 |
| EDFI | | | | S | Sn | 05 30 33.8 | -4.4 |
| **IGBI** | **Denpasar** | **4.15** | **306** | P | Pn | 05 29 50.8 | -2.2 |
| **DNP** | **Denpasar** | **4.19** | **308** | P | Pn | 05 29 55.4 | +1.9 |
| **MMRI** | **Maumere** | **4.50** | **54** | P | Pn | 05 29 57.4 | -0.4 |
| **SRBI** | **Singaraja** | **4.58** | **314** | P | Pn | 05 29 59.5 | +0.6 |
| **BATI** | **Baumata** | **5.15** | **78** | P | Pn | 05 30 07.2 | +0.4 |
| | 1μm,1.5s,269μm4.3nm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.16** | **303** | P | Pn | 05 30 07.2 | +0.4 |
| | 2μm,2.0s,12nm | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.47** | **21** | P | Pn | 05 30 10.6 | -0.6 |
| **SOEI** | **Soe** | **5.84** | **75** | P | Pn | 05 30 17.4 | +1.1 |
| | 2μm,1.7s,10nm | | | | | | |
| **BNSI** | **Bone** | **7.03** | **13** | P | Pn | 05 30 35.0 | +2.5 |

**TRN 09 05:55:07.2,17°.15N×60°.11W,h55km,MD3.7,Far East of Antigua.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANBD** | **Bethesda, Anti** | **1.59** | **267** | *e*P | Pn | 05 55 34.6 | +1.6 |
| ANBD | | | | *e*S | Sn | 05 55 53.3 | +0.8 |
| **ANWB** | **Willy Bob** | **1.69** | **288** | *e*P | Pn | 05 55 36.0 | +1.7 |
| ANWB | | | | *e*S | Sn | 05 55 55.8 | +1.1 |
| **TBG** | **Guadaloupe-3** | **1.96** | **229** | *e*P | Pn | 05 55 40.6 | +2.6 |
| TBG | | | | *e*S | Sn | 05 56 02.9 | +1.5 |
| **MBFL** | **Flemmings, Mon** | **2.06** | **259** | *e*P | Pn | 05 55 40.9 | +1.5 |
| MBFL | | | | *e*S | Sn | 05 56 05.9 | +2.1 |
| **BIM** | **Bigot** | **2.77** | **200** | *e*P | Pn | 05 55 51.4 | +2.2 |
| BIM | | | | *e*S | Sn | 05 56 22.2 | +0.7 |
| **SLBI** | **Saint Lucia, B** | **3.21** | **195** | *e*P | Pn | 05 55 56.1 | +0.9 |
| SLBI | | | | *e*S | Sn | 05 56 32.6 | +0.3 |

**IDC 09 06:25:05.3±3.7,53°.39N×87°.59E,h0km,mbtmp2.9/2, ML2.5/2,Error ellipse: s-maj=42.4km s-min=21.6km az=86.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZALV** | **Zalesovo Beam** | **1.74** | **290** | Pn | Pn | 06 25 35.9 | -0.8 |
| | 1.4nm,0.3s,baz=107,slow=16,SNR=7.8 | | | | | | |
| ZALV | | | | Sn | Sn | 06 25 59.7 | +0.2 |
| | 0.7nm,0.3s,baz=111,slow=30,SNR=3.5 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **1.74** | **290** | I | I | 06 35 40.0 | |
| | baz=107,slow=318,SNR=3.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.24** | **247** | Pn | Pn | 06 26 39.8 | +1.2 |
| | 0.1nm,0.3s,baz=62,slow=15,SNR=1.9 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.43** | **209** | Pn | Pn | 06 26 55.9 | +1.0 |
| | 0.1nm,0.3s,baz=30,slow=16,SNR=2.1 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*NEIC **09** 06:30:01.9±1.6,31°.76N±0°.02×115°.63W±0°.02,h10km±2km, Error ellipse: s-maj=3.7km s-min=3.1km az=173.0*
*ECX **09** 06:30:02.7±0.6,31°.77N×115°.62W,h6km±3km,MD3.0, ML3.2*
*PAS **09** 06:30:02.3±1.6,31°.78N±0°.02×115°.60W±0°.02,h10km±8km, ML3.1/144,ML3.1/33(NEIC),Error ellipse: s-maj=3.1km s-min=2.5km az=169.0*
*MEX **09** 06:30:03.0±0.5,31°.69N×115°.60W,h20km±9km,MD3.0*

**ISC 09 06:30:01.6±0.9,31°.77N±0°.02×115°.61W±0°.02,h12km±8km, n56,σ0°.973/85,14C-5D,Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ALAMX** | **Rancho Alamar** | **0.25** | **340** | *e*P | **Pg** | **06 30 06.9** | **+0.1** |
| ALAMX | | | | *e*S | **Sg** | **06 30 10.6** | **+0.2** |
| ALAMX | | | | IAML | | 06 30 11.2 | |
| | comp=E,4μm,0.2s | | | | | | |
| **SJX** | **San Joaquin** | **0.30** | **269** | *i*P | **Pb** | **06 30 09.5** | **+0.6** |
| SJX | | | | *e*S | **Sb** | **06 30 14.8** | **+0.9** |
| **ESJX** | **Sierra Juarez** | **0.37** | **309** | | **Pg** | **06 30 09.4** | **+0.3** |
| ESJX | | | | | **Sg** | **06 30 14.8** | **+0.7** |
| ESJX | | | | IAML | | 06 30 15.2 | |
| | comp=E,2μm,0.1s | | | | | | |
| ESJX | | | | IAML | | 06 30 15.3 | |
| | comp=N,1μm,0.1s | | | | | | |
| **VTX** | **Valle De La Tr** | **0.41** | **202** | Pg | **Pg** | **06 30 10.2** | **+0.6** |
| **VTX** | **Valle De La Tr** | **0.41** | **202** | *i*P | **Pg** | **06 30 10.2** | **+0.6** |
| VTX | | | | *e*S | **Sg** | **06 30 15.8** | **+0.7** |
| **RHX** | **Rio Hardy** | **0.46** | **37** | *e*P | **Pg** | **06 30 09.9** | **-0.6** |
| RHX | | | | *e*S | **Sg** | **06 30 16.0** | **-0.6** |
| **ECBX** | **El Chinero** | **0.56** | **122** | *i*P | **Pg** | **06 30 12.1** | **-0.3** |
| ECBX | | | | IAML | | 06 30 21.6 | |
| | comp=E,1μm,0.3s | | | | | | |
| ECBX | | | | *e* | | 06 30 21.6 | |
| **AGSX** | **Ej. Aguas Cali** | **0.62** | **37** | *e*P | **Pg** | **06 30 13.6** | **-0.1** |
| AGSX | | | | *e*S | **Sg** | **06 30 22.6** | **+0.7** |
| **CPBX** | **Cerro Prieto** | **0.70** | **22** | | **Pg** | **06 30 15.7** | **+0.6** |
| **GUVIX** | **Guadalupe Vict** | **0.70** | **40** | | **Sb** | **06 30 26.1** | **+0.8** |
| **GUVIX** | **Guadalupe Vict** | **0.70** | **40** | | **Pg** | **06 30 15.6** | **+0.4** |
| **GUVIX** | **Guadalupe Vict** | **0.70** | **40** | IAML | | 06 30 26.5 | |
| | comp=E,3μm,0.3s | | | | | | |
| GUVIX | | | | IAML | | 06 30 26.6 | |
| | comp=N,2μm,0.4s | | | | | | |
| **GUVIX** | **Guadalupe Vict** | **0.70** | **40** | *e*P | **Pg** | **06 30 15.5** | **+0.4** |
| **MBIG** | **Mexicali** | **0.72** | **28** | *e*P | **Pg** | **06 30 15.9** | **+0.3** |
| MBIG | | | | *e*S | **Sb** | **06 30 27.2** | **+1.2** |
| **MBIG** | **Mexicali** | **0.72** | **28** | *e*P | **Pg** | **06 30 16.0** | **+0.4** |
| **SPIG** | **San Pedro Mart** | **0.73** | **170** | *e*P | **Pg** | **06 30 15.7** | **-0.1** |
| SPIG | | | | *e*S | **Sg** | **06 30 24.8** | **-0.6** |
| **EDOMX** | **El Doctor, EDO** | **0.76** | **75** | *e*P | **Pg** | **06 30 16.5** | **+0.3** |
| **JARAX** | **Ej. Heriberto** | **0.77** | **2** | *e*P | **Pg** | **06 30 16.2** | **-0.2** |
| JARAX | | | | *e*S | **Sg** | **06 30 26.9** | **+0.5** |
| JARAX | | | | *e* | | 06 30 34.3 | |
| JARAX | | | | IAML | | 06 30 34.3 | |
| | comp=N,798nm,0.4s | | | | | | |
| **UABX** | **UABC, Campus M** | **0.87** | **9** | Pg | **Pg** | **06 30 18.9** | **+0.5** |
| UABX | | | | | **Sb** | **06 30 31.4** | **+1.1** |
| **SGL** | **Mount Signal** | **0.88** | **354** | | **Pg** | **06 30 18.0** | **-0.6** |
| SGL | | | | | **Sg** | **06 30 29.7** | **-0.5** |
| **SGL** | **Mount Signal** | **0.88** | **354** | *e*P | **Pg** | **06 30 18.0** | **-0.6** |
| SGL | | | | *e*S | **Sg** | **06 30 29.7** | **-0.5** |
| **5053** | **Calexico** | **0.90** | **6** | | **Pg** | **06 30 19.0** | **0.0** |
| 5053 | | | | | **Sb** | **06 30 32.6** | **+1.4** |
| **CCX** | **Cicese** | **0.91** | **276** | | **Pb** | **06 30 19.3** | **+0.1** |
| CCX | | | | | **Sb** | **06 30 31.7** | **+0.5** |
| CCX | | | | IAML | | 06 30 34.7 | |
| | comp=N,283nm,0.4s | | | | | | |
| CCX | | | | IAML | | 06 30 35.2 | |
| | comp=E,323nm,0.6s | | | | | | |
| **CCX** | **Cicese** | **0.91** | **276** | *i*P | **Pb** | **06 30 19.3** | **+0.1** |
| CCX | | | | *e*S | **Sb** | **06 30 31.8** | **+0.5** |
| CCX | | | | *e* | | 06 30 34.7 | |
| **YUH2** | **Yuha Desert** | **0.92** | **343** | *e*P | **Pg** | **06 30 18.7** | **-0.6** |
| **YUH** | **Yuha Desert** | **0.92** | **343** | | **Pg** | **06 30 18.7** | **-0.5** |
| YUH | | | | IAML | | 06 30 31.5 | |
| | comp=E,292nm,0.5s | | | | | | |
| **RMX** | **La Rumorosa** | **0.92** | **334** | Pg | **Pg** | **06 30 17.6** | **-1.8** |
| RMX | | | | | **Pb** | **06 30 17.8** | **-1.8** |
| RMX | | | | IAML | | 06 30 31.3 | |
| | comp=E,788nm,0.3s | | | | | | |
| RMX | | | | IAML | | 06 30 31.6 | |
| | comp=N,808nm,0.2s | | | | | | |
| **RMX** | **La Rumorosa** | **0.92** | **334** | *e*P | **Pg** | **06 30 17.6** | **-1.8** |
| RMX | | | | IAML | | 06 30 31.4 | |
| | comp=E,761nm,0.3s | | | | | | |
| RMX | | | | *e* | | 06 30 31.4 | |
| RMX | | | | *e* | | 06 30 31.6 | |
| RMX | | | | IAML | | 06 30 31.6 | |
| | comp=N,785nm,0.2s | | | | | | |
| **5054** | **Holtville Bond** | **0.95** | **14** | | **Pg** | **06 30 19.9** | **0.0** |
| 5054 | | | | | **Sb** | **06 30 33.6** | **+1.1** |
| **PBX** | **Punta Banda** | **0.95** | **269** | *e*P | **Pb** | **06 30 20.1** | **0.0** |
| PBX | | | | *e*S | **Sb** | **06 30 33.2** | **+0.5** |
| **SFX** | **San Felipe** | **0.97** | **138** | Pg | **Pg** | **06 30 19.9** | **-0.5** |
| SFX | | | | IAML | | 06 30 33.6 | |
| | comp=N,472nm,0.6s | | | | | | |
| SFX | | | | IAML | | 06 30 34.2 | |
| | comp=E,282nm,0.5s | | | | | | |
| **SFX** | **San Felipe** | **0.97** | **138** | *e*P | **Pg** | **06 30 19.7** | **-0.6** |
| SFX | | | | *e*S | **Sg** | **06 30 32.6** | **-0.5** |
| **IKP** | **In-Ko-Pah, Jac** | **0.98** | **334** | | **Pg** | **06 30 19.8** | **-0.6** |
| IKP | | | | | **Sg** | **06 30 32.1** | **-1.0** |
| **IKP** | **In-Ko-Pah, Jac** | **0.98** | **334** | *e*P | **Pg** | **06 30 19.7** | **-0.6** |
| IKP | | | | *e*S | **Sg** | **06 30 32.3** | **-0.9** |
| **WESC** | **Westside Schoo** | **0.99** | **354** | | **Pg** | **06 30 20.5** | **-0.2** |
| WESC | | | | | **Sb** | **06 30 34.3** | **+0.5** |
| **DREC** | **Desert Rsrch C** | **1.04** | **7** | | **Pg** | **06 30 21.6** | **0.0** |
| DREC | | | | | **Sn** | **06 30 37.2** | **+0.7** |
| **CBX** | **Cerro Bola** | **1.05** | **301** | Pg | **Pg** | **06 30 21.5** | **-0.3** |
| CBX | | | | Sg | **Sb** | **06 30 36.3** | **+0.7** |
| CBX | | | | IAML | | 06 30 36.9 | |
| | comp=N,453nm,0.6s | | | | | | |
| CBX | | | | IAML | | 06 30 38.7 | |
| | comp=E,829nm,0.5s | | | | | | |
| **CBX** | **Cerro Bola** | **1.05** | **301** | *i*P | **Pg** | **06 30 21.7** | **-0.1** |
| CBX | | | | *e*S | **Sb** | **06 30 35.7** | **+0.2** |
| **COK2** | **Cook Ranch 2** | **1.08** | **355** | | **Pb** | **06 30 22.0** | **-0.3** |
| **TJIG** | **Tijuana** | **1.12** | **306** | *e*P | **Pb** | **06 30 22.3** | **-0.6** |
| TJIG | | | | *e*S | **Sg** | **06 30 36.8** | **-1.0** |
| **TJIG** | **Tijuana** | **1.12** | **306** | *e*P | **Pb** | **06 30 22.3** | **-0.6** |
| TJIG | | | | *e*S | **Sg** | **06 30 37.3** | **-0.5** |
| **CRR** | **Carrizo Plain** | **1.16** | **345** | | **Pb** | **06 30 23.4** | **-0.1** |
| CRR | | | | | **Sb** | **06 30 38.6** | **+0.1** |
| **TKX** | **Tecate** | **1.16** | **313** | | **Pb** | **06 30 23.2** | **-0.4** |
| TKX | | | | IAML | | 06 30 39.3 | |
| | comp=E,530nm,0.2s | | | | | | |
| TKX | | | | IAML | | 06 30 41.5 | |
| | comp=N,634nm,0.2s | | | | | | |
| **COA** | **Coachella** | **1.17** | **20** | | **Pb** | **06 30 23.8** | **+0.1** |
| **SQX** | **San Quintin** | **1.21** | **191** | *e*P | **Pb** | **06 30 23.8** | **-0.7** |
| SQX | | | | *e*S | **Sb** | **06 30 39.7** | **-0.4** |
| SQX | | | | *e* | | 06 30 42.0 | |
| SQX | | | | IAML | | 06 30 42.0 | |
| | comp=E,384nm,0.3s | | | | | | |
| **BAR** | **Barrett** | **1.28** | **315** | | **Sb** | **06 30 41.8** | **-0.4** |
| **TJX** | **Tijuana** | **1.43** | **301** | | **Pn** | **06 30 27.8** | **+0.4** |
| TJX | | | | Pn | **Pb** | **06 30 28.3** | **+0.1** |
| TJX | | | | IAML | | 06 30 51.6 | |
| | comp=N,442nm,0.5s | | | | | | |
| **109C** | **Camp Elliot, M** | **1.69** | **312** | | **Pn** | **06 30 31.6** | **+0.6** |
| 109C | | | | IAML | | 06 30 56.7 | |
| | comp=N,244nm,0.3s | | | | | | |
| **113A** | **Mohawk Valley,** | **1.85** | **57** | Pn | **Pn** | **06 30 31.9** | **-1.3** |
| **PFO** | **Pinyon Flats O** | **1.97** | **339** | | **Pn** | **06 30 33.9** | **-1.1** |
| **214A** | **Organ Pipe Nat** | **2.39** | **85** | | **Pn** | **06 30 39.0** | **-1.5** |
| **ELS** | **Elsinore Mount** | **2.42** | **321** | | **Pb** | **06 30 44.2** | **-1.0** |
| ELS | | | | IAML | | 06 31 15.8 | |
| | comp=N,51nm,0.3s | | | | | | |
| ELS | | | | IAML | | 06 31 16.8 | |
| | comp=E,80nm,0.5s | | | | | | |
| **Y14A** | **Wickenburg** | **3.08** | **45** | | **Pn** | **06 30 50.0** | **-0.1** |
| **W13A** | **Hualapai Mount** | **3.62** | **23** | Pn | **Pn** | **06 30 58.5** | **+0.8** |
| **X16A** | **Lo Mia Camp, P** | **4.38** | **52** | Pn | **Pn** | **06 31 08.5** | **+0.3** |
| **U15A** | **North Rim** | **5.40** | **30** | Pn | **Pn** | **06 31 23.9** | **+1.6** |

*NEIC **09** 06:44:23.1±1.4,11°.9S±0°.1×166°.8E±0°.2,h132km±8km, mb4.4/21,Error ellipse: s-maj=23.4km s-min=15.1km az=89.0*
*IDC **09** 06:44:24.6±4.1,11°.90S×166°.65E,h151km±36km, mb3.9/13,mbtmp4.3/14,Error ellipse: s-maj=21.7km s-min=16.2km az=84.0*

**ISC 09 06:44:24.4±0.5,11°.98S±0°.07×166°.7E±0°.1,h150km,n44, σ1°.09/47,mb4.3/20,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOUNC** | **Koumac, New Ca** | **8.83** | **195** | Pn | **Pn** | **06 46 30.3** | **+1.4** |
| **DZM** | **Mont Dzumac** | **10.04** | **181** | Pn | **Pn** | **06 46 42.7** | **-2.3** |
| **DZM** | **Mont Dzumac** | **10.04** | **181** | P | **Pn** | **06 46 47.3** | **+2.3** |
| | 2.6nm,0.6s,baz=349,slow=7.8,SNR=10 | | | | | | |
| DZM | | | | S | **Sn** | **06 48 32.0** | **-4.2** |
| | 7.4nm,1.0s,baz=142,slow=19,SNR=2.3 | | | | | | |
| **MSVF** | **Nonsavu** | **12.38** | **119** | P | **P** | **06 47 22.0** | **+0.4** |
| | 16nm,0.9s,baz=119,slow=19,SNR=2.8 | | | | | | |
| **EIDS** | **Eidsvold** | **19.87** | **226** | P | **P** | **06 48 44.1** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 06 48 47.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PATS** | **Pohnpei** | **20.47** | **336** | P | **P** | **06 48 49.6** | **-0.8** |
| PATS | | | | IAmb | IAmb | 06 48 59.0 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **21.22** | **245** | P | **P** | **06 48 59.2** | **+0.7** |
| | comp=Z,0.4nm,1.0s,baz=64,slow=14,SNR=2.8 | | | | | | |
| **CTAO** | **Charters Tower** | **21.22** | **245** | P | **P** | **06 48 59.4** | **+0.9** |
| CTAO | | | | IAmb | IAmb | 06 49 28.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **23.06** | **215** | P | **P** | **06 49 18.2** | **+1.4** |
| **RTZ** | **Ruatahuna** | **28.07** | **163** | P | **P** | **06 50 01.9** | **+0.1** |
| RTZ | | | | IAmb | IAmb | 06 50 20.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **MRZ** | **Mangatainoka R** | **29.62** | **166** | P | **P** | **06 50 15.6** | **+0.1** |
| **STKA** | **Stephens Creek** | **30.43** | **225** | P | **P** | **06 50 24.1** | **+1.3** |
| **STKA** | **Stephens Creek** | **30.43** | **225** | P | **P** | **06 50 23.4** | **+0.6** |
| | comp=Z,4.5nm,0.9s,baz=352,slow=11,SNR=3.9 | | | | | | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.04** | **252** | P | **P** | **06 50 36.2** | **-0.9** |
| **WRA** | **Warramunga Arr** | **32.05** | **252** | P | **P** | **06 50 36.3** | **-0.9** |
| | comp=Z,1.6nm,0.6s,baz=83,slow=9.0,SNR=9.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 53 23.6** | **+0.2** |
| | comp=Z,1.6nm,0.8s,baz=78,slow=3.5,SNR=8.7 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **LBZ** | **Lake Benmore** | **32.43** | **175** | P | **P** | **06 50 40.8** | **+0.6** |
| LBZ | | | | IAmb | IAmb | 06 51 06.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **33.22** | **245** | P | **P** | **06 50 46.9** | **-0.5** |
| **ASAR** | **Alice Springs** | **33.22** | **245** | P | **P** | **06 50 46.5** | **-0.9** |
| | comp=Z,3.4nm,0.8s,baz=74,slow=9.5,SNR=28 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 53 26.4** | **-0.2** |
| | comp=Z,1.9nm,0.8s,baz=97,slow=2.5,SNR=11 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **34.89** | **229** | P | **P** | **06 51 01.8** | **+0.2** |
| **KNRA** | **Kununurra** | **36.98** | **260** | P | **P** | **06 51 19.7** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **45.71** | **252** | P | **P** | **06 52 30.8** | **0.0** |
| PSA00 | | | | IAmb | IAmb | 06 52 34.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **55.22** | **332** | P | **P** | **06 53 40.8** | **-1.1** |
| | comp=Z,1.3nm,0.5s,baz=164,slow=8.6,SNR=2.7 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **61.17** | **325** | P | **P** | **06 54 22.4** | **-0.6** |
| | comp=Z,1.2nm,0.7s,baz=127,slow=8.0,SNR=4.4 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **64.19** | **333** | P | **P** | **06 54 41.9** | **-1.1** |
| | comp=Z,4.2nm,1.0s,baz=137,slow=8.5,SNR=5.4 | | | | | | |
| | comp=Z,4.2nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **65.58** | **181** | P | **P** | **06 54 52.0** | **+0.5** |
| | comp=Z,1.3nm,0.9s,baz=14,slow=2.2,SNR=5.8 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **CASY** | **Casey** | **65.86** | **202** | P | **P** | **06 54 53.9** | **+0.4** |
| CASY | | | | IAmb | IAmb | 06 54 54.2 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **65.87** | **180** | P | **P** | **06 54 55.4** | **+2.0** |
| SBA | | | | IAmb | IAmb | 06 54 56.0 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.33** | **294** | P | **P** | **06 55 40.5** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **73.33** | **294** | P | **P** | **06 55 41.0** | **+0.8** |
| | comp=Z,3.8nm,0.6s,baz=120,slow=4.7,SNR=15 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **M16K** | **Timber Creek** | **77.68** | **16** | P | **P** | **06 56 05.1** | **+1.1** |
| **QSPA** | **South Pole Qui** | **78.03** | **180** | P | **P** | **06 56 06.7** | **+0.4** |
| QSPA | | | | IAmb | IAmb | 06 56 07.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **78.03** | **180** | P | **P** | **06 56 06.6** | **+0.4** |
| | comp=Z,9.6nm,1.1s,baz=40,slow=1.2,SNR=13 | | | | | | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **78.08** | **15** | P | **P** | **06 56 06.8** | **+0.5** |
| **L16K** | **Owhat River** | **78.12** | **16** | P | **P** | **06 56 07.0** | **+0.5** |
| L16K | | | | IAmb | IAmb | 06 56 07.5 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **79.96** | **324** | P | **P** | **06 56 17.2** | **+0.2** |
| | comp=Z,1.3nm,0.8s,baz=142,slow=7.5,SNR=6.3 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **84.10** | **18** | P | **P** | **06 56 38.0** | **0.0** |
| **ILAR** | **Eielson Array** | **84.10** | **18** | P | **P** | **06 56 37.2** | **-0.8** |
| | comp=Z,4.1nm,0.8s,baz=228,slow=6.1,SNR=40 | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.92** | **50** | P | **P** | **06 56 48.3** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=232,slow=7.3,SNR=4.4 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **86.62** | **17** | P | **P** | **06 56 50.8** | **+0.3** |
| **I28M** | **Miner Creek** | **86.76** | **20** | P | **P** | **06 56 51.0** | **-0.2** |
| **MKAR** | **Makanchi Array** | **94.83** | **317** | P | **P** | **06 57 29.0** | **-0.3** |
| | comp=Z,2.8nm,0.8s,baz=93,slow=6.3,SNR=21 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **117.46** | **346** | PKP | **PKiKP** | **07 02 50.8** | **-1.0** |
| | comp=Z,1.6nm,0.8s,baz=62,slow=2.9,SNR=4.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **151.20** | **345** | PKPbc | **PKiKP** | **07 04 00.4** | **-0.5** |
| | comp=Z,1.4nm,0.9s,baz=5.7,slow=4.5,SNR=6.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.31** | **276** | PKP | **PKPdf** | **07 04 11.2** | **-0.7** |
| | comp=Z,1.7nm,1.0s,baz=12,slow=7.7,SNR=6.2 | | | | | | |

**IDC 09 06:53:04.8±2.3,3°.56N×127°.50E,h0km,mb3.3/3, mbtmp3.3/3,Error ellipse: s-maj=164.0km s-min=28.8km

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| COEG | | | | | IAML | | 06 58 11.1 | |
| | comp=Z,81nm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **3.00** | **92** | *i* P | | Pn | 06 57 19.3 | +0.2 |
| SCLA | | | | | IAML | | 06 58 15.5 | |
| | comp=Z,34nm,1.0s | | | | | | | |
| **COEB** | **Comit de Eme** | **3.21** | **95** | *i* P | | Pn | 06 57 21.5 | -0.5 |
| COEB | | | | *i* S | | Sn | 06 58 01.1 | +1.4 |
| COEB | | | | | IAML | | 06 58 13.6 | |
| | comp=Z,42nm,1.0s | | | | | | | |
| **LCND** | **La Caada** | **3.85** | **97** | *i* P | | Pn | 06 57 31.6 | +0.9 |
| LCND | | | | | IAML | | 06 59 34.4 | |
| | comp=Z,46nm,1.0s | | | | | | | |

*OTT **09** 06:58:50.3±0.3,73.41N×72.07W,h18km,ML3.9/3,209km northeast from Pond Inlet, Nu Baffin Bay Seismic Zone.*
*DNK **09** 06:58:54.2±4.2,73.61N×71.61W,h25km±7km,ML2.5*
**ISC 09 06:58:46.9**±1.0,**73°46N**±0.05×**71°72W**±0.07,**h10km**,**n14**, **σ3°01**/23,**Baffin Bay**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLRN** | **Clyde River** | **3.16** | **161** | PN | **Pn** | **06 59 39.5** | **+3.0** |
| CLRN | | | | SN | **Sn** | **07 00 14.7** | **+0.5** |
| CLRN | | | | Trac | | 07 00 17.4 | |
| | comp=Z,47nm,0.2s | | | | | | |
| **TULEG** | **Thule** | **3.18** | **12** | *i* P | **Pn** | **06 59 38.9** | **+2.1** |
| TULEG | | | | *i* S | **Sn** | **07 00 12.8** | **-1.9** |
| TULEG | | | | IAML | | 07 00 15.6 | |
| | comp=Z,40nm,0.5s | | | | | | |
| **KULLO** | **Kullorsuaq** | **4.16** | **67** | PN | **Pn** | **06 59 53.7** | **+3.5** |
| KULLO | | | | SN | **Sn** | **07 00 38.8** | **0.0** |
| KULLO | | | | Trac | | 07 00 40.6 | |
| | comp=Z,4.0nm,0.1s | | | | | | |
| **KULLO** | **Kullorsuaq** | **4.16** | **67** | *i* P | **Pn** | **06 59 53.2** | **+2.9** |
| KULLO | | | | *e*S | **Sn** | **07 00 36.4** | **-2.4** |
| KULLO | | | | IAML | | 07 00 48.8 | |
| | comp=Z,61nm,0.6s | | | | | | |
| **UPNV** | **Upernavik** | **4.59** | **91** | *i* P | **Pn** | **07 00 00.1** | **+3.9** |
| UPNV | | | | *i* S | **Sn** | **07 00 49.0** | **-0.4** |
| UPNV | | | | IAML | | 07 00 52.3 | |
| | comp=Z,13nm,0.4s | | | | | | |
| **NUUG** | **Nuugaatsiaq** | **5.90** | **100** | *i* P | **Pn** | **07 00 18.5** | **+4.3** |
| NUUG | | | | *e* | | 07 01 05.5 | |
| **NEEM** | **North Greenlan** | **6.52** | **43** | *i* P | **Pn** | **07 00 25.9** | **+3.0** |
| NEEM | | | | *e*S | **Sn** | **07 01 35.2** | **-2.1** |
| **SUMG** | **Summit** | **9.69** | **79** | *i* P | **Pn** | **07 01 10.4** | **+4.0** |
| SUMG | | | | *i* S | **Sn** | **07 02 50.4** | **-4.8** |
| SUMG | | | | IAML | | 07 03 05.5 | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **FRB** | **Frobisher Bay** | **9.83** | **172** | PN | **Pn** | **07 01 08.7** | **+0.7** |
| FRB | | | | SN | **Sn** | **07 02 51.3** | **-6.9** |
| FRB | | | | Trac | | 07 03 14.3 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **ICESG** | **Greenland Ices** | **11.08** | **97** | *i* P | **Pn** | **07 01 26.3** | **+1.0** |
| **BLKN** | **Baker Lake** | **12.55** | **236** | PN | **Pn** | **07 01 45.0** | **0.0** |
| BLKN | | | | SN | Sn | 07 03 53.8 | -11 |
| BLKN | | | | Trac | | 07 03 59.3 | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **DAG** | **Danmarks Havn** | **13.59** | **52** | *i* P | **Pn** | **07 02 00.0** | **+0.7** |
| DAG | | | | *i* P | **Pn** | **07 02 00.0** | **+0.7** |
| DAG | | | | *e* | | 07 04 21.1 | |
| **NOR** | **Nord** | **13.63** | **31** | *i* P | **Pn** | **07 02 00.0** | **+0.2** |
| NOR | | | | *e* | | 07 04 24.1 | |
| **FCC** | **Fort Churchill** | **17.11** | **222** | PN | **Pn** | **07 02 45.8** | **+0.1** |
| FCC | | | | Trac | | 07 05 48.8 | |
| | comp=Z,63nm,2.4s | | | | | | |

*NOU **09** 07:05:53.1,42.11S×174.78E,h9km,MLv3.7/7,Off E. Coast of S. Island, N.Z.*
*WEL **09** 07:05:56.0±0.4,42°S±3°×17°4E±°,h11km±3km,M3.2/18, ML3.4/18,MLv3.2/18,Error ellipse: s-maj=0.0km s-min=0.0km az=9.0,confirmed*
**ISC 09 07:05:55.0**±0.9,**41°84S**±0.03×**174°28E**±0.03,**h16**km±7km, **n89**,**σ1°49**/98,**Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMWZ** | **Cape Campbell** | **0.10** | **331** | P | **Pg** | **07 05 58.9** | **+0.5** |
| **SEDS** | **Seddon Fire St** | **0.23** | **317** | P | **Pg** | **07 05 59.7** | **-0.4** |
| SEDS | | | | S | **Sg** | **07 06 02.4** | **-1.2** |
| **KEKS** | **Kekerengu Vall** | **0.25** | **242** | P | **Pg** | **07 06 01.8** | **+1.2** |
| KEKS | | | | S | **Sg** | **07 06 06.3** | **+1.9** |
| **BSWZ** | **Blackbirch Sta** | **0.33** | **292** | P | **Pg** | **07 06 01.2** | **-0.6** |
| BSWZ | | | | S | **Sg** | **07 06 05.1** | **-1.4** |
| **MGCS** | **Blenheim Marlb** | **0.41** | **323** | P | **Pg** | **07 06 01.5** | **-1.9** |
| MGCS | | | | S | **Sg** | **07 06 06.8** | **-2.3** |
| **TUWZ** | **Tuamarina** | **0.48** | **328** | P | **Pg** | **07 06 04.0** | **-0.6** |
| TUWZ | | | | S | **Sg** | **07 06 09.7** | **-1.3** |
| **BWRS** | **Waikakaho Road** | **0.49** | **325** | P | **Pg** | **07 06 04.1** | **-0.6** |
| BWRS | | | | S | **Sg** | **07 06 10.0** | **-1.3** |
| **SNZO** | **South Karori** | **0.62** | **31** | P | **Pb** | **07 06 08.1** | **+0.7** |
| **BHW** | **Baring Head** | **0.62** | **46** | P | **Pn** | **07 06 09.0** | **-0.1** |
| **TCW** | **Tory Channel** | **0.63** | **360** | P | **Pg** | **07 06 07.0** | **-0.3** |
| **WEL** | **Wellington** | **0.66** | **34** | P | **Pb** | **07 06 09.5** | **+1.2** |
| **PLWZ** | **Palliser** | **0.78** | **70** | P | **Pn** | **07 06 12.8** | **+1.4** |
| **KHZ** | **Kahutara** | **0.80** | **223** | P | **Pn** | **07 06 12.5** | **+0.9** |
| **KHZ** | **Kahutara** | **0.80** | **223** | P | **Pn** | **07 06 12.5** | **+0.9** |
| **MSWZ** | **Moikau Station** | **0.84** | **60** | P | **Pn** | **07 06 13.7** | **+1.4** |
| **NNZ** | **Nelson** | **0.92** | **312** | P | **Pg** | **07 06 11.5** | **-1.3** |
| NNZ | | | | S | **Sg** | **07 06 22.8** | **-2.1** |
| **CAW** | **Cannon Point** | **0.94** | **39** | P | **Pn** | **07 06 14.3** | **+0.7** |
| CAW | | | | S | **Sn** | **07 06 28.8** | **+2.1** |
| **PAWZ** | **Paruwai Farm** | **0.97** | **62** | P | **Pn** | **07 06 15.3** | **+1.2** |
| **THZ** | **Tophouse** | **1.03** | **274** | P | **Pb** | **07 06 14.3** | **-0.2** |
| **DUWZ** | **D'Urville Isla** | **1.07** | **345** | P | **Pb** | **07 06 14.3** | **-0.8** |
| DUWZ | | | | S | **Sb** | **07 06 28.0** | **-0.9** |
| **KIW** | **Kapiti Island** | **1.09** | **26** | P | **Pb** | **07 06 16.0** | **+0.6** |
| **MTW** | **Mount Morrison** | **1.14** | **54** | P | **Pn** | **07 06 17.4** | **+1.0** |
| **TRWZ** | **Traveller** | **1.14** | **68** | P | **Pn** | **07 06 17.4** | **+1.0** |
| **MRNZ** | **Matariki Terra** | **1.22** | **291** | P | **Pn** | **07 06 17.6** | **+0.1** |
| **OGWZ** | **Otaki Gorge** | **1.22** | **34** | P | **Pg** | **07 06 18.7** | **+0.1** |
| **TKNZ** | **Takaka Hill** | **1.28** | **309** | P | **Pn** | **07 06 17.9** | **-0.3** |
| **HOWZ** | **Holdsworth Sta** | **1.32** | **45** | P | **Pg** | **07 06 19.9** | **-0.6** |
| **TMWZ** | **Te Maipa** | **1.41** | **59** | P | **Pg** | **07 06 20.9** | **-1.3** |
| **GVZ** | **Greta Valley S** | **1.46** | **219** | P | **Pb** | **07 06 21.8** | **0.0** |
| **MRZ** | **Mangatainoka R** | **1.53** | **40** | P | **Pb** | **07 06 22.7** | **-0.3** |
| **TIWZ** | **Tintock** | **1.61** | **49** | P | **Pb** | **07 06 23.8** | **-0.6** |
| **QRZ** | **Quartz Range** | **1.66** | **307** | P | **Pn** | **07 06 24.6** | **+1.1** |
| **LTZ** | **Lake Taylor** | **1.76** | **237** | P | **Pn** | **07 06 25.9** | **+1.0** |
| **AMCZ** | **Amberley** | **1.80** | **221** | P | **Pn** | **07 06 26.2** | **+0.8** |
| **OHWZ** | **Ohakea** | **1.81** | **26** | P | **Pb** | **07 06 28.0** | **+0.2** |
| **PRWZ** | **Pori Road** | **1.81** | **45** | P | **Pb** | **07 06 26.4** | **-1.4** |
| **POWZ** | **Post Office Ro** | **1.83** | **38** | P | **Pn** | **07 06 26.9** | **+1.1** |
| **DSZ** | **Denniston Nort** | **1.85** | **272** | P | **Pn** | **07 06 28.1** | **+1.9** |
| **BFZ** | **Birch Farm** | **1.88** | **53** | P | **Pn** | **07 06 24.5** | **-2.0** |
| **OKCZ** | **Okains Bay** | **2.09** | **205** | P | **Pn** | **07 06 29.8** | **+0.4** |
| **DVHZ** | **Dannevirke** | **2.10** | **43** | P | **Pn** | **07 06 29.7** | **+0.1** |
| **WAZ** | **Wanganui** | **2.15** | **15** | P | **Pb** | **07 06 33.0** | **-0.5** |
| **ANWZ** | **Angora Road** | **2.16** | **51** | P | **Pn** | **07 06 30.7** | **+0.4** |
| **TSZ** | **Takapari Road** | **2.19** | **36** | P | **Pn** | **07 06 31.4** | **+0.6** |
| **MQZ** | **McQueen's Vall** | **2.22** | **212** | P | **Pn** | **07 06 30.7** | **-0.4** |
| **OXZ** | **Oxford** | **2.23** | **227** | P | **Pn** | **07 06 31.3** | **0.0** |
| **AKCZ** | **Akaroa Harbour** | **2.27** | **206** | P | **Pn** | **07 06 32.2** | **+0.3** |
| **INZ** | **Inchbonnie** | **2.28** | **246** | P | **Pn** | **07 06 33.1** | **+1.1** |
| **LREZ** | **Lake Rotokare** | **2.38** | **2** | P | **Pb** | **07 06 37.5** | **0.0** |
| **PNHZ** | **Pukenui** | **2.41** | **38** | P | **Pn** | **07 06 34.3** | **+0.4** |
| **PREZ** | **Palmer Road** | **2.50** | **358** | P | **Pn** | **07 06 38.4** | **+3.4** |
| **KHEZ** | **Kahui Hut** | **2.55** | **355** | P | **Pn** | **07 06 39.4** | **+3.6** |
| **KHEZ** | **Kahui Hut** | **2.55** | **355** | P | **Pn** | **07 06 39.6** | **+3.8** |
| **NEZ** | **North Egmont** | **2.57** | **357** | P | **Pn** | **07 06 40.0** | **+3.9** |
| **NBEZ** | **Newall Road No** | **2.59** | **353** | P | **Pb** | **07 06 40.7** | **-0.3** |
| **MTVZ** | **Mangateitei** | **2.61** | **21** | P | **Pn** | **07 06 39.2** | **+2.5** |
| **PKEZ** | **Pukeiti** | **2.65** | **355** | P | **Pb** | **07 06 42.3** | **+0.1** |
| **PKVZ** | **Pokaka** | **2.67** | **18** | P | **Pn** | **07 06 40.0** | **+2.5** |
| **MOVZ** | **Moawhango** | **2.67** | **25** | P | **Pn** | **07 06 38.5** | **+1.0** |
| **WNVZ** | **Wahianoa** | **2.70** | **22** | P | **Pn** | **07 06 39.9** | **+1.9** |
| **KRHZ** | **Kereru** | **2.71** | **37** | P | **Pn** | **07 06 38.1** | **+0.1** |
| **TRVZ** | **Turoa** | **2.71** | **21** | P | **Pn** | **07 06 40.4** | **+2.2** |
| **VRZ** | **Vera Road** | **2.73** | **8** | P | **Pn** | **07 06 41.0** | **+2.7** |
| **WHVZ** | **Whangaehu Hut** | **2.74** | **22** | P | **Pn** | **07 06 40.6** | **+2.1** |
| **MAVZ** | **Matarangi** | **2.75** | **21** | P | **Pb** | **07 06 44.7** | **+0.7** |
| **FWVZ** | **Far West T-bar** | **2.76** | **21** | P | **Pn** | **07 06 40.9** | **+2.1** |
| **TUVZ** | **Tukino** | **2.77** | **23** | P | **Pn** | **07 06 40.7** | **+1.8** |
| **COVZ** | **Chateau Observ** | **2.81** | **20** | P | **Pb** | **07 06 45.5** | **+0.7** |
| **KAHZ** | **Kahuranaki** | **2.84** | **45** | P | **Pn** | **07 06 39.4** | **-0.4** |
| **NGZ** | **Ngauruhoe** | **2.84** | **21** | P | **Pn** | **07 06 43.4** | **+3.5** |
| **NNVZ** | **North Ngauruho** | **2.89** | **21** | P | **Pn** | **07 06 42.7** | **+2.2** |
| **WTVZ** | **West Tongariro** | **2.90** | **21** | P | **Pb** | **07 06 46.2** | **-0.2** |
| **WVZ** | **Waitaha Valley** | **2.90** | **244** | P | **Pn** | **07 06 41.5** | **+1.1** |
| **TWVZ** | **Taurewa** | **2.90** | **18** | P | **Pb** | **07 06 46.9** | **+0.5** |
| **ETVZ** | **East Tongariro** | **2.91** | **22** | P | **Pn** | **07 06 42.5** | **+1.7** |
| **TMVZ** | **Te Maari** | **2.93** | **22** | P | **Pn** | **07 06 42.9** | **+1.8** |
| **NTVZ** | **North Tongarir** | **2.94** | **22** | P | **Pn** | **07 06 42.9** | **+1.7** |
| **RPZ** | **Rata Peaks** | **3.02** | **231** | P | **Pn** | **07 06 42.3** | **0.0** |
| **RPZ** | **Rata Peaks** | **3.02** | **231** | P | **Pn** | **07 06 42.4** | **+0.2** |
| **RITZ** | **Rihia Road** | **3.10** | **23** | P | **Pb** | **07 06 50.3** | **+0.5** |
| **ARCZ** | **Arundel** | **3.10** | **226** | P | **Pn** | **07 06 43.9** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **3.16** | **33** | P | **Pn** | **07 06 43.9** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **3.16** | **33** | P | **Pn** | **07 06 43.8** | **-0.3** |
| **HIZ** | **Hauiti** | **3.35** | **8** | P | **Pn** | **07 06 49.1** | **+2.4** |
| **HIZ** | **Hauiti** | **3.35** | **8** | P | **Pn** | **07 06 49.6** | **+2.9** |
| **TMZ** | **Timaru** | **3.49** | **222** | P | **Pn** | **07 06 48.8** | **+0.1** |
| **TLZ** | **Tolley Road** | **3.63** | **16** | P | **Pb** | **07 06 57.1** | **-1.8** |
| **ODZ** | **Otahua Downs** | **4.16** | **218** | P | **Pn** | **07 06 57.5** | **-0.3** |
| **TWGZ** | **Tauwhareparae** | **4.63** | **39** | P | **Pn** | **07 07 05.6** | **+1.2** |

*IDC **09** 07:06:35.0±1.3,56.29N×148.89W,h0km,mb3.6/7, mbtmp3.6/10,ML3.6/3,MS3.6/2,Error ellipse: s-maj=35.8km s-min=16.4km az=36.0*
*NEIC **09** 07:06:35.9±1.7,56.26N±0.09×148.8W±0.1,h21km±9km, ML3.8/62,ML3.5(AEIC),Error ellipse: s-maj=13.1km s-min=7.7km az=157.0*
*AEIC **09** 07:06:38.9±2.0,56.21N±0.08×148.76W±0.08,h11km±7km, Error ellipse: s-maj=13.5km s-min=0.7km az=149.0*
**ISC 09 07:06:36.1**±0.8,**56°40N**±0.07×**148°87W**±0.05,**h10**km, **n171**,**σ0°85**/173,**mb3.7**/7,**Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **2.46** | **306** | | **Pn** | **07 07 16.1** | **-0.1** |
| **KDAK** | **Kodiak Island** | **2.46** | **306** | Pn | **Pn** | **07 07 16.0** | **-0.1** |
| | 7.2nm,0.3s,baz=121,slow=5.4,SNR=258 | | | | | | |
| KDAK | | | | Sn | **Sn** | **07 07 44.5** | **-1.7** |
| | 12nm,0.3s,baz=269,slow=22,SNR=11 | | | | | | |
| KDAK | | | | LR | LR | 07 08 21.4 | |
| | comp=Z,365nm,20.4s,baz=90,slow=42 20nm,0.4s | | | | | | |
| **OHAK** | **Old Harbor** | **2.56** | **291** | P | **Pn** | **07 07 16.6** | **-1.1** |
| **OHAK** | **Old Harbor** | **2.56** | **291** | | **Pn** | **07 07 16.4** | **-1.3** |
| **OHAK** | **Old Harbor** | **2.56** | **291** | | **Sn** | **07 07 46.1** | **-2.8** |
| **SYI** | **Shuyak Island** | **2.92** | **321** | | **Pn** | **07 07 22.4** | **-0.1** |
| **SYI** | **Shuyak Island** | **2.92** | **321** | | **Sn** | **07 07 58.5** | **+0.9** |
| **SII** | **Sitkinak Islan** | **2.95** | **275** | P | **Pn** | **07 07 23.7** | **+0.7** |
| **SII** | **Sitkinak Islan** | **2.95** | **275** | | **Pn** | **07 07 21.9** | **-1.2** |
| SII | | | | IAML | | 07 07 58.5 | |
| | comp=E,335nm,0.8s | | | | | | |
| SII | | | | IAML | | 07 08 01.1 | |
| | comp=N,359nm,0.6s | | | | | | |
| **SII** | **Sitkinak Islan** | **2.95** | **275** | | **Sn** | **07 07 55.4** | **-3.1** |
| **R18K** | **Karluk** | **3.27** | **293** | | **Pn** | **07 07 26.9** | **-0.4** |
| R18K | | | | | **Sn** | **07 08 04.1** | **-2.1** |
| **R18K** | **Karluk** | **3.27** | **293** | IAML | | 07 08 09.6 | |
| | comp=N,267nm,0.4s | | | | | | |
| R18K | | | | IAML | | 07 08 13.2 | |
| | comp=E,228nm,0.5s | | | | | | |
| **MID** | **Middleton Isla** | **3.33** | **23** | P | **Pn** | **07 07 28.3** | **+0.2** |
| **MID** | **Middleton Isla** | **3.33** | **23** | Pn | **Pn** | **07 07 27.9** | **-0.3** |
| MID | | | | IAML | | 07 08 05.9 | |
| | comp=N,142nm,0.8s | | | | | | |
| MID | | | | IAML | | 07 08 07.5 | |
| | comp=E,142nm,1.0s | | | | | | |
| **Q23K** | **Middleton Isla** | **3.33** | **23** | Pn | **Pn** | **07 07 27.9** | **-0.2** |
| Q23K | | | | IAML | | 07 08 05.9 | |
| | comp=N,140nm,0.9s | | | | | | |
| Q23K | | | | IAML | | 07 08 07.5 | |
| | comp=E,148nm,1.0s | | | | | | |
| **Q23K** | **Middleton Isla** | **3.33** | **23** | | **Sn** | **07 08 05.1** | **-2.5** |
| **CNPM** | **China Poot** | **3.38** | **339** | | **Pn** | **07 07 29.1** | **+0.1** |
| **BRSE** | **Bradley Lake S** | **3.50** | **344** | | **Pn** | **07 07 30.1** | **-0.4** |
| BRSE | | | | | **Sn** | **07 08 12.3** | **+0.4** |
| **BRLK** | **Bradley Lake** | **3.54** | **343** | | **Pn** | **07 07 30.5** | **-0.6** |
| BRLK | | | | IAML | | 07 08 22.1 | |
| | comp=E,89nm,0.6s | | | | | | |
| **HOM** | **Homer** | **3.59** | **337** | | **Pn** | **07 07 32.2** | **+0.5** |
| HOM | | | | IAML | | 07 08 22.4 | |
| | comp=N,217nm,0.6s | | | | | | |
| HOM | | | | IAML | | 07 08 28.0 | |
| | comp=E,220nm,1.1s | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.61** | **317** | | **Pn** | **07 07 32.2** | **+0.2** |
| Q19K | | | | IAML | | 07 08 24.8 | |
| | comp=N,171nm,1.0s | | | | | | |
| **P23K** | **Montague Islan** | **3.69** | **12** | | **Pn** | **07 07 33.0** | **-0.2** |
| **KAHG** | **Katmai Hook Gl** | **3.72** | **307** | | **Pn** | **07 07 34.4** | **+0.8** |
| **SEW** | **Seward** | **3.73** | **356** | | **Pn** | **07 07 33.4** | **-0.3** |
| **CHIR** | **Chirikof Islan** | **3.82** | **264** | Pn | **Pn** | **07 07 33.3** | **-1.7** |
| CHIR | | | | IAML | | 07 08 19.5 | |
| | comp=N,137nm,0.4s | | | | | | |
| CHIR | | | | IAML | | 07 09 30.6 | |
| | comp=E,113nm,2.2s | | | | | | |
| **KCE** | **Katmai Mt Cerb** | **3.89** | **301** | | **Pn** | **07 07 37.6** | **+1.7** |
| **ACHA** | **Angle Creek He** | **3.94** | **300** | | **Pn** | **07 07 36.2** | **-0.5** |
| **P19K** | **Oil Pt** | **4.00** | **326** | | **Pn** | **07 07 37.9** | **+0.4** |
| P19K | | | | IAML | | 07 08 37.6 | |
| | comp=E,177nm,0.5s | | | | | | |
| P19K | | | | IAML | | 07 08 37.7 | |
| | comp=N,168nm,0.5s | | | | | | |
| **KAHC** | **Katmai Hardscr** | **4.00** | **307** | | **Pn** | **07 07 38.3** | **+0.8** |
| **KAHC** | **Katmai Hardscr** | **4.00** | **307** | | **Pn** | **07 07 38.5** | **+0.9** |
| **ANCK** | **Angle Creek** | **4.02** | **299** | | **Pn** | **07 07 38.4** | **+0.6** |
| **O22K** | **Cooper Landing** | **4.12** | **354** | | **Pn** | **07 07 40.2** | **+1.1** |
| **O20K** | **Slope Mountain** | **4.19** | **333** | | **Pn** | **07 07 40.1** | **0.0** |
| **HIN** | **Hinchinbrook I** | **4.20** | **16** | | **Pn** | **07 07 40.2** | **0.0** |
| HIN | | | | IAML | | 07 08 27.9 | |
| | comp=E,105nm,0.7s | | | | | | |
| **CNTC** | **Contact Creek** | **4.24** | **299** | | **Pn** | **07 07 41.0** | **+0.3** |
| **IVE** | **Iliamna Volcan** | **4.24** | **331** | | **Pn** | **07 07 40.1** | **-0.7** |
| **ILSW** | **Iliamna Southw** | **4.25** | **330** | | **Pn** | **07 07 40.7** | **-0.2** |
| **ILSW** | **Iliamna Southw** | **4.25** | **330** | IAML | | 07 08 42.2 | |
| | comp=E,61nm,1.0s | | | | | | |
| **KAIM** | **Kayak Island** | **4.25** | **32** | | **Pn** | **07 07 40.6** | **-0.3** |
| KAIM | | | | IAML | | 07 08 49.9 | |
| | comp=E,149nm,1.9s | | | | | | |
| **PLK4** | **Peulik 4** | **4.28** | **290** | | **Pn** | **07 07 41.2** | **-0.1** |
| PLK4 | | | | IAML | | 07 08 37.9 | |
| | comp=N,133nm,0.7s | | | | | | |
| PLK4 | | | | IAML | | 07 08 38.0 | |
| | comp=E,148nm,0.7s | | | | | | |
| **PLK1** | **Peulik 1** | **4.45** | **292** | | **Pn** | **07 07 43.6** | **+0.1** |
| **EYAK** | **Cordova Ski Ar** | **4.47** | **20** | P | **Pn** | **07 07 44.0** | **+0.1** |
| **EYAK** | **Cordova Ski Ar** | **4.47** | **20** | | **Pn** | **07 07 43.9** | **+0.1** |
| **RED** | **Redoubt Volcan** | **4.52** | **335** | | **Pn** | **07 07 44.4** | **-0.3** |
| **P18K** | **Big Mountain,** | **4.53** | **314** | | **Pn** | **07 07 44.2** | **-0.5** |
| **CAPN** | **Captain Cook N** | **4.54** | **346** | Pn | **Pn** | **07 07 45.7** | **+0.9** |
| **RDSO** | **Redoubt South** | **4.55** | **335** | | **Pn** | **07 07 44.8** | **-0.3** |
| **RSO** | **Redoubt South** | **4.56** | **335** | | **Pn** | **07 07 44.6** | **-0.6** |
| **SUCK** | **Suckling Hills** | **4.56** | **34** | | **Pn** | **07 07 44.8** | **-0.4** |
| SUCK | | | | IAML | | 07 08 49.1 | |
| | comp=N,111nm,2.3s | | | | | | |
| SUCK | | | | IAML | | 07 09 07.5 | |
| | comp=E,99nm,2.3s | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.57** | **27** | | **Pn** | **07 07 46.2** | **+0.9** |
| **RDT** | **Redoubt** | **4.58** | **338** | | **Pn** | **07 07 44.9** | **-0.6** |
| **GLI** | **Glacier Island** | **4.59** | **11** | | **Pn** | **07 07 45.3** | **-0.2** |
| GLI | | | | IAML | | 07 08 37.7 | |
| | comp=E,65nm,0.8s | | | | | | |
| GLI | | | | IAML | | 07 08 44.7 | |
| | comp=N,56nm,0.6s | | | | | | |
| **RDWB** | **Redoubt West** | **4.60** | **335** | | **Pn** | **07 07 45.3** | **-0.5** |
| **HMT** | **Hamilton** | **4.64** | **30** | | **Pn** | **07 07 46.0** | **-0.2** |
| **NICHA** | **Nichawak Mount** | **4.64** | **32** | | **Pn** | **07 07 46.6** | **+0.5** |
| **NCT** | **North Crescent** | **4.69** | **335** | | **Pn** | **07 07 46.4** | **-0.5** |
| **O18K** | **Koktuh Hills** | **4.83** | **319** | | **Pn** | **07 07 48.2** | **-0.6** |
| O18K | | | | IAML | | 07 09 05.8 | |
| | comp=E,29nm,0.8s | | | | | | |
| **GRIN** | **Grindle Hills** | **4.87** | **35** | | **Pn** | **07 07 49.7** | **+0.3** |
| **SNH** | **Sunshine Point** | **4.95** | **38** | Pn | **Pn** | **07 07 50.4** | **-0.2** |
| **DIV** | **Divide** | **5.01** | **17** | | **Pn** | **07 07 51.8** | **+0.5** |
| **KHIT** | **Khitrov Hills** | **5.02** | **34** | | **Pn** | **07 07 51.4** | **-0.1** |
| **KNK** | **Knik Glacier** | **5.04** | **2** | | **Pn** | **07 07 51.4** | **-0.2** |
| KNK | | | | IAML | | 07 08 53.4 | |
| | comp=E,45nm,0.6s | | | | | | |
| KNK | | | | IAML | | 07 08 59.6 | |
| | comp=N,40nm,0.6s | | | | | | |
| **SPU** | **Mount Spurr** | **5.08** | **342** | | **Pn** | **07 07 52.3** | **+0.1** |
| SPU | | | | IAML | | 07 08 55.8 | |
| | comp=N,29nm,0.6s | | | | | | |
| SPU | | | | IAML | | 07 08 56.3 | |
| | comp=E,26nm,0.6s | | | | | | |
| **BMRM** | **Bremner River** | **5.09** | **24** | | **Pn** | **07 07 52.7** | **+0.2** |
| **WAX** | **Waxell Ridge** | **5.15** | **35** | | **Pn** | **07 07 51.7** | **-1.5** |
| **SPCP** | **Crater Peak Br** | **5.17** | **342** | | **Pn** | **07 07 53.9** | **+0.3** |
| **SPCG** | **Spurr Capps Gl** | **5.17** | **343** | | **Pn** | **07 07 54.3** | **+0.7** |
| **SPBG** | **Spurr Blockage** | **5.20** | **341** | | **Pn** | **07 07 54.2** | **+0.2** |
| **PMR** | **Palmer** | **5.21** | **359** | P | **Pn** | **07 07 54.5** | **+0.5** |
| **BARK** | **Barkley Ridge** | **5.23** | **37** | | **Pn** | **07 07 54.4** | **-0.1** |
| **CRQM** | **Cirque** | **5.30** | **32** | | **Pn** | **07 07 54.8** | **-0.6** |
| **CHGN** | **Chignik** | **5.31** | **273** | Pn | **Pn** | **07 07 55.0** | **-0.4** |
| CHGN | | | | IAML | | 07 09 03.3 | |
| | comp=N,73nm,0.4s | | | | | | |
| CHGN | | | | IAML | | 07 09 28.9 | |
| | comp=E,78nm,0.1s | | | | | | |
| **N19K** | **Bonanza Creek** | **5.31** | **329** | | **Pn** | **07 07 54.9** | **-0.6** |
| **KLU** | **Klutina** | **5.33** | **15** | | **Pn** | **07 07 55.5** | **-0.2** |
| **STLK** | **Strandline Lak** | **5.34** | **345** | | **Pn** | **07 07 55.0** | **-0.8** |
| **GHO** | **Glory Hole Cre** | **5.39** | **360** | | **Pn** | **07 07 57.2** | **+0.7** |
| **SML** | **Sawmill** | **5.43** | **3** | | **Pn** | **07 07 57.3** | **+0.2** |
| **RKAV** | **Rock Avalanche** | **5.57** | **42** | | **Pn** | **07 07 58.9** | **-0.1** |
| **VRDI** | **Verde Repeater** | **5.60** | **28** | | **Pn** | **07 07 59.3** | **-0.3** |
| **N18K** | **Kilae Creek** | **5.65** | **322** | | **Pn** | **07 07 59.2** | **-0.9** |
| **KIAG** | **Kiagna River** | **5.67** | **34** | | **Pn** | **07 08 00.7** | **+0.3** |
| **N25K** | **Chitina, Valde** | **5.67** | **21** | | **Pn** | **07 08 00.7** | **+0.3** |
| **SAMH** | **Samovar Hills** | **5.68** | **45** | | **Pn** | **07 08 00.7** | **+0.2** |
| **GLB** | **Gilahina Butte** | **5.70** | **25** | | **Pn** | **07 08 00.9** | **+0.1** |
| **GRNC** | **Granite Creek** | **5.72** | **38** | | **Pn** | **07 08 00.5** | **-0.7** |
| **TABL** | **Table Mountain** | **5.74** | **42** | | **Pn** | **07 08 01.2** | **-0.2** |
| **PTPK** | **Patty Peak** | **5.84** | **32** | | **Pn** | **07 08 03.4** | **+0.5** |
| **MCARA** | **McCarthy VSAT** | **5.85** | **29** | | **Pn** | **07 08 02.5** | **-0.2** |
| **O16K** | **Kokwok River B** | **5.86** | **307** | | **Pn** | **07 08 02.8** | **0.0** |
| **M20K** | **Styx River** | **5.92** | **340** | | **Pn** | **07 08 03.6** | **-0.3** |
| **PNL** | **Peninsula** | **6.01** | **53** | P | **Pn** | **07 08 04.9** | **-0.1** |
| **PNL** | **Peninsula** | **6.01** | **53** | | **Pn** | **07 08 04.8** | **-0.1** |
| **N17K** | **Nushagak Hills** | **6.01** | **317** | | **Pn** | **07 08 05.0** | **0.0** |
| **CTGM** | **Chitina Glacie** | **6.03** | **38** | | **Pn** | **07 08 04.8** | **-0.7** |
| **BCPM** | **Bancas Point** | **6.05** | **50** | | **Pn** | **07 08 05.6** | **+0.1** |
| **LOGN** | **Logan Glacier** | **6.05** | **40** | Pn | **Pn** | **07 08 04.7** | **-1.0** |
| **WACK** | **Wrangell Chich** | **6.07** | **21** | | **Pn** | **07 08 06.0** | **-0.1** |
| **M19K** | **Big River Lodg** | **6.21** | **335** | | **Pn** | **07 08 07.2** | **-0.5** |
| **M18K** | **Stony River** | **6.24** | **328** | | **Pn** | **07 08 07.5** | **-0.6** |
| **CNBA** | **Chernabura Isl** | **6.28** | **260** | Pn | **Pn** | **07 08 06.7** | **-2.0** |
| **O15K** | **Ungalikthiuk R** | **6.48** | **300** | | **Pn** | **07 08 11.8** | **+0.3** |
| **L19K** | **White Mountain** | **6.56** | **335** | | **Pn** | **07 08 12.0** | **-0.6** |
| **N16K** | **Nishlik Lake** | **6.61** | **312** | | **Pn** | **07 08 12.9** | **-0.3** |
| **L20K** | **Farewell, AK** | **6.61** | **339** | | **Pn** | **07 08 13.1** | **-0.2** |
| **SDPT** | **Sand Point** | **6.62** | **266** | P | **Pn** | **07 08 13.2** | **-0.1** |
| **O29M** | **Mount Kennedy** | **6.68** | **50** | | **Pn** | **07 08 14.1** | **-0.3** |
| **M17K** | **Holitna River** | **6.69** | **322** | | **Pn** | **07 08 14.1** | **-0.3** |
| **DHY** | **Denali Highway** | **6.74** | **6** | | **Pn** | **07 08 16.6** | **+1.5** |
| **P29M** | **Windy Craggy** | **6.74** | **57** | | **Pn** | **07 08 14.3** | **-0.8** |
| **M16K** | **Timber Creek** | **7.00** | **316** | | **Pn** | **07 08 18.6** | **-0.1** |
| **N15K** | **Kwethluk River** | **7.02** | **307** | | **Pn** | **07 08 20.0** | **+1.2** |
| **RND** | **Reindeer** | **7.03** | **0** | | **Pn** | **07 08 20.0** | **+1.0** |
| **L18K** | **Granite Mounta** | **7.07** | **329** | | **Pn** | **07 08 18.9** | **-0.6** |
| **O14K** | **Tigyukauivet M** | **7.21** | **299** | | **Pn** | **07 08 22.2** | **+0.8** |
| **S12K** | **Black Hills** | **7.42** | **270** | Pn | **Pn** | **07 08 23.3** | **-1.1** |
| **K20K** | **Telida** | **7.45** | **342** | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GO07 | **Milladeo Hill,** | **0.77** | **143** | *i* P | | **Pb** | **07 18 59.3** | **+0.1** |
| GO07 | | | | *e*S | | **Sb** | **07 19 09.2** | **+0.1** |
| GO07 | | | | IAML | | | 07 19 14.5 | |
| | comp=E,20µm,0.5s | | | | | | | |
| **LL05** | **Los Muermos** | **1.26** | **30** | | | **Pn** | **07 19 06.9** | **0.0** |
| **LL05** | **Los Muermos** | **1.26** | **30** | *e*P | | **Pn** | **07 19 06.7** | **-0.2** |
| LL05 | | | | *e*S | | **Sb** | **07 19 23.7** | **+0.4** |
| LL05 | | | | IAML | | | 07 19 29.5 | |
| | comp=E,4µm,0.2s | | | | | | | |
| **LL01** | **San Ignacio de** | **1.40** | **85** | | | **Pn** | **07 19 07.4** | **-1.4** |
| **LL01** | **San Ignacio de** | **1.40** | **85** | *e*P | | **Pn** | **07 19 08.1** | **-0.7** |
| LL01 | | | | *e*S | | **Sb** | **07 19 29.3** | **+2.0** |
| LL01 | | | | IAML | | | 07 19 34.7 | |
| | comp=Z,630nm,0.6s | | | | | | | |
| **LL01** | **San Ignacio de** | **1.40** | **85** | *e*P | | **Pn** | **07 19 08.1** | **-0.7** |
| **LL02** | **Futaleuf** | **1.93** | **112** | Pn | | **Pn** | **07 19 15.9** | **-0.2** |
| **LL02** | **Futaleuf** | **1.93** | **112** | *e*P | | **Pn** | **07 19 16.0** | **-0.1** |
| LL02 | | | | *e*S | | **Sb** | **07 19 41.6** | **-0.9** |
| LL02 | | | | IAML | | | 07 19 42.6 | |
| | comp=Z,601nm,0.6s | | | | | | | |
| **LL02** | **Futaleuf** | **1.93** | **112** | *e*P | | **Pn** | **07 19 16.7** | **+0.6** |
| **LL03** | **Petrohue** | **1.97** | **47** | | | **Pn** | **07 19 15.9** | **-0.7** |
| **LL03** | **Petrohue** | **1.97** | **47** | *e*P | | **Pn** | **07 19 16.1** | **-0.5** |
| LL03 | | | | *e*S | | **Sb** | **07 19 43.3** | **-0.4** |
| LL03 | | | | IAML | | | 07 19 52.2 | |
| | comp=Z,1µm,0.8s | | | | | | | |
| **LL03** | **Petrohue** | **1.97** | **47** | *e*P | | **Pn** | **07 19 16.4** | **-0.3** |
| LL03 | | | | *e*S | | **Sn** | **07 19 41.4** | **+0.7** |
| LL03 | | | | IAML | | | 07 19 51.3 | |
| | comp=E,3µm,0.4s | | | | | | | |
| **LL04** | **Puerto Octay** | **2.13** | **42** | | | **Pn** | **07 19 18.2** | **-0.7** |
| **LL04** | **Puerto Octay** | **2.13** | **42** | *e*P | | **Pn** | **07 19 18.5** | **-0.4** |
| LL04 | | | | *e*S | | **Sn** | **07 19 44.2** | **-0.5** |
| LL04 | | | | IAML | | | 07 19 49.7 | |
| | comp=Z,594nm,0.6s | | | | | | | |
| **LL04** | **Puerto Octay** | **2.13** | **42** | *e*P | | **Pn** | **07 19 18.5** | **-0.4** |
| **LR04** | **Corral** | **2.70** | **14** | | | **Pn** | **07 19 26.6** | **-0.1** |
| **LR05** | **Currie** | **2.85** | **38** | | | **Pn** | **07 19 28.5** | **-0.3** |
| **LR05** | **Currie** | **2.85** | **38** | *e*P | | **Pn** | **07 19 28.8** | **0.0** |
| LR05 | | | | *e*S | | **Sn** | **07 20 02.2** | **-0.4** |
| LR05 | | | | IAML | | | 07 20 11.9 | |
| | comp=N,516nm,0.3s | | | | | | | |
| **LR03** | **Panguipulli** | **3.23** | **28** | | | **Pn** | **07 19 33.8** | **-0.1** |
| **LR03** | **Panguipulli** | **3.23** | **28** | *e*P | | **Pn** | **07 19 33.9** | **-0.1** |
| LR03 | | | | *e*S | | **Sn** | **07 20 13.2** | **+1.4** |
| LR03 | | | | IAML | | | 07 20 33.2 | |
| | comp=Z,328nm,0.5s | | | | | | | |
| **LR03** | **Panguipulli** | **3.23** | **28** | *e*P | | **Pn** | **07 19 34.5** | **+0.5** |
| **PLCA** | **Paso Flores** | **3.32** | **59** | Pn | | **Pn** | **07 19 35.7** | **+0.4** |
| **PLCA** | **Paso Flores** | **3.32** | **59** | *e*P | | **Pn** | **07 19 36.2** | **+0.9** |
| PLCA | | | | *e*S | | **Sn** | **07 20 16.8** | **+2.6** |
| PLCA | | | | IAML | | | 07 20 36.1 | |
| | comp=Z,110nm,0.4s | | | | | | | |
| **PLCA** | **Paso Flores** | **3.32** | **59** | Pn | | **Pn** | **07 19 36.7** | **+1.3** |
| | comp=Z,1.8nm,0.3s,baz=238,slow=9.0,SNR=79 | | | | | | | |
| PLCA | | | | Sn | | **Sb** | **07 20 19.6** | **-3.1** |
| | comp=Z,7.3nm,0.3s,baz=211,slow=7.4,SNR=3.0 | | | | | | | |
| | comp=Z,23nm,0.6s | | | | | | | |
| **COYC** | **Coyhaique** | **3.46** | **153** | | | **Pn** | **07 19 38.0** | **+0.9** |
| **GO06** | **Curarrehue** | **3.62** | **37** | Pn | | **Pn** | **07 19 39.8** | **+0.4** |
| **GO06** | **Curarrehue** | **3.62** | **37** | *e*P | | **Pn** | **07 19 40.5** | **+1.1** |
| GO06 | | | | *e*S | | **Sn** | **07 20 24.0** | **+2.5** |
| **GO06** | **Curarrehue** | **3.62** | **37** | *e*P | | **Pn** | **07 19 40.4** | **+0.9** |
| **AY02** | **Valle Explorad** | **4.06** | **169** | | | **Pn** | **07 19 46.4** | **+1.1** |
| **AY03** | **Cochrane** | **4.90** | **166** | | | **Pn** | **07 19 57.6** | **+0.7** |
| **GO08** | **Villa O'Higgin** | **6.08** | **169** | Pn | | **Pn** | **07 20 11.7** | **-1.4** |
| **BI02** | **San Fabin de** | **6.29** | **23** | | | **Pn** | **07 20 15.3** | **-0.7** |
| **ML02** | **Panimavida** | **7.09** | **19** | Pn | | **Pn** | **07 20 26.0** | **-1.1** |
| **GO05** | **Huala** | **7.71** | **15** | Pn | | **Pn** | **07 20 35.3** | **-0.3** |
| **BO02** | **Sierra Bellavi** | **8.18** | **21** | Pn | | **Pn** | **07 20 40.5** | **-1.5** |
| **BO01** | **Tunca** | **8.48** | **18** | Pn | | **Pn** | **07 20 42.9** | **-3.3** |
| **BO04** | **La Punta** | **8.98** | **20** | Pn | | **Pn** | **07 20 51.5** | **-1.6** |
| **LMEL** | **Las Melosas** | **9.22** | **22** | Pn | | **Pn** | **07 20 55.1** | **-1.3** |
| **MT13** | **San Alfonso** | **9.30** | **21** | Pn | | **Pn** | **07 20 56.0** | **-1.5** |
| **H03S1** | **Juan Fernandez** | **9.38** | **336** | T | | T | 07 30 12.6 | |
| | baz=155,slow=75,SNR=179 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **9.39** | **336** | T | | T | 07 30 11.9 | |
| | baz=155,slow=75,SNR=116 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **9.39** | **336** | T | | T | 07 30 13.2 | |
| | baz=155,slow=75,SNR=134 | | | | | | | |
| **CPUP** | **Villa Florida** | **21.30** | **46** | P | | **P** | **07 23 28.7** | **-1.0** |
| CPUP | | | | IAmb | | IAmb | 07 23 33.7 | |
| | comp=Z,8.7nm,1.4s | | | | | | | |
| **CPUP** | **Villa Florida** | **21.30** | **46** | P | | **P** | **07 23 29.2** | **-0.6** |
| | comp=Z,3.3nm,0.5s,baz=229,slow=8.8,SNR=14 | | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | | |
| **PMSA** | **Palmer Station** | **23.06** | **169** | LR | | LR | 07 33 36.9 | |
| | comp=Z,138nm,18.3s,baz=30,slow=39 | | | | | | | |
| **LPAZ** | **La Paz** | **26.66** | **13** | P | | **P** | **07 24 22.4** | **-0.2** |
| **LPAZ** | **La Paz** | **26.66** | **13** | P | | **P** | **07 24 22.4** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=175,slow=8.9,SNR=5.6 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **29.95** | **30** | P | | **P** | **07 24 49.4** | **-1.9** |
| PTLB | | | | IAmb | | IAmb | 07 24 57.3 | |
| | comp=Z,3.4nm,1.3s | | | | | | | |
| **MACA** | **Manacapuru-AM** | **41.02** | **21** | P | | **P** | **07 26 25.0** | **-1.2** |
| MACA | | | | IAmb | | IAmb | 07 26 43.0 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **42.31** | **154** | ⇑P | | **P** | **07 26 36.1** | **-0.2** |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **43.02** | **154** | ⇑P | | **P** | **07 26 41.5** | **-0.5** |
| | comp=Z,4.8nm,0.7s,baz=287,slow=8.6 | | | | | | | |
| **SNAA** | **Sanae** | **44.52** | **155** | P | | **P** | **07 26 53.9** | **-0.2** |
| **SNAA** | **Sanae** | **44.52** | **155** | ⇑P | | **P** | **07 26 54.2** | **0.0** |
| | comp=Z,31nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **44.52** | **155** | P | | **P** | **07 26 54.1** | **0.0** |
| | comp=Z,2.8nm,1.0s,baz=277,slow=8.7,SNR=7.4 | | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **46.19** | **155** | ⇑P | | **P** | **07 27 07.7** | **+0.1** |
| | comp=Z,145nm,0.7s | | | | | | | |
| **BOAV** | **Boa Vista** | **46.40** | **19** | P | | **P** | **07 27 08.1** | **-1.5** |
| BOAV | | | | IAmb | | IAmb | 07 27 48.2 | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **47.74** | **180** | P | | **P** | **07 27 20.9** | **+1.2** |
| QSPA | | | | IAmb | | IAmb | 07 27 39.8 | |
| | comp=Z,3.3nm,1.1s | | | | | | | |
| **TXAR** | **Lajitas Array** | **76.43** | **334** | P | | **P** | **07 30 32.2** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=156,slow=10.0,SNR=7.6 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **BOSA** | **Boshof** | **77.71** | **117** | P | | **P** | **07 30 41.7** | **+1.7** |
| | comp=Z,2.9nm,0.5s,baz=227,slow=3.5,SNR=11 | | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.94** | **327** | P | | **P** | **07 31 43.9** | **+1.8** |
| | comp=Z,0.3nm,0.7s,baz=161,slow=5.7,SNR=2.4 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **90.62** | **335** | P | | **P** | **07 31 45.1** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=145,slow=5.4,SNR=5.7 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |

**IDC 09 07:22:12.3±2.6, 54°.71N×83°.72E, h0km, mbtmp2.5/2, ML2.4/2, Error ellipse: s-maj=20.6km s-min=12.4km az=170.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.00** | **139** | I | | I | I | 07 28 00.0 | |
| | baz=318,slow=317,SNR=2.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.00** | **139** | Pg | | Pg | Pg | 07 22 31.4 | 0.0 |
| | 4.3nm,0.3s,baz=320,slow=20,SNR=4.1 | | | | | | | | |
| ZALV | | | | Lg | | Lg | Lg | 07 22 45.3 | |
| | 13nm,0.3s,baz=321,slow=29,SNR=11 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.17** | **220** | Pn | | Pn | Pn | 07 23 30.3 | -0.6 |
| | 0.1nm,0.3s,baz=42,slow=13,SNR=3.5 | | | | | | | | |
| KURBB | | | | Lg | | Lg | Lg | 07 24 57.9 | |
| | 0.1nm,0.3s,baz=39,slow=29,SNR=5.3 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.98** | **187** | Pn | | Pn | Pn | 07 24 10.0 | +0.5 |
| | 0.1nm,0.3s,baz=9.9,slow=12,SNR=2.5 | | | | | | | | |
| MKAR | | | | Lg | | Lg | Lg | 07 26 27.9 | |
| | 0.1nm,0.3s,baz=9.4,slow=31,SNR=5.7 | | | | | | | | |
| | 0.1nm,0.4s | | | | | | | | |

*SKHL **09** 07:35:25.2±0.8, 44°.00N×149°.60E, h39km±4km, mb4.1/2*
*IDC **09** 07:35:30.5±32.0, 45°.64N×148°.79E, h0km, mb3.9/5, mbtmp3.9/5, Error ellipse: s-maj=748.6km s-min=67.8km az=156.0*

**ISC 09 07:35:26.0±2.0, 44°.1N±0°.1×149°.5E±0°.1, h38km, n8, σ0s50/11, mb3.9/5, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.65** | **316** | *e*P | | **Pn** | **Pn** | **07 35 51.9** | **-0.4** |
| KUR | | | | AMB | | AMB | AMB | 07 35 53.5 | |
| | 110nm,0.4s | | | | | | | | |
| KUR | | | | *e*S | | **Sn** | | **07 36 12.8** | **+0.6** |
| KUR | | | | A | | A | | 07 36 17.5 | |
| | 160nm,0.5s | | | | | | | | |
| KUR | | | | A | | A | | 07 36 17.5 | |
| | 310nm,0.5s | | | | | | | | |
| **SHO** | **Shikotan** | **1.93** | **265** | *e*P | | **Pn** | | **07 35 56.5** | **+0.3** |
| SHO | | | | AMB | | AMB | | 07 35 59.5 | |
| | 20nm,0.4s | | | | | | | | |
| SHO | | | | *e*S | | **Sn** | | **07 36 19.1** | **-0.1** |
| SHO | | | | A | | A | | 07 36 21.9 | |
| | 130nm,0.3s | | | | | | | | |
| SHO | | | | A | | A | | 07 36 21.9 | |
| | 80nm,0.3s | | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **2.81** | **257** | *e*P | | **Pn** | | **07 36 08.5** | **+0.2** |
| NMR | | | | *e*S | | **Sn** | | **07 36 40.2** | **-0.8** |
| **MKAR** | **Makanchi Array** | **45.93** | **298** | P | | **P** | | **07 43 45.5** | **+0.6** |
| | 0.8nm,0.7s,baz=72,slow=7.9,SNR=7.7 | | | | | | | | |
| | 0.8nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.84** | **304** | P | | **P** | | **07 43 51.5** | **-0.3** |
| | 0.2nm,0.4s,baz=74,slow=8.0,SNR=2.4 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.35** | **334** | P | | **P** | | **07 46 03.3** | **-0.5** |
| | 1.9nm,0.8s,baz=9.8,slow=9.0,SNR=2.3 | | | | | | | | |
| | 1.9nm,0.8s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.91** | **340** | P | | **P** | | **07 46 32.6** | **0.0** |
| | 1.0nm,0.7s,baz=30,slow=6.4,SNR=3.6 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **HFS** | **Hagfors** | **70.04** | **338** | P | | **P** | | **07 46 33.6** | **+0.2** |
| | 1.4nm,0.6s,baz=30,slow=6.7,SNR=2.0 | | | | | | | | |
| | 1.4nm,0.6s | | | | | | | | |

*SKHL **09** 07:37:03.7±0.6, 44°.20N×149°.30E, h38km±2km, mb4.3/3*
*IDC **09** 07:37:14.5±4.6, 44°.18N×149°.30E, h149km±40km, mb3.4/8, mbtmp3.8/9, MS2.9/1, Error ellipse: s-maj=34.5km s-min=28.2km az=54.0*

**ISC 09 07:37:02.6±1.1, 44°.22N±0°.09×149°.40E±0°.10, h38km, n16, σ0s83/19, mb3.8/8, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.49** | **314** | *e*P | | **Pn** | | **07 37 26.8** | **+0.1** |
| KUR | | | | AMB | | AMB | | 07 37 29.1 | |
| | 130nm,0.4s | | | | | | | | |
| KUR | | | | *e*S | | **Sn** | | **07 37 44.7** | **-0.2** |
| KUR | | | | A | | A | | 07 37 53.8 | |
| | 600nm,0.4s | | | | | | | | |
| KUR | | | | A | | A | | 07 37 53.8 | |
| | 280nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **1.88** | **260** | *e*P | | **Pn** | | **07 37 31.8** | **-0.3** |
| SHO | | | | AMB | | AMB | | 07 37 32.6 | |
| | 40nm,0.2s | | | | | | | | |
| SHO | | | | *e*S | | **Sn** | | **07 37 53.0** | **-1.6** |
| SHO | | | | A | | A | | 07 37 58.0 | |
| | 120nm,0.3s | | | | | | | | |
| SHO | | | | A | | A | | 07 37 58.0 | |
| | 130nm,0.3s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.55** | **267** | *e*P | | **Pn** | | **07 37 42.5** | **+1.2** |
| YUK | | | | AMB | | AMB | | 07 37 44.8 | |
| | 80nm,0.5s | | | | | | | | |
| YUK | | | | *e*S | | **Sn** | | **07 38 10.5** | **-0.6** |
| YUK | | | | A | | A | | 07 38 13.8 | |
| | 250nm,0.5s | | | | | | | | |
| YUK | | | | A | | A | | 07 38 13.8 | |
| | 110nm,0.5s | | | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **2.79** | **254** | *e*P | | **Pn** | | **07 37 45.0** | **+0.4** |
| NMR | | | | *e*S | | **Sn** | | **07 38 15.8** | **-1.1** |
| **AKK** | **Akkeshi** | **3.52** | **252** | *e*P | | **Pn** | | **07 37 56.1** | **+1.5** |
| AKK | | | | *e*S | | **Sn** | | **07 38 34.9** | **0.0** |
| **ASAJ** | **Asahikawa** | **4.89** | **271** | P | | Pn | | 07 38 25.5 | +12 |
| | 3.8nm,0.4s,baz=65,slow=14,SNR=2.3 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.49** | **276** | LR | | LR | | 07 44 26.4 | |
| | comp=Z,65nm,21.5s,baz=67,slow=35 | | | | | | | | |
| **SONM** | **Songino Array** | **29.79** | **292** | P | | **P** | | **07 43 06.8** | **+1.2** |
| | 0.6nm,0.6s,baz=86,slow=7.5,SNR=4.4 | | | | | | | | |
| | 0.6nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.80** | **298** | P | | **P** | | **07 45 20.8** | **+0.4** |
| | 1.7nm,0.8s,baz=74,slow=7.7,SNR=12 | | | | | | | | |
| | 1.7nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.70** | **304** | P | | **P** | | **07 45 26.8** | **-0.5** |
| | 0.4nm,0.5s,baz=73,slow=8.1,SNR=2.7 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.18** | **334** | P | | **P** | | **07 47 39.0** | **-0.3** |
| | 2.2nm,0.8s,baz=19,slow=4.7,SNR=4.7 | | | | | | | | |
| | 2.2nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.32** | **196** | P | | **P** | | **07 47 40.1** | **-0.6** |
| | 0.5nm,0.8s,baz=17,slow=7.2,SNR=2.5 | | | | | | | | |
| | 0.5nm,0.8s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.74** | **340** | P | | **P** | | **07 48 08.4** | **+0.2** |
| | comp=Z,1.6nm,0.7s,baz=30,slow=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.74** | **340** | P | | **P** | | **07 48 08.4** | **+0.2** |
| | comp=Z,1.5nm,0.7s,baz=31,slow=6.2,SNR=5.9 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| **HFS** | **Hagfors** | **69.87** | **338** | P | | **P** | | **07 48 08.4** | **-0.6** |
| | comp=Z,2.0nm,0.7s,baz=38,slow=7.3,SNR=3.8 | | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **81.03** | **58** | P | | **P** | | **07 49 13.4** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=296,slow=4.4,SNR=5.2 | | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | | |

*DNK **09** 07:38:16.0±2.2, 82°.81N×6°.28W, h36km±25km, ML1.3*

**BER 09 07:38:21.7±3.2, 82°.29N×7°.28W, h19km±64km, mb(Pn)3.0, Confirmed Earthquake, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NOR** | **Nord** | **1.50** | **247** | *e*P | | Pn | | 07 38 44.3 | -3.1 |
| NOR | | | | *e*S | | Sn | | 07 39 04.7 | -1.7 |
| **NOR** | **Nord** | **1.50** | **247** | *i* P | | Pn | | 07 38 44.2 | -3.2 |
| NOR | | | | *i* S | | Sn | | 07 39 04.7 | -1.7 |
| NOR | | | | IAML | | | | 07 39 07.0 | |
| | comp=Z,5.6nm,0.7s | | | | | | | | |
| **KBS** | **Kingsbay** | **4.59** | **127** | *e*P | | Pn | | 07 39 26.5 | -3.4 |
| KBS | | | | *e*S | | Sn | | 07 40 16.6 | -5.9 |
| KBS | | | | IAML | | | | 07 40 23.1 | |
| | comp=Z,1.3nm,0.3s | | | | | | | | |
| **KBS** | **Kingsbay** | **4.59** | **127** | *i* P | | Pn | | 07 39 25.8 | -4.1 |
| KBS | | | | *i* S | | Sn | | 07 40 14.3 | -8.2 |
| **BRBB** | **Barentsburg B** | **5.54** | **128** | *e*P | | Pn | | 07 39 42.7 | -0.2 |
| **BRBA** | **Barentsburg A** | **5.57** | **128** | *e*P | | Pn | | 07 39 42.9 | -0.4 |
| **DAG** | **Danmarks Havn** | **5.91** | **206** | *e*S | | Sn | | 07 40 48.2 | -6.7 |
| **DAG** | **Danmarks Havn** | **5.91** | **206** | *i* P | | Pn | | 07 39 46.5 | -1.4 |
| DAG | | | | *i* S | | Sn | | 07 40 54.2 | -0.7 |
| DAG | | | | IAML | | | | 07 40 58.5 | |
| | comp=Z,0.6nm,0.2s | | | | | | | | |
| **HSPB** | **Hornsund (broa** | **6.64** | **131** | *e*P | | Pn | | 07 39 56.3 | -1.7 |
| **NEEM** | **North Greenlan** | **8.82** | **261** | *i* P | | Pn | | 07 40 20.3 | -7.9 |
| NEEM | | | | *i* S | | Sn | | 07 41 53.3 | -14 |

*IDC **09** 07:53:00.9±0.9, 0°.69S×121°.73E, h0km, mb4.0/6, mbtmp4.1/7, ML4.3/1, MS3.3/3, Error ellipse: s-maj=44.6km s-min=16.6km az=72.0*
*DJA **09** 07:53:01.3±0.2, 1°.5±2°×12°.2E±°, h10km, M4.4/12, mb4.6/2, MLv4.3/12*
*NEIC **09** 07:53:02.6±2.2, 0°.71S±0°.04×121°.68E±0°.06, h10km±1km, mb4.1/6, Error ellipse: s-maj=9.6km s-min=5.5km az=105.0*

**ISC 09 07:53:02.6±0.6, 0°.65S±0°.05×121°.68E±0°.06, h10km, n32, σ1s36/32, mb4.1/11, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **1.15** | **13** | P | | **Pn** | | **07 53 22.2** | **-2.5** |
| MRSI | | | | S | | **Sb** | | **07 53 38.3** | **-1.1** |
| **LUWI** | **Luwuk** | **1.16** | **110** | | | **Pb** | | **07 53 24.3** | **-0.4** |
| **LUWI** | **Luwuk** | **1.16** | **110** | P | | **Pn** | | **07 53 24.8** | **0.0** |
| LUWI | | | | S | | **Sn** | | **07 53 43.6** | **+2.9** |
| **GTOI** | **Gorontalo** | **1.84** | **46** | P | | **Pn** | | **07 53 33.1** | **-1.1** |
| **TOLI2** | **Tolitoli** | **1.96** | **333** | | | **Pn** | | **07 53 35.5** | **-0.4** |
| **SPSI** | **Sidrap Palu** | **3.81** | **210** | P | | **Pn** | | **07 53 59.8** | **-1.6** |
| **BNSI** | **Bone** | **4.05** | **203** | P | | **Pn** | | **07 54 04.3** | **-0.4** |
| **SANI** | **Sanana** | **4.52** | **108** | P | | **Pn** | | **07 54 11.4** | **+0.2** |
| **KAPI** | **Kappang** | **4.75** | **204** | Pn | | **Pn** | | **07 54 12.8** | **-1.5** |
| | 13nm,0.3s,baz=358,slow=6.3,SNR=17 | | | | | | | | |
| KAPI | | | | Sn | | **Sn** | | **07 55 09.7** | **+0.3** |
| | 3.2nm,0.3s,baz=0.0,slow=20,SNR=3.1 | | | | | | | | |
| KAPI | | | | LR | | LR | | 07 55 43.3 | |
| | comp=Z,249nm,19.3s,baz=32,slow=34 | | | | | | | | |
| | 30nm,0.3s | | | | | | | | |
| **BKSI** | **Bulukumba** | **4.90** | **199** | P | | **Pn** | | **07 54 14.9** | **-1.5** |
| **BSSI** | **Bau Bau, Buton** | **5.59** | **192** | P | | **Pn** | | **07 54 23.2** | **-2.6** |
| | 67nm,0.8s,0.3nm | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MYLDM | **Lahad Datu** | **6.60** | **331** | Pn | | **Pn** | | **07 54 39.5** | **-0.3** |
| **DAV** | **Davao City (W)** | **8.59** | **27** | LR | | LR | | 07 58 52.7 | |
| | comp=Z,103nm,20.3s,baz=172,slow=41 | | | | | | | | |
| **FAKI** | **Fak Fak** | **10.80** | **102** | Pn | | **Pn** | | **07 55 35.5** | **-1.8** |
| **WRA** | **Warramunga Arr** | **22.83** | **148** | P | | **P** | | **07 58 04.7** | **-1.4** |
| **WRA** | **Warramunga Arr** | **22.83** | **148** | P | | **P** | | **07 58 04.2** | **-1.8** |
| | 6.5nm,1.0s,baz=328,slow=10,SNR=14 | | | | | | | | |
| | 6.5nm,1.0s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **22.95** | **148** | P | | **P** | | **07 58 05.4** | **-1.9** |
| WR0 | | | | IAmb | | IAmb | | 07 58 15.3 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **AS31** | **Alice Springs** | **25.77** | **153** | P | | **P** | | **07 58 33.3** | **-0.5** |
| AS31 | | | | IAmb | | IAmb | | 07 58 38.7 | |
| | comp=Z,1.6nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.77** | **153** | P | | **P** | | **07 58 33.2** | **-0.7** |
| **ASAR** | **Alice Springs** | **25.77** | **153** | P | | **P** | | **07 58 34.0** | **+0.1** |
| | comp=Z,2.9nm,0.8s,baz=338,slow=10,SNR=19 | | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| **JOW** | **Kunigami** | **28.05** | **13** | LR | | LR | | 08 10 48.5 | |
| | comp=Z,203nm,19.7s,baz=247,slow=38 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.33** | **311** | P | | **P** | | **07 59 06.7** | **+1.0** |
| **PZH** | **PanZhiHua** | **33.14** | **326** | P | | **P** | | **07 59 40.7** | **+1.3** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,130nm,5.7s | | | | | | | | |
| **LYN** | **LuoYang** | **36.06** | **347** | *e*P | | P | | 08 00 12.7 | +8.3 |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **SONM** | **Songino Array** | **50.09** | **347** | P | | **P** | | **08 01 59.9** | **+2.0** |
| SONM | | | | IAmb | | IAmb | | 08 02 07.3 | |
| | comp=Z,3.1nm,1.1s | | | | | | | | |
| **SONM** | **Songino Array** | **50.09** | **347** | P | | **P** | | **08 01 58.5** | **+0.6** |
| | comp=Z,1.1nm,0.6s,baz=161,slow=7.7,SNR=6.4 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| **MK31** | **Makanchi Array** | **58.48** | **329** | P | | **P** | | **08 02 59.2** | **+0.2** |
| MK31 | | | | IAmb | | IAmb | | 08 03 03.1 | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.48** | **329** | P | | **P** | | **08 02 59.5** | **+0.5** |
| | comp=Z,1.5nm,0.7s,baz=132,slow=8.2,SNR=14 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.37** | **336** | P | | **P** | | **08 03 25.1** | **-0.2** |
| | comp=Z,0.8nm,0.4s,baz=121,slow=5.5,SNR=4.6 | | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.87** | **331** | P | | **P** | | **08 03 28.8** | **+0.1** |
| | comp=Z,1.4nm,0.9s,baz=128,slow=5.9,SNR=7.7 | | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **72.44** | **323** | P | | **P** | | **08 04 30.2** | **+1.0** |
| **QSPA** | **South Pole Qui** | **89.29** | **180** | P | | **P** | | **08 05 58.1** | **-0.9** |

*IDC **09** 07:55:22.6±2.6, 16°.69S×72°.87W, h59km±25km, mb3.7/5, mbtmp4.0/8, ML3.7/3, Error ellipse: s-maj=39.9km s-min=20.8km az=46.0*

**ISC 09 07:55:21.2±0.9, 16°.9S±0°.1×73°.1W±0°.1, h50km, n9, σ2s08/11, mb4.0/5, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **4.80** | **83** | P | | **Pn** | | **07 56 34.4** | **+2.9** |
| | 5.7nm,0.3s,baz=306,slow=7.4,SNR=32 | | | | | | | | |
| **NNA** | **Nana** | **6.09** | **323** | P | | **Pn** | | **07 56 50.7** | **+1.9** |
| | 0.7nm,0.3s,baz=124,slow=11,SNR=1.3 | | | | | | | | |
| NNA | | | | S | | **Sn** | | **07 57 55.1** | **-2.1** |
| | 23nm,0.3s,baz=215,slow=15,SNR=7.5 | | | | | | | | |
| | 2.5nm,0.4s | | | | | | | | |
| **LVC** | **Limon Verde** | **6.91** | **146** | P | | **Pn** | | **07 57 01.3** | **+1.1** |
| | 2.9nm,0.3s,baz=343,slow=8.5,SNR=34 | | | | | | | | |
| LVC | | | | S | | **Sn** | | **07 58 14.7** | **-2.9** |
| | 20nm,0.3s,baz=278,slow=11,SNR=4.2 | | | | | | | | |
| | 8.0nm,0.2s | | | | | | | | |
| **SIV** | **San Ignacio** | **11.57** | **87** | P | | **Pn** | | **07 58 02.4** | **-1.3** |
| | 0.1nm,0.3s,baz=270,slow=13,SNR=13 | | | | | | | | |
| | 1.3nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **54.63** | **327** | P | | **P** | | **08 04 44.5** | **-0.6** |
| | 0.2nm,0.5s,baz=147,slow=7.6,SNR=4.2 | | | | | | | | |
| | 0.2nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **67.88** | **161** | P | | **P** | | **08 06 16.0** | **+1.8** |
| | 1.2nm,1.0s,baz=334,slow=9.8,SNR=2.3 | | | | | | | | |
| | 1.2nm,1.0s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.81** | **345** | P | | **P** | | **08 06 25.4** | **-0.8** |
| | 1.2nm,0.6s,baz=148,slow=13,SNR=2.4 | | | | | | | | |
| | 1.2nm,0.6s | | | | | | | | |
| **DBIC** | **Dimbokro** | **71.38** | **77** | P | | **P** | | **08

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BSWZ | Blackbirch Sta | 1.30 | 40 | P | | Pb | 07 56 38.8 | +0.8 |
| MRNZ | Matariki Terra | 1.31 | 0 | P | | Pn | 07 56 38.4 | +0.8 |
| WACZ | Wakanui South | 1.40 | 208 | P | | Pn | 07 56 38.3 | -0.5 |
| CMWZ | Cape Campbell | 1.46 | 49 | P | | Pn | 07 56 40.8 | +1.2 |
| WVZ | Waitaha Valley | 1.52 | 256 | P | | Pn | 07 56 41.2 | +0.7 |
| TUWZ | Tuamarina | 1.56 | 35 | P | | Pn | 07 56 42.1 | +1.1 |
| NNZ | Nelson | 1.57 | 18 | P | | Pn | 07 56 42.1 | +1.0 |
| RPZ | Rata Peaks | 1.59 | 230 | P | | Pn | 07 56 41.3 | -0.2 |
| RPZ | Rata Peaks | 1.59 | 230 | Pn | | Pn | 07 56 41.2 | -0.3 |
| | 95nm,0.3s,baz=70,slow=2.2,SNR=607 | | | | | | | |
| RPZ | | | | Sn | | Sn | 07 57 01.6 | -0.2 |
| | 149nm,0.3s,baz=233,slow=6.7,SNR=6.2 | | | | | | | |
| RPZ | Rata Peaks | 1.59 | 230 | P | | Pn | 07 56 41.2 | -0.3 |
| ARCZ | Arundel | 1.68 | 222 | P | | Pn | 07 56 42.2 | -0.6 |
| TKNZ | Takaka Hill | 1.69 | 6 | P | | Pn | 07 56 44.2 | +1.5 |
| GCSZ | Gaunt Creek Bo | 1.87 | 250 | P | | Pn | 07 56 46.3 | +1.0 |
| TCW | Tory Channel | 1.89 | 38 | P | | Pn | 07 56 46.1 | +0.6 |
| QRZ | Quartz Range | 1.89 | 355 | P | | Pn | 07 56 47.2 | +1.6 |
| QRZ | Quartz Range | 1.89 | 355 | P | | Pn | 07 56 46.7 | +1.1 |
| SNZO | South Karori | 2.02 | 47 | P | | Pn | 07 56 47.7 | +0.3 |
| BHW | Baring Head | 2.05 | 51 | P | | Pn | 07 56 47.6 | -0.2 |
| WEL | Wellington | 2.08 | 47 | P | | Pn | 07 56 48.3 | +0.2 |
| TMZ | Timaru | 2.09 | 217 | P | | Pn | 07 56 47.8 | -0.6 |
| DUWZ | D'Urville Isla | 2.10 | 25 | P | | Pn | 07 56 49.9 | +1.4 |
| PLWZ | Palliser | 2.19 | 59 | P | | Pn | 07 56 49.0 | -0.7 |
| MSWZ | Moikau Station | 2.27 | 56 | P | | Pn | 07 56 50.3 | -0.6 |
| FOZ | Fox Glacier | 2.29 | 248 | P | | Pn | 07 56 52.0 | +0.9 |
| CAW | Cannon Point | 2.36 | 48 | P | | Pn | 07 56 51.9 | -0.2 |
| PAWZ | Paruwai Farm | 2.40 | 57 | P | | Pn | 07 56 51.7 | -0.9 |
| KIW | Kapiti Island | 2.46 | 42 | P | | Pn | 07 56 53.8 | +0.4 |
| LBZ | Lake Benmore | 2.50 | 227 | P | | Pn | 07 56 53.7 | -0.3 |
| TRWZ | Traveller | 2.56 | 60 | P | | Pn | 07 56 53.7 | -1.0 |
| MTW | Mount Morrison | 2.58 | 54 | P | | Pn | 07 56 54.2 | -0.8 |
| OGWZ | Otaki Gorge | 2.62 | 45 | P | | Pn | 07 56 55.5 | -0.1 |
| HOWZ | Holdsworth Sta | 2.75 | 50 | P | | Pn | 07 56 56.6 | -0.9 |
| ODZ | Otahua Downs | 2.78 | 212 | P | | Pn | 07 56 57.3 | -0.5 |
| ODZ | Otahua Downs | 2.78 | 212 | P | | Pn | 07 56 57.0 | -0.8 |
| TMWZ | Te Maipa | 2.84 | 57 | P | | Pn | 07 56 57.5 | -1.2 |
| MRZ | Mangatainoka R | 2.95 | 47 | P | | Pn | 07 56 59.4 | -0.7 |
| TIWZ | Tintock | 3.04 | 52 | P | | Pn | 07 57 03.5 | +2.1 |
| OHWZ | Ohakea | 3.16 | 38 | P | | Pn | 07 57 06.4 | +3.4 |
| JCZ | Jackson Bay | 3.19 | 243 | P | | Pn | 07 57 03.6 | +0.1 |
| JCZ | Jackson Bay | 3.19 | 243 | P | | Pn | 07 57 03.4 | -0.1 |
| PRWZ | Pori Road | 3.24 | 49 | P | | Pn | 07 57 03.3 | -0.8 |
| POWZ | Post Office Ro | 3.25 | 45 | P | | Pn | 07 57 03.6 | -0.6 |
| BFZ | Birch Farm | 3.32 | 53 | P | | Pn | 07 57 05.1 | -0.1 |
| BFZ | Birch Farm | 3.32 | 53 | P | | Pn | 07 57 04.0 | -1.2 |
| WAZ | Wanganui | 3.41 | 31 | P | | Pn | 07 57 08.4 | +2.0 |
| NMEZ | Namu Road | 3.41 | 15 | P | | Pn | 07 57 09.6 | +3.2 |
| WKZ | Wanaka | 3.43 | 231 | P | | Pn | 07 57 05.8 | -0.9 |
| LREZ | Lake Rotokare | 3.48 | 22 | P | | Pn | 07 57 10.9 | +3.5 |
| DVHZ | Dannevirke | 3.52 | 48 | P | | Pn | 07 57 05.9 | -2.2 |
| HHSZ | Highcliff Hill | 3.52 | 205 | P | | Pn | 07 57 07.0 | -1.0 |
| EAZ | Earnscleugh | 3.53 | 223 | P | | Pn | 07 57 07.2 | -0.9 |
| PREZ | Palmer Road | 3.53 | 18 | P | | Pn | 07 57 11.4 | +3.2 |
| NBEZ | Newall Road No | 3.54 | 14 | P | | Pn | 07 57 11.3 | +3.0 |
| KHEZ | Kahui Hut | 3.55 | 16 | P | | Pn | 07 57 11.2 | +2.8 |
| KHEZ | Kahui Hut | 3.55 | 16 | P | | Pn | 07 57 11.7 | +3.3 |
| NEZ | North Egmont | 3.59 | 17 | P | | Pn | 07 57 12.1 | +3.1 |
| TSZ | Takapari Road | 3.59 | 43 | P | | Pn | 07 57 08.0 | -0.9 |
| ANWZ | Angora Road | 3.59 | 52 | P | | Pn | 07 57 08.1 | -0.9 |
| PKE | Pukeiti | 3.64 | 15 | P | | Pn | 07 57 13.1 | +3.5 |
| DREZ | Durham Road | 3.69 | 18 | P | | Pn | 07 57 12.9 | +2.6 |
| PRHZ | Porangahau | 3.81 | 51 | P | | Pn | 07 57 12.5 | +0.6 |
| PNHZ | Pukenui | 3.82 | 44 | P | | Pn | 07 57 10.9 | -1.2 |
| MHEZ | Mangahewa | 3.83 | 19 | P | | Pb | 07 57 18.4 | -2.5 |
| WPHZ | Waipukurau | 3.84 | 48 | P | | Pn | 07 57 11.2 | -1.2 |
| VRZ | Vera Road | 3.90 | 24 | P | | Pn | 07 57 15.6 | +2.4 |
| MTVZ | Mangateitei | 3.91 | 33 | P | | Pn | 07 57 18.7 | +5.2 |
| TUZ | Tuapeka | 3.94 | 214 | P | | Pn | 07 57 12.9 | -0.7 |
| PKVZ | Pokaka | 3.95 | 31 | P | | Pn | 07 57 18.6 | +4.8 |
| MSZ | Milford Sound | 4.01 | 239 | P | | Pn | 07 57 13.3 | -1.3 |
| MOVZ | Moawhango | 4.01 | 36 | P | | Pn | 07 57 15.8 | +1.0 |
| WNVZ | Wahianoa | 4.01 | 33 | P | | Pn | 07 57 15.9 | +1.0 |
| TRVZ | Turoa | 4.02 | 33 | P | | Pn | 07 57 15.9 | +0.9 |
| WHVZ | Whangaehu Hut | 4.05 | 33 | P | | Pn | 07 57 16.2 | +0.8 |
| MAVZ | Matarangi | 4.05 | 33 | P | | Pn | 07 57 16.4 | +0.9 |
| FWVZ | Far West T-bar | 4.06 | 33 | P | | Pn | 07 57 16.3 | +0.8 |
| TUVZ | Tukino | 4.09 | 34 | P | | Pn | 07 57 16.8 | +1.0 |
| PXZ | Pawanui | 4.10 | 51 | P | | Pn | 07 57 14.9 | -1.0 |
| KRHZ | Kereru | 4.11 | 43 | P | | Pn | 07 57 14.8 | -1.3 |
| NGZ | Ngauruhoe | 4.14 | 32 | P | | Pn | 07 57 17.5 | +0.8 |
| SNVZ | South Ngauruho | 4.15 | 33 | P | | Pn | 07 57 18.0 | +1.2 |
| TWVZ | Taurewa | 4.17 | 30 | P | | Pn | 07 57 19.1 | +2.1 |
| NNVZ | North Ngauruho | 4.19 | 32 | P | | Pn | 07 57 18.1 | +0.8 |
| WTVZ | West Tongariro | 4.19 | 32 | P | | Pn | 07 57 18.1 | +0.8 |
| ETVZ | East Tongariro | 4.22 | 33 | P | | Pn | 07 57 18.3 | +0.6 |
| KRVZ | Karewarewa | 4.23 | 32 | P | | Pb | 07 57 24.1 | -3.8 |
| TMVZ | Te Maari | 4.24 | 33 | P | | Pn | 07 57 18.6 | +0.6 |
| NTVZ | North Tongarir | 4.24 | 33 | P | | Pn | 07 57 18.8 | +0.9 |
| MLZ | Mavora Lakes | 4.26 | 230 | P | | Pn | 07 57 17.0 | -1.2 |
| KAHZ | Kahuranaki | 4.27 | 48 | P | | Pn | 07 57 16.8 | -1.5 |
| MCHZ | McNeill Hill | 4.42 | 44 | P | | Pn | 07 57 22.2 | +1.8 |
| RATZ | Rangitukua | 4.48 | 32 | P | | Pn | 07 57 25.6 | +4.4 |
| HIZ | Hauiti | 4.49 | 22 | P | | Pn | 07 57 22.8 | +1.5 |
| HIZ | Hauiti | 4.49 | 22 | P | | Pn | 07 57 22.9 | +1.5 |
| BKZ | Black Stump Fm | 4.54 | 40 | P | | Pn | 07 57 21.2 | -0.8 |
| BKZ | Black Stump Fm | 4.54 | 40 | P | | Pn | 07 57 20.8 | -1.2 |
| SYZ | Scrubby Hill | 4.61 | 213 | P | | Pn | 07 57 22.3 | -0.6 |
| SYZ | Scrubby Hill | 4.61 | 213 | P | | Pn | 07 57 22.3 | -0.6 |
| WHZ | Wether Hill Ro | 4.69 | 226 | P | | Pn | 07 57 21.7 | -2.2 |
| NMHZ | Naumai | 4.75 | 42 | P | | Pn | 07 57 26.9 | +2.1 |
| MRHZ | Matea Rd | 4.77 | 37 | P | | Pn | 07 57 23.8 | -1.5 |
| TLZ | Tolley Road | 4.87 | 27 | P | | Pn | 07 57 28.8 | +2.2 |
| DCZ | Deep Cove | 4.88 | 234 | P | | Pn | 07 57 25.4 | -1.2 |
| MTHZ | Maungataniwha | 4.95 | 40 | P | | Pn | 07 57 26.8 | -0.9 |
| ALRZ | Allen Road | 4.97 | 35 | P | | Pn | 07 57 28.6 | +0.7 |
| RTZ | Ruatahuna | 5.21 | 40 | P | | Pn | 07 57 31.2 | 0.0 |
| KNZ | Kokohu | 5.25 | 47 | P | | Pn | 07 57 29.9 | -1.8 |
| SNGZ | Shannon Statio | 5.25 | 43 | P | | Pn | 07 57 32.7 | +0.9 |
| APZ | The Paps | 5.33 | 218 | P | | Pn | 07 57 31.5 | -1.3 |
| TOZ | Tahuroa Road | 5.41 | 24 | P | | Pn | 07 57 35.1 | +1.2 |
| PRGZ | Paritu Road | 5.43 | 48 | P | | Pn | 07 57 36.4 | +2.1 |
| KMRZ | Kaimai | 5.44 | 28 | P | | Pn | 07 57 34.4 | 0.0 |
| RIGZ | Rimuhau | 5.53 | 45 | P | | Pn | 07 57 34.5 | -1.0 |
| PYZ | Puysegur Point | 5.55 | 229 | P | | Pn | 07 57 35.7 | -0.1 |
| PYZ | Puysegur Point | 5.55 | 229 | P | | Pn | 07 57 36.0 | +0.2 |
| URZ | Urewera | 5.56 | 38 | P | | Pn | 07 57 35.3 | -0.6 |
| URZ | Urewera | 5.56 | 38 | Pn | | Pn | 07 57 35.5 | -0.4 |
| | 1.1nm,0.3s,baz=270,slow=4.8,SNR=5.6 | | | | | | | |
| URZ | | | | Sn | | Sn | 07 58 35.7 | -3.9 |
| | 4.8nm,0.3s,baz=174,slow=9.2,SNR=1.6 7.4nm,0.6s | | | | | | | |
| URZ | Urewera | 5.56 | 38 | P | | Pn | 07 57 35.4 | -0.6 |
| TGRZ | Tauranga | 5.66 | 30 | P | | Pn | 07 57 40.3 | +2.9 |
| MWZ | Matawai | 5.69 | 41 | P | | Pn | 07 57 36.9 | -0.9 |
| AWAZ | Awhitu Peninsu | 5.83 | 15 | P | | Pn | 07 57 41.9 | +2.2 |
| MKAZ | Moumakai | 5.90 | 19 | P | | Pn | 07 57 41.9 | +1.2 |
| WTAZ | Waiatarua | 5.94 | 14 | P | | Pn | 07 57 47.2 | +6.0 |
| ETAZ | East Tamaki Re | 5.99 | 17 | P | | Pn | 07 57 44.0 | +2.1 |
| TWGZ | Tauwhareparae | 6.04 | 43 | P | | Pn | 07 57 42.1 | -0.6 |
| RUGZ | Raukumara Rang | 6.06 | 40 | P | | Pn | 07 57 42.0 | -0.9 |
| RVAZ | Riverhead Bore | 6.10 | 14 | P | | Pn | 07 57 48.9 | +5.4 |
| MBAZ | Motutapu North | 6.16 | 16 | P | | Pn | 07 57 47.3 | +3.0 |
| WIAZ | Waiheke Island | 6.19 | 18 | P | | Pn | 07 57 46.5 | +1.8 |
| HAZ | Te Kaha | 6.27 | 40 | P | | Pn | 07 57 45.4 | -0.4 |
| ABAZ | Army Bay | 6.31 | 15 | P | | Pn | 07 57 49.4 | +3.0 |
| PKGZ | Pakihiroa | 6.33 | 42 | P | | Pn | 07 57 45.9 | -0.7 |
| KUZ | Kuaotunu | 6.39 | 22 | P | | Pn | 07 57 49.7 | +2.4 |
| KUZ | Kuaotunu | 6.39 | 22 | P | | Pn | 07 57 48.5 | +1.1 |
| OUZ | Omahuta | 7.51 | 5 | P | | Pn | 07 58 05.7 | +2.9 |
| OUZ | Omahuta | 7.51 | 5 | P | | Pn | 07 58 06.7 | +3.9 |
| ASAR | Alice Springs | 37.24 | 288 | P | | P | 08 03 24.4 | -0.5 |
| | 1.0nm,0.8s,baz=130,slow=7.1,SNR=10 | | | | | | | |
| ASAR | | | | PcP | | PcP | 08 05 43.5 | -1.1 |
| | 0.6nm,0.7s,baz=133,slow=3.8,SNR=5.8 1.0nm,0.8s | | | | | | | |
| WRA | Warramunga Arr | 39.42 | 293 | P | | P | 08 03 43.3 | 0.0 |
| | 0.8nm,0.6s,baz=132,slow=7.6,SNR=14 0.8nm,0.6s | | | | | | | |
| QSPA | South Pole Qui | 47.41 | 180 | P | | P | 08 04 50.2 | +2.8 |
| | 2.5nm,0.8s,baz=1.2,slow=1.7,SNR=9.5 2.5nm,0.8s | | | | | | | |
| TORD | Torodi Ar. Bea | 149.54 | 197 | PKPbc | | PKPbc | 08 16 02.7 | -0.2 |
| | 1.0nm,0.6s,baz=154,slow=2.3,SNR=6.8 | | | | | | | |

*IDC **09** 07:59:35.8±4.7,22.˚09S×176.˚35W,h150km±39km,mb3.7/5, mbtmp4.1/6,Error ellipse: s-maj=33.8km s-min=28.0km az=113.0*

**ISC 09 07:59:33.5±1.3,22.˚1S±0.˚2×176.˚1W±0.˚2,h137km,n8, σ1ŝ32/9,mb4.0/5,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 7.00 | 307 | P | Pn | 08 01 13.9 | +0.2 |
| | 13nm,0.7s,baz=131,slow=13,SNR=11 | | | | | | |
| DZM | Mont Dzumac | 16.18 | 267 | P | P | 08 03 16.0 | +2.2 |
| | 10.0nm,1.1s,baz=82,slow=16,SNR=4.2 | | | | | | |
| STKA | Stephens Creek | 38.73 | 246 | P | P | 08 06 43.2 | -1.3 |
| | 2.2nm,0.7s,baz=97,slow=8.6,SNR=4.7 2.2nm,0.7s | | | | | | |
| ASAR | Alice Springs | 45.89 | 258 | P | P | 08 07 41.8 | -0.8 |
| | 4.5nm,0.7s,baz=100,slow=7.1,SNR=65 | | | | | | |
| ASAR | | | | PcP | PcP | 08 09 17.9 | +0.4 |
| | 0.4nm,0.5s,baz=113,slow=4.1,SNR=4.1 4.5nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 46.15 | 263 | P | P | 08 07 43.2 | -1.4 |
| | 3.5nm,0.6s,baz=96,slow=8.1,SNR=64 3.5nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 67.98 | 180 | P | P | 08 10 18.5 | +0.9 |
| | 1.9nm,0.9s,baz=32,slow=1.3,SNR=9.0 1.9nm,0.9s | | | | | | |
| ILAR | Eielson Array | 89.48 | 12 | P | P | 08 12 14.2 | -0.4 |
| | 0.2nm,0.6s,baz=221,slow=5.7,SNR=4.4 0.2nm,0.6s | | | | | | |
| AKASG | Malin Array Be | 145.25 | 331 | PKPbc | PKPab | 08 18 55.2 | +0.3 |
| | 2.4nm,0.5s,baz=41,slow=4.5,SNR=8.0 | | | | | | |

*IDC **09** 08:01:28.9±0.4,20.˚92N×120.˚19E,h0km,mb4.8/25, mbtmp4.7/27,ML3.9/2,MS4.0/32,Error ellipse: s-maj=18.7km s-min=9.2km az=66.0*

*BJI **09** 08:01:30.0±0.0,21.˚00N×119.˚97E,h5km,mb4.6/74, mB5.0/43,ML4.7/2,Ms4.8/88,Ms7 4.6/84*

*NEIC **09** 08:01:31.4,21.˚01N×119.˚96E,h12km,Moment Tensor Solution. Duration: 1ŝ6 Moment tensor: Scale 10^16^Nm; Mrr-3.45; Mθθ-0.01; Mϕϕ3.46; Mrθ-0.04; Mθϕ-0.47; Mϕr2.68; Fault plane solution: M0 4.40000×10^16^ NP1: ϕs176.62000°,δ63.82000°,λ-86.22000°. NP2: ϕs348.10000°,δ26.43000°,λ-97.64000°. Principal axes: T 4.4260, Plg19.0000°, Azm264.0000°; N -0.0574, Plg3.0000°, Azm355.0000°; P -4.3687, Plg71.0000°, Azm95.0000°;*

*MOS **09** 08:01:31.2±0.9,20.˚86N×120.˚13E,h25km,mb5.2/51, MS4.4/12 Error ellipse: s-maj=7.3km s-min=4.1km az=113.5*

*NEIC **09** 08:01:31.4±1.2,20.˚92N±0.˚07×120.˚07E±0.˚07,h10km±1km, mb5.2/116,Mww5.0/23,Error ellipse: s-maj=12.4km s-min=10.2km az=131.0*

*NEIC **09** 08:01:31.4,20.˚91N×120.˚07E,h12km*

*GCMT **09** 08:01:32.4±0.2,20.˚92N±0.˚02×119.˚97E±0.˚01,h14km, MW5.1/120,Moment Tensor Solution. s68,c86; s120,c192; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr-4.43±.15; Mθθ0.32±.09; Mϕϕ4.12±.11; Mrθ0.85±.21; Mθϕ-0.28±.07; Mϕr2.50±.22; Best double couple: M0 5.02500×10^16^ NP1:ϕs187.00000°,δ61.00000°, λ-80.00000°. NP2:ϕs347.00000°,δ31.00000°, λ-108.00000°. Principal axes: T 4.7980, Plg15.0000°, Azm269.0000°; N 0.4630, Plg9.0000°, Azm2.0000°; P -5.2520, Plg72.0000°, Azm122.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*JMA **09** 08:01:32.7±0.3,21.˚N±1.˚×12.˚0E±.˚,h4km,MV5.2/18, TAIWAN REGION*

*BGR **09** 08:01:33.8,21.˚19N×120.˚19E,h14km±1km,mb5.2,Ms4.5*

**ISC 09 08:01:31.8±0.4,20.˚90N±0.˚03×120.˚13E±0.˚03,h17km±2km, h17km:pP-P,n831,σ1ŝ27/855,mb5.1/208,MS4.4/68, 26C-19D,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWG | Pinlang | 2.10 | 24 | | Pn | 08 02 05.4 | -0.9 |
| TWGBT | Beinan | 2.10 | 25 | P | Pn | 08 02 06.1 | -0.2 |
| TPUB | Ta-pu | 2.43 | 11 | P | Pn | 08 02 09.6 | -1.3 |
| TPUB | Ta-pu | 2.43 | 11 | | Pn | 08 02 09.2 | -1.7 |
| YULB | Yu-li | 2.71 | 23 | P | Pn | 08 02 14.6 | 0.0 |
| YULB | Yu-li | 2.71 | 23 | | Pn | 08 02 14.1 | -0.5 |
| SSLB | Suanglung | 2.97 | 15 | P | Pn | 08 02 17.6 | -0.7 |
| SSLB | Suanglung | 2.97 | 15 | | Pn | 08 02 16.8 | -1.5 |
| SZP | Santa | 3.35 | 175 | P | Pn | 08 02 23.9 | +0.5 |
| NACB | Ninganchiao | 3.53 | 22 | P | Pn | 08 02 25.6 | -0.3 |
| NACB | Ninganchiao | 3.53 | 22 | | Pn | 08 02 24.3 | -1.6 |
| KNMB | Chin-men Tao | 3.90 | 336 | | Pn | 08 02 28.8 | -2.2 |
| YHNB | Yeheng | 3.92 | 17 | P | Pn | 08 02 31.7 | +0.3 |
| YHNB | Yeheng | 3.92 | 17 | | Pn | 08 02 30.5 | -0.9 |
| TATO | Taipei | 4.24 | 17 | | Pn | 08 02 35.7 | 0.0 |
| QZH | Quanzhou | 4.27 | 341 | Pn | Pn | 08 02 33.5 | -2.5 |
| QZH | | | | Sn | Sn | 08 03 19.7 | -5.8 |
| QZH | | | | LR | LR | | |
| | comp=N,7μm,13.4s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=E,6μm,17.5s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,7μm,12.8s | | | | | | |
| JYNG | Yonagunijimaku | 4.39 | 36 | S | Sn | 08 03 27.8 | -0.6 |
| YOJ | Yonaguni jima | 4.43 | 36 | Pn | Pn | 08 02 37.9 | -0.4 |
| YOJ | Yonaguni jima | 4.43 | 36 | P | Pn | 08 02 37.9 | -0.4 |
| YOJ | Yonaguni jima | 4.43 | 36 | eP | Pn | 08 02 39.4 | +1.1 |
| YOJ | | | | eS | Sn | 08 03 28.8 | -0.7 |
| HATJ | Hateruma jima | 4.63 | 47 | P | Pn | 08 02 40.7 | -0.3 |
| HATJ | | | | eS | Sn | 08 03 30.3 | -4.1 |
| IRIF | Iriomote-Funau | 4.77 | 44 | P | Pn | 08 02 42.5 | -0.4 |
| IRIF | | | | eS | Sn | 08 03 33.9 | -4.0 |
| JKRS | Kuro-shima | 4.89 | 46 | P | Pn | 08 02 44.5 | -0.1 |
| JIJ | Ishigaki jima | 5.06 | 46 | P | Pn | 08 02 46.8 | -0.2 |
| JIJ | | | | eS | Sn | 08 03 40.2 | -4.9 |
| JISG | Ishigakijimahi | 5.32 | 46 | P | Pn | 08 02 50.2 | -0.4 |
| JISG | | | | S | Sn | 08 03 49.1 | -2.4 |
| JTJ | Tarama | 5.63 | 48 | P | Pn | 08 02 54.5 | -0.2 |
| JTJ | | | | S | Sn | 08 03 55.6 | -3.4 |
| HKPS | Hong Kong Po S | 5.74 | 285 | Pn | Pn | 08 02 53.5 | -2.8 |
| JIRB | Irabujima | 6.07 | 49 | eP | Pn | 08 03 00.5 | -0.4 |
| JMJ2 | Miyako jima3 | 6.13 | 50 | eS | Sn | 08 04 07.7 | -3.7 |
| JIKM | Ikemajima | 6.19 | 49 | eP | Pn | 08 03 01.9 | -0.6 |
| JIKM | | | | eS | Sn | 08 04 09.3 | -3.5 |
| MCO | Taipa Grande | 6.24 | 282 | P | Pn | 08 03 00.0 | -3.2 |
| JOW | Kunigami | 9.51 | 50 | Pn | Pn | 08 03 46.2 | -1.8 |
| JOW | Kunigami | 9.51 | 50 | Pn | Pn | 08 03 46.5 | -1.5 |
| | 2.8nm,0.3s,baz=130,slow=22,SNR=9.2 9.0nm,0.3s | | | | | | |
| CNSH | ChangSha | 9.77 | 319 | P | Pn | 08 03 51.0 | -0.6 |
| CNSH | | | | S | Sn | 08 05 36.4 | -4.6 |
| CNSH | | | | smax | smax | | |
| | comp=N,230nm,1.0s | | | | | | |
| CNSH | | | | smax | smax | | |
| | comp=E,230nm,1.0s | | | | | | |
| CNSH | | | | LR | LR | | |
| | comp=N,3μm,13.7s | | | | | | |
| CNSH | | | | LR | LR | | |
| | comp=E,2μm,10.4s | | | | | | |
| CNSH | | | | LR | LR | | |
| | comp=Z,3μm,13.2s | | | | | | |
| QIZ | Qiongzhong | 9.85 | 261 | P | Pn | 08 03 52.5 | -0.3 |
| QIZ | Qiongzhong | 9.85 | 261 | P | Pn | 08 03 51.8 | -1.0 |
| QIZ | | | | S | Sn | 08 05 42.9 | -0.2 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,50nm,1.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=N,3μm,11.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,2μm,11.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,3μm,10.9s | | | | | | |
| QIZ | Qiongzhong | 9.85 | 261 | Pn | Pn | 08 03 50.4 | -2.4 |
| GULI | GuiLin | 9.99 | 298 | P | Pn | 08 03 53.8 | -0.9 |
| GULI | | | | LR | LR | | |
| | comp=N,3μm,14.6s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=E,2μm,9.2s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,3μm,13.0s | | | | | | |
| SSE | Sheshan | 10.20 | 5 | P | Pn | 08 03 56.7 | -0.8 |
| SSE | | | | S | Sn | 08 05 53.1 | +1.6 |
| SSE | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,130nm,4.5s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=N,860nm,13.4s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=E,920nm,13.7s | | | | | | |
| NJ2 | Nanjing | 11.16 | 354 | eP | Pn | 08 04 10.5 | -0.2 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,89nm,3.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=N,3μm,18.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=E,2μm,16.1s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2μm,15.2s | | | | | | |
| ENH | Enshi | 13.38 | 316 | P | Pn | 08 04 41.7 | +0.6 |
| GYA | Guiyang | 13.52 | 297 | ⇓P | Pn | 08 04 41.6 | -1.5 |
| GYA | | | | S | Sn | 08 07 15.2 | +2.2 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,250nm,3.1s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=N,1μm,11.6s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,3μm,13.1s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,3μm,12.7s | | | | | | |
| DLV | T Lat | 14.28 | 233 | P | Pn | 08 04 54.4 | +0.8 |
| DAV | Davao City (W) | 14.73 | 158 | LR | LR | 08 12 03.1 | |
| | comp=Z,146nm,18.2s,baz=234,slow=43 | | | | | | |
| SLVN | Son La | 15.15 | 275 | Pn | Pn | 08 05 03.1 | -2.1 |
| LYN | LuoYang | 15.19 | 335 | P | P | 08 05 13.0 | +2.4 |
| LYN | | | | pP | sP | 08 05 16.1 | +0.1 |
| LYN | | | | sS | S | 08 08 11.2 | +0.9 |
| LYN | | | | SS | SnSn | 08 08 22.6 | +16 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,83nm,1.1s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,260nm,3.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=N,3μm,11.3s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,2μm,13.7s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,3μm,12.0s | | | | | | |
| JNU | Nakatsue | 15.47 | 36 | P | Pn | 08 05 11.1 | +1.7 |
| JNU | Nakatsue | 15.47 | 36 | Pn | P | 08 05 13.4 | -0.4 |
| | comp=Z,1.6nm,0.3s,baz=188,slow=4.2,SNR=15 | | | | | | |
| JNU | | | | LR | LR | 08 12 09.7 | |
| | comp=Z,445nm,19.9s,baz=206,slow=42 | | | | | | |
| TIA | Tai'an | 15.48 | 351 | eP | P | 08 05 11.6 | -2.2 |
| TIA | | | | pmax | pmax | | |
| | comp=Z,24nm,1.5s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=Z,360nm,4.5s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,2μm,14.3s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,2μm,12.6s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,2μm,14.9s | | | | | | |
| MYLDM | Lahad Datu | 15.71 | 186 | Pn | Pn | 08 05 12.6 | +0.2 |
| JTU | Tsushima | 15.85 | 29 | P | Pn | 08 05 15.6 | +1.4 |
| NONG | Nongkai | 16.26 | 263 | P | Pn | 08 05 20.8 | +1.2 |
| XAN | Xi'an | 16.42 | 325 | ⇓P | P | 08 05 25.4 | +1.1 |
| XAN | | | | pP | pwP | 08 05 37.4 | +4.7 |
| XAN | | | | S | S | 08 08 34.8 | -0.8 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,41nm,1.3s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,530nm,4.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,4μm,13.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,3μm,13.1s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,5μm,13.7s | | | | | | |
| XAN | Xi'an | 16.42 | 325 | ⇑P | Pn | 08 05 20.0 | -1.6 |
| XAN | | | | pP | P | 08 05 25.7 | +1.4 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,12nm,1.9s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,290nm,6.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,4μm,12.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,3μm,12.1s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,5μm,11.7s | | | | | | |
| KMI | Kunming | 16.55 | 288 | ⇓P | P | 08 05 28.5 | +2.5 |
| KMI | | | | S | Sn | 08 08 29.5 | +2.4 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,33nm,1.1s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,230nm,3.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,1μm,12.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,1μm,13.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,1μm,11.8s | | | | | | |
| TJN | Taejon | 16.67 | 21 | P | Pn | 08 05 25.4 | +0.8 |
| TJN | Taejon | 16.67 | 21 | ⇑eP | Pn | 08 05 25.2 | +0.6 |
| HNS | HongShan | 17.10 | 345 | ⇑P | P | 08 05 32.2 | +0.4 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,57nm,1.4s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,1μm,14.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,2μm,13.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,2μm,15.2s | | | | | | |
| JMN | Monobe | 17.65 | 41 | P | P | 08 05 38.6 | +0.7 |
| JMN | Monobe | 17.65 | 41 | P | Pn | 08 05 36.7 | -0.4 |
| PZH | PanZhiHua | 17.73 | 292 | P | Pn | 08 05 38.0 | -0.2 |
| PZH | | | | sP | pwP | 08 05 46.0 | -1.3 |
| PZH | | | | PP | PnPn | 08 05 52.3 | +3.4 |
| PZH | | | | S | Sn | 08 08 55.9 | +0.3 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,50nm,1.3s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,350nm,3.8s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2μm,13.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,930nm,11.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,11.8s | | | | | | |
| CD2

TIY LR LR
comp=Z,2μm,13.1s
**CRAI Chiangrai 18.52 271 P P 08 05 47.1 -0.4**
**PHRA Phrae 18.89 266 P P 08 05 52.0 +0.4**
**NAYO Nakonayok 19.08 253 P Pn 08 05 54.7 +0.1**
**BJT Baijiatuau 19.36 351 P Pn 08 05 58.2 +0.5**
**BJT Baijiatuau 19.36 351 P Pn 08 05 57.3 -0.4**
**BJI Beijing 19.38 351 P Pn 08 05 57.9 0.0**
BJI S S **08 09 38.8 +3.4**
BJI pmax pmax
comp=Z,21nm,0.9s
BJI pmax pmax
comp=Z,170nm,5.7s
BJI LR LR
comp=Z,310nm,12.2s
BJI LR LR
comp=Z,410nm,12.1s
BJI LR LR
comp=Z,650nm,13.8s
**TOLI2 Tolitoli 19.68 178 P P 08 06 01.0 +0.7**
**TOLI2 Tolitoli 19.68 178 P P 08 06 00.5 +0.2**
**SBUM Sibu 19.89 204 P P 08 06 02.0 -0.6**
**CM31 Chiang Mai Arr 20.10 267 P P 08 06 04.1 -0.7**
**CMAR Chiang Mai Arr 20.10 267 P P 08 06 05.0 +0.1**
**CMAR Chiang Mai Arr 20.10 267 P P 08 06 05.2 +0.3**
comp=Z,8.7nm,0.7s,baz=73,slow=9.3,SNR=48
CMAR PcP **PcP 08 10 20.2 +0.2**
comp=Z,2.0nm,0.4s,baz=61,slow=0.7,SNR=8.0
CMAR LR LR 08 13 50.2
comp=Z,574nm,20.6s,baz=80,slow=37
comp=Z,8.7nm,0.7s
**TNCH TengChong 20.31 286** P Pn 08 06 08.8 -0.6
TNCH sP pwP 08 06 14.9 -0.8
TNCH PP **PnPn 08 06 29.7 +5.4**
TNCH S **S 08 09 47.3 -7.5**
TNCH sS sS 08 10 01.9 +1.2
TNCH pmax pmax
comp=Z,43nm,0.6s
TNCH pmax pmax
comp=Z,470nm,2.7s
TNCH LR LR
comp=Z,1μm,12.6s
TNCH LR LR
comp=Z,990nm,12.6s
TNCH LR LR
comp=Z,2μm,12.4s
**GTOI Gorontalo 20.34 172 P P 08 06 05.8 -1.6**
**MRSI Marisa 20.38 175** P Pn 08 06 09.4 -0.5
comp=Z,114nm,1.0s,comp=Z,1μm
**KMSI Cibinong 20.55 169 P P 08 06 05.9 -3.8**
**INU Inuyama 20.67 42** P Pn 08 06 12.1 -1.1
**INU Inuyama 20.67 42 P 08 06 10.9 0.0**
INU IAmb IAmb 08 06 17.1
comp=Z,128nm,0.8s
**LZH Lanzhou 20.78 320** *e*P Pn 08 06 15.7 +0.9
LZH pP pwP 08 06 19.9 -0.9
LZH S **S 08 10 01.7 -2.2**
LZH pmax pmax
comp=Z,77nm,1.1s
LZH LR LR
comp=Z,2μm,14.9s
LZH LR LR
comp=Z,2μm,11.8s
LZH LR LR
comp=Z,2μm,10.8s
**JGF Kuroka 21.04 42 P P 08 06 16.0 +1.0**
**JGF Kuroka 21.04 42 P P 08 06 15.4 +0.4**
JGF IAmb IAmb 08 06 21.5
comp=Z,126nm,0.9s
**SRDT SRDT 21.05 255 P P 08 06 16.4 +1.3**
**JCJ Chichijima 21.06 69** LR LR 08 12 41.4
comp=Z,276nm,21.1s,baz=118,slow=32
**SNY Shenyang 21.07 7** ⇑P **P 08 06 15.3 +0.2**
SNY S Sn 08 10 15.7 +0.1
SNY pmax pmax
comp=Z,11nm,0.9s
SNY pmax pmax
comp=Z,170nm,3.5s
SNY LR LR
comp=Z,940nm,12.2s
SNY LR LR
comp=Z,590nm,13.3s
SNY LR LR
comp=Z,1μm,14.7s
**HHC Hu-ho-hao-te 21.18 342** *e*P **P 08 06 18.2 +1.7**
HHC pP sP 08 06 22.5 +0.5
HHC PP **PnPn 08 06 42.1 +6.1**
HHC S **S 08 10 12.9 +1.4**
HHC SS **SnSn 08 10 39.8 +6.1**
HHC pmax pmax
comp=Z,17nm,0.6s
HHC LR LR
comp=Z,2μm,12.2s
HHC LR LR
comp=Z,1μm,13.0s
HHC LR LR
comp=Z,2μm,13.0s
**TNTI Ternate 21.22 160** P **P 08 06 17.7 +0.7**
**JHJ Hachijo jima 2 21.28 51** P **P 08 06 21.1 +3.5**
comp=Z,218nm,0.9s,baz=207,slow=14,SNR=2.4
**BTO Baotou 21.45 339** *e*P **P 08 06 22.1 +2.7**
BTO pP **pwP 08 06 26.8 -0.9**
BTO sP **sP 08 06 29.3 +4.4**
BTO PP **PnPn 08 06 45.6 +5.9**
BTO SS Sn 08 10 48.4 +23
BTO pmax pmax
comp=Z,33nm,0.7s
BTO pmax pmax
comp=Z,360nm,3.6s
BTO LR LR
comp=Z,2μm,12.4s
BTO LR LR
comp=Z,2μm,12.8s
BTO LR LR
comp=Z,2μm,13.7s
**KSM Kuching 21.56 208 P P 08 06 21.7 +1.1**
**KSM Kuching 21.56 208 P P 08 06 19.2 -1.4**
KSM IAmb IAmb 08 06 34.2
comp=Z,126nm,1.4s
**LUWI Luwuk 21.96 173 P P 08 06 25.6 +0.7**
**LUWI Luwuk 21.96 173 P P 08 06 24.3 -0.6**
**LUWI Luwuk 21.96 173 P P 08 06 25.2 +0.3**
**MAJO Matsushiro 22.17 41 P P 08 06 28.1 +1.0**
**MAJO Matsushiro 22.17 41 P P 08 06 26.4 -0.7**
MAJO IAmb IAmb 08 06 34.9
comp=Z,217nm,1.9s
**MAJO Matsushiro 22.17 41**⇓ *e*P **P 08 06 27.6 +0.5**
MAJO pmax pmax
comp=Z,31nm,1.1s
**MJAR Matsushiro Arr 22.17 41** P **P 08 06 28.2 +1.1**
comp=Z,26nm,1.1s,baz=224,slow=8.0,SNR=17
comp=Z,26nm,1.1s
**MJB9 Matsu-Tunnel 22.17 41 P P 08 06 27.2 +0.1**
MJB9 IAmb IAmb 08 06 34.9
comp=Z,216nm,1.9s
**SURA Surathani 22.95 242 P P 08 06 36.2 +0.7**
**XLT XiLinHaoTe 23.18 353** *e*P **P 08 06 37.8 0.0**
XLT sP sP 08 06 43.8 +0.5
XLT S **S 08 10 47.8 -1.1**
XLT SS **SnSn 08 11 26.5 +3.8**
XLT pmax pmax
comp=Z,52nm,1.2s
XLT pmax pmax
comp=Z,150nm,4.4s
XLT LR LR
comp=Z,83nm,11.9s
XLT LR LR
comp=Z,560nm,14.9s
XLT LR LR
comp=Z,930nm,14.9s
**JSD Sado 23.18 39 P P 08 06 39.4 +1.7**
**CN2 Changchun 23.26 10** *e*P **P 08 06 38.8 +0.3**
CN2 *e*sP pwP 08 06 45.0 -2.0
CN2 *e*S S **08 10 46.8 -3.2**
CN2 pmax pmax
comp=Z,20nm,0.8s
CN2 pmax pmax
comp=Z,300nm,5.0s
CN2 LR LR
comp=Z,900nm,13.0s
CN2 LR LR
comp=Z,1μm,13.0s
CN2 LR LR
comp=Z,1μm,14.0s
**SRIT Nakonsritamara 23.28 241 P P 08 06 39.9 +1.0**

**PSTR Posyet 23.47 20**⇑ *e*P **P 08 06 39.8 -0.7**
**MSHR Mys Shultsa 23.52 21**⇓ *e*P **P 08 06 41.1 +0.1**
MSHR pmax pmax
comp=Z,52nm,1.3s
**SANI Sanana 23.52 165 P P 08 06 42.4 +1.2**
**SANI Sanana 23.52 165 P P 08 06 36.8 -4.4**
comp=Z,97nm,0.8s
**SWI Sorong 24.22 152 P P 08 06 46.6 -1.3**
comp=Z,199nm,1.2s,comp=Z,2μm
**SWI Sorong 24.22 152 P P 08 06 47.6 -0.3**
SWI pmax pmax
comp=Z,198nm,1.0s
**VLA Vladivostok 24.24 21** *e*P **P 08 06 49.1 +1.2**
VLA pmax pmax
comp=Z,63nm,0.9s
**GUMO Guam 24.70 103 P P 08 06 53.3 +1.0**
**GUMO Guam 24.70 103** LR LR 08 14 58.0
comp=Z,338nm,20.7s,baz=268,slow=33
**SPSI Sidrap Palu 24.71 181 P P 08 06 52.6 +0.2**
comp=Z,55nm,0.9s,comp=Z,2μm
**MDJ Mudanjiang 24.92 16 P P 08 06 54.3 +0.3**
MDJ pP sP 08 06 58.8 -0.9
MDJ pmax pmax
comp=Z,36nm,1.0s
MDJ pmax pmax
comp=Z,350nm,5.0s
MDJ LR LR
comp=Z,920nm,14.4s
MDJ LR LR
comp=Z,640nm,14.4s
MDJ LR LR
comp=Z,1μm,15.8s
**MDJ Mudanjiang 24.92 16 P P 08 06 54.5 +0.5**
**NLAI Namlea 24.94 163 P P 08 06 55.0 +0.6**
comp=Z,148nm,1.0s
**BTDF Bukit Timah Da 25.14 222 P P 08 06 57.2 +0.9**
**BNSI Bone 25.14 180 P P 08 07 00.0 +3.8**
comp=Z,47nm,0.8s
**USA0B Ussuriysk Arra 25.24 20 P P 08 06 55.9 -1.0**
USA0B IAmb IAmb 08 07 06.5
comp=Z,37nm,0.9s
**USA0B Ussuriysk Arra 25.24 20**⇑ *e*P **P 08 06 58.5 +1.6**
**USRK Ussuriysk Ar. 25.24 20 P P 08 06 56.9 0.0**
**USRK Ussuriysk Ar. 25.24 20 P P 08 06 59.6 +2.7**
comp=Z,11nm,0.8s,baz=123,slow=7.0,SNR=17
USRK LR LR 08 18 44.1
comp=Z,346nm,18.4s,baz=327,slow=41
**USRK Ussuriysk Ar. 25.24 20 P P 08 06 56.9 0.0**
**GTA Gaotai 25.37 321** *e*P **P 08 07 01.2 +2.9**
GTA sP pwP 08 07 08.8 +1.7
GTA S **S 08 11 26.4 +2.1**
GTA pmax pmax
comp=Z,8.0nm,1.2s
GTA LR LR
comp=Z,680nm,13.4s
GTA LR LR
comp=Z,880nm,14.9s
GTA LR LR
comp=Z,1μm,13.8s
**BNX BinXian 25.49 12** ⇑P **P 08 06 59.3 +0.2**
BNX sP **sP 08 07 04.3 -0.5**
BNX S **S 08 11 27.4 +1.8**
BNX pmax pmax
comp=Z,13nm,1.4s
BNX pmax pmax
comp=Z,210nm,7.7s
BNX LR LR
comp=Z,600nm,15.0s
BNX LR LR
comp=Z,860nm,14.5s
BNX LR LR
comp=Z,790nm,14.3s
**MSAI Masohi 25.59 159 P P 08 07 07.4 +7.0**
**KAPI Kappang 25.76 181 P P 08 07 02.9 +1.1**
**KAPI Kappang 25.76 181 P P 08 07 01.6 -0.1**
KAPI IAmb IAmb 08 07 15.7
comp=Z,40nm,0.9s
**KAPI Kappang 25.76 181 P P 08 07 01.7 -0.1**
KAPI pmax pmax
comp=Z,40nm,0.9s
**SHL Shillong 26.34 286 P P 08 07 07.3 -0.1**
SHL IAmb IAmb 08 07 18.6
comp=Z,75nm,1.4s
**SHL Shillong 26.34 286 P P 08 07 07.3 -0.1**
SHL pmax pmax
comp=Z,75nm,1.4s
**FAKI Fak Fak 26.48 152 P P 08 07 09.5 +1.0**
**FAKI Fak Fak 26.48 152 P P 08 07 13.0 +4.5**
**GOMU GeErMu 26.85 310 P P 08 07 15.3 +3.2**
GOMU S **S 08 11 50.9 +2.7**
GOMU LR LR
comp=Z,3μm,11.2s
GOMU LR LR
comp=Z,1μm,11.6s
GOMU LR LR
comp=Z,3μm,12.3s
**LSA Lhasa 27.57 294 P P 08 07 21.2 +2.5**
LSA pmax pmax
comp=Z,10.0nm,0.7s
LSA LR LR
comp=Z,290nm,17.6s
LSA LR LR
comp=Z,440nm,11.5s
LSA LR LR
comp=Z,470nm,12.2s
**LSA Lhasa 27.57 294 P P 08 07 19.4 +0.7**
**LSA Lhasa 27.57 294 P P 08 07 19.4 +0.7**
LSA pmax pmax
comp=Z,28nm,1.2s
**BKNI Bangkinang 27.68 225 P P 08 07 18.6 -0.6**
**ULN Ulaanbaatar 28.90 342 P P 08 07 29.1 -0.9**
**ULN Ulaanbaatar 28.90 342** *de*P **P 08 07 30.1 +0.1**
ULN pmax pmax
comp=Z,13nm,1.3s
**PDSI Padang 28.99 224** P P 08 07 38.8 +7.9
**SONM Songino Array 29.07 341 P P 08 07 30.8 -0.7**
**SONM Songino Array 29.07 341 P P 08 07 31.5 +0.1**
comp=Z,8.9nm,1.0s,baz=162,slow=9.4,SNR=28
SONM PcP **PcP 08 10 39.0 -0.4**
comp=Z,3.3nm,1.1s,baz=170,slow=2.7,SNR=5.2
comp=Z,8.9nm,1.0s
**MMRI Maumere 29.42 176 P P 08 07 35.6 +0.9**
comp=Z,86nm,1.0s
**MMRI Maumere 29.42 176 P P 08 07 34.7 0.0**
**MMRI Maumere 29.42 176 P P 08 07 35.6 +0.9**
comp=Z,89nm,1.0s
**EDFI Ende, Flores 29.50 177 P P 08 07 34.3 -1.2**
**KLR Kul'dur 29.75 15** LR LR 08 20 49.8
comp=Z,638nm,18.9s,baz=196,slow=39
**KLR Kul'dur 29.75 15**⇓ *e*P **P 08 07 38.7 +1.4**
KLR pmax pmax
comp=Z,18nm,1.7s
**HEH HeiHe 29.85 9** *e*P **P 08 07 38.7 +0.5**
HEH pP **sP 08 07 42.6 -1.3**
HEH PP **PnPn 08 08 32.1 -2.2**
HEH S **S 08 12 38.2 +3.8**
HEH pmax pmax
comp=Z,13nm,0.7s
HEH pmax pmax
comp=Z,190nm,4.2s
HEH LR LR
comp=Z,570nm,12.2s
HEH LR LR
comp=Z,900nm,12.4s
HEH LR LR
comp=Z,970nm,13.6s
**KPJI Karang Pucung 30.14 203** P P 08 07 46.8 +5.8
comp=Z,34nm,1.1s
**SISI Saibi 30.20 226 P P 08 07 46.1 +4.5**
comp=Z,53nm,1.1s
**SOEI Soe 30.73 172 P P 08 07 47.3 +0.9**
**SOEI Soe 30.73 172 P P 08 07 46.5 +0.1**
**YSS Yuzh-Sakhalins 31.83 30 P P 08 07 56.7 +1.0**
**YSS Yuzh-Sakhalins 31.83 30** *e*P **P 08 07 57.9 +2.2**
YSS *e* 08 09 05.0
YSS *e*S **S 08 13 06.9 +1.5**
YSS *e*SS **SS 08 15 21.7 -0.4**
YSS pmax pmax
comp=Z,20nm,0.8s
YSS pmax pmax
comp=Z,200nm,4.0s
YSS MLR MLR
comp=Z,300nm,14.0s
YSS MLR MLR
comp=N,300nm,16.0s

YSS MLR MLR
comp=E,300nm,16.0s
**ZAK Zakamensk 32.29 340** *e*P **P 08 07 59.1 -0.7**
ZAK pmax pmax
comp=Z,6.0nm,1.2s
**ZEA Zeya 33.23 8** *e*P **P 08 08 08.2 +0.3**
ZEA pmax pmax
comp=Z,30nm,0.9s
ZEA MLR MLR
comp=N,800nm,14.0s
ZEA MLR MLR
comp=Z,800nm,15.0s
**WMQ Urumqi 35.32 318** *e*P **P 08 08 27.8 +1.5**
WMQ LR LR
comp=Z,760nm,15.1s
WMQ LR LR
comp=Z,720nm,14.1s
WMQ LR LR
comp=Z,360nm,15.1s
**KDU Kakadu 35.51 159** P **P 08 08 28.7 +0.7**
**KDU Kakadu 35.51 159** P **P 08 08 25.3 -2.7**
comp=Z,44nm,0.9s,SNR=4.2
**KNRA Kununurra 37.32 166** P **P 08 08 41.1 -2.4**
comp=Z,39nm,0.3s,SNR=3.2
**DGZ Jazzator, Alta 38.68 326** *de*P **P 08 08 55.1 +0.2**
DGZ pmax pmax
comp=Z,7.0nm,1.0s
**ZSN Zaisan 38.87 321** *e*P **P 08 08 56.4 +0.1**
baz=321
**ZSN Zaisan 38.87 321** *e*P **P 08 08 56.3 +0.1**
**HYB Hyderabad 39.35 272** *e*P **P 08 09 00.3 -0.4**
**PATS Pohnpei 39.49 105** P **P 08 09 02.5 +0.7**
**PATS Pohnpei 39.49 105** P **P 08 09 02.4 +0.6**
comp=Z,134nm,1.7s,SNR=1.4
**MK31 Makanchi Array 40.09 319** P **P 08 09 06.4 -0.1**
**MK31 Makanchi Array 40.09 319** *c* *i*P **P 08 09 07.1 +0.6**
**MKAR Makanchi Array 40.09 319** P **P 08 09 06.4 -0.1**
**MKAR Makanchi Array 40.09 319** P **P 08 09 07.0 +0.5**
comp=Z,6.5nm,0.8s,baz=113,slow=9.3,SNR=36
MKAR PcP **PcP 08 11 10.8 -0.2**
comp=Z,4.0nm,0.8s,baz=101,slow=6.3,SNR=5.0
comp=Z,6.5nm,0.8s
**PMG Port Moresby 40.16 136** P **P 08 09 08.1 +0.8**
**PMG Port Moresby 40.16 136** P **P 08 09 08.4 +1.1**
**PMG Port Moresby 40.16 136** P **P 08 09 09.3 +1.9**
PMG IAmb IAmb 08 09 28.4
comp=Z,66nm,1.1s
**PMG Port Moresby 40.16 136**⇑ *e*P **P 08 09 08.6 +1.3**
PMG pmax pmax
comp=Z,35nm,1.1s
**MAKZ Makanchi 40.29 319** P **P 08 09 08.4 +0.2**
**MAKZ Makanchi 40.29 319** P **P 08 09 08.4 +0.2**
MAKZ pmax pmax
comp=Z,22nm,1.2s
**PALK Pallekele 40.44 256** LR LR 08 25 32.8
comp=Z,192nm,21.9s,baz=135,slow=36
**SHLS Shalkode 40.48 313** *e*P **P 08 09 08.0 -1.8**
baz=313
**SHLS Shalkode 40.48 313** *e*P **P 08 09 08.0 -1.8**
**UZB Uzynbulak 40.78 313** *e*P **P 08 09 12.8 +0.4**
comp=Z,9.9nm,0.9s,baz=312
**UZB Uzynbulak 40.78 313** *e*P **P 08 09 12.8 +0.4**
UZB pmax pmax
comp=Z,10.0nm,0.9s
**KPKS Kokpek 41.12 313** *e*P **P 08 09 15.5 +0.3**
baz=313
**KPKS Kokpek 41.12 313** *e*P **P 08 09 15.4 +0.3**
**SATY Saty 41.17 312** *e*P **P 08 09 16.1 +0.5**
baz=312
**SATY Saty 41.17 312** *e*P **P 08 09 16.1 +0.5**
**TARG Taragay, Kyrgy 41.18 310** P **P 08 09 16.3 +0.2**
**TARG Taragay, Kyrgy 41.18 310** P **P 08 09 16.3 +0.2**
TARG pmax pmax
comp=Z,16nm,1.1s
**COEN Coen 41.38 145** P **P 08 09 18.0 +0.6**
**COEN Coen 41.38 145** P **P 08 09 15.7 -1.7**
comp=Z,37nm,1.0s,SNR=3.0
**YAK Yakutsk 41.63 7** P **P 08 09 18.1 -0.7**
YAK IAmb IAmb 08 09 28.8
comp=Z,36nm,0.8s
**YAK Yakutsk 41.63 7** LR LR 08 29 32.1
comp=Z,550nm,18.9s,baz=193,slow=40
**YAK Yakutsk 41.63 7** *e*P **P 08 09 18.0 -0.9**
YAK *e*PP **pP 08 09 22.3 -0.7**
YAK *e* 08 10 53.9
YAK *e*S **S 08 15 35.0 +0.7**
YAK pmax pmax
comp=Z,21nm,0.9s
YAK pmax pmax
comp=E,7.0nm,1.3s
YAK pmax pmax
comp=N,16nm,1.4s
YAK pmax pmax
comp=Z,13nm,0.6s
YAK pmax pmax
comp=E,9.0nm,0.9s
YAK smax smax
comp=N,48nm,12.9s
YAK smax smax
comp=E,32nm,12.3s
YAK MLR MLR
comp=Z,605nm,14.0s
YAK MLR MLR
comp=N,491nm,16.0s
YAK MLR MLR
comp=E,302nm,14.0s
**MBWA Marble Bar 41.80 181** P **P 08 09 21.3 +0.6**
**MBWA Marble Bar 41.80 181** P **P 08 09 18.6 -2.1**
**TDK Taldyqorghan 41.84 315** *e*P **P 08 09 21.6 +0.6**
comp=E,10nm,1.0s,baz=315
**TDK Taldyqorghan 41.84 315** *e*P **P 08 09 21.5 +0.6**
TDK pmax pmax
comp=Z,10.0nm,1.0s
**ARXS Arharly 41.95 314** *e*P **P 08 09 21.4 -0.5**
**KSH Kashi 41.96 306** P **P 08 09 26.0 +3.9**
KSH pP pwP 08 09 31.6 +0.7
KSH pmax pmax
comp=Z,11nm,1.3s
KSH LR LR
comp=Z,660nm,15.8s
KSH LR LR
comp=Z,580nm,13.7s
KSH LR LR
comp=Z,930nm,13.4s
**MDOK Medeo 42.15 312** *e*P **P 08 09 24.1 +0.5**
baz=312
MDOK *e*S **S 08 15 43.3 +0.4**
baz=312
**MDOK Medeo 42.15 312** *e*P **P 08 09 24.1 +0.5**
MDOK *e*S **S 08 15 43.3 +0.4**
**TNSS Tian-Shan 42.18 312** *e*P **P 08 09 24.2 -0.1**
baz=312
**TNSS Tian-Shan 42.18 312** *e*P **P 08 09 24.1 -0.1**
**PSA00 Pilbara Seismi 42.22 180** P **P 08 09 22.6 -1.5**
**PSA00 Pilbara Seismi 42.22 180** P **P 08 09 21.7 -2.4**
comp=Z,30nm,0.9s,SNR=2.1
**AAA Alma-Ata 42.26 312** *e*P **P 08 09 25.0 +0.6**
comp=Z,11nm,0.4s,baz=312
**AAA Alma-Ata 42.26 312** *e*P **P 08 09 25.0 +0.6**
AAA pmax pmax
comp=Z,11nm,0.4s
**NRN Naryn 42.40 309** P **P 08 09 26.1 +0.2**
**NRN Naryn 42.40 309** P **P 08 09 26.1 +0.2**
NRN pmax pmax
comp=Z,23nm,1.1s
**CHKK Chushkaly 42.41 313** *e*P **P 08 09 25.9 +0.3**
baz=313
**CHKK Chushkaly 42.41 313** *e*P **P 08 09 25.9 +0.3**
**ZAA0 Zalesovo Array 42.52 330** P **P 08 09 26.1 -0.1**
**ZALV Zalesovo Beam 42.52 330** P **P 08 09 25.6 -0.7**
**ZALV Zalesovo Beam 42.52 330** P **P 08 09 26.1 -0.1**
comp=Z,15nm,0.9s,baz=120,slow=7.7,SNR=34
ZALV LR LR 08 26 57.0
comp=Z,176nm,18.5s,baz=120,slow=36
comp=Z,15nm,0.9s
**WB0 Warramunga Arr 42.76 160** P **P 08 09 26.6 -2.0**
WB0 IAmb IAmb 08 09 27.9
comp=Z,89nm,1.1s
**WRAB Tennant Creek 42.90 160** *d* *i*P **P 08 09 27.8 -1.9**
WRAB pmax pmax
comp=Z,76nm,1.1s
**WRA Warramunga Arr 42.91 160** P **P 08 09 26.7 -3.1**
**WRA Warramunga Arr 42.91 160** P **P 08 09 28.1 -1.7**
comp=Z,55nm,1.0s,baz=342,slow=8.7,SNR=113
WRA S **S 08 15 55.2 +1.1**
comp=Z,10nm,1.1s,baz=341,slow=15,SNR=9.3

comp=Z,55nm,1.0s
**WB1 Warramunga Ar. 42.92 160** P **P** **08 09 28.9 -1.0**
**SEM Semipalatinsk 42.98 323** *eP* **P** **08 09 30.1 -0.2**
comp=Z,9.5nm,0.9s,baz=323
SEM **Semipalatinsk 42.98 323** *eP* **P** **08 09 30.1 -0.2**
SEM pmax pmax
comp=Z,9.0nm,0.9s
**PET Petropavlovsk 43.57 33** P **P** **08 09 36.3 +1.5**
**PET Petropavlovsk 43.57 33** P **P** **08 09 34.9 +0.1**
PET IAmb IAmb 08 09 40.3
comp=Z,49nm,1.2s
**PET Petropavlovsk 43.57 33⇑** *eP* **P** **08 09 33.9 -0.9**
PET pmax pmax
comp=Z,69nm,1.7s
**AAK Ala-Archa 43.80 310** P **P** **08 09 37.1 0.0**
**AAK Ala-Archa 43.80 310** LR LR 08 28 12.7
comp=Z,648nm,21.3s,baz=108,slow=37
**AAK Ala-Archa 43.80 310⇓** *eP* **P** **08 09 38.7 +1.7**
AAK pmax pmax
comp=Z,9.0nm,1.3s
**SGDS Sogindy 43.92 312** *eP* **P** **08 09 38.6 +0.6**
baz=311
**SGDS Sogindy 43.92 312** *eP* **P** **08 09 38.5 +0.6**
**KURK Kurchatov 44.04 323** P **P** **08 09 38.4 -0.2**
KURK IAmb IAmb 08 10 01.7
comp=Z,32nm,1.1s
**KURK Kurchatov 44.04 323** *deP* **P** **08 09 38.7 +0.1**
KURK pmax pmax
comp=Z,25nm,1.3s
**KURBB Kurchatov Arra 44.05 323** P **P** **08 09 39.2 +0.5**
comp=Z,7.7nm,0.7s,baz=121,slow=8.2,SNR=40
KURBB LR LR 08 28 48.4
comp=Z,245nm,18.5s,baz=173,slow=37
comp=Z,7.7nm,0.7s
**BTLS Baital 44.77 314** *eP* **P** **08 09 45.0 +0.4**
baz=314
**BTLS Baital 44.77 314** *eP* **P** **08 09 45.0 +0.4**
**QIS Mount Isa 45.39 154** P **P** **08 09 49.3 -0.4**
**QIS Mount Isa 45.39 154** P **P** **08 09 48.6 -1.2**
comp=Z,110nm,1.5s,SNR=17
**MTSU Mount Surprise 45.46 147** P **P** **08 09 51.7 +1.4**
**GAR Garm 46.18 304** P **P** **08 09 56.6 +0.6**
GAR IAmb IAmb 08 10 19.6
comp=Z,45nm,1.2s
**AS31 Alice Springs 46.28 162** P **P** **08 09 55.4 -1.3**
**ASPA Alice Springs 46.28 162** P **P** **08 09 55.6 -1.2**
comp=Z,8.4nm,0.5s,SNR=7.9
**ASAR Alice Springs 46.28 162** P **P** **08 09 55.3 -1.4**
**ASAR Alice Springs 46.28 162** P **P** **08 09 55.5 -1.2**
comp=Z,12nm,0.8s,baz=344,slow=7.0,SNR=70
ASAR S **S** **08 16 49.7 +6.5**
comp=Z,1.5nm,0.9s,baz=348,slow=17,SNR=5.5
ASAR LR LR 08 32 18.0
comp=Z,104nm,18.4s,baz=320,slow=40
comp=Z,12nm,0.8s
**AS01 Alice Springs 46.30 162** P **P** **08 09 56.3 -0.5**
**WRKA Warakurna 46.35 170** P **P** **08 09 56.4 -0.8**
**WRKA Warakurna 46.35 170** P **P** **08 09 55.1 -2.1**
comp=Z,33nm,1.1s,SNR=2.2
**KK31 Karatay Array 46.76 310** P **P** **08 09 59.6 -0.7**
KK31 IAmb IAmb 08 10 02.2
comp=Z,14nm,1.0s
**KK31 Karatay Array 46.76 310** P **P** **08 09 59.6 -0.7**
KK31 pmax pmax
comp=Z,14nm,1.0s
**KKAR Karatay Array 46.76 310** P **P** **08 09 59.2 -1.1**
**KKAR Karatay Array 46.76 310** P **P** **08 10 00.3 -0.1**
KKAR IAmb IAmb 08 10 02.2
comp=Z,14nm,1.0s
**KKAR Karatay Array 46.76 310** P **P** **08 09 59.2 -1.1**
KKAR pmax pmax
comp=Z,14nm,1.0s
**KBL Kabul 46.77 298** P **P** **08 10 00.1 -0.6**
KBL IAmb IAmb 08 10 07.1
comp=Z,17nm,1.1s
**KBL Kabul 46.77 298** P **P** **08 10 00.1 -0.6**
KBL pmax pmax
comp=Z,17nm,1.1s
**IUG Iuzhnay 46.91 309** *eP* **P** **08 10 02.3 +0.6**
comp=Z,6.5nm,0.9s,baz=309
**IUG Iuzhnay 46.91 309** *eP* **P** **08 10 02.2 +0.6**
IUG pmax pmax
comp=Z,7.0nm,0.9s
**CHGR Chuyangaron 47.03 304** P **P** **08 10 01.9 -0.7**
CHGR IAmb IAmb 08 10 21.4
comp=Z,22nm,0.9s
**CHGR Chuyangaron 47.03 304** P **P** **08 10 01.9 -0.7**
CHGR pmax pmax
comp=Z,22nm,0.9s
**SIMJ Simiganj 47.15 304** P **P** **08 10 03.9 +0.3**
**BRLS Boroldaу 47.22 310** *eP* **P** **08 10 05.0 +0.9**
comp=Z,4.2nm,0.9s,baz=309
**BRLS Boroldaу 47.22 310** *eP* **P** **08 10 04.9 +0.9**
BRLS pmax pmax
comp=Z,4.0nm,0.9s
**CHM Chimkent 47.26 309** *eP* **P** **08 10 04.7 +0.5**
comp=Z,4.1nm,0.5s,baz=309
**CHM Chimkent 47.26 309** *eP* **P** **08 10 04.7 +0.5**
CHM pmax pmax
comp=Z,4.0nm,0.5s
**MEEK Meekatharra 47.28 182** P P 08 09 58.0 -6.5
**SEY Seymchan 47.38 19⇑** *eP* **P** **08 10 05.4 +0.6**
SEY pmax pmax
comp=Z,23nm,1.3s
**TV1H Townsville Har 47.70 145** P **P** **08 10 08.3 +0.5**
**CTA Charters Tower 48.09 146** LR LR 08 28 23.8
comp=Z,6.7nm,21.6s,baz=346,slow=34
**CTA Charters Tower 48.09 146** P **P** **08 10 11.3 +0.4**
**CTAO Charters Tower 48.09 146** P **P** **08 10 11.7 +0.8**
**CTAO Charters Tower 48.09 146** P **P** **08 10 10.6 -0.3**
**CTAO Charters Tower 48.09 146** P **P** **08 10 10.6 -0.3**
CTAO pmax pmax
comp=Z,58nm,0.8s
**HNR Honiara 49.39 124** LR LR 08 27 31.5
comp=Z,2µm,22.0s,baz=338,slow=32
**BRVK Borovoye 49.71 323** P **P** **08 10 22.8 -0.1**
BRVK IAmb IAmb 08 10 24.7
comp=Z,19nm,1.1s
**BRVK Borovoye 49.71 323** *di*P **P** **08 10 23.1 +0.2**
BRVK pmax pmax
comp=Z,25nm,1.3s
**OOD Oodnadatta 50.69 162** P **P** **08 10 30.1 -0.5**
**TIXI Tiksi 51.02 4⇓** *eP* **P** **08 10 30.2 -2.3**
TIXI pmax pmax
comp=Z,17nm,1.1s
**FORT Forrest 51.94 171** P **P** **08 10 36.3 -3.6**
**KMBL Kambalda 52.00 178** P **P** **08 10 38.2 -2.1**
comp=Z,57nm,2.6s,SNR=1.9
**INKA Innaminka 52.31 157** P **P** **08 10 43.0 +0.3**
**HRA Herat 52.38 298** P **P** **08 10 43.4 -0.2**
**MULG Mulgathing 52.62 165** P **P** **08 10 44.2 -0.8**
**QLP Quilpie 52.67 153** P **P** **08 10 45.7 +0.3**
**QLP Quilpie 52.67 153** P **P** **08 10 44.4 -1.0**
comp=Z,145nm,1.1s,SNR=12
**RK1H Rockhampton Ha 53.04 144** P **P** **08 10 48.5 +0.3**
**LCRK Leigh Creek 53.93 161** P **P** **08 10 54.2 -0.4**
**EIDS Eidsvold 54.95 145** P **P** **08 11 01.9 -0.2**
**EIDS Eidsvold 54.95 145** P **P** **08 11 01.4 -0.7**
comp=Z,14nm,1.0s,SNR=2.7
**ABKAR Akbulak array 55.08 316** P **P** **08 11 03.1 +0.3**
ABKAR IAmb IAmb 08 11 04.4
comp=Z,16nm,1.1s
**BILL Bilibino 55.09 19c** *i*P **P** **08 11 03.1 +0.5**
BILL *i* *SP **sP** **08 11 07.7 -0.8**
BILL *i* 08 11 13.0
BILL 08 12 02.0
BILL 08 13 07.0
BILL pmax pmax
comp=Z,23nm,1.3s
BILL MLR MLR
comp=Z,191nm,16.0s
**BBOO Buckleboo 55.54 164** P **P** **08 11 05.6 -0.6**
**BBOO Buckleboo 55.54 164** P **P** **08 11 05.4 -0.8**
**BBOO Buckleboo 55.54 164** P **P** **08 11 05.0 -1.2**
comp=Z,72nm,1.0s,SNR=2.9
**SVE Sverdlovsk 56.14 325** *eP* **P** **08 11 10.9 +0.6**
SVE pmax pmax
comp=Z,43nm,1.4s
**STKA Stephens Creek 56.36 158** P **P** **08 11 11.7 -0.5**
**STKA Stephens Creek 56.36 158** P **P** **08 11 11.7 -0.5**
**STKA Stephens Creek 56.36 158** P **P** **08 11 11.2 -1.0**
comp=Z,6.3nm,1.2s,SNR=2.8
**STKA Stephens Creek 56.36 158** P **P** **08 11 11.4 -0.7**
comp=Z,18nm,0.9s,baz=336,slow=8.3,SNR=18
comp=Z,18nm,0.9s

**STKA Stephens Creek 56.36 158** *ceP* **P** **08 11 11.7 -0.5**
**AKTO Aktyubinsk 56.47 317** LR LR 08 35 20.4
comp=Z,171nm,19.7s,baz=88,slow=36
**WSAR Wadi Sarin 56.67 285** LR LR 08 38 16.4
comp=Z,105nm,19.9s,baz=100,slow=39
**ARU Arti 57.17 324** P **P** **08 11 17.4 -0.3**
ARU IAmb IAmb 08 11 18.6
comp=Z,14nm,0.7s
**ARU Arti 57.17 324** LR LR 08 36 17.6
comp=Z,247nm,19.9s,baz=112,slow=36
**ARU Arti 57.17 324** *di*P **P** **08 11 17.4 -0.3**
ARU pmax pmax
comp=Z,19nm,1.0s
**ARU Arti 57.17 324** P **P** **08 11 17.7 +0.1**
comp=Z,23nm,1.2s
**CMSA Cobar Meteorol 57.61 154** P **P** **08 11 21.2 +0.2**
**CMSA Cobar Meteorol 57.61 154** P **P** **08 11 20.9 -0.2**
comp=Z,72nm,1.0s,SNR=8.8
**ARMA Armidale 59.34 148** P **P** **08 11 33.4 +0.2**
comp=Z,15nm,0.8s,SNR=2.3
**AUDCS Dubbo College 59.46 152** P **P** **08 11 34.7 +0.8**
**ARPS Mount Arapiles 60.91 160** P **P** **08 11 43.3 -0.5**
**ARPS Mount Arapiles 60.91 160** P **P** **08 11 42.9 -0.9**
comp=Z,64nm,0.8s,SNR=5.6
**YNG Young 61.13 153** P **P** **08 11 45.3 0.0**
comp=Z,46nm,0.9s,SNR=1.2
**SPIA Saint Paul Isl 61.66 35** P **P** **08 11 48.0 -0.7**
baz=265
**GAMB Gambell 61.82 28** P **P** **08 11 49.2 -0.4**
baz=260
**P08K Saint George I 61.99 36** P **P** **08 11 50.3 -0.5**
baz=266
**DZM Mont Dzumac 62.19 131** P **P** **08 11 53.7 +0.9**
**DZM Mont Dzumac 62.19 131** *e*LR LR 08 30 19.9
comp=Z,411nm,34.4s
**DZM Mont Dzumac 62.19 131** P **P** **08 11 52.8 0.0**
comp=Z,13nm,1.1s,baz=14,slow=15,SNR=3.9
DZM LR LR 08 34 34.5
comp=Z,74nm,21.6s,baz=316,slow=32
comp=Z,13nm,1.1s
**CAN Canberra 62.26 154** P **P** **08 11 53.7 +0.7**
**CAN Canberra 62.26 154** P **P** **08 11 53.3 +0.3**
**KIRV Kirov 62.36 326** *de*P **P** **08 11 52.8 -0.5**
**CNB Canberra Magne 62.41 153** P **P** **08 11 54.2 +0.2**
**CNB Canberra Magne 62.41 153** P **P** **08 11 53.8 -0.2**
comp=Z,38nm,0.8s,SNR=3.2
**YATNC Mamie plateau, 62.50 130** P **P** **08 11 56.3 +1.5**
**TOO Toolangi 62.87 158** P **P** **08 11 57.5 +0.5**
**TOO Toolangi 62.87 158** P **P** **08 11 57.1 +0.1**
**TOO Toolangi 62.87 158** P **P** **08 11 56.6 -0.4**
comp=Z,48nm,1.6s,SNR=3.5
**TOO Toolangi 62.87 158** P **P** **08 11 57.1 +0.1**
TOO pmax pmax
comp=Z,35nm,0.8s
**AUUHS Ulladulla High 62.92 152** P **P** **08 11 58.3 +1.0**
**BELG Belogornoye 63.10 319** P **P** **08 11 58.7 +0.4**
comp=Z,24nm,0.7s,baz=133,slow=3.9,SNR=3.0
comp=Z,24nm,0.7s
**BELG Belogornoye 63.10 319** *ce*P **P** **08 11 58.5 +0.2**
BELG pmax pmax
comp=Z,5.0nm,1.0s
**MAK Makhachkala 63.53 308** *e*P P 08 11 56.3 -5.1
MAK *e* 08 14 17.4
MAK *e*S **S** **08 20 26.0 -8.2**
MAK *e*SSS SSS 08 27 31.5
MAK pmax pmax
comp=Z,252nm,1.3s
MAK MLR MLR
comp=Z,356nm,13.0s
**UNV Unalaska Valle 63.62 39** P **P** **08 12 01.0 -0.8**
baz=270
**TNA Tin City 63.70 26** P **P** **08 12 01.7 -0.4**
baz=263
**M11K Mekoryuk 64.00 32** P **P** **08 12 04.6 +0.5**
baz=267
**F14K Arctic Creek 64.35 26** P **P** **08 12 06.4 0.0**
baz=264
**ANM Nome 64.67 27** P **P** **08 12 08.2 -0.3**
baz=266
**K13K Kusilvak Mount 64.83 30** P **P** **08 12 10.3 +0.7**
**K13K Kusilvak Mount 64.83 30** P **P** **08 12 09.7 +0.1**
baz=267
**C16K Lisburne Hills 65.04 23** P **P** **08 12 10.8 -0.1**
baz=264
**F15K North Star Dit 65.07 26** P **P** **08 12 11.7 +0.6**
**F15K North Star Dit 65.07 26** P **P** **08 12 11.2 +0.1**
baz=266,SNR=8.9
**G15K Niukluk 65.27 27** P **P** **08 12 12.7 +0.2**
baz=266,SNR=10
**J14K Nanvaranak Lak 65.38 29** P **P** **08 12 13.9 +0.8**
J14K IAmb IAmb 08 12 20.5
comp=Z,28nm,1.1s
**J14K Nanvaranak Lak 65.38 29** P **P** **08 12 13.3 +0.3**
baz=268,SNR=6.4
**M13K Dall Lake 65.41 32** P **P** **08 12 13.5 +0.1**
baz=269
**L14K Kuka Creek 65.75 31** P **P** **08 12 16.6 +1.1**
**L14K Kuka Creek 65.75 31** P **P** **08 12 16.0 +0.5**
baz=269,SNR=18
**D17K Noatak River 65.83 24** P **P** **08 12 16.4 +0.4**
baz=266
**C17K DeLong Mountai 65.86 23** P **P** **08 12 16.5 +0.3**
baz=266
**RDOG Red Dog Mine 65.92 24** P **P** **08 12 17.1 +0.4**
baz=266
**G16K Koyuk River 66.00 27** P **P** **08 12 17.0 -0.2**
G16K IAmb IAmb 08 12 28.7
comp=Z,26nm,1.1s
**G16K Koyuk River 66.00 27** P **P** **08 12 17.5 +0.3**
baz=268,SNR=14
**H16K Elim 66.03 27** P **P** **08 12 17.5 +0.2**
baz=268,SNR=10
**M14K Bethel 66.10 32** P **P** **08 12 18.5 +0.7**
M14K IAmb IAmb 08 12 25.1
comp=Z,29nm,1.1s
**M14K Bethel 66.10 32** P **P** **08 12 17.8 0.0**
baz=270
**S12K Black Hills 66.16 37** P **P** **08 12 18.6 +0.2**
baz=272
**N14K Kuskokwak Cree 66.25 33** P **P** **08 12 18.5 -0.2**
baz=271
**E17K Hotham Inlet 66.28 25** P **P** **08 12 19.4 +0.5**
baz=268
**K15K Wolf Creek Mou 66.31 30** P **P** **08 12 19.4 +0.2**
K15K IAmb IAmb 08 12 30.9
comp=Z,21nm,0.9s
**K15K Wolf Creek Mou 66.31 30** P **P** **08 12 19.2 +0.1**
baz=270,SNR=8.6
**L15K Ungalak Mounta 66.33 31** P **P** **08 12 19.2 0.0**
baz=270
**B18K Kokik River 66.41 22** P **P** **08 12 19.9 +0.2**
baz=267
**F17K Baldwin Pennin 66.49 25** P **P** **08 12 20.5 +0.3**
**F17K Baldwin Pennin 66.49 25** P **P** **08 12 20.0 -0.2**
baz=268
**C18K Utukok River 66.59 23** P **P** **08 12 20.8 -0.2**
baz=268
**I17K Unalakleet 66.69 28** P **P** **08 12 22.2 +0.7**
baz=270,SNR=9.9
**A19K Wainwright 66.71 21** P **P** **08 12 22.2 +0.6**
baz=267
**G17K Kiwalik Mounta 66.72 26** P **P** **08 12 22.1 +0.4**
baz=269,SNR=28
**M15K Kasigluk River 66.73 32** P **P** **08 12 21.7 -0.2**
baz=271,SNR=6.6
**J16K Anvik River 66.73 29** P **P** **08 12 22.5 +0.6**
J16K IAmb IAmb 08 12 28.8
comp=Z,15nm,1.1s
**J16K Anvik River 66.73 29** P **P** **08 12 21.8 0.0**
baz=270
**E18K Tukpahlearik C 66.77 24** P **P** **08 12 22.8 +0.8**
E18K IAmb IAmb 08 12 36.3
comp=Z,17nm,0.8s
**E18K Tukpahlearik C 66.77 24** P **P** **08 12 22.5 +0.4**
baz=269,SNR=8.2
**KBZ Khabaz 66.79 310** P **P** **08 12 23.1 +0.5**
comp=Z,5.6nm,0.9s,baz=95,slow=4.4,SNR=7.1
comp=Z,5.6nm,0.9s
**KBZ Khabaz 66.79 310** *de*P **P** **08 12 22.8 +0.2**
KBZ pmax pmax
comp=Z,10.0nm,1.0s
**VRH Novokhopyorsk 66.81 318** *e*P **P** **08 12 22.2 -0.3**
VRH pmax pmax
comp=Z,33nm,0.7s
**KIV Kislovodsk 66.92 310** *e*P **P** **08 12 24.5 +1.0**
KIV pmax pmax
comp=Z,17nm,1.0s

KIV MLR MLR
comp=Z,127nm,17.0s
**KIV Kislovodsk 66.92 310** P **P** **08 12 24.6 +1.0**
comp=Z,20nm,1.1s
**SHA1 Shidzhatmaz 66.96 310** *de*P **P** **08 12 24.0 0.0**
**H17K Granite Mounta 67.03 27** P **P** **08 12 24.5 +0.8**
**H17K Granite Mounta 67.03 27** P **P** **08 12 23.9 +0.2**
baz=270,SNR=17
**N15K Kwethluk River 67.04 32** P **P** **08 12 24.4 +0.6**
**N15K Kwethluk River 67.04 32** P **P** **08 12 24.1 +0.3**
baz=272,SNR=8.0
**SDPT Sand Point 67.08 38** P **P** **08 12 24.4 +0.2**
baz=274
**F18K Selawik 67.13 25** P **P** **08 12 24.8 +0.5**
baz=270,SNR=20
**C19K Lookout Ridge 67.19 23** P **P** **08 12 26.1 +1.4**
**C19K Lookout Ridge 67.19 23** P **P** **08 12 25.4 +0.7**
baz=269,SNR=15
**O15K Ungalikthiuk R 67.22 33** P **P** **08 12 24.9 -0.1**
baz=273
**L16K Owhat River 67.28 31** P **P** **08 12 25.1 -0.3**
baz=272
**J17K VABM Dome 67.42 29** P **P** **08 12 27.1 +0.9**
**J17K VABM Dome 67.42 29** P **P** **08 12 27.0 +0.9**
baz=272,SNR=19
**G18K Tagagawik 67.54 26** P **P** **08 12 27.3 +0.3**
G18K IAmb IAmb 08 12 33.5
comp=Z,32nm,1.2s
**G18K Tagagawik 67.54 26** P **P** **08 12 26.9 -0.1**
baz=271,SNR=16
**M16K Timber Creek 67.56 31** P **P** **08 12 27.8 +0.6**
M16K IAmb IAmb 08 12 34.4
comp=Z,22nm,1.1s
**M16K Timber Creek 67.56 31** P **P** **08 12 27.0 -0.2**
baz=273,SNR=6.3
**CHNA Chernabura Isl 67.63 38** P **P** **08 12 27.7 0.0**
baz=275
**H18K Honhosa River 67.68 27** P **P** **08 12 27.9 0.0**
baz=272,SNR=8.7
**N16K Nishlik Lake 67.68 32** P **P** **08 12 27.9 -0.1**
baz=273,SNR=7.8
**D19K Kuna River 67.72 23** P **P** **08 12 28.8 +0.7**
baz=270
**K17K Iditarod 67.79 29** P **P** **08 12 28.9 +0.3**
**K17K Iditarod 67.79 29** P **P** **08 12 29.2 +0.6**
baz=273,SNR=19
**L17K Donlin 67.82 30** P **P** **08 12 29.3 +0.5**
baz=273,SNR=14
**F19K Shaleruckik Mo 67.88 25** P **P** **08 12 30.0 +0.9**
F19K IAmb IAmb 08 12 35.5
comp=Z,30nm,1.4s
**F19K Shaleruckik Mo 67.88 25** P **P** **08 12 29.0 0.0**
baz=271,SNR=13
**B20K Meade River 68.05 22** P **P** **08 12 30.4 +0.3**
baz=271
**E19K Redstone River 68.07 24** P **P** **08 12 30.9 +0.6**
**E19K Redstone River 68.07 24** P **P** **08 12 30.4 +0.2**
baz=272
**O16K Kokwok River B 68.08 33** P **P** **08 12 30.3 -0.1**
baz=274
**P16K Nushagak River 68.17 33** P **P** **08 12 32.2 +1.2**
baz=274
**G19K Purcell Mounta 68.17 26** P **P** **08 12 31.2 +0.3**
baz=272,SNR=12
**D20K Etivluk River 68.27 23** P **P** **08 12 32.2 +0.7**
baz=272,SNR=25
**M17K Holitna River 68.28 31** P **P** **08 12 32.2 +0.6**
baz=274,SNR=8.0
**VORR Voronezh 68.32 319** *e*P **P** **08 12 32.0 -0.1**
VORR pmax pmax
comp=Z,40nm,0.4s
**GCSA Galena City Sc 68.33 27** P **P** **08 12 31.7 -0.1**
baz=273
**RAYN Ar Rayn 68.39 288** P **P** **08 12 32.7 -0.4**
**RAYN Ar Rayn 68.39 288** P **P** **08 12 32.7 -0.4**
RAYN pmax pmax
comp=Z,55nm,1.9s
**E20K Nigu River 68.44 23** P **P** **08 12 32.7 +0.1**
baz=272,SNR=22
**N17K Nushagak Hills 68.46 32** P **P** **08 12 33.7 +0.9**
N17K IAmb IAmb 08 12 38.5
comp=Z,20nm,1.1s
**N17K Nushagak Hills 68.46 32** P **P** **08 12 33.4 +0.6**
baz=274,SNR=8.0
**H19K Roundabout Mou 68.47 26** P **P** **08 12 33.4 +0.7**
**H19K Roundabout Mou 68.47 26** P **P** **08 12 33.4 +0.7**
baz=273,SNR=29
**J18K Innoko River 68.47 29** P **P** **08 12 33.2 +0.3**
J18K IAmb IAmb 08 12 39.5
comp=Z,23nm,1.1s
**J18K Innoko River 68.47 29** P **P** **08 12 33.2 +0.3**
baz=274,SNR=16
**MSVF Nonsavu 68.53 120** P **P** **08 12 34.9 +0.9**
**MSVF Nonsavu 68.53 120** LR LR 08 38 00.2
comp=Z,78nm,21.2s,baz=335,slow=32
**MSVF Nonsavu 68.53 120** P **P** **08 12 34.0 0.0**
**O17K Koliganek Bris 68.57 33** P **P** **08 12 33.4 -0.1**
baz=275
**L18K Granite Mounta 68.57 30** P **P** **08 12 33.9 +0.4**
baz=274,SNR=13
**F20K Avaraart Lake 68.67 25** P **P** **08 12 34.5 +0.5**
F20K IAmb IAmb 08 12 41.0
comp=Z,20nm,1.2s
**F20K Avaraart Lake 68.67 25** P **P** **08 12 34.4 +0.5**
baz=273,SNR=12
**A22K Sinclair Lake 68.76 20** P **P** **08 12 34.7 +0.2**
baz=272
**MOS Moscow 68.81 323** *e*P **P** **08 12 33.4 -1.7**
MOS pmax pmax
comp=Z,55nm,1.0s
**J19K Poorman 68.92 28** P **P** **08 12 36.3 +0.6**
J19K IAmb IAmb 08 12 42.5
comp=Z,22nm,1.3s
**J19K Poorman 68.92 28** P **P** **08 12 36.0 +0.4**
baz=274,SNR=14
**B21K Ikpikpuk River 68.94 22** P **P** **08 12 36.3 +0.7**
baz=273,SNR=16
**P17K Kvichak River 68.95 33** P **P** **08 12 35.7 -0.2**
baz=276
**M18K Stony River 69.04 31** P **P** **08 12 36.7 +0.3**
baz=275,SNR=12
**N18K Kilae Creek 69.08 32** P **P** **08 12 37.1 +0.3**
baz=276
**SOC Sochi 69.10 310** *e*P **P** **08 12 39.2 +2.1**
SOC *e* 08 15 09.7
SOC *e*S **S** **08 21 47.5 +5.6**
SOC *e*SS **SS** **08 26 05.8 -1.9**
SOC MLR MLR
comp=Z,123nm,19.0s
**H20K Anotleneega Mo 69.12 26** P **P** **08 12 36.9 0.0**
baz=275,SNR=12
**LVZ Lovozero 69.14 336⇑** *eP* **P** **08 12 38.6 +1.7**
LVZ pmax pmax
comp=Z,10.0nm,0.9s
**LVZ Lovozero 69.14 336** P **P** **08 12 38.6 +1.7**
comp=Z,25nm,1.9s
**R17L Mt. Peulik Vol 69.16 35** P **P** **08 12 37.0 -0.3**
baz=276
**E21K Killik River 69.25 23** P **P** **08 12 37.4 -0.2**
baz=274
**B22K Teshekpuk Lake 69.31 21** P **P** **08 12 38.0 +0.1**
baz=274
**Q17K Contact Creek 69.34 34** P **P** **08 12 37.4 -1.0**
baz=276
**I20K Naaghedeneel 69.35 27** P **P** **08 12 39.6 +1.4**
**I20K Naaghedeneel 69.35 27** P **P** **08 12 38.3 +0.1**
baz=275,SNR=12
**L19K White Mountain 69.43 30** P **P** **08 12 39.9 +1.0**
L19K IAmb IAmb 08 12 46.5
comp=Z,32nm,1.2s
**L19K White Mountain 69.43 30** P **P** **08 12 39.1 +0.2**
baz=276,SNR=16
**OBN Obninsk 69.48 322** P **P** **08 12 39.0 -0.2**
comp=Z,21nm,0.4s,baz=163,slow=22,SNR=7.3
comp=Z,21nm,0.4s
**OBN Obninsk 69.48 322⇑** *i*P **P** **08 12 39.3 +0.1**
OBN *SP **pwP** **08 12 48.0 0.0**
OBN 08 13 06.0
OBN *e* 08 22 32.8
OBN SS SS 08 26 20.0 +7.0
OBN pmax pmax
comp=Z,52nm,1.3s
OBN MLR MLR
comp=Z,139nm,16.0s
**OBN Obninsk 69.48 322** P **P** **08 12 39.3 +0.1**
comp=Z,51nm,1.0s
**O18K Koktuh Hills 69.51 32** P **P** **08 12 39.0 -0.4**

baz=276
F21K **Alatna River** 69.54 25 P P 08 12 39.0 -0.5
baz=275
P18K **Big Mountain,** 69.55 33 P P 08 12 39.3 -0.4
baz=277
J20K **Nowinta River** 69.55 28 P P 08 12 40.4 +0.9
J20K IAmb IAmb 08 12 51.4
comp=Z,13nm,0.8s
J20K **Nowinta River** 69.55 28 P P 08 12 39.7 +0.1
baz=276,SNR=16
G21K **Allakaket** 69.59 25 P P 08 12 39.9 +0.1
baz=275,SNR=20
APA **Apatity** 69.64 336 ↓*i* P P 08 12 38.1 -1.9
APA *i* 08 13 02.1
APA pmax pmax
comp=Z,13nm,1.0s
APA MLR MLR
comp=Z,300nm,16.0s
K20K **Telida** 69.67 29 P P 08 12 40.4 +0.1
baz=276
M19K **Big River Lodg** 69.68 30 P P 08 12 40.7 +0.3
baz=276,SNR=7.0
D22K **Ayikyak River** 69.69 23 P P 08 12 40.6 +0.2
baz=275
Q18K **Katmai Hardscr** 69.75 34 P P 08 12 41.1 +0.1
baz=277
N19K **Bonanza Creek** 69.76 31 P P 08 12 40.6 -0.4
baz=277,SNR=5.6
CHIR **Chirikof Islan** 69.78 37 P P 08 12 41.6 +0.6
baz=278
L20K **Farewell, AK** 69.85 30 P P 08 12 42.1 +0.6
baz=277
O19K **Port Alsworth** 69.91 32 P P 08 12 42.2 +0.4
baz=277
H21K **Melozitna Rive** 69.96 26 P P 08 12 43.0 +0.9
H21K **Melozitna Rive** 69.96 26 P P 08 12 42.3 +0.2
baz=276,SNR=20
F22K **John River** 70.01 24 P P 08 12 42.4 +0.1
baz=276
E22K **Anaktuvuk Pass** 70.08 23 P P 08 12 42.8 0.0
baz=276
M20K **Styx River** 70.27 30 P P 08 12 44.1 0.0
baz=278
C23K **Itkillik River** 70.31 22 P P 08 12 44.1 -0.1
baz=277
G22K **Bettles** 70.34 25 P P 08 12 45.1 +0.8
baz=277
I21K **Tanana** 70.36 27 P P 08 12 45.5 +1.1
baz=277
D23K **Nanushuk River** 70.40 23 P P 08 12 44.6 -0.1
baz=277
Q19K **Cape Douglas,** 70.42 33 P P 08 12 45.0 +0.1
baz=278
H22K **Ishtalitna Cre** 70.52 26 P P 08 12 45.8 +0.3
baz=278,SNR=23
P19K **Oil Pt** 70.53 33 P P 08 12 45.5 -0.2
baz=278
COLD **Coldfoot** 70.81 24 P P 08 12 46.8 -0.3
baz=278
N20K **Mount Spurr** 70.81 31 P P 08 12 47.5 +0.1
baz=278
TOLK **Toolik Lake Re** 70.84 23 P P 08 12 46.9 -0.5
baz=278
OHAK **Old Harbor** 70.86 35 P P 08 12 47.4 -0.2
baz=279
MLY **Manley** 70.90 27 P P 08 12 48.4 +0.6
MLY IAmb IAmb 08 12 59.5
comp=Z,17nm,1.0s
MLY **Manley** 70.90 27 P P 08 12 47.2 -0.7
baz=278,SNR=21
E23K **Chandalar** 70.91 23 P P 08 12 47.6 -0.3
baz=278
BPAW **Bear Paw Mtn.** 70.94 28 P P 08 12 48.6 +0.6
BPAW **Bear Paw Mtn.** 70.94 28 P P 08 12 47.9 -0.2
baz=279,SNR=16
G23K **Bananza Creek** 70.95 25 P P 08 12 47.9 -0.2
baz=278,SNR=17
C24K **Franklin Bluff** 70.99 22 P P 08 12 48.4 +0.2
baz=279
SKT **Skwentna** 71.01 30 P P 08 12 47.8 -0.7
baz=279
D24K **Happy Valley** 71.03 22 P P 08 12 48.9 +0.3
D24K IAmb IAmb 08 13 00.3
comp=Z,18nm,0.9s
D24K **Happy Valley** 71.03 22 P P 08 12 48.6 +0.1
baz=279
JOF **Joensuu** 71.09 331 *e*P P 08 12 48.9 0.0
Q20K **Shuyak Island** 71.11 34 P P 08 12 48.8 -0.3
baz=279
KDAK **Kodiak Island** 71.14 34 LR LR 08 44 52.1
comp=Z,66nm,21.2s,baz=249,slow=37
KDAK **Kodiak Island** 71.14 34 P P 08 12 49.0 -0.3
baz=279
H23K **Yukon River** 71.28 26 P P 08 12 50.2 +0.1
baz=279,SNR=27
E24K **Your Creek** 71.32 23 P P 08 12 50.5 +0.2
baz=279,SNR=17
SUA **Susitna One** 71.46 30 P P 08 12 51.2 -0.2
SUA **Susitna One** 71.46 30 P P 08 12 50.9 -0.5
baz=280,SNR=7.3
I23K **Minto, Yukon-K** 71.46 26 P P 08 12 51.2 0.0
baz=280,SNR=15
CUT **Chulitna** 71.53 29 P P 08 12 51.0 -0.5
baz=280
F24K **Squaw Lake** 71.64 24 P P 08 12 52.6 +0.3
F24K IAmb IAmb 08 13 06.2
comp=Z,14nm,0.8s
F24K **Squaw Lake** 71.64 24 P P 08 12 52.2 -0.1
baz=280,SNR=16
NEA2 **Nenana** 71.68 27 P P 08 12 53.0 +0.5
NEA2 IAmb IAmb 08 13 03.6
comp=Z,18nm,0.9s
NEA2 **Nenana** 71.68 27 P P 08 12 52.2 -0.4
baz=280,SNR=11
M22K **Willow** 71.70 30 P P 08 12 52.6 0.0
baz=280,SNR=6.9
BRSE **Bradley Lake S** 71.76 32 P P 08 12 52.7 -0.4
baz=280
D25K **Kavik River** 71.86 22 P P 08 12 53.0 -0.6
baz=281,SNR=9.9
MCK **McKinley** 71.89 28 P P 08 12 53.5 -0.3
baz=280,SNR=10.0
MCK **McKinley** 71.89 28 P P 08 12 54.2 +0.4
G24K **Hadweenzic Riv** 71.95 25 P P 08 12 53.9 -0.3
baz=281,SNR=14
H24K **Noodor Dome** 71.95 26 P P 08 12 55.2 +1.0
H24K IAmb IAmb 08 13 01.3
comp=Z,15nm,1.1s
H24K **Noodor Dome** 71.95 26 P P 08 12 54.0 -0.2
baz=281,SNR=11
MDM **Murphy Dome** 71.97 27 P P 08 12 54.5 +0.2
RND **Reindeer** 71.99 28 P P 08 12 54.4 -0.1
RC01 **Rabbit Creek A** 72.01 31 P P 08 12 54.5 0.0
baz=281
WRH **Wood River Hil** 72.12 27 P P 08 12 55.5 +0.4
WRH IAmb IAmb 08 13 02.1
comp=Z,11nm,0.9s
O22K **Cooper Landing** 72.12 31 P P 08 12 54.8 -0.5
baz=281
COLA **College** 72.14 27 P P 08 12 56.1 +0.9
COLA **College** 72.14 27 *ce*P P 08 12 56.3 +1.1
COLA pmax pmax
comp=Z,4.0nm,0.9s
PMR **Palmer** 72.20 30 P P 08 12 55.7 +0.1
PMR **Palmer** 72.20 30 P P 08 12 54.7 -0.9
baz=281,SNR=6.5
ARCES **ARCESS Array B** 72.21 338 P P 08 12 56.0 +0.4
comp=Z,7.0nm,0.8s,baz=56,slow=7.4,SNR=7.9
comp=Z,7.0nm,0.8s
WAT1 **Susitna Watana** 72.23 29 P P 08 12 55.1 -0.8
baz=281
C26K **Camden Bay** 72.25 21 P P 08 12 55.5 -0.3
baz=282
POKR **Poker Plat Res** 72.27 26 P P 08 12 55.3 -0.7
baz=281
SGF **Sodankyl** 72.27 336 P P 08 12 56.4 +0.4
SGF pmax pmax
comp=Z,19nm,1.0s
SEW **Seward** 72.33 32 P P 08 12 55.6 -0.8
baz=281
G25K **Bearman Lake** 72.47 25 P P 08 12 56.5 -0.7
baz=282
F25K **Christian Rive** 72.47 24 P P 08 12 57.1 -0.2
baz=282
SML **Sawmill** 72.53 30 P P 08 12 57.2 -0.6
baz=282,SNR=8.0
KNK **Knik Glacier** 72.55 30 P P 08 12 57.3 -0.5
baz=282
IL31 72.57 27 P P 08 12 57.5 -0.3
ILAR **Eielson Array** 72.57 27 P P 08 12 57.1 -0.7
comp=Z,0.8nm,0.5s,baz=270,slow=4.8,SNR=22
ILAR PP PP 08 15 36.2 -2.7
comp=Z,0.7nm,1.1s,baz=281,slow=9.1,SNR=3.4
ILAR PKPPKP P'P'df 08 40 40.9 -5.6
comp=Z,1.4nm,0.9s,baz=26,slow=2.5,SNR=9.0
ILAR LR LR 08 48 57.3
comp=Z,77nm,18.1s,baz=346,slow=39
comp=Z,0.8nm,0.5s
HDA **Harding Lake** 72.62 27 P P 08 12 57.4 -0.7
baz=282
WAT6 **Susitna Watana** 72.64 29 P P 08 12 57.8 -0.7
baz=282,SNR=11
H25L **Birch Creek** 72.69 25 P P 08 12 58.7 +0.2
baz=282
DIKM **Dikmen** 72.70 309 P P 08 12 59.5 +0.5
comp=Z,42nm,1.6s
DHY **Denali Highway** 72.71 28 P P 08 12 58.4 -0.5
baz=282
C27K **Jago River** 72.72 21 P P 08 12 58.3 -0.4
baz=283
PWL **Port Wells** 72.72 31 P P 08 12 58.3 -0.5
baz=282
M23K **Glacier View** 72.81 30 P P 08 12 59.2 -0.2
baz=282
BMAR **Burnt Mountain** 72.91 24 P P 08 13 00.6 +0.7
PRP **Porcupine Dome** 72.97 26 P P 08 12 59.7 -0.7
baz=283
SCM **Sheep Creek Mo** 72.99 30 P P 08 13 00.1 -0.4
baz=282,SNR=11
F26K **Sheenjek River** 73.01 23 P P 08 12 59.8 -0.6
baz=284
KBS **Kingsbay** 73.05 349↑ *e*P P 08 13 00.6 +0.1
KBS pmax pmax
comp=Z,23nm,2.5s
J25K **Salcha River,** 73.24 27 P P 08 13 01.3 -0.6
baz=283
K24K **Donnelly Dome** 73.25 28 P P 08 13 01.8 -0.1
baz=283
GLI **Glacier Island** 73.31 31 P P 08 13 02.0 -0.3
baz=283,SNR=8.5
G26K **Porcupine Rive** 73.32 24 P P 08 13 02.3 +0.1
baz=284
P23K **Montague Islan** 73.36 32 P P 08 13 02.4 -0.2
baz=283
M24K **Tolsona, Glenn** 73.46 29 P P 08 13 03.8 +0.5
M24K IAmb IAmb 08 13 17.3
comp=Z,31nm,0.9s
M24K **Tolsona, Glenn** 73.46 29 P P 08 13 02.8 -0.5
baz=283
PAX **Paxson** 73.58 28 P P 08 13 03.3 -0.6
baz=284,SNR=6.3
HIN **Hinchinbrook I** 73.70 31 P P 08 13 05.2 +0.6
KLU **Klutina** 73.72 30 P P 08 13 05.3 +0.5
baz=284
D27M **Malcolm River** 73.75 22 P P 08 13 04.8 0.0
baz=286
FINES **FINESS Array B** 73.78 330 P P 08 13 05.2 +0.2
FINES **FINESS Array B** 73.78 330 P P 08 13 05.0 0.0
comp=Z,15nm,0.9s,baz=77,slow=8.4,SNR=22
comp=Z,15nm,0.9s
FINES **FINESS Array B** 73.78 330 P P 08 13 05.2 +0.2
E27K **Coleen River** 73.82 23 P P 08 13 05.6 +0.4
E27K **Coleen River** 73.82 23 P P 08 13 05.1 -0.1
baz=286
HARP **HAARP** 73.86 29 P P 08 13 05.4 -0.1
baz=284
SCRK **Sand Creek** 73.98 27 P P 08 13 06.1 -0.2
SCRK **Sand Creek** 73.98 27 P P 08 13 05.6 -0.7
baz=285,SNR=12
I26K **Coal Creek Min** 73.98 26 P P 08 13 05.7 -0.5
baz=285
Q23K **Middleton Isla** 74.01 32 P P 08 13 06.5 +0.1
baz=284
J26L **Joseph Creek** 74.02 27 P P 08 13 06.5 0.0
J26L **Joseph Creek** 74.02 27 P P 08 13 05.7 -0.9
baz=285,SNR=12
EYAK **Cordova Ski Ar** 74.03 31 P P 08 13 07.3 +0.8
EYAK **Cordova Ski Ar** 74.03 31 P P 08 13 06.6 +0.1
baz=284,SNR=10
G27K **Doyon Strip** 74.17 24 P P 08 13 07.1 -0.2
baz=286
VSU **Vasula** 74.18 327 *ce*P P 08 13 07.6 +0.2
VSU pmax pmax
comp=Z,43nm,1.3s
N25K **Chitina, Valde** 74.31 30 P P 08 13 07.9 -0.3
baz=285
BRTR **Keskin Array B** 74.34 307 P P 08 13 08.9 -0.1
comp=Z,2.0nm,0.8s,baz=111,slow=1.7,SNR=7.0
BRTR LR LR 08 52 20.4
comp=Z,62nm,19.0s,baz=66,slow=41
comp=Z,2.0nm,0.8s
BR106 **Keskin Array S** 74.36 307 P P 08 13 09.4 +0.4
comp=Z,5.5nm,1.2s
BR105 **Keskin Array S** 74.36 307 P P 08 13 08.6 -0.5
comp=Z,5.9nm,1.0s
MENT **Mentasta** 74.36 28 P P 08 13 09.8 +1.3
H27K **Steamboat Moun** 74.38 25 P P 08 13 07.8 -0.7
baz=286,SNR=9.6
E28M **Babbage River** 74.43 22 P P 08 13 08.5 -0.3
baz=287
BMRM **Bremner River** 74.47 30 P P 08 13 08.9 -0.3
baz=285
L26K **Log Cabin Wild** 74.50 28 P P 08 13 09.3 0.0
baz=286,SNR=6.6
I27K **Kandik River** 74.52 25 P P 08 13 09.1 -0.3
baz=286
MNK **Minsk** 74.53 323 *i* P P 08 13 08.8 -0.7
MNK *i* 08 15 54.7
MNK *i* PPP PPP 08 17 40.0
MNK *i* S S 08 22 43.9 -0.2
MNK *i* SS SS 08 27 30.9 +0.6
MNK pmax pmax
comp=Z,28nm,0.9s
MNK pmax pmax
comp=N,9.0nm,0.9s
MNK pmax pmax
comp=E,10.0nm,0.9s
MNK MLR MLR
comp=E,163nm,19.0s
MNK MLR MLR
comp=N,501nm,18.0s
F28M **Old Crow** 74.61 23 P P 08 13 10.5 +0.7
F28M **Old Crow** 74.61 23 P P 08 13 09.5 -0.3
baz=287
AK09 **Malin Array Si** 74.66 319 P P 08 13 10.1 -0.2
AK03 **Malin Array Si** 74.67 319 P P 08 13 09.7 -0.7
AKASG **Malin Array Be** 74.67 319 P P 08 13 10.0 -0.5
comp=N,4.5nm,0.7s,baz=64,slow=5.3,SNR=23
comp=N,4.5nm,0.7s
AKASG **Malin Array Be** 74.67 319 P P 08 13 10.0 -0.5
AKBB **Malin Array Si** 74.67 319 *i* P P 08 13 09.3 -1.1
AKBB **Malin Array Si** 74.67 319 P P 08 13 09.4 -1.0
AK10 **Malin Array Si** 74.68 319 P P 08 13 09.5 -1.0
KIEV **Kiev** 74.69 319 P P 08 13 09.9 -0.6
KIEV **Kiev** 74.69 319 P P 08 13 09.9 -0.6
comp=N,64nm,1.2s
K27K **Chicken** 74.78 27 P P 08 13 10.4 -0.4
baz=286
M26K **Nabesna, AK** 74.83 29 P P 08 13 10.9 -0.3
baz=286,SNR=12
KAIM **Kayak Island** 74.83 31 P P 08 13 10.8 -0.4
baz=285
MEF **Metsahovi** 74.89 329 *e*P P 08 13 11.6 +0.1
EGAK **Eagle** 74.94 26 P P 08 13 11.6 -0.2
baz=287
E29M **Blow River** 75.07 22 P P 08 13 12.2 -0.3
baz=289
MCARA **McCarthy VSAT** 75.10 30 P P 08 13 12.6 -0.1
baz=286
L27K **Beaver Creek,** 75.16 28 P P 08 13 12.9 -0.1
baz=287,SNR=17
BCAR **Beaver Creek A** 75.17 28 P P 08 13 14.0 +0.8
I28M **Miner Creek** 75.24 25 P P 08 13 13.4 -0.2
baz=286
CRQE **Cirque** 75.24 30 P P 08 13 13.2 -0.5
baz=286
MI30 **MI30,Zelenitsa** 75.30 319 P P 08 13 13.4 -0.7
BGLC **Bering Glacier** 75.33 31 P P 08 13 13.8 -0.1
baz=286
M27K **Edge Creek, AK** 75.34 29 P P 08 13 14.0 -0.3
baz=287
G29M **Pine Creek** 75.51 23 P P 08 13 15.2 +0.2
G29M IAmb IAmb 08 13 33.0
comp=Z,31nm,1.5s
G29M **Pine Creek** 75.51 23 P P 08 13 15.0 0.0
baz=289
MI28 **Mi28,Pidlybu** 75.57 319 P P 08 13 15.3 -0.3
MTSE **Matsula** 75.59 328 *e*P P 08 13 15.5 -0.1
MI29 **MI29, Kamyanyy** 75.59 319 P P 08 13 15.2 -0.6
H29M **Whitestone** 75.61 24 P P 08 13 15.2 -0.3
baz=289
SORM **Soroca** 75.89 316 P P 08 13 16.1 -1.3
SORM **Soroca** 75.89 316 P P 08 13 16.1 -1.3
DAWY **Dawson** 75.89 26 P P 08 13 17.2 -0.1
baz=289
I29M **Ogilvie Camp,** 75.91 25 P P 08 13 16.9 -0.5
baz=289
EIL **Elat** 75.93 297 LR LR 08 49 51.4
comp=Z,110nm,19.8s,baz=70,slow=38
MESA **MESA** 75.95 31 P P 08 13 17.4 -0.5
baz=287
CTG **Chitna Glacier** 76.00 30 P P 08 13 17.4 -0.6
baz=288
F30M **Barrier River** 76.09 23 P P 08 13 17.7 -0.5
baz=291
YUK3 **Moose Creek** 76.15 29 P P 08 13 18.5 -0.5
baz=288
G30M **tAoh Zraii Nji** 76.15 23 P P 08 13 17.9 -0.8
baz=291
EPYK **Eagle Plains** 76.18 24 P P 08 13 18.5 -0.4
baz=290
NDNU **Novodnistrovsk** 76.39 317 P P 08 13 19.8 -0.5
PABE **Paberze** 76.43 324 *e*P P 08 13 20.2 -0.2
RNPP9 **Sopachiv** 76.52 320 P P 08 13 20.8 -0.2
RNPP8 **Varash** 76.56 320 P P 08 13 21.1 -0.1
RNPP5 **Staryi Chortor** 76.57 320 P P 08 13 21.0 -0.3
O28M **Mount Upton** 76.59 30 P P 08 13 21.2 -0.5
baz=289
INK **Inuvik** 76.62 22 P P 08 13 21.0 -0.3
baz=293
YUK8 **Steele Glacier** 76.62 29 P P 08 13 21.7 -0.1
baz=289
I30M **Mount Dempster** 76.72 25 P P 08 13 21.5 -0.6
baz=291
L29M **L29M** 76.74 27 P P 08 13 21.3 -0.9
baz=290
K29M **Barlow Dome** 76.75 26 P P 08 13 23.1 +0.8
K29M IAmb IAmb 08 13 29.8
comp=Z,38nm,1.8s
K29M **Barlow Dome** 76.75 26 P P 08 13 22.1 -0.2
baz=290
M29M **Somme Creek** 76.82 28 P P 08 13 23.2 +0.6
M29M IAmb IAmb 08 13 30.0
comp=Z,14nm,1.1s
M29M **Somme Creek** 76.82 28 P P 08 13 22.4 -0.3
baz=290,SNR=9.9
F31M **Tsiigehtchic** 76.88 22 P P 08 13 22.7 0.0
baz=293
G31M **Satah River** 76.89 23 P P 08 13 22.7 0.0
baz=292
J30M **Hart River** 76.97 26 P P 08 13 23.7 +0.2
baz=291
KMPD **K-Podol'skiy** 76.98 317 P P 08 13 22.6 -1.0
YUK4 **Talbot Arm** 77.11 29 P P 08 13 24.7 +0.3
baz=290
SUW **Suwalki** 77.32 323 *e*P P 08 13 25.5 +0.1
SUW **Suwalki** 77.32 323 *e*P P 08 13 25.7 +0.2
PNL **Peninsula** 77.33 31 P P 08 13 25.6 +0.2
baz=290
PBUR **Paburge** 77.37 325 *e*P P 08 13 25.8 +0.1
YUK6 **Outpost Mounta** 77.38 29 P P 08 13 25.9 -0.1
baz=290
O29M **Mount Kennedy** 77.50 30 P P 08 13 26.4 -0.2
baz=290
A36M **Sachs Harbour** 77.53 17 P P 08 13 26.8 +0.5
baz=300
N30M **Aishikik Lake** 77.78 29 P P 08 13 28.2 +0.2
baz=291,SNR=5.7
P29M **Windy Craggy** 78.13 31 P P 08 13 29.8 -0.2
baz=291
MLR **Muntele Rosu** 78.22 314 P P 08 13 31.4 +0.5
comp=Z,9.7nm,0.9s,baz=108,slow=3.2,SNR=6.4
MLR LR LR 08 51 48.3
comp=Z,160nm,18.6s,baz=64,slow=39
comp=Z,9.7nm,0.9s
P30M **Million Dollar** 78.32 30 P P 08 13 31.0 0.0
baz=292
N31M **Braeburn, Yuko** 78.35 28 P P 08 13 31.4 +0.3
baz=292
O30N **Mendenhall** 78.48 29 P P 08 13 31.5 -0.3
baz=292
M31M **Drury Creek, Y** 78.68 27 P P 08 13 33.0 0.0
baz=293
PLBC **Pleasant Camp** 78.85 30 P P 08 13 33.9 +0.1
baz=292
KWP **Kalwaria Pacla** 79.00 319 *e*P P 08 13 35.1 +0.2
WHY **Whitehorse** 79.07 29 P P 08 13 35.5 +0.3
baz=293
FARO **Faro, Yukon** 79.12 27 P P 08 13 35.5 +0.1
baz=294
C36M **Paulatuk** 79.21 19 P P 08 13 35.0 -0.7
baz=301
SKAG **Skagway** 79.34 30 P P 08 13 36.7 +0.2
baz=293
BEL **Belsk** 79.40 321 *e*P P 08 13 37.8 +0.8
DAG **Danmarks Havn** 79.45 351 P P 08 13 36.6 -0.2
DAG pmax pmax
comp=Z,9.0nm,1.4s
RPZ **Rata Peaks** 79.45 145 LR LR 08 44 40.4
comp=Z,65nm,21.4s,baz=131,slow=33
S31K **Pelican** 79.48 32 P P 08 13 37.6 +0.3
baz=293
URZ **Urewera** 79.49 138 LR LR 08 51 05.2
comp=Z,27nm,18.2s,baz=31,slow=38
KOLS **Kolonicke sedl** 79.50 318 *e*P P 08 13 37.9 +0.3
KOLS pmax pmax
comp=Z,8.0nm,1.3s
KOLS **Kolonicke sedl** 79.50 318 *e*P P 08 13 37.9 +0.3
R31K **City Hall, Gus** 79.55 31 P P 08 13 37.8 +0.1
baz=293
N32M **Quiet Lake** 79.68 28 P P 08 13 38.4 0.0
baz=295
HFS **Hagfors** 79.94 331 P P 08 13 39.4 -0.4
comp=Z,8.8nm,0.9s,baz=96,slow=6.0,SNR=8.8
HFS LR LR 08 54 09.1
comp=Z,144nm,18.4s,baz=51,slow=40
comp=Z,8.8nm,0.9s
KHZ **Kahutara** 79.96 143 P P 08 13 41.5 +1.5
CRVS **Cervenica-Dubn** 80.01 319 *e*P P 08 13 41.2 +0.8
CRVS pmax pmax
comp=Z,54nm,1.8s
CRVS **Cervenica-Dubn** 80.01 319 *e*P P 08 13 41.2 +0.8
P32M **Atlin** 80.04 30 P P 08 13 39.9 -0.5
baz=294
P33M **Teslin, Yukon** 80.19 29 P P 08 13 41.3 0.0
baz=295
R32K **Eaglecrest** 80.19 31 P P 08 13 41.0 -0.2
baz=294
SIT **Sitka** 80.28 32 P P 08 13 41.4 -0.2
baz=293
S32K **Killisnoo** 80.49 32 P P 08 13 43.1 +0.3
baz=294
NIE **Niedzica** 80.54 319 *e*P P 08 13 44.0 +0.7
OJC **Ojcow** 80.56 320 *e*P P 08 13 43.7 +0.4
NB2 **NORSAR Subarra** 80.66 332 P P 08 13 42.7 -1.0
comp=Z,17nm,1.1s,baz=63,slow=5.6
NB2 **NORSAR Subarra** 80.66 332 P P 08 13 42.7 -0.7
baz=63,slow=5.6
NOA **NORSAR Array B** 80.66 332 P P 08 13 43.0 -0.7
comp=Z,8.4nm,1.1s,baz=64,slow=5.3,SNR=6.4
comp=Z,8.4nm,1.1s
Q32M **Nakina River** 80.98 30 P P 08 13 45.5 -0.1
baz=296
PSZ **Piszkesteto** 81.33 318 P P 08 13 48.9 +1.3
PSZ pmax pmax
comp=Z,11nm,1.4s
R33M **Jennings River** 81.39 29 P P 08 13 47.6 -0.2
baz=297
TGTN **Hyland Airport** 81.58 27 P P 08 13 48.5 -0.2
baz=299
OKC **Ostrava-Krasne** 81.69 320 AMS AMS 08 50 40.0
comp=Z,300nm,14.9s
JMIC **Jan Mayen** 81.74 345 LR LR 08 53 52.4
comp=Z,118nm,18.6s,baz=52,slow=38
VYHS **Vyhne** 81.78 319 *e*P P 08 13 50.7 +0.8
VYHS pmax pmax
comp=Z,23nm,1.3s
VYHS **Vyhne** 81.78 319 *e*P P 08 13 50.7 +0.8
WTLY **Watson Lake, Y** 82.03 28 P P 08 13 50.7 -0.3
baz=298
MORC **Moravsky Berou** 82.07 320 *e*P P 08 13 51.1 -0.3

**MORC Moravsky Berou 82.07 320** P **P** **08 13 52.0 +0.6**
MORC pmax pmax
comp=Z,12nm,1.3s
**DLBC Dease Lake 82.26 30** P **P** **08 13 52.1 -0.2**
baz=298
**JAVC Velka Javorina 82.35 319** *eP* **P** **08 13 54.1 +1.2**
**KSP Ksiaz 82.39 322** *eP* **P** **08 13 53.5 +0.4**
**KRLC Kraliky 82.41 321** AMS AMS 08 50 00.0
comp=Z,300nm,14.2s
**OSTC Ostas 82.55 321** AMS AMS 08 49 30.0
comp=Z,300nm,14.0s
**DPC Dobruska-Polom 82.57 321** *eP* **P** **08 13 54.1 +0.1**
DPC AMS AMS 08 49 30.0
comp=Z,300nm,15.1s
**DPC Dobruska-Polom 82.57 321** *eP* **P** **08 13 54.1 +0.1**
DPC MLR MLR
comp=Z,300nm,15.1s
**CHVC Chvalec 82.63 321** AMS AMS 08 49 40.0
comp=Z,400nm,14.8s
**UPC Upice 82.69 321** AMS AMS 08 49 30.0
comp=Z,400nm,16.3s
**MODS Modra-Piesok 82.78 319** *eP* **P** **08 13 56.1 +0.9**
MODS pmax pmax
comp=Z,48nm,1.8s
**MODS Modra-Piesok 82.78 319** *eP* **P** **08 13 56.1 +0.9**
**T35M Bob Quinn 82.83 31** P **P** **08 13 55.3 +0.1**
baz=298
**VRAC Vranov 82.83 320** *eP* **P** **08 13 55.5 +0.2**
**V35K Ketchikan 82.90 33** P **P** **08 13 55.8 +0.3**
baz=297
**KRUC Moravsky 83.04 320** *eP* **P** **08 13 56.5 0.0**
**RUE Ruedersdorf 83.13 324** *eP* **P** **08 13 57.1 +0.4**
comp=Z,82nm,1.3s,baz=62,slow=5.0
**PVCC Panska Ves 83.52 322** AMS AMS 08 49 00.0
comp=Z,300nm,13.7s
**RONA Rosalia, Austr 83.66 319** *i* P **P** **08 14 00.2 +0.5**
comp=Z,12nm,1.4s
**BRG Berggiesshubel 83.73 322** *i* P **P** **08 13 60.0 +0.1**
BRG Amp 08 14 01.5
comp=Z,29nm,1.2s
**BRG Berggiesshubel 83.73 322** P **P** **08 14 04.1 +4.2**
BRG Amp 08 14 05.0
comp=Z,13nm,1.0s
**BRG Berggiesshubel 83.73 322** P P 08 14 10.1 +10
BRG Amp 08 14 10.5
comp=Z,17nm,1.2s
**BRG Berggiesshubel 83.73 322** *eP* **P** **08 14 00.0 +0.1**
comp=Z,29nm,1.2s,baz=62,slow=5.0
**PRU Pruhonice 83.76 321** *eP* **P** **08 14 01.1 +1.0**
PRU AMS AMS 08 49 00.0
comp=Z,400nm,15.3s
**PRU Pruhonice 83.76 321** *eP* **P** **08 14 01.1 +1.0**
PRU MLR MLR
comp=Z,400nm,15.3s
**PRA Prague 83.79 321** AMS AMS 08 48 50.0
comp=Z,300nm,18.4s
**CONA Conrad Observa 83.83 319** *eP* **P** **08 14 01.5 +0.9**
comp=Z,18nm,1.5s,SNR=9.9
**CLL Collm 84.07 323** *i* P **P** **08 14 01.5 -0.2**
comp=Z,38nm,1.2s
CLL *i* PcP **pP** **08 14 05.5 -0.6**
comp=Z,28nm,1.1s
CLL *i* x x 08 14 11.5
comp=Z,19nm,1.1s
CLL AMS AMS 08 48 00.0
comp=N,300nm,18.3s
CLL AMS AMS 08 48 00.0
comp=E,300nm,18.8s
**CLL Collm 84.07 323** *i* P **P** **08 14 01.5 -0.2**
CLL pmax pmax
comp=Z,38nm,1.2s
**CLL Collm 84.07 323** *eP* **P** **08 14 01.4 -0.2**
comp=Z,24nm,0.9s,baz=62,slow=5.0
**HSKC Hora Svate Kat 84.14 322** *eP* **P** **08 14 02.6 +0.5**
HSKC AMS AMS 08 48 40.0
comp=Z,500nm,15.0s
**ZVC Zvikov 84.20 321** *eP* **P** **08 14 03.1 +0.7**
**TOAD Toad River Com 84.24 28** P **P** **08 14 02.5 0.0**
baz=301
**GORT1 Trebel 84.25 325** *eP* **P** **08 14 03.0 +0.6**
comp=Z,67nm,1.2s,baz=62,slow=5.0
**ARSA Arzberg 84.32 319** *i* P **P** **08 14 03.3 +0.2**
comp=Z,6.4nm,1.0s
**BSEG Bad Segeberg 84.34 326** *eP* **P** **08 14 03.1 +0.2**
comp=Z,32nm,1.1s,baz=62,slow=5.0
**CKRC Cesky Krumlov 84.39 320** *eP* **P** **08 14 04.1 +0.7**
CKRC AMS AMS 08 48 20.0
comp=Z,200nm,16.5s
**CKRC Cesky Krumlov 84.39 320** *eP* **P** **08 14 04.1 +0.7**
CKRC MLR MLR
comp=Z,200nm,16.5s
**FLTG Flechtingen 84.59 324** *eP* **P** **08 14 03.8 -0.4**
comp=Z,23nm,1.1s,baz=62,slow=5.0
**KHC Kasperske Hory 84.70 321** *eP* **P** **08 14 05.5 +0.5**
KHC AMS AMS 08 49 00.0
comp=Z,200nm,14.5s
**KHC Kasperske Hory 84.70 321** *d iP* **P** **08 14 04.8 -0.2**
KHC pmax pmax
comp=Z,35nm,1.3s
**GEC2 GERESS Array S 84.75 320** P **P** **08 14 05.1 -0.2**
GEC2 IAmb IAmb 08 14 06.5
comp=Z,15nm,0.9s
**GEC2 GERESS Array S 84.75 320** *eP* **P** **08 14 05.2 -0.1**
comp=Z,15nm,0.9s,baz=62,slow=5.0
GEC2 *epP* **pP** **08 14 09.3 -0.4**
**GERES GERESS Array B 84.75 320** P **P** **08 14 05.1 -0.2**
**GERES GERESS Array B 84.75 320** P **P** **08 14 05.6 +0.3**
comp=Z,9.7nm,0.9s,baz=141,slow=8.6,SNR=21
GERES LR LR 08 55 19.7
comp=Z,160nm,19.8s,baz=68,slow=38
comp=Z,9.7nm,0.9s
**TANN Tannenbergstha 84.78 322** *eP* **P** **08 14 05.3 -0.1**
comp=Z,17nm,1.1s,baz=62,slow=5.0
**NEUB Neuenburg 84.81 323** *eP* **P** **08 14 05.3 -0.1**
comp=Z,38nm,1.1s,baz=62,slow=5.0
NEUB *epP* **pP** **08 14 09.5 -0.3**
**PERS Pernice 84.83 318** *i* P **P** **08 14 05.6 -0.1**
**MOA Molln 84.84 319** *eP* **P** **08 14 06.1 +0.5**
comp=Z,23nm,1.1s,SNR=12
**SOKA Soboth 84.86 318** *i* P **P** **08 14 05.7 -0.2**
comp=Z,10nm,0.9s,SNR=9.2
**PLN Plauen 84.92 322** *eP* **P** **08 14 05.9 -0.1**
comp=Z,16nm,1.0s,baz=62,slow=5.0
PLN *epP* **pP** **08 14 10.0 -0.5**
**WET Wettzell 85.10 321** *eP* **P** **08 14 07.2 +0.3**
comp=Z,25nm,1.4s,baz=62,slow=5.0
**NRDL Niedersach Rie 85.13 325** *eP* **P** **08 14 07.4 +0.5**
comp=Z,29nm,1.0s,baz=62,slow=5.0
**MOX Moxa 85.16 323** *eP* **P** **08 14 07.2 0.0**
comp=Z,19nm,1.1s,baz=62,slow=5.0
MOX *eL* L 08 46 54.4
comp=Z,196nm,18.7s
**MANZ Manzenberg 85.17 322** *eP* **P** **08 14 07.5 +0.2**
comp=Z,2.9nm,1.0s,baz=62,slow=5.0
MANZ *epP* **pP** **08 14 11.5 -0.3**
**ROTZ Rotzenmuhle 85.22 322** *eP* **P** **08 14 07.8 +0.3**
comp=Z,6.3nm,1.0s,baz=62,slow=5.0
**BOJS Bojanci 85.22 317** *i* P **P** **08 14 07.9 +0.2**
**OBKA Obir 85.24 318** *eP* **P** **08 14 08.0 +0.1**
comp=Z,12nm,1.0s,SNR=6.0
**BIOA Bad Ischl, Aus 85.29 319** *i* P **P** **08 14 08.3 +0.4**
comp=Z,9.3nm,1.1s
**CLZ Clausthal 85.29 324** *eP* **P** **08 14 08.2 +0.3**
comp=Z,31nm,1.0s,baz=62,slow=5.0
**RETH Rethem/Aller, 85.41 325** *eP* **P** **08 14 08.4 +0.1**
comp=Z,19nm,1.1s,baz=62,slow=5.0
**LJU Ljubljana 85.45 318** *eP* **P** **08 14 08.8 0.0**
**GTTG Gottingen 85.66 324** *eP* **P** **08 14 09.7 +0.1**
comp=Z,22nm,1.1s,baz=62,slow=5.0
**KBA Koelnbreinsper 85.74 319** *i* P **P** **08 14 10.2 -0.2**
comp=Z,14nm,1.4s,SNR=6.6
**MYKA Terra Mystica 85.75 318** *eP* **P** **08 14 09.8 -0.5**
comp=Z,6.4nm,1.1s
**RJOB Jochberg 85.78 320** *eP* **P** **08 14 10.3 -0.1**
comp=Z,12nm,1.0s,baz=62,slow=5.0
RJOB *epP* **pP** **08 14 14.0 -0.9**
**GRF Grafenberg Arr 85.82 322** *eP* **P** **08 14 11.3 +0.7**
comp=Z,29nm,1.4s,baz=62,slow=5.0
GRF *eL* L 08 46 47.8
comp=Z,184nm,18.6s
**UBBA Unterbreizbach 85.98 323** *eP* **P** **08 14 11.3 +0.2**
comp=Z,43nm,1.8s,baz=62,slow=5.0
**LESA Schwarzleotal 85.99 320** *i* P **P** **08 14 11.6 +0.1**
comp=Z,15nm,1.2s
**YKA Yellowknife Ar 86.36 22** P **P** **08 14 12.7 -0.2**
comp=Z,6.8nm,1.0s,baz=318,slow=4.9,SNR=16
comp=Z,6.8nm,1.0s

**ABTA Abfaltersbach 86.39 319** *eP* **P** **08 14 13.0 -0.6**
comp=Z,5.7nm,0.4s
**IBBN Ibbenburen 86.48 325** *eP* **P** **08 14 13.6 0.0**
comp=Z,16nm,1.0s,baz=62,slow=5.0
**STAL STALIGIAL 86.49 318** P **P** **08 14 12.7 -1.2**
STAL IAmb IAmb 08 14 14.2
comp=Z,20nm,1.1s
**FUR Furstenfeldbru 86.49 321** *eP* **P** **08 14 14.2 +0.3**
comp=Z,58nm,1.5s,baz=62,slow=5.0
**CIMO Cimolais 86.64 319** P **P** **08 14 14.0 -0.6**
CIMO IAmb IAmb 08 14 14.8
comp=Z,38nm,1.8s
**KASTN Kahler Asten 86.67 324** *eP* **P** **08 14 14.8 +0.1**
comp=Z,12nm,1.3s,baz=62,slow=5.0
**WTTA Wattenberg 86.69 320** *eP* **P** **08 14 14.8 -0.3**
comp=Z,20nm,0.9s,SNR=7.7
**WATA Walderalm 86.70 320** *i* P **P** **08 14 14.7 -0.3**
comp=Z,8.8nm,0.8s
**SQTA Sankt Quirin 86.97 320** *eP* **P** **08 14 16.2 -0.2**
comp=Z,15nm,1.0s,SNR=5.4
**MOTA Moosalm 86.98 320** *eP* **P** **08 14 16.2 -0.2**
comp=Z,16nm,1.2s
**RETA Reutte 87.12 320** *i* PcP **P** **08 14 17.5 +0.4**
comp=Z,2.0nm,0.5s
**TNS Taunus Mts 87.14 323** *eP* **P** **08 14 17.4 +0.3**
comp=Z,3.9nm,0.9s,baz=62,slow=5.0
**BUG Bochum--Univer 87.18 325** *eP* **P** **08 14 16.9 -0.2**
comp=Z,12nm,1.0s,baz=62,slow=5.0
**FETA Feichten 87.36 320** *eP* **P** **08 14 17.2 -1.1**
comp=Z,15nm,1.2s,SNR=7.6
**UBR Ueberruh 87.42 321** *eP* **P** **08 14 18.1 -0.4**
comp=Z,8.0nm,1.0s,baz=62,slow=5.0
**FDMO Fiordimonte 87.69 315** P **P** **08 14 19.2 -0.6**
FDMO IAmb IAmb 08 14 25.1
comp=Z,15nm,0.9s
**CAMP Campotosto 87.70 315** P **P** **08 14 20.2 +0.2**
CAMP IAmb IAmb 08 14 30.8
comp=Z,13nm,1.1s
**DAVA Damuels 87.74 320** *eP* **P** **08 14 19.4 -0.7**
comp=Z,1.4nm,0.5s
**FUORN Ofenpass-Fuorn 87.83 320** P **P** **08 14 20.8 +0.1**
FUORN IAmb IAmb 08 14 22.0
comp=Z,13nm,1.1s
**RAR Rarotonga 88.71 113** LR LR 08 49 56.2
comp=Z,67nm,18.6s,baz=301,slow=33
**MBAR Mbarara 89.64 269** LR LR 08 55 26.9
comp=Z,44nm,19.0s,baz=54,slow=36
**H04D Lebanon 93.28 40** P **P** **08 14 45.6 -0.2**
H04D IAmb IAmb 08 15 36.4
comp=Z,28nm,1.7s
**KEST Kesra 93.66 310** P **P** **08 14 46.9 -1.0**
comp=Z,3.7nm,0.8s,baz=221,slow=7.8,SNR=5.5
comp=Z,3.7nm,0.8s
**I04A Tendick Farm, 93.88 40** P **P** **08 14 48.7 0.0**
I04A IAmb IAmb 08 14 59.7
comp=Z,15nm,1.4s
**NEW Newport 94.25 34** P **P** **08 14 49.7 -0.6**
baz=308
**PPT Papeete 96.37 106** LR LR 08 51 07.5
comp=Z,45nm,19.0s,baz=326,slow=31
**PPT2 Papeete2 96.38 106** *eS* **S** **08 26 19.2 -1.4**
comp=Z,1µm,39.0s
**PPT2 Papeete2 96.38 106** *eLR* LR 08 46 06.0
comp=Z,286nm,27.0s
PPT2 *eLR* LR 08 46 07.3
comp=Z,211nm,27.5s
**MSO Missoula 96.83 34** P **P** **08 15 01.7 -0.5**
baz=310
**TBI Tubuai 98.39 112** *eLR* LR 08 47 08.9
comp=Z,923nm,31.5s
**HLID Hailey 98.67 37** P **P** **08 15 09.4 -1.2**
baz=312
**BOZ Bozeman (W) 98.84 34** P **P** **08 15 09.6 -1.7**
baz=312
**NVAR Mina Aray Bea 99.49 43** P **Pdif** **08 15 12.1 -2.3**
comp=Z,0.8nm,0.9s,baz=281,slow=4.0,SNR=6.9
comp=Z,0.8nm,0.9s
**SCZ2 Santa Cruz Isl 101.17 47** P **Pdif** **08 15 21.4 -0.4**
baz=305
**VNDA Vanda 101.21 172** P **Pdif** **08 15 20.8 +0.1**
comp=Z,1.1nm,1.0s,baz=291,slow=8.8,SNR=3.3
**TAOE Nuku Hiva Isla 102.14 95** *eLR* LR 08 48 53.0
comp=Z,317nm,28.3s
**TORD Tordil Ar. Bea 110.70 294** PKKPbc PKKPbc 08 31 09.4 +6.7
comp=Z,1.6nm,1.0s,baz=235,slow=5.1,SNR=3.7
**RKT Rikitea 111.08 108** *eLR* LR 08 52 51.7
comp=Z,677nm,28.2s
**TXAR Lajitas Array 114.61 42** PKP **PKiKP** **08 20 11.1 -0.8**
comp=Z,1.4nm,1.0s,baz=321,slow=1.6,SNR=9.7
**MIAR Mount Ida 116.22 31** P **PKiKP** **08 20 13.9 -0.9**
baz=325
**TROLL Troll, Antarti 118.15 198** ⇑PKPdf **PKPdf** **08 20 16.6 -0.9**
comp=Z,409nm,1.2s
**SNAA Sanae 119.83 198** ⇑PKPdf **PKPdf** **08 20 19.1 -1.5**
comp=Z,28nm,0.9s
**SNAA Sanae 119.83 198** PKP **PKPdf** **08 20 19.3 -1.3**
comp=Z,1.4nm,1.0s,baz=162,slow=3.2,SNR=3.8
SNAA PKKPbc **PKKPab** **08 30 28.6 -2.0**
comp=Z,1.2nm,0.9s,baz=286,slow=4.9,SNR=3.4
**VNA2 Neumayer--Watz 121.48 198** ⇑PKPdf **PKPdf** **08 20 22.6 -1.0**
comp=Z,8.6nm,0.7s,baz=101,slow=1.7
**VNA2 Neumayer--Watz 121.48 198** ⇑P **PKKPbc** **08 30 30.3 +4.1**
comp=Z,0.2nm,0.2s,baz=319,slow=13
**VNA1 Neumayer--Stat 121.87 198** ⇑PKPdf **PKPdf** **08 20 23.6 -0.8**
comp=Z,9.5nm,0.9s
**VNA3 Neumayer Olymp 121.95 197** ⇑PKPdf **PKPdf** **08 20 22.9 -1.7**
comp=Z,7.4nm,0.8s
**SDV Santo Domingo 148.57 21** PKPbc **PKPbc** **08 21 17.6 -1.4**
comp=Z,29nm,0.4s,baz=358,slow=4.2,SNR=6.6
**BDFB Brasilia 167.59 293** PKP **PKPdf** **08 21 36.9 -1.2**
comp=Z,2.4nm,0.8s,baz=107,slow=0.4,SNR=4.0
**LPAZ La Paz 170.02 61** PKP **PKPdf** **08 21 41.2 +0.4**
comp=Z,7.2nm,1.2s,baz=30,slow=3.9,SNR=13
**CPUP Villa Florida 174.11 203** PKP **PKPdf** **08 21 40.1 -1.1**
comp=Z,3.0nm,1.1s,baz=135,slow=1.4,SNR=2.7
**SIV San Ignacio 174.99 13** PKP **PKPdf** **08 21 41.3 -0.4**
comp=Z,5.4nm,1.0s,baz=166,slow=1.6,SNR=17
SIV PKPab **PKPab** **08 23 15.6 -0.8**
comp=Z,1.2nm,0.8s,baz=308,slow=10.0,SNR=3.1

**IDC 09 08:14:55.5±3.4, 54°32N×87°33E, h0km, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=28.2km s-min=20.3km az=50.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.52** | **257** | I | I | 08 23 40.0 | |
| | baz=77,slow=317,SNR=8.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.52** | **257** | Pg | Pn | 08 15 21.8 | -2.2 |
| | 0.7nm,0.3s,baz=72,slow=15,SNR=5.8 | | | | | | |
| ZALV | | | | Lg | Lg | 08 15 44.1 | |
| | 0.9nm,0.3s,baz=75,slow=28,SNR=4.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.53** | **239** | Pn | Pn | 08 16 33.4 | +0.7 |
| | baz=57,slow=14,SNR=4.2 | | | | | | |
| KURBB | | | | Lg | Lg | 08 18 23.7 | |
| | baz=54,slow=34 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.19** | **205** | Pn | Pn | 08 16 56.9 | +1.4 |
| | 0.1nm,0.3s,baz=28,slow=15,SNR=2.6 | | | | | | |
| MKAR | | | | Lg | Lg | 08 19 16.0 | |
| | baz=22,slow=28,SNR=3.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC **09** 08:17:30.2±1.9, 8°98S×115°36E, h0km, mb3.5/4, mbtmp3.6/5, ML3.5/1, Error ellipse: s-maj=59.2km s-min=23.6km az=52.0*
*DJA **09** 08:17:36.3±0.5, 8°S±7°×11°6E±°, h35km±7km, M4.0/10, mb4.3/1, MLv3.9/10*

**ISC 09 08:17:35.1±0.8, 8°24S±0°07×116°36E±0°04, h10km, n15, σ1°89/17, mb3.6/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.72** | **134** | P | **Pg** | **08 17 50.2** | **+1.2** |
| TWSI | | | | S | **Sn** | **08 18 03.3** | **+0.9** |
| **SRBI** | **Singaraja** | **1.15** | **278** | P | **Pb** | **08 17 58.1** | **+1.1** |
| **DNP** | **Denpasar** | **1.22** | **249** | P | **Pn** | **08 17 55.5** | **-2.7** |
| **IGBI** | **Denpasar** | **1.33** | **244** | P | **Pn** | **08 17 56.8** | **-3.0** |
| **PLAI** | **Plampang** | **1.52** | **113** | P | **Pn** | **08 18 01.5** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.20** | **264** | P | **Pn** | **08 18 12.8** | **+1.1** |
| **GRJI** | **Gresik** | **4.07** | **289** | P | **Pn** | **08 18 37.3** | **-0.1** |
| **PWJI** | **Pagerwojo** | **4.51** | **272** | P | **Pn** | **08 18 43.0** | **-0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.60** | **63** | P | **Pn** | **08 18 40.7** | **-4.0** |
| **KAPI** | **Kappang** | **4.65** | **47** | Pn | **Pb** | **08 18 59.2** | **+2.4** |
| | 1.2nm,0.3s,baz=203,slow=13,SNR=2.6 | | | | | | |
| KAPI | | | | Sn | **Sb** | **08 19 53.6** | **+0.7** |
| | 1.4nm,0.3s,baz=216,slow=19,SNR=2.5 | | | | | | |
| | 8.7nm,0.4s | | | | | | |
| **EDFI** | **Ende, Flores** | **5.30** | **96** | P | **Pn** | **08 18 52.6** | **-1.9** |
| **WRA** | **Warramunga Arr** | **20.94** | **126** | P | **P** | **08 22 17.2** | **-1.1** |
| | 1.0nm,0.7s,baz=302,slow=12,SNR=7.0 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.76** | **134** | P | **P** | **08 22 37.9** | **0.0** |
| | 1.0nm,0.6s,baz=305,slow=8.9,SNR=9.8 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **08 27 17.8** | **+0.1** |
| | 0.2nm,0.3s,baz=167,slow=7.2,SNR=2.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.62** | **334** | P | **P** | **08 27 58.6** | **-1.0** |
| | 0.6nm,0.6s,baz=146,slow=6.6,SNR=5.0 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

*IDC **09** 08:22:37.7±0.9, 36°73N×143°92E, h0km, mb4.0/7, mbtmp4.0/10, ML3.4/3, MS3.3/2, Error ellipse: s-maj=27.3km s-min=20.7km az=150.0*
*NEIC **09** 08:22:40.0±2.0, 36°95N±0°09×143°83E±0°06, h10km±2km, mb4.3/11, Error ellipse: s-maj=16.1km s-min=8.0km az=169.0*
*JMA **09** 08:22:42.3±0.2, 37°0N±0°7×14°4E±°, h55km, MV4.1/29, FAR E OFF NORTH HONSHU*

**ISC 09 08:22:40.2±0.9, 37°02N±0°06×143°71E±0°07, h10km, n54, σ1°56/58, mb4.1/15, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **2.19** | **307** | *i* P | **Pn** | **08 23 16.5** | **-0.2** |
| JIKH | | | | *e*S | **Sn** | **08 23 41.8** | **-2.1** |
| **JFK** | **Kawauchi** | **2.29** | **280** | P | **Pn** | **08 23 17.4** | **-0.6** |
| JFK | | | | S | **Sn** | **08 23 43.7** | **-2.5** |
| **ONAJ** | **Iwakimizuishiy** | **2.33** | **273** | P | **Pn** | **08 23 18.5** | **0.0** |
| **JMST** | **Minamisoumatoc** | **2.35** | **288** | P | **Pn** | **08 23 18.6** | **-0.2** |
| JMST | | | | S | **Sn** | **08 23 45.3** | **-2.4** |
| **JIO** | **Ouri** | **2.35** | **308** | *i* P | **Pn** | **08 23 19.0** | **+0.1** |
| JIO | | | | S | **Sn** | **08 23 45.7** | **-2.1** |
| **JMM** | **Marumori** | **2.47** | **291** | Pn | **Pn** | **08 23 20.6** | **+0.1** |
| **JOTO** | **OTAMA OYAMA** | **2.74** | **282** | P | **Pn** | **08 23 24.7** | **+0.5** |
| JOTO | | | | S | **Sn** | **08 23 56.3** | **-1.2** |
| **JMK** | **Ichinoseki** | **2.75** | **315** | P | **Pn** | **08 23 24.5** | **+0.1** |
| **JOM** | **Ohasama** | **3.10** | **323** | P | **Pn** | **08 23 29.4** | **+0.2** |
| JOM | | | | *e*S | **Sn** | **08 24 04.5** | **-1.8** |
| **BSO1** | **Boso 1** | **3.24** | **224** | *e*P | **Pn** | **08 23 29.7** | **-0.9** |
| **JYK** | **Kaneyama** | **3.25** | **307** | P | **Pn** | **08 23 32.0** | **+0.8** |
| **JAG** | **Ashikaga** | **3.47** | **261** | P | **Pn** | **08 23 33.8** | **-0.4** |
| JAG | | | | S | **Sn** | **08 24 11.3** | **-4.0** |
| **JANG** | **Nango** | **3.76** | **334** | *e*P | **Pn** | **08 23 38.2** | **-0.1** |
| JANG | | | | *e*S | **Sn** | **08 24 19.0** | **-3.5** |
| **JRY** | **Ryogami san** | **4.00** | **257** | P | **Pn** | **08 23 40.9** | **-0.6** |
| **JTM** | **Tenmabayashi** | **4.29** | **332** | Pn | **Pn** | **08 23 45.6** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **4.44** | **265** | Pn | **Pn** | **08 23 48.2** | **+0.6** |
| | 0.9nm,0.3s,baz=87,slow=15,SNR=26 | | | | | | |
| MJAR | | | | Sn | **Sn** | **08 24 36.8** | **-2.5** |
| | 0.7nm,0.3s,baz=52,slow=13,SNR=5.9 | | | | | | |
| | 7.8nm,0.4s | | | | | | |
| **MAJO** | **Matsushiro** | **4.44** | **265** | | **Pn** | **08 23 48.0** | **+0.4** |
| **MJB9** | **Matsu-Tunnel** | **4.44** | **266** | | **Pn** | **08 23 48.0** | **+0.4** |
| **JSD** | **Sado** | **4.45** | **285** | Pn | **Pn** | **08 23 48.7** | **+1.1** |
| **JOT** | **Ohata** | **4.82** | **335** | P | **Pn** | **08 23 53.9** | **+1.1** |
| **ERM** | **Erimo** | **5.01** | **355** | Pn | **Pn** | **08 23 54.5** | **-0.9** |
| **JHJ** | **Hachijo jima 2** | **5.05** | **221** | Pn | **Pn** | **08 23 53.0** | **-2.9** |
| | 6.3nm,0.3s,baz=270,slow=19,SNR=1.3 | | | | | | |
| JHJ | | | | Sn | Sn | 08 24 45.4 | -8.9 |
| | 18nm,0.3s,baz=239,slow=19,SNR=1.7 | | | | | | |
| | 66nm,0.8s | | | | | | |
| **JGF** | **Kuroka** | **5.32** | **256** | Pn | **Pn** | **08 24 00.0** | **+0.3** |
| **JCH** | **Churui** | **5.59** | **357** | *e*P | **Pn** | **08 24 02.2** | **-1.2** |
| **INU** | **Inuyama** | **5.66** | **255** | Pn | **Pn** | **08 24 07.6** | **+3.3** |
| **JKA** | **Kamikawa-asahi** | **7.14** | **354** | Pn | **Pn** | **08 24 24.3** | **-0.3** |
| **ASAJ** | **Asahikawa** | **7.14** | **354** | Pn | **Pn** | **08 24 23.6** | **-1.0** |
| | 2.4nm,0.3s,baz=234,slow=7.0,SNR=8.9 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **08 25 41.0** | **-4.8** |
| | 1.4nm,0.3s,baz=287,slow=29,SNR=4.3 | | | | | | |
| **JMN** | **Monobe** | **8.67** | **251** | Pn | **Pn** | **08 24 47.3** | **+1.6** |
| **KSRS** | **Korea Array** | **12.59** | **277** | Pn | **Pn** | **08 25 41.2** | **+2.0** |
| | 0.3nm,0.3s,baz=85,slow=14,SNR=3.6 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **14.98** | **328** | Pn | **Pn** | **08 26 10.8** | **-1.0** |
| | 0.2nm,0.3s,baz=133,slow=12,SNR=4.3 | | | | | | |
| **GUMO** | **Guam** | **23.36** | **177** | LR | LR | 08 33 48.2 | |
| | comp=Z,56nm,21.7s,baz=32,slow=29 | | | | | | |
| **SONM** | **Songino Array** | **29.32** | **303** | P | **P** | **08 28 45.7** | **+2.7** |
| | 1.0nm,0.8s,baz=102,slow=11,SNR=4.5 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **DAV** | **Davao City (W)** | **34.08** | **213** | LR | LR | 08 43 09.5 | |
| | comp=Z,60nm,21.0s,baz=344,slow=36 | | | | | | |
| **G18K** | **Tagagawik** | **43.73** | **30** | P | **P** | **08 30 45.2** | **0.0** |
| G18K | | | | IAmb | IAmb | 08 31 26.0 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **44.17** | **25** | P | **P** | **08 30 49.1** | **+0.3** |
| **D19K** | **Kuna River** | **44.53** | **27** | P | **P** | **08 30 51.7** | **+0.1** |
| D19K | | | | IAmb | IAmb | 08 31 05.0 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **44.62** | **28** | P | **P** | **08 30 52.8** | **+0.5** |
| E19K | | | | IAmb | IAmb | 08 31 12.6 | |
| | comp=Z,6.7nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.67** | **303** | P | **P** | **08 31 02.5** | **+1.4** |
| **MKAR** | **Makanchi Array** | **45.67** | **303** | P | P | 08 31 06.5 | +5.4 |
| | comp=Z,0.6nm,0.7s,baz=90,slow=10,SNR=5.4 | | | | | | |
| **IMAR** | **Indian Mountai** | **45.73** | **30** | P | **P** | **08 30 59.7** | **-1.4** |
| **E22K** | **Anaktuvuk Pass** | **46.76** | **28** | P | **P** | **08 31 09.6** | **+0.3** |
| E22K | | | | IAmb | IAmb | 08 31 11.7 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **C23K** | **Itkillik River** | **47.42** | **25** | P | **P** | **08 31 15.0** | **+0.7** |
| C23K | | | | IAmb | IAmb | 08 31 15.9 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.45** | **308** | P | **P** | **08 31 15.7** | **+0.8** |
| | comp=Z,2.9nm,0.2s,baz=76,slow=7.8,SNR=1.4 | | | | | | |
| | comp=Z,2.9nm,0.2s | | | | | | |
| **ILAR** | **Eielson Array** | **48.52** | **32** | P | **P** | **08 31 22.8** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=264,slow=6.5,SNR=9.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **48.85** | **26** | P | **P** | **08 31 25.9** | **+0.4** |
| D25K | | | | IAmb | IAmb | 08 31 26.8 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **49.46** | **29** | P | **P** | **08 31 29.5** | **-0.7** |
| **G30M** | **tAoh Zrail Nji** | **52.74** | **29** | P | **P** | **08 31 54.8** | **0.0** |
| G30M | | | | IAmb | IAmb | 08 31 56.5 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **I30M** | **Mount Dempster** | **52.94** | **31** | P | **P** | **08 31 56.6** | **+0.3** |
| **WR0** | **Warramunga Arr** | **57.33** | **190** | P | P | 08 32 25.1 | -3.3 |
| **WRA** | **Warramunga Arr** | **57.34** | **190** | P | P | 08 32 25.3 | -3.1 |
| **WRA** | **Warramunga Arr** | **57.34** | **190** | P | P | 08 32 25.6 | -2.9 |
| | comp=Z,0.7nm,0.5s,baz=9.8,slow=7.3,SNR=9.5 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **NVAR** | **Mina Aray Bea** | **73.52** | **54** | P | **P** | **08 34 13.4** | **0.0** |
| | comp=Z,0.6nm,0.8s,baz=291,slow=4.6,SNR=5.3 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **74.89** | **338** | P | **P** | **08 34 21.3** | **+0.4** |
| | comp=Z,0.6nm,0.6s,baz=41,slow=5.3,SNR=1.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **88.66** | **54** | P | **P** | **08 35 33.5** | **-0.5** |
| | comp=Z,1.0nm,0.6s,baz=304,slow=3.1,SNR=20 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |

*IDC **09** 08:29:18.3±5.9, 8°23S×116°16E, h0km, mb3.5/3, mbtmp3.6/3, Error ellipse: s-maj=267.4km s-min=28.4km az=57.0*
*DJA **09** 08:29:20.4±0.4, 8°S±6°×11°6E±°, h10km, M4.0/8, mb4.3/2, MLv3.9/8*

**ISC 09 08:29:20.4±0.8, 8°3S±0°1×116°04E±0°05, h10km, n11, σ1°20/12, mb3.5/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **0.85** | **287** | P | **Pg** | **08 29 36.2** | **-0.7** |
| SRBI | | | | S | **Sg** | **08 29 48.2** | **+0.2** |
| **DNP** | **Denpasar** | **0.89** | **247** | P | **Pb** | **08 29 38.9** | **+1.0** |
| **TWSI** | **Taliwang, Sumb** | **0.93** | **116** | P | **Pg** | **08 29 37.9** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **1.87** | **266** | P | **Pn** | **08 29 51.3** | **-1.2** |
| **PWJI** | **Pagerwojo** | **4.20** | **274** | P | **Pn** | **08 30 26.6** | **+

0.9nm,0.5s,baz=308,slow=9.2,SNR=17
0.9nm,0.5s
**SONM Songino Array 56.57 352** P **P** **08 39 02.1 -1.2**
0.6nm,0.5s,baz=170,slow=8.8,SNR=3.6
0.6nm,0.5s

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*IDC **09** 08:30:14.2±1.0,54˚.48N×35˚.19W,h0km,mb3.5/6, mbtmp3.5/7,ML2.4/1,MS3.7/33,Error ellipse: s-maj=44.8km s-min=21.6km az=21.0*
*GCMT **09** 08:30:21.0±0.3,54˚.28N±0˚.05×35˚.18W±0˚.04,h12km±1km, MW4.8/82,Moment Tensor Solution. s13,c14; s82,c106; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr~1.40±. 16; Mθθ~0.22±.11; Mϕϕ 1.62±.12; Mrθ~0.71±.36; Mθϕ 0.15±.06; Mϕr~0.90±.30; Best double couple: M☉1.91100×10^16^ NP1:ϕs341.00000°,δ64.00000°,λ-114.00000°. NP2: ϕs207.00000°,δ35.00000°,λ-50.00000°. Principal axes: T 1.8700, Plg16.0000°, Azm89.0000°; N 0.0810, Plg21.0000°, Azm352.0000°; P -1.9530, Plg63.0000°, Azm212.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*
**ISC 09 08:30:16.1±0.9,54˚.4N±0˚.3×35˚.3W±0˚.1,h10km,n37, σ1§04/9,mb3.5/6,MS3.7/30,Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFJD** | **Kangerlussuaq** | **14.62** | **336** | LR | LR | 08 38 15.1 | |
| | comp=Z,151nm,18.8s,baz=138,slow=33 | | | | | | |
| **SCHQ** | **Schefferville** | **18.19** | **284** | P | **Pn** | **08 34 27.3** | **-1.2** |
| | 0.1nm,0.3s,baz=55,slow=16,SNR=1.9 | | | | | | |
| SCHQ | | | | LR | LR | 08 40 31.7 | |
| | comp=Z,164nm,20.5s,baz=79,slow=34 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **FRB** | **Frobisher Bay** | **19.25** | **312** | LR | LR | 08 40 47.5 | |
| | comp=Z,334nm,18.6s,baz=128,slow=33 | | | | | | |
| **ESDC** | **Sonseca Array** | **25.67** | **112** | P | **P** | **08 35 45.2** | **-0.8** |
| | 0.6nm,0.5s,baz=316,slow=11,SNR=4.1 | | | | | | |
| ESDC | | | | LR | LR | 08 44 07.6 | |
| | comp=Z,198nm,18.0s,baz=292,slow=32 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **29.24** | **86** | LR | LR | 08 47 42.8 | |
| | comp=Z,319nm,18.5s,baz=42,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **29.57** | **269** | LR | LR | 08 47 20.4 | |
| | comp=Z,412nm,18.5s,baz=280,slow=35 | | | | | | |
| **VRAC** | **Vranov** | **31.84** | **77** | LR | LR | 08 49 38.4 | |
| | comp=Z,235nm,19.0s,baz=74,slow=37 | | | | | | |
| **ULM** | **Lac du Bonnet** | **36.25** | **289** | LR | LR | 08 51 04.4 | |
| | comp=Z,214nm,18.4s,baz=30,slow=34 | | | | | | |
| **VAE** | **Valguarnera** | **37.60** | **96** | LR | LR | 08 50 37.2 | |
| | comp=Z,42nm,19.9s,baz=146,slow=33 | | | | | | |
| **TKL** | **Tuckaleechee C** | **38.15** | **261** | LR | LR | 08 52 36.8 | |
| | comp=Z,161nm,19.2s,baz=20,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **39.74** | **314** | LR | LR | 08 53 06.2 | |
| | comp=Z,102nm,19.5s,baz=312,slow=35 | | | | | | |
| **BBTS** | **Babate** | **42.29** | **152** | LR | LR | 08 52 21.1 | |
| | comp=Z,41nm,21.4s,baz=274,slow=31 | | | | | | |
| **IDI** | **Anoyia** | **45.22** | **90** | LR | LR | 08 57 39.2 | |
| | comp=Z,111nm,18.2s,baz=84,slow=36 | | | | | | |
| **BELG** | **Belogornoye** | **46.74** | **57** | LR | LR | 08 58 09.6 | |
| | comp=Z,90nm,19.1s,baz=248,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **48.27** | **288** | P | **P** | **08 38 56.4** | **-0.9** |
| | 0.7nm,0.8s,baz=58,slow=8.6,SNR=2.6 | | | | | | |
| PDAR | | | | LR | LR | 08 58 13.3 | |
| | comp=Z,76nm,18.3s,baz=356,slow=35 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **NEW** | **Newport** | **48.76** | **298** | LR | LR | 08 57 46.0 | |
| | comp=Z,48nm,19.9s,baz=11,slow=34 | | | | | | |
| **KBZ** | **Khabaz** | **49.79** | **68** | LR | LR | 09 01 04.4 | |
| | comp=Z,41nm,18.3s,baz=312,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **50.14** | **329** | P | **P** | **08 39 11.8** | **+0.7** |
| | 0.5nm,1.1s,baz=46,slow=7.7,SNR=3.0 | | | | | | |
| | 0.5nm,1.1s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **50.34** | **130** | P | **P** | **08 39 13.3** | **+0.3** |
| | 0.9nm,0.9s,baz=333,slow=6.6,SNR=3.7 | | | | | | |
| | 0.9nm,0.9s | | | | | | |
| **BBB** | **Bella Bella** | **51.56** | **308** | LR | LR | 08 58 18.6 | |
| | comp=Z,74nm,19.7s,baz=35,slow=33 | | | | | | |
| **ANMO** | **Albuquerque** | **51.85** | **279** | LR | LR | 09 00 52.7 | |
| | comp=Z,248nm,18.3s,baz=102,slow=35 | | | | | | |
| **TEIG** | **Tepich** | **52.46** | **251** | LR | LR | 09 02 11.9 | |
| | comp=Z,77nm,18.3s,baz=26,slow=36 | | | | | | |
| **ELK** | **Elko** | **52.77** | **290** | LR | LR | 09 01 17.7 | |
| | comp=Z,166nm,18.6s,baz=357,slow=35 | | | | | | |
| **AKTO** | **Aktyubinsk** | **52.97** | **53** | LR | LR | 09 00 33.1 | |
| | comp=Z,69nm,19.8s,baz=134,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **53.54** | **141** | LR | LR | 08 59 57.2 | |
| | comp=Z,76nm,18.1s,baz=16,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **54.30** | **27** | P | **P** | **08 39 43.9** | **+1.5** |
| | 0.3nm,0.8s,baz=34,slow=7.0,SNR=2.9 | | | | | | |
| TXAR | | | | LR | LR | 09 03 00.9 | |
| | comp=Z,58nm,18.6s,baz=356,slow=36 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.07** | **290** | LR | LR | 09 03 22.3 | |
| | comp=Z,130nm,19.1s,baz=18,slow=36 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **56.10** | **296** | LR | LR | 09 03 10.6 | |
| | comp=Z,92nm,18.3s,baz=358,slow=35 | | | | | | |
| **KDAK** | **Kodiak Island** | **57.21** | **326** | LR | LR | 09 03 40.9 | |
| | comp=Z,44nm,19.4s,baz=93,slow=35 | | | | | | |
| **CMIG** | **Matias Romero** | **58.67** | **255** | LR | LR | 09 06 46.7 | |
| | comp=Z,42nm,18.1s,baz=6.0,slow=37 | | | | | | |
| **JTS** | **Las Juntas de** | **58.91** | **241** | LR | LR | 09 04 28.7 | |
| | comp=Z,55nm,19.2s,baz=339,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.20** | **42** | P | **P** | **08 41 03.8** | **+0.1** |
| | 0.3nm,0.8s,baz=319,slow=5.7,SNR=2.1 | | | | | | |
| MKAR | | | | LR | LR | 09 08 20.9 | |
| | comp=Z,41nm,21.5s,baz=254,slow=35 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **66.33** | **49** | LR | LR | 09 09 26.2 | |
| | comp=Z,67nm,19.3s,baz=308,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **73.11** | **26** | LR | LR | 09 14 41.4 | |
| | comp=Z,20nm,18.8s,baz=254,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **97.57** | **43** | LR | LR | 09 30 16.7 | |
| | comp=Z,24nm,18.4s,baz=205,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **144.69** | **17** | PKP | **PKPab** | **08 49 50.7** | **-0.9** |
| | 0.6nm,0.9s,baz=332,slow=2.6,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **148.25** | **19** | PKPbc | **PKPdf** | **08 49 59.2** | **+0.4** |
| | 1.0nm,0.7s,baz=357,slow=2.4,SNR=8.1 | | | | | | |

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**IDC 09 08:31:27.1±3.5,42˚.36N×128˚.98E,h0km,mbtmp2.6/2, ML2.1/2,Error ellipse: s-maj=57.9km s-min=21.5km az=125.0,Northeastern China**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I45RU** | **USSURIYSK INFR** | **2.86** | **49** | I | I | 08 51 06.7 | |
| | baz=232,slow=294,SNR=4.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **2.87** | **49** | Pn | Pn | 08 32 14.5 | +0.5 |
| | 0.2nm,0.3s,baz=231,slow=15,SNR=2.7 | | | | | | |
| USRK | | | | Pg | Pb | 08 32 19.4 | +0.4 |
| | 0.8nm,0.3s,baz=230,slow=14,SNR=14 | | | | | | |
| USRK | | | | Lg | Lg | 08 32 57.5 | |
| | 1.2nm,0.3s,baz=241,slow=28,SNR=7.9 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **4.97** | **190** | Pn | Pn | 08 32 42.9 | 0.0 |
| | 0.2nm,0.3s,baz=10,slow=12,SNR=2.3 | | | | | | |
| | 0.7nm,0.4s | | | | | | |

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*NNC **09** 08:44:42.5±0.3,44˚.28N×78˚.76E,h0km,mb4.0,mpv3.9, Error ellipse: s-maj=2.0km s-min=1.6km az=177.0*
*SOME **09** 08:44:43.7,44˚.32N×78˚.75E,h15km*
**ISC 09 08:44:42.5±1.1,44˚.27N±0˚.02×78˚.73E±0˚.02,h4km±10km, n60,σ1§19/106,10C-9D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNOS** | **Konyrlen** | **0.33** | **74** | P | **Pb** | **08 44 50.1** | **-1.0** |
| | 227nm,0.1s | | | | | | |
| KNOS | | | | S | **Sb** | **08 44 54.8** | **-2.0** |
| | 1μm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **0.65** | **266** | *e*P | **Pb** | **08 44 56.5** | **0.0** |
| | 97nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **08 45 05.7** | **-0.2** |
| | 2μm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **0.65** | **266** | P | **Pb** | **08 44 56.5** | **0.0** |
| | 98nm,0.2s | | | | | | |
| ARXS | | | | S | **Sb** | **08 45 05.7** | **-0.2** |
| | 2μm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **0.76** | **85** | *e*P | **Pb** | **08 44 57.3** | **-1.1** |
| | 100nm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sg** | **08 45 06.8** | **-0.2** |
| | 452nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **0.76** | **85** | P | **Pb** | **08 44 57.3** | **-1.1** |
| | 100nm,0.1s | | | | | | |
| DJR | | | | S | **Sg** | **08 45 06.8** | **-0.2** |
| | 452nm,0.3s | | | | | | |
| **TDK** | **Taldyqorghan** | **0.77** | **343** | *e*P | **Pg** | **08 44 57.6** | **+0.3** |
| | 83nm,0.1s | | | | | | |
| TDK | | | | *e*S | **Sg** | **08 45 07.3** | **0.0** |
| | 335nm,0.3s | | | | | | |
| **TDK** | **Taldyqorghan** | **0.77** | **343** | P | **Pg** | **08 44 57.6** | **+0.3** |
| | 83nm,0.1s | | | | | | |
| TDK | | | | S | **Sg** | **08 45 07.3** | **0.0** |
| | 381nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **0.80** | **183** | *e*P | **Pb** | **08 44 59.0** | **0.0** |
| | 238nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **08 45 09.8** | **-0.4** |
| | 498nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **0.80** | **183** | P | **Pb** | **08 44 59.0** | **0.0** |
| | 238nm,0.2s | | | | | | |
| KPKS | | | | S | **Sb** | **08 45 09.8** | **-0.4** |
| | 498nm,0.1s | | | | | | |
| **KURS** | **Kuram** | **0.88** | **208** | *e*P | **Pb** | **08 45 00.6** | **+0.3** |
| | 110nm,0.2s | | | | | | |
| KURS | | | | *e*S | **Sb** | **08 45 12.9** | **+0.5** |
| | 346nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **0.88** | **208** | P | **Pb** | **08 45 00.6** | **+0.3** |
| | 110nm,0.2s | | | | | | |
| KURS | | | | S | **Sb** | **08 45 12.9** | **+0.5** |
| | 346nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **1.09** | **149** | P | **Pg** | **08 45 03.4** | **+0.1** |
| | 32nm,0.1s | | | | | | |
| PDGK | | | | S | **Sb** | **08 45 17.7** | **-0.8** |
| | 170nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **1.09** | **149** | ⇓P | **Pg** | **08 45 03.2** | **-0.1** |
| | 8.5nm,0.2s | | | | | | |
| PDGK | | | | ⇑S | **Sb** | **08 45 18.1** | **-0.3** |
| | 126nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **1.14** | **169** | *e*P | **Pn** | **08 45 04.6** | **-0.7** |
| | 80nm,0.1s | | | | | | |
| UZB | | | | *e*S | **Sn** | **08 45 20.1** | **-1.3** |
| | 229nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.14** | **169** | P | **Pn** | **08 45 04.6** | **-0.7** |
| | 80nm,0.2s | | | | | | |
| UZB | | | | S | **Sn** | **08 45 20.1** | **-1.3** |
| | 229nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **1.23** | **154** | *e*P | **Pg** | **08 45 08.4** | **+2.3** |
| | 31nm,0.2s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **08 45 26.0** | **+2.4** |
| | 882nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **1.23** | **154** | P | **Pg** | **08 45 08.4** | **+2.3** |
| | 28nm,0.1s | | | | | | |
| SHLS | | | | S | **Sn** | **08 45 26.0** | **+2.4** |
| | 549nm,0.2s | | | | | | |
| **SATY** | **Saty** | **1.23** | **191** | *e*P | **Pg** | **08 45 06.4** | **+0.3** |
| | 184nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **08 45 22.6** | **+0.6** |
| | 952nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.23** | **191** | P | **Pg** | **08 45 06.4** | **+0.3** |
| | 184nm,0.1s | | | | | | |
| SATY | | | | S | **Sg** | **08 45 22.6** | **+0.6** |
| | 952nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.32** | **252** | *e*P | **Pb** | **08 45 07.6** | **-0.3** |
| | 114nm,0.3s | | | | | | |
| CHKK | | | | *e*S | **Sn** | **08 45 25.2** | **-0.6** |
| | 2μm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.32** | **252** | P | **Pb** | **08 45 07.6** | **-0.3** |
| | 114nm,0.3s | | | | | | |
| CHKK | | | | S | **Sn** | **08 45 25.2** | **-0.6** |
| | 2μm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **1.43** | **124** | *e*P | **Pn** | **08 45 08.6** | **-0.7** |
| | 15nm,0.2s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **08 45 26.9** | **-1.7** |
| | 96nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.43** | **124** | P | **Pn** | **08 45 08.6** | **-0.7** |
| | 17nm,0.2s | | | | | | |
| KTMS | | | | S | **Sn** | **08 45 26.9** | **-1.7** |
| | 96nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.56** | **229** | *e*P | **Pb** | **08 45 12.1** | **+0.1** |
| | 75nm,0.2s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **08 45 32.4** | **+0.2** |
| | 329nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.56** | **229** | P | **Pb** | **08 45 12.1** | **+0.1** |
| | 70nm,0.2s | | | | | | |
| KOTS | | | | S | **Sb** | **08 45 32.4** | **+0.2** |
| | 329nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **1.58** | **250** | *e*P | **Pb** | **08 45 12.1** | **-0.1** |
| | 90nm,0.2s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **08 45 32.6** | **0.0** |
| | 360nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **1.58** | **250** | P | **Pb** | **08 45 11.9** | **-0.3** |
| | 90nm,0.2s | | | | | | |
| KTBS | | | | S | **Sb** | **08 45 32.6** | **0.0** |
| | 360nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **1.65** | **228** | *e*P | **Pb** | **08 45 13.2** | **-0.3** |
| | 52nm,0.3s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **08 45 34.2** | **-0.4** |
| | 204nm,0.3s | | | | | | |
| **MDOK** | **Medeo** | **1.65** | **228** | ⇓P | **Pb** | **08 45 13.0** | **-0.4** |
| | 36nm,0.4s | | | | | | |
| MDOK | | | | Pg | **Pb** | **08 45 13.2** | **-0.3** |
| | 65nm,0.3s | | | | | | |
| MDOK | | | | Lg | Lg | 08 45 34.2 | |
| | 206nm,0.5s | | | | | | |
| MDOK | | | | ⇑S | **Sg** | **08 45 35.7** | **+0.3** |
| | 90nm,0.4s | | | | | | |
| **KNDC** | **Almaty** | **1.66** | **231** | ⇑P | **Pb** | **08 45 13.4** | **-0.1** |
| | 98nm,0.2s | | | | | | |
| KNDC | | | | ⇑S | **Sg** | **08 45 36.6** | **+0.9** |
| | 309nm,0.4s | | | | | | |
| **AAA** | **Alma-Ata** | **1.69** | **232** | *e*P | **Pb** | **08 45 14.5** | **+0.3** |
| | 242nm,0.2s | | | | | | |
| AAA | | | | *e*S | **Sg** | **08 45 37.1** | **+0.3** |
| | 437nm,0.1s | | | | | | |
| **AAA** | **Alma-Ata** | **1.69** | **232** | P | **Pb** | **08 45 14.5** | **+0.3** |
| | 242nm,0.2s | | | | | | |
| AAA | | | | S | **Sg** | **08 45 37.1** | **+0.3** |
| | 437nm,0.1s | | | | | | |
| **KUU** | **Kurty** | **1.77** | **259** | P | **Pb** | **08 45 15.9** | **+0.5** |
| | 19nm,0.2s | | | | | | |
| KUU | | | | S | **Sg** | **08 45 38.8** | **-0.4** |
| | 258nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.79** | **227** | *e*P | **Pb** | **08 45 15.3** | **-0.7** |
| | 59nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sn** | **08 45 37.8** | **+0.1** |
| | 101nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.79** | **227** | P | **Pb** | **08 45 15.3** | **-0.7** |
| | 59nm,0.2s | | | | | | |
| TNSS | | | | S | **Sn** | **08 45 37.8** | **+0.1** |
| | 101nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **2.02** | **237** | *e*P | **Pb** | **08 45 19.4** | **-0.4** |
| | 98nm,0.1s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **08 45 45.6** | **+0.3** |
| | 570nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **2.02** | **237** | Pg | **Pb** | **08 45 19.4** | **-0.4** |
| | 98nm,0.1s | | | | | | |
| MTBS | | | | Lg | Lg | 08 45 45.6 | |
| | 570nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **2.28** | **257** | *e*P | **Pb** | **08 45 24.5** | **+0.3** |
| | 7.7nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **08 45 53.5** | **+0.8** |
| | 68nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **2.28** | **257** | Pg | **Pb** | **08 45 24.5** | **+0.3** |
| | 7.7nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 08 45 53.5 | |
| | 61nm,0.2s | | | | | | |
| **KST** | **Kastek** | **2.35** | **240** | *e*P | **Pb** | **08 45 26.1** | **+0.6** |
| | 9.2nm,0.3s | | | | | | |
| KST | | | | *e*S | **Sb** | **08 45 56.2** | **+1.3** |
| | 136nm,0.4s | | | | | | |
| **KST** | **Kastek** | **2.35** | **240** | Pg | **Pb** | **08 45 26.1** | **+0.6** |
| | 26nm,0.3s | | | | | | |
| KST | | | | Lg | Lg | 08 45 56.2 | |
| | 136nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **2.38** | **245** | *e*P | **Pb** | **08 45 26.3** | **+0.4** |
| | 21nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sb** | **08 45 56.7** | **+1.1** |
| | 159nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **2.38** | **245** | Pg | **Pb** | **08 45 26.3** | **+0.4** |
| | 29nm,0.2s | | | | | | |
| DGS | | | | Lg | Lg | 08 45 56.7 | |
| | 193nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.65** | **241** | ⇑Pn | **Pn** | **08 45 27.1** | **+1.0** |
| | 8.3nm,0.3s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 08 46 06.4 | |
| | 33nm,0.3s | | | | | | |
| **SGDS** | **Sogindy** | **3.08** | **256** | Pg | **Pb** | **08 45 38.3** | **+0.4** |
| | 9.7nm,0.3s | | | | | | |
| SGDS | | | | Lg | Lg | 08 46 17.2 | |
| | 20nm,0.2s | | | | | | |
| **CHMS** | **Chumysh** | **3.16** | **248** | ⇓Pn | **Pn** | **08 45 33.5** | **+0.5** |
| | 3.7nm,0.2s | | | | | | |
| CHMS | | | | ⇑Pg | **Pg** | **08 45 41.3** | **-1.7** |
| | 5.5nm,0.3s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 08 46 23.1 | |
| | 27nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **3.41** | **41** | Pg | **Pb** | **08 45 45.1** | **+1.6** |
| | 3.3nm,0.5s | | | | | | |
| MAKZ | | | | Lg | Lg | 08 46 27.6 | |
| | 15nm,0.4s | | | | | | |
| **BTLS** | **Baital** | **3.43** | **285** | *e*P | **Pb** | **08 45 45.7** | **+1.9** |
| | 3.9nm,0.3s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **08 46 30.1** | **-2.6** |
| | 9.2nm,0.3s | | | | | | |
| **BTLS** | **Baital** | **3.43** | **285** | Pg | **Pb** | **08 45 45.7** | **+1.9** |
| | 4.0nm,0.3s | | | | | | |
| BTLS | | | | Lg | Lg | 08 46 30.1 | |
| | 9.2nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **3.49** | **244** | ⇓Pn | **Pn** | **08 45 39.0** | **+1.3** |
| | 2.9nm,0.3s | | | | | | |
| AAK | | | | Pg | **Pb** | **08 45 46.4** | **+1.6** |
| | 5.8nm,0.3s | | | | | | |
| AAK | | | | Lg | Lg | 08 46 34.8 | |
| | 20nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **3.55** | **43** | Pn | **Pn** | **08 45 39.0** | **+0.6** |
| | 1.0nm,0.3s,baz=219,slow=14,SNR=92 | | | | | | |
| MK31 | | | | ⇓Pg | **Pb** | **08 45 46.5** | **+0.6** |
| | 1.7nm,0.2s,baz=213,slow=15,SNR=27 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **08 46 21.1** | **+0.3** |
| | 10nm,0.4s,baz=217,slow=24,SNR=9.1 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 08 46 32.1 | |
| | 16nm,0.5s,baz=210,slow=26,SNR=13 | | | | | | |
| **MRKS** | **Merke** | **4.29** | **251** | *e*P | **Pb** | **08 46 01.0** | **+2.6** |
| | 3.6nm,0.3s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **08 46 56.1** | **-4.0** |
| | 30nm,0.6s | | | | | | |
| **MRKS** | **Merke** | **4.29** | **251** | Pg | **Pb** | **08 46 01.0** | **+2.6** |
| | 5.1nm,0.3s | | | | | | |
| MRKS | | | | Lg | Lg | 08 46 56.1 | |
| | 30nm,0.7s | | | | | | |
| **ZSN** | **Zaisan** | **5.34** | **51** | *e*P | **Pb** | **08 46 16.5** | **+0.3** |
| | 4.1nm,0.4s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **08 47 22.9** | **+2.3** |
| | 6.1nm,0.3s | | | | | | |
| **OTUK** | **Ortayu** | **5.96** | **314** | Pg | Pb | 08 46 31.4 | +4.6 |
| | 0.5nm,0.3s | | | | | | |
| OTUK | | | | Lg | Lg | 08 47 49.4 | |
| | 2.3nm,0.2s | | | | | | |
| **KK31** | **Karatay Array** | **6.07** | **262** | ⇑Pg | **Pg** | **08 46 35.4** | **-3.4** |
| | 1.0nm,0.6s,baz=77,slow=16,SNR=5.0 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 08 47 55.3 | |
| | 5.1nm,0.5s,baz=75,slow=28,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.36** | **359** | ⇓Lg | Lg | 08 48 02.4 | |
| | 33nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **6.45** | **359** | ⇓Lg | Lg | 08 48 04.3 | |
| | 27nm,0.7s | | | | | | |
| **BRLS** | **Borolday** | **6.57** | **262** | *e*P | **Pg** | **08 46 47.1** | **-1.2** |
| | 0.7nm,0.2s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **08 48 16.2** | **+2.8** |
| | 11nm,0.8s | | | | | | |
| **IUG** | **Iuzhnay** | **6.70** | **255** | *e*P | **Pg** | **08 46 47.9** | **-2.9** |
| | 5.4nm,0.3s | | | | | | |
| IUG | | | | *e*S | **Sg** | **08 48 17.1** | **-0.5** |
| | 39nm,0.7s | | | | | | |

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*OSPL **09** 08:50:32.2±3.0,20˚.22N×70˚.59W,h0km±20km,ML2.2*
*SDD **09** 08:50:42.3±1.7,19˚.54N×70˚.79W,h112km±37km,MD3.3, ML2.4,MW3.6*
**ISC 09 08:50:31.7±1.2,20˚.23N±0˚.05×70˚.49W±0˚.06,h10km,n11, σ1§82/13,7C-1D,Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SC01** | **Santiago de lo** | **0.83** | **196** | *i* P | **Pg** | **08 50 46.7** | **-1.1** |
| SC01 | | | | IAML | | 08 51 08.9 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **NADR** | **Nagua** | **1.06** | **146** | ⇓*e*Pg | Pn | 08 51 01.5 | +8.8 |
| NADR | | | | IAML | | 08 51 12.8 | |
| | comp=E,78nm,0.6s | | | | | | |
| NADR | | | | IAML | | 08 51 19.1 | |
| | comp=N,75nm,0.2s | | | | | | |
| **MCDR** | **Montecristi** | **1.15** | **253** | ⇑*e*Pg | Pn | 08 51 01.1 | +7.2 |
| MCDR | | | | IAML | | 08 51 20.8 | |
| | comp=E,40nm,2.2s | | | | | | |
| MCDR | | | | IAML | | 08 51 58.7 | |
| | comp=N,43nm,0.2s | | | | | | |
| **REDR** | **Restauracion** | **1.36** | **219** | ⇑*e*Pg | **Pg** | **08 51 01.6** | **+3.7** |
| REDR | | | | ⇑*e*Sg | **Sg** | **08 51 16.2** | **+0.6** |
| REDR | | | | IAML | | 08 51 17.4 | |
| | comp=E,69nm,0.2s | | | | | | |
| REDR | | | | IAML | | 08 51 18.3 | |
| | comp=N,52nm,0.2s | | | | | | |
| **GRTK** | **Grand Turk** | **1.41** | **335** | *i* P | **Pn** | **08 50 56.3** | **-1.1** |
| GRTK | | | | IAML | | 08 51 15.6 | |
| | comp=Z,40nm,0.9s | | | | | | |
| GRTK | | | | *e*S | **Sb** | **08 51 15.7** | **-0.4** |
| **SDDR** | **Presa de Saban** | **1.45** | **211** | ⇑*e*Pg | **Pg** | **08 51 01.3** | **+1.6** |
| SDDR | | | | IAML | | 08 51 18.0 | |
| | comp=E,61nm,0.3s | | | | | | |
| SDDR | | | | IAML | | 08 51 19.1 | |
| | comp=N,36nm,0.3s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.45** | **211** | *i* P | **Pn** | **08 50 56.1** | **-2.0** |
| SDDR | | | | *e*S | **Sb** | **08 51 14.9** | **-2.6** |
| SDDR | | | | IAML | | 08 51 18.5 | |
| | comp=Z,40nm,0.5s | | | | | | |
| **BANI** | **BANI** | **1.84** | **176** | ⇑*e*Pg | **Pn** | **08 51 03.7** | **+0.3** |
| BANI | | | | IAML | | 08 51 33.6 | |
| | comp=E,41nm,0.7s | | | | | | |
| BANI | | | | IAML | | 08 51 44.7 | |
| | comp=N,40nm,1.4s | | | | | | |
| BANI | | | | ⇑*e* | | 08 54 48.3 | |
| **PODR** | **Polo** | **2.19** | **200** | *i* P | **Pn** | **08 51 08.7** | **+0.3** |
| PODR | | | | *e*S | **Sb** | **08 51 37.5** | **-1.3** |
| PODR | | | | IAML | | 08 51 43.7 | |
| | comp=Z,48nm,3.1s | | | | | | |
| **HIDR** | **Higuey Centro** | **2.34** | **134** | ⇑*e*Pg | **Pg** | **08 51 16.9** | **+0.3** |
| HIDR | | | | IAML | | 08 51 55.5 | |
| | comp=E,31nm,1.1s | | | | | | |
| HIDR | | | | IAML | | 08 52 28.9 | |
| | comp=N,31nm,4.3s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.62** | **130** | *i* P | **Pn** | **08 51 15.3** | **+1.1** |
| PCDR | | | | IAML | | 08 52 02.3 | |
| | comp=Z,81nm,1.4s | | | | | | |

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**IDC 09 08:54:42.2±2.5,54˚.28N×86˚.15E,h0km,mbtmp3.1/2, ML2.9/2,Error ellipse: s-maj=19.8km s-min=12.2km az=50.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.85** | **248** | I | I | 09 00 10.0 | |
| | baz=68,slow=315,SNR=2.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.85** | **248** | Pg | Pg | 08 54 56.8 | -1.8 |
| | 2.4nm,0.3s,baz=64,slow=17,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 08 55 11.1 | |
| | 6.5nm,0.3s,baz=68,slow=28,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **235** | Pn | Pn | 08 56 12.5 | +1.3 |
| | 0.2nm,0.3s,baz=51,slow=13,SNR=12 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.88** | **200** | Pn | Pn | 08 56 38.9 | +0.8 |
| | 0.3nm,0.3s,baz=21,slow=12,SNR=15 | | | | | | |
| | 0.4nm,0.3s | | | | | | |

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**BER 09 08:56:59.0±3.2,74˚.53N×8˚.51E,h10km,mb(Pn)3.5, Confirmed Earthquake,Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BJO1** | **Bjornoya** | **2.81** | **86** | *

HOPEN **Hopen** **4.58 57** *e*P Pn 08 58 07.9 -0.3
HOPEN *e* 08 58 54.6
HOPEN *e*S Sn 08 58 55.1 -6.3
HOPEN IAML 08 59 01.1
comp=Z,9.8nm,0.3s
**DAG** **Danmarks Havn** **7.06 301** *e*S Sn 08 59 51.5 -11

**IDC 09 09:05:16.7±3.0, 53°67N×88°00E, h0km, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=24.4km s-min=17.0km az=63.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.91** | **280** | I | I | 09 17 10.0 | |
| | baz=97,slow=313,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.91** | **280** | Pn | Pn | 09 05 49.7 | -0.6 |
| | 1.2nm,0.3s,baz=101,slow=11,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 09 06 16.5 | |
| | 2.2nm,0.3s,baz=101,slow=28,SNR=8.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.57** | **246** | Pn | Pn | 09 06 54.3 | -0.2 |
| | 0.1nm,0.3s,baz=64,slow=15,SNR=7.2 | | | | | | |
| KURBB | | | | Sn | Sn | 09 08 12.0 | +2.0 |
| | 0.1nm,0.3s,baz=59,slow=18,SNR=3.4 | | | | | | |
| KURBB | | | | Lg | Lg | 09 08 43.1 | |
| | baz=64,slow=32,SNR=5.9 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.79** | **210** | Pn | Pn | 09 07 13.0 | +1.8 |
| | 0.1nm,0.3s,baz=24,slow=13,SNR=2.5 | | | | | | |
| MKAR | | | | Sn | Sn | 09 08 40.1 | 0.0 |
| | 0.1nm,0.3s,baz=33,slow=24,SNR=3.2 | | | | | | |
| MKAR | | | | Lg | Lg | 09 09 19.9 | |
| | 0.1nm,0.3s,baz=24,slow=33,SNR=2.7 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

**DJA 09 09:06:54.8±0.4, 8°S±4°×117°E±°, h10km, M3.7/6, mb3.8/1, MLv3.6/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.60** | **141** | P | Pg | 09 07 06.8 | +0.3 |
| TWSI | | | | S | Sb | 09 07 15.9 | 0.0 |
| **SRBI** | **Singaraja** | **1.29** | **278** | P | Pn | 09 07 18.1 | -0.8 |
| SRBI | | | | S | Sn | 09 07 36.0 | -0.2 |
| **DNP** | **Denpasar** | **1.34** | **252** | P | Pg | 09 07 20.2 | -0.2 |
| **PLAI** | **Plampang** | **1.38** | **114** | P | Pb | 09 07 20.6 | -0.1 |
| **JAGI** | **Jajag, Banyuwa** | **2.33** | **265** | P | Pn | 09 07 32.5 | -0.8 |
| **BSSI** | **Bau Bau, Buton** | **4.49** | **62** | P | Pn | 09 08 02.4 | -0.5 |
| **EDFI** | **Ende, Flores** | **5.16** | **96** | P | Pn | 09 08 12.0 | -0.2 |

*NOU **09** 09:21:04.3, 38°71S×177°87E, h0km, MLv4.1/7, North Island, New Zealand*
*WEL **09** 09:21:08.7±0.3, 38°S±3°×177°8E±°, h28km±3km, M3.4/33, ML3.7/33, MLv3.4/33, Error ellipse: s-maj=0.0km s-min=0.0km az=134.9, confirmed*
**ISC 09 09:21:09.2±1.3, 38°35S±0°03×177°66E±0°03, h35km, n107, σ1s35/112, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MWZ** | **Matawai** | **0.11** | **280** | P | **Pn** | **09 21 14.9** | **-0.4** |
| MWZ | | | | S | **Sn** | **09 21 19.7** | **+0.2** |
| **TKGZ** | **Te Karaka** | **0.17** | **121** | P | **Pn** | **09 21 15.9** | **+0.2** |
| **RAGZ** | **Rawiri** | **0.24** | **234** | P | **Pn** | **09 21 16.5** | **0.0** |
| **TWGZ** | **Tauwhareparae** | **0.30** | **55** | P | **Pn** | **09 21 17.8** | **+0.6** |
| **RIGZ** | **Rimuhau** | **0.36** | **168** | P | **Pn** | **09 21 18.5** | **+0.6** |
| RIGZ | | | | S | **Sn** | **09 21 26.7** | **+2.7** |
| **RUGZ** | **Raukumara Rang** | **0.39** | **2** | P | **Pn** | **09 21 17.7** | **-0.7** |
| **GISS** | **Gisborne 2ZG** | **0.42** | **138** | P | **Pn** | **09 21 17.8** | **-0.9** |
| **URZ** | **Urewera** | **0.45** | **282** | P | **Pn** | **09 21 18.6** | **-0.4** |
| **URZ** | **Urewera** | **0.45** | **282** | S | **Sn** | **09 21 26.2** | **+0.4** |
| **CNGZ** | **Carnagh Statio** | **0.45** | **107** | P | **Pn** | **09 21 19.8** | **+0.7** |
| **OPCS** | **Opotiki Colleg** | **0.45** | **319** | P | **Pn** | **09 21 17.4** | **-1.6** |
| **SNGZ** | **Shannon Statio** | **0.50** | **211** | P | **Pn** | **09 21 20.2** | **+0.4** |
| SNGZ | | | | S | **Sn** | **09 21 29.8** | **+2.5** |
| **PUZ** | **Puketiti** | **0.55** | **59** | P | **Pn** | **09 21 20.7** | **+0.3** |
| PUZ | | | | S | **Sn** | **09 21 30.3** | **+1.9** |
| **PKGZ** | **Pakihiroa** | **0.59** | **34** | P | **Pn** | **09 21 21.0** | **-0.1** |
| **PRGZ** | **Paritu Road** | **0.59** | **163** | P | **Pn** | **09 21 21.1** | **0.0** |
| **RTZ** | **Ruatahuna** | **0.60** | **244** | P | **Pn** | **09 21 21.4** | **+0.2** |
| **HAZ** | **Te Kaha** | **0.60** | **9** | P | **Pn** | **09 21 20.9** | **-0.3** |
| HAZ | | | | S | **Sn** | **09 21 30.4** | **+0.7** |
| **KNZ** | **Kokohu** | **0.67** | **179** | P | **Pn** | **09 21 22.0** | **-0.1** |
| **MUGZ** | **Murupara** | **0.71** | **260** | P | **Pn** | **09 21 22.8** | **0.0** |
| **WHRZ** | **Whale Island** | **0.74** | **312** | P | **Pn** | **09 21 23.1** | **0.0** |
| **EDRZ** | **Edgecumbe** | **0.77** | **288** | P | **Pn** | **09 21 23.6** | **0.0** |
| **WHHZ** | **Waihua** | **0.80** | **205** | P | **Pn** | **09 21 24.6** | **+0.7** |
| **WMGZ** | **Waiomatatini S** | **0.80** | **48** | P | **Pn** | **09 21 23.9** | **0.0** |
| **MTHZ** | **Maungataniwha** | **0.81** | **232** | P | **Pn** | **09 21 23.7** | **-0.5** |
| **MHGZ** | **Mahia Peninsul** | **0.82** | **167** | P | **Pn** | **09 21 24.1** | **-0.1** |
| **MARZ** | **Manawahe** | **0.86** | **295** | P | **Pn** | **09 21 24.5** | **-0.3** |
| **RRRZ** | **Republican Roa** | **0.90** | **271** | P | **Pn** | **09 21 25.5** | **+0.1** |
| **WIZ** | **White Island** | **0.91** | **335** | P | **Pn** | **09 21 24.8** | **-0.6** |
| **WSRZ** | **White Island S** | **0.92** | **335** | P | **Pn** | **09 21 25.5** | **0.0** |
| **TARZ** | **Mount Tarawera** | **0.92** | **277** | P | **Pn** | **09 21 25.9** | **+0.2** |
| **MXZ** | **Matakaoa Point** | **0.94** | **33** | P | **Pn** | **09 21 26.7** | **+0.9** |
| **MXZ** | **Matakaoa Point** | **0.94** | **33** | P | **Pn** | **09 21 26.2** | **+0.3** |
| **NMHZ** | **Naumai** | **1.00** | **222** | P | **Pn** | **09 21 27.8** | **+1.0** |
| **PRRZ** | **Plateau Road** | **1.01** | **261** | P | **Pn** | **09 21 26.9** | **+0.1** |
| **OPRZ** | **Ohinepanea** | **1.01** | **300** | P | **Pn** | **09 21 26.1** | **-0.7** |
| **OMRZ** | **Omania** | **1.05** | **283** | P | **Pn** | **09 21 27.1** | **-0.2** |
| **ARHZ** | **Aropaoanui** | **1.05** | **210** | P | **Pn** | **09 21 28.1** | **+0.7** |
| **ALRZ** | **Allen Road** | **1.06** | **258** | P | **Pn** | **09 21 27.7** | **+0.2** |
| **LIRZ** | **Lichensteins R** | **1.07** | **289** | P | **Pn** | **09 21 27.2** | **-0.4** |
| **HRRZ** | **Handcock Road** | **1.09** | **268** | P | **Pn** | **09 21 28.2** | **+0.3** |
| **MRHZ** | **Matea Rd** | **1.09** | **243** | P | **Pn** | **09 21 28.3** | **+0.3** |
| **HSRZ** | **Hossack Road** | **1.12** | **272** | P | **Pn** | **09 21 28.6** | **+0.3** |
| **KARZ** | **Kaharoa** | **1.17** | **286** | P | **Pn** | **09 21 28.7** | **-0.3** |
| **UTU** | **Utuhina** | **1.17** | **278** | P | **Pn** | **09 21 29.8** | **+0.8** |
| **WPRZ** | **Whakapapatarin** | **1.19** | **262** | P | **Pn** | **09 21 29.6** | **+0.3** |
| **GRRZ** | **Galatos Road** | **1.22** | **270** | P | **Pn** | **09 21 30.1** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **1.22** | **228** | P | **Pn** | **09 21 30.4** | **+0.6** |
| **TGRZ** | **Tauranga** | **1.27** | **299** | P | **Pn** | **09 21 29.7** | **-0.7** |
| **MCHZ** | **McNeill Hill** | **1.33** | **214** | P | **Pn** | **09 21 31.8** | **+0.6** |
| **WHKZ** | **Whakaora** | **1.38** | **256** | P | **Pn** | **09 21 34.1** | **+2.2** |
| **CKHZ** | **Cape Kidnapper** | **1.38** | **199** | P | **Pn** | **09 21 31.5** | **-0.5** |
| **KWHZ** | **Kaweka Forest** | **1.44** | **222** | P | **Pn** | **09 21 33.2** | **+0.3** |
| **KUTZ** | **Kaahu Road** | **1.45** | **264** | P | **Pn** | **09 21 33.1** | **+0.1** |
| **RITZ** | **Rihia Road** | **1.54** | **246** | P | **Pn** | **09 21 34.8** | **+0.6** |
| **KAHZ** | **Kahuranaki** | **1.56** | **203** | P | **Pn** | **09 21 34.1** | **-0.4** |
| **RATZ** | **Rangitukua** | **1.57** | **250** | P | **Pn** | **09 21 35.5** | **+0.9** |
| **KRHZ** | **Kereru** | **1.64** | **218** | P | **Pn** | **09 21 35.1** | **-0.4** |
| **TMVZ** | **Te Maari** | **1.71** | **243** | P | **Pn** | **09 21 36.8** | **+0.2** |
| **ETVZ** | **East Tongariro** | **1.72** | **242** | P | **Pn** | **09 21 36.9** | **+0.2** |
| **NTVZ** | **North Tongarir** | **1.72** | **244** | P | **Pn** | **09 21 37.1** | **+0.4** |
| **OTVZ** | **Oturere** | **1.76** | **242** | P | **Pn** | **09 21 41.4** | **+4.1** |
| **NNVZ** | **North Ngauruho** | **1.78** | **243** | P | **Pn** | **09 21 38.6** | **+1.0** |
| **PXZ** | **Pawanui** | **1.79** | **200** | P | **Pn** | **09 21 36.0** | **-1.5** |
| **SNVZ** | **South Ngauruho** | **1.79** | **242** | P | **Pn** | **09 21 38.4** | **+0.7** |
| **WTVZ** | **West Tongariro** | **1.79** | **244** | P | **Pn** | **09 21 39.8** | **+2.1** |
| **NGZ** | **Ngauruhoe** | **1.81** | **242** | P | **Pn** | **09 21 38.6** | **+0.6** |
| **TOZ** | **Tahuroa Road** | **1.82** | **289** | P | **Pn** | **09 21 37.3** | **-0.6** |
| **TUVZ** | **Tukino** | **1.82** | **239** | P | **Pn** | **09 21 38.8** | **+0.8** |
| **MOVZ** | **Moawhango** | **1.83** | **234** | P | **Pn** | **09 21 38.3** | **+0.2** |
| **COVZ** | **Chateau Observ** | **1.86** | **242** | P | **Pn** | **09 21 41.2** | **+2.6** |
| **WHVZ** | **Whangaehu Hut** | **1.87** | **240** | P | **Pn** | **09 21 39.8** | **+0.9** |
| **FWVZ** | **Far West T-bar** | **1.88** | **241** | P | **Pn** | **09 21 39.9** | **+0.9** |
| **MAVZ** | **Matarangi** | **1.88** | **240** | P | **Pn** | **09 21 40.2** | **+1.1** |
| **TWVZ** | **Taurewa** | **1.88** | **247** | P | **Pn** | **09 21 41.2** | **+2.3** |
| **WNVZ** | **Wahianoa** | **1.88** | **238** | P | **Pn** | **09 21 39.8** | **+0.8** |
| **TRVZ** | **Turoa** | **1.90** | **240** | P | **Pn** | **09 21 40.8** | **+1.4** |
| **PNHZ** | **Pukenui** | **1.93** | **216** | P | **Pn** | **09 21 38.5** | **-1.0** |
| **WPHZ** | **Waipukurau** | **1.96** | **209** | P | **Pn** | **09 21 38.7** | **-1.2** |
| **MTVZ** | **Mangateitei** | **2.00** | **238** | P | **Pn** | **09 21 40.8** | **+0.3** |
| **PKVZ** | **Pokaka** | **2.04** | **242** | P | **Pn** | **09 21 42.6** | **+1.6** |
| **PRHZ** | **Porangahau** | **2.07** | **202** | P | **Pn** | **09 21 39.9** | **-1.5** |
| **TSZ** | **Takapari Road** | **2.16** | **217** | P | **Pn** | **09 21 41.3** | **-1.3** |
| **HIZ** | **Hauiti** | **2.21** | **265** | P | **Pn** | **09 21 44.2** | **+0.9** |
| **HIZ** | **Hauiti** | **2.21** | **265** | P | **Pn** | **09 21 44.0** | **+0.7** |
| **KUZ** | **Kuaotunu** | **2.23** | **316** | P | **Pn** | **09 21 42.2** | **-1.3** |
| **DVHZ** | **Dannevirke** | **2.26** | **210** | P | **Pn** | **09 21 42.2** | **-1.9** |
| **ANWZ** | **Angora Road** | **2.30** | **203** | P | **Pn** | **09 21 42.7** | **-1.8** |
| **MKAZ** | **Moumakai** | **2.34** | **301** | P | **Pn** | **09 21 44.4** | **-0.7** |
| **VRZ** | **Vera Road** | **2.40** | **250** | P | **Pn** | **09 21 47.6** | **+1.6** |
| **WAZ** | **Wanganui** | **2.51** | **235** | P | **Pn** | **09 21 48.7** | **+1.2** |
| **WIAZ** | **Waiheke Island** | **2.54** | **307** | P | **Pn** | **09 21 47.5** | **-0.4** |
| **PRWZ** | **Pori Road** | **2.56** | **210** | P | **Pn** | **09 21 46.4** | **-1.8** |
| **BFZ** | **Birch Farm** | **2.57** | **205** | P | **Pn** | **09 21 46.1** | **-2.2** |
| **MBAZ** | **Motutapu North** | **2.71** | **305** | P | **Pn** | **09 21 50.1** | **-0.1** |
| **AWAZ** | **Awhitu Peninsu** | **2.72** | **297** | P | **Pn** | **09 21 50.7** | **+0.3** |
| **TIWZ** | **Tintock** | **2.78** | **209** | P | **Pn** | **09 21 49.3** | **-2.0** |
| **PREZ** | **Palmer Road** | **2.91** | **249** | P | **Pn** | **09 21 56.5** | **+3.5** |
| **RVAZ** | **Riverhead Bore** | **2.92** | **302** | P | **Pn** | **09 21 53.2** | **+0.2** |
| **NEZ** | **North Egmont** | **2.93** | **251** | P | **Pn** | **09 21 56.1** | **+2.7** |
| **KHEZ** | **Kahui Hut** | **3.00** | **251** | P | **Pn** | **09 21 57.2** | **+2.9** |
| **KIW** | **Kapiti Island** | **3.29** | **219** | P | **Pn** | **09 21 55.7** | **-2.5** |
| **TKNZ** | **Takaka Hill** | **4.51** | **232** | P | **Pn** | **09 22 13.1** | **-1.9** |
| **QRZ** | **Quartz Range** | **4.67** | **236** | P | **Pn** | **09 22 15.7** | **-1.5** |
| **QRZ** | **Quartz Range** | **4.67** | **236** | P | **Pn** | **09 22 15.1** | **-2.1** |
| **KHZ** | **Kahutara** | **5.14** | **217** | P | **Pn** | **09 22 19.6** | **-3.9** |
| **RPZ** | **Rata Peaks** | **7.32** | **221** | P | **Pn** | **09 22 50.5** | **-3.1** |
| **ODZ** | **Otahua Downs** | **8.50** | **216** | P | **Pn** | **09 23 06.0** | **-3.7** |

**IDC 09 09:25:12.6±1.6, 13°71N×120°27E, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=165.0km s-min=26.2km az=66.0, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **35.93** | **344** | P | P | 09 32 14.6 | -0.3 |
| | 0.7nm,0.4s,baz=162,slow=9.8,SNR=4.2 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **39.47** | **160** | P | P | 09 32 44.8 | -0.1 |
| | 0.3nm,0.5s,baz=331,slow=7.5,SNR=4.5 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.78** | **324** | P | P | 09 33 36.2 | +0.2 |
| | 0.2nm,0.4s,baz=127,slow=9.7,SNR=5.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.95** | **326** | P | P | 09 34 08.0 | -0.2 |
| | 0.5nm,0.3s,baz=120,slow=8.3,SNR=7.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |

**IDC 09 09:35:38.8±3.0, 53°64N×86°93E, h0km, mbtmp2.6/2, ML2.4/2, Error ellipse: s-maj=27.3km s-min=17.4km az=63.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.29** | **285** | I | I | 09 43 50.0 | |
| | baz=107,slow=317,SNR=2.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.29** | **284** | Pg | Pg | 09 36 02.4 | -1.2 |
| | 1.3nm,0.3s,baz=100,slow=17,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 09 36 20.5 | |
| | 1.0nm,0.3s,baz=109,slow=25,SNR=5.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.99** | **243** | Pn | Pn | 09 37 09.4 | +0.7 |
| | baz=64,slow=14,SNR=1.9 | | | | | | |
| KURBB | | | | Lg | Lg | 09 38 50.8 | |
| | baz=60,slow=32,SNR=3.5 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.47** | **205** | Pn | Pn | 09 37 30.6 | +1.5 |
| | 0.2nm,0.3s,baz=25,slow=14,SNR=3.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

**IDC 09 09:55:10.5±2.4, 54°27N×86°12E, h0km, mbtmp3.3/2, ML3.0/2, Error ellipse: s-maj=18.5km s-min=11.6km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.83** | **248** | I | I | 10 00 40.0 | |
| | baz=68,slow=315,SNR=2.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.83** | **248** | Pg | Pg | 09 55 24.8 | -1.6 |
| | 1.9nm,0.3s,baz=69,slow=17,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 09 55 38.7 | |
| | 7.8nm,0.3s,baz=64,slow=26,SNR=15 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.90** | **235** | Pn | Pn | 09 56 40.3 | +1.1 |
| | 0.2nm,0.3s,baz=51,slow=13,SNR=11 | | | | | | |
| KURBB | | | | Lg | Lg | 09 58 19.4 | |
| | baz=56,slow=33,SNR=2.0 | | | | | | |
| | 1.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.87** | **200** | Pn | Pn | 09 57 07.0 | +0.9 |
| | 0.4nm,0.3s,baz=22,slow=12,SNR=9.7 | | | | | | |
| MKAR | | | | Lg | Lg | 09 59 17.8 | |
| | 0.1nm,0.3s,baz=13,slow=34,SNR=1.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ISAL** | **Salakas** | **33.57** | **297** | *e*P | P | 10 01 41.1 | -11 |

*HEL **09** 09:59:44.4±0.2, 64°68N×30°62E, h0km, ML2.0, Suspected explosion*
*IDC **09** 09:59:45.9±3.2, 64°63N×30°44E, h0km, mbtmp2.9/3, ML2.0/3, Error ellipse: s-maj=50.1km s-min=9.9km az=103.0*
*KOLA **09** 09:59:45.6, 64°63N×30°79E, h0km, ML2.3, Error ellipse: s-maj=17.9km s-min=9.6km az=160.0, Kostomuksha, Karelia*
**ISC 09 09:59:43.8±1.0, 64°66N±0°02×30°36E±0°05, h0km, n36, σ1s66/48, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RMF** | **Romuvaara** | **0.48** | **203** | PG | **Pb** | **09 59 54.6** | **-0.5** |
| | baz=31 | | | | | | |
| RMF | | | | MSG | | 10 00 02.0 | |
| | comp=Z,31nm,0.2s | | | | | | |
| **MSF** | **Maaselka** | **1.38** | **337** | PG | **Pg** | **10 00 09.9** | **-0.3** |
| | baz=151 | | | | | | |
| MSF | | | | SG | **Sg** | **10 00 28.0** | **-0.1** |
| **KU6** | **Riekki** | **1.39** | **352** | PG | **Pn** | **10 00 09.2** | **-1.3** |
| KU6 | | | | MSG | | 10 00 26.1 | |
| | comp=Z,15nm,0.2s | | | | | | |
| KU6 | | | | SG | **Sg** | **10 00 27.4** | **-1.0** |
| **NIF** | **Nilsia** | **1.70** | **223** | PG | **Pg** | **10 00 16.7** | **+0.4** |
| **OLKF** | **Oulanka, Finla** | **1.72** | **347** | PG | **Pn** | **10 00 15.4** | **+0.5** |
| OLKF | | | | MSG | | 10 00 36.0 | |
| | comp=Z,12nm,0.2s | | | | | | |
| OLKF | | | | SN | **Sn** | **10 00 38.4** | **+0.8** |
| **JOF** | **Joensuu** | **1.80** | **166** | *e*P | **Pn** | **10 00 16.0** | **0.0** |
| **JOF** | **Joensuu** | **1.80** | **166** | PG | **Pn** | **10 00 16.3** | **+0.3** |
| **RANF** | **Ranua** | **2.03** | **314** | PG | **Pb** | **10 00 21.2** | **-0.2** |
| RANF | | | | SG | **Sg** | **10 00 49.0** | **+0.1** |
| **OBF4** | **Vikkela, Lumij** | **2.26** | **276** | PG | **Pg** | **10 00 26.4** | **-0.7** |
| | baz=95 | | | | | | |
| OBF4 | | | | MSG | | 10 00 54.4 | |
| | comp=Z,9.2nm,0.2s | | | | | | |
| **OUF** | **Merijarvi** | **2.45** | **266** | PB | **Pb** | **10 00 27.9** | **-0.8** |
| OUF | | | | MSG | | 10 01 00.1 | |
| | comp=Z,14nm,0.2s | | | | | | |
| OUF | | | | SG | **Sg** | **10 01 02.6** | **+0.1** |
| **RNF** | **Rovaniemi** | **2.66** | **319** | PG | **Pb** | **10 00 32.9** | **+0.6** |
| RNF | | | | SG | **Sg** | **10 01 08.5** | **-0.8** |
| **SUF** | **Sumiainen** | **2.70** | **226** | PB | **Pb** | **10 00 32.7** | **-0.3** |
| | baz=39 | | | | | | |
| SUF | | | | MSG | | 10 01 06.8 | |
| | comp=Z,3.3nm,0.2s | | | | | | |
| **TOF** | **Tornio** | **2.91** | **302** | PG | **Pg** | **10 00 38.2** | **-1.2** |
| | baz=117 | | | | | | |
| TOF | | | | MSG | | 10 01 12.0 | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| TOF | | | | SB | **Sg** | **10 01 13.8** | **-3.3** |
| **VRF** | **Varrio** | **3.12** | **355** | PB | **Pn** | **10 00 36.3** | **+2.1** |
| VRF | | | | MSG | | 10 01 15.6 | |
| | comp=Z,5.0nm,0.2s | | | | | | |
| **KAF** | **Kangasniemi** | **3.14** | **217** | PG | **Pb** | **10 00 40.5** | **+0.1** |
| **APA0** | **Apatity Array** | **3.15** | **19** | P | **Pn** | **10 00 35.4** | **+0.8** |
| APA0 | | | | S | **Sn** | **10 01 11.8** | **-1.0** |
| **KALU** | **Kalix** | **3.18** | **295** | SG | **Sg** | **10 01 25.7** | **-0.3** |
| **SGF** | **Sodankyl** | **3.21** | **333** | PB | **Pn** | **10 00 38.2** | **+2.8** |
| SGF | | | | SG | **Sg** | **10 01 25.0** | **-1.6** |
| **RUF** | **Ruokolahti** | **3.31** | **192** | PN | **Pn** | **10 00 39.4** | **+2.6** |
| **KEF** | **Keuruu** | **3.51** | **227** | *e*P | Pn | 10 00 33.7 | -5.9 |
| **KEF** | **Keuruu** | **3.51** | **227** | PB | **Pb** | **10 00 44.1** | **-2.6** |
| **KLF** | **Kolari** | **3.68** | **318** | PB | **Pb** | **10 00 46.7** | **-2.9** |
| **FIA0** | **FINESS Array S** | **3.77** | **213** | PG | **Pb** | **10 00 52.3** | **+1.2** |
| | baz=32 | | | | | | |
| FIA0 | | | | SG | **Sg** | **10 01 43.8** | **-0.9** |
| **FINES** | **FINESS Array B** | **3.77** | **213** | Pn | **Pn** | **10 00 44.8** | **+1.7** |
| | comp=Z,0.2nm,0.3s,baz=36,slow=13,SNR=2.4 | | | | | | |
| FINES | | | | Lg | Lg | 10 01 43.1 | |
| | comp=Z,1.1nm,0.3s,baz=40,slow=28,SNR=10 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **VAF** | **Ylistaro** | **3.77** | **248** | *e*P | **Pb** | **10 00 47.6** | **-3.6** |
| **VAF** | **Ylistaro** | **3.77** | **248** | PB | **Pb** | **10 00 49.7** | **-1.5** |
| **PAJU** | **Pajala** | **3.81** | **312** | PB | **Pb** | **10 00 50.0** | **-1.9** |
| PAJU | | | | SG | **Sg** | **10 01 44.9** | **-1.2** |
| **RAJF** | **Raja-Jooseppi** | **3.92** | **349** | PN | **Pn** | **10 00 46.0** | **+0.8** |
| **VJF** | **Virojoki** | **4.33** | **199** | SG | **Sg** | **10 02 00.3** | **-2.5** |
| **HEF** | **Hetta** | **4.62** | **328** | SG | **Sb** | **10 02 06.5** | **+4.7** |
| **ARCES** | **ARCESS Array B** | **5.25** | **341** | P | **Pn** | **10 01 05.9** | **+2.4** |
| ARCES | | | | S | **Sn** | **10 02 04.8** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **5.25** | **341** | Pn | **Pn** | **10 01 03.8** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=154,slow=13,SNR=8.7 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 02 02.5** | **-2.1** |
| | comp=Z,0.1nm,0.3s,baz=159,slow=26,SNR=1.9 | | | | | | |
| ARCES | | | | Lg | Lg | 10 02 26.3 | |
| | comp=Z,0.5nm,0.3s,baz=150,slow=34,SNR=7.7 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **VADS** | **Vadso** | **5.50** | **356** | P | **Pn** | **10 01 07.1** | **+0.2** |
| VADS | | | | S | **Sn** | **10 02 10.3** | **-0.4** |
| **I37NO** | **I37NO** | **6.41** | **319** | I | I | 10 37 00.0 | |
| | baz=127,slow=319,SNR=5.6 | | | | | | |
| **FAUS** | **Fauske** | **6.72** | **301** | S | **Sn** | **10 02 40.8** | **+0.1** |
| **HFS** | **Hagfors** | **8.96** | **247** | Pn | **Pn** | **10 01 54.3** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=56,slow=11,SNR=1.2 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |

*SJA **09** 10:18:42.5±0.6, 36°82S×72°99W, h8km, ML3.8, MW3.4*
*GUC **09** 10:18:46.9±0.8, 36°90S×72°85W, h19km±4km, ML3.9*
*NEIC **09** 10:18:48.4±1.4, 36°84S±0°05×72°85W±0°08, h42km±14km, mb4.2/5, ML3.9(GUC), Error ellipse: s-maj=9.8km s-min=7.8km az=95.0*
*IDC **09** 10:18:51.5±6.6, 37°05S×73°19W, h59km±68km, mb3.4/4, mbtmp3.7/5, ML3.8/1, MS3.0/3, Error ellipse: s-maj=119.8km s-min=22.3km az=87.0*
**ISC 09 10:18:45.4±3.1, 36°81S±0°03×72°96W±0°04, h17km±20km, n84, σ1s61/106, mb3.9/4, 3C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BI02** | **San Fabin de** | **1.36** | **84** | | **Pn** | **10 19 09.6** | **-0.1** |
| BI02 | | | | Sn | **Sn** | **10 19 25.4** | **-2.0** |
| **ML02** | **Panimavida** | **1.62** | **50** | Pn | **Pn** | **10 19 13.9** | **+0.7** |
| **ML02** | **Panimavida** | **1.62** | **50** | *e*P | **Pn** | **10 19 12.6** | **-0.7** |
| ML02 | | | | IAML | | 10 19 44.0 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **ML02** | **Panimavida** | **1.62** | **50** | *e*P | **Pb** | **10 19 14.4** | **-0.5** |
| ML02 | | | | *e*S | **Sn** | **10 19 33.8** | **0.0** |
| ML02 | | | | IAML | | 10 19 38.9 | |
| | comp=N,3μm,0.6s | | | | | | |
| **BI04** | **Isla Mocha** | **1.76** | **204** | *e*P | **Pn** | **10 19 15.3** | **+0.2** |
| BI04 | | | | *e*S | **Sn** | **10 19 36.6** | **-0.6** |
| BI04 | | | | IAML | | 10 19 47.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| **GO05** | **Huala** | **1.98** | **25** | Pn | **Pn** | **10 19 19.9** | **+1.7** |
| **GO05** | **Huala** | **1.98** | **25** | *e*P | **Pn** | **10 19 19.5** | **+1.4** |
| **GO05** | **Huala** | **1.98** | **25** | *e*P | **Pb** | **10 19 20.2** | **-0.8** |
| GO05 | | | | *e*S | **Sb** | **10 19 46.0** | **+0.7** |
| GO05 | | | | IAML | | 10 19 55.4 | |
| | comp=N,976nm,0.4s | | | | | | |
| **LC02** | **Puerto Saavedr** | **2.01** | **190** | Pn | **Pn** | **10 19 19.4** | **+0.9** |
| **LC02** | **Puerto Saavedr** | **2.01** | **190** | *e*P | **Pn** | **10 19 18.9** | **+0.3** |
| LC02 | | | | *e*S | **Sn** | **10 19 43.4** | **+0.1** |
| **BO03** | **Pichilemu** | **2.45** | **20** | *e*P | **Pn** | **10 19 26.0** | **+1.5** |
| BO03 | | | | *e*S | **Sb** | **10 19 57.5** | **-1.2** |
| BO03 | | | | IAML | | 10 20 05.4 | |
| | comp=N,384nm,0.2s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.68** | **42** | Pn | **Pn** | **10 19 28.8** | **+1.0** |
| **BO02** | **Sierra Bellavi** | **2.68** | **42** | *e*P | **Pn** | **10 19 29.3** | **+1.4** |
| BO02 | | | | *e*S | **Sn** | **10 19 55.4** | **-4.5** |
| BO02 | | | | IAML | | 10 20 12.5 | |
| | comp=Z,509nm,0.5s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.68** | **42** | *e*P | **Pn** | **10 19 29.2** | **+1.4** |
| BO02 | | | | *e*S | **Sn** | **10 20 00.8** | **+0.8** |
| BO02 | | | | IAML | | 10 20 16.5 | |
| | comp=N,1μm,0.2s | | | | | | |
| **BO01** | **Tunca** | **2.85** | **33** | Pn | **Pn** | **10 19 31.0** | **+0.9** |
| **BO01** | **Tunca** | **2.85** | **33** | *e*P | **Pn** | **10 19 30.6** | **+0.5** |
| BO01 | | | | *e*S | **Sb** | **10 20 10.4** | **-0.1** |
| BO01 | | | | IAML | | 10 20 18.3 | |
| | comp=Z,268nm,0.5s | | | | | | |
| **BO01** | **Tunca** | **2.85** | **33** | *e*P | **Pn** | **10 19 31.6** | **+1.4** |
| BO01 | | | | *e*S | **Sn** | **10 20 06.5** | **+2.4** |
| BO01 | | | | IAML | | 10 20 19.2 | |
| | comp=N,352nm,0.7s | | | | | | |
| BO01 | | | | IAML | | 10 20 19.7 | |
| | comp=E,365nm,0.3s | | | | | | |
| **LR03** | **Panguipulli** | **2.86** | **170** | Pn | **Pn** | **10 19 30.9** | **+0.7** |
| **LR03** | **Panguipulli** | **2.86** | **170** | *e*P | **Pn** | **10 19 30.7** | **+0.4** |
| LR03 | | | | IAML | | 10 20 19.0 | |
| | comp=Z,935nm,0.4s | | | | | | |
| **LR03** | **Panguipulli** | **2.86** | **170** | *e*S | **Sn** | **10 20

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| H03S2 | | | | | T | T | 10 25 47.3 | | |
| | baz=123,slow=75,SNR=631 | | | | | | | | |
| **VA04** | **Juan Fernndez** | **5.75** | **302** | | Pn | **Pn** | **10 20 13.2** | **+3.2** |
| **CO02** | **Combarbal** | **5.82** | **17** | | Pn | **Pn** | **10 20 11.7** | **+0.7** |
| **H03N1** | **Juan Fernandez** | **5.92** | **303** | | P | **Pn** | **10 20 15.9** | **+3.8** |
| H03N1 | | | | | S | **Sn** | **10 21 17.6** | **-1.9** |
| **H03N3** | **Juan Fernandez** | **5.92** | **303** | | P | **Pn** | **10 20 16.1** | **+4.0** |
| H03N3 | | | | | S | **Sn** | **10 21 19.0** | **-0.5** |
| **H03N2** | **Juan Fernandez** | **5.94** | **303** | | P | **Pn** | **10 20 16.3** | **+4.0** |
| H03N2 | | | | | S | **Sn** | **10 21 18.2** | **-1.6** |
| **CO06** | **Fray Jorge** | **6.22** | **11** | | Pn | **Pn** | **10 20 16.1** | **-0.3** |
| **CO03** | **El Pedregal** | **6.25** | **18** | | Pn | **Pn** | **10 20 17.8** | **+0.9** |
| **CO01** | **Juntas del Tor** | **7.22** | **20** | | Pn | **Pn** | **10 20 32.2** | **+1.8** |
| **LCO** | **Las Campanas** | **8.00** | **14** | | Pn | **Pn** | **10 20 41.0** | **-0.2** |
| **AC05** | **El Transito** | **8.26** | **17** | | Pn | **Pn** | **10 20 44.8** | **+0.1** |
| **AC04** | **Llanos de Chal** | **8.72** | **11** | | Pn | **Pn** | **10 20 51.2** | **+0.4** |
| **TRQA** | **Tornquist** | **8.82** | **101** | | Pn | **Pn** | **10 20 51.9** | **-0.2** |
| **LVC** | **Limon Verde** | **14.58** | **15** | | LR | LR | 10 27 32.3 | | |
| | comp=Z,60nm,20.8s,baz=186,slow=35 | | | | | | | | |
| **TA01** | **Diego Aracena** | **16.36** | **9** | | Pn | **Pn** | **10 22 35.7** | **+1.3** |
| TA01 | | | | | IAmb | IAmb | 10 22 38.5 | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **ITAB** | **Concordia** | **20.04** | **67** | | | **P** | **10 23 16.1** | **-1.5** |
| **LPAZ** | **La Paz** | **20.88** | **13** | | P | **P** | **10 23 26.7** | **-0.7** |
| **LPAZ** | **La Paz** | **20.88** | **13** | | P | Pn | 10 23 33.3 | +3.3 |
| | comp=Z,1.3nm,0.7s,baz=174,slow=9.4,SNR=6.0 comp=Z,1.3nm,0.7s | | | | | | | | |
| **NNA** | **Nana** | **24.96** | **351** | | LR | LR | 10 32 32.1 | | |
| | comp=Z,35nm,18.6s,baz=270,slow=33 | | | | | | | | |
| **BELA** | **Belgrano 2** | **44.26** | **169** | | P | **P** | **10 26 53.0** | **-0.5** |
| BELA | | | | | IAmb | IAmb | 10 26 54.1 | | |
| | comp=Z,3.5nm,1.1s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **53.43** | **180** | | P | **P** | **10 28 04.0** | **-0.2** |
| QSPA | | | | | IAmb | IAmb | 10 28 07.1 | | |
| | comp=Z,3.4nm,1.0s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **53.43** | **180** | | P | **P** | **10 28 04.3** | **+0.1** |
| | comp=Z,4.6nm,1.2s,baz=130,slow=4.9,SNR=11 comp=Z,4.6nm,1.2s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.84** | **332** | | P | **P** | **10 30 08.3** | **+1.1** |
| | comp=Z,0.2nm,0.5s,baz=158,slow=8.9,SNR=5.0 comp=Z,0.2nm,0.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.77** | **326** | | P | **P** | **10 31 25.3** | **+1.6** |
| | comp=Z,0.4nm,0.8s,baz=163,slow=3.5,SNR=3.9 comp=Z,0.4nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **117.95** | **209** | | PKP | **PKPdf** | **10 37 29.5** | **-2.1** |
| | comp=Z,0.4nm,0.5s,baz=163,slow=1.3,SNR=7.9 | | | | | | | | |

*IDC **09** 10:22:12.3±1.3,35°48N×70°67E,h0km,mb3.8/7, mbtmp3.8/10,ML3.8/3,Error ellipse: s-maj=26.9km s-min=25.8km az=82.0*
*NNC **09** 10:22:27.5±5.9,36°46N×70°73E,h0km,mb4.5,mpv4.2, Error ellipse: s-maj=48.8km s-min=44.3km az=142.0*
**ISC 09 10:22:26.0±1.1,36°01N±0°09×70.8E±0°.1,h100km,n22, σ1§68/27,mb3.7/6,3C-1D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **6.52** | **20** | P | **Pn** | **10 24 00.9** | **+1.3** |
| | SNR=23 | | | | | | |
| **EKS2** | **Erkin-Say** | **7.04** | **19** | P | **Pn** | **10 24 08.6** | **+2.1** |
| | SNR=8.8 | | | | | | |
| **KK31** | **Karatay Array** | **7.08** | **359** | ⇑P | **Pn** | **10 24 07.2** | **+0.3** |
| | 7.5nm,0.4s,baz=191,slow=15,SNR=120 | | | | | | |
| KK31 | | | | S | **Sn** | **10 25 26.8** | **+0.9** |
| | 7.5nm,0.4s,baz=188,slow=23,SNR=8.1 | | | | | | |
| **AAK** | **Ala-Archa** | **7.22** | **23** | P | **Pn** | **10 24 10.4** | **+1.4** |
| | SNR=7.7 | | | | | | |
| **AAK** | **Ala-Archa** | **7.22** | **23** | Pn | **Pn** | **10 24 09.9** | **+0.9** |
| | 4.8nm,0.3s,baz=208,slow=7.1,SNR=11 | | | | | | |
| AAK | | | | Sn | **Sn** | **10 25 28.8** | **-0.6** |
| | 0.6nm,0.3s,baz=322,slow=19,SNR=1.5 11nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **7.22** | **23** | P | **Pn** | **10 24 09.9** | **+0.9** |
| | 6.3nm,0.3s | | | | | | |
| AAK | | | | S | **Sn** | **10 25 28.2** | **-1.2** |
| | 4.0nm,0.4s | | | | | | |
| **CHMS** | **Chumysh** | **7.63** | **23** | P | **Pn** | **10 24 15.2** | **+0.9** |
| | SNR=7.5 | | | | | | |
| **CHMS** | **Chumysh** | **7.63** | **23** | ⇓P | **Pn** | **10 24 15.1** | **+0.8** |
| | 12nm,0.6s | | | | | | |
| CHMS | | | | ⇑S | **Sn** | **10 25 35.6** | **-3.6** |
| | 4.7nm,0.7s | | | | | | |
| **USP** | **Ospenovka** | **7.80** | **21** | P | **Pn** | **10 24 17.7** | **+1.1** |
| | SNR=7.1 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.85** | **27** | P | **Pn** | **10 24 18.2** | **+0.7** |
| | SNR=9.4 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.85** | **27** | ⇑P | **Pn** | **10 24 17.5** | **0.0** |
| | 6.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.80** | **35** | Pn | **Pn** | **10 25 37.1** | **-0.1** |
| | 0.1nm,0.3s,baz=220,slow=10,SNR=2.0 0.3nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **15.42** | **332** | P | **Pn** | **10 25 57.5** | **-0.3** |
| | 2.1nm,0.3s,baz=159,slow=12,SNR=114 | | | | | | |
| AB31 | | | | S | **Sn** | **10 28 43.6** | **-4.4** |
| | 3.1nm,0.7s,baz=154,slow=23,SNR=8.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.65** | **19** | Pn | **P** | **10 26 03.7** | **+1.1** |
| | baz=205,slow=9.9 | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.11** | **331** | P | **P** | **10 26 20.1** | **+1.2** |
| | 0.6nm,0.3s,baz=132,slow=12,SNR=7.5 1.4nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.44** | **24** | P | **P** | **10 26 55.8** | **+0.6** |
| | 2.1nm,0.4s,baz=226,slow=10,SNR=8.3 2.1nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **37.78** | **327** | P | **P** | **10 29 33.8** | **+1.8** |
| | 2.4nm,0.7s,baz=111,slow=10,SNR=7.0 2.4nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.52** | **338** | P | **P** | **10 30 05.1** | **+2.2** |
| | 1.5nm,0.6s,baz=108,slow=6.0,SNR=1.9 1.5nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **43.33** | **322** | P | **P** | **10 30 19.0** | **+1.3** |
| | 0.8nm,0.5s,baz=104,slow=11,SNR=5.2 0.8nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.51** | **269** | P | **P** | **10 32 56.4** | **-2.6** |
| | 0.6nm,0.7s,baz=50,slow=6.6,SNR=2.8 0.6nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **75.30** | **16** | P | **P** | **10 33 58.0** | **+0.3** |
| | 0.4nm,0.8s,baz=293,slow=4.7,SNR=4.3 0.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.90** | **122** | P | **P** | **10 34 33.6** | **-0.9** |
| | 0.2nm,0.5s,baz=325,slow=5.0,SNR=9.7 0.2nm,0.5s | | | | | | |

**IDC 09 10:30:11.5±3.4,30°35S×177°26W,h0km,mb3.7/2, mbtmp3.7/2,Error ellipse: s-maj=67.9km s-min=37.8km az=99.0,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.24** | **332** | Pn | Pn | 10 30 36.1 | +0.1 |
| | 160nm,0.3s,baz=67,slow=12,SNR=12 | | | | | | |
| RAO | | | | Sn | Sg | 10 30 47.5 | -3.7 |
| | 563nm,0.3s,baz=169,slow=19,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **43.75** | **267** | P | P | 10 38 18.6 | -0.4 |
| | 0.3nm,0.4s,baz=103,slow=7.1,SNR=2.3 0.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **272** | P | P | 10 38 26.8 | 0.0 |
| | 0.6nm,0.3s,baz=110,slow=8.1,SNR=23 0.6nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **145.32** | **340** | PKPbc | PKPbc | 10 49 49.5 | -0.8 |
| | 1.6nm,0.8s,baz=64,slow=3.2,SNR=4.6 | | | | | | |

*DJA **09** 10:52:48.2±0.3,0°S±3°×12°3E±°,h47km±11km,M4.3/11, mb4.6/2,mB4.9/1,MLv4.2/11,Mw(mB)4.2/1*
*IDC **09** 10:52:49.3±1.7,1°42S×123°48E,h0km,mb3.4/3, mbtmp3.5/4,ML3.7/1,Error ellipse: s-maj=38.7km s-min=27.9km az=64.0*
**ISC 09 10:52:46.9±1.1,0°41S±0°04×123°03E±0°.05,h50km,n16, σ1§93/19,mb3.3/3,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LUWI** | **Luwuk** | **0.68** | **202** | P | **Pn** | **10 53 01.8** | **+1.4** |
| LUWI | | | | S | **Sn** | **10 53 13.5** | **+3.3** |
| **LUWI** | **Luwuk** | **0.68** | **202** | P | **Pn** | **10 53 01.8** | **+1.4** |
| LUWI | | | | S | **Sn** | **10 53 13.0** | **+2.8** |
| **GTOI** | **Gorontalo** | **1.04** | **359** | P | **Pn** | **10 53 06.8** | **+1.7** |
| GTOI | | | | S | **Sn** | **10 53 21.9** | **+3.3** |
| **KMSI** | **Cibinong** | **1.36** | **44** | P | **Pn** | **10 53 10.1** | **+0.5** |
| **MRSI** | **Marisa** | **1.40** | **309** | P | **Pn** | **10 53 09.5** | **-0.5** |
| MRSI | | | | S | **Sn** | **10 53 26.9** | **-0.5** |
| **MPSI** | **Mapaga** | **3.22** | **283** | P | **Pn** | **10 53 35.3** | **+0.3** |
| **MPSI** | **Mapaga** | **3.22** | **283** | P | **Pn** | **10 53 34.6** | **-0.4** |
| **SANI** | **Sanana** | **3.38** | **119** | P | **Pn** | **10 53 35.7** | **-1.5** |
| **TNTI** | **Ternate** | **4.49** | **75** | P | Pn | 10 53 58.7 | +6.2 |
| **SPSI** | **Sidrap Palu** | **4.81** | **223** | P | **Pn** | **10 53 58.0** | **+1.2** |
| **NLAI** | **Namlea** | **4.95** | **125** | P | **Pn** | **10 53 59.8** | **+1.1** |
| | 29nm,0.5s,1µm0.3nm | | | | | | |
| **BBSI** | **Bau Bau** | **5.07** | **185** | P | **Pn** | **10 54 01.2** | **+0.8** |
| **KAPI** | **Kappang** | **5.63** | **216** | Pn | **Pn** | **10 54 08.0** | **0.0** |
| | 2.7nm,0.3s,baz=37,slow=5.1,SNR=5.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **10 55 09.7** | **-1.7** |
| | 4.9nm,0.3s,baz=197,slow=19,SNR=3.3 8.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.35** | **151** | P | **P** | **10 57 37.6** | **-3.3** |
| | 1.1nm,0.8s,baz=327,slow=11,SNR=18 1.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **25.42** | **156** | P | **P** | **10 58 08.4** | **-1.6** |
| | 0.6nm,0.6s,baz=344,slow=14,SNR=12 0.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.97** | **328** | P | P | 11 02 58.3 | +17 |
| | 0.5nm,0.8s,baz=126,slow=9.6,SNR=2.3 0.5nm,0.8s | | | | | | |

*NEIC **09** 11:05:40.1±1.3,12°01S±0°08×165°8E±0°.1,h10km±2km, mb4.6/16,Error ellipse: s-maj=20.5km s-min=14.2km az=82.0*
*IDC **09** 11:05:45.8±5.0,12°09S×165°69E,h53km±43km,mb3.9/12, mbtmp4.1/13,ML4.2/1,MS3.7/19,Error ellipse: s-maj=29.0km s-min=20.6km az=76.0*
*NOU **09** 11:06:02.8,13°71S×165°88E,h0km,mb4.4/8,Vanuatu Islands*
**ISC 09 11:05:44.8±0.6,12°14S±0°06×165°7E±0°.1,h50km,n58, σ1§40/44,mb4.3/18,MS3.6/17,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **6.05** | **157** | P | **Pn** | **11 07 13.5** | **+1.8** |
| **HNR** | **Honiara** | **6.28** | **295** | | **Pn** | **11 07 13.2** | **-1.7** |
| **HNR** | **Honiara** | **6.28** | **295** | LR | LR | 11 09 57.6 | |
| | comp=Z,4µm,21.0s,baz=144,slow=40 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **8.48** | **189** | P | **Pn** | **11 07 46.1** | **+1.0** |
| **KOUNC** | **Koumac, New Ca** | **8.48** | **189** | | **Pn** | **11 07 44.9** | **-0.1** |
| KOUNC | | | | | **Sn** | **11 09 18.4** | **-1.0** |
| **DZM** | **Mont Dzumac** | **9.90** | **176** | P | **Pn** | **11 08 04.4** | **-0.3** |
| **DZM** | **Mont Dzumac** | **9.90** | **176** | Pn | **Pn** | **11 08 04.8** | **+0.2** |
| **DZM** | **Mont Dzumac** | **9.90** | **176** | P | **Pn** | **11 08 04.6** | **-0.1** |
| | 2.1nm,0.3s,baz=316,slow=13,SNR=25 | | | | | | |
| DZM | | | | S | **Sn** | **11 09 49.3** | **-5.2** |
| | 6.8nm,0.9s,baz=335,slow=19,SNR=1.7 | | | | | | |
| DZM | | | | LR | LR | 11 11 52.4 | |
| | comp=Z,212nm,18.1s,baz=22,slow=37 4.2nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **9.93** | **177** | P | **Pn** | **11 08 06.0** | **+1.1** |
| **YATNC** | **Mamie plateau,** | **9.93** | **174** | P | **Pn** | **11 08 05.4** | **+0.4** |
| **TARA** | **Tarawa** | **15.19** | **29** | Pn | **Pn** | **11 09 12.4** | **-3.9** |
| **PMG** | **Port Moresby** | **18.43** | **277** | LR | LR | 11 17 05.0 | |
| | comp=Z,245nm,18.3s,baz=86,slow=37 | | | | | | |
| **EIDS** | **Eidsvold** | **19.09** | **224** | P | **P** | **11 10 04.6** | **+1.2** |
| **CTA** | **Charters Tower** | **20.29** | **245** | P | Pn | 11 10 19.2 | +0.3 |
| | 0.4nm,0.7s,baz=71,slow=11,SNR=5.8 | | | | | | |
| CTA | | | | LR | LR | 11 17 43.6 | |
| | comp=Z,12nm,18.5s,baz=82,slow=35 | | | | | | |
| **CTAO** | **Charters Tower** | **20.29** | **245** | P | **P** | **11 10 16.8** | **+0.2** |
| CTAO | | | | IAmb | IAmb | 11 10 26.0 | |
| | comp=Z,32nm,1.5s | | | | | | |
| **COEN** | **Coen** | **22.04** | **263** | P | **P** | **11 10 34.6** | **-0.8** |
| COEN | | | | IAmb | IAmb | 11 11 05.3 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **22.39** | **214** | P | **P** | **11 10 39.4** | **+0.1** |
| **STKA** | **Stephens Creek** | **29.64** | **225** | P | **P** | **11 11 47.4** | **+1.7** |
| | comp=Z,2.7nm,0.6s,baz=39,slow=9.5,SNR=4.3 | | | | | | |
| STKA | | | | LR | LR | 11 23 51.2 | |
| | comp=Z,126nm,18.3s,baz=26,slow=37 comp=Z,2.7nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **30.92** | **251** | P | **P** | **11 11 57.5** | **+0.3** |
| WR0 | | | | IAmb | IAmb | 11 12 13.1 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.02** | **252** | P | **P** | **11 11 58.4** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 11 12 14.8 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **31.09** | **252** | P | **P** | **11 11 57.9** | **-0.8** |
| **WRAB** | **Tennant Creek** | **31.09** | **252** | P | **P** | **11 11 58.6** | **0.0** |
| WRAB | | | | IAmb | IAmb | 11 12 25.3 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.10** | **252** | P | **P** | **11 11 58.9** | **+0.1** |
| | comp=Z,1.7nm,0.8s,baz=83,slow=8.8,SNR=18 | | | | | | |
| WRA | | | | LR | LR | 11 23 35.5 | |
| | comp=Z,74nm,18.6s,baz=300,slow=34 comp=Z,1.7nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **32.29** | **245** | P | **P** | **11 12 09.4** | **+0.1** |
| **ASAR** | **Alice Springs** | **32.30** | **245** | P | **P** | **11 12 09.7** | **+0.4** |
| | comp=Z,4.4nm,0.7s,baz=71,slow=9.6,SNR=44 | | | | | | |
| ASAR | | | | LR | LR | 11 25 08.9 | |
| | comp=Z,134nm,18.4s,baz=80,slow=36 comp=Z,4.4nm,0.7s | | | | | | |
| **GUMO** | **Guam** | **32.87** | **320** | LR | LR | 11 26 22.1 | |
| | comp=Z,99nm,18.1s,baz=159,slow=38 | | | | | | |
| **RAR** | **Rarotonga** | **34.20** | **110** | LR | LR | 11 24 52.2 | |
| | comp=Z,60nm,18.6s,baz=156,slow=34 | | | | | | |
| **KNRA** | **Kununurra** | **36.02** | **260** | P | **P** | **11 12 42.7** | **+1.2** |
| **FITZ** | **Fitzroy Crossi** | **39.09** | **256** | P | **P** | **11 13 07.6** | **+0.1** |
| **PPT** | **Papeete** | **43.47** | **103** | LR | LR | 11 29 48.6 | |
| | comp=Z,119nm,20.4s,baz=16,slow=33 | | | | | | |
| **DAV** | **Davao City (W)** | **44.24** | **293** | LR | LR | 11 30 56.6 | |
| | comp=Z,18nm,19.8s,baz=270,slow=34 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **48.84** | **237** | LR | LR | 11 35 29.1 | |
| | comp=Z,150nm,18.2s,baz=259,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **54.92** | **333** | P | **P** | **11 15 11.8** | **+1.2** |
| | comp=Z,1.7nm,0.8s,baz=164,slow=8.3,SNR=2.8 comp=Z,1.7nm,0.8s | | | | | | |
| **KSRS** | **Kore Array** | **60.76** | **326** | P | **P** | **11 15 51.0** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=136,slow=6.6,SNR=2.5 comp=Z,0.5nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **65.41** | **181** | P | **P** | **11 16 23.2** | **+1.4** |
| | comp=Z,0.9nm,0.7s,baz=45,slow=5.7,SNR=6.1 comp=Z,0.9nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.53** | **294** | P | **P** | **11 17 06.3** | **-0.7** |
| | comp=Z,0.5nm,0.3s,baz=111,slow=5.0,SNR=1.4 comp=Z,0.5nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **77.88** | **180** | P | **P** | **11 17 37.6** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 11 17 38.9 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **77.88** | **180** | P | **P** | **11 17 38.0** | **+0.9** |
| | comp=Z,6.2nm,1.0s,baz=6.8,slow=1.5,SNR=14 comp=Z,6.2nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **79.53** | **324** | P | **P** | **11 17 47.6** | **+1.1** |
| | comp=Z,5.5nm,0.3s,baz=154,slow=4.0,SNR=2.9 comp=Z,0.5nm,0.3s | | | | | | |
| **RPN** | **Rapa Nui** | **80.12** | **116** | LR | LR | 11 49 16.0 | |
| | comp=Z,65nm,18.1s,baz=246,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **84.55** | **18** | P | **P** | **11 18 14.7** | **+2.4** |
| | comp=Z,0.4nm,0.9s,baz=235,slow=6.1,SNR=3.4 comp=Z,0.4nm,0.9s | | | | | | |
| **BBB** | **Bella Bella** | **85.49** | **34** | LR | LR | 11 55 38.6 | |
| | comp=Z,54nm,18.0s,baz=256,slow=35 | | | | | | |
| **PFO** | **Pinyon Flats O** | **86.73** | **55** | LR | LR | 11 49 03.2 | |
| | comp=Z,28nm,19.4s,baz=266,slow=30 | | | | | | |
| **BELA** | **Belgrano 2** | **89.41** | **176** | P | **P** | **11 18 35.4** | **-0.4** |
| BELA | | | | IAmb | IAmb | 11 18 36.2 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **94.30** | **317** | P | **P** | **11 18 59.3** | **+0.3** |
| MK31 | | | | IAmb | IAmb | 11 19 11.8 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **94.30** | **317** | P | **P** | **11 18 60.0** | **+1.0** |
| **MKAR** | **Makanchi Array** | **94.30** | **317** | P | **P** | **11 18 59.5** | **+0.6** |
| | comp=Z,0.9nm,0.8s,baz=97,slow=6.2,SNR=8.0 comp=Z,0.9nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **94.31** | **47** | LR | LR | 11 58 13.1 | |
| | comp=Z,13nm,18.2s,baz=248,slow=33 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **94.42** | **324** | P | **P** | **11 18 57.9** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **94.42** | **324** | P | **P** | **11 18 58.7** | **-0.6** |
| | comp=Z,1.4nm,0.7s,baz=116,slow=6.8,SNR=6.4 comp=Z,1.4nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **94.51** | **317** | P | **P** | **11 19 00.7** | **+0.8** |
| **ANMO** | **Albuquerque** | **95.08** | **56** | LR | LR | 11 57 52.2 | |
| | comp=Z,36nm,18.1s,baz=336,slow=33 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.95** | **27** | LR | LR | 11 56 43.3 | |
| | comp=Z,17nm,18.9s,baz=314,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **96.37** | **61** | LR | LR | 11 58 26.2 | |
| | comp=Z,21nm,18.2s,baz=294,slow=33 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **97.50** | **320** | LR | LR | 12 06 24.5 | |
| | comp=Z,20nm,18.2s,baz=177,slow=37 | | | | | | |
| **KEST** | **Kesra** | **148.26** | **322** | PKPbc | **PKPbc** | **11 25 25.5** | **-0.5** |
| | comp=Z,2.9nm,0.7s,baz=315,slow=4.4,SNR=4.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **151.09** | **343** | PKPbc | **PKPbc** | **11 25 31.1** | **-1.7** |
| | comp=Z,1.1nm,0.9s,baz=5.8,slow=2.1,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **164.38** | **275** | PKP | **PKPdf** | **11 25 44.2** | **+0.3** |
| | comp=Z,1.1nm,1.0s,baz=20,slow=1.7,SNR=3.6 | | | | | | |

*WEL **09** 11:21:27.6±0.4,42°S×174°4E±°,h9km±3km,M3.1/16, ML3.4/16,MLv3.1/16,Error ellipse: s-maj=0.0km s-min=0.0km az=98.8,confirmed*
*NOU **09** 11:21:28.6,41°72S×174°16E,h0km,MLv3.8/9,Cook Strait, New Zealand*
**ISC 09 11:21:28.2±0.8,41°74S±0°02×174°20E±0°02,h16km±5km, n103,σ1§57/112,Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMWZ** | **Cape Campbell** | **0.02** | **134** | P | **Pg** | **11 21 30.7** | **-0.2** |
| **WDFS** | **Ward Fire Stat** | **0.10** | **206** | P | **Pg** | **11 21 31.3** | **-0.2** |
| WDFS | | | | S | **Sg** | **11 21 34.4** | **+0.7** |
| **SEDS** | **Seddon Fire St** | **0.11** | **306** | P | **Pg** | **11 21 30.9** | **-0.7** |
| SEDS | | | | S | **Sg** | **11 21 33.6** | **-0.3** |
| **BSWZ** | **Blackbirch Sta** | **0.24** | **275** | P | **Pg** | **11 21 32.7** | **-0.8** |
| BSWZ | | | | S | **Sg** | **11 21 36.8** | **-0.4** |
| **KEKS** | **Kekerengu Vall** | **0.27** | **216** | P | **Pg** | **11 21 33.9** | **-0.1** |
| KEKS | | | | S | **Sg** | **11 21 38.4** | **+0.4** |
| **MGCS** | **Blenheim Marlb** | **0.30** | **320** | P | **Pg** | **11 21 32.3** | **-2.2** |
| MGCS | | | | S | **Sg** | **11 21 37.3** | **-1.5** |
| **TUWZ** | **Tuamarina** | **0.36** | **328** | P | **Pg** | **11 21 34.9** | **-0.7** |
| TUWZ | | | | S | **Sg** | **11 21 40.1** | **-0.6** |
| **BWRS** | **Waikakaho Road** | **0.37** | **323** | P | **Pg** | **11 21 35.0** | **-0.7** |
| BWRS | | | | S | **Sg** | **11 21 40.4** | **-0.5** |
| **TCW** | **Tory Channel** | **0.53** | **6** | P | **Pg** | **11 21 37.8** | **-0.9** |
| TCW | | | | S | **Sg** | **11 21 45.1** | **-0.6** |
| **SNZO** | **South Karori** | **0.57** | **42** | P | **Pg** | **11 21 39.0** | **-0.4** |
| **BHW** | **Baring Head** | **0.60** | **57** | P | **Pg** | **11 21 40.0** | **-0.1** |
| **WEL** | **Wellington** | **0.62** | **44** | P | **Pg** | **11 21 40.2** | **-0.2** |
| **NNZ** | **Nelson** | **0.81** | **310** | P | **Pg** | **11 21 42.5** | **-1.3** |
| **PLWZ** | **Palliser** | **0.81** | **78** | P | **Pg** | **11 21 44.0** | **0.0** |
| **KHZ** | **Kahutara** | **0.84** | **216** | P | **Pg** | **11 21 44.3** | **-0.1** |
| **KHZ** | **Kahutara** | **0.84** | **216** | P | **Pg** | **11 21 44.4** | **-0.1** |
| KHZ | | | | S | **Sb** | **11 21 57.2** | **+1.8** |
| **MSWZ** | **Moikau Station** | **0.85** | **68** | P | **Pg** | **11 21 44.7** | **0.0** |
| **CAW** | **Cannon Point** | **0.91** | **46** | P | **Pg** | **11 21 45.1** | **-0.7** |
| **DUWZ** | **D'Urville Isla** | **0.96** | **347** | P | **Pg** | **11 21 45.1** | **-1.6** |
| **THZ** | **Tophouse** | **0.97** | **268** | P | **Pg** | **11 21 45.6** | **-1.3** |
| **PAWZ** | **Paruwai Farm** | **0.99** | **69** | P | **Pg** | **11 21 46.3** | **-1.0** |
| **KIW** | **Kapiti Island** | **1.03** | **32** | P | **Pg** | **11 21 46.9** | **-1.2** |
| **MRNZ** | **Matariki Terra** | **1.13** | **287** | P | **Pg** | **11 21 48.8** | **-1.3** |
| **MTW** | **Mount Morrison** | **1.14** | **60** | P | **Pg** | **11 21 48.4** | **-1.7** |
| **TKNZ** | **Takaka Hill** | **1.17** | **307** | P | **Pg** | **11 21 48.9** | **-1.8** |
| **TRWZ** | **Traveller** | **1.17** | **74** | P | **Pg** | **11 21 48.8** | **-1.9** |
| **OGWZ** | **Otaki Gorge** | **1.18** | **39** | P | **Pg** | **11 21 49.6** | **-1.3** |
| **HOWZ** | **Holdsworth Sta** | **1.30** | **50** | P | **Pn** | **11 21 50.8** | **-0.9** |
| **TMWZ** | **Te Maipa** | **1.42** | **64** | P | **Pn** | **11 21 52.1** | **-1.3** |
| **MRZ** | **Mangatainoka R** | **1.50** | **45** | P | **Pn** | **11 21 53.6** | **-0.8** |
| **GVZ** | **Greta Valley S** | **1.50** | **215** | P | **Pn** | **11 21 53.3** | **-1.2** |
| **QRZ** | **Quartz Range** | **1.55** | **305** | P | **Pn** | **11 21 55.5** | **+0.3** |
| **QRZ** | **Quartz Range** | **1.55** | **305** | P | **Pn** | **11 21 55.5** | **+0.3** |
| **TIWZ** | **Tintock** | **1.59** | **54** | P | **Pn** | **11 21 54.9** | **-0.9** |
| **CPWZ** | **Castlepoint** | **1.72** | **62** | P | **Pg** | **11 22 03.0** | **+1.8** |
| **LTZ** | **Lake Taylor** | **1.77** | **233** | P | **Pn** | **11 21 57.4** | **-0.8** |
| **PRWZ** | **Pori Road** | **1.79** | **49** | P | **Pn** | **11 21 57.7** | **-0.7** |
| **DSZ** | **Denniston Nort** | **1.79** | **269** | P | **Pn** | **11 21 59.1** | **+0.6** |
| **POWZ** | **Post Office Ro** | **1.79** | **42** | P | **Pn** | **11 21 58.1** | **-0.4** |
| **AMCZ** | **Amberley** | **1.84** | **218** | P | **Pb** | **11 22 02.2** | **+0.8** |
| **BFZ** | **Birch Farm** | **1.87** | **56** | P | **Pb** | **11 22 02.5** | **+0.5** |
| **BFZ** | **Birch Farm** | **1.87** | **56** | P | **Pb** | **11 22 02.7** | **+0.7** |
| **WAZ** | **Wanganui** | **2.07** | **17** | P | **Pn** | **11 22 04.4** | **+2.1** |
| **DVHZ** | **Dannevirke** | **2.07** | **47** | P | **Pb** | **11 22 06.1** | **+0.7** |
| **TSZ** | **Takapari Road** | **2.15** | **39** | P | **Pn** | **11 22 02.8** | **-0.5** |
| **OKCZ** | **Okains Bay** | **2.15** | **203** | P | **Pn** | **11 22 01.4** | **-2.1** |
| **OXZ** | **Oxford** | **2.25** | **224** | P | **Pn** | **11 22 02.7** | **-2.1** |
| **INZ** | **Inchbonnie** | **2.27** | **243** | P | **Pn** | **11 22 04.7** | **-0.3** |
| **MQZ** | **McQueen's Vall** | **2.27** | **210** | P | **Pn** | **11 22 02.3** | **-2.7** |
| **LREZ** | **Lake Rotokare** | **2.28** | **4** | P | **Pn** | **11 22 06.5** | **+1.3** |
| **NMEZ** | **Namu Road** | **2.33** | **354** | P | **Pb** | **11 22 10.4** | **+0.5** |
| **AKCZ** | **Akaroa Harbour** | **2.33** | **204** | P | **Pn** | **11 22 03.8** | **-2.2** |
| **PNHZ** | **Pukenui** | **2.37** | **40** | P | **Pn** | **11 22 05.4** | **-1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SVB | Belmont | 3.66 | 39 | eP | | Pn | 11 30 05.5 | +1.8 |
| BENV | Beln | 3.94 | 264⇑ | eP | | Pn | 11 30 10.5 | +2.9 |
| BENV | | | | eS | | Sn | 11 30 53.4 | +0.1 |
| CACV | CAICARA DEL OR | 4.05 | 226⇑ | iP | | Pn | 11 30 06.6 | -2.4 |
| CACV | | | | eS | | Sn | 11 30 49.8 | -5.9 |
| MCLT | Moule a Chique | 4.19 | 38 | eP | | Pn | 11 30 12.6 | +1.6 |
| MCLT | | | | eS | | Sn | 11 30 57.0 | -2.2 |
| SLBI | Saint Lucia, B | 4.42 | 36 | eP | | Pn | 11 30 13.9 | -0.2 |
| SLBI | Saint Lucia, B | 4.42 | 36 | eS | | Sn | 11 31 04.6 | -0.2 |
| BAUV | El Baul | 4.60 | 252⇑ | eP | | Pn | 11 30 18.1 | +1.5 |
| BAUV | | | | eS | | Sn | 11 31 09.6 | +0.3 |
| BAUV | El Baul | 4.60 | 252 | eP | | Pn | 11 30 17.1 | +0.4 |
| BAUV | El Baul | 4.60 | 252 | eS | | Sn | 11 31 10.9 | +1.6 |
| LUEV | Luepa | 5.03 | 155⇑ | eP | | Pn | 11 30 24.9 | +2.2 |
| LUEV | | | | eS | | Sn | 11 31 20.4 | +0.2 |
| JACV | Jacura | 5.16 | 278 | eP | | Pn | 11 30 25.4 | +0.9 |
| JACV | | | | eS | | Sn | 11 31 21.4 | -1.9 |
| TEPV | Terepaima | 5.50 | 266⇑ | eP | | Pn | 11 30 30.4 | +1.3 |
| TEPV | | | | eS | | Sn | 11 31 30.2 | -1.5 |
| ANBD | Bethesda, Anti | 6.83 | 15 | eP | | Pn | 11 30 46.5 | -0.7 |
| SOCV | Socops | 7.45 | 254⇑ | eP | | Pn | 11 30 56.8 | +0.9 |
| SOCV | | | | eS | | Sn | 11 32 15.2 | -4.5 |
| CAPV | Capacho | 8.95 | 254 | eP | | Pn | 11 31 16.9 | +0.2 |

*EST **09** 11:32:05.1, 60°.15N × 23°.93E, h0km, ML1.3(HEL), Explosion*

**HEL 09 11:32:00.1, 59°.99N × 23°.45E, h0km, ML1.4, Explosion, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MEF | Metsahovi | 0.53 | 64 | eP | Pg | 11 32 09.3 | -0.9 |
| MEF | | | | eS | Sg | 11 32 12.6 | -4.4 |
| HEL1 | Helsinki | 0.74 | 75 | eP | Pg | 11 32 13.5 | -0.8 |
| HEL1 | | | | eS | Sg | 11 32 19.7 | -4.3 |
| EE01 | Perakula, Nova | 0.79 | 173 | eP | Pn | 11 32 22.1 | +3.7 |
| EE01 | | | | eS | Sn | 11 32 34.5 | +3.6 |
| NUR | Nurmijrvi | 0.80 | 48 | eP | Pg | 11 32 13.9 | -1.4 |
| NUR | | | | eS | Sg | 11 32 20.5 | -5.1 |
| NUR | comp=Z,5.0nm,0.2s | | | MSG | | 11 32 24.7 | |
| EE02 | Kiisa, Saku | 1.02 | 141 | eS | Sn | 11 32 36.5 | -0.2 |
| PVF | Pernaja | 1.33 | 64 | ePB | Pg | 11 32 24.0 | -1.5 |
| PVF | comp=Z,2.4nm,0.2s | | | MSG | | 11 32 40.0 | |
| ARBE | Arbavere | 1.40 | 112 | eS | Sg | 11 32 44.0 | -1.1 |
| FIA0 | FINESS Array S | 1.95 | 40 | ePG | Pn | 11 32 34.9 | +0.5 |
| FIA0 | comp=Z,1.8nm,0.2s | | | MSG | | 11 32 58.1 | |
| VJF | Virojoki | 2.12 | 73 | ePG | Pb | 11 32 38.3 | -1.1 |
| VJF | comp=Z,2.2nm,0.2s | | | MSG | | 11 33 03.1 | |
| VJF | | | | eSG | Sn | 11 33 03.5 | -0.2 |
| KEF | Keuruu | 2.29 | 17 | MSG | | 11 33 08.0 | |
| KEF | comp=Z,1.1nm,0.2s | | | eSG | Sb | 11 33 10.8 | -0.4 |

*NEIC **09** 12:09:55.2±1.4, 56°.21N±0°.06 × 149°.5W±0°.1, h19km±9km, ML3.5/66, ML3.4(AEIC), Error ellipse: s-maj=13.4km s-min=3.4km az=128.0*

*AEIC **09** 12:09:58.7±1.0, 56°.21N±0°.09 × 149°.4W±0°.1, h12km±8km, Error ellipse: s-maj=14.7km s-min=6.3km az=150.0*

**ISC 09 12:09:53.3±1.5, 56°.23N±0°.09 × 149°.47W±0°.06, h10km, n145, σ1§21/137, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDAK | Kodiak Island | 2.31 | 314 | | Pn | 12 10 32.4 | +1.1 |
| KDAK | Kodiak Island | 2.31 | 314 | | Sn | 12 10 57.9 | -1.9 |
| OHAK | Old Harbor | 2.33 | 297 | P | Pn | 12 10 32.2 | +0.6 |
| OHAK | Old Harbor | 2.33 | 297 | Pn | Pn | 12 10 32.3 | +0.7 |
| OHAK | Old Harbor | 2.33 | 297 | | Sn | 12 10 58.6 | -1.7 |
| SII | Sitkinak Islan | 2.65 | 279 | P | Pn | 12 10 37.1 | +1.1 |
| SII | Sitkinak Islan | 2.65 | 279 | Pn | Pn | 12 10 37.4 | +1.5 |
| SII | comp=E,132nm,0.7s | | | IAML | | 12 11 21.9 | |
| SII | comp=N,133nm,1.3s | | | IAML | | 12 11 24.6 | |
| SYI | Shuyak Island | 2.87 | 328 | | Pn | 12 10 39.8 | +0.8 |
| SYI | | | | | Sn | 12 11 12.8 | -0.6 |
| R18K | Karluk | 3.05 | 298 | | Pn | 12 10 42.4 | +1.0 |
| R18K | | | | | Sn | 12 11 16.4 | -1.5 |
| R18K | Karluk | 3.05 | 298 | IAML | | 12 11 25.1 | |
| R18K | comp=E,220nm,0.4s | | | IAML | | 12 11 28.6 | |
| CNPM | comp=N,168nm,0.6s China Poot | 3.44 | 345 | Pn | Pn | 12 10 47.5 | +0.6 |
| CNPM | comp=E,61nm,0.7s | | | IAML | | 12 11 28.6 | |
| CHIR | Chirikof Islan | 3.48 | 266 | | Pn | 12 10 48.2 | +0.9 |
| CHIR | | | | | Sn | 12 11 25.8 | -2.7 |
| CHIR | Chirikof Islan | 3.48 | 266 | IAML | | 12 11 30.8 | |
| CHIR | comp=N,93nm,1.5s | | | IAML | | 12 12 23.8 | |
| Q19K | comp=E,70nm,1.4s Cape Douglas, | 3.52 | 322 | | Pn | 12 10 49.6 | +1.6 |
| KAHG | Katmai Hook Gl | 3.57 | 312 | | Pn | 12 10 50.0 | +1.2 |
| BRSE | Bradley Lake S | 3.59 | 350 | | Pn | 12 10 49.3 | +0.3 |
| BRSE | | | | | Sn | 12 11 28.9 | -2.5 |
| Q23K | Middleton Isla | 3.62 | 26 | | Pn | 12 10 49.1 | -0.1 |
| Q23K | Middleton Isla | 3.62 | 26 | IAML | | 12 11 32.4 | |
| Q23K | comp=E,85nm,1.0s | | | IAML | | 12 11 44.2 | |
| MID | comp=N,66nm,1.1s Middleton Isla | 3.62 | 26 | P | Pn | 12 10 49.3 | 0.0 |
| MID | Middleton Isla | 3.62 | 26 | Pn | Pn | 12 10 49.5 | +0.3 |
| MID | comp=E,87nm,1.2s | | | IAML | | 12 11 32.9 | |
| MID | comp=N,77nm,1.3s | | | IAML | | 12 11 37.1 | |
| BRLK | Bradley Lake | 3.63 | 349 | | Pn | 12 10 49.9 | +0.5 |
| BRLK | comp=E,83nm,0.5s | | | IAML | | 12 11 36.2 | |
| HOM | Homer | 3.63 | 342 | | Pn | 12 10 50.4 | +0.9 |
| HOM | Homer | 3.63 | 342 | IAML | | 12 11 34.4 | |
| HOM | comp=E,128nm,1.2s | | | IAML | | 12 11 59.4 | |
| ACHA | comp=N,150nm,1.1s Angle Creek He | 3.76 | 304 | | Pn | 12 10 52.5 | +1.3 |
| KAHC | Katmai Hardscr | 3.86 | 311 | | Pn | 12 10 54.2 | +1.6 |
| SEW | Seward | 3.89 | 0 | | Pn | 12 10 52.9 | -0.1 |
| P19K | Oil Pt | 3.98 | 331 | | Pn | 12 10 55.3 | +1.1 |
| P19K | Oil Pt | 3.98 | 331 | IAML | | 12 11 46.9 | |
| P19K | comp=E,99nm,0.4s | | | IAML | | 12 11 46.9 | |
| PLK4 | comp=N,110nm,0.6s Peulik 4 | 4.03 | 293 | | Pn | 12 10 56.6 | +1.5 |
| PLK4 | Peulik 4 | 4.03 | 293 | IAML | | 12 11 45.3 | |
| PLK4 | comp=N,65nm,0.5s | | | IAML | | 12 11 50.4 | |
| CNTC | comp=E,69nm,0.6s Contact Creek | 4.04 | 303 | | Pn | 12 10 56.8 | +1.6 |
| PLK1 | Peulik 1 | 4.21 | 295 | | Pn | 12 10 59.0 | +1.6 |
| O20K | Slope Mountain | 4.21 | 338 | | Pn | 12 10 58.4 | +0.9 |
| ILSW | Iliamna Southw | 4.24 | 334 | | Pn | 12 10 58.8 | +0.8 |
| ILSW | Iliamna Southw | 4.24 | 334 | IAML | | 12 11 49.1 | |
| ILSW | comp=N,49nm,0.7s | | | IAML | | 12 11 52.8 | |
| O22K | comp=E,46nm,0.7s Cooper Landing | 4.27 | 358 | | Pn | 12 10 58.8 | +0.6 |
| SLKM | Skilak Lake | 4.31 | 355 | | Pn | 12 10 59.1 | +0.3 |
| PLK5 | Peulik 5 | 4.41 | 297 | | Pn | 12 11 01.5 | +1.3 |
| P18K | Big Mountain, | 4.42 | 318 | | Pn | 12 11 01.2 | +0.8 |
| HIN | Hinchinbrook I | 4.46 | 19 | | Pn | 12 11 01.5 | +0.5 |
| HIN | comp=E,72nm,1.0s | | | IAML | | 12 11 59.4 | |
| HIN | comp=N,94nm,0.8s | | | IAML | | 12 12 04.4 | |
| KAIM | Kayak Island | 4.58 | 34 | | Pn | 12 11 03.1 | +0.7 |
| RDSO | Redoubt South | 4.58 | 339 | | Pn | 12 11 02.8 | +0.2 |
| RSO | Redoubt South | 4.59 | 339 | Pn | Pn | 12 11 03.8 | +1.0 |
| RDT | Redoubt | 4.63 | 342 | | Pn | 12 11 03.1 | -0.1 |
| CAPN | Captain Cook N | 4.64 | 350 | | Pn | 12 11 05.0 | +1.7 |
| PWL | Port Wells | 4.68 | 7 | | Pn | 12 11 04.3 | +0.4 |
| PWL | Port Wells | 4.68 | 7 | IAML | | 12 12 03.7 | |
| PWL | comp=E,48nm,0.5s | | | IAML | | 12 12 06.8 | |
| O19K | comp=N,38nm,0.6s Port Alsworth | 4.74 | 329 | | Pn | 12 11 05.2 | +0.6 |
| O18K | Koktuh Hills | 4.75 | 322 | Pn | Pn | 12 11 05.6 | +0.8 |
| O18K | | | | IAML | | 12 12 06.5 | |
| | comp=N,28nm,1.4s | | | | | | |
| EYAK | Cordova Ski Ar | 4.75 | 23 | P | Pn | 12 11 05.5 | +0.6 |
| EYAK | Cordova Ski Ar | 4.75 | 23 | | Pn | 12 11 05.2 | +0.3 |
| P17K | Kvichak River | 4.78 | 311 | | Pn | 12 11 07.3 | +2.1 |
| GLI | Glacier Island | 4.83 | 14 | | Pn | 12 11 06.3 | +0.4 |
| GLI | Glacier Island | 4.83 | 14 | IAML | | 12 12 07.0 | |
| GLI | comp=N,28nm,0.8s | | | IAML | | 12 12 09.6 | |
| RAGM | comp=E,32nm,0.7s Ragged Mountai | 4.88 | 29 | | Pn | 12 11 07.2 | +0.6 |
| RC01 | Rabbit Creek A | 4.88 | 358 | | Pn | 12 11 07.0 | +0.3 |
| RC01 | Rabbit Creek A | 4.88 | 358 | IAML | | 12 12 02.6 | |
| RC01 | comp=E,30nm,0.7s | | | IAML | | 12 12 03.8 | |
| SUCK | comp=N,31nm,0.5s Suckling Hills | 4.89 | 36 | | Pn | 12 11 07.3 | +0.5 |
| SUCK | Suckling Hills | 4.89 | 36 | IAML | | 12 12 03.3 | |
| HMT | comp=E,70nm,1.5s Hamilton | 4.95 | 32 | | Pn | 12 11 08.5 | +0.9 |
| NICHA | Nichawak Mount | 4.96 | 34 | | Pn | 12 11 08.4 | +0.6 |
| CHGN | Chignik | 4.99 | 275 | | Pn | 12 11 09.8 | +1.7 |
| CHGN | comp=E,62nm,0.1s | | | IAML | | 12 12 39.5 | |
| GOAT | Goat Mountain | 5.03 | 28 | | Pn | 12 11 09.7 | +0.9 |
| BGLC | Bering Glacier | 5.09 | 37 | | Pn | 12 11 10.5 | +1.0 |
| GRIN | Grindle Hills | 5.20 | 36 | | Pn | 12 11 12.0 | +0.9 |
| SPCP | Crater Peak Br | 5.25 | 346 | | Pn | 12 11 12.3 | +0.5 |
| DIV | Divide | 5.28 | 20 | | Pn | 12 11 12.8 | +0.6 |
| SNH | Sunshine Point | 5.29 | 39 | | Pn | 12 11 12.8 | +0.5 |
| SNH | Sunshine Point | 5.29 | 39 | IAML | | 12 12 20.7 | |
| SNH | comp=E,43nm,1.4s | | | IAML | | 12 12 26.8 | |
| SUA | comp=N,51nm,1.3s Susitna One | 5.29 | 353 | Pn | Pn | 12 11 14.0 | +1.6 |
| SUA | comp=E,19nm,1.2s | | | IAML | | 12 12 21.1 | |
| N19K | Bonanza Creek | 5.30 | 332 | | Pn | 12 11 12.9 | +0.4 |
| KHIT | Khitrov Hills | 5.35 | 35 | | Pn | 12 11 13.4 | +0.3 |
| P16K | Nushagak River | 5.37 | 305 | | Pn | 12 11 15.3 | +1.9 |
| PMR | Palmer | 5.38 | 2 | P | Pn | 12 11 14.7 | +1.2 |
| PMR | Palmer | 5.38 | 2 | | Pn | 12 11 14.4 | +0.8 |
| BMRM | Bremner River | 5.39 | 26 | | Pn | 12 11 14.4 | +0.8 |
| O17K | Koliganek Bris | 5.39 | 314 | | Pn | 12 11 15.2 | +1.5 |
| WAX | Waxell Ridge | 5.48 | 37 | | Pn | 12 11 15.5 | +0.5 |
| GHO | Glory Hole Cre | 5.57 | 3 | | Pn | 12 11 16.9 | +0.8 |
| BARK | Barkley Ridge | 5.57 | 38 | | Pn | 12 11 17.0 | +0.8 |
| KLU | Klutina | 5.59 | 18 | | Pn | 12 11 17.4 | +0.9 |
| N18K | Kilae Creek | 5.59 | 326 | | Pn | 12 11 17.6 | +1.1 |
| SML | Sawmill | 5.63 | 5 | | Pn | 12 11 17.8 | +0.8 |
| O16K | Kokwok River B | 5.70 | 310 | | Pn | 12 11 19.6 | +1.7 |
| SCM | Sheep Creek Mo | 5.73 | 10 | | Pn | 12 11 19.5 | +1.1 |
| BAGL | Bagley Icefiel | 5.77 | 39 | | Pn | 12 11 19.7 | +0.9 |
| SKT | Skwentna | 5.87 | 350 | | Pn | 12 11 21.2 | +1.0 |
| VRDI | Verde Repeater | 5.91 | 29 | | Pn | 12 11 21.0 | 0.0 |
| RKAV | Rock Avalanche | 5.92 | 43 | | Pn | 12 11 21.5 | +0.5 |
| CNBA | Chernabura Isl | 5.92 | 260 | | Pn | 12 11 22.0 | +1.1 |
| N17K | Nushagak Hills | 5.92 | 320 | | Pn | 12 11 21.9 | +1.0 |
| N25K | Chitina, Valde | 5.95 | 23 | | Pn | 12 11 21.9 | +0.4 |
| M20K | Styx River | 5.98 | 343 | Pn | Pn | 12 11 21.8 | 0.0 |
| GLB | Gilahina Butte | 6.00 | 27 | | Pn | 12 11 22.9 | +0.8 |
| KIAG | Kiagna River | 6.00 | 35 | | Pn | 12 11 22.7 | +0.6 |
| GRNC | Granite Creek | 6.06 | 39 | | Pn | 12 11 23.1 | +0.1 |
| TABL | Table Mountain | 6.09 | 43 | | Pn | 12 11 23.9 | +0.5 |
| BALM | Baldy | 6.09 | 35 | | Pn | 12 11 23.8 | +0.5 |
| M24K | Tolsona, Glenn | 6.13 | 15 | Pn | Pn | 12 11 24.4 | +0.5 |
| MCARA | McCarthy VSAT | 6.16 | 30 | Pn | Pn | 12 11 25.1 | +0.9 |
| PTPK | Petty Peak | 6.17 | 33 | | Pn | 12 11 25.5 | +0.6 |
| M18K | Stony River | 6.22 | 331 | | Pn | 12 11 25.5 | +0.4 |
| SDPT | Sand Point | 6.28 | 267 | P | Pn | 12 11 27.9 | +2.2 |
| SDPT | Sand Point | 6.28 | 267 | | Pn | 12 11 27.2 | +1.4 |
| O15K | Ungalikthiuk R | 6.29 | 302 | | Pn | 12 11 27.6 | +1.7 |
| CTGM | Chitina Glacie | 6.37 | 38 | | Pn | 12 11 27.8 | +0.6 |
| PNL | Peninsula | 6.37 | 53 | P | Pn | 12 11 28.2 | +1.1 |
| PNL | Peninsula | 6.37 | 53 | | Pn | 12 11 28.1 | +0.9 |
| LOGN | Logan Glacier | 6.39 | 40 | | Pn | 12 11 28.2 | +0.7 |
| N16K | Nishlik Lake | 6.49 | 315 | | Pn | 12 11 30.3 | +1.6 |
| L19K | White Mountain | 6.58 | 337 | | Pn | 12 11 30.3 | +0.3 |
| M17K | Holitna River | 6.63 | 325 | | Pn | 12 11 31.7 | +1.0 |
| O28M | Mount Upton | 6.66 | 43 | | Pn | 12 11 32.0 | +0.7 |
| N15K | Kwethluk River | 6.87 | 310 | | Pn | 12 11 35.9 | +2.1 |
| M16K | Timber Creek | 6.90 | 318 | | Pn | 12 11 36.1 | +1.7 |
| DHY | Denali Highway | 6.95 | 8 | Pn | Pn | 12 11 37.2 | +2.0 |
| PS1A | Pavlof South-1 | 6.97 | 268 | | Pn | 12 11 37.4 | +2.2 |
| O14K | Tigyukauivet M | 7.00 | 301 | | Pn | 12 11 37.8 | +2.0 |
| L18K | Granite Mounta | 7.06 | 331 | Pn | Pn | 12 11 37.1 | +0.7 |
| HAG | Hague Volcano | 7.08 | 268 | | Pn | 12 11 38.4 | +1.6 |
| S12K | Black Hills | 7.09 | 271 | | Pn | 12 11 38.6 | +1.6 |
| PN7A | Pavlof North-7 | 7.11 | 269 | | Pn | 12 11 38.7 | +1.5 |
| P29M | Windy Craggy | 7.11 | 57 | Pn | Pn | 12 11 39.1 | +1.8 |
| YUK2 | White River | 7.13 | 35 | | Pn | 12 11 38.9 | +1.3 |
| M27K | Edge Creek, AK | 7.27 | 29 | | Pn | 12 11 40.2 | +0.7 |
| MENT | Mentasta | 7.33 | 21 | Pn | Pn | 12 11 41.8 | +1.4 |
| K20K | Telida | 7.52 | 344 | | Pn | 12 11 43.3 | +0.5 |
| L16K | Owhat River | 7.54 | 321 | | Pn | 12 11 44.3 | +1.2 |
| SIT | Sitka | 7.84 | 78 | P | Pn | 12 11 45.4 | -1.8 |
| BCAR | Beaver Creek A | 7.88 | 26 | Pn | Pn | 12 11 49.5 | +1.7 |
| K17K | Iditarod | 7.91 | 329 | Pn | Pn | 12 11 49.0 | +0.9 |
| BPAW | Bear Paw Mtn. | 7.94 | 355 | | Pn | 12 11 48.6 | +0.1 |
| FALS | False Pass | 8.03 | 266 | P | Pn | 12 11 51.7 | +1.8 |
| FALS | False Pass | 8.03 | 266 | | Pn | 12 11 51.2 | +1.3 |
| ISLZ | Isanotski Laza | 8.23 | 265 | | Pn | 12 11 54.7 | +1.4 |
| SCNK | Sand Creek | 8.24 | 17 | Pn | Pn | 12 11 53.7 | +0.9 |
| ISNN | Isanotski Nort | 8.24 | 266 | | Pn | 12 11 54.3 | +1.6 |
| HDA | Harding Lake | 8.30 | 8 | | Pn | 12 11 56.4 | +2.8 |
| M29M | Somme Creek | 8.39 | 37 | | Pn | 12 11 55.4 | +0.6 |
| IL31 | | 8.67 | 7 | | Pn | 12 12 00.2 | +1.7 |
| COLA | College | 8.71 | 5 | P | Pn | 12 12 01.4 | +2.3 |
| COLA | College | 8.71 | 5 | | Pn | 12 12 01.4 | +2.3 |
| MLY | Manley | 8.86 | 356 | | Pn | 12 12 02.4 | +1.2 |
| DAWY | Dawson | 9.32 | 28 | | Pn | 12 12 08.9 | +1.4 |
| UNV | Unalaska Valle | 10.07 | 263 | P | Pn | 12 12 18.8 | +1.1 |

*IDC **09** 12:14:12.5±2.1, 0°.59S × 127°.82E, h0km, mb3.6/3, mbtmp3.7/3, MS3.0/2, Error ellipse: s-maj=164.3km s-min=25.2km az=67.0*

*DJA **09** 12:14:15.4±0.3, 1°.S±2°.× 12°.8E±°, h10km, M3.8/9, mb4.5/2, mB5.4/1, MLv3.5/9, Mw(mB)4.8/1*

**ISC 09 12:14:14.5±1.0, 0°.66S±0°.05 × 127°.68E±0°.07, h10km, n11, σ1§08/13, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LBMI | Labuha | 0.18 | 276 | P | Pg | 12 14 17.9 | -0.5 |
| LBMI | | | | S | Sg | 12 14 21.3 | +0.2 |
| TNTI | Ternate | 1.45 | 348 | P | Pn | 12 14 41.3 | +0.4 |
| TNTI | | | | S | Sb | 12 15 02.1 | +1.8 |
| SANI | Sanana | 2.19 | 231 | P | Pb | 12 14 53.0 | -1.2 |
| SANI | | | | S | Sn | 12 15 17.9 | -0.2 |
| NLAI | Namlea | 2.63 | 193 | P | Pn | 12 14 58.7 | +1.6 |
| NLAI | | | | S | Sn | 12 15 30.8 | +1.7 |
| LUWI | Luwuk | 4.92 | 266 | P | Pn | 12 15 29.3 | +0.7 |
| FAKI | Fak Fak | 5.09 | 116 | P | Pn | 12 15 30.7 | -0.2 |
| WRA | 25nm,1.0s,0.1nm Warramunga Arr | 20.25 | 162 | P | P | 12 18 50.0 | -0.2 |
| | 1.4nm,0.8s,baz=341,slow=12,SNR=6.5 1.4nm,0.8s | | | | | | |
| PMG | Port Moresby | 21.24 | 115 | LR | LR | 12 27 58.7 | |
| ASAR | comp=Z,46nm,20.4s,baz=128,slow=39 Alice Springs | 23.66 | 166 | P | P | 12 19 26.1 | -0.3 |
| | 3.1nm,0.9s,baz=346,slow=11,SNR=21 3.1nm,0.9s | | | | | | |
| MJAR | Matsushiro Arr | 38.28 | 14 | LR | LR | 12 35 19.6 | |
| | comp=Z,18nm,21.5s,baz=172,slow=33 | | | | | | |
| MKAR | Makanchi Array | 61.69 | 326 | P | P | 12 24 32.7 | -0.3 |
| | 0.6nm,0.8s,baz=122,slow=4.9,SNR=4.1 0.6nm,0.8s | | | | | | |

*NEIC **09** 12:26:47.6±1.9, 56°.38N±0°.07 × 148°.7W±0°.1, h26km±9km, ML3.9/82, ML3.6(AEIC), Error ellipse: s-maj=11.9km s-min=7.2km az=150.0*

*AEIC **09** 12:26:52.0±1.2, 56°.48N±0°.08 × 148°.8W±0°.1, h10km±7km, Error ellipse: s-maj=11.9km s-min=8.2km az=173.0*

**ISC 09 12:26:45.5±1.2, 56°.42N±0°.08 × 148°.67W±0°.05, h10km, n157, σ1§61/146, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDAK | Kodiak Island | 2.53 | 304 | | Pn | 12 27 27.3 | +0.7 |
| KDAK | | | | | Sn | 12 27 54.9 | -2.6 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OHAK | Old Harbor | 2.66 | 289 | P | Pn | 12 27 28.6 | +0.2 |
| OHAK | Old Harbor | 2.66 | 289 | | Pn | 12 27 28.5 | +0.2 |
| OHAK | | | | | Sn | 12 27 57.5 | -3.2 |
| SYI | Shuyak Island | 2.97 | 319 | | Pn | 12 27 33.5 | +0.8 |
| SYI | | | | | Sn | 12 28 06.8 | -1.5 |
| SYI | Shuyak Island | 2.97 | 319 | IAML | | 12 28 08.9 | |
| SII | comp=N,178nm,0.4s Sitkinak Islan | 3.06 | 275 | P | Pn | 12 27 34.4 | +0.5 |
| SII | Sitkinak Islan | 3.06 | 275 | | Pn | 12 27 34.0 | +0.1 |
| SII | | | | | Sn | 12 28 07.6 | -3.0 |
| SII | Sitkinak Islan | 3.06 | 275 | IAML | | 12 28 11.4 | |
| MID | comp=E,199nm,0.8s Middleton Isla | 3.26 | 21 | P | Pn | 12 27 37.9 | +1.3 |
| MID | Middleton Isla | 3.26 | 21 | | Pn | 12 27 37.3 | +0.7 |
| MID | | | | | Sn | 12 28 12.5 | -2.8 |
| MID | Middleton Isla | 3.26 | 21 | IAML | | 12 28 14.5 | |
| MID | comp=E,254nm,0.3s | | | IAML | | 12 28 14.5 | |
| Q23K | comp=N,264nm,0.8s Middleton Isla | 3.26 | 21 | | Pn | 12 27 37.5 | +1.0 |
| Q23K | | | | | Sn | 12 28 12.7 | -2.7 |
| Q23K | Middleton Isla | 3.26 | 21 | IAML | | 12 28 14.5 | |
| Q23K | comp=E,297nm,0.5s | | | IAML | | 12 28 14.5 | |
| R18K | comp=N,232nm,0.8s Karluk | 3.37 | 292 | | Pn | 12 27 38.4 | +0.3 |
| R18K | | | | | Sn | 12 28 15.2 | -2.7 |
| R18K | Karluk | 3.37 | 292 | IAML | | 12 28 17.6 | |
| R18K | comp=E,368nm,0.3s | | | IAML | | 12 28 21.2 | |
| CNPM | comp=N,326nm,0.5s China Poot | 3.40 | 337 | | Pn | 12 27 39.3 | +0.8 |
| CNPM | | | | | Sn | 12 28 17.7 | -1.2 |
| BRSE | Bradley Lake S | 3.51 | 343 | | Pn | 12 27 40.5 | +0.5 |
| BRSE | | | | | Sn | 12 28 19.9 | -1.6 |
| BRLK | Bradley Lake | 3.55 | 342 | | Pn | 12 27 41.0 | +0.4 |
| HOM | Homer | 3.61 | 335 | | Sn | 12 28 24.4 | +0.4 |
| HOM | comp=E,201nm,0.5s | | | IAML | | 12 28 25.8 | |
| HOM | comp=N,196nm,0.3s | | | IAML | | 12 28 27.1 | |
| HOM | Homer | 3.61 | 335 | | Pn | 12 27 42.8 | +1.4 |
| P23K | Montague Islan | 3.65 | 10 | | Pn | 12 27 42.7 | +0.8 |
| Q19K | Cape Douglas, | 3.67 | 315 | | Sn | 12 28 24.1 | -1.5 |
| Q19K | comp=N,340nm,0.7s | | | IAML | | 12 28 29.7 | |
| Q19K | comp=E,396nm,0.8s | | | IAML | | 12 28 34.2 | |
| Q19K | Cape Douglas, | 3.67 | 315 | | Pn | 12 27 43.5 | +1.2 |
| SEW | Seward | 3.72 | 354 | | Pn | 12 27 43.5 | +0.6 |
| KAHG | Katmai Hook Gl | 3.79 | 306 | | Pn | 12 27 45.2 | +1.2 |
| CHIR | Chirikof Islan | 3.94 | 264 | | Pn | 12 27 46.3 | +0.3 |
| CHIR | Chirikof Islan | 3.94 | 264 | IAML | | 12 28 29.7 | |
| CHIR | comp=N,119nm,0.3s | | | IAML | | 12 28 30.3 | |
| ACHA | comp=E,114nm,0.6s Angle Creek He | 4.03 | 299 | | Pn | 12 27 48.8 | +1.6 |
| P19K | Oil Pt | 4.05 | 325 | | Sn | 12 28 34.9 | 0.0 |
| P19K | comp=E,277nm,0.5s | | | IAML | | 12 28 36.5 | |
| P19K | comp=N,239nm,0.4s | | | IAML | | 12 28 36.8 | |
| P19K | Oil Pt | 4.05 | 325 | | Pn | 12 27 48.7 | +1.2 |
| KAHC | Katmai Hardscr | 4.08 | 306 | | Pn | 12 27 49.5 | +1.5 |
| KVTA | Katmai Vly 10 | 4.09 | 301 | | Pn | 12 27 49.8 | +1.8 |
| ANCK | Angle Creek | 4.11 | 299 | | Pn | 12 27 50.7 | +2.4 |
| O22K | Cooper Landing | 4.11 | 353 | | Sn | 12 28 34.2 | -2.1 |
| O22K | Cooper Landing | 4.11 | 353 | | Pn | 12 27 48.8 | +0.5 |
| HIN | Hinchinbrook I | 4.15 | 15 | | Pn | 12 27 49.8 | +1.0 |
| HIN | comp=E,168nm,0.4s | | | IAML | | 12 28 36.0 | |
| KAIM | Kayak Island | 4.17 | 31 | | Sn | 12 28 32.0 | -5.9 |
| KAIM | Kayak Island | 4.17 | 31 | | Pn | 12 27 50.2 | +1.1 |
| O20K | Slope Mountain | 4.22 | 332 | | Pn | 12 27 50.6 | +0.7 |
| IVE | Iliamna Volcan | 4.28 | 329 | | Pn | 12 27 51.1 | +0.5 |
| ILSW | Iliamna Southw | 4.28 | 328 | | Pn | 12 27 51.6 | +0.8 |
| ILSW | Iliamna Southw | 4.28 | 328 | IAML | | 12 28 43.0 | |
| ILSW | comp=N,147nm,0.4s | | | IAML | | 12 28 46.1 | |
| CNTC | comp=E,78nm,0.7s Contact Creek | 4.32 | 298 | | Pn | 12 27 52.5 | +1.2 |
| PLK3 | Peulik 3 | 4.34 | 290 | | Pn | 12 27 53.0 | +1.5 |
| PLK4 | Peulik 4 | 4.37 | 289 | | Pn | 12 27 53.0 | +1.0 |
| PLK4 | Peulik 4 | 4.37 | 289 | IAML | | 12 28 48.7 | |
| PLK4 | comp=E,104nm,0.5s | | | IAML | | 12 28 49.5 | |
| PLK2 | comp=N,91nm,0.7s Peulik 2 | 4.39 | 291 | | Pn | 12 27 53.7 | +1.6 |
| EYAK | Cordova Ski Ar | 4.41 | 19 | P | Pn | 12 27 53.9 | +1.5 |
| EYAK | Cordova Ski Ar | 4.41 | 19 | | Pn | 12 27 53.4 | +1.0 |
| PWL | Port Wells | 4.45 | 2 | | Pn | 12 27 53.6 | +0.6 |
| PWL | Port Wells | 4.45 | 2 | IAML | | 12 28 44.3 | |
| PWL | comp=N,96nm,0.3s | | | IAML | | 12 28 44.7 | |
| SUCK | comp=E,97nm,0.3s Suckling Hills | 4.48 | 33 | | Pn | 12 27 55.0 | +1.6 |
| SUCK | Suckling Hills | 4.48 | 33 | IAML | | 12 28 45.6 | |
| SUCK | comp=N,234nm,0.7s | | | IAML | | 12 28 46.7 | |
| RAGM | comp=E,143nm,0.5s Ragged Mountai | 4.50 | 26 | | Pn | 12 27 55.1 | +1.5 |
| PLK1 | Peulik 1 | 4.54 | 291 | | Pn | 12 27 55.2 | +1.0 |
| GLI | Glacier Island | 4.54 | 10 | | Pn | 12 27 55.0 | +0.8 |
| GLI | Glacier Island | 4.54 | 10 | IAML | | 12 28 47.3 | |
| GLI | comp=N,78nm,0.3s | | | IAML | | 12 28 49.6 | |
| CAPN | comp=E,126nm,0.4s Captain Cook N | 4.55 | 344 | Pn | Pn | 12 27 56.1 | +1.9 |
| HMT | Hamilton | 4.56 | 29 | | Pn | 12 27 56.4 | +1.9 |
| RSO | Redoubt South | 4.58 | 334 | | Pn | 12 27 55.9 | +0.9 |
| P18K | Big Mountain, | 4.59 | 313 | | Sn | 12 28 45.6 | -2.7 |
| RDWB | Redoubt West | 4.63 | 333 | | Pn | 12 27 55.7 | +0.2 |
| GOAT | Goat Mountain | 4.66 | 25 | | Pn | 12 27 57.0 | +1.2 |
| BGLC | Bering Glacier | 4.67 | 35 | | Pn | 12 27 57.7 | +1.8 |
| DFR | Drift River | 4.68 | 335 | | Pn | 12 27 56.7 | +0.5 |
| RC01 | Rabbit Creek A | 4.71 | 354 | | Pn | 12 27 57.5 | +0.9 |
| RC01 | Rabbit Creek A | 4.71 | 354 | IAML | | 12 28 51.2 | |
| RC01 | comp=N,148nm,0.4s | | | IAML | | 12 28 51.4 | |
| Q19K | comp=E,72nm,0.3s Port Alsworth | 4.81 | 324 | | Pn | 12 27 58.9 | +0.9 |
| SNH | Sunshine Point | 4.86 | 37 | | Pn | 12 28 00.3 | +1.6 |
| SNH | Sunshine Point | 4.86 | 37 | IAML | | 12 28 54.6 | |
| SNH | comp=N,125nm,0.3s | | | IAML | | 12 28 57.9 | |
| O18K | comp=E,109nm,1.0s Koktuh Hills | 4.88 | 318 | | Pn | 12 27 59.9 | +1.0 |
| DIV | Divide | 4.96 | 16 | | Pn | 12 28 01.7 | +1.8 |
| P17K | Kvichak River | 5.00 | 307 | | Pn | 12 28 01.9 | +1.4 |
| R16K | Pilot Point | 5.00 | 287 | | Pn | 12 28 02.2 | +1.7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,70nm,0.5s | | | | | | | |
| **STLK** | **Strandline Lak** | **5.35** | **343** | | **Pn** | **12 28 06.3** | **+1.0** |
| **N19K** | **Bonanza Creek** | **5.35** | **328** | | **Pn** | **12 28 06.0** | **+0.6** |
| **GHO** | **Glory Hole Cre** | **5.37** | **359** | | **Pn** | **12 28 07.0** | **+1.3** |
| **M23K** | **Glacier View** | **5.41** | **5** | | **Pn** | **12 28 08.0** | **+1.9** |
| **CHGN** | **Chignik** | **5.42** | **273** | | **Pn** | **12 28 07.8** | **+1.5** |
| **SCM** | **Sheep Creek Mo** | **5.47** | **7** | | **Pn** | **12 28 09.0** | **+2.0** |
| **SAMH** | **Samovar Hills** | **5.58** | **45** | | **Pn** | **12 28 10.9** | **+2.4** |
| **O17K** | **Koliganek Bris** | **5.59** | **310** | | **Pn** | **12 28 10.0** | **+1.4** |
| **N25K** | **Chitina, Valde** | **5.61** | **20** | | **Pn** | **12 28 10.6** | **+1.7** |
| **GLB** | **Gilahina Butte** | **5.63** | **25** | Pn | **Pn** | **12 28 11.8** | **+2.7** |
| **GRNC** | **Granite Creek** | **5.63** | **37** | | **Pn** | **12 28 11.0** | **+1.6** |
| **P16K** | **Nushagak River** | **5.64** | **302** | | **Pn** | **12 28 10.9** | **+1.7** |
| **YKU2** | **Yakutat** | **5.70** | **53** | | **Pn** | **12 28 12.4** | **+2.3** |
| **PTPK** | **Patty Peak** | **5.76** | **31** | | **Pn** | **12 28 12.8** | **+1.7** |
| **SKT** | **Skwentna** | **5.76** | **346** | | **Pn** | **12 28 12.5** | **+1.5** |
| **MCARA** | **McCarthy VSAT** | **5.77** | **28** | | **Pn** | **12 28 13.3** | **+2.2** |
| **PNL** | **Peninsula** | **5.90** | **53** | P | **Pn** | **12 28 14.8** | **+1.9** |
| **O16K** | **Kokwok River B** | **5.93** | **306** | | **Pn** | **12 28 14.7** | **+1.4** |
| **M20K** | **Styx River** | **5.94** | **339** | Pn | **Pn** | **12 28 14.4** | **+0.9** |
| **LOGN** | **Logan Glacier** | **5.96** | **39** | | **Pn** | **12 28 15.6** | **+1.8** |
| **WACK** | **Wrangell Chich** | **6.01** | **20** | | **Pn** | **12 28 16.6** | **+2.0** |
| **N17K** | **Nushagak Hills** | **6.07** | **316** | | **Pn** | **12 28 16.2** | **+1.0** |
| **WAT6** | **Susitna Watana** | **6.20** | **4** | | **Pn** | **12 28 18.4** | **+1.4** |
| **O28M** | **Mount Upton** | **6.21** | **42** | | **Pn** | **12 28 19.3** | **+1.8** |
| **M19K** | **Big River Lodg** | **6.23** | **334** | | **Pn** | **12 28 17.6** | **+0.1** |
| **M18K** | **Stony River** | **6.29** | **327** | | **Pn** | **12 28 18.4** | **+0.3** |
| **CNBA** | **Chernabura Isl** | **6.39** | **260** | Pn | **Pn** | **12 28 20.5** | **+0.9** |
| **O15K** | **Ungalikthiuk R** | **6.57** | **299** | | **Pn** | **12 28 24.0** | **+2.0** |
| **L19K** | **White Mountain** | **6.58** | **334** | | **Pn** | **12 28 22.3** | **0.0** |
| **N16K** | **Nishlik Lake** | **6.68** | **312** | | **Pn** | **12 28 25.1** | **+1.6** |
| **DHY** | **Denali Highway** | **6.71** | **5** | | **Pn** | **12 28 25.7** | **+1.6** |
| **YUK2** | **White River** | **6.72** | **34** | | **Pn** | **12 28 26.4** | **+2.2** |
| **SDPT** | **Sand Point** | **6.73** | **266** | P | **Pn** | **12 28 25.5** | **+1.3** |
| **SDPT** | **Sand Point** | **6.73** | **266** | | **Pn** | **12 28 25.5** | **+1.3** |
| **M17K** | **Holitna River** | **6.75** | **321** | | **Pn** | **12 28 25.7** | **+1.3** |
| **YUK3** | **Moose Creek** | **6.83** | **35** | | **Pn** | **12 28 28.5** | **+2.7** |
| **M27K** | **Edge Creek, AK** | **6.89** | **27** | | **Pn** | **12 28 28.6** | **+2.1** |
| **S31K** | **Pelican** | **6.93** | **72** | Pn | **Pn** | **12 28 26.9** | **-0.1** |
| **MENT** | **Mentasta** | **7.00** | **19** | Pn | **Pn** | **12 28 27.4** | **-0.5** |
| **M16K** | **Timber Creek** | **7.07** | **315** | Pn | **Pn** | **12 28 29.8** | **+1.0** |
| **L18K** | **Granite Mounta** | **7.11** | **328** | Pn | **Pn** | **12 28 30.7** | **+1.3** |
| **SIT** | **Sitka** | **7.37** | **80** | Pn | **Pn** | **12 28 30.9** | **-2.0** |
| **BCAR** | **Beaver Creek A** | **7.51** | **25** | Pn | **Pn** | **12 28 36.7** | **+1.7** |
| **S12K** | **Black Hills** | **7.53** | **270** | Pn | **Pn** | **12 28 36.3** | **+1.0** |
| **L16K** | **Owhat River** | **7.68** | **318** | Pn | **Pn** | **12 28 38.4** | **+1.1** |
| **SKAG** | **Skagway** | **7.72** | **61** | P | **Pn** | **12 28 40.2** | **+2.4** |
| **BPAW** | **Bear Paw Mtn.** | **7.79** | **352** | | **Pn** | **12 28 40.2** | **+1.5** |
| **JIS** | **Juneau Island** | **7.95** | **71** | P | **Pn** | **12 28 42.4** | **+1.5** |
| **K17K** | **Iditarod** | **7.98** | **326** | Pn | **Pn** | **12 28 42.1** | **+0.8** |
| **CCB** | **Clear Creek Bu** | **8.26** | **3** | | **Pn** | **12 28 47.9** | **+2.6** |
| **K27K** | **Chicken** | **8.30** | **20** | Pn | **Pn** | **12 28 48.3** | **+2.5** |
| **IL31** | | **8.42** | **5** | | **Pn** | **12 28 49.8** | **+2.4** |
| **COLA** | **College** | **8.49** | **2** | P | **Pn** | **12 28 50.6** | **+2.3** |
| **FALS** | **False Pass** | **8.49** | **266** | P | **Pn** | **12 28 49.7** | **+1.4** |
| **U33K** | **Whale Pass** | **8.66** | **86** | | **Pn** | **12 28 49.1** | **-1.5** |
| **P33M** | **Teslin, Yukon** | **9.16** | **59** | Pn | **Pn** | **12 28 59.6** | **+2.0** |
| **AHB** | **Akutan Harbor** | **10.05** | **264** | | **Pn** | **12 29 10.3** | **+0.5** |
| **DLBC** | **Dease Lake** | **10.25** | **71** | | **Pn** | **12 29 14.9** | **+2.4** |
| **UNV** | **Unalaska Valle** | **10.53** | **263** | P | **Pn** | **12 29 16.4** | **+0.2** |
| **UNV** | **Unalaska Valle** | **10.53** | **263** | | **Pn** | **12 29 16.4** | **+0.2** |
| **MSW** | **Makushin Switc** | **10.66** | **264** | | **Pn** | **12 29 19.5** | **+1.4** |
| **SPIA** | **Saint Paul Isl** | **11.85** | **283** | P | **Pn** | **12 29 35.1** | **+0.9** |
| **ADK** | **Adak** | **16.96** | **266** | P | **Pn** | **12 30 42.9** | **+0.3** |

**SDD 09 12:30:54.6±0.9, 19°96N×69°90W, h18km±999km, MD3.5, ML2.4, MW4.2, 4C, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NADR** | **Nagua** | **0.60** | **176** | ⇑*e*Sg | Sg | 12 31 13.7 | -0.9 |
| NADR | | | | IAML | | 12 31 16.1 | |
| | comp=E,127nm,0.3s | | | | | | |
| NADR | | | | IAML | | 12 31 18.8 | |
| | comp=N,157nm,0.2s | | | | | | |
| **SODR** | **Sosua Marina B** | **0.67** | **252** | ⇑*e*Sg | Sb | 12 31 15.2 | -1.4 |
| SODR | | | | IAML | | 12 31 18.0 | |
| | comp=N,116nm,0.3s | | | | | | |
| **MCDR** | **Montecristi** | **1.65** | **268** | ⇑*e*Pg | Pn | 12 31 22.8 | +0.1 |
| MCDR | | | | ⇑*e*Sg | Sb | 12 31 44.8 | -0.2 |
| MCDR | | | | IAML | | 12 31 48.1 | |
| | comp=N,168nm,0.2s | | | | | | |
| MCDR | | | | IAML | | 12 31 50.3 | |
| | comp=N,114nm,0.1s | | | | | | |
| **GRTK** | **Grand Turk** | **1.93** | **324** | IAML | | 12 31 56.3 | |
| | comp=E,12nm,0.3s | | | | | | |
| GRTK | | | | IAML | | 12 31 56.7 | |
| | comp=N,43nm,0.8s | | | | | | |

*NEIC **09** 12:40:59.3±2.2, 17°9S±0°.1×177°.7W±0°.2, h562km±10km, mb4.3/18, Error ellipse: s-maj=23.7km s-min=20.4km az=96.0*

*IDC **09** 12:41:06.0±3.0, 18°.43S×178°.60W, h561km±25km, mb3.1/5, mbtmp4.0/6, Error ellipse: s-maj=122.3km s-min=21.3km az=153.0*

**ISC 09 12:41:02.3±1.1, 17°9S±0°.2×178°.1W±0°.2, h590km, n26, σ1s09/24, mb4.2/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.72** | **272** | P | **P** | **12 42 23.7** | **-1.5** |
| **MSVF** | **Nonsavu** | **3.72** | **272** | P | **P** | **12 42 23.6** | **-1.6** |
| | 12nm,0.6s,baz=136,slow=6.0,SNR=13 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.16** | **251** | P | **P** | **12 44 12.7** | **+0.3** |
| DZM | | | | IAmb | IAmb | 12 44 52.1 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **258** | P | **P** | **12 44 27.8** | **-0.5** |
| **ARMA** | **Armidale** | **30.25** | **240** | P | **P** | **12 46 28.0** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 12 46 42.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.79** | **260** | P | **P** | **12 46 56.9** | **0.0** |
| **COEN** | **Coen** | **37.45** | **270** | P | **P** | **12 47 28.2** | **+1.1** |
| COEN | | | | IAmb | IAmb | 12 47 39.5 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **37.45** | **231** | P | **P** | **12 47 29.1** | **+2.2** |
| TOO | | | | IAmb | IAmb | 12 47 45.8 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | **P** | **12 47 40.4** | **+1.4** |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | **P** | **12 47 38.1** | **-0.9** |
| | comp=Z,2.1nm,0.7s,baz=76,slow=12,SNR=3.0 comp=Z,2.1nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.72** | **241** | P | **P** | **12 48 17.6** | **+1.0** |
| **WRAB** | **Tennant Creek** | **44.96** | **259** | P | **P** | **12 48 26.2** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 12 48 27.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **12 48 26.2** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **12 48 26.7** | **+0.3** |
| | comp=Z,1.6nm,0.5s,baz=96,slow=6.9,SNR=68 comp=Z,1.6nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.13** | **254** | P | **P** | **12 48 28.5** | **+0.8** |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **12 48 28.0** | **+0.4** |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **12 48 28.6** | **+1.0** |
| | comp=Z,14nm,0.5s,baz=88,slow=8.2,SNR=345 comp=Z,14nm,0.5s | | | | | | |
| **KNRA** | **Kununurra** | **50.83** | **264** | P | **P** | **12 49 09.8** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 12 49 17.2 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **MAJO** | **Matsushiro** | **68.09** | **323** | P | **P** | **12 51 03.7** | **-0.7** |
| MAJO | | | | IAmb | IAmb | 12 51 40.7 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.09** | **323** | P | **P** | **12 51 03.8** | **-0.6** |
| MJB9 | | | | IAmb | IAmb | 12 51 40.7 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.17** | **180** | P | **P** | **12 51 27.1** | **-1.1** |
| **NVAR** | **Mina Array Bea** | **79.17** | **44** | P | P | 12 52 17.4 | +10 |
| | comp=Z,0.4nm,0.9s,baz=203,slow=4.4,SNR=2.9 comp=Z,0.4nm,0.9s | | | | | | |
| **TABL** | **Table Mountain** | **83.54** | **17** | P | **P** | **12 52 27.8** | **-1.3** |
| **G18K** | **Tagagawik** | **84.80** | **8** | P | **P** | **12 52 36.6** | **+1.7** |
| G18K | | | | IAmb | IAmb | 12 53 13.0 | |
| | comp=Z,7.2nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.69** | **57** | P | P | 12 52 50.0 | +10 |
| | comp=Z,0.3nm,0.8s,baz=217,slow=8.9,SNR=3.5 comp=Z,0.3nm,0.8s | | | | | | |
| **R33M** | **Jennings River** | **86.01** | **22** | P | **P** | **12 52 41.6** | **+0.6** |
| R33M | | | | IAmb | IAmb | 12 52 53.8 | |
| | comp=Z,8.8nm,1.4s | | | | | | |

**IDC 09 12:52:32.9±5.9, 5°95N×92°12E, h0km, mb3.4/4, mbtmp3.4/4, Error ellipse: s-maj=295.1km s-min=31.4km az=60.0, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **41.57** | **350** | P | P | 13 00 22.3 | -0.1 |
| | 0.1nm,0.5s,baz=156,slow=7.4,SNR=2.3 0.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.84** | **123** | P | P | 13 01 21.3 | +0.7 |
| | 0.3nm,0.8s,baz=302,slow=9.2,SNR=5.4 0.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **50.28** | **127** | P | P | 13 01 31.2 | -0.4 |
| | 0.3nm,1.0s,baz=301,slow=7.5,SNR=1.5 0.3nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **60.28** | **132** | P | P | 13 02 43.0 | -0.6 |
| | 1.8nm,0.9s,baz=328,slow=9.5,SNR=3.5 1.8nm,0.9s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **63.06** | **210** | T | T | 14 13 40.9 | |
| | baz=48,slow=74,SNR=5.0 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **63.07** | **210** | T | T | 14 13 38.2 | |
| | baz=48,slow=74,SNR=6.4 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **63.08** | **210** | T | T | 14 13 39.3 | |
| | baz=48,slow=74,SNR=4.6 | | | | | | |

*UCR **09** 13:21:54.8±0.8, 8°.37N×82°.71W, h36km±6km, MW3.5*

*UPA **09** 13:21:55.0±0.8, 8°.36N×82°.71W, h35km±3km, ML3.7, MW3.7*

**ISC 09 13:21:55.1±0.9, 8°38N±0°.04×82°72W±0°.02, h32km±7km, n28, σ0s65/45, 5C-2D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTPM** | **Petroterminale** | **0.23** | **223** | ⇓*i*P | **Pb** | **13 22 02.0** | **0.0** |
| PTPM | | | | AMP | | 13 22 04.9 | |
| | comp=Z,9μm,0.1s | | | | | | |
| PTPM | | | | *e*S | **Sb** | **13 22 06.2** | **-0.4** |
| **DVD** | **David** | **0.27** | **77** | *e*P | **Pb** | **13 22 02.4** | **-0.1** |
| DVD | | | | AMP | | 13 22 02.6 | |
| | comp=Z,10μm,0.1s | | | | | | |
| DVD | | | | *e*S | **Sb** | **13 22 07.8** | **+0.4** |
| **PEDE3** | **Pedregal, Chir** | **0.30** | **88** | ⇑*e*P | **Pb** | **13 22 02.5** | **-0.2** |
| PEDE3 | | | | AMP | | 13 22 03.3 | |
| | comp=Z,3μm,0.1s | | | | | | |
| PEDE3 | | | | *e*S | **Sb** | **13 22 08.2** | **+0.3** |
| **LOCO3** | **Loma Colorada,** | **0.30** | **83** | *e*P | **Pb** | **13 22 02.8** | **0.0** |
| LOCO3 | | | | *e*S | **Sn** | **13 22 08.9** | **+0.3** |
| **LIMO3** | **Limones** | **0.31** | **208** | ⇓*i*P | **Pb** | **13 22 02.8** | **-0.1** |
| LIMO3 | | | | AMP | | 13 22 05.1 | |
| | comp=Z,2μm,0.1s | | | | | | |
| LIMO3 | | | | *e*S | **Sb** | **13 22 08.4** | **+0.3** |
| **LOMA3** | **Las Lomas, Chi** | **0.33** | **80** | ⇑*e*P | **Pb** | **13 22 03.1** | **-0.1** |
| LOMA3 | | | | *e*S | **Sb** | **13 22 09.3** | **+0.5** |
| **NELY** | **Ciudad Neily** | **0.35** | **321** | *e*P | **Pb** | **13 22 03.2** | **-0.3** |
| NELY | | | | *e*S | **Sn** | **13 22 10.5** | **+0.6** |
| **BCO2** | **Palmira** | **0.39** | **29** | *e*P | **Pb** | **13 22 04.2** | **0.0** |
| BCO2 | | | | AMP | | 13 22 07.1 | |
| | comp=Z,14μm,0.1s | | | | | | |
| BCO2 | | | | *e*S | **Sn** | **13 22 11.8** | **+0.7** |
| **BRU2** | **Volcan** | **0.42** | **4** | *e*P | **Pb** | **13 22 04.5** | **-0.1** |
| BRU2 | | | | AMP | | 13 22 06.3 | |
| | comp=Z,1μm,0.1s | | | | | | |
| BRU2 | | | | *e*S | **Sn** | **13 22 12.1** | **+0.3** |
| **BRU2** | **Volcan** | **0.42** | **4** | *e*P | **Pb** | **13 22 04.5** | **-0.1** |
| **FITO** | **Golfito** | **0.49** | **300** | ⇑*i*P | **Pb** | **13 22 04.5** | **-1.0** |
| **LNBQ3** | **Los Naranjos,** | **0.50** | **34** | *e*P | **Pb** | **13 22 05.8** | **0.0** |
| LNBQ3 | | | | *e*S | **Sn** | **13 22 13.9** | **+0.2** |
| **EDAD** | **Golfito** | **0.52** | **302** | *e*P | **Pb** | **13 22 05.0** | **-1.0** |
| **PTJ1** | **Puerto Jimnez** | **0.60** | **286** | ⇑*e*P | **Pb** | **13 22 06.8** | **-0.4** |
| PTJ1 | | | | AMP | | 13 22 07.1 | |
| | comp=Z,36μm,0.1s | | | | | | |
| PTJ1 | | | | *e*S | **Sn** | **13 22 16.1** | **+0.2** |
| **PTJ1** | **Puerto Jimnez** | **0.60** | **286** | ⇑*e*P | **Pb** | **13 22 06.8** | **-0.4** |
| **JIME** | **Puerto Jimenez** | **0.62** | **285** | *e*P | **Pb** | **13 22 07.1** | **-0.5** |
| **CHGR2** | **Aguacate** | **0.80** | **46** | *e*P | **Pn** | **13 22 09.0** | **-1.1** |
| CHGR2 | | | | AMP | | 13 22 09.6 | |
| | comp=Z,5μm,0.1s | | | | | | |
| CHGR2 | | | | *e*S | **Sb** | **13 22 20.4** | **-0.8** |
| **EDPN** | **Palmar Norte** | **0.93** | **309** | *e*P | **Pn** | **13 22 11.6** | **-0.4** |
| **NANC3** | **Nancito, Chiri** | **0.99** | **98** | *e*P | **Pn** | **13 22 11.5** | **-1.2** |
| NANC3 | | | | *e*S | **Sn** | **13 22 25.0** | **-0.7** |
| **DRK0** | **Durika** | **1.02** | **330** | *e*P | **Pn** | **13 22 13.2** | **-0.2** |
| DRK0 | | | | *e*S | **Sn** | **13 22 27.6** | **+0.8** |
| **DRK0** | **Durika** | **1.02** | **330** | *e*P | **Pn** | **13 22 13.0** | **-0.4** |
| **GMAL** | **Guarumal, Vera** | **1.59** | **112** | *e*P | **Pn** | **13 22 20.0** | **-1.0** |
| **SAFE3** | **Santa Fe, Vera** | **1.63** | **85** | *e*P | **Pn** | **13 22 21.6** | **0.0** |
| SAFE3 | | | | *e*S | **Sn** | **13 22 42.7** | **+1.1** |
| **LLNJ** | **Naranjito** | **1.75** | **309** | *e*P | **Pn** | **13 22 24.3** | **+1.1** |
| **LCR2** | **La Lucha 2** | **1.86** | **317** | *e*P | **Pn** | **13 22 25.0** | **+0.1** |
| **ABE2** | **San Pablo** | **1.86** | **315** | *e*P | **Pn** | **13 22 26.3** | **+1.3** |
| **CACAO** | **El Cacao, Vera** | **2.11** | **119** | *e*P | **Pn** | **13 22 28.3** | **+0.2** |
| CACAO | | | | *e*S | **Sn** | **13 22 53.6** | **+0.3** |
| **AZU** | **Azuero** | **2.49** | **103** | *e*P | **Pn** | **13 22 34.9** | **+1.5** |
| AZU | | | | *e*S | **Sn** | **13 23 03.1** | **+0.4** |

*JMA **09** 14:10:56.5±0.2, 25°.N±2°.×122°.8E±0°.9, h79km, MV1.6/6, NW OFF ISHIGAKIJIMA IS*

*TAP **09** 14:10:56.8, 24°.63N×122°.77E, h78km±1km, ML2.6, D*

**ISC 09 14:10:57.3±1.7, 24°59N±0°.07×122°79E±0°.04, h78km±10km, n53, σ0s66/72, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.20** | **134** | P | **Pn** | **14 11 08.7** | **-0.2** |
| JYNG | | | | *e*S | **Sn** | **14 11 17.6** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **0.24** | **122** | P | **Pn** | **14 11 08.9** | **-0.2** |
| | baz=127 | | | | | | |
| YOJ | | | | S | **Sn** | **14 11 18.0** | **+0.3** |
| | baz=127 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.24** | **122** | P | **Pn** | **14 11 08.8** | **-0.2** |
| **EOS3** | **EOS3** | **0.52** | **235** | *e*P | **Pn** | **14 11 11.3** | **+0.5** |
| | baz=229 | | | | | | |
| **EOS4** | **EOS4** | **0.63** | **223** | *e*P | **Pn** | **14 11 12.0** | **+0.3** |
| | baz=218 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **14 11 23.7** | **+1.3** |
| | baz=218 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.84** | **300** | *e*P | **Pn** | **14 11 13.7** | **-0.6** |
| | baz=297 | | | | | | |
| **TWC** | **Suao** | **0.85** | **272** | *e*P | **Pn** | **14 11 14.0** | **-0.5** |
| | baz=268 | | | | | | |
| TWC | | | | *e*S | **Sn** | **14 11 26.3** | **-0.9** |
| | baz=268 | | | | | | |
| **ESAO** | **Su ao** | **0.86** | **269** | *e*P | **Pn** | **14 11 14.6** | **0.0** |
| | baz=266 | | | | | | |
| ESAO | | | | *e*S | **Sn** | **14 11 26.7** | **-0.7** |
| | baz=266 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.90** | **106** | *e*P | **Pn** | **14 11 14.6** | **-0.3** |
| **EWUT** | **Wuta** | **0.93** | **261** | *e*P | **Pn** | **14 11 15.4** | **0.0** |
| | baz=258 | | | | | | |
| EWUT | | | | *e*S | **Sn** | **14 11 29.1** | **+0.2** |
| | baz=258 | | | | | | |
| **TIPB** | **Shuangxi** | **0.95** | **294** | *e*P | **Pn** | **14 11 15.3** | **-0.4** |
| | baz=291 | | | | | | |
| **ENA** | **Nanau** | **0.97** | **261** | *e*P | **Pn** | **14 11 16.1** | **+0.3** |
| | baz=257 | | | | | | |
| ENA | | | | *e*S | **Sn** | **14 11 29.9** | **+0.3** |
| | baz=257 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.97** | **301** | *e*P | **Pn** | **14 11 15.4** | **-0.5** |
| | baz=299 | | | | | | |
| **EAHA** | **Aohua** | **0.99** | **255** | *e*S | **Sn** | **14 11 30.7** | **+0.6** |
| | baz=252 | | | | | | |
| **TWE** | **Neicheng** | **1.03** | **278** | *e*P | **Pn** | **14 11 16.3** | **-0.2** |
| | baz=274 | | | | | | |
| TWE | | | | S | **Sn** | **14 11 30.6** | **-0.4** |
| | baz=274 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.10** | **279** | *e*P | **Pn** | **14 11 17.9** | **+0.4** |
| | baz=276 | | | | | | |
| **ENTT** | **Nioudou** | **1.11** | **273** | *e*P | **Pn** | **14 11 18.0** | **+0.4** |
| | baz=270 | | | | | | |
| **LATG** | **Datong** | **1.15** | **268** | *e*P | **Pn** | **14 11 18.3** | **+0.1** |
| | baz=265 | | | | | | |
| LATG | | | | *e*S | **Sn** | **14 11 34.1** | **+0.3** |
| | baz=265 | | | | | | |
| **NDT** | **Datong Townshi** | **1.16** | **271** | *e*P | **Pn** | **14 11 18.7** | **+0.5** |
| | baz=268 | | | | | | |
| **NACB** | **Ninganchiao** | **1.16** | **249** | *e*P | **Pn** | **14 11 17.7** | **-0.5** |
| | baz=246 | | | | | | |
| NACB | | | | *e*S | **Sn** | **14 11 32.9** | **-1.1** |
| | baz=246 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.17** | **107** | *e*S | **Sn** | **14 11 35.1** | **+1.1** |
| **NWLT** | **Wulai** | **1.18** | **279** | *e*P | **Pn** | **14 11 18.8** | **+0.3** |
| | baz=277 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.25** | **253** | *e*P | **Pn** | **14 11 19.3** | **-0.1** |
| | baz=250 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.25** | **100** | *e*S | **Sn** | **14 11 35.4** | **-0.6** |
| **YHNB** | **Yeheng** | **1.29** | **274** | *e*P | **Pn** | **14 11 20.3** | **+0.4** |
| | baz=271 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **14 11 36.8** | **0.0** |
| | baz=271 | | | | | | |
| **NNSB** | **Datong** | **1.29** | **263** | *e*P | **Pn** | **14 11 19.9** | **0.0** |
| | baz=260 | | | | | | |
| **NSK** | **Sanguang** | **1.30** | **274** | *e*P | **Pn** | **14 11 20.4** | **+0.3** |
| | baz=271 | | | | | | |
| **ETM** | **Tongmen** | **1.33** | **243** | *e*P | **Pn** | **14 11 19.8** | **-0.6** |
| | baz=240 | | | | | | |
| **SHUL** | **Shoufeng** | **1.37** | **235** | *e*P | **Pn** | **14 11 20.2** | **-0.6** |
| | baz=232 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.38** | **246** | *e*P | **Pn** | **14 11 21.1** | **0.0** |
| | baz=243 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.46** | **253** | *e*P | **Pn** | **14 11 22.4** | **+0.1** |
| | baz=250 | | | | | | |
| WHF | | | | *e*S | **Sn** | **14 11 40.6** | **-0.7** |
| | baz=250 | | | | | | |
| **TWT** | **Tachien** | **1.51** | **258** | *e*P | **Pn** | **14 11 23.3** | **+0.5** |
| | baz=255 | | | | | | |
| TWT | | | | *e*S | **Sn** | **14 11 41.9** | **-0.1** |
| | baz=255 | | | | | | |
| **TDCB** | **Techi** | **1.52** | **258** | *e*P | **Pn** | **14 11 23.1** | **+0.1** |
| | baz=255 | | | | | | |
| TDCB | | | | S | **Sn** | **14 11 41.6** | **-0.7** |
| | baz=255 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.55** | **236** | *e*P | **Pn** | **14 11 22.3** | **-0.8** |
| | baz=234 | | | | | | |
| WARBT | | | | *e*S | **Sn** | **14 11 41.2** | **-1.5** |
| | baz=234 | | | | | | |
| **CHGB** | **Renai** | **1.56** | **251** | *e*P | **Pn** | **14 11 23.6** | **+0.1** |
| | baz=248 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **14 11 42.7** | **-0.7** |
| | baz=248 | | | | | | |
| **OWD** | **Renai** | **1.60** | **247** | *e*P | **Pn** | **14 11 24.0** | **+0.1** |
| | baz=245 | | | | | | |
| **LIOB** | **Emei** | **1.61** | **272** | *e*P | **Pn** | **14 11 25.0** | **+1.0** |
| | baz=270 | | | | | | |
| **WUSB** | **Renai** | **1.64** | **249** | *e*P | **Pn** | **14 11 24.4** | **0.0** |
| | baz=247 | | | | | | |
| **HGSD** | **Ruisui** | **1.66** | **229** | *e*P | **Pn** | **14 11 25.4** | **+0.8** |
| | baz=227 | | | | | | |
| **WHP** | **Taichung City** | **1.71** | **260** | *e*P | **Pn** | **14 11 26.0** | **+0.7** |
| | baz=257 | | | | | | |
| **VWDT** | **VWDT** | **1.72** | **241** | *e*P | **Pn** | **14 11 25.2** | **-0.1** |
| | baz=239 | | | | | | |
| **EHY** | **Hungye** | **1.72** | **231** | *e*P | **Pn** | **14 11 24.6** | **-0.8** |
| | baz=229 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.79** | **253** | *e*P | **Pn** | **14 11 27.1** | **+0.7** |
| | baz=251 | | | | | | |
| **YULB** | **Yu-li** | **1.81** | **229** | *e*P | **Pn** | **14 11 25.8** | **-0.8** |
| | baz=227 | | | | | | |
| **TWF1** | **Yuli** | **1.84** | **228** | *e*P | **Pn** | **14 11 26.2** | **-0.8** |
| | baz=226 | | | | | | |
| **SSLB** | **Suanglung** | **1.85** | **245** | *e*P | **Pn** | **14 11 28.1** | **+0.8** |
| | baz=243 | | | | | | |
| **TYC** | **Yuchr** | **1.89** | **249** | *e*P | **Pn** | **14 11 28.6** | **+1.0** |
| | baz=247 | | | | | | |
| **CHKT** | **Chengkung** | **1.97** | **222** | *e*P | **Pn** | **14 11 27.4** | **-1.4** |
| | baz=219 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.98** | **244** | *e*P | **Pn** | **14 11 29.4** | **+0.5** |
| | baz=241 | | | | | | |
| WHYT | | | | *e*S | **Sn** | **14 11 52.9** | **0.0** |
| | baz=241 | | | | | | |
| **EDH** | **Donghe** | **2.11** | **220** | *e*P | **Pn** | **14 11 29.4** | **-1.2** |
| | baz=219 | | | | | | |
| **ELDTW** | **Lidau** | **2.14** | **230** | *e*P | **Pn** | **14 11 30.4** | **-0.7** |
| | baz=227 | | | | | | |
| **STYH** | **Taoyuan** | **2.32** | **233** | *e*P | **Pn** | **14 11 34.1** | **+0.7** |
| | baz=231 | | | | | | |
| STYH | | | | *e*S | **Sn** | **14 12 01.2** | **+0.2** |
| | baz=231 | | | | | | |
| **SLGT** | **Liugui** | **2.52** | **231** | *e*P | **Pn** | **14 11 37.8** | **+1.6** |
| | baz=229 | | | | | | |
| SLGT | | | | *e*S | **Sn** | **14 12 07.3** | **+1.3** |
| | baz=229 | | | | | | |

*IDC **09** 14:14:13.9±0.5, 43°.21N×147°.03E, h0km, mb4.8/27, mbtmp4.8/29, ML3.6/3, MS3.8/58, Error ellipse: s-maj=14.0km s-min=12.3km az=122.0*

*JMA **09** 14:14:17.6±0.3, 43°.1N±1°.0×14 7°.E±°, h38km, MD4.7/37, MV4.9/37, E OFF HOKKAIDO*

*JMA Felt I J1 at E OFF HOKKAIDO .*

*SKHL **09** 14:14:17.9±0.5, 43°.10N×147°.20E, h48km±2km, mb5.5/11, mbv5.3/3, ms4.3/2*

*NIED **09** 14:14:17.6, 43°.12N×147°.14E, h38km, MW4.7, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁶Nm; Mrr0.54; Mθθ 0.38; Mφφ -0.92; Mrθ 0.95; Mθφ -0.34; Mφr 0.11; Fault plane solution: M₀ 1.26000×10¹⁶ NP1 φs 53.00000°, δ 72.00000°, λ 131.00000°. NP2 φs 162.00000°, δ 44.00000°, λ 27.00000°.*

*BJI **09** 14:14:18.7±0.0, 43°.19N×147°.06E, h51km, mb4.6/55, mB4.9/25, Ms4.2/43, Ms7 4.1/42*

*MOS **09** 14:14:18.4±0.9, 43°.14N×146°.99E, h44km, mb5.0/51, MS4.1/12, Error ellipse: s-maj=7.2km s-min=4.4km az=116.4*

*MOS Felt (II-III) at Malokuril'skoye; (II) at Goryachiy Plyazh, Yuzhno-Kuril'sk.*

*NEIC **09** 14:14:19.9±1.3, 43°.15N±0°.09×147°.0E±0°.1, h36km±6km, mb5.0/231, Error ellipse: s-maj=14.6km s-min=11.7km az=121.0*

*BGR **09** 14:14:

**JKHN Kushirohamanak 1.42 268** P **Pn** **14 14 42.6 -1.3**
JKHN S **Sn** **14 15 01.0 -0.5**
**JKHN Kushirohamanak 1.42 268** A A 14 14 42.6
comp=E,39nm,2.7s,comp=N,28nm,1.8s
**JRA Rausu 1.64 299** *i* P **Pn** **14 14 45.4 -1.5**
JRA S **Sn** **14 15 06.4 -0.4**
**JRA Rausu 1.64 299** A A 14 14 45.4
comp=E,16nm,1.7s,comp=N,18nm,1.8s
**JNSB Nemuroshibetsu 1.65 293** *i* P **Pn** **14 14 45.4 -1.6**
JNSB S **Sn** **14 15 06.1 -1.0**
**JNSB Nemuroshibetsu 1.65 293** A A 14 14 45.4
comp=E,22nm,1.4s,comp=N,23nm,1.7s
**RUSJ Misakicho 1.65 306**⇑ *i*PN **Pn** **14 14 45.6 -1.4**
RUSJ *e*S **Sn** **14 15 08.0 +1.0**
**AKK Akkeshi 1.66 266** *e*P **Pn** **14 14 45.1 -2.1**
AKK *e*S **Sn** **14 15 05.5 -1.8**
**JAK Akkeshi 1.77 266** P **Pn** **14 14 46.8 -1.8**
JAK S **Sn** **14 15 08.0 -1.9**
**JAK Akkeshi 1.77 266** A A 14 14 46.8
comp=E,41nm,2.8s,comp=N,23nm,2.5s
**JNK Nakash 1.79 285** *i* P **Pn** **14 14 46.9 -2.1**
JNK *e*S **Sn** **14 15 08.4 -2.1**
**JNK Nakash 1.79 285** A A 14 14 46.9
comp=E,10.0nm,2.6s,comp=N,11nm,1.2s
**KUR Kuril'sk 2.16 15** *e*P **Pn** **14 14 52.4 -1.6**
KUR AMB AMB 14 14 59.6
comp=N,1µm,0.5s
KUR *e*S **Sn** **14 15 18.2 -1.2**
KUR A A 14 15 32.3
comp=N,2µm,0.5s
KUR A A 14 15 32.3
comp=N,3µm,0.5s
KUR A A 14 15 44.7
comp=N,6µm,1.0s
KUR A A 14 15 44.7
comp=N,9µm,1.0s
**KUR Kuril'sk 2.16 15***c i*PN **Pn** **14 14 52.3 -1.7**
KUR *i* S **Sn** **14 15 18.3 -1.2**
KUR pmax pmax
comp=N,338nm,0.4s
KUR pmax pmax
comp=Z,951nm,0.4s
KUR pmax pmax
comp=E,322nm,0.3s
KUR smax smax
comp=E,3µm,0.7s
KUR smax smax
comp=N,978nm,0.2s
KUR smax smax
comp=E,9µm,1.7s
KUR smax smax
comp=N,6µm,1.2s
**JOB Onbets 2.41 265** *e*P **Pn** **14 14 56.2 -1.2**
**JOB Onbets 2.41 265** A A 14 14 56.2
comp=E,11nm,3.4s,comp=N,9.0nm,2.3s
**JAR Ashorobuto 2.44 275** P **Pn** **14 14 56.6 -1.2**
JAR *e*S **Sn** **14 15 25.5 -1.0**
**JAR Ashorobuto 2.44 275** A A 14 14 56.6
comp=E,9.0nm,1.1s,comp=N,10.0nm,3.9s
**JTKR Abashiri--Toko 2.46 291** *i* P **Pn** **14 14 57.3 -0.8**
JTKR *e*S **Sn** **14 15 26.7 -0.2**
**JTKR Abashiri--Toko 2.46 291** A A 14 14 57.3
comp=E,7.0nm,2.6s,comp=N,5.0nm,4.5s
**JCH Churui 2.80 260** P **Pn** **14 15 01.6 -1.2**
JCH *e*S **Sn** **14 15 33.0 -2.3**
**JMP Maruseppu 2.85 289** P **Pn** **14 15 03.0 -0.5**
JMP S **Sn** **14 15 39.6 +3.0**
**JMP Maruseppu 2.85 289** A A 14 15 03.0
comp=E,3.0nm,3.8s,comp=N,5.0nm,2.3s
**JTHR Tokachihiroo 2.93 254** A A 14 15 03.6
comp=E,5.0nm,4.1s,comp=N,5.0nm,4.8s
**ERM Erimo 3.12 250** P **Pn** **14 15 07.2 0.0**
**ERM Erimo 3.12 250** Pn **Pn** **14 15 07.2 0.0**
**ERM Erimo 3.12 250***c i*PN **Pn** **14 15 07.1 -0.1**
**JEM Erimo 3.12 250** *e*P **Pn** **14 15 07.1 -0.1**
**JKK2 Kamakawa 2 3.25 284** *e*P **Pn** **14 15 08.9 -0.1**
**JFR Furan 3.30 272** P **Pn** **14 15 08.9 -0.7**
JFR *e*S **Sn** **14 15 47.3 -0.3**
**JNBK Urakawa-nobuka 3.32 256** *e*P **Pn** **14 15 08.4 -1.5**
JNBK *e*S **Sn** **14 15 46.9 -1.2**
**JKA Kamikawa-asahi 3.41 288** Pn **Pn** **14 15 12.1 +1.0**
**JKA Kamikawa-asahi 3.41 288** *e*P **Pn** **14 15 12.1 +1.0**
**ASAJ Asahikawa 3.41 288** Pn **Pn** **14 15 11.5 +0.4**
comp=N,8.0nm,0.3s,baz=147,slow=5.9,SNR=60
ASAJ LR LR 14 16 34.7
comp=N,2µm,20.6s,baz=43,slow=42
**ASAJ Asahikawa 3.41 288** PN **Pn** **14 15 12.1 +1.0**
**ASAJ Asahikawa 3.41 288** P **Pn** **14 15 11.5 +0.4**
**JSHD Hidakashinhida 3.49 259** A A 14 15 11.6
comp=E,9.0nm,1.5s,comp=N,6.0nm,2.6s
**JBT2 Biratori 2 3.50 266** *e*P **Pn** **14 15 10.8 -1.5**
**JAB Ashibetsu 3.58 277** P **Pn** **14 15 14.7 +1.3**
**JAHD Aomorihigashid 4.67 248** A A 14 15 28.2
comp=E,4.0nm,0.4s,comp=N,4.0nm,1.7s
**YSS Yuzh-Sakhalins 4.89 323** P **Pn** **14 15 31.7 +0.2**
**YSS Yuzh-Sakhalins 4.89 323** **Pn** **14 15 31.3 -0.2**
**YSS Yuzh-Sakhalins 4.89 323** *e*P **Pn** **14 15 31.4 -0.1**
YSS *e*S **Sn** **14 16 26.0 -0.8**
YSS A A 14 16 40.0
comp=N,100nm,0.8s
YSS A A 14 16 40.0
comp=N,130nm,0.8s
YSS AMS AMS 14 17 28.2
comp=N,2µm,15.0s
YSS AMS AMS 14 17 28.2
comp=N,2µm,15.0s
**YSS Yuzh-Sakhalins 4.89 323**⇑ *e*PN **Pn** **14 15 31.4 -0.1**
YSS *e*S **Sn** **14 16 26.0 -0.8**
YSS pmax pmax
comp=Z,110nm,0.8s
YSS smax smax
comp=N,160nm,0.8s
YSS smax smax
comp=E,120nm,0.8s
YSS MLR MLR
comp=N,2µm,15.0s
YSS MLR MLR
comp=Z,2µm,15.0s
**JTM Tenmabayashi 5.08 244** P **Pn** **14 15 32.3 -1.8**
**JTM Tenmabayashi 5.08 244** Pn **Pn** **14 15 32.2 -1.8**
**UGL Uglegorsk 6.88 331** *e*P **Pn** **14 15 59.2 +0.5**
UGL AMB AMB 14 16 01.9
comp=Z,40nm,0.6s
**JMM Marumori 7.13 224** P **Pn** **14 15 58.5 -3.8**
**TYV Tymovskoe 8.29 340** *e*P **Pn** **14 16 19.4 +1.4**
TYV AMB AMB 14 16 21.8
comp=Z,100nm,2.0s
TYV AMB AMB 14 16 24.6
comp=Z,10.0nm,0.5s
TYV *e*S **Sn** **14 17 50.0 -0.2**
TYV A A 14 17 55.3
comp=Z,60nm,1.0s
TYV A A 14 17 55.3
comp=Z,80nm,1.0s
**TYV Tymovskoe 8.29 340** *e*PN **Pn** **14 16 18.8 +0.8**
TYV *e*S **Sn** **14 17 53.1 +2.9**
TYV pmax pmax
comp=Z,100nm,4.5s
TYV pmax pmax
comp=Z,11nm,0.8s
TYV smax smax
comp=N,6.0nm,1.4s
TYV smax smax
comp=E,8.0nm,1.4s
TYV smax smax
comp=E,100nm,3.1s
**MJAR Matsushiro Arr 9.50 229** Pn **Pn** **14 16 32.4 -2.3**
comp=E,0.2nm,0.3s,baz=28,slow=15,SNR=10
MJAR Sn **Sn** **14 18 19.0 -0.9**
MJAR comp=E,0.2nm,0.3s,baz=316,slow=12,SNR=4.4 LR LR 14 20 28.9
comp=E,465nm,22.0s,baz=46,slow=40
comp=E,3.7nm,0.8s
**MJB9 Matsu-Tunnel 9.50 229** **Pn** **14 16 33.0 -1.7**
**MAJO Matsushiro 9.50 229** P **Pn** **14 16 32.8 -1.8**
**MAJO Matsushiro 9.50 229** **Pn** **14 16 32.4 -2.3**
**MAJO Matsushiro 9.50 229***c i*PN **Pn** **14 16 33.2 -1.4**
MAJO pmax pmax
comp=Z,7.0nm,0.8s
**SKR Severo-Kuril's 9.73 36** *e*P **Pn** **14 16 37.3 -0.4**
SKR AMB AMB 14 16 40.1
comp=Z,220nm,0.5s
SKR AMB AMB 14 16 41.8
comp=Z,600nm,5.0s
SKR *e*S **Sn** **14 18 20.9 -4.6**
SKR A A 14 18 25.2
comp=Z,110nm,0.6s
SKR A A 14 18 25.2
comp=Z,190nm,0.6s
SKR AMS AMS 14 19 30.3
comp=Z,1µm,16.0s
SKR AMS AMS 14 19 30.3
comp=Z,1µm,16.0s
SKR AMS AMS 14 19 30.3
comp=Z,1µm,16.0s
**SKR Severo-Kuril's 9.73 36**⇑ *i*PN **Pn** **14 16 37.3 -0.4**
SKR pmax pmax
comp=Z,220nm,0.5s
SKR pmax pmax
comp=Z,700nm,9.7s
SKR MLR MLR
comp=E,1µm,16.0s
SKR MLR MLR
comp=N,1µm,15.0s
**GRNR Gornyy 10.54 320** *e*P **Pn** **14 16 50.1 +1.2**
GRNR AMB AMB 14 16 51.1
comp=N,40nm,1.0s
**GRNR Gornyy 10.54 320**⇑ *i*PN **Pn** **14 16 50.1 +1.2**
GRNR pmax pmax
comp=Z,4.0nm,1.0s
GRNR MLR MLR
comp=N,380nm,16.0s
GRNR MLR MLR
comp=E,390nm,16.0s
GRNR MLR MLR
comp=Z,560nm,16.0s
**JGF Kuroka 10.65 228** P **Pn** **14 16 49.3 -1.2**
**JGF Kuroka 10.65 228** Pn **Pn** **14 16 49.0 -1.5**
**OKH Okha 10.77 347** AMB AMB 14 15 39.2
comp=Z,150nm,0.5s
**NKL Nikolayevsk 10.88 339** *e*P **Pn** **14 16 53.6 +0.2**
NKL AMB AMB 14 16 56.0
comp=Z,10.0nm,0.6s
**USRK Ussuriysk Ar. 11.00 281** Pn **Pn** **14 16 54.6 -0.4**
comp=Z,0.3nm,0.3s,baz=79,slow=13,SNR=4.9
USRK LR LR 14 21 15.4
comp=Z,420nm,18.2s,baz=57,slow=38
**JHJ2 Mitsune 11.54 212** P **Pn** **14 16 59.9 -2.6**
**JHJ Hachijo jima 2 11.54 212** Pn **Pn** **14 16 58.7 -3.9**
comp=Z,14nm,0.3s,baz=345,slow=20,SNR=1.6
JHJ Sn Sn 14 18 57.5 -13
comp=Z,25nm,0.3s,baz=72,slow=22,SNR=7.8
comp=Z,38nm,0.3s
**MSHR Mys Shultsa 11.72 273**⇓ *e*PN **Pn** **14 17 01.9 -3.0**
**PSTR Posyet 11.97 273***de*PN **Pn** **14 17 05.9 -2.4**
**KLR Kul'dur 12.24 305** Pn **Pn** **14 17 14.2 +2.1**
comp=Z,0.2nm,0.3s,baz=106,slow=11,SNR=7.5
KLR LR LR 14 22 23.4
comp=Z,567nm,18.9s,baz=119,slow=40
**KLR Kul'dur 12.24 305** *e*P **Pn** **14 17 11.9 -0.2**
**KLR Kul'dur 12.24 305** *e*PN **Pn** **14 17 14.8 +2.7**
KLR pmax pmax
comp=Z,33nm,1.3s
**BNX BinXian 14.30 287**⇓ P **Pn** **14 17 38.3 -1.8**
BNX pmax pmax
comp=Z,7.0nm,0.6s
**HEH HeiHe 15.24 305** *e*P **Pn** **14 17 52.7 +0.4**
HEH pP **P** **14 17 58.0 +1.6**
HEH S **Sn** **14 20 43.6 +3.9**
HEH pmax pmax
comp=Z,5.0nm,0.6s
HEH LR LR
comp=Z,950nm,15.9s
HEH LR LR
comp=Z,480nm,15.8s
HEH LR LR
comp=Z,980nm,14.2s
**KSRS Korea Array 15.69 255** Pn **Pn** **14 17 58.3 +0.2**
comp=Z,0.1nm,0.3s,baz=59,slow=13,SNR=6.4
KSRS LR LR 14 23 55.5
comp=Z,348nm,20.1s,baz=65,slow=37
**CN2 Changchun 15.73 280** *e*P **Pn** **14 17 58.6 -0.1**
CN2 *ep*P pP 14 18 08.9 -3.8
CN2 *e*S **Sn** **14 20 49.7 -2.2**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,300nm,14.0s
CN2 LR LR
comp=Z,400nm,14.0s
CN2 LR LR
comp=Z,600nm,14.0s
**JNU Nakatsue 16.19 237** Pn **P** **14 18 07.8 +0.7**
comp=Z,0.5nm,0.3s,baz=118,slow=2.3,SNR=2.2
JNU LR LR 14 23 35.1
comp=Z,50nm,21.1s,baz=32,slow=35
**KBG Krutoberegovo 16.50 32** *e*P **Pn** **14 18 04.9 -3.4**
KBG AMB AMB 14 18 07.5
comp=Z,30nm,0.5s
**ZEA Zeya 16.84 316** *e*P **P** **14 18 15.0 +0.9**
ZEA pmax pmax
comp=E,10.0nm,1.2s
ZEA pmax pmax
comp=N,10.0nm,0.8s
ZEA pmax pmax
comp=Z,20nm,1.0s
ZEA MLR MLR
comp=N,300nm,16.0s
ZEA MLR MLR
comp=E,400nm,16.0s
**DL2 Dalian 19.65 266** *e*P **P** **14 18 44.0 -1.1**
DL2 pP **pP** **14 18 54.9 -1.0**
DL2 S **S** **14 22 18.6 -5.5**
DL2 pmax pmax
comp=E,22nm,0.9s
DL2 LR LR
comp=E,220nm,14.8s
DL2 LR LR
comp=E,260nm,14.3s
DL2 LR LR
comp=E,390nm,15.5s
**SEY Seymchan 20.06 7** P **P** **14 18 46.4 -3.0**
comp=E,24nm,0.8s,baz=202,slow=8.7,SNR=33
comp=E,24nm,0.8s
**SEY Seymchan 20.06 7**⇓ *e*P **P** **14 18 47.6 -1.7**
SEY pmax pmax
comp=Z,30nm,1.0s
**YAK Yakutsk 21.54 337** P **P** **14 18 59.9 -5.3**
comp=Z,35nm,0.6s,baz=325,slow=3.9,SNR=11
YAK LR LR 14 27 41.2
comp=Z,202nm,19.7s,baz=141,slow=38
**YAK Yakutsk 21.54 337** *e*P **P** **14 19 01.9 -3.3**
YAK *e* 14 19 18.3
YAK *e*S **S** **14 22 56.0 -5.0**
YAK *e**SS Sn 14 23 07.5 -4.0
YAK *e* 14 30 23.3
YAK pmax pmax
comp=Z,26nm,0.9s
YAK pmax pmax
comp=N,3.0nm,0.6s
YAK pmax pmax
comp=E,5.0nm,1.0s
YAK smax smax
comp=E,23nm,1.4s
YAK smax smax
comp=N,49nm,1.5s
YAK MLR MLR
comp=Z,349nm,16.0s
YAK MLR MLR
comp=E,183nm,14.0s
YAK MLR MLR
comp=N,121nm,15.0s
**JOW Kunigami 22.34 229** P **P** **14 19 16.3 +2.1**
comp=N,24nm,0.9s,baz=6.7,slow=17,SNR=1.7
**XLT XiLinHaoTe 22.44 283** *e*P **P** **14 19 15.5 +0.2**
XLT pP pP 14 19 28.9 +2.6
XLT sP sP 14 19 35.5 +3.2
XLT PP **PnPn** **14 19 45.6 +5.9**
XLT S **S** **14 23 18.9 +0.4**
XLT sS Sn 14 23 35.1 +1.4
XLT SS **SnSn** **14 23 56.4 +6.7**
XLT pmax pmax
comp=N,11nm,0.6s
XLT pmax pmax
comp=N,64nm,5.5s
XLT LR LR
comp=N,410nm,15.7s
XLT LR LR
comp=N,530nm,15.3s
**AMKA Amchitka 23.20 58** P **P** **14 19 24.3 +1.4**
**BJI Beijing 23.27 273** P **P** **14 19 22.0 -1.6**
BJI pmax pmax
comp=N,6.0nm,0.8s
**SSE Sheshan 23.81 248** P **P** **14 19 26.8 -2.0**
SSE S **S** **14 23 37.9 -3.1**
SSE pmax pmax
comp=N,10.0nm,0.7s
SSE pmax pmax
comp=N,75nm,4.7s
SSE LR LR
comp=N,130nm,19.6s
SSE LR LR
comp=N,200nm,19.2s
**TIA Tai'an 24.00 263** *e*P **P** **14 19 29.5 -1.1**
TIA pmax pmax
comp=N,17nm,0.7s
**NJ2 Nanjing 24.86 253** *e*P **P** **14 19 38.8 +0.5**
NJ2 pP **pP** **14 19 49.0 -1.2**
NJ2 sP **pwP** **14 19 54.2 +0.8**
NJ2 pmax pmax
comp=N,8.0nm,0.5s
NJ2 pmax pmax
comp=N,91nm,3.8s
**HNS HongShan 25.27 268**⇓ P **P** **14 19 42.2 +0.1**
HNS LR LR
comp=N,220nm,15.1s
HNS LR LR
comp=N,220nm,15.1s
HNS LR LR
comp=N,390nm,17.5s
**HHC Hu-ho-hao-te 26.39 277** *e*P **P** **14 19 52.2 -0.1**
HHC pP pP 14 20 03.0 -1.4
HHC S **S** **14 24 20.9 -1.4**
HHC pmax pmax
comp=N,15nm,0.6s
HHC pmax pmax
comp=N,170nm,4.6s
HHC LR LR
comp=N,140nm,15.4s
HHC LR LR
comp=N,310nm,15.4s
HHC LR LR
comp=N,380nm,14.6s
**BTO Baotou 27.58 278** *e*P **P** **14 20 02.9 -0.1**
BTO pP **pP** **14 20 14.9 -0.3**
BTO sP **sP** **14 20 24.5 +3.7**
BTO PP **PnPn** **14 20 52.0 +2.1**
BTO S **S** **14 24 41.8 +0.8**
BTO pmax pmax
comp=N,14nm,0.9s
BTO pmax pmax
comp=N,250nm,4.3s
BTO LR LR
comp=N,390nm,11.2s
BTO LR LR
comp=N,620nm,8.0s
BTO LR LR
comp=N,760nm,14.2s
**LYN LuoYang 28.14 264** *e*P **P** **14 20 09.6 +1.6**
LYN pmax pmax
comp=N,36nm,0.6s
LYN pmax pmax
comp=N,240nm,4.9s
LYN LR LR
comp=N,280nm,14.8s
LYN LR LR
comp=N,260nm,10.0s
LYN LR LR
comp=N,320nm,13.1s
**ULN Ulaanbaatar 28.23 294** *e*P **P** **14 20 08.6 -0.2**
**ULN Ulaanbaatar 28.23 294***de*P **P** **14 20 08.6 -0.2**
ULN pmax pmax
comp=Z,17nm,0.8s
**SONM Songino Array 28.67 294** P **P** **14 20 12.5 -0.2**
SONM IAmb IAmb 14 20 13.5
comp=Z,14nm,0.7s
**SONM Songino Array 28.67 294** P **P** **14 20 12.1 -0.6**
comp=Z,12nm,0.5s,baz=87,slow=8.7,SNR=52
SONM LR LR 14 32 44.8
comp=Z,613nm,19.5s,baz=89,slow=39
comp=Z,12nm,0.5s
**SONM Songino Array 28.67 294** P **P** **14 20 12.5 -0.2**
SONM pmax pmax
comp=Z,14nm,0.7s
**GUMO Guam 29.52 184** LR LR 14 30 46.1
comp=Z,66nm,20.8s,baz=14,slow=34
**SPIA Saint Paul Isl 30.16 47** P **P** **14 20 26.0 +0.5**
baz=261
**P08K Saint George I 30.45 49** P **P** **14 20 28.6 +0.5**
baz=262
**NIKH Nikolski High 30.59 56** P **P** **14 20 30.0 +0.6**
baz=269
**XAN Xi'an 30.97 266**⇓ P P 14 20 40.2 +7.1
XAN pP pwP 14 20 49.0 +1.1
XAN pmax pmax
comp=Z,13nm,2.0s
XAN pmax pmax
comp=Z,150nm,6.2s
**GAMB Gambell 31.22 34** P **P** **14 20 35.3 +0.5**
baz=248
**UNV Unalaska Valle 32.00 54** P **P** **14 20 42.8 +1.0**
baz=270
**M11K Mekoryuk 32.78 42** P **P** **14 20 49.6 +1.0**
baz=260
**TNA Tin City 33.38 32** P **P** **14 20 54.5 +0.8**
baz=250
**LZH Lanzhou 33.76 273** *e*P **P** **14 20 57.8 +0.2**
LZH pP pP 14 21 06.1 -3.7
LZH pmax pmax
comp=Z,26nm,1.1s
LZH LR LR
comp=Z,170nm,15.1s
LZH LR LR
comp=Z,310nm,17.2s
**K13K Kusilvak Mount 33.81 39** P **P** **14 20 58.4 +0.9**
baz=259
**F14K Arctic Creek 33.98 33** P **P** **14 21 00.2 +1.2**
baz=252,SNR=6.9
**ANM Nome 34.10 35** P **P** **14 21 01.4 +1.3**
baz=254
**M13K Dall Lake 34.18 42** P **P** **14 21 02.2 +1.5**
baz=262
**J14K Nanvaranak Lak 34.47 38** P **P** **14 21 04.4 +1.2**
J14K IAmb IAmb 14 21 04.7
comp=Z,12nm,0.7s
**J14K Nanvaranak Lak 34.47 38** P **P** **14 21 04.2 +1.0**
baz=259
**L14K Kuka Creek 34.63 41** P **P** **14 21 06.2 +1.5**
L14K IAmb IAmb 14 21 19.6
comp=Z,24nm,1.1s
**L14K Kuka Creek 34.63 41** P **P** **14 21 05.9 +1.2**
baz=262
**F15K North Star Dit 34.72 33** P **P** **14 21 06.3 +0.9**
baz=254
**G15K Niukluk 34.77 34** P **P** **14 21 06.9 +1.2**
baz=255,SNR=7.5
**M14K Bethel 34.91 42** P **P** **14 21 08.2 +1.2**
**M14K Bethel 34.91 42** P **P** **14 21 08.0 +1.0**
baz=263,SNR=9.2
**N14K Kuskokwak Cree 34.95 43** P **P** **14 21 08.4 +1.0**
baz=265
**O14K Tigyukauivet M 35.12 44** P **P** **14 21 09.8 +1.0**
baz=266
**L15K Ungalak Mounta 35.25 40** P **P** **14 21 10.8 +0.8**
baz=262
**C16K Lisburne Hills 35.28 28** P **P** **14 21 10.5 +0.3**
baz=249
**K15K Wolf Creek Mou 35.31 39** P **P** **14 21 11.9 +1.3**
**K15K Wolf Creek Mou 35.31 39** P **P** **14 21 11.5 +1.0**
baz=262
**GTA Gaotai 35.36 280** P **P** **14 21 11.3 -0.1**
GTA PcP **PcP** **14 23 42.2 +1.6**
GTA sS sS 14 27 00.6 -1.9
GTA pmax pmax
comp=Z,4.0nm,0.7s
GTA LR LR
comp=Z,140nm,14.2s
GTA LR LR
comp=Z,200nm,16.4s
GTA LR LR
comp=Z,230nm,16.7s
**H16K Elim 35.43 35** P **P** **14 21 12.1 +0.6**
baz=258,SNR=5.5
**SDPT Sand Point 35.48 51** P **P** **14 21 12.8 +0.7**
baz=272
**M15K Kasigluk River 35.52 42** P **P** **14 21 13.0 +0.7**

baz=265,SNR=12
G16K Koyuk River 35.55 34 P P 14 21 13.2 +0.7
G16K Koyuk River 35.55 34 P P 14 21 13.2 +0.7
baz=256
N15K Kwethluk River 35.77 43 P P 14 21 15.7 +1.2
N15K Kwethluk River 35.77 43 P P 14 21 15.5 +1.0
baz=266,SNR=6.5
O15K Ungalikthiuk R 35.85 45 P P 14 21 15.7 +0.5
baz=268
J16K Anvik River 35.89 38 P P 14 21 15.1 -0.3
J16K Anvik River 35.89 38 P P 14 21 16.1 +0.7
baz=261
D17K Noatak River 35.90 30 P P 14 21 15.9 +0.5
baz=253,SNR=9.2
I17K Unalakleet 35.95 37 P P 14 21 16.2 +0.3
baz=260
CHNA Chernabura Isl 36.02 52 P P 14 21 16.8 +0.2
baz=274
RDOG Red Dog Mine 36.07 29 P P 14 21 16.9 0.0
baz=252
C17K DeLong Mountai 36.10 29 P P 14 21 17.3 +0.1
baz=252,SNR=6.7
E17K Hotham Inlet 36.19 31 P P 14 21 18.5 +0.5
baz=255
L16K Owhat River 36.21 40 IAmb IAmb 14 21 31.5
comp=Z,11nm,0.8s
L16K Owhat River 36.21 40 P P 14 21 19.0 +0.8
baz=264,SNR=7.3
F17K Baldwin Pennin 36.24 32 P P 14 21 19.4 +1.0
baz=256,SNR=9.2
G17K Kiwalik Mounta 36.27 34 P P 14 21 19.8 +1.1
baz=258,SNR=24
CD2 Chengdu 36.31 265 eP P 14 21 17.5 -2.0
M16K Timber Creek 36.39 42 IAmb IAmb 14 21 33.5
comp=Z,19nm,0.8s
M16K Timber Creek 36.39 42 P P 14 21 20.7 +0.9
baz=266,SNR=9.3
N16K Nishlik Lake 36.45 43 P P 14 21 21.5 +1.2
baz=267,SNR=12
H17K Granite Mounta 36.47 35 IAmb IAmb 14 21 22.6
comp=Z,18nm,1.1s
H17K Granite Mounta 36.47 35 P P 14 21 21.6 +1.2
baz=260,SNR=7.7
J17K VABM Dome 36.59 38 IAmb IAmb 14 21 36.4
comp=Z,19nm,0.9s
J17K VABM Dome 36.59 38 P P 14 21 22.5 +1.2
baz=262,SNR=7.9
E18K Tukpahlearik C 36.73 31 P P 14 21 23.2 +0.6
baz=256
O16K Kokwok River B 36.75 44 P P 14 21 23.4 +0.6
O16K IAmb IAmb 14 21 37.0
comp=Z,12nm,0.9s
O16K Kokwok River B 36.75 44 P P 14 21 23.6 +0.8
baz=268
P16K Nushagak River 36.79 45 P P 14 21 24.3 +1.1
baz=269
L17K Donlin 36.80 40 P P 14 21 24.4 +1.1
baz=265,SNR=8.2
C18K Utukok River 36.85 29 IAmb IAmb 14 21 24.4
comp=Z,25nm,0.8s
C18K Utukok River 36.85 29 P P 14 21 23.4 -0.3
baz=253,SNR=10
K17K Iditarod 36.85 39 IAmb IAmb 14 21 26.1
comp=Z,16nm,0.8s
K17K Iditarod 36.85 39 P P 14 21 24.9 +1.2
baz=264,SNR=8.2
B18K Kokolik River 36.86 27 P P 14 21 23.9 +0.3
baz=252
F18K Selawik 36.91 32 P P 14 21 25.1 +1.0
baz=258,SNR=13
H18K Honhosa River 37.15 35 P P 14 21 27.0 +0.8
baz=261
M17K Holitna River 37.15 41 P P 14 21 27.6 +1.3
baz=267,SNR=17
G18K Tagagawik 37.16 33 P P 14 21 27.3 +1.0
baz=260,SNR=37
N17K Nushagak Hills 37.23 42 P P 14 21 28.2 +1.2
N17K IAmb IAmb 14 21 41.0
comp=Z,15nm,0.8s
N17K Nushagak Hills 37.23 42 P P 14 21 28.0 +1.0
baz=268
O17K Koliganek Bris 37.26 44 P P 14 21 28.2 +1.1
baz=269,SNR=8.9
C19K Lookout Ridge 37.54 28 IAmb IAmb 14 21 30.6
comp=Z,35nm,1.1s
C19K Lookout Ridge 37.54 28 P P 14 21 29.7 +0.3
baz=254,SNR=10
L18K Granite Mounta 37.56 40 IAmb IAmb 14 21 43.8
comp=Z,16nm,0.8s
L18K Granite Mounta 37.56 40 P P 14 21 30.8 +1.2
baz=266,SNR=10
P17K Kvichak River 37.59 45 P P 14 21 30.8 +0.8
baz=270
J18K Innoko River 37.65 38 IAmb IAmb 14 21 44.9
comp=Z,12nm,0.9s
J18K Innoko River 37.65 38 P P 14 21 31.2 +0.8
baz=265,SNR=10
R17L Mt. Peulik Vol 37.67 47 P P 14 21 31.4 +0.7
baz=273
F19K Shaleruckik Mo 37.68 32 P P 14 21 31.0 +0.3
baz=259,SNR=33
GCSA Galena City Sc 37.72 36 P P 14 21 31.2 +0.2
baz=263,SNR=5.5
G19K Purcell Mounta 37.83 33 IAmb IAmb 14 21 33.4
comp=Z,24nm,0.8s
G19K Purcell Mounta 37.83 33 P P 14 21 32.4 +0.4
baz=261,SNR=19
N18K Kilae Creek 37.88 42 P P 14 21 33.7 +1.3
baz=269,SNR=11
Q17K Contact Creek 37.90 46 P P 14 21 33.5 +0.8
baz=272
D19K Kuna River 37.90 29 P P 14 21 33.0 +0.4
baz=257
M18K Stony River 37.93 41 P P 14 21 33.9 +1.1
baz=268
H19K Roundabout Mou 38.00 34 P P 14 21 34.5 +1.2
baz=262,SNR=61
E19K Redstone River 38.01 31 P P 14 21 34.3 +0.9
baz=259
J19K Poorman 38.18 37 IAmb IAmb 14 21 49.2
comp=Z,27nm,1.0s
J19K Poorman 38.18 37 P P 14 21 35.4 +0.5
baz=265,SNR=14
CHIR Chirikof Islan 38.20 50 P P 14 21 36.0 +0.8
baz=276
P18K Big Mountain, 38.21 44 P P 14 21 35.9 +0.6
baz=271
O18K Koktuh Hills 38.21 44 IAmb IAmb 14 21 49.9
comp=Z,21nm,0.9s
O18K Koktuh Hills 38.21 44 P P 14 21 35.8 +0.6
baz=271
Q18K Katmai Hardscr 38.35 46 P P 14 21 37.2 +0.7
baz=272
L19K White Mountain 38.42 40 P P 14 21 37.9 +1.0
L19K White Mountain 38.42 40 P P 14 21 37.8 +0.8
baz=268
D20K Etivluk River 38.49 29 P P 14 21 37.9 +0.4
baz=258
F20K Avaraart Lake 38.52 32 IAmb IAmb 14 21 39.2
comp=Z,25nm,1.3s
F20K Avaraart Lake 38.52 32 P P 14 21 38.3 +0.7
baz=261,SNR=17
E20K Nigu River 38.55 30 P P 14 21 38.7 +0.7
baz=259
N19K Bonanza Creek 38.57 42 IAmb IAmb 14 21 52.9
comp=Z,19nm,0.8s
N19K Bonanza Creek 38.57 42 P P 14 21 39.2 +0.9
baz=270,SNR=7.2
B20K Meade River 38.59 27 P P 14 21 38.2 0.0
baz=256,SNR=14
M19K Big River Lodg 38.63 40 P P 14 21 39.9 +1.2
baz=269
H20K Anotleneega Mo 38.65 35 P P 14 21 39.6 +0.8
baz=264,SNR=21
I20K Naaghedeneel 38.75 36 IAmb IAmb 14 21 41.9
comp=Z,20nm,0.9s
I20K Naaghedeneel 38.75 36 P P 14 21 40.7 +1.1
baz=265
K20K Telida 38.83 38 P P 14 21 41.3 +0.9
baz=267,SNR=7.8
J20K Nowinta River 38.84 37 IAmb IAmb 14 21 55.1
comp=Z,22nm,0.8s
J20K Nowinta River 38.84 37 P P 14 21 41.5 +1.1
baz=266,SNR=25
L20K Farewell, AK 38.88 39 P P 14 21 41.7 +0.9
baz=268
IMAR Indian Mountai 39.16 34 P P 14 21 43.7 +0.6
P19K Oil Pt 39.22 44 P P 14 21 44.0 +0.4
baz=273
M20K Styx River 39.22 40 P P 14 21 44.8 +1.1
baz=270
G21K Allakaket 39.32 33 P P 14 21 45.6 +1.2
baz=264
OHAK Old Harbor 39.36 48 P P 14 21 44.3 -0.5
baz=276
B21K Ikpikpuk River 39.37 28 P P 14 21 45.3 +0.5
baz=259,SNR=52
E21K Killik River 39.39 30 IAmb IAmb 14 21 46.2
comp=Z,17nm,0.8s
E21K Killik River 39.39 30 P P 14 21 45.2 +0.1
baz=261,SNR=16
F21K Alatna River 39.41 32 IAmb IAmb 14 21 46.8
comp=Z,27nm,1.0s
F21K Alatna River 39.41 32 P P 14 21 45.8 +0.7
baz=263,SNR=28
O20K Slope Mountain 39.51 43 P P 14 21 46.6 +0.5
baz=273
H21K Melozitna Rive 39.52 34 IAmb IAmb 14 21 48.1
comp=Z,61nm,1.6s
H21K Melozitna Rive 39.52 34 P P 14 21 46.8 +0.7
baz=266,SNR=20
A22K Sinclair Lake 39.54 26 P P 14 21 46.1 0.0
baz=257
N20K Mount Spurr 39.67 41 P P 14 21 48.4 +1.0
baz=272
KDAK Kodiak Island 39.69 47 P P 14 21 47.3 -0.2
baz=275
KDAK Kodiak Island 39.69 47 P P 14 21 47.0 -0.5
KDAK pP pP 14 21 59.7 +0.1
Q20K Shuyak Island 39.71 45 P P 14 21 47.5 -0.2
baz=274
B22K Teshekpuk Lake 39.91 27 IAmb IAmb 14 21 50.0
comp=Z,22nm,0.9s
B22K Teshekpuk Lake 39.91 27 P P 14 21 49.1 -0.2
baz=259,SNR=13
D22K Ayikyak River 39.93 29 IAmb IAmb 14 21 50.9
comp=Z,41nm,1.2s
D22K Ayikyak River 39.93 29 P P 14 21 50.0 +0.5
baz=262,SNR=23
F22K John River 39.94 32 P P 14 21 50.6 +1.1
baz=264,SNR=43
SKT Skwentna 39.98 40 P P 14 21 50.9 +0.9
SKT Skwentna 39.98 40 P P 14 21 50.5 +0.5
baz=271
H22K Ishtalitna Cre 40.12 34 P P 14 21 52.4 +1.3
baz=267,SNR=14
G22K Bettles 40.15 32 P P 14 21 51.7 +0.5
baz=265
BPAW Bear Paw Mtn. 40.22 37 P P 14 21 52.9 +1.0
baz=269,SNR=8.2
PZH PanZhiHua 40.24 261 P P 14 21 54.3 +1.6
PZH pmax pmax
comp=Z,20nm,0.6s
PZH pmax pmax
comp=Z,130nm,5.1s
GOMU GeErMu 40.29 278 P P 14 21 53.3 +0.1
GOMU PcP PcP 14 23 58.5 +2.4
GOMU pmax pmax
comp=Z,36nm,0.8s
GOMU LR LR
comp=Z,300nm,15.4s
GOMU LR LR
comp=Z,250nm,15.9s
GOMU LR LR
comp=Z,380nm,15.3s
MLY Manley 40.35 35 P P 14 21 54.1 +1.1
baz=268,SNR=16
SUA Susitna One 40.37 41 IAmb IAmb 14 22 09.5
comp=Z,68nm,1.9s
SUA Susitna One 40.37 41 P P 14 21 53.1 -0.2
baz=272
BRSE Bradley Lake S 40.48 44 P P 14 21 54.3 +0.2
baz=274
DAV Davao City (W) 40.62 214 LR LR 14 41 32.1
comp=Z,47nm,18.1s,baz=6.5,slow=40
D23K Nanushuk River 40.66 29 P P 14 21 56.2 +0.8
baz=264,SNR=17
COLD Coldfoot 40.68 32 P P 14 21 56.5 +0.8
baz=266,SNR=36
DGZ Jazzator, Alta 40.69 301⇑ eP P 14 21 56.2 0.0
DGZ pmax pmax
comp=Z,3.0nm,0.7s
G23K Bananza Creek 40.72 33 IAmb IAmb 14 21 57.8
comp=Z,26nm,0.8s
G23K Bananza Creek 40.72 33 P P 14 21 56.8 +0.7
baz=267,SNR=38
C23K Itkillik River 40.78 28 IAmb IAmb 14 21 57.8
comp=Z,34nm,0.8s
C23K Itkillik River 40.78 28 P P 14 21 56.9 +0.4
baz=263,SNR=29
H23K Yukon River 40.88 34 IAmb IAmb 14 22 03.0
comp=Z,21nm,0.8s
H23K Yukon River 40.88 34 P P 14 21 58.5 +1.2
baz=268,SNR=22
RC01 Rabbit Creek A 40.88 41 P P 14 21 57.4 0.0
RC01 IAmb IAmb 14 22 10.8
comp=Z,25nm,0.8s
RC01 Rabbit Creek A 40.88 41 P P 14 21 57.3 0.0
baz=274
O22K Cooper Landing 40.92 42 P P 14 21 57.9 +0.1
baz=274
I23K Minto, Yukon-K 40.94 35 P P 14 21 58.9 +1.1
baz=269,SNR=19
E23K Chandalar 40.96 31 P P 14 21 59.0 +0.9
baz=266,SNR=54
TOLK Toolik Lake Re 41.02 30 IAmb IAmb 14 21 59.6
comp=Z,16nm,0.7s
TOLK Toolik Lake Re 41.02 30 P P 14 21 59.1 +0.6
baz=265,SNR=16
NEA2 Nenana 41.06 36 P P 14 21 59.4 +0.6
baz=270
SEW Seward 41.09 43 P P 14 21 59.5 +0.5
baz=275
MCK McKinley 41.13 37 P P 14 21 59.8 +0.4
baz=271
PMR Palmer 41.13 41 P P 14 22 00.1 +0.7
baz=274
GHO Glory Hole Cre 41.22 40 IAmb IAmb 14 22 13.9
comp=Z,26nm,0.8s
ZALV Zalevo Beam 41.33 308 P P 14 22 00.2 -1.0
ZALV Zalesovo Beam 41.33 308 P P 14 22 00.4 -0.8
comp=Z,3.6nm,0.4s,baz=78,slow=8.6,SNR=14
ZALV PcP PcP 14 23 59.0 +0.2
comp=Z,4.9nm,0.7s,baz=78,slow=4.0,SNR=9.1
ZALV LR LR 14 39 09.1
comp=Z,96nm,19.8s,baz=76,slow=36
comp=Z,3.6nm,0.4s
ZALV Zalesovo Beam 41.33 308 i P P 14 22 00.9 -0.3
ZALV pmax pmax
comp=Z,4.0nm,0.4s
WAT1 Susitna Watana 41.34 39 P P 14 22 01.4 +0.3
baz=273
D24K Happy Valley 41.34 29 P P 14 22 01.3 +0.3
baz=265,SNR=28
E24K Your Creek 41.39 31 P P 14 22 02.5 +1.0
baz=267,SNR=72
MDM Murphy Dome 41.42 36 IAmb IAmb 14 22 03.2
comp=Z,13nm,0.6s
C24K Franklin Bluff 41.43 28 P P 14 22 02.2 +0.5
baz=265,SNR=13
KNK Knik Glacier 41.47 41 IAmb IAmb 14 22 16.6
comp=Z,32nm,0.9s
KNK Knik Glacier 41.47 41 P P 14 22 02.3 +0.1
baz=274,SNR=5.4
SML Sawmill 41.50 40 P P 14 22 02.6 +0.1
SML Sawmill 41.50 40 P P 14 22 02.7 +0.2
baz=274,SNR=14
SML Sawmill 41.50 40 P P 14 22 02.6 +0.1
SML pmax pmax
comp=Z,54nm,0.8s
H24K Noodor Dome 41.56 34 P P 14 22 03.9 +0.9
baz=270,SNR=20
PWL Port Wells 41.58 42 IAmb IAmb 14 22 16.9
comp=Z,19nm,0.8s
PWL Port Wells 41.58 42 P P 14 22 03.6 +0.5
baz=275
COLA College 41.58 36 P P 14 22 03.8 +0.7
baz=271
COLA College 41.58 36 c iP P 14 22 03.7 +0.7
COLA pmax pmax
comp=Z,12nm,0.9s
COLA College 41.58 36 P P 14 22 03.7 +0.7
F24K Squaw Lake 41.59 32 IAmb IAmb 14 22 04.8
comp=Z,15nm,0.8s
F24K Squaw Lake 41.59 32 P P 14 22 04.0 +0.8
baz=268,SNR=30
WAT6 Susitna Watana 41.73 39 P P 14 22 04.6 +0.1
baz=274
G24K Hadweenzic Riv 41.73 33 IAmb IAmb 14 22 06.8
comp=Z,39nm,0.9s
G24K Hadweenzic Riv 41.73 33 P P 14 22 05.8 +1.5
baz=269,SNR=38
POKR Poker Plat Res 41.75 35 IAmb IAmb 14 22 06.6
comp=Z,31nm,0.8s
POKR Poker Plat Res 41.75 35 P P 14 22 05.5 +1.0
baz=271,SNR=14
M23K Glacier View 41.79 40 P P 14 22 05.0 +0.2
baz=275
DHY Denali Highway 41.86 38 IAmb IAmb 14 22 18.9
comp=Z,19nm,0.8s
DHY Denali Highway 41.86 38 P P 14 22 05.7 +0.2
baz=274,SNR=7.9
SCM Sheep Creek Mo 41.97 40 IAmb IAmb 14 22 20.3
comp=Z,25nm,0.9s
SCM Sheep Creek Mo 41.97 40 P P 14 22 06.8 +0.3
baz=275,SNR=6.4
HDA Harding Lake 41.98 36 P P 14 22 06.5 +0.2
HDA IAmb IAmb 14 22 20.0
comp=Z,15nm,0.8s
HDA Harding Lake 41.98 36 P P 14 22 06.2 -0.2
baz=272,SNR=12
IL31 42.00 36 IAmb IAmb 14 22 20.4
comp=Z,18nm,1.0s
ILAR Eielson Array 42.00 36 P P 14 22 06.1 -0.3
ILAR Eielson Array 42.00 36 P P 14 22 06.3 -0.1
comp=Z,5.4nm,0.8s,baz=256,slow=6.8,SNR=65
ILAR LR LR 14 41 37.2
comp=Z,75nm,18.6s,baz=276,slow=39
comp=Z,5.4nm,0.8s
P23K Montague Islan 42.12 43 P P 14 22 07.9 +0.3
baz=277
GLI Glacier Island 42.18 42 P P 14 22 08.3 +0.3
baz=276
D25K Kavik River 42.22 29 IAmb IAmb 14 22 09.6
comp=Z,30nm,0.8s
D25K Kavik River 42.22 29 P P 14 22 08.8 +0.4
baz=268,SNR=49
G25K Bearman Lake 42.28 33 P P 14 22 09.8 +1.2
baz=271,SNR=22
WMQ Urumqi 42.28 292 eP P 14 22 09.9 +0.7
WMQ sP sP 14 22 30.4 +3.3
WMQ pmax pmax
comp=Z,28nm,1.1s
WMQ LR LR
comp=Z,490nm,15.3s
WMQ LR LR
comp=Z,480nm,14.1s
WMQ LR LR
comp=Z,320nm,15.3s
H25L Birch Creek 42.40 34 P P 14 22 11.0 +1.3
baz=271
F25K Christian Rive 42.45 32 P P 14 22 11.6 +1.4
baz=270,SNR=24
M24K Tolsona, Glenn 42.49 40 IAmb IAmb 14 22 25.1
comp=Z,30nm,0.7s
M24K Tolsona, Glenn 42.49 40 P P 14 22 11.3 +0.7
baz=276
K24K Donnelly Dome 42.53 37 P P 14 22 10.9 0.0
baz=274,SNR=9.8
PRP Porcupine Dome 42.54 35 P P 14 22 11.5 +0.4
baz=272,SNR=12
J25K Salcha River, 42.65 36 P P 14 22 10.8 -1.1
baz=274,SNR=9.5
KLU Klutina 42.67 41 P P 14 22 11.7 -0.4
baz=276
PAX Paxson 42.73 38 P P 14 22 12.9 +0.3
baz=275
C26K Camden Bay 42.76 28 P P 14 22 13.3 +0.7
baz=268,SNR=12
BMAR Burnt Mountain 42.86 32 P P 14 22 14.9 +1.4
EYAK Cordova Ski Ar 42.87 42 P P 14 22 14.4 +0.8
baz=278
HARP HAARP 42.94 39 P P 14 22 14.9 +0.7
baz=276
ZSN Zaisan 42.96 298 eP P 14 22 13.3 -1.2
baz=298
ZSN Zaisan 42.96 298 eP P 14 22 13.3 -1.2
F26K Sheenjek River 43.02 31 P P 14 22 16.2 +1.4
baz=271,SNR=43
C27K Jago River 43.17 29 P P 14 22 16.6 +0.6
baz=270,SNR=43
G26K Porcupine Rive 43.19 33 P P 14 22 17.8 +1.7
baz=272,SNR=41
N25K Chitina, Valde 43.29 40 P P 14 22 17.7 +0.6
baz=278
SCRK Sand Creek 43.31 37 P P 14 22 17.1 -0.1
baz=276,SNR=21
BMRM Bremner River 43.37 41 P P 14 22 17.9 +0.1
baz=278,SNR=8.6
RAGM Ragged Mountai 43.42 42 IAmb IAmb 14 22 46.6
comp=Z,43nm,1.3s
J26L Joseph Creek 43.44 36 P P 14 22 18.2 0.0
baz=275,SNR=11
TNCH TengChong 43.45 262 P P 14 22 18.8 -0.2
TNCH pmax pmax
comp=Z,96nm,3.8s
I26K Coal Creek Min 43.55 35 P P 14 22 18.3 -0.7
baz=275
KAIM Kayak Island 43.62 43 P P 14 22 20.3 +0.6
baz=279
L26K Log Cabin Wild 43.69 38 IAmb IAmb 14 22 34.8
comp=Z,26nm,0.8s
L26K Log Cabin Wild 43.69 38 P P 14 22 21.1 +0.8
baz=277,SNR=6.4
VRDI Verde Repeater 43.89 41 IAmb IAmb 14 22 36.4
comp=Z,15nm,0.8s
M26K Nabesna, AK 43.93 39 P P 14 22 23.4 +1.1
baz=278,SNR=15
E27K Coleen River 43.97 31 IAmb IAmb 14 22 24.6
comp=Z,20nm,1.0s
E27K Coleen River 43.97 31 P P 14 22 23.7 +1.3
baz=273,SNR=21
G27K Doyon Strip 44.03 33 P P 14 22 24.3 +1.3
baz=274,SNR=14
MCARA McCarthy VSAT 44.07 41 P P 14 22 24.3 +1.0
baz=279
H27K Steamboat Moun 44.13 33 P P 14 22 25.5 +1.7
baz=275,SNR=22
K27K Chicken 44.14 37 P P 14 22 24.8 +1.0
baz=277
CRQE Cirque 44.14 41 P P 14 22 25.0 +1.0
baz=280,SNR=12
D27M Malcolm River 44.15 29 IAmb IAmb 14 22 25.7
comp=Z,47nm,1.6s
D27M Malcolm River 44.15 29 P P 14 22 24.8 +0.9
baz=273,SNR=18
I27K Kandik River 44.16 34 P P 14 22 24.9 +0.9
baz=276
L27K Beaver Creek, 44.38 38 P P 14 22 27.1 +1.3
baz=278,SNR=26
BCAR Beaver Creek A 44.39 38 P P 14 22 27.2 +1.4
EGAK Eagle 44.44 36 IAmb IAmb 14 22 32.2
comp=Z,13nm,0.8s
EGAK Eagle 44.44 36 P P 14 22 26.4 +0.3
baz=277,SNR=19
M27K Edge Creek, AK 44.46 39 IAmb IAmb 14 22 41.3
comp=Z,29nm,0.9s
M27K Edge Creek, AK 44.46 39 P P 14 22 27.6 +1.1
baz=279,SNR=11
ISLE Juniper Island 44.53 42 IAmb IAmb 14 22 41.6
comp=Z,24nm,0.8s
F28M Old Crow 44.66 31 IAmb IAmb 14 22 30.5
comp=Z,28nm,0.9s
F28M Old Crow 44.66 31 P P 14 22 29.5 +1.6
baz=275,SNR=32
E28M Babbage River 44.70 30 P P 14 22 29.3 +1.0
baz=275,SNR=29
MESA MESA 44.80 42 P P 14 22 30.1 +0.8
baz=281
MK31 Makanchi Array 44.83 298 P P 14 22 29.2 -0.4
MK31 Makanchi Array 44.83 298 c iP P 14 22 29.0 -0.6
MKAR Makanchi Array 44.83 298 P P 14 22 29.4 -0.2
MKAR Makanchi Array 44.83 298 P P 14 22 29.2 -0.3
comp=Z,27nm,0.6s,baz=81,slow=8.9,SNR=260
MKAR PcP PcP 14 24 11.3 +0.6
comp=Z,1.5nm,0.7s,baz=72,slow=4.7,SNR=1.7
MKAR LR LR 14 42 27.2
comp=Z,160nm,21.0s,baz=83,slow=38
comp=Z,27nm,0.6s
MKAR Makanchi Array 44.83 298 eP P 14 22 29.4 -0.2
MKAR Makanchi Array 44.83 298 P P 14 22 29.4 -0.2
I28M Miner Creek 44.87 34 IAmb IAmb 14 22 35.4
comp=Z,22nm,0.7s
I28M Miner Creek 44.87 34 P P 14 22 30.8 +1.1

baz=277,SNR=44
**D28M Stokes Point** 44.93 29 P P 14 22 29.9 -0.1
baz=275
**CTG Chitna Glacier** 44.95 41 P P 14 22 30.7 +0.3
baz=281,SNR=8.2
**MAKZ Makanchi** 45.03 298 P P 14 22 30.8 -0.3
MAKZ pP **pP** 14 22 43.7 -0.2
**LOGN Logan Glacier** 45.13 41 IAmb IAmb 14 22 50.6
comp=Z,15nm,1.0s
**TABL Table Mountain** 45.14 42 IAmb IAmb 14 22 33.7
comp=Z,16nm,0.8s
**YUK3 Moose Creek** 45.21 40 P P 14 22 33.2 +0.6
baz=281,SNR=8.1
**DAWY Dawson** 45.30 36 P P 14 22 33.8 +0.7
baz=279
**E29M Blow River** 45.32 30 P P 14 22 34.7 +1.5
baz=276,SNR=75
**H29M Whitestone** 45.41 33 IAmb IAmb 14 22 37.3
comp=Z,15nm,0.7s
**H29M Whitestone** 45.41 33 P P 14 22 35.2 +1.4
baz=278,SNR=15
**G29M Pine Creek** 45.45 32 P P 14 22 35.8 +1.6
baz=278,SNR=17
**O28M Mount Upton** 45.53 41 P P 14 22 35.8 +0.5
baz=282
**I29M Ogilvie Camp,** 45.56 34 IAmb IAmb 14 22 49.1
comp=Z,26nm,0.9s
**I29M Ogilvie Camp,** 45.56 34 P P 14 22 35.9 +0.8
baz=279,SNR=37
**YUK8 Steele Glacier** 45.63 40 P P 14 22 36.7 +0.6
baz=282
**KURK Kurchatov** 45.84 304 P P 14 22 36.6 -0.9
KURK IAmb IAmb 14 22 37.5
comp=Z,15nm,0.6s
**KURK Kurchatov** 45.84 304 *eP* P 14 22 36.0 -1.4
**KURK Kurchatov** 45.84 304 *deP* P 14 22 36.0 -1.4
KURK pmax pmax
comp=Z,3.0nm,0.6s
**KURK Kurchatov** 45.84 304 P P 14 22 36.5 -0.9
**KURBB Kurchatov Arra** 45.92 304 P P 14 22 37.1 -0.9
comp=Z,9.4nm,0.4s,baz=75,slow=8.5,SNR=82
KURBB PcP **PcP** 14 24 14.4 +0.1
comp=Z,2.2nm,0.7s,baz=79,slow=3.6,SNR=4.7
KURBB LR LR 14 43 04.6
comp=Z,180nm,19.1s,baz=169,slow=38
comp=Z,9.4nm,0.4s
**M29M Somme Creek** 46.01 39 P P 14 22 40.1 +1.3
baz=282
**L29M L29M** 46.03 38 IAmb IAmb 14 22 54.0
comp=Z,16nm,0.8s
**L29M L29M** 46.03 38 P P 14 22 40.4 +1.6
baz=281,SNR=9.4
**EPYK Eagle Plains** 46.05 33 P P 14 22 40.0 +1.0
baz=279,SNR=36
**G30M tAoh Zrail Nji** 46.14 32 P P 14 22 40.5 +0.8
baz=279,SNR=30
**YUK4 Talbot Arm** 46.15 40 P P 14 22 41.0 +1.0
baz=282
**K29M Barlow Dome** 46.15 36 IAmb IAmb 14 22 54.5
comp=Z,17nm,1.1s
**K29M Barlow Dome** 46.15 36 P P 14 22 41.1 +1.2
baz=281,SNR=16
**F30M Barrier River** 46.21 31 P P 14 22 41.8 +1.7
baz=279,SNR=52
**YUK6 Outpost Mounta** 46.37 41 P P 14 22 42.7 +0.9
baz=283
**I30M Mount Dempster** 46.38 34 P P 14 22 42.5 +0.8
baz=281,SNR=50
**O29M Mount Kennedy** 46.42 41 P P 14 22 43.4 +1.4
baz=284
**J30M Hart River** 46.52 35 IAmb IAmb 14 22 44.8
comp=Z,12nm,1.1s
**J30M Hart River** 46.52 35 P P 14 22 44.0 +1.2
baz=281,SNR=12
**N30M Aishikik Lake** 46.85 40 P P 14 22 46.3 +0.9
baz=284
**G31M Satah River** 46.91 32 P P 14 22 46.2 +0.6
baz=281,SNR=18
**INK Inuvik** 46.94 30 LR LR 14 45 51.5
comp=Z,114nm,18.0s,baz=293,slow=40
**INK Inuvik** 46.94 30 P P 14 22 46.9 +1.0
baz=280,SNR=16
**INK Inuvik** 46.94 30 P P 14 22 46.8 +1.0
INK pmax pmax
comp=Z,48nm,0.9s
**P29M Windy Craggy** 46.99 42 P P 14 22 48.2 +1.9
baz=285,SNR=11
**F31M Tsiigehtchic** 47.02 31 P P 14 22 47.3 +0.9
baz=281,SNR=7.6
**P30M Million Dollar** 47.24 41 P P 14 22 49.7 +1.3
baz=285
**CMAR Chiang Mai Arr** 47.32 254 P P 14 22 49.7 +0.2
comp=Z,1.0nm,0.7s,baz=56,slow=6.8,SNR=1.6
CMAR LR LR 14 44 33.3
comp=Z,154nm,18.8s,baz=60,slow=38
comp=Z,1.0nm,0.7s
**N31M Braeburn, Yuko** 47.46 39 P P 14 22 51.6 +1.5
baz=285,SNR=7.4
**O30N Mendenhall** 47.49 40 P P 14 22 51.5 +1.2
baz=285
**PLBC Pleasant Camp** 47.71 42 P P 14 22 53.4 +1.5
baz=286
**M31M Drury Creek, Y** 47.91 38 IAmb IAmb 14 23 08.4
comp=Z,16nm,0.9s
**M31M Drury Creek, Y** 47.91 38 P P 14 22 54.9 +1.3
baz=285,SNR=9.9
**TDK Taldyqorghan** 48.02 297 *eP* P 14 22 53.8 -0.8
baz=297
**TDK Taldyqorghan** 48.02 297 *eP* P 14 22 53.7 -0.8
**SHLS Shalkode** 48.07 295 *eP* P 14 22 51.8 -3.3
comp=Z,5.3nm,0.6s,baz=294
**SHLS Shalkode** 48.07 295 *eP* P 14 22 51.8 -3.3
SHLS pmax pmax
comp=Z,5.0nm,0.6s
**WHY Whitehorse** 48.10 40 IAmb IAmb 14 22 57.5
comp=Z,8.3nm,0.8s
**WHY Whitehorse** 48.10 40 P P 14 22 56.4 +1.3
baz=286
**S31K Pelican** 48.20 44 P P 14 22 56.7 +0.9
baz=287
**SKAG Skagway** 48.22 42 P P 14 22 57.2 +1.4
baz=287
**UZB Uzynbulak** 48.37 295 *eP* P 14 22 56.5 -1.0
comp=Z,3.7nm,0.6s,baz=295
**UZB Uzynbulak** 48.37 295 *eP* P 14 22 56.5 -1.0
UZB pmax pmax
comp=Z,4.0nm,0.6s
**FARO Faro, Yukon** 48.38 38 IAmb IAmb 14 23 11.7
comp=Z,12nm,0.8s
**FARO Faro, Yukon** 48.38 38 P P 14 22 57.9 +0.8
baz=286,SNR=9.6
**KPKS Kokpek** 48.46 295 *eP* P 14 22 57.2 -0.9
comp=Z,6.2nm,0.6s,baz=295
**KPKS Kokpek** 48.46 295 *eP* P 14 22 57.2 -0.9
KPKS pmax pmax
comp=Z,6.0nm,0.6s
**ARXS Arharly** 48.72 296 *eP* P 14 22 59.6 -0.4
**ZHN Zhinishke** 48.75 295 *eP* P 14 22 59.4 -0.9
comp=Z,5.2nm,0.7s,baz=295
**ZHN Zhinishke** 48.75 295 *eP* P 14 22 59.4 -0.9
ZHN pmax pmax
comp=Z,5.0nm,0.7s
**N32M Quiet Lake** 48.80 39 P P 14 23 01.2 +0.8
baz=287
**SATY Saty** 48.81 295 *eP* P 14 23 00.0 -0.9
comp=Z,3.9nm,0.5s,baz=295
**SATY Saty** 48.81 295 *eP* P 14 23 00.0 -0.9
SATY pmax pmax
comp=Z,4.0nm,0.5s
**A36M Sachs Harbour** 48.93 24 P P 14 23 01.5 +0.3
baz=284
**P32M Atlin** 48.96 41 P P 14 23 02.3 +0.7
baz=288
**R32K Eaglecrest** 48.97 43 P P 14 23 02.5 +0.8
baz=288
**WUS Wushi** 49.07 292 P P 14 23 03.1 +0.2
**S32K Killisnoo** 49.20 44 P P 14 23 04.9 +1.5
baz=289
**P33M Teslin, Yukon** 49.20 41 IAmb IAmb 14 23 06.0
comp=Z,17nm,0.9s
**P33M Teslin, Yukon** 49.20 41 P P 14 23 04.9 +1.4
baz=288,SNR=13
**CHKK Chushkaly** 49.41 296 *eP* P 14 23 04.2 -1.2
baz=296
**CHKK Chushkaly** 49.41 296 *eP* P 14 23 04.1 -1.2
**MDOK Medeo** 49.67 296 *eP* P 14 23 06.6 -0.8
baz=296
**MDOK Medeo** 49.67 296 *eP* P 14 23 06.6 -0.8

**AAA Alma-Ata** 49.74 296 *eP* P 14 23 06.1 -1.7
baz=296
**AAA Alma-Ata** 49.74 296 *eP* P 14 23 06.9 -0.9
**AAA Alma-Ata** 49.74 296 *eP* P 14 23 06.9 -0.9
**TNSS Tian-Shan** 49.79 295 *eP* P 14 23 07.6 -1.1
baz=296
**TNSS Tian-Shan** 49.79 295 *eP* P 14 23 07.5 -1.1
**BRVK Borovoye** 49.91 310 P P 14 23 08.9 0.0
**BRVK Borovoye** 49.91 310 *eP* P 14 23 09.0 +0.1
**BRVK Borovoye** 49.91 310 *deP* P 14 23 09.0 +0.1
BRVK pmax pmax
comp=Z,12nm,1.8s
**BRVK Borovoye** 49.91 310 P P 14 23 08.8 -0.1
**C36M Paulatuk** 50.03 28 P P 14 23 10.0 +0.5
baz=287,SNR=8.1
**R33M Jennings River** 50.35 41 IAmb IAmb 14 23 15.2
comp=Z,11nm,1.0s
**R33M Jennings River** 50.35 41 P P 14 23 13.7 +1.3
baz=290,SNR=6.0
**ULHL Ulahol** 50.61 295 P P 14 23 14.7 +0.1
SNR=17
**TKM2 Tokmak 2** 50.73 296 P P 14 23 15.8 +0.3
SNR=22
**BTLS Baital** 50.82 299 *eP* P 14 23 15.0 -0.9
comp=Z,3.8nm,0.6s,baz=299
**BTLS Baital** 50.82 299 *eP* P 14 23 14.9 -0.9
BTLS pmax pmax
comp=Z,4.0nm,0.6s
**TGTN Hyland Airport** 50.88 38 P P 14 23 17.3 +1.1
baz=290
**SGDS Sogindy** 51.13 297 *eP* P 14 23 17.4 -0.9
comp=Z,4.4nm,0.6s,baz=297
**SGDS Sogindy** 51.13 297 *eP* P 14 23 17.4 -0.9
SGDS pmax pmax
comp=Z,4.0nm,0.6s
**WTLY Watson Lake, Y** 51.14 40 P P 14 23 19.1 +1.0
baz=291
**DLBC Dease Lake** 51.15 42 P P 14 23 19.7 +1.4
baz=291
**KBK Karagaybulak** 51.28 296 P P 14 23 20.4 +0.8
SNR=8.3
**USP Ospenovka** 51.30 297 P P 14 23 19.6 0.0
SNR=25
**T35M Bob Quinn** 51.58 44 P P 14 23 23.4 +2.0
baz=292
**AAK Ala-Archa** 51.59 296 P P 14 23 20.7 -1.2
**AAK Ala-Archa** 51.59 296 LR LR 14 47 45.0
comp=Z,158nm,18.9s,baz=57,slow=39
**AAK Ala-Archa** 51.59 296 *eP* P 14 23 22.1 +0.2
**AAK Ala-Archa** 51.59 296 *deP* P 14 23 22.1 +0.2
AAK pmax pmax
comp=Z,6.0nm,0.9s
**AAK Ala-Archa** 51.59 296 P P 14 23 22.3 +0.4
**EKS2 Erkin-Say** 52.05 296 P P 14 23 25.4 +0.1
SNR=12
**KSH Kashi** 52.05 292 P P 14 23 29.0 +3.7
KSH pP pwP 14 23 42.0 +1.3
KSH pmax pmax
comp=Z,5.0nm,0.9s
KSH LR LR
comp=Z,300nm,16.1s
KSH LR LR
comp=Z,220nm,17.2s
KSH LR LR
comp=Z,270nm,14.1s
**PMG Port Moresby** 52.30 180 LR LR 14 42 46.3
comp=Z,56nm,21.5s,baz=14,slow=33
**AML Almayashu** 52.34 296 P P 14 23 28.8 +0.9
SNR=12
**TOAD Toad River Com** 53.30 40 P P 14 23 35.5 +1.3
baz=294
**KOTAN Kotaneelee Air** 53.32 39 P P 14 23 35.3 +1.0
baz=294
**SVE Sverdlovsk** 53.55 317 *eP* P 14 23 35.6 -0.4
**SVE Sverdlovsk** 53.55 317 *eP* P 14 23 35.6 -0.4
SVE pmax pmax
comp=Z,19nm,1.0s
SVE MLR MLR
comp=Z,367nm,18.0s
**HNR Honiara** 53.62 164 LR LR 14 46 51.3
comp=Z,1µm,18.7s,baz=22,slow=36
**KAPI Kappang** 53.95 214 LR LR 14 49 17.5
comp=Z,12nm,18.0s,baz=41,slow=39
**KK31 Karatay Array** 53.96 298 IAmb IAmb 14 23 39.9
comp=Z,13nm,0.7s
**KKAR Karatay Array** 53.96 298 P P 14 23 38.9 -0.3
**KKAR Karatay Array** 53.96 298 IAmb IAmb 14 23 39.9
comp=Z,13nm,0.7s
**KKAR Karatay Array** 53.96 298 P P 14 23 38.9 -0.3
**BRLS Borolday** 54.43 298 *eP* P 14 23 43.5 +0.8
baz=298
**BRLS Borolday** 54.43 298 *eP* P 14 23 43.5 +0.8
**BBB Bella Bella** 54.70 49 LR LR 14 47 48.6
comp=Z,22nm,19.5s,baz=280,slow=37
**IUG luzhnay** 54.73 297 *eP* P 14 23 44.1 -0.9
comp=Z,6.0nm,0.9s,baz=297
**IUG luzhnay** 54.73 297 *eP* P 14 23 44.1 -0.9
IUG pmax pmax
comp=Z,6.0nm,0.9s
**ARU Arti** 54.76 317 P P 14 23 43.3 -1.5
ARU IAmb IAmb 14 23 45.0
comp=Z,27nm,1.3s
**ARU Arti** 54.76 317 LR LR 14 49 46.3
comp=Z,272nm,18.3s,baz=51,slow=39
**ARU Arti** 54.76 317 *eP* P 14 23 43.9 -0.9
**ARU Arti** 54.76 317 *c iP* P 14 23 43.9 -0.9
ARU 14 24 45.2
ARU S **S** 14 31 23.3 +1.7
ARU SS **SS** 14 35 04.3 -0.2
ARU pmax pmax
comp=Z,21nm,1.3s
ARU MLR MLR
comp=Z,283nm,17.0s
**ARU Arti** 54.76 317 P P 14 23 43.9 -0.9
**ARU Arti** 54.76 317 P P 14 23 43.9 -0.9
**HOPEN Hopen** 55.17 346 *eP* P 14 23 47.9 +0.5
**KBS Kingsbay** 55.37 350 *eP* P 14 23 47.0 -1.8
KBS IAmb IAmb 14 23 48.2
comp=Z,8.8nm,0.8s
**KBS Kingsbay** 55.37 350 P P 14 23 46.8 -2.1
**YKA Yellowknife Ar** 56.32 34 P P 14 23 56.4 +0.5
comp=Z,5.2nm,0.7s,baz=304,slow=7.3,SNR=8.8
YKA LR LR 14 51 56.9
comp=Z,55nm,18.4s,baz=314,slow=40
comp=Z,5.2nm,0.7s
**NIL Nilore** 56.93 287 P P 14 24 00.6 -0.1
**NIL Nilore** 56.93 287 P P 14 24 00.6 -0.1
NIL pmax pmax
comp=Z,14nm,0.6s
**NIL Nilore** 56.93 287 P P 14 24 01.1 +0.4
NIL pP **pP** 14 24 13.3 -0.3
**CHGR Chuyangaron** 57.07 294 P P 14 24 01.3 -0.4
CHGR pmax pmax
comp=Z,45nm,0.9s
**SIMJ Simiganj** 57.17 294 P P 14 24 02.8 +0.4
SIMJ IAmb IAmb 14 24 03.6
comp=Z,16nm,0.9s
**SIMJ Simiganj** 57.17 294 P P 14 24 02.1 -0.3
**ABKAR Akbulak array** 57.41 309 P P 14 24 03.5 -0.3
**ABKAR Akbulak array** 57.41 309 IAmb IAmb 14 24 04.5
comp=Z,19nm,0.5s
**AKTO Aktyubinsk** 57.90 311 LR LR 14 51 00.3
comp=Z,162nm,19.0s,baz=246,slow=38
**KIRV Kirov** 58.05 322 LR LR 14 51 45.8
comp=Z,140nm,18.4s,baz=50,slow=39
**KIRV Kirov** 58.05 322 *ceP* P 14 24 07.6 -0.5
**LVZ Lovozero** 58.33 336 P P 14 24 10.2 +0.2
comp=Z,34nm,1.9s
**VADS Vadso** 58.41 339 *eP* P 14 24 10.0 -0.5
VADS IAmb IAmb 14 24 11.5
comp=Z,27nm,1.1s
**APA Apatity** 58.91 336 *¡¡ iP* P 14 24 11.0 -3.0
APA pmax pmax
comp=Z,7.0nm,0.7s
APA MLR MLR
comp=Z,200nm,16.0s
**NEEM North Greenlan** 59.15 5 *eP* P 14 24 13.4 -2.5
**KEV Kevo** 59.26 339 P P 14 24 15.7 -0.6
**KBL Kabul** 59.36 290 P P 14 24 16.9 -1.0
KBL pmax pmax
comp=Z,16nm,0.7s
**ARA0 ARCESS Array S** 59.80 340 *eP* P 14 24 20.1 0.0
**ARCES ARCESS Array B** 59.80 340 P P 14 24 19.9 -0.2
comp=Z,8.0nm,0.7s,baz=45,slow=7.5,SNR=17
ARCES LR LR 14 55 37.0
comp=Z,78nm,18.6s,baz=50,slow=42

comp=Z,8.0nm,0.7s
**DAG Danmarks Havn** 60.02 356 P P 14 24 19.9 -1.6
DAG pmax pmax
comp=Z,20nm,1.1s
**DAG Danmarks Havn** 60.02 356 *i* P P 14 24 18.0 -3.5
**KTK1 Kautokeino** 60.74 340 *eP* P 14 24 26.2 -0.3
KTK1 IAmb IAmb 14 24 26.6
comp=Z,20nm,0.7s
**KNRA Kununurra** 60.91 200 P P 14 24 30.1 +1.8
comp=Z,15nm,2.0s,SNR=1.8
**SGF Sodankyl** 60.98 338 P P 14 24 26.9 -1.3
SGF pmax pmax
comp=Z,43nm,0.8s
**TRO Tromso** 61.32 342 *eP* P 14 24 30.1 -0.3
TRO IAmb IAmb 14 24 30.4
comp=Z,29nm,0.6s
**HOOD Mount Hood Mea** 61.86 53 IAmb IAmb 14 24 52.3
comp=Z,14nm,0.9s
**H04A Detroit Lake** 61.90 54 IAmb IAmb 14 24 36.9
comp=Z,6.2nm,0.8s
**I04A Tendick Farm,** 62.26 55 IAmb IAmb 14 24 39.4
comp=Z,7.3nm,0.8s
**BELG Belogornoye** 62.31 317 P P 14 24 37.3 0.0
comp=Z,22nm,0.5s,baz=272,slow=1.0,SNR=10
BELG LR LR 14 54 44.6
comp=Z,115nm,18.9s,baz=62,slow=39
comp=Z,22nm,0.5s
**BELG Belogornoye** 62.31 317 *c iP* P 14 24 36.6 -0.7
BELG pmax pmax
comp=Z,7.0nm,0.8s
**JOF Joensuu** 62.60 332 *eP* P 14 24 39.0 -0.1
**HYB Hyderabad** 62.72 269 *eP* P 14 24 40.7 0.0
HYB *epP* **pP** 14 24 51.7 -2.0
**NEW Newport** 62.76 48 P P 14 24 40.9 +0.4
baz=305
**NEW Newport** 62.76 48 P P 14 24 41.5 +1.0
NEW pmax pmax
comp=Z,8.0nm,1.1s
**CTA Charters Tower** 62.93 181 P P 14 24 42.5 +0.8
comp=Z,0.4nm,1.1s,baz=53,slow=10,SNR=2.1
**PINE Pine Mountain** 63.14 54 IAmb IAmb 14 24 45.9
comp=Z,11nm,0.8s
**E09A Wood Farm, Sta** 63.20 50 IAmb IAmb 14 24 45.2
comp=Z,6.7nm,0.7s
**YBH Yreka Blue Hor** 63.25 57 P P 14 24 45.9 +2.0
**YBH Yreka Blue Hor** 63.25 57 P P 14 24 45.9 +2.0
YBH pmax pmax
comp=Z,4.0nm,0.8s
**J05D Fort Rock, OR** 63.26 55 P P 14 24 45.2 +1.2
J05D IAmb IAmb 14 24 46.6
comp=Z,8.6nm,0.9s
**STEI Steigen** 63.49 342 *eP* P 14 24 44.2 -0.7
STEI IAmb IAmb 14 24 45.6
comp=Z,20nm,0.7s
**LOF Lofoten** 63.71 342 *eP* P 14 24 45.5 -0.9
**VALR Valaam** 63.81 331 *ceP* P 14 24 46.3 -0.8
VALR pmax pmax
comp=Z,54nm,0.9s
**WRAB Tennant Creek** 63.85 193 *⇑eP* P 14 24 45.5 -2.4
WRAB pmax pmax
comp=Z,4.0nm,0.9s
**WRA Warramunga Arr** 63.87 193 P P 14 24 48.1 +0.1
**WRA Warramunga Arr** 63.87 193 P P 14 24 47.9 0.0
comp=Z,3.7nm,0.8s,baz=13,slow=6.9,SNR=20
comp=Z,3.7nm,0.8s
**WRA Warramunga Arr** 63.87 193 *i* P P 14 24 48.5 +0.5
WRA pmax pmax
comp=Z,4.0nm,0.8s
**FAUS Fauske** 63.92 341 *eP* P 14 24 47.3 -0.5
FAUS IAmb IAmb 14 24 47.7
comp=Z,47nm,0.7s
**O02D Mt. Diablo Mer** 64.10 58 P P 14 24 50.9 +1.4
**SUMG Summit** 64.51 2 P P 14 24 52.2 +0.1
**SUMG Summit** 64.51 2 P P 14 24 52.2 +0.1
SUMG pmax pmax
comp=Z,103nm,1.6s
**SUMG Summit** 64.51 2 *eP* P 14 24 51.3 -0.8
**HATC Hat Creek Radi** 64.55 57 P P 14 24 53.7 +1.2
HATC IAmb IAmb 14 24 54.8
comp=Z,14nm,0.8s
**JMIC Jan Mayen** 64.83 351 LR LR 14 53 52.1
comp=Z,21nm,19.0s,baz=1.0,slow=37
**MOS Moscow** 64.91 324 *eP* P 14 24 52.2 -2.2
MOS *e* 14 25 06.7
MOS pmax pmax
comp=Z,40nm,0.7s
**MOR8 Moi Rana** 65.09 341 *eP* P 14 24 53.7 -1.8
**KONS Konsvik** 65.14 341 *eP* P 14 24 55.8 0.0
**KEF Keuruu** 65.26 334 *eP* P 14 24 56.0 -0.6
**VAF Ylistaro** 65.29 336 *eP* P 14 24 57.1 +0.3
**WVOR Wild Horse Val** 65.30 54 P P 14 24 58.5 +1.1
WVOR pmax pmax
comp=Z,6.0nm,1.2s
**MSO Missoula** 65.34 48 P P 14 24 58.0 +0.4
baz=307
**FINES FINESS Array B** 65.39 333 P P 14 24 56.5 -0.9
**FINES FINESS Array B** 65.39 333 P P 14 24 57.0 -0.5
comp=Z,32nm,0.6s,baz=46,slow=7.4,SNR=131
FINES LR LR 14 58 25.6
comp=Z,68nm,18.0s,baz=46,slow=41
comp=Z,32nm,0.6s
**FINES FINESS Array B** 65.39 333 P P 14 24 57.0 -0.5
**OBN Obninsk** 65.78 324 *eP* P 14 24 59.9 -0.1
**OBN Obninsk** 65.78 324 *¡¡ iP* P 14 24 59.9 -0.1
OBN *i* *PP **pP** 14 25 14.4 +1.2
OBN *e* *SP **sP** 14 25 20.1 +1.6
OBN 14 25 31.0
OBN S S 14 33 57.0 +14
OBN SS **SS** 14 38 03.0 +6.2
OBN pmax pmax
comp=Z,24nm,1.1s
OBN MLR MLR
comp=Z,122nm,17.0s
**OBN Obninsk** 65.78 324 P P 14 24 59.8 -0.2
comp=Z,47nm,0.5s
**VRH Novokhopyorsk** 65.95 318 *eP* P 14 25 00.4 -0.8
VRH pmax pmax
comp=Z,42nm,1.0s
**FFC Flin Flon** 66.20 36 P P 14 25 03.0 +0.2
FFC IAmb IAmb 14 25 04.3
comp=Z,14nm,0.9s
**FFC Flin Flon** 66.20 36 P P 14 25 03.0 +0.2
FFC pmax pmax
comp=Z,14nm,0.9s
**FFC Flin Flon** 66.20 36 P P 14 25 03.4 +0.5
FFC pP **pP** 14 25 17.0 +1.2
**MPK Martis Peak** 66.33 58 IAmb IAmb 14 25 07.5
comp=Z,17nm,0.8s
**EMB Emerald Bay** 66.48 58 IAmb IAmb 14 25 07.2
comp=Z,11nm,0.6s
**PAHR Pah Rah Range** 66.48 57 IAmb IAmb 14 25 07.0
comp=Z,8.4nm,0.9s
**PNTR Pine Nut** 66.73 58 IAmb IAmb 14 25 08.9
comp=Z,12nm,0.8s
**EGMT Eagleton** 66.84 45 IAmb IAmb 14 25 08.7
comp=Z,8.7nm,0.8s
**EGMT Eagleton** 66.84 45 P P 14 25 07.6 +0.5
baz=309
**VORR Voronezh** 66.85 320 *eP* P 14 25 07.2 +0.2
**MEF Metsahovi** 66.86 333 *eP* P 14 25 06.4 -0.5
**CMB Columbia Colle** 66.87 59 P P 14 25 08.4 +0.9
**CMB Columbia Colle** 66.87 59 P P 14 25 08.4 +0.9
CMB pmax pmax
comp=Z,4.0nm,0.7s
**ARBE Arbavere** 66.89 332 *eP* P 14 25 06.3 -0.8
**MSVF Nonsavu** 66.93 148 LR LR 14 49 50.9
comp=Z,97nm,18.8s,baz=169,slow=32
**YERR Yerington** 67.01 58 IAmb IAmb 14 25 10.6
comp=Z,14nm,0.9s
**NSS Namsos** 67.04 341 IAmb IAmb 14 25 07.7
comp=Z,22nm,0.8s
NSS *eP* P 14 25 08.5 +0.6
**HLID Hailey** 67.08 51 P P 14 25 09.7 +0.8
baz=308
**DZM Mont Dzumac** 67.30 161 *e*LR LR 14 45 29.0
comp=Z,77nm,21.7s
**DZM Mont Dzumac** 67.30 161 LR LR 14 51 57.9
comp=Z,60nm,20.5s,baz=22,slow=34
**VSU Vasula** 67.34 331 *c iP* P 14 25 09.6 -0.4
VSU pmax pmax
comp=Z,38nm,0.9s
**BMN Battle Mountai** 67.36 55 IAmb IAmb 14 25 12.8
comp=Z,8.0nm,0.7s
**BOZ Bozeman (W)** 67.37 48 IAmb IAmb 14 25 12.4
comp=Z,9.9nm,0.8s
**BOZ Bozeman (W)** 67.37 48 P P 14 25 11.4 +0.7

baz=309
**ASAR Alice Springs 67.58 193** P **P** **14 25 12.9 +1.1**
comp=Z,1.3nm,0.7s,baz=10,slow=5.9,SNR=14
ASAR LR LR 14 53 11.0
comp=Z,28nm,21.2s,baz=20,slow=35
comp=Z,1.3nm,0.7s
**ASAR Alice Springs 67.58 193** P **P** **14 25 13.0 +1.1**
**KVN Kaiserville 67.67 57** IAmb IAmb 14 25 14.8
comp=Z,14nm,0.8s
**NVAR Mina Array Bea 67.93 58** P **P** **14 25 15.2 +0.8**
**NVAR Mina Array Bea 67.93 58** P **P** **14 25 15.5 +1.1**
comp=Z,7.7nm,0.7s,baz=289,slow=6.5,SNR=57
comp=Z,7.7nm,0.7s
**ICESG Greenland Ices 67.97 3** *eP* **P** **14 25 14.5 +0.3**
**NV11 Mina Array Sit 68.02 58** P **P** **14 25 14.7 -0.1**
**MAK Makhachkala 68.09 309** *eP* **P** **14 25 13.2 -1.7**
MAK *e* 14 27 40.9
MAK *e*PPP PPP 14 29 21.8
MAK *e*S **S** **14 34 08.2 -2.6**
MAK *e*SS **SS** **14 38 39.8 +6.7**
MAK MLR MLR
comp=Z,143nm,16.0s
**MTSE Matsula 68.18 332** *eP* **P** **14 25 15.4 +0.2**
**TBLU Trondheim 68.52 341** *eP* **P** **14 25 16.3 -1.0**
TBLU IAmb IAmb 14 25 16.6
comp=Z,29nm,0.9s
**H17A Grant Village 68.71 49** P **P** **14 25 21.7 +2.5**
baz=310
**DSP Deep Springs 68.79 58** IAmb IAmb 14 25 22.0
comp=Z,8.2nm,0.9s
**GROC Grozny 68.90 310** *eP* **P** **14 25 19.9 -0.1**
**RLMT Red Lodge 68.95 47** P **P** **14 25 21.4 +0.8**
baz=310
**TPAW Teton Pass 69.08 50** IAmb IAmb 14 25 24.2
comp=Z,8.5nm,0.8s
**PKM Mcpherson Peak 69.17 61** P **P** **14 25 22.9 +0.8**
baz=309
**GOF Gofitskoye 69.22 313***c**eP* **P** **14 25 22.5 +0.5**
**CWC Cottonwood Cre 69.30 59** P **P** **14 25 23.8 +0.9**
baz=309
**SFJD Kangerlussuaq 69.35 7** LR LR 14 57 18.2
comp=Z,64nm,19.8s,baz=344,slow=37
**DGMT Dagmar 69.36 42** P **P** **14 25 23.6 +0.8**
baz=312
**GRAC Grapevine Rang 69.40 58** P **P** **14 25 24.3 +1.0**
baz=309
**LAO LASA Array 69.53 45** P **P** **14 25 24.9 +0.9**
baz=312
**ISA Isabella, Lake 69.54 60** P **P** **14 25 24.9 +0.7**
baz=309
**R11B Troy Canyon, C 69.65 56** P **P** **14 25 25.8 +0.8**
baz=309
**ISAL Salakas 69.70 329** *eP* **P** **14 25 26.2 +1.5**
**MOL Molde 69.75 341** *eP* **P** **14 25 25.6 +0.6**
**FRB Frobisher Bay 69.77 16** LR LR 14 58 16.3
comp=Z,87nm,20.3s,baz=348,slow=38
**MNK Minsk 69.81 327***c i*P **P** **14 25 25.0 -0.4**
**SCZ2 Santa Cruz Isl 69.84 62** P **P** **14 25 26.9 +0.8**
baz=309
**DOMB Dombas 69.84 340** *eP* **P** **14 25 25.4 -0.2**
DOMB IAmb IAmb 14 25 25.9
comp=Z,52nm,1.2s
**HWUT Hardware Ranch 69.95 52** IAmb IAmb 14 25 28.7
comp=Z,22nm,1.7s
**FURC Furnace Creek, 70.05 59** P **P** **14 25 28.2 +1.0**
baz=309
**TPNV Topopah Spring 70.13 58** P **P** **14 25 28.7 +0.8**
baz=310
**DUG Dugway, Tooele 70.13 53** P **P** **14 25 28.9 +1.0**
baz=310
**KIV Kislovodsk 70.14 312** *eP* **P** **14 25 26.9 -0.9**
**KIV Kislovodsk 70.14 312** *eP* **P** **14 25 26.9 -0.9**
KIV pmax pmax
comp=Z,33nm,1.1s
KIV MLR MLR
comp=Z,222nm,18.0s
**KIV Kislovodsk 70.14 312** P **P** **14 25 29.1 +1.3**
**NB2 NORSAR Subarra 70.15 339** P **P** **14 25 27.1 -0.4**
comp=Z,25nm,0.5s,baz=32,slow=6.5
**NB2 NORSAR Subarra 70.15 339** P **P** **14 25 27.1 -0.4**
baz=32,slow=6.5
**NB2 NORSAR Subarra 70.15 339** P **P** **14 25 26.8 -0.7**
NB2 pmax pmax
comp=Z,4.0nm,0.5s
**NOA NORSAR Array B 70.15 339** P **P** **14 25 27.0 -0.5**
comp=Z,19nm,0.6s,baz=32,slow=6.5,SNR=168
NOA LR LR 15 01 01.2
comp=Z,99nm,19.0s,baz=10.0,slow=40
comp=Z,19nm,0.6s
**NOA NORSAR Array B 70.15 339** P **P** **14 25 27.0 -0.5**
**LRMC Laurel Mtn Rad 70.16 60** P **P** **14 25 28.5 +0.4**
baz=309
**KBZ Khabaz 70.17 312** P **P** **14 25 28.3 +0.5**
comp=Z,16nm,0.8s,baz=54,slow=4.0,SNR=24
KBZ LR LR 15 01 32.2
comp=Z,217nm,18.8s,baz=30,slow=40
comp=Z,16nm,0.8s
**KBZ Khabaz 70.17 312** *eP* **P** **14 25 28.0 +0.2**
**KBZ Khabaz 70.17 312***c i*P **P** **14 25 28.0 +0.2**
KBZ pmax pmax
comp=Z,16nm,0.9s
**DY2G Dye2 70.23 6** *eP* **P** **14 25 27.2 -0.9**
**HFS Hagfors 70.23 337** P **P** **14 25 27.4 -0.5**
comp=Z,36nm,0.5s,baz=47,slow=6.5,SNR=401
HFS LR LR 15 00 07.3
comp=Z,137nm,18.8s,baz=27,slow=39
comp=Z,36nm,0.5s
**SHA1 Shidzhatmaz 70.30 312**⇓*eP* **P** **14 25 29.8 +0.9**
**NC602 NORSAR Array S 70.32 339** *eP* **P** **14 25 27.8 -0.7**
NC602 IAmb IAmb 14 25 28.7
comp=Z,20nm,1.1s
**NORES NORESS Array B 70.32 339** P **P** **14 25 27.7 -0.8**
NORES pmax pmax
comp=Z,1.0nm,0.4s
**BW06 Boulder Array 70.33 50** P **P** **14 25 29.5 +0.4**
baz=311
**PDAR Pinedale Array 70.33 50** P **P** **14 25 29.6 +0.4**
comp=Z,2.7nm,0.6s,baz=257,slow=1.9,SNR=30
comp=Z,2.7nm,0.6s
**EDW2 Edwards Air Fo 70.34 60** P **P** **14 25 30.1 +1.0**
baz=309
**GWY Greenwater Val 70.35 59** IAmb IAmb 14 25 31.1
comp=Z,9.2nm,0.7s
**SNCC San Nicolas Is 70.38 63** P **P** **14 25 30.2 +0.8**
baz=309
**PLTM Poltava 70.43 320** P **P** **14 25 29.6 +0.3**
**PABE Paberze 70.56 330** *eP* **P** **14 25 30.0 +0.1**
**GSC Goldstone, Bar 70.82 59** P **P** **14 25 32.9 +0.8**
baz=310
**PBUR Paburge 70.90 331** *eP* **P** **14 25 32.0 0.0**
**BFSC Mount Baldy Ra 70.96 61** P **P** **14 25 33.9 +0.9**
baz=310
**FOO Floro 71.18 342** *eP* **P** **14 25 34.2 +0.6**
**TUQ Turquoise Moun 71.29 59** P **P** **14 25 35.8 +0.8**
baz=310
**HYA Hoyanger 71.30 341** *eP* **P** **14 25 34.6 +0.3**
HYA IAmb IAmb 14 25 34.7
comp=Z,29nm,0.6s
**HEC Hector,Ludlow 71.42 60** P **P** **14 25 36.4 +0.7**
baz=310
**GNI Garni 71.48 308** LR LR 15 00 32.6
comp=Z,88nm,19.6s,baz=44,slow=39
**MURC Murrieta 71.66 61** P **P** **14 25 37.9 +0.8**
baz=310
**SUE Sulen 71.73 342** *eP* **P** **14 25 37.2 +0.2**
**KONO Kongsberg 71.76 339** *eP* **P** **14 25 37.3 +0.1**
**KONO Kongsberg 71.76 339** P **P** **14 25 37.0 -0.2**
**KONO Kongsberg 71.76 339** P **P** **14 25 37.2 +0.1**
**STRU Stroemstad 71.85 338** *eP* **P** **14 25 38.0 +0.2**
**GMRC Granite Mounta 71.88 59** P **P** **14 25 39.2 +0.7**
baz=310
**SOC Sochi 71.99 313** *eP* **P** **14 25 36.5 -2.3**
SOC *e*S **S** **14 34 54.5 -2.0**
SOC *e*SS **SS** **14 39 32.8 -0.2**
**ULM Lac du Bonnet 72.00 37** P **P** **14 25 38.5 -0.4**
comp=Z,2.0nm,0.7s,baz=17,slow=7.1,SNR=3.8
ULM LR LR 14 59 02.3
comp=Z,44nm,18.7s,baz=358,slow=37
comp=Z,2.0nm,0.7s
**ULM Lac du Bonnet 72.00 37**⇑*eP* **P** **14 25 38.1 -0.7**
**MDND Maddock 72.02 41** P **P** **14 25 39.7 +0.6**
baz=315
**AK03 Malin Array Si 72.03 324** P **P** **14 25 38.5 -0.4**
**AKASG Malin Array Be 72.04 324** P **P** **14 25 38.8 -0.3**
comp=Z,21nm,0.7s,baz=40,slow=6.0,SNR=47
AKASG LR LR 15 00 04.8
comp=Z,110nm,19.1s,baz=46,slow=38
comp=Z,21nm,0.7s
**AKBB Malin Array Si 72.04 324***c i*P **P** **14 25 38.2 -0.8**
**AKBB Malin Array Si 72.04 324** P **P** **14 25 39.0 0.0**
**AK04 Malin Array Si 72.05 324** P **P** **14 25 38.8 -0.3**
**KIEV Kiev 72.05 324** P **P** **14 25 38.8 -0.4**
**KIEV Kiev 72.05 324**⇑P **P** **14 25 38.7 -0.4**
**KIEV Kiev 72.05 324** P **P** **14 25 38.8 -0.4**
KIEV pmax pmax
comp=Z,29nm,0.8s
**KIEV Kiev 72.05 324** P **P** **14 25 38.8 -0.4**
comp=Z,161nm,1.1s
**KIEV Kiev 72.05 324** P **P** **14 25 38.7 -0.4**
**AK01 Malin Array Si 72.06 324** P **P** **14 25 38.7 -0.4**
**AK22 Malin Array Si 72.06 324** P **P** **14 25 38.9 -0.3**
**AK21 Malin Array Si 72.07 324** P **P** **14 25 38.9 -0.3**
**K22A Casper 72.07 48** P **P** **14 25 40.0 +0.4**
baz=313
**AK08 Malin Array Si 72.08 324** P **P** **14 25 39.1 -0.2**
**AK09 Malin Array Si 72.08 324** P **P** **14 25 39.0 -0.3**
**AK02 Malin Array Si 72.08 324** P **P** **14 25 38.9 -0.4**
**AK11 Malin Array Si 72.08 324** P **P** **14 25 38.9 -0.4**
**AK15 Malin Array Si 72.09 324** P **P** **14 25 39.0 -0.3**
**AK18 Malin Array Si 72.09 324** P **P** **14 25 39.1 -0.3**
**AK20 Malin Array Si 72.10 324** P **P** **14 25 39.1 -0.3**
**AK10 Malin Array Si 72.11 324** P **P** **14 25 39.1 -0.3**
**AK05 Malin Array Si 72.11 324** P **P** **14 25 39.2 -0.3**
**AK12 Malin Array Si 72.11 324** P **P** **14 25 39.2 -0.3**
**AK19 Malin Array Si 72.12 324** P **P** **14 25 39.2 -0.3**
**PFO Pinyon Flats O 72.12 61** LR LR 14 53 27.3
comp=Z,29nm,20.7s,baz=258,slow=33
**PFO Pinyon Flats O 72.12 61** P **P** **14 25 40.8 +0.7**
baz=310
**TPFO Pinon Flats 72.13 61** P **P** **14 25 40.9 +0.9**
baz=310
**ASK Askoy 72.13 341** *eP* **P** **14 25 39.7 +0.3**
**AK14 Malin Array Si 72.14 324** P **P** **14 25 39.4 -0.3**
**AK07 Malin Array Si 72.16 324** P **P** **14 25 39.5 -0.3**
**BELC Belle Mtn. Jos 72.17 60** P **P** **14 25 40.8 +0.5**
baz=310
**SRU San Rafael Swe 72.18 53** IAmb IAmb 14 25 42.0
comp=Z,11nm,0.9s
**AK13 Malin Array Si 72.18 324** P **P** **14 25 39.6 -0.3**
**BER Bergen 72.19 341** *eP* **P** **14 25 40.4 +0.7**
**ODD1 Odda 72.29 340** *eP* **P** **14 25 40.7 +0.3**
ODD1 IAmb IAmb 14 25 41.0
comp=Z,16nm,0.6s
**RSSD Black Hills 72.40 46** P **P** **14 25 42.1 +0.5**
**RSSD Black Hills 72.40 46** P **P** **14 25 42.1 +0.5**
baz=314
**RSSD Black Hills 72.40 46** P **P** **14 25 42.1 +0.5**
RSSD pmax pmax
comp=Z,7.0nm,0.8s
**MI30 MI30,Zelenitsa 72.45 324** P **P** **14 25 41.2 -0.3**
**MI28 MI28,Pidlybu 72.54 325** P **P** **14 25 42.1 +0.1**
**TJOU Tjoern 72.58 337** *i*P **P** **14 25 41.9 -0.2**
**IRM Iron Mountain 72.61 59** P **P** **14 25 43.6 +0.9**
baz=311
**MONP2 Monument Peak 72.61 61** P **P** **14 25 43.7 +0.7**
baz=310
**BC3 Big Chuckawall 72.74 60** P **P** **14 25 44.4 +0.8**
baz=311
**BLS5 Blasjo 72.76 340** *eP* **P** **14 25 43.5 +0.3**
**O20A White River Ci 72.81 51** P **P** **14 25 44.8 +0.7**
baz=312
**HMU Henry Mountain 72.82 54** IAmb IAmb 14 25 46.1
comp=Z,14nm,0.7s
**MI29 MI29, Kamyanyy 72.84 324** P **P** **14 25 43.3 -0.5**
**RNPP9 Sopachiv 72.92 326** P **P** **14 25 44.3 +0.1**
**IKP In-Ko-Pah, Jac 72.97 61** P **P** **14 25 45.9 +0.9**
baz=311
**SWSC Sam W. Stewart 72.98 61** P **P** **14 25 46.1 +1.2**
baz=311
**RNPP2 Kostyukhnivka 72.98 326** P **P** **14 25 44.7 +0.1**
**RNPP8 Varash 72.99 326** P **P** **14 25 44.8 +0.1**
**RNPP5 Staryi Chortor 73.06 326** P **P** **14 25 45.0 -0.1**
**PDMCI Parker Dam,Lak 73.14 59** P **P** **14 25 47.0 +1.1**
baz=311
**DEL Delary 73.22 335** *i*P **P** **14 25 45.2 -0.7**
**KMY Karmoy 73.24 341** *eP* **P** **14 25 46.6 +0.6**
**AGMN Agassiz Nation 73.44 38** P **P** **14 25 48.1 +0.8**
baz=317
**SNART Snartemo 73.52 339** *eP* **P** **14 25 48.1 +0.5**
**SNART Snartemo 73.52 339** *i*P **P** **14 25 46.0 -1.6**
SNART *i*P **P** **14 25 47.8 +0.1**
**GLA Glamis 73.53 60** P **P** **14 25 49.6 +1.4**
baz=311
**N23A Red Feather La 73.58 49** P **P** **14 25 49.5 +0.8**
baz=313
**BSD Bornholm Skovb 74.02 334** *i*P **P** **14 25 50.5 -0.1**
**WUAZ Wupatki 74.05 56** P **P** **14 25 52.4 +1.0**
baz=312
**LUNU Lund 74.05 335** *i*P **P** **14 25 50.6 -0.2**
**SORM Soroca 74.33 322**⇑P **P** **14 25 52.5 -0.1**
**SORM Soroca 74.33 322** P **P** **14 25 52.4 -0.1**
**SORM Soroca 74.33 322** P **P** **14 25 52.0 -0.5**
comp=Z,34nm,0.9s
**HORU Horodok 74.36 324** P **P** **14 25 52.5 -0.2**
**NDNU Novodnistrovsk 74.42 323** P **P** **14 25 52.8 -0.3**
**ISCO Idaho Springs 74.52 50** P **P** **14 25 55.0 +0.8**
baz=314
**MUD Monsted U'grnd 74.62 337** *eP* **P** **14 25 54.7 +0.6**
**MVCO Mesa Verde 74.63 53** P **P** **14 25 55.8 +0.9**
baz=313
**SUSD Miller 74.77 43** P **P** **14 25 56.3 +1.1**
baz=316
**STKA Stephens Creek 74.83 185** LR LR 14 57 05.2
comp=Z,26nm,21.4s,baz=28,slow=34
**KMPD K-Podol'skiy 74.84 324** P **P** **14 25 55.6 +0.1**
KMPD P **P** **14 25 55.2 -0.3**
**KIS Kishinev 74.96 321** P **P** **14 25 56.0 -0.3**
comp=Z,94nm,0.5s
**RGN Rugen 75.00 334** *eP* **P** **14 25 56.8 +0.5**
comp=Z,58nm,0.9s,baz=31,slow=5.5
**S22A 4UR Ranch, Cre 75.24 52** P **P** **14 25 59.5 +1.0**
baz=314
**Q24A Divide 75.36 50** P **P** **14 26 00.0 +0.9**
baz=314
**MORS Morshin 75.49 325** P **P** **14 25 59.6 +0.3**
**STNU Starunia 75.56 325** P **P** **14 26 00.0 +0.3**
**KWP Kalwaria Pacla 75.59 326** *eP* **P** **14 26 00.7 +0.9**
**KWP Kalwaria Pacla 75.59 326** P **P** **14 26 00.3 +0.5**
comp=Z,100nm,0.6s,comp=Z,µm
**KSV Kosov 75.62 324** P **P** **14 25 59.3 -0.8**
**EYMN Ely 75.64 36** P **P** **14 26 00.8 +0.6**
baz=320
**SHIU Shidnytsya 75.64 326** P **P** **14 26 00.9 +0.7**
**OGNE Ogallala 75.68 47** P **P** **14 26 01.2 +0.6**
baz=315
**SDCO Great Sand Dun 76.00 51** P **P** **14 26 03.2 +0.4**
baz=314
**BURAR Bucovina Array 76.10 324** P **P** **14 26 03.5 +0.5**
**BURAR Bucovina Array 76.10 324**⇑P **P** **14 26 03.3 +0.3**
**BURAR Bucovina Array 76.10 324** P **P** **14 26 03.2 +0.3**
**BZK Bozkurt 76.12 315** P **P** **14 26 03.4 +0.4**
comp=Z,143nm,1.6s
**MEZ Mezhgor'ye 76.13 325** P **P** **14 26 04.0 +1.1**
**RAKU Rahkiv 76.23 325** P **P** **14 26 03.1 -0.5**
**OJC Ojcow 76.27 328** *eP* **P** **14 26 04.2 +0.5**
**OJC Ojcow 76.27 328** IAmb IAmb 14 26 05.1
comp=Z,24nm,1.0s
**OJC Ojcow 76.27 328** P **P** **14 26 04.2 +0.5**
OJC pmax pmax
comp=Z,26nm,0.9s
**OJC Ojcow 76.27 328** P **P** **14 26 04.4 +0.7**
comp=Z,26nm,0.9s
**GHRR 76.31 321** P **P** **14 26 04.8 +0.8**
**KOLS Kolonicke sedl 76.31 326** *eP* **P** **14 26 04.3 +0.3**
KOLS pmax pmax
comp=Z,11nm,0.8s
**KOLS Kolonicke sedl 76.31 326** *eP* **P** **14 26 04.3 +0.3**
**TESR Tescani 76.31 322**⇑P **P** **14 26 04.4 +0.4**
**TESR Tescani 76.31 322** P **P** **14 26 04.1 +0.1**
comp=Z,44nm,0.8s
**ECSD EROS Data Cent 76.44 42** IAmb IAmb 14 26 05.8
comp=Z,12nm,1.1s
**ECSD EROS Data Cent 76.44 42** P **P** **14 26 05.0 +0.2**
baz=318
**BSEG Bad Segeberg 76.46 335** *eP* **P** **14 26 05.1 +0.4**
comp=Z,24nm,0.8s,baz=31,slow=5.5
**BRIU Brid 76.47 325** P **P** **14 26 05.2 +0.3**
**MUKU Mukachevo 76.52 326** P **P** **14 26 05.9 +0.8**
**ONER Baraj Valea Uz 76.56 322**⇓P **P** **14 26 06.7 +1.2**
**TUC Tucson 76.56 58** P **P** **14 26 06.4 +0.6**
baz=313
**HOLU Holmets 76.58 326** P **P** **14 26 05.8 +0.3**
**CFR Carcaliu 76.64 321**⇑P **P** **14 26 06.0 +0.1**
**CFR Carcaliu 76.64 321** P **P** **14 26 05.9 +0.1**
**BERU Beregovo 76.71 325** P **P** **14 26 06.3 +0.1**
**NIE Niedzica 76.72 328** *eP* **P** **14 26 07.2 +0.9**
**NIE Niedzica 76.72 328** P **P** **14 26 06.9 +0.6**
comp=Z,9.9nm,1.0s
**TPGR Topolog 76.75 320**⇓P **P** **14 26 07.4 +0.8**
**VRI Vrincioaia 76.77 322**⇓P **P** **14 26 07.1 +0.5**
**VRI Vrincioaia 76.77 322** P **P** **14 26 07.1 +0.5**
**VRI Vrincioaia 76.77 322** P **P** **14 26 07.1 +0.5**
comp=Z,9.0nm,0.8s,comp=Z,605nm
**PLOR5 Plostina Array 76.81 322** P **P** **14 26 07.4 +0.5**
comp=Z,18nm,0.7s
**PLOR Plostina 76.81 322**⇑P **P** **14 26 06.6 -0.3**
**PLOR Plostina 76.81 322** P **P** **14 26 06.6 -0.3**
**GORT1 Trebel 76.96 334** *eP* **P** **14 26 07.7 +0.3**
comp=Z,16nm,0.7s,baz=31,slow=5.5
**COVR Voineasa-Covas 77.02 322**⇑P **P** **14 26 08.1 +0.1**
**T25A Trinidad 77.05 51** P **P** **14 26 09.1 +0.5**
baz=315
**KSP Ksiaz 77.07 331** *eP* **P** **14 26 08.9 +0.7**
**KSP Ksiaz 77.07 331** P **P** **14 26 08.5 +0.3**
**KSP Ksiaz 77.07 331** P **P** **14 26 08.8 +0.6**
comp=Z,19nm,0.9s
**HARR Harsova 77.10 320**⇑P **P** **14 26 09.4 +0.9**
**HARR Harsova 77.10 320** P **P** **14 26 09.4 +0.9**
**LANS Liptovska Anna 77.26 328** *eP* **P** **14 26 10.8 +1.4**
LANS pmax pmax
comp=Z,11nm,0.7s
**LANS Liptovska Anna 77.26 328** *eP* **P** **14 26 10.8 +1.4**
**DOPR Dopca 77.29 323**⇑P **P** **14 26 10.9 +1.3**
**OSTC Ostas 77.33 330** *eP* **P** **14 26 12.1 +2.4**
OSTC AMS AMS 15 07 40.0
comp=Z,100nm,18.7s
**OSTC Ostas 77.33 330** *eP* **P** **14 26 12.1 +2.4**
OSTC MLR MLR
comp=Z,100nm,18.7s
**ANMO Albuquerque 77.39 54** P **P** **14 26 11.2 +0.7**
baz=314
**ANMO Albuquerque 77.39 54**⇑*eP* **P** **14 26 11.4 +0.9**
ANMO pmax pmax
comp=Z,1.0nm,1.0s
**MLR Muntele Rosu 77.41 322** IAmb IAmb 14 26 12.5
comp=Z,9.5nm,0.6s
**MLR Muntele Rosu 77.41 322** LR LR 15 03 15.6
comp=Z,138nm,20.1s,baz=44,slow=38
**MLR Muntele Rosu 77.41 322**⇑P **P** **14 26 11.8 +1.4**
**MLR Muntele Rosu 77.41 322** P **P** **14 26 11.8 +1.4**
**MLR Muntele Rosu 77.41 322** P **P** **14 26 10.8 +0.4**
comp=Z,16nm,0.9s
**ISR Istrita 77.42 321**⇓P **P** **14 26 11.7 +1.3**
**ISR Istrita 77.42 321** P **P** **14 26 11.6 +1.3**
**ISR Istrita 77.42 321** P **P** **14 26 10.9 +0.5**
comp=Z,55nm,0.7s
**UPC Upice 77.45 330** *eP* **P** **14 26 11.1 +0.7**
UPC AMS AMS 15 07 50.0
comp=Z,200nm,18.9s
**UPC Upice 77.45 330** *eP* **P** **14 26 11.1 +0.7**
UPC MLR MLR
comp=Z,200nm,18.9s
**DPC Dobruska-Polom 77.47 330** *eP* **P** **14 26 11.2 +0.7**
**DPC Dobruska-Polom 77.47 330** *eP* **P** **14 26 11.2 +0.7**
**DPC Dobruska-Polom 77.47 330** P **P** **14 26 11.0 +0.5**
comp=Z,14nm,1.1s
**MORC Moravsky Berou 77.49 329** IAmb IAmb 14 26 12.1
comp=Z,10nm,0.8s
**MORC Moravsky Berou 77.49 329** *eP* **P** **14 26 10.9 +0.3**
**MORC Moravsky Berou 77.49 329**⇑P **P** **14 26 11.1 +0.5**
**MORC Moravsky Berou 77.49 329** P **P** **14 26 11.1 +0.5**
**FLTG Flechtingen 77.54 334** *eP* **P** **14 26 10.6 -0.2**
comp=Z,22nm,0.9s,baz=31,slow=5.5
**MARR Marisel-Cluj 77.73 324**⇓P **P** **14 26 12.8 +0.7**
**NRDL Niedersach Rie 77.76 335** *eP* **P** **14 26 11.9 0.0**
comp=Z,7.7nm,0.7s,baz=31,slow=5.5
**RETH Rethem/Aller, 77.78 335** *eP* **P** **14 26 12.1 0.0**
comp=Z,11nm,0.7s,baz=31,slow=5.5
**CLL Collm 77.83 333** *i*P **P** **14 26 12.2 -0.3**
comp=Z,28nm,1.0s
CLL AMS AMS 15 05 00.0
comp=Z,100nm,19.4s
**CLL Collm 77.83 333** *i*P **P** **14 26 12.2 -0.3**
CLL pmax pmax
comp=Z,28nm,1.0s
**CLL Collm 77.83 333** P **P** **14 26 12.1 -0.3**
comp=Z,36nm,0.8s
**CLL Collm 77.83 333** *eP* **P** **14 26 12.1 -0.3**
comp=Z,26nm,0.9s,baz=31,slow=5.5
**VOIR 77.85 322**⇓P **P** **14 26 13.8 +1.0**
**VOIR 77.85 322** P **P** **14 26 13.8 +1.0**
**VOIR 77.85 322** P **P** **14 26 13.5 +0.7**
comp=Z,17nm,0.9s
**BRG Berggiesshubel 77.88 332** *eP* **P** **14 26 13.0 +0.3**
BRG Amp 14 26 14.3
comp=Z,4.6nm,0.7s
**BRG Berggiesshubel 77.88 332** *eP* **P** **14 26 12.6 -0.1**
comp=Z,4.3nm,0.7s,baz=31,slow=5.5
**BRTR Keskin Array B 77.93 314** P **P** **14 26 13.8 +0.4**
**BRTR Keskin Array B 77.93 314** P **P** **14 26 13.6 +0.2**
comp=Z,3.1nm,0.6s,baz=78,slow=3.1,SNR=8.2
BRTR LR LR 15 07 13.5
comp=Z,110nm,18.5s,baz=79,slow=41
comp=Z,3.1nm,0.6s
**BRTR Keskin Array B 77.93 314** *i*P **P** **14 26 13.8 +0.4**
BRTR pmax pmax
comp=Z,3.0nm,0.6s
**BR105 Keskin Array S 77.95 314** P **P** **14 26 13.9 +0.4**
comp=Z,7.1nm,0.8s
**ESY Stoneypath 78.03 343** *eP* **P** **14 26 13.3 -0.1**
**VYHS Vyhne 78.03 328** *eP* **P** **14 26 14.3 +0.6**
VYHS pmax pmax
comp=Z,8.0nm,0.6s
**VYHS Vyhne 78.03 328** *eP* **P** **14 26 14.3 +0.6**
**PSZ Piszkesteto 78.08 327**⇓P **P** **14 26 14.6 +0.5**
**PSZ Piszkesteto 78.08 327** P **P** **14 26 14.5 +0.5**
**ARR Arges 78.09 323**⇑P **P** **14 26 15.3 +1.2**
**RICC Richard 78.10 332** *eP* **P** **14 26 15.3 +1.4**
**JAVC Velka Javorina 78.19 329** *eP* **P** **14 26 15.4 +0.8**
**SCHQ Schefferville 78.20 19** P **P** **14 26 14.6 +0.1**
comp=Z,4.7nm,0.8s,baz=327,slow=3.0,SNR=5.9
SCHQ LR LR 15 01 28.4
comp=Z,57nm,22.0s,baz=30,slow=36
comp=Z,4.7nm,0.8s
**KIRS Kirsehir-Merke 78.21 313**⇓P **P** **14 26 15.8 +0.8**
**VRAC Vranov 78.22 329** *eP* **P** **14 26 15.0 +0.3**
**VRAC Vranov 78.22 329** LR LR 15 03 21.3
comp=Z,100nm,22.0s,baz=42,slow=38
**VRAC Vranov 78.22 329**⇑P **P** **14 26 15.4 +0.6**
**VRAC Vranov 78.22 329** P **P** **14 26 15.3 +0.6**
**CLZ Clausthal 78.24 334** *eP* **P** **14 26 15.2 +0.4**
comp=Z,14nm,0.7s,baz=31,slow=5.5
**121A Cookes Peak, D 78.26 56** P **P** **14 26 16.4 +1.0**
baz=314
**ANTO Ankara 78.27 314**⇑P **P** **14 26 16.1 +0.8**
**ANTO Ankara 78.27 314** P **P** **14 26 16.0 +0.8**
**ANTO Ankara 78.27 314** P **P** **14 26 16.2 +1.0**
comp=Z,15nm,0.8s
**HSKC Hora Svate Kat 78.28 332** *eP* **P** **14 26 15.3 +0.3**
HSKC AMS AMS 15 06 10.0
comp=Z,200nm,15.2s
**NEUB Neuenburg 78.33 333** *eP* **P** **14 26 15.6 +0.4**
comp=Z,14nm,0.7s,baz=31,slow=5.5
**GOPC GO Pecny, Ondr 78.38 331** *eP* **P** **14 26 16.3 +0.7**
**GOPC GO Pecny, Ondr 78.38 331** *eP* **P** **14 26 16.3 +0.7**
**PRU Pruhonice 78.41 331** *eP* **P** **14 26 16.3 +0.6**
PRU AMS AMS 15 05 50.0
comp=Z,100nm,20.5s
**PRU Pruhonice 78.41 331** *eP* **P** **14 26 16.3 +0.6**
PRU MLR MLR
comp=Z,100nm,20.5s
**KRUC Moravsky 78.50 329** *eP* **P** **14 26 16.5 +0.3**
**KRUC Moravsky 78.50 329** P **P** **14 26 16.8 +0.6**
KRUC pmax pmax
comp=Z,18nm,0.8s
**SMOL Smolenice 78.56 329** *eP* **P** **14 26 17.8 +1.2**
SMOL pmax pmax
comp=Z,8.0nm,0.7s
**GTTG Gottingen 78.62 334** *eP* **P** **14 26 17.1 +0.2**
comp=Z,20nm,1.0s,baz=31,slow=5.5
**IBBN Ibbenburen 78.64 336** *eP* **P** **14 26 16.9 0.0**
comp=Z,18nm,0.7s,baz=31,slow=5.5
**SIRR Siria 78.67 325**⇑P **P** **14 26 17.3 0.0**
**EKA Eskdalemuir Ar 78.69 343** P **P** **14 26 17.2 +0.1**
comp=Z,5.9nm,0.5s,baz=24,slow=4.9,SNR=45

comp=Z,5.9nm,0.5s
**ESK Eskdalemuir 78.71 343 P P 14 26 17.6 +0.4**
ESK IAmb IAmb 14 26 19.8
comp=Z,24nm,1.1s
**ESK Eskdalemuir 78.71 343 eP P 14 26 16.9 -0.3**
ESK IAmb IAmb 14 26 19.5
comp=Z,24nm,1.1s
**ESK Eskdalemuir 78.71 343 P P 14 26 17.6 +0.4**
ESK pmax pmax
comp=Z,25nm,1.1s
**MODS Modra-Piesok 78.73 329 eP P 14 26 18.6 +1.1**
MODS pmax pmax
comp=Z,21nm,1.0s
**MODS Modra-Piesok 78.73 329 eP P 14 26 18.6 +1.1**
**TANN Tannenbergstha 78.77 332 eP P 14 26 17.5 -0.2**
comp=Z,4.3nm,0.8s,baz=31,slow=5.5
**PLN Plauen 78.81 333 eP P 14 26 17.8 -0.1**
comp=Z,9.5nm,1.2s,baz=31,slow=5.5
**MOX Moxa 78.86 333 eP P 14 26 18.1 0.0**
comp=Z,5.7nm,0.7s,baz=31,slow=5.5
**SURR Surduc 78.88 324 ⇑P P 14 26 18.7 +0.3**
**GZR Gura Zlata 78.89 324 ⇓P P 14 26 18.9 +0.4**
**GZR Gura Zlata 78.89 324 P P 14 26 18.9 +0.4**
**EDMD Edmundbyers 78.89 342 eP P 14 26 17.8 -0.4**
EDMD IAmb IAmb 14 26 23.2
comp=Z,17nm,1.1s
**ZVC Zvikov 78.99 331 eP P 14 26 19.3 +0.4**
ZVC AMS AMS 15 05 10.0
comp=Z,200nm,20.7s
**BZS Buzias 79.21 324 ⇑P P 14 26 20.1 0.0**
**BZS Buzias 79.21 324 P P 14 26 20.1 0.0**
**UBBA Unterbreizbach 79.24 334 eP P 14 26 20.0 -0.1**
comp=Z,4.7nm,0.6s,baz=31,slow=5.5
**MANZ Manzenberg 79.25 332 eP P 14 26 20.6 +0.3**
comp=Z,1.8nm,1.2s,baz=31,slow=5.5
**CTYL Yalikoy Yolu 79.36 318 P P 14 26 21.5 +0.5**
comp=Z,47nm,1.3s
**KESW Keswick, Cumbr 79.37 343 eP P 14 26 20.8 -0.1**
KESW IAmb IAmb 14 26 23.7
comp=Z,31nm,1.0s
**KASTN Kahler Asten 79.41 335 eP P 14 26 21.3 +0.2**
comp=Z,8.1nm,0.9s,baz=31,slow=5.5
**ROTZ Rotzenmuhle 79.41 332 eP P 14 26 21.6 +0.4**
comp=Z,1.4nm,0.8s,baz=31,slow=5.5
**GAL1 Galloway 79.45 344 eP P 14 26 21.3 +0.1**
GAL1 IAmb IAmb 14 26 23.1
comp=Z,21nm,0.7s
**HERR Herculane 79.45 324 ⇓P P 14 26 21.6 +0.1**
**CKRC Cesky Krumlov 79.47 330 eP P 14 26 22.0 +0.5**
**CKRC Cesky Krumlov 79.47 330 eP P 14 26 22.0 +0.5**
**KHC Kasperske Hory 79.47 331 IAmb IAmb 14 26 22.9**
comp=Z,14nm,0.7s
**KHC Kasperske Hory 79.47 331 eP P 14 26 22.2 +0.6**
KHC AMS AMS 15 05 40.0
comp=Z,300nm,34.5s
**KHC Kasperske Hory 79.47 331 ceP P 14 26 21.9 +0.3**
KHC pmax pmax
comp=Z,24nm,0.9s
**KHC Kasperske Hory 79.47 331 P P 14 26 22.1 +0.5**
comp=Z,23nm,0.7s
**BUG Bochum--Univer 79.55 336 eP P 14 26 21.8 0.0**
comp=Z,13nm,0.8s,baz=31,slow=5.5
**MPLH Magyarpolny 79.62 328 P P 14 26 22.6 +0.2**
comp=Z,31nm,1.1s
**CONA Conrad Observa 79.64 329 iP P 14 26 23.4 +0.8**
comp=Z,5.8nm,0.6s,SNR=5.9
**RONA Rosalia, Austr 79.66 329 iP P 14 26 23.6 +0.9**
comp=Z,8.0nm,0.6s
**GEC2 GERESS Array S 79.67 331 eP P 14 26 22.6 -0.1**
comp=Z,4.0nm,0.7s,baz=31,slow=5.5
**GERES GERESS Array B 79.67 331 P P 14 26 22.8 0.0**
comp=Z,2.9nm,0.7s,baz=144,slow=4.8,SNR=13
GERES LR LR 15 06 02.0
comp=Z,135nm,18.6s,baz=44,slow=39
comp=Z,2.9nm,0.7s
**WET Wettzell 79.70 331 eP P 14 26 23.3 +0.5**
comp=Z,11nm,1.0s,baz=31,slow=5.5
**GRF Grafenberg Arr 79.81 333 eP P 14 26 24.0 +0.6**
comp=Z,19nm,1.0s,baz=31,slow=5.5
**MDVR Moldovita 79.83 324 ⇑P P 14 26 23.3 -0.4**
**MORH Mrgy, Hungar 79.96 326 ⇓P P 14 26 23.6 -0.5**
**MORH Mrgy, Hungar 79.96 326 P P 14 26 23.7 -0.5**
comp=Z,5.7nm,0.9s
**JFWS Jewell Farm 80.08 39 P P 14 26 25.4 +0.5**
baz=321
**LBWR Ladybower, Pea 80.16 342 eP P 14 26 25.6 +0.4**
LBWR IAmb IAmb 14 26 26.4
comp=Z,33nm,0.8s
**AMTX Amarillo 80.20 51 P P 14 26 26.7 +0.9**
baz=316
**MSTX Muleshoe 80.23 52 P P 14 26 26.8 +0.8**
baz=316
**TNS Taunus Mts 80.25 334 eP P 14 26 25.8 0.0**
comp=Z,5.7nm,0.7s,baz=31,slow=5.5
**MNTX Cornudas Mount 80.30 56 P P 14 26 27.4 +1.0**
baz=315
**MOA Molln 80.30 330 eP P 14 26 26.5 +0.4**
comp=Z,4.1nm,0.8s
**ARSA Arzberg 80.33 329 eP P 14 26 26.8 +0.6**
comp=Z,1.9nm,0.6s
**FRGS Fruska Gora 80.34 325 ⇓P P 14 26 26.9 +0.6**
**FRGS Fruska Gora 80.34 325 P P 14 26 26.5 +0.2**
comp=Z,14nm,0.9s
**RAR Rarotonga 80.52 131 LR LR 15 00 23.7**
comp=Z,66nm,19.1s,baz=274,slow=34
**MEM Membach 80.66 336 dP P 14 26 28.1 +0.2**
**BIOA Bad Ischl, Aus 80.66 330 eP P 14 26 28.4 +0.4**
comp=Z,8.8nm,0.7s
**BOVS Bovan 80.75 323 ⇓P P 14 26 28.0 -0.4**
**BSTI Sart Tilman 80.81 336 dP P 14 26 29.1 +0.4**
**RJOB Jochberg 80.92 331 eP P 14 26 29.8 +0.3**
comp=Z,6.9nm,0.9s,baz=31,slow=5.5
**FOEL Foel Wylfa 80.97 342 eP P 14 26 30.1 +0.6**
FOEL IAmb IAmb 14 26 32.1
comp=Z,23nm,0.9s
**SOKA Soboth 80.99 329 iP P 14 26 30.0 +0.1**
comp=Z,8.8nm,0.6s,SNR=8.5
**GROS Grobnik 81.00 328 iP P 14 26 29.7 -0.2**
**BCLA Clavier 81.03 336 dP P 14 26 29.4 -0.4**
BCLA dPcP PcP 14 26 34.9 -1.3
**FUR Furstenfeldbru 81.09 332 eP P 14 26 30.5 +0.2**
comp=Z,15nm,0.8s,baz=31,slow=5.5
**BGES Gesves 81.13 336 dP P 14 26 30.3 -0.1**
**VHRN Van Horn 81.18 56 IAmb IAmb 14 26 33.1**
comp=Z,7.7nm,0.7s
**LESA Schwarzleotal 81.23 331 eP P 14 26 31.6 +0.5**
comp=Z,8.4nm,0.8s
**STU Stuttgart 81.27 333 eP P 14 26 31.6 +0.5**
comp=Z,30nm,0.6s,baz=31,slow=5.5
**KBA Koelnbreinsper 81.28 330 iP P 14 26 32.2 +0.6**
comp=Z,14nm,0.7s,SNR=13
**BMRD Maredsous 81.29 337 dP P 14 26 31.4 +0.1**
**OBKA Obir 81.32 329 eP P 14 26 30.8 -0.8**
comp=Z,4.9nm,0.6s
**PDKS Podkum 81.52 329 iP P 14 26 32.2 -0.4**
**MYKA Terra Mystica 81.55 330 eP P 14 26 32.0 -0.8**
comp=Z,2.5nm,0.6s
**WATA Walderalm 81.70 331 eP P 14 26 33.5 -0.2**
comp=Z,7.7nm,0.5s
**WTTA Wattenberg 81.74 331 iP P 14 26 34.3 +0.4**
comp=Z,9.6nm,0.6s,SNR=5.6
**MMAI Mount Meron Ar 81.82 308 P P 14 26 35.9 +1.4**
comp=Z,7.1nm,0.6s,baz=69,slow=4.6,SNR=8.8
MMAI LR LR 15 07 23.4
comp=Z,87nm,19.4s,baz=336,slow=39
comp=Z,7.1nm,0.6s
**P40A Paris 81.85 42 IAmb IAmb 14 26 35.6**
comp=Z,14nm,1.2s
**RETA Reutte 81.86 332 eP P 14 26 34.6 +0.2**
comp=Z,9.2nm,1.0s
**MOTA Moosalm 81.86 331 eP P 14 26 34.7 +0.2**
comp=Z,12nm,0.8s
**ABTA Abfaltersbach 81.87 330 eP P 14 26 33.7 -0.8**
comp=Z,1.9nm,0.4s
**UBR Ueberruh 81.91 332 eP P 14 26 34.0 -0.7**
comp=Z,6.1nm,0.9s,baz=31,slow=5.5
**SQTA Sankt Quirin 81.93 331 eP P 14 26 35.3 +0.5**
comp=Z,9.9nm,0.7s
**WMOK Wichita Mounta 81.94 49 P P 14 26 35.8 +0.8**
baz=318
**BFO Black Forest 81.94 334 eP P 14 26 34.6 -0.1**
comp=Z,6.0nm,0.8s,baz=31,slow=5.5
**CEY Cerknica 82.01 329 iP P 14 26 34.5 -0.7**
**FETA Feichten 82.27 332 eP P 14 26 36.1 -0.6**
comp=Z,5.8nm,1.2s
**DAVA Damuels 82.33 332 eP P 14 26 37.1 +0.1**
comp=Z,7.2nm,0.7s
**HDIL Hopedale 82.37 40 P P 14 26 38.0 +0.8**
baz=322
**TUL3 Leonard 82.69 47 P P 14 26 39.6 +0.7**
baz=319
**DAVOX Davos/Dischmat 82.77 332 LR LR 15 06 02.9**
comp=Z,73nm,20.6s,baz=81,slow=38
**FUORN Ofenpass-Fuorn 82.78 332 IAmb IAmb 14 26 40.8**
comp=Z,9.4nm,1.1s
**CTI Castel Tesino 82.78 330 IAmb IAmb 14 26 39.0**
comp=Z,6.7nm,0.7s
**PUK Puka 82.82 323 IAmb IAmb 14 26 41.0**
comp=Z,5.9nm,0.6s
**HINF Hinteralfeld 82.87 334 eP P 14 26 42.3 +2.7**
HINF pmax pmax
comp=Z,2.0nm,0.6s
**TX31 Lajitas Ar. Si 83.01 56 IAmb IAmb 14 26 42.6**
comp=Z,7.6nm,0.9s
**TXAR Lajitas Array 83.01 56 P P 14 26 42.0 +1.2**
**TXAR Lajitas Array 83.01 56 P P 14 26 41.8 +1.0**
comp=Z,6.3nm,0.8s,baz=294,slow=3.8,SNR=40
comp=Z,6.3nm,0.8s
**FNA Florina 83.17 322 IAmb IAmb 14 26 42.0**
comp=Z,10nm,0.9s
**SADO Sadowa 83.24 31 LR LR 15 05 41.0**
comp=Z,59nm,19.6s,baz=318,slow=37
**HHAR Hobbs 83.39 45 IAmb IAmb 14 26 43.3**
comp=Z,5.7nm,0.7s
**OZNA Ozona 83.39 53 IAmb IAmb 14 26 44.0**
comp=Z,9.1nm,0.9s
**CCM Cathedral Cave 83.39 43 P P 14 26 43.0 +0.6**
CCM IAmb IAmb 14 26 43.5
comp=Z,15nm,1.4s
**CCM Cathedral Cave 83.39 43 P P 14 26 42.8 +0.3**
baz=321
**CCM Cathedral Cave 83.39 43 P P 14 26 43.0 +0.6**
CCM pmax pmax
comp=Z,15nm,1.4s
**TIR Tirane 83.39 323 P P 14 26 42.5 +0.1**
comp=Z,21nm,0.5s
**SAND Sanderson 83.50 55 IAmb IAmb 14 26 44.9**
comp=Z,7.3nm,0.9s
**TAOE Nuku Hiva Isla 83.67 108 eLR LR 14 53 05.2**
comp=Z,115nm,24.8s
**PPT Papeete 83.74 121 LR LR 14 55 45.4**
comp=Z,69nm,21.6s,baz=308,slow=30
**PPT2 Papeete2 83.76 121 eS SKSac 14 37 03.6 +0.2**
comp=Z,374nm,24.2s
**PPT2 Papeete2 83.76 121 eLR LR 14 53 00.4**
comp=Z,136nm,23.0s
PPT2 eLR LR 14 53 13.3
comp=Z,100nm,26.2s
**FLN La Foliniere 84.14 339 eP P 14 26 45.8 -0.3**
FLN pmax pmax
comp=Z,26nm,1.2s
**LDF La Druitiere 84.20 339 eP P 14 26 46.3 -0.1**
LDF pmax pmax
comp=Z,28nm,1.4s
**BRDY Brady 84.36 52 IAmb IAmb 14 26 50.1**
comp=Z,8.4nm,0.7s
**JCT Junction City 84.49 53 IAmb IAmb 14 26 49.6**
comp=Z,14nm,1.0s
**JCT Junction City 84.49 53 P P 14 26 48.8 +0.6**
baz=318
**O48B Farmland 84.50 37 P P 14 26 48.5 +0.4**
baz=325
**EIL Elat 84.52 306 LR LR 15 09 17.1**
comp=Z,46nm,18.1s,baz=65,slow=39
**WHTX Lake Whitney, 84.72 50 P P 14 26 50.0 +0.7**
baz=319
**MIAR Mount Ida 84.91 46 IAmb IAmb 14 26 51.7**
comp=Z,11nm,0.8s
**MIAR Mount Ida 84.91 46 P P 14 26 50.9 +0.7**
baz=320
**CAMP Campotosto 85.10 328 IAmb IAmb 14 26 52.1**
comp=Z,13nm,0.9s
**ERPA Erie 85.15 33 P P 14 26 51.8 +0.5**
baz=328
**P49A Miami Univ. Ec 85.29 38 P P 14 26 52.7 +0.7**
baz=325
**INTR Introdacqua 85.35 327 IAmb IAmb 14 26 53.3**
comp=Z,8.3nm,1.0s
**M53A WI Miller and 85.44 34 P P 14 26 52.6 -0.2**
baz=327
**ACSO Alum Creek Sta 85.48 36 P P 14 26 53.0 +0.1**
baz=326
**URZ Urewera 85.49 157 LR LR 15 01 31.2**
comp=Z,20nm,18.8s,baz=51,slow=33
**PKME Peaks-Kenny Pk 86.19 25 P P 14 26 56.6 +0.2**
baz=334
**O53A New Philadelph 86.21 35 P P 14 26 56.9 +0.3**
baz=327
**WVT Waverly 86.58 42 P P 14 26 59.1 +0.6**
baz=323
**OXF Oxford 87.09 44 P P 14 27 01.7 +0.7**
baz=322
**SSPA Standing Stone 87.24 33 P P 14 27 02.2 +0.6**
baz=329
**TBI Tubuai 88.15 125 eLR LR 14 55 08.7**
comp=Z,436nm,26.8s
**TZTN Tazewell 88.27 39 P P 14 27 07.3 +0.7**
baz=326
**TKL Tkaleechee C 88.89 39 LR LR 15 08 23.2**
comp=Z,64nm,21.8s,baz=350,slow=37
**BLA Blacksburg 89.10 36 P P 14 27 11.4 +0.9**
baz=328
**KMSC Kings Mountain 90.43 38 P P 14 27 16.8 0.0**
baz=327
**GOGA Godfrey 90.88 40 P P 14 27 19.4 +0.5**
baz=326
**KEST Kesra 92.56 327 LR LR 15 12 50.9**
comp=Z,114nm,19.7s,baz=305,slow=38
**ESDC Sonoca Array 93.50 338 P P 14 27 30.5 -0.4**
comp=Z,1.8nm,0.7s,baz=17,slow=4.4,SNR=11
ESDC LR LR 15 16 13.7
comp=Z,63nm,18.4s,baz=12,slow=40
comp=Z,1.8nm,0.7s
**FURI Furi 97.11 289 LR LR 15 15 56.1**
comp=Z,54nm,18.2s,baz=218,slow=38
**CMIG Matias Romero 97.45 58 LR LR 15 11 09.6**
comp=Z,14.4nm,18.8s,baz=2.5,slow=35
**TORD Torodi Ar. Bea 115.65 322 PKP PKiKP 14 32 57.2 -0.5**
comp=Z,1.0nm,0.5s,baz=31,slow=2.1,SNR=11
**DBIC Dimbokro 124.26 326 PKP PKPdf 14 33 13.8 -0.4**
comp=Z,2.2nm,0.6s,baz=339,slow=2.6,SNR=6.7
**QSPA South Pole Qui 132.88 180 PKP PKiKP 14 33 30.4 +0.2**
comp=Z,0.4nm,0.6s,baz=271,slow=0.4,SNR=7.7
**BELA Belgrano 2 145.15 179 PKPdf 14 33 51.6 +0.5**
**TROLL Troll, Antarti 146.41 199 ⇑PKPab PKPab 14 33 55.8 -0.1**
comp=Z,470nm,0.7s
**SNAA Sanae 147.87 197 PKPbc 14 33 59.5 +0.6**
**SNAA Sanae 147.87 197 ⇑PKPbc PKPbc 14 33 58.5 -0.4**
comp=Z,45nm,0.7s
**SNAA Sanae 147.87 197 PKPbc PKPbc 14 33 58.4 -0.4**
comp=Z,4.7nm,0.9s,baz=113,slow=2.1,SNR=11
**SNAA Sanae 147.87 197 PKP2 PKPbc 14 33 59.5 +0.6**
**VNA2 Neumayer--Watz 149.40 196 ⇑PKPbc PKPbc 14 34 02.0 -0.7**
comp=Z,5.8nm,0.6s,baz=69,slow=1.8
**VNA3 Neumayer Olymp 149.58 195 ⇑PKPbc PKPbc 14 34 03.4 +0.2**
comp=Z,2.9nm,0.7s
**BDFB Brasilia 149.69 30 PKPbc PKiKP 14 34 06.0 -0.2**
comp=Z,5.6nm,0.7s,baz=355,slow=1.5,SNR=8.0
**BDFB Brasilia 149.69 30 PKP2 PKiKP 14 34 06.0 -0.2**
**VNA1 Neumayer--Stat 149.79 196 ⇑PKPbc PKiKP 14 34 04.2 -0.4**
comp=Z,5.6nm,1.0s
**PLCA Paso Flores 152.04 98 PKPbc PKiKP 14 34 10.8 +0.5**
comp=Z,1.0nm,0.6s,baz=244,slow=2.4,SNR=5.5

*ISN **09** 14:17:29.5±0.7,33°.05N×46°.16E,h9km±63km, ML2.5*
*TEH **09** 14:17:29.1,33°.03N×46°.20E,h4km±157km, ML2.5*
**ISC 09 14:17:29.4±1.1,33°.04N±0°.05×46°.14E±0°.07,h10km,n6,**
**σ0s52/9,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBDR** | **Badra** baz=110 | **0.19** | **291** | *e*Pg | **Pg** | **14 17 33.0** | **-0.4** |
| IBDR | | | | *e*Sg | **Sg** | **14 17 36.0** | **-0.2** |
| IBDR | | | | AML | AML | 14 17 40.3 | |
| IBDR | comp=N,344nm,0.3s | | | AML | AML | 14 17 42.2 | |
| | comp=E,318nm,0.6s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **0.58** | **5** | Pg | **Pg** | **14 17 39.9** | **-0.9** |
| ILBA | | | | Sg | **Sb** | **14 17 50.3** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **1.08** | **350** | Pg | **Pg** | **14 17 50.4** | **+0.1** |
| **RAFI** | **Al-Rafai** | **1.32** | **181** | *e*Pg | **Pn** | **14 17 54.0** | **+0.2** |
| RAFI | | | | *e*Sg | **Sg** | **14 18 12.0** | **+0.2** |
**IKFM Kafar-mosalman 1.51 71 Pg Pn 14 17 56.6 +0.2**
**IDHR Dehrash 1.67 7 Pg Pn 14 17 59.5 +0.7**

*AEIC **09** 14:25:23.6±2.8,51°.58N±0°.03×178°.38W±0°.03,h7km±3km,*
*Error ellipse: s-maj=3.7km s-min=2.6km az=192.0*
**NEIC 09 14:25:22.0±1.6,51°.41N±0°.04×178°.41W±0°.03,h3km±9km,**
**ML3.6(AEIC),Error ellipse: s-maj=5.3km s-min=2.6km**
**az=192.0,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GAEA** | **Gareloi East** | **0.43** | **331** | | Pg | 14 25 30.8 | +0.5 |
| **GANO** | **Gareloi North** | **0.48** | **329** | | Pg | 14 25 31.3 | +0.1 |
| **TASE** | **Tanaga Southea** | **0.49** | **28** | | Pg | 14 25 31.4 | +0.1 |
| **TANO** | **Tanaga North** | **0.54** | **19** | | Pg | 14 25 32.1 | -0.2 |
| TANO | | | | | Sg | 14 25 37.4 | -2.0 |
| **TAFP** | **Tanaga Falls P** | **0.56** | **28** | | Pg | 14 25 32.2 | -0.5 |
| **KIMD** | **Kanaga Island** | **0.81** | **64** | | Pg | 14 25 37.5 | 0.0 |
| KIMD | | | | | Sg | 14 25 48.3 | +0.2 |
| **KIWB** | **Kanaga Island** | **0.90** | **60** | | Pg | 14 25 39.0 | -0.2 |
| **KICM** | **Kanaga Island** | **0.91** | **55** | | Pg | 14 25 39.4 | 0.0 |
| **KINC** | **Kanaga Island** | **0.95** | **56** | | Pg | 14 25 40.1 | -0.1 |
| **KIRH** | **Kanaga Island** | **0.95** | **58** | | Pg | 14 25 40.2 | 0.0 |
| **ADK** | **Adak** | **1.17** | **65** | | Pg | 14 25 43.5 | -0.9 |
| **AMKA** | **Amchitka** | **1.44** | **270** | | Pg | 14 25 49.5 | 0.0 |
| **AMKA** | **Amchitka** | **1.44** | **270** | | Sn | 14 26 08.7 | +0.5 |
| **GSMY** | **Great Sitkin M** | **1.59** | **65** | | Pn | 14 25 50.6 | -0.4 |
| **GSTR** | **Great Sitkin T** | **1.61** | **64** | Pn | Pn | 14 25 51.0 | -0.3 |
| **KOKL** | **Mount Kliuchef** | **2.76** | **69** | | Pn | 14 26 08.1 | +1.0 |
| **KOFP** | **Korovin Flat P** | **2.81** | **70** | | Pn | 14 26 09.1 | +1.4 |
| **LVA** | **Lava Point** | **7.99** | **65** | Pn | Pn | 14 27 20.0 | +1.1 |
| **S12K** | **Black Hills** | **10.63** | **60** | Pn | Pn | 14 27 55.7 | +0.7 |
| **CNBA** | **Chernabura Isl** | **11.81** | **66** | Pn | Pn | 14 28 13.1 | +2.0 |
| **CHGN** | **Chignik** | **12.76** | **60** | | Pn | 14 28 22.8 | -1.2 |

*IDC **09** 14:27:08.3±3.1,8°.22S×116°.33E,h0km,mb3.5/4,*
*mbtmp3.5/4,MS2.2/2,Error ellipse: s-maj=176.2km*
*s-min=23.4km az=53.0*
*DJA **09** 14:27:10.4±0.8,8°.5±6°×11°.6E±°,h16km±7km,M4.0/7,*
*mb4.1/1,MLv3.9/7*
**ISC 09 14:27:10.2±0.9,8°.11S±0°.08×116°.46E±0°.05,h10km,n13,**
**σ1s03/14,mb3.7/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.75** | **146** | P | **Pb** | **14 27 25.9** | **+0.5** |
| TWSI | | | | S | **Sb** | **14 27 37.1** | **+1.4** |
| **SRBI** | **Singaraja** | **1.23** | **271** | P | **Pn** | **14 27 33.5** | **0.0** |
| SRBI | | | | S | **Sb** | **14 27 49.7** | **0.0** |
| **DNP** | **Denpasar** | **1.36** | **245** | P | **Pn** | **14 27 33.6** | **-1.6** |
| **PLAI** | **Plampang** | **1.48** | **119** | P | **Pn** | **14 27 34.7** | **-2.3** |
| PLAI | | | | S | **Sn** | **14 27 57.0** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.31** | **261** | P | **Pn** | **14 27 47.9** | **-0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.45** | **64** | P | **Pn** | **14 28 17.0** | **-0.8** |
| **KAPI** | **Kappang** | **4.49** | **47** | LR | LR | 14 29 38.8 | |
| | comp=Z,25nm,21.4s,baz=300,slow=32 | | | | | | |
| **EDFI** | **Ende, Flores** | **5.21** | **97** | P | **Pn** | **14 28 28.4** | **0.0** |
| **WRA** | **Warramunga Arr** | **20.93** | **126** | P | **P** | **14 31 53.1** | **-0.2** |
| | 1.6nm,0.8s,baz=299,slow=12,SNR=9.6 | | | | | | |
| | 1.6nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.77** | **135** | P | **P** | **14 32 12.8** | **-0.2** |
| | 0.6nm,0.6s,baz=310,slow=8.7,SNR=22 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **CTA** | **Charters Tower** | **31.19** | **116** | LR | LR | 14 48 14.2 | |
| | comp=Z,4.9nm,19.9s,baz=352,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **56.41** | **352** | P | **P** | **14 36 52.2** | **+0.2** |
| | 0.4nm,0.5s,baz=157,slow=7.8,SNR=1.8 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.55** | **334** | P | **P** | **14 37 34.4** | **+0.1** |
| | 0.7nm,0.8s,baz=133,slow=8.5,SNR=4.1 | | | | | | |
| | 0.7nm,0.8s | | | | | | |

*IDC **09** 14:29:08.6±3.7,24°.23N×122°.23E,h0km,mb3.7/2,*
*mbtmp3.8/4,ML3.6/2,Error ellipse: s-maj=99.8km*
*s-min=30.8km az=113.0*
*TAP **09** 14:29:16.9,24°.90N×122°.26E,h111km,ML4.0,C*
*JMA **09** 14:29:17.0±0.2,25°.1N±122°.2E±0°.4,h111km±1km,*
*MV2.9/15,TAIWAN REGION*
**ISC 09 14:29:16.8±0.9,24°.91N±0°.03×122°.23E±0°.02,h117km±4km,**
**n158,σ0s97/297,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.24** | **295** | *i* P | **Pn** | **14 29 32.9** | **-0.2** |
| | baz=284 | | | | | | |
| TWB1 | | | | *i* S | **Sn** | **14 29 44.3** | **-1.2** |
| | baz=284 | | | | | | |
| **EGS** | | **0.28** | **258** | *e*P | **Pn** | **14 29 33.1** | **-0.1** |
| | baz=270 | | | | | | |
| EGS | | | | *e*S | **Sn** | **14 29 44.9** | **-0.7** |
| | baz=270 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.37** | **300** | *i* P | **Pn** | **14 29 33.5** | **-0.2** |
| | baz=298 | | | | | | |
| SXI1 | | | | *i* S | **Sn** | **14 29 45.9** | **-0.7** |
| | baz=298 | | | | | | |
| **TIPB** | **Shuangxi** | **0.38** | **280** | *i* P | **Pn** | **14 29 33.5** | **-0.2** |
| | baz=280 | | | | | | |
| TIPB | | | | *i* S | **Sn** | **14 29 45.2** | **-1.3** |
| | baz=280 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.44** | **292** | *i* P | **Pn** | **14 29 34.0** | **-0.1** |
| | baz=283 | | | | | | |
| NWF | | | | *i* S | **Sn** | **14 29 46.4** | **-0.8** |
| | baz=283 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.44** | **292** | *i* P | **Pn** | **14 29 34.2** | **+0.2** |
| | baz=284 | | | | | | |
| WFSB | | | | *e*S | **Sn** | **14 29 46.4** | **-0.6** |
| | baz=284 | | | | | | |
| **TWC** | **Suao** | **0.46** | **230** | *i* P | **Pn** | **14 29 33.7** | **-0.4** |
| | baz=231 | | | | | | |
| TWC | | | | *e*S | **Sn** | **14 29 45.5** | **-1.7** |
| | baz=231 | | | | | | |
| **ILA** | **Ilan** | **0.46** | **253** | *e*P | **Pn** | **14 29 34.2** | **0.0** |
| | baz=248 | | | | | | |
| ILA | | | | S | **Sn** | **14 29 46.6** | **-0.6** |
| | baz=248 | | | | | | |
| **ESAO** | **Su ao** | **0.48** | **227** | *e*P | **Pn** | **14 29 34.0** | **-0.3** |
| | baz=232 | | | | | | |
| ESAO | | | | *e*S | **Sn** | **14 29 47.3** | **-0.1** |
| | baz=232 | | | | | | |
| **TNOU** | **National Taiwa** | **0.48** | **300** | *e*P | **Pn** | **14 29 34.2** | **-0.1** |
| | baz=291 | | | | | | |
| TNOU | | | | *e*S | **Sn** | **14 29 46.8** | **-0.6** |
| | baz=291 | | | | | | |
| **EOS2** | **EOS2** | **0.48** | **180** | *e*P | **Pn** | **14 29 35.7** | **+1.6** |
| | baz=204 | | | | | | |
| EOS2 | | | | *e*S | **Sn** | **14 29 47.9** | **+0.7** |
| | baz=204 | | | | | | |
| **NDS** | **Dongshan** | **0.54** | **240** | *e*P | **Pn** | **14 29 34.6** | **0.0** |
| | baz=241 | | | | | | |
| NDS | | | | *e*S | **Sn** | **14 29 47.6** | **-0.5** |
| | baz=241 | | | | | | |
| **TWE** | **Neicheng** | **0.55** | **250** | *i* P | **Pn** | **14 29 34.4** | **-0.2** |
| | baz=257 | | | | | | |
| TWE | | | | *i* S | **Sn** | **14 29 47.0** | **-1.1** |
| | baz=257 | | | | | | |
| **TWA** | **Mucha** | **0.59** | **277** | *i* P | **Pn** | **14 29 34.8** | **-0.2** |
| | baz=271 | | | | | | |
| TWA | | | | S | **Sn** | **14 29 47.6** | **-1.2** |
| | baz=271 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.60** | **256** | *i* P | **Pn** | **14 29 34.9** | **-0.2** |
| | baz=262 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **14 29 48.5** | **-0.5** |
| | baz=262 | | | | | | |
| **EWUT** | **Wuta** | **0.62** | **222** | *e*P | **Pn** | **14 29 35.3** | **+0.1** |
| | baz=220 | | | | | | |
| EWUT | | | | *e*S | **Sn** | **14 29 48.5** | **-0.5** |
| | baz=220 | | | | | | |
| **NHY** | **Taipei** | **0.62** | **283** | *e*P | **Pn** | **14 29 35.2** | **+0.1** |
| | baz=277 | | | | | | |
| NHY | | | | *e*S | **Sn** | **14 29 48.4** | **-0.6** |
| | baz=277 | | | | | | |
| **EOS3** | **EOS3** | **0.62** | **173** | *e*P | **Pn** | **14 29 35.7** | **+0.7** |
| | baz=191 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **14 29 49.2** | **+0.5** |
| | baz=191 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.64** | **275** | *i* P | **Pn** | **14 29 35.2** | **-0.2** |
| | baz=276 | | | | | | |
| NHDH | | | | *e*S | **Sn** | **14 29 48.3** | **-1.1** |
| | baz=276 | | | | | | |
| **YM01** | **YM01** | **0.65** | **292** | *i* P | **Pn** | **14 29 35.4** | **0.0** |
| | baz=286 | | | | | | |
| YM01 | | | | S | **Sn** | **14 29 48.5** | **-1.0** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=286 | | | | | | | | |
| **YM08** | **YM08** | **0.65** | **296** | *e*P | **Pn** | **14** | **29** | **35.3** | **-0.2** |
| | baz=295 | | | | | | | | |
| YM08 | | | | *e*S | **Sn** | **14** | **29** | **48.8** | **-0.7** |
| | baz=295 | | | | | | | | |
| **ENA** | **Nanau** | **0.65** | **223** | P | **Pn** | **14** | **29** | **35.6** | **+0.1** |
| | baz=220 | | | | | | | | |
| ENA | | | | S | **Sn** | **14** | **29** | **49.0** | **-0.5** |
| | baz=220 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.66** | **247** | *i* P | **Pn** | **14** | **29** | **35.6** | **0.0** |
| | baz=249 | | | | | | | | |
| ENTT | | | | S | **Sn** | **14** | **29** | **50.1** | **+0.5** |
| | baz=249 | | | | | | | | |
| **NWLT** | **Wulai** | **0.68** | **259** | *i* P | **Pn** | **14** | **29** | **35.3** | **-0.3** |
| | baz=264 | | | | | | | | |
| NWLT | | | | *i* S | **Sn** | **14** | **29** | **48.8** | **-1.1** |
| | baz=264 | | | | | | | | |
| **TATO** | **Taipei** | **0.68** | **276** | P | **Pn** | **14** | **29** | **34.9** | **-0.7** |
| **TWY** | **Chenhua** | **0.68** | **303** | *i* P | **Pn** | **14** | **29** | **35.8** | **+0.2** |
| | baz=296 | | | | | | | | |
| TWY | | | | *i* S | **Sn** | **14** | **29** | **49.7** | **-0.2** |
| | baz=296 | | | | | | | | |
| **ANP** | **Anpu** | **0.70** | **294** | *e*P | **Pn** | **14** | **29** | **35.8** | **-0.2** |
| | baz=293 | | | | | | | | |
| ANP | | | | *e*S | **Sn** | **14** | **29** | **49.6** | **-0.8** |
| | baz=293 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.72** | **245** | *i* P | **Pn** | **14** | **29** | **36.2** | **+0.2** |
| | baz=248 | | | | | | | | |
| NDT | | | | *i* S | **Sn** | **14** | **29** | **50.7** | **+0.2** |
| | baz=248 | | | | | | | | |
| **EAHA** | **Aohua** | **0.73** | **218** | *e*P | **Pn** | **14** | **29** | **36.0** | **-0.1** |
| | baz=217 | | | | | | | | |
| EAHA | | | | *e*S | **Sn** | **14** | **29** | **49.5** | **-1.1** |
| | baz=217 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.74** | **349** | *i* P | **Pn** | **14** | **29** | **36.5** | **+0.4** |
| | baz=339 | | | | | | | | |
| PCYT | | | | S | **Sn** | **14** | **29** | **50.6** | **-0.1** |
| | baz=339 | | | | | | | | |
| **LATG** | **Datong** | **0.74** | **240** | *i* P | **Pn** | **14** | **29** | **36.8** | **+0.5** |
| | baz=243 | | | | | | | | |
| LATG | | | | *e*S | **Sn** | **14** | **29** | **51.6** | **+0.6** |
| | baz=243 | | | | | | | | |
| **NTST** | **Danshui** | **0.76** | **290** | *e*P | **Pn** | **14** | **29** | **38.0** | **+1.7** |
| | baz=289 | | | | | | | | |
| NTST | | | | *e*S | **Sn** | **14** | **29** | **53.1** | **+2.1** |
| | baz=289 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.76** | **285** | *e*P | **Pn** | **14** | **29** | **35.5** | **-0.9** |
| | baz=290 | | | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **14** | **29** | **52.1** | **+1.1** |
| | baz=290 | | | | | | | | |
| **EOS4** | **EOS4** | **0.79** | **174** | *e*P | **Pn** | **14** | **29** | **36.8** | **+0.6** |
| | baz=184 | | | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **14** | **29** | **49.3** | **-1.4** |
| | baz=184 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.79** | **125** | P | **Pn** | **14** | **29** | **36.5** | **-0.1** |
| JYNG | | | | S | **Sn** | **14** | **29** | **51.2** | **-0.3** |
| **YHNB** | **Yeheng** | **0.81** | **253** | P | **Pn** | **14** | **29** | **36.5** | **-0.4** |
| **YHNB** | **Yeheng** | **0.81** | **253** | *i* P | **Pn** | **14** | **29** | **36.9** | **0.0** |
| | baz=255 | | | | | | | | |
| YHNB | | | | *i* S | **Sn** | **14** | **29** | **51.4** | **-0.6** |
| | baz=255 | | | | | | | | |
| **NSK** | **Sanguang** | **0.83** | **254** | *i* P | **Pn** | **14** | **29** | **37.0** | **+0.1** |
| | baz=255 | | | | | | | | |
| NSK | | | | *i* S | **Sn** | **14** | **29** | **51.4** | **-0.8** |
| | baz=255 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.83** | **122** | P | **Pn** | **14** | **29** | **36.8** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **0.83** | **122** | P | **Pn** | **14** | **29** | **37.0** | **+0.1** |
| | baz=130 | | | | | | | | |
| YOJ | | | | *i* S | **Sn** | **14** | **29** | **52.1** | **-0.1** |
| | baz=130 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.83** | **122** | *e*P | **Pn** | **14** | **29** | **36.9** | **-0.1** |
| YOJ | | | | S | **Sn** | **14** | **29** | **51.5** | **-0.7** |
| **NNSB** | **Datong** | **0.91** | **239** | *i* P | **Pn** | **14** | **29** | **38.2** | **+0.4** |
| | baz=233 | | | | | | | | |
| NNSB | | | | *e*S | **Sn** | **14** | **29** | **53.5** | **-0.1** |
| | baz=233 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.91** | **240** | *e*P | **Pn** | **14** | **29** | **38.2** | **+0.4** |
| | baz=241 | | | | | | | | |
| **ETL** | **Fush Village** | **0.93** | **217** | *e*P | **Pn** | **14** | **29** | **37.7** | **-0.2** |
| | baz=215 | | | | | | | | |
| ETL | | | | *e*S | **Sn** | **14** | **29** | **53.3** | **-0.5** |
| | baz=215 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.93** | **219** | P | **Pn** | **14** | **29** | **37.3** | **-0.6** |
| **NACB** | **Ninganchiao** | **0.93** | **219** | P | **Pn** | **14** | **29** | **37.4** | **-0.5** |
| | baz=216 | | | | | | | | |
| NACB | | | | *e*S | **Sn** | **14** | **29** | **52.8** | **-1.0** |
| | baz=216 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.95** | **274** | *i* P | **Pn** | **14** | **29** | **38.5** | **+0.4** |
| | baz=274 | | | | | | | | |
| NCUH | | | | *i* S | **Sn** | **14** | **29** | **55.0** | **+0.9** |
| | baz=274 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.97** | **225** | *i* P | **Pn** | **14** | **29** | **38.1** | **-0.3** |
| | baz=228 | | | | | | | | |
| ETLH | | | | *e*S | **Sn** | **14** | **29** | **53.4** | **-1.3** |
| | baz=228 | | | | | | | | |
| **TWD** | **Chiawan** | **1.00** | **215** | *e*P | **Pn** | **14** | **29** | **38.4** | **-0.2** |
| | baz=214 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.05** | **255** | *i* P | **Pn** | **14** | **29** | **39.1** | **0.0** |
| | baz=256 | | | | | | | | |
| NFF | | | | *i* S | **Sn** | **14** | **29** | **55.4** | **-0.6** |
| | baz=256 | | | | | | | | |
| **HWA** | **Hwalien** | **1.09** | **212** | *e*P | **Pn** | **14** | **29** | **39.7** | **+0.3** |
| | baz=207 | | | | | | | | |
| HWA | | | | *e*S | **Sn** | **14** | **29** | **56.3** | **-0.3** |
| | baz=207 | | | | | | | | |
| **LIOB** | **Emei** | **1.14** | **257** | *i* P | **Pn** | **14** | **29** | **40.2** | **+0.2** |
| | baz=250 | | | | | | | | |
| LIOB | | | | *i* S | **Sn** | **14** | **29** | **56.9** | **-0.6** |
| | baz=250 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.14** | **265** | P | **Pn** | **14** | **29** | **40.5** | **+0.6** |
| | baz=256 | | | | | | | | |
| SBCB | | | | S | **Sn** | **14** | **29** | **58.0** | **+0.5** |
| | baz=256 | | | | | | | | |
| **HSN** | **Hsinchu** | **1.15** | **265** | *e*P | **Pn** | **14** | **29** | **40.1** | **0.0** |
| | baz=258 | | | | | | | | |
| HSN | | | | *i* S | **Sn** | **14** | **29** | **57.2** | **-0.5** |
| | baz=258 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.15** | **257** | *i* P | **Pn** | **14** | **29** | **40.2** | **+0.1** |
| | baz=250 | | | | | | | | |
| NSTT | | | | *i* S | **Sn** | **14** | **29** | **56.9** | **-0.8** |
| | baz=250 | | | | | | | | |
| **ETM** | **Tongmen** | **1.15** | **216** | *e*P | **Pn** | **14** | **29** | **39.6** | **-0.6** |
| | baz=226 | | | | | | | | |
| ETM | | | | *e*S | **Sn** | **14** | **29** | **56.1** | **-1.8** |
| | baz=226 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.15** | **220** | P | **Pn** | **14** | **29** | **39.8** | **-0.6** |
| | baz=216 | | | | | | | | |
| LXIB | | | | *i* S | **Sn** | **14** | **29** | **57.0** | **-1.1** |
| | baz=216 | | | | | | | | |
| **TWT** | **Tachien** | **1.16** | **236** | P | **Pn** | **14** | **29** | **41.3** | **+0.9** |
| | baz=232 | | | | | | | | |
| TWT | | | | *i* S | **Sn** | **14** | **29** | **58.4** | **+0.2** |
| | baz=232 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.16** | **230** | *i* P | **Pn** | **14** | **29** | **40.8** | **+0.1** |
| | baz=228 | | | | | | | | |
| WHF | | | | *i* S | **Sn** | **14** | **29** | **57.5** | **-1.2** |
| | baz=228 | | | | | | | | |
| **TDCB** | **Techi** | **1.17** | **237** | *i* P | **Pn** | **14** | **29** | **41.3** | **+0.8** |
| | baz=233 | | | | | | | | |
| TDCB | | | | *i* S | **Sn** | **14** | **29** | **58.3** | **-0.1** |
| | baz=233 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.18** | **209** | *e*P | **Pn** | **14** | **29** | **40.3** | **-0.1** |
| | baz=208 | | | | | | | | |
| TEYL | | | | *e*S | **Sn** | **14** | **29** | **56.6** | **-1.7** |
| | baz=208 | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.27** | **209** | *e*P | **Pn** | **14** | **29** | **41.5** | **+0.1** |
| | baz=207 | | | | | | | | |
| SHUL | | | | *i* S | **Sn** | **14** | **29** | **59.8** | **-0.2** |
| | baz=207 | | | | | | | | |
| **CHGB** | **Renai** | **1.28** | **229** | *i* P | **Pn** | **14** | **29** | **42.5** | **+0.7** |
| | baz=231 | | | | | | | | |
| CHGB | | | | *i* S | **Sn** | **14** | **30** | **00.5** | **-0.1** |
| | baz=231 | | | | | | | | |
| **ESL** | **Shilin** | **1.31** | **214** | *e*P | **Pn** | **14** | **29** | **40.9** | **-1.0** |
| | baz=223 | | | | | | | | |
| ESL | | | | *e*S | **Sn** | **14** | **29** | **57.8** | **-3.0** |
| | baz=223 | | | | | | | | |
| **WHP** | **Taichung City** | **1.33** | **242** | *i* P | **Pn** | **14** | **29** | **42.9** | **+0.7** |
| | baz=250 | | | | | | | | |
| WHP | | | | *e*S | **Sn** | **14** | **30** | **01.7** | **+0.4** |
| | baz=250 | | | | | | | | |
| **OWD** | **Renai** | **1.35** | **226** | *e*P | **Pn** | **14** | **29** | **42.8** | **+0.3** |
| | baz=224 | | | | | | | | |
| OWD | | | | *i* S | **Sn** | **14** | **30** | **01.1** | **-0.7** |
| | baz=224 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.36** | **255** | *e*P | **Pn** | **14** | **29** | **42.7** | **+0.3** |
| | baz=255 | | | | | | | | |
| NMLH | | | | *e*S | **Sn** | **14** | **30** | **02.8** | **+0.9** |
| | baz=255 | | | | | | | | |
| **WUSB** | **Renai** | **1.36** | **228** | *i* P | **Pn** | **14** | **29** | **43.2** | **+0.6** |
| | baz=230 | | | | | | | | |
| WUSB | | | | *e*S | **Sn** | **14** | **30** | **01.9** | **-0.2** |
| | baz=230 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.41** | **213** | P | **Pn** | **14** | **29** | **41.9** | **-1.1** |
| | baz=216 | | | | | | | | |
| WARBT | | | | *e*S | **Sn** | **14** | **30** | **01.0** | **-2.0** |
| | baz=216 | | | | | | | | |
| **NSY** | **Sanyi** | **1.42** | **250** | *e*P | **Pn** | **14** | **29** | **43.7** | **+0.5** |
| | baz=250 | | | | | | | | |
| NSY | | | | *i* S | **Sn** | **14** | **30** | **03.3** | **+0.1** |
| | baz=250 | | | | | | | | |
| **EGFH** | **Guangfu** | **1.43** | **211** | *e*P | **Pn** | **14** | **29** | **43.4** | **+0.2** |
| | baz=214 | | | | | | | | |
| EGFH | | | | *e*S | **Sn** | **14** | **30** | **03.6** | **+0.3** |
| | baz=214 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.44** | **248** | *i* P | **Pn** | **14** | **29** | **43.6** | **+0.3** |
| | baz=248 | | | | | | | | |
| TWQ1 | | | | *i* S | **Sn** | **14** | **30** | **02.9** | **-0.6** |
| | baz=248 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.47** | **235** | *i* P | **Pn** | **14** | **29** | **44.4** | **+0.7** |
| | baz=243 | | | | | | | | |
| WCS | | | | *i* S | **Sn** | **14** | **30** | **04.3** | **+0.2** |
| | baz=243 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.48** | **112** | P | **Pn** | **14** | **29** | **43.7** | **-0.1** |
| IRIF | | | | S | **Sn** | **14** | **30** | **03.7** | **-0.5** |
| **VWDT** | **VWDT** | **1.52** | **221** | *i* P | **Pn** | **14** | **29** | **44.8** | **+0.6** |
| | baz=219 | | | | | | | | |
| VWDT | | | | *e*S | **Sn** | **14** | **30** | **05.0** | **-0.1** |
| | baz=219 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.55** | **249** | *i* P | **Pn** | **14** | **29** | **45.2** | **+0.6** |
| | baz=243 | | | | | | | | |
| WDJ | | | | *i* S | **Sn** | **14** | **30** | **05.7** | **0.0** |
| | baz=243 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.59** | **208** | *i* P | **Pn** | **14** | **29** | **45.2** | **+0.1** |
| | baz=219 | | | | | | | | |
| HGSD | | | | *i* S | **Sn** | **14** | **30** | **06.3** | **-0.3** |
| | baz=219 | | | | | | | | |
| **TYC** | **Yuchr** | **1.60** | **232** | P | **Pn** | **14** | **29** | **45.9** | **+0.7** |
| | baz=240 | | | | | | | | |
| TYC | | | | *i* S | **Sn** | **14** | **30** | **06.9** | **+0.1** |
| | baz=240 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.61** | **227** | P | **Pn** | **14** | **29** | **46.1** | **+0.7** |
| **SSLB** | **Suanglung** | **1.61** | **227** | *i* P | **Pn** | **14** | **29** | **46.3** | **+0.9** |
| | baz=232 | | | | | | | | |
| SSLB | | | | *i* S | **Sn** | **14** | **30** | **08.1** | **+0.9** |
| | baz=232 | | | | | | | | |
| **EHY** | **Hungye** | **1.62** | **211** | *e*P | **Pn** | **14** | **29** | **45.6** | **+0.1** |
| | baz=214 | | | | | | | | |
| EHY | | | | S | **Sn** | **14** | **30** | **04.8** | **-2.5** |
| | baz=214 | | | | | | | | |
| **EHYH** | **Wanrong** | **1.62** | **210** | *e*P | **Pn** | **14** | **29** | **46.3** | **+0.8** |
| | baz=219 | | | | | | | | |
| EHYH | | | | *e*S | **Sn** | **14** | **30** | **06.9** | **-0.4** |
| | baz=219 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.66** | **120** | *e*P | **Pn** | **14** | **29** | **46.2** | **+0.2** |
| HATJ | | | | *e*S | **Sn** | **14** | **30** | **08.0** | **-0.2** |
| **YULB** | **Yu-li** | **1.73** | **210** | P | **Pn** | **14** | **29** | **46.0** | **-0.8** |
| **YULB** | **Yu-li** | **1.73** | **210** | *e*P | **Pn** | **14** | **29** | **46.6** | **-0.3** |
| | baz=217 | | | | | | | | |
| YULB | | | | *e*S | **Sn** | **14** | **30** | **08.1** | **-1.6** |
| | baz=217 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.73** | **242** | *e*P | **Pn** | **14** | **29** | **47.2** | **+0.4** |
| | baz=250 | | | | | | | | |
| WCHH | | | | *e*S | **Sn** | **14** | **30** | **09.2** | **-0.5** |
| | baz=250 | | | | | | | | |
| **ECBN** | **Changbin** | **1.73** | **204** | *e*P | **Pn** | **14** | **29** | **46.7** | **-0.1** |
| | baz=201 | | | | | | | | |
| ECBN | | | | *e*S | **Sn** | **14** | **30** | **07.7** | **-2.1** |
| | baz=201 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.74** | **227** | *e*P | **Pn** | **14** | **29** | **48.1** | **+1.1** |
| | baz=235 | | | | | | | | |
| WHYT | | | | *i* S | **Sn** | **14** | **30** | **10.8** | **+0.9** |
| | baz=235 | | | | | | | | |
| **WNT** | **Mingjian** | **1.74** | **234** | *e*P | **Pn** | **14** | **29** | **47.6** | **+0.7** |
| | baz=243 | | | | | | | | |
| WNT | | | | S | **Sn** | **14** | **30** | **11.1** | **+1.2** |
| | baz=243 | | | | | | | | |
| **WJS** | **Zhushan** | **1.75** | **232** | *e*P | **Pn** | **14** | **29** | **47.7** | **+0.7** |
| | baz=241 | | | | | | | | |
| WJS | | | | *e*S | **Sn** | **14** | **30** | **10.4** | **+0.5** |
| | baz=241 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.75** | **112** | P | **Pn** | **14** | **29** | **47.4** | **+0.4** |
| JKRS | | | | *e*S | **Sn** | **14** | **30** | **10.0** | **0.0** |
| **EYUL** | **Yuli** | **1.76** | **208** | *e*P | **Pn** | **14** | **29** | **47.9** | **+0.8** |
| | baz=217 | | | | | | | | |
| EYUL | | | | *e*S | **Sn** | **14** | **30** | **09.8** | **-0.5** |
| | baz=217 | | | | | | | | |
| **TWF1** | **Yuli** | **1.77** | **209** | *e*P | **Pn** | **14** | **29** | **47.1** | **-0.1** |
| | baz=217 | | | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **14** | **30** | **09.8** | **-0.7** |
| | baz=217 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.82** | **107** | P | **Pn** | **14** | **29** | **47.9** | **+0.1** |
| JIJ | | | | *e*S | **Sn** | **14** | **30** | **10.7** | **-0.9** |
| **CHKH** | **Chenggong** | **1.87** | **204** | *e*P | **Pn** | **14** | **29** | **48.4** | **-0.1** |
| | baz=201 | | | | | | | | |
| CHKH | | | | S | **Sn** | **14** | **30** | **11.0** | **-1.7** |
| | baz=201 | | | | | | | | |
| **FULB** | **Fuli** | **1.90** | **207** | P | **Pn** | **14** | **29** | **49.2** | **+0.3** |
| | baz=217 | | | | | | | | |
| FULB | | | | *i* S | **Sn** | **14** | **30** | **13.2** | **-0.2** |
| | baz=217 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.92** | **99** | P | **Pn** | **14** | **29** | **49.4** | **+0.4** |
| JISG | | | | *e*S | **Sn** | **14** | **30** | **13.4** | **-0.2** |
| **CHN5** | **Tsauling** | **1.93** | **228** | *e*P | **Pn** | **14** | **29** | **50.0** | **+0.7** |
| | baz=228 | | | | | | | | |
| CHN5 | | | | S | **Sn** | **14** | **30** | **14.7** | **+0.7** |
| | baz=228 | | | | | | | | |
| **WDLH** | **Douliu** | **1.96** | **232** | *i* P | **Pn** | **14** | **29** | **50.5** | **+0.9** |
| | baz=232 | | | | | | | | |
| WDLH | | | | *e*S | **Sn** | **14** | **30** | **14.2** | **-0.5** |
| | baz=232 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.96** | **240** | *e*P | **Pn** | **14** | **29** | **51.5** | **+1.8** |
| | baz=247 | | | | | | | | |
| WRL | | | | S | **Sn** | **14** | **30** | **14.2** | **-0.5** |
| | baz=247 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.96** | **204** | *i* P | **Pn** | **14** | **29** | **49.2** | **-0.5** |
| | baz=201 | | | | | | | | |
| CHKT | | | | *e*S | **Sn** | **14** | **30** | **11.0** | **-3.7** |
| | baz=201 | | | | | | | | |
| **EHD** | **Haiduan** | **1.98** | **208** | *e*P | **Pn** | **14** | **29** | **50.4** | **+0.5** |
| | baz=216 | | | | | | | | |
| EHD | | | | *e*S | **Sn** | **14** | **30** | **13.7** | **-1.5** |
| | baz=216 | | | | | | | | |
| **ECS** | **Chishang** | **2.03** | **207** | *e*P | **Pn** | **14** | **29** | **50.9** | **+0.4** |
| | baz=211 | | | | | | | | |
| ECS | | | | *e*S | **Sn** | **14** | **30** | **16.2** | **0.0** |
| | baz=211 | | | | | | | | |
| **ELDTW** | **Lidau** | **2.04** | **213** | *e*P | **Pn** | **14** | **29** | **51.4** | **+0.7** |
| | baz=213 | | | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **14** | **30** | **15.0** | **-1.6** |
| | baz=213 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **2.06** | **240** | *e*S | **Sn** | **14** | **30** | **17.4** | **+0.6** |
| | baz=240 | | | | | | | | |
| **WTK** | **Tuku** | **2.07** | **235** | *e*P | **Pn** | **14** | **29** | **51.5** | **+0.5** |
| | baz=234 | | | | | | | | |
| WTK | | | | *e*S | **Sn** | **14** | **30** | **16.4** | **-0.8** |
| | baz=234 | | | | | | | | |
| **WCKO** | **Fanlu** | **2.08** | **226** | *e*P | **Pn** | **14** | **29** | **52.6** | **+1.4** |
| | baz=226 | | | | | | | | |
| WCKO | | | | *i* S | **Sn** | **14** | **30** | **18.3** | **+0.8** |
| | baz=226 | | | | | | | | |
| **EDH** | **Donghe** | **2.10** | **204** | *i* P | **Pn** | **14** | **29** | **51.2** | **-0.2** |
| | baz=215 | | | | | | | | |
| EDH | | | | *i* S | **Sn** | **14** | **30** | **15.9** | **-1.9** |
| | baz=215 | | | | | | | | |
| **CHN2** | **Minshiung** | **2.11** | **230** | *e*P | **Pn** | **14** | **29** | **52.3** | **+0.9** |
| | baz=229 | | | | | | | | |
| CHN2 | | | | *e*S | **Sn** | **14** | **30** | **18.1** | **+0.1** |
| | baz=229 | | | | | | | | |
| **CHY** | **Chiayi** | **2.17** | **230** | *e*S | **Sn** | **14** | **30** | **19.7** | **+0.5** |
| | baz=231 | | | | | | | | |
| **TPUB** | **Ta-pu** | **2.17** | **223** | P | **Pn** | **14** | **29** | **53.2** | **+1.0** |
| **TPUB** | **Ta-pu** | **2.17** | **223** | *e*P | **Pn** | **14** | **29** | **53.6** | **+1.4** |
| | baz=231 | | | | | | | | |
| TPUB | | | | *i* S | **Sn** | **14** | **30** | **20.0** | **+0.6** |
| | baz=231 | | | | | | | | |
| **STYH** | **Taoyuan** | **2.18** | **218** | P | **Pn** | **14** | **29** | **54.1** | **+1.8** |
| | baz=220 | | | | | | | | |
| STYH | | | | *e*S | **Sn** | **14** | **30** | **20.9** | **+1.3** |
| | baz=220 | | | | | | | | |
| **WTP** | **Ta-pu** | **2.22** | **222** | *e*P | **Pn** | **14** | **29** | **54.2** | **+1.3** |
| | baz=233 | | | | | | | | |
| WTP | | | | S | **Sn** | **14** | **30** | **21.5** | **+0.9** |
| | baz=233 | | | | | | | | |
| **WSF** | **Szhu** | **2.23** | **236** | P | **Pn** | **14** | **29** | **53.2** | **+0.3** |
| | baz=235 | | | | | | | | |
| WSF | | | | *e*S | **Sn** | **14** | **30** | **20.3** | **-0.3** |
| | baz=235 | | | | | | | | |
| **LONT** | **Longtian** | **2.23** | **207** | P | **Pn** | **14** | **29** | **52.4** | **-0.7** |
| | baz=204 | | | | | | | | |
| LONT | | | | *e*S | **Sn** | **14** | **30** | **19.5** | **-1.3** |
| | baz=204 | | | | | | | | |
| **JTJ** | **Tarama** | **2.26** | **96** | P | **Pn** | **14** | **29** | **54.1** | **+0.8** |
| JTJ | | | | *e*S | **Sn** | **14** | **30** | **21.8** | **+0.4** |
| **TWK** | **Hsinying** | **2.28** | **225** | P | **Pn** | **14** | **29** | **54.9** | **+1.2** |
| | baz=225 | | | | | | | | |
| TWK | | | | *e*S | **Sn** | **14** | **30** | **23.0** | **+1.0** |
| | baz=225 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.29** | **233** | *e*P | **Pn** | **14** | **29** | **55.0** | **+1.3** |
| | baz=240 | | | | | | | | |
| WSL | | | | *e*S | **Sn** | **14** | **30** | **22.9** | **+0.8** |
| | baz=240 | | | | | | | | |
| **SNST** | **Tainan City** | **2.31** | **224** | *e*P | **Pn** | **14** | **29** | **57.2** | **+3.2** |
| | baz=224 | | | | | | | | |
| SNST | | | | *e*S | **Sn** | **14** | **30** | **23.0** | **+0.5** |
| | baz=224 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.31** | **223** | P | **Pn** | **14** | **29** | **55.2** | **+1.1** |
| | baz=230 | | | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **14** | **30** | **22.9** | **+0.2** |
| | baz=230 | | | | | | | | |
| **LDUT** | **Ludao** | **2.33** | **198** | *e*P | **Pn** | **14** | **29** | **53.4** | **-0.9** |
| | baz=201 | | | | | | | | |
| LDUT | | | | *i* S | **Sn** | **14** | **30** | **20.5** | **-2.5** |
| | baz=201 | | | | | | | | |
| **TWGBT** | **Beinan** | **2.33** | **207** | P | **Pn** | **14** | **29** | **53.4** | **-0.9** |
| **TWGBT** | **Beinan** | **2.33** | **207** | *e*P | **Pn** | **14** | **29** | **53.8** | **-0.5** |
| | baz=205 | | | | | | | | |
| TWGBT | | | | S | **Sn** | **14** | **30** | **21.1** | **-1.9** |
| | baz=205 | | | | | | | | |
| **TWG** | **Pinlang** | **2.33** | **207** | *e*S | **Sn** | **14** | **30** | **20.6** | **-2.4** |
| | baz=205 | | | | | | | | |
| **ICHU** | **Yijhu** | **2.35** | **230** | *e*P | **Pn** | **14** | **29** | **55.2** | **+0.6** |
| | baz=229 | | | | | | | | |
| ICHU | | | | *e*S | **Sn** | **14** | **30** | **22.9** | **-0.7** |
| | baz=229 | | | | | | | | |
| **SGST** | **Jiashian** | **2.36** | **220** | *e*P | **Pn** | **14** | **29** | **55.0** | **+0.3** |
| | baz=228 | | | | | | | | |
| SGST | | | | *i* S | **Sn** | **14** | **30** | **23.2** | **-0.5** |
| | baz=228 | | | | | | | | |
| **SLGT** | **Liugui** | **2.39** | **218** | *e*P | **Pn** | **14** | **29** | **56.9** | **+1.8** |
| | baz=220 | | | | | | | | |
| SLGT | | | | *e*S | **Sn** | **14** | **30** | **26.1** | **+1.6** |
| | baz=220 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.41** | **301** | *e*P | **Pn** | **14** | **29** | **54.9** | **-0.3** |
| | baz=298 | | | | | | | | |
| MATB | | | | *e*S | **Sn** | **14** | **30** | **22.9** | **-1.9** |
| | baz=298 | | | | | | | | |
| **CHN8** | **Yiju** | **2.41** | **230** | *e*P | **Pn** | **14** | **29** | **55.9** | **+0.6** |
| | baz=229 | | | | | | | | |
| CHN8 | | | | S | **Sn** | **14** | **30** | **24.7** | **-0.2** |
| | baz=229 | | | | | | | | |
| **VWUC** | **VWUC** | **2.53** | **273** | *i* P | **Pn** | **14** | **29** | **56.6** | **-0.1** |
| | baz=273 | | | | | | | | |
| VWUC | | | | *e*S | **Sn** | **14** | **30** | **26.0** | **-1.5** |
| | baz=273 | | | | | | | | |
| **SCLT** | **Jiali** | **2.54** | **228** | *e*S | **Sn** | **14** | **30** | **28.4** | **+0.6** |
| | baz=226 | | | | | | | | |
| **SCST** | **Cishan** | **2.56** | **219** | *e*P | **Pn** | **14** | **29** | **59.9** | **+2.6** |
| | baz=228 | | | | | | | | |
| SCST | | | | *e*S | **Sn** | **14** | **30** | **30.8** | **+2.4** |
| | baz=228 | | | | | | | | |
| **ECL** | **Taimali** | **2.58** | **207** | *e*P | **Pn** | **14** | **29** | **56.9** | **-0.6** |
| | baz=208 | | | | | | | | |
| ECL | | | | *e*S | **Sn** | **14** | **30** | **26.8** | **-2.0** |
| | baz=208 | | | | | | | | |
| **TSMG** | **Majia** | **2.63** | **214** | *e*P | **Pn** | **14** | **29** | **59.1** | **+1.0** |
| | baz=222 | | | | | | | | |
| TSMG | | | | *e*S | **Sn** | **14** | **30** | **31.2** | **+1.2** |
| | baz=222 | | | | | | | | |
| **TSCK** | **Chigu Township** | **2.63** | **229** | *e*P | **Pn** | **14** | **29** | **59.0** | **+0.8** |
| | baz=227 | | | | | | | | |
| TSCK | | | | *i* S | **Sn** | **14** | **30** | **29.4** | **-0.6** |
| | baz=227 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.71** | **213** | *e*P | **Pn** | **14** | **30** | **01.0** | **+1.7** |
| | baz=223 | | | | | | | | |
| MASBT | | | | *e*S | **Sn** | **14** | **30** | **32.1** | **+0.3** |
| | baz=223 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **2.73** | **318** | *e*P | **Pn** | **14** | **29** | **59.2** | **-0.2** |
| | baz=314 | | | | | | | | |
| XPSS | | | | *e*S | **Sn** | **14** | **30** | **31.7** | **-0.5** |
| | baz=314 | | | | | | | | |
| **SNJT** | **Kaohsiung City** | **2.76** | **219** | *e*S | **Sn** | **14** | **30** | **33.4** | **+0.5** |
| | baz=220 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.77** | **307** | *e*P | **Pn** | **14** | **29** | **59.7** | **-0.2** |
| | baz=303 | | | | | | | | |
| LYJJ | | | | *e*S | **Sn** | **14** | **30** | **31.8** | **-1.3** |
| | baz=303 | | | | | | | | |
| **PNG** | **Penghu** | **2.78** | **242** | *i* P | **Pn** | **14** | **29** | **59.5** | **-0.6** |
| | baz=240 | | | | | | | | |
| PNG | | | | *i* S | **Sn** | **14** | **30** | **31.0** | **-2.5** |
| | baz=240 | | | | | | | | |
| **EAST** | **Anshuo** | **2.81** | **207** | *e*P | **Pn** | **14** | **30** | **02.3** | **+1.7** |
| | baz=204 | | | | | | | | |
| **TAW** | **Tawu** | **2.82** | **206** | *e*P | **Pn** | **14** | **30** | **01.6** | **+1.0** |
| | baz=205 | | | | | | | | |
| TAW | | | | *e*S | **Sn** | **14** | **30** | **35.3** | **+1.0** |
| | baz=205 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.83** | **273** | *i* P | **Pn** | **14** | **30** | **00.6** | **-0.1** |
| | baz=274 | | | | | | | | |
| PTMZ | | | | *e*S | **Sn** | **14** | **30** | **32.3** | **-2.2** |
| | baz=274 | | | | | | | | |
| **WDGT** | **Dungji** | **2.87** | **236** | *e*P | **Pn** | **14** | **30** | **00.7** | **-0.5** |
| | baz=234 | | | | | | | | |
| WDGT | | | | *e*S | **Sn** | **14** | **30** | **33.5** | **-1.9** |
| | baz=234 | | | | | | | | |
| **LAY** | **Lan-yu** | **2.92** | **192** | *e*P | **Pn** | **14** | **30** | **01.1** | **-0.9** |
| | baz=200 | | | | | | | | |
| LAY | | | | *i* S | **Sn** | **14** | **30** | **34.1** | **-2.7** |
| | baz=200 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.92** | **211** | *e*P | **Pn** | **14** | **30** | **03.1** | **+1.1** |
| | baz=221 | | | | | | | | |
| SCZT | | | | *e*S | **Sn** | **14** | **30** | **36.8** | **0.0** |
| | baz=221 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.95** | **192** | *e*P | **Pn** | **14** | **30** | **01.4** | **-1.0** |
| | baz=199 | | | | | | | | |
| LYUB | | | | *e*S | **Sn** | **14** | **30** | **34.7** | **-2.8** |
| | baz=199 | | | | | | | | |
| **VCHM** | **Qimei** | **3.07** | **237** | *e*P | **Pn** | **14** | **30** | **03.7** | **-0.2** |
| | baz=234 | | | | | | | | |
| VCHM | | | | *i* S | **Sn** | **14** | **30** | **38.2** | **-2.0** |
| | baz=234 | | | | | | | | |
| **

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARXS** | **Arharly** | **0.38** | **341** | *eP* | **Pb** | **14 45 04.9** | **-0.5** |
| | 225nm,0.1s | | | | | | |
| ARXS | | | | *eS* | **Sb** | **14 45 10.8** | **-1.0** |
| | 323nm,0.1s | | | | | | |
| **ARXS** | **Arharly** | **0.38** | **341** | P | **Pb** | **14 45 05.0** | **-0.4** |
| | 225nm,0.1s | | | | | | |
| ARXS | | | | S | **Sb** | **14 45 10.9** | **-1.0** |
| | 322nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **0.39** | **162** | *eP* | **Pb** | **14 45 04.5** | **-1.0** |
| | 51nm,0.1s | | | | | | |
| KURS | | | | *eS* | **Sb** | **14 45 10.0** | **-2.0** |
| | 165nm,0.1s | | | | | | |
| **KURS** | **Kuram** | **0.39** | **162** | P | **Pb** | **14 45 04.7** | **-0.7** |
| | 41nm,0.1s | | | | | | |
| KURS | | | | S | **Sb** | **14 45 10.0** | **-2.0** |
| | 165nm,0.1s | | | | | | |
| **BLB** | **Baldybastay** | **0.42** | **55** | P | **Pb** | **14 45 05.4** | **-0.7** |
| | 446nm,0.1s | | | | | | |
| BLB | | | | S | **Sb** | **14 45 11.4** | **-1.6** |
| | 830nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **0.63** | **128** | *eP* | **Pg** | **14 45 08.3** | **+0.6** |
| | 288nm,0.1s | | | | | | |
| KPKS | | | | *eS* | **Sg** | **14 45 16.8** | **+0.9** |
| | 1µm,0.1s | | | | | | |
| **KPKS** | **Kokpek** | **0.63** | **128** | P | **Pg** | **14 45 08.4** | **+0.6** |
| | 269nm,0.1s | | | | | | |
| KPKS | | | | S | **Sg** | **14 45 16.9** | **+1.0** |
| | 1µm,0.1s | | | | | | |
| **CHKK** | **Chushkaly** | **0.73** | **270** | *eP* | **Pg** | **14 45 10.3** | **+0.6** |
| | 79nm,0.2s | | | | | | |
| CHKK | | | | *eS* | **Sg** | **14 45 20.3** | **+1.0** |
| | 156nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **0.73** | **270** | P | **Pg** | **14 45 10.4** | **+0.6** |
| | 79nm,0.2s | | | | | | |
| CHKK | | | | S | **Sg** | **14 45 20.4** | **+1.1** |
| | 156nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **0.76** | **155** | *eP* | **Pg** | **14 45 10.1** | **-0.1** |
| | 46nm,0.1s | | | | | | |
| ZHN | | | | *eS* | **Sg** | **14 45 19.9** | **-0.1** |
| | 272nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **0.76** | **155** | P | **Pg** | **14 45 10.5** | **+0.3** |
| | 48nm,0.2s | | | | | | |
| ZHN | | | | S | **Sg** | **14 45 20.4** | **+0.4** |
| | 267nm,0.1s | | | | | | |
| **SATY** | **Saty** | **0.85** | **160** | *eP* | **Pg** | **14 45 12.0** | **0.0** |
| | 57nm,0.1s | | | | | | |
| SATY | | | | *eS* | **Sg** | **14 45 23.1** | **+0.1** |
| | 1µm,0.2s | | | | | | |
| **SATY** | **Saty** | **0.85** | **160** | P | **Pg** | **14 45 12.3** | **+0.3** |
| | 69nm,0.1s | | | | | | |
| SATY | | | | S | **Sg** | **14 45 23.6** | **+0.6** |
| | 561nm,0.1s | | | | | | |
| **KOTS** | **Kotyrbulak** | **0.90** | **227** | *eP* | **Pg** | **14 45 13.2** | **+0.2** |
| | 22nm,0.2s | | | | | | |
| KOTS | | | | *eS* | **Sg** | **14 45 24.9** | **+0.4** |
| | 413nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **0.90** | **227** | P | **Pb** | **14 45 13.7** | **-0.6** |
| | 20nm,0.1s | | | | | | |
| KOTS | | | | S | **Sb** | **14 45 25.6** | **-1.1** |
| | 413nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **0.97** | **262** | *eP* | **Pg** | **14 45 14.3** | **+0.1** |
| | 41nm,0.4s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **14 45 27.1** | **+0.3** |
| | 154nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **0.97** | **262** | P | **Pg** | **14 45 14.7** | **+0.4** |
| | 16nm,0.1s | | | | | | |
| KTBS | | | | S | **Sg** | **14 45 27.5** | **+0.7** |
| | 141nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **0.98** | **225** | *eP* | **Pg** | **14 45 14.6** | **0.0** |
| | 42nm,0.1s | | | | | | |
| MDOK | | | | *eS* | **Sg** | **14 45 27.4** | **+0.1** |
| | 147nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **0.98** | **225** | ⇑P | **Pg** | **14 45 14.0** | **-0.5** |
| | 16nm,0.4s | | | | | | |
| MDOK | | | | Pg | **Pb** | **14 45 14.8** | **-0.9** |
| | 42nm,0.1s | | | | | | |
| MDOK | | | | ⇑S | **Sg** | **14 45 27.6** | **+0.4** |
| | 70nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 14 45 27.8 | |
| | 133nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **0.99** | **59** | P | **Pg** | **14 45 14.9** | **+0.3** |
| | 0.6nm,0.2s | | | | | | |
| KNOS | | | | S | **Sg** | **14 45 27.8** | **+0.4** |
| | 142nm,0.3s | | | | | | |
| **KNDC** | **Almaty** | **0.99** | **230** | ⇑P | **Pg** | **14 45 15.0** | **+0.3** |
| | 11nm,0.2s | | | | | | |
| KNDC | | | | ⇑S | **Sg** | **14 45 28.0** | **+0.5** |
| | 197nm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **1.02** | **231** | *eP* | **Pb** | **14 45 15.9** | **-0.3** |
| | 54nm,0.1s | | | | | | |
| AAA | | | | *eS* | **Sb** | **14 45 29.7** | **-0.5** |
| | 401nm,0.2s | | | | | | |
| **AAA** | **Alma-Ata** | **1.02** | **231** | P | **Pb** | **14 45 16.1** | **-0.2** |
| | 54nm,0.1s | | | | | | |
| AAA | | | | S | **Sb** | **14 45 29.9** | **-0.4** |
| | 401nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.02** | **133** | *eP* | **Pg** | **14 45 15.2** | **-0.2** |
| | 42nm,0.1s | | | | | | |
| UZB | | | | *eS* | **Sg** | **14 45 28.5** | **-0.2** |
| | 157nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.02** | **133** | P | **Pg** | **14 45 15.2** | **-0.2** |
| | 42nm,0.1s | | | | | | |
| UZB | | | | S | **Sg** | **14 45 28.2** | **-0.5** |
| | 157nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.12** | **224** | *eP* | **Pg** | **14 45 17.4** | **+0.1** |
| | 58nm,0.2s | | | | | | |
| TNSS | | | | *eS* | **Sb** | **14 45 32.3** | **-1.2** |
| | 151nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.12** | **224** | P | **Pg** | **14 45 17.4** | **+0.1** |
| | 58nm,0.2s | | | | | | |
| TNSS | | | | S | **Sb** | **14 45 32.4** | **-1.1** |
| | 68nm,0.3s | | | | | | |
| **KASK** | **Kaskelen** | **1.18** | **238** | ⇑P | **Pg** | **14 45 18.2** | **-0.1** |
| KASK | | | | ⇑S | **Sb** | **14 45 34.4** | **-0.3** |
| **TDK** | **Taldyqorghan** | **1.18** | **14** | *eP* | **Pg** | **14 45 18.2** | **-0.2** |
| | 84nm,0.2s | | | | | | |
| TDK | | | | *eS* | **Sg** | **14 45 33.8** | **0.0** |
| | 157nm,0.2s | | | | | | |
| **TDK** | **Taldyqorghan** | **1.18** | **14** | P | **Pg** | **14 45 18.6** | **+0.2** |
| | 13nm,0.0s | | | | | | |
| TDK | | | | S | **Sg** | **14 45 34.1** | **+0.3** |
| | 238nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **1.20** | **115** | P | **Pg** | **14 45 18.0** | **-0.8** |
| | 10nm,0.1s | | | | | | |
| PDGK | | | | S | **Sg** | **14 45 33.5** | **-0.8** |
| | 56nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **1.20** | **115** | ⇓P | **Pg** | **14 45 17.8** | **-1.0** |
| | 12nm,0.5s | | | | | | |
| PDGK | | | | ⇑S | **Sg** | **14 45 33.4** | **-1.0** |
| | 32nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **1.20** | **272** | P | **Pg** | **14 45 18.3** | **-0.5** |
| | 31nm,0.2s | | | | | | |
| KUU | | | | S | **Sg** | **14 45 34.7** | **+0.3** |
| | 212nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **1.27** | **123** | *eP* | **Pn** | **14 45 23.7** | **+2.9** |
| | 29nm,0.1s | | | | | | |
| SHLS | | | | *eS* | **Sn** | **14 45 42.9** | **+4.3** |
| | 157nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **1.27** | **123** | P | **Pn** | **14 45 24.3** | **+3.5** |
| | 29nm,0.1s | | | | | | |
| SHLS | | | | S | **Sn** | **14 45 43.9** | **+5.3** |
| | 157nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **1.35** | **238** | *eP* | **Pn** | **14 45 21.0** | **-0.9** |
| | 83nm,0.2s | | | | | | |
| MTBS | | | | *eS* | **Sg** | **14 45 38.4** | **-0.8** |
| | 328nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **1.35** | **238** | P | **Pn** | **14 45 21.0** | **-0.9** |
| | 83nm,0.2s | | | | | | |
| MTBS | | | | S | **Sg** | **14 45 38.9** | **-0.3** |
| | 328nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **1.37** | **69** | *eP* | **Pn** | **14 45 21.1** | **-1.1** |
| | 58nm,0.2s | | | | | | |
| DJR | | | | *eS* | **Sb** | **14 45 38.5** | **-1.9** |
| | 127nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.37** | **69** | P | **Pn** | **14 45 21.6** | **-0.6** |
| | 58nm,0.2s | | | | | | |
| DJR | | | | S | **Sb** | **14 45 39.3** | **-1.1** |
| | 117nm,0.3s | | | | | | |
| **PRZ** | **Przheval'sk** | **1.40** | **168** | ⇑*iP* | **Pg** | **14 45 22.9** | **+0.3** |
| | baz=68 | | | | | | |
| PRZ | | | | ⇑*iS* | **Sn** | **14 45 41.9** | **0.0** |
| | baz=68 | | | | | | |
| **KST** | **Kastek** | **1.69** | **242** | *eP* | **Pb** | **14 45 27.4** | **-0.4** |
| | 9.6nm,0.1s | | | | | | |
| KST | | | | *eS* | **Sb** | **14 45 49.4** | **-0.2** |
| | 164nm,0.3s | | | | | | |
| **KST** | **Kastek** | **1.69** | **242** | P | **Pb** | **14 45 27.0** | **-0.8** |
| | 9.6nm,0.1s | | | | | | |
| KST | | | | S | **Sn** | **14 45 48.5** | **-0.5** |
| | 164nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **1.69** | **265** | *eP* | **Pb** | **14 45 27.1** | **-0.6** |
| | 11nm,0.2s | | | | | | |
| KRBS | | | | *eS* | **Sb** | **14 45 48.9** | **-0.7** |
| | 52nm,0.1s | | | | | | |
| **KRBS** | **Karabastau** | **1.69** | **265** | P | **Pn** | **14 45 26.4** | **-0.2** |
| | 18nm,0.2s | | | | | | |
| KRBS | | | | S | **Sn** | **14 45 47.5** | **-1.4** |
| | 52nm,0.1s | | | | | | |
| **DGS** | **Degeres** | **1.73** | **250** | *eP* | **Pb** | **14 45 27.9** | **-0.5** |
| | 17nm,0.2s | | | | | | |
| DGS | | | | *eS* | **Sb** | **14 45 50.2** | **-0.5** |
| | 112nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **1.73** | **250** | P | **Pb** | **14 45 27.6** | **-0.8** |
| | 5.8nm,0.1s | | | | | | |
| DGS | | | | S | **Sn** | **14 45 49.6** | **-0.4** |
| | 112nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.75** | **103** | *eP* | **Pb** | **14 45 28.1** | **-0.8** |
| | 9.7nm,0.1s | | | | | | |
| KTMS | | | | *eS* | **Sb** | **14 45 50.6** | **-0.8** |
| | 21nm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **1.75** | **103** | P | **Pn** | **14 45 27.6** | **+0.1** |
| | 8.0nm,0.1s | | | | | | |
| KTMS | | | | S | **Sn** | **14 45 50.0** | **-0.5** |
| | 21nm,0.4s | | | | | | |
| **KDJ** | **Kajisay** | **1.83** | **200** | ⇓*iP* | **Pb** | **14 45 29.4** | **-0.7** |
| | baz=99 | | | | | | |
| KDJ | | | | ⇓*iS* | **Sb** | **14 45 53.0** | **-0.5** |
| | baz=99 | | | | | | |
| **TKM2** | **Tokmak 2** | **1.99** | **243** | ⇓Pn | **Pn** | **14 45 30.9** | **+0.2** |
| | 7.6nm,0.3s | | | | | | |
| TKM2 | | | | ⇑Sn | **Sb** | **14 45 57.5** | **-0.6** |
| | 25nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **1.99** | **243** | ⇓*iP* | **Pn** | **14 45 31.3** | **+0.6** |
| | baz=42 | | | | | | |
| TKM2 | | | | ⇓*iS* | **Sn** | **14 45 56.3** | **-0.1** |
| | baz=42 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.03** | **229** | ⇑*iP* | **Pn** | **14 45 31.9** | **+0.6** |
| | baz=28 | | | | | | |
| BOOM | | | | ⇑*iS* | **Sn** | **14 45 57.6** | **+0.1** |
| | baz=28 | | | | | | |
| **ULHL** | **Ulahol** | **2.06** | **219** | ⇓*iP* | **Pb** | **14 45 32.6** | **-1.5** |
| | baz=18 | | | | | | |
| ULHL | | | | ⇓*iS* | **Sb** | **14 45 58.7** | **-1.6** |
| | baz=18 | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.13** | **184** | ⇓*iP* | **Pb** | **14 45 33.7** | **-1.7** |
| | baz=84 | | | | | | |
| TARG | | | | ⇓*iS* | **Sb** | **14 46 00.6** | **-1.9** |
| | baz=84 | | | | | | |
| **SGDS** | **Sogindy** | **2.48** | **262** | Pg | **Pb** | **14 45 40.4** | **-0.8** |
| | 3.3nm,0.1s | | | | | | |
| SGDS | | | | Lg | Lg | 14 46 11.5 | |
| | 14nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **2.52** | **251** | ⇓Pg | **Pb** | **14 45 41.8** | **0.0** |
| | 11nm,0.8s | | | | | | |
| CHMS | | | | ⇑Sn | **Sb** | **14 46 12.5** | **-0.8** |
| | 8.0nm,0.2s | | | | | | |
| **CHMS** | **Chumysh** | **2.52** | **251** | ⇑*iP* | **Pn** | **14 45 38.5** | **+0.6** |
| | baz=50 | | | | | | |
| CHMS | | | | ⇑*iS* | **Sn** | **14 46 08.8** | **-0.4** |
| | baz=50 | | | | | | |
| **NRN** | **Naryn** | **2.83** | **212** | ⇑*iP* | **Pn** | **14 45 43.8** | **+1.3** |
| | baz=12 | | | | | | |
| NRN | | | | ⇑*iS* | **Sn** | **14 46 17.6** | **+0.1** |
| | baz=12 | | | | | | |
| **AAK** | **Ala-Archa** | **2.84** | **246** | Pn | **Pb** | **14 45 45.4** | **-1.9** |
| | 4.0nm,0.4s | | | | | | |
| AAK | | | | Lg | Lg | 14 46 26.5 | |
| | 17nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.66** | **254** | *eP* | **Pb** | **14 46 03.5** | **+2.2** |
| | 3.2nm,0.4s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **14 46 51.4** | **-1.8** |
| | 8.5nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **4.07** | **42** | ⇓Pn | **Pn** | **14 46 00.8** | **+1.6** |
| | 1.6nm,0.5s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 14 47 04.6 | |
| | 2.8nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **4.22** | **44** | ⇓Pn | **Pn** | **14 46 01.1** | **-0.1** |
| | 0.3nm,0.4s | | | | | | |
| MK31 | | | | Sn | **Sn** | **14 46 50.3** | **-0.8** |
| | 0.7nm,0.3s,baz=220,slow=25,SNR=4.5 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 14 47 09.1 | |
| | 3.9nm,0.6s,baz=225,slow=29,SNR=7.6 | | | | | | |
| **KK31** | **Karatay Array** | **5.50** | **265** | ⇑Pg | **Pb** | **14 46 36.8** | **+4.2** |
| | 0.4nm,0.3s,baz=80,slow=15 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 14 47 51.6 | |
| | 4.2nm,0.7s,baz=76,slow=26,SNR=5.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.78** | **3** | ⇓Lg | Lg | 14 48 36.2 | |
| | 5.4nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **6.88** | **3** | ⇑Lg | Lg | 14 48 37.2 | |
| | 3.1nm,0.8s | | | | | | |

*IDC **09** 15:17:12.0±1.3,52°.19N×171°.52W,h0km,mb3.8/5, mbtmp3.7/6,ML3.0/1,Error ellipse: s-maj=43.8km s-min=29.8km az=165.0*
*AEIC **09** 15:17:17.7±2.1,52°.2N±0°.1×171°.21W±0°.09,h26km±8km, Error ellipse: s-maj=19.1km s-min=4.9km az=162.0*
*NEIC **09** 15:17:17.9±2.6,52°.0N±0°.1×171°.07W±0°.09,h41km±14km, mb3.6/13,ML3.7/6,ML3.2(AEIC),Error ellipse: s-maj=18.9km s-min=6.2km az=160.0*

**ISC 09 15:17:17.3±0.9,52°.0N±0°.1×171°.07W±0°.06,h42km,n72, σt1s34/72,mb3.7/8,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLES** | **Cleveland East** | **1.10** | **40** | | **Pn** | **15 17 35.8** | **-0.5** |
| CLES | | | | | **Sn** | **15 17 49.9** | **-0.5** |
| **CLES** | **Cleveland East** | **1.10** | **40** | IAML | | 15 17 53.0 | |
| | comp=E,3µm,0.2s | | | | | | |
| **CLCO** | **Concord Point,** | **1.15** | **45** | | **Pn** | **15 17 36.6** | **-0.4** |
| CLCO | | | | | **Sn** | **15 17 51.2** | **-0.2** |
| **NIKH** | **Nikolski High** | **1.68** | **53** | P | **Pn** | **15 17 44.8** | **+0.7** |
| **NIKH** | **Nikolski High** | **1.68** | **53** | | **Pn** | **15 17 43.7** | **-0.4** |
| **KOFP** | **Korovin Flat P** | **1.89** | **280** | | **Pn** | **15 17 46.8** | **-0.4** |
| KOFP | | | | | **Sn** | **15 18 09.6** | **-0.2** |
| **KOKL** | **Mount Kliuchef** | **1.96** | **281** | | **Pn** | **15 17 48.2** | **+0.1** |
| **OKWE** | **Okmok W'ng Wal** | **2.27** | **48** | | **Pn** | **15 17 53.6** | **+1.2** |
| **OKCE** | **Okmok Cone E** | **2.28** | **50** | | **Pn** | **15 17 54.0** | **+1.5** |
| **OKNC** | **Okmok New Cone** | **2.32** | **49** | | **Pn** | **15 17 54.6** | **+1.6** |
| **OKFG** | **Magazine Ridge** | **2.39** | **52** | | **Pn** | **15 17 55.0** | **+1.0** |
| **GSMY** | **Great Sitkin M** | **3.08** | **273** | | **Pn** | **15 18 03.7** | **+0.2** |
| **GSTR** | **Great Sitkin T** | **3.09** | **274** | Pn | **Pn** | **15 18 02.8** | **-0.7** |
| **MAPS** | **Pakushin South** | **3.10** | **52** | | **Pn** | **15 18 05.2** | **+1.6** |
| **GSSP** | **Great Sitkin S** | **3.16** | **274** | | **Pn** | **15 18 04.8** | **+0.3** |
| **MSW** | **Makushin Switc** | **3.23** | **52** | | **Pn** | **15 18 07.4** | **+1.8** |
| **UNV** | **Unalaska Valle** | **3.33** | **54** | P | **Pn** | **15 18 09.0** | **+2.2** |
| **UNV** | **Unalaska Valle** | **3.33** | **54** | | **Pn** | **15 18 07.4** | **+0.5** |
| **ADK** | **Adak** | **3.48** | **271** | | **Pn** | **15 18 08.5** | **-0.4** |
| **ADK** | **Adak** | **3.48** | **271** | IAML | | 15 19 06.3 | |
| | comp=E,89nm,0.8s | | | | | | |
| **LVA** | **Lava Point** | **3.74** | **52** | | **Pn** | **15 18 13.3** | **+0.9** |
| LVA | | | | IAML | | 15 19 08.2 | |
| | comp=E,91nm,0.8s | | | | | | |
| LVA | | | | IAML | | 15 19 18.6 | |
| | comp=N,134nm,0.7s | | | | | | |
| **KIWB** | **Kanaga Island** | **3.77** | **270** | | **Pn** | **15 18 12.8** | **-0.1** |
| **P08K** | **Saint George I** | **4.71** | **10** | | **Pn** | **15 18 26.1** | **+0.4** |
| **SPIA** | **Saint Paul Isl** | **5.23** | **5** | P | **Pn** | **15 18 34.6** | **+1.8** |
| **AMKA** | **Amchitka** | **6.02** | **268** | Pn | **Pn** | **15 18 44.5** | **+0.7** |
| **S12K** | **Black Hills** | **6.50** | **51** | Pn | **Pn** | **15 18 51.6** | **+1.2** |
| **SDPT** | **Sand Point** | **7.14** | **58** | Pn | **Pn** | **15 18 59.9** | **+0.9** |
| **CNBA** | **Chernabura Isl** | **7.42** | **63** | Pn | **Pn** | **15 19 04.0** | **+1.0** |
| **CHGN** | **Chignik** | **8.59** | **55** | Pn | **Pn** | **15 19 19.4** | **+0.4** |
| **O14K** | **Tigyukauivet M** | **9.15** | **33** | Pn | **Pn** | **15 19 28.2** | **+1.7** |
| **M14K** | **Bethel** | **10.12** | **26** | Pn | **Pn** | **15 19 41.6** | **+1.7** |
| **PLK4** | **Peulik 4** | **10.19** | **51** | Pn | **Pn** | **15 19 41.1** | **+0.2** |
| **N15K** | **Kwethluk River** | **10.23** | **32** | Pn | **Pn** | **15 19 43.2** | **+1.9** |
| **L14K** | **Kuka Creek** | **10.44** | **23** | Pn | **Pn** | **15 19 45.9** | **+1.7** |
| **O16K** | **Kokwok River B** | **10.54** | **39** | Pn | **Pn** | **15 19 48.2** | **+2.6** |
| **K13K** | **Kusilvak Mount** | **10.56** | **17** | Pn | **Pn** | **15 19 48.6** | **+2.7** |
| **SII** | **Sitkinak Islan** | **10.87** | **58** | Pn | **Pn** | **15 19 48.9** | **-1.3** |
| **M16K** | **Timber Creek** | **11.24** | **32** | Pn | **Pn** | **15 20 00.6** | **+5.4** |
| **N17K** | **Nushagak Hills** | **11.50** | **37** | Pn | **Pn** | **15 20 01.0** | **+2.2** |
| **K15K** | **Wolf Creek Mou** | **11.54** | **23** | Pn | **Pn** | **15 19 59.1** | **-0.2** |
| **OHAK** | **Old Harbor** | **11.55** | **56** | Pn | **Pn** | **15 19 60.0** | **+0.5** |
| **L16K** | **Owhat River** | **11.61** | **28** | Pn | **Pn** | **15 20 00.7** | **+0.5** |
| **O18K** | **Koktuh Hills** | **11.86** | **42** | Pn | **Pn** | **15 20 03.3** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **12.06** | **48** | Pn | **Pn** | **15 20 07.2** | **+0.8** |
| **KDAK** | **Kodiak Island** | **12.10** | **54** | Pn | **Pn** | **15 20 08.5** | **+1.5** |
| **K17K** | **Iditarod** | **12.74** | **27** | Pn | **Pn** | **15 20 15.9** | **+0.3** |
| **M19K** | **Big River Lodg** | **13.43** | **36** | Pn | **Pn** | **15 20 28.3** | **+3.2** |
| **G16K** | **Koyuk River** | **14.17** | **15** | Pn | **P** | **15 20 38.8** | **-2.9** |
| **J19K** | **Poorman** | **14.50** | **28** | | **P** | **15 20 43.2** | **-2.2** |
| **K20K** | **Telida** | **14.52** | **32** | Pn | **Pn** | **15 20 42.9** | **+3.1** |
| **H18K** | **Honhosa River** | **14.73** | **21** | Pn | **P** | **15 20 46.0** | **-1.9** |
| **PMR** | **Palmer** | **15.31** | **43** | P | **Pn** | **15 20 51.9** | **+1.6** |
| **SCM** | **Sheep Creek Mo** | **16.19** | **43** | Pn | **Pn** | **15 21 01.3** | **-0.2** |
| SCM | | | | IAmb | IAmb | 15 21 09.2 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **17.25** | **32** | Pn | **Pn** | **15 21 14.5** | **-0.2** |
| I23K | | | | IAmb | IAmb | 15 21 18.2 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **17.47** | **35** | | **Pn** | **15 21 17.7** | **+0.3** |
| **ILAR** | **Eielson Array** | **17.86** | **35** | P | **Pn** | **15 21 22.6** | **+0.3** |
| | baz=236,slow=9.5,SNR=4.0 | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **18.32** | **36** | | **P** | **15 21 26.4** | **-1.3** |
| **SCRK** | **Sand Creek** | **18.53** | **39** | P | **P** | **15 21 29.4** | **-0.7** |
| **B20K** | **Meade River** | **19.20** | **15** | P | **P** | **15 21 36.7** | **-0.5** |
| **B21K** | **Ikpikpuk River** | **19.30** | **17** | P | **P** | **15 21 38.2** | **-0.1** |
| B21K | | | | IAmb | IAmb | 15 22 02.9 | |
| | comp=Z,7.2nm,1.5s | | | | | | |
| **I26K** | **Coal Creek Min** | **19.49** | **36** | P | **P** | **15 21 39.7** | **-0.7** |
| I26K | | | | IAmb | IAmb | 15 21 56.3 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **20.18** | **30** | P | **P** | **15 21 49.0** | **+0.9** |
| **C23K** | **Itkillik River** | **20.28** | **20** | P | **P** | **15 21 49.5** | **+0.5** |
| **K29M** | **Barlow Dome** | **21.11** | **43** | P | **P** | **15 21 59.4** | **+1.3** |
| K29M | | | | IAmb | IAmb | 15 22 27.7 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **21.66** | **36** | P | **P** | **15 22 04.0** | **+0.1** |
| **J30M** | **Hart River** | **21.84** | **41** | P | **P** | **15 22 07.4** | **+1.4** |
| J30M | | | | IAmb | IAmb | 15 22 28.0 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **G29M** | **Pine Creek** | **22.09** | **35** | P | **P** | **15 22 08.1** | **-0.4** |
| G29M | | | | IAmb | IAmb | 15 22 10.2 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **41.50** | **78** | P | **P** | **15 25 02.1** | **+1.7** |
| | comp=Z,0.2nm,0.5s,baz=314,slow=5.9,SNR=3.0 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.07** | **317** | P | **P** | **15 27 31.1** | **-2.1** |
| | comp=Z,0.8nm,0.2s,baz=42,slow=6.2,SNR=4.5 | | | | | | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.30** | **313** | P | **P** | **15 27 39.7** | **-1.9** |
| | comp=Z,0.4nm,0.7s,baz=27,slow=6.6,SNR=2.8 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.68** | **282** | P | **P** | **15 28 58.3** | **0.0** |
| | comp=Z,0.8nm,0.5s,baz=21,slow=6.7,SNR=5.0 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **89.35** | **229** | P | **P** | **15 30 09.7** | **+0.6** |
| | comp=Z,0.5nm,0.6s,baz=24,slow=5.0,SNR=15 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |

*IDC **09** 15:35:18.4±36.0,1°.80S×104°.97E,h0km,mb3.6/3, mbtmp3.6/3,Error ellipse: s-maj=640.6km s-min=214.1km az=138.0*
*DJA **09** 15:36:15.2±0.4,8°.5S±4°×10°.7E±°,h89km±4km,M3.9/13, mb4.5/3,MLv3.6/13*

**ISC 09 15:36:15.5±1.0,7°.3S±0°.1×107°.53E±0°.06,h100km,n13, σ0s83/15,mb3.2/3,Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNJI** | **Cibinong** | **0.40** | **271** | P | **Pn** | **15 36 30.5** | **-0.1** |
| CNJI | | | | S | **Sn** | **15 36 41.7** | **-0.3** |
| **SKJI** | **Sukabumi** | **1.02** | **288** | P | **Pn** | **15 36 36.1** | **-0.1** |
| SKJI | | | | S | **Sn** | **15 36 50.7** | **-1.0** |
| **CMJI** | **Cimerak** | **1.02** | **117** | P | **Pn** | **15 36 35.8** | **-0.4** |
| CMJI | | | | S | **Sn** | **15 36 51.1** | **-0.6** |
| **DBJI** | **Dramaga** | **1.09** | **314** | P | **Pn** | **15 36 37.8** | **+0.9** |
| DBJI | | | | S | **Sn** | **15 36 54.1** | **+1.0** |
| **JCJI** | **Jatiwangi** | **1.10** | **42** | P | **Pn** | **15 36 36.0** | **-1.1** |
| **UGM** | **Wanagama** | **3.02** | **102** | P | **Pn** | **15 37 01.8** | **+0.2** |
| **PWJI** | **Pagerwojo** | **4.29** | **100** | P | **Pn** | **15 37 19.3** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **6.66** | **100** | P | **Pn** | **15 37 52.4** | **+1.6** |
| | 18nm,1.0s,0.1nm | | | | | | |
| **SRBI** | **Singaraja** | **7.65** | **96** | P | Pn | 15 37 52.9 | -11 |
| **DNP** | **Denpasar** | **7.72** | **101** | P | Pn | 15 37 51.4 | -14 |
| **WRA** | **Warramunga Arr** | **28.86** | **118** | P | **P** | **15 42 04.1** | **-0.8** |
| | 0.4nm,0.9s,baz=299,slow=11,SNR=4.8 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **30.07** | **126** | P | **P** | **15 42 15.8** | **+0.2** |
| | 0.4nm,0.8s,baz=305,slow=8.2,SNR=6.2 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **40.04** | **132** | P | **P** | **15 43 41.1** | **+0.1** |
| | 1.3nm,0.4s,baz=312,slow=6.9,SNR=4.0 | | | | | | |
| | 1.3nm,0.4s | | | | | | |

**IDC 09 15:42:53.8±4.8,47°.71N×92°.16W,h0km,mbtmp2.7/1, ML0.8/1,Error ellipse: s-maj=77.4km s-min=30.3km az=48.0,Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.53** | **317** | Pn | Pn | 15 43 48.7 | -1.1 |
| | 0.1nm,0.3s,baz=129,slow=13,SNR=1.7 | | | | | | |
| ULM | | | | Sn | Sn | 15 44 30.4 | -1.9 |
| | 1.0nm,0.3s,baz=69,slow=17,SNR=7.6 | | | | | | |
| ULM | | | | Lg | Lg | 15 44 42.4 | |
| | 1.2nm,0.3s,baz=219,slow=8.4,SNR=6.4 | | | | | | |
| | 0.8nm,0.2s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.57** | **316** | I | I | 16 05 00.0 | |
| | baz=133,slow=325,SNR=2.8 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **6.71** | **281** | I | I | 17 28 50.0 | |
| | baz=86,slow=313,SNR=1.2 | | | | | | |

**NEIC 09 16:15:06.7±1.1,32°.960N±0°.007×100°.89W±0°.02, h3km±5km,mb_Lg2.4/33,ML3.0/8,Error ellipse: s-maj=2.9km s-min=0.9km az=79.0,Western Texas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SN05** | **Snyder 5** | **0.08** | **179** | | Pg | 16 15 08.4 | 0.0 |
| SN05 | | | | Sg | Sg | 16 15 09.7 | +0.2 |
| SN05 | | | | IAML | | 16 15 10.

comp=Z,10nm,1.1s
**Z35A Perchaven, San 3.07 82** Pn Pn 16 15 56.5 +0.3
**SAND Sanderson 3.18 200** Pn 16 15 57.2 -0.5
SAND IAmb_Lg 16 16 53.1
comp=Z,9.6nm,0.8s
**CSTR Hydro, Custer 3.24 34** Pn Pn 16 15 56.7 -1.8
**LOOK Love County 3.26 71** Pn Pn 16 15 54.3 -4.6
LOOK IAmb_Lg 16 16 55.3
comp=Z,13nm,0.7s
**ELIS Ellis County 3.33 21** Pn Pn 16 15 55.8 -4.0
**ALPN Alpine 3.48 223** Pn 16 15 58.6 -3.5
**DRIO Del Rio 3.53 176** Pn 16 16 00.1 -2.5
**435B Jarrell 3.55 127** Pn Pn 16 16 00.8 -2.0
**HNDO Hondo 3.69 158** Pn 16 16 02.8 -1.9
HNDO IAmb_Lg 16 17 12.4
comp=Z,14nm,0.8s
**RTBA Rita Blanca 3.79 337** Pn 16 16 05.5 -0.7
RTBA IAmb_Lg 16 17 12.7
comp=Z,10nm,0.8s
**OK038 West end E0370 3.93 26** Pn 16 16 07.7 -0.3
**NOKA Waynoka 4.00 23** Pn Pn 16 16 08.1 -0.9
**VHRN Van Horn 4.11 239** Pn 16 16 09.5 -1.0
VHRN IAmb_Lg 16 17 26.2
comp=Z,6.8nm,0.9s
**TXAR Lajitas Array 4.33 214** Pn 16 16 13.5 -0.1
**TX31 Lajitas Ar. Si 4.33 214** Pn 16 16 12.4 -1.2
**OK032 Salt Plains WL 4.42 29** Pn Pn 16 16 14.6 -0.1
**833A Chaparral WMA, 4.80 164** Pn 16 16 18.2 -1.7
833A IAmb_Lg 16 17 39.1
comp=Z,13nm,0.9s
**X37A Clayton 4.87 69** Pn Pn 16 16 19.5 -1.4
**ANMO Albuquerque 5.04 295** Pn 16 16 21.2 -2.1
ANMO IAmb_Lg 16 17 45.4
comp=Z,8.9nm,1.1s
**T25A Trinidad 5.07 326** Pn Pn 16 16 21.3 -2.7
T25A IAmb_Lg 16 17 47.3
comp=Z,8.5nm,0.8s

*NEIC **09** 16:50:32.4±1.1, 19˚.38N×0˚.02×155˚.03W±0˚.02, h10km±1km, Error ellipse: s-maj=4.0km s-min=2.5km az=328.0*
*IDC **09** 16:50:34.7±3.2, 19˚.89N×154˚.94W, h0km, mb3.9/7, mbtmp3.9/7, Error ellipse: s-maj=78.9km s-min=39.2km az=8.0*
**ISC 09 16:50:32.3±0.8, 19˚.50N±0˚.06×155˚.11W±0˚.04, h16km±5km, n84, σ1º45/84, mb4.3/23, Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NPOC** | **North of Pu'u** | **0.11** | **181** | | | **Pg** | **16 50 36.8** | **+0.9** |
| **JCUZ** | **Jacuzzi** | **0.12** | **177** | | | **Pg** | **16 50 36.5** | **+0.5** |
| **STCH** | **Steam Cracks** | **0.12** | **188** | | | **Pg** | **16 50 35.0** | **-1.0** |
| STCH | | | | IAML | | | 16 50 37.1 | |
| | comp=N,217µm,0.6s | | | | | | | |
| STCH | | | | IAML | | | 16 50 37.5 | |
| | comp=E,150µm,0.6s | | | | | | | |
| **JOKA** | **Jonika Flow** | **0.12** | **125** | Pg | | **Pg** | **16 50 34.6** | **-1.3** |
| JOKA | | | | IAML | | | 16 50 37.1 | |
| | comp=E,378µm,0.8s | | | | | | | |
| **KNHH** | **Kane Nui o Ham** | **0.14** | **205** | | | **Pg** | **16 50 35.7** | **-0.5** |
| **PAH** | **Pahoa** | **0.15** | **93** | Pg | | **Pg** | **16 50 35.8** | **-0.5** |
| **PUH** | **Pauahi** | **0.16** | **219** | Pg | | **Pg** | **16 50 36.3** | **-0.3** |
| **HATHI** | **Halema'uma'u T** | **0.16** | **242** | Pg | | **Pg** | **16 50 37.0** | **+0.4** |
| HATHI | | | | IAML | | | 16 50 43.8 | |
| | comp=N,83µm,0.6s | | | | | | | |
| **RSD** | **Rainshed** | **0.17** | **256** | Pg | | **Pb** | **16 50 37.7** | **+0.5** |
| RSD | | | | IAML | | | 16 50 43.1 | |
| | comp=N,112µm,0.3s | | | | | | | |
| RSD | | | | IAML | | | 16 50 44.5 | |
| | comp=E,76µm,0.3s | | | | | | | |
| **SBLHI** | **Steaming Bluff** | **0.17** | **244** | | | **Pg** | **16 50 37.1** | **+0.5** |
| SBLHI | | | | | | **Sg** | **16 50 40.8** | **+1.2** |
| **BYL** | **Byron's Ledge** | **0.17** | **238** | Pg | | **Pg** | **16 50 36.9** | **+0.2** |
| BYL | | | | IAML | | | 16 50 44.4 | |
| | comp=E,90µm,0.6s | | | | | | | |
| **UWB** | **Uwekahuna B** | **0.18** | **244** | | | **Pg** | **16 50 37.3** | **+0.5** |
| UWB | | | | | | **Sg** | **16 50 41.0** | **+1.3** |
| **KKO** | **Keanakako`i** | **0.18** | **235** | | | **Pg** | **16 50 37.1** | **+0.2** |
| KKO | | | | | | **Sg** | **16 50 40.7** | **+0.8** |
| **OBL** | **Observatory Le** | **0.19** | **243** | | | **Pg** | **16 50 37.4** | **+0.5** |
| **RIM** | **Rim** | **0.19** | **236** | | | **Pg** | **16 50 37.2** | **+0.3** |
| RIM | | | | | | **Sg** | **16 50 40.8** | **+0.7** |
| **UWE** | **Uwekahuna** | **0.19** | **245** | | | **Pg** | **16 50 37.6** | **+0.6** |
| UWE | | | | IAML | | | 16 50 44.1 | |
| | comp=E,86µm,0.2s | | | | | | | |
| **MLH** | **Mauna Loa** | **0.26** | **268** | Pg | | **Pb** | **16 50 39.4** | **+0.6** |
| MLH | | | | IAML | | | 16 50 46.2 | |
| | comp=E,79µm,0.6s | | | | | | | |
| MLH | | | | IAML | | | 16 50 50.2 | |
| | comp=N,78µm,0.3s | | | | | | | |
| **HLP** | **Hilina Pali** | **0.28** | **223** | Pg | | **Pg** | **16 50 37.6** | **-0.8** |
| HLP | | | | IAML | | | 16 50 44.3 | |
| | comp=E,90µm,0.3s | | | | | | | |
| **HMH** | **Humu'ula Sheep** | **0.37** | **286** | Pg | | **Pb** | **16 50 41.9** | **+1.2** |
| **HTC** | **Hot Caves** | **0.38** | **226** | | | **Pg** | **16 50 41.3** | **+1.2** |
| **MLOA** | **Mauna Loa Obse** | **0.44** | **274** | | | **Pn** | **16 50 42.9** | **-1.6** |
| **MWH** | **Moku'aweowe** | **0.46** | **268** | Pg | | **Pn** | **16 50 42.7** | **-2.1** |
| **POHA** | **Pohakuloa** | **0.47** | **302** | Pg | | **Pn** | **16 50 43.5** | **-1.2** |
| **POHA** | **Pohakuloa** | **0.47** | **302** | | | **Sn** | **16 50 51.5** | **-1.4** |
| **ALEP** | **Alea Permanent** | **0.51** | **275** | | | **Pn** | **16 50 43.4** | **-1.9** |
| **KHU** | **Kahuku** | **0.54** | **242** | Pg | | **Pg** | **16 50 42.6** | **-0.6** |
| KHU | | | | IAML | | | 16 50 52.9 | |
| | comp=E,35µm,0.4s | | | | | | | |
| KHU | | | | IAML | | | 16 50 59.9 | |
| | comp=N,28µm,0.6s | | | | | | | |
| **HPO** | **Honuapo** | **0.59** | **226** | | | **Pg** | **16 50 42.5** | **-1.4** |
| **HUH** | **Hualalai** | **0.71** | **285** | Pg | | **Pn** | **16 50 46.4** | **-1.6** |
| **HPAH** | **Hawaii Prepara** | **0.76** | **314** | Pg | | **Pn** | **16 50 47.3** | **-1.3** |
| **MHA** | **Mahukona** | **1.01** | **312** | | | **Pn** | **16 50 50.9** | **-1.0** |
| **HLK** | **Haleakala** | **1.65** | **320** | Pn | | **Pb** | **16 50 59.6** | **-2.9** |
| **KHLH** | **Kahului Airpor** | **1.86** | **318** | Pn | | **Pb** | **16 51 03.0** | **-3.0** |
| **KPA** | **Kalaupapa** | **2.43** | **314** | | | **Pn** | **16 51 10.0** | **-1.5** |
| **DHH** | **Diamond Head** | **3.07** | **305** | | | **Pn** | **16 51 18.6** | **-1.7** |
| **HON** | **Honolulu** | **3.26** | **304** | | | **Pn** | **16 51 21.4** | **-1.5** |
| **KIP** | **Kipapa** | **3.33** | **306** | Pn | | **Pn** | **16 51 22.0** | **-1.8** |
| **KEKH** | **Kekaha** | **4.96** | **301** | Pn | | **Pn** | **16 51 44.5** | **-1.8** |
| **JOHN** | **Johnston Islan** | **13.98** | **261** | Pn | | **Pn** | **16 53 46.8** | **-3.1** |
| **XMAS** | **Kiritimati** | **17.50** | **188** | Pn | | **Pn** | **16 54 32.4** | **-3.5** |
| **BBGB** | **Big Mountain B** | **34.32** | **53** | P | | **P** | **16 57 17.9** | **-0.6** |
| **ADK** | **Adak** | **36.47** | **337** | P | | **P** | **16 57 37.1** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **37.00** | **51** | P | | **P** | **16 57 44.5** | **+3.0** |
| | comp=N,0.5nm,0.6s,baz=235,slow=11,SNR=3.1 | | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | | |
| **H02S1** | **DAWSON INLET T** | **37.92** | **22** | T | | T | 17 37 54.9 | |
| | SNR=128 | | | | | | | |
| **R11B** | **Troy Canyon, C** | **39.00** | **53** | P | | **P** | **16 57 59.5** | **+1.1** |
| **G08A** | **Pilot Rock** | **39.40** | **41** | P | | **P** | **16 58 02.3** | **+0.7** |
| **W13A** | **Hualapai Mount** | **39.49** | **58** | P | | **P** | **16 58 02.3** | **-0.3** |
| **F10A** | **Beach Ranch, E** | **40.79** | **41** | P | | **P** | **16 58 14.1** | **+1.0** |
| F10A | | | | IAmb | | IAmb | 16 58 19.4 | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **41.34** | **60** | P | | **P** | **16 58 18.5** | **+0.7** |
| **MVU** | **Marysvale** | **41.59** | **54** | | | **P** | **16 58 20.4** | **+0.5** |
| MVU | | | | IAmb | | IAmb | 16 58 29.3 | |
| | comp=Z,9.9nm,1.2s | | | | | | | |
| **HLID** | **Hailey** | **41.60** | **46** | P | | **P** | **16 58 21.2** | **+1.3** |
| **HVU** | **Hansel Valley** | **42.11** | **49** | P | | **P** | **16 58 24.6** | **+0.6** |
| **TCUT** | **Toone Canyon** | **42.89** | **50** | P | | **P** | **16 58 30.1** | **-0.5** |
| TCUT | | | | IAmb | | IAmb | 16 58 43.9 | |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| **BPMT** | **Black Pine Rid** | **43.36** | **42** | P | | **P** | **16 58 34.6** | **+0.4** |
| **OVMT** | **Ovando** | **43.90** | **41** | P | | **P** | **16 58 39.1** | **+0.7** |
| **TPAW** | **Teton Pass** | **43.93** | **47** | P | | **P** | **16 58 38.7** | **-0.2** |
| TPAW | | | | IAmb | | IAmb | 16 58 43.1 | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **PD31** | **Pinedale Array** | **44.69** | **48** | P | | **P** | **16 58 45.1** | **+0.2** |
| **PDAR** | **Pinedale Array** | **44.69** | **48** | P | | **P** | **16 58 45.5** | **+0.6** |
| **PDAR** | **Pinedale Array** | **44.69** | **48** | P | | **P** | **16 58 46.4** | **+1.4** |
| | comp=Z,1.0nm,0.8s,baz=255,slow=5.7,SNR=9.1 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **J25K** | **Salcha River,** | **45.55** | **6** | P | | **P** | **16 58 54.3** | **+3.1** |
| J25K | | | | IAmb | | IAmb | 16 59 12.9 | |
| | comp=Z,4.6nm,1.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **45.58** | **5** | P | | **P** | **16 58 52.8** | **+1.4** |
| | comp=Z,0.7nm,0.6s,baz=191,slow=7.4,SNR=7.8 | | | | | | | |
| ILAR | | | | PcP | | **PcP** | **17 00 31.5** | **+1.8** |
| | comp=Z,0.3nm,0.5s,baz=201,slow=4.8,SNR=1.8 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **MDM** | **Murphy Dome** | **45.66** | **4** | P | | **P** | **16 58 54.3** | **+2.2** |
| MDM | | | | IAmb | | IAmb | 16 59 25.0 | |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| **I30M** | **Mount Dempster** | **47.36** | **11** | P | | **P** | **16 59 07.9** | **+2.4** |
| I30M | | | | IAmb | | IAmb | 16 59 14.1 | |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **47.44** | **4** | P | | **P** | **16 59 07.8** | **+1.8** |
| G24K | | | | IAmb | | IAmb | 16 59 09.5 | |
| | comp=Z,3.7nm,1.3s | | | | | | | |
| **FYU** | **Fort Yukon** | **47.48** | **5** | P | | **P** | **16 59 09.6** | **+3.4** |
| FYU | | | | IAmb | | IAmb | 16 59 12.9 | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **47.53** | **68** | P | | **P** | **16 59 07.0** | **-0.4** |
| TX31 | | | | IAmb | | IAmb | 16 59 10.8 | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **47.53** | **68** | P | | **P** | **16 59 05.8** | **-1.6** |
| **TXAR** | **Lajitas Array** | **47.53** | **68** | P | | **P** | **16 59 10.1** | **+2.7** |
| | comp=Z,1.9nm,0.7s,baz=256,slow=8.4,SNR=17 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.17** | **23** | P | | **P** | **16 59 36.8** | **+2.3** |
| | comp=Z,0.9nm,0.8s,baz=230,slow=7.5,SNR=2.4 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **54.13** | **50** | P | | **P** | **16 59 56.0** | **-0.8** |
| ECSD | | | | IAmb | | IAmb | 16 59 58.6 | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **55.65** | **42** | P | | **P** | **17 00 08.0** | **+0.3** |
| | comp=Z,2.4nm,0.8s,baz=260,slow=8.0,SNR=4.0 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **SFIN** | **Lafayette** | **61.05** | **54** | P | | **P** | **17 00 45.7** | **+0.1** |
| **DELO** | **Deloro Mine** | **67.79** | **49** | P | | **P** | **17 01 29.3** | **-0.3** |
| **L56A** | **Greenwood** | **68.09** | **52** | P | | **P** | **17 01 31.2** | **-0.5** |
| **SCHQ** | **Schefferville** | **73.31** | **37** | P | | **P** | **17 02 04.4** | **+1.2** |
| SCHQ | | | | IAmb | | IAmb | 17 02 05.9 | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **OTAV** | **Otavalo** | **77.35** | **94** | P | | **P** | **17 02 26.8** | **-0.9** |
| OTAV | | | | IAmb | | IAmb | 17 02 40.1 | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **79.94** | **310** | *e*P | | **P** | **17 02 41.5** | **+0.4** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,98nm,4.4s | | | | | | | |
| **AS31** | **Alice Springs** | **81.41** | **241** | P | | **P** | **17 02 48.4** | **-0.7** |
| AS31 | | | | IAmb | | IAmb | 17 03 14.5 | |
| | comp=Z,3.3nm,1.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **81.41** | **241** | P | | **P** | **17 02 48.3** | **-0.7** |
| **BAUV** | **El Baul** | **84.32** | **83** | P | | **P** | **17 03 03.8** | **-0.6** |
| **H03N2** | **Juan Fernandez** | **89.63** | **126** | T | | T | 18 42 26.5 | |
| | baz=298,slow=76,SNR=533 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **89.64** | **126** | T | | T | 18 42 27.4 | |
| | baz=298,slow=76,SNR=508 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **89.65** | **126** | T | | T | 18 42 27.9 | |
| | baz=298,slow=76,SNR=596 | | | | | | | |
| **PZH** | **PanZhiHua** | **92.58** | **299** | P | | **P** | **17 03 45.2** | **+1.3** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,120nm,4.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **96.20** | **324** | P | | P | 17 04 05.0 | +5.0 |
| | comp=Z,0.3nm,0.6s,baz=63,slow=3.3,SNR=3.8 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |

*IDC **09** 16:53:38.5±0.4, 33˚.39S×2˚.44E, h0km, mb5.2/32, mbtmp5.2/33, ML5.9/1, MS4.9/48, Error ellipse: s-maj=14.4km s-min=10.6km az=114.0*
*MOS **09** 16:53:38.5±1.1, 33˚.43S×2˚.40E, h10km, mb5.7/56, MS4.9/35, Error ellipse: s-maj=11.5km s-min=5.3km az=73.3*
*IPGP **09** 16:53:39.0, 33˚.39S×2˚.50E, h14km, Mw5.6, Fault plane solution: NP1:ϕs282.00000°, δ57.00000°, λ132.00000°. NP2:ϕs44.00000°, δ51.00000°, λ44.00000°.*
*NEIC **09** 16:53:39.5±1.8, 33˚.35S×0˚.09×2˚.48E±0˚.09, h10km±1km, mb5.7/236, Ms_20 5.2/585, Mwb5.4/19, Mww5.6/23, Error ellipse: s-maj=15.5km s-min=11.6km az=157.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr0.91; Mθθ-0.66; Mϕϕ-0.25; Mrθ-0.57; Mθϕ-0.97; Mϕr0.10; Fault plane solution: M₀1.39000×10¹⁷ NP1:ϕs21.25000°, δ44.86000°, λ42.80000°. NP2:ϕs257.97000°, δ61.37000°, λ126.13000°. Principal axes: T 1.2388, Plg57.0000°, Azm218.0000°; N 0.2720, Plg31.0000°, Azm59.0000°; P -1.5107, Plg9.0000°, Azm323.0000°;*
*NEIC **09** 16:53:39.5, 33˚.15S×2˚.60E, h26km, Moment Tensor Solution. Duration: 3ᵻ0 Moment tensor: Scale 10¹⁷Nm; Mrr2.57; Mθθ-3.13; Mϕϕ0.56; Mrθ-0.38; Mθϕ-1.13; Mϕr0.84; Fault plane solution: M₀3.21000×10¹⁷ NP1: ϕs275.90000°, δ50.86000°, λ120.96000°. NP2: ϕs52.35000°, δ48.31000°, λ57.70000°. Principal axes: T 2.9701, Plg66.0000°, Azm251.0000°; N 0.4835, Plg24.0000°, Azm75.0000°; P -3.4536, Plg1.0000°, Azm345.0000°;*
*NEIC **09** 16:53:39.5, 33˚.35S×2˚.48E, h26km*
*NEIC **09** 16:53:39.5, 33˚.39S×2˚.50E, h10km*
*GCMT **09** 16:53:41.5±0.1, 33˚.34S±0˚.01×2˚.66E±0˚.01, h13km, MW5.6/150, Moment Tensor Solution. s104,c177; s150,c294; Duration: 1ᵻ5 Moment tensor: Scale 10¹⁷ Nm; Mrr2.28±.05; Mθθ-2.70±.04; Mϕϕ0.41±.03; Mrθ-0.29±.07; Mθϕ-1.18±.03; Mϕr1.22±.10; Best double couple: M₀3.04800×10¹⁷ NP1:ϕs45.00000°, δ53.00000°, λ52.00000°. NP2:ϕs278.00000°, δ51.00000°, λ130.00000°. Principal axes: T 2.9970, Plg60.0000°, Azm253.0000°; N 0.1000, Plg30.0000°, Azm70.0000°; P -3.0990, Plg1.0000°, Azm161.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*BGR **09** 16:53:47.2, 32˚.56S×3˚.47E, h33km, mb5.5, Ms4.6*
**ISC 09 16:53:38.8±0.6, 33˚.46S±0˚.04×2˚.51E±0˚.04, h5km±3km, n1539, σ1º35/1276, mb5.6/301, MS5.2/366, 65C-46D, South Atlantic Ocean**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **H09N1** | **TRISTAN DA CUN** | **12.64** | **249** | Pn | | **Pn** | **16 56 38.4** | **-0.8** |
| H09N1 | | | | Sn | | Sn | 16 58 49.0 | -11 |
| H09N1 | | | | T | | T | 17 09 23.9 | |
| | SNR=10.0 | | | | | | | |
| **TRIS** | **Tristan da Cun** | **12.64** | **249** | | | **Pn** | **16 56 37.7** | **-1.5** |
| TRIS | | | | | | Sn | 16 58 47.7 | -13 |
| **TRIS** | **Tristan da Cun** | **12.64** | **249** | *e*P | | **Pn** | **16 56 38.1** | **-1.1** |
| **H09W1** | **TRISTAN DA CUN** | **12.66** | **249** | Pn | | **Pn** | **16 56 38.2** | **-1.3** |
| H09W1 | | | | Sn | | Sn | 16 58 51.0 | -10 |
| H09W1 | | | | T | | T | 17 09 29.8 | |
| | SNR=7.7 | | | | | | | |
| **KOMG** | **Komaggas** | **13.27** | **78** | *e*P | | **Pn** | **16 56 48.1** | **+0.2** |
| **AUSN** | **Aus** | **13.69** | **64** | *e*P | | **Pn** | **16 56 50.1** | **-3.7** |
| **PRTV** | **Porterville,We** | **13.89** | **93** | *e*P | | **Pn** | **16 56 57.3** | **+1.0** |
| **CER** | **Ceres** | **14.03** | **94** | *e*P | | **Pn** | **16 56 58.1** | **-0.1** |
| **ELIM** | **Elim** | **14.34** | **99** | *e*P | | **Pn** | **16 57 02.2** | **-0.3** |
| **CVNA** | **Calvinia** | **14.70** | **87** | *e*P | | **Pn** | **16 57 07.3** | **-0.2** |
| **MATJ** | **Matjiesfontein** | **15.11** | **94** | *e*P | | **Pn** | **16 57 13.3** | **+0.3** |
| **SUR** | **Sutherland** | **15.41** | **91** | Pn | | **Pn** | **16 57 17.4** | **+0.3** |
| **SUR** | **Sutherland** | **15.41** | **91** | *e*P | | **Pn** | **16 57 18.5** | **+1.3** |
| **SUR** | **Sutherland** | **15.41** | **91** | Pn | | **Pn** | **16 57 17.8** | **+0.7** |
| | 59nm,0.3s,baz=260,slow=13,SNR=236 | | | | | | | |
| SUR | | | | | | Sn | 16 59 54.2 | -14 |
| | 27nm,0.3s,baz=138,slow=23,SNR=4.4 | | | | | | | |
| SUR | | | | | | LR | 17 02 27.0 | |
| | comp=Z,8µm,18.8s,baz=250,slow=34 | | | | | | | |
| | 507nm,0.6s | | | | | | | |
| **SUR** | **Sutherland** | **15.41** | **91** | P | | **Pn** | **16 57 18.3** | **+1.1** |
| **ARMS** | **Ukamas** | **15.76** | **75** | *e*P | | **Pn** | **16 57 22.3** | **+0.6** |
| **MERW** | **Merweville** | **15.96** | **92** | *e*P | | **Pn** | **16 57 25.3** | **+1.1** |
| **FRAZ** | **Fraserburg** | **15.99** | **90** | *e*P | | **Pn** | **16 57 25.1** | **+0.6** |
| **AUGR** | **Augrabies** | **16.03** | **77** | *e*P | | **Pn** | **16 57 25.3** | **+0.3** |
| **KEIM** | **Keimoes** | **16.50** | **78** | *e*P | | **Pn** | **16 57 31.1** | **-0.1** |
| **GRAN** | **Grantham** | **16.56** | **91** | *e*P | | **P** | **16 57 34.0** | **-0.5** |
| **WIN** | **Windhoek** | **16.82** | **54** | Pn | | **Pn** | **16 57 31.9** | **-3.5** |
| **WIN** | **Windhoek** | **16.82** | **54** | *e*P | | **Pn** | **16 57 32.5** | **-2.8** |
| **WIN** | **Windhoek** | **16.82** | **54** | P | | **Pn** | **16 57 31.9** | **-3.5** |
| WIN | | | | pmax | | pmax | | |
| | comp=Z,253nm,1.6s | | | | | | | |
| **UPI** | **Upington** | **16.86** | **77** | *e*P | | **Pn** | **16 57 34.8** | **-1.0** |
| **BRAK** | **Brakfontein** | **17.26** | **90** | *e*P | | **P** | **16 57 43.4** | **+1.2** |
| **ROOI** | **Rooidraai Farm** | **17.68** | **93** | *e*P | | **P** | **16 57 47.7** | **+0.8** |
| **BFON** | **Badsfontein, M** | **17.92** | **91** | *e*P | | **P** | **16 57 49.9** | **+0.3** |
| **BUFB** | **Buffelsbos** | **18.49** | **98** | *e*P | | **P** | **16 57 55.7** | **0.0** |
| **GRAF** | **Camdeboo Natio** | **18.50** | **92** | *e*P | | **Pn** | **16 57 57.0** | **+0.9** |
| **SHEL** | **Horse Pasture** | **18.95** | **335** | P | | **P** | **16 57 56.9** | **-4.0** |
| SHEL | | | | IAmb | | IAmb | 16 58 11.4 | |
| | comp=Z,458nm,1.1s | | | | | | | |
| **SHEL** | **Horse Pasture** | **18.95** | **335** | P | | **P** | **16 57 56.9** | **-4.0** |
| SHEL | | | | pmax | | pmax | | |
| | comp=Z,458nm,1.1s | | | | | | | |
| **NMMU** | **Nelson Mandela** | **19.27** | **98** | *e*P | | **Pn** | **16 58 05.5** | **+0.3** |
| **SOE** | **Somerset East** | **19.33** | **94** | P | | **P** | **16 58 03.5** | **-1.6** |
| SOE | | | | IAmb | | IAmb | 16 58 15.9 | |
| | comp=Z,451nm,1.1s | | | | | | | |
| **SOE** | **Somerset East** | **19.33** | **94** | *e*P | | **Pn** | **16 58 06.1** | **0.0** |
| **TSUM** | **Tsumeb** | **19.57** | **47** | P | | **P** | **16 58 04.7** | **-3.0** |
| **TSUM** | **Tsumeb** | **19.57** | **47** | *e*P | | **P** | **16 58 07.6** | **-0.1** |
| **TSUM** | **Tsumeb** | **19.57** | **47** | P | | **P** | **16 58 05.5** | **-2.2** |
| | comp=Z,54nm,1.1s,baz=236,slow=13,SNR=24 | | | | | | | |
| TSUM | | | | | | S | 17 01 34.5 | -14 |
| | comp=Z,19nm,0.5s,baz=252,slow=9.6,SNR=3.0 | | | | | | | |
| TSUM | | | | | | LR | 17 04 45.5 | |
| | comp=Z,5µm,18.4s,baz=230,slow=34 | | | | | | | |
| **HVD** | **Gariep Dam** | **19.69** | **88** | *e*P | | **P** | **16 58 09.1** | **0.0** |
| **GRHM** | **Grahamstown, E** | **19.93** | **96** | P | | **P** | **16 58 10.0** | **-1.6** |
| GRHM | | | | IAmb | | IAmb | 16 58 24.4 | |
| | comp=Z,268nm,1.0s | | | | | | | |
| **GRHM** | **Grahamstown, E** | **19.93** | **96** | *e*P | | **P** | **16 58 09.8** | **-1.8** |
| **BOSA** | **Boshof** | **20.07** | **82** | P | | **P** | **16 58 11.7** | **-1.5** |
| BOSA | | | | IAmb | | IAmb | 16 58 22.8 | |
| | comp=Z,430nm,1.3s | | | | | | | |
| **BOSA** | **Boshof** | **20.07** | **82** | *e*P | | **P** | **16 58 13.2** | **+0.1** |
| BOSA | | | | IAmb | | IAmb | 16 58 22.2 | |
| | comp=Z,459nm,1.4s | | | | | | | |
| **BOSA** | **Boshof** | **20.07** | **82** | P | | **P** | **16 58 12.2** | **-1.0** |
| | comp=Z,98nm,1.0s,baz=255,slow=10,SNR=36 | | | | | | | |
| BOSA | | | | | | S | **17 01 48.7** | **-11** |
| | comp=Z,14nm,0.7s,baz=285,slow=16,SNR=1.0 | | | | | | | |
| BOSA | | | | | | LR | 17 05 21.5 | |
| | comp=Z,7µm,18.1s,baz=251,slow=35 | | | | | | | |
| | comp=Z,98nm,1.0s | | | | | | | |
| **SWZ** | **Schweizer** | **20.65** | **78** | *e*P | | **P** | **16 58 19.1** | **-0.4** |
| SWZ | | | | IAmb | | IAmb | 16 58 29.1 | |
| | comp=Z,441nm,1.3s | | | | | | | |
| **LBTB** | **Lobatse** | **21.80** | **73** | P | | **P** | **16 58 30.4** | **-1.5** |
| LBTB | | | | IAmb | | IAmb | 16 58 44.2 | |
| | comp=Z,616nm,1.2s | | | | | | | |
| **LBTB** | **Lobatse** | **21.80** | **73** | *e*P | | **P** | **16 58 31.2** | **-0.7** |
| LBTB | | | | IAmb | | IAmb | 16 58 43.9 | |
| | comp=Z,653nm,1.2s | | | | | | | |
| **LBTB** | **Lobatse** | **21.80** | **73** | P | | **P** | **16 58 30.9** | **-1.0** |
| | comp=Z,31nm,0.9s,baz=247,slow=12,SNR=21 | | | | | | | |
| LBTB | | | | | | LR | 17 06 24.8 | |
| | comp=Z,7µm,18.1s,baz=252,slow=35 | | | | | | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **SNKL** | **Senekal, Frees** | **22.27** | **83** | *e*P | | **P** | **16 58 35.1** | **-1.9** |
| SNKL | | | | IAmb | | IAmb | 16 58 45.6 | |
| | comp=Z,529nm,1.4s | | | | | | | |
| **PRYS** | **Parys** | **22.42** | **80** | *e*P | | **P** | **16 58 37.8** | **-0.7** |
| PRYS | | | | IAmb | | IAmb | 16 58 50.5 | |
| | comp=Z,355nm,1.2s | | | | | | | |
| **WDLM** | **Western Deep L** | **22.67** | **79** | *e*P | | **P** | **16 58 39.0** | **-2.2** |
| WDLM | | | | IAmb | | IAmb | 16 58 51.2 | |
| | comp=Z,161nm,1.0s | | | | | | | |
| **KSTD** | **Kokstad** | **22.87** | **90** | *e*P | | **P** | **16 58 46.1** | **+2.7** |
| KSTD | | | | IAmb | | IAmb | 16 58 59.2 | |
| | comp=Z,275nm,1.4s | | | | | | | |
| **HRAO** | **HartRAO** | **23.10** | **78** | *e*P | | **P** | **16 58 42.2** | **-3.6** |
| **NHAM** | **Northam, North** | **23.23** | **75** | *e*P | | **P** | **16 58 46.3** | **-0.7** |
| NHAM | | | | IAmb | | IAmb | 16 59 02.5 | |
| | comp=Z,95nm,0.9s | | | | | | | |
| **NYAT** | **Nyati, Northwe** | **23.23** | **76** | *e*P | | **P** | **16 58 46.1** | **-1.0** |
| NYAT | | | | IAmb | | IAmb | 16 58 58.0 | |
| | comp=Z,377nm,1.1s | | | | | | | |
| **MTLB** | **Matlabas, Limp** | **23.54** | **72** | *e*P | | **P** | **16 58 51.2** | **+1.0** |
| MTLB | | | | IAmb | | IAmb | 16 59 01.1 | |
| | comp=Z,717nm,1.6s | | | | | | | |
| **TSWA** | **Tswaing Meteor** | **23.62** | **77** | *e*P | | **P** | **16 58 49.5** | **-1.5** |
| TSWA | | | | IAmb | | IAmb | 16 59 00.0 | |
| | comp=Z,185nm,1.2s | | | | | | | |
| **RUST** | **Rust De Winter** | **24.06** | **77** | *e*P | | **P** | **16 58 54.0** | **-1.2** |
| RUST | | | | IAmb | | IAmb | 16 59 04.7 | |
| | comp=Z,426nm,1.8s | | | | | | | |
| **LEPH** | **Lephalale, Lim** | **24.11** | **73** | *e*P | | **P** | **16 58 53.7** | **-2.0** |
| LEPH | | | | IAmb | | IAmb | 16 59 06.4 | |
| | comp=Z,326nm,1.0s | | | | | | | |
| **PMBG** | **Pietermaritzbu** | **24.17** | **88** | *e*P | | **P** | **16 58 58.1** | **+1.9** |
| PMBG | | | | IAmb | | IAmb | 16 59 07.0 | |
| | comp=Z,296nm,1.3s | | | | | | | |
| **NWCL** | **Newcastle** | **24.21** | **84** | *e*P | | **P** | **16 58 56.7** | **+0.1** |
| NWCL | | | | IAmb | | IAmb | 16 59 05.7 | |
| | comp=Z,231nm,1.2s | | | | | | | |
| **WTBG** | **Waterberg Wild** | **24.82** | **75** | *e*P | | **P** | **16 59 01.8** | **-0.4** |
| WTBG | | | | IAmb | | IAmb | 16 59 12.4 | |
| | comp=Z,367nm,1.6s | | | | | | | |
| **CRLN** | **Carolina, Mapu** | **24.98** | **80** | *e*P | | **P** | **16 59 04.0** | **+0.4** |
| CRLN | | | | IAmb | | IAmb | 16 59 13.0 | |
| | comp=Z,108nm,1.3s | | | | | | | |
| **CRAIL** | **Swartwater, Li** | **24.99** | **72** | *e*P | | **P** | **16 59 05.0** | **+1.3** |
| **DULL** | **Dullstroom, Mp** | **25.36** | **79** | *e*P | | **P** | **16 59 07.3** | **+0.1** |
| DULL | | | | IAmb | | IAmb | 16 59 17.0 | |
| | comp=Z,242nm,1.2s | | | | | | | |
| **POGA** | **Pongola** | **25.86** | **84** | P | | **P** | **16 59 10.3** | **-1.1** |
| POGA | | | | IAmb | | IAmb | 16 59 22.6 | |
| | comp=Z,224n

SNAA ⇑S S 17 06 54.1 -1.5
comp=Z,13µm,7.3s
**SNAA Sanae 38.38 183** P P 17 01 02.0 +1.4
comp=Z,27nm,0.9s,baz=351,slow=6.3,SNR=41
SNAA LR LR 17 12 47.9
comp=Z,2µm,21.6s,baz=11,slow=30
comp=Z,27nm,0.9s
**SNAA Sanae 38.38 183** *ce*P P 17 01 01.8 +1.2
SNAA pmax pmax
comp=Z,56nm,1.1s
**VNA3 Neumayer Olymp 38.41 186** ⇑P P 17 01 01.6 +0.8
comp=Z,32nm,0.7s
**TROLL Troll, Antarti 38.61 180** ⇑P P 17 01 04.2 +1.5
comp=Z,1µm,0.8s
TROLL ⇑S S 17 06 56.0 -3.2
comp=Z,1.8nm,0.1s
**FOMA Nahampoana Res 39.48 90** P P 17 01 11.5 +1.2
FOMA IAmb IAmb 17 01 21.5
comp=Z,199nm,1.7s
**ABR01 Abrolhos, BA 39.92 282** *e*P P 17 01 14.5 +0.5
**ELIB Princess Elisa 40.09 170** *d*P P 17 01 16.4 +1.4
comp=Z,27nm,0.9s
ELIB *d*PcP PcP 17 03 20.7 +1.3
**ALF01 Guarapari-ES 40.30 277** *e*P P 17 01 17.6 +0.4
**DBIC Dimbokro 40.52 349** P P 17 01 17.5 -1.3
**DBIC Dimbokro 40.52 349** *e*P P 17 01 18.2 -0.7
**DBIC Dimbokro 40.52 349** P P 17 01 17.7 -1.2
comp=Z,60nm,0.7s,baz=144,slow=9.1,SNR=36
DBIC LR LR 17 14 01.2
comp=Z,916nm,21.0s,baz=160,slow=30
comp=Z,60nm,0.7s
**VOI Vohitsoka 40.60 85** P P 17 01 20.5 +0.7
**VOI Vohitsoka 40.60 85** P P 17 01 22.0 +2.2
**RIB01 Linhares ES 40.65 279** *e*P P 17 01 20.3 +0.2
**DUB01 Friburgo-RJ 41.02 274** *e*P P 17 01 21.7 -1.4
**GUA01 Guaratinga, BA 41.54 283** *e*P P 17 01 27.8 +0.3
**SJMB Sao Joao De Ma 41.60 280** *e*P P 17 01 28.0 +0.1
**VAS01 Vassouras-RJ 41.82 273** *e*P P 17 01 30.1 +0.4
**MBAR Mbarara 42.08 45** P P 17 01 30.8 -1.2
**MBAR Mbarara 42.08 45** IAMs_20 IAMs_20 17 18 19.3
comp=Z,3µm,20.0s
**MBAR Mbarara 42.08 45** *e*P P 17 01 33.8 +1.8
MBAR IAmb IAmb 17 01 49.4
comp=Z,54nm,1.1s
**MBAR Mbarara 42.08 45** LR LR 17 18 38.3
comp=Z,3µm,18.1s,baz=204,slow=36
**MBAR Mbarara 42.08 45** P P 17 01 33.4 +1.4
**MBAR Mbarara 42.08 45** *ce*P P 17 01 33.9 +1.9
MBAR pmax pmax
comp=Z,54nm,1.1s
MBAR MLR MLR
comp=Z,3µm,17.0s
**ABPO Ambohimpanom 42.29 82** P P 17 01 33.4 -0.4
**ABPO Ambohimpanom 42.29 82** IAMs_20 IAMs_20 17 18 35.5
comp=Z,3µm,19.0s
**ABPO Ambohimpanom 42.29 82** *e*P P 17 01 38.4 +4.6
ABPO IAmb IAmb 17 01 46.2
comp=Z,83nm,1.5s
**ABPO Ambohimpanom 42.29 82** P P 17 01 33.4 -0.4
ABPO pmax pmax
comp=Z,81nm,1.5s
ABPO MLR MLR
comp=Z,3µm,19.0s
**OPO Ambohidratompo 42.48 81** LR LR 17 18 25.2
comp=Z,1µm,19.0s,baz=354,slow=35
**NBAN Anadia - AL 42.77 295** *e*P P 17 01 38.1 +0.6
**NBLA Lagarto - SE 43.11 292** *e*P P 17 01 40.7 +0.4
**PARB Paraibuna 43.20 271** *e*P P 17 01 41.4 +0.4
**BSCB Bom Sucesso 43.50 274** *e*P P 17 01 43.5 +0.1
**NBCA Caruaru-PE 43.50 296** *e*P P 17 01 44.0 +0.5
**DIAM Diamantina, MG 43.85 278** *e*P P 17 01 45.5 -0.9
**VAO Valinhos 44.46 270** P P 17 01 51.3 +0.2
VAO IAmb IAmb 17 01 54.6
comp=Z,320nm,1.7s
**VAO Valinhos 44.46 270** *e*P P 17 01 51.6 +0.5
**SPB Sao Paulo 44.60 269** P P 17 01 52.7 +0.5
SPB IAmb IAmb 17 01 55.7
comp=Z,140nm,1.8s
**SPB Sao Paulo 44.60 269** *e*P P 17 01 53.8 +1.7
**RCBR Riachuelo 45.00 299** P P 17 01 55.4 -0.1
RCBR IAmb IAmb 17 01 58.7
comp=Z,99nm,1.1s
**RCBR Riachuelo 45.00 299** LR LR 17 16 11.2
comp=Z,627nm,20.0s,baz=153,slow=30
**RCBR Riachuelo 45.00 299** P P 17 01 55.4 -0.1
RCBR pmax pmax
comp=Z,99nm,1.2s
RCBR MLR MLR
comp=Z,2µm,20.0s
**RCBR Riachuelo 45.00 299** *e*P P 17 01 56.6 +1.2
**RCLB Rio Claro- Sao 45.18 271** *e*P P 17 01 58.4 +1.5
**CNLB Canela 45.33 260** *e*P P 17 01 58.8 +0.8
**KIBK Kibwezi 45.41 55** P P 17 01 57.6 -1.2
**KIBK Kibwezi 45.41 55** P P 17 02 01.0 +2.2
**KIBK Kibwezi 45.41 55** P P 17 02 02.5 +3.7
SNR=7.4
**KMBO Kilima Mbogo 45.77 53** P P 17 02 02.0 +0.3
**KMBO Kilima Mbogo 45.77 53** IAMs_20 IAMs_20 17 20 06.0
comp=Z,3µm,19.0s
**KMBO Kilima Mbogo 45.77 53** *i* P P 17 02 04.4 +2.6
SNR=9.8
**KMBO Kilima Mbogo 45.77 53** LR LR 17 20 28.7
comp=Z,14nm,20.7s,baz=1.0,slow=35
**KMBO Kilima Mbogo 45.77 53** P P 17 02 05.4 +3.6
**KMBO Kilima Mbogo 45.77 53** P P 17 02 02.1 +0.3
KMBO pmax pmax
comp=Z,26nm,1.2s
KMBO MLR MLR
comp=Z,3µm,19.0s
**JANB Januaria 46.02 282** *e*P P 17 02 03.1 -0.5
**PMNB Patos De Minas 46.03 276** *e*P P 17 02 03.7 0.0
**TOA0 Torodi Ar. Sit 46.35 359** P P 17 02 04.8 -1.2
TOA0 IAmb IAmb 17 02 15.9
comp=Z,80nm,1.0s
TOA0 PcP PcP 17 03 41.7 +0.6
**TOA0 Torodi Ar. Sit 46.35 359** P P 17 02 07.0 +1.0
SNR=15
TOA0 P P 17 02 07.0 +1.0
SNR=15
**TORD Torodi Ar. Bea 46.35 359** P P 17 02 04.4 -1.5
TORD IAmb IAmb 17 02 15.8
comp=Z,80nm,1.0s
TORD PcP PcP 17 03 41.6 +0.5
**TORD Torodi Ar. Bea 46.35 359** P P 17 02 04.9 -1.1
comp=Z,35nm,0.8s,baz=171,slow=6.5,SNR=34
TORD PcP PcP 17 03 41.8 +0.7
comp=Z,24nm,0.8s,baz=109,slow=1.6,SNR=6.6
TORD LR LR 17 17 54.6
comp=Z,2µm,21.6s,baz=182,slow=32
comp=Z,35nm,0.8s
**FRTB Fartura 46.49 268** *e*P P 17 02 07.9 +0.7
**EFI East Falkland 46.75 228** *e*P P 17 02 07.9 -0.9
**EFI East Falkland 46.75 228** ⇑*e*P P 17 02 10.9 +2.1
EFI pmax pmax
comp=Z,50nm,1.2s
**PLTB Pedras Altas 46.80 256** P P 17 02 10.0 +0.4
PLTB IAmb IAmb 17 02 12.5
comp=Z,47nm,1.0s
**PLTB Pedras Altas 46.80 256** *e*P P 17 02 10.8 +1.3
**CPSB Cacapava Do Su 47.10 258** *e*P P 17 02 12.1 +0.3
**ITAB Concordia 47.11 262** P P 17 02 11.7 -0.3
ITAB PcP PcP 17 03 45.4 +1.6
**ITAB Concordia 47.11 262** *e*P P 17 02 13.2 +1.3
**ALGR Alto Alegre (B 47.30 260** *e*P P 17 02 14.3 +0.8
**SBV Sambava 47.37 77** P P 17 02 17.2 +3.2
**BELA Belgrano 2 47.37 190** P P 17 02 13.3 0.0
BELA PcP PcP 17 03 44.4 +0.5
**LDASE Londrina, Braz 47.77 268** *e*P P 17 02 18.4 +1.2
**IPMB Ipameri, GO 47.77 276** *e*P P 17 02 17.3 0.0
**NBCL Cascavel-CE 47.83 298** *e*P P 17 02 18.8 +1.1
**NBPB Pedra_Branca-C 47.92 296** *e*P P 17 02 19.6 +1.3
**SDBA SAO DESIDERIO 47.94 284** *e*P P 17 02 18.4 -0.3
**PTGB Pitanga 48.02 266** *e*P P 17 02 20.7 +1.6
**LODK Lodwar 48.05 47** P P 17 02 18.3 -1.1
LODK IAMs_20 IAMs_20 17 23 14.2
comp=Z,2µm,18.0s
**LODK Lodwar 48.05 47** P P 17 02 20.1 +0.7
SNR=20
**MAW Mawson 48.30 154** P P 17 02 21.7 +1.2
comp=Z,5.6nm,0.7s,baz=282,slow=10.0,SNR=5.7
MAW PcP PcP 17 03 47.8 +0.5
comp=Z,9.6nm,0.8s,baz=243,slow=4.5,SNR=5.2
MAW LR LR 17 18 06.5
comp=Z,2µm,21.7s,baz=300,slow=30
comp=Z,5.6nm,0.7s

**RER Riviere de l'E 48.40 89** P P 17 02 19.1 -3.0
RER IAmb IAmb 17 02 34.6
comp=Z,60nm,1.0s
**RODS Rosario do Sul 48.55 257** *e*P P 17 02 23.7 +0.6
**CRSM Crissiumal (Br 48.60 261** *e*P P 17 02 23.9 +0.4
**PCMB Pacaembu 48.65 270** *e*P P 17 02 25.0 +1.1
**ITRB Iturama 48.75 272** *e*P P 17 02 25.7 +0.9
**BDFB Brasilia 48.77 279** P P 17 02 24.1 -0.9
**BDFB Brasilia 48.77 279** *e*P P 17 02 25.2 +0.1
comp=Z,76nm,0.9s,baz=112,slow=7.1,SNR=32
BDFB LR LR 17 18 59.0
comp=Z,2µm,19.9s,baz=127,slow=31
comp=Z,76nm,0.9s
**TRCB Terra Rica 49.28 268** P P 17 02 27.9 -1.0
TRCB IAmb IAmb 17 02 32.7
comp=Z,148nm,1.3s
**TRCB Terra Rica 49.28 268** *e*P P 17 02 30.2 +1.3
**ITQB Itaqui 49.94 257** P P 17 02 34.2 +0.5
**ITQB Itaqui 49.94 257** *e*P P 17 02 34.9 +1.2
**PMSA Palmer Station 50.33 211** P P 17 02 36.5 +0.3
PMSA IAmb IAmb 17 02 39.5
comp=Z,88nm,0.9s
**PMSA Palmer Station 50.33 211** LR LR 17 19 07.6
comp=Z,1µm,20.2s,baz=72,slow=30
**PMSA Palmer Station 50.33 211** *e*P P 17 02 37.3 +1.1
**BBTS Babate 51.18 336** P P 17 02 44.4 +1.3
comp=Z,65nm,0.8s,baz=276,slow=2.3,SNR=8.7
BBTS LR LR 17 20 05.5
comp=Z,3µm,20.3s,baz=26,slow=31
comp=Z,65nm,0.8s
**TRQA Tornquist 51.60 245** P P 17 02 45.2 -0.9
TRQA IAmb IAmb 17 02 48.6
comp=Z,137nm,1.1s
**TRQA Tornquist 51.60 245** P P 17 02 45.3 -0.9
TRQA pmax pmax
comp=Z,137nm,1.1s
**CPUP Villa Florida 51.75 261** P P 17 02 46.3 -1.1
CPUP IAmb IAmb 17 02 50.0
comp=Z,81nm,1.4s
**CPUP Villa Florida 51.75 261** P P 17 02 47.2 -0.3
comp=Z,30nm,1.1s,baz=100,slow=6.4,SNR=17
CPUP LR LR 17 20 47.9
comp=Z,2µm,19.5s,baz=116,slow=32
comp=Z,30nm,1.1s
**CPUP Villa Florida 51.75 261** *e*P P 17 02 47.2 -0.3
**SMAI San Martin Ant 51.84 207** P P 17 02 47.8 +0.4
SMAI IAmb IAmb 17 02 51.1
comp=Z,91nm,1.1s
**ARAG Araguaiana, MT 51.88 276** *e*P P 17 02 49.1 +0.6
**SMTB Santa Maria do 52.12 286** *e*P P 17 02 50.6 +0.2
**MG01 Puerto William 52.26 223** P P 17 02 51.1 +0.4
MG01 IAmb IAmb 17 02 54.9
comp=Z,133nm,1.0s
**AQDB Aquidauana 52.86 269** P P 17 02 55.0 -0.8
AQDB IAmb IAmb 17 02 59.3
comp=Z,226nm,1.5s
**AQDB Aquidauana 52.86 269** *e*P P 17 02 56.4 +0.6
**SNDB Serra Nova Dou 53.40 280** *e*P P 17 03 00.1 +0.4
**PAPY Pozo Azul 53.40 263** *e*P P 17 03 01.5 +1.8
**MURT Porto Murtinho 53.93 266** *e*P P 17 03 03.6 0.0
**SACV Santiago Islan 54.22 328** P P 17 03 04.0 -1.7
SACV IAmb IAmb 17 03 08.7
comp=Z,54nm,1.1s
**FURI Furi 54.37 46** IAMs_20 IAMs_20 17 26 11.7
comp=Z,2µm,18.0s
**FURI Furi 54.37 46** LR LR 17 26 31.3
comp=Z,2µm,18.1s,baz=218,slow=36
**GO10 Punta Arenas 54.51 225** P P 17 03 07.9 +0.4
**MG04 Isla Riesco 54.87 225** P P 17 03 10.5 +0.5
**SALV Santo Antonio 55.02 274** *e*P P 17 03 12.6 +1.0
**ROCAM Rodrigues Isla 55.41 92** P P 17 03 15.7 +1.4
**PRPB Paraiapebas 55.48 287** *e*P P 17 03 15.2 +0.2
**GO09 Cerro Castillo 55.65 227** P P 17 03 16.0 +0.3
GO09 IAmb IAmb 17 03 18.6
comp=Z,89nm,1.1s
**MG05 Puerto Natales 55.67 227** P P 17 03 15.5 -0.2
MG05 IAmb IAmb 17 03 18.4
comp=Z,107nm,1.1s
**TAM Tamanrasset 56.01 3** P P 17 03 18.8 +0.2
**TAM Tamanrasset 56.01 3** P P 17 03 18.8 +0.2
TAM pmax pmax
comp=Z,16nm,1.0s
TAM MLR MLR
comp=Z,500nm,19.0s
**GO08 Villa O'Higgin 56.43 231** P P 17 03 22.0 +0.7
**TMAB Tom-Au,PA,Br 56.45 292** *e*P P 17 03 22.3 +0.5
**AY03 Cochrane 56.76 232** P P 17 03 23.8 +0.2
**QSPA South Pole Qui 56.78 180** P P 17 03 24.7 +1.0
QSPA IAmb IAmb 17 03 29.8
comp=Z,74nm,1.0s
**QSPA South Pole Qui 56.78 180** IAMs_20 IAMs_20 17 24 00.4
comp=Z,3µm,21.0s
**QSPA South Pole Qui 56.78 180** P P 17 03 25.1 +1.4
comp=Z,51nm,0.8s,baz=234,slow=2.9,SNR=102
QSPA LR LR 17 24 22.9
comp=Z,2µm,21.6s,baz=216,slow=32
comp=Z,51nm,0.8s
**COYC Coyhaique 56.86 234** P P 17 03 24.1 -0.3
**PLCA Paso Flores 57.19 240** P P 17 03 26.9 0.0
PLCA IAmb IAmb 17 03 29.7
comp=Z,62nm,1.3s
**PLCA Paso Flores 57.19 240** P P 17 03 27.6 +0.6
comp=Z,18nm,1.1s,baz=99,slow=6.7,SNR=12
PLCA LR LR 17 23 27.7
comp=Z,996nm,21.0s,baz=108,slow=31
comp=Z,18nm,1.1s
**PLCA Paso Flores 57.19 240** *e*P P 17 03 27.8 +0.9
**AY02 Valle Explorad 57.36 233** P P 17 03 27.9 0.0
**LL02 Futaleuf 57.38 237** P P 17 03 27.6 -0.5
**CLDB Colider 57.70 279** *e*P P 17 03 31.1 +0.3
**LL01 San Ignacio de 58.02 238** P P 17 03 31.8 -0.8
**PDRB Porto dos Gac 58.08 277** *e*P P 17 03 33.6 +0.2
**PTLB Pontes e Lacer 58.12 272** P P 17 03 32.5 -1.1
PTLB IAmb IAmb 17 03 37.1
comp=Z,46nm,1.1s
**PTLB Pontes e Lacer 58.12 272** *e*P P 17 03 34.9 +1.3
**GO06 Curarrehue 58.23 241** P P 17 03 32.5 -1.7
**LL03 Petrohue 58.40 239** P P 17 03 34.1 -1.2
LL03 IAMs_20 IAMs_20 17 30 33.1
comp=Z,1µm,18.0s
**LR05 Currie 58.40 240** P P 17 03 34.2 -1.1
LR05 IAmb IAmb 17 03 37.2
comp=Z,57nm,1.1s
**BBSD Serra de San D 58.50 269** *e*P P 17 03 37.3 +0.9
**LR03 Panguipulli 58.85 241** P P 17 03 37.6 -0.8
**ZON Zonda 58.95 251** IAmb IAmb 17 03 41.3
comp=Z,39nm,1.1s
**ATD Arta Tunnel 58.97 48** P P 17 03 38.6 -0.9
ATD IAmb IAmb 17 03 53.0
comp=Z,68nm,1.4s
ATD IAMs_20 IAMs_20 17 31 00.8
comp=Z,2µm,19.0s
**ATD Arta Tunnel 58.97 48** LR LR 17 29 53.2
comp=Z,39nm,18.1s,baz=208,slow=37
**ATD Arta Tunnel 58.97 48** P P 17 03 41.4 +1.8
**BI02 San Fabin de 59.07 244** IAMs_20 IAMs_20 17 24 14.9
comp=Z,2µm,18.0s
**LL05 Los Muermos 59.08 238** P P 17 03 39.2 -0.8
**LMEL Las Melosas 59.27 248** IAmb IAmb 17 03 46.6
comp=Z,71nm,1.2s
**MT08 Bocatoma Ro 59.27 248** IAmb IAmb 17 03 45.3
comp=Z,45nm,1.0s
**BO02 Sierra Bellavi 59.37 246** P P 17 03 41.8 -0.5
BO02 IAmb IAmb 17 03 45.0
comp=Z,95nm,1.1s
**MT13 San Alfonso 59.37 248** IAmb IAmb 17 03 48.3
comp=Z,35nm,0.9s
MT13 IAMs_20 IAMs_20 17 24 00.0
comp=Z,2µm,19.0s
**NPGB Novo Progresso 59.45 283** *e*P P 17 03 43.1 +0.1
**SIV San Ignacio 59.47 270** LR LR 17 26 10.9
comp=Z,4µm,18.2s,baz=122,slow=33
**BO04 La Punta 59.53 247** P P 17 03 42.3 -1.1
BO04 IAmb IAmb 17 03 45.8
comp=Z,94nm,1.1s
BO04 IAMs_20 IAMs_20 17 24 30.2
comp=Z,2µm,19.0s
**AIS Amsterdam Isla 59.63 117** P P 17 03 44.3 +0.5
**MT03 Universidad Ad 59.64 248** P P 17 03 44.2 +0.1
MT03 IAMs_20 IAMs_20 17 25 07.1
comp=Z,1µm,20.0s
**BO01 Tunca 59.75 247** P P 17 03 43.5 -1.2
BO01 IAmb IAmb 17 03 47.0
comp=Z,88nm,1.1s
**VA03 San Esteban 59.95 249** P P 17 03 45.3 -1.0

VA03 IAmb IAmb 17 03 49.2
comp=Z,133nm,1.4s
**MT01 Popeta 60.07 247** IAmb IAmb 17 03 54.7
comp=Z,39nm,1.0s
**GO05 Huala 60.16 246** IAmb IAmb 17 03 49.9
comp=Z,118nm,1.5s
**MT02 Curacav 60.21 248** IAmb IAmb 17 03 50.3
comp=Z,73nm,1.2s
MT02 IAMs_20 IAMs_20 17 24 12.3
comp=Z,1µm,21.0s
**VILB Vilhena 60.27 274** P P 17 03 47.6 -1.0
VILB IAmb IAmb 17 03 52.2
comp=Z,87nm,1.0s
VILB IAMs_20 IAMs_20 17 26 45.0
comp=Z,1µm,18.0s
**VILB Vilhena 60.27 274** *e*P P 17 03 50.2 +1.6
**VA06 Catapilco 60.61 249** IAmb IAmb 17 03 52.9
comp=Z,134nm,1.4s
**CO01 Juntas del Tor 60.68 252** IAmb IAmb 17 03 55.5
comp=Z,124nm,1.2s
CO01 IAMs_20 IAMs_20 17 28 05.7
comp=Z,2µm,19.0s
**MCPB Macapa, AP 60.78 291** *e*P P 17 03 52.5 +0.5
**CO03 El Pedregal 60.81 251** P P 17 03 51.6 -0.6
CO03 IAmb IAmb 17 03 55.0
comp=Z,94nm,1.3s
**CO02 Combarbal 60.91 250** IAmb IAmb 17 04 39.1
comp=Z,91nm,1.5s
**AC05 El Transito 61.29 253** IAmb IAmb 17 03 58.5
comp=Z,138nm,1.4s
AC05 IAMs_20 IAMs_20 17 26 26.8
comp=Z,2µm,20.0s
**ITTB Itaituba 61.30 285** *e*P P 17 03 56.0 +0.4
**MAL2 Monte Alegre, 61.44 288** P P 17 03 55.1 -1.5
**LCO Las Campanas 61.56 252** P P 17 03 56.2 -1.3
LCO IAmb IAmb 17 03 60.0
comp=Z,82nm,1.4s
**LCO Las Campanas 61.56 252** P P 17 03 56.2 -1.3
LCO pmax pmax
comp=Z,82nm,1.5s
**AC06 Mina Casimiro 61.97 254** P P 17 03 58.9 -1.1
AC06 IAmb IAmb 17 04 02.7
comp=Z,82nm,1.2s
**GO02 Mina Guanaco 62.30 257** IAmb IAmb 17 04 23.8
comp=Z,94nm,1.6s
**LVC Limon Verde 62.88 260** P P 17 04 04.7 -1.8
**LVC Limon Verde 62.88 260** IAMs_20 IAMs_20 17 29 15.9
comp=Z,1µm,19.0s
**LVC Limon Verde 62.88 260** LR LR 17 29 09.4
comp=Z,902nm,18.1s,baz=126,slow=34
**LVC Limon Verde 62.88 260** P P 17 04 04.7 -1.8
LVC pmax pmax
comp=Z,216nm,1.7s
LVC MLR MLR
comp=Z,1µm,19.0s
**LVC Limon Verde 62.88 260** *e*P P 17 04 07.4 +0.8
**PB14 IPOC Station P 63.20 257** IAmb IAmb 17 04 15.8
comp=Z,59nm,1.3s
**EOSO Osorio 63.55 342** P P 17 04 11.6 +1.3
**PB05 IPOC Station P 63.83 259** IAMs_20 IAMs_20 17 31 13.1
comp=Z,1µm,18.0s
**MACI Morro de la Ar 63.97 341** IAMs_20 IAMs_20 17 27 26.9
comp=Z,1µm,20.0s
**PB01 IPOC Station P 64.07 261** P P 17 04 12.8 -1.4
PB01 IAmb IAmb 17 04 16.2
comp=Z,50nm,0.9s
**GO01 Chusmiza 64.47 263** IAmb IAmb 17 04 19.0
comp=Z,34nm,1.0s
**MDP Montagnes des 64.70 295** LR LR 17 29 57.5
comp=Z,811nm,18.4s,baz=127,slow=34
**TIO Tiouine 64.70 351** P P 17 04 17.9 -0.1
**SAML Samuel 64.86 276** P P 17 04 18.8 -0.5
**SAML Samuel 64.86 276** P P 17 04 18.8 -0.5
SAML pmax pmax
comp=Z,217nm,1.4s
SAML MLR MLR
comp=Z,3µm,18.0s
**SAML Samuel 64.86 276** *e*P P 17 04 20.1 +0.8
**TA02 Huaiquique 64.97 261** IAMs_20 IAMs_20 17 30 10.3
comp=Z,2µm,22.0s
**LPAZ La Paz 65.22 266** P P 17 04 20.3 -2.1
**LPAZ La Paz 65.22 266** P P 17 04 21.3 -1.1
comp=Z,13nm,0.8s,baz=110,slow=4.4,SNR=36
LPAZ LR LR 17 30 16.5
comp=Z,2µm,18.9s,baz=114,slow=34
LPAZ PKP2ab 17 33 14.0
comp=Z,2.8nm,1.2s,baz=33,slow=2.3,SNR=3.8
comp=Z,13nm,0.8s
**LPAZ La Paz 65.22 266** *e*P P 17 04 21.6 -0.7
**MACA Manacapuru-AM 66.01 283** P P 17 04 25.3 -1.4
MACA IAMs_20 IAMs_20 17 29 36.1
comp=Z,1µm,20.0s
**MACA Manacapuru-AM 66.01 283** *e*P P 17 04 27.2 +0.5
**AP01 Chacalluta 66.05 263** IAMs_20 IAMs_20 17 31 34.0
comp=Z,1µm,18.0s
**TATN Tataouine 66.12 7** P P 17 04 26.1 -0.8
TATN IAmb IAmb 17 04 46.4
comp=Z,35nm,0.7s
**MDT Midelt 66.26 353** P P 17 04 29.3 +1.4
comp=Z,13nm,0.9s,baz=174,slow=4.4,SNR=12
MDT LR LR 17 30 03.0
comp=Z,2µm,22.0s,baz=186,slow=33
comp=Z,13nm,0.9s
**CASY Casey 66.60 155** P P 17 04 29.0 -0.6
**ETMB Extrema 66.92 273** *e*P P 17 04 32.5 0.0
**IFR Ifrane 67.01 353** P P 17 04 32.9 +0.1
**AVE Averroes 67.06 351** IAMs_20 IAMs_20 17 29 32.6
comp=Z,1µm,20.0s
**FUL Funchal 68.25 342** *e*P P 17 04 42.7 +2.3
**PMAR Madeira 68.33 342** *e*P P 17 04 45.8 +4.7
**CHAS Isla Isabel II 68.44 356** P P 17 04 40.9 -0.7
**PMOZ Porto Moniz, M 68.49 342** *e*P P 17 04 46.5 +4.4
PMOZ *e*S S 17 13 52.4 +7.8
PMOZ *e*LQ LQ 17 22 47.4
PMOZ *e*LR LR 17 25 44.4
comp=Z,426nm,20.0s
**PMPS Porto Santo 68.50 343** *e*P P 17 04 43.3 +1.3
comp=Z,222nm,1.7s
**PMPST Porto Santo, M 68.52 343** *e*P P 17 04 45.7 +3.6
comp=Z,225nm,1.8s
**SBA Scott Base 68.54 176** P P 17 04 41.6 -0.2
SBA IAmb IAmb 17 04 55.5
comp=Z,113nm,1.4s
**SBA Scott Base 68.54 176** IAMs_20 IAMs_20 17 30 44.2
comp=Z,1µm,22.0s
**SBA Scott Base 68.54 176** P P 17 04 41.6 -0.2
SBA pmax pmax
comp=Z,113nm,1.5s
SBA MLR MLR
comp=Z,1µm,22.0s
**VNDA Vanda 68.57 175** P P 17 04 41.7 -0.2
VNDA IAmb IAmb 17 04 55.6
comp=Z,40nm,1.1s
**VNDA Vanda 68.57 175** P P 17 04 44.2 +2.3
comp=Z,15nm,0.8s,baz=230,slow=5.1,SNR=78
VNDA LR LR 17 32 11.1
comp=Z,1µm,20.7s,baz=184,slow=34
VNDA PKPPKP P'P'df 17 32 56.2 -8.6
comp=Z,1.4nm,1.0s,baz=284,slow=5.5,SNR=3.7
comp=Z,15nm,0.8s
**TEFE Tefe 69.05 280** *e*P P 17 04 46.3 +0.4
**KEST Kesra 69.13 6** IAmb IAmb 17 04 49.6
comp=Z,63nm,1.2s
**KEST Kesra 69.13 6** P P 17 04 47.9 +2.0
comp=Z,38nm,1.1s,baz=143,slow=3.2,SNR=21
KEST LR LR 17 33 12.2
comp=Z,578nm,20.1s,baz=143,slow=34
comp=Z,38nm,1.1s
**KEST Kesra 69.13 6** P P 17 04 47.0 +1.1
SNR=12
**BOAV Boa Vista 69.14 288** P P 17 04 45.0 -1.5
BOAV IAmb IAmb 17 04 49.1
comp=Z,152nm,1.7s
**BOAV Boa Vista 69.14 288** *e*P P 17 04 46.3 -0.2
**ECEU Ceuta 69.39 353** P P 17 04 47.7 +0.2
**CEU Ceuta 69.39 353** P P 17 04 47.7 +0.2
**EIL Elat 69.89 30** P P 17 04 51.8 +1.1
comp=Z,16nm,0.8s,baz=231,slow=3.1,SNR=15
EIL LR LR 17 34 32.4
comp=Z,822nm,18.3s,baz=234,slow=35
comp=Z,16nm,0.8s
**RAYN Ar Rayn 69.91 42** P P 17 04 49.6 -1.5
RAYN IAmb IAmb 17 04 54.7
comp=Z,32nm,0.8s
**RAYN Ar Rayn 69.91 42** IAMs_20 IAMs_20 17 36 59.7
comp=Z,1µm,18.0s

RAYN Ar Rayn 69.91 42 *i* P P 17 04 52.0 +1.0
SNR=31
RAYN Ar Rayn 69.91 42 P P 17 04 52.6 +1.6
RAYN Ar Rayn 69.91 42 P P 17 04 52.7 +1.6
EMAL Malaga-Limoner 70.16 354 P P 17 04 52.2 +0.1
EBER Berja 70.17 355 P P 17 04 52.8 +0.3
ELGU Los Guajares, 70.20 355 P P 17 04 52.2 -0.3
ENIJ Nijar 70.21 356 P P 17 04 53.1 +0.6
LIJA Lijar 70.39 353 P P 17 04 53.1 -0.7
WHFO Wadi Hawf 70.72 52 P P 17 04 59.1 +3.0
PBDV Barranco-do-Ve 71.01 351 *e*P P 17 04 58.0 +0.6
comp=Z,56nm,1.3s
PBDV eS S 17 14 17.4 +3.6
PFVI Vila Bisbo 71.02 350 IAMs_20 IAMs_20 17 32 07.5
comp=Z,1μm,21.0s
PFVI Vila Bisbo 71.02 350 *e*P P 17 04 58.7 +1.3
comp=Z,122nm,1.8s
PFVI Vila Bisbo 71.02 350 *e*PP PP 17 07 36.8 +1.5
PFVI eS S 17 14 19.6 +5.7
PVAQ Vaqueiros 71.14 351 *e*P P 17 04 58.8 +0.7
comp=Z,45nm,1.6s
PVAQ Vaqueiros 71.14 351 *e*PP PP 17 07 39.4 +3.1
PVAQ eS S 17 14 16.8 +1.5
PVAQ eSS SS 17 18 51.5 +1.9
PVAQ eLQ LQ 17 24 40.8
PVAQ eLR LR 17 27 15.5
comp=Z,433nm,18.0s
MORF Marmelete 71.17 351 IAMs_20 IAMs_20 17 31 30.4
comp=Z,2μm,22.0s
MORF Marmelete 71.17 351 *e*P P 17 04 59.8 +1.4
comp=Z,61nm,1.4s
MORF eS S 17 14 19.8 +4.1
MORF eSS SS 17 18 58.4 +8.4
MORF Marmelete 71.17 351 *e*P P 17 04 58.0 -0.3
MORF IAMs_20 IAMs_20 17 30 59.6
comp=Z,3μm,30.7s
MORF Marmelete 71.17 351 *e*P P 17 04 58.0 -0.3
DMTO DMTO 71.35 53 P P 17 05 01.9 +2.0
PCVE Castro Verde 71.41 351 *e*P P 17 05 00.3 +0.5
comp=Z,59nm,1.5s
PCVE eS S 17 14 20.9 +2.5
PTEO Sao Teotonio 71.41 351 *e*P P 17 05 03.4 +3.6
VAE Valguarnera 71.44 10 LR LR 17 35 45.2
comp=Z,719nm,18.7s,baz=170,slow=35
DOK Doka 71.45 52 P P 17 05 02.4 +1.9
DOK P P 17 05 02.4 +1.9
IDI Anoyia 71.53 19 P P 17 05 01.3 +0.7
comp=Z,26nm,0.9s,baz=333,slow=12,SNR=4.9
IDI LR LR 17 35 49.5
comp=Z,334nm,20.9s,baz=166,slow=35
comp=Z,26nm,0.9s
GHAJ Ghor Haditha 71.58 29 IAmb IAmb 17 05 16.0
comp=Z,162nm,1.8s
GHAJ IAMs_20 IAMs_20 17 36 17.6
comp=Z,1μm,20.0s
MESJ Messejana 71.63 351 P P 17 04 60.0 -1.2
MESJ Messejana 71.63 351 *e*P P 17 05 01.7 +0.6
comp=Z,48nm,1.3s
MESJ Messejana 71.63 351 *e*P P 17 05 00.8 -0.3
MESJ eS S 17 14 20.4 -0.6
MESJ IAMs_20 IAMs_20 17 31 27.7
comp=Z,1μm,29.1s
MESJ Messejana 71.63 351 *e*P P 17 05 00.8 -0.3
MESJ eS S 17 14 20.4 -0.6
PBAR Barrancos 71.82 352 *e*P P 17 05 03.2 +1.0
comp=Z,42nm,1.5s
PBAR eS S 17 14 24.6 +1.5
PBAR eSS SS 17 19 02.6 +2.6
PNCL Nicolau / Gran 71.94 351 *e*P P 17 05 04.2 +1.2
comp=Z,65nm,1.4s
PNCL Nicolau / Gran 71.94 351 *e*PP PP 17 07 48.3 +5.1
PNCL eS S 17 14 25.7 +1.2
PNCL eSS SS 17 19 03.2 +1.4
EVO Evora 72.29 351 *e*P P 17 05 06.8 +1.8
comp=Z,46nm,1.5s
BALJ Balqa 72.29 29 IAMs_20 IAMs_20 17 34 30.5
comp=Z,877nm,19.0s
KARP Karpathos 72.42 21 IAmb IAmb 17 05 09.2
comp=Z,98nm,0.9s
KARP Karpathos 72.42 21 P P 17 05 07.7 +1.7
comp=Z,136nm,1.2s
PESTR Estremoz 72.57 352 P P 17 05 05.4 -1.3
PESTR IAmb IAmb 17 05 13.8
comp=Z,65nm,1.4s
PESTR Estremoz 72.57 352 *e*P P 17 05 09.3 +2.6
comp=Z,64nm,2.1s
PESTR Estremoz 72.57 352 *e*PP PP 17 07 55.8 +7.3
PESTR eS S 17 14 35.5 +3.8
PESTR eSS SS 17 19 13.6 +2.1
ITM Ithomi 72.57 16 IAmb IAmb 17 05 09.7
comp=Z,60nm,1.3s
LIS Lisbon 72.62 350 *e*P P 17 05 06.7 -0.3
LIS IAMs_20 IAMs_20 17 31 24.0
comp=Z,3μm,33.7s
LIS Lisbon 72.62 350 *e*P P 17 05 06.7 -0.3
PMTG Montargil 72.85 351 *e*P P 17 05 08.9 +0.6
comp=Z,67nm,1.4s
PMTG eS SKiKP 17 14 37.8 -4.8
VSL Villasalto 72.87 6 P P 17 05 07.1 -1.4
VSL IAMs_20 IAMs_20 17 36 05.4
comp=Z,861nm,19.0s
ASF Jabal al Asfar 72.89 30 P P 17 05 11.1 +2.2
comp=Z,32nm,1.1s,baz=194,slow=0.0,SNR=22
comp=Z,32nm,1.1s
PAB San Pablo 72.92 354 P P 17 05 07.4 -1.5
PAB San Pablo 72.92 354 IAMs_20 IAMs_20 17 33 38.6
comp=Z,927nm,21.0s
PAB San Pablo 72.92 354 P P 17 05 07.4 -1.5
PAB pmax pmax
comp=Z,14nm,0.9s
PAB MLR MLR
comp=Z,900nm,21.0s
MMAI Mount Meron Ar 73.01 28 P P 17 05 11.6 +2.0
comp=Z,22nm,1.0s,baz=193,slow=2.6,SNR=8.5
MMAI LR LR 17 37 16.8
comp=Z,727nm,18.6s,baz=156,slow=36
comp=Z,22nm,1.0s
ESDC Sonseca Array 73.01 355 P P 17 05 08.1 -1.3
ESDC Sonseca Array 73.01 355 P P 17 05 08.8 -0.6
comp=Z,18nm,1.2s,baz=182,slow=5.6,SNR=35
ESDC PP PP 17 07 47.2 -5.2
comp=Z,2.9nm,1.1s,baz=181,slow=5.8,SNR=3.4
ESDC LR LR 17 36 05.6
comp=Z,326nm,20.4s,baz=178,slow=35
comp=Z,18nm,1.2s
TBTG Tabatinga, AM 73.04 276 *e*P P 17 05 10.2 0.0
PMRV Marv??o 73.10 352 *e*P P 17 05 12.7 +2.8
comp=Z,68nm,1.4s
PMRV Marv??o 73.10 352 *e*PP PP 17 07 56.1 +3.0
PMRV eS SKiKP 17 14 43.8 +0.8
PMRV eSS SS 17 19 20.7 +1.1
PMRV eLR LR 17 28 02.6
comp=Z,786nm,20.0s
ARG Arkhangelos 73.33 21 P P 17 05 10.6 -0.7
ARG IAmb IAmb 17 05 14.3
comp=Z,69nm,1.0s
ARG Arkhangelos 73.33 21 P P 17 05 10.6 -0.7
ARG pmax pmax
comp=Z,69nm,1.0s
PSBE So Bento 73.36 351 *e*P P 17 05 15.8 +4.4
PSBE eS SKiKP 17 14 43.4 0.0
CZSB Cruzeiro do Su 73.45 272 P P 17 05 11.0 -1.7
CZSB IAmb IAmb 17 05 13.9
comp=Z,220nm,1.8s
CZSB Cruzeiro do Su 73.45 272 *e*P P 17 05 12.0 -0.6
TIP Timpagrande 73.47 12 IAmb IAmb 17 05 15.4
comp=Z,70nm,1.1s
TIP Timpagrande 73.47 12 ⇑P P 17 05 13.0 +0.8
TIP Timpagrande 73.47 12 P P 17 05 13.1 +1.0
comp=Z,53nm,1.1s,comp=Z,679nm
PCAS Casmilo, Conde 73.85 351 *e*P P 17 05 15.8 +1.5
PCAS eS S 17 14 47.0 +0.8
SMRA Abu-Samra 73.91 45 P P 17 05 16.8 +1.8
SLWR Sila 73.92 46 P P 17 05 17.3 +2.3
SLWR P P 17 05 17.3 +2.3
CSS Mathiatis 73.94 26 IAmb IAmb 17 05 18.6
comp=Z,84nm,1.0s
CSS Mathiatis 73.94 26 P P 17 05 16.4 +1.5
comp=Z,103nm,1.1s,comp=Z,1μm
COI Coimbra 73.99 351 *e*P P 17 05 18.0 +2.9
KAAM Kaadhehdhoo 74.06 79 P P 17 05 15.4 -0.8
KAAM IAmb IAmb 17 05 20.3
comp=Z,144nm,1.1s
KAAM Kaadhehdhoo 74.06 79 P P 17 05 19.6 +3.4
MTE Manteigas 74.08 352 P P 17 05 14.3 -1.3

MTE Manteigas 74.08 352 *e*P P 17 05 16.7 +1.0
comp=Z,59nm,1.7s
MTE eS S 17 14 53.4 +4.5
MTE eSS SS 17 19 34.4 -0.2
MTE eLQ LQ 17 23 12.3
MTE eLR LR 17 28 25.6
comp=Z,510nm,22.0s
TRNA Turayna 74.14 45 P P 17 05 19.1 +2.8
MZR Muzera 74.22 48 *i* P P 17 05 18.5 +1.6
SNR=14
MZR Muzera 74.22 48 P P 17 05 19.4 +2.5
ELL Elmali 74.38 23 IAmb IAmb 17 05 21.2
comp=Z,123nm,1.0s
AGG Agios Georgios 74.42 16 IAmb IAmb 17 05 20.8
comp=Z,70nm,1.1s
PVIS Viseu 74.43 352 *e*P P 17 05 17.9 +0.2
comp=Z,42nm,1.1s
DQM DQM 74.64 53 P P 17 05 20.7 +1.4
NNA Nana 74.67 266 P P 17 05 19.6 -0.1
NNA Nana 74.67 266 LR LR 17 37 09.9
comp=Z,1μm,18.2s,baz=140,slow=35
NNA Nana 74.67 266⇓ *e*P P 17 05 20.8 +1.0
NNA pmax pmax
comp=Z,47nm,0.9s
MVO Moncorvo 74.77 353 *e*P P 17 05 20.7 +1.0
comp=Z,56nm,1.9s
MVO eS S 17 15 01.1 +4.4
MVO eSS SS 17 19 47.5 +2.3
MVO eLQ LQ 17 23 18.4
MVO eLR LR 17 29 01.1
comp=Z,713nm,22.0s
MATE Matera 74.90 11 ⇑P P 17 05 20.8 +0.5
PAOL Paolisi 74.95 9 IAmb IAmb 17 05 23.3
comp=Z,56nm,1.1s
POLO Lamas de Olo 75.07 352 *e*P P 17 05 22.3 +0.9
comp=Z,18nm,1.6s
POLO Lamas de Olo 75.07 352 *e*PP PP 17 08 11.4 +1.5
POLO eS S 17 15 02.3 +2.3
POLO eSS SS 17 19 49.8 +0.1
PBRG Braganca 75.38 353 *e*P P 17 05 24.9 +1.8
comp=Z,42nm,1.4s
CMLA Cha da Macela 75.51 337 P P 17 05 22.4 -1.6
CMLA IAmb IAmb 17 05 27.7
comp=Z,102nm,0.9s
CMLA Cha da Macela 75.51 337 P P 17 05 22.4 -1.6
CMLA pmax pmax
comp=Z,102nm,1.0s
KBD Kabd 75.57 40 P P 17 05 26.7 +2.2
KBN Korca 75.62 14 IAmb IAmb 17 05 28.5
comp=Z,72nm,1.2s
MHTO MHTO 75.67 53 P P 17 05 26.1 +0.9
MHTO P P 17 05 26.1 +0.9
CEST Esterri de Car 75.70 359 P P 17 05 24.3 -0.7
CEST IAmb IAmb 17 05 27.9
comp=Z,58nm,1.4s
CEST IAMs_20 IAMs_20 17 35 29.3
comp=Z,1μm,21.0s
PGAV Gavieira, Arco 75.71 352 *e*P P 17 05 25.5 +0.4
PGAV eS S 17 15 10.5 +3.4
PGAV eSS SS 17 20 01.8 +2.4
PGAV eLR LR 17 28 58.7
comp=Z,1μm,22.0s
FNA Florina 75.90 15 IAmb IAmb 17 05 29.6
comp=Z,92nm,0.9s
OHR Ohrid 76.09 14 *i* P P 17 05 28.9 +1.6
TIR Tirane 76.14 13 P P 17 05 27.3 -0.1
TIR IAmb IAmb 17 05 42.7
comp=Z,47nm,0.9s
TIR Tirane 76.14 13 P P 17 05 27.3 -0.1
TIR pmax pmax
comp=Z,47nm,0.9s
TIR MLR MLR
comp=Z,400nm,22.0s
TIR Tirane 76.14 13 P P 17 05 29.1 +1.7
comp=Z,69nm,1.0s,comp=Z,879nm
EZN Ezine 76.18 19 P P 17 05 28.5 +0.8
comp=Z,41nm,1.1s
CAMP Campotosto 76.28 8 IAmb IAmb 17 05 43.0
comp=Z,76nm,1.4s
ARQ Araqi 76.39 50 P P 17 05 31.5 +2.1
ARQ P P 17 05 31.5 +2.1
ALNE Al Ain 76.41 49 *i* P P 17 05 31.4 +2.0
SNR=10
ALNE Al Ain 76.41 49 P P 17 05 31.6 +2.1
SNR=5.6
BALB Balikesir 76.43 20 IAmb IAmb 17 05 32.4
comp=Z,107nm,1.1s
NRCA Norcia 76.54 8 P P 17 05 29.2 -0.6
ASUD Al Ashush, Dub 76.56 48 P P 17 05 32.1 +1.8
VAY Valandovo 76.67 15 *i* P P 17 05 31.5 +1.1
JMDO Jabal Madar 76.73 52 P P 17 05 32.8 +1.5
JMDO P P 17 05 32.8 +1.5
GUMA Gualdo di Mace 76.79 8 IAMs_20 IAMs_20 17 35 21.3
comp=Z,702nm,21.0s
FAQ Al Faqa, Dubai 76.81 48 P P 17 05 32.6 +0.9
FAQ Al Faqa, Dubai 76.81 48 P P 17 05 33.0 +1.3
DRME Dracevica, Mon 76.82 13⇑ *i* P P 17 05 30.6 -0.7
SOHO SOHO 76.97 49 *i* P P 17 05 34.2 +1.6
SNR=15
SOHO SOHO 76.97 49 P P 17 05 34.3 +1.8
OSSC Osservatorio P 77.03 7 P P 17 05 30.6 -1.8
ASHO Ashiyiah 77.06 49 *i* P P 17 05 33.6 +0.5
SNR=9.2
ASHO Ashiyiah 77.06 49 P P 17 05 34.6 +1.5
HOQ Hoqain 77.07 50 P P 17 05 35.1 +1.9
SNR=8.7
HOQ P P 17 05 35.1 +1.9
SNR=8.7
PDG Podgorica 77.07 13⇑ *i* P P 17 05 32.8 +0.1
PCRV Puerto La Cruz 77.09 291 LR LR 17 37 22.1
comp=Z,2μm,18.0s,slow=34
ALN Alexandroupoli 77.11 18 IAmb IAmb 17 05 35.8
comp=Z,59nm,1.0s
MMB Musomishta 77.16 16 P P 17 05 32.0 -1.3
SMDO Samad 77.18 51 P P 17 05 35.4 +1.5
PEHC Pehcevo 77.18 16 *i* P P 17 05 34.2 +0.8
HATD Hatta, Dubai 77.21 49 *i* P P 17 05 34.5 +0.6
SNR=12
HATD Hatta, Dubai 77.21 49 P P 17 05 36.4 +2.5
SNR=6.1
STON Ston 77.23 11⇑ *i* P P 17 05 34.7 +1.2
KKB Krupnik 77.29 16 P P 17 05 32.0 -2.0
UOSS Minazif 77.34 49 P P 17 05 32.9 -1.8
UOSS IAmb IAmb 17 05 39.1
comp=Z,72nm,1.2s
UOSS Minazif 77.34 49 *i* P P 17 05 36.2 +1.5
SNR=7.2
UOSS Minazif 77.34 49 P P 17 05 36.3 +1.7
GAZ Gaziantep 77.36 28 IAmb IAmb 17 05 38.2
comp=Z,100nm,1.2s
BRY Bratogost 77.40 12 *e*P P 17 05 35.3 +0.6
JLN Jalan Bani Buh 77.44 53 P P 17 05 36.2 +1.0
JLN P P 17 05 36.2 +1.0
WBK Wadi Bani Khal 77.47 52 P P 17 05 37.6 +2.2
WBK P P 17 05 37.6 +2.2
RZN Rozhen 77.53 17 P P 17 05 35.0 -0.5
BIDO Bidbid 77.55 51 P P 17 05 38.5 +2.6
MSFE Esma-Masafi 77.61 48 P P 17 05 36.7 +0.5
MASF Masafi 77.62 48 P P 17 05 38.1 +1.8
MASF P P 17 05 38.1 +1.8
MDH Madha 77.65 48 P P 17 05 37.0 +0.6
MDH Madha 77.65 48 P P 17 05 39.4 +3.0
MSSA Maissana 77.67 5 P P 17 05 35.0 -1.1
MSSA IAmb IAmb 17 05 42.1
comp=Z,49nm,1.2s
WSAR Wadi Sarin 77.68 51 LR LR 17 37 46.6
comp=Z,956nm,21.6s,baz=243,slow=34
WSAR Wadi Sarin 77.68 51 P P 17 05 38.6 +2.0
UPM Unac-Piva 77.75 12 *e*P P 17 05 37.6 +0.8
KIRS Kirsehir-Merke 77.88 24 ⇑P P 17 05 38.6 +1.2
PLNA Plana 77.97 16 P P 17 05 38.0 +0.1
SJES Sjenica 78.00 13⇑ *i* P P 17 05 37.6 -0.4
VTS Vitosha 78.06 15 P P 17 05 39.0 +0.6
SHME Shamm 78.10 48 P P 17 05 39.9 +1.0
SHME Shamm 78.10 48 P P 17 05 40.6 +1.8
SHME P P 17 05 40.6 +1.8
BANOM Banah 78.10 48 P P 17 05 40.9 +1.9
ANTO Ankara 78.16 23 P P 17 05 38.6 -0.3
ANTO IAmb IAmb 17 05 42.5
comp=Z,66nm,0.9s
ANTO Ankara 78.16 23 P P 17 05 40.8 +1.9
ANTO P P 17 05 40.8 +1.9
ANTO Ankara 78.16 23 ⇑P P 17 05 40.6 +1.6
ANTO Ankara 78.16 23 P P 17 05 40.5 +1.6

ANTO Ankara 78.16 23 P P 17 05 40.5 +1.6
comp=Z,38nm,1.1s,comp=Z,415nm
PRMA PARMA 78.17 6 IAMs_20 IAMs_20 17 39 20.9
comp=Z,835nm,21.0s
GDSD La Dsirade Is 78.22 299 IAmb IAmb 17 05 42.5
comp=Z,150nm,1.3s
BNI Bardonecchia 78.23 3 IAMs_20 IAMs_20 17 36 33.4
comp=Z,970nm,21.0s
CTYL Yalikoy Yolu 78.25 20 P P 17 05 40.6 +1.3
comp=Z,39nm,0.9s
BR104 Keskin Array S 78.30 24 P P 17 05 40.2 +0.4
comp=Z,19nm,1.1s,comp=Z,161nm
BR105 Keskin Array S 78.30 24 P P 17 05 40.9 +1.1
comp=Z,23nm,1.1s,comp=Z,208nm
BRTR Keskin Array B 78.31 24 P P 17 05 38.9 -1.0
BRTR Keskin Array B 78.31 24 P P 17 05 40.4 +0.5
comp=Z,9.8nm,0.7s,baz=186,slow=7.0,SNR=30
BRTR PP PP 17 08 35.8 -1.5
comp=Z,1.4nm,0.8s,baz=212,slow=8.0,SNR=2.7
BRTR LR LR 17 42 51.7
comp=Z,190nm,18.3s,baz=218,slow=38
comp=Z,9.8nm,0.7s
BR106 Keskin Array S 78.31 24 P P 17 05 40.5 +0.6
comp=Z,21nm,1.2s,comp=Z,189nm
BR131 Keskin Array S 78.31 24 P P 17 05 41.2 +1.3
SNR=8.6
BR131 Keskin Array S 78.31 24 *d* *i* P P 17 05 40.5 +0.6
BBLS Lazi&#263i 78.48 12⇑ *i* P P 17 05 40.2 -0.4
ATAH Atahualpa 78.53 269 LR LR 17 38 43.5
comp=Z,2μm,19.9s,baz=156,slow=34
A050A Klekovaca 78.61 10⇑ *i* P P 17 05 40.9 -0.5
HAPS Han Pijesak,Bl 78.62 12 *e*P P 17 05 41.4 0.0
MGRS Mrkonjic Grad 78.64 11 *e*P P 17 05 43.5 +2.1
BOVS Bovan 78.70 14 ⇑P P 17 05 42.8 +1.1
MPEP Malo Peshtene 78.87 16 P P 17 05 43.0 +0.3
TEOL Teolo 78.89 7 IAmb IAmb 17 05 44.9
comp=Z,115nm,1.3s
MARD Mardin 78.93 30 P P 17 05 43.2 -0.1
MARD IAmb IAmb 17 05 46.5
comp=Z,75nm,1.3s
BLY Banja Luka 78.97 11⇑ *i* P P 17 05 42.9 -0.3
ELND Elena 78.97 17 ⇑P P 17 05 44.0 +0.8
VALD Valchedram 79.12 15 P P 17 05 46.0 +2.0
TEKS Tekeris 79.17 12⇑ *i* P P 17 05 43.8 -0.5
A051A Mrakovica 79.19 10⇑ *i* P P 17 05 44.1 -0.4
SKDS Skadanscina 79.32 8⇑ *i* P P 17 05 44.5 -0.7
BOJS Bojanci 79.44 9 *i* P P 17 05 45.6 -0.1
BOJS eS S 17 15 47.4 +0.2
BOJS Bojanci 79.44 9⇑ *i* P P 17 05 45.5 -0.2
ARPR Arapgir-MALATY 79.47 28 IAmb IAmb 17 05 49.8
comp=Z,110nm,1.1s
CEY Cerknica 79.56 8⇑ *i* P P 17 05 46.0 -0.5
SENIN Lac Senin/Sane 79.57 3 P P 17 05 45.7 -1.0
PRD Provadia 79.58 18 P P P 17 05 47.0 +0.4
SABO M.te Sabotino 79.70 8 IAmb IAmb 17 05 50.0
comp=Z,63nm,1.2s
SABO IAMs_20 IAMs_20 17 40 48.6
comp=Z,646nm,20.0s
CRES Cresnjev 79.78 9⇑ *i* P P 17 05 47.5 -0.1
MDVR Moldovita 79.81 14 ⇓P P 17 05 48.9 +1.1
FRGS Fruska Gora 79.81 12⇑ *i* P P 17 05 47.6 -0.2
FRGS Fruska Gora 79.81 12 ⇓P P 17 05 49.4 +1.6
FRGS Fruska Gora 79.81 12 P P 17 05 48.6 +0.8
comp=Z,42nm,1.6s,comp=Z,687nm
DJES Djerdap 79.86 14 ⇓P P 17 05 49.7 +1.7
LJU Ljubljana 79.88 8 *i* P P 17 05 48.3 +0.1
LJU *i* 17 05 49.7
LJU eS S 17 15 52.2 +0.5
CIMO Cimolais 79.90 7 P P 17 05 47.3 -1.0
CIMO IAmb IAmb 17 05 50.9
comp=Z,40nm,1.2s
CADS Cadrg 79.96 8 *i* P P 17 05 48.7 0.0
HERR Herculane 80.04 14 ⇑P P 17 05 50.3 +1.3
DAVOX Davos/Dischmat 80.15 5 P P 17 05 49.7 -0.1
comp=Z,20nm,0.8s,baz=173,slow=5.5,SNR=34
DAVOX LR LR 17 41 29.8
comp=Z,300nm,19.6s,baz=227,slow=36
comp=Z,20nm,0.8s
HUMR Humele 80.27 16 ⇓P P 17 05 51.9 +1.6
OBKA Obir 80.34 8 *i* P P 17 05 51.4 +0.7
comp=Z,35nm,1.1s,SNR=19
ABTA Abfaltersbach 80.34 7 *i* P P 17 05 51.4 +0.6
comp=Z,29nm,1.2s,SNR=14
MYKA Terra Mystica 80.35 8 *i* P P 17 05 52.1 +1.3
comp=Z,33nm,1.4s,SNR=9.0
BZK Bozkurt 80.44 23 P P 17 05 52.0 +0.8
comp=Z,119nm,1.0s
FETA Feichten 80.45 6 *e*P P 17 05 51.0 -0.4
comp=Z,20nm,1.1s,SNR=14
GURO Guroymak-BITLI 80.50 30 P P 17 05 51.9 +0.1
GURO IAmb IAmb 17 05 55.5
comp=Z,48nm,1.0s
SOKA Soboth 80.56 9 *i* P P 17 05 52.5 +0.6
comp=Z,60nm,1.1s,SNR=44
STFAR Stefanesti-Arg 80.58 16 ⇓P P 17 05 54.7 +2.7
DIKM Dikmen 80.58 24 P P 17 05 53.6 +1.6
comp=Z,86nm,1.1s
BZS Buzias 80.59 13 ⇑P P 17 05 53.1 +1.1
BZS Buzias 80.59 13 P P 17 05 52.8 +0.8
GZR Gura Zlata 80.61 14 ⇑P P 17 05 53.3 +1.2
GZR Gura Zlata 80.61 14 P P 17 05 52.8 +0.6
MORH Mrgy, Hungar 80.63 11 ⇑P P 17 05 52.5 +0.3
MORH Mrgy, Hungar 80.63 11 P P 17 05 52.2 0.0
comp=Z,38nm,1.2s,comp=Z,488nm
DAVA Damuels 80.65 5 *e*P P 17 05 52.9 +0.4
comp=Z,14nm,1.3s
SQTA Sankt Quirin 80.69 6 *i* P P 17 05 52.4 -0.2
comp=Z,31nm,1.3s,SNR=15
GEVA Gevas 80.74 31 P P 17 05 53.6 +0.4
GEVA IAmb IAmb 17 05 57.2
comp=Z,76nm,1.3s
KBA Koelnbreinsper 80.76 7 *i* P P 17 05 53.3 +0.2
comp=Z,23nm,1.1s,SNR=19
WTTA Wattenberg 80.77 6 *i* P P 17 05 53.0 -0.1
comp=Z,37nm,1.5s,SNR=17
MOTA Moosalm 80.81 6 *e*P P 17 05 52.8 -0.5
comp=Z,29nm,1.3s
SMRT St. Maarten 80.81 299 IAmb IAmb 17 05 56.0
comp=Z,174nm,1.3s
SURR Surduc 80.82 14 ⇑P P 17 05 54.3 +1.1
WATA Walderalm 80.84 6 *i* P P 17 05 53.3 -0.1
comp=Z,30nm,1.3s,SNR=12
LOT Lotru 80.87 15 ⇑P P 17 05 54.9 +1.3
RETA Reutte 80.92 6 *i* P P 17 05 53.4 -0.3
comp=Z,20nm,1.3s,SNR=5.5
ARR Arges 80.98 16 ⇑P P 17 05 55.3 +1.1
LESA Schwarzleotal 81.03 7 *i* P P 17 05 53.4 -1.0
comp=Z,20nm,0.7s
TLBR Topalu 81.04 18 ⇓P P 17 05 55.6 +1.3
TIRR Tirgusor 81.06 18 P P 17 05 53.3 -1.1
comp=Z,453nm,0.8s,comp=Z,20μm
UBR Ueberruh 81.06 5 *e*P P 17 05 54.3 -0.2
comp=Z,21nm,0.9s,baz=186,slow=5.2
SDV Santo Domingo 81.06 287 P P 17 05 54.1 -1.4
SDV IAmb IAmb 17 05 59.0
comp=Z,243nm,1.9s
SDV Santo Domingo 81.06 287 LR LR 17 39 04.8
comp=Z,2μm,18.2s,baz=116,slow=34
SDV Santo Domingo 81.06 287 *e*P P 17 05 55.0 -0.5
CLF Chambon-Foret 81.12 360 P P 17 05 53.2 -1.5
CLF IAmb IAmb 17 05 57.7
comp=Z,101nm,1.3s
CLF IAMs_20 IAMs_20 17 38 54.7
comp=Z,1μm,21.0s
VOIR 81.14 16 ⇑P P 17 05 56.0 +0.9
VOIR 81.14 16 P P 17 05 55.9 +0.9
VOIR 81.14 16 P P 17 05 55.0 0.0
comp=Z,50nm,1.3s,comp=Z,580nm
HARR Harsova 81.14 18 ⇓P P 17 05 56.5 +1.6
HARR Harsova 81.14 18 P P 17 05 56.5 +1.6
ARSA Arzberg 81.19 9 *i* P P 17 05 56.0 +0.9
comp=Z,20nm,1.1s,SNR=8.4
ISR Istrita 81.20 17 ⇓P P 17 05 56.0 +0.6
ISR Istrita 81.20 17 P P 17 05 55.9 +0.6
ISR Istrita 81.20 17 P P 17 05 54.9 -0.4
comp=Z,59nm,1.4s
SIRR Siria 81.22 13 ⇑P P 17 05 56.4 +1.1
RJOB Jochberg 81.35 7 *e*P P 17 05 55.2 -0.8
comp=Z,12nm,0.9s,baz=186,slow=5.2
MPLH Magyarpolny 81.39 10 P P 17 05 56.6 +0.4
comp=Z,132nm,1.4s,comp=Z,2μm
BIOA Bad Ischl, Aus 81.40 8 *i* P P 17 05 55.8 -0.5
comp=Z,24nm,1.1s,SNR=20
MLR Muntele Rosu 81.40 16 P P 17 05 56.7 +0.2
comp=Z,61nm,1.2s,baz=186,slow=1.3,SNR=38

MLR LR LR 17 40 36.3
comp=Z,368nm,21.6s,baz=198,slow=35
comp=Z,61nm,1.2s
**MLR Muntele Rosu 81.40 16 ⇓P P 17 05 57.4 +0.9**
**MLR Muntele Rosu 81.40 16 P P 17 05 57.4 +0.9**
**MLR Muntele Rosu 81.40 16 P P 17 05 57.2 +0.7**
comp=Z,80nm,1.5s,comp=Z,1μm
**NEHR Nehoiu 81.43 17 ⇑P P 17 05 57.8 +1.3**
**TPGR Topolog 81.43 18 ⇑P P 17 05 57.2 +0.7**
**JURR Jurilovca 81.46 19 ⇑P P 17 05 57.6 +1.0**
**BFO Black Forest 81.59 4 P P 17 05 55.9 -1.3**
**BFO Black Forest 81.59 4 P P 17 05 55.9 -1.3**
BFO pmax pmax
comp=Z,31nm,1.2s
**BFO Black Forest 81.59 4** *e*P **P 17 05 56.6 -0.7**
comp=Z,28nm,1.1s,baz=186,slow=5.2
**MOA Molln 81.62 8** *i* P **P 17 05 57.5 +0.1**
comp=Z,61nm,1.0s,SNR=30
**FUR Furstenfeldbru 81.63 6** *e*P **P 17 05 58.2 +0.7**
comp=Z,56nm,1.1s,baz=186,slow=5.2
**BISRR Bisoca 81.64 17 ⇑P P 17 05 58.7 +1.1**
**BISRR Bisoca 81.64 17 P P 17 05 58.3 +0.6**
comp=Z,192nm,1.2s,comp=Z,3μm
**CFR Carcaliu 81.65 18 ⇑P P 17 05 58.8 +1.2**
**CFR Carcaliu 81.65 18 P P 17 05 58.3 +0.7**
**DOPR Dopca 81.72 16 ⇓P P 17 05 58.7 +0.7**
**ROSC El Rosal 81.73 281 P P 17 05 59.6 +0.3**
comp=Z,9.7nm,0.3s,baz=129,slow=14,SNR=6.1
ROSC LR LR 17 39 49.2
comp=Z,1μm,18.6s,baz=208,slow=34
comp=Z,9.7nm,0.3s
**RONA Rosalia, Austr 81.73 9** *i* P **P 17 05 59.0 +1.0**
comp=Z,35nm,1.3s,SNR=14
**COVR Voineasa-Covas 81.80 16 ⇓P P 17 05 59.2 +0.7**
**TLCR 81.84 18 ⇑P P 17 05 59.7 +1.1**
**TLCR 81.84 18 P P 17 05 59.7 +1.1**
**SCHLR Schela 81.85 18 ⇓P P 17 06 00.2 +1.6**
**CONA Conrad Observa 81.90 9** *i* P **P 17 05 59.7 +0.8**
comp=Z,55nm,1.2s,SNR=32
**MARR Marisel-Cluj 81.90 14 ⇑P P 17 06 00.5 +1.4**
**PLOR5 Plostina Array 81.91 17 P P 17 05 59.5 +0.5**
comp=Z,43nm,1.1s,comp=Z,842nm
**PLOR Plostina 81.91 17 ⇑P P 17 06 00.5 +1.4**
**PLOR Plostina 81.91 17 P P 17 05 59.5 +0.5**
**PLOR3 Plostina Array 81.91 17 P P 17 05 57.3 -1.8**
comp=Z,16nm,0.5s,comp=Z,1μm
**ODBI Odobesti 81.93 17 P P 17 05 59.9 +0.9**
comp=Z,31nm,1.3s
**DRGR 81.93 14 ⇑P P 17 06 00.3 +1.1**
**DRGR 81.93 14 P P 17 06 00.2 +1.1**
**VRI Vrincioaia 81.94 17 ⇑P P 17 05 58.9 -0.3**
**VRI Vrincioaia 81.94 17 P P 17 05 58.8 -0.3**
**VRI Vrincioaia 81.94 17 P P 17 05 59.2 0.0**
comp=Z,48nm,1.3s,comp=Z,496nm
**TURR Turia 81.95 16 ⇓P P 17 06 00.9 +1.7**
**STU Stuttgart 82.08 4** IAmb IAmb 17 06 02.0
comp=Z,46nm,1.1s
**STU Stuttgart 82.08 4** *e*P **P 17 05 59.5 -0.3**
comp=Z,126nm,1.1s,baz=186,slow=5.2
**SRO Srobarova 82.14 11** *e*P **P 17 06 02.1 +2.0**
SRO pmax pmax
comp=Z,60nm,1.2s
**SRO Srobarova 82.14 11** *e*P **P 17 06 02.1 +2.0**
**GHRR 82.29 17 P P 17 06 01.7 +0.7**
**ONER Baraj Valea Uz 82.30 16 ⇑P P 17 06 02.0 +1.0**
**ZST Bratislava 82.33 10** *e*P **P 17 06 01.8 +0.7**
**ZST Bratislava 82.33 10** *e*P **P 17 06 01.8 +0.7**
**PSZ Piszkesteto 82.50 12** IAmb IAmb 17 06 04.6
comp=Z,58nm,1.0s
**PSZ Piszkesteto 82.50 12 ⇑P P 17 06 02.8 +0.6**
**PSZ Piszkesteto 82.50 12 P P 17 06 02.7 +0.6**
**MODS Modra-Piesok 82.53 10** *e*P **P 17 06 02.9 +0.7**
MODS pmax pmax
comp=Z,250nm,1.3s
**MODS Modra-Piesok 82.53 10** *e*P **P 17 06 02.9 +0.7**
**TESR Tescani 82.53 17 P P 17 06 02.0 -0.2**
comp=Z,52nm,1.5s,comp=Z,764nm
**GEC2 GERESS Array S 82.54 7** *e*P **P 17 06 02.1 -0.3**
comp=Z,25nm,1.2s,baz=186,slow=5.2
**GERES GERESS Array B 82.54 7 P P 17 06 01.3 -1.1**
**GERES GERESS Array B 82.54 7 P P 17 06 01.4 -0.9**
comp=Z,7.0nm,1.0s,baz=187,slow=9.4,SNR=24
GERES PP **PP 17 09 12.7 +0.5**
comp=Z,0.6nm,0.7s,baz=198,slow=6.2,SNR=2.1
GERES LR LR 17 41 39.6
comp=Z,397nm,21.3s,baz=202,slow=35
comp=Z,7.0nm,1.0s
**ARCR ARCALIA 82.55 15 ⇑P P 17 06 03.6 +1.3**
**OTAV Otavalo 82.58 275 P P 17 06 04.6 +0.7**
OTAV IAmb IAmb 17 06 08.4
comp=Z,146nm,1.4s
**OTAV Otavalo 82.58 275 P P 17 06 04.6 +0.7**
OTAV pmax pmax
comp=Z,145nm,1.4s
OTAV MLR MLR
comp=Z,2μm,18.0s
**OTAV Otavalo 82.58 275** *e*P **P 17 06 05.8 +1.9**
**CKRC Cesky Krumlov 82.58 8** *e*P **P 17 06 03.9 +1.4**
CKRC *e*S **S 17 16 20.4 +0.6**
CKRC AMS AMS 17 42 20.0
comp=Z,400nm,20.3s
**CKRC Cesky Krumlov 82.58 8** *e*P **P 17 06 03.9 +1.4**
CKRC *e* 17 16 20.4
CKRC MLR MLR
comp=Z,400nm,20.3s
**KARS Kars 82.68 30 P P 17 06 04.1 +0.8**
**KARS Kars 82.68 30 P P 17 06 04.1 +0.8**
KARS pmax pmax
comp=Z,274nm,1.4s
**SMOL Smolenice 82.69 10** *e*P **P 17 06 03.8 +0.8**
SMOL pmax pmax
comp=Z,37nm,1.8s
**WET Wettzell 82.75 7** *e*P **P 17 06 03.1 -0.2**
comp=Z,51nm,1.2s,baz=186,slow=5.2
**BCA Borcka 82.77 29 ⇓P P 17 06 05.1 +1.5**
**KHC Kasperske Hory 82.81 7** *e*P **P 17 06 04.8 +1.1**
KHC *e*S **S 17 16 20.0 -2.2**
KHC AMS AMS 17 42 00.0
comp=Z,300nm,19.5s
**KHC Kasperske Hory 82.81 7***ce*P **P 17 06 02.8 -0.9**
KHC pmax pmax
comp=Z,39nm,1.2s
KHC MLR MLR
comp=Z,571nm,19.0s
**KHC Kasperske Hory 82.81 7 P P 17 06 03.0 -0.7**
comp=Z,20nm,1.5s,comp=Z,347nm
**WLF Walferdange 82.82 2** IAmb IAmb 17 06 06.1
comp=Z,68nm,1.3s
**WLF Walferdange 82.82 2** *d*P **P 17 06 04.4 +0.8**
comp=Z,20nm,1.2s
**WLF Walferdange 82.82 2** *e*P **P 17 06 03.7 0.0**
comp=Z,69nm,1.3s,baz=186,slow=5.2
**VYHS Vyhne 82.88 11** *e*P **P 17 06 04.1 0.0**
VYHS pmax pmax
comp=Z,88nm,1.1s
**VYHS Vyhne 82.88 11** *e*P **P 17 06 04.0 0.0**
**BMR Baia Mare 82.93 14 ⇓P P 17 06 05.7 +1.4**
**BMR Baia Mare 82.93 14 P P 17 06 05.7 +1.4**
**GNI Garni 82.99 31 P P 17 06 05.0 0.0**
GNI IAmb IAmb 17 06 08.8
comp=Z,119nm,1.5s
**GNI Garni 82.99 31***c i*P **P 17 06 06.8 +1.8**
GNI pmax pmax
comp=Z,92nm,1.5s
GNI MLR MLR
comp=Z,447nm,17.0s
**GNI Garni 82.99 31** P **P 17 06 06.5 +1.5**
comp=Z,47nm,1.3s,comp=Z,847nm
**JAVC Velka Javorina 83.06 10** *e*P **P 17 06 05.4 +0.4**
**KRUC Moravsky 83.08 9** *e*P **P 17 06 04.2 -0.8**
**KECS Kecovo 83.14 12** *e*P **P 17 06 06.6 +1.2**
KECS pmax pmax
comp=Z,50nm,1.0s
**KECS Kecovo 83.14 12** *e*P **P 17 06 06.5 +1.2**
**GRFO Grafenberg 83.14 6 P P 17 06 04.5 -0.8**
**GRFO Grafenberg 83.14 6 P P 17 06 04.5 -0.8**
GRFO pmax pmax
comp=Z,153nm,1.1s
GRFO MLR MLR
comp=Z,300nm,20.0s
**GRF Grafenberg Arr 83.14 6** *e*P **P 17 06 05.5 +0.1**
comp=Z,192nm,1.2s,baz=186,slow=5.2
GRF *e*L L 17 40 45.4
comp=Z,252nm,21.4s
**SIM Simferopol' 83.15 22** *e*P **P 17 06 07.8 +2.3**
SIM pmax pmax
comp=Z,54nm,1.1s
**ZVC Zvikov 83.18 8** *e*P **P 17 06 07.2 +1.7**
**GCPR Guaynabo City 83.19 297** IAmb IAmb 17 06 08.3
comp=Z,142nm,1.6s
**DOU Dourbes 83.21 1** *d*P **P 17 06 06.4 +0.7**
**TRSU Trosnyk 83.23 14 P P 17 06 06.5 +0.7**
**PRAR RASCA 83.23 16 ⇓P P 17 06 07.3 +1.4**
**BURAR Bucovina Array 83.24 15 ⇑P P 17 06 07.5 +1.5**
**BURAR Bucovina Array 83.24 15 P P 17 06 07.5 +1.5**
**BUR08 Bucovina Ar. S 83.27 15** IAmb IAmb 17 06 09.5
comp=Z,74nm,1.1s
**RCHB Rochefort 83.28 2** *d*P **P 17 06 05.1 -0.9**
comp=Z,6.9nm,1.4s
**BERU Beregovo 83.30 13 P P 17 06 05.8 -0.3**
**ROTZ Rotzenmuhle 83.31 6** *e*P **P 17 06 06.0 -0.1**
comp=Z,18nm,1.1s,baz=186,slow=5.2
**KORU Korolevo 83.32 14 P P 17 06 06.8 +0.6**
**VRAC Vranov 83.35 9** *e*P **P 17 06 05.6 -0.8**
**VRAC Vranov 83.35 9 P P 17 06 06.5 +0.1**
comp=Z,14nm,0.9s,baz=188,slow=5.0,SNR=27
VRAC LR LR 17 42 25.9
comp=Z,213nm,21.4s,baz=196,slow=35
comp=Z,14nm,0.9s
**VRAC Vranov 83.35 9 ⇓P P 17 06 07.2 +0.8**
**PURM Purcari 83.36 19 ⇓P P 17 06 07.9 +1.5**
**PURM Purcari 83.36 19 P P 17 06 07.5 +1.0**
comp=Z,225nm,1.0s,comp=Z,6μm
**CELP Cerrillos 83.42 297 P P 17 06 06.3 -1.2**
CELP IAmb IAmb 17 06 09.5
comp=Z,76nm,1.2s
**BMRD Maredsous 83.42 1** *d*P **P 17 06 07.2 +0.4**
comp=Z,14nm,1.4s
**OBIP Obispado Ponce 83.42 297** IAmb IAmb 17 06 08.4
comp=Z,110nm,1.4s
**MILM Milestii Mici 83.44 18** *i* P **P 17 06 07.0 +0.1**
comp=Z,200nm,1.4s
**MILM Milestii Mici 83.44 18 ⇓P P 17 06 07.9 +1.0**
**MILM Milestii Mici 83.44 18** *i* P **P 17 06 07.0 +0.1**
MILM pmax pmax
comp=Z,200nm,1.4s
**BRIU Brid 83.47 14 P P 17 06 07.4 +0.4**
**TNS Taunus Mts 83.48 4** *e*P **P 17 06 07.1 0.0**
comp=Z,70nm,1.7s,baz=186,slow=5.2
**BHOU Houvegnez 83.50 2** *d*P **P 17 06 08.1 +0.9**
comp=Z,25nm,1.2s
**BGES Gesves 83.51 2** *d*P **P 17 06 07.5 +0.3**
comp=Z,12nm,1.4s
**MANZ Manzenberg 83.51 6** *e*P **P 17 06 07.0 -0.2**
comp=Z,12nm,1.2s,baz=186,slow=5.2
**MUKU Mukachevo 83.52 13 P P 17 06 08.0 +0.8**
**KIS Kishinev 83.52 18** *e*P **P 17 06 07.0 -0.3**
comp=Z,180nm,3.9s
**KIS Kishinev 83.52 18** *e*P **P 17 06 07.0 -0.3**
KIS pmax pmax
comp=Z,200nm,3.9s
**KIS Kishinev 83.52 18 P P 17 06 07.2 -0.1**
comp=Z,68nm,0.5s
**HOLU Holmets 83.53 13 P P 17 06 08.1 +0.8**
**BCLA Clavier 83.55 2** *d*P **P 17 06 06.5 -0.9**
comp=Z,23nm,1.3s
**MAUC Maruska 83.58 10** *e*P **P 17 06 09.9 +2.3**
**UZHM Uzhgorod 83.61 13 P P 17 06 08.8 +1.1**
**LANS Liptovska Anna 83.62 11** *e*P **P 17 06 09.0 +1.2**
LANS pmax pmax
comp=Z,31nm,0.9s
**LANS Liptovska Anna 83.62 11** *e*P **P 17 06 09.0 +1.2**
**MLPR Magueyes Islan 83.70 296** IAmb IAmb 17 06 09.8
comp=Z,42nm,1.1s
**GOPC GO Pecny, Ondr 83.72 8** *e*P **P 17 06 09.4 +1.1**
**GOPC GO Pecny, Ondr 83.72 8** *e*P **P 17 06 09.4 +1.1**
**BSTI Sart Tilman 83.72 2** *d*P **P 17 06 09.2 +1.0**
comp=Z,5.6nm,1.3s
**CRVS Cervenica-Dubn 83.72 12** *e*P **P 17 06 08.7 +0.4**
CRVS pmax pmax
comp=Z,115nm,1.1s
**CRVS Cervenica-Dubn 83.72 12** *e*P **P 17 06 08.7 +0.4**
**AHRW Bad Neuenahr-A 83.73 3** *e*P **P 17 06 08.9 +0.6**
comp=Z,40nm,1.1s,baz=186,slow=5.2
**MEZ Mezhgor'ye 83.74 14 P P 17 06 09.3 +0.9**
**BTNL Ternell 83.74 2** *d*P **P 17 06 09.0 +0.6**
comp=Z,12nm,1.1s
**MEM Membach 83.76 2** *d*P **P 17 06 08.3 -0.1**
comp=Z,8.9nm,0.8s
**PRU Pruhonice 83.76 8** *e*P **P 17 06 09.5 +1.0**
PRU *e*S **SKSac 17 16 31.1 -0.4**
PRU AMS AMS 17 38 00.0
comp=Z,400nm,20.4s
**PRU Pruhonice 83.76 8** *e*P **P 17 06 09.5 +1.0**
PRU *e* 17 16 31.1
PRU MLR MLR
comp=Z,400nm,20.4s
**NE56 Odesa 83.77 19 P P 17 06 08.9 +0.3**
**PRA Prague 83.83 8** *e*P **P 17 06 10.7 +1.9**
PRA AMS AMS 17 43 00.0
comp=Z,300nm,20.2s
**PRA Prague 83.83 8** *e*P **P 17 06 10.7 +1.9**
PRA MLR MLR
comp=Z,300nm,20.2s
**SOC Sochi 83.87 26** *e*P **P 17 06 09.2 0.0**
SOC *e* 17 09 22.4
SOC *e*S **SKSac 17 16 31.4 -1.1**
SOC pmax pmax
comp=Z,63nm,1.0s
**KSV Kosov 83.87 15 P P 17 06 08.6 -0.5**
**VSLR Vesyoloye 83.88 26***ce*P **P 17 06 10.4 +1.1**
VSLR pmax pmax
comp=Z,93nm,1.0s
**KOLS Kolonicke sedl 83.90 13** *e*P **P 17 06 10.4 +1.2**
KOLS pmax pmax
comp=Z,26nm,1.6s
**KOLS Kolonicke sedl 83.90 13** *e*P **P 17 06 10.4 +1.2**
**MORC Moravsky Berou 83.94 10 P P 17 06 08.5 -1.0**
MORC IAmb IAmb 17 06 12.1
comp=Z,37nm,1.2s
**MORC Moravsky Berou 83.94 10** *e*P **P 17 06 09.0 -0.5**
**MORC Moravsky Berou 83.94 10 ⇑P P 17 06 10.2 +0.7**
**MORC Moravsky Berou 83.94 10 P P 17 06 10.1 +0.7**
**TANN Tannenbergstha 83.97 6** *e*P **P 17 06 09.8 +0.2**
comp=Z,94nm,1.5s,baz=186,slow=5.2
**PLN Plauen 84.01 6** *e*P **P 17 06 09.6 -0.2**
comp=Z,46nm,1.2s,baz=186,slow=5.2
**NIE Niedzica 84.02 12** *e*P **P 17 06 10.2 +0.3**
**NIE Niedzica 84.02 12 P P 17 06 10.1 +0.3**
comp=Z,20nm,1.4s,comp=Z,243nm
**OKC Ostrava-Krasne 84.08 10** AMS AMS 17 42 10.0
comp=Z,400nm,19.2s
**ANN Anapa 84.11 24** *e*P **P 17 06 10.6 +0.2**
ANN *e*S **S 17 16 34.0 -1.3**
ANN pmax pmax
comp=Z,182nm,1.3s
**MOX Moxa 84.12 6** *e*P **P 17 06 10.0 -0.3**
comp=Z,21nm,1.1s,baz=186,slow=5.2
MOX *e*L L 17 42 18.9
comp=Z,358nm,20.8s
**STNU Starunia 84.13 14 P P 17 06 10.8 +0.4**
**UBBA Unterbreizbach 84.17 5** *e*P **P 17 06 10.9 +0.5**
comp=Z,66nm,1.6s,baz=186,slow=5.2
**PALK Pallekele 84.22 77** LR LR 17 38 51.8
comp=Z,1μm,19.6s,baz=332,slow=32
**PALK Pallekele 84.22 77 P P 17 06 15.9 +4.1**
**HSKC Hora Svate Kat 84.25 7** *e*S **S 17 16 38.0 +1.3**
HSKC AMS AMS 17 40 10.0
comp=Z,400nm,19.7s
**RICC Richard 84.26 7** *e*P **P 17 06 13.1 +2.1**
**PVCC Panska Ves 84.30 8** *e*P **P 17 06 12.9 +1.7**
PVCC AMS AMS 17 43 20.0
comp=Z,500nm,16.4s
**PVCC Panska Ves 84.30 8** *e*P **P 17 06 12.9 +1.7**
PVCC MLR MLR
comp=Z,500nm,16.4s
**DPC Dobruska-Polom 84.33 9** *e*P **P 17 06 12.1 +0.6**
DPC *e*S **S 17 16 39.9 +2.4**
DPC AMS AMS 17 41 40.0
comp=Z,400nm,24.2s
**DPC Dobruska-Polom 84.33 9** *e*P **P 17 06 12.1 +0.6**
DPC *e* 17 16 39.9
DPC MLR MLR
comp=Z,400nm,24.2s
**DPC Dobruska-Polom 84.33 9 P P 17 06 11.7 +0.2**
comp=Z,44nm,1.0s,comp=Z,498nm
**SHIU Shidnytsya 84.39 14 P P 17 06 12.9 +1.2**
**MORS Morshin 84.41 14 P P 17 06 12.8 +1.0**
**KMPD K-Podol'skiy 84.41 16 P pP 17 06 10.9 -1.2**
KMPD P P 17 06 10.7 -1.1
**UPC Upice 84.45 9** *e*P **P 17 06 12.6 +0.6**
UPC *e*S **S 17 16 41.1 +2.5**
**UPC Upice 84.45 9** *e*P **P 17 06 12.6 +0.6**
UPC *e* 17 16 41.1
**KASTN Kahler Asten 84.46 4** *e*P **P 17 06 12.2 +0.2**
comp=Z,35nm,1.2s,baz=186,slow=5.2
**SORM Soroca 84.46 17 ⇑P P 17 06 12.6 +0.5**
**SORM Soroca 84.46 17 P P 17 06 12.5 +0.5**
**SORM Soroca 84.46 17 P P 17 06 11.8 -0.3**
comp=Z,136nm,1.2s,comp=Z,2μm
**OSTC Ostas 84.52 9** *e*P **P 17 06 12.3 -0.1**
**OSTC Ostas 84.52 9** *e*P **P 17 06 12.3 -0.1**
**CHVC Chvalec 84.53 9** AMS AMS 17 46 10.0
comp=Z,300nm,19.5s
**BRG Berggiesshubel 84.57 7** *e*P **P 17 06 12.7 +0.1**
BRG Amp 17 06 15.1
comp=Z,23nm,1.1s
**BRG Berggiesshubel 84.57 7** P P 17 06 21.9 +9.3
BRG Amp 17 06 23.0
comp=Z,13nm,1.0s
**BRG Berggiesshubel 84.57 7** S **S 17 16 42.0 +2.3**
**BRG Berggiesshubel 84.57 7** SS SS 17 22 02.0 -10
**BRG Berggiesshubel 84.57 7** *e*P **P 17 06 12.5 -0.1**
comp=Z,33nm,1.1s,baz=186,slow=5.2
**BRG Berggiesshubel 84.57 7** PP PP 17 09 31.6 +2.9
**BRG Berggiesshubel 84.57 7** Amp 17 09 33.4
comp=Z,13nm,1.3s
**BAL3X Bal3x, Balta 84.59 18 P P 17 06 13.1 +0.4**
**BUG Bochum--Univer 84.64 3** *e*P **P 17 06 12.8 0.0**
comp=Z,26nm,1.1s,baz=186,slow=5.2
**KWP Kalwaria Pacla 84.65 13** *e*P **P 17 06 14.4 +1.3**
**KWP Kalwaria Pacla 84.65 13** IAmb IAmb 17 06 16.1
comp=Z,111nm,1.5s
**KWP Kalwaria Pacla 84.65 13 P P 17 06 13.8 +0.8**
comp=Z,47nm,1.4s,comp=Z,877nm
**NDNU Novodnistrovsk 84.65 16 P P 17 06 12.8 -0.2**
**NEUB Neuenburg 84.70 6** *e*P **P 17 06 13.2 0.0**
comp=Z,73nm,1.0s,baz=186,slow=5.2
**OJC Ojcow 84.71 11** *e*P **P 17 06 13.4 +0.1**
**OJC Ojcow 84.71 11 P P 17 06 13.2 -0.1**
comp=Z,24nm,1.5s,comp=Z,328nm
**KSP Ksiaz 84.81 9** *e*P **P 17 06 14.0 +0.2**
**KSP Ksiaz 84.81 9 P P 17 06 14.0 +0.2**
comp=Z,26nm,1.5s
**GTTG Gottingen 84.89 5** *e*P **P 17 06 14.6 +0.4**
comp=Z,82nm,1.0s,baz=186,slow=5.2
**CLL Collm 84.91 7 P P 17 06 13.5 -0.7**
CLL IAmb IAmb 17 06 16.8
comp=Z,52nm,1.0s
**CLL Collm 84.91 7** *i* P **P 17 06 14.1 -0.2**
comp=Z,66nm,1.1s
CLL *e*Plp 17 06 16.0
CLL *e*PP **PP 17 09 38.0 +6.7**
CLL *e*S **S 17 16 42.0 -1.0**
CLL *e*PS **PnS 17 17 36.0 -1.7**
CLL *e*SS **SS 17 22 17.0 +0.5**
CLL L L 17 41 00.0
comp=Z,300nm,21.7s
**CLL Collm 84.91 7** *i* P **P 17 06 14.1 -0.2**
CLL *e* 17 16 40.0
CLL pmax pmax
comp=Z,66nm,1.1s
CLL MLR MLR
comp=Z,300nm,22.0s
**CLL Collm 84.91 7 P P 17 06 14.2 0.0**
comp=Z,54nm,1.0s,comp=Z,573nm
**CLL Collm 84.91 7** *e*P **P 17 06 14.3 0.0**
comp=Z,56nm,1.1s,baz=186,slow=5.2
**HORU Horodok 85.02 15 P P 17 06 14.2 -0.7**
**LVV L'vov 85.09 14 P P 17 06 15.7 +0.5**
**SHA1 Shidzhatmaz 85.12 28***de*P **P 17 06 16.9 +1.1**
**LABN Labinsk 85.15 26** *e*P **P 17 06 14.9 -0.7**
LABN *e*S **SKSac 17 16 37.7 -3.0**
LABN pmax pmax
comp=Z,203nm,1.0s
**KBZ Khabaz 85.20 28** P **P 17 06 16.1 +0.2**
comp=Z,71nm,0.9s,baz=217,slow=4.7,SNR=54
comp=Z,71nm,0.9s
**KBZ Khabaz 85.20 28***ce*P **P 17 06 16.6 +0.7**
KBZ pmax pmax
comp=Z,98nm,1.0s
KBZ MLR MLR
comp=Z,414nm,18.0s
**CLZ Clausthal 85.22 5** *e*P **P 17 06 15.9 +0.1**
comp=Z,27nm,1.1s,baz=186,slow=5.2
**NCK Nalchik 85.29 29⇓** *e*P **P 17 06 17.7 +1.3**
NCK pmax pmax
comp=Z,89nm,1.0s
NCK MLR MLR
comp=Z,325nm,17.0s
**KIV Kislovodsk 85.31 28** P **P 17 06 17.5 +0.9**
KIV IAmb IAmb 17 06 19.7
comp=Z,54nm,1.1s
**KIV Kislovodsk 85.31 28** P **P 17 06 17.5 +0.9**
**KIV Kislovodsk 85.31 28** P **P 17 06 17.0 +0.3**
KIV P **P 17 06 17.0 +0.3**
KIV P **pP 17 06 17.8 +0.9**
KIV P **pP 17 06 17.8 +0.9**
**KIV Kislovodsk 85.31 28** *e*P **P 17 06 16.7 +0.1**
KIV *e* 17 09 34.6
KIV *e* 17 16 41.0
KIV *e*SS SS 17 22 23.2 +0.2
KIV pmax pmax
comp=Z,85nm,3.9s
KIV pmax pmax
comp=Z,38nm,1.1s
KIV MLR MLR
comp=Z,286nm,20.0s
**IBBN Ibbenburen 85.53 3** *e*P **P 17 06 17.8 +0.5**
comp=Z,63nm,1.3s,baz=186,slow=5.2
**FLTG Flechtingen 85.77 5** *e*P **P 17 06 18.0 -0.5**
comp=Z,23nm,1.0s,baz=186,slow=5.2
**NRDL Niedersach Rie 85.85 5** *e*P **P 17 06 19.7 +0.9**
comp=Z,57nm,1.1s,baz=186,slow=5.2
**GROC Groznyy 85.95 30** *e*P **P 17 06 17.8 -1.9**
**ERBR Yeremizino-Bor 85.98 26** *e*P **P 17 06 19.5 -0.3**
ERBR *e*S **SKSac 17 16 45.2 -0.7**
ERBR pmax pmax
comp=Z,198nm,1.0s
**LUBAR Lubar, Ukraine 85.98 16 P P 17 06 19.3 -0.4**
**RETH Rethem/Aller, 86.04 4** *e*P **P 17 06 20.7 +0.9**
comp=Z,58nm,1.2s,baz=186,slow=5.2
**RUE Ruedersdorf 86.14 7** *e*P **P 17 06 21.8 +1.4**
**RUE Ruedersdorf 86.14 7** *e*P **P 17 06 20.3 0.0**
comp=Z,77nm,1.1s,baz=186,slow=5.2
**GOF Gofitskoye 86.38 27***ce*P **P 17 06 23.4 +1.7**
**GORT1 Trebel 86.43 5** *e*P **P 17 06 22.1 +0.4**
comp=Z,90nm,1.2s,baz=186,slow=5.2
**MI29 MI29, Kamyanyy 86.47 16 P P 17 06 23.4 +1.3**
**MAK Makhachkala 86.48 31***c i*P **P 17 06 18.4 -3.9**
MAK *e* 17 09 40.7
MAK *e*PPP PPP 17 11 40.0
MAK *e* 17 16 42.0
MAK pmax pmax
comp=Z,410nm,1.3s
**RNPP5 Staryi Chortor 86.80 14 P P 17 06 24.9 +1.2**
**MI30 MI30,Zelenitsa 86.85 16 P P 17 06 24.5 +0.6**
**RNPP8 Varash 86.90 14 P P 17 06 24.5 +0.4**
**MI28 Mi28,Pidlybu 86.91 16 P P 17 06 25.1 +0.9**
**AK07 Malin Array Si 86.91 17 P P 17 06 24.8 +0.6**
**AK13 Malin Array Si 86.93 17 P P 17 06 24.6 +0.3**
**AK08 Malin Array Si 87.00 17 P P 17 06 24.4 -0.2**
**AK18 Malin Array Si 87.04 17 P P 17 06 24.6 -0.2**
**KIEV Kiev 87.05 17 P P 17 06 24.2 -0.7**
**KIEV Kiev 87.05 17** *i* P **P 17 06 24.5 -0.3**
SNR=14
**KIEV Kiev 87.05 17 P P 17 06 24.2 -0.7**
KIEV pmax pmax
comp=Z,19nm,0.9s
KIEV MLR MLR
comp=Z,200nm,19.0s
**KIEV Kiev 87.05 17 P P 17 06 24.7 -0.1**
comp=Z,97nm,0.9s
**AKASG Malin Array Be 87.06 17 P P 17 06 24.6 -0.3**
**AKASG Malin Array Be 87.06 17 P P 17 06 24.6 -0.3**
comp=Z,10nm,0.8s,baz=206,slow=5.0,SNR=27
AKASG PP **PP 17 09 47.1 -1.7**
comp=Z,0.4nm,0.3s,baz=207,slow=7.4,SNR=2.0
AKASG LR LR 17 46 30.3
comp=Z,143nm,20.4s,baz=199,slow=36
comp=Z,10nm,0.8s
**AKASG Malin Array Be 87.06 17** *i* P **P 17 06 26.6 +1.7**
AKASG pmax pmax
comp=Z,11nm,0.8s
**AKBB Malin Array Si 87.06 17***de*P **P 17 06 25.1 +0.2**

**AK04 Malin Array Si 87.06 17** P **P** **17 06 25.0 +0.1**
**BSEG Bad Segeberg 87.30 5** *e*P **P** **17 06 25.7 -0.2**
comp=Z,41nm,1.0s,baz=186,slow=5.2
**HRA Herat 87.71 46** P **P** **17 06 27.9 -0.9**
HRA IAmb IAmb 17 06 31.4
comp=Z,61nm,1.4s
**KHAM Kharkiv 88.31 21** P **P** **17 06 33.6 +2.6**
**HYB Hyderabad 88.33 68** *e*P **P** **17 06 31.3 -0.6**
HYB *e*PcP **PcP** **17 06 32.8 -0.8**
HYB *e*PP **PP** **17 09 59.6 0.0**
HYB *e*SKSac **SKSac** **17 17 00.1 -1.6**
HYB *e*SS **SS** **17 23 07.6 -0.2**
HYB *e*SKKSdf **SKKSdf** **17 31 18.2 -2.5**
**ESK Eskdalemuir 88.55 357** P **P** **17 06 32.2 +0.2**
ESK IAmb IAmb 17 06 34.1
comp=Z,42nm,1.3s
**ESK Eskdalemuir 88.55 357** IAMs_20 IAMs_20 17 44 44.4
comp=Z,827nm,20.0s
**ESK Eskdalemuir 88.55 357** P **P** **17 06 32.2 +0.2**
ESK pmax pmax
comp=Z,42nm,1.3s
ESK MLR MLR
comp=Z,800nm,20.0s
**EKA Eskdalemuir Ar 88.57 357** P **P** **17 06 32.9 +0.9**
comp=Z,9.6nm,0.9s,baz=175,slow=4.8,SNR=17
EKA PP **PP** **17 10 00.7 -0.2**
comp=Z,2.8nm,0.9s,baz=172,slow=7.9,SNR=3.7
comp=Z,9.6nm,0.9s
**SUW Suwalki 88.93 12** *e*P **P** **17 06 34.9 +1.1**
**VORD Divnogorie 90.10 22** *e*P **P** **17 06 39.3 0.0**
VORD pmax pmax
comp=Z,150nm,1.0s
**VSR Storozhevoye 90.28 22** *e*P **P** **17 06 40.3 +0.2**
VSR pmax pmax
comp=Z,200nm,1.1s
**MNK Minsk 90.30 14** *i* P **P** **17 06 41.1 +1.0**
MNK *i* 17 10 14.7
MNK *i* PPP PPP 17 12 11.9
MNK *i* S **SKSac** **17 17 11.8 +0.3**
MNK *i* PS PnS 17 19 14.9 +33
MNK *i* SS **SS** **17 23 36.2 +1.0**
MNK pmax pmax
comp=N,9.0nm,0.8s
MNK pmax pmax
comp=Z,17nm,0.9s
MNK pmax pmax
comp=E,5.0nm,0.9s
**PABE Paberze 90.50 12** IAmb IAmb 17 06 43.5
comp=Z,72nm,1.1s
**PABE Paberze 90.50 12** *e*P **P** **17 06 41.9 +0.8**
**PBUR Paburge 90.66 11** *e*P **P** **17 06 42.0 +0.2**
**BBSR BB Station 91.05 309** P **P** **17 06 43.3 -0.9**
BBSR IAmb IAmb 17 06 47.1
comp=Z,48nm,1.1s
**VRH Novokhopyorsk 91.09 23** *e*P **P** **17 06 44.2 +0.3**
VRH pmax pmax
comp=Z,86nm,0.7s
**LPSR Galich'ya Gora 91.41 21** *e*P **P** **17 06 45.1 -0.3**
LPSR pmax pmax
comp=Z,140nm,0.9s
**RPN Rapa Nui 91.62 236** LR LR 17 41 11.9
comp=Z,166nm,20.3s,baz=167,slow=31
**MTDJ Mount Denham 91.90 291** IAMs_20 IAMs_20 17 41 55.2
comp=Z,798nm,22.0s
**KBL Kabul 92.00 49** P **P** **17 06 48.1 -0.8**
KBL IAmb IAmb 17 06 50.6
comp=Z,29nm,1.2s
**KBL Kabul 92.00 49** P **P** **17 06 48.1 -0.8**
KBL pmax pmax
comp=Z,29nm,1.3s
**CHIV Chivirico 92.02 293** IAmb IAmb 17 06 51.7
comp=Z,122nm,1.5s
**SLIT Slitere, Latvi 92.26 10** *e*P **P** **17 06 50.8 +1.7**
**OBN Obninsk 92.94 19** P **P** **17 06 52.1 -0.2**
**OBN Obninsk 92.94 19***d* *i*P **P** **17 06 53.1 +0.8**
OBN *i* *PP **pwP** **17 06 57.6 -0.9**
OBN 17 10 37.0
OBN PPP PPP 17 12 41.0
OBN *e*S **SKSac** **17 17 26.1 -0.2**
OBN *i* PPS PPS 17 19 16.1
OBN *e*SS **SS** **17 24 16.0 +2.9**
OBN SSS SSS 17 27 57.0
OBN pmax pmax
comp=Z,73nm,1.1s
OBN MLR MLR
comp=Z,168nm,19.0s
**OBN Obninsk 92.94 19** P **P** **17 06 53.7 +1.4**
comp=Z,83nm,1.4s,comp=Z,963nm
**KONO Kongsberg 92.95 4**‖ *e*P **P** **17 06 54.6 +2.3**
KONO pmax pmax
comp=Z,12nm,1.0s
**JTS Las Juntas de 93.49 280** LR LR 17 47 17.1
comp=Z,1μm,18.9s,baz=120,slow=34
**MTSE Matsula 93.53 11** *e*P **P** **17 06 56.7 +1.7**
**HFS Hagfors 93.70 6** P **P** **17 06 55.7 -0.1**
comp=Z,6.4nm,0.9s,baz=242,slow=3.2,SNR=8.4
HFS PP **PP** **17 10 41.3 -0.1**
comp=Z,5.9nm,1.0s,baz=134,slow=12,SNR=4.0
HFS LR LR 17 49 45.8
comp=Z,320nm,19.6s,baz=202,slow=36
comp=Z,6.4nm,0.9s
**MOS Moscow 93.77 19** *e*P **P** **17 06 56.0 -0.2**
MOS pmax pmax
comp=Z,80nm,1.4s
**VSU Vasula 93.79 12**‖ *e*P **P** **17 06 56.1 -0.1**
VSU pmax pmax
comp=Z,45nm,1.0s
**BELG Belogornoye 94.14 26***ce*P **P** **17 06 58.8 +0.9**
BELG pmax pmax
comp=Z,14nm,1.3s
**NC602 NORSAR Array S 94.14 4** IAmb IAmb 17 07 21.9
comp=Z,43nm,1.7s
**NIL Nilore 94.17 52** P **P** **17 06 58.2 -0.5**
**NIL Nilore 94.17 52** IAMs_20 IAMs_20 17 48 39.7
comp=Z,620nm,20.0s
**NIL Nilore 94.17 52** P **P** **17 06 58.2 -0.5**
NIL pmax pmax
comp=Z,17nm,1.1s
NIL MLR MLR
comp=Z,600nm,20.0s
**NBO00 NORSAR Array S 94.39 4** IAmb IAmb 17 07 02.1
comp=Z,43nm,1.5s
**NB2 NORSAR Subarra 94.43 4** P **P** **17 07 00.4 +1.2**
comp=Z,1.3nm,0.7s,baz=205,slow=6.9
**NOA NORSAR Array B 94.43 4** P **P** **17 06 59.1 -0.1**
comp=Z,4.8nm,1.1s,baz=186,slow=4.4,SNR=5.5
comp=Z,4.8nm,1.1s
**ARBE Arbavere 94.58 12** *e*P **P** **17 07 01.3 +1.5**
**ACON Acoyapa 94.59 281** IAMs_20 IAMs_20 17 43 52.5
comp=Z,721nm,22.0s
**SIMJ Simiganj 94.61 46** P **P** **17 06 59.4 -1.3**
SIMJ IAMs_20 IAMs_20 17 53 37.9
comp=Z,613nm,18.0s
**NC303 NORSAR Array S 94.62 4** IAmb IAmb 17 07 01.6
comp=Z,54nm,1.7s
**CHGR Chuyangaron 94.70 46** P **P** **17 07 00.2 -0.9**
CHGR IAmb IAmb 17 07 03.3
comp=Z,32nm,1.3s
**CHGR Chuyangaron 94.70 46** P **P** **17 07 00.2 -0.9**
CHGR pmax pmax
comp=Z,31nm,1.3s
CHGR MLR MLR
comp=Z,2μm,20.0s
**FINES FINESS Array B 96.49 11** P **P** **17 07 07.8 -0.7**
**FINES FINESS Array B 96.49 11** P **P** **17 07 08.7 +0.2**
comp=Z,19nm,0.8s,baz=169,slow=1.9,SNR=32
FINES LR LR 17 54 09.9
comp=Z,206nm,18.6s,baz=214,slow=38
comp=Z,19nm,0.8s
**FINES FINESS Array B 96.49 11** *i* P **P** **17 07 08.6 +0.1**
FINES pmax pmax
comp=Z,19nm,0.8s
**ABKAR Akbulak array 96.88 34** P **P** **17 07 08.7 -1.9**
**KEF Keuruu 96.99 10** *e*P **P** **17 07 11.6 +0.8**
**BKNI Bangkinang 97.30 94** IAMs_20 IAMs_20 17 42 29.2
comp=Z,544nm,20.0s
**TGUH Tegucigalpa,Un 97.43 282** IAMs_20 IAMs_20 17 49 40.8
comp=Z,593nm,20.0s
**KK31 Karatay Array 98.30 43** P **P** **17 07 15.2 -2.0**
**KK31 Karatay Array 98.30 43** P **P** **17 07 15.2 -2.0**
KK31 pmax pmax
comp=Z,14nm,1.4s
**KKAR Karatay Array 98.30 43** P **P** **17 07 16.6 -0.6**
**KKAR Karatay Array 98.30 43** P **P** **17 07 16.7 -0.5**
KKAR IAmb IAmb 17 07 22.1
comp=Z,14nm,1.4s
**KKAR Karatay Array 98.30 43** P **P** **17 07 16.7 -0.5**
KKAR pmax pmax
comp=Z,14nm,1.4s
**ARSB Arslanbob 98.66 46** P **P** **17 07 16.8 -2.3**
**ARSB Arslanbob 98.66 46** P **P** **17 07 16.8 -2.3**
ARSB pmax pmax
comp=Z,3.0nm,1.3s
**SNET Serv Nac Est T 98.84 281** IAMs_20 IAMs_20 17 50 23.2
comp=Z,872nm,20.0s
**MTO3 Montecristo 99.32 281** IAMs_20 IAMs_20 17 52 55.0
comp=Z,740nm,18.0s
**KSH Kashi 99.42 49** P **Pdif** **17 07 21.4 -1.1**
KSH pP sP 17 07 25.7 +2.8
KSH sP pwP 17 07 28.3 -0.3
KSH SKS **SKSac** **17 18 01.4 -0.2**
KSH pmax pmax
comp=Z,11nm,1.1s
KSH LR LR
comp=Z,600nm,16.8s
KSH LR LR
comp=Z,470nm,18.2s
**BORG Borgarnes 99.65 350** *i* P **Pdif** **17 07 25.5 +2.9**
**KIRV Kirov 99.69 23***de*P **Pdif** **17 07 24.0 +1.1**
**GGN Saint George 100.30 318** IAMs_20 IAMs_20 17 42 32.4
comp=Z,756nm,22.0s
**DWPF Disney Wildern 100.33 297** IAMs_20 IAMs_20 17 55 23.1
comp=Z,494nm,18.0s
**AAK Ala-Archa 100.34 46** IAMs_20 IAMs_20 17 52 48.6
comp=Z,729nm,22.0s
**AAK Ala-Archa 100.34 46**‖ *e*P **Pdif** **17 07 27.3 +0.8**
AAK pmax pmax
comp=Z,3.0nm,1.3s
**M65A Busby, Falmout 100.42 313** IAMs_20 IAMs_20 17 43 31.8
comp=Z,668nm,20.0s
**G65A Princeton 100.75 317** IAMs_20 IAMs_20 17 46 48.4
comp=Z,837nm,19.0s
**L64A Middleborough 100.75 313** IAMs_20 IAMs_20 17 43 40.7
comp=Z,1μm,21.0s
**WES Weston 101.31 313** IAMs_20 IAMs_20 17 44 06.3
comp=Z,817nm,20.0s
**TEIG Tepich 101.50 287** IAMs_20 IAMs_20 17 51 19.5
comp=Z,740nm,20.0s
**HRV Adam Dziewonsk 101.52 313** IAMs_20 IAMs_20 17 43 32.9
comp=Z,803nm,20.0s
**656A Willston 101.81 297** IAMs_20 IAMs_20 17 56 20.4
comp=Z,811nm,18.0s
**F63A Nahmakanta, Br 101.93 317** IAMs_20 IAMs_20 17 44 52.4
comp=Z,616nm,20.0s
**W59A Clinton 101.94 304** IAMs_20 IAMs_20 17 46 28.6
comp=Z,516nm,20.0s
**P61A Hammonton 101.95 310** IAMs_20 IAMs_20 17 45 07.5
comp=Z,593nm,20.0s
**K62A Royalston 102.02 313** IAMs_20 IAMs_20 17 44 17.2
comp=Z,754nm,20.0s
**456A Hilliard 102.14 299** IAMs_20 IAMs_20 17 52 40.1
comp=Z,521nm,19.0s
**T59A Double "B" Far 102.30 306** IAMs_20 IAMs_20 17 44 15.0
comp=Z,596nm,21.0s
**F62A Pittston Farm, 102.53 317** IAMs_20 IAMs_20 17 45 13.4
comp=Z,740nm,20.0s
**HNH Hanover 102.64 314** IAMs_20 IAMs_20 17 44 30.5
comp=Z,798nm,20.0s
**E62A Clayton Lake 102.70 318** IAMs_20 IAMs_20 18 03 34.8
comp=Z,562nm,21.0s
**BIRD Birdtown, Kers 103.07 303** IAMs_20 IAMs_20 17 44 50.5
comp=Z,543nm,21.0s
**JSC Jeinsville 103.45 302** IAMs_20 IAMs_20 17 45 43.5
comp=Z,517nm,21.0s
**553A Crawfordville 103.65 297** IAMs_20 IAMs_20 17 55 54.0
comp=Z,594nm,18.0s
**TIGA Tifton 103.66 299** IAMs_20 IAMs_20 17 57 39.4
comp=Z,512nm,19.0s
**S57A Dark Hollow, R 103.67 306** IAMs_20 IAMs_20 17 46 04.1
comp=Z,536nm,20.0s
**N58A Sunbury 103.82 310** IAMs_20 IAMs_20 17 45 25.0
comp=Z,596nm,20.0s
**KMSC Kings Mountain 103.94 303** IAMs_20 IAMs_20 17 45 27.6
comp=Z,577nm,21.0s
**NCB Newcomb 103.95 314** IAMs_20 IAMs_20 17 44 16.3
comp=Z,602nm,22.0s
**M57A Sunshine Farm, 104.35 310** IAMs_20 IAMs_20 17 45 52.9
comp=Z,725nm,21.0s
**LDAQ Lac Daran 104.43 318** IAMs_20 IAMs_20 17 48 09.5
comp=Z,818nm,18.0s
**LONY Lake Ozonia 104.52 314** IAMs_20 IAMs_20 17 45 17.3
comp=Z,707nm,21.0s
**352A Blakely 104.67 298** IAMs_20 IAMs_20 17 55 06.0
comp=Z,548nm,20.0s
**R55A Marlinton 104.72 306** IAMs_20 IAMs_20 17 46 37.1
comp=Z,512nm,21.0s
**V53A Saluda 105.25 303** IAMs_20 IAMs_20 17 46 08.2
comp=Z,510nm,20.0s
**TRQ Mont Tremblant 105.37 315** IAMs_20 IAMs_20 17 46 45.4
comp=Z,813nm,20.0s
**Q54A Coxs Mills 105.56 307** IAMs_20 IAMs_20 17 46 04.2
comp=Z,597nm,21.0s
**KSM Kuching 105.63 99** IAMs_20 IAMs_20 17 46 49.9
comp=Z,593nm,22.0s
**250A Grady 105.90 298** IAMs_20 IAMs_20 17 55 35.8
comp=Z,786nm,18.0s
**BRAL Brewton 106.09 297** IAMs_20 IAMs_20 17 48 47.7
comp=Z,483nm,20.0s
**TZTN Tazewell 106.20 303** IAMs_20 IAMs_20 17 47 08.4
comp=Z,598nm,21.0s
**ALLY Alegheny Colle 106.45 309** IAMs_20 IAMs_20 18 01 52.6
comp=Z,749nm,20.0s
**ERPA Erie 106.58 310** IAMs_20 IAMs_20 17 46 22.2
comp=Z,651nm,22.0s
**ASAR Alice Springs 106.73 134** Pdiff **Pdif** **17 07 53.7 -1.7**
comp=Z,0.3nm,0.8s,baz=224,slow=5.2,SNR=1.6
ASAR PKiKP **PKiKP** **17 12 05.7 -0.1**
comp=Z,1.7nm,1.0s,baz=212,slow=1.9,SNR=11
ASAR PKKPbc **PKKPbc** **17 23 24.4 +0.8**
comp=Z,0.9nm,0.9s,baz=45,slow=3.1,SNR=5.7
ASAR PKKPab **PKKPab** **17 23 40.0 -1.9**
comp=Z,3.6nm,1.1s,baz=45,slow=4.2,SNR=8.6
**LRAL Lakeview Retre 106.96 299** IAMs_20 IAMs_20 17 58 23.7
comp=Z,464nm,19.0s
**KURBB Kurchatov Arra 107.12 40** Pdiff **Pdif** **17 07 52.8 -3.5**
comp=Z,0.1nm,0.4s,baz=220,slow=5.7,SNR=1.9
KURBB PP **PP** **17 12 17.5 -5.9**
comp=Z,1.1nm,0.9s,baz=245,slow=6.7,SNR=4.5
**MKAR Makanchi Array 107.27 45** PKiKP **PKiKP** **17 12 04.9 -1.0**
comp=Z,1.0nm,0.8s,baz=235,slow=4.3,SNR=4.5
MKAR PKKP **PKKPdf** **17 23 38.4 +2.0**
comp=Z,2.2nm,1.0s,baz=58,slow=5.4,SNR=7.7
**SFJD Kangerlussuaq 107.91 341** IAMs_20 IAMs_20 17 48 01.3
comp=Z,521nm,21.0s
**146A Union 108.29 297** IAMs_20 IAMs_20 17 59 17.9
comp=Z,511nm,18.0s
**P49A Miami Univ. Ec 108.46 305** IAMs_20 IAMs_20 17 47 17.0
comp=Z,490nm,20.0s
**O49A Covington 108.51 306** IAMs_20 IAMs_20 17 47 37.3
comp=Z,523nm,21.0s
**K50A Casco 108.61 309** IAMs_20 IAMs_20 17 48 46.7
comp=Z,613nm,20.0s
**PLAL Pickwick Lake 108.67 300** IAMs_20 IAMs_20 17 49 59.0
comp=Z,429nm,19.0s
**P48A Milroy 108.91 305** IAMs_20 IAMs_20 17 47 19.9
comp=Z,597nm,22.0s
**O48B Farmland 109.09 306** IAMs_20 IAMs_20 17 47 54.8
comp=Z,547nm,22.0s
**WMQ Urumqi 109.14 50** Pdif **Pdif** **17 08 05.4 -0.1**
WMQ LR LR
comp=Z,400nm,15.9s
WMQ LR LR
comp=Z,360nm,16.7s
WMQ LR LR
comp=Z,310nm,20.3s
**Y45A Yeager Farm, C 109.22 298** IAMs_20 IAMs_20 17 57 28.7
comp=Z,447nm,20.0s
**OXF Oxford 109.43 299** IAMs_20 IAMs_20 17 58 18.0
comp=Z,425nm,19.0s
**SUMG Summit 109.45 348** IAMs_20 IAMs_20 17 49 51.0
comp=Z,599nm,21.0s
**KAPI Kappang 109.49 110** IAMs_20 IAMs_20 17 55 45.6
comp=Z,530nm,20.0s
**N47A Urbana 109.75 306** IAMs_20 IAMs_20 17 48 25.1
comp=Z,519nm,21.0s
**WRA Warramunga Arr 109.78 132** PKiKP **PKiKP** **17 12 10.8 -0.7**
comp=Z,1.8nm,0.8s,baz=235,slow=1.9,SNR=10
WRA PKKPbc **PKKPbc** **17 23 14.2 +0.4**
comp=Z,4.2nm,0.8s,baz=48,slow=3.4,SNR=25
**P46A Rosedale 110.20 305** IAMs_20 IAMs_20 17 49 14.2
comp=Z,492nm,22.0s
**SFIN Lafayette 110.47 305** IAMs_20 IAMs_20 17 48 38.2
comp=Z,518nm,22.0s
**SLVN Son La 110.64 78** IAMs_20 IAMs_20 17 54 26.6
comp=Z,501nm,20.0s
**RKT Rikitea 110.67 222** *e*LR LR 17 44 56.2
comp=Z,2μm,31.0s
**S44A Carbondale 110.76 302** IAMs_20 IAMs_20 17 50 03.2
comp=Z,517nm,21.0s
**PZH PanZhiHua 111.33 72** PKP **PKiKP** **17 12 12.2 -2.1**
PZH PP **PP** **17 12 58.1 +3.4**
PZH AMB AMB
comp=Z,150nm,5.5s
PZH LR LR
comp=Z,520nm,18.8s
PZH LR LR
comp=Z,540nm,18.0s
PZH LR LR
comp=Z,610nm,19.2s
**Z41A Richland Creek 111.37 296** IAMs_20 IAMs_20 17 50 50.5
comp=Z,502nm,22.0s
**I45A Fountain 111.52 309** IAMs_20 IAMs_20 17 50 34.9
comp=Z,663nm,19.0s
**HQIL Hanson Quary C 111.61 306** IAMs_20 IAMs_20 17 48 12.4
comp=Z,432nm,19.0s
**FVM French Village 111.72 302** IAMs_20 IAMs_20 17 50 01.6
comp=Z,564nm,21.0s
**WLAR White Oak Lake 111.79 297** IAMs_20 IAMs_20 17 59 23.7
comp=Z,449nm,19.0s
**P43A Skaggs, Pawnee 111.81 304** IAMs_20 IAMs_20 17 51 48.8
comp=Z,482nm,20.0s
**SLM Saint Louis 111.87 303** IAMs_20 IAMs_20 17 50 33.6
comp=Z,479nm,20.0s
**WHAR Wooly Hollow 111.89 299** IAMs_20 IAMs_20 18 01 17.2
comp=Z,478nm,18.0s
**HDIL Hopedale 112.05 305** IAMs_20 IAMs_20 17 48 44.1
comp=Z,584nm,22.0s
**ZALV Zalesovo Beam 112.12 39** PKiKP **PKiKP** **17 12 13.3 -1.4**
comp=Z,1.4nm,0.7s,baz=253,slow=1.9,SNR=6.2
**HKT Hockley 112.20 292** IAMs_20 IAMs_20 17 54 10.0
comp=Z,472nm,22.0s
**KBS Kingsbay 112.27 2** IAMs_20 IAMs_20 17 54 08.9
comp=Z,571nm,22.0s
**CCM Cathedral Cave 112.34 302** IAMs_20 IAMs_20 17 50 42.9
comp=Z,522nm,20.0s
**MIAR Mount Ida 112.51 297** P **PKiKP** **17 12 16.9 +0.8**
baz=116
**MGMO Mountain Grove 112.68 300** IAMs_20 IAMs_20 17 50 02.1
comp=Z,447nm,20.0s
**Z38A Mt. Pleasant 113.01 296** IAMs_20 IAMs_20 18 04 13.0
comp=Z,515nm,19.0s
**JFWS Jewell Farm 113.69 307** P **PKiKP** **17 12 19.2 +1.1**
baz=114
**U38A Gravette 113.92 299** IAMs_20 IAMs_20 18 00 43.9
comp=Z,470nm,19.0s
**L40A Anamosa 114.00 306** IAMs_20 IAMs_20 17 52 45.7
comp=Z,501nm,20.0s
**COWI Conover 114.26 310** IAMs_20 IAMs_20 17 51 48.1
comp=Z,606nm,21.0s
**ZAIG Zacatecas 114.32 282** IAMs_20 IAMs_20 17 59 17.3
comp=Z,640nm,21.0s
**QIZ Qiongzhong 114.42 83** PKP PKPdf 17 12 19.7 -0.5
QIZ PP **PP** **17 13 15.2 -1.5**
QIZ SS SS 17 29 09.9 -0.3
QIZ LR LR
comp=Z,440nm,12.7s
QIZ LR LR
comp=Z,1μm,14.1s
QIZ LR LR
comp=Z,870nm,18.9s
**G40A Rib Lake 114.61 309** IAMs_20 IAMs_20 17 52 39.5
comp=Z,580nm,20.0s
**P38A Dawn 114.61 302** IAMs_20 IAMs_20 17 52 20.1
comp=Z,516nm,21.0s
**N38A Joes South For 114.88 304** IAMs_20 IAMs_20 18 00 47.9
comp=Z,482nm,20.0s
**CD2 Chengdu 114.88 68** PKP PKPdf 17 12 20.5 -0.3
CD2 PP **PP** **17 13 20.6 +0.8**
CD2 SKS **SKSdf** **17 19 33.9 +0.2**
CD2 AMB AMB
comp=Z,190nm,4.4s
CD2 LR LR
comp=Z,420nm,19.4s
CD2 LR LR
comp=Z,410nm,16.7s
CD2 LR LR
comp=Z,470nm,20.2s
**GTA Gaotai 115.43 58** PKP **PKiKP** **17 12 22.1 +0.3**
GTA LR LR
comp=Z,360nm,17.1s
GTA LR LR
comp=Z,350nm,17.4s
GTA LR LR
comp=Z,540nm,17.8s
**JCT Junction City 115.52 291** P **PKiKP** **17 12 22.5 +0.4**
baz=115
**E38A The Farm, Brul 116.00 310** IAMs_20 IAMs_20 17 53 01.2
comp=Z,592nm,20.0s
**EYMN Ely 116.45 311** PKPdf **PKPdf** **17 12 23.0 -0.2**
**EYMN Ely 116.45 311** P **PKiKP** **17 12 24.7 +1.4**
baz=111
**WMOK Wichita Mounta 116.49 296** P **PKiKP** **17 12 24.5 +0.7**
baz=114
**LZH Lanzhou 117.06 63** *e*PKP **PKiKP** **17 12 26.5 +1.4**
LZH LR LR
comp=Z,570nm,17.2s
LZH LR LR
comp=Z,490nm,17.5s
LZH LR LR
comp=Z,880nm,20.3s
**L34A Svendsen Farm, 117.51 304** IAMs_20 IAMs_20 17 53 51.6
comp=Z,568nm,21.0s
**TBI Tubuai 117.51 209** *e*SS SS 17 29 42.3 -5.5
comp=Z,993nm,31.5s
**TBI Tubuai 117.51 209** *e*LR LR 17 48 02.2
comp=Z,1μm,26.0s
TBI *e*LR LR 17 48 07.7
comp=Z,3μm,30.8s
**TULEG Thule 118.08 345** IAMs_20 IAMs_20 17 54 29.1
comp=Z,487nm,21.0s
**TXAR Lajitas Array 118.09 288** PKP **PKiKP** **17 12 27.1 0.0**
comp=Z,5.1nm,0.9s,baz=128,slow=2.6,SNR=30
TXAR PP **PP** **17 13 38.5 -4.0**
comp=Z,3.2nm,1.1s,baz=132,slow=5.4,SNR=6.0
TXAR PKKPbc **PKKPbc** **17 22 46.3 +0.5**
comp=Z,1.4nm,1.1s,baz=263,slow=4.2,SNR=4.7
**ECSD EROS Data Cent 118.30 306** IAMs_20 IAMs_20 17 54 57.5
comp=Z,465nm,19.0s
**ECSD EROS Data Cent 118.30 306** P **PKiKP** **17 12 27.8 +0.7**
baz=110
**BGNE Belgrade 118.55 303** IAMs_20 IAMs_20 17 56 31.2
comp=Z,466nm,21.0s
**AMTX Amarillo 118.74 295** IAMs_20 IAMs_20 18 00 00.9
comp=Z,351nm,18.0s
**AMTX Amarillo 118.74 295** P **PKiKP** **17 12 29.3 +1.0**
baz=112
**F33A 5 Mile Ranch, 118.80 308** IAMs_20 IAMs_20 18 08 07.6
comp=Z,451nm,19.0s
**ENH Enshi 119.11 71** **PKPdf** **17 12 27.2 -1.7**
ENH IAMs_20 IAMs_20 17 58 25.9
comp=Z,646nm,22.0s
**MSTX Muleshoe 119.23 293** P **PKiKP** **17 12 30.0 +0.7**
baz=112
**AGMN Agassiz Nation 119.32 311** PKPdf **PKPdf** **17 12 28.0 -0.8**
AGMN IAMs_20 IAMs_20 17 55 59.1
comp=Z,430nm,20.0s
**AGMN Agassiz Nation 119.32 311** P **PKiKP** **17 12 30.2 +1.4**
baz=108
**ULM Lac du Bonnet 119.93 313** PKP **PKPdf** **17 12 28.7 -1.2**
comp=Z,6.5nm,0.8s,baz=79,slow=1.8,SNR=10
ULM PKKPab **PKKPbc** **17 22 42.8 +3.3**
comp=Z,1.8nm,0.6s,baz=317,slow=9.5,SNR=3.3
**K30B Basset 120.00 304** IAMs_20 IAMs_20 17 54 39.4
comp=Z,755nm,21.0s
**XAN Xi'an 120.13 67**‖ PKP **PKPdf** **17 12 30.7 -0.2**
**SUSD Miller 120.13 306** P **PKiKP** **17 12 31.7 +1.1**
baz=109
**MNTX Cornudas Mount 120.39 290** P **PKiKP** **17 12 32.5 +1.0**
baz=113,SNR=10
**MOY Mondy 120.41 46** *e*PKIKP **PKiKP** **17 12 30.9 -0.1**
MOY pmax pmax
comp=Z,20nm,1.8s
**OGNE Ogallala 121.15 301** IAMs_20 IAMs_20 17 56 36.1
comp=Z,406nm,21.0s
**ZAK Zakamensk 121.44 47** *e*PKIKP **PKPdf** **17 12 32.4 -0.5**
ZAK pmax pmax
comp=Z,7.0nm,1.7s
**MDND Maddock 121.58 309** IAMs_20 IAMs_20 17 59 39.0
comp=Z,581nm,21.0s
**T25A Trinidad 121.62 296** P **PKiKP** **17 12 34.6 +0.6**
baz=110,SNR=7.4

**E28A Huff 121.94 308** IAMs_20 IAMs_20 18 03 54.5
comp=Z,419nm,20.0s
**ANMO Albuquerque 122.42 293** PKPdf **PKiKP** **17 12 36.2 +0.6**
**ANMO Albuquerque 122.42 293** P **PKiKP** **17 12 35.7 +0.1**
baz=110
**ANMO Albuquerque 122.42 293** PKIKP **PKiKP** **17 12 36.2 +0.6**
**121A Cookes Peak, D 122.59 290** P **PKiKP** **17 12 36.1 +0.1**
baz=112,SNR=6.9
**SDCO Great Sand Dun 122.64 296** IAMs_20 IAMs_20 18 06 43.0
comp=Z,392nm,19.0s
**SDCO Great Sand Dun 122.64 296** P **PKiKP** **17 12 36.5 +0.4**
baz=109,SNR=11
**PPT2 Papeete2 122.67 212** *e*SS SS 17 30 58.2 +3.7
comp=Z,328nm,26.2s
**PPT2 Papeete2 122.67 212** *e*LR LR 17 50 28.9
comp=Z,639nm,33.2s
PPT2 *e*LR LR 17 50 29.6
comp=Z,1µm,30.5s
**DZM Mont Dzumac 122.69 162** *e*LR LR 17 50 28.8
comp=Z,2µm,30.7s
**SONM Songino Array 122.73 51** PKPdf **PKPdf** **17 12 34.4 -1.2**
**SONM Songino Array 122.73 51** PKP **PKPdf** **17 12 35.4 -0.2**
comp=Z,5.0nm,0.8s,baz=227,slow=2.7,SNR=18
SONM PP **PP** **17 14 15.8 +1.9**
comp=Z,1.9nm,1.0s,baz=224,slow=6.0,SNR=2.5
**Q24A Divide 122.78 298** P **PKiKP** **17 12 37.1 +0.8**
baz=109
**LYN LuoYang 123.05 68** PKP **PKPdf** **17 12 35.2 -1.2**
LYN LR LR
comp=Z,280nm,17.9s
LYN LR LR
comp=Z,770nm,18.9s
LYN LR LR
comp=Z,1µm,21.0s
**WHN Wuhan 123.08 73** PKP **PKiKP** **17 12 37.1 +0.3**
**ULN Ulaanbaatar 123.17 51** PKPdf **PKPdf** **17 12 34.7 -1.7**
**ULN Ulaanbaatar 123.17 51** IAMs_20 IAMs_20 18 11 43.7
comp=Z,407nm,18.0s
**ULN Ulaanbaatar 123.17 51** PKIKP **PKPdf** **17 12 34.7 -1.7**
ULN MLR MLR
comp=Z,400nm,18.0s
**BTO Baotou 123.18 60** *e*PKP **PKiKP** **17 12 37.2 +0.4**
BTO LR LR
comp=Z,490nm,17.1s
BTO LR LR
comp=Z,600nm,16.1s
BTO LR LR
comp=Z,870nm,14.9s
**ISCO Idaho Springs 123.38 299** IAMs_20 IAMs_20 18 02 25.4
comp=Z,433nm,20.0s
**ISCO Idaho Springs 123.38 299** P **PKiKP** **17 12 38.1 +0.6**
baz=108
**RSSD Black Hills 123.51 304** PKPdf **PKiKP** **17 12 37.2 -0.3**
**RSSD Black Hills 123.51 304** IAMs_20 IAMs_20 18 06 51.5
comp=Z,580nm,19.0s
**RSSD Black Hills 123.51 304** P **PKiKP** **17 12 38.2 +0.6**
baz=106
**RSSD Black Hills 123.51 304** PKIKP **PKiKP** **17 12 37.2 -0.3**
RSSD MLR MLR
comp=Z,600nm,19.0s
**S22A 4UR Ranch, Cre 123.64 296** P **PKiKP** **17 12 38.6 +0.5**
baz=109
**PHWY Pilot Hill 123.72 300** IAMs_20 IAMs_20 17 58 23.2
comp=Z,395nm,20.0s
**N23A Red Feather La 123.95 300** IAMs_20 IAMs_20 17 57 05.4
comp=Z,472nm,22.0s
**N23A Red Feather La 123.95 300** P **PKiKP** **17 12 39.0 +0.4**
baz=107
**HHC Hu-ho-hao-te 124.37 60** *e*PKP **PKPdf** **17 12 32.9 -6.0**
HHC LR LR
comp=Z,200nm,16.8s
HHC LR LR
comp=Z,400nm,16.8s
HHC LR LR
comp=Z,510nm,17.6s
**DGMT Dagmar 124.72 309** IAMs_20 IAMs_20 17 58 19.9
comp=Z,518nm,21.0s
**DGMT Dagmar 124.72 309** P **PKiKP** **17 12 40.3 +0.8**
baz=103
**MVCO Mesa Verde 124.73 295** P **PKiKP** **17 12 40.5 +0.4**
baz=108
**K22A Casper 124.86 302** IAMs_20 IAMs_20 18 01 26.3
comp=Z,403nm,20.0s
**K22A Casper 124.86 302** P **PKiKP** **17 12 40.7 +0.6**
baz=106
**TUC Tucson 124.88 289** PKPdf **PKiKP** **17 12 40.6 +0.2**
**TUC Tucson 124.88 289** P **PKiKP** **17 12 40.3 -0.2**
baz=111
**TUC Tucson 124.88 289** PKIKP **PKiKP** **17 12 40.6 +0.2**
**TAOE Nuku Hiva Isla 124.95 227** *e*LR LR 17 51 33.2
comp=Z,460nm,26.3s
**W18A Petrified Fore 125.01 292** P **PKiKP** **17 12 41.1 +0.4**
baz=109
**RWWY Rawlins 125.09 300** IAMs_20 IAMs_20 18 00 07.5
comp=Z,394nm,20.0s
**O20A White River Ci 125.41 298** P **PKiKP** **17 12 42.4 +1.0**
baz=106
**LAO LASA Array 125.65 307** P **PKiKP** **17 12 42.5 +1.1**
baz=103
**HNS HongShan 125.69 65** ⇓PKP **PKiKP** **17 12 41.8 +0.1**
**SSLB Suanglung 125.79 83** IAMs_20 IAMs_20 18 03 37.1
comp=Z,563nm,19.0s
**214A Organ Pipe Nat 126.37 287** P **PKiKP** **17 12 43.9 +0.6**
baz=110
**WUAZ Wupatki 126.40 292** P **PKiKP** **17 12 44.2 +0.7**
baz=108
**YHNB Yeheng 126.51 82** IAMs_20 IAMs_20 18 07 22.1
comp=Z,520nm,20.0s
**HMU Henry Mountain 126.65 295** IAMs_20 IAMs_20 18 12 05.1
comp=Z,377nm,18.0s
**BW06 Boulder Array 127.05 301** P **PKiKP** **17 12 44.4 -0.2**
baz=104
**PDAR Pinedale Array 127.05 301** PKPdf **PKPdf** **17 12 41.5 -2.6**
**PDAR Pinedale Array 127.05 301** PKP **PKPdf** **17 12 43.5 -0.6**
comp=Z,8.5nm,0.8s,baz=115,slow=3.7,SNR=49
**TIA Tai'an 127.18 67** *e*PKP **PKPdf** **17 12 43.8 -0.5**
TIA LR LR
comp=Z,340nm,16.2s
TIA LR LR
comp=Z,250nm,17.7s
TIA LR LR
comp=Z,550nm,20.1s
**NJ2 Nanjing 127.22 73** *e*PKP **PKPdf** **17 12 43.7 -0.7**
**RLMT Red Lodge 127.38 304** IAMs_20 IAMs_20 18 02 55.8
comp=Z,402nm,20.0s
**RLMT Red Lodge 127.38 304** P **PKiKP** **17 12 45.7 +0.5**
baz=102
**BJT Baijiatuan 127.53 62** IAMs_20 IAMs_20 18 10 14.0
comp=Z,357nm,19.0s
**BJI Beijing 127.54 62** PKP **PKPdf** **17 12 44.9 +0.1**
BJI LR LR
comp=Z,160nm,19.6s
BJI LR LR
comp=Z,110nm,19.5s
BJI LR LR
comp=Z,190nm,17.6s
**LOHW Long Hollow 127.99 302** IAMs_20 IAMs_20 18 00 48.0
comp=Z,683nm,22.0s
**SNOW Snow King Moun 128.06 302** IAMs_20 IAMs_20 18 00 53.1
comp=Z,624nm,20.0s
**CIT Chita 128.09 47** *e*PKIKP **PKPdf** **17 12 45.3 -0.3**
CIT pmax pmax
comp=Z,44nm,1.7s
**H17A Grant Village 128.14 303** P **PKiKP** **17 12 47.8 +1.0**
baz=102
**AHID Auburn Hatcher 128.16 301** IAMs_20 IAMs_20 18 01 55.6
comp=Z,441nm,22.0s
**PDMCI Parker Dam,Lak 128.19 290** P **PKiKP** **17 12 47.5 +0.7**
baz=108,SNR=12
**HWUT Hardware Ranch 128.22 299** IAMs_20 IAMs_20 18 12 03.5
comp=Z,529nm,19.0s
**EGMT Eagleton 128.27 308** IAMs_20 IAMs_20 18 08 46.0
comp=Z,352nm,20.0s
**EGMT Eagleton 128.27 308** P **PKiKP** **17 12 47.0 +0.4**
baz=100
**FXWY Fox Creek 128.29 302** IAMs_20 IAMs_20 18 00 48.2
comp=Z,611nm,20.0s
**GLA Glamis 128.34 288** P **PKiKP** **17 12 47.7 +0.5**
baz=109,SNR=5.4
**DUG Dugway, Tooele 128.80 297** P **PKiKP** **17 12 48.7 +0.6**
baz=104
**BOD Bodaibo 128.87 40** *e*PKIKP **PKPdf** **17 12 46.3 -0.4**
BOD pmax pmax
comp=Z,18nm,1.6s
**MSVF Nonsavu 128.92 175** PKP **PKiKP** **17 12 50.2 +1.3**
comp=Z,12nm,0.8s,baz=170,slow=18,SNR=4.8
**IRM Iron Mountain 128.94 289** P **PKiKP** **17 12 49.2 +0.8**
baz=108,SNR=18
**BC3 Big Chuckawall 129.02 289** P **PKiKP** **17 12 49.2 +0.5**
baz=108,SNR=25
**SWSC Sam W. Stewart 129.08 288** P **PKiKP** **17 12 49.1 +0.5**
baz=108
**BOZ Bozeman (W) 129.11 304** IAMs_20 IAMs_20 18 04 50.5
comp=Z,458nm,20.0s
**BOZ Bozeman (W) 129.11 304** P **PKiKP** **17 12 49.4 +0.9**
baz=100
**V12A Nelson 129.17 291** IAMs_20 IAMs_20 18 13 54.1
comp=Z,469nm,18.0s
**IKP In-Ko-Pah, Jac 129.23 287** P **PKiKP** **17 12 50.0 +0.9**
baz=109
**GMRC Granite Mounta 129.53 290** P **PKiKP** **17 12 50.5 +0.8**
baz=107,SNR=22
**MONP2 Monument Peak 129.56 287** P **PKiKP** **17 12 50.4 +0.4**
baz=108,SNR=9.6
**BELC Belle Mtn. Jos 129.56 289** P **PKiKP** **17 12 50.6 +0.8**
baz=108,SNR=15
**SPR3 Spring Creek 3 129.65 295** IAMs_20 IAMs_20 18 10 53.5
comp=Z,515nm,20.0s
**DLMT Dillon 129.73 304** IAMs_20 IAMs_20 18 05 34.1
comp=Z,557nm,20.0s
**TPFO Pinon Flats 129.80 288** P **PKiKP** **17 12 51.5 +1.2**
baz=108,SNR=8.7
**PFO Pinyon Flats O 129.81 288** PKPdf **PKiKP** **17 12 51.3 +1.0**
**PFO Pinyon Flats O 129.81 288** P **PKiKP** **17 12 51.2 +0.9**
baz=108,SNR=8.4
**PFO Pinyon Flats O 129.81 288** PKIKP **PKiKP** **17 12 51.3 +1.0**
**TUQ Turquoise Moun 129.92 291** P **PKiKP** **17 12 51.9 +1.4**
baz=106
**Q12A Willow Creek R 130.03 295** IAMs_20 IAMs_20 18 11 11.7
comp=Z,574nm,19.0s
**HEC Hector,Ludlow 130.07 290** P **PKiKP** **17 12 52.0 +1.3**
baz=107,SNR=5.3
**109C Camp Elliot, M 130.10 287** P **PKiKP** **17 12 52.1 +1.4**
baz=108
**SHOC Shoshone, Teco 130.33 291** P **PKiKP** **17 12 52.4 +1.3**
baz=106
**S11A Rachel 130.38 293** IAMs_20 IAMs_20 18 03 54.1
comp=Z,535nm,18.0s
**MURC Murrieta 130.39 288** P **PKiKP** **17 12 52.0 +0.7**
baz=108
**R11B Troy Canyon, C 130.44 294** P **PKiKP** **17 12 52.2 +0.7**
baz=104,SNR=30
**GSC Goldstone, Bar 130.58 290** P **PKiKP** **17 12 52.9 +1.1**
baz=106,SNR=8.6
**TPNV Topopah Spring 130.59 292** P **PKiKP** **17 12 52.3 +0.5**
baz=105
**HLID Hailey 130.69 301** IAMs_20 IAMs_20 18 06 10.7
comp=Z,484nm,21.0s
**HLID Hailey 130.69 301** P **PKiKP** **17 12 52.6 +0.8**
baz=100
**GWY Greenwater Val 130.71 291** IAMs_20 IAMs_20 18 10 34.0
comp=Z,479nm,18.0s
**MSO Missoula 130.89 306** P **PKiKP** **17 12 52.8 +0.8**
baz=98
**FURC Furnace Creek, 130.94 292** P **PKiKP** **17 12 53.2 +0.9**
baz=105,SNR=5.9
**BFSC Mount Baldy Ra 130.95 289** P **PKiKP** **17 12 53.0 +0.4**
baz=107
**SCI2 San Clemente I 131.28 287** P **PKiKP** **17 12 53.9 +0.8**
baz=108
**CIS Catalina Islan 131.30 287** P **PKiKP** **17 12 54.1 +0.9**
baz=107
**LRMC Laurel Mtn Rad 131.31 290** P **PKiKP** **17 12 54.2 +1.0**
baz=106
**MPMC Manual Prospec 131.32 291** P **PKiKP** **17 12 53.9 +0.5**
baz=105
**DL2 Dalian 131.35 65** PKP **PKiKP** **17 12 52.9 -0.1**
DL2 LR LR
comp=Z,480nm,22.2s
DL2 LR LR
comp=Z,420nm,19.5s
DL2 LR LR
comp=Z,560nm,17.5s
**EDW2 Edwards Air Fo 131.40 289** P **PKiKP** **17 12 54.3 +0.9**
baz=106,SNR=16
**GRAC Grapevine Rang 131.47 292** P **PKiKP** **17 12 54.0 +0.5**
baz=105
**YKA Yellowknife Ar 131.52 326** PKPdf **PKPdf** **17 12 51.3 -0.4**
**YKA Yellowknife Ar 131.52 326** PKP **PKiKP** **17 12 52.0 -0.6**
comp=Z,10nm,1.0s,baz=68,slow=2.0,SNR=16
**MZP Montezuma Peak 131.65 293** PKPpre 17 12 41.5
**HIA Hailar 131.70 51** IAMs_20 IAMs_20 18 11 53.6
comp=Z,584nm,20.0s
**CWC Cottonwood Cre 131.88 291** P **PKiKP** **17 12 54.9 +0.5**
baz=105
**ISA Isabella, Lake 131.99 290** P **PKiKP** **17 12 55.0 +0.5**
baz=105,SNR=8.0
**SCZ2 Santa Cruz Isl 132.45 288** P **PKiKP** **17 12 56.0 +0.5**
baz=106
**NVAR Mina Array Bea 132.53 294** PKPdf **PKiKP** **17 12 56.2 +0.4**
**NVAR Mina Array Bea 132.53 294** PKP **PKiKP** **17 12 55.2 -0.6**
comp=Z,4.5nm,0.7s,baz=130,slow=1.8,SNR=22
**LHV Little Huntoon 132.64 293** IAMs_20 IAMs_20 18 12 01.0
comp=Z,445nm,18.0s
**TIXI Tiksi 132.65 20** IAMs_20 IAMs_20 18 16 18.2
comp=Z,416nm,20.0s
**RYN Ryan 132.74 294** IAMs_20 IAMs_20 18 15 29.5
comp=Z,312nm,19.0s
**PKM Mcpherson Peak 132.84 289** P **PKiKP** **17 12 56.4 -0.1**
baz=106,SNR=6.5
**A36M Sachs Harbour 132.90 340** P **PKiKP** **17 12 55.4 +0.3**
baz=64
**BMO Blue Mountains 132.95 303** IAMs_20 IAMs_20 18 03 21.3
comp=Z,428nm,20.0s
**NEW Newport 133.19 307** IAMs_20 IAMs_20 18 04 41.3
comp=Z,550nm,21.0s
**YERR Yerington 133.37 294** IAMs_20 IAMs_20 18 03 05.1
comp=Z,400nm,19.0s
**WVOR Wild Horse Val 133.55 299** IAMs_20 IAMs_20 18 14 00.5
comp=Z,485nm,18.0s
**J08A Circle Bar Ran 133.57 300** IAMs_20 IAMs_20 18 05 32.1
comp=Z,472nm,21.0s
**C36M Paulatuk 133.61 337** IAMs_20 IAMs_20 18 10 52.9
comp=Z,383nm,18.0s
**C36M Paulatuk 133.61 337** P **PKiKP** **17 12 56.9 +0.2**
baz=68
**BEKR Beckworth 134.39 295** **PKiKP** **17 13 00.4 +1.0**
**I07A Izee 134.41 301** IAMs_20 IAMs_20 18 05 07.1
comp=Z,606nm,22.0s
**INCN Inchon 134.88 68** IAMs_20 IAMs_20 18 17 04.8
comp=Z,392nm,19.0s
**CN2 Changchun 135.04 59** *e*PKP **PKPdf** **17 12 56.3 -2.6**
CN2 *e*PP **PP** **17 15 35.7 +1.3**
CN2 *e*SS SS 17 33 24.8 -4.5
CN2 AMB AMB
comp=Z,100nm,7.0s
CN2 LR LR
comp=Z,400nm,19.0s
CN2 LR LR
comp=Z,300nm,19.0s
CN2 LR LR
comp=Z,400nm,20.0s
**WRGLY Wrigley 135.37 329** PKPdf **PKPdf** **17 12 58.2 -0.6**
**WRGLY Wrigley 135.37 329** P **PKiKP** **17 12 59.8 -0.6**
baz=74
**I05D Terrebonne, OR 135.75 301** IAMs_20 IAMs_20 18 05 18.6
comp=Z,491nm,20.0s
**KSAR Wonju Array Be 135.84 69** PKPdf **PKPdf** **17 12 55.3 -5.3**
**KSAR Wonju Array Be 135.84 69** PKIKP **PKPdf** **17 12 55.3 -5.3**
**KSRS Korea Array 135.88 69** PKP **PKPdf** **17 12 59.2 -1.4**
comp=Z,4.6nm,0.9s,baz=267,slow=3.3,SNR=12
**HOOD Mount Hood Mea 136.06 303** IAMs_20 IAMs_20 18 04 56.6
comp=Z,348nm,20.0s
**YAK Yakutsk 136.23 33** PKPpre 17 12 54.8
YAK PKPdf **PKPdf** **17 12 59.7 -0.8**
**YAK Yakutsk 136.23 33** IAMs_20 IAMs_20 18 15 30.5
comp=Z,504nm,21.0s
**YAK Yakutsk 136.23 33** *e*PKIKP **PKiKP** **17 13 01.2 -1.0**
YAK pmax pmax
comp=Z,8.0nm,0.9s
**LON Longmire 136.26 305** IAMs_20 IAMs_20 18 07 52.8
comp=Z,496nm,21.0s
**ZEA Zeya 136.42 45** *e*PKIKP **PKiKP** **17 13 02.5 -0.3**
ZEA pmax pmax
comp=Z,10.0nm,0.9s
**I04A Tendick Farm, 136.47 300** IAMs_20 IAMs_20 18 05 36.6
comp=Z,561nm,20.0s
**BNX BinXian 136.61 57** ⇓PKP **PKPdf** **17 13 01.8 +0.1**
**HEH HeiHe 136.71 50** PKP PKPpre 17 12 52.7
HEH sPKP 17 13 03.9
HEH PP **PP** **17 15 46.0 +1.4**
HEH AMB AMB
comp=Z,170nm,4.8s
HEH LR LR
comp=N,220nm,17.7s
HEH LR LR
comp=E,260nm,17.2s
HEH LR LR
comp=Z,540nm,17.5s
**GNW Green Mountain 136.99 306** IAMs_20 IAMs_20 18 07 11.8
comp=Z,574nm,21.0s
**INK Inuvik 137.15 338** PKPdf **PKPdf** **17 12 58.2 -3.8**
INK IAMs_20 IAMs_20 18 06 07.2
comp=Z,620nm,21.0s
**INK Inuvik 137.15 338** P **PKiKP** **17 13 03.5 -0.4**
baz=58
**INK Inuvik 137.15 338** PKIKP **PKPdf** **17 12 58.2 -3.8**
INK MLR MLR
comp=Z,600nm,21.0s
**TOAD Toad River Com 137.29 323** P **PKiKP** **17 13 04.0 -0.5**
baz=77
**KRMB Red Mountain 137.31 297** IAMs_20 IAMs_20 18 07 00.3
comp=Z,554nm,21.0s
**KSXB Camp Six Broad 137.33 297** IAMs_20 IAMs_20 18 04 11.6
comp=Z,519nm,22.0s
**J01E Myrtle Point 137.51 299** IAMs_20 IAMs_20 18 04 27.2
comp=Z,603nm,22.0s
**KBO Bosley Butte 137.63 298** IAMs_20 IAMs_20 18 09 48.6
comp=Z,490nm,21.0s
**F31M Tsiigehtchic 137.67 337** IAMs_20 IAMs_20 18 07 06.7
comp=Z,578nm,20.0s
**MDJ Mudanjiang 138.08 59** **PKPdf** **17 13 04.0 -0.5**
MDJ IAMs_20 IAMs_20 18 13 49.1
comp=Z,422nm,21.0s
**G31M Satah River 138.11 336** IAMs_20 IAMs_20 18 07 27.5
comp=Z,596nm,21.0s
**G31M Satah River 138.11 336** P **PKiKP** **17 13 05.0 -0.9**
baz=59
**D28M Stokes Point 138.11 341** P **PKiKP** **17 13 05.5 -0.4**
baz=52
**F30M Barrier River 138.24 337** P **PKiKP** **17 13 05.4 -0.8**
baz=57
**E29M Blow River 138.45 339** PKPpre 17 12 52.7
E29M IAMs_20 IAMs_20 18 10 03.1
comp=Z,471nm,21.0s
**E29M Blow River 138.45 339** P **PKiKP** **17 13 05.9 -0.6**
baz=53
**G30M tAoh Zraii Nji 138.73 337** PKPpre 17 12 58.4
G30M IAMs_20 IAMs_20 18 08 08.8
comp=Z,535nm,21.0s
**G30M tAoh Zraii Nji 138.73 337** P **PKiKP** **17 13 06.3 -0.9**
baz=57
**D27M Malcolm River 138.78 341** IAMs_20 IAMs_20 18 08 46.8
comp=Z,413nm,22.0s
**D27M Malcolm River 138.78 341** P **PKiKP** **17 13 06.7 -0.6**
baz=49
**E28M Babbage River 138.79 340** PKPpre 17 12 55.1
E28M IAMs_20 IAMs_20 18 08 27.5
comp=Z,463nm,22.0s
**E28M Babbage River 138.79 340** P **PKiKP** **17 13 06.8 -0.5**
baz=51
**MMPY Sheldon Lake, 138.93 329** P **PKiKP** **17 13 07.5 -0.3**
baz=67
**C27K Jago River 139.23 343** P **PKiKP** **17 13 08.0 -0.1**
baz=45,SNR=13
**EPYK Eagle Plains 139.23 336** P **PKiKP** **17 13 08.4 +0.1**
baz=57
**C26K Camden Bay 139.31 343** P **PKiKP** **17 13 08.3 0.0**
baz=44
**G29M Pine Creek 139.36 337** IAMs_20 IAMs_20 18 08 11.3
comp=Z,576nm,20.0s
**G29M Pine Creek 139.36 337** P **PKiKP** **17 13 08.5 0.0**
baz=55
**F28M Old Crow 139.51 339** IAMs_20 IAMs_20 18 09 41.3
comp=Z,477nm,20.0s
**F28M Old Crow 139.51 339** P **PKiKP** **17 13 08.4 -0.4**
baz=52
**KLR Kul'dur 139.56 52** *e*PKHKP PKPpre 17 12 59.4
KLR pmax pmax
comp=Z,10.0nm,0.9s
**E27K Coleen River 139.65 340** IAMs_20 IAMs_20 18 10 52.8
comp=Z,340nm,20.0s
**E27K Coleen River 139.65 340** P **PKiKP** **17 13 08.9 -0.2**
baz=49
**I30M Mount Dempster 139.74 335** P **PKiKP** **17 13 09.1 -0.4**
baz=58
**DLBC Dease Lake 139.82 323** PKPpre 17 13 00.0
**DLBC Dease Lake 139.82 323** P **PKiKP** **17 13 09.2 -0.5**
baz=73,SNR=9.3
**H29M Whitestone 139.87 337** IAMs_20 IAMs_20 18 06 05.9
comp=Z,611nm,22.0s
**H29M Whitestone 139.87 337** P **PKiKP** **17 13 09.3 -0.2**
baz=55
**R33M Jennings River 139.98 325** PKPdf **PKPdf** **17 13 05.9 -1.8**
**R33M Jennings River 139.98 325** P **PKiKP** **17 13 09.4 -0.7**
baz=70
**J30M Hart River 140.06 334** IAMs_20 IAMs_20 18 07 26.0
comp=Z,508nm,22.0s
**J30M Hart River 140.06 334** P **PKiKP** **17 13 09.8 -0.3**
baz=59
**D25K Kavik River 140.10 343** IAMs_20 IAMs_20 18 08 38.6
comp=Z,418nm,22.0s
**D25K Kavik River 140.10 343** P **PKiKP** **17 13 09.6 -0.4**
baz=42
**BBB Bella Bella 140.13 313** PKPdf **PKPdf** **17 13 04.7 -3.2**
**N32M Quiet Lake 140.31 328** P **PKiKP** **17 13 10.4 -0.2**
baz=66
**HOLB Holberg 140.34 311** PKPpre 17 12 57.6
HOLB IAMs_20 IAMs_20 18 08 20.0
comp=Z,547nm,21.0s
**I29M Ogilvie Camp, 140.34 335** IAMs_20 IAMs_20 18 09 41.7
comp=Z,497nm,20.0s
**M31M Drury Creek, Y 140.43 330** P **PKiKP** **17 13 10.1 -0.7**
baz=64
**A21K Barrow 140.46 350** P **PKiKP** **17 13 10.4 -0.1**
baz=28
**A22K Sinclair Lake 140.48 349** P **PKiKP** **17 13 10.4 -0.2**
baz=30
**G27K Doyon Strip 140.56 339** PKPpre 17 12 59.6
**G27K Doyon Strip 140.56 339** P **PKiKP** **17 13 10.3 -0.7**
baz=50
**P33M Teslin, Yukon 140.56 326** P **PKiKP** **17 13 10.9 -0.3**
baz=68
**C23K Itkillik River 140.65 346** PKPpre 17 13 02.9
**C23K Itkillik River 140.65 346** P **PKiKP** **17 13 11.0 0.0**
baz=37,SNR=6.6
**F26K Sheenjek River 140.69 341** P **PKiKP** **17 13 10.8 -0.5**
baz=46,SNR=9.2
**Q32M Nakina River 140.75 324** P **PKiKP** **17 13 10.9 -0.9**
baz=70
**B22K Teshekpuk Lake 140.78 347** PKPpre 17 13 01.6
B22K IAMs_20 IAMs_20 18 08 48.0
comp=Z,361nm,19.0s
**B22K Teshekpuk Lake 140.78 347** P **PKiKP** **17 13 10.9 -0.3**
baz=33
**D24K Happy Valley 140.80 344** IAMs_20 IAMs_20 18 10 32.0
comp=Z,427nm,22.0s
**D24K Happy Valley 140.80 344** P **PKiKP** **17 13 11.3 -0.1**
baz=39
**J29N Klondike Camp 140.81 334** IAMs_20 IAMs_20 18 07 53.0
comp=Z,477nm,21.0s
**J29N Klondike Camp 140.81 334** P **PKiKP** **17 13 11.6 0.0**
baz=57
**I28M Miner Creek 140.85 336** IAMs_20 IAMs_20 18 09 29.7
comp=Z,517nm,20.0s
**I28M Miner Creek 140.85 336** P **PKiKP** **17 13 11.5 -0.2**
baz=54
**K29M Barlow Dome 140.88 333** P **PKiKP** **17 13 11.3 -0.5**
baz=58,SNR=20
**H27K Steamboat Moun 140.89 338** P **PKiKP** **17 13 11.2 -0.5**
baz=51,SNR=27
**BMAR Burnt Mountain 141.00 341** PKPpre 17 13 02.9
**G26K Porcupine Rive 141.10 340** P **PKiKP** **17 13 11.8 -0.2**
baz=48,SNR=36
**F25K Christian Rive 141.18 341** P **PKiKP** **17 13 12.0 -0.3**
baz=45,SNR=44
**P32M Atlin 141.22 326** P **PKiKP** **17 13 12.1 -0.5**
baz=67
**I27K Kandik River 141.31 337** P **PKiKP** **17 13 12.1 -0.5**
baz=52,SNR=28
**WHY Whitehorse 141.31 328** P **PKiKP** **17 13 12.2 -0.6**
baz=65
**N31M Braeburn, Yuko 141.34 329** IAMs_20 IAMs_20 18 09 25.8
comp=Z,508nm,21.0s
**N31M Braeburn, Yuko 141.34 329** P **PKiKP** **17 13 13.0 +0.3**
baz=63
**TOLK Toolik Lake Re 141.37 344** P **PKiKP** **17 13 12.5 -0.1**
baz=39,SNR=24
**DAWY Dawson 141.46 334** P **PKiKP** **17 13 12.2 -0.7**
baz=56
**L29M L29M 141.50 332** PKPpre 17 13 03.4
**L29M L29M 141.50 332** P **PKiKP** **17 13 12.5 -0.5**

baz=58,SNR=15
V35K Ketchikan 141.53 319 P PKiKP 17 13 12.7 -0.4
baz=75
E24K Your Creek 141.55 343 IAMs_20 IAMs_20 18 12 57.9
comp=Z,292nm,20.0s
E24K Your Creek 141.55 343 P PKiKP 17 13 12.7 -0.3
baz=41,SNR=12
B21K Ikpikpuk River 141.61 347 IAMs_20 IAMs_20 18 09 38.0
comp=Z,385nm,22.0s
B21K Ikpikpuk River 141.61 347 P PKiKP 17 13 12.8 -0.1
baz=32
EGAK Eagle 141.66 336 P PKiKP 17 13 12.4 -0.9
baz=53,SNR=22
B20K Meade River 141.71 349 IAMs_20 IAMs_20 18 06 57.1
comp=Z,474nm,21.0s
B20K Meade River 141.71 349 P PKiKP 17 13 12.8 -0.4
baz=28,SNR=10
FYU Fort Yukon 141.78 340 PKPdf PKPdf 17 13 07.1 -3.4
O30N Mendenhall 141.80 328 PKPpre 17 13 05.3
O30N Mendenhall 141.80 328 P PKiKP 17 13 13.0 -0.7
baz=63
F24K Squaw Lake 141.82 342 IAMs_20 IAMs_20 18 16 01.1
comp=Z,354nm,21.0s
F24K Squaw Lake 141.82 342 P PKiKP 17 13 13.1 -0.5
baz=42,SNR=46
E23K Chandalar 141.84 343 P PKiKP 17 13 13.2 -0.4
baz=39,SNR=11
D22K Ayikyak River 141.86 346 IAMs_20 IAMs_20 18 11 13.9
comp=Z,479nm,21.0s
D22K Ayikyak River 141.86 346 P PKiKP 17 13 13.1 -0.4
baz=35,SNR=20
G25K Bearman Lake 141.89 340 P PKiKP 17 13 13.8 +0.2
baz=45
N30M Aishikik Lake 141.91 330 IAMs_20 IAMs_20 18 10 55.8
comp=Z,537nm,20.0s
N30M Aishikik Lake 141.91 330 P PKiKP 17 13 13.6 -0.3
baz=61,SNR=12
M29M Somme Creek 141.98 332 P PKiKP 17 13 13.6 -0.5
baz=59,SNR=6.8
I26K Coal Creek Min 142.00 337 IAMs_20 IAMs_20 18 10 00.4
comp=Z,480nm,20.0s
I26K Coal Creek Min 142.00 337 P PKiKP 17 13 13.5 -0.4
baz=50
SKAG Skagway 142.02 326 P PKiKP 17 13 13.8 -0.2
baz=66
R32K Eaglecrest 142.10 324 P PKiKP 17 13 14.1 -0.2
baz=68
A19K Wainwright 142.10 351 P PKiKP 17 13 13.8 -0.1
baz=23
U33K Whale Pass 142.12 320 P PKiKP 17 13 14.3 -0.1
baz=72
H25L Birch Creek 142.16 340 P PKiKP 17 13 14.4 +0.2
baz=46
G24K Hadweenzic Riv 142.32 341 IAMs_20 IAMs_20 18 11 57.3
comp=Z,454nm,20.0s
G24K Hadweenzic Riv 142.32 341 P PKiKP 17 13 14.4 -0.1
baz=43
GRNR Gornyy 142.38 49 || *i* PKiKP PKPdf 17 13 08.0 -4.1
GRNR pmax pmax
comp=Z,6.0nm,1.0s
S32K Killisnoo 142.43 323 IAMs_20 IAMs_20 18 10 49.6
comp=Z,493nm,18.0s
K27K Chicken 142.44 335 IAMs_20 IAMs_20 18 14 29.3
comp=Z,450nm,19.0s
E21K Killik River 142.49 346 IAMs_20 IAMs_20 18 11 22.8
comp=Z,499nm,22.0s
E21K Killik River 142.49 346 P PKiKP 17 13 14.6 -0.3
baz=33
PLBC Pleasant Camp 142.50 327 P PKiKP 17 13 14.3 -0.8
baz=64
PRP Porcupine Dome 142.60 339 IAMs_20 IAMs_20 18 12 17.1
comp=Z,470nm,20.0s
PRP Porcupine Dome 142.60 339 P PKiKP 17 13 14.5 -0.9
baz=47
YUK4 Talbot Arm 142.62 330 P PKiKP 17 13 14.6 -1.0
baz=60
COLD Coldfoot 142.62 343 P PKiKP 17 13 14.7 -0.4
baz=39
J26L Joseph Creek 142.65 337 IAMs_20 IAMs_20 18 10 53.7
comp=Z,537nm,21.0s
J26L Joseph Creek 142.65 337 P PKiKP 17 13 15.0 -0.4
baz=50
YUK6 Outpost Mounta 142.70 329 P PKiKP 17 13 15.0 -0.8
baz=60,SNR=7.2
D20K Etivluk River 142.76 348 P PKiKP 17 13 15.1 -0.3
baz=30,SNR=14
F22K John River 142.87 344 P PKiKP 17 13 14.8 -0.9
baz=36,SNR=62
C19K Lookout Ridge 142.90 349 IAMs_20 IAMs_20 18 12 16.1
comp=Z,410nm,20.0s
C19K Lookout Ridge 142.90 349 P PKiKP 17 13 15.0 -0.8
baz=25,SNR=17
BCAR Beaver Creek A 142.91 334 PKPdf PKPdf 17 13 08.5 -4.2
L27K Beaver Creek, 142.93 334 PKPdf 17 13 08.7 -4.1
L27K Beaver Creek, 142.93 334 P PKiKP 17 13 15.6 -0.3
baz=54,SNR=26
SIT Sitka 142.95 322 P PKiKP 17 13 16.1 0.0
baz=68
B18K Kokolik River 142.98 351 P PKiKP 17 13 15.6 -0.2
baz=22,SNR=7.2
G23K Bananza Creek 142.98 342 PKPdf PKPdf 17 13 09.0 -3.8
G23K IAMs_20 IAMs_20 18 10 42.8
comp=Z,374nm,22.0s
G23K Bananza Creek 142.98 342 P PKiKP 17 13 15.8 -0.1
baz=40
JGF Kuroka 142.99 74 PKPdf PKPdf 17 13 11.7 -2.0
P29M Windy Craggy 143.05 327 PKPdf PKPdf 17 13 10.0 -3.1
P29M Windy Craggy 143.05 327 P PKiKP 17 13 15.9 -0.4
baz=63
H24K Noodor Dome 143.06 340 P PKiKP 17 13 15.7 -0.4
baz=43
S31K Pelican 143.06 324 P PKiKP 17 13 16.0 -0.2
baz=66
E20K Nigu River 143.08 347 P PKiKP 17 13 16.0 -0.1
baz=30
O29M Mount Kennedy 143.11 329 P PKiKP 17 13 15.4 -1.1
baz=61
YUK8 Steele Glacier 143.12 331 P PKiKP 17 13 15.4 -1.3
baz=58
SCRK Sand Creek 143.13 336 PKPbc 17 13 09.1 -1.0
SCRK IAMs_20 IAMs_20 18 13 55.4
comp=Z,375nm,20.0s
SCRK Sand Creek 143.13 336 P PKiKP 17 13 14.9 -1.5
baz=50
YUK3 Moose Creek 143.13 331 P PKiKP 17 13 14.9 -1.7
baz=57
J25K Salcha River, 143.16 338 PKPpre 17 13 08.1
J25K IAMs_20 IAMs_20 18 10 55.2
comp=Z,471nm,19.0s
J25K Salcha River, 143.16 338 P PKiKP 17 13 15.0 -1.4
baz=48
D19K Kuna River 143.21 348 IAMs_20 IAMs_20 18 13 00.4
comp=Z,522nm,20.0s
M27K Edge Creek, AK 143.36 333 P PKiKP 17 13 15.4 -1.5
baz=55
F21K Alatna River 143.40 345 PKPdf PKPbc 17 13 10.0 -0.7
F21K IAMs_20 IAMs_20 18 06 44.6
comp=Z,364nm,22.0s
F21K Alatna River 143.40 345 P PKiKP 17 13 15.8 -0.9
baz=35
POKR Poker Plat Res 143.45 339 IAMs_20 IAMs_20 18 10 34.7
comp=Z,548nm,20.0s
POKR Poker Plat Res 143.45 339 P PKiKP 17 13 16.2 -0.7
baz=45
L26K Log Cabin Wild 143.50 335 P PKiKP 17 13 16.4 -0.7
baz=52
ILAR Eielson Array 143.53 338 PKPpre 17 13 09.8
ILAR Eielson Array 143.53 338 PKhKP PKPpre 17 13 10.8
comp=Z,62nm,0.8s,baz=9.6,slow=2.6,SNR=156
ILAR Eielson Array 143.53 338 PKiKP PKPab 17 13 09.8 -0.3
H23K Yukon River 143.53 341 P PKiKP 17 13 16.2 -0.9
baz=41,SNR=42
C18K Utukok River 143.56 350 IAMs_20 IAMs_20 18 31 26.5
comp=Z,352nm,20.0s
C18K Utukok River 143.56 350 P PKiKP 17 13 16.2 -0.9
baz=23,SNR=16
O28M Mount Upton 143.56 330 P PKiKP 17 13 16.5 -1.1
baz=58,SNR=32
MENT Mentasta 143.69 335 PKPbc 17 13 11.2 -0.4
BCPM Bancas Point 143.74 329 PKPbc 17 13 12.5 +0.7
COLA College 143.75 339 PKPab 17 13 10.1 -0.8
COLA College 143.75 339 P PKiKP 17 13 16.9 -0.5
baz=44
COLA College 143.75 339 PKiKP PKPab 17 13 10.1 -0.8
COLA MLR MLR
comp=Z,600nm,21.0s
M26K Nabesna, AK 143.75 334 PKPdf PKPbc 17 13 12.1 +0.2
baz=48,SNR=24
M26K Nabesna, AK 143.75 334 P PKiKP 17 13 16.8 -0.8
baz=53,SNR=20
PNL Peninsula 143.78 328 P PKiKP 17 13 17.9 +0.1
baz=61,SNR=9.5
MDM Murphy Dome 143.80 339 PKPab 17 13 10.9 -0.3
HDA Harding Lake 143.80 338 IAMs_20 IAMs_20 18 11 08.1
comp=Z,497nm,21.0s
HDA Harding Lake 143.80 338 P PKiKP 17 13 17.2 -0.4
baz=46,SNR=60
MJB9 Matsu-Tunnel 143.81 72 PKPdf PKPbc 17 13 12.4 -0.3
MAJO Matsushiro 143.82 72 PKPdf PKPbc 17 13 13.3 +0.5
MAJO Matsushiro 143.82 72 PKIKP PKPbc 17 13 13.3 +0.5
MJAR Matsushiro Arr 143.82 72 PKP PKPbc 17 13 13.1 +0.3
comp=Z,11nm,0.7s,baz=251,slow=2.9,SNR=29
K24K Donnelly Dome 143.84 337 P PKPbc 17 13 12.7 +0.7
baz=48,SNR=20
CCB Clear Creek Bu 143.90 339 IAMs_20 IAMs_20 18 10 35.6
comp=Z,489nm,20.0s
CTGM Chitina Glacie 143.93 331 IAMs_20 IAMs_20 18 08 33.1
comp=Z,570nm,22.0s
CTG Chitna Glacier 143.93 331 P PKPdf 17 13 13.9 -0.8
baz=57,SNR=16
H22K Ishtalitna Cre 143.96 342 P PKPdf 17 13 13.6 -0.8
baz=39,SNR=27
E19K Redstone River 143.97 347 IAMs_20 IAMs_20 18 10 16.4
comp=Z,518nm,22.0s
E19K Redstone River 143.97 347 P PKPdf 17 13 13.9 -0.6
baz=29,SNR=18
G21K Allakaket 143.98 344 IAMs_20 IAMs_20 18 12 27.2
comp=Z,371nm,22.0s
G21K Allakaket 143.98 344 P PKPdf 17 13 13.8 -0.7
baz=35,SNR=30
I23K Minto, Yukon-K 143.99 340 IAMs_20 IAMs_20 18 13 23.8
comp=Z,543nm,20.0s
I23K Minto, Yukon-K 143.99 340 P PKPdf 17 13 13.2 -1.2
baz=42,SNR=70
C17K DeLong Mountai 143.99 351 P PKPdf 17 13 13.2 -1.2
baz=21,SNR=14
F20K Avaraart Lake 144.02 346 IAMs_20 IAMs_20 18 13 06.2
comp=Z,568nm,21.0s
F20K Avaraart Lake 144.02 346 P PKPdf 17 13 13.5 -1.0
baz=32,SNR=22
JSD Sado 144.05 70 IAMs_20 IAMs_20 18 00 00.0
comp=Z,458nm,21.0s
WRH Wood River Hil 144.11 339 IAMs_20 IAMs_20 18 10 51.2
comp=Z,508nm,20.0s
BILL Bilibino 144.13 10 *de* PKiKP PKPdf 17 13 13.7 -1.0
BILL *i* 17 13 18.4
BILL pmax pmax
comp=Z,13nm,1.3s
BILL pmax pmax
comp=Z,29nm,1.0s
BILL MLR MLR
comp=Z,151nm,19.0s
TABL Table Mountain 144.13 330 PKPbc 17 13 13.3 +0.1
GRNC Granite Creek 144.23 331 IAMs_20 IAMs_20 18 08 18.7
comp=Z,472nm,20.0s
PAX Paxson 144.29 335 P PKPdf 17 13 14.4 -0.8
baz=49,SNR=22
NEA2 Nenana 144.31 339 P PKPbc 17 13 13.6 +0.2
baz=43,SNR=66
RDOG Red Dog Mine 144.35 351 PKPab 17 13 12.2 -0.9
RDOG Red Dog Mine 144.35 351 P PKPdf 17 13 14.8 -0.3
baz=21,SNR=5.4
MCARA McCarthy VSAT 144.37 332 PKPdf 17 13 14.2 -1.1
MCARA McCarthy VSAT 144.37 332 P PKPdf 17 13 15.2 -0.1
baz=54,SNR=67
C16K Lisburne Hills 144.45 352 IAMs_20 IAMs_20 18 13 49.9
comp=Z,324nm,21.0s
C16K Lisburne Hills 144.45 352 P PKPdf 17 13 14.3 -0.9
baz=18,SNR=6.9
MLY Manley 144.46 341 P PKPdf 17 13 14.3 -1.1
baz=40,SNR=94
IMAR Indian Mountai 144.48 344 PKPdf PKPab 17 13 13.3 -0.3
H21K Melozitna Rive 144.51 343 PKPdf PKPab 17 13 13.2 -0.6
H21K IAMs_20 IAMs_20 18 13 29.5
comp=Z,377nm,22.0s
H21K Melozitna Rive 144.51 343 P PKPdf 17 13 14.9 -0.6
baz=37,SNR=55
ISLE Juniper Island 144.54 331 IAMs_20 IAMs_20 18 10 33.2
comp=Z,482nm,20.0s
HARP HAARP 144.55 335 P PKPdf 17 13 15.4 -0.2
baz=50,SNR=38
E18K Tukpahlearik C 144.59 349 IAMs_20 IAMs_20 18 08 54.4
comp=Z,547nm,22.0s
E18K Tukpahlearik C 144.59 349 P PKPdf 17 13 15.3 -0.2
baz=25,SNR=16
MESA MESA 144.62 330 PKPbc 17 13 15.0 +0.2
MESA MESA 144.62 330 P PKPbc 17 13 14.8 0.0
baz=57,SNR=11
F19K Shaleruckik Mo 144.62 347 IAMs_20 IAMs_20 18 11 11.2
comp=Z,532nm,22.0s
F19K Shaleruckik Mo 144.62 347 P PKPbc 17 13 14.3 0.0
baz=29,SNR=49
TGL Tana Glacier 144.66 331 PKPbc 17 13 14.7 0.0
TGL IAMs_20 IAMs_20 18 12 41.2
comp=Z,508nm,20.0s
D17K Noatak River 144.71 351 P PKPdf 17 13 14.9 -0.7
baz=21
CRQE Cirque 144.76 331 P PKPbc 17 13 14.9 -0.2
baz=55,SNR=23
WAX Waxell Ridge 144.84 331 PKPdf 17 13 15.6 -0.6
N25K Chitina, Valde 144.84 333 P PKPdf 17 13 15.6 -0.6
baz=52,SNR=193
DHY Denali Highway 144.86 337 PKPdf PKPab 17 13 14.8 -0.5
DHY Denali Highway 144.86 337 P PKPdf 17 13 15.6 -0.7
baz=47,SNR=146
MCK McKinley 144.90 338 P PKPbc 17 13 15.1 -0.2
baz=44,SNR=44
SEY Seymchan 144.96 24 *c* *i* PKiKP PKPdf 17 13 15.9 -0.3
G19K Purcell Mounta 145.08 346 P PKPdf 17 13 16.5 +0.1
baz=31,SNR=41
E17K Hotham Inlet 145.10 349 P PKPab 17 13 15.7 -0.2
baz=23
M24K Tolsona, Glenn 145.10 335 P PKPdf 17 13 16.2 -0.4
baz=49,SNR=26
RND Reindeer 145.11 338 PKPbc 17 13 14.6 -1.5
RND IAMs_20 IAMs_20 18 14 48.7
comp=Z,485nm,20.0s
RND Reindeer 145.11 338 PKP2 PKPbc 17 13 14.6 -1.5
RND MLR MLR
comp=Z,500nm,20.0s
H20K Anotleneega Mo 145.15 344 P PKPab 17 13 15.8 -0.3
baz=34,SNR=79
F18K Selawik 145.18 348 P PKPdf 17 13 16.3 -0.1
baz=27,SNR=36
BGLC Bering Glacier 145.20 330 P PKPdf 17 13 16.3 -0.3
baz=55
BMRM Bremner River 145.23 332 P PKPdf 17 13 16.7 -0.2
baz=53,SNR=58
BPAW Bear Paw Mtn. 145.24 340 PKPbc 17 13 14.6 -1.9
BPAW IAMs_20 IAMs_20 18 13 60.0
comp=Z,541nm,20.0s
BPAW Bear Paw Mtn. 145.24 340 P PKPdf 17 13 16.4 -0.3
baz=41,SNR=74
WAT6 Susitna Watana 145.33 336 P PKPdf 17 13 16.9 -0.2
baz=47,SNR=62
KLU Klutina 145.41 334 P PKPdf 17 13 17.5 +0.4
baz=50,SNR=85
WAT1 Susitna Watana 145.42 337 P PKPdf 17 13 17.3 +0.2
baz=45
HMT Hamilton 145.47 331 PKPab 17 13 17.1 -0.4
H19K Roundabout Mou 145.48 345 PKPbc 17 13 15.9 -1.1
H19K IAMs_20 IAMs_20 18 13 20.6
comp=Z,421nm,21.0s
H19K Roundabout Mou 145.48 345 P PKPab 17 13 17.5 +0.2
baz=32,SNR=41
F17K Baldwin Pennin 145.60 349 PKPdf PKPdf 17 13 15.8 -1.3
F17K IAMs_20 IAMs_20 18 11 46.4
comp=Z,354nm,21.0s
F17K Baldwin Pennin 145.60 349 P PKPab 17 13 17.7 0.0
baz=24,SNR=22
G18K Tagagawik 145.62 346 PKPdf PKPab 17 13 17.5 -0.4
G18K IAMs_20 IAMs_20 18 14 22.5
comp=Z,445nm,21.0s
G18K Tagagawik 145.62 346 P PKPab 17 13 17.9 +0.1
baz=28,SNR=134
I20K Naaghedeneel 145.63 343 PKPdf 17 13 16.4 -0.9
I20K IAMs_20 IAMs_20 18 16 14.6
comp=Z,431nm,19.0s
I20K Naaghedeneel 145.63 343 P PKPab 17 13 18.1 +0.2
baz=35,SNR=100
SCM Sheep Creek Mo 145.69 335 P PKPab 17 13 18.5 +0.2
baz=48,SNR=51
KAIM Kayak Island 145.78 331 P PKPab 17 13 18.8 +0.2
baz=54,SNR=7.4
M23K Glacier View 145.86 335 P PKPab 17 13 18.8 -0.1
baz=48,SNR=24
EYAK Cordova Ski Ar 145.93 332 P PKPab 17 13 19.6 +0.5
baz=52,SNR=55
JMM Marumori 146.03 70 PKPdf 17 13 18.2 -0.6
J20K Nowinta River 146.04 342 IAMs_20 IAMs_20 18 13 51.1
comp=Z,568nm,21.0s
J20K Nowinta River 146.04 342 P PKPab 17 13 19.2 -0.3
baz=36,SNR=152
SML Sawmill 146.06 336 P PKPab 17 13 19.4 -0.3
baz=47,SNR=49
H18K Honhosa River 146.21 346 IAMs_20 IAMs_20 18 14 44.9
comp=Z,485nm,21.0s
H18K Honhosa River 146.21 346 P PKPab 17 13 20.1 0.0
baz=30,SNR=40
GLI Glacier Island 146.24 334 P PKPab 17 13 20.0 -0.3
baz=50,SNR=29
GCSA Galena City Sc 146.24 344 P PKPab 17 13 19.9 -0.2
baz=32,SNR=10
CUT Chulitna 146.28 337 P PKPab 17 13 20.1 -0.3
baz=44
UGL Uglegorsk 146.28 50 *e* PKP2 PKPab 17 13 20.9 +0.1
UGL pmax pmax
comp=Z,150nm,1.8s
UGL pmax pmax
comp=Z,2μm,5.5s
G17K Kiwalik Mounta 146.35 347 P PKPab 17 13 20.4 -0.2
baz=26,SNR=18
KNK Knik Glacier 146.37 335 P PKPab 17 13 20.6 -0.3
baz=47,SNR=14
JTM Tenmabayashi 146.40 65 PKPdf PKPbc 17 13 19.9 -0.8
PMR Palmer 146.48 336 P PKPab 17 13 20.7 -0.5
baz=46,SNR=11
J19K Poorman 146.57 343 P PKPab 17 13 21.4 -0.1
baz=34,SNR=105
K20K Telida 146.68 341 PKPdf 17 13 18.4 -0.8
K20K Telida 146.68 341 P PKPbc 17 13 20.3 -0.6
baz=37
M22K Willow 146.71 337 IAMs_20 IAMs_20 18 15 09.9
comp=Z,439nm,20.0s
M22K Willow 146.71 337 P PKPab 17 13 21.9 -0.1
baz=44,SNR=14
PWL Port Wells 146.71 334 P PKPab 17 13 21.4 -0.7
baz=48,SNR=11
H17K Granite Mounta 146.71 346 IAMs_20 IAMs_20 18 21 17.0
comp=Z,361nm,19.0s
H17K Granite Mounta 146.71 346 P PKPab 17 13 21.3 -0.7
baz=27,SNR=54
G16K Koyuk River 146.74 348 IAMs_20 IAMs_20 18 10 46.7
comp=Z,329nm,22.0s
G16K Koyuk River 146.74 348 P PKPab 17 13 21.1 -1.0
baz=23,SNR=29
F15K North Star Dit 146.80 350 P PKPab 17 13 21.4 -1.0
baz=20,SNR=18
Q23K Middleton Isla 146.86 331 P PKPbc 17 13 21.6 +0.2
baz=52
P23K Montague Islan 146.92 333 P PKPab 17 13 22.2 -0.8
baz=50,SNR=11
SKT Skwentna 147.00 338 IAMs_20 IAMs_20 18 12 40.6
comp=Z,561nm,22.0s
SKT Skwentna 147.00 338 P PKPab 17 13 22.7 -0.5
baz=42,SNR=61
RC01 Rabbit Creek A 147.04 335 P PKPbc 17 13 22.2 +0.2
baz=46,SNR=20
SUA Susitna One 147.12 337 IAMs_20 IAMs_20 18 13 11.9
comp=Z,394nm,21.0s
SUA Susitna One 147.12 337 P PKPab 17 13 23.4 -0.5
baz=44,SNR=7.8
YSS Yuzh-Sakhalins 147.15 54 PKPdf PKPdf 17 13 19.2 -1.2
YSS IAMs_20 IAMs_20 18 19 10.5
comp=Z,360nm,19.0s
YSS Yuzh-Sakhalins 147.15 54 *i* PKiKP PKPdf 17 13 20.7 +0.3
YSS *e* 17 13 27.2
YSS *e* 17 20 22.5
YSS *e* 17 29 25.7
YSS pmax pmax
comp=Z,70nm,1.0s
YSS pmax pmax
comp=E,600nm,4.2s
F14K Arctic Creek 147.25 351 P PKPab 17 13 23.4 -0.8
baz=17,SNR=8.9
J18K Innoko River 147.28 343 P PKPab 17 13 23.5 -0.8
baz=33,SNR=98
L20K Farewell, AK 147.33 340 P PKPab 17 13 23.5 -1.1
baz=38,SNR=66
TNA Tin City 147.35 353 P PKPab 17 13 23.5 -0.9
baz=15
G15K Niukluk 147.38 349 P PKPab 17 13 23.9 -0.7
baz=21,SNR=6.7
ASAJ Asahikawa 147.41 59 PKIKP PKPdf 17 13 21.6 +0.6
JKA Kamikawa-asahi 147.41 59 PKPdf 17 13 21.6 +0.6
H16K Elim 147.42 348 P PKPab 17 13 24.3 -0.5
baz=24,SNR=18
O22K Cooper Landing 147.46 335 P PKPab 17 13 24.5 -0.5
baz=46
M20K Styx River 147.57 339 IAMs_20 IAMs_20 18 13 20.6
comp=Z,489nm,19.0s
M20K Styx River 147.57 339 P PKPab 17 13 24.3 -1.3
baz=40,SNR=64
SEW Seward 147.62 334 P PKPab 17 13 24.9 -0.8
baz=47,SNR=9.6
N20K Mount Spurr 147.80 337 P PKPbc 17 13 24.7 +0.6
baz=42,SNR=8.1
I17K Unalakleet 147.81 346 P PKiKP 17 13 25.3 -0.5
baz=27
L19K White Mountain 147.84 340 PKPdf PKPdf 17 13 20.9 -0.3
L19K IAMs_20 IAMs_20 18 17 25.7
comp=Z,477nm,20.0s
L19K White Mountain 147.84 340 P PKiKP 17 13 25.3 -0.7
baz=37,SNR=31
J17K VABM Dome 147.90 344 P PKiKP 17 13 25.3 -0.8
baz=30,SNR=30
M19K Big River Lodg 147.93 340 P PKiKP 17 13 25.4 -0.9
baz=38,SNR=40
ANM Nome 147.99 350 IAMs_20 IAMs_20 18 14 04.0
comp=Z,328nm,21.0s
ANM Nome 147.99 350 P PKiKP 17 13 25.4 -0.8
baz=19
K17K Iditarod 148.30 343 IAMs_20 IAMs_20 18 16 16.7
comp=Z,462nm,19.0s
K17K Iditarod 148.30 343 P PKiKP 17 13 26.7 -0.3
baz=32,SNR=20
L18K Granite Mounta 148.31 342 PKPdf 17 13 22.4 +0.4
L18K IAMs_20 IAMs_20 18 15 57.8
comp=Z,516nm,21.0s
L18K Granite Mounta 148.31 342 P PKiKP 17 13 26.3 -0.6
baz=34,SNR=37
J16K Anvik River 148.33 346 IAMs_20 IAMs_20 18 13 39.9
comp=Z,367nm,21.0s
J16K Anvik River 148.33 346 P PKiKP 17 13 26.5 -0.4
baz=28,SNR=10
BRSE Bradley Lake S 148.35 334 P PKiKP 17 13 26.7 -0.5
baz=46,SNR=8.1
M18K Stony River 148.67 340 P PKiKP 17 13 27.5 -0.3
baz=36,SNR=75
HOM Homer 148.73 335 PKPdf 17 13 22.2 -0.5
HOM Homer 148.73 335 P PKiKP 17 13 27.1 -0.8
baz=44
O20K Slope Mountain 148.76 336 P PKPbc 17 13 26.9 +0.3
baz=43
L17K Donlin 148.80 343 P PKiKP 17 13 27.3 -0.6
baz=32,SNR=30
N19K Bonanza Creek 148.81 338 IAMs_20 IAMs_20 18 14 16.5
comp=Z,493nm,20.0s
N19K Bonanza Creek 148.81 338 P PKiKP 17 13 27.6 -0.6
baz=39,SNR=10
M17K Holitna River 149.19 341 PKPdf PKPdf 17 13 23.5 +0.2
M17K Holitna River 149.19 341 P PKiKP 17 13 28.5 -0.4
baz=34,SNR=33
P19K Oil Pt 149.29 336 PKPbc 17 13 25.5 -2.4
P19K Oil Pt 149.29 336 P PKiKP 17 13 28.6 -0.5
baz=42
N18K Kilae Creek 149.34 339 IAMs_20 IAMs_20 18 13 57.5
comp=Z,511nm,21.0s
N18K Kilae Creek 149.34 339 P PKiKP 17 13 29.1 -0.1
baz=37,SNR=16
J14K Nanvaranak Lak 149.39 347 IAMs_20 IAMs_20 18 16 53.7
comp=Z,309nm,21.0s
J14K Nanvaranak Lak 149.39 347 P PKiKP 17 13 29.4 +0.2
baz=23,SNR=18
K15K Wolf Creek Mou 149.41 345 IAMs_20 IAMs_20 18 22 00.4
comp=Z,407nm,19.0s
K15K Wolf Creek Mou 149.41 345 P PKiKP 17 13 29.5 +0.3
baz=27,SNR=43
GAMB Gambell 149.44 355 P PKiKP 17 13 29.2 0.0
baz=9.6
L16K Owhat River 149.45 343 IAMs_20 IAMs_20 18 16 51.8
comp=Z,446nm,20.0s
L16K Owhat River 149.45 343 P PKiKP 17 13 29.5 +0.2

baz=30,SNR=32
**Q20K Shuyak Island 149.75 334** P **PKiKP 17 13 29.5 -0.5**
baz=45
**O18K Koktuh Hills 149.79 338** P **PKiKP 17 13 29.7 -0.4**
baz=39
**N17K Nushagak Hills 149.85 340** IAMs_20 IAMs_20 18 14 42.4
comp=Z,449nm,20.0s
**N17K Nushagak Hills 149.85 340** P **PKiKP 17 13 30.5 +0.3**
baz=35,SNR=27
**M16K Timber Creek 149.91 342** IAMs_20 IAMs_20 18 16 15.0
comp=Z,276nm,20.0s
**M16K Timber Creek 149.91 342** P **PKiKP 17 13 30.2 -0.1**
baz=32,SNR=26
**L15K Ungalak Mounta 149.95 345** P **PKiKP 17 13 30.1 -0.2**
baz=27,SNR=43
**Q19K Cape Douglas, 149.97 335** P **PKiKP 17 13 30.2 -0.3**
baz=42
**P18K Big Mountain, 150.15 337** IAMs_20 IAMs_20 18 17 49.0
comp=Z,451nm,20.0s
**P18K Big Mountain, 150.15 337** P **PKiKP 17 13 30.4 -0.5**
baz=39
**N16K Nishlik Lake 150.33 341** P **PKiKP 17 13 31.4 +0.1**
baz=33
**K13K Kusilvak Mount 150.34 348** PKPdf **PKPdf 17 13 21.9 -3.3**
K13K **pPKPdf 17 13 27.4 +2.0**
K13K IAMs_20 IAMs_20 18 23 37.2
comp=Z,392nm,18.0s
**K13K Kusilvak Mount 150.34 348** P **PKiKP 17 13 31.1 0.0**
baz=22,SNR=22
**KDAK Kodiak Island 150.41 333** PKPdf **PKPdf 17 13 24.2 -1.1**
**KDAK Kodiak Island 150.41 333** P **PKiKP 17 13 31.1 -0.3**
baz=45
**KDAK Kodiak Island 150.41 333** PKIKP **PKPdf 17 13 24.3 -1.1**
KDAK MLR MLR
comp=Z,700nm,22.0s
**O17K Koliganek Bris 150.43 339** P **PKiKP 17 13 31.4 0.0**
baz=36,SNR=59
**L14K Kuka Creek 150.50 346** IAMs_20 IAMs_20 18 16 48.8
comp=Z,304nm,20.0s
**L14K Kuka Creek 150.50 346** P **PKiKP 17 13 31.1 -0.3**
baz=26,SNR=20
**M15K Kasigluk River 150.63 343** P **PKiKP 17 13 31.4 -0.4**
baz=30,SNR=44
**Q18K Katmai Hardscr 150.65 336** P **PKiKP 17 13 31.9 -0.1**
baz=41,SNR=16
**P17K Kvichak River 150.69 338** P **PKPbc 17 13 30.3 -0.9**
baz=38
**O16K Kokwok River B 150.87 340** P **PKiKP 17 13 32.3 0.0**
baz=35,SNR=62
**M14K Bethel 150.88 344** P **PKiKP 17 13 32.6 +0.3**
baz=27,SNR=16
**N15K Kwethluk River 150.94 342** PKPdf **PKPdf 17 13 26.3 +0.1**
N15K IAMs_20 IAMs_20 18 33 33.1
comp=Z,490nm,21.0s
**N15K Kwethluk River 150.94 342** P **PKiKP 17 13 32.8 +0.3**
baz=31,SNR=26
**OHAK Old Harbor 151.07 333** IAMs_20 IAMs_20 18 14 05.7
comp=Z,532nm,22.0s
**OHAK Old Harbor 151.07 333** P **PKiKP 17 13 32.9 +0.1**
baz=45
**Q16K King Salmon 151.17 337** P **PKiKP 17 13 32.4 -0.5**
baz=38
**Q17K Contact Creek 151.24 336** P **PKiKP 17 13 33.1 -0.2**
baz=40,SNR=38
**R18K Karluk 151.26 334** P **PKiKP 17 13 32.8 -0.3**
baz=43
**P16K Nushagak River 151.30 339** P **PKiKP 17 13 32.9 -0.3**
baz=36
**M13K Dall Lake 151.49 345** P **PKiKP 17 13 34.3 +0.8**
baz=25,SNR=6.4
**N14K Kuskokwak Cree 151.55 343** P **PKiKP 17 13 34.4 +0.8**
baz=28,SNR=14
**O15K Ungalikthiuk R 151.71 341** P **PKiKP 17 13 34.8 +0.7**
baz=32,SNR=6.2
**PLK4 Peulik 4 151.89 336** PKPdf **PKPdf 17 13 27.3 -0.5**
**SII Sitkinak Islan 151.89 332** P **PKiKP 17 13 35.2 +0.7**
baz=44
**R17L Mt. Peulik Vol 151.89 336** P **PKiKP 17 13 35.0 +0.4**
baz=40,SNR=10
**O14K Tigyukauivet M 152.03 342** IAMs_20 IAMs_20 18 20 52.7
comp=Z,467nm,19.0s
**O14K Tigyukauivet M 152.03 342** P **PKiKP 17 13 35.8 +1.1**
baz=30,SNR=8.2
**M11K Mekoryuk 152.06 348** P **PKiKP 17 13 35.6 +0.9**
baz=20
**R16K Pilot Point 152.35 337** P **PKiKP 17 13 35.6 +0.2**
baz=38
**CHIR Chirikof Islan 152.98 332** P **PKiKP 17 13 37.5 +0.8**
baz=43
**CHGN Chignik 153.63 336** P **PKPab 17 13 51.9 +1.3**
baz=38
**PET Petropavlovsk 154.05 34** PKPdf **PKPdf 17 13 30.4 -0.6**
**PET Petropavlovsk 154.05 34** *de*PKIKP **PKPdf 17 13 30.6 -0.3**
**SDPT Sand Point 155.10 337** P **PKPab 17 13 57.3 +0.5**
baz=35
**CHNA Chernabura Isl 155.21 335** P **PKPab 17 13 58.2 +0.8**
baz=38
**SPIA Saint Paul Isl 155.77 350** P **PKPab 17 14 00.1 +0.5**
baz=15

*NEIC **09** 16:54:23.9±1.2,20.9°N±0.1°×119.94°E±0.06,h10km±2km, mb4.4/3,Error ellipse: s-maj=20.2km s-min=4.6km az=156.0*
*IDC **09** 16:54:24.3±1.0,20.65°N×119.88°E,h0km,mb3.7/7, mbtmp3.7/9,ML3.8/2,MS2.7/3,Error ellipse: s-maj=32.2km s-min=17.7km az=79.0*
*JMA **09** 16:54:25.7±0.3,21°N±1°×12°0E±°,h0km,MV4.3/16, TAIWAN REGION*
**ISC 09 16:54:25.3±1.1,20°9N±0'.1×120°08E±0'.08,h10km,n40, σ1§90/43,mb3.8/10,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWG** | **Pinlang** | **2.10** | **26** | | **Pn** | **16 54 59.9** | **-0.7** |
| **TWGBT** | **Beinan** | **2.10** | **26** | P | **Pn** | **16 55 00.6** | **0.0** |
| **TPUB** | **Ta-pu** | **2.42** | **12** | P | **Pn** | **16 55 04.4** | **-0.6** |
| **TPUB** | **Ta-pu** | **2.42** | **12** | | **Pn** | **16 55 04.1** | **-0.9** |
| **YULB** | **Yu-li** | **2.70** | **24** | P | **Pn** | **16 55 08.6** | **-0.3** |
| **YULB** | **Yu-li** | **2.70** | **24** | | **Pn** | **16 55 08.3** | **-0.6** |
| **SSLB** | **Suanglung** | **2.96** | **16** | P | **Pn** | **16 55 12.1** | **-0.4** |
| **SSLB** | **Suanglung** | **2.96** | **16** | | **Pn** | **16 55 11.8** | **-0.6** |
| **NACB** | **Ninganchiao** | **3.52** | **23** | P | **Pn** | **16 55 21.0** | **+0.9** |
| **NACB** | **Ninganchiao** | **3.52** | **23** | Pn | **Pn** | **16 55 20.3** | **+0.1** |
| **KNMB** | **Chin-men Tao** | **3.86** | **336** | Pn | **Pn** | **16 55 23.1** | **-1.5** |
| **YHNB** | **Yeheng** | **3.92** | **17** | P | **Pn** | **16 55 26.5** | **+0.9** |
| **YHNB** | **Yeheng** | **3.92** | **17** | | **Pn** | **16 55 25.9** | **+0.3** |
| **TATO** | **Taipei** | **4.24** | **18** | | **Pn** | **16 55 27.6** | **-2.4** |
| **JYNG** | **Yonagunijimaku** | **4.39** | **36** | *e*P | **Pn** | **16 55 33.0** | **+0.9** |
| **YOJ** | **Yonaguni jima** | **4.44** | **37** | | **Pn** | **16 55 32.0** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **4.44** | **37** | *e*P | **Pn** | **16 55 32.0** | **-0.7** |
| **HATJ** | **Hateruma jima** | **4.64** | **47** | *e*P | **Pn** | **16 55 35.6** | **+0.1** |
| HATJ | | | | *e*S | **Sn** | **16 56 26.4** | **-3.1** |
| **IRIF** | **Iriomote-Funau** | **4.78** | **44** | *e*P | **Pn** | **16 55 37.5** | **+0.1** |
| IRIF | | | | *e*S | **Sn** | **16 56 29.8** | **-3.1** |
| **JKRS** | **Kuro-shima** | **4.90** | **47** | *e*P | **Pn** | **16 55 39.3** | **+0.2** |
| **JIJ** | **Ishigaki jima** | **5.08** | **47** | *e*P | **Pn** | **16 55 41.4** | **-0.1** |
| JIJ | | | | *e*S | **Sn** | **16 56 36.2** | **-4.0** |
| **JISG** | **Ishigakijimahi** | **5.34** | **46** | *e*P | **Pn** | **16 55 45.0** | **-0.1** |
| JISG | | | | *e*S | **Sn** | **16 56 43.7** | **-3.0** |
| **JTJ** | **Tarama** | **5.64** | **48** | *e*P | **Pn** | **16 55 49.6** | **+0.3** |
| JTJ | | | | *e*S | **Sn** | **16 56 51.9** | **-2.2** |
| **HKPS** | **Hong Kong Po S** | **5.69** | **285** | Pn | **Pn** | **16 55 46.1** | **-3.9** |
| **JIRB** | **Irabujima** | **6.09** | **49** | *e*P | **Pn** | **16 55 55.4** | **0.0** |
| **JMJ2** | **Miyako jima3** | **6.15** | **51** | *e*P | **Pn** | **16 55 56.4** | **+0.2** |
| **JNU** | **Nakatsue** | **15.48** | **36** | Pn | **P** | **16 58 09.7** | **+1.4** |
| | 0.4nm,0.3s,baz=230,slow=17,SNR=4.9 | | | | | | |
| JNU | | | | LR | LR | 17 03 51.6 | |
| | comp=Z,23nm,20.0s,baz=152,slow=36 4.4nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **17.82** | **21** | P | **P** | **16 58 37.6** | **+3.5** |
| | 0.2nm,0.3s,baz=198,slow=11,SNR=4.6 | | | | | | |
| KSRS | | | | LR | LR | 17 06 27.6 | |
| | comp=Z,22nm,18.1s,baz=215,slow=40 0.8nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.05** | **267** | LR | LR | 17 07 36.8 | |
| | comp=Z,30nm,18.4s,baz=65,slow=40 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.18** | **42** | P | **P** | **16 59 24.6** | **+2.9** |
| | 1.7nm,0.7s,baz=198,slow=9.6,SNR=5.0 1.7nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **25.23** | **20** | P | **P** | **16 59 55.8** | **+4.5** |
| | 1.4nm,0.7s,baz=191,slow=10,SNR=4.6 1.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **40.05** | **319** | P | **P** | **17 02 03.0** | **+2.3** |
| | 0.3nm,0.6s,baz=110,slow=9.9,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.48** | **330** | P | **P** | **17 02 20.1** | **-0.4** |
| | 0.7nm,0.5s,baz=98,slow=7.6,SNR=4.4 0.7nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.80** | **160** | P | **P** | **17 02 21.5** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 17 02 28.5 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.94** | **160** | P | **P** | **17 02 23.1** | **-1.5** |
| | comp=Z,1.5nm,0.6s,baz=342,slow=9.0,SNR=18 comp=Z,1.5nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.95** | **160** | P | **P** | **17 02 22.7** | **-1.9** |
| WB2 | | | | IAmb | IAmb | 17 02 52.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.02** | **160** | P | **P** | **17 02 23.2** | **-2.0** |
| WR0 | | | | IAmb | IAmb | 17 02 45.1 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.00** | **323** | P | **P** | **17 02 34.3** | **+1.5** |
| | comp=Z,0.5nm,0.7s,baz=123,slow=9.0,SNR=4.0 comp=Z,0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **46.32** | **162** | P | **P** | **17 02 50.9** | **-0.7** |
| | comp=Z,0.7nm,0.5s,baz=345,slow=7.1,SNR=17 comp=Z,0.7nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **83.68** | **322** | P | P | 17 06 45.0 | -9.3 |
| BRG | | | | Amp | | 17 06 46.0 | |
| | comp=Z,23nm,1.2s | | | | | | |

**IDC 09 17:00:05.4±4.8,47°48N×93°23W,h0km,mbtmp2.5/1, ML0.3/1,Error ellipse: s-maj=70.2km s-min=29.8km az=59.0,Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.28** | **329** | Pn | Pn | 17 00 57.1 | -0.9 |
| | 0.1nm,0.3s,baz=153,slow=9.8,SNR=1.6 | | | | | | |
| ULM | | | | Sn | Sn | 17 01 34.5 | -3.2 |
| | 0.2nm,0.3s,baz=146,slow=15,SNR=2.3 | | | | | | |
| ULM | | | | Lg | Lg | 17 01 47.1 | |
| | 0.9nm,0.3s,baz=51,slow=21,SNR=8.3 0.6nm,0.2s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.29** | **327** | I | I | 17 20 35.0 | |
| | 0.1nm,1.1s,baz=145,slow=328,SNR=15 | | | | | | |
| **I56US** | **NEWPORT INFRASI** | **6.04** | **282** | I | I | 18 36 10.0 | |
| | baz=86,slow=306,SNR=6.9 | | | | | | |

*UPP **09** 17:03:49.7±0.1,67.04°N×20.97°E,h0km,ML2.2,Unknown*
*IDC **09** 17:03:50.9±1.0,67.06°N×21.07°E,h0km,mbtmp2.6/4, ML1.8/4,Error ellipse: s-maj=19.0km s-min=8.5km az=113.0*
*HEL **09** 17:03:50.6±0.2,67.07°N×21.12°E,h0km,ML1.9,Explosion*
**ISC 09 17:03:50.1±0.8,67°07N±0'.03×20°97E±0'.03,h0km,n42, σ1§22/57,Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUNU** | **Dundret** | **0.17** | **289** | P | **Pg** | **17 03 53.2** | **0.0** |
| DUNU | | | | S | **Sg** | **17 03 55.8** | **+0.4** |
| **MASU** | **Masugnsbyn** | **0.56** | **45** | P | **Pg** | **17 04 00.6** | **-0.1** |
| **PAJU** | **Pajala** | **0.84** | **92** | P | **Pg** | **17 04 05.3** | **-0.9** |
| **PAJU** | **Pajala** | **0.84** | **92** | PB | **Pg** | **17 04 05.3** | **-0.9** |
| **HARU** | **Harads** | **0.91** | **180** | P | **Pg** | **17 04 06.2** | **-1.2** |
| **SALU** | **Saltoluokta** | **1.01** | **289** | *e*P | **Pg** | **17 04 08.8** | **-0.5** |
| **SALU** | **Saltoluokta** | **1.01** | **289** | P | **Pg** | **17 04 08.6** | **-0.8** |
| **LANU** | **Lannavaara** | **1.06** | **21** | P | **Pg** | **17 04 09.4** | **-1.0** |
| **LANU** | **Lannavaara** | **1.06** | **21** | PG | **Pg** | **17 04 09.4** | **-1.0** |
| LANU | | | | SN | **Sn** | **17 04 28.8** | **+1.1** |
| **KLF** | **Kolari** | **1.18** | **80** | PG | **Pg** | **17 04 11.5** | **-1.1** |
| KLF | | | | MSG | | 17 04 24.8 | |
| | comp=Z,14nm,0.2s | | | | | | |
| **KOVU** | **Salmi** | **1.20** | **345** | P | **Pg** | **17 04 12.2** | **-0.9** |
| **KALU** | **Kalix** | **1.55** | **141** | P | **Pn** | **17 04 17.8** | **-0.9** |
| **KALU** | **Kalix** | **1.55** | **141** | PG | **Pn** | **17 04 17.9** | **-0.9** |
| KALU | | | | SN | **Sn** | **17 04 39.4** | **-0.1** |
| **SJUU** | **Sjulsmark** | **1.59** | **170** | P | **Pn** | **17 04 18.4** | **-1.0** |
| **TOF** | **Tornio** | **1.67** | **125** | PG | **Pn** | **17 04 19.8** | **-0.7** |
| TOF | | | | MSG | | 17 04 39.1 | |
| | comp=Z,9.7nm,0.2s | | | | | | |
| TOF | | | | SN | **Sn** | **17 04 41.8** | **-0.7** |
| **HEF** | **Hetta** | **1.69** | **36** | *e*P | **Pn** | **17 04 20.0** | **-0.9** |
| **HEF** | **Hetta** | **1.69** | **36** | PG | **Pn** | **17 04 20.4** | **-0.4** |
| | baz=221 | | | | | | |
| HEF | | | | MSG | | 17 04 40.1 | |
| | comp=Z,12nm,0.2s | | | | | | |
| HEF | | | | SN | **Sg** | **17 04 44.0** | **-0.4** |
| **RNF** | **Rovaniemi** | **2.05** | **101** | PG | **Pn** | **17 04 26.1** | **+0.4** |
| RNF | | | | SG | **Sb** | **17 04 53.8** | **-0.2** |
| **KTK1** | **Kautokeino** | **2.13** | **23** | PG | **Pb** | **17 04 28.4** | **-1.1** |
| **SGF** | **Sodankyl** | **2.19** | **78** | PG | **Pn** | **17 04 27.6** | **-0.1** |
| SGF | | | | SG | **Sb** | **17 04 57.5** | **-0.7** |
| **I37NO** | **I37NO** | **2.20** | **337** | I | I | 17 17 50.0 | |
| | baz=155,slow=318,SNR=2.4 | | | | | | |
| **RANF** | **Ranua** | **2.56** | **112** | PB | **Pn** | **17 04 32.9** | **+0.2** |
| RANF | | | | SG | **Sn** | **17 05 06.4** | **+1.9** |
| **TRO** | **Tromso** | **2.69** | **345** | PG | **Pb** | **17 04 39.1** | **+0.2** |
| **OBF4** | **Vikkela, Lumij** | **2.83** | **141** | PB | **Pn** | **17 04 38.8** | **+2.4** |
| OBF4 | | | | MSG | | 17 05 12.7 | |
| | comp=Z,3.6nm,0.2s | | | | | | |
| **OBF0** | **Syolatti, Pyha** | **2.91** | **151** | PB | **Pn** | **17 04 39.7** | **+2.2** |
| | baz=330 | | | | | | |
| OBF0 | | | | MSG | | 17 05 15.3 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **3.00** | **32** | Pn | **Pn** | **17 04 39.1** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=206,slow=14,SNR=24 | | | | | | |
| ARCES | | | | Sn | **Sn** | **17 05 17.8** | **+2.5** |
| | comp=Z,0.3nm,0.3s,baz=220,slow=20,SNR=7.3 comp=Z,0.6nm,0.2s | | | | | | |
| **OUF** | **Merijarvi** | **3.12** | **148** | PB | **Pn** | **17 04 41.6** | **+1.2** |
| OUF | | | | MSG | | 17 05 21.6 | |
| | comp=Z,4.1nm,0.2s | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **3.13** | **60** | PB | **Pn** | **17 04 42.4** | **+1.8** |
| RAJF | | | | SG | **Sb** | **17 05 25.4** | **+0.3** |
| **UMAU** | **Umeaa** | **3.20** | **182** | PN | **Pn** | **17 04 41.7** | **+0.2** |
| | baz=2.0 | | | | | | |
| UMAU | | | | SG | **Sb** | **17 05 28.2** | **+1.0** |
| **VRF** | **Varrio** | **3.40** | **74** | PN | **Pn** | **17 04 45.3** | **+0.9** |
| VRF | | | | SG | **Sb** | **17 05 34.2** | **+1.2** |
| **OLKF** | **Oulanka, Finla** | **3.43** | **99** | PB | **Pn** | **17 04 47.2** | **+2.4** |
| **MSF** | **Maaselka** | **3.44** | **106** | PB | **Pn** | **17 04 47.5** | **+2.7** |
| **KEV** | **Kevo** | **3.50** | **37** | PN | **Pn** | **17 04 46.9** | **+1.3** |
| **KU6** | **Riekki** | **3.72** | **102** | PB | **Pn** | **17 04 51.0** | **+2.4** |
| **HUSU** | **Husum** | **3.81** | **192** | PN | **Pn** | **17 04 50.5** | **+0.5** |
| HUSU | | | | SN | **Sn** | **17 05 35.7** | **+0.3** |
| **VAF** | **Ylistaro** | **4.11** | **169** | PN | **Pn** | **17 04 55.1** | **+1.2** |
| **HEMU** | **Hemsoen** | **4.58** | **197** | PN | **Pn** | **17 05 02.1** | **+1.6** |
| HEMU | | | | SN | **Sn** | **17 05 54.7** | **+0.4** |
| **NIF** | **Nilsia** | **4.68** | **139** | PN | **Pn** | **17 05 02.5** | **+0.7** |
| | baz=330 | | | | | | |
| **RMF** | **Romuvaara** | **4.68** | **123** | PN | **Pn** | **17 05 03.2** | **+1.3** |
| **FINES** | **FINESS Array B** | **6.07** | **156** | Pn | **Pn** | **17 05 21.4** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=345,slow=12,SNR=7.2 | | | | | | |
| FINES | | | | Sn | **Sn** | **17 06 30.9** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=350,slow=24,SNR=5.2 comp=Z,0.3nm,0.4s | | | | | | |
| **NOA** | **NORSAR Array B** | **7.40** | **220** | Pn | **Pn** | **17 05 39.3** | **0.0** |
| | baz=30,slow=12,SNR=1.8 comp=Z,0.1nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **7.67** | **208** | Pn | **Pn** | **17 05 41.8** | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=28,slow=13,SNR=5.5 | | | | | | |
| HFS | | | | Sn | **Sn** | **17 07 07.7** | **-2.7** |
| | comp=Z,0.1nm,0.3s,baz=25,slow=29,SNR=2.1 comp=Z,1.1nm,0.9s | | | | | | |

**TAP 09 17:05:35.1,24.45N×121.90E,h23km,ML1.4,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.11** | **270** | *i* P | Pb | 17 05 39.6 | +0.1 |
| | baz=270 | | | | | | |
| EWUT | | | | *i* S | Sb | 17 05 42.6 | +0.1 |
| | baz=270 | | | | | | |
| **ESAO** | **Su ao** | **0.14** | **340** | *i* P | Pb | 17 05 39.9 | 0.0 |
| | baz=340 | | | | | | |
| ESAO | | | | *i* S | Sb | 17 05 43.0 | 0.0 |
| | baz=340 | | | | | | |
| **ENA** | **Nanau** | **0.14** | **263** | *i* P | Pb | 17 05 39.9 | +0.1 |
| | baz=262 | | | | | | |
| ENA | | | | *i* S | Sb | 17 05 43.0 | -0.1 |
| | baz=262 | | | | | | |
| **TWC** | **Suao** | **0.17** | **346** | *i* P | Pb | 17 05 40.2 | +0.1 |
| | baz=348 | | | | | | |
| TWC | | | | *i* S | Sb | 17 05 43.5 | -0.1 |
| | baz=348 | | | | | | |
| **EAHA** | **Aohua** | **0.18** | **231** | *e*P | Pb | 17 05 40.4 | +0.1 |
| | baz=233 | | | | | | |
| EAHA | | | | *e*S | Sb | 17 05 44.4 | +0.6 |
| | baz=233 | | | | | | |
| **NDS** | **Dongshan** | **0.25** | **319** | *e*P | Pb | 17 05 41.0 | -0.2 |
| | baz=319 | | | | | | |
| NDS | | | | *e*S | Sb | 17 05 44.8 | -0.5 |
| | baz=319 | | | | | | |
| **EOS2** | **EOS2** | **0.31** | **95** | *e*P | Pb | 17 05 42.5 | +0.6 |
| | baz=91 | | | | | | |
| EOS2 | | | | *e*S | Sn | 17 05 48.3 | -1.6 |
| | baz=91 | | | | | | |
| **TWE** | **Neicheng** | **0.34** | **323** | *i* P | Pb | 17 05 43.1 | +0.4 |
| | baz=324 | | | | | | |
| TWE | | | | *i* S | Sb | 17 05 48.4 | +0.6 |
| | baz=324 | | | | | | |
| **LATG** | **Datong** | **0.35** | **285** | *i* P | Pb | 17 05 42.5 | -0.3 |
| | baz=285 | | | | | | |
| LATG | | | | *i* S | Sb | 17 05 48.7 | +0.7 |
| | baz=285 | | | | | | |
| **ENTT** | **Nioudou** | **0.36** | **303** | *i* P | Pb | 17 05 43.3 | +0.4 |
| | baz=303 | | | | | | |
| ENTT | | | | *i* S | Sb | 17 05 48.6 | +0.5 |
| | baz=303 | | | | | | |
| **ETL** | **Fush Village** | **0.38** | **221** | *e*P | Pb | 17 05 43.1 | -0.1 |
| | baz=226 | | | | | | |
| ETL | | | | *e*S | Sb | 17 05 49.4 | +0.7 |
| | baz=226 | | | | | | |
| **NDT** | **Datong Townshi** | **0.38** | **294** | *i* P | Pb | 17 05 43.6 | +0.4 |
| | baz=295 | | | | | | |
| NDT | | | | *i* S | Sb | 17 05 49.4 | +0.5 |
| | baz=295 | | | | | | |
| **NACB** | **Ninganchiao** | **0.39** | **225** | *i* P | Pb | 17 05 43.2 | -0.2 |
| | baz=226 | | | | | | |
| NACB | | | | *i* S | Sb | 17 05 49.3 | +0.4 |
| | baz=226 | | | | | | |
| **EOS3** | **EOS3** | **0.42** | **112** | *e*P | Pb | 17 05 44.4 | +0.7 |
| | baz=109 | | | | | | |
| EOS3 | | | | *e*S | Sb | 17 05 51.0 | +1.4 |
| | baz=109 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.42** | **318** | *i* P | Pb | 17 05 44.3 | +0.3 |
| | baz=318 | | | | | | |
| FUSB | | | | *i* S | Sb | 17 05 50.5 | +0.5 |
| | baz=318 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.45** | **238** | *i* P | Pb | 17 05 44.4 | 0.0 |
| | baz=242 | | | | | | |
| ETLH | | | | *i* S | Sb | 17 05 51.1 | +0.4 |
| | baz=242 | | | | | | |
| **NNSB** | **Datong** | **0.47** | **268** | *i* P | Pb | 17 05 44.8 | 0.0 |
| | baz=275 | | | | | | |
| NNSB | | | | *i* S | Sb | 17 05 51.6 | +0.3 |
| | baz=275 | | | | | | |
| **NNS** | **Nan Shan** | **0.48** | **269** | *e*P | Pb | 17 05 45.0 | +0.1 |
| | baz=270 | | | | | | |
| NNS | | | | S | Sb | 17 05 51.8 | +0.3 |
| | baz=270 | | | | | | |
| **NWLT** | **Wulai** | **0.49** | **313** | *i* P | Pb | 17 05 45.2 | +0.1 |
| | baz=313 | | | | | | |
| NWLT | | | | *i* S | Sb | 17 05 51.7 | -0.1 |
| | baz=313 | | | | | | |
| **EOS4** | **EOS4** | **0.50** | **130** | *e*P | Pn | 17 05 46.0 | -0.5 |
| | baz=124 | | | | | | |
| EOS4 | | | | *e*S | Sb | 17 05 53.0 | +1.1 |
| | baz=124 | | | | | | |
| **YHNB** | **Yeheng** | **0.52** | **295** | *i* P | Pb | 17 05 45.9 | +0.2 |
| | baz=296 | | | | | | |
| YHNB | | | | S | Sb | 17 05 52.6 | -0.3 |
| | baz=296 | | | | | | |
| **TIPB** | **Shuangxi** | **0.53** | **353** | *i* P | Pb | 17 05 46.0 | +0.3 |
| | baz=358 | | | | | | |
| TIPB | | | | *i* S | Sb | 17 05 53.3 | +0.3 |
| | baz=358 | | | | | | |
| **NSK** | **Sanguang** | **0.54** | **295** | *i* P | Pb | 17 05 46.3 | +0.3 |
| | baz=296 | | | | | | |
| NSK | | | | *i* S | Sb | 17 05 53.9 | +0.5 |
| | baz=296 | | | | | | |
| **FUSS** | **Fushou** | **0.63** | **252** | P | Pn | 17 05 48.4 | -0.4 |
| | baz=257 | | | | | | |
| FUSS | | | | S | Sb | 17 05 56.8 | +0.7 |
| | baz=257 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.65** | **243** | P | Pb | 17 05 48.3 | +0.3 |
| | baz=250 | | | | | | |
| WHF | | | | *i* S | Sb | 17 05 57.1 | +0.3 |
| | baz=250 | | | | | | |
| **TDCB** | **Techi** | **0.70** | **254** | *i* P | Pn | 17 05 49.6 | -0.1 |
| | baz=251 | | | | | | |
| TDCB | | | | *e*S | Sb | 17 05 58.6 | +0.6 |
| | baz=251 | | | | | | |
| **WUSB** | **Renai** | **0.84** | **238** | P | Pn | 17 05 52.5 | +0.9 |
| | baz=244 | | | | | | |
| WUSB | | | | *e*S | Sn | 17 06 02.8 | -0.6 |
| | baz=244 | | | | | | |

*IDC **09** 17:06:03.7±0.6,25.14°S×177.21°W,h0km,mb4.1/11, mbtmp4.1/12,ML4.5/2,MS4.1/11,Error ellipse: s-maj=23.4km s-min=18.1km az=113.0*
*NEIC **09** 17:06:04.8±2.5,25.29°S±0.07°×176.9°W±0.1°,h10km±1km, mb4.7/24,Error ellipse: s-maj=15.7km s-min=11.4km az=99.0*
**ISC 09 17:06:04.8±0.4,25°23S±0'.06×176°90W±0'.07,h10km, n107,σ1§64/91,mb4.7/22,MS4.2/7,5C,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **4.10** | **193** | | **Pn** | **17 07 06.0** | **-1.6** |
| RAO | | | | Sn | **Sn** | **17 07 54.7** | **-1.0** |
| **RAO** | **Raoul Island** | **4.10** | **193** | Pn | **Pn** | **17 07 08.6** | **+1.1** |
| | 220nm,0.3s,baz=271,slow=13,SNR=6.1 | | | | | | |
| RAO | | | | Sn | **Sn** | **17 07 56.5** | **+0.8** |
| | 93nm,0.3s,baz=257,slow=23,SNR=6.8 | | | | | | |
| **MSVF** | **Nonsavu** | **8.82** | **327** | Pn | **Pn** | **17 08 12.9** | **+0.4** |
| **MSVF** | **Nonsavu** | **8.82** | **327** | Pn | **Pn** | **17 08 13.1** | **+0.6** |
| | 2.9nm,0.3s,baz=154,slow=15,SNR=8.7 | | | | | | |
| MSVF | | | | LR | LR | 17 11 06.9 | |
| | comp=Z,1μm,20.6s,baz=135,slow=35 | | | | | | |
| **NIUE** | **Niue** | **8.90** | **48** | | **Pn** | **17 08 13.7** | **+0.2** |
| NIUE | | | | Sn | **Sn** | **17 09 48.2** | **-5.7** |
| **URZ** | **Urewera** | **13.95** | **200** | Pn | **Pn** | **17 09 21.3** | **-1.1** |
| | 0.3nm,0.3s,baz=264,slow=16,SNR=2.4 | | | | | | |
| URZ | | | | LR | LR | 17 14 06.0 | |
| | comp=Z,1μm,19.4s,baz=106,slow=35 7.2nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.59** | **278** | | **P** | **17 09 48.4** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.59** | **278** | *e*P | **P** | **17 09 48.9** | **-0.2** |
| | 52nm,1.4s | | | | | | |
| DZM | | | | *e*LR | LR | 17 13 20.9 | |
| | 524nm,26.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.59** | **278** | Pn | **Pn** | **17 09 47.0** | **+2.2** |
| | 0.1nm,0.3s,baz=90,slow=14,SNR=5.1 | | | | | | |
| DZM | | | | LR | LR | 17 14 15.8 | |
| | comp=Z,394nm,20.4s,baz=90,slow=32 | | | | | | |
| **RAR** | **Rarotonga** | **16.24** | **79** | Pn | **Pn** | **17 09 53.7** | **+0.6** |
| RAR | | | | IAmb | IAmb | 17 10 20.2 | |
| | comp=Z,47nm,1.1s | | | | | | |
| **RAR** | **Rarotonga** | **16.24** | **79** | Pn | **Pn** | **17 09 53.3** | **+0.2** |
| | comp=Z,3.3nm,0.3s,baz=228,slow=8.1,SNR=8.1 | | | | | | |
| RAR | | | | LR | LR | 17 14 59.4 | |
| | comp=Z,185nm,20.8s,baz=278,slow=32 | | | | | | |
| **MRZ** | **Mangatainoka R** | **16.62** | **200** | | **P** | **17 10 00.5** | **+0.2** |
| MRZ | | | | IAmb | IAmb | 17 10 14.7 | |
| | comp=Z,52nm,1.4s | | | | | | |
| **MSWZ** | **Moikau Station** | **17.41** | **200** | Pn | **Pn** | **17 10 05.1** | **-2.7** |
| **TBI** | **Tubuai** | **25.06** | **91** | *e*LR | LR | 17 17 40.9 | |
| | comp=Z,1μm,27.5s | | | | | | |
| **PPT2** | **Papeete2** | **26.51** | **79** | *e*LR | LR | 17 18 21.3 | |
| | comp=Z,221nm,25.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 17 18 24.6 | |
| | comp=Z,206nm,23.2s | | | | | | |
| **HNR** | **Honiara** | **27.05** | **301** | LR | LR | 17 20 37.6 | |
| | comp=Z,3μm,19.7s,baz=151,slow=33 | | | | | | |
| **ARMA** | **Armidale** | **28.26** | **252** | P | **P** | **17 11 58.4** | **0.0** |
| ARMA | | | | IAmb | IAmb | 17 12 00.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **28.92** | **263** | P | **P** | **17 12 04.0**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **44.62** | **261** | P | **P** | **17 14 16.7** | **-1.0** | |
| **ASAR** | **Alice Springs** | **44.62** | **261** | P | **P** | **17 14 16.3** | **-1.4** | |
| | comp=Z,4.9nm,0.9s,baz=105,slow=8.5,SNR=29 | | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| **WB2** | **Warramunga Arr** | **45.13** | **266** | P | **P** | **17 14 19.9** | **-1.9** | |
| WB2 | | | | IAmb | IAmb | 17 14 37.5 | | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.14** | **267** | P | **P** | **17 14 19.8** | **-2.1** | |
| WB0 | | | | IAmb | IAmb | 17 14 44.1 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.14** | **266** | P | **P** | **17 14 19.5** | **-2.3** | |
| **WRA** | **Warramunga Arr** | **45.14** | **266** | P | **P** | **17 14 20.0** | **-1.9** | |
| | comp=Z,2.2nm,1.0s,baz=103,slow=8.3,SNR=8.6 | | | | | | | |
| | comp=Z,2.2nm,1.0s | | | | | | | |
| **SBA** | **Scott Base** | **53.24** | **184** | P | **P** | **17 15 25.1** | **+2.1** | |
| **VNDA** | **Vanda** | **53.31** | **186** | P | **P** | **17 15 21.2** | **-2.4** | |
| **VNDA** | **Vanda** | **53.31** | **186** | P | **P** | **17 15 25.6** | **+2.1** | |
| | comp=Z,0.6nm,0.7s,baz=345,slow=6.0,SNR=5.8 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.54** | **266** | P | **P** | **17 15 24.9** | **-1.2** | |
| **GUMO** | **Guam** | **53.65** | **312** | LR | LR | 17 35 34.3 | | |
| | comp=Z,94nm,21.5s,baz=166,slow=33 | | | | | | | |
| **CASY** | **Casey** | **60.17** | **206** | P | **P** | **17 16 10.8** | **-1.6** | |
| CASY | | | | IAmb | IAmb | 17 16 35.6 | | |
| | comp=Z,9.4nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **64.86** | **180** | P | **P** | **17 16 44.4** | **+0.5** | |
| QSPA | | | | IAmb | IAmb | 17 16 51.9 | | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **64.86** | **180** | P | **P** | **17 16 45.1** | **+1.2** | |
| | comp=Z,3.8nm,0.7s,baz=13,slow=0.8,SNR=25 | | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **74.75** | **172** | P | **P** | **17 17 44.8** | **+0.3** | |
| **PMSA** | **Palmer Station** | **76.56** | **156** | P | **P** | **17 17 53.7** | **-1.2** | |
| **PMSA** | **Palmer Station** | **76.56** | **156** | LR | LR | 17 49 17.0 | | |
| | comp=Z,198nm,19.0s,baz=258,slow=34 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **82.50** | **124** | T | T | 18 49 29.1 | | |
| | baz=243,slow=74,SNR=316 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **82.52** | **124** | T | T | 18 49 28.3 | | |
| | baz=243,slow=74,SNR=299 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **82.52** | **124** | T | T | 18 49 24.8 | | |
| | baz=243,slow=74,SNR=294 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **82.67** | **123** | T | T | 18 49 38.7 | | |
| | baz=248,slow=73,SNR=20 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **82.67** | **123** | T | T | 18 49 43.2 | | |
| | baz=248,slow=73,SNR=10 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **82.68** | **123** | T | T | 18 49 38.7 | | |
| | baz=248,slow=73,SNR=16 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **83.02** | **180** | ⇑P | **P** | **17 18 30.5** | **+0.4** | |
| | comp=Z,234nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **83.27** | **178** | P | **P** | **17 18 30.7** | **-0.6** | |
| SNAA | | | | IAmb | IAmb | 17 18 37.0 | | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **83.27** | **178** | ⇑P | **P** | **17 18 31.3** | **-0.1** | |
| | comp=Z,57nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **83.27** | **178** | P | **P** | **17 18 31.2** | **-0.1** | |
| | comp=Z,3.1nm,0.8s,baz=211,slow=5.4,SNR=26 | | | | | | | |
| SNAA | | | | LR | LR | 17 55 02.0 | | |
| | comp=Z,84nm,18.3s,baz=275,slow=35 | | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **83.37** | **176** | ⇑P | **P** | **17 18 31.8** | **0.0** | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.79** | **42** | P | **P** | **17 18 34.6** | **0.0** | |
| | comp=Z,0.4nm,0.5s,baz=225,slow=8.8,SNR=2.2 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **83.82** | **177** | ⇑P | **P** | **17 18 34.5** | **+0.4** | |
| | comp=Z,6.3nm,0.6s,baz=184,slow=4.5 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **84.04** | **176** | ⇑P | **P** | **17 18 34.9** | **-0.3** | |
| | comp=Z,4.1nm,0.6s | | | | | | | |
| **PLCA** | **Paso Flores** | **85.30** | **133** | P | **P** | **17 18 44.9** | **+2.6** | |
| | comp=Z,3.1nm,0.9s,baz=235,slow=8.9,SNR=4.1 | | | | | | | |
| PLCA | | | | LR | LR | 17 52 37.0 | | |
| | comp=Z,52nm,18.2s,baz=44,slow=33 | | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| **M16K** | **Timber Creek** | **87.17** | **9** | | **P** | **17 18 52.5** | **+1.9** | |
| **K15K** | **Wolf Creek Mou** | **88.09** | **7** | P | **P** | **17 18 54.8** | **-0.2** | |
| K15K | | | | IAmb | IAmb | 17 19 04.5 | | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **88.77** | **57** | P | **P** | **17 19 02.2** | **+3.1** | |
| | comp=Z,0.8nm,0.9s,baz=224,slow=6.9,SNR=7.2 | | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | | |
| **J17K** | **VABM Dome** | **89.45** | **8** | | **P** | **17 19 02.3** | **+1.0** | |
| J17K | | | | IAmb | IAmb | 17 19 15.5 | | |
| | comp=Z,6.9nm,1.2s | | | | | | | |
| **J18K** | **Innoko River** | **89.83** | **9** | P | **P** | **17 19 03.3** | **+0.2** | |
| **CMIG** | **Matias Romero** | **90.20** | **71** | LR | LR | 17 52 04.4 | | |
| | comp=Z,286nm,21.3s,baz=113,slow=30 | | | | | | | |
| **PDAR** | **Pinedale Array** | **91.71** | **43** | P | **P** | **17 19 15.2** | **+2.4** | |
| | comp=Z,0.4nm,0.7s,baz=230,slow=4.5,SNR=3.8 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.69** | **12** | P | **P** | **17 19 17.5** | **+1.1** | |
| | comp=Z,0.4nm,0.8s,baz=219,slow=7.0,SNR=2.9 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **140.58** | **343** | PKP | **PKPdf** | **17 25 32.2** | **-1.7** | |
| | comp=Z,0.8nm,0.7s,baz=348,slow=3.3,SNR=1.3 | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **141.87** | **151** | T | T | 20 04 39.3 | | |
| | baz=16,slow=74,SNR=6.3 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **141.87** | **151** | T | T | 20 04 38.7 | | |
| | baz=204,slow=74,SNR=8.6 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **142.92** | **150** | T | T | 20 06 04.7 | | |
| | baz=202,slow=75,SNR=7.3 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **142.93** | **150** | T | T | 20 06 04.1 | | |
| | baz=202,slow=75,SNR=11 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **142.94** | **150** | T | T | 20 06 05.6 | | |
| | baz=202,slow=75,SNR=13 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **143.78** | **353** | PKP | PKPbc | 17 25 37.3 | 0.0 | |
| | comp=Z,1.5nm,0.8s,baz=18,slow=3.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **143.78** | **353** | PKP | PKPbc | 17 25 37.4 | +0.1 | |
| | comp=Z,0.8nm,0.8s,baz=10.0,slow=2.3,SNR=3.4 | | | | | | | |
| **HFS** | **Hagfors** | **144.35** | **351** | PKP | **PKPab** | **17 25 38.8** | **+0.1** | |
| | comp=Z,2.8nm,0.5s,baz=68,slow=4.0,SNR=17 | | | | | | | |
| **KONO** | **Kongsberg** | **145.31** | **354** | PKPbc | **PKPbc** | **17 25 41.7** | **-0.4** | |
| **PABE** | **Paberze** | **146.11** | **339** | PKPdf | **PKPdf** | **17 25 43.4** | **-0.4** | |
| **AK03** | **Malin Array Si** | **147.58** | **329** | PKP | **PKPbc** | **17 25 48.8** | **-0.3** | |
| **AKASG** | **Malin Array Be** | **147.60** | **329** | PKPdf | **PKPdf** | **17 25 45.9** | **-0.6** | |
| **AKASG** | **Malin Array Be** | **147.60** | **329** | PKPbc | **PKPbc** | **17 25 48.2** | **-0.9** | |
| | comp=Z,1.6nm,0.5s,baz=43,slow=3.6,SNR=11 | | | | | | | |
| **AKBB** | **Malin Array Si** | **147.60** | **329** | PKPdf | **PKPdf** | **17 25 44.7** | **-1.7** | |
| **AKBB** | **Malin Array Si** | **147.60** | **329** | PKP | **PKPbc** | **17 25 50.1** | **+1.0** | |
| **AK01** | **Malin Array Si** | **147.61** | **328** | PKP | **PKPbc** | **17 25 48.6** | **-0.6** | |
| **KIEV** | **Kiev** | **147.61** | **329** | PKPdf | **PKPdf** | **17 25 44.4** | **-2.1** | |
| **KIEV** | **Kiev** | **147.61** | **329** | PKP | **PKPbc** | **17 25 49.8** | **+0.6** | |
| **AK04** | **Malin Array Si** | **147.61** | **329** | PKP | **PKPbc** | **17 25 48.4** | **-0.8** | |
| **AK09** | **Malin Array Si** | **147.63** | **328** | PKP | **PKPdf** | **17 25 47.8** | **+1.3** | |
| **AK08** | **Malin Array Si** | **147.63** | **328** | PKP | **PKPdf** | **17 25 46.4** | **-0.1** | |
| **AK22** | **Malin Array Si** | **147.63** | **329** | PKP | **PKPbc** | **17 25 48.5** | **-0.7** | |
| **AK21** | **Malin Array Si** | **147.63** | **329** | PKP | **PKPbc** | **17 25 48.5** | **-0.7** | |
| **AK02** | **Malin Array Si** | **147.64** | **328** | PKP | **PKPbc** | **17 25 48.1** | **-1.1** | |
| **AK11** | **Malin Array Si** | **147.64** | **329** | PKP | **PKPbc** | **17 25 48.3** | **-1.0** | |
| **AK05** | **Malin Array Si** | **147.66** | **328** | PKP | **PKPdf** | **17 25 47.7** | **+1.1** | |
| **AK20** | **Malin Array Si** | **147.67** | **329** | PKP | **PKPbc** | **17 25 48.8** | **-0.5** | |
| **AK19** | **Malin Array Si** | **147.69** | **329** | PKP | **PKPbc** | **17 25 48.7** | **-0.7** | |
| **AK14** | **Malin Array Si** | **147.70** | **328** | PKP | **PKPbc** | **17 25 48.7** | **-0.7** | |
| **MI28** | **Mi28,Pidlybu** | **148.16** | **330** | PKP | **PKPbc** | **17 25 50.3** | **-0.3** | |
| **RNPP5** | **Staryi Chortor** | **148.73** | **332** | PKP | **PKiKP** | **17 25 53.7** | **+0.2** | |
| **LUBAR** | **Lubar, Ukraine** | **148.82** | **329** | PKP | **PKPbc** | **17 25 51.0** | **-1.4** | |
| **BNN** | **Bunyan** | **149.28** | **304** | PKPbc | **PKPbc** | **17 25 53.8** | **-0.3** | |
| **EKA** | **Eskdalemuir Ar** | **149.58** | **7** | PKPbc | **PKPbc** | **17 25 52.9** | **-1.3** | |
| | comp=Z,0.4nm,0.5s,baz=346,slow=2.6,SNR=1.7 | | | | | | | |
| **BR131** | **Keskin Array S** | **150.63** | **307** | PKPbc | **PKPbc** | **17 25 55.2** | **-2.2** | |
| **BRTR** | **Keskin Array B** | **150.63** | **307** | PKPbc | **PKPbc** | **17 25 56.5** | **-0.9** | |
| **BRTR** | **Keskin Array B** | **150.63** | **307** | PKPbc | **PKPbc** | **17 25 56.2** | **-1.1** | |
| | comp=Z,1.7nm,0.8s,baz=128,slow=2.4,SNR=3.4 | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **151.27** | **333** | PKPbc | **PKPbc** | **17 25 58.1** | **-0.3** | |
| **BUR08** | **Bucovina Ar. S** | **151.62** | **328** | PKPbc | **PKPbc** | **17 25 59.6** | **+0.2** | |
| **BURAR** | **Bucovina Array** | **151.63** | **328** | PKPbc | **PKiKP** | **17 26 00.2** | **+0.4** | |
| **CLL** | **Collm** | **152.88** | **346** | *e*PKPdf | **PKPdf** | **17 25 56.0** | **+1.3** | |
| CLL | | | | *e*PKPbc | **PKPbc** | **17 26 02.0** | **+0.1** | |
| CLL | | | | *i* x | x | 17 26 07.0 | | |
| **BRG** | **Berggiesshubel** | **153.08** | **345** | *e*P | **PKPab** | **17 26 08.7** | **-5.1** | |
| BRG | | | | Amp | | 17 26 09.7 | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **BRG** | **Berggiesshubel** | **153.08** | **345** | P | **PKPab** | **17 26 20.9** | **+7.1** | |
| BRG | | | | Amp | | 17 26 22.1 | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **167.90** | **173** | PKPab | **PKPab** | **17 27 19.7** | **+0.6** | |
| | comp=Z,0.7nm,0.6s,baz=141,slow=3.4,SNR=3.2 | | | | | | | |

**JMA 09 17:06:25.1±0.2, 24°24N±0.6°×123°7E±0.5°, h19km±1km, MV1.0/8, NEAR ISHIGAKIJIMA ISLAND, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HATJ** | **Hateruma jima** | **0.13** | **141** | P | Pg | 17 06 29.0 | -0.2 |
| HATJ | | | | *e*S | Sg | 17 06 31.9 | -0.1 |
| **IRIF** | **Iriomote-Funau** | **0.17** | **5** | *i* P | Pg | 17 06 29.6 | -0.1 |
| IRIF | | | | *e*S | Sg | 17 06 33.0 | +0.1 |
| **JKRS** | **Kuro-shima** | **0.28** | **74** | *i* P | Pb | 17 06 31.4 | 0.0 |
| JKRS | | | | S | Sb | 17 06 36.7 | +1.0 |
| **JIJ** | **Ishigaki jima** | **0.44** | **63** | P | Pg | 17 06 33.7 | -0.4 |
| JIJ | | | | *e*S | Sg | 17 06 40.0 | -0.2 |
| **JISG** | **Ishigakijimahi** | **0.69** | **52** | *e*P | Pb | 17 06 38.1 | -0.3 |
| **YOJ** | **Yonaguni jima** | **0.71** | **295** | P | Pg | 17 06 39.0 | -0.1 |

**IDC 09 17:16:59.9±2.5, 7°16S×154°32E, h0km, mb3.5/4, mbtmp3.6/5, ML1.8/1, Error ellipse: s-maj=96.9km s-min=29.4km az=131.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **7.43** | **252** | Pn | Pn | 17 18 51.1 | +1.4 |
| | 0.9nm,0.3s,baz=216,slow=19,SNR=2.0 | | | | | | |
| | 9.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.17** | **235** | P | P | 17 22 07.7 | -0.6 |
| | 0.4nm,0.7s,baz=55,slow=10,SNR=2.5 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **25.56** | **228** | P | P | 17 22 30.5 | -0.2 |
| | 0.5nm,0.7s,baz=64,slow=8.6,SNR=2.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **83.77** | **22** | P | P | 17 29 30.4 | -0.3 |
| | 0.3nm,0.6s,baz=232,slow=5.5,SNR=2.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **83.94** | **326** | P | P | 17 29 32.2 | +0.5 |
| | 0.4nm,0.5s,baz=99,slow=7.4,SNR=1.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

*REN **09** 17:22:36.8±1.2, 37.65N±0.03×118.92W±0.04, h4km±4km, Error ellipse: s-maj=5.1km s-min=4.3km az=223.0*
*NEIC **09** 17:22:36.8±1.0, 37.65N±0.03×118.90W±0.04, h4km±5km, Error ellipse: s-maj=5.4km s-min=2.7km az=222.0*

**NCEDC 09 17:22:36.8±0.8, 37.66N±0.02×118.91W±0.03, h3km±4km, Md2.9/59, ML2.4/72(NEIC), ML2.7/9(REN), Error ellipse: s-maj=4.9km s-min=0.8km az=130.0, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCSM** | **Casa Diablo Ho** | **0.00** | **81** | | Pg | 17 22 37.9 | +0.2 |
| **MCBM** | **Casa Benchmark** | **0.01** | **136** | | Pg | 17 22 38.0 | +0.3 |
| **MEMM** | **East Mammoth H** | **0.03** | **295** | | Pg | 17 22 38.1 | +0.3 |
| **MGPM** | **Gravel Pit** | **0.03** | **170** | | Pg | 17 22 38.1 | +0.4 |
| **MLCM** | **Laurel Creek C** | **0.04** | **187** | | Pg | 17 22 38.2 | +0.3 |
| **MMLB** | **Mammoth Lakes** | **0.06** | **275** | | Pg | 17 22 38.6 | +0.4 |
| **MDRNC** | **Doe Ridge** | **0.06** | **106** | | Pg | 17 22 38.6 | +0.4 |
| **MLAC** | **Mammoth, Mammo** | **0.06** | **113** | | Pg | 17 22 38.6 | +0.4 |
| **MLHM** | **Little Hot Cre** | **0.08** | **72** | | Pg | 17 22 39.0 | +0.5 |
| **MDYM** | **Dry Creek** | **0.08** | **272** | | Pg | 17 22 39.0 | +0.4 |
| **OMMB** | **Old Mammoth Mi** | **0.08** | **240** | | Pg | 17 22 40.0 | +1.4 |
| **OMMB** | **Old Mammoth Mi** | **0.08** | **240** | IAML | | 17 22 40.1 | |
| | comp=E,4μm,0.2s | | | | | | |
| OMMB | | | | IAML | | 17 22 40.2 | |
| | comp=N,3μm,0.2s | | | | | | |
| **MLIM** | **Lincoln Peak** | **0.09** | **258** | | Pg | 17 22 39.2 | +0.6 |
| **MCVM** | **Convict Lake** | **0.09** | **135** | | Pg | 17 22 38.9 | +0.2 |
| **MMPM** | **Mammoth Pass** | **0.10** | **245** | | Pg | 17 22 39.2 | +0.3 |
| **MDCM** | **Deadman Creek** | **0.12** | **298** | | Pg | 17 22 39.5 | +0.2 |
| **MINS** | **Minaret Summit** | **0.12** | **270** | | Pg | 17 22 39.5 | +0.2 |
| **MRDM** | **Red Cones** | **0.13** | **245** | | Pg | 17 22 39.7 | +0.3 |
| **MDPB** | **Devils Postpil** | **0.14** | **261** | | Pg | 17 22 41.8 | +2.2 |
| **MDPB** | **Devils Postpil** | **0.14** | **261** | IAML | | 17 22 42.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| MDPB | | | | IAML | | 17 22 42.4 | |
| | comp=N,2μm,0.6s | | | | | | |
| **MGNR** | **McGee Canyon** | **0.23** | **47** | | Pg | 17 22 41.9 | +0.6 |
| **BENR** | **Benton** | **0.27** | **77** | | Pg | 17 22 42.4 | +0.3 |
| **MRCM** | **Red Rock Canyo** | **0.32** | **86** | | Pg | 17 22 43.4 | +0.4 |
| **ANTCA** | **Antelope Range** | **0.38** | **46** | | Pg | 17 22 44.5 | +0.4 |
| **MCDM** | **Chidago Canyon** | **0.39** | **106** | | Pg | 17 22 44.8 | +0.6 |
| **MTUM** | **Tungsten Hills** | **0.41** | **138** | | Pg | 17 22 44.9 | +0.2 |
| **MLNR** | **Milner Canyon** | **0.45** | **98** | | Pg | 17 22 46.0 | +0.5 |
| **KCC** | **Kaiser Creek** | **0.46** | **225** | | Pg | 17 22 45.5 | -0.2 |
| **KCC** | **Kaiser Creek** | **0.46** | **225** | | Sg | 17 22 51.6 | -0.2 |
| **BHPR** | **Bishop** | **0.49** | **136** | | Pg | 17 22 46.4 | +0.3 |
| **POCCA** | **Poleta Canyon** | **0.58** | **120** | | Pg | 17 22 48.4 | +0.5 |
| **LHV** | **Little Huntoon** | **0.68** | **28** | | Pg | 17 22 50.0 | +0.2 |
| LHV | | | | | Sg | 17 22 59.5 | +1.0 |
| **DSP** | **Deep Springs** | **0.80** | **111** | | Pg | 17 22 52.0 | -0.1 |
| DSP | | | | | Sg | 17 23 02.9 | +0.4 |
| **TIN** | **Tinemaha, Big** | **0.81** | **138** | | Pg | 17 22 52.4 | +0.2 |
| **TIN** | **Tinemaha, Big** | **0.81** | **138** | | Sb | 17 23 04.1 | -0.8 |
| **TVH1** | **TV Hill, Hawth** | **0.81** | **8** | | Sg | 17 23 03.6 | +0.7 |
| **NV08** | **Mina Array Sit** | **0.88** | **32** | | Pg | 17 22 53.7 | 0.0 |
| **NV09** | **Mina Array Sit** | **0.90** | **30** | | Pg | 17 22 54.1 | 0.0 |
| NV09 | | | | | Sg | 17 23 05.5 | +0.7 |
| **NVAR** | **Mina Array Bea** | **0.91** | **32** | Pg | Pg | 17 22 53.9 | -0.3 |
| **WAKR** | **Walker** | **0.94** | **334** | | Pg | 17 22 54.9 | 0.0 |
| **WAKR** | **Walker** | **0.94** | **334** | | Sg | 17 23 07.8 | +0.5 |
| **WAKR** | **Walker** | **0.94** | **334** | IAML | | 17 22 58.1 | |
| | comp=N,28nm,0.5s | | | | | | |
| **NV11** | **Mina Array Sit** | **0.98** | **37** | | Pg | 17 22 55.5 | 0.0 |
| NV11 | | | | | Sg | 17 23 08.4 | +0.2 |
| **RYN** | **Ryan** | **1.02** | **17** | | Pg | 17 22 56.4 | 0.0 |
| RYN | | | | | Sg | 17 23 10.1 | +0.6 |
| **RYN** | **Ryan** | **1.02** | **17** | IAML | | 17 23 11.0 | |
| | comp=N,139nm,0.2s | | | | | | |
| **LCH** | **Last Change Ra** | **1.09** | **112** | | Pg | 17 22 57.5 | -0.2 |
| LCH | | | | | Sg | 17 23 11.8 | 0.0 |
| **LCH** | **Last Change Ra** | **1.09** | **112** | IAML | | 17 23 13.5 | |
| | comp=E,83nm,0.3s | | | | | | |
| LCH | | | | IAML | | 17 23 14.7 | |
| | comp=N,67nm,0.4s | | | | | | |
| **MZP** | **Montezuma Peak** | **1.21** | **87** | | Pg | 17 23 00.1 | +0.1 |
| MZP | | | | | Sg | 17 23 15.9 | +0.2 |
| **CMB** | **Columbia Colle** | **1.23** | **288** | | Pg | 17 22 59.2 | -1.2 |
| CMB | | | | IAML | | 17 23 15.8 | |
| | comp=E,90nm,0.4s | | | | | | |
| CMB | | | | IAML | | 17 23 15.8 | |
| | comp=N,101nm,0.4s | | | | | | |
| **CMB** | **Columbia Colle** | **1.23** | **288** | | Sg | 17 23 15.2 | -1.1 |
| **MYLM** | **Yosemite Lake** | **1.23** | **258** | | Pg | 17 22 59.8 | -0.6 |
| **GMN** | **Gold Mountain** | **1.36** | **105** | | Pg | 17 23 02.7 | -0.1 |
| **MRHM** | **Rocky Hill** | **1.37** | **186** | | Pn | 17 23 01.7 | -1.2 |
| **CWC** | **Cottonwood Cre** | **1.38** | **151** | | Pn | 17 23 02.4 | -0.7 |
| **GRAC** | **Grapevine Rang** | **1.39** | **118** | | Pb | 17 23 04.6 | +1.0 |
| **GRAC** | **Grapevine Rang** | **1.39** | **118** | IAML | | 17 23 24.4 | |
| | comp=E,74nm,0.3s | | | | | | |
| GRAC | | | | IAML | | 17 23 24.6 | |
| | comp=N,69nm,0.3s | | | | | | |
| **TPH** | **Tonopah** | **1.40** | **72** | | Pn | 17 23 03.3 | -0.2 |
| **CGO** | **Cerro Gordo** | **1.41** | **141** | | Pn | 17 23 03.0 | -0.7 |
| **PNTR** | **Pine Nut** | **1.53** | **339** | | Pb | 17 23 05.7 | -0.3 |
| **PNTR** | **Pine Nut** | **1.53** | **339** | IAML | | 17 23 10.9 | |
| | comp=E,43nm,0.5s | | | | | | |
| PNTR | | | | IAML | | 17 23 33.7 | |
| | comp=N,36nm,0.7s | | | | | | |
| **KVN** | **Kaiserville** | **1.53** | **24** | | Pn | 17 23 05.5 | +0.2 |
| **KVN** | **Kaiserville** | **1.53** | **24** | IAML | | 17 23 28.8 | |
| | comp=E,44nm,0.7s | | | | | | |
| KVN | | | | IAML | | 17 23 29.0 | |
| | comp=N,32nm,0.5s | | | | | | |
| **EMB** | **Emerald Bay** | **1.62** | **325** | | Pb | 17 23 07.0 | -0.4 |
| **EMB** | **Emerald Bay** | **1.62** | **325** | IAML | | 17 23 30.5 | |
| | comp=N,34nm,0.5s | | | | | | |
| EMB | | | | IAML | | 17 23 45.8 | |
| | comp=E,27nm,0.5s | | | | | | |
| **SGV** | **South Grapevin** | **1.64** | **114** | | Pn | 17 23 07.2 | +0.5 |
| **PDRM** | **Domengine Ranc** | **1.76** | **222** | | Pb | 17 23 09.4 | -0.4 |
| **Q09A** | **Carvers** | **1.80** | **49** | | Pb | 17 23 10.5 | 0.0 |
| **MPK** | **Martis Peak** | **1.86** | **332** | | Pg | 17 23 13.2 | +0.7 |
| **MPK** | **Martis Peak** | **1.86** | **332** | IAML | | 17 23 19.4 | |
| | comp=E,33nm,0.8s | | | | | | |
| MPK | | | | IAML | | 17 23 45.5 | |
| | comp=N,42nm,0.9s | | | | | | |
| **BAVM** | **Antelope Valle** | **1.97** | **240** | | Pb | 17 23 12.3 | -1.1 |
| **BBGB** | **Big Mountain B** | **2.01** | **238** | | Pb | 17 23 13.3 | -0.8 |
| **WCT** | **Wildcat Mounta** | **2.02** | **115** | | Pn | 17 23 11.3 | -0.5 |
| WCT | | | | IAML | | 17 23 22.6 | |
| | comp=E,17nm,0.3s | | | | | | |
| **ISA** | **Isabella, Lake** | **2.02** | **170** | | Pb | 17 23 13.8 | -0.4 |
| **DONR** | **Donner Summit** | **2.02** | **327** | | Pb | 17 23 14.8 | +0.3 |
| **CTM** | **Castle Mountai** | **2.07** | **214** | | Pb | 17 23 13.9 | -1.2 |
| **AFDM** | **Forest Hills D** | **2.07** | **309** | | Pn | 17 23 11.9 | -0.7 |
| AFDM | | | | IAML | | 17 23 42.6 | |
| | comp=N,46nm,0.5s | | | | | | |
| **PSMM** | **Smith Mountain** | **2.08** | **221** | | Pn | 17 23 13.6 | +0.9 |
| **PAHR** | **Pah Rah Range** | **2.08** | **350** | | Pb | 17 23 15.1 | -0.2 |
| **LRV** | **Little Rabbit** | **2.09** | **235** | | Pb | 17 23 14.5 | -0.8 |
| **PMPB** | **Monarch Peak** | **2.09** | **227** | | Pn | 17 23 14.0 | +1.2 |
| **GHS** | **Gilroy Hot Spr** | **2.10** | **255** | | Pb | 17 23 14.4 | -1.1 |
| **HFEM** | **San Felipe** | **2.10** | **252** | | Pb | 17 23 14.6 | -0.9 |
| **PEAR** | **Peavine Mounta** | **2.12** | **337** | | Pg | 17 23 17.0 | -0.4 |
| **BVL** | **Bear Valley** | **2.12** | **240** | | Pb | 17 23 15.0 | -0.9 |
| **PPTM** | **Peach Tree Val** | **2.12** | **224** | | Pb | 17 23 14.9 | -1.0 |
| **PHFM** | **Heflinger Ranc** | **2.14** | **215** | | Pn | 17 23 14.3 | +0.8 |
| **PSTM** | **Stockdale Moun** | **2.15** | **217** | | Pn | 17 23 14.4 | +0.8 |
| **PMRM** | **Maxey Ranch** | **2.15** | **210** | | Pn | 17 23 14.5 | +0.9 |
| **PKD** | **Bear Valley Ra** | **2.15** | **218** | | Pn | 17 23 14.5 | +0.9 |
| **PHPM** | **Hope Ranch** | **2.16** | **220** | | Pn | 17 23 14.5 | +0.8 |
| **PVCM** | **Vineyard Canyo** | **2.17** | **218** | | Pn | 17 23 14.7 | +0.8 |
| **PKLM** | **Kerr Lake** | **2.20** | **212** | | Pn | 17 23 15.3 | +1.0 |
| **SAO** | **San Andreas Ge** | **2.21** | **247** | | Pn | 17 23 15.8 | +1.4 |
| **TPNV** | **Topopah Spring** | **2.23** | **108** | | Pb | 17 23 17.1 | -0.8 |
| **TPNV** | **Topopah Spring** | **2.23** | **108** | IAML | | 17 23 54.6 | |
| | comp=N,14nm,0.7s | | | | | | |
| TPNV | | | | IAML | | 17 23 59.1 | |
| | comp=N,20nm,0.6s | | | | | | |
| **PWKM** | **Work Ranch** | **2.24** | **216** | | Pn | 17 23 15.7 | +0.9 |
| **TRAM** | **Private Proper** | **2.26** | **209** | | Pn | 17 23 16.2 | +1.1 |
| **BJCM** | **Johnson Can.** | **2.27** | **242** | | Pn | 17 23 16.5 | +1.2 |
| **PBPM** | **Bitterwater Pu** | **2.27** | **205** | | Pn | 17 23 16.3 | +1.0 |
| **SDH** | **Striped Hills** | **2.29** | **115** | | Pn | 17 23 16.7 | +1.1 |
| **GWY** | **Greenwater Val** | **2.32** | **129** | | Pb | 17 23 19.0 | -0.3 |
| **GWY** | **Greenwater Val** | **2.32** | **129** | IAML | | 17 23 37.5 | |
| | comp=N,13nm,4.6s | | | | | | |
| **NSP** | **Numbskull Pass** | **2.34** | **112** | | Pn | 17 23 17.3 | +0.9 |
| **TEJ** | **El Tejon** | **2.43** | **176** | | Pb | 17 23 20.4 | -0.8 |
| **BEKR** | **Beckworth** | **2.48** | **333** | | Pb | 17 23 23.1 | +0.9 |
| **S11A** | **Rachel** | **2.51** | **89** | Pn | Pn | 17 23 17.3 | -1.4 |
| S11A | | | | IAML | | 17 23 58.9 | |
| | comp=E,30nm,0.9s | | | | | | |
| **MCY** | **Mercury** | **2.55** | **112** | | Pn | 17 23 20.6 | +1.3 |
| **R11B** | **Troy Canyon, C** | **2.71** | **74** | | Pn | 17 23 25.9 | -0.2 |
| **BCW** | **Bitter Crk WRg** | **2.74** | **189** | | Pn | 17 23 21.1 | -0.7 |
| **SPR3** | **Spring Creek 3** | **3.84** | **68** | Pg | Pb | 17 23 46.9 | +1.4 |
| SPR3 | | | | IAML | | 17 24 38.9 | |
| | comp=N,6.4nm,0.7s | | | | | | |
| SPR3 | | | | IAML | | 17 24 43.9 | |
| | comp=E,6.2nm,1.8s | | | | | | |
| **PSUT** | **Pine Spring** | **4.08** | **76** | Pg | Pb | 17 23 50.0 | +0.5 |
| PSUT | | | | IAML | | 17 25 10.6 | |
| | comp=E,6.9nm,4.4s | | | | | | |
| PSUT | | | | IAML | | 17 25 16.1 | |
| | comp=N,6.5nm,5.0s | | | | | | |

*OTT **09** 17:31:20.1±0.2, 47.48N×92.60W, h0km, MN2.4/7, Blast, Minnesota, U.S. 139km southeast from Fort Frances, On Mining explosion.*
*IDC **09** 17:31:22.6±4.8, 47.62N×92.84W, h0km, mbtmp2.4/1, ML0.5/1, Error ellipse: s-maj=65.6km s-min=30.3km az=54.0*

**ISC 09 17:31:19.0±2.2, 47.5N±0.1×92.65W±0.06, h0km, n12, σ1s14/18, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EYMN** | **Ely** | **0.89** | **61** | PG | **Pg** | **17 31 36.0** | **+0.1** |
| EYMN | | | | SG | **Sg** | **17 31 47.

comp=Z,5.9nm,0.7s
**QSPA South Pole Qui 73.02 180** P **P** **17 49 00.2 +1.1**
QSPA IAmb IAmb 17 49 40.6
comp=Z,7.0nm,1.4s
**NVAR Mina Array Bea 75.85 42** P **P** **17 49 18.5 +2.5**
comp=Z,0.4nm,0.6s,baz=224,slow=7.6,SNR=2.7
comp=Z,0.4nm,0.6s

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*MOS **09** 17:47:22.5±1.0,26°.39N×140°.45E,h394km,mb4.0/13, Error ellipse: s-maj=17.3km s-min=6.9km az=108.5*
*IDC **09** 17:47:23.4±1.1,26°.45N×140°.59E,h388km±11km, mb3.5/16,mbtmp4.3/20,Error ellipse: s-maj=18.3km s-min=10.0km az=77.0*
*NEIC **09** 17:47:23.6±1.7,26°.5N±0°.1×140°.5E±0°.2,h380km±8km, mb4.0/55,Error ellipse: s-maj=22.1km s-min=15.2km az=80.0*
*JMA **09** 17:47:26.9±0.2,27°.N±2°.×14°.1E±°,h406km,MV4.1/19, NEAR CHICHIJIMA ISLAND*
**ISC 09 17:47:24.7±0.5,26°.53N±0°.07×140°.68E±0°.08,h400km, n277,σ1§56/269,mb4.0/55,5C-9D,Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **1.34** | **85** | P | **Pn** | **17 48 18.5** | **+1.4** |
| JHH2 | | | | *e*S | **S** | **17 48 59.5** | **0.0** |
| **CBIJ** | **Chichi jima** | **1.46** | **67** | *e*P | **Pn** | **17 48 18.3** | **+0.7** |
| CBIJ | | | | *e*S | **S** | **17 48 58.4** | **-2.1** |
| **JCJ** | **Chichijima** | **1.46** | **67** | Pn | **Pn** | **17 48 14.3** | **-3.4** |
| JCJ | | | | | **S** | **17 48 55.8** | **-4.6** |
| **JCJ** | **Chichijima** | **1.46** | **67** | P | **Pn** | **17 48 13.8** | **-3.9** |
| | 78nm,0.4s,baz=264,slow=21,SNR=4.6 | | | S | | | |
| JCJ | | | | | **S** | **17 48 54.2** | **-6.2** |
| | 273nm,0.3s,baz=287,slow=23,SNR=12 | | | | | | |
| **JHCJ** | **Hachijojimakas** | **6.57** | **354** | *e*P | **P** | **17 49 04.1** | **0.0** |
| **JHJ** | **Hachijo jima 2** | **6.62** | **353** | P | **P** | **17 49 03.8** | **-0.8** |
| | 62nm,0.3s,baz=286,slow=19,SNR=22 | | | | | | |
| JHJ | | | | S | **S** | **17 50 21.7** | **-3.4** |
| | 82nm,0.3s,baz=72,slow=20,SNR=2.2 | | | | | | |
| **TTO1** | **TONANKAI O.B.S** | **7.83** | **335** | *e*P | **P** | **17 49 20.4** | **+2.6** |
| **BSO1** | **Boso 1** | **8.11** | **2** | *e*P | **P** | **17 49 20.3** | **-0.3** |
| BSO1 | | | | *e*S | **S** | **17 50 52.8** | **-2.2** |
| **BSO3** | **Boso 3** | **8.25** | **359** | *e*P | **P** | **17 49 22.0** | **-0.5** |
| BSO3 | | | | *e*S | **S** | **17 50 54.8** | **-3.7** |
| **JIE** | **Ise** | **8.56** | **337** | P | **P** | **17 49 28.2** | **+2.0** |
| **JKN2** | **Miekihoku** | **8.58** | **335** | P | **P** | **17 49 28.6** | **+2.2** |
| **JOD2** | **Odawara 2** | **8.82** | **351** | *e*P | **P** | **17 49 29.3** | **+0.2** |
| **JMN** | **Monobe** | **9.28** | **322** | P | **Pn** | **17 49 36.7** | **+2.3** |
| **JGF** | **Kuroka** | **9.48** | **343** | P | **Pn** | **17 49 37.0** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | **10.21** | **349** | P | **Pn** | **17 49 43.8** | **-1.2** |
| | 1.7nm,0.3s,baz=164,slow=9.7,SNR=16 | | | | | | |
| MJAR | | | | S | **S** | **17 51 35.8** | **-3.9** |
| | 5.2nm,0.7s,baz=177,slow=26,SNR=6.6 | | | | | | |
| **MAJO** | **Matsushiro** | **10.21** | **349** | P | **Pn** | **17 49 44.3** | **-0.7** |
| **MAJO** | **Matsushiro** | **10.21** | **349** | ⇓*e*P | **Pn** | **17 49 44.3** | **-0.7** |
| **MJB9** | **Matsu-Tunnel** | **10.21** | **349** | P | **Pn** | **17 49 44.1** | **-1.0** |
| **JNU** | **Nakatsue** | **10.75** | **310** | P | **Pn** | **17 49 53.7** | **+2.3** |
| | 7.2nm,0.7s,baz=138,slow=4.7,SNR=13 | | | | | | |
| **JOW** | **Kunigami** | **11.10** | **274** | P | **Pn** | **17 49 55.6** | **+0.1** |
| | 21nm,0.5s,baz=108,slow=18,SNR=12 | | | | | | |
| **JMM** | **Marumori** | **11.31** | **0** | P | **Pn** | **17 49 57.7** | **0.0** |
| **KSRS** | **Korea Array** | **15.34** | **318** | P | **P** | **17 50 41.1** | **+0.4** |
| | 2.3nm,0.8s,baz=132,slow=12,SNR=6.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **17.62** | **5** | P | **P** | **17 51 07.0** | **+2.0** |
| | 4.2nm,0.5s,baz=56,slow=28,SNR=6.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **17.62** | **5** | P | **P** | **17 51 07.0** | **+2.0** |
| **MSHR** | **Mys Shultsa** | **17.81** | **336** | ⇓*e*P | **P** | **17 51 07.5** | **+0.5** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| **PSTR** | **Posyet** | **18.00** | **336** | ⇑*e*P | **P** | **17 51 09.5** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **18.98** | **340** | P | **P** | **17 51 19.8** | **+0.4** |
| | comp=Z,5.0nm,0.6s,baz=140,slow=8.9,SNR=13 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **20.45** | **4** | *e*P | **P** | **17 51 34.2** | **+1.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **23.70** | **345** | ⇑*e*P | **P** | **17 52 02.9** | **+0.4** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **HNS** | **HongShan** | **24.48** | **303** | ⇓P | **P** | **17 52 09.9** | **+0.2** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **HEH** | **HeiHe** | **25.79** | **340** | *e*P | **P** | **17 52 21.3** | **+0.2** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **27.97** | **308** | *e*P | **P** | **17 52 39.5** | **-1.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,26nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,85nm,5.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,150nm,17.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,230nm,17.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,260nm,18.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **33.83** | **318** | ⇑*e*P | **P** | **17 53 31.4** | **0.0** |
| **SONM** | **Songino Array** | **34.21** | **318** | P | **P** | **17 53 32.6** | **-2.1** |
| | comp=Z,0.6nm,0.4s,baz=138,slow=9.2,SNR=3.0 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **YAK** | **Yakutsk** | **36.26** | **351** | P | **P** | **17 53 50.7** | **-0.7** |
| YAK | | | | IAmb | IAmb | 17 53 51.9 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **36.26** | **351** | *e*P | **P** | **17 53 50.3** | **-1.2** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,3.0nm,1.3s | | | | | | |
| **SEY** | **Seymchan** | **37.22** | **9** | ⇑*e*P | **P** | **17 54 01.1** | **+1.6** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **BILL** | **Bilibino** | **44.31** | **13** | *c i*P | **P** | **17 54 57.9** | **+1.3** |
| BILL | | | | | | 17 56 33.0 | |
| BILL | | | | *e* | | 17 56 46.9 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **45.82** | **306** | *e*P | **P** | **17 55 09.2** | **+0.5** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.42** | **188** | P | **P** | **17 55 12.9** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 17 55 13.8 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.59** | **188** | P | **P** | **17 55 14.0** | **-0.8** |
| **WRA** | **Warramunga Arr** | **46.60** | **188** | P | **P** | **17 55 14.4** | **-0.5** |
| | comp=Z,2.4nm,0.3s,baz=6.6,slow=7.9,SNR=68 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **46.69** | **314** | ⇓*e*P | **P** | **17 55 15.7** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **49.04** | **320** | P | **P** | **17 55 30.8** | **-2.2** |
| **ZALV** | **Zalesovo Beam** | **49.04** | **320** | P | **P** | **17 55 32.3** | **-0.6** |
| | comp=Z,2.9nm,0.4s,baz=104,slow=7.4,SNR=14 | | | | | | |
| ZALV | | | | PcP | **PcP** | **17 56 48.5** | **-1.2** |
| | comp=Z,0.8nm,0.5s,baz=122,slow=4.3,SNR=3.9 | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **49.80** | **310** | P | **P** | **17 55 38.3** | **-0.5** |
| **MK31** | **Makanchi Array** | **49.80** | **310** | P | **P** | **17 55 38.3** | **-0.5** |
| **MKAR** | **Makanchi Array** | **49.80** | **310** | P | **P** | **17 55 38.4** | **-0.4** |
| | comp=Z,1.6nm,0.7s,baz=89,slow=9.8,SNR=21 | | | | | | |
| MKAR | | | | PcP | **PcP** | **17 56 52.2** | **-0.5** |
| | comp=Z,0.7nm,0.8s,baz=72,slow=4.0,SNR=4.7 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **50.33** | **188** | P | **P** | **17 55 42.2** | **-0.6** |
| | comp=Z,1.0nm,0.8s,baz=2.0,slow=5.0,SNR=9.8 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **L14K** | **Kuka Creek** | **51.19** | **31** | P | **P** | **17 55 50.6** | **+1.9** |
| | baz=254 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **51.30** | **33** | P | **P** | **17 55 51.2** | **+1.8** |
| | baz=256 | | | | | | |
| **O14K** | **Tigyukauivet M** | **51.34** | **34** | P | **P** | **17 55 51.5** | **+1.7** |
| | baz=257 | | | | | | |
| **CHNA** | **Chernabura Isl** | **51.42** | **40** | P | **P** | **17 55 51.6** | **+1.2** |
| | baz=262 | | | | | | |
| **L15K** | **Ungalak Mounta** | **51.84** | **31** | P | **P** | **17 55 54.7** | **+1.3** |
| | baz=255 | | | | | | |
| **M15K** | **Kasigluk River** | **51.96** | **32** | P | **P** | **17 55 56.0** | **+1.7** |
| | baz=256 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **51.98** | **30** | P | **P** | **17 55 55.7** | **+1.3** |
| | baz=254 | | | | | | |
| **O15K** | **Ungalikthiuk R** | **52.05** | **34** | P | **P** | **17 55 56.6** | **+1.6** |
| | baz=258 | | | | | | |
| **N15K** | **Kwethluk River** | **52.13** | **33** | P | **P** | **17 55 57.3** | **+1.8** |
| | baz=257 | | | | | | |
| **KURK** | **Kurchatov** | **52.43** | **315** | P | **P** | **17 55 56.8** | **-1.1** |
| **KURK** | **Kurchatov** | **52.43** | **315** | ⇓*e*P | **P** | **17 55 57.2** | **-0.7** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **52.48** | **315** | P | **P** | **17 55 57.8** | **-0.5** |
| | comp=Z,3.2nm,0.5s,baz=94,slow=8.5,SNR=36 | | | | | | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **J16K** | **Anvik River** | **52.66** | **29** | P | **P** | **17 56 01.3** | **+2.0** |
| | baz=254 | | | | | | |
| **L16K** | **Owhat River** | **52.77** | **31** | P | **P** | **17 56 01.9** | **+1.7** |
| | baz=257 | | | | | | |
| **N16K** | **Nishlik Lake** | **52.84** | **33** | P | **P** | **17 56 02.5** | **+1.8** |
| | baz=258 | | | | | | |
| **M16K** | **Timber Creek** | **52.86** | **32** | P | **P** | **17 56 02.6** | **+1.7** |
| | baz=258 | | | | | | |
| **P16K** | **Nushagak River** | **52.95** | **35** | P | **P** | **17 56 02.9** | **+1.4** |
| | baz=260 | | | | | | |
| **O16K** | **Kokwok River B** | **53.00** | **34** | P | **P** | **17 56 03.3** | **+1.4** |
| | baz=260 | | | | | | |
| **D17K** | **Noatak River** | **53.09** | **23** | P | **P** | **17 56 04.3** | **+2.0** |
| | baz=259 | | | | | | |
| **G17K** | **Kiwalik Mounta** | **53.27** | **26** | P | **P** | **17 56 05.6** | **+1.8** |
| | baz=253 | | | | | | |
| **RDOG** | **Red Dog Mine** | **53.28** | **23** | P | **P** | **17 56 05.6** | **+1.9** |
| | baz=249 | | | | | | |
| **F17K** | **Baldwin Pennin** | **53.33** | **25** | P | **P** | **17 56 05.8** | **+1.7** |
| | baz=252 | | | | | | |
| **J17K** | **VABM Dome** | **53.36** | **29** | P | **P** | **17 56 06.0** | **+1.6** |
| | baz=256 | | | | | | |
| **H17K** | **Granite Mounta** | **53.41** | **27** | P | **P** | **17 56 06.8** | **+2.0** |
| | baz=254 | | | | | | |
| **L17K** | **Donlin** | **53.41** | **31** | P | **P** | **17 56 06.6** | **+1.8** |
| | baz=258 | | | | | | |
| **O17K** | **Koliganek Bris** | **53.53** | **34** | P | **P** | **17 56 08.0** | **+2.3** |
| | baz=260 | | | | | | |
| **K17K** | **Iditarod** | **53.54** | **30** | P | **P** | **17 56 07.7** | **+2.0** |
| | baz=257,SNR=7.2 | | | | | | |
| **N17K** | **Nushagak Hills** | **53.62** | **33** | P | **P** | **17 56 08.2** | **+1.9** |
| | baz=260 | | | | | | |
| **M17K** | **Holitna River** | **53.66** | **32** | P | **P** | **17 56 08.1** | **+1.5** |
| | baz=259 | | | | | | |
| **P17K** | **Kvichak River** | **53.77** | **35** | P | **P** | **17 56 09.0** | **+1.6** |
| | baz=261 | | | | | | |
| **E18K** | **Tukpahlearik C** | **53.89** | **24** | P | **P** | **17 56 10.2** | **+2.1** |
| | baz=252 | | | | | | |
| **F18K** | **Selawik** | **53.99** | **25** | P | **P** | **17 56 11.1** | **+2.3** |
| | baz=253 | | | | | | |
| **H18K** | **Honhosa River** | **54.10** | **27** | P | **P** | **17 56 11.8** | **+2.1** |
| | baz=255 | | | | | | |
| **L18K** | **Granite Mounta** | **54.17** | **31** | P | **P** | **17 56 12.2** | **+2.0** |
| | baz=259 | | | | | | |
| **G18K** | **Tagagawik** | **54.18** | **26** | P | **P** | **17 56 12.6** | **+2.3** |
| | baz=254 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **54.43** | **35** | P | **P** | **17 56 13.9** | **+1.6** |
| | baz=263 | | | | | | |
| **M18K** | **Stony River** | **54.44** | **32** | P | **P** | **17 56 14.1** | **+1.9** |
| | baz=260 | | | | | | |
| **R18K** | **Karluk** | **54.60** | **37** | P | **P** | **17 56 14.3** | **+1.0** |
| | baz=264 | | | | | | |
| **KSH** | **Kashi** | **54.72** | **301** | P | P | 17 56 17.8 | +3.1 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **54.77** | **25** | P | **P** | **17 56 15.5** | **+1.1** |
| | baz=255 | | | | | | |
| **C19K** | **Lookout Ridge** | **54.78** | **22** | P | **P** | **17 56 16.3** | **+1.8** |
| | baz=251 | | | | | | |
| **G19K** | **Purcell Mounta** | **54.86** | **26** | P | **P** | **17 56 16.5** | **+1.4** |
| | baz=256 | | | | | | |
| **H19K** | **Roundabout Mou** | **54.97** | **27** | P | **P** | **17 56 17.3** | **+1.5** |
| H19K | | | | IAmb | IAmb | 17 56 18.5 | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| **H19K** | **Roundabout Mou** | **54.97** | **27** | P | **P** | **17 56 17.9** | **+2.1** |
| | baz=257,SNR=8.5 | | | | | | |
| **N19K** | **Bonanza Creek** | **54.98** | **33** | P | **P** | **17 56 17.5** | **+1.4** |
| | baz=262 | | | | | | |
| **J19K** | **Poorman** | **54.99** | **29** | P | **P** | **17 56 18.3** | **+2.3** |
| | baz=259 | | | | | | |
| **L19K** | **White Mountain** | **55.01** | **31** | P | **P** | **17 56 18.2** | **+2.0** |
| | baz=261 | | | | | | |
| **D19K** | **Kuna River** | **55.11** | **23** | P | **P** | **17 56 18.3** | **+1.5** |
| | baz=253 | | | | | | |
| **E19K** | **Redstone River** | **55.14** | **25** | P | **P** | **17 56 18.7** | **+1.7** |
| | baz=255 | | | | | | |
| **AAK** | **Ala-Archa** | **55.48** | **305** | ⇓*e*P | **P** | **17 56 19.9** | **-0.1** |
| **L20K** | **Farewell, AK** | **55.50** | **31** | P | **P** | **17 56 21.3** | **+1.6** |
| | baz=262 | | | | | | |
| **K20K** | **Telida** | **55.56** | **30** | P | **P** | **17 56 21.8** | **+1.7** |
| **K20K** | **Telida** | **55.56** | **30** | P | **P** | **17 56 22.1** | **+2.1** |
| | baz=261 | | | | | | |
| **H20K** | **Anotleneega Mo** | **55.60** | **27** | P | **P** | **17 56 21.9** | **+1.6** |
| | baz=258,SNR=5.6 | | | | | | |
| **F20K** | **Avaraart Lake** | **55.61** | **25** | P | **P** | **17 56 21.8** | **+1.6** |
| | baz=257 | | | | | | |
| **I20K** | **Naaghedeneel** | **55.63** | **28** | P | **P** | **17 56 22.2** | **+1.7** |
| | baz=259 | | | | | | |
| **J20K** | **Nowinta River** | **55.66** | **29** | P | **P** | **17 56 22.8** | **+2.1** |
| J20K | | | | IAmb | IAmb | 17 56 23.9 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **J20K** | **Nowinta River** | **55.66** | **29** | P | **P** | **17 56 22.6** | **+1.9** |
| | baz=260,SNR=7.6 | | | | | | |
| **D20K** | **Etivluk River** | **55.70** | **23** | P | **P** | **17 56 22.4** | **+1.5** |
| | baz=255,SNR=10.0 | | | | | | |
| **E20K** | **Nigu River** | **55.73** | **24** | P | **P** | **17 56 22.7** | **+1.5** |
| | baz=255 | | | | | | |
| **B20K** | **Meade River** | **55.88** | **22** | P | **P** | **17 56 23.6** | **+1.5** |
| | baz=253 | | | | | | |
| **G21K** | **Allakaket** | **56.35** | **26** | P | **P** | **17 56 27.0** | **+1.5** |
| | baz=259 | | | | | | |
| **H21K** | **Melozitna Rive** | **56.48** | **27** | IAmb | IAmb | 17 56 29.4 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **56.48** | **27** | P | **P** | **17 56 28.4** | **+2.0** |
| | baz=260,SNR=7.0 | | | | | | |
| **F21K** | **Alatna River** | **56.50** | **25** | P | **P** | **17 56 28.2** | **+1.7** |
| | baz=259 | | | | | | |
| **E21K** | **Killik River** | **56.57** | **24** | IAmb | IAmb | 17 56 29.3 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **E21K** | **Killik River** | **56.57** | **24** | P | **P** | **17 56 28.4** | **+1.4** |
| | baz=257 | | | | | | |
| **B21K** | **Ikpikpuk River** | **56.62** | **22** | IAmb | IAmb | 17 56 29.9 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **56.62** | **22** | P | **P** | **17 56 28.6** | **+1.3** |
| | baz=256 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **57.02** | **29** | P | **P** | **17 56 32.0** | **+1.8** |
| **BPAW** | **Bear Paw Mtn.** | **57.02** | **29** | P | **P** | **17 56 31.6** | **+1.4** |
| | baz=263,SNR=10 | | | | | | |
| **F22K** | **John River** | **57.05** | **25** | P | **P** | **17 56 32.2** | **+1.9** |
| | baz=260,SNR=5.3 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **57.10** | **27** | P | **P** | **17 56 32.5** | **+1.8** |
| | baz=262 | | | | | | |
| **D22K** | **Ayikyak River** | **57.13** | **23** | IAmb | IAmb | 17 56 33.7 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **57.13** | **23** | P | **P** | **17 56 32.6** | **+1.7** |
| | baz=258,SNR=6.5 | | | | | | |
| **G22K** | **Bettles** | **57.21** | **26** | P | **P** | **17 56 33.0** | **+1.5** |
| | baz=261 | | | | | | |
| **MLY** | **Manley** | **57.24** | **28** | P | **P** | **17 56 33.4** | **+1.6** |
| MLY | | | | IAmb | IAmb | 17 56 34.3 | |
| | comp=Z,4.5nm,0.6s | | | | | | |
| **MLY** | **Manley** | **57.24** | **28** | P | **P** | **17 56 33.4** | **+1.6** |
| | baz=263,SNR=7.1 | | | | | | |
| **RC01** | **Rabbit Creek A** | **57.31** | **33** | P | **P** | **17 56 33.4** | **+1.2** |
| | baz=266 | | | | | | |
| **SEW** | **Seward** | **57.39** | **34** | P | **P** | **17 56 34.0** | **+1.3** |
| | baz=267 | | | | | | |
| **BRVK** | **Borovoye** | **57.62** | **318** | P | **P** | **17 56 33.9** | **-0.6** |
| BRVK | | | | IAmb | IAmb | 17 56 35.1 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **57.62** | **318** | *de*P | **P** | **17 56 34.2** | **-0.3** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,12nm,2.5s | | | | | | |
| **G23K** | **Bananza Creek** | **57.76** | **26** | P | **P** | **17 56 36.8** | **+1.6** |
| | baz=262 | | | | | | |
| **COLD** | **Coldfoot** | **57.76** | **25** | P | **P** | **17 56 36.8** | **+1.5** |
| | baz=262 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **57.84** | **28** | P | **P** | **17 56 36.7** | **+0.9** |
| | baz=264 | | | | | | |
| **H23K** | **Yukon River** | **57.84** | **27** | P | **P** | **17 56 37.6** | **+1.8** |
| | baz=263,SNR=5.3 | | | | | | |
| **D23K** | **Nanushuk River** | **57.85** | **23** | P | **P** | **17 56 37.6** | **+1.7** |
| | baz=260 | | | | | | |
| **MCK** | **McKinley** | **57.88** | **30** | P | **P** | **17 56 37.2** | **+1.0** |
| | baz=265 | | | | | | |
| **NEA2** | **Nenana** | **57.90** | **29** | IAmb | IAmb | 17 56 38.6 | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **NEA2** | **Nenana** | **57.90** | **29** | P | **P** | **17 56 37.7** | **+1.5** |
| | baz=265,SNR=9.3 | | | | | | |
| **KNK** | **Knik Glacier** | **57.95** | **32** | P | **P** | **17 56 37.5** | **+0.9** |
| | baz=267 | | | | | | |
| **WAT1** | **Susitna Watana** | **57.99** | **31** | P | **P** | **17 56 38.1** | **+1.2** |
| | baz=266 | | | | | | |
| **SML** | **Sawmill** | **58.03** | **32** | IAmb | IAmb | 17 56 39.0 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **58.03** | **32** | P | **P** | **17 56 38.6** | **+1.4** |
| | baz=267 | | | | | | |
| **C23K** | **Itkillik River** | **58.03** | **22** | P | **P** | **17 56 38.6** | **+1.6** |
| C23K | | | | IAmb | IAmb | 17 56 39.6 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **58.03** | **22** | P | **P** | **17 56 38.2** | **+1.1** |
| | baz=260,SNR=7.5 | | | | | | |
| **STKA** | **Stephens Creek** | **58.08** | **179** | P | **P** | **17 56 36.0** | **-1.9** |
| | comp=Z,2.3nm,0.6s,baz=339,slow=7.8,SNR=4.9 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **58.10** | **25** | P | **P** | **17 56 39.3** | **+1.6** |
| | baz=262,SNR=5.5 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **58.20** | **24** | IAmb | IAmb | 17 56 41.6 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **58.20** | **24** | P | **P** | **17 56 40.1** | **+1.8** |
| | baz=262 | | | | | | |
| **MDM** | **Murphy Dome** | **58.30** | **28** | IAmb | IAmb | 17 56 41.3 | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **58.33** | **306** | P | **P** | **17 56 39.0** | **-0.6** |
| KK31 | | | | IAmb | IAmb | 17 56 40.4 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **58.33** | **306** | P | **P** | **17 56 39.0** | **-0.6** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **58.33** | **306** | P | **P** | **17 56 39.3** | **-0.3** |
| **KKAR** | **Karatay Array** | **58.33** | **306** | P | **P** | **17 56 39.3** | **-0.3** |
| **WAT6** | **Susitna Watana** | **58.34** | **31** | P | **P** | **17 56 40.4** | **+0.9** |
| | baz=267 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **58.50** | **32** | P | **P** | **17 56 42.0** | **+1.5** |
| | baz=268 | | | | | | |
| **H24K** | **Noodor Dome** | **58.52** | **27** | P | **P** | **17 56 42.3** | **+1.8** |
| | baz=265 | | | | | | |
| **E24K** | **Your Creek** | **58.52** | **25** | IAmb | IAmb | 17 56 43.0 | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **58.52** | **25** | P | **P** | **17 56 42.1** | **+1.5** |
| | baz=263,SNR=6.7 | | | | | | |
| **D24K** | **Happy Valley** | **58.54** | **23** | P | **P** | **17 56 41.8** | **+1.3** |
| | baz=262,SNR=5.7 | | | | | | |
| **GLI** | **Glacier Island** | **58.59** | **33** | P | **P** | **17 56 42.0** | **+1.0** |
| | baz=269 | | | | | | |
| **POKR** | **Poker Plat Res** | **58.65** | **28** | P | **P** | **17 56 42.2** | **+0.8** |
| | baz=266 | | | | | | |
| **C24K** | **Franklin Bluff** | **58.67** | **23** | P | **P** | **17 56 42.8** | **+1.4** |
| | baz=262 | | | | | | |
| **F24K** | **Squaw Lake** | **58.68** | **25** | IAmb | IAmb | 17 56 44.4 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **58.68** | **25** | P | **P** | **17 56 43.5** | **+1.9** |
| | baz=264,SNR=5.3 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **58.76** | **26** | P | **P** | **17 56 44.2** | **+2.1** |
| | baz=265 | | | | | | |
| **HDA** | **Harding Lake** | **58.80** | **29** | P | **P** | **17 56 43.4** | **+1.0** |
| | baz=267 | | | | | | |
| **IL31** | | **58.85** | **29** | IAmb | IAmb | 17 56 43.8 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **58.85** | **29** | P | **P** | **17 56 42.9** | **+0.1** |
| | comp=Z,2.0nm,0.7s,baz=257,slow=5.6,SNR=26 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KLU** | **Klutina** | **59.16** | **32** | P | **P** | **17 56 46.1** | **+1.1** |
| | baz=269 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **59.24** | **33** | P | **P** | **17 56 46.6** | **+1.2** |
| | baz=270 | | | | | | |
| **K24K** | **Donnelly Dome** | **59.29** | **30** | P | **P** | **17 56 47.3** | **+1.5** |
| | baz=268 | | | | | | |
| **G25K** | **Bearman Lake** | **59.31** | **26** | P | **P** | **17 56 47.6** | **+1.8** |
| | baz=266 | | | | | | |
| **H25L** | **Birch Creek** | **59.39** | **27** | P | **P** | **17 56 48.0** | **+1.7** |
| | baz=267 | | | | | | |
| **PAX** | **Paxson** | **59.40** | **31** | P | **P** | **17 56 48.4** | **+1.8** |
| | baz=269 | | | | | | |
| **D25K** | **Kavik River** | **59.43** | **23** | IAmb | IAmb | 17 56 49.1 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **59.43** | **23** | P | **P** | **17 56 48.2** | **+1.6** |
| | baz=264,SNR=8.9 | | | | | | |
| **PRP** | **Porcupine Dome** | **59.47** | **28** | P | **P** | **17 56 47.7** | **+0.6** |
| | baz=267 | | | | | | |
| **J25K** | **Salcha River,** | **59.50** | **29** | P | **P** | **17 56 48.3** | **+1.1** |
| | baz=268 | | | | | | |
| **HARP** | **HAARP** | **59.54** | **31** | P | **P** | **17 56 48.4** | **+0.9** |
| | baz=270 | | | | | | |
| **F25K** | **Christian River** | **59.55** | **25** | P | **P** | **17 56 49.3** | **+1.8** |
| | baz=266 | | | | | | |
| **N25K** | **Chitina, Valde** | **59.80** | **32** | P | **P** | **17 56 50.0** | **+0.7** |
| | baz=270 | | | | | | |
| **BMRM** | **Bremner River** | **59.80** | **33** | P | **P** | **17 56 50.4** | **+1.1** |
| | baz=271 | | | | | | |
| **SCRK** | **Sand Creek** | **60.09** | **29** | P | **P** | **17 56 51.8** | **+0.6** |
| **SCRK** | **Sand Creek** | **60.09** | **29** | P | **P** | **17 56 51.8** | **+0.6** |
| | baz=270,SNR=20 | | | | | | |
| **CHGR** | **Chuyangaron** | **60.09** | **301** | P | **P** | **17 56 51.3** | **-0.4** |
| **CHGR** | **Chuyangaron** | **60.09** | **301** | P | **P** | **17 56 51.3** | **-0.4** |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **60.13** | **25** | P | **P** | **17 56 52.9** | **+1.6** |
| | baz=267,SNR=5.8 | | | | | | |
| **SIMJ** | **Simiganj** | **60.20** | **301** | P | **P** | **17 56 52.1** | **-0.4** |
| SIMJ | | | | IAmb | IAmb | 17 56 53.1 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **60.23** | **26** | P | **P** | **17 56 53.8** | **+1.9** |
| | baz=268 | | | | | | |
| **J26L** | **Joseph Creek** | **60.27** | **29** | P | **P** | **17 56 52.9** | **+0.4** |
| | baz=270,SNR=12 | | | | | | |
| **L26K** | **Log Cabin Wild** | **60.37** | **31** | P | **P** | **17 56 54.4** | **+1.3** |
| | baz=271 | | | | | | |
| **C27K** | **Jago River** | **60.39** | **23** | P | **P** | **17 56 54.6** | **+1.6** |
| | baz=267,SNR=5.4 | | | | | | |
| **M26K** | **Nabesna, AK** | **60.55** | **31** | P | **P** | **17 56 55.9** | **+1.7** |
| | baz=271 | | | | | | |
| **CRQE** | **Cirque** | **60.55** | **33** | P | **P** | **17 56 56.0** | **+1.7** |
| | baz=272 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **60.56** | **32** | P | **P** | **17 56 55.2** | **+0.9** |
| | baz=272 | | | | | | |
| **K27K** | **Chicken** | **60.93** | **29** | P | **P** | **17 56 58.1** | **+1.5** |
| | baz=271 | | | | | | |
| **L27K** | **Beaver Creek,** | **61.06** | **31** | P | **P** | **17 56 59.3** | **+1.6** |
| **L27K** | **Beaver Creek,** | **61.06** | **31** | P | **P** | **17 56 58.8** | **+1.2** |
| | baz=272 

baz=276
K29M **Barlow Dome** 62.95 30 IAmb IAmb 17 57 13.2
comp=Z,3.5nm,0.9s
K29M **Barlow Dome** 62.95 30 P **P** **17 57 12.0 +1.9**
baz=275
EPYK **Eagle Plains** 63.06 27 P **P** **17 57 12.1 +1.4**
baz=275
G30M **tAoh Zraii Nji** 63.21 26 IAmb IAmb 17 57 13.8
comp=Z,4.2nm,0.9s
G30M **tAoh Zraii Nji** 63.21 26 P **P** **17 57 13.2 +1.5**
baz=275
P29M **Windy Craggy** 63.30 34 P **P** **17 57 13.2 +0.8**
baz=277
I30M **Mount Dempster** 63.31 28 P **P** **17 57 13.6 +1.2**
baz=276
F30M **Barrier River** 63.32 25 P **P** **17 57 13.7 +1.3**
baz=275
J30M **Hart River** 63.39 29 P **P** **17 57 14.4 +1.4**
baz=276
N30M **Aishikik Lake** 63.40 32 P **P** **17 57 14.4 +1.4**
baz=277
P30M **Million Dollar** 63.63 34 P **P** **17 57 15.8 +1.3**
baz=278
O30N **Mendenhall** 63.97 33 P **P** **17 57 17.6 +1.0**
baz=278
G31M **Satah River** 63.98 26 P **P** **17 57 17.6 +1.0**
baz=277
N31M **Braeburn, Yuko** 64.02 32 P **P** **17 57 18.9 +1.9**
baz=278
PLBC **Pleasant Camp** 64.02 34 P **P** **17 57 18.5 +1.5**
baz=279
**ARU** **Arti** 64.05 322 *d* *i*P **17 57 15.6 -1.6**
ARU 17 59 39.4
ARU S **S** **18 05 21.6 +0.6**
ARU pmax pmax
comp=Z,3.0nm,0.7s
ABKAR **Akbulak array** 64.53 314 P **P** **17 57 19.3 -1.1**
ABKAR **Akbulak array** 64.53 314 IAmb IAmb 17 57 20.6
comp=Z,4.9nm,0.6s
M31M **Drury Creek, Y** 64.56 31 P **P** **17 57 21.9 +1.4**
baz=279
WHY **Whitehorse** 64.57 33 P **P** **17 57 21.8 +1.1**
baz=279
FARO **Faro, Yukon** 65.04 31 P **P** **17 57 25.2 +1.7**
baz=280
Q32M **Nakina River** 66.18 34 P **P** **17 57 32.3 +1.3**
baz=282
TGTN **Hyland Airport** 67.54 31 P **P** **17 57 40.9 +1.7**
baz=284
TOAD **Toad River Com** 69.74 34 P **P** **17 57 53.8 +1.1**
baz=288
ARCES **ARCESS Array B** 73.63 341 P **P** **17 58 15.7 +0.4**
comp=Z,2.3nm,0.5s,baz=75,slow=8.5,SNR=14
comp=Z,2.3nm,0.5s
KBZ **Khabaz** 77.41 313 P **P** **17 58 37.5 +0.5**
comp=Z,4.6nm,0.8s,baz=72,slow=4.7,SNR=6.2
comp=Z,4.6nm,0.8s
KBZ **Khabaz** 77.41 313 *e*P **P** **17 58 38.0 +1.1**
KBZ pmax pmax
comp=Z,3.0nm,0.8s
FINES **FINESS Array B** 77.86 333 P **P** **17 58 38.6 -0.4**
comp=Z,3.1nm,0.5s,baz=65,slow=4.5,SNR=42
comp=Z,3.1nm,0.5s
NEW **Newport** 78.23 42 P **P** **17 58 42.9 +1.4**
baz=297
BMO **Blue Mountains** 79.65 45 P **P** **17 58 50.4 +1.2**
BMO IAmb IAmb 17 58 51.8
comp=Z,2.4nm,1.0s
BMO **Blue Mountains** 79.65 45 P **P** **17 58 50.4 +1.2**
BMO pmax pmax
comp=Z,2.0nm,1.0s
NVAR **Mina Array Bea** 81.92 51 P **P** **17 59 02.1 +0.7**
comp=Z,0.6nm,0.6s,baz=304,slow=6.4,SNR=2.4
comp=Z,0.6nm,0.6s
AKASG **Malin Array Be** 82.28 323 P **P** **17 59 01.8 -0.8**
comp=Z,1.2nm,0.4s,baz=51,slow=5.8,SNR=5.6
comp=Z,1.2nm,0.4s
AKASG **Malin Array Be** 82.28 323 *i* P **P** **17 59 03.0 +0.4**
AKBB **Malin Array Si** 82.28 323‖ *e*P **P** **17 59 01.5 -1.1**
PKM **Mcpherson Peak** 82.46 55 P **P** **17 59 05.8 +1.7**
baz=297
BOZ **Bozeman (W)** 82.81 42 P **P** **17 59 05.8 +0.1**
BOZ IAmb IAmb 17 59 08.0
comp=Z,2.4nm,1.1s
BOZ **Bozeman (W)** 82.81 42 P **P** **17 59 07.2 +1.5**
baz=301
BOZ **Bozeman (W)** 82.81 42 P **P** **17 59 05.8 +0.1**
BOZ pmax pmax
comp=Z,2.0nm,1.1s
HFS **Hagfors** 83.41 336 P **P** **17 59 07.0 -1.2**
comp=Z,1.7nm,0.5s,baz=95,slow=1.8,SNR=11
comp=Z,1.7nm,0.5s
HFS **Hagfors** 83.41 336 P **P** **17 59 07.0 -1.2**
NC405 **NORSAR Array S** 83.41 338 P **P** **17 59 06.9 -1.3**
MPMC **Manual Prospec** 83.60 53 P **P** **17 59 10.5 +0.6**
baz=298
NB2 **NORSAR Subarra** 83.63 338 P **P** **17 59 08.3 -1.0**
comp=Z,0.7nm,0.4s,baz=54,slow=4.8
NOA **NORSAR Array B** 83.63 338 P **P** **17 59 08.3 -1.0**
comp=Z,2.0nm,0.6s,baz=54,slow=6.5,SNR=11
comp=Z,2.0nm,0.6s
LRMC **Laurel Mtn Rad** 83.73 54 P **P** **17 59 11.5 +1.0**
baz=298
EDW2 **Edwards Air Fo** 83.79 54 P **P** **17 59 11.9 +1.2**
baz=298
R11B **Troy Canyon, C** 83.84 50 P **P** **17 59 12.2 +1.2**
baz=299
TPNV **Topopah Spring** 84.06 52 P **P** **17 59 13.2 +1.1**
baz=299
TXAR **Lajitas Array** 97.02 52 P Pdif 18 00 14.0 +1.4
comp=Z,0.2nm,0.6s,baz=256,slow=3.6,SNR=3.0
comp=Z,0.2nm,0.6s
LPAZ **La Paz** 151.37 75 PKPbc **PKiKP** **18 06 34.0 +0.3**
comp=Z,1.2nm,0.8s,baz=288,slow=3.2,SNR=4.6
LPAZ **La Paz** 151.37 75 PKiKP **PKiKP** **18 06 34.0 +0.3**

*IDC **09** 18:15:33.1±0.7,50.°0S×115.°44E,h0km,mb4.2/11, mbtmp4.2/11,MS3.7/12,Error ellipse: s-maj=32.2km s-min=15.3km az=112.0*
*NEIC **09** 18:15:34.4±2.0,50.°08S±0.°04×115.°6E±0.°4,h10km±1km, mb4.5/11,Error ellipse: s-maj=41.6km s-min=6.1km az=274.0*
**ISC 09 18:15:34.1±0.5,50.°10S±0.°09×115.°6E±0.°2,h10km,n56, σ1s01/47,mb4.3/16,MS3.8/11,5C,Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| H01W2 | **Cape Leeuwin H** | **15.23** | **355** | T | T | 18 34 36.2 | |
| | baz=176,slow=74,SNR=169 | | | | | | |
| H01W1 | **Cape Leeuwin H** | **15.23** | **355** | T | T | 18 34 36.1 | |
| | baz=176,slow=74,SNR=150 | | | | | | |
| H01W3 | **Cape Leeuwin H** | **15.24** | **355** | T | T | 18 34 41.1 | |
| | baz=176,slow=74,SNR=152 | | | | | | |
| CASY | **Casey** | **16.44** | **187** | Pn | **Pn** | **18 19 23.0** | **-1.6** |
| CASY | | | | IAmb | IAmb | 18 19 36.0 | |
| | comp=Z,18nm,0.9s | | | | | | |
| NWAO | **Narrogin (SRO)** | **17.20** | **5** | P | **P** | **18 19 36.0** | **0.0** |
| NWAO | | | | IAmb | IAmb | 18 20 06.4 | |
| | comp=Z,94nm,1.5s | | | | | | |
| NWAO | **Narrogin (SRO)** | **17.20** | **5** | P | **P** | **18 19 37.3** | **+1.3** |
| NWAO | | | | LR | LR | 18 24 29.8 | |
| | comp=Z,16nm,1.0s,baz=156,slow=8.4,SNR=2.5 | | | | | | |
| | comp=Z,478nm,21.9s,baz=214,slow=31 | | | | | | |
| STKA | **Stephens Creek** | **26.53** | **56** | P | **P** | **18 21 10.9** | **-1.0** |
| STKA | **Stephens Creek** | **26.53** | **56** | P | **P** | **18 21 13.7** | **+1.7** |
| | comp=Z,5.7nm,0.8s,baz=226,slow=11,SNR=5.5 | | | | | | |
| STKA | | | | LR | LR | 18 29 53.3 | |
| | comp=Z,90nm,20.0s,baz=210,slow=32 | | | | | | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | **29.99** | **35** | P | **P** | **18 21 43.1** | **+0.3** |
| | comp=Z,1.5nm,0.8s,baz=207,slow=7.8,SNR=13 | | | | | | |
| ASAR | | | | LR | LR | 18 33 03.7 | |
| | comp=Z,106nm,18.4s,baz=155,slow=35 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| MAW | **Mawson** | **31.14** | **216** | P | **P** | **18 21 52.8** | **+0.4** |
| | comp=Z,2.2nm,0.5s,baz=76,slow=18,SNR=2.0 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| VNDA | **Vanda** | **32.48** | **163** | P | **P** | **18 22 04.4** | **+0.2** |
| VNDA | | | | IAmb | IAmb | 18 22 13.5 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| VNDA | **Vanda** | **32.48** | **163** | P | **P** | **18 22 05.7** | **+1.5** |
| | comp=Z,1.8nm,1.1s,baz=290,slow=8.3,SNR=5.0 | | | | | | |
| VNDA | | | | LR | LR | 18 34 05.8 | |
| | comp=Z,190nm,18.7s,baz=300,slow=34 | | | | | | |
| | comp=Z,1.8nm,1.1s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FITZ | **Fitzroy Crossi** | **32.92** | **18** | P | **P** | **18 22 07.1** | **-1.4** |
| WRA | **Warramunga Arr** | **33.57** | **33** | P | **P** | **18 22 14.7** | **+0.5** |
| WRA | **Warramunga Arr** | **33.57** | **33** | P | **P** | **18 22 14.8** | **+0.5** |
| | comp=Z,2.3nm,0.7s,baz=202,slow=11,SNR=12 | | | | | | |
| WRA | | | | LR | LR | 18 35 02.2 | |
| | comp=Z,110nm,19.9s,baz=26,slow=35 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| WB2 | **Warramunga Arr** | **33.57** | **33** | P | **P** | **18 22 13.7** | **-0.6** |
| WB0 | **Warramunga Arr** | **33.75** | **33** | P | **P** | **18 22 14.8** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 18 22 24.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| QSPA | **South Pole Qui** | **40.03** | **180** | P | **P** | **18 23 09.4** | **+0.4** |
| QSPA | | | | IAmb | IAmb | 18 23 17.4 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| QSPA | **South Pole Qui** | **40.03** | **180** | P | **P** | **18 23 09.9** | **+0.9** |
| | comp=Z,1.9nm,0.7s,baz=298,slow=1.5,SNR=15 | | | | | | |
| QSPA | | | | LR | LR | 18 38 50.1 | |
| | comp=Z,184nm,19.5s,baz=314,slow=35 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| KAPI | **Kappang** | **45.06** | **6** | LR | LR | 18 42 18.0 | |
| | comp=Z,59nm,18.9s,baz=110,slow=36 | | | | | | |
| TROLL | **Troll, Antarti** | **49.56** | **202** | ⇑P | **P** | **18 24 24.7** | **-0.1** |
| | comp=Z,115nm,0.7s | | | | | | |
| BELA | **Belgrano 2** | **50.99** | **188** | P | **P** | **18 24 35.1** | **-0.2** |
| BELA | | | | IAmb | IAmb | 18 24 43.7 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| SNAA | **Sanae** | **51.05** | **201** | P | **P** | **18 24 36.4** | **+0.4** |
| SNAA | | | | IAmb | IAmb | 18 24 38.3 | |
| | comp=Z,8.2nm,1.0s | | | | | | |
| SNAA | **Sanae** | **51.05** | **201** | ⇑P | **P** | **18 24 36.2** | **+0.1** |
| | comp=Z,106nm,0.8s | | | | | | |
| SNAA | **Sanae** | **51.05** | **201** | P | **P** | **18 24 36.8** | **+0.8** |
| | comp=Z,6.2nm,1.0s,baz=138,slow=9.1,SNR=14 | | | | | | |
| SNAA | | | | LR | LR | 18 43 56.6 | |
| | comp=Z,103nm,21.9s,baz=99,slow=33 | | | | | | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| VNA2 | **Neumayer--Watz** | **52.62** | **200** | ⇑P | **P** | **18 24 48.3** | **+0.7** |
| | comp=Z,3.9nm,0.7s,baz=138,slow=7.0 | | | | | | |
| VNA3 | **Neumayer Olymp** | **52.88** | **199** | ⇑P | **P** | **18 24 49.8** | **+0.2** |
| | comp=Z,2.0nm,0.6s | | | | | | |
| VNA1 | **Neumayer--Stat** | **53.02** | **200** | ⇑P | **P** | **18 24 50.7** | **+0.2** |
| | comp=Z,9.7nm,0.9s | | | | | | |
| H08S2 | **Diego Garcia H** | **55.47** | **305** | T | T | 19 24 50.4 | |
| | baz=148,slow=76,SNR=4.6 | | | | | | |
| H08S1 | **Diego Garcia H** | **55.48** | **305** | T | T | 19 24 50.8 | |
| | baz=148 | | | | | | |
| H08S3 | **Diego Garcia H** | **55.49** | **305** | T | T | 19 24 46.6 | |
| | baz=148,slow=76,SNR=6.0 | | | | | | |
| PALK | **Pallekele** | **64.69** | **321** | LR | LR | 18 48 02.4 | |
| | comp=Z,77nm,18.9s,baz=253,slow=30 | | | | | | |
| BOSA | **Boshof** | **68.86** | **251** | P | **P** | **18 26 38.3** | **-0.6** |
| | comp=Z,5.2nm,1.1s,baz=130,slow=6.6,SNR=3.1 | | | | | | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| CMAR | **Chiang Mai Arr** | **69.83** | **343** | P | **P** | **18 26 45.5** | **+0.8** |
| | comp=Z,1.5nm,0.8s,baz=189,slow=5.4,SNR=9.0 | | | | | | |
| CMAR | | | | LR | LR | 18 52 57.4 | |
| | comp=Z,13nm,21.6s,baz=70,slow=32 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| KSRS | **Korea Array** | **87.85** | **10** | P | **P** | **18 28 23.4** | **+0.3** |
| | comp=Z,1.8nm,1.0s,baz=205,slow=5.9,SNR=4.5 | | | | | | |
| | comp=Z,1.8nm,1.0s | | | | | | |
| PLCA | **Paso Flores** | **89.39** | **175** | P | **P** | **18 28 32.1** | **+1.2** |
| | comp=Z,2.9nm,1.0s,baz=208,slow=11,SNR=4.3 | | | | | | |
| PLCA | | | | LR | LR | 19 06 22.6 | |
| | comp=Z,62nm,19.4s,baz=204,slow=34 | | | | | | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| AAK | **Ala-Archa** | **99.11** | **331** | LR | LR | 19 08 47.6 | |
| | comp=Z,45nm,21.0s,baz=52,slow=32 | | | | | | |
| TXAR | **Lajitas Array** | **143.90** | **110** | PKP | **PKPdf** | **18 35 08.9** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=256,slow=3.6,SNR=3.3 | | | | | | |
| DUG | **Dugway, Tooele** | **144.99** | **87** | PKPbc | **PKPbc** | **18 35 09.8** | **-0.7** |
| F10A | **Beach Ranch, E** | **145.03** | **76** | PKPbc | **PKPbc** | **18 35 09.8** | **-0.5** |
| C09A | **Chrisman Ranch** | **145.16** | **72** | PKPbc | **PKPbc** | **18 35 11.2** | **+0.1** |
| SAND | **Sanderson** | **145.28** | **111** | | **PKPbc** | **18 35 11.2** | **-0.4** |
| Q16A | **Castle Valley** | **145.34** | **91** | | **PKPbc** | **18 35 10.0** | **-1.7** |
| TMUT | **Trail Mountain** | **145.53** | **90** | PKPdf | **PKPdf** | **18 35 09.6** | **-2.8** |
| 833A | **Chaparral WMA,** | **145.69** | **116** | PKPdf | **PKPdf** | **18 35 11.1** | **-1.5** |
| DRIO | **Del Rio** | **145.79** | **113** | PKPdf | **PKPdf** | **18 35 11.4** | **-1.3** |
| HVU | **Hansel Valley** | **145.85** | **85** | PKPdf | **PKPdf** | **18 35 11.2** | **-1.4** |
| SRU | **San Rafael Swe** | **145.86** | **91** | PKPdf | **PKPdf** | **18 35 10.9** | **-1.9** |
| MNHN | **Monahans** | **145.88** | **109** | PKPdf | **PKPdf** | **18 35 11.6** | **-1.3** |
| P17A | **Butcher Ranch,** | **145.92** | **90** | PKPdf | **PKPdf** | **18 35 12.8** | **-0.1** |
| ANMO | **Albuquerque** | **145.98** | **100** | | **PKPdf** | **18 35 12.1** | **-1.0** |
| OZNA | **Ozona** | **146.57** | **111** | PKPdf | **PKPdf** | **18 35 13.3** | **-0.7** |
| SGCY | **Sterling City** | **147.27** | **110** | PKPbc | **PKPdf** | **18 35 15.8** | **+0.6** |
| S22A | **4UR Ranch, Cre** | **147.45** | **96** | PKPbc | **PKPbc** | **18 35 18.0** | **-0.1** |
| BPMT | **Black Pine Rid** | **147.60** | **77** | PKPbc | **PKPbc** | **18 35 19.0** | **+0.7** |
| PDAR | **Pinedale Array** | **148.41** | **86** | PKPbc | **PKPbc** | **18 35 20.4** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=256,slow=4.3,SNR=4.8 | | | | | | |

**IDC 09 18:20:40.2±1.9,2.°28N×126.°17E,h0km,mb3.4/4, mbtmp3.5/4,Error ellipse: s-maj=184.7km s-min=23.5km az=66.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | **Warramunga Arr** | **23.50** | **160** | P | P | 18 25 51.5 | -0.5 |
| | 1.0nm,0.8s,baz=339,slow=11,SNR=7.2 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | **26.87** | **164** | P | P | 18 26 23.7 | +0.8 |
| | 0.6nm,1.0s,baz=349,slow=7.5,SNR=1.6 | | | | | | |
| | 0.6nm,1.0s | | | | | | |
| MKAR | **Makanchi Array** | **58.43** | **326** | P | P | 18 30 37.8 | -0.1 |
| | 0.1nm,0.4s,baz=108,slow=9.3,SNR=1.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| KURBB | **Kurchatov Arra** | **62.66** | **328** | P | P | 18 31 06.5 | -0.2 |
| | 0.5nm,0.4s,baz=131,slow=6.7,SNR=4.1 | | | | | | |
| | 0.5nm,0.4s | | | | | | |

**IDC 09 18:32:26.2±4.9,5.°87S×154.°33E,h0km,mb4.0/3, mbtmp4.0/3,Error ellipse: s-maj=144.8km s-min=40.9km az=110.0,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | **Warramunga Arr** | **23.94** | **232** | P | P | 18 37 43.5 | +1.1 |
| | 6.9nm,0.6s,baz=59,slow=9.8,SNR=82 | | | | | | |
| | 6.9nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | **26.45** | **226** | P | P | 18 38 04.3 | -0.8 |
| | 0.8nm,0.3s,baz=57,slow=9.2,SNR=33 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| MKAR | **Makanchi Array** | **82.13** | **319** | P | P | 18 44 48.8 | -0.1 |
| | 0.3nm,0.7s,baz=124,slow=7.3,SNR=2.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*AEIC **09** 18:35:01.9±1.0,52.°0N±0.°1×178.°5E±0.°1,h124km±5km, Error ellipse: s-maj=22.9km s-min=8.0km az=154.0*
**NEIC 09 18:35:02.9±0.6,51.°91N±0.°07×178.°5E±0.°2,h123km±5km, ML2.7**(AEIC),**Error ellipse: s-maj=14.8km s-min=9.9km az=92.0,Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LSNW | **Little Sitkin** | **0.07** | **28** | | Pn | 18 35 19.2 | -0.4 |
| LSNW | | | | | Sn | 18 35 33.0 | +0.6 |
| LSPA | **Little Sitkin** | **0.09** | **54** | | Pn | 18 35 19.6 | -0.1 |
| CESW | **Semis' Southwe** | **0.68** | **90** | | Pn | 18 35 22.4 | 0.0 |
| CESW | | | | | Sn | 18 35 37.3 | +0.1 |
| CEAP | **Semis' Anvil P** | **0.70** | **82** | | Pn | 18 35 22.4 | -0.1 |
| CEPE | **Semis' Perret** | **0.74** | **85** | | Pn | 18 35 22.5 | -0.3 |
| AMKA | **Amchitka** | **0.74** | **135** | | Pn | 18 35 23.0 | +0.2 |
| AMKA | | | | | Sn | 18 35 38.0 | 0.0 |
| GANO | **Gareloi North** | **1.70** | **92** | | Pn | 18 35 32.9 | +0.1 |
| GANO | | | | | Sn | 18 35 56.5 | +0.9 |
| GANE | **Gareloi Northe** | **1.72** | **92** | | Pn | 18 35 33.2 | +0.2 |
| TANO | **Tanaga North** | **2.12** | **88** | | Pn | 18 35 37.7 | -0.2 |
| TASE | **Tanaga Southea** | **2.17** | **90** | | Pn | 18 35 38.7 | +0.1 |
| TAFP | **Tanaga Falls P** | **2.20** | **89** | | Pn | 18 35 38.9 | -0.1 |
| TAFP | | | | | Sn | 18 36 07.3 | +0.6 |
| KIWB | **Kanaga Island** | **2.72** | **89** | Pn | Pn | 18 35 45.3 | -0.3 |
| KINC | **Kanaga Island** | **2.73** | **88** | | Pn | 18 35 45.6 | -0.1 |
| ADK | **Adak** | **3.01** | **89** | | Pn | 18 35 49.0 | -0.2 |
| GSCK | **Great Sitkin C** | **3.33** | **86** | | Pn | 18 35 53.0 | -0.5 |
| GSTR | **Great Sitkin T** | **3.39** | **85** | | Pn | 18 35 53.4 | -1.0 |
| K15K | **Wolf Creek Mou** | **14.97** | **38** | | P | 18 38 31.2 | +0.9 |
| L16K | **Owhat River** | **15.48** | **42** | P | P | 18 38 36.1 | +0.2 |
| L19K | **White Mountain** | **17.65** | **44** | P | P | 18 39 00.1 | +0.2 |
| SYI | **Shuyak Island** | **17.81** | **56** | P | P | 18 39 00.8 | -0.8 |
| CNPM | **China Poot** | **18.56** | **54** | P | P | 18 39 09.6 | -0.3 |
| H19K | **Roundabout Mou** | **18.68** | **33** | P | P | 18 39 10.5 | -0.4 |
| J20K | **Nowinta River** | **18.81** | **39** | P | P | 18 39 12.7 | +0.2 |
| IMAR | **Indian Mountai** | **19.86** | **34** | P | P | 18 39 24.9 | +1.1 |
| J26L | **Joseph Creek** | **23.22** | **43** | P | P | 18 39 58.2 | -0.5 |
| D25K | **Kavik River** | **23.98** | **30** | P | P | 18 40 05.3 | -0.2 |

**KRSC 09 18:44:30.0±1.6,48.°39N×156.°39E,h7km±27km,MI3.8, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SKR | **Severo-Kuril's** | **2.31** | **356** | *e*P | Pn | 18 45 09.2 | +0.8 |
| SKR | | | | *e*S | Sn | 18 45 38.5 | +1.4 |
| KDTR | **Khodutka, Kamc** | **3.59** | **17** | *e*P | Pn | 18 45 28.9 | +2.8 |
| KDTR | | | | *e*S | Sb | 18 46 14.2 | -3.5 |
| MTVR | **Mutnovka** | **4.26** | **15** | *e*P | Pn | 18 45 38.8 | +3.3 |
| MTVR | | | | *e*S | Sn | 18 46 30.6 | +5.1 |
| GRL | **Gorelyy** | **4.31** | **14** | *e*P | Pn | 18 45 39.8 | +3.7 |
| GRL | | | | *e*S | Sb | 18 46 32.7 | -5.6 |
| UGLR | **Uglovaya** | **5.07** | **17** | *e*P | Pn | 18 45 52.2 | +5.6 |
| KOK | **Koryaka** | **5.11** | **15** | *e*P | Pn | 18 45 51.1 | +4.0 |
| KRX | **Arik** | **5.18** | **15** | *e*P | Pn | 18 45 53.4 | +5.3 |

*NAO **09** 18:50:12.5±1.3,74.°75N×9.°94E,ML3.9*
*MOS **09** 18:50:13.2±1.8,74.°70N×9.°49E,h10km,mb4.4/13,Error ellipse: s-maj=28.1km s-min=6.8km az=97.4*
*IDC **09** 18:50:14.1±0.6,74.°66N×9.°53E,h0km,mb3.7/13, mbtmp3.8/17,ML2.9/3,MS3.4/9,Error ellipse: s-maj=18.6km s-min=11.5km az=46.0*
*NEIC **09** 18:50:15.2±2.8,74.°72N±0.°08×10.°0E±0.°4,h10km±1km, mb4.4/26,Error ellipse: s-maj=21.0km s-min=10.5km az=242.0*
*KOLA **09** 18:50:15.3,75.°01N×9.°40E,h0km,ML3.4,Norwegian sea,Knipovich ridge, south*
*BER **09** 18:50:16.4±3.1,74.°83N×10.°03E,h10km,mb(Pn)4.4, ML3.9(NAO),Confirmed Earthquake*
*FCIAR **09** 18:50:21.0,75.°29N×11.°47E,h10km,station BJO1 has station magnitude of 5.10 station HOPEN has station magnitude of 6.50*
**ISC 09 18:50:15.2±0.8,74.°75N±0.°04×9.°87E±0.°04,h12km±5km, n149,σ2s93/184,mb4.2/34,MS3.4/8,6C-7D,Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BJO1 | **Bjornoya** | **2.45** | **91** | *e*P | **Pn** | **18 50 53.7** | **-1.2** |
| BJO1 | | | | *e*S | **Sn** | **18 51 20.6** | **-4.0** |
| BJO1 | | | | IAML | | 18 51 24.4 | |
| | comp=Z,91nm,0.7s | | | | | | |
| BJO1 | **Bjornoya** | **2.45** | **91** | Pn | **Pn** | **18 50 53.6** | **-1.2** |
| BJO1 | | | | Sn | **Sn** | **18 51 20.3** | **-4.3** |
| BJO1 | **Bjornoya** | **2.45** | **91** | *e*P | **Pn** | **18 50 55.5** | **+0.6** |
| BJO1 | | | | *e*S | **Sn** | **18 51 20.0** | **-4.6** |
| | comp=Z,16μm,0.2s | | | | | | |
| HSPB | **Hornsund (broa** | **2.66** | **29** | P | **Pn** | **18 50 56.1** | **-1.6** |
| HSPB | **Hornsund (broa** | **2.66** | **29** | *e*P | **Pn** | **18 50 56.3** | **-1.5** |
| HSPB | | | | *e*S | **Sn** | **18 51 26.1** | **-3.8** |
| HSPB | | | | IAML | | 18 51 34.6 | |
| | comp=Z,32nm,0.4s | | | | | | |
| HSPB | **Hornsund (broa** | **2.66** | **29** | Pn | **Pn** | **18 50 56.4** | **-1.5** |
| HSPB | | | | Sn | **Sn** | **18 51 27.3** | **-2.5** |
| HSPB | **Hornsund (broa** | **2.66** | **29** | P | **Pn** | **18 50 56.2** | **-1.5** |
| HSPB | | | | S | **Sn** | **18 51 26.0** | **-3.8** |
| BRBA | **Barentsburg A** | **3.48** | **15** | *e*P | **Pn** | **18 51 08.2** | **-0.9** |
| BRBA | | | | *e*S | **Sn** | **18 51 47.0** | **-3.2** |
| BRBA | | | | IAML | | 18 51 50.5 | |
| | comp=Z,33nm,0.5s | | | | | | |
| BRBA | **Barentsburg A** | **3.48** | **15** | Pn | **Pn** | **18 51 08.4** | **-0.6** |
| BRBA | | | | Sn | **Sn** | **18 51 47.8** | **-2.4** |
| BRBB | **Barentsburg B** | **3.52** | **15** | P | **Pn** | **18 51 08.7** | **-0.9** |
| BRBB | | | | S | **Sn** | **18 51 48.1** | **-2.9** |
| BRBB | **Barentsburg B** | **3.52** | **15** | *e*P | **Pn** | **18 51 08.7** | **-0.9** |
| BRBB | | | | *e*S | **Sn** | **18 51 48.1** | **-2.9** |
| BRBB | **Barentsburg B** | **3.52** | **15** | Pn | **Pn** | **18 51 08.8** | **-0.7** |
| BRBB | | | | Sn | **Sn** | **18 51 48.6** | **-2.4** |
| HOPEN | **Hopen** | **4.16** | **58** | *e*P | **Pn** | **18 51 18.1** | **-0.3** |
| HOPEN | | | | *e*S | **Sn** | **18 52 01.7** | **-5.2** |
| HOPEN | | | | IAML | | 18 52 07.7 | |
| | comp=Z,32nm,0.3s | | | | | | |
| HOPEN | **Hopen** | **4.16** | **58** | Pn | **Pn** | **18 51 17.9** | **-0.4** |
| HOPEN | | | | Sn | **Sn** | **18 52 03.9** | **-3.0** |
| HOPEN | **Hopen** | **4.16** | **58** | ⇑*i*P | **Pn** | **18 51 18.2** | **-0.3** |
| HOPEN | | | | *e*S | **Sn** | **18 52 00.4** | **-6.5** |
| | comp=Z,74μm,0.2s | | | | | | |
| KBS | **Kingsbay** | **4.23** | **5** | Pn | **Pn** | **18 51 17.9** | **-1.4** |
| KBS | **Kingsbay** | **4.23** | **5** | P | **Pn** | **18 51 17.4** | **-1.8** |
| KBS | | | | S | **Sn** | **18 52 02.7** | **-5.9** |
| KBS | **Kingsbay** | **4.23** | **5** | ⇓*i*P | **Pn** | **18 51 17.6** | **-1.7** |
| KBS | | | | *e*S | **Sn** | **18 52 03.0** | **-5.5** |
| KBS | | | | IAML | | 18 52 06.3 | |
| | comp=Z,28nm,0.5s | | | | | | |
| KBS | **Kingsbay** | **4.23** | **5** | Pn | **Pn** | **18 51 17.8** | **-1.4** |
| KBS | | | | Sn | **Sn** | **18 52 05.1** | **-3.5** |
| KBS | **Kingsbay** | **4.23** | **5** | ⇑*i*P | **Pn** | **18 51 17.9** | **-1.4** |
| KBS | | | | *e*S | Sn | 18 51 59.4 | -9.2 |
| KBS | **Kingsbay** | **4.23** | **5** | *d* *i*P | **Pn** | **18 51 17.5** | **-1.8** |
| HAMF | **Hammerfest** | **5.82** | **128** | *e*P | **Pn** | **18 51 38.5** | **-2.6** |
| HAMF | | | | *e*S | **Sn** | **18 52 40.2** | **-7.4** |
| HAMF | | | | IAML | | 18 52 52.0 | |
| | comp=Z,15nm,0.6s | | | | | | |
| HAMF | **Hammerfest** | **5.82** | **128** | Pn | **Pn** | **18 51 38.3** | **-2.8** |
| HAMF | | | | Sn | **Sn** | **18 52 40.3** | **-7.3** |
| TRO | **Tromso** | **5.84** | **147** | *e*P | **Pn** | **18 51 41.8** | **+0.5** |
| TRO | | | | *e*S | **Sn** | **18 52 43.4** | **-4.7** |
| TRO | | | | IAML | | 18 52 50.4 | |
| | comp=Z,6.7nm,0.3s | | | | | | |
| TRO | **Tromso** | **5.84** | **147** | P | **Pn** | **18 51 41.8** | **+0.5** |
| JMIC | **Jan Mayen** | **6.59** | **244** | *e*P | **Pn** | **18 51 48.9** | **-2.7** |
| JMIC | | | | *e*S | **Sn** | **18 53 02.9** | **-3.6** |
| JMIC | | | | IAML | | 18 53 07.2 | |
| | comp=Z,7.5nm,0.5s | | | | | | |
| JMIC | **Jan Mayen** | **6.59** | **244** | Pn | **Pn** | **18 51 49.2** | **-2.4** |
| JMIC | **Jan Mayen** | **6.59** | **244** | Pn | **Pn** | **18 51 48.4** | **-3.3** |
| | comp=Z,47nm,0.4s,baz=72,slow=3.7,SNR=52 | | | | | | |
| JMIC | | | | LR | LR | 18 53 32.3 | |
| | comp=Z,276nm,18.4s,baz=48,slow=31 | | | | | | |
| JMI | **Jan Mayen** | **6.68** | **244** | *e*P | **Pn** | **18 51 50.5** | **-2.4** |
| JMI | | | | *e*S | **Sn** | **18 53 02.9** | **-5.9** |
| JMI | | | | IAML | | 18 53 04.0 | |
| | comp=Z,8.5nm,0.5s | | | | | | |
| JMI | **Jan Mayen** | **6.68** | **244** | Pn | **Pn** | **18 51 50.8** | **-2.2** |
| LOF | **Lofoten** | **6.75** | **168** | *e*P | **Pn** | **18 51 53.1** | **-0.8** |
| LOF | | | | *e*S | **Sn** | **18 53 03.3** | **-7.3** |
| LOF | | | | IAML | | 18 53 16.8 | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| LOF | **Lofoten** | **6.75** | **168** | Pn | **Pn** | **18 51 53.3** | **-0.6** |
| LOF | | | | Sn | Sn | 18 53 01.7 | -8.9 |
| STEI | **Steigen** | **7.06** | **163** | *e*P | **Pn** | **18 51 58.3** | **+0.2** |
| STEI | | | | *e*S | **Sn** | **18 53 10.7** | **-7.5** |
| STEI | | | | IAML | | 18 53 14.4 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| ARA0 | **ARCESS Array S** | **7.08** | **130** | Pn | **Pn** |

FAUS eS Sn 18 53 22.9 -8.7
FAUS IAML 18 53 36.2
comp=Z,3.9nm,0.8s
**HEF Hetta 7.70 139** eP **Pn** **18 52 07.6 +0.7**
HEF eS **Sn** **18 53 27.2 -6.6**
**HEF Hetta 7.70 139** Pn **Pn** **18 52 05.6 -1.3**
**SALU Saltoluokta 7.91 155** eP **Pn** **18 52 11.6 +1.8**
SALU eS **Sn** **18 53 33.7 -5.3**
**DBG Daneborg 8.00 281** eP **Pn** **18 52 08.3 -2.7**
DBG eS Sn 18 53 28.4 -13
**KONS Konsvik 8.36 171** eP **Pn** **18 52 15.7 -0.2**
KONS eS Sn 18 53 39.6 -10
KONS IAML 18 53 48.9
comp=Z,2.9nm,0.7s
**KONS Konsvik 8.36 171** Pn **Pn** **18 52 15.9 0.0**
**STOK Stokkvaagen 8.52 171** eP **Pn** **18 52 17.7 -0.5**
STOK eS Sn 18 53 44.1 -10
STOK IAML 18 53 56.5
comp=Z,3.0nm,0.6s
**STOK Stokkvaagen 8.52 171** Pn **Pn** **18 52 17.9 -0.2**
**MOR8 Moi Rana 8.75 168** eP **Pn** **18 52 21.0 -0.3**
MOR8 eS Sn 18 53 50.9 -8.9
MOR8 IAML 18 53 53.9
comp=Z,2.8nm,0.6s
**ZFI2 Zemlya Franca- 9.80 35** eP **Pn** **18 52 34.8 -0.8**
ZFI2 eS **Sn** **18 54 17.3 -8.0**
**OMEGA Omega 9.80 36** eP **Pn** **18 52 34.6 -1.0**
OMEGA eS **Sn** **18 54 17.8 -7.6**
**APA0 Apatity Array 10.26 122** Pn **Pn** **18 52 40.1 -1.9**
baz=336,slow=7.9
APA0 Sn Sn 18 54 26.4 -10
baz=320,slow=28
**APA0 Apatity Array 10.26 122** Pn **Pn** **18 52 40.1 -1.9**
baz=336,slow=7.9
APA0 Sn Sn 18 54 26.4 -10
baz=320,slow=28
**NSS Namsos 10.29 175** eP **Pn** **18 52 43.2 +0.8**
**SCO Scoresbysund 10.32 262** Pn **Pn** **18 52 39.6 -3.1**
**SCO Scoresbysund 10.32 262** P **Pn** **18 52 39.6 -3.1**
**LVZ Lovozero 10.40 119** Pn **Pn** **18 52 42.7 -1.2**
**LVZ Lovozero 10.40 119** *i* P **Pn** **18 52 42.8 -1.2**
**AKN Aaknes 12.67 186** Pn **Pn** **18 53 14.5 -0.4**
**AKN Aaknes 12.67 186** Pn **Pn** **18 53 14.5 -0.4**
**NC204 NORSAR Array S 13.54 178** Pn **Pn** **18 53 26.0 -0.8**
**FIA0 FINESS Array S 14.57 148** P **Pn** **18 53 39.6 -1.2**
baz=344,slow=14
**FIA0 FINESS Array S 14.57 148** P **Pn** **18 53 39.6 -1.2**
baz=344,slow=14
**FIA1 FINESS Array S 14.57 148** Pn **Pn** **18 53 38.7 -2.0**
**FINES FINESS Array B 14.57 148** Pn **Pn** **18 53 39.0 -1.8**
**FINES FINESS Array B 14.57 148** Pn **Pn** **18 53 39.2 -1.6**
comp=Z,0.3nm,0.3s,baz=325,slow=9.3,SNR=13
comp=Z,1.2nm,0.5s
**HFS Hagfors 14.75 172** P **Pn** **18 53 43.4 +0.1**
baz=346,slow=12
**HFS Hagfors 14.75 172** P **Pn** **18 53 43.4 +0.1**
baz=346,slow=12
**HFS Hagfors 14.75 172** Pn **Pn** **18 53 43.4 +0.1**
comp=Z,0.1nm,0.3s,baz=0.9,slow=12,SNR=1.8
comp=Z,1.8nm,0.9s
**VSU Vasula 17.54 150** *de*P **P** **18 54 21.4 +1.3**
VSU pmax pmax
comp=Z,17nm,0.9s
**EKA Eskdalemuir Ar 20.15 202** P **P** **18 54 47.0 -1.9**
comp=Z,2.0nm,0.9s,baz=12,slow=10,SNR=3.3
comp=Z,2.0nm,0.9s
**NACGM Naroch 21.01 152** *e*P **P** **18 55 05.2 +7.1**
comp=N,2μm,1.0s,baz=348
**KIRV Kirov 21.82 116** P **P** **18 55 07.5 +0.8**
comp=N,18nm,0.7s,baz=327,slow=3.1,SNR=5.1
comp=N,18nm,0.7s
**OBN Obninsk 22.31 137**⇑ *e*P **P** **18 55 14.8 +2.8**
OBN *e**PP **sP** **18 55 16.5 +0.7**
OBN *SP **pwP** **18 55 19.0 +1.0**
OBN PPP PPP 18 55 44.0
OBN *e* 18 59 06.7
OBN pmax pmax
comp=Z,18nm,1.5s
OBN MLR MLR
comp=Z,76nm,20.0s
**LPSR Galich'ya Gora 25.13 136** *e*P **P** **18 55 39.9 +0.3**
LPSR pmax pmax
comp=Z,20nm,0.8s
**AKASG Malin Array Be 25.44 151** P **P** **18 55 42.9 +0.6**
comp=Z,0.9nm,0.6s,baz=347,slow=9.2,SNR=2.0
comp=Z,0.9nm,0.6s
**AKBB Malin Array Si 25.44 151**⇑ *e*P **P** **18 55 42.9 +0.6**
**ARU Arti 25.99 108** P **P** **18 55 49.3 +1.9**
**ARU Arti 25.99 108** LR LR 19 08 25.5
comp=Z,81nm,20.1s,baz=339,slow=42
**ARU Arti 25.99 108** *d* *i*P **P** **18 55 49.2 +1.9**
ARU 18 56 26.9
ARU S **S** **19 00 23.0 +5.7**
ARU SS **SnSn** **19 01 20.5 +6.6**
ARU pmax pmax
comp=Z,8.0nm,0.9s
**GERES GERESS Array B 26.05 174** P **P** **18 55 49.6 +1.6**
comp=Z,0.2nm,0.3s,baz=0.0,slow=3.0,SNR=3.1
comp=Z,0.2nm,0.3s
**VSR Storozhevoye 26.50 136** *e*P **P** **18 55 52.5 +0.5**
VSR pmax pmax
comp=Z,3.0nm,0.8s
**BRVK Borovoye 32.03 98** P **P** **18 56 42.6 +1.5**
BRVK IAmb IAmb 18 56 49.6
comp=Z,2.5nm,0.8s
**BRVK Borovoye 32.03 98** *de*P **P** **18 56 44.0 +2.9**
BRVK pmax pmax
comp=Z,3.0nm,0.8s
**NRCA Norcia 32.04 175** **P** **18 56 39.9 -1.5**
NRCA IAmb IAmb 18 56 46.6
comp=Z,9.1nm,1.4s
**ABKAR Akbulak array 32.88 112** P **P** **18 56 49.8 +1.3**
**SOC Sochi 33.97 140** *e*P **P** **18 56 59.4 +1.3**
SOC *e* 18 58 13.2
SOC *e*PPP PPP 18 58 25.4
SOC *e*S **S** **19 02 26.8 +4.3**
SOC *e*SS **SnSn** **19 04 34.2 +5.7**
SOC *e*SSS SSS 19 04 49.5
**ZAA0 Zalesovo Array 35.07 83** P **P** **18 57 07.4 -0.1**
**ZALV Zalesovo Beam 35.07 83** P **P** **18 57 06.4 -1.1**
**ZALV Zalesovo Beam 35.07 83** P **P** **18 57 08.9 +1.5**
comp=Z,0.5nm,0.4s,baz=297,slow=9.5,SNR=3.0
ZALV LR LR 19 15 51.3
comp=Z,62nm,18.1s,baz=56,slow=44
comp=Z,0.5nm,0.4s
**ZALV Zalesovo Beam 35.07 83** P **P** **18 57 09.0 +1.5**
**KURK Kurchatov 36.35 92**⇓ *e*P **P** **18 57 20.0 +1.5**
KURK pmax pmax
comp=Z,5.0nm,1.7s
**KURBB Kurchatov Arra 36.42 92** P **P** **18 57 21.4 +2.4**
comp=Z,0.8nm,0.5s,baz=337,slow=7.4,SNR=8.3
KURBB LR LR 19 16 36.6
comp=Z,82nm,18.6s,baz=160,slow=43
comp=Z,0.8nm,0.5s
**BRTR Keskin Array B 36.80 149** P **P** **18 57 24.6 +1.9**
comp=Z,0.8nm,0.7s,baz=324,slow=9.5,SNR=2.8
comp=Z,0.8nm,0.7s
**YAK Yakutsk 37.97 42** LR LR 19 13 57.1
comp=Z,72nm,19.8s,baz=338,slow=37
**ILAR Eielson Array 39.91 345** P **P** **18 57 50.1 +1.8**
**ILAR Eielson Array 39.91 345** P **P** **18 57 50.7 +2.4**
comp=Z,1.1nm,0.9s,baz=0.0,slow=7.0,SNR=12
comp=Z,1.1nm,0.9s
**ILAR Eielson Array 39.91 345** *e*P **P** **18 57 50.5 +2.2**
ILAR pmax pmax
comp=Z,1.0nm,0.9s
**SEY Seymchan 40.41 25**⇑ *e*P **P** **18 57 55.2 +2.7**
SEY pmax pmax
comp=Z,4.0nm,1.0s
**MK31 Makanchi Array 40.92 91** P **P** **18 57 57.3 +0.4**
**MK31 Makanchi Array 40.92 91**⇑ *e*P **P** **18 57 58.2 +1.3**
**MKAR Makanchi Array 40.92 91** P **P** **18 57 56.9 0.0**
**MKAR Makanchi Array 40.92 91** P **P** **18 57 57.8 +0.9**
comp=Z,0.6nm,0.6s,baz=350,slow=6.4,SNR=7.4
MKAR LR LR 19 20 05.9
comp=Z,41nm,18.1s,baz=17,slow=44
comp=Z,0.6nm,0.6s
**MKAR Makanchi Array 40.92 91** *e*P **P** **18 57 58.9 +2.0**
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**BCAR Beaver Creek A 41.20 341** P **P** **18 58 01.0 +1.9**
**L27K Beaver Creek, 41.21 341** P **P** **18 58 00.1 +1.0**
**KK31 Karatay Array 41.27 105** P **P** **18 58 01.2 +1.4**
**KK31 Karatay Array 41.27 105** P **P** **18 58 01.2 +1.4**
KK31 pmax pmax
comp=Z,4.0nm,0.9s
**KKAR Karatay Array 41.27 105** P **P** **18 58 00.6 +0.8**
**KKAR Karatay Array 41.27 105** P **P** **18 58 00.4 +0.6**
KKAR IAmb IAmb 18 58 08.8
comp=Z,3.6nm,0.8s
**KKAR Karatay Array 41.27 105** P **P** **18 58 00.6 +0.8**
**BOOM Boomskoye usch 43.25 99** P **P** **18 58 15.8 -0.3**
**BOOM Boomskoye usch 43.25 99** P **P** **18 58 15.8 -0.3**
BOOM pmax pmax
comp=Z,2.0nm,0.7s
**CHGR Chuyangaron 45.11 108** P **P** **18 58 28.8 -2.2**
CHGR IAmb IAmb 18 58 39.5
comp=Z,6.5nm,0.8s
**CHGR Chuyangaron 45.11 108** P **P** **18 58 28.8 -2.2**
CHGR pmax pmax
comp=Z,7.0nm,0.8s
**ZEA Zeya 45.30 48**⇓ *e*P **P** **18 58 33.4 +1.2**
**HEH HeiHe 48.64 49** *e*P **P** **18 58 59.9 +1.6**
HEH pmax pmax
comp=Z,3.0nm,0.7s
**KLR Kul'dur 50.47 46** LR LR 19 23 01.8
comp=Z,87nm,19.5s,baz=348,slow=39
**MSO Missoula 53.13 315** P **P** **18 59 33.0 +0.7**
**YMP Mirror Lake Pl 54.40 311** P **P** **18 59 42.7 +0.8**
YMP IAmb IAmb 18 59 44.3
comp=Z,5.2nm,1.1s
**YHL Hebgen Lake 54.50 312** P **P** **18 59 43.4 +0.8**
YHL IAmb IAmb 18 59 45.7
comp=Z,3.7nm,1.0s
**LON Longmire 54.61 321** P **P** **18 59 43.7 +0.7**
LON IAmb IAmb 18 59 50.8
comp=Z,5.7nm,1.2s
**LON Longmire 54.61 321** P **P** **18 59 43.7 +0.7**
LON pmax pmax
comp=Z,6.0nm,1.2s
**H17A Grant Village 54.82 311** P **P** **18 59 44.5 -0.3**
H17A IAmb IAmb 18 59 48.5
comp=Z,6.4nm,1.4s
**YPP Pitchstone Pla 54.98 311** P **P** **18 59 47.5 +1.4**
YPP IAmb IAmb 18 59 49.2
comp=Z,7.8nm,1.4s
**IMW Indian Meadow 55.37 311** P **P** **18 59 49.9 +1.1**
IMW IAmb IAmb 18 59 52.3
comp=Z,6.6nm,1.2s
**FXWY Fox Creek 55.63 311** P **P** **18 59 52.3 +1.6**
**BMO Blue Mountains 55.66 317** IAmb IAmb 18 59 52.2
comp=Z,2.8nm,1.2s
**PD31 Pinedale Array 56.18 309** P **P** **18 59 54.1 -0.5**
PD31 IAmb IAmb 18 59 55.9
comp=Z,4.5nm,1.4s
**PDAR Pinedale Array 56.18 309** P **P** **18 59 54.3 -0.3**
**PDAR Pinedale Array 56.18 309** P **P** **18 59 55.2 +0.7**
comp=Z,0.9nm,0.9s,baz=32,slow=5.8,SNR=7.5
comp=Z,0.9nm,0.9s
**S44A Carbondale 56.37 290** P **P** **18 59 54.4 -1.3**
**HLID Hailey 56.37 314** P **P** **18 59 55.9 0.0**
HLID IAmb IAmb 18 59 57.0
comp=Z,5.5nm,1.4s
**PBMO Poplar Bluff 57.53 291** P **P** **19 00 03.4 -0.5**
PBMO IAmb IAmb 19 00 04.4
comp=Z,5.9nm,1.0s
**O20A White River Ci 58.43 307** P **P** **19 00 11.4 +0.9**
**ELK Elko 59.25 314** P **P** **19 00 17.0 +0.8**
ELK IAmb IAmb 19 00 18.4
comp=Z,3.0nm,1.1s
**ELK Elko 59.25 314** P **P** **19 00 17.0 +0.8**
ELK pmax pmax
comp=Z,3.0nm,1.2s
**KSRS Korea Array 61.00 53** LR LR 19 31 08.9
comp=Z,48nm,18.2s,baz=340,slow=40
**TORD Torodi Ar. Bea 61.76 189** P **P** **19 00 33.0 -0.2**
comp=Z,1.8nm,1.0s,baz=5.7,slow=7.2,SNR=6.8
comp=Z,1.8nm,1.0s
**NVAR Mina Array Bea 62.07 316** P **P** **19 00 35.7 +0.3**
comp=Z,2.0nm,0.4s,baz=39,slow=5.3,SNR=4.6
comp=Z,2.0nm,0.4s
**TXAR Lajitas Array 67.81 300** P **P** **19 01 12.9 +0.2**
comp=Z,0.6nm,0.8s,baz=50,slow=6.7,SNR=5.9
comp=Z,0.6nm,0.8s
**ASAR Alice Springs 121.39 63** PKP **PKPdf** **19 09 07.7 0.0**
comp=Z,0.7nm,0.9s,baz=356,slow=2.0,SNR=6.6
**SNAA Sanae 146.42 187** PKPbc **PKPbc** **19 09 54.4 +0.4**
comp=Z,0.9nm,0.9s,baz=27,slow=9.0,SNR=2.1

**PRU 09 18:55:31.9, 50.29N×18.95E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MORC** | **Moravsky Berou** | **1.04** | **241** | *e*PG | Pg | 18 55 51.7 | -0.2 |
| MORC | | | | *e*SG | Sg | 18 56 04.9 | -0.5 |
| **LANS** | **Liptovska Anna** | **1.19** | **163** | *e*P | Pg | 18 55 53.5 | -1.2 |
| **LANS** | **Liptovska Anna** | **1.19** | **163** | *e*PG | Pg | 18 55 53.5 | -1.2 |
| LANS | | | | *e*SG | Sg | 18 56 08.2 | -1.9 |
| LANS | | | | *e*LG | Lg | 18 56 12.3 | |
| **LANS** | **Liptovska Anna** | **1.19** | **163** | pmax | pmax | | |
| | comp=N,5.0nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.69** | **273** | *e*PG | Pn | 18 56 02.2 | -0.5 |
| DPC | | | | *e*SG | Sb | 18 56 25.4 | -0.2 |
| | comp=N,2.6nm,0.4s | | | | | | |
| **VYHS** | **Vyhne** | **1.80** | **182** | *e*P | Pn | 18 56 02.4 | -1.8 |
| **VYHS** | **Vyhne** | **1.80** | **182** | *e*PN | Pn | 18 56 02.4 | -1.8 |
| VYHS | | | | *e*SN | Sn | 18 56 23.1 | -4.6 |
| **KHC** | **Kasperske Hory** | **3.67** | **254** | *e*SG | Sg | 18 57 28.6 | -1.3 |

*IDC **09** 19:07:59.6±1.8, 6.73S×128.62E, h0km, mb3.7/2, mbtmp3.7/4, ML3.9/2, Error ellipse: s-maj=117.5km s-min=29.6km az=67.0*
*DJA **09** 19:08:15.6±0.2, 7.2°×13.0°E±°, h171km±4km, M4.4/18, mb4.2/18, mB5.0/5, MLv4.6/12, Mw(mB)4.3/5*
*NEIC **09** 19:08:16.6±1.0, 6.68S±0.06×129.7E±0.2, h177km±12km, mb4.1/8, Error ellipse: s-maj=28.2km s-min=8.0km az=88.0*

**ISC 09 19:08:16.1±0.6, 6.74S±0.06×129.81E±0.06, h200km, n55, σ2.2963/58, mb3.7/4, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.92** | **130** | P | **Pn** | **19 08 53.1** | **-0.8** |
| **SAUI** | **Saumlaki** | **1.92** | **130** | | **Pn** | **19 08 53.2** | **-0.8** |
| SAUI | | | | Sn | **Sn** | **19 09 16.5** | **-6.7** |
| **SAUI** | **Saumlaki** | **1.92** | **130** | P | **Pn** | **19 08 53.0** | **-0.8** |
| SAUI | | | | S | **Sn** | **19 09 17.9** | **-5.3** |
| **BNDI** | **Bandanaira** | **2.21** | **2** | P | **Pn** | **19 08 57.0** | **+0.1** |
| **MSAI** | **Masohi** | **3.49** | **345** | P | **Pn** | **19 09 12.3** | **+0.6** |
| **FAKI** | **Fak Fak** | **4.51** | **33** | P | **Pn** | **19 09 23.6** | **-0.8** |
| **FAKI** | **Fak Fak** | **4.51** | **33** | | **Pn** | **19 09 23.4** | **-1.0** |
| FAKI | | | | Sn | **Sn** | **19 10 09.8** | **-8.3** |
| **FAKI** | **Fak Fak** | **4.51** | **33** | P | **Pn** | **19 09 23.6** | **-0.8** |
| **KMPI** | **Kaimana, Papua** | **4.94** | **52** | P | **Pn** | **19 09 30.7** | **+0.9** |
| **DRS** | **Darwin Rock St** | **5.75** | **169** | P | **Pn** | **19 09 38.9** | **-1.3** |
| **SWI** | **Sorong** | **6.02** | **14** | P | **Pn** | **19 09 43.1** | **-0.6** |
| | 12nm,0.6s,0.6nm | | | | | | |
| **MTN** | **Manton Dam** | **6.20** | **168** | P | **Pn** | **19 09 44.0** | **-2.0** |
| **MTN** | **Manton Dam** | **6.20** | **168** | | **Pn** | **19 09 44.0** | **-2.0** |
| MTN | | | | Sn | Sn | 19 10 49.8 | -7.4 |
| **SOEI** | **Soe** | **6.25** | **241** | Pn | **Pn** | **19 09 44.2** | **-2.6** |
| **SOEI** | **Soe** | **6.25** | **241** | P | **Pn** | **19 09 44.5** | **-2.3** |
| | 50nm,1.1s,0.6nm | | | | | | |
| **KDU** | **Kakadu** | **6.46** | **156** | P | **Pn** | **19 09 48.1** | **-1.3** |
| **BATI** | **Baumata** | **6.99** | **240** | P | **Pn** | **19 09 53.6** | **-2.7** |
| | 49nm,0.6s,0.4nm | | | | | | |
| **BBSI** | **Bau Bau** | **7.31** | **279** | P | **Pn** | **19 09 58.2** | **-2.2** |
| | 43nm,1.0s,2μm0.2nm | | | | | | |
| **MMRI** | **Maumere** | **7.74** | **255** | P | **Pn** | **19 10 03.8** | **-2.2** |
| **KNRA** | **Kununurra** | **8.94** | **187** | | **Pn** | **19 10 18.0** | **-3.6** |
| KNRA | | | | Sn | Sn | 19 11 49.4 | -13 |
| **BASI** | **Baing, Sumba** | **9.76** | **249** | P | **Pn** | **19 10 29.5** | **-2.9** |
| **GENI** | **Genyem** | **11.11** | **69** | P | **Pn** | **19 10 53.3** | **+3.5** |
| **GENI** | **Genyem** | **11.11** | **69** | P | **Pn** | **19 10 52.0** | **+2.2** |
| **FITZ** | **Fitzroy Crossi** | **12.00** | **199** | | Pn | 19 10 57.0 | -4.0 |
| FITZ | | | | Sn | Sn | 19 13 00.3 | -15 |
| **TWSI** | **Taliwang, Sumb** | **12.96** | **260** | P | **Pn** | **19 11 11.5** | **-1.8** |
| | 16nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **13.69** | **161** | Pn | **Pn** | **19 11 21.9** | **-0.4** |
| WB0 | | | | Sn | S | 19 13 45.0 | -10 |
| **WRAB** | **Tennant Creek** | **13.83** | **162** | | **Pn** | **19 11 25.7** | **+1.6** |
| **WRA** | **Warramunga Arr** | **13.84** | **162** | Pn | **Pn** | **19 11 21.8** | **-2.4** |
| **WRA** | **Warramunga Arr** | **13.84** | **162** | Pn | **Pn** | **19 11 22.1** | **-2.1** |
| | 0.7nm,0.3s,baz=336,slow=13,SNR=8.8 | | | | | | |
| WRA | | | | Sn | S | 19 13 45.0 | -13 |
| | 0.5nm,0.3s,baz=337,slow=23,SNR=3.3 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **13.84** | **162** | Pn | **Pn** | **19 11 23.3** | **-0.8** |
| **WR0** | **Warramunga Arr** | **13.92** | **161** | | **Pn** | **19 11 26.0** | **+0.9** |
| **COEN** | **Coen** | **14.97** | **120** | P | **P** | **19 11 42.4** | **+3.6** |
| **COEN** | **Coen** | **14.97** | **120** | Pn | **Pn** | **19 11 35.8** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **15.62** | **263** | P | **Pn** | **19 11 43.7** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **15.62** | **263** | P | **Pn** | **19 11 41.7** | **-4.3** |
| **JAGI** | **Jajag, Banyuwa** | **15.62** | **263** | P | **Pn** | **19 11 41.7** | **-4.3** |
| | 18nm,0.7s | | | | | | |
| **QIS** | **Mount Isa** | **16.69** | **146** | P | **Pn** | **19 12 00.9** | **+2.0** |
| **AS31** | **Alice Springs** | **17.28** | **167** | | **Pn** | **19 12 06.7** | **+0.9** |
| **ASAR** | **Alice Springs** | **17.28** | **167** | | **Pn** | **19 12 06.6** | **+0.8** |
| **ASAR** | **Alice Springs** | **17.28** | **167** | P | **Pn** | **19 12 07.0** | **+1.2** |
| | 0.4nm,0.3s,baz=338,slow=10.0,SNR=12 | | | | | | |
| ASAR | | | | S | **S** | **19 15 12.0** | **-1.8** |
| | 1.3nm,0.7s,baz=352,slow=20,SNR=4.2 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **MBWA** | **Marble Bar** | **17.34** | **213** | | **P** | **19 12 05.7** | **+0.9** |
| MBWA | | | | IAmb | IAmb | 19 12 38.4 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.61** | **212** | P | **P** | **19 12 08.9** | **+1.1** |
| **PSA00** | **Pilbara Seismi** | **17.61** | **212** | | **P** | **19 12 08.6** | **+0.8** |
| PSA00 | | | | IAmb | IAmb | 19 12 09.2 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **PWJI** | **Pagerwojo** | **17.90** | **265** | P | **P** | **19 12 10.8** | **-0.3** |
| | comp=Z,23nm,2.1s | | | | | | |
| **MTSU** | **Mount Surprise** | **18.11** | **130** | P | **Pn** | **19 12 16.8** | **+1.1** |
| **WRKA** | **Warakurna** | **18.25** | **184** | P | **P** | **19 12 16.9** | **+2.1** |
| **UGM** | **Wanagama** | **19.17** | **265** | P | **P** | **19 12 25.9** | **+1.1** |
| | comp=Z,84nm,1.6s | | | | | | |
| **SBUM** | **Sibu** | **19.79** | **297** | | **Pn** | **19 12 33.7** | **-1.9** |
| SBUM | | | | IAmb | IAmb | 19 12 35.7 | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **CNJI** | **Cibinong** | **22.52** | **267** | P | **P** | **19 13 00.6** | **+1.2** |
| | comp=Z,1nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **67.91** | **327** | P | **P** | **19 18 55.9** | **+2.6** |
| **MKAR** | **Makanchi Array** | **67.91** | **327** | P | **P** | **19 18 56.0** | **+2.8** |
| **MKAR** | **Makanchi Array** | **67.91** | **327** | P | **P** | **19 18 56.2** | **+2.9** |
| | comp=Z,0.2nm,0.3s,baz=118,slow=7.9,SNR=7.3 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.20** | **329** | P | **P** | **19 19 22.5** | **+3.4** |
| | comp=Z,0.4nm,0.4s,baz=127,slow=4.8,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **82.19** | **322** | P | **P** | **19 20 16.9** | **+2.1** |
| **QSPA** | **South Pole Qui** | **83.23** | **180** | P | **P** | **19 20 23.2** | **+3.2** |
| QSPA | | | | IAmb | IAmb | 19 20 47.5 | |
| | comp=Z,3.4nm,1.4s | | | | | | |

*GCG **09** 19:21:38.9±0.8, 12.93N×92.15W, h24km, MD5.3*
*IDC **09** 19:21:48.0±0.5, 13.77N×90.81W, h0km, mb4.6/22, mbtmp4.7/23, ML4.5/1, MS5.0/60, Error ellipse: s-maj=21.9km s-min=11.9km az=52.0*
*NEIC **09** 19:21:52.0±2.9, 13.57N±0.08×91.23W±0.06, h18km±1km, mb5.2/627, Ms_20 5.1/449, Mww5.6/45, Error ellipse: s-maj=14.8km s-min=7.5km az=214.0*
*NEIC **09** 19:21:52, 13.57N×91.34W, h30km, Moment Tensor Solution. Duration: 38s3 Moment tensor: Scale 1017Nm; Mrr3.06; Mθθ-2.40; Mφφ-0.66; Mrθ1.29; Mθφ1.24; Mφr-0.55; Fault plane solution: M03.36000×1017 NP1: φs115.72000°, δ57.30000°, λ88.12000°. NP2: φs299.19000°, δ32.75000°, λ92.92000°. Principal axes: T 3.3679, Plg78.0000°, Azm20.0000°; N -0.0129, Plg2.0000°, Azm117.0000°; P -3.3550, Plg12.0000°, Azm207.0000°;*
*MOS **09** 19:21:52.61.4, 13.72N×90.96W, h33km, mb5.2/23, MS5.1/15 Error ellipse: s-maj=9.8km s-min=6.0km az=114.3*
*CATAC **09** 19:21:52.50.2, 13.55N×91.15W, h6km, MB5.6, mb5.5, ML5.6*
*NEIC **09** 19:21:52, 13.57N×91.23W, h30km*
*BJI **09** 19:21:53.00.0, 13.60N×91.20W, h31km, mB5.5/25, Ms5.6/41, Ms7 5.3/42*
*GCMT **09** 19:21:55.00.1, 13.51N±0.01×91.51W±0.01, h30km, MW5.7/141, Moment Tensor Solution. s141,c283; s141,c295; Duration: 136 Moment tensor: Scale 1017 Nm; Mrr3.17±.04; Mθθ-2.46±.03; Mφφ-0.70±.03; Mrθ1.63±.05; Mθφ1.32±.02; Mφr-1.34±.06; Best double couple: M03.80700×1017 NP1:φs124.00000°, δ62.00000°, λ96.00000°. NP2:φs292.00000°, δ29.00000°, λ79.00000°. Principal axes: T 3.8270, Plg73.0000°, Azm48.0000°; N -0.0360, Plg5.0000°, Azm302.0000°; P -3.7880, Plg17.0000°, Azm210.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*SNET **09** 19:21:59.00.1, 13.62N×90.71W, h8km±11km, ML5.5*

**ISC 09 19:21:54.0±0.6, 13.56N±0.03×91.18W±0.03, h41km±4km, n1366, σ1967/977, mb5.2/316, MS5.1/300, 21C-36D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FUG** | **Fuego 3** | **0.95** | **20** | *i* P | **Pn** | **19 22 11.5** | **+0.5** |
| **PCG** | **Pacaya** | **1.00** | **34** | *i* P | **Pn** | **19 22 12.5** | **+0.6** |
| **RTAL** | **Retalhuleu** | **1.09** | **333** | | **Pn** | **19 22 11.0** | **-1.8** |
| **RTAL** | **Retalhuleu** | **1.09** | **333** | *i* P | **Pn** | **19 22 11.2** | **-1.6** |
| RTAL | | | | *i* S | **Sn** | **19 22 28.5** | **+1.8** |
| RTAL | | | | IAML | | 19 22 54.3 | |
| | comp=Z,57μm,1.0s | | | | | | |
| **GCG4** | **OSOP** | **1.20** | **31**⇓ | *i*P | **Pn** | **19 22 15.1** | **+0.5** |
| GCG4 | | | | *i* S | **Sn** | **19 22 31.5** | **+1.7** |
| GCG4 | | | | IAML | | 19 22 38.5 | |
| | comp=Z,40μm,1.0s | | | | | | |
| **GUMI** | **Mixco** | **1.20** | **27**⇑ | *i*P | **Pn** | **19 22 15.2** | **+0.6** |
| GUMI | | | | IAML | | 19 22 16.0 | |
| | comp=Z,110μm,1.0s | | | | | | |
| GUMI | | | | *i* S | **Sn** | **19 22 31.5** | **+1.6** |
| **CHTG** | **Tecpan** | **1.22** | **9**⇑ | *i*P | **Pn** | **19 22 14.7** | **-0.1** |
| CHTG | | | | *i* S | **Sn** | **19 22 31.7** | **+1.5** |
| CHTG | | | | IAML | | 19 22 46.9 | |
| | comp=Z,100μm,1.0s | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.28** | **350** | *i* P | **Pn** | **19 22 15.0** | **-0.8** |
| SOKI | | | | IAML | | 19 22 54.5 | |
| | comp=Z,47μm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.31** | **38** | *i* P | **Pn** | **19 22 17.7** | **+1.6** |
| **QUEO** | **Labor Ovalle** | **1.35** | **346** | *i* P | **Pn** | **19 22 16.4** | **-0.3** |
| QUEO | | | | IAML | | 19 23 03.8 | |
| | comp=Z,69μm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **1.41** | **76**⇓ | *i*P | **Pn** | **19 22 17.0** | **-0.4** |
| NUBE | | | | *e*S | **Sn** | **19 22 36.1** | **+1.4** |
| **NUBE** | **Las Nubes** | **1.41** | **76**⇓ | *i*P | **Pn** | **19 22 16.9** | **-0.4** |
| NUBE | | | | *i* S | **Sn** | **19 22 37.0** | **+2.3** |
| NUBE | | | | IAML | | 19 22 59.8 | |
| | comp=Z,26μm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.43** | **72**⇓ | *i*P | **Pn** | **19 22 17.9** | **+0.3** |
| LOAL | | | | *i* S | **Sn** | **19 22 36.4** | **+1.2** |
| LOAL | | | | IAML | | 19 22 44.2 | |
| | comp=Z,110μm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.44** | **71**⇓ | *i*P | **Pn** | **19 22 17.9** | **+0.3** |
| SLOZ | | | | *e*S | **Sn** | **19 22 36.8** | **+1.5** |
| **RTR** | **El Retiro** | **1.53** | **77** | *e*P | **Pn** | **19 22 19.2** | **+0.1** |
| **CEVE** | **Cerro Verde** | **1.54** | **80** | *e*P | **Pn** | **19 22 19.2** | **-0.1** |
| **CEVE** | **Cerro Verde** | **1.54** | **80**⇓ | *i*P | **Pn** | **19 22 19.1** | **-0.1** |
| CEVE | | | | *i* S | **Sn** | **19 22 40.0** | **+1.9** |
| CEVE | | | | IAML | | 19 22 43.9 | |
| | comp=Z,77μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **1.54** | **79** | *e*P | **Pn** | **19 22 19.0** | **-0.2** |
| **SNJE** | **San Jose** | **1.56** | **78** | *e*P | **Pn** | **19 22 19.5** | **0.0** |
| **APG** | **El Apazote** | **1.60** | **26** | Pg | **Pn** | **19 22 21.3** | **+1.2** |
| | comp=Z,236nm,0.3s,baz=168,slow=8.0,SNR=5012 | | | | | | |
| **UNIC** | **Universidad Ca** | **1.64** | **75**⇑ | *i*P | **Pn** | **19 22 21.3** | **+0.8** |
| UNIC | | | | *i* S | **Sn** | **19 22 42.9** | **+2.4** |
| UNIC | | | | IAML | | 19 22 53.3 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.69** | **86**⇓ | *i*P | **Pn** | **19 22 20.9** | **-0.3** |
| **JAYA** | **Jayaque - finc** | **1.69** | **86**⇓ | *i*P | **Pn** | **19 22 20.9** | **-0.3** |
| JAYA | | | | *i* S | **Sn** | **19 22 43.7** | **+2.0** |
| JAYA | | | | IAML | | 19 22 49.2 | |
| | comp=Z,120μm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **1.75** | **82** | *e*P | **Pn** | **19 22 22.9** | **+0.8** |
| **CEDA** | **San Andres** | **1.75** | **82** | *i* P | **Pn** | **19 22 22.8** | **+0.8** |
| CEDA | | | | *i* S | **Sn** | **19 22 45.7** | **+2.5** |
| CEDA | | | | IAML | | 19 22 55.4 | |
| | comp=Z,120μm,1.0s | | | | | | |
| **HUEH** | **Huehuetenango** | **1.78** | **350** | | **Pn** | **19 22 23.3** | **+0.8** |
| **HUEH** | **Huehuetenango** | **1.78** | **350** | *i* S | **Sn** | **19 22 47.7** | **+3.6** |
| **LALI** | **Alcalda de L** | **1.81** | **92** | *e*P | **Pn** | **19 22 22.9** | **+0.2** |
| **LALI** | **Alcalda

comp=Z,13µm,1.0s
**PMON Piamonte 1.82 85 ⇓ iP Pn 19 22 23.0 0.0**
PMON i S Sn 19 22 47.8 +2.9
PMON IAML 19 22 56.0
comp=Z,65µm,1.0s
**ITCA Escuela Especi 1.85 86 i S Sn 19 22 48.1 +2.4**
**BOQS Boqueron 1.86 84 eP Pn 19 22 24.0 +0.4**
**QUEZ Alcaldia de Qu 1.88 81 i P Pn 19 22 24.6 +0.9**
QUEZ i S Sn 19 22 48.6 +2.4
QUEZ IAML 19 23 03.0
comp=Z,120µm,1.0s
**UEES Universidad Ev 1.90 85 eP Pn 19 22 24.6 +0.6**
**UEES Universidad Ev 1.90 85 i P Pn 19 22 24.8 +0.8**
UEES i S Sn 19 22 50.2 +3.5
UEES IAML 19 22 56.3
comp=Z,29µm,1.0s
**SNET Serv Nac Est T 1.90 86 Pn 19 22 24.2 +0.1**
**SNET Serv Nac Est T 1.90 86 eP Pn 19 22 24.4 +0.3**
**SNET Serv Nac Est T 1.90 86 ⇓ iP Pn 19 22 24.2 +0.1**
SNET i S Sn 19 22 49.8 +3.0
SNET IAML 19 22 52.0
comp=Z,71µm,1.0s
**UTEC Universidad Te 1.93 85 i P Pn 19 22 25.1 +0.6**
UTEC i S Sn 19 22 50.0 +2.4
UTEC IAML 19 22 55.8
comp=Z,24µm,1.0s
**PANCS Alcalda de 1.95 88 i P Pn 19 22 25.7 +1.0**
PANCS IAML 19 22 57.8
comp=Z,58µm,1.0s
**LOMA Loma Larga 1.96 87 eP Pn 19 22 25.2 +0.3**
**LOMA Loma Larga 1.96 87 ⇓ iP Pn 19 22 25.1 +0.3**
LOMA i S Sn 19 22 51.4 +3.1
LOMA IAML 19 22 59.9
comp=Z,42µm,1.0s
**MTO3 Montecristo 1.96 64 Pn Pn 19 22 25.8 +0.9**
**MTO3 Montecristo 1.96 64 ⇓ iP Pn 19 22 26.0 +0.9**
**MTO3 Montecristo 1.96 64 ⇓ iP Pn 19 22 25.9 +0.9**
MTO3 i S Sn 19 22 50.8 +2.4
MTO3 IAML 19 22 57.9
comp=Z,18µm,1.0s
**UDBS Universidad Do 1.98 85 i P Pn 19 22 25.9 +0.8**
UDBS i S Sn 19 22 51.1 +2.4
UDBS IAML 19 22 59.5
comp=Z,35µm,1.0s
**ESQI Esquipulas 2.05 61 Pn Pn 19 22 27.1 +1.0**
**ESQI Esquipulas 2.05 61 ⇓ iP Pn 19 22 27.4 +1.3**
ESQI i S Sn 19 22 54.7 +4.2
**LFRS El Faro 2.06 88 eP Pn 19 22 26.6 +0.2**
**MRL Marmol 2.10 44 i P Pn 19 22 29.2 +2.2**
**COEG Centro de Oper 2.24 88 eP Pn 19 22 29.9 +1.2**
**COEG Centro de Oper 2.24 88 ⇑ iP Pn 19 22 29.9 +1.2**
COEG i S Sn 19 22 58.7 +3.5
COEG IAML 19 23 11.2
comp=Z,26µm,1.0s
**LLGN La Laguna 2.25 74 i P Pn 19 22 30.0 +1.0**
LLGN i S Sn 19 22 59.7 +4.1
LLGN IAML 19 23 10.9
comp=Z,11µm,1.0s
**UESV Universidad de 2.33 88 i P Pn 19 22 31.4 +1.5**
UESV i S Sn 19 23 00.3 +2.9
UESV IAML 19 23 11.7
comp=Z,21µm,1.0s
**TECO Alcaldia de Te 2.33 90 eP Pn 19 22 31.0 +1.0**
**TECO Alcaldia de Te 2.33 90 ⇑ iP Pn 19 22 30.9 +1.0**
TECO i S Sn 19 23 00.3 +2.8
TECO IAML 19 23 13.1
comp=Z,10µm,1.0s
**SCLA Alcaldia de Sa 2.39 86 eP Pn 19 22 31.7 +1.0**
**SCLA Alcaldia de Sa 2.39 86 ⇓ iP Pn 19 22 31.8 +1.0**
SCLA i S Sn 19 23 02.7 +3.8
SCLA IAML 19 23 16.0
comp=Z,10µm,1.0s
**PQSS Presa 15 de Se 2.55 88 i P Pn 19 22 34.2 +1.3**
PQSS IAML 19 23 13.1
comp=Z,6µm,1.0s
**TECA Tecapa 2.61 91 eP Pn 19 22 34.8 +0.9**
**PACA Pacayal 2.78 91 eP Pn 19 22 37.6 +1.4**
**PACA Pacayal 2.78 91 i P Pn 19 22 37.6 +1.4**
PACA i S Sn 19 23 12.3 +3.7
PACA IAML 19 23 25.4
comp=Z,94µm,1.0s
**LCY Lacayo 2.81 92 eP Pn 19 22 37.7 +1.1**
**RANC El Ranchito 2.82 92 ⇓ iP Pn 19 22 37.8 +1.1**
RANC i S Sn 19 23 13.0 +3.5
RANC IAML 19 23 27.2
comp=Z,10µm,1.0s
**BLLM Bellamira 2.87 92 eP Pn 19 22 38.5 +1.2**
**CCIG Comitan 2.87 341 Pn Pn 19 22 38.6 +1.1**
**CCIG Comitan 2.87 341 ⇓ iP Pn 19 22 39.3 +1.9**
CCIG i S Sn 19 23 15.3 +4.5
CCIG IAML 19 23 31.9
comp=Z,11µm,1.0s
**JUCU Jucuarˌn 2.87 96 i P Pn 19 22 38.2 +0.8**
**CNRM Centro Naciona 2.93 91 i S Sn 19 23 15.1 +3.0**
**MARCA Marcala la Paz 3.12 79 i P Pn 19 22 41.9 +1.1**
**CHIHN Chmisales 3.17 59 ⇓ iP Pn 19 22 42.8 +1.1**
**LCND La Caada 3.21 94 eP Pn 19 22 43.0 +1.0**
**LCND La Caada 3.21 94 i P Pn 19 22 43.2 +1.2**
LCND IAML 19 23 35.2
comp=Z,10µm,1.0s
**CNCH Conchagua 3.27 94 eP Pn 19 22 43.3 +0.4**
**CNCH Conchagua 3.27 94 ⇓ iP Pn 19 22 43.3 +0.4**
CNCH i S Sn 19 23 23.6 +2.9
CNCH IAML 19 23 37.5
comp=Z,22µm,1.0s
**PETF Flores 3.58 21 Pn Pn 19 22 48.7 +1.7**
**PETF Flores 3.58 21 ⇓ iP Pn 19 22 49.0 +2.0**
PETF IAML 19 24 05.7
comp=Z,7µm,1.0s
**TGUH Tegucigalpa,Un 3.83 82 Pn 19 22 51.6 +1.0**
**TGUH Tegucigalpa,Un 3.83 82 ⇓ iP Pn 19 22 51.4 +0.8**
TGUH IAML 19 23 59.4
comp=Z,5µm,1.0s
**CRIN San Cristobal 4.11 101 Pn Pn 19 22 55.0 +0.5**
**CRIN San Cristobal 4.11 101 ⇓ iP Pn 19 22 56.1 +1.6**
CRIN IAML 19 24 11.0
comp=Z,16µm,1.0s
**PKGN Cerro Pekin 4.19 102 ⇓ iP Pn 19 22 56.7 +1.2**
PKGN i S Sn 19 23 46.1 +2.9
PKGN IAML 19 24 06.0
comp=Z,14µm,1.0s
**YUSH Yuscaran 4.23 84 ⇓ iP Pn 19 22 56.7 +0.5**
**QUEN Al S del Volca 4.33 102 i P Pn 19 22 58.4 +1.0**
QUEN IAML 19 23 53.4
comp=Z,3µm,1.0s
**TEL3 Telica 3 4.34 103 i P Pn 19 22 57.8 +0.3**
**SOMN Somoto 4.45 91 i P Pn 19 23 00.7 +1.6**
SOMN IAML 19 23 06.0
comp=Z,900nm,1.0s
**ILCN San Idelfonso 4.47 102 ⇑ iP Pn 19 23 00.3 +0.9**
ILCN IAML 19 24 12.2
comp=Z,1µm,1.0s
**CNGN Cerro Negro 4.49 103 Pn Pn 19 22 59.7 0.0**
**CNGN Cerro Negro 4.49 103 i P Pn 19 23 00.5 +0.8**
CNGN IAML 19 24 11.3
comp=Z,4µm,1.0s
**LEVN Ruinas Leon Vi 4.59 104 i P Pn 19 23 02.1 +1.1**
LEVN i S Sn 19 23 56.3 +3.1
LEVN IAML 19 24 11.7
comp=Z,6µm,1.0s
**COPN Copaltepe 4.68 106 i P Pn 19 23 02.9 +0.7**
COPN IAML 19 24 18.8
comp=Z,3µm,1.0s
**BC86 Nagarote 4.68 105 i P Pn 19 23 03.3 +1.1**
BC86 IAML 19 24 44.3
comp=Z,6µm,1.0s
**MOM2 El Cardon 4.71 103 ⇓ iP Pn 19 23 03.7 +1.1**
MOM2 IAML 19 24 25.5
comp=Z,4µm,1.0s
**LIMN Finca el Limon 4.71 95 ⇑ iP Pn 19 23 03.6 +0.9**
LIMN IAML 19 24 20.1
comp=Z,3µm,1.0s
**BRAN Las Pilas 4.78 99 i P Pn 19 23 06.0 +2.4**
BRAN IAML 19 23 23.7
comp=Z,2µm,1.0s
**SAPS Ciudad Sandino 4.86 106 i P Pn 19 23 05.7 +1.1**
SAPS IAML 19 24 20.5
comp=Z,6µm,1.0s
**APQ3 Volcan Apoyequ 4.86 105 i P Pn 19 23 05.6 +0.9**
APQ3 IAML 19 24 28.4
comp=Z,3µm,1.0s
**APQ2 Apoyeque 4.92 105 i P Pn 19 23 06.9 +1.4**
APQ2 IAML 19 24 19.6
comp=Z,4µm,1.0s
**UNAN Cigeo UNAN 5.00 106 i P Pn 19 23 07.1 +0.5**
UNAN IAML 19 24 33.4
comp=Z,28µm,1.0s
**R4DEC Barrio San Lui 5.01 106 i P Pn 19 23 08.1 +1.4**
R4DEC IAML 19 24 25.7
comp=Z,3µm,1.0s
**CMIG Matias Romero 5.01 315 Pn Pn 19 23 05.5 -1.3**
comp=Z,19nm,0.3s,baz=138,slow=11,SNR=88
CMIG Sn Sn 19 24 03.0 -0.5
comp=Z,52nm,0.3s,baz=61,slow=12,SNR=4.1
CMIG LR LR 19 25 06.2
comp=Z,15µm,21.8s,baz=119,slow=39
comp=Z,145nm,0.6s
**HUEN 5.03 103 i P Pn 19 23 07.5 +0.5**
HUEN IAmb IAmb 19 23 10.7
comp=Z,350nm,0.6s
HUEN IVmB_BB 19 23 47.6
comp=Z,8µm,1.0s
HUEN IAML 19 24 37.4
comp=Z,2µm,1.0s
**MAFN Magfor 5.03 106 i P Pn 19 23 08.6 +1.5**
MAFN IAML 19 24 26.5
comp=Z,9µm,1.0s
**WILN Americas 2 5.06 105 i P Pn 19 23 08.3 +0.8**
WILN IAmb IAmb 19 23 19.1
comp=Z,630nm,1.0s
WILN IVmB_BB 19 23 57.4
comp=Z,8µm,1.0s
WILN IAML 19 24 41.0
comp=Z,3µm,1.0s
**MAS3 Al N del Volca 5.11 107 i P Pn 19 23 09.6 +1.4**
MAS3 IAmb IAmb 19 23 27.2
comp=Z,1µm,0.5s
MAS3 IVmB_BB 19 23 50.9
comp=Z,14µm,1.0s
MAS3 IAML 19 24 41.8
comp=Z,3µm,1.0s
**BOAB BOACO BROADBAN 5.49 101 Pn Pn 19 23 12.9 -0.4**
**BOAB BOACO BROADBAN 5.49 101 ⇓ iP Pn 19 23 13.6 +0.3**
BOAB IAmb IAmb 19 23 16.3
comp=Z,300nm,0.4s
BOAB IVmB_BB 19 23 16.4
comp=Z,5µm,1.0s
BOAB i S Sn 19 24 17.8 +2.6
BOAB IAML 19 24 30.6
comp=Z,970nm,1.0s
**ACON Acoyapa 6.07 104 Pn Pn 19 23 21.1 -0.2**
**ACON Acoyapa 6.07 104 i P Pn 19 23 21.2 -0.1**
ACON IAmb IAmb 19 23 30.7
comp=Z,210nm,0.8s
ACON IAML 19 24 43.7
comp=Z,800nm,1.0s
**JUD3 Juan Diaz 3 6.47 121 Pn Pn 19 23 28.4 +1.6**
**INDI Punta indio, G 6.66 123 i P Pn 19 23 31.1 +1.7**
INDI IVmB_BB 19 24 00.1
comp=Z,6µm,1.0s
INDI IAmb IAmb 19 24 00.5
comp=Z,820nm,0.7s
INDI IAML 19 25 32.2
comp=Z,6µm,1.0s
**ESPN Las Esperanzas 6.84 101 Pn Pn 19 23 32.2 +0.3**
**ESPN Las Esperanzas 6.84 101 i P Pn 19 23 33.1 +1.2**
ESPN IAmb IAmb 19 23 44.0
comp=Z,330nm,0.9s
ESPN IAML 19 25 16.9
comp=Z,690nm,1.0s
**JTS Las Juntas de 6.90 117 Pn 19 23 32.6 -0.2**
**JTS Las Juntas de 6.90 117 Pn Pn 19 23 35.5 +2.7**
comp=Z,17nm,0.3s,baz=298,slow=7.1,SNR=33
JTS Sn Sn 19 24 46.8 -3.3
baz=198,slow=20
JTS Lg Lg 19 25 16.6
comp=Z,19nm,0.3s,baz=62,slow=21,SNR=11
**JTS Las Juntas de 6.90 117 P Pn 19 23 32.6 -0.2**
**SOCE Pocosol 7.15 115 Pn Pn 19 23 35.9 -0.4**
**SOCE Pocosol 7.15 115 i P Pn 19 23 38.0 +1.8**
SOCE IVmB_BB 19 23 56.9
comp=Z,4µm,1.0s
SOCE IAmb IAmb 19 24 03.5
comp=Z,240nm,0.8s
SOCE IAML 19 25 42.5
comp=Z,830nm,1.0s
**TEIG Tepich 7.19 22 Pn Pn 19 23 38.6 +1.9**
**TEIG Tepich 7.19 22 Pn Pn 19 23 38.9 +2.2**
comp=Z,173nm,0.3s,baz=196,slow=2.9,SNR=608
TEIG Lg Lg 19 25 40.1
comp=Z,9.6nm,0.3s,baz=69,slow=19,SNR=1.4
TEIG LR LR 19 26 02.7
comp=Z,3µm,21.5s,baz=196,slow=37
**COVE Coope Vega, Sa 7.20 112 i S Sn 19 25 01.3 +3.8**
**HDC Heredia 7.77 116 Pn Pn 19 23 46.0 +1.2**
**HDC Heredia 7.77 116 i P Pn 19 23 46.1 +1.3**
HDC IAmb IAmb 19 24 08.1
comp=Z,440nm,1.1s
HDC IVmB_BB 19 24 11.0
comp=Z,4µm,1.0s
HDC IAML 19 25 55.1
comp=Z,2µm,1.0s
**HDC Heredia 7.77 116 eP Pn 19 23 44.8 0.0**
**HDC3 Heredia 3 7.77 116 i P Pn 19 23 47.1 +2.3**
HDC3 IAmb IAmb 19 24 08.1
comp=Z,450nm,0.8s
HDC3 IVmB_BB 19 24 11.1
comp=Z,5µm,1.0s
HDC3 IAML 19 25 55.1
comp=Z,2µm,1.0s
**LCR2 La Lucha 2 7.99 118 Pn 19 23 50.1 +2.3**
**LCR2 La Lucha 2 7.99 118 i P Pn 19 23 49.0 +1.2**
LCR2 IVmB_BB 19 24 06.6
comp=Z,4µm,1.0s
LCR2 IAmb IAmb 19 24 07.0
comp=Z,370nm,0.7s
LCR2 IAML 19 24 15.2
comp=Z,480nm,1.0s
**TLIG Tlapa 8.16 300 Pn Pn 19 23 50.1 0.0**
**TLIG Tlapa 8.16 300 ⇑ iP Pn 19 23 52.2 +2.1**
TLIG IVmB_BB 19 24 15.0
comp=Z,2µm,1.0s
TLIG IAmb IAmb 19 24 20.4
comp=Z,190nm,1.2s
**OCHAL Ojochal 8.61 120 i P Pn 19 23 58.9 +2.6**
OCHAL IAmb IAmb 19 24 02.7
comp=Z,300nm,1.1s
OCHAL IVmB_BB 19 24 02.8
comp=Z,5µm,1.0s
**DRK0 Durika 8.87 118 i P Pn 19 24 01.5 +1.6**
DRK0 IAmb IAmb 19 24 21.1
comp=Z,700nm,0.6s
**CDITO Canoas 9.54 120 i P Pn 19 24 09.9 +1.0**
CDITO IAmb IAmb 19 24 25.6
comp=Z,420nm,1.0s
CDITO IVmB_BB 19 24 43.0
comp=Z,7µm,1.0s
**BRU2 Volcan 9.58 119 Pn 19 24 12.3 +2.6**
**JRQG Juriquilla Cam 11.35 310 Pn 19 24 32.7 -1.3**
**MOIG Morelia 11.36 304 Pn Pn 19 24 31.5 -2.6**
**MOIG Morelia 11.36 304 i P Pn 19 24 36.7 +2.6**
MOIG IVmB_BB 19 24 54.2
comp=Z,4µm,1.0s
MOIG IAmb IAmb 19 25 04.2
comp=Z,360nm,0.8s
**BCIP Isla Barro Col 11.95 110 Pn Pn 19 24 42.5 +0.6**
**BCIP Isla Barro Col 11.95 110 i P Pn 19 24 42.6 +0.7**
BCIP IAmb IAmb 19 24 44.5
comp=Z,150nm,1.1s
**BCIP Isla Barro Col 11.95 110 P Pn 19 24 42.5 +0.6**
**SOR Soroa 12.03 39 Pn Pn 19 24 43.7 +0.8**
**SOR Soroa 12.03 39 P Pn 19 24 43.7 +0.8**
**CAMR Camarioca 13.27 43 Pn Pn 19 24 57.2 -2.7**
**MTDJ Mount Denham 13.92 69 Pn Pn 19 25 08.6 -0.4**
**PAYG Puerto Ayora 14.16 176 Pn Pn 19 25 13.1 +0.9**
**ZAIG Zacatecas 14.17 312 Pn Pn 19 25 13.1 +0.6**
**ZAIG Zacatecas 14.17 312 ⇓ iP Pn 19 25 15.4 +2.9**
ZAIG IAmb IAmb 19 25 20.2
comp=Z,44nm,1.2s
ZAIG IVmB_BB 19 25 31.6
comp=Z,2µm,1.0s
**HBVL Hebbronville 15.16 334 Pn 19 25 24.5 -0.9**
**CHIV Chivirico 15.51 64 Pn 19 25 25.9 -4.0**
CHIV IAmb IAmb 19 25 34.4
comp=Z,70nm,1.4s
**061Z Ochoppi 15.59 37 P P 19 25 35.4 +0.6**
061Z IAmb IAmb 19 25 38.5
comp=Z,188nm,0.8s
**735A Kenedy 16.42 339 Pn 19 25 42.9 +1.3**
735A IAmb IAmb 19 25 45.0
comp=Z,352nm,1.8s
**833A Chaparral WMA, 16.57 334 P Pn 19 25 44.3 +0.9**
**833A Chaparral WMA, 16.57 334 P Pn 19 25 44.1 +0.7**
baz=151,SNR=9.4
**060A Indiantown 16.80 35 Pn 19 25 44.6 -1.8**
060A IAmb IAmb 19 25 54.2
comp=Z,241nm,0.7s
**HKT Hockley 16.87 346 P Pn 19 25 46.4 -0.8**
**HKT Hockley 16.87 346 c iP Pn 19 25 47.7 +0.5**
HKT pmax pmax
comp=Z,103nm,2.8s
**DWPF Disney Wildern 17.10 31 Pn 19 25 47.6 -2.5**
**DWPF Disney Wildern 17.10 31 P Pn 19 25 50.1 +0.1**
baz=214
**HNVL Huntsville, TX 17.57 348 IAmb IAmb 19 26 00.9**
comp=Z,490nm,1.9s
**656A Willston 17.66 26 IAmb IAmb 19 26 07.4**
comp=Z,162nm,0.8s
**346A Big Creek Wild 17.82 5 P Pn 19 25 58.3 -0.7**
346A IAmb IAmb 19 26 08.2
comp=Z,416nm,1.4s
**BRAL Brewton 17.94 12 P P 19 26 00.8 +0.1**
BRAL IAmb IAmb 19 26 08.0
comp=Z,125nm,0.8s
**BRAL Brewton 17.94 12 P P 19 26 02.1 +1.4**
baz=193,SNR=5.2
**435B Jarrell 18.13 342 P P 19 26 02.9 0.0**
baz=160
**OTAV Otavalo 18.28 135 P P 19 26 04.1 -0.9**
**OTAV Otavalo 18.28 135 P P 19 26 04.1 -0.9**
OTAV pmax pmax
comp=Z,15nm,1.3s
**OTAV Otavalo 18.28 135 eP P 19 26 04.7 -0.3**
**NATX Nacogdoches 18.40 351 IAmb IAmb 19 26 09.6**
comp=Z,529nm,2.0s
**NATX Nacogdoches 18.40 351 P P 19 26 05.3 -0.5**
baz=169
**PULU Pululahua 18.40 136 P Pn 19 26 08.2 +1.6**
PULU IAmb IAmb 19 26 11.5
comp=Z,322nm,1.2s
**IMBA Imbabura, San 18.42 135 Pn 19 26 08.1 +1.2**
**VBMS Vicksburg 18.59 2 P Pn 19 26 08.5 +0.2**
baz=182
**JCT Junction City 18.63 336 P Pn 19 26 09.3 +0.4**
baz=153,SNR=10
**352A Blakely 18.74 17 P Pn 19 26 11.7 +1.4**
352A IAmb IAmb 19 26 20.2
comp=Z,125nm,1.0s
**ROSC El Rosal 18.75 116 Pn 19 26 12.1 +1.3**
**ROSC El Rosal 18.75 116 P Pn 19 26 14.2 +3.4**
comp=Z,19nm,0.2s,baz=24,slow=4.3,SNR=16
**ROSC El Rosal 18.75 116 P Pn 19 26 12.1 +1.3**
ROSC pmax pmax
comp=Z,94nm,1.2s
**HPIG 19.00 317 Pn 19 26 14.5 +0.9**
**HPIG 19.00 317 i P Pn 19 26 14.6 +1.0**
HPIG IAmb IAmb 19 26 17.3
comp=Z,62nm,1.2s
HPIG IVmB_BB 19 26 32.7
comp=Z,2µm,1.0s
**146A Union 19.09 5 IAmb IAmb 19 26 19.0**
comp=Z,181nm,1.2s
**TIGA Tifton 19.12 20 P Pn 19 26 14.3 -0.5**
baz=203,SNR=5.5
**WHTX Lake Whitney, 19.23 344 P P 19 26 14.5 -0.4**
baz=161
**RUSI La Rusia 19.38 111 i P Pn 19 26 19.3 +0.8**
RUSI IAmb IAmb 19 26 21.7
comp=Z,49nm,0.7s
RUSI IVmB_BB 19 26 22.4
comp=Z,2µm,1.0s
**TXAR Lajitas Array 19.51 326 P Pn 19 26 19.8 +0.2**
comp=Z,36nm,0.7s,baz=152,slow=12,SNR=309
TXAR PcP PcP 19 30 39.5 +1.7
comp=Z,3.0nm,0.8s,baz=156,slow=3.4,SNR=4.4
TXAR ScP ScP 19 34 16.5 +5.8
comp=Z,0.5nm,1.0s,baz=121,slow=3.4,SNR=2.1
TXAR LR LR 19 36 03.9
comp=Z,1µm,18.7s,baz=125,slow=44
**TXAR Lajitas Array 19.51 326 P Pn 19 26 19.9 +0.4**
**FW14 Alvarado 19.55 345 IAmb IAmb 19 26 24.5**
comp=Z,100nm,0.9s
**OZNA Ozona 19.56 334 IAmb IAmb 19 26 22.8**
comp=Z,80nm,0.6s
**H06E1 SOCORRO T-PHAS 19.66 288 T T 19 46 35.1**
SNR=706
**H06S1 SOCORRO T 19.68 288 T T 19 46 38.7**
SNR=6.7
**Z47A Carrollton 19.76 8 IAmb IAmb 19 26 27.7**
comp=Z,131nm,0.8s
**LRAL Lakeview Retre 19.76 10 P Pn 19 26 21.7 -0.7**
baz=192
**SDDR Presa de Saban 19.84 72 P P 19 26 21.8 +0.1**
**Z38A Mt. Pleasant 19.92 351 IAmb IAmb 19 26 24.7**
comp=Z,77nm,0.8s
**152A Waverly Hall 19.92 16 IAmb IAmb 19 26 30.3**
comp=Z,60nm,0.6s
**255A Hazlehurst 19.95 22 IAmb IAmb 19 26 37.5**
comp=Z,108nm,1.0s
**FW07 Weatherford 19.99 344 IAmb IAmb 19 26 36.8**
comp=Z,147nm,1.2s
**PLPT Palo Pinto 20.25 342 IAmb IAmb 19 26 38.1**
comp=Z,83nm,0.8s
**Y45A Yeager Farm, C 20.27 4 IAmb IAmb 19 26 37.6**
comp=Z,99nm,0.9s
**CCAR Cane Creek 20.28 359 IAmb IAmb 19 26 41.7**
comp=Z,82nm,0.8s
**ALPN Alpine 20.31 328 IAmb IAmb 19 26 31.7**
comp=Z,113nm,0.8s
**SLBS Sierra La Lagu 20.41 302 P P 19 26 28.2 +0.3**
**SGCY Sterling City 20.42 335 IAmb IAmb 19 26 31.2**
comp=Z,80nm,0.7s
**Z35A Perchaven, San 20.45 345 IAmb IAmb 19 26 42.2**
comp=Z,353nm,1.8s
**ABTX Abilene, Hawle 20.50 339 IAmb IAmb 19 26 31.3**
comp=Z,110nm,0.8s
**ABTX Abilene, Hawle 20.50 339 P P 19 26 28.5 -0.2**
baz=156,SNR=42
**Y49A Blount Mountai 20.67 11 IAmb IAmb 19 26 46.3**
comp=Z,72nm,0.8s
**GRTK Grand Turk 20.67 65 P P 19 26 30.8 +0.1**
GRTK IAmb IAmb 19 26 46.3
comp=Z,95nm,1.0s
**SDV Santo Domingo 20.68 101 P 19 26 27.5 -3.5**
**SDV Santo Domingo 20.68 101 P P 19 26 28.0 -3.0**
comp=Z,11nm,0.4s,baz=180,slow=18,SNR=2.0
SDV LR LR 19 35 56.3
comp=Z,4µm,18.4s,baz=285,slow=42
comp=Z,11nm,0.4s
**SDV Santo Domingo 20.68 101 eP P 19 26 31.1 +0.2**
**X40A Basin Creek Fa 20.89 356 IAmb IAmb 19 26 49.7**
comp=Z,184nm,2.0s
**LPIG La Paz 20.90 303 P P 19 26 33.7 +0.7**
comp=Z,16nm,0.3s,baz=315,slow=1.4,SNR=1.5
LPIG LR LR 19 35 18.7
comp=Z,4µm,18.1s,baz=124,slow=38
comp=Z,16nm,0.3s
**OXF Oxford 20.93 4 P P 19 26 32.4 -0.8**
baz=185
**GOGA Godfrey 20.98 18 P P 19 26 33.6 -0.2**
baz=201,SNR=30
**MIAR Mount Ida 21.01 354 P P 19 26 33.4 -0.8**
baz=174,SNR=24
**UALR University of 21.15 357 IAmb IAmb 19 26 38.4**
comp=Z,80nm,0.8s
**SN05 Snyder 5 21.18 337 IAmb IAmb 19 26 39.4**
comp=Z,70nm,0.6s
**WTFS Witchita Falls 21.18 343 P P 19 26 34.7 -1.3**
WTFS IAmb IAmb 19 26 53.9
comp=Z,138nm,1.6s
**ODSA Odessa 21.21 332 IAmb IAmb 19 26 43.2**
comp=Z,63nm,0.8s
**Y52A Lilburn 21.23 17 IAmb IAmb 19 26 42.0**
comp=Z,70nm,0.8s
**APMT Aspermont 21.30 339 IAmb IAmb 19 26 50.7**
comp=Z,71nm,0.7s
**VHRN Van Horn 21.35 326 IAmb IAmb 19 26 41.6**
comp=Z,105nm,0.7s
**SN07 Snyder 07 21.37 337 IAmb IAmb 19 26 56.8**
comp=Z,247nm,1.9s
**FPAL Fort Paine 21.49 13 IAmb IAmb 19 26 56.8**
comp=Z,79nm,1.0s
**PLAL Pickwick Lake 21.52 7 IAmb IAmb 19 26 54.9**
comp=Z,344nm,1.9s
**POST Post 21.58 336 IAmb IAmb 19 26 42.1**
comp=Z,78nm,0.8s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| WHAR | **Wooly Hollow** | 21.66 | 358 | IAmb | IAmb | 19 27 00.4 | | | | |
| | comp=Z,332nm,1.8s | | | | | | | | | |
| X51A | **Calhoun** | 21.69 | 14 | IAmb | IAmb | 19 26 58.0 | | | | |
| | comp=Z,295nm,1.7s | | | | | | | | | |
| DKNS | **Dickens** | 21.90 | 338 | IAmb | IAmb | 19 26 48.4 | | | | |
| | comp=Z,53nm,0.6s | | | | | | | | | |
| NHSC | **New Hope** | 21.90 | 25 | P | **P** | **19 26 43.0** | **-0.7** | | | |
| | baz=210 | | | | | | | | | |
| HODGE | **Hodges** | 22.12 | 20 | IAMs_20 | IAMs_20 | 19 36 13.6 | | | | |
| | comp=Z,6µm,18.0s | | | | | | | | | |
| WMOK | **Wichita Mounta** | 22.18 | 343 | IAmb | IAmb | 19 27 09.5 | | | | |
| | comp=Z,214nm,1.9s | | | | | | | | | |
| WMOK | **Wichita Mounta** | 22.18 | 343 | P | **P** | **19 26 45.0** | **-1.8** | | | |
| | baz=160 | | | | | | | | | |
| W50A | **Signal Mountai** | 22.19 | 13 | IAmb | IAmb | 19 27 08.3 | | | | |
| | comp=Z,66nm,1.0s | | | | | | | | | |
| MNTX | **Cornudas Mount** | 22.27 | 327 | P | **P** | **19 26 48.0** | **+0.3** | | | |
| | baz=141,SNR=383 | | | | | | | | | |
| W52A | **Murphy** | 22.42 | 16 | IAmb | IAmb | 19 27 13.5 | | | | |
| | comp=Z,53nm,0.7s | | | | | | | | | |
| V48A | **Smith Brothers** | 22.44 | 9 | IAmb | IAmb | 19 27 09.3 | | | | |
| | comp=Z,52nm,0.7s | | | | | | | | | |
| PCDR | **Punta Cana, DR** | 22.45 | 74 | IAMs_20 | IAMs_20 | 19 35 32.4 | | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| JSC | **Jenkinsville** | 22.51 | 22 | IAMs_20 | IAMs_20 | 19 36 14.0 | | | | |
| | comp=Z,6µm,18.0s | | | | | | | | | |
| Y57A | **Sumter** | 22.61 | 24 | IAmb | IAmb | 19 26 52.7 | | | | |
| | comp=Z,72nm,0.6s | | | | | | | | | |
| Y57A | | | | IAMs_20 | IAMs_20 | 19 36 15.5 | | | | |
| | comp=Z,6µm,18.0s | | | | | | | | | |
| BG3 | **Lake Jocassee** | 22.61 | 18 | IAmb | IAmb | 19 27 11.8 | | | | |
| | comp=Z,42nm,0.6s | | | | | | | | | |
| CPCT | **Cooper Cave** | 22.61 | 14 | IAmb | IAmb | 19 27 10.0 | | | | |
| | comp=Z,250nm,1.9s | | | | | | | | | |
| TUL3 | **Leonard** | 22.64 | 350 | P | **P** | **19 26 49.3** | **-2.4** | | | |
| | baz=168 | | | | | | | | | |
| WVT | **Waverly** | 22.68 | 7 | P | **P** | **19 26 50.2** | **-1.8** | | | |
| WVT | **Waverly** | 22.68 | 7 | P | **P** | **19 26 50.9** | **-1.2** | | | |
| | baz=189 | | | | | | | | | |
| WVT | **Waverly** | 22.68 | 7 | P | **P** | **19 26 50.3** | **-1.8** | | | |
| WVT | | | | pmax | pmax | | | | | |
| | comp=Z,55nm,0.9s | | | | | | | | | |
| DEOK | **Depew** | 22.70 | 349 | IAmb | IAmb | 19 27 11.8 | | | | |
| | comp=Z,112nm,1.3s | | | | | | | | | |
| RLO | **Rose Lookout** | 22.78 | 352 | IAmb | IAmb | 19 27 16.4 | | | | |
| | comp=Z,141nm,1.5s | | | | | | | | | |
| PAULI | **Pauline** | 22.81 | 20 | IAMs_20 | IAMs_20 | 19 36 34.8 | | | | |
| | comp=Z,6µm,18.0s | | | | | | | | | |
| CLTN | **Cedars of Leba** | 22.86 | 10 | IAmb | IAmb | 19 27 17.8 | | | | |
| | comp=Z,68nm,0.9s | | | | | | | | | |
| MSTX | **Muleshoe** | 22.89 | 335 | IAmb | IAmb | 19 26 56.4 | | | | |
| | comp=Z,53nm,0.7s | | | | | | | | | |
| MSTX | **Muleshoe** | 22.89 | 335 | P | **P** | **19 26 52.5** | **-1.9** | | | |
| | baz=150,SNR=37 | | | | | | | | | |
| SMWD | **Samnorwood** | 22.96 | 341 | IAmb | IAmb | 19 26 58.2 | | | | |
| | comp=Z,84nm,0.7s | | | | | | | | | |
| TKL | **Tuckaleechee C** | 23.00 | 16 | LR | LR | 19 36 29.5 | | | | |
| | comp=Z,5µm,21.0s,baz=184,slow=39 | | | | | | | | | |
| PBMO | **Poplar Bluff** | 23.14 | 2 | IAmb | IAmb | 19 27 07.4 | | | | |
| | comp=Z,57nm,0.7s | | | | | | | | | |
| BAUV | **El Baul** | 23.15 | 99 | P | **P** | **19 26 55.6** | **-1.4** | | | |
| BAUV | | | | IAmb | IAmb | 19 27 21.3 | | | | |
| | comp=Z,72nm,0.9s | | | | | | | | | |
| BAUV | | | | IAMs_20 | IAMs_20 | 19 37 15.6 | | | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| KMSC | **Kings Mountain** | 23.26 | 21 | P | **P** | **19 26 56.9** | **-1.1** | | | |
| | baz=205,SNR=11 | | | | | | | | | |
| AMTX | **Amarillo** | 23.26 | 338 | IAmb | IAmb | 19 27 01.8 | | | | |
| | comp=Z,78nm,0.8s | | | | | | | | | |
| AMTX | **Amarillo** | 23.26 | 338 | P | **P** | **19 26 56.8** | **-1.3** | | | |
| | baz=154 | | | | | | | | | |
| T42A | **Van Buren** | 23.38 | 0 | IAmb | IAmb | 19 27 13.2 | | | | |
| | comp=Z,118nm,1.6s | | | | | | | | | |
| Y60A | **Bolivia** | 23.52 | 28 | IAmb | IAmb | 19 27 02.5 | | | | |
| | comp=Z,100nm,0.9s | | | | | | | | | |
| CROK | **Carrier** | 23.65 | 346 | IAmb | IAmb | 19 27 20.2 | | | | |
| | comp=Z,82nm,1.1s | | | | | | | | | |
| CGM3 | **Cape Girardeau** | 23.68 | 3 | IAmb | IAmb | 19 27 15.6 | | | | |
| | comp=Z,68nm,1.2s | | | | | | | | | |
| BLOK | **Blackwell** | 23.73 | 348 | IAmb | IAmb | 19 27 13.3 | | | | |
| | comp=Z,248nm,1.9s | | | | | | | | | |
| TZTN | **Tazewell** | 23.89 | 15 | P | **P** | **19 27 03.5** | **-0.5** | | | |
| | baz=199,SNR=26 | | | | | | | | | |
| KAN13 | **South Haven SW** | 24.03 | 348 | IAmb | IAmb | 19 27 26.2 | | | | |
| | comp=Z,197nm,1.8s | | | | | | | | | |
| S44A | **Carbondale** | 24.10 | 4 | IAmb | IAmb | 19 27 35.1 | | | | |
| | comp=Z,75nm,0.8s | | | | | | | | | |
| ATAH | **Atahualpa** | 24.16 | 148 | P | **P** | **19 27 10.3** | **+3.2** | | | |
| | comp=Z,17nm,0.8s,baz=344,slow=5.8,SNR=13 | | | | | | | | | |
| ATAH | | | | LR | LR | 19 35 23.5 | | | | |
| | comp=Z,6µm,18.4s,baz=331,slow=34 | | | | | | | | | |
| KAN09 | **Caldwell North** | 24.18 | 347 | IAmb | IAmb | 19 27 30.6 | | | | |
| | comp=Z,148nm,1.7s | | | | | | | | | |
| 121A | **Cookes Peak, D** | 24.23 | 324 | IAmb | IAmb | 19 27 32.8 | | | | |
| | comp=Z,126nm,1.1s | | | | | | | | | |
| 121A | **Cookes Peak, D** | 24.23 | 324 | P | **P** | **19 27 09.5** | **+2.1** | | | |
| | baz=138,SNR=44 | | | | | | | | | |
| 319A | **Douglas** | 24.31 | 320 | IAmb | IAmb | 19 27 33.7 | | | | |
| | comp=Z,125nm,1.2s | | | | | | | | | |
| W59A | **Clinton** | 24.40 | 26 | IAMs_20 | IAMs_20 | 19 37 47.0 | | | | |
| | comp=Z,6µm,18.0s | | | | | | | | | |
| CCM | **Cathedral Cave** | 24.40 | 360 | P | **P** | **19 27 06.4** | **-2.2** | | | |
| CCM | | | | IAmb | IAmb | 19 27 10.7 | | | | |
| | comp=Z,57nm,0.8s | | | | | | | | | |
| CCM | **Cathedral Cave** | 24.40 | 360 | P | **P** | **19 27 07.3** | **-1.4** | | | |
| | baz=180 | | | | | | | | | |
| CCM | **Cathedral Cave** | 24.40 | 360 | P | **P** | **19 27 06.4** | **-2.2** | | | |
| CCM | | | | pmax | pmax | | | | | |
| | comp=Z,57nm,0.8s | | | | | | | | | |
| USIN | **University of** | 24.51 | 7 | IAmb | IAmb | 19 27 36.6 | | | | |
| | comp=Z,68nm,0.8s | | | | | | | | | |
| R40A | **Maddies Statio** | 24.66 | 358 | IAmb | IAmb | 19 27 12.2 | | | | |
| | comp=Z,53nm,0.8s | | | | | | | | | |
| V58A | **Windy Hill, Pi** | 24.66 | 24 | IAmb | IAmb | 19 27 12.3 | | | | |
| | comp=Z,49nm,0.8s | | | | | | | | | |
| CNNC | **Cliffs of the** | 24.70 | 27 | P | **P** | **19 27 10.2** | **-1.2** | | | |
| | baz=212 | | | | | | | | | |
| HUMP | **Col San Antoni** | 24.78 | 76 | | **PcP** | **19 30 48.4** | **+0.1** | | | |
| S51A | **Beattyville** | 24.92 | 14 | IAmb | IAmb | 19 27 36.9 | | | | |
| | comp=Z,56nm,1.0s | | | | | | | | | |
| Y22D | **IRIS PASSCAL I** | 24.93 | 328 | P | **P** | **19 27 15.8** | **+2.1** | | | |
| | baz=142 | | | | | | | | | |
| WCI | **Wyandotte Cave** | 24.96 | 9 | P | **P** | **19 27 12.4** | **-1.3** | | | |
| WCI | **Wyandotte Cave** | 24.96 | 9 | P | **P** | **19 27 12.7** | **-0.9** | | | |
| | baz=191 | | | | | | | | | |
| WCI | **Wyandotte Cave** | 24.96 | 9 | P | **P** | **19 27 12.4** | **-1.3** | | | |
| WCI | | | | pmax | pmax | | | | | |
| | comp=Z,108nm,0.9s | | | | | | | | | |
| SLM | **Saint Louis** | 25.00 | 2 | IAmb | IAmb | 19 27 47.0 | | | | |
| | comp=Z,57nm,0.8s | | | | | | | | | |
| RTBA | **Rita Blanca** | 25.04 | 338 | IAmb | IAmb | 19 27 17.6 | | | | |
| | comp=Z,44nm,0.8s | | | | | | | | | |
| R49A | **Shelbyville** | 25.21 | 11 | IAmb | IAmb | 19 27 48.9 | | | | |
| | comp=Z,88nm,1.2s | | | | | | | | | |
| OLIL | **Olney** | 25.23 | 6 | IAmb | IAmb | 19 27 40.1 | | | | |
| | comp=Z,41nm,0.7s | | | | | | | | | |
| Q44A | **Meyer Farm, Va** | 25.32 | 4 | IAmb | IAmb | 19 27 52.9 | | | | |
| | comp=Z,85nm,1.2s | | | | | | | | | |
| ANMO | **Albuquerque** | 25.38 | 330 | P | **P** | **19 27 18.6** | **+0.8** | | | |
| ANMO | **Albuquerque** | 25.38 | 330 | LR | LR | 19 38 43.4 | | | | |
| | comp=Z,2µm,19.8s,baz=229,slow=40 | | | | | | | | | |
| ANMO | **Albuquerque** | 25.38 | 330 | P | **P** | **19 27 19.0** | **+1.2** | | | |
| | baz=144 | | | | | | | | | |
| ANMO | **Albuquerque** | 25.38 | 330 | *c iP* | **P** | **19 27 18.6** | **+0.8** | | | |
| ANMO | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | | |
| BLA | **Blacksburg** | 25.45 | 20 | P | **P** | **19 27 17.8** | **-0.4** | | | |
| | baz=205,SNR=5.3 | | | | | | | | | |
| T57A | **Hurt** | 25.67 | 22 | IAmb | IAmb | 19 27 55.4 | | | | |
| | comp=Z,74nm,1.7s | | | | | | | | | |
| BLO | **Bloomington** | 25.85 | 8 | IAmb | IAmb | 19 27 55.8 | | | | |
| | comp=Z,74nm,0.8s | | | | | | | | | |
| TUC | **Tucson** | 25.89 | 319 | P | **P** | **19 27 23.9** | **+1.6** | | | |
| TUC | **Tucson** | 25.89 | 319 | P | **P** | **19 27 24.2** | **+1.9** | | | |
| | baz=132 | | | | | | | | | |
| TUC | **Tucson** | 25.89 | 319 | P | **P** | **19 27 23.9** | **+1.6** | | | |
| TUC | | | | pmax | pmax | | | | | |
| | comp=Z,21nm,0.8s | | | | | | | | | |
| TUC | | | | MLR | MLR | | | | | |
| | comp=Z,10µm,19.0s | | | | | | | | | |
| KSU1 | **Kansas State U** | 25.89 | 350 | IAmb | IAmb | 19 27 56.1 | | | | |
| | comp=Z,68nm,1.2s | | | | | | | | | |
| KSU1 | **Kansas State U** | 25.89 | 350 | P | **P** | **19 27 20.0** | **-2.1** | | | |
| | baz=168 | | | | | | | | | |
| SSFO | **Shawnee State** | 26.02 | 14 | IAmb | IAmb | 19 27 56.1 | | | | |
| | comp=Z,77nm,0.9s | | | | | | | | | |
| P38A | **Dawn** | 26.05 | 356 | IAmb | IAmb | 19 27 25.2 | | | | |
| | comp=Z,37nm,0.8s | | | | | | | | | |
| PCRV | **Puerto La Cruz** | 26.19 | 94 | P | **P** | **19 27 23.5** | **-1.7** | | | |
| | comp=Z,5.9nm,0.5s,baz=297,slow=5.3,SNR=2.3 | | | | | | | | | |
| PCRV | | | | LR | LR | 19 40 02.3 | | | | |
| | comp=Z,2µm,18.4s,slow=42 | | | | | | | | | |
| | comp=Z,5.9nm,0.5s | | | | | | | | | |
| CBKS | **Cedar Bluff** | 26.28 | 345 | P | **P** | **19 27 23.4** | **-2.3** | | | |
| | baz=161 | | | | | | | | | |
| T25A | **Trinidad** | 26.30 | 336 | IAmb | IAmb | 19 27 48.9 | | | | |
| | comp=Z,87nm,1.7s | | | | | | | | | |
| T25A | **Trinidad** | 26.30 | 336 | P | **P** | **19 27 26.2** | **+0.1** | | | |
| | baz=150,SNR=12 | | | | | | | | | |
| P48A | **Milroy** | 26.30 | 10 | IAmb | IAmb | 19 27 58.8 | | | | |
| | comp=Z,72nm,1.0s | | | | | | | | | |
| T59A | **Double "B" Far** | 26.31 | 25 | IAmb | IAmb | 19 27 27.2 | | | | |
| | comp=Z,36nm,0.7s | | | | | | | | | |
| P49A | **Miami Univ. Ec** | 26.50 | 11 | P | **P** | **19 27 25.5** | **-2.2** | | | |
| | baz=194 | | | | | | | | | |
| X18A | **Snowflake** | 26.92 | 324 | IAmb | IAmb | 19 27 36.3 | | | | |
| | comp=Z,34nm,0.7s | | | | | | | | | |
| Q54A | **Coxs Mills** | 26.93 | 18 | IAmb | IAmb | 19 28 04.5 | | | | |
| | comp=Z,64nm,1.1s | | | | | | | | | |
| HDIL | **Hopedale** | 26.95 | 3 | P | **P** | **19 27 29.5** | **-2.1** | | | |
| | baz=184 | | | | | | | | | |
| SFIN | **Lafayette** | 26.96 | 7 | IAmb | IAmb | 19 28 10.1 | | | | |
| | comp=Z,38nm,0.8s | | | | | | | | | |
| SFIN | **Lafayette** | 26.96 | 7 | P | **P** | **19 27 29.9** | **-1.9** | | | |
| | baz=185 | | | | | | | | | |
| 214A | **Organ Pipe Nat** | 26.98 | 316 | P | **P** | **19 27 32.7** | **+0.5** | | | |
| | baz=128,SNR=11 | | | | | | | | | |
| R58B | **Mineral** | 27.04 | 24 | IAmb | IAmb | 19 28 04.2 | | | | |
| | comp=Z,106nm,1.8s | | | | | | | | | |
| O48B | **Farmland** | 27.12 | 10 | IAmb | IAmb | 19 28 11.3 | | | | |
| | comp=Z,36nm,0.7s | | | | | | | | | |
| O48B | **Farmland** | 27.12 | 10 | P | **P** | **19 27 31.5** | **-1.8** | | | |
| | baz=193 | | | | | | | | | |
| P52A | **Corning** | 27.18 | 15 | P | **P** | **19 27 32.3** | **-1.5** | | | |
| | baz=200 | | | | | | | | | |
| N38A | **Joes South For** | 27.20 | 357 | IAmb | IAmb | 19 27 47.4 | | | | |
| | comp=Z,56nm,0.8s | | | | | | | | | |
| O49A | **Covington** | 27.20 | 12 | IAmb | IAmb | 19 27 56.2 | | | | |
| | comp=Z,175nm,1.8s | | | | | | | | | |
| W18A | **Petrified Fore** | 27.23 | 325 | IAmb | IAmb | 19 27 48.4 | | | | |
| | comp=Z,72nm,1.1s | | | | | | | | | |
| W18A | **Petrified Fore** | 27.23 | 325 | P | **P** | **19 27 36.6** | **+2.0** | | | |
| | baz=138,SNR=12 | | | | | | | | | |
| SDCO | **Great Sand Dun** | 27.26 | 335 | P | **P** | **19 27 35.2** | **+0.3** | | | |
| | baz=148,SNR=10 | | | | | | | | | |
| KSCO | **Kaye Shedlock'** | 27.30 | 340 | P | **P** | **19 27 34.7** | **-0.4** | | | |
| | baz=155 | | | | | | | | | |
| SEUS | **St. Eustatius** | 27.44 | 78 | IAMs_20 | IAMs_20 | 19 38 21.6 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| CBN | **Corbin Frederi** | 27.45 | 24 | P | **P** | **19 27 35.6** | **-0.5** | | | |
| | baz=210 | | | | | | | | | |
| ACSO | **Alum Creek Sta** | 27.53 | 14 | IAmb | IAmb | 19 27 59.6 | | | | |
| | comp=Z,137nm,1.5s | | | | | | | | | |
| ACSO | **Alum Creek Sta** | 27.53 | 14 | P | **P** | **19 27 35.4** | **-1.6** | | | |
| | baz=198 | | | | | | | | | |
| N47A | **Urbana** | 27.64 | 9 | IAmb | IAmb | 19 28 19.2 | | | | |
| | comp=Z,35nm,0.8s | | | | | | | | | |
| O52A | **Adamsville** | 27.70 | 16 | IAmb | IAmb | 19 28 10.3 | | | | |
| | comp=Z,74nm,1.3s | | | | | | | | | |
| S22A | **4UR Ranch, Cre** | 27.83 | 333 | IAmb | IAmb | 19 27 52.0 | | | | |
| | comp=Z,60nm,1.6s | | | | | | | | | |
| S22A | **4UR Ranch, Cre** | 27.83 | 333 | P | **P** | **19 27 40.8** | **+0.7** | | | |
| | baz=146,SNR=11 | | | | | | | | | |
| MCWV | **Mont Chateau** | 27.86 | 19 | P | **P** | **19 27 38.7** | **-1.1** | | | |
| | baz=204 | | | | | | | | | |
| CZSB | **Cruzeiro do Su** | 28.00 | 138 | P | **P** | **19 27 42.6** | **+1.3** | | | |
| CZSB | | | | IAmb | IAmb | 19 28 01.0 | | | | |
| | comp=Z,80nm,1.3s | | | | | | | | | |
| CZSB | | | | IAMs_20 | IAMs_20 | 19 38 16.9 | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| CZSB | **Cruzeiro do Su** | 28.00 | 138 | *eP* | **P** | **19 27 43.2** | **+1.9** | | | |
| O53A | **New Philadelph** | 28.00 | 16 | IAmb | IAmb | 19 28 26.9 | | | | |
| | comp=Z,59nm,0.9s | | | | | | | | | |
| O53A | **New Philadelph** | 28.00 | 16 | P | **P** | **19 27 39.8** | **-1.3** | | | |
| | baz=201 | | | | | | | | | |
| 113A | **Mohawk Valley,** | 28.12 | 317 | IAmb | IAmb | 19 27 53.9 | | | | |
| | comp=Z,141nm,2.0s | | | | | | | | | |
| Q24A | **Divide** | 28.16 | 337 | P | **P** | **19 27 42.9** | **-0.1** | | | |
| | baz=150 | | | | | | | | | |
| O54A | **Arella** | 28.17 | 18 | IAmb | IAmb | 19 27 45.0 | | | | |
| | comp=Z,30nm,0.6s | | | | | | | | | |
| MVCO | **Mesa Verde** | 28.18 | 330 | IAmb | IAmb | 19 27 46.2 | | | | |
| | comp=Z,34nm,0.9s | | | | | | | | | |
| MVCO | **Mesa Verde** | 28.18 | 330 | P | **P** | **19 27 44.4** | **+1.4** | | | |
| | baz=142,SNR=19 | | | | | | | | | |
| SCIA | **State Center** | 28.30 | 357 | P | **P** | **19 27 41.7** | **-2.1** | | | |
| | baz=176 | | | | | | | | | |
| P57A | **Homestead Farm** | 28.32 | 22 | IAmb | IAmb | 19 28 48.1 | | | | |
| | comp=Z,49nm,1.4s | | | | | | | | | |
| L42A | **Oliver, Polo** | 28.38 | 2 | IAmb | IAmb | 19 28 42.5 | | | | |
| | comp=Z,30nm,0.9s | | | | | | | | | |
| BGNE | **Belgrade** | 28.41 | 349 | P | **P** | **19 27 45.7** | **+0.9** | | | |
| | baz=166 | | | | | | | | | |
| WUAZ | **Wupatki** | 28.44 | 324 | IAmb | IAmb | 19 27 50.3 | | | | |
| | comp=Z,35nm,0.8s | | | | | | | | | |
| WUAZ | | | | IAMs_20 | IAMs_20 | 19 40 30.3 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| WUAZ | **Wupatki** | 28.44 | 324 | P | **P** | **19 27 47.4** | **+2.0** | | | |
| | baz=135,SNR=31 | | | | | | | | | |
| GDHS | **Morne Mazeau,** | 28.54 | 81 | IAMs_20 | IAMs_20 | 19 38 13.9 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| ANWB | **Willy Bob** | 28.59 | 78 | IAMs_20 | IAMs_20 | 19 40 33.0 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| N53A | **Lisbon** | 28.62 | 17 | IAmb | IAmb | 19 28 35.7 | | | | |
| | comp=Z,98nm,1.4s | | | | | | | | | |
| L44A | **Lake County Fo** | 28.66 | 5 | P | **P** | **19 27 44.2** | **-2.7** | | | |
| | baz=187 | | | | | | | | | |
| ABD | **La Joyeuse, An** | 28.81 | 80 | IAMs_20 | IAMs_20 | 19 38 32.1 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| L48A | **N Adams** | 28.89 | 10 | IAmb | IAmb | 19 28 44.6 | | | | |
| | comp=Z,35nm,0.6s | | | | | | | | | |
| OGNE | **Ogallala** | 28.89 | 343 | P | **P** | **19 27 47.0** | **-2.1** | | | |
| | baz=158 | | | | | | | | | |
| MAGL | **Barre de l'ile** | 29.00 | 82 | IAMs_20 | IAMs_20 | 19 38 26.1 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| GLA | **Glamis** | 29.00 | 316 | IAmb | IAmb | 19 28 02.1 | | | | |
| | comp=Z,57nm,1.4s | | | | | | | | | |
| GLA | **Glamis** | 29.00 | 316 | P | **P** | **19 27 52.1** | **+1.9** | | | |
| | baz=127,SNR=5.1 | | | | | | | | | |
| ISCO | **Idaho Springs** | 29.07 | 337 | P | **P** | **19 27 50.3** | **-0.6** | | | |
| | baz=150 | | | | | | | | | |
| NNA | **Nana** | 29.09 | 150 | LR | LR | 19 37 21.6 | | | | |
| | comp=Z,3µm,21.1s,baz=322,slow=32 | | | | | | | | | |
| NNA | **Nana** | 29.09 | 150 | *eP* | **P** | **19 27 54.0** | **+2.9** | | | |
| NNA | | | | pmax | pmax | | | | | |
| | comp=Z,32nm,1.5s | | | | | | | | | |
| SVN | **Savane Anatole** | 29.11 | 84 | IAMs_20 | IAMs_20 | 19 38 50.3 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| FDF | **Fort de France** | 29.14 | 84 | IAMs_20 | IAMs_20 | 19 39 09.8 | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| ESJX | **Sierra Juarez** | 29.18 | 313 | IAmb | IAmb | 19 28 13.7 | | | | |
| | comp=Z,71nm,1.9s | | | | | | | | | |
| GDSD | **La Dsirade Is** | 29.21 | 81 | IAMs_20 | IAMs_20 | 19 38 54.7 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| BIM | **Bigot** | 29.22 | 84 | IAMs_20 | IAMs_20 | 19 39 03.1 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| BLYC | **Blythe** | 29.22 | 317 | P | **P** | **19 27 52.9** | **+0.8** | | | |
| M53A | **Wf Miller and** | 29.25 | 16 | P | **P** | **19 27 51.0** | **-1.3** | | | |
| | baz=201 | | | | | | | | | |
| JFWS | **Jewell Farm** | 29.27 | 1 | IAmb | IAmb | 19 28 54.1 | | | | |
| | comp=Z,45nm,1.2s | | | | | | | | | |
| JFWS | **Jewell Farm** | 29.27 | 1 | P | **P** | **19 27 50.0** | **-2.4** | | | |
| | baz=182 | | | | | | | | | |
| PDMCI | **Parker Dam,Lak** | 29.32 | 319 | P | **P** | **19 27 54.8** | **+1.9** | | | |
| | baz=129,SNR=9.3 | | | | | | | | | |
| AAM | **Ann Arbor** | 29.38 | 11 | P | **P** | **19 27 51.4** | **-1.9** | | | |
| | baz=195 | | | | | | | | | |
| SSPA | **Standing Stone** | 29.39 | 21 | P | **P** | **19 27 52.3** | **-1.1** | | | |
| SSPA | | | | IAmb | IAmb | 19 28 57.0 | | | | |
| | comp=Z,69nm,1.8s | | | | | | | | | |
| SSPA | **Standing Stone** | 29.39 | 21 | P | **P** | **19 27 52.0** | **-1.4** | | | |
| | baz=207 | | | | | | | | | |
| ILAM | **Ilet Lapin Mar** | 29.40 | 84 | IAMs_20 | IAMs_20 | 19 39 17.8 | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| MPOM | **Morne Pois Mar** | 29.43 | 85 | IAMs_20 | IAMs_20 | 19 39 18.5 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| YUH | **Yuha Desert** | 29.52 | 314 | IAmb | IAmb | 19 28 16.6 | | | | |
| | comp=Z,146nm,2.0s | | | | | | | | | |
| SWSC | **Sam W. Stewart** | 29.61 | 315 | P | **P** | **19 27 57.6** | **+2.1** | | | |
| | baz=125 | | | | | | | | | |
| IKP | **In-Ko-Pah, Jac** | 29.65 | 314 | P | **P** | **19 27 58.4** | **+2.3** | | | |
| | baz=124 | | | | | | | | | |
| BC3 | **Big Chuckawall** | 29.78 | 316 | P | **P** | **19 27 58.6** | **+1.4** | | | |
| | baz=127,SNR=19 | | | | | | | | | |
| IRM | **Iron Mountain** | 29.88 | 317 | P | **P** | **19 28 00.2** | **+2.3** | | | |
| | baz=128 | | | | | | | | | |
| NEE2 | **Needles Airpor** | 29.91 | 319 | P | **P** | **19 27 58.3** | **+0.1** | | | |
| | baz=129 | | | | | | | | | |
| MONP2 | **Monument Peak** | 30.01 | 314 | P | **P** | **19 27 59.1** | **-0.2** | | | |
| | baz=124 | | | | | | | | | |
| ERPA | **Erie** | 30.07 | 17 | P | **P** | **19 27 58.1** | **-1.4** | | | |
| | baz=202 | | | | | | | | | |
| N23A | **Red Feather La** | 30.14 | 337 | P | **P** | **19 28 00.2** | **-0.3** | | | |
| | baz=151 | | | | | | | | | |
| BELC | **Belle Mtn. Jos** | 30.35 | 316 | P | **P** | **19 28 04.4** | **+2.1** | | | |
| | baz=126,SNR=5.5 | | | | | | | | | |
| O20A | **White River Ci** | 30.43 | 334 | P | **P** | **19 28 03.1** | **+0.2** | | | |
| | baz=146,SNR=5.8 | | | | | | | | | |
| TPFO | **Pinon Flats** | 30.43 | 315 | P | **P** | **19 28 05.3** | **+2.4** | | | |
| | baz=125 | | | | | | | | | |
| ECSD | **EROS Data Cent** | 30.43 | 352 | P | **P** | **19 28 00.5** | **-2.2** | | | |
| | baz=170 | | | | | | | | | |
| PFO | **Pinyon Flats O** | 30.44 | 315 | P | **P** | **19 28 04.8** | **+1.8** | | | |
| PFO | **Pinyon Flats O** | 30.44 | 315 | LR | LR | 19 41 43.0 | | | | |
| | comp=Z,3µm,18.3s,baz=127,slow=39 | | | | | | | | | |
| PFO | **Pinyon Flats O** | 30.44 | 315 | P | **P** | **19 28 05.4** | **+2.4** | | | |
| | baz=125 | | | | | | | | | |
| PFO | **Pinyon Flats O** | 30.44 | 315 | P | **P** | **19 28 04.8** | **+1.8** | | | |
| PFO | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,1.1s | | | | | | | | | |
| 109C | **Camp Elliot, M** | 30.48 | 314 | IAMs_20 | IAMs_20 | 19 41 31.4 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| 109C | **Camp Elliot, M** | 30.48 | 314 | P | **P** | **19 28 04.8** | **+1.6** | | | |
| | baz=123 | | | | | | | | | |
| LCMT | **Little Creek M** | 30.57 | 324 | IAmb | IAmb | 19 28 09.6 | | | | |
| | comp=Z,33nm,0.8s | | | | | | | | | |
| GMRC | **Granite Mounta** | 30.60 | 318 | P | **P** | **19 28 06.6** | **+2.2** | | | |
| | baz=128,SNR=24 | | | | | | | | | |
| BBSR | **BB Station** | 30.61 | 48 | P | **P** | **19 28 02.8** | **-1.5** | | | |
| BBSR | | | | IAmb | IAmb | 19 28 37.5 | | | | |
| | comp=Z,62nm,0.9s | | | | | | | | | |
| SRU | **San Rafael Swe** | 30.66 | 330 | IAmb | IAmb | 19 28 17.1 | | | | |
| | comp=Z,74nm,1.8s | | | | | | | | | |
| V12A | **Nelson** | 30.67 | 320 | IAmb | IAmb | 19 28 17.0 | | | | |
| | comp=Z,48nm,1.1s | | | | | | | | | |
| WVNY | **West Valley, N** | 30.74 | 18 | IAmb | IAmb | 19 29 05.3 | | | | |
| | comp=Z,35nm,0.9s | | | | | | | | | |
| WVNY | | | | IAMs_20 | IAMs_20 | 19 41 22.9 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| L56A | **Greenwood** | 30.83 | 20 | IAMs_20 | IAMs_20 | 19 41 13.3 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| SZCU | **Shurtz Canyon** | 30.89 | 325 | IAmb | IAmb | 19 28 11.7 | | | | |
| | comp=Z,44nm,0.8s | | | | | | | | | |
| P18A | **Preston Nutter** | 30.93 | 331 | IAmb | IAmb | 19 28 19.6 | | | | |
| | comp=Z,95nm,1.9s | | | | | | | | | |
| MURC | **Murrieta** | 30.94 | 315 | P | **P** | **19 28 09.6** | **+2.3** | | | |
| | baz=124 | | | | | | | | | |
| KSPA | **Keystone Colle** | 30.96 | 23 | IAmb | IAmb | 19 28 07.1 | | | | |
| | comp=Z,76nm,2.0s | | | | | | | | | |
| KSPA | | | | IAMs_20 | IAMs_20 | 19 41 03.7 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| CCUT | **Cedar City** | 31.01 | 324 | IAmb | IAmb | 19 28 14.2 | | | | |
| | comp=Z,34nm,0.9s | | | | | | | | | |
| ODNJ | **Ogdensburg** | 31.01 | 25 | IAMs_20 | IAMs_20 | 19 41 22.0 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| P17A | **Butcher Ranch,** | 31.05 | 330 | IAmb | IAmb | 19 28 20.5 | | | | |
| | comp=Z,39nm,1.2s | | | | | | | | | |
| MSU | **Marysvale** | 31.05 | 327 | PcP | **PcP** | **19 31 05.2** | **+1.6** | | | |
| HEC | **Hector,Ludlow** | 31.07 | 317 | P | **P** | **19 28 11.3** | **+2.8** | | | |
| | baz=127,SNR=12 | | | | | | | | | |
| BBRC | **Big Bear Solar** | 31.12 | 316 | P | **P** | **19 28 11.5** | **+2.4** | | | |
| | baz=125 | | | | | | | | | |
| TUQ | **Turquoise Moun** | 31.17 | 319 | P | **P** | **19 28 10.6** | **+1.1** | | | |
| | baz=128 | | | | | | | | | |
| TRNY | **Table Rock, Ra** | 31.22 | 25 | IAMs_20 | IAMs_20 | 19 41 27.6 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| PAL | **Palisades** | 31.24 | 26 | IAMs_20 | IAMs_20 | 19 42 04.0 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| PAL | **Palisades** | 31.24 | 26 | P | **P** | **19 28 08.3** | **-1.4** | | | |
| | baz=214 | | | | | | | | | |
| RWWY | **Rawlins** | 31.31 | 337 | IAmb | IAmb | 19 28 22.5 | | | | |
| | comp=Z,71nm,1.8s | | | | | | | | | |
| N62A | **Caumsett State** | 31.36 | 26 | IAMs_20 | IAMs_20 | 19 42 16.3 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| SHPR | **Sheep Range** | 31.36 | 321 | | **PcP** | **19 31 05.8** | **+1.5** | | | |
| RDMU | **Red Mountain** | 31.37 | 333 | IAmb | IAmb | 19 28 22.9 | | | | |
| | comp=Z,44nm,1.6s | | | | | | | | | |
| BINY | **Binghamton** | 31.44 | 22 | IAmb | IAmb | 19 28 48.4 | | | | |
| | comp=Z,39nm,1.2s | | | | | | | | | |
|

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| UCCT | **U. Connecticut** | | **32.61** | **27** | IAmb | IAmb | 19 28 22.1 | | | |
| | comp=Z,36nm,0.7s | | | | | | | | | |
| PECO | **Prince Edward** | | **32.63** | **19** | IAmb | IAmb | 19 28 21.9 | | | |
| | comp=Z,27nm,0.8s | | | | | | | | | |
| PECO | | | | | IAMs_20 | IAMs_20 | 19 42 28.7 | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| DUG | **Dugway, Tooele** | | **32.63** | **328** | IAmb | IAmb | 19 28 34.9 | | | |
| | comp=Z,34nm,1.2s | | | | | | | | | |
| DUG | | | | | PcP | **PcP** | **19 31 08.5** | **+0.8** | | |
| DUG | | | | | IAMs_20 | IAMs_20 | 19 43 34.9 | | | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| DUG | **Dugway, Tooele** | | **32.63** | **328** | P | **P** | **19 28 23.8** | **+1.6** | | |
| | baz=138,SNR=7.9 | | | | | | | | | |
| TCUT | **Toone Canyon** | | **32.65** | **331** | IAmb | IAmb | 19 28 26.2 | | | |
| | comp=Z,37nm,0.7s | | | | | | | | | |
| J58A | **Remsen** | | **32.70** | **22** | IAMs_20 | IAMs_20 | 19 42 17.7 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| SADO | **Sadowa** | | **32.76** | **16** | IAMs_20 | IAMs_20 | 19 42 01.2 | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| SADO | **Sadowa** | | **32.76** | **16** | LR | LR | 19 42 32.0 | | | |
| | comp=Z,4µm,18.5s,baz=202,slow=38 | | | | | | | | | |
| R11B | **Troy Canyon, C** | | **32.84** | **323** | IAmb | IAmb | 19 28 48.5 | | | |
| | comp=Z,88nm,1.9s | | | | | | | | | |
| R11B | **Troy Canyon, C** | | **32.84** | **323** | P | **P** | **19 28 26.6** | **+2.5** | | |
| | baz=132,SNR=34 | | | | | | | | | |
| SCZ2 | **Santa Cruz Isl** | | **32.86** | **313** | P | **P** | **19 28 26.0** | **+1.9** | | |
| | baz=122 | | | | | | | | | |
| ARVC | **Arvin** | | **32.91** | **316** | P | **P** | **19 28 26.8** | **+2.3** | | |
| | baz=124 | | | | | | | | | |
| L61B | **Northampton** | | **32.95** | **26** | IAMs_20 | IAMs_20 | 19 43 04.2 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| L61B | **Northampton** | | **32.95** | **26** | P | **P** | **19 28 27.0** | **+2.3** | | |
| | baz=215 | | | | | | | | | |
| E38A | **The Farm, Brul** | | **32.95** | **360** | IAmb | IAmb | 19 28 24.3 | | | |
| | comp=Z,23nm,0.7s | | | | | | | | | |
| DELO | **Deloro Mine** | | **32.96** | **18** | IAmb | IAmb | 19 28 24.9 | | | |
| | comp=Z,28nm,0.7s | | | | | | | | | |
| ISA | **Isabella, Lake** | | **32.97** | **317** | IAmb | IAmb | 19 28 49.1 | | | |
| | comp=Z,59nm,1.6s | | | | | | | | | |
| ISA | | | | | PcP | **PcP** | **19 31 09.7** | **+1.1** | | |
| ISA | **Isabella, Lake** | | **32.97** | **317** | P | **P** | **19 28 27.1** | **+1.9** | | |
| | baz=125,SNR=8.1 | | | | | | | | | |
| GRAC | **Grapevine Rang** | | **33.05** | **320** | IAmb | IAmb | 19 28 38.4 | | | |
| | comp=Z,51nm,1.1s | | | | | | | | | |
| GRAC | **Grapevine Rang** | | **33.05** | **320** | P | **P** | **19 28 28.5** | **+2.7** | | |
| | baz=128,SNR=5.7 | | | | | | | | | |
| HWUT | **Hardware Ranch** | | **33.10** | **331** | IAmb | IAmb | 19 28 30.7 | | | |
| | comp=Z,23nm,0.8s | | | | | | | | | |
| SBC | **Santa Barbara** | | **33.15** | **314** | P | **P** | **19 28 28.6** | **+2.0** | | |
| | baz=122 | | | | | | | | | |
| BW06 | **Boulder Array** | | **33.16** | **335** | P | **P** | **19 28 26.9** | **0.0** | | |
| | baz=146,SNR=6.5 | | | | | | | | | |
| PDAR | **Pinedale Array** | | **33.16** | **335** | P | **P** | **19 28 25.7** | **-1.2** | | |
| PDAR | **Pinedale Array** | | **33.16** | **335** | P | **P** | **19 28 25.1** | **-1.8** | | |
| | comp=Z,1.2nm,0.6s,baz=123,slow=9.8,SNR=7.9 | | | | | | | | | |
| PDAR | | | | | PcP | **PcP** | **19 31 09.4** | **+0.1** | | |
| | comp=Z,3.0nm,0.7s,baz=147,slow=5.4,SNR=8.4 | | | | | | | | | |
| PDAR | | | | | ScP | **ScP** | **19 34 56.5** | **+6.1** | | |
| | comp=Z,0.9nm,0.7s,baz=167,slow=4.4,SNR=5.1 | | | | | | | | | |
| PDAR | | | | | PKiKP | **PKiKP** | **19 38 34.6** | **-0.6** | | |
| | comp=Z,0.5nm,0.6s,baz=129,slow=3.6,SNR=6.8 | | | | | | | | | |
| PDAR | | | | | LR | LR | 19 44 21.2 | | | |
| | comp=Z,2µm,20.7s,baz=136,slow=41 | | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | | |
| CWC | **Cottonwood Cre** | | **33.17** | **318** | P | **P** | **19 28 28.4** | **+1.4** | | |
| | baz=127 | | | | | | | | | |
| GMN | **Gold Mountain** | | **33.17** | **320** | IAmb | IAmb | 19 28 49.9 | | | |
| | comp=Z,36nm,1.6s | | | | | | | | | |
| BGU | **Big Grassy Mou** | | **33.29** | **329** | IAmb | IAmb | 19 28 40.4 | | | |
| | comp=Z,32nm,1.0s | | | | | | | | | |
| K62A | **Royalston** | | **33.31** | **26** | IAMs_20 | IAMs_20 | 19 43 23.9 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| ACCN | **Adirondack Com** | | **33.33** | **24** | IAmb | IAmb | 19 28 29.6 | | | |
| | comp=Z,83nm,1.9s | | | | | | | | | |
| PKM | **Mcpherson Peak** | | **33.46** | **314** | P | **P** | **19 28 32.1** | **+2.5** | | |
| | baz=122 | | | | | | | | | |
| HRV | **Adam Dziewonsk** | | **33.47** | **27** | IAMs_20 | IAMs_20 | 19 42 13.2 | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| HRV | **Adam Dziewonsk** | | **33.47** | **27** | P | **P** | **19 28 27.9** | **-1.5** | | |
| | baz=216 | | | | | | | | | |
| WES | **Weston** | | **33.48** | **27** | IAMs_20 | IAMs_20 | 19 42 04.4 | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| VES | **Vestal, Richgr** | | **33.48** | **316** | P | **P** | **19 28 32.3** | **+2.7** | | |
| | baz=125,SNR=7.8 | | | | | | | | | |
| BCX | **Boston College** | | **33.51** | **27** | IAMs_20 | IAMs_20 | 19 43 16.1 | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| TIN | **Tinemaha, Big** | | **33.63** | **319** | P | **P** | **19 28 33.1** | **+2.2** | | |
| | baz=127 | | | | | | | | | |
| DSP | **Deep Springs** | | **33.66** | **320** | IAmb | IAmb | 19 28 43.5 | | | |
| | comp=Z,48nm,1.5s | | | | | | | | | |
| J61A | **Chester** | | **33.74** | **25** | IAMs_20 | IAMs_20 | 19 43 30.2 | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| SMMC | **Simmler** | | **33.81** | **315** | P | **P** | **19 28 34.6** | **+2.2** | | |
| | baz=123 | | | | | | | | | |
| AHID | **Auburn Hatcher** | | **33.81** | **333** | IAmb | IAmb | 19 28 46.2 | | | |
| | comp=Z,37nm,1.2s | | | | | | | | | |
| VOG | **Valley Oaks Go** | | **33.95** | **317** | P | **P** | **19 28 35.4** | **+1.8** | | |
| | baz=125 | | | | | | | | | |
| ETMB | **Extrema** | | **33.96** | **132** | P | **P** | **19 28 33.4** | **-0.5** | | |
| ETMB | | | | | IAmb | IAmb | 19 28 56.9 | | | |
| | comp=Z,44nm,0.9s | | | | | | | | | |
| ETMB | **Extrema** | | **33.96** | **132** | *e*P | **P** | **19 28 34.0** | **+0.2** | | |
| LONY | **Lake Ozonia** | | **34.05** | **21** | IAmb | IAmb | 19 28 42.8 | | | |
| | comp=Z,52nm,1.4s | | | | | | | | | |
| LONY | **Lake Ozonia** | | **34.05** | **21** | P | **P** | **19 28 32.7** | **-1.7** | | |
| | baz=210,SNR=9.2 | | | | | | | | | |
| WBO | **Williamsburg** | | **34.14** | **20** | IAmb | IAmb | 19 28 35.0 | | | |
| | comp=Z,21nm,0.8s | | | | | | | | | |
| HNH | **Hanover** | | **34.15** | **25** | IAMs_20 | IAMs_20 | 19 43 52.0 | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| SNOW | **Snow King Moun** | | **34.23** | **334** | IAmb | IAmb | 19 28 39.4 | | | |
| | comp=Z,39nm,0.8s | | | | | | | | | |
| EYMN | **Ely** | | **34.29** | **360** | P | **P** | **19 28 34.2** | **-2.2** | | |
| | baz=180,SNR=12 | | | | | | | | | |
| ELK | **Elko** | | **34.30** | **327** | IAmb | IAmb | 19 28 41.3 | | | |
| | comp=Z,24nm,0.8s | | | | | | | | | |
| ELK | | | | | PcP | **PcP** | **19 31 13.5** | **+0.9** | | |
| ELK | | | | | IAMs_20 | IAMs_20 | 19 44 10.0 | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| ELK | **Elko** | | **34.30** | **327** | LR | LR | 19 44 21.0 | | | |
| | comp=Z,4µm,20.4s,baz=152,slow=39 | | | | | | | | | |
| TPAW | **Teton Pass** | | **34.33** | **334** | IAmb | IAmb | 19 28 48.0 | | | |
| | comp=Z,32nm,1.0s | | | | | | | | | |
| MLAC | **Mammoth, Mamma** | | **34.36** | **319** | P | **P** | **19 28 39.9** | **+2.4** | | |
| | baz=127 | | | | | | | | | |
| OMMB | **Old Mammoth Mi** | | **34.45** | **319** | IAmb | IAmb | 19 28 50.7 | | | |
| | comp=Z,57nm,1.5s | | | | | | | | | |
| VT1 | **Waterbury** | | **34.48** | **24** | IAMs_20 | IAMs_20 | 19 43 09.6 | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| FXWY | **Fox Creek** | | **34.48** | **334** | IAmb | IAmb | 19 28 50.1 | | | |
| | comp=Z,39nm,1.4s | | | | | | | | | |
| NVAR | **Mina Array Bea** | | **34.52** | **321** | P | **P** | **19 28 40.5** | **+1.7** | | |
| NVAR | **Mina Array Bea** | | **34.52** | **321** | P | **P** | **19 28 40.6** | **+1.8** | | |
| | comp=Z,49nm,0.7s,baz=132,slow=8.4,SNR=55 | | | | | | | | | |
| NVAR | | | | | PcP | **PcP** | **19 31 13.7** | **+0.5** | | |
| | comp=Z,10nm,0.6s,baz=153,slow=3.1,SNR=4.8 | | | | | | | | | |
| NVAR | | | | | ScP | **ScP** | **19 35 02.7** | **+7.3** | | |
| | comp=Z,2.1nm,0.8s,baz=127,slow=5.8,SNR=5.7 | | | | | | | | | |
| NVAR | | | | | LR | LR | 19 44 33.2 | | | |
| | comp=Z,4µm,19.3s,baz=132,slow=40 | | | | | | | | | |
| MDPB | **Devils Postpil** | | **34.52** | **319** | IAmb | IAmb | 19 29 01.8 | | | |
| | comp=Z,48nm,1.3s | | | | | | | | | |
| MACA | **Manacapuru-AM** | | **34.52** | **117** | P | **P** | **19 28 38.8** | **0.0** | | |
| MACA | **Manacapuru-AM** | | **34.52** | **117** | *e*P | **P** | **19 28 38.9** | **+0.2** | | |
| IMW | **Indian Meadow** | | **34.66** | **335** | PcP | **PcP** | **19 31 14.2** | **+0.7** | | |
| FLWY | **Flagg Ranch** | | **34.71** | **335** | IAmb | IAmb | 19 29 02.7 | | | |
| | comp=Z,75nm,2.0s | | | | | | | | | |
| LBNH | **Lisbon** | | **34.73** | **25** | IAMs_20 | IAMs_20 | 19 44 10.5 | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| LBNH | **Lisbon** | | **34.73** | **25** | P | **P** | **19 28 38.1** | **-2.1** | | |
| | baz=214 | | | | | | | | | |
| KVN | **Kaiserville** | | **34.78** | **322** | IAmb | IAmb | 19 28 53.2 | | | |
| | comp=Z,68nm,1.4s | | | | | | | | | |
| AGMN | **Agassiz Nation** | | **34.86** | **355** | P | **P** | **19 28 39.4** | **-1.9** | | |
| | baz=172,SNR=8.2 | | | | | | | | | |
| MDND | **Maddock** | | **34.90** | **350** | P | **P** | **19 28 40.2** | **-1.5** | | |
| | baz=166 | | | | | | | | | |
| H17A | **Grant Village** | | **34.92** | **335** | IAmb | IAmb | 19 28 57.0 | | | |
| | comp=Z,57nm,1.9s | | | | | | | | | |
| H17A | | | | | IAMs_20 | IAMs_20 | 19 45 39.8 | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| H17A | **Grant Village** | | **34.92** | **335** | P | **P** | **19 28 41.9** | **-0.2** | | |
| | baz=146 | | | | | | | | | |
| RLMT | **Red Lodge** | | **35.02** | **337** | P | **P** | **19 28 42.4** | **-0.6** | | |
| | baz=148,SNR=8.1 | | | | | | | | | |
| YFT | **Old Faithful** | | **35.07** | **335** | IAmb | IAmb | 19 29 06.9 | | | |
| | comp=Z,53nm,1.5s | | | | | | | | | |
| MNTQ | **Montreal, Queb** | | **35.15** | **22** | IAmb | IAmb | 19 28 52.4 | | | |
| | comp=Z,84nm,1.5s | | | | | | | | | |
| BMN | **Battle Mountai** | | **35.17** | **324** | IAmb | IAmb | 19 28 48.4 | | | |
| | comp=Z,45nm,0.8s | | | | | | | | | |
| LAO | **LASA Array** | | **35.37** | **342** | P | **P** | **19 28 46.0** | **+0.2** | | |
| | baz=154 | | | | | | | | | |
| TRQ | **Mont Tremblant** | | **35.45** | **20** | IAmb | IAmb | 19 29 27.0 | | | |
| | comp=Z,50nm,1.5s | | | | | | | | | |
| TRQ | | | | | IAMs_20 | IAMs_20 | 19 43 55.5 | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| SAO | **San Andreas Ge** | | **35.58** | **316** | IAMs_20 | IAMs_20 | 19 44 43.3 | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| CMB | **Columbia Colle** | | **35.59** | **319** | IAmb | IAmb | 19 28 59.4 | | | |
| | comp=Z,34nm,1.2s | | | | | | | | | |
| CMB | | | | | IAMs_20 | IAMs_20 | 19 44 59.5 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| SAML | **Samuel** | | **35.67** | **127** | P | **P** | **19 28 47.4** | **-1.3** | | |
| SAML | | | | | IAmb | IAmb | 19 28 53.2 | | | |
| | comp=Z,45nm,1.2s | | | | | | | | | |
| SAML | **Samuel** | | **35.67** | **127** | P | **P** | **19 28 47.4** | **-1.3** | | |
| SAML | | | | | pmax | pmax | | | | |
| | comp=Z,45nm,1.3s | | | | | | | | | |
| SAML | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| SAML | **Samuel** | | **35.67** | **127** | *e*P | **P** | **19 28 47.7** | **-1.0** | | |
| HLID | **Hailey** | | **35.95** | **331** | IAMs_20 | IAMs_20 | 19 45 47.7 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| HLID | **Hailey** | | **35.95** | **331** | P | **P** | **19 28 51.8** | **+0.8** | | |
| | baz=139,SNR=20 | | | | | | | | | |
| PAHR | **Pah Rah Range** | | **35.97** | **322** | IAmb | IAmb | 19 29 15.3 | | | |
| | comp=Z,66nm,1.5s | | | | | | | | | |
| G62A | **West of Eustis** | | **36.10** | **25** | IAMs_20 | IAMs_20 | 19 45 24.8 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| VLDQ | **Val d'Or** | | **36.30** | **16** | IAmb | IAmb | 19 29 17.6 | | | |
| | comp=Z,56nm,1.7s | | | | | | | | | |
| VLDQ | | | | | IAMs_20 | IAMs_20 | 19 43 58.6 | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| BOZ | **Bozeman (W)** | | **36.33** | **336** | P | **P** | **19 28 54.9** | **+0.7** | | |
| | baz=145,SNR=15 | | | | | | | | | |
| DGMT | **Dagmar** | | **36.45** | **345** | IAmb | IAmb | 19 28 56.5 | | | |
| | comp=Z,20nm,0.7s | | | | | | | | | |
| DGMT | **Dagmar** | | **36.45** | **345** | P | **P** | **19 28 54.1** | **-0.9** | | |
| | baz=158 | | | | | | | | | |
| MFID | **Camas Ranch** | | **36.53** | **329** | IAmb | IAmb | 19 29 09.1 | | | |
| | comp=Z,112nm,1.7s | | | | | | | | | |
| MFID | | | | | IAMs_20 | IAMs_20 | 19 45 45.0 | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| PKME | **Peaks-Kenny Pk** | | **36.66** | **26** | IAMs_20 | IAMs_20 | 19 44 43.6 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| PKME | **Peaks-Kenny Pk** | | **36.66** | **26** | P | **P** | **19 28 55.2** | **-1.6** | | |
| | baz=217 | | | | | | | | | |
| ULM | **Lac du Bonnet** | | **36.79** | **355** | P | **P** | **19 28 55.4** | **-2.5** | | |
| | comp=Z,12nm,0.7s,baz=170,slow=9.4,SNR=22 | | | | | | | | | |
| ULM | | | | | LR | LR | 19 47 23.8 | | | |
| | comp=Z,2µm,18.2s,baz=176,slow=42 | | | | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| F62A | **Pittston Farm,** | | **36.89** | **25** | IAMs_20 | IAMs_20 | 19 45 26.5 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| ORV | **Oroville** | | **37.18** | **320** | IAmb | IAmb | 19 29 13.8 | | | |
| | comp=Z,56nm,1.4s | | | | | | | | | |
| MCCM | **Marconi Confer** | | **37.28** | **317** | IAMs_20 | IAMs_20 | 19 45 46.4 | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| WVOR | **Wild Horse Val** | | **37.30** | **326** | IAmb | IAmb | 19 29 07.2 | | | |
| | comp=Z,43nm,0.9s | | | | | | | | | |
| WVOR | | | | | IAMs_20 | IAMs_20 | 19 46 25.6 | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| LPAZ | **La Paz** | | **37.39** | **142** | P | **P** | **19 29 03.1** | **-0.9** | | |
| | comp=Z,3.5nm,0.7s,baz=334,slow=11,SNR=12 | | | | | | | | | |
| LPAZ | | | | | LR | LR | 19 44 21.0 | | | |
| | comp=Z,3µm,20.9s,baz=320,slow=36 | | | | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | | | | |
| LPAZ | **La Paz** | | **37.39** | **142** | *e*P | **P** | **19 29 02.9** | **-1.1** | | |
| GDXM | **Geysers** | | **37.59** | **318** | IAmb | IAmb | 19 29 17.2 | | | |
| | comp=Z,58nm,1.7s | | | | | | | | | |
| PB18 | **Visviri** | | **37.64** | **145** | IAMs_20 | IAMs_20 | 19 44 02.5 | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| EGMT | **Eagleton** | | **37.68** | **340** | IAmb | IAmb | 19 29 16.6 | | | |
| | comp=Z,104nm,1.9s | | | | | | | | | |
| EGMT | **Eagleton** | | **37.68** | **340** | P | **P** | **19 29 05.4** | **-0.1** | | |
| | baz=150 | | | | | | | | | |
| BPMT | **Black Pine Rid** | | **37.76** | **335** | PcP | **PcP** | **19 31 23.9** | **+1.2** | | |
| AP01 | **Chacalluta** | | **37.80** | **147** | IAMs_20 | IAMs_20 | 19 43 16.8 | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| LMQ | **Isla Isabel** | | **38.10** | **23** | IAMs_20 | IAMs_20 | 19 45 47.5 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| LDAQ | **Lac Daran** | | **38.10** | **22** | IAMs_20 | IAMs_20 | 19 45 32.7 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| D62A | **Allapoint, All** | | **38.22** | **25** | IAMs_20 | IAMs_20 | 19 45 22.7 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| MSO | **Missoula** | | **38.27** | **335** | IAmb | IAmb | 19 29 21.9 | | | |
| | comp=Z,86nm,1.7s | | | | | | | | | |
| MSO | **Missoula** | | **38.27** | **335** | P | **P** | **19 29 10.2** | **-0.4** | | |
| | baz=143,SNR=8.0 | | | | | | | | | |
| BMO | **Blue Mountains** | | **38.30** | **330** | IAmb | IAmb | 19 29 21.8 | | | |
| | comp=Z,68nm,1.6s | | | | | | | | | |
| BMO | | | | | IAMs_20 | IAMs_20 | 19 46 40.0 | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| O02D | **Mt. Diablo Mer** | | **38.35** | **320** | IAMs_20 | IAMs_20 | 19 45 33.5 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| KCPM | **Cahto Peak** | | **38.58** | **318** | IAmb | IAmb | 19 29 26.7 | | | |
| | comp=Z,65nm,1.2s | | | | | | | | | |
| MDP | **Montagnes des** | | **38.90** | **99** | PcP | **PcP** | **19 31 27.6** | **+1.0** | | |
| | comp=Z,10.0nm,0.6s,baz=275,slow=5.5,SNR=8.7 | | | | | | | | | |
| KMRM | **Mail Ridge** | | **38.96** | **319** | IAmb | IAmb | 19 29 28.5 | | | |
| | comp=Z,101nm,1.1s | | | | | | | | | |
| F10A | **Beach Ranch, E** | | **39.08** | **331** | IAmb | IAmb | 19 29 26.3 | | | |
| | comp=Z,61nm,0.8s | | | | | | | | | |
| LMN | **Caledonia Moun** | | **39.15** | **29** | IAmb | IAmb | 19 29 16.7 | | | |
| | comp=Z,93nm,1.9s | | | | | | | | | |
| LMN | | | | | IAMs_20 | IAMs_20 | 19 47 20.5 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| YBH | **Yreka Blue Hor** | | **39.20** | **322** | IAMs_20 | IAMs_20 | 19 47 10.2 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| YBH | **Yreka Blue Hor** | | **39.20** | **322** | LR | LR | 19 47 20.8 | | | |
| | comp=Z,4µm,19.6s,baz=148,slow=39 | | | | | | | | | |
| J05D | **Fort Rock, OR** | | **39.30** | **325** | IAmb | IAmb | 19 29 33.3 | | | |
| | comp=Z,129nm,1.9s | | | | | | | | | |
| KMPM | **Mount Pierce** | | **39.33** | **319** | IAmb | IAmb | 19 29 24.6 | | | |
| | comp=Z,59nm,0.8s | | | | | | | | | |
| KHMM | **Horse Mountain** | | **39.34** | **320** | IAmb | IAmb | 19 29 31.2 | | | |
| | comp=Z,56nm,1.0s | | | | | | | | | |
| ITTB | **Itaituba** | | **39.43** | **114** | *e*P | **P** | **19 29 19.6** | **-1.0** | | |
| PINE | **Pine Mountain** | | **39.47** | **326** | IAmb | IAmb | 19 29 23.9 | | | |
| | comp=Z,38nm,0.8s | | | | | | | | | |
| JCC | **Jacoby Creek,** | | **39.49** | **320** | IAMs_20 | IAMs_20 | 19 46 01.7 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| TA01 | **Diego Aracena** | | **39.70** | **148** | IAMs_20 | IAMs_20 | 19 45 15.2 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| KRMB | **Red Mountain** | | **39.81** | **321** | IAmb | IAmb | 19 29 35.1 | | | |
| | comp=Z,178nm,2.0s | | | | | | | | | |
| KSXB | **Camp Six Broad** | | **39.97** | **321** | IAmb | IAmb | 19 29 48.8 | | | |
| | comp=Z,66nm,1.5s | | | | | | | | | |
| G06A | **Carlson Farm,** | | **40.26** | **327** | IAmb | IAmb | 19 29 40.6 | | | |
| | comp=Z,80nm,1.8s | | | | | | | | | |
| VILB | **Vilhena** | | **40.45** | **129** | IAmb | IAmb | 19 29 36.3 | | | |
| | comp=Z,48nm,1.0s | | | | | | | | | |
| VILB | **Vilhena** | | **40.45** | **129** | *e*P | **P** | **19 29 28.8** | **-0.2** | | |
| D08A | **Wollman Farm,** | | **40.67** | **331** | IAmb | IAmb | 19 29 41.8 | | | |
| | comp=Z,82nm,1.5s | | | | | | | | | |
| H04A | **Detroit Lake** | | **40.73** | **326** | IAmb | IAmb | 19 29 34.2 | | | |
| | comp=Z,67nm,0.9s | | | | | | | | | |
| NEW | **Newport** | | **40.75** | **333** | IAMs_20 | IAMs_20 | 19 48 58.4 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| NEW | **Newport** | | **40.75** | **333** | LR | LR | 19 49 08.4 | | | |
| | comp=Z,2µm,18.6s,baz=136,slow=40 | | | | | | | | | |
| NEW | **Newport** | | **40.75** | **333** | P | **P** | **19 29 31.0** | **-0.1** | | |
| | baz=140 | | | | | | | | | |
| H04D | **Lebanon** | | **40.93** | **325** | IAmb | IAmb | 19 29 43.2 | | | |
| | comp=Z,68nm,0.9s | | | | | | | | | |
| MXC | **Moxie City** | | **41.00** | **329** | IAmb | IAmb | 19 29 45.4 | | | |
| | comp=Z,89nm,1.4s | | | | | | | | | |
| NPGB | **Novo Progresso** | | **41.04** | **118** | *e*P | **P** | **19 29 32.4** | **-1.5** | | |
| MCPB | **Macapa, AP** | | **41.15** | **106** | *e*P | **P** | **19 29 33.9** | **-0.9** | | |
| PB04 | **IPOC Station P** | | **41.20** | **150** | IAMs_20 | IAMs_20 | 19 43 34.9 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| PB09 | **IPOC Station P** | | **41.20** | **148** | IAmb | IAmb | 19 30 17.5 | | | |
| | comp=Z,99nm,1.8s | | | | | | | | | |
| COR | **Corvallis** | | **41.28** | **325** | P | **P** | **19 29 36.0** | **+0.6** | | |
| COR | **Corvallis** | | **41.28** | **325** | P | **P** | **19 29 36.0** | **+0.6** | | |
| COR | | | | | pmax | pmax | | | | |
| | comp=Z,362nm,1.8s | | | | | | | | | |
| COR | | | | | MLR | MLR | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| PB05 | **IPOC Station P** | | **41.61** | **150** | IAMs_20 | IAMs_20 | 19 43 21.8 | | | |
| | comp=Z,3µm,22.0s | | | | | | | | | |
| G03D | **McMinnville, O** | | **41.65** | **326** | IAmb | IAmb | 19 29 51.6 | | | |
| | comp=Z,83nm,1.0s | | | | | | | | | |
| SIV | **San Ignacio** | | **41.81** | **134** | LR | LR | 19 46 32.0 | | | |
| | comp=Z,4µm,19.7s,baz=326,slow=36 | | | | | | | | | |
| LON | **Longmire** | | **41.88** | **328** | IAmb | IAmb | 19 29 50.1 | | | |
| | comp=Z,31nm,0.8s | | | | | | | | | |
| FFC | **Flin Flon** | | **41.94** | **351** | P | **P** | **19 29 39.1** | **-1.6** | | |
| FFC | **Flin Flon** | | **41.94** | **351** | P | **P** | **19 29 39.1** | **-1.6** | | |
| FFC | | | | | pmax | pmax | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| LVC | **Limon Verde** | | **42.05** | **148** | P | **P** | **19 29 44.2** | **+1.8** | | |
| LVC | **Limon Verde** | | **42.05** | **148** | IAMs_20 | IAMs_20 | 19 46 55.5 | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| LVC | **Limon Verde** | | **42.05** | **148** | LR | LR | 19 47 07.3 | | | |
| | comp=Z,2µm,18.4s,baz=321,slow=36 | | | | | | | | | |
| LVC | **Limon Verde** | | **42.05** | **148** | P | **P** | **19 29 44.2** | **+1.8** | | |
| LVC | | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| LVC | | | | | MLR | MLR | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| LVC | **Limon Verde** | | **42.05** | **148** | *e*P | **P** | **19 29 43.3** | **+0.9** | | |
| D05A | **Enumclaw** | | **42.27** | **329** | IAmb | IAmb | 19 29 55.2 | | | |
| | comp=Z,160nm,1.8s | | | | | | | | | |
| PDRB | **Porto dos Gac** | | **42.34** | **125** | *e*P | **P** | **19 29 43.1** | **-1.4** | | |
| CLDB | **Colider** | | **42.68** | **123** | *e*P | **P** | **19 29 45.8** | **-1.5** | | |
| AF01 | **San Pedro de A** | | **42.71** | **148** | IAMs_20 | IAMs_20 | 19 44 31.8 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| RADR | **Rader Ridge** | | **42.71** | **327** | IAmb | IAmb | 19 30 06.1 | | | |
| | comp=Z,84nm,1.0s | | | | | | | | | |
| PTLB | **Pontes e Lacer** | | **42.84** | **131** | *e*P | **P** | **19 29 48.3** | **-0.2** | | |
| BBSD | **Serra de San D** | | **42.95** | **134** | *e*P | **P** | **19 29 48.9** | **-0.4** | | |
| NLWA | **Neilton Lookou** | | **43.37** | **328** | IAMs_20 | IAMs_20 | 19 50 09.0 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| RPN | **Rapa Nui** | | **44.11** | **204** | LR | LR | 19 43 44.4 | | | |
| | comp=Z,3µm,18.8s,baz=32,slow=30 | | | | | | | | | |
| FCC | **Fort Churchill** | | **45.18** | **358** | IAmb | IAmb | 19 30 06.5 | | | |
| | comp=Z,19nm,0.8s | | | | | | | | | |
| FCC | | | | | IAMs_20 | IAMs_20 | 19 51 32.9 | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| SCHQ | **Schefferville** | | **45.37** | **20** | P | **P** | **19 30 06.1** | **-2.2** | | |
| SCHQ | **Schefferville** | | **45.37** | **20** | P | **P** | **19 30 06.2** | **-2.2** | | |
| | comp=Z,60nm,0.8s,baz=213,slow=6.6,SNR=18 | | | | | | | | | |
| SCHQ | | | | | LR | LR | 19 50 09.7 | | | |
| | comp=Z,4µm,19.5s,baz=215,slow=38 | | | | | | | | | |
| | comp=Z,60nm,0.8s | | | | | | | | | |
| PRPB | **Parauapebas** | | **45.51** | **113** | *e*P | **P** | **19 30 09.3** | **-0.7** | | |
| TMAB | **Tom-Au,PA,Br** | | **45.57** | **107** | *e*P | **P** | **19 30 09.7** | **-0.7** | | |
| SALV | **Santo Antonio** | | **45.69** | **129** | *e*P | **P** | **19 30 10.1** | **-1.2** | | |
| CBB | **Campbell River** | | **45.83** | **330** | IAmb | IAmb | 19 30 23.4 | | | |
| | comp=Z,38nm,1.1s | | | | | | | | | |
| LCO | **Las Campanas** | | **46.72** | **155** | P | **P** | **19 30 20.1** | **+0.6** | | |
| LCO | | | | | IAmb | IAmb | 19 30 34.5 | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| LCO | **Las Campanas** | | **46.72** | **155** | P | **P** | **19 30 20.1** | **+0.6** | | |
| LCO | | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| AC05 | **El Transito** | | **46.74** | **155** | IAmb | IAmb | 19 30 33.5 | | | |
| | comp=Z,70nm,1.6s | | | | | | | | | |
| AC05 | | | | | IAMs_20 | IAMs_20 | 19 45 45.7 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| SNDB | **Serra Nova Dou** | | **46.99** | **121** | *e*P | **P** | **19 30 21.8** | **+0.2** | | |
| H03N2 | **Juan Fernandez** | | **48.17** | **166** | T | T | 20 22 04.4 | | | |
| | baz=347,slow=76,SNR=45 | | | | | | | | | |
| H03N1 | **Juan Fernandez** | | **48.18** | **166** | T | T | 20 22 12.2 | | | |
| | baz=347,slow=76,SNR=56 | | | | | | | | | |
| H03N3 | **Juan Fernandez** | | **48.19** | **166** | T | T | 20 22 11.1 | | | |
| | baz=347,slow=76,SNR=64 | | | | | | | | | |
| CO03 | **El Pedregal** | | **48.34** | **156** | IAmb | IAmb | 19 30 43.7 | | | |
| | comp=Z,33nm,1.4s | | | | | | | | | |
| BBB | **Bella Bella** | | **48.54** | **330** | IAmb | IAmb | 19 30 36.3 | | | |
| | comp=Z,22nm,0.9s | | | | | | | | | |
| BBB | **Bella Bella** | | **48.54** | **330** | LR | LR | 19 54 25.4 | | | |
| | comp=Z,1µm,18.6s,baz=140,sl

**CRSM Crissiumal (Br** 54.43 139 *e*P P **19 31 16.4 -1.1**
**WRGLY Wrigley** 54.55 343 IAMs_20 IAMs_20 19 58 31.8
comp=Z,2µm,18.0s
**WRGLY Wrigley** 54.55 343 P P **19 31 17.3 -0.5**
baz=140
**Q32M Nakina River** 54.62 335 IAmb IAmb 19 31 30.3
comp=Z,53nm,1.2s
**Q32M Nakina River** 54.62 335 P P **19 31 19.8 +1.2**
baz=128,SNR=9.5
**NBPB Pedra_Branca-C** 54.62 107 *e*P P **19 31 18.1 -1.1**
**S32K Killisnoo** 54.70 333 P P **19 31 20.4 +1.4**
baz=125
**SIT Sitka** 54.81 332 P P **19 31 21.5 +1.7**
baz=124
**TGTN Hyland Airport** 54.82 339 P P **19 31 21.0 +1.1**
baz=134
**R32K Eaglecrest** 55.15 334 IAMs_20 IAMs_20 19 59 12.9
comp=Z,2µm,19.0s
**R32K Eaglecrest** 55.15 334 P P **19 31 22.6 +0.4**
baz=126
**NBCL Cascavel-CE** 55.38 105 *e*P P **19 31 25.3 +0.7**
**ITAB Concordia** 55.50 137 *e*P P **19 31 24.5 -0.6**
**P32M Atlin** 55.59 335 IAMs_20 IAMs_20 19 59 04.7
comp=Z,2µm,18.0s
**P32M Atlin** 55.59 335 P P **19 31 26.2 +0.7**
baz=127,SNR=5.1
**P33M Teslin, Yukon** 55.62 336 IAmb IAmb 19 31 36.6
comp=Z,57nm,1.8s
P33M IAMs_20 IAMs_20 19 58 44.3
comp=Z,2µm,21.0s
**P33M Teslin, Yukon** 55.62 336 P P **19 31 26.0 +0.3**
baz=129,SNR=6.6
**S31K Pelican** 55.72 333 P P **19 31 27.9 +1.6**
baz=124
**RODS Rosario do Sul** 55.72 142 *e*P P **19 31 26.5 -0.2**
**SKAG Skagway** 56.18 335 P P **19 31 29.9 +0.3**
baz=126
**RKT Rikitea** 56.26 230 *e*P P **19 31 29.8 -0.9**
RKT *e*S S **19 39 16.1 -2.0**
comp=Z,729nm,25.0s
RKT *e*SS SS **19 43 01.2 -4.3**
comp=Z,5µm,29.0s
RKT *e*LQ LQ 19 45 36.3
comp=Z,2µm,29.0s
RKT *e*LR LR 19 47 54.9
comp=Z,6µm,34.8s
**N32M Quiet Lake** 56.31 337 IAMs_20 IAMs_20 19 58 42.5
comp=Z,11µm,25.2s
**N32M Quiet Lake** 56.31 337 P P **19 31 30.6 0.0**
comp=Z,2µm,22.0s
**VAO Valinhos** 56.51 130 *e*P P **19 31 31.4 -1.2**
baz=129
**DIAM Diamantina, MG** 56.53 123 *e*P P **19 31 32.6 -0.4**
**PLBC Pleasant Camp** 56.61 334 P P **19 31 32.8 +0.1**
baz=124
**WHY Whitehorse** 56.70 336 IAmb IAmb 19 32 40.1
comp=Z,30nm,1.6s
**WHY Whitehorse** 56.70 336 P P **19 31 33.3 -0.2**
baz=127
**CPSB Cacapava Do Su** 56.83 141 *e*P P **19 31 34.8 +0.2**
**BSCB Bom Sucesso** 57.07 126 *e*P P **19 31 36.7 +0.1**
**FARO Faro, Yukon** 57.09 338 IAmb IAmb 19 32 32.1
comp=Z,36nm,2.0s
FARO IAMs_20 IAMs_20 20 00 06.0
comp=Z,2µm,20.0s
**FARO Faro, Yukon** 57.09 338 P P **19 31 36.6 +0.5**
baz=129
**P30M Million Dollar** 57.24 335 P P **19 31 38.5 +1.3**
baz=124
**O30N Mendenhall** 57.25 336 IAmb IAmb 19 31 39.5
comp=Z,16nm,0.8s
O30N IAMs_20 IAMs_20 20 00 20.5
comp=Z,2µm,18.0s
**O30N Mendenhall** 57.25 336 P P **19 31 38.0 +0.8**
baz=125,SNR=11
**P29M Windy Craggy** 57.29 334 IAmb IAmb 19 31 40.3
comp=Z,26nm,0.8s
**P29M Windy Craggy** 57.29 334 P P **19 31 38.6 +1.0**
baz=123,SNR=8.7
**PLCA Paso Flores** 57.30 161 P P **19 31 37.5 -0.3**
PLCA IAmb IAmb 19 31 49.6
comp=Z,50nm,1.4s
**PLCA Paso Flores** 57.30 161 P P **19 31 37.6 -0.3**
comp=Z,5.2nm,0.9s,baz=353,slow=6.9,SNR=5.6
PLCA LR LR 19 51 31.3
comp=Z,3µm,18.1s,baz=360,slow=31
comp=Z,5.2nm,0.9s
**PLCA Paso Flores** 57.30 161 *e*P P **19 31 38.0 +0.1**
**M31M Drury Creek, Y** 57.45 338 P P **19 31 38.6 0.0**
baz=128
**N31M Braeburn, Yuko** 57.55 336 IAmb IAmb 19 31 49.9
comp=Z,22nm,1.1s
**N31M Braeburn, Yuko** 57.55 336 P P **19 31 40.1 +0.8**
baz=126,SNR=6.5
**PARB Paraibuna** 57.72 129 *e*P P **19 31 40.8 -0.3**
**O29M Mount Kennedy** 58.01 334 P P **19 31 43.5 +0.8**
baz=122
**PNL Peninsula** 58.02 334 P P **19 31 43.1 +0.4**
baz=121
**N30M Aishikik Lake** 58.05 336 IAmb IAmb 19 31 53.9
comp=Z,21nm,1.1s
N30M IAMs_20 IAMs_20 19 58 47.5
comp=Z,2µm,20.0s
**N30M Aishikik Lake** 58.05 336 P P **19 31 43.9 +1.0**
baz=125,SNR=6.5
**RCBR Riachuelo** 58.16 106 P P **19 31 44.2 -0.2**
RCBR IAmb IAmb 19 31 46.2
comp=Z,31nm,1.1s
**RCBR Riachuelo** 58.16 106 IAMs_20 IAMs_20 19 58 32.9
comp=Z,2µm,20.0s
**RCBR Riachuelo** 58.16 106 LR LR 19 58 43.6
comp=Z,741nm,20.3s,baz=332,slow=38
**RCBR Riachuelo** 58.16 106 P P **19 31 44.2 -0.2**
RCBR pmax pmax
comp=Z,31nm,1.1s
RCBR MLR MLR
comp=Z,2µm,20.0s
**RCBR Riachuelo** 58.16 106 *e*P P **19 31 45.0 +0.6**
**YUK6 Outpost Mounta** 58.27 335 P P **19 31 45.3 +0.6**
baz=123
**LL01 San Ignacio de** 58.27 164 P P **19 31 44.9 +0.4**
LL01 IAmb IAmb 19 31 56.1
comp=Z,42nm,1.2s
**BCPM Bancas Point** 58.28 334 IAMs_20 IAMs_20 19 58 39.6
comp=Z,2µm,21.0s
**NBLA Lagarto - SE** 58.31 112 *e*P P **19 31 45.0 -0.4**
**YUK4 Talbot Arm** 58.60 335 P P **19 31 47.8 +0.8**
baz=123
**PINM Pinnacle** 58.62 334 P P **19 31 48.0 +1.1**
baz=121
**SJMB Sao Joao De Ma** 58.78 122 *e*P P **19 31 48.9 +0.4**
**VAS01 Vassouras-RJ** 58.80 127 *e*P P **19 31 49.0 +0.3**
**NBCA Caruaru-PE** 58.89 108 *e*P P **19 31 50.2 +0.7**
**GUA01 Guaratinga, BA** 58.93 119 *e*P P **19 31 50.0 +0.3**
**O28M Mount Upton** 58.94 334 P P **19 31 49.7 +0.4**
baz=121
**YUK8 Steele Glacier** 59.03 335 P P **19 31 50.1 +0.1**
baz=122,SNR=10
**M29M Somme Creek** 59.14 337 IAmb IAmb 19 32 01.2
comp=Z,28nm,0.8s
M29M IAMs_20 IAMs_20 19 59 24.1
comp=Z,2µm,21.0s
**M29M Somme Creek** 59.14 337 P P **19 31 51.0 +0.5**
baz=124,SNR=34
**NBAN Anadia - AL** 59.18 110 *e*P P **19 31 51.6 +0.2**
**LL02 Futaleuf** 59.18 164 P P **19 31 51.8 +0.9**
LL02 IAmb IAmb 19 32 01.9
comp=Z,27nm,1.2s
**L29M L29M** 59.38 337 IAmb IAmb 19 32 50.7
comp=Z,32nm,1.2s
L29M IAMs_20 IAMs_20 20 00 27.8
comp=Z,2µm,21.0s
**L29M L29M** 59.38 337 P P **19 31 52.2 +0.1**
baz=124,SNR=8.4
**MESA MESA** 59.39 333 P P **19 31 53.3 +0.9**
baz=119
**C36M Paulatuk** 59.51 347 P P **19 31 53.5 +0.8**
baz=142
**CTG Chitna Glacier** 59.52 334 P P **19 31 54.1 +0.9**
baz=120
**YUK3 Moose Creek** 59.57 335 P P **19 31 54.2 +0.6**
baz=121,SNR=8.6
**K29M Barlow Dome** 59.58 338 IAmb IAmb 19 32 03.4
comp=Z,38nm,1.8s
**K29M Barlow Dome** 59.58 338 P P **19 31 53.2 -0.3**
baz=125
**J30M Hart River** 59.59 339 IAmb IAmb 19 32 53.1
comp=Z,28nm,1.7s
J30M IAMs_20 IAMs_20 20 00 48.9
comp=Z,1µm,21.0s
**J30M Hart River** 59.59 339 P P **19 31 53.4 -0.3**
baz=127
**SFJD Kangerlussuaq** 59.70 17 LR LR 19 58 48.3
comp=Z,3µm,18.5s,baz=220,slow=37
**RIB01 Linhares ES** 59.73 122 *e*P P **19 31 55.4 +0.3**
**WAX Waxell Ridge** 59.92 333 IAMs_20 IAMs_20 19 58 15.0
comp=Z,2µm,21.0s
**I30M Mount Dempster** 60.00 340 IAmb IAmb 19 32 06.2
comp=Z,25nm,1.4s
**I30M Mount Dempster** 60.00 340 P P **19 31 56.0 -0.5**
baz=127,SNR=12
**TGL Tana Glacier** 60.05 334 IAMs_20 IAMs_20 19 59 17.6
comp=Z,2µm,20.0s
**ALF01 Guarapari-ES** 60.10 124 *e*P P **19 31 58.9 +1.3**
**CRQE Cirque** 60.17 334 P P **19 31 58.2 +0.5**
baz=118
**J29N Klondike Camp** 60.18 339 IAMs_20 IAMs_20 20 02 36.7
comp=Z,2µm,18.0s
**J29N Klondike Camp** 60.18 339 P P **19 31 57.8 +0.2**
baz=125
**KAIM Kayak Island** 60.38 332 P P **19 31 60.0 +1.1**
baz=116
**DAWY Dawson** 60.39 338 P P **19 31 58.1 -0.9**
baz=124
**G31M Satah River** 60.40 342 IAmb IAmb 19 31 59.7
comp=Z,14nm,0.8s
**G31M Satah River** 60.40 342 P P **19 31 58.2 -0.7**
baz=130,SNR=10
**MCARA McCarthy VSAT** 60.44 334 P P **19 32 00.5 +1.2**
baz=118,SNR=5.3
**M27K Edge Creek, AK** 60.44 335 IAmb IAmb 19 32 10.4
comp=Z,22nm,1.2s
**M27K Edge Creek, AK** 60.44 335 P P **19 32 00.1 +0.6**
baz=120,SNR=9.0
**HMT Hamilton** 60.49 333 IAMs_20 IAMs_20 20 02 18.1
comp=Z,1µm,20.0s
**ABR01 Abrolhos, BA** 60.51 120 *e*P P **19 32 00.7 +0.2**
**VRDI Verde Repeater** 60.55 334 IAMs_20 IAMs_20 19 59 35.6
comp=Z,2µm,21.0s
**F31M Tsiigehtchic** 60.58 343 P P **19 31 59.4 -0.7**
baz=131
**RAGM Ragged Mountai** 60.69 333 IAMs_20 IAMs_20 20 00 30.6
comp=Z,2µm,19.0s
**I29M Ogilvie Camp,** 60.74 339 IAMs_20 IAMs_20 20 01 32.1
comp=Z,2µm,19.0s
**I29M Ogilvie Camp,** 60.74 339 P P **19 32 00.7 -0.6**
baz=125
**BCAR Beaver Creek A** 60.76 336 P P **19 32 01.5 -0.1**
**L27K Beaver Creek,** 60.78 336 IAmb IAmb 19 32 12.1
comp=Z,14nm,0.9s
**L27K Beaver Creek,** 60.78 336 P P **19 32 02.0 +0.3**
baz=121,SNR=19
**GLB Gilahla Butte** 60.80 334 IAmb IAmb 19 32 04.4
comp=Z,24nm,0.8s
GLB IAMs_20 IAMs_20 19 59 45.3
comp=Z,2µm,22.0s
**EPYK Eagle Plains** 60.81 341 IAmb IAmb 19 32 55.7
comp=Z,32nm,1.3s
EPYK IAMs_20 IAMs_20 20 02 10.3
comp=Z,1µm,18.0s
**EPYK Eagle Plains** 60.81 341 P P **19 32 01.8 -0.1**
baz=127
**M26K Nabesna, AK** 60.92 335 IAmb IAmb 19 32 56.7
comp=Z,27nm,1.3s
**M26K Nabesna, AK** 60.92 335 P P **19 32 03.0 +0.3**
baz=119,SNR=6.5
**BMRM Bremner River** 60.92 333 P P **19 32 03.4 +0.7**
baz=117,SNR=9.2
**G30M tAoh Zraii Nji** 61.03 341 IAmb IAmb 19 32 47.5
comp=Z,27nm,1.7s
G30M IAMs_20 IAMs_20 20 03 33.6
comp=Z,1µm,19.0s
**G30M tAoh Zraii Nji** 61.03 341 P P **19 32 02.7 -0.6**
baz=128
**Q23K Middleton Isla** 61.05 331 P P **19 32 04.5 +1.0**
baz=114
**INK Inuvik** 61.09 343 IAmb IAmb 19 32 16.3
comp=Z,22nm,1.1s
**INK Inuvik** 61.09 343 LR LR 20 04 50.7
comp=Z,2µm,18.4s,baz=143,slow=42
**INK Inuvik** 61.09 343 P P **19 32 03.2 -0.3**
baz=132,SNR=7.9
**RES Resolute Bay** 61.16 359 IAmb IAmb 19 32 03.3
comp=Z,22nm,0.7s
**RES Resolute Bay** 61.16 359 LR LR 20 01 14.4
comp=Z,2µm,19.3s,baz=178,slow=39
**N25K Chitina, Valde** 61.21 334 IAMs_20 IAMs_20 20 03 20.2
comp=Z,1µm,19.0s
**N25K Chitina, Valde** 61.21 334 P P **19 32 05.8 +1.1**
baz=120,SNR=21
**EYAK Cordova Ski Ar** 61.24 333 P P **19 32 05.9 +1.1**
baz=115,SNR=13
**H29M Whitestone** 61.26 340 IAmb IAmb 19 32 57.3
comp=Z,28nm,1.3s
**H29M Whitestone** 61.26 340 P P **19 32 04.6 -0.2**
baz=126
**F30M Barrier River** 61.29 342 P P **19 32 04.5 -0.5**
baz=129,SNR=10
**I28M Miner Creek** 61.35 339 IAMs_20 IAMs_20 20 02 45.3
comp=Z,1µm,19.0s
**I28M Miner Creek** 61.35 339 P P **19 32 04.8 -0.8**
baz=124
**L26K Log Cabin Wild** 61.36 336 P P **19 32 06.2 +0.6**
baz=119
**K27K Chicken** 61.37 337 IAMs_20 IAMs_20 20 02 01.5
comp=Z,2µm,21.0s
**K27K Chicken** 61.37 337 P P **19 32 05.7 +0.1**
baz=121
**EGAK Eagle** 61.42 338 IAmb IAmb 19 32 31.8
comp=Z,22nm,1.4s
**EGAK Eagle** 61.42 338 P P **19 32 04.9 -1.0**
baz=122
**MENT Mentasta** 61.47 336 IAMs_20 IAMs_20 20 00 49.0
comp=Z,2µm,20.0s
**HIN Hinchinbrook I** 61.52 332 IAMs_20 IAMs_20 19 59 14.4
comp=Z,1µm,22.0s
**G29M Pine Creek** 61.55 341 IAMs_20 IAMs_20 20 02 50.6
comp=Z,1µm,19.0s
**G29M Pine Creek** 61.55 341 P P **19 32 06.7 -0.1**
baz=126,SNR=5.8
**KLU Klutina** 61.73 334 IAMs_20 IAMs_20 20 03 25.9
comp=Z,1µm,20.0s
**KLU Klutina** 61.73 334 P P **19 32 08.8 +0.6**
baz=116,SNR=23
**P23K Montague Islan** 61.77 332 P P **19 32 09.2 +0.8**
baz=114,SNR=7.5
**HARP HAARP** 61.80 335 P P **19 32 08.6 0.0**
baz=117
**A36M Sachs Harbour** 61.84 349 P P **19 32 06.9 -1.7**
baz=142
**GLI Glacier Island** 61.98 333 IAmb IAmb 19 32 12.6
comp=Z,18nm,0.8s
**GLI Glacier Island** 61.98 333 P P **19 32 10.1 +0.3**
baz=114,SNR=11
**I27K Kandik River** 62.02 339 P P **19 32 10.0 -0.1**
baz=122,SNR=9.9
**SCRK Sand Creek** 62.07 337 IAmb IAmb 19 32 21.1
comp=Z,42nm,1.6s
**SCRK Sand Creek** 62.07 337 P P **19 32 10.5 0.0**
baz=119,SNR=9.7
**M24K Tolsona, Glenn** 62.10 334 P P **19 32 12.0 +1.3**
baz=116,SNR=7.0
**J26L Joseph Creek** 62.17 337 IAmb IAmb 19 32 21.7
comp=Z,39nm,1.4s
J26L IAMs_20 IAMs_20 20 02 04.4
comp=Z,2µm,21.0s
**J26L Joseph Creek** 62.17 337 P P **19 32 11.3 +0.2**
baz=120,SNR=22
**PAX Paxson** 62.19 335 P P **19 32 11.1 -0.1**
baz=117,SNR=9.5
**H27K Steamboat Moun** 62.33 339 P P **19 32 11.8 -0.3**
baz=122,SNR=15
**E29M Blow River** 62.40 342 IAmb IAmb 19 32 57.6
comp=Z,27nm,1.2s
**E29M Blow River** 62.40 342 P P **19 32 12.3 -0.1**
baz=127,SNR=11
**I26K Coal Creek Min** 62.42 338 IAMs_20 IAMs_20 20 03 56.3
comp=Z,2µm,18.0s
**I26K Coal Creek Min** 62.42 338 P P **19 32 11.9 -0.7**
baz=120
**SCM Sheep Creek Mo** 62.48 334 IAMs_20 IAMs_20 19 59 29.8
comp=Z,1µm,22.0s
**SCM Sheep Creek Mo** 62.48 334 P P **19 32 13.5 +0.3**
baz=114,SNR=14
**PWL Port Wells** 62.53 332 P P **19 32 13.2 -0.3**
baz=113
**F28M Old Crow** 62.55 341 P P **19 32 13.4 -0.1**
baz=125,SNR=37
**M23K Glacier View** 62.64 333 P P **19 32 14.5 +0.3**
baz=114,SNR=10
**G27K Doyon Strip** 62.68 340 P P **19 32 13.9 -0.5**
baz=122,SNR=8.5
**K24K Donnelly Dome** 62.69 336 P P **19 32 14.9 +0.4**
baz=117
**SEW Seward** 62.76 331 P P **19 32 15.2 +0.2**
baz=112
**KNK Knik Glacier** 62.80 333 P P **19 32 15.8 +0.5**
baz=113,SNR=16
**SML Sawmill** 62.91 333 IAMs_20 IAMs_20 20 01 43.0
comp=Z,1µm,20.0s
**SML Sawmill** 62.91 333 P P **19 32 16.3 +0.3**
baz=114,SNR=8.1
**J25K Salcha River,** 62.91 337 IAmb IAmb 19 32 26.4
comp=Z,21nm,1.1s
**J25K Salcha River,** 62.91 337 P P **19 32 16.1 +0.1**
baz=118,SNR=22
**WAT6 Susitna Watana** 62.97 334 P P **19 32 16.5 -0.1**
baz=114,SNR=17
**E28M Babbage River** 63.01 342 IAmb IAmb 19 32 29.3
comp=Z,14nm,0.9s
E28M IAMs_20 IAMs_20 20 03 50.1
comp=Z,2µm,19.0s
**E28M Babbage River** 63.01 342 P P **19 32 16.0 -0.6**
baz=125,SNR=12
**DHY Denali Highway** 63.02 335 IAmb IAmb 19 33 10.2
comp=Z,16nm,1.2s
**DHY Denali Highway** 63.02 335 P P **19 32 16.2 -0.7**
baz=115
**O22K Cooper Landing** 63.02 332 IAMs_20 IAMs_20 19 59 05.3
comp=Z,2µm,21.0s
**O22K Cooper Landing** 63.02 332 P P **19 32 16.9 +0.2**
baz=112
**PMR Palmer** 63.17 333 P P **19 32 17.8 +0.1**
baz=113
**D28M Stokes Point** 63.21 343 P P **19 32 17.9 +0.1**
baz=127
**BRSE Bradley Lake S** 63.23 331 P P **19 32 18.5 +0.3**
baz=110,SNR=10
**RC01 Rabbit Creek A** 63.25 332 P P **19 32 18.6 +0.3**
baz=112,SNR=19
**BRLK Bradley Lake** 63.31 331 IAMs_20 IAMs_20 19 59 16.1
comp=Z,1µm,21.0s
**PRP Porcupine Dome** 63.39 338 IAmb IAmb 19 33 06.6
comp=Z,55nm,1.7s
**PRP Porcupine Dome** 63.39 338 P P **19 32 19.0 -0.3**
baz=118,SNR=14
**CNPM China Poot** 63.40 330 IAMs_20 IAMs_20 19 58 53.3
comp=Z,2µm,22.0s
**E27K Coleen River** 63.41 341 IAmb IAmb 19 32 30.2
comp=Z,18nm,1.1s
**E27K Coleen River** 63.41 341 P P **19 32 19.1 -0.1**
baz=123,SNR=11
**WAT1 Susitna Watana** 63.41 334 P P **19 32 18.8 -0.5**
baz=114
**HDA Harding Lake** 63.42 336 P P **19 32 18.8 -0.5**
baz=116,SNR=9.5
**G26K Porcupine Rive** 63.47 340 P P **19 32 19.0 -0.6**
baz=120,SNR=7.5
**KDAK Kodiak Island** 63.51 328 P P **19 32 20.3 +0.3**
**KDAK Kodiak Island** 63.51 328 LR LR 20 01 17.8
comp=Z,884nm,19.4s,baz=127,slow=37
**KDAK Kodiak Island** 63.51 328 P P **19 32 19.8 -0.2**
baz=108
**KDAK Kodiak Island** 63.51 328 *ce*P P **19 32 20.7 +0.7**
KDAK pmax pmax
comp=Z,38nm,0.9s
**IL31** 63.56 337 IAmb IAmb 19 32 30.2
comp=Z,43nm,1.3s
**ILAR Eielson Array** 63.56 337 P P **19 32 19.1 -1.2**
**ILAR Eielson Array** 63.56 337 P P **19 32 19.2 -1.0**
comp=Z,12nm,0.9s,baz=184,slow=6.7,SNR=87
ILAR LR LR 20 02 30.7
comp=Z,2µm,21.1s,baz=115,slow=38
comp=Z,12nm,0.9s
**HOM Homer** 63.64 330 IAMs_20 IAMs_20 19 58 50.5
comp=Z,1µm,21.0s
**HOM Homer** 63.64 330 P P **19 32 21.2 +0.4**
baz=109
**SYI Shuyak Island** 63.67 329 IAMs_20 IAMs_20 19 59 55.1
comp=Z,1µm,21.0s
**M22K Willow** 63.67 333 P P **19 32 20.9 0.0**
baz=112
**Q20K Shuyak Island** 63.67 329 P P **19 32 21.4 +0.4**
baz=108
**OHAK Old Harbor** 63.71 328 P P **19 32 21.5 +0.2**
baz=107
**RND Reindeer** 63.77 335 IAMs_20 IAMs_20 20 04 56.8
comp=Z,2µm,20.0s
**D27M Malcolm River** 63.80 342 P P **19 32 21.6 -0.3**
baz=124
**SUA Susitna One** 63.84 333 P P **19 32 22.5 +0.2**
baz=111,SNR=7.2
**H25L Birch Creek** 63.85 338 P P **19 32 22.3 +0.3**
baz=118
**POKR Poker Plat Res** 63.92 337 IAmb IAmb 19 33 09.1
comp=Z,31nm,1.1s
**POKR Poker Plat Res** 63.92 337 P P **19 32 22.5 -0.1**
baz=116,SNR=7.3
**MCK McKinley** 63.93 335 P P **19 32 22.6 -0.1**
baz=114,SNR=5.9
**F26K Sheenjek River** 63.97 340 P P **19 32 23.0 +0.1**
baz=120,SNR=11
**CUT Chulitna** 63.98 334 IAMs_20 IAMs_20 20 02 37.3
comp=Z,2µm,22.0s
**CUT Chulitna** 63.98 334 P P **19 32 22.9 0.0**
baz=112
**COLA College** 63.98 337 P P **19 32 21.2 -1.7**
**COLA College** 63.98 337 P P **19 32 22.3 -0.7**
baz=115
**COLA College** 63.98 337 *de*P P **19 32 23.3 +0.4**
COLA pmax pmax
comp=Z,15nm,0.9s
**BMAR Burnt Mountain** 63.98 340 P P **19 32 22.4 -0.6**
**SII Sitkinak Islan** 64.00 327 P P **19 32 23.2 -0.1**
baz=106
**TULEG Thule** 64.08 6 P P **19 32 21.1 -2.3**
TULEG IAmb IAmb 19 32 23.2
comp=Z,12nm,0.7s
**MDM Murphy Dome** 64.16 337 IAmb IAmb 19 33 10.0
comp=Z,27nm,1.2s
**G25K Bearman Lake** 64.18 339 P P **19 32 24.6 +0.3**
baz=118,SNR=7.7
**ICESG Greenland Ices** 64.24 18 *i*P P **19 32 21.5 -3.6**
**O20K Slope Mountain** 64.24 331 P P **19 32 24.6 -0.3**
baz=108,SNR=5.2
**BWN Browne** 64.32 336 IAMs_20 IAMs_20 20 03 06.7
comp=Z,2µm,19.0s
**NEA2 Nenana** 64.33 336 IAmb IAmb 19 32 27.3
comp=Z,11nm,0.8s
NEA2 IAMs_20 IAMs_20 20 01 54.7
comp=Z,1µm,21.0s
**NEA2 Nenana** 64.33 336 P P **19 32 24.7 -0.6**
baz=114,SNR=11
**SKT Skwentna** 64.38 333 P P **19 32 25.9 +0.2**
baz=110,SNR=29
**Q19K Cape Douglas,** 64.39 329 P P **19 32 26.2 +0.4**
baz=107
**P19K Oil Pt** 64.40 330 P P **19 32 26.3 +0.5**
baz=108,SNR=7.5
**H24K Noodor Dome** 64.40 338 IAmb IAmb 19 32 35.9
comp=Z,22nm,1.1s
**H24K Noodor Dome** 64.40 338 P P **19 32 25.6 -0.2**
baz=116,SNR=20
**R18K Karluk** 64.41 328 P P **19 32 26.4 +0.5**
baz=106
**N20K Mount Spurr** 64.41 332 P P **19 32 26.3 +0.3**
baz=110,SNR=6.6
**SPCR Spurr Chakacha** 64.41 332 P P 19 32 08.3 -18
baz=110
**F25K Christian Rive** 64.42 340 P P **19 32 26.4 +0.5**
baz=119,SNR=14
**CHIR Chirikof Islan** 64.59 326 P P **19 32 27.5 +0.3**
baz=104
**G24K Hadweenzic Riv** 64.64 339 IAmb IAmb 19 32 37.8
comp=Z,23nm,1.2s
G24K IAMs_20 IAMs_20 20 06 00.0
comp=Z,1µm,21.0s
**G24K Hadweenzic Riv** 64.64 339 P P **19 32 27.5 +0.2**
baz=116,SNR=13
**I23K Minto, Yukon-K** 64.67 337 P P **19 32 27.6 +0.1**
baz=114,SNR=36
**C27K Jago River** 64.83 342 P P **19 32 28.4 -0.1**
baz=122

**BPAW Bear Paw Mtn. 64.91 335** IAMs_20 IAMs_20 20 03 57.0
comp=Z,2µm,20.0s
**BPAW Bear Paw Mtn. 64.91 335** P **P** **19 32 28.8 -0.3**
baz=112,SNR=30
**Q18K Katmai Hardscr 64.99 329** P **P** **19 32 30.0 +0.2**
baz=106,SNR=9.6
**H23K Yukon River 65.02 337** P **P** **19 32 29.5 -0.3**
baz=114,SNR=6.7
**M20K Styx River 65.06 333** IAMs_20 IAMs_20 20 01 39.9
comp=Z,1µm,20.0s
**M20K Styx River 65.06 333** P **P** **19 32 30.2 0.0**
baz=109,SNR=39
**F24K Squaw Lake 65.15 339** IAMs_20 IAMs_20 20 05 44.5
comp=Z,1µm,19.0s
**F24K Squaw Lake 65.15 339** P **P** **19 32 31.0 +0.4**
baz=116
**MLY Manley 65.16 336** IAMs_20 IAMs_20 20 03 56.7
comp=Z,1µm,19.0s
**MLY Manley 65.16 336** P **P** **19 32 30.7 -0.1**
baz=113,SNR=78
**P18K Big Mountain, 65.30 330** P **P** **19 32 32.0 +0.3**
baz=106,SNR=5.9
**Q17K Contact Creek 65.33 328** P **P** **19 32 32.3 +0.2**
baz=105,SNR=12
**C26K Camden Bay 65.34 342** P **P** **19 32 31.8 +0.1**
baz=120
**N19K Bonanza Creek 65.34 331** IAMs_20 IAMs_20 20 01 27.7
comp=Z,1µm,20.0s
**N19K Bonanza Creek 65.34 331** P **P** **19 32 32.2 +0.1**
baz=107,SNR=34
**PPT Papeete 65.40 243** LR LR 19 54 01.5
comp=Z,2µm,18.1s,baz=40,slow=29
**PPT2 Papeete2 65.41 243** *e*P **P** **19 32 35.2 +2.1**
comp=Z,178nm,25.2s
PPT2 *e*S **S** **19 41 13.4 -1.7**
comp=Z,811nm,24.5s
PPT2 *e*SS **SS** **19 45 29.3 +0.1**
comp=Z,412nm,31.0s
PPT2 *e*LQ LQ 19 49 25.9
comp=Z,1µm,29.5s
PPT2 *e*LR LR 19 52 07.4
comp=Z,2µm,22.8s
PPT2 *e*LR LR 19 52 07.7
comp=Z,3µm,24.0s
**O18K Koktuh Hills 65.42 330** P **P** **19 32 32.5 0.0**
baz=106,SNR=16
**R17L Mt. Peulik Vol 65.42 328** P **P** **19 32 33.1 +0.6**
baz=104
**D25K Kavik River 65.49 341** IAmb IAmb 19 33 15.4
comp=Z,23nm,1.1s
**D25K Kavik River 65.49 341** P **P** **19 32 33.0 +0.2**
baz=119
**G23K Bananza Creek 65.56 338** P **P** **19 32 33.1 -0.2**
baz=114,SNR=13
**L20K Farewell, AK 65.58 333** P **P** **19 32 33.2 -0.3**
baz=108,SNR=78
**E24K Your Creek 65.60 340** IAMs_20 IAMs_20 20 04 59.4
comp=Z,1µm,19.0s
**E24K Your Creek 65.60 340** P **P** **19 32 33.8 +0.3**
baz=116
**M19K Big River Lodg 65.63 332** IAMs_20 IAMs_20 20 01 57.0
comp=Z,1µm,20.0s
**M19K Big River Lodg 65.63 332** P **P** **19 32 34.0 +0.3**
baz=108,SNR=21
**H22K Ishtalitna Cre 65.74 337** P **P** **19 32 33.5 -0.9**
baz=112,SNR=14
**Q16K King Salmon 65.83 329** P **P** **19 32 35.8 +0.7**
baz=104
**COLD Coldfoot 65.83 339** P **P** **19 32 35.7 +0.7**
baz=114,SNR=5.4
**P17K Kvichak River 65.85 329** P **P** **19 32 35.2 0.0**
baz=105
**L19K White Mountain 65.92 333** IAmb IAmb 19 32 45.6
comp=Z,23nm,1.0s
L19K IAMs_20 IAMs_20 20 03 40.7
comp=Z,1µm,19.0s
**L19K White Mountain 65.92 333** P **P** **19 32 35.4 -0.3**
baz=107,SNR=16
**SVW2 Sparrevohn 65.94 331** IAmb IAmb 19 32 37.0
comp=Z,23nm,0.8s
**K20K Telida 65.94 334** IAMs_20 IAMs_20 20 03 48.8
comp=Z,1µm,20.0s
**K20K Telida 65.94 334** P **P** **19 32 35.5 -0.3**
baz=109
**N18K Kilae Creek 65.97 331** IAMs_20 IAMs_20 20 03 11.3
comp=Z,1µm,18.0s
**N18K Kilae Creek 65.97 331** P **P** **19 32 35.9 -0.2**
baz=106,SNR=24
**E23K Chandalar 65.97 339** P **P** **19 32 36.6 +0.6**
baz=115,SNR=17
**R16K Pilot Point 66.04 327** P **P** **19 32 36.7 +0.2**
baz=103
**M18K Stony River 66.16 332** P **P** **19 32 37.0 -0.2**
baz=106,SNR=26
**G22K Bettles 66.18 338** P **P** **19 32 37.3 +0.1**
baz=113
**D24K Happy Valley 66.19 341** IAmb IAmb 19 33 24.1
comp=Z,57nm,1.9s
**D24K Happy Valley 66.19 341** P **P** **19 32 37.1 -0.1**
baz=116
**H21K Melozitna Rive 66.20 337** IAMs_20 IAMs_20 20 04 54.0
comp=Z,1µm,18.0s
**H21K Melozitna Rive 66.20 337** P **P** **19 32 36.6 -0.8**
baz=111,SNR=13
**TOLK Toolik Lake Re 66.21 340** IAmb IAmb 19 33 34.1
comp=Z,20nm,1.2s
**TOLK Toolik Lake Re 66.21 340** P **P** **19 32 37.1 -0.3**
baz=115,SNR=8.0
**CHGN Chignik 66.23 326** P **P** **19 32 37.5 -0.1**
baz=102,SNR=11
**J20K Nowinta River 66.24 335** IAmb IAmb 19 32 38.7
comp=Z,18nm,0.8s
J20K IAMs_20 IAMs_20 20 06 09.0
comp=Z,2µm,20.0s
**J20K Nowinta River 66.24 335** P **P** **19 32 37.1 -0.5**
baz=109,SNR=27
**O17K Koliganek Bris 66.32 330** P **P** **19 32 38.7 +0.5**
baz=104
**C24K Franklin Bluff 66.40 341** P **P** **19 32 38.3 -0.2**
baz=116
**SUMG Summit 66.45 15** P **P** **19 32 37.1 -2.2**
SUMG IAmb IAmb 19 32 40.7
comp=Z,18nm,0.9s
**SUMG Summit 66.45 15** P **P** **19 32 37.2 -2.2**
SUMG pmax pmax
comp=Z,19nm,0.9s
**SUMG Summit 66.45 15** *i*P **P** **19 32 37.0 -2.4**
SUMG IAmb IAmb 19 32 40.4
comp=Z,17nm,0.8s
**N17K Nushagak Hills 66.55 330** P **P** **19 32 40.0 +0.3**
baz=104,SNR=24
**I20K Naaghedeneel 66.57 335** IAMs_20 IAMs_20 20 02 17.5
comp=Z,1µm,21.0s
**I20K Naaghedeneel 66.57 335** P **P** **19 32 39.4 -0.3**
baz=109,SNR=18
**P16K Nushagak River 66.59 329** P **P** **19 32 40.0 +0.1**
baz=103
**CNBA Chernabura Isl 66.61 324** IAMs_20 IAMs_20 20 03 05.7
comp=Z,1µm,20.0s
**CHNA Chernabura Isl 66.61 324** P **P** **19 32 40.1 0.0**
baz=100
**F22K John River 66.65 338** P **P** **19 32 40.5 +0.3**
baz=112,SNR=9.5
**IMAR Indian Mountai 66.68 337** P **P** **19 32 39.8 -0.6**
**D23K Nanushuk River 66.71 340** P **P** **19 32 40.7 +0.1**
baz=114
**L18K Granite Mounta 66.76 332** P **P** **19 32 40.8 -0.2**
baz=106,SNR=9.4
**E22K Anaktuvuk Pass 66.76 339** IAMs_20 IAMs_20 20 05 57.0
comp=Z,1µm,18.0s
**E22K Anaktuvuk Pass 66.76 339** P **P** **19 32 40.9 -0.1**
baz=113
**O16K Kokwok River B 66.77 329** P **P** **19 32 41.2 +0.1**
baz=103,SNR=18
**G21K Allakaket 66.77 337** IAmb IAmb 19 32 42.6
comp=Z,15nm,0.8s
**G21K Allakaket 66.77 337** P **P** **19 32 40.7 -0.3**
baz=110,SNR=17
**J19K Poorman 66.80 334** IAmb IAmb 19 32 50.8
comp=Z,26nm,0.9s
J19K IAMs_20 IAMs_20 20 03 03.4
comp=Z,1µm,21.0s
**J19K Poorman 66.80 334** P **P** **19 32 40.6 -0.6**
baz=107,SNR=17
**S14K Fog Glacier 66.85 326** P **P** **19 32 42.2 +0.4**
baz=101
**M17K Holitna River 66.89 331** IAMs_20 IAMs_20 20 04 01.5
comp=Z,1µm,18.0s
**M17K Holitna River 66.89 331** P **P** **19 32 41.8 0.0**
baz=105,SNR=18
**H20K Anotleneega Mo 66.96 336** P **P** **19 32 41.4 -0.9**
baz=109,SNR=12
**F21K Alatna River 67.01 338** IAmb IAmb 19 32 44.7
comp=Z,23nm,0.9s
**F21K Alatna River 67.01 338** P **P** **19 32 43.1 +0.5**
baz=111,SNR=30
**C23K Itkillik River 67.05 341** IAmb IAmb 19 33 39.8
comp=Z,32nm,1.1s
**C23K Itkillik River 67.05 341** P **P** **19 32 42.9 +0.2**
baz=115,SNR=13
**NEEM North Greenlan 67.05 9** *e*P **P** **19 32 40.8 -2.2**
NEEM IAmb IAmb 19 32 43.8
comp=Z,21nm,1.0s
**J18K Innoko River 67.11 334** IAmb IAmb 19 32 53.0
comp=Z,53nm,1.7s
J18K IAMs_20 IAMs_20 20 04 11.7
comp=Z,1µm,21.0s
**J18K Innoko River 67.11 334** P **P** **19 32 42.6 -0.7**
baz=106,SNR=11
**SDPT Sand Point 67.20 325** P **P** **19 32 44.0 +0.2**
baz=99
**N16K Nishlik Lake 67.30 330** P **P** **19 32 44.8 +0.3**
baz=103
**D22K Ayikyak River 67.34 340** IAmb IAmb 19 32 58.2
comp=Z,11nm,0.8s
**D22K Ayikyak River 67.34 340** P **P** **19 32 44.8 +0.2**
baz=112,SNR=6.9
**L17K Donlin 67.46 332** P **P** **19 32 45.3 -0.2**
baz=104,SNR=12
**M16K Timber Creek 67.51 331** IAmb IAmb 19 32 47.7
comp=Z,21nm,0.7s
M16K IAMs_20 IAMs_20 20 04 49.0
comp=Z,1µm,18.0s
**M16K Timber Creek 67.51 331** P **P** **19 32 46.2 +0.3**
baz=103,SNR=17
**GCSA Galena City Sc 67.54 335** P **P** **19 32 45.5 -0.3**
baz=106
**O15K Ungalikthiuk R 67.54 329** P **P** **19 32 45.1 -0.9**
baz=102,SNR=7.0
**H19K Roundabout Mou 67.59 336** IAmb IAmb 19 32 47.5
comp=Z,20nm,0.8s
H19K IAMs_20 IAMs_20 20 03 46.0
comp=Z,1µm,21.0s
**H19K Roundabout Mou 67.59 336** P **P** **19 32 46.0 -0.2**
baz=107,SNR=14
**K17K Iditarod 67.61 333** IAmb IAmb 19 32 56.0
comp=Z,31nm,1.0s
K17K IAMs_20 IAMs_20 20 06 39.9
comp=Z,1µm,21.0s
**K17K Iditarod 67.61 333** P **P** **19 32 46.5 +0.1**
baz=104,SNR=11
**E21K Killik River 67.62 339** IAmb IAmb 19 32 56.5
comp=Z,23nm,1.2s
E21K IAMs_20 IAMs_20 20 05 43.7
comp=Z,1µm,20.0s
**E21K Killik River 67.62 339** P **P** **19 32 46.7 +0.3**
baz=111,SNR=5.7
**F20K Avaraart Lake 67.78 338** IAmb IAmb 19 32 57.9
comp=Z,15nm,1.1s
**F20K Avaraart Lake 67.78 338** P **P** **19 32 47.5 +0.1**
baz=108,SNR=18
**TBI Tubuai 67.78 238** *e*P **P** **19 32 47.5 -0.6**
comp=Z,579nm,25.8s
**TBI Tubuai 67.78 238** *e*PP PP 19 35 04.4 -14
TBI comp=Z,549nm,36.5s *e*S **S** **19 41 40.6 -2.9**
TBI comp=Z,3µm,24.5s *e*SS **SS** **19 45 58.4 -7.4**
TBI comp=Z,2µm,38.8s *e*LQ LQ 19 49 56.3
TBI comp=Z,2µm,29.5s *e*LR LR 19 53 14.8
TBI comp=Z,10µm,26.2s *e*LR LR 19 53 16.4
comp=Z,3µm,26.5s
**N15K Kwethluk River 67.87 330** IAmb IAmb 19 32 59.9
comp=Z,17nm,0.8s
**N15K Kwethluk River 67.87 330** P **P** **19 32 48.5 +0.4**
baz=102,SNR=8.1
**L16K Owhat River 67.91 331** IAMs_20 IAMs_20 20 04 51.5
comp=Z,1µm,18.0s
**L16K Owhat River 67.91 331** P **P** **19 32 48.4 +0.1**
baz=103,SNR=17
**G19K Purcell Mounta 68.02 336** IAmb IAmb 19 33 10.9
comp=Z,35nm,1.4s
G19K IAMs_20 IAMs_20 20 07 54.6
comp=Z,1µm,18.0s
**G19K Purcell Mounta 68.02 336** P **P** **19 32 48.9 -0.1**
baz=107,SNR=7.9
**J17K VABM Dome 68.12 333** IAmb IAmb 19 33 40.2
comp=Z,22nm,1.2s
J17K IAMs_20 IAMs_20 20 05 29.0
comp=Z,878nm,18.0s
**J17K VABM Dome 68.12 333** P **P** **19 32 49.4 -0.2**
baz=104
**B22K Teshekpuk Lake 68.13 341** P **P** **19 32 49.2 -0.3**
baz=112
**S12K Black Hills 68.14 325** P **P** **19 32 50.0 +0.1**
baz=98
**B21K Ikpikpuk River 68.25 340** IAmb IAmb 19 33 31.9
comp=Z,16nm,0.9s
B21K IAMs_20 IAMs_20 20 06 18.5
comp=Z,1µm,20.0s
**B21K Ikpikpuk River 68.25 340** P **P** **19 32 50.1 -0.2**
baz=111
**H18K Honhosa River 68.26 335** IAmb IAmb 19 33 27.8
comp=Z,48nm,1.6s
**H18K Honhosa River 68.26 335** P **P** **19 32 51.1 +0.7**
baz=105,SNR=7.6
**M15K Kasigluk River 68.27 330** P **P** **19 32 50.8 +0.3**
baz=101,SNR=7.0
**O14K Tigyukauivet M 68.28 329** P **P** **19 32 50.3 -0.4**
baz=100
**E20K Nigu River 68.33 339** P **P** **19 32 51.2 +0.2**
baz=108
**E19K Redstone River 68.46 338** IAmb IAmb 19 33 29.5
comp=Z,20nm,1.5s
**E19K Redstone River 68.46 338** P **P** **19 32 52.2 +0.5**
baz=107,SNR=9.2
**F19K Shaleruckik Mo 68.48 337** P **P** **19 32 52.0 +0.3**
baz=106,SNR=10
**G18K Tagagawik 68.57 336** IAMs_20 IAMs_20 20 06 21.3
comp=Z,1µm,21.0s
**G18K Tagagawik 68.57 336** P **P** **19 32 52.6 +0.3**
baz=105,SNR=6.4
**N14K Kuskwak Cree 68.61 329** P **P** **19 32 52.7 +0.1**
baz=100
**D20K Etivluk River 68.63 339** P **P** **19 32 52.6 -0.1**
baz=108,SNR=15
**J16K Anvik River 68.76 333** P **P** **19 32 54.1 +0.5**
baz=102,SNR=12
**FALS False Pass 68.80 324** P **P** **19 32 53.5 -0.5**
baz=97
**L15K Ungalak Mounta 68.84 331** P **P** **19 32 54.8 +0.7**
baz=101,SNR=16
**H17K Granite Mounta 68.84 335** IAMs_20 IAMs_20 20 04 39.1
comp=Z,2µm,22.0s
**H17K Granite Mounta 68.84 335** P **P** **19 32 53.8 -0.2**
baz=104,SNR=5.3
**A22K Sinclair Lake 68.86 342** P **P** **19 32 53.5 -0.6**
baz=111
**M14K Bethel 68.89 330** P **P** **19 32 54.5 +0.1**
baz=100
**I17K Unalakleet 68.93 334** IAMs_20 IAMs_20 20 03 02.9
comp=Z,1µm,21.0s
**I17K Unalakleet 68.93 334** P **P** **19 32 55.3 +0.7**
baz=103
**K15K Wolf Creek Mou 68.98 332** IAMs_20 IAMs_20 20 05 52.8
comp=Z,1µm,18.0s
**K15K Wolf Creek Mou 68.98 332** P **P** **19 32 54.6 -0.4**
baz=101,SNR=21
**D19K Kuna River 69.09 339** IAMs_20 IAMs_20 20 09 01.6
comp=Z,1µm,19.0s
**D19K Kuna River 69.09 339** P **P** **19 32 55.3 -0.3**
baz=107,SNR=5.5
**F18K Selawik 69.14 337** P **P** **19 32 55.8 -0.1**
baz=105
**B20K Meade River 69.22 340** P **P** **19 32 56.7 +0.4**
baz=108
**BORG Borgarnes 69.27 26** IAMs_20 IAMs_20 20 03 25.2
comp=Z,1µm,18.0s
**BORG Borgarnes 69.27 26** LR LR 20 03 35.9
comp=Z,968nm,18.1s,baz=280,slow=36
**G17K Kiwalik Mounta 69.28 335** P **P** **19 32 56.9 +0.2**
baz=103
**L14K Kuka Creek 69.34 331** IAmb IAmb 19 33 00.5
comp=Z,19nm,0.8s
L14K IAMs_20 IAMs_20 20 05 12.8
comp=Z,951nm,20.0s
**L14K Kuka Creek 69.34 331** P **P** **19 32 57.4 +0.2**
baz=100,SNR=10
**PMOZ Porto Moniz, M 69.42 60** *e*P **P** **19 32 56.1 -2.3**
**PMOZ Porto Moniz, M 69.42 60** *e*PP **PP** **19 35 34.1 +2.0**
**PMOZ Porto Moniz, M 69.42 60** *e*LR LR 19 54 10.1
comp=Z,733nm,20.0s
**M13K Dall Lake 69.52 330** P **P** **19 32 58.3 0.0**
baz=99,SNR=13
**E18K Tukpahlearik C 69.71 337** P **P** **19 32 58.9 -0.5**
baz=104
**F17K Baldwin Pennin 69.73 336** IAMs_20 IAMs_20 20 04 17.5
comp=Z,1µm,21.0s
**F17K Baldwin Pennin 69.73 336** P **P** **19 32 59.5 0.0**
baz=103
**H16K Elim 69.75 334** P **P** **19 33 00.2 +0.5**
baz=101,SNR=5.0
**C19K Lookout Ridge 69.77 339** IAMs_20 IAMs_20 20 08 54.6
comp=Z,1µm,19.0s
**C19K Lookout Ridge 69.77 339** P **P** **19 33 00.3 +0.5**
baz=106
**G16K Koyuk River 69.95 335** IAMs_20 IAMs_20 20 05 12.9
comp=Z,1µm,21.0s
**G16K Koyuk River 69.95 335** P **P** **19 33 01.5 +0.6**
baz=102
**J14K Nanvaranak Lak 69.98 332** IAMs_20 IAMs_20 20 06 44.3
comp=Z,1µm,19.0s
**J14K Nanvaranak Lak 69.98 332** P **P** **19 33 02.0 +0.9**
baz=100,SNR=9.8
**E17K Hotham Inlet 70.09 337** P **P** **19 33 02.2 +0.4**
baz=103
**C18K Utukok River 70.22 339** P **P** **19 33 02.5 -0.1**
baz=104
**K13K Kusilvak Mount 70.36 331** IAmb IAmb 19 33 14.2
comp=Z,46nm,1.5s
K13K IAMs_20 IAMs_20 20 06 15.0
comp=Z,986nm,18.0s
**K13K Kusilvak Mount 70.36 331** P **P** **19 33 04.0 +0.5**
baz=98
**UNV Unalaska Valle 70.51 323** P **P** **19 33 04.6 +0.1**
baz=94
**A19K Wainwright 70.56 340** P **P** **19 33 04.6 +0.1**
baz=104
**G15K Niukluk 70.57 334** P **P** **19 33 05.4 +0.7**
baz=100
**B18K Kokolik River 70.60 339** P **P** **19 33 05.2 +0.3**
baz=104
**D17K Noatak River 70.70 337** P **P** **19 33 05.1 -0.3**
baz=102
**RDOG Red Dog Mine 70.70 338** IAMs_20 IAMs_20 20 08 59.6
comp=Z,1µm,19.0s
**RDOG Red Dog Mine 70.70 338** P **P** **19 33 04.9 -0.6**
baz=102
**C17K DeLong Mountai 70.89 338** P **P** **19 33 06.3 -0.3**
baz=102
**M11K Mekoryuk 70.91 329** P **P** **19 33 07.9 +1.1**
baz=96
**F15K North Star Dit 70.94 335** IAMs_20 IAMs_20 20 05 41.6
comp=Z,1µm,21.0s
**F15K North Star Dit 70.94 335** P **P** **19 33 07.8 +0.9**
baz=100
**ANM Nome 71.07 334** IAMs_20 IAMs_20 20 06 13.3
comp=Z,1µm,22.0s
**ANM Nome 71.07 334** P **P** **19 33 06.9 -0.8**
baz=98
**F14K Arctic Creek 71.60 335** P **P** **19 33 11.3 +0.3**
baz=98
**C16K Lisburne Hills 71.64 338** IAMs_20 IAMs_20 20 06 46.0
comp=Z,1µm,20.0s
**C16K Lisburne Hills 71.64 338** P **P** **19 33 11.3 +0.2**
baz=100
**NIKH Nikolski High 71.88 322** P **P** **19 33 13.1 +0.3**
baz=92
**BBTS Babate 72.08 79** LR LR 20 01 04.4
comp=Z,1µm,19.9s,baz=160,slow=33
**TNA Tin City 72.27 335** P **P** **19 33 15.8 +0.9**
baz=96
**P08K Saint George I 72.39 325** P **P** **19 33 16.7 +0.9**
baz=92
**SPIA Saint Paul Isl 72.80 326** P **P** **19 33 19.2 +1.0**
baz=92
**DAG Danmarks Havn 72.91 13** *e*P **P** **19 33 15.8 -2.7**
**GAMB Gambell 73.75 333** P **P** **19 33 25.0 +1.3**
baz=92
**JMIC Jan Mayen 74.89 20** LR LR 20 07 11.1
comp=Z,1µm,20.5s,baz=262,slow=36
**RAR Rarotonga 75.67 244** LR LR 19 58 26.0
comp=Z,964nm,18.1s,baz=86,slow=29
**PSBE So Bento 75.68 52** *e*P **P** **19 33 36.7 +1.2**
**PGAV Gavieira, Arco 75.84 50** *e*P **P** **19 33 38.1 +1.7**
PGAV *e*S S 19 43 26.7 +11
PGAV *e*SS SS 19 48 20.1 +12
**PGAV Gavieira, Arco 75.84 50** *e*LR LR 19 59 22.1
comp=Z,942nm,20.0s
**PCAS Casmilo, Conde 75.86 52** *e*P **P** **19 33 38.8 +2.4**
PCAS *e*S S 19 43 25.9 +10
PCAS *e*SS SS 19 48 25.8 +17
**COI Coimbra 75.91 52** IAMs_20 IAMs_20 20 04 44.9
comp=Z,1µm,20.0s
**COI Coimbra 75.91 52** *e*P **P** **19 33 35.1 -1.6**
**PFVI Vila Bisbo 75.91 55** *e*P **P** **19 33 38.7 +1.9**
**MORF Marmelete 76.03 55** *e*P **P** **19 33 39.6 +2.1**
MORF *e*S S 19 43 32.1 +14
**MORF Marmelete 76.03 55** *e*P **P** **19 33 38.5 +1.0**
MORF *e*S **S** **19 43 20.5 +2.3**
MORF IAMs_20 IAMs_20 20 06 55.8
comp=Z,1µm,21.9s
**MORF Marmelete 76.03 55** *e*P **P** **19 33 38.5 +1.0**
MORF *e*S **S** **19 43 20.5 +2.3**
**PNCL Nicolau / Gran 76.04 54** *e*P **P** **19 33 40.4 +2.9**
PNCL *e*S **S** **19 43 21.4 +3.3**
**PMTG Montargil 76.17 53** *e*P **P** **19 33 40.1 +1.9**
**POLO Lamas de Olo 76.25 50** *e*P **P** **19 33 41.4 +2.6**
POLO *e*S **S** **19 43 22.4 +1.8**
POLO *e*SS **SS** **19 48 06.3 -8.4**
**MESJ Messejana 76.31 54** IAMs_20 IAMs_20 20 03 22.8
comp=Z,958nm,21.0s
**MESJ Messejana 76.31 54** *e*P **P** **19 33 40.0 +0.9**
MESJ IAMs_20 IAMs_20 20 06 06.1
comp=Z,844nm,16.0s
**MESJ Messejana 76.31 54** *e*P **P** **19 33 40.0 +0.9**
**PCVE Castro Verde 76.48 54** *e*P **P** **19 33 42.4 +2.4**
**PCVE Castro Verde 76.48 54** *e*PP **PP** **19 36 35.4 +3.3**
**MTE Manteigas 76.55 51** IAMs_20 IAMs_20 20 06 04.8
comp=Z,1µm,20.0s
**MTE Manteigas 76.55 51** *e*P **P** **19 33 42.8 +2.4**
**MTE Manteigas 76.55 51** *e*PP **PP** **19 36 29.4 -3.3**
MTE *e*S **S** **19 43 28.2 +4.4**
MTE *e*SS **SS** **19 48 08.6 -11**
MTE *e*LR LR 19 57 39.6
comp=Z,930nm,18.0s
**PBDV Barranco-do-Ve 76.61 55** *e*P **P** **19 33 43.1 +2.3**
PBDV *e*S S 19 43 36.4 +12
**PESTR Estremoz 76.69 53** *e*P **P** **19 33 43.1 +1.9**
PESTR *e*S **S** **19 43 27.4 +2.1**
PESTR *e*SS SS 19 48 36.1 +15
**ADK Adak 76.70 321** P **P** **19 33 40.6 -0.3**
**ADK Adak 76.70 321** P **P** **19 33 40.6 -0.3**
ADK pmax pmax
comp=Z,89nm,1.3s
**PVAQ Vaqueiros 76.76 54** IAMs_20 IAMs_20 20 07 17.7
comp=Z,989nm,18.0s
**PVAQ Vaqueiros 76.76 54** *e*P **P** **19 33 43.9 +2.3**
PVAQ *e*S **S** **19 43 30.6 +4.5**
PVAQ *e*SS SS 19 48 32.0 +10
PVAQ *e*LR LR 19 57 22.0
comp=Z,1µm,18.0s
**PMRV Marv??o 76.77 52** *e*P **P** **19 33 44.0 +2.3**
PMRV *e*S **S** **19 43 32.0 +5.8**
**PMRV Marv??o 76.77 52** *e*LR LR 19 58 40.9
comp=Z,756nm,18.0s
**MVO Moncorvo 76.85 50** *e*P **P** **19 33 39.5 -2.6**
**MVO Moncorvo 76.85 50** *e*SS SS 19 48 08.6 -15
**MVO Moncorvo 76.85 50** *e*LR LR 19 58 37.6
comp=Z,730nm,18.0s
**PBRG Braganca 76.99 50** *e*P **P** **19 33 44.9 +2.0**
**PBAR Barrancos 77.20 54** *e*P **P** **19 33 46.9 +2.9**
PBAR *e*S **S** **19 43 36.0 +5.2**
PBAR *e*SS **SS** **19 48 36.7 +7.8**
**AVE Averroes 77.55 58** IAMs_20 IAMs_20 20 05 11.7
comp=Z,990nm,20.0s
**ESK Eskdalemuir 77.83 36** P **P** **19 33 45.5 -1.8**
ESK IAmb IAmb 19 34 44.5
comp=Z,35nm,1.4s

**ESK Eskdalemuir 77.83 36** IAMs_20 IAMs_20 20 08 38.9
comp=Z,1μm,21.0s
**ESK Eskdalemuir 77.83 36** P **P** **19 33 45.5 -1.8**
ESK pmax pmax
comp=Z,35nm,1.4s
ESK MLR MLR
comp=Z,1μm,21.0s
**EKA Eskdalemuir Ar 77.86 36** P **P** **19 33 44.5 -2.9**
comp=Z,7.8nm,0.8s,baz=271,slow=6.1,SNR=16
comp=Z,7.8nm,0.8s
**PAB San Pablo 79.09 52** IAMs_20 IAMs_20 20 06 47.2
comp=Z,923nm,20.0s
**KBS Kingsbay 79.29 11**⇑ *e*P **P** **19 33 56.0 +1.1**
KBS pmax pmax
comp=Z,19nm,1.7s
**ESDC Sonseca Array 79.37 52** P **P** **19 33 53.4 -2.7**
comp=Z,2.3nm,0.6s,baz=289,slow=4.7,SNR=26
comp=Z,2.3nm,0.6s
**MDT Midelt 79.95 59** LR LR 20 03 29.9
comp=Z,621nm,21.6s,baz=297,slow=32
**PMSA Palmer Station 80.77 169** LR LR 20 05 23.2
comp=Z,848nm,18.1s,baz=2.5,slow=32
**BILL Bilibino 82.17 338** P **P** **19 34 09.5 -0.9**
BILL IAmb IAmb 19 34 34.2
comp=Z,38nm,1.2s
**BILL Bilibino 82.17 338** IAMs_20 IAMs_20 20 17 26.7
comp=Z,991nm,21.0s
**BILL Bilibino 82.17 338** *c* *i*P **P** **19 34 10.4 0.0**
BILL *i* *PP **PcP** **19 34 19.3 +3.6**
BILL *i* *SP **pP** **19 34 25.0 +2.3**
BILL *i* PPP PPP 19 39 05.5
BILL S **SKSac** **19 44 31.0 +3.5**
BILL pmax pmax
comp=Z,45nm,2.5s
BILL MLR MLR
comp=Z,908nm,21.0s
**SHEM Shemya Is, Ala 82.17 322** LR LR 20 07 57.6
comp=Z,238nm,20.9s,baz=87,slow=34
**CLF Chambon-Foret 82.33 43** IAMs_20 IAMs_20 20 05 16.3
comp=Z,968nm,21.0s
**CEST Esterri de Car 82.73 48** IAMs_20 IAMs_20 20 07 42.2
comp=Z,641nm,19.0s
**SMAI San Martin Ant 83.30 171** P **P** **19 34 16.8 +0.7**
SMAI IAmb IAmb 19 34 35.4
comp=Z,29nm,1.2s
**KONO Kongsberg 83.78 30** IAMs_20 IAMs_20 20 14 25.8
comp=Z,690nm,19.0s
**NB2 NORSAR Subarra 84.16 29** P **P** **19 34 19.4 -1.5**
comp=Z,4.4nm,0.9s,baz=292,slow=4.8
**NOA NORSAR Array B 84.16 29** P **P** **19 34 19.1 -1.7**
comp=Z,2.9nm,1.0s,baz=290,slow=4.8,SNR=10
NOA LR LR 20 09 52.4
comp=Z,458nm,20.6s,baz=300,slow=34
comp=Z,2.9nm,1.0s
**NC602 NORSAR Array S 84.40 29** P **P** **19 34 23.2 +1.2**
NC602 IAmb IAmb 19 35 25.9
comp=Z,48nm,1.9s
**SSB Saint Sauveur 84.47 45** IAMs_20 IAMs_20 20 06 52.9
comp=Z,761nm,21.0s
**WLF Walferdange 84.47 40** IAMs_20 IAMs_20 20 11 55.7
comp=Z,1μm,20.0s
**DBIC Dimbokro 84.91 84** P **P** **19 34 22.6 -2.9**
DBIC IAmb IAmb 19 34 26.8
comp=Z,23nm,0.9s
**DBIC Dimbokro 84.91 84** P **P** **19 34 23.3 -2.2**
comp=Z,17nm,0.8s,baz=272,slow=4.3,SNR=18
DBIC LR LR 20 12 54.0
comp=Z,280nm,18.4s,baz=264,slow=36
comp=Z,17nm,0.8s
**ECH Echery 85.48 42** IAMs_20 IAMs_20 20 07 15.5
comp=Z,824nm,21.0s
**HFS Hagfors 85.60 29** P **P** **19 34 26.4 -1.6**
comp=Z,4.6nm,0.7s,baz=252,slow=2.8,SNR=9.9
HFS LR LR 20 10 44.7
comp=Z,666nm,20.2s,baz=286,slow=34
comp=Z,4.6nm,0.7s
**BNI Bardonecchia 85.99 45** IAMs_20 IAMs_20 20 14 44.1
comp=Z,992nm,20.0s
**SENIN Lac Senin/Sane 86.06 43** P **P** **19 34 31.0 0.0**
SENIN IAmb IAmb 19 34 57.1
comp=Z,27nm,0.9s
**BFO Black Forest 86.20 41** IAMs_20 IAMs_20 20 15 00.6
comp=Z,902nm,19.0s
**ARCES ARCESS Array B 86.31 18** P **P** **19 34 29.7 -1.7**
comp=Z,4.9nm,0.7s,baz=270,slow=4.9,SNR=9.8
ARCES LR LR 20 13 18.7
comp=Z,731nm,19.0s,baz=299,slow=36
comp=Z,4.9nm,0.7s
**STU Stuttgart 86.63 41** IAMs_20 IAMs_20 20 14 28.8
comp=Z,836nm,19.0s
**DAVA Damuels 87.50 42** *e*P **P** **19 34 38.0 +0.1**
comp=Z,7.6nm,0.8s
**DAVOX Davos/Dischmat 87.65 42** LR LR 20 09 04.4
comp=Z,780nm,21.5s,baz=288,slow=32
**FUORN Ofenpass-Fuorn 87.95 43** P **P** **19 34 38.3 -1.8**
FUORN IAMs_20 IAMs_20 20 14 23.0
comp=Z,671nm,19.0s
**RETA Reutte 88.02 42** *e*P **P** **19 34 40.6 +0.4**
comp=Z,7.1nm,0.8s
**FETA Feichten 88.14 42** *e*P **P** **19 34 41.2 +0.3**
comp=Z,4.9nm,0.8s
**CLL Collm 88.18 38** IAMs_20 IAMs_20 20 13 17.6
comp=Z,899nm,20.0s
**CLL Collm 88.18 38** *e*P **P** **19 34 40.0 -0.8**
comp=Z,5.0nm,0.9s
CLL *e*S S 19 45 31.0 +8.7
CLL *e*PS **PnS** **19 46 25.0 -3.5**
CLL *e*SS **SS** **19 51 06.0 -5.0**
CLL AMS AMS 20 13 00.0
comp=Z,900nm,20.6s
**CLL Collm 88.18 38** *e*P **P** **19 34 40.0 -0.8**
CLL pmax pmax
comp=Z,5.0nm,0.9s
CLL MLR MLR
comp=Z,900nm,20.6s
**MOTA Moosalm 88.28 42** *e*P **P** **19 34 41.7 +0.1**
comp=Z,4.8nm,0.8s
**SQTA Sankt Quirin 88.39 42** *e*P **P** **19 34 42.1 0.0**
comp=Z,2.0nm,0.5s
**WATA Walderalm 88.59 42** *e*PcP **PcP** **19 34 45.3 +0.7**
comp=Z,2.1nm,0.5s
**WTTA Wattenberg 88.65 42** *e*P **P** **19 34 43.4 0.0**
comp=Z,4.7nm,1.1s
**HSKC Hora Svate Kat 88.67 38** *e*P **P** **19 34 41.7 -1.5**
HSKC AMS AMS 20 16 45.3
comp=Z,1μm,18.4s
**BRG Berggiesshubel 88.89 38** *e*P **P** **19 34 44.0 -0.1**
**KHC Kasperske Hory 89.26 39** *e*P **P** **19 34 44.0 -2.0**
KHC *e*SKS **SKSac** **19 45 09.6 -3.4**
KHC AMS AMS 20 11 29.5
comp=Z,1μm,21.2s
**KHC Kasperske Hory 89.26 39**⇑ *e*P **P** **19 34 46.3 +0.3**
KHC pmax pmax
comp=Z,7.0nm,1.3s
**ABTA Abfaltersbach 89.38 42** *e*P **P** **19 34 46.3 -0.4**
comp=Z,3.8nm,1.0s
**GERES GERESS Array B 89.44 40** P **P** **19 34 45.1 -1.8**
comp=Z,1.2nm,0.8s,baz=182,slow=9.3,SNR=6.2
GERES LR LR 20 12 26.5
comp=Z,676nm,19.7s,baz=276,slow=34
comp=Z,1.2nm,0.8s
**VSL Villasalto 89.45 50** IAMs_20 IAMs_20 20 13 38.6
comp=Z,816nm,19.0s
**PRA Prague 89.46 38** AMS AMS 20 14 29.7
comp=Z,900nm,18.4s
**CIMO Cimolais 89.48 42** P **P** **19 34 46.3 -0.8**
CIMO IAmb IAmb 19 34 47.3
comp=Z,3.6nm,0.8s
CIMO IAMs_20 IAMs_20 20 09 53.9
comp=Z,1μm,22.0s
**SEY Seymchan 89.48 336** *e*P **P** **19 34 46.4 -0.3**
SEY pmax pmax
comp=Z,9.0nm,0.9s
**ZVC Zvikov 89.53 39** *e*P **P** **19 34 44.3 -2.9**
ZVC AMS AMS 20 18 35.2
comp=Z,1μm,18.5s
**PRU Pruhonice 89.56 38** *e*P **P** **19 34 44.7 -2.6**
PRU AMS AMS 20 14 20.0
comp=Z,1μm,20.5s
**PRU Pruhonice 89.56 38** *e*P **P** **19 34 44.7 -2.6**
PRU MLR MLR
comp=Z,1μm,20.5s
**OSSC Osservatorio P 89.56 45** IAMs_20 IAMs_20 20 16 36.4
comp=Z,751nm,19.0s
**STAL STALIGIAL 89.67 42** P **P** **19 34 47.2 -0.8**
**TORD Torodi Ar. Bea 89.71 77** P **P** **19 34 45.9 -2.8**
**TORD Torodi Ar. Bea 89.71 77** P **P** **19 34 45.3 -3.4**
comp=Z,1.3nm,0.6s,baz=300,slow=5.0,SNR=13
TORD LR LR 20 12 47.6
comp=Z,858nm,19.6s,baz=284,slow=34
comp=Z,1.3nm,0.6s
**GOPC GO Pecny, Ondr 89.73 38** *e*P **P** **19 34 46.2 -2.0**
GOPC AMS AMS 20 14 26.7
comp=Z,900nm,19.3s
**GOPC GO Pecny, Ondr 89.73 38** *e*P **P** **19 34 46.2 -2.0**
GOPC MLR MLR
comp=Z,900nm,19.3s
**KBA Koelnbreinsper 89.81 41** *e*P **P** **19 34 48.8 0.0**
comp=Z,2.7nm,1.0s
**APA Apatity 89.82 18**⇓ *i*P **P** **19 34 44.7 -3.4**
APA pmax pmax
comp=Z,5.0nm,0.9s
**CKRC Cesky Krumlov 89.82 40** AMS AMS 20 16 18.0
comp=Z,900nm,19.2s
**CHVC Chvalec 90.24 38** AMS AMS 20 16 08.9
comp=Z,900nm,18.4s
**UPC Upice 90.25 38** AMS AMS 20 15 24.3
comp=Z,1μm,21.0s
**SABO M.te Sabotino 90.35 42** IAMs_20 IAMs_20 20 10 30.3
comp=Z,834nm,22.0s
**OSTC Ostas 90.35 37** *e*P **P** **19 34 51.2 +0.2**
OSTC AMS AMS 20 16 12.2
comp=Z,1μm,19.4s
**OSTC Ostas 90.35 37** *e*P **P** **19 34 51.2 +0.2**
OSTC MLR MLR
comp=Z,1μm,19.4s
**DPC Dobruska-Polom 90.49 38** *e*P **P** **19 34 50.0 -1.7**
DPC AMS AMS 20 15 28.5
comp=Z,1μm,18.3s
**DPC Dobruska-Polom 90.49 38** *e*P **P** **19 34 50.0 -1.7**
DPC MLR MLR
comp=Z,1μm,18.3s
**KEST Kesra 90.53 53** P **P** **19 34 49.0 -3.3**
comp=Z,1.5nm,0.7s,baz=326,slow=3.6,SNR=1.9
comp=Z,1.5nm,0.7s
**FINES FINESS Array B 90.56 25** P **P** **19 34 51.6 -0.1**
comp=Z,3.8nm,1.0s,baz=331,slow=11,SNR=5.4
FINES LR LR 20 16 12.0
comp=Z,809nm,19.5s,baz=312,slow=36
comp=Z,3.8nm,1.0s
**TAM Tamanrasset 90.86 66** IAMs_20 IAMs_20 20 10 40.6
comp=Z,843nm,22.0s
**KRLC Kraliky 90.87 38** AMS AMS 20 15 35.1
comp=Z,900nm,20.5s
**PET Petropavlovsk 90.97 325** *c* *i*P **P** **19 34 54.5 +0.7**
PET *e* 19 38 29.4
PET *e* 19 45 28.3
PET *e*S **S** **19 45 48.7 +0.6**
PET pmax pmax
comp=Z,400nm,6.8s
PET pmax pmax
comp=Z,300nm,13.7s
PET MLR MLR
comp=Z,300nm,18.0s
**FDMO Fiordimonte 91.00 45** IAMs_20 IAMs_20 20 14 21.2
comp=Z,786nm,20.0s
**VRAC Vranov 91.05 39** LR LR 20 13 22.7
comp=Z,918nm,20.5s,baz=292,slow=34
**CONA Conrad Observa 91.11 40** *e*P **P** **19 34 55.0 +0.3**
comp=Z,3.0nm,0.9s
**ARSA Arzberg 91.14 41** *e*P **P** **19 34 54.7 -0.1**
comp=Z,1.2nm,0.6s
**OKC Ostrava-Krasne 91.77 38** AMS AMS 20 16 04.6
comp=Z,1μm,19.1s
**PABE Paberze 92.50 31** IAMs_20 IAMs_20 20 16 02.5
comp=Z,744nm,20.0s
**PSZ Piszkesteto 93.61 39** IAMs_20 IAMs_20 20 14 29.5
comp=Z,692nm,21.0s
**RAO Raoul Island 93.72 241** LR LR 20 07 19.2
comp=Z,530nm,19.9s,baz=132,slow=29
**CUC Castrocucco 93.97 47** IAMs_20 IAMs_20 20 16 01.0
comp=Z,650nm,20.0s
**KWP Kalwaria Pacla 94.54 37** IAMs_20 IAMs_20 20 18 46.0
comp=Z,670nm,21.0s
**MSVF Nonsavu 94.76 253** LR LR 20 08 21.9
comp=Z,1μm,20.3s,baz=70,slow=29
**TIP Timpagrande 94.95 48** IAMs_20 IAMs_20 20 15 59.9
comp=Z,735nm,21.0s
**RNPP8 Varash 95.50 34** P **P** **19 35 14.4 -0.3**
**PUK Puka 96.03 44** IAMs_20 IAMs_20 20 17 18.2
comp=Z,603nm,22.0s
**BELA Belgrano 2 96.56 170** P **P** **19 35 18.1 -0.8**
BELA IAmb IAmb 19 35 36.6
comp=Z,7.7nm,1.2s
**KBN Korca 97.23 45** IAMs_20 IAMs_20 20 16 22.0
comp=Z,610nm,21.0s
**AKASG Malin Array Be 97.66 34** LR LR 20 19 49.8
comp=Z,696nm,19.7s,baz=302,slow=36
**YAK Yakutsk 98.13 342** IAMs_20 IAMs_20 20 24 55.3
comp=Z,708nm,22.0s
**YAK Yakutsk 98.13 342** LR LR 20 25 15.2
comp=Z,644nm,21.3s,baz=26,slow=39
**YAK Yakutsk 98.13 342**⇓ *e*P Pdif 19 35 29.1 +2.7
YAK pmax pmax
comp=Z,3.0nm,0.8s
**MLR Muntele Rosu 98.42 39** IAMs_20 IAMs_20 20 23 58.8
comp=Z,805nm,20.0s
**MLR Muntele Rosu 98.42 39** LR LR 20 18 43.8
comp=Z,449nm,19.8s,baz=309,slow=35
**OBN Obninsk 98.71 27** IAMs_20 IAMs_20 20 18 31.5
comp=Z,715nm,19.0s
**OBN Obninsk 98.71 27** LR LR 20 18 34.8
comp=Z,640nm,20.7s,baz=342,slow=35
**OBN Obninsk 98.71 27**⇓ *e*P Pdif 19 35 28.9 -0.2
OBN *e* 19 39 33.0
OBN PPP PPP 19 41 36.0
OBN *e*PS **PS** **19 48 16.7 -8.8**
OBN SS SS 19 53 55.0 +14
OBN pmax pmax
comp=Z,5.0nm,0.9s
OBN MLR MLR
comp=Z,495nm,19.0s
**URZ Urewera 99.58 233** LR LR 20 10 12.7
comp=Z,638nm,21.7s,baz=177,slow=29
**ALN Alexandroupoli 100.68 43** IAMs_20 IAMs_20 20 25 10.4
comp=Z,546nm,18.0s
**SNAA Sanae 102.24 161** IAMs_20 IAMs_20 20 19 55.4
comp=Z,615nm,20.0s
**YSS Yuzh-Sakhalins 102.86 325** *e*P **Pdif** **19 35 47.1 -0.7**
YSS *e* 19 40 00.1
YSS *e* 19 46 26.7
YSS *e*S **Sdif** **19 47 28.0 -2.6**
YSS *e*PS **PS** **19 49 16.6 +6.5**
YSS *e*SS SS 19 54 55.5 +17
**QSPA South Pole Qui 103.51 180** Pdiff **Pdif** **19 35 51.7 +1.4**
comp=Z,0.9nm,0.8s,baz=201,slow=2.0,SNR=7.2
**DZM Mont Dzumac 106.28 251** *e*PP **PP** **19 40 26.3 -2.1**
comp=Z,77nm,24.8s
**DZM Mont Dzumac 106.28 251** *e*SS SS 19 55 16.7 -12
comp=Z,326nm,25.6s
**DZM Mont Dzumac 106.28 251** *e*LQ LQ 20 06 28.4
comp=Z,426nm,34.3s
DZM *e*LR LR 20 10 58.1
comp=Z,1μm,25.4s
**HEH HeiHe 108.02 335** Pdif **Pdif** **19 36 12.3 +1.6**
HEH PP **PP** **19 40 40.0 +0.7**
HEH AMB AMB
comp=Z,330nm,5.4s
HEH LR LR
comp=Z,290nm,17.7s
HEH LR LR
comp=Z,470nm,15.1s
HEH LR LR
comp=Z,720nm,18.8s
**HNR Honiara 110.38 265** IAMs_20 IAMs_20 20 19 21.9
comp=Z,624nm,20.0s
**HIA Hailar 111.75 339** IAMs_20 IAMs_20 20 34 15.2
comp=Z,557nm,22.0s
**MAK Makhachkala 112.22 32** *i* P **Pdif** **19 36 28.2 -1.3**
MAK *i* 19 40 24.2
MAK *e* 19 41 07.5
MAK *e*PPP PPP 19 43 33.2
MAK *e* 19 47 04.5
MAK *e*PS **PS** **19 50 41.7 -2.4**
MAK *e*SS SS 19 56 50.5 +5.1
MAK *e*SSS SSS 20 00 59.9
MAK pmax pmax
comp=Z,172nm,1.3s
**ZALV Zalesovo Beam 112.68 3** PKiKP **PKiKP** **19 40 26.6 +0.5**
comp=Z,0.9nm,0.4s,baz=267,slow=2.7,SNR=7.4
**KURK Kurchatov 115.39 7** **PKiKP** **19 40 30.8 -0.7**
**KURK Kurchatov 115.39 7**⇓ *i*PKIKP **PKPdf** **19 40 31.6 +0.2**
KURK pmax pmax
comp=Z,5.0nm,1.0s
**KURBB Kurchatov Arra 115.47 7** PKP **PKPdf** **19 40 32.4 +0.7**
comp=Z,4.8nm,0.7s,baz=360,slow=2.1,SNR=26
**SEM Semipalatinsk 115.87 6** *e*PKP **PKPdf** **19 40 33.2 +0.5**
baz=6.2
**SEM Semipalatinsk 115.87 6** *e*PKIKP **PKPdf** **19 40 33.2 +0.5**
**ULN Ulaanbaatar 116.73 346**⇑ *i*PKIKP **PKiKP** **19 40 34.6 +0.2**
ULN pmax pmax
comp=Z,4.0nm,2.5s
**SONM Songino Array 116.91 347** PKP **PKiKP** **19 40 34.7 0.0**
comp=Z,1.1nm,0.7s,baz=349,slow=1.7,SNR=5.3
**DGZ Jazzator, Alta 117.01 1**⇓ *i*PKIKP **PKiKP** **19 40 35.3 +0.4**
**KSRS Korea Array 117.36 326** PKP **PKiKP** **19 40 36.4 +0.7**
comp=Z,3.9nm,0.7s,baz=10.0,slow=1.4,SNR=17
**KSAR Wonju Array Be 117.39 326** PKPdf **PKPdf** **19 40 35.3 -0.4**
**KSAR Wonju Array Be 117.39 326** PKiKP **PKPdf** **19 40 35.3 -0.4**
**INCN Inchon 118.04 326** IAMs_20 IAMs_20 20 41 47.3
comp=Z,509nm,21.0s
**ZSN Zaisan 119.17 3** *e*PKP **PKiKP** **19 40 39.8 +0.9**
baz=3.2
ZSN *e*PP **PP** **19 41 59.5 +1.3**
baz=3.2
**ZSN Zaisan 119.17 3** *e*PKIKP **PKiKP** **19 40 39.8 +0.9**
ZSN *e* 19 41 59.4
**BOSA Boshof 119.45 115** PKPdf **PKPdf** **19 40 38.7 -1.3**
**BOSA Boshof 119.45 115** PKP **PKPdf** **19 40 39.0 -1.0**
comp=Z,11nm,0.8s,baz=282,slow=2.8,SNR=17
**MK31 Makanchi Array 119.64 5** PKPdf **PKPdf** **19 40 38.5 -1.4**
**MK31 Makanchi Array 119.64 5***d* *i*PKIKP **PKPdf** **19 40 39.4 -0.4**
**MKAR Makanchi Array 119.64 5** PKPdf **PKPdf** **19 40 39.5 -0.3**
**MKAR Makanchi Array 119.64 5** PKP **PKPdf** **19 40 38.5 -1.3**
comp=Z,3.1nm,0.7s,baz=340,slow=1.6,SNR=24
**BTLS Baital 120.16 12** *e*PKP **PKiKP** **19 40 41.4 +0.4**
baz=12
**BTLS Baital 120.16 12** *e*PKIKP **PKiKP** **19 40 41.3 +0.4**
**BJT Baijiatuau 120.94 336** IAMs_20 IAMs_20 20 40 18.1
comp=Z,595nm,21.0s
**TDK Taldyqorghan 120.96 9** *e*PKP **PKiKP** **19 40 42.5 0.0**
baz=8.7
**TDK Taldyqorghan 120.96 9** *e*PKIKP **PKiKP** **19 40 42.5 0.0**
**BRLS Borolday 121.06 16** *e*PKP **PKiKP** **19 40 43.3 +0.5**
baz=16
BRLS *e*PP **PP** **19 42 13.3 +2.0**
baz=16
**BRLS Borolday 121.06 16** *e*PKIKP **PKiKP** **19 40 43.3 +0.5**
BRLS *e* 19 42 13.3
**SGDS Sogindy 121.80 12** *e*PKP **PKiKP** **19 40 44.5 +0.1**
baz=12
SGDS *e*PP **PP** **19 42 17.1 +0.8**
baz=12
**SGDS Sogindy 121.80 12** *e*PKIKP **PKiKP** **19 40 44.4 +0.1**
SGDS *e* 19 42 17.1
**HHC Hu-ho-hao-te 121.91 340** *e*PKP **PKPdf** **19 40 42.3 -2.2**
HHC PP **PP** **19 42 19.1 +1.8**
HHC SKKS 19 49 06.0
HHC AMB AMB
comp=Z,200nm,7.4s
HHC LR LR
comp=Z,610nm,19.1s
HHC LR LR
comp=Z,400nm,17.6s
HHC LR LR
comp=Z,920nm,19.1s
**IUG luzhnay 121.94 16** *e*PKP **PKiKP** **19 40 44.5 -0.2**
baz=16
**IUG luzhnay 121.94 16** *e*PKIKP **PKiKP** **19 40 44.5 -0.2**
**KPKS Kokpek 122.50 9** *e*PKP **PKiKP** **19 40 45.5 -0.2**
baz=8.9
**KPKS Kokpek 122.50 9** *e*PKIKP **PKiKP** **19 40 45.5 -0.2**
**MDOK Medeo 122.54 10** *e*PKP **PKiKP** **19 40 45.7 -0.2**
baz=10
**MDOK Medeo 122.54 10** *e*PKIKP **PKPdf** **19 40 45.6 -0.1**
**AAK Ala-Archa 122.56 13**⇑ *i*PKIKP **PKiKP** **19 40 47.7 +1.8**
AAK pmax pmax
comp=Z,4.0nm,1.3s
**BTO Baotou 122.64 341** *e*PKP **PKiKP** **19 40 47.0 +0.9**
BTO sPKP 19 41 01.6
BTO LR LR
comp=Z,570nm,10.3s
BTO LR LR
comp=Z,770nm,19.0s
BTO LR LR
comp=Z,550nm,20.6s
**TNSS Tian-Shan 122.64 10** *e*PKP **PKiKP** **19 40 46.4 -0.1**
baz=10
**TNSS Tian-Shan 122.64 10** *e*PKIKP **PKiKP** **19 40 46.3 -0.1**
**ZHN Zhinishke 122.76 9** *e*PKP **PKiKP** **19 40 46.6 +0.3**
baz=9.1
**ZHN Zhinishke 122.76 9** *e*PKIKP **PKiKP** **19 40 46.6 +0.3**
**SATY Saty 122.86 9** *e*PKP **PKPdf** **19 40 46.2 -0.1**
baz=9.2
**SATY Saty 122.86 9** *e*PKIKP **PKPdf** **19 40 46.2 -0.1**
**UZB Uzynbulak 122.87 9** *e*PKP **PKiKP** **19 40 46.4 -0.2**
baz=8.6
**UZB Uzynbulak 122.87 9** *e*PKIKP **PKiKP** **19 40 46.3 -0.2**
**WMQ Urumqi 122.89 1** *e*PKP **PKiKP** **19 40 47.0 +0.6**
WMQ LR LR
comp=Z,960nm,19.3s
WMQ LR LR
comp=Z,440nm,17.1s
WMQ LR LR
comp=Z,950nm,17.1s
**SHLS Shalkode 122.92 8** *e*PKP **PKiKP** **19 40 46.7 0.0**
baz=7.9
**SHLS Shalkode 122.92 8** *e*PKIKP **PKiKP** **19 40 46.6 0.0**
**PRZ Przheval'sk 123.42 9** PKPdf **PKiKP** **19 40 48.7 +1.0**
**PRZ Przheval'sk 123.42 9** PKiKP **PKiKP** **19 40 48.7 +1.0**
**TIA Tai'an 123.74 333** *e*PKP **PKPdf** **19 40 47.8 -0.2**
TIA LR LR
comp=Z,520nm,18.6s
TIA LR LR
comp=Z,450nm,22.1s
TIA LR LR
comp=Z,700nm,22.1s
**HNS HongShan 123.77 335**⇓ PKP **PKiKP** **19 40 49.4 +1.2**
HNS PP **PP** **19 42 34.1 +4.3**
HNS AMB AMB
comp=Z,280nm,10.6s
HNS LR LR
comp=Z,550nm,20.6s
HNS LR LR
comp=Z,520nm,21.6s
**RAYN Ar Rayn 123.85 49** IAMs_20 IAMs_20 20 35 11.3
comp=Z,460nm,20.0s
**SIMJ Simiganj 124.85 19** PKPdf **PKiKP** **19 40 50.7 +0.1**
**FURI Furi 125.46 69** IAMs_20 IAMs_20 20 35 42.2
comp=Z,490nm,20.0s
**KSH Kashi 125.86 12** PKP **PKiKP** **19 40 54.6 +2.1**
KSH PP **PP** **19 42 47.6 +3.9**
KSH LR LR
comp=Z,550nm,23.4s
KSH LR LR
comp=Z,510nm,23.4s
KSH LR LR
comp=Z,820nm,19.9s
**GTA Gaotai 126.32 349** PKP **PKiKP** **19 40 53.7 +0.2**
GTA LR LR
comp=Z,440nm,20.7s
GTA LR LR
comp=Z,280nm,19.3s
GTA LR LR
comp=Z,630nm,20.0s
**LYN LuoYang 127.14 335** PKP **PKPdf** **19 40 53.3 -1.2**
LYN PP **PP** **19 42 53.1 +0.8**
LYN AMB AMB
comp=Z,360nm,8.3s
LYN LR LR
comp=Z,330nm,22.0s
LYN LR LR
comp=Z,570nm,22.0s
LYN LR LR
comp=Z,730nm,21.6s
**KMBO Kilima Mbogo 127.51 81** IAMs_20 IAMs_20 20 33 50.6
comp=Z,515nm,22.0s
**ATD Arta Tunnel 128.04 63** IAMs_20 IAMs_20 20 33 43.0
comp=Z,522nm,21.0s
**STKA Stephens Creek 128.53 240** PKP **PKPdf** **19 40 57.3 +0.1**
comp=Z,4.2nm,0.8s,baz=286,slow=22,SNR=4.9
**KIBK Kibwezi 128.60 82** IAMs_20 IAMs_20 20 49 27.7
comp=Z,374nm,19.0s
**KBL Kabul 128.61 21** PKPdf **PKPdf** **19 40 55.5 -2.1**
**KBL Kabul 128.61 21** PKiKP **PKPdf** **19 40 55.5 -2.1**
**LZH Lanzhou 128.63 344** PKP **PKPdf** **19 40 56.3 -1.3**
LZH sPKP 19 41 15.0
LZH PP **PP** **19 43 09.1 +7.1**
LZH AMB AMB
comp=Z,220nm,14.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LZH | | | | LR | LR | | | |
| | comp=Z,800nm,18.2s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,540nm,17.2s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,1μm,18.5s | | | | | | | |
| **XAN** | **Xi'an** | **128.95** | **338** | ⇑PKP | **PKPdf** | **19** | **40** | **58.2 +0.1** |
| **SSLB** | **Suanglung** | **131.37** | **320** | PKPdf | **PKPdf** | **19** | **41** | **02.8 -0.1** |
| **ENH** | **Enshi** | **132.09** | **336** | | **PKiKP** | **19** | **41** | **04.8 -0.4** |
| ENH | | | | IAMs_20 | IAMs_20 | 20 | 46 | 50.2 |
| | comp=Z,530nm,20.0s | | | | | | | |
| **CD2** | **Chengdu** | **133.52** | **342** | PKP | **PKPdf** | **19** | **41** | **06.2 -0.6** |
| CD2 | | | | PP | **PP** | **19** | **43** | **39.1 +5.5** |
| CD2 | | | | SKS | **SKSdf** | **19** | **48** | **14.6 -0.7** |
| CD2 | | | | AMB | AMB | | | |
| | comp=Z,170nm,7.1s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,580nm,19.4s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,390nm,18.4s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,410nm,16.3s | | | | | | | |
| **WB2** | **Warramunga Arr** | **136.04** | **255** | PKPdf | **PKiKP** | **19** | **41** | **12.5 -0.8** |
| **WRAB** | **Tennant Creek** | **136.04** | **255** | | **PKiKP** | **19** | **41** | **12.7 -0.6** |
| **WRAB** | **Tennant Creek** | **136.04** | **255** | PKIKP | **PKiKP** | **19** | **41** | **12.7 -0.6** |
| **WRA** | **Warramunga Arr** | **136.05** | **255** | PKhKP | PKPpre | 19 | 41 | 01.4 |
| | comp=Z,0.7nm,0.8s,baz=86,slow=3.3,SNR=5.6 | | | | | | | |
| WRA | | | | PKP | **PKiKP** | **19** | **41** | **12.6 -0.8** |
| | comp=Z,5.0nm,0.7s,baz=89,slow=2.5,SNR=11 | | | | | | | |
| WRA | | | | SKPab | **SKiKP** | **19** | **44** | **53.3 +6.9** |
| | comp=Z,0.7nm,0.8s,baz=93,slow=2.7,SNR=1.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **136.26** | **250** | PKPdf | **PKPdf** | **19** | **41** | **10.8 -1.2** |
| **ASAR** | **Alice Springs** | **136.26** | **250** | PKhKP | PKPpre | 19 | 41 | 05.5 |
| | comp=Z,0.5nm,0.7s,baz=112,slow=3.7,SNR=5.1 | | | | | | | |
| ASAR | | | | PKP | **PKPdf** | **19** | **41** | **12.1 0.0** |
| | comp=Z,2.8nm,0.7s,baz=104,slow=2.2,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **136.26** | **250** | PKIKP | **PKPdf** | **19** | **41** | **10.9 -1.2** |
| **GYA** | **Guiyang** | **136.61** | **336** | ⇑PKP | **PKPdf** | **19** | **41** | **12.4 -0.4** |
| GYA | | | | PP | **PP** | **19** | **43** | **54.5 +1.1** |
| GYA | | | | AMB | AMB | | | |
| | comp=Z,230nm,8.2s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,210nm,11.8s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,360nm,14.9s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,220nm,14.8s | | | | | | | |
| **LSA** | **Lhasa** | **136.94** | **357** | PKP | **PKiKP** | **19** | **41** | **15.5 -0.1** |
| **LSA** | **Lhasa** | **136.94** | **357** | | **PKPdf** | **19** | **41** | **11.6 -2.2** |
| **LSA** | **Lhasa** | **136.94** | **357** | PKIKP | **PKPdf** | **19** | **41** | **11.6 -2.2** |
| **PZH** | **PanZhiHua** | **138.25** | **342** | PKP | **PKPdf** | **19** | **41** | **16.1 +0.3** |
| PZH | | | | PP | **PP** | **19** | **44** | **10.1 +6.7** |
| PZH | | | | PKS | **PKSdf** | **19** | **44** | **49.8 -2.4** |
| PZH | | | | AMB | AMB | | | |
| | comp=Z,150nm,10.8s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,230nm,17.7s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,310nm,17.1s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,350nm,19.6s | | | | | | | |
| **KMI** | **Kunming** | **139.23** | **340** | ⇓PKP | **PKiKP** | **19** | **41** | **19.4 -0.6** |
| KMI | | | | PKS | **PKSdf** | **19** | **44** | **54.2 0.0** |
| KMI | | | | AMB | AMB | | | |
| | comp=Z,240nm,12.7s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,560nm,25.3s | | | | | | | |
| **TNCH** | **TengChong** | **140.50** | **346** | PKP | **PKPdf** | **19** | **41** | **20.6 +0.6** |
| TNCH | | | | sPKP | | 19 | 41 | 30.6 |
| TNCH | | | | PP | **PP** | **19** | **44** | **25.0 +7.7** |
| TNCH | | | | PKS | **PKSdf** | **19** | **44** | **57.9 +1.5** |
| TNCH | | | | AMB | AMB | | | |
| | comp=Z,160nm,6.9s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,210nm,19.9s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,220nm,17.5s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,480nm,20.6s | | | | | | | |
| **QIZ** | **Qiongzhong** | **141.56** | **327** | PKP | **PKiKP** | **19** | **41** | **24.4 -0.3** |
| QIZ | | | | PP | **PP** | **19** | **44** | **25.9 +1.7** |
| QIZ | | | | SS | SS | 20 | 02 | 55.1 +3.4 |
| QIZ | | | | LR | LR | | | |
| | comp=Z,580nm,14.7s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,660nm,15.4s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,620nm,17.7s | | | | | | | |
| **CRAI** | **Chiangrai** | **144.56** | **341** | PKPdf | **PKPdf** | **19** | **41** | **26.4 -0.7** |
| **CMAR** | **Chiang Mai Arr** | **146.66** | **342** | PKPdf | **PKPdf** | **19** | **41** | **30.9 +0.2** |
| **CMAR** | **Chiang Mai Arr** | **146.66** | **342** | PKPbc | **PKPbc** | **19** | **41** | **32.0 -0.3** |
| | comp=Z,32nm,0.7s,baz=343,slow=3.3,SNR=108 | | | | | | | |
| **UBPT** | **Khong Chiam** | **146.95** | **330** | | **PKPbc** | **19** | **41** | **33.1 0.0** |
| **HYB** | **Hyderabad** | **147.60** | **19** | *e*PKPbc | **PKPbc** | **19** | **41** | **34.4 -0.7** |
| HYB | | | | *e*PKiKP | **PKiKP** | **19** | **41** | **37.2 +0.1** |
| HYB | | | | *e*SKSdf | **SKSdf** | **19** | **48** | **40.6 +2.3** |
| HYB | | | | *e*SKKSac | **SKKSac** | **19** | **51** | **51.5 +1.3** |
| **PSA00** | **Pilbara Seismi** | **149.41** | **251** | | **PKPbc** | **19** | **41** | **38.9 -0.6** |
| **PSA00** | **Pilbara Seismi** | **149.41** | **251** | | **PKPbc** | **19** | **41** | **39.5 0.0** |
| **MBWA** | **Marble Bar** | **149.58** | **251** | | **PKPbc** | **19** | **41** | **39.8 -0.2** |
| **SBUM** | **Sibu** | **151.86** | **303** | | **PKiKP** | **19** | **41** | **46.0 0.0** |
| SBUM | | | | IAMs_20 | IAMs_20 | 20 | 40 | 51.3 |
| | comp=Z,415nm,22.0s | | | | | | | |

*NNC **09** 19:37:12.2±3.2,39.°91N×77.°32E,h0km,mb4.0,mpv3.6, Error ellipse: s-maj=21.7km s-min=16.5km az=164.0*
*SOME **09** 19:37:14.3,40.°15N×77.°40E,h0km*
*KRNET **09** 19:37:17.1±0.1,40.°21N×77.°37E,h21km,mb3.0*
**ISC 09 19:37:14.4±1.7, 40.°02N±0.°07×77.°23E±0.°04, h10km, n62, σ2.8s15/95, 22C-13D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NRN** | **Naryn** | **1.70** | **327** | ⇑ | *e*P | **Pg** | | **19 37 47.3** | **+0.3** |
| | baz=19 | | | | | | | | |
| NRN | | | | ⇑ | *e*S | **Sb** | | **19 38 09.5** | **+2.1** |
| | baz=19 | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.76** | **14** | ⇓ | *e*P | **Pb** | | **19 37 46.4** | **-0.7** |
| | baz=12 | | | | | | | | |
| TARG | | | | ⇓ | *e*S | **Sn** | | **19 38 07.9** | **-0.2** |
| | baz=12 | | | | | | | | |
| **KDJ** | **Kajisay** | **2.11** | **359** | ⇑ | *e*P | **Pb** | | **19 37 52.8** | **-0.1** |
| | baz=56 | | | | | | | | |
| KDJ | | | | ⇑ | *i*S | **Sb** | | **19 38 18.9** | **-0.3** |
| | baz=56 | | | | | | | | |
| **ULHL** | **Ulahol** | **2.35** | **342** | ⇑ | *i*P | **Pb** | | **19 37 57.1** | **+0.2** |
| | baz=38 | | | | | | | | |
| ULHL | | | | ⇑ | *i*S | **Sb** | | **19 38 26.2** | **+0.1** |
| | baz=38 | | | | | | | | |
| **PRZ** | **Przheval'sk** | **2.62** | **19** | ⇓ | *e*P | **Pb** | | **19 38 00.2** | **-1.3** |
| | baz=18 | | | | | | | | |
| PRZ | | | | ⇓ | *e*S | **Sb** | | **19 38 31.1** | **-2.7** |
| | baz=18 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.66** | **339** | ⇑ | *e*P | **Pb** | | **19 38 01.4** | **-0.8** |
| | baz=35 | | | | | | | | |
| BOOM | | | | ⇑ | *i*S | **Sb** | | **19 38 33.8** | **-1.1** |
| | baz=35 | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.86** | **271** | ⇑ | *e*P | **Pg** | | **19 38 07.8** | **-1.5** |
| | baz=67 | | | | | | | | |
| SFK | | | | ⇑ | *i*S | **Sg** | | **19 38 44.8** | **-1.6** |
| | baz=67 | | | | | | | | |
| **ARLS** | **Aral** | **2.87** | **311** | ⇑ | *e*P | **Pb** | | **19 38 05.7** | **-0.1** |
| | baz=6.0 | | | | | | | | |
| ARLS | | | | ⇑ | *e*S | **Sb** | | **19 38 41.1** | **0.0** |
| | baz=6.0 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.02** | **356** | *e*P | | **Pg** | | **19 38 10.5** | **-1.9** |
| | 12nm,0.3s | | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | | **19 38 51.0** | **-0.6** |
| | 22nm,0.4s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.02** | **356** | Pg | | **Pg** | | **19 38 10.5** | **-1.9** |
| | 12nm,0.3s | | | | | | | | |
| TNSS | | | | Lg | | Lg | | 19 38 51.1 | |
| | 22nm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **3.15** | **358** | *e*P | | **Pb** | | **19 38 12.2** | **+1.7** |
| | 17nm,0.4s | | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | | **19 38 53.5** | **-1.9** |
| | 57nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **3.15** | **358** | Pg | | **Pb** | | **19 38 11.9** | **+1.4** |
| | 11nm,0.5s | | | | | | | | |
| MDOK | | | | Pg | | **Pb** | | **19 38 12.2** | **+1.7** |
| | 15nm,0.3s | | | | | | | | |
| MDOK | | | | Lg | | Lg | | 19 38 53.5 | |
| | 51nm,0.5s | | | | | | | | |
| MDOK | | | | Lg | | Lg | | 19 38 59.8 | |
| | 49nm,0.6s | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.15** | **328** | ⇑ | *i*P | **Pb** | | **19 38 08.7** | **-1.8** |
| | baz=24 | | | | | | | | |
| KBK | | | | ⇑ | *i*S | **Sn** | | **19 38 46.5** | **+4.6** |
| | baz=24 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.15** | **338** | ⇓ | Pg | **Pg** | | **19 38 13.0** | **-1.8** |
| | 2.6nm,0.3s | | | | | | | | |
| TKM2 | | | | ⇑ | Lg | Lg | | 19 38 56.6 | |
| | 16nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.15** | **338** | ⇓ | *e*P | **Pb** | | **19 38 08.3** | **-2.3** |
| | baz=34 | | | | | | | | |
| TKM2 | | | | ⇓ | *i*S | **Sn** | | **19 38 45.8** | **+3.8** |
| | baz=34 | | | | | | | | |
| **SATY** | **Saty** | **3.16** | **16** | *e*P | | **Pb** | | **19 38 11.6** | **+0.8** |
| | 7.0nm,0.3s | | | | | | | | |
| SATY | | | | *e*S | | **Sb** | | **19 38 52.8** | **+3.3** |
| | 37nm,0.4s | | | | | | | | |
| **SATY** | **Saty** | **3.16** | **16** | Pg | | **Pb** | | **19 38 11.9** | **+1.1** |
| | 7.0nm,0.3s | | | | | | | | |
| SATY | | | | Lg | | Lg | | 19 38 52.8 | |
| | 37nm,0.4s | | | | | | | | |
| **MTBS** | **Maitube** | **3.17** | **349** | *e*P | | **Pb** | | **19 38 12.7** | **+1.9** |
| | 11nm,0.2s | | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | | **19 38 54.7** | **-1.5** |
| | 42nm,0.5s | | | | | | | | |
| **MTBS** | **Maitube** | **3.17** | **349** | Pg | | **Pb** | | **19 38 12.7** | **+1.9** |
| | 11nm,0.2s | | | | | | | | |
| MTBS | | | | Lg | | Lg | | 19 38 54.7 | |
| | 42nm,0.5s | | | | | | | | |
| **KST** | **Kastek** | **3.17** | **343** | *e*P | | **Pg** | | **19 38 13.3** | **-1.8** |
| | 6.7nm,0.3s | | | | | | | | |
| KST | | | | *e*S | | **Sg** | | **19 38 55.5** | **-0.7** |
| | 46nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **3.17** | **343** | Pg | | **Pg** | | **19 38 13.3** | **-1.8** |
| | 6.7nm,0.3s | | | | | | | | |
| KST | | | | Lg | | Lg | | 19 38 55.5 | |
| | 46nm,0.5s | | | | | | | | |
| **AAA** | **Alma-Ata** | **3.20** | **356** | *e*P | | **Pg** | | **19 38 13.9** | **-1.7** |
| | 33nm,0.3s | | | | | | | | |
| AAA | | | | *e*S | | **Sg** | | **19 38 56.4** | **-0.7** |
| | 128nm,0.6s | | | | | | | | |
| **AAA** | **Alma-Ata** | **3.20** | **356** | Pg | | **Pg** | | **19 38 14.1** | **-1.5** |
| | 30nm,0.3s | | | | | | | | |
| AAA | | | | Lg | | Lg | | 19 38 56.4 | |
| | 128nm,0.6s | | | | | | | | |
| **KNDC** | **Almaty** | **3.20** | **357** | ⇑ | Pg | **Pg** | | **19 38 13.6** | **-2.2** |
| | 15nm,0.4s | | | | | | | | |
| KNDC | | | | ⇑ | Lg | Lg | | 19 39 01.3 | |
| | 143nm,0.5s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.21** | **358** | *e*P | | **Pg** | | **19 38 14.0** | **-2.0** |
| | 27nm,0.2s | | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | | **19 38 56.8** | **-0.8** |
| | 109nm,0.5s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.21** | **358** | Pg | | **Pg** | | **19 38 14.0** | **-2.0** |
| | 27nm,0.2s | | | | | | | | |
| KOTS | | | | Lg | | Lg | | 19 38 56.8 | |
| | 109nm,0.5s | | | | | | | | |
| **ZHN** | **Zhinishke** | **3.27** | **16** | *e*P | | **Pb** | | **19 38 13.9** | **+1.2** |
| | 4.7nm,0.2s | | | | | | | | |
| ZHN | | | | *e*S | | **Sg** | | **19 38 56.6** | **-3.0** |
| | 57nm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **3.27** | **16** | Pg | | **Pb** | | **19 38 13.9** | **+1.2** |
| | 4.7nm,0.2s | | | | | | | | |
| ZHN | | | | Lg | | Lg | | 19 38 56.6 | |
| | 56nm,0.3s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.33** | **323** | ⇓ | Pg | **Pb** | | **19 38 15.8** | **+2.2** |
| | 7.1nm,0.8s | | | | | | | | |
| AAK | | | | Lg | | Lg | | 19 39 02.8 | |
| | 38nm,0.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.33** | **323** | ⇑ | *e*P | **Pb** | | **19 38 11.5** | **-2.2** |
| | baz=19 | | | | | | | | |
| AAK | | | | ⇑ | *i*S | **Sn** | | **19 38 51.3** | **+4.9** |
| | baz=19 | | | | | | | | |
| **DGS** | **Degeres** | **3.40** | **342** | *e*P | | **Pg** | | **19 38 17.5** | **-2.1** |
| | 7.8nm,0.3s | | | | | | | | |
| DGS | | | | *e*S | | **Sg** | | **19 39 02.8** | **-0.9** |
| | 41nm,0.5s | | | | | | | | |
| **DGS** | **Degeres** | **3.40** | **342** | Pg | | **Pg** | | **19 38 17.7** | **-1.9** |
| | 7.8nm,0.3s | | | | | | | | |
| DGS | | | | Lg | | Lg | | 19 39 02.7 | |
| | 40nm,0.5s | | | | | | | | |
| **UZB** | **Uzynbulak** | **3.40** | **23** | *e*P | | **Pb** | | **19 38 15.2** | **+0.3** |
| | 5.2nm,0.5s | | | | | | | | |
| UZB | | | | *e*S | | **Sb** | | **19 38 58.5** | **+2.2** |
| | 14nm,0.3s | | | | | | | | |
| **UZB** | **Uzynbulak** | **3.40** | **23** | Pg | | **Pb** | | **19 38 15.2** | **+0.3** |
| | 5.2nm,0.5s | | | | | | | | |
| UZB | | | | Lg | | Lg | | 19 38 58.5 | |
| | 14nm,0.3s | | | | | | | | |
| **AML** | **Almayashu** | **3.41** | **309** | ⇓ | *e*P | **Pb** | | **19 38 13.5** | **-1.6** |
| | baz=6.0 | | | | | | | | |
| AML | | | | ⇓ | *i*S | **Sb** | | **19 38 54.7** | **-2.0** |
| | baz=6.0 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.51** | **329** | ⇓ | Pg | **Pb** | | **19 38 15.2** | **-1.5** |
| | 5.4nm,0.7s | | | | | | | | |
| CHMS | | | | ⇑ | Lg | Lg | | 19 39 07.7 | |
| | 13nm,0.5s | | | | | | | | |
| **KURS** | **Kuram** | **3.54** | **11** | *e*P | | **Pb** | | **19 38 18.1** | **+0.9** |
| | 6.3nm,0.8s | | | | | | | | |
| KURS | | | | *e*S | | **Sb** | | **19 39 03.7** | **+3.5** |
| | 19nm,0.5s | | | | | | | | |
| **KURS** | **Kuram** | **3.54** | **11** | Pg | | **Pb** | | **19 38 18.4** | **+1.3** |
| | 6.4nm,0.4s | | | | | | | | |
| KURS | | | | Lg | | Lg | | 19 39 03.7 | |
| | 17nm,0.4s | | | | | | | | |
| **SHLS** | **Shalkode** | **3.55** | **27** | *e*P | | **Pg** | | **19 38 20.5** | **-2.0** |
| | 4.9nm,0.5s | | | | | | | | |
| SHLS | | | | *e*S | | **Sg** | | **19 39 07.8** | **-0.8** |
| | 48nm,0.6s | | | | | | | | |
| **SHLS** | **Shalkode** | **3.55** | **27** | Pg | | **Pg** | | **19 38 20.9** | **-1.6** |
| | 4.1nm,0.4s | | | | | | | | |
| SHLS | | | | Lg | | Lg | | 19 39 07.8 | |
| | 48nm,0.6s | | | | | | | | |
| **KPKS** | **Kokpek** | **3.61** | **17** | *e*P | | **Pb** | | **19 38 18.7** | **+0.3** |
| | 6.4nm,0.4s | | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | | **19 39 04.8** | **+2.5** |
| | 30nm,0.5s | | | | | | | | |
| **KPKS** | **Kokpek** | **3.61** | **17** | Pg | | **Pb** | | **19 38 18.9** | **+0.5** |
| | 9.0nm,0.3s | | | | | | | | |
| KPKS | | | | Lg | | Lg | | 19 39 04.8 | |
| | 30nm,0.5s | | | | | | | | |
| **KTBS** | **Karatobe** | **3.71** | **354** | *e*P | | **Pb** | | **19 38 22.2** | **+2.1** |
| | 8.3nm,0.2s | | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | | **19 39 10.8** | **-2.9** |
| | 36nm,0.5s | | | | | | | | |
| **KTBS** | **Karatobe** | **3.71** | **354** | Pg | | **Pb** | | **19 38 22.4** | **+2.3** |
| | 8.3nm,0.2s | | | | | | | | |
| KTBS | | | | Lg | | Lg | | 19 39 10.8 | |
| | 15nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.72** | **26** | Pg | | **Pb** | | **19 38 20.0** | **-0.1** |
| | 4.3nm,0.6s | | | | | | | | |
| PDGK | | | | Lg | | Lg | | 19 39 06.7 | |
| | 12nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.72** | **26** | ⇑ | Pg | **Pb** | | **19 38 20.1** | **-0.1** |
| | 8.4nm,0.7s | | | | | | | | |
| PDGK | | | | ⇓ | Lg | Lg | | 19 39 12.6 | |
| | 33nm,0.6s | | | | | | | | |
| **CHKK** | **Chushkaly** | **3.84** | **357** | *e*P | | **Pb** | | **19 38 24.4** | **+2.2** |
| | 14nm,0.4s | | | | | | | | |
| CHKK | | | | *e*S | | **Sg** | | **19 39 14.9** | **-2.7** |
| | 34nm,0.4s | | | | | | | | |
| **CHKK** | **Chushkaly** | **3.84** | **357** | Pg | | **Pb** | | **19 38 24.4** | **+2.2** |
| | 12nm,0.3s | | | | | | | | |
| CHKK | | | | Lg | | Lg | | 19 39 14.9 | |
| | 34nm,0.4s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.85** | **343** | *e*P | | **Pb** | | **19 38 24.9** | **+2.4** |
| | 9.0nm,0.4s | | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | | **19 39 15.5** | **-2.7** |
| | 28nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.85** | **343** | Pg | | **Pb** | | **19 38 25.1** | **+2.6** |
| | 8.8nm,0.3s | | | | | | | | |
| KRBS | | | | Lg | | Lg | | 19 39 15.5 | |
| | 28nm,0.5s | | | | | | | | |
| **SGDS** | **Sogindy** | **3.94** | **331** | Pg | | **Pg** | | **19 38 27.5** | **-2.4** |
| | 4.9nm,0.4s | | | | | | | | |
| SGDS | | | | Lg | | Lg | | 19 39 19.6 | |
| | 24nm,0.4s | | | | | | | | |
| **MRKS** | **Merke** | **4.06** | **313** | *e*P | | **Pg** | | **19 38 30.5** | **-1.7** |
| | 5.0nm,0.4s | | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | | **19 39 25.1** | **+0.2** |
| | 10.0nm,0.4s | | | | | | | | |
| **MRKS** | **Merke** | **4.06** | **313** | Pg | | **Pg** | | **19 38 30.5** | **-1.7** |
| | 4.9nm,0.3s | | | | | | | | |
| MRKS | | | | Lg | | Lg | | 19 39 25.1 | |
| | 10.0nm,0.4s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.18** | **12** | Pg | | **Pb** | | **19 38 29.7** | **+1.6** |
| | 18nm,0.3s | | | | | | | | |
| BLB | | | | Lg | | Lg | | 19 39 23.3 | |
| | 22nm,0.3s | | | | | | | | |
| **ARXS** | **Arharly** | **4.22** | **6** | *e*P | | **Pb** | | **19 38 30.7** | **+2.1** |
| | 2.8nm,0.4s | | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | | **19 39 25.6** | **-4.1** |
| | 14nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **4.22** | **6** | Pg | | **Pb** | | **19 38 31.0** | **+2.4** |
| | 2.8nm,0.4s | | | | | | | | |
| ARXS | | | | Lg | | Lg | | 19 39 25.6 | |
| | 14nm,0.6s | | | | | | | | |
| **KNOS** | **Konyrlen** | **4.57** | **18** | Pg | | **Pg** | | **19 38 37.6** | **-4.4** |
| | 0.6nm,0.3s | | | | | | | | |
| KNOS | | | | Lg | | Lg | | 19 39 36.9 | |
| | 3.9nm,0.6s | | | | | | | | |
| **DJR** | **Jarkent** | **4.71** | **23** | *e*P | | **Pb** | | **19 38 38.8** | **+1.6** |
| | 0.9nm,0.2s | | | | | | | | |
| DJR | | | | *e*S | | **Sb** | | **19 39 39.1** | **+5.2** |
| | 10nm,0.5s | | | | | | | | |
| **DJR** | **Jarkent** | **4.71** | **23** | Pg | | **Pb** | | **19 38 39.4** | **+2.3** |
| | 2.8nm,0.7s | | | | | | | | |
| DJR | | | | Lg | | Lg | | 19 39 39.2 | |
| | 10nm,0.5s | | | | | | | | |
| **BTLS** | **Baital** | **5.54** | **336** | *e*P | | **Pg** | | **19 38 56.9** | **-3.7** |
| | 1.8nm,0.4s | | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | | **19 40 10.3** | **-2.1** |
| | 7.2nm,0.6s | | | | | | | | |
| **BTLS** | **Baital** | **5.54** | **336** | Pg | | **Pg** | | **19 38 56.3** | **-4.2** |
| | 2.6nm,0.4s | | | | | | | | |
| BTLS | | | | Lg | | Lg | | 19 40 10.3 | |
| | 7.2nm,0.6s | | | | | | | | |
| **KK31** | **Karatay Array** | **5.91** | **304** | ⇓ | Pg | **Pb** | | **19 39 00.5** | **+3.0** |
| | 2.4nm,0.8s,baz=139,slow=16,SNR=3.8 | | | | | | | | |
| KK31 | | | | ⇑ | Lg | Lg | | 19 40 21.9 | |
| | 2.8nm,0.8s,baz=136,slow=30,SNR=4.5 | | | | | | | | |

**IDC 09 20:07:05.0±1.7, 12.°73N×143.°79E, h110km±18km, mb3.2/4, mbtmp3.5/4, Error ellipse: s-maj=38.9km s-min=24.4km az=129.0, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.36** | **51** | P | | P | Pn | 20 07 29.3 | -0.7 |
| | 115nm,0.3s,baz=256,slow=1.9,SNR=17 | | | | | | | | |
| GUMO | | | | S | | | Sn | 20 07 49.2 | +0.1 |
| | 514nm,0.3s,baz=130,slow=18,SNR=12 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.77** | **196** | P | | P | P | 20 13 36.3 | -0.2 |
| | 0.4nm,0.7s,baz=18,slow=9.6,SNR=6.1 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.48** | **283** | P | | P | P | 20 14 58.0 | +0.2 |
| | 0.8nm,0.7s,baz=78,slow=6.9,SNR=5.7 | | | | | | | | |
| | 0.8nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **69.79** | **25** | P | | P | P | 20 18 02.2 | -1.1 |
| | 0.2nm,0.5s,baz=252,slow=5.4,SNR=2.7 | | | | | | | | |
| | 0.2nm,0.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.28** | **51** | P | | P | P | 20 19 45.8 | +1.1 |
| | 0.2nm,0.4s,baz=256,slow=6.3,SNR=3.2 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |

*IDC **09** 20:14:22.0±13.0,14.°90S×165.°78E,h0km,mb4.0/3, mbtmp4.0/4,ML3.7/1, Error ellipse: s-maj=234.0km s-min=37.3km az=56.0*
*NOU **09** 20:14:33.4,15.°39S×167.°78E,h98km,MLv4.1/7, Vanuatu Islands*
**ISC 09 20:14:22.1±2.8, 14.°68S±0.°2×167.°1E±0.°3, h100km, n8, σ1.8s29/9, mb3.6/3, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **3.29** | **162** | P | | P | **Pn** | **20 15 11.8** | **+0.2** |
| **YATNC** | **Mamie plateau,** | **7.44** | **182** | P | | P | **Pn** | **20 16 08.8** | **+0.8** |
| **DZM** | **Mont Dzumac** | **7.48** | **185** | P | | P | **Pn** | **20 16 09.3** | **+0.7** |
| **DZM** | **Mont Dzumac** | **7.48** | **185** | Pn | | P | **Pn** | **20 16 08.3** | **-0.3** |
| | 1.3nm,0.3s,baz=34,slow=17,SNR=13 | | | | | | | | |
| DZM | | | | Sn | | | **Sn** | **20 17 30.6** | **-1.3** |
| | 0.6nm,0.3s,baz=135,slow=19,SNR=1.4 | | | | | | | | |
| | 6.5nm,0.7s | | | | | | | | |
| **NOUC** | **Port Laguerre** | **7.52** | **186** | P | | P | **Pn** | **20 16 11.5** | **+2.4** |
| **STKA** | **Stephens Creek** | **28.99** | **229** | P | | P | **P** | **20 20 12.8** | **+0.4** |
| | 1.9nm,0.4s,baz=50,slow=11,SNR=7.2 | | | | | | | | |
| | 1.9nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.73** | **256** | P | | P | **P** | **20 20 35.9** | **-0.9** |
| | 0.5nm,0.3s,baz=85,slow=9.0,SNR=3.3 | | | | | | | | |
| | 0.5nm,0.3s | | | | | | | | |
| **ASAR** | **Alice Springs** | **32.60** | **249** | P | | P | **P** | **20 20 44.0** | **-0.4** |
| | 0.5nm,0.4s,baz=78,slow=9.1,SNR=9.5 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |

**IDC 09 20:24:46.8±2.0, 26.°58S×70.°44E, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=115.0km s-min=34.0km az=92.0, Indian Ocean Triple Junction**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **18.93** | | **6** | | T | T | 20 47 56.1 | |
| | baz=185,slow=76,SNR=16 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **18.93** | | **6** | | T | T | 20 47 58.4 | |
| | baz=185,slow=76,SNR=22 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **18.95** | | **6** | | T | T | 20 47 59.6 | |
| | baz=185,slow=76,SNR=41 | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **24.53** | **212** | | | T | T | 20 56 29.8 | |
| | baz=44,slow=74,SNR=104 | | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **24.54** | **212** | | | T | T | 20 56 29.3 | |
| | baz=44,slow=74,SNR=89 | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **24.55** | **212** | | | T | T | 20 56 29.7 | |
| | baz=44,slow=74,SNR=89 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **38.22** | **113** | | | T | T | 21 12 24.2 | |
| | baz=272,slow=75,SNR=4.6 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **38.22** | **113** | | | T | T | 21 12 22.5 | |
| | baz=272,slow=75,SNR=5.7 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **38.23** | **113** | | | T | T | 21 12 23.8 | |
| | baz=272,slow=75,SNR=6.0 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.63** | **35** | | | P | P | 20 34 02.7 | -0.1 |
| | 1.1nm,0.5s,baz=224,slow=7.3,SNR=7.5 | | | | | | | | |
| | 1.1nm,0.5s | | | | | | | | |
| **VNDA** | **Vanda** | **64.56** | **166** | | | P | P | 20 35 25.2 | 0.0 |
| | 0.5nm,1.0s,baz=276,slow=7.7,SNR=1.9 | | | | | | | | |
| | 0.5nm,1.0s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **73.81** | **8** | | | P | P | 20 36 22.8 | -0.1 |
| | 0.4nm,0.8s,baz=193,slow=5.9,SNR=4.0 | | | | | | | | |
| | 0.4nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **77.19** | **5** | | | P | P | 20 36 42.5 | +0.3 |
| | 0.2nm,0.4s,baz=203,slow=4.5,SNR=4.1 | | | | | | | | |
| | 0.2nm,0.4s | | | | | |

**MMRI Maumere 5.60 93** Pn **Pn** **20 34 25.9 -0.9**
**MMRI Maumere 5.60 93** P **Pn** **20 34 26.4 -0.4**
**UGM Wanagama 6.02 274** Pn **Pn** **20 34 33.5 +0.9**
**UGM Wanagama 6.02 274** P **Pn** **20 34 33.2 +0.7**
121nm,1.0s,0.8nm
**BBSI Bau Bau 6.61 65** P **Pn** **20 34 42.0 +1.3**
56nm,1.0s,0.2nm
**BATI Baumata 7.22 105** P **Pn** **20 34 51.1 +2.0**
119nm,1.0s,2µm0.4nm
**MTKI Muara Teweh, K 7.59 347** P **Pn** **20 34 54.0 -0.1**
50nm,0.4s,2µm0.4nm
**SOEI Soe 7.71 101** P **Pn** **20 34 57.9 +2.0**
**SOEI Soe 7.71 101** Pn **Pn** **20 34 56.7 +0.7**
**SOEI Soe 7.71 101** P **Pn** **20 34 58.1 +2.2**
113nm,1.0s,1µm
**CNJI Cibinong 9.43 276** P **Pn** **20 35 21.3 +2.0**
**MBWA Marble Bar 13.05 167** Pn **Pn** **20 36 06.9 -2.1**
**FITZ Fitzroy Crossi 13.07 139** Pn **Pn** **20 36 09.0 -0.2**
**PSA00 Pilbara Seismi 13.48 167** Pn **Pn** **20 36 12.6 -2.2**
**PSA00 Pilbara Seismi 13.48 167** Pn **Pn** **20 36 12.9 -1.9**
**KNRA Kununurra 13.94 122** Pn **Pn** **20 36 20.6 -0.5**
**GIRL Giralia 14.35 189** Pn **Pn** **20 36 24.9 -1.8**
**MTN Manton Dam 14.97 108** P **Pn** **20 36 34.0 -1.2**
**MTN Manton Dam 14.97 108** Pn **Pn** **20 36 32.2 -3.0**
**KDU Kakadu 16.20 107** P **Pn** **20 36 50.6 -0.6**
**FAKI Fak Fak 16.51 72** Pn **Pn** **20 36 54.2 -1.0**
**WRKA Warakurna 19.97 147** P **P** **20 37 37.4 +1.3**
**MORW Morawa 20.58 181** P **P** **20 37 42.4 -0.1**
MORW IAmb IAmb 20 37 48.5
comp=Z,66nm,1.4s
**WB0 Warramunga Arr 20.62 125** P **P** **20 37 42.8 -0.3**
**WRA Warramunga Arr 20.67 126** P **P** **20 37 43.3 -0.3**
**WRA Warramunga Arr 20.67 126** P **P** **20 37 43.4 -0.2**
comp=Z,27nm,1.0s,baz=300,slow=12,SNR=132
WRA S **S** **20 41 29.3 -5.5**
comp=Z,1.0nm,0.8s,baz=291,slow=26,SNR=3.1
comp=Z,27nm,1.0s
**WRAB Tennant Creek 20.68 126** P **P** **20 37 43.8 +0.1**
WRAB IAmb IAmb 20 37 48.4
comp=Z,26nm,0.7s
**WB2 Warramunga Arr 20.68 126** P **P** **20 37 43.9 +0.1**
**WR0 Warramunga Arr 20.84 125** P **P** **20 37 45.4 -0.1**
WR0 IAmb IAmb 20 37 48.6
comp=Z,51nm,1.1s
**AS31 Alice Springs 22.50 134** P **P** **20 38 02.9 -0.4**
**ASAR Alice Springs 22.50 134** P **P** **20 38 03.5 +0.2**
**ASAR Alice Springs 22.50 134** P **P** **20 38 03.2 -0.1**
comp=Z,10.0nm,0.8s,baz=313,slow=9.5,SNR=70
ASAR LR LR 20 46 16.3
comp=Z,396nm,18.5s,baz=36,slow=36
comp=Z,10.0nm,0.8s
**AS01 Alice Springs 22.53 134** P **P** **20 38 04.1 +0.5**
**NWAO Narrogin (SRO) 24.43 179** P **P** **20 38 22.5 +0.2**
**FORT Forrest 24.72 156** P **P** **20 38 25.0 0.0**
**QIS Mount Isa 25.32 121** P **P** **20 38 32.9 +2.3**
**OOD Oodnadatta 26.43 139** P **P** **20 38 40.9 +0.4**
**COEN Coen 26.66 104** P **P** **20 38 41.9 -0.8**
COEN IAmb IAmb 20 38 43.3
comp=Z,20nm,1.1s
**MULG Mulgathing 27.24 145** P **P** **20 38 48.3 +0.5**
**BBOO Buckleboo 30.26 146** P **P** **20 39 14.8 +0.1**
**CTA Charters Tower 30.96 115** LR LR 20 53 50.7
comp=Z,18nm,18.7s,baz=284,slow=40
**CMAR Chiang Mai Arr 31.85 327** P **P** **20 39 28.4 -0.4**
**CMAR Chiang Mai Arr 31.85 327** P **P** **20 39 30.1 +1.3**
comp=Z,2.1nm,0.7s,baz=148,slow=6.5,SNR=15
comp=Z,2.1nm,0.7s
**CRAI Chiangrai 32.61 331** P **P** **20 39 35.9 +0.5**
CRAI IAmb IAmb 20 39 39.0
comp=Z,5.0nm,0.9s
**STKA Stephens Creek 32.97 139** P **P** **20 39 39.2 +0.8**
comp=Z,3.6nm,0.5s,baz=314,slow=9.6,SNR=12
STKA PcP **PcP** **20 42 22.3 -0.3**
comp=Z,4.0nm,0.8s,baz=305,slow=6.0,SNR=2.9
STKA LR LR 20 53 06.3
comp=Z,296nm,18.1s,baz=299,slow=37
comp=Z,3.6nm,0.5s
**PZH PanZhiHua 37.56 338** P **P** **20 40 20.4 +2.2**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,120nm,5.7s
**NJ2 Nanjing 40.27 3** *e*P **P** **20 40 44.1 +3.4**
NJ2 pmax pmax
comp=Z,73nm,0.5s
**SHL Shillong 41.44 325** P **P** **20 40 51.3 +0.6**
SHL IAmb IAmb 20 40 52.1
comp=Z,8.4nm,0.9s
**LZH Lanzhou 45.84 346** *e*P **P** **20 41 27.4 +1.5**
LZH sP sP 20 41 36.5 +5.5
LZH pmax pmax
comp=Z,11nm,1.1s
**KSAR Wonju Array Be 46.80 12** P **P** **20 41 34.0 +0.7**
**KSRS Korea Array 46.82 12** P **P** **20 41 33.9 +0.5**
comp=Z,1.4nm,0.9s,baz=182,slow=8.6,SNR=5.2
comp=Z,1.4nm,0.9s
**MAJO Matsushiro 49.10 23** P **P** **20 41 49.7 -1.4**
MAJO IAmb IAmb 20 42 26.6
comp=Z,14nm,1.4s
**MJAR Matsushiro Arr 49.10 23** P **P** **20 41 50.2 -0.9**
comp=Z,3.2nm,0.8s,baz=206,slow=7.0,SNR=8.1
comp=Z,3.2nm,0.8s
**MJB9 Matsu-Tunnel 49.10 23** P **P** **20 41 49.7 -1.4**
MJB9 IAmb IAmb 20 42 26.6
comp=Z,14nm,1.4s
**HHC Hu-ho-hao-te 49.21 355** *e*P **P** **20 41 54.9 +2.9**
HHC pmax pmax
comp=Z,20nm,0.6s
HHC pmax pmax
comp=Z,220nm,5.7s
**GTA Gaotai 50.04 343** *e*P **P** **20 41 59.8 +1.4**
GTA pmax pmax
comp=Z,6.0nm,1.3s
**JSD Sado 50.43 22** P **P** **20 42 00.8 -0.4**
**USRK Ussuriysk Ar. 54.17 14** P **P** **20 42 29.2 +0.3**
comp=Z,5.9nm,0.7s,baz=188,slow=8.2,SNR=7.5
comp=Z,5.9nm,0.7s
**SONM Songino Array 56.70 352** P **P** **20 42 47.0 -0.2**
**SONM Songino Array 56.70 352** P **P** **20 42 48.3 +1.0**
comp=Z,2.2nm,0.7s,baz=171,slow=8.0,SNR=15
comp=Z,2.2nm,0.7s
**HEH HeiHe 59.16 8** *e*P **P** **20 43 03.8 -0.4**
HEH pmax pmax
comp=Z,12nm,1.3s
**URZ Urewera 61.80 129** LR LR 21 12 08.0
comp=Z,108nm,18.5s,baz=29,slow=38
**MK31 Makanchi Array 62.85 334** P **P** **20 43 28.3 -1.2**
MK31 IAmb IAmb 20 43 30.7
comp=Z,2.3nm,0.9s
**MKAR Makanchi Array 62.85 334** P **P** **20 43 28.6 -0.8**
**MKAR Makanchi Array 62.85 334** P **P** **20 43 28.1 -1.4**
comp=Z,2.0nm,0.7s,baz=143,slow=6.8,SNR=18
comp=Z,2.0nm,0.7s
**KURBB Kurchatov Arra 67.38 335** P **P** **20 43 57.1 -1.7**
comp=Z,0.6nm,0.7s,baz=144,slow=6.0,SNR=5.1
comp=Z,0.6nm,0.7s
**KURK Kurchatov 67.42 335** **P** **20 43 58.3 -0.7**
**ZALV Zalesovo Beam 67.64 340** P **P** **20 43 58.6 -1.8**
comp=Z,1.8nm,0.6s,baz=157,slow=5.8,SNR=6.2
comp=Z,1.8nm,0.6s
**YAK Yakutsk 70.94 6** P **P** **20 44 20.3 -0.3**
YAK IAmb IAmb 20 44 25.1
comp=Z,4.8nm,0.8s
**VNDA Vanda 72.97 171** P **P** **20 44 33.0 +0.4**
VNDA IAmb IAmb 20 44 37.4
comp=Z,4.1nm,1.1s
**VNDA Vanda 72.97 171** P **P** **20 44 33.5 +0.8**
comp=Z,2.4nm,1.0s,baz=312,slow=8.3,SNR=9.7
comp=Z,2.4nm,1.0s
**ABKAR Akbulak array 75.70 326** P **P** **20 44 46.5 -2.6**
**QSPA South Pole Qui 81.60 180** P **P** **20 45 22.0 +0.5**
comp=Z,5.1nm,1.1s,baz=340,slow=1.7,SNR=11
comp=Z,5.1nm,1.1s
**BOSA Boshof 87.19 242** P **P** **20 45 50.6 0.0**
comp=Z,1.9nm,0.5s,baz=105,slow=3.7,SNR=7.5
comp=Z,1.9nm,0.5s
**TROLL Troll, Antarti 89.29 196** ⇓P **P** **20 46 00.6 +0.9**
comp=Z,45nm,0.5s
**SNAA Sanae 90.93 196** ⇓P **P** **20 46 07.1 -0.2**
comp=Z,49nm,0.6s
**SNAA Sanae 90.93 196** P **P** **20 46 07.9 +0.7**
comp=Z,2.1nm,0.7s,baz=215,slow=6.4,SNR=6.9
comp=Z,2.1nm,0.7s
**BELA Belgrano 2 92.39 186** **P** **20 46 14.0 +0.2**
BELA IAmb IAmb 20 46 42.1
comp=Z,4.5nm,1.3s

**TORD Torodi Ar. Bea 116.00 281** PKP **PKPdf** **20 51 45.4 -2.2**
comp=Z,0.5nm,0.6s,baz=70,slow=2.7,SNR=6.0
**CPUP Villa Florida 144.98 190** PKPbc **PKPbc** **20 52 41.3 +0.4**
comp=Z,6.5nm,0.6s,baz=164,slow=2.9,SNR=20
**BDFB Brasilia 151.66 213** PKPbc **PKPbc** **20 52 59.1 -0.2**
comp=Z,2.2nm,0.6s,baz=162,slow=6.4,SNR=5.1

*NEIC **09** 20:35:29.3±2.4, 45.07°N±0.05°×107.00°W±0.08, h0km±1km, ML2.7/51, Error ellipse: s-maj=11.5km s-min=6.2km az=235.0*
*IDC **09** 20:35:30.7±1.2, 44.95°N×106.73°W, h0km, mbtmp3.4/2, ML3.0/2, Error ellipse: s-maj=46.0km s-min=8.7km az=137.0*
**ISC 09 20:35:29.6**±1.0, **45.15N**±0.05°×**106.81W**±0.06°, **h0**km, **n39,** σ1°**69**/38, **Montana**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LAO** | **LASA Array** | **1.59** | **15** | | | **Pg** | **20 36 00.5** | **+0.5** |
| LAO | | | | | IAML | | 20 36 27.7 | |
| | 99nm,0.3s | | | | | | | |
| LAO | | | | | IAML | | 20 36 29.5 | |
| | 123nm,0.9s | | | | | | | |
| **RLMT** | **Red Lodge** | **1.74** | **270** | | | **Pn** | **20 36 01.0** | **-0.3** |
| RLMT | | | | | IAML | | 20 36 27.4 | |
| | 53nm,0.3s | | | | | | | |
| **GCMT** | **Greycliff** | **2.11** | **289** | Pn | | **Pn** | **20 36 06.4** | **+0.1** |
| **RSSD** | **Black Hills** | **2.23** | **117** | | | **Pb** | **20 36 10.6** | **-0.3** |
| RSSD | | | | | IAML | | 20 36 48.4 | |
| | 52nm,0.8s | | | | | | | |
| RSSD | | | | | IAML | | 20 36 58.2 | |
| | 46nm,0.6s | | | | | | | |
| **YMP** | **Mirror Lake Pl** | **2.42** | **261** | Pn | | **Pn** | **20 36 10.4** | **-0.2** |
| YMP | | | | | IAML | | 20 36 55.5 | |
| | comp=N,45nm,0.5s | | | | | | | |
| YMP | | | | | IAML | | 20 37 02.0 | |
| | comp=E,66nm,0.7s | | | | | | | |
| **K22A** | **Casper** | **2.51** | **175** | | | **Pn** | **20 36 10.2** | **-1.6** |
| K22A | | | | | IAML | | 20 36 55.8 | |
| | comp=N,41nm,0.7s | | | | | | | |
| K22A | | | | | IAML | | 20 37 36.2 | |
| | comp=E,43nm,3.4s | | | | | | | |
| **LKWY** | **Lake** | **2.62** | **258** | Pn | | **Pn** | **20 36 11.7** | **-1.7** |
| LKWY | | | | | IAML | | 20 36 38.2 | |
| | comp=E,51nm,0.6s | | | | | | | |
| **YNR** | **Norris Junctio** | **2.79** | **262** | | | **Pn** | **20 36 16.6** | **+0.9** |
| YNR | | | | | IAML | | 20 37 20.2 | |
| | comp=E,22nm,0.8s | | | | | | | |
| **H17A** | **Grant Village** | **2.79** | **256** | Pn | | **Pn** | **20 36 12.9** | **-2.8** |
| H17A | | | | | IAML | | 20 36 29.5 | |
| | comp=N,30nm,0.1s | | | | | | | |
| **YHH** | **Holmes Hill** | **2.89** | **264** | | | **Pn** | **20 36 16.9** | **-0.3** |
| **YFT** | **Old Faithful** | **2.95** | **258** | Pn | | **Pn** | **20 36 16.1** | **-1.9** |
| **FLWY** | **Flagg Ranch** | **2.98** | **250** | | | **Pn** | **20 36 17.0** | **-1.2** |
| FLWY | | | | | IAML | | 20 37 24.4 | |
| | comp=N,34nm,2.0s | | | | | | | |
| FLWY | | | | | IAML | | 20 37 41.3 | |
| | comp=N,24nm,2.6s | | | | | | | |
| **YPP** | **Pitchstone Pla** | **2.98** | **254** | | | **Pn** | **20 36 18.1** | **-0.3** |
| **PD31** | **Pinedale Array** | **3.10** | **221** | | | **Pn** | **20 36 21.0** | **+1.0** |
| **PDAR** | **Pinedale Array** | **3.10** | **221** | | | **Pn** | **20 36 21.7** | **+1.7** |
| **PDAR** | **Pinedale Array** | **3.10** | **221** | Pn | | **Pn** | **20 36 22.0** | **+2.0** |
| | comp=N,1.6nm,0.3s,baz=49,slow=18,SNR=36 | | | | | | | |
| PDAR | | | | | Lg | Lg | 20 37 04.5 | |
| | comp=N,2.0nm,0.3s,baz=47,slow=46,SNR=10.0 | | | | | | | |
| | comp=N,1.5nm,0.3s | | | | | | | |
| **YHL** | **Hebgen Lake** | **3.12** | **266** | Pn | | **Pn** | **20 36 20.3** | **0.0** |
| YHL | | | | | IAML | | 20 37 38.3 | |
| | comp=N,24nm,1.3s | | | | | | | |
| YHL | | | | | IAML | | 20 37 47.4 | |
| | comp=E,21nm,2.5s | | | | | | | |
| **LOHW** | **Long Hollow** | **3.13** | **242** | | | **Pn** | **20 36 18.6** | **-1.7** |
| **IMW** | **Indian Meadow** | **3.21** | **248** | Pn | | **Pn** | **20 36 19.2** | **-2.4** |
| IMW | | | | | IAML | | 20 37 30.3 | |
| | comp=E,14nm,0.6s | | | | | | | |
| IMW | | | | | IAML | | 20 37 40.7 | |
| | comp=E,13nm,1.3s | | | | | | | |
| **FXWY** | **Fox Creek** | **3.38** | **245** | | | **Pn** | **20 36 26.2** | **+2.3** |
| **TPAW** | **Teton Pass** | **3.41** | **242** | Pn | | **Pn** | **20 36 25.2** | **+1.0** |
| TPAW | | | | | IAML | | 20 37 38.1 | |
| | comp=E,11nm,1.9s | | | | | | | |
| **REDW** | **Red Top Meadow** | **3.41** | **240** | Pn | | **Pn** | **20 36 25.5** | **+1.2** |
| **BOZ** | **Bozeman (W)** | **3.43** | **279** | | | **Pn** | **20 36 24.0** | **-0.4** |
| BOZ | | | | | IAML | | 20 37 26.0 | |
| | comp=E,12nm,1.8s | | | | | | | |
| **RWWY** | **Rawlins** | **3.48** | **185** | Pn | | **Pn** | **20 36 23.6** | **-1.5** |
| RWWY | | | | | IAML | | 20 37 30.1 | |
| | comp=E,18nm,2.0s | | | | | | | |
| RWWY | | | | | IAML | | 20 37 52.7 | |
| | comp=E,16nm,3.0s | | | | | | | |
| **EGMT** | **Eagleton** | **3.52** | **326** | Pn | | **Pn** | **20 36 24.1** | **-1.5** |
| **DGMT** | **Dagmar** | **3.77** | **27** | Pn | | **Pn** | **20 36 31.4** | **+2.5** |
| **AHID** | **Auburn Hatcher** | **3.91** | **234** | | | **Pn** | **20 36 32.5** | **+1.5** |
| AHID | | | | | IAML | | 20 37 47.7 | |
| | comp=E,12nm,2.5s | | | | | | | |
| AHID | | | | | IAML | | 20 38 54.6 | |
| | comp=E,8.8nm,0.8s | | | | | | | |
| **DLMT** | **Dillon** | **4.09** | **275** | | | **Pn** | **20 36 33.2** | **-0.3** |
| DLMT | | | | | IAML | | 20 37 54.3 | |
| | comp=E,14nm,4.0s | | | | | | | |
| **LYMT** | **Lyon Mountain** | **4.23** | **297** | Pn | | **Pn** | **20 36 37.0** | **+1.5** |
| **N23A** | **Red Feather La** | **4.30** | **171** | | | **Pn** | **20 36 37.8** | **+1.3** |
| N23A | | | | | IAML | | 20 38 14.6 | |
| | comp=E,12nm,1.2s | | | | | | | |
| **OVMT** | **Ovando** | **4.71** | **296** | Pn | | **Pn** | **20 36 45.4** | **+3.5** |
| **BPMT** | **Black Pine Rid** | **4.82** | **288** | Pn | | **Pn** | **20 36 42.1** | **-1.4** |
| **HWUT** | **Hardware Ranch** | **4.96** | **226** | Pn | | **Pn** | **20 36 47.0** | **+1.6** |
| HWUT | | | | | IAML | | 20 38 25.9 | |
| | comp=E,6.8nm,1.4s | | | | | | | |
| **MSO** | **Missoula** | **5.25** | **291** | | | **Pn** | **20 36 48.7** | **-0.6** |
| **TCUT** | **Toone Canyon** | **5.25** | **221** | Pn | | **Pn** | **20 36 50.6** | **+1.0** |
| **P18A** | **Preston Nutter** | **6.08** | **206** | Pn | | **Pn** | **20 37 01.1** | **+0.1** |
| **I56US** | **NEWPORT INFRAS** | **7.75** | **297** | I | | I | 21 22 30.0 | |
| | baz=115,slow=310,SNR=1.0 | | | | | | | |
| **HMU** | **Henry Mountain** | **7.79** | **204** | Pn | | **Pn** | **20 37 19.8** | **-4.6** |
| **ULM** | **Lac du Bonnet** | **8.96** | **51** | Pn | | **Pn** | **20 37 40.4** | **+0.3** |
| | comp=E,0.5nm,0.3s,baz=243,slow=10.0,SNR=9.1 | | | | | | | |
| ULM | | | | | Lg | Lg | 20 40 11.2 | |
| | comp=E,0.1nm,0.3s,baz=334,slow=18,SNR=2.0 | | | | | | | |
| | comp=E,1.3nm,0.2s | | | | | | | |

*NEIC **09** 20:40:37.5±1.2, 43.67°N±0.04°×105.29°W±0.07, h0km±1km, ML3.1/70, Error ellipse: s-maj=8.1km s-min=7.5km az=277.0*
*IDC **09** 20:40:38.4±2.1, 43.79°N×105.45°W, h0km, mbtmp3.2/2, ML3.0/2, Error ellipse: s-maj=55.2km s-min=10.6km az=150.0*
**ISC 09 20:40:37.6**±0.9, **43.70N**±0.04°×**105.24W**±0.04°, **h0**km, **n58,** σ1°**47**/57, **Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.97** | **64** | | Pg | **Pb** | **20 40 57.2** | **-0.1** |
| RSSD | | | | | Sg | **Sn** | **20 41 12.1** | **-1.1** |
| **K22A** | **Casper** | **1.41** | **222** | | | **Pg** | **20 41 03.6** | **-0.9** |
| K22A | | | | | IAML | | 20 41 26.1 | |
| | comp=N,231nm,0.3s | | | | | | | |
| K22A | | | | | IAML | | 20 41 26.8 | |
| | comp=E,191nm,0.8s | | | | | | | |
| **PHWY** | **Pilot Hill** | **2.40** | **184** | Pn | | **Pn** | **20 41 19.2** | **+0.8** |
| PHWY | | | | | IAML | | 20 41 53.0 | |
| | comp=E,69nm,0.5s | | | | | | | |
| **RWWY** | **Rawlins** | **2.48** | **216** | Pn | | **Pn** | **20 41 20.5** | **+1.1** |
| RWWY | | | | | IAML | | 20 41 56.2 | |
| | comp=E,114nm,1.0s | | | | | | | |
| **N23A** | **Red Feather La** | **2.85** | **191** | Pn | | **Pn** | **20 41 25.9** | **+1.3** |
| N23A | | | | | IAML | | 20 42 08.1 | |
| | comp=E,64nm,1.5s | | | | | | | |
| N23A | | | | | IAML | | 20 42 19.1 | |
| | comp=N,57nm,0.6s | | | | | | | |
| **LAO** | **LASA Array** | **3.07** | **347** | | | **Pn** | **20 41 27.5** | **+0.2** |
| **BRIGG** | **Briggsdale** | **3.19** | **167** | Pn | | **Pn** | **20 41 30.5** | **+1.3** |
| **RLMT** | **Red Lodge** | **3.21** | **298** | Pn | | **Pn** | **20 41 29.6** | **+0.1** |
| **BW06** | **Boulder Array** | **3.29** | **255** | Pn | | **Pn** | **20 41 32.0** | **+1.5** |
| **PD31** | **Pinedale Array** | **3.29** | **255** | Pn | | **Pn** | **20 41 31.4** | **+0.8** |
| **PDAR** | **Pinedale Array** | **3.29** | **255** | Pn | | **Pn** | **20 41 31.0** | **+0.4** |
| **PDAR** | **Pinedale Array** | **3.29** | **255** | Pn | | **Pn** | **20 41 32.3** | **+1.7** |
| | comp=N,1.3nm,0.3s,baz=72,slow=16,SNR=23 | | | | | | | |
| PDAR | | | | | Lg | Lg | 20 42 18.6 | |
| | comp=N,3.0nm,0.3s,baz=71,slow=34,SNR=4.2 | | | | | | | |
| | comp=N,1.3nm,0.4s | | | | | | | |
| **OGNE** | **Ogallala** | **3.64** | **138** | | | **Pn** | **20 41 36.6** | **+1.3** |

**YMP Mirror Lake Pl 3.68 288** Pn **Pn** **20 41 37.7 +1.7**
**GCMT Greycliff 3.78 305** Pn **Pn** **20 41 40.0 +2.8**
**LOHW Long Hollow 3.89 271** **Pn** **20 41 39.9 +1.0**
**H17A Grant Village 3.91 282** Pn **Pn** **20 41 40.4 +1.4**
H17A IAML 20 42 43.5
comp=E,25nm,0.1s
H17A IAML 20 42 44.0
comp=N,27nm,0.1s
**ISCO Idaho Springs 3.91 184** Pn **Pn** **20 41 39.8 +0.6**
ISCO IAML 20 43 34.0
comp=N,18nm,3.9s
**FLWY Flagg Ranch 3.96 277** **Pb** **20 41 50.6 +2.2**
FLWY IAML 20 42 54.9
comp=N,36nm,2.1s
FLWY IAML 20 42 59.3
comp=N,26nm,2.3s
**SNOW Snow King Moun 4.01 268** **Pb** **20 41 49.3 0.0**
SNOW IAML 20 42 56.1
comp=N,35nm,1.4s
SNOW IAML 20 43 17.6
comp=N,26nm,1.2s
**YPP Pitchstone Pla 4.05 280** **Pn** **20 41 43.2 +2.1**
**REDW Red Top Meadow 4.09 267** **Pb** **20 41 51.4 +0.8**
**YFT Old Faithful 4.10 282** **Pn** **20 41 42.0 +0.3**
YFT IAML 20 42 12.2
comp=E,18nm,1.1s
**IMW Indian Meadow 4.13 275** **Pn** **20 41 44.0 +1.8**
IMW IAML 20 43 04.4
comp=E,21nm,0.8s
**TPAW Teton Pass 4.15 269** **Pb** **20 41 50.2 -1.4**
TPAW IAML 20 43 13.1
comp=E,14nm,2.2s
TPAW IAML 20 43 16.4
comp=E,25nm,1.0s
**FXWY Fox Creek 4.20 271** Pn **Pn** **20 41 45.5 +2.4**
**O20A White River Ci 4.21 213** **Pg** **20 41 56.1 -2.1**
O20A IAML 20 44 25.1
comp=E,28nm,4.0s
**AHID Auburn Hatcher 4.38 260** **Pn** **20 41 44.2 -1.3**
AHID IAML 20 43 02.3
comp=E,23nm,1.4s
AHID IAML 20 43 03.9
comp=E,24nm,0.5s
**YHL Hebgen Lake 4.42 287** **Pb** **20 41 58.4 +2.2**
YHL IAML 20 43 08.4
comp=N,17nm,1.6s
YHL IAML 20 43 27.4
comp=E,20nm,1.0s
**RDMU Red Mountain 4.49 227** **Pb** **20 41 57.4 0.0**
RDMU IAML 20 43 10.1
comp=N,17nm,1.3s
RDMU IAML 20 43 11.5
comp=E,23nm,1.1s
**SMCO Snowmass 4.70 197** **Pb** **20 42 02.6 +1.5**
SMCO IAML 20 43 14.8
comp=E,19nm,1.1s
SMCO IAML 20 43 32.5
comp=E,18nm,0.2s
**Q24A Divide 4.73 179** **Pb** **20 42 03.3 +1.7**
**DGMT Dagmar 4.82 8** Pn **Pn** **20 41 52.6 +1.2**
**BOZ Bozeman (W) 4.94 295** **Pb** **20 42 02.2 -2.7**
BOZ IAML 20 43 52.7
comp=E,8.4nm,5.0s
BOZ IAML 20 45 04.5
comp=E,9.2nm,4.3s
**HWUT Hardware Ranch 5.11 248** **Pn** **20 41 55.0 -0.5**
HWUT IAML 20 43 30.3
comp=E,13nm,1.1s
HWUT IAML 20 43 30.7
comp=E,14nm,2.6s
**TCUT Toone Canyon 5.24 243** **Pn** **20 41 57.7 +0.2**
**EGMT Eagleton 5.35 325** Pn **Pn** **20 42 01.9 +3.2**
**DLMT Dillon 5.51 290** **Pb** 20 42 20.2 +5.4
**P18A Preston Nutter 5.53 224** **Pn** **20 42 03.4 +2.0**
**LRM Limekiln Ridge 5.55 295** Pn **Pn** **20 42 03.8 +2.1**
**MCMT McKenzie Canyo 5.58 284** Pn **Pn** **20 42 03.0 +1.0**
**PV22 Blue Mesa, Par 5.81 209** Pn **Pn** **20 42 04.5 -0.7**
**PV07 Paradox Valley 5.85 207** Pn **Pn** **20 42 03.1 -2.7**
**HVU Hansel Valley 5.87 253** **Pn** **20 42 07.3 +1.3**
**LYMT Lyon Mountain 5.95 306** Pn **Pn** **20 42 07.5 +0.5**
**SDCO Great Sand Dun 5.95 182** Pn **Pn** **20 42 06.2 -1.0**
**PV23 Carpenter Ridg 5.97 210** Pn **Pn** **20 42 06.1 -1.3**
**PV10 Paradox Valley 6.04 210** Pn **Pn** **20 42 07.8 -0.6**
**PV20 West Nyswonger 6.05 209** Pn **Pn** **20 42 08.3 -0.1**
**PV11 David Mesa, Pa 6.06 208** Pn **Pn** **20 42 07.6 -0.9**
**PV16 Nyswonger Mesa 6.06 209** Pn **Pn** **20 42 08.5 -0.1**
**PV03 Paradox Valley 6.09 208** Pn **Pn** **20 42 08.7 -0.3**
**PV18 Skein Mesa, Pa 6.12 208** Pn **Pn** **20 42 07.3 -2.1**
**PV13 Radium Mtn., P 6.16 207** Pn **Pn** **20 42 08.9 -1.1**
**BPMT Black Pine Rid 6.42 298** Pn **Pn** **20 42 12.9 -0.7**
**HMU Henry Mountain 7.11 218** **Pn** **20 42 24.1 +1.0**
**ULM Lac du Bonnet 9.15 41** Pn **Pn** **20 42 50.4 -0.4**
comp=E,0.4nm,0.3s,baz=231,slow=13,SNR=2.2
ULM Lg Lg 20 45 21.7
comp=E,0.1nm,0.3s,baz=139,slow=21,SNR=1.7
comp=E,1.0nm,0.3s
**I56US NEWPORT INFRAS 9.44 303** I I 21 33 30.0
baz=118,slow=307,SNR=3.8

*ISK **09** 20:44:58.3, 39.99°N×40.02E, h11km, ML2.8/7*
*AFAD **09** 20:44:58.9±0.0, 39.99°N×40.01E, h7km±5km, ML2.2*
**ISC 09 20:44:58.7**±1.1, **39.98N**±0.03°×**40.01E**±0.03°, **h9**km±10km, **n16,** σ0°**68**/25, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BAYB** | **BAYBURT** | **0.34** | **34** | P | | **Pg** | **20 45 05.4** | **-0.1** |
| BAYB | | | | | *i* AML | AML | 20 45 10.0 | |
| | comp=E,704nm,0.2s | | | | | | | |
| BAYB | | | | | S | **Sg** | **20 45 10.4** | **+0.4** |
| BAYB | | | | | *i* AML | AML | 20 45 11.0 | |
| | comp=N,600nm,0.2s | | | | | | | |
| **EUZM** | **Uzumlu** | **0.36** | **221** | P | | **Pg** | **20 45 06.5** | **+0.6** |
| EUZM | | | | | S | **Sb** | **20 45 12.7** | **-0.7** |
| EUZM | | | | | *i* AML | AML | 20 45 14.0 | |
| | comp=E,231nm,0.4s | | | | | | | |
| EUZM | | | | | *i* AML | AML | 20 45 16.0 | |
| | comp=N,156nm,0.5s | | | | | | | |
| **KOPT** | **Kop Dagi** | **0.38** | **84** | P | | **Pg** | **20 45 06.6** | **+0.3** |
| KOPT | | | | | S | **Sb** | **20 45 13.3** | **-0.5** |
| KOPT | | | | | *i* AML | AML | 20 45 14.0 | |
| | comp=N,1µm,0.6s | | | | | | | |
| KOPT | | | | | *i* AML | AML | 20 45 14.0 | |
| | comp=E,890nm,0.5s | | | | | | | |
| **BAYT** | **Aydıntepe-Bayb** | **0.42** | **14** | Pg | | **Pg** | **20 45 07.2** | **+0.1** |
| BAYT | | | | Sg | | **Sg** | **20 45 13.3** | **+0.6** |
| **ERZN** | **Erzincan** | **0.45** | **209** | Pg | | **Pg** | **20 45 07.6** | **0.0** |
| ERZN | | | | Sg | | **Sb** | **20 45 15.1** | **-0.8** |
| **KELT** | **Kelkit** | **0.60** | **286** | P | | **Pb** | **20 45 11.3** | **-0.3** |
| KELT | | | | | *i* AML | AML | 20 45 22.0 | |
| | comp=E,63nm,0.2s | | | | | | | |
| KELT | | | | | *i* AML | AML | 20 45 25.0 | |
| | comp=N,73nm,0.6s | | | | | | | |
| **GUMT** | **Gumushane** | **0.63** | **320** | Pg | | **Pg** | **20 45 11.1** | **+0.2** |
| GUMT | | | | Sg | | **Sb** | **20 45 20.1** | **-0.9** |
| **YEDI** | **Yedisu-Bingol** | **0.68** | **143** | Pg | | **Pg** | **20 45 11.7** | **-0.2** |
| **ECAT** | **Cat-ERZURUM** | **0.83** | **116** | P | | **Pg** | **20 45 14.2** | **-0.6** |
| ECAT | | | | | *i* AML | AML | 20 45 29.0 | |
| | comp=E,54nm,0.4s | | | | | | | |
| ECAT | | | | | S | **Sn** | **20 45 29.4** | **0.0** |
| ECAT | | | | | *i* AML | AML | 20 45 32.0 | |
| | comp=N,64nm,0.4s | | | | | | | |
| **ETEKE** | **Tekederesi - E** | **0.89** | **102** | P | | **Pg** | **20 45 15.6** | **-0.3** |
| ETEKE | | | | | S | **Sn** | **20 45 32.9** | **+2.1** |
| ETEKE | | | | | *i* AML | AML | 20 45 34.0 | |
| | comp=N,96nm,0.3s | | | | | | | |
| ETEKE | | | | | *i* AML | AML | 20 45 36.0 | |
| | comp=E,79nm,0.5s | | | | | | | |
| **IZDR** | **Rize** | **0.91** | **27** | P | | **Pg** | **20 45 15.4** | **-0.8** |
| IZDR | | | | | *i* AML | AML | 20 45 27.0 | |
| | comp=N,98nm,0.2s | | | | | | | |
| IZDR | | | | | *i* AML | AML | 20 45 27.0 | |
| | comp=E,112nm,0.4s | | | | | | | |
| IZDR | | | | | S | **Sg** | **20 45 27.3** | **-0.8** |
| **MACK** | **Trabzon** | **0.98** | **349** | P | | **Pb** | **20 45 18.0** | **0.0** |
| MACK | | | | | S | **Sb** | **20 45 31.3** | **+0.3** |
| MACK | | | | | *i* AML | AML | 20 45 33.0 | |
| | comp=N,436nm,0.1s | | | | | | | |
| MACK | | | | | *i* AML | AML | 20 45 33.0 | |
| | comp=E,666nm,0.2s | | | | | | | |
| **ERZM** | **Erzurum** | **1.04** | **94** | P | | **Pb** | **20 45 19.3** | **+0.1** |
| **PTK** | **Pertek** | **1.19** | **204** | Pn | | **Pb** | **20 45 21.5** | **-0.1** |
| **CHOM** | **Cayeli-Rize** | **1.25** | **27** | Pn | | Pn | 20 45 14.0 | -8.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ESPY** | **Espiye-Giresun** | **1.35 314** | Pn | **Pn** | **20 45 23.8** | **-0.1** |

**TAP 09 20:45:19.5, 23.52N×121.51E, h21km, ML1.1, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HGSD** | **Ruisui** | **0.08** | **253** | *e*P | Pb | 20 45 23.2 | -0.3 |
| | baz=252 | | | | | | |
| HGSD | | | | *i* S | Sb | 20 45 26.9 | +0.8 |
| | baz=252 | | | | | | |
| **EHYH** | **Wanrong** | **0.15** | **262** | *i* P | Pb | 20 45 24.6 | -1.0 |
| | baz=261 | | | | | | |
| **EHY** | **Hungye** | **0.17** | **267** | P | Pb | 20 45 24.9 | -0.6 |
| | baz=265 | | | | | | |
| EHY | | | | *e*S | Sb | 20 45 29.2 | -0.4 |
| | baz=265 | | | | | | |
| **ECBN** | **Changbin** | **0.21** | **195** | *e*P | Pb | 20 45 25.9 | +0.5 |
| | baz=194 | | | | | | |
| ECBN | | | | S | Sb | 20 45 29.1 | -0.5 |
| | baz=194 | | | | | | |
| **YULB** | **Yu-li** | **0.23** | **238** | *i* P | Pb | 20 45 25.7 | +0.2 |
| | baz=237 | | | | | | |
| YULB | | | | S | Sb | 20 45 30.5 | +0.7 |
| | baz=237 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.23** | **331** | P | Pb | 20 45 25.4 | -0.2 |
| | baz=330 | | | | | | |
| WARBT | | | | *e*S | Sb | 20 45 29.6 | -0.1 |
| | baz=330 | | | | | | |
| **EYUL** | **Yuli** | **0.24** | **226** | P | Pb | 20 45 26.2 | +0.6 |
| | baz=225 | | | | | | |
| EYUL | | | | *e*S | Sb | 20 45 29.6 | -0.2 |
| | baz=225 | | | | | | |
| **TWF1** | **Yuli** | **0.25** | **230** | P | Pb | 20 45 25.6 | -0.1 |
| | baz=228 | | | | | | |
| TWF1 | | | | *e*S | Sb | 20 45 31.1 | +1.1 |
| | baz=228 | | | | | | |
| **SHUL** | **Shoufeng** | **0.28** | **11** | *i* P | Pb | 20 45 26.4 | +0.4 |
| | baz=10.0 | | | | | | |
| SHUL | | | | *i* S | Sb | 20 45 31.4 | +1.1 |
| | baz=10.0 | | | | | | |
| **SHUL** | **Shoufeng** | **0.28** | **11** | *e*P | Pn | 20 45 31.4 | +3.0 |
| | baz=192 | | | | | | |
| **ESL** | **Shilin** | **0.30** | **347** | *i* P | Pb | 20 45 26.9 | +0.6 |
| | baz=348 | | | | | | |
| ESL | | | | *i* S | Sb | 20 45 32.1 | +1.2 |
| | baz=348 | | | | | | |
| **CHKH** | **Chenggong** | **0.34** | **198** | P | Pb | 20 45 27.3 | +0.6 |
| | baz=197 | | | | | | |
| CHKH | | | | *e*S | Sb | 20 45 32.8 | +1.1 |
| | baz=197 | | | | | | |
| **FULB** | **Fuli** | **0.37** | **212** | P | Pb | 20 45 28.5 | +1.1 |
| | baz=211 | | | | | | |
| FULB | | | | S | Sb | 20 45 34.0 | +1.3 |
| | baz=211 | | | | | | |
| **VWDT** | **VWDT** | **0.41** | **305** | P | Pb | 20 45 28.9 | +0.9 |
| | baz=305 | | | | | | |
| VWDT | | | | S | Sb | 20 45 35.2 | +1.5 |
| | baz=305 | | | | | | |
| **CHKT** | **Chengkung** | **0.43** | **198** | *i* P | Pb | 20 45 29.1 | +0.6 |
| | baz=196 | | | | | | |
| CHKT | | | | S | Sb | 20 45 36.1 | +1.6 |
| | baz=196 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.51** | **350** | *i* P | Pb | 20 45 30.4 | +0.5 |
| | baz=350 | | | | | | |
| LXIB | | | | S | Sb | 20 45 38.4 | +1.4 |
| | baz=350 | | | | | | |
| **YUS** | **Yu-Shan** | **0.51** | **267** | *e*P | Pb | 20 45 30.6 | +0.4 |
| | baz=266 | | | | | | |
| **SSLB** | **Suanglung** | **0.57** | **298** | P | Pb | 20 45 31.7 | +0.7 |
| | baz=298 | | | | | | |
| SSLB | | | | S | Sb | 20 45 39.9 | +1.0 |
| | baz=298 | | | | | | |
| **WUSB** | **Renai** | **0.59** | **323** | *e*P | Pb | 20 45 32.1 | +0.7 |
| | baz=322 | | | | | | |
| WUSB | | | | *e*S | Sb | 20 45 38.8 | -0.8 |
| | baz=322 | | | | | | |
| **CHGB** | **Renai** | **0.62** | **331** | *i* P | Pb | 20 45 32.3 | +0.3 |
| | baz=330 | | | | | | |
| CHGB | | | | *e*S | Sb | 20 45 41.0 | +0.6 |
| | baz=330 | | | | | | |
| **CHGB** | **Renai** | **0.62** | **331** | *e*P | Pb | 20 45 32.2 | +0.3 |
| | baz=235 | | | | | | |
| CHGB | | | | *e*S | Sb | 20 45 41.1 | +0.7 |
| | baz=235 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.67** | **340** | P | Pb | 20 45 33.3 | +0.5 |
| | baz=340 | | | | | | |
| WHF | | | | *e*S | Sb | 20 45 42.8 | +1.0 |
| | baz=340 | | | | | | |
| **FUSS** | **Fushou** | **0.77** | **342** | P | Pb | 20 45 34.5 | +0.1 |
| | baz=341 | | | | | | |
| FUSS | | | | *e*S | Sb | 20 45 45.4 | +0.9 |
| | baz=341 | | | | | | |
| **TDCB** | **Techi** | **0.80** | **337** | *e*P | Pn | 20 45 36.5 | +0.7 |
| | baz=336 | | | | | | |
| TDCB | | | | *e*S | Sb | 20 45 45.6 | +0.3 |
| | baz=336 | | | | | | |
| **EWUT** | **Wuta** | **0.96** | **15** | *i* P | Pn | 20 45 37.9 | +0.1 |
| | baz=14 | | | | | | |

**TAP 09 20:45:20.2, 24.26N×121.70E, h7km, ML1.0, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.06** | **37** | *e*P | Pg | 20 45 22.4 | +0.6 |
| | baz=44 | | | | | | |
| **EAHA** | **Aohua** | **0.07** | **27** | *i* S | Sg | 20 45 24.1 | +0.7 |
| | baz=29 | | | | | | |
| **ETL** | **Fush Village** | **0.12** | **215** | P | Pg | 20 45 23.1 | +0.2 |
| | baz=204 | | | | | | |
| ETL | | | | S | Sg | 20 45 25.3 | +0.6 |
| | baz=204 | | | | | | |
| **NACB** | **Ninganchiao** | **0.13** | **228** | P | Pg | 20 45 23.3 | +0.3 |
| | baz=218 | | | | | | |
| NACB | | | | S | Sg | 20 45 25.4 | +0.6 |
| | baz=218 | | | | | | |
| **ENA** | **Nanau** | **0.17** | **12** | P | Pg | 20 45 24.1 | +0.4 |
| | baz=17 | | | | | | |
| ENA | | | | S | Sg | 20 45 26.9 | +1.0 |
| | baz=17 | | | | | | |
| **EWUT** | **Wuta** | **0.20** | **21** | P | Pg | 20 45 24.6 | +0.5 |
| | baz=23 | | | | | | |
| EWUT | | | | *e*S | Sg | 20 45 27.7 | +0.9 |
| | baz=23 | | | | | | |
| **TWD** | **Chiawan** | **0.20** | **208** | *e*P | Pg | 20 45 24.2 | -0.1 |
| | baz=205 | | | | | | |
| TWD | | | | *e*S | Sg | 20 45 27.1 | +0.1 |
| | baz=205 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.21** | **255** | *e*P | Pg | 20 45 25.2 | +0.8 |
| | baz=254 | | | | | | |
| ETLH | | | | *e*S | Sg | 20 45 27.6 | +0.4 |
| | baz=254 | | | | | | |
| **LATG** | **Datong** | **0.32** | **330** | P | Pg | 20 45 26.9 | +0.4 |
| | baz=331 | | | | | | |
| LATG | | | | *e*S | Sg | 20 45 31.6 | +0.9 |
| | baz=331 | | | | | | |
| **NNSB** | **Datong** | **0.34** | **300** | *i* P | Pg | 20 45 27.3 | +0.4 |
| | baz=300 | | | | | | |
| NNSB | | | | S | Sg | 20 45 32.2 | +1.0 |
| | baz=300 | | | | | | |
| **NNS** | **Nan Shan** | **0.35** | **301** | P | Pg | 20 45 27.6 | +0.6 |
| | baz=301 | | | | | | |
| NNS | | | | S | Sg | 20 45 32.6 | +0.9 |
| | baz=301 | | | | | | |
| **NDS** | **Dongshan** | **0.37** | **2** | P | Pg | 20 45 28.0 | +0.5 |
| | baz=4.0 | | | | | | |
| NDS | | | | *e*S | Sg | 20 45 33.6 | +1.3 |
| | baz=4.0 | | | | | | |
| **NDT** | **Datong Townshi** | **0.38** | **333** | *i* P | Pg | 20 45 28.5 | +0.8 |
| | baz=335 | | | | | | |
| NDT | | | | *e*S | Sb | 20 45 35.2 | -0.3 |
| | baz=335 | | | | | | |
| **ENTT** | **Nioudou** | **0.40** | **342** | P | Pg | 20 45 28.5 | +0.6 |
| | baz=344 | | | | | | |
| ENTT | | | | *e*S | Sg | 20 45 34.3 | +1.1 |
| | baz=344 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.42** | **254** | *i* P | Pg | 20 45 29.1 | +0.6 |
| | baz=252 | | | | | | |
| WHF | | | | *e*S | Sg | 20 45 34.9 | +1.0 |
| | baz=252 | | | | | | |
| **SHUL** | **Shoufeng** | **0.49** | **195** | *e*S | Sb | 20 45 39.7 | +1.2 |
| | baz=192 | | | | | | |
| **OWD** | **Renai** | **0.57** | **238** | *i* P | Pb | 20 45 32.3 | -0.3 |
| | baz=235 | | | | | | |
| OWD | | | | *e*S | Sg | 20 45 39.0 | +0.3 |
| | baz=235 | | | | | | |

*NNC **09** 20:46:49.2±1.1, 46.04N×83.27E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=7.9km s-min=3.6km az=91.0*
*SOME **09** 20:46:51.2, 46.12N×82.88E, h0km*

**ISC 09 20:46:50.2±1.0, 46.06N±0.03×82.99E±0.06, h12km, n32, σ1s93/50, 5C-6D, Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **0.88** | **327** | ⇓P | **Pn** | **20 47 09.0** | **+0.6** |
| | 3.0nm,0.2s,baz=134,slow=17,SNR=984 | | | | | | |
| MK31 | | | | ⇓S | **Sn** | **20 47 22.7** | **+1.5** |
| | 4.6nm,0.2s,baz=132,slow=30,SNR=5.2 | | | | | | |
| **ZSN** | **Zaisan** | **1.90** | **42** | *e*P | **Pb** | **20 47 23.9** | **-0.8** |
| | 17nm,0.3s | | | | | | |
| ZSN | | | | *e*S | **Sn** | **20 47 46.8** | **+0.5** |
| | 51nm,0.7s | | | | | | |
| **DJR** | **Jarkent** | **2.84** | **234** | *e*P | **Pg** | **20 47 44.0** | **-0.6** |
| | 5.5nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **20 48 20.3** | **-1.3** |
| | 23nm,0.6s | | | | | | |
| **DJR** | **Jarkent** | **2.84** | **234** | Pg | **Pg** | **20 47 44.3** | **-0.3** |
| | 5.5nm,0.2s | | | | | | |
| DJR | | | | Lg | Lg | 20 48 22.0 | |
| | 15nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **3.18** | **239** | Pg | **Pg** | **20 47 50.6** | **-0.6** |
| | 0.3nm,0.2s | | | | | | |
| KNOS | | | | Lg | Lg | 20 48 31.7 | |
| | 16nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **3.22** | **217** | *e*P | **Pg** | **20 47 51.0** | **-0.7** |
| | 1.0nm,0.2s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **20 48 31.8** | **-1.7** |
| | 11nm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **3.22** | **217** | Pg | **Pg** | **20 47 51.1** | **-0.7** |
| | 1.3nm,0.4s | | | | | | |
| KTMS | | | | Lg | Lg | 20 48 31.8 | |
| | 11nm,0.4s | | | | | | |
| **TDK** | **Taldyqorghan** | **3.39** | **253** | *e*P | **Pg** | **20 47 55.0** | **-0.1** |
| | 17nm,0.4s | | | | | | |
| TDK | | | | *e*S | **Sg** | **20 48 39.3** | **+0.4** |
| | 22nm,0.2s | | | | | | |
| **TDK** | **Taldyqorghan** | **3.39** | **253** | Pg | **Pg** | **20 47 54.5** | **-0.6** |
| | 15nm,0.2s | | | | | | |
| TDK | | | | Lg | Lg | 20 48 39.3 | |
| | 21nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **3.70** | **224** | Pg | **Pg** | **20 47 59.2** | **-1.8** |
| | 2.4nm,0.4s | | | | | | |
| PDGK | | | | Lg | Lg | 20 48 46.4 | |
| | 9.8nm,0.5s | | | | | | |
| **PDGK** | **Podgornoye** | **3.70** | **224** | ⇑Pn | **Pn** | **20 47 50.2** | **+2.9** |
| | 1.9nm,0.5s | | | | | | |
| PDGK | | | | ⇑Pg | **Pg** | **20 47 59.9** | **-1.1** |
| | 6.3nm,0.7s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 20 48 50.7 | |
| | 17nm,0.7s | | | | | | |
| **BLB** | **Baldybastay** | **3.75** | **240** | Pg | **Pg** | **20 48 00.3** | **-1.7** |
| | 18nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 20 48 48.4 | |
| | 18nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **3.84** | **222** | *e*P | **Pb** | **20 47 58.5** | **+0.5** |
| | 5.9nm,0.3s | | | | | | |
| SHLS | | | | *e*S | **Sb** | **20 48 45.0** | **+0.5** |
| | 22nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **3.84** | **222** | Pg | **Pb** | **20 47 58.5** | **+0.5** |
| | 6.0nm,0.3s | | | | | | |
| SHLS | | | | Lg | Lg | 20 48 45.2 | |
| | 22nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **4.01** | **231** | *e*P | **Pg** | **20 48 05.4** | **-1.7** |
| | 4.4nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **20 48 56.5** | **-2.5** |
| | 22nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **4.01** | **231** | Pg | **Pg** | **20 48 05.4** | **-1.7** |
| | 4.4nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 20 48 56.5 | |
| | 20nm,0.6s | | | | | | |
| **UZB** | **Uzynbulak** | **4.06** | **226** | *e*P | **Pg** | **20 48 06.3** | **-1.6** |
| | 1.6nm,0.1s | | | | | | |
| UZB | | | | *e*S | **Sg** | **20 48 58.4** | **-2.2** |
| | 5.8nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **4.06** | **226** | Pg | **Pg** | **20 48 07.2** | **-0.8** |
| | 1.6nm,0.1s | | | | | | |
| UZB | | | | Lg | Lg | 20 48 58.4 | |
| | 5.8nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **4.09** | **245** | *e*P | **Pg** | **20 48 07.5** | **-1.0** |
| | 2.9nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **20 49 00.2** | **-1.3** |
| | 15nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **4.09** | **245** | Pg | **Pg** | **20 48 07.7** | **-0.8** |
| | 3.1nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 20 49 00.2 | |
| | 14nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **4.29** | **235** | *e*P | **Pg** | **20 48 10.3** | **-2.0** |
| | 1.8nm,0.4s | | | | | | |
| KURS | | | | *e*S | **Sg** | **20 49 04.9** | **-2.9** |
| | 6.8nm,0.6s | | | | | | |
| **KURS** | **Kuram** | **4.29** | **235** | Pg | **Pg** | **20 48 09.4** | **-2.8** |
| | 1.8nm,0.4s | | | | | | |
| KURS | | | | Lg | Lg | 20 49 04.9 | |
| | 3.9nm,0.8s | | | | | | |
| **SATY** | **Saty** | **4.44** | **229** | *e*P | **Pg** | **20 48 13.0** | **-2.2** |
| | 4.2nm,0.2s | | | | | | |
| SATY | | | | *e*S | **Sg** | **20 49 09.9** | **-2.8** |
| | 18nm,0.3s | | | | | | |
| **SATY** | **Saty** | **4.44** | **229** | Pg | **Pg** | **20 48 12.8** | **-2.4** |
| | 4.2nm,0.2s | | | | | | |
| SATY | | | | Lg | Lg | 20 49 09.9 | |
| | 18nm,0.3s | | | | | | |
| **SEM** | **Semipalatinsk** | **4.72** | **338** | *e*P | **Pg** | **20 48 20.4** | **-0.1** |
| | 4.2nm,0.4s | | | | | | |
| SEM | | | | *e*S | **Sg** | **20 49 22.4** | **+0.8** |
| | 16nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.05** | **238** | *e*P | **Pg** | **20 48 24.7** | **-2.2** |
| | 1.0nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **20 49 30.3** | **-2.1** |
| | 15nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.05** | **238** | Pg | **Pg** | **20 48 25.5** | **-1.4** |
| | 1.7nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 20 49 30.3 | |
| | 15nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **5.06** | **245** | *e*P | **Pg** | **20 48 25.4** | **-1.7** |
| | 1.1nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **20 49 31.0** | **-1.5** |
| | 8.8nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **5.06** | **245** | Pg | **Pg** | **20 48 25.9** | **-1.1** |
| | 1.1nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 20 49 31.0 | |
| | 8.8nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **5.13** | **238** | Pn | **Pn** | **20 48 09.9** | **+2.9** |
| | 0.9nm,0.5s | | | | | | |
| MDOK | | | | Pg | **Pg** | **20 48 25.8** | **-2.7** |
| | 4.7nm,1.0s | | | | | | |
| MDOK | | | | Lg | Lg | 20 49 36.2 | |
| | 4.9nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.45** | **329** | ⇓Pn | **Pn** | **20 48 14.7** | **+3.6** |
| | 0.8nm,0.5s | | | | | | |
| KURBB | | | | ⇓Pg | **Pg** | **20 48 30.4** | **-4.1** |
| | 3.5nm,1.1s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 20 49 46.1 | |
| | 30nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **5.49** | **330** | ⇓Pn | **Pn** | **20 48 14.4** | **+2.7** |
| | 1.2nm,0.8s | | | | | | |
| KURK | | | | ⇑Pg | **Pg** | **20 48 31.4** | **-3.8** |
| | 1.6nm,0.8s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 20 49 46.1 | |
| | 9.9nm,0.7s | | | | | | |

*IDC **09** 20:51:00.3±1.5, 1.15N×126.92E, h0km, mb3.9/5, mbtmp3.9/5, Error ellipse: s-maj=157.9km s-min=18.5km az=66.0*
*NEIC **09** 20:51:03.0±2.9, 0.9N±0.1×126.27E±0.05, h10km±1km, mb4.0/10, Error ellipse: s-maj=17.6km s-min=8.1km az=185.0*
*DJA **09** 20:51:04.5±0.3, 1.1N±4.1×12.6E±°, h10km, M3.7/11, MLv3.7/11*

**ISC 09 20:51:02.4±0.7, 0.87N±0.08×126.20E±0.05, h10km, n30, σ2s03/33, mb4.0/10, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.17** | **95** | | **Pb** | **20 51 25.4** | **+0.7** |
| TNTI | | | | Sn | **Sb** | **20 51 40.2** | **+0.3** |
| **TNTI** | **Ternate** | **1.17** | **95** | P | **Pb** | **20 51 25.4** | **+0.7** |
| TNTI | | | | S | **Sb** | **20 51 40.4** | **+0.5** |
| **LBMI** | **Labuha** | **1.98** | **139** | P | **Pb** | **20 51 41.0** | **+2.4** |
| **KMSI** | **Cibinong** | **2.24** | **263** | P | **Pn** | **20 51 41.2** | **+1.6** |
| KMSI | | | | S | **Sn** | **20 52 01.6** | **-5.7** |
| **SANI** | **Sanana** | **2.91** | **184** | P | **Pn** | **20 51 49.2** | **+0.5** |
| **GTOI** | **Gorontalo** | **3.20** | **266** | P | **Pn** | **20 51 56.4** | **+3.6** |
| **LUWI** | **Luwuk** | **3.92** | **241** | | **Pn** | **20 52 05.4** | **+2.7** |
| **LUWI** | **Luwuk** | **3.92** | **241** | P | **Pn** | **20 52 06.3** | **+3.6** |
| **MRSI** | **Marisa** | **4.28** | **265** | P | **Pn** | **20 52 08.6** | **+1.0** |
| **TOLI2** | **Tolitoli** | **5.42** | **273** | | **Pn** | **20 52 24.8** | **+1.4** |
| **FAKI** | **Fak Fak** | **7.12** | **122** | Pn | **Pn** | **20 52 45.0** | **-1.7** |
| **KAPI** | **Kappang** | **8.70** | **228** | Pn | **Pn** | **20 53 10.8** | **+2.5** |
| **MYLDM** | **Lahad Datu** | **8.80** | **299** | Pn | **Pn** | **20 53 13.1** | **+3.3** |
| **KNRA** | **Kununurra** | **16.63** | **171** | Pn | **Pn** | **20 54 56.3** | **+0.5** |
| KNRA | | | | IAmb | IAmb | 20 55 00.8 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.02** | **159** | P | **P** | **20 55 55.9** | **-1.3** |
| WB0 | | | | IAmb | IAmb | 20 56 07.1 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.16** | **159** | P | **P** | **20 55 56.2** | **-2.5** |
| WRAB | | | | IAmb | IAmb | 20 56 02.8 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.17** | **159** | P | **P** | **20 55 57.0** | **-1.8** |
| **WRA** | **Warramunga Arr** | **22.17** | **159** | P | **P** | **20 55 57.6** | **-1.2** |
| | comp=Z,3.2nm,0.7s,baz=340,slow=11,SNR=26 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.17** | **159** | P | **P** | **20 55 57.7** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 20 56 02.9 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.25** | **159** | P | **P** | **20 55 58.8** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 20 56 00.9 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **25.51** | **163** | P | **P** | **20 56 32.5** | **+1.2** |
| **ASAR** | **Alice Springs** | **25.51** | **163** | P | **P** | **20 56 32.3** | **+1.0** |
| **ASAR** | **Alice Springs** | **25.51** | **163** | P | **P** | **20 56 32.6** | **+1.4** |
| | comp=Z,0.7nm,0.4s,baz=340,slow=7.9,SNR=23 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **35.68** | **157** | P | **P** | **20 57 59.0** | **-2.0** |
| | comp=Z,2.1nm,0.8s,baz=331,slow=10,SNR=1.4 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **59.61** | **326** | P | **P** | **21 01 05.9** | **-0.7** |
| MK31 | | | | IAmb | IAmb | 21 01 15.7 | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.61** | **326** | P | **P** | **21 01 06.5** | **-0.1** |
| **MKAR** | **Makanchi Array** | **59.61** | **326** | P | **P** | **21 01 07.1** | **+0.5** |
| | comp=Z,0.7nm,0.4s,baz=119,slow=7.7,SNR=16 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.87** | **328** | P | **P** | **21 01 35.7** | **+0.6** |
| | comp=Z,1.2nm,0.7s,baz=127,slow=6.4,SNR=9.2 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **63.87** | **328** | P | **P** | **21 01 35.8** | **+0.6** |
| **ARU** | **Arti** | **77.07** | **328** | P | **P** | **21 02 55.7** | **0.0** |

*IDC **09** 20:55:08.3±2.1, 2.64S×127.55E, h0km, mb3.6/2, mbtmp3.7/3, ML3.9/1, MS3.8/1, Error ellipse: s-maj=180.6km s-min=25.5km az=66.0*
*DJA **09** 20:55:11.0±0.3, 2.2S±2.2×12.8E±°, h10km, M3.8/9, mb3.9/4, MLv3.7/9*

**ISC 09 20:55:10.3±1.0, 2.38S±0.07×128.07E±0.07, h10km, n11, σ2s13/10, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **1.28** | **138** | P | **Pn** | **20 55 36.0** | **+1.6** |
| MSAI | | | | S | **Sb** | **20 55 53.7** | **+2.5** |
| **NLAI** | **Namlea** | **1.29** | **229** | P | **Pn** | **20 55 34.8** | **+0.3** |
| **SANI** | **Sanana** | **2.11** | **279** | P | Pn | 20 55 36.6 | -9.1 |
| **SWI** | **Sorong** | **3.52** | **65** | P | **Pn** | **20 56 04.1** | **-1.1** |
| **FAKI** | **Fak Fak** | **4.21** | **97** | P | **Pn** | **20 56 13.9** | **-0.7** |
| **GTOI** | **Gorontalo** | **5.88** | **301** | P | **Pn** | **20 56 41.2** | **+3.6** |
| | 9.9nm,1.2s,0.1nm | | | | | | |
| **MRSI** | **Marisa** | **6.76** | **295** | P | **Pn** | **20 56 50.5** | **+0.9** |
| **WRA** | **Warramunga Arr** | **18.50** | **161** | P | **P** | **20 59 24.6** | **-2.2** |
| | 0.4nm,0.3s,baz=341,slow=12,SNR=19 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **21.90** | **166** | P | **P** | **21 00 02.5** | **-1.3** |
| | 3.6nm,0.6s,baz=346,slow=11,SNR=40 | | | | | | |
| | 3.6nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **53.48** | **342** | LR | LR | 21 29 57.7 | |
| | comp=Z,86nm,18.6s,baz=194,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.34** | **327** | P | **P** | **21 05 38.7** | **-1.0** |
| | 0.3nm,0.7s,baz=118,slow=8.6,SNR=3.8 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC **09** 20:55:22.5±1.2, 8.22S×116.34E, h0km, mb3.8/5, mbtmp3.8/6, ML3.8/1, Error ellipse: s-maj=27.0km s-min=20.2km az=99.0*
*DJA **09** 20:55:23.8±0.3, 8.3S±3.1×11.6E±°, h10km, M4.3/11, mb4.5/2, MLv4.2/11*
*NEIC **09** 20:55:23.7±1.4, 8.32S±0.09×116.19E±0.06, h10km±1km, mb4.2/13, Error ellipse: s-maj=16.2km s-min=7.6km az=149.0*

**ISC 09 20:55:22.7±1.7, 8.20S±0.06×116.23E±0.03, h5km±11km, n36, σ1s45/42, mb4.2/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.84** | **129** | P | **Pg** | **20 55 39.8** | **+1.0** |
| TWSI | | | | S | **Sb** | **20 55 52.1** | **+0.7** |
| **SRBI** | **Singaraja** | **1.01** | **277** | P | **Pg** | **20 55 42.6** | **+0.5** |
| SRBI | | | | S | **Sb** | **20 55 56.2** | **-0.1** |
| **DNP** | **Denpasar** | **1.11** | **245** | P | **Pb** | **20 55 44.5** | **+0.1** |
| DNP | | | | S | **Sn** | **20 56 06.3** | **+5.6** |
| **PLAI** | **Plampang** | **1.65** | **112** | P | **Pn** | **20 55 53.7** | **+1.3** |
| PLAI | | | | S | **Sb** | **20 56 16.1** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.07** | **262** | | **Pn** | **20 55 57.4** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.07** | **262** | P | **Pn** | **20 55 57.6** | **-0.6** |
| JAGI | | | | S | **Sn** | **20 56 23.4** | **-1.0** |
| **GRJI** | **Gresik** | **3.93** | **289** | P | **Pn** | **20 56 24.2** | **+0.5** |
| **PWJI** | **Pagerwojo** | **4.38** | **272** | P | **Pn** | **20 56 30.0** | **0.0** |
| **BSSI** | **Bau Bau, Buton** | **4.70** | **64** | P | **Pn** | **20 56 34.3** | **-0.1** |
| **KAPI** | **Kappang** | **4.72** | **48** | | **Pn** | **20 56 34.8** | **+0.1** |
| **KAPI** | **Kappang** | **4.72** | **48** | Pn | **Pn** | **20 56 35.0** | **+0.3** |
| | 4.8nm,0.3s,baz=232,slow=3.3,SNR=10.0 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 57 28.2** | **-1.7** |
| | 4.5nm,0.3s,baz=301,slow=22,SNR=6.0 | | | | | | |
| KAPI | | | | Lg | Lg | 20 57 49.8 | |
| | 5.1nm,0.3s,baz=70,slow=21,SNR=4.7 | | | | | | |
| | 5.4nm,0.3s | | | | | | |
| **BNSI** | **Bone** | **5.40** | **46** | P | **Pn** | **20 56 45.0** | **+1.1** |
| | 25nm,0.6s,0.3nm | | | | | | |
| **UGM** | **Wanagama** | **5.66** | **273** | Pn | **Pn** | **20 56 47.6** | **+0.1** |
| **UGM** | **Wanagama** | **5.66** | **273** | P | **Pn** | **20 56 47.9** | **+0.4** |
| **MBWA** | **Marble Bar** | **13.32** | **166** | Pn | **Pn** | **20 58 30.7** | **-1.9** |
| **FITZ** | **Fitzroy Crossi** | **13.44** | **138** | Pn | **Pn** | **20 58 32.5** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **13.74** | **166** | Pn | **Pn** | **20 58 35.0** | **-3.4** |
| **GIRL** | **Giralia** | **14.49** | **187** | Pn | **Pn** | **20 58 45.6** | **-2.9** |
| **MTN** | **Manton Dam** | **15.36** | **109** | Pn | **Pn** | **20 59 00.2** | **-0.2** |
| MTN | | | | IAmb | IAmb | 20 59 26.1 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **FAKI** | **Fak Fak** | **16.78** | **73** | Pn | **Pn** | **20 59 18.0** | **-0.7** |
| FAKI | | | | IAmb | IAmb | 20 59 42.6 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.02** | **125** | P | **P** | **21 00 06.5** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 21 00 09.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.06** | **126** | P | **P** | **21 00 06.7** | **-1.2** |
| **WRA** | **Warramunga Arr** | **21.06** | **126** | P | **P** | **21 00 07.2** | **-0.8** |
| | comp=Z,3.1nm,0.5s,baz=300,slow=12,SNR=34 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.07** | **126** | P | **P** | **21 00 07.5** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 21 00 49.1 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.07** | **126** | P | **P** | **21 00 07.7** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 21 00 49.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.23** | **125** | P | **P** | **21 00 09.3** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 21 00 31.7 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **COEN** | **Coen** | **27.04** | **105** | P | **P** | **21 01 06.2** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **33.13** | **11** | P | **P** | **21 02 00.5** | **+0.4** |
| **STKA** | **Stephens Creek** | **33.34** | **138** | P | **P** | **21 02 02.8** | **+1.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| QSPA | South Pole Qui | 81.79 | 180 | P | P | 21 07 42.0 | -0.7 |
| BELA | Belgrano 2 | 92.54 | 186 | P | P | 21 08 34.1 | -0.6 |

**DJA 09 21:13:56.0**±1.3, **12°S**±14′×**11°7E**±°, **h10**km, **M4.4/6, mb4.3/3**4, **mB4.8/1, MLv4.4/6, Mw(mB)4.0/1, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PLAI | Plampang | 2.88 | 7 | P | Pn | 21 14 41.7 | -0.3 |
| TWSI | Taliwang, Sumb | 3.00 | 349 | P | Pn | 21 14 43.4 | -0.3 |
| BASI | Baing, Sumba | 3.42 | 65 | P | Pn | 21 14 49.3 | -0.1 |
| JAGI | Jajag, Banyuwa | 4.57 | 315 | P | Pn | 21 15 04.3 | -0.9 |
| EDFI | Ende, Flores | 5.11 | 55 | P | Pn | 21 15 12.1 | -0.7 |
| | 7.9nm,1.1s,836nm0.1nm | | | | | | |
| BSSI | Bau Bau, Buton | 6.30 | 29 | P | Pn | 21 15 30.2 | +1.2 |
| | 79nm,1.5s | | | | | | |
| PWJI | Pagerwojo | 6.65 | 303 | P | Pn | 21 15 33.9 | 0.0 |
| | 27nm,1.2s,0.2nm | | | | | | |

*BER **09** 21:22:02.3±1.4, 69°.55N×33°.44E, h0km, ML2.5, Suspected explosion*
*KOLA **09** 21:22:04.0, 69°.52N×33°.02E, h0km, ML2.8, Error ellipse: s-maj=7.9km s-min=3.3km az=40.0*
*HEL **09** 21:22:03.6±0.3, 69°.54N×32°.85E, h0km, ML2.6, Explosion*
*IDC **09** 21:22:06.9±2.4, 69°.40N×32°.17E, h0km, mbtmp3.2/4, ML2.4/4, Error ellipse: s-maj=23.2km s-min=11.6km az=41.0*

**ISC 09 21:22:02.5**±0.9, **69°.45N**±0°.04×**32°.86E**±0°.04, **h0**km, **n29, σ0s95/47, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PRVG | Vayda Guba | 0.38 | 322 | P | Pg | 21 22 10.9 | +1.1 |
| PRVG | | | | S | Sg | 21 22 15.9 | +1.2 |
| TERR | Teriberka | 0.84 | 106 | P | Pg | 21 22 18.4 | -0.1 |
| TERR | | | | S | Sg | 21 22 29.3 | 0.0 |
| VADS | Vadso | 1.39 | 301 | P | Pn | 21 22 27.8 | -1.4 |
| VADS | | | | S | Sg | 21 22 46.6 | -0.5 |
| VADS | Vadso | 1.39 | 301 | eP | Pn | 21 22 28.2 | -0.9 |
| VADS | | | | eS | Sg | 21 22 47.0 | -0.1 |
| VADS | | | | IAML | | 21 22 49.4 | |
| | comp=Z,183nm,0.4s | | | | | | |
| LVZ | Lovozero | 1.69 | 156 | P | Pg | 21 22 34.9 | 0.0 |
| LVZ | | | | S | Sg | 21 22 57.5 | +0.7 |
| LVZ | Lovozero | 1.69 | 156 | eP | Pg | 21 22 34.9 | 0.0 |
| LVZ | | | | eS | Sg | 21 22 57.7 | +0.9 |
| APA0 | Apatity Array | 1.85 | 178 | P | Pb | 21 22 37.2 | 0.0 |
| APA0 | | | | S | Sb | 21 23 00.4 | -0.5 |
| APA | Apatity | 1.90 | 174 | P | Pb | 21 22 38.4 | +0.4 |
| APA | | | | S | Sg | 21 23 03.3 | -0.2 |
| RAJF | Raja-Jooseppi | 1.91 | 241 | eP | Pb | 21 22 38.2 | 0.0 |
| RAJF | | | | eS | Sb | 21 23 02.7 | +0.1 |
| KEV | Kevo | 2.07 | 281 | eP | Pn | 21 22 39.4 | +0.9 |
| KEV | | | | eS | Sn | 21 23 06.2 | +1.2 |
| KEV | Kevo | 2.07 | 281 | eP | Pn | 21 22 39.2 | +0.7 |
| KEV | | | | eSB | Sn | 21 23 06.2 | +1.2 |
| KEV | | | | MSG | | 21 23 08.8 | |
| | comp=Z,35nm,0.2s | | | | | | |
| VRF | Varrio | 2.09 | 216 | eP | Pb | 21 22 40.5 | -0.7 |
| VRF | | | | eSB | Sg | 21 23 09.1 | -0.3 |
| VRF | | | | MSG | | 21 23 10.9 | |
| | comp=Z,28nm,0.2s | | | | | | |
| ARA0 | ARCESS Array S | 2.59 | 275 | eP | Pn | 21 22 46.6 | +1.0 |
| ARA0 | | | | eS | Sn | 21 23 19.9 | +2.1 |
| ARCES | ARCESS Array B | 2.59 | 275 | P | Pn | 21 22 46.6 | +1.0 |
| ARCES | | | | S | Sb | 21 23 20.6 | -1.5 |
| ARCES | ARCESS Array B | 2.59 | 275 | Pn | Pn | 21 22 46.6 | +1.0 |
| | comp=Z,1.0nm,0.3s,baz=89,slow=16,SNR=83 | | | | | | |
| ARCES | | | | Lg | Lg | 21 23 21.1 | |
| | comp=Z,7.6nm,0.3s,baz=91,slow=29,SNR=45 | | | | | | |
| | comp=Z,5.2nm,0.2s | | | | | | |
| SGF | Sodankyl | 3.09 | 232 | eP | Pn | 21 22 52.4 | 0.0 |
| SGF | | | | eSB | Sb | 21 23 36.4 | 0.0 |
| SGF | | | | MSG | | 21 23 46.2 | |
| | comp=Z,26nm,0.3s | | | | | | |
| HAMF | Hammerfest | 3.37 | 295 | eP | Pn | 21 22 56.6 | +0.4 |
| HAMF | | | | eS | Sn | 21 23 36.7 | -0.2 |
| HAMF | | | | IAML | | 21 23 52.5 | |
| | comp=Z,22nm,0.5s | | | | | | |
| OLKF | Oulanka, Finla | 3.41 | 204 | eP | Pn | 21 22 59.0 | +2.2 |
| KTK1 | Kautokeino | 3.46 | 267 | eP | Pn | 21 22 58.4 | +0.9 |
| KTK1 | | | | IAML | | 21 23 54.0 | |
| | comp=Z,16nm,0.5s | | | | | | |
| HEF | Hetta | 3.48 | 257 | eP | Pn | 21 22 58.5 | +0.5 |
| HEF | | | | eS | Sn | 21 23 39.9 | +0.1 |
| HEF | Hetta | 3.48 | 257 | eP | Pn | 21 22 58.4 | +0.5 |
| TRO | Tromso | 4.89 | 279 | eP | Pn | 21 23 17.3 | +0.2 |
| SALU | Saltoluokta | 5.69 | 255 | eP | Pn | 21 23 28.4 | +0.2 |
| STEI | Steigen | 6.59 | 265 | eP | Pn | 21 23 40.2 | -0.3 |
| STEI | | | | IAML | | 21 25 43.7 | |
| | comp=Z,6.7nm,0.6s | | | | | | |
| FAUS | Fauske | 6.80 | 261 | P | Pn | 21 23 43.6 | +0.3 |
| FAUS | | | | S | Sn | 21 24 60.0 | -1.3 |
| STOK | Stokkvaagen | 8.09 | 257 | eP | Pn | 21 24 00.6 | -0.4 |
| FINES | FINESS Array B | 8.52 | 203 | Pn | Pn | 21 24 06.9 | +0.1 |
| | comp=Z,0.1nm,0.3s,baz=11,slow=16,SNR=8.4 | | | | | | |
| FINES | | | | Sn | Sn | 21 25 34.1 | -9.4 |
| | comp=Z,0.1nm,0.3s,baz=19,slow=18,SNR=1.5 | | | | | | |
| FINES | | | | Lg | Lg | 21 26 30.1 | |
| | comp=Z,0.9nm,0.3s,baz=21,slow=24,SNR=9.0 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| NOA | NORSAR Array B | 12.30 | 237 | Pn | Pn | 21 24 56.4 | -2.3 |
| | baz=34,slow=10,SNR=5.9 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| HFS | Hagfors | 12.34 | 230 | Pn | Pn | 21 24 57.2 | -2.0 |
| | comp=Z,0.1nm,0.3s,baz=29,slow=18,SNR=1.6 | | | | | | |
| HFS | | | | Lg | Lg | 21 28 24.2 | |
| | comp=Z,0.1nm,0.3s,baz=30,slow=36,SNR=1.4 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |

*NEIC **09** 21:22:05.9±1.9, 22°.8S±0°.1×176°.6W±0°.1, h85km±7km, mb4.4/31, Error ellipse: s-maj=17.6km s-min=14.3km az=140.0*
*IDC **09** 21:22:08.2±5.3, 22°.84S×176°.72W, h107km±46km, mb3.7/8, mbtmp4.1/10, Error ellipse: s-maj=26.1km s-min=19.9km az=173.0*

**ISC 09 21:22:07.0**±0.5, **22°.79S**±0°.09×**176°.67W**±0°.08, **h100**km, **n58, σ1s13/52, mb4.3/20, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 6.53 | 190 | Pn | Pn | 21 23 42.2 | +1.7 |
| MSVF | Nonsavu | 7.06 | 314 | P | Pn | 21 23 57.5 | +10 |
| | 15nm,0.7s,baz=136,slow=18,SNR=4.0 | | | | | | |
| NIUE | Niue | 7.31 | 61 | Pn | Pn | 21 23 48.5 | -2.6 |
| DZM | Mont Dzumac | 15.63 | 269 | | Pn | 21 25 41.6 | -0.3 |
| DZM | Mont Dzumac | 15.63 | 269 | P | P | 21 25 44.1 | +0.2 |
| | 5.3nm,0.9s,baz=85,slow=19,SNR=1.8 | | | | | | |
| RAR | Rarotonga | 15.75 | 87 | | Pn | 21 25 44.8 | +1.6 |
| RAR | | | | IAmb | IAmb | 21 25 54.8 | |
| | comp=Z,19nm,0.9s | | | | | | |
| RAR | Rarotonga | 15.75 | 87 | P | Pn | 21 25 44.4 | +1.1 |
| | comp=Z,16nm,0.9s,baz=275,slow=11,SNR=2.3 | | | | | | |
| URZ | Urewera | 16.31 | 198 | P | Pn | 21 25 47.6 | -2.4 |
| | comp=Z,3.0nm,0.6s,baz=63,slow=6.8,SNR=1.4 | | | | | | |
| HIZ | Hauiti | 17.27 | 203 | P | Pn | 21 26 01.7 | -0.1 |
| HIZ | | | | IAmb | IAmb | 21 26 10.4 | |
| | comp=Z,41nm,1.2s | | | | | | |
| BKZ | Black Stump Fm | 17.33 | 198 | P | P | 21 26 00.8 | -1.7 |
| QRZ | Quartz Range | 20.16 | 204 | P | Pn | 21 26 36.0 | -0.1 |
| QRZ | | | | IAmb | IAmb | 21 26 43.2 | |
| | comp=Z,20nm,1.1s | | | | | | |
| THZ | Tophouse | 20.84 | 202 | P | P | 21 26 41.7 | +1.1 |
| INZ | Inchbonnie | 22.20 | 204 | P | P | 21 26 53.8 | -1.3 |
| INZ | | | | IAmb | IAmb | 21 26 55.8 | |
| | comp=Z,16nm,1.1s | | | | | | |
| EIDS | Eidsvold | 29.52 | 258 | P | P | 21 28 03.4 | +1.3 |
| EIDS | | | | IAmb | IAmb | 21 28 18.4 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| CTA | Charters Tower | 34.56 | 267 | P | P | 21 28 47.3 | +1.0 |
| | comp=Z,0.5nm,0.3s,baz=96,slow=12,SNR=16 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| CTAO | Charters Tower | 34.56 | 267 | P | P | 21 28 47.6 | +1.3 |
| CTAO | | | | IAmb | IAmb | 21 28 48.3 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| PMG | Port Moresby | 37.09 | 285 | P | P | 21 29 08.0 | 0.0 |
| STKA | Stephens Creek | 37.97 | 247 | P | P | 21 29 14.7 | -0.5 |
| | comp=Z,1.7nm,0.4s,baz=92,slow=13,SNR=6.5 | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | |
| COEN | Coen | 39.00 | 276 | P | P | 21 29 23.7 | -0.4 |
| COEN | | | | IAmb | IAmb | 21 29 31.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| BBOO | Buckleboo | 42.69 | 246 | P | P | 21 29 52.8 | -1.3 |
| BBOO | | | | IAmb | IAmb | 21 30 11.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| AS31 | Alice Springs | 45.24 | 259 | P | P | 21 30 14.9 | +0.2 |
| ASAR | Alice Springs | 45.24 | 259 | P | P | 21 30 14.6 | -0.1 |
| ASAR | Alice Springs | 45.24 | 259 | P | P | 21 30 14.1 | -0.7 |
| | comp=Z,2.5nm,0.6s,baz=98,slow=6.9,SNR=31 | | | | | | |
| ASAR | | | | PcP | PcP | 21 31 53.0 | -0.2 |
| | comp=Z,0.6nm,0.5s,baz=108,slow=3.6,SNR=5.0 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| WR0 | Warramunga Arr | 45.36 | 264 | P | P | 21 30 14.8 | -0.8 |
| WR0 | | | | IAmb | IAmb | 21 30 16.6 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| WB0 | Warramunga Arr | 45.54 | 264 | P | P | 21 30 16.4 | -0.7 |
| WB0 | | | | IAmb | IAmb | 21 30 34.1 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 45.54 | 264 | P | P | 21 30 16.4 | -0.7 |
| WRAB | Tennant Creek | 45.54 | 264 | P | P | 21 30 16.4 | -0.7 |
| WRAB | | | | IAmb | IAmb | 21 30 17.5 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 45.55 | 264 | P | P | 21 30 16.5 | -0.7 |
| WRA | Warramunga Arr | 45.55 | 264 | P | P | 21 30 16.2 | -0.9 |
| | comp=Z,6.5nm,0.7s,baz=95,slow=8.2,SNR=281 | | | | | | |
| WRA | | | | PcP | PcP | 21 31 54.4 | +0.1 |
| | comp=Z,0.4nm,0.8s,baz=97,slow=3.5,SNR=1.8 | | | | | | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| FORT | Forrest | 49.56 | 248 | P | P | 21 30 47.4 | -0.6 |
| KNRA | Kununurra | 51.77 | 268 | P | P | 21 31 04.7 | -0.1 |
| FITZ | Fitzroy Crossi | 53.98 | 264 | P | P | 21 31 20.7 | -0.3 |
| SBA | Scott Base | 55.68 | 184 | P | P | 21 31 31.7 | -0.7 |
| VNDA | Vanda | 55.75 | 186 | P | P | 21 31 33.1 | +0.2 |
| VNDA | Vanda | 55.75 | 186 | P | P | 21 31 33.4 | +0.5 |
| | comp=Z,0.4nm,0.8s,baz=2.8,slow=11,SNR=2.4 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| NWAO | Narrogin (SRO) | 58.47 | 244 | P | P | 21 31 51.8 | -1.0 |
| MBWA | Marble Bar | 58.58 | 258 | P | P | 21 31 52.9 | -0.8 |
| QSPA | South Pole Qui | 67.29 | 180 | P | P | 21 32 50.9 | +0.1 |
| QSPA | | | | IAmb | IAmb | 21 32 52.2 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 67.29 | 180 | P | P | 21 32 51.0 | +0.1 |
| | comp=Z,2.9nm,1.0s,baz=350,slow=10,SNR=9.9 | | | | | | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| H03S2 | Juan Fernandez | 83.69 | 124 | T | T | 23 06 32.0 | |
| | baz=245,slow=74,SNR=18 | | | | | | |
| H03S1 | Juan Fernandez | 83.70 | 124 | T | T | 23 06 27.4 | |
| | baz=245,slow=74,SNR=24 | | | | | | |
| H03S3 | Juan Fernandez | 83.70 | 124 | T | T | 23 06 20.1 | |
| | baz=245,slow=74,SNR=26 | | | | | | |
| H03N2 | Juan Fernandez | 83.84 | 124 | T | T | 23 06 30.9 | |
| | baz=250,slow=72,SNR=10 | | | | | | |
| H03N3 | Juan Fernandez | 83.84 | 124 | T | T | 23 06 30.0 | |
| | baz=250,slow=72,SNR=20 | | | | | | |
| H03N1 | Juan Fernandez | 83.85 | 124 | T | T | 23 06 26.5 | |
| | baz=250,slow=72,SNR=15 | | | | | | |
| TXAR | Lajitas Array | 87.26 | 57 | P | P | 21 34 42.4 | -0.4 |
| | comp=Z,0.2nm,0.7s,baz=245,slow=3.9,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| MLY | Manley | 89.80 | 11 | P | P | 21 34 54.9 | +1.1 |
| MLY | | | | IAmb | IAmb | 21 34 55.5 | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| CCB | Clear Creek Bu | 89.98 | 12 | P | P | 21 34 55.6 | +1.0 |
| CCB | | | | IAmb | IAmb | 21 34 56.7 | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| H21K | Melozitna Rive | 90.04 | 10 | P | P | 21 34 56.3 | +1.4 |
| ILAR | Eielson Array | 90.27 | 12 | P | P | 21 34 56.9 | +0.9 |
| | comp=Z,0.4nm,0.5s,baz=224,slow=5.4,SNR=7.8 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| J26L | Joseph Creek | 90.72 | 14 | P | P | 21 35 01.0 | +2.8 |
| J26L | | | | IAmb | IAmb | 21 35 01.8 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| E18K | Tukpahlearik C | 90.74 | 6 | P | P | 21 34 56.7 | -1.3 |
| E18K | | | | IAmb | IAmb | 21 35 10.1 | |
| | comp=Z,2.5nm,1.0s | | | | | | |
| G21K | Allakaket | 90.74 | 9 | P | P | 21 34 59.8 | +1.7 |
| G21K | | | | IAmb | IAmb | 21 35 01.2 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| FINES | FINESS Array B | 138.31 | 344 | PKP | PKPdf | 21 41 20.6 | +0.6 |
| | comp=Z,0.7nm,0.6s,baz=46,slow=4.0,SNR=5.2 | | | | | | |
| HFS | Hagfors | 141.98 | 352 | PKhKP | PKPpre | 21 41 20.8 | |
| | comp=Z,0.6nm,0.5s,baz=72,slow=4.7,SNR=5.1 | | | | | | |
| HFS | | | | PKP | PKPdf | 21 41 26.9 | +0.1 |
| | comp=Z,1.6nm,0.9s,baz=23,slow=3.1,SNR=2.4 | | | | | | |
| AKASG | Malin Array Be | 145.61 | 331 | PKPbc | PKPdf | 21 41 33.1 | -0.2 |
| | comp=Z,2.6nm,0.4s,baz=42,slow=4.0,SNR=16 | | | | | | |
| EKA | Eskdalemuir Ar | 147.14 | 7 | PKPbc | PKPdf | 21 41 38.1 | +2.3 |
| | comp=Z,0.3nm,0.4s,baz=347,slow=2.9,SNR=2.3 | | | | | | |
| MMAI | Mount Meron Ar | 149.98 | 297 | PKPbc | PKPbc | 21 41 46.8 | +0.5 |
| | comp=Z,1.4nm,0.5s,baz=67,slow=6.1,SNR=4.4 | | | | | | |

*TIR **09** 21:24:22.9, 40°.20N×20°.61E, h2km±1km, Md2.8, Ml2.0*
*ATH **09** 21:24:23.3, 40°.21N×20°.62E, h11km±4km, ML2.1/5, Error ellipse: s-maj=4.7km s-min=1.1km az=42.0*

**ISC 09 21:24:23.8**±1.0, **40°.19N**±0°.02×**20°.66E**±0°.03, **h14**km±11km, **n17, σ1s08/28, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NEST | Nestorio | 0.38 | 53 | P | Pg | 21 24 30.8 | -0.6 |
| NEST | | | | S | Sg | 21 24 37.2 | +0.7 |
| NEST | | | | AML | AML | 21 24 41.7 | |
| | comp=N,576μm,0.3s | | | | | | |
| NEST | | | | AML | AML | 21 24 42.4 | |
| | comp=E,810μm,0.4s | | | | | | |
| KBN | Korca | 0.44 | 13 | P | Pg | 21 24 32.4 | -0.3 |
| | baz=18 | | | | | | |
| KBN | | | | S | Sb | 21 24 39.6 | -0.5 |
| | baz=18 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,0.9nm,0.5s,baz=18 | | | | | | |
| JAN | Janina | 0.55 | 164 | P | Pg | 21 24 34.1 | -0.5 |
| JAN | | | | S | Sg | 21 24 42.8 | +0.8 |
| JAN | | | | AML | AML | 21 24 44.9 | |
| | comp=N,1299μm,0.3s | | | | | | |
| JAN | | | | AML | AML | 21 24 46.2 | |
| | comp=E,1414μm,0.3s | | | | | | |
| SRN | Sarande | 0.59 | 239 | P | Pg | 21 24 34.3 | -1.0 |
| | baz=236 | | | | | | |
| SRN | | | | S | Sb | 21 24 42.9 | -1.2 |
| | baz=236 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,0.3nm,0.4s,baz=236 | | | | | | |
| KPRO | Kipourio | 0.59 | 113 | P | Pg | 21 24 34.5 | -0.9 |
| KPRO | | | | S | Sg | 21 24 43.8 | +0.5 |
| KPRO | | | | AML | AML | 21 24 50.8 | |
| | comp=E,359μm,0.4s | | | | | | |
| KPRO | | | | AML | AML | 21 24 51.1 | |
| | comp=N,227μm,0.4s | | | | | | |
| FNA | Florina | 0.81 | 43 | P | Pb | 21 24 39.4 | -0.3 |
| | baz=45 | | | | | | |
| FNA | | | | S | Sb | 21 24 51.4 | +0.9 |
| | baz=45 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.2nm,0.6s,baz=45 | | | | | | |
| FNA | Florina | 0.81 | 43 | P | Pg | 21 24 38.5 | -1.0 |
| FNA | | | | S | Sg | 21 24 50.1 | 0.0 |
| FNA | | | | AML | AML | 21 24 54.6 | |
| | comp=E,265μm,0.6s | | | | | | |
| FNA | | | | AML | AML | 21 24 57.9 | |
| | comp=N,218μm,0.3s | | | | | | |
| KEK | Kerkira | 0.81 | 234 | P | Pg | 21 24 38.3 | -1.2 |
| KEK | | | | S | Sb | 21 24 49.7 | -0.9 |
| KEK | | | | AML | AML | 21 24 54.4 | |
| | comp=N,186μm,0.6s | | | | | | |
| KEK | | | | AML | AML | 21 24 55.8 | |
| | comp=E,164μm,0.3s | | | | | | |
| KZN | Kozani | 0.86 | 82 | P | Pg | 21 24 39.5 | -1.0 |
| VLO | Vlora | 0.93 | 288 | P | Pn | 21 24 43.3 | +0.9 |
| | baz=288 | | | | | | |
| THL | Klokotos Trika | 1.22 | 120 | P | Pn | 21 24 46.0 | -0.4 |
| TYRN | Tyrnavos | 1.30 | 111 | P | Pn | 21 24 47.8 | +0.2 |
| LKD2 | Lefkada island | 1.40 | 180 | P | Pg | 21 24 50.8 | +0.1 |
| | baz=178 | | | | | | |
| LKD2 | | | | S | Sg | 21 25 12.2 | +3.3 |
| | baz=178 | | | | | | |
| SCTE | Santa Cesarea | 1.68 | 267 | P | Pg | 21 24 55.3 | -0.7 |
| | baz=267 | | | | | | |
| SCTE | | | | S | Sg | 21 25 17.9 | +0.1 |
| | baz=267 | | | | | | |
| SCTE | | | | AMP | | | |
| | comp=N,0.1nm,0.4s,baz=267 | | | | | | |
| PUK | Puka | 1.94 | 343 | P | Pg | 21 24 60.0 | -1.0 |
| | baz=344 | | | | | | |
| PUK | | | | S | Sg | 21 25 28.1 | +2.0 |
| | baz=344 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.1nm,0.5s,baz=344 | | | | | | |
| BCI | Bajram Curri | 2.22 | 349 | P | Pg | 21 25 06.1 | -0.2 |
| | baz=350 | | | | | | |
| SGRT | San Giovanni R | 4.03 | 294 | P | Pn | 21 25 25.7 | +0.5 |
| | baz=295 | | | | | | |

*IDC **09** 22:09:39.7±5.7, 6°.21S×130°.49E, h80km±51km, mb3.8/9, mbtmp4.2/11, ML4.4/2, Error ellipse: s-maj=59.1km s-min=15.4km az=65.0*
*DJA **09** 22:09:44.8±0.3, 6°.5S±3°×13°.1E±°, h147km±10km, M4.7/12, mb4.4/6, mB5.4/4, MLv4.7/12, Mw(mB)4.8/4*
*NEIC **09** 22:09:45.1±2.7, 6°.18S±0°.04×130°.7E±0°.1, h140km±11km, mb4.3/10, Error ellipse: s-maj=17.2km s-min=5.0km az=95.0*

**ISC 09 22:09:45.8**±0.5, **6°.21S**±0°.05×**130°.68E**±0°.07, **h150**km, **n64, σ2s25/67, mb4.0/10, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNDI | Bandanaira | 1.85 | 335 | P | Pn | 22 10 17.9 | -1.4 |
| BNDI | Bandanaira | 1.85 | 335 | P | Pn | 22 10 18.2 | -1.1 |
| SAUI | Saumlaki | 1.86 | 161 | P | Pn | 22 10 18.6 | -0.8 |
| SAUI | Saumlaki | 1.86 | 161 | | Pn | 22 10 18.3 | -1.2 |
| SAUI | | | | Sn | Sn | 22 10 43.3 | -2.0 |
| SAUI | Saumlaki | 1.86 | 161 | P | Pn | 22 10 18.9 | -0.5 |
| MSAI | Masohi | 3.34 | 328 | P | Pn | 22 10 36.2 | -1.4 |
| FAKI | Fak Fak | 3.62 | 26 | P | Pn | 22 10 39.8 | -1.5 |
| FAKI | Fak Fak | 3.62 | 26 | | Pn | 22 10 39.7 | -1.6 |
| FAKI | | | | Sn | Sn | 22 11 21.2 | -3.1 |
| FAKI | Fak Fak | 3.62 | 26 | P | Pn | 22 10 39.6 | -1.6 |
| KMPI | Kaimana, Papua | 3.94 | 50 | P | Pn | 22 10 45.1 | -0.2 |
| SWI | Sorong | 5.34 | 6 | P | Pn | 22 11 01.6 | -2.3 |
| DRS | Darwin Rock St | 6.18 | 178 | P | Pn | 22 11 13.5 | -1.5 |
| SANI | Sanana | 6.25 | 311 | P | Pn | 22 11 15.3 | -0.6 |
| SANI | Sanana | 6.25 | 311 | P | Pn | 22 11 14.7 | -1.2 |
| | 19nm,0.8s | | | | | | |
| MTN | Manton Dam | 6.60 | 176 | P | Pn | 22 11 19.2 | -1.4 |
| MTN | Manton Dam | 6.60 | 176 | | Pn | 22 11 19.8 | -0.9 |
| KDU | Kakadu | 6.67 | 165 | P | Pn | 22 11 19.7 | -1.8 |
| SOEI | Soe | 7.26 | 241 | | Pn | 22 11 28.9 | -0.7 |
| SOEI | Soe | 7.26 | 241 | P | Pn | 22 11 27.8 | -1.7 |
| | 30nm,0.7s,0.5nm | | | | | | |
| BATI | Baumata | 8.00 | 240 | P | Pn | 22 11 37.2 | -2.1 |
| | 41nm,0.6s,0.5nm | | | | | | |
| EDFI | Ende, Flores | 9.26 | 254 | P | Pn | 22 11 55.3 | -1.0 |
| KNRA | Kununurra | 9.59 | 191 | | Pn | 22 11 57.9 | -2.6 |
| TOLI2 | Tolitoli | 12.27 | 306 | P | Pn | 22 12 35.9 | +0.1 |
| TOLI2 | Tolitoli | 12.27 | 306 | Pn | Pn | 22 12 36.2 | +0.5 |
| FITZ | Fitzroy Crossi | 12.80 | 202 | | Pn | 22 12 38.0 | -4.5 |
| WB0 | Warramunga Arr | 13.95 | 165 | | Pn | 22 12 54.3 | -2.9 |
| WRAB | Tennant Creek | 14.10 | 166 | | Pn | 22 12 55.6 | -3.5 |
| WRA | Warramunga Arr | 14.10 | 166 | P | Pn | 22 12 54.8 | -4.4 |
| | 1.5nm,0.3s,baz=345,slow=13,SNR=59 | | | | | | |
| WRA | | | | S | Sn | 22 15 21.9 | -14 |
| | 12nm,0.5s,baz=333,slow=24,SNR=11 | | | | | | |
| | 6.0nm,0.3s | | | | | | |
| WB2 | Warramunga Arr | 14.11 | 166 | | Pn | 22 12 55.8 | -3.4 |
| WR0 | Warramunga Arr | 14.17 | 165 | | Pn | 22 12 57.1 | -2.9 |
| COEN | Coen | 14.50 | 123 | P | P | 22 13 06.5 | -0.1 |
| COEN | Coen | 14.50 | 123 | | P | 22 13 06.6 | -0.1 |
| JAGI | Jajag, Banyuwa | 16.55 | 261 | P | P | 22 13 26.5 | -2.8 |
| JAGI | | | | IAmb | IAmb | 22 13 58.5 | |
| | comp=Z,23nm,1.0s | | | | | | |
| QIS | Mount Isa | 16.68 | 150 | P | Pn | 22 13 32.3 | +1.3 |
| AS31 | Alice Springs | 17.63 | 170 | P | Pn | 22 13 42.0 | -0.3 |
| AS31 | | | | IAmb | IAmb | 22 13 45.8 | |
| | comp=Z,6.4nm,0.4s | | | | | | |
| ASAR | Alice Springs | 17.63 | 170 | P | Pn | 22 13 42.4 | 0.0 |
| ASAR | Alice Springs | 17.63 | 170 | P | Pn | 22 13 42.0 | -0.3 |
| | comp=Z,2.2nm,0.3s,baz=344,slow=8.4,SNR=115 | | | | | | |
| ASAR | | | | S | S | 22 16 46.4 | -10 |
| | comp=Z,5.3nm,0.7s,baz=351,slow=27,SNR=9.4 | | | | | | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| AS01 | Alice Springs | 17.64 | 170 | P | Pn | 22 13 43.5 | +1.1 |
| MBWA | Marble Bar | 18.26 | 214 | P | Pn | 22 13 48.7 | -1.1 |
| MBWA | Marble Bar | 18.26 | 214 | P | Pn | 22 13 48.3 | -1.5 |
| MBWA | | | | IAmb | IAmb | 22 14 08.4 | |
| | comp=Z,31nm,1.5s | | | | | | |
| PSA00 | Pilbara Seismi | 18.52 | 213 | P | Pn | 22 13 52.8 | -0.1 |
| PSA00 | Pilbara Seismi | 18.52 | 213 | P | Pn | 22 13 51.0 | -1.8 |
| PSA00 | | | | IAmb | IAmb | 22 13 55.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| PSA00 | Pilbara Seismi | 18.52 | 213 | P | Pn | 22 13 51.2 | -1.7 |
| PSA00 | | | | IAmb | IAmb | 22 13 57.9 | |
| | comp=Z,21nm,1.5s | | | | | | |
| WRKA | Warakurna | 18.86 | 187 | P | Pn | 22 13 56.0 | -0.8 |
| OOD | Oodnadatta | 21.98 | 168 | P | P | 22 14 30.4 | +2.5 |
| BBUL | Bungbulang | 22.90 | 266 | P | P | 22 14 39.6 | +2.6 |
| LCRK | Leigh Creek | 25.13 | 165 | P | P | 22 14 59.3 | +2.3 |
| KMBL | Kambalda | 26.35 | 197 | P | P | 22 15 11.5 | +3.5 |
| STKA | Stephens Creek | 27.50 | 160 | P | P | 22 15 19.7 | +1.5 |
| | comp=Z,1.9nm,0.7s,baz=322,slow=17,SNR=2.1 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 39.76 | 309 | P | P | 22 17 03.2 | -1.0 |
| | comp=Z,2.7nm,0.6s,baz=132,slow=7.1,SNR=18 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| SONM | Songino Array | 57.92 | 341 | P | P | 22 19 23.6 | +1.2 |
| | comp=Z,0.4nm,0.3s,baz=152,slow=7.2,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| MK31 | Makanchi Array | 67.94 | 326 | P | P | 22 20 29.9 | +1.4 |
| MK31 | | | | IAmb | IAmb | 22 20 30.8 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 67.94 | 326 | P | P | 22 20 30.0 | +1.5 |
| | comp=Z,8.1nm,0.7s,baz=114,slow=8.6,SNR=86 | | | | | | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 71.18 | 333 | P | P | 22 20 48.9 | +0.7 |
| | comp=Z,1.3nm,0.5s,baz=128,slow=4.2,SNR=7.4 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 72.20 | 328 | P | P | 22 20 55.5 | +1.2 |
| | comp=Z,2.8nm,0.7s,baz=126,slow=5.4,SNR=29 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| KURK | Kurchatov | 72.20 | 328 | P | P | 22 20 55.2 | +0.8 |
| SIMJ | Simiganj | 72.39 | 314 | P | P | 22 20 56.7 | +0.7 |
| VNDA | Vanda | 73.14 | 173 | P | P | 22 21 01.4 | +1.9 |
| | comp=Z,0.5nm,0.7s,baz=298,slow=6.3,SNR=3.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 83.76 | 180 | P | P | 22 21 59.3 | +1.3 |
| | comp=Z,0.9nm,0.7s,baz=265,slow=0.7,SNR=7.0 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| KNK | Knik Glacier | 91.05 | 28 | P | P | 22 22 33.1 | +0.1 |
| SML | Sawm

**VITO San Vito** 0.60 23 eP Pb 23 09 09.5 +0.1
**MLIR3 Monte Lirio, C** 0.65 36 ⇓iP Pb 23 09 10.5 +0.3
MLIR3 iS Sb 23 09 18.8 -0.4
**BRU2 Volcan** 0.73 44 Pb 23 09 11.7 +0.1
**BRU2 Volcan** 0.73 44 iP Pb 23 09 11.8 +0.1
BRU2 iS Sg 23 09 19.7 -1.1
BRU2 IAML 23 09 28.7
comp=Z,16μm,1.0s
**BRU2 Volcan** 0.73 44 ⇓iP Pb 23 09 11.8 +0.1
BRU2 iS Sb 23 09 22.4 +0.7
**BRU2 Volcan** 0.73 44 eP Pb 23 09 11.8 +0.1
**EDPN Palmar Norte** 0.73 340 eP Pg 23 09 11.2 +0.1
**EDP2 Potrero Grande** 0.74 2 eP Pb 23 09 11.9 0.0
**DVD David** 0.77 77 iP Pb 23 09 12.7 +0.4
DVD iS Sb 23 09 22.7 +0.1
**PEDE3 Pedregal, Chir** 0.79 82 eP Pb 23 09 13.1 +0.6
**LOCO3 Loma Colorada,** 0.79 80 eP Pn 23 09 14.0 0.0
**BCO2 Palmira** 0.81 56 ⇓iP Pb 23 09 13.2 +0.2
BCO2 iS Sb 23 09 24.6 +0.6
**LOMA3 Las Lomas, Chi** 0.82 79 eP Pn 23 09 14.3 -0.1
LOMA3 eS Sb 23 09 24.1 -0.2
**EDBA Buenos Aires** 0.89 356 eP Pb 23 09 14.3 0.0
**BURE Buenos Aires** 0.91 352 eP Pb 23 09 14.6 -0.1
**LNBQ3 Los Naranjos,** 0.92 56 ⇓iP Pg 23 09 14.5 -0.2
LNBQ3 iS Sg 23 09 26.2 -0.5
**OCHAL Ojochal** 0.93 332 iP Pg 23 09 14.6 -0.3
OCHAL iS Sg 23 09 27.1 0.0
OCHAL IAML 23 09 31.7
comp=Z,10μm,1.0s
**DRK0 Durika** 0.99 358 iP Pg 23 09 15.4 -0.6
DRK0 IAML 23 09 15.8
comp=Z,54μm,1.0s
DRK0 iS Sg 23 09 27.4 -1.6
**DRK0 Durika** 0.99 358 ⇓iP Pg 23 09 15.5 -0.5
**DRK0 Durika** 0.99 358 eP Pg 23 09 15.6 -0.5
**CHGR2 Aguacate** 1.25 58 ⇓iP Pn 23 09 19.6 -0.6
CHGR2 iS Sb 23 09 35.8 -0.6
**BUS1 Rivas** 1.38 337 eP Pn 23 09 21.8 -0.7
**ABE2 San Pablo** 1.65 330 eP Pn 23 09 26.5 +0.5
**LCR2 La Lucha 2** 1.66 332 Pn 23 09 26.4 +0.2
LCR2 Sn 23 09 47.3 -0.2
**LCR2 La Lucha 2** 1.66 332 iP Pn 23 09 26.6 +0.5
LCR2 iS Sb 23 09 48.5 -0.2
LCR2 IAML 23 09 49.1
comp=Z,6μm,1.0s
**LCR2 La Lucha 2** 1.66 332 eP Pn 23 09 26.2 0.0
**REPA Paraso** 1.68 337 eP Pb 23 09 27.3 -0.6
**PCAYA Pacayas** 1.74 340 eP Pn 23 09 27.5 +0.3
**RAFA San Farael, Vo** 1.78 341 iP Pn 23 09 28.1 +0.2
RAFA iS Sn 23 09 50.8 +0.1
RAFA IAML 23 09 55.4
comp=Z,19μm,1.0s
**RAFA San Farael, Vo** 1.78 341 eP Pn 23 09 28.1 +0.2
**CVTV Tajo** 1.81 343 eP Pn 23 09 28.6 +0.4
**CVTQ Turrialba Volc** 1.81 342 eP Pn 23 09 28.7 +0.4
**VTR0 Volcan Turrial** 1.82 343 eP Pn 23 09 28.7 +0.2
**CVTR Volcan Turrial** 1.82 343 eP Pn 23 09 28.7 +0.1
**LCOC0 El Coco** 1.84 349 eP Pn 23 09 29.3 +1.0
**RVLA Villa Bonita** 1.87 348 eP Pn 23 09 29.6 +0.8
**CVIMO Finca Echandi** 1.89 337 eP Pn 23 09 29.7 +0.4
**HDC3 Heredia 3** 1.94 333 iP Pn 23 09 31.1 +1.2
HDC3 iS Sn 23 09 54.9 +0.6
HDC3 IAML 23 09 59.3
comp=Z,7μm,1.0s
**HDC Heredia** 1.94 333 Pn 23 09 31.1 +1.2
**HDC Heredia** 1.94 333 iP Pb 23 09 31.3 -1.1
HDC iS Sn 23 09 55.3 +1.0
HDC IAML 23 09 59.3
comp=Z,7μm,1.0s
**HDC Heredia** 1.94 333 eP Pn 23 09 30.9 +1.0
**BELE Belen** 1.95 330 eP Pn 23 09 30.9 +0.9
**MESA3 La Mesa, Verag** 2.01 93 iP Pn 23 09 31.9 +1.2
MESA3 iS Sb 23 09 58.3 0.0
**GMAL Guarumal, Vera** 2.02 104 eP Pn 23 09 30.9 0.0
**GMAL Guarumal, Vera** 2.02 104 eP Pn 23 09 30.6 -0.2
**RSUS3 Rio de Jesus,** 2.05 98 ⇓eP Pn 23 09 32.6 +1.3
RSUS3 eS Sn 23 09 57.0 +0.3
**TCS1 Tacares** 2.07 329 iP Pn 23 09 32.7 +1.1
TCS1 iS Sn 23 09 58.9 +1.5
TCS1 IAML 23 10 04.0
comp=Z,32μm,1.0s
**TCS1 Tacares** 2.07 329 eP Pn 23 09 32.9 +1.3
**STIA3 Santiago, Vera** 2.22 94 ⇓eP Pb 23 09 35.8 -1.2
STIA3 eS Sn 23 10 02.5 +1.5
**CBL1 Cabuya** 2.28 305 eP Pn 23 09 33.9 -0.5
**MARI3 Mariato, Verag** 2.28 105 ⇓iP Pn 23 09 35.8 +1.4
MARI3 iS Sn 23 10 03.4 +0.9
**CACA0 El Cacao, Vera** 2.50 111 eP Pn 23 09 30.6 +0.6
**SOCE Pocosol** 2.52 327 Pn Pn 23 09 38.7 +0.9
**SOCE Pocosol** 2.52 327 iP Pn 23 09 39.9 +2.1
SOCE IAML 23 09 41.7
comp=Z,4μm,1.0s
SOCE iS Sn 23 10 10.4 +1.9
**SOCE Pocosol** 2.52 327 eP Pn 23 09 39.6 +1.8
**CRIS3 El Cristo, Coc** 2.56 90 iP Pn 23 09 40.4 +2.0
**PESE3 Pese, Herrera** 2.59 98 eP Pn 23 09 40.3 +1.5
**VACR Volcan Arenal** 2.63 327 eP Pn 23 09 41.2 +1.9
**ARE1 Arenal 1** 2.64 326 eP Pb 23 09 42.0 -2.2
**JTS Las Juntas de** 2.65 320 Pn 23 09 39.5 0.0
**JTS Las Juntas de** 2.65 320 Pn Pn 23 09 41.2 +1.7
comp=Z,58nm,0.3s,baz=148,slow=9.5,SNR=146
JTS Sn Sn 23 10 10.6 -1.0
comp=Z,45nm,0.3s,baz=327,slow=21,SNR=11
JTS LR LR 23 10 44.7
comp=Z,228nm,18.7s,baz=116,slow=37
comp=Z,189nm,0.4s
**JTS Las Juntas de** 2.65 320 ⇑iP Pn 23 09 41.6 +2.1
JTS eS Sn 23 10 10.9 -0.7
**JTS Las Juntas de** 2.65 320 eP Pn 23 09 39.6 +0.1
**COVE Coope Vega, Sa** 2.71 334 iP Pn 23 09 42.0 +1.7
COVE iS Sn 23 10 13.8 +0.8
COVE IAML 23 10 55.6
comp=Z,2μm,1.0s
**INDI Punta indio, G** 2.77 305 iP Pn 23 09 43.5 +2.4
INDI IAML 23 10 45.7
comp=Z,530nm,1.0s
**CHIT3 Chitre** 2.78 96 iP Pn 23 09 43.5 +2.2
**PNME Penonome** 2.86 85 eP Pn 23 09 43.9 +1.4
PNME eS Sb 23 10 20.9 -2.0
**TOSI3 Tonosi** 2.87 107 eP Pn 23 09 45.0 +2.4
**AZU Azuero** 2.94 99 iP Pn 23 09 45.1 +1.5
AZU iS Sn 23 10 20.4 +1.5
**AZU Azuero** 2.94 99 eP Pn 23 09 44.7 +1.1
**JUD3 Juan Diaz 3** 2.98 310 Pn 23 09 44.8 +0.8
**COLC Colonia** 3.09 321 eP Pn 23 09 48.0 +2.4
**PCRI3 Pocri, Los San** 3.12 101 eP Pb 23 09 49.5 -2.9
**ACHO3 Achotines, Los** 3.12 106 eP Pn 23 09 47.2 +1.1
ACHO3 iS Sn 23 10 22.5 +0.8
**ZANG Zanguenga, Cho** 3.37 78 eP Pn 23 09 50.3 +0.8
ZANG eS Sb 23 10 38.7 +0.9
**ZANG Zanguenga, Cho** 3.37 78 eP Pn 23 09 50.5 +1.0
**BCIP Isla Barro Col** 3.45 75 Pn Pn 23 09 51.6 +1.1
BCIP Pb 23 09 52.2 -5.8
**BCIP Isla Barro Col** 3.45 75 iP Pn 23 09 52.3 +1.8
BCIP iS Sn 23 10 33.5 +2.1
BCIP IAML 23 11 06.9
comp=Z,230nm,1.0s
**BCIP Isla Barro Col** 3.45 75 iP Pn 23 09 52.6 +2.1
BCIP eS Sn 23 10 29.0 -2.4
**BCIP Isla Barro Col** 3.45 75 eP Pn 23 09 52.4 +1.9
**FRIJ El Hiral** 3.57 74 eP Pn 23 09 54.6 +2.4
**UPA Univ. de Panam** 3.70 79 eP Pn 23 09 53.5 -0.5
UPA eS Sn 23 10 40.1 +2.5
**BLUN Bluefields** 3.75 352 iP Pn 23 09 55.4 +0.7
BLUN IAML 23 09 59.9
comp=Z,450nm,1.0s
**ESPN Las Esperanzas** 4.05 345 Pn Pn 23 09 59.4 +0.7
**CHPO Chepo, Panama** 4.14 77 eP Pn 23 10 02.0 +2.0
**ACON Acoyapa** 4.16 332 Pn Pn 23 10 01.9 +1.6
**ACON Acoyapa** 4.16 332 iP Pn 23 10 01.2 +1.0
ACON IAML 23 10 10.6
comp=Z,390nm,1.0s
**BOAB BOACO BROADBAN** 4.81 330 Pn Pn 23 10 10.3 +1.1
**BOAB BOACO BROADBAN** 4.81 330 iP Pn 23 10 10.9 +1.7
BOAB IAML 23 10 25.3
comp=Z,130nm,1.0s
BOAB iS Sn 23 11 06.0 +1.1
**TOTI Torti** 4.89 82 eP Pn 23 10 11.6 +1.3
**UPD2 Meteti** 5.14 87 eP Pn 23 10 14.1 +0.2
**CNGN Cerro Negro** 5.43 321 Pn Pn 23 10 19.3 +1.5
**CNGN Cerro Negro** 5.43 321 iP Pn 23 10 19.7 +1.9
CNGN IAmb IAmb 23 10 31.1
comp=Z,83nm,0.5s
CNGN IAML 23 10 31.4
comp=Z,140nm,1.0s
**LIMN Finca el Limon** 5.69 327 iP Pn 23 10 23.5 +2.1
LIMN IAML 23 10 30.7
comp=Z,160nm,1.0s
LIMN IAmb IAmb 23 10 30.8
comp=Z,140nm,0.7s
**CRIN San Cristobal** 5.80 320 Pn Pn 23 10 24.2 +1.2
**MTO3 Montecristo** 8.57 316 Pn Pn 23 11 03.4 +2.2
**TEIG Tepich** 12.86 338 LR LR 23 17 24.0
comp=Z,128nm,18.4s,baz=260,slow=38
**CMIG Matias Romero** 14.37 309 Pn Pn 23 12 22.0 +1.7
comp=Z,0.3nm,0.3s,baz=162,slow=16,SNR=3.0
comp=Z,1.5nm,0.5s
**BAUV El Baul** 15.01 86 P P 23 12 34.9 +0.4
**ATAH Atahualpa** 16.04 162 LR LR 23 18 05.9
comp=Z,174nm,19.7s,baz=324,slow=36
**CZSB Cruzeiro do Su** 19.03 146 P Pn 23 13 21.2 +1.4
CZSB IAmb IAmb 23 14 05.3
comp=Z,8.4nm,0.5s
**ETMB Extrema** 24.68 136 P P 23 14 19.4 +1.4
**GOGA Godfrey** 25.02 359 P P 23 14 19.8 -1.1
GOGA IAmb IAmb 23 14 29.1
comp=Z,7.2nm,1.1s
**Y52A Lilburn** 25.48 358 P P 23 14 25.7 +0.6
Y52A IAmb IAmb 23 14 30.0
comp=Z,5.9nm,0.7s
**TKL Tuckaleechee C** 27.27 359 LR LR 23 25 51.9
comp=Z,64nm,18.8s,baz=145,slow=37
**WHAR Wooly Hollow** 28.15 344 P P 23 14 49.1 -0.1
WHAR IAmb IAmb 23 14 51.7
comp=Z,3.9nm,0.8s
**LCAR Lake Charles** 28.61 346 P P 23 14 52.6 -0.6
LCAR IAmb IAmb 23 15 01.2
comp=Z,10nm,1.3s
**PDAR Pinedale Array** 41.43 330 LR LR 23 35 53.1
comp=Z,14nm,18.3s,baz=120,slow=39
**H03N2 Juan Fernandez** 41.68 175 T T 00 01 12.3
baz=354,slow=76,SNR=16
**H03N1 Juan Fernandez** 41.68 175 T T 00 01 12.3
baz=354,slow=76,SNR=15
**H03N3 Juan Fernandez** 41.69 175 T T 00 01 11.1
baz=354,slow=76,SNR=29
**NVAR Mina Array Bea** 43.58 319 P P 23 17 02.6 +1.3
comp=Z,0.9nm,0.8s,baz=116,slow=8.1,SNR=4.5
comp=Z,0.9nm,0.8s
**ILAR Eielson Array** 71.51 336 P P 23 20 17.6 +0.1
comp=Z,0.6nm,0.7s,baz=106,slow=5.0,SNR=6.4
comp=Z,0.6nm,0.7s
**ESDC Sonseca Array** 76.50 51 P P 23 20 47.2 -0.1
comp=Z,1.4nm,0.8s,baz=261,slow=8.4,SNR=8.0
comp=Z,1.4nm,0.8s
**TORD Torodi Ar. Bea** 83.23 78 P P 23 21 23.7 -0.3
comp=Z,0.8nm,0.8s,baz=284,slow=5.0,SNR=4.0
comp=Z,0.8nm,0.8s
**VRAC Vranov** 90.13 40 LR LR 00 00 35.0
comp=Z,16nm,19.2s,baz=244,slow=34
**ASAR Alice Springs** 141.32 242 PKP PKPdf 23 28 22.8 -5.9
comp=Z,0.2nm,0.5s,baz=104,slow=3.4,SNR=3.4
**WRA Warramunga Arr** 141.88 248 PKP PKPdf 23 28 23.9 -5.8
comp=Z,0.9nm,1.2s,baz=101,slow=3.1,SNR=3.0

*NIED* ***09*** *23:27:00.4,37.°01N×141.°47E,h51km,MW3.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; $M_{rr}$6.03; $M_{\theta\theta}$-1.82; $M_{\phi\phi}$-4.21; $M_{r\theta}$1.05; $M_{\theta\phi}$-2.33; $M_{\phi r}$2.51; Fault plane solution: $M_0$6.43000×10¹⁴ NP1:φ≈28.00000°, δ57.00000°, λ,86.00000°. NP2:φ≈215.00000°, δ33.00000°, λ,96.00000°.*
*JMA* ***09*** *23:27:00.4±0.1,37.°0N±0.°4×141.°5E±0.°9,h51km±1km, MD3.8/40,MV4.0/40,E OFF FUKUSHIMA PREF*
*JMA Felt II J1 at E OFF FUKUSHIMA PREF .*
*IDC* ***09*** *23:27:01.1±2.2,36.°88N×141.°64E,h57km±20km, mb3.4/12, mbtmp3.7/17,ML3.5/5,MS2.7/4,Error ellipse: s-maj=17.5km s-min=11.8km az=79.0*
**ISC 09 23:26:59.9±1.4,36.°99N±0.°04×141.°59E±0.°08,h40km±14km, n50,σ1s39/47,mb3.7/12,12D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ONAJ** | **Iwakimizuishiy** | **0.65** | **281** | ⇓iP | **Pn** | **23 27 12.2** | **-0.5** |
| ONAJ | | | | ⇓S | **Sn** | **23 27 20.6** | **-1.2** |
| **ONAJ** | **Iwakimizuishiy** | **0.65** | **281** | A | A | 23 27 12.2 | |
| comp=E,21nm,0.3s,comp=N,20nm,0.3s | | | | | | | |
| **JFK** | **Kawauchi** | **0.69** | **304** | ⇓iP | **Pn** | **23 27 12.7** | **-0.5** |
| JFK | | | | ⇓S | **Sn** | **23 27 21.4** | **-1.4** |
| **JFK** | **Kawauchi** | **0.69** | **304** | A | A | 23 27 12.7 | |
| comp=E,19nm,0.3s,comp=N,11nm,0.3s | | | | | | | |
| **JFFD** | **Fukushimafurud** | **0.83** | **278** | ⇓iP | **Pn** | **23 27 14.6** | **-0.5** |
| JFFD | | | | ⇓S | **Sn** | **23 27 24.7** | **-1.6** |
| **JFFD** | **Fukushimafurud** | **0.83** | **278** | A | A | 23 27 14.6 | |
| comp=E,11nm,0.3s,comp=N,5.0nm,0.5s | | | | | | | |
| **JHO** | **Hitachi** | **0.90** | **246** | ⇓iP | **Pn** | **23 27 15.5** | **-0.6** |
| JHO | | | | ⇓S | **Sn** | **23 27 26.2** | **-1.8** |
| **JHO** | **Hitachi** | **0.90** | **246** | A | A | 23 27 15.5 | |
| comp=E,6.0nm,0.6s,comp=N,2.0nm,0.2s | | | | | | | |
| **JMM** | **Marumori** | **1.09** | **324** | P | **Pn** | **23 27 18.3** | **-0.3** |
| **JMM** | **Marumori** | **1.09** | **324** | ⇓iP | **Pn** | **23 27 18.3** | **-0.3** |
| JMM | | | | ⇓S | **Sn** | **23 27 31.4** | **-1.0** |
| **JMM** | **Marumori** | **1.09** | **324** | A | A | 23 27 18.3 | |
| comp=E,3.0nm,2.6s,comp=N,3.0nm,1.1s | | | | | | | |
| **JOTO** | **OTAMA OYAMA** | **1.16** | **300** | P | **Pn** | **23 27 19.9** | **+0.3** |
| JOTO | | | | S | **Sn** | **23 27 33.8** | **-0.4** |
| **JOTO** | **OTAMA OYAMA** | **1.16** | **300** | A | A | 23 27 19.9 | |
| comp=E,6.0nm,1.7s,comp=N,11nm,1.3s | | | | | | | |
| **JYT** | **Yasato** | **1.36** | **237** | A | A | 23 27 22.4 | |
| comp=E,3.0nm,0.5s,comp=N,4.0nm,0.3s | | | | | | | |
| **JIO** | **Ouri** | **1.48** | **353** | ⇓iP | **Pn** | **23 27 24.2** | **+0.2** |
| JIO | | | | ⇓S | **Sn** | **23 27 41.2** | **-0.9** |
| **JYAR** | **Yonezawaarcadi** | **1.48** | **309** | A | A | 23 27 23.9 | |
| comp=E,5.0nm,0.8s,comp=N,5.0nm,0.6s | | | | | | | |
| **JOU** | **Okura** | **1.56** | **332** | P | **Pn** | **23 27 25.8** | **+0.6** |
| **JFY** | **Yanaizu** | **1.57** | **286** | iP | **Pn** | **23 27 25.3** | **+0.1** |
| **JYS** | **Shirataka** | **1.73** | **316** | P | **Pn** | **23 27 27.9** | **+0.4** |
| **JAG** | **Ashikaga** | **1.81** | **253** | P | **Pn** | **23 27 28.6** | **0.0** |
| JAG | | | | S | **Sn** | **23 27 49.7** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **2.75** | **262** | P | **Pn** | **23 27 42.3** | **+0.8** |
| comp=N,2.4nm,0.3s,baz=86,slow=16,SNR=46 | | | | | | | |
| MJAR | | | | S | **Sn** | **23 28 17.1** | **+3.5** |
| comp=N,23nm,0.4s,baz=95,slow=29,SNR=6.3 | | | | | | | |
| MJAR | | | | LR | LR | 23 29 01.1 | |
| comp=N,130nm,20.1s,baz=68,slow=43 | | | | | | | |
| comp=N,14nm,0.4s | | | | | | | |
| **MAJO** | **Matsushiro** | **2.75** | **262** | P | **Pn** | **23 27 43.1** | **+1.5** |
| **JSD** | **Sado** | **2.85** | **293** | P | **Pn** | **23 27 42.8** | **-0.1** |
| **JGF** | **Kuroka** | **3.69** | **249** | P | **Pn** | **23 27 57.0** | **+2.5** |
| **JTM** | **Tanmabayashi** | **3.82** | **354** | P | **Pn** | **23 27 58.1** | **+2.0** |
| **INU** | **Inuyama** | **4.05** | **248** | P | **Pn** | **23 28 01.9** | **+2.6** |
| **JHJ2** | **Mitsune** | **4.13** | **201** | P | **Pn** | **23 28 03.3** | **+2.8** |
| **JHJ** | **Hachijo jima 2** | **4.13** | **202** | P | **Pn** | **23 28 01.3** | **+0.8** |
| comp=N,24nm,0.3s,baz=138,slow=24,SNR=11 | | | | | | | |
| JHJ | | | | S | **Sn** | **23 28 45.5** | **-2.1** |
| comp=N,154nm,0.3s,baz=79,slow=23,SNR=10 | | | | | | | |
| comp=N,46nm,0.3s | | | | | | | |
| **JMN** | **Monobe** | **7.09** | **245** | P | **Pn** | **23 28 43.1** | **+1.9** |
| **ASAJ** | **Asahikawa** | **7.16** | **6** | P | **Pn** | **23 28 43.1** | **+1.0** |
| comp=N,1.3nm,0.3s,baz=218,slow=17,SNR=1.8 | | | | | | | |
| comp=N,3.4nm,0.4s | | | | | | | |
| **JNU** | **Nakatsue** | **9.59** | **249** | LR | LR | 23 33 06.5 | |
| comp=N,44nm,18.3s,baz=32,slow=38 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.26** | **318** | P | **Pn** | **23 29 28.0** | **+3.6** |
| comp=N,0.2nm,0.3s,baz=120,slow=14,SNR=5.7 | | | | | | | |
| comp=N,4.4nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **10.91** | **277** | P | **Pn** | **23 29 34.0** | **+0.5** |
| comp=N,0.3nm,0.3s,baz=87,slow=13,SNR=1.4 | | | | | | | |
| KSRS | | | | LR | LR | 23 33 36.2 | |
| comp=N,38nm,18.3s,baz=100,slow=36 | | | | | | | |
| comp=N,0.4nm,0.4s | | | | | | | |
| **KLR** | **Kulʹdur** | **14.18** | **333** | LR | LR | 23 35 06.6 | |
| comp=N,31nm,18.8s,baz=129,slow=34 | | | | | | | |
| **SONM** | **Songino Array** | **27.93** | **304** | P | **P** | **23 32 45.5** | **-0.9** |
| comp=N,0.6nm,0.5s,baz=104,slow=8.7,SNR=5.1 | | | | | | | |
| comp=N,0.6nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.05** | **312** | P | **P** | **23 34 47.4** | **0.0** |
| comp=N,0.5nm,0.4s,baz=69,slow=9.4,SNR=2.3 | | | | | | | |
| comp=N,0.5nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.27** | **302** | P | **P** | **23 35 05.1** | **-0.3** |
| comp=N,0.7nm,0.7s,baz=89,slow=9.8,SNR=8.3 | | | | | | | |
| comp=N,0.7nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.15** | **308** | P | **P** | **23 35 18.5** | **-1.7** |
| comp=N,1.4nm,0.6s,baz=84,slow=8.3,SNR=14 | | | | | | | |
| comp=N,1.4nm,0.6s | | | | | | | |

**ILAR Eielson Array** 49.46 32 P P 23 35 46.4 +0.7
comp=N,0.6nm,0.7s,baz=262,slow=7.0,SNR=9.6
comp=N,0.6nm,0.7s
**WRA Warramunga Arr** 57.03 188 P P 23 36 41.4 -0.4
comp=N,0.4nm,0.5s,baz=5.6,slow=7.4,SNR=14
comp=N,0.4nm,0.5s
**ASAR Alice Springs** 60.76 188 P P 23 37 06.8 -0.9
comp=N,0.6nm,0.8s,baz=352,slow=5.6,SNR=4.1
comp=N,0.6nm,0.8s
**FINES FINESS Array B** 68.92 332 P P 23 38 00.1 -0.2
comp=N,0.9nm,0.8s,baz=35,slow=8.5,SNR=1.6
comp=N,0.9nm,0.8s
**HFS Hagfors** 74.19 336 P P 23 38 32.5 +0.5
comp=N,0.4nm,0.4s,baz=45,slow=6.3,SNR=1.1
comp=N,0.4nm,0.4s
**NB2 NORSAR Subarra** 74.29 337 P P 23 38 32.9 +0.2
comp=Z,0.4nm,0.7s,baz=41,slow=6.2
**NOA NORSAR Array B** 74.29 337 P P 23 38 32.5 -0.1
comp=Z,0.7nm,0.8s,baz=40,slow=5.9,SNR=3.9
comp=Z,0.7nm,0.8s
**PDAR Pinedale Array** 77.60 46 P P 23 38 52.1 -0.1
comp=Z,0.1nm,0.3s,baz=286,slow=4.4,SNR=4.6
comp=Z,0.1nm,0.3s
**TXAR Lajitas Array** 90.04 52 P P 23 39 56.0 +0.3
comp=Z,0.4nm,0.6s,baz=328,slow=4.3,SNR=3.9
comp=Z,0.4nm,0.6s
**H03N2 Juan Fernandez** 146.88 96 T T 02 31 38.9
baz=290,slow=74,SNR=13
**H03N3 Juan Fernandez** 146.89 96 T T 02 30 53.8
baz=290,SNR=11
**H03N1 Juan Fernandez** 146.89 96 T T 02 31 33.9
baz=290,slow=74,SNR=18

*NEIC* ***09*** *23:36:01.7±1.9,34.°95N±0.°02×97.°52W±0.°02,h5km±1km, Error ellipse: s-maj=3.5km s-min=3.0km az=108.0*
**TUL 09 23:36:02.6±1.6,34.°99N±0.°01×97.°55W±0.°02,h6km±5km, ML2.4,mb_Lg2.6/86(NEIC),ML2.5/35(NEIC),Error ellipse: s-maj=2.7km s-min=1.3km az=118.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FNO** | **Franklin** | **0.30** | **24** | Pg | Pg | 23 36 08.9 | +0.5 |
| FNO | | | | IAML | | 23 36 16.9 | |
| comp=E,821nm,0.5s | | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.43** | **12** | Pb | | 23 36 12.8 | +0.2 |
| OKCSW | | | | IAML | | 23 36 25.2 | |
| comp=N,297nm,0.6s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.45** | **211** | Pg | Pg | 23 36 11.9 | +0.6 |
| X34A | | | | IAML | | 23 36 22.9 | |
| comp=E,290nm,0.6s | | | | | | | |
| X34A | | | | IAML | | 23 36 26.8 | |
| comp=N,294nm,0.7s | | | | | | | |
| **W35A** | **Tecumseh** | **0.58** | **73** | Pg | Pg | 23 36 13.9 | +0.1 |
| W35A | | | | IAML | | 23 36 27.5 | |
| comp=E,201nm,0.3s | | | | | | | |
| W35A | | | | IAML | | 23 36 28.5 | |
| comp=N,211nm,0.5s | | | | | | | |
| **OK029** | **Liberty Lake** | **0.81** | **5** | Pb | | 23 36 19.0 | -0.2 |
| OK029 | | | | IAML | | 23 36 32.7 | |
| comp=N,291nm,0.5s | | | | | | | |
| OK029 | | | | IAML | | 23 36 44.7 | |
| comp=N,110nm,0.4s | | | | | | | |
| **LOOK** | **Love County** | **1.04** | **163** | Pg | | 23 36 22.7 | +0.2 |
| LOOK | | | | IAML | | 23 36 38.7 | |
| comp=E,154nm,0.2s | | | | | | | |
| LOOK | | | | IAML | | 23 36 48.2 | |
| comp=N,160nm,0.2s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.04** | **257** | Pg | Pg | 23 36 21.5 | -1.1 |
| **OK031** | **S. Brethren Rd** | **1.13** | **31** | Pg | Pg | 23 36 23.5 | -0.7 |
| OK031 | | | | IAML | | 23 36 44.0 | |
| comp=N,160nm,0.3s | | | | | | | |
| **CSTR** | **Hydro, Custer** | **1.14** | **306** | | Pg | 23 36 24.4 | -0.1 |
| **OK052** | **Battle Ridge R** | **1.18** | **31** | | Pg | 23 36 24.4 | -0.7 |
| **DEOK** | **Depew** | **1.21** | **45** | Pg | Pg | 23 36 24.9 | -1.0 |
| **QUOK** | **Quay** | **1.37** | **30** | | Pn | 23 36 27.5 | -0.8 |
| **WTFS** | **Witchita Falls** | **1.43** | **212** | | Pn | 23 36 28.8 | -0.3 |
| **OK048** | **Pawnee Station** | **1.51** | **19** | | Pn | 23 36 30.2 | 0.0 |
| **CROK** | **Carrier** | **1.56** | **347** | | Pn | 23 36 30.7 | -0.2 |
| **OK051** | **E0350 and S346** | **1.62** | **21** | | Pn | 23 36 31.4 | -0.4 |
| **Z35A** | **Perchaven, San** | **1.67** | **171** | | Pn | 23 36 32.1 | -0.3 |
| **TUL3** | **Leonard** | **1.71** | **57** | | Pn | 23 36 33.3 | +0.4 |
| TUL3 | | | | IAmb_Lg | | 23 37 00.7 | |
| comp=Z,25nm,0.8s | | | | | | | |
| **OK038** | **West end E0370** | **1.78** | **327** | | Pn | 23 36 34.2 | +0.2 |
| **BLOK** | **Blackwell** | **1.79** | **9** | | Pn | 23 36 35.0 | +0.8 |
| **X37A** | **Clayton** | **1.84** | **102** | | Pn | 23 36 34.6 | -0.1 |
| **ELIS** | **Ellis County** | **1.86** | **306** | | Pn | 23 36 34.7 | -0.5 |
| **GC02** | **Grant County #** | **1.88** | **352** | | Pn | 23 36 34.8 | -0.5 |
| **OK032** | **Salt Plains WL** | **1.89** | **344** | | Pn | 23 36 34.6 | -0.9 |
| OK032 | | | | IAmb_Lg | | 23 37 03.1 | |
| comp=Z,22nm,0.7s | | | | | | | |
| **FW03** | **Perrin-Whitt E** | **1.99** | **193** | | Pn | 23 36 35.9 | -0.9 |
| **NOKA** | **Waynoka** | **1.99** | **326** | | Pn | 23 36 36.3 | -0.6 |
| **KAN14** | **Manchester OK** | **1.99** | **350** | | Pn | 23 36 36.5 | -0.4 |
| **FW06** | **Azle** | **2.01** | **180** | | Pn | 23 36 36.0 | -1.1 |
| **KAN13** | **South Haven SW** | **2.02** | **2** | | Pn | 23 36 36.9 | -0.4 |
| **KAN17** | **Caldwell West** | **2.06** | **355** | | Pn | 23 36 37.9 | +0.1 |
| **T35A** | **Sooner Cattle** | **2.10** | **23** | | Pg | 23 36 42.9 | 0.0 |
| **KAN09** | **Caldwell North** | **2.15** | **359** | | Pn | 23 36 38.0 | -1.0 |
| **KAN01** | **Argonia South** | **2.17** | **356** | Pn | Pn | 23 36 39.5 | +0.2 |
| **PLPT** | **Palo Pinto** | **2.26** | **197** | | Pn | 23 36 40.9 | +0.3 |
| PLPT | | | | IAmb_Lg | | 23 37 14.9 | |
| comp=Z,16nm,0.8s | | | | | | | |
| **FW07** | **Weatherford** | **2.29** | **185** | | Pn | 23 36 40.8 | -0.2 |
| FW07 | | | | IAmb_Lg | | 23 37 17.4 | |
| comp=Z,24nm,0.9s | | | | | | | |
| **RLO** | **Rose Lookout** | **2.37** | **60** | | Pn | 23 36 43.7 | +1.6 |
| **FW16** | **Waxahatchie** | **2.56** | **168** | IAmb_Lg | | 23 37 30.1 | |
| comp=Z,36nm,0.8s | | | | | | | |
| **TREL** | **Terrell** | **2.56** | **151** | | Pn | 23 36 43.8 | -0.9 |
| TREL | | | | IAmb_Lg | | 23 37 27.8 | |
| comp=Z,23nm,0.8s | | | | | | | |
| **FW13** | **Cleburne** | **2.63** | **178** | IAmb_Lg | | 23 37 25.9 | |
| comp=Z,19nm,1.0s | | | | | | | |
| **APMT** | **Aspermont** | **2.70** | **233** | | Pn | 23 36 45.4 | -1.2 |
| **Z38A** | **Mt. Pleasant** | **2.74** | **128** | IAmb_Lg | | 23 37 32.2 | |
| comp=Z,21nm,0.8s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **2.93** | **217** | IAmb_Lg | | 23 37 36.7 | |
| comp=Z,18nm,1.2s | | | | | | | |
| **U38A** | **Gravette** | **2.96** | **60** | | Pn | 23 36 50.8 | +0.6 |
| **WHTX** | **Lake Whitney,** | **2.99** | **178** | IAmb_Lg | | 23 37 40.1 | |
| comp=Z,12nm,0.7s | | | | | | | |
| **DKNS** | **Dickens** | **3.09** | **246** | IAmb_Lg | | 23 37 43.7 | |
| comp=Z,12nm,1.2s | | | | | | | |
| **HHAR** | **Hobbs** | **3.21** | **65** | | Pn | 23 36 53.3 | -0.3 |
| **MIAR** | **Mount Ida** | **3.30** | **97** | | Pn | 23 36 54.8 | -0.1 |
| MIAR | | | | IAmb_Lg | | 23 37 50.3 | |
| comp=Z,16nm,0.9s | | | | | | | |
| **237A** | **Washetta, Mont** | **3.31** | **153** | IAmb_Lg | | 23 37 55.8 | |
| comp=Z,15nm,0.8s | | | | | | | |
| **SN07** | **Snyder 07** | **3.36** | **237** | Pn | Pn | 23 36 53.8 | -1.8 |
| SN07 | | | | | Pb | 23 37 04.5 | +2.0 |
| **SN05** | **Snyder 5** | **3.48** | **234** | Pn | Pn | 23 36 55.1 | -2.3 |
| **R32A** | **Long Quarter,** | **3.55** | **345** | IAmb_Lg | | 23 37 59.1 | |
| comp=Z,12nm,0.8s | | | | | | | |
| **BRDY** | **Brady** | **3.89** | **199** | Pn | Pn | 23 37 02.8 | -0.2 |
| BRDY | | | | IAmb_Lg | | 23 38 08.1 | |
| comp=Z,12nm,0.7s | | | | | | | |
| **WLAR** | **White Oak Lake** | **3.89** | **108** | | Pn | 23 37 00.6 | -2.4 |
| WLAR | | | | IAmb_Lg | | 23 38 17.4 | |
| comp=Z,13nm,0.9s | | | | | | | |
| **KSU1** | **Kansas State U** | **4.17** | **10** | IAmb_Lg | | 23 38 23.8 | |
| comp=Z,15nm,0.7s | | | | | | | |
| **435B** | **Jarrell** | **4.19** | **180** | IAmb_

| | | | | | | |
|---|---|---|---|---|---|---|
| HNDO | **Hondo** | **5.64** | **196** | IAmb_Lg | | 23 39 05.3 |
| | comp=Z,12nm,0.8s | | | | | |
| CCM | **Cathedral Cave** | **5.93** | **57** | IAmb_Lg | | 23 39 16.3 |
| | comp=Z,13nm,0.8s | | | | | |
| DRIO | **Del Rio** | **6.13** | **206** | IAmb_Lg | | 23 39 24.1 |
| | comp=Z,8.3nm,1.0s | | | | | |
| P40A | **Paris** | **6.31** | **42** | IAmb_Lg | | 23 39 35.1 |
| | comp=Z,9.1nm,0.8s | | | | | |
| FVM | **French Village** | **6.47** | **60** | IAmb_Lg | | 23 39 30.4 |
| | comp=Z,8.6nm,0.9s | | | | | |
| CGM3 | **Cape Girardeau** | **6.79** | **68** | IAmb_Lg | | 23 39 44.6 |
| | comp=Z,7.2nm,0.8s | | | | | |
| PLAL | **Pickwick Lake** | **7.78** | **87** | IAmb_Lg | | 23 40 25.9 |
| | comp=Z,4.7nm,0.9s | | | | | |
| PHWY | **Pilot Hill** | **8.86** | **318** | IAmb_Lg | | 23 40 37.1 |
| | comp=Z,5.0nm,0.9s | | | | | |

**NAM 09 23:50:28.1±1.1, 19°.79S×14°.60E, h11km±5km, ML0.7, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST1N** | **ST1** | **0.05** | **13** | *i* P | Pg | 23 50 31.1 | +0.7 |
| ST1N | | | | *i* S | Sg | 23 50 32.3 | +0.3 |
| ST1N | | | | IAML | | 23 50 32.5 | |
| | comp=Z,2.4nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.05** | **13** | *i* P | Pg | 23 50 31.1 | +0.7 |
| ST1N | | | | *i* S | Sg | 23 50 32.3 | +0.3 |
| ST1N | | | | IAML | | 23 50 32.5 | |
| | comp=Z,2.4nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.06** | **255** | *i* P | Pg | 23 50 30.7 | +0.3 |
| ST9N | | | | *i* S | Sg | 23 50 31.6 | -0.5 |
| ST9N | | | | IAML | | 23 50 32.4 | |
| | comp=Z,10nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.06** | **255** | *i* P | Pg | 23 50 30.7 | +0.3 |
| ST9N | | | | *i* S | Sg | 23 50 31.6 | -0.5 |
| ST9N | | | | IAML | | 23 50 32.4 | |
| | comp=Z,11nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.11** | **293** | *i* P | Pg | 23 50 31.4 | +0.4 |
| ST3N | | | | *i* S | Sg | 23 50 33.0 | -0.1 |
| ST3N | | | | IAML | | 23 50 33.4 | |
| | comp=Z,0.3nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.11** | **293** | *i* P | Pg | 23 50 30.7 | -0.3 |
| ST3N | | | | *i* S | Sg | 23 50 33.0 | -0.1 |
| ST3N | | | | IAML | | 23 50 33.4 | |
| | comp=Z,0.3nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.14** | **182** | *i* P | Pg | 23 50 31.9 | +0.4 |
| ST2N | | | | *i* S | Sg | 23 50 34.1 | +0.2 |
| ST2N | | | | IAML | | 23 50 34.3 | |
| | comp=Z,0.5nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.14** | **182** | *i* P | Pg | 23 50 31.9 | +0.3 |
| ST2N | | | | *i* S | Sg | 23 50 34.1 | +0.2 |
| ST2N | | | | IAML | | 23 50 34.3 | |
| | comp=Z,0.5nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.15** | **93** | *i* P | Pg | 23 50 30.7 | -0.8 |
| ST5N | | | | IAML | | 23 50 35.5 | |
| | comp=Z,0.2nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.19** | **265** | *i* P | Pg | 23 50 32.5 | +0.2 |
| ST6N | | | | *i* S | Sg | 23 50 35.3 | +0.1 |
| ST6N | | | | IAML | | 23 50 35.5 | |
| | comp=Z,0.3nm,0.1s | | | | | | |

**DJA 09 23:51:10.6±1.6, 9°.3S×11°.5E×, h18km±15km, M4.0/10, mb4.0/2, MLv4.0/10, South of Bali**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAGI** | **Jajag, Banyuwa** | **0.99** | **340** | P | Pb | 23 51 28.8 | -0.4 |
| JAGI | | | | S | Sb | 23 51 41.2 | -0.7 |
| **DNP** | **Denpasar** | **1.00** | **44** | P | Pn | 23 51 29.8 | 0.0 |
| DNP | | | | S | Sn | 23 51 43.6 | +0.1 |
| **SRBI** | **Singaraja** | **1.48** | **28** | P | Pn | 23 51 36.7 | +0.3 |
| SRBI | | | | S | Sn | 23 51 55.3 | -0.1 |
| **TWSI** | **Taliwang, Sumb** | **2.44** | **75** | P | Pn | 23 51 49.4 | -0.2 |
| TWSI | | | | S | Sn | 23 52 16.7 | -2.4 |
| **PWJI** | **Pagerwojo** | **3.00** | **297** | P | Pn | 23 51 57.3 | +0.1 |
| **PLAI** | **Plampang** | **3.29** | **80** | P | Pn | 23 52 00.4 | -0.8 |
| **UGM** | **Wanagama** | **4.20** | **290** | P | Pn | 23 52 14.2 | +0.4 |
| **EDFI** | **Ende, Flores** | **7.13** | **85** | P | Pn | 23 52 53.8 | -0.4 |

*IGQ **10** 00:15:30.9±0.5, 0°.5S±2°.2×8°.1W±°, h3km, M4.2/29*
*RSNC **10** 00:15:36.6±0.0, 0°.1N±18°.2×8°.0W±1°.8, h-1km±18km, M3.5, mB5.2, mb4.3, ML3.0, Mw(mB)4.5*
**ISC 10 00:15:31.2±3.3, 0°.14S±0°.04×80°.60W±0°.07, h10km±25km, n91, σ1°.40/91, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ACHN** | **Ecuador-Chone-** | **0.76** | **137** | P | **Pb** | **00 15 45.7** | **-0.8** |
| **MAG1** | **Magdalena** | **0.83** | **85** | P | **Pb** | **00 15 47.9** | **+0.1** |
| **PECV** | **Mancha de Ca P** | **0.84** | **139** | S | Sb | 00 15 51.7 | -7.6 |
| PECV | | | | P | Pb | 00 15 43.4 | -4.6 |
| **PTGL** | **Punta Galera** | **1.08** | **32** | P | **Pb** | **00 15 51.0** | **-1.0** |
| PTGL | | | | S | **Sb** | **00 16 07.2** | **+1.0** |
| **AV18** | **Acelerografo,** | **1.21** | **68** | P | **Pn** | **00 15 54.6** | **+0.3** |
| **AATC** | **Ecuador-Atacam** | **1.24** | **36** | P | **Pn** | **00 15 54.4** | **-0.3** |
| **AV21** | **Acelerografo,** | **1.32** | **53** | P | **Pn** | **00 15 56.7** | **+0.9** |
| **AMA1** | **Acelerografo,** | **1.38** | **39** | P | **Pn** | **00 15 57.9** | **+1.3** |
| **AQUE** | **Quevedo** | **1.43** | **129** | P | Pn | 00 15 54.9 | -2.3 |
| **AES2** | **Ecuador-Puerto** | **1.47** | **40** | P | **Pn** | **00 15 58.6** | **+0.8** |
| **ASDO** | **Santo Domingo** | **1.48** | **95** | P | Pn | 00 15 56.1 | -2.0 |
| **APR2** | **Miler** | **1.65** | **82** | P | **Pn** | **00 15 58.9** | **-1.4** |
| **RVRD** | **Rio Verde** | **1.71** | **45** | P | **Pn** | **00 16 00.5** | **-0.6** |
| **PAC1** | **Pacto, Paraso** | **1.85** | **77** | P | **Pn** | **00 16 01.9** | **-1.4** |
| PAC1 | | | | S | **Sn** | **00 16 25.6** | **-1.3** |
| **PAC1** | **Pacto, Paraso** | **1.85** | **77** | S | **Sn** | **00 16 24.7** | **-2.2** |
| PAC1 | | | | P | **Pn** | **00 16 01.8** | **-1.5** |
| **ILLI** | **Illinizas Sur** | **1.96** | **107** | P | **Pn** | **00 16 03.8** | **-1.2** |
| **ABAB** | **Ecuador-Univer** | **1.98** | **147** | P | **Pn** | **00 16 03.8** | **-0.9** |
| **GGPT** | **Toaza - Volcan** | **1.98** | **92** | P | **Pn** | **00 16 04.0** | **-1.2** |
| **PINO** | **Pino** | **1.99** | **91** | P | **Pn** | **00 16 04.3** | **-1.2** |
| **JUA2** | **San Juan 2** | **2.00** | **92** | P | **Pn** | **00 16 04.7** | **-0.8** |
| **TERV** | **Terraza Guagua** | **2.00** | **91** | P | **Pn** | **00 16 04.4** | **-1.1** |
| **GGPC** | **Guagua Pichinc** | **2.00** | **91** | P | **Pn** | **00 16 04.8** | **-0.9** |
| **AGUAY** | **Guayaquil** | **2.01** | **161** | P | **Pn** | **00 16 04.4** | **-0.8** |
| **YANA** | **Yana** | **2.03** | **89** | P | **Pn** | **00 16 05.1** | **-0.9** |
| **PAST** | **Pastocalle** | **2.03** | **106** | P | **Pn** | **00 16 05.2** | **-0.8** |
| **SALI** | **Salinas** | **2.07** | **191** | P | **Pn** | **00 16 06.4** | **+0.3** |
| **PULU** | **Pululahua** | **2.10** | **86** | P | **Pn** | **00 16 06.5** | **-0.4** |
| **TING** | **Casa Alexandra** | **2.16** | **94** | P | **Pn** | **00 16 07.3** | **-0.3** |
| **CAMI** | **Rancho Maria** | **2.16** | **104** | P | **Pn** | **00 16 08.2** | **+0.4** |
| **OTAV** | **Otavalo** | **2.18** | **80** | P | **Pn** | **00 16 07.1** | **-0.9** |
| OTAV | | | | S | **Sn** | **00 16 32.7** | **-2.7** |
| **OTAV** | **Otavalo** | **2.18** | **80** | P | **Pn** | **00 16 07.0** | **-1.1** |
| **SLOR** | **San Lorenzo -** | **2.18** | **106** | P | **Pn** | **00 16 08.2** | **+0.1** |
| **BNAS** | **Cotopaxi Volca** | **2.18** | **104** | P | **Pn** | **00 16 09.1** | **+1.0** |
| **CHSH** | **Refugio Sur-Vo** | **2.19** | **128** | P | **Pn** | **00 16 08.2** | **-0.1** |
| **PITA** | **Cotopaxi Volc** | **2.21** | **101** | P | **Pn** | **00 16 08.8** | **+0.4** |
| **BREF** | **Cotopaxi Volca** | **2.22** | **104** | P | **Pn** | **00 16 09.2** | **+0.4** |
| **BVC2** | **Cotopaxi Volca** | **2.25** | **103** | P | **Pn** | **00 16 09.4** | **+0.4** |
| **PORT** | **Chimborazo Vol** | **2.25** | **126** | P | **Pn** | **00 16 08.4** | **-0.7** |
| **VC1** | **Cotopaxi 1** | **2.25** | **103** | P | **Pn** | **00 16 10.0** | **+0.9** |
| **JSCH** | **Cashca Tororas** | **2.25** | **134** | P | **Pn** | **00 16 08.2** | **-0.8** |
| **BTAM** | **Cotopaxi Volca** | **2.27** | **104** | P | **Pn** | **00 16 09.8** | **+0.5** |
| **CUIC** | **Cuicocha-Domo** | **2.28** | **79** | P | **Pn** | **00 16 09.2** | **-0.1** |
| **CUSW** | **Cuicocha Oeste** | **2.29** | **79** | P | **Pn** | **00 16 10.5** | **+1.1** |
| **TAMH** | **Tambohuasha Ch** | **2.29** | **127** | P | **Pn** | **00 16 09.8** | **+0.2** |
| **TAMB** | **Tambo** | **2.30** | **104** | P | **Pn** | **00 16 10.4** | **+0.7** |
| **COTA** | **Cotacachi** | **2.31** | **78** | P | **Pn** | **00 16 10.5** | **+0.7** |
| **MILO** | **Milagro-Astudi** | **2.37** | **154** | P | Pn | 00 16 07.7 | -2.5 |
| **IGUA** | **Igualata** | **2.38** | **124** | P | **Pn** | **00 16 10.7** | **-0.1** |
| **URCU** | **Urcuqui** | **2.41** | **76** | P | **Pn** | **00 16 11.7** | **+0.5** |
| **LITE1** | **Lita** | **2.42** | **67** | P | **Pn** | **00 16 09.8** | **-1.4** |
| **IMBA** | **Imbabura, San** | **2.44** | **80** | P | **Pn** | **00 16 13.0** | **+1.5** |
| **ANTI** | **Antisana** | **2.46** | **97** | P | **Pn** | **00 16 12.8** | **+0.8** |
| **BBIL** | **Ulba Tungurahu** | **2.48** | **122** | P | **Pn** | **00 16 12.8** | **+0.7** |
| **PIAT** | **Ana Tenorio** | **2.49** | **110** | P | **Pn** | **00 16 12.4** | **+0.2** |
| PIAT | | | | S | **Sn** | **00 16 39.9** | **-3.0** |
| **PIAT** | **Ana Tenorio** | **2.49** | **110** | P | **Pn** | **00 16 12.7** | **+0.5** |
| **TUYU** | **Q. Yuibug Volc** | **2.51** | **122** | P | **Pn** | **00 16 13.1** | **+0.6** |
| **BMAS** | **Trigal station** | **2.52** | **123** | P | **Pn** | **00 16 13.8** | **+1.2** |
| **ARRY** | **Arrayan** | **2.54** | **122** | P | **Pn** | **00 16 12.8** | **0.0** |
| **BULB** | **Ulba Tungurahu** | **2.54** | **120** | P | **Pn** | **00 16 13.4** | **+0.5** |
| **BPAT** | **Tungurahua Vol** | **2.55** | **122** | P | **Pn** | **00 16 15.4** | **+2.2** |
| **YAHU** | **Yahuarcocha** | **2.58** | **79** | P | **Pn** | **00 16 15.4** | **+1.9** |
| **ANGU** | **Angureal** | **2.60** | **86** | P | **Pn** | **00 16 15.3** | **+1.4** |
| **CAYR** | **Refugio Cayamb** | **2.60** | **87** | P | **Pn** | **00 16 16.3** | **+2.4** |
| **TUMC** | **Tumaco** | **2.71** | **44** | P | **Pn** | **00 16 14.0** | **-0.8** |
| TUMC | | | | S | **Sn** | **00 16 49.2** | **+1.5** |
| **TUMC** | **Tumaco** | **2.71** | **44** | P | **Pn** | **00 16 14.3** | **-0.6** |
| **LNGL** | **El Angel-Carch** | **2.74** | **71** | P | **Pn** | **00 16 16.2** | **+0.4** |
| **CHL2** | **Volcan Chiles** | **2.84** | **71** | P | **Pn** | **00 16 17.4** | **+0.3** |
| **ISPG** | **Isla Puna-Puer** | **2.84** | **171** | P | **Pn** | **00 16 18.5** | **+1.7** |
| **PUYO** | **Puyo, Santa Ro** | **2.91** | **118** | P | **Pn** | **00 16 18.0** | **+0.3** |
| **ARDO** | **Archidona, Ten** | **2.92** | **107** | P | **Pn** | **00 16 19.8** | **+1.8** |
| **LAV4** | **Lava4-Reventad** | **2.97** | **89** | P | **Pn** | **00 16 20.8** | **+2.1** |
| **REVS** | **Reventador Sur** | **2.98** | **89** | P | **Pn** | **00 16 20.3** | **+1.5** |
| **BONI** | **La Bonita** | **3.13** | **79** | P | **Pn** | **00 16 23.6** | **+2.7** |
| BONI | | | | S | **Sn** | **00 17 04.5** | **+6.0** |
| **BONI** | **La Bonita** | **3.13** | **79** | P | **Pn** | **00 16 23.6** | **+2.7** |
| **PCRA** | **Pucara 2** | **3.24** | **160** | P | **Pn** | **00 16 22.2** | **-0.4** |
| **CASC** | **Dorado de Casc** | **3.27** | **85** | P | **Pn** | **00 16 24.4** | **+1.7** |
| **PKYU** | **Pakayacu** | **3.36** | **117** | P | **Pn** | **00 16 26.3** | **+2.5** |
| **ARNL** | **Arenillas** | **3.43** | **171** | P | **Pn** | **00 16 24.9** | **+0.2** |
| **BOSC** | **San Juan Bosco** | **3.66** | **145** | P | **Pn** | **00 16 30.0** | **+1.9** |
| **TAIS** | **Taisha** | **3.81** | **126** | P | **Pn** | **00 16 31.6** | **+1.4** |
| **GR1C** | **Gorgona, Isla** | **3.96** | **38** | P | Pn | 00 16 28.9 | -3.2 |
| **BBAC** | **Balboa, Cauca** | **3.98** | **57** | P | Pn | 00 16 30.4 | -2.2 |
| BBAC | | | | S | **Sn** | **00 17 17.8** | **-1.7** |
| **BBAC** | **Balboa, Cauca** | **3.98** | **57** | P | Pn | 00 16 29.7 | -2.9 |
| **POPC** | **Popayan, Colom** | **4.74** | **56** | P | **Pn** | **00 16 42.8** | **-0.3** |
| **ZUMB** | **Zumba** | **4.91** | **163** | P | **Pn** | **00 16 47.5** | **+2.2** |
| **FLOC** | **Florencia** | **5.23** | **71** | P | **Pn** | **00 16 48.6** | **-1.1** |
| **MALC** | **Bahia Malaga** | **5.26** | **38** | P | Pn | 00 16 55.3 | +5.3 |
| **PTLC** | **Puerto Leguiza** | **5.81** | **87** | P | **Pn** | **00 16 59.0** | **+1.4** |
| | 80nm,1.1s,873nm | | | | | | |
| **YOTC** | **Yotoco, Valle** | **5.90** | **46** | P | **Pn** | **00 16 59.8** | **+0.8** |
| | 7.2nm,0.6s | | | | | | |
| **PLMC** | **San Jos del P** | **6.61** | **41** | P | **Pn** | **00 17 08.7** | **0.0** |
| | 13nm,0.5s,3µm | | | | | | |
| **ORTC** | **Ortega, Tolima** | **6.69** | **53** | P | **Pn** | **00 17 10.7** | **+0.9** |

*SDD **10** 00:22:49.8±2.1, 19°.39N×67°.87W, h18km±97km, MD3.0, ML1.9, MW2.4*
*OSPL **10** 00:22:59.8±1.4, 19°.02N×67°.77W, h0km±999km, ML1.9*
*RSPR **10** 00:23:03.1, 18°.85N×67°.90W, h59km±7km, MD2.5/6*
**ISC 10 00:23:00.2±2.4, 19°.0N±0°.2×67°.81W±0°.04, h20km, n21, σ1°.08/20, 10C-4D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCDR** | **Punta Cana, DR** | **0.71** | **229** | ↑*e*P | **Pn** | **00 23 15.4** | **+0.3** |
| **PCDR** | **Punta Cana, DR** | **0.71** | **229** | *i* P | **Pb** | **00 23 13.4** | **-0.6** |
| PCDR | | | | *e*S | **Sb** | **00 23 23.7** | **+0.4** |
| PCDR | | | | IAML | | 00 23 27.2 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.84** | **128** | ↑*e*P | **Pn** | **00 23 17.7** | **+0.8** |
| **AGPR** | **Aguadilla, PR** | **0.84** | **128** | ↓*e*Pg | Pb | 00 23 09.3 | -6.8 |
| AGPR | | | | IAML | | 00 23 25.9 | |
| | comp=E,42nm,1.6s | | | | | | |
| AGPR | | | | IAML | | 00 23 49.7 | |
| | comp=N,56nm,1.3s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.84** | **128** | *i* P | **Pb** | **00 23 14.7** | **-1.4** |
| AGPR | | | | *e*S | **Sb** | **00 23 24.7** | **-2.2** |
| AGPR | | | | IAML | | 00 23 30.1 | |
| | comp=Z,41nm,1.6s | | | | | | |
| **LSP** | **Las Mesas** | **1.06** | **139** | ↓*e*P | **Pb** | **00 23 20.7** | **+0.8** |
| **LSP** | **Las Mesas** | **1.06** | **139** | *e*S | **Sb** | **00 23 34.4** | **+1.1** |
| **MIDR** | **Miches** | **1.17** | **270** | ↑*e*Pg | Pn | 00 23 11.1 | -10 |
| MIDR | | | | IAML | | 00 23 48.0 | |
| | comp=N,22nm,2.7s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.18** | **145** | ↑*e*P | **Pn** | **00 23 21.8** | **+0.3** |
| **CRPR** | **Cabo Rojo, PR** | **1.18** | **145** | ↓*e*Pg | Pn | 00 23 16.6 | -4.9 |
| CRPR | | | | ↑*e*Sg | **Sb** | **00 23 36.2** | **-0.5** |
| CRPR | | | | IAML | | 00 23 53.3 | |
| | comp=E,24nm,2.7s | | | | | | |
| CRPR | | | | IAML | | 00 23 58.3 | |
| | comp=N,28nm,1.9s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.18** | **145** | *i* P | **Pn** | **00 23 21.9** | **+0.3** |
| CRPR | | | | *e*S | **Sb** | **00 23 37.2** | **+0.5** |
| CRPR | | | | IAML | | 00 23 41.2 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.19** | **122** | *e*S | **Sn** | **00 23 39.0** | **+1.8** |
| **AOPR** | **Arecibo Observ** | **1.19** | **122** | ↓*e*Pg | Pn | 00 23 15.1 | -6.6 |
| AOPR | | | | ↑*e*Sg | **Sb** | **00 23 36.2** | **-0.7** |
| AOPR | | | | IAML | | 00 23 42.1 | |
| | comp=N,13nm,0.8s | | | | | | |
| AOPR | | | | IAML | | 00 23 48.6 | |
| | comp=E,16nm,0.9s | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.24** | **144** | ↑*e*P | **Pn** | **00 23 22.8** | **+0.4** |
| **MLPR** | **Magueyes Islan** | **1.24** | **144** | *e*S | **Sn** | **00 23 37.6** | **-1.0** |
| **MLPR** | **Magueyes Islan** | **1.24** | **144** | IAML | | 00 23 40.7 | |
| | comp=N,8.5nm,0.7s | | | | | | |
| MLPR | | | | IAML | | 00 23 41.9 | |
| | comp=Z,14nm,2.6s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **1.26** | **125** | ↓*e*P | **Pb** | **00 23 23.9** | **+0.5** |
| **UUPR** | **Utuado, UPR, P** | **1.26** | **125** | *e*S | **Sn** | **00 23 37.3** | **-1.8** |
| **CELP** | **Cerrillos** | **1.48** | **128** | ↓*e*P | **Pn** | **00 23 26.3** | **+0.6** |
| **CELP** | **Cerrillos** | **1.48** | **128** | *e*S | **Sn** | **00 23 44.9** | **+0.4** |
| **CELP** | **Cerrillos** | **1.48** | **128** | ↑*e*Pg | Pn | 00 23 20.7 | -5.0 |
| CELP | | | | IAML | | 00 23 45.4 | |
| | comp=N,12nm,1.4s | | | | | | |
| CELP | | | | IAML | | 00 23 47.1 | |
| | comp=E,5.7nm,1.6s | | | | | | |

*KRNET **10** 00:26:32.6±0.1, 40°.45N×73°.89E, h13km, mb2.2*
*SOME **10** 00:26:32.3, 40°.52N×73°.90E, h0km*
**ISC 10 00:26:32.0±1.2, 40°.46N±0°.03×73°.90E±0°.03, h10km±12km, n23, σ1°.24/37, 20C-8D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **0.54** | **214** | ↑*i*P | **Pg** | **00 26 42.6** | **0.0** |
| SFK | baz=14 | | | ↑*i*S | **Sg** | **00 26 50.1** | **+0.4** |
| | baz=14 | | | | | | |
| **OHH** | **Osh** | **0.85** | **275** | ↓*e*P | **Pg** | **00 26 48.6** | **+0.2** |
| OHH | baz=75 | | | ↓*e*S | **Sb** | **00 27 00.2** | **-0.3** |
| | baz=75 | | | | | | |
| **ARSB** | **Arslanbob** | **1.11** | **321** | ↑*i*P | **Pb** | **00 26 53.8** | **+0.5** |
| ARSB | baz=22 | | | ↑*i*S | **Sg** | **00 27 08.9** | **-0.3** |
| | baz=22 | | | | | | |
| **ARLS** | **Aral** | **1.43** | **13** | ↑*e*P | **Pb** | **00 26 59.5** | **+0.6** |
| ARLS | baz=13 | | | ↑*e*S | **Sg** | **00 27 19.0** | **+0.8** |
| | baz=13 | | | | | | |
| **AML** | **Almayashu** | **1.67** | **355** | ↑*i*P | **Pb** | **00 27 04.1** | **+0.9** |
| AML | baz=55 | | | ↑*i*S | **Sg** | **00 27 26.9** | **+1.0** |
| | baz=55 | | | | | | |
| **NRN** | **Naryn** | **1.86** | **58** | ↑*i*P | **Pb** | **00 27 07.0** | **+0.6** |
| NRN | baz=58 | | | ↑*i*S | **Sg** | **00 27 31.8** | **-0.2** |
| | baz=58 | | | | | | |
| **DRK** | **Karamyk** | **1.89** | **239** | ↑*e*P | **Pb** | **00 27 07.2** | **+0.5** |
| DRK | baz=39 | | | ↑*e*S | **Sg** | **00 27 32.7** | **0.0** |
| | baz=39 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.20** | **358** | ↓*i*P | **Pb** | **00 27 12.0** | **0.0** |
| EKS2 | baz=58 | | | ↓*i*S | **Sb** | **00 27 40.9** | **+1.6** |
| | baz=58 | | | | | | |
| **MNAS** | **Manas** | **2.28** | **333** | ↑*i*P | **Pb** | **00 27 13.1** | **-0.2** |
| MNAS | baz=33 | | | ↑*i*S | **Sb** | **00 27 42.5** | **+0.9** |
| | baz=33 | | | | | | |
| **KBK** | **Karagaybulak** | **2.33** | **19** | ↓*i*P | **Pb** | **00 27 14.0** | **-0.2** |
| KBK | baz=20 | | | ↓*i*S | **Sb** | **00 27 44.0** | **+0.9** |
| | baz=20 | | | | | | |
| **MRKS** | **Merke** | **2.34** | **348** | *e*P | **Pb** | **00 27 16.1** | **+1.8** |
| MRKS | 18nm,0.3s | | | *e*S | **Sg** | **00 27 48.0** | **+0.9** |
| | 12nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **2.34** | **348** | Lg | Lg | 00 27 48.0 | |
| | 12nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **2.34** | **348** | Pg | **Pb** | **00 27 16.1** | **+1.8** |
| | 18nm,0.3s | | | | | | |
| **TRKS** | **Terek-Say** | **2.34** | **298** | ↑*e*P | **Pb** | **00 27 13.8** | **-0.6** |
| TRKS | baz=97 | | | ↑*e*S | **Sb** | **00 27 43.8** | **+0.3** |
| | baz=97 | | | | | | |
| **BTK** | **Batken** | **2.39** | **261** | ↑*e*P | **Pb** | **00 27 14.8** | **-0.4** |
| BTK | baz=61 | | | ↑*e*S | **Sb** | **00 27 45.2** | **+0.4** |
| | baz=61 | | | | | | |
| **ULHL** | **Ulahol** | **2.51** | **44** | ↑*i*P | **Pb** | **00 27 16.5** | **-0.8** |
| ULHL | baz=44 | | | ↑*i*S | **Sb** | **00 27 48.5** | **+0.2** |
| | baz=44 | | | | | | |
| **USP** | **Ospenovka** | **2.84** | **9** | ↓*i*P | **Pb** | **00 27 20.8** | **-2.0** |
| | baz=9.0 | | | | | | |
| USP | | | | ↓*i*S | **Sb** | **00 27 56.0** | **-1.6** |
| | baz=9.0 | | | | | | |
| **IUG** | **Iuzhnay** | **3.36** | **301** | *e*P | **Pg** | **00 27 35.0** | **-1.4** |
| | 7.3nm,0.4s | | | | | | |
| IUG | | | | *e*S | **Sg** | **00 28 20.1** | **+0.1** |
| | 16nm,0.4s | | | | | | |
| **IUG** | **Iuzhnay** | **3.36** | **301** | Lg | Lg | 00 28 20.1 | |
| | 16nm,0.4s | | | | | | |
| **IUG** | **Iuzhnay** | **3.36** | **301** | Pg | **Pg** | **00 27 35.0** | **-1.4** |
| | 7.3nm,0.4s | | | | | | |
| **BRLS** | **Boroldav** | **3.98** | **312** | *e*P | **Pb** | **00 27 44.6** | **+2.4** |
| | 1.5nm,0.7s | | | | | | |
| BRLS | | | | *e*S | **Sg** | **00 28 36.3** | **-3.3** |
| | 1.8nm,0.3s | | | | | | |
| **BRLS** | **Boroldav** | **3.98** | **312** | Lg | Lg | 00 28 36.3 | |
| | 0.5nm,0.4s | | | | | | |
| **BRLS** | **Boroldav** | **3.98** | **312** | Pg | **Pb** | **00 27 44.6** | **+2.4** |
| | 1.5nm,0.7s | | | | | | |

*SOME **10** 00:26:35.7, 41°.05N×83°.50E, h15km*
*NNC **10** 00:26:36.4±1.6, 40°.98N×83°.34E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=13.5km s-min=9.7km az=3.0*
**ISC 10 00:26:38.2±2.7, 41°.2N±0°.1×83°.35E±0°.09, h10km, n19, σ2°.43/28, 5C-4D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHLS** | **Shalkode** | **3.51** | **306** | *e*P | **Pb** | **00 27 38.5** | **-2.0** |
| | 7.5nm,0.3s | | | | | | |
| SHLS | | | | *e*S | **Sb** | **00 28 24.3** | **+1.0** |
| | 144nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **3.59** | **308** | ↑Pn | **Pn** | **00 27 33.9** | **-0.2** |
| | 1.5nm,0.3s | | | | | | |
| PDGK | | | | ↑Pg | **Pb** | **00 27 44.1** | **+2.2** |
| | 15nm,0.7s | | | | | | |
| PDGK | | | | ↓Lg | Lg | 00 28 35.2 | |
| | 65nm,0.8s | | | | | | |
| **UZB** | **Uzynbulak** | **3.78** | **303** | *e*P | **Pb** | **00 27 47.4** | **+2.3** |
| | 3.1nm,0.4s | | | | | | |
| UZB | | | | *e*S | **Sg** | **00 28 38.7** | **-0.9** |
| | 21nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **3.78** | **303** | Pg | **Pb** | **00 27 47.4** | **+2.3** |
| | 3.1nm,0.4s | | | | | | |
| UZB | | | | Lg | Lg | 00 28 38.7 | |
| | 21nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **4.11** | **322** | *e*P | **Pb** | **00 27 53.8** | **+3.1** |
| | 4.0nm,0.5s | | | | | | |
| DJR | | | | *e*S | **Sg** | **00 28 49.9** | **-0.3** |
| | 8.9nm,0.6s | | | | | | |
| **SATY** | **Saty** | **4.14** | **299** | *e*P | **Pb** | **00 27 54.3** | **+3.1** |
| | 8.3nm,0.3s | | | | | | |
| SATY | | | | *e*S | **Sg** | **00 28 50.5** | **-0.6** |
| | 17nm,0.2s | | | | | | |
| **SATY** | **Saty** | **4.14** | **299** | Pg | **Pb** | **00 27 54.3** | **+3.1** |
| | 8.3nm,0.3s | | | | | | |
| SATY | | | | Lg | Lg | 00 28 50.5 | |
| | 17nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **4.16** | **305** | *e*P | **Pb** | **00 27 53.4** | **+1.9** |
| | 8.0nm,0.5s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **00 28 49.9** | **-1.8** |
| | 31nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **4.16** | **305** | Pg | **Pb** | **00 27 53.4** | **+1.9** |
| | 8.0nm,0.5s | | | | | | |
| KPKS | | | | Lg | Lg | 00 28 49.9 | |
| | 31nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **4.17** | **300** | *e*P | **Pb** | **00 27 54.1** | **+2.4** |
| | 6.9nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **00 28 50.2** | **-1.8** |
| | 18nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **4.17** | **300** | Pg | **Pb** | **00 27 54.1** | **+2.4** |
| | 6.9nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 00 28 50.2 | |
| | 18nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **4.43** | **317** | Pg | **Pb** | **00 27 59.9** | **+3.7** |
| | 0.5nm,0.3s | | | | | | |
| KNOS | | | | Lg | Lg | 00 29 00.3 | |
| | 10nm,0.8s | | | | | | |
| **BLB** | **Baldybastay** | **4.64** | **311** | Pg | **Pb** | **00 28 02.6** | **+2.9** |
| | 5.9nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 00 29 05.2 | |
| | 5.8nm,0.7s | | | | | | |
| **ARXS** | **Arharly** | **5.09** | **309** | *e*P | **Pg** | **00 28 13.5** | **-2.1** |
| | 2.0nm,0.5s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **00 29 24.4** | **+2.9** |
| | 13nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **5.09** | **295** | Pg | **Pg** | **00 28 12.5** | **-3.3** |
| | 2.4nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 00 29 20.8 | |
| | 28nm,0.9s | | | | | | |
| **TNSS** | **Tian-Shan** | **5.12** | **294** | *e*P | **Pg** | **00 28 13.7** | **-2.5** |
| | 2.3nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **00 29 23.7** | **+1.1** |
| | 8.9nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **5.68** | **353** | ↑Pn | **Pn** | **00 28 03.4** | **+0.7** |
| | 0.1nm,0.3s,baz=176,slow=12,SNR=7.3 | | | | | | |
| MK31 | | | | ↑Pg | **Pg** | **00 28 24.5** | **-2.4** |
| | 0.7nm,0.4s,baz=168,slow=16,SNR=8.0 | | | | | | |
| MK31 | | | | ↑Lg | Lg | 00 29 43.2 | |
| |

comp=Z,6.3nm,0.8s,baz=98,slow=11,SNR=8.0
comp=Z,6.3nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BBOO** | **Buckleboo** | **43.31 241** | P | **P** | **00 36 46.9** | **+0.3** |
| **WR0** | **Warramunga Arr** | **44.23 259** | P | **P** | **00 36 51.8** | **-2.1** |
| **WB0** | **Warramunga Arr** | **44.39 260** | P | **P** | **00 36 54.1** | **-1.0** |
| **WB2** | **Warramunga Arr** | **44.41 259** | P | **P** | **00 36 54.2** | **-1.0** |
| WB2 | | | IAmb | IAmb | 00 36 55.0 | |

comp=Z,7.4nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.42 259** | P | **P** | **00 36 51.7** | **-3.7** |
| **WRA** | **Warramunga Arr** | **44.42 259** | P | **P** | **00 36 53.9** | **-1.4** |

comp=Z,2.3nm,0.5s,baz=98,slow=7.1,SNR=32
comp=Z,2.3nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **44.61 254** | P | **P** | **00 36 56.5** | **-0.2** |
| AS31 | | | IAmb | IAmb | 00 36 57.0 | |

comp=Z,7.0nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **44.61 254** | P | **P** | **00 36 56.5** | **-0.3** |

comp=Z,20nm,0.5s,baz=88,slow=8.1,SNR=260

| | | | | | | |
|---|---|---|---|---|---|---|
| ASAR | | | S | **S** | **00 42 51.0** | **-2.3** |

comp=Z,0.5nm,0.8s,baz=88,slow=16,SNR=4.1
comp=Z,20nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **FORT** | **Forrest** | **49.89 244** | P | **P** | **00 37 34.2** | **-2.0** |
| **KNRA** | **Kununurra** | **50.25 264** | P | **P** | **00 37 38.4** | **-0.7** |
| KNRA | | | IAmb | IAmb | 00 37 39.2 | |

comp=Z,7.2nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **52.81 260** | P | **P** | **00 37 57.6** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **57.72 255** | P | **P** | **00 38 31.0** | **-0.7** |
| PSA00 | | | IAmb | IAmb | 00 38 45.2 | |

comp=Z,6.6nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MBWA** | **Marble Bar** | **57.89 256** | P | **P** | **00 38 32.2** | **-0.6** |
| **SBA** | **Scott Base** | **60.68 184** | P | **P** | **00 38 53.0** | **+2.5** |
| **VNDA** | **Vanda** | **60.70 185** | P | **P** | **00 38 51.8** | **+1.1** |
| **VNDA** | **Vanda** | **60.70 185** | P | **P** | **00 38 51.6** | **+0.9** |

comp=Z,0.6nm,0.9s,baz=350,slow=7.4,SNR=5.6
comp=Z,0.6nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| **JOW** | **Kunigami** | **67.84 310** | P | **P** | **00 39 36.5** | **-0.2** |

comp=Z,16nm,0.8s,baz=45,slow=4.3,SNR=2.4
comp=Z,16nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **72.43 180** | P | **P** | **00 40 04.2** | **+0.8** |
| QSPA | | | IAmb | IAmb | 00 40 05.2 | |

comp=Z,8.3nm,1.1s

| | | | | | | |
|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **72.43 180** | P | **P** | **00 40 04.0** | **+0.6** |

comp=Z,3.0nm,0.6s,baz=75,slow=2.2,SNR=27
comp=Z,3.0nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **79.41 44** | P | **P** | **00 40 42.0** | **-0.5** |

comp=Z,0.1nm,0.3s,baz=220,slow=11,SNR=2.6
comp=Z,0.1nm,0.3s

| | | | | | | |
|---|---|---|---|---|---|---|
| **BRLK** | **Bradley Lake** | **80.37 14** | | pP | 00 42 39.2 | -4.0 |
| **TXAR** | **Lajitas Array** | **86.07 58** | P | P | **00 41 16.2** | **+0.2** |

comp=Z,0.5nm,0.7s,baz=219,slow=5.6,SNR=8.2
comp=Z,0.5nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **87.33 44** | P | **P** | **00 41 20.9** | **-0.9** |

comp=Z,0.2nm,0.5s,baz=205,slow=4.0,SNR=2.2
comp=Z,0.2nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **TROLL** | **Troll, Antarti** | **90.59 180** | ⇑P | **P** | **00 41 35.7** | **-0.7** |

comp=Z,97nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **90.88 179** | ⇑P | **P** | **00 41 36.5** | **-1.1** |

comp=Z,21nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **90.88 179** | P | **P** | **00 41 37.1** | **-0.6** |

comp=Z,0.8nm,0.6s,baz=200,slow=9.4,SNR=18
comp=Z,0.8nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **VNA3** | **Neumayer Olymp** | **91.04 176** | ⇑P | **P** | **00 41 38.1** | **-0.2** |

comp=Z,4.4nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **VNA2** | **Neumayer--Watz** | **91.47 177** | ⇑P | **P** | **00 41 39.2** | **-1.1** |

comp=Z,1.1nm,0.6s,baz=199,slow=4.2

| | | | | | | |
|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **91.70 177** | ⇑P | **P** | **00 41 41.2** | **-0.1** |

comp=Z,4.1nm,1.1s

*MOS **10** 00:47:34.3±1.3, 43°.23N×148°.48E, h53km, mb4.1/5, Error ellipse: s-maj=14.6km s-min=8.8km az=44.2*
*SKHL **10** 00:47:36.8±0.1, 43°.20N×148°.30E, h44km±4km, mb4.4/3*
*JMA **10** 00:47:38.7±0.2, 43°.4N±0°.9×14°.8E±°, h8km, MV3.3/18, E OFF HOKKAIDO*
*IDC **10** 00:47:52.9±4.9, 43°.63N×147°.38E, h120km±35km, mb3.3/8, mbtmp3.6/9, MS2.7/1, Error ellipse: s-maj=119.1km s-min=25.3km az=173.0*

**ISC 10 00:47:37.2±3.1, 43°.31N±0°.08×148°.22E±0°.09, h29km±19km, n41, σ1°85/48, mb3.9/13, 4C-3D, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHO** | **Shikotan** | **1.16** | **300** | *e*P | **Pn** | **00 47 57.3** | **0.0** |
| SHO | | | | AMB | AMB | 00 47 59.8 | |

300nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| SHO | | | | *e*S | **Sb** | **00 48 13.4** | **+0.3** |
| SHO | | | | A | A | 00 48 16.5 | |

540nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| SHO | | | | A | A | 00 48 16.5 | |

1μm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **1.16** | **300** | *e*PN | **Pn** | **00 47 57.3** | **0.0** |
| SHO | | | | *e*S | **Sb** | **00 48 13.9** | **+0.8** |
| SHO | | | | pmax | pmax | | |

comp=Z,68nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| SHO | | | | smax | smax | | |

comp=N,537nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| SHO | | | | smax | smax | | |

comp=E,1μm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **NEM2** | **Nemuro 2** | **1.81** | **273** | *i* P | **Pn** | **00 48 07.1** | **+0.8** |
| NEM2 | | | | *e*S | **Sn** | **00 48 27.6** | **-0.5** |
| **NMR** | **Nemuro--Hokkai** | **1.82** | **273** | *e*P | **Pn** | **00 48 06.2** | **-0.2** |
| NMR | | | | *e*S | **Sn** | **00 48 28.2** | **-0.3** |
| **NMR** | **Nemuro--Hokkai** | **1.82** | **273** | *e*PN | **Pn** | **00 48 06.8** | **+0.4** |
| NMR | | | | *e*S | **Sn** | **00 48 27.5** | **-1.0** |
| **YUK** | **Yuzh-Kuril'sk** | **1.86** | **294** | *e*P | **Pn** | **00 48 07.1** | **+0.1** |
| YUK | | | | AMB | AMB | 00 48 08.4 | |

comp=E,190nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| YUK | | | | *e*S | **Sn** | **00 48 29.4** | **-0.1** |
| YUK | | | | A | A | 00 48 33.6 | |

comp=E,430nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| YUK | | | | A | A | 00 48 33.6 | |

comp=E,370nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **YUK** | **Yuzh-Kuril'sk** | **1.86** | **294**⇑ | *e*PN | **Pn** | **00 48 05.8** | **-1.2** |
| **KUR** | **Kuril'sk** | **1.94** | **353** | *e*P | **Pn** | **00 48 09.1** | **+0.9** |
| KUR | | | | AMB | AMB | 00 48 11.8 | |

comp=E,40nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| KUR | | | | *e*S | **Sn** | **00 48 33.4** | **+1.8** |
| KUR | | | | A | A | 00 48 42.2 | |

comp=E,150nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| KUR | | | | A | A | 00 48 42.2 | |

comp=E,170nm,0.5s

| | | | | | | |
|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.94** | **353** | PN | **Pn** | **00 48 09.2** | **+1.0** |
| KUR | | | | S | **Sn** | **00 48 33.6** | **+2.0** |
| KUR | | | | smax | smax | | |

comp=N,77nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| KUR | | | | smax | smax | | |

comp=E,146nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| **RUSJ** | **Misakicho** | **2.30** | **291** | *e*PN | **Pn** | **00 48 14.7** | **+1.7** |
| RUSJ | | | | S | **Sn** | **00 48 42.1** | **+1.8** |
| **JRA** | **Rausu** | **2.33** | **287** | *e*P | **Pn** | **00 48 14.7** | **+1.1** |
| JRA | | | | *e*S | **Sn** | **00 48 40.6** | **-0.6** |
| **JNSB** | **Nemuroshibetsu** | **2.38** | **282** | *e*S | **Sn** | **00 48 42.3** | **-0.1** |
| **JAK** | **Akkeshi** | **2.59** | **264** | *e*P | **Pn** | **00 48 19.1** | **+2.0** |
| JAK | | | | *e*S | **Sn** | **00 48 47.7** | **+0.1** |
| **JTKR** | **Abashiri--Toko** | **3.20** | **283** | *e*P | **Pn** | **00 48 27.5** | **+2.1** |
| **JAR** | **Ashorobuto** | **3.25** | **271** | *e*P | **Pn** | **00 48 27.6** | **+1.5** |
| JAR | | | | *e*S | **Sn** | **00 49 03.0** | **-0.7** |
| **JCH** | **Churui** | **3.63** | **261** | *e*P | **Pn** | **00 48 33.5** | **+2.2** |
| JCH | | | | *e*S | **Sn** | **00 49 13.7** | **+0.5** |
| **ERM** | **Erimo** | **3.95** | **253**⇑ | *e*PN | **Pn** | **00 48 36.1** | **+0.4** |
| **JEM** | **Erimo** | **3.95** | **253** | *e*P | **Pn** | **00 48 38.8** | **+3.0** |
| **JNBK** | **Urakawa-nobuka** | **4.15** | **258** | *e*P | **Pn** | **00 48 40.7** | **+2.2** |
| JNBK | | | | *e*S | **Sn** | **00 49 27.2** | **+1.2** |
| **ASAJ** | **Asahikawa** | **4.15** | **283** | P | Pb | 00 48 44.7 | -4.8 |

comp=E,4.2nm,0.5s,baz=121,slow=28,SNR=1.7

| | | | | | | |
|---|---|---|---|---|---|---|
| **YSS** | **Yuzh-Sakhalins** | **5.31** | **315** | *e*PN | **Pn** | **00 48 53.7** | **-0.8** |
| **MAJO** | **Matsushiro** | **10.23** | **232**⇓ | *e*PN | **Pn** | **00 50 00.7** | **-1.3** |
| **KLR** | **Kul'dur** | **12.83** | **303** | LR | LR | 00 55 48.1 | |

comp=E,35nm,19.9s,baz=141,slow=39

| | | | | | | |
|---|---|---|---|---|---|---|
| **KLR** | **Kul'dur** | **12.83** | **303**⇓ | *e*PN | **Pn** | **00 50 36.6** | **-0.9** |
| KLR | | | | pmax | pmax | | |

comp=Z,1.0nm,1.0s

| | | | | | | |
|---|---|---|---|---|---|---|
| **YAK** | **Yakutsk** | **21.71** | **336**⇑ | *e*P | **P** | **00 52 19.9** | **-5.7** |
| YAK | | | | pmax | pmax | | |

comp=Z,5.0nm,0.7s

| | | | | | | |
|---|---|---|---|---|---|---|
| **BILL** | **Bilibino** | **26.58** | **15** | *e*P | **P** | **00 53 06.6** | **-5.7** |
| BILL | | | | pmax | pmax | | |

comp=Z,4.0nm,1.1s

| | | | | | | |
|---|---|---|---|---|---|---|
| **ULN** | **Ulaanbaatar** | **28.91** | **294**⇓ | *e*P | P | 00 53 27.0 | -6.6 |
| ULN | | | | pmax | pmax | | |

comp=Z,1.0nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **29.36** | **294** | P | **P** | **00 53 38.6** | **+1.1** |

comp=Z,0.8nm,0.8s,baz=72,slow=9.3,SNR=4.0
comp=Z,0.8nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **DGZ** | **Jazzator, Alta** | **41.31** | **301**⇑ | *e*P | P | 00 55 13.7 | -6.4 |
| DGZ | | | | pmax | pmax | | |

comp=Z,1.0nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **41.39** | **36** | P | P | 00 55 29.2 | **+8.8** |

comp=Z,0.2nm,0.5s,baz=251,slow=7.2,SNR=4.2
comp=Z,0.2nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **45.48** | **298** | P | **P** | **00 55 55.3** | **+1.7** |

comp=Z,0.9nm,0.8s,baz=72,slow=7.7,SNR=7.0
comp=Z,0.9nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KURK** | **Kurchatov** | **46.42** | **305** | *e*P | **P** | **00 56 03.1** | **+2.2** |
| **KURK** | **Kurchatov** | **46.42** | **305** | P | **P** | **00 56 03.1** | **+2.2** |
| **KURBB** | **Kurchatov Arra** | **46.51** | **305** | P | **P** | **00 56 03.0** | **+1.5** |

comp=Z,0.5nm,0.4s,baz=72,slow=8.4,SNR=5.0
comp=Z,0.5nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **65.62** | **333** | P | **P** | **00 58 20.1** | **+2.1** |

comp=Z,0.6nm,0.5s,baz=35,slow=5.1,SNR=8.1
comp=Z,0.6nm,0.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OBN** | **Obninsk** | **66.13** | **324** | *e*P | P | 00 58 13.5 | -7.8 |
| OBN | | | | *e* | | 00 58 43.3 | |
| OBN | | | | pmax | pmax | | |

comp=Z,3.0nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **69.60** | **50** | P | P | 00 58 50.0 | +6.3 |

comp=Z,0.1nm,0.3s,baz=250,slow=1.8,SNR=1.9
comp=Z,0.1nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NB2** | **NORSAR Subarra** | **70.29** | **339** | P | **P** | **00 58 49.1** | **+1.6** |

comp=Z,0.8nm,0.6s,baz=31,slow=6.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NOA** | **NORSAR Array B** | **70.29** | **339** | P | **P** | **00 58 49.0** | **+1.6** |

comp=Z,1.1nm,0.8s,baz=31,slow=6.1,SNR=5.9
comp=Z,1.1nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NOA** | **NORSAR Array B** | **70.29** | **339** | P | **P** | **00 58 49.0** | **+1.6** |
| **HFS** | **Hagfors** | **70.40** | **338** | P | **P** | **00 58 48.6** | **+0.6** |

comp=Z,0.7nm,0.5s,baz=54,slow=7.3,SNR=6.4
comp=Z,0.7nm,0.5s

**DJA 10 00:55:51.1±0.5, 4°S±5°×140°E±°, h10km, M3.9/3, mb3.9/1, MLv3.9/3, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **1.65** | **24** | P | Pn | 00 56 19.2 | -0.9 |
| GENI | | | | S | Sg | 00 56 43.7 | -0.5 |
| **JAY** | **Jayapura** | **1.99** | **37** | P | Pn | 00 56 25.5 | +0.6 |
| JAY | | | | S | Sb | 00 56 52.8 | +0.5 |

**CATAC 10 01:06:10.3±0.6, 13°.53N×88°.09W, h1km±3km, ML2.3, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PACA** | **Pacayal** | **0.23** | **256** | *i* P | Pg | 01 06 14.6 | -0.2 |
| PACA | | | | IAML | | 01 06 27.8 | |

comp=Z,920nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LCND** | **La Caada** | **0.29** | **138** | *i* P | Pg | 01 06 16.6 | +0.7 |
| LCND | | | | *i* S | Sg | 01 06 19.9 | +0.2 |
| LCND | | | | IAML | | 01 06 21.5 | |

comp=Z,370nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JUCU** | **Jucuarįn** | **0.31** | **210** | *i* P | Pg | 01 06 15.9 | -0.4 |
| JUCU | | | | *i* S | Sg | 01 06 19.2 | -1.1 |
| JUCU | | | | IAML | | 01 06 20.2 | |

comp=Z,250nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CNCH** | **Conchagua** | **0.35** | **135** | *i* P | Pg | 01 06 17.1 | 0.0 |
| CNCH | | | | *i* S | Sg | 01 06 21.8 | +0.1 |
| CNCH | | | | IAML | | 01 06 21.9 | |

comp=Z,650nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MARCA** | **Marcala la Paz** | **0.63** | **5** | *i* P | Pg | 01 06 22.8 | +0.4 |
| MARCA | | | | *i* S | Sg | 01 06 29.8 | -0.8 |
| **TECO** | **Alcaldia de Te** | **0.67** | **271** | *i* S | Sg | 01 06 31.9 | 0.0 |
| **UESV** | **Universidad de** | **0.69** | **279** | *i* P | Pg | 01 06 23.6 | +0.1 |
| UESV | | | | *i* S | Sb | 01 06 34.1 | -1.0 |
| UESV | | | | IAML | | 01 06 36.1 | |

comp=Z,250nm,1.0s

**SNET 10 01:06:45.1±0.5, 13°.45N×88°.28W, h0km±3km, ML0.7, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RANC** | **El Ranchito** | **0.02** | **209** | *e*P | Pg | 01 06 46.0 | +0.6 |
| RANC | | | | *e*S | Sg | 01 06 46.6 | +1.0 |
| RANC | | | | IAML | | 01 06 48.7 | |

comp=Z,292nm,0.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VSM** | **San Miguel** | **0.02** | **165** | *e*P | Pg | 01 06 45.8 | +0.3 |
| **LCY** | **Lacayo** | **0.03** | **209** | *e*P | Pg | 01 06 46.5 | +0.9 |
| **BLLM** | **Bellamira** | **0.04** | **99** | *e*P | Pg | 01 06 46.7 | +0.8 |

**RSNC 10 01:23:26.6±0.0, 7°N±2°×7°7W±°, h4km±4km, M2.9, mb4.1, mB5.0, ML2.9, Mw(mB)4.3, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DBBC** | **Dabeiba** | **0.46** | **80** | P | Pg | 01 23 33.9 | -1.6 |
| DBBC | | | | S | Sg | 01 23 40.8 | -0.8 |
| **APAC** | **Apartado, Choc** | **0.96** | **5** | P | Pg | 01 23 42.7 | -2.3 |
| APAC | | | | S | Sg | 01 23 58.1 | +0.6 |
| **SOLC** | **Bahia Solano** | **1.02** | **226** | P | Pg | 01 23 45.7 | -0.5 |
| SOLC | | | | S | Sb | 01 24 00.3 | -0.3 |
| **PTAC** | **Punta Ardita,** | **1.15** | **280** | P | Pg | 01 23 45.5 | -3.2 |
| PTAC | | | | S | Sg | 01 24 00.9 | -2.7 |
| **CBOC** | **Ciudad Bolivar** | **1.25** | **149** | P | Pg | 01 23 48.5 | -2.2 |
| CBOC | | | | S | Sb | 01 24 07.3 | -0.2 |
| **UREC** | **San Jos de Ur** | **1.39** | **54** | P | Pn | 01 23 49.2 | -3.6 |
| UREC | | | | S | Sb | 01 24 07.5 | -3.7 |
| **CAPC** | **Capurgana** | **1.81** | **338** | P | Pn | 01 23 56.1 | -2.6 |
| CAPC | | | | S | Sn | 01 24 19.3 | -2.8 |
| **ZARC** | **Zaragoza, Cauc** | **1.88** | **73** | P | Pn | 01 23 56.9 | -2.7 |
| ZARC | | | | S | Sn | 01 24 20.2 | -3.5 |
| **LCBC** | **Los crdobas,** | **1.93** | **9** | P | Pn | 01 23 57.6 | -2.6 |
| LCBC | | | | S | Sn | 01 24 23.8 | -1.1 |
| **PLMC** | **San Jos del P** | **2.06** | **169** | P | Pn | 01 23 57.8 | -4.3 |
| PLMC | | | | S | Sn | 01 24 22.3 | -5.9 |
| **PTBC** | **PUERTO BERRIO,** | **2.23** | **100** | P | Pn | 01 24 03.5 | -0.9 |
| PTBC | | | | S | Sn | 01 24 32.3 | -0.2 |
| **NORC** | **Norcasia** | **2.25** | **127** | P | Pn | 01 24 04.9 | +0.2 |
| NORC | | | | S | Sb | 01 24 34.9 | -1.3 |
| **ANIL** | **Santa Ana** | **2.74** | **153** | P | Pb | 01 24 14.3 | -2.1 |
| **SPBC** | **San Pablo de B** | **2.88** | **116** | P | Pn | 01 24 14.2 | +0.8 |
| SPBC | | | | S | Sb | 01 24 52.4 | -2.0 |
| **BRJC** | **Barrancabermej** | **2.91** | **89** | P | Pn | 01 24 14.9 | +1.2 |
| **YOTC** | **Yotoco, Valle** | **2.96** | **174** | P | Pn | 01 24 10.8 | -3.7 |
| YOTC | | | | S | Sn | 01 24 44.2 | -6.3 |
| **MALC** | **Bahia Malaga** | **2.98** | **193** | P | Pn | 01 24 15.7 | +1.0 |
| **ROSC** | **El Rosal** | **3.13** | **132** | P | Pb | 01 24 21.7 | -1.4 |
| **SJCC** | **San Jacinto, C** | **3.29** | **27** | P | Pn | 01 24 18.7 | -0.3 |
| SJCC | | | | S | Sn | 01 24 52.3 | -6.3 |
| **ORTC** | **Ortega, Tolima** | **3.33** | **155** | P | Pn | 01 24 21.4 | +1.9 |
| ORTC | | | | S | Sb | 01 25 05.8 | -1.4 |
| **BARC** | **Barichara** | **3.48** | **95** | P | Pn | 01 24 23.0 | +1.2 |
| BARC | | | | S | Sn | 01 25 01.6 | -2.0 |
| **OCAC** | **Ocana** | **3.56** | **69** | P | Pn | 01 24 22.1 | -0.8 |
| OCAC | | | | S | Sn | 01 25 02.9 | -2.6 |
| **PRAC** | **Prado** | **3.66** | **151** | P | Pn | 01 24 26.7 | +2.5 |
| **AZU** | **Azuero** | **3.67** | **284** | P | Pn | 01 24 20.8 | -3.4 |
| AZU | | | | S | Sn | 01 25 01.5 | -6.5 |
| **JAMC** | **Jamundi, Valle** | **3.70** | **180** | P | Pn | 01 24 22.8 | -2.0 |
| JAMC | | | | S | Sn | 01 25 04.6 | -4.4 |
| **RUSC** | **La Rusia** | **3.71** | **106** | P | Pn | 01 24 26.1 | +0.9 |
| **BCIP** | **Isla Barro Col** | **3.84** | **305** | P | Pn | 01 24 23.1 | -3.4 |
| BCIP | | | | S | Sn | 01 25 07.1 | -5.0 |
| **CACAO** | **El Cacao, Vera** | **4.18** | **276** | P | Pn | 01 24 27.5 | -3.7 |
| CACAO | | | | S | Sn | 01 25 12.0 | -8.5 |
| **POPC** | **Popayan, Colom** | **4.37** | **180** | P | Pn | 01 24 32.6 | -1.4 |
| POPC | | | | S | Sn | 01 25 23.7 | -1.9 |
| **CRJC** | **Cerrejon, Guaj** | **5.52** | **42** | P | Pn | 01 24 47.6 | -2.1 |

18nm,0.8s,1μm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CRJC | | | | S | Sn | 01 25 44.7 | -9.0 |

18nm,0.8s,1μm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **URIC** | **Uribia, Colomb** | **6.61** | **44** | P | Pn | 01 25 01.5 | -3.1 |
| URIC | | | | S | Sn | 01 26 13.5 | -7.0 |

**IDC 10 02:02:33.6±2.1, 9°.28S×125°.77E, h0km, mb3.3/1, mbtmp3.3/3, ML3.2/2, Error ellipse: s-maj=177.2km s-min=34.3km az=58.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.46** | **143** | Pn | Pn | 02 05 45.7 | -0.3 |

0.1nm,0.3s,baz=318,slow=12,SNR=11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | | | | Sn | Sn | 02 08 10.3 | -6.2 |

0.1nm,0.3s,baz=316,slow=26,SNR=5.0
0.7nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **16.29** | **152** | Pn | Pn | 02 06 24.2 | +0.3 |

0.1nm,0.3s,baz=322,slow=11,SNR=2.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | Sn | Sn | 02 09 16.9 | -8.5 |

0.1nm,0.3s,baz=323,slow=23,SNR=1.6
0.6nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **67.93** | **329** | P | P | 02 13 34.3 | 0.0 |

0.2nm,0.5s,baz=126,slow=7.3,SNR=2.8
0.2nm,0.5s

*TEH **10** 02:06:40.0, 34°.87N×45°.09E, h8km±4.3km, ML2.8*
*ISN **10** 02:06:40.8±1.2, 34°.70N×45°.02E, h6km±20km, ML2.6*

**ISC 10 02:06:40.4±1.0, 34°.87N±0°.05×45°.09E±0°.06, h10km, n15, σ0°98/19, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **131** | Pg | **Pg** | **02 06 51.0** | **-0.1** |
| **IKRK** | **Kirkuk** | **0.81** | **311** | *e*Pg | **Pn** | **02 06 58.0** | **+0.1** |
| IKRK | | | | *e*Sg | **Sn** | **02 07 11.0** | **+0.9** |
| IKRK | | | | AML | AML | 02 07 14.2 | |

comp=N,141nm,0.4s

| | | | | | | |
|---|---|---|---|---|---|---|
| IKRK | | | | AML | AML | 02 07 15.4 | |

comp=E,220nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GLG1** | **Gilan-e-Gharb** | **1.01** | **138** | Pg | **Pb** | **02 06 59.7** | **-0.4** |
| GLG1 | | | | Sg | **Sn** | **02 07 14.8** | **-0.3** |
| **IDHR** | **Dehrash** | **1.08** | **99** | Pg | **Pg** | **02 07 00.2** | **-1.0** |
| **IGHG** | **Ghaleghazi** | **1.33** | **113** | Pg | **Pg** | **02 07 06.3** | **+0.3** |
| **ILIN** | **Lien** | **1.54** | **88** | Pg | **Pb** | **02 07 09.0** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **1.55** | **143** | Pg | **Pb** | **02 07 08.6** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **1.71** | **110** | Pg | **Pb** | **02 07 11.9** | **-0.2** |
| **IBDR** | **Badra** | **1.89** | **158** | *e*Pn | **Pn** | **02 07 13.0** | **+0.3** |
| IBDR | | | | *e*Sn | **Sb** | **02 07 38.0** | **-0.6** |
| **MAHB** | **Mahabad** | **1.96** | **15** | Pn | **Pb** | **02 07 15.8** | **-0.4** |
| **SNQR** | **Sonqor, Kerman** | **2.09** | **90** | Pn | **Pb** | **02 07 17.7** | **-0.9** |
| **IBZA** | **Bozab** | **2.32** | **99** | Pn | **Pb** | **02 07 20.7** | **-1.7** |
| **IKFM** | **Kafar-mosalman** | **2.65** | **120** | Pn | **Pn** | **02 07 24.8** | **+1.6** |
| **HSAM** | **Samen** | **2.97** | **102** | Pn | **Pn** | **02 07 29.6** | **+1.7** |
| **RAFI** | **Al-Rafai** | **3.25** | **164** | *e*Pn | **Pn** | **02 07 33.0** | **+1.5** |
| RAFI | | | | *e*Sn | **Sn** | **02 08 09.5** | **-0.7** |

*IDC **10** 02:06:43.5±0.7, 40°.07N×145°.21E, h0km, mb3.8/12, mbtmp3.8/16, ML3.7/4, MS2.8/5, Error ellipse: s-maj=19.2km s-min=18.2km az=54.0*
*JMA **10** 02:06:46.4±0.3, 40°N±1°×14°5E±°, h48km, MV4.1/34, FAR E OFF NORTH HONSHU*
*NIED **10** 02:06:46.4, 40°.15N×145°.02E, h48km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁹Nm; Mrr=8.90; Mθe1.64; Mθθ 7.25; Mre2.19; Mθe2.74; Mθr3.00; Fault plane solution: M0 9.39000×10¹⁹ NP1: φs207.00000°, δ57.00000°, λ-84.00000°. NP2: φs17.00000°, δ34.00000°, λ-98.00000°.*
*NEIC **10** 02:06:47.0±1.9, 40°.10N±0°.02×145°.2E±0°.1, h37km±6km, mb4.3/32 Error ellipse: s-maj=13.7km s-min=1.7km az=101.0*

**ISC 10 02:06:46.5±0.5, 40°.07N±0°.05×145°.16E±0°.06, h32km, n84, σ1°71/97, mb4.2/28, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ERM** | **Erimo** | **2.46** | **323** | | **Pn** | **02 07 24.0** | **-0.4** |
| ERM | | | | Sn | **Sn** | **02 07 51.7** | **-1.7** |
| **JEM** | **Erimo** | **2.46** | **323** | P | **Pn** | **02 07 24.0** | **-0.4** |
| JEM | | | | *e*S | **Sn** | **02 07 51.6** | **-1.8** |
| **JTH** | **Tanohata** | **2.54** | **268** | *e*P | **Pn** | **02 07 24.6** | **-0.8** |
| **MIYJ** | **Miyakonagasawa** | **2.62** | **260** | *e*P | **Pn** | **02 07 26.4** | **-0.2** |
| MIYJ | | | | *e*S | **Sn** | **02 07 54.8** | **-2.5** |
| **JKEN** | **Kujiedanarisaw** | **2.65** | **274** | P | **Pn** | **02 07 26.2** | **-0.8** |
| **JANG** | **Nango** | **2.81** | **277** | P | **Pn** | **02 07 28.5** | **-0.7** |
| **JNBK** | **Urakawa-nobuka** | **2.86** | **321** | P | **Pn** | **02 07 30.0** | **+0.1** |
| JNBK | | | | *e*S | **Sn** | **02 08 02.4** | **-0.8** |
| **JCH** | **Churui** | **2.88** | **333** | *e*P | **Pn** | **02 07 29.5** | **-0.6** |
| JCH | | | | S | **Sn** | **02 08 01.2** | **-2.5** |
| **JAK** | **Akkeshi** | **2.94** | **353** | *e*P | **Pn** | **02 07 30.0** | **-1.0** |
| JAK | | | | *e*S | **Sn** | **02 08 02.0** | **-3.3** |
| **JOM** | **Ohasama** | **3.04** | **260** | *i* P | **Pn** | **02 07 32.9** | **+0.4** |
| **JTM** | **Ten

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D22K | Ayikyak River | 43.32 | 28 | P | P | 02 14 44.6 | -0.5 |
| MK31 | Makanchi Array | 45.06 | 300 | P | P | 02 14 59.8 | +0.5 |
| MKAR | Makanchi Array | 45.06 | 300 | P | P | 02 15 01.3 | +2.0 |
| | comp=Z,0.3nm,0.7s,baz=90,slow=9.4,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| MAKZ | Makanchi | 45.27 | 300 | P | P | 02 15 01.3 | +0.4 |
| MAKZ | | | | IAmb | IAmb | 02 15 42.3 | |
| | comp=Z,4.2nm,1.4s | | | | | | |
| ILAR | Eielson Array | 45.35 | 34 | P | P | 02 15 02.6 | +1.3 |
| | comp=Z,0.7nm,0.7s,baz=262,slow=6.9,SNR=8.7 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| BMAR | Burnt Mountain | 46.25 | 30 | P | P | 02 15 07.2 | -1.2 |
| KURK | Kurchatov | 46.44 | 306 | P | P | 02 15 10.3 | +0.3 |
| KURK | | | | IAmb | IAmb | 02 15 22.3 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| KURBB | Kurchatov Array | 46.51 | 306 | P | P | 02 15 12.4 | +1.7 |
| | comp=Z,2.1nm,0.8s,baz=80,slow=8.7,SNR=13 | | | | | | |
| KURBB | | | | PcP | PcP | 02 16 47.2 | +2.6 |
| | comp=Z,0.3nm,0.3s,baz=90,slow=4.6,SNR=2.2 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| BCAR | Beaver Creek A | 47.72 | 36 | P | P | 02 15 17.7 | -2.3 |
| MESA | MESA | 48.07 | 40 | P | P | 02 15 21.3 | -1.6 |
| M29M | Somme Creek | 49.33 | 37 | P | P | 02 15 31.5 | -1.0 |
| M29M | | | | IAmb | IAmb | 02 16 12.7 | |
| | comp=Z,2.8nm,1.2s | | | | | | |
| KK31 | Karatay Array | 54.17 | 299 | P | P | 02 16 07.9 | -0.9 |
| ARU | Arti | 56.05 | 318 | LR | LR | 02 42 16.6 | |
| | comp=Z,25nm,19.4s,baz=121,slow=38 | | | | | | |
| KBS | Kingsbay | 58.16 | 350 | P | P | 02 16 36.7 | +0.1 |
| ABKAR | Akbulak array | 58.24 | 310 | P | P | 02 16 37.2 | -0.4 |
| ABKAR | Akbulak array | 58.24 | 310 | P | P | 02 16 36.8 | -0.9 |
| ABKAR | | | | IAmb | IAmb | 02 16 50.3 | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| WB0 | Warramunga Arr | 60.37 | 192 | P | P | 02 16 53.2 | +0.7 |
| WB0 | | | | IAmb | IAmb | 02 17 06.8 | |
| | comp=Z,4.2nm,1.0s | | | | | | |
| WR0 | Warramunga Arr | 60.54 | 191 | P | P | 02 16 53.1 | -0.5 |
| WRA | Warramunga Arr | 60.55 | 192 | P | P | 02 16 53.6 | -0.1 |
| WRA | Warramunga Arr | 60.55 | 192 | P | P | 02 16 54.8 | +1.0 |
| | comp=Z,1.4nm,0.6s,baz=12,slow=7.1,SNR=7.5 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| FITZ | Fitzroy Crossi | 60.66 | 201 | P | P | 02 16 52.5 | -2.1 |
| HRA | Herat | 63.98 | 294 | P | P | 02 17 16.3 | -0.7 |
| HRA | | | | IAmb | IAmb | 02 17 20.0 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| ASAR | Alice Springs | 64.27 | 191 | P | P | 02 17 20.7 | +2.0 |
| | comp=Z,1.0nm,0.8s,baz=21,slow=8.0,SNR=4.7 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| FINES | FINESS Array B | 67.47 | 333 | P | P | 02 17 39.0 | +0.2 |
| FINES | FINESS Array B | 67.47 | 333 | P | P | 02 17 40.3 | +1.4 |
| | comp=Z,1.3nm,0.7s,baz=60,slow=7.7,SNR=8.0 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| SUMG | Summit | 67.62 | 1 | P | P | 02 17 39.2 | -0.9 |
| SUMG | | | | IAmb | IAmb | 02 17 59.0 | |
| | comp=Z,6.3nm,1.3s | | | | | | |
| BMN | Battle Mountai | 70.33 | 53 | P | P | 02 17 54.9 | -2.3 |
| NVAR | Mina Array Bea | 70.83 | 56 | P | P | 02 18 03.4 | +3.0 |
| | comp=Z,0.3nm,0.5s,baz=292,slow=8.3,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| NOA | NORSAR Array B | 72.48 | 338 | P | P | 02 18 10.9 | +1.3 |
| | comp=Z,0.5nm,0.8s,baz=36,slow=6.1,SNR=1.8 | | | | | | |
| NOA | | | | LR | LR | 02 56 08.2 | |
| | comp=Z,5.5nm,19.3s,baz=260,slow=41 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| PDAR | Pinedale Array | 73.45 | 48 | P | P | 02 18 17.6 | +1.6 |
| | comp=Z,0.4nm,0.6s,baz=332,slow=1.5,SNR=5.5 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 85.96 | 55 | P | P | 02 19 26.2 | +2.4 |
| | comp=Z,1.1nm,0.8s,baz=299,slow=3.7,SNR=14 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 129.81 | 180 | PKP | PKiKP | 02 25 53.4 | +1.1 |
| | comp=Z,0.6nm,0.8s,baz=353,slow=1.3,SNR=6.4 | | | | | | |
| SNAA | Sanae | 144.50 | 197 | PKP | PKPdf | 02 26 18.4 | -0.1 |
| | comp=Z,0.7nm,0.6s,baz=215,slow=6.9,SNR=2.6 | | | | | | |

*DJA* ***10*** *02:10:34.2±0.8,8°S±10′×11°7E±°, h12km±7km, M4.2/10, mb4.5/2, MLv4.2/10*
*IDC* ***10*** *02:10:45.7±7.0, 8°.72S×116°.23E, h140km±60km, mb3.4/6, mbtmp3.8/7, MS3.3/1, Error ellipse: s-maj=64.8km s-min=17.4km az=67.0*

**ISC 10 02:10:33.5±0.8, 8°21S±0°.08×116°.53E±0°.05, h10km, n17, σ0s71/18, mb4.0/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.63 | 146 | P | | Pb | | 02 10 46.6 | +0.1 |
| SRBI | Singaraja | 1.31 | 276 | P | | Pn | | 02 10 57.5 | -0.3 |
| SRBI | | | | S | | Sb | | 02 11 15.2 | +0.1 |
| DNP | Denpasar | 1.39 | 250 | P | | Pn | | 02 10 58.9 | 0.0 |
| JAGI | Jajag, Banyuwa | 2.37 | 264 | P | | Pn | | 02 11 12.7 | +0.3 |
| GRJI | Gresik | 4.22 | 288 | P | | Pn | | 02 11 37.9 | 0.0 |
| BSSI | Bau Bau, Buton | 4.43 | 63 | P | | Pn | | 02 11 41.5 | +0.6 |
| KAPI | Kappang | 4.51 | 45 | P | | Pg | | 02 11 58.7 | -1.3 |
| | 15nm,0.4s,baz=201,slow=13,SNR=5.3 | | | | | | | | |
| KAPI | | | | S | | Sg | | 02 12 59.8 | +1.3 |
| | 19nm,0.6s,baz=59,slow=23,SNR=1.6 | | | | | | | | |
| PWJI | Pagerwojo | 4.68 | 272 | P | | Pn | | 02 11 44.3 | 0.0 |
| EDFI | Ende, Flores | 5.13 | 96 | P | | Pn | | 02 11 51.1 | +0.5 |
| | 22nm,0.7s,0.1nm | | | | | | | | |
| UGM | Wanagama | 5.96 | 272 | P | | Pn | | 02 12 02.4 | +0.6 |
| WRA | Warramunga Arr | 20.81 | 126 | P | | P | | 02 15 15.3 | 0.0 |
| | 1.2nm,0.6s,baz=300,slow=12,SNR=26 | | | | | | | | |
| | 1.2nm,0.6s | | | | | | | | |
| ASAR | Alice Springs | 22.65 | 135 | P | | P | | 02 15 34.6 | -0.4 |
| | 1.1nm,0.6s,baz=304,slow=8.8,SNR=10 | | | | | | | | |
| | 1.1nm,0.6s | | | | | | | | |
| PMG | Port Moresby | 30.29 | 95 | LR | | LR | | 02 30 52.3 | |
| | comp=Z,53nm,19.0s,baz=200,slow=40 | | | | | | | | |
| USRK | Ussuriysk Ar. | 54.01 | 14 | P | | P | | 02 19 58.3 | +0.4 |
| | 1.4nm,0.7s,baz=142,slow=7.3,SNR=4.1 | | | | | | | | |
| | 1.4nm,0.7s | | | | | | | | |
| SONM | Songino Array | 56.52 | 352 | P | | P | | 02 20 16.9 | +0.8 |
| | 0.7nm,0.7s,baz=168,slow=7.9,SNR=3.9 | | | | | | | | |
| | 0.7nm,0.7s | | | | | | | | |
| MKAR | Makanchi Array | 62.67 | 334 | P | | P | | 02 20 58.3 | -0.1 |
| | 0.7nm,0.6s,baz=142,slow=8.8,SNR=7.0 | | | | | | | | |
| | 0.7nm,0.6s | | | | | | | | |
| ZALV | Zalesovo Beam | 67.46 | 340 | P | | P | | 02 21 28.0 | -1.3 |
| | 0.9nm,0.4s,baz=149,slow=5.9,SNR=4.1 | | | | | | | | |
| | 0.9nm,0.4s | | | | | | | | |

*IDC* ***10*** *02:25:17.1±7.9, 22°.72S×178°.01W, h337km±81km, mb3.2/7, mbtmp4.0/9, Error ellipse: s-maj=34.6km s-min=25.7km az=3.0*

**ISC 10 02:25:18.7±0.8, 22°.7S±0°.1×178°.1W±0°.1, h352km, n10, σ1s28/11, mb3.5/8, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 14.30 | 269 | P | | Pn | | 02 28 27.7 | +0.1 |
| | 7.7nm,0.8s,baz=334,slow=8.1,SNR=3.7 | | | | | | | | |
| URZ | Urewera | 16.08 | 194 | P | | P | | 02 28 42.3 | -2.5 |
| | 3.5nm,0.4s,baz=349,slow=4.5,SNR=9.9 | | | | | | | | |
| URZ | | | | S | | S | | 02 31 35.5 | -0.2 |
| | 4.5nm,0.4s,baz=330,slow=24,SNR=13 | | | | | | | | |
| ASAR | Alice Springs | 43.96 | 259 | P | | P | | 02 32 53.2 | +0.7 |
| | 2.1nm,0.7s,baz=91,slow=7.9,SNR=19 | | | | | | | | |
| | 2.1nm,0.7s | | | | | | | | |
| WRA | Warramunga Arr | 44.24 | 264 | P | | P | | 02 32 54.5 | -0.3 |
| | 1.3nm,0.7s,baz=96,slow=8.2,SNR=29 | | | | | | | | |
| | 1.3nm,0.7s | | | | | | | | |
| QSPA | South Pole Qui | 67.42 | 180 | P | | P | | 02 35 39.4 | +2.4 |
| | 1.2nm,1.0s,baz=151,slow=3.1,SNR=1.8 | | | | | | | | |
| NVAR | Mina Array Bea | 82.66 | 43 | P | | P | | 02 37 03.9 | +0.1 |
| | 0.5nm,0.7s,baz=222,slow=12,SNR=3.7 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| PLCA | Paso Flores | 87.87 | 134 | P | | P | | 02 37 29.2 | 0.0 |
| | 2.6nm,1.0s,baz=250,slow=11,SNR=3.1 | | | | | | | | |
| | 2.6nm,1.0s | | | | | | | | |
| TXAR | Lajitas Array | 88.31 | 57 | P | | P | | 02 37 31.2 | -0.2 |
| | 0.4nm,0.7s,baz=198,slow=5.7,SNR=4.7 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| ILAR | Eielson Array | 90.44 | 13 | P | | P | | 02 37 39.5 | -0.9 |
| | 0.3nm,0.5s,baz=221,slow=5.2,SNR=6.7 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| PDAR | Pinedale Array | 90.60 | 43 | P | | P | | 02 37 42.1 | +0.1 |
| | 0.2nm,0.5s,baz=182,slow=2.7,SNR=2.6 | | | | | | | | |
| | 0.2nm,0.5s | | | | | | | | |

*NEIC* ***10*** *02:47:33.1±1.4, 21°.0S±0°.1×169°.9E±0°.1, h68km±7km, mb4.7/16, Error ellipse: s-maj=15.7km s-min=15.3km az=83.0*
*NOU* ***10*** *02:47:34.2, 21°.07S×169°.61E, h17km, MLv4.6/12, Southeast of Loyalty Islands*
*IDC* ***10*** *02:47:35.5±2.2, 20°.96S×169°.53E, h90km±18km, mb3.8/5, mbtmp4.1/7, MS3.0/4, Error ellipse: s-maj=40.7km s-min=16.5km az=159.0*

**ISC 10 02:47:28.0±0.7, 21°.0S±0°.1×170°.05E±0°.09, h35km, n47, σ1s88/41, mb4.5/15, 2C, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MARNC | Mare, Loyalty | 1.95 | 254 | P | | Pn | | 02 48 00.7 | +2.1 |
| LIFNC | LIFOU | 2.63 | 273 | P | | Pn | | 02 48 09.7 | +1.8 |
| LIFNC | LIFOU | 2.63 | 273 | | | Pn | | 02 48 09.6 | +1.8 |
| PINNC | Pines Island, | 2.92 | 235 | P | | Pn | | 02 48 14.0 | +2.0 |
| PINNC | Pines Island, | 2.92 | 235 | | | Pn | | 02 48 14.4 | +2.4 |
| YATNC | Mamie plateau, | 3.13 | 249 | P | | Pn | | 02 48 16.2 | +1.3 |
| RTV | Rentapao | 3.50 | 334 | P | | Pn | | 02 48 27.1 | +7.2 |
| DZM | Mont Dzumac | 3.53 | 251 | P | | Pn | | 02 48 23.1 | +2.7 |
| DZM | Mont Dzumac | 3.53 | 251 | | | Pn | | 02 48 23.4 | +2.9 |
| DZM | Mont Dzumac | 3.53 | 251 | P | | Pn | | 02 48 23.1 | +2.7 |
| | 68nm,0.3s,baz=162,slow=13,SNR=218 | | | | | | | | |
| DZM | | | | LR | | LR | | 02 48 54.7 | |
| | comp=Z,60nm,21.4s,baz=88,slow=26 | | | | | | | | |
| DZM | | | | S | | Sn | | 02 48 57.9 | -3.1 |
| | 363nm,0.4s,baz=346,slow=23,SNR=27 | | | | | | | | |
| ONTNC | Ouen Toro | 3.60 | 247 | P | | Pn | | 02 48 24.2 | +2.9 |
| ONTNC | Ouen Toro | 3.60 | 247 | | | Pn | | 02 48 24.3 | +3.0 |
| DVP | Devils Point | 3.66 | 331 | P | | Pn | | 02 48 29.5 | +7.4 |
| NOUC | Port Laguerre | 3.67 | 251 | P | | Pn | | 02 48 25.0 | +2.8 |
| KOUNC | Koumac, New Ca | 5.40 | 273 | P | | Pn | | 02 48 49.5 | +3.4 |
| KOUNC | Koumac, New Ca | 5.40 | 273 | | | Pn | | 02 48 49.8 | +3.7 |
| MSVF | Nonsavu | 8.21 | 68 | P | | Pn | | 02 49 40.0 | +15 |
| | 8.1nm,0.7s,baz=226,slow=14,SNR=4.7 | | | | | | | | |
| MSVF | | | | LR | | LR | | 02 52 13.2 | |
| | comp=Z,144nm,18.2s,baz=202,slow=32 | | | | | | | | |
| ARMA | Armidale | 19.06 | 237 | Pn | | Pn | | 02 51 49.1 | +0.6 |
| STKA | Stephens Creek | 27.62 | 241 | P | | P | | 02 53 11.4 | -0.9 |
| | 2.5nm,0.9s,baz=56,slow=7.3,SNR=1.9 | | | | | | | | |
| | 2.5nm,0.9s | | | | | | | | |
| RAR | Rarotonga | 28.14 | 96 | LR | | LR | | 03 05 24.7 | |
| | comp=Z,46nm,18.2s,baz=154,slow=37 | | | | | | | | |
| BBOO | Buckleboo | 32.39 | 241 | P | | P | | 02 53 51.4 | -3.1 |
| BBOO | | | | IAmb | | IAmb | | 02 54 07.1 | |
| | comp=Z,47nm,1.4s | | | | | | | | |
| WR0 | Warramunga Arr | 33.24 | 265 | P | | P | | 02 54 01.1 | -1.0 |
| WB0 | Warramunga Arr | 33.40 | 266 | P | | P | | 02 54 03.1 | -0.4 |
| WB0 | | | | IAmb | | IAmb | | 02 54 14.5 | |
| | comp=Z,8.8nm,1.3s | | | | | | | | |
| WB2 | Warramunga Arr | 33.42 | 265 | P | | P | | 02 54 02.8 | -0.8 |
| WB2 | | | | IAmb | | IAmb | | 02 54 35.4 | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| WRA | Warramunga Arr | 33.43 | 265 | P | | P | | 02 54 02.5 | -1.2 |
| WRA | Warramunga Arr | 33.43 | 265 | P | | P | | 02 54 02.5 | -1.2 |
| | comp=Z,0.8nm,0.8s,baz=87,slow=8.2,SNR=9.1 | | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | | |
| AS31 | Alice Springs | 33.49 | 259 | P | | P | | 02 54 04.1 | -0.1 |
| AS31 | | | | IAmb | | IAmb | | 02 54 04.6 | |
| | comp=Z,3.4nm,0.5s | | | | | | | | |
| ASAR | Alice Springs | 33.49 | 259 | P | | P | | 02 54 03.7 | -0.6 |
| ASAR | Alice Springs | 33.49 | 259 | P | | P | | 02 54 03.9 | -0.3 |
| | comp=Z,5.6nm,0.5s,baz=93,slow=9.3,SNR=104 | | | | | | | | |
| | comp=Z,5.6nm,0.5s | | | | | | | | |
| MCQ | Macquarie Isla | 34.53 | 191 | P | | P | | 02 54 14.4 | +1.7 |
| FORT | Forrest | 38.83 | 247 | P | | P | | 02 54 49.6 | -0.2 |
| FORT | | | | IAmb | | IAmb | | 02 55 08.3 | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| FITZ | Fitzroy Crossi | 41.85 | 266 | P | | P | | 02 55 14.8 | -0.2 |
| NWAO | Narrogin (SRO) | 48.13 | 244 | P | | P | | 02 56 05.2 | +0.5 |
| DAV | Davao City (W) | 51.79 | 298 | LR | | LR | | 03 18 09.2 | |
| | comp=Z,16nm,19.6s,baz=106,slow=36 | | | | | | | | |
| SBA | Scott Base | 56.97 | 181 | P | | P | | 02 57 09.3 | -0.1 |
| SBA | | | | IAmb | | IAmb | | 02 57 36.3 | |
| | comp=Z,3.5nm,1.1s | | | | | | | | |
| QSPA | South Pole Qui | 69.11 | 180 | P | | P | | 02 58 30.5 | +0.1 |
| QSPA | South Pole Qui | 69.11 | 180 | P | | P | | 02 58 30.9 | +0.5 |
| | comp=Z,2.4nm,1.1s,baz=24,slow=4.2,SNR=3.6 | | | | | | | | |
| | comp=Z,2.4nm,1.1s | | | | | | | | |
| CMAR | Chiang Mai Arr | 79.89 | 294 | P | | P | | 02 59 33.4 | -0.2 |
| VNA3 | Neumayer Olymp | 88.05 | 180 | ⇑P | | P | | 03 00 13.4 | -1.0 |
| | comp=Z,2.2nm,0.9s | | | | | | | | |
| VNA2 | Neumayer--Watz | 88.35 | 181 | ⇑P | | P | | 03 00 14.6 | -1.2 |
| | comp=Z,2.3nm,0.8s,baz=231,slow=5.0 | | | | | | | | |
| CUT | Chulitna | 88.84 | 17 | P | | P | | 03 00 18.1 | +0.2 |
| CUT | | | | IAmb | | IAmb | | 03 00 37.0 | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| NVAR | Mina Array Bea | 89.37 | 48 | P | | P | | 03 00 23.1 | +1.8 |
| | comp=Z,0.5nm,0.6s,baz=226,slow=7.3,SNR=5.5 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| KVN | Kaiserville | 89.80 | 48 | P | | P | | 03 00 24.4 | +1.2 |
| KVN | | | | IAmb | | IAmb | | 03 00 26.4 | |
| | comp=Z,3.5nm,1.4s | | | | | | | | |
| BCPM | Bancas Point | 90.40 | 23 | P | | P | | 03 00 30.8 | +5.5 |
| EKA | Eskdalemuir Ar | 145.30 | 353 | PKPbc | | PKPdf | | 03 07 00.3 | -1.4 |
| | comp=Z,0.9nm,0.5s,baz=344,slow=2.3,SNR=4.2 | | | | | | | | |
| GERES | GERESS Array B | 146.35 | 331 | PKPbc | | PKPab | | 03 07 04.9 | -1.1 |
| | comp=Z,0.7nm,0.6s,baz=159,slow=6.3,SNR=5.0 | | | | | | | | |
| DAVOX | Davos/Dischmat | 149.60 | 333 | PKPbc | | PKiKP | | 03 07 13.6 | -1.4 |
| | comp=Z,1.0nm,0.6s,baz=270,slow=4.0,SNR=2.5 | | | | | | | | |

*TEH* ***10*** *02:52:59.2, 34°.82N×45°.89E, h8km±31km, ML2.9*
*ISN* ***10*** *02:53:00.2±0.9, 34°.83N×45°.88E, h14km±342km, ML2.7*

**ISC 10 02:52:59.7±0.9, 34°.83N±0°.03×45°.89E±0°.04, h10km, n16, σ0s85/19, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| KGS1 | Ghasr-e-Shirin | 0.41 | 218 | Pg | | Pg | | 02 53 07.2 | -0.6 |
| IDHR | Dehrash | 0.43 | 108 | Pg | | Pg | | 02 53 08.1 | -0.1 |
| GLG1 | Gilan-e-Gharb | 0.71 | 179 | Pg | | Pg | | 02 53 13.1 | -0.5 |
| IGHG | Ghaleghazi | 0.75 | 132 | Pg | | Pg | | 02 53 14.0 | -0.3 |
| ILIN | Lien | 0.89 | 84 | Pg | | Pg | | 02 53 16.8 | 0.0 |
| KCHF | Cheshme Sefid, | 1.10 | 120 | Pg | | Pg | | 02 53 20.3 | -0.6 |
| ILBA | Ilam Banvizeh | 1.23 | 168 | Pg | | Pn | | 02 53 22.6 | -0.5 |
| SDS1 | Sardasht. Az. | 1.36 | 346 | Pg | | Pg | | 02 53 25.6 | -0.2 |
| IKRK | Kirkuk | 1.39 | 295 | ePg | | Pg | | 02 53 26.0 | -0.5 |
| IKRK | | | | eSg | | Sg | | 02 53 44.0 | -0.6 |
| SNQR | Sonqor, Kerman | 1.43 | 88 | Pg | | Pb | | 02 53 26.4 | -0.3 |
| IBZA | Bozab | 1.66 | 102 | Pg | | Pb | | 02 53 31.0 | +0.3 |
| IBDR | Badra | 1.72 | 179 | ePn | | Pb | | 02 53 31.5 | +0.1 |
| IBDR | | | | eSn | | Sg | | 02 53 54.0 | -0.9 |
| IBDR | | | | AML | | AML | | 02 54 04.5 | |
| | comp=N,104nm,0.8s | | | | | | | | |
| IBDR | | | | AML | | AML | | 02 54 04.9 | |
| | comp=E,106nm,0.4s | | | | | | | | |
| MAHB | Mahabad | 1.94 | 356 | Pn | | Pb | | 02 53 35.1 | -0.1 |
| IKFM | Kafar-mosalman | 2.08 | 128 | Pn | | Pb | | 02 53 36.6 | -0.9 |
| HSAM | Samen | 2.32 | 105 | Pn | | Pb | | 02 53 40.7 | -1.2 |
| RAFI | Al-Rafai | 3.10 | 176 | ePn | | Pn | | 02 53 50.2 | +1.4 |
| RAFI | | | | eSn | | Sn | | 02 54 28.0 | +2.1 |

*PAS* ***10*** *02:56:08.8±1.8, 31°.77N±0°.02×115°.62W±0°.03, h15km±2km, ML3.1/123, ML2.8/38(NEIC), Error ellipse: s-maj=3.5km s-min=2.6km az=121.0*
*NEIC* ***10*** *02:56:08.4±1.8, 31°.76N±0°.01×115°.66W±0°.02, h5km±5km, Error ellipse: s-maj=2.6km s-min=1.0km az=136.0*
*ECX* ***10*** *02:56:09.1±0.5, 31°.77N×115°.59W, h4km±3km, MD2.9, ML3.1*

**ISC 10 02:56:08.1±0.9, 31°.77N±0°.02×115°.59W±0°.02, h14km±8km, n70, σ0s79/93, 7C-3D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| ALAMX | Rancho Alamar | 0.26 | 337 | ⇑iP | | Pg | | 02 56 13.3 | -0.3 |
| ALAMX | | | | eS | | Sg | | 02 56 17.1 | -0.3 |
| ALAMX | | | | e | | | | 02 56 17.7 | |
| ALAMX | | | | IAML | | | | 02 56 17.7 | |
| | comp=E,2μm,0.2s | | | | | | | | |
| SJX | San Joaquin | 0.32 | 269 | ⇑iP | | Pb | | 02 56 15.8 | +0.3 |
| SJX | | | | eS | | Sb | | 02 56 21.3 | +0.8 |
| SJX | | | | IAML | | | | 02 56 21.5 | |
| | comp=E,2μm,0.1s | | | | | | | | |
| SJX | | | | e | | | | 02 56 21.5 | |
| SJX | | | | IAML | | | | 02 56 22.2 | |
| | comp=N,2μm,0.0s | | | | | | | | |
| SJX | | | | ⇓e | | | | 02 56 22.2 | |
| ESJX | Sierra Juarez | 0.39 | 308 | | | Pg | | 02 56 15.8 | -0.1 |
| ESJX | Sierra Juarez | 0.39 | 308 | IAML | | | | 02 56 21.6 | |
| | comp=E,1μm,0.1s | | | | | | | | |
| ESJX | | | | IAML | | | | 02 56 22.2 | |
| | comp=N,1μm,0.1s | | | | | | | | |
| ESJX | Sierra Juarez | 0.39 | 308 | | | Sg | | 02 56 21.6 | +0.3 |
| VTX | Valle De La Tr | 0.41 | 204 | | | Pg | | 02 56 16.6 | +0.3 |
| VTX | | | | | | Sg | | 02 56 22.5 | +0.6 |
| VTX | Valle De La Tr | 0.41 | 204 | IAML | | | | 02 56 23.7 | |
| | comp=E,436nm,0.1s | | | | | | | | |
| VTX | Valle De La Tr | 0.41 | 204 | ⇓iP | | Pg | | 02 56 16.6 | +0.3 |
| VTX | | | | eS | | Sg | | 02 56 22.5 | +0.6 |
| ECBX | El Chinero | 0.54 | 123 | ⇑iP | | Pg | | 02 56 18.5 | -0.2 |
| ECBX | | | | eS | | Sg | | 02 56 26.4 | +0.5 |
| AGSX | Ej. Aguas Cali | 0.61 | 36 | ⇓eP | | Pg | | 02 56 20.0 | -0.1 |
| AGSX | | | | eS | | Sg | | 02 56 29.0 | +0.7 |
| GUVIX | Guadalupe Vict | 0.69 | 39 | | | Pg | | 02 56 21.9 | +0.4 |
| GUVIX | Guadalupe Vict | 0.69 | 39 | eP | | Pg | | 02 56 21.6 | +0.2 |
| GUVIX | | | | eS | | Sg | | 02 56 30.9 | +0.4 |
| CPBX | Cerro Prieto | 0.69 | 20 | | | Pg | | 02 56 22.2 | +0.6 |
| CPBX | | | | | | Sb | | 02 56 32.8 | +1.4 |
| SPIG | San Pedro Mart | 0.73 | 172 | eP | | Pg | | 02 56 22.2 | -0.1 |
| SPIG | | | | eS | | Sg | | 02 56 32.1 | +0.2 |
| JARAX | Ej. Heriberto | 0.77 | 0 | eP | | Pg | | 02 56 22.5 | -0.5 |
| JARAX | | | | eS | | Sg | | 02 56 33.4 | +0.3 |
| JARAX | | | | IAML | | | | 02 56 36.9 | |
| | comp=E,598nm,0.5s | | | | | | | | |
| JARAX | | | | ⇑e | | | | 02 56 36.9 | |
| UABX | UABC, Campus M | 0.87 | 8 | | | Sg | | 02 56 38.0 | +1.6 |
| SGL | Mount Signal | 0.89 | 352 | | | Pb | | 02 56 24.2 | -1.0 |
| SGL | | | | | | Sb | | 02 56 36.2 | -0.8 |
| 5053 | Calexico | 0.90 | 5 | | | Sg | | 02 56 38.8 | +1.3 |
| CCX | Cicese | 0.92 | 277 | | | Pb | | 02 56 25.3 | -0.6 |
| CCX | | | | | | Sb | | 02 56 36.5 | -1.5 |
| CCX | Cicese | 0.92 | 277 | IAML | | | | 02 56 41.1 | |
| | comp=N,193nm,0.4s | | | | | | | | |
| CCX | | | | IAML | | | | 02 56 41.6 | |
| | comp=E,230nm,0.5s | | | | | | | | |
| CCX | Cicese | 0.92 | 277 | eP | | Pb | | 02 56 25.6 | -0.3 |
| CCX | | | | eS | | Sg | | 02 56 38.0 | -0.1 |
| YUH | Yuha Desert | 0.92 | 342 | | | Pb | | 02 56 25.0 | -0.9 |
| YUH | | | | | | Sb | | 02 56 36.9 | -1.1 |
| YUH | Yuha Desert | 0.92 | 342 | IAML | | | | 02 56 37.8 | |
| | comp=E,266nm,0.5s | | | | | | | | |
| YUH2 | Yuha Desert | 0.92 | 342 | eP | | Pb | | 02 56 25.0 | -0.9 |
| RMX | La Rumorosa | 0.93 | 333 | | | Pb | | 02 56 24.2 | -1.9 |
| RMX | | | | IAML | | | | 02 56 37.6 | |
| | comp=E,739nm,0.3s | | | | | | | | |
| RMX | | | | IAML | | | | 02 56 38.0 | |
| | comp=N,717nm,0.2s | | | | | | | | |
| RMX | La Rumorosa | 0.93 | 333 | | | Sb | | 02 56 35.4 | -3.0 |
| RMX | La Rumorosa | 0.93 | 333 | eP | | Pb | | 02 56 24.2 | -1.9 |
| RMX | | | | ⇑e | | | | 02 56 38.0 | |
| RMX | | | | IAML | | | | 02 56 38.0 | |
| | comp=N,675nm,0.2s | | | | | | | | |
| 5054 | Holtville Bond | 0.95 | 13 | | | Pb | | 02 56 26.3 | +0.1 |
| 5054 | | | | | | Sg | | 02 56 39.9 | +1.1 |
| SFX | San Felipe | 0.96 | 139 | | | Pb | | 02 56 26.2 | -0.3 |
| SFX | San Felipe | 0.96 | 139 | IAML | | | | 02 56 40.0 | |
| | comp=N,246nm,0.6s | | | | | | | | |
| SFX | | | | IAML | | | | 02 56 40.6 | |
| | comp=E,212nm,0.6s | | | | | | | | |
| SFX | San Felipe | 0.96 | 139 | eP | | Pb | | 02 56 26.1 | -0.4 |
| SFX | | | | eS | | Sb | | 02 56 38.9 | -0.2 |
| SFX | | | | IAML | | | | 02 56 39.9 | |
| | comp=N,309nm,0.4s | | | | | | | | |
| PBX | Punta Banda | 0.97 | 269 | eP | | Pb | | 02 56 26.4 | -0.3 |
| PBX | | | | eS | | Sb | | 02 56 39.0 | -0.4 |
| IKP | In-Ko-Pah, Jac | 0.99 | 333 | | | Pb | | 02 56 26.2 | -0.8 |
| IKP | | | | | | Sb | | 02 56 38.6 | -1.3 |
| IKP | In-Ko-Pah, Jac | 0.99 | 333 | eP | | Pb | | 02 56 26.2 | -0.8 |
| WESC | Westside Schoo | 1.00 | 353 | | | Pb | | 02 56 27.0 | -0.1 |
| WESC | | | | | | Sb | | 02 56 40.8 | +0.6 |
| DREC | Desert Rsrch C | 1.04 | 6 | | | Sn | | 02 56 43.5 | +0.9 |
| CBX | Cerro Bola | 1.06 | 301 | | | Pb | | 02 56 28.0 | -0.3 |
| CBX | | | | | | Sg | | 02 56 42.7 | +0.1 |
| CBX | Cerro Bola | 1.06 | 301 | IAML | | | | 02 56 46.0 | |
| | comp=N,462nm,0.2s | | | | | | | | |
| CBX | Cerro Bola | 1.06 | 301 | ⇑iP | | Pb | | 02 56 28.0 | -0.3 |
| CBX | | | | eS | | Sb | | 02 56 42.3 | +0.1 |
| COK2 | Cook Ranch 2 | 1.09 | 354 | | | Pb | | 02 56 28.8 | +0.1 |
| COK2 | | | | | | Sg | | 02 56 43.8 | +0.5 |
| SNR | Schaffner Ranc | 1.10 | 7 | | | Pb | | 02 56 28.8 | 0.0 |
| SNR | | | | | | Sn | | 02 56 44.8 | +0.8 |
| TJIG | Tijuana | 1.14 | 306 | eP | | Pb | | 02 56 28.7 | -0.9 |
| CRR | Carrizo Plain | 1.16 | 344 | | | Pn | | 02 56 29.9 | 0.0 |
| TKX | Tecate | 1.18 | 313 | | | Pn | | 02 56 29.2 | -1.0 |
| TKX | | | | IAML | | | | 02 56 47.0 | |
| | comp=E,482nm,0.2s | | | | | | | | |
| SQX | San Quintin | 1.21 | 192 | eP | | Pn | | 02 56 30.5 | -0.1 |
| SQX | | | | eS | | Sb | | 02 56 46.2 | -0.1 |
| SQX | | | | ⇓e | | | | 02 56 46.8 | |
| SQX | | | | IAML | | | | 02 56 46.8 | |
| | comp=E,224nm,0.3s | | | | | | | | |
| BAR | Barrett | 1.29 | 315 | | | Sb | | 02 56 48.3 | -0.5 |
| DUZA | Dulzura | 1.31 | 310 | | | Pn | | 02 56 31.8 | -0.2 |
| DUZA | | | | | | Sb | | 02 56 48.9 | -0.3 |
| MONP2 | Monument Peak | 1.33 | 328 | | | Pn | | 02 56 32.5 | +0.1 |
| MONP2 | | | | | | Sb | | 02 56 49.6 | -0.2 |
| MONP2 | Monument Peak | 1.33 | 328 | eP | | Pn |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WB2** | **Warramunga Arr** | **48.02** | **256** | P | | **P** | **03 28 32.2** | **-0.5** |
| **WRA** | **Warramunga Arr** | **48.03** | **256** | P | | **P** | **03 28 31.8** | **-1.1** |
| **WRA** | **Warramunga Arr** | **48.03** | **256** | P | | **P** | **03 28 31.6** | **-1.1** |
| | comp=Z,1.5nm,0.7s,baz=91,slow=7.1,SNR=23 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **03 29 55.0** | **-0.7** |
| | comp=Z,0.3nm,0.5s,baz=93,slow=3.5,SNR=2.6 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **48.40** | **251** | | | **P** | **03 28 34.9** | **-0.7** |
| AS31 | | | | IAmb | | IAmb | 03 28 36.1 | |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.40** | **251** | | | **P** | **03 28 35.0** | **-0.6** |
| **ASAR** | **Alice Springs** | **48.40** | **251** | P | | **P** | **03 28 34.8** | **-0.8** |
| | comp=Z,14nm,0.5s,baz=86,slow=8.2,SNR=189 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **03 29 56.4** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=91,slow=4.8,SNR=2.3 | | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | | |
| **KNRA** | **Kununurra** | **53.68** | **261** | P | | **P** | **03 29 15.4** | **+0.7** |
| **FORT** | **Forrest** | **53.90** | **243** | P | | **P** | **03 29 15.8** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **56.38** | **258** | P | | **P** | **03 29 34.6** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **61.46** | **253** | P | | **P** | **03 30 07.9** | **-0.6** |
| **CLES** | **Cleveland East** | **67.54** | **4** | P | | **P** | **03 30 48.5** | **+1.6** |
| **ERM** | **Erimo** | **68.21** | **328** | P | | **P** | **03 30 50.5** | **-0.8** |
| **JNU** | **Nakatsue** | **69.96** | **314** | P | | **P** | **03 31 02.5** | **+0.2** |
| JNU | | | | IAmb | | IAmb | 03 31 03.8 | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| **JNU** | **Nakatsue** | **69.96** | **314** | P | | **P** | **03 31 02.8** | **+0.5** |
| | comp=Z,4.3nm,0.7s,baz=126,slow=4.9,SNR=4.7 | | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **75.21** | **180** | P | | **P** | **03 31 32.9** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **75.26** | **43** | P | | **P** | **03 31 34.1** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=234,slow=7.7,SNR=3.6 | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **M16K** | **Timber Creek** | **76.74** | **8** | P | | **P** | **03 31 41.0** | **+0.1** |
| **K15K** | **Wolf Creek Mou** | **77.65** | **7** | P | | **P** | **03 31 45.0** | **-0.9** |
| **L18K** | **Granite Mounta** | **78.21** | **9** | P | | **P** | **03 31 50.8** | **+1.7** |
| L18K | | | | IAmb | | IAmb | 03 31 52.0 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **K17K** | **Iditarod** | **78.45** | **8** | P | | **P** | **03 31 52.0** | **+1.6** |
| K17K | | | | IAmb | | IAmb | 03 32 01.8 | |
| | comp=Z,3.1nm,1.1s | | | | | | | |
| **SUA** | **Susitna One** | **78.53** | **12** | P | | **P** | **03 31 51.4** | **+0.4** |
| SUA | | | | IAmb | | IAmb | 03 31 53.0 | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **GRNB** | **Grenville Isla** | **78.65** | **26** | P | | **P** | **03 31 48.6** | **-3.0** |
| **J16K** | **Anvik River** | **78.72** | **7** | P | | **P** | **03 31 53.4** | **+1.7** |
| **J17K** | **VABM Dome** | **79.01** | **7** | P | | **P** | **03 31 55.1** | **+1.8** |
| J17K | | | | IAmb | | IAmb | 03 31 56.3 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **GLB** | **Gilahina Butte** | **80.06** | **15** | P | | **P** | **03 31 57.7** | **-1.4** |
| GLB | | | | IAmb | | IAmb | 03 32 03.9 | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **J20K** | **Nowinta River** | **80.44** | **9** | P | | **P** | **03 32 00.8** | **-0.2** |
| J20K | | | | IAmb | | IAmb | 03 32 03.0 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **G19K** | **Purcell Mounta** | **81.89** | **7** | P | | **P** | **03 32 08.9** | **+0.3** |
| G19K | | | | IAmb | | IAmb | 03 32 14.6 | |
| | comp=Z,2.1nm,1.1s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **81.99** | **12** | P | | **P** | **03 32 08.9** | **-0.1** |
| CCB | | | | IAmb | | IAmb | 03 32 10.2 | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **IMAR** | **Indian Mountai** | **82.20** | **9** | P | | **P** | **03 32 10.5** | **+0.3** |
| **IL31** | | **82.29** | **12** | P | | **P** | **03 32 10.6** | **0.0** |
| IL31 | | | | IAmb | | IAmb | 03 32 12.0 | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.29** | **12** | P | | **P** | **03 32 10.3** | **-0.3** |
| **ILAR** | **Eielson Array** | **82.29** | **12** | P | | **P** | **03 32 10.9** | **+0.3** |
| | comp=Z,1.0nm,0.6s,baz=222,slow=5.8,SNR=18 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **J25K** | **Salcha River,** | **82.46** | **13** | P | | **P** | **03 32 12.3** | **+0.7** |
| J25K | | | | IAmb | | IAmb | 03 32 13.6 | |
| | comp=Z,2.6nm,1.0s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **82.47** | **7** | P | | **P** | **03 32 12.0** | **+0.5** |
| F19K | | | | IAmb | | IAmb | 03 32 13.4 | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **G21K** | **Allakaket** | **82.73** | **9** | P | | **P** | **03 32 13.7** | **+0.9** |
| G21K | | | | IAmb | | IAmb | 03 32 15.1 | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| **H23K** | **Yukon River** | **82.73** | **10** | P | | **P** | **03 32 12.4** | **-0.6** |
| **E18K** | **Tukpahlearik C** | **82.74** | **6** | P | | **P** | **03 32 12.9** | **0.0** |
| E18K | | | | IAmb | | IAmb | 03 32 15.1 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **E19K** | **Redstone River** | **83.13** | **7** | P | | **P** | **03 32 15.1** | **+0.2** |
| E19K | | | | IAmb | | IAmb | 03 32 17.5 | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **PDAR** | **Pinedale Array** | **83.18** | **43** | P | | **P** | **03 32 16.4** | **+0.4** |
| | comp=Z,0.2nm,0.7s,baz=220,slow=5.4,SNR=2.4 | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | |
| **F21K** | **Alatna River** | **83.40** | **8** | P | | **P** | **03 32 17.1** | **+0.9** |
| F21K | | | | IAmb | | IAmb | 03 32 17.7 | |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **EGAK** | **Eagle** | **83.54** | **14** | P | | **P** | **03 32 17.4** | **+0.4** |
| EGAK | | | | IAmb | | IAmb | 03 32 18.9 | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **83.89** | **11** | P | | **P** | **03 32 17.9** | **-0.9** |
| **D19K** | **Kuna River** | **84.03** | **6** | P | | **P** | **03 32 19.9** | **+0.5** |
| D19K | | | | IAmb | | IAmb | 03 32 20.9 | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **I28M** | **Miner Creek** | **84.39** | **14** | P | | **P** | **03 32 21.5** | **+0.1** |
| **E24K** | **Your Creek** | **84.95** | **10** | P | | **P** | **03 32 24.9** | **+0.8** |
| **D22K** | **Ayikyak River** | **85.06** | **8** | P | | **P** | **03 32 25.4** | **+0.9** |
| D22K | | | | IAmb | | IAmb | 03 32 27.4 | |
| | comp=Z,2.4nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **85.08** | **11** | P | | **P** | **03 32 25.9** | **+1.2** |
| **I30M** | **Mount Dempster** | **85.08** | **15** | P | | **P** | **03 32 25.4** | **+0.6** |
| I30M | | | | IAmb | | IAmb | 03 32 27.5 | |
| | comp=Z,1.9nm,1.1s | | | | | | | |
| **H29M** | **Whitestone** | **85.39** | **14** | P | | **P** | **03 32 26.0** | **-0.2** |
| H29M | | | | IAmb | | IAmb | 03 32 27.8 | |
| | comp=Z,3.2nm,0.9s | | | | | | | |
| **GSI** | **Gunungsitoli** | **87.39** | **272** | P | | **P** | **03 32 35.8** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **90.54** | **289** | P | | **P** | **03 32 53.0** | **+1.3** |
| | comp=Z,1.2nm,0.3s,baz=100,slow=3.0,SNR=5.4 | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.45** | **320** | PKP | | **PKPab** | **03 39 23.8** | **+0.6** |
| | comp=Z,5.8nm,0.8s,baz=93,slow=3.4,SNR=13 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.65** | **308** | PKPbc | | **PKPbc** | **03 39 30.4** | **+0.5** |
| | comp=Z,2.8nm,0.6s,baz=62,slow=6.7,SNR=5.7 | | | | | | | |

*IDC **10** 03:30:26.5±1.4, 53°.21S×139°.43E, h0km, mb3.7/5, mbtmp3.7/5, MS3.4/4, Error ellipse: s-maj=140.7km s-min=20.2km az=86.0*

**ISC 10 03:30:28.1±1.4, 53°.2S±0°.2×139°.2E±1°.0, h10km, n11, σ0s45/6, mb3.8/5, MS3.5/4, West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W1** | **Cape Leeuwin H** | **25.49** | **306** | T | T | 04 03 13.6 | |
| | baz=142,slow=76,SNR=8.0 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **25.49** | **306** | T | T | 04 03 12.2 | |
| | baz=142,slow=76,SNR=7.7 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **25.50** | **306** | T | T | 04 03 10.8 | |
| | baz=142,slow=76,SNR=6.8 | | | | | | |
| **VNDA** | **Vanda** | **25.76** | **169** | P | **P** | **03 35 58.7** | **+0.3** |
| | 0.6nm,0.8s,baz=336,slow=7.3,SNR=2.5 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **29.79** | **350** | P | **P** | **03 36 35.2** | **+0.3** |
| | 0.7nm,1.0s,baz=165,slow=9.5,SNR=4.6 | | | | | | |
| | 0.7nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.43** | **352** | P | **P** | **03 37 06.5** | **-0.5** |
| | 1.5nm,1.1s,baz=175,slow=7.6,SNR=7.4 | | | | | | |
| | 1.5nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **36.89** | **180** | P | **P** | **03 37 36.2** | **-0.4** |
| | 2.4nm,1.0s,baz=342,slow=3.5,SNR=3.8 | | | | | | |
| QSPA | | | | LR | LR | 03 52 29.2 | |
| | comp=Z,83nm,18.2s,baz=144,slow=36 | | | | | | |
| | 2.4nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **37.38** | **44** | LR | LR | 03 49 27.8 | |
| | comp=Z,56nm,21.1s,baz=310,slow=31 | | | | | | |
| **KAPI** | **Kappang** | **50.65** | **335** | LR | LR | 03 59 18.0 | |
| | comp=Z,17nm,21.5s,baz=64,slow=34 | | | | | | |
| **SNAA** | **Sanae** | **52.56** | **194** | P | **P** | **03 39 41.2** | **+0.1** |
| | 0.8nm,0.6s,baz=167,slow=19,SNR=7.8 | | | | | | |
| SNAA | | | | LR | LR | 04 01 28.5 | |
| | comp=Z,80nm,18.4s,baz=283,slow=35 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **144.53** | **310** | PKP | **PKPdf** | **03 50 03.4** | **+0.2** |
| | 1.1nm,0.9s,baz=129,slow=3.3,SNR=1.5 | | | | | | |

*JMA **10** 03:32:15.6±0.2, 33°.2N×138°.8E, h351km, MV3.1/19, FAR S OFF TOKAI DISTRICT*
*IDC **10** 03:32:19.8±3.0, 33°.4N×138°.08E, h295km±93km, mb3.0/3, mbtmp3.5/4, Error ellipse: s-maj=221.4km s-min=27.7km az=61.0*

**ISC 10 03:32:20.3±1.1, 33°.57N±0°.10×138°.28E±0°.09, h300km, n16, σ1s53/19, mb3.1/3, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TTO4** | **TONANKAI O.B.S** | **0.76** | **306** | *eP* | **Pn** | **03 33 01.4** | **+2.1** |
| **TTO5** | **TONANKAI O.B.S** | **0.83** | **326** | *eP* | **Pn** | **03 33 02.0** | **+2.3** |
| **TTO1** | **TONANKAI O.B.S** | **1.25** | **273** | P | **Pn** | **03 33 03.4** | **+1.9** |
| **JIE** | **Ise** | **1.55** | **303** | P | **Pn** | **03 33 05.0** | **+1.3** |
| **JOD2** | **Odawara 2** | **1.82** | **21** | P | **Pn** | **03 33 07.2** | **+1.6** |
| **JYN** | **Shimob** | **1.94** | **6** | P | **Pn** | **03 33 08.2** | **+1.6** |
| **JTNC** | **Tanabenakahech** | **2.24** | **277** | P | **Pn** | **03 33 09.5** | **+0.5** |
| **BSO1** | **Boso 1** | **2.49** | **63** | *eP* | **Pn** | **03 33 11.1** | **+0.6** |
| **JRY** | **Ryogami san** | **2.50** | **12** | P | **Pn** | **03 33 12.7** | **+1.5** |
| JRY | | | | | **S** | **03 33 54.5** | **+2.7** |
| **JWT** | **Wachi** | **2.93** | **307** | *eP* | **Pn** | **03 33 16.1** | **+0.8** |
| JWT | | | | *eS* | **S** | **03 33 58.7** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **2.97** | **359** | P | **Pn** | **03 33 16.0** | **+0.3** |
| | 5.3nm,0.4s,baz=179,slow=9.6,SNR=22 | | | | | | |
| **MAT** | **Matsushiro** | **2.97** | **359** | P | **Pn** | **03 33 16.3** | **+0.6** |
| **JAG** | **Ashikaga** | **3.01** | **18** | P | **Pn** | **03 33 16.1** | **+0.1** |
| JAG | | | | | **S** | **03 33 58.7** | **-1.8** |
| **MKAR** | **Makanchi Array** | **43.88** | **305** | P | **P** | **03 39 56.9** | **-0.8** |
| | 0.2nm,0.3s,baz=88,slow=7.9,SNR=2.1 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.34** | **185** | P | **P** | **03 41 08.0** | **-1.4** |
| | 0.5nm,0.3s,baz=1.6,slow=7.6,SNR=27 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **57.07** | **185** | P | **P** | **03 41 35.2** | **-0.6** |
| | 0.2nm,0.2s,baz=8.5,slow=9.3,SNR=4.1 | | | | | | |
| | 0.2nm,0.2s | | | | | | |

*IDC **10** 03:41:49.8±1.2, 81°.68N×120°.61E, h0km, mb3.7/7, mbtmp3.7/7, MS3.3/35, Error ellipse: s-maj=42.1km s-min=20.8km az=164.0*

**ISC 10 03:41:47.7±1.1, 80°.8N±0°.1×119°.95E±0°.08, h10km, n41, σ2s56/12, mb3.7/7, MS3.3/34, East of Severnaya Zemlya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVZ** | **Severnaya Zeml** | **3.52** | **254** | *eP* | **Pn** | **03 42 42.5** | **+0.2** |
| SVZ | | | | *eS* | **Sn** | **03 43 21.1** | **-2.6** |
| | 58nm,0.2s | | | | | | |
| SVZ | | | | *etx* | tx | 03 45 44.5 | |
| **ZFI2** | **Zemlya Franca-** | **10.89** | **306** | *eP* | **Pn** | **03 44 26.9** | **+3.7** |
| ZFI2 | | | | *eS* | **Sn** | **03 46 21.9** | **-3.0** |
| | 4.6nm,0.2s | | | | | | |
| **OMEGA** | **Omega** | **10.89** | **306** | *eP* | **Pn** | **03 44 26.9** | **+3.6** |
| OMEGA | | | | *eS* | **Sn** | **03 46 21.9** | **-3.1** |
| | 2.8nm,0.2s | | | | | | |
| **YAK** | **Yakutsk** | **19.06** | **166** | LR | LR | 03 54 22.1 | |
| | comp=Z,50nm,20.3s,baz=324,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **23.14** | **297** | P | **P** | **03 46 53.6** | **+0.1** |
| | 3.4nm,0.9s,baz=26,slow=8.4,SNR=2.7 | | | | | | |
| | 3.4nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **25.95** | **55** | LR | LR | 03 58 46.6 | |
| | comp=Z,58nm,19.3s,baz=350,slow=40 | | | | | | |
| **ILAR** | **Eielson Array** | **27.39** | **68** | P | **P** | **03 47 32.0** | **-0.6** |
| | 1.3nm,0.8s,baz=338,slow=11,SNR=16 | | | | | | |
| ILAR | | | | LR | LR | 03 59 00.3 | |
| | comp=Z,65nm,19.3s,baz=12,slow=38 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.09** | **224** | LR | LR | 04 00 22.1 | |
| | comp=Z,113nm,20.2s,baz=16,slow=37 | | | | | | |
| **KIRV** | **Kirov** | **29.68** | **266** | LR | LR | 04 01 48.1 | |
| | comp=Z,265nm,18.6s,baz=356,slow=40 | | | | | | |
| **ARU** | **Arti** | **30.29** | **255** | LR | LR | 04 01 11.4 | |
| | comp=Z,53nm,19.5s,baz=277,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **31.94** | **165** | LR | LR | 04 01 01.4 | |
| | comp=Z,33nm,19.3s,baz=10.0,slow=35 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **32.77** | **114** | LR | LR | 04 00 40.7 | |
| | comp=Z,44nm,21.8s,baz=342,slow=34 | | | | | | |
| **KDAK** | **Kodiak Island** | **33.15** | **78** | LR | LR | 04 03 27.2 | |
| | comp=Z,85nm,18.6s,baz=37,slow=40 | | | | | | |
| **NOA** | **NORSAR Array B** | **33.17** | **303** | P | **P** | **03 48 24.2** | **+0.4** |
| | 0.7nm,0.8s,baz=17,slow=8.7,SNR=3.0 | | | | | | |
| NOA | | | | LR | LR | 04 02 45.9 | |
| | comp=Z,13nm,18.1s,baz=335,slow=38 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **33.41** | **197** | LR | LR | 04 02 01.6 | |
| | comp=Z,23nm,19.1s,baz=14,slow=35 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.82** | **43** | P | **P** | **03 48 27.4** | **-1.9** |
| | 0.4nm,0.7s,baz=351,slow=6.9,SNR=2.6 | | | | | | |
| YKA | | | | LR | LR | 04 01 33.7 | |
| | comp=Z,41nm,21.1s,baz=342,slow=36 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **DLBC** | **Dease Lake** | **35.86** | **58** | LR | LR | 04 03 30.2 | |
| | comp=Z,44nm,19.7s,baz=302,slow=37 | | | | | | |
| **BELG** | **Belogornoye** | **35.92** | **264** | LR | LR | 04 05 31.6 | |
| | comp=Z,190nm,18.7s,baz=33,slow=39 | | | | | | |
| **AKTO** | **Aktyubinsk** | **36.18** | **253** | LR | LR | 04 06 20.0 | |
| | comp=Z,50nm,18.4s,baz=37,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **36.42** | **225** | P | P | 03 49 01.8 | +10 |
| | 0.6nm,0.8s,baz=8.3,slow=11,SNR=4.1 | | | | | | |
| MKAR | | | | LR | LR | 04 04 57.1 | |
| | comp=Z,87nm,19.8s,baz=338,slow=37 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **37.66** | **153** | LR | LR | 04 06 01.2 | |
| | comp=Z,37nm,18.5s,baz=2.0,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **40.50** | **282** | LR | LR | 04 07 55.3 | |
| | comp=Z,36nm,21.2s,baz=356,slow=39 | | | | | | |
| **AAK** | **Ala-Archa** | **41.46** | **233** | LR | LR | 04 09 39.7 | |
| | comp=Z,36nm,18.4s,baz=7.1,slow=40 | | | | | | |
| **BBB** | **Bella Bella** | **42.21** | **58** | LR | LR | 04 09 16.8 | |
| | comp=Z,28nm,18.0s,baz=341,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **43.57** | **171** | LR | LR | 04 09 52.3 | |
| | comp=Z,23nm,18.4s,baz=320,slow=38 | | | | | | |
| **KBZ** | **Khabaz** | **45.09** | **266** | LR | LR | 04 11 11.1 | |
| | comp=Z,79nm,21.0s,baz=344,slow=39 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **47.23** | **298** | LR | LR | 04 10 39.6 | |
| | comp=Z,32nm,19.8s,baz=264,slow=37 | | | | | | |
| **NEW** | **Newport** | **47.48** | **50** | LR | LR | 04 12 31.8 | |
| | comp=Z,32nm,18.1s,baz=359,slow=39 | | | | | | |
| **ULM** | **Lac du Bonnet** | **47.71** | **31** | LR | LR | 04 10 44.7 | |
| | comp=Z,34nm,19.1s,baz=219,slow=37 | | | | | | |
| **JNU** | **Nakatsue** | **47.98** | **168** | LR | LR | 04 10 47.5 | |
| | comp=Z,11nm,19.4s,baz=330,slow=36 | | | | | | |
| **GNI** | **Garni** | **48.29** | **263** | LR | LR | 04 13 59.7 | |
| | comp=Z,93nm,20.9s,baz=37,slow=40 | | | | | | |
| **BRTR** | **Keskin Array B** | **50.49** | **274** | LR | LR | 04 15 05.4 | |
| | comp=Z,26nm,20.6s,baz=12,slow=40 | | | | | | |
| **PDAR** | **Pinedale Array** | **53.79** | **44** | LR | LR | 04 15 06.3 | |
| | comp=Z,40nm,20.2s,baz=20,slow=38 | | | | | | |
| **VAE** | **Valguarnera** | **55.69** | **292** | LR | LR | 04 16 09.8 | |
| | comp=Z,52nm,18.4s,baz=320,slow=37 | | | | | | |
| **EIL** | **Elat** | **60.11** | **270** | LR | LR | 04 19 50.9 | |
| | comp=Z,25nm,18.9s,baz=62,slow=38 | | | | | | |
| **ANMO** | **Albuquerque** | **61.86** | **42** | LR | LR | 04 19 36.1 | |
| | comp=Z,28nm,18.5s,baz=106,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **63.05** | **202** | LR | LR | 04 21 59.6 | |
| | comp=Z,18nm,18.2s,baz=350,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.71** | **41** | P | **P** | **03 52 44.3** | **-0.6** |
| | 1.2nm,0.8s,baz=0.0,slow=8.1,SNR=8.3 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **LPIG** | **La Paz** | **72.14** | **48** | LR | LR | 04 26 37.7 | |
| | comp=Z,29nm,19.1s,baz=30,slow=38 | | | | | | |
| **CMIG** | **Matias Romero** | **80.68** | **34** | LR | LR | 04 32 41.9 | |
| | comp=Z,12nm,18.3s,baz=19,slow=38 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.44** | **300** | P | **P** | **03 54 06.2** | **+1.6** |
| | 1.0nm,0.9s,baz=22,slow=4.6,SNR=3.6 | | | | | | |
| | 1.0nm,0.9s | | | | | | |

*CATAC **10** 03:44:49.5±0.5, 15°.02N×94°.65W, h98km±30km, MB5.1, mb4.6, ML4.6*
*MEX **10** 03:44:50.8±1.1, 15°.15N×94°.57W, h16km±25km, MD4.4*
*NEIC **10** 03:44:50.9±1.9, 15°.08N±0°.07×94°.54W±0°.05, h38km±9km, mb4.2/101, Md4.4/62(MEX), Error ellipse: s-maj=9.8km s-min=7.4km az=185.0*
*IDC **10** 03:44:53.2±2.4, 15°.41N×94°.50W, h52km±17km, mb3.9/10, mbtmp4.1/14, ML3.5/3, MS3.4/10, Error ellipse: s-maj=25.1km s-min=8.1km az=43.0*

**ISC 10 03:44:49.4±2.3, 15°.18N±0°.04×94°.60W±0°.03, h30km±17km, n182, σ2s00/225, mb4.3/31, MS3.2/8, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CARR** | **Arriaga** | **1.25** | **32** | *eP* | **Pn** | **03 45 09.2** | **-1.7** |
| CARR | | | | *eS* | **Sn** | **03 45 23.3** | **-3.4** |
| **NILT** | **Santiago Nilte** | **1.38** | **359** | *eP* | **Pn** | **03 45 11.1** | **-1.6** |
| NILT | | | | *eS* | **Sn** | **03 45 26.6** | **-3.3** |
| **PCIG** | | **1.43** | **68** | | **Pn** | **03 45 12.0** | **-1.3** |
| PCIG | | | | | **Sn** | **03 45 28.6** | **-2.5** |
| **PCIG** | | **1.43** | **68** | *eP* | **Pn** | **03 45 12.0** | **-1.3** |
| PCIG | | | | *eS* | **Sn** | **03 45 28.6** | **-2.5** |
| **HUIG** | **Huatulco** | **1.57** | **292** | | **Pn** | **03 45 14.9** | **-0.4** |
| HUIG | | | | | **Sn** | **03 45 32.2** | **-2.5** |
| **HUIG** | **Huatulco** | **1.57** | **292** | *eP* | **Pn** | **03 45 14.9** | **-0.4** |
| HUIG | | | | *eS* | **Sn** | **03 45 32.2** | **-2.5** |
| **PANG** | **Puerto Angel** | **1.87** | **285** | | **Pn** | **03 45 18.8** | **-0.6** |
| PANG | | | | | **Sn** | **03 45 38.6** | **-3.5** |
| **PANG** | **Puerto Angel** | **1.87** | **285** | *eP* | **Pn** | **03 45 18.8** | **-0.6** |
| PANG | | | | *eS* | **Sn** | **03 45 38.6** | **-3.5** |
| **CMIG** | **Matias Romero** | **1.93** | **352** | | **Pn** | **03 45 20.0** | **-0.1** |
| CMIG | | | | | **Sn** | **03 45 42.2** | **-1.1** |
| **CMIG** | **Matias Romero** | **1.93** | **352** | P | **Pn** | **03 45 19.9** | **-0.2** |
| | 1µm,0.3s,baz=172,slow=12,SNR=2540 | | | | | | |
| CMIG | | | | S | **Sn** | **03 45 41.5** | **-1.8** |
| | 3µm,0.5s,baz=97,slow=17,SNR=44 | | | | | | |
| CMIG | | | | LR | LR | 03 46 12.5 | |
| | comp=Z,485nm,19.3s,baz=144,slow=46 | | | | | | |
| **CMIG** | **Matias Romero** | **1.93** | **352** | *eP* | **Pn** | **03 45 20.0** | **-0.1** |
| CMIG | | | | *eS* | **Sn** | **03 45 42.2** | **-1.1** |
| **TGIG** | | **2.13** | **41** | | **Pn** | **03 45 23.4** | **+0.3** |
| TGIG | | | | | **Sn** | **03 45 47.6** | **-1.0** |
| **TGIG** | | **2.13** | **41** | *eP* | **Pn** | **03 45 23.4** | **+0.3** |
| TGIG | | | | *eS* | **Sn** | **03 45 47.6** | **-1.0** |
| **TGBT** | **Tuxtla Gutierr** | **2.15** | **42** | | **Pn** | **03 45 23.6** | **+0.3** |
| TGBT | | | | | **Sn** | **03 45 48.1** | **-0.9** |
| **TGBT** | **Tuxtla Gutierr** | **2.15** | **42** | *eP* | **Pn** | **03 45 23.6** | **+0.3** |
| TGBT | | | | *eS* | **Sn** | **03 45 48.1** | **-0.9** |
| **UXUV** | **UXUV** | **2.17** | **11** | *eP* | **Pn** | **03 45 24.3** | **+0.7** |
| UXUV | | | | *eS* | **Sn** | **03 45 48.7** | **-0.8** |
| **THIG** | | **2.27** | **96** | | **Pn** | **03 45 26.5** | **+1.7** |
| THIG | | | | | **Sn** | **03 45 49.4** | **-2.4** |
| **THIG** | | **2.27** | **96** | *eP* | **Pn** | **03 45 26.5** | **+1.7** |
| THIG | | | | *eS* | **Sn** | **03 45 49.4** | **-2.4** |
| **PAVE** | **Pavencul** | **2.34** | **89** | *eP* | **Pn** | **03 45 25.5** | **-0.5** |
| PAVE | | | | *eS* | **Sn** | **03 45 52.0** | **-1.8** |
| **CHUJ** | **Union Juarez** | **2.41** | **92** | *eP* | **Pn** | **03 45 26.2** | **-0.7** |
| CHUJ | | | | *eS* | **Sn** | **03 45 53.2** | **-2.3** |
| **PEIG** | **Puerto Escondi** | **2.59** | **289** | | **Pn** | **03 45 29.3** | **0.0** |
| PEIG | | | | | **Sn** | **03 45 55.1** | **-4.7** |
| **PEIG** | **Puerto Escondi** | **2.59** | **289** | *eP* | **Pn** | **03 45 29.3** | **0.0** |
| PEIG | | | | *eS* | **Sn** | **03 45 55.1** | **-4.7** |
| **CCIG** | **Comitan** | **2.61** | **65** | Pn | **Pn** | **03 45 30.8** | **+1.0** |
| **CCIG** | **Comitan** | **2.61** | **65** | *eP* | **Pn** | **03 45 31.4** | **+1.6** |
| CCIG | | | | *eS* | **Sn** | **03 46 00.4** | **-0.1** |
| **CCIG** | **Comitan** | **2.61** | **65** | *i* P | **Pn** | **03 45 31.4** | **+1.6** |
| CCIG | | | | *i* S | **Sb** | **03 46 04.3** | **-3.1** |
| CCIG | | | | IAML | | 03 46 04.6 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **NEUV** | **Arroyo Zacate** | **2.78** | **336** | *eP* | **Pn** | **03 45 31.6** | **-0.2** |
| NEUV | | | | *eS* | **Sn** | **03 46 02.9** | **-1.5** |
| **OXIG** | **Oaxaca** | **2.79** | **313** | | **Pn** | **03 45 34.0** | **+1.8** |
| OXIG | | | | | **Sn** | **03 46 04.9** | **-0.1** |
| **VHO** | **Vista Hermosa** | **2.79** | **313** | *eP* | **Pn** | **03 45 34.0** | **+1.8** |
| VHO | | | | *eS* | **Sn** | **03 46 04.9** | **-0.1** |
| **TUIG** | **Tuzandepetl** | **2.85** | **3** | *eP* | **Pn** | **03 45 33.6** | **+0.8** |
| TUIG | | | | *eS* | **Sn** | **03 46 07.5** | **+1.4** |
| **RTAL** | **Retalhuleu** | **2.88** | **103** | | **Pn** | **03 45 32.9** | **-0.4** |
| **RTAL** | **Retalhuleu** | **2.88** | **103** | *i* P | **Pn** | **03 45 34.1** | **+0.8** |
| RTAL | | | | *i* S | **Sn** | **03 46 08.6** | **+1.6** |
| RTAL | | | | IAML | | 03 46 30.2 | |
| | comp=Z,740nm,1.0s | | | | | | |
| **SOKI** | **Kika Raxquin** | **3.11** | **96** | *i* P | **Pn** | **03 45 37.2** | **+0.4** |
| SOKI | | | | IAML | | 03 46 41.0 | |
| | comp=Z,630nm,1.0s | | | | | | |
| **YOIG** | **Yosondua** | **3.29** | **301** | | **Pn** | **03 45 41.4** | **+2.2** |
| YOIG | | | | | **Sn** | **03 46 15.1** | **-2.4** |
| **YOIG** | **Yosondua** | **3.29** | **301** | *eP* | **Pn** | **03 45 41.4** | **+2.2** |
| YOIG | | | | *eS* | **Sn** | **03 46 15.1** | **-2.4** |
| **PMUV** | **Sontecomapan** | **3.39** | **352** | *eP* | **Pn** | **03 45 39.2** | **-1.1** |
| PMUV | | | | *eS* | **Sn** | **03 46 16.9** | **-2.7** |
| **PNIG** | **Pinotepa** | **3.61** | **290** | | **Pn** | **03 45 44.1** | **+0.8** |
| PNIG | | | | | **Sn** | **03 46 20.6** | **-4.4** |
| **PNIG** | **Pinotepa** | **3.61** | **290** | *eP* | **Pn** | **03 45 44.1** | **+0.8** |
| PNIG | | | | *eS* | **Sn** | **03 46 20.6** | **-4.4** |
| **TXIG** | **Tlaxiaco** | **3.68** | **305** | | **Pn** | **03 45 47.2** | **+2.7** |
| TXIG | | | | | **Sn** | **03 46 21.4** | **-5.

HNDO **Hondo** 14.92 344 Pn **Pn** 03 48 20.3 +1.9
HNDO IAmb IAmb 03 48 29.3
comp=Z,8.2nm,0.6s
DRIO **Del Rio** 15.23 340 Pn **Pn** 03 48 24.5 +2.1
435B **Jarrell** 15.78 351 Pn **Pn** 03 48 30.3 +0.9
435B IAmb IAmb 03 48 36.5
comp=Z,17nm,0.7s
JCT **Junction City** 15.97 343 Pn **P** 03 48 33.7 -1.5
SAND **Sanderson** 16.26 336 Pn **P** 03 48 37.3 -1.2
TXAR **Lajitas Array** 16.39 331 Pn **Pn** 03 48 38.6 +1.2
TXAR **Lajitas Array** 16.39 331 P **P** 03 48 39.2 -0.8
comp=Z,0.1nm,0.3s,baz=155,slow=15,SNR=15
comp=Z,1.8nm,1.0s
TX31 **Lajitas Ar. Si** 16.39 331 Pn **P** 03 48 39.3 -0.7
BRDY **Brady** 16.54 347 Pn **P** 03 48 41.1 -0.5
OZNA **Ozona** 16.78 340 **P** 03 48 44.8 +0.5
OZNA IAmb IAmb 03 48 58.0
comp=Z,16nm,0.7s
WHTX **Lake Whitney,** 16.94 352 Pn **P** 03 48 45.9 -0.1
WHTX IAmb IAmb 03 48 49.2
comp=Z,16nm,0.6s
LPIG **La Paz** 17.25 303 LR LR 03 55 53.0
comp=Z,76nm,18.3s,baz=124,slow=38
FW13 **Cleburne** 17.29 352 **P** 03 48 50.1 +0.2
FW13 IAmb IAmb 03 48 53.8
comp=Z,16nm,0.6s
FW14 **Alvarado** 17.31 353 **P** 03 48 50.2 +0.2
FW14 IAmb IAmb 03 48 55.0
comp=Z,24nm,0.7s
FW07 **Weatherford** 17.69 351 **P** 03 48 55.7 +1.4
FW07 IAmb IAmb 03 49 26.8
comp=Z,12nm,0.6s
SGCY **Sterling City** 17.70 341 **P** 03 48 55.7 +1.3
SGCY IAmb IAmb 03 49 00.5
comp=Z,13nm,0.6s
MNHN **Monahans** 17.74 336 **P** 03 48 56.0 +1.1
MNHN IAmb IAmb 03 49 02.4
comp=Z,14nm,1.0s
PLPT **Palo Pinto** 17.88 350 **P** 03 48 58.4 +2.0
PLPT IAmb IAmb 03 49 10.9
comp=Z,9.7nm,0.6s
FW06 **Azle** 17.92 352 **P** 03 48 59.0 +2.2
FW06 IAmb IAmb 03 49 11.9
comp=Z,11nm,0.7s
ABTX **Abilene, Hawle** 17.97 346 **P** 03 48 59.0 +1.6
ABTX IAmb IAmb 03 49 03.1
comp=Z,17nm,1.1s
FW03 **Perrin-Whitt E** 18.06 351 P **P** 03 49 00.7 +2.3
FW03 IAmb IAmb 03 49 12.9
comp=Z,11nm,0.7s
ODSA **Odessa** 18.36 338 P **Pn** 03 49 03.7 +1.8
352A **Blakely** 18.48 27 P **Pn** 03 49 03.6 +0.3
352A IAmb IAmb 03 49 06.4
comp=Z,22nm,0.9s
SN05 **Snyder 5** 18.53 343 P **Pn** 03 49 05.2 +1.3
SN05 IAmb IAmb 03 49 09.8
comp=Z,7.0nm,0.6s
SN07 **Snyder 07** 18.73 343 P **Pn** 03 49 07.7 +1.4
APMT **Aspermont** 18.75 345 Pn **Pn** 03 49 08.6 +2.0
APMT IAmb IAmb 03 49 36.0
comp=Z,7.8nm,0.7s
WTFS **Witchita Falls** 18.84 350 **Pn** 03 49 08.3 +0.7
WTFS IAmb IAmb 03 49 22.7
comp=Z,11nm,0.6s
POST **Post** 18.88 342 P **Pn** 03 49 10.1 +1.9
Z47A **Carrollton** 18.90 17 P **P** 03 49 07.2 -0.3
Z47A IAmb IAmb 03 49 08.8
comp=Z,7.4nm,0.6s
DKNS **Dickens** 19.28 344 P **Pn** 03 49 13.0 0.0
DKNS IAmb IAmb 03 49 15.8
comp=Z,15nm,1.0s
MIAR **Mount Ida** 19.31 3 P **P** 03 49 12.4 +0.4
X37A **Clayton** 19.34 358 P **Pn** 03 49 14.2 +0.5
WMOK **Wichita Mounta** 19.84 350 P **Pn** 03 49 20.1 +0.5
W35A **Tecumseh** 20.00 355 P Pn 03 49 21.5 0.0
W35A IAmb IAmb 03 49 25.6
comp=Z,15nm,0.7s
MSTX **Muleshoe** 20.12 340 P **P** 03 49 21.5 +0.4
MSTX IAmb IAmb 03 49 25.9
comp=Z,12nm,1.1s
FNO **Franklin** 20.16 353 P Pn 03 49 23.5 +0.2
FNO IAmb IAmb 03 49 27.8
comp=Z,12nm,0.8s
AMTX **Amarillo** 20.63 343 P **P** 03 49 27.3 +0.7
AMTX IAmb IAmb 03 49 33.4
comp=Z,8.9nm,0.6s
DEOK **Depew** 20.65 356 P Pn 03 49 28.4 -0.7
FCAR **Ozark Folk Cen** 20.75 6 P **P** 03 49 28.9 +1.3
FCAR IAmb IAmb 03 49 31.7
comp=Z,8.1nm,0.7s
OK031 **S. Brethren Rd** 20.79 355 P Pn 03 49 31.1 +0.4
OK052 **Battle Ridge R** 20.83 355 P Pn 03 49 31.0 -0.1
FPAL **Fort Paine** 20.91 21 P **P** 03 49 28.7 -0.9
QUOK **Quay** 21.00 355 P Pn 03 49 32.0 -1.1
QUOK IAmb IAmb 03 49 33.7
comp=Z,19nm,1.0s
HHAR **Hobbs** 21.03 1 P **P** 03 49 33.3 +2.5
HHAR IAmb IAmb 03 49 33.6
comp=Z,4.8nm,0.5s
121A **Cookes Peak, D** 21.04 328 P **P** 03 49 32.8 +1.7
121A IAmb IAmb 03 49 37.2
comp=Z,6.7nm,0.9s
U38A **Gravette** 21.18 0 P **P** 03 49 33.6 +1.3
ELIS **Ellis County** 21.25 349 P **P** 03 49 31.8 -1.4
OK048 **Pawnee Station** 21.26 355 P **P** 03 49 32.4 -0.8
OK048 IAmb IAmb 03 49 36.4
comp=Z,10nm,0.8s
OK051 **E0350 and S346** 21.34 355 P **P** 03 49 35.9 +1.9
OK051 IAmb IAmb 03 49 37.1
comp=Z,14nm,0.7s
CROK **Carrier** 21.46 353 P **P** 03 49 36.9 +1.5
BLOK **Blackwell** 21.62 354 P **P** 03 49 37.8 +0.7
V48A **Smith Brothers** 21.63 17 P **P** 03 49 38.4 +1.2
WVT **Waverly** 21.73 15 P **P** 03 49 38.3 0.0
PBMO **Poplar Bluff** 21.83 9 P **P** 03 49 39.6 +0.3
KAN13 **South Haven SW** 21.90 354 P **P** 03 49 41.7 +1.6
KAN14 **Manchester OK** 21.90 353 P **P** 03 49 42.0 +1.9
KAN14 IAmb IAmb 03 49 42.4
comp=Z,11nm,0.8s
IMBA **Imbabura, San** 21.95 131 P **P** 03 49 39.4 -1.9
KAN17 **Caldwell West** 21.96 353 P **P** 03 49 42.5 +1.7
T42A **Van Buren** 21.99 8 P **P** 03 49 42.3 +1.3
KAN09 **Caldwell North** 22.04 354 P **P** 03 49 42.8 +1.2
KAN01 **Argonia South** 22.07 353 P **P** 03 49 43.6 +1.7
KAN08 **Anthony NE Sta** 22.17 353 P **P** 03 49 44.2 +1.3
KAN12 **Harper NE Stat** 22.24 353 P **P** 03 49 44.0 +0.2
BG3 **Lake Jocassee** 22.35 26 P **P** 03 49 43.8 -1.1
BG3 IAmb IAmb 03 50 21.4
comp=Z,14nm,1.3s
RTBA **Rita Blanca** 22.39 343 P **P** 03 49 46.9 +1.4
RTBA IAmb IAmb 03 49 51.0
comp=Z,13nm,1.0s
ANMO **Albuquerque** 22.39 334 P **P** 03 49 46.5 +0.9
S39A **Bolivar** 22.45 3 P **P** 03 49 46.5 +0.4
TKL **Tuckaleechee C** 22.59 23 LR LR 04 01 08.9
comp=Z,47nm,18.4s,baz=178,slow=44
U49A **Red Boiling Sp** 22.66 19 P **P** 03 49 47.0 -1.2
T47A **Sharon Grove** 22.73 16 P **P** 03 49 47.7 -1.2
T47A IAmb IAmb 03 50 29.0
comp=Z,4.9nm,0.6s
CCM **Cathedral Cave** 22.98 7 P **P** 03 49 51.0 -0.6
CCM IAmb IAmb 03 49 52.0
comp=Z,5.7nm,0.9s
R40A **Maddies Statio** 23.12 5 P **P** 03 49 53.1 +0.2
R40A IAmb IAmb 03 49 53.6
comp=Z,5.6nm,0.9s
R32A **Long Quarter,** 23.44 352 P **P** 03 49 56.3 +0.1
T25A **Trinidad** 23.55 340 P **P** 03 49 59.1 +1.6
T25A IAmb IAmb 03 50 20.2
comp=Z,5.6nm,1.0s
Q44A **Meyer Farm, Va** 24.14 11 P **P** 03 50 01.1 -1.7
Q44A IAmb IAmb 03 50 02.3
comp=Z,12nm,1.0s
OLIL **Olney** 24.16 12 P **P** 03 50 01.6 -1.4
SDV **Santo Domingo** 24.24 102 LR LR 04 00 55.8
comp=Z,60nm,18.6s,baz=261,slow=40
X16A **Lo Mia Camp, P** 24.45 325 P **P** 03 50 07.8 +1.9
SDCO **Great Sand Dun** 24.47 339 P **P** 03 50 07.1 +0.9
P48A **Milroy** 25.50 17 P **P** 03 50 13.0 -2.1
P48A IAmb IAmb 03 50 13.7
comp=Z,7.8nm,0.6s
N38A **Joes South For** 25.55 2 P **P** 03 50 14.4 -1.2
PFO **Pinyon Flats O** 26.98 317 LR LR 04 01 16.0
comp=Z,79nm,19.2s,baz=120,slow=37

PCRV **Puerto La Cruz** 29.63 96 LR LR 04 02 28.6
comp=Z,54nm,21.9s,slow=36
SPMN **Marine on St.** 29.99 3 P **P** 03 50 54.7 -0.6
PDAR **Pinedale Array** 30.35 338 P **P** 03 50 58.1 -0.7
comp=Z,0.5nm,0.9s,baz=150,slow=12,SNR=4.3
comp=Z,0.5nm,0.9s
HVU **Hansel Valley** 30.82 333 P **P** 03 51 04.3 +1.5
HVU IAmb IAmb 03 51 06.0
comp=Z,3.3nm,0.9s
NVAR **Mina Array Bea** 31.20 322 P **P** 03 51 08.3 +2.0
comp=Z,1.6nm,0.9s,baz=137,slow=9.6,SNR=7.2
NVAR LR LR 04 05 20.3
comp=Z,164nm,18.4s,baz=110,slow=40
comp=Z,1.6nm,0.9s
REDW **Red Top Meadow** 31.35 337 P **P** 03 51 09.0 +1.4
SNOW **Snow King Moun** 31.39 337 P **P** 03 51 10.0 +2.0
E38A **The Farm, Brul** 31.44 4 P **P** 03 51 07.0 -1.0
LOHW **Long Hollow** 31.47 337 P **P** 03 51 09.3 +0.7
LOHW IAmb IAmb 03 51 11.2
comp=Z,2.7nm,0.8s
TPAW **Teton Pass** 31.49 337 P **P** 03 51 09.8 +0.9
TPAW IAmb IAmb 03 51 15.0
comp=Z,5.6nm,1.1s
EYMN **Ely** 32.78 4 P **P** 03 51 17.8 -1.9
EYMN IAmb IAmb 03 51 18.2
comp=Z,2.8nm,0.7s
MDND **Maddock** 32.84 354 P **P** 03 51 21.2 +0.8
HLID **Hailey** 32.97 333 P **P** 03 51 22.6 +0.9
HLID IAmb IAmb 03 51 24.8
comp=Z,2.3nm,0.9s
AGMN **Agassiz Nation** 33.05 358 P **P** 03 51 21.3 -0.8
DLMT **Dillon** 33.70 337 P **P** 03 51 29.5 +1.4
DLMT IAmb IAmb 03 51 31.4
comp=Z,3.6nm,0.8s
J08A **Circle Bar Ran** 34.72 329 P **P** 03 51 37.6 +0.7
J08A IAmb IAmb 03 51 40.0
comp=Z,4.4nm,1.0s
ULM **Lac du Bonnet** 35.00 359 P **P** 03 51 38.7 -0.3
comp=Z,5.0nm,1.2s,baz=205,slow=12,SNR=3.7
comp=Z,5.0nm,1.2s
F10A **Beach Ranch, E** 36.10 333 P **P** 03 51 49.5 +0.8
F10A IAmb IAmb 03 51 53.3
comp=Z,4.0nm,0.9s
YKA **Yellowknife Ar** 49.33 348 P **P** 03 53 35.5 -0.1
comp=Z,1.2nm,0.8s,baz=157,slow=7.0,SNR=8.1
comp=Z,1.2nm,0.8s
PLCA **Paso Flores** 59.93 159 P **P** 03 54 53.8 +0.9
comp=Z,3.2nm,1.0s,baz=328,slow=3.3,SNR=3.6
PLCA LR LR 04 15 57.4
comp=Z,116nm,18.8s,baz=192,slow=31
comp=Z,3.2nm,1.0s
ILAR **Eielson Array** 60.78 337 P **P** 03 54 58.5 +0.2
comp=Z,1.7nm,1.0s,baz=138,slow=4.4,SNR=13
comp=Z,1.7nm,1.0s
EKA **Eskdalemuir Ar** 78.48 36 P **P** 03 56 46.8 -0.7
comp=Z,5.0nm,0.8s,baz=278,slow=6.9,SNR=9.1
comp=Z,5.0nm,0.8s
ESDC **Sonseca Array** 80.96 51 P **P** 03 57 00.5 -0.9
comp=Z,1.2nm,0.9s,baz=288,slow=4.0,SNR=4.8
comp=Z,1.2nm,0.9s
NOA **NORSAR Array B** 84.31 28 P **P** 03 57 18.5 +0.1
comp=Z,2.6nm,1.1s,baz=292,slow=4.8,SNR=3.5
NOA LR LR 04 32 56.5
comp=Z,8.1nm,21.9s,baz=350,slow=34
comp=Z,2.6nm,1.1s
ARCES **ARCESS Array B** 85.80 18 P **P** 03 57 26.4 +0.7
comp=Z,6.6nm,1.2s,baz=325,slow=4.4,SNR=4.5
comp=Z,6.6nm,1.2s
DBIC **Dimbokro** 88.03 84 LR LR 04 36 53.9
comp=Z,30nm,18.5s,baz=124,slow=36

**UPA 10 03:47:11.9±2.7, 7°45'N×80°62'W, h1km±10km, MD3.8, ML4.3, MW4.2, 14C-12D, Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TOSI3** | **Tonosi** | **0.18** | **103** | ↓*i* | *P* | 03 47 16.2 | +0.9 |
| TOSI3 | | | | *i* | S | 03 47 19.1 | +1.5 |
| **CACAO** | **El Cacao, Vera** | **0.26** | **247** | ↑*i* | *P* | 03 47 17.3 | +0.3 |
| CACAO | | | | AMP | | 03 47 17.8 | |
| | comp=Z,109μm,0.1s | | | | | | |
| CACAO | | | | *i* | S | 03 47 20.5 | +0.1 |
| **MARI3** | **Mariato, Verag** | **0.42** | **298** | ↑*iP* | | 03 47 21.3 | -0.8 |
| MARI3 | | | | *i* | S | 03 47 28.0 | -1.0 |
| **ACHO3** | **Achotines, Los** | **0.44** | **94** | ↑*iP* | | 03 47 20.4 | +0.1 |
| ACHO3 | | | | *i* | S | 03 47 26.5 | +0.4 |
| **PESE3** | **Pese, Herrera** | **0.46** | **0** | ↑*iP* | | 03 47 22.7 | -0.1 |
| PESE3 | | | | *i* | S | 03 47 29.9 | -0.2 |
| **AZU** | **Azuero** | **0.48** | **45** | *i* | *P* | 03 47 22.2 | -1.0 |
| AZU | | | | AMP | | 03 47 22.4 | |
| | comp=Z,5μm,0.1s | | | | | | |
| AZU | | | | *i* | S | 03 47 29.9 | -0.9 |
| **PCRI3** | **Pocri, Los San** | **0.54** | **67** | ↓*iP* | | 03 47 22.7 | +0.5 |
| PCRI3 | | | | *i* | S | 03 47 31.0 | -1.4 |
| **CHIT3** | **Chitre** | **0.54** | **21** | ↓*iP* | | 03 47 23.7 | -0.5 |
| CHIT3 | | | | *i* | S | 03 47 32.1 | -0.4 |
| **PEDA3** | **Pedasi** | **0.59** | **82** | ↓*iP* | | 03 47 22.9 | -0.3 |
| PEDA3 | | | | *i* | S | 03 47 31.0 | 0.0 |
| **GMAL** | **Guarumal, Vera** | **0.69** | **297** | ↑*iP* | | 03 47 25.9 | -0.8 |
| GMAL | | | | *i* | S | 03 47 36.4 | -0.3 |
| **STIA3** | **Santiago, Vera** | **0.74** | **331** | ↑*eP* | | 03 47 27.0 | -0.5 |
| STIA3 | | | | *i* | S | 03 47 37.7 | -0.5 |
| **RSUS3** | **Rio de Jesus,** | **0.76** | **315** | ↑*iP* | | 03 47 27.0 | +0.5 |
| RSUS3 | | | | *i* | S | 03 47 38.4 | -0.4 |
| **CRIS3** | **El Cristo, Coc** | **0.80** | **360** | ↓*eP* | | 03 47 28.2 | -0.4 |
| CRIS3 | | | | *i* | S | 03 47 39.9 | -0.1 |
| **MESA3** | **La Mesa, Verag** | **0.90** | **321** | ↓*iP* | | 03 47 29.4 | +0.3 |
| MESA3 | | | | *i* | S | 03 47 44.7 | -0.6 |
| **PNME** | **Penonome** | **1.07** | **15** | ↑*eP* | | 03 47 32.9 | -0.3 |
| PNME | | | | *eS* | | 03 47 47.3 | -0.5 |
| **ZANG** | **Zanguenga, Cho** | **1.67** | **26** | ↑*eP* | | 03 47 42.6 | +0.2 |
| ZANG | | | | *i* | S | 03 48 04.2 | -0.2 |
| **ARRA3** | **Arraijan, Pana** | **1.78** | **32** | ↑*iP* | | 03 47 43.9 | +0.1 |
| ARRA3 | | | | *i* | S | 03 48 08.6 | +0.3 |
| **UPA** | **Univ. de Panam** | **1.86** | **35** | ↑*eP* | | 03 47 45.0 | +0.1 |
| UPA | | | | *i* | S | 03 48 11.6 | -0.3 |
| **BCIP** | **Isla Barro Col** | **1.87** | **24** | ↓*eP* | | 03 47 45.9 | +0.7 |
| BCIP | | | | AMP | | 03 47 46.4 | |
| | comp=Z,7μm,0.2s | | | | | | |
| BCIP | | | | *i* | S | 03 48 12.7 | +0.5 |
| **FRIJ** | **El Hiral** | **1.97** | **26** | ↑*eP* | | 03 47 47.2 | +0.7 |
| FRIJ | | | | *eS* | | 03 48 09.7 | -2.1 |
| **LOMA3** | **Las Lomas, Chi** | **2.01** | **299** | ↓*eP* | | 03 47 47.4 | +0.4 |
| **LOCO3** | **Loma Colorada,** | **2.02** | **298** | ↓*eP* | | 03 47 47.1 | -0.1 |
| **DVD** | **David** | **2.07** | **299** | *eP* | | 03 47 49.4 | -0.9 |
| **CHGR2** | **Aguacate** | **2.12** | **315** | *eP* | | 03 47 48.4 | -0.1 |
| CHGR2 | | | | *i* | S | 03 48 17.4 | -0.5 |
| **LNBQ3** | **Los Naranjos,** | **2.25** | **307** | *eP* | | 03 47 52.2 | -1.2 |
| **CHPO** | **Chepo, Panama** | **2.27** | **41** | ↓*eP* | | 03 47 50.6 | +0.1 |
| **BCO2** | **Palmira** | **2.28** | **304** | ↑*eP* | | 03 47 52.3 | +1.5 |
| BCO2 | | | | *i* | S | 03 48 22.1 | -0.6 |
| **BRU2** | **Volcan** | **2.45** | **303** | | *P* | 03 47 54.7 | +1.5 |
| **BRU2** | **Volcan** | **2.45** | **303** | ↑*eP* | | 03 47 54.8 | +1.6 |
| BRU2 | | | | *eS* | | 03 48 27.7 | -0.1 |
| **CNTA3** | **Canitas, Panam** | **2.45** | **44** | ↓*eP* | | 03 47 53.5 | +0.4 |
| **MLIR3** | **Monte Lirio, C** | **2.56** | **302** | *eP* | | 03 47 58.1 | -0.7 |
| **TOTI** | **Torti** | **2.72** | **57** | ↓*eP* | | 03 47 57.7 | +0.9 |
| **UPD2** | **Meteti** | **2.80** | **67** | *eP* | | 03 47 58.8 | +0.9 |
| UPD2 | | | | *eS* | | 03 48 37.3 | -0.2 |
| **DRK0** | **Durika** | **3.17** | **305** | *eP* | | 03 48 05.5 | +2.4 |

*NSSP **10** 03:53:58.1, 38°57'N×43°60'E, h7km, Ms3.3*
*ISK **10** 03:53:59.9, 38°72'N×43°70'E, h18km, ML3.3/14*
*AFAD **10** 03:54:02.7±0.0, 38°71'N×43°55'E, h7km±6km, ML2.9*
**ISC 10 03:54:03.0±1.0, 38°69'N±0°03'×43°51'E±0°03, h20km±3km, n33, σ0°97/52, 1C-1D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VANB** | **Van** | **0.14** | **226** | Pg | **Pg** | **03 54 07.4** | **-0.1** |
| VANB | | | | Sg | **Sg** | **03 54 11.8** | **+1.4** |
| **TVAN** | **Van** | **0.18** | **207** | P | **Pb** | **03 54 07.4** | **+0.1** |
| TVAN | | | | S | **Sg** | **03 54 11.8** | **+0.3** |
| TVAN | | | | *i* AML | AML | 03 54 12.0 | |
| | comp=E,6μm,0.4s | | | | | | |
| TVAN | | | | *i* AML | AML | 03 54 19.0 | |
| | comp=N,5μm,0.5s | | | | | | |
| **VMUR** | **Van-Muradiye** | **0.30** | **9** | P | **Pg** | **03 54 08.7** | **-1.2** |
| VMUR | | | | S | **Sb** | **03 54 14.7** | **+0.2** |
| VMUR | | | | *i* AML | AML | 03 54 15.0 | |
| | comp=E,3μm,0.3s | | | | | | |
| VMUR | | | | *i* AML | AML | 03 54 16.0 | |
| | comp=N,3μm,0.4s | | | | | | |
| **ERCV** | **ERCIS-VAN** | **0.36** | **338** | Pg | **Pg** | **03 54 09.4** | **-1.4** |
| **OZAP** | **Van, Ozalp-Mer** | **0.38** | **94** | P | **Pg** | **03 54 10.5** | **-0.6** |
| OZAP | | | | S | **Sn** | **03 54 19.1** | **-1.4** |
| OZAP | | | | *i* AML | AML | 03 54 25.0 | |
| | comp=N,1μm,0.7s | | | | | | |
| OZAP | | | | *i* AML | AML | 03 54 25.0 | |
| | comp=E,1μm,0.7s | | | | | | |
| **GEVA** | **Gevas** | **0.52** | **224** | P | **Pb** | **03 54 13.1** | **-0.5** |
| GEVA | | | | *i* AML | AML | 03 54 23.0 | |
| | comp=E,699nm,0.5s | | | | | | |
| GEVA | | | | S | **Sn** | **03 54 23.1** | **-0.8** |
| GEVA | | | | *i* AML | AML | 03 54 29.0 | |
| | comp=N,696nm,0.5s | | | | | | |
| **AKDM** | **Akdamar-Van** | **0.55** | **229** | Pg | **Pb** | **03 54 13.5** | **-0.6** |
| AKDM | | | | Sg | **Sn** | **03 54 23.9** | **-0.8** |
| **CLDR** | **Caldiran** | **0.55** | **35** | Pg | Pb | 03 54 09.4 | -4.8 |
| **CLDR** | **Caldiran** | **0.55** | **35** | P | Pb | 03 54 09.3 | -4.9 |
| CLDR | | | | S | **Sb** | **03 54 19.0** | **-2.7** |
| CLDR | | | | *i* AML | AML | 03 54 19.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| CLDR | | | | *i* AML | AML | 03 54 20.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| **ADCV** | **BITLIS_Adilcev** | **0.63** | **281** | P | **Pb** | **03 54 15.1** | **-0.3** |
| ADCV | | | | *i* AML | AML | 03 54 25.0 | |
| | comp=N,352nm,0.4s | | | | | | |
| ADCV | | | | S | **Sg** | **03 54 25.8** | **+1.7** |
| ADCV | | | | *i* AML | AML | 03 54 29.0 | |
| | comp=E,465nm,0.4s | | | | | | |
| **DYDN** | **Diyadin** | **0.86** | **9** | P | **Pb** | **03 54 18.4** | **-1.1** |
| DYDN | | | | *i* AML | AML | 03 54 32.0 | |
| | comp=E,470nm,0.6s | | | | | | |
| DYDN | | | | S | **Sg** | **03 54 32.5** | **+1.0** |
| DYDN | | | | *i* AML | AML | 03 54 33.0 | |
| | comp=N,253nm,0.2s | | | | | | |
| **MLAZ** | **Malazgirt-MUS** | **0.88** | **301** | Pg | **Pb** | **03 54 19.5** | **-0.2** |
| MLAZ | | | | Sg | **Sn** | **03 54 33.9** | **+1.2** |
| **DORK** | **Agr/Tutak/Do** | **0.90** | **321** | P | **Pb** | **03 54 19.1** | **-1.0** |
| DORK | | | | S | **Sb** | **03 54 32.5** | **+0.7** |
| DORK | | | | *i* AML | AML | 03 54 33.0 | |
| | comp=N,740nm,0.7s | | | | | | |
| DORK | | | | *i* AML | AML | 03 54 35.0 | |
| | comp=E,487nm,0.4s | | | | | | |
| **AGRB** | **Hanur-Agry** | **0.97** | **336** | Pg | **Pb** | **03 54 20.3** | **-1.1** |
| AGRB | | | | Sg | **Sb** | **03 54 34.4** | **+0.5** |
| **BLIS** | **Bitlis-Merkez** | **1.13** | **256** | P | **Pn** | **03 54 23.5** | **-0.4** |
| BLIS | | | | *i* AML | AML | 03 54 40.0 | |
| | comp=N,461nm,0.4s | | | | | | |
| BLIS | | | | S | **Sn** | **03 54 40.1** | **+1.1** |
| BLIS | | | | *i* AML | AML | 03 54 43.0 | |
| | comp=E,238nm,0.5s | | | | | | |
| **KOTA** | **Agri, Merkez-K** | **1.14** | **348** | P | **Pn** | **03 54 23.3** | **-0.8** |
| KOTA | | | | *i* AML | AML | 03 54 44.0 | |
| | comp=E,138nm,0.7s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **1.17** | **264** | Pn | **Pn** | **03 54 24.1** | **-0.3** |
| **IGDI** | **IGDIR** | **1.26** | **20** | P | **Pn** | **03 54 25.8** | **+0.2** |
| IGDI | | | | *i* AML | AML | 03 54 48.0 | |
| | comp=N,189nm,0.6s | | | | | | |
| IGDI | | | | *i* AML | AML | 03 54 50.0 | |
| | comp=E,165nm,0.6s | | | | | | |
| **TASB** | **TASBURUN-IGDIR** | **1.41** | **23** | Pn | **Pb** | **03 54 29.1** | **+0.3** |
| **EATA** | **Eleskirt** | **1.41** | **326** | P | **Pn** | **03 54 28.8** | **+0.8** |
| EATA | | | | S | **Sg** | **03 54 49.7** | **+0.8** |
| EATA | | | | *i* AML | AML | 03 54 51.0 | |
| | comp=E,498nm,0.6s | | | | | | |
| EATA | | | | *i* AML | AML | 03 54 53.0 | |
| | comp=N,251nm,0.5s | | | | | | |
| **VNNZ** | **Vanand** | **1.43** | **10** | *e*P | **Pb** | **03 54 29.2** | **+0.1** |
| VNNZ | | | | *e*S | **Sg** | **03 54 50.3** | **+0.9** |
| **METS** | **Metsamor** | **1.52** | **17** | *e*P | **Pb** | **03 54 30.9** | **+0.3** |
| METS | | | | *e*S | **Sg** | **03 54 53.7** | **+1.4** |
| **NRKZ** | **NAREK** | **1.58** | **34** | *e*P | **Pb** | **03 54 31.8** | **+0.1** |
| NRKZ | | | | *e*S | **Sg** | **03 54 54.6** | **+0.4** |
| **ARUZ** | **Aruch** | **1.65** | **16** | *e*P | **Pb** | **03 54 33.5** | **+0.6** |
| ARUZ | | | | *e*S | **Sg** | **03 54 57.7** | **+1.3** |
| **VRTB** | **Varto-Mus** | **1.67** | **287** | Pn | **Pn** | **03 54 30.5** | **-0.9** |
| **GNI** | **Garni** | **1.74** | **33** | ↓*iP* | **Pb** | **03 54 34.7** | **+0.2** |
| GNI | | | | ↑*iS* | **Sg** | **03 55 00.2** | **+0.9** |
| **AMBZ** | **Amberd** | **1.79** | **19** | *e*P | **Pb** | **03 54 36.0** | **+0.6** |
| AMBZ | | | | *e*S | **Sg** | **03 55 02.3** | **+1.4** |
| **KOPR** | **Koprukoy-ERZUR** | **1.83** | **316** | Pn | **Pn** | **03 54 32.6** | **-1.0** |
| **KAPZ** | **Kaputan** | **1.87** | **29** | *e*P | **Pn** | **03 54 35.5** | **+1.3** |
| KAPZ | | | | *e*S | **Sb** | **03 55 01.4** | **+1.7** |
| **SVAN** | **Silvan-Diyarba** | **1.90** | **254** | Pn | **Pn** | **03 54 34.9** | **+0.5** |
| **BNGB** | **Bingl** | **2.23** | **279** | Pn | **Pn** | **03 54 39.0** | **-0.1** |
| **MAZI** | **Mazidag** | **2.71** | **244** | Pn | **Pn** | **03 54 46.6** | **+0.9** |
| **BAYT** | **Aydıntepe-Bayb** | **3.11** | **304** | Pn | **Pn** | **03 54 50.9** | **-0.3** |

*ISK **10** 03:57:41.5, 38°73'N×43°68'E, h17km, ML2.6/6*
*AFAD **10** 03:57:43.7±0.0, 38°70'N×43°59'E, h7km±7km, ML2.1*
**ISC 10 03:57:42.1±1.3, 38°69'N±0°04'×43°70'E±0°06, h11km±10km, n14, σ0°84/24, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VANB** | **Van** | **0.26** | **248** | Pg | **Pb** | **03 57 48.8** | **-0.1** |
| VANB | | | | Sg | **Sg** | **03 57 53.1** | **+1.8** |
| **TVAN** | **Van** | **0.28** | **235** | P | **Pb** | **03 57 48.7** | **-0.6** |
| TVAN | | | | S | **Sb** | **03 57 52.9** | **-1.3** |
| TVAN | | | | *i* AML | AML | 03 57 53.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| TVAN | | | | *i* AML | AML | 03 57 58.0 | |
| | comp=N,822nm,0.6s | | | | | | |
| **VMUR** | **Van-Muradiye** | **0.31** | **341** | P | **Pb** | **03 57 50.0** | **+0.2** |
| VMUR | | | | S | **Sb** | **03 57 55.6** | **+0.6** |
| VMUR | | | | *i* AML | AML | 03 57 57.0 | |
| | comp=N,525nm,0.3s | | | | | | |
| VMUR | | | | *i* AML | AML | 03 57 57.0 | |
| | comp=E,403nm,0.3s | | | | | | |
| **CLDR** | **Caldiran** | **0.48** | **20** | Pg | **Pg** | **03 57 50.6** | **-1.0** |
| CLDR | | | | Sg | **Sg** | **03 57 58.2** | **+0.2** |
| **CLDR** | **Caldiran** | **0.48** | **20** | P | **Pg** | **03 57 50.8** | **-0.8** |
| CLDR | | | | *i* AML | AML | 03 58 00.0 | |
| | comp=N,238nm,0.6s | | | | | | |
| CLDR | | | | S | **Sb** | **03 58 00.4** | **+0.5** |
| CLDR | | | | *i* AML | AML | 03 58 01.0 | |
| | comp=E,247nm,0.4s | | | | | | |
| **GEVA** | **Gevas** | **0.63** | **233** | P | **Pg** | **03 57 54.4** | **0.0** |
| GEVA | | | | S | **Sb** | **03 58 04.5** | **+0.4** |
| GEVA | | | | *i* AML | AML | 03 58 07.0 | |
| | comp=E,96nm,0.5s | | | | | | |
| GEVA | | | | *i* AML | AML | 03 58 10.0 | |
| | comp=N,120nm,0.6s | | | | | | |
| **AKDM** | **Akdamar-Van** | **0.67** | **238** | Pg | **Pg** | **03 57 55.1** | **-0.1** |
| AKDM | | | | Sg | **Sb** | **03 58 05.6** | **+0.3** |
| **ADCV** | **BITLIS_Adilcev** | **0.77** | **279** | P | **Pg** | **03 57 56.7** | **-0.4** |
| ADCV | | | | *i* AML | AML | 03 58 09.0 | |
| | comp=E,56nm,0.4s | | | | | | |
| ADCV | | | | *i* AML | AML | 03 58 13.0 | |
| | comp=N,77nm,0.4s | | | | | | |
| **DYDN** | **Diyadin** | **0.85** | **359** | P | **Pn** | **03 58 00.3** | **+0.1** |
| DYDN | | | | *i* AML | AML | 03 58 14.0 | |
| | comp=N,39nm,0.2s | | | | | | |
| DYDN | | | | *i* AML | AML | 03 58 14.0 | |
| | comp=E,58nm,0.5s | | | | | | |
| DYDN | | | | S | **Sn** | **03 58 14.1** | **+1.4** |
| **DORK** | **Agr/Tutak/Do** | **1.00** | **314** | P | **Pg** | **03 58 00.4** | **-1.0** |
| DORK | | | | *i* AML | AML | 03 58 14.0 | |
| | comp=N,75nm,0.4s | | | | | | |
| DORK | | | | S | **Sb** | **03 58 14.1** | **-0.7** |
| DORK | | | | *i* AML | AML | 03 58 16.0 | |
| | comp=E,69nm,0.3s | | | | | | |
| **MLAZ** | **Malazgirt-MUS** | **1.00** | **297** | Pg | **Pg** | **03 58 00.8** | **-0.7** |
| **AGRB** | **Hanur-Agry** | **1.04** | **328** | Pg | **Pg** | **03 58 01.2** | **-1.0** |
| AGRB | | | | Sg | **Sb** | **03 58 15.6** | **-0.3** |
| **KOTA** | **Agri, Merkez-K** | **1.17** | **341** | P | **Pn** | **03 58 05.2** | **+0.5** |
| KOTA | | | | *i* AML | AML | 03 58 26.0 | |
| | comp=E,18nm,1.0s | | | | | | |
| KOTA | | | | *i* AML | AML | 03 58 50.0 | |
| | comp=N,6.2nm,1.4s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **1.32** | **264** | Pn | **Pn** | **03 58 05.5** | **-1.0** |

*IDC **10** 04:09:17.9±1.2, 21°63S×33°35E, h0km, mb3.9/5, mbtmp4.0/6, ML4.5/1, MS2.9/2, Error ellipse: s-maj=43.2km s-min=25.9km az=63.0*
*PRE **10** 04:09:17.9±2.2, 21°45S×33°60E, h10km, ML3.7*
*NEIC **10** 04:09:19.1±1.9, 21°46S±0°09×33°5E±0°1, h10km±1km, mb4.5/11, Error ellipse: s-maj=21.2km s-min=14.2km az=75.0*
**ISC

σ2.935/61, **mb4.3**/9, **1C-7D, Mozambique**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOPA** | **Mopani** | **2.69** | **221** | ⇓ *i* P | **Pn** | **04 10 04.3** | **+1.5** |
| MOPA | | | | *e* S | **Sb** | **04 10 40.7** | **-0.1** |
| MOPA | | | | IAML | | 04 10 56.7 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **MPHEP** | **Siloam, Limpop** | **3.24** | **243** | ⇑ *i* P | **Pn** | **04 10 13.6** | **+3.2** |
| MPHEP | | | | *e* S | **Sn** | **04 10 53.0** | **+4.1** |
| MPHEP | | | | IAML | | 04 11 09.1 | |
| | comp=Z,492nm,0.5s | | | | | | |
| **MUSN** | **Musina, Limpop** | **3.31** | **255** | ⇓ *i* P | **Pn** | **04 10 14.9** | **+3.6** |
| MUSN | | | | *e* S | **Sn** | **04 10 54.4** | **+3.9** |
| MUSN | | | | IAML | | 04 11 10.9 | |
| | comp=Z,278nm,0.4s | | | | | | |
| **PILG** | **Pilgrimsrest,** | **4.19** | **214** | ⇓ *i* P | **Pn** | **04 10 24.9** | **+1.4** |
| PILG | | | | *e* S | **Sn** | **04 11 15.0** | **+2.6** |
| PILG | | | | IAML | | 04 11 50.3 | |
| | comp=Z,185nm,0.6s | | | | | | |
| **DULL** | **Dullstroom, Mp** | **4.82** | **216** | *e* P | **Pn** | **04 10 34.1** | **+1.9** |
| DULL | | | | *e* S | **Sn** | **04 11 29.2** | **+1.1** |
| DULL | | | | IAML | | 04 11 59.0 | |
| | comp=Z,127nm,0.5s | | | | | | |
| **CRLN** | **Carolina, Mapu** | **5.41** | **213** | *e* P | **Pn** | **04 10 42.4** | **+2.1** |
| CRLN | | | | *e* S | **Sn** | **04 11 41.4** | **-1.1** |
| CRLN | | | | IAML | | 04 12 21.1 | |
| | comp=Z,66nm,0.5s | | | | | | |
| **TEMBE** | **Tembe Elephant** | **5.59** | **188** | *e* P | **Pn** | **04 10 44.5** | **+1.9** |
| TEMBE | | | | *e* S | **Sn** | **04 11 47.7** | **+0.9** |
| TEMBE | | | | IAML | | 04 12 40.1 | |
| | comp=Z,149nm,0.7s | | | | | | |
| **LEPH** | **Lephalale, Lim** | **5.62** | **244** | ⇓ *i* P | **Pn** | **04 10 45.1** | **+2.0** |
| LEPH | | | | *e* S | **Sn** | **04 11 51.0** | **+3.4** |
| LEPH | | | | IAML | | 04 12 28.0 | |
| | comp=Z,214nm,0.5s | | | | | | |
| **KRI** | **Karoi** | **5.80** | **322** | *i* P | **Pn** | **04 10 47.8** | **+2.1** |
| KRI | | | | *e* S | **Sn** | **04 11 53.3** | **+1.1** |
| **POGA** | **Pongola** | **6.02** | **194** | | **Pn** | **04 10 49.4** | **+0.9** |
| **POGA** | **Pongola** | **6.02** | **194** | ⇓ *i* P | **Pn** | **04 10 49.3** | **+0.8** |
| POGA | | | | *e* S | **Sn** | **04 11 57.3** | **0.0** |
| POGA | | | | IAML | | 04 12 45.3 | |
| | comp=Z,111nm,0.5s | | | | | | |
| **MTLB** | **Matlabas, Limp** | **6.23** | **247** | ⇓ *i* P | **Pn** | **04 10 54.2** | **+2.7** |
| MTLB | | | | *e* S | **Sn** | **04 12 04.5** | **+1.8** |
| MTLB | | | | IAML | | 04 12 50.9 | |
| | comp=Z,278nm,0.7s | | | | | | |
| **NHAM** | **Northam, North** | **6.49** | **237** | *e* P | **Pn** | **04 10 58.4** | **+3.3** |
| NHAM | | | | *e* S | **Sn** | **04 12 12.1** | **+3.0** |
| NHAM | | | | IAML | | 04 12 55.2 | |
| | comp=Z,94nm,0.7s | | | | | | |
| **HRAO** | **HartRAO** | **6.77** | **229** | *e* P | **Pn** | **04 11 00.6** | **+1.6** |
| HRAO | | | | *e* S | **Sn** | **04 12 19.1** | **+3.0** |
| **LSZ** | **Lusaka** | **7.86** | **321** | | **Pn** | **04 11 15.5** | **+1.5** |
| **LBTB** | **Lobatse** | **7.92** | **242** | | **Pn** | **04 11 16.4** | **+1.7** |
| **LBTB** | **Lobatse** | **7.92** | **242** | ⇓ *i* P | **Pn** | **04 11 16.6** | **+1.9** |
| LBTB | | | | *e* S | **Sn** | **04 12 47.3** | **+3.0** |
| LBTB | | | | IAML | | 04 13 36.4 | |
| | comp=Z,66nm,0.6s | | | | | | |
| **LBTB** | **Lobatse** | **7.92** | **242** | LR | LR | 04 13 30.9 | |
| | comp=Z,48nm,18.7s,baz=82,slow=32 | | | | | | |
| **PMBG** | **Pietermaritzbu** | **8.39** | **197** | *e* P | **Pn** | **04 11 21.7** | **+0.6** |
| PMBG | | | | *e* S | **Sn** | **04 12 52.4** | **-3.3** |
| PMBG | | | | IAML | | 04 13 51.4 | |
| | comp=Z,40nm,0.7s | | | | | | |
| **KSANE** | **Kasane** | **8.51** | **294** | *i* P | **Pn** | **04 11 23.8** | **+0.9** |
| KSANE | | | | *e* S | **Sn** | **04 12 53.7** | **-5.2** |
| KSANE | | | | IAML | | 04 14 04.7 | |
| | comp=Z,97nm,0.7s | | | | | | |
| **SKOMA** | **Sekoma** | **9.16** | **249** | *i* P | **Pn** | **04 11 32.1** | **+0.4** |
| SKOMA | | | | *e* S | **Sn** | **04 13 08.3** | **-6.4** |
| SKOMA | | | | IAML | | 04 14 17.8 | |
| | comp=Z,58nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **10.19** | **224** | | **Pn** | **04 11 45.2** | **-0.6** |
| **BOSA** | **Boshof** | **10.19** | **224** | *e* P | **Pn** | **04 11 45.4** | **-0.4** |
| BOSA | | | | *e* S | **Sn** | **04 13 39.2** | **-0.8** |
| BOSA | | | | IAML | | 04 14 49.5 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **10.19** | **224** | Pn | **Pn** | **04 11 45.0** | **-0.8** |
| | comp=Z,2.7nm,0.3s,baz=49,slow=12,SNR=67 | | | | | | |
| BOSA | | | | Sn | **Sn** | **04 13 32.6** | **-7.4** |
| | comp=Z,2.6nm,0.3s,baz=309,slow=13,SNR=6.9 | | | | | | |
| BOSA | | | | Lg | Lg | 04 14 35.4 | |
| | comp=Z,2.6nm,0.3s,baz=56,slow=4.5,SNR=4.4 | | | | | | |
| | comp=Z,8.1nm,0.5s | | | | | | |
| **GRTLG** | **Ghanzi** | **11.27** | **268** | *i* P | **Pn** | **04 12 00.5** | **-0.2** |
| GRTLG | | | | *e* S | Sn | 04 13 51.6 | -15 |
| GRTLG | | | | IAML | | 04 15 23.2 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **GRHM** | **Grahamstown, E** | **13.26** | **206** | Pn | **Pn** | **04 12 29.1** | **+1.4** |
| **TSUM** | **Tsumeb** | **14.93** | **276** | Pn | **Pn** | **04 12 50.4** | **-0.3** |
| **TSUM** | **Tsumeb** | **14.93** | **276** | LR | LR | 04 18 19.2 | |
| | comp=Z,58nm,18.9s,baz=138,slow=36 | | | | | | |
| **SUR** | **Sutherland** | **15.55** | **223** | Pn | **Pn** | **04 12 58.0** | **-0.9** |
| SUR | | | | IAmb | IAmb | 04 13 12.7 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.35** | **315** | P | **P** | **04 17 46.7** | **+0.8** |
| TORD | | | | IAmb | IAmb | 04 17 51.9 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.35** | **315** | P | **P** | **04 17 48.2** | **+2.3** |
| | comp=Z,1.8nm,0.7s,baz=120,slow=7.7,SNR=13 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro** | **46.74** | **303** | P | **P** | **04 17 48.2** | **-0.8** |
| **DBIC** | **Dimbokro** | **46.74** | **303** | P | **P** | **04 17 48.0** | **-1.0** |
| | comp=Z,2.6nm,0.8s,baz=265,slow=24,SNR=1.7 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **54.31** | **193** | P | **P** | **04 18 44.9** | **-0.6** |
| SNAA | | | | IAmb | IAmb | 04 19 00.6 | |
| | comp=Z,5.9nm,1.5s | | | | | | |
| **SNAA** | **Sanae** | **54.31** | **193** | P | **P** | **04 18 44.8** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=270,slow=11,SNR=0.8 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **KEST** | **Kesra** | **61.27** | **338** | P | **P** | **04 19 32.6** | **-2.2** |
| KEST | | | | IAmb | IAmb | 04 19 39.1 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| **BELA** | **Belgrano 2** | **64.54** | **193** | P | **P** | **04 19 56.5** | **+0.5** |
| BELA | | | | IAmb | IAmb | 04 20 09.3 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.67** | **180** | P | **P** | **04 20 22.9** | **+0.2** |
| **QSPA** | **South Pole Qui** | **68.67** | **180** | P | **P** | **04 20 22.2** | **-0.5** |
| | comp=Z,1.4nm,1.1s,baz=158,slow=4.4,SNR=3.8 | | | | | | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| **PAB** | **San Pablo** | **70.18** | **330** | P | **P** | **04 20 31.8** | **-0.4** |
| PAB | | | | IAmb | IAmb | 04 21 11.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **AAK** | **Ala-Archa** | **74.24** | **30** | P | **P** | **04 20 55.3** | **-1.3** |
| AAK | | | | IAmb | IAmb | 04 21 39.2 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **TRQA** | **Tornquist** | **81.05** | **233** | P | **P** | **04 21 34.0** | **-0.8** |
| **ASAR** | **Alice Springs** | **90.66** | **116** | P | **P** | **04 22 22.6** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=244,slow=3.8,SNR=5.7 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **150.34** | **311** | PKPbc | **PKPbc** | **04 29 11.4** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=75,slow=4.8,SNR=1.7 | | | | | | |

*IDC **10** 04:09:55.3±7.0, 17°.06S×172°.13W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=304.2km s-min=37.2km az=140.0*
*NEIC **10** 04:10:10.4±0.5, 15°.13S±0°.06×174°.0W±0°.1, h35km±2km, mb4.3/13, Error ellipse: s-maj=24.1km s-min=4.9km az=114.0*

**ISC 10 04:10:09.6**±0.8, **15°.23S**±0°.08×**173°.83W**±0°.09, **h35**km, **n19,** σ1°59/21, **mb4.3**/10, **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.38** | **57** | | **Pn** | **04 10 47.7** | **+1.4** |
| AFI | | | | Sn | **Sn** | **04 11 11.6** | **-2.7** |
| **NIUE** | **Niue** | **5.34** | **136** | Pn | **Pn** | **04 11 29.5** | **+2.6** |
| NIUE | | | | Sn | **Sn** | **04 12 23.6** | **-3.6** |
| **COEN** | **Coen** | **41.58** | **266** | P | **P** | **04 17 54.0** | **-0.5** |
| **WR0** | **Warramunga Arr** | **49.29** | **257** | P | **P** | **04 18 54.5** | **-1.1** |
| WR0 | | | | IAmb | IAmb | 04 19 13.5 | |
| | comp=Z,7.2nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **49.44** | **257** | P | **P** | **04 18 55.8** | **-0.8** |
| **WB2** | **Warramunga Arr** | **49.47** | **257** | P | **P** | **04 18 56.0** | **-0.8** |
| **WRAB** | **Tennant Creek** | **49.47** | **257** | P | **P** | **04 18 55.4** | **-1.5** |
| WRAB | | | | IAmb | IAmb | 04 18 55.6 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.48** | **257** | P | **P** | **04 18 56.0** | **-1.0** |
| **WRA** | **Warramunga Arr** | **49.48** | **257** | P | **P** | **04 18 55.9** | **-1.0** |
| | comp=Z,1.5nm,0.4s,baz=98,slow=8.0,SNR=67 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **49.77** | **252** | P | **P** | **04 18 58.4** | **-0.8** |
| AS31 | | | | IAmb | IAmb | 04 18 59.2 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **49.77** | **252** | P | **P** | **04 18 57.7** | **-1.5** |
| **ASAR** | **Alice Springs** | **49.77** | **252** | P | **P** | **04 18 58.5** | **-0.7** |
| | comp=Z,11nm,0.6s,baz=86,slow=8.0,SNR=112 | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.81** | **180** | P | **P** | **04 21 46.7** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 04 22 03.2 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **PSUT** | **Pine Spring** | **77.47** | **44** | P | **P** | **04 22 03.8** | **+1.9** |
| **L19K** | **White Mountain** | **78.60** | **9** | P | **P** | **04 22 07.8** | **+0.4** |
| L19K | | | | IAmb | IAmb | 04 22 17.4 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **80.59** | **9** | P | **P** | **04 22 18.5** | **+0.3** |
| J20K | | | | IAmb | IAmb | 04 22 25.4 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **WRH** | **Wood River Hil** | **81.86** | **11** | P | **P** | **04 22 24.6** | **-0.3** |
| WRH | | | | IAmb | IAmb | 04 22 31.1 | |
| | comp=Z,3.1nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **82.36** | **11** | P | **P** | **04 22 26.2** | **-1.2** |
| | comp=Z,0.2nm,0.5s,baz=228,slow=7.3,SNR=5.6 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **G23K** | **Bananza Creek** | **83.59** | **9** | P | **P** | **04 22 33.5** | **-0.3** |

*SKHL **10** 04:15:15.7±0.1, 44°.30N×147°.80E, h81km±3km, mb4.2/3, msha5.1/3*
*JMA **10** 04:15:15.2±0.2, 44°.3N±0°.9×147°.8E±°, h60km, MV3.6/14, SE OFF ETOROFU*

**ISC 10 04:15:15.5**±2.9, **44°.3N**±0°.1×**147°.8E**±0°.2, **h70**km±23km, **n11,** σ0873/19, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.81** | **235** | *e*P | **Pn** | **04 15 32.1** | **+0.4** |
| SHO | | | | AMB | AMB | 04 15 32.6 | |
| | 110nm,0.4s | | | | | | |
| SHO | | | | *i* S | **Sn** | **04 15 44.4** | **+0.8** |
| SHO | | | | A | A | 04 15 45.1 | |
| | 470nm,0.4s | | | | | | |
| SHO | | | | A | A | 04 15 45.1 | |
| | 390nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **0.89** | **6** | *e*P | **Pn** | **04 15 33.0** | **+0.4** |
| KUR | | | | AMB | AMB | 04 15 36.5 | |
| | 40nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **04 15 44.6** | **-0.8** |
| KUR | | | | A | A | 04 15 45.4 | |
| | 110nm,0.4s | | | | | | |
| KUR | | | | A | A | 04 15 45.4 | |
| | 300nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.39** | **258** | *e*P | **Pn** | **04 15 38.9** | **0.0** |
| YUK | | | | AMB | AMB | 04 15 39.1 | |
| | 140nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **04 15 56.3** | **-0.3** |
| YUK | | | | A | A | 04 15 59.4 | |
| | 330nm,0.4s | | | | | | |
| YUK | | | | A | A | 04 15 59.4 | |
| | 670nm,0.4s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.75** | **237** | P | **Pn** | **04 15 43.3** | **-0.4** |
| NEM2 | | | | S | **Sn** | **04 16 04.1** | **-1.0** |
| **NMR** | **Nemuro--Hokkai** | **1.75** | **237** | *e*P | **Pn** | **04 15 43.4** | **-0.4** |
| NMR | | | | *e*S | **Sn** | **04 16 04.1** | **-1.2** |
| **JRA** | **Rausu** | **1.93** | **259** | P | **Pn** | **04 15 45.9** | **-0.2** |
| **JNK** | **Nakash** | **2.31** | **252** | S | **Sn** | **04 16 18.4** | **-0.3** |
| **JAK** | **Akkeshi** | **2.59** | **240** | P | **Pn** | **04 15 55.3** | **+0.2** |
| JAK | | | | *e*S | **Sn** | **04 16 24.5** | **-1.0** |
| **JAR** | **Ashorobuto** | **3.06** | **251** | P | **Pn** | **04 16 02.3** | **+0.8** |
| JAR | | | | *e*S | **Sn** | **04 16 38.0** | **+1.0** |
| **JMP** | **Maruseppu** | **3.17** | **265** | *e*P | **Pn** | **04 16 03.1** | **0.0** |
| **JOB** | **Onbets** | **3.18** | **244** | *e*P | **Pn** | **04 16 04.0** | **+0.9** |
| JOB | | | | *e*S | **Sn** | **04 16 40.2** | **+0.3** |

**IDC 10 04:22:42.9**±2.4, **4°.14N**×**122°.99E, h0**km, **mb3.6**/3, **mbtmp3.6**/3, **MS2.7**/1, **Error ellipse: s-maj=345.7km s-min=28.6km az=63.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **23.55** | **65** | LR | LR | 04 38 39.2 | |
| | comp=Z,17nm,18.1s,baz=288,slow=41 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.41** | **155** | P | P | 04 28 21.6 | +0.2 |
| | 0.8nm,0.5s,baz=336,slow=9.5,SNR=15 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **29.62** | **159** | P | P | 04 28 50.0 | -0.2 |
| | 0.3nm,0.5s,baz=331,slow=7.6,SNR=6.5 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.13** | **327** | P | P | 04 32 17.1 | -0.1 |
| | 0.2nm,0.4s,baz=110,slow=8.3,SNR=2.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*IDC **10** 04:27:08.8±1.6, 15°.16S×178°.90W, h451km±29km, mb3.0/6, mbtmp3.8/7, Error ellipse: s-maj=113.7km s-min=18.6km az=154.0*

**ISC 10 04:27:08.9**±1.0, **15°.1S**±0°.4×**179°.0W**±0°.3, **h450**km, **n8,** σ0848/9, **mb3.3**/6, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.92** | **227** | | **P** | **04 28 23.9** | **+0.5** |
| **MSVF** | **Nonsavu** | **3.92** | **227** | P | **P** | **04 28 23.8** | **+0.3** |
| | 8.9nm,0.4s,baz=65,slow=14,SNR=30 | | | | | | |
| MSVF | | | | S | **S** | **04 29 23.7** | **-0.4** |
| | 3.5nm,0.6s,baz=22,slow=11,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.70** | **257** | P | **P** | **04 34 40.4** | **-0.4** |
| | 0.4nm,0.3s,baz=95,slow=8.4,SNR=32 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.12** | **252** | P | **P** | **04 34 44.1** | **+0.1** |
| | 4.9nm,0.5s,baz=84,slow=8.6,SNR=43 | | | | | | |
| | 4.9nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.75** | **44** | P | **P** | **04 38 19.0** | **+0.3** |
| | 0.5nm,0.7s,baz=228,slow=8.0,SNR=4.4 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **83.24** | **13** | P | **P** | **04 38 46.9** | **+0.3** |
| | 0.3nm,0.4s,baz=229,slow=5.7,SNR=7.0 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.93** | **58** | P | **P** | **04 38 55.8** | **-0.1** |
| | 0.2nm,0.5s,baz=212,slow=8.4,SNR=4.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **85.66** | **44** | P | **P** | **04 38 58.5** | **-0.8** |
| | 0.3nm,0.5s,baz=215,slow=3.7,SNR=4.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*IDC **10** 04:32:24.5±1.9, 60°.71S×41°.78W, h0km, mb3.8/1, mbtmp3.6/2, ML3.0/1, MS3.4/4, Error ellipse: s-maj=86.6km s-min=44.9km az=58.0*
*NEIC **10** 04:32:25.5±1.2, 60°.72S±0°.10×41°.8W±0°.2, h10km±1km, mb4.5/15, Error ellipse: s-maj=18.9km s-min=14.3km az=135.0*

**ISC 10 04:32:25.5**±0.6, **60°.70S**±0°.09×**41°.94W**±0°.08, **h10**km, **n26,** σ1°06/23, **mb4.5**/7, **Scotia Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ORCD** | **Orcadas** | **1.38** | **267** | | **Pn** | **04 32 44.0** | **-6.8** |
| ORCD | | | | Sn | **Sn** | **04 33 06.5** | **-2.5** |
| **HOPE** | **Hope Point** | **7.07** | **27** | Pn | **Pn** | **04 34 07.4** | **-1.5** |
| **PMSA** | **Palmer Station** | **10.90** | **239** | LR | LR | 04 38 59.7 | |
| | comp=Z,461nm,18.4s,baz=112,slow=36 | | | | | | |
| **MG01** | **Puerto William** | **14.80** | **282** | Pn | **Pn** | **04 35 55.5** | **+1.0** |
| **BELA** | **Belgrano 2** | **17.42** | **175** | | **Pn** | **04 36 28.7** | **+0.5** |
| **SNAA** | **Sanae** | **18.79** | **142** | P | **P** | **04 36 44.0** | **-0.6** |
| **SNAA** | **Sanae** | **18.79** | **142** | P | **P** | **04 36 44.0** | **-0.6** |
| | baz=288,slow=14,SNR=7.9 | | | | | | |
| SNAA | | | | LR | LR | 04 42 34.1 | |
| | comp=Z,88nm,19.9s,baz=270,slow=32 | | | | | | |
| | 1.4nm,1.0s | | | | | | |
| **MG05** | **Puerto Natales** | **19.09** | **285** | P | **P** | **04 36 46.6** | **-1.3** |
| MG05 | | | | IAmb | IAmb | 04 37 17.0 | |
| | comp=Z,62nm,1.5s | | | | | | |
| **GO09** | **Cerro Castillo** | **19.28** | **286** | P | **P** | **04 36 50.9** | **+0.9** |
| GO09 | | | | IAmb | IAmb | 04 37 05.7 | |
| | comp=Z,64nm,1.4s | | | | | | |
| **GO08** | **Villa O'Higgin** | **21.32** | **291** | P | **P** | **04 37 13.2** | **+0.9** |
| GO08 | | | | IAmb | IAmb | 04 37 30.5 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **LL07** | **Hotel Espejo d** | **26.08** | **299** | P | **P** | **04 37 58.9** | **-0.1** |
| **QSPA** | **South Pole Qui** | **29.54** | **180** | P | **P** | **04 38 29.6** | **-0.3** |
| QSPA | | | | IAmb | IAmb | 04 38 55.8 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **BO02** | **Sierra Bellavi** | **31.88** | **311** | P | **P** | **04 38 52.0** | **+1.2** |
| BO02 | | | | IAmb | IAmb | 04 39 28.2 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **GO05** | **Huala** | **32.12** | **309** | P | **P** | **04 38 52.9** | **+0.2** |
| **VNDA** | **Vanda** | **41.24** | **188** | P | **P** | **04 40 10.0** | **+0.1** |
| **LVC** | **Limon Verde** | **42.45** | **322** | LR | LR | 04 58 39.7 | |
| | comp=Z,43nm,18.4s,baz=188,slow=37 | | | | | | |
| **VILB** | **Vilhena** | **49.51** | **336** | P | **P** | **04 41 15.7** | **-0.4** |
| VILB | | | | IAmb | IAmb | 04 41 29.3 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **SAML** | **Samuel** | **54.02** | **334** | P | **P** | **04 41 49.7** | **-0.1** |
| SAML | | | | IAmb | IAmb | 04 42 04.7 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **54.38** | **86** | P | **P** | **04 41 52.6** | **+0.2** |
| BOSA | | | | IAmb | IAmb | 04 42 32.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **LBTB** | **Lobatse** | **57.54** | **84** | LR | LR | 05 03 55.6 | |
| | comp=Z,18nm,18.0s,baz=189,slow=33 | | | | | | |
| **INZ** | **Inchbonnie** | **73.39** | **205** | P | **P** | **04 43 56.5** | **-0.8** |
| **TORD** | **Torodi Ar. Bea** | **81.37** | **43** | P | **P** | **04 44 42.2** | **+0.1** |
| TORD | | | | IAmb | IAmb | 04 44 50.6 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.37** | **43** | P | **P** | **04 44 42.2** | **+0.1** |
| | comp=Z,0.8nm,1.0s,baz=190,slow=4.8,SNR=2.6 | | | | | | |
| | comp=Z,0.8nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **145.36** | **88** | PKPbc | **PKPbc** | **04 52 02.1** | **-0.3** |
| | comp=Z,0.2nm,0.6s,baz=217,slow=3.0,SNR=2.4 | | | | | | |
| **KURBB** | **Kurchatov Array** | **146.10** | **80** | PKPbc | **PKPdf** | **04 52 04.6** | **+1.1** |
| | comp=Z,0.7nm,0.4s,baz=234,slow=3.9,SNR=1.7 | | | | | | |
| **ILAR** | **Eielson Array** | **147.25** | **310** | PKPbc | **PKPdf** | **04 52 07.3** | **+2.3** |
| | comp=Z,0.3nm,0.7s,baz=122,slow=2.7,SNR=4.3 | | | | | | |

*BUL **10** 04:59:53.3±1.6, 21°.58S×34°.01E, h33km±37km, MD3.9*

**PRE 10 04:59:48.2**±1.0, **21°.60S**×**33°.46E, h5**km, **ML2.7, Mozambique**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOPA** | **Mopani** | **2.69** | **225** | *e*P | Pn | 05 00 32.5 | +0.3 |
| MOPA | | | | *e*S | Sn | 05 01 06.0 | +0.7 |
| MOPA | | | | IAML | | 05 01 22.9 | |
| | comp=Z,121nm,0.7s | | | | | | |
| **MOPA** | **Mopani** | **2.69** | **225** | *i* P | Pg | 05 00 40.7 | +0.8 |
| MOPA | | | | *i* S | Sg | 05 01 15.2 | +0.4 |
| **MOPA** | **Mopani** | **2.69** | **225** | *i* P | Pg | 05 00 40.7 | +0.8 |
| MOPA | | | | *i* S | Sg | 05 01 15.2 | +0.4 |
| **MUSN** | **Musina, Limpop** | **3.41** | **258** | *e*P | Pn | 05 00 43.7 | +1.6 |
| MUSN | | | | *e*S | Sn | 05 01 22.2 | -0.7 |
| MUSN | | | | IAML | | 05 01 42.0 | |
| | comp=Z,25nm,0.5s | | | | | | |
| **MUSN** | **Musina, Limpop** | **3.41** | **258** | *i* P | Pb | 05 00 51.0 | +1.9 |
| MUSN | | | | *i* S | Sb | 05 01 34.2 | +3.3 |
| **MUSN** | **Musina, Limpop** | **3.41** | **258** | *i* P | Pb | 05 00 51.0 | +1.9 |
| MUSN | | | | *i* S | Sb | 05 01 34.2 | +3.3 |
| **MATP** | **Matopo** | **4.78** | **283** | *i* P | Pb | 05 01 09.0 | -3.6 |
| MATP | | | | *i* S | Sb | 05 02 05.0 | -5.4 |
| **MATP** | **Matopo** | **4.78** | **283** | *i* P | Pb | 05 01 09.0 | -3.6 |
| MATP | | | | *i* S | Sb | 05 02 05.0 | -5.4 |
| **LEPH** | **Lephalale, Lim** | **5.69** | **246** | *e*P | Pn | 05 01 14.3 | +0.8 |
| LEPH | | | | *e*S | Sn | 05 02 18.0 | -1.2 |
| LEPH | | | | IAML | | 05 02 57.4 | |
| | comp=Z,20nm,0.5s | | | | | | |
| **KRI** | **Karoi** | **5.97** | **322** | *i* P | Pn | 05 01 14.0 | -3.5 |
| KRI | | | | *i* S | Sn | 05 02 13.3 | -13 |
| **KRI** | **Karoi** | **5.97** | **322** | *i* P | Pn | 05 01 14.0 | -3.5 |
| KRI | | | | *i* S | Sn | 05 02 13.3 | -13 |
| **LBTB** | **Lobatse** | **7.98** | **243** | *e*P | Pn | 05 01 45.7 | +0.7 |
| LBTB | | | | *e*S | Sn | 05 03 11.9 | -3.9 |
| LBTB | | | | IAML | | 05 03 57.9 | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **LBTB** | **Lobatse** | **7.98** | **243** | *i* P | Pn | 05 01 51.9 | +6.9 |
| LBTB | | | | *i* S | Sn | 05 03 16.2 | +0.4 |
| **LBTB** | **Lobatse** | **7.98** | **243** | *i* P | Pn | 05 01 51.9 | +6.9 |
| LBTB | | | | *i* S | Sn | 05 03 16.2 | +0.4 |

**IDC 10 05:11:16.7**±6.1, **22°.11S**×**148°.01E, h0**km, **mbtmp3.1**/2, **ML2.6**/3, **Error ellipse: s-maj=67.6km s-min=31.5km az=79.0, Queensland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **2.59** | **320** | Pn | Pn | 05 12 00.9 | +1.0 |
| | 0.2nm,0.3s,baz=139,slow=18,SNR=16 | | | | | | |
| CTA | | | | Pg | Pb | 05 12 04.5 | +0.4 |
| | 0.3nm,0.3s,baz=140,slow=18,SNR=7.1 | | | | | | |
| CTA | | | | Lg | Lg | 05 12 38.6 | |
| | 0.6nm,0.3s,baz=46,slow=22,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **12.95** | **277** | Pn | Pn | 05 14 21.1 | -1.0 |
| | 0.1nm,0.3s,baz=100,slow=14,SNR=2.6 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **13.10** | **260** | Pn | Pn | 05 14 23.2 | -1.0 |
| | 0.1nm,0.3s,baz=91,slow=14,SNR=2.2 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **I22FR** | **PORTLAGUERRE I** | **17.45** | **94** | I | I | 06 46 20.0 | |
| | baz=268,slow=300,SNR=2.0 | | | | | | |

*IDC **10** 05:18:13.8±3.3, 17°.64S×168°.72E, h213km±28km, mb3.6/8, mbtmp4.2/9, Error ellipse: s-maj=28.2km s-min=24.7km az=9.0*
*NEIC **10** 05:18:13.4±1.1, 17°.5S±0°.1×168°.6E±0°.2, h198km±10km, mb4.1/15, Error ellipse: s-maj=23.7km s-min=17.1km az=125.0*
*NOU **10** 05:18:16.4, 17°.67S×168°.72E, h173km, MLv4.1/14, Vanuatu Islands*

**ISC 10 05:18:13.1**±0.8, **17°.59S**±0°.08×**168°.7E**±0°.1, **h200**km, **n43,** σ1°39/45, **mb4.0**/16, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **0.31** | **230** | P | **Pn** | **05 18 42.0** | **+2.4** |
| **DVP** | **Devils Point** | **0.48** | **254** | P | **Pn** | **05 18 42.3** | **+2.2** |
| **LIFNC** | **LIFOU** | **3.44** | **203** | P | **Pn** | **05 19 08.6** | **+0.6** |
| **LIFNC** | **LIFOU** | **3.44** | **203** | | **Pn** | **05 19 08.2** | **+0.1** |
| **MARNC** | **Mare, Loyalty** | **3.92** | **189** | P | **Pn** | **05 19 14.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **L18K** | **Granite Mounta** | **84.13** | **16** | P | **P** | **05 30 21.9** | **+0.8** |
| L18K | | | | IAmb | IAmb | 05 31 02.6 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **K17K** | **Iditarod** | **84.15** | **15** | P | **P** | **05 30 22.1** | **+0.8** |
| **J17K** | **VABM Dome** | **84.55** | **14** | | **P** | **05 30 24.2** | **+0.9** |
| J17K | | | | IAmb | IAmb | 05 30 39.6 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **L19K** | **White Mountain** | **84.58** | **16** | P | **P** | **05 30 23.9** | **+0.4** |
| L19K | | | | IAmb | IAmb | 05 30 27.3 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **J18K** | **Innoko River** | **85.17** | **15** | P | **P** | **05 30 25.9** | **-0.5** |
| **SONM** | **Songino Array** | **85.59** | **323** | P | **P** | **05 30 28.9** | **0.0** |
| | comp=Z,1.2nm,0.5s,baz=134,slow=4.2,SNR=6.9 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **J19K** | **Poorman** | **85.88** | **15** | P | **P** | **05 30 30.4** | **+0.5** |
| J19K | | | | IAmb | IAmb | 05 30 52.4 | |
| | comp=Z,4.2nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **86.40** | **15** | P | **P** | **05 30 32.6** | **+0.2** |
| J20K | | | | IAmb | IAmb | 05 30 33.6 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **88.83** | **17** | P | **P** | **05 30 42.4** | **-1.5** |
| | comp=Z,0.3nm,0.5s,baz=234,slow=5.2,SNR=7.3 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.77** | **183** | P | **P** | **05 30 50.8** | **-2.3** |
| | comp=Z,0.6nm,0.7s,baz=202,slow=16,SNR=1.7 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **100.19** | **316** | P | **Pdif** | **05 31 35.8** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=100,slow=5.3,SNR=5.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **123.35** | **345** | PKP | **PKPdf** | **05 36 45.1** | **-0.5** |
| | comp=Z,0.6nm,0.5s,baz=50,slow=1.5,SNR=7.0 | | | | | | |

**IDC 10 05:19:29.2±3.0, 54°54N×87°12E, h0km, mbtmp2.9/2, ML2.7/2, Error ellipse: s-maj=23.7km s-min=17.9km az=51.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.47** | **247** | I | I | 05 27 40.0 | |
| | baz=65,slow=315,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.47** | **247** | Pg | Pn | 05 19 54.7 | -2.3 |
| | 0.8nm,0.3s,baz=63,slow=15,SNR=8.1 | | | | | | |
| ZALV | | | | Lg | Lg | 05 20 16.1 | |
| | 0.7nm,0.3s,baz=67,slow=28,SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.54** | **237** | Pn | Pn | 05 21 07.2 | +0.6 |
| | 0.1nm,0.3s,baz=53,slow=14,SNR=4.1 | | | | | | |
| KURBB | | | | Sn | Sn | 05 22 21.9 | +0.1 |
| | 0.1nm,0.3s,baz=50,slow=21,SNR=1.9 | | | | | | |
| KURBB | | | | Lg | Lg | 05 22 56.6 | |
| | baz=52,slow=32,SNR=1.2 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.34** | **203** | Pn | Pn | 05 21 32.6 | +1.3 |
| | 0.2nm,0.3s,baz=24,slow=12,SNR=7.5 | | | | | | |
| MKAR | | | | Sn | Sn | 05 23 05.2 | -0.9 |
| | baz=18,slow=30,SNR=4.7 | | | | | | |
| MKAR | | | | Lg | Lg | 05 23 53.2 | |
| | baz=23,slow=30,SNR=3.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*MDD **10** 05:26:07.4±1.7, 36°75N×9°70W, h20km±7km, mb_Lg2.4/6, Error ellipse: s-maj=12.7km s-min=9.7km az=26.0*
*SFS **10** 05:26:07.6, 36°78N×9°68W, h24km, ML2.5/6, ML2.4/6, MLv2.5/6*
*INMG **10** 05:26:07.6±1.1, 36°75N×9°69W, h18km±4km, ML1.5, Error ellipse: s-maj=6.0km s-min=5.6km az=46.0*
*IGIL **10** 05:26:08.3, 36°77N×9°67W, h16km, ML1.3*
*CNRM **10** 05:26:09.0, 36°60N×9°44W, h49km, ML1.6*
**ISC 10 05:26:03.8±2.1, 36°65N±0°05×9°80W±0°09, h31km±13km, n42, σ1s10/60, West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **0.92** | **58** | *eP* | **Pb** | **05 26 22.2** | **+1.0** |
| PFVI | | | | *eS* | **Sb** | **05 26 32.8** | **-0.2** |
| PFVI | | | | A | A | 05 26 34.0 | |
| | 12nm,0.4s | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.92** | **58** | S | **Sb** | **05 26 32.2** | **-0.9** |
| PFVI | | | | P | **Pb** | **05 26 21.4** | **+0.2** |
| **PFVI** | **Vila Bisbo** | **0.92** | **58** | P | **Pb** | **05 26 22.0** | **+0.8** |
| **PFVI** | **Vila Bisbo** | **0.92** | **58** | S | **Sn** | **05 26 33.5** | **+0.9** |
| **MORF** | **Marmelete** | **1.13** | **54** | *eP* | **Pb** | **05 26 25.3** | **+0.5** |
| MORF | | | | *eS* | **Sn** | **05 26 38.3** | **+0.4** |
| MORF | | | | A | A | 05 26 38.9 | |
| | 7.3nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **1.13** | **54** | *eP* | **Pb** | **05 26 25.2** | **+0.5** |
| MORF | | | | *eS* | **Sn** | **05 26 38.0** | **+0.2** |
| MORF | | | | IAML | | 05 26 38.6 | |
| | comp=E,8.6nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.24** | **44** | *eS* | **Sn** | **05 26 41.0** | **+0.4** |
| **PBDV** | **Barranco-do-Ve** | **1.61** | **68** | *eP* | **Pb** | **05 26 32.0** | **-0.9** |
| PBDV | | | | *eS* | **Sn** | **05 26 50.1** | **+0.3** |
| **PBDV** | **Barranco-do-Ve** | **1.61** | **68** | S | **Sn** | **05 26 49.2** | **-0.5** |
| PBDV | | | | P | **Pb** | **05 26 31.7** | **-1.1** |
| **PCVE** | **Castro Verde** | **1.71** | **55** | *eP* | **Pb** | **05 26 33.8** | **-0.8** |
| PCVE | | | | *eS* | **Sn** | **05 26 53.3** | **+1.0** |
| **PCVE** | **Castro Verde** | **1.71** | **55** | P | **Pn** | **05 26 32.6** | **+1.1** |
| PCVE | | | | S | **Sn** | **05 26 52.1** | **-0.2** |
| **MESJ** | **Messejana** | **1.73** | **46** | *eS* | **Sn** | **05 26 53.0** | **+0.3** |
| **MESJ** | **Messejana** | **1.73** | **46** | *eS* | **Sn** | **05 26 52.7** | **0.0** |
| MESJ | | | | IAML | | 05 26 54.3 | |
| | comp=E,2.0nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.77** | **34** | *eP* | **Pb** | **05 26 34.0** | **-1.7** |
| PNCL | | | | *eS* | **Sn** | **05 26 53.5** | **-0.3** |
| **PNCL** | **Nicolau / Gran** | **1.77** | **34** | P | **Pn** | **05 26 33.2** | **+0.9** |
| PNCL | | | | S | **Sn** | **05 26 53.2** | **-0.6** |
| **PVAQ** | **Vaqueiros** | **1.83** | **65** | *eP* | **Pb** | **05 26 35.0** | **-1.6** |
| PVAQ | | | | *eS* | **Sn** | **05 26 55.3** | **+0.2** |
| PVAQ | | | | A | A | 05 26 57.0 | |
| | comp=E,2.8nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.83** | **65** | P | **Pb** | **05 26 35.0** | **-1.6** |
| PVAQ | | | | S | **Sn** | **05 26 54.5** | **-0.6** |
| **PVAQ** | **Vaqueiros** | **1.83** | **65** | P | **Pb** | **05 26 35.5** | **-1.1** |
| **EGRO** | **El Granado** | **2.05** | **64** | S | **Sn** | **05 27 00.1** | **-0.5** |
| **EGRO** | **El Granado** | **2.05** | **64** | P | **Pb** | **05 26 39.5** | **-0.9** |
| EGRO | | | | S | **Sn** | **05 27 01.1** | **+0.5** |
| EGRO | | | | *i* Vmb_Lg | | 05 27 03.9 | |
| **PMAFR** | **Mafra** | **2.33** | **10** | *eS* | **Sn** | **05 27 07.8** | **+0.2** |
| **PMAFR** | **Mafra** | **2.33** | **10** | S | **Sn** | **05 27 07.0** | **-0.7** |
| **EVO** | **Evora** | **2.35** | **37** | *eS* | **Sn** | **05 27 07.3** | **-0.8** |
| **EVO** | **Evora** | **2.35** | **37** | S | **Sn** | **05 27 07.0** | **-1.1** |
| **PBAR** | **Barrancos** | **2.67** | **55** | *eS* | **Sn** | **05 27 15.5** | **-0.4** |
| **PBAR** | **Barrancos** | **2.67** | **55** | P | **Pn** | **05 26 46.1** | **+1.4** |
| **PMTG** | **Montargil** | **2.71** | **27** | *eP* | **Pn** | **05 26 47.2** | **+2.0** |
| PMTG | | | | *eS* | **Sn** | **05 27 16.6** | **-0.4** |
| **EMIN** | **Mina Concepcio** | **2.73** | **65** | S | **Sn** | **05 27 16.2** | **-1.3** |
| **EMIN** | **Mina Concepcio** | **2.73** | **65** | S | **Sn** | **05 27 16.9** | **-0.5** |
| EMIN | | | | *i* Vmb_Lg | | 05 27 24.0 | |
| **PESTR** | **Estremoz** | **2.82** | **38** | *eP* | **Pn** | **05 26 48.0** | **+1.3** |
| PESTR | | | | *eS* | **Sn** | **05 27 18.9** | **-0.7** |
| **PESTR** | **Estremoz** | **2.82** | **38** | S | **Sn** | **05 27 17.9** | **-1.7** |
| **PESTR** | **Estremoz** | **2.82** | **38** | P | **Pb** | **05 26 51.1** | **-2.4** |
| **PESTR** | **Estremoz** | **2.82** | **38** | S | **Sn** | **05 27 22.0** | **+2.4** |
| **EBAD** | **Badajoz** | **3.05** | **46** | P | **Pn** | **05 26 50.8** | **+1.0** |
| EBAD | | | | S | **Sn** | **05 27 24.3** | **-1.0** |
| EBAD | | | | *i* Vmb_Lg | | 05 27 30.7 | |
| **PMRV** | **Marv??o** | **3.36** | **34** | *eP* | **Pn** | **05 26 55.5** | **+1.4** |
| PMRV | | | | *eS* | **Sn** | **05 27 32.2** | **-0.8** |
| **ECAB** | **El Cabril** | **3.77** | **67** | P | **Pn** | **05 27 01.6** | **+1.8** |
| ECAB | | | | S | **Sn** | **05 27 41.6** | **-1.5** |
| ECAB | | | | *i* Vmb_Lg | | 05 27 51.0 | |
| **EADA** | **Adamuz** | **4.42** | **68** | *i* Vmb_Lg | | 05 27 58.4 | |
| EADA | | | | S | **Sn** | **05 27 58.8** | **-0.5** |
| **EPLA** | **Plasencia** | **4.49** | **40** | S | **Sn** | **05 27 60.0** | **-0.8** |
| EPLA | | | | *i* Vmb_Lg | | 05 28 03.6 | |
| **MD31** | **MD31** | **5.61** | **131** | P | **Pn** | **05 27 26.5** | **+1.4** |
| **MD31** | **MD31** | **5.61** | **131** | S | **Sn** | **05 28 27.0** | **-1.6** |
| **MDT** | **Midelt** | **5.74** | **130** | P | **Pn** | **05 27 28.5** | **+1.5** |
| **MDT** | **Midelt** | **5.74** | **130** | S | **Sn** | **05 28 30.5** | **-1.2** |

*IDC **10** 05:29:47.3±1.1, 15°73S×174°52W, h0km, mb4.0/7, mbtmp4.0/7, Error ellipse: s-maj=42.1km s-min=25.1km az=135.0*
*NEIC **10** 05:30:17.7±1.3, 15°7S±0°1×174°8W±0°1, h260km±12km, mb4.2/12, Error ellipse: s-maj=21.8km s-min=6.8km az=51.0*
**ISC 10 05:30:16.5±0.7, 15°8S±0°1×174°9W±0°1, h250km, n23, σ1s29/23, mb4.0/12, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **3.51** | **58** | Pn | **Pn** | **05 31 15.2** | **+0.5** |
| **NIUE** | **Niue** | **5.73** | **126** | Pn | **Pn** | **05 31 41.6** | **+0.2** |
| **URZ** | **Urewera** | **23.49** | **196** | P | **P** | **05 34 59.0** | **-5.0** |
| | 1.7nm,0.3s,baz=286,slow=23,SNR=1.3 | | | | | | |
| | 1.7nm,0.3s | | | | | | |
| **BKZ** | **Black Stump Fm** | **24.50** | **196** | P | **P** | **05 35 13.7** | **+0.4** |
| BKZ | | | | IAmb | IAmb | 05 35 33.9 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **QRZ** | **Quartz Range** | **27.25** | **201** | P | **P** | **05 35 37.2** | **-0.7** |
| **WHZ** | **Wether Hill Ro** | **33.30** | **202** | P | **P** | **05 36 31.7** | **+0.9** |
| **ARMA** | **Armidale** | **33.95** | **239** | P | **P** | **05 36 37.1** | **+0.4** |
| ARMA | | | | IAmb | IAmb | 05 36 37.9 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **COEN** | **Coen** | **40.56** | **267** | P | **P** | **05 37 33.1** | **+0.9** |
| COEN | | | | IAmb | IAmb | 05 37 46.1 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **42.64** | **240** | P | **P** | **05 37 49.4** | **+0.6** |
| **STKA** | **Stephens Creek** | **42.64** | **240** | P | **P** | **05 37 48.6** | **-0.1** |
| | comp=Z,1.2nm,0.4s,baz=54,slow=8.7,SNR=3.6 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **48.20** | **257** | P | **P** | **05 38 31.7** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 05 38 44.2 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.40** | **257** | P | **P** | **05 38 33.9** | **-0.1** |
| | comp=Z,3.5nm,0.6s,baz=91,slow=6.9,SNR=109 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **48.66** | **252** | P | **P** | **05 38 36.1** | **+0.1** |
| **ASAR** | **Alice Springs** | **48.66** | **252** | P | **P** | **05 38 35.1** | **-0.8** |
| **ASAR** | **Alice Springs** | **48.66** | **252** | P | **P** | **05 38 36.2** | **+0.2** |
| | comp=Z,8.2nm,0.6s,baz=86,slow=8.4,SNR=82 | | | | | | |
| | comp=Z,8.2nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **61.76** | **254** | P | **P** | **05 40 08.9** | **-0.4** |
| **VNDA** | **Vanda** | **62.86** | **186** | P | **P** | **05 40 16.8** | **+1.2** |
| **QSPA** | **South Pole Qui** | **74.27** | **180** | P | **P** | **05 41 26.3** | **+0.1** |
| QSPA | | | | IAmb | IAmb | 05 42 08.7 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.27** | **180** | P | **P** | **05 41 26.7** | **+0.5** |
| | comp=Z,1.6nm,1.0s,baz=336,slow=20,SNR=3.1 | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.55** | **43** | P | **P** | **05 41 33.9** | **-0.2** |
| | comp=Z,0.3nm,0.7s,baz=234,slow=7.7,SNR=3.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **83.09** | **12** | P | **P** | **05 42 12.5** | **-1.4** |
| | comp=Z,0.1nm,0.6s,baz=216,slow=5.6,SNR=1.6 | | | | | | |
| | comp=Z,0.1nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **85.78** | **10** | P | **P** | **05 42 27.2** | **-0.2** |
| E24K | | | | IAmb | IAmb | 05 42 34.1 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **85.89** | **11** | P | **P** | **05 42 27.7** | **-0.2** |

*NNC **10** 05:54:48.9±5.6, 54°18N×86°66E, h0km, mb2.7, mpv2.6, Error ellipse: s-maj=93.6km s-min=22.5km az=3.0, Suspected Mining explosion.*
*IDC **10** 05:54:51.0±2.4, 53°91N×86°60E, h0km, mbtmp3.2/2, ML3.1/2, Error ellipse: s-maj=19.6km s-min=12.8km az=60.0*
**ISC 10 05:55:00.1±2.1, 53°8N±0°3×84°0E±0°2, h0km, n7, σ0s63/8, 2C-2D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.52** | **68** | I | I | 06 01 40.0 | |
| | baz=89,slow=315,SNR=2.6 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.52** | **68** | ⇓P | **Pg** | **05 55 09.7** | **-0.4** |
| | 0.3nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **05 55 25.3** | **+0.9** |
| | 0.6nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.52** | **68** | Pg | **Pg** | **05 55 10.0** | **-0.1** |
| | 1.5nm,0.3s,baz=93,slow=11,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 05 55 25.7 | |
| | 4.4nm,0.3s,baz=95,slow=30,SNR=18 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **4.60** | **229** | Pn | **Pb** | **05 56 21.2** | **-0.4** |
| | 0.3nm,0.3s,baz=60,slow=14,SNR=9.2 | | | | | | |
| KURBB | | | | Sn | **Sg** | **05 57 28.7** | **+0.9** |
| | baz=54,slow=25,SNR=1.4 | | | | | | |
| KURBB | | | | Lg | Lg | 05 58 01.4 | |
| | baz=56,slow=33,SNR=1.3 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **4.60** | **229** | ⇓Pn | **Pb** | **05 56 21.4** | **-0.3** |
| | 1.1nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **7.06** | **190** | ⇑Pn | **Pn** | **05 56 44.4** | **-0.2** |
| | 0.2nm,0.4s,baz=27,slow=13,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.06** | **190** | Pn | **Pn** | **05 56 44.5** | **-0.1** |
| | 0.4nm,0.3s,baz=25,slow=14,SNR=11 | | | | | | |
| | 0.5nm,0.3s | | | | | | |

*BJI **10** 05:57:18.0±0.0, 18°23S×174°88W, h124km, mb4.9/27, mB5.2/10*
*NEIC **10** 05:57:19.1±2.5, 18°8S±0°1×174°95W±0°09, h134km±7km, mb4.9/60, Error ellipse: s-maj=15.1km s-min=11.8km az=171.0*
*NOU **10** 05:57:22.1, 19°04S×174°72W, h180km, mb5.1/55, Tonga Islands*
*GCMT **10** 05:57:24.1±0.3, 18°79S±0°02×174°74W±0°02, h169km±2km, MW5.0/90, Moment Tensor Solution. s40,c47; s90,c114; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr-3.06±.11; Mθθ4.59±.16; Mφφ-1.53±.15; Mrθ-0.17±.13; Mφθ0.73±.13; Mφr-1.45±.09; Best double couple: M=4.31600×10^16 NP1:φs56.00000°, δ55.00000°, λ-129.00000°. NP2:φs291.00000°, δ51.00000°, λ-48.00000°. Principal axes: T 4.6920, Plg3.0000°, Azm173.0000°; N -0.7510, Plg31.0000°, Azm81.0000°; P -3.9410, Plg59.0000°, Azm267.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*IDC **10** 05:57:26.6±1.7, 18°91S×175°09W, h206km±14km, mb4.2/19, mbtmp4.8/21, MS3.3/5 Error ellipse: s-maj=12.4km s-min=9.3km az=138.0*
**ISC 10 05:57:19.5±0.5, 19°00S±0°05×174°98W±0°05, h146km±4km, h146km:pP-P, n599, σ1s57/622, mb4.8/62, 11C-34D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **4.78** | **92** | P | **Pn** | **05 58 28.9** | **-1.1** |
| **NIUE** | **Niue** | **4.78** | **92** | Pn | **Pn** | **05 58 28.1** | **-1.9** |
| **AFI** | **Afiamalu** | **5.92** | **32** | Pn | Pn | 05 58 39.3 | -5.9 |
| **MSVF** | **Nonsavu** | **6.73** | **280** | P | Pn | 05 59 02.8 | +6.7 |
| **MSVF** | **Nonsavu** | **6.73** | **280** | Pn | Pn | 05 59 02.4 | +6.3 |
| **MSVF** | **Nonsavu** | **6.73** | **280** | P | Pn | 05 59 02.0 | +6.0 |
| | 66nm,0.8s,baz=130,slow=19,SNR=33 | | | | | | |
| **GLKZ** | **Green Lake** | **10.56** | **194** | P | **Pn** | **05 59 45.8** | **-1.2** |
| GLKZ | | | | S | **Sn** | **06 01 41.1** | **-2.7** |
| **RAR** | **Rarotonga** | **14.46** | **101** | P | **Pn** | **06 00 35.7** | **-1.7** |
| **RAR** | **Rarotonga** | **14.46** | **101** | P | **P** | **06 00 40.7** | **+0.7** |
| | 30nm,0.9s,baz=230,slow=11,SNR=5.0 | | | | | | |
| RAR | | | | LR | LR | 06 05 26.1 | |
| | comp=Z,78nm,21.2s,baz=259,slow=33 | | | | | | |
| **RTV** | **Rentapao** | **15.79** | **272** | P | **P** | **06 00 58.9** | **+4.1** |
| **DVP** | **Devils Point** | **16.03** | **272** | P | **P** | **06 01 01.3** | **+3.9** |
| **MARNC** | **Mare, Loyalty** | **16.13** | **258** | P | **P** | **06 01 02.2** | **+3.7** |
| **LIFNC** | **LIFOU** | **16.81** | **261** | P | **Pn** | **06 01 08.7** | **+2.3** |
| **LIFNC** | **LIFOU** | **16.81** | **261** | P | **Pn** | **06 01 07.9** | **+1.5** |
| **PINNC** | **Pines Island,** | **16.82** | **255** | P | **Pn** | **06 01 10.0** | **+3.6** |
| **PINNC** | **Pines Island,** | **16.82** | **255** | P | **Pn** | **06 01 08.8** | **+2.4** |
| **YATNC** | **Mamie plateau,** | **17.25** | **257** | P | **Pn** | **06 01 14.1** | **+2.5** |
| **DZM** | **Mont Dzumac** | **17.66** | **257** | P | **Pn** | **06 01 18.7** | **+2.0** |
| **DZM** | **Mont Dzumac** | **17.66** | **257** | *eP* | **P** | **06 01 16.4** | **+0.9** |
| | 176nm,1.1s | | | | | | |
| DZM | | | | *eS* | **S** | **06 04 22.6** | **-9.1** |
| | 147nm,27.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **17.66** | **257** | P | **Pn** | **06 01 19.4** | **+2.7** |
| | 59nm,0.7s,baz=87,slow=16,SNR=30 | | | | | | |
| **ONTNC** | **Ouen Toro** | **17.68** | **256** | P | **Pn** | **06 01 19.1** | **+2.3** |
| **OUZ** | **Omahuta** | **19.07** | **210** | P | **Pn** | **06 01 39.7** | **+6.7** |
| **MXZ** | **Matakaoa Point** | **19.41** | **196** | P | **Pn** | **06 01 42.1** | **+5.2** |
| **KUZ** | **Kuaotunu** | **19.48** | **203** | P | **Pn** | **06 01 37.0** | **-0.8** |
| **KOUNC** | **Koumac, New Ca** | **19.57** | **262** | P | **Pn** | **06 01 38.4** | **-0.6** |
| **HAZ** | **Te Kaha** | **19.73** | **197** | P | **Pn** | **06 01 41.9** | **+1.1** |
| HAZ | | | | S | **S** | **06 05 05.0** | **-7.2** |
| **WIAZ** | **Waiheke Island** | **19.74** | **204** | P | **Pn** | **06 01 42.6** | **+1.7** |
| **MBAZ** | **Motutapu North** | **19.81** | **205** | P | **Pn** | **06 01 44.8** | **+3.2** |
| **PUZ** | **Puketiti** | **19.90** | **196** | P | **Pn** | **06 01 45.6** | **+2.9** |
| PUZ | | | | S | **S** | **06 05 06.0** | **-10** |
| **RUGZ** | **Raukumara Rang** | **19.96** | **197** | P | Pn | 06 01 44.3 | +0.8 |
| RUGZ | | | | S | **S** | **06 05 09.6** | **-7.3** |
| **MKAZ** | **Moumakai** | **20.00** | **204** | P | Pn | 06 01 43.9 | 0.0 |
| **TWGZ** | **Tauwhareparae** | **20.07** | **196** | P | Pn | 06 01 44.6 | -0.2 |
| **WTAZ** | **Waiatarua** | **20.08** | **205** | P | Pn | 06 01 47.7 | +2.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MWZ** | **Matawai** | **20.34** | **197** | P | Pn | 06 01 49.6 | +1.6 |
| MWZ | | | | S | **S** | **06 05 20.3** | **-4.1** |
| **URZ** | **Urewera** | **20.39** | **198** | P | Pn | 06 01 47.4 | -1.1 |
| | 13nm,0.4s,baz=108,slow=3.1,SNR=22 | | | | | | |
| URZ | | | | S | **S** | **06 05 22.1** | **-3.2** |
| | 14nm,0.6s,baz=304,slow=22,SNR=9.8 | | | | | | |
| | 13nm,0.4s | | | | | | |
| **URZ** | **Urewera** | **20.39** | **198** | P | **P** | **06 01 47.1** | **+2.2** |
| URZ | | | | S | **S** | **06 05 21.5** | **-3.8** |
| **TOZ** | **Tahuroa Road** | **20.43** | **202** | P | Pn | 06 01 48.5 | -0.5 |
| **RAGZ** | **Rawiri** | **20.52** | **197** | P | Pn | 06 01 50.9 | +0.7 |
| **RIGZ** | **Rimuhau** | **20.63** | **196** | P | Pn | 06 01 52.3 | +1.0 |
| RIGZ | | | | S | **S** | **06 05 22.5** | **-7.5** |
| **MUGZ** | **Murupara** | **20.70** | **199** | P | Pn | 06 01 53.3 | +1.2 |
| **RTZ** | **Ruatahuna** | **20.76** | **198** | P | Pn | 06 01 52.2 | -0.9 |
| **RTZ** | **Ruatahuna** | **20.76** | **198** | P | Pn | 06 01 52.2 | -0.8 |
| **SNGZ** | **Shannon Statio** | **20.81** | **197** | P | Pn | 06 01 53.5 | -0.1 |
| SNGZ | | | | S | **S** | **06 05 26.5** | **-7.0** |
| **MTHZ** | **Maungataniwha** | **21.02** | **198** | P | **P** | **06 01 53.8** | **+2.2** |
| MTHZ | | | | S | **S** | **06 05 30.6** | **-6.9** |
| **NMHZ** | **Naumai** | **21.26** | **198** | P | **P** | **06 01 58.8** | **+4.6** |
| NMHZ | | | | S | **S** | **06 05 40.8** | **-1.1** |
| **HIZ** | **Hauiti** | **21.36** | **202** | P | **P** | **06 02 01.1** | **+5.9** |
| **BKZ** | **Black Stump Fm** | **21.41** | **198** | P | **P** | **06 01 57.9** | **+2.0** |
| **BKZ** | **Black Stump Fm** | **21.41** | **198** | P | **P** | **06 01 57.9** | **+2.0** |
| BKZ | | | | S | **S** | **06 05 42.0** | **-2.7** |
| **OTVZ** | **Oturere** | **21.67** | **200** | P | **P** | **06 02 00.3** | **+1.6** |
| OTVZ | | | | S | **S** | **06 05 54.7** | **+5.4** |
| **SNVZ** | **South Ngauruho** | **21.70** | **200** | P | **P** | **06 02 01.4** | **+2.4** |
| SNVZ | | | | S | **S** | **06 05 51.0** | **+1.1** |
| **CKHZ** | **Cape Kidnapper** | **21.70** | **197** | P | **P** | **06 01 57.3** | **-1.6** |
| **WNVZ** | **Wahianoa** | **21.84** | **200** | P | **P** | **06 02 02.4** | **+1.9** |
| WNVZ | | | | S | **S** | **06 05 56.3** | **+4.0** |
| **KAHZ** | **Kahuranaki** | **21.89** | **197** | P | **P** | **06 02 05.6** | **+4.8** |
| KAHZ | | | | S | **S** | **06 05 53.0** | **+0.3** |
| **PKVZ** | **Pokaka** | **21.89** | **200** | P | **P** | **06 02 02.2** | **+1.4** |
| **PXZ** | **Pawanui** | **22.11** | **197** | P | **P** | **06 02 07.6** | **+4.6** |
| PXZ | | | | S | **S** | **06 05 56.1** | **-0.3** |
| **PNHZ** | **Pukenui** | **22.19** | **198** | P | **P** | **06 02 00.3** | **-3.6** |
| PNHZ | | | | S | **S** | **06 05 55.8** | **-2.0** |
| **PPT2** | **Papeete2** | **24.16** | **91** | *eP* | **P** | **06 02 15.3** | **-7.1** |
| | 59nm,23.2s | | | | | | |
| PPT2 | | | | *eS* | **S** | **06 06 33.3** | **+3.2** |
| | 346nm,27.2s | | | | | | |
| PPT2 | | | | *eLR* | LR | 06 08 07.8 | |
| | 136nm,25.8s | | | | | | |
| PPT2 | | | | *eLR* | LR | 06 08 16.7 | |
| | 121nm,39.5s | | | | | | |
| **PPT** | **Papeete** | **24.16** | **91** | LR | LR | 06 09 43.3 | |
| | comp=Z,57nm,18.3s,baz=258,slow=30 | | | | | | |
| **TBI** | **Tubuai** | **24.18** | **105** | *eS* | S | 06 06 45.8 | +16 |
| | 2µm,28.0s | | | | | | |
| **THZ** | **Tophouse** | **24.93** | **202** | P | **P** | **06 02 31.5** | **+2.4** |
| THZ | | | | IAmb | IAmb | 06 02 37.5 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **GVZ** | **Greta Valley S** | **25.95** | **200** | P | **P** | **06 02 38.8** | **+0.4** |
| GVZ | | | | IAmb | IAmb | 06 02 43.4 | |
| | comp=Z,70nm,1.1s | | | | | | |
| **JCZ** | **Jackson Bay** | **28.47** | **205** | P | **P** | **06 03 01.1** | **+0.3** |
| **WHZ** | **Wether Hill Ro** | **30.31** | **204** | P | **P** | **06 03 18.5** | **+1.5** |
| WHZ | | | | IAmb | IAmb | 06 03 22.5 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **32.00** | **252** | P | **P** | **06 03 32.5** | **+0.4** |
| **EIDS** | **Eidsvold** | **32.00** | **252** | P | **P** | **06 03 32.3** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 06 03 34.4 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **ARMA** | **Armidale** | **32.28** | **243** | P | **P** | **06 03 36.0** | **+1.4** |
| **RK1H** | **Rockhampton Ha** | **32.44** | **256** | P | **P** | **06 03 37.2** | **+1.3** |
| **TAOE** | **Nuku Hiva Isla** | **35.22** | **78** | *eLR* | LR | 06 13 10.0 | |
| | comp=Z,251nm,32.8s | | | | | | |
| **TV1H** | **Townsville Har** | **36.06** | **263** | P | **P** | **06 04 08.7** | **+1.5** |
| **CTAO** | **Charters Tower** | **36.49** | **262** | P | **P** | **06 04 11.8** | **+0.9** |
| **CTAO** | **Charters Tower** | **36.49** | **262** | P | **P** | **06 04 10.9** | **0.0** |
| **CTAO** | **Charters Tower** | **36.49** | **262** | P | **P** | **06 04 11.7** | **+0.7** |
| CTAO | | | | sP | **sP** | **06 04 56.0** | **-2.1** |
| **PMG** | **Port Moresby** | **37.84** | **279** | P | **P** | **06 04 23.6** | **+1.2** |
| **PMG** | **Port Moresby** | **37.84** | **279** | P | **P** | **06 04 23.5** | **+1.2** |
| **PMG** | **Port Moresby** | **37.84** | **279** | P | **P** | **06 04 22.2** | **-0.1** |
| **PMG** | **Port Moresby** | **37.84** | **279** | P | **P** | **06 04 23.1** | **+0.8** |
| **QLP** | **Quilpie** | **38.22** | **251** | P | **P** | **06 04 25.8** | **+0.4** |
| **MTSU** | **Mount Surprise** | **38.53** | **265** | P | **P** | **06 04 28.9** | **+0.8** |
| **STKA** | **Stephens Creek** | **41.00** | **243** | P | **P** | **06 04 49.7** | **+1.4** |
| **STKA** | **Stephens Creek** | **41.00** | **243** | P | **P** | **06 04 48.9** | **+0.5** |
| **STKA** | **Stephens Creek** | **41.00** | **243** | P | **P** | **06

comp=Z,6.4nm,0.8s,baz=48,slow=2.0,SNR=33
QSPA LR LR 06 37 01.0
comp=Z,33nm,19.2s,baz=162,slow=33
comp=Z,6.4nm,0.8s
**QSPA South Pole Qui** 71.07 180 P P 06 08 23.8 +2.2
**JMN Monobe** 71.58 317 P P 06 08 25.5 +0.5
**JNU Nakatsue** 73.19 315 P P 06 08 34.0 -0.5
**YOJ Yonaguni jima** 74.25 303 P P 06 08 41.2 +0.4
**YOJ Yonaguni jima** 74.25 303 P P 06 08 41.0 +0.2
**PKM Mcpherson Peak** 74.93 44 P P 06 08 45.0 +0.2
baz=234
**YULB Yu-li** 75.10 302 P P 06 08 45.4 -0.4
**YULB Yu-li** 75.10 302 P P 06 08 44.5 -1.3
YULB IAmb IAmb 06 08 45.8
comp=Z,23nm,0.8s
**NACB Ninganchiao** 75.23 302 P P 06 08 46.3 -0.2
**NACB Ninganchiao** 75.23 302 P P 06 08 46.3 -0.2
**SSLB Suanglung** 75.56 302 P P 06 08 48.2 -0.2
**SSLB Suanglung** 75.56 302 P P 06 08 47.3 -1.2
**TPUB Ta-pu** 75.59 301 P P 06 08 47.7 -0.9
**TPUB Ta-pu** 75.59 301 P P 06 08 47.3 -1.3
**YHNB Yeheng** 75.65 303 P P 06 08 49.2 +0.2
**ARVC Arvin** 75.72 45 P P 06 08 49.4 +0.3
baz=234
**MURC Murrieta** 75.95 47 P P 06 08 50.3 -0.1
baz=236
**VES Vestal, Richgr** 75.97 44 P P 06 08 50.7 +0.2
baz=234
**BFSC Mount Baldy Ra** 76.00 46 P P 06 08 51.2 +0.4
baz=235
**KSM Kuching** 76.04 276 P P 06 08 52.0 +0.6
**MONP2 Monument Peak** 76.09 48 P P 06 08 51.7 +0.2
baz=236
**EDW2 Edwards Air Fo** 76.14 45 P P 06 08 51.9 +0.3
baz=235
**IKP In-Ko-Pah, Jac** 76.18 48 P P 06 08 52.1 +0.2
baz=237
**ISA Isabella, Lake** 76.27 44 P P 06 08 52.6 +0.4
baz=234,SNR=5.4
**CHGN Chignik** 76.30 9 P P 06 08 53.7 +1.9
baz=196
**PFO Pinyon Flats O** 76.47 47 P P 06 08 53.6 +0.1
baz=236
**TPFO Pinon Flats** 76.47 47 P P 06 08 53.6 +0.1
baz=236
**CWC Cottonwood Cre** 76.98 44 P P 06 08 56.7 +0.4
baz=234
**BELC Belle Mtn. Jos** 77.00 47 P P 06 08 56.7 +0.2
baz=236
**OMMB Old Mammoth Mi** 77.07 42 P P 06 08 57.0 -0.1
**MPMC Manual Prospec** 77.15 44 P P 06 08 57.7 +0.4
baz=235,SNR=9.6
**GSC Goldstone, Bar** 77.18 45 P P 06 08 57.9 +0.5
baz=236
**BC3 Big Chuckawall** 77.19 47 P P 06 08 57.6 +0.1
baz=237
**HEC Hector,Ludlow** 77.23 46 P P 06 08 57.8 +0.1
baz=236
**SII Sitkinak Islan** 77.27 12 P P 06 08 57.7 +0.3
baz=200
**GLA Glamis** 77.30 48 P P 06 08 58.7 +0.6
baz=237
**YBH Yreka Blue Hor** 77.36 37 P P 06 08 58.8 +0.5
**R16K Pilot Point** 77.64 10 P P 06 09 01.2 +1.9
baz=197
**GMRC Granite Mounta** 77.67 46 P P 06 09 00.9 +0.7
baz=236
**IRM Iron Mountain** 77.68 47 P P 06 09 00.9 +0.8
baz=237
**KSRS Korea Array** 77.69 317 P P 06 09 00.7 +0.6
comp=Z,12nm,1.1s,baz=135,slow=6.2,SNR=27
comp=Z,12nm,1.1s
**KSAR Wonju Array Be** 77.71 317 P P 06 09 00.3 +0.2
**GRAC Grapevine Rang** 77.77 44 P P 06 09 01.2 +0.6
baz=235,SNR=6.5
**FURC Furnace Creek,** 77.80 44 P P 06 09 01.5 +0.8
baz=235
**SHOC Shoshone, Teco** 77.87 45 P P 06 09 00.9 -0.3
baz=236
**R17L Mt. Peulik Vol** 77.90 10 P P 06 09 00.7 -0.1
baz=198
**PLK4 Peulik 4** 77.90 10 P P 06 09 00.8 -0.1
PLK4 IAmb IAmb 06 09 01.3
comp=Z,8.9nm,0.7s
**NVAR Mina Array Bea** 78.00 42 P P 06 09 02.5 +0.5
**NVAR Mina Array Bea** 78.00 42 P P 06 09 02.3 +0.2
comp=Z,4.0nm,0.9s,baz=228,slow=9.4,SNR=26
comp=Z,4.0nm,0.9s
**OHAK Old Harbor** 78.07 12 P P 06 09 01.8 +0.1
baz=201
**214A Organ Pipe Nat** 78.17 50 P P 06 09 03.5 +0.6
baz=239
**TPNV Topopah Spring** 78.48 44 P P 06 09 04.8 +0.2
baz=236,SNR=5.1
**KVN Kaiserville** 78.49 42 P P 06 09 04.8 +0.1
**Q17K Contact Creek** 78.58 10 P P 06 09 03.8 -0.8
baz=198
**KDAK Kodiak Island** 78.73 12 P P 06 09 05.0 -0.3
baz=202
**O14K Tigvukauivet M** 78.77 7 P P 06 09 05.2 -0.2
baz=193
**Q16K King Salmon** 78.85 10 P P 06 09 05.3 -0.6
baz=198
**P16K Nushagak River** 78.99 9 P P 06 09 05.7 -0.9
baz=196
**Q18K Katmai Hardscr** 79.10 10 P P 06 09 06.3 -1.1
baz=199
**J05D Fort Rock, OR** 79.19 37 P P 06 09 08.4 +0.1
**USRK Ussuriysk Ar.** 79.37 324 P P 06 09 09.6 +0.5
comp=Z,2.9nm,0.8s,baz=132,slow=3.1,SNR=6.0
comp=Z,2.9nm,0.8s
**N14K Kuskokwak Cree** 79.38 7 P P 06 09 07.7 -1.0
baz=193
**P17K Kvichak River** 79.38 10 P P 06 09 07.6 -1.2
baz=198
**O16K Kokwok River B** 79.52 9 P P 06 09 08.0 -1.5
baz=196
**Q20K Shuyak Island** 79.54 12 P P 06 09 08.7 -0.9
baz=202
**Q19K Cape Douglas,** 79.60 11 P P 06 09 09.1 -0.9
baz=200
**PINE Pine Mountain** 79.67 37 P P 06 09 10.4 -0.7
**R11B Troy Canyon, C** 79.70 43 P P 06 09 11.0 -0.3
baz=236
**P18K Big Mountain,** 79.76 10 P P 06 09 09.4 -1.5
P18K IAmb IAmb 06 09 10.7
comp=Z,19nm,0.8s
**P18K Big Mountain,** 79.76 10 P P 06 09 09.5 -1.5
baz=199,SNR=6.4
**N15K Kwethluk River** 79.81 8 P P 06 09 10.7 -0.5
baz=194
**TUC Tucson** 79.83 51 P P 06 09 12.3 +0.3
**TUC Tucson** 79.83 51 P P 06 09 12.5 +0.5
baz=240
**O17K Koliganek Bris** 79.83 9 P P 06 09 10.0 -1.2
baz=197
**M14K Bethel** 80.16 6 P P 06 09 12.6 -0.3
baz=192
**WVOR Wild Horse Val** 80.17 39 P P 06 09 13.4 -0.3
**O18K Koktuh Hills** 80.21 10 P P 06 09 12.2 -1.1
O18K IAmb IAmb 06 09 13.4
comp=Z,18nm,1.1s
**O18K Koktuh Hills** 80.21 10 P P 06 09 12.4 -0.9
baz=199,SNR=5.2
**M15K Kasigluk River** 80.25 7 P P 06 09 13.2 -0.3
baz=194,SNR=5.6
**N16K Nishlik Lake** 80.27 8 P P 06 09 13.3 -0.3
baz=196
**P19K Oil Pt** 80.36 11 P P 06 09 13.0 -1.1
baz=201
**X16A Lo Mia Camp, P** 80.42 49 P P 06 09 15.7 +0.4
**N17K Nushagak Hills** 80.54 9 P P 06 09 14.3 -0.7
baz=197
**L14K Kuka Creek** 80.67 6 P P 06 09 15.7 +0.1
baz=192
**O19K Port Alsworth** 80.68 10 P P 06 09 14.6 -1.1
baz=200
**M16K Timber Creek** 80.78 8 P P 06 09 16.2 -0.1
M16K IAmb IAmb 06 09 17.7
comp=Z,30nm,1.2s
**M16K Timber Creek** 80.78 8 P P 06 09 16.6 +0.3
baz=195,SNR=6.4
**U15A North Rim** 80.86 47 P P 06 09 18.0 +0.3
**N18K Kilae Creek** 80.88 9 P P 06 09 16.0 -0.9
baz=198
**BRSE Bradley Lake S** 80.91 12 P P 06 09 16.3 -0.7
baz=203
**MDJ Mudanjiang** 80.97 323 P P 06 09 18.7 +1.0
MDJ pmax pmax
comp=Z,14nm,0.9s
**WUAZ Wupatki** 81.03 48 P P 06 09 18.5 0.0
baz=239
**K13K Kusilvak Mount** 81.07 5 P P 06 09 18.4 +0.6
baz=190
**L15K Ungalak Mounta** 81.12 6 P P 06 09 17.9 -0.2
baz=193,SNR=6.1
**NJ2 Nanjing** 81.15 308 eP P 06 09 20.8 +1.9
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
NJ2 pmax pmax
comp=Z,200nm,5.0s
**N19K Bonanza Creek** 81.23 10 P P 06 09 18.5 -0.3
baz=200
**M17K Holitna River** 81.35 8 P P 06 09 19.4 +0.2
baz=197,SNR=5.0
**L16K Owhat River** 81.38 7 P P 06 09 19.7 +0.3
baz=195
**SEW Seward** 81.51 13 P P 06 09 19.9 -0.2
baz=204
**M18K Stony River** 81.67 9 P P 06 09 20.4 -0.5
baz=198
**K15K Wolf Creek Mou** 81.72 6 P P 06 09 21.7 +0.5
baz=193,SNR=18
**L17K Donlin** 81.94 8 P P 06 09 22.5 +0.2
baz=196,SNR=9.8
**J14K Nanvaranak Lak** 81.97 5 P P 06 09 22.5 +0.1
baz=191
**E07A Sunnyside** 82.00 35 P P 06 09 22.9 -0.2
E07A IAmb IAmb 06 09 24.2
comp=Z,19nm,1.3s
**121A Cookes Peak, D** 82.15 52 P P 06 09 25.6 +1.2
baz=242,SNR=6.2
**L18K Granite Mounta** 82.24 9 P P 06 09 24.1 +0.2
baz=197,SNR=6.2
**M19K Big River Lodg** 82.28 10 P P 06 09 22.9 -1.3
baz=200
**RC01 Rabbit Creek A** 82.35 12 P P 06 09 23.7 -0.9
baz=204
**PWL Port Wells** 82.43 13 P P 06 09 23.7 -1.2
baz=205,SNR=5.4
**M20K Styx River** 82.47 10 P P 06 09 24.0 -1.3
baz=201
**L19K White Mountain** 82.47 9 P P 06 09 24.4 -0.8
baz=199
**KAIM Kayak Island** 82.48 15 P P 06 09 24.2 -1.1
baz=209
**K17K Iditarod** 82.50 8 P P 06 09 25.3 0.0
baz=196
**SUA Susitna One** 82.50 11 P P 06 09 24.1 -1.3
baz=203
**DUG Dugway, Tooele** 82.51 43 P P 06 09 26.0 -0.1
baz=238
**V35K Ketchikan** 82.67 23 P P 06 09 26.0 -0.3
baz=221
**GLI Glacier Island** 82.71 13 P P 06 09 25.2 -1.2
baz=206,SNR=8.3
**EYAK Cordova Ski Ar** 82.72 14 P P 06 09 25.4 -1.0
baz=208
**U33K Whale Pass** 82.72 22 P P 06 09 26.7 +0.1
baz=220
**KLR Kul'dur** 82.72 328 LR LR 06 40 57.0
comp=Z,24nm,20.6s,baz=104,slow=32
**J16K Anvik River** 82.78 6 P P 06 09 26.9 +0.2
baz=194,SNR=7.5
**SKT Skwentna** 82.83 11 P P 06 09 25.4 -1.6
baz=202
**BNX BinXian** 82.88 323 ⇑P P 06 09 27.7 +0.1
BNX pmax pmax
comp=Z,17nm,0.9s
**CN2 Changchun** 82.89 321 P P 06 09 27.7 0.0
CN2 pmax pmax
comp=Z,10.0nm,0.9s
**M22K Willow** 82.89 12 P P 06 09 25.9 -1.3
baz=204
**KNK Knik Glacier** 82.90 13 P P 06 09 26.3 -1.1
baz=205
**L20K Farewell, AK** 82.90 10 P P 06 09 26.2 -1.2
baz=200,SNR=5.5
**PMR Palmer** 82.93 12 P P 06 09 26.6 -0.9
**PMR Palmer** 82.93 12 P P 06 09 26.2 -1.3
baz=205,SNR=5.1
**J17K VABM Dome** 83.06 7 P P 06 09 28.3 +0.2
baz=195
**S32K Killisnoo** 83.28 21 P P 06 09 29.0 -0.4
baz=218
**SML Sawmill** 83.29 12 P P 06 09 29.7 +0.2
baz=205
**SPUT South Promonto** 83.34 42 P P 06 09 30.2 -0.1
SPUT IAmb IAmb 06 09 31.6
comp=Z,12nm,1.2s
**HLID Hailey** 83.35 40 P P 06 09 30.6 +0.3
baz=206,SNR=17
**BMRM Bremner River** 83.35 14 P P 06 09 29.1 -0.7
baz=209,SNR=5.4
**I17K Unalakleet** 83.36 6 P P 06 09 29.8 +0.1
baz=194
**M23K Glacier View** 83.40 13 P P 06 09 29.9 -0.1
baz=206
**J18K Innoko River** 83.43 8 P P 06 09 29.8 -0.3
baz=197,SNR=12
**CUT Chulitna** 83.46 11 P P 06 09 29.8 -0.4
baz=204
**KLU Klutina** 83.52 14 P P 06 09 29.8 -0.9
baz=208
**SCM Sheep Creek Mo** 83.52 13 P P 06 09 30.5 -0.2
baz=206,SNR=8.9
**CRQE Cirque** 83.53 15 P P 06 09 31.1 +0.3
baz=210
**MNTX Cornudas Mount** 83.57 54 P P 06 09 32.4 +0.8
baz=243
**PPLA Purkeypile** 83.57 10 P P 06 09 30.7 -0.3
baz=202
**PNL Peninsula** 83.58 17 P P 06 09 31.1 +0.2
baz=214
**K20K Telida** 83.70 9 P P 06 09 30.5 -1.0
baz=200,SNR=7.4
**TX31 Lajitas Ar. Si** 83.86 56 P P 06 09 33.4 +0.2
TX31 IAmb IAmb 06 09 35.7
comp=Z,24nm,1.4s
**TXAR Lajitas Array** 83.86 56 P P 06 09 33.7 +0.5
**TXAR Lajitas Array** 83.86 56 P P 06 09 34.2 +1.0
comp=Z,6.7nm,1.1s,baz=217,slow=5.6,SNR=36
comp=Z,6.7nm,1.1s
**WHN Wuhan** 83.88 305 P P 06 09 34.0 +0.9
**N25K Chitina, Valde** 83.92 14 P P 06 09 31.6 -1.1
baz=209,SNR=8.0
**MAW Mawson** 83.92 199 P P 06 09 32.7 0.0
comp=Z,8.8nm,1.1s,baz=113,slow=5.2,SNR=5.4
comp=Z,8.8nm,1.1s
**H16K Elim** 83.94 5 P P 06 09 32.3 -0.4
baz=192
**M24K Tolsona, Glenn** 84.01 13 P P 06 09 32.7 -0.4
baz=207
**P29M Windy Craggy** 84.03 18 P P 06 09 32.9 -0.3
baz=215
**J19K Poorman** 84.08 8 P P 06 09 33.0 -0.4
baz=198
**WAT6 Susitna Watana** 84.11 12 P P 06 09 32.8 -0.9
baz=206,SNR=6.8
**G15K Niukluk** 84.15 5 P P 06 09 33.6 -0.1
baz=190
**CTG Chitna Glacier** 84.16 16 P P 06 09 33.1 -0.9
baz=212
**WAT1 Susitna Watana** 84.17 12 P P 06 09 32.8 -1.1
baz=205
**ANMO Albuquerque** 84.26 50 P P 06 09 35.7 +0.5
baz=242
**O28M Mount Upton** 84.29 16 P P 06 09 34.3 -0.5
baz=213
**PLBC Pleasant Camp** 84.30 19 P P 06 09 34.3 -0.2
baz=216
**O29M Mount Kennedy** 84.34 17 P P 06 09 34.5 -0.4
baz=214
**TIA Tai'an** 84.39 311 P P 06 09 35.8 +0.2
TIA pmax pmax
comp=Z,10.0nm,0.9s
**F14K Arctic Creek** 84.47 4 P P 06 09 34.9 -0.4
baz=188
**H17K Granite Mounta** 84.47 6 P P 06 09 34.9 -0.3
baz=194
**J20K Nowinta River** 84.47 9 P P 06 09 34.7 -0.5
baz=200,SNR=12
**CHUM Lake Minchumin** 84.47 10 P P 06 09 33.8 -1.5
baz=202
**HARP HAARP** 84.49 13 P P 06 09 35.2 -0.3
baz=208
**NEW Newport** 84.51 35 P P 06 09 35.3 -0.7
baz=234
**SKAG Skagway** 84.61 19 P P 06 09 36.1 0.0
baz=217
**DHY Denali Highway** 84.63 12 P P 06 09 35.3 -1.0
baz=206
**GCSA Galena City Sc** 84.63 8 P P 06 09 36.0 -0.1
baz=197
**P30M Million Dollar** 84.66 18 P P 06 09 36.5 0.0
baz=216
**G16K Koyuk River** 84.68 5 P P 06 09 35.9 -0.4
baz=192
**F15K North Star Dit** 84.81 4 P P 06 09 36.3 -0.7
baz=190
**YUK8 Steele Glacier** 84.84 16 P P 06 09 37.1 -0.4
baz=213,SNR=6.3
**H18K Honhosa River** 84.84 7 P P 06 09 36.3 -0.9
baz=196
**BPAW Bear Paw Mtn.** 84.90 10 P P 06 09 35.6 -1.9
baz=203
**MCK McKinley** 84.92 11 P P 06 09 36.5 -1.1
baz=205,SNR=12
**PAX Paxson** 84.93 13 P P 06 09 36.5 -1.3
baz=208,SNR=5.2
**YUK6 Outpost Mounta** 84.93 17 P P 06 09 36.6 -1.4
baz=214
**G17K Kiwalik Mounta** 84.94 6 P P 06 09 37.0 -0.6
baz=194,SNR=5.5
**M26K Nabesna, AK** 84.98 14 P P 06 09 37.5 -0.5
baz=210,SNR=14
**I20K Naaghedeneel** 85.00 9 P P 06 09 37.7 -0.2
baz=199,SNR=5.3
**YUK3 Moose Creek** 85.07 16 P P 06 09 38.0 -0.6
baz=213,SNR=6.0
**YUK4 Talbot Arm** 85.19 17 P P 06 09 39.4 +0.1
baz=214
**Q32M Nakina River** 85.21 21 P P 06 09 39.0 -0.4
baz=220
**M27K Edge Creek, AK** 85.21 15 P P 06 09 39.1 -0.1
M27K IAmb IAmb 06 09 40.3
comp=Z,27nm,1.1s
**M27K Edge Creek, AK** 85.21 15 P P 06 09 38.6 -0.6
baz=211,SNR=18
**P32M Atlin** 85.22 20 P P 06 09 38.9 -0.3
baz=219
**MENT Mentasta** 85.28 14 P P 06 09 39.2 -0.3
**S22A 4UR Ranch, Cre** 85.30 48 P P 06 09 40.6 +0.1
baz=242,SNR=14
**UBPT Khong Chiam** 85.36 288 P P 06 09 41.7 +0.9
**MNHN Monahans** 85.43 55 P P 06 09 41.4 +0.4
MNHN IAmb IAmb 06 09 42.7
comp=Z,15nm,0.9s
**REDW Red Top Meadow** 85.43 41 P P 06 09 40.6 -0.3
**H19K Roundabout Mou** 85.44 8 P P 06 09 40.0 -0.1
baz=198,SNR=8.4
**O30N Mendenhall** 85.44 18 P P 06 09 40.1 -0.2
baz=217,SNR=5.8
**L26K Log Cabin Wild** 85.44 14 P P 06 09 40.0 -0.2
baz=210,SNR=8.0
**MSO Missoula** 85.45 37 P P 06 09 39.7 -1.0
baz=236
**O20A White River Ci** 85.48 45 P P 06 09 41.1 -0.2
baz=241
**G18K Tagagawik** 85.53 7 P P 06 09 39.8 -0.8
baz=196,SNR=7.3
**DLBC Dease Lake** 85.58 22 P P 06 09 40.9 -0.2
baz=222
**K24K Donnelly Dome** 85.60 13 P P 06 09 40.4 -0.7
baz=208,SNR=9.2
**H20K Anotleneega Mo** 85.61 8 P P 06 09 40.9 -0.1
baz=199,SNR=7.6
**NEA2 Nenana** 85.68 11 P P 06 09 39.8 -1.5
baz=204,SNR=9.3
**WHY Whitehorse** 85.71 19 P P 06 09 41.5 -0.2
baz=218
**N30M Aishikik Lake** 85.71 17 P P 06 09 41.7 0.0
baz=216
**WRH Wood River Hil** 85.75 11 P P 06 09 40.7 -1.0
WRH IAmb IAmb 06 09 41.8
comp=Z,39nm,1.0s
**MLY Manley** 85.80 10 P P 06 09 40.4 -1.6
baz=203,SNR=14
**F17K Baldwin Pennin** 85.80 5 P P 06 09 41.4 -0.5
baz=193
**L27K Beaver Creek,** 85.83 14 P P 06 09 41.6 -0.6
baz=211,SNR=9.6
**HDA Harding Lake** 85.91 12 P P 06 09 41.4 -1.0
baz=206,SNR=17
**BW06 Boulder Array** 85.94 42 P P 06 09 42.5 -0.9
baz=240
**PDAR Pinedale Array** 85.94 42 P P 06 09 42.5 -0.9
comp=Z,3.0nm,1.0s,baz=222,slow=4.0,SNR=16
PDAR PKKPbc **PKKPbc** 06 27 43.4 -1.6
comp=Z,0.1nm,0.3s,baz=90,slow=8.9,SNR=3.7
comp=Z,3.0nm,1.0s
**G19K Purcell Mounta** 85.95 7 P P 06 09 42.4 -0.3
G19K IAmb IAmb 06 09 43.4
comp=Z,17nm,1.1s
**G19K Purcell Mounta** 85.95 7 P P 06 09 42.2 -0.4
baz=197,SNR=11
**CCB Clear Creek Bu** 85.96 11 P P 06 09 41.4 -1.3
CCB IAmb IAmb 06 09 42.6
comp=Z,19nm,0.8s
**R33M Jennings River** 85.98 21 P P 06 09 42.8 -0.3
baz=221
**P33M Teslin, Yukon** 85.99 20 P P 06 09 42.8 -0.3
baz=220
**H21K Melozitna Rive** 86.06 9 P P 06 09 43.2 0.0
H21K IAmb IAmb 06 09 44.7
comp=Z,17nm,1.1s
**H21K Melozitna Rive** 86.06 9 P P 06 09 42.7 -0.5
baz=201,SNR=17
**N31M Braeburn, Yuko** 86.10 18 P P 06 09 43.2 -0.4
baz=217,SNR=5.5
**F18K Selawik** 86.11 6 P P 06 09 42.6 -0.8
baz=194
**BOZ Bozeman (W)** 86.13 39 P P 06 09 43.5 -0.7
baz=238,SNR=6.2
**H17A Grant Village** 86.13 40 P P 06 09 45.4 +1.0
baz=239
**SCRK Sand Creek** 86.14 13 P P 06 09 43.2 -0.5
baz=209,SNR=12
**I23K Minto, Yukon-K** 86.14 11 P P 06 09 42.4 -1.2
baz=204,SNR=10
**M29M Somme Creek** 86.15 16 P P 06 09 43.5 -0.3
baz=214,SNR=10
**COLA College** 86.16 11 P P 06 09 42.4 -1.2
**COLA College** 86.16 11 P P 06 09 42.7 -1.0
baz=206
**IMAR Indian Mountai** 86.23 9 P P 06 09 42.7 -1.3
**SDCO Great Sand Dun** 86.23 48 P P 06 09 44.6 -0.5
baz=243,SNR=6.8
**ILAR Eielson Array** 86.25 12 P P 06 09 42.9 -1.3
comp=Z,4.4nm,0.8s,baz=214,slow=5.5,SNR=42
comp=Z,4.4nm,0.8s
**E17K Hotham Inlet** 86.38 5 P P 06 09 43.9 -0.8
baz=192
**J25K Salcha River,** 86.41 12 P P 06 09 44.1 -0.9
baz=208,SNR=20
**POKR Poker Plat Res** 86.46 11 P P 06 09 43.6 -1.6
baz=206,SNR=6.1
**H22K Ishtalitna Cre** 86.50 9 P P 06 09 44.2 -1.1
baz=202
**F19K Shaleruckik Mo** 86.53 7 P P 06 09 44.5 -1.0
baz=196,SNR=12
**MSTX Muleshoe** 86.54 52 P P 06 09 46.5 0.0
baz=245
**K27K Chicken** 86.60 14 P P 06 09 45.5 -0.4
baz=211
**HNS HongShan** 86.66 311 ⇓P P 06 09 47.6 +0.8
HNS pmax pmax
comp=Z,16nm,1.0s
**J26L Joseph Creek** 86.68 13 P P 06 09 46.0 -0.4
baz=210,SNR=27
**H23K Yukon River** 86.73 10 P P 06 09 45.2 -1.3
baz=204
**T25A Trinidad** 86.73 49 P P 06 09 47.2 -0.3
baz=243
**G21K Allakaket** 86.77 8 P P 06 09 45.9 -0.7
baz=200,SNR=7.0
**L29M L29M** 86.78 16 P P 06 09 46.8 0.0
baz=215,SNR=22
**E18K Tukpahlearik C** 86.82 6 P P 06 09 46.0 -0.9
E18K IAmb IAmb 06 09 47.6
comp=Z,18nm,1.3s
**E18K Tukpahlearik C** 86.82 6 P P 06 09 46.3 -0.5
baz=194,SNR=6.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 833A | Chaparral WMA, baz=247 | 86.85 | 59 | P | | P | 06 09 48.1 | +0.2 |
| F20K | Avaraart Lake baz=198 | 86.98 | 7 | P | | P | 06 09 47.1 | -0.5 |
| H24K | Noodor Dome baz=206 | 87.03 | 11 | P | | P | 06 09 48.0 | 0.0 |
| M31M | Drury Creek, Y baz=218 | 87.07 | 18 | P | | P | 06 09 47.9 | -0.3 |
| ISCO | Idaho Springs baz=242 | 87.10 | 46 | P | | P | 06 09 48.9 | -0.4 |
| PRP | Porcupine Dome baz=208,SNR=7.7 | 87.18 | 12 | P | | P | 06 09 47.8 | -1.1 |
| E19K | Redstone River baz=197,SNR=8.8 | 87.19 | 7 | P | | P | 06 09 48.4 | -0.3 |
| DAWY | Dawson | 87.26 | 15 | P | | P | 06 09 48.5 | -0.5 |
| DAWY | comp=Z,14nm,0.8s | | | IAmb | IAmb | IAmb | 06 09 50.0 | |
| DAWY | Dawson baz=213,SNR=17 | 87.26 | 15 | P | | P | 06 09 48.6 | -0.5 |
| C16K | Lisburne Hills baz=189 | 87.31 | 4 | P | | P | 06 09 48.4 | -0.8 |
| JCT | Junction City baz=246 | 87.39 | 57 | P | | P | 06 09 50.2 | -0.3 |
| N23A | Red Feather La baz=242 | 87.39 | 45 | P | | P | 06 09 50.7 | +0.2 |
| FARO | Faro, Yukon baz=219 | 87.40 | 18 | P | | P | 06 09 49.6 | -0.2 |
| G22K | Bettles baz=202 | 87.43 | 9 | P | | P | 06 09 49.2 | -0.6 |
| F21K | Alatna River baz=200 | 87.43 | 8 | P | | P | 06 09 48.9 | -1.0 |
| EGAK | Eagle | 87.45 | 14 | P | | P | 06 09 49.9 | -0.1 |
| EGAK | comp=Z,12nm,1.0s | | | IAmb | IAmb | IAmb | 06 09 50.6 | |
| EGAK | Eagle baz=212,SNR=13 | 87.45 | 14 | P | | P | 06 09 49.4 | -0.6 |
| G23K | Bananza Creek baz=204,SNR=6.4 | 87.47 | 10 | P | | P | 06 09 49.2 | -0.8 |
| I26K | Coal Creek Min baz=210 | 87.47 | 13 | P | | P | 06 09 49.6 | -0.4 |
| K29M | Barlow Dome | 87.55 | 16 | P | | P | 06 09 49.8 | -0.8 |
| K29M | comp=Z,13nm,0.9s | | | IAmb | IAmb | IAmb | 06 09 51.7 | |
| K29M | Barlow Dome baz=215,SNR=16 | 87.55 | 16 | P | | P | 06 09 50.5 | -0.1 |
| ENH | Enshi | 87.58 | 303 | P | | P | 06 09 52.3 | +0.9 |
| TOAD | Toad River Com baz=226,SNR=9.3 | 87.63 | 23 | P | | P | 06 09 50.8 | -0.1 |
| AMTX | Amarillo baz=245 | 87.75 | 52 | P | | P | 06 09 52.3 | +0.1 |
| K22A | Casper baz=242 | 87.83 | 43 | P | | P | 06 09 53.5 | +1.0 |
| G24K | Hadweenzic Riv baz=206 | 87.88 | 11 | P | | P | 06 09 50.6 | -1.4 |
| F22K | John River baz=202 | 87.88 | 9 | P | | P | 06 09 51.3 | -0.7 |
| COLD | Coldfoot baz=203 | 87.91 | 9 | P | | P | 06 09 51.7 | -0.4 |
| C18K | Utukok River baz=193 | 87.97 | 5 | P | | P | 06 09 51.4 | -1.0 |
| I27K | Kandik River baz=211,SNR=5.3 | 88.06 | 13 | P | | P | 06 09 52.3 | -0.6 |
| E20K | Nigu River baz=198 | 88.08 | 7 | P | | P | 06 09 52.3 | -0.7 |
| D19K | Kuna River baz=196 | 88.10 | 6 | P | | P | 06 09 52.1 | -0.9 |
| G25K | Bearman Lake baz=207 | 88.18 | 11 | P | | P | 06 09 52.1 | -1.2 |
| I28M | Miner Creek | 88.30 | 14 | P | | P | 06 09 53.4 | -0.7 |
| I28M | comp=Z,11nm,1.4s | | | IAmb | IAmb | IAmb | 06 09 55.8 | |
| I28M | Miner Creek baz=213,SNR=7.1 | 88.30 | 14 | P | | P | 06 09 53.5 | -0.7 |
| ABTX | Abilene, Hawle baz=246 | 88.37 | 55 | P | | P | 06 09 55.2 | +0.1 |
| NONG | Nongkai | 88.42 | 290 | P | | P | 06 09 56.6 | +1.0 |
| ELIB | Princess Elisa comp=Z,5.9nm,1.2s | 88.43 | 186 | *d*P | | P | 06 09 55.8 | +0.9 |
| ELIB | | | | | *d*PcP | PcP | 06 09 57.7 | +1.2 |
| J30M | Hart River baz=216,SNR=6.2 | 88.44 | 16 | P | | P | 06 09 54.6 | -0.2 |
| SRIT | Nakonsritamara | 88.47 | 280 | P | | P | 06 09 56.9 | +1.0 |
| D20K | Etivluk River baz=197,SNR=6.9 | 88.47 | 7 | P | | P | 06 09 54.3 | -0.4 |
| EGMT | Eagleton baz=239 | 88.49 | 38 | P | | P | 06 09 55.0 | -0.4 |
| E22K | Anaktuvuk Pass baz=202 | 88.52 | 8 | P | | P | 06 09 54.5 | -0.5 |
| E21K | Killik River baz=200 | 88.52 | 8 | P | | P | 06 09 54.9 | -0.1 |
| F24K | Squaw Lake baz=206 | 88.55 | 10 | P | | P | 06 09 54.8 | -0.4 |
| C19K | Lookout Ridge | 88.55 | 5 | P | | P | 06 09 54.5 | -0.6 |
| C19K | comp=Z,9.3nm,0.8s | | | IAmb | IAmb | IAmb | 06 09 55.7 | |
| C19K | Lookout Ridge baz=194 | 88.55 | 5 | P | | P | 06 09 54.5 | -0.6 |
| I29M | Ogilvie Camp, baz=214,SNR=8.3 | 88.60 | 15 | P | | P | 06 09 54.8 | -0.7 |
| H27K | Steamboat Moun baz=211,SNR=6.5 | 88.61 | 13 | P | | P | 06 09 55.1 | -0.3 |
| SURA | Surathani | 88.63 | 280 | P | | P | 06 09 56.7 | 0.0 |
| E23K | Chandalar baz=204 | 88.77 | 9 | P | | P | 06 09 55.9 | -0.3 |
| G26K | Porcupine Rive baz=209,SNR=8.3 | 88.78 | 12 | P | | P | 06 09 56.2 | 0.0 |
| KSCO | Kaye Shedlock' baz=244 | 88.82 | 48 | P | | P | 06 09 56.9 | -0.4 |
| KOTAN | Kotaneelee Air baz=227 | 88.94 | 23 | P | | P | 06 09 57.2 | +0.1 |
| I30M | Mount Dempster baz=216,SNR=10.0 | 88.96 | 15 | P | | P | 06 09 56.8 | -0.4 |
| E24K | Your Creek baz=205 | 88.96 | 10 | P | | P | 06 09 56.7 | -0.4 |
| F25K | Christian Rive baz=208 | 89.00 | 11 | P | | P | 06 09 57.1 | -0.2 |
| G27K | Doyon Strip baz=211 | 89.08 | 13 | P | | P | 06 09 56.9 | -0.7 |
| D22K | Ayikyak River baz=201,SNR=10.0 | 89.10 | 8 | P | | P | 06 09 57.2 | -0.5 |
| TROLL | Troll, Antarti comp=Z,156nm,0.8s | 89.21 | 179 | ⇓P | | P | 06 09 59.5 | +1.0 |
| H29M | Whitestone baz=214,SNR=5.5 | 89.30 | 14 | P | | P | 06 09 57.9 | -0.8 |
| TOLK | Toolik Lake Re baz=204 | 89.31 | 9 | P | | P | 06 09 58.3 | -0.4 |
| F26K | Sheenjek River baz=209 | 89.36 | 11 | P | | P | 06 09 58.9 | 0.0 |
| SNAA | Sanae comp=Z,57nm,0.7s | 89.41 | 178 | ⇓P | | P | 06 09 59.6 | +0.3 |
| SNAA | Sanae comp=Z,2.9nm,0.9s,baz=204,slow=5.5,SNR=7.5 comp=Z,2.9nm,0.9s | 89.41 | 178 | P | | P | 06 10 00.0 | +0.7 |
| VNA3 | Neumayer Olymp comp=Z,6.5nm,0.7s | 89.42 | 175 | ⇓P | | P | 06 10 00.2 | +0.8 |
| D23K | Nanushuk River baz=203 | 89.45 | 9 | P | | P | 06 09 59.0 | -0.3 |
| XAN | Xi'an | 89.51 | 306 | ⇑P | | P | 06 10 01.4 | +1.0 |
| XAN | comp=Z,14nm,1.5s | | | pmax | | pmax | | |
| B21K | Ikpikpuk River baz=199 | 89.56 | 7 | P | | P | 06 09 58.8 | -0.9 |
| B20K | Meade River baz=197 | 89.66 | 6 | P | | P | 06 09 59.5 | -0.7 |
| EPYK | Eagle Plains baz=216 | 89.81 | 14 | P | | P | 06 10 00.5 | -0.5 |
| WHTX | Lake Whitney, baz=248 | 89.83 | 56 | P | | P | 06 10 01.9 | 0.0 |
| WMOK | Wichita Mounta baz=247 | 89.87 | 53 | P | | P | 06 10 01.7 | -0.3 |
| D24K | Happy Valley baz=205 | 89.89 | 9 | P | | P | 06 10 01.4 | +0.1 |
| VNA2 | Neumayer--Watz comp=Z,12nm,0.7s,baz=180,slow=3.9 | 89.90 | 176 | ⇓P | | P | 06 10 02.8 | +1.2 |
| LAO | LASA Array baz=242 | 89.93 | 40 | P | | P | 06 10 02.3 | +0.2 |
| G29M | Pine Creek baz=215 | 89.95 | 14 | P | | P | 06 10 01.3 | -0.4 |
| VNA1 | Neumayer--Stat comp=Z,10nm,1.0s | 90.11 | 176 | ⇓P | | P | 06 10 03.8 | +1.3 |
| RSSD | Black Hills baz=244 | 90.11 | 43 | P | | P | 06 10 02.3 | -0.9 |
| F28M | Old Crow baz=213 | 90.14 | 13 | P | | P | 06 10 02.3 | -0.2 |
| C23K | Itkillik River baz=203,SNR=6.0 | 90.26 | 8 | P | | P | 06 10 02.7 | -0.3 |
| E27K | Coleen River baz=211 | 90.28 | 12 | P | | P | 06 10 03.0 | -0.2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HHC | Hu-ho-hao-te | 90.36 | 313 | *e*P | | P | 06 10 05.5 | +1.1 |
| HHC | comp=Z,26nm,0.9s | | | pmax | pmax | | | |
| HHC | comp=Z,90nm,4.6s | | | pmax | pmax | | | |
| G30M | tAoh Zraii Nji baz=216,SNR=13 | 90.42 | 14 | P | | P | 06 10 03.2 | -0.7 |
| D25K | Kavik River baz=207 | 90.42 | 10 | P | | P | 06 10 02.7 | -1.2 |
| C24K | Franklin Bluff baz=205 | 90.43 | 9 | P | | P | 06 10 03.6 | -0.2 |
| CBKS | Cedar Bluff baz=246 | 90.79 | 49 | P | | P | 06 10 06.0 | -0.3 |
| G31M | Satah River baz=218,SNR=13 | 90.84 | 15 | P | | P | 06 10 05.3 | -0.5 |
| F30M | Barrier River baz=217 | 91.03 | 14 | P | | P | 06 10 06.1 | -0.5 |
| E28M | Babbage River baz=213,SNR=7.2 | 91.04 | 12 | P | | P | 06 10 06.2 | -0.5 |
| C27K | Jago River baz=209 | 91.14 | 10 | P | | P | 06 10 06.4 | -0.7 |
| E29M | Blow River baz=215 | 91.20 | 13 | P | | P | 06 10 06.4 | -1.1 |
| KMI | Kunming | 91.22 | 296 | ⇑P | | P | 06 10 09.7 | +0.9 |
| KMI | comp=Z,17nm,1.0s | | | pmax | pmax | | | |
| KMI | comp=Z,150nm,3.8s | | | pmax | pmax | | | |
| D27M | Malcolm River baz=212 | 91.30 | 12 | P | | P | 06 10 07.9 | -0.1 |
| F31M | Tsiigehtchic baz=219,SNR=9.9 | 91.37 | 15 | P | | P | 06 10 07.7 | -0.5 |
| DGMT | Dagmar baz=243 | 91.96 | 39 | P | | P | 06 10 10.8 | -0.7 |
| INK | Inuvik comp=Z,12nm,1.1s,baz=229,slow=2.5,SNR=12 comp=Z,12nm,1.1s | 92.10 | 14 | P | | P | 06 10 11.1 | -0.5 |
| INK | Inuvik baz=219,SNR=7.6 | 92.10 | 14 | P | | P | 06 10 10.6 | -0.9 |
| CMAR | Chiang Mai Arr comp=Z,15nm,1.0s,baz=112,slow=2.9,SNR=45 comp=Z,15nm,1.0s | 92.31 | 289 | P | | P | 06 10 14.9 | +1.2 |
| PZH | PanZhiHua | 92.54 | 297 | P | | P | 06 10 15.8 | +1.0 |
| PZH | comp=Z,10.0nm,0.6s | | | pmax | pmax | | | |
| PZH | comp=Z,140nm,5.3s | | | pmax | pmax | | | |
| TUL3 | Leonard baz=249 | 92.57 | 53 | P | | P | 06 10 14.7 | +0.2 |
| BGNE | Belgrade baz=247 | 92.93 | 47 | P | | P | 06 10 16.3 | +0.2 |
| KSU1 | Kansas State U baz=248 | 93.14 | 50 | P | | P | 06 10 16.8 | -0.3 |
| MIAR | Mount Ida baz=250 | 93.78 | 55 | P | | P | 06 10 20.4 | +0.2 |
| YKA | Yellowknife Ar comp=Z,1.4nm,0.9s,baz=248,slow=4.8,SNR=7.0 comp=Z,1.4nm,0.9s | 93.98 | 24 | P | | P | 06 10 19.5 | -0.9 |
| LZH | Lanzhou | 94.14 | 307 | *e*P | | P | 06 10 23.2 | +1.2 |
| LZH | | | | pP | | pP | 06 10 57.5 | -0.8 |
| LZH | comp=Z,14nm,1.0s | | | pmax | pmax | | | |
| MDND | Maddock baz=247 | 94.49 | 41 | P | | P | 06 10 22.6 | -0.5 |
| ECSD | EROS Data Cent baz=248 | 94.85 | 45 | P | | P | 06 10 24.4 | -0.4 |
| SONM | Songino Array comp=Z,0.4nm,0.4s,baz=117,slow=3.3,SNR=1.9 comp=Z,0.4nm,0.4s | 96.51 | 318 | P | | P | 06 10 31.3 | -1.2 |
| AGMN | Agassiz Nation baz=250 | 96.98 | 41 | P | | P | 06 10 34.2 | -0.2 |
| SPMN | Marine on St. baz=251 | 97.93 | 45 | P | | P | 06 10 38.1 | -0.6 |
| JFWS | Jewell Farm baz=253 | 98.96 | 48 | P | | P | 06 10 42.6 | -0.8 |
| EYMN | Ely baz=253 | 99.64 | 43 | P | | Pdif | 06 10 45.5 | -0.8 |
| P49A | Miami Univ. Ec baz=256 | 102.04 | 52 | P | | Pdif | 06 10 56.3 | -0.8 |
| NHSC | New Hope baz=256 | 104.03 | 60 | P | | Pdif | 06 11 05.5 | -0.7 |
| BLA | Blacksburg baz=257 | 104.77 | 55 | P | | Pdif | 06 11 08.7 | -0.8 |
| SSPA | Standing Stone baz=260 | 107.39 | 52 | P | | PKiKP | 06 15 28.5 | -0.3 |
| ZALV | Zalesovo Beam comp=Z,1.0nm,0.4s,baz=284,slow=2.0,SNR=4.8 | 111.10 | 321 | PKiKP | | PKiKP | 06 15 34.4 | -1.0 |
| MKAR | Makanchi Array comp=Z,0.1nm,0.5s,baz=98,slow=10,SNR=1.6 | 112.23 | 314 | Pdiff | | Pdif | 06 11 42.4 | 0.0 |
| MKAR | | | | PKiKP | | PKiKP | 06 15 36.8 | -1.1 |
| MKAR | comp=Z,1.7nm,0.8s,baz=82,slow=2.6,SNR=8.7 | | | PKKPbc | | PKKPbc | 06 26 29.4 | -0.9 |
| KURBB | comp=Z,0.6nm,0.8s,baz=232,slow=1.4,SNR=5.5 Kurchatov Arra comp=Z,1.9nm,0.8s,baz=90,slow=2.0,SNR=9.2 | 114.86 | 318 | PKP | PKPdf | 06 15 41.5 | -1.2 | |
| ARU | Arti comp=Z,2.9nm,0.3s,baz=104,slow=4.2,SNR=8.8 | 125.55 | 327 | PKP | | PKPdf | 06 16 02.4 | -0.7 |
| AKTO | Aktyubinsk comp=Z,2.2nm,0.8s,baz=75,slow=2.3,SNR=5.0 | 127.80 | 320 | PKP | | PKPdf | 06 16 07.1 | -0.5 |
| ARCES | ARCESS Array B comp=Z,2.1nm,0.6s,baz=44,slow=0.5,SNR=9.7 | 127.92 | 351 | PKP | | PKPdf | 06 16 06.6 | -0.6 |
| BELG | Belogornoye comp=Z,17nm,0.8s,baz=91,slow=5.6,SNR=4.7 | 133.03 | 325 | PKP | | PKPdf | 06 16 16.9 | -0.5 |
| FINES | FINESS Array B comp=Z,2.2nm,0.9s,baz=166,slow=33,SNR=3.0 | 135.08 | 346 | PKhKP | PKPpre | | 06 16 16.8 | |
| FINES | comp=Z,3.0nm,0.8s,baz=62,slow=4.5,SNR=7.0 | | | PKP | | PKPdf | 06 16 21.4 | +0.4 |
| HFS | Hagfors comp=Z,1.8nm,0.7s,baz=46,slow=6.2,SNR=4.3 | 138.44 | 353 | PKhKP | PKPpre | | 06 16 17.9 | |
| AKASG | Makin Array Be comp=Z,1.6nm,0.5s,baz=39,slow=3.8,SNR=6.5 | 142.99 | 334 | PKhKP | PKPpre | | 06 16 31.7 | |
| AKBB | Malin Array Si | 142.99 | 334 | PKPdf | | PKPdf | 06 16 31.6 | -4.1 |
| KIEV | Kiev | 143.00 | 334 | PKPdf | | PKPdf | 06 16 31.7 | -4.0 |
| EKA | Eskdalemuir Ar comp=Z,3.0nm,0.8s,baz=343,slow=2.6,SNR=5.6 | 143.20 | 8 | PKhKP | PKPpre | | 06 16 31.5 | |
| RNPP5 | Staryi Chortor | 143.85 | 338 | PKPdf | PKPab | | 06 16 30.7 | -3.9 |
| LUBAR | Lubar, Ukraine | 144.19 | 335 | PKPdf | | PKPab | 06 16 32.5 | -3.4 |
| SORM | Soroca | 145.31 | 332 | ⇓P | | PKPdf | 06 16 38.8 | -1.0 |
| NDNU | Novodnistrovsk | 145.38 | 334 | PKPdf | | PKPdf | 06 16 37.9 | -2.1 |
| KMPD | K-Podol'skiy | 145.78 | 334 | PKPdf | | PKPbc | 06 16 40.2 | -1.2 |
| KMPD | | | | PKPdf | | PKPdf | 06 16 39.4 | -1.2 |
| OJC | Ojcow | 146.69 | 343 | PKP | | PKPdf | 06 16 42.8 | +0.7 |
| KSP | Ksiaz | 146.99 | 347 | *e*PKP | | PKPbc | 06 16 44.0 | -0.8 |
| KSP | Ksiaz | 146.99 | 347 | PKPdf | | PKPbc | 06 16 44.6 | -0.2 |
| BURAR | Bucovina Array | 147.04 | 335 | ⇑P | | PKPbc | 06 16 45.6 | +0.4 |
| CLL | Collm | 147.15 | 351 | *e*PKPdf | | PKPdf | 06 16 43.0 | +0.1 |
| CLL | comp=Z,49nm,1.0s | | | *i* PKPbc | | PKPbc | 06 16 44.8 | -0.4 |
| CLL | | | | *i* PKiKP | | PKiKP | 06 16 49.8 | +2.3 |
| CLL | | | | *ep*PKiKP | | pPKPbc | 06 17 24.0 | +1.0 |
| CLL | comp=Z,600nm,18.3s | | | AMS | | AMS | 07 58 00.0 | |
| TLCR | | 147.25 | 328 | ⇓P | | PKPbc | 06 16 46.4 | +0.7 |
| NIE | Niedzica | 147.26 | 341 | *e*PKP | | PKPdf | 06 16 44.1 | +0.9 |
| NIE | Niedzica | 147.26 | 341 | PKPdf | | PKPbc | 06 16 45.5 | -0.2 |
| OSTC | Ostas | 147.27 | 347 | ePKP | | PKPbc | 06 16 46.4 | +0.7 |
| TESR | Tescani | 147.29 | 332 | ⇓P | | PKPbc | 06 16 45.8 | -0.1 |
| UPC | Upice | 147.36 | 347 | *e*PKP | | PKPbc | 06 16 46.5 | +0.6 |
| BRG | Berggiesshubel | 147.41 | 349 | *e*PKP | | PKPdf | 06 16 43.6 | +0.3 |
| BRG | comp=Z,2.9nm,0.9s | | | Amp | | | 06 16 44.4 | |
| BRG | Berggiesshubel | 147.41 | 349 | P | | PKPbc | 06 16 46.3 | +0.3 |
| BRG | comp=Z,22nm,1.1s | | | Amp | | | 06 16 47.2 | |
| BRG | Berggiesshubel | 147.41 | 349 | P | | PKPab | 06 16 53.6 | +5.3 |
| BRG | comp=Z,4.3nm,0.9s | | | Amp | | | 06 16 53.9 | |
| DPC | Dobruska-Polom | 147.44 | 347 | *e*PKP | | PKPbc | 06 16 46.7 | +0.5 |
| DPC | Dobruska-Polom | 147.44 | 347 | PKPdf | | PKPbc | 06 16 45.9 | -0.3 |
| TPGR | Topolog | 147.68 | 328 | ⇓P | | PKPbc | 06 16 46.9 | 0.0 |
| MORC | Moravsky Berou | 147.69 | 345 | *e*PKP | | PKPbc | 06 16 46.2 | -0.6 |
| MORC | Moravsky Berou | 147.69 | 345 | ⇑P | | PKPbc | 06 16 46.3 | -0.6 |
| LANS | Liptovska Anna | 147.74 | 342 | *e*PKP | | PKPbc | 06 16 45.8 | -1.2 |
| LANS | | | | *e* | | | 06 16 48.0 | |
| VRI | Vrincioaia | 147.75 | 331 | ⇑P | | PKPbc | 06 16 46.1 | -1.0 |
| PLOR | Plostina | 147.80 | 331 | ⇓P | | PKPbc | 06 16 46.6 | -0.7 |
| BRTR | Keskin Array B comp=Z,13nm,1.0s,baz=139,slow=2.5,SNR=20 | 147.84 | 316 | PKPbc | | PKPbc | 06 16 47.0 | -0.7 |
| BR104 | Keskin Array S | 147.84 | 316 | PKPdf | | PKPbc | 06 16 47.3 | -0.4 |
| BR105 | Keskin Array S | 147.85 | 316 | PKPdf | | PKPbc | 06 16 47.0 | -0.8 |
| KIRS | Kirsehir-Merke | 147.96 | 315 | ⇑P | | PKPdf | 06 16 44.6 | -0.2 |
| MAUC | Maruska | 148.00 | 344 | *e*PKP | | PKPbc | 06 16 47.7 | 0.0 |
| KECS | Kecovo | 148.03 | 340 | *e*PKP | | PKPbc | 06 16 46.6 | -1.1 |
| KECS | | | | *e* | | | 06 16 49.2 | |
| HARR | Harsova | 148.04 | 328 | ⇓P | | PKiKP | 06 16 48.6 | -0.9 |
| PRU | Pruhonice | 148.15 | 348 | *e*PKP | | PKPbc | 06 16 48.4 | +0.4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GOPC | GO Pecny, Ondr | 148.18 | 348 | *e*PKP | | PKiKP | 06 16 48.8 | -0.9 |
| VRAC | Vranov | 148.36 | 346 | *e*PKP | | PKPbc | 06 16 48.5 | -0.1 |
| MEM | Membach | 148.45 | 359 | *d*PKP | | PKPbc | 06 16 48.2 | -0.5 |
| BTNL | Ternell | 148.47 | 359 | *d*PKP | | PKPbc | 06 16 48.7 | -0.1 |
| BSTI | Sart Tilman | 148.48 | 359 | *d*PKP | | PKPbc | 06 16 48.9 | +0.1 |
| JAVC | Velka Javorina | 148.50 | 344 | *e*PKP | | PKiKP | 06 16 50.1 | -0.4 |
| VYHS | Vyhne | 148.51 | 342 | *e*PKP | | PKPbc | 06 16 48.8 | -0.2 |
| KRUC | Moravsky | 148.63 | 346 | *e*PKP | | PKPbc | 06 16 49.0 | -0.3 |
| MARR | Marisel-Cluj | 148.64 | 336 | ⇓P | | PKPbc | 06 16 49.6 | +0.1 |
| BCLA | Clavier | 148.65 | 360 | *d*PKP | | PKPab | 06 16 52.6 | -0.6 |
| BGES | Gesves | 148.68 | 360 | *d*PKP | | PKPab | 06 16 52.3 | -1.0 |
| DRGR | | 148.70 | 336 | ⇑P | | PKPbc | 06 16 49.5 | -0.1 |
| BHOU | Houvegnez | 148.70 | 359 | *d*PKP | | PKPbc | 06 16 49.8 | +0.4 |
| PSZ | Piszkesteto | 148.71 | 341 | ⇑P | | PKPbc | 06 16 49.8 | +0.2 |
| BMRD | Maredsous | 148.76 | 0 | *d*PKP | | PKPbc | 06 16 49.7 | +0.2 |
| VOIR | | 148.83 | 332 | ⇓P | | PKPbc | 06 16 49.8 | -0.2 |
| RCHB | Rochefort | 148.91 | 360 | *d*PKPdf | | PKPdf | 06 16 46.1 | +0.3 |
| RCHB | | | | *d*PKP | | PKPbc | 06 16 50.0 | +0.1 |
| DOU | Dourbes | 148.97 | 1 | *d*PKP | | PKPbc | 06 16 48.2 | -1.8 |
| ARR | Arges | 149.07 | 333 | ⇓P | | PKiKP | 06 16 51.3 | -0.5 |
| KHC | Kasperske Hory | 149.15 | 349 | *e*PKP | | PKPbc | 06 16 50.8 | +0.2 |
| KHC | | | | *ex* | | x | 06 18 50.0 | |
| KHC | Kasperske Hory | 149.15 | 349 | PKPdf | | PKPbc | 06 16 50.4 | -0.2 |
| ZST | Bratislava | 149.26 | 344 | *e*PKP | | PKPbc | 06 16 50.0 | -0.9 |
| CKRC | Cesky Krumlov | 149.31 | 348 | *e*PKP | | PKPbc | 06 16 51.3 | +0.3 |
| WLF | Walferdange | 149.39 | 359 | *d*PKP | | PKiKP | 06 16 51.7 | -0.5 |
| GERES | GERESS Array B comp=Z,11nm,1.0s,baz=163,slow=5.6,SNR=25 | 149.41 | 349 | PKPbc | | PKPbc | 06 16 51.2 | -0.1 |
| MMAI | Mount Meron Ar comp=Z,15nm,0.7s,baz=57,slow=5.1,SNR=12 | 149.46 | 303 | PKPbc | | PKiKP | 06 16 52.6 | -0.4 |
| SIRR | Siria | 149.53 | 337 | ⇑P | | PKiKP | 06 16 52.2 | -0.5 |
| SURR | Surduc | 149.79 | 336 | ⇓P | | PKPbc | 06 16 51.8 | -0.4 |
| CONA | Conrad Observa comp=Z,3.0nm,1.1s | 149.82 | 345 | *e*PKP | | PKPdf | 06 16 48.4 | +0.9 |
| CONA | | | | *i* PKiKP | | PKiKP | 06 16 52.9 | -0.3 |
| GZR | comp=Z,40nm,1.4s,SNR=16 Gura Zlata | 149.83 | 335 | ⇓P | | PKPbc | 06 16 52.0 | -0.4 |
| RONA | Rosalia, Austr comp=Z,17nm,0.8s,SNR=7.4 | 149.93 | 345 | *i* PKP | | PKiKP | 06 16 52.8 | -0.7 |
| BZS | Buzias | 150.10 | 336 | ⇓P | | PKPbc | 06 16 53.0 | 0.0 |
| MOA | Molln comp=Z,7.4nm,0.8s | 150.25 | 347 | *e*PKP | | PKPbc | 06 16 53.1 | -0.2 |
| HERR | Herculane | 150.40 | 335 | ⇓P | | PKPbc | 06 16 53.4 | -0.4 |
| BIOA | Bad Ischl, Aus comp=Z,6.4nm,0.5s | 150.53 | 348 | *e*PKP | | PKPbc | 06 16 53.9 | -0.1 |
| ARSA | Arzberg comp=Z,8.6nm,1.3s | 150.53 | 345 | *e*PKP | | PKPbc | 06 16 53.9 | -0.2 |
| MORH | Mrgy, Hungar | 150.62 | 341 | ⇓P | | PKPbc | 06 16 53.7 | -0.5 |
| MORH | Mrgy, Hungar | 150.62 | 341 | PKPdf | | PKPbc | 06 16 53.3 | -0.9 |
| LESA | Schwarzleotal comp=Z,14nm,1.0s | 150.96 | 349 | *e*PKP | | PKPbc | 06 16 54.9 | -0.2 |
| FRGS | Fruska Gora | 151.16 | 338 | ⇓P | | PKPbc | 06 16 54.7 | -0.8 |
| KBA | Koelnbreinsper comp=Z,2.2nm,0.8s | 151.17 | 348 | *e*PKP | | PKPdf | 06 16 48.7 | -1.0 |
| KBA | comp=Z,11nm,0.7s,SNR=8.0 | | | *i* PKP | | PKPbc | 06 16 55.1 | -0.6 |
| SOKA | Soboth comp=Z,13nm,0.9s,SNR=9.5 | 151.19 | 346 | *i* PKP | | PKPbc | 06 16 54.8 | -0.8 |
| RETA | Reutte comp=Z,23nm,1.2s | 151.20 | 352 | *e*PKP | | PKPbc | 06 16 55.5 | -0.1 |
| WATA | Walderalm comp=Z,20nm,1.0s,SNR=6.1 | 151.23 | 351 | *i* PKP | | PKPbc | 06 16 55.4 | -0.4 |
| GROS | Grobnik | 151.28 | 345 | *i* PKPbc | | PKPbc | 06 16 54.6 | -1.2 |
| MOTA | Moosalm comp=Z,7.7nm,1.3s | 151.29 | 351 | *e*PKP | | PKPdf | 06 16 50.1 | +0.3 |
| MOTA | comp=Z,34nm,1.0s | | | *e*PKP | | PKiKP | 06 16 56.0 | -0.4 |
| WTTA | Wattenberg comp=Z,28nm,0.7s,SNR=12 | 151.29 | 351 | *i* PKP | | PKPbc | 06 16 55.8 | -0.2 |
| SQTA | Sankt Quirin comp=Z,5.2nm,0.8s | 151.40 | 351 | *e*PKP | | PKPdf | 06 16 50.5 | +0.5 |
| SQTA | comp=Z,25nm,1.0s,SNR=6.4 | | | *i* PKP | | PKiKP | 06 16 56.2 | -0.4 |
| OBKA | Obir comp=Z,6.4nm,0.8s | 151.46 | 346 | *e*PKP | | PKPbc | 06 16 55.6 | -0.6 |
| DAVA | Damuels comp=Z,37nm,0.9s,SNR=11 | 151.50 | 353 | *i* PKiKP | | PKiKP | 06 16 56.7 | -0.2 |
| MYKA | Terra Mystica comp=Z,9.0nm,0.6s | 151.54 | 347 | *e*PKP | | PKPbc | 06 16 55.6 | -0.9 |
| ABTA | Abfaltersbach comp=Z,9.4nm,1.3s | 151.64 | 349 | *e*PKP | | PKPdf | 06 16 49.7 | -0.6 |
| ABTA | comp=Z,30nm,0.8s,SNR=11 | | | *i* PKP | | PKPbc | 06 16 55.9 | -0.8 |
| FETA | Feichten comp=Z,7.9nm,1.0s | 151.66 | 352 | *e*PKP | | PKPdf | 06 16 50.9 | +0.4 |
| FETA | comp=Z,29nm,1.0s,SNR=8.2 | | | *i* PKP | | PKPbc | 06 16 56.7 | -0.2 |
| BOVS | Bovan | 151.71 | 334 | ⇑P | | PKPbc | 06 16 56.4 | -0.4 |
| VNDS | Vrh nad Dolski | 151.81 | 346 | *i* PKPbc | | PKPbc | 06 16 56.3 | -0.7 |
| GBAS | Gorenja Brezov | 152.03 | 346 | *e*PKPdf | | PKPdf | 06 16 50.6 | -0.3 |
| GBAS | | | | *i* PKPbc | | PKPbc | 06 16 56.7 | -0.8 |
| BOJS | Bojanci | 152.23 | 344 | *e*PKPbc | | PKPbc | 06 16 57.3 | -0.6 |
| GBRS | Gornja Briga | 152.32 | 345 | *i* PKPbc | | PKPbc | 06 16 57.7 | -0.5 |
| GBRS | | | | *e*PKPab | | PKPab | 06 17 06.5 | -2.1 |
| ESDC | Sonseca Array comp=Z,0.2nm,0.3s,baz=349,slow=1.3,SNR=5.1 | 157.98 | 19 | PKP | | PKPdf | 06 16 59.6 | +0.4 |
| ESDC | | | | PKPab | | PKPab | 06 17 32.8 | -0.2 |
| TORD | comp=Z,2.7nm,0.8s,baz=330,slow=3.7,SNR=10 Torodi Ar. Bea comp=Z,2.4nm,0.8s,baz=360,slow=1.4,SNR=11 | 173.37 | 151 | PKP | | PKPdf | 06 17 10.3 | -1.9 |
| TORD | comp=Z,0.8nm,0.8s,baz=208,slow=1.9,SNR=3.9 | | | PKPab | | PKPab | 06 18 41.8 | +0.6 |

**IDC 10 05:59:31.2±3.5, 54°46N×87°10E, h0km, mbtmp2.8/2, ML2.3/2, Error ellipse: s-maj=30.9km s-min=20.9km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.43 | 250 | I | I | 06 07 38.1 | |
| ZALV | baz=70,slow=312,SNR=3.9 Zalesovo Beam | 1.43 | 250 | Pg | Pn | 05 59 56.3 | -2.2 |
| | 1.1nm,0.3s,baz=69,slow=16,SNR=11 | | | Lg | Lg | 06 00 17.0 | |
| KURBB | 1.7nm,0.3s,baz=72,slow=28,SNR=4.2 Kurchatov Arra | 6.48 | 237 | Pn | Pn | 06 01 08.3 | +0.4 |
| MKAR | 0.1nm,0.3s,baz=54,slow=14,SNR=5.0 0.6nm,0.4s Makanchi Array | 8.26 | 204 | Pn | Pn | 06 01 33.9 | +1.7 |
| MKAR | baz=24,slow=13,SNR=2.5 | | | Lg | Lg | 06 03 55.5 | |
| | baz=23,slow=30,SNR=2.1 0.1nm,0.2s | | | | | | |

**IDC 10 06:00:01.8±2.9, 54°17N×86°59E, h0km, mbtmp3.1/2, ML2.9/2, Error ellipse: s-maj=23.6km s-min=13.7km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.07 | 259 | I | I | 06 06 10.0 | |
| ZALV | baz=80,slow=317,SNR=3.2 Zalesovo Beam | 1.07 | 259 | Pg | Pg | 06 00 20.6 | -1.6 |
| | 1.7nm,0.3s,baz=77,slow=16,SNR=5.9 | | | Lg | Lg | 06 00 37.7 | |
| KURBB | 2.3nm,0.3s,baz=78,slow=29,SNR=8.0 Kurchatov Arra | 6.08 | 237 | Pn | Pn | 06 01 33.5 | +0.6 |
| MKAR | 0.1nm,0.3s,baz=54,slow=13,SNR=2.3 0.5nm,0.4s Makanchi Array | 7.88 | 202 | Pn | Pn | 06 01 58.6 | +1.1 |
| MKAR | 0.4nm,0.3s,baz=22,slow=14,SNR=

*IDC **10** 06:10:35.0±2.8, 53.˚53N×87.˚77E, h0km, mbtmp3.1/2, ML2.9/2, Error ellipse: s-maj=23.4km s-min=14.4km az=59.0*

*NNC **10** 06:10:36.0±2.6, 53.˚49N×87.˚64E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=23.8km s-min=16.6km az=61.0, Suspected Mining explosion.*

**ISC 10 06:10:36.2±3.6, 53.˚6N±0.˚1×87.˚6E±0.˚2, h0km, n8, σ0s81/11, 2C-7D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.71** | **284** | I | I | 06 22 30.0 | |
| | 0.1nm,0.8s,baz=99,slow=315,SNR=26 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.71** | **284** | ⇑Pn | **Pn** | **06 11 06.8** | **-0.4** |
| ZAA0 | 0.7nm,0.5s | | | | | | |
| | | | | ⇓Sn | **Sg** | **06 11 32.0** | **+0.9** |
| | 4.8nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.71** | **284** | Pg | **Pn** | **06 11 07.1** | **-0.1** |
| | 3.2nm,0.3s,baz=100,slow=15,SNR=33 | | | | | | |
| ZALV | | | | Lg | Lg | 06 11 32.4 | |
| | 3.8nm,0.3s,baz=104,slow=25,SNR=20 | | | | | | |
| **KURK** | **Kurchatov** | **6.23** | **246** | ⇓Pn | **Pn** | **06 12 10.0** | **+0.7** |
| | 4.5nm,1.3s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 06 13 54.2 | |
| | 7.6nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.32** | **246** | Pn | **Pn** | **06 12 11.4** | **+0.8** |
| | 0.3nm,0.3s,baz=64,slow=15,SNR=12 | | | | | | |
| KURBB | | | | Sn | **Sn** | **06 13 22.9** | **-0.6** |
| | 0.1nm,0.3s,baz=62,slow=22,SNR=4.3 | | | | | | |
| KURBB | | | | Lg | Lg | 06 13 56.6 | |
| | baz=64,slow=33,SNR=5.9 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.32** | **246** | ⇓Pn | **Pn** | **06 12 11.0** | **+0.4** |
| | 1.2nm,0.3s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **06 13 22.1** | **-1.4** |
| | 4.6nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 06 13 57.4 | |
| | 11nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **7.58** | **209** | ⇓Pn | **Pn** | **06 12 28.4** | **+0.4** |
| | 0.5nm,0.6s,baz=27,slow=13,SNR=12 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 06 14 33.9 | |
| | 5.4nm,1.1s,baz=53,slow=32,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.58** | **209** | Pn | **Pn** | **06 12 28.1** | **+0.2** |
| | 0.2nm,0.3s,baz=28,slow=14,SNR=10.0 | | | | | | |
| MKAR | | | | Sn | **Sn** | **06 13 53.9** | **-0.7** |
| | 0.1nm,0.3s,baz=26,slow=34,SNR=3.5 | | | | | | |
| MKAR | | | | Lg | Lg | 06 14 34.7 | |
| | 0.1nm,0.3s,baz=29,slow=30,SNR=5.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*IDC **10** 06:36:32.0±5.4, 80.˚74N×121.˚59E, h0km, mb3.6/4, mbtmp3.6/4, MS3.3/20, Error ellipse: s-maj=196.8km s-min=27.6km az=1.0*

**ISC 10 06:36:36.3±2.2, 81.˚4N±0.˚4×121.˚8E±0.˚2, h10km, n25, σ1s37/8, mb3.6/4, MS3.2/19, East of Severnaya Zemlya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVZ** | **Severnaya Zeml** | **3.97** | **248** | eP | Pn | 06 37 28.2 | -8.9 |
| SVZ | | | | eS | Sn | 06 38 06.0 | -18 |
| | 57nm,0.5s | | | | | | |
| SVZ | | | | etx | tx | 06 40 29.4 | |
| **ZFI2** | **Zemlya Franca-** | **10.78** | **304** | eP | **Pn** | **06 39 11.9** | **+1.6** |
| ZFI2 | | | | eS | **Sn** | **06 41 09.7** | **-1.1** |
| | 2.1nm,0.3s | | | | | | |
| **OMEGA** | **Omega** | **10.79** | **304** | eP | **Pn** | **06 39 11.7** | **+1.3** |
| OMEGA | | | | eS | **Sn** | **06 41 09.7** | **-1.2** |
| | 5.2nm,0.4s | | | | | | |
| **YAK** | **Yakutsk** | **19.57** | **169** | LR | LR | 06 49 07.1 | |
| | comp=Z,39nm,19.7s,baz=321,slow=40 | | | | | | |
| **RES** | **Resolute Bay** | **22.95** | **24** | LR | LR | 06 49 46.3 | |
| | comp=Z,28nm,21.4s,baz=40,slow=34 | | | | | | |
| **ARCES** | **ARCESS Array B** | **23.13** | **297** | P | **P** | **06 41 42.7** | **+0.8** |
| | 1.4nm,0.7s,baz=26,slow=11,SNR=4.9 | | | | | | |
| ARCES | | | | LR | LR | 06 51 46.5 | |
| | comp=Z,31nm,18.8s,baz=311,slow=39 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **25.39** | **57** | LR | LR | 06 53 30.7 | |
| | comp=Z,40nm,18.9s,baz=19,slow=40 | | | | | | |
| **ILAR** | **Eielson Array** | **26.92** | **71** | P | **P** | **06 42 16.9** | **-0.1** |
| | 0.6nm,0.7s,baz=341,slow=11,SNR=9.9 | | | | | | |
| ILAR | | | | LR | LR | 06 53 55.9 | |
| | comp=Z,65nm,18.1s,baz=314,slow=38 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.70** | **226** | LR | LR | 06 55 06.8 | |
| | comp=Z,90nm,19.7s,baz=32,slow=38 | | | | | | |
| **KIRV** | **Kirov** | **29.99** | **267** | LR | LR | 06 56 33.1 | |
| | comp=Z,163nm,18.4s,baz=9.9,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **30.70** | **291** | LR | LR | 06 59 25.9 | |
| | comp=Z,35nm,18.1s,baz=98,slow=44 | | | | | | |
| **KDAK** | **Kodiak Island** | **32.77** | **81** | LR | LR | 06 58 11.8 | |
| | comp=Z,37nm,18.7s,baz=359,slow=40 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **32.78** | **117** | LR | LR | 06 55 36.9 | |
| | comp=Z,27nm,21.8s,baz=286,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **33.09** | **303** | LR | LR | 06 58 07.4 | |
| | comp=Z,13nm,18.4s,baz=20,slow=39 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.20** | **45** | LR | LR | 06 56 08.1 | |
| | comp=Z,33nm,21.6s,baz=318,slow=35 | | | | | | |
| **DLBC** | **Dease Lake** | **35.32** | **60** | LR | LR | 06 57 43.0 | |
| | comp=Z,44nm,20.7s,baz=226,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **37.03** | **226** | LR | LR | 06 59 52.0 | |
| | comp=Z,47nm,19.2s,baz=324,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **42.04** | **234** | LR | LR | 07 04 23.1 | |
| | comp=Z,29nm,18.2s,baz=80,slow=40 | | | | | | |
| **KBZ** | **Khabaz** | **45.41** | **267** | LR | LR | 07 06 04.6 | |
| | comp=Z,55nm,19.4s,baz=184,slow=39 | | | | | | |
| **GNI** | **Garni** | **48.63** | **264** | LR | LR | 07 08 43.4 | |
| | comp=Z,70nm,18.9s,baz=286,slow=40 | | | | | | |
| **JOW** | **Kunigami** | **54.71** | **173** | LR | LR | 07 10 57.2 | |
| | comp=Z,24nm,18.6s,baz=124,slow=38 | | | | | | |
| **ESDC** | **Sonseca Array** | **55.90** | **311** | LR | LR | 07 11 40.8 | |
| | comp=Z,35nm,18.1s,baz=178,slow=38 | | | | | | |
| **EIL** | **Elat** | **60.38** | **272** | LR | LR | 07 14 46.1 | |
| | comp=Z,68nm,20.1s,baz=249,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.08** | **42** | P | **P** | **06 47 29.6** | **+0.1** |
| | 0.5nm,0.8s,baz=339,slow=4.8,SNR=5.3 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.38** | **301** | P | **P** | **06 48 51.4** | **-1.4** |
| | 0.6nm,0.8s,baz=8.5,slow=6.2,SNR=2.6 | | | | | | |
| | 0.6nm,0.8s | | | | | | |

*IDC **10** 06:38:02.5±0.8, 12.˚75S×14.˚60W, h0km, mb4.1/9, mbtmp4.1/9, MS3.8/33, Error ellipse: s-maj=39.2km s-min=18.9km az=115.0*

*GCMT **10** 06:38:05.1±0.4, 12.˚54S±0.˚05×14.˚55W±0.˚03, h23km±1km, MW4.8/77, Moment Tensor Solution. s21,c21; s77,c92; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~2.54±.22; Mθθ 0.63±.12; Mφφ 1.90±.14; Mrθ 0.62±.21; Mφφ-0.12±.07; Mφr~0.32±.18; Best double couple: M◎2.31000×10^16 NP1:φs 343.00000°, δ51.00000°, λ-103.00000°. NP2: φs 183.00000°, δ41.00000°, λ-75.00000°. Principal axes: T 1.9450, Plg5.0000°, Azm82.0000°; N 0.7230, Plg10.0000°, Azm352.0000°; P -2.6760, Plg79.0000°, Azm200.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **10** 06:38:06.1±2.2, 12.˚79S±0.˚08×14.˚5W±0.˚1, h10km±1km, mb4.8/20 Error ellipse: s-maj=18.5km s-min=13.5km az=261.0*

**ISC 10 06:38:04.8±0.5, 12.˚76S±0.˚09×14.˚6W±0.˚1, h10km, n66, σ1s33/33, mb4.6/17, MS3.8/34, 3C, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10S2** | **ASCENSION HYDR** | **3.78** | **359** | T | T | 06 43 06.2 | |
| | baz=178,slow=74,SNR=203 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **3.79** | **359** | T | T | 06 43 08.5 | |
| | baz=42,slow=74,SNR=152 | | | | | | |
| **ASCN** | **Ascension** | **4.80** | **3** | Pn | **Pn** | **06 39 18.7** | **+1.4** |
| **H10N1** | **ASCENSION HYDR** | **4.88** | **1** | T | T | 06 44 27.1 | |
| | baz=181,slow=72,SNR=39 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **4.89** | **1** | T | T | 06 44 27.6 | |
| | baz=181,slow=72,SNR=83 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **4.90** | **1** | T | T | 06 44 30.4 | |
| | baz=181,slow=72,SNR=27 | | | | | | |
| **DBIC** | **Dimbokro** | **21.59** | **27** | P | **P** | **06 42 55.6** | **+0.7** |
| DBIC | | | | IAmb | IAmb | 06 42 58.1 | |
| | comp=Z,55nm,1.7s | | | | | | |
| **DBIC** | **Dimbokro** | **21.59** | **27** | P | **P** | **06 42 54.0** | **-0.8** |
| | comp=Z,5.1nm,0.8s,baz=180,slow=9.9,SNR=3.5 | | | | | | |
| DBIC | | | | LR | LR | 06 49 12.0 | |
| | comp=Z,320nm,21.9s,baz=188,slow=31 | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **RCBR** | **Riachuelo** | **22.13** | **286** | LR | LR | 06 49 18.7 | |
| | comp=Z,117nm,21.5s,baz=340,slow=31 | | | | | | |
| **TRIS** | **Tristan da Cun** | **24.29** | **176** | P | **P** | **06 43 23.0** | **+0.7** |
| **MBO** | **M'Bour** | **27.08** | **355** | P | **P** | **06 43 47.0** | **-0.7** |
| **BBTS** | **Babate** | **27.31** | **356** | LR | LR | 06 52 41.0 | |
| | comp=Z,105nm,20.5s,baz=96,slow=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.38** | **33** | P | **P** | **06 44 18.0** | **+0.8** |
| **TORD** | **Torodi Ar. Bea** | **30.38** | **33** | P | **P** | **06 44 14.9** | **-2.3** |
| | comp=Z,2.0nm,1.1s,baz=224,slow=6.2,SNR=3.9 | | | | | | |
| TORD | | | | LR | LR | 06 54 36.7 | |
| | comp=Z,277nm,19.7s,baz=208,slow=33 | | | | | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **TSUM** | **Tsumeb** | **31.54** | **106** | LR | LR | 06 54 44.9 | |
| | comp=Z,162nm,19.7s,baz=323,slow=32 | | | | | | |
| **VAO** | **Valinhos** | **32.39** | **247** | P | **P** | **06 44 36.4** | **+1.3** |
| **BDFB** | **Brasilia** | **32.52** | **261** | LR | LR | 06 55 28.5 | |
| | comp=Z,192nm,19.2s,baz=126,slow=32 | | | | | | |
| **SUR** | **Sutherland** | **37.82** | **127** | LR | LR | 06 57 39.7 | |
| | comp=Z,149nm,18.1s,baz=292,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **39.77** | **114** | LR | LR | 06 59 27.6 | |
| | comp=Z,197nm,19.5s,baz=280,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **40.25** | **119** | LR | LR | 06 59 02.8 | |
| | comp=Z,228nm,21.6s,baz=271,slow=31 | | | | | | |
| **MDP** | **Montagnes des** | **41.78** | **293** | LR | LR | 07 00 08.6 | |
| | comp=Z,106nm,20.8s,baz=106,slow=32 | | | | | | |
| **CPUP** | **Villa Florida** | **42.29** | **245** | LR | LR | 07 00 33.7 | |
| | comp=Z,234nm,19.6s,baz=92,slow=32 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **43.24** | **261** | P | **P** | **06 46 07.5** | **+0.8** |
| **VILB** | **Vilhena** | **44.43** | **264** | P | **P** | **06 46 19.1** | **+2.7** |
| VILB | | | | IAmb | IAmb | 06 46 23.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **HOPE** | **Hope Point** | **44.88** | **198** | P | **P** | **06 46 21.8** | **+2.5** |
| **SIV** | **San Ignacio** | **45.08** | **260** | P | **P** | **06 46 21.3** | **-0.2** |
| | comp=Z,1.5nm,1.0s,baz=98,slow=5.0,SNR=4.3 | | | | | | |
| SIV | | | | LR | LR | 07 03 02.3 | |
| | comp=Z,78nm,19.5s,baz=108,slow=33 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **MDT** | **Midelt** | **46.31** | **12** | LR | LR | 07 04 37.7 | |
| | comp=Z,75nm,18.7s,baz=208,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **46.50** | **79** | LR | LR | 07 04 41.0 | |
| | comp=Z,168nm,18.5s,baz=247,slow=34 | | | | | | |
| **ETMB** | **Extrema** | **50.66** | **268** | P | **P** | **06 47 04.7** | **-0.1** |
| **TATN** | **Tataouine** | **51.08** | **27** | P | **P** | **06 47 10.0** | **+2.3** |
| TATN | | | | IAmb | IAmb | 06 47 23.0 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **51.84** | **259** | LR | LR | 07 07 12.3 | |
| | comp=Z,87nm,19.9s,baz=86,slow=34 | | | | | | |
| **LVC** | **Limon Verde** | **52.44** | **251** | LR | LR | 07 08 10.9 | |
| | comp=Z,121nm,20.3s,baz=131,slow=34 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **52.62** | **82** | P | **P** | **06 47 20.0** | **+0.3** |
| **KEST** | **Kesra** | **53.27** | **24** | P | **P** | **06 47 24.9** | **+0.9** |
| KEST | | | | IAmb | IAmb | 06 47 29.1 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KEST** | **Kesra** | **53.27** | **24** | P | **P** | **06 47 22.9** | **-1.0** |
| | comp=Z,4.9nm,0.9s,baz=180,slow=4.0,SNR=6.4 | | | | | | |
| KEST | | | | LR | LR | 07 09 32.4 | |
| | comp=Z,130nm,19.2s,baz=288,slow=36 | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **54.68** | **292** | LR | LR | 07 07 38.6 | |
| | comp=Z,84nm,22.0s,slow=32 | | | | | | |
| **TBTG** | **Tabatinga, AM** | **55.29** | **274** | P | **P** | **06 47 38.1** | **-0.9** |
| **BI02** | **San Fabin de** | **55.86** | **234** | P | **P** | **06 47 42.2** | **-0.7** |
| BI02 | | | | IAmb | IAmb | 06 47 49.8 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **PLCA** | **Paso Flores** | **56.12** | **229** | LR | LR | 07 09 22.7 | |
| | comp=Z,116nm,19.1s,baz=133,slow=34 | | | | | | |
| **VSL** | **Villasalto** | **56.58** | **22** | P | **P** | **06 47 47.0** | **-0.7** |
| VSL | | | | IAmb | IAmb | 06 47 48.2 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **FURI** | **Furi** | **57.11** | **71** | LR | LR | 07 10 28.1 | |
| | comp=Z,194nm,18.8s,baz=227,slow=34 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **57.33** | **269** | P | **P** | **06 47 51.8** | **-1.8** |
| CZSB | | | | IAmb | IAmb | 06 47 58.8 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **58.30** | **177** | ⇑P | **P** | **06 47 58.3** | **-1.2** |
| | comp=Z,2.3nm,0.8s,baz=345,slow=6.0 | | | | | | |
| **SNAA** | **Sanae** | **59.31** | **176** | P | **P** | **06 48 05.7** | **-0.9** |
| SNAA | | | | IAmb | IAmb | 06 48 06.6 | |
| | comp=Z,8.3nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **59.31** | **176** | ⇑P | **P** | **06 48 05.3** | **-1.3** |
| | comp=Z,73nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **59.31** | **176** | P | **P** | **06 48 05.6** | **-0.9** |
| | comp=Z,3.3nm,1.0s,baz=329,slow=5.2,SNR=5.3 | | | | | | |
| SNAA | | | | LR | LR | 07 06 30.8 | |
| | comp=Z,40nm,21.9s,baz=278,slow=29 | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **SDV** | **Santo Domingo** | **59.69** | **288** | LR | LR | 07 13 40.6 | |
| | comp=Z,53nm,19.5s,baz=78,slow=36 | | | | | | |
| **TROLL** | **Troll, Antarti** | **60.11** | **174** | ⇑P | **P** | **06 48 12.1** | **-0.1** |
| | comp=Z,105nm,0.8s | | | | | | |
| **NNA** | **Nana** | **60.69** | **263** | LR | LR | 07 13 06.5 | |
| | comp=Z,121nm,19.9s,baz=130,slow=35 | | | | | | |
| **ROSC** | **El Rosal** | **61.87** | **63** | LR | LR | 07 15 29.4 | |
| | comp=Z,185nm,18.1s,baz=82,slow=36 | | | | | | |
| **ATD** | **Arta Tunnel** | **61.89** | **69** | LR | LR | 07 14 42.7 | |
| | comp=Z,5.9nm,19.2s,baz=240,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **62.98** | **268** | LR | LR | 07 16 02.7 | |
| | comp=Z,128nm,18.5s,baz=106,slow=36 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **63.20** | **19** | LR | LR | 07 14 42.1 | |
| | comp=Z,106nm,21.3s,baz=262,slow=35 | | | | | | |
| **CIMO** | **Cimolais** | **63.62** | **21** | P | **P** | **06 48 36.6** | **+0.6** |
| CIMO | | | | IAmb | IAmb | 06 48 48.6 | |
| | comp=Z,12nm,1.6s | | | | | | |
| **STAL** | **STALIGIAL** | **63.67** | **21** | P | **P** | **06 48 36.8** | **+0.5** |
| STAL | | | | IAmb | IAmb | 06 48 37.9 | |
| | comp=Z,8.1nm,1.2s | | | | | | |
| **VRAC** | **Vranov** | **67.64** | **21** | LR | LR | 07 19 25.5 | |
| | comp=Z,86nm,18.1s,baz=212,slow=37 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.80** | **38** | P | **P** | **06 49 10.4** | **+0.9** |
| | comp=Z,1.1nm,0.7s,baz=226,slow=10,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **73.50** | **157** | LR | LR | 07 15 16.2 | |
| | comp=Z,127nm,19.3s,baz=142,slow=30 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.84** | **27** | P | **P** | **06 49 39.3** | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=226,slow=6.7,SNR=6.6 | | | | | | |
| AKASG | | | | LR | LR | 07 23 27.7 | |
| | comp=Z,53nm,19.2s,baz=232,slow=37 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **76.11** | **14** | LR | LR | 07 24 00.8 | |
| | comp=Z,35nm,18.1s,baz=168,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **76.36** | **13** | LR | LR | 07 23 30.7 | |
| | comp=Z,20nm,18.9s,baz=190,slow=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **77.39** | **180** | P | **P** | **06 49 59.4** | **-0.5** |
| | comp=Z,2.4nm,0.6s,baz=219,slow=13,SNR=24 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **WSAR** | **Wadi Sarin** | **80.03** | **63** | LR | LR | 07 26 32.3 | |
| | comp=Z,72nm,18.2s,baz=242,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **81.69** | **319** | LR | LR | 07 19 55.9 | |
| | comp=Z,33nm,19.2s,baz=240,slow=31 | | | | | | |
| **TXAR** | **Lajitas Array** | **95.36** | **299** | P | **P** | **06 51 27.6** | **-2.3** |
| | comp=Z,0.4nm,0.9s,baz=140,slow=2.8,SNR=4.1 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **135.37** | **136** | PKP | **PKPdf** | **06 57 24.5** | **-1.4** |
| | comp=Z,0.2nm,0.9s,baz=244,slow=2.7,SNR=1.0 | | | | | | |

*IDC **10** 06:43:59.6±2.3, 28.˚35S×67.˚66W, h109km±20km, mb3.4/3, mbtmp3.7/8, Error ellipse: s-maj=29.8km s-min=17.7km az=85.0*

*SJA **10** 06:43:59.4±0.7, 28.˚25S×67.˚51W, h156km±7km, ML3.5, MW3.6*

**ISC 10 06:44:01.4±0.8, 28.˚26S±0.˚04×67.˚53W±0.˚05, h134km±8km, n34, σ1s29/46, mb3.6/3, La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AANI** | **Anillaco** | **0.76** | **137** | eP | Pn | 06 44 28.9 | +6.1 |
| **ACLC** | **CERRO LA CRUZ** | **1.27** | **157** | eP | **Pn** | **06 44 28.3** | **+0.8** |
| ACLC | | | | eS | **Sn** | **06 44 47.3** | **0.0** |
| ACLC | | | | IAML | | 06 44 47.9 | |
| | comp=Z,711nm,0.2s | | | | | | |
| **CYA** | **Choya** | **1.53** | **97** | eP | **Pn** | **06 44 31.4** | **+1.3** |
| CYA | | | | eS | **Sn** | **06 44 52.9** | **+0.9** |
| CYA | | | | IAML | | 06 44 53.2 | |
| | comp=Z,395nm,0.8s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.36** | **216** | eP | **Pn** | **06 44 40.7** | **+0.5** |
| ACDV | | | | eS | **Sn** | **06 45 11.0** | **+1.0** |
| ACDV | | | | IAML | | 06 45 11.5 | |
| | comp=Z,97nm,0.3s | | | | | | |
| **GO03** | **Copiap** | **2.49** | **285** | eP | **Pn** | **06 44 42.0** | **+0.3** |
| GO03 | | | | eS | **Sn** | **06 45 12.5** | **-0.1** |
| **FSA** | **Cafayete** | **2.54** | **33** | eP | **Pn** | **06 44 40.0** | **-2.5** |
| **AROD** | **Rodeo** | **2.55** | **221** | eP | **Pn** | **06 44 43.2** | **+0.5** |
| AROD | | | | eS | **Sn** | **06 45 15.9** | **+1.4** |
| **ACCO** | **Cerro Coronel** | **2.68** | **210** | eP | **Pn** | **06 44 44.8** | **+0.4** |
| ACCO | | | | eS | **Sn** | **06 45 18.1** | **+0.7** |
| **DOCA** | **Reserva Natura** | **3.00** | **206** | eP | **Pn** | **06 44 48.4** | **-0.2** |
| DOCA | | | | IAML | | 06 45 24.7 | |
| | comp=Z,214nm,0.4s | | | | | | |
| DOCA | | | | eS | **Sn** | **06 45 24.8** | **-0.1** |
| **RTLL** | **Cerro Villicun** | **3.17** | **195** | eP | **Pn** | **06 44 50.4** | **0.0** |
| RTLL | | | | eS | **Sn** | **06 45 27.1** | **-1.1** |
| **ZON** | **Zonda** | **3.43** | **197** | eP | **Pn** | **06 44 53.7** | **0.0** |
| ZON | | | | IAML | | 06 45 39.4 | |
| | comp=Z,39nm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **3.44** | **236** | eP | **Pn** | **06 44 53.7** | **-0.4** |
| GO04 | | | | eS | **Sn** | **06 45 34.6** | **-0.2** |
| **GO02** | **Mina Guanaco** | **3.59** | **329** | eP | **Pn** | **06 44 57.4** | **+1.2** |
| GO02 | | | | eS | **Sn** | **06 45 40.9** | **+2.3** |
| **CO03** | **El Pedregal** | **3.77** | **226** | eP | **Pn** | **06 44 57.7** | **-0.5** |
| CO03 | | | | eS | **Sn** | **06 45 42.7** | **+0.4** |
| CO03 | | | | IAML | | 06 45 46.1 | |
| | comp=Z,74nm,0.3s | | | | | | |
| **RTLS** | **Leoncito** | **3.85** | **203** | eP | **Pn** | **06 44 59.3** | **-0.2** |
| RTLS | | | | eS | **Sn** | **06 45 46.4** | **+1.9** |
| RTLS | | | | IAML | | 06 45 47.1 | |
| | comp=Z,97nm,0.3s | | | | | | |
| **SLA** | **San Lorenzo** | **3.96** | **28** | eP | **Pn** | **06 44 58.5** | **-2.4** |
| **CO02** | **Combarbal** | **4.21** | **225** | eS | **Sn** | **06 45 52.3** | **-0.6** |
| CO02 | | | | IAML | | 06 45 52.9 | |
| | comp=Z,98nm,0.1s | | | | | | |
| **AZAP** | **Zapla** | **4.58** | **29** | eP | **Pn** | **06 45 06.0** | **-3.2** |
| AZAP | | | | eS | Sn | 06 45 52.0 | -10 |
| AZAP | | | | IAML | | 06 45 58.4 | |
| | comp=Z,44nm,0.5s | | | | | | |
| **ALOL** | **LOMAS DE OLMED** | **5.45** | **37** | eP | Pn | 06 45 08.0 | -13 |
| ALOL | | | | eS | Sn | 06 46 14.0 | -8.4 |
| **LVC** | **Limon Verde** | **5.76** | **347** | eP | **Pn** | **06 45 26.3** | **+1.2** |
| LVC | | | | eS | **Sn** | **06 46 32.1** | **+1.7** |
| LVC | | | | IAML | | 06 47 14.6 | |
| | comp=Z,7.7nm,3.8s | | | | | | |
| **LVC** | **Limon Verde** | **5.76** | **347** | P | **Pn** | **06 45 25.5** | **+0.4** |
| | comp=Z,8.8nm,0.4s,baz=183,slow=8.6,SNR=31 | | | | | | |
| LVC | | | | S | **Sn** | **06 46 28.9** | **-1.4** |
| | comp=Z,5.3nm,0.4s,baz=187,slow=7.5,SNR=2.9 | | | | | | |
| **YJA** | **Yavi** | **6.32** | **17** | eP | **Pn** | **06 45 30.5** | **-2.2** |
| **CPUP** | **Villa Florida** | **9.27** | **80** | P | **Pn** | **06 46 12.3** | **+0.4** |
| | comp=Z,1.0nm,0.9s,baz=251,slow=16,SNR=1.1 | | | | | | |
| **LPAZ** | **La Paz** | **11.93** | **357** | P | **Pn** | **06 46 48.1** | **+0.2** |
| | comp=Z,0.7nm,0.8s,baz=176,slow=6.3,SNR=1.6 | | | | | | |
| **PLCA** | **Paso Flores** | **12.69** | **191** | P | **Pn** | **06 46 53.9** | **-3.2** |
| | comp=Z,5.2nm,1.2s,baz=18,slow=13,SNR=3.0 | | | | | | |
| **SIV** | **San Ignacio** | **13.59** | **27** | P | **Pn** | **06 47 08.0** | **-0.9** |
| | comp=Z,0.4nm,0.6s,baz=191,slow=10,SNR=1.6 | | | | | | |
| **QSPA** | **South Pole Qui** | **61.96** | **180** | P | **P** | **06 54 07.6** | **+0.7** |
| | comp=Z,1.4nm,0.9s,baz=164,slow=1.5,SNR=8.1 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.56** | **68** | P | **P** | **06 55 49.8** | **+1.4** |
| | comp=Z,0.7nm,0.7s,baz=256,slow=3.7,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **80.57** | **330** | P | **P** | **06 56 00.2** | **+1.1** |
| | comp=Z,0.3nm,0.6s,baz=145,slow=7.9,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **124.40** | **204** | PKP | **PKPdf** | **07 02 45.0** | **-0.2** |
| | comp=Z,0.3nm,0.4s,baz=131,slow=1.6,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **127.63** | **206** | PKP | **PKPdf** | **07 02 51.6** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=159,slow=1.9,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **146.02** | **40** | PKPbc | **PKPab** | **07 03 26.5** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=299,slow=3.2,SNR=7.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **147.33** | **31** | PKPbc | **PKiKP** | **07 03 30.6** | **-0.4** |
| | comp=Z,1.5nm,0.5s,baz=286,slow=5.5,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **150.01** | **44** | PKPbc | **PKiKP** | **07 03 37.4** | **+0.6** |
| | comp=Z,1.2nm,0.7s,baz=325,slow=1.4,SNR=11 | | | | | | |

*SJA **10** 07:06:02.6±0.7, 35.˚70S×71.˚51W, h95km±3km, ML3.9, MW4.0*

*IDC **10** 07:06:04.7±0.7, 35.˚58S×71.˚07W, h87km±6km, mb3.7/9, mbtmp4.0/11, Error ellipse: s-maj=34.4km s-min=12.0km az=79.0*

*NEIC **10** 07:06:04.4±1.3, 35.˚64S±0.˚05×71.˚6W±0.˚1, h85km±8km, mb4.3/9, ML4.0(GUC), Error ellipse: s-maj=14.3km s-min=6.4km az=112.0*

*GUC **10** 07:06:05.0±0.8, 35.˚63S×71.˚49W, h87km±4km, ML4.0*

**ISC 10 07:06:04.6±0.6, 35.˚64S±0.˚03×71.˚52W±0.˚05, h86km±4km, n112, σ0s97/139, mb4.0/12, 10C-2D, Central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ML02** | **Panimavida** | **0.15** | **146** | | **Pn** | **07 06 16.8** | **-0.1** |
| **ML02** | **Panimavida** | **0.15** | **146** | eP | **Pn** | **07 06 16.1** | **-0.8** |
| **ML02** | **Panimavida** | **0.15** | **146** | eP | **Pn** | **07 06 16.9** | **-0.1** |
| ML02 | | | | eS | **Sn** | **07 06 26.1** | **-0.1** |
| **GO05** | **Huala** | **0.71** | **332** | | **Pn** | **07 06 21.3** | **+0.5** |
| **GO05** | **Huala** | **0.71** | **332** | eP | Pn | 07 06 16.1 | -4.7 |
| GO05 | | | | eP | | 07 06 21.4 | |
| GO05 | | | | eS | **Sn** | **07 06 34.8** | **+1.8** |
| **GO05** | **Huala** | **0.71** | **332** | ⇑iP | **Pn** | **07 06 21.4** | **+0.5** |
| GO05 | | | | eS | **Sn** | **07 06 33.7** | **+0.7**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MT03** | **Universidad Ad** | **2.29** | **22** | | | **Pn** | **07 06 40.7** | **+0.1** |
| **MT03** | **Universidad Ad** | **2.29** | **22** | *e*P | | **Pn** | **07 06 40.9** | **+0.3** |
| MT03 | | | | *e*S | | **Sn** | **07 07 08.8** | **+0.6** |
| MT03 | | | | IAML | | | 07 07 10.1 | |
| | comp=Z,685nm,0.2s | | | | | | | |
| **MT03** | **Universidad Ad** | **2.29** | **22** | *e*P | | **Pn** | **07 06 40.9** | **+0.3** |
| MT03 | | | | IAML | | | 07 07 14.0 | |
| | comp=E,1µm,0.1s | | | | | | | |
| **MT05** | **Renca** | **2.33** | **16** | | | **Pn** | **07 06 42.5** | **+1.4** |
| **MT05** | **Renca** | **2.33** | **16** | *e*P | | **Pn** | **07 06 37.4** | **-3.7** |
| MT05 | | | | *e*S | | **Sn** | **07 07 11.0** | **+2.0** |
| MT05 | | | | IAML | | | 07 07 15.5 | |
| | comp=Z,482nm,0.2s | | | | | | | |
| **MT05** | **Renca** | **2.33** | **16** | *e*P | | **Pn** | **07 06 42.8** | **+1.7** |
| MT05 | | | | IAML | | | 07 07 11.5 | |
| | comp=E,2µm,0.6s | | | | | | | |
| **MT16** | **CCHEN** | **2.35** | **21** | | | **Pn** | **07 06 41.1** | **-0.3** |
| **MT16** | **CCHEN** | **2.35** | **21** | *e*P | | **Pn** | **07 06 41.4** | **0.0** |
| MT16 | | | | IAML | | | 07 07 29.1 | |
| | comp=N,473nm,0.5s | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **2.38** | **20** | *e*P | | **Pn** | **07 06 42.0** | **+0.3** |
| MT14 | | | | IAML | | | 07 07 11.3 | |
| | comp=E,2µm,0.3s | | | | | | | |
| **MT02** | **Curacav** | **2.39** | **8** | | | **Pn** | **07 06 41.9** | **+0.1** |
| **MT02** | **Curacav** | **2.39** | **8** | *e*P | | **Pn** | **07 06 42.1** | **+0.2** |
| MT02 | | | | *e*S | | Sn | 07 06 58.4 | -12 |
| MT02 | | | | IAML | | | 07 07 16.0 | |
| | comp=Z,284nm,0.5s | | | | | | | |
| **MT02** | **Curacav** | **2.39** | **8** | ⇑*i*P | | **Pn** | **07 06 42.0** | **+0.1** |
| MT02 | | | | IAML | | | 07 07 16.4 | |
| | comp=N,448nm,0.7s | | | | | | | |
| **MT10** | **Hacienda Santa** | **2.49** | **19** | ⇑*i*P | | **Pn** | **07 06 43.5** | **+0.2** |
| MT10 | | | | IAML | | | 07 07 33.5 | |
| | comp=E,2µm,0.6s | | | | | | | |
| **MT04** | **Ro Olivares** | **2.50** | **28** | *e*P | | **Pn** | **07 06 44.3** | **+0.8** |
| MT04 | | | | *e*S | | **Sn** | **07 07 14.3** | **+1.0** |
| MT04 | | | | IAML | | | 07 07 20.3 | |
| | comp=Z,284nm,0.8s | | | | | | | |
| **MT04** | **Ro Olivares** | **2.50** | **28** | *e*P | | **Pn** | **07 06 44.2** | **+0.7** |
| MT04 | | | | IAML | | | 07 07 16.2 | |
| | comp=N,850nm,0.4s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.51** | **30** | | | **Pn** | **07 06 44.7** | **+0.9** |
| **MT08** | **Bocatoma Ro** | **2.51** | **30** | *e*P | | **Pn** | **07 06 44.6** | **+0.9** |
| MT08 | | | | IAML | | | 07 07 41.3 | |
| | comp=Z,259nm,0.7s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.51** | **30** | *i* P | | **Pn** | **07 06 45.0** | **+1.3** |
| MT08 | | | | IAML | | | 07 07 18.9 | |
| | comp=E,266nm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **2.58** | **16** | | | **Pn** | **07 06 44.9** | **+0.5** |
| **PEL** | **Peldehue** | **2.58** | **16** | *e*P | | **Pn** | **07 06 44.6** | **+0.2** |
| PEL | | | | *e*S | | **Sn** | **07 07 16.3** | **+1.3** |
| **VA01** | **Torpederas** | **2.61** | **358** | | | **Pn** | **07 06 44.6** | **-0.2** |
| **VA01** | **Torpederas** | **2.61** | **358** | *e*P | | **Pn** | **07 06 44.2** | **-0.6** |
| VA01 | | | | IAML | | | 07 07 25.6 | |
| | comp=Z,240nm,0.6s | | | | | | | |
| **RFA** | **San Rafael** | **2.65** | **72** | *e*P | | **Pn** | **07 06 45.0** | **-0.3** |
| RFA | | | | *e*S | | Sn | 07 07 05.7 | -11 |
| RFA | | | | IAML | | | 07 07 17.6 | |
| | comp=Z,151nm,0.9s | | | | | | | |
| **ROC1** | **El Roble** | **2.69** | **9** | *e*P | | **Pn** | **07 06 46.2** | **+0.1** |
| **ROCH** | **El Roble** | **2.69** | **9** | *e*P | | **Pn** | **07 06 46.1** | **0.0** |
| ROCH | | | | IAML | | | 07 07 22.7 | |
| | comp=N,1µm,0.5s | | | | | | | |
| **VA03** | **San Esteban** | **2.98** | **16** | | | **Pn** | **07 06 49.7** | **-0.1** |
| **VA03** | **San Esteban** | **2.98** | **16** | *e*P | | **Pn** | **07 06 50.0** | **+0.2** |
| VA03 | | | | *e*S | | **Sn** | **07 07 25.7** | **+1.1** |
| VA03 | | | | IAML | | | 07 07 27.6 | |
| | comp=Z,310nm,0.6s | | | | | | | |
| **VA06** | **Catapilco** | **3.07** | **4** | | | **Pn** | **07 06 50.7** | **-0.2** |
| **GO06** | **Curarrehue** | **3.94** | **179** | | | **Pn** | **07 07 04.0** | **+1.1** |
| **GO06** | **Curarrehue** | **3.94** | **179** | *e*P | | **Pn** | **07 07 01.9** | **-1.0** |
| GO06 | | | | *e*S | | Sn | 07 07 33.0 | -15 |
| **LR03** | **Panguipulli** | **4.04** | **189** | | | **Pn** | **07 07 03.1** | **-1.0** |
| **LR03** | **Panguipulli** | **4.04** | **189** | *e*P | | **Pn** | **07 07 03.1** | **-1.0** |
| LR03 | | | | IAML | | | 07 08 00.5 | |
| | comp=Z,337nm,0.4s | | | | | | | |
| **RTLS** | **Leoncito** | **4.25** | **26** | *e*P | | **Pn** | **07 07 08.4** | **+1.1** |
| RTLS | | | | IAML | | | 07 08 28.0 | |
| | comp=Z,215nm,1.0s | | | | | | | |
| **CO02** | **Combarbal** | **4.44** | **6** | | | **Pn** | **07 07 09.5** | **-0.2** |
| **CO02** | **Combarbal** | **4.44** | **6** | *e*P | | **Pn** | **07 07 08.9** | **-0.8** |
| CO02 | | | | *e*S | | **Sn** | **07 08 00.2** | **0.0** |
| CO02 | | | | IAML | | | 07 08 29.9 | |
| | comp=Z,144nm,0.6s | | | | | | | |
| **LR04** | **Corral** | **4.50** | **199** | | | **Pn** | **07 07 08.5** | **-1.8** |
| **LR05** | **Currie** | **4.60** | **185** | | | **Pn** | **07 07 12.0** | **+0.3** |
| **LR05** | **Currie** | **4.60** | **185** | *e*P | | **Pn** | **07 07 11.9** | **+0.3** |
| LR05 | | | | IAML | | | 07 08 26.3 | |
| | comp=Z,45nm,0.8s | | | | | | | |
| **CO03** | **El Pedregal** | **4.83** | **9** | | | **Pn** | **07 07 14.4** | **-0.6** |
| **CO03** | **El Pedregal** | **4.83** | **9** | *e*P | | **Pn** | **07 07 15.0** | **0.0** |
| CO03 | | | | *e*S | | **Sn** | **07 08 08.2** | **-1.6** |
| CO03 | | | | IAML | | | 07 08 11.2 | |
| | comp=Z,123nm,0.5s | | | | | | | |
| **CO06** | **Fray Jorge** | **4.95** | **359** | | | **Pn** | **07 07 15.3** | **-1.1** |
| **RTLL** | **Cerro Villicun** | **4.99** | **32** | *e*P | | **Pn** | **07 07 17.3** | **+0.2** |
| **DOCA** | **Reserva Natura** | **5.10** | **24** | *e*P | | **Pn** | **07 07 17.8** | **-1.1** |
| DOCA | | | | IAML | | | 07 09 05.2 | |
| | comp=Z,164nm,4.7s | | | | | | | |
| **PLCA** | **Paso Flores** | **5.15** | **172** | | | **Pn** | **07 07 19.6** | **+0.5** |
| **PLCA** | **Paso Flores** | **5.15** | **172** | *e*P | | **Pn** | **07 07 19.6** | **+0.5** |
| PLCA | | | | IAML | | | 07 08 38.9 | |
| | comp=Z,34nm,5.0s | | | | | | | |
| **PLCA** | **Paso Flores** | **5.15** | **172** | P | | **Pn** | **07 07 19.3** | **+0.2** |
| | comp=Z,5.3nm,0.4s,baz=342,slow=12,SNR=57 | | | | | | | |
| PLCA | | | | S | | **Sn** | **07 08 18.6** | **+1.4** |
| | comp=Z,8.3nm,0.7s,baz=332,slow=12,SNR=2.9 | | | | | | | |
| **LL04** | **Puerto Octay** | **5.31** | **187** | | | **Pn** | **07 07 20.1** | **-1.3** |
| **LL04** | **Puerto Octay** | **5.31** | **187** | *e*P | | **Pn** | **07 07 20.0** | **-1.3** |
| LL04 | | | | IAML | | | 07 08 24.5 | |
| | comp=Z,30nm,0.5s | | | | | | | |
| **CO05** | **La Serena** | **5.71** | **2** | | | **Pn** | **07 07 25.4** | **-1.3** |
| **CO01** | **Juntas del Tor** | **5.77** | **12** | | | **Pn** | **07 07 27.5** | **-0.4** |
| **LCO** | **Las Campanas** | **6.64** | **6** | | | **Pn** | **07 07 38.9** | **-0.9** |
| **LL01** | **San Ignacio de** | **6.77** | **186** | | | **Pn** | **07 07 40.1** | **-1.1** |
| **AC05** | **El Transito** | **6.86** | **9** | | | **Pn** | **07 07 41.1** | **-1.5** |
| **TRQA** | **Tornquist** | **8.02** | **110** | | | **Pn** | **07 07 57.1** | **-1.2** |
| **PLTB** | **Pedras Altas** | **15.40** | **81** | Pn | | **Pn** | **07 09 37.1** | **+0.1** |
| PLTB | | | | IAmb | | IAmb | 07 10 15.8 | |
| | comp=Z,36nm,1.4s | | | | | | | |
| **ITAB** | **Concordia** | **18.52** | **69** | P | | **P** | **07 10 11.9** | **-2.2** |
| ITAB | | | | IAmb | | IAmb | 07 10 18.7 | |
| | comp=Z,30nm,1.4s | | | | | | | |
| **LPAZ** | **La Paz** | **19.50** | **10** | P | | **P** | **07 10 24.1** | **-1.4** |
| | comp=Z,0.7nm,0.7s,baz=184,slow=12,SNR=0.5 | | | | | | | |
| **AQDB** | **Aquidauana** | **20.52** | **47** | P | | **P** | **07 10 34.3** | **-1.6** |
| AQDB | | | | IAmb | | IAmb | 07 10 35.2 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **TRCB** | **Terra Rica** | **20.82** | **57** | P | | **P** | **07 10 39.9** | **+0.7** |
| **ETMB** | **Extrema** | **26.15** | **12** | P | | **P** | **07 11 31.1** | **+0.3** |
| **BAUV** | **El Baul** | **44.46** | **5** | P | | **P** | **07 14 06.6** | **-0.6** |
| **VNA3** | **Neumayer Olymp** | **47.69** | **157** | ⇑P | | **P** | **07 14 33.0** | **+1.1** |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **48.01** | **156** | ⇑P | | **P** | **07 14 38.0** | **+3.6** |
| | comp=Z,2.9nm,1.1s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.34** | **157** | ⇑P | | **P** | **07 14 36.4** | **-0.6** |
| | comp=Z,0.8nm,0.5s,baz=281,slow=9.9 | | | | | | | |
| **SNAA** | **Sanae** | **49.91** | **157** | P | | **P** | **07 14 48.5** | **-0.6** |
| SNAA | | | | IAmb | | IAmb | 07 15 21.1 | |
| | comp=Z,3.4nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **49.91** | **157** | ⇑P | | **P** | **07 14 46.7** | **-2.3** |
| | comp=Z,28nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **49.91** | **157** | P | | **P** | **07 14 48.5** | **-0.6** |
| | comp=Z,0.9nm,0.5s,baz=295,slow=12,SNR=8.8 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **51.62** | **158** | ⇑P | | **P** | **07 15 02.3** | **+0.4** |
| | comp=Z,84nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **54.60** | **180** | P | | **P** | **07 15 24.2** | **+0.3** |
| QSPA | | | | IAmb | | IAmb | 07 15 26.0 | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **54.60** | **180** | P | | **P** | **07 15 24.4** | **+0.5** |
| | comp=Z,2.3nm,0.8s,baz=165,slow=4.1,SNR=7.1 | | | | | | | |
| QSPA | | | | pP | | **pP** | **07 15 45.8** | **+0.5** |
| | comp=Z,1.3nm,0.8s,baz=154,slow=7.3,SNR=2.6 | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.36** | **331** | P | | **P** | **07 17 16.3** | **+1.1** |
| | comp=Z,1.2nm,0.7s,baz=158,slow=9.2,SNR=21 | | | | | | | |
| TXAR | | | | pP | | **pP** | **07 17 38.2** | **+0.6** |
| | comp=Z,0.3nm,0.8s,baz=140,slow=5.7,SNR=2.1 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **80.70** | **323** | P | | **P** | **07 18 10.0** | **+1.8** |
| | comp=Z,2.0nm,0.8s,baz=190,slow=5.7,SNR=5.0 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.37** | **70** | P | | **P** | **07 18 27.3** | **-0.3** |
| | comp=Z,0.9nm,1.1s,baz=225,slow=5.9,SNR=2.1 | | | | | | | |
| TORD | | | | pP | | **pP** | **07 18 48.8** | **-1.9** |
| | comp=Z,1.2nm,0.7s,baz=268,slow=3.0,SNR=6.3 | | | | | | | |
| | comp=Z,0.9nm,1.1s | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.41** | **333** | P | | **P** | **07 18 32.9** | **+0.5** |
| | comp=Z,0.4nm,0.7s,baz=128,slow=5.8,SNR=5.2 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.47** | **325** | P | | **P** | **07 18 33.8** | **+1.0** |
| | comp=Z,0.7nm,0.8s,baz=153,slow=4.3,SNR=5.6 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **ELK** | **Elko** | **85.97** | **328** | P | | **P** | **07 18 35.9** | **+0.6** |
| | comp=Z,1.2nm,0.8s,baz=117,slow=6.8,SNR=4.0 | | | | | | | |
| ELK | | | | pP | | **pP** | **07 18 59.8** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=192,slow=12,SNR=1.5 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **88.18** | **345** | P | | **P** | **07 18 45.3** | **-0.1** |
| | comp=Z,2.4nm,0.6s,baz=157,slow=6.1,SNR=5.2 | | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **119.53** | **208** | PKP | | **PKPdf** | **07 24 43.6** | **-1.2** |
| | comp=Z,0.2nm,0.3s,baz=151,slow=1.8,SNR=11 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **153.73** | **46** | PKPbc | | **PKPbc** | **07 25 52.0** | **-0.9** |
| | comp=Z,0.2nm,0.5s,baz=284,slow=2.5,SNR=4.9 | | | | | | | |

*IDC* ***10*** *07:16:32.1±0.7, 12°.75S×14°.80W, h0km, mb3.9/14, mbtmp3.9/14, Error ellipse: s-maj=29.3km s-min=16.5km az=124.0*

*NEIC* ***10*** *07:16:37.0±1.2, 12°.5S±0°.1×14°.7W±0°.1, h10km±1km, mb4.6/14, Error ellipse: s-maj=25.2km s-min=18.2km az=110.0*

**ISC 10 07:16:36.3±0.6, 12°.60S±0°.10×14°.7W±0°.1, h18km, n30, σ1ş68/30, mb4.0/18, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **ASCN** | **Ascension** | **4.65** | **4** | Pn | **Pn** | | **07 17 46.0** | **+0.3** |
| **DBIC** | **Dimbokro** | **21.48** | **27** | P | **P** | | **07 21 24.1** | **-0.1** |
| DBIC | | | | IAmb | IAmb | | 07 21 32.0 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **DBIC** | **Dimbokro** | **21.48** | **27** | P | **P** | | **07 21 23.4** | **-0.8** |
| | comp=Z,1.4nm,0.5s,baz=148,slow=6.5,SNR=1.5 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **RCBR** | **Riachuelo** | **22.01** | **286** | P | **P** | | **07 21 30.1** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** | **30.29** | **33** | P | **P** | | **07 22 45.8** | **-0.9** |
| | comp=Z,1.2nm,0.9s,baz=210,slow=8.4,SNR=3.1 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **BDFB** | **Brasilia** | **32.47** | **261** | P | **P** | | **07 23 06.2** | **0.0** |
| BDFB | | | | IAmb | IAmb | | 07 23 13.3 | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **BDFB** | **Brasilia** | **32.47** | **261** | P | **P** | | **07 23 02.9** | **-3.3** |
| | comp=Z,3.7nm,0.9s,baz=86,slow=14,SNR=3.6 | | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **43.19** | **261** | P | **P** | | **07 24 37.2** | **+0.6** |
| **SIV** | **San Ignacio** | **45.04** | **260** | P | **P** | | **07 24 48.3** | **-3.2** |
| | comp=Z,1.5nm,0.9s,baz=103,slow=10,SNR=5.9 | | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | | |
| **SAML** | **Samuel** | **47.76** | **269** | P | **P** | | **07 25 14.3** | **+1.4** |
| SAML | | | | IAmb | IAmb | | 07 25 20.5 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **BOAV** | **Boa Vista** | **47.92** | **285** | P | **P** | | **07 25 14.4** | **+0.3** |
| BOAV | | | | IAmb | IAmb | | 07 25 22.8 | |
| | comp=Z,4.5nm,1.2s | | | | | | | |
| **TRQA** | **Tornquist** | **49.05** | **230** | P | **P** | | **07 25 23.1** | **+0.6** |
| **ETMB** | **Extrema** | **50.59** | **268** | P | **P** | | **07 25 34.7** | **+0.1** |
| ETMB | | | | IAmb | IAmb | | 07 25 35.6 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **LPAZ** | **La Paz** | **51.80** | **259** | P | **P** | | **07 25 44.0** | **-0.4** |
| **LPAZ** | **La Paz** | **51.80** | **259** | P | **P** | | **07 25 41.2** | **-3.1** |
| | comp=Z,0.7nm,0.8s,baz=72,slow=3.2,SNR=3.5 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **KEST** | **Kesra** | **53.16** | **24** | P | **P** | | **07 25 53.8** | **+0.4** |
| | comp=Z,4.9nm,0.9s,baz=349,slow=0.5,SNR=3.8 | | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| **CO01** | **Juntas del Tor** | **53.96** | **242** | P | **P** | | **07 26 00.0** | **+0.2** |
| CO01 | | | | IAmb | IAmb | | 07 26 08.0 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **55.18** | **236** | P | **P** | | **07 26 09.8** | **+1.5** |
| **TBTG** | **Tabatinga, AM** | **55.20** | **274** | P | **P** | | **07 26 08.6** | **-0.1** |
| **SNAA** | **Sanae** | **59.47** | **176** | P | **P** | | **07 26 42.2** | **+4.3** |
| SNAA | | | | IAmb | IAmb | | 07 27 07.6 | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **59.47** | **176** | P | **P** | | **07 26 36.6** | **-1.3** |
| | comp=Z,1.7nm,1.1s,baz=7.9,slow=14,SNR=4.4 | | | | | | | |
| | comp=Z,1.7nm,1.1s | | | | | | | |
| **PMSA** | **Palmer Station** | **62.09** | **202** | P | **P** | | **07 26 58.0** | **+2.2** |
| **GERES** | **GERESS Array B** | **66.12** | **20** | P | **P** | | **07 27 22.6** | **0.0** |
| | comp=Z,0.2nm,0.2s,baz=209,slow=9.8,SNR=1.6 | | | | | | | |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **68.36** | **7** | P | **P** | | **07 27 36.8** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=190,slow=7.1,SNR=1.5 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.72** | **38** | P | **P** | | **07 27 40.0** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=267,slow=7.2,SNR=2.0 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.73** | **27** | P | **P** | | **07 28 09.1** | **-0.1** |
| | comp=Z,0.7nm,0.5s,baz=225,slow=6.4,SNR=6.2 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **77.55** | **180** | P | **P** | | **07 28 28.0** | **-3.0** |
| | comp=Z,1.4nm,0.6s,baz=233,slow=2.0,SNR=11 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **VNDA** | **Vanda** | **90.02** | **179** | P | **P** | | **07 29 33.2** | **-1.3** |
| | comp=Z,0.9nm,0.9s,baz=229,slow=4.2,SNR=3.7 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **95.22** | **299** | P | **P** | | **07 30 00.9** | **+1.4** |
| **TXAR** | **Lajitas Array** | **95.22** | **299** | P | **P** | | **07 29 59.5** | **0.0** |
| | comp=Z,0.5nm,0.9s,baz=145,slow=4.6,SNR=5.4 | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | |

*IDC* ***10*** *07:17:02.9±0.5, 12°.75S×14°.73W, h0km, mb4.5/27, mbtmp4.5/27, MS5.0/2, Error ellipse: s-maj=22.2km s-min=11.1km az=129.0*

*MOS* ***10*** *07:17:03.1±1.1, 12°.78S×14°.64W, h12km, mb5.1/25, Error ellipse: s-maj=11.5km s-min=6.4km az=56.9*

*NEIC* ***10*** *07:17:05.3±1.2, 12°.8S±0°.1×14°.7W±0°.1, h10km±1km, mb5.2/78, Error ellipse: s-maj=19.3km s-min=15.3km az=129.0*

*GCMT* ***10*** *07:17:08.3±0.2, 12°.79S±0°.02×14°.57W±0°.01, h28km, MW5.3/136, Moment Tensor Solution. s24,c26; s136,c238; Duration: 1ş2 Moment tensor: Scale 10^17 Nm; Mrr=1.52±.05; Mθθ=0.40±.03; Mφφ=1.13±.03; Mrθ=0.04±.05; Mθφ=-0.04±.01; Mφr=0.03±.04; Best double couple: Mo=1.32700×10^17 NP1:φs=178.00000°, δ=46.00000°, λ=-88.00000°. NP2:φs=355.00000°, δ=44.00000°, λ=-92.00000°. Principal axes: T 1.1330, Plg=1.0000°, Azm=267.0000°; N 0.3960, Plg=1.0000°, Azm=357.0000°; P -1.5210, Plg=89.0000°, Azm=154.0000°; nsta=1 refers to body waves, cutoff=40s. nsta=2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 10 07:17:05.4±0.3, 12°.82S±0°.07×14°.61W±0°.06, h16km, n294, σ1ş08/285, mb5.0/113, MS5.0/8, 16C-1D, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **ASCN** | **Ascension** | **4.86** | **3** | Pn | **Pn** | | **07 18 17.2** | **-0.8** |
| **H10N1** | **ASCENSION HYDR** | **4.94** | **1** | T | T | | 07 23 25.5 | |
| | baz=190,slow=78,SNR=20 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **4.95** | **1** | T | T | | 07 23 25.5 | |
| | baz=190,slow=78,SNR=236 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **4.96** | **1** | T | T | | 07 23 25.5 | |
| | baz=190,slow=78,SNR=77 | | | | | | | |
| **LIC** | **Lanto** | **21.18** | **27** | ⇑*e*PKIKP | | **P** | **07 21 53.7** | **+3.4** |
| | 95nm,1.2s | | | | | | | |
| **KIC** | **Kosan Boka** | **21.43** | **28** | ⇑*e*PKIKP | | **P** | **07 21 53.1** | **+0.1** |
| | 19nm,1.0s | | | | | | | |
| **NBCA** | **Caruaru-PE** | **21.53** | **280** | *e*P | | **P** | **07 21 55.0** | **+0.7** |
| **TIC** | **Toumodi** | **21.56** | **27** | ⇑*e*PKIKP | | **P** | **07 21 53.6** | **-0.8** |
| | 36nm,1.0s | | | | | | | |
| **DBIC** | **Dimbokro** | **21.65** | **27** | P | | **P** | **07 21 55.7** | **+0.3** |
| **DBIC** | **Dimbokro** | **21.65** | **27** | P | | **P** | **07 21 54.8** | **-0.6** |
| | 24nm,1.2s,baz=205,slow=16,SNR=4.0 | | | | | | | |
| | 24nm,1.2s | | | | | | | |
| **DBIC** | **Dimbokro** | **21.65** | **27** | P | | **P** | **07 21 55.7** | **+0.3** |
| DBIC | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.2s | | | | | | | |
| **RCBR** | **Riachuelo** | **22.12** | **286** | P | | **P** | **07 22 01.4** | **+0.9** |
| **RCBR** | **Riachuelo** | **22.12** | **286** | P | | **P** | **07 22 01.4** | **+0.9** |
| RCBR | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.3s | | | | | | | |
| **NBLA** | **Lagarto - SE** | **22.76** | **272** | *e*P | | **P** | **07 22 06.8** | **-0.5** |
| **NBPB** | **Pedra_Branca-C** | **25.68** | **284** | *e*P | | **P** | **07 22 35.1** | **+0.1** |
| **SJMB** | **Sao Joao De Ma** | **26.22** | **254** | *e*P | | **P** | **07 22 42.0** | **+2.1** |
| **JANB** | **Januaria** | **28.91** | **262** | *e*P | | **P** | **07 23 05.3** | **+1.2** |
| **SDBA** | **SAO DESIDERIO** | **29.56** | **267** | *e*P | | **P** | **07 23 08.8** | **-1.1** |
| **TOA0** | **Torodi Ar. Sit** | **30.44** | **33** | P | | **P** | **07 23 17.5** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **30.44** | **33** | P | | **P** | **07 23 16.8** | **-0.8** |
| | comp=Z,5.3nm,1.1s,baz=206,slow=9.5,SNR=7.0 | | | | | | | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| **VAO** | **Valinhos** | **32.34** | **247** | *e*P | | **P** | **07 23 34.1** | **-0.3** |
| **BDFB** | **Brasilia** | **32.49** | **261** | P | | **P** | **07 23 34.7** | **-1.0** |
| BDFB | | | | IAmb | IAmb | | 07 23 42.8 | |
| | comp=Z,46nm,1.4s | | | | | | | |
| **BDFB** | **Brasilia** | **32.49** | **261** | P | | **P** | **07 23 34.9** | **-0.8** |
| | comp=Z,20nm,1.1s,baz=76,slow=9.1,SNR=10 | | | | | | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **SMTB** | **Santa Maria do** | **32.62** | **274** | *e*P | | **P** | **07 23 36.8** | **0.0** |
| **SPB** | **Sao Paulo** | **32.89** | **246** | P | | **P** | **07 23 39.0** | **-0.1** |
| **PRPB** | **Parauapebas** | **35.32** | **277** | *e*P | | **P** | **07 23 59.2** | **-1.1** |
| **SNDB** | **Serra Nova Dou** | **35.83** | **267** | *e*P | | **P** | **07 24 03.6** | **-1.1** |
| **PCMB** | **Pacaembu** | **36.01** | **251** | *e*P | | **P** | **07 24 06.1** | **-0.1** |
| **LDASE** | **Londrina, Braz** | **36.17** | **248** | *e*P | | **P** | **07 24 06.5** | **-1.0** |
| **PTGB** | **Pitanga** | **37.27** | **246** | *e*P | | **P** | **07 24 17.4** | **+0.5** |
| **MCPB** | **Macapa, AP** | **39.13** | **286** | *e*P | | **P** | **07 24 32.1** | **-0.5** |
| **CRSM** | **Crissiumal (Br** | **39.61** | **242** | *e*P | | **P** | **07 24 37.2** | **+0.7** |
| **LBTB** | **Lobatse** | **39.77** | **114** | P | | **P** | **07 24 36.8** | **-1.2** |
| **SALV** | **Santo Antonio** | **39.88** | **261** | *e*P | | **P** | **07 24 39.0** | **+0.2** |
| **AQDB** | **Aquidauana** | **40.02** | **253** | *e*P | | **P** | **07 24 39.7** | **-0.2** |
| **NPGB** | **Novo Progresso** | **40.51** | **274** | *e*P | | **P** | **07 24 44.1** | **-0.1** |
| **TAM** | **Tamanrasset** | **40.51** | **29** | P | | **P** | **07 24 46.0** | **+1.8** |
| **TAM** | **Tamanrasset** | **40.51** | **29** | P | | **P** | **07 24 46.0** | **+1.8** |
| TAM | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.8s | | | | | | | |
| **PDRB** | **Porto dos Gac** | **41.16** | **267** | *e*P | | **P** | **07 24 49.2** | **-0.3** |
| **ITTB** | **Itaituba** | **41.47** | **278** | *e*P | | **P** | **07 24 50.8** | **-1.3** |
| **LSZ** | **Lusaka** | **41.54** | **99** | P | | **P** | **07 24 52.5** | **-0.2** |
| **LSZ** | **Lusaka** | **41.54** | **99** | P | | **P** | **07 24 52.5** | **-0.2** |
| LSZ | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **MURT** | **Porto Murtinho** | **41.89** | **252** | *e*P | | **P** | **07 24 54.9** | **-0.4** |
| **CPUP** | **Villa Florida** | **42.24** | **245** | *e*P | | **P** | **07 24 57.4** | **-0.9** |
| **CPUP** | **Villa Florida** | **42.24** | **245** | P | | **P** | **07 24 57.8** | **-0.4** |
| | comp=Z,7.7nm,1.1s,baz=82,slow=8.6,SNR=5.4 | | | | | | | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| **CPUP** | **Villa Florida** | **42.24** | **245** | *e*P | | **P** | **07 24 58.4** | **+0.2** |
| **ITQB** | **Itaqui** | **42.33** | **240** | P | | **P** | **07 24 58.8** | **-0.1** |
| **PAPY** | **Pozo Azul** | **42.71** | **248** | *e*P | | **P** | **07 25 03.0** | **+1.0** |
| **PTLB** | **Pontes e Lacer** | **43.21** | **261** | P | | **P** | **07 25 05.8** | **-0.3** |
| **PTLB** | **Pontes e Lacer** | **43.21** | **261** | *e*P | | **P** | **07 25 06.5** | **+0.3** |
| **VILB** | **Vilhena** | **44.40** | **265** | P | | **P** | **07 25 15.4** | **-0.4** |
| **VILB** | **Vilhena** | **44.40** | **265** | *e*P | | **P** | **07 25 16.6** | **+0.8** |
| **BBSD** | **Serra de San D** | **44.57** | **258** | *e*P | | **P** | **07 25 17.3** | **+0.1** |
| **SIV** | **San Ignacio** | **45.05** | **260** | P | | **P** | **07 25 20.7** | **-0.3** |
| | comp=Z,6.2nm,1.1s,baz=94,slow=7.9,SNR=8.4 | | | | | | | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **MDT** | **Midelt** | **46.37** | **12** | P | | **P** | **07 25 31.0** | **-0.2** |
| | comp=Z,10nm,1.2s,baz=205,slow=8.8,SNR=4.6 | | | | | | | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **MBAR** | **Mbarara** | **46.54** | **78** | P | | **P** | **07 25 34.4** | **+1.3** |
| MBAR | | | | IAmb | IAmb | | 07 25 36.5 | |
| | comp=Z,49nm,1.7s | | | | | | | |
| **MBAR** | **Mbarara** | **46.54** | **78** | LR | LR | | 07 43 05.6 | |
| | comp=Z,1µm,21.1s,baz=248,slow=34 | | | | | | | |
| **MBAR** | **Mbarara** | **46.54** | **78** | *e*P | | **P** | **07 25 34.3** | **+1.3** |
| MBAR | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.5s |

comp=Z,34nm,1.4s
**SSB Saint Sauveur 60.37 15** P **P** **07 27 14.2 +0.4**
SSB pmax pmax
comp=Z,34nm,1.4s
**INTR Introdacqua 60.54 24** P **P** **07 27 16.0 +0.9**
INTR IAmb IAmb 07 27 39.8
comp=Z,16nm,1.2s
**BNI Bardonecchia 60.74 17** P **P** **07 27 17.3 +0.8**
BNI IAmb IAmb 07 27 20.4
comp=Z,24nm,1.2s
**BNI Bardonecchia 60.74 17** P **P** **07 27 17.3 +0.8**
BNI pmax pmax
comp=Z,24nm,1.3s
**ROSC El Rosal 61.86 283** P **P** **07 27 24.6 -0.4**
comp=Z,8.6nm,0.6s,baz=133,slow=18,SNR=4.0
comp=Z,8.6nm,0.6s
**TIR Tirane 62.59 29** P **P** **07 27 29.3 +0.4**
**TIR Tirane 62.59 29** P **P** **07 27 29.3 +0.4**
comp=Z,25nm,0.8s
**FNA Florina 62.88 30** P **P** **07 27 31.4 +0.5**
**FNA Florina 62.88 30** P **P** **07 27 31.4 +0.5**
FNA pmax pmax
comp=Z,12nm,1.1s
**PUK Puka 63.15 28** P **P** **07 27 33.1 +0.5**
**FUORN Ofenpass-Fuorn 63.24 19** P **P** **07 27 33.5 +0.1**
**DAVOX Davos/Dischmat 63.26 19** P **P** **07 27 32.7 -0.8**
comp=Z,1.7nm,0.4s,baz=207,slow=11,SNR=4.2
comp=Z,1.7nm,0.4s
**ELIB Princess Elisa 63.30 168** *d*P **P** **07 27 33.6 +0.3**
comp=Z,4.8nm,1.2s
**CIMO Cimolais 63.69 21** P **P** **07 27 35.8 -0.3**
CIMO IAmb IAmb 07 27 38.5
comp=Z,26nm,1.4s
**DAVA Damuels 63.72 18** *i* P **P** **07 27 36.8 +0.4**
comp=Z,32nm,1.1s,SNR=7.0
**SLE Schleitheim 63.73 17** P **P** **07 27 36.1 -0.3**
SLE pmax pmax
comp=Z,19nm,1.3s
**STAL STALIGIAL 63.74 21** P **P** **07 27 37.0 +0.6**
STAL IAmb IAmb 07 27 38.8
comp=Z,26nm,1.3s
**FETA Feichten 63.74 19** *i* P **P** **07 27 36.5 -0.2**
comp=Z,19nm,1.0s,SNR=5.8
**EIL Elat 63.76 48** P **P** **07 27 38.0 +1.1**
comp=Z,3.1nm,0.8s,baz=207,slow=8.8,SNR=4.3
comp=Z,3.1nm,0.8s
**ECH Echery 63.77 16** P **P** **07 27 36.2 -0.4**
ECH IAmb IAmb 07 27 39.3
comp=Z,19nm,1.2s
**ECH Echery 63.77 16** P **P** **07 27 36.2 -0.4**
ECH pmax pmax
comp=Z,19nm,1.2s
**SQTA Sankt Quirin 64.07 19** *i* P **P** **07 27 38.9 +0.1**
comp=Z,25nm,1.1s,SNR=6.2
**ABTA Abfaltersbach 64.09 20** *e*P **P** **07 27 39.7 +0.9**
comp=Z,13nm,1.4s
**MOTA Moosalm 64.15 19** *e*P **P** **07 27 39.3 0.0**
comp=Z,22nm,1.4s
**RETA Reutte 64.17 19** *e*P **P** **07 27 39.0 -0.3**
comp=Z,15nm,1.3s
**BFO Black Forest 64.20 17** P **P** **07 27 39.3 -0.1**
**BFO Black Forest 64.20 17** *e*P **P** **07 27 39.3 -0.1**
**WTTA Wattenberg 64.25 20** *i* P **P** **07 27 40.4 +0.4**
comp=Z,22nm,1.3s,SNR=6.5
**WATA Walderalm 64.30 19** *e*P **P** **07 27 40.1 -0.1**
comp=Z,13nm,1.0s
**IMBA Imbabura, San 64.36 277** P **P** **07 27 41.8 +0.1**
**MYKA Terra Mystica 64.38 21** *e*P **P** **07 27 42.4 +1.7**
comp=Z,16nm,1.7s
**PULU Pululahua 64.59 276** P **P** **07 27 42.5 -0.6**
**KBA Koelnbreinsper 64.66 21** *e*P **P** **07 27 45.5 +2.8**
comp=Z,13nm,1.6s
**KBA Koelnbreinsper 64.66 21** P **P** **07 27 43.1 +0.4**
**EZN Ezine 64.73 34** P **P** **07 27 44.4 +1.4**
**EZN Ezine 64.73 34** P **P** **07 27 44.4 +1.4**
comp=Z,18nm,1.1s
**LESA Schwarzleotal 64.74 20** *e*P **P** **07 27 43.1 +0.1**
comp=Z,9.4nm,1.1s
**SOKA Soboth 64.92 22** *i* P **P** **07 27 45.5 +1.3**
comp=Z,18nm,1.4s,SNR=7.5
**ARNL Arenillas 65.30 272** P **P** **07 27 46.5 -0.8**
**FRGS Fruska Gora 65.57 26** P **P** **07 27 49.0 +0.6**
comp=Z,12nm,1.1s,comp=Z,385nm
**ARSA Arzberg 65.59 22** *e*P **P** **07 27 49.4 +1.0**
comp=Z,18nm,1.6s
**MOA Molln 65.65 21** *e*P **P** **07 27 49.3 +0.5**
comp=Z,15nm,1.3s
**CSS Mathiatis 65.73 42** P **P** **07 27 50.2 +0.5**
comp=Z,12nm,1.4s
**MORH Mrgy, Hungar 65.94 25** P **P** **07 27 50.7 0.0**
comp=Z,9.5nm,1.4s
**MMAI Mount Meron Ar 65.97 45** P **P** **07 27 52.2 +0.9**
comp=Z,0.4nm,0.3s,baz=255,slow=20,SNR=4.6
comp=Z,0.4nm,0.3s
**RONA Rosalia, Austr 66.25 22** *i* P **P** **07 27 54.1 +1.3**
comp=Z,28nm,1.4s,SNR=7.7
**MPLH Magyarpolny 66.28 23** P **P** **07 27 53.6 +0.7**
comp=Z,38nm,1.4s,comp=Z,1µm
**CONA Conrad Observa 66.28 22** *e*P **P** **07 27 54.4 +1.4**
comp=Z,16nm,1.5s
**GEC2 GERESS Array S 66.31 20** P **P** **07 27 53.4 +0.2**
GEC2 IAmb IAmb 07 28 07.4
comp=Z,33nm,1.7s
**GERES GERESS Array B 66.31 20** P **P** **07 27 53.0 -0.2**
**GERES GERESS Array B 66.31 20** P **P** **07 27 52.7 -0.5**
comp=Z,1.9nm,0.9s,baz=185,slow=9.9,SNR=9.5
comp=Z,1.9nm,0.9s
**GERES GERESS Array B 66.31 20** *e*P **P** **07 27 53.0 -0.2**
**KHC Kasperske Hory 66.52 20** P **P** **07 27 54.8 +0.4**
KHC IAmb IAmb 07 27 56.3
comp=Z,22nm,1.6s
**KHC Kasperske Hory 66.52 20** *e*P **P** **07 27 54.0 -0.4**
**KHC Kasperske Hory 66.52 20***ce*P **P** **07 27 55.4 +1.0**
KHC pmax pmax
comp=Z,32nm,1.7s
**KHC Kasperske Hory 66.52 20** P **P** **07 27 54.3 -0.1**
comp=Z,7.6nm,1.4s
**ASF Jabal al Asfar 66.54 46** P **P** **07 27 56.5 +1.5**
comp=Z,11nm,1.1s,baz=267,slow=0.1,SNR=7.1
comp=Z,11nm,1.1s
**ZST Bratislava 66.96 22** *e*P **P** **07 27 59.7 +2.5**
ZST pmax pmax
comp=Z,135nm,1.8s
**ZST Bratislava 66.96 22** *e*P **P** **07 27 59.7 +2.5**
**KRUC Moravsky 67.43 22** *e*P **P** **07 28 00.6 +0.4**
**VRAC Vranov 67.70 21** *e*P **P** **07 28 02.0 +0.1**
**VRAC Vranov 67.70 21** P **P** **07 28 01.6 -0.3**
comp=Z,2.2nm,0.4s,baz=230,slow=5.8,SNR=5.2
comp=Z,2.2nm,0.4s
**JAVC Velka Javorina 67.72 22** *e*P **P** **07 28 02.3 +0.2**
**PSZ Piszkesteto 67.81 24** P **P** **07 28 02.6 -0.1**
**PSZ Piszkesteto 67.81 24** P **P** **07 28 02.6 -0.1**
PSZ pmax pmax
comp=Z,49nm,1.8s
**VYHS Vyhne 67.86 23** *e*P **P** **07 28 03.2 +0.2**
VYHS pmax pmax
comp=Z,13nm,1.2s
**VYHS Vyhne 67.86 23** *e*P **P** **07 28 03.2 +0.2**
**BRG Berggiesshubel 68.14 19** *e*P **P** **07 28 05.2 +0.6**
BRG Amp 07 28 06.8
comp=Z,3.8nm,0.8s
**BRG Berggiesshubel 68.14 19** P P 07 28 11.7 +7.0
BRG Amp 07 28 12.6
comp=Z,5.6nm,1.0s
**BRG Berggiesshubel 68.14 19** S S 07 37 14.0 +10
**BRG Berggiesshubel 68.14 19** SS SS 07 41 24.0 -3.1
**VOIR 68.15 29** P **P** **07 28 04.4 -0.5**
**VOIR 68.15 29** P **P** **07 28 04.4 -0.5**
comp=Z,6.4nm,1.2s
**MORC Moravsky Berou 68.44 22** P **P** **07 28 06.9 +0.3**
MORC IAmb IAmb 07 28 09.0
comp=Z,19nm,1.4s
**MORC Moravsky Berou 68.44 22** *e*P **P** **07 28 06.3 -0.3**
**MORC Moravsky Berou 68.44 22** P **P** **07 28 06.9 +0.3**
MORC pmax pmax
comp=Z,19nm,1.4s
**ANTO Ankara 68.45 38** P **P** **07 28 07.7 +0.8**
**ANTO Ankara 68.45 38** P **P** **07 28 07.7 +0.8**
comp=Z,6.7nm,0.5s
**DPC Dobruska-Polom 68.48 21** P **P** **07 28 06.7 -0.2**
**DPC Dobruska-Polom 68.48 21** P **P** **07 28 06.7 -0.2**
comp=Z,7.8nm,2.1s
**EKA Eskdalemuir Ar 68.57 7** P **P** **07 28 06.5 -0.8**
comp=Z,6.8nm,0.9s,baz=187,slow=6.5,SNR=7.7
comp=Z,6.8nm,0.9s
**MLR Muntele Rosu 68.61 29** P **P** **07 28 07.6 -0.3**
comp=Z,30nm,1.3s,baz=214,slow=3.6,SNR=9.4
**MLR Muntele Rosu 68.61 29** P **P** **07 28 07.6 -0.3**
MLR pmax pmax
comp=Z,51nm,1.4s
**MLR Muntele Rosu 68.61 29** P **P** **07 28 07.8 -0.1**
comp=Z,26nm,1.4s
**ISR Istrita 68.63 30** P **P** **07 28 08.8 +0.9**
**ISR Istrita 68.63 30** P **P** **07 28 08.8 +0.9**
comp=Z,45nm,0.9s
**BR105 Keskin Array S 68.84 38** P **P** **07 28 09.7 +0.2**
comp=Z,7.5nm,1.1s
**BR104 Keskin Array S 68.85 38** P **P** **07 28 09.8 +0.3**
comp=Z,5.9nm,0.9s,comp=Z,90nm
**BR106 Keskin Array S 68.85 38** P **P** **07 28 09.9 +0.4**
comp=Z,7.3nm,1.4s,comp=Z,85nm
**BRTR Keskin Array B 68.86 38** P **P** **07 28 09.7 +0.1**
comp=Z,4.2nm,1.1s,baz=212,slow=5.1,SNR=9.2
comp=Z,4.2nm,1.1s
**BRTR Keskin Array B 68.86 38***ce*P **P** **07 28 11.8 +2.2**
BRTR pmax pmax
comp=Z,4.0nm,1.0s
**BR131 Keskin Array S 68.86 38** P **P** **07 28 10.0 +0.4**
BR131 IAmb IAmb 07 28 12.4
comp=Z,24nm,1.4s
**BR131 Keskin Array S 68.86 38** *i* P **P** **07 28 09.5 -0.1**
**KSP Ksiaz 68.89 20** P **P** **07 28 09.1 -0.2**
**KSP Ksiaz 68.89 20** P **P** **07 28 09.1 -0.2**
comp=Z,7.4nm,1.7s
**RAYN Ar Rayn 68.98 58** P **P** **07 28 11.3 +0.8**
**RAYN Ar Rayn 68.98 58** P **P** **07 28 11.3 +0.8**
RAYN pmax pmax
comp=Z,31nm,1.6s
**HOLU Holmets 69.32 25** P **P** **07 28 11.9 -0.1**
**GAZ Gaziantep 69.57 42** P **P** **07 28 14.7 +0.7**
GAZ IAmb IAmb 07 29 49.0
comp=Z,19nm,1.2s
**OJC Ojcow 69.63 23** P **P** **07 28 13.6 -0.4**
OJC IAmb IAmb 07 28 16.2
comp=Z,19nm,1.3s
**OJC Ojcow 69.63 23** P **P** **07 28 13.6 -0.4**
OJC pmax pmax
comp=Z,19nm,1.3s
**OJC Ojcow 69.63 23** P **P** **07 28 13.5 -0.4**
comp=Z,10nm,0.9s
**BNN Bunyan 69.68 40** P **P** **07 28 14.4 -0.3**
**TESR Tescani 69.70 29** P **P** **07 28 14.6 +0.2**
comp=Z,8.7nm,1.6s
**STNU Starunia 70.36 26** P **P** **07 28 18.6 +0.2**
**MORS Morshin 70.42 26** P **P** **07 28 18.7 -0.1**
**MORS Morshin 70.42 26** P **P** **07 28 18.7 -0.1**
**LUBAR Lubar, Ukraine 72.68 27** P **P** **07 28 30.3 -2.1**
**RNPP9 Sopachiv 72.98 25** P **P** **07 28 34.4 +0.3**
**MI30 MI30,Zelenitsa 73.47 27** P **P** **07 28 36.9 -0.2**
**AK13 Malin Array Si 73.76 27** P **P** **07 28 38.4 -0.4**
**KIEV Kiev 73.89 27** P **P** **07 28 38.5 -1.0**
**KIEV Kiev 73.89 27** P **P** **07 28 38.5 -1.0**
comp=Z,92nm,1.7s
**AKASG Malin Array Be 73.90 27** P **P** **07 28 38.8 -0.7**
AKASG IAmb IAmb 07 28 41.6
comp=Z,26nm,1.4s
**AKASG Malin Array Be 73.90 27** P **P** **07 28 39.0 -0.5**
comp=Z,13nm,1.1s,baz=228,slow=6.7,SNR=18
comp=Z,13nm,1.1s
**AKASG Malin Array Be 73.90 27***ce*P **P** **07 28 39.0 -0.5**
AKASG pmax pmax
comp=Z,17nm,1.2s
**AKBB Malin Array Si 73.90 27** P **P** **07 28 39.0 -0.6**
AKBB IAmb IAmb 07 28 41.1
comp=Z,39nm,1.4s
**AKBB Malin Array Si 73.90 27***ce*P **P** **07 28 38.9 -0.6**
AKBB pmax pmax
comp=Z,35nm,1.4s
**AKBB Malin Array Si 73.90 27** P **P** **07 28 38.4 -1.2**
**SOC Sochi 74.81 38** *e*P **P** **07 28 45.1 0.0**
SOC *e* 07 31 30.8
SOC *e*PPP PPP 07 33 16.1
SOC *e*S **S** **07 38 23.0 +1.7**
SOC *e*SS **SS** **07 43 11.1 +1.3**
SOC pmax pmax
comp=Z,7.0nm,0.4s
**HFS Hagfors 76.17 14** P **P** **07 28 51.9 -0.6**
comp=Z,3.2nm,0.9s,baz=168,slow=7.4,SNR=2.1
comp=Z,3.2nm,0.9s
**NB2 NORSAR Subarra 76.42 13** P **P** **07 28 54.4 +0.4**
comp=Z,9.4nm,1.2s,baz=205,slow=6.2
**NOA NORSAR Array B 76.42 13** P **P** **07 28 54.8 +0.8**
comp=Z,3.6nm,1.0s,baz=206,slow=6.0,SNR=5.5
**SHA1 Shidzhatmaz 76.68 39** ⇑ *i*P **P** **07 28 54.6 -1.4**
**KIV Kislovodsk 76.81 39** *e*P **P** **07 28 57.5 +0.9**
KIV pmax pmax
comp=Z,18nm,1.1s
**KBZ Khabaz 76.82 39** P **P** **07 28 57.2 +0.7**
comp=Z,2.1nm,0.8s,baz=260,slow=6.1,SNR=2.2
comp=Z,2.1nm,0.8s
**KBZ Khabaz 76.82 39** ⇑ *i*P **P** **07 28 57.6 +1.1**
KBZ pmax pmax
comp=Z,5.0nm,1.1s
**QSPA South Pole Qui 77.33 180** P **P** **07 29 00.1 +0.8**
comp=Z,6.1nm,0.7s,baz=189,slow=2.5,SNR=30
comp=Z,6.1nm,0.7s
**KMSC Kings Mountain 79.08 310** P **P** **07 29 09.9 +0.6**
**MAK Makhachkala 79.33 41** *e*P P 07 29 04.2 -6.2
MAK *e* 07 32 06.9
MAK *e*S **S** **07 39 02.9 -7.5**
MAK *e*SS **SS** **07 44 14.6 -3.3**
MAK *e*SSS SSS 07 47 44.3
MAK MLR MLR
comp=Z,388nm,16.0s
**L56A Greenwood 79.48 318** P **P** **07 29 11.7 +0.3**
L56A IAmb IAmb 07 30 39.4
comp=Z,50nm,1.6s
**OBN Obninsk 80.16 27** *e*P **P** **07 29 14.1 -0.6**
OBN *e* 07 32 15.0
OBN *e*PPP PPP 07 34 04.7
OBN pmax pmax
comp=Z,6.0nm,0.9s
**BG3 Lake Jocassee 80.22 309** P **P** **07 29 15.4 -0.1**
**Y52A Lilburn 80.65 308** P **P** **07 29 19.2 +1.4**
**FINES FINESS Array B 80.67 19** P **P** **07 29 17.5 +0.2**
comp=Z,7.7nm,1.0s,baz=202,slow=9.5,SNR=5.8
comp=Z,7.7nm,1.0s
**W52A Murphy 81.01 309** P **P** **07 29 20.1 +0.3**
**MOS Moscow 81.02 27** *e*P **P** **07 29 16.9 -2.4**
MOS MLR MLR
comp=Z,700nm,22.0s
**O53A New Philadelph 81.11 315** P **P** **07 29 21.6 +1.4**
O53A IAmb IAmb 07 29 28.2
comp=Z,31nm,1.2s
**Y49A Blount Mountai 82.46 307** P **P** **07 29 27.2 -0.3**
**WVT Waverly 84.35 309** P **P** **07 29 37.0 -0.1**
**143A Socs Landing, 86.03 305** P **P** **07 29 45.7 +0.2**
**PBMO Poplar Bluff 86.54 309** P **P** **07 29 47.7 -0.3**
**CCM Cathedral Cave 87.56 310** P **P** **07 29 52.5 -0.5**
**CCM Cathedral Cave 87.56 310** P **P** **07 29 52.5 -0.5**
CCM pmax pmax
comp=Z,23nm,1.2s
**I42A Draeger Farm, 87.80 316** P **P** **07 29 54.0 0.0**
I42A IAmb IAmb 07 30 01.3
comp=Z,12nm,0.8s
**COWI Conover 88.70 318** P **P** **07 29 58.5 +0.2**
COWI IAmb IAmb 07 30 06.5
comp=Z,12nm,1.3s
**DAG Danmarks Havn 89.45 359** P **P** **07 30 02.0 +0.9**
**U38A Gravette 89.47 307** P **P** **07 30 02.5 +0.4**
U38A IAmb IAmb 07 31 31.5
comp=Z,26nm,1.5s
**SBA Scott Base 89.49 180** P **P** **07 30 03.7 +2.3**
**ABKAR Akbulak array 89.79 39** P **P** **07 30 03.2 0.0**
**VNDA Vanda 89.81 179** P **P** **07 30 03.2 +0.4**
comp=Z,1.6nm,1.0s,baz=214,slow=6.5,SNR=6.4
comp=Z,1.6nm,1.0s
**OK052 Battle Ridge R 91.24 307** P **P** **07 30 10.7 +0.4**
OK052 IAmb IAmb 07 31 40.1
comp=Z,12nm,0.9s
**ARU Arti 91.51 32** *c i*P **P** **07 30 12.0 +0.9**
ARU 07 33 49.0
ARU S **SKSac** **07 40 44.0 +1.2**
ARU SS **SS** **07 47 12.3 -4.3**
ARU pmax pmax
comp=Z,8.0nm,1.1s
**ARU Arti 91.51 32** P **P** **07 30 11.0 -0.1**
comp=Z,4.3nm,1.1s
**BRDY Brady 91.85 302** P **P** **07 30 12.4 -0.9**
**WMOK Wichita Mounta 92.50 305** P **P** **07 30 15.8 -0.4**
**ECSD EROS Data Cent 93.07 314** P **P** **07 30 18.4 -0.2**
ECSD IAmb IAmb 07 31 48.1
comp=Z,6.3nm,0.9s
**SGCY Sterling City 93.76 302** P **P** **07 30 21.9 -0.3**
**TXAR Lajitas Array 95.36 299** P **P** **07 30 29.6 0.0**
comp=Z,0.9nm,0.8s,baz=124,slow=6.9,SNR=11
comp=Z,0.9nm,0.8s
**WMQ Urumqi 107.61 48** Pdif **Pdif** **07 31 25.4 +1.4**
WMQ LR LR
comp=Z,150nm,24.1s
**RKT Rikitea 111.59 239** *e*LR LR 08 08 45.4
comp=Z,1µm,27.5s
**PZH PanZhiHua 119.06 67** PKP **PKPdf** **07 35 52.2 -2.2**
PZH PP **PP** **07 37 15.4 +1.0**
PZH AMB AMB
comp=Z,180nm,5.7s
PZH LR LR
comp=N,250nm,20.1s
PZH LR LR
comp=E,280nm,20.6s
PZH LR LR
comp=Z,310nm,21.6s
**CD2 Chengdu 120.73 62** PKP **PKPdf** **07 35 57.1 -0.3**
**TAOE Nuku Hiva Isla 121.78 251** *e*LR LR 08 13 34.7
comp=Z,431nm,30.1s
**TBI Tubuai 123.05 231** *e*LR LR 08 13 58.5
comp=Z,2µm,22.0s
**BILL Bilibino 124.83 360** *e*PKIKP **PKiKP** **07 36 04.5 +0.1**
BILL *e* 07 37 50.7
BILL *e*PPP PPP 07 40 31.7
BILL pmax pmax
comp=Z,3.0nm,1.0s
**HHC Hu-ho-hao-te 125.47 49** *e*P **PKPdf** **07 36 02.3 -4.0**
HHC LR LR
comp=N,180nm,17.6s
HHC LR LR
comp=E,190nm,17.3s
HHC LR LR
comp=Z,310nm,18.3s
**PPT2 Papeete2 126.25 237** *e*LR LR 08 15 31.2
comp=Z,438nm,23.0s
PPT2 *e*LR LR 08 15 32.5
comp=Z,359nm,24.0s
**ASAR Alice Springs 132.42 140** PKP **PKPdf** **07 36 19.2 -0.8**
comp=Z,0.6nm,0.8s,baz=218,slow=1.3,SNR=3.2
**NJ2 Nanjing 133.33 58** *e*P **PKPdf** **07 36 21.1 -0.2**
NJ2 pmax pmax
comp=Z,12nm,0.7s
**CN2 Changchun 133.91 40** PKP **PKPdf** **07 36 21.1 -1.0**
CN2 PP **PP** **07 38 54.2 +2.5**
CN2 LR LR
comp=N,400nm,18.0s
CN2 LR LR
comp=E,400nm,18.0s
CN2 LR LR
comp=Z,300nm,18.0s
**WRA Warramunga Arr 135.34 136** PKP **PKPdf** **07 36 23.7 -1.9**
comp=Z,0.5nm,0.9s,baz=242,slow=2.3,SNR=2.6
**MDJ Mudanjiang 136.00 37** P **PKiKP** **07 36 27.6 0.0**
MDJ pmax pmax
comp=Z,8.0nm,0.5s
MDJ pmax pmax
comp=Z,130nm,5.2s
**TJN Taejon 138.61 49** ⇑ *i*PKIKP **PKPdf** **07 36 31.7 +0.7**
**DZM Mont Dzumac 145.31 182** *e*LR LR 08 24 28.7
comp=Z,178nm,27.5s
**MJAR Matsushiro Arr 146.04 41** PKPbc **PKPdf** **07 36 43.1 -1.1**
comp=Z,1.4nm,0.8s,baz=312,slow=3.8,SNR=2.2

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*IDC* ***10*** *07:18:28.9±0.5, 12°.86S×14°.65W, h0km, mb4.4/28, mbtmp4.4/28, MS4.4/1, Error ellipse: s-maj=20.4km s-min=11.9km az=132.0*
*MOS* ***10*** *07:18:29.0±0.8, 12°.93S×14°.64W, h10km, mb5.1/17, Error ellipse: s-maj=16.3km s-min=10.2km az=146.5*
*NEIC* ***10*** *07:18:31.9±1.2, 12°.9S±0°.1×14°.6W±0°.1, h10km±1km, mb5.2/82, Error ellipse: s-maj=20.2km s-min=15.6km az=128.0*
**ISC 10 07:18:31.5±0.4, 12°.88S±0°.08×14°.59W±0°.07, h16km, n199, σ1§12/196, mb5.0/93, MS4.5/3, 7C-7D, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ASCN** | **Ascension** | **4.92** | **3** | Pn | **Pn** | **Pn** | **07 19 44.4** | **-0.4** |
| **H10N1** | **ASCENSION HYDR** | **5.00** | **1** | T | T | T | 07 24 59.2 | |
| | baz=190,slow=77,SNR=27 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **5.00** | **1** | T | T | T | 07 24 54.5 | |
| | baz=190,slow=77,SNR=27 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **5.02** | **1** | T | T | T | 07 24 54.1 | |
| | baz=190,slow=77,SNR=25 | | | | | | | |
| **LIC** | **Lamto** | **21.22** | **27** ⇑ | *e*PKIKP | **P** | **P** | **07 23 19.7** | **+2.8** |
| | 35nm,0.7s | | | | | | | |
| **KIC** | **Kosan Boka** | **21.47** | **28** ⇑ | *e*PKIKP | **P** | **P** | **07 23 19.6** | **+0.1** |
| | 16nm,0.9s | | | | | | | |
| **TIC** | **Toumodi** | **21.60** | **27** ⇑ | *e*PKIKP | **P** | **P** | **07 23 20.0** | **-0.9** |
| | 42nm,1.0s | | | | | | | |
| **DBIC** | **Dimbokro** | **21.70** | **27** | P | **P** | **P** | **07 23 20.9** | **-1.0** |
| **DBIC** | **Dimbokro** | **21.70** | **27** | P | **P** | **P** | **07 23 20.6** | **-1.3** |
| | 35nm,1.2s,baz=184,slow=8.5,SNR=5.9 | | | | | | | |
| | 35nm,1.2s | | | | | | | |
| **DBIC** | **Dimbokro** | **21.70** | **27** | P | **P** | **P** | **07 23 20.9** | **-1.0** |
| DBIC | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.1s | | | | | | | |
| **RCBR** | **Riachuelo** | **22.15** | **286** | P | **P** | **P** | **07 23 25.2** | **-1.7** |
| **RCBR** | **Riachuelo** | **22.15** | **286** | P | **P** | **P** | **07 23 25.4** | **-1.5** |
| | comp=Z,8.2nm,0.9s,baz=63,slow=16,SNR=6.0 | | | | | | | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **RCBR** | **Riachuelo** | **22.15** | **286** | P | **P** | **P** | **07 23 25.2** | **-1.7** |
| RCBR | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.3s | | | | | | | |
| **NBPB** | **Pedra_Branca-C** | **25.70** | **284** | *e*P | **P** | **P** | **07 24 03.0** | **+1.7** |
| **TOA0** | **Torodi Ar. Sit** | **30.48** | **33** | P | **P** | **P** | **07 24 43.9** | **-0.1** |
| TOA0 | | | | IAmb | IAmb | IAmb | 07 24 45.0 | |
| | comp=Z,90nm,1.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.48** | **33** | P | **P** | **P** | **07 24 43.8** | **-0.2** |
| TORD | | | | IAmb | IAmb | IAmb | 07 24 44.9 | |
| | comp=Z,58nm,1.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.48** | **33** | P | **P** | **P** | **07 24 43.1** | **-0.8** |
| | comp=Z,4.5nm,0.7s,baz=207,slow=8.0,SNR=4.8 | | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **BDFB** | **Brasilia** | **32.49** | **261** | P | **P** | **P** | **07 25 01.6** | **-0.2** |
| BDFB | | | | IAmb | IAmb | IAmb | 07 25 03.2 | |
| | comp=Z,62nm,1.5s | | | | | | | |
| **BDFB** | **Brasilia** | **32.49** | **261** | P | **P** | **P** | **07 25 01.3** | **-0.6** |
| | comp=Z,14nm,1.0s,baz=92,slow=9.1,SNR=7.8 | | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **BDFB** | **Brasilia** | **32.49** | **261** | P | **P** | **P** | **07 25 01.6** | **-0.2** |
| BDFB | | | | pmax | pmax | | | |
| | comp=Z,62nm,1.5s | | | | | | | |
| **SMTB** | **Santa Maria do** | **32.63** | **274** | *e*P | **P** | **P** | **07 25 03.5** | **+0.5** |
| **TMAB** | **Tom-Au,PA,Br** | **34.76** | **285** | *e*P | **P** | **P** | **07 25 22.0** | **+0.5** |
| **PRPB** | **Parauapebas** | **35.34** | **278** | *e*P | **P** | **P** | **07 25 27.0** | **+0.5** |
| **SNDB** | **Serra Nova Dou** | **35.84** | **267** | *e*P | **P** | **P** | **07 25 31.7** | **+0.9** |
| **ARAG** | **Araguaiana, MT** | **36.15** | **261** | *e*P | **P** | **P** | **07 25 34.1** | **+0.7** |
| **MCPB** | **Macapa, AP** | **39.16** | **286** | *e*P | **P** | **P** | **07 25 59.5** | **+0.6** |
| **SALV** | **Santo Antonio** | **39.88** | **261** | *e*P | **P** | **P** | **07 26 05.9** | **+1.0** |
| **AQDB** | **Aquidauana** | **40.01** | **253** | P | **P** | **P** | **07 26 06.5** | **+0.5** |
| **CLDB** | **Colider** | **40.34** | **268** | *e*P | **P** | **P** | **07 26 09.6** | **+0.8** |
| **PLTB** | **Pedras Altas** | **40.41** | **236** | P | **P** | **P** | **07 26 10.1** | **+0.9** |
| **NPGB** | **Novo Progresso** | **40.53** | **274** | *e*P | **P** | **P** | **07 26 11.3** | **+0.9** |
| **TAM** | **Tamanrasset** | **40.56** | **29** | P | **P** | **P** | **07 26 12.2** | **+1.7** |
| **TAM** | **Tamanrasset** | **40.56** | **29** | P | **P** | **P** | **07 26 12.2** | **+1.7** |
| TAM | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| **PDRB** | **Porto dos Gac** | **41.17** | **267** | *e*P | **P** | **P** | **07 26 15.2** | **-0.4** |
| **ITTB** | **Itaituba** | **41.49** | **278** | *e*P | **P** | **P** | **07 26 18.7** | **+0.4** |
| **MURT** | **Porto Murtinho** | **41.88** | **252** | *e*P | **P** | **P** | **07 26 21.4** | **+0.1** |
| **CPUP** | **Villa Florida** | **42.23** | **245** | P | **P** | **P** | **07 26 24.4** | **+0.2** |
| **CPUP** | **Villa Florida** | **42.23** | **245** | P | **P** | **P** | **07 26 24.3** | **+0.1** |
| | comp=Z,2.8nm,0.7s,baz=105,slow=11,SNR=5.1 | | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **CPUP** | **Villa Florida** | **42.23** | **245** | P | **P** | **P** | **07 26 24.4** | **+0.2** |
| CPUP | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.8s | | | | | | | |
| **ITQB** | **Itaqui** | **42.32** | **240** | P | **P** | **P** | **07 26 24.9** | **+0.1** |
| ITQB | | | | IAmb | IAmb | IAmb | 07 26 29.6 | |
| | comp=Z,108nm,1.8s | | | | | | | |
| **PAPY** | **Pozo Azul** | **42.70** | **248** | *e*P | **P** | **P** | **07 26 29.8** | **+1.7** |
| **PTLB** | **Pontes e Lacer** | **43.21** | **261** | P | **P** | **P** | **07 26 32.0** | **-0.2** |
| **PTLB** | **Pontes e Lacer** | **43.21** | **261** | *e*P | **P** | **P** | **07 26 33.7** | **+1.5** |
| **VILB** | **Vilhena** | **44.41** | **265** | P | **P** | **P** | **07 26 43.2** | **+1.2** |
| VILB | | | | IAmb | IAmb | IAmb | 07 26 44.5 | |
| | comp=Z,52nm,1.5s | | | | | | | |
| **VILB** | **Vilhena** | **44.41** | **265** | *e*P | **P** | **P** | **07 26 43.2** | **+1.2** |

**BBSD Serra de San D 44.57 259** *e*P **P** 07 26 44.0 +0.8
**SIV San Ignacio 45.05 260** P **P** 07 26 47.3 +0.3
comp=Z,3.7nm,0.7s,baz=96,slow=11,SNR=7.3
comp=Z,3.7nm,0.7s
**MBAR Mbarara 46.54 78** P **P** 07 27 00.1 +1.0
MBAR IAmb IAmb 07 27 02.6
comp=Z,41nm,1.7s
**MBAR Mbarara 46.54 78**⇑ *i*P **P** 07 26 59.9 +0.9
MBAR pmax pmax
comp=Z,24nm,1.7s
**MACA Manacapuru-AM 46.58 278** P **P** 07 26 59.3 +0.2
**MACA Manacapuru-AM 46.58 278** *e*P **P** 07 26 58.3 -0.8
**SAML Samuel 47.82 270** P **P** 07 27 09.4 +0.6
SAML IAmb IAmb 07 27 11.1
comp=Z,18nm,1.1s
**SAML Samuel 47.82 270** *e*P **P** 07 27 09.4 +0.6
**SAML Samuel 47.82 270** *e*P **P** 07 27 09.4 +0.6
**BOAV Boa Vista 48.05 285** P **P** 07 27 10.1 -0.5
BOAV IAmb IAmb 07 27 12.4
comp=Z,25nm,1.4s
**BOAV Boa Vista 48.05 285** *e*P **P** 07 27 10.5 -0.1
**TRQA Tornquist 48.92 230** P **P** 07 27 17.0 0.0
**TRQA Tornquist 48.92 230** *e*P **P** 07 27 17.0 0.0
**TEFE Tefe 50.31 276** *e*P **P** 07 27 27.5 -0.4
**ETMB Extrema 50.64 268** P **P** 07 27 30.7 +0.3
ETMB IAmb IAmb 07 27 32.3
comp=Z,30nm,1.2s
**ETMB Extrema 50.64 268** *e*P **P** 07 27 31.1 +0.7
**TATN Tataouine 51.19 27** P **P** 07 27 36.7 +2.5
TATN IAmb IAmb 07 27 38.9
comp=Z,26nm,0.9s
**LPAZ La Paz 51.81 259** P **P** 07 27 40.1 +0.2
**LPAZ La Paz 51.81 259** P **P** 07 27 39.0 -0.9
comp=Z,3.5nm,0.9s,baz=42,slow=4.5,SNR=4.5
comp=Z,3.5nm,0.9s
**LPAZ La Paz 51.81 259** *e*P **P** 07 27 40.1 +0.2
**LPAZ La Paz 51.81 259** *e*P **P** 07 27 39.9 0.0
**PESTR Estremoz 51.89 7** P **P** 07 27 40.7 +1.4
**KMBO Kilima Mbogo 52.65 81** LR LR 07 48 46.5
comp=Z,5.2nm,18.0s,baz=244,slow=34
**ZON Zonda 52.87 240** P **P** 07 27 47.0 +0.1
ZON IAmb IAmb 07 27 47.7
comp=Z,52nm,1.8s
**ZON Zonda 52.87 240** P **P** 07 27 47.0 +0.1
ZON pmax pmax
comp=Z,52nm,1.8s
**ESDC Sonseca Array 53.21 10** P **P** 07 27 49.4 +0.3
comp=Z,1.2nm,0.8s,baz=188,slow=7.5,SNR=4.3
ESDC LR LR 07 50 38.8
comp=Z,304nm,18.5s,baz=174,slow=36
comp=Z,1.2nm,0.8s
**H05S1 Guadeloupe/Mar 53.23 299** T T 08 25 12.3
SNR=9.9
**KEST Kesra 53.38 24** P **P** 07 27 51.8 +1.3
**KEST Kesra 53.38 24** P **P** 07 27 51.5 +1.0
comp=Z,21nm,0.9s,baz=219,slow=4.0,SNR=7.0
comp=Z,21nm,0.9s
**PB14 IPOC Station P 53.81 249** P **P** 07 27 54.2 -0.1
PB14 IAmb IAmb 07 27 55.4
comp=Z,47nm,1.7s
**CO01 Juntas del Tor 53.89 242** P **P** 07 27 55.7 +1.0
**H05N1 Guadeloupe/Mar 54.33 301** T T 08 26 28.3
SNR=5.1
**CO03 El Pedregal 54.49 241** P **P** 07 27 59.2 +0.4
CO03 IAmb IAmb 07 28 00.3
comp=Z,46nm,1.6s
**CO02 Combarbal 54.80 241** P **P** 07 28 01.1 0.0
**BO02 Sierra Bellavi 55.08 237** P **P** 07 28 03.3 +0.2
**MT09 Talagante 55.11 238** P **P** 07 28 02.1 -1.3
**BO01 Tunca 55.27 237** P **P** 07 28 03.8 -0.5
BO01 IAmb IAmb 07 28 06.3
comp=Z,37nm,1.5s
**TBTG Tabatinga, AM 55.28 274** P **P** 07 28 04.4 -0.3
**TBTG Tabatinga, AM 55.28 274** *e*P **P** 07 28 04.1 -0.6
**MT01 Popeta 55.33 238** P **P** 07 28 04.1 -0.7
MT01 IAmb IAmb 07 28 12.1
comp=Z,64nm,1.8s
**PLCA Paso Flores 56.03 229** P **P** 07 28 09.5 -0.3
PLCA IAmb IAmb 07 29 46.3
comp=Z,58nm,1.9s
**PLCA Paso Flores 56.03 229** P **P** 07 28 09.3 -0.5
comp=Z,2.3nm,0.9s,baz=90,slow=4.0,SNR=3.8
comp=Z,2.3nm,0.9s
**PLCA Paso Flores 56.03 229** *e*P **P** 07 28 09.5 -0.3
**CZSB Cruzeiro do Su 57.31 269** P **P** 07 28 18.4 -0.8
**CZSB Cruzeiro do Su 57.31 269** *e*P **P** 07 28 18.8 -0.4
**BAUV El Baul 57.34 289** P **P** 07 28 20.1 +0.7
BAUV IAmb IAmb 07 28 21.9
comp=Z,45nm,1.3s
**VNA2 Neumayer--Watz 58.18 177**⇓P **P** 07 28 23.5 -0.9
comp=Z,1.5nm,0.8s,baz=356,slow=2.7
**VNA3 Neumayer Olymp 58.41 178**⇓P **P** 07 28 22.8 -3.2
comp=Z,0.5nm,0.8s
**SNAA Sanae 59.20 176** P **P** 07 28 32.8 +1.3
**SNAA Sanae 59.20 176**⇓P **P** 07 28 32.1 +0.6
comp=Z,53nm,0.8s
**SNAA Sanae 59.20 176** P **P** 07 28 32.0 +0.5
comp=Z,2.9nm,1.0s,baz=354,slow=5.6,SNR=2.6
comp=Z,2.9nm,1.0s
**SNAA Sanae 59.20 176**⇑ *i*P **P** 07 28 30.5 -1.0
SNAA pmax pmax
comp=Z,10.0nm,1.5s
**SDV Santo Domingo 59.72 288** *e*P **P** 07 28 33.8 -2.4
**TROLL Troll, Antarti 59.99 174**⇓P **P** 07 28 37.2 +0.1
comp=Z,78nm,1.1s
**UUPR Utuado, UPR, P 60.00 300** P **P** 07 28 37.8 -0.1
**ROSC El Rosal 61.88 283** P **P** 07 28 51.5 +0.3
**ROSC El Rosal 61.88 283** P **P** 07 28 50.7 -0.5
comp=Z,13nm,0.8s,baz=80,slow=7.0,SNR=5.8
comp=Z,13nm,0.8s
**ROSC El Rosal 61.88 283** P **P** 07 28 51.5 +0.3
ROSC pmax pmax
comp=Z,26nm,1.0s
**ELIB Princess Elisa 63.24 168** *d*P **P** 07 29 00.3 +1.3
comp=Z,6.8nm,1.2s
**DAVOX Davos/Dischmat 63.31 19** P **P** 07 28 59.5 -0.3
comp=Z,3.6nm,0.7s,baz=191,slow=7.5,SNR=4.8
comp=Z,3.6nm,0.7s
**DAVA Damuels 63.77 18** *e*P **P** 07 29 04.1 +1.3
comp=Z,9.6nm,0.8s
**FETA Feichten 63.79 19** *e*P **P** 07 29 03.6 +0.6
comp=Z,8.8nm,1.0s
**SQTA Sankt Quirin 64.12 19** *e*P **P** 07 29 05.9 +0.7
comp=Z,9.5nm,1.1s
**ABTA Abfaltersbach 64.14 20** *e*P **P** 07 29 07.0 +1.8
comp=Z,10nm,1.6s
**MOTA Moosalm 64.20 19** *e*P **P** 07 29 08.7 +3.0
comp=Z,0.8nm,0.2s
**WTTA Wattenberg 64.30 20** *e*P **P** 07 29 07.3 +1.0
comp=Z,18nm,1.2s
**LESA Schwarzleotal 64.78 20** *e*P **P** 07 29 11.6 +2.2
comp=Z,4.1nm,0.8s
**ARNL Arenillas 65.31 272** P **P** 07 29 13.6 +0.2
ARNL IAmb IAmb 07 29 22.4
comp=Z,21nm,1.0s
**ARSA Arzberg 65.63 22** *e*P **P** 07 29 16.0 +1.2
comp=Z,1.3nm,0.3s
**RONA Rosalia, Austr 66.30 22** *e*P **P** 07 29 21.2 +2.1
comp=Z,11nm,1.2s
**CONA Conrad Observa 66.33 22** *e*P **P** 07 29 20.9 +1.5
comp=Z,8.1nm,1.3s
**GERES GERESS Array B 66.36 20** P **P** 07 29 19.1 -0.4
comp=Z,0.6nm,0.4s,baz=173,slow=12,SNR=3.5
comp=Z,0.6nm,0.4s
**KHC Kasperske Hory 66.56 20** *i*P **P** 07 29 21.4 +0.6
KHC pmax pmax
comp=Z,7.0nm,1.1s
**ASF Jabal al Asfar 66.57 46** P **P** 07 29 23.3 +2.0
comp=Z,7.1nm,0.9s,baz=233,slow=5.1,SNR=5.5
comp=Z,7.1nm,0.9s
**KRUC Moravsky 67.47 22** *e*P **P** 07 29 26.9 +0.4
**VRAC Vranov 67.75 21** *e*P **P** 07 29 28.8 +0.5
**VRAC Vranov 67.75 21** P **P** 07 29 28.5 +0.2
comp=Z,2.3nm,0.3s,baz=243,slow=9.8,SNR=4.0
comp=Z,2.3nm,0.3s
**JAVC Velka Javorina 67.77 22** *e*P **P** 07 29 30.0 +1.5
**MORC Moravsky Berou 68.48 22** *e*P **P** 07 29 33.8 +0.9
**EKA Eskdalemuir Ar 68.63 7** P **P** 07 29 33.4 -0.2
comp=Z,5.0nm,0.9s,baz=179,slow=5.0,SNR=2.2
comp=Z,5.0nm,0.9s
**MLR Muntele Rosu 68.66 29** P **P** 07 29 34.3 +0.1
comp=Z,9.6nm,1.1s,baz=294,slow=7.3,SNR=4.5
comp=Z,9.6nm,1.1s
**BR131 Keskin Array S 68.90 38**⇓ *i*P **P** 07 29 36.3 +0.4
**BRTR Keskin Array B 68.90 38** P **P** 07 29 36.5 +0.6
**BRTR Keskin Array B 68.90 38** P **P** 07 29 36.8 +0.9
comp=Z,2.7nm,0.8s,baz=208,slow=7.0,SNR=4.6
comp=Z,2.7nm,0.8s
**BRTR Keskin Array B 68.90 38** P **P** 07 29 36.5 +0.6
**RAYN Ar Rayn 69.00 58** P **P** 07 29 37.9 +1.2
RAYN IAmb IAmb 07 29 40.0
comp=Z,31nm,1.6s
**RAYN Ar Rayn 69.00 58** P **P** 07 29 37.9 +1.2
RAYN pmax pmax
comp=Z,31nm,1.6s
**MAW Mawson 73.40 157** P **P** 07 30 02.9 +0.4
comp=Z,2.2nm,0.5s,baz=269,slow=16,SNR=2.2
comp=Z,2.2nm,0.5s
**AKASG Malin Array Be 73.94 27** P **P** 07 30 04.9 -1.0
comp=Z,5.8nm,0.8s,baz=226,slow=6.5,SNR=8.2
comp=Z,5.8nm,0.8s
**AKASG Malin Array Be 73.94 27** *i*P **P** 07 30 06.0 +0.1
AKASG pmax pmax
comp=Z,5.0nm,0.8s
**AKBB Malin Array Si 73.94 27**⇑ *i*P **P** 07 30 05.6 -0.3
AKBB pmax pmax
comp=Z,27nm,1.7s
**HFS Hagfors 76.23 14** P **P** 07 30 18.1 -0.7
comp=Z,3.2nm,0.9s,baz=234,slow=12,SNR=2.3
comp=Z,3.2nm,0.9s
**NB2 NORSAR Subarra 76.48 13** P **P** 07 30 20.7 +0.4
comp=Z,6.8nm,1.1s,baz=203,slow=6.2
**NOA NORSAR Array B 76.48 13** P **P** 07 30 20.9 +0.6
comp=Z,2.6nm,0.9s,baz=206,slow=5.8,SNR=5.0
**KIV Kislovodsk 76.85 39** *e*P **P** 07 30 24.5 +1.6
KIV pmax pmax
comp=Z,9.0nm,1.0s
**KBZ Khabaz 76.85 39**⇑ *e*P **P** 07 30 24.1 +1.4
KBZ pmax pmax
comp=Z,4.0nm,0.9s
**T59A Double "B" Far 77.15 313** P **P** 07 30 25.2 +0.6
T59A IAmb IAmb 07 30 28.2
comp=Z,19nm,1.3s
**QSPA South Pole Qui 77.28 180** P **P** 07 30 24.5 -0.5
comp=Z,2.9nm,0.6s,baz=249,slow=1.3,SNR=7.8
comp=Z,2.9nm,0.6s
**L59A Walton 77.92 319** P **P** 07 30 29.8 +0.9
L59A IAmb IAmb 07 30 32.7
comp=Z,26nm,1.3s
**KSPA Keystone Colle 78.08 318** P **P** 07 30 30.1 +0.4
KSPA IAmb IAmb 07 30 33.2
comp=Z,28nm,1.4s
**JSC Jenkinsville 78.72 309** P **P** 07 30 33.7 +0.3
**JSC Jenkinsville 78.72 309** P **P** 07 30 33.7 +0.3
JSC pmax pmax
comp=Z,19nm,1.3s
**U56A King 78.92 311** P **P** 07 30 35.5 +1.0
U56A IAmb IAmb 07 30 38.5
comp=Z,24nm,1.5s
**Q56A Snyder Ridge, 79.23 314** P **P** 07 30 37.2 +1.0
Q56A IAmb IAmb 07 30 40.3
comp=Z,29nm,1.3s
**MAK Makhachkala 79.36 41** *e*P **P** 07 30 32.6 -4.1
MAK *e*S **S** 07 40 31.9 -5.0
MAK *e*SS **SS** 07 45 40.4 -4.1
MAK *e*SSS SSS 07 49 06.1
MAK pmax pmax
comp=Z,517nm,1.6s
**U54A Nelsons Funny 80.05 311** P **P** 07 30 41.3 +0.6
U54A IAmb IAmb 07 30 44.7
comp=Z,43nm,1.5s
**BG3 Lake Jocassee 80.26 309** P **P** 07 30 43.1 +1.3
BG3 IAmb IAmb 07 30 46.7
comp=Z,30nm,1.4s
**Q54A Coxs Mills 80.36 314** P **P** 07 30 43.1 +0.9
**V53A Saluda 80.44 310** P **P** 07 30 43.4 +0.6
**SCHQ Schefferville 80.51 332** P **P** 07 30 42.5 -0.2
comp=Z,2.4nm,0.6s,baz=128,slow=4.7,SNR=5.0
comp=Z,2.4nm,0.6s
**Y52A Lilburn 80.69 308** P **P** 07 30 45.3 +1.2
**FINES FINESS Array B 80.72 18** P **P** 07 30 44.1 +0.5
comp=Z,2.7nm,0.7s,baz=198,slow=5.4,SNR=7.3
comp=Z,2.7nm,0.7s
**TKL Tuckaleechee C 81.16 310** P **P** 07 30 47.2 +0.7
**TKL Tuckaleechee C 81.16 310** P **P** 07 30 47.3 +0.7
TKL pmax pmax
comp=Z,20nm,1.4s
**P52A Corning 81.55 314** P **P** 07 30 49.3 +0.8
P52A IAmb IAmb 07 30 50.4
comp=Z,36nm,1.4s
**250A Grady 81.73 305** P **P** 07 30 50.3 +0.6
**X48A Hartselle 83.21 307** P **P** 07 30 57.9 +0.5
X48A IAmb IAmb 07 31 00.2
comp=Z,18nm,1.2s
**V48A Smith Brothers 83.49 309** P **P** 07 30 59.3 +0.5
V48A IAmb IAmb 07 31 02.2
comp=Z,16nm,1.1s
**Z47A Carrollton 83.58 306** P **P** 07 30 59.5 +0.2
Z47A IAmb IAmb 07 31 02.7
comp=Z,13nm,1.0s
**T47A Sharon Grove 84.15 310** P **P** 07 31 02.1 -0.1
T47A IAmb IAmb 07 31 04.7
comp=Z,14nm,1.0s
**WVT Waverly 84.39 309** P **P** 07 31 03.8 +0.4
WVT IAmb IAmb 07 31 06.3
comp=Z,25nm,1.3s
**WVT Waverly 84.39 309** P **P** 07 31 03.8 +0.4
WVT pmax pmax
comp=Z,25nm,1.3s
**N47A Urbana 84.54 314** P **P** 07 31 03.6 -0.4
**GNAR Gosnell 86.01 308** P **P** 07 31 11.5 +0.1
**143A Socs Landing, 86.07 305** P **P** 07 31 12.2 +0.4
**CGM3 Cape Girardeau 86.17 309** P **P** 07 31 11.9 -0.3
**HDIL Hopedale 86.98 313** P **P** 07 31 15.8 -0.4
HDIL IAmb IAmb 07 31 18.0
comp=Z,14nm,0.9s
**CCM Cathedral Cave 87.61 310** P **P** 07 31 18.5 -0.7
CCM IAmb IAmb 07 31 22.6
comp=Z,23nm,1.1s
**CCM Cathedral Cave 87.61 310** P **P** 07 31 18.5 -0.7
CCM pmax pmax
comp=Z,23nm,1.2s
**R40A Maddies Statio 88.44 310** P **P** 07 31 23.6 +0.4
R40A IAmb IAmb 07 31 25.9
comp=Z,16nm,1.3s
**P40A Paris 88.66 311** P **P** 07 31 24.1 -0.1
**VNDA Vanda 89.75 179** P **P** 07 31 28.7 0.0
comp=Z,1.3nm,1.0s,baz=214,slow=5.0,SNR=2.8
comp=Z,1.3nm,1.0s
**ABKAR Akbulak array 89.82 39** P **P** 07 31 29.7 +0.3
**WHTX Lake Whitney, 90.79 303** P **P** 07 31 34.3 0.0
WHTX IAmb IAmb 07 31 37.8
comp=Z,17nm,1.1s
**OK031 S. Brethren Rd 91.30 306** P **P** 07 31 37.4 +0.7
**ARU Arti 91.55 32***d i*P **P** 07 31 37.7 +0.4
ARU 07 35 14.6
ARU S **SKSac** 07 42 09.6 +0.5
ARU pmax pmax
comp=Z,11nm,1.7s
**HNDO Hondo 91.71 300** P **P** 07 31 39.7 +1.0
**BRDY Brady 91.89 302** P **P** 07 31 39.4 -0.1
BRDY IAmb IAmb 07 31 42.9
comp=Z,12nm,1.1s
**JCT Junction City 92.38 301** P **P** 07 31 41.7 -0.1
**JCT Junction City 92.38 301** P **P** 07 31 41.7 -0.1
JCT pmax pmax
comp=Z,26nm,1.3s
**SMWD Samnorwood 93.79 305** P **P** 07 31 48.0 -0.2
SMWD IAmb IAmb 07 31 51.7
comp=Z,15nm,1.2s
**SGCY Sterling City 93.81 302** P **P** 07 31 48.1 -0.3
**ULM Lac du Bonnet 94.30 320** P **P** 07 31 50.0 -0.1
comp=Z,2.5nm,0.9s,baz=85,slow=4.6,SNR=3.4
comp=Z,2.5nm,0.9s
**TXAR Lajitas Array 95.40 299** P **P** 07 31 55.3 -0.6
comp=Z,1.1nm,0.8s,baz=120,slow=7.4,SNR=8.2
comp=Z,1.1nm,0.8s
**MSTX Muleshoe 95.59 303** P **P** 07 31 56.7 +0.1
MSTX IAmb IAmb 07 32 00.4
comp=Z,18nm,1.4s
**PECS Pecos 95.98 301** P **P** 07 31 58.2 -0.2
PECS IAmb IAmb 07 32 01.9
comp=Z,10nm,1.3s
**KSH Kashi 98.50 51** P **P** 07 32 07.8 -1.8
KSH pmax pmax
comp=Z,3.0nm,0.5s
**WMQ Urumqi 107.64 48** Pdif **Pdif** 07 32 52.8 +2.7
WMQ LR LR
comp=Z,170nm,24.2s
**PZH PanZhiHua 119.07 67** PKP **PKPdf** 07 37 19.1 -1.4
**SONM Songino Array 120.12 42** PKP **PKPdf** 07 37 20.1 -1.8
comp=Z,0.4nm,0.3s,baz=268,slow=4.3,SNR=2.1
**HHC Hu-ho-hao-te 125.50 49** *e*P **PKPdf** 07 37 28.9 -3.5
HHC LR LR
comp=N,170nm,16.0s
HHC LR LR
comp=E,190nm,15.3s
HHC LR LR
comp=Z,350nm,15.3s
**WRA Warramunga Arr 135.29 136** PKP **PKPdf** 07 37 51.8 +0.3
comp=Z,1.3nm,1.0s,baz=249,slow=2.6,SNR=4.7
**MDJ Mudanjiang 136.03 37** P **PKiKP** 07 37 54.1 +0.4
MDJ pmax pmax
comp=Z,6.0nm,0.5s
MDJ pmax pmax
comp=Z,160nm,6.9s
**MJAR Matsushiro Arr 146.07 41** PKPbc **PKPdf** 07 38 10.5 +0.1
comp=Z,2.4nm,0.8s,baz=318,slow=3.3,SNR=4.5

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*IDC* ***10*** *07:29:02.2±0.7, 12°.72S×14°.75W, h0km, mb4.1/13, mbtmp4.1/13, MS3.8/7, Error ellipse: s-maj=31.8km s-min=16.3km az=117.0*
*NEIC* ***10*** *07:29:04.9±1.2, 12°.81S±0°.06×14°.6W±0°.1, h10km±1km, mb4.5/22, Error ellipse: s-maj=18.2km s-min=7.7km az=250.0*
**ISC 10 07:29:05.0±0.5, 12°.77S±0°.09×14°.68W±0°.10, h16km, n50, σ0s 86/43, mb4.4/26, MS3.8/7, 5C, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ASCN** | **Ascension** | **4.81** | **4** | Pn | **Pn** | | | **07 30 17.3** | **+0.4** |
| **H10N1** | **ASCENSION HYDR** | **4.89** | **2** | T | T | | | 07 35 29.0 | |
| | baz=189,slow=78,SNR=34 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **4.90** | **2** | T | T | | | 07 35 28.9 | |
| | baz=189,slow=78,SNR=59 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **4.91** | **2** | T | T | | | 07 35 27.4 | |
| | baz=189,slow=78,SNR=30 | | | | | | | | |
| **DBIC** | **Dimbokro** | **21.64** | **27** | P | **P** | | | **07 33 54.8** | **0.0** |
| **DBIC** | **Dimbokro** | **21.64** | **27** | P | **P** | | | **07 33 54.8** | **0.0** |
| | 4.7nm,0.8s,baz=207,slow=10,SNR=2.4 | | | | | | | | |
| | 4.7nm,0.8s | | | | | | | | |
| **RCBR** | **Riachuelo** | **22.04** | **286** | P | **P** | | | **07 33 59.7** | **+0.5** |
| RCBR | | | | IAmb | IAmb | | | 07 34 21.1 | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| **RCBR** | **Riachuelo** | **22.04** | **286** | LR | LR | | | 07 40 20.4 | |
| | comp=Z,69nm,19.8s,baz=350,slow=31 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.44** | **33** | P | **P** | | | **07 35 16.8** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **30.44** | **33** | P | **P** | | | **07 35 17.0** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=203,slow=6.9,SNR=5.7 | | | | | | | | |
| TORD | | | | LR | LR | | | 07 45 35.2 | |
| | comp=Z,231nm,18.5s,baz=188,slow=33 | | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | | |
| **BDFB** | **Brasilia** | **32.42** | **261** | P | **P** | | | **07 35 34.5** | **-0.2** |
| **BDFB** | **Brasilia** | **32.42** | **261** | P | **P** | | | **07 35 33.7** | **-1.1** |
| | comp=Z,5.9nm,0.9s,baz=62,slow=7.4,SNR=5.4 | | | | | | | | |
| BDFB | | | | LR | LR | | | 07 46 20.7 | |
| | comp=Z,159nm,19.0s,baz=139,slow=32 | | | | | | | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| **SUR** | **Sutherland** | **37.89** | **127** | LR | LR | | | 07 49 13.8 | |
| | comp=Z,138nm,19.7s,baz=310,slow=32 | | | | | | | | |
| **LBTB** | **Lobatse** | **39.86** | **114** | LR | LR | | | 07 50 05.0 | |
| | comp=Z,129nm,18.5s,baz=312,slow=32 | | | | | | | | |
| **BOSA** | **Boshof** | **40.33** | **119** | LR | LR | | | 07 50 18.9 | |
| | comp=Z,194nm,18.8s,baz=242,slow=32 | | | | | | | | |
| **LSZ** | **Lusaka** | **41.62** | **99** | P | **P** | | | **07 36 52.3** | **-0.7** |
| **CPUP** | **Villa Florida** | **42.20** | **245** | P | **P** | | | **07 36 57.3** | **-0.2** |
| CPUP | | | | IAmb | IAmb | | | 07 37 15.3 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **CPUP** | **Villa Florida** | **42.20** | **245** | P | **P** | | | **07 36 56.6** | **-0.9** |
| | comp=Z,1.4nm,0.8s,baz=86,slow=9.8,SNR=4.0 | | | | | | | | |
| CPUP | | | | LR | LR | | | 07 51 35.0 | |
| | comp=Z,326nm,20.5s,baz=35,slow=32 | | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **43.15** | **261** | P | **P** | | | **07 37 05.8** | **+0.6** |
| **MACA** | **Manacapuru-AM** | **46.48** | **278** | P | **P** | | | **07 37 32.6** | **+0.7** |
| MACA | | | | IAmb | IAmb | | | 07 37 34.4 | |
| | comp=Z,4.9nm,0.8s | | | | | | | | |
| **SAML** | **Samuel** | **47.74** | **269** | P | **P** | | | **07 37 41.9** | **+0.2** |
| SAML | | | | IAmb | IAmb | | | 07 37 44.0 | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **BOAV** | **Boa Vista** | **47.94** | **285** | P | **P** | | | **07 37 43.0** | **-0.3** |
| BOAV | | | | IAmb | IAmb | | | 07 38 09.2 | |
| | comp=Z,6.4nm,1.4s | | | | | | | | |
| **TRQA** | **Tornquist** | **48.92** | **230** | P | **P** | | | **07 37 49.5** | **-1.0** |
| TRQA | | | | IAmb | IAmb | | | 07 37 53.5 | |
| | comp=Z,7.4nm,1.0s | | | | | | | | |
| **ETMB** | **Extrema** | **50.56** | **268** | P | **P** | | | **07 38 04.1** | **+0.8** |
| ETMB | | | | IAmb | IAmb | | | 07 38 05.2 | |
| | comp=Z,5.4nm,1.0s | | | | | | | | |
| **TATN** | **Tataouine** | **51.13** | **28** | P | **P** | | | **07 38 09.6** | **+2.3** |
| TATN | | | | IAmb | IAmb | | | 07 38 18.6 | |
| | comp=Z,8.1nm,0.7s | | | | | | | | |
| **LPAZ** | **La Paz** | **51.75** | **259** | P | **P** | | | **07 38 12.9** | **0.0** |
| **KEST** | **Kesra** | **53.32** | **24** | P | **P** | | | **07 38 24.6** | **+1.0** |
| **KEST** | **Kesra** | **53.32** | **24** | P | **P** | | | **07 38 22.6** | **-1.0** |
| | comp=Z,6.1nm,0.9s,baz=186,slow=3.3,SNR=6.3 | | | | | | | | |
| | comp=Z,6.1nm,0.9s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **53.87** | **242** | P | **P** | | | **07 38 28.4** | **+0.3** |
| CO01 | | | | IAmb | IAmb | | | 07 38 30.2 | |
| | comp=Z,7.7nm,1.1s | | | | | | | | |
| **CO03** | **El Pedregal** | **54.47** | **241** | P | **P** | | | **07 38 31.6** | **-0.7** |
| **VA03** | **San Esteban** | **54.59** | **239** | P | **P** | | | **07 38 34.3** | **+1.2** |
| **CO02** | **Combarbal** | **54.78** | **241** | P | **P** | | | **07 38 34.3** | **-0.2** |
| **BO01** | **Tunca** | **55.26** | **237** | P | **P** | | | **07 38 36.8** | **-1.0** |
| BO01 | | | | IAmb | IAmb | | | 07 38 37.6 | |
| | comp=Z,3.4nm,0.8s | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **57.98** | **177**⇑ | P | **P** | | | **07 38 56.8** | **+0.3** |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **58.30** | **177**⇑ | P | **P** | | | **07 38 57.7** | **-1.0** |
| | comp=Z,0.8nm,0.6s,baz=5.6,slow=2.5 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **58.52** | **178**⇑ | P | **P** | | | **07 38 58.9** | **-1.5** |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **SNAA** | **Sanae** | **59.31** | **176** | P | **P** | | | **07 39 05.9** | **+0.1** |
| SNAA | | | | IAmb | IAmb | | | 07 39 12.9 | |
| | comp=Z,6.7nm,1.3s | | | | | | | | |
| **SNAA** | **Sanae** | **59.31** | **176**⇑ | P | **P** | | | **07 39 06.0** | **+0.1** |
| | comp=Z,27nm,0.7s | | | | | | | | |
| **SNAA** | **Sanae** | **59.31** | **176** | P | **P** | | | **07 39 05.7** | **-0.1** |
| | comp=Z,3.1nm,1.0s,baz=328,slow=5.8,SNR=5.7 | | | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **60.11** | **174**⇑ | P | **P** | | | **07 39 11.0** | **-0.4** |
| | comp=Z,151nm,1.3s | | | | | | | | |
| **BELA** | **Belgrano 2** | **65.89** | **185** | P | **P** | | | **07 39 51.9** | **+2.3** |
| BELA | | | | IAmb | IAmb | | | 07 40 03.4 | |
| | comp=Z,3.7nm,0.7s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **68.53** | **7** | P | **P** | | | **07 40 06.1** | **-0.4** |
| | comp=Z,4.9nm,0.9s,baz=187,slow=5.5,SNR=5.5 | | | | | | | | |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **68.86** | **38** | P | **P** | | | **07 40 09.6** | **+0.4** |
| | comp=Z,1.4nm,0.9s,baz=242,slow=3.1,SNR=2.1 | | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.89** | **27** | P | **P** | | | **07 40 38.8** | **-0.3** |
| | comp=Z,0.2nm,0.2s,baz=230,slow=5.3,SNR=4.6 | | | | | | | | |
| | comp=Z,0.2nm,0.2s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **77.38** | **180** | P | **P** | | | **07 40 59.4** | **+0.3** |
| | comp=Z,2.4nm,0.7s,baz=177,slow=0.7,SNR=15 | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **80.65** | **19** | P | **P** | | | **07 41 15.2** | **-1.5** |
| | comp=Z,1.8nm,0.8s,baz=207,slow=8.9,SNR=2.2 | | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | | |
| **VNDA** | **Vanda** | **89.86** | **179** | P | **P** | | | **07 42 03.1** | **+0.4** |
| | comp=Z,1.2nm,0.9s,baz=224,slow=4.6,SNR=6.0 | | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **95.28** | **299** | P | **P** | | | **07 42 29.1** | **+0.3** |
| | comp=Z,0.3nm,0.8s,baz=111,slow=5.7,SNR=4.7 | | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **132.51** | **140** | PKP | **PKPdf** | | | **07 48 19.3** | **-0.5** |
| | comp=Z,0.7nm,1.0s,baz=194,slow=2.3,SNR=2.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **135.43** | **136** | PKP | **PKPdf** | | | **07 48 24.2** | **-1.1** |
| | comp=Z,0.4nm,1.0s,baz=243,slow=1.9,SNR=1.2 | | | | | | | | |

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**IDC 10 07:55:01.4±2.6, 53°.98N×86°.44E, h0km, mbtmp2.8/2, ML2.6/2, Error ellipse: s-maj=21.8km s-min=12.4km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.95** | **269** | I | I | | | 08 01 20.0 | |
| | baz=85,slow=312,SNR=4.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.95** | **269** | Pg | Pg | | | 07 55 19.0 | -0.7 |
| | 0.8nm,0.3s,baz=87,slow=12,SNR=6.2 | | | | | | | | |
| ZALV | | | | Lg | Lg | | | 07 55 33.3 | |
| | 1.5nm,0.3s,baz=90,slow=27,SNR=7.2 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.90** | **238** | Pn | Pn | | | 07 56 30.9 | +0.9 |
| | 0.1nm,0.3s,baz=55,slow=13,SNR=12 | | | | | | | | |
| | 0.7nm,0.4s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **7.67** | **202** | Pn | Pn | 07 56 55.3 | +1.0 |
| | 0.1nm,0.3s,baz=16,slow=9.1,SNR=5.6 | | | | | | |
| MKAR | | | | Sn | Sn | 07 58 20.5 | -1.3 |
| | 0.1nm,0.3s,baz=17,slow=31,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 07 59 05.3 | |
| | baz=15,slow=33,SNR=2.6 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

**IDC 10 08:00:07.7±3.8, 55°39N×86°06E, h0km, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=31.1km s-min=24.6km az=39.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.61** | **207** | I | I | 08 11 20.0 | |
| | baz=24,slow=318,SNR=5.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.61** | **207** | Pg | Pn | 08 00 36.8 | -0.6 |
| | 3.0nm,0.3s,baz=31,slow=17,SNR=29 | | | | | | |
| ZALV | | | | Lg | Lg | 08 00 58.6 | |
| | 2.7nm,0.3s,baz=28,slow=27,SNR=6.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.58** | **227** | Pn | Pn | 08 01 45.5 | -0.1 |
| | 0.1nm,0.3s,baz=46,slow=14,SNR=5.1 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.92** | **197** | Pn | Pn | 08 02 18.1 | +0.3 |
| | baz=19,slow=14,SNR=1.8 | | | | | | |
| | 0.1nm,0.6s | | | | | | |

*NEIC **10** 08:02:37.8±2.4, 8.9S±0.1×112.48E±0.05, h90km±9km, mb4.3/7, Error ellipse: s-maj=15.1km s-min=7.0km az=179.0*
*IDC **10** 08:02:37.9±3.9, 8.53S×112.50E, h71km±33km, mb3.7/9, mbtmp4.0/9, Error ellipse: s-maj=42.8km s-min=15.6km az=56.0*
*DJA **10** 08:02:38.0±0.9, 9.3S±4.3×111.25E±.3°, h26km±8km, M4.7/19, mb4.9/6, mB5.8/2, MLv4.6/19, Mw(mB)5.3/2*

**ISC 10 08:02:37.0±0.6, 8.84S±0.07×112.44E±0.05, h71km, n45, σ1s87/46, mb4.0/10, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PWJI** | **Pagerwojo** | **1.03** | **322** | P | Pn | 08 02 57.4 | +1.4 |
| PWJI | | | | S | Sn | 08 03 10.9 | +0.9 |
| **JAGI** | **Jajag, Banyuwa** | **1.74** | **78** | Pn | Pn | 08 03 06.2 | +1.0 |
| **JAGI** | **Jajag, Banyuwa** | **1.74** | **78** | P | Pn | 08 03 06.3 | +1.1 |
| JAGI | | | | S | Sn | 08 03 26.0 | -0.5 |
| **NGJI** | **Ngawi** | **1.75** | **327** | P | Pn | 08 03 09.5 | +4.0 |
| **GRJI** | **Gresik** | **1.92** | **1** | P | Pn | 08 03 09.7 | +2.1 |
| GRJI | | | | S | Sn | 08 03 30.8 | 0.0 |
| **UGM** | **Wanagama** | **2.11** | **296** | Pn | Pn | 08 03 12.4 | +2.2 |
| **UGM** | **Wanagama** | **2.11** | **296** | P | Pn | 08 03 12.7 | +2.5 |
| **YOGI** | **Yogyakarta** | **2.35** | **296** | P | Pn | 08 03 15.2 | +1.7 |
| **SMRI** | **Semarang** | **2.66** | **312** | | Pn | 08 03 19.6 | +1.9 |
| **SMRI** | **Semarang** | **2.66** | **312** | P | Pn | 08 03 20.1 | +2.4 |
| **IGBI** | **Denpasar** | **2.68** | **90** | P | Pn | 08 03 21.0 | +3.1 |
| **DNP** | **Denpasar** | **2.75** | **87** | P | Pn | 08 03 19.5 | +0.7 |
| **SRBI** | **Singaraja** | **2.85** | **75** | P | Pn | 08 03 21.7 | +1.5 |
| **BWJI** | **Bawean** | **2.98** | **4** | P | Pn | 08 03 24.2 | +2.2 |
| **KPJI** | **Karang Pucung** | **3.78** | **293** | P | Pn | 08 03 36.2 | +3.3 |
| **CMJI** | **Cimerak** | **4.08** | **285** | P | Pn | 08 03 39.1 | +2.0 |
| **TWSI** | **Taliwang, Sumb** | **4.39** | **89** | P | Pn | 08 03 42.9 | +1.6 |
| **CNJI** | **Cibinong** | **5.47** | **286** | P | Pn | 08 03 58.1 | +2.0 |
| **TNG** | **Tangerang** | **6.33** | **294** | P | Pn | 08 04 09.8 | +2.1 |
| **XMIS** | **Christmas Isla** | **6.88** | **256** | Pn | Pn | 08 04 16.1 | +0.7 |
| **BASI** | **Baing, Sumba** | **8.14** | **100** | P | Pn | 08 04 33.8 | +1.2 |
| | 203nm,1.7s | | | | | | |
| **EDFI** | **Ende, Flores** | **9.15** | **90** | P | Pn | 08 04 48.0 | +1.6 |
| **MBWA** | **Marble Bar** | **14.12** | **151** | Pn | Pn | 08 05 51.4 | -2.3 |
| **PSA00** | **Pilbara Seismi** | **14.53** | **151** | Pn | Pn | 08 05 56.6 | -2.4 |
| **FITZ** | **Fitzroy Crossi** | **15.79** | **127** | P | Pn | 08 06 14.2 | -1.0 |
| FITZ | | | | IAmb | IAmb | 08 06 24.5 | |
| | comp=Z,203nm,1.3s | | | | | | |
| **KULM** | **Kulim** | **18.31** | **320** | P | P | 08 06 43.2 | -2.4 |
| KULM | | | | IAmb | IAmb | 08 07 00.1 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **20.56** | **75** | P | P | 08 07 08.7 | -1.5 |
| FAKI | | | | IAmb | IAmb | 08 07 38.0 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.88** | **120** | P | P | 08 07 43.8 | -0.5 |
| **WRA** | **Warramunga Arr** | **23.88** | **120** | P | P | 08 07 45.7 | +1.4 |
| | comp=Z,1.3nm,0.7s,baz=297,slow=11,SNR=55 | | | | | | |
| WRA | | | | ScP | ScP | 08 14 58.2 | +0.2 |
| | comp=Z,0.5nm,0.7s,baz=309,slow=2.0,SNR=2.9 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.89** | **120** | P | P | 08 07 44.5 | +0.1 |
| WB2 | | | | IAmb | IAmb | 08 07 46.7 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **25.28** | **128** | P | P | 08 07 59.1 | +2.1 |
| | comp=Z,2.2nm,0.9s,baz=300,slow=7.9,SNR=14 | | | | | | |
| ASAR | | | | PcP | PcP | 08 11 30.8 | +2.1 |
| | comp=Z,0.2nm,0.5s,baz=343,slow=2.9,SNR=1.7 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **35.46** | **134** | P | P | 08 09 28.6 | +1.8 |
| STKA | | | | IAmb | IAmb | 08 09 30.0 | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **35.46** | **134** | P | P | 08 09 29.3 | +2.5 |
| | comp=Z,3.6nm,0.5s,baz=315,slow=11,SNR=11 | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **H08S2** | **Diego Garcia H** | **39.54** | **269** | T | T | 08 51 21.8 | |
| | baz=94 | | | | | | |
| **H08S3** | **Diego Garcia H** | **39.55** | **269** | T | T | 08 51 24.5 | |
| | baz=94 | | | | | | |
| **H08S1** | **Diego Garcia H** | **39.55** | **269** | T | T | 08 51 33.5 | |
| | baz=94 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.69** | **17** | P | P | 08 12 04.9 | -1.1 |
| | comp=Z,1.2nm,0.7s,baz=220,slow=4.1,SNR=4.1 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.68** | **355** | P | P | 08 12 12.3 | -0.9 |
| | comp=Z,0.3nm,0.4s,baz=170,slow=6.7,SNR=1.8 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.56** | **337** | P | P | 08 12 45.6 | -1.2 |
| **MKAR** | **Makanchi Array** | **61.56** | **337** | P | P | 08 12 46.0 | -0.9 |
| | comp=Z,0.7nm,0.5s,baz=150,slow=6.9,SNR=9.1 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.13** | **337** | P | P | 08 13 15.6 | -1.1 |
| | comp=Z,0.3nm,0.5s,baz=151,slow=6.1,SNR=6.1 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.77** | **343** | P | P | 08 13 19.5 | -1.3 |
| | comp=Z,0.8nm,0.4s,baz=202,slow=3.2,SNR=4.5 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.81** | **327** | P | P | 08 14 02.6 | -1.3 |
| **AFI** | **Afiamalu** | **74.21** | **102** | P | P | 08 14 00.6 | -6.4 |
| **BOSA** | **Boshof** | **83.37** | **242** | P | P | 08 14 59.1 | +2.0 |
| | comp=Z,3.7nm,0.9s,baz=90,slow=5.1,SNR=2.0 | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | |

*JSN **10** 08:04:22.8±0.3, 18.20N×76.70W, h14km±13km, MD2.7*
*SSNC **10** 08:04:23.8±1.7, 18.37N×76.79W, h5km±10km, MD2.6, ML1.3*

**ISC 10 08:04:22.0±1.2, 18.26N±0.05×76.74W±0.05, h18km±3km, n8, σ1s02/15, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STH** | **Stony Hill** | **0.19** | **200** | *i* P | Pg | 08 04 26.6 | -0.4 |
| STH | | | | *i* S | Sb | 08 04 29.3 | +0.1 |
| **HOJ** | **Hope** | **0.25** | **182** | *i* P | Pg | 08 04 27.1 | -0.8 |
| **MTDJ** | **Mount Denham** | **0.76** | **268** | *i* P | Pg | 08 04 36.9 | 0.0 |
| MTDJ | | | | *i* S | Sg | 08 04 47.7 | +0.6 |
| **MTDJ** | **Mount Denham** | **0.76** | **268** | *e*P | Pg | 08 04 36.9 | 0.0 |
| MTDJ | | | | *e*S | Sg | 08 04 47.6 | +0.6 |
| MTDJ | | | | IAML | | 08 04 49.7 | |
| | comp=Z,11nm,0.1s | | | | | | |
| MTDJ | | | | IAML | | 08 04 49.8 | |
| | 24nm,0.3s | | | | | | |
| **LMGC** | **Las Mercedes** | **1.81** | **352** | *e*P | Pn | 08 04 52.3 | 0.0 |
| LMGC | | | | *e*S | Sn | 08 05 12.2 | -2.6 |
| LMGC | | | | IAML | | 08 05 15.7 | |
| | comp=E,10.0nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 08 05 16.8 | |
| | comp=N,7.9nm,0.1s | | | | | | |
| **RCC** | **Rio Carpintero** | **1.99** | **30** | *e*P | Pn | 08 04 55.5 | +0.7 |
| RCC | | | | *e*S | Sn | 08 05 19.8 | +0.6 |
| RCC | | | | IAML | | 08 05 21.8 | |
| | comp=N,0.7nm,0.1s | | | | | | |
| RCC | | | | IAML | | 08 05 22.1 | |
| | comp=E,0.6nm,0.1s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **2.27** | **43** | *e*P | Pn | 08 04 59.3 | +0.8 |
| GTBY | | | | *e*S | Sn | 08 05 26.7 | +0.7 |
| **QMBU** | **Quimbuelo** | **2.66** | **43** | *e*P | Pn | 08 05 04.2 | +0.2 |
| QMBU | | | | *e*S | Sn | 08 05 34.7 | -0.9 |
| QMBU | | | | IAML | | 08 05 36.2 | |
| | comp=N,1.7nm,0.2s | | | | | | |
| QMBU | | | | IAML | | 08 05 36.3 | |
| | comp=E,0.5nm,0.0s | | | | | | |

**IDC 10 08:20:34.5±3.5, 53.58N×87.75E, h0km, mbtmp2.7/2, ML2.5/2, Error ellipse: s-maj=30.6km s-min=18.2km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.78** | **283** | I | I | 08 32 20.0 | |
| | 0.1nm,0.9s,baz=99,slow=315,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.78** | **283** | Pg | Pn | 08 21 06.7 | +0.3 |
| | 0.9nm,0.3s,baz=98,slow=15,SNR=3.9 | | | | | | |
| ZALV | | | | Lg | Lg | 08 21 30.8 | |
| | 0.6nm,0.3s,baz=100,slow=32,SNR=2.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.40** | **246** | Pn | Pn | 08 22 10.7 | +0.8 |
| | 0.1nm,0.3s,baz=65,slow=15,SNR=4.3 | | | | | | |
| KURBB | | | | Lg | Lg | 08 23 56.8 | |
| | baz=52,slow=32 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.64** | **209** | Pn | Pn | 08 22 28.1 | +1.2 |
| | 0.1nm,0.3s,baz=24,slow=13,SNR=2.1 | | | | | | |
| MKAR | | | | Lg | Lg | 08 24 35.5 | |
| | 0.1nm,0.3s,baz=26,slow=32,SNR=2.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**IDC 10 08:34:31.1±3.0, 54.32N×86.86E, h0km, mbtmp3.1/2, ML2.6/2, Error ellipse: s-maj=26.5km s-min=17.7km az=52.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.26** | **254** | I | I | 08 42 35.0 | |
| | baz=73,slow=310,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.26** | **254** | Pg | Pg | 08 34 53.6 | -1.6 |
| | 1.9nm,0.3s,baz=70,slow=17,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 08 35 12.0 | |
| | 1.9nm,0.3s,baz=68,slow=27,SNR=5.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.30** | **237** | Pn | Pn | 08 36 06.5 | +1.4 |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=7.7 | | | | | | |
| KURBB | | | | Lg | Lg | 08 37 49.9 | |
| | baz=51,slow=31 | | | | | | |
| | 1.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.08** | **203** | Pn | Pn | 08 36 30.5 | +0.9 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=7.8 | | | | | | |
| MKAR | | | | Lg | Lg | 08 38 47.6 | |
| | 0.1nm,0.3s,baz=25,slow=29,SNR=6.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*NNC **10** 08:34:46.7±0.6, 40.80N×74.21E, h0km, mb4.0, mpv3.7, Error ellipse: s-maj=4.6km s-min=2.8km az=174.0*
*SOME **10** 08:34:46.1, 40.78N×74.17E, h20km*
*KRNET **10** 08:34:47.2±0.1, 40.81N×74.15E, h24km, mb3.4*
*KNET **10** 08:34:49.7±0.6, 41.00N×74.23E, h1km±4km, ml3.1, Error ellipse: s-maj=5.9km s-min=3.8km az=62.0*

**ISC 10 08:34:46.5±0.8, 40.77N±0.03×74.14E±0.02, h10km, n81, σ1s74/135, 45C-33D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **0.90** | **213** | ↑*e*P | Pb | 08 35 04.6 | +0.3 |
| | baz=12 | | | | | | |
| SFK | | | | ↑*e*S | Sb | 08 35 17.3 | +0.9 |
| | baz=12 | | | | | | |
| **ARSB** | **Arslanbob** | **1.03** | **303** | ↑*e*P | Pg | 08 35 06.2 | -0.2 |
| | baz=1.0 | | | | | | |
| ARSB | | | | ↑*e*S | Sb | 08 35 20.0 | -0.3 |
| | baz=1.0 | | | | | | |
| **OHH** | **Osh** | **1.06** | **257** | ↓*e*P | Pn | 08 35 07.3 | -0.2 |
| | baz=55 | | | | | | |
| OHH | | | | ↓*i*S | Sn | 08 35 21.8 | -0.5 |
| | baz=55 | | | | | | |
| **ARLS** | **Aral** | **1.10** | **7** | ↓*e*P | Pg | 08 35 06.7 | -0.9 |
| | baz=7.0 | | | | | | |
| ARLS | | | | ↓*i*S | Sg | 08 35 21.0 | -0.9 |
| | baz=7.0 | | | | | | |
| **AML** | **Almayashu** | **1.40** | **346** | P | Pn | 08 35 12.5 | +0.1 |
| | 163nm,0.2s,SNR=80 | | | | | | |
| AML | | | | ↑S | Sb | 08 35 30.8 | -0.3 |
| | 449nm,0.5s | | | | | | |
| **AML** | **Almayashu** | **1.40** | **346** | ↓*e*P | Pn | 08 35 12.5 | +0.1 |
| | baz=46 | | | | | | |
| AML | | | | ↓*e*S | Sb | 08 35 30.7 | -0.3 |
| | baz=46 | | | | | | |
| **UCH** | **Uchtor** | **1.48** | **11** | ↑P | Pb | 08 35 14.3 | -0.1 |
| | 11nm,0.1s,SNR=11 | | | | | | |
| **NRN** | **Naryn** | **1.55** | **64** | ↓*e*P | Pn | 08 35 14.9 | +0.4 |
| | baz=65 | | | | | | |
| NRN | | | | ↓*e*S | Sn | 08 35 34.9 | 0.0 |
| | baz=65 | | | | | | |
| **AAK** | **Ala-Archa** | **1.88** | **8** | ↑P | Pb | 08 35 21.4 | +0.3 |
| | 63nm,0.5s,SNR=23 | | | | | | |
| AAK | | | | ↑S | Sb | 08 35 45.5 | +0.8 |
| | 106nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **1.88** | **8** | ↓Pn | Pb | 08 35 20.6 | -0.5 |
| | 28nm,0.5s | | | | | | |
| AAK | | | | ↑Sn | Sb | 08 35 45.1 | +0.3 |
| | 52nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **1.88** | **8** | ↑*i*P | Pb | 08 35 20.4 | -0.7 |
| | baz=8.0 | | | | | | |
| AAK | | | | ↑*e*S | Sb | 08 35 44.6 | -0.1 |
| | baz=8.0 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.91** | **352** | ↑P | Pb | 08 35 21.6 | +0.1 |
| | 22nm,0.2s,SNR=27 | | | | | | |
| EKS2 | | | | ↑S | Sg | 08 35 46.5 | -1.3 |
| | 31nm,0.2s | | | | | | |
| **EKS2** | **Erkin-Say** | **1.91** | **352** | ↓*i*P | Pb | 08 35 20.8 | -0.7 |
| | baz=52 | | | | | | |
| EKS2 | | | | ↓*i*S | Sb | 08 35 45.2 | -0.2 |
| | baz=52 | | | | | | |
| **ARK** | **Arkit** | **1.93** | **303** | ↑*e*P | Pb | 08 35 21.5 | -0.4 |
| | baz=2.0 | | | | | | |
| ARK | | | | ↑*i*S | Sb | 08 35 46.4 | +0.3 |
| | baz=2.0 | | | | | | |
| **KBK** | **Karagaybulak** | **1.98** | **18** | ↑P | Pg | 08 35 23.7 | -0.8 |
| | 27nm,0.1s,SNR=24 | | | | | | |
| KBK | | | | ↓S | Sg | 08 35 48.8 | -1.3 |
| | 334nm,0.4s | | | | | | |
| **KBK** | **Karagaybulak** | **1.98** | **18** | ↑*e*P | Pb | 08 35 21.9 | -0.8 |
| | baz=18 | | | | | | |
| KBK | | | | ↑*e*S | Sb | 08 35 47.0 | -0.5 |
| | baz=18 | | | | | | |
| **FRU1** | **Bishkek** | **2.07** | **10** | ↑*e*P | Pb | 08 35 23.6 | -0.6 |
| | baz=10.0 | | | | | | |
| FRU1 | | | | ↑*e*S | Sb | 08 35 49.6 | -0.4 |
| | baz=10.0 | | | | | | |
| **MRKS** | **Merke** | **2.09** | **341** | *e*P | Pb | 08 35 24.9 | +0.4 |
| | 274nm,0.3s | | | | | | |
| MRKS | | | | *e*S | Sg | 08 35 53.6 | 0.0 |
| | 97nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **2.09** | **341** | Pg | Pb | 08 35 24.7 | +0.2 |
| | 274nm,0.3s | | | | | | |
| MRKS | | | | Lg | Lg | 08 35 54.0 | |
| | 97nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **2.11** | **325** | ↓*e*P | Pb | 08 35 23.7 | -1.2 |
| | baz=24 | | | | | | |
| MNAS | | | | ↓*e*S | Sb | 08 35 50.3 | -0.9 |
| | baz=24 | | | | | | |
| **ULHL** | **Ulahol** | **2.16** | **46** | ↑P | Pb | 08 35 25.5 | -0.3 |
| | 58nm,0.3s,SNR=89 | | | | | | |
| ULHL | | | | ↑S | Sb | 08 35 53.7 | +1.0 |
| | 100nm,0.3s | | | | | | |
| **ULHL** | **Ulahol** | **2.16** | **46** | ↓*e*P | Pb | 08 35 24.5 | -1.3 |
| | baz=47 | | | | | | |
| ULHL | | | | ↓*i*S | Sb | 08 35 51.5 | -1.2 |
| | baz=47 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.19** | **38** | ↑*i*P | Pb | 08 35 24.7 | -1.5 |
| | baz=38 | | | | | | |
| BOOM | | | | ↑*i*S | Sb | 08 35 52.0 | -1.4 |
| | baz=38 | | | | | | |
| **DRK** | **Karamyk** | **2.21** | **235** | ↑*e*P | Pb | 08 35 25.7 | -1.0 |
| | baz=34 | | | | | | |
| DRK | | | | ↑*e*S | Sb | 08 35 54.0 | -0.2 |
| | baz=34 | | | | | | |
| **CHMS** | **Chumysh** | **2.27** | **11** | ↑P | Pb | 08 35 28.0 | +0.4 |
| | 24nm,0.3s,SNR=8.3 | | | | | | |
| CHMS | | | | ↑S | Sb | 08 35 57.5 | +1.7 |
| | 92nm,0.3s | | | | | | |
| **CHMS** | **Chumysh** | **2.27** | **11** | ↓Pg | Pb | 08 35 28.5 | +0.8 |
| | 32nm,0.8s | | | | | | |
| CHMS | | | | ↓Lg | Lg | 08 35 57.5 | |
| | 54nm,0.4s | | | | | | |
| **CHMS** | **Chumysh** | **2.27** | **11** | ↓*e*P | Pn | 08 35 25.7 | +1.6 |
| | baz=11 | | | | | | |
| CHMS | | | | ↓*e*S | Sn | 08 35 53.8 | +1.6 |
| | baz=11 | | | | | | |
| **TRKS** | **Terek-Say** | **2.39** | **289** | ↓*i*P | Pn | 08 35 27.6 | +1.8 |
| | baz=87 | | | | | | |
| TRKS | | | | ↓*e*S | Sn | 08 35 56.9 | +1.7 |
| | baz=87 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.41** | **26** | ↑P | Pb | 08 35 30.3 | +0.2 |
| | 21nm,0.4s,SNR=28 | | | | | | |
| TKM2 | | | | ↑S | Sb | 08 36 01.2 | +1.3 |
| | 111nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.41** | **26** | ↑Pg | Pb | 08 35 30.3 | +0.2 |
| | 8.9nm,0.3s | | | | | | |
| TKM2 | | | | ↑Lg | Lg | 08 36 01.7 | |
| | 66nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.41** | **26** | ↓*e*P | Pn | 08 35 27.8 | +1.6 |
| | baz=27 | | | | | | |
| TKM2 | | | | ↓*i*S | Sn | 08 35 57.3 | +1.5 |
| | baz=27 | | | | | | |
| **USP** | **Ospenovka** | **2.51** | **6** | ↑P | Pb | 08 35 30.9 | -0.7 |
| | 35nm,0.2s,SNR=40 | | | | | | |
| USP | | | | ↓S | Sb | 08 36 03.0 | +0.4 |
| | 96nm,0.3s | | | | | | |
| **USP** | **Ospenovka** | **2.51** | **6** | ↑*e*P | Pn | 08 35 29.1 | +1.7 |
| | baz=6.0 | | | | | | |
| USP | | | | ↑*i*S | Sn | 08 35 59.4 | +1.4 |
| | baz=6.0 | | | | | | |
| **BTK** | **Batken** | **2.63** | **255** | ↓*e*P | Pb | 08 35 31.6 | -2.2 |
| | baz=55 | | | | | | |
| BTK | | | | ↓*e*S | Sb | 08 36 03.9 | -2.3 |
| | baz=55 | | | | | | |
| **KST** | **Kastek** | **2.65** | **30** | *e*P | Pb | 08 35 34.1 | 0.0 |
| | 18nm,0.4s | | | | | | |
| KST | | | | *e*S | Sg | 08 36 09.4 | -2.1 |
| | 171nm,0.3s | | | | | | |
| **KST** | **Kastek** | **2.65** | **30** | Pg | Pb | 08 35 34.1 | 0.0 |
| | 18nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 08 36 09.4 | |
| | 171nm,0.3s | | | | | | |
| **KDJ** | **Kajisay** | **2.66** | **58** | ↑*e*P | Pn | 08 35 31.6 | +2.0 |
| | baz=59 | | | | | | |
| KDJ | | | | ↑*e*S | Sn | 08 36 03.9 | +2.0 |
| | baz=59 | | | | | | |
| **SGDS** | **Sogindy** | **2.70** | **8** | Pg | Pb | 08 35 34.3 | -0.7 |
| | 21nm,0.4s | | | | | | |
| SGDS | | | | Lg | Lg | 08 36 09.5 | |
| | 74nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **2.75** | **26** | *e*P | Pb | 08 35 36.5 | +0.7 |
| | 28nm,0.4s | | | | | | |
| DGS | | | | *e*S | Sg | 08 36 13.6 | -1.3 |
| | 232nm,0.8s | | | | | | |
| **DGS** | **Degeres** | **2.75** | **26** | Pg | Pb | 08 35 36.5 | +0.7 |
| | 28nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 08 36 13.6 | |
| | 232nm,0.8s | | | | | | |
| **MTBS** | **Maitube** | **2.91** | **35** | *e*P | Pb | 08 35 39.6 | +1.1 |
| | 23nm,0.4s | | | | | | |
| MTBS | | | | *e*S | Sg | 08 36 18.6 | -1.3 |
| | 125nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **2.91** | **35** | Pg | Pb | 08 35 39.6 | +1.1 |
| | 23nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 08 36 18.7 | |
| | 125nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.08** | **42** | *e*P | Pb | 08 35 42.3 | +0.6 |
| | 18nm,0.4s | | | | | | |
| TNSS | | | | *e*S | Sg | 08 36 23.2 | -2.4 |
| | 30nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.08** | **42** | Pg | Pb | 08 35 42.3 | +0.6 |
| | 18nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 08 36 23.2 | |
| | 30nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **3.14** | **21** | *e*P | Pb | 08 35 42.8 | +0.4 |
| | 25nm,0.4s | | | | | | |
| KRBS | | | | *e*S | Sg | 08 36 24.2 | -3.0 |
| | 79nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.14** | **21** | Pg | Pb | 08 35 42.8 | +0.4 |
| | 25nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 08 36 24.2 | |
| | 79nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.23** | **41** | *e*P | Pb | 08 35 44.6 | +0.7 |
| | 16nm,0.4s | | | | | | |
| MDOK | | | | *e*S | Sg | 08 36 27.3 | -2.8 |
| | 47nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **3.23** | **41** | ↑Pg | Pb | 08 35 43.5 | -0.5 |
| | 8.8nm,0.4s | | | | | | |
| MDOK | | | | Pg | Pg | 08 35 44.5 | -3.8 |
| | 16nm,0.4s | | | | | | |
| MDOK | | | | ↑Lg | Lg | 08 36 27.0 | |
| | 67nm,1.0s | | | | | | |
| MDOK | | | | Lg | Lg | 08 36 27.3 | |
| | 47nm,0.7s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.31** | **41** | *e*P | Pb | 08 35 46.4 | +1.0 |
| | 21nm,0.3s | | | | | | |
| KOTS | | | | *e*S | Sg | 08 36 30.9 | -1.9 |
| | 145nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.31** | **41** | Pg | Pb | 08 35 46.4 | +1.0 |
| | 21nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 08 36 30.9 | |
| | 145nm,0.5s | | | | | | |
| **GAR** | **Garm** | **3.43** | **240** | ↓*e*P | Pn | 08 35 42.7 | +2.6 |
| | baz=40 | | | | | | |
| GAR | | | | ↓*e*S | Sn | 08 36 23.2 | +2.3 |
| | baz=40 | | | | | | |
| **KUU** | **Kurty** | **3.52** | **27** | *e*P | Pb | 08 35 49.6 | +0.7 |
| | 11nm,0.1s | | | | | | |
| KUU | | | | *e*S | Sg | 08 36 35.7 | -3.8 |
| | 267nm,0.7s | | | | | | |
| **KUU** | **Kurty** | **3.52** | **27** | Pg | Pb | 08 35 49.6 | +0.7 |
| | 11nm,0.1s | | | | | | |
| KUU | | | | Lg | Lg | 08 36 35.7 | |
| | 267nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **3.57** | **312** | ↓Pn | Pn | 08 35 43.3 | +1.3 |
| | 0.7nm,0.5s,baz=127,slow=12,SNR=37 | | | | | | |
| KK31 | | | | ↑Pg | Pb | 08 35 51.0 | +1.3 |
| | 2.5nm,0.3s,baz=126,slow=17,SNR=16 | | | | | | |
| KK31 | | | | ↑Lg | Lg | 08 36 38.0 | |
| | 12nm,0.3s,baz=134,slow=28,SNR=11 | | | | | | |
| **KKAR** | **Karatay Array** | **3.57** | **312** | ↓*e*P | Pn | 08 35 44.1 | +2.2 |
| | baz=11 | | | | | | |
| KKAR | | | | ↓*e*S | Sn | 08 36 25.4 | +1.2 |
| | baz=11 | | | | | | |
| **PRZ** | **Przheval'sk** | **3.62** | **60** | ↑*e*P | Pn | 08 35 44.9 | +2.1 |
| | baz=61 | | | | | | |
| PRZ | | | | ↑*e*S | Sn | 08 36 26.9 | +1.2 |
| | baz=61 | | | | | | |
| **CHKK** | **Chushkaly** | **3.73** | **33** | *e*P | Pb | 08 35 53.6 | +1.0 |
| | 6.6nm,0.5s | | | | | | |
| CHKK | | | | *e*S | Sg | 08 36 42.9 | -3.6 |
| | 32nm,0.6s | | | | | | |
| **CHKK** | **Chushkaly** | **3.73** | **33** | Pg | Pb | 08 35 53.6 | +1.0 |
| | 6.6nm,0.5s | | | | | | |
| CHKK | | | | Lg | Lg | 08 36 42.9 | |
| | 32nm,0.6s | | | | | | |
| **SATY** | **Saty** | **3.92** | **53** | *e*P | Pb | 08 35 57.8 | +2.1 |
| | 14nm,0.8s | | | | | | |
| SATY | | | | *e*S | Sg | 08 36 50.2 | -2.2 |
| | 26nm,0.7s | | | | | | |
| **SATY** | **Saty** | **3.92** | **53** | Pg | Pb | 08 35 57.8 | +2.1 |
| | 14nm,0.8s | | | | | | |
| SATY | | | | Lg | Lg | 08 36 50.2 | |
| | 26nm,0.7s | | | | | | |
| **BRLS** | **Borolday** | **3.92** | **307** | *e*P | Pb | 08 35 58.2 | +2.4 |
| | 6.7nm,0.3s | | | | | | |
| BRLS | | | | *e*S | Sg | 08 36 50.6 | -1.9 |
| | 23nm,0.4s | | | | | | |
| **BRLS** | **Borolday** | **3.92** | **307** | Pg | Pb | 08 35 57.9 | +2.2 |
| | 6.7nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 08 36 50.6 | |
| | 23nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **4.00** | **52** | *e*P | Pb | 08 35 58.3 | +1.2 |
| ZHN | | | | *e*S | Sg | 08 36 50.7 | -4.2 |
| **ZHN** | **Zhinishke** | **4.00** | **52** | Pg | Pb | 08 35 58.3 | +1.2 |
| 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 7.4nm,0.4s | | | | | | | | |
| KPKS | | | | | Lg | Lg | 08 37 01.5 | | |
| | 26nm,0.6s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.35** | **55** | *e* | P | **Pb** | **08 36 04.6** | **+1.6** | |
| | 6.3nm,0.6s | | | | | | | | |
| UZB | | | | *e* | S | **Sg** | **08 37 01.4** | **-4.6** | |
| | 14nm,0.5s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.35** | **55** | | Pg | **Pb** | **08 36 04.6** | **+1.6** | |
| | 6.3nm,0.6s | | | | | | | | |
| UZB | | | | | Lg | Lg | 08 37 01.4 | | |
| | 14nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **4.39** | **37** | *e* | P | **Pb** | **08 36 05.3** | **+1.6** | |
| | 2.9nm,0.5s | | | | | | | | |
| ARXS | | | | *e* | S | **Sg** | **08 37 02.7** | **-4.7** | |
| | 30nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **4.39** | **37** | | Pg | **Pb** | **08 36 04.9** | **+1.2** | |
| | 2.9nm,0.5s | | | | | | | | |
| ARXS | | | | | Lg | Lg | 08 37 02.7 | | |
| | 30nm,0.5s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.62** | **43** | | Pg | **Pb** | **08 36 09.0** | **+1.3** | |
| | 8.5nm,0.6s | | | | | | | | |
| BLB | | | | | Lg | Lg | 08 37 09.5 | | |
| | 49nm,0.2s | | | | | | | | |
| **SHLS** | **Shalkode** | **4.63** | **57** | *e* | P | **Pg** | **08 36 14.4** | **-0.8** | |
| | 8.9nm,0.5s | | | | | | | | |
| SHLS | | | | *e* | S | **Sg** | **08 37 18.1** | **+3.0** | |
| | 29nm,0.7s | | | | | | | | |
| **SHLS** | **Shalkode** | **4.63** | **57** | | Pg | **Pg** | **08 36 14.4** | **-0.8** | |
| | 8.9nm,0.5s | | | | | | | | |
| SHLS | | | | | Lg | Lg | 08 37 18.2 | | |
| | 29nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.73** | **56** | | Pg | **Pb** | **08 36 12.4** | **+2.8** | |
| | 3.4nm,0.7s | | | | | | | | |
| PDGK | | | | | Lg | Lg | 08 37 14.8 | | |
| | 12nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.73** | **56** | ⇑ | Pg | **Pb** | **08 36 11.4** | **+1.8** | |
| | 8.3nm,0.7s | | | | | | | | |
| PDGK | | | | ⇓ | Lg | Lg | 08 37 14.6 | | |
| | 22nm,0.7s | | | | | | | | |
| **DJR** | **Jarkent** | **5.48** | **48** | *e* | P | **Pb** | **08 36 26.6** | **+4.2** | |
| | 3.8nm,0.8s | | | | | | | | |
| DJR | | | | *e* | S | **Sg** | **08 37 38.9** | **-3.6** | |
| | 14nm,0.7s | | | | | | | | |
| **DJR** | **Jarkent** | **5.48** | **48** | | Pg | **Pb** | **08 36 25.2** | **+2.8** | |
| | 3.8nm,0.8s | | | | | | | | |
| DJR | | | | | Lg | Lg | 08 37 37.0 | | |
| | 14nm,0.7s | | | | | | | | |
| **OTUK** | **Ortayu** | **7.58** | **351** | ⇑ | Lg | Lg | 08 38 46.9 | | |
| | 9.0nm,0.7s | | | | | | | | |

*IDC **10** 08:52:06.9±3.1,53.˝79N×90.˝75E,h0km,mbtmp3.2/3, ML3.0/3,Error ellipse: s-maj=27.0km s-min=21.9km az=58.0*

*NNC **10** 08:52:15.0±2.8,53.˝57N×90.˝36E,h18km±13km,mb3.8, mpv3.5,Error ellipse: s-maj=19.2km s-min=15.9km az=176.0,Suspected Mining explosion.*

**ISC 10 08:52:10.7±3.9,53.˝7N±0.1×90.˝4E±0.˝2,h0km,n9,σ1s28/13, 5C-5D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.35** | **277** | I | | I | 09 14 08.4 | |
| | 0.2nm,1.0s,baz=91,slow=312,SNR=7.7 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.35** | **277** | ⇑ | Pn | **Pn** | **08 53 06.8** | **+2.7** |
| | 2.9nm,0.8s | | | | | | | |
| ZAA0 | | | | ⇓ | Lg | Lg | 08 53 59.1 | |
| | 11nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.35** | **277** | | Pn | **Pn** | **08 53 04.0** | **-0.2** |
| | 1.7nm,0.3s,baz=94,slow=10,SNR=8.8 | | | | | | | |
| ZALV | | | | | Pg | **Pb** | **08 53 09.5** | **-1.3** |
| | 2.4nm,0.3s,baz=90,slow=17,SNR=18 | | | | | | | |
| ZALV | | | | | Lg | Lg | 08 53 57.8 | |
| | 3.4nm,0.3s,baz=91,slow=32,SNR=3.7 | | | | | | | |
| | 0.9nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **7.84** | **253** | ⇓ | Pn | **Pn** | **08 54 07.4** | **+1.5** |
| | 6.4nm,1.1s | | | | | | | |
| KURK | | | | ⇑ | Sn | **Sn** | **08 55 35.3** | **0.0** |
| | 14nm,1.0s | | | | | | | |
| KURK | | | | ⇓ | Lg | Lg | 08 56 23.7 | |
| | 39nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.94** | **252** | | Pn | **Pn** | **08 54 06.5** | **-0.6** |
| | 0.3nm,0.3s,baz=67,slow=15,SNR=11 | | | | | | | |
| KURBB | | | | | Sn | **Sn** | **08 55 37.1** | **-0.5** |
| | baz=67,slow=24,SNR=1.3 | | | | | | | |
| KURBB | | | | | Lg | Lg | 08 56 26.8 | |
| | 0.1nm,0.3s,baz=59,slow=30,SNR=6.9 | | | | | | | |
| | 1.2nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.94** | **252** | ⇑ | Pn | **Pn** | **08 54 07.3** | **+0.1** |
| | 6.7nm,1.2s | | | | | | | |
| KURBB | | | | ⇑ | Sn | **Sn** | **08 55 37.5** | **-0.1** |
| | 37nm,0.9s | | | | | | | |
| KURBB | | | | ⇓ | Lg | Lg | 08 56 26.6 | |
| | 60nm,0.9s | | | | | | | |
| **MK31** | **Makanchi Array** | **8.63** | **220** | | Pn | **Pn** | **08 54 16.5** | **-0.3** |
| | 0.7nm,0.4s,baz=35,slow=13,SNR=16 | | | | | | | |
| MK31 | | | | ⇓ | Sn | **Sn** | **08 55 56.1** | **+1.3** |
| | 5.3nm,1.0s,baz=41,slow=22,SNR=3.8 | | | | | | | |
| MK31 | | | | ⇑ | Lg | Lg | 08 56 48.7 | |
| | 5.9nm,0.9s,baz=39,slow=29,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.63** | **220** | | Pn | **Pn** | **08 54 16.3** | **-0.5** |
| | 0.5nm,0.3s,baz=30,slow=12,SNR=15 | | | | | | | |
| MKAR | | | | | Sn | **Sn** | **08 55 56.4** | **+1.6** |
| | 0.2nm,0.3s,baz=35,slow=18,SNR=6.6 | | | | | | | |
| MKAR | | | | | Lg | Lg | 08 56 46.4 | |
| | 0.1nm,0.3s,baz=40,slow=27,SNR=6.4 | | | | | | | |
| | 0.8nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **11.66** | **114** | | Lg | Lg | 08 58 03.4 | |
| | baz=298,slow=28 | | | | | | | |

**SJA 10 08:52:57.1±1.1,31.˝60S×66.˝69W,h134km±5km,ML3.5, MW3.5,1D,La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MRA** | **San Martin** | **1.16** | **135** | *i* | P | Pn | 08 53 23.3 | +1.2 |
| MRA | | | | *i* | S | Sn | 08 53 41.1 | +0.1 |
| MRA | | | | | IAML | | 08 53 42.3 | |
| | comp=Z,232nm,0.7s | | | | | | | |
| **RTLL** | **Cerro Villicun** | **1.55** | **279** | *i* | P | Pn | 08 53 27.2 | +1.2 |
| RTLL | | | | *i* | S | Sn | 08 53 48.8 | +0.6 |
| **SJA** | **San Juan** | **1.60** | **272** | *i* | P | Pn | 08 53 28.0 | +1.4 |
| SJA | | | | *i* | S | Sn | 08 53 50.2 | +1.1 |
| SJA | | | | | IAML | | 08 53 50.8 | |
| | comp=Z,432nm,0.4s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **1.60** | **260** | *i* | P | Pn | 08 53 27.8 | +1.2 |
| RTCV | | | | *i* | S | Sn | 08 53 50.1 | +1.0 |
| **ZON** | **Zonda** | **1.70** | **271** | *i* | P | Pn | 08 53 28.8 | +1.0 |
| ZON | | | | *i* | S | Sn | 08 53 52.1 | +0.9 |
| ZON | | | | | IAML | | 08 53 52.9 | |
| | comp=Z,452nm,0.2s | | | | | | | |
| **DOCA** | **Reserva Natura** | **2.15** | **287** | *i* | P | Pn | 08 53 34.8 | +1.3 |
| DOCA | | | | *i* | S | Sn | 08 54 02.2 | +1.0 |
| DOCA | | | | | IAML | | 08 54 02.6 | |
| | comp=Z,591nm,0.5s | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **2.18** | **354** | *i* | P | Pn | 08 53 35.0 | +1.3 |
| ACLC | | | | *i* | S | Sn | 08 54 01.8 | +0.2 |
| ACLC | | | | | IAML | | 08 54 03.7 | |
| | comp=Z,308nm,0.3s | | | | | | | |
| **RTLS** | **Leoncito** | **2.23** | **264** | *i* | P | Pn | 08 53 35.8 | +1.4 |
| RTLS | | | | *i* | S | Sn | 08 54 03.7 | +0.7 |
| RTLS | | | | | IAML | | 08 54 06.3 | |
| | comp=Z,405nm,0.2s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.27** | **296** | *i* | P | Pn | 08 53 36.4 | +1.4 |
| ACCO | | | | *i* | S | Sn | 08 54 05.3 | +1.4 |
| **ACDV** | **Cuesta del Vie** | **2.53** | **304** | *i* | P | Pn | 08 53 39.7 | +1.7 |
| ACDV | | | | *i* | S | Sn | 08 54 09.6 | +0.3 |
| ACDV | | | | | IAML | | 08 54 12.8 | |
| | comp=Z,163nm,0.5s | | | | | | | |
| **AROD** | **Rodeo** | **2.79** | **300** | *i* | P | Pn | 08 53 43.0 | +1.6 |
| AROD | | | | *i* | S | Sn | 08 54 16.1 | +0.6 |
| **CYA** | **Choya** | **3.24** | **14** | *i* | P | Pn | 08 53 47.6 | +0.6 |
| CYA | | | | ⇓*i* | S | Sn | 08 54 25.8 | +0.3 |
| CYA | | | | | IAML | | 08 54 26.2 | |
| | comp=Z,102nm,0.4s | | | | | | | |
| **CO01** | **Juntas del Tor** | **3.34** | **298** | *i* | P | Pn | 08 53 51.0 | +2.4 |
| CO01 | | | | | IAML | | 08 54 35.9 | |
| | comp=Z,68nm,0.6s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **3.36** | **236** | *i* | P | Pn | 08 53 49.9 | +1.2 |
| MT08 | | | | | IAML | | 08 54 33.1 | |
| | comp=Z,27nm,0.4s | | | | | | | |
| **MT04** | **Ro Olivares** | **3.42** | **237** | *i* | P | Pn | 08 53 50.8 | +1.2 |
| **VA03** | **San Esteban** | **3.47** | **249** | *i* | P | Pn | 08 53 51.2 | +1.2 |
| VA03 | | | | | IAML | | 08 54 37.9 | |
| | comp=Z,54nm,0.8s | | | | | | | |
| **RFA** | **San Rafael** | **3.50** | **205** | *i* | P | Pn | 08 53 50.5 | +0.1 |
| RFA | | | | | IAML | | 08 54 34.5 | |
| | comp=Z,49nm,0.6s | | | | | | | |
| **CO03** | **El Pedregal** | **3.51** | **281** | *i* | P | Pn | 08 53 51.9 | +1.4 |
| CO03 | | | | | IAML | | 08 54 35.2 | |
| | comp=Z,117nm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **3.71** | **275** | *i* | P | Pn | 08 53 54.4 | +1.2 |
| CO02 | | | | | IAML | | 08 54 40.0 | |
| | comp=Z,128nm,0.3s | | | | | | | |
| **MT13** | **San Alfonso** | **3.71** | **234** | *i* | P | Pn | 08 53 54.7 | +1.5 |
| **LMEL** | **Las Melosas** | **3.71** | **232** | *i* | P | Pn | 08 53 54.3 | +1.0 |
| **MT03** | **Universidad Ad** | **3.74** | **239** | *i* | P | Pn | 08 53 54.2 | +0.6 |
| **MT05** | **Renca** | **3.86** | **241** | *i* | P | Pn | 08 53 57.4 | +2.2 |
| MT05 | | | | | IAML | | 08 54 47.5 | |
| | comp=Z,57nm,0.3s | | | | | | | |
| **MT02** | **Curacav** | **4.11** | **245** | *i* | P | Pn | 08 53 57.5 | -0.9 |
| **AC05** | **El Transito** | **4.15** | **311** | *i* | P | Pn | 08 54 01.4 | +2.4 |
| AC05 | | | | | IAML | | 08 54 53.6 | |
| | comp=Z,26nm,0.3s | | | | | | | |
| **MT01** | **Popeta** | **4.46** | **238** | *i* | P | Pn | 08 54 01.9 | -1.1 |
| **BO01** | **Tunca** | **4.63** | **232** | *i* | P | Pn | 08 54 04.7 | -0.6 |
| **BO02** | **Sierra Bellavi** | **4.68** | **226** | *i* | P | Pn | 08 54 06.7 | +0.7 |
| BO02 | | | | | IAML | | 08 55 14.1 | |
| | comp=Z,21nm,0.2s | | | | | | | |
| **GO03** | **Copiap** | **5.04** | **321** | *i* | P | Pn | 08 54 11.7 | +0.8 |
| **AC04** | **Llanos de Chal** | **5.09** | **311** | *i* | P | Pn | 08 54 12.0 | +0.5 |

**ROM 10 08:58:37.1±0.0,43.˝341N±0.˝002×12.˝586E±0.˝003, h8km,ML2.2/56,6C-1D,Error ellipse: s-maj=0.2km s-min=0.1km az=226.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ATFO** | **Monte Foce - G** | **0.03** | **338** | P | | Pg | 08 58 38.6 | -0.2 |
| ATFO | | | | S | | Sg | 08 58 39.5 | -0.5 |
| ATFO | | | | | AML | AML | | |
| | comp=E,21350μm,0.2s | | | | | | | |
| ATFO | | | | | AML | AML | | |
| | comp=N,17500μm,0.3s | | | | | | | |
| **MURB** | **Monte Urbino** | **0.09** | **210** | ⇑ | P | Pg | 08 58 39.8 | +0.4 |
| MURB | | | | | S | Sg | 08 58 42.0 | +0.9 |
| MURB | | | | | AML | AML | | |
| | comp=E,11750μm,0.4s | | | | | | | |
| MURB | | | | | AML | AML | | |
| | comp=N,12600μm,0.4s | | | | | | | |
| MURB | | | | | AML | AML | | |
| | comp=E,12200μm,0.3s | | | | | | | |
| MURB | | | | | AML | AML | | |
| | comp=N,17050μm,0.3s | | | | | | | |
| **ATSC** | **Scheggia e Pas** | **0.11** | **41** | P | | Pg | 08 58 40.3 | +0.5 |
| ATSC | | | | S | | Sg | 08 58 42.6 | +1.0 |
| **ATVO** | **AVT- Monte Val** | **0.14** | **288** | P | | Pg | 08 58 40.6 | +0.5 |
| ATVO | | | | S | | Sg | 08 58 43.0 | +0.8 |
| **ATBU** | **Serra di Buran** | **0.14** | **349** | P | | Pg | 08 58 40.8 | +0.6 |
| ATBU | | | | S | | Sg | 08 58 43.3 | +1.0 |
| **ATCC** | **AVT- Casa Cast** | **0.16** | **166** | ⇑ | P | Pg | 08 58 41.2 | +0.7 |
| ATCC | | | | | S | Sg | 08 58 44.5 | +1.6 |
| ATCC | | | | | AML | AML | | |
| | comp=N,3650μm,0.3s | | | | | | | |
| ATCC | | | | | AML | AML | | |
| | comp=E,2695μm,0.4s | | | | | | | |
| **ATPC** | **Poggio Castell** | **0.17** | **326** | P | | Pg | 08 58 41.2 | +0.5 |
| ATPC | | | | S | | Sg | 08 58 44.5 | +1.4 |
| **SSFR** | **Montelago di S** | **0.17** | **56** | P | | Pg | 08 58 41.3 | +0.6 |
| SSFR | | | | S | | Sg | 08 58 44.5 | +1.3 |
| SSFR | | | | | AML | AML | | |
| | comp=E,3455μm,0.2s | | | | | | | |
| SSFR | | | | | AML | AML | | |
| | comp=N,2445μm,0.3s | | | | | | | |
| SSFR | | | | | AML | AML | | |
| | comp=N,2245μm,0.2s | | | | | | | |
| SSFR | | | | | AML | AML | | |
| | comp=E,3360μm,0.2s | | | | | | | |
| SSFR | | | | | AML | AML | | |
| | comp=E,3455μm,1.8s | | | | | | | |
| SSFR | | | | | AML | AML | | |
| | comp=E,3360μm,1.8s | | | | | | | |
| SSFR | | | | | AML | AML | | |
| | comp=N,2445μm,0.3s | | | | | | | |
| **ATPI** | **Pietralunga -** | **0.17** | **309** | ⇓ | P | Pg | 08 58 41.3 | +0.5 |
| ATPI | | | | | S | Sg | 08 58 44.5 | +1.3 |
| ATPI | | | | | AML | AML | | |
| | comp=E,1665μm,0.5s | | | | | | | |
| ATPI | | | | | AML | AML | | |
| | comp=N,1490μm,0.3s | | | | | | | |
| **PIEI** | **Pieia** | **0.20** | **349** | ⇑ | P | Pg | 08 58 41.8 | +0.6 |
| PIEI | | | | | S | Sg | 08 58 45.5 | +1.4 |
| PIEI | | | | | AML | AML | | |
| | comp=N,2140μm,0.2s | | | | | | | |
| PIEI | | | | | AML | AML | | |
| | comp=E,3370μm,0.2s | | | | | | | |
| **FRON** | **Frontone** | **0.20** | **30** | ⇑ | P | Pg | 08 58 41.9 | +0.6 |
| FRON | | | | | S | Sg | 08 58 45.6 | +1.4 |
| FRON | | | | | AML | AML | | |
| | comp=E,1630μm,0.2s | | | | | | | |
| FRON | | | | | AML | AML | | |
| | comp=N,1635μm,0.3s | | | | | | | |
| **ATTE** | **AVT- Monte Tez** | **0.22** | **230** | ⇑ | P | Pg | 08 58 42.1 | +0.4 |
| ATTE | | | | | S | Sg | 08 58 46.1 | +1.5 |
| ATTE | | | | | AML | AML | | |
| | comp=E,1085μm,0.3s | | | | | | | |
| ATTE | | | | | AML | AML | | |
| | comp=N,869μm,0.7s | | | | | | | |
| ATTE | | | | | AML | AML | | |
| | comp=N,869μm,1.3s | | | | | | | |
| **ATMI** | **Monte Miggiano** | **0.23** | **269** | P | | Pg | 08 58 42.5 | +0.6 |
| ATMI | | | | | AML | AML | | |
| | comp=E,1290μm,1.4s | | | | | | | |
| ATMI | | | | | AML | AML | | |
| | comp=E,1290μm,0.6s | | | | | | | |
| ATMI | | | | | AML | AML | | |
| | comp=N,1009μm,0.4s | | | | | | | |
| **APEC** | **Apecchio** | **0.25** | **331** | P | | Pg | 08 58 42.8 | +0.7 |
| **NARO** | **Abbazia di Nar** | **0.27** | **359** | P | | Pg | 08 58 43.1 | +0.6 |
| NARO | | | | S | | Sb | 08 58 47.6 | -1.4 |
| NARO | | | | | AML | AML | | |
| | comp=E,668μm,0.2s | | | | | | | |
| NARO | | | | | AML | AML | | |
| | comp=N,347μm,0.9s | | | | | | | |
| **SNTG** | **Esanatoglia** | **0.27** | **108** | P | | Pg | 08 58 43.2 | +0.6 |
| SNTG | | | | S | | Sb | 08 58 48.0 | -1.1 |
| SNTG | | | | | AML | AML | | |
| | comp=E,638μm,0.3s | | | | | | | |
| SNTG | | | | | AML | AML | | |
| | comp=N,734μm,0.4s | | | | | | | |
| SNTG | | | | | AML | AML | | |
| | comp=E,416μm,0.3s | | | | | | | |
| SNTG | | | | | AML | AML | | |
| | comp=N,734μm,0.4s | | | | | | | |
| SNTG | | | | | AML | AML | | |
| | comp=N,788μm,0.4s | | | | | | | |
| SNTG | | | | | AML | AML | | |
| | comp=E,638μm,0.3s | | | | | | | |
| **BADI** | **Badiali** | **0.30** | **304** | P | | Pg | 08 58 43.8 | +0.7 |
| BADI | | | | S | | Sb | 08 58 49.0 | -0.9 |
| BADI | | | | | AML | AML | | |
| | comp=N,1755μm,0.2s | | | | | | | |
| BADI | | | | | AML | AML | | |
| | comp=E,1365μm,0.2s | | | | | | | |
| **ARVD** | **Arcevia** | **0.30** | **59** | ⇑ | P | Pg | 08 58 43.8 | +0.7 |
| ARVD | | | | | S | Sb | 08 58 49.0 | -0.9 |
| ARVD | | | | | AML | AML | | |
| | comp=E,481μm,1.1s | | | | | | | |
| ARVD | | | | | AML | AML | | |
| | comp=N,320μm,0.8s | | | | | | | |
| ARVD | | | | | AML | AML | | |
| | comp=E,481μm,0.9s | | | | | | | |
| ARVD | | | | | AML | AML | | |
| | comp=N,320μm,1.2s | | | | | | | |
| **PE3** | **Peglio** | **0.36** | **350** | P | | Pb | 08 58 45.3 | -0.5 |
| PE3 | | | | | AML | AML | | |
| | comp=E,1225μm,1.4s | | | | | | | |
| PE3 | | | | | AML | AML | | |
| | comp=N,955μm,0.4s | | | | | | | |
| PE3 | | | | | AML | AML | | |
| | comp=E,1225μm,0.6s | | | | | | | |
| PE3 | | | | | AML | AML | | |
| | comp=N,955μm,1.6s | | | | | | | |
| **EL6** | **Elcito** | **0.38** | **92** | P | | Pg | 08 58 45.1 | +0.6 |
| EL6 | | | | S | | Sb | 08 58 51.6 | -0.5 |
| EL6 | | | | | AML | AML | | |
| | comp=N,905μm,0.3s | | | | | | | |
| EL6 | | | | | AML | AML | | |
| | comp=N,906μm,0.3s | | | | | | | |
| EL6 | | | | | AML | AML | | |
| | comp=E,644μm,0.3s | | | | | | | |
| EL6 | | | | | AML | AML | | |
| | comp=N,906μm,1.7s | | | | | | | |
| **PARC** | **Parchiule** | **0.40** | **321** | P | | Pg | 08 58 45.6 | +0.7 |
| PARC | | | | | AML | AML | | |
| | comp=N,582μm,0.2s | | | | | | | |
| PARC | | | | | AML | AML | | |
| | comp=E,545μm,0.4s | | | | | | | |
| **SSP9** | **Sansepolcro** | **0.41** | **305** | P | | Pg | 08 58 45.8 | +0.7 |
| SSP9 | | | | | AML | AML | | |
| | comp=E,132μm,0.6s | | | | | | | |
| SSP9 | | | | | AML | AML | | |
| | comp=N,180μm,1.3s | | | | | | | |
| SSP9 | | | | | AML | AML | | |
| | comp=E,132μm,1.4s | | | | | | | |
| SSP9 | | | | | AML | AML | | |
| | comp=N,180μm,0.7s | | | | | | | |
| **CESI** | **CESI - Serrava** | **0.41** | **145** | P | | Pg | 08 58 45.6 | +0.5 |
| CESI | | | | | AML | AML | | |
| | comp=N,202μm,0.4s | | | | | | | |
| CESI | | | | | AML | AML | | |
| | comp=E,290μm,0.8s | | | | | | | |
| CESI | | | | | AML | AML | | |
| | comp=N,202μm,1.6s | | | | | | | |
| CESI | | | | | AML | AML | | |
| | comp=E,290μm,1.2s | | | | | | | |
| **COR1** | **Corinaldo** | **0.42** | **46** | P | | Pb | 08 58 46.6 | -0.1 |
| COR1 | | | | | AML | AML | | |
| | comp=E,358μm,0.8s | | | | | | | |
| COR1 | | | | | AML | AML | | |
| | comp=N,662μm,0.9s | | | | | | | |
| **CING** | **Cingoli** | **0.45** | **85** | P | | Pg | 08 58 46.4 | +0.5 |
| CING | | | | | AML | AML | | |
| | comp=E,139μm,0.2s | | | | | | | |
| CING | | | | | AML | AML | | |
| | comp=N,310μm,0.3s | | | | | | | |
| **CAFI** | **Castiglion Fio** | **0.45** | **269** | P | | Pg | 08 58 46.5 | +0.5 |
| CAFI | | | | | AML | AML | | |
| | comp=E,119μm,0.2s | | | | | | | |
| CAFI | | | | | AML | AML | | |
| | comp=N,144μm,1.0s | | | | | | | |
| CAFI | | | | | AML | AML | | |
| | comp=E,119μm,1.8s | | | | | | | |
| CAFI | | | | | AML | AML | | |
| | comp=N,144μm,1.0s | | | | | | | |
| **FDMO** | **Fiordimonte** | **0.48** | **129** | P | | Pg | 08 58 46.7 | +0.4 |
| FDMO | | | | | AML | AML | | |
| | comp=N,156μm,0.2s | | | | | | | |
| FDMO | | | | | AML | AML | | |
| | comp=E,188μm,0.2s | | | | | | | |
| FDMO | | | | | AML | AML | | |
| | comp=N,156μm,1.8s | | | | | | | |
| **CPGN** | **Carpegna, Ital** | **0.50** | **337** | P | | Pb | 08 58 48.0 | -0.2 |
| CPGN | | | | | AML | AML | | |
| | comp=N,200μm,0.3s | | | | | | | |
| CPGN | | | | | AML | AML | | |
| | comp=E,181μm,1.6s | | | | | | | |
| CPGN | | | | | AML | AML | | |
| | comp=N,201μm,0.3s | | | | | | | |
| CPGN | | | | | AML | AML | | |
| | comp=E,181μm,0.4s | | | | | | | |
| **CSP1** | **Cessapalombo** | **0.52** | **119** | P | | Pg | 08 58 47.5 | +0.4 |
| **MC2** | **Monte Cornacci** | **0.62** | **134** | P | | Pg | 08 58 49.6 | +0.6 |
| **NRCA** | **Norcia** | **0.64** | **142** | P | | Pg | 08 58 49.8 | +0.3 |
| NRCA | | | | | AML | AML | | |
| | comp=E,196μm,1.5s | | | | | | | |
| NRCA | | | | | AML | AML | | |
| | comp=N,208μm,0.9s | | | | | | | |
| NRCA | | | | | AML | AML | | |
| | comp=N,208μm,1.1s | | | | | | | |
| NRCA | | | | | AML | AML | | |
| | comp=E,196μm,0.5s | | | | | | | |
| **SACS** | **San Casciano d** | **0.70** | **225** | P | | Pg | 08 58 51.0 | +0.4 |
| SACS | | | | | AML | AML | | |
| | comp=E,120μm,1.4s | | | | | | | |
| SACS | | | | | AML | AML | | |
| | comp=N,178μm,0.9s | | | | | | | |
| SACS | | | | | AML | AML | | |
| | comp=N,178μm,1.1s | | | | | | | |
| **MF5** | **Montefalcone A** | **0.73** | **118** | P | | Pg | 08 58 51.5 | +0.3 |
| MF5 | | | | | AML | AML | | |
| | comp=E,150μm,0.3s | | | | | | | |
| MF5 | | | | | AML | AML | | |
| | comp=N,165μm,1.2s | | | | | | | |
| MF5 | | | | | AML | AML | | |
| | comp=E,151μm,0.3s | | | | | | | |
| **ASQU** | **Asqua** | **0.74** | **308** | P | | Pg | 08 58 51.8 | +0.4 |

**ROM 10 08:59:23.7±0.1,42.˝618N±0.˝003×13.˝322E±0.˝004, h14km,ML1.4/14,2C,Error ellipse: s-maj=0.4km s-min=0.0km az=25.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SMA1** | **SAN MARTINO** | **0.02** | **38** | P | | Pg | 08 59 26.6 | +0.2 |
| **CAMP** | **Campotosto** | **0.10** | **142** | P | | Pg | 08 59 27.3 | +0.2 |
| CAMP | | | | S | | Sg | 08 59 29.6 | +0.3 |
| **RM33** | **Pellescritta (** | **0.14** | **216** | ⇑ | P | Pg | 08 59 27.6 | +0.2 |
| RM33 | | | | | S | Sg | 08 59 30.3 | +0.4 |
| RM33 | | | | | AML | AML | | |
| | comp=E,212μm,0.2s | | | | | | | |
| RM33 | | | | | AML | AML | | |
| | comp=E,210μm,0.2s | | | | | | | |
| RM33 | | | | | AML | AML | | |
| | comp=N,139μm,1.1s | | | | | | | |
| RM33 | | | | | AML | AML | | |
| | comp=N,136μm,0.5s | | | | | | | |
| **MTRA** | **Matera** | **0.15** | **22** | P | | Pg | 08 59 27.9 | +0.3 |
| MTRA | | | | S | | Sg | 08 59 30.7 | +0.4 |
| MTRA | | | | | AML | AML | | |
| | comp=N,224μm,0.9s | | | | | | | |
| MTRA | | | | | AML | AML | | |
| | comp=N,224μm,1.1s | | | | | | | |
| MTRA | | | | | AML | AML | | |
| | comp=E,266μm,0.1s | | | | | | | |
| MTRA | | | | | AML | AML | | |
| | comp=E,247μm,0.1s | | | | | | | |
| MTRA | | | | | AML | AML | | |
| | comp=N,212μm,0.1s | | | | | | | |
| **TERO** | **Teramo** | **0.21** | **89** | P | | Pb | 08 59 29.0 | -0.3 |
| TERO | | | | S | | Sg | 08 59 32.3 | +0.7 |
| TERO | | | | | AML | AML | | |
| | comp=E,27μm,0.3s | | | | | | | |
| TERO | | | | | AML | AML | | |
| | comp=N,34μm,0.2s | | | | | | | |
| **GIGS** | **Gran Sasso** | **0.25** | **133** | P | | Pg | 08 59 29.4 | +0.3 |
| GIGS | | | | S | | Sg | 08 59 33.5 | +0.7 |
| **NRCA** | **Norcia** | **0.26** | **325** | ⇑ | P | Pg | 08 59 29.6 | +0.2 |
| NRCA | | | | | S | Sg | 08 59 33.9 | +0.6 |
| NRCA | | | | | AML | AML | | |
| | comp=E,150μm,0.2s | | | | | | | |
| NRCA | | | | | AML | AML | | |
| | comp=N,99μm,0.1s | | | | | | | |
| NRCA | | | | | AML | AML | | |
| | comp=N,158μm,1.1s | | | | | | | |
| NRCA | | | | | AML | AML | | |
| | comp=E,162μm,0.2s | | | | | | | |

*IDC **10** 09:03:13.1±3.4,19.˝99N×145.˝42E,h159km±33km, mb3.3/13,mbtmp3.8/16,Error ellipse: s-maj=24.4km s-min=15.1km az=76.0*

*NEIC **10** 09:03:13.4±1.1,19.˝86N±0.˝09×145.˝3E±0.˝2,h155km±8km, mb4.3/100,Error ellipse: s-maj=23.1km s-min=11.8km az=77.0*

**ISC 10 09:03:12.2±0.6,19.˝89N±0.˝07×145.˝3E±0.˝1,h150km,n127, σ0s93/127,mb4.2/59,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GUMO** | **Guam** | **6.28** | **184** | Pn | | **Pn** | **09 04 40.0** | **-2.8** |
| **GUMO** | **Guam** | **6.28** | **184** | P | | **Pn** | **09 04 45.5** | **+2.8** |
| | 20nm,0.3s,baz=0.2,slow=6.8,SNR=1.4 | | | | | | | |
| **JCJ** | **Chichijima** | **7.72** | **339** | Pn | | **Pn** | **09 05 00.5** | **-1.5** |
| **JSG** | **Sagara** | **16.02** | **338** | | | **Pn** | **09 06 49.6** | **+0.5** |
| **INU** | **Inuyama** | **17.05** | **336** | | | **P** | **09 07 01.4** | **+0.4** |
| INU | | | | IAmb | | IAmb | 09 07 02.4 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **JMN** | **Monobe** | **17.13** | **326** | | | **P** | **09 07 01.9** | **-0.1** |
| JMN | | | | IAmb | | IAmb | 09 07 23.5 | |
| | comp=Z,23nm,1.5s | | | | | | | |
| **JGF** | **Kuroka** | **17.15** | **338** | P | | **P** | **09 07 02.9** | **+0.8** |
| JGF | | | | IAmb | | IAmb | 09 07 30.1 | |
| | comp=Z,20nm,1.3s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MJAR | Matsushiro Arr | 17.72 | 341 | P | | P | 09 07 05.8 | -2.6 |
| | comp=Z,1.0nm,0.7s,baz=148,slow=10,SNR=1.8 | | | | | | | |
| MAJO | Matsushiro | 17.72 | 341 | P | | P | 09 07 08.5 | +0.1 |
| MJB9 | Matsu-Tunnel | 17.73 | 341 | P | | P | 09 07 08.8 | +0.3 |
| PATS | Pohnpei | 18.10 | 134 | P | | P | 09 07 12.5 | -0.2 |
| JMM | Marumori | 18.34 | 349 | P | | P | 09 07 15.7 | +0.7 |
| JNU | Nakatsue | 18.42 | 319 | P | | P | 09 07 16.9 | +0.7 |
| JNU | | | | IAmb | | IAmb | 09 07 24.1 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| JNU | Nakatsue | 18.42 | 319 | P | | P | 09 07 17.3 | +1.2 |
| | comp=Z,3.6nm,0.8s,baz=177,slow=9.5,SNR=1.2 | | | | | | | |
| KSRS | Korea Array | 23.15 | 323 | P | | P | 09 08 05.3 | +0.1 |
| | comp=Z,2.5nm,0.7s,baz=145,slow=8.9,SNR=14 | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| KSAR | Wonju Array Be | 23.16 | 323 | P | | P | 09 08 04.5 | -0.9 |
| USRK | Ussuriysk Ar. | 26.67 | 338 | P | | P | 09 08 35.8 | -1.2 |
| | comp=Z,0.9nm,0.8s,baz=198,slow=8.8,SNR=1.9 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| WB0 | Warramunga Arr | 40.84 | 196 | P | | P | 09 10 38.9 | -0.4 |
| WB0 | | | | IAmb | | IAmb | 09 11 01.9 | |
| | comp=Z,9.4nm,1.3s | | | | | | | |
| WRAB | Tennant Creek | 41.01 | 196 | P | | P | 09 10 40.5 | -0.2 |
| WRAB | | | | IAmb | | IAmb | 09 11 13.8 | |
| | comp=Z,8.1nm,1.4s | | | | | | | |
| WB2 | Warramunga Arr | 41.02 | 196 | P | | P | 09 10 40.6 | -0.2 |
| WB2 | | | | IAmb | | IAmb | 09 11 23.6 | |
| | comp=Z,9.6nm,1.4s | | | | | | | |
| WRA | Warramunga Arr | 41.02 | 196 | P | | P | 09 10 41.4 | +0.5 |
| | comp=Z,0.3nm,0.6s,baz=7.4,slow=8.7,SNR=7.1 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| SONM | Songino Array | 41.99 | 321 | P | | P | 09 10 49.3 | +0.7 |
| | comp=Z,0.5nm,0.4s,baz=121,slow=7.6,SNR=3.1 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| ASAR | Alice Springs | 44.70 | 195 | P | | P | 09 11 10.8 | +0.4 |
| | comp=Z,0.1nm,0.4s,baz=15,slow=7.4,SNR=1.8 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |
| M14K | Bethel | 54.94 | 29 | P | | P | 09 12 28.5 | +1.2 |
| N15K | Kwethluk River | 55.56 | 30 | P | | P | 09 12 32.9 | +1.1 |
| K15K | Wolf Creek Mou | 55.76 | 27 | P | | P | 09 12 33.7 | +0.6 |
| K15K | | | | IAmb | | IAmb | 09 13 07.7 | |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| O16K | Kokwok River B | 56.31 | 31 | P | | P | 09 12 37.6 | +0.5 |
| O16K | | | | IAmb | | IAmb | 09 13 18.5 | |
| | comp=Z,7.7nm,1.3s | | | | | | | |
| M16K | Timber Creek | 56.40 | 29 | P | | P | 09 12 38.4 | +0.7 |
| L16K | Owhat River | 56.42 | 28 | P | | P | 09 12 37.8 | 0.0 |
| ZALV | Zalesovo Beam | 56.85 | 322 | P | | P | 09 12 40.9 | -0.1 |
| | comp=Z,1.4nm,0.5s,baz=98,slow=7.6,SNR=1.7 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| N17K | Nushagak Hills | 57.05 | 30 | P | | P | 09 12 43.5 | +1.2 |
| N17K | | | | IAmb | | IAmb | 09 12 51.8 | |
| | comp=Z,5.9nm,1.2s | | | | | | | |
| M17K | Holitna River | 57.22 | 29 | P | | P | 09 12 44.7 | +1.2 |
| M17K | | | | IAmb | | IAmb | 09 13 28.5 | |
| | comp=Z,5.3nm,1.3s | | | | | | | |
| J17K | VABM Dome | 57.23 | 26 | P | | P | 09 12 44.2 | +0.7 |
| J17K | | | | IAmb | | IAmb | 09 12 45.5 | |
| | comp=Z,6.9nm,1.4s | | | | | | | |
| K17K | Iditarod | 57.30 | 27 | P | | P | 09 12 45.4 | +1.4 |
| K17K | | | | IAmb | | IAmb | 09 12 46.2 | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| MKAR | Makanchi Array | 57.38 | 313 | P | | P | 09 12 45.3 | +0.4 |
| MKAR | Makanchi Array | 57.38 | 313 | P | | P | 09 12 45.5 | +0.6 |
| | comp=Z,0.3nm,0.5s,baz=79,slow=7.5,SNR=2.8 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| H17K | Granite Mounta | 57.51 | 24 | P | | P | 09 12 46.4 | +0.9 |
| H17K | | | | IAmb | | IAmb | 09 13 25.0 | |
| | comp=Z,8.6nm,1.4s | | | | | | | |
| MAKZ | Makanchi | 57.59 | 313 | P | | P | 09 12 46.6 | +0.2 |
| MAKZ | | | | IAmb | | IAmb | 09 13 08.9 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| F17K | Baldwin Pennin | 57.66 | 22 | P | | P | 09 12 47.5 | +1.1 |
| F17K | | | | IAmb | | IAmb | 09 12 47.8 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| N18K | Kilae Creek | 57.70 | 30 | P | | P | 09 12 47.7 | +0.8 |
| O18K | Koktuh Hills | 57.78 | 31 | P | | P | 09 12 48.4 | +0.9 |
| L18K | Granite Mounta | 57.83 | 28 | P | | P | 09 12 48.8 | +1.1 |
| L18K | | | | IAmb | | IAmb | 09 13 14.5 | |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| H18K | Honhosa River | 58.20 | 24 | P | | P | 09 12 50.6 | +0.4 |
| H18K | | | | IAmb | | IAmb | 09 12 50.9 | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| E18K | Tukpahlearik C | 58.32 | 22 | P | | P | 09 12 52.3 | +1.2 |
| E18K | | | | IAmb | | IAmb | 09 13 21.7 | |
| | comp=Z,7.4nm,1.4s | | | | | | | |
| G18K | Tagagawik | 58.38 | 24 | P | | P | 09 12 51.8 | +0.2 |
| N19K | Bonanza Creek | 58.40 | 30 | P | | P | 09 12 52.9 | +1.0 |
| N19K | | | | IAmb | | IAmb | 09 12 53.7 | |
| | comp=Z,5.5nm,1.1s | | | | | | | |
| L19K | White Mountain | 58.63 | 28 | P | | P | 09 12 54.1 | +0.7 |
| L19K | | | | IAmb | | IAmb | 09 13 21.5 | |
| | comp=Z,4.1nm,1.4s | | | | | | | |
| J19K | Poorman | 58.88 | 26 | P | | P | 09 12 55.9 | +0.9 |
| G19K | Purcell Mounta | 59.07 | 24 | P | | P | 09 12 57.1 | +0.9 |
| H19K | Roundabout Mou | 59.08 | 24 | P | | P | 09 12 57.2 | +0.9 |
| H19K | | | | IAmb | | IAmb | 09 13 00.3 | |
| | comp=Z,5.5nm,1.5s | | | | | | | |
| M20K | Styx River | 59.32 | 29 | P | | P | 09 12 59.1 | +0.9 |
| M20K | | | | IAmb | | IAmb | 09 13 08.8 | |
| | comp=Z,7.0nm,1.5s | | | | | | | |
| K20K | Telida | 59.33 | 27 | P | | P | 09 12 59.2 | +1.0 |
| C19K | Lookout Ridge | 59.41 | 20 | P | | P | 09 12 59.7 | +1.1 |
| E19K | Redstone River | 59.52 | 22 | P | | P | 09 13 00.3 | +1.0 |
| E19K | | | | IAmb | | IAmb | 09 13 17.3 | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| J20K | Nowinta River | 59.55 | 26 | P | | P | 09 13 00.7 | +1.0 |
| J20K | | | | IAmb | | IAmb | 09 13 01.0 | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| D19K | Kuna River | 59.63 | 21 | P | | P | 09 13 01.0 | +0.9 |
| D19K | | | | IAmb | | IAmb | 09 13 01.3 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| CNPM | China Poot | 59.65 | 32 | P | | P | 09 13 00.2 | -0.2 |
| F20K | Avaraat Lake | 59.91 | 23 | P | | P | 09 13 03.0 | +1.0 |
| SKT | Skwentna | 60.08 | 29 | P | | P | 09 13 02.8 | -0.5 |
| SKT | | | | IAmb | | IAmb | 09 13 37.8 | |
| | comp=Z,6.6nm,1.4s | | | | | | | |
| KURBB | Kurchatov Arra | 60.19 | 318 | P | | P | 09 13 04.3 | +0.1 |
| | comp=Z,0.3nm,0.4s,baz=89,slow=7.8,SNR=1.6 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| IMAR | Indian Mountai | 60.29 | 24 | P | | P | 09 13 05.2 | +0.6 |
| SUA | Susitna One | 60.32 | 30 | P | | P | 09 13 05.1 | +0.1 |
| H21K | Melozitna Rive | 60.55 | 25 | P | | P | 09 13 07.3 | +0.8 |
| B20K | Meade River | 60.57 | 19 | P | | P | 09 13 07.8 | +1.4 |
| KTH | Kantishna Hill | 60.75 | 27 | P | | P | 09 13 08.2 | +0.4 |
| KTH | | | | IAmb | | IAmb | 09 13 25.3 | |
| | comp=Z,7.3nm,1.4s | | | | | | | |
| F21K | Alatna River | 60.79 | 23 | P | | P | 09 13 09.5 | +1.5 |
| BPAW | Bear Paw Mtn. | 60.86 | 27 | P | | P | 09 13 09.2 | +0.7 |
| BPAW | | | | IAmb | | IAmb | 09 13 09.6 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| E21K | Killik River | 61.03 | 22 | P | | P | 09 13 10.5 | +0.9 |
| PMR | Palmer | 61.10 | 30 | P | | P | 09 13 09.7 | -0.4 |
| PMR | | | | IAmb | | IAmb | 09 13 11.2 | |
| | comp=Z,7.5nm,1.5s | | | | | | | |
| MLY | Manley | 61.21 | 26 | P | | P | 09 13 11.6 | +0.7 |
| B21K | Ikpikpuk River | 61.23 | 20 | P | | P | 09 13 12.0 | +1.1 |
| B21K | | | | IAmb | | IAmb | 09 13 15.4 | |
| | comp=Z,5.4nm,1.3s | | | | | | | |
| GHO | Glory Hole Cre | 61.24 | 30 | P | | P | 09 13 11.3 | +0.1 |
| PWL | Port Wells | 61.34 | 31 | P | | P | 09 13 11.6 | -0.2 |
| PWL | | | | IAmb | | IAmb | 09 13 12.4 | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| KNK | Knik Glacier | 61.38 | 30 | P | | P | 09 13 12.3 | +0.2 |
| SML | Sawmill | 61.52 | 30 | P | | P | 09 13 13.1 | +0.1 |
| D22K | Ayikyak River | 61.62 | 21 | P | | P | 09 13 14.6 | +1.0 |
| D22K | | | | IAmb | | IAmb | 09 13 15.3 | |
| | comp=Z,3.5nm,0.7s | | | | | | | |
| E22K | Anaktuvuk Pass | 61.69 | 22 | P | | P | 09 13 15.1 | +1.0 |
| NEA2 | Nenana | 61.79 | 26 | P | | P | 09 13 13.9 | -0.9 |
| I23K | Minto, Yukon-K | 61.80 | 26 | P | | P | 09 13 15.3 | +0.5 |
| I23K | | | | IAmb | | IAmb | 09 13 29.1 | |
| | comp=Z,4.9nm,1.5s | | | | | | | |
| GLI | Glacier Island | 61.94 | 31 | P | | P | 09 13 15.8 | 0.0 |
| SCM | Sheep Creek Mo | 61.99 | 30 | P | | P | 09 13 16.5 | +0.2 |
| SCM | | | | IAmb | | IAmb | 09 13 16.8 | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| Q23K | Middleton Isla | 62.08 | 33 | P | | P | 09 13 15.7 | -1.0 |
| MID | Middleton Isla | 62.09 | 33 | P | | P | 09 13 15.7 | -1.0 |
| WRH | Wood River Hil | 62.18 | 27 | P | | P | 09 13 16.8 | -0.5 |
| MDM | Murphy Dome | 62.22 | 26 | P | | P | 09 13 19.0 | +1.3 |
| TAU | Tasmania Unive | 62.51 | 178 | P | | P | 09 13 19.2 | -0.5 |
| H24K | Noodor Dome | 62.56 | 25 | P | | P | 09 13 20.7 | +0.7 |
| C23K | Itkillik River | 62.62 | 21 | P | | P | 09 13 21.2 | +1.0 |
| C23K | | | | IAmb | | IAmb | 09 13 21.4 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| TOLK | Toolik Lake Re | 62.63 | 22 | P | | P | 09 13 21.5 | +1.2 |
| TOLK | | | | IAmb | | IAmb | 09 13 29.5 | |
| | comp=Z,7.6nm,1.5s | | | | | | | |
| HDA | Harding Lake | 62.65 | 27 | P | | P | 09 13 19.6 | -0.9 |
| IL31 | | 62.75 | 27 | P | | P | 09 13 20.0 | -1.0 |
| IL31 | | | | IAmb | | IAmb | 09 13 20.4 | |
| | comp=Z,2.7nm,0.9s | | | | | | | |
| ILAR | Eielson Array | 62.75 | 27 | P | | P | 09 13 20.0 | -1.2 |
| ILAR | Eielson Array | 62.75 | 27 | P | | P | 09 13 19.6 | -1.5 |
| | comp=Z,1.0nm,0.8s,baz=262,slow=5.5,SNR=12 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| E24K | Your Creek | 62.87 | 23 | P | | P | 09 13 22.9 | +1.0 |
| E24K | | | | IAmb | | IAmb | 09 13 51.1 | |
| | comp=Z,5.3nm,1.5s | | | | | | | |
| F24K | Squaw Lake | 62.95 | 23 | P | | P | 09 13 23.2 | +0.7 |
| F24K | | | | IAmb | | IAmb | 09 13 59.2 | |
| | comp=Z,3.7nm,1.3s | | | | | | | |
| HMT | Hamilton | 63.24 | 32 | P | | P | 09 13 25.0 | +0.5 |
| J25K | Salcha River, | 63.36 | 27 | P | | P | 09 13 24.3 | -0.9 |
| J25K | | | | IAmb | | IAmb | 09 13 53.6 | |
| | comp=Z,4.3nm,1.5s | | | | | | | |
| GLB | Gilahina Butte | 63.59 | 30 | P | | P | 09 13 27.6 | +0.8 |
| GLB | | | | IAmb | | IAmb | 09 14 11.3 | |
| | comp=Z,5.9nm,1.3s | | | | | | | |
| FYU | Fort Yukon | 63.77 | 25 | P | | P | 09 13 28.7 | +0.9 |
| SCRK | Sand Creek | 63.85 | 28 | P | | P | 09 13 28.9 | +0.3 |
| D25K | Kavik River | 63.92 | 22 | P | | P | 09 13 29.8 | +0.9 |
| D25K | | | | IAmb | | IAmb | 09 13 29.9 | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| J26L | Joseph Creek | 64.11 | 27 | P | | P | 09 13 30.2 | 0.0 |
| BMAR | Burnt Mountain | 64.18 | 24 | P | | P | 09 13 31.9 | +1.4 |
| GRNC | Granite Creek | 64.52 | 31 | P | | P | 09 13 32.2 | -0.8 |
| M27K | Edge Creek, AK | 64.60 | 30 | P | | P | 09 13 32.9 | -0.6 |
| K27K | Chicken | 64.69 | 28 | P | | P | 09 13 33.5 | -0.4 |
| L27K | Beaver Creek, | 64.70 | 29 | P | | P | 09 13 35.0 | +1.1 |
| BCAR | Beaver Creek A | 64.72 | 29 | P | | P | 09 13 34.6 | +0.5 |
| TABL | Table Mountain | 64.80 | 32 | P | | P | 09 13 35.6 | +0.7 |
| I28M | Miner Creek | 65.75 | 26 | P | | P | 09 13 41.3 | +0.5 |
| I28M | | | | IAmb | | IAmb | 09 14 20.1 | |
| | comp=Z,4.2nm,1.4s | | | | | | | |
| D27M | Malcolm River | 65.80 | 22 | P | | P | 09 13 42.7 | +1.7 |
| D27M | | | | IAmb | | IAmb | 09 13 42.9 | |
| | comp=Z,2.9nm,1.1s | | | | | | | |
| M29M | Somme Creek | 66.20 | 30 | P | | P | 09 13 45.0 | +1.2 |
| H29M | Whitestone | 66.46 | 25 | P | | P | 09 13 46.0 | +0.8 |
| H29M | | | | IAmb | | IAmb | 09 13 47.0 | |
| | comp=Z,6.4nm,1.4s | | | | | | | |
| G29M | Pine Creek | 66.65 | 25 | P | | P | 09 13 47.5 | +1.1 |
| G29M | | | | IAmb | | IAmb | 09 13 54.5 | |
| | comp=Z,8.9nm,1.5s | | | | | | | |
| G31M | Satah River | 68.13 | 25 | P | | P | 09 13 56.2 | +0.6 |
| G31M | | | | IAmb | | IAmb | 09 14 14.8 | |
| | comp=Z,9.9nm,1.5s | | | | | | | |
| INK | Inuvik | 68.43 | 23 | P | | P | 09 13 57.2 | -0.2 |
| C36M | Paulatuk | 71.78 | 22 | P | | P | 09 14 17.5 | -0.3 |
| C36M | | | | IAmb | | IAmb | 09 14 58.2 | |
| | comp=Z,8.9nm,1.3s | | | | | | | |
| NLWA | Neilton Lookou | 76.17 | 44 | P | | P | 09 14 44.5 | +0.7 |
| NLWA | | | | IAmb | | IAmb | 09 15 27.4 | |
| | comp=Z,7.1nm,1.4s | | | | | | | |
| YKA | Yellowknife Ar | 77.11 | 28 | P | | P | 09 14 48.5 | -0.3 |
| | comp=Z,1.1nm,0.7s,baz=312,slow=6.4,SNR=2.9 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| KVN | Kaiserville | 82.64 | 51 | P | | P | 09 15 19.2 | -0.1 |
| NVAR | Mina Array Bea | 82.70 | 52 | P | | P | 09 15 20.1 | +0.5 |
| NVAR | Mina Array Bea | 82.70 | 52 | P | | P | 09 15 19.6 | 0.0 |
| | comp=Z,0.7nm,0.7s,baz=268,slow=6.3,SNR=8.5 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| YHL | Hebgen Lake | 85.33 | 44 | P | | P | 09 15 33.7 | +0.7 |
| FIA1 | FINESS Array S | 85.65 | 335 | P | | P | 09 15 33.3 | -0.4 |
| FINES | FINESS Array B | 85.65 | 335 | P | | P | 09 15 32.6 | -1.2 |
| FINES | FINESS Array B | 85.65 | 335 | P | | P | 09 15 32.1 | -1.6 |
| | comp=Z,2.0nm,0.8s,baz=69,slow=6.3,SNR=4.7 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| PDAR | Pinedale Array | 87.25 | 45 | P | | P | 09 15 41.1 | -1.2 |
| | comp=Z,0.1nm,0.4s,baz=258,slow=2.7,SNR=1.8 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |

*IDC **10** 09:09:51.0±1.1,28°.10N×104°.80E,h0km,mb3.6/9, mbtmp3.6/10,ML3.7/1,MS3.3/4,Error ellipse: s-maj=30.3km s-min=18.6km az=61.0*

**ISC 10 09:09:56.2±1.3,28°.1N±0°.2×104°.8E±0°.2,h35km,n12, σ0s.96/10,mb3.5/9,MS3.3/4,Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SONM | Songino Array | 19.70 | 3 | P | Pn | 09 14 23.6 | -0.6 |
| | 0.2nm,0.3s,baz=190,slow=12,SNR=2.8 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| KSRS | Korea Array | 21.46 | 58 | P | P | 09 14 41.2 | -0.4 |
| | 0.5nm,0.4s,baz=242,slow=10,SNR=2.4 | | | | | | |
| KSRS | | | | LR | LR | 09 23 17.4 | |
| | comp=Z,18nm,18.9s,baz=205,slow=38 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| JNU | Nakatsue | 22.92 | 71 | P | P | 09 14 57.1 | -0.1 |
| | 1.9nm,0.6s,baz=326,slow=15,SNR=1.5 | | | | | | |
| JNU | | | | LR | LR | 09 25 39.3 | |
| | comp=Z,33nm,19.2s,baz=105,slow=41 | | | | | | |
| | 1.9nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 25.67 | 323 | P | P | 09 15 21.1 | -1.7 |
| | 0.2nm,0.4s,baz=130,slow=12,SNR=2.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| USRK | Ussuriysk Ar. | 26.98 | 46 | P | P | 09 15 33.8 | -0.7 |
| | 0.7nm,0.5s,baz=251,slow=9.0,SNR=2.5 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 29.67 | 336 | P | P | 09 15 58.8 | +0.4 |
| | 0.8nm,0.5s,baz=108,slow=3.2,SNR=2.0 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 30.01 | 326 | P | P | 09 16 01.8 | +0.3 |
| | 0.5nm,0.6s,baz=131,slow=10,SNR=4.9 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 55.67 | 146 | P | P | 09 19 28.6 | -0.5 |
| | 1.3nm,0.9s,baz=334,slow=8.4,SNR=10 | | | | | | |
| | 1.3nm,0.9s | | | | | | |
| ASAR | Alice Springs | 58.64 | 149 | P | P | 09 19 50.3 | +0.2 |
| | 0.7nm,0.6s,baz=330,slow=7.0,SNR=11 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| ILAR | Eielson Array | 72.22 | 25 | P | P | 09 21 18.8 | +1.4 |
| | 0.1nm,0.5s,baz=270,slow=4.5,SNR=1.6 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| SFJD | Kangerlussuaq | 83.35 | 351 | LR | LR | 10 03 12.9 | |
| | comp=Z,49nm,20.2s,baz=179,slow=38 | | | | | | |
| FRB | Frobisher Bay | 88.27 | 357 | LR | LR | 10 04 04.7 | |
| | comp=Z,29nm,18.7s,baz=206,slow=37 | | | | | | |

**IDC 10 09:10:11.9±3.4,53°.76N×88°.04E,h0km,mbtmp2.8/2, ML2.7/2,Error ellipse: s-maj=29.6km s-min=18.7km az=50.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 1.92 | 277 | I | I | 09 22 40.0 | |
| | 0.1nm,1.0s,baz=92,slow=305,SNR=12 | | | | | | |
| ZALV | Zalesovo Beam | 1.92 | 277 | Pg | Pn | 09 10 46.0 | +0.3 |
| | 1.7nm,0.3s,baz=90,slow=16,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 09 11 13.6 | |
| | 3.6nm,0.3s,baz=96,slow=28,SNR=18 | | | | | | |
| KURBB | Kurchatov Arra | 6.63 | 246 | Pn | Pn | 09 11 51.1 | +0.6 |
| | 0.2nm,0.3s,baz=65,slow=14,SNR=5.6 | | | | | | |
| KURBB | | | | Lg | Lg | 09 13 42.1 | |
| | baz=57,slow=32,SNR=1.5 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 7.88 | 210 | Pn | Pn | 09 12 09.1 | +1.4 |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=1.5 | | | | | | |
| MKAR | | | | Lg | Lg | 09 14 18.8 | |
| | baz=20,slow=33,SNR=1.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**IDC 10 09:15:25.9±3.7,54°.43N×86°.92E,h0km,mbtmp2.5/2, ML1.4/1,Error ellipse: s-maj=33.3km s-min=20.4km az=53.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 1.33 | 250 | I | I | 09 23 50.0 | |
| | baz=72,slow=318,SNR=4.0 | | | | | | |
| ZALV | Zalesovo Beam | 1.33 | 250 | Pg | Pg | 09 15 50.0 | -1.3 |
| | 0.4nm,0.3s,baz=68,slow=19,SNR=2.0 | | | | | | |
| ZALV | | | | Lg | Lg | 09 16 08.7 | |
| | 0.5nm,0.3s,baz=64,slow=26,SNR=2.4 | | | | | | |
| KURBB | Kurchatov Arra | 6.38 | 237 | Pn | Pn | 09 17 01.2 | +0.1 |
| | baz=56,slow=14,SNR=2.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 8.19 | 203 | Pn | Pn | 09 17 27.6 | +1.7 |
| | 0.2nm,0.6s,baz=24,slow=15,SNR=1.5 | | | | | | |

*IDC **10** 09:18:42.9±1.0,2°.39S×140°.28E,h0km,mb3.8/6, mbtmp3.9/7,ML4.0/1,MS3.0/2,Error ellipse: s-maj=49.7km s-min=22.7km az=86.0*

*NEIC **10** 09:18:42.5±1.6,2°.1S±0°.2×140°.36E±0°.06,h35km±2km, mb4.0/10,Error ellipse: s-maj=25.9km s-min=9.7km az=12.0*

**ISC 10 09:18:43.6±0.7,2°.56S±0°.08×140°.27E±0°.09,h24km,n28, σ3s.10/27,mb3.8/7,Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| FAKI | Fak Fak | 8.02 | 267 | Pn | Pn | 09 20 37.1 | -1.6 |
| PMG | Port Moresby | 9.65 | 135 | Pn | Pn | 09 21 02.6 | +1.4 |
| COEN | Coen | 11.69 | 166 | Pn | Pn | 09 21 29.2 | +0.2 |
| RABL | Rabaul | 11.98 | 98 | Pn | Pn | 09 21 30.2 | -2.9 |
| MTN | Manton Dam | 13.65 | 221 | Pn | Pn | 09 21 58.1 | +2.3 |
| KNRA | Kununurra | 17.28 | 220 | | P | 09 22 47.4 | +2.7 |
| SOEI | Soe | 17.43 | 245 | Pn | Pn | 09 22 44.2 | -1.3 |
| WB0 | Warramunga Arr | 18.05 | 198 | P | P | 09 22 54.7 | +1.5 |
| WB0 | | | | IAmb | IAmb | 09 23 14.3 | |
| | comp=Z,16nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 18.18 | 198 | P | P | 09 22 56.9 | +2.1 |
| WR0 | | | | IAmb | IAmb | 09 23 24.5 | |
| | comp=Z,11nm,1.3s | | | | | | |
| WRAB | Tennant Creek | 18.21 | 198 | P | P | 09 22 57.5 | +2.4 |
| WRAB | | | | IAmb | IAmb | 09 23 03.8 | |
| | comp=Z,6.1nm,0.6s | | | | | | |
| WB2 | Warramunga Arr | 18.22 | 198 | P | P | 09 22 57.0 | +1.8 |
| WB2 | | | | IAmb | IAmb | 09 23 03.9 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 18.23 | 198 | P | Pn | 09 22 59.0 | +3.9 |
| | comp=Z,0.5nm,0.3s,baz=14,slow=13,SNR=32 | | | | | | |
| WRA | | | | S | Sn | 09 26 09.4 | -8.7 |
| | comp=Z,0.8nm,0.9s,baz=26,slow=22,SNR=2.6 | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| CTAO | Charters Tower | 18.38 | 162 | P | Pn | 09 22 56.2 | -0.8 |
| CTAO | | | | IAmb | IAmb | 09 23 21.8 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| KAPI | Kappang | 20.62 | 263 | LR | LR | 09 31 42.7 | |
| | comp=Z,17nm,21.0s,baz=74,slow=38 | | | | | | |
| AS31 | Alice Springs | 21.87 | 196 | P | P | 09 23 36.7 | +1.8 |
| ASAR | Alice Springs | 21.87 | 196 | P | P | 09 23 36.4 | +1.5 |
| ASAR | Alice Springs | 21.87 | 196 | P | P | 09 23 39.3 | +4.4 |
| | comp=Z,2.2nm,0.5s,baz=27,slow=9.9,SNR=27 | | | | | | |
| ASAR | | | | S | S | 09 27 38.4 | +2.8 |
| | comp=Z,0.9nm,1.0s,baz=16,slow=27,SNR=1.4 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| MYLDM | Lahad Datu | 23.07 | 289 | P | P | 09 23 43.0 | -4.6 |
| EIDS | Eidsvold | 24.96 | 156 | P | P | 09 24 05.6 | +0.2 |
| EIDS | | | | IAmb | IAmb | 09 24 14.8 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| STKA | Stephens Creek | 29.19 | 178 | LR | LR | 09 37 41.6 | |
| | comp=Z,83nm,18.9s,baz=93,slow=39 | | | | | | |
| MKAR | Makanchi Array | 70.62 | 322 | P | P | 09 29 59.4 | +2.2 |
| | comp=Z,0.3nm,0.5s,baz=93,slow=7.8,SNR=6.4 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 72.59 | 329 | P | P | 09 30 10.9 | +2.0 |
| | comp=Z,0.4nm,0.3s,baz=107,slow=6.3,SNR=1.4 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 74.50 | 324 | P | P | 09 30 22.9 | +2.8 |
| | comp=Z,0.3nm,0.6s,baz=118,slow=4.7,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| ILAR | Eielson Array | 85.05 | 24 | P | P | 09 31 18.9 | +1.9 |
| | comp=Z,0.6nm,0.9s,baz=271,slow=4.9,SNR=3.4 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| QSPA | South Pole Qui | 87.39 | 180 | P | P | 09 31 32.1 | +3.4 |
| | comp=Z,5.0nm,1.4s,baz=302,slow=1.3,SNR=2.0 | | | | | | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| DBIC | Dimbokro | 145.01 | 278 | PKPbc | PKiKP | 09 38 22.8 | -1.1 |
| | comp=Z,5.2nm,0.9s,baz=153,slow=1.5,SNR=3.4 | | | | | | |
| LPAZ | La Paz | 146.26 | 125 | PKPbc | PKiKP | 09 38 26.7 | -0.5 |
| | comp=Z,0.5nm,0.6s,baz=287,slow=1.8,SNR=1.7 | | | | | | |
| SIV | San Ignacio | 151.99 | 132 | PKPbc | PKPab | 09 38 42.4 | -4.7 |
| | comp=Z,0.3nm,0.4s,baz=277,slow=8.1,SNR=1.7 | | | | | | |

**IDC 10 09:22:31.9±12.0,8°.17N×104°.52W,h0km,mb3.2/4, mbtmp3.3/4,MS3.5/12,Error ellipse: s-maj=274.9km s-min=108.4km az=125.0,Northern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMIG | Matias Romero | 12.91 | 46 | LR | LR | 09 28 54.4 | |
| | comp=Z,538nm,21.6s,baz=224,slow=30 | | | | | | |
| APG | El Apazote | 15.34 | 62 | LR | LR | 09 31 02.9 | |
| | comp=Z,6.6nm,19.5s,baz=237,slow=33 | | | | | | |
| LPIG | La Paz | 16.78 | 341 | LR | LR | 09 31 29.1 | |
| | comp=Z,202nm,18.1s,baz=178,slow=32 | | | | | | |
| JTS | Las Juntas de | 19.43 | 82 | LR | LR | 09 31 55.8 | |
| | comp=Z,63nm,19.6s,baz=250,slow=29 | | | | | | |
| TEIG | Tepich | 19.76 | 51 | LR | LR | 09 33 08.5 | |
| | comp=Z,224nm,21.4s,baz=224,slow=32 | | | | | | |
| TXAR | Lajitas Array | 21.07 | 2 | P | P | 09 27 16.6 | -1.3 |
| | 0.6nm,0.7s,baz=182,slow=11,SNR=8.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| PFO | Pinyon Flats O | 27.61 | 338 | LR | LR | 09 37 31.7 | |
| | comp=Z,88nm,18.1s,baz=146,slow=33 | | | | | | |
| ATAH | Atahualpa | 30.16 | 120 | LR | LR | 09 37 56.4 | |
| | comp=Z,164nm,21.9s,baz=276,slow=31 | | | | | | |
| NVAR | Mina Array Bea | 32.59 | 340 | P | P | 09 29 05.3 | -0.1 |
| | 0.3nm,0.9s,baz=170,slow=11,SNR=2.1 | | | | | | |
| NVAR | | | | LR | LR | 09 39 54.0 | |
| | comp=Z,81nm,21.5s,baz=146,slow=32 | | | | | | |
| | 0.3nm,0.9s | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H10N2 | **ASCENSION HYDR** | **9.92** | **353** | T | T | 09 36 44.6 | |
| | baz=170,slow=79,SNR=24 | | | | | | |
| RCBR | **Riachuelo** | **25.10** | **295** | LR | LR | 09 37 30.4 | |
| | comp=Z,107nm,20.2s,baz=94,slow=32 | | | | | | |
| LIC | **Lamto** | **25.14** | **20⇑** | *eP* | **P** | **09 29 34.7** | **+0.5** |
| | 45nm,1.2s | | | | | | |
| KIC | **Kosan Boka** | **25.36** | **20⇑** | *eP* | **P** | **09 29 37.2** | **+1.0** |
| | 33nm,0.8s | | | | | | |
| TIC | **Toumodi** | **25.54** | **19⇑** | *eP* | **P** | **09 29 38.7** | **+0.8** |
| | 37nm,0.9s | | | | | | |
| DBIC | **Dimbokro** | **25.62** | **20** | P | **P** | **09 29 38.3** | **-0.2** |
| DBIC | | | | IAmb | IAmb | 09 29 40.7 | |
| | comp=Z,54nm,1.6s | | | | | | |
| DBIC | **Dimbokro** | **25.62** | **20** | P | **P** | **09 29 37.3** | **-1.2** |
| | comp=Z,14nm,1.1s,baz=178,slow=8.3,SNR=5.7 | | | | | | |
| DBIC | | | | LR | LR | 09 37 13.7 | |
| | comp=Z,616nm,20.1s,baz=176,slow=31 | | | | | | |
| | comp=Z,14nm,1.1s | | | | | | |
| TSUM | **Tsumeb** | **29.26** | **98** | P | **P** | **09 30 11.3** | **-0.1** |
| TSUM | | | | IAmb | IAmb | 09 30 20.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| TSUM | **Tsumeb** | **29.26** | **98** | LR | LR | 09 39 42.3 | |
| | comp=Z,189nm,21.9s,baz=302,slow=32 | | | | | | |
| BBTS | **Babate** | **32.35** | **354** | LR | LR | 09 41 21.7 | |
| | comp=Z,481nm,19.5s,baz=64,slow=32 | | | | | | |
| BDFB | **Brasilia** | **33.35** | **268** | LR | LR | 09 41 38.3 | |
| | comp=Z,445nm,20.8s,baz=115,slow=31 | | | | | | |
| SUR | **Sutherland** | **33.95** | **122** | P | **P** | **09 30 50.9** | **-1.7** |
| SUR | **Sutherland** | **33.95** | **122** | LR | LR | 09 41 45.4 | |
| | comp=Z,311nm,19.9s,baz=290,slow=31 | | | | | | |
| TORD | **Torodi Ar. Bea** | **34.04** | **27** | P | **P** | **09 30 53.0** | **-0.3** |
| TORD | **Torodi Ar. Bea** | **34.04** | **27** | P | **P** | **09 30 52.7** | **-0.6** |
| | comp=Z,24nm,0.8s,baz=194,slow=7.6,SNR=81 | | | | | | |
| TORD | | | | LR | LR | 09 42 35.0 | |
| | comp=Z,603nm,18.2s,baz=196,slow=33 | | | | | | |
| | comp=Z,24nm,0.8s | | | | | | |
| LBTB | **Lobatse** | **36.79** | **108** | P | **P** | **09 31 16.9** | **-0.1** |
| LBTB | | | | IAmb | IAmb | 09 31 25.4 | |
| | comp=Z,32nm,1.7s | | | | | | |
| LBTB | **Lobatse** | **36.79** | **108** | LR | LR | 09 43 48.6 | |
| | comp=Z,359nm,21.1s,baz=272,slow=32 | | | | | | |
| BOSA | **Boshof** | **36.87** | **114** | P | **P** | **09 31 17.9** | **+0.2** |
| BOSA | | | | IAmb | IAmb | 09 31 21.1 | |
| | comp=Z,33nm,1.4s | | | | | | |
| BOSA | **Boshof** | **36.87** | **114** | P | **P** | **09 31 16.0** | **-1.7** |
| | comp=Z,1.9nm,0.5s,baz=245,slow=6.9,SNR=1.8 | | | | | | |
| BOSA | | | | LR | LR | 09 43 42.1 | |
| | comp=Z,329nm,20.5s,baz=275,slow=32 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| LSZ | **Lusaka** | **39.74** | **93** | P | **P** | **09 31 42.1** | **+0.1** |
| CPUP | **Villa Florida** | **41.59** | **250** | LR | LR | 09 46 24.5 | |
| | comp=Z,108nm,20.8s,baz=94,slow=32 | | | | | | |
| TAM | **Tamanrasset** | **44.26** | **25** | P | **P** | **09 32 19.6** | **+0.8** |
| SIV | **San Ignacio** | **45.71** | **265** | LR | LR | 09 50 55.8 | |
| | comp=Z,127nm,18.2s,baz=114,slow=35 | | | | | | |
| MBAR | **Mbarara** | **46.45** | **73** | LR | LR | 09 49 54.6 | |
| | comp=Z,262nm,20.1s,baz=191,slow=34 | | | | | | |
| TRQA | **Tornquist** | **47.00** | **234** | P | **P** | **09 32 39.5** | **-0.9** |
| MDT | **Midelt** | **50.93** | **9** | LR | LR | 09 52 49.4 | |
| | comp=Z,174nm,18.2s,baz=204,slow=34 | | | | | | |
| LVC | **Limon Verde** | **52.24** | **255** | LR | LR | 09 55 28.5 | |
| | comp=Z,89nm,18.1s,baz=94,slow=36 | | | | | | |
| LPAZ | **La Paz** | **52.35** | **263** | LR | LR | 09 54 40.9 | |
| | comp=Z,171nm,18.4s,baz=96,slow=35 | | | | | | |
| VNA1 | **Neumayer--Stat** | **53.00** | **178** | ⇑P | **P** | **09 33 27.9** | **+2.6** |
| | comp=Z,8.5nm,0.9s | | | | | | |
| VNA2 | **Neumayer--Watz** | **53.31** | **178** | ⇑P | **P** | **09 33 29.6** | **+2.0** |
| | comp=Z,11nm,0.7s,baz=2.8,slow=6.0 | | | | | | |
| VNA3 | **Neumayer Olymp** | **53.55** | **179** | ⇑P | **P** | **09 33 32.7** | **+3.3** |
| | comp=Z,3.1nm,0.7s | | | | | | |
| PLCA | **Paso Flores** | **53.99** | **232** | LR | LR | 09 52 47.0 | |
| | comp=Z,271nm,21.2s,baz=93,slow=32 | | | | | | |
| SNAA | **Sanae** | **54.29** | **176** | P | **P** | **09 33 35.5** | **+0.7** |
| SNAA | **Sanae** | **54.29** | **176** | ⇑P | **P** | **09 33 36.7** | **+1.9** |
| | comp=Z,43nm,0.7s | | | | | | |
| SNAA | **Sanae** | **54.29** | **176** | P | **P** | **09 33 35.1** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=21,slow=14,SNR=4.6 | | | | | | |
| SNAA | | | | LR | LR | 09 51 27.9 | |
| | comp=Z,108nm,18.8s,baz=98,slow=30 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| TROLL | **Troll, Antarti** | **55.06** | **174** | ⇑P | **P** | **09 33 43.7** | **+3.1** |
| | comp=Z,88nm,0.6s | | | | | | |
| LR03 | **Panguipulli** | **55.24** | **234** | P | **P** | **09 33 41.4** | **-0.7** |
| LR03 | | | | IAmb | IAmb | 09 35 29.1 | |
| | comp=Z,26nm,1.2s | | | | | | |
| OPO | **Ambohidratompo** | **57.18** | **101** | LR | LR | 09 53 56.4 | |
| | comp=Z,224nm,21.7s,baz=132,slow=31 | | | | | | |
| KEST | **Kesra** | **57.31** | **22** | P | **P** | **09 33 56.0** | **-1.0** |
| | comp=Z,2.2nm,0.8s,baz=170,slow=12,SNR=3.0 | | | | | | |
| KEST | | | | LR | LR | 09 56 50.5 | |
| | comp=Z,280nm,21.9s,baz=198,slow=34 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| FURI | **Furi** | **57.70** | **67** | LR | LR | 09 57 09.9 | |
| | comp=Z,252nm,19.9s,baz=241,slow=34 | | | | | | |
| ESDC | **Sonseca Array** | **57.76** | **8** | P | **P** | **09 34 00.1** | **+0.1** |
| | comp=Z,1.0nm,0.8s,baz=186,slow=7.7,SNR=6.2 | | | | | | |
| ESDC | | | | LR | LR | 09 57 20.8 | |
| | comp=Z,200nm,21.0s,baz=166,slow=35 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| PCRV | **Puerto La Cruz** | **57.84** | **295** | LR | LR | 09 58 02.4 | |
| | comp=Z,124nm,18.9s,slow=35 | | | | | | |
| PMSA | **Palmer Station** | **57.89** | **203** | LR | LR | 09 53 49.7 | |
| | comp=Z,179nm,20.1s,baz=48,slow=31 | | | | | | |
| CZSB | **Cruzeiro do Su** | **58.65** | **272** | P | **P** | **09 34 06.1** | **-0.6** |
| CZSB | | | | IAmb | IAmb | 09 34 27.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| VAE | **Valguarnera** | **60.77** | **25** | LR | LR | 10 00 18.4 | |
| | comp=Z,442nm,18.4s,baz=155,slow=36 | | | | | | |
| NNA | **Nana** | **61.51** | **266** | LR | LR | 10 00 14.3 | |
| | comp=Z,140nm,18.7s,baz=88,slow=35 | | | | | | |
| SDV | **Santo Domingo** | **62.54** | **290** | LR | LR | 10 01 09.5 | |
| | comp=Z,150nm,18.3s,baz=117,slow=35 | | | | | | |
| IGPR | **InterUniversit** | **62.94** | **302** | P | **P** | **09 34 34.6** | **-1.2** |
| TIP | **Timpagrande** | **63.18** | **26** | P | **P** | **09 34 38.0** | **+0.9** |
| TIP | | | | IAmb | IAmb | 09 35 14.8 | |
| | comp=Z,9.5nm,1.3s | | | | | | |
| ATAH | **Atahualpa** | **64.23** | **271** | LR | LR | 10 00 30.9 | |
| | comp=Z,242nm,21.3s,baz=111,slow=34 | | | | | | |
| ROSC | **El Rosal** | **64.28** | **285** | LR | LR | 10 00 20.7 | |
| | comp=Z,377nm,21.5s,baz=224,slow=34 | | | | | | |
| EIL | **Elat** | **66.18** | **45** | LR | LR | 10 01 29.9 | |
| | comp=Z,151nm,18.8s,baz=250,slow=34 | | | | | | |
| DAVOX | **Davos/Dischmat** | **67.51** | **17** | LR | LR | 10 03 01.0 | |
| | comp=Z,166nm,20.9s,baz=256,slow=35 | | | | | | |
| MAW | **Mawson** | **68.46** | **156** | P | **P** | **09 35 11.8** | **+1.1** |
| | comp=Z,1.1nm,0.3s,baz=246,slow=18,SNR=2.3 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| MMAI | **Mount Meron Ar** | **68.59** | **43** | LR | LR | 10 03 11.1 | |
| | comp=Z,102nm,20.6s,baz=159,slow=34 | | | | | | |
| PSZ | **Piszkesteto** | **71.77** | **23** | P | **P** | **09 35 32.4** | **+1.1** |
| VRAC | **Vranov** | **71.80** | **20** | LR | LR | 10 06 23.3 | |
| | comp=Z,252nm,20.6s,baz=210,slow=35 | | | | | | |
| BR131 | **Keskin Array S** | **71.95** | **36** | P | **P** | **09 35 33.6** | **+0.9** |
| BR131 | | | | IAmb | IAmb | 09 36 54.3 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| BRTR | **Keskin Array B** | **71.95** | **36** | P | **P** | **09 35 33.0** | **+0.3** |
| BRTR | **Keskin Array B** | **71.95** | **36** | P | **P** | **09 35 32.0** | **-0.6** |
| | comp=Z,2.5nm,0.7s,baz=215,slow=5.2,SNR=8.0 | | | | | | |
| BRTR | | | | LR | LR | 10 07 24.6 | |
| | comp=Z,30nm,20.6s,baz=274,slow=36 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| MLR | **Muntele Rosu** | **72.27** | **28** | LR | LR | 10 08 11.6 | |
| | comp=Z,144nm,19.9s,baz=264,slow=37 | | | | | | |
| QSPA | **South Pole Qui** | **72.45** | **180** | P | **P** | **09 35 35.3** | **0.0** |
| QSPA | **South Pole Qui** | **72.45** | **180** | P | **P** | **09 35 36.8** | **+1.5** |
| | comp=Z,2.9nm,1.0s,baz=237,slow=1.8,SNR=9.3 | | | | | | |
| QSPA | | | | LR | LR | 10 02 05.3 | |
| | comp=Z,154nm,21.5s,baz=204,slow=31 | | | | | | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| CLL | **Collm** | **72.48** | **17** | *eS* | **S** | **09 45 05.0** | **+5.6** |
| CLL | | | | AMS | AMS | 10 04 00.0 | |
| | comp=Z,100nm,21.9s | | | | | | |
| JTS | **Las Juntas de** | **76.08** | **286** | LR | LR | 10 08 46.2 | |
| | comp=Z,192nm,21.3s,baz=258,slow=35 | | | | | | |
| AKASG | **Malin Array Be** | **77.67** | **26** | P | **P** | **09 36 02.8** | **-2.5** |
| | comp=Z,0.5nm,0.4s,baz=225,slow=5.6,SNR=1.8 | | | | | | |
| AKASG | | | | LR | LR | 10 12 57.3 | |
| | comp=Z,47nm,18.3s,baz=232,slow=38 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| GNI | **Garni** | **78.88** | **41** | LR | LR | 10 09 49.3 | |
| | comp=Z,57nm,21.2s,baz=276,slow=35 | | | | | | |
| UOSS | **Minazif** | **79.81** | **60** | P | **P** | **09 36 18.4** | **+0.7** |
| KBZ | **Khabaz** | **79.83** | **38** | LR | LR | 10 11 58.8 | |
| | comp=Z,35nm,18.5s,baz=237,slow=36 | | | | | | |
| HFS | **Hagfors** | **80.60** | **13** | LR | LR | 10 10 39.7 | |
| | comp=Z,92nm,21.5s,baz=204,slow=35 | | | | | | |
| NOA | **NORSAR Array B** | **80.92** | **12** | LR | LR | 10 14 01.8 | |
| | comp=Z,112nm,18.1s,baz=210,slow=37 | | | | | | |
| WSAR | **Wadi Sarin** | **81.14** | **62** | LR | LR | 10 11 52.1 | |
| | comp=Z,277nm,19.1s,baz=255,slow=35 | | | | | | |
| TEIG | **Tepich** | **82.70** | **294** | LR | LR | 10 15 17.8 | |
| | comp=Z,59nm,18.1s,baz=32,slow=37 | | | | | | |
| APG | **El Apazote** | **82.77** | **288** | LR | LR | 10 12 56.0 | |
| | comp=Z,12nm,21.3s,baz=92,slow=35 | | | | | | |
| OBN | **Obninsk** | **83.93** | **26** | LR | LR | 10 15 14.4 | |
| | comp=Z,85nm,19.5s,baz=7.5,slow=37 | | | | | | |
| FINES | **FINESS Array B** | **84.90** | **18** | P | **P** | **09 36 42.6** | **-0.9** |
| | comp=Z,2.9nm,0.9s,baz=207,slow=5.3,SNR=2.2 | | | | | | |
| FINES | | | | LR | LR | 10 14 05.5 | |
| | comp=Z,125nm,21.4s,baz=230,slow=35 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| VNDA | **Vanda** | **84.90** | **179** | LR | LR | 10 09 08.8 | |
| | comp=Z,133nm,21.7s,baz=178,slow=32 | | | | | | |
| SCHQ | **Schefferville** | **85.39** | **332** | LR | LR | 10 07 33.1 | |
| | comp=Z,69nm,21.5s,baz=138,slow=30 | | | | | | |
| SADO | **Sadowa** | **86.29** | **319** | LR | LR | 10 06 58.1 | |
| | comp=Z,74nm,21.8s,baz=77,slow=30 | | | | | | |
| BELG | **Belogornoye** | **87.41** | **32** | LR | LR | 10 18 02.5 | |
| | comp=Z,34nm,18.4s,baz=249,slow=37 | | | | | | |
| CMIG | **Matias Romero** | **87.47** | **289** | LR | LR | 10 16 37.7 | |
| | comp=Z,102nm,20.9s,baz=123,slow=36 | | | | | | |
| ARCES | **ARCESS Array B** | **91.25** | **13** | LR | LR | 10 18 54.2 | |
| | comp=Z,82nm,18.9s,baz=276,slow=36 | | | | | | |
| KIRV | **Kirov** | **91.63** | **28** | LR | LR | 10 20 53.2 | |
| | comp=Z,111nm,18.4s,baz=252,slow=37 | | | | | | |
| AKTO | **Aktyubinsk** | **92.11** | **37** | LR | LR | 10 19 24.5 | |
| | comp=Z,64nm,21.2s,baz=208,slow=36 | | | | | | |
| ARU | **Arti** | **94.95** | **32** | LR | LR | 10 23 22.0 | |
| | comp=Z,46nm,18.4s,baz=242,slow=38 | | | | | | |
| AAK | **Ala-Archa** | **100.16** | **49** | LR | LR | 10 22 33.9 | |
| | comp=Z,90nm,20.6s,baz=262,slow=35 | | | | | | |
| ASAR | **Alice Springs** | **127.83** | **141** | PKP | **PKPdf** | **09 43 13.3** | **-2.2** |
| | comp=Z,0.3nm,0.7s,baz=204,slow=2.0,SNR=1.2 | | | | | | |
| WRA | **Warramunga Arr** | **130.86** | **138** | PKP | **PKPdf** | **09 43 19.4** | **-2.0** |
| | comp=Z,0.4nm,0.9s,baz=247,slow=2.0,SNR=2.4 | | | | | | |
| MJAR | **Matsushiro Arr** | **148.61** | **48** | PKPbc | **PKPbc** | **09 43 55.7** | **-0.8** |
| | comp=Z,1.1nm,0.4s,baz=251,slow=1.4,SNR=5.4 | | | | | | |

**IDC 10 09:27:06.4±7.0, 54.97N×88.42E, h0km, mbtmp2.4/3, ML1.8/2, Error ellipse: s-maj=72.8km s-min=32.7km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | **ZALESOVO INFRA** | **2.34** | **246** | I | I | 09 41 50.0 | |
| | 0.2nm,0.9s,baz=62,slow=312,SNR=6.5 | | | | | | |
| ZALV | **Zalesovo Beam** | **2.34** | **246** | Pn | Pn | 09 27 45.4 | -0.7 |
| | 0.3nm,0.3s,baz=60,slow=19,SNR=2.0 | | | | | | |
| ZALV | | | | Sn | Sn | 09 28 15.0 | -0.5 |
| | 1.5nm,0.3s,baz=62,slow=28,SNR=11 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| KURBB | **Kurchatov Arra** | **7.41** | **238** | Pn | Pn | 09 28 56.4 | +0.8 |
| | 0.2nm,0.6s,baz=53,slow=15,SNR=1.4 | | | | | | |
| MKAR | **Makanchi Array** | **9.05** | **208** | Pn | Pn | 09 29 18.3 | +0.1 |
| | baz=29,slow=14,SNR=1.5 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**IDC 10 09:28:31.9±1.7, 4.07N×123.99E, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=210.0km s-min=22.4km az=64.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | **Warramunga Arr** | **25.95** | **157** | P | P | 09 34 06.0 | -0.1 |
| | 0.3nm,0.4s,baz=335,slow=10,SNR=7.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| ASAR | **Alice Springs** | **29.22** | **161** | P | P | 09 34 35.8 | +0.2 |
| | 0.4nm,0.8s,baz=343,slow=7.7,SNR=5.2 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| MKAR | **Makanchi Array** | **55.73** | **326** | P | P | 09 38 10.7 | +0.2 |
| | 0.5nm,0.3s,baz=128,slow=6.7,SNR=8.3 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| KURBB | **Kurchatov Arra** | **59.99** | **328** | P | P | 09 38 39.6 | -0.6 |
| | 0.5nm,0.5s,baz=122,slow=7.1,SNR=2.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

*SJA **10** 09:29:56.6±0.7, 21.90S×68.52W, h125km±5km, ML4.1, MW4.0*
*VAO **10** 09:29:57.8±0.3, 21.70S×68.35W, h107km, mb4.4*
*IDC **10** 09:29:57.0±0.7, 21.83S×68.30W, h108km±7km, mb3.6/9, mbtmp4.1/13, MS3.8/3, Error ellipse: s-maj=18.7km s-min=13.1km az=100.0*
*NEIC **10** 09:29:57.0±2.5, 21.84S±0.05×68.41W±0.08, h111km±6km, mb4.4/21, ML4.0(GUC), Error ellipse: s-maj=10.9km s-min=7.8km az=87.0*
*GUC **10** 09:29:59.5±0.8, 21.86S×68.57W, h105km±7km, ML4.0*
**ISC 10 09:29:57.1±0.6, 21.81S±0.03×68.44W±0.04, h113km±6km, n147, σ1°76/157, mb4.2/13, 6C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PB09 | **IPOC Station P** | **0.74** | **271** | Pn | **Pn** | **09 30 16.4** | **+0.1** |
| LVC | **Limon Verde** | **0.91** | **208** | *eP* | **Pn** | **09 30 18.4** | **+0.4** |
| LVC | | | | *eS* | **Sn** | **09 30 34.3** | **+0.4** |
| LVC | **Limon Verde** | **0.91** | **208** | P | **Pn** | **09 30 18.5** | **+0.4** |
| | 3μm,0.4s,baz=22,slow=7.1,SNR=6175 | | | | | | |
| LVC | | | | S | **Sn** | **09 30 34.1** | **+0.3** |
| | 898nm,0.4s,baz=49,slow=20,SNR=36 | | | | | | |
| LVC | | | | LR | LR | 09 30 53.2 | |
| | comp=Z,180nm,21.1s,baz=206,slow=58 | | | | | | |
| LVC | **Limon Verde** | **0.91** | **208** | *eP* | **Pn** | **09 30 18.4** | **+0.4** |
| LVC | | | | *eS* | **Sn** | **09 30 33.7** | **-0.2** |
| LVC | | | | IAML | | 09 30 34.9 | |
| | 8μm,0.4s | | | | | | |
| LVC | **Limon Verde** | **0.91** | **208** | *eP* | **Pn** | **09 30 18.5** | **+0.4** |
| AF01 | **San Pedro de A** | **1.16** | **168** | Pn | **Pn** | **09 30 22.2** | **+1.5** |
| AF01 | **San Pedro de A** | **1.16** | **168** | *eP* | **Pn** | **09 30 21.6** | **+0.9** |
| AF01 | | | | *eS* | Sn | 09 30 52.9 | +14 |
| AF01 | | | | IAML | | 09 31 03.6 | |
| | comp=Z,2μm,0.8s | | | | | | |
| AF01 | **San Pedro de A** | **1.16** | **168** | ⇑*iP* | **Pn** | **09 30 22.2** | **+1.5** |
| AF01 | | | | *eS* | **Sn** | **09 30 41.0** | **+2.6** |
| AF01 | | | | IAML | | 09 31 00.2 | |
| | comp=E,3μm,0.5s | | | | | | |
| PB04 | **IPOC Station P** | **1.67** | **251** | Pn | **Pn** | **09 30 26.0** | **-0.3** |
| PB04 | **IPOC Station P** | **1.67** | **251** | *eP* | **Pn** | **09 30 26.1** | **-0.3** |
| PB04 | | | | *eS* | **Sn** | **09 30 49.2** | **+0.7** |
| PB04 | | | | IAML | | 09 30 54.9 | |
| | comp=Z,1μm,0.7s | | | | | | |
| PB04 | **IPOC Station P** | **1.67** | **251** | ⇑*iP* | **Pn** | **09 30 26.1** | **-0.3** |
| PB04 | | | | *eS* | **Sn** | **09 30 46.6** | **-1.9** |
| PB04 | | | | IAML | | 09 30 52.5 | |
| | comp=E,1μm,0.2s | | | | | | |
| PX03 | **IPOC Station P** | **1.79** | **321** | *eP* | **Pn** | **09 30 27.9** | **+0.2** |
| PX03 | | | | *eS* | **Sn** | **09 30 51.3** | **+0.3** |
| PX03 | | | | IAML | | 09 30 52.8 | |
| | comp=N,2μm,0.3s | | | | | | |
| PATCX | **Punta Patache** | **1.87** | **301** | Pn | **Pn** | **09 30 28.8** | **0.0** |
| PB05 | **IPOC Station P** | **1.93** | **237** | Pn | **Pn** | **09 30 29.1** | **-0.5** |
| HMBC | **Humberstone** | **2.04** | **318** | Pn | **Pn** | **09 30 31.1** | **+0.2** |
| TA01 | **Diego Aracena** | **2.04** | **307** | Pn | **Pn** | **09 30 30.7** | **-0.1** |
| TA01 | **Diego Aracena** | **2.04** | **307** | *eP* | **Pn** | **09 30 30.4** | **-0.4** |
| TA01 | | | | *eS* | **Sn** | **09 30 56.6** | **+0.1** |
| TA01 | | | | IAML | | 09 31 05.3 | |
| | comp=Z,583nm,0.5s | | | | | | |
| TA01 | **Diego Aracena** | **2.04** | **307** | *eP* | **Pn** | **09 30 31.0** | **+0.2** |
| TA01 | | | | *eS* | **Sn** | **09 30 55.8** | **-0.7** |
| TA01 | | | | IAML | | 09 31 00.6 | |
| | comp=E,1μm,0.2s | | | | | | |
| TA02 | **Huaiquique** | **2.20** | **314** | Pn | **Pn** | **09 30 32.9** | **+0.1** |
| TA02 | **Huaiquique** | **2.20** | **314** | *eP* | **Pn** | **09 30 34.3** | **+1.5** |
| TA02 | | | | *eS* | **Sn** | **09 31 02.9** | **+2.8** |
| TA02 | | | | IAML | | 09 31 09.0 | |
| | comp=Z,1μm,0.1s | | | | | | |
| TA02 | **Huaiquique** | **2.20** | **314** | *eP* | **Pn** | **09 30 32.9** | **+0.1** |
| TA02 | | | | *eS* | **Sn** | **09 31 00.5** | **+0.4** |
| TA02 | | | | IAML | | 09 31 09.1 | |
| | comp=N,1μm,0.2s | | | | | | |
| GO01 | **Chusmiza** | **2.24** | **342** | Pn | **Pn** | **09 30 35.4** | **+1.6** |
| GO01 | **Chusmiza** | **2.24** | **342** | *eP* | **Pn** | **09 30 35.5** | **+1.6** |
| GO01 | | | | *eS* | **Sn** | **09 31 06.8** | **+4.9** |
| GO01 | **Chusmiza** | **2.24** | **342** | *eP* | **Pn** | **09 30 35.4** | **+1.6** |
| GO01 | | | | *eS* | **Sn** | **09 31 03.8** | **+1.9** |
| GO01 | | | | IAML | | 09 31 08.0 | |
| | comp=E,771nm,0.2s | | | | | | |
| YJA | **Yavi** | **2.74** | **98** | *eP* | **Pn** | **09 30 38.4** | **-1.8** |
| YJA | | | | *eS* | **Sn** | **09 31 16.6** | **+3.3** |
| YJA | **Yavi** | **2.74** | **98** | *eP* | **Pn** | **09 30 43.5** | **+3.3** |
| PB14 | **IPOC Station P** | **3.33** | **212** | Pn | **Pn** | **09 30 47.1** | **-0.9** |
| PB14 | **IPOC Station P** | **3.33** | **212** | *eP* | **Pn** | **09 30 47.2** | **-0.7** |
| PB14 | | | | *eS* | **Sn** | **09 31 27.2** | **+0.1** |
| PB14 | | | | IAML | | 09 31 35.8 | |
| | comp=Z,491nm,0.3s | | | | | | |
| PB14 | **IPOC Station P** | **3.33** | **212** | *eP* | **Pn** | **09 30 48.7** | **+0.8** |
| GO02 | **Mina Guanaco** | **3.50** | **197** | Pn | **Pn** | **09 30 49.8** | **-0.4** |
| GO02 | **Mina Guanaco** | **3.50** | **197** | *eP* | **Pn** | **09 30 49.5** | **-0.6** |
| GO02 | | | | *eS* | **Sn** | **09 31 29.3** | **-1.8** |
| GO02 | **Mina Guanaco** | **3.50** | **197** | *eP* | **Pn** | **09 30 50.9** | **+0.8** |
| AP01 | **Chacalluta** | **3.86** | **332** | Pn | **Pn** | **09 30 54.6** | **-0.1** |
| AP01 | **Chacalluta** | **3.86** | **332** | *eP* | **Pn** | **09 30 56.3** | **+1.6** |
| AP01 | | | | IAML | | 09 31 59.0 | |
| | comp=Z,288nm,0.2s | | | | | | |
| PB18 | **Visviri** | **4.31** | **347** | Pn | **Pn** | **09 31 01.6** | **+0.4** |
| AC01 | **Pan de Azucar** | **4.75** | **204** | Pn | **Pn** | **09 31 04.5** | **-2.1** |
| AC01 | **Pan de Azucar** | **4.75** | **204** | *eP* | **Pn** | **09 31 04.2** | **-2.4** |
| AC01 | | | | *eS* | **Sn** | **09 32 06.9** | **+6.3** |
| AC01 | | | | IAML | | 09 32 14.8 | |
| | comp=Z,278nm,0.8s | | | | | | |
| AC01 | **Pan de Azucar** | **4.75** | **204** | *eP* | **Pn** | **09 31 04.5** | **-2.1** |
| AC01 | | | | *eS* | **Sn** | **09 31 55.3** | **-5.3** |
| LPAZ | **La Paz** | **5.50** | **3** | Pn | **Pn** | **09 31 18.9** | **+1.5** |
| LPAZ | **La Paz** | **5.50** | **3** | P | **Pn** | **09 31 19.3** | **+1.9** |
| | comp=Z,9.8nm,0.4s,baz=198,slow=6.5,SNR=59 | | | | | | |
| LPAZ | | | | S | **Sn** | **09 32 14.1** | **-5.7** |
| | comp=Z,5.7nm,0.7s,baz=187,slow=13,SNR=1.6 | | | | | | |
| LPAZ | | | | LR | LR | 09 34 24.7 | |
| | comp=Z,38nm,19.9s,baz=178,slow=48 | | | | | | |
| LPAZ | **La Paz** | **5.50** | **3** | *eP* | **Pn** | **09 31 16.5** | **-0.9** |
| AC06 | **Mina Casimiro** | **5.79** | **197** | | **Pn** | **09 31 17.9** | **-2.8** |
| GO03 | **Copiap** | **5.99** | **195** | | **Pn** | **09 31 20.6** | **-2.7** |
| AC05 | **El Transito** | **7.19** | **193** | | **Pn** | **09 31 36.9** | **-2.8** |
| LCO | **Las Campanas** | **7.46** | **195** | Pn | **Pn** | **09 31 39.2** | **-4.3** |
| CO01 | **Juntas del Tor** | **8.27** | **190** | | **Pn** | **09 31 52.5** | **-2.0** |
| CO05 | **La Serena** | **8.46** | **197** | Pn | **Pn** | **09 31 52.4** | **-4.4** |
| GO04 | **Tololo Observa** | **8.59** | **194** | Pn | **Pn** | **09 31 56.1** | **-2.8** |
| BBSD | **Serra de San D** | **8.70** | **59** | *eP* | **Pn** | **09 31 58.4** | **-1.7** |
| SIV | **San Ignacio** | **9.06** | **52** | P | **Pn** | **09 32 03.2** | **-2.0** |
| | comp=Z,45nm,0.5s,baz=232,slow=10,SNR=302 | | | | | | |
| SIV | | | | S | **Sn** | **09 33 39.3** | **-6.1** |
| | comp=Z,1.9nm,0.4s,baz=246,slow=22,SNR=1.1 | | | | | | |
| CO03 | **El Pedregal** | **9.21** | **192** | Pn | Pn | 09 32 02.3 | -4.9 |
| CO06 | **Fray Jorge** | **9.28** | **197** | Pn | Pn | 09 32 01.7 | -6.2 |
| CO02 | **Combarbal** | **9.63** | **193** | Pn | Pn | 09 32 07.6 | -5.2 |
| PAPY | **Pozo Azul** | **9.68** | **105** | *eP* | **Pn** | **09 32 13.7** | **+0.3** |
| MURT | **Porto Murtinho** | **10.07** | **91** | *eP* | **Pn** | **09 32 17.3** | **-1.4** |
| PTLB | **Pontes e Lacer** | **10.85** | **56** | Pn | **Pn** | **09 32 28.0** | **-1.3** |
| PTLB | **Pontes e Lacer** | **10.85** | **56** | *eP* | **Pn** | **09 32 28.3** | **-1.0** |
| VA06 | **Catapilco** | **11.01** | **193** | Pn | Pn | 09 32 25.0 | -6.2 |
| VA03 | **San Esteban** | **11.07** | **189** | Pn | Pn | 09 32 26.5 | -5.8 |
| CPUP | **Villa Florida** | **11.11** | **116** | P | **Pn** | **09 32 35.3** | **+2.7** |
| | comp=Z,0.9nm,0.4s,baz=318,slow=5.5,SNR=1.5 | | | | | | |
| MT02 | **Curacav** | **11.65** | **191** | Pn | **Pn** | **09 32 39.0** | **-0.8** |
| VILB | **Vilhena** | **11.80** | **43** | Pn | **Pn** | **09 32 41.5** | **-0.5** |
| AQDB | **Aquidauana** | **11.97** | **86** | Pn | **Pn** | **09 32 42.5** | **-1.6** |
| AQDB | **Aquidauana** | **11.97** | **86** | *eP* | **Pn** | **09 32 42.5** | **-1.6** |
| LMEL | **Las Melosas** | **12.09** | **187** | Pn | **Pn** | **09 32 44.2** | **-1.7** |
| ETMB | **Extrema** | **12.12** | **11** | Pn | **Pn** | **09 32 44.3** | **-1.9** |
| ETMB | **Extrema** | **12.12** | **11** | *eP* | **Pn** | **09 32 44.2** | **-1.9** |
| VA05 | **Santo Domingo** | **12.13** | **193** | Pn | Pn | 09 32 38.9 | -7.3 |
| MT09 | **Talagante** | **12.13** | **190** | Pn | Pn | 09 32 41.1 | -5.2 |
| MT01 | **Popeta** | **12.26** | **191** | Pn | **Pn** | **09 32 43.5** | **-4.4** |
| BO04 | **La Punta** | **12.28** | **188** | Pn | **Pn** | **09 32 46.6** | **-1.7** |
| NNA | **Nana** | **12.64** | **319** | P | **Pn** | **09 32 56.2** | **+3.1** |
| | comp=Z,2.1nm,0.3s,baz=162,slow=20,SNR=1.7 | | | | | | |
| BO02 | **Sierra Bellavi** | **13.10** | **189** | Pn | **Pn** | **09 32 56.4** | **-2.6** |
| SALV | **Santo Antonio** | **13.42** | **66** | *eP* | **Pn** | **09 33 01.8** | **-1.4** |
| SAML | **Samuel** | **13.75** | **22** | Pn | **Pn** | **09 33 07.5** | **0.0** |
| SAML | **Samuel** | **13.75** | **22** | *eP* | **Pn** | **09 33 06.5** | **-0.9** |
| ML02 | **Panimavida** | **14.14** | **190** | Pn | **Pn** | **09 33 08.4** | **-4.0** |
| CRSM | **Crissiumal (Br** | **14.26** | **116** | *eP* | **Pn** | **09 33 14.6** | **+0.7** |
| TRCB | **Terra Rica** | **14.67** | **97** | Pn | **Pn** | **09 33 19.1** | **0.0** |
| TRCB | **Terra Rica** | **14.67** | **97** | *eP* | **Pn** | **09 33 18.8** | **-0.3** |
| PDRB | **Porto dos Gac** | **15.11** | **50** | *eP* | **Pn** | **09 33 25.0** | **+0.2** |
| P

comp=Z,0.3nm,0.6s
**ULM Lac du Bonnet 75.74 342** P **P** **09 41 30.1 0.0**
comp=Z,0.7nm,0.4s,baz=108,slow=6.4,SNR=1.5
comp=Z,0.7nm,0.4s
**NVAR Mina Array Bea 76.00 322** P **P** **09 41 33.0 +0.8**
comp=Z,0.5nm,0.8s,baz=167,slow=7.4,SNR=6.3
comp=Z,0.5nm,0.8s
**TORD Torodi Ar. Bea 77.05 70** P **P** **09 41 38.6 +0.3**
**TORD Torodi Ar. Bea 77.05 70** P **P** **09 41 38.1 -0.2**
comp=Z,1.5nm,0.4s,baz=252,slow=4.5,SNR=28
comp=Z,1.5nm,0.4s
**PAHR Pah Rah Range 77.49 322** P **P** **09 41 42.0 +1.6**
PAHR IAmb IAmb 09 41 43.7
comp=Z,3.2nm,0.8s
**HLID Hailey 77.53 328** P **P** **09 41 41.4 +0.8**
**NEW Newport 82.23 330** LR LR 10 22 36.1
comp=Z,69nm,20.5s,baz=98,slow=38
**YKA Yellowknife Ar 91.62 340** LR LR 10 27 23.3
comp=Z,29nm,19.0s,baz=108,slow=38
**DLBC Dease Lake 94.68 332** LR LR 10 31 21.6
comp=Z,45nm,18.8s,baz=106,slow=39
**ASAR Alice Springs 129.84 207** PKP **PKPdf** **09 48 52.8 -1.3**
comp=Z,0.6nm,0.8s,baz=140,slow=2.2,SNR=4.8
**WRA Warramunga Arr 132.91 210** PKP **PKPdf** **09 49 00.6 +0.7**
comp=Z,0.6nm,0.7s,baz=162,slow=1.7,SNR=13
KURBB **Kurchatov Arra 141.35 34** PKP **PKPdf** **09 49 15.6 +1.2**
comp=Z,0.2nm,0.6s,baz=304,slow=1.7,SNR=2.2
**MKAR Makanchi Array 145.62 37** PKPbc **PKPdf** **09 49 22.9 +0.7**
comp=Z,0.5nm,0.8s,baz=268,slow=5.9,SNR=4.0

**IDC 10 09:44:02.8±3.0, 53.73N×86.81E, h0km, mbtmp2.8/2, ML2.3/2, Error ellipse: s-maj=27.6km s-min=15.8km az=70.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.20** | **281** | I | I | 09 52 00.0 | |
| | baz=101,slow=314,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.20** | **281** | Pg | Pg | 09 44 25.6 | -0.1 |
| | 1.8nm,0.3s,baz=104,slow=17,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 09 44 41.3 | |
| | 0.8nm,0.3s,baz=97,slow=29,SNR=3.0 | | | | | | |
| KURBB | **Kurchatov Arra** | **5.96** | **242** | Pn | Pn | 09 45 33.6 | +1.3 |
| | 0.1nm,0.3s,baz=57,slow=13,SNR=2.1 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.52** | **204** | Pn | Pn | 09 45 54.5 | +0.8 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=2.7 | | | | | | |
| | 0.3nm,0.2s | | | | | | |

*NEIC **10** 09:48:58.6±2.1, 19.66N×0.09×145.4E±0.2, h168km±10km, mb4.1/18, Error ellipse: s-maj=29.3km s-min=12.6km az=89.0*
*IDC **10** 09:49:00.2±3.4, 19.67N×145.39E, h176km±33km, mb3.2/10, mbtmp3.7/12, Error ellipse: s-maj=26.5km s-min=16.5km az=78.0*
**ISC 10 09:48:57.0±0.7, 19.71N±0.08×145.3E±0.2, h147km, n37, σ1§31/37, mb3.9/18, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **6.10** | **184** | Pn | **Pn** | **09 50 25.9** | **+0.9** |
| **GUMO** | **Guam** | **6.10** | **184** | P | **Pn** | **09 50 28.3** | **+3.3** |
| | 20nm,0.4s,baz=0.2,slow=23,SNR=0.9 | | | | | | |
| **JCJ** | **Chichijima** | **7.91** | **339** | Pn | **Pn** | **09 50 50.0** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **17.90** | **341** | P | **P** | **09 52 54.9** | **-0.4** |
| | 0.4nm,0.3s,baz=168,slow=10,SNR=1.0 | | | | | | |
| **MAJO** | **Matsushiro** | **17.90** | **341** | P | **P** | **09 52 55.6** | **+0.3** |
| MAJO | | | | IAmb | IAmb | 09 53 06.8 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **17.91** | **341** | P | **P** | **09 52 56.0** | **+0.6** |
| **JMM** | **Marumori** | **18.52** | **349** | P | **Pn** | **09 53 03.3** | **-0.7** |
| **JNU** | **Nakatsue** | **18.58** | **319** | P | **P** | **09 53 03.9** | **+1.1** |
| JNU | | | | IAmb | IAmb | 09 53 32.8 | |
| | comp=Z,8.6nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **23.31** | **323** | P | **P** | **09 53 54.3** | **+2.5** |
| | comp=Z,1.2nm,0.7s,baz=148,slow=9.4,SNR=7.1 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **40.67** | **196** | P | **P** | **09 56 20.2** | **-2.9** |
| WB0 | | | | IAmb | IAmb | 09 56 30.9 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **40.82** | **196** | P | **P** | **09 56 21.8** | **-2.4** |
| WR0 | | | | IAmb | IAmb | 09 56 23.0 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **40.84** | **196** | P | **P** | **09 56 23.9** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 09 56 46.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **40.85** | **196** | P | **P** | **09 56 24.8** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 09 56 42.3 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.85** | **196** | P | **P** | **09 56 22.6** | **-1.9** |
| **WRA** | **Warramunga Arr** | **40.85** | **196** | P | **P** | **09 56 24.9** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=14,slow=8.4,SNR=5.5 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.53** | **195** | P | **P** | **09 56 53.8** | **-0.3** |
| | comp=Z,0.5nm,1.1s,baz=17,slow=6.8,SNR=2.0 | | | | | | |
| | comp=Z,0.5nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **48.01** | **213** | P | **P** | **09 57 19.8** | **-1.5** |
| **ZALV** | **Zalesovo Beam** | **57.02** | **322** | P | **P** | **09 58 27.9** | **+0.7** |
| | comp=Z,0.5nm,0.4s,baz=125,slow=7.2,SNR=2.0 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.53** | **313** | P | **P** | **09 58 31.6** | **+0.6** |
| | comp=Z,0.3nm,0.5s,baz=96,slow=7.5,SNR=3.6 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| KURBB | **Kurchatov Arra** | **60.35** | **318** | P | **P** | **09 58 51.0** | **+0.7** |
| | comp=Z,1.0nm,0.3s,baz=96,slow=7.7,SNR=8.3 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KNK** | **Knik Glacier** | **61.53** | **30** | P | **P** | **09 58 58.6** | **+0.4** |
| **SML** | **Sawmill** | **61.66** | **30** | P | **P** | **09 58 58.1** | **-1.0** |
| SML | | | | IAmb | IAmb | 09 59 18.7 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **61.78** | **21** | P | **P** | **09 58 58.9** | **-0.8** |
| D22K | | | | IAmb | IAmb | 09 59 12.1 | |
| | comp=Z,2.7nm,1.2s | | | | | | |
| **MCK** | **McKinley** | **61.80** | **27** | P | **P** | **09 58 58.6** | **-1.3** |
| MCK | | | | IAmb | IAmb | 09 59 18.4 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **62.90** | **26** | P | **P** | **09 59 06.9** | **-0.2** |
| **ILAR** | **Eielson Array** | **62.90** | **26** | P | **P** | **09 59 06.8** | **-0.4** |
| | comp=Z,0.4nm,0.9s,baz=241,slow=6.3,SNR=4.1 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **63.51** | **27** | P | **P** | **09 59 10.5** | **-0.8** |
| J25K | | | | IAmb | IAmb | 09 59 33.7 | |
| | comp=Z,3.1nm,1.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **64.33** | **24** | P | **P** | **09 59 15.3** | **-1.3** |
| **KK31** | **Karatay Array** | **65.87** | **309** | P | **P** | **09 59 25.6** | **-1.4** |
| **KKAR** | **Karatay Array** | **65.87** | **309** | P | **P** | **09 59 25.6** | **-1.3** |
| **G31M** | **Satah River** | **68.28** | **25** | P | **P** | **09 59 42.7** | **+1.1** |
| **DLBC** | **Dease Lake** | **70.64** | **34** | P | **P** | **09 59 57.7** | **+1.3** |
| | comp=Z,0.7nm,0.6s,baz=266,slow=15,SNR=1.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| ABKAR | **Akbulak array** | **72.38** | **317** | P | **P** | **10 00 07.5** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **82.78** | **52** | P | **P** | **10 01 05.4** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=260,slow=5.3,SNR=4.9 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **85.83** | **335** | P | **P** | **10 01 18.9** | **-0.9** |
| **FINES** | **FINESS Array B** | **85.83** | **335** | P | **P** | **10 01 18.6** | **-1.1** |
| | comp=Z,0.8nm,0.6s,baz=103,slow=4.1,SNR=4.4 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **LPAZ** | **La Paz** | **148.01** | **89** | PKPbc | **PKPbc** | **10 08 25.9** | **-0.8** |
| | comp=Z,0.5nm,0.5s,baz=342,slow=3.2,SNR=1.7 | | | | | | |

*SDD **10** 09:53:28.9±2.1, 19.69N×69.97W, h12km±9km, MD2.9, ML2.4, MW2.6*
*OSPL **10** 09:53:32.3±3.8, 19.61N×69.94W, h16km±20km, ML2.0*
**ISC 10 09:53:28.1±1.1, 19.69N±0.05×69.90W±0.04, h15km±6km, n14, σ1§31/24, 13C-1D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CADR** | **Cabrera** | **0.04** | **239** | ⇑*e*Pg | **Pg** | **09 53 31.0** | **+0.1** |
| CADR | | | | ⇑*e*Sg | **Sg** | **09 53 32.4** | **-0.3** |
| CADR | | | | IAML | | 09 53 33.3 | |
| | comp=N,3μm,0.4s | | | | | | |
| CADR | | | | IAML | | 09 53 34.0 | |
| | comp=E,2μm,0.1s | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **0.31** | **174** | *e*S | **Sb** | **09 53 40.4** | **+0.2** |
| **SC01** | **Santiago de lo** | **0.82** | **252** | *i* P | **Pn** | **09 53 45.3** | **+0.1** |
| SC01 | | | | *e*S | **Sn** | **09 53 57.0** | **0.0** |
| SC01 | | | | IAML | | 09 54 03.1 | |
| | comp=Z,56nm,0.3s | | | | | | |
| **MIDR** | **Miches** | **1.07** | **131** | ⇑*e*Pg | **Pg** | **09 53 49.0** | **+0.3** |
| MIDR | | | | ⇑*e*Sg | **Sg** | **09 54 04.6** | **+1.8** |
| MIDR | | | | IAML | | 09 54 08.9 | |
| | comp=N,26nm,0.7s | | | | | | |
| MIDR | | | | IAML | | 09 54 08.9 | |
| | comp=N,26nm,0.7s | | | | | | |
| MIDR | | | | IAML | | 09 54 09.1 | |
| | comp=E,34nm,0.3s | | | | | | |
| **ABDR** | **Alto Bandera** | **1.11** | **218** | ⇑*e*Pg | **Pb** | **09 53 47.8** | **-1.4** |
| ABDR | | | | ⇑*e*Sg | **Sn** | **09 54 03.6** | **-1.0** |
| ABDR | | | | IAML | | 09 54 05.3 | |
| | comp=N,79nm,0.4s | | | | | | |
| ABDR | | | | IAML | | 09 54 06.1 | |
| | comp=E,79nm,0.1s | | | | | | |
| **SDD** | **Santo Domingo** | **1.22** | **181** | *e*S | **Sg** | **09 54 07.1** | **-0.6** |
| **BANI** | **BANI** | **1.36** | **199** | ⇑*e*Pg | **Pn** | **09 53 52.1** | **-0.5** |
| BANI | | | | ⇑*e*Sg | **Sg** | **09 54 11.4** | **-0.7** |
| BANI | | | | IAML | | 09 54 12.6 | |
| | comp=E,232nm,0.5s | | | | | | |
| BANI | | | | IAML | | 09 54 13.7 | |
| | comp=N,204nm,0.2s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.49** | **242** | ⇓*e*Pg | **Pb** | **09 53 54.5** | **-0.9** |
| SDDR | | | | ⇑*e*Sg | **Sb** | **09 54 13.4** | **-0.8** |
| SDDR | | | | IAML | | 09 54 14.7 | |
| | comp=N,30nm,0.3s | | | | | | |
| SDDR | | | | IAML | | 09 54 15.5 | |
| | comp=E,26nm,0.8s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.49** | **242** | *i* P | **Pn** | **09 53 54.4** | **0.0** |
| SDDR | | | | *e*S | **Sn** | **09 54 11.7** | **-1.8** |
| SDDR | | | | IAML | | 09 54 14.3 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **REDR** | **Restauracion** | **1.50** | **250** | ⇓*e*Pg | **Pg** | **09 53 58.9** | **+1.8** |
| REDR | | | | ⇑*e*Sg | **Sg** | **09 54 20.6** | **+4.0** |
| REDR | | | | IAML | | 09 54 23.4 | |
| | comp=E,118nm,0.2s | | | | | | |
| REDR | | | | IAML | | 09 54 23.4 | |
| | comp=N,88nm,0.2s | | | | | | |
| **MCDR** | **Montecristi** | **1.67** | **277** | ⇑*e*Pg | **Pn** | **09 53 57.0** | **+0.3** |
| MCDR | | | | IAML | | 09 54 18.9 | |
| | comp=N,76nm,1.3s | | | | | | |
| MCDR | | | | ⇑*e*Sg | **Sg** | **09 54 21.1** | **-0.7** |
| MCDR | | | | IAML | | 09 54 24.3 | |
| | comp=N,73nm,0.2s | | | | | | |
| MCDR | | | | IAML | | 09 54 25.8 | |
| | comp=E,36nm,1.1s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.85** | **129** | *i* P | **Pb** | **09 54 02.0** | **+0.3** |
| PCDR | | | | IAML | | 09 54 29.4 | |
| | comp=Z,62nm,1.9s | | | | | | |
| **PODR** | **Polo** | **2.00** | **221** | *i* P | **Pb** | **09 54 04.0** | **-0.3** |
| PODR | | | | *e*S | **Sb** | **09 54 30.2** | **+1.1** |
| PODR | | | | IAML | | 09 54 40.5 | |
| | comp=Z,16nm,1.6s | | | | | | |
| **GRTK** | **Grand Turk** | **2.15** | **328** | *e*S | **Sb** | **09 54 32.5** | **-0.7** |

*IDC **10** 09:59:42.7±1.6, 8.22S×116.51E, h0km, mb3.4/4, mbtmp3.5/5, ML3.3/1, Error ellipse: s-maj=30.1km s-min=23.5km az=71.0*
*DJA **10** 09:59:44.5±0.8, 8.°S±11.°×11.°6E±.°, h14km±7km, M4.0/8, mb4.2/1, MLv3.8/8*
**ISC 10 09:59:47.3±1.0, 8.28S±0.09×116.49E±0.05, h35km, n13, σ1§40/13, mb3.4/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.60** | **140** | P | **Pn** | **09 59 57.6** | **-1.7** |
| **SRBI** | **Singaraja** | **1.28** | **279** | P | **Pn** | **10 00 07.5** | **-1.1** |
| **DNP** | **Denpasar** | **1.32** | **253** | P | **Pn** | **10 00 07.7** | **-1.6** |
| **PLAI** | **Plampang** | **1.39** | **113** | P | **Pn** | **10 00 11.0** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.32** | **265** | P | **Pn** | **10 00 22.1** | **-0.9** |
| **BSSI** | **Bau Bau, Buton** | **4.50** | **62** | P | **Pn** | **10 00 52.0** | **-1.0** |
| **KAPI** | **Kappang** | **4.59** | **45** | Pn | **Pn** | **10 00 52.5** | **-1.6** |
| | 1.5nm,0.3s,baz=221,slow=9.3,SNR=1.2 | | | | | | |
| KAPI | | | | Lg | Lg | 10 02 06.3 | |
| | 1.4nm,0.3s,baz=176,slow=19,SNR=1.6 | | | | | | |
| | 4.6nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.64** | **273** | P | **Pn** | **10 00 57.6** | **+2.6** |
| **EDFI** | **Ende, Flores** | **5.17** | **96** | P | **Pn** | **10 01 02.0** | **-0.3** |
| **WRA** | **Warramunga Arr** | **20.81** | **126** | P | **P** | **10 04 25.7** | **-0.1** |
| | 1.5nm,0.9s,baz=299,slow=12,SNR=8.1 | | | | | | |
| | 1.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.64** | **135** | P | **P** | **10 04 46.1** | **+0.7** |
| | 0.5nm,0.6s,baz=311,slow=9.4,SNR=10.0 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.58** | **352** | P | **P** | **10 09 27.0** | **+0.5** |
| | 0.7nm,0.6s,baz=183,slow=5.8,SNR=2.1 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.71** | **334** | P | **P** | **10 10 08.9** | **+0.3** |
| | 0.1nm,0.3s,baz=149,slow=6.1,SNR=2.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**IDC 10 10:08:33.6±63.0, 17.45S×176.25W, h545km±80km, mb3.2/3, mbtmp4.2/4, Error ellipse: s-maj=1023.0km s-min=131.8km az=79.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.45** | **266** | P | P | 10 10 07.1 | 0.0 |
| | 20nm,0.7s,baz=125,slow=14,SNR=12 | | | | | | |
| **STKA** | **Stephens Creek** | **40.65** | **241** | P | P | 10 15 26.5 | -0.3 |
| | 1.0nm,0.4s,baz=76,slow=12,SNR=3.6 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.74** | **259** | P | P | 10 16 13.6 | -0.6 |
| | 0.7nm,0.5s,baz=96,slow=6.9,SNR=31 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.90** | **254** | P | P | 10 16 15.6 | +0.3 |
| | 5.8nm,0.4s,baz=89,slow=7.8,SNR=170 | | | | | | |
| | 5.8nm,0.4s | | | | | | |

*SOME **10** 10:15:04.8, 42.15N×81.30E, h10km*
*NNC **10** 10:15:07.1±1.0, 42.10N×81.18E, h0km, mb3.1, mpv2.8, Error ellipse: s-maj=8.0km s-min=4.4km az=168.0*
**ISC 10 10:14:51.0±3.8, 41.8N±0.2×82.0E±0.1, h14km, n12, σ1§72/24, 4C-2D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHLS** | **Shalkode** | **2.35** | **307** | *e*P | **Pb** | **10 15 33.5** | **+0.1** |
| | 14nm,0.2s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **10 15 54.0** | **-4.2** |
| | 79nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **2.44** | **311** | ⇑Pn | **Pg** | **10 15 38.7** | **+0.8** |
| | 5.1nm,0.5s | | | | | | |
| PDGK | | | | ⇑Sn | **Sn** | **10 16 02.9** | **+2.5** |
| | 22nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **2.62** | **303** | *e*P | **Pg** | **10 15 41.5** | **+0.2** |
| | 3.4nm,0.5s | | | | | | |
| UZB | | | | *e*S | **Sn** | **10 16 07.7** | **+3.0** |
| | 23nm,0.4s | | | | | | |
| **SATY** | **Saty** | **2.98** | **297** | *e*P | **Pg** | **10 15 48.0** | **-0.1** |
| | 6.9nm,0.5s | | | | | | |
| SATY | | | | *e*S | **Sb** | **10 16 19.2** | **-1.1** |
| | 19nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **3.00** | **306** | *e*P | **Pg** | **10 15 48.2** | **-0.3** |
| | 6.2nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **10 16 19.3** | **-1.5** |
| | 29nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **3.00** | **299** | *e*P | **Pg** | **10 15 48.5** | **-0.2** |
| ZHN | | | | *e*S | **Sb** | **10 16 19.7** | **-1.3** |
| **DJR** | **Jarkent** | **3.05** | **328** | *e*P | **Pg** | **10 15 50.5** | **+1.1** |
| | 0.7nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sb** | **10 16 23.9** | **+1.8** |
| | 28nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **3.33** | **302** | *e*P | **Pg** | **10 15 54.4** | **-0.4** |
| | 1.9nm,0.5s | | | | | | |
| KURS | | | | *e*S | **Sb** | **10 16 29.8** | **-0.4** |
| | 6.7nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **3.94** | **310** | *e*P | **Pg** | **10 16 04.4** | **-2.0** |
| | 1.4nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **10 16 47.3** | **-0.4** |
| | 9.9nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.97** | **290** | *e*P | **Pg** | **10 16 06.3** | **-0.8** |
| | 1.6nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **10 16 50.3** | **+1.2** |
| | 4.5nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **5.03** | **2** | Pn | **Pb** | **10 16 19.9** | **+1.0** |
| | baz=190,slow=13,SNR=29 | | | | | | |
| MK31 | | | | ⇑Sn | **Sb** | **10 17 17.1** | **-2.1** |
| | 2.8nm,0.9s | | | | | | |
| MK31 | | | | Lg | Lg | 10 17 36.1 | |
| | 1.6nm,0.6s,baz=191,slow=29,SNR=3.5 | | | | | | |
| **MAKZ** | **Makanchi** | **5.04** | **360** | ⇓Pn | **Pb** | **10 16 20.0** | **+0.9** |
| | 0.7nm,0.5s | | | | | | |
| MAKZ | | | | ⇓Sn | **Sb** | **10 17 16.9** | **-2.6** |
| | 0.9nm,0.7s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 10 17 35.8 | |
| | 1.3nm,0.5s | | | | | | |

*IDC **10** 10:30:54.9±1.2, 27.20N×103.96E, h0km, mb3.6/8, mbtmp3.7/8, MS3.3/5, Error ellipse: s-maj=41.9km s-min=20.2km az=57.0*
**ISC 10 10:30:60.0±1.3, 27.3N±0.2×104.0E±0.2, h35km, n12, σ0§69/8, mb3.7/7, MS3.4/4, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **9.91** | **209** | LR | LR | 10 37 36.9 | |
| | comp=Z,43nm,20.4s,baz=95,slow=41 | | | | | | |
| **SONM** | **Songino Array** | **20.63** | **5** | P | **P** | **10 35 36.1** | **-0.4** |
| | 0.2nm,0.3s,baz=190,slow=9.8,SNR=1.5 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **22.57** | **57** | P | **P** | **10 35 57.5** | **+0.3** |
| | 0.6nm,0.5s,baz=245,slow=11,SNR=4.3 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **25.94** | **324** | P | **P** | **10 36 30.4** | **+1.3** |
| | 1.5nm,0.7s,baz=133,slow=9.7,SNR=16 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **28.14** | **46** | LR | LR | 10 50 06.1 | |
| | comp=Z,90nm,19.9s,baz=313,slow=41 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **30.18** | **337** | P | **P** | **10 37 06.8** | **0.0** |
| | 2.3nm,0.6s,baz=143,slow=8.5,SNR=8.1 | | | | | | |
| | 2.3nm,0.6s | | | | | | |
| KURBB | **Kurchatov Arra** | **30.33** | **327** | P | **P** | **10 37 07.8** | **-0.4** |
| | 0.7nm,0.4s,baz=132,slow=9.6,SNR=2.9 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **BELG** | **Belogornoye** | **48.54** | **317** | LR | LR | 11 03 43.6 | |
| | comp=Z,31nm,20.1s,baz=139,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.37** | **145** | P | **P** | **10 40 31.0** | **+0.3** |
| | 0.6nm,0.8s,baz=332,slow=8.6,SNR=3.3 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **56.92** | **43** | LR | LR | 11 06 57.2 | |
| | comp=Z,25nm,18.1s,baz=359,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **58.28** | **147** | P | **P** | **10 40 51.0** | **-0.4** |
| | 0.4nm,0.7s,baz=331,slow=5.6,SNR=2.4 | | | | | | |
| ASAR | | | | LR | LR | 11 05 47.9 | |
| | comp=Z,42nm,21.0s,baz=346,slow=36 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| ARCES | **ARCESS Array B** | **60.73** | **337** | P | **P** | **10 41 07.6** | **-0.1** |
| | 0.6nm,0.5s,baz=83,slow=7.4,SNR=3.9 | | | | | | |
| | 0.6nm,0.5s | | | | | | |

**DJA 10 10:33:57.0±0.3, 8.°S±5.°×11.°7E±.°, h10km, MS3.7/7, mb4.1/1, MLv3.5/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.44** | **138** | P | Pg | 10 34 06.0 | +0.3 |
| TWSI | | | | S | Sb | 10 34 13.0 | -0.6 |
| **PLAI** | **Plampang** | **1.25** | **109** | P | Pn | 10 34 20.4 | -0.2 |
| **DNP** | **Denpasar** | **1.38** | **259** | P | Pn | 10 34 21.6 | -0.7 |
| **SRBI** | **Singaraja** | **1.39** | **283** | P | Pn | 10 34 22.2 | -0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.40** | **268** | P | Pn | 10 34 36.8 | +0.4 |
| **BSSI** | **Bau Bau, Buton** | **4.49** | **60** | P | Pn | 10 35 03.9 | -1.2 |
| **EDFI** | **Ende, Flores** | **5.07** | **94** | P | Pn | 10 35 12.8 | -0.4 |

*IDC **10** 10:39:58.2±1.2, 8.23S×116.71E, h0km, mb4.0/7, mbtmp4.0/8, ML4.0/1, MS3.1/2, Error ellipse: s-maj=25.7km s-min=18.4km az=70.0*
*NEIC **10** 10:39:59.3±1.8, 8.19S±0.09×116.68E±0.06, h10km±1km, mb4.3/14, Error ellipse: s-maj=15.1km s-min=9.9km az=347.0*
*DJA **10** 10:40:00.7±0.3, 8.°S±5.°×11.°7E±.°, h10km, M4.2/9, mb4.5/1, mB4.6/1, MLv4.0/9, Mw(mB)3.8/1*
**ISC 10 10:40:02.3±0.6, 8.31S±0.05×116.67E±0.04, h35km, n43, σ1§53/48, mb4.0/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.48** | **154** | P | **Pn** | **10 40 09.8** | **-2.9** |
| TWSI | | | | S | **Sn** | **10 40 16.7** | **-3.2** |
| **PLAI** | **Plampang** | **1.22** | **115** | P | **Pn** | **10 40 23.9** | **+1.1** |
| PLAI | | | | S | **Sn** | **10 40 40.4** | **+2.4** |
| **SRBI** | **Singaraja** | **1.46** | **279** | P | **Pn** | **10 40 25.8** | **-0.3** |
| SRBI | | | | S | **Sn** | **10 40 44.9** | **+1.0** |
| **DNP** | **Denpasar** | **1.49** | **255** | P | **Pn** | **10 40 26.6** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.49** | **266** | | **Pn** | **10 40 39.4** | **-0.9** |
| JAGI | | | | Sn | **Sn** | **10 41 08.9** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.49** | **266** | P | **Pn** | **10 40 39.3** | **-1.1** |
| **BASI** | **Baing, Sumba** | **4.30** | **117** | P | **Pn** | **10 41 07.5** | **+2.2** |
| **BSSI** | **Bau Bau, Buton** | **4.36** | **61** | P | **Pn** | **10 41 07.7** | **+1.6** |
| **KAPI** | **Kappang** | **4.48** | **43** | Pn | **Pn** | **10 41 05.3** | **-2.4** |
| **KAPI** | **Kappang** | **4.48** | **43** | Pn | **Pn** | **10 41 05.4** | **-2.3** |
| | 7.1nm,0.3s,baz=168,slow=5.6,SNR=10 | | | | | | |
| KAPI | | | | Sn | **Sn** | **10 41 59.5** | **+0.8** |
| | 5.1nm,0.3s,baz=33,slow=24,SNR=3.7 | | | | | | |
| KAPI | | | | Lg | Lg | 10 42 17.4 | |
| | 4.0nm,0.3s,baz=245,slow=22,SNR=4.1 | | | | | | |
| | 12nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.99** | **95** | P | **Pn** | **10 41 16.6** | **+1.8** |
| **MMRI** | **Maumere** | **5.52** | **94** | Pn | **Pn** | **10 41 19.5** | **-2.5** |
| **SOEI** | **Soe** | **7.65** | **101** | Pn | **Pn** | **10 41 50.2** | **-1.2** |
| **FITZ** | **Fitzroy Crossi** | **13.07** | **139** | Pn | **Pn** | **10 43 05.5** | **-0.1** |
| **MBWA** | **Marble Bar** | **13.12** | **167** | Pn | **Pn** | **10 43 06.8** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **13.54** | **167** | Pn | **Pn** | **10 43 11.6** | **-0.4** |
| **KNRA** | **Kununurra** | **13.91** | **123** | Pn | **Pn** | **10 43 17.0** | **0.0** |
| **TNTI** | **Ternate** | **13.97** | **50** | Pn | **Pn** | **10 43 14.4** | **-3.4** |
| **MTN** | **Manton Dam** | **14.92** | **109** | Pn | **Pn** | **10 43 29.2** | **-1.5** |
| **FAKI** | **Fak Fak** | **16.40** | **72** | | **Pn** | **10 43 47.1** | **-2.8** |
| FAKI | | | | IAmb | IAmb | 10 44 14.6 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.61** | **125** | P | **P** | **10 44 38.8** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 10 44 44.1 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.65** | **126** | P | **P** | **10 44 39.8** | **+0.7** |
| **WRA** | **Warramunga Arr** | **20.65** | **126** | P | **P** | **10 44 39.7** | **+0.6** |
| | comp=Z,7.6nm,0.8s,baz=302,slow=12,SNR=69 | | | | | | |
| WRA | | | | S | **S** | **10 48 26.3** | **-1.9** |
| | comp=Z,0.2nm,0.7s,baz=360,slow=26,SNR=1.2 | | | | | | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.66** | **126** | P | **P** | **10 44 40.1** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 10 44 44.9 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVZ** | **Lovozero** | **0.42** | **50** | PG | Pg | 10 47 46.4 | -0.4 |
| LVZ | | | | SG | Sg | 10 47 51.9 | -0.4 |
| **VRF** | **Varrio** | **1.60** | **276** | PG | Pn | 10 48 07.6 | -0.5 |
| VRF | | | | MSG | | 10 48 26.6 | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| VRF | | | | SG | Sn | 10 48 26.6 | -2.9 |
| **OLKF** | **Oulanka, Finla** | **2.17** | **235** | PG | Pb | 10 48 17.6 | -1.0 |
| OLKF | | | | MSG | | 10 48 42.9 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| OLKF | | | | SG | Sb | 10 48 45.4 | -0.7 |
| **RAJF** | **Raja-Jooseppi** | **2.23** | **295** | PB | Pn | 10 48 17.3 | +0.6 |
| RAJF | | | | SN | Sn | 10 48 44.5 | -0.4 |
| **KU6** | **Riekki** baz=42 | **2.23** | **226** | PG | Pb | 10 48 18.6 | -1.1 |
| KU6 | | | | MSG | | 10 48 44.7 | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| KU6 | | | | SG | Sn | 10 48 45.8 | +0.8 |
| **MSF** | **Maaselka** | **2.55** | **230** | PG | Pb | 10 48 24.2 | -1.0 |
| MSF | | | | SG | Sb | 10 48 58.6 | +1.5 |
| **SGF** | **Sodankyl** | **2.80** | **270** | SB | Sb | 10 49 01.7 | -2.4 |
| **RNF** | **Rovaniemi** baz=71 | **3.21** | **255** | PN | Pn | 10 48 30.6 | +0.5 |
| RNF | | | | SG | Sb | 10 49 14.8 | -1.1 |
| **RANF** | **Ranua** | **3.21** | **243** | PN | Pn | 10 48 28.4 | -1.8 |
| RANF | | | | SG | Sb | 10 49 15.6 | -0.3 |
| **KEV** | **Kevo** | **3.27** | **314** | SN | Sn | 10 49 09.1 | -1.4 |
| **HEF** | **Hetta** | **3.89** | **286** | SN | Sn | 10 49 25.8 | -0.1 |

**HEL 10 10:48:11.5±0.2, 65°15N×24°98E, h0km, ML0.8, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OBF4** | **Vikkela, Lumij** | **0.34** | **171** | PG | Pg | 10 48 17.4 | -0.7 |
| OBF4 | | | | SG | Sg | 10 48 22.6 | +0.1 |
| **OBF0** | **Syolatti, Pyha** | **0.73** | **206** | PB | Pg | 10 48 25.8 | +0.4 |
| OBF0 | | | | MSG | | 10 48 34.3 | |
| | comp=Z,0.7nm,0.2s | | | | | | |
| **OUF** | **Merijarvi** baz=8.0 | **0.80** | **188** | PB | Pg | 10 48 25.9 | -0.8 |
| OUF | | | | MSG | | 10 48 36.1 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| **TOF** | **Tornio** | **0.97** | **344** | PN | Sg | 10 48 42.0 | -0.6 |
| **TOF** | **Tornio** | **0.97** | **344** | PG | Pg | 10 48 29.1 | -1.0 |
| TOF | | | | MSG | | 10 48 41.3 | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| TOF | | | | SG | Sg | 10 48 42.0 | -0.6 |
| **OBF8** | **Ulkokalla** baz=40 | **1.05** | **219** | PN | Pb | 10 48 32.7 | +0.1 |
| OBF8 | | | | MSG | | 10 48 43.6 | |
| | comp=Z,1.5nm,0.2s | | | | | | |
| OBF8 | | | | SN | Sn | 10 48 49.2 | +0.4 |
| **RANF** | **Ranua** | **1.15** | **40** | PN | Pn | 10 48 34.6 | -0.1 |
| **RNF** | **Rovaniemi** | **1.52** | **16** | SG | Sg | 10 48 58.0 | -2.4 |
| **PAJU** | **Pajala** | **2.03** | **339** | PB | Pn | 10 48 47.6 | +0.6 |
| **PAJU** | **Pajala** | **2.03** | **339** | PG | Pn | 10 48 47.6 | +0.6 |
| PAJU | | | | SG | Sb | 10 49 14.3 | -0.6 |
| **KLF** | **Kolari** | **2.13** | **349** | PG | Pn | 10 48 47.1 | -1.2 |
| **KLF** | **Kolari** | **2.13** | **349** | PN | Pn | 10 48 47.1 | -1.2 |
| KLF | | | | MSG | | 10 49 14.7 | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| KLF | | | | SN | Sn | 10 49 15.7 | +0.3 |
| **NIF** | **Nilsia** | **2.16** | **144** | SN | Sn | 10 49 13.9 | -2.2 |
| **KU6** | **Riekki** | **2.22** | **65** | PN | Pn | 10 48 49.7 | +0.1 |
| KU6 | | | | MSG | | 10 49 17.3 | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **VRF** | **Varrio** | **3.20** | **33** | PB | Pb | 10 49 07.7 | -1.4 |
| **JOF** | **Joensuu** | **3.58** | **126** | SG | Sb | 10 50 01.2 | +1.8 |
| **KEV** | **Kevo** | **4.69** | **9** | PN | Pn | 10 49 22.6 | -0.8 |

*SOME **10** 10:52:57.6, 42°.12N×81°.30E, h15km*
*NNC **10** 10:52:58.6±1.0, 42°.07N×81°.20E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=7.4km s-min=5.2km az=174.0*
**ISC 10 10:53:02.9±3.4, 42°.2N±0°.1×81°.01E±0°.08, h16km±14km, n24, σ1ş65/38, 2C-5D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHLS** | **Shalkode** 27nm,0.2s | **1.50** | **311** | *eP* | **Pn** | **10 53 26.2** | **-3.1** |
| SHLS | | | | *eS* | **Sn** | **10 53 46.7** | **-2.0** |
| | 153nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** 27nm,0.2s | **1.50** | **311** | P | **Pn** | **10 53 26.2** | **-3.1** |
| SHLS | | | | S | **Sn** | **10 53 46.7** | **-2.0** |
| | 153nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** 8.5nm,0.2s | **1.60** | **316** | P | **Pb** | **10 53 30.9** | **-1.3** |
| PDGK | | | | S | **Sg** | **10 53 55.5** | **+1.0** |
| | 20nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** 8.8nm,0.5s | **1.60** | **316** | ⇑Pn | **Pb** | **10 53 30.5** | **-1.7** |
| PDGK | | | | ⇓Sn | **Sg** | **10 53 55.6** | **+1.0** |
| | 45nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** 6.5nm,0.3s | **1.75** | **304** | *eP* | **Pb** | **10 53 33.9** | **-0.9** |
| UZB | | | | *eS* | **Sg** | **10 53 59.8** | **+0.4** |
| | 45nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** 6.5nm,0.3s | **1.75** | **304** | Pg | **Pb** | **10 53 33.9** | **-0.9** |
| UZB | | | | Lg | Lg | 10 53 59.8 | |
| | 45nm,0.3s | | | | | | |
| **SATY** | **Saty** 13nm,0.3s | **2.11** | **295** | *eP* | **Pb** | **10 53 40.3** | **-0.6** |
| SATY | | | | *eS* | **Sg** | **10 54 11.2** | **+0.4** |
| | 35nm,0.4s | | | | | | |
| **SATY** | **Saty** 13nm,0.3s | **2.11** | **295** | Pg | **Pb** | **10 53 40.3** | **-0.6** |
| SATY | | | | Lg | Lg | 10 54 11.2 | |
| | 35nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** 13nm,0.3s | **2.14** | **308** | *eP* | **Pb** | **10 53 40.2** | **-1.1** |
| KPKS | | | | *eS* | **Sb** | **10 54 10.8** | **+3.1** |
| | 54nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** 13nm,0.3s | **2.14** | **308** | Pg | **Pb** | **10 53 40.2** | **-1.1** |
| KPKS | | | | Lg | Lg | 10 54 10.8 | |
| | 54nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** 5.8nm,0.3s | **2.14** | **298** | *eP* | **Pb** | **10 53 41.4** | **0.0** |
| ZHN | | | | *eS* | **Sg** | **10 54 12.7** | **+1.0** |
| | 96nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** 5.8nm,0.3s | **2.14** | **298** | Pg | **Pb** | **10 53 41.4** | **0.0** |
| ZHN | | | | Lg | Lg | 10 54 12.7 | |
| | 96nm,0.3s | | | | | | |
| **DJR** | **Jarkent** 2.3nm,0.3s | **2.33** | **338** | *eP* | **Pb** | **10 53 43.9** | **-0.6** |
| DJR | | | | *eS* | **Sg** | **10 54 17.2** | **-0.5** |
| | 54nm,0.4s | | | | | | |
| **DJR** | **Jarkent** 2.3nm,0.3s | **2.33** | **338** | Pg | **Pb** | **10 53 43.9** | **-0.6** |
| DJR | | | | Lg | Lg | 10 54 17.2 | |
| | 54nm,0.4s | | | | | | |
| **KNOS** | **Konyrlen** 1.2nm,0.5s | **2.55** | **329** | Pg | **Pb** | **10 53 47.2** | **-1.2** |
| KNOS | | | | Lg | Lg | 10 54 22.9 | |
| | 24nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** 12nm,0.3s | **2.66** | **317** | Pg | **Pb** | **10 53 49.8** | **-0.5** |
| BLB | | | | Lg | Lg | 10 54 27.4 | |
| | 22nm,0.3s | | | | | | |
| **MDOK** | **Medeo** 2.6nm,0.3s | **3.08** | **290** | *eP* | **Pb** | **10 53 57.2** | **-0.2** |
| MDOK | | | | *eS* | **Sb** | **10 54 39.9** | **+5.0** |
| | 6.5nm,0.4s | | | | | | |
| **MDOK** | **Medeo** 2.6nm,0.3s | **3.08** | **290** | Pg | **Pb** | **10 53 57.2** | **-0.2** |
| MDOK | | | | Lg | Lg | 10 54 39.9 | |
| | 6.5nm,0.4s | | | | | | |
| **ARXS** | **Arharly** 1.3nm,0.4s | **3.09** | **312** | *eP* | **Pb** | **10 53 57.3** | **-0.2** |
| ARXS | | | | *eS* | **Sg** | **10 54 40.4** | **-1.6** |
| | 21nm,0.5s | | | | | | |
| **ARXS** | **Arharly** 1.3nm,0.4s | **3.09** | **312** | Pg | **Pb** | **10 53 57.3** | **-0.2** |
| ARXS | | | | Lg | Lg | 10 54 40.4 | |
| | 21nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** 1.9nm,0.3s | **3.12** | **287** | *eP* | **Pb** | **10 53 59.2** | **+1.0** |
| TNSS | | | | *eS* | **Sg** | **10 54 43.3** | **+0.2** |
| | 8.1nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** 1.9nm,0.3s | **3.12** | **287** | Pg | **Pb** | **10 53 59.2** | **+1.0** |
| TNSS | | | | Lg | Lg | 10 54 43.3 | |
| | 8.1nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** 1.1nm,0.4s | **4.68** | **8** | ⇓Pn | **Pn** | **10 54 12.4** | **-0.5** |
| MAKZ | | | | ⇓Sn | **Sn** | **10 55 08.9** | **+2.1** |
| | 1.7nm,0.7s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 10 55 27.4 | |
| | 2.0nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** 0.2nm,0.2s,baz=190,slow=13,SNR=50 | **4.70** | **11** | Pn | **Pn** | **10 54 12.2** | **-1.0** |
| MK31 | | | | ⇑Sn | **Sn** | **10 55 09.4** | **+1.9** |
| | 0.8nm,0.4s,baz=185,slow=23,SNR=3.9 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 10 55 28.0 | |
| | 2.9nm,0.6s,baz=191,slow=30,SNR=3.5 | | | | | | |

*DJA **10** 10:54:28.8±0.5, 7°.S±3°.×12°.9E±°, h204km±13km, M4.7/15, mb4.7/7, mB5.1/8, MLv4.9/15, Mw(mB)4.4/8*
*IDC **10** 10:54:29.5±4.5, 7°.13S×129°.13E, h164km±42km, mb3.7/12, mbtmp4.3/14, MS3.0/3, Error ellipse: s-maj=27.0km s-min=11.1km az=70.0*
*NEIC **10** 10:54:29.5±2.1, 7°.14S±0°.06×129°.14E±0°.07, h160km±5km, mb4.4/71, Error ellipse: s-maj=10.4km s-min=7.2km az=56.0*
**ISC 10 10:54:28.7±0.3, 7°24S±0°.04×129°17E±0°.05, h156km, n164, σ1ş54/163, mb4.4/44, 2C, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.23** | **109** | P | **Pn** | **10 55 09.0** | **+2.1** |
| **SAUI** | **Saumlaki** | **2.23** | **109** | | **Pn** | **10 55 09.0** | **+2.1** |
| **SAUI** | **Saumlaki** | **2.23** | **109** | P | **Pn** | **10 55 08.8** | **+1.9** |
| **BNDI** | **Bandanaira** | **2.80** | **15** | P | **Pn** | **10 55 17.3** | **+3.5** |
| **BNDI** | **Bandanaira** | **2.80** | **15** | P | **Pn** | **10 55 16.2** | **+2.4** |
| **MSAI** | **Masohi** | **3.88** | **356** | P | **Pn** | **10 55 30.7** | **+3.1** |
| **NLAI** | **Namlea** | **4.48** | **332** | P | **Pn** | **10 55 38.3** | **+2.9** |
| **FAKI** | **Fak Fak** | **5.28** | **36** | Pn | **Pn** | **10 55 44.8** | **-1.1** |
| **FAKI** | **Fak Fak** | **5.28** | **36** | P | **Pn** | **10 55 44.8** | **-1.1** |
| **DRS** | **Darwin Rock St** | **5.43** | **162** | P | **Pn** | **10 55 48.1** | **+0.2** |
| **SOEI** | **Soe** | **5.45** | **242** | P | **Pn** | **10 55 49.8** | **+1.4** |
| **SOEI** | **Soe** | **5.45** | **242** | Pn | **Pn** | **10 55 49.6** | **+1.2** |
| **SOEI** | **Soe** | **5.45** | **242** | P | **Sn** | **10 56 48.0** | **-2.6** |
| **SOEI** | **Soe** 366nm,0.7s,4μm2.6nm | **5.45** | **242** | P | **Pn** | **10 55 49.9** | **+1.5** |
| **KMPI** | **Kaimana, Papua** 178nm,0.6s,7μm | **5.75** | **52** | P | **Pn** | **10 55 52.1** | **0.0** |
| **MTN** | **Manton Dam** | **5.89** | **161** | P | **Pn** | **10 55 54.5** | **+0.5** |
| **MTN** | **Manton Dam** | **5.89** | **161** | Pn | **Pn** | **10 55 54.5** | **+0.5** |
| **SANI** | **Sanana** | **6.06** | **328** | P | Pn | 10 56 01.8 | +5.6 |
| **SANI** | **Sanana** 63nm,1.3s,0.2nm | **6.06** | **328** | P | **Pn** | **10 55 58.8** | **+2.6** |
| **BATI** | **Baumata** | **6.19** | **241** | P | **Pn** | **10 55 59.3** | **+1.3** |
| **KDU** | **Kakadu** | **6.31** | **149** | P | **Pn** | **10 55 59.6** | **0.0** |
| **SWI** | **Sorong** | **6.67** | **18** | P | **Pn** | **10 56 04.8** | **+0.4** |
| **BBSI** | **Bau Bau** | **6.79** | **285** | P | Pn | 10 55 55.9 | -10 |
| **EDFI** | **Ende, Flores** | **7.56** | **258** | P | **Pn** | **10 56 17.8** | **+1.5** |
| **EDFI** | **Ende, Flores** | **7.56** | **258** | P | **Pn** | **10 56 17.9** | **+1.6** |
| **KNRA** | **Kununurra** | **8.39** | **183** | Pn | **Pn** | **10 56 26.6** | **-0.7** |
| **BASI** | **Baing, Sumba** 126nm,1.5s,3μm0.8nm | **8.99** | **250** | P | **Pn** | **10 56 34.4** | **-0.9** |
| **BASI** | **Baing, Sumba** | **8.99** | **250** | P | **Pn** | **10 56 35.3** | **0.0** |
| **KAPI** | **Kappang** | **9.62** | **283** | Pn | **Pn** | **10 56 39.9** | **-3.8** |
| **FITZ** | **Fitzroy Crossi** | **11.32** | **197** | Pn | **Pn** | **10 57 04.5** | **-1.6** |
| **TOLI2** | **Tolitoli** | **11.79** | **314** | Pn | **Pn** | **10 57 09.7** | **-2.5** |
| **TABU** | **Tabubil** | **12.14** | **81** | P | **Pn** | **10 57 19.4** | **+2.6** |
| **WBO** | **Learramunga Arr** | **13.44** | **158** | Pn | **Pn** | **10 57 31.1** | **-2.3** |
| **WRAB** | **Tennant Creek** | **13.58** | **159** | | **Pn** | **10 57 33.1** | **-2.0** |
| **WRA** | **Warramunga Arr** | **13.58** | **159** | | **Pn** | **10 57 31.6** | **-3.6** |
| **WRA** | **Warramunga Arr** 9.9nm,0.3s,baz=328,slow=15,SNR=81 | **13.58** | **159** | P | **Pn** | **10 57 32.5** | **-2.7** |
| WRA | | | | S | Sn | 10 59 54.7 | -11 |
| | 33nm,0.7s,baz=332,slow=23,SNR=10 | | | | | | |
| **WB2** | **Warramunga Arr** | **13.59** | **159** | Pn | **Pn** | **10 57 33.1** | **-2.1** |
| **WR0** | **Warramunga Arr** | **13.67** | **158** | | **Pn** | **10 57 33.9** | **-2.4** |
| **JAGI** | **Jajag, Banyuwa** | **14.93** | **264** | Pn | **Pn** | **10 57 50.3** | **-1.8** |
| **COEN** | **Coen** | **15.29** | **117** | P | **P** | **10 57 57.4** | **-0.4** |
| **COEN** | **Coen** | **15.29** | **117** | Pn | **Pn** | **10 57 55.7** | **-0.9** |
| COEN | | | | IAmb | IAmb | 10 58 13.3 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **MYLDM** | **Lahad Datu** | **16.30** | **319** | | **Pn** | **10 58 07.0** | **-2.0** |
| **MBWA** | **Marble Bar** | **16.57** | **212** | P | **Pn** | **10 58 12.8** | **+0.6** |
| **MBWA** | **Marble Bar** | **16.57** | **212** | P | **P** | **10 58 11.8** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 10 58 13.5 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **QIS** | **Mount Isa** | **16.65** | **144** | P | **Pn** | **10 58 13.9** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **16.85** | **211** | P | **Pn** | **10 58 16.5** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **16.85** | **211** | | **Pn** | **10 58 16.3** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **16.85** | **211** | P | **Pn** | **10 58 16.7** | **+1.2** |
| PSA00 | | | | IAmb | IAmb | 10 58 17.5 | |
| | comp=Z,16nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **16.95** | **165** | P | **Pn** | **10 58 16.8** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 10 58 24.5 | |
| | comp=Z,8.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** comp=Z,14nm,0.6s,baz=342,slow=10,SNR=176 | **16.95** | **165** | P | **Pn** | **10 58 17.3** | **+0.5** |
| ASAR | | | | S | **S** | **11 01 18.1** | **-6.8** |
| | comp=Z,4.8nm,0.5s,baz=340,slow=26,SNR=6.9 | | | | | | |
| **AS01** | **Alice Springs** | **16.96** | **165** | P | **P** | **10 58 16.4** | **+0.1** |
| **WRKA** | **Warakurna** | **17.71** | **183** | P | **Pn** | **10 58 25.8** | **-0.1** |
| **PMG** | **Port Moresby** comp=Z,23nm,0.8s,baz=281,slow=5.2,SNR=3.1 | **17.93** | **98** | P | **Pn** | **10 58 29.1** | **+0.6** |
| PMG | | | | S | **S** | **11 01 40.8** | **-4.1** |
| | comp=Z,19nm,0.9s,baz=313,slow=19,SNR=2.0 | | | | | | |
| **MTSU** | **Mount Surprise** | **18.30** | **128** | P | **Pn** | **10 58 33.0** | **+0.2** |
| **KKM** | **Kota Kinabalu** | **18.48** | **315** | P | **P** | **10 58 33.5** | **+0.5** |
| **MANU** | **Manus Island** | **18.85** | **75** | P | **P** | **10 58 35.4** | **-1.6** |
| **SBUM** | **Sibu** | **19.46** | **299** | P | **P** | **10 58 42.6** | **-1.0** |
| SBUM | | | | IAmb | IAmb | 10 58 47.5 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **KSM** | **Kuching** | **20.72** | **294** | P | **P** | **10 58 56.3** | **-0.7** |
| KSM | | | | IAmb | IAmb | 10 59 03.0 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** comp=Z,0.2nm,0.4s,baz=300,slow=12,SNR=7.3 | **20.91** | **129** | P | **P** | **10 59 00.8** | **+1.7** |
| CTA | | | | LR | LR | 11 08 19.7 | |
| | comp=Z,7.0nm,19.5s,baz=297,slow=40 | | | | | | |
| **CTAO** | **Charters Tower** | **20.91** | **129** | P | **P** | **10 59 01.1** | **+2.0** |
| **CTAO** | **Charters Tower** | **20.91** | **129** | P | **P** | **10 59 00.2** | **+1.1** |
| CTAO | | | | IAmb | IAmb | 10 59 34.2 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **BBJI** | **Bungbulang** | **21.34** | **268** | P | **P** | **10 59 05.6** | **+1.7** |
| **OOD** | **Oodnadatta** | **21.35** | **164** | P | **P** | **10 59 04.7** | **+1.0** |
| **MULG** | **Mulgathing** | **23.37** | **169** | P | **P** | **10 59 24.4** | **+1.1** |
| **FORT** | **Forrest** | **23.44** | **182** | P | **P** | **10 59 26.6** | **+2.7** |
| **FORT** | **Forrest** | **23.44** | **182** | P | **P** | **10 59 24.2** | **+0.2** |
| **QLP** | **Quilpie** | **23.98** | **145** | P | **P** | **10 59 30.7** | **+1.7** |
| **LCRK** | **Leigh Creek** | **24.59** | **161** | P | **P** | **10 59 35.6** | **+1.9** |
| **MORW** | **Morawa** | **24.99** | **208** | P | **P** | **10 59 41.0** | **+2.9** |
| **MORW** | **Morawa** | **24.99** | **208** | P | **P** | **10 59 38.6** | **+0.5** |
| MORW | | | | IAmb | IAmb | 10 59 56.8 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **GUMO** | **Guam** | **25.91** | **37** | P | **P** | **10 59 44.1** | **-2.4** |
| **BLDU** | **Ballidu** | **26.02** | **205** | P | **P** | **10 59 47.9** | **+0.5** |
| **BBOO** | **Buckleboo** | **26.23** | **167** | P | **P** | **10 59 49.8** | **+0.6** |
| **BBOO** | **Buckleboo** | **26.23** | **167** | P | **P** | **10 59 50.1** | **+0.8** |
| **STKA** | **Stephens Creek** | **27.11** | **156** | P | **P** | **10 59 58.9** | **+1.8** |
| **STKA** | **Stephens Creek** | **27.11** | **156** | P | **P** | **10 59 58.0** | **+0.9** |
| **STKA** | **Stephens Creek** comp=Z,5.8nm,0.8s,baz=325,slow=10,SNR=6.6 | **27.11** | **156** | P | **P** | **10 59 57.8** | **+0.7** |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **HTT** | **Hallett** | **27.58** | **162** | P | **P** | **11 00 03.4** | **+2.1** |
| **CMSA** | **Cobar Meteorol** | **28.68** | **150** | P | **P** | **11 00 12.3** | **+1.3** |
| **KULM** | **Kulim** | **31.06** | **293** | P | **P** | **11 00 33.4** | **+1.1** |
| **ARMA** | **Armidale** | **31.23** | **140** | P | **P** | **11 00 33.5** | **-0.2** |
| **ARPS** | **Mount Arapiles** | **31.58** | **160** | P | **P** | **11 00 38.3** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** comp=Z,1.5nm,0.6s,baz=142,slow=7.5,SNR=10 | **39.26** | **311** | P | **P** | **11 01 42.1** | **-0.3** |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **40.30** | **346** | *eP* | **P** | **11 01 54.1** | **+3.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,270nm,4.4s | | | | | | |
| **PZH** | **PanZhiHua** | **42.82** | **323** | P | **P** | **11 02 12.0** | **+0.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,4.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** comp=Z,2.6nm,0.8s,baz=188,slow=9.0,SNR=7.6 | **44.37** | **10** | P | **P** | **11 02 21.9** | **-1.8** |
| MJAR | | | | LR | LR | 11 20 25.5 | |
| | comp=Z,20nm,19.4s,baz=122,slow=35 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **44.37** | **10** | P | **P** | **11 02 21.3** | **-2.3** |
| MAJO | | | | IAmb | IAmb | 11 02 22.5 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **44.38** | **10** | P | **P** | **11 02 21.1** | **-2.6** |
| MJB9 | | | | IAmb | IAmb | 11 02 22.4 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **KSAR** | **Wonju Array Be** | **44.47** | **359** | P | **P** | **11 02 23.1** | **-1.2** |
| **KSRS** | **Korea Array** comp=Z,1.2nm,0.7s,baz=177,slow=9.2,SNR=7.8 | **44.48** | **359** | P | **P** | **11 02 23.4** | **-1.0** |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.52** | **343** | *eP* | **P** | **11 03 14.1** | **+2.9** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,70nm,4.5s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **50.96** | **146** | P | **P** | **11 03 15.7** | **+1.4** |
| **USA0B** | **Ussuriysk Arra** | **51.27** | **3** | P | **P** | **11 03 16.7** | **+0.2** |
| **USRK** | **Ussuriysk Ar.** comp=Z,1.8nm,0.6s,baz=194,slow=7.2,SNR=8.5 | **51.27** | **3** | P | **P** | **11 03 15.8** | **-0.6** |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **MDJ** | **Mudanjiang** | **51.62** | **0** | P | **P** | **11 03 22.4** | **+3.3** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,210nm,5.5s | | | | | | |
| **TUWZ** | **Tuamasina** | **52.25** | **138** | P | **P** | **11 03 25.4** | **+1.4** |
| **DGAR** | **Diego Garcia** | **56.22** | **266** | P | **P** | **11 03 52.7** | **-0.4** |
| **SONM** | **Songino Array** comp=Z,1.0nm,0.7s,baz=153,slow=8.9,SNR=3.6 | **58.41** | **342** | P | **P** | **11 04 07.6** | **-0.4** |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **67.98** | **327** | P | **P** | **11 05 11.3** | **+0.3** |
| **MKAR** | **Makanchi Array** | **67.98** | **327** | P | **P** | **11 05 10.9** | **0.0** |
| **MKAR** | **Makanchi Array** comp=Z,0.9nm,0.3s,baz=130,slow=8.3,SNR=23 | **67.98** | **327** | P | **P** | **11 05 10.8** | **-0.2** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **68.16** | **327** | P | **P** | **11 05 11.9** | **-0.1** |
| **BOOM** | **Boomskoye usch** | **69.21** | **321** | P | **P** | **11 05 18.3** | **-0.5** |
| **KBL** | **Kabul** | **70.29** | **311** | P | **P** | **11 05 25.8** | **+0.1** |
| KBL | | | | IAmb | IAmb | 11 06 04.6 | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **ARSB** | **Arslanbob** | **70.52** | **318** | P | **P** | **11 05 27.5** | **+0.6** |
| **SHEM** | **Shemya Is, Ala** comp=Z,77nm,21.4s,baz=70,slow=33 | **70.87** | **27** | LR | LR | 11 33 33.9 | |
| **GAR** | **Garm** | **71.26** | **315** | P | **P** | **11 05 31.2** | **-0.1** |
| GAR | | | | IAmb | IAmb | 11 05 32.7 | |
| | comp=Z,6.3nm,0.6s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **71.44** | **334** | P | **P** | **11 05 29.9** | **-1.9** |
| **ZALV** | **Zalesovo Beam** | **71.44** | **334** | P | **P** | **11 05 31.0** | **-0.8** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.3nm,0.5s,baz=139,slow=6.9,SNR=5.5 | **71.44** | **334** | P | **P** | **11 05 30.7** | **-1.1** |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **CHGR** | **Chuyangaron** | **71.92** | **314** | P | **P** | **11 05 34.4** | **-0.9** |
| CHGR | | | | IAmb | IAmb | 11 05 36.6 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **SIMJ** | **Simiganj** | **72.03** | **314** | P | **P** | **11 05 34.8** | **-1.2** |
| **KURBB** | **Kurchatov Arra** comp=Z,1.1nm,0.3s,baz=132,slow=5.2,SNR=7.1 | **72.29** | **329** | P | **P** | **11 05 35.3** | **-1.7** |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **VNDA** | **Vanda** | **72.31** | **173** | P | **P** | **11 05 37.7** | **+0.9** |
| **VNDA** | **Vanda** comp=Z,3.3nm,1.2s,baz=317,slow=7.2,SNR=5.4 | **72.31** | **173** | P | **P** | **11 05 37.2** | **+0.5** |
| | comp=Z,3.3nm,1.2s | | | | | | |
| **KK31** | **Karatay Array** | **72.98** | **319** | P | **P** | **11 05 41.2** | **-0.2** |
| **KKAR** | **Karatay Array** | **72.98** | **319** | P | **P** | **11 05 40.6** | **-0.7** |
| **ABKAR** | **Akbulak array** | **82.19** | **322** | P | **P** | **11 06 31.3** | **-0.9** |
| **QSPA** | **South Pole Qui** | **82.73** | **180** | P | **P** | **11 06 35.1** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 11 06 35.6 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** comp=Z,2.9nm,0.7s,baz=236,slow=0.5,SNR=32 | **82.73** | **180** | P | **P** | **11 06 35.0** | **+0.1** |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **K13K** | **Kusilvak Mount** | **85.46** | **26** | P | **P** | **11 06 49.1** | **+0.6** |
| K13K | | | | IAmb | IAmb | 11 06 50.5 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **L14K** | **Kuka Creek** | **86.08** | **27** | P | **P** | **11 06 52.7** | **+1.1** |
| **M14K** | **Bethel** | **86.19** | **27** | P | **P** | **11 06 53.4** | **+1.3** |
| M14K | | | | IAmb | IAmb | 11 06 53.8 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **L16K** | **Owhat River** | **87.65** | **27** | P | **P** | **11 07 00.4** | **+1.2** |
| **M16K** | **Timber Creek** | **87.65** | **28** | P | **P** | **11 07 01.2** | **+2.0** |
| **J17K** | **VABM Dome** | **88.39** | **25** | P | **P** | **11 07 03.4** | **+0.8** |
| **H17K** | **Granite Mounta** | **88.58** | **24** | P | **P** | **11 07 04.3** | **+0.8** |
| H17K | | | | IAmb | IAmb | 11 07 19.0 | |
| | comp=Z,5.6nm,1.4s | | | | | | |
| **L18K** | **Granite Mounta** | **89.06** | **27** | P | **P** | **11 07 06.5** | **+0.7** |
| L18K | | | | IAmb | IAmb | 11 07 45.1 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **J18K** | **Innoko River** | **89.42** | **26** | P | **P** | **11 07 08.2** | **+0.7** |
| J18K | | | | IAmb | IAmb | 11 07 48.2 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **C18K** | **Utukok River** | **89.43** | **20** | P | **P** | **11 07 07.9** | **+0.4** |
| C18K | | | | IAmb | IAmb | 11 07 21.8 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **L19K** | **White Mountain** | **89.88** | **27** | P | **P** | **11 07 08.5** | **-1.2** |
| L19K | | | | IAmb | IAmb | 11 07 11.5 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **C19K** | **Lookout Ridge** | **90.14** | **20** | P | **P** | **11 07 10.8** | **0.0** |
| **H19K** | **Roundabout Mou** | **90.15** | **24** | P | **P** | **11 07 11.4** | **+0.6** |
| H19K | | | | IAmb | IAmb | 11 07 11.8 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **SYI** | **Shuyak Island** | **90.15** | **31** | P | **P** | **11 07 10.5** | **-0.5** |
| **E19K** | **Redstone River** | **90.43** | **22** | P | **P** | **11 07 

comp=Z,3.4nm,1.0s,baz=189,slow=5.5,SNR=3.0
**LPAZ La Paz 151.02 144** PKPbc **PKiKP 11 14 06.0 +0.5**
comp=Z,2.3nm,0.8s,baz=145,slow=2.3,SNR=5.6

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**IDC 10 10:54:46.4±4.2, 53°.95N×89°.75E, h0km, mbtmp3.1/3, ML2.6/3, Error ellipse: s-maj=40.7km s-min=26.9km az=50.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **2.92** | **272** | I | | I | 11 13 54.1 | |
| | 0.1nm,1.0s,baz=87,slow=316,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.92** | **272** | Pn | | Pn | 10 55 34.5 | +0.5 |
| | 0.7nm,0.3s,baz=94,slow=16,SNR=5.8 | | | | | | | |
| ZALV | | | | Lg | | Lg | 10 56 18.6 | |
| | 1.1nm,0.3s,baz=86,slow=28,SNR=5.2 | | | | | | | |
| | 1.4nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.64** | **249** | Pn | | Pn | 10 56 39.3 | +0.3 |
| | 0.2nm,0.3s,baz=64,slow=15,SNR=4.5 | | | | | | | |
| | 0.7nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.60** | **217** | Pn | | Pn | 10 56 52.6 | +0.5 |
| | 0.3nm,0.3s,baz=31,slow=14,SNR=3.2 | | | | | | | |
| MKAR | | | | Lg | | Lg | 10 59 18.8 | |
| | 0.1nm,0.3s,baz=18,slow=39,SNR=1.9 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |

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*IDC **10** 11:04:20.0±0.7, 29°.44S×71°.91W, h0km, mb4.1/6, mbtmp4.0/11, ML3.9/5, MS3.2/6, Error ellipse: s-maj=32.7km s-min=17.4km az=92.0*
*NEIC **10** 11:04:21.2±1.6, 29°.34S±0°.04×72°.01W±0°.05, h10km±1km, mb4.3/9, Mwr4.0/23, ML4.1(GUC), Error ellipse: s-maj=7.2km s-min=5.5km az=240.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$1.24; $M_{\theta\theta}$0.13; $M_{\phi\phi}$-1.37; $M_{r\theta}$0.01; $M_{\theta\phi}$-0.46; $M_{r\theta}$0.17; Fault plane solution: $M_0$1.40000×$10^{15}$ NP1:$\varphi_s$197.69000°, δ41.55000°, λ92.76000°. NP2:$\varphi_s$14.01000°, δ48.51000°, λ87.56000°. Principal axes: T 1.2543, Plg86.0000°, Azm258.0000°; N 0.2544, Plg2.0000°, Azm16.0000°; P -1.5087, Plg3.0000°, Azm106.0000°;*
*SJA **10** 11:04:21.2±1.3, 29°.37S×71°.81W, h20km, ML4.1, MW4.2*
*NEIC **10** 11:04:24, 29°.32S×72°.02W, h35km*
*GUC **10** 11:04:25.0±0.9, 29°.37S×71°.72W, h38km±3km, ML4.1*
**ISC 10 11:04:20.1±1.3, 29°.35S±0°.02×71°.95W±0°.04, h4km±8km, n134, σ1s29/165, mb4.6/11, 10C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO05** | **La Serena** | **0.84** | **133** | Pg | | **Pn** | **11 04 38.8** | **+0.1** |
| CO05 | | | | | | **Sb** | **11 04 48.9** | **+0.1** |
| **CO05** | **La Serena** | **0.84** | **133** | *e*P | | **Pn** | **11 04 38.9** | **+0.1** |
| CO05 | | | | *e*S | | **Sb** | **11 04 48.4** | **-0.5** |
| CO05 | | | | IAML | | | 11 04 49.8 | |
| | comp=E,15μm,0.3s | | | | | | | |
| **LCO** | **Las Campanas** | **1.14** | **73** | | | **Pn** | **11 04 43.7** | **+0.5** |
| LCO | | | | Sn | | **Sb** | **11 04 57.3** | **-0.6** |
| **LCO** | **Las Campanas** | **1.14** | **73** | *e*P | | **Pb** | **11 04 42.6** | **+0.1** |
| LCO | | | | *e*S | | **Sb** | **11 04 57.1** | **-0.8** |
| **LCO** | **Las Campanas** | **1.14** | **73** | *i*P | | **Pb** | **11 04 43.2** | **0.0** |
| LCO | | | | *e*S | | **Sb** | **11 04 57.1** | **-0.8** |
| **GO04** | **Tololo Observa** | **1.29** | **130** | | | **Pn** | **11 04 45.8** | **+0.6** |
| GO04 | | | | Sn | | **Sg** | **11 05 01.2** | **-0.3** |
| **GO04** | **Tololo Observa** | **1.29** | **130** | *e*P | | **Pn** | **11 04 45.1** | **-0.1** |
| **GO04** | **Tololo Observa** | **1.29** | **130** | *e*P | | **Pn** | **11 04 45.8** | **+0.6** |
| GO04 | | | | *e*S | | **Sg** | **11 05 01.3** | **-0.3** |
| **CO06** | **Fray Jorge** | **1.34** | **168** | | | **Pg** | **11 04 46.3** | **+0.5** |
| **CO06** | **Fray Jorge** | **1.34** | **168** | *e*P | | **Pg** | **11 04 46.4** | **+0.5** |
| CO06 | | | | *e*S | | **Sb** | **11 05 02.5** | **-1.0** |
| **AC04** | **Llanos de Chal** | **1.38** | **34** | | | **Pg** | **11 04 46.6** | **+0.2** |
| **AC04** | **Llanos de Chal** | **1.38** | **34** | *e*P | | **Pb** | **11 04 46.5** | **+0.1** |
| AC04 | | | | *e*S | | **Sb** | **11 05 04.0** | **-0.3** |
| AC04 | | | | IAML | | | 11 05 08.6 | |
| | comp=Z,1μm,0.6s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.38** | **34** | *e*P | | **Pg** | **11 04 46.7** | **+0.2** |
| AC04 | | | | *e*S | | **Sb** | **11 05 02.9** | **-1.5** |
| **AC05** | **El Transito** | **1.55** | **71** | | | **Pg** | **11 04 49.7** | **-0.2** |
| **AC05** | **El Transito** | **1.55** | **71** | *e*P | | **Pg** | **11 04 49.7** | **-0.2** |
| AC05 | | | | *e*S | | **Sn** | **11 05 08.3** | **-1.0** |
| AC05 | | | | IAML | | | 11 05 10.5 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| **AC05** | **El Transito** | **1.55** | **71** | *e*P | | **Pb** | **11 04 49.0** | **-0.5** |
| AC05 | | | | *e*S | | **Sn** | **11 05 07.5** | **-1.8** |
| AC05 | | | | IAML | | | 11 05 10.0 | |
| | comp=N,5μm,0.3s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.73** | **112** | | | **Pb** | **11 04 52.7** | **+0.1** |
| **CO01** | **Juntas del Tor** | **1.73** | **112** | *e*P | | **Pb** | **11 04 52.7** | **+0.1** |
| CO01 | | | | *e*S | | **Sn** | **11 05 13.1** | **-0.8** |
| CO01 | | | | IAML | | | 11 05 13.8 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.73** | **112** | *e*P | | **Pb** | **11 04 52.7** | **+0.1** |
| CO01 | | | | *e*S | | **Sn** | **11 05 12.5** | **-1.4** |
| CO01 | | | | IAML | | | 11 05 15.3 | |
| | comp=N,3μm,0.3s | | | | | | | |
| **CO03** | **El Pedregal** | **1.84** | **144** | | | **Pb** | **11 04 53.5** | **-0.9** |
| **CO03** | **El Pedregal** | **1.84** | **144** | *e*P | | **Pb** | **11 04 53.5** | **-0.9** |
| CO03 | | | | *e*S | | **Sn** | **11 05 15.7** | **-0.8** |
| CO03 | | | | IAML | | | 11 05 19.1 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **CO03** | **El Pedregal** | **1.84** | **144** | *e*P | | **Pb** | **11 04 53.5** | **-0.9** |
| CO03 | | | | *e*S | | **Sn** | **11 05 14.9** | **-1.5** |
| CO03 | | | | IAML | | | 11 05 16.2 | |
| | comp=E,5μm,0.3s | | | | | | | |
| **CO02** | **Combarbal** | **2.02** | **156** | | | **Pb** | **11 04 56.7** | **-0.8** |
| **CO02** | **Combarbal** | **2.02** | **156** | *e*P | | **Pn** | **11 04 55.9** | **+0.8** |
| CO02 | | | | *e*S | | **Sn** | **11 05 20.4** | **-0.4** |
| CO02 | | | | IAML | | | 11 05 22.4 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **CO02** | **Combarbal** | **2.02** | **156** | *e*P | | **Pb** | **11 04 56.6** | **-0.8** |
| CO02 | | | | *e*S | | **Sn** | **11 05 19.9** | **-0.9** |
| **AROD** | **Rodeo** | **2.30** | **111** | *e*P | | **Pb** | **11 05 01.9** | **-0.4** |
| AROD | | | | *e*S | | **Sn** | **11 05 25.0** | **-3.1** |
| **GO03** | **Copiap** | **2.31** | **41** | | | **Pn** | **11 04 59.9** | **+0.9** |
| **GO03** | **Copiap** | **2.31** | **41** | *e*P | | **Pn** | **11 05 00.0** | **+0.9** |
| GO03 | | | | *e*S | | **Sg** | **11 05 37.6** | **+3.2** |
| **GO03** | **Copiap** | **2.31** | **41** | *i*P | | **Pn** | **11 04 60.0** | **+0.9** |
| GO03 | | | | *i* S | | **Sn** | **11 05 27.8** | **-0.2** |
| GO03 | | | | IAML | | | 11 05 39.9 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **AC06** | **Mina Casimiro** | **2.43** | **36** | | | **Pn** | **11 05 02.2** | **+1.5** |
| **AC06** | **Mina Casimiro** | **2.43** | **36** | *e*P | | **Pn** | **11 05 02.2** | **+1.5** |
| AC06 | | | | *e*S | | **Sn** | **11 05 30.5** | **-0.4** |
| AC06 | | | | IAML | | | 11 05 43.1 | |
| | comp=E,870nm,0.4s | | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.59** | **109** | *e*P | | **Pb** | **11 05 05.9** | **-1.4** |
| ACDV | | | | *e*S | | **Sb** | **11 05 40.7** | **+1.2** |
| ACDV | | | | IAML | | | 11 05 40.9 | |
| | comp=Z,692nm,0.5s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.79** | **117** | *e*P | | **Pb** | **11 05 09.6** | **-1.1** |
| ACCO | | | | *e*S | | **Sb** | **11 05 45.1** | **-0.2** |
| **DOCA** | **Reserva Natura** | **2.95** | **123** | *e*P | | **Pb** | **11 05 11.2** | **-2.2** |
| DOCA | | | | *e*S | | **Sn** | **11 05 43.5** | **-0.6** |
| DOCA | | | | IAML | | | 11 05 50.1 | |
| | comp=Z,2μm,0.7s | | | | | | | |
| **VA06** | **Catapilco** | **3.25** | **170** | | | **Pn** | **11 05 13.0** | **+1.1** |
| **VA06** | **Catapilco** | **3.25** | **170** | *e*P | | **Pn** | **11 05 12.9** | **+1.1** |
| **RTLS** | **Leoncito** | **3.34** | **138** | *e*P | | **Pb** | **11 05 17.5** | **-2.6** |
| RTLS | | | | *e*S | | **Sn** | **11 05 54.7** | **+0.9** |
| RTLS | | | | IAML | | | 11 06 09.0 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.41** | **21** | Pn | | **Pn** | **11 05 14.0** | **-0.1** |
| **AC01** | **Pan de Azucar** | **3.41** | **21** | *e*P | | **Pn** | **11 05 14.0** | **-0.1** |
| AC01 | | | | *e*S | | **Sg** | **11 06 07.9** | **-1.7** |
| AC01 | | | | IAML | | | 11 06 21.2 | |
| | comp=Z,259nm,0.6s | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.41** | **21** | *i* P | | **Pn** | **11 05 13.9** | **-0.1** |
| AC01 | | | | IAML | | | 11 06 22.6 | |
| | comp=E,404nm,0.5s | | | | | | | |
| **ZON** | **Zonda** | **3.57** | **129** | Pn | | **Pn** | **11 05 17.8** | **+1.4** |
| **RTLL** | **Cerro Villicun** | **3.59** | **124** | *e*P | | **Pn** | **11 05 14.3** | **-2.3** |
| RTLL | | | | *e*S | | **Sn** | **11 05 59.4** | **-0.2** |
| **VA03** | **San Esteban** | **3.61** | **161** | | | **Pn** | **11 05 19.1** | **+2.2** |
| **VA03** | **San Esteban** | **3.61** | **161** | *e*P | | **Pn** | **11 05 19.2** | **+2.3** |
| VA03 | | | | *e*S | | **Sn** | **11 06 01.6** | **+1.6** |
| VA03 | | | | IAML | | | 11 06 19.4 | |
| | comp=Z,367nm,0.4s | | | | | | | |
| **VA03** | **San Esteban** | **3.61** | **161** | *e*P | | **Pn** | **11 05 19.1** | **+2.2** |
| **VA01** | **Torpederas** | **3.67** | **176** | Pn | | **Pn** | **11 05 18.1** | **+0.5** |
| **ROCH** | **El Roble** | **3.70** | **168** | *e*P | | **Pn** | **11 05 19.6** | **+1.3** |
| **PEL** | **Peldehue** | **3.93** | **164** | | | **Pn** | **11 05 23.0** | **+1.7** |
| **MT02** | **Curacav** | **3.96** | **170** | | | **Pn** | **11 05 22.5** | **+0.8** |
| **MT02** | **Curacav** | **3.96** | **170** | *e*P | | **Pn** | **11 05 22.4** | **+0.8** |
| MT02 | | | | *e*S | | **Sn** | **11 06 08.0** | **-0.5** |
| MT02 | | | | IAML | | | 11 06 27.3 | |
| | comp=Z,159nm,0.7s | | | | | | | |
| **AVFE** | **Valle Fertil** | **4.11** | **110** | *e*P | | **Pn** | **11 05 26.4** | **+2.6** |
| AVFE | | | | *e*S | | **Sn** | **11 06 09.2** | **-3.2** |
| AVFE | | | | IAML | | | 11 06 33.3 | |
| | comp=Z,445nm,0.5s | | | | | | | |
| **MT05** | **Renca** | **4.16** | **166** | Pn | | **Pn** | **11 05 25.5** | **+1.1** |
| **MT16** | **CCHEN** | **4.24** | **164** | | | **Pn** | **11 05 26.1** | **+0.5** |
| **VA05** | **Santo Domingo** | **4.30** | **176** | | | **Pn** | **11 05 26.9** | **+0.5** |
| **MT03** | **Universidad Ad** | **4.31** | **164** | | | **Pn** | **11 05 28.5** | **+2.0** |
| **MT03** | **Universidad Ad** | **4.31** | **164** | *e*P | | **Pn** | **11 05 28.8** | **+2.3** |
| MT03 | | | | *e*S | | **Sn** | **11 06 17.7** | **+0.4** |
| MT03 | | | | IAML | | | 11 06 46.6 | |
| | comp=Z,311nm,0.6s | | | | | | | |
| **MT04** | **Ro Olivares** | **4.33** | **159** | *e*P | | **Pn** | **11 05 29.8** | **+2.9** |
| MT04 | | | | *e*S | | **Sn** | **11 06 20.4** | **+2.4** |
| MT04 | | | | IAML | | | 11 06 37.0 | |
| | comp=Z,167nm,0.4s | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.36** | **92** | *e*P | | **Pn** | **11 05 29.9** | **+2.5** |
| ACLC | | | | *e*S | | **Sn** | **11 06 20.1** | **+1.4** |
| ACLC | | | | IAML | | | 11 06 42.1 | |
| | comp=Z,208nm,1.0s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **4.40** | **158** | | | **Pn** | **11 05 30.9** | **+3.0** |
| **MT08** | **Bocatoma Ro** | **4.40** | **158** | *e*P | | **Pn** | **11 05 31.7** | **+3.8** |
| MT08 | | | | IAML | | | 11 06 53.9 | |
| | comp=Z,113nm,1.2s | | | | | | | |
| **MT09** | **Talagante** | **4.49** | **170** | Pn | | **Pn** | **11 05 30.7** | **+1.7** |
| **MT01** | **Popeta** | **4.54** | **173** | | | **Pn** | **11 05 30.6** | **+1.0** |
| **MT01** | **Popeta** | **4.54** | **173** | *e*P | | **Pn** | **11 05 30.0** | **+0.4** |
| MT01 | | | | IAML | | | 11 06 51.8 | |
| | comp=Z,220nm,0.4s | | | | | | | |
| **MT13** | **San Alfonso** | **4.60** | **162** | | | **Pn** | **11 05 31.1** | **+0.5** |
| **GO02** | **Mina Guanaco** | **4.67** | **27** | Pn | | **Pn** | **11 05 32.3** | **+0.6** |
| **GO02** | **Mina Guanaco** | **4.67** | **27** | *e*P | | **Pn** | **11 05 32.6** | **+0.9** |
| GO02 | | | | *e*S | | **Sn** | **11 06 25.8** | **-0.8** |
| **LMEL** | **Las Melosas** | **4.72** | **162** | | | **Pn** | **11 05 35.1** | **+2.9** |
| **LMEL** | **Las Melosas** | **4.72** | **162** | *e*P | | **Pn** | **11 05 34.5** | **+2.2** |
| **BO04** | **La Punta** | **4.76** | **166** | | | **Pn** | **11 05 34.2** | **+1.5** |
| **PB14** | **IPOC Station P** | **4.91** | **17** | Pn | | **Pn** | **11 05 34.3** | **-0.6** |
| **PB14** | **IPOC Station P** | **4.91** | **17** | *e*S | | **Sn** | **11 06 30.3** | **-2.0** |
| PB14 | | | | IAML | | | 11 07 06.6 | |
| | comp=Z,112nm,0.5s | | | | | | | |
| **ACHE** | **Chepes** | **4.91** | **113** | *e*P | | **Pn** | **11 05 31.7** | **-3.2** |
| ACHE | | | | *e*S | | **Sn** | **11 06 32.3** | **0.0** |
| **BO01** | **Tunca** | **5.08** | **172** | | | **Pn** | **11 05 37.7** | **+0.7** |
| **BO01** | **Tunca** | **5.08** | **172** | *e*P | | **Pn** | **11 05 38.0** | **+0.9** |
| BO01 | | | | *e*S | | **Sn** | **11 06 37.0** | **+0.9** |
| BO01 | | | | IAML | | | 11 06 46.4 | |
| | comp=Z,134nm,0.2s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **5.51** | **170** | | | **Pn** | **11 05 43.4** | **+0.3** |
| **GO05** | **Huala** | **5.64** | **180** | | | **Pn** | **11 05 44.5** | **-0.3** |
| **ML02** | **Panimavida** | **6.41** | **176** | Pn | | **Pn** | **11 05 55.7** | **+0.4** |
| **PB05** | **IPOC Station P** | **6.66** | **14** | Pn | | **Pn** | **11 05 57.1** | **-1.8** |
| **PB04** | **IPOC Station P** | **7.17** | **13** | Pn | | **Pn** | **11 06 04.7** | **-1.3** |
| **H03N1** | **Juan Fernandez** | **7.21** | **234** | T | | T | 11 13 54.3 | |
| | baz=63,slow=72 | | | | | | | |
| **AF01** | **San Pedro de A** | **7.22** | **29** | Pn | | **Pn** | **11 06 06.3** | **-0.4** |
| **H03N2** | **Juan Fernandez** | **7.23** | **234** | T | | T | 11 13 54.3 | |
| | baz=63,slow=72 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.23** | **234** | T | | T | 11 13 52.9 | |
| | baz=63,slow=72 | | | | | | | |
| **LVC** | **Limon Verde** | **7.25** | **23** | Pn | | **Pn** | **11 06 07.1** | **-0.1** |
| | comp=Z,0.7nm,0.3s,baz=174,slow=6.3,SNR=14 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **11 07 26.4** | **-3.8** |
| | comp=Z,2.1nm,0.3s,baz=221,slow=20,SNR=1.6 | | | | | | | |
| LVC | | | | LR | | LR | 11 09 02.7 | |
| | comp=Z,203nm,19.6s,baz=212,slow=39 | | | | | | | |
| | comp=Z,2.5nm,0.2s | | | | | | | |
| **VA04** | **Juan Fernndez** | **7.27** | **232** | | | **Pn** | **11 06 06.7** | **-0.4** |
| **BI02** | **San Fabin de** | **7.31** | **176** | | | **Pn** | **11 06 08.5** | **+0.7** |
| **H03S3** | **Juan Fernandez** | **7.43** | **231** | T | | T | 11 14 03.1 | |
| | baz=56 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **7.43** | **231** | T | | T | 11 14 03.7 | |
| | baz=56 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **7.44** | **231** | T | | T | 11 14 04.7 | |
| | baz=56 | | | | | | | |
| **PB09** | **IPOC Station P** | **7.91** | **19** | Pn | | **Pn** | **11 06 15.6** | **-0.5** |
| **PATCX** | **Punta Patache** | **8.65** | **11** | Pn | | **Pn** | **11 06 25.3** | **-0.8** |
| **TA01** | **Diego Aracena** | **8.89** | **11** | Pn | | **Pn** | **11 06 28.5** | **-0.9** |
| **HMBC** | **Humberstone** | **9.23** | **12** | Pn | | **Pn** | **11 06 33.4** | **-0.7** |
| **GO06** | **Curarrehue** | **10.21** | **178** | Pn | | **Pn** | **11 06 47.6** | **0.0** |
| **PLCA** | **Paso Flores** | **11.41** | **175** | Pn | | **Pn** | **11 07 03.7** | **-0.3** |
| **PLCA** | **Paso Flores** | **11.41** | **175** | Pn | | **Pn** | **11 07 03.0** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=342,slow=12,SNR=7.3 | | | | | | | |
| PLCA | | | | LR | | LR | 11 11 26.7 | |
| | comp=Z,179nm,20.5s,baz=20,slow=38 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **PB18** | **Visviri** | **11.93** | **11** | Pn | | **Pn** | **11 07 10.5** | **-0.9** |
| **TRQA** | **Tornquist** | **12.00** | **139** | Pn | | **Pn** | **11 07 13.0** | **+1.0** |
| **LL05** | **Los Muermos** | **12.09** | **185** | Pn | | **Pn** | **11 07 14.5** | **+1.4** |
| **LL06** | **Loncomilla** | **12.91** | **186** | Pn | | **Pn** | **11 07 24.9** | **+0.6** |
| **LL01** | **San Ignacio de** | **13.01** | **182** | Pn | | **Pn** | **11 07 25.7** | **+0.1** |
| **CPUP** | **Villa Florida** | **13.28** | **80** | Pn | | **Pn** | **11 07 29.8** | **+0.3** |
| **CPUP** | **Villa Florida** | **13.28** | **80** | Pn | | **Pn** | **11 07 30.6** | **+1.1** |
| | comp=Z,0.1nm,0.3s,baz=249,slow=15,SNR=1.4 | | | | | | | |
| CPUP | | | | LR | | LR | 11 13 14.4 | |
| | comp=Z,119nm,20.3s,baz=249,slow=40 | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| **LPAZ** | **La Paz** | **13.47** | **16** | Pn | | **Pn** | **11 07 32.2** | **-0.4** |
| **LPAZ** | **La Paz** | **13.47** | **16** | Pn | | **Pn** | **11 07 35.3** | **+2.6** |
| | comp=Z,0.4nm,0.3s,baz=196,slow=5.5,SNR=7.3 | | | | | | | |
| LPAZ | | | | LR | | LR | 11 12 34.8 | |
| | comp=Z,93nm,20.7s,baz=201,slow=36 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **SIV** | **San Ignacio** | **16.64** | **39** | Pn | | **Pn** | **11 08 15.2** | **+0.7** |
| | baz=219,slow=11,SNR=31 | | | | | | | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **NNA** | **Nana** | **17.87** | **344** | LR | | LR | 11 14 18.5 | |
| | comp=Z,52nm,19.1s,baz=160,slow=33 | | | | | | | |
| **GO08** | **Villa O'Higgin** | **19.09** | **181** | P | | **P** | **11 08 43.2** | **-0.4** |
| **VILB** | **Vilhena** | **19.63** | **36** | P | | **P** | **11 08 48.7** | **-1.1** |
| VILB | | | | IAmb | | IAmb | 11 08 53.8 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **ETMB** | **Extrema** | **20.16** | **17** | P | | **P** | **11 08 54.1** | **-1.5** |
| ETMB | | | | IAmb | | IAmb | 11 09 02.5 | |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **GO09** | **Cerro Castillo** | **21.90** | **181** | P | | **P** | **11 09 12.7** | **-1.4** |
| GO09 | | | | IAmb | | IAmb | 11 09 38.5 | |
| | comp=Z,34nm,1.2s | | | | | | | |
| **SAML** | **Samuel** | **21.90** | **24** | P | | **P** | **11 09 12.7** | **-1.7** |
| **BDFB** | **Brasilia** | **25.91** | **63** | LR | | LR | 11 20 42.7 | |
| | comp=Z,74nm,21.4s,baz=117,slow=38 | | | | | | | |
| **BELA** | **Belgrano 2** | **51.43** | **171** | P | | **P** | **11 13 27.1** | **+1.2** |
| BELA | | | | IAmb | | IAmb | 11 13 55.9 | |
| | comp=Z,3.4nm,1.4s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **53.64** | **159** | ⇑P | | **P** | **11 13 42.7** | **+0.4** |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **53.93** | **158** | ⇑P | | **P** | **11 13 44.8** | **+0.5** |
| | comp=Z,6.7nm,1.0s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **54.28** | **159** | ⇑P | | **P** | **11 13 47.3** | **+0.4** |
| | comp=Z,8.5nm,0.6s,baz=287,slow=7.5 | | | | | | | |
| **SNAA** | **Sanae** | **55.87** | **159** | P | | **P** | **11 13 59.0** | **+0.5** |
| **SNAA** | **Sanae** | **55.87** | **159** | ⇑P | | **P** | **11 13 58.6** | **+0.1** |
| | comp=Z,99nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **55.87** | **159** | P | | **P** | **11 13 58.6** | **+0.1** |
| | comp=Z,4.6nm,0.6s,baz=275,slow=7.5,SNR=42 | | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **57.58** | **159** | ⇑P | | **P** | **11 14 10.8** | **0.0** |
| | comp=Z,147nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.87** | **180** | P | | **P** | **11 14 34.6** | **+0.9** |
| QSPA | | | | IAmb | | IAmb | 11 14 35.4 | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.87** | **180** | P | | **P** | **11 14 33.9** | **+0.3** |
| | comp=Z,1.7nm,0.6s,baz=207,slow=0.3,SNR=31 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **65.75** | **330** | P | | **P** | **11 15 06.0** | **-0.3** |
| **TXAR** | **Lajitas Array** | **65.75** | **330** | P | | **P** | **11 15 07.8** | **+1.5** |
| | comp=Z,0.5nm,0.9s,baz=157,slow=9.0,SNR=5.3 | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | |
| **DBIC** | **Dimbokro** | **73.66** | **72** | P | | **P** | **11 15 55.3** | **-0.1** |
| **DBIC** | **Dimbokro** | **73.66** | **72** | P | | **P** | **11 15 55.2** | **-0.1** |
| | comp=Z,4.3nm,0.7s,baz=214,slow=7.8,SNR=3.8 | | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **MAW** | **Mawson** | **77.61** | **164** | P | | **P** | **11 16 17.0** | **-0.1** |
| | comp=Z,1.9nm,0.5s,baz=179,slow=14,SNR=4.1 | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **79.67** | **333** | P | | **P** | **11 16 30.0** | **+1.0** |
| | comp=Z,0.2nm,0.6s,baz=129,slow=8.6,SNR=2.7 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **121.72** | **208** | PKP | | **PKPdf** | **11 23 15.0** | **-0.9** |
| | comp=Z,0.2nm,0.6s,baz=114,slow=1.8,SNR=1.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.82** | **210** | PKP | | **PKPdf** | **11 23 21.3** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=154,slow=1.6,SNR=15 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **149.30** | **38** | PKPbc | | **PKiKP** | **11 24 10.7** | **-0.3** |
| | comp=Z,2.3nm,0.4s,baz=305,slow=3.0,SNR=18 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.18** | **28** | PKP | | **PKPdf** | **11 24 07.7** | **+0.9** |
| | comp=Z,2.4nm,0.5s,baz=335,slow=2.9,SNR=4.1 | | | | | | | |
| ZALV | | | | PKPbc | | **PKiKP** | **11 24 12.6** | **-0.1** |
| | comp=Z,7.0nm,0.5s,baz=298,slow=3.2,SNR=32 | | | | | | | |
| **MKAR** | **Makanchi Array** | **153.45** | **42** | PKPbc | | **PKiKP** | **11 24 19.9** | **+0.2** |
| | comp=Z,1.2nm,0.7s,baz=291,slow=1.6,SNR=11 | | | | | | | |

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*IDC **10** 11:25:54.7±1.1, 54°.30S×146°.91W, h0km, mb4.3/4, mbtmp4.3/4, MS3.8/5, Error ellipse: s-maj=50.2km s-min=30.3km az=20.0*
*NEIC **10** 11:25:56.3±1.6, 54°.3S±0°.2×146°.8W±0°.1, h10km±1km, mb4.9/11, Error ellipse: s-maj=38.8km s-min=8.5km az=12.0*
**ISC 10 11:25:55.5±0.5, 54°.3S±0°.2×146°.7W±0°.1, h10km, n81, σ1s10/73, mb4.8/9, MS3.8/5, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **URZ** | **Urewera** | **29.31** | **288** | LR | | LR | 11 41 34.2 | |
| | comp=Z,103nm,18.8s,baz=216,slow=32 | | | | | | | |
| **RAR** | **Rarotonga** | **34.49** | **338** | LR | | LR | 11 42 57.0 | |
| | comp=Z,115nm,20.0s,baz=158,slow=30 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **50.67** | **95** | T | | T | 12 29 42.4 | |
| | baz=222,slow=74,SNR=7.1 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **50.68** | **95** | T | | T | 12 29 43.5 | |
| | baz=222,slow=74,SNR=6.4 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **50.69** | **95** | T | | T | 12 29 40.1 | |
| | baz=222,slow=74,SNR=5.5 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **50.95** | **95** | T | | T | 12 29 57.0 | |
| | baz=226,slow=72,SNR=49 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **50.95** | **95** | T | | T | 12 29 56.5 | |
| | baz=226,slow=72,SNR=52 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **50.97** | **95** | T | | T | 12 29 55.5 | |
| | baz=226,slow=72,SNR=49 | | | | | | | |
| **SNAA** | **Sanae** | **51.78** | **166** | P | | **P** | **11 35 04.1** | **+1.4** |
| SNAA | | | | IAmb | | IAmb | 11 36 55.3 | |
| | comp=Z,25nm,2.0s | | | | | | | |
| **SNAA** | **Sanae** | **51.78** | **166** | P | | **P** | **11 35 03.6** | **+0.9** |
| | comp=Z,0.9nm,0.4s,baz=243,slow=8.9,SNR=8.2 | | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | | |
| **GO05** | **Huala** | **53.90** | **101** | P | | **P** | **11 35 18.6** | **-0.2** |
| **STKA** | **Stephens Creek** | **54.40** | **264** | P | | **P** | **11 35 22.9** | **+0.5** |
| | comp=Z,3.6nm,0.8s,baz=142,slow=15,SNR=3.8 | | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **54.71** | **102** | P | | **P** | **11 35 25.1** | **+0.3** |
| BO02 | | | | IAmb | | IAmb | 11 35 28.2 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **BO01** | **Tunca** | **54.83** | **102** | P | | **P** | **11 35 25.4** | **-0.2** |
| BO01 | | | | IAmb | | IAmb | 11 35 42.3 | |
| | comp=Z,30nm,1.7s | | | | | | | |
| **LVC** | **Limon Verde** | **64.89** | **94** | LR | | LR | 11 58 54.9 | |
| | comp=Z,88nm,20.0s,baz=192,slow=30 | | | | | | | |
| **AS31** | **Alice Springs** | **65.03** | **264** | P | | **P** | **11 36 35.6** | **-0.3** |
| **AS31** | **Alice Springs** | **65.03** | **264** | P | | **P** | **11 36 35.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **65.03** | **264** | P | | **P** | **11 36 35.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **65.03** | **264** | P | | **P** | **11 36 35.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **65.03** | **264** | P | | **P** | **11 36 35.7** | **-0.2** |
| | comp=Z,4.1nm,0.8s,baz=137,slow=6.3,SNR=40 | | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **67.38** | **242** | T | | T | 12 50 35.5 | |
| | baz=140,slow=76,SNR=11 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **67.39** | **242** | T | | T | 12 50 33.8 | |
| | baz=140,slow=76,SNR=8.8 | | | | | | | |
| **H01W3** | **Cape Leeu

*$M_{\theta\theta}$2.58±.11; $M_{\phi\phi}$0.26±.09; $M_{r\theta}$-0.82±.16; $M_{\theta\phi}$-0.21±.06; $M_{rr}$0.46±.20; Best double couple: $M_0$2.87500×$10^{16}$ NP1:$\phi_s$102.00000°,δ54.00000°,λ-82.00000°. NP2: $\phi_s$269.00000°,δ37.00000°,λ-101.00000°. Principal axes: T 2.7330, Plg9.0000°, Azm187.0000°; T 0.2840, Plg6.0000°, Azm277.0000°; P -3.0170, Plg79.0000°, Azm43.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **10** 11:26:41.0±1.2, 50.01N±0.07×178.25W±0.07, h27km±4km, mb4.8/430, ML4.5(AEIC) Error ellipse: s-maj=10.6km s-min=5.1km az=155.0*

**ISC 10 11:26:38.5±0.7, 50.00N±0.06×178.33W±0.04, h13km±3km, n1068, σ0.99/965, mb4.8/304, MS3.6/43, 24C-48D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| GAEA | Gareloi East | 1.80 | 352 | | | Pn | 11 27 10.1 | +0.8 |
| GANE | Gareloi Northe | 1.84 | 351 | | | Pn | 11 27 10.5 | +0.7 |
| TASE | Tanaga Southea | 1.84 | 6 | | | Pn | 11 27 10.4 | +0.6 |
| GANO | Gareloi North | 1.84 | 351 | | | Pn | 11 27 10.4 | +0.6 |
| TAFP | Tanaga Falls P | 1.91 | 6 | | | Pn | 11 27 11.0 | +0.2 |
| TAFP | | | | | | Sn | 11 27 34.6 | 0.0 |
| TANO | Tanaga North | 1.92 | 4 | | | Pn | 11 27 11.5 | +0.7 |
| KIWB | Kanaga Island | 2.00 | 21 | | | Pn | 11 27 11.9 | 0.0 |
| KIKV | Kanaga Island | 2.02 | 21 | | | Pn | 11 27 12.4 | +0.2 |
| KIKV | | | | | | Sn | 11 27 36.8 | -0.4 |
| AMKA | Amchitka | 2.04 | 313 | | | Pn | 11 27 11.8 | -0.7 |
| KICM | Kanaga Island | 2.05 | 20 | | | Pn | 11 27 13.1 | +0.5 |
| KICM | | | | | | Sn | 11 27 37.7 | -0.2 |
| KIRH | Kanaga Island | 2.05 | 22 | | | Pn | 11 27 13.1 | +0.4 |
| KINC | Kanaga Island | 2.07 | 21 | | | Pn | 11 27 13.1 | +0.1 |
| ADK | Adak | 2.15 | 28 | P | | Pn | 11 27 13.9 | -0.1 |
| ADK | Adak | 2.15 | 28 | | | Pn | 11 27 13.4 | -0.5 |
| ADK | Adak | 2.15 | 28 | P | | Pn | 11 27 13.5 | -0.5 |
| ADK | | | | | | | 11 27 39.5 | |
| GSMY | Great Sitkin M | 2.50 | 34 | | | Pn | 11 27 18.6 | -0.2 |
| GSTR | Great Sitkin T | 2.54 | 33 | | | Pn | 11 27 19.2 | -0.1 |
| KOKL | Mount Kliuchef | 3.48 | 47 | | | Pn | 11 27 32.1 | -0.3 |
| KOFP | Korovin Flat P | 3.50 | 48 | | | Pn | 11 27 32.4 | -0.2 |
| KOSE | Korovin Southe | 3.57 | 47 | | | Pn | 11 27 33.6 | +0.1 |
| SHEM | Shemya Is, Ala | 5.47 | 303 | Pn | | Pn | 11 28 00.5 | +0.9 |
| SHEM | 11nm,0.3s,baz=84,slow=2.6,SNR=20 | | | Sn | | Sn | 11 28 58.5 | -3.9 |
| | 5.2nm,0.3s,baz=226,slow=22,SNR=8.4 58nm,0.6s | | | | | | | |
| CLES | Cleveland East | 5.98 | 59 | Pn | | Pn | 11 28 07.2 | +0.6 |
| CLCO | Concord Point, | 6.06 | 59 | | | Pn | 11 28 08.0 | +0.3 |
| NIKH | Nikolski High | 6.62 | 60 | P | | Pn | 11 28 15.1 | -0.3 |
| NIKH | Nikolski High | 6.62 | 60 | | | Pn | 11 28 15.3 | -0.1 |
| NIKH | Nikolski High baz=246 | 6.62 | 60 | P | | Pn | 11 28 15.1 | -0.3 |
| OKWE | Okmok W'ng Wal | 7.16 | 57 | | | Pn | 11 28 22.9 | +0.1 |
| OKCE | Okmok Cone E | 7.18 | 58 | | | Pn | 11 28 24.0 | +0.8 |
| OKFG | Magazine Ridge | 7.32 | 58 | | | Pn | 11 28 25.3 | +0.5 |
| MAPS | Pakushin South | 8.00 | 57 | | | Pn | 11 28 34.9 | +0.5 |
| MGOD | Makushin Gods | 8.04 | 57 | | | Pn | 11 28 35.2 | +0.4 |
| MSW | Makushin Switc | 8.13 | 57 | | | Pn | 11 28 36.3 | +0.2 |
| MTBL | Makushin Table | 8.21 | 57 | | | Pn | 11 28 37.7 | +0.4 |
| UNV | Unalaska Valle | 8.26 | 58 | P | | Pn | 11 28 37.0 | -0.8 |
| UNV | Unalaska Valle | 8.26 | 58 | | | Pn | 11 28 37.8 | 0.0 |
| UNV | Unalaska Valle baz=246 | 8.26 | 58 | P | | Pn | 11 28 37.5 | -0.3 |
| LVA | Lava Point | 8.64 | 56 | | | Pn | 11 28 43.1 | +0.1 |
| SPIA | Saint Paul Isl | 8.64 | 31 | P | | Pn | 11 28 44.7 | +1.7 |
| SPIA | Saint Paul Isl baz=217 | 8.64 | 31 | P | | Pn | 11 28 44.1 | +1.1 |
| AKV | Akutan Volcano | 8.66 | 57 | | | Pn | 11 28 44.1 | +0.7 |
| AKSA | Akutan Strait | 8.81 | 57 | | | Pn | 11 28 45.8 | +0.5 |
| FALS | False Pass baz=248 | 10.31 | 56 | P | | Pn | 11 29 05.6 | -0.3 |
| S12K | Black Hills | 11.36 | 54 | Pn | | Pn | 11 29 21.1 | +0.8 |
| S12K | Black Hills baz=246 | 11.36 | 54 | P | | Pn | 11 29 20.7 | +0.4 |
| SDPT | Sand Point | 12.07 | 57 | P | | Pn | 11 29 28.6 | -1.3 |
| SDPT | Sand Point | 12.07 | 57 | Pn | | Pn | 11 29 28.3 | -1.6 |
| SDPT | Sand Point baz=251 | 12.07 | 57 | P | | Pn | 11 29 28.7 | -1.3 |
| CNBA | Chernabura Isl | 12.40 | 60 | Pn | | Pn | 11 29 32.5 | -2.1 |
| M11K | Mekoryuk baz=219 | 12.47 | 29 | P | | Pn | 11 29 35.7 | +0.3 |
| M13K | Dall Lake | 13.45 | 33 | | | Pn | 11 29 49.8 | +1.1 |
| M13K | Dall Lake baz=226 | 13.45 | 33 | P | | Pn | 11 29 48.7 | 0.0 |
| CHGN | Chignik | 13.48 | 55 | Pn | | Pn | 11 29 46.8 | -2.5 |
| CHGN | Chignik baz=250 | 13.48 | 55 | P | | Pn | 11 29 49.6 | +0.3 |
| O14K | Tigyukauivet M | 13.51 | 40 | Pn | | Pn | 11 29 46.8 | -2.7 |
| O14K | Tigyukauivet M baz=234 | 13.51 | 40 | P | | Pn | 11 29 50.3 | +0.7 |
| N14K | Kuskokwak Cree baz=231 | 13.74 | 37 | P | | Pn | 11 29 53.6 | +0.8 |
| O15K | Ungalikthiuk R baz=237,SNR=14 | 14.07 | 42 | P | | Pn | 11 29 57.5 | +0.2 |
| K13K | Kusilvak Mount | 14.15 | 27 | Pn | | Pn | 11 29 58.3 | -0.1 |
| K13K | Kusilvak Mount baz=218 | 14.15 | 27 | P | | Pn | 11 29 58.1 | -0.2 |
| M14K | Bethel | 14.18 | 34 | Pn | | Pn | 11 29 59.4 | +0.7 |
| M14K | Bethel baz=228,SNR=16 | 14.18 | 34 | P | | Pn | 11 29 58.2 | -0.6 |
| L14K | Kuka Creek | 14.33 | 32 | Pn | | Pn | 11 30 01.3 | +0.5 |
| L14K | Kuka Creek baz=224,SNR=8.1 | 14.33 | 32 | P | | Pn | 11 30 01.6 | +0.7 |
| N15K | Kwethluk River | 14.53 | 39 | Pn | | Pn | 11 30 03.9 | +0.4 |
| N15K | Kwethluk River baz=233 | 14.53 | 39 | P | | Pn | 11 30 04.2 | +0.6 |
| M15K | Kasigluk River baz=230,SNR=11 | 14.62 | 36 | P | | Pn | 11 30 05.0 | +0.3 |
| PET | Petropavlovsk | 14.63 | 291 | Pn | | Pn | 11 30 05.9 | +1.0 |
| PET | Petropavlovsk | 14.63 | 291 | *e*P | | Pn | 11 30 06.4 | +1.4 |
| PET | | | | *e*S | | Sn | 11 32 39.8 | -7.0 |
| PET | comp=Z,25nm,1.3s | | | pmax | | pmax | | |
| PET | comp=Z,100nm,18.0s | | | MLR | | MLR | | |
| PET | comp=Z,100nm,15.0s | | | MLR | | MLR | | |
| PET | Petropavlovsk comp=Z,29nm,1.2s,comp=Z,583nm | 14.63 | 291 | P | | Pn | 11 30 05.5 | +0.5 |
| P16K | Nushagak River baz=241,SNR=12 | 14.81 | 45 | P | | Pn | 11 30 07.6 | +0.2 |
| CHIR | Chirikof Islan | 14.85 | 58 | Pn | | Pn | 11 30 06.2 | -1.7 |
| L15K | Ungalak Mounta baz=226,SNR=14 | 14.98 | 32 | P | | Pn | 11 30 09.9 | +0.3 |
| R17L | Mt. Peulik Vol baz=249,SNR=6.6 | 15.00 | 51 | P | | Pn | 11 30 08.5 | -1.4 |
| PLK4 | Peulik 4 | 15.00 | 51 | Pn | | Pn | 11 30 08.7 | -1.4 |
| O16K | Kokwok River B | 15.05 | 43 | Pn | | Pn | 11 30 11.0 | +0.5 |
| O16K | Kokwok River B baz=239,SNR=9.4 | 15.05 | 43 | P | | Pn | 11 30 10.3 | -0.2 |
| J14K | Nanvaranak Lak | 15.11 | 27 | Pn | | Pn | 11 30 12.6 | +1.2 |
| J14K | Nanvaranak Lak baz=219 | 15.11 | 27 | P | | Pn | 11 30 12.3 | +1.0 |
| N16K | Nishlik Lake baz=235,SNR=7.7 | 15.24 | 39 | P | | Pn | 11 30 12.3 | -0.8 |
| K15K | Wolf Creek Mou | 15.40 | 31 | | | Pn | 11 30 15.6 | +0.4 |
| K15K | comp=Z,35nm,1.0s | | | IAmb | | IAmb | 11 30 22.4 | |
| K15K | Wolf Creek Mou baz=224,SNR=7.3 | 15.40 | 31 | P | | Pn | 11 30 14.7 | -0.4 |
| Q17K | Contact Creek baz=247 | 15.47 | 49 | P | | Pn | 11 30 14.7 | -1.6 |
| M16K | Timber Creek | 15.49 | 37 | | | Pn | 11 30 17.1 | +0.7 |
| M16K | Timber Creek baz=233 | 15.49 | 37 | P | | Pn | 11 30 15.8 | -0.6 |
| O17K | Koliganek Bris baz=240 | 15.58 | 43 | P | | Pn | 11 30 16.7 | -0.8 |
| P17K | Kvichak River baz=243 | 15.60 | 46 | P | | Pn | 11 30 17.8 | 0.0 |
| L16K | Owhat River | 15.72 | 35 | | | Pn | 11 30 18.5 | -0.8 |
| L16K | Owhat River baz=230,SNR=5.8 | 15.72 | 35 | P | | Pn | 11 30 19.1 | -0.2 |
| ACHA | Angle Creek He | 15.73 | 50 | | | Pn | 11 30 17.6 | -2.0 |
| SII | Sitkinak Islan | 15.81 | 56 | P | | Pn | 11 30 17.8 | -2.7 |
| SII | Sitkinak Islan | 15.81 | 56 | Pn | | Pn | 11 30 20.1 | -0.4 |
| SII | comp=Z,50nm,1.0s | | | IAmb | | IAmb | 11 30 27.6 | |
| SII | Sitkinak Islan baz=255 | 15.81 | 56 | P | | Pn | 11 30 19.9 | -0.6 |
| N17K | Nushagak Hills | 15.92 | 41 | | | Pn | 11 30 21.2 | -0.8 |
| N17K | Nushagak Hills baz=238 | 15.92 | 41 | P | | Pn | 11 30 22.0 | 0.0 |
| Q18K | Katmai Hardscr baz=247,SNR=7.8 | 16.05 | 48 | P | | Pn | 11 30 22.7 | -1.0 |
| ANM | Nome | 16.13 | 20 | | | Pn | 11 30 24.1 | -0.5 |
| ANM | Nome baz=211 | 16.13 | 20 | P | | Pn | 11 30 24.1 | -0.5 |
| ANM | Nome | 16.13 | 20 | P | | Pn | 11 30 24.2 | -0.5 |
| ANM | comp=Z,53nm,1.6s | | | pmax | | pmax | | |
| P18K | Big Mountain, | 16.24 | 46 | | | Pn | 11 30 24.6 | -1.6 |
| P18K | Big Mountain, baz=245 | 16.24 | 46 | P | | Pn | 11 30 25.9 | -0.2 |
| M17K | Holitna River | 16.31 | 38 | Pn | | Pn | 11 30 27.0 | +0.1 |
| M17K | comp=Z,64nm,0.9s | | | IAmb | | IAmb | 11 30 35.0 | |
| M17K | Holitna River baz=235,SNR=13 | 16.31 | 38 | P | | Pn | 11 30 27.1 | +0.1 |
| SKR | Severo-Kuril's | 16.31 | 282 | *i*P | | P | 11 30 29.0 | -0.9 |
| J16K | Anvik River | 16.41 | 29 | | | Pn | 11 30 27.6 | -0.6 |
| J16K | Anvik River baz=224,SNR=11 | 16.41 | 29 | P | | Pn | 11 30 27.8 | -0.4 |
| L17K | Donlin baz=231 | 16.42 | 35 | P | | Pn | 11 30 28.1 | -0.2 |
| OHAK | Old Harbor | 16.45 | 54 | P | | Pn | 11 30 25.1 | -3.6 |
| OHAK | Old Harbor | 16.45 | 54 | Pn | | Pn | 11 30 28.4 | -0.3 |
| OHAK | comp=Z,40nm,0.7s | | | IAmb | | IAmb | 11 30 36.4 | |
| OHAK | Old Harbor baz=254,SNR=13 | 16.45 | 54 | P | | Pn | 11 30 27.8 | -0.9 |
| O18K | Koktuh Hills | 16.46 | 44 | | | Pn | 11 30 28.7 | -0.1 |
| O18K | Koktuh Hills baz=243 | 16.46 | 44 | P | | Pn | 11 30 28.5 | -0.3 |
| TNA | Tin City baz=204 | 16.52 | 15 | P | | Pn | 11 30 29.0 | -0.5 |
| N18K | Kilae Creek | 16.55 | 41 | | | Pn | 11 30 30.2 | +0.1 |
| N18K | comp=Z,78nm,1.6s | | | IAmb | | IAmb | 11 30 38.5 | |
| N18K | Kilae Creek baz=240,SNR=8.8 | 16.55 | 41 | P | | Pn | 11 30 30.0 | 0.0 |
| F14K | Arctic Creek baz=208 | 16.73 | 18 | P | | Pn | 11 30 31.5 | -0.7 |
| K17K | Iditarod | 16.79 | 33 | Pn | | Pn | 11 30 32.4 | -0.6 |
| K17K | Iditarod baz=230 | 16.79 | 33 | P | | Pn | 11 30 32.5 | -0.5 |
| G15K | Niukluk baz=213,SNR=9.8 | 16.80 | 21 | P | | Pn | 11 30 32.7 | -0.5 |
| Q19K | Cape Douglas, | 16.81 | 48 | Pn | | Pn | 11 30 32.8 | -0.5 |
| Q19K | Cape Douglas, baz=248 | 16.81 | 48 | P | | Pn | 11 30 31.9 | -1.5 |
| I17K | Unalakleet | 16.82 | 28 | Pn | | Pn | 11 30 33.4 | +0.1 |
| I17K | Unalakleet baz=222 | 16.82 | 28 | P | | Pn | 11 30 33.5 | +0.1 |
| SVW2 | Sparrevohn | 16.89 | 40 | Pn | | Pn | 11 30 33.6 | -0.7 |
| H16K | Elim baz=218 | 16.96 | 24 | P | | Pn | 11 30 35.5 | +0.3 |
| KDAK | Kodiak Island | 16.97 | 53 | Pn | | Pn | 11 30 32.9 | -2.4 |
| KDAK | comp=Z,83nm,1.2s | | | IAmb | | IAmb | 11 30 39.9 | |
| KDAK | Kodiak Island | 16.97 | 53 | Pn | | Pn | 11 30 32.9 | -2.4 |
| KDAK | comp=Z,1.2nm,0.3s,baz=193,slow=2.5,SNR=62 | | | Sn | | Sn | 11 33 41.6 | -2.0 |
| KDAK | comp=Z,0.4nm,0.3s,baz=30,slow=20,SNR=3.5 | | | LR | | LR | 11 37 17.6 | |
| KDAK | comp=Z,544nm,21.8s,baz=267,slow=38 | | | | | | | |
| KDAK | Kodiak Island baz=254 | 16.97 | 53 | P | | Pn | 11 30 34.2 | -1.2 |
| KDAK | Kodiak Island | 16.97 | 53 | *c i*P | | Pn | 11 30 32.8 | -2.5 |
| KDAK | comp=Z,740nm,20.0s | | | MLR | | MLR | | |
| J17K | VABM Dome | 16.98 | 31 | P | | P | 11 30 36.4 | -0.9 |
| J17K | comp=Z,40nm,0.8s | | | IAmb | | IAmb | 11 30 44.4 | |
| J17K | VABM Dome baz=226,SNR=34 | 16.98 | 31 | P | | Pn | 11 30 35.4 | 0.0 |
| M18K | Stony River baz=237,SNR=8.9 | 17.00 | 39 | P | | Pn | 11 30 36.0 | +0.3 |
| O19K | Port Alsworth | 17.01 | 44 | Pn | | Pn | 11 30 36.2 | +0.5 |
| L18K | Granite Mounta | 17.07 | 36 | | | Pn | 11 30 35.4 | -1.2 |
| L18K | comp=Z,113nm,1.6s | | | IAmb | | IAmb | 11 30 41.4 | |
| L18K | Granite Mounta baz=234,SNR=20 | 17.07 | 36 | P | | Pn | 11 30 36.8 | +0.3 |
| N19K | Bonanza Creek | 17.22 | 42 | | | Pn | 11 30 37.6 | -0.9 |
| N19K | Bonanza Creek baz=242,SNR=12 | 17.22 | 42 | P | | Pn | 11 30 38.2 | -0.3 |
| F15K | North Star Dit | 17.27 | 19 | | | Pn | 11 30 38.8 | -0.3 |
| F15K | comp=Z,151nm,1.9s | | | IAmb | | IAmb | 11 30 47.2 | |
| F15K | North Star Dit baz=211 | 17.27 | 19 | P | | Pn | 11 30 39.7 | +0.6 |
| SYI | Shuyak Island | 17.32 | 50 | Pn | | Pn | 11 30 36.9 | -2.7 |
| ILSW | Iliamna Southw | 17.45 | 46 | | | P | 11 30 42.0 | -0.7 |
| G16K | Koyuk River | 17.54 | 22 | | | Pn | 11 30 41.0 | -1.4 |
| G16K | Koyuk River baz=216,SNR=7.2 | 17.54 | 22 | P | | Pn | 11 30 42.7 | +0.3 |
| O20K | Slope Mountain baz=246 | 17.73 | 46 | P | | Pn | 11 30 44.6 | -0.3 |
| L19K | White Mountain | 17.76 | 38 | Pn | | Pn | 11 30 43.5 | -1.7 |
| L19K | comp=Z,61nm,1.0s | | | IAmb | | IAmb | 11 30 49.9 | |
| L19K | White Mountain baz=237,SNR=35 | 17.76 | 38 | P | | P | 11 30 45.4 | -0.5 |
| M19K | Big River Lodg | 17.80 | 39 | | | P | 11 30 46.2 | -0.2 |
| M19K | Big River Lodg baz=239 | 17.80 | 39 | P | | P | 11 30 46.2 | -0.2 |
| J18K | Innoko River | 17.82 | 33 | | | P | 11 30 47.0 | +0.4 |
| J18K | Innoko River baz=231 | 17.82 | 33 | P | | Pn | 11 30 45.9 | 0.0 |
| RSO | Redoubt South | 17.83 | 44 | Pn | | P | 11 30 46.7 | -0.2 |
| RSO | | | | P | | Pn | 11 30 47.0 | +0.9 |
| H17K | Granite Mounta | 17.83 | 26 | | | P | 11 30 47.9 | +1.2 |
| H17K | Granite Mounta baz=222 | 17.83 | 26 | P | | Pn | 11 30 45.9 | -0.1 |
| G17K | Kiwalik Mounta baz=216,SNR=10 | 18.06 | 24 | P | | P | 11 30 49.0 | -0.1 |
| CNPM | China Poot | 18.18 | 48 | | | Pn | 11 30 48.1 | -2.3 |
| L20K | Farewell, AK baz=238 | 18.30 | 38 | P | | Pn | 11 30 51.7 | -0.1 |
| M20K | Styx River | 18.30 | 40 | | | Pn | 11 30 50.9 | -1.1 |
| M20K | comp=Z,72nm,1.5s | | | IAmb | | IAmb | 11 30 57.0 | |
| M20K | Styx River baz=241,SNR=17 | 18.30 | 40 | P | | P | 11 30 51.9 | -0.1 |
| N20K | Mount Spurr baz=244,SNR=13 | 18.38 | 43 | P | | P | 11 30 52.7 | -0.1 |
| BRLK | Brrley Lake | 18.43 | 48 | P | | Pn | 11 30 53.2 | -0.2 |
| H18K | Honhosa River | 18.44 | 27 | | | Pn | 11 30 54.4 | +1.0 |
| H18K | comp=Z,128nm,1.8s | | | IAmb | | IAmb | 11 31 01.4 | |
| H18K | Honhosa River baz=224 | 18.44 | 27 | P | | Pn | 11 30 54.0 | +0.6 |
| SPU | Mount Spurr | 18.44 | 43 | P | | Pn | 11 30 54.0 | +0.5 |
| BRSE | Bradley Lake S baz=250 | 18.49 | 48 | P | | Pn | 11 30 54.3 | +0.2 |
| J19K | Poorman | 18.54 | 32 | P | | Pn | 11 30 55.7 | +1.1 |
| J19K | comp=Z,48nm,1.1s | | | IAmb | | IAmb | 11 30 58.8 | |
| J19K | Poorman baz=231,SNR=28 | 18.54 | 32 | P | | Pn | 11 30 55.3 | +0.7 |
| GCSA | Galena City Sc baz=228 | 18.61 | 29 | P | | Pn | 11 30 55.8 | +0.4 |
| F17K | Baldwin Pennin comp=Z,96nm,1.6s | 18.66 | 22 | IAmb | | IAmb | 11 31 01.3 | |
| F17K | Baldwin Pennin baz=216,SNR=8.5 | 18.66 | 22 | P | | Pn | 11 30 56.7 | +0.6 |
| K20K | Telida baz=236 | 18.71 | 35 | P | | Pn | 11 30 57.0 | +0.2 |
| G18K | Tagagawik baz=222,SNR=10 | 18.90 | 25 | P | | Pn | 11 30 59.4 | +0.4 |
| SKT | Skwentna | 19.02 | 41 | P | | Pn | 11 31 00.7 | +0.1 |
| SKT | comp=Z,37nm,0.9s | | | IAmb | | IAmb | 11 31 07.4 | |
| SKT | Skwentna baz=243,SNR=30 | 19.02 | 41 | P | | Pn | 11 31 00.5 | 0.0 |
| E17K | Hotham Inlet baz=214 | 19.05 | 20 | P | | Pn | 11 31 00.9 | +0.1 |
| SUA | Susitna One baz=246,SNR=14 | 19.13 | 43 | P | | Pn | 11 31 01.9 | -0.1 |
| J20K | Nowinta River | 19.16 | 33 | IAmb | | IAmb | 11 31 07.1 | |
| J20K | comp=Z,50nm,1.4s Nowinta River baz=233,SNR=16 | 19.16 | 33 | P | | Pn | 11 31 02.4 | +0.2 |
| F18K | Selawik baz=219,SNR=36 | 19.17 | 23 | P | | Pn | 11 31 03.4 | +1.2 |
| PPLA | Purkeypile baz=240,SNR=14 | 19.19 | 38 | P | | P | 11 31 01.6 | -0.2 |
| O22K | Cooper Landing | 19.22 | 46 | P | | P | 11 31 01.9 | -0.1 |
| O22K | comp=Z,32nm,0.7s | | | IAmb | | IAmb | 11 31 15.2 | |
| O22K | Cooper Landing baz=250 | 19.22 | 46 | P | | P | 11 31 02.1 | +0.1 |
| SEW | Seward baz=251 | 19.22 | 47 | P | | P | 11 31 01.7 | -0.2 |
| H19K | Roundabout Mou | 19.27 | 28 | P | | Pn | 11 31 03.2 | -0.3 |
| H19K | comp=Z,52nm,1.4s | | | IAmb | | IAmb | 11 31 08.8 | |
| H19K | Roundabout Mou baz=227,SNR=23 | 19.27 | 28 | P | | P | 11 31 02.9 | +0.4 |
| D17K | Noatak River baz=211,SNR=15 | 19.31 | 18 | P | | Pn | 11 31 03.7 | -0.2 |
| C16K | Lisburne Hills comp=Z,34nm,0.9s | 19.42 | 15 | IAmb | | IAmb | 11 31 11.2 | |
| C16K | Lisburne Hills baz=206 | 19.42 | 15 | P | | Pn | 11 31 04.8 | -0.4 |
| I20K | Naaghedeneel | 19.42 | 31 | P | | Pn | 11 31 04.6 | -0.7 |
| I20K | comp=Z,114nm,1.9s | | | IAmb | | IAmb | 11 31 10.4 | |
| I20K | Naaghedeneel baz=232,SNR=5.8 | 19.42 | 31 | P | | Pn | 11 31 04.9 | -0.4 |
| RC01 | Rabbit Creek A baz=248 | 19.43 | 44 | P | | P | 11 31 04.6 | +0.3 |
| G19K | Purcell Mounta | 19.52 | 26 | P | | Pn | 11 31 05.8 | -0.7 |
| G19K | comp=Z,51nm,1.2s | | | IAmb | | IAmb | 11 31 12.2 | |
| G19K | Purcell Mounta baz=224,SNR=23 | 19.52 | 26 | P | | Pn | 11 31 06.4 | -0.1 |
| M22K | Willow comp=Z,49nm,1.1s | 19.53 | 42 | IAmb | | IAmb | 11 31 15.5 | |
| M22K | Willow baz=246 | 19.53 | 42 | P | | Pn | 11 31 05.9 | -0.6 |
| E18K | Tukpahlearik C baz=216 | 19.60 | 21 | P | | Pn | 11 31 07.1 | -0.3 |
| BILL | Bilibino | 19.64 | 343 | P | | P | 11 31 06.1 | -0.3 |
| BILL | comp=Z,42nm,1.2s | | | IAmb | | IAmb | 11 31 13.0 | |
| BILL | Bilibino | 19.64 | 343 | *e*P | | P | 11 31 06.9 | +0.5 |
| BILL | comp=Z,16nm,0.9s | | | pmax | | pmax | | |
| BILL | comp=Z,371nm,23.0s | | | MLR | | MLR | | |
| RDOG | Red Dog Mine | 19.65 | 17 | P | | P | 11 31 06.6 | 0.0 |
| RDOG | Red Dog Mine baz=210 | 19.65 | 17 | P | | Pn | 11 31 07.7 | -0.4 |
| CHUM | Lake Minchumin baz=237,SNR=8.5 | 19.66 | 35 | P | | Pn | 11 31 07.5 | -0.6 |
| H20K | Anotleneega Mo baz=229,SNR=12 | 19.74 | 29 | P | | Pn | 11 31 08.5 | -0.5 |
| CUT | Chulitna | 19.74 | 40 | P | | P | 11 31 07.5 | -0.1 |
| CUT | Chulitna baz=244 | 19.74 | 40 | P | | P | 11 31 07.9 | +0.3 |
| F19K | Shaleruckik Mo comp=Z,54nm,1.3s | 19.84 | 24 | IAmb | | IAmb | 11 31 17.3 | |
| F19K | Shaleruckik Mo baz=222,SNR=38 | 19.84 | 24 | P | | Pn | 11 31 09.5 | -0.7 |
| PMR | Palmer | 19.90 | 43 | P | | P | 11 31 04.7 | -4.6 |
| PMR | Palmer baz=247,SNR=11 | 19.90 | 43 | P | | P | 11 31 09.7 | +0.5 |
| C17K | DeLong Mountai baz=209,SNR=9.2 | 19.97 | 16 | P | | P | 11 31 10.7 | +0.6 |
| PWL | Port Wells baz=250 | 19.99 | 46 | P | | P | 11 31 10.9 | +0.5 |
| KTH | Kantishna Hill | 20.02 | 37 | P | | P | 11 31 11.1 | +0.4 |
| GHO | Glory Hole Cre | 20.06 | 43 | P | | P | 11 31 11.6 | +0.4 |
| KNK | Knik Glacier comp=Z,45nm,1.1s | 20.13 | 44 | IAmb | | IAmb | 11 31 18.0 | |
| KNK | Knik Glacier baz=249,SNR=7.2 | 20.13 | 44 | P | | P | 11 31 12.0 | +0.1 |
| P23K | Montague Islan baz=254 | 20.17 | 48 | P | | P | 11 31 12.8 | +0.5 |
| BPAW | Bear Paw Mtn. baz=239,SNR=17 | 20.27 | 36 | P | | P | 11 31 13.5 | +0.1 |
| SML | Sawmill comp=Z,46nm,0.8s | 20.33 | 43 | IAmb | | IAmb | 11 31 20.0 | |
| SML | Sawmill baz=248,SNR=25 | 20.33 | 43 | P | | P | 11 31 14.2 | 0.0 |
| IMAR | Indian Mountai | 20.41 | 29 | P | | P | 11 31 15.1 | +0.2 |
| E19K | Redstone River baz=222 | 20.45 | 23 | P | | Pn | 11 31 16.3 | -1.1 |
| SEY | Seymchan comp=Z,23nm,0.9s,baz=120,slow=11,SNR=38 comp=Z,23nm,0.9s | 20.48 | 320 | P | | Pn | 11 31 17.9 | 0.0 |
| SEY | Seymchan | 20.48 | 320 | *d i*P | | Pn | 11 31 17.8 | 0.0 |
| SEY | comp=Z,40nm,1.1s | | | pmax | | pmax | | |
| SEY | comp=Z,197nm,18.0s | | | MLR | | MLR | | |
| C18K | Utukok River comp=Z,35nm,1.0s | 20.50 | 18 | IAmb | | IAmb | 11 31 25.1 | |
| C18K | Utukok River baz=213 | 20.50 | 18 | P | | P | 11 31 15.8 | 0.0 |
| I21K | Tanana baz=235 | 20.50 | 32 | P | | P | 11 31 16.7 | +0.8 |
| H21K | Melozitna Rive comp=Z,75nm,1.3s | 20.51 | 31 | IAmb | | IAmb | 11 31 23.9 | |
| H21K | Melozitna Rive baz=232,SNR=57 | 20.51 | 31 | P | | P | 11 31 16.4 | +0.4 |
| Q23K | Middleton Isla baz=257 | 20.55 | 50 | P | | P | 11 31 16.9 | +0.5 |
| F20K | Avaraart Lake | 20.55 | 25 | P | | P | 11 31 16.9 | +0.6 |
| F20K | Avaraart Lake baz=225,SNR=29 | 20.55 | 25 | P | | P | 11 31 16.3 | 0.0 |
| GLI | Glacier Island | 20.57 | 46 | P | | P | 11 31 16.4 | -0.4 |
| GLI | Glacier Island baz=252 | 20.57 | 46 | P | | P | 11 31 17.4 | +0.7 |
| M23K | Glacier View baz=249,SNR=14 | 20.59 | 43 | P | | P | 11 31 17.9 | +0.9 |
| WAT1 | Susitna Watana baz=245 | 20.64 | 40 | P | | P | 11 31 17.2 | -0.2 |
| HIN | Hinchinbrook I | 20.71 | 48 | P | | P | 11 31 18.4 | +0.2 |
| RND | Reindeer | 20.77 | 39 | P | | P | 11 31 18.2 | -0.6 |
| RND | comp=Z,29nm,1.1s | | | IAmb | | IAmb | 11 31 36.2 | |
| RND | Reindeer | 20.77 | 39 | P | | P | 11 31 18.3 | -0.6 |
| RND | comp=Z,29nm,1.1s | | | pmax | | pmax | | |
| SCM | Sheep Creek Mo | 20.78 | 44 | P | | P | 11 31 19.3 | +0.2 |
| SCM | Sheep Creek Mo baz=249,SNR=18 | 20.78 | 44 | P | | P | 11 31 19.0 | 0.0 |
| SCM | Sheep Creek Mo | 20.78 | 44 | P | | P | 11 31 19.3 | +0.2 |
| SCM | comp=Z,94nm,1.3s | | | pmax | | pmax | | |
| G21K | Allakaket | 20.83 | 28 | P | | P | 11 31 20.3 | +0.9 |
| G21K | comp=Z,40nm,0.9s | | | IAmb | | IAmb | 11 31 27.2 | |
| G21K | Allakaket baz=229 | 20.83 | 28 | P | | P | 11 31 19.5 | +0.1 |
| MLY | Manley comp=Z,72nm,1.3s | 20.86 | 34 | IAmb | | IAmb | 11 31 28.0 | |
| MLY | Manley baz=237,SNR=18 | 20.86 | 34 | P | | P | 11 31 19.5 | -0.3 |
| MCK | McKinley baz=242 | 20.88 | 38 | P | | P | 11 31 19.6 | -0.5 |
| WAT6 | Susitna Watana baz=247,SNR=9.4 | 20.88 | 41 | P | | P | 11 31 19.4 | -0.8 |
| B18K | Kokolik River baz=211 | 20.99 | 16 | P | | P | 11 31 20.9 | -0.2 |
| D19K | Kuna River baz=218 | 21.03 | 21 | P | | P | 11 31 21.7 | +0.1 |
| EYAK | Cordova Ski Ar | 21.11 | 48 | P | | P | 11 31 17.5 | -5.0 |
| EYAK | Cordova Ski Ar baz=254 | 21.11 | 48 | P | | P | 11 31 22.2 | -0.3 |
| H22K | Ishtalitna Cre baz=234,SNR=20 | 21.13 | 31 | P | | P | 11 31 22.3 | -0.3 |
| C19K | Lookout Ridge baz=215 | 21.20 | 19 | P | | P | 11 31 22.9 | -0.5 |
| DHY | Denali Highway baz=246,SNR=76 | 21.23 | 40 | P | | P | 11 31 22.1 | -1.8 |
| NEA2 | Nenana baz=240,SNR=6.2 | 21.24 | 36 | P | | P | 11 31 23.3 | -0.5 |
| KLU | Klutina comp=Z,20nm,0.8s | 21.30 | 45 | IAmb | | IAmb | 11 31 32.1 | |
| KLU | Klutina baz=252,SNR=20 | 21.30 | 45 | P | | P | 11 31 25.2 | +0.5 |
| F21K | Alatna River | 21.30 | 27 | P | | P | 11 31 25.5 | +1.0 |
| F21K | Alatna River baz=228,SNR=26 | 21.30 | 27 | P | | P | 11 31 24.7 | +0.1 |
| E20K | Nigu River baz=222 | 21.31 | 23 | P | | P | 11 31 24.9 | +0.3 |
| M24K | Tolsona, Glenn baz=250,SNR=18 | 21.39 | 43 | P | | P | 11 31 26.1 | +0.6 |
| I23K | Minto, Yukon-K comp=Z,41nm,1.1s | 21.41 | 34 | IAmb | | IAmb | 11 31 34.7 | |
| I23K | Minto, Yukon-K baz=239,SNR=26 | 21.41 | 34 | P | | P | 11 31 26.4 | +0.7 |

D20K **Etivluk River** 21.55 22 P P 11 31 27.7 +0.6
baz=220
RAGM **Ragged Mountai** 21.59 48 P P 11 31 27.7 0.0
RAGM IAmb IAmb 11 31 41.4
comp=Z,55nm,1.2s
KAIM **Kayak Island** 21.61 50 P P 11 31 27.7 -0.2
baz=258
G22K **Bettles** 21.70 29 P P 11 31 28.8 +0.1
baz=232
H23K **Yukon River** 21.71 32 P P 11 31 29.2 +0.3
H23K IAmb IAmb 11 31 38.1
comp=Z,41nm,1.2s
H23K **Yukon River** 21.71 32 P P 11 31 29.3 +0.3
baz=237,SNR=23
MDM **Murphy Dome** 21.73 35 P P 11 31 28.7 -0.5
MDM IAmb IAmb 11 31 37.6
comp=Z,24nm,0.9s
CCB **Clear Creek Bu** 21.75 36 P P 11 31 28.9 -0.3
BMRM **Bremner River** 21.77 47 P P 11 31 29.4 -0.2
baz=255,SNR=9.9
HMT **Hamilton** 21.78 49 IAmb IAmb 11 31 36.7
comp=Z,22nm,0.9s
COLA **College** 21.84 36 P P 11 31 30.1 -0.1
COLA **College** 21.84 36 P P 11 31 30.7 +0.5
baz=241
COLA **College** 21.84 36⇑ *e*P P 11 31 29.5 -0.7
COLA pmax pmax
comp=Z,3.0nm,0.6s
COLA MLR MLR
comp=Z,225nm,17.0s
A19K **Wainwright** 21.84 16 P P 11 31 30.3 0.0
baz=211
F22K **John River** 21.87 27 P P 11 31 30.8 +0.1
baz=230,SNR=9.4
HARP **HAARP** 21.94 43 P P 11 31 31.4 0.0
baz=251
N25K **Chitina, Valde** 21.94 45 IAmb IAmb 11 31 35.7
comp=Z,31nm,0.8s
N25K **Chitina, Valde** 21.94 45 P P 11 31 31.6 +0.1
baz=253,SNR=26
HDA **Harding Lake** 21.97 37 P P 11 31 32.0 +0.3
baz=244,SNR=9.7
PAX **Paxson** 22.00 41 P P 11 31 31.9 -0.2
baz=249,SNR=30
E21K **Killik River** 22.01 24 P P 11 31 32.1 0.0
baz=225
G23K **Bananza Creek** 22.05 30 P P 11 31 32.4 -0.1
G23K **Bananza Creek** 22.05 30 P P 11 31 32.8 +0.3
baz=234,SNR=20
POKR **Poker Plat Res** 22.11 35 P P 11 31 32.5 -0.7
baz=242
IL31 22.15 36 P P 11 31 33.0 -0.6
ILAR **Eielson Array** 22.15 36 P P 11 31 33.9 +0.3
ILAR **Eielson Array** 22.15 36 P P 11 31 33.2 -0.4
comp=Z,1.9nm,0.9s,baz=241,slow=11,SNR=18
ILAR S S 11 35 33.9 -3.3
comp=Z,2.1nm,1.0s,baz=232,slow=16,SNR=6.9
ILAR LR LR 11 41 57.0
comp=Z,188nm,18.4s,baz=230,slow=42
ILAR **Eielson Array** 22.15 36 P P 11 31 33.9 +0.3
K24K **Donnelly Dome** 22.18 39 P P 11 31 33.9 -0.1
baz=247,SNR=10
BGLC **Bering Glacier** 22.21 50 P P 11 31 33.9 -0.3
baz=258
GLB **Gilahina Butte** 22.26 46 IAmb IAmb 11 31 38.5
comp=Z,27nm,0.8s
COLD **Coldfoot** 22.30 29 P P 11 31 35.8 +0.6
baz=233,SNR=13
H24K **Noodor Dome** 22.30 33 P P 11 31 35.2 -0.1
H24K **Noodor Dome** 22.30 33 P P 11 31 36.2 +1.0
baz=239,SNR=24
VRDI **Verde Repeater** 22.38 47 IAmb IAmb 11 31 39.4
comp=Z,60nm,1.8s
E22K **Anaktuvuk Pass** 22.39 26 P P 11 31 36.0 -0.2
baz=229
CRQM **Cirque** 22.41 48 IAmb IAmb 11 31 40.0
comp=Z,26nm,1.1s
CRQE **Cirque** 22.43 48 P P 11 31 36.6 -0.2
baz=257
B20K **Meade River** 22.44 19 P P 11 31 37.0 +0.4
baz=218
MCARA **McCarthy VSAT** 22.61 46 IAmb IAmb 11 32 00.8
comp=Z,32nm,0.8s
MCARA **McCarthy VSAT** 22.61 46 P P 11 31 38.9 +0.3
baz=256
D22K **Ayikyak River** 22.66 24 P P 11 31 39.2 +0.2
D22K IAmb IAmb 11 31 52.3
comp=Z,28nm,1.2s
D22K **Ayikyak River** 22.66 24 P P 11 31 39.5 +0.5
baz=226,SNR=17
J25K **Salcha River,** 22.67 37 P P 11 31 37.9 -1.3
J25K IAmb IAmb 11 31 42.2
comp=Z,78nm,2.0s
J25K **Salcha River,** 22.67 37 P P 11 31 39.4 +0.1
baz=245,SNR=17
B21K **Ikpikpuk River** 22.71 21 P P 11 31 39.6 +0.1
B21K IAmb IAmb 11 31 45.6
comp=Z,45nm,1.2s
B21K **Ikpikpuk River** 22.71 21 P P 11 31 39.8 +0.3
baz=222,SNR=18
MESA **MESA** 22.88 50 P P 11 31 41.1 -0.5
baz=260
G24K **Hadweenzic Riv** 22.89 32 IAmb IAmb 11 31 52.0
comp=Z,20nm,1.0s
G24K **Hadweenzic Riv** 22.89 32 P P 11 31 41.7 +0.2
baz=238,SNR=18
M26K **Nabesna, AK** 22.89 44 IAmb IAmb 11 31 44.7
comp=Z,31nm,0.8s
M26K **Nabesna, AK** 22.89 44 P P 11 31 41.7 +0.1
baz=253,SNR=31
L26K **Log Cabin Wild** 22.93 42 P P 11 31 42.3 +0.4
L26K **Log Cabin Wild** 22.93 42 P P 11 31 42.2 +0.3
baz=252,SNR=49
E23K **Chandalar** 22.98 28 P P 11 31 43.0 +0.6
baz=232
SCRK **Sand Creek** 22.98 40 P P 11 31 41.6 -1.0
SCRK IAmb IAmb 11 31 44.6
comp=Z,29nm,1.0s
SCRK **Sand Creek** 22.98 40 P P 11 31 42.4 -0.2
baz=249,SNR=38
PRP **Porcupine Dome** 23.00 35 P P 11 31 43.2 +0.4
baz=243
GRNC **Granite Creek** 23.07 48 P P 11 31 44.6 +0.9
GRNC IAmb IAmb 11 31 46.3
comp=Z,68nm,1.5s
F24K **Squaw Lake** 23.20 30 P P 11 31 45.3 +0.6
F24K IAmb IAmb 11 31 50.5
comp=Z,24nm,0.9s
F24K PcP PcP 11 35 33.6 +1.4
F24K **Squaw Lake** 23.20 30 P P 11 31 45.0 +0.3
baz=236,SNR=27
H25L **Birch Creek** 23.24 33 P P 11 31 45.7 +0.7
baz=241
D23K **Nanushuk River** 23.25 25 P P 11 31 45.3 +0.2
baz=229
CTG **Chitna Glacier** 23.32 48 P P 11 31 46.2 +0.2
baz=259,SNR=10
TABL **Table Mountain** 23.32 49 P P 11 31 46.6 +0.4
TABL IAmb IAmb 11 31 58.6
comp=Z,39nm,0.8s
CTGM **Chitina Glacie** 23.32 48 P P 11 31 46.6 +0.5
E24K **Your Creek** 23.33 28 P P 11 31 46.7 +0.7
E24K **Your Creek** 23.33 28 P P 11 31 46.5 +0.5
baz=234,SNR=21
J26L **Joseph Creek** 23.34 39 IAmb IAmb 11 31 49.9
comp=Z,67nm,1.7s
J26L **Joseph Creek** 23.34 39 P P 11 31 46.5 +0.3
baz=248,SNR=28
TOLK **Toolik Lake Re** 23.35 26 P P 11 31 46.6 +0.4
TOLK IAmb IAmb 11 31 51.6
comp=Z,38nm,1.3s
TOLK **Toolik Lake Re** 23.35 26 P P 11 31 46.3 +0.1
baz=231,SNR=21
M27K **Edge Creek, AK** 23.39 44 P P 11 31 46.3 -0.4
baz=255,SNR=72
G25K **Bearman Lake** 23.39 32 P P 11 31 46.7 +0.2
baz=240
LOGN **Logan Glacier** 23.45 48 P P 11 31 48.9 +1.5
LOGN IAmb IAmb 11 31 49.9
comp=Z,39nm,0.9s
B22K **Teshekpuk Lake** 23.52 21 P P 11 31 48.1 +0.4
baz=223
L27K **Beaver Creek,** 23.60 43 P P 11 31 49.5 +0.8
L27K **Beaver Creek,** 23.60 43 P P 11 31 48.6 -0.1
baz=253,SNR=43
BCAR **Beaver Creek A** 23.62 43 P P 11 31 49.8 +0.9
A22K **Sinclair Lake** 23.68 19 P P 11 31 49.7 +0.4
baz=219
K27K **Chicken** 23.79 40 P P 11 31 50.7 +0.2
baz=251
I26K **Coal Creek Min** 23.82 37 P P 11 31 51.0 +0.3
baz=247
O28M **Mount Upton** 23.84 49 P P 11 31 50.8 -0.5
baz=260,SNR=25
C23K **Itkillik River** 23.85 24 P P 11 31 51.6 +0.6
C23K IAmb IAmb 11 31 56.9
comp=Z,43nm,1.1s
C23K **Itkillik River** 23.85 24 P P 11 31 51.5 +0.6
baz=228,SNR=26
D24K **Happy Valley** 23.89 26 P P 11 31 51.4 0.0
D24K IAmb IAmb 11 31 57.2
comp=Z,21nm,1.0s
D24K **Happy Valley** 23.89 26 P P 11 31 51.4 0.0
baz=232
YUK3 **Moose Creek** 23.90 46 P P 11 31 51.5 -0.3
baz=256,SNR=33
F25K **Christian Rive** 23.96 31 P P 11 31 52.2 0.0
baz=239,SNR=9.4
BCPM **Bancas Point** 23.99 51 IAmb IAmb 11 31 54.5
comp=Z,40nm,0.8s
PNL **Peninsula** 24.07 51 P P 11 31 43.8 -9.5
PNL **Peninsula** 24.07 51 P P 11 31 52.7 -0.5
baz=264
YUK8 **Steele Glacier** 24.13 47 P P 11 31 52.9 -1.1
baz=260,SNR=37
BMAR **Burnt Mountain** 24.24 31 P P 11 31 55.5 +0.8
C24K **Franklin Bluff** 24.27 25 P P 11 31 54.4 -0.6
baz=231
G26K **Porcupine Rive** 24.28 33 P P 11 31 55.7 +0.6
baz=243,SNR=16
EGAK **Eagle** 24.41 39 P P 11 31 56.8 +0.5
EGAK IAmb IAmb 11 31 59.3
comp=Z,16nm,0.8s
EGAK **Eagle** 24.41 39 P P 11 31 55.6 -0.7
baz=250,SNR=21
F26K **Sheenjek River** 24.51 31 P P 11 31 56.8 -0.4
baz=241,SNR=9.5
I27K **Kandik River** 24.52 37 P P 11 31 57.1 -0.3
baz=248,SNR=9.3
O29M **Mount Kennedy** 24.56 50 P P 11 31 57.5 -0.3
baz=263
YUK4 **Talbot Arm** 24.67 48 P P 11 31 58.6 -0.3
baz=260,SNR=13
TYV **Tymovskoe** 24.68 287 *e*P P 11 32 00.4 +1.6
TYV pmax pmax
comp=Z,15nm,1.0s
TYV pmax pmax
comp=Z,100nm,3.3s
D25K **Kavik River** 24.69 27 P P 11 31 59.5 +0.8
D25K **Kavik River** 24.69 27 P P 11 31 59.0 +0.2
baz=235,SNR=20
YUK6 **Outpost Mounta** 24.75 49 P P 11 31 58.8 -0.9
baz=262
H27K **Steamboat Moun** 24.80 35 P P 11 31 59.9 +0.1
baz=247
P29M **Windy Craggy** 24.91 52 IAmb IAmb 11 32 03.4
comp=Z,20nm,0.8s
P29M **Windy Craggy** 24.91 52 P P 11 32 00.5 -0.3
baz=265,SNR=7.2
DAWY **Dawson** 24.93 41 P P 11 32 02.4 +1.4
DAWY IAmb IAmb 11 32 03.7
comp=Z,30nm,1.2s
DAWY **Dawson** 24.93 41 P P 11 32 00.6 -0.4
baz=254,SNR=25
M29M **Somme Creek** 24.95 45 IAmb IAmb 11 32 03.5
comp=Z,21nm,0.8s
M29M **Somme Creek** 24.95 45 P P 11 32 01.1 -0.2
baz=258,SNR=36
G27K **Doyon Strip** 24.98 34 P P 11 32 01.9 +0.5
G27K **Doyon Strip** 24.98 34 P P 11 32 01.5 0.0
baz=246
I28M **Miner Creek** 25.12 38 P P 11 32 03.0 +0.2
baz=250,SNR=17
L29M **L29M** 25.24 43 P P 11 32 05.0 +1.2
L29M IAmb IAmb 11 32 05.9
comp=Z,21nm,0.8s
L29M PcP PcP 11 35 37.9 +1.2
L29M **L29M** 25.24 43 P P 11 32 03.7 -0.1
baz=257,SNR=32
P30M **Million Dollar** 25.34 51 P P 11 32 05.4 +0.6
baz=265
N30M **Aishikik Lake** 25.43 48 P P 11 32 05.1 -0.5
baz=262,SNR=18
C26K **Camden Bay** 25.45 26 P P 11 32 05.7 +0.1
baz=236
E27K **Coleen River** 25.59 31 P P 11 32 08.5 +1.5
E27K PcP PcP 11 35 38.0 +0.6
E27K **Coleen River** 25.59 31 P P 11 32 06.9 0.0
baz=243,SNR=5.8
PLBC **Pleasant Camp** 25.60 52 P P 11 32 06.7 -0.3
baz=267,SNR=9.7
S31K **Pelican** 25.63 56 P P 11 32 07.1 -0.2
S31K IAmb IAmb 11 32 31.1
comp=Z,26nm,1.1s
S31K **Pelican** 25.63 56 P P 11 32 06.6 -0.7
baz=270
C27K **Jago River** 25.64 27 P P 11 32 07.1 -0.2
baz=238
K29M **Barlow Dome** 25.67 42 IAmb IAmb 11 32 27.7
comp=Z,25nm,0.8s
K29M **Barlow Dome** 25.67 42 P P 11 32 07.4 -0.4
baz=257,SNR=36
I29M **Ogilvie Camp,** 25.74 38 P P 11 32 08.2 -0.1
baz=253,SNR=27
YSS **Yuzh-Sakhalins** 25.78 278⇓ *i*P P 11 32 10.0 +1.2
YSS pmax pmax
comp=Z,17nm,0.9s
O30N **Mendenhall** 25.83 49 IAmb IAmb 11 32 15.3
comp=Z,21nm,1.1s
O30N **Mendenhall** 25.83 49 P P 11 32 09.1 -0.1
baz=264,SNR=12
F28M **Old Crow** 25.94 33 P P 11 32 11.3 +1.2
F28M IAmb IAmb 11 32 13.9
comp=Z,13nm,0.8s
F28M **Old Crow** 25.94 33 P P 11 32 09.9 -0.2
baz=246,SNR=15
H29M **Whitestone** 25.99 36 P P 11 32 10.8 +0.3
H29M **Whitestone** 25.99 36 P P 11 32 10.8 +0.3
baz=251,SNR=7.1
N31M **Braeburn, Yuko** 26.06 48 IAmb IAmb 11 32 25.8
comp=Z,14nm,0.9s
N31M **Braeburn, Yuko** 26.06 48 P P 11 32 10.6 -0.6
baz=263
SKAG **Skagway** 26.12 52 P P 11 32 11.4 -0.4
baz=268
SIT **Sitka** 26.15 58 P P 11 32 02.4 -10
SIT **Sitka** 26.15 58 P P 11 32 11.1 -0.9
baz=273
D27M **Malcolm River** 26.29 29 P P 11 32 12.7 -0.5
baz=242
J30M **Hart River** 26.35 41 P P 11 32 13.9 -0.1
J30M PcP PcP 11 35 40.0 +0.7
J30M **Hart River** 26.35 41 P P 11 32 13.2 -0.8
baz=256,SNR=8.9
G29M **Pine Creek** 26.35 35 P P 11 32 13.4 -0.4
G29M IAmb IAmb 11 32 17.1
comp=Z,52nm,1.9s
G29M **Pine Creek** 26.35 35 P P 11 32 13.2 -0.6
baz=250
WHY **Whitehorse** 26.41 50 P P 11 32 14.1 -0.4
baz=266
E28M **Babbage River** 26.46 31 P P 11 32 13.6 -1.2
E28M PcP PcP 11 35 40.2 +0.8
E28M **Babbage River** 26.46 31 P P 11 32 15.1 +0.3
baz=245
I30M **Mount Dempster** 26.49 39 P P 11 32 15.7 +0.5
I30M IAmb IAmb 11 32 16.8
comp=Z,22nm,0.8s
I30M **Mount Dempster** 26.49 39 P P 11 32 15.1 -0.1
baz=255,SNR=38
S32K **Killisnoo** 26.53 57 P P 11 32 14.9 -0.6
baz=272
R32K **Eaglecrest** 26.54 55 P P 11 32 15.2 -0.4
baz=271
EPYK **Eagle Plains** 26.67 37 P P 11 32 15.9 -0.9
baz=252,SNR=6.6
M31M **Drury Creek, Y** 26.79 46 P P 11 32 18.4 +0.6
M31M **Drury Creek, Y** 26.79 46 P P 11 32 17.7 -0.2
baz=263,SNR=6.9
E29M **Blow River** 26.93 32 P P 11 32 19.2 +0.2
E29M IAmb IAmb 11 32 24.5
comp=Z,24nm,1.6s
E29M **Blow River** 26.93 32 P P 11 32 18.9 -0.1
baz=247
P32M **Atlin** 26.95 52 P P 11 32 18.7 -0.6
P32M IAmb IAmb 11 32 26.3
comp=Z,22nm,0.9s
P32M **Atlin** 26.95 52 P P 11 32 19.2 -0.2
baz=269,SNR=12
JKA **Kamikawa-asahi** 27.03 273 P P 11 32 19.9 -0.2
ASAJ **Asahikawa** 27.03 273 P P 11 32 19.9 -0.2
ASAJ pmax pmax
comp=Z,91nm,1.8s
G30M **tAoh Zraii Nji** 27.04 35 P P 11 32 20.3 +0.2
G30M **tAoh Zraii Nji** 27.04 35 P P 11 32 19.2 -0.9
baz=252
FARO **Faro, Yukon** 27.28 46 P P 11 32 22.5 +0.2
FARO **Faro, Yukon** 27.28 46 P P 11 32 22.5 +0.2
baz=264,SNR=13
N32M **Quiet Lake** 27.32 49 P P 11 32 23.0 +0.3
baz=266,SNR=11
F30M **Barrier River** 27.40 34 P P 11 32 23.6 +0.3
baz=251
P33M **Teslin, Yukon** 27.41 51 P P 11 32 23.5 0.0
baz=269,SNR=29
U33K **Whale Pass** 27.44 60 P P 11 32 23.4 -0.2
baz=276
CRAG **Craig** 27.52 61 P P 11 32 14.3 -10
CRAG **Craig** 27.52 61 P P 11 32 23.9 -0.4
baz=278
ERM **Erimo** 27.66 268 P P 11 32 26.3 +0.5
ERM **Erimo** 27.66 268 P P 11 32 26.3 +0.5
ERM pmax pmax
comp=Z,102nm,1.4s
Q32M **Nakina River** 27.70 53 P P 11 32 25.5 -0.8
baz=272,SNR=12
G31M **Satah River** 27.76 36 P P 11 32 26.1 -0.3
G31M **Satah River** 27.76 36 P P 11 32 26.1 -0.3
baz=254,SNR=6.1
F31M **Tsiigehtchic** 28.10 35 IAmb IAmb 11 32 32.2
comp=Z,14nm,1.1s
F31M **Tsiigehtchic** 28.10 35 P P 11 32 29.2 -0.2
baz=254,SNR=7.0
R33M **Jennings River** 28.35 52 P P 11 32 31.8 -0.2
baz=272,SNR=7.3
V35K **Ketchikan** 28.39 61 P P 11 32 31.7 -0.5
baz=279
INK **Inuvik** 28.43 33 P P 11 32 32.3 -0.1
INK IAmb IAmb 11 32 36.3
comp=Z,28nm,1.6s
INK PcP PcP 11 35 44.4 +0.4
INK **Inuvik** 28.43 33 LR LR 11 45 46.2
comp=Z,150nm,18.5s,baz=238,slow=40
INK **Inuvik** 28.43 33 P P 11 32 32.1 -0.2
baz=253
INK **Inuvik** 28.43 33 P P 11 32 32.3 -0.1
INK 11 35 44.4
INK pmax pmax
comp=Z,28nm,1.6s
DLBC **Dease Lake** 28.89 54 LR LR 11 44 39.5
comp=Z,186nm,19.0s,baz=280,slow=38
DLBC **Dease Lake** 28.89 54 P P 11 32 36.3 -0.4
baz=274,SNR=6.6
T35M **Bob Quinn** 28.92 57 P P 11 32 36.5 -0.4
baz=277
TGTN **Hyland Airport** 29.65 48 P P 11 32 43.5 +0.1
baz=270
YAK **Yakutsk** 30.57 313 LR LR 11 45 18.9
comp=Z,62nm,20.9s,baz=87,slow=37
YAK **Yakutsk** 30.57 313 *e*P P 11 32 48.1 -3.3
YAK *e* 11 33 47.3
YAK *e* 11 35 47.8
YAK *e*S S 11 37 48.9 -3.6
YAK *e*SS SnSn 11 39 29.5 +0.6
YAK *e* 11 43 18.1
YAK pmax pmax
comp=Z,8.0nm,1.1s
YAK pmax pmax
comp=N,1.0nm,1.7s
YAK pmax pmax
comp=E,2.0nm,0.8s
YAK pmax pmax
comp=Z,158nm,5.7s
YAK pmax pmax
comp=N,89nm,4.8s
YAK pmax pmax
comp=E,57nm,5.2s
YAK smax smax
comp=E,204nm,8.6s
YAK smax smax
comp=N,68nm,4.6s
LIRD **Liard River Hi** 30.84 52 P P 11 32 53.4 -0.4
baz=276
BBB **Bella Bella** 31.11 66 LR LR 11 43 03.2
comp=N,31nm,20.7s,baz=314,slow=32
TOAD **Toad River Com** 31.34 53 P P 11 32 57.8 -0.6
baz=277
WRGLY **Wrigley** 31.87 45 P P 11 33 02.4 -0.4
baz=272
KLR **Kul'dur** 31.87 288 LR LR 11 44 54.7
comp=N,51nm,21.7s,baz=68,slow=34
KLR **Kul'dur** 31.87 288 *e*P P 11 33 01.1 -1.9
KLR pmax pmax
comp=Z,39nm,1.3s
TIXI **Tiksi** 31.99 332 *i* P P 11 33 04.0 +0.2
TIXI pmax pmax
comp=Z,4.0nm,1.0s
TIXI MLR MLR
comp=Z,134nm,17.0s
C36M **Paulatuk** 32.01 33 P P 11 33 03.6 -0.4
baz=261
ZEA **Zeya** 33.12 298 *e*P P 11 33 13.5 -0.4
ZEA pmax pmax
comp=Z,20nm,0.9s
USRK **Ussuriysk Ar.** 33.79 280 P P 11 33 20.0 +0.1
comp=Z,9.6nm,1.0s,baz=54,slow=8.4,SNR=16
USRK PcP PcP 11 35 58.4 -0.4
comp=Z,4.4nm,0.8s,baz=70,slow=4.6,SNR=8.2
comp=Z,9.6nm,1.0s
MJAR **Matsushiro Arr** 33.90 263 P P 11 33 21.7 +0.8
comp=Z,1.5nm,0.8s,baz=35,slow=7.5,SNR=4.7
MJAR LR LR 11 45 40.1
comp=Z,53nm,19.6s,baz=58,slow=34
comp=Z,1.5nm,0.8s
HEH **HeiHe** 34.13 292 *e*P P 11 33 21.6 -1.2
HEH pmax pmax
comp=Z,8.0nm,0.9s
CLRS **Cowichan Lake** 34.63 71 IAmb IAmb 11 33 37.8
comp=Z,18nm,1.5s
MSHR **Mys Shultsa** 35.11 278 *i* P P 11 33 32.0 +0.7
MSHR pmax pmax
comp=Z,51nm,1.8s
MDJ **Mudanjiang** 35.12 282 P P 11 33 31.7 +0.3
MDJ pmax pmax
comp=Z,10.0nm,0.9s
MDJ pmax pmax
comp=Z,160nm,6.9s
PSTR **Posyet** 35.30 278 *c i*P P 11 33 34.4 +1.5
NLWA **Neilton Lookou** 35.37 73 IAmb IAmb 11 33 35.7
comp=Z,8.4nm,1.1s
GNW **Green Mountain** 35.94 72 IAmb IAmb 11 33 41.0
comp=Z,21nm,1.5s
YKA **Yellowknife Ar** 35.98 45 P P 11 33 39.2 +0.7
YKA **Yellowknife Ar** 35.98 45 P P 11 33 39.1 +0.6
comp=Z,8.7nm,0.9s,baz=283,slow=8.2,SNR=11
comp=Z,8.7nm,0.9s
YKA **Yellowknife Ar** 35.98 45 P P 11 33 39.2 +0.7
BNX **BinXian** 35.98 285 ⇑P P 11 33 38.6 -0.1
BNX pmax pmax
comp=Z,13nm,0.9s
F04A **Amboy** 36.91 74 IAmb IAmb 11 33 48.7
comp=Z,11nm,0.9s
H04D **Lebanon** 37.37 76 IAmb IAmb 11 33 53.1
comp=Z,13nm,0.8s
I03D **Drain, OR** 37.39 78 IAmb IAmb 11 33 53.0
comp=Z,9.9nm,1.0s
LTY **Liberty** 37.40 71 P P 11 33 51.0 +0.1
KBO **Bosley Butte** 37.58 81 P P 11 33 52.0 -0.5
HOOD **Mount Hood Mea** 37.67 75 P P 11 33 52.5 -0.8
HOOD IAmb IAmb 11 33 55.5
comp=Z,13nm,1.1s
K02D **Willamette Mer** 37.69 80 P P 11 33 52.4 -1.1
K02D IAmb IAmb 11 34 05.2
comp=Z,14nm,1.1s
B08A **Colville Reser** 37.73 69 P P 11 33 54.0 +0.3
B08A IAmb IAmb 11 34 04.4
comp=Z,8.1nm,0.8s
DBO **Dodson Butte** 37.74 79 P P 11 33 53.4 -0.5
G05A **Wamic** 37.92 75 P P 11 33 55.8 +0.5
G05A IAmb IAmb 11 34 02.9
comp=Z,11nm,0.9s

KSXB **Camp Six Broad** 38.00 81 IAmb IAmb 11 33 58.9
comp=Z,12nm,1.0s
CN2 **Changchun** 38.12 283 P **P** **11 33 57.2 +0.2**
CN2 pmax pmax
comp=Z,10.0nm,0.8s
KRMB **Red Mountain** 38.14 81 P **P** **11 33 57.1 -0.3**
KRMB IAmb IAmb 11 34 01.0
comp=Z,30nm,1.6s
HUMO **Hull Mountain** 38.19 79 P **P** **11 33 57.2 -0.3**
HUMO PcP **PcP** **11 36 12.7 +0.8**
KRPM **Rodgers** 38.26 82 IAmb IAmb 11 34 04.3
comp=Z,16nm,1.1s
I05D **Terrebonne, OR** 38.34 76 P **P** **11 33 58.5 -0.3**
I05D IAmb IAmb 11 34 01.1
comp=Z,14nm,0.8s
HAWA **Hanford** 38.48 72 IAmb IAmb 11 34 01.7
comp=Z,9.5nm,0.8s
KMPM **Mount Pierce** 38.60 83 IAmb IAmb 11 34 14.0
comp=Z,24nm,1.0s
KHMM **Horse Mountain** 38.60 82 P **P** **11 33 59.8 -1.5**
KHMM IAmb IAmb 11 34 07.4
comp=Z,30nm,1.4s
YBH **Yreka Blue Hor** 38.80 80 P **P** **11 34 02.6 -0.2**
YBH IAmb IAmb 11 34 08.2
comp=Z,18nm,1.5s
YBH **Yreka Blue Hor** 38.80 80 P **P** **11 34 02.6 -0.2**
YBH pmax pmax
comp=Z,18nm,1.5s
PINE **Pine Mountain** 38.86 76 IAmb IAmb 11 34 06.1
comp=Z,16nm,1.0s
J05D **Fort Rock, OR** 38.93 77 P **P** **11 34 03.6 -0.3**
J05D IAmb IAmb 11 34 06.5
comp=Z,13nm,0.8s
J05D **PcP** **11 36 15.4 +1.1**
K04D **Chiloquin, OR** 38.94 79 IAmb IAmb 11 34 06.4
comp=Z,19nm,0.7s
BOD **Bodaibo** 39.05 308 *e*P **P** **11 34 04.3 -0.3**
BOD pmax pmax
comp=Z,21nm,1.5s
NEW **Newport** 39.10 68 P **P** **11 34 04.8 -0.4**
NEW **Newport** 39.10 68 P **P** **11 34 03.8 -1.4**
baz=296,SNR=5.4
NEW **Newport** 39.10 68 P **P** **11 34 04.8 -0.4**
NEW pmax pmax
comp=Z,7.0nm,0.8s
KCPM **Cahto Peak** 39.35 84 IAmb IAmb 11 34 10.0
comp=Z,14nm,0.8s
O02D **Mt. Diablo Mer** 39.59 82 P **P** **11 34 08.9 -0.4**
O02D IAmb IAmb 11 34 12.3
comp=Z,13nm,0.9s
KSRS **Korea Array** 39.98 273 P **P** **11 34 13.8 +1.3**
comp=Z,7.8nm,0.9s,baz=58,slow=8.3,SNR=25
KSRS PcP **PcP** **11 36 18.2 +0.7**
comp=Z,1.7nm,1.0s,baz=48,slow=4.0,SNR=4.7
comp=Z,7.8nm,0.9s
KSAR **Wonju Array Be** 40.01 273 P **P** **11 34 12.7 -0.1**
KSAR **Wonju Array Be** 40.01 273 P **P** **11 34 12.7 -0.1**
HATC **Hat Creek Radi** 40.08 81 P **P** **11 34 12.4 -1.1**
HATC IAmb IAmb 11 34 16.0
comp=Z,22nm,0.8s
GDXM **Geysers** 40.35 84 P **P** **11 34 15.3 -0.3**
GDXM IAmb IAmb 11 34 18.5
comp=Z,21nm,1.2s
BMO **Blue Mountains** 40.59 73 P **P** **11 34 16.7 -1.0**
BMO **Blue Mountains** 40.59 73 P **P** **11 34 16.7 -1.0**
BMO pmax pmax
comp=Z,3.0nm,0.9s
J08A **Circle Bar Ran** 40.62 76 P **P** **11 34 18.9 +0.9**
JNU **Nakatsue** 40.73 265 P **P** **11 34 18.6 -0.3**
RES **Resolute Bay** 40.88 24 LR LR 11 55 44.4
comp=Z,49nm,18.4s,baz=328,slow=43
TJN **Taejon** 40.98 272 *c* P **P** **11 34 21.4 +0.6**
WVOR **Wild Horse Val** 41.00 77 IAmb IAmb 11 34 23.0
comp=Z,12nm,0.8s
WVOR **Wild Horse Val** 41.00 77 P **P** **11 34 22.1 +1.0**
WVOR pmax pmax
comp=Z,18nm,0.9s
MSO **Missoula** 41.67 69 P **P** **11 34 26.3 -0.3**
MSO **Missoula** 41.67 69 P **P** **11 34 25.4 -1.2**
baz=299,SNR=5.1
MPK **Martis Peak** 41.84 82 IAmb IAmb 11 34 41.2
comp=Z,36nm,1.4s
PAHR **Pah Rah Range** 42.02 81 IAmb IAmb 11 34 31.5
comp=Z,17nm,1.1s
BPMT **Black Pine Rid** 42.16 69 P **P** **11 34 30.7 0.0**
BPMT PcP **PcP** **11 36 25.3 +0.4**
PNTR **Pine Nut** 42.23 82 IAmb IAmb 11 34 33.6
comp=Z,12nm,0.8s
YERR **Yerington** 42.52 82 IAmb IAmb 11 34 35.8
comp=Z,43nm,1.9s
LYMT **Lyon Mountain** 42.59 68 P **P** **11 34 34.3 +0.1**
BBGB **Big Mountain B** 42.78 86 IAmb IAmb 11 34 57.9
comp=Z,21nm,0.9s
HLID **Hailey** 43.04 73 P **P** **11 34 37.9 +0.1**
HLID PcP **PcP** **11 36 28.8 +1.0**
HLID **Hailey** 43.04 73 P **P** **11 34 37.1 -0.7**
baz=302,SNR=9.9
DLMT **Dillon** 43.22 70 P **P** **11 34 39.2 0.0**
DLMT PcP **PcP** **11 36 29.3 +1.0**
MCMT **McKenzie Canyo** 43.34 71 P **P** **11 34 40.4 +0.1**
MDPB **Devils Postpil** 43.41 83 IAmb IAmb 11 34 43.3
comp=Z,16nm,1.1s
LHV **Little Huntoon** 43.42 82 IAmb IAmb 11 34 43.4
comp=Z,21nm,1.2s
NVAR **Mina Array Bea** 43.44 82 P **P** **11 34 41.5 +0.4**
NVAR **Mina Array Bea** 43.44 82 P **P** **11 34 40.1 -1.0**
comp=Z,4.9nm,0.9s,baz=291,slow=8.3,SNR=30
NVAR PcP **PcP** **11 36 29.7 +0.4**
comp=Z,1.6nm,0.8s,baz=282,slow=3.1,SNR=5.3
comp=Z,4.9nm,0.9s
OMMB **Old Mammoth Mi** 43.47 83 IAmb IAmb 11 34 43.9
comp=Z,14nm,1.2s
NV11 **Mina Array Sit** 43.53 82 P **P** **11 34 42.3 +0.5**
EGMT **Eagleton** 43.57 65 IAmb IAmb 11 34 43.2
comp=Z,14nm,0.8s
EGMT **Eagleton** 43.57 65 P **P** **11 34 41.3 -0.6**
baz=299,SNR=10
BOZ **Bozeman (W)** 43.68 69 P **P** **11 34 42.8 -0.1**
BOZ **Bozeman (W)** 43.68 69 P **P** **11 34 42.4 -0.5**
baz=301,SNR=15
BOZ **Bozeman (W)** 43.68 69 P **P** **11 34 42.8 -0.1**
BOZ pmax pmax
comp=Z,8.0nm,1.0s
XLT **XiLinHaoTe** 43.89 288 *e*P **P** **11 34 45.4 +0.8**
XLT pmax pmax
comp=Z,17nm,0.7s
XLT pmax pmax
comp=Z,92nm,5.2s
ELK **Elko** 44.06 77 LR LR 11 48 49.3
comp=Z,40nm,19.8s,baz=304,slow=30
ELK **Elko** 44.06 77 P **P** **11 34 46.6 +0.4**
SMMC **Simmler** 44.22 86 P **P** **11 34 47.5 +0.3**
baz=308
DSP **Deep Springs** 44.28 83 IAmb IAmb 11 34 50.1
comp=Z,16nm,1.1s
YHL **Hebgen Lake** 44.34 70 IAmb IAmb 11 35 03.0
comp=Z,9.9nm,1.1s
MZP **Montezuma Peak** 44.45 82 P **P** **11 34 49.3 -0.1**
YMR **Madison River** 44.56 70 P **P** **11 34 50.2 +0.1**
PKM **Mcpherson Peak** 44.60 87 P **P** **11 34 50.2 -0.2**
baz=308
FFC **Flin Flon** 44.71 53 P **P** **11 34 50.2 -0.6**
FFC PcP **PcP** **11 36 33.5 +0.5**
FFC IAmb IAmb 11 36 34.1
comp=Z,12nm,0.9s
FFC **Flin Flon** 44.71 53 P **P** **11 34 50.3 -0.6**
FFC pmax pmax
comp=Z,12nm,0.9s
GCMT **Greycliff** 44.76 68 P **P** **11 34 51.6 +0.1**
CWC **Cottonwood Cre** 44.76 84 P **P** **11 34 51.2 -0.6**
baz=307
BCW **Bitter Crk WRg** 44.82 86 IAmb IAmb 11 34 54.4
comp=Z,16nm,0.8s
YPP **Pitchstone Pla** 44.87 70 IAmb IAmb 11 36 34.7
comp=Z,4.5nm,0.6s
GRAC **Grapevine Rang** 44.89 83 P **P** **11 34 51.8 -0.8**
baz=307
H17A **Grant Village** 44.95 70 IAmb IAmb 11 35 19.0
comp=Z,9.2nm,1.1s
H17A **Grant Village** 44.95 70 P **P** **11 34 52.4 -0.8**
baz=302
LKWY **Lake** 44.96 70 IAmb IAmb 11 34 55.5
comp=Z,6.4nm,0.7s
ISA **Isabella, Lake** 44.98 85 P **P** **11 34 51.9 -1.5**
ISA IAmb IAmb 11 34 54.4
comp=Z,14nm,1.1s

ISA **Isabella, Lake** 44.98 85 P **P** **11 34 52.6 -0.8**
baz=308,SNR=14
ISA **Isabella, Lake** 44.98 85 P **P** **11 34 51.9 -1.5**
ISA pmax pmax
comp=Z,15nm,1.1s
YMP **Mirror Lake Pl** 45.02 69 IAmb IAmb 11 35 35.9
comp=Z,16nm,1.4s
HVU **Hansel Valley** 45.02 74 IAmb IAmb 11 34 55.2
comp=Z,6.4nm,0.7s
FLWY **Flagg Ranch** 45.04 70 IAmb IAmb 11 35 03.8
comp=Z,12nm,1.4s
ARVC **Arvin** 45.08 86 P **P** **11 34 53.5 -0.6**
baz=308
R11B **Troy Canyon, C** 45.22 80 IAmb IAmb 11 34 56.8
comp=Z,8.8nm,0.9s
R11B **Troy Canyon, C** 45.22 80 P **P** **11 34 54.4 -1.0**
baz=306,SNR=14
SCZ2 **Santa Cruz Isl** 45.27 88 P **P** **11 34 55.2 -0.4**
baz=309
BGU **Big Grassy Mou** 45.34 75 P **P** **11 34 55.7 -0.6**
RLMT **Red Lodge** 45.35 68 IAmb IAmb 11 34 57.8
comp=Z,13nm,0.9s
RLMT **Red Lodge** 45.35 68 P **P** **11 34 55.2 -1.2**
baz=302,SNR=12
MPMC **Manual Prospec** 45.37 84 P **P** **11 34 55.2 -1.4**
baz=308,SNR=15
FURC **Furnace Creek,** 45.53 83 P **P** **11 34 57.2 -0.3**
baz=307,SNR=5.5
LRMC **Laurel Mtn Rad** 45.60 85 P **P** **11 34 58.0 -0.4**
baz=308
TPNV **Topopah Spring** 45.63 82 P **P** **11 34 57.9 -0.7**
baz=307,SNR=18
SPR3 **Spring Creek 3** 45.63 78 P **P** **11 34 59.5 +0.7**
EDW2 **Edwards Air Fo** 45.77 85 P **P** **11 34 58.8 -0.9**
baz=309,SNR=6.8
GWY **Greenwater Val** 45.82 83 IAmb IAmb 11 35 01.4
comp=Z,29nm,1.6s
DUG **Dugway, Tooele** 45.90 76 P **P** **11 35 00.2 -0.4**
DUG IAmb IAmb 11 35 02.3
comp=Z,21nm,1.3s
DUG **Dugway, Tooele** 45.90 76 P **P** **11 34 59.5 -1.2**
baz=305,SNR=14
DUG **Dugway, Tooele** 45.90 76 P **P** **11 35 00.2 -0.4**
DUG pmax pmax
comp=Z,21nm,1.3s
DECC **Green Verdugo** 45.95 86 P **P** **11 35 00.5 -0.5**
baz=309
PSUT **Pine Spring** 46.21 79 IAmb IAmb 11 35 04.5
comp=Z,34nm,1.9s
TCUT **Toone Canyon** 46.24 74 IAmb IAmb 11 35 13.7
comp=Z,16nm,1.3s
SHOC **Shoshone, Teco** 46.25 83 P **P** **11 35 02.4 -1.0**
baz=308,SNR=7.2
GSC **Goldstone, Bar** 46.28 84 P **P** **11 35 02.8 -0.8**
baz=308,SNR=21
LAO **LASA Array** 46.32 65 P **P** **11 35 03.3 -0.5**
LAO PcP **PcP** **11 36 39.6 +0.7**
LAO IAmb IAmb 11 36 40.6
comp=Z,11nm,1.1s
LAO **LASA Array** 46.32 65 P **P** **11 35 03.4 -0.5**
baz=302
BFSC **Mount Baldy Ra** 46.39 86 P **P** **11 35 03.9 -0.7**
baz=309,SNR=12
CIS **Catalina Islan** 46.43 87 P **P** **11 35 04.1 -0.7**
baz=310
BW06 **Boulder Array** 46.45 71 P **P** **11 35 04.5 -0.7**
BW06 IAmb IAmb 11 35 06.1
comp=Z,8.8nm,0.8s
BW06 **Boulder Array** 46.45 71 P **P** **11 35 03.5 -1.7**
baz=304,SNR=15
PD31 **Pinedale Array** 46.45 71 P **P** **11 35 05.0 -0.1**
PD31 IAmb IAmb 11 35 06.1
comp=Z,8.7nm,0.8s
PDAR **Pinedale Array** 46.45 71 P **P** **11 35 04.8 -0.3**
PDAR **Pinedale Array** 46.45 71 P **P** **11 35 05.0 -0.1**
comp=Z,6.8nm,0.8s,baz=304,slow=3.6,SNR=67
PDAR LR LR 11 52 18.7
comp=Z,21nm,19.3s,baz=296,slow=33
comp=Z,6.8nm,0.8s
NLU **North Lily Min** 46.50 76 IAmb IAmb 11 35 11.8
comp=Z,24nm,1.8s
JLU **Jordanelle** 46.51 75 IAmb IAmb 11 35 16.3
comp=Z,7.3nm,0.9s
DGMT **Dagmar** 46.56 62 P **P** **11 35 04.6 -1.0**
baz=301
SCI2 **San Clemente I** 46.62 88 P **P** **11 35 05.8 -0.4**
baz=310
MPU **Maple Canyon** 46.74 76 P **P** **11 35 07.2 -0.1**
TUQ **Turquoise Moun** 46.76 83 P **P** **11 35 07.3 -0.2**
baz=308
BBRC **Big Bear Solar** 46.85 85 P **P** **11 35 07.6 -0.7**
baz=309,SNR=9.5
HEC **Hector,Ludlow** 46.87 84 P **P** **11 35 08.1 -0.2**
baz=309,SNR=11
ELS **Elsinore Mount** 46.91 86 P **P** **11 35 08.1 -0.6**
ELS IAmb IAmb 11 35 10.0
comp=Z,9.4nm,1.1s
MURC **Murrieta** 47.09 86 P **P** **11 35 09.6 -0.4**
baz=310
CCUT **Cedar City** 47.10 79 IAmb IAmb 11 35 12.0
comp=Z,16nm,1.4s
ULN **Ulaanbaatar** 47.15 298 P **P** **11 35 11.6 +1.1**
ULN **Ulaanbaatar** 47.15 298 *d* P **P** **11 35 11.5 +1.1**
ULN pmax pmax
comp=Z,19nm,1.2s
V12A **Nelson** 47.27 82 P **P** **11 35 11.5 +0.1**
V12A IAmb IAmb 11 35 17.0
comp=Z,14nm,1.4s
MSU **Marysvale** 47.28 78 P **P** **11 35 12.3 +0.7**
MSU PcP **PcP** **11 36 44.1 +1.5**
MSU **Marysvale** 47.28 78 P **P** **11 35 12.3 +0.7**
GMRC **Granite Mounta** 47.33 84 P **P** **11 35 11.2 -0.8**
baz=309,SNR=8.7
TMUT **Trail Mountain** 47.42 76 IAmb IAmb 11 35 32.0
comp=Z,6.8nm,0.9s
LCMT **Little Creek M** 47.51 80 IAmb IAmb 11 35 15.1
comp=Z,13nm,1.0s
SONM **Songino Array** 47.55 298 P **P** **11 35 13.9 +0.5**
SONM **Songino Array** 47.55 298 P **P** **11 35 14.3 +0.9**
comp=Z,13nm,1.1s,baz=59,slow=7.6,SNR=36
SONM PcP **PcP** **11 36 43.1 -0.1**
comp=Z,3.2nm,0.7s,baz=101,slow=4.4,SNR=5.9
SONM LR LR 11 55 17.1
comp=Z,46nm,21.9s,baz=50,slow=36
comp=Z,13nm,1.1s
MTPU **Mount Pierson** 47.55 78 IAmb IAmb 11 35 15.8
comp=Z,9.1nm,1.1s
PFO **Pinyon Flats O** 47.56 86 P **P** **11 35 13.9 +0.2**
PFO IAmb IAmb 11 35 14.9
comp=Z,10nm,1.1s
PFO **Pinyon Flats O** 47.56 86 P **P** **11 35 13.1 -0.6**
baz=310
PFO **Pinyon Flats O** 47.56 86 *d* P **P** **11 35 14.0 +0.3**
PFO pmax pmax
comp=Z,18nm,1.1s
TPFO **Pinon Flats** 47.57 86 P **P** **11 35 13.0 -0.7**
baz=310
109C **Camp Elliot, M** 47.60 87 P **P** **11 35 13.6 -0.3**
baz=310
BELC **Belle Mtn. Jos** 47.61 85 P **P** **11 35 13.6 -0.5**
baz=309,SNR=7.8
TIA **Tai'an** 47.65 279 P **P** **11 35 14.8 +0.5**
TIA pmax pmax
comp=Z,14nm,0.8s
RDMU **Red Mountain** 47.70 74 P **P** **11 35 14.7 -0.1**
RDMU IAmb IAmb 11 35 16.3
comp=Z,12nm,0.8s
KNB **Kanab** 47.77 80 IAmb IAmb 11 35 17.3
comp=Z,12nm,0.9s
PKCU **Pink Cliffs** 47.84 79 IAmb IAmb 11 35 22.9
comp=Z,11nm,1.2s
ZAK **Zakamensk** 47.93 302 *e*P **P** **11 35 17.2 +0.8**
ZAK pmax pmax
comp=Z,28nm,1.4s
SRU **San Rafael Swe** 47.96 76 IAmb IAmb 11 35 18.6
comp=Z,6.6nm,0.8s
MONP2 **Monument Peak** 48.04 86 P **P** **11 35 16.6 -0.9**
baz=310,SNR=6.3
IRM **Iron Mountain** 48.06 84 P **P** **11 35 16.7 -0.8**
baz=309,SNR=9.2
BC3 **Big Chuckawall** 48.18 85 P **P** **11 35 18.0 -0.5**
baz=310,SNR=5.8
NOR **Nord** 48.27 4 *i* P **P** **11 35 20.2 +1.7**
NOR IAmb IAmb 11 35 20.9
comp=Z,2.4nm,0.8s
W13A **Hualapai Mount** 48.27 82 P **P** **11 35 19.2 -0.2**
W13A IAmb IAmb 11 35 20.6

comp=Z,11nm,1.3s
K22A **Casper** 48.37 70 P **P** **11 35 18.9 -1.0**
K22A IAmb IAmb 11 35 29.6
comp=Z,5.7nm,0.8s
K22A **Casper** 48.37 70 P **P** **11 35 19.1 -0.8**
baz=305,SNR=5.1
HHC **Hu-ho-hao-te** 48.37 287 *e*P **P** **11 35 20.8 +0.9**
HHC pmax pmax
comp=Z,15nm,0.8s
HHC pmax pmax
comp=Z,66nm,5.0s
IKP **In-Ko-Pah, Jac** 48.40 86 P **P** **11 35 19.4 -0.8**
baz=310,SNR=5.7
SWSC **Sam W. Stewart** 48.41 86 P **P** **11 35 19.4 -0.8**
baz=310
HNS **HongShan** 48.46 282 ⇓P **P** **11 35 21.3 +0.8**
HNS pmax pmax
comp=Z,18nm,1.3s
MOY **Mondy** 48.49 305 *e*P **P** **11 35 21.7 +1.0**
MOY pmax pmax
comp=Z,26nm,1.6s
PDMCI **Parker Dam,Lak** 48.61 83 P **P** **11 35 21.0 -0.7**
baz=309,SNR=10
NEEM **North Greenlan** 48.70 13 *i* P **P** **11 35 23.7 +1.5**
NEEM IAmb IAmb 11 35 24.5
comp=Z,32nm,0.7s
O20A **White River Ci** 48.78 73 P **P** **11 35 22.9 -0.2**
O20A IAmb IAmb 11 35 33.2
comp=Z,12nm,0.8s
O20A **White River Ci** 48.78 73 P **P** **11 35 22.1 -1.1**
baz=306,SNR=8.9
ESJX **Sierra Juarez** 48.92 87 P **P** **11 35 23.8 -0.5**
ESJX IAmb IAmb 11 35 25.4
comp=Z,6.1nm,0.8s
GLA **Glamis** 48.97 85 P **P** **11 35 24.5 0.0**
GLA **Glamis** 48.97 85 P **P** **11 35 23.7 -0.7**
baz=310,SNR=8.4
GLA **Glamis** 48.97 85 P **P** **11 35 24.5 0.0**
GLA pmax pmax
comp=Z,20nm,0.8s
RSSD **Black Hills** 49.02 67 P **P** **11 35 23.6 -1.4**
baz=305
NJ2 **Nanjing** 49.17 273 *e*P **P** **11 35 27.0 +1.0**
NJ2 pmax pmax
comp=Z,11nm,0.6s
NJ2 pmax pmax
comp=Z,120nm,3.5s
VTX **Valle De La Tr** 49.43 87 IAmb IAmb 11 35 39.2
comp=Z,12nm,1.4s
BTO **Baotou** 49.46 288 *e*P **P** **11 35 29.8 +1.5**
BTO pP **sP** **11 35 34.6 +3.1**
BTO sP **pwP** **11 35 36.8 -1.3**
BTO pmax pmax
comp=Z,74nm,0.9s
BTO pmax pmax
comp=Z,220nm,4.2s
MDND **Maddock** 49.49 60 P **P** **11 35 27.1 -1.1**
baz=304,SNR=6.3
Y14A **Wickenburg** 49.57 83 IAmb IAmb 11 35 30.4
comp=Z,8.6nm,1.0s
WUAZ **Wupatki** 49.62 80 P **P** **11 35 29.6 0.0**
WUAZ **Wupatki** 49.62 80 P **P** **11 35 28.3 -1.3**
baz=309,SNR=11
PV02 **Paradox Valley** 49.62 76 P **P** **11 35 29.6 0.0**
N23A **Red Feather La** 49.74 71 IAmb IAmb 11 35 39.3
comp=Z,8.6nm,1.1s
N23A **Red Feather La** 49.74 71 P **P** **11 35 29.3 -1.3**
baz=306
PV01 **Paradox Valley** 49.77 76 P **P** **11 35 30.6 -0.2**
PV01 IAmb IAmb 11 35 31.7
comp=Z,16nm,1.1s
113A **Mohawk Valley,** 49.83 85 IAmb IAmb 11 35 32.0
comp=Z,8.9nm,1.0s
SMCO **Snowmass** 50.13 74 P **P** **11 35 32.7 -1.0**
SMCO IAmb IAmb 11 35 35.0
comp=Z,16nm,1.8s
ULM **Lac du Bonnet** 50.20 56 P **P** **11 35 33.5 -0.1**
ULM IAmb IAmb 11 35 33.7
comp=Z,11nm,1.1s
ULM **Lac du Bonnet** 50.20 56 P **P** **11 35 32.8 -0.8**
comp=Z,5.3nm,0.9s,baz=320,slow=3.9,SNR=6.5
ULM PcP **PcP** **11 36 52.3 -0.3**
comp=Z,1.8nm,0.7s,baz=294,slow=3.1,SNR=4.7
ULM LR LR 11 56 46.6
comp=Z,83nm,21.5s,baz=332,slow=36
comp=Z,5.3nm,0.9s
ULM **Lac du Bonnet** 50.20 56 ⇓*i* P **P** **11 35 32.9 -0.7**
X16A **Lo Mia Camp, P** 50.27 81 IAmb IAmb 11 35 36.3
comp=Z,8.5nm,1.0s
MVCO **Mesa Verde** 50.38 77 IAmb IAmb 11 35 36.6
comp=Z,17nm,1.1s
MVCO **Mesa Verde** 50.38 77 P **P** **11 35 34.1 -1.3**
baz=308,SNR=9.4
ISCO **Idaho Springs** 50.60 72 IAmb IAmb 11 35 42.5
comp=Z,5.2nm,0.7s
ISCO **Idaho Springs** 50.60 72 P **P** **11 35 35.9 -1.2**
baz=307,SNR=5.2
ISCO **Idaho Springs** 50.60 72 P **P** **11 35 37.9 +0.8**
ISCO pmax pmax
comp=Z,7.0nm,0.6s
W18A **Petrified Fore** 50.91 80 P **P** **11 35 39.3 -0.1**
W18A IAmb IAmb 11 35 40.9
comp=Z,11nm,0.9s
W18A **Petrified Fore** 50.91 80 P **P** **11 35 38.3 -1.1**
baz=309
214A **Organ Pipe Nat** 50.97 85 P **P** **11 35 39.0 -0.7**
214A IAmb IAmb 11 35 41.0
comp=Z,22nm,1.2s
214A **Organ Pipe Nat** 50.97 85 P **P** **11 35 39.2 -0.5**
baz=311,SNR=7.2
S22A **4UR Ranch, Cre** 51.09 75 IAmb IAmb 11 35 42.8
comp=Z,15nm,1.2s
S22A **4UR Ranch, Cre** 51.09 75 P **P** **11 35 39.5 -1.4**
baz=308,SNR=14
X18A **Snowflake** 51.14 80 IAmb IAmb 11 35 42.8
comp=Z,10nm,0.9s
UPNV **Upernavik** 51.18 19 *i* P **P** **11 35 42.0 +1.4**
UPNV IAmb IAmb 11 35 42.9
comp=Z,24nm,0.7s
KBS **Kingsbay** 51.19 357 P **P** **11 35 41.6 +0.9**
KBS IAmb IAmb 11 35 43.6
comp=Z,14nm,0.8s
KBS **Kingsbay** 51.19 357 *c* *i* P **P** **11 35 41.4 +0.7**
KBS pmax pmax
comp=Z,16nm,0.8s
KBS **Kingsbay** 51.19 357 *i* P **P** **11 35 43.3 +2.6**
AGMN **Agassiz Nation** 51.30 58 P **P** **11 35 41.1 -0.8**
AGMN IAmb IAmb 11 35 42.3
comp=Z,14nm,1.2s
LYN **LuoYang** 51.66 280 P **P** **11 35 45.5 +0.7**
LYN pmax pmax
comp=Z,25nm,0.5s
LYN pmax pmax
comp=Z,210nm,4.3s
SDCO **Great Sand Dun** 51.92 74 IAmb IAmb 11 35 48.5
comp=Z,8.8nm,1.2s
SDCO **Great Sand Dun** 51.92 74 P **P** **11 35 46.5 -0.6**
baz=308,SNR=9.9
TUC **Tucson** 52.04 83 P **P** **11 35 47.3 -0.5**
TUC IAmb IAmb 11 35 49.1
comp=Z,9.2nm,0.8s
TUC **Tucson** 52.04 83 P **P** **11 35 47.3 -0.5**
baz=311
TUC **Tucson** 52.04 83 P **P** **11 35 47.3 -0.5**
TUC pmax pmax
comp=Z,9.0nm,0.8s
OGNE **Ogallala** 52.08 69 P **P** **11 35 47.5 -0.5**
baz=307
F33A **5 Mile Ranch,** 52.50 61 IAmb IAmb 11 37 01.8
comp=Z,5.6nm,0.7s
NUUG **Nuugaatsiaq** 52.71 19 *i* P **P** **11 35 52.8 +0.8**
NUUG IAmb IAmb 11 35 54.2
comp=Z,14nm,0.8s
DAG **Danmarks Havn** 52.84 6 P **P** **11 35 53.6 +0.6**
DAG pmax pmax
comp=Z,12nm,1.3s
DAG **Danmarks Havn** 52.84 6 *i* P **P** **11 35 53.7 +0.8**
DAG IAmb IAmb 11 35 54.4
comp=Z,6.9nm,0.9s
KSCO **Kaye Shedlock'** 52.91 71 P **P** **11 35 53.6 -0.5**
baz=308
DUN6 **Lazy B Ranch** 52.97 82 P **P** **11 35 53.6 -1.0**
T25A **Trinidad** 52.98 74 P **P** **11 35 54.9 0.0**
T25A **Trinidad** 52.98 74 P **P** **11 35 54.1 -0.7**
baz=309,SNR=12
WHN **Wuhan** 53.06 275 P **P** **11 35 55.1 -0.1**

**ANMO Albuquerque 53.09 78 P P 11 35 55.7 +0.1**
**ANMO Albuquerque 53.09 78 P P 11 35 55.4 -0.3**
baz=310
**ANMO Albuquerque 53.09 78 i⇓P P 11 35 55.4 -0.3**
ANMO pmax pmax
comp=Z,3.0nm,1.0s
**SSLB Suanglung 53.45 264 P P 11 35 57.8 -0.4**
**ECSD EROS Data Cent 53.58 63 P P 11 35 58.1 -0.8**
baz=308
**319A Douglas 53.62 83 IAmb IAmb 11 36 00.7**
comp=Z,17nm,1.1s
**121A Cookes Peak, D 53.81 81 P P 11 36 00.6 -0.4**
121A IAmb IAmb 11 36 02.2
comp=Z,8.8nm,0.8s
**121A Cookes Peak, D 53.81 81 P P 11 36 00.0 -1.0**
baz=311,SNR=6.7
**EYMN Ely 53.88 56 IAmb IAmb 11 36 01.7**
comp=Z,10nm,1.0s
**EYMN Ely 53.88 56 P P 11 36 00.2 -0.8**
baz=307,SNR=7.9
**RTBA Rita Blanca 54.46 74 IAmb IAmb 11 36 06.3**
comp=Z,14nm,1.1s
**SUMG Summit 54.56 14 P P 11 36 06.3 +0.2**
**SUMG Summit 54.56 14 P P 11 36 06.3 +0.2**
SUMG pmax pmax
comp=Z,37nm,1.0s
**SUMG Summit 54.56 14 i P P 11 36 07.5 +1.4**
SUMG IAmb IAmb 11 36 08.4
comp=Z,44nm,1.1s
**E38A The Farm, Brul 54.66 58 P P 11 36 06.0 -0.7**
E38A IAmb IAmb 11 36 16.3
comp=Z,8.8nm,0.9s
**CBKS Cedar Bluff 54.79 70 P P 11 36 06.1 -1.7**
baz=309
**DBG Daneborg 55.10 7 i P P 11 36 10.0 +0.5**
DBG IAmb IAmb 11 36 10.6
comp=Z,14nm,1.1s
**ZALV Zalesovo Beam 55.20 314 P P 11 36 10.4 -0.1**
**ZALV Zalesovo Beam 55.20 314 P P 11 36 10.2 -0.3**
comp=Z,2.7nm,0.7s,baz=39,slow=7.1,SNR=8.7
ZALV PcP **PcP 11 37 11.8 +0.4**
comp=Z,2.6nm,0.7s,baz=33,slow=5.5,SNR=6.4
comp=Z,2.7nm,0.7s
**ZALV Zalesovo Beam 55.20 314 P P 11 36 10.4 -0.1**
**MNTX Cornudas Mount 55.89 80 P P 11 36 16.2 +0.3**
MNTX IAmb IAmb 11 36 17.1
comp=Z,13nm,1.0s
**MNTX Cornudas Mount 55.89 80 P P 11 36 14.5 -1.3**
baz=312,SNR=22
**MSTX Muleshoe 56.04 76 P P 11 36 15.7 -1.3**
baz=311,SNR=6.4
**LZH Lanzhou 56.07 287 eP P 11 36 18.5 +1.3**
LZH pP sP 11 36 23.4 +2.9
LZH pmax pmax
comp=Z,25nm,1.0s
**AMTX Amarillo 56.12 74 P P 11 36 16.6 -0.9**
baz=311
**G40A Rib Lake 56.23 58 IAmb IAmb 11 37 16.1**
comp=Z,19nm,1.6s
**GTA Gaotai 56.37 293 eP P 11 36 20.2 +0.9**
GTA pmax pmax
comp=Z,11nm,1.2s
**DGZ Jazzator, Alta 56.63 309 d iP P 11 36 21.9 +0.9**
DGZ pmax pmax
comp=Z,17nm,1.1s
**VHRN Van Horn 56.75 80 P P 11 36 21.4 -0.7**
VHRN IAmb IAmb 11 36 22.9
comp=Z,7.2nm,0.8s
**PECS Pecos 57.07 79 IAmb IAmb 11 36 25.2**
comp=Z,7.6nm,0.9s
**ICESG Greenland Ices 57.38 16 i P P 11 36 27.2 +0.9**
ICESG IAmb IAmb 11 36 27.7
comp=Z,25nm,0.8s
**DKNS Dickens 57.39 75 IAmb IAmb 11 36 27.4**
comp=Z,12nm,1.1s
**JFWS Jewell Farm 57.71 60 IAmb IAmb 11 36 37.7**
comp=Z,11nm,0.8s
**JFWS Jewell Farm 57.71 60 P P 11 36 27.0 -1.6**
baz=310
**MNHN Monahans 57.79 78 P P 11 36 29.2 -0.2**
**SN07 Snyder 07 57.79 76 IAmb IAmb 11 36 29.8**
comp=Z,8.5nm,1.0s
**WMOK Wichita Mounta 58.01 73 IAmb IAmb 11 36 31.7**
comp=Z,7.4nm,1.0s
**WMOK Wichita Mounta 58.01 73 P P 11 36 29.5 -1.3**
baz=312,SNR=9.2
**WMOK Wichita Mounta 58.01 73 P P 11 36 30.7 -0.1**
WMOK pmax pmax
comp=Z,8.0nm,1.4s
**APMT Aspermont 58.12 75 P P 11 36 31.1 -0.5**
APMT IAmb IAmb 11 36 33.1
comp=Z,22nm,1.5s
**DY2G Dye2 58.25 21 i P P 11 36 33.1 +0.8**
**TX31 Lajitas Ar. Si 58.57 81 P P 11 36 34.4 -0.5**
TX31 IAmb IAmb 11 36 35.7
comp=Z,14nm,1.2s
**TXAR Lajitas Array 58.57 81 P P 11 36 34.6 -0.3**
**TXAR Lajitas Array 58.57 81 P P 11 36 34.5 -0.4**
comp=Z,5.5nm,0.9s,baz=301,slow=5.2,SNR=53
TXAR PcP **PcP 11 37 25.2 0.0**
comp=Z,4.3nm,0.8s,baz=276,slow=2.6,SNR=9.8
comp=Z,5.5nm,0.9s
**TXAR Lajitas Array 58.57 81 P P 11 36 34.7 -0.3**
**ABTX Abilene, Hawle 58.89 75 P P 11 36 35.4 -1.6**
baz=312
**P40A Paris 58.89 64 P P 11 36 35.8 -1.0**
**HPIG 58.94 84 P P 11 36 37.8 +0.1**
HPIG IAmb IAmb 11 36 38.4
comp=Z,7.3nm,0.7s
**TUL3 Leonard 59.06 70 P P 11 36 37.2 -0.9**
baz=312
**JMIC Jan Mayen 59.10 4 LR LR 12 01 03.5**
comp=Z,20nm,21.6s,baz=22,slow=35
**OZNA Ozona 59.10 78 IAmb IAmb 11 36 38.8**
comp=Z,12nm,1.0s
**ZSN Zaisan 59.39 308 eP P 11 36 41.2 +1.0**
comp=Z,5.6nm,0.9s,baz=308
**ZSN Zaisan 59.39 308 eP P 11 36 41.2 +1.0**
ZSN pmax pmax
comp=Z,6.0nm,0.9s
**L44A Lake County Fo 59.50 60 P P 11 36 39.0 -2.0**
baz=312
**ARCES ARCESS Array B 59.50 351 P P 11 36 41.2 +0.6**
**ARCES ARCESS Array B 59.50 351 P P 11 36 40.9 +0.3**
comp=Z,13nm,0.7s,baz=24,slow=7.6,SNR=32
ARCES LR LR 12 08 05.9
comp=Z,20nm,18.1s,baz=14,slow=42
comp=Z,13nm,0.7s
**ARCES ARCESS Array B 59.50 351 P P 11 36 41.2 +0.6**
ARCES pmax pmax
comp=Z,26nm,0.9s
**SOEG Soedalen 59.56 14 i P P 11 36 42.6 +1.6**
**PLPT Palo Pinto 59.58 74 P P 11 36 41.9 +0.1**
**LVZ Lovozero 59.85 346 P P 11 36 43.5 +0.3**
**LVZ Lovozero 59.85 346 ceP P 11 36 43.4 +0.3**
LVZ pmax pmax
comp=Z,39nm,0.8s
**LVZ Lovozero 59.85 346 P P 11 36 43.3 +0.2**
comp=Z,59nm,0.9s
**FW07 Weatherford 59.99 74 P P 11 36 44.5 -0.1**
**KURK Kurchatov 60.19 314 P P 11 36 46.4 +0.8**
**KURK Kurchatov 60.19 314 d iP P 11 36 46.1 +0.4**
KURK pmax pmax
comp=Z,19nm,1.0s
**JCT Junction City 60.24 77 P P 11 36 45.1 -1.3**
baz=313
**KURBB Kurchatov Arra 60.30 314 P P 11 36 47.1 +0.7**
comp=Z,11nm,0.6s,baz=45,slow=6.7,SNR=52
KURBB LR LR 12 05 59.5
comp=Z,82nm,18.9s,baz=171,slow=39
comp=Z,11nm,0.6s
**CCM Cathedral Cave 60.34 65 P P 11 36 45.1 -1.8**
baz=312
**WMQ Urumqi 60.35 304 eP P 11 36 48.7 +1.7**
WMQ pmax pmax
comp=Z,21nm,1.3s
**WHTX Lake Whitney, 60.67 74 P P 11 36 47.8 -1.4**
baz=313
**GYA Guiyang 60.78 277 ⇓P P 11 36 50.7 +0.5**
GYA pmax pmax
comp=Z,19nm,1.2s
**SCHQ Schefferville 60.90 38 P P 11 36 51.3 +0.9**
**SCHQ Schefferville 60.90 38 P P 11 36 50.9 +0.4**
comp=Z,14nm,0.7s,baz=308,slow=6.4,SNR=15
comp=Z,14nm,0.7s
**VLDQ Val d'Or 60.96 49 P P 11 36 49.8 -1.1**

**MK31 Makanchi Array 61.13 309 P P 11 36 52.1 -0.1**
MK31 IAmb IAmb 11 36 53.2
comp=Z,7.6nm,0.9s
**MK31 Makanchi Array 61.13 309 d iP P 11 36 52.0 -0.2**
**MKAR Makanchi Array 61.13 309 P P 11 36 52.3 +0.1**
**MKAR Makanchi Array 61.13 309 P P 11 36 52.1 0.0**
comp=Z,7.0nm,0.8s,baz=55,slow=6.9,SNR=62
comp=Z,7.0nm,0.8s
**SFIN Lafayette 61.16 61 P P 11 36 51.0 -1.4**
baz=313
**FCAR Ozark Folk Cen 61.28 68 P P 11 36 51.9 -1.4**
FCAR IAmb IAmb 11 37 36.1
comp=Z,6.0nm,0.8s
**MAKZ Makanchi 61.28 309 P P 11 36 53.3 +0.1**
MAKZ IAmb IAmb 11 36 54.2
comp=Z,10.0nm,0.8s
**MAKZ Makanchi 61.28 309 P P 11 36 53.3 +0.1**
MAKZ pmax pmax
comp=Z,10.0nm,0.9s
**MIAR Mount Ida 61.32 70 P P 11 36 53.3 -0.3**
**MIAR Mount Ida 61.32 70 P P 11 36 52.3 -1.3**
baz=313
**MIAR Mount Ida 61.32 70 P P 11 36 53.3 -0.3**
MIAR pmax pmax
comp=Z,12nm,0.9s
**SGF Sodankyl 61.39 349 P P 11 36 50.6 -2.9**
SGF pmax pmax
comp=Z,21nm,1.6s
**435B Jarrell 61.42 75 P P 11 36 54.7 +0.4**
**833A Chaparral WMA, 61.98 79 P P 11 36 57.2 -0.9**
baz=314
**BRVK Borovoye 62.16 321 P P 11 36 59.8 +0.9**
**BRVK Borovoye 62.16 321 d iP P 11 36 59.9 +0.9**
BRVK pmax pmax
comp=Z,7.0nm,1.0s
**O48B Farmland 62.33 60 P P 11 36 58.8 -1.5**
baz=313
**SADO Sadowa 62.43 52 LR LR 12 04 59.2**
comp=Z,62nm,19.8s,baz=56,slow=37
**MSF Maaselka 62.52 348 P P 11 37 02.5 +1.3**
MSF pmax pmax
comp=Z,41nm,2.5s
**SVE Sverdlovsk 62.92 328 eP P 11 37 05.5 +1.5**
SVE pmax pmax
comp=Z,34nm,1.4s
**P49A Miami Univ. Ec 63.07 60 P P 11 37 04.0 -1.2**
baz=314
**HKT Hockley 63.09 75 eP P 11 37 05.2 -0.2**
HKT pmax pmax
comp=Z,11nm,1.5s
**WVT Waverly 63.65 65 P P 11 37 07.8 -1.3**
baz=314
**ZAIG Zacatecas 63.87 85 P P 11 37 10.8 -0.3**
**PZH PanZhiHua 63.88 281 P P 11 37 11.0 0.0**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,150nm,4.7s
**ARU Arti 63.94 329 P P 11 37 11.7 +1.0**
**ARU Arti 63.94 329 d iP P 11 37 11.7 +1.0**
ARU 11 37 44.8
ARU S **S 11 45 48.4 +2.6**
ARU SS **SS 11 49 55.1 +1.9**
ARU pmax pmax
comp=Z,35nm,1.2s
**ARU Arti 63.94 329 P P 11 37 11.5 +0.8**
comp=Z,27nm,1.1s
**M53A WI Miller and 63.95 56 P P 11 37 09.7 -1.4**
baz=315
**BORG Borgarnes 64.19 11 LR LR 12 03 48.6**
comp=Z,39nm,21.6s,baz=3.1,slow=35
**TDK Taldyqorghan 64.32 310 eP P 11 37 14.3 +0.8**
baz=310
**TDK Taldyqorghan 64.32 310 eP P 11 37 14.2 +0.8**
**O53A New Philadelph 64.50 57 P P 11 37 13.3 -1.4**
baz=315
**CLTN Cedars of Leba 64.54 64 IAmb IAmb 11 37 27.0**
comp=Z,13nm,1.4s
**P53A Whipple 64.94 58 IAmb IAmb 11 37 20.2**
comp=Z,13nm,1.1s
**KIRV Kirov 64.94 335 LR LR 12 08 01.3**
comp=Z,95nm,21.0s,baz=26,slow=38
**KIRV Kirov 64.94 335 ceP P 11 37 18.7 +1.5**
**O54A Avella 65.00 57 P P 11 37 18.3 +0.4**
**SHLS Shalkode 65.11 308 eP P 11 37 18.3 -0.5**
comp=Z,8.6nm,0.9s,baz=308
**SHLS Shalkode 65.11 308 eP P 11 37 18.3 -0.5**
SHLS pmax pmax
comp=Z,9.0nm,0.9s
**KPKS Kokpek 65.29 309 eP P 11 37 20.8 +0.9**
comp=Z,5.8nm,0.9s,baz=309
**KPKS Kokpek 65.29 309 eP P 11 37 20.7 +0.9**
KPKS pmax pmax
comp=Z,6.0nm,0.9s
**UZB Uzunbulak 65.34 308 eP P 11 37 21.0 +0.6**
comp=Z,5.1nm,1.0s,baz=308
**UZB Uzunbulak 65.34 308 eP P 11 37 20.9 +0.6**
UZB pmax pmax
comp=Z,5.0nm,1.0s
**Q54A Coxs Mills 65.60 58 IAmb IAmb 11 37 22.5**
comp=Z,14nm,1.1s
**ZHN Zhinishke 65.63 309 eP P 11 37 22.9 +0.7**
comp=Z,5.8nm,1.0s,baz=309
**ZHN Zhinishke 65.63 309 eP P 11 37 22.8 +0.7**
ZHN pmax pmax
comp=Z,6.0nm,1.0s
**SATY Saty 65.72 309 eP P 11 37 23.8 +1.0**
comp=Z,8.3nm,1.0s,baz=308
**SATY Saty 65.72 309 eP P 11 37 23.7 +1.0**
SATY pmax pmax
comp=Z,8.0nm,1.0s
**TZTN Tazewell 65.82 62 P P 11 37 21.4 -1.9**
baz=315
**BINY Binghamton 65.87 53 P P 11 37 22.2 -1.4**
baz=316
**SSPA Standing Stone 66.01 55 P P 11 37 24.0 -0.4**
SSPA IAmb IAmb 11 37 34.8
comp=Z,12nm,0.9s
**SSPA Standing Stone 66.01 55 P P 11 37 24.3 -0.2**
baz=316
**V52A Sevierville 66.29 62 IAmb IAmb 11 38 04.5**
comp=Z,6.6nm,0.9s
**TKL Tuckaleechee C 66.32 62 IAmb IAmb 11 37 51.3**
comp=Z,7.4nm,0.9s
**TKL Tuckaleechee C 66.32 62 LR LR 12 07 31.6**
comp=Z,43nm,18.1s,baz=326,slow=37
**MDOK Medeo 66.33 309 eP P 11 37 27.4 +0.8**
baz=309
MDOK eS **S 11 46 17.7 +1.8**
baz=309
**MDOK Medeo 66.33 309 eP P 11 37 27.4 +0.8**
MDOK eS **S 11 46 17.7 +1.8**
**AAA Alma-Ata 66.36 309 eP P 11 37 27.8 +1.1**
baz=310
**AAA Alma-Ata 66.36 309 eP P 11 37 27.8 +1.1**
**BTLS Baital 66.41 312 eP P 11 37 27.7 +0.8**
comp=Z,6.0nm,0.9s,baz=312
**BTLS Baital 66.41 312 eP P 11 37 27.6 +0.7**
BTLS pmax pmax
comp=Z,6.0nm,0.9s
**LBNH Lisbon 66.41 49 P P 11 37 26.8 -0.2**
baz=318
**TNSS Tian-Shan 66.47 309 eP P 11 37 28.6 +0.7**
baz=309
**TNSS Tian-Shan 66.47 309 eP P 11 37 28.6 +0.7**
**H62A Milan 66.53 48 P P 11 37 28.0 +0.2**
**FINES FINESS Array B 67.19 348 P P 11 37 31.8 +0.2**
comp=Z,8.0nm,0.7s,baz=35,slow=7.0,SNR=19
comp=Z,8.0nm,0.7s
**FINES FINESS Array B 67.19 348 ceP P 11 37 32.2 +0.6**
FINES pmax pmax
comp=Z,8.0nm,0.7s
**SGDS Sogindy 67.31 311 eP P 11 37 33.6 +0.8**
comp=Z,6.1nm,1.0s,baz=311
**SGDS Sogindy 67.31 311 eP P 11 37 33.5 +0.8**
SGDS pmax pmax
comp=Z,6.0nm,1.0s
**TAOE Nuku Hiva Isla 67.39 139 eLR LR 11 57 46.4**
comp=Z,170nm,26.6s
**MSVF Nonsavu 67.51 184 LR LR 12 01 28.8**
comp=Z,44nm,19.3s,baz=8.4,slow=31
**AAK Ala-Archa 67.98 310 P P 11 37 38.7 +1.5**
**AAK Ala-Archa 67.98 310 ceP P 11 37 38.6 +1.5**
AAK pmax pmax
comp=Z,25nm,0.9s
**KMSC Kings Mountain 68.08 61 P P 11 37 37.3 -0.4**

baz=316
**GOGA Godfrey 68.10 64 P P 11 37 37.4 -0.5**
baz=316
**NC204 NORSAR Array S 68.83 355 P P 11 37 43.4 +1.3**
**AKTO Aktyubinsk 68.98 325 LR LR 12 09 25.0**
comp=Z,44nm,21.4s,baz=80,slow=37
**NB2 NORSAR Subarra 69.04 355 P P 11 37 44.0 +0.7**
comp=Z,12nm,0.8s,baz=7.5,slow=6.5
**NB2 NORSAR Subarra 69.04 355 P P 11 37 44.2 +0.9**
NB2 pmax pmax
comp=Z,1.0nm,0.6s
**NOA NORSAR Array B 69.04 355 P P 11 37 43.8 +0.4**
comp=Z,26nm,0.5s,baz=12,slow=6.8,SNR=7.7
comp=Z,26nm,0.5s
**ABKAR Akbulak array 69.22 323 P P 11 37 45.5 +1.0**
**ABKAR Akbulak array 69.22 323 P P 11 37 45.2 +0.6**
ABKAR IAmb IAmb 11 37 46.7
comp=Z,11nm,1.1s
**CRAI Chiangrai 69.25 277 P P 11 37 45.1 -0.1**
CRAI IAmb IAmb 11 37 46.4
comp=Z,11nm,0.9s
**KK31 Karatay Array 69.54 313 IAmb IAmb 11 37 48.1**
comp=Z,9.0nm,0.9s
**KKAR Karatay Array 69.54 313 P P 11 37 47.6 +0.9**
KKAR IAmb IAmb 11 37 48.1
comp=Z,8.9nm,0.9s
**KKAR Karatay Array 69.54 313 P P 11 37 47.6 +0.9**
KKAR pmax pmax
comp=Z,9.0nm,0.9s
**KSH Kashi 69.57 307 P P 11 37 51.7 +4.6**
KSH sP pwP 11 38 01.5 +4.5
KSH pmax pmax
comp=Z,36nm,0.9s
**ARSB Arslanbob 69.71 310 IAmb IAmb 11 37 50.4**
comp=Z,6.8nm,1.0s
**HFS Hagfors 69.79 354 P P 11 37 48.5 +0.6**
comp=Z,7.6nm,0.6s,baz=20,slow=4.9,SNR=10
comp=Z,7.6nm,0.6s
**BRLS Borolday 69.91 314 eP P 11 37 51.1 +2.1**
comp=Z,6.5nm,1.2s,baz=314
**BRLS Borolday 69.91 314 eP P 11 37 51.1 +2.1**
BRLS pmax pmax
comp=Z,7.0nm,1.2s
**VSU Vasula 69.96 346 ceP P 11 37 49.4 +0.5**
VSU pmax pmax
comp=Z,20nm,0.8s
**MOS Moscow 70.45 339 eP P 11 37 50.1 -1.9**
MOS e 11 38 19.0
MOS pmax pmax
comp=Z,100nm,1.0s
MOS pmax pmax
comp=Z,82nm,0.9s
**BELG Belogornoye 70.81 332 LR LR 12 14 06.8**
comp=Z,40nm,18.3s,baz=102,slow=40
**BELG Belogornoye 70.81 332 d iP P 11 37 55.0 +0.8**
BELG pmax pmax
comp=Z,11nm,0.9s
BELG MLR MLR
comp=Z,11nm,20.0s
**OBN Obninsk 71.26 340 LR LR 12 11 40.6**
comp=Z,68nm,21.8s,baz=358,slow=38
**OBN Obninsk 71.26 340 eP P 11 37 57.4 +0.5**
OBN e*SP **pwP 11 38 04.1 -2.7**
OBN e 11 38 16.0
OBN e 11 40 33.1
OBN ePPP PPP 11 42 16.6
OBN pmax pmax
comp=Z,39nm,0.9s
OBN MLR MLR
comp=Z,87nm,20.0s
**OBN Obninsk 71.26 340 P P 11 37 57.8 +0.9**
comp=Z,28nm,0.6s
**CMAR Chiang Mai Arr 71.46 277 P P 11 37 58.8 +0.1**
**CMAR Chiang Mai Arr 71.46 277 P P 11 37 58.5 -0.2**
comp=Z,3.2nm,0.8s,baz=27,slow=6.2,SNR=14
comp=Z,3.2nm,0.8s
**CMAR Chiang Mai Arr 71.46 277 ceP P 11 37 59.0 +0.2**
CMAR pmax pmax
comp=Z,3.0nm,0.7s
**BTK Batken 71.73 311 P P 11 38 01.6 +1.4**
**BTK Batken 71.73 311 P P 11 38 01.6 +1.4**
BTK pmax pmax
comp=Z,86nm,0.4s
**PPT Papeete 71.91 151 LR LR 12 01 10.5**
comp=Z,71nm,20.5s,baz=295,slow=29
**PPT2 Papeete2 71.93 151 eLR LR 11 59 40.8**
comp=Z,205nm,29.0s
PPT2 eLR LR 11 59 44.7
comp=Z,170nm,32.0s
**RAR Rarotonga 72.78 162 LR LR 12 02 16.9**
comp=Z,120nm,21.1s,baz=335,slow=30
**LPSR Galich'ya Gora 73.01 337 eP P 11 38 07.2 -0.3**
LPSR pmax pmax
comp=Z,20nm,0.6s
**DZM Mont Dzumac 73.02 195 eLR LR 12 00 17.0**
comp=Z,199nm,25.6s
**VRH Novokhopyorsk 73.56 335 eP P 11 38 10.9 +0.2**
VRH pmax pmax
comp=Z,45nm,0.9s
**SIMJ Simiganj 73.70 311 P P 11 38 12.8 +0.7**
**VORR Voronezh 73.79 337 eP P 11 38 09.7 -2.4**
VORR pmax pmax
comp=Z,40nm,0.4s
**VSR Storozhevoye 74.22 337 eP P 11 38 13.2 -1.4**
VSR pmax pmax
comp=Z,30nm,1.1s
**VORD Divnogorie 74.42 336 eP P 11 38 14.1 -1.6**
VORD pmax pmax
comp=Z,20nm,0.8s
**EKA Eskdalemuir Ar 74.95 3 P P 11 38 19.2 +0.4**
comp=Z,5.5nm,0.7s,baz=359,slow=4.6,SNR=15
comp=Z,5.5nm,0.7s
**NIL Nilore 75.45 305 P P 11 38 23.1 +1.0**
**NIL Nilore 75.45 305 P P 11 38 23.1 +1.0**
NIL pmax pmax
comp=Z,49nm,1.1s
**KAPI Kappang 76.33 245 LR LR 12 10 55.1**
comp=Z,31nm,18.8s,baz=354,slow=35
**RNPP9 Sopachiv 76.88 345 P P 11 38 30.7 +0.9**
**AK23 Malin Array Si 76.91 343 P P 11 38 30.6 +0.6**
**AK21 Malin Array Si 76.91 343 P P 11 38 30.7 +0.7**
**AK22 Malin Array Si 76.92 343 P P 11 38 30.7 +0.6**
**KBL Kabul 76.92 309 P P 11 38 30.2 -0.5**
**KBL Kabul 76.92 309 P P 11 38 30.2 -0.5**
**AK03 Malin Array Si 76.93 342 P P 11 38 30.8 +0.7**
**AK04 Malin Array Si 76.94 342 P P 11 38 30.7 +0.5**
**AKASG Malin Array Be 76.95 342 P P 11 38 30.2 0.0**
AKASG IAmb IAmb 11 38 32.1
comp=Z,10nm,1.1s
**AKASG Malin Array Be 76.95 342 P P 11 38 30.9 +0.6**
comp=Z,17nm,0.7s,baz=20,slow=5.6,SNR=46
AKASG LR LR 12 14 53.2
comp=Z,26nm,21.8s,baz=52,slow=38
comp=Z,17nm,0.7s
**AKASG Malin Array Be 76.95 342 ceP P 11 38 30.8 +0.6**
AKASG pmax pmax
comp=Z,24nm,0.8s
**AKBB Malin Array Si 76.95 342 P P 11 38 30.9 +0.7**
**AKBB Malin Array Si 76.95 342 P P 11 38 30.9 +0.7**
AKBB pmax pmax
comp=Z,38nm,1.0s
**AKBB Malin Array Si 76.95 342 P P 11 38 30.7 +0.5**
**AK20 Malin Array Si 76.95 343 P P 11 38 30.8 +0.5**
**RNPP8 Varash 76.96 345 P P 11 38 30.8 +0.5**
**KIEV Kiev 76.96 342 P P 11 38 30.9 +0.6**
**KIEV Kiev 76.96 342 ⇓P P 11 38 30.5 +0.2**
**KIEV Kiev 76.96 342 P P 11 38 30.9 +0.6**
KIEV pmax pmax
comp=Z,37nm,1.0s
**KIEV Kiev 76.96 342 P P 11 38 30.5 +0.2**
comp=Z,162nm,1.0s,comp=Z,1μm
**RNPP5 Staryi Chortor 77.06 345 P P 11 38 31.7 +0.9**
**MI30 MI30,Zelenitsa 77.11 343 P P 11 38 31.7 +0.6**
**TBI Tubuai 77.39 153 eLR LR 12 02 15.9**
comp=Z,683nm,27.0s
TBI eLR LR 12 02 33.7
comp=Z,779nm,31.8s
**MI29 MI29, Kamyanyy 77.48 343 P P 11 38 33.6 +0.3**
**LUBAR Lubar, Ukraine 77.98 343 P P 11 38 36.0 0.0**
**LVV L'vov 78.73 345 eP P 11 38 40.9 +0.7**
**HORU Horodok 78.90 344 P P 11 38 41.8 +0.7**
**RAO Raoul Island 78.90 180 LR LR 12 09 15.0**
comp=Z,79nm,20.7s,baz=122,slow=32
**BRG Berggiesshubel 78.96 352 eP P 11 38 42.3 +0.9**
BRG Amp 11 38 43.1
comp=Z,7.5nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OJC | Ojcow | 78.96 | 348 | P | P | 11 38 42.3 | +0.9 |
| | comp=Z,12nm,1.4s | | | | | | |
| DPC | Dobruska-Polom | 79.24 | 351 | *e*P | P | 11 38 44.1 | +1.0 |
| DPC | Dobruska-Polom | 79.24 | 351 | *e*P | P | 11 38 44.1 | +1.0 |
| DPC | Dobruska-Polom | 79.24 | 351 | P | P | 11 38 44.0 | +1.0 |
| | comp=Z,9.5nm,1.3s | | | | | | |
| RICC | Richard | 79.27 | 352 | *e*P | P | 11 38 44.0 | +0.9 |
| NDNU | Novodnistrovsk | 79.32 | 343 | P | P | 11 38 43.8 | +0.4 |
| SHIU | Shidnytsya | 79.41 | 346 | P | P | 11 38 45.7 | +1.7 |
| MORS | Morshin | 79.41 | 345 | P | P | 11 38 44.8 | +0.9 |
| KMPD | K-Podol'skiy | 79.52 | 344 | P | pP | 11 38 45.2 | -1.7 |
| KMPD | | | | P | P | 11 38 44.5 | 0.0 |
| SORM | Soroca | 79.57 | 342 | ⇓P | P | 11 38 45.6 | +0.8 |
| SORM | Soroca | 79.57 | 342 | P | P | 11 38 45.4 | +0.6 |
| MORC | Moravsky Berou | 79.67 | 350 | *e*P | P | 11 38 46.3 | +0.9 |
| NIE | Niedzica | 79.67 | 348 | P | P | 11 38 46.5 | +1.1 |
| | comp=Z,3.6nm,1.1s | | | | | | |
| MEM | Membach | 79.70 | 357 | *d*P | P | 11 38 45.5 | +0.1 |
| STNU | Starunia | 79.72 | 345 | P | P | 11 38 46.9 | +1.3 |
| KIV | Kislovodsk | 79.82 | 331 | *e*P | P | 11 38 47.6 | +1.2 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,55nm,19.0s | | | | | | |
| KOLS | Kolonicke sedl | 79.86 | 346 | *e*P | P | 11 38 47.8 | +1.4 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| KOLS | Kolonicke sedl | 79.86 | 346 | *e*P | P | 11 38 47.8 | +1.4 |
| BCLA | Clavier | 79.91 | 358 | *d*P | P | 11 38 47.9 | +1.3 |
| NCK | Nalchik | 79.95 | 330 | *e*P | P | 11 38 47.7 | +0.7 |
| NCK | | | | pmax | pmax | | |
| | comp=Z,34nm,0.9s | | | | | | |
| BGES | Gesves | 79.95 | 358 | *d*P | P | 11 38 48.5 | +1.6 |
| KBZ | Khabaz | 79.96 | 331 | P | P | 11 38 48.0 | +1.1 |
| | comp=Z,7.8nm,0.8s,baz=20,slow=4.6,SNR=10 | | | | | | |
| KBZ | | | | LR | LR | 12 17 40.5 | |
| | comp=Z,52nm,21.7s,baz=30,slow=38 | | | | | | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| KBZ | Khabaz | 79.96 | 331 | *ce*P | P | 11 38 48.3 | +1.3 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,82nm,22.0s | | | | | | |
| KSV | Kosov | 80.01 | 344 | P | P | 11 38 47.3 | +0.1 |
| SHA1 | Shidzhatmaz | 80.02 | 331 | *ce*P | P | 11 38 47.8 | +0.1 |
| BMRD | Maredsous | 80.04 | 358 | *d*P | P | 11 38 48.7 | +1.4 |
| LANS | Liptovska Anna | 80.05 | 348 | *e*P | P | 11 38 49.3 | +1.8 |
| LANS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| LANS | Liptovska Anna | 80.05 | 348 | *e*P | P | 11 38 49.3 | +1.8 |
| VRAC | Vranov | 80.24 | 350 | *e*P | P | 11 38 49.7 | +1.2 |
| VRAC | Vranov | 80.24 | 350 | LR | LR | 12 15 29.6 | |
| | comp=Z,23nm,21.9s,baz=18,slow=36 | | | | | | |
| VRAC | Vranov | 80.24 | 350 | ⇓P | P | 11 38 48.5 | +0.1 |
| HOLU | Holmets | 80.24 | 346 | P | P | 11 38 49.1 | +0.7 |
| DOU | Dourbes | 80.25 | 358 | *d*P | P | 11 38 49.2 | +0.8 |
| MUKU | Mukachevo | 80.27 | 346 | P | P | 11 38 49.8 | +1.2 |
| BRIU | Brid | 80.33 | 346 | P | P | 11 38 49.8 | +0.9 |
| HRA | Herat | 80.37 | 313 | IAmb | IAmb | 11 38 51.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| KORU | Korolevo | 80.48 | 346 | P | P | 11 38 51.5 | +1.8 |
| BERU | Beregovo | 80.49 | 346 | P | P | 11 38 50.6 | +0.9 |
| KRUC | Moravsky | 80.51 | 350 | *e*P | P | 11 38 50.9 | +1.0 |
| JAVC | Velka Javorina | 80.56 | 349 | *e*P | P | 11 38 52.0 | +1.8 |
| KECS | Kecovo | 80.56 | 347 | *e*P | P | 11 38 51.7 | +1.5 |
| KECS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| KECS | Kecovo | 80.56 | 347 | *e*P | P | 11 38 51.7 | +1.5 |
| ANN | Anapa | 80.58 | 335 | *e*P | P | 11 38 47.1 | -3.2 |
| ANN | | | | *e*S | S | 11 48 52.4 | -4.2 |
| ANN | | | | pmax | pmax | | |
| | comp=Z,113nm,1.4s | | | | | | |
| BUR08 | Bucovina Ar. S | 80.63 | 344 | P | P | 11 38 51.6 | +0.9 |
| BURAR | Bucovina Array | 80.66 | 344 | P | P | 11 38 52.1 | +1.3 |
| BURAR | Bucovina Array | 80.66 | 344 | ⇓P | P | 11 38 51.6 | +0.8 |
| BURAR | Bucovina Array | 80.66 | 344 | P | P | 11 38 52.2 | +1.4 |
| BURAR | | | | pmax | pmax | | |
| | comp=Z,33nm,0.8s | | | | | | |
| KHC | Kasperske Hory | 80.72 | 352 | IAmb | IAmb | 11 38 53.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| KHC | Kasperske Hory | 80.72 | 352 | *e*P | P | 11 38 52.4 | +1.4 |
| KHC | Kasperske Hory | 80.72 | 352 | *ce*P | P | 11 38 52.2 | +1.2 |
| KHC | | | | pmax | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | |
| KHC | Kasperske Hory | 80.72 | 352 | P | P | 11 38 51.8 | +0.8 |
| | comp=Z,10nm,1.1s | | | | | | |
| VYHS | Vyhne | 80.78 | 349 | *e*P | P | 11 38 52.8 | +1.5 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| VYHS | Vyhne | 80.78 | 349 | *e*P | P | 11 38 52.8 | +1.5 |
| GERES | GERESS Array B | 80.99 | 352 | P | P | 11 38 52.9 | +0.3 |
| GERES | GERESS Array B | 80.99 | 352 | P | P | 11 38 52.0 | -0.6 |
| | comp=Z,2.9nm,0.8s,baz=132,slow=2.0,SNR=11 | | | | | | |
| GERES | | | | LR | LR | 12 17 47.7 | |
| | comp=Z,25nm,20.2s,baz=26,slow=38 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| GERES | GERESS Array B | 80.99 | 352 | P | P | 11 38 52.9 | +0.3 |
| PSZ | Piszkesteto | 81.20 | 348 | P | P | 11 38 55.0 | +1.3 |
| WRA | Warramunga Arr | 81.23 | 224 | P | P | 11 38 52.6 | -1.4 |
| | comp=Z,1.3nm,0.9s,baz=34,slow=6.1,SNR=6.1 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 81.23 | 224 | *ce*P | P | 11 38 56.9 | +2.9 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ARCR | ARCALIA | 81.32 | 345 | ⇓P | P | 11 38 55.3 | +1.1 |
| TESR | Tescani | 81.46 | 343 | ⇓P | P | 11 38 56.3 | +1.3 |
| TESR | Tescani | 81.46 | 343 | P | P | 11 38 55.8 | +0.8 |
| | comp=Z,24nm,1.1s | | | | | | |
| CONA | Conrad Observa | 81.68 | 350 | *i* PcP | P | 11 38 58.2 | +1.9 |
| | comp=Z,7.8nm,0.9s,SNR=6.3 | | | | | | |
| GHRR | | 81.75 | 342 | P | P | 11 38 58.2 | +1.7 |
| RONA | Rosalia, Austr | 81.86 | 350 | *e*PcP | P | 11 38 59.1 | +2.0 |
| | comp=Z,7.8nm,1.0s | | | | | | |
| DRGR | | 81.88 | 346 | ⇓P | P | 11 38 58.2 | +0.9 |
| DRGR | | 81.88 | 346 | ⇓P | P | 11 38 58.2 | +0.9 |
| MARR | Marisel-Cluj | 81.92 | 345 | ⇓P | P | 11 38 58.5 | +1.0 |
| OZUR | | 82.02 | 343 | ⇓P | P | 11 38 59.3 | +1.3 |
| VRI | Vrincioaia | 82.06 | 343 | ⇓P | P | 11 38 59.7 | +1.5 |
| VRI | Vrincioaia | 82.06 | 343 | ⇓P | P | 11 38 59.7 | +1.5 |
| PLOR3 | Plostina Array | 82.09 | 343 | P | P | 11 38 59.3 | +0.9 |
| | comp=Z,9.4nm,0.8s | | | | | | |
| PLOR | Plostina | 82.09 | 343 | ⇓P | P | 11 38 59.8 | +1.4 |
| PLOR | Plostina | 82.09 | 343 | ⇓P | P | 11 38 59.8 | +1.4 |
| ODBI | Odobesti | 82.10 | 342 | P | P | 11 38 59.6 | +1.2 |
| | comp=Z,35nm,0.8s | | | | | | |
| BIOA | Bad Ischl, Aus | 82.14 | 352 | *e*PcP | P | 11 39 00.3 | +1.7 |
| | comp=Z,9.5nm,0.9s | | | | | | |
| SPBR | Spulber | 82.17 | 343 | ⇑P | P | 11 39 00.6 | +1.8 |
| COVR | Voineasa-Covas | 82.18 | 343 | ⇓P | P | 11 39 00.6 | +1.7 |
| DOPR | Dopca | 82.22 | 344 | ⇓P | P | 11 39 00.4 | +1.4 |
| MPLH | Magyarpolny | 82.24 | 349 | P | P | 11 39 00.8 | +1.7 |
| | comp=Z,51nm,1.2s | | | | | | |
| RKT | Rikitea | 82.32 | 140 | *e*LR | LR | 12 04 38.5 | |
| | comp=Z,524nm,30.5s | | | | | | |
| ARSA | Arzberg | 82.39 | 351 | *e*PcP | P | 11 39 01.7 | +1.8 |
| | comp=Z,5.7nm,0.8s | | | | | | |
| LESA | Schwarzleotal | 82.49 | 352 | *e*PcP | P | 11 39 02.0 | +1.5 |
| | comp=Z,11nm,1.4s | | | | | | |
| SIRR | Siria | 82.56 | 346 | ⇓P | P | 11 39 02.0 | +1.3 |
| GNI | Garni | 82.57 | 328 | LR | LR | 12 21 06.4 | |
| | comp=Z,29nm,18.5s,baz=9.5,slow=40 | | | | | | |
| RETA | Reutte | 82.57 | 354 | *e*PcP | P | 11 39 02.1 | +1.2 |
| | comp=Z,6.3nm,1.1s | | | | | | |
| MLR | Muntele Rosu | 82.58 | 343 | ⇓P | P | 11 39 02.4 | +1.4 |
| MLR | Muntele Rosu | 82.58 | 343 | ⇓P | P | 11 39 02.4 | +1.4 |
| MLR | Muntele Rosu | 82.58 | 343 | P | P | 11 39 02.8 | +1.8 |
| | comp=Z,17nm,1.1s | | | | | | |
| WATA | Walderalm | 82.66 | 353 | *e*PcP | P | 11 39 02.8 | +1.3 |
| | comp=Z,14nm,1.0s | | | | | | |
| MOTA | Moosalm | 82.69 | 354 | *e*PcP | P | 11 39 02.9 | +1.3 |
| | comp=Z,13nm,1.0s | | | | | | |
| WTTA | Wattenberg | 82.73 | 353 | *e*PcP | P | 11 39 03.2 | +1.3 |
| | comp=Z,18nm,1.2s | | | | | | |
| KBA | Koelnbreinsper | 82.77 | 352 | *i* PcP | P | 11 39 03.5 | +1.4 |
| | comp=Z,23nm,0.8s,SNR=15 | | | | | | |
| VOIR | | 82.79 | 344 | ⇓P | P | 11 39 03.9 | +1.8 |
| VOIR | | 82.79 | 344 | ⇓P | P | 11 39 03.9 | +1.8 |
| VOIR | | 82.79 | 344 | P | P | 11 39 03.2 | +1.1 |
| | comp=Z,22nm,1.2s | | | | | | |
| SQTA | Sankt Quirin | 82.81 | 353 | *e*PcP | P | 11 39 03.8 | +1.6 |
| | comp=Z,5.1nm,0.6s | | | | | | |
| DAVA | Damuels | 82.83 | 354 | *e*PcP | P | 11 39 03.9 | +1.5 |
| | comp=Z,6.6nm,0.9s | | | | | | |
| SURR | Surduc | 82.98 | 346 | ⇓P | P | 11 39 04.3 | +1.3 |
| SOKA | Soboth | 83.01 | 351 | *i* PcP | P | 11 39 04.5 | +1.3 |
| | comp=Z,14nm,0.9s,SNR=8.2 | | | | | | |
| MORH | Mrgy, Hungar | 83.04 | 348 | ⇓P | P | 11 39 04.4 | +1.2 |
| MORH | Mrgy, Hungar | 83.04 | 348 | P | P | 11 39 03.7 | +0.5 |
| | comp=Z,5.8nm,1.5s | | | | | | |
| FETA | Feichten | 83.04 | 354 | *i* PcP | P | 11 39 04.9 | +1.4 |
| | comp=Z,13nm,1.1s,SNR=5.6 | | | | | | |
| ABTA | Abfaltersbach | 83.17 | 353 | *e*PcP | P | 11 39 05.2 | +1.1 |
| | comp=Z,8.3nm,0.9s | | | | | | |
| MYKA | Terra Mystica | 83.19 | 352 | *e*PcP | P | 11 39 05.6 | +1.5 |
| | comp=Z,1.8nm,0.5s | | | | | | |
| BZS | Buzias | 83.20 | 346 | ⇓P | P | 11 39 05.1 | +1.0 |
| BZS | Buzias | 83.20 | 346 | ⇓P | P | 11 39 05.1 | +1.0 |
| OBKA | Obir | 83.22 | 351 | *e*PcP | P | 11 39 05.8 | +1.5 |
| | comp=Z,11nm,1.1s | | | | | | |
| GZR | Gura Zlata | 83.23 | 345 | ⇓P | P | 11 39 05.7 | +1.3 |
| GZR | Gura Zlata | 83.23 | 345 | ⇓P | P | 11 39 05.7 | +1.3 |
| PRED | Cave del Predi | 83.38 | 352 | P | P | 11 39 05.0 | -0.2 |
| PRED | | | | IAmb | IAmb | 11 39 06.5 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| FUORN | Ofenpass-Fuorn | 83.47 | 354 | P | P | 11 39 06.6 | +0.8 |
| FUORN | | | | IAmb | IAmb | 11 39 09.6 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| FRGS | Fruska Gora | 83.92 | 347 | ⇓P | P | 11 39 09.0 | +1.1 |
| FRGS | Fruska Gora | 83.92 | 347 | P | P | 11 39 08.3 | +0.5 |
| | comp=Z,39nm,1.1s,comp=Z,393nm | | | | | | |
| MDVR | Moldovita | 84.00 | 346 | ⇓P | P | 11 39 09.8 | +1.5 |
| ASAR | Alice Springs | 84.68 | 223 | P | P | 11 39 10.9 | -0.9 |
| | comp=Z,2.2nm,0.9s,baz=30,slow=4.8,SNR=9.3 | | | | | | |
| ASAR | | | | LR | LR | 12 09 54.8 | |
| | comp=Z,42nm,21.3s,baz=36,slow=31 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| BR131 | Keskin Array S | 86.32 | 336 | *e*P | P | 11 39 20.9 | +0.8 |
| BRTR | Keskin Array B | 86.32 | 336 | P | P | 11 39 19.9 | -0.3 |
| BRTR | Keskin Array B | 86.32 | 336 | P | P | 11 39 21.0 | +0.8 |
| | comp=Z,2.3nm,0.8s,baz=54,slow=3.2,SNR=5.6 | | | | | | |
| BRTR | | | | LR | LR | 12 23 37.1 | |
| | comp=Z,15nm,19.0s,baz=16,slow=40 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| BRTR | Keskin Array B | 86.32 | 336 | *ce*P | P | 11 39 21.2 | +1.0 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| BR104 | Keskin Array S | 86.34 | 336 | P | P | 11 39 21.2 | +1.0 |
| RDO | Rodhopi | 86.84 | 342 | P | P | 11 39 22.7 | +0.3 |
| RDO | | | | IAmb | IAmb | 11 39 24.7 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| STKA | Stephens Creek | 88.94 | 213 | LR | LR | 12 18 12.3 | |
| | comp=Z,60nm,18.2s,baz=26,slow=35 | | | | | | |
| ESDC | Sonseca Array | 90.56 | 4 | P | P | 11 39 40.4 | +0.2 |
| ESDC | | | | IAmb | IAmb | 11 39 41.1 | |
| | comp=Z,8.4nm,1.5s | | | | | | |
| ESDC | Sonseca Array | 90.56 | 4 | P | P | 11 39 39.3 | -0.9 |
| | comp=Z,2.4nm,1.1s,baz=330,slow=4.7,SNR=7.2 | | | | | | |
| ESDC | | | | LR | LR | 12 24 15.1 | |
| | comp=Z,17nm,18.4s,baz=3.0,slow=38 | | | | | | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| MMAI | Mount Meron Ar | 92.10 | 332 | LR | LR | 12 26 37.4 | |
| | comp=Z,18nm,18.6s,baz=350,slow=39 | | | | | | |
| SDV | Santo Domingo | 94.39 | 71 | LR | LR | 12 24 54.4 | |
| | comp=Z,16nm,20.4s,baz=257,slow=37 | | | | | | |
| EIL | Elat | 95.35 | 331 | LR | LR | 12 28 04.2 | |
| | comp=Z,27nm,20.3s,baz=70,slow=39 | | | | | | |
| H03N2 | Juan Fernandez | 120.47 | 107 | T | T | 13 57 47.8 | |
| | baz=317,slow=77 | | | | | | |
| H03N1 | Juan Fernandez | 120.48 | 107 | T | T | 13 57 49.2 | |
| | baz=317,slow=77 | | | | | | |
| H03N3 | Juan Fernandez | 120.49 | 107 | T | T | 13 57 47.0 | |
| | baz=317,slow=77 | | | | | | |
| PLCA | Paso Flores | 130.26 | 109 | PKP | PKPdf | 11 45 47.7 | -0.1 |
| | comp=Z,2.6nm,0.8s,baz=318,slow=3.3,SNR=7.3 | | | | | | |
| QSPA | South Pole Qui | 139.76 | 180 | PKPdf | PKiKP | 11 46 06.9 | -0.2 |
| QSPA | South Pole Qui | 139.76 | 180 | PKP | PKPdf | 11 46 04.5 | -0.2 |
| | comp=Z,4.4nm,1.2s,baz=252,slow=1.1,SNR=8.9 | | | | | | |
| MAW | Mawson | 145.56 | 216 | PKPbc | PKPbc | 11 46 15.0 | -0.1 |
| | comp=Z,17nm,1.0s,baz=99,slow=5.5,SNR=13 | | | | | | |
| LBTB | Lobatse | 148.91 | 315 | PKPdf | PKPdf | 11 46 22.8 | +0.8 |
| LBTB | Lobatse | 148.91 | 315 | PKiKP | PKPdf | 11 46 22.8 | +0.8 |
| BELA | Belgrano 2 | 148.94 | 166 | PKPdf | PKPbc | 11 46 22.6 | -1.7 |
| BOSA | Boshof | 152.12 | 311 | PKPbc | PKPbc | 11 46 33.2 | -0.3 |
| | comp=Z,4.6nm,0.6s,baz=52,slow=0.8,SNR=8.8 | | | | | | |
| BOSA | | | | PKPab | PKPab | 11 46 42.6 | -0.4 |
| | comp=Z,4.5nm,1.0s,baz=87,slow=6.6,SNR=4.8 | | | | | | |
| SOE | Somerset East | 155.27 | 305 | PKPdf | PKPdf | 11 46 30.3 | -0.9 |
| TROLL | Troll, Antarti | 157.92 | 181 | ⇑PKPab | PKPab | 11 47 04.6 | -2.1 |
| | comp=Z,179nm,0.9s | | | | | | |
| VNA3 | Neumayer Olymp | 158.06 | 170 | ⇑PKPab | PKPab | 11 47 07.0 | -0.2 |
| | comp=Z,2.5nm,0.8s | | | | | | |
| SNAA | Sanae | 158.16 | 176 | ⇑PKPab | PKPab | 11 47 05.4 | -2.2 |
| | comp=Z,60nm,1.0s | | | | | | |
| SNAA | Sanae | 158.16 | 176 | PKPab | PKPab | 11 47 06.2 | -1.4 |
| | comp=Z,2.9nm,1.0s,baz=215,slow=6.6,SNR=4.8 | | | | | | |
| VNA2 | Neumayer--Watz | 158.59 | 172 | ⇑PKPab | PKPab | 11 47 08.4 | -1.0 |
| | comp=Z,3.0nm,0.8s,baz=197,slow=2.9 | | | | | | |

*IDC **10** 11:30:40.0±0.9, 10.°30S×161.°17E, h0km, mb3.9/9, mbtmp3.9/10, ML3.2/2, MS3.7/5, Error ellipse: s-maj=29.1km s-min=21.8km az=115.0*

*NEIC **10** 11:30:44.7±1.4, 10.°50S±0.°08×161.°0E±0.°1, h35km±2km, mb4.5/90, Error ellipse: s-maj=17.7km s-min=11.5km az=65.0*

*NOU **10** 11:30:45.0, 10.°10S×161.°35E, h45km, mb4.3/8, Solomon Islands*

**ISC 10 11:30:44.9±0.5, 10.°45S±0.°06×160.°99E±0.°09, h35km, n117, σ1°29/115, mb4.5/52, MS3.7/3, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| HNR | Honiara | 1.44 | 315 | P | | Pn | 11 31 10.0 | +1.4 |
| HNR | Honiara | 1.44 | 315 | Pn | | Pn | 11 31 08.8 | +0.2 |
| KOUNC | Koumac, New Ca | 10.53 | 163 | P | | Pn | 11 33 17.6 | +4.1 |
| KOUNC | Koumac, New Ca | 10.53 | 163 | Pn | | Pn | 11 33 13.0 | -0.5 |
| LIFNC | LIFOU | 11.90 | 150 | P | | Pn | 11 33 33.3 | +1.1 |
| LIFNC | LIFOU | 11.90 | 150 | Pn | | Pn | 11 33 31.2 | -1.0 |
| DZM | Mont Dzumac | 12.68 | 156 | P | | Pn | 11 33 46.3 | +3.3 |
| DZM | Mont Dzumac | 12.68 | 156 | Pn | | Pn | 11 33 42.7 | -0.3 |
| DZM | Mont Dzumac | 12.68 | 156 | Pn | | Pn | 11 33 44.6 | +1.6 |
| | 0.3nm,0.3s,baz=28,slow=5.5,SNR=20 | | | | | | | |
| DZM | | | | Sn | | Sn | 11 36 01.7 | -1.4 |
| | 0.2nm,0.3s,baz=137,slow=19,SNR=1.4 | | | | | | | |
| DZM | | | | LR | | LR | 11 38 19.1 | |
| | comp=Z,121nm,18.4s,baz=360,slow=36 | | | | | | | |
| | 5.4nm,0.9s | | | | | | | |
| PMG | Port Moresby | 13.66 | 273 | LR | | LR | 11 39 07.0 | |
| | comp=Z,334nm,19.0s,baz=82,slow=37 | | | | | | | |
| TARA | Tarawa | 16.70 | 46 | | | | 11 34 38.3 | -0.1 |
| TARA | | | | IAmb | | IAmb | 11 35 09.6 | |
| | comp=Z,26nm,0.8s | | | | | | | |
| CTA | Charters Tower | 17.12 | 234 | P | | P | 11 34 45.8 | +2.7 |
| | baz=58,slow=13,SNR=2.0 | | | | | | | |
| CTA | | | | LR | | LR | 11 40 53.2 | |
| | comp=Z,15nm,18.3s,baz=77,slow=35 | | | | | | | |
| CTAO | Charters Tower | 17.12 | 234 | P | | P | 11 34 47.1 | +4.0 |
| PATS | Pohnpei | 17.38 | 351 | Pn | | Pn | 11 34 43.9 | -1.0 |
| EIDS | Eidsvold | 17.56 | 211 | Pn | | Pn | 11 34 45.1 | -1.9 |
| INKA | Innaminka | 25.65 | 225 | P | | P | 11 36 14.8 | +3.3 |
| WR0 | Warramunga Arr | 27.18 | 247 | P | | P | 11 36 21.3 | -4.1 |
| WB0 | Warramunga Arr | 27.26 | 247 | P | | P | 11 36 22.1 | -4.0 |
| WRAB | Tennant Creek | 27.34 | 247 | P | | P | 11 36 23.6 | -3.3 |
| WB2 | Warramunga Arr | 27.34 | 247 | P | | P | 11 36 24.0 | -2.9 |
| WRA | Warramunga Arr | 27.35 | 247 | P | | P | 11 36 25.2 | -1.8 |
| WRA | Warramunga Arr | 27.35 | 247 | P | | P | 11 36 28.8 | +1.7 |
| | comp=Z,0.7nm,0.5s,baz=77,slow=9.0,SNR=14 | | | | | | | |
| WRA | | | | LR | | LR | 11 46 16.0 | |
| | comp=Z,126nm,19.9s,baz=360,slow=34 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| STKA | Stephens Creek | 27.86 | 217 | P | | P | 11 36 29.2 | -2.2 |
| STKA | Stephens Creek | 27.86 | 217 | LR | | LR | 11 47 31.5 | |
| | comp=Z,208nm,19.6s,baz=27,slow=36 | | | | | | | |
| GUMO | Guam | 28.75 | 326 | P | | P | 11 36 37.8 | -1.6 |
| ASAR | Alice Springs | 28.96 | 240 | P | | P | 11 36 42.9 | +1.5 |
| | comp=Z,0.4nm,0.5s,baz=63,slow=10,SNR=11 | | | | | | | |
| ASAR | | | | LR | | LR | 11 48 13.0 | |
| | comp=Z,352nm,18.0s,baz=68,slow=36 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| MTN | Manton Dam | 29.33 | 262 | P | | P | 11 36 41.8 | -2.8 |
| MTN | | | | IAmb | | IAmb | 11 36 54.7 | |
| | comp=Z,25nm,1.5s | | | | | | | |
| BKZ | Black Stump Fm | 31.77 | 157 | P | | P | 11 37 07.0 | +1.0 |
| KNRA | Kununurra | 31.79 | 257 | P | | P | 11 37 04.3 | -2.1 |
| KNRA | | | | IAmb | | IAmb | 11 37 36.9 | |
| | comp=Z,6.6nm,0.9s | | | | | | | |
| BBOO | Buckleboo | 31.96 | 222 | P | | P | 11 37 05.2 | -2.6 |
| FITZ | Fitzroy Crossi | 35.04 | 253 | P | | P | 11 37 33.2 | -1.5 |
| FITZ | | | | IAmb | | IAmb | 11 37 47.8 | |
| | comp=Z,80nm,0.8s | | | | | | | |
| FITZ | Fitzroy Crossi | 35.04 | 253 | P | | P | 11 37 33.2 | -1.5 |
| MBWA | Marble Bar | 40.98 | 250 | P | | P | 11 38 24.4 | -0.4 |
| JHJ2 | Mitsune | 47.79 | 336 | P | | P | 11 39 18.4 | -0.6 |
| JTM | Tenmabayashi | 54.20 | 341 | P | | P | 11 40 06.5 | -0.6 |
| JKA | Kamikawa-asahi | 56.82 | 344 | P | | P | 11 40 25.6 | -0.3 |
| KSRS | Korea Array | 56.85 | 329 | P | | P | 11 40 26.8 | +0.6 |
| | comp=Z,1.1nm,0.9s,baz=148,slow=9.7,SNR=4.5 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| CMAR | Chiang Mai Arr | 67.61 | 295 | P | | P | 11 41 40.0 | +1.3 |
| | comp=Z,0.6nm,0.4s,baz=112,slow=4.3,SNR=2.8 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| SONM | Songino Array | 75.47 | 325 | P | | P | 11 42 26.6 | +0.9 |
| | comp=Z,3.0nm,0.6s,baz=128,slow=4.8,SNR=8.8 | | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| O16K | Kokwok River B | 77.12 | 20 | P | | P | 11 42 33.6 | -1.0 |
| O16K | | | | IAmb | | IAmb | 11 43 02.1 | |
| | comp=Z,8.8nm,1.4s | | | | | | | |
| OHAK | Old Harbor | 77.16 | 24 | P | | P | 11 42 35.0 | +0.2 |
| KDAK | Kodiak Island | 77.82 | 23 | P | | P | 11 42 38.5 | 0.0 |
| M16K | Timber Creek | 77.92 | 19 | P | | P | 11 42 38.4 | -0.7 |
| M16K | | | | IAmb | | IAmb | 11 42 40.4 | |
| | comp=Z,9.7nm,1.2s | | | | | | | |
| J14K | Nanvaranak Lak | 77.95 | 16 | P | | P | 11 42 38.5 | -0.6 |
| N17K | Nushagak Hills | 78.12 | 20 | P | | P | 11 42 38.6 | -1.6 |
| N17K | | | | IAmb | | IAmb | 11 43 12.2 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| Q19K | Cape Douglas, | 78.21 | 22 | P | | P | 11 42 39.7 | -1.0 |
| L16K | Owhat River | 78.29 | 18 | P | | P | 11 42 39.6 | -1.5 |
| L16K | | | | IAmb | | IAmb | 11 43 04.8 | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| O18K | Koktuh Hills | 78.31 | 21 | P | | P | 11 42 40.8 | -0.5 |
| O18K | | | | IAmb | | IAmb | 11 43 24.9 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| N18K | Kilae Creek | 78.67 | 20 | P | | P | 11 42 43.0 | -0.2 |
| N18K | | | | IAmb | | IAmb | 11 43 17.3 | |
| | comp=Z,7.6nm,1.4s | | | | | | | |
| M17K | Holitna River | 78.69 | 19 | P | | P | 11 42 43.0 | -0.3 |
| M17K | | | | IAmb | | IAmb | 11 43 08.9 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| P19K | Oil Pt | 78.87 | 22 | P | | P | 11 42 43.7 | -0.6 |
| J16K | Anvik River | 79.19 | 17 | P | | P | 11 42 45.6 | -0.4 |
| J16K | | | | IAmb | | IAmb | 11 42 54.7 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| N19K | Bonanza Creek | 79.25 | 20 | P | | P | 11 42 45.9 | -0.6 |
| N19K | | | | IAmb | | IAmb | 11 42 59.2 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| CNPM | China Poot | 79.53 | 23 | P | | P | 11 42 48.2 | +0.3 |
| L18K | Granite Mounta | 79.54 | 19 | P | | P | 11 42 48.6 | +0.7 |
| L18K | | | | IAmb | | IAmb | 11 42 57.3 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| QSPA | South Pole Qui | 79.55 | 180 | P | | P | 11 42 48.0 | -0.2 |
| QSPA | South Pole Qui | 79.55 | 180 | P | | P | 11 42 49.1 | +1.0 |
| | comp=Z,1.2nm,0.8s,baz=356,slow=1.3,SNR=5.9 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| J17K | VABM Dome | 79.71 | 17 | P | | P | 11 42 47.8 | -1.0 |
| J17K | | | | IAmb | | IAmb | 11 43 15.6 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| M19K | Big River Lodg | 80.06 | 20 | P | | P | 11 42 51.3 | +0.6 |
| M19K | | | | IAmb | | IAmb | 11 42 52.3 | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| L19K | White Mountain | 80.11 | 19 | P | | P | 11 42 51.1 | +0.1 |
| L19K | | | | IAmb | | IAmb | 11 43 20.5 | |
| | comp=Z,7.8nm,1.4s | | | | | | | |
| J18K | Innoko River | 80.46 | 18 | P | | P | 11 42 52.7 | -0.2 |
| M20K | Styx River | 80.47 | 20 | P | | P | 11 42 53.1 | +0.1 |
| H17K | Granite Mounta | 80.67 | 16 | P | | P | 11 42 54.0 | 0.0 |
| H17K | | | | IAmb | | IAmb | 11 43 36.3 | |
| | comp=Z,7.2nm,1.4s | | | | | | | |
| SUA | Susitna One | 81.01 | 21 | P | | P | 11 42 55.9 | -0.1 |
| SUA | | | | IAmb | | IAmb | 11 43 23.0 | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| RC01 | Rabbit Creek A | 81.12 | 22 | P | | P | 11 42 56.9 | +0.4 |
| J19K | Poorman | 81.18 | 18 | P | | P | 11 42 55.6 | -1.1 |
| K20K | Telida | 81.20 | 19 | P | | P | 11 42 56.8 | 0.0 |
| K20K | | | | IAmb | | IAmb | 11 43 11.1 | |
| | comp=Z,5.3nm,1.4s | | | | | | | |
| G18K | Tagagawik | 81.75 | 16 | P | | P | 11 42 59.2 | -0.5 |
| G18K | | | | IAmb | | IAmb | 11 43 40.5 | |
| | comp=Z,5.9nm,1.4s | | | | | | | |
| J20K | Nowinta River | 81.76 | 18 | P | | P | 11 42 59.8 | 0.0 |
| J20K | | | | IAmb | | IAmb | 11 43 01.5 | |
| | comp=Z,7.6nm,1.5s | | | | | | | |
| KTH | Kantishna Hill | 82.36 | 20 | P | | P | 11 43 02.8 | -0.2 |
| KTH | | | | IAmb | | IAmb | 11 43 03.0 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| G19K | Purcell Mounta | 82.36 | 16 | P | | P | 11 43 02.1 | -0.7 |
| G19K | | | | IAmb | | IAmb | 11 43 11.6 | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| E18K | Tukpahlearik C | 82.45 | 14 | P | | P | 11 43 03.7 | +0.4 |
| E18K | | | | IAmb | | IAmb | 11 43 32.6 | |
| | comp=Z,8.5nm,1.5s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **L27K** | **Beaver Creek,** | **85.28** | **23** | P | **P** | **11 43 17.9** | **-0.1** |
| **BCAR** | **Beaver Creek A** | **85.30** | **23** | P | **P** | **11 43 16.1** | **-1.9** |
| **D22K** | **Ayikyak River** | **85.52** | **15** | P | **P** | **11 43 18.9** | **-0.1** |
| D22K | | | | IAmb | IAmb | 11 43 20.6 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **87.82** | **21** | P | **P** | **11 43 30.2** | **-0.1** |
| I29M | | | | IAmb | IAmb | 11 43 54.0 | |
| | comp=Z,6.1nm,1.5s | | | | | | |
| **I30M** | **Mount Dempster** | **88.45** | **22** | P | **P** | **11 43 33.3** | **-0.1** |
| I30M | | | | IAmb | IAmb | 11 43 49.6 | |
| | comp=Z,2.5nm,1.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.25** | **51** | P | **P** | **11 43 38.1** | **+0.2** |
| | comp=Z,0.3nm,0.7s,baz=253,slow=3.7,SNR=3.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **89.91** | **318** | P | **P** | **11 43 40.6** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=106,slow=4.4,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **G31M** | **Satah River** | **90.01** | **21** | P | **P** | **11 43 40.9** | **+0.4** |
| G31M | | | | IAmb | IAmb | 11 43 48.4 | |
| | comp=Z,5.8nm,1.2s | | | | | | |

*IDC **10** 11:32:02.3±1.2, 14°.56N×54°.39E, h0km, mb4.0/10, mbtmp4.0/11, ML3.0/1, MS3.4/14, Error ellipse: s-maj=35.1km s-min=22.1km az=42.0*
*NEIC **10** 11:32:04.3±2.2, 14°.74N±0°.06×54°.29E±0°.10, h10km±1km, mb4.7/31, Error ellipse: s-maj=17.4km s-min=8.3km az=244.0*
**ISC 10 11:32:03.7±0.7, 14°.75N±0°.10×54°.29E±0°.09, h10km, n61, σ1ŝ10/45, mb4.4/22, MS3.3/14, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WSAR** | **Wadi Sarin** | **9.39** | **25** | Pn | **Pn** | **11 34 20.4** | **+1.2** |
| | 0.2nm,0.3s,baz=244,slow=17,SNR=2.4 | | | | | | |
| | 6.1nm,0.9s | | | | | | |
| **UOSS** | **Minazif** | **10.30** | **10** | Pn | **Pn** | **11 34 32.2** | **+0.5** |
| **ATD** | **Arta Tunnel** | **11.60** | **255** | LR | LR | 11 38 21.4 | |
| | comp=Z,15nm,18.3s,baz=218,slow=33 | | | | | | |
| **RAYN** | **Ar Rayn** | **12.04** | **318** | Pn | **Pn** | **11 34 54.8** | **-0.8** |
| **HRA** | **Herat** | **20.83** | **19** | P | **P** | **11 36 44.2** | **-1.6** |
| HRA | | | | IAmb | IAmb | 11 36 51.9 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **LODK** | **Lodwar** | **21.80** | **241** | P | **P** | **11 36 55.8** | **-0.4** |
| LODK | | | | IAmb | IAmb | 11 37 07.8 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **23.09** | **228** | P | **P** | **11 37 11.1** | **+0.9** |
| **EIL** | **Elat** | **23.21** | **313** | LR | LR | 11 45 44.5 | |
| | comp=Z,100nm,18.7s,baz=70,slow=35 | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **23.29** | **126** | P | **P** | **11 37 12.2** | **+0.3** |
| **KIBK** | **Kibwezi** | **23.39** | **225** | P | **P** | **11 37 13.8** | **+0.7** |
| KIBK | | | | IAmb | IAmb | 11 37 20.9 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **GHAJ** | **Ghor Haditha** | **23.78** | **317** | P | **P** | **11 37 16.5** | **-0.1** |
| **MMAI** | **Mount Meron Ar** | **25.00** | **320** | LR | LR | 11 46 36.8 | |
| | comp=Z,44nm,20.9s,baz=82,slow=35 | | | | | | |
| **GNI** | **Garni** | **26.65** | **344** | LR | LR | 11 50 18.8 | |
| | comp=Z,138nm,19.1s,baz=146,slow=41 | | | | | | |
| **PALK** | **Pallekele** | **26.95** | **103** | LR | LR | 11 45 59.3 | |
| | comp=Z,72nm,19.8s,baz=45,slow=31 | | | | | | |
| **SIMJ** | **Simiganj** | **27.13** | **26** | P | **P** | **11 37 46.1** | **-1.1** |
| SIMJ | | | | IAmb | IAmb | 11 38 14.0 | |
| | comp=Z,35nm,1.0s | | | | | | |
| **CHGR** | **Chuyangaron** | **27.19** | **26** | P | **P** | **11 37 47.0** | **-0.7** |
| **KARS** | **Kars** | **27.58** | **341** | P | **P** | **11 37 49.2** | **-2.0** |
| **GAR** | **Garm** | **27.98** | **27** | P | **P** | **11 37 54.1** | **-0.7** |
| **ARPR** | **Arapgir-MALATY** | **28.02** | **333** | P | **P** | **11 37 55.2** | **0.0** |
| ARPR | | | | IAmb | IAmb | 11 38 11.8 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **BNN** | **Bunyan** | **29.00** | **329** | P | **P** | **11 38 04.2** | **+0.3** |
| BNN | | | | IAmb | IAmb | 11 38 17.8 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **DRK** | **Karamyk** | **29.04** | **29** | P | **P** | **11 38 02.2** | **-2.2** |
| DRK | | | | IAmb | IAmb | 11 38 02.8 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **KBZ** | **Khabaz** | **30.48** | **344** | LR | LR | 11 53 57.9 | |
| | comp=Z,94nm,18.0s,baz=160,slow=43 | | | | | | |
| **BRTR** | **Keskin Array B** | **30.77** | **328** | LR | LR | 11 52 22.8 | |
| | comp=Z,63nm,18.4s,baz=108,slow=39 | | | | | | |
| **AAK** | **Ala-Archa** | **32.78** | **28** | LR | LR | 11 52 37.7 | |
| | comp=Z,67nm,21.9s,baz=224,slow=38 | | | | | | |
| **OPO** | **Ambohidratompo** | **33.84** | **192** | LR | LR | 11 51 07.1 | |
| | comp=Z,115nm,19.8s,baz=139,slow=34 | | | | | | |
| **ABKAR** | **Akbulak array** | **34.72** | **7** | P | **P** | **11 38 54.5** | **+0.7** |
| **MK31** | **Makanchi Array** | **39.58** | **30** | P | **P** | **11 39 34.1** | **-1.2** |
| **MKAR** | **Makanchi Array** | **39.58** | **30** | P | **P** | **11 39 36.1** | **+0.9** |
| **MKAR** | **Makanchi Array** | **39.58** | **30** | P | **P** | **11 39 35.6** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=214,slow=9.3,SNR=5.7 | | | | | | |
| MKAR | | | | LR | LR | 11 57 46.6 | |
| | comp=Z,45nm,18.8s,baz=266,slow=39 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **40.26** | **15** | P | **P** | **11 39 41.9** | **+1.2** |
| **KURBB** | **Kurchatov Arra** | **40.80** | **24** | P | **P** | **11 39 46.8** | **+1.6** |
| | comp=Z,0.9nm,0.2s,baz=227,slow=8.4,SNR=1.7 | | | | | | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| **AKASG** | **Malin Array Be** | **41.19** | **336** | P | **P** | **11 39 50.6** | **+2.1** |
| | comp=Z,1.0nm,0.3s,baz=133,slow=10,SNR=4.8 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.87** | **79** | P | **P** | **11 40 02.6** | **-0.1** |
| | comp=Z,0.7nm,0.4s,baz=277,slow=8.8,SNR=2.3 | | | | | | |
| CMAR | | | | LR | LR | 11 58 31.1 | |
| | comp=Z,17nm,18.0s,baz=170,slow=37 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **LBTB** | **Lobatse** | **48.43** | **216** | LR | LR | 12 00 08.6 | |
| | comp=Z,43nm,20.3s,baz=24,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **50.84** | **343** | P | **P** | **11 41 05.8** | **+1.5** |
| **FINES** | **FINESS Array B** | **50.84** | **343** | P | **P** | **11 41 06.0** | **+1.7** |
| | comp=Z,1.8nm,0.7s,baz=138,slow=7.4,SNR=7.1 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **ECH** | **Echery** | **51.08** | **321** | P | **P** | **11 41 04.9** | **-1.5** |
| ECH | | | | IAmb | IAmb | 11 41 12.4 | |
| | comp=Z,9.8nm,1.5s | | | | | | |
| **BOSA** | **Boshof** | **51.45** | **213** | LR | LR | 12 01 32.5 | |
| | comp=Z,24nm,21.7s,baz=25,slow=34 | | | | | | |
| **NAO01** | **NORSAR Array S** | **55.61** | **336** | P | **P** | **11 41 38.8** | **-0.7** |
| NAO01 | | | | IAmb | IAmb | 11 42 19.5 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **NC303** | **NORSAR Array S** | **55.65** | **336** | P | **P** | **11 41 39.5** | **-0.3** |
| **ESDC** | **Sonseca Array** | **56.38** | **308** | P | **P** | **11 41 45.4** | **-0.1** |
| ESDC | | | | IAmb | IAmb | 11 41 55.2 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **56.38** | **308** | P | **P** | **11 41 47.0** | **+1.6** |
| | comp=Z,1.1nm,0.9s,baz=106,slow=5.3,SNR=4.3 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **SUR** | **Sutherland** | **56.77** | **214** | LR | LR | 12 05 43.3 | |
| | comp=Z,62nm,18.4s,baz=28,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.65** | **348** | P | **P** | **11 41 55.0** | **+1.1** |
| ARCES | | | | IAmb | IAmb | 11 42 29.7 | |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.65** | **348** | P | **P** | **11 41 55.5** | **+1.6** |
| | comp=Z,0.8nm,0.4s,baz=140,slow=6.4,SNR=13 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **DBIC** | **Dimbokro** | **58.53** | **269** | LR | LR | 12 05 42.7 | |
| | comp=Z,38nm,18.9s,baz=140,slow=34 | | | | | | |
| **MTE** | **Manteigas** | **59.20** | **308** | P | **P** | **11 42 04.3** | **-1.0** |
| **KSRS** | **Korea Array** | **68.27** | **55** | P | **P** | **11 43 05.4** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=282,slow=6.1,SNR=4.7 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **75.19** | **133** | T | T | 13 05 51.6 | |
| | baz=300,slow=76,SNR=38 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **75.20** | **133** | T | T | 13 05 50.9 | |
| | baz=300,slow=76,SNR=34 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **75.21** | **133** | T | T | 13 05 50.6 | |
| | baz=300,slow=76,SNR=46 | | | | | | |
| **WB0** | **Warramunga Arr** | **85.89** | **112** | P | **P** | **11 44 43.0** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 11 45 21.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **85.90** | **112** | P | **P** | **11 44 43.7** | **-0.8** |
| **WRA** | **Warramunga Arr** | **85.90** | **112** | P | **P** | **11 44 44.1** | **-0.4** |
| | comp=Z,2.3nm,0.8s,baz=298,slow=4.1,SNR=8.7 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **85.90** | **112** | P | **P** | **11 44 44.7** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 11 45 06.8 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **85.91** | **112** | P | **P** | **11 44 43.7** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 11 44 47.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **86.08** | **112** | P | **P** | **11 44 44.2** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 11 45 18.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **86.62** | **115** | P | **P** | **11 44 48.1** | **0.0** |
| **ASAR** | **Alice Springs** | **86.62** | **115** | P | **P** | **11 44 47.5** | **-0.6** |
| | comp=Z,2.3nm,0.7s,baz=298,slow=5.0,SNR=9.0 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **86.62** | **115** | P | **P** | **11 44 47.8** | **-0.3** |
| **NVAR** | **Mina Array Bea** | **126.65** | **353** | PKP | **PKPdf** | **11 51 07.5** | **-0.6** |
| | comp=Z,0.4nm,0.7s,baz=90,slow=0.9,SNR=5.0 | | | | | | |

*IDC **10** 11:39:40.8±1.8, 5°.79S×129°.64E, h0km, mb3.9/2, mbtmp4.1/4, ML4.4/2, Error ellipse: s-maj=90.3km s-min=29.3km az=69.0*
*NEIC **10** 11:39:56.9±0.9, 6°.00S±0°.07×129°.6E±0°.2, h159km±15km, mb4.2/6, Error ellipse: s-maj=23.2km s-min=10.0km az=92.0*
**ISC 10 11:39:56.4±0.9, 6°.11S±0°.08×129°.58E±0°.10, h150km, n40, σ1ŝ63/36, mb3.7/3, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.53** | **138** | P | **Pn** | **11 40 39.1** | **+1.1** |
| **SAUI** | **Saumlaki** | **2.53** | **138** | | **Pn** | **11 40 39.5** | **+1.6** |
| SAUI | | | | Sn | **Sn** | **11 41 12.0** | **+2.0** |
| **FAKI** | **Fak Fak** | **4.14** | **40** | P | **Pn** | **11 40 57.8** | **-0.8** |
| **FAKI** | **Fak Fak** | **4.14** | **40** | | **Pn** | **11 40 57.7** | **-0.8** |
| **SOEI** | **Soe** | **6.38** | **235** | P | Pn | 11 41 23.6 | -4.8 |
| **DRS** | **Darwin Rock St** | **6.42** | **168** | P | **Pn** | **11 41 28.8** | **0.0** |
| **MTN** | **Manton Dam** | **6.87** | **167** | P | **Pn** | **11 41 34.5** | **-0.3** |
| **MTN** | **Manton Dam** | **6.87** | **167** | Pn | **Pn** | **11 41 34.5** | **-0.3** |
| **KDU** | **Kakadu** | **7.13** | **157** | P | **Pn** | **11 41 37.4** | **-0.9** |
| **KNRA** | **Kununurra** | **9.54** | **185** | Pn | **Pn** | **11 42 09.7** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **12.52** | **198** | P | **Pn** | **11 42 48.6** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **12.52** | **198** | Pn | **Pn** | **11 42 48.1** | **-1.4** |
| **WB0** | **Warramunga Arr** | **14.36** | **161** | Pn | Pn | 11 43 09.5 | -3.5 |
| **WRAB** | **Tennant Creek** | **14.51** | **162** | Pn | Pn | 11 43 11.2 | -3.6 |
| **WRA** | **Warramunga Arr** | **14.51** | **162** | Pn | Pn | 11 43 10.7 | -4.2 |
| **WRA** | **Warramunga Arr** | **14.51** | **162** | Pn | **Pn** | **11 43 12.5** | **-2.4** |
| | 1.3nm,0.3s,baz=342,slow=12,SNR=27 | | | | | | |
| WRA | | | | Sn | Sn | 11 45 43.9 | -12 |
| | 2.0nm,0.3s,baz=334,slow=23,SNR=10 | | | | | | |
| | 1.7nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **14.52** | **162** | Pn | Pn | 11 43 11.1 | -3.9 |
| **WR0** | **Warramunga Arr** | **14.59** | **161** | Pn | Pn | 11 43 11.6 | -4.2 |
| **COEN** | **Coen** | **15.49** | **121** | P | **Pn** | **11 43 27.8** | **+0.7** |
| **COEN** | **Coen** | **15.49** | **121** | | **Pn** | **11 43 27.9** | **+0.9** |
| COEN | | | | IAmb | IAmb | 11 43 30.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **QIS** | **Mount Isa** | **17.35** | **147** | P | **P** | **11 43 50.4** | **+1.7** |
| **MBWA** | **Marble Bar** | **17.74** | **212** | Pn | **P** | **11 43 54.8** | **+1.8** |
| MBWA | | | | IAmb | IAmb | 11 44 39.1 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **17.95** | **167** | | **P** | **11 43 55.9** | **+0.7** |
| AS31 | | | | IAmb | IAmb | 11 43 57.1 | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **17.95** | **167** | P | **P** | **11 43 55.9** | **+0.6** |
| **ASAR** | **Alice Springs** | **17.95** | **167** | P | **P** | **11 43 54.9** | **-0.4** |
| | comp=Z,2.2nm,0.3s,baz=348,slow=11,SNR=148 | | | | | | |
| ASAR | | | | S | **S** | **11 47 06.9** | **-6.7** |
| | comp=Z,1.1nm,0.5s,baz=359,slow=29,SNR=4.7 | | | | | | |
| | comp=Z,9.6nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **17.96** | **167** | P | **P** | **11 43 56.1** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **18.03** | **211** | P | **P** | **11 43 56.8** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **18.03** | **211** | P | **P** | **11 43 58.0** | **+1.9** |
| **WRKA** | **Warakurna** | **18.86** | **184** | P | **P** | **11 44 06.2** | **+1.0** |
| **MEEK** | **Meekatharra** | **22.94** | **206** | P | **P** | **11 44 48.8** | **+1.1** |
| **MULG** | **Mulgathing** | **24.41** | **171** | P | **P** | **11 45 01.3** | **+0.2** |
| **FORT** | **Forrest** | **24.59** | **183** | P | **P** | **11 45 03.0** | **+0.4** |
| **KMBL** | **Kambalda** | **26.14** | **195** | P | **P** | **11 45 17.0** | **+0.2** |
| **BLDU** | **Ballidu** | **27.21** | **205** | P | **P** | **11 45 26.5** | **+0.2** |
| **KLBR** | **Kellerberrin** | **27.66** | **202** | P | **P** | **11 45 31.1** | **+0.8** |
| **MK31** | **Makanchi Array** | **67.25** | **327** | P | **P** | **11 50 33.9** | **-0.9** |
| **MKAR** | **Makanchi Array** | **67.25** | **327** | P | **P** | **11 50 33.1** | **-1.7** |
| **MKAR** | **Makanchi Array** | **67.25** | **327** | P | **P** | **11 50 35.8** | **+1.0** |
| | comp=Z,0.6nm,0.6s,baz=109,slow=7.6,SNR=3.8 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **67.43** | **327** | P | **P** | **11 50 35.7** | **-0.2** |
| MAKZ | | | | IAmb | IAmb | 11 50 51.8 | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.53** | **329** | P | **P** | **11 51 02.2** | **+1.3** |
| | comp=Z,0.4nm,0.3s,baz=117,slow=5.2,SNR=1.4 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |

*HEL **10** 11:51:06.5±0.2, 68°.07N×33°.01E, h0km, ML2.3, Explosion*
*IDC **10** 11:51:09.2±4.1, 68°.42N×32°.93E, h0km, mbtmp2.8/2, ML2.0/2, Error ellipse: s-maj=53.4km s-min=18.1km az=64.0*
**ISC 10 11:51:07.6±2.7, 68°.09N±0°.06×32°.7E±0°.1, h0km, n10, σ0ŝ65/16, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VRF** | **Varrio** | **1.22** | **255** | *e*P | **Pg** | **11 51 30.8** | **-0.1** |
| VRF | | | | *e*S | **Sb** | **11 51 47.4** | **-0.3** |
| **RAJF** | **Raja-Jooseppi** | **1.68** | **285** | *e*PG | **Pb** | **11 51 39.2** | **-0.1** |
| RAJF | | | | *e*S | **Sb** | **11 52 01.0** | **0.0** |
| **OLKF** | **Oulanka, Finla** | **2.19** | **217** | *e*PB | **Pn** | **11 51 45.8** | **+0.6** |
| OLKF | | | | *e*SB | **Sb** | **11 52 14.4** | **-1.3** |
| **SGF** | **Sodankyl** | **2.44** | **257** | *e*P | **Pn** | **11 51 47.8** | **-0.8** |
| SGF | | | | *e*SB | **Sb** | **11 52 22.8** | **+0.1** |
| **KEV** | **Kevo** | **2.65** | **312** | *e*P | **Pn** | **11 51 51.6** | **0.0** |
| KEV | | | | *e*S | **Sn** | **11 52 25.2** | **+0.8** |
| KEV | | | | MSN | | 11 52 29.6 | |
| | comp=Z,5.8nm,0.2s | | | | | | |
| **RNF** | **Rovaniemi** | **2.98** | **243** | *e*P | **Pn** | **11 51 56.2** | **+0.1** |
| RNF | | | | *e*S | **Sn** | **11 52 33.8** | **+1.3** |
| RNF | | | | MSN | | 11 52 35.5 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **2.99** | **302** | Pn | **Pn** | **11 51 55.9** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=110,slow=16,SNR=9.3 | | | | | | |
| ARCES | | | | Sn | **Sn** | **11 52 32.6** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=113,slow=23,SNR=7.0 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **KLF** | **Kolari** | **3.44** | **260** | *e*P | **Pn** | **11 52 03.0** | **+0.5** |
| KLF | | | | *e*S | **Sn** | **11 52 44.0** | **+0.1** |
| KLF | | | | MSN | | 11 53 00.1 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| **I37NO** | **I37NO** | **5.26** | **287** | I | I | 12 24 50.0 | |
| | baz=94,slow=324,SNR=4.7 | | | | | | |
| **FINES** | **FINESS Array B** | **7.24** | **206** | Pn | Pn | 11 52 58.8 | +4.3 |
| | comp=Z,0.1nm,0.3s,baz=18,slow=14,SNR=1.6 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |

*IDC **10** 11:55:31.4±1.8, 38°.65N×14°.33E, h0km, mb3.7/3, mbtmp3.6/4, ML2.9/1, Error ellipse: s-maj=80.4km s-min=26.3km az=142.0*
*ROM **10** 11:55:32.2±0.1, 38°.481N±0°.007×14°.327E±0°.008, h21km±1km, ML3.2/141, Mw3.3, Error ellipse: s-maj=0.8km s-min=0.2km az=358.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.20; $M_{\theta\theta}$-1.13; $M_{\phi\phi}$0.93; $M_{r\theta}$-0.10; $M_{r\phi}$-0.72; $M_{\theta\phi}$0.06; Fault plane solution: $M_o$1.26692×$10^{14}$ NP1:$\phi_s$28.00000°, $\delta$84.00000°, $\lambda$2.00000°. NP2:$\phi_s$297.00000°, $\delta$88.00000°, $\lambda$174.00000°.*
**ISC 10 11:55:32.6±0.8, 38°.50N±0°.02×14°.33E±0°.02, h18km±5km, n75, σ1ŝ21/90, mb3.7/3, 16C-7D, Sicily**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IACL** | **Alicudi** | **0.04** | **33** | ⇓P | **Pg** | **11 55 36.2** | **+0.3** |
| IACL | | | | S | **Sg** | **11 55 38.7** | **+0.7** |
| IACL | | | | AML | AML | | |
| IACL | | | | AML | AML | | |
| IACL | | | | AML | AML | | |
| IACL | | | | AML | AML | | |
| IACL | | | | AML | AML | | |
| IACL | | | | AML | AML | | |
| **LLI** | **Lipari** | **0.49** | **96** | ⇑P | **Pg** | **11 55 43.0** | **+0.5** |
| LLI | | | | AML | AML | | |
| LLI | | | | AML | AML | | |
| LLI | | | | AML | AML | | |
| LLI | | | | AML | AML | | |
| **IVGP** | **Vulcano Grotta** | **0.51** | **101** | P | **Pg** | **11 55 43.0** | **+0.1** |
| IVGP | | | | S | **Sg** | **11 55 50.2** | **+0.5** |
| **PLLN** | **Pollina** | **0.53** | **196** | ⇓P | **Pg** | **11 55 41.9** | **-1.3** |
| PLLN | | | | S | **Sg** | **11 55 49.4** | **-0.9** |
| PLLN | | | | AML | AML | | |
| | comp=E,17850μm,0.4s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=N,33850μm,1.1s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=E,17900μm,0.4s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=E,17900μm,1.6s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=E,17879μm,0.4s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=N,32466μm,0.7s | | | | | | |
| **VPL** | **Vulcano Piano** | **0.53** | **103** | ⇑P | **Pg** | **11 55 43.0** | **-0.3** |
| VPL | | | | S | **Sg** | **11 55 50.9** | **+0.6** |
| VPL | | | | AML | AML | | |
| | comp=E,13250μm,0.5s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=N,16400μm,0.5s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=N,16400μm,1.5s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=N,16397μm,0.5s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=E,13233μm,0.5s | | | | | | |
| **CSLB** | **Castelbuono** | **0.60** | **201** | ⇓P | **Pg** | **11 55 43.0** | **-1.5** |
| CSLB | | | | S | **Sg** | **11 55 51.7** | **-0.9** |
| CSLB | | | | AML | AML | | |
| | comp=N,6870μm,0.3s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=E,6890μm,0.2s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=N,6870μm,0.3s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=E,6889μm,0.2s | | | | | | |
| **MUCR** | **Ucria** | **0.63** | **137** | ⇓P | **Pg** | **11 55 44.0** | **-1.1** |
| MUCR | | | | S | **Sg** | **11 55 53.0** | **-0.4** |
| MUCR | | | | AML | AML | | |
| | comp=E,20850μm,0.4s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=N,34950μm,0.4s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=E,20811μm,0.4s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=N,34942μm,0.4s | | | | | | |
| **MNO** | **Monte Soro** | **0.64** | **153** | ⇓P | **Pg** | **11 55 44.2** | **-1.0** |
| MNO | | | | S | **Sg** | **11 55 54.0** | **+0.2** |
| MNO | | | | AML | AML | | |
| | comp=E,10490μm,1.1s | | | | | | |
| MNO | | | | AML | AML | | |
| | comp=N,9815μm,0.5s | | | | | | |
| MNO | | | | AML | AML | | |
| | comp=E,7052μm,0.5s | | | | | | |
| MNO | | | | AML | AML | | |
| | comp=N,9820μm,0.5s | | | | | | |
| **PETRA** | **Petralia Sopra** | **0.69** | **194** | ⇓P | **Pg** | **11 55 45.0** | **-1.2** |
| PETRA | | | | S | **Sg** | **11 55 55.1** | **-0.2** |
| PETRA | | | | AML | AML | | |
| | comp=E,14550μm,0.4s | | | | | | |
| PETRA | | | | AML | AML | | |
| | comp=N,12800μm,0.6s | | | | | | |
| PETRA | | | | AML | AML | | |
| | comp=E,14580μm,0.4s | | | | | | |
| PETRA | | | | AML | AML | | |
| | comp=N,12804μm,0.6s | | | | | | |
| **ISTR** | **Stromboli Gino** | **0.73** | **67** | P | **Pg** | **11 55 46.2** | **-0.9** |
| **MILZ** | **Milazzo** | **0.74** | **108** | ⇑P | **Pg** | **11 55 46.2** | **-1.1** |
| MILZ | | | | S | **Sg** | **11 55 56.1** | **-1.0** |
| MILZ | | | | AML | AML | | |
| | comp=N,5385μm,0.4s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=E,6940μm,0.3s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=N,5385μm,1.6s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=E,6940μm,0.3s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=N,5386μm,0.4s | | | | | | |
| **SOLUN** | **Solunto** | **0.75** | **237** | ⇑P | **Pg** | **11 55 46.0** | **-1.2** |
| SOLUN | | | | S | **Sg** | **11 55 56.6** | **-0.6** |
| SOLUN | | | | AML | AML | | |
| | comp=E,1980μm,1.2s | | | | | | |
| SOLUN | | | | AML | AML | | |
| | comp=N,2090μm,0.6s | | | | | | |
| SOLUN | | | | AML | AML | | |
| | comp=E,1980μm,0.8s | | | | | | |
| SOLUN | | | | AML | AML | | |
| | comp=E,1968μm,0.6s | | | | | | |
| SOLUN | | | | AML | AML | | |
| | comp=N,2094μm,0.6s | | | | | | |
| **IST3** | **Stromboli F** | **0.77** | **67** | P | **Pb** | **11 55 48.3** | **+0.9** |
| IST3 | | | | AML | AML | | |
| | comp=N,2300μm,1.4s | | | | | | |
| IST3 | | | | AML | AML | | |
| | comp=N,2300μm,0.6s | | | | | | |
| IST3 | | | | AML | AML | | |
| | comp=E,2230μm,0.6s | | | | | | |
| IST3 | | | | AML | AML | | |
| | comp=E,2001μm,0.3s | | | | | | |
| IST3 | | | | AML | AML | | |
| | comp=N,2039μm,0.2s | | | | | | |
| **NOV** | **Novara** | **0.79** | **126** | P | **Pb** | **11 55 47.0** | **-1.0** |
| NOV | | | | S | **Sb** | **11 55 57.9** | **-0.5** |
| NOV | | | | AML | AML | | |
| | comp=E,38000μm,0.4s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,27350μm,0.3s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=E,38000μm,1.6s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,27350μm,1.7s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=E,38029μm,0.4s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,27318μm,0.3s | | | | | | |
| **EPZF** | **Pizzo Felice** | **0.79** | **148** | P | **Pb** | **11 55 47.5** | **-0.5** |
| EPZF | | | | AML | AML | | |
| | comp=E,10580μm,1.3s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=E,10580μm,0.7s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,12350μm,0.4s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=E,8964μm,0.3s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,12383μm,0.4s | | | | | | |
| **GALF** | **Gagliano Caste** | **0.81** | **167** | P | **Pb** | **11 55 47.7** | **-0.5** |
| GALF | | | | AML | AML | | |
| | comp=N,1076μm,0.6s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,4105μm,0.7s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,3385μm,0.7s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,3385μm,1.3s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,4105μm,1.3s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,1160μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,1076μm,1.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,3006μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,4104μm,0.7s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,1159μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,1074μm,0.6s | | | | | | |
| **MPG** | **Monte Pellegri** | **0.83** | **246** | P | **Pb** | **11 55 47.5** | **-1.2** |
| MPG | | | | AML | AML | | |
| | comp=N,990μm,1.5s | | | | | | |
| MPG | | | | AML | AML | | |
| | comp=E,1165μm,0.6s | | | | | | |
| MPG | | | | AML | AML | | |
| | comp=N,990μm,1.5s | | | | | | |
| MPG | | | | AML | AML | | |

MPNC AML AML
comp=N,12404µm,0.4s
MPNC AML AML
comp=E,10720µm,0.5s
**AIO Antillo 0.89 126 P Pb 11 55 48.3 -1.2**
AIO S Sb 11 56 00.8 -0.3
AIO AML AML
comp=E,4030µm,0.4s
AIO AML AML
comp=N,6570µm,0.3s
AIO AML AML
comp=N,6567µm,0.3s
AIO AML AML
comp=E,4027µm,0.4s
**EMCN Etna Monte Con 0.90 142 P Pb 11 55 50.1 +0.3**
**USI Ustica 0.92 283 ⇑P Pb 11 55 49.0 -1.2**
USI AML AML
comp=N,4900µm,0.4s
USI AML AML
comp=E,1425µm,0.6s
USI AML AML
comp=E,1424µm,0.6s
USI AML AML
comp=N,4901µm,0.4s
**ESLN Serra La Nave 0.95 147 P Pg 11 55 51.8 +0.6**
ESLN AML AML
comp=E,3625µm,1.4s
ESLN AML AML
comp=N,3890µm,0.5s
ESLN AML AML
comp=E,3429µm,0.4s
ESLN AML AML
comp=N,3895µm,0.5s
**MSRU Castanea 0.96 104 ⇑P Pb 11 55 49.4 -1.3**
MSRU S Sb 11 56 02.2 -0.9
MSRU AML AML
comp=E,4790µm,0.3s
MSRU AML AML
comp=N,4355µm,0.9s
MSRU AML AML
comp=E,4788µm,0.3s
MSRU AML AML
comp=N,4315µm,0.3s
**ESML S. M. di Licod 0.98 154 P Pg 11 55 52.2 +0.5**
ESML AML AML
comp=E,3335µm,0.7s
ESML AML AML
comp=N,3065µm,0.6s
ESML AML AML
comp=E,3335µm,1.3s
ESML AML AML
comp=N,3064µm,0.6s
ESML AML AML
comp=E,3339µm,0.7s
**CORL Corleone 1.01 234 ⇑P Pb 11 55 50.6 -1.0**
CORL AML AML
comp=E,3025µm,1.1s
CORL AML AML
comp=N,2235µm,0.4s
CORL AML AML
comp=E,3025µm,0.9s
CORL AML AML
comp=E,2825µm,0.4s
CORL AML AML
comp=N,2232µm,0.4s
**VAE Valguarnera 1.02 176 P Pg 11 55 53.7 +1.2**
**MCT Mte Cammarata 1.03 213 P Pb 11 55 52.7 +0.7**
MCT AML AML
comp=E,1250µm,1.3s
MCT AML AML
comp=N,1640µm,0.6s
MCT AML AML
comp=E,1250µm,0.7s
MCT AML AML
comp=E,1221µm,1.0s
MCT AML AML
comp=N,1641µm,0.6s
**EPOZ Pozzillo 1.15 149 P Pn 11 55 53.3 -0.6**
EPOZ AML AML
comp=E,12000µm,0.5s
EPOZ AML AML
comp=N,13350µm,0.4s
EPOZ AML AML
comp=E,12018µm,0.5s
EPOZ AML AML
comp=N,13342µm,0.4s
**MTTG Motta San Giov 1.18 114 P Pn 11 55 53.0 -1.4**
MTTG AML AML
comp=E,2820µm,1.2s
MTTG AML AML
comp=N,2140µm,0.6s
MTTG AML AML
comp=N,2138µm,0.6s
MTTG AML AML
comp=E,2547µm,0.9s
**MBFT Monte Bonifato 1.22 243 P Pn 11 55 53.5 -1.4**
**GMB Gambarie 1.23 105 P Pn 11 55 53.5 -1.5**
GMB AML AML
comp=E,5485µm,0.6s
GMB AML AML
comp=N,5790µm,0.5s
GMB AML AML
comp=E,5485µm,1.4s
GMB AML AML
comp=N,5788µm,0.5s
GMB AML AML
comp=E,5304µm,0.4s
**JOPP Joppolo 1.23 84 ⇑P Pn 11 55 53.6 -1.3**
JOPP AML AML
comp=E,548µm,0.6s
JOPP AML AML
comp=N,628µm,0.4s
JOPP AML AML
comp=E,548µm,1.4s
JOPP AML AML
comp=N,628µm,1.6s
JOPP AML AML
comp=E,513µm,0.2s
JOPP AML AML
comp=N,628µm,0.4s
**HLNI Lentini 1.23 159 P Pn 11 55 54.2 -0.7**
HLNI AML AML
comp=E,1305µm,0.9s
HLNI AML AML
comp=N,1320µm,0.9s
HLNI AML AML
comp=E,1224µm,0.4s
HLNI AML AML
comp=N,1313µm,0.3s
**CRJA Costa Raja 1.25 237 P Pn 11 55 54.7 -0.6**
CRJA AML AML
comp=N,493µm,0.8s
CRJA AML AML
comp=E,1035µm,0.6s
CRJA AML AML
comp=N,493µm,1.2s
CRJA AML AML
comp=E,1033µm,0.6s
CRJA AML AML
comp=N,493µm,0.8s
**FAVR Favara 1.34 203 P Pb 11 55 58.3 +1.1**
FAVR AML AML
comp=N,790µm,1.0s
FAVR AML AML
comp=E,416µm,0.9s
FAVR AML AML
comp=N,785µm,1.0s
FAVR AML AML
comp=E,826µm,0.5s
FAVR AML AML
comp=N,785µm,1.0s
FAVR AML AML
comp=N,790µm,1.0s
FAVR AML AML
comp=E,416µm,1.1s
**CLTA Licata 1.37 192 ⇑P Pn 11 55 58.1 +1.2**
CLTA AML AML
comp=E,2135µm,1.3s
CLTA AML AML
comp=N,1266µm,0.4s
CLTA AML AML
comp=E,1783µm,0.4s
**MTGR Montagna Grand 1.38 244 P Pn 11 55 55.8 -1.3**
MTGR AML AML
comp=E,30200µm,0.4s
MTGR AML AML
comp=N,30650µm,0.4s
MTGR AML AML
comp=E,30227µm,0.4s
MTGR AML AML
comp=N,29565µm,0.3s
**HAGA Augusta 1.38 151 P Pn 11 55 55.9 -1.1**
HAGA AML AML
comp=E,1006µm,0.3s
**SOI Samo 1.42 107 P Pn 11 55 56.2 -1.4**
SOI AML AML
comp=E,1110µm,1.0s
SOI AML AML
comp=N,976µm,0.6s
SOI AML AML
comp=E,1076µm,0.6s
SOI AML AML
comp=N,974µm,0.6s
**AGST Augusta-Monte 1.43 150 P Pn 11 55 57.0 -0.8**
AGST AML AML
comp=N,1860µm,0.3s
AGST AML AML
comp=E,1970µm,0.7s
AGST AML AML
comp=E,1726µm,0.7s
AGST AML AML
comp=N,1860µm,0.3s
**SSY Sortino 1.47 156 P Pn 11 55 57.5 -0.8**
SSY AML AML
comp=N,8291µm,0.3s
**HMDC Modica 1.58 167 P Pn 11 55 59.4 -0.4**
HMDC AML AML
comp=N,1567µm,0.3s
**CET2 Cetraro 1.63 50 ⇑P Pn 11 56 00.3 -0.3**
CET2 AML AML
comp=N,643µm,1.3s
CET2 AML AML
comp=N,643µm,0.7s
CET2 AML AML
comp=E,377µm,0.7s
CET2 AML AML
comp=N,614µm,0.2s
CET2 AML AML
comp=E,377µm,0.7s
**CAR1 CAROLEI 1.65 62 ⇑P Pn 11 56 00.3 -0.5**
CAR1 AML AML
comp=E,604µm,0.4s
CAR1 AML AML
comp=N,636µm,0.4s
CAR1 AML AML
comp=N,636µm,1.6s
CAR1 AML AML
comp=N,537µm,0.4s
CAR1 AML AML
comp=N,636µm,0.4s
CAR1 AML AML
comp=E,584µm,0.4s
CAR1 AML AML
comp=E,603µm,0.4s
**PLAC Placanica 1.66 91 ⇑P Pn 11 56 00.2 -0.7**
PLAC AML AML
comp=E,478µm,0.5s
PLAC AML AML
comp=N,438µm,0.8s
PLAC AML AML
comp=N,461µm,0.5s
PLAC AML AML
comp=E,416µm,1.2s
PLAC AML AML
comp=N,438µm,1.2s
PLAC AML AML
comp=N,414µm,0.6s
PLAC AML AML
comp=E,478µm,0.5s
PLAC AML AML
comp=N,461µm,0.5s
PLAC AML AML
comp=E,399µm,0.5s
**GRI Girifalco 1.67 78 P Pn 11 56 00.5 -0.6**
GRI AML AML
comp=E,627µm,0.4s
GRI AML AML
comp=N,430µm,0.8s
GRI AML AML
comp=E,627µm,0.4s
GRI AML AML
comp=N,430µm,0.8s
**CROCE Santa Croce Ca 1.67 174 P Pn 11 56 01.0 -0.1**
CROCE AML AML
comp=E,1120µm,0.6s
CROCE AML AML
comp=N,1010µm,0.9s
CROCE AML AML
comp=N,1010µm,1.1s
CROCE AML AML
comp=E,1066µm,0.4s
CROCE AML AML
comp=N,842µm,0.3s
**BULG Bulgheria - Ca 1.77 27 P Pn 11 56 02.5 -0.1**
BULG AML AML
comp=N,246µm,0.5s
BULG AML AML
comp=E,102µm,0.6s
BULG AML AML
comp=N,246µm,0.5s
BULG AML AML
comp=N,234µm,0.5s
BULG AML AML
comp=E,92µm,0.3s
BULG AML AML
comp=E,108µm,0.3s
**CUC Castrocucco 1.89 37 ⇑P Pn 11 56 04.1 +0.1**
CUC AML AML
comp=E,156µm,0.9s
CUC AML AML
comp=E,156µm,1.1s
CUC AML AML
comp=N,152µm,0.6s
CUC AML AML
comp=E,186µm,0.9s
CUC AML AML
comp=E,155µm,0.3s
CUC AML AML
comp=N,151µm,0.6s
CUC AML AML
comp=N,126µm,0.5s
**HPAC Pachino 1.90 161 P Pn 11 56 04.0 -0.3**
HPAC AML AML
comp=E,1190µm,0.5s
HPAC AML AML
comp=N,1117µm,0.5s
HPAC AML AML
comp=E,1190µm,1.5s
HPAC AML AML
comp=N,1115µm,0.5s
HPAC AML AML
comp=E,1189µm,0.5s
**SERS Sersale 1.92 73 ⇑P Pn 11 56 04.5 -0.1**
SERS AML AML
comp=E,200µm,0.4s
SERS AML AML
comp=N,148µm,1.3s
SERS AML AML
comp=N,148µm,0.7s
SERS AML AML
comp=N,189µm,0.4s
SERS AML AML
comp=E,200µm,0.4s
SERS AML AML
comp=N,148µm,0.7s
SERS AML AML
comp=E,132µm,0.5s
**CMPR Campora 1.97 22 P Pn 11 56 05.1 -0.1**
CMPR AML AML
comp=E,102µm,0.9s
CMPR AML AML
comp=N,96µm,0.5s
CMPR AML AML
comp=N,96µm,0.5s
CMPR AML AML
comp=E,98µm,0.3s
**TIP Timpagrande 2.02 70 ⇑P Pn 11 56 06.1 +0.2**
TIP AML AML
comp=N,122µm,0.6s
TIP AML AML
comp=E,99µm,1.6s
TIP AML AML
comp=E,95µm,0.8s
TIP AML AML
comp=N,122µm,0.6s
TIP AML AML
comp=N,113µm,0.6s
TIP AML AML
comp=E,100µm,0.7s
**MTSN Montesano sull 2.08 32 P Pn 11 56 07.3 +0.5**
MTSN AML AML
comp=E,114µm,0.6s
MTSN AML AML
comp=N,89µm,0.6s
MTSN AML AML
comp=E,113µm,0.6s
MTSN AML AML
comp=N,89µm,0.6s
**SALB San Lorenzo Be 2.09 48 P Pn 11 56 07.5 +0.6**
SALB AML AML
comp=N,113µm,0.7s
SALB AML AML
comp=E,133µm,0.3s
SALB AML AML
comp=N,113µm,1.3s
SALB AML AML
comp=E,133µm,0.3s
SALB AML AML
comp=N,101µm,0.5s
**MCEL Monticello 2.15 32 P Pb 11 56 09.8 -1.3**
MCEL AML AML
comp=E,76µm,0.4s
MCEL AML AML
comp=N,75µm,1.6s
MCEL AML AML
comp=N,75µm,0.4s
MCEL AML AML
comp=E,76µm,0.4s
MCEL AML AML
comp=E,69µm,0.6s
MCEL AML AML
comp=N,71µm,0.5s
MCEL AML AML
comp=N,73µm,0.5s
**VENT Ventotene 2.40 343 P Pn 11 56 11.8 +0.8**
**MRLC Muro Lucano 2.43 21 P Pb 11 56 14.1 -1.7**
MRLC AML AML
comp=E,70µm,0.4s
MRLC AML AML
comp=N,65µm,0.6s
MRLC AML AML
comp=N,61µm,0.3s
MRLC AML AML
comp=E,70µm,0.4s
**SNAL S. Angelo Dei 2.52 15 P Pn 11 56 14.9 +2.1**
SNAL AML AML
comp=E,83µm,0.9s
SNAL AML AML
comp=N,65µm,1.5s
SNAL AML AML
comp=N,65µm,0.5s
SNAL AML AML
comp=E,83µm,1.1s
SNAL AML AML
comp=E,83µm,0.9s
SNAL AML AML
comp=N,61µm,1.3s
SNAL AML AML
comp=N,78µm,1.1s
SNAL AML AML
comp=E,88µm,1.7s
**ACER Acerenza 2.60 28 P Pb 11 56 16.7 -2.1**
ACER AML AML
comp=E,97µm,0.5s
ACER AML AML
comp=N,103µm,0.4s
ACER AML AML
comp=N,103µm,1.6s
ACER AML AML
comp=N,102µm,0.4s
ACER AML AML
comp=N,151µm,0.7s
ACER AML AML
comp=E,111µm,0.5s
ACER AML AML
comp=E,97µm,0.5s
**MIGL Miglionico 2.66 37 P Pn 11 56 17.5 +2.8**
MIGL AML AML
comp=E,284µm,1.3s
MIGL AML AML
comp=N,309µm,0.5s
MIGL AML AML
comp=E,284µm,0.7s
MIGL AML AML
comp=N,309µm,0.5s
MIGL AML AML
comp=E,272µm,0.5s
**SGTA Sant Agata di 2.75 17 P Pb 11 56 19.4 -2.0**
SGTA AML AML
comp=N,39µm,0.3s
SGTA AML AML
comp=E,46µm,1.5s
SGTA AML AML
comp=N,39µm,0.3s
SGTA AML AML
comp=E,42µm,0.3s
**MATE Matera 2.83 40 P Pn 11 56 19.2 +2.3**
MATE AML AML
comp=N,52µm,0.5s
MATE AML AML
comp=E,42µm,0.6s
MATE AML AML
comp=N,50µm,0.4s
MATE AML AML
comp=E,42µm,0.6s
**MOCO Biccari - m.te 2.94 12 P Pn 11 56 21.3 +2.7**
MOCO AML AML
comp=E,33µm,1.4s
MOCO AML AML
comp=E,33µm,0.6s
MOCO AML AML
comp=N,18µm,1.2s
MOCO AML AML
comp=E,31µm,0.3s
MOCO AML AML
comp=N,15µm,0.3s
**TRIV Trivento 3.27 3 P Pb 11 56 26.9 -3.2**
**SGRT San Giovanni R 3.43 18 P Pn 11 56 27.0 +1.7**
SGRT AML AML
comp=E,30µm,0.7s
SGRT AML AML
comp=E,30µm,1.3s
SGRT AML AML
comp=N,33µm,0.5s
SGRT AML AML
comp=N,33µm,0.5s
SGRT AML AML
comp=E,26µm,0.6s
**MSAG Monte S. Angel 3.43 20 P Pn 11 56 27.0 +1.7**
MSAG AML AML
comp=E,18µm,1.0s
MSAG AML AML
comp=N,39µm,0.8s
MSAG AML AML
comp=E,18µm,1.0s
MSAG AML AML
comp=N,39µm,0.8s
MSAG AML AML
comp=N,107µm,0.8s
MSAG AML AML
comp=E,18µm,1.0s
MSAG AML AML
comp=E,49µm,1.2s
**SCTE Santa Cesarea 3.58 63 P Pn 11 56 27.2 0.0**
SCTE AML AML
comp=N,85µm,0.8s
SCTE AML AML
comp=E,72µm,0.6s
**VSL Villasalto 3.98 286 P Pn 11 56 31.2 -1.7**
VSL AML AML
comp=E,61µm,1.5s
VSL AML AML
comp=E,61µm,0.5s
VSL AML AML
comp=N,44µm,1.2s
VSL AML AML
comp=E,54µm,0.2s
VSL AML AML
comp=N,36µm,0.2s
**AGLI Aglientu 4.76 305 P Pn 11 56 43.6 +0.2**
AGLI AML AML
comp=E,100µm,0.9s

AGLI AML AML
comp=N,78µm,1.3s
AGLI AML AML
comp=E,100µm,1.1s
AGLI AML AML
comp=N,78µm,0.7s
AGLI AML AML
comp=E,99µm,0.3s
AGLI AML AML
comp=N,63µm,0.3s
**KEST Kesra 4.85 237** Pn **Pn 11 56 47.9 +3.1**
comp=N,0.4nm,0.3s,baz=321,slow=6.2,SNR=3.0
KEST Sn **Sn 11 57 43.4 +2.9**
comp=N,0.3nm,0.3s,baz=323,slow=20,SNR=1.1
comp=N,1.7nm,0.5s
**FINES FINESS Array B 24.10 14** P **P 12 00 47.0 +0.1**
comp=N,2.2nm,0.9s,baz=201,slow=7.3,SNR=3.4
comp=N,2.2nm,0.9s
**KURBB Kurchatov Arra 45.94 53** P **P 12 03 55.3 +1.0**
comp=N,0.2nm,0.3s,baz=287,slow=7.9,SNR=1.7
comp=N,0.2nm,0.3s
**MKAR Makanchi Array 49.25 57** P **P 12 04 20.6 +0.5**
comp=N,0.7nm,0.5s,baz=281,slow=6.2,SNR=5.3
comp=N,0.7nm,0.5s

*IDC **10** 11:56:06.3±0.9,25°.66N× 143°.08E,h0km,mb3.8/7, mbtmp3.7/9,ML3.0/2,Error ellipse: s-maj=35.2km s-min=17.5km az=82.0*
*JMA **10** 11:56:09.4±0.5,26°.N±1°×14°3E±°,h16km,MV4.3/4,IOTO ISLANDS REGION*
*NEIC **10** 11:56:10.8±1.8,25°.61N±0°.06×143°.1E±0°.1,h24km±6km, mb4.4/30,Error ellipse: s-maj=15.7km s-min=5.5km az=61.0*
**ISC 10 11:56:08.0±0.8,25°.58N±0°.08×143°.2E±0°.1,h10km,n56, σ1§18/60,mb4.4/23,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **1.40** | **319** | P | **Pn** | **11 56 35.1** | **+1.5** |
| JHH2 | | | | *e*S | **Sg** | **11 56 54.1** | **+1.0** |
| **CBIJ** | **Chichi jima** | **1.77** | **329** | P | **Pn** | **11 56 40.5** | **+1.8** |
| CBIJ | | | | S | **Sn** | **11 57 02.5** | **+1.2** |
| **JCJ** | **Chichijima** | **1.77** | **329** | Pn | **Pn** | **11 56 40.8** | **+2.1** |
| JCJ | | | | | **Sn** | **11 57 02.5** | **+1.3** |
| **JCJ** | **Chichijima** | **1.77** | **329** | Pn | **Pn** | **11 56 35.8** | **-2.8** |
| | 105nm,0.3s,baz=255,slow=8.4,SNR=18 | | | | | | |
| JCJ | | | | Sn | **Sn** | **11 56 57.5** | **-3.8** |
| | 149nm,0.3s,baz=276,slow=22,SNR=14 | | | | | | |
| **JMZ** | **Minamidaito 2** | **10.81** | **274** | Pn | **Pn** | **11 58 43.2** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **11.74** | **340** | Pn | **Pn** | **11 58 54.0** | **-1.5** |
| | baz=150,slow=11,SNR=1.4 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **11.74** | **340** | Pn | **Pn** | **11 58 55.3** | **-0.3** |
| **MJB9** | **Matsu-Tunnel** | **11.74** | **340** | Pn | **Pn** | **11 58 55.1** | **-0.5** |
| **JMM** | **Marumori** | **12.42** | **351** | Pn | **Pn** | **11 59 04.5** | **-0.4** |
| **JSD** | **Sado** | **13.11** | **343** | Pn | **Pn** | **11 59 14.3** | **0.0** |
| **KSRS** | **Korea Array** | **17.58** | **316** | P | **Pn** | **12 00 12.2** | **-0.8** |
| | 0.1nm,0.3s,baz=125,slow=11,SNR=4.3 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **17.59** | **316** | | **Pn** | **12 00 12.9** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **18.34** | **271** | P | **Pn** | **12 00 21.6** | **-0.9** |
| **USA0B** | **Ussuriysk Arra** | **20.70** | **337** | P | **P** | **12 00 48.7** | **+0.5** |
| **KLR** | **Kul'dur** | **25.25** | **342** | P | **P** | **12 01 34.3** | **+0.2** |
| | 1.1nm,0.6s,baz=149,slow=8.3,SNR=2.7 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **39.96** | **199** | P | **P** | **12 03 42.3** | **-0.4** |
| MTN | | | | IAmb | IAmb | 12 03 45.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.88** | **192** | P | **P** | **12 04 31.5** | **+0.8** |
| WB0 | | | | IAmb | IAmb | 12 04 46.4 | |
| | comp=Z,7.1nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.04** | **191** | P | **P** | **12 04 32.6** | **+0.6** |
| WR0 | | | | IAmb | IAmb | 12 04 59.0 | |
| | comp=Z,9.4nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **46.05** | **192** | P | **P** | **12 04 32.9** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 12 04 48.8 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **46.06** | **192** | P | **P** | **12 04 33.0** | **+0.9** |
| **WRA** | **Warramunga Arr** | **46.06** | **192** | P | **P** | **12 04 32.7** | **+0.6** |
| | comp=Z,2.6nm,0.4s,baz=14,slow=8.5,SNR=47 | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **49.77** | **191** | P | **P** | **12 05 00.5** | **-0.4** |
| **ASAR** | **Alice Springs** | **49.77** | **191** | P | **P** | **12 05 00.4** | **-0.5** |
| **ASAR** | **Alice Springs** | **49.77** | **191** | P | **P** | **12 05 00.9** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=18,slow=9.9,SNR=9.8 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **N15K** | **Kwethluk River** | **51.71** | **32** | P | **P** | **12 05 16.6** | **+1.5** |
| N15K | | | | IAmb | IAmb | 12 05 22.6 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.76** | **315** | P | **P** | **12 05 36.0** | **-1.7** |
| | comp=Z,0.5nm,0.4s,baz=89,slow=9.4,SNR=4.2 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **54.81** | **22** | P | **P** | **12 05 38.8** | **+0.9** |
| C19K | | | | IAmb | IAmb | 12 05 56.6 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **M19K** | **Big River Lodg** | **54.81** | **31** | P | **P** | **12 05 37.5** | **-0.4** |
| **KDAK** | **Kodiak Island** | **55.04** | **36** | P | **P** | **12 05 38.8** | **-0.8** |
| **K20K** | **Telida** | **55.26** | **29** | P | **P** | **12 05 41.4** | **+0.3** |
| K20K | | | | IAmb | IAmb | 12 05 42.9 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **J20K** | **Nowinta River** | **55.41** | **28** | P | **P** | **12 05 41.5** | **-0.6** |
| J20K | | | | IAmb | IAmb | 12 05 44.6 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **55.99** | **26** | P | **P** | **12 05 48.0** | **+1.7** |
| **MLY** | **Manley** | **57.02** | **28** | P | **P** | **12 05 54.8** | **+1.1** |
| **D22K** | **Ayikyak River** | **57.11** | **23** | P | **P** | **12 05 56.6** | **+2.4** |
| D22K | | | | IAmb | IAmb | 12 05 57.3 | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **RND** | **Reindeer** | **57.59** | **30** | P | **P** | **12 05 58.5** | **+0.7** |
| RND | | | | IAmb | IAmb | 12 05 58.9 | |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **57.62** | **28** | P | **P** | **12 05 59.0** | **+1.1** |
| I23K | | | | IAmb | IAmb | 12 06 03.9 | |
| | comp=Z,3.3nm,1.4s | | | | | | |
| **SML** | **Sawmill** | **57.64** | **32** | P | **P** | **12 05 58.0** | **-0.1** |
| SML | | | | IAmb | IAmb | 12 06 12.5 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **57.65** | **25** | P | **P** | **12 05 58.1** | **0.0** |
| **C23K** | **Itkillik River** | **58.05** | **22** | P | **P** | **12 06 01.9** | **+1.0** |
| C23K | | | | IAmb | IAmb | 12 06 27.5 | |
| | comp=Z,7.6nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **58.06** | **28** | P | **P** | **12 06 01.2** | **+0.1** |
| **ILAR** | **Eielson Array** | **58.61** | **28** | P | **P** | **12 06 04.2** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=254,slow=5.7,SNR=6.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **59.41** | **23** | P | **P** | **12 06 12.4** | **+2.0** |
| **SCRK** | **Sand Creek** | **59.80** | **29** | P | **P** | **12 06 13.1** | **-0.2** |
| SCRK | | | | IAmb | IAmb | 12 06 41.4 | |
| | comp=Z,5.9nm,1.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **59.83** | **25** | P | **P** | **12 06 14.1** | **+0.8** |
| **J26L** | **Joseph Creek** | **60.01** | **29** | P | **P** | **12 06 15.8** | **+1.2** |
| **MESA** | **MESA** | **60.67** | **34** | P | **P** | **12 06 19.3** | **0.0** |
| **KK31** | **Karatay Array** | **60.72** | **307** | P | **P** | **12 06 19.0** | **-0.8** |
| KK31 | | | | IAmb | IAmb | 12 06 26.3 | |
| | comp=Z,3.9nm,1.5s | | | | | | |
| **KKAR** | **Karatay Array** | **60.72** | **307** | P | **P** | **12 06 19.4** | **-0.4** |
| **BCAR** | **Beaver Creek A** | **60.75** | **30** | P | **P** | **12 06 21.3** | **+1.6** |
| **I29M** | **Ogilvie Camp,** | **62.27** | **28** | P | **P** | **12 06 31.4** | **+1.6** |
| I29M | | | | IAmb | IAmb | 12 06 33.4 | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **G31M** | **Satah River** | **63.84** | **26** | P | **P** | **12 06 41.4** | **+1.2** |
| **FIA1** | **FINESS Array S** | **79.71** | **334** | P | **P** | **12 08 15.6** | **-0.1** |
| **FINES** | **FINESS Array B** | **79.71** | **334** | P | **P** | **12 08 15.5** | **-0.2** |
| **FINES** | **FINESS Array B** | **79.71** | **334** | P | **P** | **12 08 15.1** | **-0.6** |
| | comp=Z,2.1nm,0.8s,baz=97,slow=7.9,SNR=4.7 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.74** | **52** | P | **P** | **12 08 22.5** | **+0.5** |
| | comp=Z,0.3nm,0.6s,baz=274,slow=4.4,SNR=3.7 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **LRM** | **Limekiln Ridge** | **81.35** | **43** | P | **P** | **12 08 25.0** | **-0.2** |

*IDC **10** 11:59:05.7±1.0,37°.61N× 134°.92E,h378km±12km,mb2.6/2, mbtmp3.6/7,Error ellipse: s-maj=22.2km s-min=18.3km az=40.0*
*JMA **10** 11:59:06.1±0.3,38°.N±2°×13°5E±°,h386km,MV2.9/36, SEA OF JAPAN*
**ISC 10 11:59:06.0±1.1,37°.67N±0°.09×135°.04E±0°.10,h378km,n17, σ1§91/21,Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JWT** | **Wachi** | **2.40** | **173** | P | **Pn** | **12 00 02.7** | **0.0** |
| **JSD** | **Sado** | **2.58** | **81** | P | **Pn** | **12 00 04.9** | **+1.0** |
| **JNG** | **Nsakai** | **2.75** | **116** | *e*P | **Pn** | **12 00 07.0** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **2.77** | **113** | P | **Pn** | **12 00 06.4** | **+0.8** |
| | 5.8nm,0.7s,baz=295,slow=10,SNR=18 | | | | | | |
| MJAR | | | | S | **S** | **12 00 55.5** | **+1.8** |
| | 2.5nm,0.8s,baz=304,slow=13,SNR=4.5 | | | | | | |
| **JAW** | **Awa shima** | **3.41** | **75** | *e*P | **Pn** | **12 00 12.3** | **+1.3** |
| **JMM** | **Marumori** | **4.56** | **86** | P | **Pn** | **12 00 23.5** | **+1.3** |
| JMM | | | | *e*S | **S** | **12 01 23.9** | **-0.2** |
| **JFK** | **Kawauchi** | **4.65** | **92** | P | **Pn** | **12 00 23.0** | **-0.2** |
| JFK | | | | S | **S** | **12 01 23.6** | **-2.2** |
| **JRG** | **Rokugo** | **4.71** | **67** | P | **Pn** | **12 00 25.2** | **+1.5** |
| **JIW** | **Iwasaki** | **4.84** | **51** | P | **Pn** | **12 00 27.4** | **+2.3** |
| **KSRS** | **Korea Array** | **5.66** | **270** | P | **Pn** | **12 00 32.9** | **-1.1** |
| | 3.0nm,0.7s,baz=94,slow=12,SNR=15 | | | | | | |
| **JNU** | **Nakatsue** | **5.67** | **218** | P | **Pn** | **12 00 32.4** | **-1.9** |
| | 6.3nm,0.5s,baz=147,slow=0.4,SNR=8.6 | | | | | | |
| **JSH** | **Shimam** | **6.27** | **36** | *e*P | **Pn** | **12 00 44.4** | **+3.7** |
| **USRK** | **Ussuriysk Ar.** | **6.92** | **341** | P | **Pn** | **12 00 48.8** | **+0.9** |
| | 8.2nm,0.5s,baz=152,slow=11,SNR=39 | | | | | | |
| **JSK** | **Shakotan** | **7.02** | **34** | P | **P** | **12 00 51.0** | **+0.9** |
| **ASAJ** | **Asahikawa** | **8.61** | **39** | P | **Pn** | **12 01 07.7** | **+0.2** |
| | 14nm,0.3s,baz=234,slow=10,SNR=38 | | | | | | |
| ASAJ | | | | S | **S** | **12 02 42.5** | **-4.7** |
| | 5.7nm,0.7s,baz=288,slow=20,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.31** | **181** | P | **P** | **12 08 15.0** | **-0.8** |
| | 0.2nm,0.4s,baz=355,slow=7.5,SNR=6.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **61.02** | **181** | P | **P** | **12 08 40.5** | **-0.4** |
| | 0.2nm,0.7s,baz=1.3,slow=6.0,SNR=1.6 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

*NEIC **10** 12:03:09.4±0.8,36°.52N±0°.02×99°.01W±0°.02,h5km±1km, Error ellipse: s-maj=3.4km s-min=2.7km az=311.0*
**TUL 10 12:03:09.8±0.8,36°.52N±0°.02×99°.00W±0°.02,h5km±2km, ML2.3,mb_Lg2.3/39(NEIC),ML2.5/12(NEIC),Error ellipse: s-maj=2.6km s-min=1.3km az=147.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NOKA** | **Waynoka** | **0.13** | **23** | Pg | Pg | 12 03 12.9 | +0.4 |
| NOKA | | | | Sg | Sg | 12 03 15.3 | +1.0 |
| NOKA | | | | IAML | | 12 03 15.4 | |
| | comp=E,2µm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **0.21** | **100** | Pg | Pg | 12 03 14.3 | +0.4 |
| OK038 | | | | Sg | Sg | 12 03 17.7 | +1.1 |
| OK038 | | | | IAML | | 12 03 21.1 | |
| | comp=E,1µm,0.3s | | | | | | |
| OK038 | | | | IAML | | 12 03 21.4 | |
| | comp=E,1µm,0.4s | | | | | | |
| **ELIS** | **Ellis County** | **0.56** | **217** | Pg | Pg | 12 03 20.8 | +0.1 |
| ELIS | | | | Sg | Sg | 12 03 29.1 | +1.1 |
| ELIS | | | | IAML | | 12 03 37.3 | |
| | comp=N,270nm,0.2s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.69** | **65** | Pg | Pg | 12 03 23.0 | -0.2 |
| OK032 | | | | Sg | Sg | 12 03 32.7 | +0.5 |
| **CROK** | **Carrier** | **0.82** | **90** | Pg | Pg | 12 03 25.4 | -0.1 |
| CROK | | | | Sg | Sg | 12 03 36.0 | -0.1 |
| CROK | | | | IAML | | 12 03 42.2 | |
| | comp=E,182nm,0.2s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.90** | **164** | Pg | Pg | 12 03 26.9 | -0.2 |
| CSTR | | | | Sg | Sb | 12 03 39.7 | -0.6 |
| **KAN14** | **Manchester OK** | **0.94** | **62** | Pg | Pg | 12 03 27.7 | -0.1 |
| KAN14 | | | | Sg | Sg | 12 03 40.2 | +0.2 |
| **GC02** | **Grant County #** | **0.97** | **70** | Pg | Pg | 12 03 28.3 | -0.1 |
| GC02 | | | | Sg | Sg | 12 03 41.2 | +0.1 |
| **KAN08** | **Anthony NE Sta** | **1.09** | **49** | Pg | Pg | 12 03 30.2 | -0.4 |
| KAN08 | | | | Sg | Sg | 12 03 44.8 | 0.0 |
| **KAN11** | **Harper NE Stat** | **1.12** | **45** | Pg | Pg | 12 03 30.9 | -0.4 |
| **KAN17** | **Caldwell West** | **1.12** | **62** | Pg | Pg | 12 03 30.9 | -0.3 |
| **KAN01** | **Argonia South** | **1.18** | **57** | Pg | Pg | 12 03 32.3 | -0.1 |
| **KAN09** | **Caldwell North** | **1.27** | **60** | Pg | Pg | 12 03 33.5 | -0.6 |
| **KAN13** | **South Haven SW** | **1.32** | **67** | | Pn | 12 03 34.2 | -0.7 |
| **BLOK** | **Blackwell** | **1.45** | **80** | | Pn | 12 03 36.5 | -0.3 |
| **OK048** | **Pawnee Station** | **1.66** | **93** | | Pn | 12 03 40.0 | +0.4 |
| **SMWD** | **Samnorwood** | **1.73** | **216** | Pn | Pn | 12 03 41.1 | +0.5 |
| **OK051** | **E0350 and S346** | **1.74** | **90** | | Pn | 12 03 41.4 | +0.8 |
| **WMOK** | **Wichita Mounta** | **1.78** | **174** | Pn | Pn | 12 03 41.6 | +0.3 |
| **FNO** | **Franklin** | **1.80** | **134** | Pn | Pb | 12 03 42.5 | -0.8 |
| **OK031** | **S. Brethren Rd** | **1.83** | **107** | Pn | Pn | 12 03 42.6 | +0.7 |
| **QUOK** | **Quay** | **1.88** | **100** | | Pn | 12 03 41.2 | -1.4 |
| **R32A** | **Long Quarter,** | **1.92** | **7** | Pn | Pn | 12 03 42.6 | -0.5 |
| **DEOK** | **Depew** | **2.13** | **108** | Pn | Pn | 12 03 46.1 | +0.1 |
| **X34A** | **Smith Ranch, M** | **2.13** | **153** | Pn | Pn | 12 03 45.7 | -0.4 |
| **CBKS** | **Cedar Bluff** | **2.37** | **346** | Pn | Pn | 12 03 49.5 | +0.2 |
| CBKS | | | | IAmb_Lg | | 12 04 28.5 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **2.73** | **234** | Pn | Pn | 12 03 53.4 | -1.0 |
| AMTX | | | | IAmb_Lg | | 12 04 44.1 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **WTFS** | **Witchita Falls** | **2.78** | **171** | Pn | Pn | 12 03 54.9 | 0.0 |
| **RTBA** | **Rita Blanca** | **3.02** | **270** | Pn | Pn | 12 03 58.2 | -0.2 |
| **RLO** | **Rose Lookout** | **3.23** | **95** | Pn | Pn | 12 04 01.3 | +0.2 |
| **DKNS** | **Dickens** | **3.25** | **210** | Pn | Pn | 12 04 01.6 | +0.1 |
| DKNS | | | | IAmb_Lg | | 12 04 59.6 | |
| | comp=Z,7.3nm,1.3s | | | | | | |
| **APMT** | **Aspermont** | **3.31** | **197** | | Pn | 12 04 01.4 | -1.0 |
| **Z35A** | **Perchaven, San** | **3.48** | **155** | Pn | Pn | 12 04 04.8 | +0.2 |
| **X37A** | **Clayton** | **3.52** | **122** | Pn | Pn | 12 04 05.2 | 0.0 |
| **U38A** | **Gravette** | **3.72** | **90** | Pn | Pn | 12 04 06.9 | -0.9 |
| **PLPT** | **Palo Pinto** | **3.74** | **171** | Pn | Pn | 12 04 07.4 | -0.7 |
| **SN07** | **Snyder 07** | **3.76** | **205** | IAmb_Lg | | 12 05 08.7 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.81** | **312** | IAmb_Lg | | 12 05 16.4 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **SN05** | **Snyder 5** | **3.95** | **204** | IAmb_Lg | | 12 05 25.2 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **T25A** | **Trinidad** | **4.39** | **280** | Pn | Pn | 12 04 16.2 | -1.1 |
| T25A | | | | IAmb_Lg | | 12 05 38.6 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **4.68** | **74** | IAmb_Lg | | 12 05 38.4 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.69** | **164** | IAmb_Lg | | 12 05 47.0 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **5.02** | **333** | IAmb_Lg | | 12 06 02.0 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.31** | **53** | IAmb_Lg | | 12 06 06.3 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.43** | **81** | IAmb_Lg | | 12 06 06.5 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **5.46** | **298** | IAmb_Lg | | 12 06 05.7 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **5.64** | **70** | IAmb_Lg | | 12 06 18.2 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.37** | **74** | IAmb_Lg | | 12 06 43.3 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **6.97** | **311** | IAmb_Lg | | 12 06 55.8 | |
| | comp=Z,4.5nm,0.8s | | | | | | |

**DJA 10 12:06:36.4±0.4,0°.S±3°×12°0E±°,h10km,M4.0/8,mb4.4/1, MLv3.9/8,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **2.11** | **72** | P | Pn | 12 07 10.1 | -1.7 |
| MRSI | | | | S | Sn | 12 07 37.9 | -0.2 |
| **LUWI** | **Luwuk** | **2.97** | **107** | P | Pn | 12 07 23.7 | +0.1 |
| LUWI | | | | S | Sn | 12 08 01.5 | +2.1 |
| **GTOI** | **Gorontalo** | **3.18** | **75** | P | Pn | 12 07 24.9 | -1.7 |
| **BNSI** | **Bone** | **4.21** | **178** | P | Pn | 12 07 40.5 | -0.1 |
| **MTKI** | **Muara Teweh, K** | **5.09** | **261** | P | Pn | 12 07 52.7 | -0.1 |

*BJI **10** 12:18:15.1±0.0,34°.71N× 138°.76E,h10km,mb4.2/14, mB4.5/5,Ms3.9/4,Ms7 3.5/4*
*IDC **10** 12:18:18.5±0.6,34°.75N× 138°.22E,h0km,mb4.0/18, mbtmp3.9/22,ML3.1/4,MS3.3/14,Error ellipse: s-maj=15.5km s-min=11.3km az=87.0*
*NEIC **10** 12:18:21.4±2.7,34°.93N±0°.03×138°.44E±0°.05,h10km±1km, mb4.5/4,Mwr4.1/16,Error ellipse: s-maj=6.9km s-min=5.8km az=90.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr1.20; Mθθ -1.12; Mφφ -0.08; Mrθ-1.25; Mθφ0.46; Mrφ-0.20; Fault plane solution: Mo1.78000×10¹⁵ NP1:φs270.52000°,δ68.43000°, λ73.70000°. NP2:φs129.02000°,δ26.80000°,λ125.38000°. Principal axes: T 1.8185, Plg63.0000°, Azm155.0000°; N -0.0809, Plg15.0000°, Azm277.0000°; P -1.7376, Plg22.0000°, Azm13.0000°;*
*JMA **10** 12:18:22.4±0.1,34°.9N±0°.5×138°.4E±0°.5,h22km±1km, MD4.4/20,MW4.3/20,SOUTHERN SURUGA BAY REG*
*JMA Felt III J1 at SOUTHERN SURUGA BAY REG .*
*NEIC **10** 12:18:22.4,34°.99N×138°.27E,h10km*
*NIED **10** 12:18:22.4,34°.88N×138°.38E,h22km,MW4.2,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr1.18; Mθθ-2.12; Mφφ0.94; Mrθ0.49; Mθφ0.90; Mrr1.18; Fault plane solution: Mo2.41000×10¹⁵ NP1:φs70.00000°, δ62.00000°,λ37.00000°. NP2:φs320.00000°,δ58.00000°, λ147.00000°.*
**ISC 10 12:18:21.8±0.8,34°.87N±0°.03×138°.39E±0°.02,h18km±3km, n137,σ1§36/127,mb4.5/41,MS3.5/9,12D,Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHZ3** | **Shizuoka 3** | **0.25** | **323** | P | **Pg** | **12 18 28.1** | **+0.5** |
| SHZ3 | | | | *e*S | **Sg** | **12 18 32.6** | **+1.1** |
| **JSG** | **Sagara** | **0.26** | **221** | P | **Pb** | **12 18 29.0** | **+1.2** |
| **JSG** | **Sagara** | **0.26** | **221** | | **Pb** | **12 18 28.8** | **+1.0** |
| JSG | | | | Sg | **Sn** | **12 18 34.3** | **-1.9** |
| **JSG** | **Sagara** | **0.26** | **221** | ↓P | **Pb** | **12 18 28.8** | **+1.0** |
| JSG | | | | ↓S | **Sn** | **12 18 34.4** | **-1.9** |
| **JSG** | **Sagara** | **0.26** | **221** | A | A | 12 18 28.8 | |
| | comp=E,107nm,0.6s,comp=N,235nm,0.6s | | | | | | |
| **JKKG** | **Kakegawa** | **0.35** | **256** | P | **Pg** | **12 18 29.5** | **+0.3** |
| JKKG | | | | *e*S | **Sg** | **12 18 34.9** | **+0.6** |
| **JKKS** | **Kakegawashinom** | **0.35** | **251** | *e*P | **Pb** | **12 18 29.9** | **+0.3** |
| JKKS | | | | S | **Sb** | **12 18 36.1** | **+1.2** |
| **JKKS** | **Kakegawashinom** | **0.35** | **251** | A | A | 12 18 29.9 | |
| | comp=E,55nm,0.7s,comp=N,71nm,0.7s | | | | | | |
| **JFNN** | **Fujinakano** | **0.40** | **37** | ↓P | **Pb** | **12 18 30.6** | **+0.1** |
| **JFNN** | **Fujinakano** | **0.40** | **37** | A | A | 12 18 30.6 | |
| | comp=E,39nm,1.9s,comp=N,51nm,2.0s | | | | | | |
| **JIZS** | **Izushimoda** | **0.43** | **111** | ↓*i*P | **Pb** | **12 18 30.8** | **-0.1** |
| JIZS | | | | ↓S | **Sb** | **12 18 37.1** | **+0.1** |
| **JIZS** | **Izushimoda** | **0.43** | **111** | A | A | 12 18 30.8 | |
| | comp=E,43nm,0.9s,comp=N,49nm,1.2s | | | | | | |
| **JHTM** | **Izuhatsuma** | **0.52** | **80** | A | A | 12 18 32.6 | |
| | comp=E,98nm,1.5s,comp=N,112nm,1.5s | | | | | | |
| **HMMJ** | **Hamamatsu 2** | **0.55** | **269** | A | A | 12 18 33.0 | |
| | comp=E,8.0nm,1.6s,comp=N,13nm,2.8s | | | | | | |
| **KTJ3** | **Kamata3** | **0.56** | **83** | P | **Pb** | **12 18 33.1** | **+0.1** |
| KTJ3 | | | | S | **Sb** | **12 18 41.1** | **+0.4** |
| **JYN** | **Shimob** | **0.64** | **11** | ↓P | **Pb** | **12 18 34.2** | **-0.3** |
| JYN | | | | ↓eS | **Sb** | **12 18 43.5** | **+0.5** |
| **JNY** | **Yasuok** | **0.65** | **318** | ↓*i*P | **Pb** | **12 18 34.5** | **-0.1** |
| JNY | | | | ↓S | **Sb** | **12 18 43.7** | **+0.2** |
| **JNY** | **Yasuok** | **0.65** | **318** | A | A | 12 18 34.5 | |
| | comp=E,43nm,1.7s,comp=N,49nm,0.7s | | | | | | |
| **JOD2** | **Odawara 2** | **0.69** | **55** | ↓*i*P | **Pg** | **12 18 35.3** | **-0.2** |
| JOD2 | | | | ↓S | **Sg** | **12 18 45.4** | **+0.7** |
| **JOD2** | **Odawara 2** | **0.69** | **55** | A | A | 12 18 35.3 | |
| | comp=E,16nm,0.8s,comp=N,18nm,0.9s | | | | | | |
| **JSSY** | **Shinshiroyabe** | **0.73** | **274** | A | A | 12 18 36.0 | |
| | comp=E,18nm,0.2s,comp=N,21nm,0.2s | | | | | | |
| **JTHY** | **Toshimahigashi** | **0.82** | **115** | A | A | 12 18 37.8 | |
| | comp=E,17nm,1.9s,comp=N,27nm,1.9s | | | | | | |
| **TTO5** | **TONANKAI O.B.S** | **0.83** | **222** | A | A | 12 18 37.9 | |
| | comp=E,45nm,0.8s,comp=N,50nm,2.2s | | | | | | |
| **JSKK** | **Shikinejimakit** | **0.86** | **128** | A | A | 12 18 38.6 | |
| | comp=E,43nm,0.8s,comp=N,40nm,1.1s | | | | | | |
| **JIM2** | **Oshima 3** | **0.87** | **100** | P | **Pn** | **12 18 38.5** | **-0.7** |
| **JIM2** | **Oshima 3** | **0.87** | **100** | A | A | 12 18 38.5 | |
| | comp=E,21nm,1.2s,comp=N,20nm,1.0s | | | | | | |
| **JNIO** | **Nijimaoohara** | **0.89** | **125** | A | A | 12 18 39.1 | |
| | comp=E,19nm,1.1s,comp=N,47nm,0.9s | | | | | | |
| **JKO** | **Kozu shima** | **0.92** | **138** | A | A | 12 18 39.5 | |
| | comp=E,28nm,0.3s,comp=N,18nm,0.3s | | | | | | |
| **JSGW** | **Sagamiharawaka** | **0.99** | **42** | A | A | 12 18 40.5 | |
| | comp=E,27nm,0.4s,comp=N,11nm,0.4s | | | | | | |
| **JAO** | **Obara** | **1.01** | **293** | A | A | 12 18 40.7 | |
| | comp=E,8.0nm,0.9s,comp=N,8.0nm,1.1s | | | | | | |
| **JAA** | **Atsumi** | **1.05** | **257** | A | A | 12 18 41.5 | |
| | comp=E,4.0nm,2.9s,comp=N,11nm,1.2s | | | | | | |
| **JYO** | **Yokosk** | **1.10** | **71** | A | A | 12 18 42.4 | |
| | comp=E,33nm,0.7s,comp=N,66nm,0.6s | | | | | | |
| **JGF** | **Kuroka** | **1.12** | **311** | P | **Pn** | **12 18 42.2** | **-0.4** |
| **JGF** | **Kuroka** | **1.12** | **311** | | **Pn** | **12 18 42.0** | **-0.6** |
| JGF | | | | Sg | **Sb** | **12 18 57.0** | **+0.1** |
| **JHU** | **Hanno** | **1.22** | **36** | A | A | 12 18 44.2 | |
| | comp=E,4.0nm,2.5s,comp=N,4.0nm,2.3s | | | | | | |
| **INU** | **Inuyama** | **1.22** | **293** | P | **Pn** | **12 18 43.9** | **-0.1** |
| **INU** | **Inuyama** | **1.22** | **293** | | **Pn** | **12 18 43.4** | **-0.6** |
| INU | | | | Sg | **Sb** | **12 18 59.5** | **-0.4** |
| **TATJ** | **Tateyama 2** | **1.24** | **82** | A | A | 12 18 44.6 | |
| | comp=E,22nm,0.9s,comp=N,38nm,0.8s | | | | | | |
| **JICN** | **Ichinomiyachia** | **1.34** | **289** | A | A | 12 18 45.9 | |
| | comp=E,17nm,0.9s,comp=N,18nm,1.5s | | | | | | |
| **TOK** | **Tokyo** | **1.38** | **54** | A | A | 12 18 46.7 | |
| | comp=E,38nm,1.7s,comp=N,39nm,1.7s | | | | | | |
| **JIE** | **Ise** | **1.47** | **252** | A | A | 12 18 48.0 | |
| | comp=E,4.0nm,0.8s,comp=N,4.0nm,1.7s | | | | | | |
| **JNG** | **Nsakai** | **1.55** | **351** | A | A | 12 18 49.2 | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HHC | | | | pmax | pmax | | | |
| | comp=Z,130nm,5.3s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,160nm,12.2s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,130nm,13.0s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,120nm,13.8s | | | | | | | |
| **SONM** | **Songino Array** | **27.08** | **308** | P | **P** | **12 24 02.6** | **-0.8** | |
| | comp=Z,0.6nm,0.5s,baz=122,slow=14,SNR=1.9 | | | | | | | |
| SONM | | | | LR | LR | 12 35 07.1 | | |
| | comp=Z,77nm,21.8s,baz=88,slow=37 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **30.93** | **44** | LR | LR | 12 39 57.0 | | |
| | comp=Z,23nm,18.1s,baz=296,slow=42 | | | | | | | |
| **TNTI** | **Ternate** | **35.45** | **199** | P | **P** | **12 25 18.2** | **+1.1** | |
| **KIWB** | **Kanaga Island** | **35.86** | **48** | P | **P** | **12 25 20.5** | **+0.2** | |
| **CRAI** | **Chiangrai** | **36.49** | **257** | P | **P** | **12 25 26.5** | **+0.4** | |
| CRAI | | | | IAmb | IAmb | 12 25 27.4 | | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **TOLI2** | **Tolitoli** | **37.39** | **210** | P | **P** | **12 25 35.3** | **+1.6** | |
| TOLI2 | | | | IAmb | IAmb | 12 25 37.8 | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **38.58** | **255** | P | **P** | **12 25 45.1** | **+1.3** | |
| **CMAR** | **Chiang Mai Arr** | **38.58** | **255** | P | **P** | **12 25 43.6** | **-0.2** | |
| **CMAR** | **Chiang Mai Arr** | **38.58** | **255** | P | **P** | **12 25 42.0** | **-1.8** | |
| | comp=Z,1.1nm,0.6s,baz=44,slow=7.6,SNR=7.8 | | | | | | | |
| CMAR | | | | LR | LR | 12 43 09.9 | | |
| | comp=Z,34nm,18.3s,baz=70,slow=39 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.61** | **314** | P | **P** | **12 26 07.6** | **-0.9** | |
| | comp=Z,0.4nm,0.4s,baz=90,slow=10,SNR=1.7 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **12 28 04.5** | **-0.8** | |
| | comp=Z,1.7nm,0.9s,baz=124,slow=2.7,SNR=5.7 | | | | | | | |
| ZALV | | | | LR | LR | 12 44 01.1 | | |
| | comp=Z,36nm,20.8s,baz=82,slow=37 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.23** | **304** | P | **P** | **12 26 21.6** | **-0.3** | |
| | comp=Z,0.4nm,0.6s,baz=78,slow=8.7,SNR=1.9 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **12 28 10.6** | **-0.3** | |
| | comp=Z,0.5nm,0.5s,baz=99,slow=4.2,SNR=3.8 | | | | | | | |
| MKAR | | | | LR | LR | 12 45 08.6 | | |
| | comp=Z,56nm,18.7s,baz=70,slow=37 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **45.37** | **309** | P | **P** | **12 26 38.9** | **0.0** | |
| **KURBB** | **Kurchatov Arra** | **45.44** | **309** | P | **P** | **12 26 37.8** | **-1.6** | |
| | comp=Z,2.3nm,0.9s,baz=85,slow=8.1,SNR=19 | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **L16K** | **Owhat River** | **46.88** | **35** | P | **P** | **12 26 50.0** | **-0.6** | |
| **E18K** | **Tukpahlearik C** | **47.24** | **27** | P | **P** | **12 26 53.6** | **+0.3** | |
| E18K | | | | IAmb | IAmb | 12 27 08.2 | | |
| | comp=Z,9.4nm,1.4s | | | | | | | |
| **C18K** | **Utukok River** | **47.29** | **26** | P | **P** | **12 26 54.0** | **+0.2** | |
| C18K | | | | IAmb | IAmb | 12 27 04.2 | | |
| | comp=Z,7.9nm,1.2s | | | | | | | |
| **O16K** | **Kokwok River B** | **47.43** | **38** | P | **P** | **12 26 54.9** | **0.0** | |
| O16K | | | | IAmb | IAmb | 12 27 11.6 | | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **K17K** | **Iditarod** | **47.52** | **34** | P | **P** | **12 26 55.0** | **-0.6** | |
| **H18K** | **Honhosa River** | **47.76** | **31** | P | **P** | **12 26 58.5** | **+1.0** | |
| H18K | | | | IAmb | IAmb | 12 27 06.7 | | |
| | comp=Z,9.5nm,1.4s | | | | | | | |
| **C19K** | **Lookout Ridge** | **47.96** | **25** | P | **P** | **12 27 00.1** | **+1.1** | |
| **F19K** | **Shaleruckik Mo** | **48.23** | **28** | P | **P** | **12 27 02.1** | **+1.1** | |
| F19K | | | | IAmb | IAmb | 12 27 14.1 | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **D19K** | **Kuna River** | **48.37** | **26** | P | **P** | **12 27 04.0** | **+1.8** | |
| D19K | | | | IAmb | IAmb | 12 27 17.9 | | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **E19K** | **Redstone River** | **48.53** | **28** | P | **P** | **12 27 05.2** | **+1.9** | |
| E19K | | | | IAmb | IAmb | 12 27 22.0 | | |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| **H19K** | **Roundabout Mou** | **48.60** | **30** | P | **P** | **12 27 05.1** | **+1.3** | |
| H19K | | | | IAmb | IAmb | 12 27 34.0 | | |
| | comp=Z,8.2nm,1.5s | | | | | | | |
| **COEN** | **Coen** | **48.77** | **174** | P | **P** | **12 27 06.3** | **+0.6** | |
| **O18K** | **Koktuh Hills** | **48.89** | **38** | P | **P** | **12 27 07.3** | **+1.1** | |
| O18K | | | | IAmb | IAmb | 12 27 16.2 | | |
| | comp=Z,4.8nm,1.0s | | | | | | | |
| **B20K** | **Meade River** | **48.98** | **24** | P | **P** | **12 27 07.0** | **+0.3** | |
| **KSH** | **Kashi** | **49.07** | **295** | P | **P** | **12 27 10.9** | **+2.9** | |
| KSH | | | | pP | sP | 12 27 17.6 | +1.7 | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **K20K** | **Telida** | **49.48** | **33** | P | **P** | **12 27 12.3** | **+1.6** | |
| **IMAR** | **Indian Mountai** | **49.75** | **30** | P | **P** | **12 27 13.9** | **+1.2** | |
| IMAR | | | | PcP | **PcP** | **12 28 35.1** | **+1.7** | |
| **E21K** | **Killik River** | **49.88** | **27** | P | **P** | **12 27 13.2** | **-0.5** | |
| **OHAK** | **Old Harbor** | **50.00** | **41** | P | **P** | **12 27 13.9** | **-0.8** | |
| **B22K** | **Teshekpuk Lake** | **50.29** | **24** | P | **P** | **12 27 15.8** | **-0.9** | |
| **BRVK** | **Borovoye** | **50.30** | **313** | P | **P** | **12 27 15.5** | **-1.5** | |
| **D22K** | **Ayikyak River** | **50.39** | **26** | P | **P** | **12 27 16.9** | **-0.6** | |
| **GSI** | **Gunungsitoli** | **50.58** | **238** | P | **P** | **12 27 19.6** | **-0.1** | |
| **KTH** | **Kantishna Hill** | **50.90** | **33** | P | **P** | **12 27 21.2** | **-0.4** | |
| **GHO** | **Glory Hole Cre** | **51.90** | **35** | P | **P** | **12 27 30.2** | **+1.1** | |
| GHO | | | | IAmb | IAmb | 12 27 37.4 | | |
| | comp=Z,8.9nm,1.4s | | | | | | | |
| **MDM** | **Murphy Dome** | **52.04** | **31** | P | **P** | **12 27 30.2** | **+0.2** | |
| **KK31** | **Karatay Array** | **52.10** | **301** | P | **P** | **12 27 30.9** | **+0.1** | |
| KK31 | | | | IAmb | IAmb | 12 27 31.6 | | |
| | comp=Z,6.7nm,1.2s | | | | | | | |
| **KKAR** | **Karatay Array** | **52.10** | **301** | P | **P** | **12 27 30.3** | **-0.4** | |
| **ILAR** | **Eielson Array** | **52.62** | **31** | P | **P** | **12 27 35.5** | **+1.2** | |
| **ILAR** | **Eielson Array** | **52.62** | **31** | P | **P** | **12 27 36.0** | **+1.8** | |
| | comp=Z,0.5nm,0.8s,baz=283,slow=6.7,SNR=6.0 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **D25K** | **Kavik River** | **52.67** | **26** | P | **P** | **12 27 35.4** | **+0.8** | |
| **BMAR** | **Burnt Mountain** | **53.40** | **28** | P | **P** | **12 27 40.0** | **0.0** | |
| **WB0** | **Warramunga Arr** | **54.47** | **185** | P | **P** | **12 27 47.4** | **-0.8** | |
| WB0 | | | | IAmb | IAmb | 12 27 50.9 | | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **54.63** | **185** | P | **P** | **12 27 49.0** | **-0.5** | |
| **WB2** | **Warramunga Arr** | **54.65** | **185** | P | **P** | **12 27 48.9** | **-0.6** | |
| WB2 | | | | IAmb | IAmb | 12 27 49.1 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.65** | **185** | P | **P** | **12 27 47.5** | **-2.0** | |
| | comp=Z,3.0nm,0.8s,baz=0.2,slow=7.5,SNR=30 | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **54.65** | **184** | P | **P** | **12 27 48.4** | **-1.1** | |
| WR0 | | | | IAmb | IAmb | 12 28 08.5 | | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **55.05** | **33** | P | **P** | **12 27 54.3** | **+2.2** | |
| **ARU** | **Arti** | **56.37** | **319** | P | **P** | **12 28 01.5** | **-0.1** | |
| | comp=Z,1.4nm,0.3s,baz=90,slow=17,SNR=1.9 | | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | | |
| **EPYK** | **Eagle Plains** | **56.61** | **29** | P | **P** | **12 28 05.4** | **+2.2** | |
| EPYK | | | | IAmb | IAmb | 12 28 15.1 | | |
| | comp=Z,8.5nm,1.2s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **56.68** | **28** | P | **P** | **12 28 04.7** | **+1.0** | |
| G30M | | | | IAmb | IAmb | 12 28 15.3 | | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| **I30M** | **Mount Dempster** | **56.98** | **30** | P | **P** | **12 28 07.6** | **+1.7** | |
| I30M | | | | IAmb | IAmb | 12 28 18.9 | | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **57.46** | **310** | P | **P** | **12 28 08.4** | **-1.1** | |
| **AKTO** | **Aktyubinsk** | **58.30** | **312** | P | **P** | **12 28 14.3** | **-1.1** | |
| | comp=Z,1.7nm,0.7s,baz=90,slow=6.3,SNR=4.6 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **58.37** | **185** | P | **P** | **12 28 14.9** | **-1.2** | |
| | comp=Z,1.0nm,0.7s,baz=14,slow=10,SNR=21 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **69.57** | **332** | P | **P** | **12 29 28.3** | **-0.9** | |
| | comp=Z,3.6nm,0.8s,baz=56,slow=6.6,SNR=7.9 | | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | **70.43** | **310** | P | **P** | **12 29 35.0** | **+0.2** | |
| | comp=Z,2.7nm,0.7s,baz=74,slow=7.4,SNR=4.7 | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **SUMG** | **Summit** | **72.82** | **359** | P | **P** | **12 29 50.2** | **+1.0** | |
| SUMG | | | | IAmb | IAmb | 12 29 50.9 | | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.48** | **321** | P | **P** | **12 29 58.3** | **-0.6** | |
| | comp=Z,0.3nm,0.3s,baz=54,slow=7.0,SNR=4.6 | | | | | | | |
| AKASG | | | | LR | LR | 13 05 10.1 | | |
| | comp=Z,57nm,19.2s,baz=54,slow=38 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **HFS** | **Hagfors** | **75.02** | **335** | P | **P** | **12 30 01.3** | **-0.5** | |
| | comp=Z,2.7nm,0.7s,baz=40,slow=7.6,SNR=2.3 | | | | | | | |
| HFS | | | | LR | LR | 13 05 57.5 | | |
| | comp=Z,36nm,18.3s,baz=144,slow=38 | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.20** | **336** | P | **P** | **12 30 02.7** | **-0.3** | |
| | comp=Z,1.3nm,0.8s,baz=42,slow=5.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **75.20** | **336** | LR | LR | 13 07 52.3 | | |
| | comp=Z,21nm,18.3s,baz=30,slow=40 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.25** | **51** | P | **P** | **12 30 21.8** | **+1.0** | |
| | comp=Z,0.6nm,0.7s,baz=287,slow=5.8,SNR=5.8 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.42** | **310** | P | **P** | **12 30 21.9** | **+0.3** | |
| | comp=Z,3.0nm,0.9s,baz=79,slow=6.4,SNR=6.1 | | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **80.92** | **44** | P | **P** | **12 30 35.9** | **+0.5** | |
| | comp=Z,0.2nm,0.4s,baz=300,slow=3.3,SNR=3.4 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **CLL** | **Collm** | **81.71** | **329** | *e*P | **P** | **12 30 39.0** | **0.0** | |
| **TXAR** | **Lajitas Array** | **93.38** | **51** | P | **P** | **12 31 36.2** | **0.0** | |
| | comp=Z,0.4nm,0.8s,baz=282,slow=2.8,SNR=4.8 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **124.62** | **180** | PKP | **PKPdf** | **12 37 18.0** | **-1.2** | |
| | comp=Z,1.2nm,1.0s,baz=259,slow=3.7,SNR=2.5 | | | | | | | |
| **LPAZ** | **La Paz** | **149.91** | **59** | PKP | **PKPdf** | **12 38 06.0** | **-1.4** | |
| | comp=Z,0.4nm,0.5s,baz=59,slow=5.9,SNR=1.6 | | | | | | | |
| LPAZ | | | | PKPbc | **PKiKP** | **12 38 12.8** | **-0.4** | |
| | comp=Z,1.4nm,0.8s,baz=40,slow=3.8,SNR=4.4 | | | | | | | |

*IDC **10** 12:27:08.4±1.1, 4.°09N×127.°74E, h0km, mb3.9/8, mbtmp3.9/8, MS2.6/2, Error ellipse: s-maj=88.3km s-min=15.8km az=66.0*
*NEIC **10** 12:27:09.9±1.2, 3.°96N±0.°09×127.°7E±0.°1, h10km±1km, mb4.3/20, Error ellipse: s-maj=19.1km s-min=14.2km az=65.0*
**ISC 10 12:27:12.8±0.6, 3.°97N±0.°07×127.°7E±0.°1, h35km, n35, σ1s02/34, mb4.2/16, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **3.19** | **185** | Pn | **Pn** | **12 27 58.2** | **-2.3** |
| **TOLI2** | **Tolitoli** | **7.44** | **248** | Pn | **Pn** | **12 28 57.5** | **-1.5** |
| **FAKI** | **Fak Fak** | **8.23** | **146** | Pn | **Pn** | **12 29 09.0** | **-0.8** |
| **MTN** | **Manton Dam** | **17.05** | **168** | Pn | **Pn** | **12 31 07.5** | **-1.2** |
| **GUMO** | **Guam** | **19.48** | **60** | P | **P** | **12 31 35.3** | **-1.7** |
| **KNRA** | **Kununurra** | **19.55** | **177** | P | **P** | **12 31 37.9** | **+0.3** |
| **TWG** | **Pinlang** | **19.80** | **342** | P | **P** | **12 31 39.5** | **-0.9** |
| **YULB** | **Yu-li** | **20.27** | **343** | P | **P** | **12 31 45.3** | **-0.2** |
| YULB | | | | IAmb | IAmb | 12 31 46.0 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **TPUB** | **Ta-pu** | **20.39** | **341** | P | **P** | **12 31 47.0** | **+0.2** |
| TPUB | | | | IAmb | IAmb | 12 31 47.8 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.02** | **185** | P | **P** | **12 32 03.3** | **-1.0** |
| **WB0** | **Warramunga Arr** | **24.49** | **165** | P | **P** | **12 32 28.7** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 12 32 31.0 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.64** | **165** | P | **P** | **12 32 30.0** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 12 32 33.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.65** | **165** | P | **P** | **12 32 29.1** | **-1.3** |
| **WRA** | **Warramunga Arr** | **24.65** | **165** | P | **P** | **12 32 31.5** | **+1.1** |
| | comp=Z,2.2nm,0.8s,baz=344,slow=10,SNR=40 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.65** | **165** | P | **P** | **12 32 30.5** | **+0.1** |
| **WR0** | **Warramunga Arr** | **24.72** | **164** | P | **P** | **12 32 31.0** | **0.0** |
| WR0 | | | | IAmb | IAmb | 12 32 33.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **28.13** | **168** | P | **P** | **12 33 02.4** | **+0.6** |
| **ASAR** | **Alice Springs** | **28.13** | **168** | P | **P** | **12 33 03.1** | **+1.3** |
| | comp=Z,0.4nm,0.5s,baz=356,slow=7.7,SNR=16 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 36 17.0** | **+1.4** |
| | comp=Z,0.2nm,0.7s,baz=342,slow=2.9,SNR=4.8 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.57** | **299** | P | **P** | **12 33 32.8** | **+0.5** |
| | comp=Z,0.3nm,0.3s,baz=118,slow=7.7,SNR=1.4 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **33.84** | **15** | LR | LR | 12 50 14.1 | |
| | comp=Z,5.0nm,18.2s,baz=145,slow=41 | | | | | | |
| **STKA** | **Stephens Creek** | **38.03** | **161** | P | **P** | **12 34 28.7** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.03** | **161** | P | **P** | **12 34 29.4** | **+1.6** |
| | comp=Z,1.2nm,0.4s,baz=342,slow=9.3,SNR=8.0 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **40.25** | **5** | P | **P** | **12 34 44.9** | **-1.4** |
| USA0B | | | | IAmb | IAmb | 12 35 23.7 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **40.25** | **5** | LR | LR | 12 51 02.7 | |
| | comp=Z,14nm,21.9s,baz=294,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **47.38** | **341** | P | **P** | **12 35 43.4** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=152,slow=6.5,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **57.90** | **325** | P | **P** | **12 37 01.9** | **+0.4** |
| **MKAR** | **Makanchi Array** | **57.90** | **325** | P | **P** | **12 37 01.6** | **+0.1** |
| **MKAR** | **Makanchi Array** | **57.90** | **325** | P | **P** | **12 37 02.2** | **+0.8** |
| | comp=Z,1.5nm,0.6s,baz=122,slow=8.4,SNR=21 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **58.09** | **325** | P | **P** | **12 37 03.0** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 12 37 04.1 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.81** | **333** | P | **P** | **12 37 21.2** | **-0.2** |
| | comp=Z,0.5nm,0.3s,baz=57,slow=7.1,SNR=2.0 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.05** | **327** | P | **P** | **12 37 30.3** | **+0.5** |
| | comp=Z,1.0nm,0.7s,baz=126,slow=6.5,SNR=6.5 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **62.05** | **327** | P | **P** | **12 37 30.4** | **+0.6** |
| KURK | | | | IAmb | IAmb | 12 37 34.5 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **80.56** | **21** | P | **P** | **12 39 21.8** | **+0.4** |
| D19K | | | | IAmb | IAmb | 12 40 03.2 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **E21K** | **Killik River** | **82.05** | **21** | P | **P** | **12 39 31.0** | **+1.7** |
| E21K | | | | IAmb | IAmb | 12 39 52.1 | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **93.87** | **180** | P | **P** | **12 40 27.3** | **+0.8** |

**IDC 10 12:38:47.5±3.2, 1.°87N×92.°18E, h0km, mb3.4/3, mbtmp3.4/4, ML4.0/1, Error ellipse: s-maj=102.0km s-min=33.7km az=60.0, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **17.77** | **21** | P | P | 12 42 57.3 | -0.1 |
| | 0.2nm,0.3s,baz=226,slow=15,SNR=1.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.57** | **350** | P | P | 12 47 09.0 | -0.2 |
| | 0.4nm,0.7s,baz=156,slow=7.3,SNR=4.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.68** | **120** | P | P | 12 47 17.8 | -0.6 |
| | 0.3nm,1.0s,baz=301,slow=8.5,SNR=1.5 | | | | | | |
| | 0.3nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.26** | **355** | P | P | 12 48 00.7 | +0.2 |
| | 0.7nm,0.6s,baz=155,slow=7.5,SNR=1.8 | | | | | | |
| | 0.7nm,0.6s | | | | | | |

*IDC **10** 12:47:35.9±1.2, 0.°77N×122.°42E, h0km, mb3.7/6, mbtmp3.7/6, Error ellipse: s-maj=90.2km s-min=18.7km az=70.0*
*DJA **10** 12:48:08.1±1.4, 1.°1N±7.°12×126.°3E±.°, h337km±16km, M4.0/11, mb4.2/1, mB4.8/1, MLv3.9/11, Mw(mB)4.0/1*
**ISC 10 12:48:10.2±0.9, 0.°6N±0.°1×122.°9E±0.°1, h350km, n12, σ2s41/12, mb3.2/6, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTOI** | **Gorontalo** | **0.10** | **95** | P | **Pn** | **12 48 50.9** | **-3.0** |
| **MRSI** | **Marisa** | **0.98** | **260** | P | **Pn** | **12 48 53.0** | **-2.8** |
| **LUWI** | **Luwuk** | **1.68** | **185** | P | **Pn** | **12 48 56.7** | **-2.7** |
| **SANI** | **Sanana** | **4.08** | **131** | P | **Pn** | **12 49 17.2** | **-2.8** |
| **TNTI** | **Ternate** | **4.46** | **88** | P | **Pn** | **12 49 22.0** | **-2.0** |
| **LBMI** | **Labuha** | **4.77** | **105** | P | **Pn** | **12 49 24.5** | **-2.8** |
| **WRA** | **Warramunga Arr** | **23.33** | **152** | P | **P** | **12 52 49.5** | **+0.9** |
| | 1.1nm,0.5s,baz=330,slow=10,SNR=32 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **26.42** | **157** | P | **P** | **12 53 17.6** | **+1.4** |
| | 0.2nm,0.5s,baz=336,slow=7.4,SNR=7.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **36.87** | **153** | P | **P** | **12 54 48.6** | **+2.1** |
| | 2.6nm,0.9s,baz=308,slow=12,SNR=1.8 | | | | | | |
| | 2.6nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **44.11** | **9** | P | **P** | **12 55 45.3** | **+0.3** |
| | 0.7nm,0.3s,baz=205,slow=8.8,SNR=5.1 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **49.14** | **345** | P | **P** | **12 56 24.5** | **+0.8** |
| | 0.3nm,0.4s,baz=167,slow=7.1,SNR=2.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.02** | **328** | P | **P** | **12 57 27.7** | **+0.2** |
| | 0.2nm,0.3s,baz=133,slow=7.5,SNR=5.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC **10** 12:54:47.9±0.8, 39.°66N×97.°70E, h0km, mb3.9/12, mbtmp3.9/16, ML3.3/3, MS3.0/4, Error ellipse: s-maj=20.0km s-min=13.2km az=46.0*
*MOS **10** 12:54:48.3±1.2, 39.°70N×97.°64E, h16km, mb4.4/7, Error ellipse: s-maj=11.7km s-min=8.2km az=103.3*
*NEIC **10** 12:54:50.0±1.8, 39.°70N±0.°08×97.°7E±0.°1, h10km±1km, mb4.5/43, Error ellipse: s-maj=16.5km s-min=13.0km az=124.0*
**ISC 10 12:54:49.9±0.4, 39.°74N±0.°05×97.°74E±0.°04, h11km, n104, σ1s60/103, mb4.4/46, MS2.8/3, 3C, Gansu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTA** | **Gaotai** | **1.64** | **101** | Pg | **Pn** | **12 55 18.3** | **-0.5** |
| GTA | | | | Sg | **Sn** | **12 55 39.6** | **-0.3** |
| GTA | | | | smax | smax | | |
| | comp=N,900nm,0.5s | | | | | | |
| GTA | | | | smax | smax | | |
| | comp=E,920nm,0.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,1μm,6.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,830nm,5.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,620nm,6.2s | | | | | | |
| **GOMU** | **GeErMu** | **4.23** | **214** | Pn | **Pn** | **12 55 57.0** | **+2.4** |
| GOMU | | | | Sn | **Sg** | **12 57 06.7** | **+1.0** |
| GOMU | | | | smax | smax | | |
| | comp=N,180nm,0.9s | | | | | | |
| GOMU | | | | smax | smax | | |
| | comp=E,190nm,1.0s | | | | | | |
| **LZH** | **Lanzhou** | **6.05** | **125** | *e*Pg | **Pg** | **12 56 43.2** | **-2.6** |
| LZH | | | | Sg | **Sb** | **12 57 54.8** | **+6.8** |
| LZH | | | | smax | smax | | |
| | comp=N,130nm,1.2s | | | | | | |
| LZH | | | | smax | smax | | |
| | comp=E,140nm,0.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,720nm,5.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,440nm,7.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,340nm,7.1s | | | | | | |
| **WMQ** | **Urumqi** | **8.54** | **302** | *e*P | Pn | 12 56 59.5 | +6.0 |
| WMQ | | | | smax | smax | | |
| | comp=N,75nm,0.9s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,93nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **10.22** | **35** | Pn | **Pn** | **12 57 17.9** | **+1.3** |
| **SONM** | **Songino Array** | **10.22** | **35** | Pn | **Pn** | **12 57 18.1** | **+1.5** |
| | comp=E,12nm,0.4s,baz=222,slow=15,SNR=36 | | | | | | |
| SONM | | | | Sn | **Sn** | **12 59 13.7** | **+2.5** |
| | comp=E,5.4nm,0.3s,baz=218,slow=26,SNR=16 | | | | | | |
| SONM | | | | Lg | Lg | 13 00 12.1 | |
| | comp=E,1.0nm,0.3s,baz=215,slow=32,SNR=3.9 | | | | | | |
| SONM | | | | LR | LR | 13 01 26.5 | |
| | comp=E,80nm,19.7s,baz=251,slow=39 | | | | | | |
| **ULN** | **Ulaanbaatar** | **10.54** | **37** | | **Pn** | **12 57 21.0** | **0.0** |
| **ULN** | **Ulaanbaatar** | **10.54** | **37** | *i* P | **Pn** | **12 57 21.6** | **+0.6** |
| **ZAK** | **Zakamensk** | **11.33** | **18** | *e*P | **Pn** | **12 57 35.0** | **+3.2** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.3s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **12.35** | **327** | *i* P | **Pn** | **12 57 48.3** | **+2.6** |
| **LYN** | **LuoYang** | **12.84** | **109** | *e*P | Pn | 12 57 42.9 | -9.4 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,130nm,4.7s | | | | | | |
| **MK31** | **Makanchi Array** | **13.27** | **307** | Pn | **Pn** | **12 57 55.7** | **-2.4** |
| **MK31** | **Makanchi Array** | **13.27** | **307** | *ce*P | **Pn** | **12 57 57.6** | **-0.5** |
| **MKAR** | **Makanchi Array** | **13.27** | **307** | Pn | **Pn** | **12 57 56.6** | **-1.5** |
| **MKAR** | **Makanchi Array** | **13.27** | **307** | Pn | **Pn** | **12 57 55.4** | **-2.7** |
| | comp=Z,0.2nm,0.3s,baz=112,slow=16,SNR=6.3 | | | | | | |
| MKAR | | | | Sn | Sn | 13 00 14.9 | -11 |
| | comp=Z,0.2nm,0.3s,baz=119,slow=17,SNR=1.7 | | | | | | |
| MKAR | | | | Lg | Lg | 13 01 50.8 | |
| | baz=123,slow=26 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.27** | **307** | P | **Pn** | **12 57 56.6** | **-1.5** |
| **TIA** | **Tai'an** | **15.69** | **97** | P | **P** | **12 58 36.2** | **+1.3** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **16.69** | **333** | | **Pn** | **12 58 43.0** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **16.69** | **333** | Pn | **Pn** | **12 58 41.9** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **16.69** | **333** | Pn | P | **12 58 45.2** | **-0.7** |
| | comp=Z,0.4nm,0.3s,baz=139,slow=11,SNR=23 | | | | | | |
| ZALV | | | | Lg | Lg | 13 03 37.6 | |
| | comp=Z,0.1nm,0.3s,baz=127,slow=29,SNR=1.3 | | | | | | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.69** | **333** | *e*P | **P** | **12 58 47.1** | **+1.2** |
| **KURBB** | **Kurchatov Arra** | **17.31** | **315** | P | **Pn** | **12 58 50.2** | **-1.2** |
| | comp=Z,0.1nm,0.3s,baz=115,slow=14,SNR=10.0 | | | | | | |
| KURBB | | | | Lg | Lg | 13 03 57.2 | |
| | baz=113,slow=30,SNR=3.4 | |

comp=Z,4.0nm,0.9s
**BILL Bilibino 45.88 29** *e*P **P 13 03 10.3 -1.5**
BILL *e* 13 04 44.8
BILL *e* 13 05 00.3
BILL pmax pmax
comp=Z,2.0nm,1.3s
**ARCES ARCESS Array B 47.24 333** P **P 13 03 23.9 +1.4**
ARCES IAmb IAmb 13 03 50.9
comp=Z,4.1nm,1.2s
**ARCES ARCESS Array B 47.24 333** P **P 13 03 22.4 -0.1**
comp=Z,0.9nm,0.6s,baz=81,slow=7.4,SNR=3.8
comp=Z,0.9nm,0.6s
**ARCES ARCESS Array B 47.24 333** *e*P **P 13 03 23.8 +1.3**
ARCES pmax pmax
comp=Z,1.0nm,0.6s
**FIA1 FINESS Array S 47.54 322** P **P 13 03 26.5 +1.6**
**FINES FINESS Array B 47.54 322** P **P 13 03 26.1 +1.2**
**FINES FINESS Array B 47.54 322** P **P 13 03 25.4 +0.5**
comp=Z,2.5nm,0.7s,baz=76,slow=7.1,SNR=10.0
comp=Z,2.5nm,0.7s
**FINES FINESS Array B 47.54 322** P **P 13 03 26.1 +1.2**
**AKASG Malin Array Be 47.85 307** P **P 13 03 27.7 +0.2**
comp=Z,0.5nm,0.5s,baz=65,slow=7.8,SNR=1.6
comp=Z,0.5nm,0.5s
**HFS Hagfors 53.75 322** P **P 13 04 11.6 -0.2**
comp=Z,3.0nm,0.8s,baz=96,slow=10,SNR=2.3
comp=Z,3.0nm,0.8s
**NOA NORSAR Array B 54.62 323** P **P 13 04 17.2 -1.0**
comp=Z,0.6nm,0.8s,baz=72,slow=9.0,SNR=2.7
**NC204 NORSAR Array S 54.74 324 P P 13 04 20.6 +1.5**
**C18K Utukok River 57.43 25** P **P 13 04 38.8 +0.6**
C18K IAmb IAmb 13 05 10.5
comp=Z,14nm,1.5s
**C19K Lookout Ridge 57.74 24** P **P 13 04 41.5 +1.2**
C19K IAmb IAmb 13 05 15.0
comp=Z,8.1nm,1.4s
**B20K Meade River 58.07 23** P **P 13 04 42.9 +0.3**
B20K IAmb IAmb 13 04 52.0
comp=Z,15nm,1.4s
**D19K Kuna River 58.50 25** P **P 13 04 47.0 +1.4**
D19K IAmb IAmb 13 05 02.4
comp=Z,8.6nm,1.4s
**E19K Redstone River 59.30 26** P **P 13 04 52.1 +0.8**
E19K IAmb IAmb 13 05 15.1
comp=Z,4.1nm,1.4s
**F19K Shaleruckik Mo 59.43 26** P **P 13 04 52.8 +0.7**
**J16K Anvik River 60.16 31** P **P 13 04 58.4 +1.3**
J16K IAmb IAmb 13 05 41.9
comp=Z,3.6nm,1.1s
**K15K Wolf Creek Mou 60.27 32** P **P 13 04 59.3 +1.3**
**IMAR Indian Mountai 61.26 26** P **P 13 05 04.8 +0.2**
**J18K Innoko River 61.57 29** P **P 13 05 07.5 +0.7**
J18K IAmb IAmb 13 05 22.9
comp=Z,6.7nm,1.5s
**H21K Melozitna Rive 61.77 26** P **P 13 05 09.1 +1.0**
H21K IAmb IAmb 13 05 16.7
comp=Z,3.3nm,1.3s
**J20K Nowinta River 62.13 28** P **P 13 05 10.1 -0.4**
J20K IAmb IAmb 13 05 25.5
comp=Z,4.6nm,1.4s
**FITZ Fitzroy Crossi 63.16 150** P **P 13 05 17.6 -0.3**
**BWN Browne 63.79 27** P **P 13 05 22.9 +1.4**
**EKA Eskdalemuir Ar 63.94 321** P **P 13 05 22.6 0.0**
comp=Z,1.1nm,0.7s,baz=59,slow=7.8,SNR=2.7
comp=Z,1.1nm,0.7s
**ILAR Eielson Array 64.29 25** P **P 13 05 25.0 +0.1**
comp=Z,0.5nm,0.7s,baz=282,slow=5.4,SNR=8.8
comp=Z,0.5nm,0.7s
**ILAR Eielson Array 64.29 25** *e*P **P 13 05 25.3 +0.4**
ILAR pmax pmax
comp=Z,1.0nm,0.9s
**RND Reindeer 64.48 27** P **P 13 05 26.7 +0.5**
RND IAmb IAmb 13 05 39.8
comp=Z,3.7nm,1.2s
**RND Reindeer 64.48 27** P **P 13 05 26.7 +0.5**
RND pmax pmax
comp=Z,4.0nm,1.2s
**E29M Blow River 64.51 20** P **P 13 05 25.6 -0.6**
E29M IAmb IAmb 13 05 28.1
comp=Z,3.0nm,0.9s
**F28M Old Crow 64.53 21** P **P 13 05 25.7 -0.7**
**I26K Coal Creek Min 65.14 24** P **P 13 05 29.5 -0.9**
I26K IAmb IAmb 13 06 06.9
comp=Z,3.8nm,1.4s
**DHY Denali Highway 65.21 27** P **P 13 05 30.3 -0.7**
DHY IAmb IAmb 13 05 32.8
comp=Z,3.3nm,1.1s
**SML Sawmill 65.68 28** P **P 13 05 33.3 -0.6**
SML IAmb IAmb 13 05 38.4
comp=Z,6.2nm,0.8s
**SCM Sheep Creek Mo 66.03 28** P **P 13 05 36.8 +0.6**
**SCM Sheep Creek Mo 66.03 28** P **P 13 05 36.8 +0.6**
SCM pmax pmax
comp=Z,15nm,1.5s
**EGAK Eagle 66.13 24** P **P 13 05 37.0 +0.2**
EGAK IAmb IAmb 13 05 41.2
comp=Z,3.4nm,1.1s
**M24K Tolsona, Glenn 66.26 27** P **P 13 05 38.8 +1.0**
**PWL Port Wells 66.28 29** P **P 13 05 38.1 +0.3**
PWL IAmb IAmb 13 05 56.7
comp=Z,5.2nm,1.2s
**KDAK Kodiak Island 66.51 33** P **P 13 05 39.1 -0.1**
**KDAK Kodiak Island 66.51 33** P **P 13 05 39.2 -0.1**
KDAK pmax pmax
comp=Z,13nm,1.2s
**G31M Satah River 66.54 20** P **P 13 05 39.7 +0.4**
G31M IAmb IAmb 13 06 22.3
comp=Z,3.5nm,1.2s
**KLU Klutina 66.76 28** P **P 13 05 42.5 +1.6**
KLU IAmb IAmb 13 05 45.7
comp=Z,3.4nm,0.8s
**BCAR Beaver Creek A 67.12 25** P **P 13 05 44.2 +1.0**
**K29M Barlow Dome 67.91 23** P **P 13 05 49.2 +1.0**
K29M IAmb IAmb 13 05 49.7
comp=Z,2.3nm,0.8s
**WRA Warramunga Arr 68.51 143** P **P 13 05 51.1 -1.3**
comp=Z,0.8nm,0.8s,baz=349,slow=6.7,SNR=2.7
comp=Z,0.8nm,0.8s
**ASAR Alice Springs 71.55 145** P **P 13 06 10.2 -0.8**
comp=Z,1.1nm,0.7s,baz=337,slow=6.0,SNR=16
comp=Z,1.1nm,0.7s
**NVAR Mina Array Bea 95.48 28** P **P 13 08 15.7 +0.7**
comp=Z,0.1nm,0.3s,baz=345,slow=2.8,SNR=2.0
comp=Z,0.1nm,0.3s

**IDC 10 13:11:33.4±2.1, 2°.00N×125°.64E, h0$^{km}$, mb3.3/3, mbtmp3.3/3, Error ellipse: s-maj=178.4km s-min=27.9km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.42** | **159** | P | P | 13 16 43.3 | -1.0 |
| | 0.7nm,0.5s,baz=337,slow=11,SNR=19 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **26.75** | **163** | P | P | 13 17 16.5 | +1.5 |
| | 0.2nm,0.6s,baz=342,slow=7.3,SNR=4.3 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.37** | **326** | P | P | 13 21 30.2 | -0.4 |
| | 0.3nm,0.6s,baz=124,slow=7.8,SNR=2.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*DJA **10** 13:36:44.5±0.1, 3°.S±2°.×10°.2E±°, h118$^{km}$±2$^{km}$, M5.0/49, mB5.5/13, mb4.9/49, MLv5.2/18, Mw(mB)5.0/13, MwMwp6.2/1, Mwp6.2/1*
*NEIC **10** 13:36:44.4±2.2, 3°.25S±0°.07×102°.28E±0°.07, h117$^{km}$±6$^{km}$, mb4.9/60, Error ellipse: s-maj=11.3km s-min=9.1km az=58.0*
*IDC **10** 13:36:45.7±1.4, 3°.08S×102°.34E, h131$^{km}$±12$^{km}$, mb4.4/29, mbtmp4.8/30, MS3.2/7, Error ellipse: s-maj=14.7km s-min=8.0km az=68.0*

**ISC 10 13:36:44.4±0.4, 3°.20S±0°.04×102°.28E±0°.05, h122$^{km}$±3$^{km}$, n260, σ1§33/282, mb4.8/72, 6C, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **2.31** | **281** | P | **Pn** | **13 37 23.3** | **+1.5** |
| **PMBI** | **Palembang** | **2.50** | **84** | P | **Pn** | **13 37 24.6** | **+0.4** |
| **PMBI** | **Palembang** | **2.50** | **84** | | **Pn** | **13 37 23.9** | **-0.4** |
| **PMBI** | **Palembang** | **2.50** | **84** | P | **Pn** | **13 37 24.1** | **-0.1** |
| **LWLI** | **Liwa** | **2.53** | **136** | P | **Pn** | **13 37 25.3** | **+0.6** |
| **PDSI** | **Padang** | **2.91** | **321** | P | **Pn** | **13 37 30.4** | **+0.8** |
| **KASI** | **Kota Agung** | **3.19** | **136** | P | **Pn** | **13 37 33.3** | **0.0** |
| **BLSI** | **Bandar Lampung** | **3.66** | **126** | P | **Pn** | **13 37 40.2** | **+0.8** |
| **SISI** | **Saibi** | **3.69** | **300** | P | **Pn** | **13 37 40.8** | **+0.9** |
| **BKNI** | **Bangkinang** | **3.72** | **340** | P | **Pn** | **13 37 42.3** | **+2.1** |
| **BKNI** | **Bangkinang** | **3.72** | **340** | | **Pn** | **13 37 41.8** | **+1.6** |
| **BKNI** | **Bangkinang** | **3.72** | **340** | P | **Pn** | **13 37 41.8** | **+1.6** |
| **PPBI** | **Pangkal Pinang** | **3.98** | **75** | P | **Pn** | **13 37 44.9** | **+1.1** |
| **PBSI** | **Pulau Batu** | **5.08** | **308** | P | **Pn** | **13 37 58.8** | **+0.4** |
| **DBJI** | **Dramaga** | **5.56** | **127** | P | **Pn** | **13 38 05.2** | **+0.3** |
| | 269nm,1.2s,0.9nm | | | | | | |
| **SKJI** | **Sukabumi** | **5.69** | **132** | P | **Pn** | **13 38 05.3** | **-1.4** |
| | 252nm,0.7s,4μm2.3nm | | | | | | |
| **CNJI** | **Cibinong** | **6.32** | **130** | P | **Pn** | **13 38 13.2** | **-2.0** |
| | 86nm,0.4s | | | | | | |
| **GSI** | **Gunungsitoli** | **6.49** | **313** | P | **Pn** | **13 38 16.9** | **-0.6** |
| **GSI** | **Gunungsitoli** | **6.49** | **313** | Pn | **Pn** | **13 38 16.9** | **-0.6** |
| **GSI** | **Gunungsitoli** | **6.49** | **313** | P | **Pn** | **13 38 16.9** | **-0.6** |
| **BBJI** | **Bungbulang** | **6.82** | **129** | P | **Pn** | **13 38 20.6** | **-1.4** |
| **CMJI** | **Cimerak** | **7.64** | **127** | P | **Pn** | **13 38 30.7** | **-2.3** |
| | 143nm,0.4s,2μm0.7nm | | | | | | |
| **KPJI** | **Karang Pucung** | **7.79** | **122** | P | **Pn** | **13 38 35.2** | **+0.2** |
| | 128nm,0.7s,0.4nm | | | | | | |
| **XMIS** | **Christmas Isla** | **7.97** | **155** | P | **Pn** | **13 38 33.2** | **-4.3** |
| **XMIS** | **Christmas Isla** | **7.97** | **155** | Pn | **Pn** | 13 38 30.5 | -7.0 |
| **KCSI** | **Kotacane, Aceh** | **8.06** | **326** | P | **Pn** | **13 38 39.4** | **+0.7** |
| | 69nm,0.8s,8μm | | | | | | |
| **SNSI** | **Sinabang, Aceh** | **8.15** | **313** | P | **Pn** | **13 38 39.6** | **-0.4** |
| **KULM** | **Kulim** | **8.59** | **349** | | **Pn** | **13 38 46.4** | **+0.5** |
| **SMRI** | **Semarang** | **8.98** | **116** | Pn | **Pn** | **13 38 53.5** | **+2.3** |
| **UGM** | **Wanagama** | **9.44** | **120** | P | **Pn** | **13 38 56.4** | **-1.0** |
| **UGM** | **Wanagama** | **9.44** | **120** | Pn | **Pn** | **13 38 56.6** | **-0.8** |
| **UGM** | **Wanagama** | **9.44** | **120** | P | **Pn** | **13 38 56.3** | **-1.1** |
| | 170nm,1.3s | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **9.46** | **322** | P | **Pn** | **13 38 56.3** | **-1.3** |
| **STKI** | **Sintang** | **9.74** | **71** | P | **Pn** | **13 39 03.8** | **+2.4** |
| | 63nm,0.9s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **9.93** | **327** | P | **Pn** | **13 39 03.4** | **-0.5** |
| | 206nm,1.1s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **9.93** | **327** | Pn | **Pn** | **13 39 01.8** | **-2.0** |
| **LHMI** | **Lhok Sumawe** | **9.93** | **327** | P | **Pn** | **13 39 02.1** | **-1.8** |
| | 205nm,1.0s | | | | | | |
| **NGJI** | **Ngawi** | **10.03** | **115** | P | **Pn** | **13 39 07.4** | **+2.1** |
| | 78nm,0.7s | | | | | | |
| **COCO** | **West Island** | **10.44** | **211** | Pn | **Pn** | **13 39 09.3** | **-1.4** |
| **PWJI** | **Pagerwojo** | **10.62** | **117** | P | **Pn** | **13 39 11.6** | **-1.6** |
| | 78nm,0.7s | | | | | | |
| **SBUM** | **Sibu** | **11.41** | **61** | Pn | **Pn** | **13 39 27.0** | **+3.3** |
| **MTKI** | **Mutra Teweh, K** | **12.80** | **80** | P | **P** | **13 39 46.4** | **-1.8** |
| **JAGI** | **Jajag, Banyuwa** | **12.91** | **114** | P | **Pn** | **13 39 41.2** | **-2.2** |
| **JAGI** | **Jajag, Banyuwa** | **12.91** | **114** | Pn | **Pn** | **13 39 41.5** | **-2.0** |
| **JAGI** | **Jajag, Banyuwa** | **12.91** | **114** | P | **Pn** | **13 39 41.3** | **-2.2** |
| **SRBI** | **Singaraja** | **13.75** | **111** | P | **Pn** | **13 39 54.8** | **+0.5** |
| | 58nm,0.7s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **15.52** | **111** | P | **P** | **13 40 18.0** | **-0.4** |
| | 27nm,0.9s | | | | | | |
| **KAPI** | **Kappang** | **17.52** | **96** | P | **P** | **13 40 39.5** | **-0.9** |
| | 12nm,0.3s,baz=246,slow=10.0,SNR=1.7 | | | | | | |
| **BNSI** | **Bone** | **17.82** | **94** | P | **Pn** | **13 40 45.5** | **+0.7** |
| | 43nm,0.9s | | | | | | |
| **UBPT** | **Khong Chiam** | **18.63** | **10** | P | **Pn** | **13 40 54.7** | **+0.3** |
| **UBPT** | **Khong Chiam** | **18.63** | **10** | | **Pn** | **13 40 54.6** | **+0.3** |
| **TOLI2** | **Tolitoli** | **18.98** | **77** | P | **Pn** | **13 40 57.9** | **-0.6** |
| **TOLI2** | **Tolitoli** | **18.98** | **77** | P | **Pn** | **13 40 58.3** | **-0.2** |
| **BASI** | **Baing, Sumba** | **19.45** | **112** | P | **Pn** | **13 41 03.1** | **-0.9** |
| **MRSI** | **Marisa** | **19.98** | **80** | P | **Pn** | **13 41 08.9** | **-1.4** |
| | 47nm,0.8s | | | | | | |
| **EDFI** | **Ende, Flores** | **20.07** | **107** | P | Pn | 13 41 09.7 | -1.6 |
| **LUWI** | **Luwuk** | **20.59** | **84** | P | **P** | **13 41 13.6** | **-0.2** |
| **LUWI** | **Luwuk** | **20.59** | **84** | P | Pn | 13 41 15.7 | -1.6 |
| | 68nm,1.0s,1μm | | | | | | |
| **CM31** | **Chiang Mai Arr** | **21.77** | **351** | P | **P** | **13 41 27.7** | **+1.3** |
| **CMAR** | **Chiang Mai Arr** | **21.77** | **351** | P | **P** | **13 41 28.4** | **+1.9** |
| CMAR | | | | | **PcP** | **13 45 22.8** | **+0.6** |
| **CMAR** | **Chiang Mai Arr** | **21.77** | **351** | P | **P** | **13 41 25.8** | **-0.7** |
| | 9.9nm,0.7s,baz=182,slow=8.9,SNR=62 | | | | | | |
| CMAR | | | | | PcP | **PcP** | **13 45 22.9** | **+0.6** |
| | 3.4nm,0.7s,baz=209,slow=2.8,SNR=13 | | | | | | |
| CMAR | | | | | ScP | **ScP** | **13 48 46.5** | **-1.9** |
| | 1.0nm,0.6s,baz=204,slow=4.3,SNR=7.3 | | | | | | |
| | 9.9nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **22.33** | **109** | P | **P** | **13 41 33.6** | **+1.2** |
| | 38nm,1.1s | | | | | | |
| **CRAI** | **Chiangrai** | **23.36** | **355** | | **PcP** | **13 45 27.0** | **+1.5** |
| **PALK** | **Pallekele** | **23.92** | **296** | LR | LR | 13 50 10.2 | |
| | comp=Z,34nm,18.4s,baz=225,slow=34 | | | | | | |
| **SLVN** | **Son La** | **24.43** | **4** | P | **P** | **13 41 53.1** | **+1.2** |
| SLVN | | | | | IAmb | IAmb | 13 41 56.3 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **24.64** | **138** | P | **P** | **13 41 53.1** | **-0.6** |
| MBWA | | | | | IAmb | IAmb | 13 42 07.7 | |
| | comp=Z,96nm,1.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.00** | **138** | P | **P** | **13 41 59.8** | **+2.8** |
| PSA00 | | | | | IAmb | IAmb | 13 42 33.1 | |
| | comp=Z,45nm,1.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.26** | **125** | P | **P** | **13 42 16.3** | **-1.0** |
| **MEEK** | **Meekatharra** | **28.07** | **148** | P | **P** | **13 42 25.1** | **+0.5** |
| **MORW** | **Morawa** | **28.86** | **154** | P | **P** | **13 42 32.2** | **+0.8** |
| **KNRA** | **Kununurra** | **28.86** | **117** | P | **P** | **13 42 29.9** | **-1.7** |
| KNRA | | | | | IAmb | IAmb | 13 42 37.1 | |
| | comp=Z,48nm,1.8s | | | | | | |
| **FAKI** | **Fak Fak** | **29.92** | **90** | P | **P** | **13 42 40.8** | **-0.3** |
| **FAKI** | **Fak Fak** | **29.92** | **90** | P | **P** | **13 42 40.3** | **-0.8** |
| FAKI | | | | | IAmb | IAmb | 13 42 43.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **29.92** | **90** | P | **P** | **13 42 42.4** | **+1.3** |
| | comp=Z,17nm,0.9s | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.98** | **260** | T | T | 14 12 42.9 | |
| | baz=83,slow=75,SNR=21 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.98** | **260** | T | T | 14 12 48.6 | |
| | baz=83,slow=75,SNR=61 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.99** | **260** | T | T | 14 12 49.9 | |
| | baz=83,slow=75,SNR=14 | | | | | | |
| **MTN** | **Manton Dam** | **30.09** | **110** | P | **P** | **13 42 41.0** | **-1.6** |
| MTN | | | | | IAmb | IAmb | 13 42 54.2 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **MUN** | **Mundaring** | **31.48** | **157** | P | **P** | **13 42 56.5** | **+1.9** |
| **KLBR** | **Kellerberrin** | **31.78** | **154** | P | **P** | **13 42 58.6** | **+1.4** |
| **NWAO** | **Narrogin (SRO)** | **32.72** | **156** | P | **P** | **13 43 07.3** | **+1.9** |
| **NWAO** | **Narrogin (SRO)** | **32.72** | **156** | P | **P** | **13 43 07.1** | **+1.6** |
| **WRKA** | **Warakurna** | **33.14** | **133** | P | **P** | **13 43 09.5** | **+0.2** |
| **H01W3** | **Cape Leeuwin H** | **33.39** | **162** | T | T | 14 19 50.9 | |
| | baz=336,slow=75,SNR=7.1 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.41** | **162** | T | T | 14 19 48.8 | |
| | baz=336,slow=75,SNR=6.7 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.41** | **162** | T | T | 14 19 49.7 | |
| | baz=336,slow=75,SNR=6.9 | | | | | | |
| **WB0** | **Warramunga Arr** | **35.40** | **120** | P | **P** | **13 43 27.9** | **-0.8** |
| **WRA** | **Warramunga Arr** | **35.42** | **121** | P | **P** | **13 43 28.5** | **-0.4** |
| WRA | | | | | PcP | **PcP** | **13 45 56.5** | **+0.2** |
| WRA | | | | | | **S** | **13 48 52.1** | **-3.0** |
| **WRA** | **Warramunga Arr** | **35.42** | **121** | P | **P** | **13 43 27.7** | **-1.2** |
| | comp=Z,4.2nm,0.4s,baz=302,slow=9.0,SNR=131 | | | | | | |
| WRA | | | | | PcP | **PcP** | **13 45 56.0** | **-0.3** |
| | comp=Z,4.3nm,0.6s,baz=301,slow=2.3,SNR=12 | | | | | | |
| WRA | | | | | S | S | 13 48 46.0 | -9.0 |
| | comp=Z,1.9nm,0.8s,baz=294,slow=16,SNR=6.3 | | | | | | |
| WRA | | | | | ScP | **ScP** | **13 49 29.6** | **-1.5** |
| | comp=Z,0.6nm,0.6s,baz=319,slow=3.1,SNR=4.5 | | | | | | |
| | comp=Z,4.2nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **35.43** | **120** | P | **P** | **13 43 28.7** | **-0.3** |
| WRAB | | | | | IAmb | IAmb | 13 43 29.5 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **35.43** | **121** | P | **P** | **13 43 28.8** | **-0.2** |
| WB2 | | | | | IAmb | IAmb | 13 43 29.4 | |
| | comp=Z,12nm,0.6s | | | | | | |
| WB2 | | | | | | **S** | **13 48 50.9** | **-4.3** |
| **WR0** | **Warramunga Arr** | **35.60** | **120** | P | **P** | **13 43 29.5** | **-1.0** |
| WR0 | | | | | IAmb | IAmb | 13 43 30.6 | |
| | comp=Z,8.9nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **36.67** | **141** | P | **P** | **13 43 40.3** | **+0.9** |
| **FORT** | **Forrest** | **36.67** | **141** | P | **P** | **13 43 39.9** | **+0.4** |
| **ASAR** | **Alice Springs** | **36.71** | **126** | P | **P** | **13 43 40.1** | **+0.2** |
| ASAR | | | | | PcP | **PcP** | **13 46 00.6** | **+0.5** |
| **ASAR** | **Alice Springs** | **36.71** | **126** | P | **P** | **13 43 39.7** | **-0.2** |
| | comp=Z,10nm,0.6s,baz=300,slow=8.4,SNR=90 | | | | | | |
| ASAR | | | | | PcP | **PcP** | **13 46 00.6** | **+0.5** |
| | comp=Z,4.8nm,0.6s,baz=307,slow=2.5,SNR=18 | | | | | | |
| ASAR | | | | | S | **S** | **13 49 09.2** | **-5.5** |
| | comp=Z,2.9nm,0.6s,baz=297,slow=14,SNR=11 | | | | | | |
| ASAR | | | | | ScP | **ScP** | **13 49 34.6** | **-1.1** |
| | comp=Z,1.1nm,0.6s,baz=306,slow=4.4,SNR=4.6 | | | | | | |
| | comp=Z,10nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **36.71** | **126** | P | **P** | **13 43 39.7** | **-0.2** |
| AS31 | | | | | | **S** | **13 49 09.7** | **-5.0** |
| **AS01** | **Alice Springs** | **36.74** | **126** | P | **P** | **13 43 40.0** | **-0.2** |
| **LYN** | **LuoYang** | **38.75** | **13** | P | **P** | **13 43 58.5** | **+1.6** |
| LYN | | | | | pP | pP | 13 44 27.0 | +2.7 |
| LYN | | | | | pmax | pmax | | |
| | comp=Z,32nm,0.6s | | | | | | |
| LYN | | | | | pmax | pmax | | |
| | comp=Z,240nm,5.0s | | | | | | |
| **OOD** | **Oodnadatta** | **40.17** | **131** | P | **P** | **13 44 09.0** | **+0.3** |
| **QIS** | **Mount Isa** | **40.23** | **118** | P | **P** | **13 44 09.2** | **-0.2** |
| **MULG** | **Mulgathing** | **40.35** | **135** | P | **P** | **13 44 10.9** | **+0.7** |
| **ROCAM** | **Rodrigues Isla** | **41.38** | **244** | P | **P** | **13 44 17.1** | **-1.7** |
| **COEN** | **Coen** | **41.75** | **107** | P | **P** | **13 44 22.6** | **+0.7** |
| COEN | | | | | IAmb | IAmb | 13 45 35.5 | |
| | comp=Z,62nm,1.8s | | | | | | |
| **GTA** | **Gaotai** | **42.46** | **357** | P | **P** | **13 44 28.6** | **+1.2** |
| GTA | | | | | PcP | **PcP** | **13 46 19.0** | **+0.8** |
| GTA | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **43.21** | **137** | P | **P** | **13 44 33.8** | **+0.3** |
| **BBOO** | **Buckleboo** | **43.21** | **137** | P | **P** | **13 44 34.0** | **+0.5** |
| **LCRK** | **Leigh Creek** | **43.44** | **133** | P | **P** | **13 44 35.1** | **-0.2** |
| **INKA** | **Innaminka** | **44.06** | **128** | P | **P** | **13 44 41.0** | **+0.7** |
| **HTT** | **Hallett** | **45.54** | **136** | P | **P** | **13 44 52.9** | **+0.8** |
| **NIL** | **Nilore** | **45.76** | **326** | P | **P** | **13 44 53.9** | **+0.2** |
| NIL | | | | | IAmb | IAmb | 13 44 54.9 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **NIL** | **Nilore** | **45.76** | **326** | P | **P** | **13 44 54.3** | **+0.6** |
| NIL | | | | | pP | **pP** | **13 45 21.3** | **-1.0** |
| NIL | | | | | sP | **sP** | **13 45 34.9** | **-1.3** |
| **CTAO** | **Charters Tower** | **46.03** | **115** | P | **P** | **13 44 55.5** | **-0.5** |
| **CTAO** | **Charters Tower** | **46.03** | **115** | P | **P** | **13 44 55.3** | **-0.7** |
| CTAO | | | | | IAmb | IAmb | 13 45 47.9 | |
| | comp=Z,44nm,1.8s | | | | | | |
| **CTAO** | **Charters Tower** | **46.03** | **115** | P | **P** | **13 44 55.9** | **-0.1** |
| **STKA** | **Stephens Creek** | **46.66** | **132** | P | **P** | **13 45 01.3** | **+0.5** |
| **STKA** | **Stephens Creek** | **46.66** | **132** | P | **P** | **13 45 00.5** | **-0.3** |
| **STKA** | **Stephens Creek** | **46.66** | **132** | P | **P** | **13 45 00.7** | **-0.1** |
| | comp=Z,17nm,0.7s,baz=300,slow=8.5,SNR=24 | | | | | | |
| STKA | | | | | PcP | **PcP** | **13 46 33.0** | **+0.4** |
| | comp=Z,4.0nm,0.4s,baz=335,slow=6.1,SNR=5.1 | | | | | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.91** | **28** | P | **P** | **13 45 03.4** | **+0.8** |
| **KSRS** | **Korea Array** | **46.94** | **28** | P | **P** | **13 45 02.9** | **+0.1** |
| | comp=Z,9.3nm,1.0s,baz=214,slow=8.2,SNR=26 | | | | | | |
| KSRS | | | | | PcP | **PcP** | **13 46 33.6** | **+0.2** |
| | comp=Z,2.0nm,0.8s,baz=229,slow=2.2,SNR=7.8 | | | | | | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **JMN** | **Monobe** | **47.30** | **36** | P | **P** | **13 45 06.7** | **+0.9** |
| JMN | | | | | IAmb | IAmb | 13 45 54.0 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **XLT** | **XiLinHaoTe** | **48.50** | **13** | *e*P | **P** | **13 45 15.8** | **+0.9** |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,120nm,5.4s | | | | | | |
| **KSH** | **Kashi** | **48.91** | **333** | P | **P** | **13 45 17.8** | **-0.4** |
| KSH | | | | | pP | pP | 13 45 45.3 | -1.8 |
| KSH | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **ARPS** | **Mount Arapiles** | **49.37** | **138** | P | **P** | **13 45 22.4** | **+0.8** |
| **CMSA** | **Cobar Meteorol** | **49.59** | **130** | P | **P** | **13 45 23.9** | **+0.5** |
| **PRZ** | **Przheval'sk** | **50.35** | **337** | P | **P** | **13 45 30.3** | **+1.2** |
| PRZ | | | | | IAmb | IAmb | 13 45 32.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **SHLS** | **Shalkode** | **50.53** | **338** | *e*P | **P** | **13 45 29.9** | **-0.4** |
| | comp=Z,6.0nm,0.7s,baz=339 | | | | | | |
| **UZB** | **Uzynbulak** | **50.69** | **338** | *e*P | **P** | **13 45 32.1** | **+0.6** |
| | comp=Z,4.7nm,0.6s,baz=338 | | | | | | |
| **SATY** | **Saty** | **50.84** | **338** | *e*P | **P** | **13 45 33.3** | **+0.6** |
| | baz=338 | | | | | | |
| **ZHN** | **Zhinishke** | **50.92** | **338** | *e*P | **P** | **13 45 33.7** | **+0.4** |
| | baz=338 | | | | | | |
| **SONM** | **Songino Array** | **50.95** | **4** | P | **P** | **13 45 34.6** | **+1.2** |
| SONM | | | | | IAmb | IAmb | 13 45 35.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **50.95** | **4** | P | **P** | **13 45 34.2** | **+0.8** |
| | comp=Z,20nm,0.8s,baz=184,slow=8.8,SNR=61 | | | | | | |
| SONM | | | | | PcP | **PcP** | **13 46 48.1** | **+0.1** |
| | comp=Z,5.6nm,0.5s,baz=187,slow=4.2,SNR=10.0 | | | | | | |
| SONM | | | | | LR | LR | 14 10 45.6 | |
| | comp=Z,40nm,18.8s,baz=46,slow=40 | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.02** | **4** | P | **P** | **13 45 35.5** | **+1.5** |
| ULN | | | | | IAmb | IAmb | 13 45 36.2 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **KPKS** | **Kokpek** | **51.09** | **338** | *e*P | **P** | **13 45 34.8** | **+0.3** |
| | comp=Z,5.7nm,0.7s,baz=338 | | | | | | |
| **CN2** | **Changchun** | **51.21** | **21** | P | **P** | **13 45 35.3** | **0.0** |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.35** | **335** | P | **P** | **13 45 37.9** | **+1.3** |
| BOOM | | | | | IAmb | IAmb | 13 45 39.7 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **TNSS** | **Tian-Shan** | **51.40** | **336** | *e*P | **P** | **13 45 37.5** | **+0.4** |
| | baz=336 | | | | | | |
| **MDOK** | **Medeo** | **51.46** | **336** | *e*P | **P** | **13 45 37.8** | **+0.5** |
| | baz=336 | | | | | | |
| **AAA** | **Alma-Ata** | **51.55** | **336** | *e*P | **P** | **13 45 38.6** | **+0.6** |
| | comp=Z,9.9nm,0.5s,baz=336 | | | | | | |
| **ARSB** | **Arslanbob** | **51.73** | **332** | P | **P** | **13 45 40.4** | **+1.0** |
| **SIMJ** | **Simiganj** | **51.75** | **327** | P | **P** | **13 45 39.7** | **+0.2** |
| SIMJ | | | | | pP | **pP** | **13 46 07.4** | **-1.2** |
| SIMJ | | | | | PcP | **PcP** | **13 46 52.4** | **+1.1** |
| **EIDS** | **Eidsvold** | **51.78** | **120** | P | **P** | **13 45 39.8** | **-0.2** |
| **MAJO** | **Matsushiro** | **51.81** | **37** | P | **P** | **13 45 40.0** | **+0.1** |
| MAJO | | | | | IAmb | IAmb | 13 46 01.2 | |
| | comp=Z,43nm,1.8s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **51.81** | **37** | P | **P** | **13 45 39.5** | **-0.4** |
| MJB9 | | | | | IAmb | IAmb | 13 46 01.2 | |
| | comp=Z,42nm,1.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.81** | **37** | P | **P** | **13 45 39.0** | **-0.9** |
| | comp=Z,2.5nm,0.6s,baz=211,slow=7.8,SNR=15 | | | | | | |
| MJAR | | | | | PcP | **PcP** | **13 46 51.9** | **+0.5** |
| | comp=Z,4.5nm,1.0s,baz=214,slow=2.4,SNR=6.9 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | |

KURK IAmb IAmb 13 46 20.9
comp=Z,11nm,0.8s
**KURK Kurchatov 57.41 342** P **P** **13 46 19.9 -0.2**
KURK pP **pP** **13 46 48.3 -1.2**
KURK sP **sP** **13 47 01.7 -1.4**
KURK PcP **PcP** **13 47 12.8 +0.3**
**HEH HeiHe 57.47 19** *eP* **P** **13 46 20.7 +0.3**
HEH pmax pmax
comp=Z,34nm,0.9s
**HNR Honiara 57.59 99** LR LR 14 15 02.5
comp=Z,363nm,18.2s,baz=154,slow=40
**ZAA0 Zalesovo Array 58.78 348** P **P** **13 46 29.2 -0.3**
**ZALV Zalesovo Beam 58.78 348** P **P** **13 46 29.3 -0.2**
comp=Z,13nm,0.4s,baz=165,slow=5.4,SNR=68
ZALV PcP **PcP** **13 47 17.1 -0.7**
comp=Z,3.2nm,0.7s,baz=169,slow=5.3,SNR=1.3
ZALV S **S** **13 54 25.0 -0.1**
comp=Z,0.8nm,0.6s,baz=186,slow=13,SNR=2.4
ZALV LR LR 14 15 32.2
comp=Z,21nm,18.7s,baz=91,slow=40
comp=Z,13nm,0.4s
**JKA Kamikawa-asahi 59.34 33** P **P** **13 46 33.1 -0.5**
**H04N2 CROZET ISLANDS 61.22 218** T T 14 52 10.3
baz=60,slow=75,SNR=82
**H04N1 CROZET ISLANDS 61.23 218** T T 14 52 11.2
baz=60,slow=75,SNR=70
**H04N3 CROZET ISLANDS 61.24 218** T T 14 52 03.9
baz=60,slow=75,SNR=78
**YSS Yuzh-Sakhalins 61.32 30** P **P** **13 46 47.0 +0.1**
**YSS Yuzh-Sakhalins 61.32 30** P **P** **13 46 47.4 +0.5**
**H04S1 CROZET ISLANDS 61.48 217** T T 14 52 23.0
baz=60,slow=75,SNR=7.1
**H04S3 CROZET ISLANDS 61.49 217** T T 14 52 28.9
baz=60,slow=75,SNR=15
**H04S2 CROZET ISLANDS 61.50 217** T T 14 52 25.5
baz=60,slow=75,SNR=8.0
**BRVK Borovoye 62.17 339** P **P** **13 46 52.3 -0.2**
**BRVK Borovoye 62.17 339** P **P** **13 46 52.1 -0.4**
BRVK pP **pP** **13 47 20.6 -1.9**
BRVK PcP **PcP** **13 47 31.7 +0.2**
**CASY Casey 63.23 176** P **P** **13 47 00.3 +1.0**
CASY IAmb IAmb 13 47 02.3
comp=Z,15nm,1.1s
**CASY Casey 63.23 176** P **P** **13 47 01.3 +1.9**
CASY PcP **PcP** **13 47 37.1 +1.5**
**ABKAR Akbulak array 63.79 331** P **P** **13 47 03.3 -0.1**
**ABKAR Akbulak array 63.79 331** P **P** **13 47 03.5 +0.1**
ABKAR IAmb IAmb 13 47 04.0
comp=Z,25nm,0.7s
**FURI Furi 64.53 281** LR LR 14 11 16.3
comp=Z,28nm,18.7s,baz=152,slow=32
**AKTO Aktyubinsk 65.50 331** P **P** **13 47 13.2 -1.3**
comp=Z,3.9nm,0.7s,baz=145,slow=5.8,SNR=12
AKTO S **S** **13 55 43.8 -5.9**
comp=Z,0.7nm,0.6s,baz=228,slow=15,SNR=1.6
comp=Z,3.9nm,0.7s
**YAK Yakutsk 68.34 13** P **P** **13 47 32.0 -0.1**
**YAK Yakutsk 68.34 13** P **P** **13 47 31.3 -0.9**
YAK PcP **PcP** **13 47 57.0 +0.2**
**DRV Dumont d'Urvil 68.56 165** P **P** **13 47 34.6 +1.0**
DRV pP **pP** **13 48 03.9 +0.1**
**ARU Arti 69.22 336** P **P** **13 47 37.2 -0.5**
ARU IAmb IAmb 13 47 38.4
comp=Z,14nm,1.0s
**ARU Arti 69.22 336** P **P** **13 47 36.3 -1.5**
comp=Z,6.2nm,0.5s,baz=160,slow=4.5,SNR=3.8
comp=Z,6.2nm,0.5s
**ARU Arti 69.22 336** P **P** **13 47 37.5 -0.2**
ARU PcP **PcP** **13 48 00.9 +0.2**
**MAW Mawson 69.71 195** P **P** **13 47 42.7 +2.2**
comp=Z,4.9nm,0.6s,baz=47,slow=4.5,SNR=9.9
comp=Z,4.9nm,0.6s
**KBZ Khabaz 70.71 319** P **P** **13 47 46.4 -0.7**
comp=Z,6.2nm,0.7s,baz=130,slow=7.1,SNR=11
comp=Z,6.2nm,0.7s
**JCZ Jackson Bay 71.01 136** P **P** **13 47 49.9 +0.8**
**BELG Belogornoye 71.93 328** P **P** **13 47 54.0 -0.3**
comp=Z,28nm,0.8s,baz=116,slow=1.8,SNR=4.6
comp=Z,28nm,0.8s
**RPZ Rata Peaks 72.52 135** P **P** **13 47 59.0 +0.9**
**OXZ Oxford 73.14 134** P **P** **13 48 01.3 -0.4**
OXZ IAmb IAmb 13 48 10.1
comp=Z,81nm,2.0s
**PET Petropavlovsk 73.15 32** P **P** **13 48 01.5 0.0**
**PET Petropavlovsk 73.15 32** P **P** **13 48 01.0 -0.5**
PET IAmb IAmb 13 48 02.3
comp=Z,28nm,0.7s
**KIRV Kirov 74.43 334** P **P** **13 48 08.4 -0.3**
comp=Z,26nm,0.6s,baz=75,slow=2.6,SNR=8.8
comp=Z,26nm,0.6s
**BKZ Black Stump Fm 75.75 129** P **P** **13 48 16.9 -0.1**
**BR131 Keskin Array S 75.81 312** P **P** **13 48 16.6 -0.8**
**BRTR Keskin Array B 75.81 312** P **P** **13 48 16.6 -0.8**
**BRTR Keskin Array B 75.81 312** P **P** **13 48 16.4 -1.0**
comp=Z,7.7nm,0.5s,baz=120,slow=7.3,SNR=7.7
comp=Z,2.7nm,0.5s
**RTZ Ruatahuna 76.06 129** P **P** **13 48 18.1 -0.7**
RTZ IAmb IAmb 13 48 19.4
comp=Z,26nm,1.0s
**URZ Urewera 76.12 128** P **P** **13 48 18.2 -0.8**
**TIXI Tiksi 76.69 8** P **P** **13 48 20.9 -0.6**
TIXI IAmb IAmb 13 48 22.0
comp=Z,26nm,1.4s
**BOSA Boshof 77.09 242** P **P** **13 48 26.0 +1.1**
BOSA IAmb IAmb 13 49 08.1
comp=Z,35nm,1.6s
**BOSA Boshof 77.09 242** P **P** **13 48 26.5 +1.6**
comp=Z,1.7nm,0.4s,baz=91,slow=5.1,SNR=4.7
comp=Z,1.7nm,0.4s
**OBN Obninsk 79.02 328** P **P** **13 48 35.2 +0.5**
comp=Z,18nm,0.6s,baz=72,slow=9.6,SNR=3.2
comp=Z,18nm,0.6s
**VNDA Vanda 80.55 169** P **P** **13 48 44.1 +1.5**
**VNDA Vanda 80.55 169** P **P** **13 48 43.9 +1.3**
comp=Z,3.0nm,0.6s,baz=314,slow=6.3,SNR=26
comp=Z,3.0nm,0.6s
**SBA Scott Base 81.64 169** P **P** **13 48 50.2 +1.8**
**AKASG Malin Array Be 81.82 322** P **P** **13 48 49.1 -0.7**
comp=Z,1.0nm,0.5s,baz=92,slow=4.9,SNR=6.4
comp=Z,1.0nm,0.5s
**MLR Muntele Rosu 82.73 316** P **P** **13 48 53.2 -1.7**
comp=Z,2.7nm,0.5s,baz=152,slow=4.4,SNR=3.4
comp=Z,2.7nm,0.5s
**KOLS Kolonicke sedl 85.84 319** *eP* **P** **13 49 12.0 +1.7**
**FIA1 FINESS Array S 86.23 332** P **P** **13 49 11.8 -0.1**
**FINES FINESS Array B 86.23 332** P **P** **13 49 12.5 +0.6**
**FINES FINESS Array B 86.23 332** P **P** **13 49 11.5 -0.4**
comp=Z,5.2nm,0.6s,baz=110,slow=5.5,SNR=23
comp=Z,5.2nm,0.6s
**QSPA South Pole Qui 86.77 180** **P** **13 49 15.8 +1.1**
QSPA IAmb IAmb 13 49 17.0
comp=Z,10nm,1.1s
**QSPA South Pole Qui 86.77 180** P **P** **13 49 15.5 +0.8**
comp=Z,5.9nm,0.7s,baz=277,slow=0.9,SNR=13
comp=Z,5.9nm,0.7s
**KECS Kecovo 86.94 319** *eP* **P** **13 49 14.6 -1.1**
**VADS Vadso 87.24 341** *eP* **P** **13 49 16.7 +0.1**
**KEV Kevo 87.92 340** P **P** **13 49 19.4 -0.5**
**VYHS Vyhne 88.03 319** *eP* **P** **13 49 19.4 -1.5**
**ARA0 ARCESS Array S 88.37 340** *eP* **P** **13 49 22.3 +0.3**
**ARCES ARCESS Array B 88.37 340** P **P** **13 49 22.3 +0.2**
ARCES IAmb IAmb 13 49 23.3
comp=Z,12nm,0.8s
**ARCES ARCESS Array B 88.37 340** P **P** **13 49 22.3 +0.2**
comp=Z,8.8nm,0.7s,baz=95,slow=5.8,SNR=31
ARCES LR LR 14 35 00.9
comp=Z,18nm,18.1s,baz=134,slow=40
comp=Z,8.8nm,0.7s
**JAVC Velka Javorina 88.84 319** *eP* **P** **13 49 26.4 +1.6**
**MORC Moravsky Berou 89.02 320** P **P** **13 49 26.5 +0.9**
**MORC Moravsky Berou 89.02 320** *eP* **P** **13 49 26.7 +1.1**
**KTK1 Kautokeino 89.05 339** *eP* **P** **13 49 25.1 -0.1**
**TROLL Troll, Antarti 89.99 198** ⇑P **P** **13 49 33.0 +3.2**
comp=Z,188nm,0.8s
**TRO Tromso 90.66 340** *eP* **P** **13 49 32.3 -0.4**
**GERES GERESS Array B 91.45 319** P **P** **13 49 37.0 0.0**
comp=Z,0.3nm,0.3s,baz=123,slow=4.9,SNR=4.4
comp=Z,0.3nm,0.3s
**SNAA Sanae 91.71 198** ⇑P **P** **13 49 40.0 +2.3**
comp=Z,47nm,0.8s
**SNAA Sanae 91.71 198** P **P** **13 49 39.2 +1.5**
comp=Z,2.6nm,0.9s,baz=157,slow=7.7,SNR=8.0
comp=Z,2.6nm,0.9s
**FAUS Fauske 91.77 337** *eP* **P** **13 49 38.4 +0.5**
**STEI Steigen 91.83 338** *eP* **P** **13 49 38.1 -0.1**
**MOR8 Moi Rana 92.03 336** *eP* **P** **13 49 38.7 -0.5**

**HFS Hagfors 92.05 330** P **P** **13 49 39.2 -0.1**
comp=Z,5.2nm,0.8s,baz=165,slow=6.2,SNR=4.4
comp=Z,5.2nm,0.8s
**NB2 NORSAR Subarra 93.30 331** P **P** **13 49 45.1 -0.1**
comp=Z,3.5nm,0.9s,baz=92,slow=4.6
**NB2 NORSAR Subarra 93.30 331** P **P** **13 49 45.1 -0.1**
baz=92,slow=4.6
**VNA2 Neumayer--Watz 93.33 198** ⇑P **P** **13 49 47.4 +2.3**
comp=Z,2.7nm,0.8s,baz=111,slow=4.5
**VNA1 Neumayer--Stat 93.70 198** ⇑P **P** **13 49 50.0 +3.2**
comp=Z,4.4nm,1.0s
**VNA3 Neumayer Olymp 93.92 198** ⇑P **P** **13 49 51.2 +3.3**
comp=Z,1.0nm,0.7s
**EKA Eskdalemuir Ar 101.39 326** PKiKP **PKiKP** **13 54 46.9 +1.5**
comp=Z,0.2nm,0.4s,baz=27,slow=7.6,SNR=3.4
**SCHQ Schefferville 127.77 352** PKP **PKPdf** **13 55 34.9 -0.6**
comp=Z,3.6nm,1.0s,baz=44,slow=5.5,SNR=3.5
**NVAR Mina Array Bea 129.04 41** PKP **PKiKP** **13 55 39.2 -0.1**
comp=Z,2.0nm,0.7s,baz=290,slow=1.7,SNR=14
**ULM Lac du Bonnet 130.66 15** PKP **PKPdf** **13 55 40.6 -0.4**
comp=Z,4.1nm,0.8s,baz=350,slow=2.8,SNR=9.3
ULM SKPbc **SKPbc** **13 58 47.3 -6.5**
comp=Z,1.1nm,0.5s,baz=352,slow=7.1,SNR=2.6
**PDAR Pinedale Array 131.46 31** PKP **PKPdf** **13 55 42.7 -0.4**
comp=Z,1.2nm,0.6s,baz=236,slow=1.1,SNR=13
PDAR SKPbc **SKPbc** **13 58 54.5 -2.8**
comp=Z,0.5nm,0.6s,baz=57,slow=1.0,SNR=5.0
**TXAR Lajitas Array 144.19 41** PKP PKPbc 13 56 05.7 +0.7
comp=Z,9.6nm,0.6s,baz=249,slow=1.2,SNR=139
**CPUP Villa Florida 144.63 213** PKP **PKPdf** **13 56 06.9 -0.5**
comp=Z,23nm,0.9s,baz=123,slow=4.6,SNR=27
**BDFB Brasilia 145.16 237** PKPbc **PKPdf** **13 56 09.6 +0.9**
comp=Z,7.4nm,0.6s,baz=90,slow=4.7,SNR=10
**LPAZ La Paz 158.44 206** PKP **PKPdf** **13 56 28.6 -0.5**
comp=Z,1.7nm,0.8s,baz=162,slow=6.4,SNR=5.8

*IDC **10** 13:43:13.2±2.7,51.57N×179.52E,h0km,mb3.5/5,*
*mbtmp3.5/5,MS2.1/1,Error ellipse: s-maj=74.9km*
*s-min=30.1km az=4.0*
*AEIC **10** 13:43:16.3±1.1,51.20N±0.06×179.75E±0.07,h19km±4km,*
*Error ellipse: s-maj=10.1km s-min=4.4km az=208.0*
*NEIC **10** 13:43:17.0±1.2,51.28N±0.07×179.77E±0.06,*
*h22km±12km,ML3.7(AEIC),Error ellipse: s-maj=10.1km*
*s-min=5.3km az=184.0*
**ISC 10 13:43:15.9±1.9,51.2N±0.1×179.71E±0.05,h28km±12km,**
**n27,σ1§14/31,mb3.8/5,Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.32** | **306** | | | **Pn** | | **13 43 24.0** | **-0.6** |
| AMKA | | | | | | **Sn** | | **13 43 29.8** | **-0.6** |
| **CESW** | **Semis' Southwe** | **0.71** | **353** | | | **Pn** | | **13 43 30.5** | **+0.4** |
| CESW | | | | | | **Sn** | | **13 43 39.1** | **-1.1** |
| **CEPE** | **Semis' Perret** | **0.77** | **357** | | | **Pn** | | **13 43 31.3** | **+0.3** |
| **CEAP** | **Semis' Anvil P** | **0.81** | **354** | | | **Pn** | | **13 43 32.1** | **+0.5** |
| CEAP | | | | | | **Sn** | | **13 43 44.1** | **+1.4** |
| **LSSE** | **Little Sitkin** | **1.03** | **316** | | | **Pb** | | **13 43 35.2** | **+0.1** |
| **LSPA** | **Little Sitkin** | **1.04** | **318** | | | **Pb** | | **13 43 35.7** | **+0.4** |
| LSPA | | | | | | **Sn** | | **13 43 50.4** | **+2.1** |
| **LSNW** | **Little Sitkin** | **1.08** | **317** | | | **Pb** | | **13 43 35.7** | **-0.2** |
| **GANO** | **Gareloi North** | **1.12** | **55** | | | **Pb** | | **13 43 35.8** | **-0.8** |
| **GAEA** | **Gareloi East** | **1.13** | **58** | | | **Pb** | | **13 43 36.1** | **-0.7** |
| **TANO** | **Tanaga North** | **1.53** | **61** | | | **Pn** | | **13 43 42.0** | **+0.6** |
| TANO | | | | | | **Sb** | | **13 44 03.1** | **+0.5** |
| **TASE** | **Tanaga Southea** | **1.55** | **65** | | | **Pn** | | **13 43 42.1** | **+0.5** |
| **TAFP** | **Tanaga Falls P** | **1.60** | **63** | | | **Pb** | | **13 43 43.4** | **-1.4** |
| **KICM** | **Kanaga Island** | **2.06** | **68** | | | **Pn** | | **13 43 49.8** | **+1.1** |
| **KIWB** | **Kanaga Island** | **2.07** | **70** | | | **Pn** | | **13 43 49.9** | **+1.2** |
| **ADK** | **Adak** | **2.35** | **72** | | | **Pn** | | **13 43 53.3** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **2.70** | **71** | | | **Pn** | | **13 43 58.1** | **+0.7** |
| **GSMY** | **Great Sitkin M** | **2.77** | **70** | | | **Pn** | | **13 43 59.1** | **+0.7** |
| **GSTR** | **Great Sitkin T** | **2.79** | **69** | | | **Pn** | | **13 43 59.1** | **+0.5** |
| **SHEM** | **Shemya Is, Ala** | **3.80** | **296** | LR | | LR | | 13 44 51.2 | |
| | comp=Z,27nm,18.4s,baz=157,slow=28 | | | | | | | | |
| **NIKH** | **Nikolski High** | **7.27** | **71** | | | **Pn** | | **13 45 02.1** | **+1.9** |
| **LVA** | **Lava Point** | **9.15** | **66** | Pn | | **Pn** | | **13 45 28.4** | **+2.4** |
| **CNBA** | **Chernabura Isl** | **12.97** | **66** | Pn | | **Pn** | | **13 46 17.3** | **-0.9** |
| **ILAR** | **Eielson Array** | **21.97** | **39** | P | | **P** | | **13 48 06.7** | **-0.5** |
| | 0.2nm,0.6s,baz=250,slow=9.5,SNR=2.3 | | | | | | | | |
| | 0.2nm,0.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.11** | **350** | P | | **P** | | **13 53 04.4** | **-1.8** |
| | 0.4nm,0.4s,baz=24,slow=9.1,SNR=4.8 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.57** | **313** | P | | **P** | | **13 53 09.1** | **-0.6** |
| | 1.7nm,0.6s,baz=42,slow=6.6,SNR=22 | | | | | | | | |
| | 1.7nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.41** | **308** | P | | **P** | | **13 53 14.9** | **-0.7** |
| | 0.4nm,0.4s,baz=52,slow=6.5,SNR=7.5 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **59.61** | **80** | P | | **P** | | **13 53 19.0** | **+1.7** |
| | 0.1nm,0.5s,baz=297,slow=4.0,SNR=2.5 | | | | | | | | |
| | 0.1nm,0.5s | | | | | | | | |

*IDC **10** 13:59:53.8±4.9,7.05S×129.75E,h126km±47km,mb3.7/7,*
*mbtmp4.2/10,MS3.1/1,Error ellipse: s-maj=39.3km*
*s-min=17.6km az=64.0*
*DJA **10** 13:59:56.0±0.4,7.5±3.3×13.0E±°,h189km±9km,M4.5/14,*
*mb4.6/8,mB5.0/7,MLv4.6/14,Mw(mB)4.3/7*
*NEIC **10** 13:59:57.1±2.3,6.96S±0.07×129.59E±0.09,h146km±9km,*
*mb4.3/15,Error ellipse: s-maj=13.4km s-min=10.6km*
*az=73.0*
**ISC 10 13:59:56.8±0.5,6.98S±0.06×129.62E±0.06,h150km,n75,**
**σ1§59/75,mb3.9/9,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.94** | **121** | P | | **Pn** | | **14 00 32.4** | **+1.2** |
| **SAUI** | **Saumlaki** | **1.94** | **121** | Pn | | **Pn** | | **14 00 32.2** | **+0.9** |
| **SAUI** | **Saumlaki** | **1.94** | **121** | P | | **Pn** | | **14 00 32.6** | **+1.4** |
| SAUI | | | | S | | **Sn** | | **14 00 58.7** | **+1.0** |
| **BNDI** | **Bandanaira** | **2.46** | **7** | P | | **Pn** | | **14 00 40.1** | **+2.7** |
| **BNDI** | **Bandanaira** | **2.46** | **7** | P | | **Pn** | | **14 00 39.3** | **+1.9** |
| **MSAI** | **Masohi** | **3.68** | **349** | P | | **Pn** | | **14 00 55.8** | **+2.9** |
| **NLAI** | **Namlea** | **4.48** | **326** | P | | **Pn** | | **14 01 06.0** | **+2.6** |
| **FAKI** | **Fak Fak** | **4.81** | **33** | | | **Pn** | | **14 01 06.8** | **-1.0** |
| **FAKI** | **Fak Fak** | **4.81** | **33** | P | | **Pn** | | **14 01 07.0** | **-0.8** |
| **KMPI** | **Kaimana, Papua** | **5.24** | **51** | P | | **Pn** | | **14 01 12.7** | **-0.7** |
| | 150nm,0.6s | | | | | | | | |
| **DRS** | **Darwin Rock St** | **5.56** | **167** | P | | **Pn** | | **14 01 17.0** | **-0.7** |
| **SOEI** | **Soe** | **5.97** | **242** | P | | **Pn** | | **14 01 24.0** | **+0.8** |
| **SOEI** | **Soe** | **5.97** | **242** | Pn | | **Pn** | | **14 01 23.2** | **0.0** |
| **SOEI** | **Soe** | **5.97** | **242** | P | | **Pn** | | **14 01 23.5** | **+0.3** |
| | 74nm,0.8s,2µm1.4nm | | | | | | | | |
| **MTN** | **Manton Dam** | **6.01** | **166** | P | | **Pn** | | **14 01 22.9** | **-0.8** |
| **MTN** | **Manton Dam** | **6.01** | **166** | Pn | | **Pn** | | **14 01 23.0** | **-0.7** |
| **SANI** | **Sanana** | **6.09** | **323** | P | | **Pn** | | 14 01 29.0 | **+4.3** |
| **SWI** | **Sorong** | **6.29** | **15** | P | | **Pn** | | **14 01 27.0** | **-0.5** |
| **KDU** | **Kakadu** | **6.33** | **154** | P | | **Pn** | | **14 01 26.9** | **-1.0** |
| **BATI** | **Baumata** | **6.70** | **241** | P | | **Pn** | | **14 01 33.3** | **+0.4** |
| | 49nm,0.5s,1µm0.9nm | | | | | | | | |
| **MMRI** | **Maumere** | **7.49** | **257** | Pn | | **Pn** | | **14 01 42.2** | **-1.2** |
| **EDFI** | **Ende, Flores** | **8.05** | **257** | P | | **Pn** | | **14 01 52.2** | **+1.3** |
| **KNRA** | **Kununurra** | **8.68** | **185** | Pn | | **Pn** | | **14 01 57.1** | **-2.2** |
| **TABU** | **Tabubil** | **11.66** | **82** | P | | **Pn** | | **14 02 40.5** | **+1.7** |
| **FITZ** | **Fitzroy Crossi** | **11.71** | **199** | Pn | | **Pn** | | **14 02 36.3** | **-3.0** |
| **WB0** | **Warramunga Arr** | **13.53** | **160** | Pn | | **Pn** | | **14 02 59.3** | **-3.5** |
| **WRAB** | **Tennant Creek** | **13.67** | **161** | | | **Pn** | | **14 03 01.1** | **-3.5** |
| **WRA** | **Warramunga Arr** | **13.68** | **161** | P | | **Pn** | | **14 03 00.4** | **-4.2** |
| | 7.2nm,0.4s,baz=328,slow=14,SNR=62 | | | | | | | | |
| WRA | | | | S | | Sn | | 14 05 22.2 | -14 |
| | 13nm,0.4s,baz=333,slow=22,SNR=12 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **13.68** | **161** | Pn | | **Pn** | | **14 03 01.4** | **-3.3** |
| **WR0** | **Warramunga Arr** | **13.76** | **160** | | | **Pn** | | **14 03 02.8** | **-2.9** |
| **COEN** | **Coen** | **15.02** | **119** | P | | **P** | | **14 03 22.4** | **-0.9** |
| **COEN** | **Coen** | **15.02** | **119** | P | | **Pn** | | **14 03 19.6** | **-1.9** |
| COEN | | | | IAmb | | IAmb | | 14 03 42.9 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.39** | **263** | P | | **P** | | **14 03 28.3** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **15.39** | **263** | P | | **Pn** | | **14 03 24.4** | **-1.9** |
| **QIS** | **Mount Isa** | **16.61** | **145** | P | | **Pn** | | **14 03 41.7** | **+0.7** |
| **MBWA** | **Marble Bar** | **17.03** | **213** | P | | **Pn** | | **14 03 46.6** | **+0.5** |
| **MBWA** | **Marble Bar** | **17.03** | **213** | P | | **Pn** | | **14 03 45.5** | **-0.6** |
| MBWA | | | | IAmb | | IAmb | | 14 04 01.8 | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **AS31** | **Alice Springs** | **17.09** | **167** | | | **P** | | **14 03 45.7** | **-0.5** |
| AS31 | | | | IAmb | | IAmb | | 14 03 58.8 | |
| | comp=Z,4.9nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **17.09** | **167** | P | | **Pn** | | **14 03 47.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **17.09** | **167** | P | | **P** | | **14 03 44.7** | **-1.5** |
| | comp=Z,5.0nm,0.6s,baz=339,slow=8.5,SNR=119 | | | | | | | | |
| ASAR | | | | S | | S | | 14 06 40.1 | -17 |
| | comp=Z,1.2nm,0.4s,baz=349,slow=40,SNR=2.5 | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.31** | **212** | P | | **Pn** | | **14 03 49.8** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **17.31** | **212** | P | | **Pn** | | **14 03 48.7** | **-0.7** |
| PSA00 | | | | IAmb | | IAmb | | 14 04 04.7 | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| **PMG** | **Port Moresby** | **17.53** | **99** | P | | **Pn** | | **14 03 52.7** | **+0.6** |
| **PMG** | **Port Moresby** | **17.53** | **99** | P | | **Pn** | | **14 03 52.5** | **+0.4** |
| **PMG** | **Port Moresby** | **17.53** | **99** | P | | **P** | | **14 03 48.1** | **-3.0** |
| | comp=Z,11nm,1.0s,baz=288,slow=18,SNR=2.4 | | | | | | | | |
| PMG | | | | LR | | LR | | 14 11 59.4 | |
| | comp=Z,60nm,18.4s,baz=184,slow=42 | | | | | | | | |
| **WRKA** | **Warakurna** | **18.00** | **184** | P | | **Pn** | | **14 03 57.1** | **-0.6** |
| **MTSU** | **Mount Surprise** | **18.11** | **129** | P | | **Pn** | | **14 04 00.5** | **+1.4** |
| **SBUM** | **Sibu** | **19.73** | **298** | P | | **P** | | **14 04 15.5** | **+0.5** |
| SBUM | | | | IAmb | | IAmb | | 14 04 19.1 | |
| | comp=Z,9.8nm,0.7s | | | | | | | | |
| **OOD** | **Oodnadatta** | **21.49** | **165** | P | | **P** | | **14 04 34.2** | **+0.5** |
| **BBJI** | **Bungbulang** | **21.80** | **267** | P | | **P** | | **14 04 38.9** | **+1.7** |
| **MEEK** | **Meekatharra** | **22.18** | **207** | P | | **P** | | **14 04 41.8** | **+0.9** |
| **INKA** | **Innaminka** | **23.19** | **154** | P | | **P** | | **14 04 52.0** | **+1.7** |
| **MULG** | **Mulgathing** | **23.55** | **170** | P | | **P** | | **14 04 54.5** | **+0.9** |
| **FORT** | **Forrest** | **23.72** | **183** | P | | **P** | | **14 04 56.8** | **+1.7** |
| **FORT** | **Forrest** | **23.72** | **183** | P | | **P** | | **14 04 56.7** | **+1.6** |
| **LCRK** | **Leigh Creek** | **24.70** | **162** | P | | **P** | | **14 05 06.5** | **+2.5** |
| **BBOO** | **Buckleboo** | **26.39** | **168** | P | | **P** | | **14 05 19.2** | **-0.1** |
| **STKA** | **Stephens Creek** | **27.18** | **157** | P | | **P** | | **14 05 28.8** | **+2.5** |
| **STKA** | **Stephens Creek** | **27.18** | **157** | P | | **P** | | **14 05 28.4** | **+2.1** |
| **STKA** | **Stephens Creek** | **27.18** | **157** | P | | **P** | | **14 05 24.8** | **-1.5** |
| | comp=Z,2.6nm,0.8s,baz=342,slow=6.4,SNR=2.0 | | | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.43** | **310** | P | | **P** | | **14 07 12.8** | **+0.4** |
| | comp=Z,1.6nm,0.6s,baz=136,slow=7.4,SNR=10 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.04** | **10** | P | | **P** | | **14 07 49.0** | **-0.6** |
| | comp=Z,0.8nm,0.6s,baz=183,slow=8.8,SNR=1.8 | | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | | |
| **MK31** | **Makanchi Array** | **68.00** | **327** | P | | **P** | | **14 10 40.6** | **+0.9** |
| **MKAR** | **Makanchi Array** | **68.00** | **327** | P | | **P** | | **14 10 40.6** | **+0.8** |
| **MKAR** | **Makanchi Array** | **68.00** | **327** | P | | **P** | | **14 10 41.0** | **+1.2** |
| | comp=Z,2.4nm,0.4s,baz=117,slow=8.2,SNR=9.2 | | | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | | | |
| **MAKZ** | **Makanchi** | **68.18** | **327** | P | | **P** | | **14 10 41.8** | **+0.9** |
| MAKZ | | | | IAmb | | IAmb | | 14 10 43.2 | |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.40** | **334** | P | | **P** | | **14 10 60.0** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=143,slow=8.4,SNR=2.4 | | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.30** | **329** | P | | **P** | | **14 11 06.1** | **+0.3** |
| | comp=Z,1.3nm,0.7s,baz=129,slow=5.1,SNR=4.3 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **VNDA** | **Vanda** | **72.51** | **173** | P | | **P** | | **14 11 05.8** | **-0.9** |
| **ABKAR** | **Akbulak array** | **82.26** | **322** | P | | **P** | | **14 12 01.5** | **+0.2** |
| **QSPA** | **South Pole Qui** | **83.00** | **180** | P | | **P** | | **14 12 05.2** | **+0.2** |
| QSPA | | | | IAmb | | IAmb | | 14 12 26.1 | |
| | comp=Z,5.4nm,1.4s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **83.00** | **180** | P | | **P** | | **14 12 03.8** | **-1.2** |
| | comp=Z,0.6nm,0.8s,baz=308,slow=6.5,SNR=1.6 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| **M16K** | **Timber Creek** | **87.22** | **28** | | | **P** | | **14 12 26.2** | **+0.3** |
| M16K | | | | IAmb | | IAmb | | 14 12 32.3 | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.43** | **281** | PKP | | **PKPdf** | | **14 18 46.1** | **-0.6** |
| | comp=Z,0.5nm,0.6s,baz=45,slow=2.7,SNR=2.1 | | | | | | | | |
| **LPAZ** | **La Paz** | **150.96** | **143** | PKPbc | | **PKiKP** | | **14 19 33.5** | **-0.7** |
| | comp=Z,0.7nm,0.4s,baz=189,slow=5.0,SNR=3.6 | | | | | | | | |

*SOME **10** 14:07:12.8,46.52N×84.10E,h0km*
*NNC **10** 14:07:13.7±0.7,46.52N×84.12E,h0km,mb3.2,mpv3.5,*
*Error ellipse: s-maj=5.1km s-min=2.7km az=141.0*
**ISC 10 14:07:13.1±1.2,46.54N±0.06×84.12E±0.06,h10km,n14,**
**σ2§35/22,2C,Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ZSN** | **Zaisan** | **1.05** | **29** | *eP* | | **Pg** | | **14 07 32.0** | **-1.2** |
| | 39nm,0.1s | | | | | | | | |
| ZSN | | | | *eS* | | **Sg** | | **14 07 45.3** | **-1.5** |
| | 121nm,0.1s | | | | | | | | |
| **ZSN** | **Zaisan** | **1.05** | **29** | P | | **Pg** | | **14 07 32.0** | **-1.2** |
| | 39nm,0.1s | | | | | | | | |
| ZSN | | | | S | | **Sg** | | **14 07 45.3** | **-1.5** |
| | 121nm,0.1s | | | | | | | | |
| **MK31** | **Makanchi Array** | **1.29** | **282** | P | | **Pn** | | **14 07 37.7** | **+0.6** |
| | 1.1nm,0.1s,baz=247,slow=12,SNR=404 | | | | | | | | |
| MK31 | | | | S | | **Sg** | | **14 07 55.6** | **+1.1** |
| | 2.4nm,0.1s,baz=106,slow=35,SNR=32 | | | | | | | | |
| **MAKZ** | **Makanchi** | **1.50** | **281** | ⇑P | | **Pb** | | **14 07 41.3** | **+0.2** |
| | 1.9nm,0.3s | | | | | | | | |
| MAKZ | | | | ⇑S | | **Sg** | | **14 08 02.4** | **+1.0** |
| | 25nm,0.6s | | | | | | | | |
| **DJR** | **Jarkent** | **3.76** | **236** | *eP* | | **Pb** | | **14 08 22.4** | **+2.8** |
| | 0.6nm,0.2s | | | | | | | | |
| DJR | | | | *eS* | | **Sg** | | **14 09 12.1** | **-1.7** |
| | 4.9nm,0.7s | | | | | | | | |
| **DJR** | **Jarkent** | **3.76** | **236** | Pg | | **Pb** | | **14 08 22.4** | **+2.8** |
| | 0.6nm,0.2s | | | | | | | | |
| DJR | | | | Lg | | Lg | | 14 09 12.1 | |
| | 4.9nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.59** | **227** | Pg | | **Pb** | | **14 08 37.4** | **+3.6** |
| | 1.0nm,0.7s | | | | | | | | |
| PDGK | | | | Lg | | Lg | | 14 09 37.2 | |
| | 1.8nm,0.6s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.67** | **241** | Pg | | **Pg** | | **14 08 40.2** | **-2.3** |

comp=Z,7.8nm,1.3s
**WRA Warramunga Arr 43.72 277** P **P** **14 21 09.1 +1.2**
comp=Z,0.7nm,0.5s,baz=120,slow=7.3,SNR=19
comp=Z,0.7nm,0.5s
**WB0 Warramunga Arr 43.76 277** P **P** **14 21 09.5 +1.3**
WB0 IAmb IAmb 14 21 49.5
comp=Z,8.1nm,1.2s
**MORW Morawa 54.88 256** P **P** **14 22 32.2 -0.9**
**PSA00 Pilbara Seismi 54.95 266** P **P** **14 22 31.8 -1.9**
**QSPA South Pole Qui 55.88 180** P **P** **14 22 40.0 0.0**
QSPA IAmb IAmb 14 23 09.4
comp=Z,5.7nm,1.4s
**SNAA Sanae 74.34 179** P **P** **14 24 38.9 -0.8**
SNAA IAmb IAmb 14 24 58.3
comp=Z,7.8nm,1.4s
**FINES FINESS Array B 148.47 337** PKPbc **PKPbc** **14 32 48.5 +0.1**
comp=Z,1.6nm,0.9s,baz=34,slow=3.3,SNR=1.6

**TRN 10 14:14:48.2, 15.01N×60.60W, h61km, MD3.5, North-east of Martinique., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ILAM** | **Ilet Lapin Mar** | **0.35** | **228** | *e*P | | Pn | 14 14 59.8 | +0.9 |
| **MVM** | **Montagne Vaucl** | **0.54** | **212** | *e*P | | Pn | 14 15 01.8 | +1.1 |
| **LPMF** | **Morne Lapointe** | **0.56** | **219** | *e*P | | Pn | 14 15 01.9 | +0.9 |
| **SVN** | **Savane Anatole** | **0.57** | **253** | *e*P | | Pn | 14 15 02.8 | +1.7 |
| SVN | | | | *e*S | | Sn | 14 15 13.1 | +2.5 |
| **CXM** | **Morne La Croix** | **0.58** | **250** | *e*P | | Pn | 14 15 03.5 | +2.1 |
| **GBMF** | **Grand Be** | **0.59** | **249** | *e*P | | Pn | 14 15 03.1 | +1.8 |
| **FDF** | **Fort de France** | **0.60** | **243** | *e*P | | Pn | 14 15 03.0 | +1.6 |
| **PML** | **Morne Lenard** | **0.61** | **248** | *e*P | | Pn | 14 15 03.4 | +1.9 |
| **PCM** | **Pelee Case Pet** | **0.62** | **252** | *e*P | | Pn | 14 15 02.8 | +1.2 |
| **PCM** | **Pelee Case Pet** | **0.62** | **252** | *e*P | | Pn | 14 15 03.5 | +1.8 |
| **TRMF** | **Trois Ilets** | **0.64** | **223** | *e*P | | Pn | 14 15 03.1 | +1.2 |
| **BIM** | **Bigot** | **0.67** | **223** | *e*P | | Pn | 14 15 03.7 | +1.5 |
| BIM | | | | *e*S | | Sn | 14 15 14.4 | +1.9 |
| **SLBI** | **Saint Lucia, B** | **1.05** | **200** | *e*P | | Pn | 14 15 08.1 | +1.1 |
| SLBI | | | | *e*S | | Sn | 14 15 21.6 | +0.8 |
| **MAGL** | **Barre de l'ile** | **1.14** | **325** | *e*P | | Pn | 14 15 09.4 | +1.2 |
| **TBG** | **Guadaloupe-3** | **1.31** | **310** | *e*P | | Pn | 14 15 12.3 | +1.9 |
| TBG | | | | *e*S | | Sn | 14 15 28.6 | +1.6 |
| **SVB** | **Belmont** | **1.84** | **200** | *e*P | | Pn | 14 15 19.7 | +2.1 |
| SVB | | | | *e*S | | Sn | 14 15 40.4 | +0.5 |
| **ANBD** | **Bethesda, Anti** | **2.31** | **331** | *e*P | | Pn | 14 15 26.3 | +2.3 |
| ANBD | | | | *e*S | | Sn | 14 15 52.8 | +1.4 |
| **GCMP** | **Grenada, Carri** | **2.64** | **198** | *e*P | | Pn | 14 15 30.7 | +2.3 |
| GCMP | | | | *e*S | | Sn | 14 16 00.9 | +1.7 |

*IDC **10** 14:28:24.5±0.5, 16.18S×178.03E, h0km, mb4.3/18, mbtmp4.3/19, ML3.0/1, MS4.1/12, Error ellipse: s-maj=20.0km s-min=13.5km az=100.0*
*NEIC **10** 14:28:27.2±2.2, 16.16S±0.07×177.93E±0.09, h10km±1km, mb5.1/40, Error ellipse: s-maj=15.4km s-min=10.9km az=283.0*
*GCMT **10** 14:28:32.2±0.2, 16.12S±0.02×178.11E±0.01, h14km±1km, MW5.0/91, Moment Tensor Solution. s37,c50; s91,c146; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=2.70±.18; Mθθ=0.12±.11; Mφφ=2.81±.12; Mrθ=-0.59±.24; Mθφ=1.59±.07; Mφr=1.03±.23; Best double couple: M0=3.37600×10^16 NP1:φs=184.00000°, δ55.00000°, λ=-117.00000°. NP2: φs=45.00000°, δ43.00000°, λ=-57.00000°. Principal axes: T 3.5890, Plg7.0000°, Azm292.0000°; N -0.4340, Plg22.0000°, Azm200.0000°; P -3.1640, Plg67.0000°, Azm38.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 10 14:28:27.2±0.3, 16.24S±0.05×178.00E±0.07, h10km, n356, σ1§02/350, mb4.9/52, MS4.4/24, 8C-6D, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **1.48** | **178** | Pn | | **Pn** | **14 28 54.0** | **-0.1** |
| **MSVF** | **Nonsavu** | **1.48** | **178** | Pn | | **Pn** | **14 28 52.6** | **-1.5** |
| | 64nm,0.3s,baz=261,slow=4.9,SNR=308 | | | | | | | |
| MSVF | | | | Sn | | **Sn** | **14 29 15.1** | **+1.6** |
| | 270nm,0.3s,baz=260,slow=22,SNR=11 | | | | | | | |
| **FUNA** | **Funafuti** | **7.76** | **9** | Pn | | **Pn** | **14 30 17.8** | **-2.4** |
| **AFI** | **Afiamalu** | **10.14** | **78** | Pn | | **Pn** | **14 30 51.8** | **-1.3** |
| **DZM** | **Mont Dzumac** | **12.36** | **240** | *e*P | | Pn | 14 31 28.4 | +5.0 |
| | 77nm,1.7s | | | | | | | |
| DZM | | | | *e*LR | | LR | 14 34 07.7 | |
| | 976nm,24.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.36** | **240** | Pn | | **Pn** | **14 31 21.1** | **-2.3** |
| | 0.1nm,0.3s,baz=135,slow=17,SNR=1.2 | | | | | | | |
| DZM | | | | LR | | LR | 14 35 22.4 | |
| | comp=Z,796nm,20.5s,baz=68,slow=34 | | | | | | | |
| | 2.4nm,0.8s | | | | | | | |
| **RAO** | **Raoul Island** | **13.48** | **165** | LR | | LR | 14 35 54.9 | |
| | comp=Z,1μm,19.6s,baz=28,slow=33 | | | | | | | |
| **HNR** | **Honiara** | **18.85** | **289** | LR | | LR | 14 39 03.8 | |
| | comp=Z,14μm,18.9s,baz=120,slow=34 | | | | | | | |
| **RAR** | **Rarotonga** | **21.61** | **107** | LR | | LR | 14 39 54.2 | |
| | comp=Z,431nm,20.1s,baz=273,slow=32 | | | | | | | |
| **URZ** | **Urewera** | **21.95** | **182** | LR | | LR | 14 40 41.3 | |
| | comp=Z,405nm,19.6s,baz=90,slow=34 | | | | | | | |
| **LTZ** | **Lake Taylor** | **26.90** | **189** | P | | **P** | **14 34 09.6** | **+1.1** |
| LTZ | | | | IAmb | | IAmb | 14 34 31.5 | |
| | comp=Z,45nm,1.3s | | | | | | | |
| **CTA** | **Charters Tower** | **30.38** | **258** | LR | | LR | 14 45 24.9 | |
| | comp=Z,26nm,19.3s,baz=85,slow=34 | | | | | | | |
| **PPT2** | **Papeete2** | **31.03** | **97** | *e*S | | **S** | **14 39 50.5** | **-0.3** |
| | comp=Z,136nm,23.5s | | | | | | | |
| PPT2 | | | | *e*LQ | | LQ | 14 41 31.8 | |
| | comp=Z,485nm,24.8s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 14 42 48.1 | |
| | comp=Z,844nm,30.5s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 14 42 50.1 | |
| | comp=Z,1μm,29.0s | | | | | | | |
| **PPT** | **Papeete** | **31.03** | **97** | LR | | LR | 14 44 02.7 | |
| | comp=Z,170nm,19.2s,baz=276,slow=30 | | | | | | | |
| **TBI** | **Tubuai** | **31.37** | **108** | *e*P | | P | 14 34 42.5 | -5.8 |
| | comp=Z,247nm,31.2s | | | | | | | |
| TBI | | | | *e*S | | **S** | **14 40 01.1** | **+5.2** |
| | comp=Z,768nm,25.8s | | | | | | | |
| TBI | | | | *e*LQ | | LQ | 14 41 41.1 | |
| | comp=Z,2μm,24.5s | | | | | | | |
| TBI | | | | *e*LR | | LR | 14 42 56.4 | |
| | comp=Z,1μm,31.0s | | | | | | | |
| TBI | | | | *e*LR | | LR | 14 43 04.0 | |
| | comp=Z,8μm,29.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.50** | **238** | P | | **P** | **14 35 33.3** | **+0.4** |
| **STKA** | **Stephens Creek** | **36.50** | **238** | P | | **P** | **14 35 30.3** | **-2.5** |
| | comp=Z,2.2nm,0.9s,baz=90,slow=7.1,SNR=1.5 | | | | | | | |
| STKA | | | | LR | | LR | 14 49 07.8 | |
| | comp=Z,242nm,19.7s,baz=72,slow=34 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **BBOO** | **Buckleboo** | **41.27** | **239** | P | | **P** | **14 36 12.7** | **-0.2** |
| BBOO | | | | IAmb | | IAmb | 14 36 26.1 | |
| | comp=Z,72nm,1.4s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **41.44** | **85** | *e*LR | | LR | 14 47 39.3 | |
| | comp=Z,987nm,25.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **41.54** | **258** | P | | **P** | **14 36 13.6** | **-1.6** |
| **WB2** | **Warramunga Arr** | **41.57** | **258** | P | | **P** | **14 36 13.5** | **-2.0** |
| **WRAB** | **Tennant Creek** | **41.57** | **258** | P | | **P** | **14 36 15.5** | **0.0** |
| **WRA** | **Warramunga Arr** | **41.58** | **258** | P | | **P** | **14 36 15.0** | **-0.6** |
| | comp=Z,2.0nm,0.9s,baz=89,slow=7.7,SNR=9.9 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **14 38 13.1** | **+0.2** |
| | comp=Z,0.9nm,1.1s,baz=92,slow=2.5,SNR=4.7 | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **41.97** | **253** | P | | **P** | **14 36 18.3** | **-0.5** |
| **ASAR** | **Alice Springs** | **41.97** | **253** | P | | **P** | **14 36 16.8** | **-2.0** |
| **ASAR** | **Alice Springs** | **41.97** | **253** | P | | **P** | **14 36 18.6** | **-0.2** |
| | comp=Z,3.7nm,0.9s,baz=83,slow=8.2,SNR=23 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **14 38 14.5** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=79,slow=4.8,SNR=4.1 | | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **RKT** | **Rikitea** | **44.66** | **107** | *e*S | | **S** | **14 43 16.4** | **-0.5** |
| | comp=Z,441nm,24.2s | | | | | | | |
| RKT | | | | *e*LR | | LR | 14 49 11.2 | |
| | comp=Z,5μm,28.5s | | | | | | | |
| **VNDA** | **Vanda** | **61.83** | **184** | P | | **P** | **14 38 47.1** | **+1.1** |
| **VNDA** | **Vanda** | **61.83** | **184** | P | | **P** | **14 38 46.5** | **+0.5** |
| | comp=Z,0.8nm,0.8s,baz=348,slow=5.1,SNR=4.6 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **64.56** | **325** | P | | **P** | **14 39 02.6** | **-2.0** |
| | comp=Z,3.8nm,1.0s,baz=151,slow=5.4,SNR=7.4 | | | | | | | |
| | comp=Z,3.8nm,1.0s | | | | | | | |
| **CASY** | **Casey** | **66.22** | **204** | P | | **P** | **14 39 15.6** | **+0.6** |
| CASY | | | | IAmb | | IAmb | 14 39 22.4 | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **JNU** | **Nakatsue** | **66.59** | **318** | LR | | LR | 15 03 37.5 | |
| | comp=Z,141nm,21.9s,baz=148,slow=32 | | | | | | | |
| **RPN** | **Rapa Nui** | **67.60** | **113** | LR | | LR | 15 01 52.1 | |
| | comp=Z,251nm,18.5s,baz=240,slow=30 | | | | | | | |
| **KSRS** | **Korea Array** | **71.20** | **320** | P | | **P** | **14 39 45.1** | **-1.3** |
| | comp=Z,1.2nm,1.0s,baz=123,slow=4.6,SNR=4.5 | | | | | | | |
| KSRS | | | | LR | | LR | 15 05 41.5 | |
| | comp=Z,168nm,21.5s,baz=125,slow=31 | | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **73.34** | **327** | P | | **P** | **14 39 57.9** | **-1.2** |
| | comp=Z,3.4nm,1.0s,baz=102,slow=6.6,SNR=6.1 | | | | | | | |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| **S12K** | **Black Hills** | **73.62** | **12** | P | | **P** | **14 40 01.3** | **+0.8** |
| | baz=200 | | | | | | | |
| **QSPA** | **South Pole Qui** | **73.80** | **180** | P | | **P** | **14 40 03.0** | **+1.3** |
| **QSPA** | **South Pole Qui** | **73.80** | **180** | P | | **P** | **14 40 00.2** | **-1.6** |
| | comp=Z,8.2nm,1.1s,baz=48,slow=5.3,SNR=8.2 | | | | | | | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| **NJ2** | **Nanjing** | **74.25** | **311** | *e*P | | **P** | **14 40 05.8** | **+1.1** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **MDJ** | **Mudanjiang** | **74.88** | **326** | P | | **P** | **14 40 09.5** | **+1.4** |
| MDJ | | | | S | | **S** | **14 49 49.7** | **+4.4** |
| MDJ | | | | SS | | **SS** | **14 54 39.9** | **+5.9** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,150nm,4.1s | | | | | | | |
| MDJ | | | | LR | | LR | | |
| | comp=Z,210nm,24.4s | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **76.61** | **14** | P | | **P** | **14 40 17.9** | **+0.2** |
| | baz=205 | | | | | | | |
| **CN2** | **Changchun** | **76.63** | **324** | P | | **P** | **14 40 19.8** | **+1.7** |
| CN2 | | | | S | | **S** | **14 50 07.3** | **+2.6** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,200nm,12.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,200nm,12.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,200nm,15.0s | | | | | | | |
| **BNX** | **BinXian** | **76.78** | **326** | ⇑P | | **P** | **14 40 20.2** | **+1.3** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **76.97** | **331** | P | | **P** | **14 40 17.4** | **-2.5** |
| | comp=Z,1.6nm,0.8s,baz=106,slow=2.3,SNR=4.3 | | | | | | | |
| KLR | | | | LR | | LR | 15 09 22.0 | |
| | comp=Z,119nm,21.2s,baz=158,slow=32 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **Q17K** | **Contact Creek** | **77.29** | **14** | P | | **P** | **14 40 20.9** | **-0.7** |
| | baz=206,SNR=5.5 | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **77.67** | **10** | P | | **P** | **14 40 23.8** | **+0.3** |
| | baz=200 | | | | | | | |
| **KDAK** | **Kodiak Island** | **77.67** | **16** | P | | **P** | **14 40 24.6** | **+1.0** |
| | baz=209 | | | | | | | |
| **Q18K** | **Katmai Hardscr** | **77.84** | **14** | P | | **P** | **14 40 24.0** | **-0.8** |
| | baz=206,SNR=5.1 | | | | | | | |
| **M13K** | **Dall Lake** | **77.86** | **9** | P | | **P** | **14 40 25.4** | **+0.8** |
| | baz=198 | | | | | | | |
| **PKM** | **Mcpherson Peak** | **77.87** | **48** | P | | **P** | **14 40 25.2** | **-0.3** |
| | baz=240 | | | | | | | |
| **P17K** | **Kvichak River** | **78.02** | **13** | P | | **P** | **14 40 25.3** | **-0.2** |
| | baz=205 | | | | | | | |
| **O16K** | **Kokwok River B** | **78.03** | **12** | P | | **P** | **14 40 25.6** | **0.0** |
| | baz=204 | | | | | | | |
| **M14K** | **Bethel** | **78.40** | **10** | P | | **P** | **14 40 28.2** | **+0.6** |
| | baz=200 | | | | | | | |
| **O17K** | **Koliganek Bris** | **78.40** | **13** | P | | **P** | **14 40 27.3** | **-0.4** |
| | baz=204 | | | | | | | |
| **Q19K** | **Cape Douglas,** | **78.42** | **15** | P | | **P** | **14 40 27.5** | **-0.3** |
| | baz=208 | | | | | | | |
| **P18K** | **Big Mountain,** | **78.46** | **14** | P | | **P** | **14 40 26.7** | **-1.4** |
| P18K | | | | IAmb | | IAmb | 14 40 28.7 | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **P18K** | **Big Mountain,** | **78.46** | **14** | P | | **P** | **14 40 27.4** | **-0.7** |
| | baz=206,SNR=6.9 | | | | | | | |
| **M15K** | **Kasigluk River** | **78.56** | **11** | P | | **P** | **14 40 28.9** | **+0.4** |
| | baz=201 | | | | | | | |
| **ARVC** | **Arvin** | **78.69** | **48** | P | | **P** | **14 40 29.3** | **-0.6** |
| | baz=241 | | | | | | | |
| **L14K** | **Kuka Creek** | **78.84** | **9** | P | | **P** | **14 40 30.0** | **0.0** |
| | baz=199 | | | | | | | |
| **O18K** | **Koktub Hills** | **78.88** | **13** | P | | **P** | **14 40 29.7** | **-0.6** |
| | baz=206 | | | | | | | |
| **K13K** | **Kusilvak Mount** | **79.12** | **8** | P | | **P** | **14 40 32.2** | **+0.6** |
| | baz=197 | | | | | | | |
| **P19K** | **Oil Pt** | **79.16** | **14** | P | | **P** | **14 40 31.8** | **-0.1** |
| | baz=208 | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **79.17** | **49** | P | | **P** | **14 40 32.7** | **+0.1** |
| | baz=242,SNR=9.7 | | | | | | | |
| **M16K** | **Timber Creek** | **79.18** | **11** | P | | **P** | **14 40 27.8** | **-4.2** |
| M16K | | | | IAmb | | IAmb | 14 40 34.2 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **M16K** | **Timber Creek** | **79.18** | **11** | P | | **P** | **14 40 32.8** | **+0.9** |
| | baz=203,SNR=5.3 | | | | | | | |
| **ISA** | **Isabella, Lake** | **79.20** | **48** | P | | **P** | **14 40 32.3** | **-0.4** |
| | baz=241 | | | | | | | |
| **L15K** | **Ungalak Mounta** | **79.35** | **10** | P | | **P** | **14 40 32.9** | **0.0** |
| | baz=200 | | | | | | | |
| **MONP2** | **Monument Peak** | **79.40** | **51** | P | | **P** | **14 40 34.3** | **+0.2** |
| | baz=243,SNR=10 | | | | | | | |
| **IKP** | **In-o-Pah, Jac** | **79.53** | **52** | P | | **P** | **14 40 34.9** | **+0.3** |
| | baz=243 | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **79.68** | **48** | P | | **P** | **14 40 35.9** | **+0.5** |
| | baz=242 | | | | | | | |
| **O20K** | **Slope Mountain** | **79.68** | **14** | P | | **P** | **14 40 35.7** | **+1.0** |
| | baz=209 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **79.70** | **51** | P | | **P** | **14 40 35.1** | **-0.5** |
| | baz=243 | | | | | | | |
| **TPFO** | **Pinon Flats** | **79.70** | **51** | P | | **P** | **14 40 35.6** | **0.0** |
| | baz=243 | | | | | | | |
| **HEH** | **HeiHe** | **79.72** | **330** | *e*P | | **P** | **14 40 36.5** | **+1.4** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **L16K** | **Owhat River** | **79.73** | **11** | P | | **P** | **14 40 35.8** | **+0.9** |
| | baz=202 | | | | | | | |
| **M17K** | **Holitna River** | **79.82** | **12** | P | | **P** | **14 40 36.5** | **+1.1** |
| | baz=204 | | | | | | | |
| **BRSE** | **Bradley Lake S** | **79.85** | **15** | P | | **P** | **14 40 35.7** | **+0.1** |
| | baz=210,SNR=5.2 | | | | | | | |
| **CWC** | **Cottonwood Cre** | **79.85** | **47** | P | | **P** | **14 40 36.1** | **-0.3** |
| | baz=241 | | | | | | | |
| **HNS** | **HongShan** | **79.88** | **314** | ⇑P | | **P** | **14 40 38.2** | **+1.9** |
| HNS | | | | *e*S | | **SKSac** | **14 50 48.8** | **-4.8** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,190nm,20.7s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,200nm,20.7s | | | | | | | |
| **N19K** | **Bonanza Creek** | **79.90** | **13** | P | | **P** | **14 40 35.9** | **-0.1** |
| **K15K** | **Wolf Creek Mou** | **79.93** | **10** | P | | **P** | **14 40 34.2** | **-1.8** |
| K15K | | | | IAmb | | IAmb | 14 40 38.0 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **79.93** | **10** | P | | **P** | **14 40 36.0** | **0.0** |
| | baz=200,SNR=5.7 | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **80.06** | **9** | P | | **P** | **14 40 37.1** | **+0.5** |
| | baz=198 | | | | | | | |
| **MPMC** | **Manual Prospec** | **80.09** | **48** | P | | **P** | **14 40 37.5** | **-0.2** |
| | baz=242,SNR=8.9 | | | | | | | |
| **LYN** | **LuoYang** | **80.13** | **310** | *e*P | | **P** | **14 40 40.0** | **+2.3** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,29nm,0.5s | | | | | | | |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,170nm,5.2s | | | | | | | |
| **GAMB** | **Gambell** | **80.16** | **5** | P | | **P** | **14 40 38.3** | **+1.1** |
| | baz=190 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **80.22** | **50** | P | | **P** | **14 40 38.0** | **-0.4** |
| | baz=243,SNR=8.2 | | | | | | | |
| **GSC** | **Goldstone, Bar** | **80.23** | **49** | P | | **P** | **14 40 38.7** | **+0.3** |
| | baz=242 | | | | | | | |
| **M18K** | **Stony River** | **80.23** | **12** | P | | **P** | **14 40 38.0** | **+0.4** |
| | baz=206 | | | | | | | |
| **L17K** | **Donlin** | **80.33** | **11** | P | | **P** | **14 40 39.2** | **+1.0** |
| | baz=203 | | | | | | | |
| **HEC** | **Hector,Ludlow** | **80.35** | **49** | P | | **P** | **14 40 39.0** | **0.0** |
| | baz=243,SNR=8.9 | | | | | | | |
| **BC3** | **Big Chuckawall** | **80.47** | **51** | P | | **P** | **14 40 39.9** | **+0.2** |
| | baz=243 | | | | | | | |
| **SEW** | **Seward** | **80.50** | **16** | P | | **P** | **14 40 38.5** | **-0.5** |
| | baz=212 | | | | | | | |
| **GRAC** | **Grapevine Rang** | **80.62** | **47** | P | | **P** | **14 40 39.9** | **-0.5** |
| | baz=242,SNR=8.8 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.66** | **46** | P | | **P** | **14 40 41.3** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **80.66** | **46** | P | | **P** | **14 40 39.1** | **-1.7** |
| | comp=Z,2.8nm,1.0s,baz=228,slow=9.4,SNR=13 | | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | | |
| **L18K** | **Granite Mounta** | **80.72** | **12** | P | | **P** | **14 40 41.6** | **+1.4** |
| L18K | | | | IAmb | | IAmb | 14 40 42.5 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **L18K** | **Granite Mounta** | **80.72** | **12** | P | | **P** | **14 40 41.1** | **+0.9** |
| | baz=205,SNR=8.6 | | | | | | | |
| **FURC** | **Furnace Creek,** | **80.73** | **48** | P | | **P** | **14 40 40.4** | **-0.5** |
| | baz=242 | | | | | | | |
| **N20K** | **Mount Spurr** | **80.77** | **14** | P | | **P** | **14 40 40.3** | **-0.3** |
| | baz=209 | | | | | | | |
| **GMRC** | **Granite Mounta** | **80.83** | **50** | P | | **P** | **14 40 41.6** | **0.0** |
| | baz=243 | | | | | | | |
| **K17K** | **Iditarod** | **80.87** | **11** | P | | **P** | **14 40 41.5** | **+0.5** |
| | baz=203 | | | | | | | |
| **SHOC** | **Shoshone, Teco** | **80.89** | **49** | P | | **P** | **14 40 41.5** | **-0.3** |
| | baz=242 | | | | | | | |
| **M19K** | **Big River Lodg** | **80.90** | **13** | P | | **P** | **14 40 41.3** | **0.0** |
| | baz=207 | | | | | | | |
| **IRM** | **Iron Mountain** | **80.92** | **51** | P | | **P** | **14 40 41.3** | **-0.7** |
| | baz=243,SNR=8.3 | | | | | | | |
| **TUQ** | **Turquoise Moun** | **80.93** | **49** | P | | **P** | **14 40 41.3** | **-0.9** |
| | baz=243 | | | | | | | |
| **P23K** | **Montague Islan** | **80.96** | **17** | P | | **P** | **14 40 41.5** | **0.0** |
| | baz=214 | | | | | | | |
| **J16K** | **Anvik River** | **81.01** | **10** | P | | **P** | **14 40 42.4** | **+0.7** |
| | baz=201,SNR=6.4 | | | | | | | |
| **L19K** | **White Mountain** | **81.05** | **13** | P | | **P** | **14 40 42.4** | **+0.3** |
| L19K | | | | IAmb | | IAmb | 14 40 43.9 | |
| | comp=Z,24nm,1.1s | | | | | | | |
| **L19K** | **White Mountain** | **81.05** | **13** | P | | **P** | **14 40 42.4** | **+0.3** |
| | baz=206,SNR=11 | | | | | | | |
| **M20K** | **Styx River** | **81.16** | **13** | P | | **P** | **14 40 41.5** | **-1.3** |
| | baz=208 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **81.22** | **40** | P | | **P** | **14 40 43.8** | **+0.2** |
| J05D | | | | IAmb | | IAmb | 14 40 56.6 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **81.27** | **15** | P | | **P** | **14 40 43.0** | **-0.3** |
| | baz=211 | | | | | | | |
| **SUA** | **Susitna One** | **81.34** | **15** | P | | **P** | **14 40 43.4** | **-0.3** |
| **SUA** | **Susitna One** | **81.34** | **15** | P | | **P** | **14 40 43.0** | **-0.7** |
| | baz=210 | | | | | | | |
| **J17K** | **VABM Dome** | **81.37** | **10** | P | | **P** | **14 40 44.3** | **+0.7** |
| J17K | | | | IAmb | | IAmb | 14 40 45.8 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **J17K** | **VABM Dome** | **81.37** | **10** | P | | **P** | **14 40 44.2** | **+0.5** |
| | baz=202,SNR=5.1 | | | | | | | |
| **TPNV** | **Topopah Spring** | **81.39** | **48** | P | | **P** | **14 40 43.5** | **-1.1** |
| | baz=242 | | | | | | | |
| **SEY** | **Seymchan** | **81.43** | **348** | P | | **P** | **14 40 43.0** | **-0.9** |
| | comp=Z,3.9nm,1.0s,baz=157,slow=2.4,SNR=5.9 | | | | | | | |
| | comp=Z,3.9nm,1.0s | | | | | | | |
| **PWL** | **Port Wells** | **81.44** | **16** | P | | **P** | **14 40 43.7** | **-0.4** |
| | baz=213,SNR=5.3 | | | | | | | |
| **L20K** | **Farewell, AK** | **81.52** | **13** | P | | **P** | **14 40 44.2** | **-0.4** |
| | baz=207 | | | | | | | |
| **I17K** | **Unalakleet** | **81.56** | **9** | P | | **P** | **14 40 45.2** | **+0.6** |
| | baz=201 | | | | | | | |
| **ANM** | **Nome** | **81.56** | **7** | P | | **P** | **14 40 44.7** | **0.0** |
| | baz=196 | | | | | | | |
| **SKT** | **Skwentna** | **81.61** | **14** | P | | **P** | **14 40 45.4** | **+0.4** |
| | baz=210 | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **81.73** | **51** | P | | **P** | **14 40 46.1** | **-0.2** |
| | baz=244 | | | | | | | |
| **214A** | **Organ Pipe Nat** | **81.74** | **53** | P | | **P** | **14 40 44.9** | **-1.5** |
| | baz=245 | | | | | | | |
| **M22K** | **Willow** | **81.75** | **15** | P | | **P** | **14 40 44.4** | **-1.2** |
| **M22K** | **Willow** | **81.75** | **15** | P | | **P** | **14 40 46.3** | **+0.6** |
| | baz=211 | | | | | | | |
| **KAIM** | **Kayak Island** | **81.76** | **18** | P | | **P** | **14 40 46.0** | **+0.1** |
| | baz=216 | | | | | | | |
| **J18K** | **Innoko River** | **81.85** | **11** | P | | **P** | **14 40 46.5** | **+0.2** |
| J18K | | | | IAmb | | IAmb | 14 41 00.2 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **J18K** | **Innoko River** | **81.85** | **11** | P | | **P** | **14 40 46.4** | **+0.2** |
| | baz=204,SNR=5.8 | | | | | | | |
| **KNK** | **Knik Glacier** | **81.87** | **16** | P | | **P** | **14 40 46.2** | **-0.2** |
| | baz=212 | | | | | | | |
| **SHPR** | **Sheep Range** | **81.97** | **48** | P | | **P** | **14 40 48.1** | **+0.4** |
| **H16K** | **Elim** | **82.04** | **8** | P | | **P** | **14 40 47.6** | **+0.5** |
| | baz=199 | | | | | | | |
| **S11A** | **Rachel** | **82.07** | **47** | P | | **P** | **14 40 48.1** | **-0.1** |
| S11A | | | | IAmb | | IAmb | 14 40 55.5 | |
| | comp=Z,27nm,1.3s | | | | | | | |
| **G15K** | **Niukluk** | **82.14** | **8** | P | | **P** | **14 40 47.9** | **+0.2** |
| | baz=198 | | | | | | | |
| **K20K** | **Telida** | **82.27** | **12** | P | | **P** | **14 40 49.1** | **+0.7** |
| | baz=207 | | | | | | | |
| **W13A** | **Hualapai Mount** | **82.27** | **50** | P | | **P** | **14 40 49.9** | **+0.5** |
| **BMN** | **Battle Mountai** | **82.36** | **44** | P | | **P** | **14 40 49.7** | **0.0** |
| BMN | | | | IAmb | | IAmb | 14 41 00.8 | |
| | comp=Z,26nm,1.5s | | | | | | | |
| **CRAG** | **Craig** | **82.46** | **26** | P | | **P** | **14 40 50.4** | **+0.9** |
| | baz=227 | | | | | | | |
| **R11B** | **Troy Canyon, C** | **82.50** | **47** | P | | **P** | **14 40 50.3** | **-0.2** |
| | baz=243,SNR=7.5 | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **82.52** | **16** | P | | **P** | **14 40 49.6** | **-0.3** |
| | baz=214 | | | | | | | |
| **XAN** | **Xi'an** | **82.53** | **309** | ⇑P | | **P** | **14 40 52.5** | **+1.9** |
| XAN | | | | pP | | pwP | 14 40 59.3 | +1.7 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **J19K** | **Poorman** | **82.54** | **11** | P | | **P** | **14 40 50.3** | **+0.5** |
| | baz=206 | | | | | | | |
| **BMRM** | **Bremner River** | **82.55** | **17** | P | | **P** | **14 40 50.9** | **+0.9** |
| | baz=216 | | | | | | | |
| **KLU** | **Klutina** | **82.61** | **17** | P | | **P** | **14 40 50.1** | **-0.3** |
| | baz=215 | | | | | | | |
| **H17K** | **Granite Mounta** | **82.67** | **9** | P | | **P** | **14 40 50.5** | **+0.1** |
| | baz=201 | | | | | | | |
| **G16K** | **Koyuk River** | **82.74** | **8** | P | | **P** | **14 40 51.3** | **+0.4** |
| | baz=199 | | | | | | | |
| **J20K** | **Nowinta River** | **82.99** | **12** | P | | **P** | **14 40 51.8** | **-0.3** |
| | baz=207,SNR=7.2 | | | | | | | |
| **GCSA** | **Galena City Sc** | **82.99** | **11** | P | | **P** | **14 40 52.1** | **0.0** |
| | baz=204 | | | | | | | |
| **S31K** | **Pelican** | **82.99** | **23** | P | | **P** | **14 40 52.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| P29M | **Windy Craggy** baz=222 | 83.68 | 21 | P | | P | 14 40 55.4 | -0.5 |
| MCK | **McKinley** baz=212,SNR=5.1 | 83.73 | 14 | P | | P | 14 40 55.5 | -0.6 |
| O28M | **Mount Upton** baz=220 | 83.73 | 19 | P | | P | 14 40 56.3 | -0.1 |
| G18K | **Tagagawik** baz=203 | 83.75 | 9 | P | | P | 14 40 55.6 | -0.4 |
| H19K | **Roundabout Mou** baz=205,SNR=7.7 | 83.78 | 10 | P | | P | 14 40 56.6 | +0.4 |
| F17K | **Baldwin Pennin** baz=200 | 83.89 | 8 | P | | P | 14 40 56.4 | -0.2 |
| PAX | **Paxson** baz=215 | 83.95 | 16 | P | | P | 14 40 57.0 | -0.3 |
| PLBC | **Pleasant Camp** baz=224 | 84.03 | 22 | P | | P | 14 40 56.9 | -0.7 |
| H20K | **Anotleneega Mo** baz=206,SNR=6.8 | 84.03 | 11 | P | | P | 14 40 57.1 | -0.4 |
| M26K | **Nabesna, AK** | 84.16 | 17 | P | | P | 14 40 57.6 | -0.7 |
| M26K | **Nabesna, AK** baz=218,SNR=13 | 84.16 | 17 | P | | P | 14 40 58.1 | -0.2 |
| BELA | **Belgrano 2** | 84.22 | 173 | P | | P | 14 40 58.8 | +0.3 |
| MAW | **Mawson** comp=Z,5.1nm,0.9s,baz=70,slow=7.9,SNR=5.8 comp=Z,5.1nm,0.9s | 84.24 | 200 | P | | P | 14 40 57.7 | -1.0 |
| G19K | **Purcell Mounta** | 84.24 | 10 | P | | P | 14 40 59.2 | +0.7 |
| G19K | comp=Z,19nm,1.3s | | | IAmb | IAmb | IAmb | 14 41 00.1 | |
| G19K | **Purcell Mounta** baz=204,SNR=7.3 | 84.24 | 10 | P | | P | 14 40 59.4 | +0.8 |
| YUK8 | **Steele Glacier** baz=220,SNR=5.4 | 84.26 | 19 | P | | P | 14 40 59.1 | +0.1 |
| F18K | **Selawik** baz=202 | 84.26 | 9 | P | | P | 14 40 58.7 | +0.1 |
| P30M | **Million Dollar** baz=223 | 84.31 | 21 | P | | P | 14 40 59.5 | +0.4 |
| WUAZ | **Wupatki** baz=246 | 84.31 | 51 | P | | P | 14 40 60.0 | +0.1 |
| E17K | **Hotham Inlet** baz=200,SNR=8.1 | 84.41 | 8 | P | | P | 14 40 59.4 | +0.1 |
| YUK3 | **Moose Creek** baz=220,SNR=10 | 84.42 | 18 | P | | P | 14 40 59.4 | -0.4 |
| NEA2 | **Nenana** baz=212 | 84.43 | 14 | P | | P | 14 40 58.5 | -1.1 |
| MLY | **Manley** baz=210,SNR=6.7 | 84.44 | 13 | P | | P | 14 40 59.1 | -0.6 |
| YUK6 | **Outpost Mounta** baz=222 | 84.45 | 20 | P | | P | 14 40 59.8 | -0.2 |
| M27K | **Edge Creek, AK** baz=218,SNR=9.8 | 84.45 | 18 | P | | P | 14 40 59.3 | -0.6 |
| K24K | **Donnelly Dome** baz=215 | 84.56 | 15 | P | | P | 14 41 00.1 | -0.2 |
| L26K | **Log Cabin Wild** baz=217,SNR=7.0 | 84.56 | 17 | P | | P | 14 40 59.9 | -0.4 |
| H21K | **Melozitna Rive** baz=208,SNR=6.1 | 84.57 | 12 | P | | P | 14 41 00.2 | -0.1 |
| YUK4 | **Talbot Arm** baz=222 | 84.66 | 19 | P | | P | 14 41 01.1 | 0.0 |
| T35M | **Bob Quinn** baz=229 | 84.67 | 26 | P | | P | 14 41 01.1 | +0.2 |
| F19K | **Shaleruckik Mo** baz=203,SNR=7.4 | 84.76 | 9 | P | | P | 14 41 00.9 | -0.2 |
| HDA | **Harding Lake** baz=214,SNR=8.0 | 84.77 | 15 | P | | P | 14 41 00.3 | -1.0 |
| I23K | **Minto, Yukon-K** baz=211 | 84.84 | 13 | P | | P | 14 41 01.0 | -0.6 |
| D17K | **Noatak River** baz=198,SNR=5.8 | 84.84 | 7 | P | | P | 14 41 02.2 | +0.6 |
| E18K | **Tukpahlearik C** baz=201,SNR=8.0 | 84.90 | 8 | P | | P | 14 41 01.6 | -0.2 |
| MDM | **Murphy Dome** | 84.93 | 14 | P | | P | 14 41 01.9 | -0.3 |
| COLA | **College** baz=213 | 84.95 | 14 | P | | P | 14 41 01.8 | -0.3 |
| L27K | **Beaver Creek,** baz=218,SNR=8.9 | 85.02 | 17 | P | | P | 14 41 01.8 | -0.8 |
| BCAR | **Beaver Creek A** | 85.03 | 17 | P | | P | 14 41 03.1 | +0.5 |
| H22K | **Ishtalitna Cre** baz=210,SNR=7.5 | 85.06 | 12 | P | | P | 14 41 02.4 | -0.3 |
| O30N | **Mendenhall** baz=224 | 85.07 | 21 | P | | P | 14 41 02.5 | -0.4 |
| P32M | **Atlin** baz=226 | 85.07 | 22 | P | | P | 14 41 02.5 | -0.4 |
| ILAR | **Eielson Array** | 85.09 | 14 | P | | P | 14 41 02.3 | -0.6 |
| ILAR | **Eielson Array** comp=Z,8.0nm,0.9s,baz=235,slow=6.1,SNR=69 comp=Z,8.0nm,0.9s | 85.09 | 14 | P | | P | 14 41 01.3 | -1.6 |
| CMAR | **Chiang Mai Arr** comp=Z,0.7nm,0.4s,baz=117,slow=3.6,SNR=6.8 comp=Z,0.7nm,0.4s | 85.09 | 291 | P | | P | 14 41 03.4 | -0.5 |
| SCRK | **Sand Creek** baz=216,SNR=11 | 85.16 | 16 | P | | P | 14 41 03.6 | +0.2 |
| Q32M | **Nakina River** baz=227 | 85.18 | 23 | P | | P | 14 41 04.0 | +0.2 |
| G21K | **Allakaket** baz=207 | 85.20 | 11 | P | | P | 14 41 03.5 | +0.1 |
| N30M | **Aishikik Lake** baz=223 | 85.24 | 20 | P | | P | 14 41 03.4 | -0.4 |
| POKR | **Poker Plat Res** baz=213 | 85.25 | 14 | P | | P | 14 41 02.5 | -1.1 |
| DUG | **Dugway, Tooele** baz=244 | 85.25 | 46 | P | | P | 14 41 04.5 | +0.1 |
| F20K | **Avaraart Lake** baz=205 | 85.29 | 10 | P | | P | 14 41 03.9 | +0.1 |
| J25K | **Salcha River,** | 85.33 | 15 | P | | P | 14 41 03.8 | -0.4 |
| J25K | comp=Z,17nm,1.1s | | | IAmb | IAmb | IAmb | 14 41 05.0 | |
| J25K | **Salcha River,** baz=215,SNR=14 | 85.33 | 15 | P | | P | 14 41 03.1 | -1.0 |
| PZH | **PanZhiHua** | 85.35 | 299 | P | | P | 14 41 06.9 | +1.7 |
| PZH | comp=Z,10.0nm,0.6s | | | pmax | pmax | | | |
| PZH | comp=Z,110nm,4.7s | | | pmax | pmax | | | |
| W18A | **Petrified Fore** baz=247 | 85.37 | 52 | P | | P | 14 41 05.0 | -0.2 |
| H23K | **Yukon River** baz=211 | 85.38 | 13 | P | | P | 14 41 03.1 | -1.2 |
| WHY | **Whitehorse** baz=225 | 85.41 | 21 | P | | P | 14 41 05.0 | +0.3 |
| E19K | **Redstone River** baz=204 | 85.42 | 9 | P | | P | 14 41 04.9 | +0.4 |
| M29M | **Somme Creek** baz=222,SNR=6.0 | 85.54 | 19 | P | | P | 14 41 05.4 | +0.1 |
| HLID | **Hailey** baz=243,SNR=8.3 | 85.68 | 42 | P | | P | 14 41 06.7 | +0.1 |
| J26L | **Joseph Creek** | 85.69 | 16 | P | | P | 14 41 06.0 | 0.0 |
| J26L | comp=Z,22nm,1.2s | | | IAmb | IAmb | IAmb | 14 41 07.5 | |
| J26L | **Joseph Creek** baz=217,SNR=16 | 85.69 | 16 | P | | P | 14 41 05.6 | -0.4 |
| N31M | **Braeburn, Yuko** baz=224 | 85.70 | 20 | P | | P | 14 41 05.4 | -0.6 |
| DLBC | **Dease Lake** baz=229 | 85.71 | 25 | P | | P | 14 41 06.1 | -0.1 |
| K27K | **Chicken** baz=218 | 85.71 | 16 | P | | P | 14 41 06.3 | +0.3 |
| H24K | **Noodor Dome** baz=213 | 85.76 | 13 | P | | P | 14 41 06.3 | +0.1 |
| P33M | **Teslin, Yukon** baz=227 | 85.83 | 22 | P | | P | 14 41 06.4 | -0.4 |
| F21K | **Alatna River** baz=207 | 85.83 | 11 | P | | P | 14 41 06.4 | -0.2 |
| 121A | **Cookes Peak, D** baz=248 | 85.87 | 55 | P | | P | 14 41 06.3 | -1.4 |
| G22K | **Bettles** baz=209 | 85.94 | 12 | P | | P | 14 41 06.7 | -0.3 |
| R33M | **Jennings River** baz=228 | 85.97 | 24 | P | | P | 14 41 07.4 | -0.2 |
| C18K | **Utukok River** baz=200 | 85.97 | 7 | P | | P | 14 41 06.9 | -0.4 |
| PRP | **Porcupine Dome** baz=215 | 86.03 | 14 | P | | P | 14 41 07.3 | -0.4 |
| G23K | **Bananza Creek** baz=211 | 86.05 | 12 | P | | P | 14 41 08.1 | +0.4 |
| L29M | **L29M** baz=222,SNR=14 | 86.14 | 18 | P | | P | 14 41 08.4 | +0.2 |
| D19K | **Kuna River** baz=203 | 86.25 | 9 | P | | P | 14 41 08.6 | 0.0 |
| E20K | **Nigu River** baz=205 | 86.32 | 9 | P | | P | 14 41 08.7 | -0.2 |
| F22K | **John River** baz=209 | 86.33 | 11 | P | | P | 14 41 09.0 | 0.0 |
| I26K | **Coal Creek Min** baz=217 | 86.44 | 15 | P | | P | 14 41 09.8 | +0.2 |
| COLD | **Coldfoot** baz=210 | 86.46 | 12 | P | | P | 14 41 09.3 | -0.3 |
| DAWY | **Dawson** baz=221,SNR=7.2 | 86.49 | 17 | P | | P | 14 41 09.4 | -0.5 |
| EGAK | **Eagle** | 86.55 | 16 | P | | P | 14 41 09.4 | -0.7 |
| EGAK | comp=Z,8.1nm,1.0s | | | IAmb | IAmb | | 14 41 17.4 | |
| EGAK | **Eagle** baz=219,SNR=8.2 | 86.55 | 16 | P | | P | 14 41 09.6 | -0.5 |
| PMSA | **Palmer Station** comp=Z,135nm,18.1s,baz=231,slow=33 | 86.66 | 158 | LR | | LR | 15 16 28.9 | |
| D20K | **Etivluk River** baz=204 | 86.67 | 9 | P | | P | 14 41 11.0 | +0.4 |
| E21K | **Killik River** baz=207 | 86.84 | 10 | P | | P | 14 41 11.2 | -0.3 |
| K29M | **Barlow Dome** baz=222 | 86.87 | 18 | P | | P | 14 41 10.7 | -1.2 |
| I27K | **Kandik River** baz=219 | 87.07 | 16 | P | | P | 14 41 12.3 | -0.5 |
| LZH | **Lanzhou** | 87.17 | 309 | *e*P | | P | 14 41 16.4 | +2.4 |
| LZH | | | | sP | | pwP | 14 41 23.0 | +1.9 |
| LZH | comp=Z,32nm,1.1s | | | pmax | pmax | | | |
| LZH | comp=Z,210nm,15.1s | | | LR | LR | | | |
| LZH | comp=Z,260nm,16.1s | | | LR | LR | | | |
| LZH | comp=Z,260nm,17.2s | | | LR | LR | | | |
| F24K | **Squaw Lake** baz=213 | 87.18 | 12 | P | | P | 14 41 13.6 | +0.4 |
| E23K | **Chandalar** baz=211 | 87.29 | 12 | P | | P | 14 41 13.2 | -0.6 |
| I28M | **Miner Creek** baz=220 | 87.40 | 16 | P | | P | 14 41 13.3 | -1.0 |
| D22K | **Ayikyak River** baz=208 | 87.45 | 10 | P | | P | 14 41 14.0 | -0.5 |
| MSO | **Missoula** baz=243 | 87.46 | 40 | P | | P | 14 41 14.4 | -0.7 |
| A19K | **Wainwright** baz=200 | 87.46 | 7 | P | | P | 14 41 14.2 | -0.2 |
| MNTX | **Cornudas Mount** baz=249 | 87.47 | 56 | P | | P | 14 41 14.4 | -1.0 |
| TNCH | **TengChong** | 87.58 | 297 | P | | P | 14 41 15.8 | -0.5 |
| TNCH | comp=Z,120nm,3.7s | | | pmax | pmax | | | |
| H27K | **Steamboat Moun** baz=219 | 87.59 | 15 | P | | P | 14 41 14.8 | -0.4 |
| G26K | **Porcupine Rive** baz=217,SNR=7.1 | 87.61 | 14 | P | | P | 14 41 14.9 | -0.2 |
| DLMT | **Dillon** | 87.64 | 41 | P | | P | 14 41 14.8 | -1.3 |
| F25K | **Christian Rive** baz=215 | 87.72 | 13 | P | | P | 14 41 15.9 | +0.1 |
| J30M | **Hart River** baz=224 | 87.76 | 18 | P | | P | 14 41 16.0 | -0.2 |
| ANMO | **Albuquerque** baz=249 | 87.79 | 53 | P | | P | 14 41 16.5 | -0.6 |
| B21K | **Ikpikpuk River** baz=206 | 87.80 | 9 | P | | P | 14 41 15.0 | -1.1 |
| TOLK | **Toolik Lake Re** baz=211 | 87.80 | 11 | P | | P | 14 41 15.7 | -0.4 |
| D23K | **Nanushuk River** baz=210 | 87.88 | 11 | P | | P | 14 41 16.9 | +0.4 |
| TOAD | **Toad River Com** baz=234 | 87.92 | 26 | P | | P | 14 41 17.2 | +0.3 |
| G27K | **Doyon Strip** baz=218 | 88.01 | 15 | P | | P | 14 41 16.5 | -0.7 |
| TXAR | **Lajitas Array** | 88.04 | 59 | P | | P | 14 41 19.2 | +0.9 |
| TXAR | **Lajitas Array** comp=Z,1.1nm,0.9s,baz=226,slow=6.7,SNR=9.0 comp=Z,1.1nm,0.9s | 88.04 | 59 | P | | P | 14 41 17.2 | -1.1 |
| F26K | **Sheenjek River** baz=216 | 88.13 | 14 | P | | P | 14 41 17.4 | -0.3 |
| I30M | **Mount Dempster** baz=223 | 88.22 | 18 | P | | P | 14 41 17.7 | -0.6 |
| BOZ | **Bozeman (W)** baz=245 | 88.36 | 41 | P | | P | 14 41 18.0 | -1.5 |
| H29M | **Whitestone** baz=222 | 88.40 | 16 | P | | P | 14 41 19.7 | +0.7 |
| O20A | **White River Ci** baz=247 | 88.42 | 47 | P | | P | 14 41 19.2 | -0.8 |
| LYMT | **Lyon Mountain** | 88.53 | 40 | P | | P | 14 41 19.6 | -0.8 |
| S22A | **4UR Ranch, Cre** baz=248 | 88.54 | 50 | P | | P | 14 41 19.8 | -0.9 |
| BW06 | **Boulder Array** baz=246,SNR=8.5 | 88.55 | 45 | P | | P | 14 41 19.7 | -0.9 |
| PDAR | **Pinedale Array** | 88.55 | 45 | P | | P | 14 41 17.9 | -2.7 |
| PDAR | **Pinedale Array** comp=Z,2.2nm,1.0s,baz=204,slow=3.3,SNR=14 comp=Z,2.2nm,1.0s | 88.55 | 45 | P | | P | 14 41 20.1 | -0.4 |
| C23K | **Itkillik River** baz=210 | 88.65 | 10 | P | | P | 14 41 19.4 | -0.7 |
| EPYK | **Eagle Plains** baz=223 | 88.97 | 17 | P | | P | 14 41 21.0 | -0.7 |
| G29M | **Pine Creek** baz=222 | 89.02 | 16 | P | | P | 14 41 21.3 | -0.6 |
| F28M | **Old Crow** baz=220 | 89.08 | 15 | P | | P | 14 41 22.0 | -0.1 |
| E27K | **Coleen River** | 89.11 | 14 | P | | P | 14 41 21.6 | -0.7 |
| E27K | **Coleen River** baz=219 | 89.11 | 14 | P | | P | 14 41 22.0 | -0.4 |
| SDCO | **Great Sand Dun** baz=249 | 89.52 | 50 | P | | P | 14 41 23.6 | -1.7 |
| G30M | **tAoh Zraii Nji** baz=224 | 89.55 | 16 | P | | P | 14 41 23.7 | -0.8 |
| RLMT | **Red Lodge** baz=247 | 89.68 | 43 | P | | P | 14 41 25.5 | -0.3 |
| E28M | **Babbage River** baz=220 | 89.92 | 14 | P | | P | 14 41 26.3 | +0.2 |
| G31M | **Satah River** baz=225 | 90.04 | 17 | P | | P | 14 41 26.8 | +0.2 |
| SONM | **Songino Array** comp=Z,1.3nm,1.0s,baz=103,slow=3.2,SNR=7.0 comp=Z,1.3nm,1.0s | 90.07 | 320 | P | | P | 14 41 26.7 | -0.7 |
| E29M | **Blow River** baz=222 | 90.15 | 15 | P | | P | 14 41 28.4 | +1.2 |
| ISCO | **Idaho Springs** baz=249 | 90.17 | 48 | P | | P | 14 41 27.3 | -1.0 |
| Q24A | **Divide** baz=249 | 90.21 | 49 | P | | P | 14 41 28.3 | -0.2 |
| MSTX | **Muleshoe** baz=251 | 90.31 | 55 | P | | P | 14 41 28.8 | 0.0 |
| N23A | **Red Feather La** baz=249 | 90.33 | 47 | P | | P | 14 41 29.0 | 0.0 |
| ELIB | **Princess Elisa** comp=Z,9.9nm,1.1s | 90.38 | 188 | *d*P | | P | 14 41 28.7 | +0.1 |
| EGMT | **Eagleton** baz=246 | 90.54 | 40 | P | | P | 14 41 29.7 | +0.1 |
| K22A | **Casper** baz=248 | 90.57 | 46 | P | | P | 14 41 30.2 | +0.3 |
| INK | **Inuvik** baz=226 | 91.22 | 16 | P | | P | 14 41 33.8 | +1.7 |
| 833A | **Chaparral WMA,** baz=252 | 91.27 | 61 | P | | P | 14 41 33.5 | +0.2 |
| GTA | **Gaotai** | 91.34 | 311 | P | | P | 14 41 35.4 | +1.8 |
| GTA | | | | sP | | pwP | 14 41 45.4 | +4.7 |
| GTA | comp=Z,52nm,13.8s | | | LR | LR | | | |
| GTA | comp=Z,100nm,15.6s | | | LR | LR | | | |
| GTA | comp=Z,120nm,17.8s | | | LR | LR | | | |
| AMTX | **Amarillo** baz=251 | 91.46 | 54 | P | | P | 14 41 33.8 | -0.3 |
| JCT | **Junction City** baz=252 | 91.59 | 59 | P | | P | 14 41 34.8 | 0.0 |
| TROLL | **Troll, Antarti** comp=Z,286nm,0.7s | 91.91 | 181 | ⇑P | | P | 14 41 36.0 | +0.3 |
| TROLL | comp=Z,1μm,1.1s | | | ⇓sP | | pwP | 14 41 41.4 | -0.8 |
| LAO | **LASA Array** baz=249 | 92.24 | 42 | P | | P | 14 41 37.9 | +0.4 |
| SNAA | **Sanae** | 92.30 | 180 | P | | P | 14 41 37.3 | -0.1 |
| SNAA | **Sanae** comp=Z,45nm,0.8s | 92.30 | 180 | ⇑P | | P | 14 41 37.1 | -0.3 |
| SNAA | comp=Z,207nm,1.2s | | | ⇓sP | | pwP | 14 41 43.1 | +0.7 |
| SNAA | **Sanae** comp=Z,4.8nm,1.1s,baz=190,slow=3.0,SNR=7.1 comp=Z,4.8nm,1.1s | 92.30 | 180 | P | | P | 14 41 36.8 | -0.6 |
| ABTX | **Abilene, Hawle** baz=252 | 92.37 | 57 | P | | P | 14 41 37.8 | -0.5 |
| VNA3 | **Neumayer Olymp** comp=Z,3.8nm,0.8s | 92.58 | 178 | ⇑P | | P | 14 41 38.4 | -0.2 |
| VNA3 | comp=Z,12nm,0.9s | | | ⇓sP | | pwP | 14 41 44.3 | +0.7 |
| RSSD | **Black Hills** baz=250 | 92.78 | 45 | P | | P | 14 41 40.0 | -0.3 |
| VNA2 | **Neumayer--Watz** comp=Z,3.0nm,0.7s,baz=182,slow=3.4 | 92.97 | 178 | ⇑P | | P | 14 41 40.8 | +0.4 |
| VNA2 | comp=Z,11nm,0.8s,baz=183,slow=4.4 | | | ⇓sP | | pwP | 14 41 46.4 | +1.0 |
| VNA1 | **Neumayer--Stat** comp=Z,7.6nm,1.0s | 93.22 | 178 | ⇑P | | P | 14 41 42.0 | +0.5 |
| VNA1 | comp=Z,28nm,1.0s | | | ⇓sP | | pwP | 14 41 47.8 | +1.2 |
| PLCA | **Paso Flores** comp=Z,100nm,21.4s,baz=225,slow=30 | 94.95 | 135 | LR | | LR | 15 15 13.4 | |
| WMQ | **Urumqi** | 101.27 | 312 | *e*P | | Pdif | 14 42 20.2 | +1.7 |
| WMQ | comp=Z,150nm,19.7s | | | LR | | LR | | |
| OKC | **Ostrava-Krasne** comp=Z,100nm,18.2s | 142.72 | 338 | AMS | | AMS | 16 03 50.0 | |
| DPC | **Dobruska-Polom** comp=Z,100nm,22.0s | 142.90 | 340 | AMS | | AMS | 16 04 20.0 | |
| HSKC | **Hora Svate Kat** comp=Z,200nm,17.7s | 143.54 | 343 | AMS | | AMS | 16 03 30.0 | |
| GOPC | **GO Pecny, Ondr** comp=Z,100nm,17.4s | 143.76 | 342 | AMS | | AMS | 16 04 20.0 | |
| KHC | **Kasperske Hory** | 144.82 | 342 | *e*PKP | | PKPdf | 14 48 04.6 | +0.1 |
| KHC | comp=Z,100nm,19.0s | | | AMS | | AMS | 16 05 40.0 | |
| CKRC | **Cesky Krumlov** comp=Z,100nm,20.2s | 144.88 | 341 | AMS | | AMS | 16 03 10.0 | |
| GERES | **GERESS Array B** comp=Z,1.9nm,0.9s,baz=24,slow=1.9,SNR=7.7 | 145.04 | 342 | PKP | | PKPab | 14 48 03.4 | -0.9 |
| CONA | **Conrad Observa** comp=Z,12nm,1.3s | 145.15 | 339 | *e*PKP | | PKPdf | 14 48 05.6 | +0.4 |
| RONA | **Rosalia, Austr** comp=Z,7.3nm,1.2s | 145.19 | 338 | *e*PKP | | PKPdf | 14 48 05.6 | +0.4 |
| MOA | **Molln** comp=Z,15nm,1.4s | 145.75 | 340 | *e*PKP | | PKPab | 14 48 07.3 | +0.5 |
| ARSA | **Arzberg** comp=Z,6.7nm,1.1s | 145.84 | 339 | *ep*PKP | | PKPab | 14 48 07.8 | +0.6 |
| BIOA | **Bad Ischl, Aus** comp=Z,8.7nm,1.1s | 146.09 | 341 | *e*PKP | | PKPab | 14 48 08.1 | 0.0 |
| SOKA | **Soboth** comp=Z,5.2nm,1.1s | 146.51 | 339 | *e*PKP | | PKPbc | 14 48 09.0 | +0.1 |
| LESA | **Schwarzleotal** comp=Z,6.0nm,1.1s | 146.62 | 342 | *ep*PKP | | PKPab | 14 48 10.0 | -0.3 |
| KBA | **Koelnbreinsper** comp=Z,2.1nm,0.5s | 146.72 | 341 | *i* pPKP | | pPKPdf | 14 48 10.2 | 0.0 |
| OBKA | **Obir** comp=Z,5.7nm,1.5s | 146.82 | 339 | *e*PKP | | PKPdf | 14 48 06.5 | -1.6 |
| WATA | **Walderalm** comp=Z,2.5nm,0.6s | 147.02 | 343 | *ep*PKP | | pPKPdf | 14 48 11.1 | +0.5 |
| MYKA | **Terra Mystica** comp=Z,5.0nm,1.0s | 147.02 | 340 | *e*PKP | | PKPbc | 14 48 09.6 | -0.7 |
| WTTA | **Wattenberg** comp=Z,9.4nm,1.0s | 147.07 | 343 | *e*PKP | | PKPbc | 14 48 10.7 | +0.1 |
| RETA | **Reutte** comp=Z,4.6nm,0.7s | 147.10 | 344 | *ep*PKP | | pPKPdf | 14 48 11.2 | +0.6 |
| MOTA | **Moosalm** comp=Z,7.4nm,0.8s | 147.14 | 343 | *e*PKP | | PKPbc | 14 48 10.1 | -0.8 |
| SQTA | **Sankt Quirin** comp=Z,6.7nm,1.0s | 147.23 | 343 | *e*PKP | | PKPbc | 14 48 11.6 | +0.6 |
| ABTA | **Abfaltersbach** comp=Z,7.0nm,1.2s | 147.28 | 341 | *ep*PKP | | PKPbc | 14 48 10.9 | -0.3 |
| DAVA | **Damuels** comp=Z,12nm,1.3s | 147.52 | 345 | *e*PKP | | PKPab | 14 48 13.1 | -0.8 |
| FETA | **Feichten** comp=Z,9.3nm,1.1s | 147.54 | 344 | *i* PKP | | PKPdf | 14 48 09.7 | +0.4 |
| ESDC | **Sonseca Array** comp=Z,0.2nm,0.4s,baz=356,slow=4.7,SNR=4.2 | 156.59 | 4 | PKPab | | PKPab | 14 48 48.8 | -2.9 |
| TORD | **Torodi Ar. Bea** comp=Z,0.3nm,0.5s,baz=140,slow=4.5,SNR=2.7 | 175.28 | 230 | PKPab | | PKPab | 14 50 14.8 | +0.2 |

**IDC 10 14:34:09.5±1.8, 16°21S×178°26E, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=48.3km s-min=24.1km az=100.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** 13nm,0.3s,baz=328,slow=13,SNR=5.0 | 1.52 | 188 | Pn | Pn | 14 34 37.9 | -0.2 |
| MSVF | 66nm,0.3s,baz=53,slow=21,SNR=4.5 | | | Sn | Sn | 14 34 59.6 | +0.9 |
| WRA | **Warramunga Arr** 1.2nm,1.2s,baz=85,slow=9.6,SNR=1.8 1.2nm,1.2s | 41.83 | 258 | P | P | 14 42 02.2 | +0.7 |
| ASAR | **Alice Springs** 0.3nm,0.7s,baz=72,slow=9.0,SNR=1.8 0.3nm,0.7s | 42.22 | 253 | P | P | 14 42 04.0 | -0.6 |
| ILAR | **Eielson Array** 0.6nm,0.9s,baz=232,slow=6.7,SNR=7.1 0.6nm,0.9s | 85.00 | 14 | P | P | 14 46 46.4 | 0.0 |

*IDC **10** 14:44:19.1±0.5, 47°.44N×153°.14E, h0km, mb4.2/24, mbtmp4.2/29, ML4.2/2, MS3.4/10, Error ellipse: s-maj=15.8km s-min=12.0km az=144.0*
*SKHL **10** 14:44:27.5±0.5, 47°.10N×153°.70E, h85km±5km, mb5.3/10, msha5.9/7*
*MOS **10** 14:44:28.6±1.4, 47°.26N×153°.34E, h75km, mb4.5/28, Error ellipse: s-maj=7.9km s-min=6.1km az=62.0*
*NEIC **10** 14:44:31.1±1.6, 47°.6N±0°.1×153°.1E±0°.1, h67km±7km, mb4.5/112, Error ellipse: s-maj=18.3km s-min=10.8km az=147.0*

**ISC 10 14:44:27.5±0.5, 47°33N±0°.05×153°34E±0°.05, h53km±4km, h53km:pP-P, n481, σ2°05/500, mb4.5/103, MS3.5/10, 23C-9D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SKR | **Severo-Kuril's** 140nm,0.4s | 3.82 | 28 | *e*P | Pn | 14 45 25.1 | +1.4 |
| SKR | | | | AMB | AMB | 14 45 29.2 | |
| SKR | | | | *e*S | Sn | 14 46 07.9 | +0.7 |
| SKR | 490nm,0.4s | | | A | A | 14 46 16.6 | |
| SKR | 450nm,0.4s | | | A | A | 14 46 16.6 | |
| SKR | **Severo-Kuril's** | 3.82 | 28 | *e*PN | Pn | 14 45 25.8 | +2.1 |
| SKR | | | | *e*S | Sn | 14 46 07.9 | +0.7 |
| SKR | comp=Z,47nm,0.4s | | | pmax | pmax | | |
| SKR | comp=N,565nm,0.4s | | | smax | smax | | |
| SKR | comp=E,712nm,0.6s | | | smax | smax | | |
| SKR | comp=Z,500nm,12.0s | | | MLR | MLR | | |
| KUR | **Kuril'sk** comp=Z,360nm,0.8s | 4.34 | 243 | *i* P | Pn | 14 45 33.0 | +2.2 |
| KUR | | | | AMB | AMB | 14 45 34.5 | |
| KUR | | | | *e*S | Sn | 14 46 22.2 | +2.1 |
| KUR | comp=Z,250nm,0.6s | | | A | A | 14 46 37.4 | |
| KUR | comp=Z,350nm,0.6s | | | A | A | 14 46 37.4 | |
| KUR | **Kuril'sk** | 4.34 | 243 | ⇓*i*PN | Pn | 14 45 32.8 | +2.0 |
| KUR | | | | *e*S | Sn | 14 46 24.5 | +4.4 |
| KUR | comp=Z,296nm,0.7s | | | pmax | pmax | | |
| KUR | comp=N,28nm,0.2s | | | pmax | pmax | | |
| KUR | comp=E,59nm,0.6s | | | smax | smax | | |
| KUR | comp=E,380nm,0.8s | | | smax | smax | | |
| KUR | comp=N,268nm,0.6s | | | pmax | pmax | | |
| SHO | **Shikotan** comp=N,30nm,0.2s | 5.73 | 235 | *e*P | Pn | 14 45 51.0 | +1.1 |
| SHO | | | | AMB | AMB | 14 45 52.2 | |
| SHO | | | | *e*S | Sn | 14 46 54.1 | -0.2 |
| SHO | comp=N,210nm,0.5s | | | A | A | 14 47 12.9 | |
| SHO | comp=N,120nm,0.5s | | | A | A | 14 47 12.9 | |
| SHO | **Shikotan** | 5.73 | 235 | *e*PN | Pn | 14 45 49.7 | -0.2 |
| SHO | comp=E,12nm,0.2s | | | pmax | pmax | | |
| SHO | comp=Z,28nm,0.2s | | | pmax | pmax | | |
| SHO | comp=N,9.0nm,0.1s | | | pmax | pmax | | |
| YUK | **Yuzh-Kuril'sk** comp=N,100nm,0.3s | 6.19 | 241 | *e*P | Pn | 14 45 58.8 | +2.6 |
| YUK | | | | AMB | AMB | 14 46 00.3 | |
| YUK | | | | *e*S | Sn | 14 47 06.4 | +0.8 |
| YUK | comp=N,140nm,0.6s | | | A | A | 14 47 23.8 | |
| YUK | comp=N,270nm,0.6s | | | A | A | 14 47 23.8 | |
| YUK | **Yuzh-Kuril'sk** | 6.19 | 241 | *e*PN | Pn | 14 45 57.9 | +1.7 |
| YUK | | | | S | Sn | 14 47 08.5 | +2.9 |

YUK pmax pmax
comp=N,50nm,0.2s
YUK pmax pmax
comp=Z,126nm,0.2s
**RUSJ Misakicho 6.52 243** *e*PN **Pn** **14 46 04.1 +3.4**
RUSJ S **Sn** **14 47 20.5 +6.8**
**PET Petropavlovsk 6.64 29** **Pn** **14 46 03.4 +1.1**
**PET Petropavlovsk 6.64 29** *e*P **Pn** **14 46 04.7 +2.4**
PET *e*S **Sn** **14 47 15.6 -0.9**
PET A A 14 47 37.1
comp=Z,140nm,0.6s
PET A A 14 47 37.1
comp=Z,210nm,0.6s
**PET Petropavlovsk 6.64 29** *e*PN Pn 14 46 07.0 +4.7
PET MLR MLR
comp=Z,100nm,12.0s
PET MLR MLR
comp=Z,200nm,10.0s
**NMR Nemuro--Hokkai 6.67 236** *i* P **Pn** **14 46 02.0 -0.8**
**NMR Nemuro--Hokkai 6.67 236**⇑ *i*PN **Pn** **14 46 01.9 -0.8**
**YSS Yuzh-Sakhalins 7.23 271** Pn **Pn** **14 46 14.1 +3.6**
**YSS Yuzh-Sakhalins 7.23 271** *e*P **Pn** **14 46 14.4 +3.9**
YSS AMB AMB 14 46 15.5
comp=Z,120nm,0.7s
YSS *e*S **Sn** **14 47 35.7 +4.6**
YSS A A 14 47 52.4
comp=Z,120nm,0.7s
YSS A A 14 47 52.4
comp=Z,30nm,0.7s
**YSS Yuzh-Sakhalins 7.23 271** *de*PN **Pn** **14 46 14.0 +3.5**
YSS *e*S **Sn** **14 47 35.8 +4.6**
YSS pmax pmax
comp=Z,90nm,0.7s
YSS MLR MLR
comp=N,200nm,15.0s
YSS MLR MLR
comp=Z,400nm,15.0s
YSS MLR MLR
comp=E,300nm,14.0s
**AKK Akkeshi 7.39 237** *e*P **Pn** **14 46 13.2 +0.5**
AKK *e*S **Sn** **14 47 36.2 +1.0**
**UGL Uglegorsk 7.74 287** *e*P **Pn** **14 46 21.7 +4.4**
UGL AMB AMB 14 46 22.0
comp=E,130nm,0.9s
**UGL Uglegorsk 7.74 287** *e*PN **Pn** **14 46 21.7 +4.4**
UGL pmax pmax
comp=Z,130nm,0.9s
**TYV Tymovskoe 7.85 301** *e*P **Pn** **14 46 22.1 +3.2**
TYV AMB AMB 14 46 26.4
comp=Z,20nm,0.7s
TYV *e*S **Sn** **14 47 49.5 +3.1**
TYV A A 14 48 11.9
comp=Z,10.0nm,0.8s
TYV A A 14 48 11.9
comp=Z,10.0nm,0.8s
**TYV Tymovskoe 7.85 301** *e*PN **Pn** **14 46 22.1 +3.2**
TYV *e*S **Sn** **14 47 49.5 +3.1**
TYV pmax pmax
comp=Z,100nm,3.1s
TYV pmax pmax
comp=Z,37nm,0.9s
TYV smax smax
comp=N,9.0nm,0.8s
TYV smax smax
comp=E,7.0nm,0.8s
TYV smax smax
comp=N,100nm,4.7s
TYV smax smax
comp=E,100nm,4.7s
**JKA Kamikawa-asahi 8.18 251** Pn **Pn** **14 46 26.2 +2.9**
**JKA Kamikawa-asahi 8.18 251** *e*P **Pn** **14 46 26.3 +2.9**
**ASAJ Asahikawa 8.18 251** Pn **Pn** **14 46 26.8 +3.3**
comp=E,1.3nm,0.3s,baz=87,slow=13,SNR=10.0
ASAJ Lg Lg 14 48 38.0
comp=E,0.2nm,0.3s,baz=80,slow=33,SNR=1.3
ASAJ LR LR 14 49 20.4
comp=E,326nm,21.4s,baz=18,slow=37
**ASAJ Asahikawa 8.18 251** PN **Pn** **14 46 26.3 +2.9**
**ERM Erimo 8.99 237** Pn **Pn** **14 46 36.9 +2.3**
**ERM Erimo 8.99 237** PN **Pn** **14 46 36.9 +2.3**
**JTM Tenmabayashi 10.98 238** Pn **Pn** **14 46 57.5 -4.3**
**GRNR Gornyy 11.62 293** *e*P **Pn** **14 47 14.4 +3.9**
GRNR AMB AMB 14 47 16.0
comp=E,100nm,1.0s
**GRNR Gornyy 11.62 293**⇓ *i*PN **Pn** **14 47 14.4 +3.9**
GRNR pmax pmax
comp=Z,10.0nm,1.1s
GRNR MLR MLR
comp=N,60nm,16.0s
GRNR MLR MLR
comp=E,150nm,16.0s
**SHEM Shemya Is, Ala 14.37 60** Pn **Pn** **14 47 46.2 -1.5**
comp=E,38nm,0.5s,baz=297,slow=11,SNR=18
SHEM Sn Sn 14 50 14.2 -11
comp=E,1.5nm,0.3s,baz=292,slow=17,SNR=1.4
SHEM LR LR 14 52 48.7
comp=E,67nm,21.8s,baz=212,slow=35
**KLR Kul'dur 14.50 285** Pn **Pn** **14 47 50.4 +0.9**
comp=E,0.1nm,0.3s,baz=93,slow=14,SNR=4.3
KLR LR LR 14 53 45.3
comp=E,243nm,18.1s,baz=94,slow=40
**KLR Kul'dur 14.50 285** *e*P **P** **14 47 52.0 -2.8**
**KLR Kul'dur 14.50 285** *ce*P **P** **14 47 53.3 -1.5**
KLR pmax pmax
comp=Z,10.0nm,1.8s
KLR MLR MLR
comp=Z,199nm,15.0s
**USA0B Ussuriysk Arra 15.22 266** **Pn** **14 47 59.7 +0.8**
**USA0B Ussuriysk Arra 15.22 266** P **Pn** **14 47 59.7 +0.8**
USA0B pmax pmax
comp=Z,13nm,1.0s
**USRK Ussuriysk Ar. 15.22 266** Pn **Pn** **14 47 54.7 -4.1**
comp=Z,0.2nm,0.3s,baz=80,slow=10,SNR=1.1
USRK LR LR 14 53 39.9
comp=Z,138nm,18.9s,baz=101,slow=37
comp=Z,1.3nm,0.7s
**MJAR Matsushiro Arr 15.56 232** Pn **Pn** **14 47 59.9 -3.4**
comp=Z,2.4nm,0.8s,baz=26,slow=13,SNR=9.2
**MJB9 Matsu-Tunnel 15.56 232** Pn **P** **14 48 07.2 +0.5**
MJB9 IAmb IAmb 14 48 09.1
comp=Z,31nm,1.1s
**MAJO Matsushiro 15.56 232** Pn **P** **14 48 06.6 -0.2**
MAJO IAmb IAmb 14 48 09.1
comp=Z,33nm,1.1s
**MAJO Matsushiro 15.56 232** *i* P **Pn** **14 48 03.4 +0.1**
MAJO pmax pmax
comp=Z,28nm,1.0s
**SEY Seymchan 15.65 358** Pn **Pn** **14 47 58.7 -5.5**
comp=Z,0.8nm,0.7s,baz=155,slow=23,SNR=2.2
**SEY Seymchan 15.65 358**⇑ *i*P **P** **14 48 07.6 +0.2**
SEY pmax pmax
comp=Z,13nm,2.5s
SEY MLR MLR
comp=Z,115nm,15.0s
**PSTR Posyet 16.60 262** *i* P **P** **14 48 18.8 +0.7**
**MDJ Mudanjiang 16.72 269** **P** **14 48 18.5 -0.9**
**HEH HeiHe 17.30 289** *e*P **P** **14 48 26.8 +0.9**
HEH pmax pmax
comp=Z,19nm,1.0s
HEH LR LR
comp=N,88nm,14.3s
HEH LR LR
comp=E,240nm,15.7s
HEH LR LR
comp=Z,330nm,15.1s
**ZEA Zeya 17.72 301** *e*P **P** **14 48 31.8 +1.4**
ZEA AMB AMB 14 48 36.4
comp=Z,20nm,0.6s
**ZEA Zeya 17.72 301** *e*P **P** **14 48 31.8 +1.4**
ZEA MLR MLR
comp=Z,100nm,12.0s
**BNX BinXian 17.89 274**⇓ P **P** **14 48 34.2 +1.8**
BNX pmax pmax
comp=Z,6.0nm,0.8s
**KIWB Kanaga Island 19.58 66** P **P** **14 48 50.8 0.0**
**CN2 Changchun 19.80 270** P **Pn** **14 48 58.5 +3.3**
CN2 pmax pmax
comp=Z,10.0nm,0.7s
CN2 LR LR
comp=N,200nm,15.0s
CN2 LR LR
comp=E,200nm,15.0s
CN2 LR LR
comp=Z,200nm,16.0s
**YAK Yakutsk 19.92 326** **P** **14 48 51.4 -3.0**
YAK IAmb IAmb 14 49 18.0
comp=Z,32nm,0.7s
**YAK Yakutsk 19.92 326** P **P** **14 48 50.8 -3.6**
comp=Z,1.0nm,0.3s,baz=143,slow=2.0,SNR=1.6
YAK LR LR 14 56 21.6
comp=Z,104nm,21.4s,baz=127,slow=37
comp=Z,6.5nm,0.5s
**YAK Yakutsk 19.92 326** *e*P **Pn** **14 48 57.3 +0.8**
**YAK Yakutsk 19.92 326** *e*P **Pn** **14 48 56.8 +0.3**
YAK pmax pmax
comp=Z,17nm,1.5s
YAK pmax pmax
comp=N,5.0nm,1.2s
YAK pmax pmax
comp=E,5.0nm,1.3s
**KSRS Korea Array 21.13 251** P **P** **14 49 05.1 -2.6**
comp=E,3.5nm,0.9s,baz=55,slow=10,SNR=11
KSRS PcP **PcP** **14 53 12.8 +1.0**
comp=E,0.7nm,0.9s,baz=350,slow=1.5,SNR=4.1
comp=E,3.5nm,0.9s
**KS19 Wonju Array Si 21.14 252** P **P** **14 49 10.3 +2.5**
**KSAR Wonju Array Be 21.16 251** P **P** **14 49 08.2 +0.2**
**KSAR Wonju Array Be 21.16 251** P **P** **14 49 08.2 +0.2**
**BILL Bilibino 21.79 13** *e*P **P** **14 49 13.8 -0.7**
**BILL Bilibino 21.79 13** *e*P **P** **14 49 13.8 -0.7**
BILL *e* 14 49 39.0
BILL *e* 14 53 09.8
BILL pmax pmax
comp=Z,6.0nm,1.5s
BILL MLR MLR
comp=Z,71nm,18.0s
**INCN Inchon 21.95 253** P **P** **14 49 17.9 +1.4**
INCN IAmb IAmb 14 49 19.4
comp=Z,22nm,0.9s
**INCN Inchon 21.95 253** P **P** **14 49 17.9 +1.4**
INCN pmax pmax
comp=Z,22nm,0.9s
**JNU Nakatsue 22.16 238** P **P** **14 49 20.6 +1.8**
JNU IAmb IAmb 14 49 35.9
comp=Z,21nm,1.3s
**JNU Nakatsue 22.16 238** P **P** **14 49 15.9 -2.9**
comp=Z,15nm,1.1s,baz=36,slow=16,SNR=2.5
comp=Z,15nm,1.1s
**N15K Kwethluk River 29.70 47** P **P** **14 50 31.1 +3.1**
baz=266
**D17K Noatak River 30.05 32** P **P** **14 50 31.9 +1.0**
baz=250
**L16K Owhat River 30.15 44** P **P** **14 50 32.4 +0.5**
L16K IAmb IAmb 14 50 35.3
comp=Z,13nm,1.4s
**L16K Owhat River 30.15 44** P **P** **14 50 34.3 +2.3**
baz=264
**E17K Hotham Inlet 30.30 33** P **P** **14 50 35.5 +2.3**
baz=252,SNR=5.2
**G17K Kiwalik Mounta 30.32 36** P **P** **14 50 35.8 +2.4**
baz=256
**M16K Timber Creek 30.32 46** P **P** **14 50 35.3 +1.8**
M16K IAmb IAmb 14 50 40.9
comp=Z,11nm,1.2s
**M16K Timber Creek 30.32 46** P **P** **14 50 35.9 +2.4**
baz=266
**F17K Baldwin Pennin 30.33 35** P **P** **14 50 34.4 +1.0**
baz=254
**N16K Nishlik Lake 30.38 47** P **P** **14 50 37.1 +3.1**
baz=267
**H17K Granite Mounta 30.49 38** P **P** **14 50 36.8 +1.9**
baz=258
**J17K VABM Dome 30.56 41** P **P** **14 50 38.3 +2.7**
baz=262
**L17K Donlin 30.75 43** P **P** **14 50 40.3 +3.1**
baz=264
**K17K Iditarod 30.81 42** P **P** **14 50 38.5 +0.7**
K17K IAmb IAmb 14 51 17.5
comp=Z,13nm,1.4s
**K17K Iditarod 30.81 42** P **P** **14 50 40.7 +2.9**
baz=264
**R16K Pilot Point 30.95 52** P P 14 50 44.5 +5.5
baz=273
**F18K Selawik 30.99 35** P **P** **14 50 40.8 +1.5**
baz=256
**C18K Utukok River 31.04 30** P **P** **14 50 41.0 +1.2**
C18K IAmb IAmb 14 50 56.0
comp=Z,6.2nm,0.7s
**C18K Utukok River 31.04 30** P **P** **14 50 41.3 +1.5**
baz=251
**M17K Holitna River 31.09 45** P **P** **14 50 41.8 +1.6**
**M17K Holitna River 31.09 45** P **P** **14 50 42.9 +2.6**
baz=267
**B18K Kokolik River 31.09 29** P **P** **14 50 41.9 +1.7**
baz=249
**N17K Nushagak Hills 31.16 47** P **P** **14 50 44.3 +3.4**
baz=268
**H18K Honhosa River 31.18 38** P **P** **14 50 42.4 +1.4**
**O17K Koliganek Bris 31.18 48** P **P** **14 50 45.0 +4.0**
baz=270
**G18K Tagagawik 31.21 36** P **P** **14 50 42.9 +1.6**
**G18K Tagagawik 31.21 36** P **P** **14 50 43.2 +1.9**
baz=258
**SONM Songino Array 31.29 289** P **P** **14 50 39.0 -3.4**
comp=Z,0.5nm,0.5s,baz=79,slow=7.5,SNR=2.3
comp=Z,0.5nm,0.5s
**SONM Songino Array 31.29 289** P **P** **14 50 39.0 -3.4**
**L18K Granite Mounta 31.51 43** P **P** **14 50 46.6 +2.7**
baz=266
**J18K Innoko River 31.62 41** P **P** **14 50 46.4 +1.5**
baz=264
**C19K Lookout Ridge 31.74 30** P **P** **14 50 47.3 +1.3**
C19K IAmb IAmb 14 51 02.5
comp=Z,6.1nm,0.9s
**C19K Lookout Ridge 31.74 30** P **P** **14 50 47.7 +1.7**
baz=252
**F19K Shaleruckik Mo 31.77 34** P **P** **14 50 47.5 +1.4**
**F19K Shaleruckik Mo 31.77 34** P **P** **14 50 46.9 +0.8**
baz=257
**N18K Kilae Creek 31.81 46** P **P** **14 50 48.0 +1.3**
N18K IAmb IAmb 14 50 50.0
comp=Z,6.3nm,0.9s
**N18K Kilae Creek 31.81 46** P **P** **14 50 50.1 +3.5**
baz=265
**M18K Stony River 31.87 45** P **P** **14 50 49.8 +2.7**
baz=268
**G19K Purcell Mounta 31.89 36** P **P** **14 50 48.4 +1.2**
baz=259
**H19K Roundabout Mou 32.03 37** P **P** **14 50 50.4 +1.9**
H19K IAmb IAmb 14 51 05.9
comp=Z,7.1nm,0.8s
**H19K Roundabout Mou 32.03 37** P **P** **14 50 50.5 +2.0**
baz=261
**D19K Kuna River 32.07 31** P **P** **14 50 50.6 +1.7**
D19K IAmb IAmb 14 51 05.8
comp=Z,12nm,0.8s
**D19K Kuna River 32.07 31** P **P** **14 50 50.5 +1.7**
baz=254
**E19K Redstone River 32.12 33** P **P** **14 50 51.2 +1.9**
E19K IAmb IAmb 14 51 06.6
comp=Z,6.1nm,0.9s
**E19K Redstone River 32.12 33** P **P** **14 50 51.1 +1.8**
baz=257
**P18K Big Mountain, 32.13 49** P **P** **14 50 52.4 +2.9**
baz=272
**O18K Koktuh Hills 32.14 48** P **P** **14 50 52.3 +2.8**
baz=271
**J19K Poorman 32.16 40** P **P** **14 50 50.3 +0.6**
**J19K Poorman 32.16 40** P **P** **14 50 51.2 +1.5**
baz=264
**Q18K Katmai Hardscr 32.27 50** P **P** **14 50 53.0 +2.1**
baz=273
**L19K White Mountain 32.36 44** P **P** **14 50 54.1 +2.6**
baz=268
**N19K Bonanza Creek 32.50 46** P **P** **14 50 53.4 +0.6**
**F20K Avaraart Lake 32.60 34** P **P** **14 50 54.2 +0.8**
**F20K Avaraart Lake 32.60 34** P **P** **14 50 54.6 +1.1**
baz=259
**D20K Etivluk River 32.66 31** P **P** **14 50 55.5 +1.5**
baz=256
**H20K Anotleneega Mo 32.67 37** P **P** **14 50 54.9 +0.8**
baz=262
**E20K Nigu River 32.70 32** P **P** **14 50 56.5 +2.2**
baz=257
**K20K Telida 32.80 41** P **P** **14 50 57.7 +2.5**
baz=266
**J20K Nowinta River 32.83 40** P **P** **14 50 57.3 +1.8**
baz=265
**B20K Meade River 32.83 29** P **P** **14 50 56.9 +1.5**
**B20K Meade River 32.83 29** P **P** **14 50 56.1 +0.7**
baz=253
**M20K Styx River 33.16 44** P **P** **14 51 00.8 +2.3**
baz=270
**IMAR Indian Mountai 33.20 37** P **P** **14 50 59.9 +1.2**
**RSO Redoubt South 33.35 47** P **P** **14 51 01.7 +1.4**
**G21K Allakaket 33.38 36** P **P** **14 51 01.4 +1.2**
**G21K Allakaket 33.38 36** P **P** **14 51 02.5 +2.2**
baz=262
**F21K Alatna River 33.50 34** P **P** **14 51 02.5 +1.2**
baz=261
**E21K Killik River 33.54 32** P **P** **14 51 03.2 +1.5**
E21K IAmb IAmb 14 51 19.1
comp=Z,6.5nm,0.9s
**E21K Killik River 33.54 32** P **P** **14 51 03.4 +1.7**
baz=259,SNR=5.7
**H21K Melozitna Rive 33.55 37** P **P** **14 51 03.4 +1.6**
H21K IAmb IAmb 14 51 27.5
comp=Z,10nm,1.5s
**H21K Melozitna Rive 33.55 37** P **P** **14 51 04.3 +2.6**
baz=264
**B21K Ikpikpuk River 33.58 30** P **P** **14 51 04.0 +2.0**
baz=256,SNR=14
**KDAK Kodiak Island 33.62 52** LR LR 15 03 47.1
comp=Z,33nm,20.7s,baz=264,slow=35
**KDAK Kodiak Island 33.62 52** *e*P **P** **14 51 01.1 -1.3**
KDAK pmax pmax
comp=Z,16nm,2.1s
**PPLA Purkeypile 33.62 42** P **P** **14 51 06.2 +3.6**
baz=269
**SKT Skwentna 33.92 44** P **P** **14 51 07.7 +2.7**
baz=271
**F22K John River 34.04 34** P **P** **14 51 08.1 +2.1**
baz=262,SNR=5.5
**D22K Ayikyak River 34.09 32** P **P** **14 51 08.4 +2.0**
D22K IAmb IAmb 14 51 27.0
comp=Z,4.6nm,0.8s
**D22K Ayikyak River 34.09 32** P **P** **14 51 07.6 +1.2**
baz=260
**CAPN Captain Cook N 34.13 46** P **P** **14 51 10.8 +3.9**
baz=273
**H22K Ishtalitna Cre 34.16 37** P **P** **14 51 08.2 +1.1**
baz=265
**BPAW Bear Paw Mtn. 34.21 40** P **P** **14 51 08.3 +0.8**
**BPAW Bear Paw Mtn. 34.21 40** P **P** **14 51 09.1 +1.6**
baz=268
**G22K Bettles 34.22 35** P **P** **14 51 08.9 +1.4**
baz=264,SNR=14
**SUA Susitna One 34.30 45** P **P** **14 51 10.5 +2.0**
baz=272
**MLY Manley 34.36 39** P **P** **14 51 10.4 +1.6**
**MLY Manley 34.36 39** P **P** **14 51 10.3 +1.4**
baz=267
**COLD Coldfoot 34.76 35** P **P** **14 51 13.8 +1.6**
baz=264,SNR=6.3
**G23K Bananza Creek 34.78 36** P **P** **14 51 13.2 +0.7**
**G23K Bananza Creek 34.78 36** P **P** **14 51 13.7 +1.2**
baz=265
**D23K Nanushuk River 34.82 32** P **P** **14 51 14.6 +1.9**
baz=261,SNR=6.1
**H23K Yukon River 34.91 37** P **P** **14 51 15.4 +1.8**
H23K IAmb IAmb 14 51 31.5
comp=Z,3.8nm,0.8s
**H23K Yukon River 34.91 37** P **P** **14 51 16.0 +2.4**
baz=267,SNR=5.6
**I23K Minto, Yukon-K 34.95 38** P **P** **14 51 15.5 +1.7**
baz=268
**C23K Itkillik River 34.99 30** P **P** **14 51 15.2 +1.1**
**C23K Itkillik River 34.99 30** P **P** **14 51 15.9 +1.8**
baz=260,SNR=11
**NEA2 Nenana 35.06 39** P **P** **14 51 16.5 +1.7**
baz=269
**E23K Chandalar 35.08 33** P **P** **14 51 17.1 +2.0**
baz=264,SNR=14
**MCK McKinley 35.11 41** P **P** **14 51 16.3 +1.0**
baz=271
**RND Reindeer 35.14 41** P **P** **14 51 17.2 +1.5**
RND IAmb IAmb 14 51 18.2
comp=Z,8.4nm,1.2s
**RND Reindeer 35.14 41** P **P** **14 51 17.2 +1.5**
RND pmax pmax
comp=Z,8.0nm,1.2s
**TOLK Toolik Lake Re 35.17 32** P **P** **14 51 17.1 +1.3**
TOLK IAmb IAmb 14 51 32.7
comp=Z,7.7nm,0.7s
**TOLK Toolik Lake Re 35.17 32** P **P** **14 51 17.8 +2.0**
baz=263,SNR=7.0
**KNK Knik Glacier 35.41 45** P **P** **14 51 19.6 +1.8**
baz=274
**MDM Murphy Dome 35.42 39** P **P** **14 51 19.6 +1.6**
**SML Sawmill 35.44 44** P **P** **14 51 20.2 +2.0**
**SML Sawmill 35.44 44** P **P** **14 51 20.5 +2.3**
baz=274,SNR=6.0
**E24K Your Creek 35.50 33** P **P** **14 51 20.6 +1.9**
**E24K Your Creek 35.50 33** P **P** **14 51 20.6 +1.9**
baz=265,SNR=12
**D24K Happy Valley 35.50 31** P **P** **14 51 20.4 +1.8**
baz=263
**COLA College 35.58 39** *e*P **P** **14 51 17.9 -1.4**
COLA pmax pmax
comp=Z,3.0nm,0.6s
**H24K Noodor Dome 35.59 37** P **P** **14 51 21.0 +1.6**
H24K IAmb IAmb 14 51 42.8
comp=Z,8.3nm,1.5s
**H24K Noodor Dome 35.59 37** P **P** **14 51 21.9 +2.4**
baz=269
**CCB Clear Creek Bu 35.60 39** P **P** **14 51 21.2 +1.7**
**C24K Franklin Bluff 35.62 30** P **P** **14 51 21.0 +1.4**
baz=262
**F24K Squaw Lake 35.68 34** P **P** **14 51 21.5 +1.3**
**F24K Squaw Lake 35.68 34** P **P** **14 51 22.1 +2.0**
baz=266
**POKR Poker Plat Res 35.76 38** P **P** **14 51 22.0 +1.1**
baz=270
**G24K Hadweenzic Riv 35.79 36** P **P** **14 51 23.4 +2.4**
**G24K Hadweenzic Riv 35.79 36** P **P** **14 51 23.5 +2.4**
baz=268,SNR=11
**DHY Denali Highway 35.82 42** P **P** **14 51 22.7 +1.1**
**DHY Denali Highway 35.82 42** P **P** **14 51 23.6 +2.1**
baz=273
**SCM Sheep Creek Mo 35.91 44** P **P** **14 51 24.4 +2.1**
baz=275
**IL31 35.99 39** P **P** **14 51 23.9 +1.1**
**ILAR Eielson Array 35.99 39** P **P** **14 51 24.1 +1.3**
**ILAR Eielson Array 35.99 39** P **P** **14 51 20.3 -2.6**
comp=Z,1.2nm,0.9s,baz=262,slow=8.4,SNR=13
comp=Z,1.2nm,0.9s
**P23K Montague Islan 36.05 47** P **P** **14 51 28.0 +4.7**
baz=277
**G25K Bearman Lake 36.34 36** P **P** **14 51 27.6 +1.9**
baz=269
**D25K Kavik River 36.39 31** P **P** **14 51 27.8 +1.6**
**D25K Kavik River 36.39 31** P **P** **14 51 27.8 +1.6**
baz=265,SNR=14
**M24K Tolsona, Glenn 36.44 44** P **P** **14 51 28.7 +1.9**
baz=275
**H25L Birch Creek 36.44 37** P **P** **14 51 28.5 +1.9**
baz=270
**K24K Donnelly Dome 36.51 41** P **P** **14 51 28.9 +1.6**
baz=273
**F25K Christian Rive 36.55 34** P **P** **14 51 29.3 +1.7**
baz=268
**KLU Klutina 36.61 45** P **P** **14 51 30.9 +2.6**
baz=276
**J25K Salcha River, 36.65 39** P **P** **14 51 29.5 +1.0**
**J25K Salcha River, 36.65 39** P **P** **14 51 31.0 +2.5**
baz=273
**PAX Paxson 36.70 42** P **P** **14 51 31.3 +2.4**
baz=275
**BMAR Burnt Mountain 36.95 35** P **P** **14 51 33.0 +2.0**
**F26K Sheenjek River 37.12 34** P **P** **14 51 34.7 +2.3**
baz=270
**N25K Chitina, Valde 37.23 44** P **P** **14 51 35.7 +2.2**
baz=277
**G26K Porcupine Rive 37.26 35** P **P** **14 51 36.2 +2.7**
baz=271,SNR=7.4
**SCRK Sand Creek 37.29 40** P **P** **14 51 35.5 +1.5**
baz=275
**BMRM Bremner River 37.31 45** P **P** **14 51 36.6 +2.5**
baz=278
**C27K Jago River 37.35 31** P **P** **14 51 35.5 +1.2**
baz=267,SNR=7.2
**J26L Joseph Creek 37.44 39** P **P** **14 51 36.3 +1.1**
baz=274
**KAIM Kayak Island 37.55 47** P **P** **14 51 39.4 +3.3**
baz=280
**M26K Nabesna, AK 37.89 43** P **P** **14 51 41.5 +2.5**
baz=278
**MCARA McCarthy VSAT 38.01 44** P **P** **14 51 43.3 +3.4**
baz=279
**CRQE Cirque 38.07 45** P **P** **14 51 43.5 +2.8**

baz=280
**E27K Coleen River 38.09 33 P P 14 51 42.9 +2.3**
E27K IAmb IAmb 14 51 43.8
comp=Z,4.6nm,0.8s
**E27K Coleen River 38.09 33 P P 14 51 42.0 +1.4**
baz=271,SNR=5.6
**G27K Doyon Strip 38.10 36 P P 14 51 42.5 +1.8**
baz=273
**K27K Chicken 38.12 40 P P 14 51 41.9 +1.1**
K27K IAmb IAmb 14 51 58.4
comp=Z,4.1nm,0.7s
**K27K Chicken 38.12 40 P P 14 51 42.9 +2.0**
baz=276
**H27K Steamboat Moun 38.18 37 P P 14 51 43.4 +2.0**
baz=274
**D27M Malcolm River 38.31 32 P P 14 51 44.3 +1.8**
baz=270
**L27K Beaver Creek, 38.34 42 P P 14 51 45.4 +2.6**
L27K IAmb IAmb 14 52 01.6
comp=Z,4.2nm,0.7s
**L27K Beaver Creek, 38.34 42 P P 14 51 45.2 +2.4**
baz=278,SNR=7.0
**BCAR Beaver Creek A 38.36 42 P P 14 51 44.9 +2.0**
**M27K Edge Creek, AK 38.41 43 P P 14 51 45.9 +2.4**
**M27K Edge Creek, AK 38.41 43 P P 14 51 47.3 +3.9**
baz=278
**EGAK Eagle 38.45 39 P P 14 51 44.8 +1.2**
EGAK IAmb IAmb 14 52 00.1
comp=Z,5.0nm,0.6s
**EGAK Eagle 38.45 39 P P 14 51 45.5 +2.0**
baz=276
**F28M Old Crow 38.76 34 P P 14 51 48.2 +2.0**
F28M IAmb IAmb 14 51 49.6
comp=Z,5.0nm,0.9s
**F28M Old Crow 38.76 34 P P 14 51 48.1 +2.0**
baz=274
**E28M Babbage River 38.84 33 P P 14 51 49.0 +2.1**
baz=273
**CTG Chitna Glacier 38.88 45 P P 14 51 50.9 +3.4**
baz=281
**I28M Miner Creek 38.90 38 P P 14 51 49.5 +2.0**
I28M IAmb IAmb 14 52 05.3
comp=Z,5.1nm,0.7s
**I28M Miner Creek 38.90 38 P P 14 51 49.9 +2.4**
baz=276
**YUK3 Moose Creek 39.16 44 P P 14 51 52.6 +2.7**
baz=280
**DAWY Dawson 39.29 40 P P 14 51 54.3 +3.6**
baz=278
**E29M Blow River 39.45 33 P P 14 51 54.3 +2.3**
E29M IAmb IAmb 14 51 55.4
comp=Z,8.5nm,0.9s
**E29M Blow River 39.45 33 P P 14 51 54.9 +2.9**
baz=274,SNR=6.4
**H29M Whitestone 39.46 36 P P 14 51 54.6 +2.6**
baz=277
**O28M Mount Upton 39.47 45 P P 14 51 55.2 +2.7**
baz=282
**G29M Pine Creek 39.52 35 P P 14 51 55.6 +3.0**
baz=276,SNR=5.0
**YUK8 Steele Glacier 39.57 44 P P 14 51 56.7 +3.3**
baz=281
**M29M Somme Creek 39.97 42 P P 14 51 58.5 +2.0**
**M29M Somme Creek 39.97 42 P P 14 51 59.4 +3.0**
baz=281
**L29M L29M 40.00 41 P P 14 51 59.1 +2.5**
L29M IAmb IAmb 14 52 00.3
comp=Z,4.7nm,0.8s
**L29M L29M 40.00 41 P P 14 51 59.5 +2.9**
baz=280,SNR=5.5
**PNL Peninsula 40.09 47 P P 14 52 01.6 +4.3**
baz=284
**YUK4 Talbot Arm 40.09 44 P P 14 52 01.2 +3.7**
baz=282
**EPYK Eagle Plains 40.10 36 P P 14 51 59.2 +1.8**
baz=278
**K29M Barlow Dome 40.14 40 P P 14 52 00.5 +2.7**
baz=280
**G30M tAoh Zraii Nji 40.22 35 P P 14 52 00.4 +2.0**
baz=278
**F30M Barrier River 40.31 34 P P 14 52 00.6 +1.5**
baz=277
**I30M Mount Dempster 40.41 38 P P 14 52 01.6 +1.5**
**I30M Mount Dempster 40.41 38 P P 14 52 02.8 +2.8**
baz=279,SNR=6.9
**J30M Hart River 40.53 39 P P 14 52 03.8 +2.7**
baz=280
**N30M Aishikik Lake 40.80 44 P P 14 52 07.1 +3.8**
baz=283
**P29M Windy Craggy 40.92 46 P P 14 52 07.3 +3.1**
baz=285
**G31M Satah River 40.99 35 P P 14 52 06.7 +2.1**
G31M IAmb IAmb 14 52 22.0
comp=Z,9.0nm,1.2s
**G31M Satah River 40.99 35 P P 14 52 06.7 +2.1**
baz=279
**INK Inuvik 41.07 33 P P 14 52 07.8 +2.5**
baz=278
**F31M Tsiigehtchic 41.12 34 P P 14 52 08.0 +2.3**
baz=279
**P30M Million Dollar 41.17 45 P P 14 52 09.4 +3.0**
baz=285
**N31M Braeburn, Yuko 41.41 43 P P 14 52 11.3 +3.1**
baz=284
**O30N Mendenhall 41.43 44 P P 14 52 11.5 +3.0**
baz=285
**PLBC Pleasant Camp 41.64 46 P P 14 52 13.8 +3.8**
baz=286
**M31M Drury Creek, Y 41.87 42 P P 14 52 14.2 +2.1**
baz=284
**WHY Whitehorse 42.04 44 P P 14 52 16.5 +3.0**
baz=286
**S31K Pelican 42.12 48 P P 14 52 18.5 +4.5**
baz=288
**FARO Faro, Yukon 42.34 42 P P 14 52 18.2 +2.3**
baz=285
**ZALV Zalesovo Beam 42.40 305 P P 14 52 12.7 -3.7**
comp=Z,0.4nm,0.3s,baz=43,slow=8.9,SNR=4.4
ZALV PcP **PcP 14 54 07.9 -0.7**
comp=Z,1.2nm,0.6s,baz=66,slow=3.6,SNR=4.9
ZALV LR LR 15 11 04.2
comp=Z,74nm,21.8s,baz=82,slow=38
comp=Z,0.4nm,0.3s
**P33M Teslin, Yukon 43.14 45 P P 14 52 25.8 +3.4**
baz=288
**C36M Paulatuk 44.23 30 P P 14 52 33.0 +2.1**
baz=285
**R33M Jennings River 44.29 45 P P 14 52 34.3 +2.7**
R33M IAmb IAmb 14 52 50.8
comp=Z,16nm,1.4s
**R33M Jennings River 44.29 45 P P 14 52 35.1 +3.4**
baz=290
**U33K Whale Pass 44.34 50 P P 14 52 36.0 +4.1**
baz=292
**DLBC Dease Lake 45.08 46 LR LR 15 11 25.6**
comp=Z,50nm,21.7s,baz=175,slow=36
**DLBC Dease Lake 45.08 46 P P 14 52 41.4 +3.6**
baz=291
**V35K Ketchikan 45.42 51 P P 14 52 44.4 +3.8**
baz=293
**T35M Bob Quinn 45.50 48 P P 14 52 44.1 +2.9**
baz=293
**WRGLY Wrigley 46.37 38 P P 14 52 48.2 +0.3**
baz=292
**MK31 Makanchi Array 46.82 297 P P 14 52 51.8 +0.1**
**MK31 Makanchi Array 46.82 297 *ce*P P 14 52 50.4 -1.3**
**MKAR Makanchi Array 46.82 297 P P 14 52 51.1 -0.6**
**MKAR Makanchi Array 46.82 297 P P 14 52 48.8 -2.9**
comp=Z,0.9nm,0.8s,baz=60,slow=7.3,SNR=7.3
MKAR PcP **PcP 14 54 22.6 -1.3**
comp=Z,1.1nm,0.8s,baz=59,slow=4.1,SNR=4.3
comp=Z,0.9nm,0.8s
**MKAR Makanchi Array 46.82 297 *e*P P 14 52 51.1 -0.6**
**MKAR Makanchi Array 46.82 297 P P 14 52 51.1 -0.6**
**KURK Kurchatov 47.17 303 P P 14 52 53.1 -1.3**
**KURK Kurchatov 47.17 303 *e*P P 14 52 53.4 -1.0**
**KURK Kurchatov 47.17 303 *ce*P P 14 52 53.4 -1.0**
KURK pmax pmax
comp=Z,3.0nm,0.8s
**TOAD Toad River Com 47.24 44 P P 14 52 57.1 +2.3**
baz=294
**KURBB Kurchatov Arra 47.27 303 P P 14 52 52.7 -2.3**
comp=Z,1.8nm,0.2s,baz=67,slow=8.2,SNR=11
KURBB PcP **PcP 14 54 24.9 -0.5**
comp=Z,0.8nm,0.5s,baz=67,slow=8.9,SNR=2.6
comp=Z,1.8nm,0.2s
**RES Resolute Bay 50.23 19 P P 14 53 18.6 +1.1**
RES IAmb IAmb 14 53 31.6
comp=Z,8.3nm,1.1s
**RES Resolute Bay 50.23 19 LR LR 15 16 01.6**
comp=Z,24nm,20.1s,baz=294,slow=38
**RES Resolute Bay 50.23 19 P P 14 53 18.6 +1.1**
RES pmax pmax
comp=Z,8.0nm,1.2s
**YKA Yellowknife Ar 50.36 37 P P 14 53 17.7 -0.9**
comp=Z,7.2nm,0.9s,baz=298,slow=7.7,SNR=5.2
comp=Z,7.2nm,0.9s
**BRVK Borovoye 50.65 309 *e*P P 14 53 20.5 -0.4**
**BRVK Borovoye 50.65 309 *ce*P P 14 53 20.5 -0.4**
BRVK pmax pmax
comp=Z,11nm,3.2s
**CMAR Chiang Mai Arr 52.66 256 P P 14 53 38.3 +1.9**
**CMAR Chiang Mai Arr 52.66 256 P P 14 53 33.5 -2.9**
comp=Z,4.5nm,0.8s,baz=35,slow=7.4,SNR=24
CMAR LR LR 15 15 58.8
comp=Z,41nm,20.3s,baz=125,slow=36
comp=Z,4.5nm,0.8s
**CMAR Chiang Mai Arr 52.66 256 *ce*P P 14 53 37.4 +1.0**
CMAR pmax pmax
comp=Z,5.0nm,0.8s
**ARU Arti 54.69 317 *e*P P 14 53 49.7 -1.0**
**ARU Arti 54.69 317 *c i*P P 14 53 49.7 -1.0**
ARU 14 55 52.0
ARU S **S 15 01 27.2 +0.6**
ARU SS **SS 15 05 11.1 +1.7**
ARU pmax pmax
comp=Z,5.0nm,1.0s
**NEW Newport 56.70 53 P P 14 54 07.2 +1.9**
baz=306
**ABKAR Akbulak array 58.17 310 P P 14 54 14.7 -0.9**
**BMO Blue Mountains 58.62 56 P P 14 54 20.3 +1.4**
BMO IAmb IAmb 14 54 37.7
comp=Z,4.2nm,0.9s
**BMO Blue Mountains 58.62 56 P P 14 54 20.3 +1.4**
BMO pmax pmax
comp=Z,4.0nm,0.9s
**MSO Missoula 59.28 53 P P 14 54 25.0 +1.5**
MSO IAmb IAmb 14 54 26.1
comp=Z,5.6nm,1.0s
**MSO Missoula 59.28 53 P P 14 54 25.2 +1.7**
baz=308
**SIMJ Simiganj 59.43 295 P P 14 54 24.6 -0.1**
SIMJ IAmb IAmb 14 54 52.6
comp=Z,4.3nm,0.8s
**OVMT Ovando 59.65 52 P P 14 54 27.4 +1.4**
**BPMT Black Pine Rid 59.79 53 P P 14 54 28.9 +1.7**
**LYMT Lyon Mountain 60.09 52 P P 14 54 30.1 +0.9**
**SUMG Summit 60.11 4 P P 14 54 30.1 +1.0**
**SUMG Summit 60.11 4 P P 14 54 30.1 +1.0**
SUMG pmax pmax
comp=Z,9.0nm,0.9s
**FFC Flin Flon 60.19 40 P 14 54 30.8 +1.3**
**EGMT Eagleton 60.76 50 P P 14 54 34.4 +0.9**
**EGMT Eagleton 60.76 50 P P 14 54 35.0 +1.5**
baz=310
**HLID Hailey 61.05 56 P P 14 54 37.8 +2.1**
baz=310
**BOZ Bozeman (W) 61.31 53 P P 14 54 38.9 +1.5**
**BOZ Bozeman (W) 61.31 53 P P 14 54 39.3 +1.9**
baz=310
**BOZ Bozeman (W) 61.31 53 P P 14 54 38.9 +1.5**
BOZ pmax pmax
comp=Z,7.0nm,0.9s
**KVN Kaiserville 61.75 62 P 14 54 42.2 +1.7**
KVN IAmb IAmb 14 54 59.3
comp=Z,4.9nm,0.8s
**KVN Kaiserville 61.75 62 P P 14 54 42.2 +1.7**
KVN pmax pmax
comp=Z,5.0nm,0.8s
**NVAR Mina Array Bea 62.02 63 P P 14 54 42.6 +0.2**
comp=Z,0.6nm,0.7s,baz=297,slow=6.0,SNR=4.7
comp=Z,0.6nm,0.7s
**H17A Grant Village 62.65 53 P P 14 54 49.8 +3.3**
baz=311
**IMW Indian Meadow 62.77 54 P P 14 54 49.5 +2.1**
IMW IAmb IAmb 14 55 07.0
comp=Z,5.8nm,1.1s
**RLMT Red Lodge 62.89 52 P P 14 54 50.2 +2.2**
RLMT IAmb IAmb 14 55 08.0
comp=Z,7.2nm,1.1s
**RLMT Red Lodge 62.89 52 P P 14 54 50.4 +2.2**
baz=311
**DSP Deep Springs 62.91 63 P 14 54 50.2 +2.2**
DSP IAmb IAmb 14 55 06.5
comp=Z,7.4nm,1.3s
**LOHW Long Hollow 63.14 54 P P 14 54 51.5 +1.7**
LOHW IAmb IAmb 14 55 09.3
comp=Z,5.7nm,1.1s
**DGMT Dagmar 63.29 47 P P 14 54 51.5 +1.1**
**DGMT Dagmar 63.29 47 P P 14 54 52.2 +1.7**
baz=312
**LAO LASA Array 63.46 49 P P 14 54 53.0 +1.4**
**LAO LASA Array 63.46 49 P P 14 54 53.2 +1.6**
baz=312
**FINES FINESS Array B 63.58 335 P P 14 54 50.8 -1.3**
comp=Z,3.0nm,0.6s,baz=26,slow=7.6,SNR=20
comp=Z,3.0nm,0.6s
**FINES FINESS Array B 63.58 335 *ce*P P 14 54 51.7 -0.4**
FINES pmax pmax
comp=Z,3.0nm,0.6s
**R11B Troy Canyon, C 63.71 61 P P 14 54 55.3 +1.8**
baz=311
**DUG Dugway, Tooele 64.13 58 P P 14 54 58.9 +2.7**
baz=312
**TPNV Topopah Spring 64.22 63 P P 14 54 59.8 +2.8**
baz=311
**BW06 Boulder Array 64.28 54 P P 14 55 00.4 +3.1**
baz=312
**PD31 Pinedale Array 64.28 54 P P 14 54 58.5 +1.3**
PD31 IAmb IAmb 14 55 15.8
comp=Z,6.6nm,0.9s
**PDAR Pinedale Array 64.28 54 P P 14 54 58.5 +1.3**
**PDAR Pinedale Array 64.28 54 P P 14 54 57.6 +0.3**
comp=Z,2.2nm,0.9s,baz=318,slow=2.0,SNR=16
comp=Z,2.2nm,0.9s
**OBN Obninsk 64.92 326 *e*P P 14 55 00.5 -0.4**
**OBN Obninsk 64.92 326 *e*P P 14 55 00.5 -0.4**
OBN *e**SP **PcP 14 55 28.0 -5.7**
OBN *e* 14 55 33.7
OBN *e* 14 57 27.1
OBN *e*PPP PPP 14 59 01.7
OBN pmax pmax
comp=Z,3.0nm,0.9s
OBN MLR MLR
comp=Z,35nm,18.0s
**HEC Hector,Ludlow 65.57 65 P P 14 55 08.1 +2.5**
baz=312
**MDND Maddock 65.96 45 P P 14 55 08.9 +1.1**
**MDND Maddock 65.96 45 P P 14 55 09.7 +1.9**
baz=315
**ULM Lac du Bonnet 65.98 41 P P 14 55 07.2 -0.6**
comp=Z,3.1nm,0.7s,baz=328,slow=9.4,SNR=4.6
comp=Z,3.1nm,0.7s
**K22A Casper 66.01 53 P P 14 55 10.6 +2.2**
baz=313
**RSSD Black Hills 66.33 50 P P 14 55 11.1 +0.6**
**RSSD Black Hills 66.33 50 P P 14 55 11.3 +0.8**
baz=314
**RSSD Black Hills 66.33 50 P P 14 55 11.1 +0.6**
RSSD pmax pmax
comp=Z,10.0nm,0.9s
**IKP In-Ko-Pah, Jac 67.16 66 P P 14 55 19.4 +3.6**
baz=313
**AGMN Agassiz Nation 67.39 43 P P 14 55 18.0 +1.0**
baz=317
**N23A Red Feather La 67.53 54 P P 14 55 19.9 +1.7**
N23A IAmb IAmb 14 55 37.1
comp=Z,4.6nm,0.8s
**N23A Red Feather La 67.53 54 P P 14 55 20.5 +2.3**
baz=314
**NB2 NORSAR Subarra 67.73 341 P P 14 55 18.8 -0.1**
comp=Z,2.0nm,0.6s,baz=27,slow=6.5
**NB2 NORSAR Subarra 67.73 341 P P 14 55 19.5 +0.6**
**NOA NORSAR Array B 67.73 341 P P 14 55 17.5 -1.4**
comp=Z,23nm,0.6s,baz=36,slow=6.7,SNR=4.7
**HFS Hagfors 67.97 340 P P 14 55 18.8 -1.5**
comp=Z,2.7nm,0.4s,baz=49,slow=4.5,SNR=18
comp=Z,2.7nm,0.4s
**SMCO Snowmass 68.14 56 P 14 55 23.6 +1.3**
SMCO IAmb IAmb 14 55 40.7
comp=Z,5.6nm,0.8s
**ISCO Idaho Springs 68.47 54 P P 14 55 25.9 +1.7**
baz=315
**MVCO Mesa Verde 68.63 58 P P 14 55 27.0 +1.8**
baz=314
**X16A Lo Mia Camp, P 68.82 62 P P 14 55 28.3 +1.9**
X16A IAmb IAmb 14 55 45.3
comp=Z,5.9nm,1.0s
**F33A 5 Mile Ranch, 68.98 45 P P 14 55 28.0 +1.1**
F33A IAmb IAmb 14 55 28.5
comp=Z,8.2nm,0.7s
**WRAB Tennant Creek 69.10 199 *i*P P 14 55 27.4 -0.4**
WRAB pmax pmax
comp=Z,15nm,1.8s
**WRA Warramunga Arr 69.11 199 P P 14 55 27.1 -0.8**
comp=Z,1.4nm,0.7s,baz=17,slow=6.7,SNR=16
comp=Z,1.4nm,0.7s
**WRA Warramunga Arr 69.11 199 *ce*P P 14 55 27.7 -0.2**
WRA pmax pmax
comp=Z,2.0nm,0.6s
**S22A 4UR Ranch, Cre 69.22 57 P P 14 55 30.5 +1.6**
S22A IAmb IAmb 14 55 48.0
comp=Z,4.8nm,0.8s
**S22A 4UR Ranch, Cre 69.22 57 P P 14 55 31.5 +2.6**
baz=315
**OGNE Ogallala 69.61 51 P P 14 55 32.8 +1.9**
baz=316
**EYMN Ely 69.62 40 P P 14 55 31.8 +0.9**
baz=319
**K30B Basset 69.63 49 P P 14 55 32.2 +1.2**
**SDCO Great Sand Dun 69.97 56 P P 14 55 35.2 +1.7**
baz=315
**ECSD EROS Data Cent 70.37 46 P P 14 55 36.5 +1.0**
**ECSD EROS Data Cent 70.37 46 P P 14 55 36.7 +1.2**
baz=318
**KIV Kislovodsk 70.51 314 *e*P P 14 55 36.6 +0.2**
**KIV Kislovodsk 70.51 314 *e*P P 14 55 36.6 +0.2**
KIV pmax pmax
comp=Z,10.0nm,1.1s
KIV MLR MLR
comp=Z,48nm,18.0s
**KBZ Khabaz 70.57 314 *e*P P 14 55 36.6 -0.1**
**KBZ Khabaz 70.57 314 *ce*P P 14 55 36.6 -0.1**
KBZ pmax pmax
comp=Z,6.0nm,1.2s
KBZ MLR MLR
comp=Z,62nm,17.0s
**TUC Tucson 70.67 63 P P 14 55 41.5 +3.9**
baz=315
**T25A Trinidad 71.01 56 P P 14 55 41.6 +1.8**
baz=316
**SPMN Marine on St. 71.08 43 P P 14 55 41.0 +1.2**
baz=319
**AKASG Malin Array Be 71.15 326 P P 14 55 38.6 -1.4**
comp=Z,0.8nm,0.4s,baz=34,slow=6.5,SNR=6.1
comp=Z,0.8nm,0.4s
**AKASG Malin Array Be 71.15 326 *ce*P P 14 55 39.4 -0.7**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 71.15 326 *i*P P 14 55 39.7 -0.4**
AKBB pmax pmax
comp=Z,2.0nm,0.6s
**I37A Lemond, Waseca 71.71 44 P P 14 55 44.2 +0.6**
**121A Cookes Peak, D 72.32 61 P P 14 55 50.0 +2.4**
baz=316
**SCHQ Schefferville 72.71 23 P P 14 55 48.8 -0.6**
comp=Z,5.5nm,0.8s,baz=359,slow=13,SNR=3.4
comp=Z,5.5nm,0.8s
**ASAR Alice Springs 72.81 199 P P 14 55 49.9 -0.3**
comp=Z,3.9nm,0.8s,baz=9.2,slow=5.1,SNR=34
comp=Z,3.9nm,0.8s
**AMTX Amarillo 74.17 56 P P 14 55 59.3 +0.9**
**AMTX Amarillo 74.17 56 P P 14 56 00.5 +2.1**
baz=317
**MSTX Muleshoe 74.21 57 P P 14 56 00.7 +1.9**
baz=317
**MNTX Cornudas Mount 74.34 60 P P 14 56 01.6 +2.3**
baz=317
**BUR08 Bucovina Ar. S 75.17 327 P P 14 56 03.6 -0.5**
**VLDQ Val d'Or 75.17 32 P P 14 56 03.0 -0.8**
**BURAR Bucovina Array 75.19 327 P P 14 56 04.1 0.0**
**DKNS Dickens 75.48 56 P P 14 56 07.8 +1.8**
DKNS IAmb IAmb 14 56 24.3
comp=Z,7.0nm,0.8s
**POST Post 75.60 57 P P 14 56 07.7 +1.0**
POST IAmb IAmb 14 56 25.4
comp=Z,6.5nm,0.7s
**EKA Eskdalemuir Ar 75.81 346 P P 14 56 06.0 -1.4**
comp=Z,0.7nm,0.6s,baz=30,slow=5.9,SNR=2.4
comp=Z,0.7nm,0.6s
**EKA Eskdalemuir Ar 75.81 346 P P 14 56 06.0 -1.4**
**WMOK Wichita Mounta 75.89 54 P P 14 56 09.3 +1.0**
WMOK IAmb IAmb 14 56 26.3
comp=Z,4.7nm,0.9s
**WMOK Wichita Mounta 75.89 54 P P 14 56 09.2 +1.0**
baz=319
**WMOK Wichita Mounta 75.89 54 P P 14 56 09.3 +1.0**
WMOK pmax pmax
comp=Z,5.0nm,0.9s
**MORC Moravsky Berou 76.00 332 P P 14 56 08.3 -0.3**
**MORC Moravsky Berou 76.00 332 P P 14 56 08.3 -0.3**
MORC pmax pmax
comp=Z,3.0nm,0.9s
**CLL Collm 76.00 336 P P 14 56 07.7 -0.8**
CLL IAmb IAmb 14 56 08.9
comp=Z,9.9nm,1.1s
**CLL Collm 76.00 336 *i*P P 14 56 07.9 -0.6**
comp=Z,10.0nm,1.1s
CLL AMS AMS 16 02 00.0
comp=Z,100nm,20.3s
**CLL Collm 76.00 336 P P 14 56 07.7 -0.8**
CLL pmax pmax
comp=Z,10.0nm,1.1s
**OK052 Battle Ridge R 76.02 52 P P 14 56 10.1 +1.1**
**TX31 Lajitas Ar. Si 77.07 61 P P 14 56 16.4 +1.3**
**TXAR Lajitas Array 77.07 61 P P 14 56 16.2 +1.1**
**TXAR Lajitas Array 77.07 61 P P 14 56 13.6 -1.5**
comp=Z,1.5nm,0.6s,baz=300,slow=4.6,SNR=17
comp=Z,1.5nm,0.6s
**CCM Cathedral Cave 77.32 47 P P 14 56 16.7 +0.5**
baz=321
**KHC Kasperske Hory 77.78 334 P P 14 56 17.3 -1.4**
KHC IAmb IAmb 14 56 19.8
comp=Z,4.8nm,1.0s
**KHC Kasperske Hory 77.78 334 *e*P P 14 56 18.5 -0.2**
**KHC Kasperske Hory 77.78 334 *ce*P P 14 56 18.9 +0.2**
KHC *i* *PP **sP 14 56 37.0 -1.7**
KHC pmax pmax
comp=Z,11nm,1.0s
**GERES GERESS Array B 78.00 334 P P 14 56 16.6 -3.4**
comp=Z,0.8nm,0.5s,baz=32,slow=5.5,SNR=3.4
comp=Z,0.8nm,0.5s
**BRTR Keskin Array B 78.07 317 P P 14 56 17.0 -3.6**
comp=Z,0.7nm,0.8s,baz=29,slow=5.8,SNR=2.7
comp=Z,0.7nm,0.8s
**BRTR Keskin Array B 78.07 317 P P 14 56 17.0 -3.6**
**CONA Conrad Observa 78.15 332 *i*P P 14 56 21.1 +0.3**
comp=Z,4.8nm,1.0s
**RONA Rosalia, Austr 78.22 332 *i*P P 14 56 21.8 +0.6**
comp=Z,6.8nm,1.1s
**BTNL Ternell 78.45 339 *d*P P 14 56 22.2 -0.1**
**MEM Membach 78.46 339 *d*P P 14 56 22.8 +0.5**
**O48B Farmland 78.47 42 P P 14 56 22.7 +0.1**
baz=324
**JCT Junction City 78.48 57 P 14 56 23.7 +0.8**
**JCT Junction City 78.48 57 P P 14 56 24.9 +2.0**
baz=319
**JCT Junction City 78.48 57 P P 14 56 23.7 +0.8**
JCT pmax pmax
comp=Z,9.0nm,0.6s
**FCAR Ozark Folk Cen 78.55 49 P P 14 56 23.0 -0.1**
FCAR IAmb IAmb 14 56 40.4
comp=Z,6.9nm,0.7s
**MOA Molln 78.72 333 *e*P P 14 56 21.9 -1.9**
comp=Z,1.6nm,0.7s
**MIAR Mount Ida 78.83 51 P P 14 56 25.8 +1.1**
baz=321
**BGES Gesves 78.88 340 *d*P P 14 56 24.3 -0.4**
**BMRD Maredsous 79.03 340 *d*P P 14 56 26.1 +0.7**
**BIOA Bad Ischl, Aus 79.05 334 *i*P P 14 56 26.6 +1.0**
comp=Z,2.9nm,0.8s
**ACSO Alum Creek Sta 79.46 40 P P 14 56 28.4 +0.4**
baz=325
**SOKA Soboth 79.52 332 *i*P P 14 56 28.1 -0.2**
comp=Z,7.7nm,1.4s
**WCI Wyandotte Cave 79.58 44 P P 14 56 29.5 +0.9**
baz=324
**LESA Schwarzleotal 79.58 334 *i*P P 14 56 29.1 +0.5**
comp=Z,7.2nm,1.1s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KBA | Koelnbreinsper | 79.69 | 333 | *i* P | | P | | 14 56 30.1 | +0.7 |
| | comp=Z,12nm,1.2s | | | | | | | | |
| OBKA | Obir | 79.83 | 332 | *i* P | | P | | 14 56 29.9 | -0.1 |
| | comp=Z,4.8nm,1.0s | | | | | | | | |
| WATA | Walderalm | 79.98 | 335 | *i* P | | P | | 14 56 31.4 | +0.5 |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| MYKA | Terra Mystica | 80.00 | 333 | *e*P | | P | | 14 56 30.8 | -0.1 |
| | comp=Z,3.1nm,1.0s | | | | | | | | |
| WTTA | Wattenberg | 80.03 | 335 | *i* P | | P | | 14 56 30.4 | -0.8 |
| | comp=Z,5.5nm,0.7s | | | | | | | | |
| RETA | Reutte | 80.08 | 335 | *i* PcP | | P | | 14 56 33.6 | +2.2 |
| | comp=Z,6.5nm,1.2s | | | | | | | | |
| MOTA | Moosalm | 80.11 | 335 | *i* P | | P | | 14 56 32.0 | +0.4 |
| | comp=Z,9.2nm,1.0s | | | | | | | | |
| SQTA | Sankt Quirin | 80.19 | 335 | *i* P | | P | | 14 56 31.9 | -0.1 |
| | comp=Z,9.3nm,1.3s | | | | | | | | |
| O53A | New Philadelph | 80.22 | 39 | P | | P | | 14 56 32.4 | +0.3 |
| | baz=326 | | | | | | | | |
| DAVA | Damuels | 80.51 | 336 | *i* P | | P | | 14 56 30.3 | -3.5 |
| | comp=Z,6.1nm,1.4s | | | | | | | | |
| FETA | Feichten | 80.51 | 335 | *i* P | | P | | 14 56 34.0 | +0.3 |
| | comp=Z,3.4nm,1.2s | | | | | | | | |
| WVT | Waverly | 80.51 | 46 | P | | P | | 14 56 34.6 | +0.8 |
| | baz=323 | | | | | | | | |
| SSFO | Shawnee State | 80.62 | 41 | P | | P | | 14 56 34.8 | +0.5 |
| OXF | Oxford | 81.01 | 48 | P | | P | | 14 56 37.7 | +1.3 |
| | baz=323 | | | | | | | | |
| FUORN | Ofenpass-Fuorn | 81.01 | 335 | P | | P | | 14 56 35.9 | -0.7 |
| SSPA | Standing Stone | 81.29 | 37 | P | | P | | 14 56 38.2 | +0.3 |
| | baz=328 | | | | | | | | |
| L61B | Northampton | 81.76 | 33 | P | | P | | 14 56 39.1 | -1.1 |
| | baz=331 | | | | | | | | |
| SWET | Sewanee | 82.17 | 45 | P | | P | | 14 56 42.1 | -0.5 |
| TZTN | Tazewell | 82.22 | 43 | P | | P | | 14 56 42.9 | +0.1 |
| | baz=325 | | | | | | | | |
| FNA | Florina | 82.44 | 325 | P | | P | | 14 56 43.4 | -0.6 |
| FNA | | | | IAmb | | IAmb | | 14 56 51.8 | |
| | comp=Z,7.6nm,0.9s | | | | | | | | |
| FNA | Florina | 82.44 | 325 | P | | P | | 14 56 43.4 | -0.6 |
| FNA | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| MMAI | Mount Meron Ar | 82.55 | 312 | P | | P | | 14 56 43.2 | -1.4 |
| | comp=Z,6.4nm,0.6s,baz=28,slow=5.9,SNR=7.8 | | | | | | | | |
| | comp=Z,6.4nm,0.6s | | | | | | | | |
| BALJ | Balqa | 83.16 | 311 | P | | P | | 14 56 47.8 | 0.0 |
| KMSC | Kings Mountain | 84.39 | 42 | P | | P | | 14 56 53.5 | -0.5 |
| | baz=327 | | | | | | | | |
| GOGA | Godfrey | 84.82 | 45 | P | | P | | 14 56 55.1 | -1.0 |
| | baz=326 | | | | | | | | |
| ESDC | Sonseca Array | 91.04 | 343 | P | | P | | 14 57 23.7 | -2.3 |
| | comp=Z,1.1nm,1.0s,baz=29,slow=2.9,SNR=4.4 | | | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | | | |
| MAW | Mawson | 132.78 | 211 | PKP | | PKPdf | | 15 03 34.7 | -0.3 |
| | comp=Z,1.8nm,0.7s,baz=131,slow=10,SNR=2.9 | | | | | | | | |
| SIV | San Ignacio | 137.76 | 54 | PKP | | PKPdf | | 15 03 44.3 | -1.7 |
| | comp=Z,0.6nm,0.4s,baz=323,slow=2.9,SNR=2.6 | | | | | | | | |
| H03N2 | Juan Fernandez | 138.59 | 90 | T | | T | | 17 37 37.5 | |
| | baz=309,slow=77,SNR=101 | | | | | | | | |
| H03N1 | Juan Fernandez | 138.61 | 90 | T | | T | | 17 37 38.8 | |
| | baz=309,slow=77,SNR=124 | | | | | | | | |
| H03N3 | Juan Fernandez | 138.61 | 90 | T | | T | | 17 37 39.3 | |
| | baz=309,slow=77,SNR=84 | | | | | | | | |
| ELIB | Princess Elisa | 146.39 | 206 | *d*PKPdf | | PKPbc | | 15 04 01.0 | -0.1 |
| CPUP | Villa Florida | 148.04 | 60 | PKPbc | | PKPdf | | 15 04 04.5 | +0.9 |
| | comp=Z,4.2nm,0.9s,baz=334,slow=1.2,SNR=4.1 | | | | | | | | |
| PLCA | Paso Flores | 148.10 | 94 | PKPbc | | PKPdf | | 15 04 04.9 | +1.4 |
| | comp=Z,1.5nm,0.9s,baz=323,slow=5.1,SNR=2.1 | | | | | | | | |
| TROLL | Troll, Antarti | 151.80 | 199 | ⇑PKPbc | | PKPbc | | 15 04 14.7 | -0.1 |
| | comp=Z,162nm,0.6s | | | | | | | | |
| TROLL | | | | ⇑pPKPdf | | sPKPdf | | 15 04 28.5 | -0.6 |
| | comp=Z,40nm,0.6s | | | | | | | | |
| SNAA | Sanae | 153.16 | 196 | ⇑PKPbc | | PKPbc | | 15 04 17.1 | -0.7 |
| | comp=Z,23nm,0.5s | | | | | | | | |
| SNAA | | | | ⇑pPKPdf | | PKPab | | 15 04 29.2 | -0.5 |
| | comp=Z,14nm,0.5s | | | | | | | | |
| SNAA | Sanae | 153.16 | 196 | PKPbc | | PKPbc | | 15 04 17.1 | -0.7 |
| | comp=Z,1.2nm,0.6s,baz=213,slow=3.0,SNR=10 | | | | | | | | |
| VNA2 | Neumayer--Watz | 154.61 | 195 | ⇑PKPab | | PKPab | | 15 04 35.8 | 0.0 |
| | comp=Z,3.3nm,0.7s,baz=140,slow=3.2 | | | | | | | | |
| VNA2 | | | | ⇑pPKPab | | sPKPab | | 15 04 52.8 | -3.3 |
| | comp=Z,4.6nm,0.6s,baz=146,slow=3.3 | | | | | | | | |
| VNA3 | Neumayer Olymp | 154.70 | 193 | ⇑PKPab | | PKPab | | 15 04 35.8 | -0.4 |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| VNA3 | | | | ⇑pPKPab | | pPKPab | | 15 04 52.5 | +1.5 |
| | comp=Z,3.6nm,0.5s | | | | | | | | |
| VNA1 | Neumayer--Stat | 154.99 | 194 | ⇑PKPab | | PKPab | | 15 04 35.8 | -1.6 |
| | comp=Z,1.9nm,0.6s | | | | | | | | |
| VNA1 | | | | ⇑pPKPab | | pPKPab | | 15 04 53.1 | +1.0 |
| | comp=Z,1.7nm,0.6s | | | | | | | | |

*IDC* ***10*** *14:51:53.1±0.6,6˚.52S×14˚.21E,h0km,mb4.2/12, mbtmp4.2/14,ML2.2/1,MS4.2/32,Error ellipse: s-maj=28.7km s-min=13.8km az=76.0*

*NEIC* ***10*** *14:51:55.2±2.1,6˚.63S±0˚.07×143˚.02E±0˚.02,h10km±1km, mb4.7/56,Error ellipse: s-maj=12.5km s-min=4.0km az=181.0*

*DJA* ***10*** *14:51:55.4±0.4,6˚.5S±5˚×14˚.3E±˚,h10km,M5.1/5,mb4.8/4, mB5.6/1,MLv5.3/5,Mw(mB)5.1/1*

*GCMT* ***10*** *14:51:58.2±0.2,6˚.61S±0˚.01×142˚.95E±0˚.02,h12km, MW5.0/113,Moment Tensor Solution. s31,c34; s113,c171; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr3.26±.06; Mθθ-2.04±.06; Mϕϕ-1.22±.07; Mrθ0.86±.24; Mθϕ1.34±.05; Mrϕ-0.84±.25; Best double couple: Ms3.36900×10¹⁶ NP1:ϕs129.00000°,δs55.00000°, λ93.00000°. NP2:ϕs304.00000°,δs35.00000°,λ86.00000°. Principal axes: T 3.4870, Plg79.0000°, Azm50.0000°; N -0.2360, Plg2.0000°, Azm308.0000°; P -3.2510, Plg10.0000°, Azm217.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 10 14:51:55.0±0.4,6˚.60S±0˚.05×143˚.01E±0˚.06,h10km,n136, σ1ᵍ55/112,mb4.6/38,MS4.1/29,New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MMPI | Merauke | 3.20 | 234 | P | Pb | 14 52 49.7 | -2.3 |
| JAY | Jayapura | 4.67 | 330 | P | Pn | 14 53 06.5 | +0.9 |
| GENI | Genyem | 4.89 | 324 | P | Pn | 14 53 08.5 | -0.1 |
| PMG | Port Moresby | 4.96 | 124 | P | Pn | 14 53 09.1 | -0.6 |
| PMG | Port Moresby | 4.96 | 124 | Pn | Pn | 14 53 07.8 | -1.9 |
| PMG | Port Moresby | 4.96 | 124 | Pn | Pn | 14 53 08.1 | -1.5 |
| | 7.1nm,0.3s,baz=346,slow=4.6,SNR=17 | | | | | | |
| PMG | | | | Sn | Sn | 14 54 04.6 | -2.5 |
| | 6.9nm,0.3s,baz=209,slow=23,SNR=9.1 | | | | | | |
| | 29nm,0.5s | | | | | | |
| MANU | Manus Island | 6.27 | 44 | Pn | Pn | 14 53 28.7 | +1.1 |
| COEN | Coen | 7.31 | 179 | P | Pn | 14 53 45.3 | +3.3 |
| COEN | Coen | 7.31 | 179 | | Pn | 14 53 40.5 | -1.5 |
| FAKI | Fak Fak | 11.33 | 288 | P | Pn | 14 54 36.2 | -0.9 |
| FAKI | Fak Fak | 11.33 | 288 | | Pn | 14 54 37.0 | -0.2 |
| FAKI | Fak Fak | 11.33 | 288 | P | Pn | 14 54 38.1 | +1.0 |
| | 45nm,0.7s | | | | | | |
| MTSU | Mount Surprise | 11.53 | 174 | P | Pn | 14 54 43.4 | +3.5 |
| KDU | Kakadu | 12.02 | 239 | P | Pn | 14 54 46.2 | -0.3 |
| MTN | Manton Dam | 13.25 | 241 | P | Pn | 14 55 03.6 | +0.3 |
| MTN | Manton Dam | 13.25 | 241 | | Pn | 14 55 01.3 | -2.0 |
| CTA | Charters Tower | 13.77 | 167 | Lg | Lg | 14 58 59.0 | |
| | baz=256,slow=22,SNR=2.3 | | | | | | |
| CTA | | | | LR | LR | 15 00 23.3 | |
| | comp=Z,155nm,18.3s,baz=356,slow=37 | | | | | | |
| QIS | Mount Isa | 14.26 | 193 | P | Pn | 14 55 20.8 | +3.6 |
| WB0 | Warramunga Arr | 15.54 | 212 | | Pn | 14 55 31.9 | -2.4 |
| WB0 | Warramunga Arr | 15.54 | 212 | P | Pn | 14 55 31.9 | -2.4 |
| WR0 | Warramunga Arr | 15.62 | 211 | | Pn | 14 55 34.4 | -1.0 |
| WRAB | Tennant Creek | 15.70 | 212 | | Pn | 14 55 35.3 | -1.1 |
| WB2 | Warramunga Arr | 15.70 | 212 | Pn | Pn | 14 55 35.2 | -1.3 |
| WRA | Warramunga Arr | 15.71 | 212 | | Pn | 14 55 34.6 | -2.1 |
| WRA | Warramunga Arr | 15.71 | 212 | Pn | Pn | 14 55 34.0 | -2.6 |
| | 1.0nm,0.3s,baz=29,slow=13,SNR=50 | | | | | | |
| WRA | | | | Sn | Sn | 14 58 25.3 | -5.6 |
| | 0.4nm,0.3s,baz=23,slow=21,SNR=4.9 | | | | | | |
| WRA | | | | Lg | Lg | 15 00 18.8 | |
| | 0.5nm,0.3s,baz=28,slow=23,SNR=4.8 | | | | | | |
| WRA | | | | LR | LR | 15 02 20.2 | |
| | comp=Z,6μm,19.3s,baz=50,slow=40 | | | | | | |
| KNRA | Kununurra | 16.63 | 236 | Pn | Pn | 14 55 47.4 | -1.0 |
| KNRA | | | | IAmb | IAmb | 14 55 48.6 | |
| | comp=Z,33nm,0.7s | | | | | | |
| SOEI | Soe | 18.82 | 259 | P | P | 14 56 15.2 | 0.0 |
| SOEI | Soe | 18.82 | 259 | | P | 14 56 15.6 | +0.4 |
| AS01 | Alice Springs | 19.07 | 206 | P | Pn | 14 56 19.6 | +1.0 |
| AS31 | Alice Springs | 19.09 | 206 | P | Pn | 14 56 19.8 | +1.0 |
| ASAR | Alice Springs | 19.09 | 206 | P | Pn | 14 56 19.8 | +1.0 |
| ASAR | Alice Springs | 19.09 | 206 | P | Pn | 14 56 19.3 | +0.4 |
| | comp=Z,7.8nm,0.7s,baz=36,slow=10.0,SNR=47 | | | | | | |
| ASAR | | | | Lg | Lg | 15 02 00.8 | |
| | comp=Z,0.1nm,0.3s,baz=16,slow=30,SNR=1.8 | | | | | | |
| ASAR | | | | LR | LR | 15 04 09.9 | |
| | comp=Z,5μm,19.1s,baz=30,slow=38 | | | | | | |
| QLP | Quilpie | 19.91 | 177 | P | Pn | 14 56 30.7 | +2.2 |
| PATS | Pohnpei | 20.28 | 49 | | P | 14 56 31.1 | +0.1 |
| FITZ | Fitzroy Crossi | 20.43 | 234 | P | Pn | 14 56 34.3 | -0.5 |
| MMRI | Maumere | 20.69 | 263 | P | P | 14 56 34.6 | -0.9 |
| | comp=Z,38nm,0.9s | | | | | | |
| LUWI | Luwuk | 20.93 | 284 | P | P | 14 56 36.1 | -2.0 |
| INKA | Innaminka | 21.14 | 186 | P | P | 14 56 43.2 | +3.0 |
| DAV | Davao City (W) | 22.07 | 308 | | S | 15 00 53.6 | -0.3 |
| OOD | Oodnadatta | 22.20 | 197 | P | P | 14 56 54.4 | +2.8 |
| TW1H | Toowoomba 1 Ha | 22.50 | 159 | P | P | 14 56 57.0 | +2.0 |
| WRKA | Warakurna | 23.12 | 216 | P | P | 14 57 03.3 | +1.8 |
| KAPI | Kappang | 23.19 | 273 | LR | LR | 15 08 51.0 | |
| | comp=Z,420nm,19.9s,baz=88,slow=44 | | | | | | |
| LCRK | Leigh Creek | 24.15 | 190 | P | P | 14 57 13.1 | +1.7 |
| MULG | Mulgathing | 25.02 | 199 | P | P | 14 57 21.2 | +1.9 |
| STKA | Stephens Creek | 25.18 | 183 | P | P | 14 57 22.6 | +1.8 |
| STKA | Stephens Creek | 25.18 | 183 | P | P | 14 57 22.2 | +1.4 |
| STKA | Stephens Creek | 25.18 | 183 | P | P | 14 57 21.1 | +0.4 |
| | comp=Z,4.9nm,0.7s,baz=350,slow=9.5,SNR=8.6 | | | | | | |
| STKA | | | | LR | LR | 15 07 50.6 | |
| | comp=Z,1μm,22.0s,baz=359,slow=38 | | | | | | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| BBOO | Buckleboo | 26.87 | 193 | P | P | 14 57 36.7 | +0.6 |
| PSA00 | Pilbara Seismi | 26.89 | 234 | P | P | 14 57 37.0 | +0.7 |
| DZM | Mont Dzumac | 27.35 | 127 | *e*S | S | 15 02 15.1 | -5.7 |
| | comp=Z,77nm,22.4s | | | | | | |
| DZM | | | | *e*LR | LR | 15 04 29.5 | |
| | comp=Z,840nm,23.8s | | | | | | |
| FORT | Forrest | 27.84 | 208 | P | P | 14 57 46.5 | +1.7 |
| FORT | Forrest | 27.84 | 208 | | P | 14 57 46.2 | +1.4 |
| JCJ | Chichijima | 33.51 | 359 | LR | LR | 15 10 32.8 | |
| | comp=Z,120nm,20.8s,baz=124,slow=34 | | | | | | |
| NWAO | Narrogin (SRO) | 35.50 | 219 | LR | LR | 15 14 44.0 | |
| | comp=Z,773nm,21.3s,baz=34,slow=38 | | | | | | |
| MSVF | Nonsavu | 35.92 | 111 | LR | LR | 15 13 34.3 | |
| | comp=Z,274nm,18.2s,baz=291,slow=36 | | | | | | |
| JOW | Kunigami | 36.17 | 337 | LR | LR | 15 11 47.4 | |
| | comp=Z,296nm,19.7s,baz=138,slow=33 | | | | | | |
| JNU | Nakatsue | 41.15 | 344 | LR | LR | 15 14 36.5 | |
| | comp=Z,153nm,20.0s,baz=163,slow=33 | | | | | | |
| MJAR | Matsushiro Arr | 43.15 | 354 | P | P | 14 59 54.5 | -1.4 |
| | comp=Z,1.8nm,1.0s,baz=176,slow=12,SNR=2.4 | | | | | | |
| MJAR | | | | LR | LR | 15 16 12.0 | |
| | comp=Z,234nm,19.7s,baz=155,slow=34 | | | | | | |
| | comp=Z,1.8nm,1.0s | | | | | | |
| URZ | Urewera | 44.11 | 141 | LR | LR | 15 18 27.0 | |
| | comp=Z,414nm,18.6s,baz=34,slow=36 | | | | | | |
| TUWZ | Tuamarina | 44.27 | 146 | P | P | 15 00 04.8 | 0.0 |
| RPZ | Rata Peaks | 44.40 | 151 | LR | LR | 15 18 14.2 | |
| | comp=Z,757nm,18.5s,baz=311,slow=36 | | | | | | |
| GVZ | Greta Valley S | 44.85 | 149 | P | P | 15 00 09.3 | -0.3 |
| KSRS | Korea Array | 46.04 | 343 | P | P | 15 00 19.0 | +0.1 |
| | comp=Z,3.6nm,1.0s,baz=166,slow=9.8,SNR=15 | | | | | | |
| KSRS | | | | LR | LR | 15 17 50.7 | |
| | comp=Z,182nm,20.3s,baz=140,slow=34 | | | | | | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 50.09 | 301 | P | P | 15 00 51.7 | +1.1 |
| | comp=Z,1.3nm,0.8s,baz=120,slow=6.4,SNR=6.4 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| ASAJ | Asahikawa | 50.48 | 360 | LR | LR | 15 24 48.5 | |
| | comp=Z,68nm,19.1s,baz=174,slow=39 | | | | | | |
| USRK | Ussuriysk Ar. | 51.54 | 350 | P | P | 15 01 00.8 | -0.3 |
| | comp=Z,2.9nm,0.8s,baz=166,slow=6.7,SNR=7.1 | | | | | | |
| USRK | | | | LR | LR | 15 19 37.3 | |
| | comp=Z,152nm,21.7s,baz=166,slow=32 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| KLR | Kul'dur | 56.46 | 351 | LR | LR | 15 21 18.5 | |
| | comp=Z,155nm,21.9s,baz=164,slow=31 | | | | | | |
| RAR | Rarotonga | 57.11 | 111 | LR | LR | 15 22 48.6 | |
| | comp=Z,69nm,21.1s,baz=295,slow=33 | | | | | | |
| SONM | Songino Array | 63.07 | 333 | P | P | 15 02 21.9 | -0.9 |
| SONM | | | | IAmb | IAmb | 15 02 29.6 | |
| | comp=Z,5.3nm,1.4s | | | | | | |
| SONM | Songino Array | 63.07 | 333 | P | P | 15 02 22.6 | -0.2 |
| | comp=Z,1.6nm,0.8s,baz=171,slow=5.5,SNR=6.5 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| PALK | Pallekele | 63.66 | 281 | LR | LR | 15 31 53.4 | |
| | comp=Z,114nm,21.3s,baz=221,slow=38 | | | | | | |
| CASY | Casey | 63.67 | 194 | P | P | 15 02 26.3 | 0.0 |
| SHEM | Shemya Is, Ala | 64.74 | 20 | LR | LR | 15 27 00.8 | |
| | comp=Z,417nm,20.8s,baz=256,slow=33 | | | | | | |
| PPT | Papeete | 66.53 | 106 | LR | LR | 15 26 50.2 | |
| | comp=Z,82nm,21.9s,baz=346,slow=32 | | | | | | |
| PPT2 | Papeete2 | 66.53 | 106 | *e*LR | LR | 15 22 36.6 | |
| | comp=Z,142nm,22.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 15 22 38.0 | |
| | comp=Z,135nm,24.0s | | | | | | |
| TBI | Tubuai | 66.80 | 112 | *e*LR | LR | 15 22 44.0 | |
| | comp=Z,842nm,25.5s | | | | | | |
| YAK | Yakutsk | 69.20 | 353 | P | P | 15 03 01.4 | -0.3 |
| YAK | Yakutsk | 69.20 | 353 | LR | LR | 15 31 42.3 | |
| | comp=Z,140nm,20.5s,baz=162,slow=35 | | | | | | |
| VNDA | Vanda | 71.58 | 176 | P | P | 15 03 18.2 | +2.2 |
| VNDA | Vanda | 71.58 | 176 | P | P | 15 03 16.6 | +0.6 |
| | comp=Z,0.7nm,0.6s,baz=341,slow=5.8,SNR=8.1 | | | | | | |
| VNDA | | | | LR | LR | 15 33 57.8 | |
| | comp=Z,285nm,18.6s,baz=348,slow=35 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| SBA | Scott Base | 72.29 | 175 | P | P | 15 03 22.5 | +2.2 |
| SBA | | | | IAmb | IAmb | 15 03 32.7 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| MK31 | Makanchi Array | 75.47 | 322 | P | P | 15 03 40.0 | +0.5 |
| MKAR | Makanchi Array | 75.47 | 322 | P | P | 15 03 39.7 | +0.2 |
| MKAR | Makanchi Array | 75.47 | 322 | P | P | 15 03 39.4 | -0.1 |
| | comp=Z,4.3nm,0.9s,baz=111,slow=6.8,SNR=18 | | | | | | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| MAKZ | Makanchi | 75.67 | 322 | P | P | 15 03 41.1 | +0.5 |
| MAKZ | | | | IAmb | IAmb | 15 03 44.9 | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| NIL | Nilore | 77.07 | 307 | P | P | 15 03 47.7 | -1.2 |
| NIL | | | | IAmb | IAmb | 15 03 52.8 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| ZAA0 | Zalesovo Array | 77.44 | 329 | P | P | 15 03 49.6 | -0.8 |
| ZALV | Zalesovo Beam | 77.44 | 329 | P | P | 15 03 49.2 | -1.3 |
| ZALV | Zalesovo Beam | 77.44 | 329 | P | P | 15 03 48.8 | -1.6 |
| | comp=Z,2.5nm,0.9s,baz=96,slow=7.4,SNR=6.7 | | | | | | |
| ZALV | | | | LR | LR | 15 39 18.4 | |
| | comp=Z,76nm,19.0s,baz=104,slow=37 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| KURK | Kurchatov | 79.35 | 324 | P | P | 15 04 00.8 | -0.3 |
| KURK | | | | IAmb | IAmb | 15 04 04.4 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 79.36 | 324 | P | P | 15 04 01.4 | +0.3 |
| | comp=Z,3.1nm,1.0s,baz=114,slow=4.9,SNR=14 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| RKT | Rikitea | 80.12 | 112 | *e*LR | LR | 15 28 50.0 | |
| | comp=Z,461nm,29.0s | | | | | | |
| MAW | Mawson | 80.17 | 203 | LR | LR | 15 39 00.3 | |
| | comp=Z,179nm,18.1s,baz=80,slow=35 | | | | | | |
| KDAK | Kodiak Island | 82.33 | 29 | LR | LR | 15 34 53.7 | |
| | comp=Z,221nm,21.9s,baz=265,slow=31 | | | | | | |
| QSPA | South Pole Qui | 83.37 | 180 | P | P | 15 04 23.2 | +0.9 |
| QSPA | South Pole Qui | 83.37 | 180 | P | P | 15 04 21.7 | -0.6 |
| | comp=Z,5.0nm,1.0s,baz=319,slow=1.5,SNR=14 | | | | | | |
| QSPA | | | | LR | LR | 15 41 51.9 | |
| | comp=Z,871nm,18.8s,baz=18,slow=36 | | | | | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| G18K | Tagagawik | 83.68 | 21 | P | P | 15 04 23.0 | -0.7 |
| G18K | | | | IAmb | IAmb | 15 05 06.7 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| M20K | Styx River | 83.87 | 25 | P | P | 15 04 24.6 | -0.2 |
| M20K | | | | IAmb | IAmb | 15 04 26.0 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| K20K | Telida | 84.15 | 24 | P | P | 15 04 26.0 | -0.1 |
| K20K | | | | IAmb | IAmb | 15 04 30.2 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| G19K | Purcell Mounta | 84.36 | 21 | P | P | 15 04 27.3 | +0.2 |
| G19K | | | | IAmb | IAmb | 15 04 29.2 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| J20K | Nowinta River | 84.49 | 23 | P | P | 15 04 28.4 | +0.6 |
| J20K | | | | IAmb | IAmb | 15 04 30.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| SUA | Susitna One | 84.72 | 26 | P | P | 15 04 28.7 | -0.5 |
| SUA | | | | IAmb | IAmb | 15 04 31.6 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| E19K | Redstone River | 84.98 | 20 | P | P | 15 04 30.8 | +0.5 |
| E19K | | | | IAmb | IAmb | 15 04 31.7 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| BRVK | Borovoye | 85.01 | 325 | P | P | 15 04 31.7 | +1.0 |
| C19K | Lookout Ridge | 85.10 | 18 | P | P | 15 04 31.9 | +1.1 |
| C19K | | | | IAmb | IAmb | 15 04 33.2 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| D19K | Kuna River | 85.23 | 18 | P | P | 15 04 31.3 | -0.2 |
| D19K | | | | IAmb | IAmb | 15 05 14.8 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| F20K | Avaraart Lake | 85.28 | 20 | P | P | 15 04 32.3 | +0.6 |
| F20K | | | | IAmb | IAmb | 15 04 33.3 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| H21K | Melozitna Rive | 85.67 | 22 | P | P | 15 04 33.5 | -0.3 |
| SML | Sawmill | 85.92 | 26 | P | P | 15 04 34.3 | -0.8 |
| SML | | | | IAmb | IAmb | 15 04 41.7 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| Q23K | Middleton Isla | 85.97 | 29 | P | P | 15 04 34.1 | -1.2 |
| MLY | Manley | 86.19 | 23 | P | P | 15 04 35.4 | -1.0 |
| MLY | | | | IAmb | IAmb | 15 04 37.7 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| RND | Reindeer | 86.30 | 25 | P | P | 15 04 35.5 | -1.5 |
| RND | | | | IAmb | IAmb | 15 04 37.3 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| E21K | Killik River | 86.53 | 19 | P | P | 15 04 38.3 | +0.3 |
| E21K | | | | IAmb | IAmb | 15 04 40.4 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| DHY | Denali Highway | 86.80 | 25 | P | P | 15 04 39.5 | 0.0 |
| DHY | | | | IAmb | IAmb | 15 04 41.7 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| H23K | Yukon River | 86.97 | 22 | P | P | 15 04 40.2 | 0.0 |
| H23K | | | | IAmb | IAmb | 15 04 41.7 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| G23K | Bananza Creek | 87.15 | 21 | P | P | 15 04 41.0 | -0.1 |
| CCB | Clear Creek Bu | 87.19 | 24 | P | P | 15 04 39.5 | -1.8 |
| CCB | | | | IAmb | IAmb | 15 04 41.4 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| WSAR | Wadi Sarin | 87.44 | 294 | LR | LR | 15 51 02.4 | |
| | comp=Z,41nm,18.1s,baz=130,slow=40 | | | | | | |
| H24K | Noodor Dome | 87.61 | 23 | P | P | 15 04 42.1 | -1.2 |
| H24K | | | | IAmb | IAmb | 15 04 44.4 | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| ILAR | Eielson Array | 87.61 | 24 | P | P | 15 04 41.4 | -1.8 |
| ILAR | Eielson Array | 87.61 | 24 | P | P | 15 04 41.2 | -2.0 |
| | comp=Z,2.7nm,0.8s,baz=259,slow=4.7,SNR=36 | | | | | | |
| ILAR | | | | LR | LR | 15 42 02.9 | |
| | comp=Z,197nm,19.6s,baz=249,slow=34 | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| J25K | Salcha River, | 88.17 | 24 | P | P | 15 04 44.8 | -1.2 |
| J25K | | | | IAmb | IAmb | 15 04 46.8 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| C23K | Itkillik River | 88.23 | 19 | P | P | 15 04 46.8 | +0.8 |
| F24K | Squaw Lake | 88.23 | 21 | P | P | 15 04 47.2 | +1.0 |
| D24K | Happy Valley | 88.53 | 19 | P | P | 15 04 48.2 | +0.7 |
| J26L | Joseph Creek | 88.87 | 25 | P | P | 15 04 48.7 | -0.6 |
| M27K | Edge Creek, AK | 88.97 | 27 | P | P | 15 04 50.3 | +0.4 |
| M27K | | | | IAmb | IAmb | 15 04 51.8 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| K27K | Chicken | 89.35 | 25 | P | P | 15 04 52.1 | +0.6 |
| K27K | | | | IAmb | IAmb | 15 05 20.2 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| BMAR | Burnt Mountain | 89.39 | 22 | P | P | 15 04 52.2 | +0.5 |
| L29M | L29M | 90.83 | 26 | P | P | 15 04 58.9 | +0.5 |
| L29M | | | | IAmb | IAmb | 15 05 00.5 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| INK | Inuvik | 93.67 | 22 | LR | LR | 15 44 20.1 | |
| | comp=Z,344nm,20.6s,baz=228,slow=34 | | | | | | |
| DLBC | Dease Lake | 93.98 | 32 | LR | LR | 15 41 50.9 | |
| | comp=Z,210nm,20.4s,baz=297,slow=32 | | | | | | |
| BBB | Dease Lake | 94.47 | 38 | LR | LR | 15 42 38.9 | |
| | comp=Z,240nm,19.2s,baz=268,slow=32 | | | | | | |
| SIV | San Ignacio | 147.25 | 133 | PKPbc | PKPbc | 15 11 40.3 | +0.4 |
| | comp=Z,1.6nm,0.8s,baz=242,slow=7.9,SNR=3.6 | | | | | | |
| DBIC | Dimbokro | 148.09 | 272 | PKPbc | PKiKP | 15 11 43.4 | -0.5 |
| | comp=Z,5.5nm,0.9s,baz=84,slow=4.4,SNR=4.6 | | | | | | |

*IDC* ***10*** *15:03:28.3±0.8,3˚.48S×77˚.59W,h0km,mb3.9/7, mbtmp4.0/10,ML4.1/3,MS3.7/8,Error ellipse: s-maj=34.9km s-min=18.0km az=76.0*

*RSNC* ***10*** *15:03:29.5±0.7,4˚.5S±6˚×7˚.7W±˚,h0km,M4.5,mb4.5,mB5.2, ML3.9,Mw(mB)4.6*

*IGQ* ***10*** *15:03:33.9±0.8,4˚.5S±5˚×7˚.8W±˚,h10km,M4.6/15*

*VAO* ***10*** *15:03:44.6±1.1,4˚.19S×76˚.86W,h10km,mb4.4*

**ISC 10 15:03:31.2±0.5,3˚.65S±0˚.03×77˚.74W±0˚.04,h10km,n81, σ2ᵍ03/77,mb4.0/8,MS4.2/5,4C,Peru-Ecuador border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BOSC | San Juan Bosco | 0.90 | 303 | P | Pg | 15 03 48.4 | -0.2 |
| BOSC | | | | S | Sg | 15 03 59.6 | -0.8 |
| TAIS | Taisha | 1.28 | 11 | P | Pn | 15 03 55.2 | 0.0 |
| AZOG | Ecuador-Azogue | 1.42 | 309 | P | Pb | 15 03 58.3 | +0.3 |
| ALJ1 | Ecuador-Loja-U | 1.50 | 257 | P | Pg | 15 04 00.5 | +0.5 |
| GONZ | Gonzanam | 1.75 | 250 | P | Pn | 15 04 01.8 | -0.3 |
| PCRA | Pucara 2 | 1.81 | 284 | P | Pn | 15 04 03.2 | +0.2 |
| ZUMB | Zumba | 1.85 | 229 | P | Pb | 15 04 05.8 | +0.5 |
| ACH2 | Ecuador-Machal | 2.10 | 280 | P | Pb | 15 04 10.0 | +0.5 |
| BPAT | Tungurahua Vol | 2.24 | 342 | P | Pn | 15 04 09.6 | +0.8 |
| BMAS | Trigal station | 2.25 | 341 | P | Pn | 15 04 09.5 | +0.6 |
| TUYU | Q. Yuibug Volc | 2.27 | 341 | P | Pn | 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PCRV** | **Puerto La Cruz** | **18.94** | **43** | LR | LR | 15 16 31.2 | |
| | comp=Z,110nm,19.6s,slow=42 | | | | | | |
| **SIV** | **San Ignacio** | **20.47** | **128** | P | **P** | **15 08 09.0** | **-0.3** |
| | 3.0nm,0.8s,baz=316,slow=11,SNR=12 | | | | | | |
| | 3.0nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **20.70** | **156** | *e*P | Pn | 15 08 14.5 | 0.0 |
| **MCPB** | **Macapa, AP** | **25.87** | **83** | *e*P | **P** | **15 09 10.3** | **+6.9** |
| **MDP** | **Montagnes des** | **26.53** | **71** | LR | LR | 15 19 53.9 | |
| | comp=Z,67nm,21.5s,baz=278,slow=37 | | | | | | |
| **SNDB** | **Serra Nova Dou** | **27.45** | **109** | *e*P | **P** | **15 09 21.5** | **+3.8** |
| **PLCA** | **Paso Flores** | **37.48** | **171** | P | **P** | **15 10 44.0** | **-1.2** |
| | 1.2nm,0.6s,baz=340,slow=8.9,SNR=8.1 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **54.43** | **331** | P | **P** | **15 12 57.1** | **-1.9** |
| | 0.6nm,0.7s,baz=119,slow=12,SNR=4.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.20** | **322** | P | **P** | **15 13 10.7** | **-1.1** |
| | 0.4nm,0.6s,baz=116,slow=6.3,SNR=3.3 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **PMSA** | **Palmer Station** | **61.80** | **173** | *e*P | P | 15 13 59.4 | +10 |
| **YKA** | **Yellowknife Ar** | **71.65** | **343** | LR | LR | 15 48 19.5 | |
| | comp=Z,244nm,21.4s,baz=299,slow=38 | | | | | | |
| **RES** | **Resolute Bay** | **78.90** | **355** | LR | LR | 15 54 27.7 | |
| | comp=Z,81nm,19.3s,baz=358,slow=39 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **79.61** | **162** | ⇑P | **P** | **15 15 37.3** | **-1.0** |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **VNA2** | **Neumayer~Watz** | **80.21** | **162** | ⇑P | **P** | **15 15 40.6** | **-1.0** |
| | comp=Z,1.5nm,0.8s,baz=296,slow=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.56** | **76** | P | **P** | **15 15 42.0** | **-2.6** |
| | comp=Z,0.3nm,0.5s,baz=288,slow=5.5,SNR=5.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **81.83** | **162** | ⇑P | **P** | **15 15 49.2** | **-1.0** |
| | comp=Z,43nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **81.83** | **162** | P | **P** | **15 15 49.3** | **-1.0** |
| | comp=Z,1.6nm,0.7s,baz=266,slow=6.6,SNR=11 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **83.54** | **162** | ⇑P | **P** | **15 15 58.3** | **-1.0** |
| | comp=Z,75nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.43** | **180** | P | **P** | **15 16 13.2** | **-0.7** |
| | comp=Z,4.1nm,1.0s,baz=148,slow=2.5,SNR=5.3 | | | | | | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **TSUM** | **Tsumeb** | **93.83** | **109** | LR | LR | 15 56 56.4 | |
| | comp=Z,104nm,21.8s,baz=149,slow=34 | | | | | | |
| **ARCES** | **ARCESS Array B** | **98.02** | **20** | LR | LR | 15 56 18.4 | |
| | comp=Z,97nm,21.9s,baz=62,slow=32 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **129.10** | **19** | PKP | **PKPdf** | **15 22 37.8** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=332,slow=2.7,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **133.66** | **19** | PKP | **PKPdf** | **15 22 46.4** | **-2.1** |
| | comp=Z,0.2nm,0.6s,baz=337,slow=3.3,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **140.73** | **232** | PKP | **PKPdf** | **15 23 00.6** | **-1.6** |
| | comp=Z,0.7nm,0.7s,baz=116,slow=2.1,SNR=3.4 | | | | | | |

**IDC 10 15:14:25.1±4.7, 47°.59N×92°.58W, h0km, mbtmp2.4/1, ML0.7/1, Error ellipse: s-maj=75.5km s-min=29.6km az=52.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ULM** | **Lac du Bonnet** | **3.44** | **322** | Pn | Pn | 15 15 19.0 | -0.9 |
| | 0.1nm,0.3s,baz=146,slow=12,SNR=1.5 | | | | | | |
| ULM | | | | Sn | Sn | 15 15 58.0 | -3.4 |
| | 0.1nm,0.3s,baz=326,slow=21,SNR=1.2 | | | | | | |
| ULM | | | | Lg | Lg | 15 16 11.8 | |
| | 0.5nm,0.3s,baz=58,slow=11,SNR=8.2 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.47** | **320** | I | I | 15 35 40.0 | |
| | baz=138,slow=329,SNR=9.0 | | | | | | |
| **I56US** | **NEWPORT INFRASI** | **6.45** | **281** | I | I | 16 56 50.0 | |
| | baz=84,slow=319,SNR=1.7 | | | | | | |

*IDC **10** 15:22:46.7±1.2, 2°.89S×147°.40E, h0km, mb3.8/7, mbtmp3.8/7, MS3.5/13, Error ellipse: s-maj=55.4km s-min=22.2km az=102.0*

*NEIC **10** 15:22:46.1±2.4, 2°.94S±0°.05×147°.8E±0°.1, h10km±1km, mb4.3/12, Error ellipse: s-maj=19.6km s-min=5.8km az=247.0*

**ISC 10 15:22:46.4±0.7, 2°.99S±0°.07×147°.8E±0°.1, h10km, n35, σ1§58/27, mb4.2/13, MS3.5/12, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MANU** | **Manus Island** | **1.02** | **337** | Pn | **Pb** | **15 23 05.3** | **-0.9** |
| MANU | | | | Sn | **Sn** | **15 23 20.1** | **-1.1** |
| **RABL** | **Rabaul** | **4.55** | **105** | Pn | **Pn** | **15 23 54.1** | **-1.3** |
| **PMG** | **Port Moresby** | **6.40** | **185** | Pn | **Pn** | **15 24 18.9** | **-1.8** |
| **COEN** | **Coen** | **11.80** | **202** | Pn | **Pn** | **15 25 37.3** | **+2.4** |
| **HNR** | **Honiara** | **13.69** | **118** | LR | LR | 15 31 31.7 | |
| | comp=Z,3μm,18.8s,baz=64,slow=37 | | | | | | |
| **GUMO** | **Guam** | **16.72** | **350** | LR | LR | 15 32 16.0 | |
| | comp=Z,49nm,19.5s,baz=162,slow=34 | | | | | | |
| **MTN** | **Manton Dam** | **19.14** | **238** | P | **P** | **15 27 09.1** | **-0.9** |
| **WB0** | **Warramunga Arr** | **21.18** | **217** | P | **P** | **15 27 34.7** | **+2.6** |
| WB0 | | | | IAmb | IAmb | 15 27 59.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.23** | **216** | P | **P** | **15 27 34.1** | **+1.3** |
| WR0 | | | | IAmb | IAmb | 15 27 37.0 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.33** | **217** | P | **P** | **15 27 33.3** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 15 27 37.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.34** | **217** | P | **P** | **15 27 32.3** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 15 27 38.6 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.34** | **217** | P | **P** | **15 27 34.3** | **+0.4** |
| **WRA** | **Warramunga Arr** | **21.34** | **217** | P | **P** | **15 27 34.2** | **+0.4** |
| | comp=Z,13nm,1.1s,baz=41,slow=11,SNR=43 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 31 40.3** | **+2.0** |
| | comp=Z,0.4nm,0.6s,baz=23,slow=1.8,SNR=6.8 | | | | | | |
| WRA | | | | LR | LR | 15 36 07.7 | |
| | comp=Z,163nm,19.3s,baz=272,slow=38 | | | | | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **22.56** | **235** | P | **P** | **15 27 45.6** | **-1.3** |
| KNRA | | | | IAmb | IAmb | 15 27 52.6 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **24.53** | **212** | P | **P** | **15 28 05.3** | **-1.1** |
| **ASAR** | **Alice Springs** | **24.54** | **212** | P | **P** | **15 28 06.9** | **+0.5** |
| **ASAR** | **Alice Springs** | **24.54** | **212** | P | **P** | **15 28 07.2** | **+0.8** |
| | comp=Z,1.8nm,0.6s,baz=38,slow=7.3,SNR=28 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 31 47.0** | **+2.2** |
| | comp=Z,0.1nm,0.4s,baz=27,slow=4.5,SNR=2.4 | | | | | | |
| ASAR | | | | LR | LR | 15 37 27.4 | |
| | comp=Z,178nm,18.9s,baz=27,slow=36 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **26.25** | **138** | P | **P** | **15 28 21.4** | **-0.6** |
| **DZM** | **Mont Dzumac** | **26.25** | **138** | LR | LR | 15 37 09.4 | |
| | comp=Z,193nm,21.1s,baz=331,slow=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.37** | **234** | P | **P** | **15 28 24.6** | **+1.6** |
| **STKA** | **Stephens Creek** | **29.31** | **191** | LR | LR | 15 40 54.3 | |
| | comp=Z,104nm,18.5s,baz=20,slow=37 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **32.82** | **234** | P | **P** | **15 29 18.1** | **-2.2** |
| PSA00 | | | | IAmb | IAmb | 15 29 43.5 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **MSVF** | **Nonsavu** | **33.12** | **118** | LR | LR | 15 42 42.9 | |
| | comp=Z,36nm,19.6s,baz=320,slow=36 | | | | | | |
| **JOW** | **Kunigami** | **35.12** | **329** | LR | LR | 15 41 20.8 | |
| | comp=Z,86nm,18.9s,baz=118,slow=32 | | | | | | |
| **JNU** | **Nakatsue** | **39.31** | **337** | LR | LR | 15 43 05.1 | |
| | comp=Z,61nm,18.7s,baz=129,slow=31 | | | | | | |
| **URZ** | **Urewera** | **44.17** | **146** | LR | LR | 15 47 09.3 | |
| | comp=Z,95nm,18.2s,baz=32,slow=33 | | | | | | |
| **KSRS** | **Korea Array** | **44.26** | **337** | P | **P** | **15 30 58.0** | **+1.8** |
| | comp=Z,0.6nm,0.8s,baz=150,slow=11,SNR=2.5 | | | | | | |
| KSRS | | | | LR | LR | 15 47 39.2 | |
| | comp=Z,33nm,19.1s,baz=145,slow=34 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **RAR** | **Rarotonga** | **54.10** | **114** | LR | LR | 15 55 00.8 | |
| | comp=Z,51nm,18.1s,baz=209,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.69** | **320** | P | **P** | **15 34 31.1** | **-1.0** |
| | comp=Z,0.2nm,0.8s,baz=137,slow=6.6,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **76.90** | **327** | P | **P** | **15 34 38.6** | **-0.2** |
| | comp=Z,0.4nm,0.4s,baz=139,slow=6.8,SNR=2.2 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **82.44** | **23** | P | **P** | **15 35 10.4** | **+1.8** |
| | comp=Z,0.9nm,1.0s,baz=251,slow=5.5,SNR=7.6 | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.95** | **180** | P | **P** | **15 35 31.2** | **-0.5** |
| **QSPA** | **South Pole Qui** | **86.95** | **180** | P | **P** | **15 35 34.1** | **+2.5** |
| | comp=Z,0.7nm,0.8s,baz=330,slow=0.6,SNR=1.6 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **BBB** | **Bella Bella** | **88.74** | **38** | LR | LR | 16 08 38.1 | |
| | comp=Z,32nm,19.7s,baz=275,slow=31 | | | | | | |
| **ELK** | **Elko** | **97.25** | **49** | LR | LR | 16 13 05.4 | |
| | comp=Z,24nm,19.7s,baz=279,slow=31 | | | | | | |

*IDC **10** 15:57:35.2±0.5, 7°.99S×116°.53E, h0km, mb4.4/16, mbtmp4.4/17, ML3.7/1, MS4.1/53, Error ellipse: s-maj=18.0km s-min=11.7km az=81.0*

*DJA **10** 15:57:37.8±0.1, 8°.5±2°.×11°.6E±°., h10km, M4.9/44, mb5.0/44, mB5.5/16, MLv5.0/24, Mw(mB)4.9/16, MwMwp4.8/4, Mwp5.1/4*

*NEIC **10** 15:57:38.1±2.5, 8°.09S±0°.06×116°.43E±0°.06, h10km±1km, mb4.8/30, Error ellipse: s-maj=11.2km s-min=9.4km az=33.0*

*GCMT **10** 15:57:40.2±0.2, 8°.11S±0°.01×116°.49E±0°.02, h12km, MW4.9/90, Moment Tensor Solution. s42,c55; s90,c127; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=1.76±.06; Mθθ=-1.99±.05; Mφφ=0.23±.07; Mrθ=-1.61±.15; Mθφ=-0.62±.05; Mφr=-0.27±.24; Best double couple: M=2.54800×10^16 NP1:φs=70.00000°, δ25.00000°, λ.82.00000°. Principal axes: T 2.3570, Plg70.0000°, Azm177.0000°; N 0.3830, Plg3.0000°, Azm78.0000°; P -2.7400, Plg20.0000°, Azm346.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 10 15:57:38.0±0.3, 8°.11S±0°.04×116°.50E±0°.05, h10km, n169, σ1§61/140, mb4.8/41, MS4.2/66, 6C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.73** | **149** | P | **Pg** | **15 57 52.8** | **+0.7** |
| **SRBI** | **Singaraja** | **1.28** | **271** | P | **Pn** | **15 58 00.4** | **-1.5** |
| **DNP** | **Denpasar** | **1.40** | **246** | P | **Pb** | **15 58 03.5** | **-0.7** |
| **PLAI** | **Plampang** | **1.45** | **120** | P | **Pn** | **15 58 04.5** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **261** | Pn | **Pn** | **15 58 15.9** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **261** | P | **Pn** | **15 58 15.8** | **-0.9** |
| **GRJI** | **Gresik** | **4.16** | **286** | P | **Pn** | **15 58 41.4** | **-0.3** |
| **BSSI** | **Bau Bau, Buton** | **4.41** | **64** | P | **Pn** | **15 58 43.6** | **-1.5** |
| **BWJI** | **Bawean** | **4.43** | **300** | P | **Pn** | **15 58 44.4** | **-0.9** |
| **KAPI** | **Kappang** | **4.46** | **47** | | **Pn** | **15 58 44.5** | **-1.3** |
| **KAPI** | **Kappang** | **4.46** | **47** | Pn | **Pn** | **15 58 43.1** | **-2.6** |
| | 4.3nm,0.3s,baz=221,slow=11,SNR=8.0 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 59 34.5** | **-3.3** |
| | 14nm,0.3s,baz=237,slow=22,SNR=6.7 | | | | | | |
| KAPI | | | | Lg | Lg | 15 59 53.4 | |
| | 13nm,0.3s,baz=262,slow=18,SNR=3.8 | | | | | | |
| KAPI | | | | LR | LR | 16 00 28.3 | |
| | comp=Z,1μm,19.6s,baz=241,slow=40 | | | | | | |
| | 12nm,0.3s | | | | | | |
| **BASI** | **Baing, Sumba** | **4.54** | **118** | P | **Pn** | **15 58 47.3** | **+0.5** |
| **PWJI** | **Pagerwojo** | **4.65** | **271** | P | **Pn** | **15 58 48.7** | **+0.3** |
| **BNSI** | **Bone** | **5.14** | **44** | P | **Pn** | **15 58 55.2** | **+0.1** |
| **EDFI** | **Ende, Flores** | **5.17** | **97** | P | **Pn** | **15 58 54.9** | **-0.7** |
| | 121nm,0.7s,2μm0.9nm | | | | | | |
| **MMRI** | **Maumere** | **5.70** | **96** | P | **Pn** | **15 59 04.1** | **+1.3** |
| **MMRI** | **Maumere** | **5.70** | **96** | Pn | **Pn** | **15 59 05.0** | **+2.3** |
| **MMRI** | **Maumere** | **5.70** | **96** | P | **Pn** | **15 59 03.0** | **+0.2** |
| **UGM** | **Wanagama** | **5.93** | **272** | P | **Pn** | **15 59 08.5** | **+2.6** |
| **UGM** | **Wanagama** | **5.93** | **272** | Pn | **Pn** | **15 59 08.2** | **+2.2** |
| **UGM** | **Wanagama** | **5.93** | **272** | P | **Pn** | **15 59 06.3** | **+0.4** |
| | 273nm,1.0s,1.5nm | | | | | | |
| **SMRI** | **Semarang** | **6.10** | **280** | Pn | **Pn** | **15 59 08.8** | **+0.5** |
| **SMRI** | **Semarang** | **6.10** | **280** | P | **Pn** | **15 59 08.7** | **+0.3** |
| | 114nm,0.6s,4μm1.3nm | | | | | | |
| **BBSI** | **Bau Bau** | **6.56** | **67** | P | **Pn** | **15 59 15.8** | **+1.1** |
| | 86nm,0.9s,0.5nm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.30** | **347** | P | **Pn** | **15 59 23.7** | **-1.1** |
| **BATI** | **Baumata** | **7.37** | **107** | P | **Pn** | **15 59 25.3** | **-0.5** |
| | 75nm,1.0s,0.3nm | | | | | | |
| **KPJI** | **Karang Pucung** | **7.54** | **275** | P | **Pn** | **15 59 28.4** | **+0.3** |
| | 60nm,0.8s,2μm0.4nm | | | | | | |
| **SOEI** | **Soe** | **7.84** | **103** | Pn | **Pn** | **15 59 36.5** | **+4.1** |
| **SOEI** | **Soe** | **7.84** | **103** | P | **Pn** | **15 59 33.0** | **+0.6** |
| | 104nm,0.7s,3μm | | | | | | |
| **BBJI** | **Bungbulang** | **8.80** | **274** | P | Pn | 15 59 49.5 | +4.1 |
| **CBJI** | **Citeko** | **9.72** | **279** | P | **Pn** | **15 59 56.2** | **-1.9** |
| | 70nm,0.7s,4μm | | | | | | |
| **DBJI** | **Dramaga** | **9.80** | **278** | P | **Pn** | **15 59 59.3** | **+0.2** |
| **GTOI** | **Gorontalo** | **10.85** | **37** | P | **Pn** | **16 00 13.0** | **-0.4** |
| **PPBI** | **Pangkal Pinang** | **11.89** | **299** | P | **Pn** | **16 00 28.2** | **+0.4** |
| **KASI** | **Kota Agung** | **12.20** | **281** | P | **Pn** | **16 00 30.1** | **-1.8** |
| | 36nm,0.8s,7μm | | | | | | |
| **LWLI** | **Liwa** | **12.74** | **283** | P | **Pn** | **16 00 38.7** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **13.32** | **139** | P | **Pn** | **16 00 47.1** | **-0.3** |
| | 53nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.32** | **139** | Pn | **Pn** | **16 00 49.4** | **+2.0** |
| **MBWA** | **Marble Bar** | **13.34** | **167** | P | **Pn** | **16 00 46.8** | **-0.8** |
| **MBWA** | **Marble Bar** | **13.34** | **167** | Pn | **Pn** | **16 00 48.5** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **13.77** | **167** | P | **Pn** | **16 00 52.6** | **-0.8** |
| **BNDI** | **Bandanaira** | **13.79** | **76** | P | **Pn** | **16 00 53.8** | **+0.1** |
| **KNRA** | **Kununurra** | **14.15** | **123** | Pn | **Pn** | **16 00 59.3** | **+0.6** |
| **GIRL** | **Giralia** | **14.61** | **188** | P | **Pn** | **16 01 05.3** | **+0.3** |
| **KDU** | **Kakadu** | **16.35** | **107** | P | **Pn** | **16 01 28.5** | **+0.7** |
| | 28nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **16.50** | **73** | P | **Pn** | **16 01 29.9** | **+0.2** |
| **FAKI** | **Fak Fak** | **16.50** | **73** | Pn | **Pn** | **16 01 30.0** | **+0.2** |
| **FAKI** | **Fak Fak** | **16.50** | **73** | P | **Pn** | **16 01 29.2** | **-0.5** |
| | 65nm,1.0s,1μm | | | | | | |
| **PPSI** | **Pulau Pagai** | **17.25** | **287** | P | **Pn** | **16 01 37.8** | **-1.5** |
| | 116nm,1.0s | | | | | | |
| **MEEK** | **Meekatharra** | **18.53** | **174** | P | **Pn** | **16 01 55.7** | **+0.7** |
| **SISI** | **Saibi** | **18.61** | **290** | P | **Pn** | **16 01 55.5** | **-0.5** |
| | 83nm,1.9s | | | | | | |
| **PBSI** | **Pulau Batu** | **19.85** | **293** | P | **P** | **16 02 08.2** | **-1.1** |
| | 139nm,1.9s | | | | | | |
| **WRKA** | **Warakurna** | **20.25** | **148** | P | **P** | **16 02 14.6** | **+0.9** |
| **WB0** | **Warramunga Arr** | **20.85** | **126** | P | **P** | **16 02 19.6** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 16 02 23.9 | |
| | comp=Z,51nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **20.85** | **181** | P | **P** | **16 02 21.5** | **+1.4** |
| **WRA** | **Warramunga Arr** | **20.89** | **126** | P | **P** | **16 02 19.8** | **-1.0** |
| **WRA** | **Warramunga Arr** | **20.89** | **126** | P | **P** | **16 02 19.3** | **-1.4** |
| | comp=Z,33nm,0.8s,baz=299,slow=12,SNR=75 | | | | | | |
| WRA | | | | LR | LR | 16 11 06.4 | |
| | comp=Z,851nm,19.6s,baz=14,slow=39 | | | | | | |
| | comp=Z,33nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.90** | **126** | P | **P** | **16 02 19.6** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 16 02 24.6 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.91** | **126** | P | **P** | **16 02 20.3** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 16 02 26.2 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **GSI** | **Gunungsitoli** | **21.06** | **296** | P | | 16 02 27.0 | |
| **GSI** | **Gunungsitoli** | **21.06** | **296** | P | **P** | **16 02 20.4** | **-2.2** |
| **GSI** | **Gunungsitoli** | **21.06** | **296** | P | **P** | **16 02 21.6** | **-1.0** |
| | comp=Z,79nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.07** | **126** | P | **P** | **16 02 22.0** | **-0.6** |
| **BLDU** | **Ballidu** | **22.39** | **180** | P | **P** | **16 02 38.7** | **+2.0** |
| **ASAR** | **Alice Springs** | **22.74** | **135** | P | **P** | **16 02 39.6** | **-0.9** |
| **ASAR** | **Alice Springs** | **22.74** | **135** | P | **P** | **16 02 39.3** | **-1.3** |
| | comp=Z,15nm,0.8s,baz=309,slow=8.2,SNR=72 | | | | | | |
| ASAR | | | | S | **S** | **16 06 48.4** | **-1.1** |
| | comp=Z,0.4nm,0.8s,baz=42,slow=8.8,SNR=2.1 | | | | | | |
| ASAR | | | | LR | LR | 16 11 42.8 | |
| | comp=Z,634nm,19.3s,baz=302,slow=37 | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.75** | **135** | P | **P** | **16 02 39.8** | **-0.8** |
| **LHMI** | **Lhok Sumawe** | **23.58** | **304** | P | **P** | **16 02 49.0** | **-0.1** |
| | comp=Z,135nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.70** | **179** | LR | LR | 16 14 00.7 | |
| | comp=Z,528nm,18.0s,baz=31,slow=40 | | | | | | |
| **QIS** | **Mount Isa** | **25.53** | **121** | P | **P** | **16 03 07.7** | **+0.6** |
| **QIZ** | **Qiongzhong** | **27.76** | **346** | P | **P** | **16 03 28.6** | **+1.5** |
| QIZ | | | | S | **S** | **16 08 13.9** | **+4.0** |
| QIZ | | | | LR | LR | | |
| | comp=Z,860nm,14.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,490nm,12.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,790nm,13.3s | | | | | | |
| **PMG** | **Port Moresby** | **30.32** | **95** | LR | LR | 16 19 24.9 | |
| | comp=Z,403nm,18.4s,baz=262,slow=43 | | | | | | |
| **CTA** | **Charters Tower** | **31.15** | **116** | P | **P** | **16 03 57.1** | **-0.2** |
| | comp=Z,1.0nm,0.8s,baz=275,slow=9.7,SNR=10 | | | | | | |
| CTA | | | | LR | LR | 16 18 26.0 | |
| | comp=Z,69nm,18.1s,baz=292,slow=40 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **31.15** | **116** | P | **P** | **16 03 57.2** | **-0.2** |
| CTAO | | | | IAmb | IAmb | 16 04 02.1 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.58** | **327** | P | **P** | **16 04 00.9** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **31.58** | **327** | P | **P** | **16 03 58.9** | **-2.2** |
| | comp=Z,0.4nm,0.4s,baz=225,slow=14,SNR=3.6 | | | | | | |
| CMAR | | | | LR | LR | 16 17 14.9 | |
| | comp=Z,634nm,18.9s,baz=165,slow=38 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.4nm,0.4s | | | | | | |
| **CRAI** | **Chiangrai** | **32.33** | **331** | P | **P** | **16 04 07.6** | **0.0** |
| **STKA** | **Stephens Creek** | **33.22** | **139** | P | **P** | **16 04 14.8** | **-0.6** |
| | comp=Z,10nm,0.9s,baz=311,slow=8.8,SNR=10.0 | | | | | | |
| STKA | | | | LR | LR | 16 18 37.9 | |
| | comp=Z,694nm,18.2s,baz=303,slow=38 | | | | | | |
| | comp=Z,10nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **35.47** | **53** | LR | LR | 16 20 13.4 | |
| | comp=Z,70nm,18.4s,baz=232,slow=38 | | | | | | |
| **JOW** | **Kunigami** | **36.56** | **18** | LR | LR | 16 20 55.8 | |
| | comp=Z,321nm,19.9s,baz=126,slow=38 | | | | | | |
| **PZH** | **PanZhiHua** | **37.27** | **338** | P | **P** | **16 04 52.7** | **+2.3** |
| PZH | | | | S | **S** | **16 10 40.1** | **+2.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,190nm,5.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,470nm,15.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,610nm,16.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,470nm,14.9s | | | | | | |
| **TNCH** | **TengChong** | **37.31** | **332** | P | **P** | **16 04 52.4** | **+1.6** |
| TNCH | | | | S | **S** | **16 10 40.0** | **+1.3** |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,12nm,2.0s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,180nm,4.8s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,820nm,12.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,510nm,11.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,1μm,12.8s | | | | | | |
| **PALK** | **Pallekele** | **38.83** | **292** | LR | LR | 16 21 04.3 | |
| | comp=Z,410nm,21.0s,baz=218,slow=36 | | | | | | |
| **NJ2** | **Nanjing** | **40.00** | **3** | *e*P | **P** | **16 05 14.4** | **+1.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **CD2** | **Chengdu** | **40.68** | **343** | P | **P** | **16 05 19.3** | **+0.5** |
| CD2 | | | | pP | sP | 16 05 29.6 | +7.0 |
| CD2 | | | | sP | pP | 16 05 34.2 | +13 |
| CD2 | | | | S | **S** | **16 11 29.8** | **+0.8** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,200nm,5.3s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,480nm,14.3s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,550nm,15.9s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,650nm,14.8s | | | | | | |
| **XAN** | **Xi'an** | **42.53** | **351** | ⇑P | **P** | **16 05 36.6** | **+2.6** |
| XAN | | | | pP | sP | 16 05 45.6 | +7.9 |
| XAN | | | | S | **S** | **16 11 53.1** | **-3.3** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,290nm,3.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,850nm,15.8s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,540nm,15.1s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,13.7s | | | | | | |
| **HNR** | **Honiara** | **42.94** | **95** | LR | LR | 16 24 56.2 | |
| | comp=Z,2μm,19.6s,baz=213,slow=38 | | | | | | |
| **JCJ** | **Chichijima** | **42.95** | **35** | LR | LR | 16 22 34.3 | |
| | comp=Z,66nm,21.5s,baz=112,slow=35 | | | | | | |
| **JNU** | **Nakatsue** | **43.23** | **18** | P | **P** | **16 05 41.3** | **+1.7** |
| JNU | | | | IAmb | IAmb | 16 06 12.8 | |
| | comp=Z,35nm,1.6s | | | | | | |
| **JNU** | **Nakatsue** | **43.23** | **18** | LR | LR | 16 25 35.7 | |
| | comp=Z,154nm,20.3s,baz=188,slow=39 | | | | | | |
| **TIA** | **Tai'an** | **44.09** | **1** | P | **P** | **16 05 45.3** | **-1.2** |
| TIA | | | | S | **S** | **16 12 23.3** | **+4.2** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=Z,140nm,4.3s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,430nm,15.1s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,500nm,12.9s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,520nm,16.5s | | | | | | |
| **LSA** | **Lhasa** | **44.81** | **328** | P | **P** | **16 05 54.2** | **+1.3** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **44.81** | **328** | P | **P** | **16 05 53.2** | **+0.3** |
| LSA | | | | IAmb | IAmb | 16 06 02.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **HNS** | **HongShan** | **45.30** | **358** | ⇑P | **P** | **16 05 58.8** | **+2.7** |
| HNS | | | | LR | LR | | |
| | comp=Z,550nm,16.7s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,250nm,13.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,590nm,18.1s | | | | | | |
| **KSRS** | **Korea Array** | **46.57** | **13** | P | **P** | **16 06 02.8** | **-3.2** |
| | comp=Z,1.9nm,1.0s,baz=192,slow=8.6,SNR=6.4 | | | | | | |
| KSRS | | | | LR | LR | 16 27 47.9 | |
| | comp=

comp=Z,41nm,18.6s
XLT LR LR
comp=Z,140nm,11.0s
XLT LR LR
comp=Z,460nm,18.3s
**MDJ Mudanjiang 53.80 12** P **P** **16 07 00.4 -0.4**
MDJ S **S** **16 14 37.1 +1.6**
MDJ pmax pmax
comp=Z,5.0nm,0.9s
MDJ pmax pmax
comp=Z,150nm,5.5s
**USRK Ussuriysk Ar. 53.92 14** P **P** **16 06 59.9 -1.8**
comp=Z,2.2nm,0.6s,baz=188,slow=8.6,SNR=7.1
USRK LR LR 16 31 15.6
comp=Z,88nm,20.4s,baz=194,slow=38
comp=Z,2.2nm,0.6s
**ULN Ulaanbaatar 56.36 352** P **P** **16 07 20.2 +0.7**
ULN IAmb IAmb 16 07 21.2
comp=Z,9.2nm,1.4s
**SONM Songino Array 56.42 352** P **P** **16 07 20.5 +0.6**
SONM IAmb IAmb 16 07 21.5
comp=Z,9.0nm,1.2s
**SONM Songino Array 56.42 352** P **P** **16 07 18.0 -1.9**
comp=Z,3.4nm,0.6s,baz=171,slow=8.8,SNR=19
SONM LR LR 16 33 35.6
comp=Z,282nm,20.4s,baz=178,slow=38
comp=Z,3.4nm,0.6s
**ASAJ Asahikawa 57.10 22** LR LR 16 32 21.6
comp=Z,64nm,20.2s,baz=173,slow=37
**WMQ Urumqi 57.91 336** *eP* **P** **16 07 30.7 +0.3**
WMQ pmax pmax
comp=Z,15nm,0.7s
WMQ LR LR
comp=Z,230nm,23.9s
**KLR Kul'dur 58.64 12** LR LR 16 36 10.8
comp=Z,130nm,18.9s,baz=191,slow=40
**HEH HeiHe 58.89 8** *eP* **P** **16 07 35.9 -1.2**
HEH pmax pmax
comp=Z,19nm,0.9s
HEH pmax pmax
comp=Z,220nm,6.0s
HEH LR LR
comp=Z,200nm,18.1s
HEH LR LR
comp=Z,150nm,17.8s
HEH LR LR
comp=Z,270nm,15.0s
**RPZ Rata Peaks 59.14 137** LR LR 16 32 49.6
comp=Z,330nm,21.9s,baz=312,slow=36
**KSH Kashi 60.44 325** P **P** **16 07 48.7 +0.5**
KSH sP sP 16 08 01.0 +8.6
KSH pmax pmax
comp=Z,4.0nm,1.0s
**MSVF Nonsavu 60.53 106** LR LR 16 35 20.9
comp=Z,131nm,18.2s,baz=266,slow=37
**URZ Urewera 62.03 129** LR LR 16 34 43.3
comp=Z,340nm,19.9s,baz=23,slow=36
**MK31 Makanchi Array 62.57 334** P **P** **16 08 00.8 -1.4**
MK31 IAmb IAmb 16 08 06.2
comp=Z,5.6nm,0.7s
**MKAR Makanchi Array 62.57 334** P **P** **16 08 00.8 -1.4**
**MKAR Makanchi Array 62.57 334** P **P** **16 08 00.6 -1.7**
comp=Z,6.2nm,0.7s,baz=151,slow=6.6,SNR=53
MKAR LR LR 16 38 53.4
comp=Z,226nm,18.1s,baz=161,slow=40
comp=Z,6.2nm,0.7s
**MAKZ Makanchi 62.71 334** P **P** **16 08 02.5 -0.8**
**AAK Ala-Archa 63.37 326** LR LR 16 40 24.4
comp=Z,238nm,18.5s,baz=139,slow=41
**WSAR Wadi Sarin 64.57 300** LR LR 16 36 10.8
comp=Z,113nm,20.6s,baz=135,slow=36
**KKAR Karatay Array 65.90 325** P **P** **16 08 23.3 -0.8**
**KURBB Kurchatov Arra 67.10 335** P **P** **16 08 30.1 -1.6**
comp=Z,2.2nm,0.6s,baz=148,slow=5.5,SNR=20
KURBB LR LR 16 40 21.1
comp=Z,292nm,21.3s,baz=178,slow=38
comp=Z,2.2nm,0.6s
**KURK Kurchatov 67.13 335** P **P** **16 08 30.4 -1.4**
KURK IAmb IAmb 16 08 35.1
comp=Z,4.6nm,0.8s
**ZALV Zalesovo Beam 67.36 340** P **P** **16 08 31.4 -1.8**
comp=Z,4.2nm,0.6s,baz=145,slow=4.7,SNR=21
ZALV LR LR 16 40 45.6
comp=Z,116nm,19.1s,baz=162,slow=38
comp=Z,4.2nm,0.6s
**MAW Mawson 69.24 199** P **P** **16 08 44.5 -0.4**
comp=Z,5.9nm,0.9s,baz=61,slow=11,SNR=6.9
MAW LR LR 16 33 19.9
comp=Z,107nm,21.2s,baz=58,slow=31
comp=Z,5.9nm,0.9s
**YAK Yakutsk 70.68 7** P **P** **16 08 52.2 -1.5**
**YAK Yakutsk 70.68 7** LR LR 16 43 01.9
comp=Z,89nm,18.8s,baz=200,slow=39
**VNDA Vanda 73.25 171** P **P** **16 09 09.1 +0.1**
VNDA IAmb IAmb 16 09 21.3
comp=Z,14nm,1.5s
**VNDA Vanda 73.25 171** P **P** **16 09 08.9 -0.1**
comp=Z,1.6nm,0.6s,baz=312,slow=5.1,SNR=8.3
VNDA LR LR 16 39 51.9
comp=Z,155nm,19.9s,baz=326,slow=35
comp=Z,1.6nm,0.6s
**ABKAR Akbulak array 75.43 326** P **P** **16 09 19.1 -3.0**
**AKTO Aktyubinsk 77.10 326** LR LR 16 47 02.5
comp=Z,128nm,20.3s,baz=75,slow=38
**SHEM Shemya Is, Ala 77.80 32** LR LR 16 39 48.1
comp=Z,36nm,21.6s,baz=346,slow=33
**FURI Furi 79.35 281** LR LR 16 44 12.7
comp=Z,72nm,18.2s,baz=108,slow=35
**ARU Arti 79.90 331** LR LR 16 49 26.6
comp=Z,183nm,18.6s,baz=137,slow=39
**RAR Rarotonga 81.29 110** LR LR 16 43 51.1
comp=Z,65nm,21.9s,baz=279,slow=34
**GNI Garni 81.52 313** LR LR 16 50 40.6
comp=Z,63nm,19.1s,baz=104,slow=39
**QSPA South Pole Qui 81.88 180** P **P** **16 09 57.8 +0.3**
QSPA IAmb IAmb 16 10 05.1
comp=Z,19nm,1.4s
**QSPA South Pole Qui 81.88 180** P **P** **16 09 56.8 -0.7**
comp=Z,4.1nm,0.9s,baz=318,slow=1.3,SNR=12
QSPA LR LR 16 43 04.6
comp=Z,171nm,21.7s,baz=350,slow=33
comp=Z,4.1nm,0.9s
**BELG Belogorsnoye 83.81 325** LR LR 16 51 12.4
comp=Z,123nm,21.3s,baz=119,slow=38
**KIRV Kirov 85.27 331** LR LR 16 54 36.9
comp=Z,90nm,18.6s,baz=121,slow=40
**MBAR Mbarara 85.72 270** LR LR 16 42 48.9
comp=Z,80nm,21.2s,baz=88,slow=32
**ARPR Arapgir-MALATY 85.99 310** P **P** **16 10 16.7 -2.4**
**EIL Elat 86.70 300** LR LR 16 50 49.0
comp=Z,112nm,19.3s,baz=71,slow=37
**MMAI Mount Meron Ar 86.98 304** LR LR 16 52 27.8
comp=Z,46nm,20.0s,baz=52,slow=38
**BOSA Boshof 87.26 242** LR LR 16 45 31.4
comp=Z,99nm,19.4s,baz=79,slow=33
**TROLL Troll, Antarti 89.53 196** ⇑P **P** **16 10 36.4 +0.9**
comp=Z,122nm,0.6s
**BRTR Keskin Array B 89.68 310** LR LR 16 55 05.8
comp=Z,44nm,18.5s,baz=114,slow=38
**TBI Tubuai 90.50 114** *e*LR LR 16 39 36.7
comp=Z,1µm,31.8s
**OBN Obninsk 90.88 326** LR LR 16 54 54.1
comp=Z,121nm,20.0s,baz=164,slow=38
**SNAA Sanae 91.18 196** P **P** **16 10 42.4 -0.7**
**SNAA Sanae 91.18 196** ⇑P **P** **16 10 43.3 +0.2**
comp=Z,30nm,0.6s
**SNAA Sanae 91.18 196** P **P** **16 10 42.1 -1.0**
comp=Z,3.3nm,0.7s,baz=174,slow=6.2,SNR=24
SNAA LR LR 16 46 03.7
comp=Z,154nm,21.4s,baz=100,slow=32
comp=Z,3.3nm,0.7s
**PPT2 Papeete2 91.29 108** *e*LR LR 16 39 57.4
comp=Z,130nm,23.5s
PPT2 *e*LR LR 16 39 58.8
comp=Z,126nm,23.8s
**PPT Papeete 91.29 108** LR LR 16 47 23.3
comp=Z,71nm,21.1s,baz=352,slow=33
**BELA Belgrano 2 92.65 186** P **P** **16 10 49.8 +0.1**
**VNA2 Neumayer--Watz 92.82 196** ⇑P **P** **16 10 51.0 +0.4**
comp=Z,3.1nm,0.6s,baz=128,slow=3.1
**VNA3 Neumayer Olymp 93.23 195** ⇑P **P** **16 10 52.5 -0.1**
comp=Z,1.3nm,0.7s
**AKASG Malin Array Be 94.49 320** LR LR 17 03 47.6
comp=Z,28nm,18.2s,baz=94,slow=42
**TSUM Tsumeb 95.70 250** LR LR 16 51 19.1
comp=Z,65nm,18.6s,baz=312,slow=34
**MLR Muntele Rosu 96.11 315** LR LR 17 00 53.0
comp=Z,81nm,20.0s,baz=78,slow=40
**FINES FINESS Array B 97.27 331** LR LR 17 00 48.9
comp=Z,120nm,18.6s,baz=63,slow=39
**ARCES ARCESS Array B 97.89 339** LR LR 16 58 33.8
comp=Z,90nm,18.6s,baz=110,slow=37
**CPUP Villa Florida 145.24 190** PKPbc **PKPbc** **16 17 14.5 -1.9**
comp=Z,12nm,1.2s,baz=191,slow=4.0,SNR=6.0
**BDFB Brasilia 151.85 213** PKPbc **PKPdf** **16 17 31.2 +3.2**
comp=Z,3.4nm,0.6s,baz=86,slow=4.1,SNR=3.0
**LPAZ La Paz 155.33 169** PKPab **PKPab** **16 17 59.1 +0.7**
comp=Z,4.1nm,0.9s,baz=130,slow=6.4,SNR=7.0

*MOS **10** 15:58:16.0±1.7,44˚.19N×148˚.44E,h37km,mb4.0/6,Error ellipse: s-maj=12.3km s-min=10.9km az=11.9*
*SKHL **10** 15:58:22.8±0.3,44˚.30N×148˚.20E,h54km±3km,mb4.6/4*
*JMA **10** 15:58:22.8±0.3,44˚N±1˚×14˚8E±˚,h0km,MV3.8/26,SE OFF ETOROFU*
**ISC 10 15:58:21.9±1.2,44˚.21N±0˚.07×148˚.24E±0˚.10,h35km,n37,**
**σ1§13/52,mb3.8/6,5C-4D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.06** | **346** | *e*P | **Pn** | **15 58 40.4** | **+0.2** |
| KUR | | | | AMB | AMB | 15 58 41.6 | |
| | 90nm,0.2s | | | | | | |
| KUR | | | | *i* S | **Sn** | **15 58 52.9** | **-0.9** |
| KUR | | | | A | A | 15 58 55.3 | |
| | 510nm,0.3s | | | | | | |
| KUR | | | | A | A | 15 58 55.3 | |
| | 350nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **1.06** | **346** | *d i* PN | **Pn** | **15 58 40.4** | **+0.2** |
| KUR | | | | *i* S | **Sn** | **15 58 51.4** | **-2.4** |
| **SHO** | **Shikotan** | **1.07** | **252** | *i* P | **Pn** | **15 58 40.0** | **-0.4** |
| SHO | | | | AMB | AMB | 15 58 40.5 | |
| | 80nm,0.2s | | | | | | |
| SHO | | | | *i* S | **Sn** | **15 58 52.0** | **-2.0** |
| SHO | | | | A | A | 15 58 52.9 | |
| | 270nm,0.2s | | | | | | |
| SHO | | | | A | A | 15 58 52.9 | |
| | 620nm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **1.07** | **252** | ⇓ *i* PN | **Pn** | **15 58 40.2** | **-0.2** |
| SHO | | | | *i* S | **Sn** | **15 58 51.6** | **-2.4** |
| SHO | | | | pmax | pmax | | |
| | comp=N,33nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,128nm,0.1s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,151nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,779nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.72** | **265** | *e*P | **Pn** | **15 58 49.8** | **+0.5** |
| YUK | | | | AMB | AMB | 15 58 51.0 | |
| | comp=E,190nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **15 59 09.6** | **-0.5** |
| YUK | | | | A | A | 15 59 14.0 | |
| | comp=E,320nm,0.2s | | | | | | |
| YUK | | | | A | A | 15 59 14.0 | |
| | comp=E,260nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.72** | **265** | ⇓ *i* PN | **Pn** | **15 58 49.8** | **+0.5** |
| YUK | | | | *e*S | **Sn** | **15 59 09.6** | **-0.5** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,383nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,92nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,557nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,115nm,0.1s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.00** | **246** | *e*P | **Pn** | **15 58 52.9** | **-0.1** |
| NEM2 | | | | *e*S | **Sn** | **15 59 14.7** | **-2.1** |
| **NMR** | **Nemuro--Hokkai** | **2.00** | **246** | *i* P | **Pn** | **15 58 52.9** | **-0.3** |
| NMR | | | | *e*S | **Sn** | **15 59 15.7** | **-1.3** |
| **NMR** | **Nemuro--Hokkai** | **2.00** | **246** | ⇑ *i* PN | **Pn** | **15 58 52.9** | **-0.3** |
| NMR | | | | *e*S | **Sn** | **15 59 17.4** | **+0.4** |
| **RUSJ** | **Misakicho** | **2.16** | **268** | ⇑ *i* PN | **Pn** | **15 58 56.7** | **+1.4** |
| RUSJ | | | | *e*S | **Sn** | **15 59 21.3** | **+0.5** |
| **JRA** | **Rausu** | **2.27** | **264** | *e*P | **Pn** | **15 58 57.8** | **+1.1** |
| JRA | | | | *e*S | **Sn** | **15 59 24.1** | **+0.7** |
| **JNSB** | **Nemuroshibetsu** | **2.38** | **261** | *e*P | **Pn** | **15 58 59.4** | **+1.1** |
| **JKHN** | **Kushirohamanak** | **2.50** | **244** | *e*P | **Pn** | **15 59 00.3** | **+0.3** |
| **JNK** | **Nakash** | **2.62** | **258** | *e*P | **Pn** | **15 59 02.6** | **+0.9** |
| JNK | | | | *e*S | **Sn** | **15 59 31.8** | **-0.5** |
| **AKK** | **Akkeshi** | **2.74** | **246** | *e*P | **Pn** | **15 59 03.5** | **+0.2** |
| AKK | | | | *e*S | **Sn** | **15 59 33.5** | **-1.7** |
| **JAK** | **Akkeshi** | **2.84** | **246** | *e*P | **Pn** | **15 59 05.2** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **3.13** | **267** | *e*P | **Pn** | **15 59 09.8** | **+1.1** |
| **JAR** | **Ashorobuto** | **3.37** | **256** | *e*P | **Pn** | **15 59 13.5** | **+1.6** |
| **JOB** | **Onbets** | **3.46** | **249** | *e*P | **Pn** | **15 59 14.3** | **+1.2** |
| JOB | | | | *e*S | **Sn** | **15 59 52.0** | **-0.8** |
| **JCH** | **Churui** | **3.90** | **248** | *e*P | **Pn** | **15 59 20.2** | **+1.0** |
| JCH | | | | *e*S | **Sn** | **16 00 01.9** | **-1.8** |
| **ERM** | **Erimo** | **4.32** | **241** | *e*PN | **Pn** | **15 59 27.5** | **+2.5** |
| **JNBK** | **Urakawa-nobuka** | **4.45** | **246** | *e*P | **Pn** | **15 59 28.2** | **+1.4** |
| **YSS** | **Yuzh-Sakhalins** | **4.73** | **307** | *e*P | **Pn** | **15 59 31.4** | **+0.7** |
| YSS | | | | AMB | AMB | 15 59 32.0 | |
| | comp=E,20nm,0.2s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.73** | **307** | *d i* PN | **Pn** | **15 59 31.3** | **+0.6** |
| **MAJO** | **Matsushiro** | **10.82** | **228** | *e*PN | **Pn** | **16 00 55.7** | **+1.5** |
| **KLR** | **Kul'dur** | **12.38** | **300** | *i* PN | **Pn** | **16 01 16.8** | **+1.4** |
| **HIA** | **Hailar** | **20.11** | **295** | *i* P | **P** | **16 02 51.5** | **-1.0** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **BILL** | **Bilibino** | **25.71** | **16** | *e*P | **P** | **16 03 49.5** | **+1.1** |
| **BILL** | **Bilibino** | **25.71** | **16** | *e*P | **P** | **16 03 49.5** | **+1.1** |
| BILL | | | | *e*PPP | PPP | 16 04 33.6 | |
| BILL | | | | *e* | | 16 07 18.9 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,22nm,16.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.58** | **292** | *e*P | **P** | **16 04 14.6** | **0.0** |
| **ULN** | **Ulaanbaatar** | **28.58** | **292** | *i* P | **P** | **16 04 14.6** | **0.0** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **COLA** | **College** | **40.24** | **36** | *i* P | **P** | **16 05 55.1** | **+0.4** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **40.87** | **300** | ⇑ *i* P | **P** | **16 06 00.1** | **-0.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **45.07** | **298** | *e*P | **P** | **16 06 33.6** | **-0.7** |
| **KURK** | **Kurchatov** | **45.93** | **304** | *e*P | **P** | **16 06 40.1** | **-0.8** |
| **KURK** | **Kurchatov** | **45.93** | **304** | ⇑ *i* P | **P** | **16 06 40.1** | **-0.8** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **BRVK** | **Borovoye** | **49.87** | **309** | ⇑ *i* P | **P** | **16 07 10.3** | **-1.1** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |

*IDC **10** 16:01:08.9±1.5,2˚.70S×147˚.01E,h0km,mb3.9/4,*
*mbtmp4.0/5,ML1.5/1,MS4.2/1,Error ellipse: s-maj=87.3km s-min=27.6km az=113.0*
**ISC 10 16:01:10.5±1.4,2˚.7S±0˚.2×147˚.0E±0˚.2,h10km,n7,σ1§21/6,**
**mb3.9/4,Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TABU** | **Tabubil** | **6.30** | **245** | P | **Pb** | **16 03 00.5** | **+0.2** |
| **PMG** | **Port Moresby** | **6.71** | **178** | Pn | **Pn** | **16 02 50.0** | **+0.9** |
| | 0.5nm,0.3s,baz=331,slow=13,SNR=1.8 | | | | | | |
| | 11nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **14.55** | **118** | LR | LR | 16 09 07.0 | |
| | comp=Z,876nm,20.4s,baz=270,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.16** | **215** | P | **P** | **16 05 55.9** | **-0.1** |
| | 5.0nm,1.0s,baz=41,slow=11,SNR=8.1 | | | | | | |
| | 5.0nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **24.42** | **210** | P | **P** | **16 06 29.2** | **-0.2** |
| | 1.8nm,0.7s,baz=39,slow=6.9,SNR=8.0 | | | | | | |
| | 1.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **82.43** | **23** | P | **P** | **16 13 33.5** | **+0.8** |
| | 0.7nm,0.8s,baz=250,slow=5.8,SNR=5.5 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **87.29** | **180** | P | **P** | **16 13 55.7** | **-1.7** |
| | 2.7nm,1.1s,baz=16,slow=4.7,SNR=3.1 | | | | | | |
| | 2.7nm,1.1s | | | | | | |

*IDC **10** 16:08:49.8±6.2,8˚.68S×116˚.25E,h0km,mb3.2/3,*
*mbtmp3.3/3,Error ellipse: s-maj=274.7km s-min=29.7km az=56.0*
*DJA **10** 16:08:51.6±0.4,9˚S±6˚×11˚6E±˚,h10km,M3.5/7,MLv3.5/7*
**ISC 10 16:08:51.1±1.0,8.6S±0˚.1×116˚.15E±0˚.05,h10km,n9,**
**σ1§05/10,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.74** | **102** | P | **Pg** | **16 09 06.2** | **+0.7** |
| **DNP** | **Denpasar** | **0.93** | **264** | P | **Pg** | **16 09 09.3** | **+0.2** |
| **SRBI** | **Singaraja** | **1.05** | **298** | P | **Pg** | **16 09 10.4** | **-0.9** |
| SRBI | | | | S | **Sg** | **16 09 25.3** | **+0.3** |
| **PLAI** | **Plampang** | **1.63** | **99** | P | **Pn** | **16 09 19.4** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **1.98** | **273** | P | **Pn** | **16 09 25.1** | **+0.4** |
| **PWJI** | **Pagerwojo** | **4.34** | **277** | P | **Pn** | **16 09 57.8** | **+0.6** |
| **WRA** | **Warramunga Arr** | **20.91** | **125** | P | **P** | **16 13 33.1** | **-1.0** |
| | 0.4nm,0.5s,baz=305,slow=12,SNR=12 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.67** | **134** | P | **P** | **16 13 51.1** | **-1.8** |
| | 0.5nm,0.7s,baz=309,slow=8.8,SNR=6.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.83** | **352** | P | **P** | **16 18 36.9** | **+1.1** |
| | 0.2nm,0.3s,baz=175,slow=7.2,SNR=1.9 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*SNET **10** 16:11:31.7±1.1,13˚.01N×89˚.04W,h34km±4km,ML3.3*
*CATAC **10** 16:11:32.1±0.0,13˚.03N×89˚.03W,h9km±1km,ML3.5*
**ISC 10 16:11:30.9±2.1,13˚.0N±0˚.1×89˚.06W±0˚.04,h29km±12km,**
**n28,σ0§33/40,Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LALI** | **Alcalda de L** | **0.58** | **333** | *i* P | **Pb** | **16 11 43.4** | **+0.8** |
| LALI | | | | IAML | | 16 11 56.1 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.62** | **25** | *e*P | **Pb** | **16 11 43.7** | **+0.3** |
| **TECO** | **Alcaldia de Te** | **0.62** | **25** | *i* P | **Pb** | **16 11 43.4** | **0.0** |
| TECO | | | | IAML | | 16 11 44.2 | |
| | comp=Z,940nm,1.0s | | | | | | |
| TECO | | | | *i* S | **Sb** | **16 11 51.6** | **-0.3** |
| **LFRS** | **El Faro** | **0.65** | **359** | *e*P | **Pb** | **16 11 44.2** | **+0.4** |
| **PANCS** | **Alcalda de** | **0.65** | **349** | *i* P | **Pb** | **16 11 43.9** | **+0.1** |
| PANCS | | | | *i* S | **Sn** | **16 11 53.6** | **-0.1** |
| PANCS | | | | IAML | | 16 11 53.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **0.67** | **15** | *i* P | **Pb** | **16 11 44.3** | **+0.1** |
| COEG | | | | IAML | | 16 11 59.4 | |
| | comp=Z,550nm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **0.68** | **350** | *e*P | **Pb** | **16 11 44.8** | **+0.4** |
| LOMA | | | | IAML | | 16 11 45.0 | |
| | comp=Z,2µm,0.1s | | | | | | |
| LOMA | | | | *e*S | **Sn** | **16 11 54.2** | **-0.3** |
| **LOMA** | **Loma Larga** | **0.68** | **350** | *i* P | **Pb** | **16 11 44.7** | **+0.4** |
| LOMA | | | | IAML | | 16 11 44.9 | |
| | comp=Z,3µm,1.0s | | | | | | |
| LOMA | | | | *i* S | **Sn** | **16 11 54.8** | **+0.3** |
| **UESV** | **Universidad de** | **0.71** | **21** | *i* P | **Pb** | **16 11 44.7** | **-0.2** |
| UESV | | | | IAML | | 16 11 45.5 | |
| | comp=Z,990nm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **0.73** | **343** | *i* P | **Pb** | **16 11 45.3** | **0.0** |
| ITCA | | | | IAML | | 16 11 45.6 | |
| | comp=Z,3µm,1.0s | | | | | | |
| ITCA | | | | *i* S | **Sn** | **16 11 55.8** | **0.0** |
| **SNET** | **Serv Nac Est T** | **0.73** | **346** | *i* P | **Pb** | **16 11 45.3** | **0.0** |
| SNET | | | | *i* S | **Sn** | **16 11 55.9** | **+0.1** |
| SNET | | | | IAML | | 16 11 58.9 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **0.75** | **46** | *e*P | **Pb** | **16 11 45.8** | **+0.2** |
| **LFU** | **La Fuente** | **0.78** | **356** | *e*P | **Pb** | **16 11 46.1** | **+0.1** |
| **JAYA** | **Jayaque - finc** | **0.78** | **331** | *e*P | **Pb** | **16 11 46.2** | **+0.1** |
| JAYA | | | | *e*S | **Sb** | **16 11 56.7** | **+0.3** |
| JAYA | | | | IAML | | 16 11 59.2 | |
| | comp=Z,3µm,0.2s | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.78** | **331** | *i* P | **Pb** | **16 11 46.0** | **-0.1** |
| JAYA | | | | *i* S | **Sn** | **16 11 57.3** | **+0.2** |
| JAYA | | | | IAML | | 16 11 59.2 | |
| | comp=Z,6µm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **0.79** | **344** | *e*P | **Pb** | **16 11 46.4** | **+0.1** |
| BOQS | | | | IAML | | 16 12 01.8 | |
| | comp=Z,449nm,0.2s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.79** | **24** | *e*P | **Pb** | **16 11 46.2** | **-0.1** |
| SCLA | | | | *e*S | **Sn** | **16 11 57.8** | **+0.5** |
| **PQSS** | **Presa 15 de Se** | **0.81** | **36** | *e*S | **Sn** | **16 11 57.9** | **+0.4** |
| **LCY** | **Lacayo** | **0.87** | **59** | *e*P | **Pb** | **16 11 47.7** | **+0.2** |
| **PACA** | **Pacayal** | **0.87** | **55** | *e*P | **Pb** | **16 11 47.8** | **+0.2** |
| **PACA** | **Pacayal** | **0.87** | **55** | *i* P | **Pb** | **16 11 47.6** | **+0.1** |
| PACA | | | | *i* S | **Sn** | **16 11 59.9** | **+0.7** |
| PACA | | | | IAML | | 16 12 05.4 | |
| | comp=Z,7µm,1.0s | | | | | | |
| **VSM** | **San Miguel** | **0.89** | **59** | *e*P | **Pb** | **16 11 48.0** | **0.0** |
| **BLLM** | **Bellamira** | **0.92** | **59** | *e*P | **Pb** | **16 11 48.0** | **-0.4** |
| **SBLS** | **San Blas** | **1.03** | **327** | *e*P | **Pb** | **16 11 50.1** | **-0.2** |
| **NUBE** | **Las Nubes** | **1.17** | **323** | *e*P | **Pn** | **16 11 51.5** | **+0.1** |
| NUBE | | | | *e*S | **Sb** | **16 12 06.8** | **-0.5** |
| NUBE | | | | *e*S | **Sn** | **16 12 06.9** | **+0.4** |
| **LCND** | **La Caada** | **1.18** | **73** | *e*P | **Pn** | **16 11 51.6** | **0.0** |
| LCND | | | | IAML | | 16 12 09.1 | |
| | comp=Z,380nm,0.2s | | | | | | |
| **CNCH** | **Conchagua** | **1.23** | **75** | *e*P | **Pn** | **16 11 52.0** | **-0.3** |
| **MTO3** | **Montecristo** | **1.45** | **348** | *e*P | **Pn** | **16 11 54.9** | **-0.6** |

*CATAC **10** 16:25:25.6±0.7,10˚.01N×86˚.13W,h13km±3km,ML4.2*
*UCR **10** 16:25:25.7±0.8,9˚.98N×86˚.15W,h28km±4km,MW4.7*
*IDC **10** 16:25:27.8±0.7,11˚.29N×85˚.16W,h0km,mb3.8/7,*
*mbtmp3.8/8,ML3.1/2,Error ellipse: s-maj=28.1km s-min=9.5km az=73.0*
*NEIC **10** 16:25:32.2±2.2,10˚.28N±0˚.10×85˚.83W±0˚.09,h45km±7km,*
*mb4.2/15,Error ellipse: s-maj=16.4km s-min=8.6km az=218.0*
*SNET **10** 16:25:33.9±0.7,10˚.59N×86˚.13W,h116km±97km,ML4.1*
**ISC 10 16:25:28.1±1.2,10˚.11N±0˚.04×86˚.04W±0˚.04,h32km±8km,**
**n90,σ1§52/103,mb4.2/16,Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SACU** | **Santa Cruz** | **0.47** | **71** | *e*P | **Pb** | **16 25 38.3** | **0.0** |
| SACU | | | | *e*S | **Sn** | **16 25 47.5** | **+1.5** |
| **INDI** | **Punta indio, G** | **0.58** | **114** | *i* P | **Pb** | **16 25 38.3** | **-1.6** |
| INDI | | | | *i* S | **Sb** | **16 25 47.7** | **-0.3** |
| INDI | | | | IAML | | 16 25 57.9 | |
| | comp=Z,13µm,1.0s | | | | | | |
| **NICO** | **Nicoya** | **0.58** | **87** | *e*P | **Pb** | **16 25 39.1** | **-0.9** |
| NICO | | | | *e*S | **Sn** | **16 25 50.1** | **+1.4** |
| **DELF** | **Filadelfia** | **0.59** | **55** | *e*P | **Pn** | **16 25 40.9** | **+0.7** |
| **ALIBA** | **Liberia Airpor** | **0.69** | **45** | *e*P | **Pn** | **16 25 43.1** | **+1.5** |
| **ELI1** | **Hacienda Flor** | **0.72** | **42** | *e*P | **Pb** | **16 25 42.9** | **+0.6** |
| **ERIA** | **Liberia** | **0.79** | **48** | *e*P | **Pb** | **16 25 43.9** | **+0.5** |
| **GPS3** | **Bodega del ICE** | **0.93** | **46** | *e*P | **Pb** | **16 25 46.5** | **+0.7** |
| **GPS2** | **Hotel Rincn d** | **0.93** | **46** | *e*P | **Pn** | **16 25 45.3** | **+0.2** |
| **VRLE** | **La Escondida,** | **0.95** | **44** | *e*P | **Pn** | **16 25 45.5** | **+0.2** |
| **VORI** | **VORI** | **0.98** | **44** | *e*P | **Pn** | **16 25 46.0** | **+0.2** |
| **COLC** | **Colonia** | **0.99** | **56** | *e*P | **Pn** | **16 25 46.1** | **+0.2** |
| **CUI** | **Cuipilapa** | **1.02** | **58** | *e*P | **Pn** | **16 25 46.7** | **+0.4** |
| **LCRUZ** | **La Cruz** | **1.05** | **23** | *e*P | **Pb** | **16 25 48.1** | **+0.4** |
| **CBL1** | **Cabuya** | **1.07** | **119** | *e*P | **Pn** | **16 25 45.0** | **-1.8** |
| CBL1 | | | | *e*S | **Sn** | **16 25 59.4** | **-1.3** |
| **JUNT** | **Juntas** | **1.08** | **81** | *e*P | **Pn** | **16 25 46.9** | **-0.1** |
| **JTS** | **Las Juntas de** | **1.09** | **80** | | **Pn** | **16 25 47.1** | **-0.1** |
| **JTS** | **Las Juntas de** | **1.09** | **80** | Pg | **Pn** | **16 25 45.6** | **-1.6** |
| | comp=Z,55nm,0.3s,baz=255,slow=5.8,SNR=133 | | | | | | |
| JTS | | | | Lg | Lg | 16 26 03.5 | |
| | comp=Z,215nm,0.3s,baz=359,slow=21,SNR=7.2 | | | | | | |
| **JTS** | **Las Juntas de** | **1.09** | **80** | *e*P | **Pn** | **16 25 46.8** | **-0.3** |
| **TENO** | **El Achiote** | **1.20** | **60** | *e*P | **Pn** | **16 25 48.3** | **-0.5** |
| **MTEVE** | **Monteverde** | **1.21** | **80** | *e*P | **Pb** | **16 25 49.9** | **-0.7** |
| **ARE1** | **Arenal 1** | **1.35** | **75** | *e*P | **Pn** | **16 25 51.6** | **+0.8** |
| **VERA** | **Finca Concepci** | **1.37** | **57** | *e*P | **Pb** | **16 25 52.0** | **-1.2** |
| **SOCE** | **Pocosol** | **1.43** | **79** | | **Pn** | **16 25 52.7** | **+0.8** |
| **SOCE** | **Pocosol** | **1.43** | **79** | *i* P | **Pn** | **16 25 52.4** | **+0.5** |
| SOCE | | | | IAML | | 16 25 58.3 | |
| | comp=Z,3µm,1.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HDC | | | | | IAML | | | 16 26 46.6 |
| | comp=Z,2μm,1.0s | | | | | | | |
| **HDC3** | **Heredia 3** | **1.90** | **93** | *i* P | | **Pn** | **16 25 59.6** | **+1.1** |
| HDC3 | | | | *i* S | | **Sb** | **16 26 25.2** | **-0.5** |
| HDC3 | | | | | IAML | | 16 26 40.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **MAS3** | **Al N del Volca** | **1.91** | **356** | *i* P | | **Pn** | **16 25 59.8** | **+1.3** |
| MAS3 | | | | | IAML | | 16 26 16.2 | |
| | comp=Z,850nm,1.0s | | | | | | | |
| MAS3 | | | | *i* S | | **Sb** | **16 26 24.6** | **-1.2** |
| **ACON** | **Acoyapa** | **2.04** | **25** | | | **Pn** | **16 26 00.8** | **+0.6** |
| **ACON** | **Acoyapa** | **2.04** | **25** | *i* P | | **Pn** | **16 26 01.3** | **+1.1** |
| ACON | | | | | IAML | | 16 26 11.7 | |
| | comp=Z,980nm,1.0s | | | | | | | |
| ACON | | | | *i* S | | **Sb** | **16 26 28.8** | **-0.6** |
| **ACON** | **Acoyapa** | **2.04** | **25** | *e*P | | **Pn** | **16 26 00.9** | **+0.7** |
| **LCR2** | **La Lucha 2** | **2.04** | **100** | | | **Pn** | **16 26 01.1** | **+0.7** |
| **LCR2** | **La Lucha 2** | **2.04** | **100** | *i* P | | **Pn** | **16 26 00.6** | **+0.2** |
| LCR2 | | | | *i* S | | **Sn** | **16 26 26.8** | **+1.9** |
| LCR2 | | | | | IAML | | 16 26 49.8 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **2.04** | **100** | *e*P | | **Pn** | **16 26 00.6** | **+0.2** |
| **COPN** | **Copaltepe** | **2.13** | **345** | *i* P | | **Pn** | **16 26 01.7** | **+0.2** |
| COPN | | | | | IAML | | 16 26 57.2 | |
| | comp=Z,540nm,1.0s | | | | | | | |
| **HUEN** | | **2.22** | **357** | *i* P | | **Pn** | **16 26 03.3** | **+0.6** |
| HUEN | | | | | IAML | | 16 27 32.5 | |
| | comp=Z,590nm,1.0s | | | | | | | |
| **BUS1** | **Rivas** | **2.33** | **103** | *e*P | | **Pn** | **16 26 04.4** | **-0.2** |
| **BOAB** | **BOACO BROADBAN** | **2.36** | **9** | | | **Pn** | **16 26 05.5** | **+0.9** |
| **BOAB** | **BOACO BROADBAN** | **2.36** | **9** | *i* P | | **Pn** | **16 26 05.4** | **+0.8** |
| BOAB | | | | | IAML | | 16 27 02.0 | |
| | comp=Z,530nm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **2.46** | **345** | Pn | | **Pn** | **16 26 08.6** | **+2.5** |
| **ESPN** | **Las Esperanzas** | **2.69** | **39** | Pn | | **Pn** | **16 26 10.8** | **+1.6** |
| **ESPN** | **Las Esperanzas** | **2.69** | **39** | *e*P | | **Pn** | **16 26 09.9** | **+0.8** |
| **CRIN** | **San Cristobal** | **2.76** | **339** | Pn | | **Pb** | **16 26 15.1** | **-1.7** |
| **PTJ1** | **Puerto Jimnez** | **3.12** | **120** | *i* P | | **Pn** | **16 26 15.2** | **+0.1** |
| PTJ1 | | | | *i* S | | **Sn** | **16 26 52.7** | **+1.3** |
| PTJ1 | | | | | IAML | | 16 27 35.8 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **3.61** | **331** | *e*P | | **Pn** | **16 26 22.5** | **+0.5** |
| CNCH | | | | *e*S | | **Sn** | **16 27 01.3** | **-2.2** |
| CNCH | | | | | IAML | | 16 27 12.3 | |
| | comp=Z,724nm,0.4s | | | | | | | |
| **INTP** | **Intipuca** | **3.65** | **327** | *e*P | | **Pn** | **16 26 23.5** | **+1.0** |
| INTP | | | | *e*S | | **Sn** | **16 27 01.9** | **-2.6** |
| **LCND** | **La Caada** | **3.66** | **331** | *e*P | | **Pn** | **16 26 23.6** | **+1.0** |
| LCND | | | | *e*S | | **Sn** | **16 27 02.1** | **-2.6** |
| LCND | | | | | IAML | | 16 27 08.0 | |
| | comp=Z,273nm,0.3s | | | | | | | |
| **LCY** | **Lacayo** | **3.97** | **326** | *e*P | | **Pn** | **16 26 28.5** | **+1.6** |
| **PACA** | **Pacayal** | **4.02** | **326** | *e*P | | **Pn** | **16 26 29.1** | **+1.4** |
| **SCLA** | **Alcaldia de Sa** | **4.44** | **324** | *e*P | | **Pn** | **16 26 34.4** | **+1.1** |
| **JAYA** | **Jayaque - finc** | **4.85** | **317** | *e*P | | **Pn** | **16 26 40.2** | **+1.1** |
| **NUBE** | **Las Nubes** | **5.25** | **316** | *e*P | | **Pn** | **16 26 45.8** | **+1.2** |
| **MTO3** | **Montecristo** | **5.36** | **323** | | | **Pn** | **16 26 47.8** | **+1.7** |
| **MTO3** | **Montecristo** | **5.36** | **323** | *e*P | | **Pn** | **16 26 47.7** | **+1.6** |
| **APG** | **El Apazote** | **6.51** | **319** | Pn | | **Pn** | **16 27 03.3** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=116,slow=8.8,SNR=6.3 | | | | | | | |
| **CMIG** | **Matias Romero** | **11.05** | **310** | Pn | | **Pn** | **16 28 05.5** | **+1.5** |
| | comp=Z,0.4nm,0.3s,baz=160,slow=9.3,SNR=3.5 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **SLOR** | **San Lorenzo -** | **13.12** | **145** | Pn | | **Pn** | **16 28 37.0** | **+4.1** |
| **PCRV** | **Puerto La Cruz** | **21.07** | **88** | P | | **P** | **16 30 04.8** | **-5.1** |
| | comp=Z,2.1nm,0.5s,baz=342,slow=12,SNR=2.1 | | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| **LRAL** | **Lakeview Retre** | **22.84** | **358** | P | | **P** | **16 30 29.6** | **+1.0** |
| LRAL | | | | | IAmb | IAmb | 16 30 31.9 | |
| | comp=Z,7.5nm,1.0s | | | | | | | |
| **GOGA** | **Godfrey** | **23.31** | **5** | P | | **P** | **16 30 34.4** | **+1.0** |
| GOGA | | | | | IAmb | IAmb | 16 30 35.8 | |
| | comp=Z,5.9nm,0.7s | | | | | | | |
| **Y49A** | **Blount Mountai** | **23.64** | **359** | P | | **P** | **16 30 37.2** | **+0.6** |
| **HODGE** | **Hodges** | **24.26** | **8** | P | | **P** | **16 30 41.7** | **-0.7** |
| **BRDY** | **Brady** | **24.27** | **332** | P | | **P** | **16 30 43.2** | **+0.7** |
| **JSC** | **Jenkinsville** | **24.46** | **10** | P | | **P** | **16 30 43.5** | **-0.6** |
| **W50A** | **Signal Mountai** | **24.99** | **1** | P | | **P** | **16 30 48.4** | **-0.7** |
| W50A | | | | | IAmb | IAmb | 16 30 53.5 | |
| | comp=Z,8.1nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **25.25** | **322** | P | | **P** | **16 30 54.1** | **+2.5** |
| **TXAR** | **Lajitas Array** | **25.25** | **322** | P | | **P** | **16 30 53.6** | **+2.0** |
| | comp=Z,1.1nm,0.5s,baz=137,slow=10.0,SNR=20 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **25.26** | **322** | P | | **P** | **16 30 53.9** | **+2.3** |
| **MIAR** | **Mount Ida** | **25.28** | **345** | P | | **P** | **16 30 52.4** | **+0.7** |
| MIAR | | | | | IAmb | IAmb | 16 30 54.0 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **25.52** | **4** | P | | **P** | **16 30 55.4** | **+1.6** |
| TKL | | | | | IAmb | IAmb | 16 30 57.5 | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| **V53A** | **Saluda** | **25.62** | **6** | P | | **P** | **16 30 55.8** | **+1.1** |
| V53A | | | | | IAmb | IAmb | 16 30 58.9 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **S51A** | **Beattyville** | **27.50** | **4** | P | | **P** | **16 31 11.3** | **-0.3** |
| S51A | | | | | IAmb | IAmb | 16 31 12.7 | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **Q54A** | **Coxs Mills** | **29.13** | **8** | P | | **P** | **16 31 27.1** | **+1.0** |
| Q54A | | | | | IAmb | IAmb | 16 31 27.4 | |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| **J58A** | **Remsen** | **34.43** | **14** | P | | **P** | **16 32 12.4** | **-0.3** |
| **PDAR** | **Pinedale Array** | **38.48** | **332** | P | | **P** | **16 32 47.5** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=142,slow=10,SNR=4.9 | | | | | | | |
| PDAR | | | | | PcP | **PcP** | **16 35 02.5** | **+2.3** |
| | comp=Z,0.1nm,0.4s,baz=64,slow=8.3,SNR=2.4 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.37** | **320** | P | | **P** | **16 33 05.7** | **+2.3** |
| | comp=Z,1.2nm,0.7s,baz=136,slow=7.7,SNR=10 | | | | | | | |
| NVAR | | | | | PcP | **PcP** | **16 35 09.1** | **+2.7** |
| | comp=Z,0.2nm,0.5s,baz=163,slow=7.1,SNR=2.2 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **MDPB** | **Devils Postpil** | **40.42** | **318** | P | | **P** | **16 33 07.0** | **+3.1** |
| MDPB | | | | | IAmb | IAmb | 16 33 08.0 | |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| **SCHQ** | **Schefferville** | **47.14** | **15** | P | | **P** | **16 33 52.8** | **-4.5** |
| | comp=Z,3.5nm,0.9s,baz=233,slow=13,SNR=1.8 | | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **68.71** | **336** | P | | **P** | **16 36 27.2** | **-1.2** |
| | comp=Z,0.3nm,0.8s,baz=78,slow=13,SNR=2.5 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **77.71** | **35** | P | | **P** | **16 37 18.0** | **-3.7** |
| | comp=Z,1.1nm,0.8s,baz=252,slow=6.3,SNR=3.1 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **118.05** | **11** | PKP | | **PKiKP** | **16 44 12.6** | **+0.7** |
| | comp=Z,0.1nm,0.5s,baz=303,slow=6.6,SNR=1.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **139.62** | **245** | PKhKP | | PKPpre | 16 44 55.3 | |
| | comp=Z,0.3nm,0.8s,baz=100,slow=1.1,SNR=1.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **139.89** | **251** | PKhKP | | PKPpre | 16 44 55.0 | |
| | comp=Z,0.7nm,1.0s,baz=92,slow=2.0,SNR=3.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **151.19** | **350** | PKPbc | | **PKiKP** | **16 45 21.4** | **+1.6** |
| | comp=Z,0.6nm,0.4s,baz=5.2,slow=2.5,SNR=6.2 | | | | | | | |

*IDC **10** 16:27:40.1±4.9, 14°.53S×167°.27E, h115km±40km, mb3.6/8, mbtmp4.0/9, Error ellipse: s-maj=32.6km s-min=24.2km az=37.0*
*NOU **10** 16:27:42.4, 14°.47S×167°.34E, h123km, MLv4.8/21, Vanuatu Islands*
*NEIC **10** 16:27:49.1±2.2, 14°.91S±0°.02×167°.0E±0°.2, h162km±10km, mb4.4/16, Error ellipse: s-maj=22.1km s-min=1.9km az=95.0*

**ISC 10 16:27:45.5±0.8, 14°.71S±0°.10×167°.2E±0°.1, h150km, n50, σ1s42/50, mb4.1/14, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **3.15** | **162** | P | **Pn** | **16 28 34.6** | **-0.3** |
| **RTV** | **Rentapao** | **3.29** | **159** | P | **Pn** | **16 28 35.8** | **-0.9** |
| **LIFNC** | **LIFOU** | **6.03** | **179** | P | **Pn** | **16 29 11.0** | **-1.7** |
| | 94nm,0.8s | | | | | | |
| **LIFNC** | **LIFOU** | **6.03** | **179** | Pn | **Pn** | **16 29 11.0** | **-1.7** |
| **KOUNC** | **Koumac, New Ca** | **6.42** | **205** | P | **Pn** | **16 29 17.7** | **-0.1** |
| **KOUNC** | **Koumac, New Ca** | **6.42** | **205** | | **Pn** | **16 29 17.8** | **-0.1** |
| **MARNC** | **Mare, Loyalty** | **6.78** | **173** | P | **Pn** | **16 29 20.4** | **-2.3** |
| **YATNC** | **Mamie plateau,** | **7.31** | **182** | P | **Pn** | **16 29 29.7** | **-0.1** |
| **DZM** | **Mont Dzumac** | **7.35** | **185** | P | **Pn** | **16 29 30.2** | **-0.2** |
| **DZM** | **Mont Dzumac** | **7.35** | **185** | | **Pn** | **16 29 31.7** | **+1.3** |
| **DZM** | **Mont Dzumac** | **7.35** | **185** | P | **Pn** | **16 29 28.1** | **-2.3** |
| | 30nm,0.3s,baz=23,slow=13,SNR=96 | | | | | | |
| DZM | | | | S | **Sn** | **16 30 50.9** | **-1.8** |
| | 20nm,0.4s,baz=302,slow=21,SNR=3.2 | | | | | | |
| **NOUC** | **Port Laguerre** | **7.40** | **186** | P | **Pn** | **16 29 32.3** | **+1.4** |
| **ONTNC** | **Ouen Toro** | **7.59** | **185** | P | **Pn** | **16 29 35.3** | **+1.9** |
| **ONTNC** | **Ouen Toro** | **7.59** | **185** | | **Pn** | **16 29 35.1** | **+1.7** |
| **PINNC** | **Pines Island,** | **7.87** | **178** | P | **Pn** | **16 29 37.5** | **+0.3** |
| **PINNC** | **Pines Island,** | **7.87** | **178** | | **Pn** | **16 29 37.5** | **+0.3** |
| **EIDS** | **Eidsvold** | **18.44** | **232** | P | **Pn** | **16 31 53.3** | **+1.7** |
| **EIDS** | **Eidsvold** | **18.44** | **232** | P | **P** | **16 31 49.3** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 16 31 53.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **20.65** | **252** | P | **P** | **16 32 11.3** | **-2.3** |
| | comp=Z,0.4nm,0.7s,baz=47,slow=5.8,SNR=2.9 | | | | | | |
| **ARMA** | **Armidale** | **21.18** | **220** | P | **P** | **16 32 21.4** | **+2.2** |
| ARMA | | | | IAmb | IAmb | 16 32 55.7 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **OUZ** | **Omahuta** | **21.23** | **165** | P | **P** | **16 32 21.2** | **+1.6** |
| **BKZ** | **Black Stump Fm** | **25.71** | **163** | P | **P** | **16 33 02.1** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **25.71** | **163** | P | **P** | **16 33 02.4** | **+0.5** |
| BKZ | | | | IAmb | IAmb | 16 33 38.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.81** | **226** | P | **P** | **16 33 06.2** | **+3.3** |
| **STKA** | **Stephens Creek** | **28.93** | **229** | P | **P** | **16 33 29.6** | **-1.1** |
| | comp=Z,3.7nm,0.9s,baz=61,slow=13,SNR=2.5 | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **LBZ** | **Lake Benmore** | **29.69** | **176** | P | **P** | **16 33 37.8** | **+0.6** |
| LBZ | | | | IAmb | IAmb | 16 33 49.4 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.67** | **256** | P | **P** | **16 33 55.0** | **0.0** |
| WB0 | | | | IAmb | IAmb | 16 34 18.2 | |
| | comp=Z,9.8nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **31.72** | **256** | P | **P** | **16 33 55.7** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 16 34 23.8 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.73** | **256** | P | **P** | **16 33 54.6** | **-0.9** |
| | comp=Z,0.5nm,0.6s,baz=85,slow=8.7,SNR=12 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **32.54** | **249** | P | **P** | **16 34 02.9** | **+0.3** |
| **AS31** | **Alice Springs** | **32.58** | **249** | P | **P** | **16 34 02.1** | **-0.8** |
| **ASAR** | **Alice Springs** | **32.59** | **249** | P | **P** | **16 34 00.2** | **-2.8** |
| **ASAR** | **Alice Springs** | **32.59** | **249** | P | **P** | **16 34 02.9** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=79,slow=9.2,SNR=23 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **33.51** | **232** | P | **P** | **16 34 10.9** | **0.0** |
| **MULG** | **Mulgathing** | **34.13** | **237** | P | **P** | **16 34 17.2** | **+0.9** |
| **KNRA** | **Kununurra** | **37.04** | **263** | P | **P** | **16 34 39.7** | **-1.5** |
| KNRA | | | | IAmb | IAmb | 16 35 08.8 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **WRKA** | **Warakurna** | **37.85** | **248** | P | **P** | **16 34 48.6** | **+0.6** |
| **FORT** | **Forrest** | **39.22** | **239** | P | **P** | **16 35 00.3** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **39.92** | **259** | P | **P** | **16 35 06.5** | **+1.2** |
| **VNDA** | **Vanda** | **62.88** | **181** | P | **P** | **16 37 55.0** | **-0.1** |
| **VNDA** | **Vanda** | **62.88** | **181** | P | **P** | **16 37 55.4** | **+0.3** |
| | comp=Z,0.5nm,0.5s,baz=316,slow=8.4,SNR=2.9 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **SBA** | **Scott Base** | **63.16** | **180** | P | **P** | **16 37 58.1** | **+1.2** |
| **CASY** | **Casey** | **63.51** | **202** | P | **P** | **16 37 59.2** | **-0.2** |
| **QSPA** | **South Pole Qui** | **75.32** | **180** | P | **P** | **16 39 12.6** | **+0.4** |
| QSPA | | | | IAmb | IAmb | 16 39 43.8 | |
| | comp=Z,8.9nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.32** | **180** | P | **P** | **16 39 12.0** | **-0.1** |
| | comp=Z,2.1nm,0.8s,baz=89,slow=0.7,SNR=8.7 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.54** | **18** | P | P | 16 40 08.9 | -2.4 |
| | comp=Z,0.3nm,0.8s,baz=238,slow=5.2,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **SLBS** | **Sierra La Lagu** | **89.49** | **65** | P | **P** | **16 40 28.7** | **+2.4** |
| **SNAA** | **Sanae** | **93.56** | **183** | P | **P** | **16 40 42.8** | **-1.5** |
| | comp=Z,0.8nm,0.7s,baz=222,slow=5.5,SNR=2.8 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **97.12** | **316** | P | **P** | **16 41 00.0** | **-0.7** |
| | comp=Z,0.3nm,0.9s,baz=61,slow=6.8,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.21** | **345** | PKP | **PKPdf** | **16 46 15.1** | **-3.0** |
| | comp=Z,1.2nm,0.9s,baz=48,slow=1.8,SNR=4.0 | | | | | | |

*TEH **10** 16:41:56.7, 35°.68N×44°.52E, h7km±68km, ML2.7*
*ISN **10** 16:41:57.0±0.3, 35°.66N×44°.53E, h8km, ML2.8*

**ISC 10 16:41:56.8±1.7, 35°.7N±0°.1×44°.6E±0°.1, h10km, n9, σ0s91/11, Iraq**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IKRK** | **Kirkuk** | **0.31** | **216** | *e*Pg | **Pg** | **16 42 03.0** | **0.0** |
| | baz=30 | | | | | | |
| IKRK | | | | *e*Sg | **Sg** | **16 42 07.4** | **+0.3** |
| IKRK | | | | AML | AML | 16 42 13.2 | |
| | comp=N,1μm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 16 42 13.8 | |
| | comp=E,1μm,0.2s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **0.90** | **56** | Pg | **Pg** | **16 42 14.4** | **+0.3** |
| SDS1 | | | | Sg | **Sb** | **16 42 27.5** | **+0.8** |
| **MAHB** | **Mahabad** | **1.45** | **39** | Pg | **Pg** | **16 42 24.5** | **-0.2** |
| **IDHR** | **Dehrash** | **1.77** | **122** | Pn | **Pb** | **16 42 30.3** | **+0.8** |
| **GLG1** | **Gilan-e-Gharb** | **1.89** | **144** | Pn | **Pb** | **16 42 32.4** | **+0.9** |
| **ILIN** | **Lien** | **2.09** | **110** | Pn | **Pb** | **16 42 34.7** | **-0.3** |
| **IGHG** | **Ghaleghazi** | **2.11** | **128** | Pn | **Pb** | **16 42 34.8** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **2.43** | **146** | Pn | **Pb** | **16 42 39.3** | **-1.4** |
| **SNQR** | **Sonqor, Kerman** | **2.63** | **107** | Pn | **Pb** | **16 42 42.7** | **-1.5** |

*IDC **10** 16:45:34.2±1.0, 13°.79N×146°.51E, h0km, mb4.0/10, mbtmp4.0/10, Error ellipse: s-maj=25.3km s-min=17.9km az=91.0*
*NEIC **10** 16:45:38.1±2.1, 13°.64N±0°.06×146°.58E±0°.08, h31km±8km, mb4.4/10, Error ellipse: s-maj=12.1km s-min=7.0km az=59.0*

**ISC 10 16:45:37.1±0.7, 13°.7N±0°.1×146°.58E±0°.08, h26km, n27, σ1s04/29, mb4.3/16, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.67** | **266** | | **Pn** | **16 46 04.7** | **-0.1** |
| **GUMO** | **Guam** | **1.67** | **266** | Pn | **Pn** | **16 46 04.8** | **+0.1** |
| | 101nm,0.3s,baz=114,slow=3.1,SNR=108 | | | | | | |
| GUMO | | | | Sn | **Sn** | **16 46 25.0** | **-0.3** |
| | 215nm,0.3s,baz=15,slow=20,SNR=99 | | | | | | |
| **PATS** | **Pohnpei** | **13.40** | **119** | Pn | **Pn** | **16 48 44.5** | **-1.3** |
| **MANU** | **Manus Island** | **15.66** | **177** | P | **P** | **16 49 19.6** | **-0.5** |
| **JOW** | **Kunigami** | **21.54** | **310** | P | **P** | **16 50 24.1** | **-0.5** |
| **JOW** | **Kunigami** | **21.54** | **310** | P | **P** | **16 50 25.6** | **+1.1** |
| | 9.4nm,0.4s,baz=120,slow=17,SNR=5.7 | | | | | | |
| | 9.4nm,0.4s | | | | | | |
| **YULB** | **Yu-li** | **25.80** | **296** | P | **P** | **16 51 03.8** | **-2.6** |
| YULB | | | | IAmb | IAmb | 16 51 07.1 | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **28.92** | **328** | P | **P** | **16 51 33.2** | **-1.0** |
| | comp=Z,1.6nm,0.6s,baz=145,slow=9.5,SNR=9.7 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **32.86** | **340** | P | **P** | **16 52 06.8** | **-2.1** |
| USA0B | | | | IAmb | IAmb | 16 52 37.3 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **35.35** | **200** | P | **P** | **16 52 30.6** | **-0.1** |
| **WR0** | **Warramunga Arr** | **35.48** | **200** | P | **P** | **16 52 31.8** | **0.0** |
| WR0 | | | | IAmb | IAmb | 16 52 57.7 | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **35.53** | **200** | P | **P** | **16 52 32.3** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 16 52 34.7 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.53** | **200** | P | **P** | **16 52 33.2** | **+0.9** |
| | comp=Z,1.2nm,0.7s,baz=26,slow=9.6,SNR=13 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 55 03.4** | **+2.1** |
| | comp=Z,0.6nm,1.2s,baz=20,slow=3.3,SNR=5.0 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **39.15** | **199** | P | **P** | **16 53 03.9** | **+1.0** |
| | comp=Z,0.5nm,0.5s,baz=16,slow=11,SNR=13 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **47.61** | **324** | P | **P** | **16 54 10.9** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=130,slow=6.9,SNR=2.9 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.51** | **324** | P | **P** | **16 55 58.8** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=111,slow=6.8,SNR=4.8 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **62.57** | **316** | P | **P** | **16 55 59.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **62.57** | **316** | P | **P** | **16 55 59.6** | **+0.5** |
| **MKAR** | **Makanchi Array** | **62.57** | **316** | P | **P** | **16 55 59.3** | **+0.3** |
| | comp=Z,0.7nm,0.4s,baz=90,slow=8.6,SNR=20 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **62.79** | **316** | P | **P** | **16 56 00.7** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 16 56 26.5 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **65.44** | **23** | P | **P** | **16 56 19.3** | **+1.8** |
| **KURK** | **Kurchatov** | **65.58** | **320** | P | **P** | **16 56 18.5** | **-0.2** |
| KURK | | | | IAmb | IAmb | 16 56 22.1 | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.62** | **320** | P | **P** | **16 56 18.7** | **-0.2** |
| | comp=Z,1.4nm,0.5s,baz=102,slow=7.1,SNR=18 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **67.76** | **25** | P | **P** | **16 56 32.0** | **-0.3** |
| **ILAR** | **Eielson Array** | **67.76** | **25** | P | **P** | **16 56 33.4** | **+1.1** |
| | comp=Z,0.2nm,0.4s,baz=253,slow=5.9,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **91.76** | **336** | P | **P** | **16 58 43.5** | **+1.1** |
| | comp=Z,3.7nm,1.1s,baz=87,slow=6.5,SNR=4.7 | | | | | | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **DBIC** | **Dimbokro** | **145.16** | **304** | PKPbc | **PKPdf** | **17 05 13.9** | **+0.5** |
| | comp=Z,2.8nm,1.0s,baz=49,slow=1.2,SNR=1.6 | | | | | | |

*PDG **10** 16:48:34.8±0.1, 41°.4N×19°.53E, h17km, ML2.3/9, Error ellipse: s-maj=0.6km s-min=0.9km az=0.0*
*TIR **10** 16:48:35.0, 41°.45N×19°.62E, h25km±1km, Md2.7, Ml2.1*
*RHSSO **10** 16:48:36.3±0.9, 41°.42N×19°.43E, h7km±2km, ML2.2/8*
*BEO **10** 16:48:36.6±0.6, 41°.43N×19°.61E, h10km±3km, ML1.8/8*

**ISC 10 16:48:35.8±1.0, 41°.43N±0°.02×19°.57E±0°.03, h14km±8km, n38, σ0s82/75, 5C-3D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.23** | **109** | P | **Pg** | **16 48 40.8** | **-0.1** |
| | baz=117 | | | | | | |
| TIR | | | | S | **Sb** | **16 48 44.9** | **-0.9** |
| | baz=117 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=N,3.6nm,0.1s,baz=117 | | | | | | |
| **TIR** | **Tirane** | **0.23** | **109** | *e*Pg | **Pg** | **16 48 40.6** | **-0.3** |
| TIR | | | | *e*Sg | **Sb** | **16 48 45.0** | **-0.9** |
| **PUK** | **Puka** | **0.66** | **21** | P | **Pg** | **16 48 48.0** | **-0.8** |
| | baz=19 | | | | | | |
| PUK | | | | S | **Sg** | **16 48 57.0** | **-0.6** |
| | baz=19 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.5nm,0.4s,baz=19 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.81** | **339** | *e*Pg | **Pb** | **16 48 50.1** | **-1.7** |
| DRME | | | | *e*Sg | **Sb** | **16 49 01.6** | **-1.0** |
| **DRME** | **Dracevica, Mon** | **0.81** | **339** | *i*↓Pg | **Pb** | **16 48 50.2** | **-1.6** |
| DRME | | | | *i* Sg | **Sg** | **16 49 03.3** | **+0.9** |
| **OHR** | **Ohrid** | **0.98** | **108** | *i* Pg | **Pb** | **16 48 53.9** | **-0.7** |
| OHR | | | | *i* Sg | **Sn** | **16 49 08.9** | **0.0** |
| **BCI** | **Bajram Curri** | **1.01** | **21** | P | **Pb** | **16 48 52.9** | **-2.3** |
| | baz=20 | | | | | | |
| BCI | | | | S | **Sg** | **16 49 08.4** | **-0.2** |
| | baz=20 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=E,0.2nm,0.6s,baz=20 | | | | | | |
| **BUM** | **Brajici-Budva** | **1.01** | **330** | ↑*i*Pg | **Pb** | **16 48 53.7** | **-1.5** |
| BUM | | | | *i* Sg | **Sn** | **16 49 09.9** | **+0.1** |
| **PDG** | **Podgorica** | **1.03** | **347** | *e*Pg | **Pg** | **16 48 56.3** | **+0.5** |
| PDG | | | | *e*Sg | **Sn** | **16 49 11.0** | **+0.9** |
| **PDG** | **Podgorica** | **1.03** | **347** | *e*Pg | **Pb** | **16 48 55.2** | **-0.3** |
| PDG | | | | *e*Sg | **Sb** | **16 49 09.2** | **+0.3** |
| **PDG** | **Podgorica** | **1.03** | **347** | ↓*i*Pg | **Pb** | **16 48 54.2** | **-1.3** |
| PDG | | | | *i* Sg | **Sn** | **16 49 11.0** | **+0.9** |
| **PVY** | **Plav** | **1.20** | **14** | ↑*i*Pg | **Pb** | **16 48 58.5** | **0.0** |
| PVY | | | | *i* Sg | **Sg** | **16 49 17.0** | **+2.3** |
| **CEME** | **Cevo** | **1.22** | **337** | ↑*i*Pg | **Pn** | **16 48 58.1** | **-0.5** |
| CEME | | | | *i* Sg | **Sg** | **16 49 16.8** | **+1.5** |
| **NKME** | **Niksic** | **1.42** | **341** | ↑*i*Pg | **Pn** | **16 49 01.2** | **-0.1** |
| NKME | | | | *i* Sg | **Sg** | **16 49 22.1** | **+0.5** |
| **KOME** | **Kolasin** | **1.42** | **358** | ↑*i*Pg | **Pn** | **16 49 01.7** | **+0.3** |
| KOME | | | | *i* Sg | **Sg** | **16 49 23.1** | **+1.3** |
| **IVA** | **Berane** | **1.47** | **9** | *e*Pg | **Pn** | **16 49 02.4** | **+0.4** |
| IVA | | | | *i* Sg | **Sg** | **16 49 23.2** | **+0.1** |
| **FNA** | **Florina** | **1.51** | **115** | P | **Pb** | **16 49 03.1** | **-0.5** |
| | baz=115 

*s-maj=10.7km s-min=6.1km az=151.0*
*IDC **10** 17:17:31.0±1.1,55°.92N×149°.97W,h0km,mb3.8/7,*
*mbtmp3.9/11,ML3.9/4,MS3.4/20,Error ellipse:*
*s-maj=27.9km s-min=16.9km az=42.0*
*AEIC **10** 17:17:35.2±1.6,55°.89N±0°.07×149°.9W±0°.1,h10km±5km,*
*Error ellipse: s-maj=10.6km s-min=7.9km az=158.0*

**ISC 10 17:17:31.5±0.7,55°.99N±0°.07×150°.00W±0°.06,h10km,**
**n220,σ0°91/214,mb4.0/12,MS3.4/14,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **OHAK** | **Old Harbor** | **2.20** | **306** | P | **Pn** | **17 18 08.1** | **+0.1** |
| **OHAK** | **Old Harbor** | **2.20** | **306** | | **Pn** | **17 18 07.9** | **-0.1** |
| OHAK | | | | Sn | **Sn** | 17 18 32.8 | -2.4 |
| **KDAK** | **Kodiak Island** | **2.29** | **323** | | **Pn** | **17 18 09.7** | **+0.4** |
| KDAK | | | | Sn | **Sn** | 17 18 35.8 | -1.7 |
| **KDAK** | **Kodiak Island** | **2.29** | **323** | Pn | **Pn** | **17 18 09.7** | **+0.4** |
| | 50nm,0.3s,baz=142,slow=4.7,SNR=1056 | | | | | | |
| KDAK | | | | Sn | **Sn** | **17 18 36.4** | **-1.1** |
| | 16nm,0.3s,baz=216,slow=19,SNR=13 | | | | | | |
| KDAK | | | | LR | LR | 17 19 21.8 | |
| | comp=Z,1μm,19.5s,baz=188,slow=47 | | | | | | |
| | 150nm,0.4s | | | | | | |
| **SII** | **Sitkinak Islan** | **2.40** | **285** | P | **Pn** | **17 18 10.7** | **-0.2** |
| **SII** | **Sitkinak Islan** | **2.40** | **285** | | **Pn** | **17 18 10.4** | **-0.5** |
| SII | | | | Sn | **Sn** | **17 18 37.4** | **-3.0** |
| SII | | | | IAML | | 17 18 46.5 | |
| | comp=E,877nm,0.7s | | | | | | |
| SII | | | | IAML | | 17 18 56.1 | |
| | comp=N,826nm,0.6s | | | | | | |
| **R18K** | **Karluk** | **2.92** | **305** | | **Pn** | **17 18 18.1** | **+0.3** |
| **R18K** | **Karluk** | **2.92** | **305** | IAML | | 17 19 00.7 | |
| | comp=N,340nm,0.5s | | | | | | |
| R18K | | | | IAML | | 17 19 05.8 | |
| | comp=E,310nm,0.6s | | | | | | |
| **SYI** | **Shuyak Island** | **2.93** | **335** | Pn | **Pn** | **17 18 18.5** | **+0.4** |
| SYI | | | | Sn | **Sn** | **17 18 52.3** | **-1.0** |
| **CHIR** | **Chirikof Islan** | **3.17** | **269** | Pn | **Pn** | **17 18 20.7** | **-0.7** |
| CHIR | | | | Sn | **Sn** | **17 18 55.5** | **-3.7** |
| CHIR | | | | IAML | | 17 18 56.9 | |
| | comp=N,333nm,0.7s | | | | | | |
| CHIR | | | | IAML | | 17 19 06.8 | |
| | comp=E,386nm,0.8s | | | | | | |
| **KAPH** | **Katmai Pasha** | **3.52** | **320** | | **Pn** | **17 18 27.1** | **+0.8** |
| **KAHG** | **Katmai Hook Gl** | **3.52** | **317** | | **Pn** | **17 18 27.9** | **+1.6** |
| **Q19K** | **Cape Douglas,** | **3.54** | **328** | | **Pn** | **17 18 27.5** | **+0.9** |
| Q19K | | | | Sn | **Sn** | **17 18 08.5** | **0.0** |
| **CNPM** | **China Poot** | **3.61** | **350** | Pn | **Pn** | **17 18 27.2** | **-0.2** |
| CNPM | | | | Sn | **Sn** | **17 19 08.7** | **-1.3** |
| **KCE** | **Katmai Mt Cerb** | **3.62** | **311** | | **Pn** | **17 18 28.4** | **+0.8** |
| **ACHA** | **Angle Creek He** | **3.66** | **310** | | **Pn** | **17 18 29.3** | **+1.1** |
| **KABU** | **Katmai Buttres** | **3.68** | **311** | | **Pn** | **17 18 29.9** | **+1.5** |
| **KVTA** | **Katmai Vly 10** | **3.75** | **312** | | **Pn** | **17 18 30.0** | **+0.7** |
| **BRSE** | **Bradley Lake S** | **3.78** | **354** | | **Pn** | **17 18 28.9** | **-0.9** |
| **HOM** | **Homer** | **3.78** | **347** | | **Pn** | **17 18 28.1** | **-1.6** |
| HOM | | | | IAML | | 17 19 27.5 | |
| | comp=E,438nm,0.8s | | | | | | |
| **KAHC** | **Katmai Hardscr** | **3.81** | **317** | | **Pn** | **17 18 30.9** | **+0.7** |
| **KAHC** | **Katmai Hardscr** | **3.81** | **317** | | **Pn** | **17 18 31.2** | **+1.0** |
| **BRLK** | **Bradley Lake** | **3.81** | **353** | | **Pn** | **17 18 29.4** | **-0.8** |
| BRLK | | | | IAML | | 17 19 22.4 | |
| | comp=E,159nm,0.7s | | | | | | |
| BRLK | | | | IAML | | 17 19 22.5 | |
| | comp=N,168nm,1.0s | | | | | | |
| **AU22** | **Augustine Moun** | **3.84** | **333** | | **Pn** | **17 18 31.6** | **+1.0** |
| **PLK3** | **Peulik 3** | **3.84** | **299** | | **Pn** | **17 18 31.4** | **+0.8** |
| **AUCH** | **Augustine Cone** | **3.85** | **333** | | **Pn** | **17 18 31.4** | **+0.5** |
| **PLK4** | **Peulik 4** | **3.86** | **298** | Pn | **Pn** | **17 18 31.2** | **+0.2** |
| PLK4 | | | | IAML | | 17 19 25.5 | |
| | comp=E,376nm,0.8s | | | | | | |
| PLK4 | | | | IAML | | 17 19 36.8 | |
| | comp=N,244nm,1.0s | | | | | | |
| **AUL** | **Augustine Lava** | **3.87** | **333** | | **Pn** | **17 18 32.4** | **+1.4** |
| **PLK2** | **Peulik 2** | **3.90** | **300** | | **Pn** | **17 18 32.3** | **+0.9** |
| **CNTC** | **Contact Creek** | **3.94** | **308** | | **Pn** | **17 18 32.9** | **+0.9** |
| **Q23K** | **Middleton Isla** | **3.96** | **28** | Pn | **Pn** | **17 18 31.7** | **-0.6** |
| **MID** | **Middleton Isla** | **3.96** | **28** | P | **Pn** | **17 18 31.4** | **-0.9** |
| **MID** | **Middleton Isla** | **3.96** | **28** | Pn | **Pn** | **17 18 31.5** | **-0.7** |
| **PLK1** | **Peulik 1** | **4.05** | **299** | | **Pn** | **17 18 34.5** | **+1.0** |
| **P19K** | **Oil Pt** | **4.06** | **336** | | **Pn** | **17 18 34.6** | **+1.0** |
| **SEW** | **Seward** | **4.14** | **4** | | **Pn** | **17 18 34.1** | **-0.5** |
| **P23K** | **Montague Islan** | **4.25** | **18** | | **Pn** | **17 18 35.6** | **-0.6** |
| **O20K** | **Slope Mountain** | **4.33** | **342** | | **Pn** | **17 18 37.7** | **+0.3** |
| **ILSW** | **Iliamna Southw** | **4.34** | **339** | | **Pn** | **17 18 37.5** | **0.0** |
| **ILSW** | **Iliamna Southw** | **4.34** | **339** | IAML | | 17 19 31.6 | |
| | comp=E,190nm,0.8s | | | | | | |
| ILSW | | | | IAML | | 17 19 46.5 | |
| | comp=N,118nm,1.0s | | | | | | |
| **IVE** | **Iliamna Volcan** | **4.34** | **340** | | **Pn** | **17 18 37.6** | **0.0** |
| **P18K** | **Big Mountain,** | **4.42** | **323** | Pn | **Pn** | **17 18 39.0** | **+0.5** |
| **R16K** | **Pilot Point** | **4.46** | **294** | Pn | **Pn** | **17 18 40.3** | **+1.3** |
| R16K | | | | IAML | | 17 20 17.3 | |
| | comp=N,180nm,1.1s | | | | | | |
| R16K | | | | IAML | | 17 20 17.5 | |
| | comp=E,167nm,1.1s | | | | | | |
| **O22K** | **Cooper Landing** | **4.51** | **2** | | **Pn** | **17 18 38.3** | **-1.4** |
| **SLKM** | **Skilak Lake** | **4.53** | **359** | | **Pn** | **17 18 39.5** | **-0.7** |
| **RSO** | **Redoubt South** | **4.71** | **343** | | **Pn** | **17 18 41.6** | **-1.1** |
| **CHGN** | **Chignik** | **4.72** | **277** | | **Pn** | **17 18 43.2** | **+0.6** |
| CHGN | | | | IAML | | 17 19 41.4 | |
| | comp=E,123nm,0.7s | | | | | | |
| CHGN | | | | IAML | | 17 19 45.2 | |
| | comp=N,115nm,0.8s | | | | | | |
| **P17K** | **Kvichak River** | **4.72** | **315** | | **Pn** | **17 18 43.8** | **+1.1** |
| **RDWB** | **Redoubt West** | **4.75** | **343** | | **Pn** | **17 18 42.8** | **-0.5** |
| **O18K** | **Koktuh Hills** | **4.77** | **327** | Pn | **Pn** | **17 18 43.3** | **0.0** |
| O18K | | | | IAML | | 17 19 40.6 | |
| | comp=N,106nm,0.8s | | | | | | |
| O18K | | | | IAML | | 17 19 59.5 | |
| | comp=E,106nm,0.8s | | | | | | |
| **RDT** | **Redoubt** | **4.77** | **346** | | **Pn** | **17 18 42.6** | **-0.8** |
| **HIN** | **Hinchinbrook I** | **4.79** | **21** | | **Pn** | **17 18 43.3** | **-0.3** |
| HIN | | | | IAML | | 17 19 42.6 | |
| | comp=E,211nm,0.7s | | | | | | |
| HIN | | | | IAML | | 17 19 43.1 | |
| | comp=N,150nm,0.8s | | | | | | |
| **CAPN** | **Captain Cook N** | **4.83** | **353** | | **Pn** | **17 18 45.9** | **+1.7** |
| **KAIM** | **Kayak Island** | **4.94** | **35** | Pn | **Pn** | **17 18 45.2** | **-0.4** |
| KAIM | | | | IAML | | 17 19 44.6 | |
| | comp=E,150nm,0.6s | | | | | | |
| **PWL** | **Port Wells** | **4.96** | **9** | | **Pn** | **17 18 45.4** | **-0.6** |
| PWL | | | | IAML | | 17 19 41.8 | |
| | comp=E,112nm,0.5s | | | | | | |
| PWL | | | | IAML | | 17 19 50.9 | |
| | comp=N,110nm,0.5s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **5.09** | **24** | P | **Pn** | **17 18 47.8** | **+0.1** |
| **EYAK** | **Cordova Ski Ar** | **5.09** | **24** | | **Pn** | **17 18 47.3** | **-0.4** |
| **RC01** | **Rabbit Creek A** | **5.12** | **1** | | **Pn** | **17 18 47.9** | **-0.2** |
| RC01 | | | | IAML | | 17 19 47.4 | |
| | comp=E,76nm,0.7s | | | | | | |
| RC01 | | | | IAML | | 17 19 53.9 | |
| | comp=N,97nm,0.6s | | | | | | |
| **GLI** | **Glacier Island** | **5.13** | **16** | | **Pn** | **17 18 48.2** | **-0.2** |
| GLI | | | | IAML | | 17 19 48.3 | |
| | comp=E,110nm,0.6s | | | | | | |
| GLI | | | | IAML | | 17 19 52.1 | |
| | comp=N,73nm,1.0s | | | | | | |
| **FIS** | **Fire Island** | **5.17** | **359** | | **Pn** | **17 18 48.7** | **-0.1** |
| **RAGM** | **Ragged Mountai** | **5.23** | **30** | | **Pn** | **17 18 49.6** | **0.0** |
| **SUCK** | **Suckling Hills** | **5.26** | **36** | Pn | **Pn** | **17 18 50.1** | **0.0** |
| SUCK | | | | IAML | | 17 19 48.9 | |
| | comp=N,119nm,0.6s | | | | | | |
| SUCK | | | | IAML | | 17 20 01.4 | |
| | comp=E,93nm,0.7s | | | | | | |
| **P16K** | **Nushagak River** | **5.28** | **309** | | **Pn** | **17 18 51.2** | **+0.9** |
| **HMT** | **Hamilton** | **5.31** | **32** | | **Pn** | **17 18 51.0** | **+0.2** |
| **SPU** | **Mount Spurr** | **5.32** | **349** | | **Pn** | **17 18 50.6** | **-0.3** |
| SPU | | | | IAML | | 17 19 54.9 | |
| | comp=N,58nm,0.8s | | | | | | |
| SPU | | | | IAML | | 17 19 58.1 | |
| | comp=E,65nm,0.7s | | | | | | |
| **NICHA** | **Nichawak Mount** | **5.32** | **34** | | **Pn** | **17 18 50.8** | **-0.1** |
| **N19K** | **Bonanza Creek** | **5.38** | **336** | | **Pn** | **17 18 51.6** | **-0.2** |
| **BGLC** | **Bering Glacier** | **5.46** | **38** | | **Pn** | **17 18 52.5** | **-0.3** |
| **KNK** | **Knik Glacier** | **5.50** | **8** | Pn | **Pn** | **17 18 52.4** | **-1.0** |
| **SUA** | **Susitna One** | **5.50** | **356** | | **Pn** | **17 18 51.9** | **-1.6** |
| **GRIN** | **Grindle Hills** | **5.57** | **37** | | **Pn** | **17 18 54.3** | **0.0** |
| **CNBA** | **Chernabura Isl** | **5.59** | **262** | Pn | **Pn** | **17 18 53.7** | **-0.9** |
| **STLK** | **Strandline Lak** | **5.61** | **351** | | **Pn** | **17 18 54.4** | **-0.5** |
| **N18K** | **Kilae Creek** | **5.63** | **329** | Pn | **Pn** | **17 18 54.9** | **-0.3** |
| **PMR** | **Palmer** | **5.64** | **4** | | **Pn** | **17 18 54.5** | **-0.7** |
| **O16K** | **Kokwok River B** | **5.64** | **313** | Pn | **Pn** | **17 18 56.0** | **+0.8** |
| **SNH** | **Sunshine Point** | **5.66** | **39** | | **Pn** | **17 18 54.8** | **-0.8** |
| **KHIT** | **Khitrov Hills** | **5.71** | **36** | | **Pn** | **17 18 56.1** | **-0.3** |
| **BMRM** | **Bremner River** | **5.74** | **27** | | **Pn** | **17 18 56.4** | **-0.2** |
| **M22K** | **Willow** | **5.78** | **359** | Pn | **Pn** | **17 18 57.6** | **+0.4** |
| **GHO** | **Glory Hole Cre** | **5.83** | **5** | | **Pn** | **17 18 58.1** | **+0.2** |
| **WAX** | **Waxell Ridge** | **5.85** | **37** | Pn | **Pn** | **17 18 58.0** | **-0.2** |
| **SVW2** | **Sparrevohn** | **5.89** | **333** | | **Pn** | **17 18 59.5** | **+0.7** |
| **SML** | **Sawmill** | **5.90** | **8** | | **Pn** | **17 18 59.1** | **+0.3** |
| **KLU** | **Klutina** | **5.91** | **19** | | **Pn** | **17 18 59.4** | **+0.3** |
| **N17K** | **Nushagak Hills** | **5.92** | **323** | Pn | **Pn** | **17 18 59.7** | **+0.5** |
| **BARK** | **Barkley Ridge** | **5.94** | **39** | | **Pn** | **17 18 59.2** | **-0.3** |
| **SDPT** | **Sand Point** | **5.97** | **268** | P | **Pn** | **17 19 00.1** | **+0.4** |
| **SDPT** | **Sand Point** | **5.97** | **268** | Pn | **Pn** | **17 19 00.4** | **+0.7** |
| **MESA** | **MESA** | **5.99** | **42** | | **Pn** | **17 19 00.1** | **-0.1** |
| **CRQM** | **Cirque** | **5.99** | **34** | | **Pn** | **17 19 00.2** | **0.0** |
| **SCM** | **Sheep Creek Mo** | **6.02** | **12** | | **Pn** | **17 19 00.7** | **+0.1** |
| **SKT** | **Skwentna** | **6.06** | **353** | | **Pn** | **17 19 00.6** | **-0.5** |
| **TGL** | **Tana Glacier** | **6.08** | **35** | | **Pn** | **17 19 01.1** | **-0.4** |
| **ISLE** | **Juniper Island** | **6.14** | **38** | | **Pn** | **17 19 01.9** | **-0.3** |
| **BAGL** | **Bagley Icefiel** | **6.14** | **40** | | **Pn** | **17 19 01.6** | **-0.5** |
| **O15K** | **Ungalikthiuk R** | **6.17** | **305** | | **Pn** | **17 19 03.7** | **+1.1** |
| **VRDI** | **Verde Repeater** | **6.26** | **30** | Pn | **Pn** | **17 19 03.9** | **-0.2** |
| **N25K** | **Chitina, Valde** | **6.29** | **24** | Pn | **Pn** | **17 19 04.8** | **+0.5** |
| **RKAV** | **Rock Avalanche** | **6.29** | **43** | | **Pn** | **17 19 04.5** | **0.0** |
| **GLB** | **Gilahina Butte** | **6.34** | **28** | Pn | **Pn** | **17 19 04.5** | **-0.4** |
| **M19K** | **Big River Lodg** | **6.35** | **341** | Pn | **Pn** | **17 19 05.0** | **0.0** |
| **SAMH** | **Samovar Hills** | **6.41** | **46** | | **Pn** | **17 19 06.3** | **+0.3** |
| **GRNC** | **Granite Creek** | **6.43** | **39** | | **Pn** | **17 19 06.1** | **-0.3** |
| **CUT** | **Chulitna** | **6.44** | **359** | Pn | **Pn** | **17 19 06.2** | **+0.1** |
| **M24K** | **Tolsona, Glenn** | **6.44** | **16** | | **Pn** | **17 19 06.8** | **+0.4** |
| **BALM** | **Baldy** | **6.45** | **35** | | **Pn** | **17 19 06.1** | **-0.4** |
| **N16K** | **Nishlik Lake** | **6.45** | **318** | | **Pn** | **17 19 07.8** | **+1.4** |
| **TABL** | **Table Mountain** | **6.46** | **43** | | **Pn** | **17 19 06.8** | **0.0** |
| **MCARA** | **McCarthy VSAT** | **6.51** | **31** | | **Pn** | **17 19 07.3** | **0.0** |
| **YKU2** | **Yakutat** | **6.56** | **53** | Pn | **Pn** | **17 19 08.3** | **+0.5** |
| **M17K** | **Holitna River** | **6.67** | **328** | Pn | **Pn** | **17 19 09.5** | **+0.1** |
| **L19K** | **White Mountain** | **6.69** | **340** | Pn | **Pn** | **17 19 09.0** | **-0.8** |
| **WAT6** | **Susitna Watana** | **6.71** | **9** | | **Pn** | **17 19 10.8** | **+0.7** |
| **CTGM** | **Chitina Glacie** | **6.74** | **39** | | **Pn** | **17 19 09.6** | **-0.9** |
| **PNL** | **Peninsula** | **6.75** | **53** | P | **Pn** | **17 19 10.7** | **+0.1** |
| **PNL** | **Peninsula** | **6.75** | **53** | | **Pn** | **17 19 10.3** | **-0.3** |
| **LOGN** | **Logan Glacier** | **6.76** | **41** | | **Pn** | **17 19 08.2** | **-2.6** |
| **BCPM** | **Bancas Point** | **6.79** | **50** | | **Pn** | **17 19 11.1** | **0.0** |
| **N15K** | **Kwethluk River** | **6.79** | **312** | Pn | **Pn** | **17 19 12.4** | **+1.3** |
| **S12K** | **Black Hills** | **6.80** | **273** | Pn | **Pn** | **17 19 11.5** | **+0.3** |
| **O14K** | **Tigyukauivet M** | **6.88** | **303** | | **Pn** | **17 19 13.1** | **+0.9** |
| **M16K** | **Timber Creek** | **6.89** | **321** | Pn | **Pn** | **17 19 13.5** | **+1.1** |
| **L18K** | **Granite Mounta** | **7.13** | **334** | | **Pn** | **17 19 15.8** | **+0.1** |
| **DHY** | **Denali Highway** | **7.23** | **10** | Pn | **Pn** | **17 19 17.2** | **0.0** |
| **M26K** | **Nabesna, AK** | **7.36** | **26** | Pn | **Pn** | **17 19 19.0** | **+0.1** |
| **O29M** | **Mount Kennedy** | **7.43** | **50** | | **Pn** | **17 19 20.0** | **+0.1** |
| **RND** | **Reindeer** | **7.46** | **4** | | **Pn** | **17 19 19.9** | **-0.4** |
| **P29M** | **Windy Craggy** | **7.49** | **56** | Pn | **Pn** | **17 19 20.4** | **-0.3** |
| **L16K** | **Owhat River** | **7.55** | **323** | | **Pn** | **17 19 21.6** | **+0.1** |
| **M27K** | **Edge Creek, AK** | **7.62** | **30** | | **Pn** | **17 19 22.8** | **+0.2** |
| **MENT** | **Mentasta** | **7.66** | **22** | | **Pn** | **17 19 23.6** | **+0.6** |
| **S31K** | **Pelican** | **7.78** | **70** | Pn | **Pn** | **17 19 22.6** | **-2.0** |
| **L26K** | **Log Cabin Wild** | **7.82** | **23** | | **Pn** | **17 19 25.3** | **+0.1** |
| **M14K** | **Bethel** | **7.89** | **312** | Pn | **Pn** | **17 19 27.0** | **+0.9** |
| **BPAW** | **Bear Paw Mtn.** | **8.15** | **357** | | **Pn** | **17 19 29.9** | **+0.2** |
| **L27K** | **Beaver Creek,** | **8.21** | **27** | | **Pn** | **17 19 29.9** | **-0.7** |
| **BWN** | **Browne** | **8.21** | **2** | | **Pn** | **17 19 31.2** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **8.22** | **27** | Pn | **Pn** | **17 19 30.6** | **-0.2** |
| **M13K** | **Dall Lake** | **8.32** | **308** | Pn | **Pn** | **17 19 32.8** | **+0.8** |
| **J20K** | **Nowinta River** | **8.47** | **348** | Pn | **Pn** | **17 19 33.9** | **-0.2** |
| **J19K** | **Poorman** | **8.51** | **343** | Pn | **Pn** | **17 19 34.0** | **-0.6** |
| **L14K** | **Kuka Creek** | **8.51** | **314** | Pn | **Pn** | **17 19 34.5** | **0.0** |
| **SCRK** | **Sand Creek** | **8.55** | **18** | | **Pn** | **17 19 34.9** | **-0.5** |
| **WRH** | **Wood River Hil** | **8.56** | **6** | | **Pn** | **17 19 34.9** | **-0.4** |
| **HDA** | **Harding Lake** | **8.58** | **9** | | **Pn** | **17 19 36.1** | **+0.5** |
| **SKAG** | **Skagway** | **8.58** | **60** | | **Pn** | **17 19 33.5** | **-2.1** |
| **S32K** | **Killisnoo** | **8.61** | **74** | | **Pn** | **17 19 33.7** | **-2.2** |
| **NEA2** | **Nenana** | **8.64** | **3** | | **Pn** | **17 19 36.3** | **-0.1** |
| **K15K** | **Wolf Creek Mou** | **8.65** | **322** | Pn | **Pn** | **17 19 37.4** | **+0.8** |
| **N30M** | **Aishikik Lake** | **8.66** | **45** | | **Pn** | **17 19 36.9** | **+0.1** |
| **J17K** | **VABM Dome** | **8.72** | **332** | Pn | **Pn** | **17 19 37.5** | **0.0** |
| **R32K** | **Eaglecrest** | **8.72** | **68** | | **Pn** | **17 19 36.6** | **-1.0** |
| **O30N** | **Mendenhall** | **8.73** | **51** | | **Pn** | **17 19 36.9** | **-0.8** |
| **CCB** | **Clear Creek Bu** | **8.75** | **6** | | **Pn** | **17 19 38.1** | **+0.2** |
| **M29M** | **Somme Creek** | **8.76** | **38** | Pn | **Pn** | **17 19 38.4** | **+0.3** |
| **IL31** | | **8.94** | **9** | | **Pn** | **17 19 41.2** | **+0.7** |
| **ILAR** | **Eielson Array** | **8.94** | **9** | | **Pn** | **17 19 41.4** | **+0.8** |
| **ILAR** | **Eielson Array** | **8.94** | **9** | Pn | **Pn** | **17 19 40.5** | **0.0** |
| | comp=E,0.7nm,0.3s,baz=190,slow=13,SNR=27 | | | | | | |
| ILAR | | | | Sn | **Sn** | **17 21 17.9** | **-3.2** |
| | comp=E,0.6nm,0.3s,baz=187,slow=22,SNR=7.7 | | | | | | |
| ILAR | | | | LR | LR | 17 23 18.6 | |
| | comp=E,166nm,19.8s,baz=279,slow=39 | | | | | | |
| | comp=E,2.3nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **8.95** | **13** | | **Pn** | **17 19 40.5** | **-0.1** |
| **J16K** | **Anvik River** | **9.06** | **328** | Pn | **Pn** | **17 19 42.6** | **+0.5** |
| **MLY** | **Manley** | **9.08** | **358** | Pn | **Pn** | **17 19 42.5** | **0.0** |
| **J26L** | **Joseph Creek** | **9.11** | **18** | Pn | **Pn** | **17 19 42.5** | **-0.5** |
| **I23K** | **Minto, Yukon-K** | **9.19** | **2** | | **Pn** | **17 19 44.2** | **+0.3** |
| **L29M** | **L29M** | **9.33** | **35** | Pn | **Pn** | **17 19 46.1** | **+0.2** |
| **H21K** | **Melozitna Rive** | **9.79** | **353** | Pn | **Pn** | **17 19 51.9** | **-0.3** |
| **H23K** | **Yukon River** | **9.87** | **1** | Pn | **Pn** | **17 19 53.8** | **+0.5** |
| **H24K** | **Noodor Dome** | **9.93** | **5** | | **Pn** | **17 19 56.4** | **+2.3** |
| **P33M** | **Teslin, Yukon** | **10.02** | **58** | Pn | **Pn** | **17 19 54.5** | **-0.9** |
| **M31M** | **Drury Creek, Y** | **10.14** | **46** | | **Pn** | **17 19 56.2** | **-0.7** |
| **IMAR** | **Indian Mountai** | **10.19** | **351** | Pn | **Pn** | **17 19 58.1** | **+0.5** |
| **FARO** | **Faro, Yukon** | **10.58** | **47** | | **Pn** | **17 20 02.6** | **-0.4** |
| **I28M** | **Miner Creek** | **10.67** | **23** | Pn | **Pn** | **17 20 05.4** | **+1.1** |
| **R33M** | **Jennings River** | **10.73** | **64** | | **Pn** | **17 20 04.3** | **-0.9** |
| **G23K** | **Bananza Creek** | **10.76** | **360** | Pn | **Pn** | **17 20 05.0** | **-0.5** |
| **G24K** | **Hadweenzic Riv** | **10.81** | **5** | Pn | **Pn** | **17 20 05.5** | **-0.7** |
| **I29M** | **Ogilvie Camp,** | **10.98** | **26** | | **Pn** | **17 20 09.0** | **+0.5** |
| **DLBC** | **Dease Lake** | **11.09** | **69** | Pn | **Pn** | **17 20 10.2** | **+0.1** |
| | comp=E,0.4nm,0.3s,baz=206,slow=19,SNR=2.6 | | | | | | |
| DLBC | | | | LR | LR | 17 23 41.1 | |
| | comp=E,193nm,18.3s,baz=258,slow=33 | | | | | | |
| | comp=E,1.6nm,0.5s | | | | | | |
| **F21K** | **Alatna River** | **11.39** | **353** | Pn | **Pn** | **17 20 13.8** | **-0.2** |
| **F20K** | **Avaraart Lake** | **11.42** | **349** | Pn | **Pn** | **17 20 14.2** | **-0.1** |
| **E19K** | **Redstone River** | **11.99** | **346** | | **Pn** | **17 20 21.9** | **-0.3** |
| **E24K** | **Your Creek** | **12.15** | **3** | | **Pn** | **17 20 23.9** | **-0.6** |
| **E21K** | **Killik River** | **12.63** | **353** | Pn | **Pn** | **17 20 30.9** | **-0.1** |
| **E27K** | **Coleen River** | **12.84** | **14** | Pn | **Pn** | **17 20 32.9** | **-0.9** |
| **BBB** | **Bella Bella** | **13.38** | **97** | LR | LR | 17 24 12.9 | |
| | comp=E,109nm,20.4s,baz=304,slow=30 | | | | | | |
| **E28M** | **Babbage River** | **13.53** | **17** | Pn | **Pn** | **17 20 43.6** | **+0.4** |
| **E29M** | **Blow River** | **13.62** | **19** | Pn | **Pn** | **17 20 43.1** | **-1.3** |
| **D27M** | **Malcolm River** | **13.91** | **13** | Pn | **Pn** | **17 20 49.5** | **+1.1** |
| **C16K** | **Lisburne Hills** | **14.19** | **336** | Pn | **Pn** | **17 20 51.0** | **-1.3** |
| **INK** | **Inuvik** | **14.48** | **25** | Pn | **Pn** | **17 20 55.4** | **-0.7** |
| **INK** | **Inuvik** | **14.48** | **25** | Pn | **Pn** | **17 20 57.0** | **+0.8** |
| | comp=E,0.3nm,0.3s,baz=208,slow=15,SNR=5.6 | | | | | | |
| INK | | | | LR | LR | 17 26 48.2 | |
| | comp=E,135nm,19.5s,baz=216,slow=38 | | | | | | |
| | comp=E,2.6nm,0.3s | | | | | | |
| **C36M** | **Paulatuk** | **17.70** | **31** | P | **P** | **17 21 38.0** | **-0.5** |
| C36M | | | | IAmb | IAmb | 17 21 49.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.04** | **56** | LR | LR | 17 28 56.7 | |
| | comp=Z,119nm,19.1s,baz=311,slow=36 | | | | | | |
| **NEW** | **Newport** | **21.45** | **97** | LR | LR | 17 28 30.8 | |
| | comp=Z,46nm,21.6s,baz=292,slow=31 | | | | | | |
| **HUMO** | **Hull Mountain** | **21.96** | **116** | P | **P** | **17 22 24.6** | **-0.5** |
| HUMO | | | | IAmb | IAmb | 17 22 48.6 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **PINE** | **Pine Mountain** | **22.16** | **111** | P | **P** | **17 22 26.0** | **-1.5** |
| **G08A** | **Pilot Rock** | **22.21** | **106** | P | **P** | **17 22 26.6** | **-1.4** |
| **J05D** | **Fort Rock, OR** | **22.36** | **113** | P | **P** | **17 22 29.1** | **-0.5** |
| **I07A** | **Izee** | **22.72** | **109** | P | **P** | **17 22 33.9** | **+0.5** |
| **F10A** | **Beach Ranch, E** | **22.73** | **102** | P | **P** | **17 22 33.3** | **-0.2** |
| F10A | | | | IAmb | IAmb | 17 22 36.7 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **22.73** | **117** | P | **P** | **17 22 33.8** | **+0.3** |
| YBH | | | | IAmb | IAmb | 17 22 59.4 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **22.73** | **117** | LR | LR | 17 29 08.8 | |
| | comp=Z,120nm,21.6s,baz=322,slow=31 | | | | | | |
| **WVOR** | **Wild Horse Val** | **24.31** | **111** | P | **P** | **17 22 47.9** | **-1.2** |
| WVOR | | | | IAmb | IAmb | 17 23 18.6 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| **ELK** | **Elko** | **27.31** | **109** | LR | LR | 17 31 54.5 | |
| | comp=Z,95nm,20.9s,baz=320,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **27.43** | **116** | P | **P** | **17 23 18.2** | **+0.7** |
| | comp=Z,0.7nm,0.6s,baz=309,slow=8.5,SNR=5.7 | | | | | | |
| NVAR | | | | LR | LR | 17 32 16.2 | |
| | comp=Z,132nm,18.5s,baz=276,slow=32 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **RES** | **Resolute Bay** | **28.01** | **28** | LR | LR | 17 35 00.9 | |
| | comp=Z,102nm,19.2s,baz=21,slow=37 | | | | | | |
| **PFO** | **Pinyon Flats O** | **32.15** | **120** | LR | LR | 17 35 11.2 | |
| | comp=Z,78nm,18.4s,baz=352,slow=33 | | | | | | |
| **FRB** | **Frobisher Bay** | **38.92** | **44** | LR | LR | 17 41 05.0 | |
| | comp=Z,149nm,18.5s,baz=358,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **42.10** | **110** | P | **P** | **17 25 25.1** | **+1.5** |
| | comp=Z,1.0nm,1.0s,baz=319,slow=6.9,SNR=5.9 | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **43.56** | **34** | LR | LR | 17 43 16.0 | |
| | comp=Z,58nm,19.9s,baz=324,slow=35 | | | | | | |
| **SCHQ** | **Schefferville** | **44.49** | **55** | LR | LR | 17 44 09.3 | |
| | comp=Z,60nm,18.5s,baz=176,slow=36 | | | | | | |
| **JMIC** | **Jan Mayen** | **50.40** | **15** | LR | LR | 17 50 08.9 | |
| | comp=Z,16nm,18.1s,baz=122,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **55.77** | **288** | LR | LR | 17 51 15.3 | |
| | comp=Z,18nm,21.1s,baz=350,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **58.52** | **310** | P | **P** | **17 27 30.1** | **+2.4** |
| | comp=Z,1.7nm,1.1s,baz=64,slow=6.8,SNR=4.3 | | | | | | |
| SONM | | | | LR | LR | 17 55 05.6 | |
| | comp=Z,61nm,18.8s,baz=60,slow=38 | | | | | | |
| | comp=Z,1.7nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **61.55** | **301** | *e*P | **P** | **17 27 47.5** | **-1.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,110nm,6.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.59** | **327** | P | **P** | **17 27 50.7** | **+2.2** |
| | comp=Z,0.6nm,0.5s,baz=40,slow=7.8,SNR=3.6 | | | | | | |
| ZALV | | | | LR | LR | 17 56 54.7 | |
| | comp=Z,17nm,20.7s,baz=358,slow=38 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ARU** | **Arti** | **65.57** | **343** | LR | LR | 18 01 35.0 | |
| | comp=Z,18nm,18.5s,baz=290,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.38** | **329** | P | **P** | **17 28 20.7** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=345,slow=3.8,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.60** | **324** | P | **P** | **17 28 35.3** | **+1.1** |
| | comp=Z,0.4nm,0.5s,baz=34,slow=7.3,SNR=5.2 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **71.42** | **342** | P | **P** | **17 28 52.1** | **+0.8** |
| | comp=Z,1.7nm,0.6s,baz=22,slow=3.1,SNR=5.1 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |

*BJI **10** 17:17:32.2±0.0,27°.26N×104°.01E,h14km,mb4.3/26,*
*mB4.6/9,ML4.0/19,Ms3.7/10,Ms7 3.5/11*
*NEIC **10** 17:17:33.5±1.7,27°.28N±0°.09×104°.0E±0°.1,h16km±5km,*
*mb

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,100nm,5.2s | | | | | | |
| **NIL** | **Nilore** | **27.26** | **291** | P | **P** | **17 23 16.7** | **-0.3** |
| NIL | | | | IAmb | IAmb | 17 23 31.5 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **28.10** | **46** | P | **P** | **17 23 24.7** | **+0.3** |
| | comp=Z,2.5nm,0.9s,baz=286,slow=3.8,SNR=5.2 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **PALK** | **Pallekele** | **29.76** | **232** | LR | LR | 17 35 42.1 | |
| | comp=Z,28nm,18.1s,baz=159,slow=36 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **30.22** | **337** | P | **P** | **17 23 41.6** | **-1.5** |
| ZAA0 | | | | IAmb | IAmb | 17 23 45.8 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **30.22** | **337** | P | **P** | **17 23 42.2** | **-0.9** |
| | comp=Z,5.6nm,0.6s,baz=141,slow=8.2,SNR=25 | | | | | | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **30.31** | **64** | LR | LR | 17 36 59.9 | |
| | comp=Z,38nm,21.3s,baz=249,slow=38 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **30.38** | **327** | P | **P** | **17 23 44.0** | **-0.5** |
| | comp=Z,2.2nm,0.7s,baz=131,slow=10.0,SNR=21 | | | | | | |
| KURBB | | | | LR | LR | 17 36 08.2 | |
| | comp=Z,24nm,21.8s,baz=178,slow=37 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **30.40** | **327** | P | **P** | **17 23 44.1** | **-0.6** |
| **ABKAR** | **Akbulak array** | **40.30** | **315** | P | **P** | **17 25 09.3** | **-0.5** |
| **ABKAR** | **Akbulak array** | **40.30** | **315** | P | **P** | **17 25 09.3** | **-0.5** |
| ABKAR | | | | IAmb | IAmb | 17 25 15.1 | |
| | comp=Z,2.3nm,1.1s | | | | | | |
| **ARU** | **Arti** | **43.51** | **325** | P | **P** | **17 25 35.0** | **-1.0** |
| ARU | | | | IAmb | IAmb | 17 25 38.4 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **GNI** | **Garni** | **50.17** | **301** | LR | LR | 17 50 35.6 | |
| | comp=Z,27nm,21.6s,baz=73,slow=40 | | | | | | |
| **WRAB** | **Tennant Creek** | **55.31** | **145** | P | **P** | **17 27 06.5** | **0.0** |
| WRAB | | | | IAmb | IAmb | 17 27 22.6 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.32** | **145** | P | **P** | **17 27 06.7** | **+0.1** |
| | comp=Z,1.1nm,0.7s,baz=333,slow=8.4,SNR=13 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **55.32** | **145** | P | **P** | **17 27 06.4** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 17 27 13.9 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **55.44** | **145** | P | **P** | **17 27 06.9** | **-0.5** |
| **ASAR** | **Alice Springs** | **58.24** | **148** | P | **P** | **17 27 27.4** | **+0.2** |
| | comp=Z,0.8nm,0.8s,baz=326,slow=6.4,SNR=11 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **60.04** | **315** | P | **P** | **17 27 36.9** | **-2.5** |
| | comp=Z,0.8nm,0.6s,baz=61,slow=5.8,SNR=4.3 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **KIEV** | **Kiev** | **60.05** | **315** | P | **P** | **17 27 38.3** | **-1.2** |
| KIEV | | | | IAmb | IAmb | 17 28 07.5 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **KEV** | **Kevo** | **60.25** | **337** | | **P** | **17 27 39.3** | **-1.3** |
| **FINES** | **FINESS Array B** | **60.77** | **327** | P | **P** | **17 27 42.0** | **-2.2** |
| **FINES** | **FINESS Array B** | **60.77** | **327** | P | **P** | **17 27 41.3** | **-3.0** |
| | comp=Z,4.4nm,1.1s,baz=86,slow=5.7,SNR=1.8 | | | | | | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **60.77** | **337** | P | **P** | **17 27 41.7** | **-2.4** |
| ARCES | | | | IAmb | IAmb | 17 27 42.0 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **60.77** | **337** | P | **P** | **17 27 40.8** | **-3.3** |
| | comp=Z,0.7nm,0.6s,baz=75,slow=10,SNR=1.6 | | | | | | |
| ARCES | | | | LR | LR | 17 57 32.0 | |
| | comp=Z,23nm,18.2s,baz=40,slow=40 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **62.31** | **135** | P | **P** | **17 27 54.3** | **-0.9** |
| **C19K** | **Lookout Ridge** | **67.07** | **23** | P | **P** | **17 28 25.6** | **-0.1** |
| **B20K** | **Meade River** | **67.62** | **22** | P | **P** | **17 28 28.1** | **-0.9** |
| **D19K** | **Kuna River** | **67.76** | **23** | P | **P** | **17 28 30.8** | **+0.8** |
| D19K | | | | IAmb | IAmb | 17 28 37.7 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **67.91** | **328** | P | **P** | **17 28 30.1** | **-1.0** |
| | comp=Z,0.9nm,0.9s,baz=71,slow=5.4,SNR=1.6 | | | | | | |
| **VRAC** | **Vranov** | **68.29** | **315** | LR | LR | 18 03 00.7 | |
| | comp=Z,22nm,18.4s,baz=52,slow=40 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **68.40** | **25** | P | **P** | **17 28 34.6** | **+0.6** |
| F19K | | | | IAmb | IAmb | 17 28 36.5 | |
| | comp=Z,3.9nm,1.3s | | | | | | |
| **B21K** | **Ikpikpuk River** | **68.58** | **22** | P | **P** | **17 28 35.7** | **+0.6** |
| B21K | | | | IAmb | IAmb | 17 28 41.8 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **J17K** | **VABM Dome** | **68.98** | **29** | P | **P** | **17 28 37.2** | **-0.6** |
| **E21K** | **Killik River** | **69.22** | **23** | P | **P** | **17 28 39.5** | **+0.3** |
| E21K | | | | IAmb | IAmb | 17 28 42.6 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **H19K** | **Roundabout Mou** | **69.35** | **26** | P | **P** | **17 28 38.6** | **-1.3** |
| H19K | | | | IAmb | IAmb | 17 28 43.5 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **L16K** | **Owhat River** | **69.36** | **30** | P | **P** | **17 28 39.0** | **-1.1** |
| **D22K** | **Ayikyak River** | **69.50** | **22** | P | **P** | **17 28 40.2** | **-0.6** |
| D22K | | | | IAmb | IAmb | 17 28 52.0 | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **C23K** | **Itkillik River** | **69.79** | **21** | P | **P** | **17 28 41.8** | **-0.8** |
| C23K | | | | IAmb | IAmb | 17 28 45.2 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **G21K** | **Allakaket** | **70.11** | **25** | P | **P** | **17 28 44.4** | **-0.3** |
| G21K | | | | IAmb | IAmb | 17 29 25.4 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **70.22** | **25** | P | **P** | **17 28 44.7** | **-0.6** |
| **GERES** | **GERESS Array B** | **70.24** | **315** | P | **P** | **17 28 45.7** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=165,slow=8.1,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **71.24** | **22** | P | **P** | **17 28 51.8** | **+0.2** |
| **MLY** | **Manley** | **71.75** | **26** | P | **P** | **17 28 54.9** | **+0.2** |
| MLY | | | | IAmb | IAmb | 17 28 57.5 | |
| | comp=Z,5.6nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **72.86** | **22** | P | **P** | **17 29 00.6** | **-0.7** |

*IDC **10** 17:29:19.1±5.7, 36.4°N×71.7°E, h153km±52km, mb3.2/6, mbtmp3.6/10, Error ellipse: s-maj=41.5km s-min=22.3km az=29.0*
*NNC **10** 17:29:26.5±2.3, 37.0°N×71.2°E, h120km±45km, mb2.9, mpv3.6, Error ellipse: s-maj=19.5km s-min=16.2km az=7.0*

**ISC 10 17:29:19.5±1.0, 36.62N±0.1°×71.4E±0.1, h150km, n17, σ1§53/21, mb3.6/7, 2C-4D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **6.47** | **21** | P | **Pn** | **17 30 54.2** | **+1.6** |
| | 4.9nm,0.3s,baz=191,slow=3.7,SNR=5.0 | | | | | | |
| AAK | | | | S | **Sn** | **17 32 03.6** | **-1.9** |
| | 9.8nm,0.5s,baz=323,slow=20,SNR=8.5 | | | | | | |
| **AAK** | **Ala-Archa** | **6.47** | **21** | ⇓P | **Pn** | **17 30 54.8** | **+2.2** |
| | 4.5nm,0.5s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **17 32 03.4** | **-2.1** |
| | 17nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **6.51** | **354** | ⇓P | **Pn** | **17 30 54.1** | **+1.2** |
| | 1.5nm,0.2s,baz=183,slow=14,SNR=46 | | | | | | |
| KK31 | | | | S | **Sn** | **17 32 03.0** | **-3.1** |
| | 4.2nm,0.3s,baz=172,slow=18,SNR=6.7 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.08** | **26** | ⇓P | **Pn** | **17 31 02.5** | **+1.8** |
| | 2.2nm,0.8s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **17 32 19.3** | **-0.8** |
| | 6.4nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **13.02** | **35** | P | **P** | **17 32 24.0** | **+0.5** |
| | 0.3nm,0.3s,baz=214,slow=11,SNR=7.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.02** | **35** | P | **Pn** | **17 32 19.6** | **+0.9** |
| | 0.3nm,0.5s,baz=211,slow=11,SNR=6.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.91** | **18** | P | **Pn** | **17 32 44.6** | **+2.0** |
| | 0.7nm,0.6s,baz=204,slow=10,SNR=8.4 | | | | | | |
| **AB31** | **Akbulak array** | **15.13** | **330** | ⇑P | **P** | **17 32 47.6** | **+0.7** |
| | 0.4nm,0.5s,baz=153,slow=12,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.68** | **24** | P | **P** | **17 33 36.2** | **-0.5** |
| | 0.9nm,0.4s,baz=220,slow=13,SNR=6.1 | | | | | | |
| **FINES** | **FINESS Array B** | **37.55** | **326** | P | **P** | **17 36 19.9** | **+1.1** |
| | 0.4nm,0.3s,baz=122,slow=6.9,SNR=6.0 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.15** | **337** | P | **P** | **17 36 48.8** | **+0.3** |
| | 1.2nm,0.8s,baz=106,slow=2.6,SNR=3.9 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.47** | **323** | P | **P** | **17 37 15.9** | **+0.5** |
| | comp=Z,0.4nm,0.3s,baz=99,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.47** | **323** | P | **P** | **17 37 15.6** | **+0.3** |
| | comp=Z,1.0nm,0.6s,baz=97,slow=7.7,SNR=2.5 | | | | | | |
| **ESDC** | **Sonseca Array** | **57.67** | **298** | P | **P** | **17 38 54.8** | **+0.6** |
| | comp=Z,0.2nm,0.5s,baz=56,slow=5.9,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.03** | **269** | P | **P** | **17 39 49.1** | **-1.2** |
| | comp=Z,0.9nm,0.7s,baz=45,slow=6.1,SNR=5.5 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.80** | **122** | P | **P** | **17 41 20.5** | **-1.3** |
| | comp=Z,0.3nm,0.7s,baz=310,slow=7.6,SNR=1.4 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **84.07** | **125** | P | **P** | **17 41 32.7** | **-0.8** |
| | comp=Z,0.4nm,0.7s,baz=308,slow=5.5,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |

*AEIC **10** 17:35:59.4±1.7, 55.9°N±0.1°×149.9°W±0.1, h11km±8km, Error ellipse: s-maj=17.0km s-min=9.1km az=167.0*

**NEIC 10 17:35:55.3±1.9, 56.0°N±0.1°×150.0°W±0.1, h7km±8km, ML3.1/52, ML2.8(AEIC), Error ellipse: s-maj=16.6km s-min=9.4km az=165.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.21** | **305** | | Pn | 17 36 31.9 | -0.3 |
| OHAK | | | | | Sn | 17 36 57.5 | -2.2 |
| **KDAK** | **Kodiak Island** | **2.29** | **323** | | Pn | 17 36 33.6 | +0.2 |
| **KDAK** | **Kodiak Island** | **2.29** | **323** | | Sn | 17 37 00.5 | -1.5 |
| **SII** | **Sitkinak Islan** | **2.41** | **285** | | Pn | 17 36 34.2 | -1.0 |
| **SII** | **Sitkinak Islan** | **2.41** | **285** | IAML | | 17 37 17.6 | |
| | comp=N,62nm,0.7s | | | | | | |
| SII | | | | IAML | | 17 37 24.6 | |
| | comp=E,76nm,0.8s | | | | | | |
| **R18K** | **Karluk** | **2.92** | **305** | | Pn | 17 36 42.4 | +0.3 |
| R18K | | | | | Sn | 17 37 16.4 | -1.0 |
| **R18K** | **Karluk** | **2.92** | **305** | IAML | | 17 37 18.1 | |
| | comp=N,44nm,0.5s | | | | | | |
| R18K | | | | IAML | | 17 37 28.4 | |
| | comp=E,44nm,0.4s | | | | | | |
| **SYI** | **Shuyak Island** | **2.93** | **335** | | Pn | 17 36 42.6 | +0.4 |
| **SYI** | **Shuyak Island** | **2.93** | **335** | | Sn | 17 37 17.2 | -0.4 |
| **KAHG** | **Katmai Hook Gl** | **3.53** | **317** | | Pn | 17 36 51.6 | +1.1 |
| **Q19K** | **Cape Douglas,** | **3.55** | **328** | | Pn | 17 36 51.9 | +1.2 |
| **CNPM** | **China Poot** | **3.61** | **350** | | Pn | 17 36 51.3 | -0.3 |
| **CNPM** | **China Poot** | **3.61** | **350** | | Sn | 17 37 33.5 | -0.9 |
| **ACHA** | **Angle Creek He** | **3.67** | **310** | | Pn | 17 36 52.9 | +0.5 |
| **BRSE** | **Bradley Lake S** | **3.78** | **354** | | Pn | 17 36 53.1 | -0.8 |
| BRSE | | | | | Sn | 17 37 36.7 | -1.9 |
| **KAHC** | **Katmai Hardscr** | **3.81** | **316** | | Pn | 17 36 55.2 | +0.8 |
| **KAHC** | **Katmai Hardscr** | **3.81** | **316** | | Pn | 17 36 55.8 | +1.3 |
| **BRLK** | **Bradley Lake** | **3.81** | **353** | | Pn | 17 36 53.3 | -1.1 |
| **BRLK** | **Bradley Lake** | **3.81** | **353** | IAML | | 17 37 41.2 | |
| | comp=N,20nm,0.4s | | | | | | |
| **PLK4** | **Peulik 4** | **3.87** | **298** | | Pn | 17 36 54.3 | -0.9 |
| PLK4 | | | | IAML | | 17 37 47.5 | |
| | comp=N,23nm,0.4s | | | | | | |
| PLK4 | | | | IAML | | 17 38 03.4 | |
| | comp=E,20nm,0.9s | | | | | | |
| **CNTC** | **Contact Creek** | **3.94** | **308** | | Pn | 17 36 56.9 | +0.7 |
| **Q23K** | **Middleton Isla** | **3.96** | **28** | | Pn | 17 36 55.5 | -0.8 |
| **Q23K** | **Middleton Isla** | **3.96** | **28** | IAML | | 17 37 48.7 | |
| | comp=E,47nm,1.3s | | | | | | |
| Q23K | | | | IAML | | 17 39 21.8 | |
| | comp=N,31nm,1.1s | | | | | | |
| **MID** | **Middleton Isla** | **3.96** | **28** | Pn | Pn | 17 36 55.6 | -0.7 |
| MID | | | | IAML | | 17 37 45.3 | |
| | comp=E,41nm,1.1s | | | | | | |
| MID | | | | IAML | | 17 39 11.4 | |
| | comp=N,36nm,0.9s | | | | | | |
| **P19K** | **Oil Pt** | **4.06** | **336** | | Pn | 17 36 58.4 | +0.6 |
| **PLK1** | **Peulik 1** | **4.06** | **299** | | Pn | 17 36 58.9 | +1.2 |
| **P23K** | **Montague Islan** | **4.24** | **18** | | Pn | 17 36 59.8 | -0.5 |
| **O20K** | **Slope Mountain** | **4.33** | **342** | | Pn | 17 37 01.4 | -0.2 |
| **ILSW** | **Iliamna Southw** | **4.34** | **339** | | Pn | 17 37 01.8 | +0.1 |
| **ILSW** | **Iliamna Southw** | **4.34** | **339** | IAML | | 17 37 57.7 | |
| | comp=E,16nm,0.8s | | | | | | |
| ILSW | | | | IAML | | 17 38 01.7 | |
| | comp=N,15nm,1.0s | | | | | | |
| **P18K** | **Big Mountain,** | **4.42** | **323** | | Pn | 17 37 02.2 | -0.5 |
| P18K | | | | IAML | | 17 38 14.1 | |
| | comp=E,11nm,1.2s | | | | | | |
| **RSO** | **Redoubt South** | **4.71** | **343** | | Pn | 17 37 05.8 | -1.1 |
| **CHGN** | **Chignik** | **4.73** | **277** | Pn | Pn | 17 37 06.6 | -0.3 |
| CHGN | | | | IAML | | 17 37 51.2 | |
| | comp=E,28nm,0.1s | | | | | | |
| **P17K** | **Kvichak River** | **4.73** | **315** | | Pn | 17 37 07.9 | +1.0 |
| **O18K** | **Koktuh Hills** | **4.77** | **326** | | Pn | 17 37 07.8 | +0.3 |
| **O18K** | **Koktuh Hills** | **4.77** | **326** | IAML | | 17 38 12.9 | |
| | comp=N,15nm,0.9s | | | | | | |
| O18K | | | | IAML | | 17 40 13.7 | |
| | comp=E,11nm,0.7s | | | | | | |
| **HIN** | **Hinchinbrook I** | **4.78** | **21** | | Pn | 17 37 07.2 | -0.5 |
| **KAIM** | **Kayak Island** | **4.93** | **35** | | Pn | 17 37 09.4 | -0.3 |
| **KAIM** | **Kayak Island** | **4.93** | **35** | IAML | | 17 40 04.3 | |
| | comp=E,20nm,1.3s | | | | | | |
| **PWL** | **Port Wells** | **4.96** | **9** | | Pn | 17 37 09.5 | -0.6 |
| **PWL** | **Port Wells** | **4.96** | **9** | IAML | | 17 38 07.1 | |
| | comp=E,19nm,0.3s | | | | | | |
| **RC01** | **Rabbit Creek A** | **5.11** | **1** | Pn | Pn | 17 37 10.6 | -1.6 |
| **GLI** | **Glacier Island** | **5.13** | **16** | Pn | Pn | 17 37 12.2 | -0.2 |
| GLI | | | | IAML | | 17 38 27.6 | |
| | comp=N,17nm,1.1s | | | | | | |
| **RAGM** | **Ragged Mountai** | **5.22** | **30** | | Pn | 17 37 13.7 | -0.1 |
| **SUCK** | **Suckling Hills** | **5.25** | **36** | Pn | Pn | 17 37 14.0 | -0.2 |
| SUCK | | | | IAML | | 17 38 18.9 | |
| | comp=E,17nm,1.1s | | | | | | |
| **HMT** | **Hamilton** | **5.30** | **32** | | Pn | 17 37 14.1 | -0.7 |
| **N19K** | **Bonanza Creek** | **5.38** | **336** | Pn | Pn | 17 37 16.8 | +0.8 |
| N19K | | | | IAML | | 17 40 34.4 | |
| | comp=E,6.0nm,1.1s | | | | | | |
| **SUA** | **Susitna One** | **5.50** | **356** | Pn | Pn | 17 37 16.2 | -1.4 |
| **N18K** | **Kilae Creek** | **5.64** | **329** | Pn | Pn | 17 37 18.6 | -0.8 |
| **O16K** | **Kokwok River B** | **5.64** | **313** | | Pn | 17 37 19.8 | +0.4 |
| **SNH** | **Sunshine Point** | **5.65** | **39** | Pn | Pn | 17 37 20.0 | +0.4 |
| **GHO** | **Glory Hole Cre** | **5.82** | **5** | | Pn | 17 37 22.4 | +0.3 |
| **WAX** | **Waxell Ridge** | **5.84** | **37** | Pn | Pn | 17 37 22.4 | +0.2 |
| **SML** | **Sawmill** | **5.89** | **8** | Pn | Pn | 17 37 23.3 | +0.3 |
| **KLU** | **Klutina** | **5.91** | **19** | | Pn | 17 37 23.8 | +0.7 |
| **N17K** | **Nushagak Hills** | **5.92** | **323** | Pn | Pn | 17 37 22.4 | -0.9 |
| **CRQM** | **Cirque** | **5.98** | **34** | Pn | Pn | 17 37 24.2 | -0.1 |
| **SCM** | **Sheep Creek Mo** | **6.02** | **12** | Pn | Pn | 17 37 23.5 | -1.2 |
| **SKT** | **Skwentna** | **6.06** | **353** | Pn | Pn | 17 37 23.9 | -1.3 |
| **TGL** | **Tana Glacier** | **6.08** | **35** | Pn | Pn | 17 37 25.3 | -0.3 |
| **M20K** | **Styx River** | **6.13** | **346** | Pn | Pn | 17 37 25.4 | -0.8 |
| **ISLE** | **Juniper Island** | **6.13** | **38** | Pn | Pn | 17 37 26.4 | +0.1 |
| **VRDI** | **Verde Repeater** | **6.26** | **30** | Pn | Pn | 17 37 27.4 | -0.7 |
| **N25K** | **Chitina, Valde** | **6.28** | **24** | Pn | Pn | 17 37 28.4 | 0.0 |
| **GLB** | **Gilahina Butte** | **6.34** | **28** | | Pn | 17 37 29.5 | +0.5 |
| **GRNC** | **Granite Creek** | **6.42** | **39** | Pn | Pn | 17 37 30.1 | -0.3 |
| **M24K** | **Tolsona, Glenn** | **6.44** | **16** | Pn | Pn | 17 37 30.3 | -0.1 |
| **TABL** | **Table Mountain** | **6.45** | **43** | Pn | Pn | 17 37 30.4 | -0.4 |
| **MCARA** | **McCarthy VSAT** | **6.51** | **31** | Pn | Pn | 17 37 32.3 | +1.0 |
| **M17K** | **Holitna River** | **6.67** | **327** | Pn | Pn | 17 37 34.1 | +0.6 |
| **L19K** | **White Mountain** | **6.69** | **340** | Pn | Pn | 17 37 34.3 | +0.4 |
| **CTGM** | **Chitina Glacie** | **6.74** | **39** | Pn | Pn | 17 37 34.2 | -0.4 |
| **LOGN** | **Logan Glacier** | **6.76** | **41** | Pn | Pn | 17 37 34.7 | -0.2 |
| **N15K** | **Kwethluk River** | **6.80** | **312** | Pn | Pn | 17 37 36.7 | +1.3 |
| **M16K** | **Timber Creek** | **6.89** | **321** | Pn | Pn | 17 37 37.6 | +1.0 |
| **L18K** | **Granite Mounta** | **7.13** | **334** | Pn | Pn | 17 37 40.6 | +0.7 |
| **DHY** | **Denali Highway** | **7.23** | **9** | Pn | Pn | 17 37 42.6 | +1.3 |
| **Q29M** | **Mount Kennedy** | **7.42** | **50** | Pn | Pn | 17 37 44.1 | +0.2 |
| **RND** | **Reindeer** | **7.46** | **4** | Pn | Pn | 17 37 45.4 | +1.0 |
| **L16K** | **Owhat River** | **7.55** | **323** | Pn | Pn | 17 37 46.2 | +0.6 |
| **M27K** | **Edge Creek, AK** | **7.62** | **30** | Pn | Pn | 17 37 47.6 | +1.0 |
| **K17K** | **Iditarod** | **7.96** | **331** | Pn | Pn | 17 37 51.7 | +0.4 |
| **BPAW** | **Bear Paw Mtn.** | **8.15** | **357** | Pn | Pn | 17 37 53.9 | +0.1 |
| **L14K** | **Kuka Creek** | **8.51** | **314** | Pn | Pn | 17 38 00.0 | +1.3 |

*THE **10** 17:37:20.6, 40.4°N×21.5°E, h0km±2km, ML2.6/5, Error ellipse: s-maj=2.0km s-min=0.5km az=20.0*
*TIR **10** 17:37:20.0, 40.4°N×21.4°E, h25km, Md3.0, Ml2.6*
*SKO **10** 17:37:20.9, 40.4°N×21.4°E, h14km, ML2.3*
*ATH **10** 17:37:21.2, 40.4°N×21.5°E, h7km±3km, ML2.6/6, Error ellipse: s-maj=3.2km s-min=1.5km az=274.0*
*BEO **10** 17:37:22.4±0.8, 40.5°N×21.6°E, h7km±2km, ML2.0/9*

**ISC 10 17:37:20.8±0.9, 40.44N±0.02°×21.50E±0.02, h11km±7km, n46, σ1§02/78, 1C, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZN** | **Kozani** | **0.25** | **123** | P | **Pg** | **17 37 26.0** | **+0.1** |
| KZN | | | | S | **Sg** | **17 37 29.3** | **-0.1** |
| | 4μm,0.2s | | | | | | |
| **KZN** | **Kozani** | **0.25** | **123** | P | **Pg** | **17 37 26.3** | **+0.3** |
| KZN | | | | S | **Sg** | **17 37 29.5** | **+0.1** |
| KZN | | | | AML | AML | 17 37 31.3 | |
| | comp=N,8288μm,0.2s | | | | | | |
| KZN | | | | AML | AML | 17 37 31.4 | |
| | comp=E,7475μm,0.1s | | | | | | |
| **NEST** | **Nestorio** | **0.35** | **266** | P | **Pg** | **17 37 27.2** | **-0.6** |
| NEST | | | | S | **Sg** | **17 37 31.8** | **-0.6** |
| NEST | | | | AML | AML | 17 37 33.4 | |
| | comp=N,3552μm,0.3s | | | | | | |
| NEST | | | | AML | AML | 17 37 33.5 | |
| | comp=E,3799μm,0.2s | | | | | | |
| **FNA** | **Florina** | **0.35** | **344** | P | **Pg** | **17 37 27.5** | **-0.4** |
| | baz=348 | | | | | | |
| FNA | | | | S | **Sg** | **17 37 33.1** | **+0.4** |
| | baz=348 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,3.1nm,0.2s,baz=348 | | | | | | |
| **FNA** | **Florina** | **0.35** | **344** | P | **Pg** | **17 37 27.4** | **-0.5** |
| FNA | | | | S | **Sg** | **17 37 32.6** | **-0.1** |
| | comp=E,2μm,0.2s | | | | | | |
| **FNA** | **Florina** | **0.35** | **344** | *e*Pg | **Pg** | **17 37 27.5** | **-0.4** |
| FNA | | | | *e*Sg | **Sg** | **17 37 33.1** | **+0.4** |
| **FNA** | **Florina** | **0.35** | **344** | ⇑*i*Pg | **Pg** | **17 37 27.5** | **-0.4** |
| FNA | | | | *e*Sg | **Sg** | **17 37 33.2** | **+0.5** |
| **FNA** | **Florina** | **0.35** | **344** | P | **Pg** | **17 37 27.5** | **-0.4** |
| FNA | | | | S | **Sg** | **17 37 32.8** | **+0.1** |
| FNA | | | | AML | AML | 17 37 33.5 | |
| | comp=N,3825μm,0.2s | | | | | | |
| FNA | | | | AML | AML | 17 37 33.8 | |
| | comp=E,3754μm,0.2s | | | | | | |
| **PENT** | **Pentalofos** | **0.37** | **229** | P | **Pg** | **17 37 27.7** | **-0.5** |
| PENT | | | | S | **Sg** | **17 37 32.8** | **-0.4** |
| **KTI** | **Kastanea** | **0.47** | **96** | P | **Pg** | **17 37 29.9** | **-0.2** |
| **KPRO** | **Kipourio** | **0.50** | **192** | P | **Pg** | **17 37 30.0** | **-0.6** |
| KPRO | | | | S | **Sg** | **17 37 37.5** | **+0.3** |
| | comp=E,1μm,0.3s | | | | | | |
| **KPRO** | **Kipourio** | **0.50** | **192** | P | **Pg** | **17 37 29.9** | **-0.6** |
| KPRO | | | | S | **Sg** | **17 37 37.4** | **+0.3** |
| KPRO | | | | AML | AML | 17 37 40.9 | |
| | comp=E,2474μm,0.3s | | | | | | |
| KPRO | | | | AML | AML | 17 37 42.1 | |
| | comp=N,2116μm,0.3s | | | | | | |
| **KBN** | **Korca** | **0.57** | **289** | P | **Pg** | **17 37 31.3** | **-0.7** |
| | baz=287 | | | | | | |
| KBN | | | | S | **Sg** | **17 37 39.8** | **+0.2** |
| | baz=287 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,3.1nm,0.2s,baz=287 | | | | | | |
| **LIT** | **Litokhoron** | **0.83** | **114** | P | **Pg** | **17 37 36.0** | **-0.8** |
| **LIT** | **Litokhoron** | **0.83** | **114** | *i* Pg | **Pg** | **17 37 36.3** | **-0.5** |
| LIT | | | | *e*Sg | **Sn** | **17 37 50.4** | **-0.2** |
| **OHR** | **Ohrid** | **0.86** | **322** | *i* Pg | **Pg** | **17 37 36.3** | **-1.1** |
| OHR | | | | *e*Sg | **Sb** | **17 37 50.1** | **+1.0** |
| OHR | | | | *e*Lg | Lg | 17 37 52.9 | |
| | comp=E,200nm,0.4s | | | | | | |
| OHR | | | | *e*Lg | Lg | 17 37 53.0 | |
| | comp=N,138nm,0.7s | | | | | | |
| **TYRN** | **Tyrnavos** | **0.92** | **142** | P | **Pg** | **17 37 37.5** | **-1.0** |
| TYRN | | | | S | **Sb** | **17 37 51.4** | **+0.5** |
| | comp=N,235nm,0.6s | | | | | | |
| **TYRN** | **Tyrnavos** | **0.92** | **142** | P | **Pg** | **17 37 37.5** | **-1.0** |
| TYRN | | | | S | **Sb** | **17 37 51.3** | **+0.5** |
| TYRN | | | | AML | AML | 17 37 54.8 | |
| | comp=E,427μm,0.5s | | | | | | |
| TYRN | | | | AML | AML | 17 37 57.5 | |
| | comp=N,460μm,0.4s | | | | | | |
| **JAN** | **Janina** | **0.93** | **213** | P | **Pg** | **17 37 38.0** | **-0.7** |
| **THL** | **Klokotos Trika** | **0.96** | **156** | P | **Pg** | **17 37 37.9** | **-1.4** |
| THL | | | | S | **Sb** | **17 37 52.6** | **+0.6** |
| | comp=N,242nm,0.3s | | | | | | |
| **THL** | **Klokotos Trika** | **0.96** | **156** | P | **Pg** | **17 37 37.9** | **-1.4** |
| THL | | | | S | **Sb** | **17 37 52.6** | **+0.6** |
| THL | | | | AML | AML | 17 37 55.2 | |
| | comp=N,398μm,0.2s | | | | | | |
| THL | | | | AML | AML | 17 37 56.2 | |
| | comp=E,563μm,0.5s | | | | | | |
| **THE** | **Thessaloniki** | **1.13** | **80** | *e*Pg | **Pg** | **17 37 41.7** | **-0.9** |
| THE | | | | *e*Sg | **Sb** | **17 37 57.6** | **+0.7** |
| **VAY** | **Valandovo** | **1.20** | **42** | *i* Pg | **Pg** | **17 37 43.4** | **-0.4** |
| VAY | | | | *e*Sg | **Sn** | **17 38 00.9** | **+1.3** |
| VAY | | | | *e*Lg | Lg | 17 38 07.4 | |
| | comp=N,22nm,0.4s | | | | | | |
| VAY | | | | *e*Lg | Lg | 17 38 07.5 | |
| | comp=E,38nm,0.6s | | | | | | |
| **HORT** | **Hortiatis** | **1.23** | **82** | P | **Pg** | **17 37 43.0** | **-1.4** |
| **IGT** | **Igoumenitsa** | **1.28** | **225** | P | **Pn** | **17 37 44.1** | **-0.4** |
| IGT | | | | S | **Sn** | **17 38 03.5** | **+1.9** |
| **SRN** | **Sarande** | **1.28** | **244** | P | **Pn** | **17 37 45.1** | **+0.6** |
| | baz=243 | | | | | | |
| SRN | | | | S | **Sn** | **17 38 02.4** | **+0.7** |
| | baz=243 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,0.4nm,0.5s,baz=243 | | | | | | |
| **KNT** | **Kendrikon** | **1.28** | **55** | P | **Pn** | **17 37 44.5** | **-0.1** |
| **KNT** | **Kendrikon** | **1.28** | **55** | *i* Pg | **Pn** | **17 37 44.5** | **-0.1** |
| KNT | | | | *e*Sg | **Sb** | **17 38 01.6** | **+0.2** |
| **SOH** | **Sokhos** | **1.46** | **74** | *e*Pn | **Pn** | **17 37 47.3** | **+0.2** |
| SOH | | | | *e*Sg | **Sg** | **17 38 10.5** | **+2.7** |
| **KEK** | **Kerkira** | **1.50** | **241** | P | **Pn** | **17 37 47.9** | **+0.4** |
| **KEK** | **Kerkira** | **1.50** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WHF | | | | *e*S | | Sn | 17 56 33.0 | -0.5 |
| | baz=285 | | | | | | | |
| **FUSS** | **Fushou** | **0.37** | **300** | *i* P | | Pb | 17 56 27.6 | +0.5 |
| | baz=300 | | | | | | | |
| FUSS | | | | *e*S | | Sn | 17 56 34.2 | -0.5 |
| | baz=300 | | | | | | | |
| **CHGB** | **Renai** | **0.39** | **270** | *i* P | | Pn | 17 56 28.1 | -0.3 |
| | baz=270 | | | | | | | |
| CHGB | | | | S | | Sn | 17 56 34.5 | -0.4 |
| | baz=270 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.39** | **209** | P | | Pb | 17 56 27.7 | +0.5 |
| | baz=209 | | | | | | | |
| WARBT | | | | *e*S | | Sb | 17 56 32.7 | -0.4 |
| | baz=209 | | | | | | | |
| **NNSH** | **Datong** | **0.41** | **332** | P | | Pb | 17 56 27.8 | +0.2 |
| | baz=332 | | | | | | | |
| NNSH | | | | S | | Sb | 17 56 34.7 | +0.8 |
| | baz=332 | | | | | | | |
| **NNSH** | **Datong** | **0.41** | **332** | *e*P | | Pb | 17 56 27.8 | +0.1 |
| | baz=227 | | | | | | | |
| NNSH | | | | *e*S | | Sb | 17 56 34.6 | +0.7 |
| | baz=227 | | | | | | | |
| **EWUT** | **Wuta** | **0.42** | **23** | P | | Pn | 17 56 28.4 | -0.3 |
| | baz=23 | | | | | | | |
| EWUT | | | | *e*S | | Sn | 17 56 36.9 | +1.4 |
| | baz=23 | | | | | | | |
| **EWUT** | **Wuta** | **0.42** | **23** | *i* P | | Pn | 17 56 28.2 | -0.5 |
| | baz=132 | | | | | | | |
| **TWT** | **Tachien** | **0.43** | **297** | *i* P | | Pn | 17 56 28.5 | -0.5 |
| | baz=295 | | | | | | | |
| TWT | | | | *e*S | | Sn | 17 56 36.0 | +0.1 |
| | baz=295 | | | | | | | |
| **NNS** | **Nan Shan** | **0.43** | **332** | *i* P | | Pb | 17 56 28.2 | +0.3 |
| | baz=332 | | | | | | | |
| NNS | | | | *i* S | | Sn | 17 56 35.2 | -0.7 |
| | baz=332 | | | | | | | |
| **NNS** | **Nan Shan** | **0.43** | **332** | P | | Pb | 17 56 28.2 | +0.4 |
| | baz=229 | | | | | | | |
| NNS | | | | *e*S | | Sb | 17 56 35.0 | +0.7 |
| | baz=229 | | | | | | | |
| **WUSB** | **Renai** | **0.44** | **261** | P | | Pb | 17 56 28.6 | +0.5 |
| | baz=261 | | | | | | | |
| WUSB | | | | S | | Sn | 17 56 35.6 | -0.6 |
| | baz=261 | | | | | | | |
| **VWDT** | **VWDT** | **0.52** | **234** | *e*P | | Pb | 17 56 29.0 | -0.2 |
| | baz=233 | | | | | | | |
| VWDT | | | | S | | Sn | 17 56 37.4 | -0.4 |
| | baz=233 | | | | | | | |

**TAP 10 17:56:22.6,24.60N×121.59E,h6km±1km, ML0.6,1C, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ENTT** | **Nioudou** | **0.04** | **329** | ⇑*i* P | Pg | 17 56 24.5 | +0.4 |
| | baz=335 | | | | | | |
| ENTT | | | | S | Sg | 17 56 25.6 | +0.5 |
| | baz=335 | | | | | | |
| **NDT** | **Datong Townshi** | **0.07** | **271** | *i* P | Pg | 17 56 25.1 | +0.6 |
| | baz=271 | | | | | | |
| NDT | | | | *i* S | Sg | 17 56 26.8 | +1.0 |
| | baz=271 | | | | | | |
| **LATG** | **Datong** | **0.09** | **222** | *i* P | Pg | 17 56 25.3 | +0.5 |
| | baz=222 | | | | | | |
| LATG | | | | S | Sg | 17 56 27.2 | +0.9 |
| | baz=222 | | | | | | |
| **NDS** | **Dongshan** | **0.12** | **74** | P | Pg | 17 56 26.0 | +0.9 |
| | baz=73 | | | | | | |
| NDS | | | | *e*S | Sg | 17 56 28.5 | +1.6 |
| | baz=73 | | | | | | |
| **TWE** | **Neicheng** | **0.14** | **30** | *e*P | Pg | 17 56 27.0 | +1.4 |
| | baz=35 | | | | | | |
| TWE | | | | *e*S | Sg | 17 56 29.4 | +2.0 |
| | baz=35 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.16** | **359** | P | Pg | 17 56 26.5 | +0.6 |
| | baz=358 | | | | | | |
| FUSB | | | | *i* S | Sg | 17 56 29.8 | +1.6 |
| | baz=358 | | | | | | |
| **NWLT** | **Wulai** | **0.19** | **335** | P | Pg | 17 56 27.4 | +0.8 |
| | baz=335 | | | | | | |
| NWLT | | | | *e*S | Sg | 17 56 30.7 | +1.5 |
| | baz=335 | | | | | | |
| **YHNB** | **Yeheng** | **0.21** | **289** | P | Pg | 17 56 28.1 | +1.3 |
| | baz=289 | | | | | | |
| YHNB | | | | *e*S | Sg | 17 56 31.9 | +2.3 |
| | baz=289 | | | | | | |
| **ENA** | **Nanau** | **0.22** | **142** | P | Pg | 17 56 27.9 | +0.9 |
| | baz=140 | | | | | | |
| ENA | | | | S | Sg | 17 56 33.0 | +3.1 |
| | baz=140 | | | | | | |
| **NSK** | **Sanguang** | **0.23** | **289** | *i* P | Pg | 17 56 28.1 | +0.9 |
| | baz=289 | | | | | | |
| NSK | | | | *i* S | Sg | 17 56 31.9 | +1.7 |
| | baz=289 | | | | | | |
| **EWUT** | **Wuta** | **0.23** | **132** | *e*S | Sg | 17 56 31.8 | +1.6 |
| | baz=132 | | | | | | |
| **NNSB** | **Datong** | **0.26** | **228** | *e*P | Pg | 17 56 28.1 | +0.3 |
| | baz=227 | | | | | | |
| NNSB | | | | *e*S | Sb | 17 56 34.8 | +0.3 |
| | baz=227 | | | | | | |

*NEIC **10** 18:00:50.7±1.1,46.52N±0.01×121.39W±0.02,h5km±2km, Error ellipse: s-maj=3.0km s-min=1.9km az=312.0*
*SEA **10** 18:00:51.4±0.9,46.54N±0.01×121.42W±0.02,h4km±7km, ML2.5/21,ML2.5/95(NEIC), Error ellipse: s-maj=1.7km s-min=1.6km az=175.0*

**PNSN 10 18:00:51.4,46.54N×121.42W,h4km,MD2.5,Fault plane solution: NP1:ϕs190.00000°,δ60.00000°,λ-70.00000°., Washington**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LON** | **Longmire** | **0.34** | **308** | | Pg | 18 00 57.7 | -0.3 |
| **LON** | **Longmire** | **0.34** | **308** | | Pg | 18 00 57.8 | -0.2 |
| **LON** | **Longmire** | **0.34** | **308** | | Sg | 18 01 02.8 | +0.3 |
| **RCM** | **Mount Rainier-** | **0.37** | **324** | | Pg | 18 00 58.4 | -0.2 |
| **RCS** | **Mount Rainier-** | **0.40** | **327** | | Pg | 18 00 58.8 | -0.3 |
| **ASR** | **Mount Adams--S** | **0.41** | **197** | | Pg | 18 00 58.9 | -0.3 |
| **FMW** | **Mount Fremont** | **0.43** | **336** | | Pg | 18 00 59.4 | -0.3 |
| **NAC** | **Naches** | **0.45** | **64** | | Pg | 18 00 59.4 | -0.7 |
| **OBSR** | **Observation Ro** | **0.45** | **323** | | Pg | 18 01 00.0 | -0.1 |
| OBSR | | | | | Sg | 18 01 07.1 | +1.1 |
| **AWST** | **Adams West** | **0.47** | **212** | | Pg | 18 01 00.1 | -0.3 |
| AWST | | | | | Sg | 18 01 07.3 | +0.9 |
| **KOSW** | **Kosmos** | **0.54** | **262** | | Pg | 18 01 01.4 | -0.3 |
| **B202** | **Windy Ridge, M** | **0.58** | **240** | | Pg | 18 01 02.0 | -0.5 |
| B202 | | | | | Sg | 18 01 10.3 | +0.3 |
| **SOSW** | **Source of Smit** | **0.58** | **239** | | Pg | 18 01 02.1 | -0.4 |
| **TDL** | **Tradedollar La** | **0.58** | **251** | | Pg | 18 01 02.3 | -0.3 |
| **CDFW** | **Cedar Flats** | **0.61** | **226** | | Pg | 18 01 02.5 | -0.6 |
| CDFW | | | | | Sg | 18 01 11.4 | +0.4 |
| **ESD** | **East Dome** | **0.61** | **236** | | Pg | 18 01 02.9 | -0.2 |
| **YA2** | **Yakima** | **0.61** | **91** | | Pg | 18 01 02.7 | -0.4 |
| **JRO** | **Jston Ridge Ob** | **0.61** | **245** | | Pg | 18 01 02.7 | -0.5 |
| **JRO** | **Jston Ridge Ob** | **0.61** | **245** | | Sg | 18 01 11.7 | +0.5 |
| **BOLM** | **Sugar Bowl** | **0.62** | **238** | | Pg | 18 01 03.0 | -0.2 |
| **VALT** | **Mount Saint He** | **0.63** | **239** | | Pg | 18 01 03.2 | -0.2 |
| **B201** | **Coldwater, Mou** | **0.63** | **248** | | Pg | 18 01 03.0 | -0.5 |
| B201 | | | | | Sg | 18 01 12.0 | +0.3 |
| **SEPW** | **September Lobe** | **0.63** | **238** | | Pg | 18 01 03.3 | -0.3 |
| **STD** | **Studebaker Rid** | **0.63** | **242** | | Pg | 18 01 03.0 | -0.5 |
| **JLK** | **June Lake** | **0.64** | **233** | | Pg | 18 01 03.2 | -0.5 |
| JLK | | | | | Sg | 18 01 12.7 | +0.6 |
| **HSR** | **South Ridge** | **0.65** | **236** | | Pg | 18 01 03.4 | -0.4 |
| **TRW** | **Toppenish Ridg** | **0.65** | **112** | | Pg | 18 01 03.2 | -0.8 |
| **F05D** | **White Salmon** | **0.66** | **183** | | Pg | 18 01 03.3 | -0.6 |
| **SWF2** | **Southwest Flan** | **0.66** | **237** | | Pg | 18 01 03.7 | -0.4 |
| **ERK** | **Elk Rock** | **0.68** | **250** | | Pg | 18 01 03.9 | -0.5 |
| **EBG** | **Ellensburg** | **0.69** | **57** | | Pg | 18 01 04.3 | -0.4 |
| **GSM** | **Grass Mountain** | **0.71** | **339** | | Pg | 18 01 04.6 | -0.5 |
| **FL2** | **Flat Top 2** | **0.73** | **242** | | Pg | 18 01 04.8 | -0.6 |
| **B203** | **Quarry, Mount** | **0.73** | **240** | | Pg | 18 01 04.7 | -0.8 |
| B203 | | | | | Sg | 18 01 15.2 | +0.2 |
| **MTMW** | **Mount Mitchell** | **0.75** | **227** | | Sg | 18 01 15.7 | +0.1 |
| **D05A** | **Enumclaw** | **0.76** | **329** | | Pg | 18 01 05.8 | -0.1 |
| **MXC** | **Moxie City** | **0.78** | **87** | | Pg | 18 01 05.6 | -0.7 |
| MXC | | | | | Sg | 18 01 16.5 | +0.1 |
| **MXC** | **Moxie City** | **0.78** | **87** | IAML | | 18 01 16.9 | |
| | comp=N,164nm,0.2s | | | | | | |
| **TBM** | **Table Mountain** | **0.84** | **42** | | Pg | 18 01 07.1 | -0.5 |
| **LTY** | **Liberty** | **0.88** | **35** | | Pg | 18 01 07.3 | -1.0 |
| **LTY** | **Liberty** | **0.88** | **35** | | Sg | 18 01 19.1 | -0.7 |
| LTY | | | | IAML | | 18 01 19.6 | |
| | comp=N,135nm,0.5s | | | | | | |
| LTY | | | | IAML | | 18 01 19.9 | |
| | comp=E,112nm,0.3s | | | | | | |
| **F04A** | **Amboy** | **0.92** | **229** | Pg | Pg | 18 01 07.6 | -1.4 |
| F04A | | | | | Sg | 18 01 20.6 | -0.4 |
| F04A | | | | IAML | | 18 01 22.3 | |
| | comp=E,136nm,0.3s | | | | | | |
| F04A | | | | IAML | | 18 01 23.7 | |
| | comp=N,115nm,0.4s | | | | | | |
| **E07A** | **Sunnyside** | **1.08** | **88** | | Pg | 18 01 10.7 | -1.4 |
| E07A | | | | Sg | Sg | 18 01 25.6 | -0.5 |
| E07A | | | | IAML | | 18 01 27.4 | |
| | comp=E,169nm,0.5s | | | | | | |
| E07A | | | | IAML | | 18 01 28.5 | |
| | comp=N,173nm,0.4s | | | | | | |
| **F04D** | **Rainier, OR** | **1.20** | **248** | | Pg | 18 01 12.9 | -1.3 |
| **F07A** | **Phinny Hill Vi** | **1.22** | **121** | | Pg | 18 01 13.2 | -1.6 |
| F07A | | | | Sg | Sg | 18 01 29.7 | -0.8 |
| F07A | | | | IAML | | 18 01 34.3 | |
| | comp=E,155nm,0.5s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **1.23** | **188** | | Pg | 18 01 12.7 | -2.3 |
| **G05A** | **Wamic** | **1.30** | **177** | | Pg | 18 01 14.5 | -1.8 |
| G05A | | | | IAML | | 18 01 36.4 | |
| | comp=E,86nm,0.4s | | | | | | |
| **HAWA** | **Hanford** | **1.31** | **96** | | Pn | 18 01 14.5 | -1.9 |
| HAWA | | | | IAML | | 18 01 33.5 | |
| | comp=E,106nm,0.6s | | | | | | |
| **GNW** | **Green Mountain** | **1.41** | **317** | | Pn | 18 01 16.2 | -1.5 |
| **G06A** | **Carlson Farm,** | **1.42** | **157** | | Pn | 18 01 16.3 | -1.6 |
| **E03A** | **Lebam** | **1.48** | **271** | | Pn | 18 01 17.4 | -1.3 |
| E03A | | | | IAML | | 18 01 38.4 | |
| | comp=N,83nm,0.5s | | | | | | |
| **F03A** | **Seaside** | **1.61** | **248** | | Pn | 18 01 19.4 | -1.1 |
| **E08A** | **Dider Farm, El** | **1.63** | **91** | | Pn | 18 01 19.2 | -1.6 |
| E08A | | | | IAML | | 18 01 43.3 | |
| | comp=N,71nm,0.3s | | | | | | |
| E08A | | | | IAML | | 18 01 46.0 | |
| | comp=E,59nm,0.4s | | | | | | |
| **RADR** | **Rader Ridge** | **1.65** | **267** | Pn | Pn | 18 01 20.6 | -0.5 |
| RADR | | | | IAML | | 18 01 44.4 | |
| | comp=E,76nm,0.7s | | | | | | |
| RADR | | | | IAML | | 18 01 53.6 | |
| | comp=N,74nm,0.7s | | | | | | |
| **WISH** | **Wishkah** | **1.71** | **291** | Pn | Pn | 18 01 21.6 | -0.4 |
| WISH | | | | IAML | | 18 01 58.6 | |
| | comp=N,37nm,0.7s | | | | | | |
| WISH | | | | IAML | | 18 02 09.7 | |
| | comp=E,36nm,1.4s | | | | | | |
| **D08A** | **Wollman Farm,** | **1.79** | **72** | | Pn | 18 01 22.1 | -1.0 |
| **G03D** | **McMinnville, O** | **1.85** | **225** | | Pn | 18 01 22.8 | -1.0 |
| G03D | | | | IAML | | 18 01 54.1 | |
| | comp=E,53nm,0.4s | | | | | | |
| G03D | | | | IAML | | 18 01 56.0 | |
| | comp=N,62nm,0.9s | | | | | | |
| **NLWA** | **Neilton Lookou** | **1.88** | **298** | | Pn | 18 01 23.9 | -0.4 |
| NLWA | | | | IAML | | 18 01 53.2 | |
| | comp=N,46nm,0.5s | | | | | | |
| NLWA | | | | IAML | | 18 01 54.0 | |
| | comp=N,42nm,1.2s | | | | | | |
| **H04A** | **Detroit Lake** | **1.93** | **196** | | Pn | 18 01 24.8 | -0.3 |
| H04A | | | | IAML | | 18 01 53.1 | |
| | comp=E,39nm,0.3s | | | | | | |
| H04A | | | | IAML | | 18 01 53.3 | |
| | comp=N,52nm,0.4s | | | | | | |
| **B04A** | **Port Angeles** | **2.08** | **318** | Pn | Pn | 18 01 27.3 | +0.4 |
| **HEBO** | **Mount Hebo** | **2.10** | **232** | Pn | Pn | 18 01 27.1 | -0.3 |
| HEBO | | | | IAML | | 18 02 09.0 | |
| | comp=N,54nm,1.4s | | | | | | |
| **G08A** | **Pilot Rock** | **2.12** | **125** | Pn | Pn | 18 01 25.8 | -1.9 |
| G08A | | | | IAML | | 18 01 58.2 | |
| | comp=E,44nm,0.5s | | | | | | |
| G08A | | | | IAML | | 18 01 59.7 | |
| | comp=N,50nm,0.5s | | | | | | |
| **I05D** | **Terrebonne, OR** | **2.20** | **179** | | Pn | 18 01 27.3 | -1.4 |
| I05D | | | | IAML | | 18 02 09.2 | |
| | comp=N,33nm,0.6s | | | | | | |
| I05D | | | | IAML | | 18 02 09.5 | |
| | comp=E,29nm,0.7s | | | | | | |
| **H04D** | **Lebanon** | **2.22** | **205** | | Pn | 18 01 27.3 | -1.6 |
| H04D | | | | IAML | | 18 02 00.1 | |
| | comp=E,48nm,0.6s | | | | | | |
| H04D | | | | IAML | | 18 02 02.7 | |
| | comp=N,32nm,0.4s | | | | | | |
| **E09A** | **Wood Farm, Sta** | **2.26** | **89** | | Pn | 18 01 27.2 | -2.2 |
| **B08A** | **Colville Reser** | **2.30** | **37** | | Pn | 18 01 28.5 | -1.6 |
| B08A | | | | IAML | | 18 02 03.4 | |
| | comp=N,22nm,0.5s | | | | | | |
| B08A | | | | IAML | | 18 02 04.3 | |
| | comp=E,26nm,0.3s | | | | | | |
| **COR** | **Corvallis** | **2.36** | **215** | Pn | Pn | 18 01 29.0 | -1.8 |
| COR | | | | IAML | | 18 02 04.7 | |
| | comp=E,36nm,1.0s | | | | | | |
| COR | | | | IAML | | 18 02 06.9 | |
| | comp=E,28nm,0.9s | | | | | | |
| **C09A** | **Chrisman Ranch** | **2.49** | **58** | | Pn | 18 01 31.4 | -1.2 |
| **PGC** | **Sidney** | **2.52** | **328** | Pn | Pn | 18 01 32.0 | -0.9 |
| **BUCK** | **Buck Mountain** | **2.59** | **206** | Pn | Pn | 18 01 32.8 | -1.3 |
| BUCK | | | | IAML | | 18 02 11.5 | |
| | comp=E,20nm,0.6s | | | | | | |
| **PINE** | **Pine Mountain** | **2.77** | **173** | | Pn | 18 01 36.2 | -0.4 |
| PINE | | | | IAML | | 18 02 29.0 | |
| | comp=N,15nm,0.8s | | | | | | |
| PINE | | | | IAML | | 18 02 29.4 | |
| | comp=E,16nm,0.7s | | | | | | |
| **I07A** | **Izee** | **2.81** | **151** | | Pn | 18 01 36.2 | -0.8 |
| **I04A** | **Tendick Farm,** | **2.83** | **195** | Pn | Pn | 18 01 37.5 | +0.1 |
| I04A | | | | IAML | | 18 02 18.4 | |
| | comp=E,19nm,0.3s | | | | | | |
| I04A | | | | IAML | | 18 02 19.0 | |
| | comp=N,15nm,0.2s | | | | | | |
| **CLRS** | **Cowichan Lake** | **2.93** | **322** | Pn | Pn | 18 01 38.9 | +0.3 |
| **F10A** | **Beach Ranch, E** | **2.96** | **100** | | Pn | 18 01 38.3 | -0.9 |
| **J05D** | **Fort Rock, OR** | **3.26** | **178** | | Pn | 18 01 42.1 | -1.2 |
| J05D | | | | IAML | | 18 03 01.5 | |
| | comp=E,11nm,4.0s | | | | | | |
| **BMO** | **Blue Mountains** | **3.34** | **119** | | Pn | 18 01 43.0 | -1.4 |
| BMO | | | | IAML | | 18 02 40.7 | |
| | comp=E,7.8nm,0.5s | | | | | | |
| **NEW** | **Newport** | **3.39** | **58** | | Pn | 18 01 43.3 | -1.7 |
| NEW | | | | IAML | | 18 02 39.6 | |
| | comp=E,14nm,0.5s | | | | | | |
| NEW | | | | IAML | | 18 02 44.7 | |
| | comp=E,13nm,0.4s | | | | | | |
| **DBO** | **Dodson Butte** | **3.66** | **201** | Pn | Pn | 18 01 48.0 | -0.8 |
| DBO | | | | IAML | | 18 02 54.3 | |
| | comp=N,8.3nm,3.4s | | | | | | |
| DBO | | | | IAML | | 18 03 60.0 | |
| | comp=E,7.9nm,3.2s | | | | | | |
| **OZB** | **Mount Ozzard** | **3.66** | **313** | Pn | Pn | 18 01 49.3 | +0.6 |
| **YBH** | **Yreka Blue Hor** | **4.90** | **191** | Pn | Pn | 18 02 02.5 | -3.3 |
| YBH | | | | IAML | | 18 02 49.2 | |
| | comp=N,4.4nm,3.8s | | | | | | |
| YBH | | | | IAML | | 18 03 28.6 | |
| | comp=E,4.0nm,4.4s | | | | | | |
| **KSXB** | **Camp Six Broad** | **5.03** | **201** | Pn | Pn | 18 02 05.9 | -1.7 |
| **MSO** | **Missoula** | **5.15** | **84** | Pn | Pn | 18 02 06.5 | -2.9 |
| **BPMT** | **Black Pine Rid** | **5.51** | **88** | Pn | Pn | 18 02 12.0 | -2.3 |

**RSNC 10 18:01:14.4±0.0,7°N±2°×7°3W±°,h148km±3km,M1.7,ML1.7, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.20** | **181** | P | Pn | 18 01 34.0 | -0.8 |
| BARC | | | | S | Sn | 18 01 48.1 | -2.1 |
| **BRJC** | **Barrancabermej** | **0.59** | **288** | P | Pn | 18 01 36.1 | +0.1 |
| BRJC | | | | S | Sn | 18 01 51.9 | -0.5 |
| **PAMC** | **Pamplona, Colo** | **0.72** | **41** | P | Pn | 18 01 36.8 | -0.6 |
| **RUSC** | **La Rusia** | **0.90** | **174** | P | Pn | 18 01 37.9 | -0.8 |
| **PTBC** | **PUERTO BERRIO,** | **1.29** | **259** | P | Pn | 18 01 41.0 | -0.7 |
| **ZARC** | **Zaragoza, Cauc** | **1.81** | **293** | P | Pn | 18 01 46.7 | -0.5 |
| ZARC | | | | S | Sn | 18 02 11.1 | -1.2 |

**RSNC 10 18:01:38.7±0.0,6°N±2°×7°4W±°,h14km±4km,ML1.2, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPBC** | **San Pablo de B** | **0.42** | **155** | P | Pg | 18 01 45.3 | -1.9 |
| SPBC | | | | S | Sg | 18 01 53.6 | +0.6 |
| **PTBC** | **PUERTO BERRIO,** | **0.54** | **338** | P | Pg | 18 01 48.5 | -0.8 |
| PTBC | | | | S | Sg | 18 01 56.0 | -0.5 |
| **NORC** | **Norcasia** | **0.78** | **232** | P | Pg | 18 01 52.9 | -0.9 |
| NORC | | | | S | Sg | 18 02 03.2 | -0.9 |
| **BRJC** | **Barrancabermej** | **1.05** | **28** | P | Pb | 18 01 52.9 | -5.9 |
| BRJC | | | | S | Sb | 18 02 11.3 | -1.1 |
| **RUSC** | **La Rusia** | **1.17** | **97** | P | Pb | 18 01 56.6 | -4.4 |
| RUSC | | | | S | Sb | 18 02 14.8 | -1.4 |
| **RUSC** | **La Rusia** | **1.17** | **97** | S | Pn | 18 01 56.6 | -4.5 |

*IDC **10** 18:09:23.3±0.6,62.63S×165.65E,h0km,mb4.7/11, mbtmp4.8/13,ML4.8/2,MS5.0/9, Error ellipse: s-maj=30.6km s-min=13.6km az=73.0*
*NEIC **10** 18:09:24.3,62.62S×165.85E,h20km,Moment Tensor Solution. Duration: 3s1 Moment tensor: Scale 10^17Nm; Mrr-0.28; Mθθ2.19; Mϕϕ-1.91; Mrθ-1.38; Mθϕ-0.44; Mϕr0.47; Fault plane solution: M0 2.45000×10^17 NP1: ϕs321.06000°,δ83.22000°,λ27.93000°. NP2: ϕs227.48000°,δ62.28000°,λ172.33000°. Principal axes: T 2.8735, Plg24.0000°, Azm188.0000°; N -0.8391, Plg61.0000°, Azm334.0000°; P -2.0344, Plg14.0000°, Azm91.0000°;*
*NEIC **10** 18:09:24.3±1.3,62.63S±0.08×165.6E±0.3,h10km±1km, mb5.4/95,Ms_20 5.6/67,Mwb5.4/12,Mww5.5/12 Error ellipse: s-maj=21.7km s-min=11.7km az=251.0,Moment Tensor Solution. Moment tensor: Scale 10^17Nm; Mrr0.24; Mθθ1.65; Mϕϕ-1.90; Mrθ0.07; Mθϕ0.07; Mϕr-0.29; Fault plane solution: M0 1.81000×10^17 NP1: ϕs313.67000°,δ86.46000°,λ-7.07000°. NP2:ϕs44.11000°, δ82.94000°,λ-176.44000°. Principal axes: T 1.6583, Plg2.0000°, Azm359.0000°; N 0.2767, Plg82.0000°, Azm107.0000°; P -1.9349, Plg7.0000°, Azm269.0000°;*
*NEIC **10** 18:09:24.9,62.63S×165.75E,h10km*
*NEIC **10** 18:09:24.3,62.62S×165.64E,h20km*
*GCMT **10** 18:09:27.3±0.2,62.56S±0.01×165.75E±0.03,h12km, MW5.5/114,Moment Tensor Solution. s59,c85; s114,c188; Duration: 1s3 Moment tensor: Scale 10^17 Nm; Mrr-0.26±.04; Mθθ1.85±.03; Mϕϕ-1.59±.04; Mrθ-1.02±.09; Mθϕ-0.41±.03; Mϕr0.46±.12; Best double couple: M0 2.03900×10^17 NP1:ϕs321.00000°,δ86.00000°, λ28.00000°. NP2:ϕs229.00000°,δ62.00000°,λ175.00000°. Principal axes: T 2.3400, Plg23.0000°, Azm189.0000°; N -0.5990, Plg62.0000°, Azm329.0000°; P -1.7370, Plg16.0000°, Azm92.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 10 18:09:24.4±1.2,62.62S±0.05×165.71E±0.10,h8km±7km, n279,σ1§24/256,mb5.3/65,MS5.1/22,11C-2D,Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCQ** | **Macquarie Isla** | **8.87** | **334** | Pn | Pn | 18 11 27.6 | -5.2 |
| **VNDA** | **Vanda** | **15.02** | **183** | | Pn | **18 12 55.2** | **-1.5** |
| VNDA | | | | IAmb | IAmb | 18 12 59.5 | |
| | comp=Z,238nm,1.6s | | | | | | |
| **VNDA** | **Vanda** | **15.02** | **183** | Pn | **Pn** | **18 12 55.8** | **-0.9** |
| | comp=Z,6.4nm,0.3s,baz=359,slow=14,SNR=238 | | | | | | |
| VNDA | | | | LR | LR | 18 17 51.8 | |
| | comp=Z,9μm,18.1s,baz=12,slow=34 | | | | | | |
| | comp=Z,24nm,0.4s | | | | | | |
| **SBA** | **Scott Base** | **15.31** | **179** | | **Pn** | **18 12 59.8** | **-0.7** |
| SBA | | | | IAmb | IAmb | 18 13 03.9 | |
| | comp=Z,574nm,1.6s | | | | | | |
| **APZ** | **The Paps** | **15.88** | **6** | P | **Pn** | **18 13 05.9** | **-2.1** |
| **SYZ** | **Scrubby Hill** | **16.23** | **9** | P | **Pn** | **18 13 09.7** | **-2.9** |
| **PYZ** | **Puysegur Point** | **16.50** | **2** | P | **P** | **18 13 17.4** | **-1.3** |
| **PYZ** | **Puysegur Point** | **16.50** | **2** | Pn | **Pn** | **18 13 14.3** | **-1.7** |
| **PYZ** | **Puysegur Point** | **16.50** | **2** | P | **Pn** | **18 13 14.5** | **-1.4** |
| **WHZ** | **Wether Hill Ro** | **16.81** | **5** | | **Pn** | **18 13 18.5** | **-1.5** |
| **WHZ** | **Wether Hill Ro** | **16.81** | **5** | P | **Pn** | **18 13 19.2** | **-0.8** |
| **TUZ** | **Tuapeka** | **16.85** | **9** | P | **Pn** | **18 13 21.0** | **+0.6** |
| **HHSZ** | **Highcliff Hill** | **17.00** | **12** | P | **P** | **18 13 23.4** | **-0.9** |
| **DCZ** | **Deep Cove** | **17.21** | **3** | Pn | **Pn** | **18 13 24.4** | **-0.5** |
| **DCZ** | **Deep Cove** | **17.21** | **3** | P | **P** | **18 13 26.5** | **0.0** |
| **MLZ** | **Mavora Lakes** | **17.34** | **6** | Pn | **Pn** | **18 13 26.1** | **-0.6** |
| MLZ | | | | IAmb | IAmb | 18 13 30.8 | |
| | comp=Z,206nm,1.0s | | | | | | |
| **MLZ** | **Mavora Lakes** | **17.34** | **6** | P | **P** | **18 13 27.4** | **-0.7** |
| **EAZ** | **Earnscleugh** | **17.55** | **8** | P | **P** | **18 13 29.9** | **-0.3** |
| **ODZ** | **Otahua Downs** | **17.84** | **11** | P | **P** | **18 13 33.5** | **0.0** |
| **ODZ** | **Otahua Downs** | **17.84** | **11** | P | **Pn** | **18 13 32.7** | **-0.1** |
| ODZ | | | | IAmb | IAmb | 18 13 36.4 | |
| | comp=Z,470nm,1.6s | | | | | | |
| **ODZ** | **Otahua Downs** | **17.84** | **11** | P | **P** | **18 13 34.2** | **+0.7** |
| **WKZ** | **Wanaka** | **17.93** | **8** | | **P** | **18 13 34.5** | **0.0** |
| WKZ | | | | IAmb | IAmb | 18 13 38.0 | |
| | comp=Z,648nm,1.4s | | | | | | |
| **WKZ** | **Wanaka** | **17.93** | **8** | P | **P** | **18 13 35.3** | **+0.7** |
| **MSZ** | **Milford Sound** | **18.03** | **5** | P | **P** | **18 13 36.0** | **+0.4** |
| **LBZ** | **Lake Benmore** | **18.45** | **10** | | **Pn** | **18 13 40.4** | **+0.1** |
| **LBZ** | **Lake Benmore** | **18.45** | **10** | P | **Pn** | **18 13 41.5** | **+1.2** |
| **TMZ** | **Timaru** | **18.53** | **12** | P | **Pn** | **18 13 42.7** | **+1.5** |
| **JCZ** | **Jackson Bay** | **18.67** | **7** | P | **Pn** | **18 13 44.5** | **+1.5** |
| **JCZ** | **Jackson Bay** | **18.67** | **7** | P | **P** | **18 13 42.3** | **-0.4** |
| **ARCZ** | **Arundel** | **18.98** | **12** | P | **Pn** | **18 13 47.6** | **+0.9** |
| **WACZ** | **Wakanui South** | **19.05** | **14** | P | **Pn** | **18 13 49.6** | **+2.0** |
| **RPZ** | **Rata Peaks** | **19.20** | **12** | P | **Pn** | **18 13 48.8** | **-0.5** |
| RPZ | | | | IAmb | IAmb | 18 13 52.4 | |
| | comp=Z,497nm,1.6s | | | | | | |
| **RPZ** | **Rata Peaks** | **19.20** | **12** | P | **Pn** | **18 13 49.5** | **+0.2** |
| | comp=Z,1.0nm,0.3s,baz=175,slow=11,SNR=22 | | | | | | |
| RPZ | | | | LR | LR | 18 20 06.3 | |
| | comp=Z,7μm,20.4s,baz=214,slow=34 | | | | | | |
| | comp=Z,105nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **19.20** | **12** | P | **Pn** | **18 13 50.4** | **+1.1** |
| **FOZ** | **Fox Glacier** | **19.27** | **9** | P | **P** | **18 13 49.3** | **+0.1** |
| **FOZ** | **Fox Glacier** | **19.27** | **9** | P | **Pn** | **18 13 51.0** | **+0.8** |
| **MQZ** | **McQueen's Vall** | **19.38** | **15** | P | **P** | **18 13 50.5** | **+0.1** |
| MQZ | | | | IAmb | IAmb | 18 13 56.3 | |
| | comp=Z,556nm,1.8s | | | | | | |
| **MQZ** | **McQueen's Vall** | **19.38** | **15** | P | **Pn** | **18 13 51.7** | **+0.2** |
| **OXZ** | **Oxford** | **19.68** | **14** | P | **P** | **18 13 54.2** | **+0.5** |
| OXZ | | | | IAmb | IAmb | 18 14 00.1 | |
| | comp=Z,394nm,1.5s | | | | | | |
| **AMCZ** | **Amberley** | **19.90** | **15** | P | **P** | **18 13 55.0** | **-1.1** |
| **GVZ** | **Greta Valley S** | **20.15** | **16** | P | **P** | **18 13 58.6** | **-0.3** |
| GVZ | | | | IAmb | IAmb | 18 14 02.8 | |
| | comp=Z,288nm,1.2s | | | | | | |
| **INZ** | **Inchbonnie** | **20.21** | **12** | P | **P** | **18 13 59.9** | **+0.4** |
| INZ | | | | IAmb | IAmb | 18 14 04.7 | |
| | comp=Z,309nm,1.4s | | | | | | |
| INZ | | | | IAMs_20 | IAMs_20 | 18 20 35.7 | |
| | comp=Z,9μm,20.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **20.25** | **14** | | **P** | **18 14 00.1** | **+0.2** |
| LTZ | | | | IAmb | IAmb | 18 14 04.9 | |
| | comp=Z,249nm,1.4s | | | | | | |
| **KHZ** | **Kahutara** | **20.76** | **17** | | **P** | **18 14 06.3** | **+0.9** |
| **DSZ** | **Denniston Nort** | **21.22** | **13** | P | **P** | **18 14 11.0** | **+0.5** |
| DSZ | | | | IAmb | IAmb | 18 14 15.6 | |
| | comp=Z,238nm,1.2s | | | | | | |
| DSZ | | | | IAMs_20 | IAMs_20 | 18 21 25.3 | |
| | comp=Z,7μm,19.0s | | | | | | |
| **THZ** | **Tophouse** | **21.32** | **15** | | **P** | **18 14 12.0** | **+0.4** |
| THZ | | | | IAmb | IAmb | 18 14 17.1 | |
| | comp=Z,155nm,1.0s | | | | | | |
| **BSWZ** | **Blackbirch Sta** | **21.49** | **17** | P | **P** | **18 14 12.8** | **-0.5** |
| **CMWZ** | **Cape Campbell**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **MRZ** | **Mangatainoka R** | **22.77** | **20** | P | | **P** | | **18 14 27.3** | **+0.2** |
| | **BFZ** | **Birch Farm** | **22.86** | **21** | P | | **P** | | **18 14 29.3** | **+1.3** |
| | **BFZ** | **Birch Farm** | **22.86** | **21** | P | | **P** | | **18 14 28.0** | **0.0** |
| | BFZ | | | | IAMs_20 | | IAMs_20 | | 18 23 50.7 | |
| | | comp=Z,6μm,18.0s | | | | | | | | |
| | **BFZ** | **Birch Farm** | **22.86** | **21** | P | | **P** | | **18 14 29.9** | **+1.9** |
| | **MOO** | **Moorlands** | **22.97** | **323** | P | | **P** | | **18 14 30.9** | **+1.8** |
| | **MOO** | **Moorlands** | **22.97** | **323** | P | | **P** | | **18 14 29.5** | **+0.4** |
| | | comp=Z,119nm,1.0s,SNR=2.3 | | | | | | | | |
| | **DVHZ** | **Dannevirke** | **23.22** | **21** | P | | **P** | | **18 14 32.8** | **+1.1** |
| | **PRHZ** | **Porangahau** | **23.33** | **21** | P | | **P** | | **18 14 34.0** | **+1.2** |
| | **CASY** | **Casey** | **23.40** | **237** | P | | **P** | | **18 14 34.0** | **+0.7** |
| | **KHEZ** | **Kahui Hut** | **23.89** | **16** | P | | **P** | | **18 14 40.0** | **+1.6** |
| | **CORO** | **Coronation Par** | **23.90** | **324** | P | | **P** | | **18 14 39.7** | **+1.4** |
| | **GLAD** | **Gladstone** | **24.11** | **326** | P | | **P** | | **18 14 42.4** | **+2.1** |
| | **KWHZ** | **Kaweka Forest** | **24.12** | **21** | P | | **P** | | **18 14 40.9** | **+0.4** |
| | **VRZ** | **Vera Road** | **24.16** | **17** | P | | **P** | | **18 14 41.3** | **+0.5** |
| | **OTVZ** | **Oturere** | **24.25** | **19** | P | | **P** | | **18 14 43.5** | **+1.6** |
| | **BKZ** | **Black Stump Fm** | **24.38** | **21** | P | | **P** | | **18 14 44.1** | **+1.2** |
| | **BKZ** | **Black Stump Fm** | **24.38** | **21** | P | | **P** | | **18 14 43.4** | **+0.5** |
| | BKZ | | | | IAmb | | IAmb | | 18 14 46.2 | |
| | | comp=Z,114nm,1.1s | | | | | | | | |
| | **HIZ** | **Hauiti** | **24.77** | **17** | P | | **P** | | **18 14 46.3** | **-0.1** |
| | **HIZ** | **Hauiti** | **24.77** | **17** | P | | **P** | | **18 14 44.7** | **-1.7** |
| | **RTZ** | **Ruatahuna** | **25.00** | **21** | P | | **P** | | **18 14 49.1** | **+0.6** |
| | **MWZ** | **Matawai** | **25.37** | **22** | P | | **P** | | **18 14 51.9** | **+0.1** |
| | **URZ** | **Urewera** | **25.37** | **21** | LR | | LR | | 18 23 20.5 | |
| | | comp=Z,5μm,21.2s,baz=276,slow=33 | | | | | | | | |
| | **URZ** | **Urewera** | **25.37** | **21** | P | | **P** | | **18 14 52.6** | **+0.9** |
| | **TOZ** | **Tahuroa Road** | **25.63** | **18** | P | | **P** | | **18 14 53.9** | **-0.2** |
| | TOZ | | | | IAmb | | IAmb | | 18 14 57.9 | |
| | | comp=Z,92nm,1.1s | | | | | | | | |
| | TOZ | | | | IAMs_20 | | IAMs_20 | | 18 25 16.0 | |
| | | comp=Z,5μm,18.0s | | | | | | | | |
| | **TOZ** | **Tahuroa Road** | **25.63** | **18** | P | | **P** | | **18 14 54.4** | **+0.2** |
| | **RUGZ** | **Raukumara Rang** | **25.75** | **22** | P | | **P** | | **18 14 57.1** | **+1.7** |
| | **QSPA** | **South Pole Qui** | **27.47** | **180** | | | **P** | | **18 15 10.3** | **-0.5** |
| | QSPA | | | | IAmb | | IAmb | | 18 15 18.2 | |
| | | comp=Z,151nm,1.3s | | | | | | | | |
| | **QSPA** | **South Pole Qui** | **27.47** | **180** | IAMs_20 | | IAMs_20 | | 18 24 52.7 | |
| | | comp=Z,5μm,18.0s | | | | | | | | |
| | **QSPA** | **South Pole Qui** | **27.47** | **180** | P | | **P** | | **18 15 11.3** | **+0.5** |
| | | comp=Z,34nm,1.0s,baz=13,slow=2.5,SNR=69 | | | | | | | | |
| | QSPA | | | | PcP | | **PcP** | | **18 18 28.6** | **0.0** |
| | | comp=Z,2.2nm,0.6s,baz=117,slow=14,SNR=2.1 | | | | | | | | |
| | QSPA | | | | LR | | LR | | 18 25 03.2 | |
| | | comp=Z,5μm,18.1s,baz=28,slow=34 | | | | | | | | |
| | | comp=Z,34nm,1.0s | | | | | | | | |
| | **TOO** | **Toolangi** | **27.98** | **324** | P | | **P** | | **18 15 15.0** | **-0.4** |
| | **TOO** | **Toolangi** | **27.98** | **324** | P | | **P** | | **18 15 14.2** | **-1.1** |
| | **TOO** | **Toolangi** | **27.98** | **324** | P | | **P** | | **18 15 14.1** | **-1.3** |
| | | comp=Z,36nm,1.1s,SNR=2.3 | | | | | | | | |
| | **BRAT** | **Ballarat** | **28.43** | **322** | P | | **P** | | **18 15 21.3** | **+2.0** |
| | **CNB** | **Canberra Magne** | **29.18** | **332** | P | | **P** | | **18 15 24.3** | **-1.8** |
| | | comp=Z,37nm,1.9s,SNR=2.8 | | | | | | | | |
| | **AUMAG** | **Moama Anglican** | **29.56** | **324** | P | | **P** | | **18 15 30.8** | **+1.4** |
| | **ARPS** | **Mount Arapiles** | **29.77** | **319** | P | | **P** | | **18 15 33.1** | **+1.8** |
| | **YNG** | **Young** | **30.37** | **331** | P | | **P** | | **18 15 38.6** | **+2.0** |
| | **YNG** | **Young** | **30.37** | **331** | P | | **P** | | **18 15 36.8** | **+0.2** |
| | | comp=Z,196nm,1.1s,SNR=3.7 | | | | | | | | |
| | **AUDCS** | **Dubbo College** | **32.31** | **332** | P | | **P** | | **18 15 55.1** | **+1.5** |
| | **AUPHS** | **Peel High Scho** | **32.95** | **336** | P | | **P** | | **18 16 01.1** | **+1.8** |
| | **ARMA** | **Armidale** | **33.48** | **338** | P | | **P** | | **18 16 05.4** | **+1.4** |
| | **ARMA** | **Armidale** | **33.48** | **338** | P | | **P** | | **18 16 03.0** | **-1.0** |
| | ARMA | | | | IAmb | | IAmb | | 18 16 06.5 | |
| | | comp=Z,63nm,1.7s | | | | | | | | |
| | **ARMA** | **Armidale** | **33.48** | **338** | P | | **P** | | **18 16 03.1** | **-0.9** |
| | | comp=Z,22nm,1.6s,SNR=2.0 | | | | | | | | |
| | **CMSA** | **Cobar Meteorol** | **33.65** | **328** | P | | **P** | | **18 16 06.7** | **+1.4** |
| | **CMSA** | **Cobar Meteorol** | **33.65** | **328** | P | | **P** | | **18 16 06.1** | **+0.7** |
| | | comp=Z,56nm,1.2s,SNR=7.6 | | | | | | | | |
| | **PTPS** | **Port Pirie** | **34.29** | **316** | P | | **P** | | **18 16 12.9** | **+2.0** |
| | **STKA** | **Stephens Creek** | **34.41** | **322** | P | | **P** | | **18 16 13.5** | **+1.5** |
| | **STKA** | **Stephens Creek** | **34.41** | **322** | P | | **P** | | **18 16 11.5** | **-0.4** |
| | **STKA** | **Stephens Creek** | **34.41** | **322** | P | | **P** | | **18 16 12.8** | **+0.9** |
| | | comp=Z,13nm,1.4s,SNR=8.7 | | | | | | | | |
| | **STKA** | **Stephens Creek** | **34.41** | **322** | P | | **P** | | **18 16 12.9** | **+0.9** |
| | | comp=Z,32nm,0.9s,baz=156,slow=8.8,SNR=31 | | | | | | | | |
| | | comp=Z,32nm,0.9s | | | | | | | | |
| | **WHYH** | **Whyalla** | **34.56** | **316** | P | | **P** | | **18 16 14.2** | **+1.0** |
| | **RAO** | **Raoul Island** | **35.04** | **25** | LR | | LR | | 18 29 40.0 | |
| | | comp=Z,484nm,18.9s,baz=160,slow=35 | | | | | | | | |
| | **AULRC** | **Lightning Ridg** | **35.15** | **333** | P | | **P** | | **18 16 19.6** | **+1.2** |
| | **BBOO** | **Buckleboo** | **35.26** | **314** | P | | **P** | | **18 16 19.2** | **-0.1** |
| | BBOO | | | | IAmb | | IAmb | | 18 16 22.5 | |
| | | comp=Z,116nm,1.6s | | | | | | | | |
| | **AUWSH** | **Wavell State H** | **36.20** | **341** | P | | **P** | | **18 16 28.7** | **+1.3** |
| | **LCRK** | **Leigh Creek** | **36.75** | **318** | P | | **P** | | **18 16 32.9** | **+0.9** |
| | **EIDS** | **Eidsvold** | **38.51** | **338** | P | | **P** | | **18 16 47.5** | **+0.5** |
| | **EIDS** | **Eidsvold** | **38.51** | **338** | P | | **P** | | **18 16 45.6** | **-1.3** |
| | EIDS | | | | IAmb | | IAmb | | 18 16 48.6 | |
| | | comp=Z,54nm,1.1s | | | | | | | | |
| | **EIDS** | **Eidsvold** | **38.51** | **338** | P | | **P** | | **18 16 47.3** | **+0.3** |
| | | comp=Z,53nm,1.2s,SNR=7.6 | | | | | | | | |
| | **INKA** | **Innaminka** | **38.55** | **323** | P | | **P** | | **18 16 48.6** | **+1.3** |
| | **QLP** | **Quilpie** | **38.74** | **328** | P | | **P** | | **18 16 50.2** | **+1.2** |
| | **QLP** | **Quilpie** | **38.74** | **328** | P | | **P** | | **18 16 49.6** | **+0.7** |
| | | comp=Z,105nm,1.3s,SNR=9.9 | | | | | | | | |
| | **MAW** | **Mawson** | **38.77** | **217** | P | | **P** | | **18 16 49.6** | **+0.9** |
| | | comp=Z,5.0nm,0.8s,baz=125,slow=11,SNR=8.4 | | | | | | | | |
| | MAW | | | | LR | | LR | | 18 32 52.6 | |
| | | comp=Z,4μm,18.3s,baz=126,slow=36 | | | | | | | | |
| | | comp=Z,5.0nm,0.8s | | | | | | | | |
| | **BELA** | **Belgrano 2** | **39.19** | **173** | P | | **P** | | **18 16 51.4** | **-0.8** |
| | **FORT** | **Forrest** | **39.95** | **305** | P | | **P** | | **18 16 56.6** | **-2.4** |
| | FORT | | | | IAmb | | IAmb | | 18 17 00.4 | |
| | | comp=Z,84nm,1.1s | | | | | | | | |
| | **FORT** | **Forrest** | **39.95** | **305** | P | | P | | 18 16 54.0 | -5.0 |
| | **PINNC** | **Pines Island,** | **40.00** | **3** | P | | **P** | | **18 16 57.9** | **-1.6** |
| | PINNC | | | | IAmb | | IAmb | | 18 17 04.3 | |
| | | comp=Z,93nm,1.2s | | | | | | | | |
| | **OOD** | **Oodnadatta** | **40.01** | **316** | P | | **P** | | **18 17 00.4** | **+0.9** |
| | **ONTNC** | **Ouen Toro** | **40.29** | **1** | P | | **P** | | **18 17 02.9** | **+1.0** |
| | **ONTNC** | **Ouen Toro** | **40.29** | **1** | P | | **P** | | **18 16 59.1** | **-2.7** |
| | **NOUC** | **Port Laguerre** | **40.50** | **1** | P | | **P** | | **18 17 04.4** | **+0.8** |
| | **DZM** | **Mont Dzumac** | **40.53** | **1** | P | | **P** | | **18 17 04.9** | **+1.0** |
| | **DZM** | **Mont Dzumac** | **40.53** | **1** | P | | **P** | | **18 17 02.3** | **-1.6** |
| | DZM | | | | IAmb | | IAmb | | 18 17 06.1 | |
| | | comp=Z,109nm,1.2s | | | | | | | | |
| | **DZM** | **Mont Dzumac** | **40.53** | **1** | *e*LR | | LR | | 18 28 07.6 | |
| | | comp=Z,1μm,25.6s | | | | | | | | |
| | **LIFNC** | **LIFOU** | **41.83** | **2** | P | | **P** | | **18 17 15.2** | **+0.7** |
| | **LIFNC** | **LIFOU** | **41.83** | **2** | P | | **P** | | **18 17 12.9** | **-1.6** |
| | **KMBL** | **Kambalda** | **41.87** | **297** | P | | **P** | | **18 17 15.8** | **+0.9** |
| | **KMBL** | **Kambalda** | **41.87** | **297** | P | | **P** | | **18 17 13.4** | **-1.5** |
| | | comp=Z,62nm,1.6s,SNR=3.1 | | | | | | | | |
| | **KOUNC** | **Koumac, New Ca** | **42.05** | **358** | P | | **P** | | **18 17 17.2** | **+0.9** |
| | **KOUNC** | **Koumac, New Ca** | **42.05** | **358** | P | | **P** | | **18 17 15.1** | **-1.2** |
| | KOUNC | | | | IAmb | | IAmb | | 18 17 18.1 | |
| | | comp=Z,90nm,1.0s | | | | | | | | |
| | KOUNC | | | | IAMs_20 | | IAMs_20 | | 18 32 33.0 | |
| | | comp=Z,3μm,21.0s | | | | | | | | |
| | **H01W1** | **Cape Leeuwin H** | **42.16** | **286** | T | | T | | 19 02 31.9 | |
| | | baz=147,slow=76,SNR=1405 | | | | | | | | |
| | **H01W2** | **Cape Leeuwin H** | **42.17** | **286** | T | | T | | 19 02 29.0 | |
| | | baz=147,slow=76,SNR=1789 | | | | | | | | |
| | **H01W3** | **Cape Leeuwin H** | **42.18** | **286** | T | | T | | 19 02 29.5 | |
| | | baz=147,slow=76,SNR=1143 | | | | | | | | |
| | **NWAO** | **Narrogin (SRO)** | **42.48** | **291** | LR | | LR | | 18 30 39.3 | |
| | | comp=Z,2μm,20.4s,baz=138,slow=30 | | | | | | | | |
| | **ELIB** | **Princess Elisa** | **43.25** | **196** | *d*P | | **P** | | **18 17 25.4** | **-0.4** |
| | | comp=Z,6.9nm,1.4s | | | | | | | | |
| | ELIB | | | | *d*PP | | **PP** | | **18 19 04.2** | **-1.6** |
| | **SMAI** | **San Martin Ant** | **44.16** | **155** | P | | **P** | | **18 17 33.9** | **+1.0** |
| | **AS01** | **Alice Springs** | **44.41** | **316** | P | | **P** | | **18 17 35.3** | **-0.2** |
| | **ASAR** | **Alice Springs** | **44.42** | **316** | P | | **P** | | **18 17 34.9** | **-0.7** |
| | **ASAR** | **Alice Springs** | **44.42** | **316** | P | | **P** | | **18 17 35.4** | **-0.2** |
| | | comp=Z,44nm,0.8s,baz=159,slow=8.0,SNR=295 | | | | | | | | |
| | ASAR | | | | PcP | | **PP** | | **18 19 17.4** | **-1.7** |
| | | comp=Z,3.6nm,1.0s,baz=148,slow=3.7,SNR=3.6 | | | | | | | | |
| | | comp=Z,44nm,0.8s | | | | | | | | |
| | **AS31** | **Alice Springs** | **44.42** | **316** | P | | **P** | | **18 17 33.9** | **-1.6** |
| | **ASPA** | **Alice Springs** | **44.42** | **316** | P | | **P** | | **18 17 35.2** | **-0.3** |
| | | comp=Z,22nm,1.0s,SNR=23 | | | | | | | | |
| | **CTA** | **Charters Tower** | **44.56** | **334** | P | | **P** | | **18 17 37.7** | **+1.0** |
| | **CTA** | **Charters Tower** | **44.56** | **334** | P | | **P** | | **18 17 37.3** | **+0.6** |
| | | comp=Z,5.0nm,1.0s,baz=166,slow=9.2,SNR=26 | | | | | | | | |
| | | comp=Z,5.0nm,1.0s | | | | | | | | |
| | **CTAO** | **Charters Tower** | **44.56** | **334** | P | | **P** | | **18 17 37.7** | **+1.0** |
| | **CTAO** | **Charters Tower** | **44.56** | **334** | P | | **P** | | **18 17 35.6** | **-1.0** |
| | **WRKA** | **Warakurna** | **45.06** | **309** | P | | **P** | | **18 17 40.9** | **+0.2** |
| | **WRKA** | **Warakurna** | **45.06** | **309** | P | | **P** | | **18 17 40.2** | **-0.5** |
| | | comp=Z,49nm,1.4s,SNR=3.6 | | | | | | | | |
| | **TROLL** | **Troll, Antarti** | **45.15** | **187** | ⇑P | | **P** | | **18 17 40.7** | **-0.2** |
| | | comp=Z,292nm,0.7s | | | | | | | | |
| | TROLL | | | | ⇑PcP | | **PcP** | | **18 19 21.0** | **0.0** |
| | | comp=Z,1.5nm,0.2s | | | | | | | | |
| | **TV1H** | **Townsville Har** | **45.26** | **334** | P | | **P** | | **18 17 43.5** | **+1.4** |
| | **QIS** | **Mount Isa** | **45.69** | **325** | P | | **P** | | **18 17 44.8** | **-0.8** |
| | **QIS** | **Mount Isa** | **45.69** | **325** | P | | **P** | | **18 17 45.1** | **-0.5** |
| | | comp=Z,45nm,1.2s,SNR=8.8 | | | | | | | | |
| | **SNAA** | **Sanae** | **45.75** | **185** | P | | **P** | | **18 17 44.3** | **-1.3** |
| | SNAA | | | | IAMs_20 | | IAMs_20 | | 18 35 41.7 | |
| | | comp=Z,3μm,20.0s | | | | | | | | |
| | **SNAA** | **Sanae** | **45.75** | **185** | ⇑P | | **P** | | **18 17 45.4** | **-0.2** |
| | | comp=Z,148nm,0.6s | | | | | | | | |
| | SNAA | | | | ⇑PcP | | **PcP** | | **18 19 25.3** | **+2.2** |
| | | comp=Z,66nm,1.1s | | | | | | | | |
| | **SNAA** | **Sanae** | **45.75** | **185** | P | | **P** | | **18 17 45.4** | **-0.2** |
| | | comp=Z,11nm,0.9s,baz=179,slow=9.1,SNR=45 | | | | | | | | |
| | SNAA | | | | PcP | | **PcP** | | **18 19 22.4** | **-0.6** |
| | | comp=Z,4.4nm,1.1s,baz=46,slow=4.3,SNR=1.5 | | | | | | | | |
| | SNAA | | | | LR | | LR | | 18 36 11.1 | |
| | | comp=Z,2μm,18.5s,baz=220,slow=35 | | | | | | | | |
| | | comp=Z,11nm,0.9s | | | | | | | | |
| | **VNA3** | **Neumayer Olymp** | **46.37** | **182** | ⇑P | | **P** | | **18 17 50.0** | **-0.5** |
| | | comp=Z,5.7nm,0.8s | | | | | | | | |
| | VNA3 | | | | ⇑PcP | | **PcP** | | **18 19 29.8** | **+4.6** |
| | | comp=Z,6.0nm,0.8s | | | | | | | | |
| | **VNA2** | **Neumayer--Watz** | **46.65** | **183** | ⇑P | | **P** | | **18 17 52.1** | **-0.5** |
| | | comp=Z,8.0nm,0.6s,baz=174,slow=6.7 | | | | | | | | |
| | VNA2 | | | | ⇑PcP | | **PcP** | | **18 19 31.3** | **+5.2** |
| | | comp=Z,2.8nm,0.7s,baz=148,slow=1.9 | | | | | | | | |
| | **MTSU** | **Mount Surprise** | **46.87** | **332** | P | | **P** | | **18 17 55.8** | **+0.9** |
| | **VNA1** | **Neumayer--Stat** | **46.94** | **183** | ⇑P | | **P** | | **18 17 54.8** | **-0.1** |
| | | comp=Z,14nm,0.9s | | | | | | | | |
| | VNA1 | | | | ⇑PcP | | **PcP** | | **18 19 32.1** | **+5.0** |
| | | comp=Z,11nm,0.9s | | | | | | | | |
| | **MEEK** | **Meekatharra** | **47.38** | **297** | P | | **P** | | **18 17 58.9** | **0.0** |
| | **PMSA** | **Palmer Station** | **47.69** | **154** | LR | | LR | | 18 35 03.2 | |
| | | comp=Z,811nm,18.7s,baz=213,slow=32 | | | | | | | | |
| | **WR0** | **Warramunga Arr** | **47.70** | **319** | IAmb | | IAmb | | 18 18 01.9 | |
| | | comp=Z,101nm,1.4s | | | | | | | | |
| | **WB2** | **Warramunga Arr** | **47.77** | **319** | IAmb | | IAmb | | 18 18 02.4 | |
| | | comp=Z,86nm,1.4s | | | | | | | | |
| | **WRA** | **Warramunga Arr** | **47.78** | **319** | P | | **P** | | **18 17 59.8** | **-2.2** |
| | WRA | | | | PcP | | **PcP** | | **18 19 29.9** | **-1.0** |
| | **WRA** | **Warramunga Arr** | **47.78** | **319** | P | | **P** | | **18 18 00.9** | **-1.1** |
| | | comp=Z,26nm,1.2s,baz=166,slow=7.5,SNR=38 | | | | | | | | |
| | WRA | | | | PcP | | **PcP** | | **18 19 29.6** | **-1.3** |
| | | comp=Z,6.7nm,1.0s,baz=178,slow=2.9,SNR=8.9 | | | | | | | | |
| | | comp=Z,26nm,1.2s | | | | | | | | |
| | **WRAB** | **Tennant Creek** | **47.78** | **319** | P | | **P** | | **18 18 00.2** | **-1.8** |
| | WRAB | | | | IAmb | | IAmb | | 18 18 02.4 | |
| | | comp=Z,78nm,1.4s | | | | | | | | |
| | **WB0** | **Warramunga Arr** | **47.92** | **319** | P | | **P** | | **18 18 00.6** | **-2.5** |
| | WB0 | | | | IAmb | | IAmb | | 18 18 03.4 | |
| | | comp=Z,88nm,1.6s | | | | | | | | |
| | WB0 | | | | PcP | | **PcP** | | **18 19 29.9** | **-1.5** |
| | **TBI** | **Tubuai** | **49.40** | **59** | *e*LR | | LR | | 18 32 15.9 | |
| | | comp=Z,5μm,25.5s | | | | | | | | |
| | TBI | | | | *e*LR | | LR | | 18 32 17.3 | |
| | | comp=Z,2μm,24.8s | | | | | | | | |
| | **COEN** | **Coen** | **51.16** | **331** | P | | **P** | | **18 18 28.4** | **+0.6** |
| | **COEN** | **Coen** | **51.16** | **331** | P | | **P** | | **18 18 27.1** | **-0.7** |
| | **AFI** | **Afiamalu** | **51.20** | **28** | IAMs_20 | | IAMs_20 | | 18 32 43.2 | |
| | | comp=Z,3μm,21.0s | | | | | | | | |
| | **PSA00** | **Pilbara Seismi** | **51.40** | **301** | P | | **P** | | **18 18 29.1** | **-0.6** |
| | **PSA00** | **Pilbara Seismi** | **51.40** | **301** | P | | **P** | | **18 18 28.7** | **-0.9** |
| | PSA00 | | | | IAmb | | IAmb | | 18 19 48.7 | |
| | | comp=Z,197nm,2.0s | | | | | | | | |
| | **MBWA** | **Marble Bar** | **51.82** | **301** | P | | **P** | | **18 18 31.7** | **-1.0** |
| | MBWA | | | | IAmb | | IAmb | | 18 18 48.5 | |
| | | comp=Z,146nm,1.8s | | | | | | | | |
| | **MBWA** | **Marble Bar** | **51.82** | **301** | IAMs_20 | | IAMs_20 | | 18 41 56.4 | |
| | | comp=Z,2μm,18.0s | | | | | | | | |
| | **FITZ** | **Fitzroy Crossi** | **52.39** | **309** | P | | **P** | | **18 18 35.2** | **-1.8** |
| | **HNR** | **Honiara** | **53.26** | **353** | P | | **P** | | **18 18 44.5** | **+1.1** |
| | **HNR** | **Honiara** | **53.26** | **353** | P | | **P** | | **18 18 42.5** | **-0.9** |
| | **KNRA** | **Kununurra** | **53.55** | **314** | P | | **P** | | **18 18 45.0** | **-0.6** |
| | KNRA | | | | IAmb | | IAmb | | 18 18 46.5 | |
| | | comp=Z,97nm,1.1s | | | | | | | | |
| | **PPT2** | **Papeete2** | **54.57** | **55** | *e*LR | | LR | | 18 34 38.0 | |
| | | comp=Z,2μm,25.0s | | | | | | | | |
| | **PMG** | **Port Moresby** | **54.80** | **337** | P | | **P** | | **18 18 56.0** | **+1.4** |
| | **PMG** | **Port Moresby** | **54.80** | **337** | P | | **P** | | **18 18 54.0** | **-0.6** |
| | **PMG** | **Port Moresby** | **54.80** | **337** | IAMs_20 | | IAMs_20 | | 18 41 54.0 | |
| | | comp=Z,6μm,22.0s | | | | | | | | |
| | **KDU** | **Kakadu** | **55.19** | **319** | P | | **P** | | **18 18 57.2** | **-0.2** |
| | **MTN** | **Manton Dam** | **55.45** | **318** | P | | **P** | | **18 18 59.3** | **0.0** |
| | **MTN** | **Manton Dam** | **55.45** | **318** | P | | **P** | | **18 18 58.6** | **-0.7** |
| | MTN | | | | IAmb | | IAmb | | 18 18 59.8 | |
| | | comp=Z,84nm,1.1s | | | | | | | | |
| | **RKT** | **Rikitea** | **55.71** | **73** | *e*LR | | LR | | 18 35 12.9 | |
| | | comp=Z,7μm,26.2s | | | | | | | | |
| | **DRS** | **Darwin Rock St** | **55.91** | **318** | P | | **P** | | **18 19 02.9** | **+0.3** |
| | **GO09** | **Cerro Castillo** | **57.58** | **141** | P | | **P** | | **18 19 14.4** | **+0.3** |
| | **RABL** | **Rabaul** | **59.16** | **344** | P | | **P** | | **18 19 24.3** | **-1.3** |
| | **TABU** | **Tabubil** | **60.01** | **332** | P | | **P** | | **18 19 32.2** | **+0.7** |
| | **SOEI** | **Soe** | **60.60** | **312** | P | | **P** | | **18 19 37.3** | **+1.7** |
| | **SOEI** | **Soe** | **60.60** | **312** | P | | **P** | | **18 19 35.0** | **-0.6** |
| | SOEI | | | | IAmb | | IAmb | | 18 19 46.4 | |
| | | comp=Z,68nm,1.3s | | | | | | | | |
| | **SOEI** | **Soe** | **60.60** | **312** | P | | **P** | | **18 19 36.2** | **+0.6** |
| | | comp=Z,46nm,1.1s | | | | | | | | |
| | **MMRI** | **Maumere** | **62.35** | **310** | P | | **P** | | **18 19 46.3** | **-1.0** |
| | **EDFI** | **Ende, Flores** | **62.44** | **309** | P | | **P** | | **18 19 48.5** | **+0.5** |
| | | comp=Z,18nm,1.7s | | | | | | | | |
| | **JAY** | **Jayapura** | **62.79** | **332** | P | | **P** | | **18 19 50.6** | **+0.3** |
| | | comp=Z,29nm,1.1s | | | | | | | | |
| | **TARA** | **Tarawa** | **64.04** | **8** | P | | **P** | | **18 19 58.6** | **+0.2** |
| | **FAKI** | **Fak Fak** | **64.53** | **322** | P | | **P** | | **18 20 01.2** | **-0.5** |
| | **FAKI** | **Fak Fak** | **64.53** | **322** | P | | **P** | | **18 20 03.3** | **+1.6** |
| | | comp=Z,51nm,1.7s | | | | | | | | |
| | **LL02** | **Futaleuf** | **64.96** | **137** | P | | **P** | | **18 20 03.4** | **-0.8** |
| | LL02 | | | | IAmb | | IAmb | | 18 20 13.1 | |
| | | comp=Z,55nm,1.9s | | | | | | | | |
| | **NLAI** | **Namlea** | **65.76** | **317** | P | | **P** | | **18 20 09.3** | **-0.4** |
| | **KAPI** | **Kappang** | **66.60** | **309** | P | | **P** | | **18 20 14.6** | **-0.5** |
| | **SWI** | **Sorong** | **66.77** | **322** | P | | **P** | | **18 20 16.7** | **+0.6** |
| | | comp=Z,46nm,1.4s,comp=Z,538nm,comp=Z,4μm | | | | | | | | |
| | **SANI** | **Sanana** | **67.24** | **316** | P | | **P** | | **18 20 18.1** | **-1.0** |
| | **SANI** | **Sanana** | **67.24** | **316** | P | | **P** | | **18 20 18.8** | **-0.3** |
| | | comp=Z,52nm,1.1s,comp=Z,3μm | | | | | | | | |
| | **PLCA** | **Paso Flores** | **67.59** | **137** | P | | **P** | | **18 20 20.6** | **-0.7** |
| | PLCA | | | | IAmb | | IAmb | | 18 20 24.3 | |
| | | comp=Z,47nm,1.8s | | | | | | | | |
| | **PLCA** | **Paso Flores** | **67.59** | **137** | P | | **P** | | **18 20 21.6** | **+0.4** |
| | | comp=Z,3.7nm,1.1s,baz=204,slow=6.9,SNR=3.9 | | | | | | | | |
| | | comp=Z,3.7nm,1.1s | | | | | | | | |
| | **GO06** | **Curarrehue** | **68.34** | **136** | P | | **P** | | **18 20 25.6** | **-0.4** |
| | GO06 | | | | IAmb | | IAmb | | 18 20 38.6 | |
| | | comp=Z,34nm,1.6s | | | | | | | | |
| | **LUWI** | **Luwuk** | **69.24** | **313** | P | | **P** | | **18 20 31.0** | **-0.7** |
| | **H03S2** | **Juan Fernandez** | **70.94** | **127** | T | | T | | 19 38 57.1 | |
| | | baz=204,slow=74,SNR=474 | | | | | | | | |
| | **H03S1** | **Juan Fernandez** | **70.94** | **127** | T | | T | | 19 38 58.4 | |
| | | baz=204,slow=74,SNR=394 | | | | | | | | |
| | **H03S3** | **Juan Fernandez** | **70.95** | **127** | T | | T | | 19 38 57.8 | |
| | | baz=204,slow=74,SNR=246 | | | | | | | | |
| | **BI02** | **San Fabin de** | **71.06** | **135** | P | | **P** | | **18 20 41.9** | **-0.8** |
| | **H03N3** | **Juan Fernandez** | **71.28** | **127** | T | | T | | 19 39 29.2 | |
| | | baz=205,slow=73 | | | | | | | | |
| | **H03N2** | **Juan Fernandez** | **71.29** | **127** | T | | T | | 19 39 32.0 | |
| | | baz=205,slow=73 | | | | | | | | |
| | **H03N1** | **Juan Fernandez** | **71.30** | **127** | T | | T | | 19 39 31.9 | |
| | | baz=205,slow=73 | | | | | | | | |
| | **TOLI2** | **Tolitoli** | **71.93** | **312** | P | | **P** | | **18 20 46.1** | **-1.9** |
| | TOLI2 | | | | IAmb | | IAmb | | 18 21 44.8 | |
| | | comp=Z,34nm,0.8s | | | | | | | | |
| | **TRQA** | **Tornquist** | **72.62** | **142** | P | | **P** | | **18 20 51.6** | **-0.5** |
| | TRQA | | | | IAmb | | IAmb | | 18 22 56.8 | |
| | | comp=Z,73nm,2.0s | | | | | | | | |
| | **BO02** | **Sierra Bellavi** | **72.93** | **134** | P | | **P** | | **18 20 53.4** | **-0.6** |
| | **BO01** | **Tunca** | **73.19** | **134** | P | | **P** | | **18 20 54.8** | **-0.7** |
| | BO01 | | | | IAmb | | IAmb | | 18 21 20.2 | |
| | | comp=Z,52nm,1.8s | | | | | | | | |
| | **BO04** | **La Punta** | **73.72** | **134** | P | | **P** | | **18 20 57.8** | **-0.9** |
| | BO04 | | | | IAmb | | IAmb | | 18 21 11.5 | |
| | | comp=Z,48nm,1.5s | | | | | | | | |
| | **MT13** | **San Alfonso** | **74.05** | **134** | P | | **P** | | **18 21 00.3** | **-0.3** |
| | MT13 | | | | IAmb | | IAmb | | 18 21 13.5 | |
| | | comp=Z,33nm,1.2s | | | | | | | | |
| | **VA06** | **Catapilco** | **74.79** | **133** | P | | **P** | | **18 21 04.9** | **+0.1** |
| | VA06 | | | | IAmb | | IAmb | | 18 21 29.6 | |
| | | comp=Z,51nm,1.5s | | | | | | | | |
| | **KSM** | **Kuching** | **76.12** | **302** | P | | **P** | | **18 21 14.1** | **+1.5** |
| | **KSM** | **Kuching** | **76.12** | **302** | P | | **P** | | **18 21 12.0** | **-0.6** |
| | **SBUM** | **Sibu** | **76.28** | **304** | P | | **P** | | **18 21 12.8** | **-0.7** |
| | SBUM | | | | IAMs_20 | | IAMs_20 | | 18 47 02.7 | |
| | | comp=Z,3μm,21.0s | | | | | | | | |
| | **CO03** | **El Pedregal** | **76.57** | **133** | P | | **P** | | **18 21 13.7** | **-1.6** |
| | CO03 | | | | IAmb | | IAmb | | 18 22 11.9 | |
| | | comp=Z,63nm,1.9s | | | | | | | | |
| | **LCO** | **Las Campanas** | **78.24** | **132** | P | | **P** | | **18 21 22.9** | **-1.9** |
| | **BKNI** | **Bangkinang** | **78.88** | **293** | IAMs_20 | | IAMs_20 | | 18 55 27.9 | |
| | | comp=Z,3μm,18.0s | | | | | | | | |
| | **GO03** | **Copiap** | **79.70** | **132** | P | | **P** | | **18 21 32.2** | **-0.3** |
| | **AC06** | **Mina Casimiro** | **79.88** | **131** | P | | **P** | | **18 21 32.9** | **-0.5** |
| | **AC01** | **Pan de Azucar** | **80.90** | **131** | P | | **P** | | **18 21 38.3** | **-0.7** |
| | **GSI** | **Gunungsitoli** | **81.25** | **290** | P | | **P** | | **18 21 42.7** | **+1.8** |
| | **GSI** | **Gunungsitoli** | **81.25** | **290** | P | | **P** | | 18 21 48.1 | +7.2 |
| | **GO02** | **Mina Guanaco** | **82.16** | **131** | P | | **P** | | **18 21 45.5** | **-0.5** |
| | **PB14** | **IPOC Station P** | **82.37** | **130** | P | | **P** | | **18 21 46.2** | **-0.9** |
| | **KULM** | **Kulim** | **83.52** | **295** | P | | **P** | | **18 21 52.7** | **0.0** |
| | **BOSA** | **Boshof** | **83.74** | **214** | P | | **P** | | **18 21 52.8** | **-1.1** |
| | | comp=Z,1.1nm,0.6s,baz=30,slow=12,SNR=1.5 | | | | | | | | |
| | | comp=Z,1.1nm,0.6s | | | | | | | | |
| | **PB05** | **IPOC Station P** | **84.07** | **130** | P | | **P** | | **18 21 53.6** | **-2.0** |
| | PB05 | | | | IAmb | | IAmb | | 18 22 09.5 | |
| | | comp=Z,29nm,1.4s | | | | | | | | |
| | **PB04** | **IPOC Station P** | **84.56** | **130** | P | | **P** | | **18 21 57.2** | **-1.0** |
| | PB04 | | | | IAmb | | IAmb | | 18 22 14.9 | |
| | | comp=Z,23nm,1.1s | | | | | | | | |
| | **LVC** | **Limon Verde** | **84.75** | **131** | P | | **P** | | **18 21 56.9** | **-2.5** |
| | **H08S2** | **Diego Garcia H** | **84.75** | **264** | T | | T | | 19 55 56.0 | |
| | | baz=151,slow=76,SNR=169 | | | | | | | | |
| | **H08S1** | **Diego Carcia H** | **84.76** | **264** | T | | T | | 19 55 57.6 | |
| | | baz=151,slow=76,SNR=79 | | | | | | | | |
| | **H08S3** | **Diego Garcia H** | **84.77** | **264** | T | | T | | 19 55 57.9 | |
| | | baz=151,slow=76,SNR=319 | | | | | | | | |
| | **CPUP** | **Villa Florida** | **84.96** | **142** | P | | **P** | | **18 21 59.8** | **-0.1** |
| | | comp=Z,4

*waves, cutoff=50s. Triangular moment-rate function*
*BGR **10** 18:12:16.0,49°.32N×154°.13E,h83$^{km}$▵4$^{km}$,mb6.2,*
*mB_BB6.3,Ms6.3*
**ISC 10 18:12:06.7**±0.3,**48°.31N**±0°.02×**154°.98E**±0°.02,**h28**$^{km}$±1$^{km}$,
**h28**$^{km}$;**pP-P**,**n2907**,σ1ˢ**70**/3160,**mb6.0**/847,**MS5.9**/569,
**134C-272D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | h | m | s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **2.49** | **17** | *e*P | | **Pn** | **18** | **12** | **44.6** | **-0.8** |
| SKR | | | | *e*S | | **Sn** | **18** | **13** | **16.5** | **+1.7** |
| **SKR** | **Severo-Kuril's** | **2.49** | **17** | *e*P | | **Pn** | **18** | **12** | **45.5** | **+0.1** |
| SKR | | | | | AMB | AMB | 18 | 12 | 48.5 | |
| | 25μm,3.2s | | | | | | | | | |
| SKR | | | | | AMB | AMB | 18 | 12 | 52.4 | |
| | 26μm,0.7s | | | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **18** | **13** | **15.8** | **+1.0** |
| SKR | | | | | A | A | 18 | 13 | 25.8 | |
| | 191μm,0.8s | | | | | | | | | |
| SKR | | | | | A | A | 18 | 13 | 25.8 | |
| | 51μm,0.8s | | | | | | | | | |
| SKR | | | | | AMS | AMS | 18 | 13 | 57.7 | |
| | 443μm,9.0s | | | | | | | | | |
| SKR | | | | | AMS | AMS | 18 | 13 | 57.7 | |
| | 638μm,9.0s | | | | | | | | | |
| SKR | | | | | AMS | AMS | 18 | 13 | 57.7 | |
| | 209μm,9.0s | | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **2.49** | **17** | *e*PN | | **Pn** | **18** | **12** | **46.3** | **+0.9** |
| SKR | | | | *e*S | | **Sn** | **18** | **13** | **15.6** | **+0.8** |
| SKR | | | | | pmax | pmax | | | | |
| | comp=Z,25μm,3.2s | | | | | | | | | |
| SKR | | | | | pmax | pmax | | | | |
| | comp=Z,21μm,0.7s | | | | | | | | | |
| SKR | | | | | smax | smax | | | | |
| | comp=N,191μm,0.9s | | | | | | | | | |
| SKR | | | | | smax | smax | | | | |
| | comp=E,51μm,0.7s | | | | | | | | | |
| SKR | | | | | MLR | MLR | | | | |
| | comp=Z,476μm,12.0s | | | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **4.04** | **28** | *e*P | | **Pn** | **18** | **13** | **05.3** | **-1.3** |
| KDTR | | | | *e*S | | **Sn** | **18** | **13** | **51.9** | **-0.9** |
| **KDTR** | **Khodutka, Kamc** | **4.04** | **28** | *e*P | | **Pn** | **18** | **13** | **05.9** | **-0.7** |
| KDTR | | | | | AMB | AMB | 18 | 13 | 13.0 | |
| | comp=Z,5μm,0.6s | | | | | | | | | |
| KDTR | | | | *e*S | | **Sn** | **18** | **13** | **51.9** | **-0.9** |
| KDTR | | | | | A | A | 18 | 14 | 01.2 | |
| | comp=Z,19μm,0.8s | | | | | | | | | |
| KDTR | | | | | A | A | 18 | 14 | 01.2 | |
| | comp=Z,22μm,0.8s | | | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **4.04** | **28** | | PN | **Pn** | **18** | **13** | **05.2** | **-1.3** |
| KDTR | | | | | S | **Sn** | **18** | **13** | **51.9** | **-0.9** |
| **ASAK** | **Asacha** | **4.49** | **24** | *e*P | | **Pn** | **18** | **13** | **12.8** | **-0.1** |
| **ASAK** | **Asacha** | **4.49** | **24** | | PN | **Pn** | **18** | **13** | **12.8** | **-0.1** |
| **MTVR** | **Mutnovka** | **4.66** | **25** | *e*P | | **Pn** | **18** | **13** | **14.6** | **-0.7** |
| **MTVR** | **Mutnovka** | **4.66** | **25** | | PN | **Pn** | **18** | **13** | **14.5** | **-0.7** |
| **GRL** | **Gorelyy** | **4.69** | **24** | *e*P | | **Pn** | **18** | **13** | **15.8** | **0.0** |
| **GRL** | **Gorelyy** | **4.69** | **24** | | PN | **Pn** | **18** | **13** | **15.7** | **0.0** |
| **APC** | **Apacha** | **4.83** | **16** | *e*P | | **Pn** | **18** | **13** | **20.0** | **+2.5** |
| **APC** | **Apacha** | **4.83** | **16** | | PN | **Pn** | **18** | **13** | **19.9** | **+2.5** |
| **KRMR** | **Karymshinskiy** | **4.96** | **23** | *e*P | | **Pn** | **18** | **13** | **20.0** | **+0.7** |
| KRMR | | | | *e*S | | **Sn** | **18** | **14** | **16.6** | **+1.1** |
| **KRMR** | **Karymshinskiy** | **4.96** | **23** | | PN | **Pn** | **18** | **13** | **19.9** | **+0.7** |
| KRMR | | | | | S | **Sn** | **18** | **14** | **16.6** | **+1.1** |
| **PET** | **Petropavlovsk** | **5.27** | **25** | | P | **Pn** | **18** | **13** | **24.1** | **+0.6** |
| **PET** | **Petropavlovsk** | **5.27** | **25** | | Pn | **Pn** | **18** | **13** | **22.2** | **-1.3** |
| **PET** | **Petropavlovsk** | **5.27** | **25** | ⇑P | | **Pn** | **18** | **13** | **22.7** | **-0.8** |
| **PET** | **Petropavlovsk** | **5.27** | **25** | *e*P | | **Pn** | **18** | **13** | **23.4** | **-0.2** |
| PET | | | | *e*S | | **Sn** | **18** | **14** | **23.3** | **0.0** |
| **PET** | **Petropavlovsk** | **5.27** | **25** | *e*P | | **Pn** | **18** | **13** | **23.0** | **-0.5** |
| PET | | | | | AMB | AMB | 18 | 13 | 24.3 | |
| | comp=Z,4μm,2.0s | | | | | | | | | |
| PET | | | | | AMB | AMB | 18 | 13 | 28.7 | |
| | comp=Z,1μm,0.6s | | | | | | | | | |
| PET | | | | *e*S | | **Sn** | **18** | **14** | **22.6** | **-0.7** |
| PET | | | | | A | A | 18 | 14 | 43.5 | |
| PET | | | | | AMS | AMS | 18 | 16 | 07.0 | |
| | comp=Z,86μm,13.0s | | | | | | | | | |
| PET | | | | | AMS | AMS | 18 | 16 | 07.0 | |
| | comp=Z,66μm,13.0s | | | | | | | | | |
| PET | | | | | AMS | AMS | 18 | 16 | 07.0 | |
| | comp=Z,41μm,13.0s | | | | | | | | | |
| **PET** | **Petropavlovsk** | **5.27** | **25**κ | *i*PN | | **Pn** | **18** | **13** | **23.3** | **-0.2** |
| PET | | | | *e*S | | **Sn** | **18** | **14** | **23.5** | **+0.2** |
| PET | | | | | pmax | pmax | | | | |
| | comp=Z,35μm,2.1s | | | | | | | | | |
| PET | | | | | pmax | pmax | | | | |
| | comp=Z,1μm,2.2s | | | | | | | | | |
| PET | | | | | pmax | pmax | | | | |
| | comp=Z,340nm,1.1s | | | | | | | | | |
| PET | | | | | smax | smax | | | | |
| | comp=N,28μm,1.4s | | | | | | | | | |
| PET | | | | | MLR | MLR | | | | |
| | comp=Z,63μm,13.0s | | | | | | | | | |
| PET | | | | | MLR | MLR | | | | |
| | comp=Z,566μm,14.0s | | | | | | | | | |
| **PET** | **Petropavlovsk** | **5.27** | **25** | | P | **Pn** | **18** | **13** | **23.0** | **-0.5** |
| | comp=Z,4μm,1.3s,comp=Z,44μmcomp=Z,59nm | | | | | | | | | |
| **DALK** | **Dalny** | **5.31** | **25** | *e*P | | **Pn** | **18** | **13** | **24.2** | **+0.2** |
| DALK | | | | *e*S | | **Sn** | **18** | **14** | **25.9** | **+1.7** |
| **DALK** | **Dalny** | **5.31** | **25** | | PN | **Pn** | **18** | **13** | **24.2** | **+0.2** |
| DALK | | | | | S | **Sn** | **18** | **14** | **25.8** | **+1.7** |
| **UGLR** | **Uglovaya** | **5.48** | **25** | *e*P | | **Pn** | **18** | **13** | **25.9** | **-0.7** |
| **UGLR** | **Uglovaya** | **5.48** | **25** | | PN | **Pn** | **18** | **13** | **25.8** | **-0.7** |
| **KOK** | **Koryaka** | **5.51** | **24** | *e*P | | **Pn** | **18** | **13** | **27.4** | **+0.6** |
| **KOK** | **Koryaka** | **5.51** | **24** | | PN | **Pn** | **18** | **13** | **27.4** | **+0.6** |
| **AVH** | **Avacha** | **5.51** | **24** | *e*P | | **Pn** | **18** | **13** | **28.1** | **+1.1** |
| **AVH** | **Avacha** | **5.51** | **24** | *e*P | | **Pn** | **18** | **13** | **28.0** | **+1.1** |
| **AVH** | **Avacha** | **5.51** | **24** | | PN | **Pn** | **18** | **13** | **28.0** | **+1.1** |
| **SMAR** | **Somma** | **5.53** | **25** | *e*P | | **Pn** | **18** | **13** | **27.7** | **+0.5** |
| **SMAR** | **Somma** | **5.53** | **25** | | PN | **Pn** | **18** | **13** | **27.7** | **+0.5** |
| **KRER** | **Koryakskii** | **5.55** | **24** | *e*P | | **Pn** | **18** | **13** | **27.9** | **+0.4** |
| **KRER** | **Koryakskii** | **5.55** | **24** | | PN | **Pn** | **18** | **13** | **27.9** | **+0.4** |
| **KRX** | **Arik** | **5.57** | **23** | *e*P | | **Pn** | **18** | **13** | **28.8** | **+1.0** |
| **KRX** | **Arik** | **5.57** | **23** | | PN | **Pn** | **18** | **13** | **28.7** | **+1.0** |
| **NLC** | **Nalytchevo** | **5.61** | **28** | *e*P | | **Pn** | **18** | **13** | **26.3** | **-1.9** |
| **NLC** | **Nalytchevo** | **5.61** | **28** | | PN | **Pn** | **18** | **13** | **26.2** | **-1.9** |
| **GNL** | **Ganaly** | **5.71** | **18** | *e*P | | **Pn** | **18** | **13** | **31.0** | **+1.3** |
| **GNL** | **Ganaly** | **5.71** | **18** | | PN | **Pn** | **18** | **13** | **31.0** | **+1.3** |
| **KUR** | **Kuril'sk** | **5.77** | **240** | *e*P | | **Pn** | **18** | **13** | **32.9** | **+2.6** |
| KUR | | | | *e*S | | **Sn** | **18** | **14** | **37.7** | **+2.1** |
| **KUR** | **Kuril'sk** | **5.77** | **240** | *i*P | | **Pn** | **18** | **13** | **33.5** | **+3.1** |
| KUR | | | | | AMB | AMB | 18 | 13 | 37.4 | |
| | comp=Z,10μm,0.5s | | | | | | | | | |
| KUR | | | | *i*S | | **Sn** | **18** | **14** | **39.7** | **+4.1** |
| KUR | | | | | A | A | 18 | 14 | 49.7 | |
| | comp=Z,171μm,2.0s | | | | | | | | | |
| KUR | | | | | A | A | 18 | 14 | 49.7 | |
| | comp=Z,4μm,0.9s | | | | | | | | | |
| KUR | | | | | A | A | 18 | 14 | 49.7 | |
| | comp=Z,12μm,0.9s | | | | | | | | | |
| KUR | | | | | AMS | AMS | 18 | 16 | 00.3 | |
| | comp=Z,93μm,12.0s | | | | | | | | | |
| KUR | | | | | AMS | AMS | 18 | 16 | 00.3 | |
| | comp=Z,39μm,12.0s | | | | | | | | | |
| KUR | | | | | AMS | AMS | 18 | 16 | 00.3 | |
| | comp=Z,84μm,12.0s | | | | | | | | | |
| **KUR** | **Kuril'sk** | **5.77** | **240** | *d i*PN | | **Pn** | **18** | **13** | **33.9** | **+3.5** |
| KUR | | | | *i*S | | **Sn** | **18** | **14** | **42.3** | **+6.7** |
| KUR | | | | | pmax | pmax | | | | |
| | comp=E,3μm,0.5s | | | | | | | | | |
| KUR | | | | | pmax | pmax | | | | |
| | comp=Z,11μm,0.5s | | | | | | | | | |
| KUR | | | | | pmax | pmax | | | | |
| | comp=N,3μm,0.4s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=E,12μm,0.8s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=N,4μm,0.9s | | | | | | | | | |
| KUR | | | | | smax | smax | | | | |
| | comp=E,171μm,1.8s | | | | | | | | | |
| **SPN** | **Mys Shipunski** | **5.77** | **32** | *e*P | | **Pn** | **18** | **13** | **28.8** | **-1.7** |
| **SPN** | **Mys Shipunski** | **5.77** | **32** | | PN | **Pn** | **18** | **13** | **28.7** | **-1.7** |
| **KII** | **Karymskiy** | **6.39** | **24** | *e*P | | **Pn** | **18** | **13** | **40.9** | **+1.9** |
| **KII** | **Karymskiy** | **6.39** | **24** | | PN | **Pn** | **18** | **13** | **40.9** | **+1.9** |
| **SHO** | **Shikotan** | **7.19** | **235** | *e*P | | **Pn** | **18** | **13** | **49.5** | **-0.4** |
| SHO | | | | *e*S | | **Sn** | **18** | **15** | **08.9** | **-1.6** |
| **SHO** | **Shikotan** | **7.19** | **235** | *i*P | | **Pn** | **18** | **13** | **49.9** | **0.0** |
| SHO | | | | | AMB | AMB | 18 | 13 | 56.5 | |
| | comp=E,2μm,0.8s | | | | | | | | | |
| SHO | | | | *i*S | | **Sn** | **18** | **15** | **08.3** | **-2.3** |
| SHO | | | | | A | A | 18 | 15 | 20.4 | |
| | comp=E,6μm,2.0s | | | | | | | | | |
| SHO | | | | | A | A | 18 | 15 | 20.4 | |
| | comp=E,5μm,2.0s | | | | | | | | | |
| SHO | | | | | A | A | 18 | 15 | 21.7 | |
| | comp=E,2μm,0.5s | | | | | | | | | |
| SHO | | | | | A | A | 18 | 15 | 21.7 | |
| | comp=E,6μm,0.5s | | | | | | | | | |
| SHO | | | | | AMS | AMS | 18 | 16 | 25.8 | |
| | comp=E,77μm,15.0s | | | | | | | | | |
| SHO | | | | | AMS | AMS | 18 | 16 | 25.8 | |
| | comp=E,72μm,15.0s | | | | | | | | | |
| SHO | | | | | AMS | AMS | 18 | 16 | 25.8 | |
| | comp=E,46μm,15.0s | | | | | | | | | |
| **SHO** | **Shikotan** | **7.19** | **235**⇓ | *i*PN | | **Pn** | **18** | **13** | **49.9** | **0.0** |
| SHO | | | | | pmax | pmax | | | | |
| | comp=N,469nm,0.4s | | | | | | | | | |
| SHO | | | | | pmax | pmax | | | | |
| | comp=E,315nm,0.4s | | | | | | | | | |
| SHO | | | | | pmax | pmax | | | | |
| | comp=Z,928nm,0.4s | | | | | | | | | |
| **MKZ** | **Mys Kozlova** | **7.55** | **31** | *e*P | | **Pn** | **18** | **13** | **53.4** | **-1.4** |
| **MKZ** | **Mys Kozlova** | **7.55** | **31** | | PN | **Pn** | **18** | **13** | **53.3** | **-1.4** |
| **YUK** | **Yuzh-Kuril'sk** | **7.63** | **239** | *e*P | | **Pn** | **18** | **13** | **57.9** | **+1.9** |
| YUK | | | | *e*S | | **Sn** | **18** | **15** | **21.0** | **-0.4** |
| **YUK** | **Yuzh-Kuril'sk** | **7.63** | **239** | *i*P | | **Pn** | **18** | **13** | **57.7** | **+1.8** |
| YUK | | | | | AMB | AMB | 18 | 14 | 01.3 | |
| | comp=Z,5μm,0.5s | | | | | | | | | |
| YUK | | | | *i*S | | **Sn** | **18** | **15** | **21.7** | **+0.3** |
| YUK | | | | | A | A | 18 | 15 | 34.7 | |
| | comp=Z,10μm,2.0s | | | | | | | | | |
| YUK | | | | | A | A | 18 | 15 | 34.7 | |
| | comp=Z,12μm,2.0s | | | | | | | | | |
| YUK | | | | | AMS | AMS | 18 | 16 | 47.5 | |
| | comp=Z,107μm,13.0s | | | | | | | | | |
| YUK | | | | | AMS | AMS | 18 | 16 | 47.5 | |
| | comp=Z,166μm,13.0s | | | | | | | | | |
| YUK | | | | | AMS | AMS | 18 | 16 | 47.5 | |
| | comp=Z,93μm,13.0s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **7.63** | **239** | *d i*PN | | **Pn** | **18** | **13** | **57.7** | **+1.8** |
| YUK | | | | *i*S | | **Sn** | **18** | **15** | **28.0** | **+6.6** |
| YUK | | | | | pmax | pmax | | | | |
| | comp=Z,5μm,0.5s | | | | | | | | | |
| YUK | | | | | pmax | pmax | | | | |
| | comp=N,547nm,0.3s | | | | | | | | | |
| YUK | | | | | pmax | pmax | | | | |
| | comp=E,2μm,0.5s | | | | | | | | | |
| YUK | | | | | pmax | pmax | | | | |
| | comp=Z,11μm,1.2s | | | | | | | | | |
| YUK | | | | | smax | smax | | | | |
| | comp=E,171μm,1.8s | | | | | | | | | |
| YUK | | | | | smax | smax | | | | |
| | comp=N,10μm,1.9s | | | | | | | | | |
| YUK | | | | | MLR | MLR | | | | |
| | comp=Z,10μm,13.0s | | | | | | | | | |
| YUK | | | | | MLR | MLR | | | | |
| | comp=N,9μm,8.0s | | | | | | | | | |
| **TUMD** | **Tumrok D** | **7.68** | **24** | *e*P | | **Pn** | **18** | **13** | **57.3** | **+0.6** |
| TUMD | | | | *e*S | | **Sn** | **18** | **15** | **21.2** | **-1.5** |
| **TUMR** | **Tumrok** | **7.69** | **23** | *e*P | | **Pn** | **18** | **13** | **57.4** | **+0.6** |
| **TUMR** | **Tumrok** | **7.69** | **23** | | PN | **Pn** | **18** | **13** | **57.4** | **+0.6** |
| **RUSJ** | **Misakicho** | **7.95** | **242** | *e*PN | | **Pn** | **18** | **14** | **02.9** | **+2.6** |
| RUSJ | | | | *e*S | | **Sn** | **18** | **15** | **34.9** | **+5.7** |
| **ESO** | **Esso** | **7.97** | **15** | *e*P | | **Pn** | **18** | **14** | **01.8** | **+1.2** |
| **ESO** | **Esso** | **7.97** | **15** | | PN | **Pn** | **18** | **14** | **01.7** | **+1.2** |
| **NMR** | **Nemuro--Hokkai** | **8.12** | **236** | *i*P | | **Pn** | **18** | **14** | **02.3** | **-0.4** |
| NMR | | | | *i*S | | **Sn** | **18** | **15** | **31.3** | **-2.2** |
| **NMR** | **Nemuro--Hokkai** | **8.12** | **236**⇑ | *i*PN | | **Pn** | **18** | **14** | **02.0** | **-0.7** |
| **KMNR** | **Kamenistaya** | **8.13** | **21** | *e*P | | **Pn** | **18** | **14** | **02.9** | **0.0** |
| **KMNR** | **Kamenistaya** | **8.13** | **21** | | PN | **Pn** | **18** | **14** | **02.9** | **0.0** |
| **KPT** | **Kopyto** | **8.32** | **21** | *e*P | | **Pn** | **18** | **14** | **05.2** | **-0.3** |
| **KPT** | **Kopyto** | **8.32** | **21** | | PN | **Pn** | **18** | **14** | **05.1** | **-0.3** |
| **KOZ** | **Kozyrevsk** | **8.33** | **19** | *e*P | | **Pn** | **18** | **14** | **05.6** | **+0.1** |
| **KOZ** | **Kozyrevsk** | **8.33** | **19** | | PN | **Pn** | **18** | **14** | **05.5** | **+0.1** |
| **KIRR** | **Kirishev** | **8.34** | **21** | *e*P | | **Pn** | **18** | **14** | **05.6** | **-0.1** |
| **KIRR** | **Kirishev** | **8.34** | **21** | | PN | **Pn** | **18** | **14** | **05.6** | **-0.1** |
| **BZMR** | **Bezymyannaya** | **8.36** | **22** | *e*P | | **Pn** | **18** | **14** | **06.1** | **0.0** |
| **BZMR** | **Bezymyannaya** | **8.36** | **22** | | PN | **Pn** | **18** | **14** | **06.0** | **0.0** |
| **YSS** | **Yuzh-Sakhalins** | **8.37** | **265** | | P | **Pn** | **18** | **14** | **09.6** | **+3.6** |
| **YSS** | **Yuzh-Sakhalins** | **8.37** | **265** | | Pn | **Pn** | **18** | **14** | **08.6** | **+2.6** |
| **YSS** | **Yuzh-Sakhalins** | **8.37** | **265** | ⇑P | | **Pn** | **18** | **14** | **09.1** | **+3.1** |
| **YSS** | **Yuzh-Sakhalins** | **8.37** | **265** | *e*P | | **Pn** | **18** | **14** | **09.3** | **+3.3** |
| YSS | | | | | AMB | AMB | 18 | 14 | 15.1 | |
| | comp=N,9μm,7.0s | | | | | | | | | |
| YSS | | | | | AMB | AMB | 18 | 14 | 17.4 | |
| | comp=N,1μm,0.8s | | | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **18** | **15** | **43.7** | **+4.2** |
| YSS | | | | | A | A | 18 | 15 | 48.1 | |
| | comp=N,800nm,0.6s | | | | | | | | | |
| YSS | | | | | A | A | 18 | 15 | 48.1 | |
| | comp=N,800nm,0.6s | | | | | | | | | |
| YSS | | | | | A | A | 18 | 15 | 53.0 | |
| | comp=N,840nm,0.6s | | | | | | | | | |
| YSS | | | | | A | A | 18 | 15 | 53.0 | |
| | comp=N,460nm,0.6s | | | | | | | | | |
| YSS | | | | | AMS | AMS | 18 | 17 | 10.1 | |
| | comp=N,25μm,17.0s | | | | | | | | | |
| YSS | | | | | AMS | AMS | 18 | 17 | 10.1 | |
| | comp=N,83μm,17.0s | | | | | | | | | |
| YSS | | | | | AMS | AMS | 18 | 17 | 10.1 | |
| | comp=N,95μm,17.0s | | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **8.37** | **265**ω | *e*PN | | **Pn** | **18** | **14** | **09.9** | **+3.9** |
| YSS | | | | *e*S | | **Sn** | **18** | **15** | **46.1** | **+6.6** |
| YSS | | | | | pmax | pmax | | | | |
| | comp=E,3μm,0.8s | | | | | | | | | |
| YSS | | | | | pmax | pmax | | | | |
| | comp=Z,2μm,0.8s | | | | | | | | | |
| YSS | | | | | pmax | pmax | | | | |
| | comp=N,2μm,0.9s | | | | | | | | | |
| YSS | | | | | pmax | pmax | | | | |
| | comp=Z,9μm,6.4s | | | | | | | | | |
| YSS | | | | | pmax | pmax | | | | |
| | comp=N,4μm,6.7s | | | | | | | | | |
| YSS | | | | | pmax | pmax | | | | |
| | comp=E,11μm,6.6s | | | | | | | | | |
| YSS | | | | | smax | smax | | | | |
| | comp=N,760nm,0.6s | | | | | | | | | |
| YSS | | | | | smax | smax | | | | |
| | comp=E,810nm,0.6s | | | | | | | | | |
| YSS | | | | | MLR | MLR | | | | |
| | comp=E,83μm,16.0s | | | | | | | | | |
| **BZWR** | **Bezymyannyi-We** | **8.39** | **22** | *e*P | | **Pn** | **18** | **14** | **06.6** | **+0.1** |
| **BZWR** | **Bezymyannyi-We** | **8.39** | **22** | | PN | **Pn** | **18** | **14** | **06.5** | **+0.1** |
| **TYV** | **Tymovskoe** | **8.41** | **292** | *e*P | | **Pn** | **18** | **14** | **10.9** | **+4.4** |
| TYV | | | | | AMB | AMB | 18 | 14 | 14.8 | |
| | comp=E,230nm,0.5s | | | | | | | | | |
| TYV | | | | | AMB | AMB | 18 | 14 | 15.3 | |
| | comp=E,6μm,4.0s | | | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **18** | **15** | **44.5** | **+4.1** |
| TYV | | | | | A | A | 18 | 15 | 47.4 | |
| | comp=E,200nm,0.8s | | | | | | | | | |
| TYV | | | | | A | A | 18 | 15 | 47.4 | |
| | comp=E,110nm,0.8s | | | | | | | | | |
| TYV | | | | | A | A | 18 | 15 | 57.0 | |
| | comp=E,10μm,9.0s | | | | | | | | | |
| TYV | | | | | A | A | 18 | 15 | 57.0 | |
| | comp=E,3μm,9.0s | | | | | | | | | |
| TYV | | | | | AMS | AMS | 18 | 17 | 35.9 | |
| | comp=E,109μm,18.0s | | | | | | | | | |
| TYV | | | | | AMS | AMS | 18 | 17 | 35.9 | |
| | comp=E,93μm,18.0s | | | | | | | | | |
| TYV | | | | | AMS | AMS | 18 | 17 | 35.9 | |
| | comp=E,179μm,18.0s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **8.41** | **292** | *e*PN | | **Pn** | **18** | **14** | **10.9** | **+4.4** |
| TYV | | | | | pmax | pmax | | | | |
| | comp=Z,6μm,3.8s | | | | | | | | | |
| TYV | | | | | pmax | pmax | | | | |
| | comp=Z,469nm,1.4s | | | | | | | | | |
| TYV | | | | | MLR | MLR | | | | |
| | comp=E,74μm,16.0s | | | | | | | | | |
| **BZGR** | **Bezymyannyi-Gr** | **8.41** | **23** | *e*P | | **Pn** | **18** | **14** | **06.8** | **+0.1** |
| **BZGR** | **Bezymyannyi-Gr** | **8.41** | **23** | | PN | **Pn** | **18** | **14** | **06.8** | **+0.1** |
| **SRDR** | **Sredinnyy** | **8.53** | **18** | *e*P | | **Pn** | **18** | **14** | **09.5** | **+1.1** |
| **SRDR** | **Sredinnyy** | **8.53** | **18** | | PN | **Pn** | **18** | **14** | **09.4** | **+1.1** |
| **LGNR** | **Loginova** | **8.54** | **22** | *e*P | | **Pn** | **18** | **14** | **10.3** | **+1.6** |
| **LGNR** | **Loginova** | **8.54** | **22** | | PN | **Pn** | **18** | **14** | **10.2** | **+1.6** |
| **UGL** | **Uglegorsk** | **8.58** | **280** | *e*P | | **Pn** | **18** | **14** | **13.5** | **+4.6** |
| UGL | | | | | AMB | AMB | 18 | 14 | 14.8 | |
| | comp=E,15μm,7.0s | | | | | | | | | |
| UGL | | | | | AMB | AMB | 18 | 14 | 17.6 | |
| | comp=E,1μm,0.6s | | | | | | | | | |
| UGL | | | | *e*S | | **Sn** | **18** | **15** | **48.3** | **+3.7** |
| UGL | | | | | A | A | 18 | 15 | 57.8 | |
| | comp=E,750nm,0.6s | | | | | | | | | |
| UGL | | | | | A | A | 18 | 15 | 57.8 | |
| | comp=E,1μm,0.6s | | | | | | | | | |
| UGL | | | | | AMS | AMS | 18 | 18 | 05.0 | |
| | comp=E,119μm,13.0s | | | | | | | | | |
| UGL | | | | | AMS | AMS | 18 | 18 | 05.0 | |
| | comp=E,119μm,13.0s | | | | | | | | | |
| UGL | | | | | AMS | AMS | 18 | 18 | 05.0 | |
| | comp=E,130μm,13.0s | | | | | | | | | |
| **UGL** | **Uglegorsk** | **8.58** | **280** | *e*PN | | **Pn** | **18** | **14** | **03.3** | **-5.6** |
| UGL | | | | | pmax | pmax | | | | |
| | comp=Z,1μm,1.1s | | | | | | | | | |
| UGL | | | | | pmax | pmax | | | | |
| | comp=Z,15μm,7.0s | | | | | | | | | |
| UGL | | | | | MLR | MLR | | | | |
| | comp=Z,130μm,1.0s | | | | | | | | | |
| UGL | | | | | MLR | MLR | | | | |
| | comp=N,119μm,12.0s | | | | | | | | | |
| UGL | | | | | MLR | MLR | | | | |
| | comp=E,119μm,13.0s | | | | | | | | | |
| **KLY** | **Klyuchi** | **8.74** | **21** | *e*P | | **Pn** | **18** | **14** | **11.6** | **+0.6** |
| **KLY** | **Klyuchi** | **8.74** | **21** | | PN | **Pn** | **18** | **14** | **11.6** | **+0.6** |
| **AKK** | **Akkeshi** | **8.85** | **237** | *e*P | | **Pn** | **18** | **14** | **12.6** | **0.0** |
| AKK | | | | *e*S | | **Sn** | **18** | **15** | **49.4** | **-1.9** |
| **SRKR** | **Sorokina** | **9.17** | **22** | *e*P | | **Pn** | **18** | **14** | **18.8** | **+1.7** |
| **SRKR** | **Sorokina** | **9.17** | **22** | | PN | **Pn** | **18** | **14** | **18.8** | **+1.7** |
| **OKH** | **Okha** | **9.24** | **309** | *e*P | | **Pn** | **18** | **14** | **20.4** | **+2.5** |
| **OKH** | **Okha** | **9.24** | **309** | *i*P | | **Pn** | **18** | **14** | **21.9** | **+4.0** |
| OKH | | | | | AMB | AMB | 18 | 14 | 26.3 | |
| | comp=E,940nm,0.9s | | | | | | | | | |
| OKH | | | | | AMB | AMB | 18 | 14 | 29.1 | |
| | comp=E,8μm,12.0s | | | | | | | | | |
| OKH | | | | *e*S | | **Sn** | **18** | **16** | **05.4** | **+4.7** |
| OKH | | | | | A | A | 18 | 16 | 22.2 | |
| OKH | | | | | AMS | AMS | 18 | 19 | 34.7 | |
| | comp=E,49μm,13.0s | | | | | | | | | |
| OKH | | | | | AMS | AMS | 18 | 19 | 34.7 | |
| | comp=E,132μm,13.0s | | | | | | | | | |
| OKH | | | | | AMS | AMS | 18 | 19 | 34.7 | |
| | comp=E,109μm,13.0s | | | | | | | | | |
| **OKH** | **Okha** | **9.24** | **309** | *d i*PN | | **Pn** | **18** | **14** | **21.9** | **+4.0** |
| OKH | | | | | pmax | pmax | | | | |
| | comp=Z,8μm,12.3s | | | | | | | | | |
| OKH | | | | | MLR | MLR | | | | |
| | comp=N,49μm,13.0s | | | | | | | | | |
| OKH | | | | | MLR | MLR | | | | |
| | comp=E,132μm,12.0s | | | | | | | | | |
| OKH | | | | | MLR | MLR | | | | |
| | comp=Z,109μm,12.0s | | | | | | | | | |
| **KBTR** | **Krutoberegovo** | **9.26** | **28** | *e*P | | **Pn** | **18** | **14** | **16.8** | **-1.4** |
| **KBTR** | **Krutoberegovo** | **9.26** | **28** | | PN | **Pn** | **18** | **14** | **16.7** | **-1.4** |
| **KBG** | **Krutoberegovo** | **9.26** | **28** | *e*P | | **Pn** | **18** | **14** | **18.0** | **-0.2** |
| KBG | | | | | AMB | AMB | 18 | 14 | 22.9 | |
| | comp=Z,790nm,0.8s | | | | | | | | | |
| KBG | | | | *e*S | | **Sn** | **18** | **15** | **58.4** | **-2.9** |
| KBG | | | | | A | A | 18 | 16 | 13.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| KBG | | | | | A | A | 18 | 16 | 13.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **9.55** | **249** | | Pn | **Pn** | **18** | **14** | **25.1** | **+3.0** |
| **JKA** | **Kamikawa-asahi** | **9.55** | **249** | *e*P | | **Pn** | **18** | **14** | **25.2** | **+3.0** |
| **ASAJ** | **Asahikawa** | **9.55** | **249** | | Pn | **Pn** | **18** | **14** | **26.4** | **+4.2** |
| | comp=Z,111nm,0.3s,baz=79,slow=13,SNR=245 | | | | | | | | | |
| ASAJ | | | | | LR | LR | 18 | 17 | 57.2 | |
| | comp=Z,109μm,18.6s,baz=68,slow=37 | | | | | | | | | |
| **ASAJ** | **Asahikawa** | **9.55** | **249** | | PN | **Pn** | **18** | **14** | **25.2** | **+3.0** |
| **BKI** | **Bering** | **9.70** | **40** | *e*P | | **Pn** | **18** | **14** | **22.2** | **-2.1** |
| **BKI** | **Bering** | **9.70** | **40** | | PN | **Pn** | **18** | **14** | **22.1** | **-2.1** |
| **NKL** | **Nikolayevsk** | **10.28** | **304** | *e*P | | **Pn** | **18** | **14** | **36.4** | **+4.3** |
| NKL | | | | | AMB | AMB | 18 | 14 | 42.8 | |
| | comp=Z,620nm,0.9s | | | | | | | | | |
| NKL | | | | *e*S | | **Sn** | **18** | **16** | **30.6** | **+4.4** |
| NKL | | | | | A | A | 18 | 16 | 48.3 | |
| | comp=Z,920nm,0.8s | | | | | | | | | |
| NKL | | | | | A | A | 18 | 16 | 48.3 | |
| | comp=Z,2μm,0.8s | | | | | | | | | |
| NKL | | | | | AMS | AMS | 18 | 19 | 31.1 | |
| | comp=Z,67μm,15.0s | | | | | | | | | |
| NKL | | | | | AMS | AMS | 18 | 19 | 31.1 | |
| | comp=Z,87μm,15.0s | | | | | | | | | |
| NKL | | | | | AMS | AMS | 18 | 19 | 31.1 | |
| | comp=Z,91μm,15.0s | | | | | | | | | |
| **NKL** | **Nikolayevsk** | **10.28** | **304** | *e*PN | | **Pn** | **18** | **14** | **35.7** | **+3.6** |
| NKL | | | | | pmax | pmax | | | | |
| | comp=E,4μm,1.1s | | | | | | | | | |
| NKL | | | | | pmax | pmax | | | | |
| | comp=N,1μm,0.9s | | | | | | | | | |
| NKL | | | | | pmax | pmax | | | | |
| | comp=Z,5μm,1.0s | | | | | | | | | |
| NKL | | | | | MLR | MLR | | | | |
| | comp=N,194μm,13.0s | | | | | | | | | |
| NKL | | | | | MLR | MLR | | | | |
| | comp=E,253μm,14.0s | | | | | | | | | |
| NKL | | | | | MLR | MLR | | | | |
| | comp=Z,305μm,14.0s | | | | | | | | | |
| **JEM** | **Erimo** | **10.44** | **237** | | P | **Pn** | **18** | **14** | **35.0** | **+0.5** |
| **ERM** | **Erimo** | **10.44** | **237** | | P | **Pn** | **18** | **14** | **35.1** | **+0.6** |
| **ERM** | **Erimo** | **10.44** | **237** | | Pn | **Pn** | **18** | **14** | **33.7** | **-0.8** |
| **ERM** | **Erimo** | **10.44** | **237** | ⇑P | | **Pn** | **18** | **14** | **34.4** | **-0.1** |
| **ERM** | **Erimo** | **10.44** | **237** | *d i*PN | | **Pn** | **18** | **14** | **35.0** | **+0.6** |
| **PALN** | **Palana** | **11.20** | **13** | *e*P | | **Pn** | **18** | **14** | **44.2** | **-0.6** |
| **PALN** | **Palana** | **11.20** | **13** | | PN | **Pn** | **18** | **14** | **44.1** | **-0.6** |
| **OSSR**

**MAJO Matsushiro 17.03 233** P **Pn** **18 16 01.1 -1.6**
**MAJO Matsushiro 17.03 233** Pn **Pn** **18 15 58.6 -4.1**
**MAJO Matsushiro 17.03 233** ⇑P **Pn** **18 16 00.2 -2.5**
**MAJO Matsushiro 17.03 233** *d* iP **Pn** **18 16 00.7 -2.0**
MAJO MLR MLR
comp=Z,14µm,14.0s
**MJAR Matsushiro Arr 17.03 233** P **Pn** **18 16 01.6 -1.1**
comp=Z,1.3nm,0.3s,baz=41,slow=13,SNR=92
comp=Z,182nm,0.8s
**MJB9 Matsu-Tunnel 17.03 233** P **Pn** **18 15 57.2 -5.5**
**MSHR Mys Shultsa 17.63 260** *ce* P **Pn** **18 16 09.3 -0.9**
MSHR pmax pmax
comp=Z,214nm,0.8s
MSHR MLR MLR
comp=Z,22µm,14.0s
**PSTR Posyet 17.83 261** *e* P **Pn** **18 16 12.5 -0.1**
**MDJ Mudanjiang 17.84 268** P **P** **18 16 13.9 +0.6**
**MDJ Mudanjiang 17.84 268** P **P** **18 16 13.2 -0.1**
MDJ pP pP 18 16 16.7 -4.1
MDJ PP **sP** **18 16 27.0 +2.6**
MDJ S **Sn** **18 19 32.0 +1.3**
MDJ SS **SnSn** **18 19 51.7 +7.6**
MDJ pmax pmax
comp=Z,370nm,1.0s
MDJ LR LR
comp=Z,36µm,18.2s
MDJ LR LR
comp=Z,31µm,21.0s
MDJ LR LR
comp=Z,58µm,21.3s
**MDJ Mudanjiang 17.84 268** P **Pn** **18 16 12.2 -0.6**
**HEH HeiHe 18.05 287** *e* P **P** **18 16 16.5 +1.0**
HEH pP **pP** **18 16 19.2 -3.9**
HEH S **Sn** **18 19 37.4 +1.7**
HEH SS **SnSn** **18 19 53.2 +4.1**
HEH pmax pmax
comp=Z,1µm,1.0s
HEH pmax pmax
comp=Z,14µm,5.3s
HEH LR LR
comp=Z,41µm,14.1s
HEH LR LR
comp=Z,78µm,18.4s
HEH LR LR
comp=Z,118µm,16.9s
**KIWB Kanaga Island 18.19 68** P **Pn** **18 16 14.1 -2.8**
**JGF Kuroka 18.19 232** P **P** **18 16 17.6 +0.4**
**JGF Kuroka 18.19 232** P **Pn** **18 16 15.1 -2.1**
**JGF Kuroka 18.19 232** ⇓P **Pn** **18 16 16.3 -0.8**
**ZEA Zeya 18.20 298** *e* P **P** **18 16 19.5 +2.3**
ZEA AMB AMB 18 16 30.3
comp=Z,10µm,8.0s
ZEA AMB AMB 18 16 34.6
comp=Z,310nm,0.9s
**ZEA Zeya 18.20 298** *e* P **P** **18 16 18.9 +1.7**
ZEA *e* S **Sn** **18 19 30.5 -8.8**
ZEA pmax pmax
comp=E,10µm,8.3s
ZEA pmax pmax
comp=N,2µm,7.0s
ZEA pmax pmax
comp=Z,10µm,8.1s
ZEA pmax pmax
comp=N,260nm,0.8s
ZEA pmax pmax
comp=E,240nm,0.9s
ZEA pmax pmax
comp=Z,310nm,0.9s
ZEA smax smax
comp=E,4µm,7.4s
ZEA smax smax
comp=N,8µm,10.7s
ZEA MLR MLR
comp=E,47µm,15.0s
ZEA MLR MLR
comp=Z,56µm,15.0s
**ADK Adak 18.48 68** P **P** **18 16 20.2 0.0**
**ADK Adak 18.48 68** P **P** **18 16 18.2 -2.0**
**ADK Adak 18.48 68** ⇑P **P** **18 16 18.5 -1.7**
**ADK Adak 18.48 68** P **P** **18 16 18.0 -2.2**
**JSG Sagara 18.48 229** P **Pn** **18 16 24.1 +3.5**
**JSG Sagara 18.48 229** P **P** **18 16 19.3 -1.0**
JSG IAmb IAmb 18 16 29.6
comp=Z,626nm,0.7s
**JSG Sagara 18.48 229** ⇓P **Pn** **18 16 22.4 +1.7**
**INU Inuyama 18.56 232** P **Pn** **18 16 22.5 +0.9**
**INU Inuyama 18.56 232** P **P** **18 16 19.5 -1.7**
**INU Inuyama 18.56 232** ⇓P **P** **18 16 20.8 -0.4**
**GSTR Great Sitkin T 18.86 68** P **P** **18 16 22.9 -1.6**
**BNX BinXian 18.93 273** ⇑P **P** **18 16 23.8 -1.4**
BNX pP **Pn** **18 16 26.9 +0.9**
BNX S **Sn** **18 19 56.4 -0.6**
BNX sS **sS** **18 20 04.8 -6.0**
BNX pmax pmax
comp=Z,140nm,0.8s
BNX pmax pmax
comp=Z,3µm,7.3s
BNX LR LR
comp=Z,37µm,17.3s
BNX LR LR
comp=Z,36µm,19.5s
BNX LR LR
comp=Z,50µm,18.4s
**JHJ2 Mitsune 18.98 222** P **Pn** **18 16 29.2 +2.5**
**JHJ2 Mitsune 18.98 222** P **P** **18 16 25.5 -0.4**
JHJ2 IAmb IAmb 18 16 33.9
comp=Z,1µm,0.9s
**JHJ2 Mitsune 18.98 222** ⇑P **Pn** **18 16 28.6 +1.9**
**JHJ Hachijo jima 2 18.99 223** P **P** **18 16 25.1 -0.8**
comp=Z,9.1nm,0.3s,baz=108,slow=3.9,SNR=12
JHJ LR LR 18 27 31.6
comp=Z,4µm,18.2s,baz=43,slow=49
comp=Z,647nm,1.0s
**YAK Yakutsk 19.76 323** P **P** **18 16 32.3 -1.8**
**YAK Yakutsk 19.76 323** ⇓P **P** **18 16 31.5 -2.6**
**YAK Yakutsk 19.76 323** P **P** **18 16 32.3 -1.8**
comp=Z,10nm,0.3s,baz=102,slow=1.5,SNR=56
YAK LR LR 18 24 30.6
comp=Z,35µm,18.3s,baz=118,slow=38
comp=Z,459nm,0.8s
**YAK Yakutsk 19.76 323** *e* P **P** **18 16 33.8 -0.3**
YAK *e* S **S** **18 20 15.2 +0.2**
YAK pmax pmax
comp=Z,2µm,1.0s
YAK pmax pmax
comp=N,687nm,1.8s
YAK pmax pmax
comp=E,1µm,1.5s
YAK smax smax
comp=E,5µm,7.3s
YAK smax smax
comp=N,4µm,3.5s
YAK MLR MLR
comp=Z,29µm,14.0s
YAK MLR MLR
comp=N,12µm,16.0s
YAK MLR MLR
comp=E,11µm,12.0s
**BILL Bilibino 20.60 12** P **P** **18 16 40.7 -2.6**
BILL IAMs_20 IAMs_20 18 25 11.1
comp=Z,32µm,18.0s
**BILL Bilibino 20.60 12** *de* P **P** **18 16 40.8 -2.4**
BILL *e* *SP **sP** **18 16 57.5 +3.1**
BILL *e* 18 17 01.7
BILL *e* S **S** **18 20 30.9 -0.9**
BILL *e* SS **SnSn** **18 20 53.5 +2.1**
BILL *e* SSS SSS 18 21 06.1
BILL pmax pmax
comp=Z,293nm,0.9s
BILL MLR MLR
comp=Z,53µm,15.0s
**CN2 Changchun 20.91 269** P **P** **18 16 44.5 -2.3**
CN2 S **S** **18 20 31.3 -7.0**
CN2 pmax pmax
comp=Z,760nm,0.8s
CN2 pmax pmax
comp=Z,6µm,11.0s
CN2 LR LR
comp=Z,24µm,15.0s
CN2 LR LR
comp=Z,42µm,15.0s
CN2 LR LR
comp=Z,36µm,14.0s
**JMN Monobe 21.48 235** P **P** **18 16 54.4 +1.4**
**JMN Monobe 21.48 235** P **P** **18 16 52.4 -0.6**

**JMN Monobe 21.48 235** ⇑P **P** **18 16 54.2 +1.2**
**KSRS Korea Array 22.48 251** P **P** **18 17 04.0 +0.3**
comp=Z,359nm,0.9s,baz=50,slow=9.8,SNR=202
KSRS PcP **PcP** **18 20 57.0 +0.1**
comp=Z,19nm,0.8s,baz=34,slow=1.1,SNR=5.3
KSRS ScP **ScP** **18 24 33.1 +0.8**
comp=Z,2.0nm,0.8s,baz=66,slow=1.5,SNR=5.1
KSRS LR LR 18 25 28.1
comp=Z,43µm,18.4s,baz=50,slow=36
comp=Z,359nm,0.9s
**KS19 Wonju Array Si 22.49 251** P **P** **18 17 03.4 -0.3**
KS19 IAmb IAmb 18 17 14.7
comp=Z,584nm,0.8s
**KSAR Wonju Array Be 22.51 251** P **P** **18 17 03.3 -0.7**
**KSAR Wonju Array Be 22.51 251** P **P** **18 17 03.3 -0.7**
**SPIA Saint Paul Isl 22.62 54** P **P** **18 17 08.1 +3.1**
**SPIA Saint Paul Isl 22.62 54** P **P** **18 17 04.0 -1.1**
baz=262,SNR=6.5
SPIA S **S** **18 21 15.7 +4.9**
baz=262
**P08K Saint George I 22.93 55** P **P** **18 17 07.8 -0.4**
baz=264
P08K S **S** **18 21 15.2 -1.0**
baz=264
P08K S **S** **18 21 15.2 -1.0**
baz=264
**PYAG Pyongyang 22.95 257** P **P** **18 17 07.7 -0.9**
PYAG S **S** **18 21 14.2 -2.6**
PYAG AmB
comp=Z,590nm,0.7s
PYAG AMS AMS
comp=Z,14µm,19.0s
**SNY Shenyang 22.99 265** ⇓P **P** **18 17 06.0 -3.0**
SNY S **S** **18 21 18.0 +0.5**
SNY pmax pmax
comp=Z,120nm,1.2s
SNY pmax pmax
comp=Z,5µm,11.6s
SNY LR LR
comp=Z,22µm,14.1s
SNY LR LR
comp=Z,24µm,17.1s
SNY LR LR
comp=Z,37µm,14.9s
**HIA Hailar 23.11 286** P **P** **18 17 11.1 +0.9**
**SUJ Sinuiju 23.22 261** P **P** **18 17 09.8 -1.5**
SUJ S **S** **18 21 17.4 -3.9**
SUJ AmB
comp=Z,460nm,0.8s
SUJ AMS AMS
comp=Z,28µm,17.5s
**NIKH Nikolski High 23.24 65** P **P** **18 17 12.1 +0.7**
baz=273
NIKH S **S** **18 21 14.7 -6.8**
baz=273
**INCN Inchon 23.28 253** P **P** **18 17 13.3 +1.3**
**INCN Inchon 23.28 253** P **P** **18 17 12.2 +0.2**
INCN IAmb IAmb 18 17 18.8
comp=Z,338nm,0.9s
**INCN Inchon 23.28 253** IAMs_20 IAMs_20 18 25 40.8
comp=Z,39µm,19.0s
**INCN Inchon 23.28 253** ⇓P **P** **18 17 12.4 +0.4**
**INCN Inchon 23.28 253** P **P** **18 17 13.2 +1.2**
INCN P **P** **18 17 13.2 +1.2**
INCN P **P** **18 17 13.2 +1.2**
INCN S **S** **18 21 20.6 -1.9**
INCN S **S** **18 21 20.6 -1.9**
INCN S **S** **18 21 20.6 -1.9**
**INCN Inchon 23.28 253** P **P** **18 17 12.2 +0.2**
INCN pmax pmax
comp=Z,338nm,0.9s
INCN MLR MLR
comp=Z,39µm,19.0s
**JCJ Chichijima 23.41 210** P **P** **18 17 15.6 +2.4**
**JCJ Chichijima 23.41 210** P **P** **18 17 13.3 +0.1**
**JCJ Chichijima 23.41 210** LR LR 18 28 55.3
comp=Z,5µm,18.1s,baz=10,slow=43
**JTU Tsushima 23.47 243** P **P** **18 17 14.8 +0.9**
**JTU Tsushima 23.47 243** ⇓P **P** **18 17 14.4 +0.5**
**TJN Taejon 23.50 250** P **P** **18 17 15.3 +1.2**
comp=Z,5µm,0.8s
**TJN Taejon 23.50 250** *d* iP **P** **18 17 15.3 +1.2**
**HJU Haeju 23.54 255** P **P** **18 17 14.7 +0.2**
HJU S **S** **18 21 24.8 -1.8**
HJU AmB
comp=Z,940nm,1.2s
HJU AMS AMS
comp=Z,26µm,18.3s
**JNU Nakatsue 23.60 239** P **P** **18 17 16.2 +1.0**
**JNU Nakatsue 23.60 239** P **P** **18 17 15.4 +0.2**
JNU IAmb IAmb 18 17 23.9
comp=Z,236nm,0.7s
**JNU Nakatsue 23.60 239** ⇓P **P** **18 17 15.7 +0.5**
**JNU Nakatsue 23.60 239** LR LR 18 25 55.3
comp=Z,21µm,21.8s,baz=44,slow=35
**GAMB Gambell 23.82 37** ⇓P **P** **18 17 17.0 +0.1**
**GAMB Gambell 23.82 37** P **P** **18 17 17.0 +0.1**
baz=246,SNR=123
GAMB S **S** **18 21 31.6 +1.0**
baz=246
**UNV Unalaska Valle 24.60 62** P **P** **18 17 24.6 +0.4**
baz=273
UNV S **S** **18 21 46.2 +2.9**
baz=273
**M11K Mekoryuk 25.24 47** P **P** **18 17 30.3 +0.4**
baz=259,SNR=8.1
M11K S **S** **18 21 56.9 +3.4**
baz=259
**DL2 Dalian 25.73 261** P **P** **18 17 34.3 -0.3**
DL2 pP **pP** **18 17 43.0 +0.2**
DL2 PP **PnPn** **18 18 12.3 +0.7**
DL2 S **S** **18 22 06.4 +4.8**
DL2 sS **sS** **18 22 15.8 +0.6**
DL2 ScS **ScS** **18 28 28.2 -2.3**
DL2 pmax pmax
comp=Z,84nm,0.8s
DL2 pmax pmax
comp=Z,6µm,10.0s
DL2 LR LR
comp=Z,16µm,13.7s
DL2 LR LR
comp=Z,13µm,12.3s
DL2 LR LR
comp=Z,25µm,14.5s
**BOD Bodaibo 26.02 307** *e* P **P** **18 17 35.0 -2.0**
BOD pmax pmax
comp=Z,203nm,1.7s
**TNA Tin City 26.04 35** ⇓P **P** **18 17 37.7 +0.6**
**TNA Tin City 26.04 35** P **P** **18 17 37.2 +0.1**
baz=247,SNR=68
TNA S **S** **18 22 08.7 +2.8**
baz=247
**K13K Kusilvak Mount 26.30 44** P **P** **18 17 40.1 +0.6**
baz=258
K13K S **S** **18 22 12.7 +2.6**
baz=258
**FALS False Pass 26.36 60** P **P** **18 17 40.0 0.0**
baz=273
**TIXI Tiksi 26.36 342** P **P** **18 17 37.3 -2.6**
**TIXI Tiksi 26.36 342** IAMs_20 IAMs_20 18 29 05.1
comp=Z,42µm,18.0s
**TIXI Tiksi 26.36 342** ⇑P **P** **18 17 36.9 -3.0**
**TIXI Tiksi 26.36 342** *d* iP **P** **18 17 37.0 -3.0**
TIXI pmax pmax
comp=Z,221nm,1.3s
TIXI MLR MLR
comp=Z,52µm,15.0s
**CIT Chita 26.53 294** *e* P **P** **18 17 41.7 -0.1**
CIT *e* 18 17 53.7
CIT *e* 18 18 01.3
CIT *e* 18 18 26.8
CIT *e* 18 18 38.7
CIT *e* 18 23 23.8
**F14K Arctic Creek 26.62 36** P **P** **18 17 42.7 +0.3**
baz=249,SNR=50
F14K S **S** **18 22 17.3 +2.1**
baz=249
**M13K Dall Lake 26.64 47** P **P** **18 17 43.4 +0.8**
M13K IAmb IAmb 18 18 14.1
comp=Z,426nm,1.1s
**M13K Dall Lake 26.64 47** P **P** **18 17 42.5 -0.1**
baz=262,SNR=7.8
**ANM Nome 26.69 38** P **P** **18 17 43.1 +0.1**
**ANM Nome 26.69 38** P **P** **18 17 43.8 +0.8**
baz=252,SNR=49

ANM S **S** **18 22 20.0 +3.7**
baz=252
**ANM Nome 26.69 38** P **P** **18 17 43.1 +0.1**
ANM pmax pmax
comp=Z,980nm,1.4s
**J14K Nanvaranak Lak 26.98 42** P **P** **18 17 45.9 +0.3**
baz=257
J14K S **S** **18 22 22.9 +2.1**
baz=257
**S12K Black Hills 27.09 58** P **P** **18 17 46.4 -0.4**
baz=273
S12K S **S** **18 22 27.5 +4.7**
baz=273
**L14K Kuka Creek 27.11 45** P **P** **18 17 47.1 +0.4**
baz=261,SNR=27
L14K S **S** **18 22 27.2 +4.3**
baz=261
**XLT XiLinHaoTe 27.12 275** *e* P **P** **18 17 46.0 -1.2**
XLT pP pP 18 17 49.8 -5.6
XLT sS sS 18 22 33.1 -4.2
XLT pmax pmax
comp=Z,100nm,1.0s
XLT LR LR
comp=Z,4µm,16.9s
XLT LR LR
comp=Z,27µm,17.7s
XLT LR LR
comp=Z,43µm,20.5s
**F15K North Star Dit 27.35 36** P **P** **18 17 49.6 +0.6**
F15K IAMs_20 IAMs_20 18 30 22.7
comp=Z,21µm,19.0s
**F15K North Star Dit 27.35 36** P **P** **18 17 49.3 +0.3**
baz=250,SNR=46
F15K S **S** **18 22 29.7 +2.9**
baz=250
**G15K Niukluk 27.36 37** P **P** **18 17 49.1 +0.1**
baz=253,SNR=66
G15K S **S** **18 22 29.8 +2.9**
baz=253
**M14K Bethel 27.37 47** P **P** **18 17 49.9 +0.8**
baz=263
M14K S **S** **18 22 28.5 +1.5**
baz=263
**N14K Kuskokwak Cree 27.41 49** P **P** **18 17 49.8 +0.3**
baz=265
N14K S **S** **18 22 29.0 +1.3**
baz=265
**O14K Tigyukauivet M 27.57 50** P **P** **18 17 51.5 +0.5**
**O14K Tigyukauivet M 27.57 50** P **P** **18 17 50.7 -0.2**
baz=266,SNR=7.7
O14K S **S** **18 22 32.1 +1.8**
baz=266
**L15K Ungalak Mounta 27.73 45** P **P** **18 17 52.6 +0.3**
baz=262,SNR=17
L15K S **S** **18 22 34.4 +1.7**
baz=262
**K15K Wolf Creek Mou 27.81 44** P **P** **18 17 52.9 -0.2**
**K15K Wolf Creek Mou 27.81 44** P **P** **18 17 52.5 -0.6**
baz=260,SNR=24
K15K S **S** **18 22 36.6 +2.7**
baz=260
**M15K Kasigluk River 27.98 47** P **P** **18 17 54.3 -0.4**
baz=264,SNR=22
M15K S **S** **18 22 35.6 -1.1**
baz=264
**H16K Elim 28.00 39** P **P** **18 17 54.6 -0.2**
baz=255,SNR=30
H16K S **S** **18 22 38.2 +1.3**
baz=255
**SDPT Sand Point 28.01 59** P **P** **18 17 54.3 -0.6**
baz=274
**C16K Lisburne Hills 28.08 30** P **P** **18 17 54.8 -0.6**
C16K IAmb IAmb 18 18 01.9
comp=Z,387nm,1.0s
C16K IAMs_20 IAMs_20 18 29 26.7
comp=Z,21µm,20.0s
**C16K Lisburne Hills 28.08 30** P **P** **18 17 55.1 -0.3**
baz=245,SNR=65
C16K S **S** **18 22 39.3 +1.1**
baz=245
**G16K Koyuk River 28.16 37** P **P** **18 17 56.1 -0.1**
**G16K Koyuk River 28.16 37** P **P** **18 17 56.3 +0.1**
baz=254,SNR=25
G16K S **S** **18 22 41.8 +2.3**
baz=254
**N15K Kwethluk River 28.23 48** P **P** **18 17 56.9 0.0**
**N15K Kwethluk River 28.23 48** P **P** **18 17 56.9 0.0**
baz=266,SNR=17
N15K S **S** **18 22 42.2 +1.5**
baz=266
**O15K Ungalikthiuk R 28.30 50** P **P** **18 17 57.3 -0.2**
baz=268,SNR=14
O15K S **S** **18 22 42.9 +1.1**
baz=268
**J16K Anvik River 28.41 42** P **P** **18 17 58.2 -0.1**
**J16K Anvik River 28.41 42** P **P** **18 17 58.5 +0.1**
baz=260,SNR=27
J16K S **S** **18 22 46.2 +2.9**
baz=260
**S14K Fog Glacier 28.47 57** P **P** **18 17 59.0 -0.2**
baz=274
**I17K Unalakleet 28.48 40** P **P** **18 17 58.6 -0.4**
**I17K Unalakleet 28.48 40** P **P** **18 17 59.3 +0.3**
baz=258,SNR=9.2
I17K S **S** **18 22 46.3 +1.8**
baz=258
**CHNA Chernabura Isl 28.57 60** P **P** **18 17 59.6 -0.3**
baz=276
CHNA S **S** **18 22 41.0 -5.0**
baz=276
**CNBA Chernabura Isl 28.57 60** IAMs_20 IAMs_20 18 29 32.0
comp=Z,34µm,21.0s
**D17K Noatak River 28.64 32** P **P** **18 17 59.9 -0.5**
baz=249,SNR=98
D17K S **S** **18 22 48.5 +1.6**
baz=249
**L16K Owhat River 28.68 45** P **P** **18 18 00.2 -0.6**
baz=264,SNR=16
L16K S **S** **18 22 47.7 0.0**
baz=264
**BJI Beijing 28.78 268** P **P** **18 18 02.1 +0.2**
BJI S **S** **18 22 51.0 +1.4**
BJI pmax pmax
comp=Z,31nm,0.8s
BJI LR LR
comp=Z,12µm,16.1s
BJI LR LR
comp=Z,9µm,18.0s
BJI LR LR
comp=Z,15µm,14.7s
**BJT Baijiatuau 28.79 268** P **P** **18 18 04.9 +2.9**
**BJT Baijiatuau 28.79 268** P **P** **18 18 01.6 -0.5**
**BJT Baijiatuau 28.79 268** P **P** **18 18 01.6 -0.5**
BJT pmax pmax
comp=Z,49nm,0.9s
BJT MLR MLR
comp=Z,15µm,18.0s
**RDOG Red Dog Mine 28.83 32** P **P** **18 18 01.4 -0.7**
RDOG IAmb IAmb 18 18 22.6
comp=Z,278nm,1.1s
RDOG IAMs_20 IAMs_20 18 31 23.0
comp=Z,19µm,18.0s
**RDOG Red Dog Mine 28.83 32** P **P** **18 18 02.0 -0.1**
baz=248,SNR=44
RDOG S **S** **18 22 50.8 +0.8**
baz=248
**M16K Timber Creek 28.86 47** P **P** **18 18 02.4 0.0**
**M16K Timber Creek 28.86 47** P **P** **18 18 02.4 0.0**
baz=265,SNR=42
M16K S **S** **18 22 53.1 +2.6**
baz=265
**G17K Kiwalik Mounta 28.88 37** P **P** **18 18 02.7 +0.1**
baz=256,SNR=174
G17K S **S** **18 22 53.5 +2.8**
baz=256
**E17K Hotham Inlet 28.88 34** P **P** **18 18 03.1 +0.5**
baz=251,SNR=175
E17K S **S** **18 22 51.8 +1.1**
baz=251
**C17K DeLong Mountai 28.90 31** P **P** **18 18 03.0 +0.2**
baz=247,SNR=34
C17K S **S** **18 22 52.4 +1.3**
baz=247
**F17K Baldwin Pennin 28.90 35** IAmb IAmb 18 18 06.8
comp=Z,279nm,1.1s
**F17K Baldwin Pennin 28.90 35** P **P** **18 18 03.5 +0.8**
baz=253

F17K S **S** **18 22 53.6 +2.6**
baz=253
**N16K** **Nishlik Lake** **28.91 48** P **P** **18 18 03.2 +0.2**
baz=266
N16K S **S** **18 22 53.4 +2.0**
baz=266
**H17K** **Granite Mounta** **29.04 38** P **P** **18 18 04.6 +0.6**
baz=257
H17K S **S** **18 22 56.4 +3.0**
baz=257
**J17K** **VABM Dome** **29.10 42** P **P** **18 18 04.2 -0.4**
J17K IAmb IAmb 18 18 21.8
comp=Z,437nm,1.5s
**J17K** **VABM Dome** **29.10 42** P **P** **18 18 04.8 +0.3**
baz=261,SNR=53
J17K S **S** **18 22 56.7 +2.4**
baz=261
J17K S **S** **18 22 56.7 +2.4**
baz=261
**CHGN** **Chignik** **29.10 56** P **P** **18 18 04.8 +0.2**
baz=274
CHGN S **S** **18 22 49.6 -4.7**
baz=274
**JMZ** **Minamidaito 2** **29.16 228** P **P** **18 18 05.8 +0.5**
**O16K** **Kokwok River B** **29.20 50** P **P** **18 18 05.7 +0.1**
**O16K** **Kokwok River B** **29.20 50** P **P** **18 18 05.2 -0.3**
baz=269,SNR=9.4
O16K S **S** **18 22 56.8 +0.8**
baz=269
**P16K** **Nushagak River** **29.25 51** P **P** **18 18 05.8 -0.1**
baz=270
P16K S **S** **18 22 58.8 +2.2**
baz=270
P16K S **S** **18 22 58.8 +2.2**
baz=270
**L17K** **Donlin** **29.28 44** P **P** **18 18 06.8 +0.6**
baz=264
L17K S **S** **18 22 58.7 +1.5**
baz=264
**MIDW** **Midway** **29.30 123** IAMs_20 IAMs_20 18 27 04.7
comp=Z,20μm,20.0s
**K17K** **Iditarod** **29.35 43** IAmb IAmb 18 18 56.4
comp=Z,228nm,1.1s
**K17K** **Iditarod** **29.35 43** P **P** **18 18 07.5 +0.7**
baz=263
K17K S **S** **18 23 01.6 +3.4**
baz=263
**E18K** **Tukpahlearik C** **29.44 33** P **P** **18 18 08.1 +0.6**
baz=252,SNR=45
E18K S **S** **18 23 02.7 +3.1**
baz=252
**R16K** **Pilot Point** **29.49 54** IAMs_20 IAMs_20 18 31 59.6
comp=Z,19μm,19.0s
**R16K** **Pilot Point** **29.49 54** P **P** **18 18 07.4 -0.7**
baz=273
R16K S **S** **18 23 01.5 +1.1**
baz=273
R16K S **S** **18 23 01.5 +1.1**
baz=273
**F18K** **Selawik** **29.56 35** P **P** **18 18 09.0 +0.5**
baz=255,SNR=156
F18K S **S** **18 23 03.2 +1.9**
baz=255
**M17K** **Holitna River** **29.62 46** P **P** **18 18 09.5 +0.3**
M17K IAmb IAmb 18 18 45.1
comp=Z,224nm,0.9s
**M17K** **Holitna River** **29.62 46** P **P** **18 18 09.1 -0.1**
baz=266,SNR=65
M17K S **S** **18 23 04.7 +2.1**
baz=266
**C18K** **Utukok River** **29.64 31** P **P** **18 18 09.1 -0.2**
**C18K** **Utukok River** **29.64 31** P **P** **18 18 09.3 -0.1**
baz=249,SNR=87
C18K S **S** **18 23 02.7 -0.1**
baz=249
**N17K** **Nushagak Hills** **29.69 48** P **P** **18 18 09.9 +0.1**
**N17K** **Nushagak Hills** **29.69 48** P **P** **18 18 09.7 -0.1**
baz=266,SNR=18
N17K S **S** **18 23 06.4 +2.8**
baz=268
**B18K** **Kokolik River** **29.70 29** P **P** **18 18 10.2 +0.3**
baz=248,SNR=34
B18K S **S** **18 23 03.3 -0.4**
baz=248
**O17K** **Koliganek Bris** **29.72 49** P **P** **18 18 09.9 -0.1**
baz=269
O17K S **S** **18 23 05.0 +1.1**
baz=269
**H18K** **Honhosa River** **29.73 38** IAmb IAmb 18 18 13.9
comp=Z,329nm,1.4s
**H18K** **Honhosa River** **29.73 38** P **P** **18 18 10.5 +0.3**
baz=258
H18K S **S** **18 23 06.8 +2.6**
baz=258
**G18K** **Tagagawik** **29.77 37** IAmb IAmb 18 18 14.2
comp=Z,214nm,1.0s
**G18K** **Tagagawik** **29.77 37** P **P** **18 18 10.9 +0.4**
baz=257
G18K S **S** **18 23 06.1 +1.3**
baz=257
**JOW** **Kunigami** **29.86 234** P **P** **18 18 12.7 +1.0**
**JOW** **Kunigami** **29.86 234** P **P** **18 18 12.1 +0.4**
JOW IAmb IAmb 18 18 18.0
comp=Z,181nm,1.0s
**JOW** **Kunigami** **29.86 234** ⇑P **P** **18 18 12.7 +1.0**
**JOW** **Kunigami** **29.86 234** LR LR 18 30 38.8
comp=Z,11μm,21.6s,baz=38,slow=37
**Q16K** **King Salmon** **29.94 51** P **P** **18 18 11.7 -0.3**
baz=272
Q16K S **S** **18 23 08.5 +1.0**
baz=272
**L18K** **Granite Mounta** **30.04 44** P **P** **18 18 13.1 +0.1**
**L18K** **Granite Mounta** **30.04 44** P **P** **18 18 13.0 +0.1**
baz=265,SNR=49
L18K S **S** **18 23 11.0 +1.9**
baz=265
L18K S **S** **18 23 11.0 +1.9**
baz=265
**P17K** **Kvichak River** **30.05 50** P **P** **18 18 12.6 -0.3**
baz=271
P17K S **S** **18 23 10.5 +1.4**
baz=271
P17K S **S** **18 23 10.5 +1.4**
baz=271
**R17L** **Mt. Peulik Vol** **30.14 54** P **P** **18 18 12.7 -1.2**
baz=274,SNR=7.5
R17L S **S** **18 23 08.9 -1.8**
baz=274
**PLK4** **Peulik 4** **30.14 54** IAMs_20 IAMs_20 18 32 29.3
comp=Z,22μm,19.0s
**J18K** **Innoko River** **30.16 42** P **P** **18 18 13.9 -0.1**
baz=263
J18K S **S** **18 23 12.6 +1.6**
baz=263
**TIA** **Tai'an** **30.20 261** P **P** **18 18 14.5 -0.1**
TIA PP **PnPn** **18 19 10.7 -1.9**
TIA PcP **PcP** **18 21 17.7 +2.7**
TIA S **S** **18 23 14.8 +2.7**
TIA pmax pmax
comp=Z,120nm,0.7s
TIA pmax pmax
comp=Z,2μm,4.6s
TIA LR LR
comp=Z,15μm,14.4s
TIA LR LR
comp=Z,18μm,15.8s
TIA LR LR
comp=Z,21μm,17.2s
**A19K** **Wainwright** **30.27 28** P **P** **18 18 15.3 +0.5**
baz=247,SNR=35
A19K S **S** **18 23 13.6 +1.2**
baz=247
**GCSA** **Galena City Sc** **30.28 39** P **P** **18 18 14.3 -0.6**
baz=261
GCSA S **S** **18 23 13.4 +0.8**
baz=261
**N18K** **Kilae Creek** **30.34 47** P **P** **18 18 16.1 +0.5**
N18K IAMs_20 IAMs_20 18 31 25.3
comp=Z,18μm,19.0s
**N18K** **Kilae Creek** **30.34 47** P **P** **18 18 16.1 +0.5**
baz=269,SNR=61
N18K S **S** **18 23 16.9 +3.1**
baz=269
N18K S **S** **18 23 16.9 +3.1**
baz=269
**F19K** **Shaleruckik Mo** **30.34 35** P **P** **18 18 15.5 0.0**
F19K IAmb IAmb 18 18 18.2
comp=Z,183nm,1.1s
**F19K** **Shaleruckik Mo** **30.34 35** P **P** **18 18 15.6 +0.1**
baz=256,SNR=152
F19K S **S** **18 23 15.0 +1.3**
baz=256
**C19K** **Lookout Ridge** **30.35 30** P **P** **18 18 15.2 -0.4**
C19K IAmb IAmb 18 18 37.2
comp=Z,310nm,1.3s
C19K IAMs_20 IAMs_20 18 30 50.5
comp=Z,22μm,20.0s
**C19K** **Lookout Ridge** **30.35 30** P **P** **18 18 15.6 0.0**
baz=251,SNR=117
C19K S **S** **18 23 14.3 +0.5**
baz=251
**Q17K** **Contact Creek** **30.36 52** P **P** **18 18 15.1 -0.8**
baz=273,SNR=34
Q17K S **S** **18 23 14.1 -0.3**
baz=273
**M18K** **Stony River** **30.40 46** P **P** **18 18 16.4 +0.3**
baz=267,SNR=48
M18K S **S** **18 23 15.8 +1.1**
baz=267
**G19K** **Purcell Mounta** **30.45 37** IAmb IAmb 18 18 19.2
comp=Z,190nm,1.1s
**G19K** **Purcell Mounta** **30.45 37** P **P** **18 18 16.2 -0.3**
baz=258,SNR=130
G19K S **S** **18 23 16.5 +1.1**
baz=258
**WAKE** **Wake Island** **30.46 158** IAMs_20 IAMs_20 18 27 37.4
comp=Z,27μm,22.0s
**SVW2** **Sparrevohn** **30.50 47** P **P** **18 18 18.4 +1.4**
**SVW2** **Sparrevohn** **30.50 47** P **P** **18 18 17.1 +0.1**
**H19K** **Roundabout Mou** **30.59 38** P **P** **18 18 17.7 +0.1**
**H19K** **Roundabout Mou** **30.59 38** P **P** **18 18 18.1 +0.4**
baz=260,SNR=336
H19K S **S** **18 23 18.9 +1.3**
baz=260
**D19K** **Kuna River** **30.66 32** IAmb IAmb 18 18 38.9
comp=Z,393nm,1.2s
**D19K** **Kuna River** **30.66 32** P **P** **18 18 18.4 +0.1**
baz=253,SNR=160
D19K S **S** **18 23 18.2 -0.5**
baz=253
**P18K** **Big Mountain,** **30.67 50** P **P** **18 18 18.1 -0.4**
**P18K** **Big Mountain,** **30.67 50** P **P** **18 18 18.3 -0.2**
baz=272,SNR=28
P18K S **S** **18 23 19.9 +0.9**
baz=272
**O18K** **Koktuh Hills** **30.67 49** P **P** **18 18 18.7 +0.2**
baz=271,SNR=22
O18K S **S** **18 23 20.4 +1.4**
baz=271
O18K S **S** **18 23 20.4 +1.4**
baz=271
**E19K** **Redstone River** **30.70 34** IAmb IAmb 18 18 22.4
comp=Z,219nm,0.9s
**E19K** **Redstone River** **30.70 34** P **P** **18 18 18.7 0.0**
baz=256,SNR=217
E19K S **S** **18 23 17.0 -2.3**
baz=256
**CHIR** **Chirikof Islan** **30.71 57** IAMs_20 IAMs_20 18 30 26.1
comp=Z,41μm,22.0s
**CHIR** **Chirikof Islan** **30.71 57** P **P** **18 18 17.1 -1.8**
baz=277,SNR=9.6
CHIR S **S** **18 23 17.8 -1.8**
baz=277
**J19K** **Poorman** **30.71 41** P **P** **18 18 18.4 -0.4**
J19K IAMs_20 IAMs_20 18 32 55.8
comp=Z,26μm,19.0s
**J19K** **Poorman** **30.71 41** P **P** **18 18 18.7 -0.1**
baz=263,SNR=67
J19K S **S** **18 23 17.8 -1.7**
baz=263
J19K S **S** **18 23 17.8 -1.7**
baz=263
**Q18K** **Katmai Hardscr** **30.80 51** P **P** **18 18 18.5 -1.3**
baz=273,SNR=42
Q18K S **S** **18 23 21.2 -0.2**
baz=273
**SSE** **Sheshan** **30.84 249** P **P** **18 18 19.8 -0.4**
SSE S **S** **18 23 22.7 +0.6**
SSE sS **pS** **18 23 29.9 -1.4**
SSE pmax pmax
comp=Z,1μm,5.3s
**L19K** **White Mountain** **30.90 45** P **P** **18 18 20.2 -0.3**
baz=267,SNR=35
L19K S **S** **18 23 24.4 +1.9**
baz=267
L19K S **S** **18 23 24.4 +1.9**
baz=267
**N19K** **Bonanza Creek** **31.03 47** P **P** **18 18 21.9 +0.1**
N19K IAMs_20 IAMs_20 18 29 55.6
comp=Z,20μm,22.0s
**N19K** **Bonanza Creek** **31.03 47** P **P** **18 18 21.7 0.0**
baz=270,SNR=31
N19K S **S** **18 23 25.2 +0.4**
baz=270
N19K S **S** **18 23 25.2 +0.4**
baz=270
**M19K** **Big River Lodg** **31.10 45** P **P** **18 18 22.8 +0.5**
M19K IAMs_20 IAMs_20 18 31 01.3
comp=Z,18μm,20.0s
**M19K** **Big River Lodg** **31.10 45** P **P** **18 18 22.3 0.0**
baz=268,SNR=24
M19K S **S** **18 23 28.4 +2.7**
baz=268
M19K S **S** **18 23 28.4 +2.7**
baz=268
**HNS** **HongShan** **31.14 265** ⇑P **P** **18 18 23.0 +0.2**
HNS S **S** **18 23 33.2 +6.6**
HNS pmax pmax
comp=Z,320nm,1.0s
HNS pmax pmax
comp=Z,2μm,6.7s
HNS LR LR
comp=Z,10μm,16.7s
HNS LR LR
comp=Z,30μm,20.6s
HNS LR LR
comp=Z,37μm,21.5s
**R18K** **Karluk** **31.17 54** P **P** **18 18 21.0 -1.9**
baz=275
R18K S **S** **18 23 23.9 -2.9**
baz=275
R18K S **S** **18 23 23.9 -2.9**
baz=275
**F20K** **Avaraart Lake** **31.18 35** P **P** **18 18 22.8 0.0**
**F20K** **Avaraart Lake** **31.18 35** P **P** **18 18 22.5 -0.3**
baz=258,SNR=96
F20K S **S** **18 23 27.7 +1.0**
baz=258
**H20K** **Anotleneega Mo** **31.23 38** P **P** **18 18 23.2 -0.2**
baz=262,SNR=176
H20K S **S** **18 23 29.3 +1.7**
baz=262
**D20K** **Etivluk River** **31.25 32** P **P** **18 18 23.2 -0.3**
baz=254,SNR=339
D20K S **S** **18 23 28.8 +0.8**
baz=254
**E20K** **Nigu River** **31.28 33** P **P** **18 18 23.4 -0.5**
baz=256,SNR=286
E20K S **S** **18 23 29.1 +0.5**
baz=256
**I20K** **Naaghedeneel** **31.30 40** IAmb IAmb 18 19 15.3
comp=Z,473nm,1.4s
**I20K** **Naaghedeneel** **31.30 40** P **P** **18 18 24.1 +0.2**
baz=263,SNR=41
I20K S **S** **18 23 31.1 +2.4**
baz=263
**K20K** **Telida** **31.34 42** IAMs_20 IAMs_20 18 32 07.1
comp=Z,18μm,20.0s
**K20K** **Telida** **31.34 42** P **P** **18 18 24.3 0.0**
baz=266,SNR=69
K20K S **S** **18 23 30.9 +1.6**
baz=266
K20K S **S** **18 23 30.9 +1.6**
baz=266
**L20K** **Farewell, AK** **31.37 44** P **P** **18 18 24.7 0.0**
baz=268
L20K S **S** **18 23 32.2 +2.3**
baz=268
L20K S **S** **18 23 32.2 +2.3**
baz=268
**J20K** **Nowinta River** **31.38 41** IAmb IAmb 18 18 40.4
comp=Z,220nm,1.2s
J20K IAMs_20 IAMs_20 18 33 17.0
comp=Z,25μm,19.0s
**J20K** **Nowinta River** **31.38 41** P **P** **18 18 24.5 -0.1**
baz=264,SNR=87
J20K S **S** **18 23 30.7 +0.8**
baz=264
J20K S **S** **18 23 30.7 +0.8**
baz=264
**SII** **Sitkinak Islan** **31.42 55** P **P** **18 18 25.6 +0.5**
**SII** **Sitkinak Islan** **31.42 55** P **P** **18 18 25.1 0.0**
SII IAmb IAmb 18 19 24.2
comp=Z,325nm,1.4s
SII IAMs_20 IAMs_20 18 30 31.7
comp=Z,30μm,22.0s
**SII** **Sitkinak Islan** **31.42 55** P **P** **18 18 23.7 -1.4**
baz=277
SII S **S** **18 23 28.8 -1.9**
baz=277
**B20K** **Meade River** **31.45 29** P **P** **18 18 24.9 -0.3**
**B20K** **Meade River** **31.45 29** P **P** **18 18 25.9 +0.7**
baz=252,SNR=342
B20K S **S** **18 23 30.4 -0.5**
baz=252
**HHC** **Hu-ho-hao-te** **31.46 273** *e*P **P** **18 18 26.2 +0.4**
HHC pP pP 18 18 30.2 -3.8
HHC sP sP 18 18 33.3 -4.1
HHC PP **PnPn** **18 19 31.8 +2.8**
HHC S **S** **18 23 30.9 -1.0**
HHC pmax pmax
comp=Z,260nm,1.1s
HHC LR LR
comp=Z,27μm,16.0s
HHC LR LR
comp=Z,20μm,15.3s
HHC LR LR
comp=Z,39μm,18.3s
**Q19K** **Cape Douglas,** **31.50 51** P **P** **18 18 24.7 -1.1**
baz=274,SNR=8.6
Q19K S **S** **18 23 28.3 -3.7**
baz=274
Q19K S **S** **18 23 28.3 -3.7**
baz=274
**ULN** **Ulaanbaatar** **31.61 288** P **P** **18 18 25.6 -1.4**
**ULN** **Ulaanbaatar** **31.61 288** ⇓P **P** **18 18 25.3 -1.7**
**ULN** **Ulaanbaatar** **31.61 288** P **P** **18 18 26.8 -0.3**
ULN P **P** **18 18 26.8 -0.3**
ULN P **P** **18 18 26.8 -0.3**
ULN S **S** **18 23 34.6 +0.4**
ULN S **S** **18 23 34.6 +0.4**
ULN S **S** **18 23 34.6 +0.4**
**ULN** **Ulaanbaatar** **31.61 288** *d* *i*P **P** **18 18 26.4 -0.7**
ULN pmax pmax
comp=Z,110nm,1.1s
ULN MLR MLR
comp=Z,71μm,16.0s
**NJ2** **Nanjing** **31.66 252** *e*P **P** **18 18 28.4 +0.9**
NJ2 pP **pP** **18 18 32.2 -3.6**
NJ2 S **S** **18 23 32.9 -2.1**
NJ2 sS **sS** **18 23 49.9 +1.3**
NJ2 ScP **ScP** **18 25 00.8 +0.8**
NJ2 pmax pmax
comp=Z,47nm,0.9s
NJ2 pmax pmax
comp=Z,2μm,5.6s
NJ2 LR LR
comp=Z,29μm,19.9s
NJ2 LR LR
comp=Z,20μm,17.1s
NJ2 LR LR
comp=Z,32μm,18.5s
**P19K** **Oil Pt** **31.68 49** P **P** **18 18 27.4 0.0**
baz=273
P19K S **S** **18 23 35.2 +0.4**
baz=273
**M20K** **Styx River** **31.70 45** P **P** **18 18 27.2 -0.4**
M20K IAmb IAmb 18 19 36.1
comp=Z,259nm,1.6s
**M20K** **Styx River** **31.70 45** P **P** **18 18 28.2 +0.5**
baz=269
M20K S **S** **18 23 37.4 +2.2**
baz=269
M20K S **S** **18 23 37.4 +2.2**
baz=269
**IMAR** **Indian Mountai** **31.77 37** P **P** **18 18 27.6 -0.5**
**OHAK** **Old Harbor** **31.83 54** P **P** **18 18 27.8 -0.9**
**OHAK** **Old Harbor** **31.83 54** P **P** **18 18 27.1 -1.6**
OHAK IAmb IAmb 18 18 29.7
comp=Z,187nm,1.1s
OHAK IAMs_20 IAMs_20 18 31 23.5
comp=Z,39μm,22.0s
**OHAK** **Old Harbor** **31.83 54** P **P** **18 18 27.1 -1.6**
baz=277,SNR=43
OHAK S **S** **18 23 34.5 -2.5**
baz=277
**RSO** **Redoubt South** **31.89 48** P **P** **18 18 29.4 -0.1**
**G21K** **Allakaket** **31.94 36** IAmb IAmb 18 18 33.4
comp=Z,261nm,0.9s
**G21K** **Allakaket** **31.94 36** P **P** **18 18 30.0 +0.4**
baz=261,SNR=307
G21K S **S** **18 23 40.3 +1.6**
baz=261
**O20K** **Slope Mountain** **31.96 49** P **P** **18 18 29.2 -0.8**
baz=272,SNR=16
O20K S **S** **18 23 38.8 -0.6**
baz=272
O20K S **S** **18 23 38.8 -0.6**
baz=272
**SONM** **Songino Array** **32.03 288** P **P** **18 18 29.2 -1.6**
**SONM** **Songino Array** **32.03 288** P **P** **18 18 30.1 -0.7**
comp=Z,57nm,0.9s,baz=69,slow=9.1,SNR=75
SONM PcP **PcP** **18 21 19.3 -0.5**
comp=Z,24nm,0.8s,baz=110,slow=1.2,SNR=6.9
SONM ScP **ScP** **18 25 03.2 +2.1**
comp=Z,3.8nm,0.9s,baz=75,slow=4.0,SNR=2.2
SONM LR LR 18 32 41.3
comp=Z,64μm,19.1s,baz=74,slow=39
SONM P3KPbc 18 50 00.5
comp=Z,1.0nm,0.8s,baz=248,slow=4.0,SNR=6.0
comp=Z,57nm,0.9s
**A21K** **Barrow** **32.05 27** P **P** **18 18 29.3 -1.2**
baz=250,SNR=9.9
A21K S **S** **18 23 38.3 -1.9**
baz=250
**F21K** **Alatna River** **32.07 35** P **P** **18 18 30.9 +0.1**
baz=260,SNR=75
F21K S **S** **18 23 40.9 +0.1**
baz=260
**IRK** **Irkutsk** **32.10 296** *e*P **P** **18 18 30.6 -0.6**
IRK *e* 18 18 44.0
IRK pmax pmax
comp=Z,152nm,0.8s
**H21K** **Melozitna Rive** **32.11 38** IAmb IAmb 18 18 34.8
comp=Z,309nm,1.0s
**H21K** **Melozitna Rive** **32.11 38** P **P** **18 18 31.7 +0.6**
baz=263,SNR=350
H21K S **S** **18 23 42.9 +1.6**
baz=263
H21K S **S** **18 23 42.9 +1.6**
baz=263
**E21K** **Killik River** **32.13 33** P **P** **18 18 30.4 -0.8**
E21K IAmb IAmb 18 18 34.7
comp=Z,256nm,1.1s
**E21K** **Killik River** **32.13 33** P **P** **18 18 31.4 +0.1**
baz=258,SNR=301
E21K S **S** **18 23 40.8 -0.9**
baz=258
**SPCR** **Spurr Chakacha** **32.14 46** P P 18 18 13.6 -18
baz=271
SPCR S S 18 23 25.1 -17
baz=271
**N20K** **Mount Spurr** **32.14 46** P **P** **18 18 31.9 +0.5**
baz=271,SNR=16
N20K S **S** **18 23 42.9 +0.9**
baz=271
**KDAK** **Kodiak Island** **32.15 53** P **P** **18 18 29.8 -1.7**
KDAK IAmb IAmb 18 18 32.5
comp=Z,171nm,1.0s
**KDAK** **Kodiak Island** **32.15 53** IAMs_20 IAMs_20 18 33 48.8
comp=Z,23μm,22.0s
**KDAK** **Kodiak Island** **32.15 53** ⇓P **P** **18 18 30.1 -1.4**
**KDAK** **Kodiak Island** **32.15 53** LR LR 18 34 56.0
comp=Z,16μm,18.0s,baz=276,slow=43
**KDAK** **Kodiak Island** **32.15 53** P **P** **18 18 29.8 -1.7**
baz=276
KDAK S **S** **18 23 38.4 -3.7**
baz=276
**KDAK** **Kodiak Island** **32.15 53** *d* *i*P **P** **18 18 29.9 -1.6**
KDAK *i* *PP **sP** **18 18 41.4 -1.5**
KDAK pmax pmax
comp=Z,261nm,1.0s

KDAK MLR MLR
comp=Z,43µm,19.0s
**CHUM Lake Minchumin 32.16 41** P **P** **18 18 32.0 +0.6**
baz=267
CHUM S **S** **18 23 42.9 +0.9**
baz=267
**Q20K Shuyak Island 32.17 51** P **P** **18 18 30.3 -1.4**
baz=275,SNR=18
Q20K S **S** **18 23 37.4 -5.0**
baz=275
**SYI Shuyak Island 32.17 51** IAmb IAmb 18 18 32.9
comp=Z,210nm,1.1s
SYI IAMs_20 IAMs_20 18 32 40.8
comp=Z,20µm,20.0s
**B21K Ikpikpuk River 32.18 30** P **P** **18 18 32.5 +0.9**
baz=255,SNR=631
B21K S **S** **18 23 41.7 -0.6**
baz=255
**A22K Sinclair Lake 32.45 28** P **P** **18 18 34.3 +0.3**
baz=253,SNR=55
A22K S **S** **18 23 44.6 -2.0**
baz=253
**SKT Skwentna 32.46 45** P **P** **18 18 33.8 -0.4**
**SKT Skwentna 32.46 45** P **P** **18 18 34.2 0.0**
baz=270,SNR=58
SKT S **S** **18 23 47.8 +0.9**
baz=270
**TIY Taiyuan 32.48 267** ⇑P **P** **18 18 36.1 +1.4**
TIY sP **sP** **18 18 45.2 -1.1**
TIY S **S** **18 23 49.0 +1.3**
TIY sS **sS** **18 24 05.6 +4.2**
TIY pmax pmax
comp=Z,86nm,1.5s
TIY pmax pmax
comp=Z,2µm,6.1s
TIY LR LR
comp=Z,18µm,14.4s
TIY LR LR
comp=Z,18µm,16.5s
TIY LR LR
comp=Z,19µm,16.5s
**HOM Homer 32.48 49** P **P** **18 18 33.3 -1.1**
HOM IAmb IAmb 18 18 49.9
comp=Z,253nm,1.0s
**HOM Homer 32.48 49** P **P** **18 18 33.1 -1.2**
baz=274
HOM S **S** **18 23 44.8 -2.4**
baz=274
**BTO Baotou 32.61 273** *e*P **P** **18 18 36.1 +0.3**
BTO pP **pP** **18 18 40.6 -3.5**
BTO sP **sP** **18 18 43.3 -4.2**
BTO S **S** **18 23 53.1 +3.3**
BTO sS **pS** **18 23 57.6 -1.2**
BTO SS **SnSn** **18 25 47.8 +2.7**
BTO pmax pmax
comp=Z,130nm,1.4s
BTO pmax pmax
comp=Z,3µm,9.7s
BTO LR LR
comp=Z,66µm,17.1s
BTO LR LR
comp=Z,67µm,16.2s
BTO LR LR
comp=Z,62µm,20.0s
**F22K John River 32.62 35** P **P** **18 18 36.1 +0.6**
baz=261,SNR=122
F22K S **S** **18 23 49.9 +0.7**
baz=261
**CAPN Captain Cook N 32.66 47** IAMs_20 IAMs_20 18 31 06.8
comp=Z,16µm,20.0s
**CAPN Captain Cook N 32.66 47** P **P** **18 18 36.3 +0.3**
baz=273
CAPN S **S** **18 23 52.4 +2.4**
baz=273
**D22K Ayikyak River 32.68 32** IAmb IAmb 18 18 57.0
comp=Z,319nm,1.2s
**D22K Ayikyak River 32.68 32** P **P** **18 18 36.5 +0.5**
baz=258,SNR=111
D22K S **S** **18 23 50.9 +0.7**
baz=258
**CNPM China Poot 32.70 50** IAmb IAmb 18 18 58.2
comp=Z,134nm,1.0s
CNPM IAMs_20 IAMs_20 18 33 14.9
comp=Z,22µm,21.0s
**H22K Ishtalitna Cre 32.72 38** P **P** **18 18 37.0 +0.6**
baz=264,SNR=289
H22K S **S** **18 23 53.6 +2.7**
baz=264
H22K S **S** **18 23 53.6 +2.7**
baz=264
**BPAW Bear Paw Mtn. 32.75 41** IAMs_20 IAMs_20 18 34 18.4
comp=Z,28µm,18.0s
**BPAW Bear Paw Mtn. 32.75 41** P **P** **18 18 37.5 +0.7**
baz=268,SNR=82
BPAW S **S** **18 23 52.4 +1.0**
baz=268
**B22K Teshekpuk Lake 32.77 29** P **P** **18 18 36.1 -0.6**
B22K IAMs_20 IAMs_20 18 34 16.4
comp=Z,18µm,18.0s
**B22K Teshekpuk Lake 32.77 29** P **P** **18 18 37.1 +0.4**
baz=255,SNR=81
B22K S **S** **18 23 52.2 +0.8**
baz=255
**G22K Bettles 32.79 36** P **P** **18 18 37.3 +0.3**
baz=263
G22K S **S** **18 23 52.6 +0.8**
baz=263
**SUA Susitna One 32.84 46** P **P** **18 18 37.2 -0.4**
baz=272,SNR=53
SUA S **S** **18 23 54.9 +1.9**
baz=272
**BRLK Bradley Lake 32.86 49** P **P** **18 18 36.5 -1.2**
BRLK IAMs_20 IAMs_20 18 33 22.8
comp=Z,18µm,21.0s
**MLY Manley 32.91 39** IAmb IAmb 18 18 41.5
comp=Z,196nm,1.3s
**MLY Manley 32.91 39** P **P** **18 18 38.7 +0.6**
baz=266,SNR=191
MLY S **S** **18 23 56.4 +2.5**
baz=266
**BRSE Bradley Lake S 32.93 49** P **P** **18 18 37.3 -1.0**
baz=275,SNR=18
BRSE S **S** **18 23 52.0 -2.2**
baz=275
**CUT Chulitna 33.05 44** IAmb IAmb 18 18 41.9
comp=Z,210nm,1.2s
**CUT Chulitna 33.05 44** P **P** **18 18 38.9 -0.4**
baz=271,SNR=7.4
CUT S **S** **18 23 54.5 -1.4**
baz=271
**JMJ Miyako jima 2 33.09 236** P **P** **18 18 41.9 +1.9**
**M22K Willow 33.13 45** P **P** **18 18 39.7 -0.3**
baz=272
**ZAK Zakamensk 33.19 293** *e*P **P** **18 18 40.1 -0.7**
ZAK *e* 18 21 19.7
ZAK pmax pmax
comp=Z,76nm,1.2s
**COLD Coldfoot 33.33 35** P **P** **18 18 42.1 +0.3**
baz=264
COLD S **S** **18 24 02.1 +1.8**
baz=264
**RC01 Rabbit Creek A 33.34 47** P **P** **18 18 40.7 -1.2**
baz=273,SNR=25
RC01 S **S** **18 23 59.3 -1.3**
baz=273
**G23K Bananza Creek 33.35 36** P **P** **18 18 41.8 -0.2**
G23K IAmb IAmb 18 18 45.5
comp=Z,215nm,0.9s
**G23K Bananza Creek 33.35 36** P **P** **18 18 42.2 +0.3**
baz=264,SNR=304
G23K S **S** **18 24 01.7 +1.1**
baz=264
**O22K Cooper Landing 33.38 48** IAMs_20 IAMs_20 18 34 16.9
comp=Z,25µm,20.0s
**O22K Cooper Landing 33.38 48** P **P** **18 18 41.3 -1.0**
baz=274,SNR=8.7
O22K S **S** **18 23 58.6 -2.6**
baz=274
**D23K Nanushuk River 33.41 32** P **P** **18 18 43.1 +0.7**
baz=260
D23K S **S** **18 24 01.3 -0.2**
baz=260
**BWN Browne 33.42 41** IAMs_20 IAMs_20 18 34 41.0
comp=Z,28µm,19.0s
**H23K Yukon River 33.47 38** P **P** **18 18 43.5 +0.5**
H23K IAmb IAmb 18 18 47.2
comp=Z,173nm,1.0s
**H23K Yukon River 33.47 38** P **P** **18 18 43.8 +0.8**
baz=266,SNR=194
H23K S **S** **18 24 04.4 +1.9**
baz=266
H23K S **S** **18 24 04.4 +1.9**
baz=266
**I23K Minto, Yukon-K 33.50 39** IAmb IAmb 18 18 46.5
comp=Z,433nm,1.6s
**I23K Minto, Yukon-K 33.50 39** P **P** **18 18 43.7 +0.5**
baz=268,SNR=116
I23K S **S** **18 24 02.1 -0.9**
baz=268
I23K S **S** **18 24 02.1 -0.9**
baz=268
**SEW Seward 33.55 48** P **P** **18 18 42.6 -1.1**
baz=275,SNR=20
SEW S **S** **18 24 01.1 -2.6**
baz=275
**C23K Itkillik River 33.59 31** P **P** **18 18 44.6 +0.6**
baz=259,SNR=161
C23K S **S** **18 24 05.3 +1.0**
baz=259
**NEA2 Nenana 33.60 40** P **P** **18 18 44.4 +0.2**
baz=269,SNR=61
NEA2 S **S** **18 24 06.7 +2.2**
baz=269
**PMR Palmer 33.61 46** P **P** **18 18 45.0 +0.8**
**PMR Palmer 33.61 46** P **P** **18 18 43.5 -0.6**
**PMR Palmer 33.61 46** P **P** **18 18 43.3 -0.9**
baz=273,SNR=7.5
PMR S **S** **18 24 03.2 -1.4**
baz=273
**PMR Palmer 33.61 46** P **P** **18 18 43.6 -0.6**
PMR pmax pmax
comp=Z,47nm,0.8s
PMR MLR MLR
comp=Z,15µm,20.0s
**MCK McKinley 33.65 42** P **P** **18 18 44.6 0.0**
baz=270,SNR=50
MCK S **S** **18 24 05.0 -0.3**
baz=270
**MCK McKinley 33.65 42** P **P** **18 18 43.6 -1.0**
**E23K Chandalar 33.66 34** P **P** **18 18 45.4 +0.7**
baz=263,SNR=605
E23K S **S** **18 24 05.9 +0.4**
baz=263
**RND Reindeer 33.69 42** IAmb IAmb 18 18 47.0
comp=Z,279nm,1.2s
**RND Reindeer 33.69 42** P **P** **18 18 43.1 -1.9**
**GHO Glory Hole Cre 33.70 45** P **P** **18 18 44.7 -0.4**
GHO IAMs_20 IAMs_20 18 34 11.8
comp=Z,16µm,21.0s
**TOLK Toolik Lake Re 33.76 33** IAmb IAmb 18 19 06.3
comp=Z,327nm,1.1s
**TOLK Toolik Lake Re 33.76 33** P **P** **18 18 46.2 +0.7**
baz=262,SNR=176
TOLK S **S** **18 24 06.7 -0.2**
baz=262
**WAT1 Susitna Watana 33.83 43** P **P** **18 18 45.3 -0.9**
baz=272
WAT1 S **S** **18 24 06.7 -1.6**
baz=272
**KNK Knik Glacier 33.94 46** IAMs_20 IAMs_20 18 31 50.3
comp=Z,16µm,21.0s
**KNK Knik Glacier 33.94 46** P **P** **18 18 46.6 -0.5**
baz=274,SNR=107
KNK S **S** **18 24 09.3 -0.6**
baz=274
**MDM Murphy Dome 33.97 40** IAmb IAmb 18 18 50.5
comp=Z,234nm,1.2s
**SML Sawmill 33.98 45** P **P** **18 18 46.9 -0.6**
SML IAMs_20 IAMs_20 18 34 28.2
comp=Z,17µm,21.0s
**SML Sawmill 33.98 45** P **P** **18 18 47.1 -0.3**
baz=273,SNR=223
SML S **S** **18 24 09.6 -0.9**
baz=273
**SML Sawmill 33.98 45** P **P** **18 18 46.9 -0.6**
SML pmax pmax
comp=Z,391nm,0.9s
**WRH Wood River Hil 34.02 40** IAmb IAmb 18 19 03.6
comp=Z,320nm,1.2s
WRH IAMs_20 IAMs_20 18 35 15.0
comp=Z,16µm,18.0s
**PWL Port Wells 34.04 47** IAmb IAmb 18 18 49.6
comp=Z,288nm,1.5s
PWL IAMs_20 IAMs_20 18 34 48.1
comp=Z,17µm,21.0s
**PWL Port Wells 34.04 47** P **P** **18 18 47.2 -0.7**
baz=275,SNR=33
PWL S **S** **18 24 09.6 -1.8**
baz=275
**E24K Your Creek 34.08 34** IAMs_20 IAMs_20 18 35 09.5
comp=Z,21µm,18.0s
**E24K Your Creek 34.08 34** P **P** **18 18 49.4 +1.0**
baz=264,SNR=573
E24K S **S** **18 24 12.3 +0.3**
baz=264
**D24K Happy Valley 34.10 32** P **P** **18 18 48.9 +0.6**
baz=262,SNR=132
D24K S **S** **18 24 12.4 +0.3**
baz=262
**COLA College 34.13 40** P **P** **18 18 49.1 +0.4**
**COLA College 34.13 40** P **P** **18 18 49.0 +0.4**
COLA IAmb IAmb 18 18 52.4
comp=Z,285nm,1.0s
**COLA College 34.13 40** ⇓P **P** **18 18 49.1 +0.4**
**COLA College 34.13 40** P **P** **18 18 49.5 +0.8**
baz=269
COLA S **S** **18 24 14.5 +1.8**
baz=269
**COLA College 34.13 40** *d* *i*P **P** **18 18 49.1 +0.4**
COLA pmax pmax
comp=Z,452nm,1.4s
COLA MLR MLR
comp=Z,23µm,17.0s
**CCB Clear Creek Bu 34.15 40** IAmb IAmb 18 19 03.8
comp=Z,283nm,1.2s
**H24K Noodor Dome 34.15 38** IAmb IAmb 18 18 52.4
comp=Z,254nm,1.3s
H24K IAMs_20 IAMs_20 18 35 04.1
comp=Z,15µm,18.0s
**H24K Noodor Dome 34.15 38** P **P** **18 18 49.9 +1.0**
baz=268,SNR=147
H24K S **S** **18 24 15.7 +2.6**
baz=268
H24K S **S** **18 24 15.7 +2.6**
baz=268
**MOY Mondy 34.21 296** *e*P **P** **18 18 49.3 -0.4**
MOY pmax pmax
comp=Z,120nm,2.1s
**WAT6 Susitna Watana 34.21 44** P **P** **18 18 48.9 -0.7**
baz=273,SNR=49
WAT6 S **S** **18 24 13.7 -0.6**
baz=273
**C24K Franklin Bluff 34.23 31** P **P** **18 18 50.0 +0.6**
baz=261
C24K S **S** **18 24 15.1 +1.0**
baz=261
**F24K Squaw Lake 34.26 35** P **P** **18 18 50.4 +0.6**
baz=265,SNR=166
F24K S **S** **18 24 14.4 -0.3**
baz=265
**LYN LuoYang 34.26 262** P **P** **18 18 51.4 +1.3**
LYN pP pP 18 18 55.2 -3.2
LYN S **S** **18 24 14.4 -0.8**
LYN pmax pmax
comp=Z,310nm,0.7s
LYN LR LR
comp=Z,12µm,15.5s
LYN LR LR
comp=Z,27µm,15.5s
LYN LR LR
comp=Z,36µm,17.2s
**M23K Glacier View 34.26 45** P **P** **18 18 49.3 -0.6**
baz=274,SNR=39
M23K S **S** **18 24 13.7 -1.2**
baz=274
**POKR Poker Plat Res 34.31 39** P **P** **18 18 50.4 0.0**
**POKR Poker Plat Res 34.31 39** P **P** **18 18 51.2 +0.9**
baz=269,SNR=124
POKR S **S** **18 24 15.0 -0.6**
baz=269
**G24K Hadweenzic Riv 34.36 36** P **P** **18 18 51.8 +1.1**
baz=267,SNR=510
G24K S **S** **18 24 19.0 +2.9**
baz=267
**DHY Denali Highway 34.36 43** IAmb IAmb 18 19 02.9
comp=Z,380nm,1.4s
**DHY Denali Highway 34.36 43** P **P** **18 18 50.4 -0.5**
baz=272,SNR=162
DHY S **S** **18 24 14.4 -2.2**
baz=272
**SCM Sheep Creek Mo 34.45 45** IAmb IAmb 18 19 23.8
comp=Z,345nm,1.2s
**SCM Sheep Creek Mo 34.45 45** P **P** **18 18 51.3 -0.3**
baz=274,SNR=84
SCM S **S** **18 24 16.9 -1.0**
baz=274
**HDA Harding Lake 34.52 41** IAmb IAmb 18 19 07.2
comp=Z,266nm,1.6s
HDA IAMs_20 IAMs_20 18 35 13.1
comp=Z,15µm,20.0s
**HDA Harding Lake 34.52 41** P **P** **18 18 51.2 -0.9**
baz=271,SNR=63
HDA S **S** **18 24 16.8 -1.9**
baz=271
**IL31 34.55 40** IAmb IAmb 18 18 56.7
comp=Z,169nm,1.1s
**ILAR Eielson Array 34.55 40** P **P** **18 18 51.3 -1.0**
**ILAR Eielson Array 34.55 40** P **P** **18 18 51.9 -0.4**
comp=Z,83nm,1.0s,baz=260,slow=8.3,SNR=153
ILAR P3KPbc 18 49 49.5
comp=Z,0.9nm,0.9s,baz=94,slow=2.4,SNR=5.3
comp=Z,83nm,1.0s
**ILAR Eielson Array 34.55 40** P **P** **18 18 51.3 -1.0**
**P23K Montague Islan 34.58 48** P **P** **18 18 52.2 -0.5**
baz=277,SNR=21
P23K S **S** **18 24 18.7 -1.1**
baz=277
P23K S **S** **18 24 18.7 -1.1**
baz=277
**GLI Glacier Island 34.64 47** P **P** **18 18 52.3 -0.9**
baz=276,SNR=13
GLI S **S** **18 24 20.2 -0.5**
baz=276
**YOJ Yonaguni jima 34.64 238** P **P** **18 18 54.7 +1.2**
**YOJ Yonaguni jima 34.64 238** ⇑P **P** **18 18 54.2 +0.7**
**G25K Bearman Lake 34.91 36** P **P** **18 18 56.5 +1.2**
baz=268,SNR=141
G25K S **S** **18 24 25.9 +1.4**
baz=268
**M24K Tolsona, Glenn 34.97 45** P **P** **18 18 56.6 +0.4**
baz=275,SNR=34
M24K S **S** **18 24 27.8 +2.0**
baz=275
**HIN Hinchinbrook I 34.98 48** IAmb IAmb 18 18 59.5
comp=Z,170nm,1.0s
HIN IAMs_20 IAMs_20 18 34 51.1
comp=Z,14µm,19.0s
**D25K Kavik River 34.98 32** P **P** **18 18 56.6 +0.5**
baz=264,SNR=415
D25K S **S** **18 24 25.9 0.0**
baz=264
**H25L Birch Creek 35.00 37** P **P** **18 18 57.3 +1.1**
baz=269,SNR=65
H25L S **S** **18 24 29.5 +3.4**
baz=269
**K24K Donnelly Dome 35.05 42** P **P** **18 18 56.3 -0.5**
baz=273,SNR=67
K24K S **S** **18 24 25.3 -1.6**
baz=273
K24K S **S** **18 24 25.3 -1.6**
baz=273
**F25K Christian Rive 35.12 35** P **P** **18 18 58.5 +1.2**
baz=267,SNR=183
F25K S **S** **18 24 31.1 +3.1**
baz=267
**PRP Porcupine Dome 35.12 39** IAmb IAmb 18 19 17.5
comp=Z,282nm,1.0s
PRP IAMs_20 IAMs_20 18 35 53.7
comp=Z,17µm,18.0s
**PRP Porcupine Dome 35.12 39** P **P** **18 18 57.7 +0.3**
baz=270,SNR=68
PRP S **S** **18 24 27.4 -0.8**
baz=270
**TATO Taipei 35.12 241** P **P** **18 18 58.4 +0.8**
**TATO Taipei 35.12 241** P **P** **18 18 58.1 +0.5**
TATO IAmb IAmb 18 19 11.0
comp=Z,174nm,1.1s
**TATO Taipei 35.12 241** IAMs_20 IAMs_20 18 33 18.9
comp=Z,16µm,20.0s
**TATO Taipei 35.12 241** P **P** **18 18 58.6 +1.0**
TATO P **P** **18 18 58.6 +1.0**
TATO S **S** **18 24 25.6 -3.0**
TATO S **S** **18 24 25.6 -3.0**
**KLU Klutina 35.15 46** P **P** **18 18 57.7 +0.1**
baz=276,SNR=83
KLU S **S** **18 24 29.8 +1.2**
baz=276
**Q23K Middleton Isla 35.19 49** IAmb IAmb 18 19 28.6
comp=Z,335nm,1.2s
Q23K IAMs_20 IAMs_20 18 33 18.8
comp=Z,20µm,22.0s
**Q23K Middleton Isla 35.19 49** P **P** **18 18 57.9 0.0**
baz=278
Q23K S **S** **18 24 31.6 +2.6**
baz=278
Q23K S **S** **18 24 31.6 +2.6**
baz=278
**MID Middleton Isla 35.19 49** P **P** **18 18 58.9 +1.0**
**MID Middleton Isla 35.19 49** IAmb IAmb 18 19 28.6
comp=Z,337nm,1.3s
MID IAMs_20 IAMs_20 18 33 18.8
comp=Z,18µm,22.0s
**J25K Salcha River, 35.20 40** P **P** **18 18 57.0 -1.0**
baz=272,SNR=77
J25K S **S** **18 24 26.9 -2.4**
baz=272
J25K S **S** **18 24 26.9 -2.4**
baz=272
**PAX Paxson 35.23 43** P **P** **18 18 58.1 -0.3**
baz=274,SNR=65
PAX S **S** **18 24 28.9 -1.1**
baz=274
**EYAK Cordova Ski Ar 35.34 47** P **P** **18 18 59.2 +0.1**
comp=Z,52nm,0.9s
**EYAK Cordova Ski Ar 35.34 47** P **P** **18 18 59.2 +0.1**
baz=277,SNR=20
EYAK S **S** **18 24 32.7 +1.5**
baz=277
**YHNB Yeheng 35.42 240** P **P** **18 18 59.8 -0.5**
**YHNB Yeheng 35.42 240** P **P** **18 18 59.6 -0.7**
YHNB IAMs_20 IAMs_20 18 33 19.0
comp=Z,17µm,20.0s
**HARP HAARP 35.42 44** P **P** **18 19 00.2 +0.2**
baz=275,SNR=14
HARP S **S** **18 24 34.6 +2.0**
baz=275
**BMAR Burnt Mountain 35.52 35** P **P** **18 19 01.1 +0.4**
**WHN Wuhan 35.55 255** ⇑*r*P **P** **18 19 01.4 +0.1**
WHN S **S** **18 24 34.8 -0.3**
WHN sS **pS** **18 24 43.8 -0.6**
WHN pmax pmax
comp=Z,570nm,0.8s
WHN pmax pmax
comp=Z,5µm,4.7s
WHN LR LR
comp=Z,52µm,18.4s
WHN LR LR
comp=Z,54µm,18.0s
WHN LR LR
comp=Z,43µm,22.3s
**C26K Camden Bay 35.55 31** P **P** **18 19 02.3 +1.4**
baz=265,SNR=16
C26K S **S** **18 24 36.3 +1.9**
baz=265
**GUMO Guam 35.62 197** P **P** **18 19 03.0 +1.0**
GUMO IAmb IAmb 18 19 46.3
comp=Z,196nm,1.1s
**GUMO Guam 35.62 197** P **P** **18 19 00.2 -1.8**
comp=Z,57nm,0.7s,baz=223,slow=22,SNR=2.3
GUMO LR LR 18 32 39.0
comp=Z,7µm,19.7s,baz=28,slow=35
comp=Z,57nm,0.7s
**NACB Ninganchiao 35.67 240** P **P** **18 19 03.6 +1.2**
**NACB Ninganchiao 35.67 240** IAmb IAmb 18 19 06.5
comp=Z,229nm,1.7s
NACB IAMs_20 IAMs_20 18 32 51.8
comp=Z,20µm,21.0s
**F26K Sheenjek River 35.70 35** P **P** **18 19 03.3 +1.0**
baz=269,SNR=276
F26K S **S** **18 24 38.6 +1.8**
baz=269

**N25K Chitina, Valde 35.77 45** IAMs_20 IAMs_20 18 34 34.5
comp=Z,15µm,22.0s
**N25K Chitina, Valde 35.77 45** P **P** **18 19 03.2 +0.3**
baz=277,SNR=62
N25K S **S** **18 24 39.8 +1.8**
baz=277
**G26K Porcupine Rive 35.82 36** P **P** **18 19 04.6 +1.4**
baz=270,SNR=432
G26K S **S** **18 24 42.6 +3.9**
baz=270
**SCRK Sand Creek 35.83 41** IAmb IAmb 18 19 05.5
comp=Z,394nm,1.6s
SCRK IAMs_20 IAMs_20 18 36 22.8
comp=Z,17µm,20.0s
**SCRK Sand Creek 35.83 41** P **P** **18 19 03.0 -0.5**
baz=274,SNR=145
SCRK S **S** **18 24 38.0 -1.1**
baz=274
**BMRM Bremner River 35.84 46** P **P** **18 19 03.6 +0.1**
baz=278,SNR=70
BMRM S **S** **18 24 41.5 +2.3**
baz=278
**RAGM Ragged Mountai 35.88 47** IAmb IAmb 18 19 07.1
comp=Z,438nm,1.6s
RAGM IAMs_20 IAMs_20 18 35 05.9
comp=Z,25µm,21.0s
**C27K Jago River 35.95 32** P **P** **18 19 05.1 +0.8**
baz=266,SNR=96
C27K S **S** **18 24 40.6 +0.1**
baz=266
**J26L Joseph Creek 35.98 40** P **P** **18 19 03.6 -1.2**
baz=274,SNR=21
J26L S **S** **18 24 39.0 -2.4**
baz=274
J26L S **S** **18 24 39.0 -2.4**
baz=274
**MENT Mentasta 36.03 43** P **P** **18 19 05.6 +0.4**
**MENT Mentasta 36.03 43** IAMs_20 IAMs_20 18 35 48.4
comp=Z,15µm,21.0s
**KAIM Kayak Island 36.08 48** IAmb IAmb 18 19 10.5
comp=Z,293nm,1.1s
KAIM IAMs_20 IAMs_20 18 33 14.2
comp=Z,17µm,21.0s
**KAIM Kayak Island 36.08 48** P **P** **18 19 04.7 -0.9**
baz=279,SNR=30
KAIM S **S** **18 24 45.5 +2.7**
baz=279
**HMT Hamilton 36.09 47** IAmb IAmb 18 19 08.8
comp=Z,205nm,1.2s
HMT IAMs_20 IAMs_20 18 35 22.5
comp=Z,25µm,21.0s
**I26K Coal Creek Min 36.12 39** IAMs_20 IAMs_20 18 36 34.1
comp=Z,15µm,18.0s
**I26K Coal Creek Min 36.12 39** P **P** **18 19 04.7 -1.1**
baz=273
I26K S **S** **18 24 44.2 +1.0**
baz=273
I26K S **S** **18 24 44.2 +1.0**
baz=273
**GLB Gilahina Butte 36.16 46** P **P** **18 19 06.1 -0.2**
GLB IAmb IAmb 18 19 09.3
comp=Z,259nm,1.6s
GLB IAMs_20 IAMs_20 18 35 06.0
comp=Z,16µm,22.0s
**L26K Log Cabin Wild 36.20 43** IAMs_20 IAMs_20 18 36 02.6
comp=Z,18µm,19.0s
**L26K Log Cabin Wild 36.20 43** P **P** **18 19 07.1 +0.6**
baz=276,SNR=37
L26K S **S** **18 24 46.3 +1.8**
baz=276
L26K S **S** **18 24 46.3 +1.8**
baz=276
**SSLB Suanglung 36.34 240** P **P** **18 19 09.5 +1.3**
**SSLB Suanglung 36.34 240** IAMs_20 IAMs_20 18 33 12.5
comp=Z,25µm,21.0s
**VRDI Verde Repeater 36.36 46** P **P** **18 19 07.9 -0.2**
**SUCK Suckling Hills 36.38 48** IAmb IAmb 18 19 26.0
comp=Z,392nm,1.7s
SUCK IAMs_20 IAMs_20 18 34 26.9
comp=Z,20µm,22.0s
**M26K Nabesna, AK 36.42 44** IAmb IAmb 18 19 12.2
comp=Z,262nm,1.1s
M26K IAMs_20 IAMs_20 18 35 10.8
comp=Z,15µm,22.0s
**M26K Nabesna, AK 36.42 44** P **P** **18 19 09.5 +1.0**
baz=277,SNR=194
M26K S **S** **18 24 51.4 +3.3**
baz=277
M26K S **S** **18 24 51.4 +3.3**
baz=277
**YULB Yu-li 36.45 239** P **P** **18 19 10.2 +1.1**
**YULB Yu-li 36.45 239** P **P** **18 19 09.5 +0.4**
YULB IAmb IAmb 18 19 16.6
comp=Z,122nm,0.8s
**MCARA McCarthy VSAT 36.54 46** P **P** **18 19 09.6 +0.1**
**MCARA McCarthy VSAT 36.54 46** P **P** **18 19 10.1 +0.7**
baz=278,SNR=16
MCARA S **S** **18 24 52.5 +2.7**
baz=278
**CRQM Cirque 36.58 47** IAMs_20 IAMs_20 18 35 01.8
comp=Z,21µm,21.0s
**CRQE Cirque 36.60 47** P **P** **18 19 10.7 +0.5**
baz=279,SNR=132
CRQE S **S** **18 24 53.0 +2.1**
baz=279
**BGLC Bering Glacier 36.61 48** P **P** **18 19 11.1 +1.1**
baz=280
BGLC S **S** **18 24 55.4 +4.6**
baz=280
**E27K Coleen River 36.66 34** IAmb IAmb 18 19 14.3
comp=Z,222nm,1.0s
**E27K Coleen River 36.66 34** P **P** **18 19 11.5 +1.0**
baz=270,SNR=201
E27K S **S** **18 24 55.1 +3.5**
baz=270
**G27K Doyon Strip 36.67 36** P **P** **18 19 11.9 +1.4**
baz=272,SNR=99
G27K S **S** **18 24 54.8 +3.2**
baz=272
**K27K Chicken 36.67 41** IAmb IAmb 18 19 14.4
comp=Z,349nm,1.2s
**K27K Chicken 36.67 41** P **P** **18 19 11.2 +0.7**
baz=276
K27K S **S** **18 24 51.2 -0.4**
baz=276
K27K S **S** **18 24 51.2 -0.4**
baz=276
**TGL Tana Glacier 36.73 47** IAmb IAmb 18 19 14.4
comp=Z,358nm,1.3s
TGL IAMs_20 IAMs_20 18 35 05.2
comp=Z,22µm,22.0s
**I27K Kandik River 36.74 38** P **P** **18 19 10.9 -0.3**
baz=274,SNR=26
I27K S **S** **18 24 53.9 +1.1**
baz=274
I27K S **S** **18 24 53.9 +1.1**
baz=274
**H27K Steamboat Moun 36.74 37** P **P** **18 19 12.6 +1.4**
baz=273,SNR=216
H27K S **S** **18 24 57.7 +4.9**
baz=273
**WAX Waxell Ridge 36.77 47** P **P** **18 19 11.8 +0.3**
WAX IAmb IAmb 18 19 14.8
comp=Z,274nm,1.3s
WAX IAMs_20 IAMs_20 18 35 53.3
comp=Z,22µm,20.0s
**SNH Sunshine Point 36.82 48** IAmb IAmb 18 19 15.6
comp=Z,347nm,1.3s
SNH IAMs_20 IAMs_20 18 34 52.7
comp=Z,23µm,22.0s
**QZH Quanzhou 36.85 244** P **P** **18 19 13.3 +0.8**
QZH PP **PnPn** **18 20 43.4 +6.6**
QZH S **S** **18 24 56.3 +1.1**
QZH pmax pmax
comp=Z,190nm,0.8s
QZH pmax pmax
comp=Z,3µm,7.1s
QZH LR LR
comp=Z,6µm,17.5s
QZH LR LR
comp=Z,6µm,15.1s
QZH LR LR
comp=Z,11µm,15.8s
**L27K Beaver Creek, 36.88 43** IAmb IAmb 18 19 16.1
comp=Z,448nm,1.2s
L27K IAMs_20 IAMs_20 18 36 22.7
comp=Z,15µm,20.0s
**L27K Beaver Creek, 36.88 43** P **P** **18 19 13.5 +1.1**
baz=277,SNR=305
L27K S **S** **18 24 55.6 +0.6**
baz=277
**BCAR Beaver Creek A 36.90 43** P **P** **18 19 13.1 +0.5**
**D27M Malcolm River 36.90 32** IAmb IAmb 18 19 34.5
comp=Z,382nm,1.1s
**D27M Malcolm River 36.90 32** P **P** **18 19 13.6 +1.0**
baz=270,SNR=87
D27M S **S** **18 24 56.7 +1.5**
baz=270
**TPUB Ta-pu 36.91 240** P **P** **18 19 13.7 +0.7**
**TPUB Ta-pu 36.91 240** IAMs_20 IAMs_20 18 33 30.4
comp=Z,27µm,22.0s
**XAN Xi'an 36.91 265** ⇑P **P** **18 19 12.6 -0.4**
XAN pP pP 18 19 16.0 -5.3
XAN sP sP 18 19 19.2 -5.5
XAN S **S** **18 24 52.8 -3.3**
XAN sS pS 18 25 07.2 +1.9
XAN ScP **ScP** **18 25 18.5 -0.2**
XAN PcS **PcS** **18 25 22.6 +0.4**
XAN pmax pmax
comp=Z,230nm,0.9s
XAN pmax pmax
comp=Z,2µm,8.8s
XAN LR LR
comp=Z,37µm,15.8s
XAN LR LR
comp=Z,19µm,16.1s
XAN LR LR
comp=Z,38µm,15.8s
**M27K Edge Creek, AK 36.95 44** IAmb IAmb 18 19 16.9
comp=Z,206nm,1.1s
M27K IAMs_20 IAMs_20 18 36 09.6
comp=Z,20µm,22.0s
**M27K Edge Creek, AK 36.95 44** P **P** **18 19 13.9 +0.9**
baz=278,SNR=117
M27K S **S** **18 24 57.8 +1.5**
baz=278
M27K S **S** **18 24 57.8 +1.5**
baz=278
**ISLE Juniper Island 36.99 47** IAmb IAmb 18 19 18.9
comp=Z,177nm,1.0s
ISLE IAMs_20 IAMs_20 18 36 01.1
comp=Z,19µm,19.0s
**EGAK Eagle 37.00 40** IAmb IAmb 18 19 15.6
comp=Z,276nm,1.1s
EGAK IAMs_20 IAMs_20 18 37 01.5
comp=Z,13µm,18.0s
**EGAK Eagle 37.00 40** ⇑P **P** **18 19 12.5 -0.8**
**EGAK Eagle 37.00 40** P **P** **18 19 12.9 -0.4**
baz=275,SNR=182
EGAK S **S** **18 24 58.4 +1.8**
baz=275
**TWGBT Beinan 37.02 239** P **P** **18 19 14.0 0.0**
**TWG Pinlang 37.02 239** P **P** **18 19 14.0 0.0**
**GRNC Granite Creek 37.26 46** IAmb IAmb 18 19 19.7
comp=Z,286nm,1.1s
GRNC IAMs_20 IAMs_20 18 35 30.2
comp=Z,15µm,21.0s
**MESA MESA 37.26 47** IAmb IAmb 18 19 19.2
comp=Z,362nm,1.3s
MESA IAMs_20 IAMs_20 18 35 05.2
comp=Z,22µm,22.0s
**MESA MESA 37.26 47** P **P** **18 19 16.6 +0.7**
baz=281,SNR=22
MESA S **S** **18 25 03.7 +2.6**
baz=281
**F28M Old Crow 37.33 35** P **P** **18 19 17.6 +1.4**
baz=273,SNR=366
F28M S **S** **18 25 03.3 +1.6**
baz=273
**CTG Chitna Glacier 37.41 46** P **P** **18 19 17.9 +0.8**
baz=280,SNR=96
CTG S **S** **18 25 06.2 +2.9**
baz=280
**CTGM Chitina Glacie 37.42 46** IAmb IAmb 18 19 20.4
comp=Z,306nm,1.2s
CTGM IAMs_20 IAMs_20 18 35 28.2
comp=Z,23µm,22.0s
**E28M Babbage River 37.42 33** P **P** **18 19 17.6 +0.7**
E28M IAmb IAmb 18 19 39.1
comp=Z,326nm,1.3s
**E28M Babbage River 37.42 33** P **P** **18 19 18.0 +1.1**
baz=272,SNR=89
E28M S **S** **18 25 03.0 0.0**
baz=272
**I28M Miner Creek 37.45 39** IAmb IAmb 18 19 21.1
comp=Z,271nm,1.2s
I28M IAMs_20 IAMs_20 18 37 34.8
comp=Z,18µm,18.0s
**I28M Miner Creek 37.45 39** P **P** **18 19 17.9 +0.6**
baz=276,SNR=171
I28M S **S** **18 25 06.9 +3.2**
baz=276
**LOGN Logan Glacier 37.60 46** IAmb IAmb 18 19 29.6
comp=Z,205nm,1.2s
**TABL Table Mountain 37.60 47** P **P** **18 19 18.8 0.0**
TABL IAmb IAmb 18 19 22.5
comp=Z,247nm,1.2s
TABL IAMs_20 IAMs_20 18 36 38.3
comp=Z,18µm,20.0s
**D28M Stokes Point 37.69 32** P **P** **18 19 20.2 +1.1**
baz=272
D28M S **S** **18 25 09.4 +2.4**
baz=272
**YUK3 Moose Creek 37.69 45** P **P** **18 19 19.9 +0.4**
baz=280,SNR=146
YUK3 S **S** **18 25 09.5 +1.8**
baz=280
**DAWY Dawson 37.84 41** P **P** **18 19 20.8 +0.3**
baz=278,SNR=42
DAWY S **S** **18 25 10.6 +1.0**
baz=278
**O28M Mount Upton 38.00 46** P **P** **18 19 22.8 +0.6**
baz=281,SNR=158
O28M S **S** **18 25 15.3 +2.8**
baz=281
**H29M Whitestone 38.02 37** IAmb IAmb 18 19 25.9
comp=Z,234nm,1.1s
**H29M Whitestone 38.02 37** P **P** **18 19 23.0 +1.0**
baz=276,SNR=164
H29M S **S** **18 25 14.2 +2.1**
baz=276
**E29M Blow River 38.03 34** IAmb IAmb 18 19 43.8
comp=Z,311nm,1.1s
**E29M Blow River 38.03 34** P **P** **18 19 23.4 +1.4**
baz=273,SNR=207
E29M S **S** **18 25 14.9 +2.6**
baz=273
**CNSH ChangSha 38.05 254** P **P** **18 19 23.0 +0.4**
CNSH S **S** **18 25 10.0 -3.3**
CNSH pmax pmax
comp=Z,110nm,0.7s
CNSH LR LR
comp=Z,12µm,17.8s
CNSH LR LR
comp=Z,14µm,18.9s
CNSH LR LR
comp=Z,29µm,17.5s
**G29M Pine Creek 38.09 36** P **P** **18 19 24.3 +1.7**
baz=275,SNR=337
G29M S **S** **18 25 18.3 +5.0**
baz=275
**YUK8 Steele Glacier 38.11 45** P **P** **18 19 23.2 +0.1**
baz=281
YUK8 S **S** **18 25 16.2 +2.1**
baz=281
**I29M Ogilvie Camp, 38.14 39** P **P** **18 19 23.3 +0.2**
I29M IAmb IAmb 18 19 41.2
comp=Z,240nm,1.3s
I29M IAMs_20 IAMs_20 18 37 12.5
comp=Z,14µm,19.0s
**I29M Ogilvie Camp, 38.14 39** P **P** **18 19 23.2 +0.2**
baz=277,SNR=39
I29M S **S** **18 25 16.2 +2.2**
baz=277
**J29N Klondike Camp 38.29 40** IAMs_20 IAMs_20 18 38 09.2
comp=Z,15µm,20.0s
**J29N Klondike Camp 38.29 40** P **P** **18 19 25.1 +0.7**
baz=278
J29N S **S** **18 25 18.8 +2.4**
baz=278
**BCPM Bancas Point 38.44 47** IAMs_20 IAMs_20 18 36 57.5
comp=Z,14µm,19.0s
**M29M Somme Creek 38.50 43** IAMs_20 IAMs_20 18 37 25.0
comp=Z,17µm,20.0s
**M29M Somme Creek 38.50 43** P **P** **18 19 27.0 +0.8**
baz=280,SNR=98
M29M S **S** **18 25 24.5 +4.8**
baz=280
**L29M L29M 38.54 42** IAMs_20 IAMs_20 18 37 30.4
comp=Z,19µm,20.0s
**L29M L29M 38.54 42** P **P** **18 19 27.3 +0.9**
baz=280,SNR=155
L29M S **S** **18 25 23.5 +3.3**
baz=280
**PNL Peninsula 38.62 48** P **P** **18 19 27.9 +0.8**
**PNL Peninsula 38.62 48** P **P** **18 19 27.2 +0.1**
baz=283
PNL S **S** **18 25 22.8 +1.4**
baz=283
**YUK4 Talbot Arm 38.63 45** P **P** **18 19 27.7 +0.3**
baz=282,SNR=52
YUK4 S **S** **18 25 21.0 -0.8**
baz=282
**EPYK Eagle Plains 38.67 37** P **P** **18 19 27.8 +0.4**
**EPYK Eagle Plains 38.67 37** P **P** **18 19 28.1 +0.7**
baz=277,SNR=175
EPYK S **S** **18 25 24.4 +2.4**
baz=277
**K29M Barlow Dome 38.69 41** IAmb IAmb 18 19 31.3
comp=Z,406nm,1.7s
**K29M Barlow Dome 38.69 41** P **P** **18 19 28.3 +0.5**
baz=280,SNR=114
K29M S **S** **18 25 25.0 +2.5**
baz=280
**G30M tAoh Zraii Nji 38.79 36** IAmb IAmb 18 19 31.9
comp=Z,270nm,1.1s
**G30M tAoh Zraii Nji 38.79 36** P **P** **18 19 28.9 +0.4**
baz=277,SNR=68
G30M S **S** **18 25 26.4 +2.5**
baz=277
**YUK6 Outpost Mounta 38.84 46** P **P** **18 19 29.9 +0.6**
baz=282,SNR=43
YUK6 S **S** **18 25 27.7 +2.6**
baz=282
**O29M Mount Kennedy 38.88 47** IAMs_20 IAMs_20 18 36 08.2
comp=Z,18µm,22.0s
**O29M Mount Kennedy 38.88 47** P **P** **18 19 29.8 +0.4**
baz=283,SNR=16
O29M S **S** **18 25 27.8 +2.3**
baz=283
**F30M Barrier River 38.89 35** P **P** **18 19 30.7 +1.4**
baz=276,SNR=137
F30M S **S** **18 25 27.8 +2.5**
baz=276
**ENH Enshi 38.89 259** P **P** **18 19 29.8 +0.1**
**ENH Enshi 38.89 259** IAmb IAmb 18 19 32.5
comp=Z,230nm,1.1s
ENH IAMs_20 IAMs_20 18 35 10.1
comp=Z,13µm,21.0s
**I30M Mount Dempster 38.96 39** P **P** **18 19 30.2 +0.2**
I30M IAmb IAmb 18 19 34.0
comp=Z,252nm,1.1s
I30M IAMs_20 IAMs_20 18 38 04.7
comp=Z,18µm,19.0s
**I30M Mount Dempster 38.96 39** P **P** **18 19 30.4 +0.3**
baz=279,SNR=251
I30M S **S** **18 25 28.5 +1.9**
baz=279
**J30M Hart River 39.08 40** P **P** **18 19 31.5 +0.4**
baz=280,SNR=44
J30M S **S** **18 25 30.8 +2.4**
baz=280
**LZH Lanzhou 39.11 271** ⇑P **P** **18 19 32.8 +1.2**
LZH sP pP 18 19 40.9 +0.9
LZH PP **PnPn** **18 21 05.1 +1.1**
LZH S **S** **18 25 20.8 -8.7**
LZH SS **SS** **18 28 13.4 -8.9**
LZH pmax pmax
comp=Z,290nm,1.1s
LZH pmax pmax
comp=Z,3µm,5.8s
LZH LR LR
comp=Z,27µm,15.1s
LZH LR LR
comp=Z,32µm,18.6s
LZH LR LR
comp=Z,40µm,16.8s
**N30M Aishikik Lake 39.34 45** IAMs_20 IAMs_20 18 38 44.9
comp=Z,13µm,19.0s
**N30M Aishikik Lake 39.34 45** P **P** **18 19 33.6 +0.4**
baz=283,SNR=50
N30M S **S** **18 25 34.7 +2.5**
baz=283
**P29M Windy Craggy 39.45 48** P **P** **18 19 34.9 +0.9**
baz=284,SNR=44
P29M S **S** **18 25 36.7 +2.8**
baz=284
**G31M Satah River 39.56 36** P **P** **18 19 34.9 +0.1**
G31M IAmb IAmb 18 19 38.3
comp=Z,323nm,1.2s
**G31M Satah River 39.56 36** P **P** **18 19 35.6 +0.8**
baz=278,SNR=112
G31M S **S** **18 25 37.2 +2.0**
baz=278
**INK Inuvik 39.66 34** ⇓P **P** **18 19 36.5 +1.0**
**INK Inuvik 39.66 34** P **P** **18 19 36.4 +0.8**
baz=277,SNR=55
INK S **S** **18 25 39.8 +3.2**
baz=277
**INK Inuvik 39.66 34** P **P** **18 19 35.8 +0.2**
**F31M Tsiigehtchic 39.69 35** IAmb IAmb 18 19 40.0
comp=Z,276nm,1.1s
**F31M Tsiigehtchic 39.69 35** P **P** **18 19 36.4 +0.6**
baz=278,SNR=95
F31M S **S** **18 25 37.9 +0.7**
baz=278
**P30M Million Dollar 39.71 47** P **P** **18 19 37.1 +0.9**
baz=284,SNR=38
P30M S **S** **18 25 42.0 +4.2**
baz=284
**N31M Braeburn, Yuko 39.94 44** IAmb IAmb 18 19 42.4
comp=Z,266nm,1.2s
N31M IAMs_20 IAMs_20 18 39 00.9
comp=Z,15µm,20.0s
**N31M Braeburn, Yuko 39.94 44** P **P** **18 19 39.4 +1.3**
baz=284,SNR=57
N31M S **S** **18 25 46.4 +5.1**
baz=284
**O30N Mendenhall 39.97 45** IAMs_20 IAMs_20 18 35 35.8
comp=Z,13µm,21.0s
**O30N Mendenhall 39.97 45** P **P** **18 19 39.0 +0.6**
baz=284,SNR=153
O30N S **S** **18 25 46.3 +4.6**
baz=284
**GTA Gaotai 39.98 278** *e*P **P** **18 19 38.5 -0.4**
GTA sP pP 18 19 47.5 +0.3
GTA PP **PnPn** **18 21 17.6 +3.3**
GTA PcP **PcP** **18 21 42.8 -0.8**
GTA ScP **ScP** **18 25 31.2 +0.8**
GTA S **S** **18 25 40.3 -2.2**
GTA sS sS 18 25 56.3 0.0
GTA SS **SS** **18 28 34.4 -5.3**
GTA ScS **ScS** **18 29 43.2 -0.5**
GTA pmax pmax
comp=Z,2µm,10.1s
GTA LR LR
comp=Z,20µm,17.1s
GTA LR LR
comp=Z,31µm,18.5s
GTA LR LR
comp=Z,52µm,17.8s
**PLBC Pleasant Camp 40.17 48** P **P** **18 19 40.9 +1.0**
baz=286,SNR=55
PLBC S **S** **18 25 49.3 +4.7**
baz=286
**M31M Drury Creek, Y 40.41 43** IAMs_20 IAMs_20 18 38 58.2
comp=Z,14µm,20.0s
**M31M Drury Creek, Y 40.41 43** P **P** **18 19 43.2 +1.2**
baz=284,SNR=75
M31M S **S** **18 25 52.7 +4.5**
baz=284
**WHY Whitehorse 40.57 45** IAMs_20 IAMs_20 18 35 55.6
comp=Z,16µm,21.0s
**WHY Whitehorse 40.57 45** P **P** **18 19 44.6 +1.1**
baz=285,SNR=104
WHY S **S** **18 25 56.3 +5.6**
baz=285
**S31K Pelican 40.66 50** P **P** **18 19 44.9 +0.9**
**S31K Pelican 40.66 50** P **P** **18 19 44.8 +0.9**
baz=287,SNR=11
S31K S **S** **18 25 56.6 +4.8**
baz=287
S31K S **S** **18 25 56.6 +4.8**

baz=287
**SKAG Skagway 40.68 47** P **P** **18 19 45.8 +1.6**
**SKAG Skagway 40.68 47** IAmb IAmb 18 19 48.5
comp=Z,445nm,1.6s
**SKAG Skagway 40.68 47** ⇓P **P** **18 19 45.8 +1.6**
**SKAG Skagway 40.68 47** P **P** **18 19 45.7 +1.6**
baz=286,SNR=16
SKAG S **S** **18 25 58.6 +6.5**
baz=286
**R31K City Hall, Gus 40.77 49** P **P** **18 19 46.5 +1.6**
baz=287
R31K S **S** **18 25 59.1 +5.6**
baz=287
**FARO Faro, Yukon 40.88 43** IAMs_20 IAMs_20 18 39 11.5
comp=Z,15µm,19.0s
**FARO Faro, Yukon 40.88 43** P **P** **18 19 46.4 +0.6**
baz=285,SNR=82
FARO S **S** **18 25 59.8 +4.5**
baz=285
**N32M Quiet Lake 41.29 44** IAMs_20 IAMs_20 18 39 59.8
comp=Z,15µm,19.0s
**N32M Quiet Lake 41.29 44** P **P** **18 19 50.1 +0.9**
baz=286
N32M S **S** **18 26 05.5 +4.3**
baz=286
**SIT Sitka 41.40 51** P **P** **18 19 52.1 +2.0**
**SIT Sitka 41.40 51** IAmb IAmb 18 19 54.4
comp=Z,384nm,1.6s
**SIT Sitka 41.40 51** P **P** **18 19 51.7 +1.6**
baz=289,SNR=9.5
SIT S **S** **18 26 08.8 +5.9**
baz=289
**PATS Pohnpei 41.42 175** IAMs_20 IAMs_20 18 33 19.2
comp=Z,21µm,22.0s
**P32M Atlin 41.43 47** P **P** **18 19 51.3 +0.9**
P32M IAMs_20 IAMs_20 18 39 44.5
comp=Z,17µm,18.0s
**P32M Atlin 41.43 47** P **P** **18 19 51.3 +0.9**
baz=287,SNR=41
P32M S **S** **18 26 07.9 +4.5**
baz=287
**R32K Eaglecrest 41.43 49** P **P** **18 19 51.8 +1.4**
baz=288
R32K S **S** **18 26 09.5 +6.2**
baz=288
R32K S **S** **18 26 09.5 +6.2**
baz=288
**JIS Juneau Island 41.50 49** P **P** **18 19 52.5 +1.6**
**HKPS Hong Kong Po S 41.54 246** P **P** **18 19 53.0 +1.3**
**HKPS Hong Kong Po S 41.54 246** IAMs_20 IAMs_20 18 36 11.6
comp=Z,16µm,21.0s
**SZP Santa 41.59 235** P **P** **18 19 53.8 +1.7**
**S32K Killisnoo 41.65 50** P **P** **18 19 53.7 +1.5**
baz=289,SNR=22
S32K S **S** **18 26 10.2 +3.5**
baz=289
S32K S **S** **18 26 10.2 +3.5**
baz=289
**P33M Teslin, Yukon 41.68 46** IAmb IAmb 18 19 57.1
comp=Z,201nm,0.9s
P33M IAMs_20 IAMs_20 18 39 00.9
comp=Z,16µm,19.0s
**P33M Teslin, Yukon 41.68 46** P **P** **18 19 53.4 +0.9**
baz=287,SNR=197
P33M S **S** **18 26 11.5 +4.3**
baz=287
**GULI GuiLin 41.70 253** P **P** **18 19 55.2 +2.2**
GULI S **S** **18 26 08.2 +0.1**
GULI pmax pmax
comp=Z,160nm,0.8s
GULI LR LR
comp=Z,13µm,16.3s
GULI LR LR
comp=Z,27µm,16.3s
GULI LR LR
comp=Z,35µm,17.3s
**MMPY Sheldon Lake, 41.72 42** P **P** **18 19 54.0 +1.3**
baz=286,SNR=28
MMPY S **S** **18 26 10.1 +2.4**
baz=286
**A36M Sachs Harbour 41.89 27** P **P** **18 19 53.9 -0.1**
A36M IAmb IAmb 18 20 11.8
comp=Z,288nm,0.8s
**A36M Sachs Harbour 41.89 27** P **P** **18 19 55.0 +1.0**
baz=280,SNR=24
A36M S **S** **18 26 12.3 +2.5**
baz=280
**CD2 Chengdu 42.27 265** P **P** **18 19 57.0 -0.6**
CD2 pP pP 18 20 05.8 -0.3
CD2 sP sP 18 20 08.5 -0.9
CD2 PP **PP** **18 21 38.0 +2.3**
CD2 S **S** **18 26 14.1 -2.4**
CD2 sS sS 18 26 28.7 -1.7
CD2 pmax pmax
comp=Z,350nm,1.0s
CD2 pmax pmax
comp=Z,3µm,7.4s
CD2 LR LR
comp=Z,6µm,14.3s
CD2 LR LR
comp=Z,7µm,12.2s
CD2 LR LR
comp=Z,21µm,19.6s
**Q32M Nakina River 42.33 47** IAmb IAmb 18 20 02.6
comp=Z,487nm,1.7s
**Q32M Nakina River 42.33 47** P **P** **18 19 59.6 +1.6**
baz=289,SNR=44
Q32M S **S** **18 26 23.8 +6.8**
baz=289
**T33K Petersburg 42.71 50** P **P** **18 20 02.4 +1.6**
baz=291
**ZAA0 Zalesovo Array 42.74 305** P **P** **18 19 58.9 -2.2**
ZAA0 PcP **PcP** **18 21 52.3 +0.1**
**ZALV Zalesovo Beam 42.74 305** P **P** **18 19 58.8 -2.3**
ZALV PcP **PcP** **18 21 51.9 -0.3**
**ZALV Zalesovo Beam 42.74 305** P **P** **18 19 59.1 -2.0**
comp=Z,21nm,0.7s,baz=63,slow=6.2,SNR=40
ZALV PcP **PcP** **18 21 51.5 -0.7**
comp=Z,76nm,0.9s,baz=90,slow=3.0,SNR=16
ZALV ScS ScS 18 29 59.3 -0.3
comp=Z,2.6nm,0.8s,baz=90,slow=7.2,SNR=3.3
ZALV LR LR 18 38 23.5
comp=Z,21µm,20.8s,baz=70,slow=37
comp=Z,21nm,0.7s
**ZALV Zalesovo Beam 42.74 305** *i* P **P** **18 19 59.0 -2.1**
ZALV pmax pmax
comp=Z,21nm,0.7s
**JOHN Johnston Islan 42.79 125** IAMs_20 IAMs_20 18 33 31.0
comp=Z,20µm,21.0s
**R33M Jennings River 42.82 46** IAmb IAmb 18 20 06.4
comp=Z,247nm,1.1s
R33M IAMs_20 IAMs_20 18 37 35.3
comp=Z,16µm,21.0s
**R33M Jennings River 42.82 46** P **P** **18 20 03.5 +1.6**
baz=289,SNR=201
R33M S **S** **18 26 28.7 +4.6**
baz=289
**C36M Paulatuk 42.84 31** IAmb IAmb 18 20 05.2
comp=Z,285nm,1.0s
**C36M Paulatuk 42.84 31** P **P** **18 20 02.2 +0.5**
baz=284,SNR=60
C36M S **S** **18 26 24.5 +0.7**
baz=284
**U33K Whale Pass 42.87 51** P **P** **18 20 03.1 +1.0**
U33K IAMs_20 IAMs_20 18 37 15.7
comp=Z,15µm,21.0s
**U33K Whale Pass 42.87 51** P **P** **18 20 03.9 +1.8**
baz=291,SNR=15
U33K S **S** **18 26 30.9 +6.3**
baz=291
U33K S **S** **18 26 30.9 +6.3**
baz=291
**DGZ Jazzator, Alta 42.96 298***d i* P **P** **18 20 02.4 -0.8**
DGZ pmax pmax
comp=Z,161nm,1.2s
DGZ MLR MLR
comp=Z,21µm,14.0s
**CRAG Craig 43.11 52** P **P** **18 20 06.1 +2.1**
**CRAG Craig 43.11 52** IAMs_20 IAMs_20 18 37 18.4
comp=Z,12µm,20.0s
**CRAG Craig 43.11 52** ⇑P **P** **18 20 06.2 +2.1**
**CRAG Craig 43.11 52** P **P** **18 20 05.2 +1.2**
baz=292,SNR=11
CRAG S **S** **18 26 34.1 +6.1**
baz=292
**WRAK Wrangell Islan 43.16 51** IAMs_20 IAMs_20 18 37 48.7
comp=Z,13µm,21.0s

**TGTN Hyland Airport 43.39 43** P **P** **18 20 07.8 +1.4**
baz=289,SNR=31
TGTN S **S** **18 26 37.3 +5.1**
baz=289
**DLBC Dease Lake 43.61 47** IAmb IAmb 18 20 12.8
comp=Z,245nm,1.2s
DLBC IAMs_20 IAMs_20 18 41 31.1
comp=Z,18µm,19.0s
**DLBC Dease Lake 43.61 47** LR LR 18 41 51.4
comp=Z,17µm,18.1s,baz=296,slow=41
**DLBC Dease Lake 43.61 47** P **P** **18 20 09.9 +1.7**
baz=291,SNR=80
DLBC S **S** **18 26 40.5 +4.9**
baz=291
**WTLY Watson Lake, Y 43.62 45** P **P** **18 20 09.3 +1.1**
baz=290,SNR=10.0
WTLY S **S** **18 26 39.5 +4.0**
baz=290
**V35K Ketchikan 43.96 52** P **P** **18 20 11.7 +0.8**
V35K IAMs_20 IAMs_20 18 37 34.4
comp=Z,14µm,21.0s
**V35K Ketchikan 43.96 52** P **P** **18 20 11.9 +1.0**
baz=293,SNR=19
V35K S **S** **18 26 47.0 +6.5**
baz=293
V35K S **S** **18 26 47.0 +6.5**
baz=293
**T35M Bob Quinn 44.03 49** IAmb IAmb 18 20 30.4
comp=Z,229nm,1.1s
T35M IAMs_20 IAMs_20 18 38 26.1
comp=Z,10µm,20.0s
**T35M Bob Quinn 44.03 49** P **P** **18 20 14.0 +2.4**
baz=292,SNR=69
T35M S **S** **18 26 49.7 +8.0**
baz=292
**DIB Dawson Inlet, 44.34 55** P **P** **18 20 14.5 +0.5**
DIB IAMs_20 IAMs_20 18 40 28.5
comp=Z,11µm,19.0s
**U35K Hyder 44.56 51** IAMs_20 IAMs_20 18 38 40.2
comp=Z,14µm,20.0s
**U35K Hyder 44.56 51** P **P** **18 20 17.5 +1.8**
baz=293
U35K S **S** **18 26 55.5 +6.3**
baz=293
**WRGLY Wrigley 44.92 39** P **P** **18 20 18.7 +0.3**
WRGLY IAmb IAmb 18 20 22.6
comp=Z,256nm,1.0s
WRGLY IAMs_20 IAMs_20 18 42 39.9
comp=Z,15µm,18.0s
**WRGLY Wrigley 44.92 39** P **P** **18 20 20.1 +1.6**
baz=291,SNR=7.2
WRGLY S **S** **18 26 58.6 +4.3**
baz=291
**GOMU GeErMu 45.05 278** P **P** **18 20 20.1 -0.3**
GOMU PcP **PP** **18 22 05.0 -0.7**
GOMU S **S** **18 26 59.9 +2.2**
GOMU pmax pmax
comp=Z,110nm,0.8s
GOMU LR LR
comp=Z,40µm,14.1s
GOMU LR LR
comp=Z,37µm,14.5s
GOMU LR LR
comp=Z,56µm,14.7s
**LIRD Liard River Hi 45.14 45** P **P** **18 20 22.1 +1.7**
baz=293
LIRD S **S** **18 27 00.5 +2.8**
baz=293
**HG4B Hotspring 45.43 56** P **P** **18 20 22.9 +0.1**
HG4B IAmb IAmb 18 20 25.9
comp=Z,182nm,1.1s
HG4B IAMs_20 IAMs_20 18 40 39.4
comp=Z,9µm,18.0s
**GRNB Grenville Isla 45.44 53** IAmb IAmb 18 20 26.7
comp=Z,373nm,1.2s
**ZSN Zaisan 45.50 297**⇑ *i* P **P** **18 20 23.0 -0.3**
baz=296
ZSN *e*S **S** **18 27 02.0 -1.2**
baz=296
**ZSN Zaisan 45.50 297***c i* P **P** **18 20 23.0 -0.3**
ZSN *e*S **S** **18 27 02.0 -1.2**
**WMQ Urumqi 45.55 291** ⇓P **P** **18 20 24.2 +0.4**
WMQ PcP **PcP** **18 22 01.5 -0.6**
WMQ ScP **ScP** **18 25 55.0 +2.3**
WMQ S **S** **18 27 01.5 -2.5**
WMQ SS **ScS** **18 30 17.0 -0.9**
WMQ pmax pmax
comp=Z,120nm,1.3s
WMQ pmax pmax
comp=Z,2µm,9.9s
WMQ LR LR
comp=Z,24µm,18.3s
WMQ LR LR
comp=Z,40µm,14.9s
WMQ LR LR
comp=Z,23µm,22.9s
**TOAD Toad River Com 45.77 46** P **P** **18 20 26.2 +0.9**
baz=294,SNR=144
TOAD S **S** **18 27 10.0 +3.2**
baz=294
**KOTAN Kotaneelee Air 45.82 44** P **P** **18 20 26.7 +1.1**
baz=293
KOTAN S **S** **18 27 09.1 +1.7**
baz=293
**KIP Kipapa 46.01 109** P **P** **18 20 29.5 +1.9**
**KIP Kipapa 46.01 109** P **P** **18 20 29.5 +1.9**
KIP IAmb IAmb 18 20 31.1
comp=Z,359nm,1.2s
**PZH PanZhiHua 46.48 262** P **P** **18 20 31.0 -0.5**
PZH PP **PP** **18 22 21.8 +1.0**
PZH PcS **PcS** **18 26 01.1 +0.4**
PZH S **S** **18 27 14.4 -3.6**
PZH ScS **ScS** **18 30 23.7 -0.9**
PZH pmax pmax
comp=Z,200nm,0.8s
PZH pmax pmax
comp=Z,3µm,9.4s
PZH LR LR
comp=Z,8µm,16.7s
PZH LR LR
comp=Z,5µm,15.3s
PZH LR LR
comp=Z,9µm,16.9s
**QIZ Qiongzhong 46.62 247** P **P** **18 20 34.7 +2.3**
QIZ PP **PP** **18 22 25.2 +3.0**
QIZ S **S** **18 27 21.5 +1.8**
QIZ pmax pmax
comp=Z,110nm,1.5s
QIZ pmax pmax
comp=Z,2µm,4.3s
QIZ LR LR
comp=Z,7µm,16.5s
QIZ LR LR
comp=Z,11µm,15.7s
QIZ LR LR
comp=Z,17µm,16.6s
**QIZ Qiongzhong 46.62 247** IAMs_20 IAMs_20 18 40 38.0
comp=Z,10µm,18.0s
**QIZ Qiongzhong 46.62 247** IAmb IAmb 18 20 43.3
comp=Z,499nm,1.9s
**KMI Kunming 46.77 260** ⇓P **P** **18 20 33.8 0.0**
KMI pP pP 18 20 39.4 -2.9
KMI PP **PP** **18 22 25.5 +1.6**
KMI ScP **ScP** **18 25 59.8 +1.6**
KMI PcS **PcS** **18 26 06.3 +4.2**
KMI S **S** **18 27 16.4 -5.8**
KMI pmax pmax
comp=Z,210nm,1.1s
KMI pmax pmax
comp=Z,3µm,4.9s
KMI LR LR
comp=Z,11µm,16.7s
KMI LR LR
comp=Z,13µm,15.9s
KMI LR LR
comp=Z,12µm,20.7s
**SEM Semipalatinsk 46.79 302**⇑ *i* P **P** **18 20 32.8 -0.9**
comp=Z,86nm,0.9s,baz=302
SEM LR LR 18 40 33.5
comp=Z,9µm,18.2s,baz=302
**SEM Semipalatinsk 46.79 302***c i* P **P** **18 20 32.8 -0.9**
SEM pmax pmax
comp=Z,86nm,0.9s
SEM MLR MLR
comp=Z,9µm,18.0s
**BBB Bella Bella 47.18 55** P **P** **18 20 37.1 +0.7**
BBB IAmb IAmb 18 20 39.8
comp=Z,266nm,1.4s
BBB IAMs_20 IAMs_20 18 42 20.4
comp=Z,9µm,19.0s
**BBB Bella Bella 47.18 55**⇑P **P** **18 20 36.9 +0.5**
**BBB Bella Bella 47.18 55** LR LR 18 42 22.8
comp=Z,7µm,18.1s,baz=294,slow=39
**EUNU Eureka 47.35 12** P **P** **18 20 36.4 -1.1**
**MK31 Makanchi Array 47.35 297** P **P** **18 20 36.2 -1.7**
MK31 IAmb IAmb 18 20 42.8
comp=Z,123nm,0.8s
**MK31 Makanchi Array 47.35 297***d i* P **P** **18 20 36.9 -1.0**
**MKAR Makanchi Array 47.35 297** P **P** **18 20 36.0 -2.0**
**MKAR Makanchi Array 47.35 297** P **P** **18 20 37.0 -0.9**
comp=Z,132nm,0.9s,baz=64,slow=8.2,SNR=182
MKAR ScP **ScP** **18 26 00.5 +0.4**
comp=Z,5.1nm,0.9s,baz=68,slow=3.0,SNR=2.2
MKAR ScS **ScS** **18 30 32.3 +2.8**
comp=Z,5.8nm,1.0s,baz=83,slow=9.9,SNR=6.4
MKAR LR LR 18 42 01.8
comp=Z,25µm,19.6s,baz=55,slow=38
MKAR P4KPbc 18 58 21.7
comp=Z,0.8nm,0.9s,baz=57,slow=4.5,SNR=5.9
comp=Z,132nm,0.9s
**MKAR Makanchi Array 47.35 297** *i* P **P** **18 20 37.0 -0.9**
MKAR pmax pmax
comp=Z,131nm,0.9s
**KHLH Kahului Airpor 47.40 108** IAmb IAmb 18 20 42.3
comp=Z,298nm,1.2s
**MAKZ Makanchi 47.53 297** P **P** **18 20 37.5 -1.8**
MAKZ IAmb IAmb 18 20 41.7
comp=Z,189nm,1.2s
MAKZ PcP **PcP** **18 22 10.3 +1.4**
**MAKZ Makanchi 47.53 297** ⇓P **P** **18 20 37.6 -1.8**
**KURK Kurchatov 47.56 303** P **P** **18 20 37.4 -2.0**
KURK PcP **PcP** **18 22 08.6 -0.3**
**KURK Kurchatov 47.56 303** ⇓P **P** **18 20 37.5 -1.9**
**KURK Kurchatov 47.56 303** P **P** **18 20 38.2 -1.2**
KURK P **P** **18 20 38.2 -1.2**
KURK P **P** **18 20 38.2 -1.2**
**KURK Kurchatov 47.56 303***d i* P **P** **18 20 37.0 -2.4**
KURK pmax pmax
comp=Z,365nm,1.3s
KURK MLR MLR
comp=Z,19µm,13.0s
**KURBB Kurchatov Arra 47.66 303** P **P** **18 20 39.0 -1.1**
comp=Z,168nm,0.8s,baz=64,slow=8.1,SNR=159
KURBB PcP **PcP** **18 22 09.1 -0.2**
comp=Z,45nm,0.9s,baz=69,slow=3.0,SNR=7.9
KURBB LR LR 18 41 44.2
comp=Z,31µm,19.6s,baz=64,slow=38
KURBB P4KPbc 18 58 21.4
comp=Z,1.6nm,0.7s,baz=63,slow=3.7,SNR=12
comp=Z,168nm,0.8s
**MHA Mahukona 48.25 108** P **P** **18 20 47.2 +2.1**
**MHA Mahukona 48.25 108** P **P** **18 20 47.2 +2.1**
**HPAH Hawaii Prepara 48.50 108** P **P** **18 20 48.2 +1.0**
HPAH IAmb IAmb 18 20 50.1
comp=Z,271nm,1.1s
**SLVN Son La 48.67 255** P **P** **18 20 48.4 0.0**
SLVN IAmb IAmb 18 20 56.3
comp=Z,221nm,1.1s
**POHA Pohakuloa 48.80 108** P **P** **18 20 51.0 +1.4**
**POHA Pohakuloa 48.80 108** P **P** **18 20 50.8 +1.1**
**POHA Pohakuloa 48.80 108** ⇓P **P** **18 20 51.2 +1.6**
**YKA Yellowknife Ar 48.92 38** P **P** **18 20 49.7 0.0**
**YKA Yellowknife Ar 48.92 38** P **P** **18 20 50.4 +0.7**
comp=Z,139nm,0.9s,baz=300,slow=7.7,SNR=41
YKA LR LR 18 44 40.4
comp=Z,4µm,18.7s,baz=296,slow=40
comp=Z,139nm,0.9s
**YKA Yellowknife Ar 48.92 38** P **P** **18 20 49.7 0.0**
**HMH Humu'ula Sheep 48.95 108** P **P** **18 20 52.0 +1.1**
HMH IAmb IAmb 18 20 54.2
comp=Z,249nm,1.0s
**RES Resolute Bay 48.95 19** IAmb IAmb 18 20 53.3
comp=Z,103nm,0.9s
**RES Resolute Bay 48.95 19** ⇓P **P** **18 20 49.8 0.0**
**RES Resolute Bay 48.95 19** LR LR 18 43 38.2
comp=Z,10µm,20.5s,baz=310,slow=39
**RES Resolute Bay 48.95 19** P **P** **18 20 49.8 0.0**
**MWH Moku'aweowe 48.96 108** P **P** **18 20 52.1 +0.9**
MWH IAmb IAmb 18 20 54.2
comp=Z,308nm,1.3s
**KHU Kahuku 49.13 108** P **P** **18 20 52.7 +0.6**
**KHU Kahuku 49.13 108** P **P** **18 20 52.7 +0.6**
KHU pmax pmax
comp=Z,286nm,1.1s
**RSD Rainshed 49.18 108** P **P** **18 20 53.6 +1.2**
**HATHI Halema'uma'u T 49.22 108** IAmb IAmb 18 21 06.2
comp=Z,185nm,1.1s
**PUH Pauahi 49.29 108** P **P** **18 20 54.5 +1.3**
PUH IAmb IAmb 18 20 56.2
comp=Z,257nm,1.2s
**STCH Steam Cracks 49.34 108** IAmb IAmb 18 20 56.5
comp=Z,186nm,1.1s
**JOKA Jonika Flow 49.38 108** P **P** **18 20 54.8 +1.0**
JOKA IAmb IAmb 18 20 56.8
comp=Z,271nm,1.1s
**TNCH TengChong 49.62 263**⇓ *e*P **P** **18 20 56.5 +0.7**
TNCH pP pP 18 20 59.2 -5.1
TNCH sP sP 18 21 01.4 -6.2
TNCH PP **PP** **18 22 55.1 +5.0**
TNCH S **S** **18 27 56.3 -6.1**
TNCH sS pS 18 28 11.8 -0.7
TNCH ScS **ScS** **18 30 47.5 +1.9**
TNCH SS **SS** **18 31 36.0 +1.4**
TNCH pmax pmax
comp=Z,430nm,1.5s
TNCH pmax pmax
comp=Z,2µm,4.0s
TNCH LR LR
comp=Z,7µm,16.6s
TNCH LR LR
comp=Z,8µm,15.3s
TNCH LR LR
comp=Z,14µm,16.3s
**CBB Campbell River 49.74 56** P **P** **18 20 56.6 +0.5**
CBB IAmb IAmb 18 20 59.2
comp=Z,240nm,1.7s
**LKP Lekhapani 49.85 267** *e*P **P** **18 20 58.1 +0.8**
**OZB Mount Ozzard 50.22 57** IAmb IAmb 18 21 02.8
comp=Z,203nm,1.4s
**NOR Nord 50.27 358**⇓ *i* P **P** **18 20 57.6 -2.2**
NOR IAmb IAmb 18 21 01.2
comp=Z,9.5nm,1.0s
**TDK Taldyqorghan 50.60 297** *e*P **P** **18 21 02.5 -0.3**
comp=Z,103nm,0.9s,baz=297
TDK LR LR 18 42 55.6
comp=Z,11µm,13.2s,baz=297
**TDK Taldyqorghan 50.60 297** *e*P **P** **18 21 02.5 -0.3**
TDK pmax pmax
comp=Z,103nm,0.9s
TDK MLR MLR
comp=Z,11µm,13.0s
**BRVK Borovoye 50.89 309** P **P** **18 21 03.2 -1.7**
BRVK IAmb IAmb 18 21 09.7
comp=Z,86nm,0.7s
**BRVK Borovoye 50.89 309**⇑P **P** **18 21 02.9 -1.9**
**BRVK Borovoye 50.89 309** P **P** **18 21 03.1 -1.8**
BRVK P **P** **18 21 03.1 -1.8**
BRVK P **P** **18 21 03.1 -1.8**
BRVK S **S** **18 28 17.0 -2.1**
BRVK S **S** **18 28 17.0 -2.1**
BRVK S **S** **18 28 17.0 -2.1**
**BRVK Borovoye 50.89 309***ce*P **P** **18 21 02.4 -2.4**
BRVK pmax pmax
comp=Z,84nm,0.7s
BRVK MLR MLR
comp=Z,37µm,18.0s
**SHLS Shalkode 50.98 294** *e*P **P** **18 21 03.5 -2.3**
baz=294
**SHLS Shalkode 50.98 294** *e*P **P** **18 21 03.5 -2.3**
**ZIRO ZIRO 51.06 269** *e*P **P** **18 21 07.3 +0.7**
ZIRO IAmb IAmb 18 21 10.6
comp=Z,288nm,0.9s
**CLRS Cowichan Lake 51.06 57** P **P** **18 21 06.1 0.0**
CLRS IAmb IAmb 18 21 09.0
comp=Z,218nm,1.3s
**KBS Kingsbay 51.15 351** P **P** **18 21 04.6 -1.8**
**KBS Kingsbay 51.15 351** IAMs_20 IAMs_20 18 42 04.0
comp=Z,13µm,20.0s
**KBS Kingsbay 51.15 351** *eP* **P** **18 21 05.8 -0.7**
KBS *e*S **S** **18 28 22.6 +0.5**
KBS *e*ScS **ScS** **18 30 56.6 +2.5**
**KBS Kingsbay 51.15 351***d i* P **P** **18 21 05.6 -0.8**

KBS pmax pmax
comp=Z,61nm,0.8s
**UZB Uzynbulak 51.25 294**⇑ *i*P **P** **18 21 07.6 -0.3**
comp=Z,63nm,1.0s,baz=294
UZB *e*S **S** **18 28 23.7 -1.1**
baz=294
**UZB Uzynbulak 51.25 294***c i*P **P** **18 21 07.5 -0.3**
UZB *e*S **S** **18 28 23.6 -1.1**
UZB pmax pmax
comp=Z,63nm,1.0s
**KPKS Kokpek 51.28 295**⇑ *i*P **P** **18 21 07.9 -0.2**
comp=Z,56nm,1.0s,baz=295
KPKS *e*S **S** **18 28 24.3 -0.8**
baz=295
**KPKS Kokpek 51.28 295***c i*P **P** **18 21 07.8 -0.2**
KPKS *e*S **S** **18 28 24.2 -0.8**
KPKS pmax pmax
comp=Z,56nm,1.0s
**ARXS Arharly 51.38 296** *e*P **P** **18 21 07.9 -0.9**
**LSA Lhasa 51.45 273** P **P** **18 21 11.8 +1.9**
LSA S **S** **18 28 20.0 -8.4**
LSA pmax pmax
comp=Z,63nm,0.7s
LSA LR LR
comp=Z,9µm,17.6s
LSA LR LR
comp=Z,9µm,20.1s
LSA LR LR
comp=Z,11µm,23.4s
**LSA Lhasa 51.45 273** IAmb IAmb 18 21 15.2
comp=Z,146nm,0.6s
LSA IAMs_20 IAMs_20 18 43 57.9
comp=Z,12µm,20.0s
**LSA Lhasa 51.45 273** *i* P **P** **18 21 10.9 +1.0**
SNR=62
**HOPEN Hopen 51.47 347** *e*P **P** **18 21 08.1 -0.7**
HOPEN *e*S **S** **18 28 30.8 +4.3**
HOPEN *e*ScS **ScS** **18 30 55.9 -0.4**
**PGC Sidney 51.53 57** IAmb IAmb 18 21 12.4
comp=Z,316nm,1.7s
**ZHN Zhinishke 51.60 295** *e*P **P** **18 21 10.3 -0.2**
baz=295
**ZHN Zhinishke 51.60 295** *e*P **P** **18 21 10.2 -0.2**
**SATY Saty 51.67 295**⇑ *i*P **P** **18 21 11.2 +0.1**
baz=295
SATY *e*S **S** **18 28 29.2 -1.4**
baz=295
**SATY Saty 51.67 295***c i*P **P** **18 21 11.1 +0.1**
SATY *e*S **S** **18 28 29.1 -1.4**
**CRAI Chiangrai 51.75 257** PcP **PcP** **18 22 25.6 +0.9**
**B04A Port Angeles 51.82 58** IAmb IAmb 18 21 14.8
comp=Z,192nm,1.4s
**NLWA Neilton Lookou 51.98 58** IAmb IAmb 18 21 16.4
comp=Z,288nm,1.3s
**NLWA Neilton Lookou 51.98 58** ⇓P **P** **18 21 13.8 +0.7**
**KOHI KOHIMA 52.08 267** *e*P **P** **18 21 14.6 +0.3**
**CHKK Chushkaly 52.08 296** *e*P **P** **18 21 14.0 0.0**
baz=296
**CHKK Chushkaly 52.08 296** *e*P **P** **18 21 13.9 0.0**
**UBPT Khong Chiam 52.16 248** P **P** **18 21 16.4 +1.6**
**UBPT Khong Chiam 52.16 248** IAmb IAmb 18 21 18.2
comp=Z,243nm,1.5s
**UBPT Khong Chiam 52.16 248** ⇓P **P** **18 21 16.4 +1.6**
**WISH Wishkah 52.18 59** P **P** **18 21 15.5 +0.9**
WISH IAmb IAmb 18 21 18.2
comp=Z,331nm,1.4s
**GENI Genyem 52.31 199** P **P** **18 21 17.8 +2.0**
**RABL Rabaul 52.34 184** P **P** **18 21 16.4 +0.4**
RABL IAmb IAmb 18 22 17.3
comp=Z,186nm,1.4s
**TULEG Thule 52.35 12** IAmb IAmb 18 21 18.1
comp=Z,150nm,0.8s
TULEG IAMs_20 IAMs_20 18 45 44.5
comp=Z,13µm,20.0s
**TULEG Thule 52.35 12**⇓ *i*P **P** **18 21 13.3 -2.1**
TULEG IAmb IAmb 18 21 17.9
comp=Z,146nm,0.8s
**HSPB Hornsund (broa 52.39 349** *e*P **P** **18 21 11.1 -4.6**
HSPB *e*S **S** **18 28 33.2 -5.9**
HSPB *e*L L 18 43 11.3
**MDOK Medeo 52.44 295** *e*P **P** **18 21 16.7 0.0**
baz=295
MDOK *e*S **S** **18 28 40.0 -1.0**
baz=295
MDOK LR LR 18 44 26.1
comp=Z,19µm,13.8s,baz=295
**MDOK Medeo 52.44 295** *e*P **P** **18 21 16.7 0.0**
MDOK *e*S **S** **18 28 40.0 -1.0**
MDOK MLR MLR
comp=Z,19µm,14.0s
**GNW Green Mountain 52.47 58** IAmb IAmb 18 21 19.9
comp=Z,215nm,1.6s
**AAA Alma-Ata 52.49 296** *e*P **P** **18 21 16.8 -0.2**
AAA comp=Z,104nm,0.9s,baz=296 LR LR 18 44 58.1
comp=Z,14µm,13.7s,baz=296
**AAA Alma-Ata 52.49 296** *e*P **P** **18 21 16.8 -0.2**
**AAA Alma-Ata 52.49 296** *e*P **P** **18 21 16.8 -0.2**
AAA pmax pmax
comp=Z,104nm,0.9s
AAA MLR MLR
comp=Z,14µm,14.0s
**RADR Rader Ridge 52.55 59** IAmb IAmb 18 21 20.8
comp=Z,293nm,1.4s
**TNSS Tian-Shan 52.57 295** *e*P **P** **18 21 17.6 -0.4**
baz=295
**TNSS Tian-Shan 52.57 295** *e*P **P** **18 21 17.6 -0.4**
**E03A Lebam 52.62 59** IAmb IAmb 18 21 20.9
comp=Z,232nm,1.3s
E03A IAMs_20 IAMs_20 18 39 21.8
comp=Z,9µm,22.0s
**IMP Imphal 52.79 266** *e*P **P** **18 21 19.1 -0.3**
IMP IAmb IAmb 18 21 22.7
comp=Z,285nm,0.7s
**DLV T Lat 52.92 243** P **P** **18 21 22.4 +1.8**
**F03A Seaside 52.96 60** IAmb IAmb 18 21 23.6
comp=Z,331nm,1.3s
F03A IAMs_20 IAMs_20 18 39 29.1
comp=Z,9µm,22.0s
**TNTI Ternate 53.02 215** P **P** **18 21 24.0 +2.9**
**TNTI Ternate 53.02 215** P **P** **18 21 20.2 -0.9**
**MYLDM Lahad Datu 53.02 228** IAmb IAmb 18 21 34.4
comp=Z,323nm,1.4s
**MYLDM Lahad Datu 53.02 228** ⇓P **P** **18 21 23.9 +2.8**
**SWI Sorong 53.12 210** P **P** **18 21 21.6 -0.2**
comp=Z,98nm,1.3s,comp=Z,3µmcomp=Z,4µm
**BTLS Baital 53.16 299**⇑ *i*P **P** **18 21 21.4 -0.5**
baz=299
**BTLS Baital 53.16 299***c i*P **P** **18 21 21.3 -0.5**
**D05A Enumclaw 53.16 58** P **P** **18 21 21.9 +0.1**
D05A IAmb IAmb 18 21 25.1
comp=Z,377nm,1.4s
**HEBO Mount Hebo 53.26 61** IAmb IAmb 18 21 25.9
comp=Z,216nm,1.1s
**TKM2 Tokmak 2 53.45 296** P **P** **18 21 24.0 -0.3**
SNR=110
**ULHL Ulahol 53.45 295** P **P** **18 21 24.2 -0.1**
SNR=45
**NEEM North Greenlan 53.47 7**⇓ *i*P **P** **18 21 22.4 -1.6**
NEEM IAmb IAmb 18 21 26.1
comp=Z,353nm,0.8s
**BOOM Boomskoye usch 53.49 295** IAmb IAmb 18 21 31.9
comp=Z,111nm,0.9s
**G03D McMinnville, O 53.54 60** P **P** **18 21 25.0 +0.4**
G03D IAmb IAmb 18 21 27.9
comp=Z,201nm,1.5s
**SVE Sverdlovsk 53.55 317** *e*P **P** **18 21 23.2 -1.3**
**SVE Sverdlovsk 53.55 317***ce*P **P** **18 21 23.2 -1.3**
SVE *e*S **S** **18 28 52.5 -3.0**
SVE *e* 18 31 11.3
SVE pmax pmax
comp=Z,80nm,0.9s
SVE MLR MLR
comp=Z,20µm,15.0s
**F04A Amboy 53.62 59** P **P** **18 21 24.9 -0.3**
F04A IAmb IAmb 18 21 27.9
comp=Z,170nm,1.2s
**SHL Shillong 53.67 269** *e*P **P** **18 21 25.6 -0.5**
**SHL Shillong 53.67 269** P **P** **18 21 25.8 -0.3**
SNR=134
SHL S **S** **18 28 57.3 -0.9**
**SHL Shillong 53.67 269** ⇓P **P** **18 21 25.7 -0.3**
**SGDS Sogindy 53.72 297**⇑ *i*P **P** **18 21 25.9 -0.2**
baz=297
**SGDS Sogindy 53.72 297***c i*P **P** **18 21 25.9 -0.2**
**LTY Liberty 53.86 57** IAmb IAmb 18 21 29.6
comp=Z,235nm,1.6s
**COR Corvallis 53.88 61** P **P** **18 21 26.1 -1.0**
COR IAmb IAmb 18 21 30.9
comp=Z,308nm,1.3s
**COR Corvallis 53.88 61** ⇓P **P** **18 21 27.8 +0.7**
**COR Corvallis 53.88 61** P **P** **18 21 26.1 -1.0**
COR pmax pmax
comp=Z,308nm,1.3s
COR MLR MLR
comp=Z,7µm,22.0s
**USP Ospenovka 53.91 297** P **P** **18 21 27.1 -0.2**
SNR=191
**CHMS Chumysh 53.91 297** P **P** **18 21 27.1 -0.4**
SNR=60
**CM31 Chiang Mai Arr 53.96 257** IAmb IAmb 18 21 32.5
comp=Z,156nm,1.0s
CM31 PcP **PcP** **18 22 35.5 +2.5**
**CM31 Chiang Mai Arr 53.96 257** P **P** **18 21 29.6 +1.6**
SNR=39
CM31 P **P** **18 21 29.6 +1.6**
SNR=39
CM31 P **P** **18 21 29.6 +1.6**
SNR=39
CM31 S **S** **18 29 02.1 +0.1**
CM31 S **S** **18 29 02.1 +0.1**
CM31 S **S** **18 29 02.1 +0.1**
**CMAR Chiang Mai Arr 53.96 257** P **P** **18 21 28.3 +0.3**
CMAR PcP **PcP** **18 22 35.9 +2.8**
**CMAR Chiang Mai Arr 53.96 257** P **P** **18 21 28.8 +0.8**
comp=Z,100nm,0.9s,baz=33,slow=7.2,SNR=236
CMAR ScP **ScP** **18 26 28.5 -0.4**
comp=Z,3.8nm,1.1s,baz=32,slow=5.0,SNR=3.1
CMAR LR LR 18 46 31.3
comp=Z,15µm,18.1s,baz=55,slow=38
CMAR PKPPKP **P'P'df** **18 51 45.0 -0.2**
comp=Z,1.4nm,1.0s,baz=207,slow=1.2,SNR=1.4
comp=Z,100nm,0.9s
**CMAR Chiang Mai Arr 53.96 257** P **P** **18 21 28.3 +0.3**
CMAR 18 22 35.9
**B08A Colville Reser 53.97 55** IAmb IAmb 18 21 30.6
comp=Z,271nm,1.4s
**BJO1 Bjornoya 53.99 347** *e*P **P** **18 21 27.0 -0.5**
BJO1 IVmB_BB 18 21 28.2
comp=Z,598nm,1.3s
BJO1 *e*S **S** **18 29 00.8 0.0**
BJO1 *e*ScS **ScS** **18 31 14.8 +0.8**
BJO1 IVMs_BB IVMs_BB 18 50 07.9
comp=Z,10µm,14.1s
**KBK Karagaybulak 53.99 296** P **P** **18 21 28.0 -0.2**
SNR=44
**FRU1 Bishkek 54.09 296** IAmb IAmb 18 21 31.8
comp=Z,152nm,1.0s
FRU1 PcP **PcP** **18 22 33.2 -0.2**
**AAK Ala-Archa 54.27 296** P **P** **18 21 30.3 +0.1**
SNR=55
**AAK Ala-Archa 54.27 296** P **P** **18 21 29.1 -1.1**
AAK IAmb IAmb 18 21 33.0
comp=Z,112nm,0.9s
AAK PcP **PcP** **18 22 34.5 +0.3**
**AAK Ala-Archa 54.27 296** *i* P **P** **18 21 29.2 -1.0**
SNR=17
**AAK Ala-Archa 54.27 296** ⇓P **P** **18 21 29.2 -1.1**
**AAK Ala-Archa 54.27 296** LR LR 18 46 06.7
comp=Z,22µm,19.1s,baz=42,slow=38
**AAK Ala-Archa 54.27 296** P **P** **18 21 29.1 -1.1**
AAK P **P** **18 21 29.1 -1.1**
AAK P **P** **18 21 29.1 -1.1**
**AAK Ala-Archa 54.27 296** *e*P **P** **18 21 28.8 -1.4**
**AAK Ala-Archa 54.27 296***d i*P **P** **18 21 28.8 -1.4**
AAK pmax pmax
comp=Z,125nm,0.9s
AAK MLR MLR
comp=Z,20µm,17.0s
**J01E Myrtle Point 54.33 63** IAmb IAmb 18 21 34.1
comp=Z,194nm,1.1s
**HOOD Mount Hood Mea 54.41 60** PcP **PcP** **18 22 35.0 +0.4**
**MXC Moxie City 54.46 58** P **P** **18 21 31.1 -0.3**
MXC IAmb IAmb 18 21 34.4
comp=Z,171nm,1.4s
**H04A Detroit Lake 54.47 60** IAmb IAmb 18 21 34.5
comp=Z,277nm,1.4s
**KMSI Cibinong 54.57 219** P **P** **18 21 33.6 +1.2**
**EKS2 Erkin-Say 54.69 297** P **P** **18 21 33.0 -0.3**
SNR=129
**GTK Tadong 54.70 273** *e*P **P** **18 21 34.8 +1.3**
GTK IAmb IAmb 18 21 39.2
comp=Z,149nm,0.6s
**TABU Tabubil 54.70 197** P **P** **18 21 35.5 +2.1**
**KBO Bosley Butte 54.71 64** P **P** **18 21 33.4 +0.1**
**E07A Sunnyside 54.72 57** IAmb IAmb 18 21 36.2
comp=Z,272nm,1.4s
**ARU Arti 54.72 317** P **P** **18 21 31.1 -2.0**
ARU IAmb IAmb 18 21 35.4
comp=Z,115nm,0.8s
**ARU Arti 54.72 317** ⇓P **P** **18 21 31.2 -1.8**
**ARU Arti 54.72 317** LR LR 18 46 57.4
comp=Z,11µm,20.0s,baz=40,slow=38
**ARU Arti 54.72 317***d i*P **P** **18 21 31.2 -1.8**
ARU 18 22 31.5
ARU 18 23 33.0
ARU S **S** **18 29 08.8 -2.4**
ARU 18 31 17.6
ARU SS **SS** **18 32 55.8 +2.1**
ARU pmax pmax
comp=Z,125nm,0.8s
ARU MLR MLR
comp=Z,15µm,15.0s
**ARU Arti 54.72 317** P **P** **18 21 30.9 -2.1**
comp=Z,159nm,0.9s,comp=Z,2µm
**FAKI Fak Fak 54.73 208** P **P** **18 21 34.1 +0.5**
**FAKI Fak Fak 54.73 208** P **P** **18 21 33.1 -0.5**
FAKI IAmb IAmb 18 21 35.6
comp=Z,123nm,1.1s
**FAKI Fak Fak 54.73 208** ⇓P **P** **18 21 34.2 +0.6**
**FAKI Fak Fak 54.73 208** P **P** **18 21 34.7 +1.1**
comp=Z,110nm,1.2s,comp=Z,2µmcomp=Z,4µm
**DBO Dodson Butte 54.77 63** IAmb IAmb 18 21 37.5
comp=Z,216nm,1.3s
**C09A Chrisman Ranch 54.88 55** IAmb IAmb 18 21 36.9
comp=Z,187nm,1.2s
**GTOI Gorontalo 54.93 220** P **P** **18 21 36.5 +1.5**
**D08A Wollman Farm, 54.95 56** IAmb IAmb 18 21 37.4
comp=Z,210nm,1.5s
**HAWA Hanford 54.99 57** IAmb IAmb 18 21 38.1
comp=Z,163nm,1.2s
**HAWA Hanford 54.99 57** ⇓P **P** **18 21 35.5 +0.3**
**G06A Carlson Farm, 55.04 59** IAmb IAmb 18 21 37.9
comp=Z,349nm,2.0s
**AML Almayashu 55.05 296** P **P** **18 21 35.7 -0.4**
SNR=45
**F07A Phinny Hill Vi 55.06 58** P **P** **18 21 34.9 -0.8**
F07A IAmb IAmb 18 21 38.8
comp=Z,110nm,1.0s
**DAG Danmarks Havn 55.13 358** P **P** **18 21 31.4 -4.4**
**DAG Danmarks Havn 55.13 358**⇑ P **P** **18 21 33.7 -2.1**
**DAG Danmarks Havn 55.13 358** P **P** **18 21 33.6 -2.2**
**DAG Danmarks Havn 55.13 358**⇓ *i*P **P** **18 21 33.5 -2.3**
DAG IAmb IAmb 18 21 38.3
comp=Z,17nm,0.7s
**KSXB Camp Six Broad 55.15 64** IAmb IAmb 18 21 40.3
comp=Z,242nm,1.3s
**L02F Cave Junction 55.16 64** IAmb IAmb 18 21 40.1
comp=Z,157nm,1.1s
**I05D Terrebonne, OR 55.16 60** IAmb IAmb 18 21 39.9
comp=Z,293nm,1.4s
**E08A Dider Farm, El 55.20 57** P **P** **18 21 36.1 -0.6**
E08A PcP **PcP** **18 22 38.2 +0.8**
**KSH Kashi 55.23 292** P **P** **18 21 40.3 +3.2**
KSH sP pP 18 21 46.7 +0.9
KSH S **S** **18 29 25.3 +6.5**
KSH ScS **ScS** **18 31 23.4 -0.9**
KSH pmax pmax
comp=Z,98nm,1.0s
KSH pmax pmax
comp=Z,2µm,7.4s
KSH LR LR
comp=Z,35µm,16.8s
KSH LR LR
comp=Z,34µm,17.9s
KSH LR LR
comp=Z,44µm,18.5s
**AGT Agartala 55.23 268** *e*P **P** **18 21 36.9 -0.2**
**NEW Newport 55.23 54** IAmb IAmb 18 21 39.7
comp=Z,221nm,1.4s
**NEW Newport 55.23 54** ⇓P **P** **18 21 37.0 0.0**
**NEW Newport 55.23 54** LR LR 18 46 55.4
comp=Z,4µm,19.7s,baz=308,slow=38
**NEW Newport 55.23 54** P **P** **18 21 37.1 +0.1**
baz=306,SNR=42
NEW S **S** **18 29 18.0 -0.5**
baz=306
**NEW Newport 55.23 54** P **P** **18 21 37.0 0.0**
**HUMO Hull Mountain 55.24 63** IAmb IAmb 18 21 40.8
comp=Z,165nm,1.2s
HUMO IAMs_20 IAMs_20 18 41 30.8
comp=Z,9µm,22.0s
**HUMO Hull Mountain 55.24 63** ⇓P **P** **18 21 38.1 +1.1**
**KRMB Red Mountain 55.31 64** IAmb IAmb 18 21 41.5
comp=Z,264nm,1.3s
**KRPM Rodgers 55.46 65** P **P** **18 21 39.5 +0.7**
KRPM IAmb IAmb 18 21 42.6
comp=Z,265nm,1.2s
**EVN Everest 55.47 275** ⇓P **P** **18 21 40.0 +0.4**
**VADS Vadso 55.49 340** *e*P **P** **18 21 36.8 -1.6**
VADS IVmB_BB 18 21 39.4
comp=Z,501nm,1.2s
VADS *e*S **S** **18 29 20.6 -0.5**
VADS *e*ScS **ScS** **18 31 26.1 +1.3**
VADS IVMs_BB IVMs_BB 18 50 12.3
comp=Z,10µm,15.7s
**NAYO Nakonayok 55.49 251** P **P** **18 21 40.8 +1.7**
**TOLI2 Tolitoli 55.49 223** P **P** **18 21 40.0 +0.9**
**KULLO Kullorsuaq 55.52 10** ⇓P **P** **18 21 37.7 -0.8**
**KULLO Kullorsuaq 55.52 10** *i* P **P** **18 21 36.4 -2.1**
KULLO IAmb IAmb 18 21 40.6
comp=Z,322nm,0.8s
**MRSI Marisa 55.54 221** P **P** **18 21 40.2 +0.8**
comp=Z,119nm,1.2s,comp=Z,3µmcomp=Z,5µm
**E09A Wood Farm, Sta 55.70 57** IAmb IAmb 18 21 43.0
comp=Z,181nm,1.2s
**LVZ Lovozero 55.84 337** P **P** **18 21 40.4 -0.6**
**LVZ Lovozero 55.84 337** ⇓P **P** **18 21 39.0 -2.0**
**LVZ Lovozero 55.84 337***d i*P **P** **18 21 39.3 -1.7**
LVZ pmax pmax
comp=Z,64nm,1.3s
**LVZ Lovozero 55.84 337** P **P** **18 21 40.1 -0.9**
comp=Z,75nm,1.0s,comp=Z,2µm
**J05D Fort Rock, OR 55.85 61** P **P** **18 21 41.7 +0.1**
**YBH Yreka Blue Hor 55.91 64** IAmb IAmb 18 21 45.8
comp=Z,240nm,1.2s
YBH IAMs_20 IAMs_20 18 41 17.6
comp=Z,8µm,21.0s
**YBH Yreka Blue Hor 55.91 64** LR LR 18 42 14.0
comp=Z,8µm,21.7s,baz=311,slow=32
**K04D Chiloquin, OR 55.94 62** IAMs_20 IAMs_20 18 40 54.2
comp=Z,9µm,21.0s
**SANI Sanana 56.14 216** P **P** **18 21 43.6 -0.1**
**SANI Sanana 56.14 216** P **P** **18 21 42.0 -1.7**
**SANI Sanana 56.14 216** ⇓P **P** **18 21 43.6 -0.1**
**SANI Sanana 56.14 216** P **P** **18 21 43.9 +0.2**
comp=Z,128nm,0.8s,comp=Z,2µmcomp=Z,5µm
**KMRM Mail Ridge 56.22 66** IAmb IAmb 18 21 48.2
comp=Z,198nm,1.2s
**MSAI Masohi 56.24 212** P **P** **18 21 45.5 +1.1**
comp=Z,118nm,1.2s,comp=Z,1µm
**HAMF Hammerfest 56.29 342** *e*P **P** **18 21 41.7 -2.4**
HAMF IVmB_BB 18 21 45.6
comp=Z,464nm,2.1s
HAMF *e*S **S** **18 29 32.0 +0.1**
HAMF *e*ScS **ScS** **18 31 30.3 -0.4**
HAMF IVMs_BB IVMs_BB 18 51 21.3
comp=Z,8µm,20.2s
**KEV Kevo 56.29 341** P **P** **18 21 42.0 -2.2**
KEV PcP **PcP** **18 22 41.9 +0.6**
**KEV Kevo 56.29 341**⇑ P **P** **18 21 42.4 -1.7**
**KEV Kevo 56.29 341** P **P** **18 21 42.0 -2.2**
KEV 18 22 41.9
KEV MLR MLR
comp=Z,26µm,20.0s
**KKAR Karatay Array 56.35 299** P **P** **18 21 44.4 -0.7**
KKAR PcP **PcP** **18 22 41.2 -0.8**
**KKAR Karatay Array 56.35 299** IAmb IAmb 18 21 47.5
comp=Z,60nm,0.9s
**KKAR Karatay Array 56.35 299** ⇓P **P** **18 21 43.9 -1.2**
**KKAR Karatay Array 56.35 299** P **P** **18 21 44.4 -0.7**
**I07A Izee 56.38 60** IAmb IAmb 18 21 48.7
comp=Z,216nm,1.4s
I07A IAMs_20 IAMs_20 18 41 28.4
comp=Z,9µm,22.0s
**APA Apatity 56.41 337**⇓ *i*P **P** **18 21 44.3 -0.7**
APA *i* 18 22 43.5
APA *i* 18 23 47.0
APA *i* PPP PPP 18 25 12.0
APA *i* S **S** **18 29 30.0 -3.4**
APA *i* PS **PnS** **18 29 56.0 +10**
APA pmax pmax
comp=Z,30nm,0.7s
**F10A Beach Ranch, E 56.53 57** IAmb IAmb 18 21 49.5
comp=Z,235nm,1.8s
F10A IAMs_20 IAMs_20 18 41 55.1
comp=Z,7µm,22.0s
**F10A Beach Ranch, E 56.53 57**⇑ P **P** **18 21 46.7 +0.4**
**LUWI Luwuk 56.54 220** P **P** **18 21 45.4 -1.1**
**LUWI Luwuk 56.54 220** IAmb IAmb 18 22 16.2
comp=Z,163nm,0.9s
**LUWI Luwuk 56.54 220** P **P** **18 21 44.1 -2.5**
**LUWI Luwuk 56.54 220** P **P** **18 21 45.7 -0.8**
comp=Z,183nm,1.2s,comp=Z,2µmcomp=Z,6µm
**KCPM Cahto Peak 56.62 66** IAmb IAmb 18 21 50.7
comp=Z,258nm,1.3s
**BRLS Borolday 56.79 299**⇑ *i*P **P** **18 21 49.6 +1.4**
baz=299
**BRLS Borolday 56.79 299***c i*P **P** **18 21 49.5 +1.4**
**ARA0 ARCESS Array S 56.80 341** *e*P **P** **18 21 47.2 -0.6**
ARA0 *e*S **S** **18 29 38.0 -0.6**
ARA0 *e*ScS **ScS** **18 31 33.3 -1.1**
**ARCES ARCESS Array B 56.80 341** P **P** **18 21 46.0 -1.7**
ARCES PcP **PcP** **18 22 42.6 -0.6**
**ARCES ARCESS Array B 56.80 341** P **P** **18 21 46.1 -1.6**
comp=Z,18nm,0.8s,baz=34,slow=8.8,SNR=31
ARCES PcP **PcP** **18 22 43.1 -0.1**
comp=Z,64nm,1.0s,baz=35,slow=4.4,SNR=7.5
ARCES LR LR 18 51 31.0
comp=Z,26µm,18.4s,baz=36,slow=42
comp=Z,18nm,0.8s
**O02D Mt. Diablo Mer 56.80 65** P **P** **18 21 48.7 +0.3**
O02D IAmb IAmb 18 21 52.2
comp=Z,273nm,1.4s
O02D IAMs_20 IAMs_20 18 40 47.5
comp=Z,8µm,22.0s
**SRDT SRDT 56.87 253** P **P** **18 21 50.5 +1.6**
**BNDI Bandanaira 57.00 210** P **P** **18 21 50.8 +1.0**
**BNDI Bandanaira 57.00 210** P **P** **18 21 50.8 +1.0**
**BMO Blue Mountains 57.17 58** IAmb IAmb 18 21 54.2
comp=Z,211nm,1.3s
BMO IAMs_20 IAMs_20 18 41 59.0
comp=Z,8µm,22.0s
**BMO Blue Mountains 57.17 58** ⇓P **P** **18 21 51.5 +0.6**
**HATC Hat Creek Radi 57.21 64** P **P** **18 21 51.5 +0.3**
HATC IAmb IAmb 18 21 54.7
comp=Z,282nm,1.2s
**UPNV Upernavik 57.28 11**⇓ *i*P **P** **18 21 49.6 -1.6**
UPNV IAmb IAmb 18 21 53.0
comp=Z,138nm,0.8s
**KIRV Kirov 57.29 323** LR LR 18 49 03.5
comp=Z,9µm,19.8s,baz=31,slow=39
**KIRV Kirov 57.29 323***d* P **P** **18 21 49.3 -2.1**
**HOPS Hopland Field 57.36 66** IAmb IAmb 18 21 55.4
comp=Z,234nm,1.4s
HOPS IAMs_20 IAMs_20 18 40 52.3
comp=Z,9µm,22.0s
**CHM Chimkent 57.36 299** *e*P **P** **18 21 51.9 -0.3**
baz=299
CHM LR LR 18 47 18.3
comp=Z,9µm,13.5s,baz=299
**CHM Chimkent 57.36 299** *e*P **P** **18 21 51.9 -0.3**
CHM MLR MLR
comp=Z,9µm,14.0s
**J08A Circle Bar Ran 57.41 60** IAmb IAmb 18 21 56.3
comp=Z,279nm,1.4s
**HNLY HANLEY 57.51 284** *e*P **P** **18 21 54.5 +0.6**
**ADZR Andozero 57.63 332** *e*P **P** **18 21 52.4 -1.3**
ADZR 18 23 59.3
ADZR *e*S **S** **18 29 51.6 +2.0**
ADZR *e* 18 31 37.7
ADZR pmax pmax
comp=Z,213nm,1.5s
**DBG Daneborg 57.64 358** ⇓P **P** **18 21 51.9 -1.8**
**DBG Daneborg 57.64 358**⇓ *i*P **P** **18 21 52.6 -1.0**
DBG IAmb IAmb 18 21 57.8

comp=Z,38nm,1.2s
**GDXM Geysers 57.64 66** IAmb IAmb 18 21 57.9
comp=Z,155nm,1.3s
**HNR Honiara 57.65 174** IAMs_20 IAMs_20 18 42 45.6
comp=Z,13µm,21.0s
**HNR Honiara 57.65 174** LR LR 18 42 57.8
comp=Z,155µm,21.9s,baz=340,slow=32
**KTK1 Kautokeino 57.70 341** *e*P **P** **18 21 52.6 -1.5**
KTK1 IVmB_BB 18 21 55.3
comp=Z,950nm,2.5s
KTK1 *e*S **S** **18 29 50.1 -0.4**
KTK1 IVMs_BB IVMs_BB 18 49 40.2
comp=Z,7µm,17.7s
**MSO Missoula 57.82 54** P **P** **18 21 55.1 -0.4**
MSO IAmb IAmb 18 21 59.3
comp=Z,233nm,1.2s
**MSO Missoula 57.82 54** ⇓P **P** **18 21 55.8 +0.3**
**MSO Missoula 57.82 54** P **P** **18 21 55.6 +0.1**
baz=308,SNR=88
MSO S **S** **18 29 53.6 +0.7**
baz=308
**VLK Valmikinagar 57.85 276** *e*P **P** **18 21 56.9 +1.1**
VLK IAmb IAmb 18 21 59.7
comp=Z,328nm,1.1s
**PMG Port Moresby 57.87 189** LR LR 18 43 01.3
comp=Z,5µm,21.8s,baz=352,slow=32
**WVOR Wild Horse Val 57.88 61** P **P** **18 21 56.2 +0.2**
WVOR IAmb IAmb 18 21 59.5
comp=Z,260nm,1.4s
WVOR IAMs_20 IAMs_20 18 42 12.4
comp=Z,7µm,22.0s
**WVOR Wild Horse Val 57.88 61** ⇓P **P** **18 21 56.7 +0.7**
**WVOR Wild Horse Val 57.88 61** P **P** **18 21 56.2 +0.2**
WVOR pmax pmax
comp=Z,260nm,1.4s
WVOR MLR MLR
comp=Z,7µm,22.0s
**MCCM Marconi Confer 58.00 67** IAmb IAmb 18 21 59.4
comp=Z,160nm,1.2s
**BTK Batken 58.04 296** IAmb IAmb 18 22 03.5
comp=Z,302nm,1.4s
**BTK Batken 58.04 296** P **P** **18 21 56.0 -1.1**
**TRO Tromso 58.06 343** *e*P **P** **18 21 55.0 -1.6**
TRO IVmBBB 18 21 57.2
comp=Z,708nm,2.0s
TRO *e*S **S** **18 29 54.5 -0.6**
TRO IVMs_BB IVMs_BB 18 51 51.5
comp=Z,8µm,19.0s
**SGF Sodankyl 58.22 339** P **P** **18 21 55.1 -2.7**
**ABKAR Akbulak array 58.40 310** P **P** **18 21 57.6 -1.7**
**ABKAR Akbulak array 58.40 310** IAmb IAmb 18 22 05.2
comp=Z,65nm,0.8s
**ABKAR Akbulak array 58.40 310** ⇓P **P** **18 21 57.4 -1.9**
**AKTO Aktyubinsk 58.63 312** LR LR 18 49 34.8
comp=Z,13µm,18.6s,baz=40,slow=38
**AFDM Forest Hills D 58.67 65** P **P** **18 22 01.2 -0.2**
**FFC Flin Flon 58.74 41** P **P** **18 22 01.7 +0.1**
FFC IAmb IAmb 18 22 05.0
comp=Z,199nm,1.1s
**FFC Flin Flon 58.74 41** P **P** **18 22 01.7 +0.1**
FFC pmax pmax
comp=Z,199nm,1.1s
FFC MLR MLR
comp=Z,5µm,20.0s
**KLP Kalpa 58.78 284** *e*P **P** **18 22 02.4 -0.2**
KLP IAmb IAmb 18 22 08.1
comp=Z,85nm,0.8s
**PTH Pithoragarh 58.79 281** *e*P **P** **18 22 01.5 -1.1**
PTH IAmb IAmb 18 22 10.0
comp=Z,144nm,1.1s
**NUUG Nuugaatsiaq 58.79 10** ⇓*i*P **P** **18 21 59.9 -1.8**
NUUG IAmb IAmb 18 22 03.1
comp=Z,53nm,1.0s
**MSF Maaselka 58.80 337** P **P** **18 22 00.1 -1.8**
**LGTI Lohaghat 58.83 280** *e*P **P** **18 22 02.8 +0.2**
LGTI IAmb IAmb 18 22 07.2
comp=Z,201nm,1.0s
**BOK Bokaro 58.87 272** *e*P **P** **18 22 03.7 +0.7**
BOK IAmb IAmb 18 22 06.9
comp=Z,183nm,0.8s
**MFID Camas Ranch 58.89 58** IAmb IAmb 18 22 06.4
comp=Z,165nm,1.4s
**SUMG Summit 59.05 5** IAMs_20 IAMs_20 18 50 21.1
comp=Z,12µm,20.0s
**SUMG Summit 59.05 5** P **P** **18 22 01.4 -2.6**
**SUMG Summit 59.05 5** ⇓P **P** **18 22 03.3 -0.7**
**SUMG Summit 59.05 5** P **P** **18 22 03.4 -0.6**
**SUMG Summit 59.05 5** ⇓*i*P **P** **18 22 04.0 0.0**
SUMG IAmb IAmb 18 22 07.0
comp=Z,402nm,0.8s
**PAHR Pah Rah Range 59.15 64** P **P** **18 22 04.6 -0.2**
PAHR IAmb IAmb 18 22 07.9
comp=Z,195nm,1.3s
**EGMT Eagleton 59.29 51** IAMs_20 IAMs_20 18 50 08.4
comp=Z,9µm,19.0s
**EGMT Eagleton 59.29 51** ⇓P **P** **18 22 05.8 +0.1**
**EGMT Eagleton 59.29 51** P **P** **18 22 05.9 +0.1**
baz=310,SNR=88
EGMT S **S** **18 30 13.0 +1.0**
baz=310
**DHRM DHARAMSHALA 59.57 286** *e*P **P** **18 22 07.4 -0.6**
DHRM IAmb IAmb 18 22 13.5
comp=Z,374nm,0.8s
**HLID Hailey 59.60 57** P **P** **18 22 07.9 -0.1**
HLID IAmb IAmb 18 22 11.5
comp=Z,214nm,1.5s
**HLID Hailey 59.60 57** ⇓P **P** **18 22 08.8 +0.8**
**HLID Hailey 59.60 57** P **P** **18 22 08.4 +0.5**
baz=310,SNR=119
HLID S **S** **18 30 18.2 +2.0**
baz=310
**CMB Columbia Colle 59.60 66** P **P** **18 22 08.0 +0.1**
CMB IAmb IAmb 18 22 11.0
comp=Z,185nm,1.4s
CMB IAMs_20 IAMs_20 18 42 04.6
comp=Z,7µm,22.0s
**CMB Columbia Colle 59.60 66** P **P** **18 22 08.0 +0.1**
CMB pmax pmax
comp=Z,185nm,1.4s
CMB MLR MLR
comp=Z,7µm,22.0s
**DDI Dehra Dun 59.69 283** *e*P **P** **18 22 08.7 0.0**
DDI IAmb IAmb 18 22 11.3
comp=Z,580nm,1.2s
**UMMG Ummannaq 59.72 10** ⇓*i*P **P** **18 22 06.4 -1.7**
UMMG IAmb IAmb 18 22 10.3
comp=Z,94nm,1.1s
**SMLA Simla 59.74 284** *e*P **P** **18 22 08.1 -0.8**
**SAO San Andreas Ge 59.76 67** ⇑P **P** **18 22 09.7 +0.7**
**THN Thein Dam 59.83 286** *e*P **P** **18 22 09.0 -0.5**
THN IAmb IAmb 18 22 13.5
comp=Z,160nm,0.8s
**BOZ Bozeman (W) 59.84 54** IAMs_20 IAMs_20 18 52 46.4
comp=Z,6µm,18.0s
**BOZ Bozeman (W) 59.84 54** ⇓P **P** **18 22 10.4 +0.8**
**BOZ Bozeman (W) 59.84 54** P **P** **18 22 10.4 +0.8**
baz=310,SNR=325
BOZ S **S** **18 30 20.4 +1.1**
baz=310
**BOZ Bozeman (W) 59.84 54** ⇓P **P** **18 22 10.4 +0.8**
**WAKR Walker 59.88 65** IAmb IAmb 18 22 13.4
comp=Z,163nm,1.2s
**CHGR Chuyangaron 59.92 296** P **P** **18 22 09.3 -0.8**
**BMN Battle Mountai 59.97 62** P **P** **18 22 10.5 0.0**
BMN IAmb IAmb 18 22 14.0
comp=Z,185nm,1.2s
BMN IAMs_20 IAMs_20 18 43 37.7
comp=Z,7µm,21.0s
**BMN Battle Mountai 59.97 62** P **P** **18 22 10.5 0.0**
BMN pmax pmax
comp=Z,185nm,1.2s
**SIMJ Simiganj 60.01 296** P **P** **18 22 08.2 -2.6**
SIMJ IAmb IAmb 18 22 16.9
comp=Z,159nm,0.8s
**BHK Bhakra 60.04 285** *e*P **P** **18 22 10.9 0.0**
BHK IAmb IAmb 18 22 15.4
comp=Z,360nm,0.8s
**MTKI Muara Teweh, K 60.09 228** P **P** **18 22 13.0 +1.6**
comp=Z,128nm,0.7s,comp=Z,2µmcomp=Z,6µm
**BBGB Big Mountain B 60.13 67** IAmb IAmb 18 22 14.9
comp=Z,205nm,1.1s
**STEI Steigen 60.22 344** *e*P **P** **18 22 11.1 -0.5**
STEI IVmBBB 18 22 12.2
comp=Z,998nm,2.5s
STEI *e*S **S** **18 30 24.7 +1.7**
STEI *e*SS **SS** **18 34 20.6 +1.2**
STEI IVMs_BB IVMs_BB 18 53 47.2
comp=Z,8µm,18.8s
**KVN Kaiserville 60.33 63** IAmb IAmb 18 22 16.3
comp=Z,193nm,1.3s
**RYN Ryan 60.35 64** P **P** **18 22 13.4 +0.3**
RYN IAmb IAmb 18 22 16.3
comp=Z,128nm,1.2s
**LOF Lofoten 60.35 344** *e*P **P** **18 22 11.2 -1.3**
LOF IVmBBB 18 22 12.0
comp=Z,781nm,1.6s
LOF *e*S **S** **18 30 24.3 -0.4**
LOF *e*SS **SS** **18 34 24.1 +2.6**
LOF IVMs_BB IVMs_BB 18 53 31.3
comp=Z,7µm,17.1s
**KSM Kuching 60.42 234** P **P** **18 22 15.7 +2.1**
**KSM Kuching 60.42 234** IAmb IAmb 18 22 36.6
comp=Z,131nm,1.2s
**KSM Kuching 60.42 234** ⇓P **P** **18 22 15.9 +2.3**
**JMIC Jan Mayen 60.42 354** *e*P **P** **18 22 12.7 -0.3**
JMI *e*S **S** **18 30 27.5 +1.9**
**JMIC Jan Mayen 60.42 354** LR LR 18 46 34.9
comp=Z,7µm,21.6s,baz=12,slow=34
**SURA Surathani 60.48 249** P **P** **18 22 15.8 +1.7**
**JOF Joensuu 60.49 334** *e*P **P** **18 22 13.3 -0.3**
**JMI Jan Mayen 60.50 354** *e*P **P** **18 22 12.7 -0.8**
JMI *e*S **S** **18 30 27.4 +0.8**
JMI *e*ScS **ScS** **18 32 03.7 +2.2**
**PMPB Monarch Peak 60.51 68** IAmb IAmb 18 22 22.6
comp=Z,155nm,1.4s
**ALBI Allahabad 60.56 276** *e*P **P** **18 22 14.5 0.0**
ALBI IAmb IAmb 18 22 17.2
comp=Z,386nm,1.3s
**YHL Hebgen Lake 60.56 55** IAMs_20 IAMs_20 18 53 19.5
comp=Z,10µm,18.0s
**NVAR Mina Array Bea 60.61 64** P **P** **18 22 15.0 0.0**
**NVAR Mina Array Bea 60.61 64** P **P** **18 22 15.6 +0.6**
comp=Z,26nm,0.8s,baz=291,slow=6.8,SNR=77
NVAR LR LR 18 44 33.1
comp=Z,5µm,22.0s,baz=305,slow=32
NVAR PKPPKP **P'P'df** **18 51 34.5 -5.2**
comp=Z,1.2nm,0.9s,baz=132,slow=3.8,SNR=3.6
NVAR P4KPbc 18 59 17.7
comp=Z,0.3nm,0.4s,baz=298,slow=3.2,SNR=3.7
comp=Z,26nm,0.8s
**NIL Nilore 60.61 289** P **P** **18 22 13.8 -1.1**
**NIL Nilore 60.61 289** P **P** **18 22 14.6 -0.2**
NIL P **P** **18 22 14.6 -0.2**
**NIL Nilore 60.61 289** P **P** **18 22 13.8 -1.1**
NIL pmax pmax
comp=Z,262nm,0.9s
**BBSI Bau Bau 60.63 218** P **P** **18 22 16.0 +0.9**
comp=Z,136nm,1.4s,comp=Z,3µmcomp=Z,5µm
**MDPB Devils Postpil 60.65 65** IAmb IAmb 18 22 18.6
comp=Z,118nm,1.3s
**FAUS Fauske 60.69 343** *e*P **P** **18 22 13.9 -0.9**
FAUS IVmBBB 18 22 15.6
comp=Z,778nm,2.5s
FAUS *e*S **S** **18 30 31.2 +2.1**
FAUS IVMs_BB IVMs_BB 18 53 23.6
comp=Z,8µm,18.1s
**NV11 Mina Array Sit 60.69 64** IAmb IAmb 18 22 18.8
comp=Z,130nm,1.4s
**BNSI Bone 60.70 221** P **P** **18 22 16.9 +1.4**
comp=Z,140nm,1.2s,comp=Z,2µmcomp=Z,5µm
**OMMB Old Mammoth Mi 60.71 65** P **P** **18 22 16.3 +0.5**
**MLAC Mammoth, Mammo 60.80 65** P **P** **18 22 17.6 +1.3**
baz=310
MLAC S **S** **18 30 35.1 +3.2**
baz=310
**YMR Madison River 60.80 55** IAMs_20 IAMs_20 18 53 27.7
comp=Z,10µm,18.0s
**YNM Yellowstone No 60.90 54** IAMs_20 IAMs_20 18 53 39.5
comp=Z,9µm,18.0s
**YNR Norris Junctio 60.92 54** IAmb IAmb 18 22 22.1
comp=Z,207nm,1.2s
YNR IAMs_20 IAMs_20 18 53 40.1
comp=Z,9µm,18.0s
**ELK Elko 60.93 60** ⇓P **P** **18 22 17.7 +0.6**
**ELK Elko 60.93 60** LR LR 18 45 36.2
comp=Z,5µm,21.5s,baz=320,slow=33
**ELK Elko 60.93 60** P **P** **18 22 17.4 +0.2**
**SRIT Nakonsritamara 60.94 249** P **P** **18 22 19.3 +2.1**
**SRIT Nakonsritamara 60.94 249** IAmb IAmb 18 22 21.9
comp=Z,161nm,1.1s
**STKI Sintang 60.98 232** P **P** **18 22 18.7 +1.3**
comp=Z,92nm,0.9s
**Q09A Carvers 61.02 63** P **P** **18 22 18.2 +0.5**
**UGON Onchagaon 61.12 281** *e*P **P** **18 22 16.4 -2.0**
UGON IAmb IAmb 18 22 19.9
comp=Z,554nm,1.1s
**YPP Pitchstone Pla 61.15 55** IAmb IAmb 18 22 23.3
comp=Z,259nm,1.5s
**LKWY Lake 61.17 54** ⇓P **P** **18 22 21.3 +2.5**
**H17A Grant Village 61.19 55** P **P** **18 22 21.2 +2.3**
baz=311,SNR=56
H17A S **S** **18 30 44.2 +7.5**
baz=311
**YMP Mirror Lake Pl 61.19 54** P **P** **18 22 19.6 +0.6**
YMP IAMs_20 IAMs_20 18 51 15.1
comp=Z,8µm,20.0s
**BISR Bishrakh 61.25 282** *e*P **P** **18 22 19.0 -0.2**
**IMW Indian Meadow 61.31 55** IAmb IAmb 18 22 24.0
comp=Z,185nm,1.3s
**VOG Valley Oaks Go 61.31 67** P **P** **18 22 19.9 +0.3**
baz=311
VOG S **S** **18 30 39.9 +2.0**
baz=311
**NDI New Delhi 61.32 282** *e*P **P** **18 22 19.3 -0.5**
NDI IAmb IAmb 18 22 22.0
comp=Z,169nm,0.6s
**NPLP NPLP New Delhi 61.39 282** *e*P **P** **18 22 19.9 -0.2**
**KAPI Kappang 61.40 221** P **P** **18 22 21.7 +1.5**
**KAPI Kappang 61.40 221** P **P** **18 22 20.4 +0.2**
KAPI IAmb IAmb 18 22 44.2
comp=Z,188nm,1.4s
**KAPI Kappang 61.40 221** LR LR 18 47 50.5
comp=Z,1µm,21.5s,baz=26,slow=35
**KAPI Kappang 61.40 221** P **P** **18 22 22.1 +1.8**
KAPI P **P** **18 22 22.1 +1.8**
KAPI P **P** **18 22 22.1 +1.8**
KAPI S **S** **18 30 42.1 +2.8**
KAPI S **S** **18 30 42.1 +2.8**
KAPI S **S** **18 30 42.1 +2.8**
**KAPI Kappang 61.40 221** *c*i P **P** **18 22 21.0 +0.8**
KAPI pmax pmax
comp=Z,111nm,1.1s
KAPI MLR MLR
comp=Z,3µm,19.0s
**RLMT Red Lodge 61.42 53** P **P** **18 22 21.3 +0.9**
baz=311,SNR=86
RLMT S **S** **18 30 42.6 +3.0**
baz=311
**FXWY Fox Creek 61.44 56** IAmb IAmb 18 22 24.7
comp=Z,187nm,1.4s
**DSP Deep Springs 61.49 65** P **P** **18 22 21.3 +0.6**
DSP IAmb IAmb 18 22 24.3
comp=Z,202nm,1.3s
**SCO Scoresbysund 61.50 359** P **P** **18 22 20.3 0.0**
SCO IAMs_20 IAMs_20 18 52 56.5
comp=Z,8µm,19.0s
**SCO Scoresbysund 61.50 359** ⇓P **P** **18 22 19.8 -0.5**
**SCO Scoresbysund 61.50 359** P **P** **18 22 20.3 0.0**
SCO pmax pmax
comp=Z,64nm,0.9s
SCO MLR MLR
comp=Z,8µm,19.0s
**SCO Scoresbysund 61.50 359** ⇓*i*P **P** **18 22 20.1 -0.2**
SCO IAmb IAmb 18 22 25.1
comp=Z,64nm,1.0s
**TIN Tinemaha, Big 61.54 65** P **P** **18 22 22.2 +0.9**
baz=311
TIN S **S** **18 30 44.6 +3.5**
baz=311
**XMAS Kiritimati 61.54 123** P **P** **18 22 24.2 +2.9**
**XMAS Kiritimati 61.54 123** P **P** **18 22 22.0 +0.7**
XMAS IAmb IAmb 18 22 24.2
comp=Z,167nm,1.1s
**XMAS Kiritimati 61.54 123** IAMs_20 IAMs_20 18 45 31.4
comp=Z,6µm,19.0s
**SMMC Simmler 61.59 68** P **P** **18 22 22.2 +0.7**
baz=311,SNR=20
SMMC S **S** **18 30 44.4 +2.8**
baz=311
**HVU Hansel Valley 61.67 58** IAmb IAmb 18 22 25.7
comp=Z,103nm,1.2s
HVU IAMs_20 IAMs_20 18 53 21.2
comp=Z,7µm,19.0s
**JHSG JHARSUGUGA 61.68 272** *e*P **P** **18 22 22.9 +0.7**
JHSG IAmb IAmb 18 22 31.9
comp=Z,286nm,0.9s
**SNOW Snow King Moun 61.70 56** P **P** **18 22 23.3 +0.9**
**SONA Sohna 61.70 282** *e*P **P** **18 22 21.9 -0.3**
SONA IAmb IAmb 18 22 25.4
comp=Z,242nm,1.0s
**VES Vestal, Richgr 61.81 67** P **P** **18 22 22.8 -0.1**
baz=311,SNR=17
VES S **S** **18 30 45.2 +0.9**
baz=311
**DGMT Dagmar 61.82 48** P **P** **18 22 23.2 +0.3**
**DGMT Dagmar 61.82 48** IAMs_20 IAMs_20 18 49 09.9
comp=Z,10µm,22.0s
**DGMT Dagmar 61.82 48** ⇓P **P** **18 22 23.6 +0.8**
**DGMT Dagmar 61.82 48** P **P** **18 22 23.4 +0.5**
baz=312,SNR=46
DGMT S **S** **18 30 48.2 +4.0**
baz=312
**VALR Valaam 61.83 333** *i* P **P** **18 22 21.6 -1.0**
VALR pmax pmax
comp=Z,128nm,0.8s
**KONS Konsvik 61.87 344** *e*P **P** **18 22 22.3 -0.5**
**MOR8 Moi Rana 61.91 343** *e*P **P** **18 22 22.2 -0.9**
MOR8 IVmBBB 18 22 22.8
comp=Z,957nm,2.0s
MOR8 *e*S **S** **18 30 44.0 -0.7**
MOR8 *e*ScS **SKKSac** **18 32 12.4 +0.1**
MOR8 *e*SS **SS** **18 34 48.6 +2.5**
MOR8 IVMs_BB IVMs_BB 18 55 05.5
comp=Z,6µm,17.9s
**AHID Auburn Hatcher 61.97 56** IAmb IAmb 18 22 27.7
comp=Z,259nm,1.4s
**AHID Auburn Hatcher 61.97 56** ⇓P **P** **18 22 25.1 +0.9**
**PKM Mcpherson Peak 61.98 68** P **P** **18 22 24.9 +0.5**
baz=311,SNR=55
PKM S **S** **18 30 49.0 +2.0**
baz=311
**LAO LASA Array 61.99 50** IAMs_20 IAMs_20 18 49 57.6
comp=Z,9µm,20.0s
**LAO LASA Array 61.99 50** ⇓P **P** **18 22 25.4 +1.3**
**LAO LASA Array 61.99 50** P **P** **18 22 25.2 +1.2**
baz=312,SNR=82
LAO S **S** **18 30 50.7 +4.3**
baz=312
**CWC Cottonwood Cre 62.03 66** P **P** **18 22 24.7 +0.1**
baz=311
CWC S **S** **18 30 49.2 +1.7**
baz=311
**STOK Stokkvaagen 62.04 344** *e*P **P** **18 22 23.5 -0.4**
STOK IVmB_BB 18 22 26.7
comp=Z,1µm,5.1s
STOK *e*PP **PP** **18 24 39.8 -0.2**
STOK *e*S **S** **18 30 45.5 -0.8**
STOK *e*SS **SS** **18 34 48.9 +0.9**
STOK IVMs_BB IVMs_BB 18 54 25.2
comp=Z,8µm,15.6s
**BSSI Bau Bau, Buton 62.09 220** P **P** **18 22 25.9 +1.0**
comp=Z,116nm,0.8s,comp=Z,2µmcomp=Z,5µm
**GRAC Grapevine Rang 62.10 65** IAmb IAmb 18 22 28.4
comp=Z,250nm,1.4s
**GRAC Grapevine Rang 62.10 65** P **P** **18 22 25.5 +0.6**
baz=311,SNR=45
GRAC S **S** **18 30 50.9 +2.8**
baz=311
**KUDL Kundal 62.16 282** *e*P **P** **18 22 24.6 -0.7**
KUDL IAmb IAmb 18 22 28.5
comp=Z,199nm,0.8s
**SPUT South Promonto 62.16 58** IAmb IAmb 18 22 29.0
comp=Z,226nm,1.3s
SPUT IAMs_20 IAMs_20 18 53 47.3
comp=Z,7µm,19.0s
**BCW Bitter Crk WRg 62.20 68** P **P** **18 22 26.1 +0.5**
**BELG Belogornoye 62.21 319** LR LR 18 50 39.8
comp=Z,7µm,21.5s,baz=36,slow=37
**BELG Belogornoye 62.21 319** *d* iP **P** **18 22 23.8 -1.5**
BELG pmax pmax
comp=Z,27nm,0.9s
BELG MLR MLR
comp=Z,3µm,15.0s
**Q12A Willow Creek R 62.27 62** IAmb IAmb 18 22 29.5
comp=Z,218nm,1.3s
**R11B Troy Canyon, C 62.28 63** IAmb IAmb 18 22 29.3
comp=Z,140nm,1.2s
R11B IAMs_20 IAMs_20 18 46 11.2
comp=Z,6µm,21.0s
**R11B Troy Canyon, C 62.28 63** P **P** **18 22 27.0 +0.7**
baz=311,SNR=160
R11B S **S** **18 30 51.3 +0.8**
baz=311
**ISA Isabella, Lake 62.30 67** P **P** **18 22 25.6 -0.7**
baz=311,SNR=22
ISA S **S** **18 30 50.7 0.0**
baz=311
**SBC Santa Barbara 62.34 68** P **P** **18 22 26.0 -0.5**
baz=312
SBC S **S** **18 30 52.0 +1.0**
baz=312
**ICESG Greenland Ices 62.42 6** ⇓P **P** **18 22 25.9 -1.0**
**ICESG Greenland Ices 62.42 6** ⇓*i*P **P** **18 22 27.0 +0.1**
ICESG IAmb IAmb 18 22 29.8
comp=Z,374nm,0.8s
**ARVC Arvin 62.44 67** P **P** **18 22 26.2 -0.9**
baz=312
ARVC S **S** **18 30 53.9 +1.7**
baz=312
**HWUT Hardware Ranch 62.47 58** ⇓P **P** **18 22 28.3 +0.9**
**BLSP Bilaspur 62.52 273** *e*P **P** **18 22 27.1 -0.8**
BLSP IAmb IAmb 18 22 30.6
comp=Z,338nm,1.1s
**SPR3 Spring Creek 3 62.59 61** IAmb IAmb 18 22 32.4
comp=Z,259nm,1.5s
**JHNI Jhansi 62.62 278** *e*P **P** **18 22 27.6 -0.9**
JHNI IAmb IAmb 18 22 32.0
comp=Z,139nm,1.0s
**MPMC Manual Prospec 62.64 66** P **P** **18 22 28.8 +0.1**
baz=312,SNR=67
MPMC S **S** **18 30 59.0 +3.8**
baz=312
**KBL Kabul 62.66 292** P **P** **18 22 26.7 -2.2**
KBL IAmb IAmb 18 22 35.5
comp=Z,76nm,0.8s
**KBL Kabul 62.66 292** P **P** **18 22 27.7 -1.2**
SNR=43
KBL P **P** **18 22 27.7 -1.2**
SNR=43
KBL P **P** **18 22 27.7 -1.2**
SNR=43
KBL S **S** **18 30 50.1 -5.4**
KBL S **S** **18 30 50.1 -5.4**
KBL S **S** **18 30 50.1 -5.4**
**KBL Kabul 62.66 292** P **P** **18 22 26.7 -2.2**
KBL pmax pmax
comp=Z,76nm,0.8s
**SCZ2 Santa Cruz Isl 62.68 69** P **P** **18 22 29.2 +0.4**
baz=312,SNR=7.0
SCZ2 S **S** **18 30 58.1 +2.7**
baz=312
**DUG Dugway, Tooele 62.69 59** IAmb IAmb 18 22 32.4
comp=Z,236nm,1.4s
DUG IAMs_20 IAMs_20 18 45 07.4
comp=Z,7µm,22.0s
**DUG Dugway, Tooele 62.69 59** ⇓P **P** **18 22 29.7 +0.8**
**DUG Dugway, Tooele 62.69 59** P **P** **18 22 29.5 +0.6**
baz=312,SNR=92
DUG S **S** **18 30 59.0 +3.4**
baz=312
**DUG Dugway, Tooele 62.69 59** P **P** **18 22 28.9 0.0**
**VAF Ylistaro 62.75 338** *e*P **P** **18 22 29.1 +0.3**
**FURC Furnace Creek, 62.75 65** P **P** **18 22 29.6 +0.4**
baz=312,SNR=37
FURC S **S** **18 30 57.5 +1.4**
baz=312
**TPNV Topopah Spring 62.80 64** P **P** **18 22 29.9 +0.2**
baz=312,SNR=88
TPNV S **S** **18 31 00.6 +3.5**
baz=312
**BW06 Boulder Array 62.82 55** ⇓P **P** **18 22 30.5 +0.6**
**BW06 Boulder Array 62.82 55** P **P** **18 22 30.0 +0.2**
baz=312,SNR=90
BW06 S **S** **18 30 59.0 +1.7**
baz=312
**PD31 Pinedale Array 62.82 55** IAmb IAmb 18 22 33.9
comp=Z,188nm,1.1s
**PDAR Pinedale Array 62.82 55** P **P** **18 22 30.1 +0.3**

PDAR **Pinedale Array** 62.82 55 P P 18 22 30.4 +0.6
comp=Z,89nm,1.0s,baz=318,slow=2.0,SNR=217
PDAR LR LR 18 50 44.9
comp=Z,2µm,19.9s,baz=324,slow=37
PDAR PKPPKP P'P'df 18 51 17.4 -19
comp=Z,1.2nm,0.9s,baz=123,slow=5.5,SNR=7.4
comp=Z,89nm,1.0s
**OSI Osito Audit: C** 62.84 68 P P 18 22 29.8 -0.1
baz=312,SNR=5.8
OSI S S 18 30 59.8 +2.4
baz=312
**COEN Coen** 62.87 193 P P 18 22 30.8 +0.8
**COEN Coen** 62.87 193 P P 18 22 30.1 0.0
comp=Z,61nm,1.7s,SNR=4.7
**COEN Coen** 62.87 193 ⇑P P 18 22 31.2 +1.2
**KULM Kulim** 62.88 245 IAmb IAmb 18 22 45.1
comp=Z,97nm,0.9s
KULM IAMs_20 IAMs_20 18 48 20.1
comp=Z,7µm,22.0s
**KULM Kulim** 62.88 245 ⇓P P 18 22 31.8 +1.6
**KEF Keuruu** 62.90 336 *e*P P 18 22 29.9 +0.2
**LRMC Laurel Mtn Rad** 62.91 66 P P 18 22 30.1 -0.3
baz=312,SNR=16
LRMC S S 18 30 58.2 -0.2
baz=312
**CCAC Calif City Air** 62.92 67 IAmb IAmb 18 23 36.9
comp=Z,109nm,0.7s
**CTU Camp Tracy** 62.97 58 IAmb IAmb 18 22 34.2
comp=Z,195nm,1.4s
CTU IAMs_20 IAMs_20 18 54 31.6
comp=Z,6µm,19.0s
**PBA Port Blair** 62.99 257 *e*P P 18 22 32.4 +1.4
**PBA Port Blair** 62.99 257 P P 18 22 32.4 +1.4
**GWY Greenwater Val** 63.06 65 P P 18 22 31.2 -0.2
GWY IAmb IAmb 18 22 34.3
comp=Z,277nm,1.5s
**EDW2 Edwards Air Fo** 63.11 67 P P 18 22 31.9 +0.2
baz=312,SNR=72
EDW2 S S 18 31 01.5 +0.7
baz=312
**FRB Frobisher Bay** 63.16 20 ⇑P P 18 22 30.8 -0.6
**FRB Frobisher Bay** 63.16 20 LR LR 18 54 42.6
comp=Z,11µm,18.8s,baz=319,slow=41
**FRB Frobisher Bay** 63.16 20 P P 18 22 30.0 -1.4
**FINES FINESS Array B** 63.16 335 P P 18 22 30.3 -1.2
**FINES FINESS Array B** 63.16 335 P P 18 22 30.6 -0.9
comp=Z,113nm,0.8s,baz=31,slow=7.3,SNR=65
FINES LR LR 18 52 39.6
comp=Z,26µm,20.0s,baz=27,slow=39
comp=Z,113nm,0.8s
**PSUT Pine Spring** 63.18 61 IAmb IAmb 18 22 35.5
comp=Z,177nm,1.5s
**JLU Jordanelle** 63.20 58 IAmb IAmb 18 22 36.0
comp=Z,211nm,1.4s
JLU IAMs_20 IAMs_20 18 54 38.7
comp=Z,5µm,19.0s
**PRN Pahroc Range** 63.22 63 IAmb IAmb 18 22 35.9
comp=Z,325nm,1.7s
**PRN Pahroc Range** 63.22 63 ⇓P P 18 22 33.0 +0.5
**SNCC San Nicolas Is** 63.25 69 P P 18 22 32.2 -0.3
baz=312,SNR=7.1
**NLU North Lily Min** 63.27 59 IAmb IAmb 18 22 36.3
comp=Z,119nm,1.2s
NLU IAMs_20 IAMs_20 18 45 48.8
comp=Z,7µm,22.0s
**DECC Green Verdugo** 63.32 68 P P 18 22 33.3 +0.2
baz=312,SNR=5.9
DECC S S 18 31 05.8 +2.5
baz=312
**SFJD Kangerlussuaq** 63.39 11 P P 18 22 32.3 -0.6
SFJD IAmb IAmb 18 22 35.4
comp=Z,86nm,0.7s
**SFJD Kangerlussuaq** 63.39 11 ⇓P P 18 22 32.5 -0.4
**SFJD Kangerlussuaq** 63.39 11 LR LR 18 53 10.3
comp=Z,16µm,19.1s,baz=346,slow=39
**SFJD Kangerlussuaq** 63.39 11 P P 18 22 32.3 -0.6
SFJD pmax pmax
comp=Z,86nm,0.7s
SFJD MLR MLR
comp=Z,17µm,20.0s
**SFJD Kangerlussuaq** 63.39 11 ⇓*i*P P 18 22 31.3 -1.6
SFJD IAmb IAmb 18 22 35.2
comp=Z,87nm,0.7s
**PASC Pasadena Art C** 63.47 68 IAMs_20 IAMs_20 18 43 56.1
comp=Z,8µm,22.0s
**PASC Pasadena Art C** 63.47 68 IAmb IAmb 18 22 36.6
comp=Z,180nm,1.4s
**MPU Maple Canyon** 63.48 59 IAmb IAmb 18 22 37.7
comp=Z,191nm,1.2s
MPU IAMs_20 IAMs_20 18 54 30.4
comp=Z,6µm,19.0s
**SHOC Shoshone, Teco** 63.48 65 P P 18 22 33.8 -0.3
baz=312,SNR=16
SHOC S S 18 31 07.4 +2.0
baz=312
**GSC Goldstone, Bar** 63.56 66 IAmb IAmb 18 22 37.6
comp=Z,181nm,1.6s
**GSC Goldstone, Bar** 63.56 66 P P 18 22 34.7 0.0
baz=312,SNR=30
GSC S S 18 31 09.5 +3.1
baz=312
**MMRI Maumere** 63.62 217 P P 18 22 35.3 +0.2
**MMRI Maumere** 63.62 217 P P 18 22 34.8 -0.3
**MMRI Maumere** 63.62 217 ⇓P P 18 22 35.5 +0.4
**MMRI Maumere** 63.62 217 P P 18 22 35.6 +0.5
comp=Z,239nm,1.5s,comp=Z,3µmcomp=Z,4µm
**FMP Fort Macarthur** 63.70 68 P P 18 22 35.1 -0.4
baz=312
FMP S S 18 31 10.0 +1.9
baz=312
**SOEG Soedalen** 63.72 3 ⇓*i*P P 18 22 34.9 -0.2
SOEG IAmb IAmb 18 22 37.7
comp=Z,214nm,0.8s
**RRX Edison Barstow** 63.73 66 P P 18 22 36.5 +0.8
baz=312
RRX S S 18 31 10.7 +2.3
baz=312
**BFSC Mount Baldy Ra** 63.74 67 P P 18 22 35.5 -0.5
baz=312,SNR=16
BFSC S S 18 31 10.2 +1.3
baz=312
**CIS Catalina Islan** 63.84 68 P P 18 22 36.7 +0.3
baz=312,SNR=6.9
CIS S S 18 31 11.5 +1.7
baz=312
**NSS Namsos** 63.85 343 *e*P P 18 22 34.9 -1.1
NSS IVmBBB 18 22 38.1
comp=Z,900nm,1.7s
NSS *e*S S 18 31 04.7 -4.3
**SOEI Soe** 63.86 214 P P 18 22 37.1 +0.3
**SOEI Soe** 63.86 214 P P 18 22 36.5 -0.3
SOEI IAmb IAmb 18 23 03.7
comp=Z,185nm,1.0s
**SOEI Soe** 63.86 214 P P 18 22 35.2 -1.6
**SOEI Soe** 63.86 214 ⇑P P 18 22 36.9 +0.1
**SOEI Soe** 63.86 214 P P 18 22 37.4 +0.6
comp=Z,174nm,1.1s,comp=Z,2µmcomp=Z,5µm
**MOS Moscow** 63.87 326 *e*P P 18 22 33.4 -2.8
MOS *e* 18 22 43.3
MOS *e* 18 23 11.7
MOS *e*S S 18 31 03.9 -5.5
MOS *e* 18 32 23.3
MOS *e*SSS SSS 18 38 13.0
MOS pmax pmax
comp=Z,66nm,1.0s
MOS smax smax
comp=E,2µm,5.0s
MOS MLR MLR
comp=N,10µm,16.0s
MOS MLR MLR
comp=Z,12µm,16.0s
**KDU Kakadu** 63.93 205 P P 18 22 37.1 +0.1
**KDU Kakadu** 63.93 205 P P 18 22 37.6 +0.5
comp=Z,135nm,1.4s,SNR=16
**KDU Kakadu** 63.93 205 ⇑P P 18 22 37.5 +0.5
**EDFI Ende, Flores** 63.95 217 P P 18 22 36.9 -0.4
**TCRU Three Creeks R** 63.95 61 IAmb IAmb 18 22 49.5
comp=Z,144nm,1.5s
TCRU IAMs_20 IAMs_20 18 45 58.0
comp=Z,9µm,22.0s
**GUNA GUNA** 63.98 278 *e*P P 18 22 37.6 +0.2
GUNA IAmb IAmb 18 22 40.5
comp=Z,117nm,1.0s
**TUQ Turquoise Moun** 64.01 65 P P 18 22 37.7 0.0
baz=312,SNR=21
TUQ S S 18 31 13.7 +1.6
baz=312

**SCI2 San Clemente I** 64.03 69 P P 18 22 38.6 +0.8
baz=312,SNR=7.1
SCI2 S S 18 31 13.2 +0.9
baz=312
**CCUT Cedar City** 64.12 62 IAmb IAmb 18 22 42.0
comp=Z,141nm,1.3s
**DRS Darwin Rock St** 64.14 206 P P 18 22 40.1 +1.7
**HEC Hector,Ludlow** 64.16 66 P P 18 22 38.9 +0.2
baz=312,SNR=26
HEC S S 18 31 15.4 +1.5
baz=312
**BTDF Bukit Timah Da** 64.17 240 P P 18 22 41.0 +2.3
**MSU Marysvale** 64.17 61 P P 18 22 39.2 +0.3
**MSU Marysvale** 64.17 61 P P 18 22 39.2 +0.3
**BBRC Big Bear Solar** 64.18 67 P P 18 22 39.2 +0.3
baz=312
BBRC S S 18 31 15.6 +1.1
baz=312
**TMUT Trail Mountain** 64.21 59 IAmb IAmb 18 22 42.5
comp=Z,126nm,1.2s
**SZCU Shurtz Canyon** 64.26 62 IAmb IAmb 18 22 42.6
comp=Z,148nm,1.4s
**ELS Elsinore Mount** 64.28 68 P P 18 22 38.7 -0.7
ELS IAmb IAmb 18 22 42.1
comp=Z,250nm,1.4s
**DY2G Dye2** 64.40 9 ⇑P P 18 22 39.5 -0.5
**DY2G Dye2** 64.40 9 ⇓*i*P P 18 22 39.2 -0.7
DY2G IAmb IAmb 18 22 42.2
comp=Z,296nm,1.4s
**MURC Murrieta** 64.46 68 P P 18 22 40.3 -0.3
baz=313,SNR=18
MURC S S 18 31 19.7 +2.1
baz=313
**MTN Manton Dam** 64.46 206 P P 18 22 41.7 +1.2
**MTN Manton Dam** 64.46 206 IAmb IAmb 18 22 45.3
comp=Z,240nm,1.4s
**MTN Manton Dam** 64.46 206 P P 18 22 41.2 +0.7
comp=Z,125nm,1.2s,SNR=12
**MTN Manton Dam** 64.46 206 ⇓P P 18 22 40.4 -0.2
**V12A Nelson** 64.46 64 P P 18 22 40.8 +0.2
V12A IAmb IAmb 18 22 43.9
comp=Z,222nm,1.5s
**MTPU Mount Pierson** 64.49 61 IAmb IAmb 18 22 44.9
comp=Z,181nm,1.4s
MTPU IAMs_20 IAMs_20 18 46 14.2
comp=Z,6µm,22.0s
**MDND Maddock** 64.49 46 IAMs_20 IAMs_20 18 54 03.2
comp=Z,10µm,19.0s
**MDND Maddock** 64.49 46 P P 18 22 41.0 +0.5
baz=315,SNR=14
MDND S S 18 31 19.8 +2.4
baz=315
**AJM Ajmer** 64.49 282 *e*P P 18 22 40.7 -0.2
AJM IAmb IAmb 18 22 44.7
comp=Z,188nm,1.0s
**ULM Lac du Bonnet** 64.52 42 IAmb IAmb 18 22 43.3
comp=Z,127nm,1.1s
**ULM Lac du Bonnet** 64.52 42 ⇓P P 18 22 40.7 +0.1
**ULM Lac du Bonnet** 64.52 42 P P 18 22 40.7 +0.1
comp=Z,81nm,0.9s,baz=312,slow=6.8,SNR=49
ULM PKPPKP P'P'df 18 51 27.9 -6.5
comp=Z,2.9nm,0.7s,baz=112,slow=1.8,SNR=3.4
ULM LR LR 18 51 58.6
comp=Z,9µm,20.4s,baz=321,slow=37
comp=Z,81nm,0.9s
**ULM Lac du Bonnet** 64.52 42 *d i*P P 18 22 40.4 -0.2
**P18A Preston Nutter** 64.53 58 IAmb IAmb 18 22 44.8
comp=Z,230nm,1.4s
P18A IAMs_20 IAMs_20 18 55 33.1
comp=Z,7µm,19.0s
**K22A Casper** 64.55 54 P P 18 22 41.4 +0.2
baz=313,SNR=59
K22A S S 18 31 20.9 +2.2
baz=313
**LCMT Little Creek M** 64.56 62 IAmb IAmb 18 22 44.8
comp=Z,206nm,1.3s
**GMRC Granite Mounta** 64.60 66 P P 18 22 41.6 0.0
baz=313,SNR=63
GMRC S S 18 31 20.9 +1.4
baz=313
**MEF Metsahovi** 64.64 335 *e*P P 18 22 40.9 -0.4
**RAF Rauma** 64.68 337 *e*P P 18 22 41.3 -0.2
**SRU San Rafael Swe** 64.72 59 IAMs_20 IAMs_20 18 55 12.2
comp=Z,5µm,19.0s
**OBN Obninsk** 64.73 326 P P 18 22 40.9 -0.9
**OBN Obninsk** 64.73 326 LR LR 18 55 00.6
comp=Z,13µm,18.4s,baz=31,slow=40
**OBN Obninsk** 64.73 326 *e*P P 18 22 41.0 -0.9
**OBN Obninsk** 64.73 326 *d i*P P 18 22 41.0 -0.9
OBN *e**PP **sP** 18 22 53.9 -0.1
OBN *e**SP pP 18 22 59.5 +8.8
OBN *e* 18 23 13.7
OBN *e* 18 25 03.9
OBN *e*PPP PPP 18 26 35.6
OBN *i* S **S** 18 31 17.3 -2.8
OBN *e**SS **sS** 18 31 41.8 +7.2
OBN *e*SS **SS** 18 35 30.8 +0.4
OBN pmax pmax
comp=Z,147nm,1.5s
OBN MLR MLR
comp=Z,17µm,16.0s
**OBN Obninsk** 64.73 326 P P 18 22 40.5 -1.4
comp=Z,82nm,1.4s,comp=Z,2µm
**RWWY Rawlins** 64.83 55 IAmb IAmb 18 22 46.2
comp=Z,247nm,1.3s
**ARBE Arbavere** 64.83 334 *e*P P 18 22 41.1 -1.4
**E28A Huff** 64.85 48 IAMs_20 IAMs_20 18 51 16.0
comp=Z,11µm,22.0s
**RSSD Black Hills** 64.86 51 P P 18 22 43.6 +0.4
**RSSD Black Hills** 64.86 51 IAMs_20 IAMs_20 18 55 22.8
comp=Z,8µm,18.0s
**RSSD Black Hills** 64.86 51 ⇑P P 18 22 43.1 -0.2
**RSSD Black Hills** 64.86 51 P P 18 22 43.7 +0.4
baz=314
RSSD S S 18 31 25.0 +2.4
baz=314
**RSSD Black Hills** 64.86 51 P P 18 22 43.6 +0.4
RSSD pmax pmax
comp=Z,271nm,1.0s
RSSD MLR MLR
comp=Z,8µm,18.0s
**BHPL Bhopal** 64.88 277 *e*P P 18 22 43.5 +0.1
BHPL IAmb IAmb 18 22 46.8
comp=Z,315nm,1.0s
**PFO Pinyon Flats O** 64.90 67 P P 18 22 43.2 -0.4
PFO IAmb IAmb 18 22 46.3
comp=Z,273nm,1.9s
**PFO Pinyon Flats O** 64.90 67 LR LR 18 45 39.0
comp=Z,6µm,21.7s,baz=302,slow=31
**PFO Pinyon Flats O** 64.90 67 P P 18 22 43.5 -0.1
baz=313,SNR=12
**PFO Pinyon Flats O** 64.90 67 *de*P P 18 22 43.4 -0.1
PFO pmax pmax
comp=Z,208nm,1.8s
**TPFO Pinon Flats** 64.91 67 P P 18 22 43.4 -0.3
baz=313,SNR=15
TPFO S S 18 31 24.8 +1.5
baz=313
**BELC Belle Mtn. Jos** 64.92 67 P P 18 22 43.3 -0.4
baz=313,SNR=31
BELC S S 18 31 23.6 +0.1
baz=313
**109C Camp Elliot, M** 64.99 68 IAmb IAmb 18 22 46.7
comp=Z,159nm,1.4s
**109C Camp Elliot, M** 64.99 68 P P 18 22 43.3 -0.7
baz=313
109C S S 18 31 24.5 +0.4
baz=313
**LHMI Lhok Sumawe** 65.20 249 P P 18 22 48.3 +2.8
**LHMI Lhok Sumawe** 65.20 249 IAMs_20 IAMs_20 18 50 29.9
comp=Z,5µm,20.0s
**LHMI Lhok Sumawe** 65.20 249 ⇑P P 18 22 48.5 +3.0
**NEE2 Needles Airpor** 65.25 65 P P 18 22 44.9 -0.7
baz=313
NEE2 S S 18 31 29.8 +2.7
baz=313
**NGP Nagpur** 65.25 274 *e*P P 18 22 45.3 -0.5
**O20A White River Ci** 65.32 57 IAmb IAmb 18 22 49.3
comp=Z,216nm,1.2s
**O20A White River Ci** 65.32 57 P P 18 22 46.3 0.0
baz=313,SNR=43
O20A S S 18 31 29.6 +1.2
baz=313
**TBLU Trondheim** 65.34 343 *e*P P 18 22 44.4 -1.4
TBLU IVmBBB 18 22 46.7
comp=Z,1µm,2.3s

TBLU *e*PP **PP** 18 25 05.9 -3.1
TBLU *e*S **S** 18 31 22.3 -5.1
TBLU *e*SS **SS** 18 35 40.0 +0.5
TBLU IVMs_BB IVMs_BB 18 56 18.2
comp=Z,8µm,16.2s
**IRM Iron Mountain** 65.34 66 P P 18 22 46.2 -0.1
baz=313
IRM S S 18 31 29.5 +1.1
baz=313
**HMU Henry Mountain** 65.39 60 P P 18 22 47.0 +0.1
**VSU Vasula** 65.41 333 ⇓P P 18 22 45.0 -1.2
**VSU Vasula** 65.41 333 *d i*P P 18 22 46.0 -0.2
VSU pmax pmax
comp=Z,132nm,0.8s
VSU MLR MLR
comp=Z,23µm,19.0s
**MONP2 Monument Peak** 65.41 68 P P 18 22 46.4 -0.6
baz=313,SNR=20
MONP2 S S 18 31 31.9 +2.3
baz=313
**NRDN NARMADA NAGAR** 65.41 277 *e*P P 18 22 51.0 +4.2
NRDN IAmb IAmb 18 22 55.0
comp=Z,368nm,0.8s
**BC3 Big Chuckawall** 65.49 66 P P 18 22 47.0 -0.3
baz=313,SNR=34
BC3 S S 18 31 30.8 +0.4
baz=313
**U15A North Rim** 65.51 62 IAmb IAmb 18 22 51.2
comp=Z,220nm,1.4s
**TKX Tecate** 65.52 68 IAmb IAmb 18 22 50.0
comp=Z,157nm,1.5s
**VRH Novokhopyorsk** 65.62 321 *e*P P 18 22 47.2 -0.5
VRH pmax pmax
comp=Z,120nm,0.8s
**PLAI Plampang** 65.66 221 P S 18 31 47.3 +15
**LPSR Galich'ya Gora** 65.72 323 *e*P P 18 22 45.6 -2.8
LPSR pmax pmax
comp=Z,60nm,0.8s
LPSR MLR MLR
comp=Z,12µm,14.0s
**CMBY CAMPBELL BAY** 65.73 252 *e*P P 18 22 49.1 +0.2
**SWSC Sam W. Stewart** 65.76 67 P P 18 22 48.8 -0.2
baz=313,SNR=14
SWSC S S 18 31 34.5 +1.1
baz=313
**IKP In-Ko-Pah, Jac** 65.77 68 P P 18 22 49.3 +0.2
baz=313,SNR=27
IKP S S 18 31 35.2 +1.5
baz=313
**RMX La Rumorosa** 65.82 68 IAmb IAmb 18 22 52.7
comp=Z,133nm,1.4s
**PDMCI Parker Dam,Lak** 65.85 65 P P 18 22 50.0 +0.5
baz=313,SNR=36
PDMCI S S 18 31 38.1 +3.7
baz=313
**YUH Yuha Desert** 65.89 68 IAmb IAmb 18 22 52.4
comp=Z,170nm,1.6s
**NUUK Nuuk** 65.92 12 ⇓P P 18 22 49.8 +0.3
**NUUK Nuuk** 65.92 12 ⇓*i*P P 18 22 48.2 -1.2
**AGMN Agassiz Nation** 65.93 44 P P 18 22 49.4 -0.4
AGMN IAmb IAmb 18 22 52.6
comp=Z,158nm,1.1s
AGMN IAMs_20 IAMs_20 18 50 23.1
comp=Z,9µm,22.0s
**AGMN Agassiz Nation** 65.93 44 ⇓P P 18 22 49.8 0.0
**AGMN Agassiz Nation** 65.93 44 P P 18 22 49.5 -0.3
baz=317,SNR=63
AGMN S S 18 31 35.5 +0.4
baz=317
**ISOG Isortoq, Green** 65.97 6 ⇓P P 18 22 49.4 -0.4
**ISOG Isortoq, Green** 65.97 6 ⇓*i*P P 18 22 49.3 -0.4
ISOG IAmb IAmb 18 22 52.1
comp=Z,162nm,0.7s
**TWSI Taliwang, Sumb** 65.98 222 P S 18 31 33.1 -3.2
**BLYC Blythe** 65.99 66 IAmb IAmb 18 22 53.6
comp=Z,242nm,1.5s
**ANGG Ammassalik, Gr** 66.00 6 IAmb IAmb 18 22 52.4
comp=Z,131nm,0.7s
ANGG IAMs_20 IAMs_20 18 55 05.7
comp=Z,10µm,19.0s
**ANGG Ammassalik, Gr** 66.00 6 ⇑P P 18 22 49.8 -0.2
**ANGG Ammassalik, Gr** 66.00 6 *i*P P 18 22 48.0 -1.9
**PHWY Pilot Hill** 66.05 54 P P 18 22 50.7 -0.4
PHWY IAmb IAmb 18 22 54.1
comp=Z,144nm,1.5s
**MTSE Matsula** 66.06 335 *e*P P 18 22 50.9 +0.4
**N23A Red Feather La** 66.07 55 P P 18 22 52.2 +1.0
baz=314,SNR=66
N23A S S 18 31 41.0 +3.4
baz=314
**SRBI Singaraja** 66.16 224 P S 18 31 40.1 +1.6
**GLA Glamis** 66.28 67 IAmb IAmb 18 22 55.5
comp=Z,262nm,1.4s
**GLA Glamis** 66.28 67 P P 18 22 52.4 0.0
baz=314,SNR=40
GLA S S 18 31 41.3 +1.4
baz=314
**ESJX Sierra Juarez** 66.31 68 IAmb IAmb 18 22 55.6
comp=Z,158nm,1.5s
**VORR Voronezh** 66.31 322 *e*P P 18 22 50.3 -1.9
VORR pmax pmax
comp=Z,40nm,0.4s
VORR MLR MLR
comp=Z,11µm,16.0s
**MOL Molde** 66.47 344 *e*P P 18 22 53.4 +0.4
**BKNI Bangkinang** 66.59 242 P P 18 22 56.7 +2.2
**BKNI Bangkinang** 66.59 242 P P 18 22 55.1 +0.6
**JASL Jaisalmer** 66.62 285 *e*P P 18 22 55.0 +0.5
JASL IAmb IAmb 18 22 58.8
comp=Z,368nm,1.0s
**DOMB Dombas** 66.67 343 *e*P P 18 22 53.8 -0.6
DOMB IVmB_BB 18 22 55.5
comp=Z,808nm,1.1s
DOMB *e*S S 18 31 46.0 +2.2
DOMB *e*SS **SS** 18 36 10.8 +11
DOMB IVMs_BB IVMs_BB 18 57 36.4
comp=Z,7µm,17.6s
**VSR Storozhevoye** 66.67 322 *e*P P 18 22 51.7 -2.8
VSR pmax pmax
comp=Z,60nm,0.8s
VSR MLR MLR
comp=Z,11µm,17.0s
**WUAZ Wupatki** 66.68 62 IAmb IAmb 18 22 58.6
comp=Z,215nm,1.4s
WUAZ IAMs_20 IAMs_20 18 47 03.6
comp=Z,7µm,22.0s
**WUAZ Wupatki** 66.68 62 ⇓P P 18 22 55.8 +0.8
**WUAZ Wupatki** 66.68 62 P P 18 22 56.1 +1.0
baz=314,SNR=44
WUAZ S S 18 31 50.0 +5.1
baz=314
**DNP Denpasar** 66.68 224 P S 18 31 38.1 -6.7
**SMCO Snowmass** 66.69 57 P P 18 22 55.5 +0.2
SMCO IAmb IAmb 18 22 58.6
comp=Z,165nm,1.4s
**SMCO Snowmass** 66.69 57 ⇑P P 18 22 55.9 +0.5
**Y14A Wickenburg** 66.79 65 IAmb IAmb 18 22 58.8
comp=Z,125nm,1.3s
**VORD Divnogorie** 66.81 322 *e*P P 18 22 53.0 -2.4
VORD pmax pmax
comp=Z,50nm,0.3s
VORD MLR MLR
comp=Z,7µm,14.0s
**MTSU Mount Surprise** 66.82 191 P P 18 22 57.0 +1.3
**VTX Valle De La Tr** 66.83 68 IAmb IAmb 18 22 58.8
comp=Z,160nm,1.5s
**AKL Akola** 66.92 276 *e*P P 18 22 56.6 0.0
AKL IAmb IAmb 18 23 00.4
comp=Z,673nm,1.1s
**NC303 NORSAR Array S** 66.95 342 P P 18 22 55.0 -1.2
**NC405 NORSAR Array S** 66.98 342 IAmb IAmb 18 23 00.5
comp=Z,96nm,0.8s
**ISCO Idaho Springs** 67.01 56 IAmb IAmb 18 23 01.0
comp=Z,206nm,1.2s
ISCO IAMs_20 IAMs_20 18 54 19.3
comp=Z,8µm,20.0s
**ISCO Idaho Springs** 67.01 56 P P 18 22 58.3 +1.0
baz=315,SNR=55
ISCO S S 18 31 54.0 +4.9
baz=315
**ISCO Idaho Springs** 67.01 56 P P 18 22 58.0 +0.7
**NC204 NORSAR Array S** 67.03 342 IAmb IAmb 18 23 00.8
comp=Z,122nm,0.8s
**PMBI Palembang** 67.11 236 P P 18 23 00.4 +2.7
**PMBI Palembang** 67.11 236 IAMs_20 IAMs_20 18 52 56.0
comp=Z,3µm,20.0s

**113A Mohawk Valley, 67.13 66** P **P** **18 22 57.6 0.0**
113A IAmb IAmb 18 23 00.5
comp=Z,147nm,1.4s
**NB201 NORSAR Array S 67.13 342** P **P** **18 22 56.0 -1.3**
NB201 IAmb IAmb 18 23 01.4
comp=Z,95nm,0.8s
**NB2 NORSAR Subarra 67.15 342** P **P** **18 22 56.8 -0.7**
comp=Z,152nm,1.1s,baz=29,slow=6.5
**NB2 NORSAR Subarra 67.15 342** P **P** **18 22 56.8 -0.7**
baz=29,slow=6.5
**NB2 NORSAR Subarra 67.15 342** P **P** **18 22 58.1 +0.6**
**NOA NORSAR Array B 67.15 342** P **P** **18 22 56.8 -0.7**
comp=Z,72nm,0.8s,baz=28,slow=6.5,SNR=15
NOA LR LR 18 57 46.8
comp=Z,12μm,18.5s,baz=25,slow=41
comp=Z,72nm,0.8s
**MVCO Mesa Verde 67.19 59** IAmb IAmb 18 23 01.5
comp=Z,221nm,1.4s
MVCO IAMs_20 IAMs_20 18 48 27.8
comp=Z,6μm,22.0s
**MVCO Mesa Verde 67.19 59** ⇓P **P** **18 22 58.9 +0.6**
**MVCO Mesa Verde 67.19 59** P **P** **18 22 58.6 +0.3**
baz=314,SNR=40
MVCO S **S** **18 31 54.8 +3.6**
baz=314
**SUSD Miller 67.22 48** P **P** **18 22 57.7 -0.4**
baz=316,SNR=9.1
SUSD S **S** **18 31 50.3 -0.6**
baz=316
**BORG Borgarnes 67.25 358** P **P** **18 22 59.1 +1.2**
**BORG Borgarnes 67.25 358** IAMs_20 IAMs_20 18 49 31.4
comp=Z,6μm,22.0s
**BORG Borgarnes 67.25 358** ⇓P **P** **18 22 59.5 +1.6**
**BORG Borgarnes 67.25 358** LR LR 18 54 53.7
comp=Z,5μm,18.8s,baz=355,slow=38
**BORG Borgarnes 67.25 358** P **P** **18 22 59.1 +1.2**
BORG pmax pmax
comp=Z,301nm,0.9s
BORG MLR MLR
comp=Z,6μm,22.0s
**NBO00 NORSAR Array S 67.25 342** P **P** **18 22 57.2 -0.8**
NBO00 IAmb IAmb 18 23 01.5
comp=Z,102nm,1.1s
**NC602 NORSAR Array S 67.36 342** *e*P **P** **18 22 59.1 +0.4**
NC602 IVmB_BB 18 22 59.7
comp=Z,813nm,2.7s
NC602 *e*S **S** **18 31 52.0 0.0**
NC602 IVMs_BB IVMs_BB 18 56 58.6
comp=Z,5μm,16.0s
**NORES NORESS Array B 67.36 342** P **P** **18 23 00.8 +2.1**
**X16A Lo Mia Camp, P 67.39 63** P **P** **18 23 00.3 +0.6**
**NAO01 NORSAR Array S 67.40 342** IAmb IAmb 18 23 02.4
comp=Z,97nm,1.1s
**SLIT Slitere, Latvi 67.42 335** ⇓P **P** **18 22 57.0 -2.1**
**SLIT Slitere, Latvi 67.42 335** *e*P **P** **18 22 58.4 -0.6**
**HFS Hagfors 67.43 340** LR LR 18 57 43.2
comp=Z,19μm,18.3s,baz=24,slow=41
**F33A 5 Mile Ranch, 67.51 46** IAmb IAmb 18 23 02.7
comp=Z,208nm,1.1s
F33A IAMs_20 IAMs_20 18 55 28.2
comp=Z,8μm,19.0s
**SMRI Semarang 67.57 229** P **P** **18 23 03.2 +2.6**
comp=Z,206nm,1.4s
**SFX San Felipe 67.65 68** P **P** **18 23 00.4 -0.6**
SFX IAmb IAmb 18 23 03.7
comp=Z,134nm,1.4s
**S22A 4UR Ranch, Cre 67.77 58** IAmb IAmb 18 23 05.9
comp=Z,205nm,1.4s
**S22A 4UR Ranch, Cre 67.77 58** P **P** **18 23 03.0 +0.9**
baz=315,SNR=112
S22A S **S** **18 32 02.7 +4.5**
baz=315
**IZAR Zarasai 67.80 332** *e*P **P** **18 23 02.0 +0.4**
**FOO Floro 67.82 345** *e*P **P** **18 23 01.7 +0.2**
FOO *e*S **S** **18 31 57.4 0.0**
**KNRA Kununurra 67.85 207** IAmb IAmb 18 23 06.5
comp=Z,142nm,1.1s
**KNRA Kununurra 67.85 207** P **P** **18 23 02.8 +0.6**
comp=Z,123nm,1.3s,SNR=12
**Q24A Divide 67.85 56** IAmb IAmb 18 23 17.8
comp=Z,206nm,1.7s
**Q24A Divide 67.85 56** P **P** **18 23 02.8 +0.2**
baz=315,SNR=18
Q24A S **S** **18 32 00.7 +1.4**
baz=315
**GSI Gunungsitoli 67.89 245** P **P** **18 23 04.0 +1.3**
**GSI Gunungsitoli 67.89 245** IAMs_20 IAMs_20 18 51 29.6
comp=Z,6μm,22.0s
**GSI Gunungsitoli 67.89 245** ⇓P **P** **18 23 03.9 +1.2**
**W18A Petrified Fore 67.92 62** P **P** **18 23 03.5 +0.6**
baz=314,SNR=14
W18A S **S** **18 32 03.0 +3.1**
baz=314
**ISAL Salakas 67.98 332** *e*P **P** **18 23 03.1 +0.4**
**HYA Hoyanger 68.02 344** *e*P **P** **18 23 02.3 -0.5**
HYA IVmB_BB 18 23 05.8
comp=Z,870nm,1.1s
HYA *e*S **S** **18 31 58.2 -1.5**
HYA IVMs_BB IVMs_BB 18 58 16.9
comp=Z,7μm,15.2s
**OGNE Ogallala 68.14 53** IAMs_20 IAMs_20 18 56 54.8
comp=Z,6μm,20.0s
**OGNE Ogallala 68.14 53** ⇓P **P** **18 23 04.8 +0.7**
**OGNE Ogallala 68.14 53** P **P** **18 23 04.5 +0.4**
baz=316,SNR=105
OGNE S **S** **18 32 05.5 +3.3**
baz=316
**PIX Pinacate 68.15 67** P **P** **18 23 04.6 +0.4**
PIX IAmb IAmb 18 23 07.0
comp=Z,228nm,1.5s
**K30B Basset 68.17 50** IAMs_20 IAMs_20 18 53 08.6
comp=Z,10μm,21.0s
**EYMN Ely 68.17 42** P **P** **18 23 03.4 -0.6**
EYMN IAmb IAmb 18 23 06.6
comp=Z,177nm,1.1s
**EYMN Ely 68.17 42** IAMs_20 IAMs_20 18 56 29.9
comp=Z,7μm,20.0s
**EYMN Ely 68.17 42** ⇓P **P** **18 23 03.9 -0.2**
**EYMN Ely 68.17 42** P **P** **18 23 03.6 -0.4**
baz=319,SNR=80
EYMN S **S** **18 32 02.3 +0.2**
baz=319
**X18A Snowflake 68.20 62** IAmb IAmb 18 23 08.2
comp=Z,229nm,1.5s
**HYB Hyderabad 68.22 272** *e*P **P** **18 23 05.1 +0.3**
HYB IVmB_BB 18 23 09.4
comp=Z,2μm,2.7s
HYB *e*sP **sP** **18 23 16.9 0.0**
HYB *e*PP **PP** **18 25 35.4 +0.1**
HYB *e*S **S** **18 32 04.1 +0.7**
HYB *e*ScS **SKKSac** **18 33 02.1 +0.4**
HYB *e*SS **SS** **18 36 28.8 +2.5**
HYB IVMs_BB IVMs_BB 18 55 51.6
comp=Z,3μm,14.2s
**OSL Oslo 68.26 342** *e*P **P** **18 23 03.1 -1.2**
OSL IVmB_BB 18 23 06.3
comp=Z,1μm,1.6s
OSL *e*S **S** **18 31 59.4 -3.3**
**UGM Wanagama 68.27 228** P **P** **18 23 05.8 +0.8**
**214A Organ Pipe Nat 68.27 66** P **P** **18 23 05.0 0.0**
214A IAmb IAmb 18 23 08.2
comp=Z,226nm,1.5s
**214A Organ Pipe Nat 68.27 66** P **P** **18 23 05.4 +0.4**
baz=314,SNR=23
214A S **S** **18 32 06.3 +2.5**
baz=314
**MNK Minsk 68.29 330** *i* P **P** **18 23 05.3 +0.6**
MNK *i* 18 25 34.9
MNK *i* PPP PPP 18 27 14.3
MNK *i* S **S** **18 32 05.6 +2.3**
MNK pmax pmax
comp=Z,94nm,0.9s
MNK pmax pmax
comp=N,59nm,1.0s
MNK pmax pmax
comp=E,14nm,0.9s
MNK MLR MLR
comp=N,7μm,20.0s
MNK MLR MLR
comp=Z,13μm,19.0s
MNK MLR MLR
comp=E,3μm,17.0s
**VSVD Vaisvydziai 68.33 333** *e*P **P** **18 23 04.4 -0.4**
**SUE Sulen 68.37 345** *e*P **P** **18 23 04.9 -0.2**
SUE *e*S **S** **18 32 05.1 +1.1**
**SDCO Great Sand Dun 68.52 57** IAmb IAmb 18 23 10.1
comp=Z,270nm,1.8s
**SDCO Great Sand Dun 68.52 57** ⇓P **P** **18 23 07.4 +0.6**
**SDCO Great Sand Dun 68.52 57** P **P** **18 23 07.2 +0.5**
baz=315,SNR=76
SDCO S **S** **18 32 10.6 +3.5**
baz=315
**CTA Charters Tower 68.53 189** P **P** **18 23 06.8 +0.3**
**CTA Charters Tower 68.53 189** P **P** **18 23 06.7 +0.2**
comp=Z,1.6nm,1.0s,baz=1.2,slow=8.5,SNR=8.7
CTA LR LR 18 48 53.8
comp=Z,256nm,22.0s,baz=0.5,slow=32
**CTAO Charters Tower 68.53 189** P **P** **18 23 06.7 +0.3**
**CTAO Charters Tower 68.53 189** P **P** **18 23 06.1 -0.3**
**CTAO Charters Tower 68.53 189** ⇑P **P** **18 23 06.9 +0.5**
**CTAO Charters Tower 68.53 189** P **P** **18 23 06.1 -0.3**
CTAO pmax pmax
comp=Z,32nm,0.9s
CTAO MLR MLR
comp=Z,4μm,20.0s
**AFI Afiamalu 68.63 145** IAMs_20 IAMs_20 18 47 54.0
comp=Z,7μm,20.0s
**PABE Paberze 68.72 333** *e*P **P** **18 23 05.5 -1.7**
**KONO Kongsberg 68.76 342** P **P** **18 23 07.3 -0.2**
KONO IAmb IAmb 18 23 11.3
comp=Z,121nm,0.9s
**KONO Kongsberg 68.76 342** *e*P **P** **18 23 06.2 -1.3**
KONO IVmB_BB 18 23 07.9
comp=Z,1μm,1.9s
KONO *e*S **S** **18 32 06.9 -1.7**
KONO IVMs_BB IVMs_BB 18 58 31.4
comp=Z,6μm,15.4s
**KONO Kongsberg 68.76 342** ⇓P **P** **18 23 07.3 -0.2**
**KONO Kongsberg 68.76 342** *d* iP **P** **18 23 06.2 -1.3**
KONO pmax pmax
comp=Z,142nm,1.0s
KONO MLR MLR
comp=Z,16μm,17.0s
**ASK Askoy 68.83 344** *e*P **P** **18 23 08.3 +0.4**
ASK *e*S **S** **18 32 09.4 -0.1**
**PBUR Paburge 68.89 334** *e*P **P** **18 23 08.0 -0.4**
**MSVF Nonsavu 68.90 156** P **P** **18 23 11.2 +2.3**
**MSVF Nonsavu 68.90 156** P **P** **18 23 10.4 +1.5**
MSVF IAmb IAmb 18 23 42.5
comp=Z,139nm,1.5s
**MSVF Nonsavu 68.90 156** ⇑P **P** **18 23 11.2 +2.3**
**MSVF Nonsavu 68.90 156** LR LR 18 48 29.1
comp=Z,13μm,20.2s,baz=328,slow=32
**MSVF Nonsavu 68.90 156** P **P** **18 23 10.4 +1.5**
MSVF pmax pmax
comp=Z,139nm,1.5s
MSVF MLR MLR
comp=Z,13μm,21.0s
**ECSD EROS Data Cent 68.90 47** ⇓P **P** **18 23 08.2 -0.5**
**ECSD EROS Data Cent 68.90 47** P **P** **18 23 08.6 -0.1**
baz=318,SNR=135
ECSD S **S** **18 32 11.0 0.0**
baz=318
**BER Bergen 68.90 344** *e*P **P** **18 23 08.9 +0.6**
BER *e*S **S** **18 32 10.7 +0.4**
BER IVMs_BB IVMs_BB 18 58 52.2
comp=Z,7μm,14.6s
**MAK Makhachkala 69.00 311** *e*P **P** **18 23 06.8 -2.5**
MAK *e* 18 25 39.9
MAK *e*PPP PPP 18 27 17.7
MAK *e*S **S** **18 32 09.5 -2.5**
MAK *e*SS **SS** **18 36 33.5 -3.5**
MAK pmax pmax
comp=Z,368nm,1.5s
MAK pmax pmax
comp=Z,2μm,3.3s
MAK smax smax
comp=N,1μm,2.2s
MAK smax smax
comp=E,932nm,1.6s
MAK MLR MLR
comp=N,19μm,16.0s
MAK MLR MLR
comp=Z,31μm,18.0s
MAK MLR MLR
comp=E,31μm,17.0s
**KOUNC Koumac, New Ca 69.05 171** P **P** **18 23 11.2 +1.6**
**KOUNC Koumac, New Ca 69.05 171** ⇑P **P** **18 23 11.2 +1.6**
**ODD1 Odda 69.10 344** *e*P **P** **18 23 07.5 -2.2**
ODD1 IVmB_BB 18 23 11.9
comp=Z,1μm,1.3s
ODD1 *e*SS SS 18 36 41.2 +3.3
ODD1 IVMs_BB IVMs_BB 18 58 54.9
comp=Z,6μm,16.5s
**E38A The Farm, Brul 69.15 43** IAmb IAmb 18 23 12.6
comp=Z,170nm,1.0s
E38A IAMs_20 IAMs_20 18 53 33.1
comp=Z,9μm,22.0s
**KSCO Kaye Shedlock' 69.20 54** IAMs_20 IAMs_20 18 58 34.2
comp=Z,5μm,20.0s
**KSCO Kaye Shedlock' 69.20 54** P **P** **18 23 11.0 +0.1**
baz=316,SNR=11
KSCO S **S** **18 32 16.0 +1.1**
baz=316
**TUC Tucson 69.25 65** P **P** **18 23 11.6 +0.4**
TUC IAmb IAmb 18 23 14.4
comp=Z,128nm,1.4s
**TUC Tucson 69.25 65** ⇓P **P** **18 23 11.4 +0.2**
**TUC Tucson 69.25 65** P **P** **18 23 12.0 +0.9**
baz=315
TUC S **S** **18 32 19.4 +3.8**
baz=315
**TUC Tucson 69.25 65** P **P** **18 23 11.6 +0.4**
TUC pmax pmax
comp=Z,128nm,1.5s
TUC MLR MLR
comp=Z,4μm,21.0s
**IVI Ivigtut 69.26 12** P **P** **18 23 09.8 -0.7**
IVI IAMs_20 IAMs_20 18 59 01.3
comp=Z,8μm,19.0s
**IVI Ivigtut 69.26 12** ⇓P **P** **18 23 10.7 +0.2**
**IVI Ivigtut 69.26 12** *j* P **P** **18 23 10.0 -0.5**
IVI IAmb IAmb 18 23 14.2
comp=Z,121nm,1.1s
**T25A Trinidad 69.56 57** P **P** **18 23 13.3 +0.1**
T25A IAMs_20 IAMs_20 18 55 59.9
comp=Z,5μm,21.0s
**T25A Trinidad 69.56 57** P **P** **18 23 13.6 +0.5**
baz=316,SNR=55
T25A S **S** **18 32 23.7 +4.4**
baz=316
**BLS5 Blasjo 69.59 343** *e*P **P** **18 23 12.2 -0.6**
BLS5 IVmBBB 18 23 14.8
comp=Z,1μm,1.4s
BLS5 *e*S **S** **18 32 22.1 +3.5**
BLS5 IVMs_BB IVMs_BB 18 58 06.5
comp=Z,8μm,17.2s
**GOF Gofitskoye 69.61 315** *d* iP **P** **18 23 11.4 -1.6**
GOF *e*S **S** **18 32 17.0 -2.2**
**SPMN Marine on St. 69.62 44** IAmb IAmb 18 23 15.8
comp=Z,174nm,1.1s
SPMN IAMs_20 IAMs_20 18 52 35.7
comp=Z,8μm,22.0s
**SPMN Marine on St. 69.62 44** P **P** **18 23 12.8 -0.3**
baz=319,SNR=24
SPMN S **S** **18 32 20.4 +1.1**
baz=319
**NRS Narsarsuaq 69.66 10** IAmb IAmb 18 23 31.2
comp=Z,193nm,1.4s
**NRS Narsarsuaq 69.66 10** ⇓P **P** **18 23 12.8 -0.1**
**NRS Narsarsuaq 69.66 10** P **P** **18 23 12.2 -0.8**
**NRS Narsarsuaq 69.66 10** ⇓*j* P **P** **18 23 11.6 -1.4**
NRS IAmb IAmb 18 23 16.2
comp=Z,45nm,1.0s
**BGNE Belgrade 69.83 50** IAMs_20 IAMs_20 18 54 11.2
comp=Z,8μm,21.0s
**BGNE Belgrade 69.83 50** P **P** **18 23 13.9 -0.7**
baz=317,SNR=17
BGNE S **S** **18 32 21.3 -0.7**
baz=317
**QIS Mount Isa 69.92 195** P **P** **18 23 14.9 -0.2**
**ANMO Albuquerque 69.95 60** P **P** **18 23 15.8 +0.2**
ANMO IAMs_20 IAMs_20 18 49 54.7
comp=Z,6μm,22.0s
**ANMO Albuquerque 69.95 60** LR LR 18 50 39.8
comp=Z,5μm,21.7s,baz=56,slow=33
ANMO PKPPKP 18 51 16.1
comp=Z,1.2nm,0.6s,baz=220,slow=11,SNR=5.7
**ANMO Albuquerque 69.95 60** P **P** **18 23 16.4 +0.9**
baz=316
ANMO S **S** **18 32 28.6 +4.6**
baz=316
**ANMO Albuquerque 69.95 60** *d* iP **P** **18 23 16.3 +0.7**
ANMO pmax pmax
comp=Z,49nm,1.3s
**BHUJ Bhuj 69.98 283** *e*P **P** **18 23 16.8 +1.2**
BHUJ IAmb IAmb 18 23 19.7
comp=Z,314nm,0.9s
**KMY Karmoy 70.01 344** *e*P **P** **18 23 13.7 -1.6**
KMY IVmBBB 18 23 20.7
comp=Z,2μm,1.8s
KMY *e*S **S** **18 32 23.1 -0.3**
KMY IVMs_BB IVMs_BB 18 59 24.8
comp=Z,6μm,16.5s
**LRW Lerwick 70.19 348** *e*P **P** **18 23 15.8 -0.4**
LRW IAmb IAmb 18 23 20.9
comp=Z,57nm,0.8s
LRW IAMs_20 IAMs_20 19 00 09.8
comp=Z,7μm,18.4s
**LRW Lerwick 70.19 348** ⇓P **P** **18 23 15.9 -0.4**
**MDRS Chennai 70.21 267** IAmb IAmb 18 23 26.0
comp=Z,73nm,0.7s
**WB0 Warramunga Arr 70.22 201** IAmb IAmb 18 23 18.8
comp=Z,185nm,1.1s
**SUW Suwalki 70.22 332** *e*P **P** **18 23 16.4 -0.2**
SUW *e*S **S** **18 32 28.0 +1.9**
SUW *e*L L 18 53 52.9
**SUW Suwalki 70.22 332** P **P** **18 23 16.0 -0.6**
**SUW Suwalki 70.22 332** *e*P **P** **18 23 17.3 +0.7**
**SUW Suwalki 70.22 332** P **P** **18 23 16.0 -0.6**
SUW pmax pmax
comp=Z,285nm,1.1s
SUW MLR MLR
comp=Z,14μm,19.0s
**I37A Lemond, Waseca 70.25 45** IAMs_20 IAMs_20 18 56 45.5
comp=Z,7μm,19.0s
**ERBR Yeremizino-Bor 70.29 317** *e*P **P** **18 23 13.3 -3.9**
ERBR *e**PP **pP** **18 23 25.9 -0.2**
ERBR *e*S **S** **18 32 26.0 -1.2**
ERBR pmax pmax
comp=Z,23nm,0.6s
**Y22D IRIS PASSCAL I 70.30 61** IAMs_20 IAMs_20 18 49 30.1
comp=Z,11μm,22.0s
**Y22D IRIS PASSCAL I 70.30 61** P **P** **18 23 19.0 +1.3**
baz=316
Y22D S **S** **18 32 32.3 +4.4**
baz=316
**WR0 Warramunga Arr 70.37 200** IAmb IAmb 18 23 22.1
comp=Z,115nm,1.0s
**WRAB Tennant Creek 70.39 201** P **P** **18 23 17.7 -0.3**
WRAB IAmb IAmb 18 23 22.4
comp=Z,228nm,1.2s
**WRAB Tennant Creek 70.39 201** *d* iP **P** **18 23 18.6 +0.6**
WRAB pmax pmax
comp=Z,219nm,1.3s
WRAB MLR MLR
comp=Z,3μm,18.0s
**WB2 Warramunga Arr 70.40 201** IAmb IAmb 18 23 19.9
comp=Z,173nm,1.1s
**WRA Warramunga Arr 70.40 201** P **P** **18 23 17.6 -0.4**
**WRA Warramunga Arr 70.40 201** P **P** **18 23 18.1 +0.1**
comp=Z,88nm,0.9s,baz=19,slow=6.4,SNR=115
WRA PKPPKP 18 51 16.3
comp=Z,3.3nm,1.0s,baz=202,slow=2.2,SNR=8.3
WRA LR LR 18 51 37.0
comp=Z,4μm,21.9s,baz=6.0,slow=34
comp=Z,88nm,0.9s
**WRA Warramunga Arr 70.40 201** P **P** **18 23 17.6 -0.4**
WRA pmax pmax
comp=Z,12nm,1.1s
**SEKA Sheki 70.44 310** P **P** **18 23 20.7 +2.4**
**SNART Snartemo 70.45 343** *e*P **P** **18 23 17.9 0.0**
SNART *e*S **S** **18 32 28.9 +0.3**
**NCK Nalchik 70.52 314** *e*P **P** **18 23 18.2 -0.5**
NCK pmax pmax
comp=Z,68nm,0.9s
NCK MLR MLR
comp=Z,9μm,16.0s
**POO Poona 70.56 276** *e*P **P** **18 23 19.7 +0.4**
**KVAR Kislovodsk Arr 70.60 315** LR LR 18 57 50.5
comp=Z,11μm,19.3s,baz=272,slow=39
**KIV Kislovodsk 70.61 315** P **P** **18 23 19.0 -0.3**
KIV IAmb IAmb 18 23 38.5
comp=Z,157nm,1.1s
**KIV Kislovodsk 70.61 315** *i* P **P** **18 23 18.7 -0.6**
SNR=7.2
**KIV Kislovodsk 70.61 315** ⇓P **P** **18 23 18.6 -0.7**
**KIV Kislovodsk 70.61 315** P **P** **18 23 20.4 +1.1**
KIV P **P** **18 23 20.4 +1.1**
KIV P **P** **18 23 20.4 +1.1**
KIV S **S** **18 32 30.7 -0.4**
KIV S **S** **18 32 30.7 -0.4**
KIV S **S** **18 32 30.7 -0.4**
**KIV Kislovodsk 70.61 315** *e*P **P** **18 23 19.5 +0.2**
**KIV Kislovodsk 70.61 315** *e*P **P** **18 23 19.5 +0.2**
KIV *e* 18 25 56.5
KIV *e*PPP PPP 18 27 38.5
KIV *e*S **S** **18 32 30.4 -0.7**
KIV *e*SS **SS** **18 37 02.9 +1.0**
KIV pmax pmax
comp=Z,537nm,3.7s
KIV pmax pmax
comp=Z,71nm,1.0s
KIV MLR MLR
comp=Z,9μm,18.0s
**KIV Kislovodsk 70.61 315** P **P** **18 23 20.3 +1.0**
comp=Z,121nm,1.1s,comp=Z,2μm
**COWI Conover 70.62 42** IAmb IAmb 18 23 21.7
comp=Z,96nm,1.1s
**COWI Conover 70.62 42** ⇓P **P** **18 23 18.9 -0.3**
**KBZ Khabaz 70.68 315** P **P** **18 23 18.9 -0.6**
comp=Z,19nm,0.6s,baz=68,slow=3.6,SNR=24
KBZ PKPPKP 18 51 15.5
comp=Z,3.2nm,1.0s,baz=204,slow=3.9,SNR=4.5
KBZ LR LR 18 57 58.4
comp=Z,15μm,19.5s,baz=36,slow=39
comp=Z,19nm,0.6s
**KBZ Khabaz 70.68 315** *d* iP **P** **18 23 19.4 -0.2**
KBZ pmax pmax
comp=Z,112nm,1.2s
KBZ MLR MLR
comp=Z,12μm,15.0s
**OVD Ostervraa, Den 70.76 341** *i* P **P** **18 23 22.1 +2.2**
OVD IAmb IAmb 18 23 24.1
comp=Z,210nm,0.8s
**G40A Rib Lake 70.78 43** IAmb IAmb 18 23 22.7
comp=Z,96nm,1.1s
G40A IAMs_20 IAMs_20 18 54 54.2
comp=Z,9μm,21.0s
**SHA1 Shidzhatmaz 70.78 315** *c* iP **P** **18 23 21.5 +0.9**
**DZM Mont Dzumac 70.80 169** P **P** **18 23 22.8 +2.3**
**DZM Mont Dzumac 70.80 169** P **P** **18 23 21.8 +1.3**
DZM IAMs_20 IAMs_20 18 49 39.1
comp=Z,9μm,20.0s
**DZM Mont Dzumac 70.80 169** ⇑P **P** **18 23 22.6 +2.1**
**DZM Mont Dzumac 70.80 169** *e*P **P** **18 23 21.3 +0.8**
comp=Z,145nm,1.5s
DZM *e*S **S** **18 32 36.3 +2.8**
comp=Z,3μm,24.4s
DZM *e*SS **SS** **18 37 07.9 +1.1**
comp=Z,2μm,24.3s
DZM *e*LQ LQ 18 41 57.1
comp=Z,3μm,25.6s
DZM *e*LR LR 18 44 55.1
comp=Z,21μm,24.8s
**DZM Mont Dzumac 70.80 169** LR LR 18 50 00.8
comp=Z,10μm,20.3s,baz=12,slow=32
**NOUC Port Laguerre 70.81 169** P **P** **18 23 23.8 +3.3**
**MNGR Mingechevir, A 70.82 310** P **P** **18 23 22.3 +1.8**
**121A Cookes Peak, D 70.89 62** P **P** **18 23 22.2 +0.9**
baz=316,SNR=39
121A S **S** **18 32 39.2 +4.3**
baz=316
**CBKS Cedar Bluff 70.90 53** IAmb IAmb 18 23 23.9
comp=Z,118nm,0.9s
**CBKS Cedar Bluff 70.90 53** P **P** **18 23 20.2 -0.9**
baz=317,SNR=8.7
CBKS S **S** **18 32 34.0 -0.6**
baz=317
**AKASG Malin Array Be 70.94 327** P **P** **18 23 18.9 -2.2**
AKASG IAmb IAmb 18 23 23.6
comp=Z,87nm,0.8s
**AKASG Malin Array Be 70.94 327** P **P** **18 23 19.7 -1.4**
comp=Z,59nm,0.7s,baz=34,slow=6.2,SNR=51
AKASG ScS SKiKP 18 33 23.5 +23
comp=Z,3.4nm,1.1s,baz=36,slow=8.0,SNR=5.1
AKASG PKPPKP P'P'df 18 51 15.6 -8.1
comp=Z,0.5nm,0.6s,baz=234,slow=3.2,SNR=4.9

AKASG LR LR 18 59 28.3
comp=Z,15µm,18.7s,baz=20,slow=40
comp=Z,59nm,0.7s
**AKBB Malin Array Si** **70.94 327** IAmb IAmb 18 23 23.5
comp=Z,102nm,0.8s
**AKBB Malin Array Si** **70.94 327** *d iP* **P** **18 23 19.0 -2.1**
AKBB pmax pmax
comp=Z,115nm,0.9s
AKBB MLR MLR
comp=Z,16µm,17.0s
**KIEV Kiev** **70.96 327** P **P** **18 23 19.1 -2.0**
KIEV IAmb IAmb 18 23 23.5
comp=Z,87nm,0.8s
**KIEV Kiev** **70.96 327** *i* P **P** **18 23 19.5 -1.6**
SNR=11
**KIEV Kiev** **70.96 327** ⇓P **P** **18 23 19.1 -2.0**
**KIEV Kiev** **70.96 327** P **P** **18 23 19.2 -2.0**
KIEV pmax pmax
comp=Z,87nm,0.8s
KIEV MLR MLR
comp=Z,17µm,19.0s
**KIEV Kiev** **70.96 327** P **P** **18 23 19.6 -1.6**
comp=Z,451nm,0.8s,comp=Z,8µm
**RTBA Rita Blanca** **70.99 56** IAmb IAmb 18 23 24.5
comp=Z,213nm,1.4s
**LABN Labinsk** **71.00 316** *eP* **P** **18 23 18.7 -2.9**
LABN *e**PP **pP** **18 23 30.1 -0.3**
LABN *eS* **S** **18 32 33.8 -1.7**
LABN pmax pmax
comp=Z,69nm,0.8s
LABN MLR MLR
comp=Z,15µm,16.0s
LABN MLR MLR
comp=E,15µm,14.0s
LABN MLR MLR
comp=N,14µm,16.0s
**ONTNC Ouen Toro** **71.04 169** P **P** **18 23 25.5 +3.7**
**ONTNC Ouen Toro** **71.04 169** P **P** **18 23 23.6 +1.8**
**FITZ Fitzroy Crossi** **71.11 210** P **P** **18 23 23.6 +1.2**
**FITZ Fitzroy Crossi** **71.11 210** ⇑P **P** **18 23 23.6 +1.2**
**KAD Karad** **71.20 275** *eP* **P** **18 23 23.9 +0.7**
KAD IAmb IAmb 18 23 27.0
comp=Z,552nm,0.9s
**GANJ Ganja** **71.30 310** P **P** **18 23 23.9 +0.4**
**F42A Maple Grove Fa** **71.33 41** IAmb IAmb 18 23 26.3
comp=Z,146nm,1.0s
F42A IAMs_20 IAMs_20 18 55 37.4
comp=Z,10µm,21.0s
**SCHQ Schefferville** **71.38 24** IAmb IAmb 18 23 25.3
comp=Z,103nm,0.9s
**SCHQ Schefferville** **71.38 24** P **P** **18 23 24.1 +0.4**
comp=Z,78nm,0.9s,baz=347,slow=6.1,SNR=41
SCHQ LR LR 18 58 33.9
comp=Z,8µm,19.6s,baz=335,slow=39
comp=Z,78nm,0.9s
**LKRN Lenkeran, Azer** **71.46 308** P **P** **18 23 26.3 +1.9**
**PINNC Pines Island,** **71.47 168** IAMs_20 IAMs_20 18 49 23.9
comp=Z,9µm,22.0s
**RK1H Rockhampton Ha** **71.47 184** P **P** **18 23 25.3 +0.9**
**BSD Bornholm Skovb** **71.63 337** ⇓P **P** **18 23 24.1 -1.0**
**BSD Bornholm Skovb** **71.63 337** *eP* **P** **18 23 25.4 +0.2**
**BSD Bornholm Skovb** **71.63 337** P **P** **18 23 24.7 -0.4**
**BSD Bornholm Skovb** **71.63 337** ⇓ *iP* **P** **18 23 25.2 +0.1**
BSD IAmb IAmb 18 23 27.7
comp=Z,250nm,0.9s
**I40A Norwalk** **71.65 44** IAmb IAmb 18 23 28.0
comp=Z,129nm,0.9s
**COP Copenhagen** **71.73 339** *i* P **P** **18 23 26.0 +0.3**
COP IAmb IAmb 18 23 28.8
comp=Z,544nm,0.8s
**TRLG Trialeti** **71.75 312** P **P** **18 23 26.1 -0.2**
**MUD Monsted U'grnd** **71.78 341** *eP* **P** **18 23 26.6 +0.6**
**MUD Monsted U'grnd** **71.78 341** ⇓P **P** **18 23 25.8 -0.2**
**MUD Monsted U'grnd** **71.78 341** ⇓P **P** **18 23 25.8 -0.2**
**MUD Monsted U'grnd** **71.78 341** *i* P **P** **18 23 26.9 +0.8**
MUD IAmb IAmb 18 23 28.9
comp=Z,131nm,0.9s
**SRIG Santa Rosalia** **71.88 69** IAmb IAmb 18 23 29.9
comp=Z,235nm,1.5s
**SCIA State Center** **71.93 47** P **P** **18 23 26.8 -0.4**
SCIA IAMs_20 IAMs_20 18 58 33.1
comp=Z,8µm,18.0s
**SCIA State Center** **71.93 47** ⇓P **P** **18 23 27.5 +0.3**
**SCIA State Center** **71.93 47** P **P** **18 23 27.3 +0.1**
baz=320,SNR=32
SCIA S **S** **18 32 46.6 +0.4**
baz=320
**BIGH Upper Bighouse** **72.15 349** *eP* **P** **18 23 28.2 0.0**
BIGH IAmb IAmb 18 23 30.6
comp=Z,139nm,0.8s
BIGH IAMs_20 IAMs_20 19 01 01.1
comp=Z,6µm,19.7s
**EPT El Paso** **72.19 62** IAmb IAmb 18 23 32.1
comp=Z,179nm,1.3s
**SOC Sochi** **72.28 316** *eP* **P** **18 23 27.6 -1.6**
SOC *i* *PP **sP** **18 23 40.7 -0.8**
SOC *e**SP **PcP** **18 23 45.9 -1.4**
SOC *e* 18 26 07.3
SOC *e*PPP PPP 18 27 53.7
SOC *eS* **S** **18 32 48.2 -2.0**
SOC *e**SS sS 18 33 12.3 +7.4
SOC *eSS* **SS** **18 37 29.2 +1.9**
SOC pmax pmax
comp=Z,105nm,0.8s
**KSU1 Kansas State U** **72.33 51** P **P** **18 23 28.0 -1.6**
KSU1 IAmb IAmb 18 23 31.7
comp=Z,130nm,0.9s
**KSU1 Kansas State U** **72.33 51** ⇓P **P** **18 23 28.6 -1.0**
**KSU1 Kansas State U** **72.33 51** P **P** **18 23 28.5 -1.2**
baz=319,SNR=19
KSU1 S **S** **18 32 48.9 -2.1**
baz=319
**ANN Anapa** **72.36 319** *eP* **P** **18 23 27.8 -1.9**
**ANN Anapa** **72.36 319** *eP* **P** **18 23 27.8 -1.9**
ANN *e**PP **sP** **18 23 39.9 -2.0**
ANN *e* 18 23 45.4
ANN *e* 18 26 07.3
ANN *eS* **S** **18 32 48.4 -2.7**
ANN *eSS* **SS** **18 37 30.0 +1.5**
ANN pmax pmax
comp=Z,138nm,1.3s
**I42A Draeger Farm,** **72.43 43** IAmb IAmb 18 23 32.7
comp=Z,115nm,1.0s
**GNI Garni** **72.47 311** P **P** **18 23 30.3 -0.4**
GNI IAmb IAmb 18 24 03.6
comp=Z,184nm,1.1s
**GNI Garni** **72.47 311** P **P** **18 23 31.0 +0.3**
**GNI Garni** **72.47 311** ⇓P **P** **18 23 31.6 +0.9**
**GNI Garni** **72.47 311** LR LR 19 00 47.8
comp=Z,15µm,18.8s,baz=38,slow=40
**GNI Garni** **72.47 311** P **P** **18 23 33.1 +2.3**
GNI P **P** **18 23 33.1 +2.3**
GNI S **S** **18 32 52.6 -0.3**
GNI S **S** **18 32 52.6 -0.3**
**GNI Garni** **72.47 311** *d iP* **P** **18 23 31.4 +0.7**
GNI pmax pmax
comp=Z,124nm,0.9s
**E46A Sault Ste Mari** **72.49 39** P **P** **18 23 29.3 -1.1**
E46A IAmb IAmb 18 23 33.5
comp=Z,377nm,1.7s
E46A IAMs_20 IAMs_20 18 59 27.8
comp=Z,8µm,19.0s
**H43A Windswept, Lux** **72.49 42** IAmb IAmb 18 23 33.1
comp=Z,241nm,1.2s
H43A IAMs_20 IAMs_20 18 56 00.4
comp=Z,8µm,21.0s
**RGN Rugen** **72.54 338** ⇓P **P** **18 23 30.8 +0.2**
**RGN Rugen** **72.54 338** *eP* **P** **18 23 31.1 +0.5**
**RGN Rugen** **72.54 338** *eP* **P** **18 23 31.6 +1.0**
comp=Z,583nm,0.8s,baz=24,slow=5.7
**JFWS Jewell Farm** **72.57 44** P **P** **18 23 29.7 -1.3**
**JFWS Jewell Farm** **72.57 44** IAMs_20 IAMs_20 18 57 10.8
comp=Z,7µm,19.0s
**JFWS Jewell Farm** **72.57 44** ⇓P **P** **18 23 30.3 -0.7**
**JFWS Jewell Farm** **72.57 44** P **P** **18 23 30.2 -0.9**
baz=321,SNR=11
JFWS S **S** **18 32 53.3 -0.3**
baz=321
**JFWS Jewell Farm** **72.57 44** P **P** **18 23 29.7 -1.3**
JFWS pmax pmax
comp=Z,99nm,1.2s
JFWS MLR MLR
comp=Z,7µm,19.0s
**SSRD Sdr. Stenderup** **72.58 340** *i* P **P** **18 23 31.0 +0.2**
SSRD IAmb IAmb 18 23 34.3
comp=Z,382nm,0.8s
**SALM Salem** **72.60 268** *eP* **P** **18 23 31.9 +0.4**
SALM IAmb IAmb 18 23 40.1
comp=Z,63nm,0.7s
**GKP Gorka Klasztor** **72.64 335** *eP* **P** **18 23 31.2 0.0**
GKP *eS* **S** **18 32 57.4 +3.4**
GKP *eL* L 18 58 09.2
**GKP Gorka Klasztor** **72.64 335** *eP* **P** **18 23 31.4 +0.2**
**LINV Loch Inver, As** **72.66 349** *eP* **P** **18 23 31.2 0.0**
LINV IAmb IAmb 18 23 35.3
comp=Z,64nm,0.9s
**AMTX Amarillo** **72.71 57** IAmb IAmb 18 23 35.3
comp=Z,193nm,1.1s
**AMTX Amarillo** **72.71 57** ⇓P **P** **18 23 32.5 +0.4**
**AMTX Amarillo** **72.71 57** P **P** **18 23 32.8 +0.7**
baz=317
AMTX S **S** **18 32 57.5 +1.9**
baz=317
**GOA Goa** **72.75 274** *eP* **P** **18 23 33.7 +1.3**
**N38A Joes South For** **72.76 48** P **P** **18 23 31.5 -0.7**
**MSTX Muleshoe** **72.76 58** IAmb IAmb 18 23 36.0
comp=Z,194nm,1.2s
**MSTX Muleshoe** **72.76 58** P **P** **18 23 32.7 +0.3**
baz=317,SNR=24
MSTX S **S** **18 32 59.5 +3.2**
baz=317
**L40A Anamosa** **72.77 46** IAmb IAmb 18 23 34.4
comp=Z,199nm,1.0s
L40A IAMs_20 IAMs_20 18 55 54.2
comp=Z,5µm,20.0s
**BEL Belsk** **72.84 332** *eP* **P** **18 23 33.0 +0.6**
BEL *eS* **S** **18 32 56.6 +0.3**
BEL *eL* L 18 55 34.8
**BEL Belsk** **72.84 332** P **P** **18 23 34.5 +2.1**
**LEWI Lewis, Hebride** **72.86 350** *eP* **P** **18 23 32.4 -0.1**
LEWI IAmb IAmb 18 23 35.0
comp=Z,121nm,0.8s
**BATM Batumi** **72.87 314** P **P** **18 23 33.1 +0.3**
**MNTX Cornudas Mount** **72.91 62** ⇓P **P** **18 23 33.7 +0.6**
**MNTX Cornudas Mount** **72.91 62** P **P** **18 23 33.8 +0.6**
baz=317,SNR=96
MNTX S **S** **18 33 00.5 +2.7**
baz=317
**NOKA Waynoka** **72.94 54** IAmb IAmb 18 23 35.7
comp=Z,293nm,1.2s
**KARS Kars** **72.94 312** ⇓P **P** **18 23 34.3 +0.8**
**KARS Kars** **72.94 312** ⇓P **P** **18 23 34.3 +0.8**
**MCD Coleburn Disti** **72.95 348** *eP* **P** **18 23 33.0 0.0**
MCD IAmb IAmb 18 23 35.8
comp=Z,215nm,0.9s
**KAN08 Anthony NE Sta** **73.01 53** IAmb IAmb 18 23 35.6
comp=Z,142nm,1.3s
**ELIS Ellis County** **73.09 55** P **P** **18 23 34.0 -0.3**
**OK038 West end E0370** **73.15 54** IAMs_20 IAMs_20 19 00 44.6
comp=Z,7um,19.0s
**KAN01 Argonia South** **73.18 53** IAmb IAmb 18 23 36.7
comp=Z,309nm,1.6s
**OK032 Salt Plains WL** **73.20 53** P **P** **18 23 33.8 -1.0**
OK032 IAmb IAmb 18 23 37.2
comp=Z,246nm,1.6s
OK032 IAMs_20 IAMs_20 19 00 41.7
comp=Z,5µm,19.0s
**KAN17 Caldwell West** **73.26 53** IAmb IAmb 18 23 47.2
comp=Z,281nm,1.6s
**KAN09 Caldwell North** **73.27 53** IAmb IAmb 18 23 37.2
comp=Z,286nm,1.6s
**SMWD Samnorwood** **73.35 56** IAmb IAmb 18 23 39.7
comp=Z,216nm,1.0s
**SORM Soroca** **73.38 326** P **P** **18 23 34.2 -1.5**
**SORM Soroca** **73.38 326** P **P** **18 23 34.2 -1.5**
comp=Z,236nm,1.0s,comp=Z,3µm
**EIDS Eidsvold** **73.42 184** P **P** **18 23 37.6 +1.6**
**EIDS Eidsvold** **73.42 184** ⇑P **P** **18 23 37.4 +1.4**
**MALK Mahakanadarawa** **73.42 264** P **P** **18 23 36.0 -0.4**
**MALK Mahakanadarawa** **73.42 264** ⇑P **P** **18 23 37.2 +0.8**
**KAN13 South Haven SW** **73.43 53** P **P** **18 23 35.5 -0.8**
KAN13 IAmb IAmb 18 23 38.2
comp=Z,198nm,1.5s
**DRUM Mains of Drumt** **73.49 347** *eP* **P** **18 23 36.1 -0.1**
DRUM IAmb IAmb 18 23 38.3
comp=Z,187nm,0.7s
**KPL Plockton** **73.50 349** *eP* **P** **18 23 36.4 +0.1**
KPL IAmb IAmb 18 23 39.0
comp=Z,184nm,0.8s
**P38A Dawn** **73.50 49** IAMs_20 IAMs_20 18 56 14.1
comp=Z,6µm,21.0s
**I45A Fountain** **73.51 41** IAMs_20 IAMs_20 18 56 52.3
comp=Z,9µm,21.0s
**LVV L'vov** **73.51 329** *eP* **P** **18 23 36.1 -0.4**
LVV *e* 18 23 56.5
LVV *e* 18 26 22.1
LVV *eS* **S** **18 33 02.0 -2.1**
LVV *ePS* 18 33 41.6
LVV *eSS* **SS** **18 37 49.6 +3.8**
LVV MLR MLR
comp=N,6µm,19.0s
LVV MLR MLR
comp=E,5µm,19.0s
LVV MLR MLR
comp=Z,6µm,21.0s
**CROK Carrier** **73.54 53** IAmb IAmb 18 23 39.3
comp=Z,262nm,1.3s
CROK IAMs_20 IAMs_20 19 00 52.9
comp=Z,5µm,19.0s
**L42A Oliver, Polo** **73.55 45** P **P** **18 23 35.1 -1.7**
L42A IAmb IAmb 18 23 38.8
comp=Z,147nm,0.9s
L42A IAMs_20 IAMs_20 18 59 41.7
comp=Z,8µm,18.0s
**GLMI Grayling** **73.59 40** P **P** **18 23 37.3 +0.2**
baz=323
GLMI S **SKiKP** **18 33 04.8 +0.1**
baz=323
**K43A Burlington** **73.62 43** P **P** **18 23 35.9 -1.3**
K43A IAmb IAmb 18 23 39.4
comp=Z,209nm,1.0s
**SIM Simferopol'** **73.68 321** *d iP* **P** **18 23 38.1 +0.6**
SIM *eS* **S** **18 33 09.0 +2.9**
SIM *e* 18 33 45.0
SIM pmax pmax
comp=Z,200nm,1.0s
SIM pmax pmax
comp=Z,2µm,7.3s
SIM smax smax
comp=N,400nm,4.0s
**VLDQ Val d'Or** **73.75 34** IAmb IAmb 18 23 37.9
comp=Z,197nm,1.2s
VLDQ IAMs_20 IAMs_20 19 00 27.0
comp=Z,6µm,20.0s
**VHRN Van Horn** **73.80 62** IAmb IAmb 18 23 41.9
comp=Z,187nm,1.4s
**CSTR Hydro, Custer** **73.80 54** P **P** **18 23 38.0 -0.4**
**BSEG Bad Segeberg** **73.84 339** *eP* **P** **18 23 39.1 +0.9**
comp=Z,170nm,0.8s,baz=24,slow=5.7
BSEG *ep*P **PcP** **18 24 00.6 +6.9**
baz=23,slow=5.8
**MNGI Mangalore** **73.92 271** *eP* **P** **18 23 39.7 +0.3**
MNGI IAmb IAmb 18 23 47.1
comp=Z,87nm,0.9s
**NGCH Negor - Chabah** **73.94 290** P **P** **18 23 40.7 +1.4**
**T35A Sooner Cattle** **74.02 52** P **P** **18 23 38.4 -1.3**
T35A IAmb IAmb 18 23 41.9
comp=Z,199nm,1.5s
**PECS Pecos** **74.03 61** P **P** **18 23 39.7 -0.2**
**DKNS Dickens** **74.03 57** IAmb IAmb 18 23 54.7
comp=Z,144nm,1.0s
**NIUE Niue** **74.05 146** IAMs_20 IAMs_20 18 49 02.7
comp=Z,10µm,22.0s
**AS01 Alice Springs** **74.08 200** P **P** **18 23 41.0 +1.0**
**ASAR Alice Springs** **74.09 200** P **P** **18 23 40.3 +0.2**
**ASAR Alice Springs** **74.09 200** P **P** **18 23 40.6 +0.5**
comp=Z,47nm,0.8s,baz=13,slow=5.7,SNR=182
ASAR PKPPKP 18 51 16.8
comp=Z,1.5nm,0.8s,baz=171,slow=1.5,SNR=7.2
ASAR LR LR 18 53 41.1
comp=Z,4µm,22.0s,baz=24,slow=34
comp=Z,47nm,0.8s
**ASAR Alice Springs** **74.09 200** P **P** **18 23 40.3 +0.2**
**KWP Kalwaria Pacla** **74.12 330** *eP* **P** **18 23 40.6 +0.5**
KWP *eS* **S** **18 33 12.0 +1.1**
KWP *eL* L 18 58 36.2
**KWP Kalwaria Pacla** **74.12 330** ⇑P **P** **18 23 39.6 -0.5**
**KWP Kalwaria Pacla** **74.12 330** P **P** **18 23 39.7 -0.4**
**KWP Kalwaria Pacla** **74.12 330** P **P** **18 23 39.4 -0.7**
comp=Z,681nm,1.0s,comp=Z,6µm
**KOD Kodaikanal** **74.12 268** *eP* **P** **18 23 41.2 +0.3**
KOD IAmb IAmb 18 23 49.4
comp=Z,115nm,0.8s
**POST Post** **74.15 58** IAmb IAmb 18 23 43.6
comp=Z,238nm,1.1s
**PALK Pallekele** **74.15 263** P **P** **18 23 41.1 +0.4**
**PALK Pallekele** **74.15 263** P **P** **18 23 40.4 -0.4**
comp=Z,37nm,0.8s,baz=134,slow=5.9,SNR=17
PALK LR LR 19 00 55.9
comp=Z,4µm,18.6s,baz=147,slow=40
comp=Z,37nm,0.8s
**PALK Pallekele** **74.15 263** P **P** **18 23 41.7 +1.0**
PALK P **P** **18 23 41.7 +1.0**
PALK S **S** **18 33 11.3 -0.9**
PALK S **S** **18 33 11.3 -0.9**
**PALK Pallekele** **74.15 263** *d iP* **P** **18 23 41.3 +0.6**
**KIS Kishinev** **74.15 325** *eP* **P** **18 23 40.0 -0.2**
comp=Z,300nm,1.5s
KIS M M 18 23 59.0
comp=Z,950nm,7.9s
**KIS Kishinev** **74.15 325** *eP* **P** **18 23 40.0 -0.2**
KIS *e*PPP PPP 18 28 10.0
KIS *eS* **SKiKP** **18 33 05.0 -0.5**
KIS *ePS* **PnS** **18 33 45.0 -1.6**
KIS pmax pmax
comp=Z,300nm,1.5s
**OK051 E0350 and S346** **74.15 53** IAMs_20 IAMs_20 18 57 37.0
comp=Z,5µm,21.0s
**OK048 Pawnee Station** **74.16 53** IAmb IAmb 18 23 43.0
comp=Z,144nm,1.3s
OK048 IAMs_20 IAMs_20 18 57 37.2
comp=Z,5µm,19.0s
**INVG Invergeldie, C** **74.18 348** *eP* **P** **18 23 40.1 -0.2**
INVG IAmb IAmb 18 23 42.4
comp=Z,75nm,0.8s
**MILM Milestii Mici** **74.22 325** *eP* **P** **18 23 38.0 -2.6**
comp=Z,500nm,1.8s
**MILM Milestii Mici** **74.22 325** *eP* **P** **18 23 38.0 -2.6**
MILM *e*PPP PPP 18 28 12.0
MILM *eS* **SKiKP** **18 33 05.0 -0.6**
MILM pmax pmax
comp=Z,500nm,1.8s
**L44A Lake County Fo** **74.22 43** IAmb IAmb 18 23 43.1
comp=Z,130nm,0.9s
**L44A Lake County Fo** **74.22 43** P **P** **18 23 40.1 -0.7**
baz=322
L44A S **S** **18 33 09.7 -2.6**
baz=322
**ODSA Odessa** **74.24 59** P **P** **18 23 40.9 -0.2**
ODSA IAmb IAmb 18 23 44.1
comp=Z,220nm,1.3s
**RUE Ruedersdorf** **74.29 337** *eP* **P** **18 23 41.4 +0.5**
**RUE Ruedersdorf** **74.29 337** *eP* **P** **18 23 41.5 +0.6**
comp=Z,323nm,0.9s,baz=24,slow=5.7
RUE *ep*P **PcP** **18 24 02.8 +7.1**
baz=23,slow=5.8
**P40A Paris** **74.31 48** IAMs_20 IAMs_20 18 59 29.4
comp=Z,9µm,20.0s
**OK029 Liberty Lake** **74.36 54** IAMs_20 IAMs_20 19 01 55.4
comp=Z,4µm,19.0s
**WMOK Wichita Mounta** **74.43 55** IAMs_20 IAMs_20 19 01 28.5
comp=Z,5µm,20.0s
**WMOK Wichita Mounta** **74.43 55** IAmb IAmb 18 23 45.0
comp=Z,162nm,1.2s
**WMOK Wichita Mounta** **74.43 55** ⇓P **P** **18 23 42.2 +0.1**
**WMOK Wichita Mounta** **74.43 55** P **P** **18 23 42.0 -0.1**
baz=319,SNR=142
WMOK S **S** **18 33 17.1 +2.2**
baz=319
**WMOK Wichita Mounta** **74.43 55** ⇓P **P** **18 23 42.2 +0.1**
**GORT1 Trebel** **74.46 338** *eP* **P** **18 23 42.8 +0.9**
baz=24,slow=5.7
**ESY Stoneypath** **74.47 347** *eP* **P** **18 23 41.8 -0.1**
**QUOK Quay** **74.47 53** IAmb IAmb 18 23 45.6
comp=Z,238nm,1.1s
**SN07 Snyder 07** **74.47 58** IAmb IAmb 18 23 45.4
comp=Z,401nm,1.6s
**ADOK Arcadia Dam** **74.51 54** P **P** **18 23 41.8 -0.8**
**LAWE Loch Awe, Argy** **74.52 349** *eP* **P** **18 23 42.2 0.0**
LAWE IAmb IAmb 18 23 45.0
comp=Z,297nm,0.8s
LAWE IAMs_20 IAMs_20 19 01 48.2
comp=Z,6µm,16.6s
**EDI Edinburgh** **74.55 347** *eP* **P** **18 23 41.9 -0.5**
EDI IAmb IAmb 18 23 46.2
comp=Z,195nm,0.9s
EDI IAMs_20 IAMs_20 18 57 55.6
comp=Z,6µm,20.2s
**OJC Ojcow** **74.55 332** *eP* **P** **18 23 41.0 -1.5**
OJC *eS* **S** **18 33 15.9 +0.1**
OJC *eL* L 18 57 16.7
**OJC Ojcow** **74.55 332** P **P** **18 23 42.1 -0.5**
**OJC Ojcow** **74.55 332** P **P** **18 23 42.1 -0.5**
comp=Z,365nm,1.1s,comp=Z,4µm
**SN05 Snyder 5** **74.63 58** IAmb IAmb 18 23 46.2
comp=Z,296nm,1.6s
**MNHN Monahans** **74.69 60** P **P** **18 23 43.6 -0.2**
MNHN IAmb IAmb 18 23 46.8
comp=Z,229nm,1.3s
**FNO Franklin** **74.79 54** IAmb IAmb 18 23 47.2
comp=Z,126nm,1.1s
**PRAR RASCA** **74.82 327** ⇑P **P** **18 23 43.9 -0.3**
**PGBU Glenifferbraes** **74.84 348** *eP* **P** **18 23 44.1 0.0**
PGBU IAmb IAmb 18 23 47.2
comp=Z,686nm,0.9s
**HDIL Hopedale** **74.85 45** IAMs_20 IAMs_20 19 00 25.7
comp=Z,6µm,20.0s
**HDIL Hopedale** **74.85 45** P **P** **18 23 44.8 +0.4**
baz=322
HDIL S **S** **18 33 20.1 +0.7**
baz=322
**KOLS Kolonicke sedl** **74.87 330** *eP* **P** **18 23 44.6 +0.2**
KOLS pmax pmax
comp=Z,63nm,0.8s
**KOLS Kolonicke sedl** **74.87 330** *eP* **P** **18 23 44.6 +0.2**
**ALPN Alpine** **74.89 61** P **P** **18 23 44.6 -0.4**
ALPN IAmb IAmb 18 23 47.9
comp=Z,161nm,1.5s
**BUR08 Bucovina Ar. S** **74.95 327** IAmb IAmb 18 23 48.1
comp=Z,135nm,0.8s
**BURAR Bucovina Array** **74.97 327** P **P** **18 23 43.9 -1.2**
BURAR IAmb IAmb 18 23 48.5
comp=Z,137nm,0.8s
**BURAR Bucovina Array** **74.97 327** ⇑P **P** **18 23 45.3 +0.1**
**BURAR Bucovina Array** **74.97 327** P **P** **18 23 45.2 +0.1**
**HALK Hakmana** **75.04 262** ⇑P **P** **18 23 47.0 +1.1**
**X34A Smith Ranch, M** **75.05 55** IAmb IAmb 18 23 49.0
comp=Z,206nm,1.3s
**GURO Guroymak-BITLI** **75.05 312** IAmb IAmb 18 23 50.3
comp=Z,119nm,1.0s
**KSP Ksiaz** **75.06 334** *eP* **P** **18 23 45.5 0.0**
KSP *eS* **S** **18 33 14.4 -7.0**
KSP *eL* L 19 00 02.7
**KSP Ksiaz** **75.06 334** ⇓P **P** **18 23 44.4 -1.1**
**KSP Ksiaz** **75.06 334** P **P** **18 23 45.2 -0.3**
**KSP Ksiaz** **75.06 334** P **P** **18 23 45.2 -0.3**
comp=Z,353nm,1.0s,comp=Z,3µm
**FLTG Flechtingen** **75.08 338** ⇓P **P** **18 23 44.7 -0.8**
**FLTG Flechtingen** **75.08 338** *eP* **P** **18 23 45.6 +0.1**
comp=Z,178nm,0.9s,baz=24,slow=5.7
**S39A Bolivar** **75.08 50** P **P** **18 23 44.4 -1.4**
S39A IAmb IAmb 18 23 47.5
comp=Z,135nm,1.2s
S39A IAMs_20 IAMs_20 19 00 53.1
comp=Z,8µm,19.0s
**L46A Eue Claire** **75.09 43** IAmb IAmb 18 23 48.3
comp=Z,185nm,1.0s
L46A IAMs_20 IAMs_20 18 56 41.3
comp=Z,8µm,22.0s
**NIE Niedzica** **75.09 331** *eP* **P** **18 23 45.5 -0.2**
NIE *eS* **S** **18 33 17.5 -4.4**
NIE *eL* L 18 56 50.4
**NIE Niedzica** **75.09 331** P **P** **18 23 45.8 +0.1**
**NIE Niedzica** **75.09 331** P **P** **18 23 45.8 +0.1**
comp=Z,101nm,0.9s,comp=Z,2µm
**EKA Eskdalemuir Ar** **75.11 347** P **P** **18 23 44.8 -0.9**
comp=Z,125nm,0.7s,baz=19,slow=5.5,SNR=243
EKA PKKPbc **PKKPbc** **18 43 07.4 +0.8**
comp=Z,1.1nm,0.7s,baz=9.7,slow=5.9,SNR=4.2
comp=Z,125nm,0.7s
**ESK Eskdalemuir** **75.14 347** P **P** **18 23 45.4 -0.4**
ESK IAmb IAmb 18 23 48.8
comp=Z,180nm,0.8s
**ESK Eskdalemuir** **75.14 347** *eP* **P** **18 23 45.8 0.0**
ESK IAmb IAmb 18 23 48.6
comp=Z,179nm,0.7s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESK** | **Eskdalemuir** | **75.14** | **347** | | P | | **P** | **18 23 45.4** | **-0.4** |
| ESK | | | | | pmax | | pmax | | | |
| | comp=Z,181nm,0.8s | | | | | | | | | |
| **R40A** | **Maddies Statio** | **75.16** | **49** | | IAMs_20 | | IAMs_20 | 18 57 13.9 | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **TUL3** | **Leonard** | **75.16** | **52** | | IAmb | | IAmb | 18 23 49.6 | | |
| | comp=Z,178nm,0.9s | | | | | | | | | |
| TUL3 | | | | | IAMs_20 | | IAMs_20 | 19 01 02.0 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **TUL3** | **Leonard** | **75.16** | **52** | | P | | **P** | **18 23 46.1** | **-0.1** | |
| | baz=320,SNR=19 | | | | | | | | | |
| TUL3 | | | | | S | | **S** | **18 33 21.8** | **-1.1** | |
| | baz=320 | | | | | | | | | |
| **QLP** | **Quilpie** | **75.16** | **190** | | P | | **P** | **18 23 46.8** | **+0.7** | |
| **QLP** | **Quilpie** | **75.16** | **190** | ⇑ | P | | **P** | **18 23 46.9** | **+0.7** | |
| **RETH** | **Rethem/Aller,** | **75.17** | **339** | | *e*P | | **P** | **18 23 46.7** | **+0.7** | |
| | comp=Z,178nm,1.0s,baz=24,slow=5.7 | | | | | | | | | |
| RETH | | | | | *e*pP | | PcP | 18 24 08.2 | +8.8 | |
| | baz=23,slow=5.8 | | | | | | | | | |
| **SGCY** | **Sterling City** | **75.21** | **59** | | P | | **P** | **18 23 46.4** | **-0.3** | |
| SGCY | | | | | IAmb | | IAmb | 18 23 49.7 | | |
| | comp=Z,314nm,1.5s | | | | | | | | | |
| **NRDL** | **Niedersach Rie** | **75.21** | **339** | | *e*P | | **P** | **18 23 46.8** | **+0.6** | |
| | comp=Z,151nm,0.9s,baz=24,slow=5.7 | | | | | | | | | |
| NRDL | | | | | *e*pP | | PcP | 18 24 08.3 | +8.7 | |
| | baz=23,slow=5.8 | | | | | | | | | |
| **BIR** | **Birlad** | **75.22** | **325** | ⇑ | P | | **P** | **18 23 47.6** | **+1.1** | |
| **BIR** | **Birlad** | **75.22** | **325** | | P | | **P** | **18 23 47.5** | **+1.1** | |
| **WTFS** | **Witchita Falls** | **75.33** | **56** | | IAmb | | IAmb | 18 23 59.9 | | |
| | comp=Z,265nm,1.4s | | | | | | | | | |
| **OSTC** | **Ostas** | **75.34** | **334** | | *e*P | | **P** | **18 23 47.5** | **+0.4** | |
| OSTC | | | | | AMS | | AMS | 19 00 00.0 | | |
| | comp=Z,16µm,18.0s | | | | | | | | | |
| **OSTC** | **Ostas** | **75.34** | **334** | | *e*P | | **P** | **18 23 47.5** | **+0.4** | |
| OSTC | | | | | MLR | | MLR | | | |
| | comp=Z,16µm,18.0s | | | | | | | | | |
| **CHVC** | **Chvalec** | **75.36** | **334** | | *e*P | | **P** | **18 23 47.8** | **+0.6** | |
| CHVC | | | | | AMS | | AMS | 19 00 00.0 | | |
| | comp=Z,18µm,18.2s | | | | | | | | | |
| **CHVC** | **Chvalec** | **75.36** | **334** | | *e*P | | **P** | **18 23 47.8** | **+0.6** | |
| CHVC | | | | | MLR | | MLR | | | |
| | comp=Z,18µm,18.2s | | | | | | | | | |
| **RLO** | **Rose Lookout** | **75.37** | **52** | | IAmb | | IAmb | 18 23 50.0 | | |
| | comp=Z,262nm,1.2s | | | | | | | | | |
| RLO | | | | | IAMs_20 | | IAMs_20 | 18 56 41.9 | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| **AUWSH** | **Wavell State H** | **75.38** | **182** | | P | | **P** | **18 23 48.9** | **+1.6** | |
| **TESR** | **Tescani** | **75.38** | **326** | ⇑ | P | | **P** | **18 23 47.6** | **+0.3** | |
| **TESR** | **Tescani** | **75.38** | **326** | | P | | **P** | **18 23 46.7** | **-0.7** | |
| | comp=Z,428nm,1.1s,comp=Z,4µm | | | | | | | | | |
| **VLDR** | **Vladesti** | **75.39** | **325** | ⇑ | P | | **P** | **18 23 48.2** | **+0.8** | |
| **LPIG** | **La Paz** | **75.39** | **70** | | LR | | LR | 18 51 01.5 | | |
| | comp=Z,2µm,21.6s,baz=308,slow=31 | | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **75.40** | **333** | | *e*P | | **P** | **18 23 48.0** | **+0.6** | |
| OKC | | | | | *e*S | | **S** | **18 33 22.4** | **-2.8** | |
| OKC | | | | | AMS | | AMS | 19 02 20.0 | | |
| | comp=Z,19µm,18.2s | | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **75.40** | **333** | | *e*P | | **P** | **18 23 48.0** | **+0.6** | |
| OKC | | | | | *e*S | | **S** | **18 33 22.4** | **-2.8** | |
| OKC | | | | | MLR | | MLR | | | |
| | comp=Z,19µm,18.2s | | | | | | | | | |
| **EDMD** | **Edmundbyers** | **75.42** | **346** | | *e*P | | **P** | **18 23 47.3** | **-0.1** | |
| EDMD | | | | | IAmb | | IAmb | 18 23 51.3 | | |
| | comp=Z,202nm,0.9s | | | | | | | | | |
| EDMD | | | | | IAMs_20 | | IAMs_20 | 19 02 32.0 | | |
| | comp=Z,8µm,18.1s | | | | | | | | | |
| **VARL** | **Varlezi** | **75.44** | **325** | ⇑ | P | | **P** | **18 23 48.7** | **+1.0** | |
| **UPC** | **Upice** | **75.44** | **334** | | *e*P | | **P** | **18 23 48.2** | **+0.5** | |
| UPC | | | | | *e*S | | **S** | **18 33 22.2** | **-3.4** | |
| UPC | | | | | AMS | | AMS | 19 00 10.0 | | |
| | comp=Z,20µm,17.9s | | | | | | | | | |
| **UPC** | **Upice** | **75.44** | **334** | | *e*P | | **P** | **18 23 48.2** | **+0.5** | |
| UPC | | | | | *e*S | | **S** | **18 33 22.2** | **-3.4** | |
| UPC | | | | | MLR | | MLR | | | |
| | comp=Z,20µm,17.9s | | | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **75.46** | **46** | | IAmb | | IAmb | 18 23 50.5 | | |
| | comp=Z,186nm,1.1s | | | | | | | | | |
| **GHRR** | | **75.47** | **325** | ⇑ | P | | **P** | **18 23 48.9** | **+1.0** | |
| **NEWG** | **New Galloway** | **75.48** | **348** | | *e*P | | **P** | **18 23 47.6** | **-0.1** | |
| NEWG | | | | | IAmb | | IAmb | 18 23 50.1 | | |
| | comp=Z,164nm,0.8s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **75.49** | **334** | | *e*P | | **P** | **18 23 48.5** | **+0.5** | |
| DPC | | | | | *e*S | | **S** | **18 33 24.3** | **-2.0** | |
| DPC | | | | | AMS | | AMS | 19 03 20.0 | | |
| | comp=Z,16µm,16.2s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **75.49** | **334** | | *e*P | | **P** | **18 23 48.5** | **+0.5** | |
| DPC | | | | | *e*S | | **S** | **18 33 24.3** | **-2.0** | |
| DPC | | | | | MLR | | MLR | | | |
| | comp=Z,16µm,16.2s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **75.49** | **334** | | P | | **P** | **18 23 48.0** | **0.0** | |
| | comp=Z,257nm,1.1s,comp=Z,3µm | | | | | | | | | |
| **U38A** | **Gravette** | **75.49** | **51** | | IAmb | | IAmb | 18 23 50.5 | | |
| | comp=Z,210nm,1.2s | | | | | | | | | |
| U38A | | | | | IAMs_20 | | IAMs_20 | 19 02 58.2 | | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **75.52** | **57** | | IAmb | | IAmb | 18 24 01.6 | | |
| | comp=Z,306nm,1.4s | | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **75.52** | **57** | | P | | **P** | **18 23 49.1** | **+0.6** | |
| | baz=319,SNR=14 | | | | | | | | | |
| ABTX | | | | | S | | **S** | **18 33 27.7** | **+0.5** | |
| | baz=319 | | | | | | | | | |
| **BMR** | **Baia Mare** | **75.53** | **328** | ⇓ | P | | **P** | **18 23 49.4** | **+1.2** | |
| **BMR** | **Baia Mare** | **75.53** | **328** | | P | | **P** | **18 23 49.4** | **+1.2** | |
| **CLL** | **Collm** | **75.56** | **336** | | P | | **P** | **18 23 47.4** | **-0.9** | |
| **CLL** | **Collm** | **75.56** | **336** | | *i* P | | **P** | **18 23 48.2** | **-0.1** | |
| CLL | | | | | *i* *PP | | **pP** | **18 23 57.8** | **+0.6** | |
| CLL | | | | | *e*S | | **S** | **18 33 28.0** | **+1.1** | |
| CLL | | | | | pmax | | pmax | | | |
| | comp=Z,361nm,0.9s | | | | | | | | | |
| CLL | | | | | MLR | | MLR | | | |
| | comp=Z,18µm,21.1s | | | | | | | | | |
| **CLL** | **Collm** | **75.56** | **336** | | P | | **P** | **18 23 47.6** | **-0.7** | |
| | comp=Z,420nm,1.0s,comp=Z,3µm | | | | | | | | | |
| **CLL** | **Collm** | **75.56** | **336** | | *e*P | | **P** | **18 23 48.5** | **+0.2** | |
| | comp=Z,284nm,0.9s,baz=24,slow=5.7 | | | | | | | | | |
| **SCTR** | **Scanteiesti** | **75.57** | **325** | ⇑ | P | | **P** | **18 23 49.2** | **+0.8** | |
| **LANS** | **Liptovska Anna** | **75.59** | **332** | | *e*P | | **P** | **18 23 49.6** | **+1.0** | |
| LANS | | | | | pmax | | pmax | | | |
| | comp=Z,60nm,0.9s | | | | | | | | | |
| **LANS** | **Liptovska Anna** | **75.59** | **332** | | *e*P | | **P** | **18 23 49.6** | **+1.0** | |
| **KRLC** | **Kraliky** | **75.60** | **334** | | *e*P | | **P** | **18 23 49.4** | **+0.7** | |
| KRLC | | | | | *e*S | | **S** | **18 33 23.6** | **-3.9** | |
| KRLC | | | | | AMS | | AMS | 19 02 40.0 | | |
| | comp=Z,21µm,17.2s | | | | | | | | | |
| **KRLC** | **Kraliky** | **75.60** | **334** | | *e*P | | **P** | **18 23 49.4** | **+0.7** | |
| KRLC | | | | | *e*S | | **S** | **18 33 23.6** | **-3.9** | |
| KRLC | | | | | MLR | | MLR | | | |
| | comp=Z,21µm,17.2s | | | | | | | | | |
| **ONER** | **Baraj Valea Uz** | **75.62** | **326** | ⇓ | P | | **P** | **18 23 49.1** | **+0.3** | |
| **GDLE** | **Glaisdale, N Y** | **75.63** | **346** | | *e*P | | **P** | **18 23 48.8** | **+0.2** | |
| GDLE | | | | | IAmb | | IAmb | 18 23 51.8 | | |
| | comp=Z,274nm,0.8s | | | | | | | | | |
| GDLE | | | | | IAMs_20 | | IAMs_20 | 19 02 51.0 | | |
| | comp=Z,10µm,20.5s | | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **75.64** | **62** | | IAmb | | IAmb | 18 23 52.5 | | |
| | comp=Z,278nm,1.4s | | | | | | | | | |
| **MORC** | **Moravsky Berou** | **75.64** | **333** | | *e*P | | **P** | **18 23 48.6** | **-0.3** | |
| MORC | | | | | *e*S | | **S** | **18 33 25.5** | **-2.4** | |
| **MORC** | **Moravsky Berou** | **75.64** | **333** | ⇑ | P | | **P** | **18 23 49.7** | **+0.8** | |
| **MORC** | **Moravsky Berou** | **75.64** | **333** | | P | | **P** | **18 23 49.6** | **+0.8** | |
| **TXAR** | **Lajitas Array** | **75.64** | **62** | | P | | **P** | **18 23 49.0** | **-0.2** | |
| | comp=Z,50nm,0.6s,baz=297,slow=3.7,SNR=360 | | | | | | | | | |
| TXAR | | | | | PKKPbc | | **PKKPbc** | **18 43 06.7** | **+1.5** | |
| | comp=Z,0.8nm,0.8s,baz=146,slow=4.0,SNR=6.2 | | | | | | | | | |
| TXAR | | | | | PKPPKP | | **P'P'df** | **18 51 07.8** | **-6.1** | |
| | comp=Z,0.9nm,0.9s,baz=127,slow=3.3,SNR=4.1 | | | | | | | | | |
| TXAR | | | | | LR | | LR | 18 53 58.4 | | |
| | comp=Z,3µm,21.9s,baz=326,slow=33 | | | | | | | | | |
| | comp=Z,50nm,0.6s | | | | | | | | | |
| **TLCR** | | **75.66** | **324** | ⇑ | P | | **P** | **18 23 49.3** | **+0.4** | |
| **TLCR** | | **75.66** | **324** | | P | | **P** | **18 23 49.3** | **+0.4** | |
| **COSR** | **Cosmesti PH** | **75.68** | **325** | ⇑ | P | | **P** | **18 23 50.5** | **+1.5** | |
| **BRG** | **Berggiesshubel** | **75.70** | **336** | *i* | P | | **P** | **18 23 49.1** | **0.0** | |
| BRG | | | | | Amp | | | 18 23 51.8 | | |
| | comp=Z,109nm,0.9s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **75.70** | **336** | | PP | | PP | 18 26 41.0 | +2.8 | |
| **BRG** | **Berggiesshubel** | **75.70** | **336** | | S | | **S** | **18 33 27.0** | **-1.4** | |
| **BRG** | **Berggiesshubel** | **75.70** | **336** | | SS | | SS | 18 38 35.0 | +16 | |
| **BRG** | **Berggiesshubel** | **75.70** | **336** | | *e*P | | **P** | **18 23 49.3** | **+0.2** | |
| | comp=Z,108nm,0.9s,baz=24,slow=5.7 | | | | | | | | | |
| **SLCR** | **Slobozia Conac** | **75.72** | **325** | ⇑ | P | | **P** | **18 23 50.1** | **+0.8** | |
| **PANC** | **Panciu** | **75.73** | **325** | ⇓ | P | | **P** | **18 23 50.2** | **+0.8** | |
| **NEGRR** | **Negrea** | **75.73** | **325** | ⇑ | P | | **P** | **18 23 50.1** | **+0.8** | |
| **TRD** | **Trivandrum** | **75.73** | **267** | | *e*P | | **P** | **18 23 50.7** | **+0.9** | |
| TRD | | | | | IAmb | | IAmb | 18 23 58.4 | | |
| | comp=Z,157nm,1.1s | | | | | | | | | |
| **ARCR** | **ARCALIA** | **75.73** | **328** | ⇓ | P | | **P** | **18 23 50.5** | **+1.1** | |
| **CLZ** | **Clausthal** | **75.75** | **338** | | *e*P | | **P** | **18 23 50.4** | **+0.9** | |
| | comp=Z,324nm,1.0s,baz=24,slow=5.7 | | | | | | | | | |
| **TUDR** | | **75.76** | **325** | ⇓ | P | | **P** | **18 23 50.0** | **+0.5** | |
| **CLGH** | **Cloghs, Cushen** | **75.76** | **349** | | *e*P | | **P** | **18 23 49.7** | **+0.3** | |
| CLGH | | | | | IAmb | | IAmb | 18 23 52.4 | | |
| | comp=Z,427nm,0.8s | | | | | | | | | |
| CLGH | | | | | IAMs_20 | | IAMs_20 | 19 03 10.7 | | |
| | comp=Z,7µm,17.9s | | | | | | | | | |
| **IZVR** | **Izvoarele** | **75.77** | **325** | ⇑ | P | | **P** | **18 23 50.2** | **+0.6** | |
| **SCHL** | **Schela** | **75.78** | **325** | ⇑ | P | | **P** | **18 23 50.4** | **+0.8** | |
| **GAL1** | **Galloway** | **75.79** | **348** | | *e*P | | **P** | **18 23 49.5** | **0.0** | |
| GAL1 | | | | | IAmb | | IAmb | 18 23 51.8 | | |
| | comp=Z,233nm,0.8s | | | | | | | | | |
| **KESW** | **Keswick, Cumbr** | **75.83** | **347** | | *e*P | | **P** | **18 23 50.3** | **+0.5** | |
| KESW | | | | | IAmb | | IAmb | 18 23 52.9 | | |
| | comp=Z,360nm,0.9s | | | | | | | | | |
| **DIKM** | **Dikmen** | **75.83** | **318** | ⇓ | P | | **P** | **18 23 50.7** | **+0.7** | |
| **PVCC** | **Panska Ves** | **75.83** | **335** | | *e*P | | **P** | **18 23 50.4** | **+0.5** | |
| PVCC | | | | | AMS | | AMS | 19 02 10.0 | | |
| | comp=Z,18µm,16.1s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **75.83** | **335** | | *e*P | | **P** | **18 23 50.4** | **+0.5** | |
| PVCC | | | | | MLR | | MLR | | | |
| | comp=Z,18µm,16.1s | | | | | | | | | |
| **HHAR** | **Hobbs** | **75.84** | **51** | | IAmb | | IAmb | 18 23 52.5 | | |
| | comp=Z,311nm,1.3s | | | | | | | | | |
| **CCM** | **Cathedral Cave** | **75.85** | **48** | | P | | **P** | **18 23 49.6** | **-0.6** | |
| CCM | | | | | IAmb | | IAmb | 18 23 52.6 | | |
| | comp=Z,223nm,1.1s | | | | | | | | | |
| CCM | | | | | IAMs_20 | | IAMs_20 | 18 56 12.1 | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **CCM** | **Cathedral Cave** | **75.85** | **48** | | P | | **P** | **18 23 49.8** | **-0.4** | |
| | baz=321 | | | | | | | | | |
| CCM | | | | | S | | **S** | **18 33 30.1** | **-0.4** | |
| | baz=321 | | | | | | | | | |
| **CCM** | **Cathedral Cave** | **75.85** | **48** | | P | | **P** | **18 23 49.6** | **-0.6** | |
| CCM | | | | | pmax | | pmax | | | |
| | comp=Z,223nm,1.1s | | | | | | | | | |
| CCM | | | | | MLR | | MLR | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **KECS** | **Kecovo** | **75.85** | **331** | | *e*P | | **P** | **18 23 50.8** | **+0.8** | |
| KECS | | | | | pmax | | pmax | | | |
| | comp=Z,58nm,0.9s | | | | | | | | | |
| **KECS** | **Kecovo** | **75.85** | **331** | | *e*P | | **P** | **18 23 50.8** | **+0.8** | |
| **LOOK** | **Love County** | **75.86** | **55** | | IAmb | | IAmb | 18 23 53.2 | | |
| | comp=Z,266nm,1.3s | | | | | | | | | |
| **SADO** | **Sadowa** | **75.89** | **37** | | P | | **P** | **18 23 49.0** | **-1.3** | |
| SADO | | | | | IAMs_20 | | IAMs_20 | 18 58 17.6 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| **SADO** | **Sadowa** | **75.89** | **37** | ⇓ | P | | **P** | **18 23 49.5** | **-0.8** | |
| **SADO** | **Sadowa** | **75.89** | **37** | | LR | | LR | 18 59 01.9 | | |
| | comp=Z,6µm,21.9s,baz=346,slow=37 | | | | | | | | | |
| **VRI** | **Vrincioaia** | **75.89** | **326** | ⇓ | P | | **P** | **18 23 51.1** | **+0.8** | |
| **VRI** | **Vrincioaia** | **75.89** | **326** | | P | | **P** | **18 23 51.1** | **+0.8** | |
| **VRI** | **Vrincioaia** | **75.89** | **326** | | P | | **P** | **18 23 50.7** | **+0.4** | |
| | comp=Z,104nm,1.1s,comp=Z,760nm | | | | | | | | | |
| **SLM** | **Saint Louis** | **75.89** | **47** | | IAmb | | IAmb | 18 23 53.1 | | |
| | comp=Z,216nm,1.1s | | | | | | | | | |
| **MAUC** | **Maruska** | **75.92** | **333** | | *e*P | | **P** | **18 23 51.4** | **+1.0** | |
| **SLBS** | **Sierra La Lagu** | **75.92** | **70** | | P | | **P** | **18 23 51.3** | **+0.4** | |
| SLBS | | | | | IAmb | | IAmb | 18 23 54.7 | | |
| | comp=Z,183nm,1.4s | | | | | | | | | |
| **CFR** | **Carcaliu** | **75.93** | **324** | ⇑ | P | | **P** | **18 23 50.1** | **-0.5** | |
| **CFR** | **Carcaliu** | **75.93** | **324** | | P | | **P** | **18 23 50.0** | **-0.5** | |
| **PLOR3** | **Plostina Array** | **75.93** | **326** | | P | | **P** | **18 23 50.2** | **-0.4** | |
| | comp=Z,88nm,0.8s,comp=Z,4µm | | | | | | | | | |
| **PLOR** | **Plostina** | **75.93** | **326** | ⇑ | P | | **P** | **18 23 51.1** | **+0.4** | |
| **PLOR** | **Plostina** | **75.93** | **326** | | P | | **P** | **18 23 51.0** | **+0.4** | |
| **PLOR5** | **Plostina Array** | **75.93** | **326** | | P | | **P** | **18 23 50.8** | **+0.2** | |
| | comp=Z,139nm,1.2s,comp=Z,4µm | | | | | | | | | |
| **IBBN** | **Ibbenburen** | **75.94** | **340** | ⇓ | P | | **P** | **18 23 50.6** | **+0.2** | |
| **IBBN** | **Ibbenburen** | **75.94** | **340** | | *e*P | | **P** | **18 23 51.1** | **+0.7** | |
| | comp=Z,236nm,0.8s,baz=24,slow=5.7 | | | | | | | | | |
| **OZNA** | **Ozona** | **75.94** | **59** | | IAmb | | IAmb | 18 23 53.8 | | |
| | comp=Z,177nm,1.3s | | | | | | | | | |
| **IDGL** | **Inch Island, C** | **75.94** | **350** | | P | | **P** | **18 23 50.4** | **0.0** | |
| **IDGL** | **Inch Island, C** | **75.94** | **350** | | *e*P | | **P** | **18 23 50.9** | **+0.5** | |
| IDGL | | | | | IAmb | | IAmb | 18 23 53.3 | | |
| | comp=Z,517nm,0.9s | | | | | | | | | |
| **RICC** | **Richard** | **75.95** | **335** | | *e*P | | **P** | **18 23 51.3** | **+0.7** | |
| RICC | | | | | AMS | | AMS | 19 00 10.0 | | |
| | comp=Z,21µm,20.4s | | | | | | | | | |
| **ICQ** | **Pointe Anglais** | **75.96** | **27** | | P | | **P** | **18 23 49.5** | **-1.1** | |
| **NEUB** | **Neuenburg** | **75.97** | **337** | | *e*P | | **P** | **18 23 51.1** | **+0.4** | |
| | comp=Z,275nm,1.2s,baz=24,slow=5.7 | | | | | | | | | |
| NEUB | | | | | *e*pP | | PcP | 18 24 13.0 | +10 | |
| | baz=23,slow=5.8 | | | | | | | | | |
| **JURR** | **Jurilovca** | **75.98** | **324** | ⇑ | P | | **P** | **18 23 51.2** | **+0.4** | |
| **L48A** | **N Adams** | **75.98** | **41** | | IAmb | | IAmb | 18 23 53.7 | | |
| | comp=Z,138nm,0.8s | | | | | | | | | |
| **TURR** | **Turia** | **76.00** | **326** | ⇓ | P | | **P** | **18 23 51.8** | **+0.8** | |
| **MBWA** | **Marble Bar** | **76.01** | **214** | | P | | **P** | **18 23 51.8** | **+0.7** | |
| **MBWA** | **Marble Bar** | **76.01** | **214** | | P | | **P** | **18 23 50.7** | **-0.4** | |
| **MBWA** | **Marble Bar** | **76.01** | **214** | ⇑ | P | | **P** | **18 23 52.1** | **+1.0** | |
| **MBWA** | **Marble Bar** | **76.01** | **214** | | P | | **P** | **18 23 52.3** | **+1.2** | |
| MBWA | | | | | S | | **S** | **18 33 36.1** | **+3.8** | |
| **SFIN** | **Lafayette** | **76.02** | **44** | | IAmb | | IAmb | 18 23 53.7 | | |
| | comp=Z,126nm,1.1s | | | | | | | | | |
| SFIN | | | | | IAMs_20 | | IAMs_20 | 18 56 47.1 | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **SFIN** | **Lafayette** | **76.02** | **44** | | P | | **P** | **18 23 50.6** | **-0.5** | |
| | baz=323,SNR=21 | | | | | | | | | |
| SFIN | | | | | S | | **S** | **18 33 31.9** | **-0.5** | |
| | baz=323 | | | | | | | | | |
| **AAM** | **Ann Arbor** | **76.03** | **41** | | IAmb | | IAmb | 18 23 54.2 | | |
| | comp=Z,169nm,1.1s | | | | | | | | | |
| **AAM** | **Ann Arbor** | **76.03** | **41** | | P | | **P** | **18 23 51.1** | **0.0** | |
| | baz=324 | | | | | | | | | |
| AAM | | | | | S | | **S** | **18 33 31.5** | **-0.9** | |
| | baz=324 | | | | | | | | | |
| **MGMO** | **Mountain Grove** | **76.03** | **49** | | P | | **P** | **18 23 50.3** | **-1.0** | |
| MGMO | | | | | IAmb | | IAmb | 18 23 53.3 | | |
| | comp=Z,196nm,1.4s | | | | | | | | | |
| MGMO | | | | | IAMs_20 | | IAMs_20 | 19 01 30.2 | | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| **OZUR** | | **76.05** | **326** | ⇑ | P | | **P** | **18 23 52.2** | **+0.9** | |
| **LDAQ** | **Lac Daran** | **76.07** | **30** | | IAmb | | IAmb | 18 23 54.4 | | |
| | comp=Z,160nm,0.9s | | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **76.08** | **336** | | *e*P | | **P** | **18 23 51.4** | **+0.1** | |
| HSKC | | | | | *e*S | | **S** | **18 33 29.9** | **-2.8** | |
| HSKC | | | | | AMS | | AMS | 19 00 10.0 | | |
| | comp=Z,20µm,19.5s | | | | | | | | | |
| **SAND** | **Sanderson** | **76.08** | **61** | | IAmb | | IAmb | 18 23 54.8 | | |
| | comp=Z,185nm,1.3s | | | | | | | | | |
| **TPGR** | **Topolog** | **76.08** | **324** | ⇓ | P | | **P** | **18 23 51.4** | **-0.1** | |
| **FW03** | **Perrin-Whitt E** | **76.09** | **56** | | IAmb | | IAmb | 18 23 54.3 | | |
| | comp=Z,281nm,1.3s | | | | | | | | | |
| FW03 | | | | | IAMs_20 | | IAMs_20 | 19 02 49.7 | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **K50A** | **Casco** | **76.09** | **40** | | IAmb | | IAmb | 18 23 54.4 | | |
| | comp=Z,106nm,0.9s | | | | | | | | | |
| **COVR** | **Voineasa-Covas** | **76.11** | **326** | ⇓ | P | | **P** | **18 23 52.4** | **+0.8** | |
| **GTTG** | **Gottingen** | **76.12** | **338** | | *e*P | | **P** | **18 23 52.2** | **+0.7** | |
| | comp=Z,150nm,0.9s,baz=24,slow=5.7 | | | | | | | | | |
| GTTG | | | | | *e*pP | | PcP | 18 24 14.0 | +10 | |
| | baz=23,slow=5.8 | | | | | | | | | |
| **PLPT** | **Palo Pinto** | **76.12** | **56** | | P | | **P** | **18 23 51.2** | **-0.7** | |
| PLPT | | | | | IAmb | | IAmb | 18 23 54.6 | | |
| | comp=Z,261nm,1.3s | | | | | | | | | |
| **BZK** | **Bozkurt** | **76.13** | **319** | ⇓ | P | | **P** | **18 23 52.0** | **+0.3** | |
| **BZK** | **Bozkurt** | **76.13** | **319** | | P | | **P** | **18 23 51.9** | **+0.2** | |
| | comp=Z,311nm,0.8s,comp=Z,4µm | | | | | | | | | |
| **TGMR** | **Targu Mures** | **76.14** | **327** | ⇓ | P | | **P** | **18 23 53.1** | **+1.3** | |
| **BISRR** | **Bisoca** | **76.17** | **325** | ⇑ | P | | **P** | **18 23 53.1** | **+1.1** | |
| **BISRR** | **Bisoca** | **76.17** | **325** | | P | | **P** | **18 23 52.5** | **+0.5** | |
| | comp=Z,934nm,1.1s,comp=Z,13µm | | | | | | | | | |
| **MESR** | **Meseseni** | **76.17** | **329** | ⇑ | P | | **P** | **18 23 52.9** | **+1.0** | |
| **HPIG** | | **76.20** | **65** | | IAmb | | IAmb | 18 23 55.6 | | |
| | comp=Z,212nm,1.3s | | | | | | | | | |
| **HPK** | **Haverah Park** | **76.20** | **346** | | *e*P | | **P** | **18 23 52.6** | **+0.7** | |
| HPK | | | | | IAmb | | IAmb | 18 23 55.1 | | |
| | comp=Z,724nm,0.9s | | | | | | | | | |
| HPK | | | | | IAMs_20 | | IAMs_20 | 19 03 31.3 | | |
| | comp=Z,12µm,18.2s | | | | | | | | | |
| **N47A** | **Urbana** | **76.27** | **43** | | IAmb | | IAmb | 18 23 54.8 | | |
| | comp=Z,123nm,1.0s | | | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **76.28** | **46** | | P | | **P** | **18 23 52.1** | **-0.5** | |
| Q44A | | | | | IAmb | | IAmb | 18 23 55.3 | | |
| | comp=Z,193nm,1.0s | | | | | | | | | |
| **PRA** | **Prague** | **76.28** | **335** | | *e*P | | **P** | **18 23 53.2** | **+0.7** | |
| PRA | | | | | *e*S | | **S** | **18 33 33.2** | **-1.7** | |
| PRA | | | | | AMS | | AMS | 19 02 30.0 | | |
| | comp=Z,19µm,16.5s | | | | | | | | | |
| **PRA** | **Prague** | **76.28** | **335** | | *e*P | | **P** | **18 23 53.2** | **+0.7** | |
| PRA | | | | | *e*S | | **S** | **18 33 33.2** | **-1.7** | |
| PRA | | | | | MLR | | MLR | | | |
| | comp=Z,19µm,16.5s | | | | | | | | | |
| **DOPR** | **Dopca** | **76.31** | **326** | ⇓ | P | | **P** | **18 23 53.3** | **+0.6** | |
| **FVM** | **French Village** | **76.31** | **48** | | IAmb | | IAmb | 18 23 55.5 | | |
| | comp=Z,122nm,1.1s | | | | | | | | | |
| FVM | | | | | IAMs_20 | | IAMs_20 | 19 00 50.3 | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| **Z35A** | **Perchaven, San** | **76.32** | **55** | | IAmb | | IAmb | 18 23 55.3 | | |
| | comp=Z,182nm,1.3s | | | | | | | | | |
| Z35A | | | | | IAMs_20 | | IAMs_20 | 19 02 42.6 | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **CJR** | **Cluj-Napoca** | **76.32** | **328** | ⇑ | P | | **P** | **18 23 53.6** | **+0.8** | |
| **CJR** | **Cluj-Napoca** | **76.32** | **328** | | P | | **P** | **18 23 53.6** | **+0.8** | |
| **GOPC** | **GO Pecny, Ondr** | **76.32** | **335** | | *e*P | | **P** | **18 23 53.6** | **+0.9** | |
| GOPC | | | | | AMS | | AMS | 19 03 10.0 | | |
| | comp=Z,25µm,16.7s | | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **76.32** | **335** | | *e*P | | **P** | **18 23 53.6** | **+0.9** | |
| GOPC | | | | | MLR | | MLR | | | |
| | comp=Z,25µm,16.7s | | | | | | | | | |
| **PRU** | **Pruhonice** | **76.33** | **335** | | *e*P | | **P** | **18 23 52.4** | **-0.3** | |
| PRU | | | | | *e*S | | **S** | **18 33 31.3** | **-4.1** | |
| PRU | | | | | AMS | | AMS | 19 03 10.0 | | |
| | comp=Z,21µm,16.8s | | | | | | | | | |
| **PRU** | **Pruhonice** | **76.33** | **335** | | *e*P | | **P** | **18 23 52.4** | **-0.3** | |
| PRU | | | | | *e*S | | **S** | **18 33 31.3** | **-4.1** | |
| PRU | | | | | MLR | | MLR | | | |
| | comp=Z,21µm,16.8s | | | | | | | | | |
| **VRAC** | **Vranov** | **76.34** | **333** | | *e*P | | **P** | **18 23 52.7** | **-0.1** | |
| VRAC | | | | | *e*S | | **S** | **18 33 30.8** | **-4.8** | |
| **VRAC** | **Vranov** | **76.34** | **333** | | LR | | LR | 19 03 38.9 | | |
| | comp=Z,24µm,18.1s,baz=17,slow=41 | | | | | | | | | |
| **VRAC** | **Vranov** | **76.34** | **333** | ⇑ | P | | **P** | **18 23 54.0** | **+1.2** | |
| **VRAC** | **Vranov** | **76.34** | **333** | | P | | **P** | **18 23 54.0** | **+1.2** | |
| **PSA00** | **Pilbara Seismi** | **76.34** | **213** | | P | | **P** | **18 23 53.7** | **+0.7** | |
| **PSA00** | **Pilbara Seismi** | **76.34** | **213** | | P | | **P** | **18 23 52.6** | **-0.4** | |
| **IOMK** | **Kirk Michael** | **76.36** | **348** | | *e*P | | **P** | **18 23 52.6** | **-0.2** | |
| IOMK | | | | | IAmb | | IAmb | 18 23 55.6 | | |
| | comp=Z,556nm,0.9s | | | | | | | | | |
| IOMK | | | | | IAMs_20 | | IAMs_20 | 19 04 38.1 | | |
| | comp=Z,13µm,16.6s | | | | | | | | | |
| **VYHS** | **Vyhne** | **76.37** | **332** | | *e*P | | **P** | **18 23 53.8** | **+0.8** | |
| VYHS | | | | | pmax | | pmax | | | |
| | comp=Z,104nm,1.1s | | | | | | | | | |
| **VYHS** | **Vyhne** | **76.37** | **332** | | *e*P | | **P** | **18 23 53.8** | **+0.8** | |
| **X37A** | **Clayton** | **76.38** | **53** | | IAMs_20 | | IAMs_20 | 19 01 44.0 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **JAVC** | **Velka Javorina** | **76.41** | **333** | | *e*P | | **P** | **18 23 54.1** | **+0.8** | |
| JAVC | | | | | *e*S | | **S** | **18 33 34.7** | **-1.8** | |
| **TRQ** | **Mont Tremblant** | **76.41** | **33** | | IAmb | | IAmb | 18 23 55.8 | | |
| | comp=Z,203nm,0.9s | | | | | | | | | |
| TRQ | | | | | IAMs_20 | | IAMs_20 | 19 03 42.0 | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **HARR** | **Harsova** | **76.42** | **324** | ⇑ | P | | **P** | **18 23 53.8** | **+0.4** | |
| **HARR** | **Harsova** | **76.42** | **324** | | P | | **P** | **18 23 53.7** | **+0.4** | |
| **FW06** | **Azle** | **76.42** | **56** | | P | | **P** | **18 23 52.8**

**ICOR Ion Corvin 76.95 324** ⇓P **P 18 23 57.2 +0.9**
**FW13 Cleburne 76.96 56** P **P 18 23 55.8 -0.8**
FW13 IAmb IAmb 18 23 59.3
comp=Z,170nm,1.2s
**MDH Madha 76.98 293** *i* P **P 18 23 56.1 -0.7**
SNR=13
**MDH Madha 76.98 293** P **P 18 23 57.5 +0.6**
SNR=13
MDH S **S 18 33 39.7 -3.7**
**MANZ Manzenberg 77.00 336** *e*P **P 18 23 57.0 +0.5**
comp=Z,28nm,0.9s,baz=24,slow=5.7
MANZ *e*pP sP 18 24 19.7 +11
baz=23,slow=5.8
**WACR West Acre 77.00 344** *e*P **P 18 23 56.4 0.0**
WACR IAmb IAmb 18 23 59.6
comp=Z,582nm,0.9s
WACR IAMs_20 IAMs_20 19 04 13.3
comp=Z,10μm,17.8s
**O48B Farmland** baz=324,SNR=29 **77.01 43** P **P 18 23 56.3 -0.5**
**MASF Masafi 77.02 293** P **P 18 23 57.7 +0.6**
SNR=16
**MSFE Esma-Masafi 77.03 293** *i* P **P 18 23 56.4 -0.8**
SNR=16
**LEHL Lehliu 77.03 325** ⇑P **P 18 23 57.3 +0.6**
**JCT Junction City 77.03 59** P **P 18 23 56.6 -0.4**
JCT IAmb IAmb 18 24 09.9
comp=Z,275nm,1.4s
JCT IAMs_20 IAMs_20 18 54 03.1
comp=Z,7μm,22.0s
**JCT Junction City 77.03 59** ⇓P **P 18 23 57.2 +0.1**
**JCT Junction City 77.03 59** P **P 18 23 57.1 0.0**
baz=319,SNR=28
JCT S **S 18 33 44.9 +1.1**
baz=319
**JCT Junction City 77.03 59** P **P 18 23 56.7 -0.4**
JCT pmax pmax
comp=Z,275nm,1.4s
JCT MLR MLR
comp=Z,7μm,22.0s
**WSAR Wadi Sarin 77.04 290** P **P 18 23 56.9 -0.3**
comp=Z,124nm,0.9s,baz=62,slow=4.9,SNR=28
WSAR LR LR 19 02 44.8
comp=Z,15μm,19.4s,baz=60,slow=40
comp=Z,124nm,0.9s
**WSAR Wadi Sarin 77.04 290** P **P 18 23 58.5 +1.3**
SNR=11
WSAR S **S 18 33 44.3 +0.3**
**FW14 Alvarado 77.05 56** IAmb IAmb 18 23 59.9
comp=Z,204nm,1.1s
**SULR 77.07 325** ⇑P **P 18 23 57.6 +0.6**
**FCAR Ozark Folk Cen 77.08 50** IAmb IAmb 18 23 59.4
comp=Z,283nm,1.2s
FCAR IAMs_20 IAMs_20 18 58 45.1
comp=Z,8μm,21.0s
**ARR Arges 77.09 327** ⇓P **P 18 23 58.2 +0.9**
**S44A Carbondale 77.11 47** IAmb IAmb 18 24 00.2
comp=Z,177nm,1.1s
S44A IAMs_20 IAMs_20 18 59 55.5
comp=Z,8μm,20.0s
**STNC Stoke 77.14 346** *e*P **P 18 23 57.9 +0.6**
**SRO Srobarova 77.14 332** *e*P **P 18 23 58.4 +1.1**
SRO pmax pmax
comp=Z,111nm,0.8s
**SRO Srobarova 77.14 332** *e*P **P 18 23 58.4 +1.1**
**BIDO Bidbid 77.15 291** P **P 18 23 59.4 +1.6**
SNR=15
BIDO P **P 18 23 59.4 +1.6**
SNR=15
BIDO S **S 18 33 47.1 +1.8**
BIDO S **S 18 33 47.1 +1.8**
**FW16 Waxahatchie 77.15 55** IAmb IAmb 18 24 01.2
comp=Z,191nm,1.2s
**WME Myndd Eilian 77.16 347** *e*P **P 18 23 56.8 -0.5**
**ROTZ Rotzenmuhle 77.17 336** *e*P **P 18 23 58.2 +0.7**
comp=Z,58nm,1.1s,baz=24,slow=5.7
ROTZ *e*pP sP 18 24 20.3 +11
baz=23,slow=5.8
**ZST Bratislava 77.17 333** *e*P **P 18 23 58.2 +0.7**
ZST pmax pmax
comp=Z,252nm,1.2s
**ZST Bratislava 77.17 333** *e*P **P 18 23 58.2 +0.7**
**WPS Cemaes, Angles 77.18 348** *e*P **P 18 23 56.9 -0.5**
WPS IAmb IAmb 18 23 59.9
comp=Z,85nm,0.8s
**UMQ Umm Al-Quwin 77.21 294** P **P 18 23 59.4 +1.3**
SNR=13
UMQ S **S 18 33 46.6 +0.9**
**PSN Preselentsi 77.22 323** *i* P **P 18 23 58.7 +0.9**
**PSN Preselentsi 77.22 323** *i* P **S 18 33 47.7 +2.4**
**WHTX Lake Whitney, 77.22 56** IAmb IAmb 18 24 01.0
comp=Z,218nm,1.2s
WHTX IAMs_20 IAMs_20 18 54 19.5
comp=Z,6μm,22.0s
**WHTX Lake Whitney,** baz=320,SNR=30 **77.22 56** P **P 18 23 58.4 +0.3**
WHTX S **S 18 33 45.5 -0.1**
baz=320
**CGM3 Cape Girardeau 77.23 48** IAMs_20 IAMs_20 18 59 48.5
comp=Z,7μm,20.0s
**PBMO Poplar Bluff 77.25 48** IAMs_20 IAMs_20 19 00 57.3
comp=Z,5μm,20.0s
**BLO Bloomington 77.25 44** P **P 18 23 57.5 -0.6**
BLO IAmb IAmb 18 24 00.8
comp=Z,196nm,1.4s
**BLO Bloomington 77.25 44** P **P 18 23 57.5 -0.6**
BLO pmax pmax
comp=Z,196nm,1.5s
BLO MLR MLR
comp=Z,8μm,18.0s
**WLF1 Llynfaes 77.28 347** *e*P **P 18 23 57.9 -0.1**
WLF1 IAmb IAmb 18 24 00.1
comp=Z,154nm,0.8s
**DEV Deva 77.28 328** ⇑P **P 18 23 58.8 +0.7**
**DEV Deva 77.28 328** P **P 18 23 58.8 +0.7**
**WBK Wadi Bani Khal 77.29 290** P **P 18 24 00.2 +1.6**
SNR=16
WBK P **P 18 24 00.2 +1.6**
SNR=16
WBK S **S 18 33 49.2 +2.4**
WBK S **S 18 33 49.2 +2.4**
**UOSS Minazif 77.30 293** P **P 18 23 56.1 -2.5**
**UOSS Minazif 77.30 293** *i* P **P 18 23 57.9 -0.7**
SNR=58
**UOSS Minazif 77.30 293** P **P 18 23 59.1 +0.4**
UOSS P **P 18 23 59.1 +0.4**
UOSS S **S 18 33 46.4 -0.4**
UOSS S **S 18 33 46.4 -0.4**
**CWF Charnwood Fore 77.33 345** *e*P **P 18 23 58.4 +0.2**
CWF IAmb IAmb 18 24 02.0
comp=Z,273nm,1.0s
CWF IAMs_20 IAMs_20 19 02 59.7
comp=Z,9μm,18.6s
**J54A Appleton 77.34 37** IAmb IAmb 18 24 01.3
comp=Z,204nm,1.1s
J54A IAMs_20 IAMs_20 19 00 22.9
comp=Z,7μm,20.0s
**LOT Lotru 77.34 327** ⇓P **P 18 23 58.5 -0.2**
**JLN Jalan Bani Buh 77.35 289** P **P 18 24 00.4 +1.5**
SNR=28
JLN P **P 18 24 00.4 +1.5**
SNR=28
JLN S **S 18 33 50.3 +3.0**
JLN S **S 18 33 50.3 +3.0**
**DRIO Del Rio 77.35 60** IAmb IAmb 18 24 01.8
comp=Z,253nm,1.2s
**MIAR Mount Ida 77.37 52** IAmb IAmb 18 24 01.7
comp=Z,250nm,1.1s
MIAR IAMs_20 IAMs_20 19 04 28.9
comp=Z,7μm,18.0s
**MIAR Mount Ida 77.37 52** ⇑P **P 18 23 57.4 -1.4**
**MIAR Mount Ida 77.37 52** P **P 18 23 58.8 -0.1**
baz=321,SNR=127
MIAR S **S 18 33 48.4 +1.2**
baz=321
**MIAR Mount Ida 77.37 52** P **P 18 23 58.8 -0.1**
**MNTQ Montreal, Queb 77.37 33** IAmb IAmb 18 24 01.1
comp=Z,184nm,1.1s
MNTQ IAMs_20 IAMs_20 19 02 53.1
comp=Z,8μm,20.0s
**KHC Kasperske Hory 77.37 335** *e*P **P 18 23 58.2 -0.4**
KHC *ex* x 18 24 11.3
KHC *eS* **S 18 33 44.1 -2.8**
KHC AMS AMS 19 00 50.0
comp=Z,26μm,19.9s
**KHC Kasperske Hory 77.37 335** *d i*P **P 18 23 58.3 -0.4**
KHC pmax pmax
comp=Z,740nm,1.0s
**KHC Kasperske Hory 77.37 335** P **P 18 23 58.7 0.0**
comp=Z,398nm,1.0s,comp=Z,3μm
**SIRR Siria 77.38 329** ⇑P **P 18 23 58.6 -0.1**
**YLL Llanberis 77.39 347** *e*P **P 18 23 58.9 +0.2**
**HATD Hatta, Dubai 77.43 293** *i* P **P 18 23 59.4 0.0**
SNR=91
**HATD Hatta, Dubai 77.43 293** P **P 18 24 00.1 +0.7**
SNR=37
HATD P **P 18 24 00.1 +0.7**
SNR=37
**PECO Prince Edward 77.43 36** P **P 18 23 58.2 -0.8**
PECO IAMs_20 IAMs_20 19 00 40.3
comp=Z,8μm,20.0s
**LCAR Lake Charles 77.44 49** IAMs_20 IAMs_20 19 01 47.4
comp=Z,7μm,19.0s
**O49A Covington 77.44 42** IAmb IAmb 18 24 01.8
comp=Z,135nm,1.1s
**CKRC Cesky Krumlov 77.44 335** *e*P **P 18 23 57.9 -1.2**
CKRC AMS AMS 19 04 00.0
comp=Z,22μm,17.0s
**CKRC Cesky Krumlov 77.44 335** *e*P **P 18 23 57.9 -1.2**
CKRC MLR MLR
comp=Z,22μm,17.0s
**WHAR Wooly Hollow 77.46 51** IAMs_20 IAMs_20 19 02 31.2
comp=Z,7μm,18.0s
**FOEL Foel Wylfa 77.49 347** *e*P **P 18 23 59.6 +0.3**
FOEL IAmb IAmb 18 24 02.3
comp=Z,270nm,0.8s
FOEL IAMs_20 IAMs_20 19 04 33.7
comp=Z,8μm,18.0s
**GRF Grafenberg Arr 77.50 337** *e*P **P 18 24 00.3 +0.9**
comp=Z,381nm,0.9s,baz=24,slow=5.7
GRF *e*L L 19 01 32.4
comp=Z,17μm,20.5s
**GRFO Grafenberg 77.50 337** P **P 18 23 59.1 -0.3**
**GRFO Grafenberg 77.50 337** P **P 18 23 59.1 -0.3**
GRFO pmax pmax
comp=Z,373nm,1.0s
GRFO MLR MLR
comp=Z,17μm,20.0s
**P48A Milroy 77.53 44** IAmb IAmb 18 24 02.1
comp=Z,171nm,1.0s
**SMDO Samad 77.54 291** P **P 18 24 01.0 +0.9**
SNR=14
SMDO P **P 18 24 01.0 +0.9**
SNR=14
SMDO S **S 18 33 50.6 +1.0**
SMDO S **S 18 33 50.6 +1.0**
**ELMS Elmsett, Ipswi 77.54 344** *e*P **P 18 24 00.2 +0.7**
ELMS IAmb IAmb 18 24 02.7
comp=Z,674nm,0.9s
**WET Wettzell 77.55 336** *e*P **P 18 24 00.8 +1.1**
comp=Z,280nm,0.9s,baz=24,slow=5.7
WET *e*pP sP 18 24 22.5 +11
baz=23,slow=5.8
**D62A Allapoint, All 77.56 29** P **P 18 23 59.2 -0.5**
D62A IAmb IAmb 18 24 02.8
comp=Z,99nm,0.8s
**SGRR Singureni 77.56 325** ⇓P **P 18 23 59.8 0.0**
**ASHO Ashiyiah 77.58 293** *i* P **P 18 23 60.0 -0.3**
SNR=66
**ASHO Ashiyiah 77.58 293** P **P 18 24 00.8 +0.6**
SNR=34
ASHO P **P 18 24 00.8 +0.6**
SNR=34
**DSB Dublin 77.59 349** P **P 18 23 59.8 0.0**
**DSB Dublin 77.59 349** P **P 18 23 58.8 -0.9**
DSB IAMs_20 IAMs_20 18 56 21.6
comp=Z,5μm,21.0s
**DSB Dublin 77.59 349** *e*P **P 18 23 59.1 -0.7**
**DSB Dublin 77.59 349** P **P 18 23 57.8 -1.9**
**DSB Dublin 77.59 349** ⇓P **P 18 23 59.8 0.0**
**GEC2 GERESS Array S 77.60 335** IAmb IAmb 18 24 02.8
comp=Z,136nm,0.8s
**GEC2 GERESS Array S 77.60 335** *e*P **P 18 24 00.4 +0.4**
comp=Z,137nm,0.8s,baz=24,slow=5.7
**GERES GERESS Array B 77.60 335** P **P 18 23 58.5 -1.5**
**GERES GERESS Array B 77.60 335** P **P 18 24 00.2 +0.2**
comp=Z,73nm,0.7s,baz=145,slow=4.9,SNR=179
GERES LR LR 19 01 40.7
comp=Z,21μm,20.2s,baz=19,slow=38
comp=Z,73nm,0.7s
**GERES GERESS Array B 77.60 335** P **P 18 23 58.5 -1.5**
**LLW Llanuwychllyn 77.60 347** *e*P **P 18 23 59.9 +0.1**
**NAZ Nazwa, Dubai 77.60 294** *i* P **P 18 24 00.1 -0.2**
SNR=33
**NAZ Nazwa, Dubai 77.60 294** P **P 18 24 00.8 +0.5**
SNR=35
NAZ P **P 18 24 00.8 +0.5**
SNR=35
NAZ S **S 18 33 46.7 -3.4**
NAZ S **S 18 33 46.7 -3.4**
**Z38A Mt. Pleasant 77.60 54** IAmb IAmb 18 24 03.0
comp=Z,200nm,1.1s
Z38A IAMs_20 IAMs_20 19 00 58.4
comp=Z,5μm,20.0s
**HOQ Hoqain 77.62 291** P **P 18 24 01.1 +0.7**
SNR=32
HOQ P **P 18 24 01.1 +0.7**
SNR=32
**AULRC Lightning Ridg 77.63 186** P **P 18 24 00.6 +0.5**
**M52A Chesterland 77.64 40** IAmb IAmb 18 24 03.3
comp=Z,198nm,1.1s
**SURR Surduc 77.66 328** ⇓P **P 18 24 00.5 +0.1**
**J55A Hilton 77.67 37** P **P 18 23 58.7 -1.7**
J55A IAmb IAmb 18 24 02.9
comp=Z,129nm,1.0s
J55A IAMs_20 IAMs_20 19 03 58.7
comp=Z,6μm,18.0s
**PARMO Parma 77.68 48** IAMs_20 IAMs_20 18 56 56.5
comp=Z,6μm,22.0s
**SOHO SOHO 77.69 292** *i* P **P 18 24 00.7 -0.1**
SNR=81
**SOHO SOHO 77.69 292** P **P 18 24 01.2 +0.4**
SOHO P **P 18 24 01.2 +0.4**
SOHO S **S 18 33 53.6 +2.6**
SOHO S **S 18 33 53.6 +2.6**
**OOD Oodnadatta 77.70 197** P **P 18 24 02.0 +1.5**
**TNS Taunus Mts 77.71 339** *e*P **P 18 24 01.3 +0.7**
comp=Z,234nm,0.8s,baz=24,slow=5.7
**N51A Ashland 77.72 41** P **P 18 23 59.9 -0.8**
N51A IAmb IAmb 18 24 03.4
comp=Z,187nm,1.0s
**AHRW Bad Neuenahr-A 77.74 340** *e*P **P 18 24 01.2 +0.6**
comp=Z,220nm,1.0s,baz=24,slow=5.7
**ERPA Erie 77.75 39** IAmb IAmb 18 24 03.8
comp=Z,215nm,1.1s
ERPA IAMs_20 IAMs_20 19 02 24.9
comp=Z,5μm,20.0s
**ERPA Erie 77.75 39** ⇓P **P 18 24 01.2 +0.3**
**ERPA Erie 77.75 39** P **P 18 24 00.9 +0.1**
baz=326,SNR=12
ERPA S **S 18 33 50.3 -0.8**
baz=326
**GZR Gura Zlata 77.75 328** ⇓P **P 18 24 00.6 -0.3**
**GZR Gura Zlata 77.75 328** P **P 18 24 00.5 -0.3**
**LONY Lake Ozonia 77.77 34** IAMs_20 IAMs_20 19 04 47.9
comp=Z,5μm,20.0s
**LONY Lake Ozonia 77.77 34** ⇓P **P 18 24 00.1 -0.9**
**LONY Lake Ozonia 77.77 34** P **P 18 23 59.8 -1.2**
baz=329,SNR=18
LONY S **S 18 33 49.0 -2.4**
baz=329
**IGLA Glengowla, Co 77.78 350** P **P 18 24 00.3 -0.5**
**IGLA Glengowla, Co 77.78 350** *e*P **P 18 24 00.9 +0.1**
IGLA IAmb IAmb 18 24 03.3
comp=Z,326nm,0.8s
**CONA Conrad Observa 77.79 333** *e*P **P 18 24 01.8 +0.7**
comp=Z,297nm,0.9s,SNR=158
**P49A Miami Univ. Ec 77.79 43** P **P 18 24 00.2 -0.9**
P49A IAmb IAmb 18 24 03.7
comp=Z,156nm,1.1s
**P49A Miami Univ. Ec 77.79 43** P **P 18 24 00.6 -0.6**
baz=324,SNR=19
P49A S **S 18 33 49.8 -1.9**
baz=324
**HLM1 Long Mynd 77.80 346** *e*P **P 18 24 01.3 +0.4**
HLM1 IAmb IAmb 18 24 03.6
comp=Z,140nm,0.9s
HLM1 IAMs_20 IAMs_20 19 04 11.4
comp=Z,8μm,18.5s
**X40A Basin Creek Fa 77.80 51** IAMs_20 IAMs_20 19 04 39.3
comp=Z,6μm,18.0s
**BEBN Eben Emael 77.82 341** *d*P **P 18 24 01.0 0.0**
comp=Z,366nm,0.8s
**FAQ Al Faqa, Dubai 77.82 293** *i* P **P 18 24 02.0 +0.4**
SNR=27
**FAQ Al Faqa, Dubai 77.82 293** P **P 18 24 02.0 +0.4**
SNR=28
FAQ P **P 18 24 02.0 +0.4**
SNR=28
FAQ S **S 18 33 50.0 -2.4**
FAQ S **S 18 33 50.0 -2.4**
**RONA Rosalia, Austr 77.86 333** *i* P **P 18 24 02.2 +0.7**
comp=Z,326nm,1.0s,SNR=140
**NEF NEVSHA 77.87 324** *i* P **P 18 24 02.6 +1.1**
**PVMO Portageville 77.90 48** IAMs_20 IAMs_20 19 01 37.4
comp=Z,6μm,21.0s
**PRD Provadia 77.90 324** *i* P **P 18 24 02.2 +0.5**
**PRD Provadia 77.90 324** *i* P **S 18 33 55.4 +2.7**
**BTNL Ternell 77.91 340** *d*P **P 18 24 01.7 0.0**
comp=Z,182nm,0.9s
**MEM Membach 77.92 340** *d*P **P 18 24 01.0 -0.6**
comp=Z,341nm,0.9s
**T45A Paducah 77.94 47** IAmb IAmb 18 24 05.0
comp=Z,242nm,1.2s
T45A IAMs_20 IAMs_20 19 00 20.5
comp=Z,8μm,20.0s
**MPLH Magyarpolny 77.95 332** P **P 18 24 01.5 -0.4**
comp=Z,1μm,1.0s,comp=Z,11μm
**BZS Buzias 77.96 329** ⇓P **P 18 24 00.6 -1.4**
**BZS Buzias 77.96 329** ⇓P **P 18 24 01.7 -0.3**
**BZS Buzias 77.96 329** P **P 18 24 01.6 -0.3**
**ACSO Alum Creek Sta 78.01 42** IAmb IAmb 18 24 05.2
comp=Z,119nm,1.0s
ACSO IAMs_20 IAMs_20 18 59 40.3
comp=Z,9μm,21.0s
**ACSO Alum Creek Sta 78.01 42** ⇓P **P 18 24 01.9 -0.4**
**ACSO Alum Creek Sta 78.01 42** P **P 18 24 01.9 -0.4**
baz=325,SNR=17
ACSO S **S 18 33 52.5 -1.5**
baz=325
**JMDO Jabal Madar 78.01 290** P **P 18 24 03.7 +1.0**
SNR=31
JMDO P **P 18 24 03.7 +1.0**
SNR=31
**M53A WI Miller and 78.02 39** IAmb IAmb 18 24 05.4
comp=Z,256nm,1.1s
M53A IAMs_20 IAMs_20 19 02 58.3
comp=Z,7μm,18.0s
**M53A WI Miller and 78.02 39** P **P 18 24 02.7 +0.3**
baz=326,SNR=24
M53A S **S 18 33 52.8 -1.3**
baz=326
**HICK Hickman 78.03 48** IAmb IAmb 18 24 06.0
comp=Z,177nm,0.9s
HICK IAMs_20 IAMs_20 19 00 01.9
comp=Z,7μm,21.0s
**BSTI Sart Tilman 78.04 341** *d*P **P 18 24 01.9 -0.5**
comp=Z,63nm,0.9s
**J56A Wolcott 78.04 36** P **P 18 24 01.6 -0.8**
J56A IAMs_20 IAMs_20 19 01 09.4
comp=Z,8μm,20.0s
**PEBM Pemiscott Bayo 78.05 49** IAMs_20 IAMs_20 19 01 31.6
comp=Z,5μm,20.0s
**435B Jarrell 78.06 57** IAMs_20 IAMs_20 19 04 04.0
comp=Z,7μm,19.0s
**435B Jarrell 78.06 57** P **P 18 24 03.3 +0.6**
baz=320
435B S **S 18 33 55.7 +0.9**
baz=320
**ALLY Alegheny Colle 78.07 39** IAMs_20 IAMs_20 19 03 33.5
comp=Z,6μm,20.0s
**ASUD Al Ashush, Dub 78.07 294** *i* P **P 18 24 03.3 +0.4**
SNR=21
**ASUD Al Ashush, Dub 78.07 294** P **P 18 24 03.9 +1.0**
SNR=34
ASUD P **P 18 24 03.9 +1.0**
SNR=34
ASUD S **S 18 33 53.2 -1.9**
ASUD S **S 18 33 53.2 -1.9**
**WVNY West Valley, N 78.08 38** IAmb IAmb 18 24 06.1
comp=Z,264nm,1.2s
WVNY IAMs_20 IAMs_20 19 00 13.5
comp=Z,9μm,21.0s
**MMNY Mt. Morris Dam 78.08 37** P **P 18 24 01.6 -1.1**
**GNAR Gosnell 78.09 49** IAMs_20 IAMs_20 19 01 21.6
comp=Z,5μm,20.0s
**BR131 Keskin Array S 78.11 318** P **P 18 24 03.9 +0.8**
SNR=104
BR131 P **P 18 24 03.9 +0.8**
SNR=104
BR131 S **S 18 33 56.8 +1.4**
BR131 S **S 18 33 56.8 +1.4**
**BR131 Keskin Array S 78.11 318** *d i*P **P 18 24 03.1 0.0**
**BRTR Keskin Array B 78.11 318** P **P 18 24 01.6 -1.5**
**BRTR Keskin Array B 78.11 318** P **P 18 24 03.4 +0.3**
comp=Z,183nm,0.9s,baz=62,slow=3.2,SNR=118
BRTR LR LR 19 03 59.4
comp=Z,6μm,18.8s,baz=24,slow=40
comp=Z,183nm,0.9s
**BRTR Keskin Array B 78.11 318** P **P 18 24 01.6 -1.5**
**WCI Wyandotte Cave 78.11 45** P **P 18 24 02.8 -0.1**
**WCI Wyandotte Cave 78.11 45** IAMs_20 IAMs_20 19 03 57.5
comp=Z,7μm,19.0s
**WCI Wyandotte Cave 78.11 45** ⇓P **P 18 24 03.2 +0.3**
**WCI Wyandotte Cave 78.11 45** P **P 18 24 03.0 0.0**
baz=324
WCI S **S 18 33 55.1 0.0**
baz=324
**WCI Wyandotte Cave 78.11 45** P **P 18 24 02.8 -0.1**
WCI pmax pmax
comp=Z,193nm,0.6s
WCI MLR MLR
comp=Z,7μm,19.0s
**237A Washetta, Mont 78.12 55** IAMs_20 IAMs_20 19 03 55.2
comp=Z,5μm,18.0s
**BHOU Houvegnez 78.16 340** *d*P **P 18 24 02.5 -0.5**
comp=Z,158nm,1.1s
**GLAT Glass 78.22 48** IAMs_20 IAMs_20 18 57 22.8
comp=Z,6μm,21.0s
**SRE Strehaia 78.22 327** ⇑P **P 18 24 03.8 +0.3**
**SRE Strehaia 78.22 327** P **P 18 24 03.7 +0.3**
**ALNE Al Ain 78.23 293** *i* P **P 18 24 03.7 -0.1**
SNR=146
**ALNE Al Ain 78.23 293** P **P 18 24 04.5 +0.6**
SNR=42
ALNE P **P 18 24 04.5 +0.6**
SNR=42
ALNE S **S 18 33 59.4 +2.5**
ALNE S **S 18 33 59.4 +2.5**
**LNXT Lenox 78.25 48** IAMs_20 IAMs_20 19 01 46.7
comp=Z,5μm,20.0s
**BCLA Clavier 78.25 341** *d*P **P 18 24 03.7 +0.2**
comp=Z,181nm,0.9s
**PQI Presque Isle 78.26 29** IAMs_20 IAMs_20 19 05 23.1
comp=Z,4μm,18.0s
**J57A Williamstown 78.26 35** P **P 18 24 03.0 -0.7**
J57A IAMs_20 IAMs_20 19 01 46.2
comp=Z,6μm,20.0s
**WLAR White Oak Lake 78.27 52** P **P 18 24 03.7 -0.2**
WLAR IAmb IAmb 18 24 07.5
comp=Z,210nm,1.0s
WLAR IAMs_20 IAMs_20 19 04 58.9
comp=Z,7μm,18.0s
**ZIMR 78.28 325** ⇑P **P 18 24 03.6 -0.2**
**ZIMR 78.28 325** P **P 18 24 03.5 -0.2**
**ARQ Araqi 78.29 292** P **P 18 24 05.0 +0.8**
SNR=20
ARQ P **P 18 24 05.0 +0.8**
SNR=20
ARQ S **S 18 33 54.8 -2.7**
ARQ S **S 18 33 54.8 -2.7**
**F62A Pittston Farm,** comp=Z,134nm,0.9s **78.30 30** IAmb IAmb 18 24 07.0
**HERR Herculane 78.32 328** ⇓P **P 18 24 03.8 -0.2**
**BATG Bathurst New B 78.33 27** IAmb IAmb 18 24 07.2
comp=Z,112nm,0.9s
**AJN Ajban 78.33 294** *i* P **P 18 24 03.5 -0.8**
SNR=19
**AJN Ajban 78.33 294** P **P 18 24 04.7 +0.3**
SNR=40
AJN P **P 18 24 04.7 +0.3**
SNR=40
AJN S **S 18 33 54.9 -2.9**
AJN S **S 18 33 54.9 -2.9**
**BANR Banloc 78.33 329** ⇑P **P 18 24 05.0 +1.0**
**MOA Molln 78.33 334** *i* P **P 18 24 04.4 +0.4**
comp=Z,171nm,0.8s,SNR=106
**BGES Gesves 78.33 341** *d*P **P 18 24 03.7 -0.2**
comp=Z,174nm,1.0s

**VLAD Vladila** 78.35 326 ⇓P P 18 24 04.3 +0.2
**ANTO Ankara** 78.37 318 P P 18 24 03.3 -1.1
**ANTO Ankara** 78.37 318 IAMs_20 IAMs_20 19 03 50.9
comp=Z,6µm,21.0s
**ANTO Ankara** 78.37 318 ⇓P P 18 24 04.2 -0.2
**ANTO Ankara** 78.37 318 P P 18 24 05.3 +0.9
ANTO P P 18 24 05.3 +0.9
**ANTO Ankara** 78.37 318 ⇓P P 18 24 05.0 +0.6
**ANTO Ankara** 78.37 318 P P 18 24 03.3 -1.1
ANTO pmax pmax
comp=Z,340nm,0.9s
ANTO MLR MLR
comp=Z,6µm,21.0s
**ANTO Ankara** 78.37 318 P P 18 24 04.6 +0.2
comp=Z,195nm,1.1s,comp=Z,2µm
**UTMT University of** 78.37 48 IAMs_20 IAMs_20 19 00 22.7
comp=Z,7µm,20.0s
**SZH Strazhitsa** 78.38 325 *i* P P 18 24 04.5 +0.2
**SZH Strazhitsa** 78.38 325 *i* P S 18 33 58.9 +1.0
**STRD Stroud** 78.40 346 *eP* P 18 24 04.6 +0.3
STRD IAmb IAmb 18 24 07.5
comp=Z,680nm,0.9s
**ELSH Elham, Standar** 78.42 344 *eP* P 18 24 05.2 +0.9
ELSH IAmb IAmb 18 24 07.8
comp=Z,766nm,0.9s
ELSH IAMs_20 IAMs_20 19 04 53.2
comp=Z,16µm,17.7s
**ARMA Armidale** 78.42 183 P P 18 24 05.9 +1.3
**ARMA Armidale** 78.42 183 IAMs_20 IAMs_20 18 55 53.2
comp=Z,7µm,20.0s
**MONM Monmouth** 78.44 346 *eP* P 18 24 04.9 +0.5
MONM IAmb IAmb 18 24 07.7
comp=Z,357nm,0.8s
MONM IAMs_20 IAMs_20 19 04 48.2
comp=Z,11µm,18.3s
**MORH Mrgy, Hungar** 78.44 331 ⇓P P 18 24 04.1 -0.5
**NCB Newcomb** 78.46 34 P P 18 24 03.9 -0.9
NCB IAMs_20 IAMs_20 19 00 06.1
comp=Z,7µm,22.0s
**KIRS Kirsehir-Merke** 78.46 317 ⇑P P 18 24 05.8 +0.8
**DJES Djerdap** 78.47 327 ⇓P P 18 24 04.8 0.0
**N53A Lisbon** 78.47 40 IAmb IAmb 18 24 07.8
comp=Z,145nm,1.1s
**HALT Halls** 78.47 48 IAMs_20 IAMs_20 19 01 53.6
comp=Z,5µm,20.0s
**BMRD Maredsous** 78.48 341 *dP* P 18 24 04.2 -0.5
comp=Z,240nm,1.0s
**GAZ Gaziantep** 78.49 314 IAmb IAmb 18 24 09.6
comp=Z,203nm,0.8s
**IWEX Carrickbyrne,** 78.50 349 P P 18 24 05.0 +0.2
**IWEX Carrickbyrne,** 78.50 349 *eP* P 18 24 05.1 +0.2
IWEX IAmb IAmb 18 24 07.9
comp=Z,217nm,0.8s
**ARSA Arzberg** 78.50 333 *i* P P 18 24 05.2 +0.2
comp=Z,203nm,0.9s,SNR=106
**RCHB Rochefort** 78.52 341 *dP* P 18 24 04.8 -0.1
comp=Z,156nm,1.0s
**J58A Remsen** 78.58 35 IAmb IAmb 18 24 07.8
comp=Z,114nm,1.0s
J58A IAMs_20 IAMs_20 18 58 11.5
comp=Z,7µm,22.0s
**P51A Williamsport** 78.58 42 IAMs_20 IAMs_20 18 59 11.7
comp=Z,8µm,22.0s
**R49A Shelbyville** 78.59 44 P P 18 24 04.4 -1.1
R49A IAmb IAmb 18 24 08.7
comp=Z,266nm,1.6s
R49A IAMs_20 IAMs_20 19 00 02.0
comp=Z,7µm,21.0s
**SWN1 Swindon** 78.59 345 *eP* P 18 24 06.1 +0.8
SWN1 IAmb IAmb 18 24 08.8
comp=Z,1µm,0.8s
**O52A Adamsville** 78.61 41 IAmb IAmb 18 24 08.4
comp=Z,159nm,1.0s
**K57A Scipio Center** 78.64 36 IAMs_20 IAMs_20 19 01 16.2
comp=Z,7µm,20.0s
**MDVR Moldovita** 78.65 328 ⇑P P 18 24 05.8 -0.1
**BIOA Bad Ischl, Aus** 78.66 335 *i* P P 18 24 06.1 +0.3
comp=Z,84nm,0.8s,SNR=153
**GIVF Givet** 78.66 341 *eP* P 18 24 05.0 -0.7
GIVF pmax pmax
comp=Z,175nm,1.0s
**WOL Wolverton** 78.69 345 *eP* P 18 24 06.2 +0.3
**VT1 Waterbury** 78.69 33 IAmb IAmb 18 24 18.5
comp=Z,109nm,1.0s
**ELND Elena** 78.70 324 ⇑P P 18 24 06.2 +0.1
**G62A West of Eustis** 78.70 31 IAmb IAmb 18 24 09.6
comp=Z,215nm,1.0s
**DOU Dourbes** 78.71 341 *eP* P 18 24 06.3 +0.3
**DOU Dourbes** 78.71 341 *dP* P 18 24 04.7 -1.4
comp=Z,120nm,1.0s
**DOU Dourbes** 78.71 341 P P 18 24 05.6 -0.4
**T47A Sharon Grove** 78.72 46 IAmb IAmb 18 24 09.5
comp=Z,221nm,1.2s
**L56A Greenwood** 78.72 37 IAmb IAmb 18 24 08.9
comp=Z,111nm,1.0s
L56A IAMs_20 IAMs_20 19 01 15.6
comp=Z,6µm,21.0s
**F63A Nahmakanta, Br** 78.76 30 P P 18 24 06.0 -0.4
F63A IAMs_20 IAMs_20 19 05 01.5
comp=Z,8µm,20.0s
**O53A New Philadelph** 78.77 40 IAmb IAmb 18 24 09.2
comp=Z,136nm,1.1s
**O53A New Philadelph** 78.77 40 P P 18 24 06.3 -0.2
baz=326,SNR=26
O53A S S 18 34 00.8 -1.4
baz=326
**Z41A Richland Creek** 78.77 52 IAmb IAmb 18 24 09.7
comp=Z,146nm,1.3s
Z41A IAMs_20 IAMs_20 19 05 16.0
comp=Z,7µm,19.0s
**WLF Walferdange** 78.77 340 P P 18 24 05.4 -1.0
**WLF Walferdange** 78.77 340 P P 18 24 06.2 -0.2
**WLF Walferdange** 78.77 340 ⇓P P 18 24 06.8 +0.4
**WLF Walferdange** 78.77 340 *dP* P 18 24 06.6 +0.2
comp=Z,63nm,1.0s
**WLF Walferdange** 78.77 340 P P 18 24 05.4 -1.0
WLF pmax pmax
comp=Z,537nm,2.0s
**WLF Walferdange** 78.77 340 *eP* P 18 24 07.1 +0.7
comp=Z,71nm,0.9s,baz=24,slow=5.7
**MET Memphis--Engin** 78.80 49 IAMs_20 IAMs_20 19 02 37.3
comp=Z,8µm,19.0s
**PVL Pavlikeni** 78.81 325 *i* P P 18 24 06.9 +0.2
**PVL Pavlikeni** 78.81 325 *i* P S 18 34 04.0 +1.6
**JMB Yambol** 78.81 324 *i* P P 18 24 07.3 +0.6
**JMB Yambol** 78.81 324 *i* P S 18 34 03.6 +1.0
**BAIF Baives** 78.83 341 *eP* P 18 24 06.1 -0.6
BAIF pmax pmax
comp=Z,150nm,0.9s
**DRLN Deer Lake** 78.85 21 P P 18 24 06.9 +0.1
**DRLN Deer Lake** 78.85 21 ⇑P P 18 24 07.7 +0.9
**RJOB Jochberg** 78.86 335 *eP* P 18 24 08.0 +1.0
comp=Z,176nm,0.8s,baz=24,slow=5.7
**F64A Sherman** 78.86 29 IAMs_20 IAMs_20 19 02 19.3
comp=Z,8µm,20.0s
**STU Stuttgart** 78.87 338 IAmb IAmb 18 24 09.9
comp=Z,196nm,1.0s
**STU Stuttgart** 78.87 338 ⇓P P 18 24 06.5 -0.5
**STU Stuttgart** 78.87 338 P P 18 24 07.3 +0.4
**STU Stuttgart** 78.87 338 *eP* P 18 24 07.5 +0.5
comp=Z,444nm,0.9s,baz=24,slow=5.7
STU *eP*P sP 18 24 29.5 +10
baz=23,slow=5.8
**P52A Corning** 78.87 41 P P 18 24 06.5 -0.6
baz=325,SNR=11
P52A S S 18 34 01.4 -1.9
baz=325
**833A Chaparral WMA,** 78.88 60 P P 18 24 07.3 0.0
833A IAMs_20 IAMs_20 19 05 29.3
comp=Z,6µm,18.0s
**833A Chaparral WMA,** 78.88 60 P P 18 24 08.5 +1.1
baz=319,SNR=8.3
833A S S 18 34 02.3 -1.4
baz=319
**FUR Furstenfeldbru** 78.88 336 *eP* P 18 24 08.0 +0.9
comp=Z,325nm,1.0s,baz=24,slow=5.7
**NATX Nacogdoches** 78.93 54 IAMs_20 IAMs_20 19 04 33.6
comp=Z,4µm,19.0s
**NATX Nacogdoches** 78.93 54 ⇓P P 18 24 08.3 +0.7
**NATX Nacogdoches** 78.93 54 P P 18 24 08.2 +0.7
baz=321,SNR=14
NATX S S 18 34 02.6 -1.5
baz=321
**VALD Valchedram** 78.97 326 *i* P P 18 24 07.8 +0.2
**FRGS Fruska Gora** 78.98 329 ⇓*i* P P 18 24 07.4 -0.3
**FRGS Fruska Gora** 78.98 329 P P 18 24 06.5 -1.2
comp=Z,759nm,1.1s,comp=Z,5µm
**R50A Paris** 78.98 44 IAMs_20 IAMs_20 19 03 05.5
comp=Z,7µm,20.0s
**KOGS Kog** 79.00 332 *i* P P 18 24 07.5 -0.1
KOGS *eS* S 18 34 04.9 +0.6
**H62A Milan** 79.05 32 IAmb IAmb 18 24 11.8
comp=Z,203nm,0.9s
**WVT Waverly** 79.05 47 P P 18 24 07.4 -0.7
WVT IAmb IAmb 18 24 11.0
comp=Z,133nm,1.2s
**WVT Waverly** 79.05 47 IAMs_20 IAMs_20 19 01 03.6
comp=Z,7µm,20.0s
**WVT Waverly** 79.05 47 ⇓P P 18 24 08.2 +0.1
**WVT Waverly** 79.05 47 P P 18 24 08.3 +0.2
baz=323
WVT S S 18 34 05.5 +0.2
baz=323
**WVT Waverly** 79.05 47 P P 18 24 07.4 -0.7
WVT pmax pmax
comp=Z,133nm,1.2s
WVT MLR MLR
comp=Z,7µm,20.0s
**LBNH Lisbon** 79.06 32 P P 18 24 07.8 -0.3
**LBNH Lisbon** 79.06 32 ⇓P P 18 24 08.6 +0.5
**LBNH Lisbon** 79.06 32 P P 18 24 07.9 -0.3
baz=330,SNR=13
LBNH S S 18 34 02.4 -2.7
baz=330
**LBNH Lisbon** 79.06 32 P P 18 24 07.8 -0.3
LBNH pmax pmax
comp=Z,82nm,1.2s
LBNH MLR MLR
comp=Z,10µm,19.0s
**PKME Peaks-Kenny Pk** 79.08 30 ⇓P P 18 24 08.4 +0.3
**PKME Peaks-Kenny Pk** 79.08 30 P P 18 24 08.1 0.0
baz=332,SNR=16
PKME S S 18 34 03.4 -1.8
baz=332
**MLDN Muldoon** 79.11 57 IAmb IAmb 18 24 11.7
comp=Z,282nm,1.2s
**MHTO MHTO** 79.11 289 P P 18 24 10.0 +1.3
SNR=60
MHTO P P 18 24 10.0 +1.3
SNR=60
MHTO S S 18 34 06.5 +0.2
MHTO S S 18 34 06.5 +0.2
**AUPHS Peel High Scho** 79.13 184 P P 18 24 09.7 +1.4
**MPEP Malo Peshtene** 79.15 326 *i* P P 18 24 09.1 +0.5
**MPEP Malo Peshtene** 79.15 326 *i* P S 18 34 05.7 -0.4
**SOKA Soboth** 79.16 333 *i* P P 18 24 08.8 +0.1
comp=Z,462nm,0.9s,SNR=312
**SSFO Shawnee State** 79.16 43 P P 18 24 08.5 -0.2
**ACCN Adirondack Com** 79.17 34 IAMs_20 IAMs_20 19 00 37.0
comp=Z,7µm,22.0s
**LESA Schwarzleotal** 79.17 335 *i* P P 18 24 09.1 +0.4
comp=Z,438nm,0.9s
**PERS Pernice** 79.17 333 *eP* P 18 24 08.1 -0.6
PERS *eS* S 18 34 03.8 -2.6
**O54A Avella** 79.18 40 IAmb IAmb 18 24 11.8
comp=Z,160nm,1.1s
**KBD Kabd** 79.19 302 P P 18 24 09.7 +0.7
KBD S S 18 34 03.8 -3.2
**YLV Yalova** 79.27 321 P P 18 24 09.1 -0.3
comp=Z,195nm,1.1s,comp=Z,3µm
**EDRB Edirne** 79.27 323 P P 18 24 08.5 -0.8
**BINY Binghamton** 79.30 36 IAMs_20 IAMs_20 19 01 36.6
comp=Z,6µm,20.0s
**BINY Binghamton** 79.30 36 ⇓P P 18 24 09.0 -0.4
**BINY Binghamton** 79.30 36 P P 18 24 09.0 -0.4
baz=328,SNR=10
BINY S S 18 34 05.4 -2.3
baz=328
**KBA Koelnbreinsper** 79.30 334 *i* P P 18 24 09.9 +0.4
comp=Z,639nm,0.9s,SNR=415
**KBA Koelnbreinsper** 79.30 334 P P 18 24 09.9 +0.4
**VAL Valentia** 79.34 351 P P 18 24 09.7 +0.3
**VAL Valentia** 79.34 351 P P 18 24 09.6 +0.2
**VAL Valentia** 79.34 351 ⇓P P 18 24 09.6 +0.2
**JRN Qarnain Island** 79.35 295 P P 18 24 09.9 0.0
SNR=11
JRN P P 18 24 09.9 0.0
SNR=11
JRN S S 18 34 06.3 -2.4
JRN S S 18 34 06.3 -2.4
**Q52A Bidwell** 79.36 42 IAmb IAmb 18 24 13.2
comp=Z,343nm,1.7s
Q52A IAMs_20 IAMs_20 19 00 32.2
comp=Z,9µm,22.0s
**735A Kenedy** 79.39 58 IAMs_20 IAMs_20 18 56 00.5
comp=Z,7µm,22.0s
**OBKA Obir** 79.46 333 *i* P P 18 24 10.3 0.0
comp=Z,148nm,0.7s,SNR=115
**OBKA Obir** 79.46 333 ⇓*i* P P 18 24 09.5 -0.8
**BFO Black Forest** 79.50 338 P P 18 24 09.6 -0.8
BFO IAmb IAmb 18 24 13.3
comp=Z,218nm,1.0s
**BFO Black Forest** 79.50 338 P P 18 24 09.6 -0.8
BFO pmax pmax
comp=Z,218nm,1.0s
**BFO Black Forest** 79.50 338 *eP* P 18 24 10.8 +0.4
comp=Z,197nm,0.9s,baz=24,slow=5.7
**HTL Hartland** 79.52 347 *eP* P 18 24 11.1 +0.6
HTL IAmb IAmb 18 24 14.1
comp=Z,302nm,0.9s
HTL IAMs_20 IAMs_20 19 05 36.4
comp=Z,10µm,19.5s
**OXF Oxford** 79.54 49 IAmb IAmb 18 24 13.7
comp=Z,229nm,0.9s
OXF IAMs_20 IAMs_20 19 03 08.1
comp=Z,7µm,19.0s
**OXF Oxford** 79.54 49 ⇓P P 18 24 10.9 +0.1
**OXF Oxford** 79.54 49 P P 18 24 10.8 -0.1
baz=322,SNR=22
OXF S S 18 34 10.2 -0.3
baz=322
**OXF Oxford** 79.54 49 ⇓P P 18 24 10.9 +0.1
**WATA Walderalm** 79.56 336 *i* P P 18 24 11.5 +0.6
comp=Z,731nm,1.0s,SNR=218
**DIM Dimitrovgrad** 79.57 324 *i* P P 18 24 11.6 +0.8
**DIM Dimitrovgrad** 79.57 324 *i* P S 18 34 16.1 +5.6
**M57A Sunshine Farm,** 79.57 37 P P 18 24 10.7 -0.3
M57A IAmb IAmb 18 24 13.7
comp=Z,135nm,1.0s
M57A IAMs_20 IAMs_20 19 01 42.0
comp=Z,7µm,20.0s
**UMZA Um Al Zommool** 79.59 292 P P 18 24 11.7 +0.4
UMZA S S 18 34 07.6 -3.8
**MZWR Madinat Zayed** 79.60 294 P P 18 24 11.4 +0.1
MZWR P P 18 24 11.4 +0.1
MZWR S S 18 34 08.3 -3.1
MZWR S S 18 34 08.3 -3.1
**WTTA Wattenberg** 79.61 336 *i* P P 18 24 11.6 +0.4
comp=Z,878nm,0.9s,SNR=427
**J61A Chester** 79.61 33 IAMs_20 IAMs_20 19 05 21.6
comp=Z,6µm,20.0s
**TEKS Tekeris** 79.61 329 ⇓*i* P P 18 24 10.4 -0.7
**MYKA Terra Mystica** 79.62 334 *i* P P 18 24 10.9 -0.2
comp=Z,165nm,1.0s,SNR=76
**UBR Ueberruh** 79.64 337 *eP* P 18 24 11.9 +0.7
comp=Z,145nm,1.0s,baz=24,slow=5.7
**RETA Reutte** 79.64 336 *i* P P 18 24 11.7 +0.4
comp=Z,285nm,0.9s,SNR=100
**HKT Hockley** 79.67 56 P P 18 24 11.7 +0.2
**HKT Hockley** 79.67 56 IAMs_20 IAMs_20 19 05 36.2
comp=Z,6µm,19.0s
**HKT Hockley** 79.67 56*d* *i*P P 18 24 12.0 +0.5
HKT pmax pmax
comp=Z,103nm,1.8s
**L59A Walton** 79.67 35 P P 18 24 10.4 -1.1
L59A IAmb IAmb 18 24 14.1
comp=Z,144nm,1.0s
L59A IAMs_20 IAMs_20 19 01 58.4
comp=Z,7µm,20.0s
**CDF Champ du Feu** 79.68 339 *eP* P 18 24 10.8 -0.7
CDF pmax pmax
comp=Z,206nm,0.9s
**MOTA Moosalm** 79.68 336 *i* P P 18 24 12.0 +0.4
comp=Z,825nm,1.0s
**I63A Otisfield** 79.70 32 IAmb IAmb 18 24 15.2
comp=Z,155nm,1.0s
I63A IAMs_20 IAMs_20 19 03 56.8
comp=Z,6µm,20.0s
**G65A Princeton** 79.71 29 IAMs_20 IAMs_20 19 02 55.6
comp=Z,7µm,20.0s
**PGB Panagyurishte** 79.71 325 *i* P P 18 24 11.5 -0.2
**PGB Panagyurishte** 79.71 325 *i* P S 18 34 05.7 -6.4
**TRY Troy** 79.73 34 IAMs_20 IAMs_20 19 02 43.2
comp=Z,6µm,20.0s
**U49A Red Boiling Sp** 79.73 46 IAmb IAmb 18 24 14.8
comp=Z,138nm,1.2s
**T50A Nancy** 79.77 45 IAmb IAmb 18 24 15.0
comp=Z,119nm,1.0s
**SQTA Sankt Quirin** 79.77 336 *i* P P 18 24 12.3 +0.3
comp=Z,709nm,1.0s,SNR=304
**SHMA Al-Shehemyia** 79.79 297 P P 18 24 12.6 +0.3
SNR=10.0
SHMA S S 18 34 09.3 -4.1
**CRES Cresnjev** 79.80 333 ⇓*i* P P 18 24 11.0 -1.1
**PLD Plovdiv** 79.80 325 *i* P P 18 24 12.2 +0.1
**PLD Plovdiv** 79.80 325 *i* P S 18 34 14.8 +1.8
**CLTN Cedars of Leba** 79.81 46 IAmb IAmb 18 24 15.3
comp=Z,186nm,1.2s
**LCRK Leigh Creek** 79.82 195 P P 18 24 13.1 +1.0
**ABTA Abfaltersbach** 79.84 335 *i* P P 18 24 12.3 -0.1
comp=Z,191nm,1.0s,SNR=127
**PLAL Pickwick Lake** 79.84 48 IAmb IAmb 18 24 14.9
comp=Z,155nm,1.3s
PLAL IAMs_20 IAMs_20 19 01 06.7
comp=Z,5µm,21.0s
**S51A Beattyville** 79.84 43 IAMs_20 IAMs_20 18 59 27.2
comp=Z,7µm,22.0s
**MCWV Mont Chateau** 79.85 40 IAmb IAmb 18 24 15.7
comp=Z,153nm,1.1s
**MCWV Mont Chateau** 79.85 40 ⇓P P 18 24 12.9 +0.5
**MCWV Mont Chateau** 79.85 40 P P 18 24 12.5 +0.1
baz=327,SNR=18
MCWV S S 18 34 13.0 -0.6
baz=327
**V48A Smith Brothers** 79.85 47 IAMs_20 IAMs_20 19 02 32.8
comp=Z,7µm,19.0s
**SSPA Standing Stone** 79.85 38 P P 18 24 11.7 -0.7
**SSPA Standing Stone** 79.85 38 IAMs_20 IAMs_20 19 01 08.6
comp=Z,6µm,22.0s
**SSPA Standing Stone** 79.85 38 ⇓P P 18 24 12.4 0.0
**SSPA Standing Stone** 79.85 38 P P 18 24 12.2 -0.2
baz=328
SSPA S S 18 34 11.4 -2.2
baz=328
**SOF Sofia** 79.87 326 *i* P P 18 24 13.7 +1.1
**SOF Sofia** 79.87 326 *eP* S 18 34 09.7 -4.2
**ECH Echery** 79.89 339 IAmb IAmb 18 24 15.4
comp=Z,220nm,1.0s
**ECH Echery** 79.89 339 ⇓P P 18 24 12.5 -0.1
**ECH Echery** 79.89 339 P P 18 24 11.5 -1.1
**CMSA Cobar Meteorol** 79.92 188 P P 18 24 13.9 +1.3
**KSPA Keystone Colle** 79.93 36 IAMs_20 IAMs_20 19 01 22.3
comp=Z,6µm,22.0s
**DOB Doboj** 79.93 330 *eP* P 18 24 14.9 +2.1
**CRNS Crni Vrh** 79.93 333 *eP* P 18 24 11.2 -1.7
**143A Socs Landing,** 79.94 52 IAmb IAmb 18 24 16.4
comp=Z,256nm,1.1s
143A IAMs_20 IAMs_20 19 00 28.8
comp=Z,8µm,22.0s
**SAKB Bahrain** 79.95 298 P P 18 24 13.2 0.0
SAKB S S 18 34 11.6 -3.5
**SBD Saint Breward** 79.97 347 *eP* P 18 24 13.2 +0.3
SBD IAMs_20 IAMs_20 19 05 50.2
comp=Z,8µm,19.2s
**VTS Vitosha** 79.97 326 *i* P P 18 24 13.4 +0.2
**VTS Vitosha** 79.97 326 *i* P S 18 34 13.6 -1.6
**Q54A Coxs Mills** 79.98 41 IAmb IAmb 18 24 16.3
comp=Z,129nm,1.0s
**DYA Yadsworthy** 79.98 346 *eP* P 18 24 13.3 +0.3
DYA IAmb IAmb 18 24 16.0
comp=Z,411nm,0.9s
DYA IAMs_20 IAMs_20 19 03 10.7
comp=Z,5µm,18.1s
**SLE Schleitheim** 79.98 338 P P 18 24 12.2 -0.9
**Y45A Yeager Farm, C** 79.98 50 P P 18 24 12.8 -0.5
Y45A IAMs_20 IAMs_20 19 03 13.8
comp=Z,7µm,19.0s
**LMN Caledonia Moun** 79.99 27 P P 18 24 12.1 -1.0
LMN IAMs_20 IAMs_20 19 04 25.7
comp=Z,6µm,19.0s
**GGN Saint George** 80.01 29 IAMs_20 IAMs_20 19 01 39.6
comp=Z,7µm,22.0s
**KDZ Kurdzhali** 80.01 324 *i* P P 18 24 13.7 +0.4
**KDZ Kurdzhali** 80.01 324 *i* P S 18 34 16.1 +0.8
**PLNA Plana** 80.02 326 *i* P P 18 24 14.0 +0.5
**PLNA Plana** 80.02 326 *i* P S 18 34 13.2 -2.4
**GHWR Ruwais** 80.06 295 P P 18 24 14.0 +0.2
GHWR P P 18 24 14.0 +0.2
GHWR S S 18 34 12.2 -4.1
GHWR S S 18 34 12.2 -4.1
**DAVA Damuels** 80.06 337 *i* P P 18 24 13.8 +0.1
comp=Z,168nm,0.9s,SNR=129
**A051A Mrakovica** 80.07 331 ⇓*i* P P 18 24 12.0 -1.6
**FETA Feichten** 80.08 336 *i* P P 18 24 14.4 +0.7
comp=Z,344nm,1.0s,SNR=172
**BOJS Bojanci** 80.15 333 ⇓*i* P P 18 24 12.6 -1.4
**DQM DQM** 80.16 289 P P 18 24 15.1 +0.7
SNR=5.1
DQM P P 18 24 15.1 +0.7
SNR=5.1
**N58A Sunbury** 80.16 37 P P 18 24 13.3 -0.7
N58A IAmb IAmb 18 24 16.8
comp=Z,120nm,1.1s
N58A IAMs_20 IAMs_20 19 01 59.6
comp=Z,7µm,20.0s
**PRIJ Prijedor** 80.16 331 *eP* P 18 24 15.0 +1.0
**RAR Rarotonga** 80.17 138 LR LR 18 53 31.6
comp=Z,6µm,20.6s,baz=335,slow=31
**EMMW East Machias** 80.18 29 IAMs_20 IAMs_20 19 04 33.1
comp=Z,8µm,20.0s
**CEY Cerknica** 80.19 333 ⇓*i* P P 18 24 13.2 -1.0
**RZN Rozhen** 80.19 325 *i* P P 18 24 14.1 -0.4
**RZN Rozhen** 80.19 325 *i* P S 18 34 18.2 +0.6
**BLY Banja Luka** 80.22 331 ⇑P P 18 24 13.9 -0.5
**BLY Banja Luka** 80.22 331 ⇓*i* P P 18 24 13.5 -0.8
**STAL STALIGIAL** 80.22 334 IAmb IAmb 18 24 17.1
comp=Z,194nm,0.9s
**BBLS Lazi&#263i** 80.26 329 ⇓*i* P P 18 24 14.6 -0.1
**CIMO Cimolais** 80.26 335 IAmb IAmb 18 24 20.0
comp=Z,82nm,0.9s
**HAU Haudompre** 80.28 339 *eP* P 18 24 13.9 -0.8
HAU pmax pmax
comp=Z,212nm,1.0s
**K62A Royalston** 80.32 33 P P 18 24 14.3 -0.7
K62A IAMs_20 IAMs_20 19 06 01.3
comp=Z,6µm,18.0s
**HINF Hinteralfeld** 80.34 339 *eP* P 18 24 14.0 -1.0
HINF pmax pmax
comp=Z,96nm,1.0s
**KVTX Kingsville** 80.34 59 IAMs_20 IAMs_20 19 00 57.7
comp=Z,5µm,18.0s
**L61B Northampton** 80.34 34 IAMs_20 IAMs_20 19 06 23.0
comp=Z,19µm,19.0s
**L61B Northampton** 80.34 34 P P 18 24 14.5 -0.5
baz=330,SNR=8.6
L61B S S 18 34 16.1 -2.6
baz=330
**RDO Rodhopi** 80.35 324 P P 18 24 14.4 -0.7
**ALN Alexandroupoli** 80.36 323 P P 18 24 14.3 -0.8
**ALN Alexandroupoli** 80.36 323 P P 18 24 14.7 -0.4
**AUDCS Dubbo College** 80.37 185 P P 18 24 17.0 +2.0
**MZR Muzera** 80.41 294 *i* P P 18 24 15.4 -0.3
SNR=30
**MZR Muzera** 80.41 294 P P 18 24 16.0 +0.3
SNR=51
MZR P P 18 24 16.0 +0.3
SNR=51
MZR S S 18 34 16.2 -3.8
MZR S S 18 34 16.2 -3.8
**CCA1 Carnmenellis** 80.42 347 *eP* P 18 24 15.8 +0.5
CCA1 IAmb IAmb 18 24 18.4
comp=Z,275nm,0.9s
CCA1 IAMs_20 IAMs_20 19 06 04.7
comp=Z,9µm,18.7s
**TAOE Nuku Hiva Isla** 80.43 115 *eP* P 18 24 13.6 -2.3
comp=Z,828nm,27.6s
**TAOE Nuku Hiva Isla** 80.43 115 *eP*P PP 18 27 16.7 -2.7
comp=Z,543nm,23.3s
TAOE *eS* S 18 34 13.3 -7.1
comp=Z,2µm,26.2s
TAOE *eSS* SS 18 39 33.7 +0.9
comp=Z,855nm,25.2s
TAOE *eLR* LR 18 49 16.7
comp=Z,24µm,22.9s
**MULG Mulgathing** 80.45 198 P P 18 24 16.7 +1.2
**ENEZ Enez** 80.45 323 P P 18 24 14.8 -0.8
**TRNA Turayna** 80.48 296 P P 18 24 16.2 +0.1

SNR=7.5
TRNA S S 18 34 18.4 -2.2
**RUDO Rudo** 80.49 329 *e*P P 18 24 15.1 -0.7
**SKDS Skadanscina** 80.49 333 ⇓*i*P P 18 24 14.6 -1.2
**441A DeRidder** 80.50 54 P P 18 24 16.5 +0.4
441A IAmb IAmb 18 24 19.9
comp=Z,222nm,1.1s
**DAVOX Davos/Dischmat** 80.53 337 LR LR 19 03 57.8
comp=Z,15µm,20.0s,baz=14,slow=39
**MGRS Mrkonjic Grad** 80.54 331 *e*P P 18 24 16.7 +0.6
**SJES Sjenica** 80.59 328 ⇓*i*P P 18 24 15.6 -0.9
**Q56A Snyder Ridge,** 80.64 40 IAmb IAmb 18 24 19.8
comp=Z,132nm,1.1s
**KSCT Kent School, K** 80.66 35 IAmb IAmb 18 24 19.1
comp=Z,183nm,1.1s
**A050A Klekovaca** 80.67 331 ⇓*i*P P 18 24 16.2 -0.6
**SLWR Sila** 80.69 296 P P 18 24 17.5 +0.3
SLWR P P 18 24 17.5 +0.3
SLWR S S 18 34 18.4 -4.5
SLWR S S 18 34 18.4 -4.5
**MMB Musomishta** 80.70 325 *i*P P 18 24 17.3 +0.3
**MMB Musomishta** 80.70 325 *i*P S 18 34 18.6 -4.0
**SWET Sewanee** 80.70 46 IAmb IAmb 18 24 19.6
comp=Z,150nm,1.0s
**HRV Adam Dziewonsk** 80.70 33 P P 18 24 16.8 -0.1
**HRV Adam Dziewonsk** 80.70 33 IAMs_20 IAMs_20 19 04 51.4
comp=Z,8µm,20.0s
**HRV Adam Dziewonsk** 80.70 33 ⇓P P 18 24 17.2 +0.2
**HRV Adam Dziewonsk** 80.70 33 P P 18 24 16.9 -0.1
baz=331
HRV S S 18 34 20.9 -1.6
baz=331
**HRV Adam Dziewonsk** 80.70 33 P P 18 24 16.8 -0.1
HRV pmax pmax
comp=Z,87nm,1.0s
HRV MLR MLR
comp=Z,8µm,20.0s
**SMRA Abu-Samra** 80.71 297 P P 18 24 18.0 +0.7
SNR=18
SMRA S S 18 34 19.2 -3.9
**STKA Stephens Creek** 80.71 192 P P 18 24 18.1 +1.2
**STKA Stephens Creek** 80.71 192 P P 18 24 17.4 +0.5
comp=Z,20nm,0.9s,baz=338,slow=8.8,SNR=11
STKA LR LR 18 58 35.0
comp=Z,5µm,21.9s,baz=18,slow=35
comp=Z,20nm,0.9s
**STKA Stephens Creek** 80.71 192 *d*/*i*P P 18 24 16.4 -0.5
**CTI Castel Tesino** 80.72 335 IAmb IAmb 18 24 19.8
comp=Z,222nm,0.9s
**TZTN Tazewell** 80.76 44 IAMs_20 IAMs_20 19 01 28.4
comp=Z,6µm,20.0s
**TZTN Tazewell** 80.76 44 ⇓P P 18 24 17.7 +0.3
**TZTN Tazewell** 80.76 44 P P 18 24 17.7 +0.3
baz=325,SNR=21
TZTN S S 18 34 23.5 +0.2
baz=325
**P57A Homestead Farm** 80.77 39 IAMs_20 IAMs_20 19 04 07.0
comp=Z,5µm,18.0s
**X48A Hartselle** 80.77 48 IAMs_20 IAMs_20 19 03 16.4
comp=Z,5µm,20.0s
**VBMS Vicksburg** 80.78 51 IAmb IAmb 18 24 21.1
comp=Z,190nm,1.0s
VBMS IAMs_20 IAMs_20 19 00 52.1
comp=Z,7µm,22.0s
**VBMS Vicksburg** 80.78 51 P P 18 24 18.3 +0.8
baz=322
VBMS S S 18 34 23.3 -0.2
baz=322
**ODNJ Ogdensburg** 80.79 36 P P 18 24 16.4 -1.0
ODNJ IAMs_20 IAMs_20 19 02 41.0
comp=Z,6µm,21.0s
**PEHC Pehcevo** 80.82 326 ⇓*i*P P 18 24 18.0 +0.3
PEHC *i*S S 18 34 26.3 +2.4
**NVR Nevrokopi** 80.83 325 P P 18 24 17.8 +0.1
**JLP Les Platons** 80.83 345 *e*P P 18 24 18.0 +0.5
**R55A Marlinton** 80.87 41 IAmb IAmb 18 24 21.2
comp=Z,160nm,1.0s
**KAVA Kavala** 80.88 324 P P 18 24 17.0 -0.9
**TRNY Table Rock, Ra** 80.88 35 IAMs_20 IAMs_20 19 03 24.5
comp=Z,6µm,20.0s
**WES Weston** 80.89 33 P P 18 24 17.7 -0.3
**WES Weston** 80.89 33 P P 18 24 17.7 -0.3
WES pmax pmax
comp=Z,103nm,1.0s
WES MLR MLR
comp=Z,9µm,20.0s
**JSA Saint Aubin** 80.90 345 *e*P P 18 24 17.9 0.0
JSA IAmb IAmb 18 24 21.1
comp=Z,374nm,1.0s
JSA IAMs_20 IAMs_20 19 05 59.0
comp=Z,8µm,18.1s
**SMTH Samothraki Isl** 80.93 323 P P 18 24 17.6 -0.6
**RAO Raoul Island** 80.94 156 LR LR 18 54 23.4
comp=Z,14µm,21.6s,baz=355,slow=31
**FLN La Foliniere** 81.01 344 *e*P P 18 24 17.8 -0.7
FLN pmax pmax
comp=Z,244nm,1.0s
**UPM Unac-Piva** 81.01 329 *e*P P 18 24 18.1 -0.8
**W50A Signal Mountai** 81.01 46 IAmb IAmb 18 24 21.6
comp=Z,124nm,1.1s
**MVL Millersville** 81.02 37 IAMs_20 IAMs_20 19 01 54.4
comp=Z,7µm,20.0s
**UCCT U. Connecticut** 81.08 34 IAMs_20 IAMs_20 19 06 34.5
comp=Z,7µm,18.0s
**PAL Palisades** 81.12 35 IAMs_20 IAMs_20 19 04 59.9
comp=Z,6µm,20.0s
**PAL Palisades** 81.12 35 P P 18 24 18.7 -0.5
baz=330,SNR=10.0
PAL S S 18 34 27.7 +0.8
baz=330
**SRS Serrai** 81.13 325 P P 18 24 18.0 -1.3
**THAS Thassos island** 81.13 324 P P 18 24 17.6 -1.7
**CLF Chambon-Foret** 81.17 342 P P 18 24 18.7 -0.7
CLF IAmb IAmb 18 24 23.0
comp=Z,228nm,1.0s
**CLF Chambon-Foret** 81.17 342 ⇓P P 18 24 20.1 +0.8
**CPCT Cooper Cave** 81.19 45 P P 18 24 19.4 -0.3
**146A Union** 81.20 50 IAMs_20 IAMs_20 19 04 15.2
comp=Z,6µm,19.0s
**KOKK Kokkinochori,** 81.23 325 P P 18 24 18.5 -1.3
**Z47A Carrollton** 81.26 49 IAmb IAmb 18 24 22.9
comp=Z,290nm,1.2s
Z47A IAMs_20 IAMs_20 19 04 20.5
comp=Z,5µm,19.0s
**CPNY Central Park** 81.29 35 IAMs_20 IAMs_20 19 05 13.2
comp=Z,7µm,21.0s
**KULA Kula-Manisa** 81.29 320 P P 18 24 19.4 -0.9
**V52A Sevierville** 81.31 45 IAMs_20 IAMs_20 18 59 41.1
comp=Z,8µm,22.0s
**SDMD Soldier's Deli** 81.32 38 P P 18 24 19.7 -0.6
**VAY Valandovo** 81.34 326 ⇓*i*P P 18 24 20.5 +0.1
VAY *i*S S 18 34 25.7 -3.4
**KNT Kendrikon** 81.36 325 P P 18 24 19.4 -1.1
**N62A Caumsett State** 81.36 35 IAMs_20 IAMs_20 19 05 36.0
comp=Z,7µm,19.0s
**GBN Guysborough** 81.36 25 IAMs_20 IAMs_20 19 07 13.8
comp=Z,6µm,18.0s
**TKL Tuckaleechee C** 81.37 45 LR LR 19 00 38.6
comp=Z,6µm,21.7s,baz=331,slow=36
**WUPA West Chester U** 81.37 37 P P 18 24 20.3 -0.2
WUPA IAMs_20 IAMs_20 19 04 32.7
comp=Z,4µm,19.0s
**FPAL Fort Paine** 81.40 47 IAmb IAmb 18 24 23.6
comp=Z,165nm,1.1s
**BRY Bratogost** 81.40 329 ⇓*i*P P 18 24 19.7 -1.2
**MEEK Meekatharra** 81.42 212 P P 18 24 21.2 +0.4
**HWQ Hawqa** 81.43 313 *e*P P 18 24 19.7 -1.4
**GRR Gorron** 81.44 344 *e*P P 18 24 20.3 -0.5
GRR pmax pmax
comp=Z,344nm,1.0s
**L64A Middleborough** 81.46 33 IAmb IAmb 18 24 24.1
comp=Z,128nm,1.0s
**SOH Sokhos** 81.47 325 P P 18 24 20.5 -0.7
**M63A Gales Ferry** 81.48 34 P P 18 24 20.6 -0.5
M63A IAMs_20 IAMs_20 19 06 56.2
comp=Z,7µm,20.0s
**LOR Lormes** 81.55 341 ⇑P P 18 24 20.6 -0.8
LOR ⇑P PcP 18 24 24.2 -3.1
**LOR Lormes** 81.55 341 *e*P P 18 24 20.7 -0.7
LOR pmax pmax
comp=Z,271nm,0.9s
**LIA Limnos Island** 81.55 323 P P 18 24 20.5 -1.0
**Y49A Blount Mountai** 81.56 48 IAMs_20 IAMs_20 18 59 28.2
comp=Z,5µm,22.0s
**PDG Podgorica** 81.57 328 ⇓P P 18 24 20.2 -1.4
**PDG Podgorica** 81.57 328 ⇑P P 18 24 20.8 -0.8
**PDG Podgorica** 81.57 328 ⇑P P 18 24 21.2 -0.4
**BLA Blacksburg** 81.63 42 IAmb IAmb 18 24 25.8
comp=Z,267nm,1.6s
**BLA Blacksburg** 81.63 42 P P 18 24 22.3 +0.2
baz=326
BLA S S 18 34 33.2 +0.8
baz=326
**BLA Blacksburg** 81.63 42 ⇓P P 18 24 22.3 +0.2
**TREB Trebinje** 81.63 329 *e*P P 18 24 20.2 -1.7
**CABF La Chapelle** 81.65 339 *e*P P 18 24 21.7 -0.4
CABF pmax pmax
comp=Z,184nm,1.0s
**OUR Ouranopolis** 81.65 324 P P 18 24 21.4 -0.6
**PRK Paraskevi** 81.67 322 P P 18 24 21.8 -0.3
**STON Ston** 81.72 330 ⇓*i*P P 18 24 20.7 -1.6
**X51A Calhoun** 81.75 46 P P 18 24 22.5 -0.2
X51A IAmb IAmb 18 24 25.5
comp=Z,147nm,1.3s
**W52A Murphy** 81.76 45 IAMs_20 IAMs_20 18 59 54.2
comp=Z,8µm,22.0s
**HORT Hortiatis** 81.77 325 P P 18 24 21.1 -1.7
**THE Thessaloniki** 81.79 325 P P 18 24 21.7 -1.0
**DRME Dracevica, Mon** 81.81 328 ⇓*i*P P 18 24 21.8 -1.1
**V53A Saluda** 81.81 44 IAMs_20 IAMs_20 19 07 03.4
comp=Z,7µm,19.0s
**SSF Saint Saulge** 81.82 341 *e*P P 18 24 22.2 -0.6
SSF pmax pmax
comp=Z,187nm,0.8s
**M65A Busby, Falmout** 81.86 33 P P 18 24 22.5 -0.6
baz=331
M65A S S 18 34 34.0 -0.4
baz=331
**SIGR SIGRI** 81.87 322 P P 18 24 22.6 -0.6
**SGMF Saint Gilles** 81.87 345 *e*P P 18 24 22.7 -0.3
SGMF pmax pmax
comp=Z,189nm,1.0s
**BHL Bhannes** 81.87 313 *e*P P 18 24 22.7 -0.8
**ROSF Rostrenen** 81.91 346 *e*P P 18 24 24.1 +0.8
**ROSF Rostrenen** 81.91 346 *e*P P 18 24 23.0 -0.3
ROSF pmax pmax
comp=Z,360nm,1.0s
**P61A Hammonton** 81.92 37 IAMs_20 IAMs_20 19 06 08.1
comp=Z,6µm,18.0s
**LRAL Lakeview Retre** 81.93 48 IAMs_20 IAMs_20 19 01 10.0
comp=Z,5µm,20.0s
**LRAL Lakeview Retre** 81.93 48 ⇓P P 18 24 23.3 -0.3
**LRAL Lakeview Retre** 81.93 48 P P 18 24 22.9 -0.8
baz=324,SNR=23
LRAL S S 18 34 33.8 -1.8
baz=324
**346A Big Creek Wild** 81.98 51 IAMs_20 IAMs_20 19 05 43.0
comp=Z,7µm,18.0s
**PPT Papeete** 82.08 128 P P 18 24 23.9 -0.6
comp=Z,74nm,1.1s,baz=39,slow=18,SNR=2.6
PPT LR LR 18 53 39.3
comp=Z,8µm,21.2s,baz=314,slow=30
comp=Z,74nm,1.1s
**PPT2 Papeete2** 82.09 128 *e*P P 18 24 23.5 -1.1
comp=Z,1µm,27.5s
**PPT2 Papeete2** 82.09 128 *e*PP PP 18 27 28.3 -4.8
comp=Z,553nm,24.8s
PPT2 *e*S S 18 34 31.4 -6.0
comp=Z,3µm,23.0s
**PPT2 Papeete2** 82.09 128 *e*LQ LQ 18 46 42.5
comp=Z,2µm,25.5s
PPT2 *e*LR LR 18 50 00.2
comp=Z,16µm,24.0s
PPT2 *e*LR LR 18 50 13.6
comp=Z,20µm,23.5s
**AVF Avril sur Loir** 82.11 341 *e*P P 18 24 23.9 -0.4
AVF pmax pmax
comp=Z,225nm,0.9s
**CBN Corbin Frederi** 82.11 39 P P 18 24 23.7 -0.8
CBN IAMs_20 IAMs_20 19 02 55.6
comp=Z,7µm,21.0s
**CBN Corbin Frederi** 82.11 39 P P 18 24 24.3 -0.2
baz=328
CBN S S 18 34 35.9 -1.3
baz=328
**CSS Mathiatis** 82.13 315 P P 18 24 23.4 -1.2
CSS IAMs_20 IAMs_20 19 07 14.8
comp=Z,5µm,18.0s
**CSS Mathiatis** 82.13 315 ⇓P P 18 24 23.8 -0.9
**CSS Mathiatis** 82.13 315 P P 18 24 23.9 -0.8
comp=Z,366nm,0.8s,comp=Z,4µm
**SMF Signal de Mont** 82.14 340 *e*P P 18 24 24.0 -0.5
SMF pmax pmax
comp=Z,392nm,1.0s
**OHR Ohrid** 82.18 327 ⇓*i*P P 18 24 24.8 -0.1
OHR *i*S S 18 34 35.9 -2.1
**ELL Elmali** 82.22 318 P P 18 24 24.5 -0.8
**FNA Florina** 82.25 326 P P 18 24 23.6 -1.7
**FNA Florina** 82.25 326 ⇓P P 18 24 24.6 -0.7
**QUIF Quistinic** 82.30 345 *e*P P 18 24 24.8 -0.5
QUIF pmax pmax
comp=Z,122nm,1.1s
**TIR Tirane** 82.31 328 P P 18 24 23.9 -1.6
**TIR Tirane** 82.31 328 ⇑P P 18 24 25.7 +0.1
**TIR Tirane** 82.31 328 P P 18 24 25.6 +0.1
**TIR Tirane** 82.31 328 P P 18 24 24.8 -0.7
comp=Z,741nm,0.9s,comp=Z,6µm
**BG3 Lake Jocassee** 82.31 45 P P 18 24 25.2 -0.5
BG3 IAmb IAmb 18 24 28.9
comp=Z,122nm,0.9s
**T57A Hurt** 82.32 41 IAmb IAmb 18 24 28.5
comp=Z,255nm,1.9s
**FORT Forrest** 82.34 203 P P 18 24 26.8 +1.3
**FORT Forrest** 82.34 203 P P 18 24 26.3 +0.8
**U56A King** 82.36 42 IAmb IAmb 18 24 29.8
comp=Z,328nm,2.0s
**GEM Giv'at Ha'Em** 82.43 312 ⇓P P 18 24 26.1 -0.1
**LIT Litokhoron** 82.43 325 IAmb IAmb 18 24 28.6
comp=Z,206nm,0.9s
**LIT Litokhoron** 82.43 325 P P 18 24 25.2 -1.0
**BGF Bois d'Agland** 82.44 341 *e*P P 18 24 25.6 -0.5
BGF pmax pmax
comp=Z,95nm,1.0s
**YNG Young** 82.44 185 P P 18 24 27.8 +1.8
**WHYH Whyalla** 82.46 195 P P 18 24 27.9 +1.9
**CHOS Chios island** 82.49 322 P P 18 24 26.1 -0.5
**BBOO Buckleboo** 82.51 196 P P 18 24 27.9 +1.6
**LPL La Plagne** 82.52 338 *e*P P 18 24 27.0 +0.2
LPL pmax pmax
comp=Z,295nm,0.9s
**KZN Kozani** 82.52 326 P P 18 24 25.7 -1.0
**LPG La Plagne** 82.53 338 *e*P P 18 24 27.2 +0.2
LPG pmax pmax
comp=Z,358nm,1.0s
**YER Yerkesik** 82.61 320 P P 18 24 27.6 +0.4
**KBN Korca** 82.61 327 P P 18 24 25.5 -1.7
**HTT Hallett** 82.63 193 P P 18 24 28.5 +1.5
**ASF Jabal al Asfar** 82.65 311 LR LR 19 04 47.0
comp=Z,8µm,21.4s,baz=109,slow=38
**NEST Nestorio** 82.70 326 P P 18 24 26.1 -1.6
**Y52A Lilburn** 82.70 46 IAmb IAmb 18 24 30.8
comp=Z,119nm,1.2s
**MMAI Mount Meron Ar** 82.71 313 P P 18 24 27.6 -0.2
comp=Z,369nm,0.8s,baz=32,slow=4.9,SNR=132
MMAI LR LR 19 06 03.9
comp=Z,7µm,18.9s,baz=346,slow=39
comp=Z,369nm,0.8s
**SHAO Shalim** 82.78 289 P P 18 24 28.9 +0.6
**SHAO Shalim** 82.78 289 P P 18 24 29.3 +1.0
SHAO P P 18 24 29.3 +1.0
**VLC Villacollemand** 82.81 335 P P 18 24 26.5 -1.6
**NEO Neokhori** 82.83 324 P P 18 24 27.0 -1.3
**TCF Toulx Ste Croi** 82.83 341 *e*P P 18 24 27.8 -0.4
TCF pmax pmax
comp=Z,228nm,1.0s
**R61A Willards** 82.85 38 IAMs_20 IAMs_20 19 03 10.2
comp=Z,7µm,22.0s
**PENT Pentalofos** 82.86 326 P P 18 24 27.7 -0.8
**TYRN Tyrnavos** 82.86 325 P P 18 24 26.8 -1.6
**KMSC Kings Mountain** 82.93 43 P P 18 24 28.3 -0.5
baz=326,SNR=20
KMSC S S 18 34 44.2 -1.5
baz=326
**GUMA Gualdo di Mace** 82.95 333 P P 18 24 28.5 -0.4
GUMA IAmb IAmb 18 24 46.6
comp=Z,286nm,0.8s
**BNI Bardonecchia** 82.96 338 P P 18 24 29.4 +0.4
**PAULI Pauline** 82.97 44 P P 18 24 28.6 -0.5
PAULI IAMs_20 IAMs_20 19 05 52.1
comp=Z,7µm,20.0s
**KPRO Kipourio** 82.98 326 P P 18 24 27.1 -2.0
**MFF Saint Martin d** 83.02 343 *e*P P 18 24 28.8 -0.3
MFF pmax pmax
comp=Z,194nm,0.9s
**THL Klokotos Trika** 83.08 325 P P 18 24 27.1 -2.4
**T59A Double "B" Far** 83.08 40 IAmb IAmb 18 24 32.7
comp=Z,123nm,1.3s
**250A Grady** 83.14 49 IAMs_20 IAMs_20 19 00 56.3
comp=Z,5µm,20.0s
**DAT Datca** 83.25 320 P P 18 24 29.4 -1.2
**HODGE Hodges** 83.25 45 IAmb IAmb 18 24 33.7
comp=Z,120nm,1.1s
**S61A Accomac** 83.27 38 IAMs_20 IAMs_20 19 02 40.3
comp=Z,7µm,22.0s
**SSB Saint Sauveur** 83.27 339 P P 18 24 29.6 -0.9
**SSB Saint Sauveur** 83.27 339 IAMs_20 IAMs_20 19 04 47.6
comp=Z,7µm,20.0s
**SSB Saint Sauveur** 83.27 339 ⇓P P 18 24 30.2 -0.2
**SSB Saint Sauveur** 83.27 339 P P 18 24 29.6 -0.9
SSB pmax pmax
comp=Z,256nm,0.9s
SSB MLR MLR
comp=Z,8µm,20.0s
**DOK Doka** 83.28 290 P P 18 24 31.5 +0.7
DOK P P 18 24 31.5 +0.7
**ORIF Oris-en-Rattie** 83.29 338 *e*P P 18 24 30.8 +0.2
ORIF pmax pmax
comp=Z,259nm,1.0s
**152A Waverly Hall** 83.35 47 P P 18 24 29.9 -1.2
152A IAmb IAmb 18 24 33.7
comp=Z,122nm,1.3s
152A IAMs_20 IAMs_20 19 04 50.0
comp=Z,7µm,20.0s
**GOGA Godfrey** 83.35 46 P P 18 24 30.8 -0.2
baz=325,SNR=12
GOGA S S 18 34 48.7 -1.3
baz=325
**GOGA Godfrey** 83.35 46 ⇓P P 18 24 31.2 +0.2
**V58A Windy Hill, Pi** 83.39 42 IAmb IAmb 18 24 34.3
comp=Z,129nm,1.1s
**BRAL Brewton** 83.40 50 IAMs_20 IAMs_20 19 05 48.2
comp=Z,6µm,20.0s
**BRAL Brewton** 83.40 50 P P 18 24 32.5 +1.2
baz=324
BRAL S SKSac 18 34 52.0 +0.3
baz=324
**CNB Canberra Magne** 83.40 185 P P 18 24 32.6 +1.6
**CAMP Campotosto** 83.40 332 P P 18 24 30.3 -1.0
**AGG Agios Georgios** 83.42 325 IAmb IAmb 18 24 32.7
comp=Z,89nm,0.9s
**JAN Janina** 83.43 326 P P 18 24 30.6 -0.8
**DMTO DMTO** 83.43 289 P P 18 24 32.3 +0.6
DMTO P P 18 24 32.3 +0.6
**ARG Arkhangelos** 83.45 319 P P 18 24 30.4 -1.0
**ARG Arkhangelos** 83.45 319 P P 18 24 31.2 -0.3
**ARG Arkhangelos** 83.45 319 P P 18 24 30.5 -1.0
ARG pmax pmax
comp=Z,516nm,1.0s
**W57A Gilead** 83.53 42 IAmb IAmb 18 24 34.9
comp=Z,100nm,1.1s
**SRN Sarande** 83.55 327 P P 18 24 31.2 -0.7
**CESX Cesi** 83.59 333 P P 18 24 31.2 -0.9
CESX IAmb IAmb 18 24 35.5
comp=Z,122nm,0.9s
**VIVF Saint-Julien-l** 83.64 339 *e*P P 18 24 32.4 0.0
VIVF pmax pmax
comp=Z,293nm,1.0s
**JSC Jenkinsville** 83.68 44 IAmb IAmb 18 24 35.7
comp=Z,81nm,1.0s
**EVR Evrytania** 83.72 325 P P 18 24 32.6 -0.4
**BIRD Birdtown, Kers** 83.74 43 IAmb IAmb 18 24 36.0
comp=Z,108nm,1.1s
**KEK Kerkira** 83.77 327 P P 18 24 31.7 -1.4
**KEK Kerkira** 83.77 327 P P 18 24 31.9 -1.2
**VILL Villia** 83.78 324 P P 18 24 31.3 -2.0
**ATH Athens Observa** 83.79 323 P P 18 24 31.7 -1.5
**APE Apeiranthos** 83.83 322 *d*/*i*P P 18 24 31.3 -2.2
APE pmax pmax
comp=Z,169nm,0.9s
**SBF Sospel** 83.88 337 *e*P P 18 24 32.9 -0.8
SBF pmax pmax
comp=Z,745nm,1.0s
**RJF Les Rejaudoux** 83.92 342 *e*P P 18 24 33.5 -0.3
RJF pmax pmax
comp=Z,221nm,1.0s
**CASP Castiglione de** 83.93 334 IAmb IAmb 18 24 52.2
comp=Z,76nm,0.9s
**ANX Ano Chora** 83.96 325 P P 18 24 33.0 -1.2
**GHAJ Ghor Haditha** 84.01 311 P P 18 24 33.9 -0.6
**WHFO Wadi Hawf** 84.02 290 P P 18 24 35.1 +0.3
SNR=9.2
WHFO P P 18 24 35.1 +0.3
SNR=9.2
**MATE Matera** 84.03 329 ⇑P P 18 24 34.5 +0.1
**KALE Kalithea** 84.05 325 P P 18 24 33.5 -1.1
**RBK Rabkut** 84.06 290 P P 18 24 35.3 +0.3
RBK P P 18 24 35.3 +0.3
**LOUT Loutraki** 84.07 324 P P 18 24 32.4 -2.3
**EFP Efpalio** 84.11 325 P P 18 24 33.6 -1.2
**GHSS Government Hou** 84.14 193 P P 18 24 37.9 +3.3
**CAF Calviac** 84.16 341 *e*P P 18 24 33.3 -1.8
CAF pmax pmax
comp=Z,252nm,1.1s
**W59A Clinton** 84.21 41 IAmb IAmb 18 24 38.7
comp=Z,129nm,0.9s
**352A Blakely** 84.21 48 P P 18 24 35.5 0.0
352A IAMs_20 IAMs_20 19 00 47.9
comp=Z,5µm,22.0s
**LKD2 Lefkada island** 84.27 326 P P 18 24 34.6 -1.1
**KAAM Kaadhehdhoo** 84.29 264 ⇑P P 18 24 39.9 +3.8
**KAAM Kaadhehdhoo** 84.29 264 P P 18 24 37.7 +1.7
**MOIG Morelia** 84.33 67 P P 18 24 35.8 -0.7
**KLV Kalavryta, Ach** 84.34 324 P P 18 24 34.8 -1.3
**GUR Goura** 84.36 324 P P 18 24 34.6 -1.7
**CNNC Cliffs of the** 84.39 41 IAmb IAmb 18 24 39.6
comp=Z,112nm,0.8s
**CNNC Cliffs of the** 84.39 41 P P 18 24 36.9 +0.5
baz=328
CNNC S S 18 34 59.6 -0.8
baz=328
**PAOL Paolisi** 84.40 331 IAmb IAmb 18 24 54.3
comp=Z,84nm,0.9s
**EVGI Lefkada island** 84.41 326 P P 18 24 35.5 -0.9
**KARP Karpathos** 84.43 320 IAMs_20 IAMs_20 19 08 04.3
comp=Z,7µm,19.0s
**KARP Karpathos** 84.43 320 P P 18 24 35.5 -1.1
comp=Z,889nm,0.9s,comp=Z,8µm
**LFF La Frestale** 84.43 342 *e*P P 18 24 36.3 0.0
LFF pmax pmax
comp=Z,200nm,1.0s
**SANT Santorini** 84.45 321 IAmb IAmb 18 24 40.2
comp=Z,120nm,0.9s
SANT IAMs_20 IAMs_20 19 06 44.8
comp=Z,7µm,20.0s
**SANT Santorini** 84.45 321 ⇑P P 18 24 37.4 +0.7
**451A Vernon** 84.50 49 IAMs_20 IAMs_20 18 59 53.8
comp=Z,5µm,22.0s
**AUMAG Moama Anglican** 84.53 188 P P 18 24 38.2 +1.6
**MORW Morawa** 84.56 214 P P 18 24 38.0 +1.0
**MORW Morawa** 84.56 214 IAmb IAmb 18 24 41.5
comp=Z,107nm,1.0s
**FSK Fiskardo** 84.59 326 P P 18 24 35.4 -1.9
**RLS Riolos of Patr** 84.60 325 P P 18 24 35.7 -1.6
**KMBL Kambalda** 84.67 208 P P 18 24 38.3 +0.8
**PGF Pioggiola** 84.68 335 *e*P P 18 24 37.0 -0.8
PGF pmax pmax
comp=Z,200nm,1.0s
**Y58A Scranton** 84.72 43 IAmb IAmb 18 24 41.1
comp=Z,142nm,0.9s
**ABTO Aybut** 84.74 290 P P 18 24 38.8 +0.4
SNR=6.3
ABTO P P 18 24 38.8 +0.4
SNR=6.3
ABTO S SKSac 18 34 58.7 -2.1
ABTO S SKSac 18 34 58.7 -2.1
**RAYN Ar Rayn** 84.77 300 P P 18 24 37.6 -0.9
**RAYN Ar Rayn** 84.77 300 *i*P P 18 24 38.1 -0.4
SNR=191
**RAYN Ar Rayn** 84.77 300 P P 18 24 39.4 +0.9
**RAYN Ar Rayn** 84.77 300 P P 18 24 37.6 -0.9
RAYN pmax pmax
comp=Z,253nm,1.0s
**RTZL Ratzakli, Kefa** 84.85 325 P P 18 24 37.8 -0.8
**TIGA Tifton** 84.91 47 P P 18 24 39.7 +0.7
baz=325,SNR=12

TIGA S SKSac 18 35 01.8 +0.4
baz=325
CUC Castrocucco 84.92 330 P P 18 24 37.1 -1.9
CUC IAmb IAmb 18 24 41.6
comp=Z,104nm,1.0s
255A Hazlehurst 85.05 46 P P 18 24 39.9 +0.3
NHSC New Hope 85.15 44 P P 18 24 41.0 +0.9
baz=327
NHSC S S 18 35 07.7 -0.3
baz=327
ITM Ithomi 85.18 324 P P 18 24 38.2 -2.1
ZKR Zakros 85.20 320 P P 18 24 39.8 -0.6
Y60A Bolivia 85.29 42 P P 18 24 40.5 -0.4
Y60A IAmb IAmb 18 24 43.8
comp=Z,146nm,1.0s
TIP Timpagrande 85.33 329 P P 18 24 40.1 -1.0
comp=Z,197nm,1.1s,comp=Z,3µm
ARPS Mount Arapiles 85.51 191 P P 18 24 42.6 +1.1
553A Crawfordville 85.51 48 IAMs_20 IAMs_20 19 07 50.3
comp=Z,5µm,19.0s
IDI Anoyia 85.62 321 LR LR 19 07 39.9
comp=Z,4µm,19.9s,baz=21,slow=39
MTLF Montolieu 85.64 340 eP P 18 24 43.3 +0.8
MTLF pmax pmax
comp=Z,50nm,0.8s
EIL Elat 85.65 311 LR LR 19 07 14.8
comp=Z,7µm,21.8s,baz=47,slow=39
BLDU Ballidu 85.72 212 P P 18 24 43.5 +0.8
UNM Universidad Na 85.83 66 IAMs_20 IAMs_20 19 09 49.4
comp=Z,5µm,19.0s
TOO Toolangi 85.92 188 P P 18 24 45.7 +2.1
TOO Toolangi 85.92 188 P P 18 24 43.8 +0.2
TOO IAmb IAmb 18 24 49.1
comp=Z,106nm,1.4s
TOO IAMs_20 IAMs_20 19 01 11.7
comp=Z,4µm,20.0s
TOO Toolangi 85.92 188 P P 18 24 43.8 +0.2
TOO pmax pmax
comp=Z,106nm,1.4s
TOO MLR MLR
comp=Z,4µm,20.0s
BRAT Ballarat 86.04 189 P P 18 24 46.0 +1.9
KLBR Kellerberrin 86.24 211 P P 18 24 45.8 +0.5
EJON La Jonquera 86.33 340 P P 18 24 44.8 -1.2
EPF Esparros 86.34 342 eP P 18 24 45.3 -0.7
EPF pmax pmax
comp=Z,40nm,0.8s
CEL Celeste 86.45 329 P P 18 24 44.6 -2.0
comp=Z,231nm,0.8s,comp=Z,3µm
CEST Esterri de Car 86.56 341 IAmb IAmb 18 24 51.8
comp=Z,88nm,0.9s
SJPF Ste Jean 86.58 343 eP P 18 24 47.3 +0.2
SJPF pmax pmax
comp=Z,28nm,0.8s
GEXS Deakin Univers 86.65 188 P P 18 24 49.6 +2.5
ETSF Etsaut 86.65 342 eP P 18 24 47.5 -0.1
ETSF pmax pmax
comp=Z,27nm,0.8s
TBI Tubuai 86.93 131 eP P 18 24 52.9 +4.1
comp=Z,3µm,28.0s
TBI Tubuai 86.93 131 ePP PP 18 28 09.4 -3.0
comp=Z,1µm,27.5s
TBI eS S 18 35 23.4 -1.8
comp=Z,13µm,27.0s
TBI eSS SS 18 41 08.7 -0.1
comp=Z,8µm,26.5s
TBI eLQ LQ 18 48 34.1
comp=Z,5µm,27.2s
TBI eLR LR 18 52 13.8
comp=Z,25µm,25.5s
TBI eLR LR 18 52 18.3
comp=Z,103µm,25.0s
656A Willston 87.12 47 P P 18 24 49.1 -0.8
656A IAMs_20 IAMs_20 19 02 03.8
comp=Z,6µm,22.0s
MUN Mundaring 87.13 212 P P 18 24 49.9 +0.3
TOZ Tahuroa Road 87.59 164 IAmb IAmb 18 24 57.9
comp=Z,118nm,1.3s
TOZ IAMs_20 IAMs_20 18 57 09.2
comp=Z,6µm,20.0s
NWAO Narrogin (SRO) 87.63 211 P P 18 24 52.7 +0.7
NWAO Narrogin (SRO) 87.63 211 P P 18 24 52.1 +0.1
NWAO Narrogin (SRO) 87.63 211 IAMs_20 IAMs_20 19 08 35.4
comp=Z,4µm,19.0s
NWAO Narrogin (SRO) 87.63 211 LR LR 19 02 24.4
comp=Z,2µm,21.9s,baz=38,slow=34
NWAO Narrogin (SRO) 87.63 211 P P 18 24 53.0 +1.0
NWAO P P 18 24 53.0 +1.0
NWAO Narrogin (SRO) 87.63 211 P P 18 24 52.1 +0.1
NWAO pmax pmax
comp=Z,129nm,0.9s
NWAO MLR MLR
comp=Z,4µm,19.0s
VAE Valguarnera 87.66 330 LR LR 19 08 41.0
comp=Z,12µm,19.7s,baz=34,slow=39
HIZ Hauiti 88.23 165 IAmb IAmb 18 24 58.0
comp=Z,111nm,0.9s
URZ Urewera 88.41 163 LR LR 18 58 57.4
comp=Z,5µm,20.9s,baz=88,slow=32
ECAL Calabor 88.69 346 P P 18 24 56.1 -1.3
DWPF Disney Wildern 88.70 47 P P 18 24 56.4 -1.1
DWPF Disney Wildern 88.70 47 IAMs_20 IAMs_20 19 10 42.7
comp=Z,5µm,19.0s
DWPF Disney Wildern 88.70 47 P P 18 24 58.6 +1.1
baz=326
DWPF S S 18 35 43.9 +1.4
baz=326
PBRG Braganca 88.83 346 eP P 18 24 57.1 -0.9
comp=Z,73nm,1.5s
ETOS Mallorca 88.89 339 P P 18 24 58.2 -0.1
PGAV Gavieira, Arco 88.90 348 eP P 18 24 58.1 -0.3
comp=Z,78nm,1.7s
PGAV Gavieira, Arco 88.90 348 eS SKSac 18 35 28.0 +2.1
PGAV Gavieira, Arco 88.90 348 eLQ LQ 18 49 42.6
PGAV eLR LR 18 55 23.7
comp=Z,5µm,18.0s
WDD Wied Dalam 89.10 329 IAMs_20 IAMs_20 19 10 40.3
comp=Z,5µm,20.0s
PCAB Cabril 89.12 347 eP P 18 24 59.0 -0.3
BKZ Black Stump Fm 89.16 163 P P 18 24 58.6 -0.6
BKZ Black Stump Fm 89.16 163 IAmb IAmb 18 25 02.5
comp=Z,80nm,1.2s
BKZ IAMs_20 IAMs_20 18 59 36.0
comp=Z,6µm,21.0s
POLO Lamas de Olo 89.41 347 eP P 18 25 00.2 -0.6
comp=Z,46nm,1.2s
PVRL Vila Real 89.50 347 eP P 18 25 00.5 -0.6
comp=Z,111nm,1.2s
MVO Moncorvo 89.50 347 eP P 18 25 00.2 -0.9
comp=Z,91nm,1.4s
MVO Moncorvo 89.50 347 eS SKSac 18 35 30.6 +1.2
MVO Moncorvo 89.50 347 eLQ LQ 18 51 52.9
MVO eLR LR 18 56 04.7
comp=Z,8µm,20.0s
CORO Coronation Par 89.64 186 P P 18 25 04.5 +3.3
UCM Universidad Co 89.68 344 P P 18 24 59.6 -2.4
ECHE Chera 89.92 342 P P 18 25 01.7 -1.4
PVIS Viseu 90.07 347 eP P 18 25 02.8 -1.0
comp=Z,72nm,1.9s
CMIG Matias Romero 90.14 64 LR LR 19 02 43.8
comp=Z,2µm,21.6s,baz=316,slow=34
MTE Manteigas 90.33 347 eP P 18 25 04.2 -0.8
comp=Z,78nm,1.6s
MTE Manteigas 90.33 347 eS SKSac 18 35 36.0 +1.7
MTE Manteigas 90.33 347 eLQ LQ 18 49 56.3
MTE eLR LR 18 56 20.4
comp=Z,6µm,20.0s
TKNZ Takaka Hill 90.37 166 P P 18 25 04.3 -0.5
ESDC Sonseca Array 90.43 344 P P 18 25 04.8 -0.7
comp=Z,31nm,1.0s,baz=6.0,slow=4.3,SNR=72
ESDC LR LR 19 13 34.0
comp=Z,11µm,18.2s,baz=23,slow=41
comp=Z,31nm,1.0s
MRZ Mangatainoka R 90.44 164 IAmb IAmb 18 25 20.6
comp=Z,72nm,1.0s
PAB San Pablo 90.62 344 P P 18 25 05.1 -1.3
PAB San Pablo 90.62 344 P P 18 25 05.1 -1.3
PAB pmax pmax
comp=Z,37nm,1.0s
PAB MLR MLR
comp=Z,13µm,19.0s
CMAH Djebel Manchou 90.63 334 P P 18 25 05.4 -1.1
COI Coimbra 90.64 347 eP P 18 25 06.8 +0.4
comp=Z,86nm,1.3s
CAEH 'Ain El Ouahch 90.65 335 P P 18 25 11.2 +4.7
PCAS Casmilo, Conde 90.81 347 eP P 18 25 06.4 -0.8
comp=Z,75nm,1.4s
061Z Ochoppi 90.82 48 IAMs_20 IAMs_20 19 13 28.0
comp=Z,4µm,18.0s
PCBR Castelo Branco 90.86 347 eP P 18 25 06.8 -0.6
comp=Z,65nm,1.4s
KEST Kesra 90.89 333 IAmb IAmb 18 25 14.3
comp=Z,103nm,0.8s
KEST Kesra 90.89 333 P P 18 25 07.8 +0.1
comp=Z,88nm,0.9s,baz=306,slow=2.2,SNR=51
KEST LR LR 19 10 59.3
comp=Z,15µm,20.2s,baz=322,slow=39
comp=Z,88nm,0.9s
KEST Kesra 90.89 333 P P 18 25 08.3 +0.5
SNR=27
KEST S SKSac 18 35 38.0 +0.4
CKFL Kef-Lekhel 91.04 335 P P 18 25 12.0 +3.5
BHW Baring Head 91.05 165 IAMs_20 IAMs_20 18 58 23.8
comp=Z,6µm,22.0s
CASM Ain Smara 91.24 335 P P 18 25 12.2 +2.9
PMRV Marv??o 91.25 346 eP P 18 25 07.4 -1.9
comp=Z,57nm,1.4s
PMRV Marv??o 91.25 346 eS SKSac 18 35 40.8 +1.3
PMRV Marv??o 91.25 346 eLQ LQ 18 50 58.9
PMRV eLR LR 18 56 50.3
comp=Z,11µm,20.0s
PSBE So Bento 91.38 348 eP P 18 25 08.7 -1.2
comp=Z,112nm,2.1s
SET Setif 91.60 336 P P 18 25 12.0 +1.0
PMTG Montargil 91.73 347 eP P 18 25 10.5 -1.0
comp=Z,53nm,1.6s
PESTR Estremoz 91.83 346 eP P 18 25 11.3 -0.7
comp=Z,67nm,1.4s
LTZ Lake Taylor 91.98 167 P P 18 25 13.2 +1.0
LTZ IAmb IAmb 18 26 00.9
comp=Z,70nm,1.6s
BBSR BB Station 92.19 33 IAMs_20 IAMs_20 19 12 57.1
comp=Z,5µm,19.0s
LIS Lisbon 92.21 348 eP P 18 25 12.7 -1.0
LIS IAMs_20 IAMs_20 19 15 09.7
comp=Z,9µm,15.0s
EVO Evora 92.23 347 eP P 18 25 13.9 +0.1
comp=Z,57nm,1.6s
SOR Soroa 92.29 52 IAmb IAmb 18 25 32.1
comp=Z,128nm,1.9s
FOZ Fox Glacier 92.38 169 IAMs_20 IAMs_20 19 02 45.9
comp=Z,6µm,20.0s
PBAR Barrancos 92.42 346 eP P 18 25 14.2 -0.5
comp=Z,70nm,1.5s
OXZ Oxford 92.48 168 P P 18 25 14.2 -0.2
PBEJ Beja 92.70 347 eP P 18 25 15.3 -0.7
comp=Z,67nm,1.5s
PNCL Nicolau / Gran 92.72 347 eP P 18 25 16.0 0.0
comp=Z,45nm,1.5s
RPZ Rata Peaks 92.72 168 P P 18 25 16.9 +1.3
comp=Z,15nm,0.8s,baz=205,slow=3.6,SNR=7.3
RPZ LR LR 19 01 51.3
comp=Z,7µm,21.8s,baz=343,slow=32
comp=Z,15nm,0.8s
JCZ Jackson Bay 92.79 170 P P 18 25 19.3 +3.3
CAMR Camarioca 92.91 50 IAMs_20 IAMs_20 19 14 28.6
comp=Z,5µm,18.0s
MESJ Messejana 92.94 347 P P 18 25 16.2 -0.9
MESJ Messejana 92.94 347 eP P 18 25 15.2 -1.9
comp=Z,57nm,1.3s
MESJ Messejana 92.94 347 eP P 18 25 16.0 -1.1
MESJ ePP PP 18 28 58.4 -0.3
MESJ eSKSac SKSac 18 35 47.7 -1.2
MESJ eSS SS 18 42 34.9 +1.8
MESJ IAMs_20 IAMs_20 19 15 34.1
comp=Z,11µm,17.4s
MESJ Messejana 92.94 347 P P 18 25 16.2 -0.9
MESJ pmax pmax
comp=Z,54nm,0.5s
PGRA Graciosa 93.01 2 eP P 18 25 15.9 -1.5
comp=Z,48nm,1.0s
PCVE Castro Verde 93.11 347 eP P 18 25 17.2 -0.7
comp=Z,97nm,1.5s
LBZ Lake Benmore 93.27 169 P P 18 25 18.2 +0.2
PSBA Serra de Santa 93.28 2 eP P 18 25 18.5 -0.2
comp=Z,66nm,1.2s
PVAQ Vaqueiros 93.29 346 eP P 18 25 17.7 -1.0
comp=Z,54nm,2.1s
PVAQ Vaqueiros 93.29 346 eS SKSac 18 35 52.1 +1.2
PVAQ Vaqueiros 93.29 346 eLQ LQ 18 51 46.4
PVAQ eLR LR 18 57 49.7
comp=Z,11µm,20.0s
ROSA Rosais 93.31 3 eP P 18 25 20.4 +1.6
comp=Z,136nm,1.2s
PMAN Manadas 93.40 2 eP P 18 25 20.3 +1.1
comp=Z,229nm,1.8s
PBDV Barranco-do-Ve 93.48 346 eP P 18 25 19.1 -0.5
comp=Z,65nm,1.6s
PICO Pico 93.52 3 eP P 18 25 21.0 +1.2
comp=Z,200nm,0.9s
MORF Marmelete 93.53 347 IAmb IAmb 18 25 23.8
comp=Z,59nm,1.2s
MORF Marmelete 93.53 347 eP P 18 25 20.8 +1.0
MORF Marmelete 93.53 347 eP P 18 25 18.8 -1.0
MORF ePP PP 18 29 03.1 -0.3
MORF eSKSac SKSac 18 35 51.1 -1.2
MORF IAMs_20 IAMs_20 19 15 06.0
comp=Z,10µm,14.7s
PCAN Candelaria 93.56 3 eP P 18 25 20.6 +0.7
comp=Z,111nm,1.1s
PFVI Vila Bisbo 93.72 347 eP P 18 25 21.0 +0.3
PSET Sete Cidades 94.25 1 eP P 18 25 21.0 -2.1
comp=Z,31nm,1.1s
CMLA Cha da Macela 94.31 0 IAMs_20 IAMs_20 19 10 59.5
comp=Z,4µm,19.0s
PYZ Puysegur Point 94.64 172 IAMs_20 IAMs_20 19 05 26.6
comp=Z,5µm,20.0s
RKT Rikitea 94.64 120 eP P 18 25 23.5 -1.4
comp=Z,1µm,27.5s
RKT Rikitea 94.64 120 ePP PP 18 29 08.7 -4.9
comp=Z,2µm,27.2s
RKT eS S 18 36 33.2 -2.7
comp=Z,20µm,29.5s
RKT eSS SS 18 43 01.3 +1.0
comp=Z,12µm,26.0s
RKT eLQ LQ 18 51 48.9
comp=Z,11µm,40.2s
RKT eLR LR 18 55 47.4
comp=Z,35µm,35.8s
PSMN Pico do Norte, 95.07 0 eP P 18 25 26.1 -0.8
comp=Z,32nm,1.9s
ATD Arta Tunnel 95.66 294 P P 18 25 27.3 -2.7
ATD IAmb IAmb 18 25 36.0
comp=Z,47nm,1.0s
ATD Arta Tunnel 95.66 294 LR LR 19 14 26.1
comp=Z,666nm,18.6s,baz=32,slow=39
ATD Arta Tunnel 95.66 294 P P 18 25 31.7 +1.7
SNR=5.4
ATD S SKSac 18 36 07.8 +3.4
ATD Arta Tunnel 95.66 294 eP P 18 25 32.6 +2.6
ATD IAMs_20 IAMs_20 19 12 14.3
comp=E,16µm,17.8s
FSCY Frank Sound, G 96.11 52 IAMs_20 IAMs_20 19 02 14.6
comp=Z,3µm,21.0s
SNET Serv Nac Est T 96.16 62 IAMs_20 IAMs_20 19 02 32.2
comp=Z,3µm,21.0s
TGUH Tegucigalpa,Un 97.01 60 IAMs_20 IAMs_20 19 12 46.5
comp=Z,5µm,22.0s
MDT Midelt 97.20 343 LR LR 19 14 17.1
comp=Z,5µm,21.1s,baz=28,slow=38
CHIV Chivirico 97.99 48 IAMs_20 IAMs_20 19 16 15.8
comp=Z,5µm,19.0s
GTBY Guantanamo Bay 98.67 47 IAMs_20 IAMs_20 19 10 14.8
comp=Z,5µm,22.0s
MTDJ Mount Denham 98.90 50 IAMs_20 IAMs_20 19 15 20.3
comp=Z,4µm,20.0s
PMOZ Porto Moniz, M 98.94 353 ePP PP 18 29 49.7 +4.4
PMOZ eS SKSac 18 36 33.1 +12
PMOZ Porto Moniz, M 98.94 353 eLR LR 18 59 40.3
comp=Z,3µm,18.0s
PMAR Madeira 99.01 353 ePP PP 18 29 55.0 +9.0
GRTK Grand Turk 99.19 43 IAMs_20 IAMs_20 19 13 35.6
comp=Z,5µm,20.0s
BOAB BOAOCO BROADBAND 99.22 60 IAMs_20 IAMs_20 19 13 01.4
comp=Z,6µm,22.0s
FURI Furi 100.25 296 IAMs_20 IAMs_20 19 16 58.2
comp=Z,5µm,20.0s
FURI Furi 100.25 296 eP Pdif 18 25 50.9 0.0
FURI IAMs_20 IAMs_20 19 13 03.4
comp=Z,6µm,20.2s
SDDR Presa de Saban 101.31 44 IAMs_20 IAMs_20 19 21 23.1
comp=Z,8µm,19.0s
HDC Heredia 102.09 60 IAMs_20 IAMs_20 19 21 55.7
comp=Z,2µm,20.0s
AGPR Aguadilla, PR 103.64 41 IAMs_20 IAMs_20 19 18 41.4
comp=Z,3µm,21.0s
EMPR Esperanza - Ma 103.89 40 IAMs_20 IAMs_20 19 20 25.8
comp=Z,3µm,18.0s
UUPR Utuado, UPR, P 104.00 41 IAMs_20 IAMs_20 19 20 13.9
comp=Z,4µm,19.0s
CELP Cerrillos 104.22 41 IAMs_20 IAMs_20 19 20 18.7
comp=Z,4µm,19.0s
GCPR Guaynabo City 104.23 40 IAMs_20 IAMs_20 19 17 33.8
comp=Z,4µm,20.0s
OBIP Obispado Ponce 104.24 41 IAMs_20 IAMs_20 19 20 20.2
comp=Z,5µm,19.0s
HUMP Col San Antoni 104.48 40 IAMs_20 IAMs_20 19 16 14.4
comp=Z,3µm,20.0s
IGPR InterUniversit 104.52 40 IAMs_20 IAMs_20 19 19 38.7
comp=Z,2µm,19.0s
BCIP Isla Barro Col 105.19 57 IAMs_20 IAMs_20 19 11 44.2
comp=Z,3µm,22.0s
ROCAM Rodrigues Isla 105.53 258 IAMs_20 IAMs_20 19 11 29.3
comp=Z,3µm,20.0s
SMRT St. Maarten 105.72 38 IAMs_20 IAMs_20 19 20 11.9
comp=Z,4µm,20.0s
SEUS St. Eustatius 106.26 38 IAMs_20 IAMs_20 19 17 36.3
comp=Z,3µm,20.0s
LODK Lodwar 106.57 295 IAMs_20 IAMs_20 19 21 00.4
comp=Z,9µm,18.0s
LODK Lodwar 106.57 295 eP Pdif 18 26 18.5 -0.2
ANWB Willy Bob 106.58 37 IAMs_20 IAMs_20 19 19 37.6
comp=Z,2µm,20.0s
PAYG Puerto Ayora 106.74 72 IAMs_20 IAMs_20 19 04 32.3
comp=Z,3µm,21.0s
ABD La Joyeuse, An 107.78 37 IAMs_20 IAMs_20 19 24 20.4
comp=Z,3µm,18.0s
CBE Ff, Capester 108.10 37 IAMs_20 IAMs_20 19 19 53.9
comp=Z,3µm,20.0s
HATO Hato, Curacao 108.30 46 IAMs_20 IAMs_20 19 17 58.7
comp=Z,5µm,21.0s
KMBO Kilima Mbogo 108.97 291 eP Pdif 18 26 30.7 +1.1
SVN Savane Anatole 109.38 37 IAMs_20 IAMs_20 19 25 37.1
comp=Z,4µm,19.0s
KIBK Kibwezi 109.41 289 IAMs_20 IAMs_20 19 22 53.9
comp=Z,5µm,20.0s
FDF Fort de France 109.49 37 IAMs_20 IAMs_20 19 25 48.8
comp=Z,4µm,19.0s
ILAM Ilet Lapin Mar 109.56 37 IAMs_20 IAMs_20 19 24 10.7
comp=Z,2µm,20.0s
BIM Bigot 109.72 37 IAMs_20 IAMs_20 19 16 52.8
comp=Z,4µm,22.0s
SDV Santo Domingo 110.32 49 IAMs_20 IAMs_20 19 21 38.8
comp=Z,4µm,22.0s
BBGH Gun Hill 111.57 36 IAMs_20 IAMs_20 19 23 07.7
comp=Z,5µm,20.0s
GRGR Grenville 111.62 39 IAMs_20 IAMs_20 19 17 41.6
comp=Z,4µm,22.0s
MBAR Mbarara 112.54 296 eP Pdif 18 26 43.3 -2.1
TORD Torodi Ar. Bea 114.37 331 Pdiff Pdif 18 26 52.8 -0.6
comp=Z,2.3nm,0.9s,baz=32,slow=7.3,SNR=8.6
TORD PKP PKiKP 18 30 43.1 -0.9
comp=Z,3.2nm,0.8s,baz=2.3,slow=2.2,SNR=9.5
TORD PP PP 18 31 37.0 -2.1
comp=Z,5.5nm,0.9s,baz=26,slow=5.3,SNR=4.6
TORD PKKPbc PKKPbc 18 41 21.6 +0.1
comp=Z,0.8nm,0.5s,baz=230,slow=1.4,SNR=6.1
OPO Ambohidratompo 115.41 270 PKP PKiKP 18 30 46.3 +0.3
comp=Z,7.9nm,1.1s,baz=127,slow=18,SNR=3.0
OPO PP PP 18 31 44.5 -3.2
comp=Z,4.9nm,1.0s,baz=42,slow=4.6,SNR=3.9
CASY Casey 119.21 199 PKPdf 18 30 51.1 -0.4
CASY Casey 119.21 199 IAMs_20 IAMs_20 19 19 18.1
comp=Z,2µm,21.0s
BOAV Boa Vista 120.81 42 IAMs_20 IAMs_20 19 29 07.7
comp=Z,2µm,20.0s
DBIC Dimbokro 122.45 336 PKPdf 18 30 58.0 -1.6
DBIC Dimbokro 122.45 336 PKP PKPdf 18 30 59.4 -0.2
comp=Z,15nm,0.7s,baz=356,slow=2.0,SNR=15
DBIC Dimbokro 122.45 336 PKIKP PKPdf 18 30 58.0 -1.6
TIC Toumodi 122.52 336 ePKIKP PKPdf 18 30 59.4 -0.3
comp=Z,31nm,1.1s
KIC Kosan Boka 122.72 336 ePKIKP PKPdf 18 30 59.7 -0.4
comp=Z,14nm,0.8s
LIC Lamto 122.93 336 ePKIKP PKPdf 18 31 00.1 -0.4
comp=Z,19nm,0.7s
LSZ Lusaka 125.51 288 PKPdf 18 31 03.9 -1.5
LSZ Lusaka 125.51 288 P PKiKP 18 31 06.2 +0.4
LSZ Lusaka 125.51 288 PKIKP PKPdf 18 31 03.9 -1.5
LSZ MLR MLR
comp=Z,6µm,20.0s
MACA Manacapuru-AM 125.62 46 IAMs_20 IAMs_20 19 27 28.7
comp=Z,3µm,22.0s
VNDA Vanda 125.62 178 PKP PKPdf 18 31 03.9 +0.2
comp=Z,9.9nm,0.8s,baz=313,slow=4.2,SNR=28
VNDA PKKPbc PKKPbc 18 40 40.3 -0.4
comp=Z,3.6nm,0.8s,baz=209,slow=3.0,SNR=11
SBA Scott Base 126.09 177 PKIKP PKiKP 18 31 05.1 +0.1
SBA Scott Base 126.09 177 IAMs_20 IAMs_20 19 22 04.6
comp=Z,2µm,19.0s
SBA Scott Base 126.09 177 PKIKP PKiKP 18 31 05.1 +0.1
SBA MLR MLR
comp=Z,2µm,19.0s
MATP Matopo 129.09 284 PKP PKiKP 18 31 12.6 -0.3
comp=Z,12nm,1.1s,baz=348,slow=1.3,SNR=14
MATP PP PP 18 33 22.4 +2.0
comp=Z,7.9nm,0.9s,baz=42,slow=8.4,SNR=6.5
SAML Samuel 129.32 52 PKPdf 18 31 11.3 -1.4
SAML Samuel 129.32 52 PKIKP PKPdf 18 31 11.3 -1.4
SAML MLR MLR
comp=Z,4µm,22.0s
LPAZ La Paz 132.50 63 PKP PKPdf 18 31 19.2 -0.2
comp=Z,17nm,1.2s,baz=353,slow=4.3,SNR=16
LPAZ SKPbc SKPab 18 34 45.3 -0.2
comp=Z,4.6nm,0.9s,baz=12,slow=6.9,SNR=2.8
LPAZ La Paz 132.50 63 eP PKiKP 18 31 20.0 -0.5
MAW Mawson 134.19 212 PKP PKPdf 18 31 18.5 -1.6
comp=Z,16nm,0.8s,baz=102,slow=4.9,SNR=10
LBTB Lobatse 134.22 282 PKP PKPdf 18 31 20.7 -1.0
comp=Z,23nm,0.8s,baz=280,slow=0.4,SNR=14
LBTB PP PP 18 33 56.3 +2.9
comp=Z,9.9nm,0.9s,baz=72,slow=8.8,SNR=3.6
TA01 Diego Aracena 134.52 69 PKPdf 18 31 22.1 -0.2
TSUM Tsumeb 135.06 295 PKPpre 18 31 11.5
PB01 IPOC Station P 135.31 68 PKPpre 18 31 13.0
PB01 PKPdf PKPdf 18 31 24.0 +0.2
LVC Limon Verde 136.82 69 PKPdf 18 31 26.5 -0.5
LVC Limon Verde 136.82 69 IAMs_20 IAMs_20 19 18 09.5
comp=Z,3µm,22.0s
LVC Limon Verde 136.82 69 PKIKP PKPdf 18 31 26.5 -0.5
LVC MLR MLR
comp=Z,3µm,22.0s
LVC Limon Verde 136.82 69 eP PKPdf 18 31 27.4 +0.5
BOSA Boshof 136.87 278 PKhKP PKPpre 18 31 14.0
comp=Z,3.7nm,0.8s,baz=358,slow=2.3,SNR=4.5
PTLB Pontes e Lacer 136.90 52 PKPpre 18 31 13.8
PTLB PKPdf PKPdf 18 31 26.9 +0.1
PTLB IAMs_20 IAMs_20 19 32 33.7
comp=Z,3µm,22.0s
H03N2 Juan Fernandez 137.49 90 T T 21 04 31.9
baz=310,slow=77
H03N1 Juan Fernandez 137.51 90 T T 21 04 32.4
baz=310,slow=77
H03N3 Juan Fernandez 137.51 90 T T 21 04 28.5
baz=310,slow=77
H03S2 Juan Fernandez 137.74 90 T T 21 04 47.6
baz=310,slow=28,SNR=20
H03S3 Juan Fernandez 137.74 90 T T 21 04 48.4
baz=310,slow=28,SNR=20
H03S1 Juan Fernandez 137.75 90 T T 21 04 45.7
baz=310,slow=28,SNR=15
QSPA South Pole Qui 138.04 180 PKPpre 18 31 14.8
QSPA PKPdf PKPdf 18 31 28.4 +1.0
QSPA South Pole Qui 138.04 180 IAMs_20 IAMs_20 19 24 47.9
comp=Z,3µm,21.0s
QSPA South Pole Qui 138.04 180 PKhKP PKPpre 18 31 14.8
comp=Z,3.0nm,0.5s,baz=244,slow=0.8,SNR=23
LCO Las Campanas 140.16 78 PKPpre 18 31 22.6
LCO PKPdf PKPdf 18 31 32.3 -0.5
LCO Las Campanas 140.16 78 PKIKP PKPdf 18 31 32.3 -0.5
VA01 Torpederas 142.09 84 PKPpre 18 31 30.0
SUR Sutherland 142.22 278 PKPdf 18 31 33.5 -2.8
SUR Sutherland 142.22 278 PKhKP PKPpre 18 31 32.9
comp=Z,16nm,1.0s,baz=82,slow=6.4,SNR=10
SUR PP PP 18 34 42.9 -0.3
comp=Z,17nm,0.9s,baz=32,slow=1.9,SNR=3.7
SUR Sutherland 142.22 278 P PKPdf 18 31 34.3 -1.9
BDFB Brasilia 142.34 38 PKPpre 18 31 30.9
BDFB Brasilia 142.34 38 PKhKP PKPpre 18 31 32.8
comp=Z,12nm,0.9s,baz=0.3,slow=8.3,SNR=8.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **142.34** | **38** | PKIKP | PKPpre | 18 31 30.9 | | |
| **PEL** | **Peldehue** | **142.81** | **83** | IAMs_20 | IAMs_20 | 19 22 48.7 | | |
| | comp=Z,3µm,22.0s | | | | | | | |
| **MT01** | **Popeta** | **142.87** | **84** | | PKPpre | 18 31 31.8 | | |
| MT01 | | | | PKPdf | **PKiKP** | **18 31 39.0** | **-1.4** | |
| **MT16** | **CCHEN** | **143.09** | **83** | | **PKPdf** | **18 31 37.3** | **-0.3** | |
| **BO04** | **La Punta** | **143.37** | **84** | | PKPpre | 18 31 32.9 | | |
| **MT08** | **Bocatoma Ro** | **143.43** | **83** | | PKPab | 18 31 33.5 | -1.2 | |
| **LR05** | **Currie** | **145.86** | **94** | | **PKPdf** | **18 31 42.4** | **+0.3** | |
| **GO06** | **Curarrehue** | **145.89** | **93** | | **PKPdf** | **18 31 42.3** | **-0.1** | |
| **CPUP** | **Villa Florida** | **146.60** | **61** | | **PKPdf** | **18 31 43.1** | **-0.7** | |
| **CPUP** | **Villa Florida** | **146.60** | **61** | PKPbc | **PKPbc** | **18 31 44.8** | **-0.6** | |
| | comp=Z,150nm,1.2s,baz=326,slow=2.6,SNR=55 | | | | | | | |
| **CPUP** | **Villa Florida** | **146.60** | **61** | PKP2 | **PKPdf** | **18 31 43.1** | **-0.7** | |
| **PLCA** | **Paso Flores** | **147.07** | **94** | | **PKPdf** | **18 31 43.7** | **-0.6** | |
| **PLCA** | **Paso Flores** | **147.07** | **94** | PKPbc | **PKPbc** | **18 31 47.0** | **+0.5** | |
| | comp=Z,68nm,0.9s,baz=293,slow=3.8,SNR=60 | | | | | | | |
| **PLCA** | **Paso Flores** | **147.07** | **94** | PKP2 | **PKPdf** | **18 31 43.7** | **-0.6** | |
| **PLCA** | **Paso Flores** | **147.07** | **94** | *e*P | **PKPdf** | **18 31 45.3** | **+1.0** | |
| **ELIB** | **Princess Elisa** | **147.74** | **206** | *d*PKPdf | **PKPdf** | **18 31 44.2** | **-0.3** | |
| **CRSM** | **Crissiumal (Br** | **149.37** | **58** | *e*P | **PKPdf** | **18 31 49.0** | **+0.7** | |
| **ITQB** | **Itaqui** | **149.49** | **64** | | **PKPdf** | **18 31 47.1** | **-1.3** | |
| ITQB | | | | | **PKPbc** | **18 31 52.8** | **-0.1** | |
| **SPB** | **Sao Paulo** | **149.60** | **44** | *e*P | **PKPdf** | **18 31 50.2** | **+1.4** | |
| **MG05** | **Puerto Natales** | **149.71** | **115** | | **PKPdf** | **18 31 47.5** | **-0.6** | |
| **BELA** | **Belgrano 2** | **150.09** | **176** | | **PKPdf** | **18 31 46.6** | **-1.4** | |
| **VAS01** | **Vassouras-RJ** | **150.15** | **36** | *e*P | **PKPdf** | **18 31 50.8** | **+1.0** | |
| **ITAB** | **Concordia** | **150.23** | **55** | | **PKPdf** | **18 31 52.3** | **+2.6** | |
| **DUB01** | **Friburgo-RJ** | **150.38** | **34** | *e*P | **PKPdf** | **18 31 50.8** | **+0.6** | |
| **RODS** | **Rosario do Sul** | **150.84** | **63** | *e*P | **PKPdf** | **18 31 51.7** | **+1.1** | |
| **ALGR** | **Alto Alegre (B** | **150.95** | **58** | *e*P | **PKPdf** | **18 31 52.6** | **+1.7** | |
| **TRQA** | **Tornquist** | **151.42** | **83** | | **PKPdf** | **18 31 49.9** | **-1.4** | |
| TRQA | | | | PKPbc | **PKPbc** | **18 31 57.3** | **-0.1** | |
| **TRQA** | **Tornquist** | **151.42** | **83** | PKIKP | **PKPdf** | **18 31 49.9** | **-1.4** | |
| **NVL** | **N'lazarevskaya** | **151.57** | **205** | *e*PKIKP | **PKPbc** | **18 31 56.2** | **-0.4** | |
| NVL | | | | *e*SS | SS | 18 54 55.2 | -4.7 | |
| **PLTB** | **Pedras Altas** | **152.80** | **63** | PKPdf | **PKPdf** | **18 31 51.7** | **-1.8** | |
| PLTB | | | | | **PKPbc** | **18 32 00.2** | **-0.5** | |
| **TROLL** | **Troll, Antarti** | **153.07** | **199** | ⇓PKPab | **pPKPbc** | **18 32 09.6** | **+0.1** | |
| | comp=Z,3µm,0.7s | | | | | | | |
| TROLL | | | | ⇑PKPdf | **PKPdf** | **18 31 52.8** | **0.0** | |
| | comp=Z,5µm,0.8s | | | | | | | |
| TROLL | | | | ⇑PKPbc | **PKiKP** | **18 32 00.5** | **+0.2** | |
| | comp=Z,1µm,0.6s | | | | | | | |
| TROLL | | | | ⇑PP | **PP** | **18 35 42.2** | **-3.6** | |
| | comp=Z,666nm,1.2s | | | | | | | |
| **PMSA** | **Palmer Station** | **153.50** | **143** | PKPdf | **PKPdf** | **18 31 53.6** | **+0.2** | |
| PMSA | | | | | **PKPbc** | **18 32 01.1** | **0.0** | |
| PMSA | | | | PKPab | **sPKPbc** | **18 32 12.7** | **-0.8** | |
| **SNAA** | **Sanae** | **154.40** | **196** | | **PKPdf** | **18 31 53.4** | **-1.2** | |
| SNAA | | | | PKPab | **PKPab** | **18 32 17.6** | **+0.2** | |
| SNAA | | | | IAMs_20 | IAMs_20 | 19 35 08.4 | | |
| | comp=Z,5µm,22.0s | | | | | | | |
| **SNAA** | **Sanae** | **154.40** | **196** | ⇓PKPab | **sPKPbc** | **18 32 13.6** | **-1.9** | |
| | comp=Z,105nm,0.6s | | | | | | | |
| SNAA | | | | ⇑PKPdf | **PKPdf** | **18 31 54.1** | **-0.6** | |
| | comp=Z,257nm,0.7s | | | | | | | |
| SNAA | | | | ⇑PKPbc | **PKPbc** | **18 32 02.7** | **-0.3** | |
| | comp=Z,257nm,0.7s | | | | | | | |
| SNAA | | | | ⇑PP | **PP** | **18 35 53.0** | **-0.1** | |
| | comp=Z,248nm,1.3s | | | | | | | |
| **SNAA** | **Sanae** | **154.40** | **196** | PKP | **PKPdf** | **18 31 54.2** | **-0.5** | |
| | comp=Z,9.5nm,0.9s,baz=158,slow=1.1,SNR=15 | | | | | | | |
| SNAA | | | | PKPbc | **PKPbc** | **18 32 02.4** | **-0.6** | |
| | comp=Z,28nm,0.9s,baz=226,slow=2.6,SNR=34 | | | | | | | |
| SNAA | | | | PKPab | **PKPab** | **18 32 16.9** | **-0.5** | |
| | comp=Z,65nm,1.0s,baz=80,slow=4.0,SNR=14 | | | | | | | |
| SNAA | | | | PP | **PP** | **18 35 55.5** | **+2.4** | |
| | comp=Z,29nm,1.2s,baz=155,slow=3.7,SNR=4.3 | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **155.82** | **194** | ⇓PKPab | **PKPab** | **18 32 23.6** | **+0.2** | |
| | comp=Z,28nm,0.7s,baz=151,slow=4.7 | | | | | | | |
| VNA2 | | | | ⇑PKPdf | **PKPdf** | **18 31 56.0** | **-0.5** | |
| | comp=Z,10nm,0.8s,baz=155,slow=0.3 | | | | | | | |
| VNA2 | | | | ⇓PP | **PP** | **18 36 01.8** | **+0.8** | |
| | comp=Z,5.4nm,0.8s,baz=125,slow=6.5 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **155.88** | **192** | ⇓PKPab | **PKPab** | **18 32 23.3** | **-0.4** | |
| | comp=Z,54nm,0.8s | | | | | | | |
| VNA3 | | | | ⇑PKPdf | **PKPdf** | **18 31 55.7** | **-0.9** | |
| | comp=Z,9.1nm,1.0s | | | | | | | |
| VNA3 | | | | ⇓PP | **PP** | **18 36 00.5** | **-0.8** | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **156.20** | **194** | ⇓PKPab | **PKPab** | **18 32 24.4** | **-0.6** | |
| | comp=Z,47nm,0.8s | | | | | | | |
| VNA1 | | | | ⇑PKPdf | **PKPdf** | **18 31 56.5** | **-0.4** | |
| | comp=Z,11nm,1.1s | | | | | | | |
| VNA1 | | | | ⇓PP | **PP** | **18 36 00.5** | **-2.5** | |
| | comp=Z,10nm,0.9s | | | | | | | |

**JMA 10 18:15:10.5±0.1, 37°.2N±0°.2×141°.2E±0°.7, h18km±1km, MV2.5/37, 1D, E OFF FUKUSHIMA PREF, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFK** | **Kawauchi** | **0.30** | **301** | P | Pg | 18 15 16.8 | -0.3 |
| JFK | | | | *e*S | Sg | 18 15 21.6 | +0.1 |
| **ONAJ** | **Iwakimizuishiy** | **0.34** | **251** | *e*P | Pg | 18 15 17.3 | -0.4 |
| **JFFD** | **Fukushimafurud** | **0.52** | **257** | P | Pg | 18 15 20.6 | -0.3 |
| JFFD | | | | *e*S | Sg | 18 15 27.7 | -0.3 |
| **JMST** | **Minamisoumatoc** | **0.57** | **334** | *e*P | Pb | 18 15 21.2 | -0.6 |
| JMST | | | | *e*S | Sb | 18 15 29.7 | +0.2 |
| **JMM** | **Marumori** | **0.72** | **334** | ⇓P | Pb | 18 15 24.1 | -0.5 |
| **JMM** | **Marumori** | **0.72** | **334** | P | Pb | 18 15 24.1 | -0.4 |
| JMM | | | | S | Sg | 18 15 34.5 | +0.1 |
| **JOTO** | **OTAMA OYAMA** | **0.77** | **297** | P | Pb | 18 15 25.4 | +0.1 |
| JOTO | | | | *e*S | Sg | 18 15 36.1 | +0.3 |
| **JHO** | **Hitachi** | **0.78** | **220** | *e*P | Pb | 18 15 24.6 | -0.9 |
| JHO | | | | *e*S | Sb | 18 15 34.8 | -1.1 |
| **JSB** | **Shiboa** | **1.05** | **257** | P | Pg | 18 15 30.7 | -0.1 |

*SKHL **10** 18:17:14.6±0.3, 48°.20N×155°.40E, h45km±4km, mb4.8/8*
*KRSC **10** 18:17:14.6±1.3, 48°.45N×155°.10E, h54km±19km, Ml4.5*
**ISC 10 18:17:14.0±2.1, 48°.1N±0°.2×155°.6E±0°.2, h35km, n16, σ1°91/26, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.64** | **8** | *e*P | **Pn** | **18 17 53.1** | **-1.0** |
| SKR | | | | *e*S | **Sn** | **18 18 20.7** | **-4.1** |
| **SKR** | **Severo-Kuril's** | **2.64** | **8** | *e*P | **Pn** | **18 17 53.3** | **-0.8** |
| SKR | | | | AMB | AMB | 18 17 54.1 | |
| | 260nm,0.6s | | | | | | |
| SKR | | | | *e*S | **Sn** | **18 18 21.7** | **-3.1** |
| SKR | | | | A | A | 18 18 28.8 | |
| | 580nm,0.5s | | | | | | |
| SKR | | | | A | A | 18 18 28.8 | |
| | 360nm,0.5s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **4.08** | **22** | *e*P | **Pn** | **18 18 14.0** | **+0.2** |
| KDTR | | | | *e*S | **Sn** | **18 18 59.4** | **-0.8** |
| **KDTR** | **Khodutka, Kamc** | **4.08** | **22** | *e*P | **Pn** | **18 18 14.6** | **+0.8** |
| KDTR | | | | AMB | AMB | 18 18 15.3 | |
| | 60nm,0.5s | | | | | | |
| KDTR | | | | *e*S | **Sn** | **18 18 59.7** | **-0.6** |
| KDTR | | | | A | A | 18 19 07.6 | |
| | 130nm,0.5s | | | | | | |
| KDTR | | | | A | A | 18 19 07.6 | |
| | 230nm,0.5s | | | | | | |
| **ASAK** | **Asacha** | **4.57** | **18** | *e*P | **Pn** | **18 18 22.0** | **+1.3** |
| **MTVR** | **Mutnovka** | **4.72** | **20** | *e*P | **Pn** | **18 18 23.4** | **+0.6** |
| MTVR | | | | *e*S | **Sn** | **18 19 15.5** | **-1.0** |
| **GRL** | **Gorelyy** | **4.76** | **19** | *e*P | **Pn** | **18 18 24.8** | **+1.4** |
| **PET** | **Petropavlovsk** | **5.33** | **20** | *e*P | **Pn** | **18 18 31.8** | **+0.7** |
| **PET** | **Petropavlovsk** | **5.33** | **20** | *e*P | **Pn** | **18 18 32.9** | **+1.8** |
| PET | | | | AMB | AMB | 18 18 37.2 | |
| | 60nm,0.8s | | | | | | |
| PET | | | | *e*S | **Sn** | **18 19 30.9** | **-0.3** |
| PET | | | | A | A | 18 19 46.1 | |
| | 90nm,0.6s | | | | | | |
| PET | | | | A | A | 18 19 46.1 | |
| | 90nm,0.6s | | | | | | |
| **AVH** | **Avacha** | **5.58** | **20** | *e*P | **Pn** | **18 18 36.5** | **+2.0** |
| **KRX** | **Arik** | **5.64** | **19** | *e*P | **Pn** | **18 18 37.2** | **+1.7** |
| **KUR** | **Kuril'sk** | **6.01** | **245** | *e*P | **Pn** | **18 18 42.9** | **+2.5** |
| KUR | | | | *e*S | **Sn** | **18 19 49.4** | **+1.4** |
| **KUR** | **Kuril'sk** | **6.01** | **245** | *e*P | **Pn** | **18 18 42.1** | **+1.7** |
| KUR | | | | AMB | AMB | 18 18 45.1 | |
| | 60nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **18 19 47.4** | **-0.6** |
| KUR | | | | A | A | 18 19 57.1 | |
| | 150nm,0.7s | | | | | | |
| KUR | | | | A | A | 18 19 57.1 | |
| | 80nm,0.7s | | | | | | |
| **SHO** | **Shikotan** | **7.39** | **239** | *e*P | **Pn** | **18 18 59.0** | **-0.4** |
| SHO | | | | AMB | AMB | 18 19 02.8 | |
| | 40nm,0.7s | | | | | | |
| SHO | | | | *e*S | **Sn** | **18 20 17.7** | **-4.3** |
| SHO | | | | A | A | 18 20 22.5 | |
| | 70nm,0.6s | | | | | | |
| SHO | | | | A | A | 18 20 22.5 | |
| | 110nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **7.87** | **243** | *e*P | **Pn** | **18 19 07.0** | **+1.2** |
| YUK | | | | AMB | AMB | 18 19 09.6 | |
| | 30nm,0.6s | | | | | | |
| YUK | | | | *e*S | **Sn** | **18 20 31.5** | **-2.0** |
| YUK | | | | A | A | 18 20 41.0 | |
| | 2µm,0.7s | | | | | | |
| YUK | | | | A | A | 18 20 41.0 | |
| | 1µm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **8.75** | **267** | *e*P | **Pn** | **18 19 19.7** | **+1.8** |
| YSS | | | | AMB | AMB | 18 19 23.2 | |
| | 30nm,0.7s | | | | | | |

*KRSC **10** 18:20:15.7±1.0, 48°.44N×155°.93E, h16km±12km, Ml4.0*
*SKHL **10** 18:20:19.1±0.7, 48°.50N×155°.00E, h51km±3km, mb4.2/4*
**ISC 10 18:20:18.1±2.7, 48°.4N±0°.3×155°.1E±0°.3, h35km, n10, σ0°83/16, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.35** | **16** | *e*P | **Pn** | **18 20 53.8** | **-0.4** |
| SKR | | | | *e*S | **Sn** | **18 21 20.7** | **-1.2** |
| **SKR** | **Severo-Kuril's** | **2.35** | **16** | *e*P | **Pn** | **18 20 55.3** | **+1.1** |
| SKR | | | | AMB | AMB | 18 20 57.6 | |
| | 40nm,0.4s | | | | | | |
| SKR | | | | *e*S | **Sn** | **18 21 21.8** | **-0.1** |
| SKR | | | | A | A | 18 21 26.7 | |
| | 80nm,0.4s | | | | | | |
| SKR | | | | A | A | 18 21 26.7 | |
| | 150nm,0.4s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.89** | **29** | *e*P | **Pn** | **18 21 14.3** | **-1.0** |
| KDTR | | | | *e*S | **Sn** | **18 21 59.0** | **-0.8** |
| **KDTR** | **Khodutka, Kamc** | **3.89** | **29** | *e*P | **Pn** | **18 21 16.2** | **+0.8** |
| KDTR | | | | AMB | AMB | 18 21 16.8 | |
| | 20nm,0.4s | | | | | | |
| KDTR | | | | *e*S | **Sn** | **18 21 59.2** | **-0.6** |
| KDTR | | | | A | A | 18 22 05.3 | |
| | 50nm,0.6s | | | | | | |
| KDTR | | | | A | A | 18 22 05.3 | |
| | 50nm,0.6s | | | | | | |
| **ASAK** | **Asacha** | **4.35** | **23** | *e*P | **Pn** | **18 21 22.6** | **+0.9** |
| **MTVR** | **Mutnovka** | **4.52** | **25** | *e*P | **Pn** | **18 21 24.1** | **+0.1** |
| MTVR | | | | *e*S | **Sn** | **18 22 15.7** | **+0.4** |
| **GRL** | **Gorelyy** | **4.55** | **24** | *e*P | **Pn** | **18 21 25.0** | **+0.5** |
| **PET** | **Petropavlovsk** | **5.13** | **25** | *e*P | **Pn** | **18 21 32.7** | **+0.4** |
| **PET** | **Petropavlovsk** | **5.13** | **25** | *e*P | **Pn** | **18 21 32.7** | **+0.4** |
| **KUR** | **Kuril'sk** | **5.89** | **240** | *e*P | **Pn** | **18 21 43.9** | **+1.1** |
| KUR | | | | AMB | AMB | 18 21 46.3 | |
| | 20nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **18 22 48.0** | **-1.1** |
| KUR | | | | A | A | 18 22 58.4 | |
| | 40nm,0.6s | | | | | | |
| KUR | | | | A | A | 18 22 58.4 | |
| | 20nm,0.6s | | | | | | |

*IDC **10** 18:41:56.3±0.9, 54°.15N×168°.19E, h0km, mb3.6/7, mbtmp3.6/8, ML3.8/1, Error ellipse: s-maj=32.6km s-min=21.0km az=178.0*
*MOS **10** 18:41:59.3±0.5, 53°.78N×168°.37E, h38km, mb3.9/1, Error ellipse: s-maj=13.5km s-min=7.3km az=18.9*
*KRSC **10** 18:42:02.0±1.5, 53°.79N×167°.72E, h40km±25km, Ml4.2*
**ISC 10 18:42:01.3±0.8, 53°.83N±0°.07×168°.19E±0°.05, h35km, n62, σ1°69/70, mb3.5/7, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BKI** | **Bering** | **1.89** | **318** | *e*P | **Pn** | **18 42 30.7** | **-0.3** |
| BKI | | | | *e*S | **Sn** | **18 42 53.6** | **-0.1** |
| **BKI** | **Bering** | **1.89** | **318** | PN | **Pn** | **18 42 30.7** | **-0.3** |

**HEL 10 18:21:26.0±0.5, 70°.38N×28°.57E, h0km, ML1.3, Explosion, Northern Norway**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KEV** | **Kevo** | **0.82** | **221** | PG | Pg | 18 21 40.9 | -0.8 |
| | baz=28 | | | | | | |
| KEV | | | | SG | Sg | 18 21 50.8 | -1.5 |
| KEV | | | | MSG | | 18 21 51.4 | |
| | comp=Z,2.8nm,0.2s | | | | | | |
| **ARA0** | **ARCESS Array S** | **1.35** | **233** | PG | Pg | 18 21 50.2 | -1.7 |
| | baz=47 | | | | | | |
| ARA0 | | | | SG | Sg | 18 22 08.2 | -1.1 |
| **RAJF** | **Raja-Jooseppi** | **1.91** | **183** | PG | Pn | 18 22 00.3 | +0.5 |
| RAJF | | | | SG | Sn | 18 22 25.2 | +0.7 |
| **KTK1** | **Kautokeino** | **2.31** | **236** | SG | Sb | 18 22 36.5 | -1.0 |
| **VRF** | **Varrio** | **2.67** | **171** | MSG | | 18 22 44.5 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| VRF | | | | SG | Sb | 18 22 47.8 | 0.0 |
| **SGF** | **Sodankyl** | **3.04** | **195** | SN | Sn | 18 22 51.3 | -1.0 |
| **TRO** | **Tromso** | **3.39** | **262** | PN | Pn | 18 22 19.5 | -0.6 |
| **RNF** | **Rovaniemi** | **3.90** | **195** | SN | Sn | 18 23 13.9 | +0.4 |

**KRSC 10 18:27:03.6±0.7, 48°.29N×156°.15E, h8km±10km, Ml3.8, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.39** | **359** | *e*P | Pn | 18 27 44.4 | +1.3 |
| SKR | | | | *e*S | Sn | 18 28 14.4 | +1.8 |
| **KDTR** | **Khodutka, Kamc** | **3.73** | **19** | *e*P | Pn | 18 28 05.2 | +3.7 |
| KDTR | | | | *e*S | Sn | 18 28 49.9 | +4.3 |
| **ASAK** | **Asacha** | **4.25** | **15** | *e*P | Pn | 18 28 12.8 | +4.2 |
| **MTVR** | **Mutnovka** | **4.39** | **16** | *e*P | Pn | 18 28 14.7 | +4.0 |
| MTVR | | | | *e*S | Sn | 18 29 07.6 | +5.6 |
| **GRL** | **Gorelyy** | **4.44** | **15** | *e*P | Pn | 18 28 15.4 | +4.1 |
| **KOK** | **Koryaka** | **5.25** | **17** | *e*P | Pn | 18 28 26.9 | +4.5 |
| **KRX** | **Arik** | **5.32** | **16** | *e*P | Pn | 18 28 28.1 | +4.7 |

*KRSC **10** 18:31:26.3±1.3, 48°.26N×156°.22E, h8km±28km, Ml3.9*
*SKHL **10** 18:31:27.2±0.1, 48°.10N×155°.20E, h48km±2km, mb4.3/4*
**ISC 10 18:31:27.9±3.1, 48°.1N±0°.3×155°.2E±0°.3, h35km, n13, σ0°93/18, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.62** | **13** | *e*P | **Pn** | **18 32 06.8** | **-0.7** |
| SKR | | | | *e*S | **Sn** | **18 32 37.9** | **-0.1** |
| **SKR** | **Severo-Kuril's** | **2.62** | **13** | *e*P | **Pn** | **18 32 07.2** | **-0.4** |
| SKR | | | | AMB | AMB | 18 32 12.3 | |
| | 60nm,0.4s | | | | | | |
| SKR | | | | *e*S | **Sn** | **18 32 37.3** | **-0.8** |
| SKR | | | | A | A | 18 32 42.9 | |
| | 140nm,0.4s | | | | | | |
| SKR | | | | A | A | 18 32 42.9 | |
| | 110nm,0.4s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **4.12** | **26** | *e*P | **Pn** | **18 32 27.3** | **-0.9** |
| KDTR | | | | *e*S | **Sn** | **18 33 14.5** | **-0.6** |
| **KDTR** | **Khodutka, Kamc** | **4.12** | **26** | *e*P | **Pn** | **18 32 28.7** | **+0.5** |
| KDTR | | | | AMB | AMB | 18 32 32.9 | |
| | 20nm,0.5s | | | | | | |
| KDTR | | | | *e*S | **Sn** | **18 33 14.4** | **-0.7** |
| KDTR | | | | A | A | 18 33 33.0 | |
| | 30nm,0.4s | | | | | | |
| KDTR | | | | A | A | 18 33 33.0 | |
| | 40nm,0.4s | | | | | | |
| **ASAK** | **Asacha** | **4.59** | **21** | *e*P | **Pn** | **18 32 36.1** | **+1.3** |
| **MTVR** | **Mutnovka** | **4.75** | **23** | *e*P | **Pn** | **18 32 37.1** | **0.0** |
| MTVR | | | | *e*S | **Sn** | **18 33 30.2** | **-0.7** |
| **GRL** | **Gorelyy** | **4.79** | **22** | *e*P | **Pn** | **18 32 38.5** | **+1.0** |
| **PET** | **Petropavlovsk** | **5.36** | **23** | *e*S | **Sn** | **18 33 45.7** | **-0.1** |
| PET | | | | A | A | 18 34 00.7 | |
| | 10.0nm,0.5s | | | | | | |
| PET | | | | A | A | 18 34 00.7 | |
| | 20nm,0.5s | | | | | | |
| **UGLR** | **Uglovaya** | **5.58** | **23** | *e*P | **Pn** | **18 32 49.7** | **+1.4** |
| **KOK** | **Koryaka** | **5.60** | **22** | *e*P | **Pn** | **18 32 50.3** | **+1.6** |
| **SMAR** | **Somma** | **5.62** | **23** | *e*P | **Pn** | **18 32 49.4** | **+0.4** |
| **KRX** | **Arik** | **5.67** | **21** | *e*P | **Pn** | **18 32 51.0** | **+1.4** |
| **KUR** | **Kuril'sk** | **5.82** | **243** | *e*P | **Pn** | **18 32 51.8** | **+0.3** |
| KUR | | | | AMB | AMB | 18 32 54.0 | |
| | 20nm,0.6s | | | | | | |

*IDC **10** 18:45:56.4±0.7, 48°.38N×154°.98E, h0km, mb3.8/13, mbtmp3.9/14, ML4.6/1, Error ellipse: s-maj=22.1km s-min=18.7km az=144.0*
*SKHL **10** 18:45:59.4±0.3, 48°.10N×155°.70E, h57km±2km, mb4.9/6*
*KRSC **10** 18:46:00.8±1.1, 48°.42N×156°.14E, h17km±14km, Ml4.5*
*MOS **10** 18:46:03.2±1.1, 48°.45N×155°.34E, h63km, mb4.1/4, Error ellipse: s-maj=16.3km s-min=4.9km az=75.6*
**ISC 10 18:46:01.8±0.7, 48°.31N±0°.07×155°.27E±0°.08, h36km, n86, σ1°53/95, mb3.9/15, 1C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.44** | **13** | *e*P | **Pn** | **18 46 38.5** | **-0.5** |
| SKR | | | | *e*S | **Sn** | **18 47 06.9** | **-0.6** |
| **SKR** | **Severo-Kuril's** | **2.44** | **13** | *e*P | **Pn** | **18 46 38.5** | **-0.5** |
| SKR | | | | AMB | AMB | 18 46 42.5 | |
| | 180nm,0.3s | | | | | | |
| SKR | | | | *e*S | **Sn** | **18 47 08.0** | **+0.5** |
| SKR | | | | A | A | 18 47 14.6 | |
| | 780nm,0.6s | | | | | | |
| SKR | | | | A | A | 18 47 14.6 | |
| | 470nm,0.6s | | | | | | |
| **SKR** | **Severo-Kuril's** | **2.44** | **13** | *e*PN | **Pn** | **18 46 37.4** | **-1.6** |
| SKR | | | | *e*S | **Sn** | **18 47 08.5** | **+1.0** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,50nm,0.9s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,775nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,596nm,0.5s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,7µm,11.0s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.94** | **26** | *e*P | **Pn** | **18 46 59.4** | **-0.2** |
| KDTR | | | | *e*S | **Sn** | **18 47 42.5** | **-2.0** |
| **KDTR** | **Khodutka, Kamc** | **3.94** | **26** | *e*P | **Pn** | **18 46 59.4** | **-0.2** |
| KDTR | | | | AMB | AMB | 18 47 03.4 | |
| | comp=Z,80nm,0.4s | | | | | | |
| KDTR | | | | *e*S | **Sn** | **18 47 44.4** | **-0.1** |
| KDTR | | | | A | A | 18 47 51.8 | |
| | comp=Z,210nm,0.4s | | | | | | |
| KDTR | | | | A | A | 18 47 51.8 | |
| | comp=Z,370nm,0.4s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.94** | **26** | PN | **Pn** | **18 46 59.4** | **-0.2** |
| KDTR | | | | S | **Sn** | **18 47 42.5** | **-2.0** |
| **ASAK** | **Asacha** | **4.41** | **21** | *e*P | **Pn** | **18 47 07.7** | **+1.4** |
| **ASAK** | **Asacha** | **4.41** | **21** | PN | **Pn** | **18 47 07.6** | **+1.4** |
| **MTVR** | **Mutnovka** | **4.57** | **23** | *e*P | **Pn** | **18 47 09.2** | **+0.6** |
| MTVR | | | | *e*S | **Sn** | **18 48 00.0** | **-0.4** |
| **MTVR** | **Mutnovka** | **4.57** | **23** | PN | **Pn** | **18 47 09.1** | **+0.6** |
| MTVR | | | | S | **Sn** | **18 48 00.0** | **-0.4** |
| **GRL** | **Gorelyy** | **4.61** | **22** | *e*P | **Pn** | **18 47 10.2** | **+1.3** |
| **GRL** | **Gorelyy** | **4.61** | **22** | PN | **Pn** | **18 47 10.2** | **+1.3** |
| **APC** | **Apacha** | **4.77** | **14** | *e*P | **Pn** | **18 47 13.4** | **+2.3** |
| **APC** | **Apacha** | **4.77** | **14** | PN | **Pn** | **18 47 13.4** | **+2.3** |
| **KRMR** | **Karymshinskiy** | **4.88** | **21** | *e*P | **Pn** | **18 47 14.3** | **+1.7** |
| **KRMR** | **Karymshinskiy** | **4.88** | **21** | PN | **Pn** | **18 47 14.2** | **+1.7** |
| **PET** | **Petropavlovsk** | **5.18** | **23** | *e*P | **Pn** | **18 47 17.0** | **+0.3** |
| PET | | | | *e*S | **Sn** | **18 48 14.4** | **-0.8** |
| **PET** | **Petropavlovsk** | **5.18** | **23** | *e*P | **Pn** | **18 47 17.9** | **+1.2** |
| PET | | | | *e*S | **Sn** | **18 48 16.4** | **+1.2** |
| **PET** | **Petropavlovsk** | **5.18** | **23** | *e*PN | **Pn** | **18 47 19.4** | **+2.7** |
| PET | | | | *e*S | **Sn** | **18 48 17.3** | **+2.1** |
| PET | | | | pmax | pmax | | |
| | comp=Z,21nm,0.3s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,112nm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,84nm,0.5s | | | | | | |
| **DALK** | **Dalny** | **5.22** | **24** | *e*P | **Pn** | **18 47 17.9** | **+0.7** |
| **DALK** | **Dalny** | **5.22** | **24** | PN | **Pn** | **18 47 17.7** | **+0.7** |
| **UGLR** | **Uglovaya** | **5.39** | **23** | *e*P | **Pn** | **18 47 20.7** | **+0.9** |
| **UGLR** | **Uglovaya** | **5.39** | **23** | PN | **Pn** | **18 47 20.7** | **+0.9** |
| **KOK** | **Koryaka** | **5.42** | **22** | *e*P | **Pn** | **18 47 22.0** | **+1.9** |
| **KOK** | **Koryaka** | **5.42** | **22** | PN | **Pn** | **18 47 22.0** | **+1.9** |
| **AVH** | **Avacha** | **5.42** | **23** | *e*P | **Pn** | **18 47 21.7** | **+1.6** |
| **AVH** | **Avacha** | **5.42** | **23** | *e*P | **Pn** | **18 47 21.7** | **+1.6** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AVH | Avacha | 5.42 | 23 | PN | | Pn | | 18 47 21.7 | +1.6 |
| SMAR | Somma | 5.44 | 23 | eP | | Pn | | 18 47 21.9 | +1.5 |
| SMAR | Somma | 5.44 | 23 | PN | | Pn | | 18 47 21.9 | +1.5 |
| KRER | Koryakskii | 5.46 | 22 | eP | | Pn | | 18 47 21.9 | +1.1 |
| KRER | Koryakskii | 5.46 | 22 | PN | | Pn | | 18 47 21.8 | +1.1 |
| KRX | Arik | 5.49 | 22 | eP | | Pn | | 18 47 22.7 | +1.6 |
| KRX | Arik | 5.49 | 22 | PN | | Pn | | 18 47 22.7 | +1.6 |
| GNL | Ganaly | 5.65 | 16 | eP | | Pn | | 18 47 25.6 | +2.4 |
| GNL | Ganaly | 5.65 | 16 | PN | | Pn | | 18 47 25.6 | +2.4 |
| SPN | Mys Shipunski | 5.66 | 30 | eP | | Pn | | 18 47 23.4 | +0.1 |
| SPN | | | | eS | | Sn | | 18 48 25.2 | -1.8 |
| SPN | Mys Shipunski | 5.66 | 30 | PN | | Pn | | 18 47 23.4 | +0.1 |
| SPN | | | | S | | Sn | | 18 48 25.2 | -1.8 |
| KUR | Kuril'sk | 5.95 | 242 | eP | | Pn | | 18 47 27.9 | +0.7 |
| KUR | | | | AMB | AMB | | | 18 47 29.0 | |
| | comp=E,80nm,0.7s | | | | | | | | |
| KUR | | | | eS | | Sn | | 18 48 34.2 | +0.2 |
| KUR | | | | A | A | | | 18 48 54.2 | |
| | comp=E,60nm,0.6s | | | | | | | | |
| KUR | | | | A | A | | | 18 48 54.2 | |
| | comp=E,80nm,0.6s | | | | | | | | |
| KUR | Kuril'sk | 5.95 | 242 | i PN | | Pn | | 18 47 31.4 | +4.2 |
| SHO | Shikotan | 7.36 | 236 | eP | | Pn | | 18 47 45.5 | -1.1 |
| SHO | | | | AMB | AMB | | | 18 47 48.9 | |
| | comp=E,20nm,0.4s | | | | | | | | |
| SHO | | | | eS | | Sn | | 18 49 05.3 | -3.5 |
| SHO | | | | A | A | | | 18 50 12.8 | |
| | comp=E,30nm,0.4s | | | | | | | | |
| SHO | | | | A | A | | | 18 50 12.8 | |
| | comp=E,10.0nm,0.4s | | | | | | | | |
| SHO | Shikotan | 7.36 | 236 | PN | | Pn | | 18 47 44.9 | -1.7 |
| TUMR | Tumrok | 7.61 | 22 | eP | | Pn | | 18 47 50.8 | +0.7 |
| TUMR | Tumrok | 7.61 | 22 | PN | | Pn | | 18 47 50.8 | +0.7 |
| YUK | Yuzh-Kuril'sk | 7.81 | 240 | eP | | Pn | | 18 47 53.4 | +0.6 |
| YUK | | | | AMB | AMB | | | 18 47 55.9 | |
| | comp=E,40nm,0.5s | | | | | | | | |
| YUK | | | | eS | | Sn | | 18 49 18.3 | -1.5 |
| YUK | | | | A | A | | | 18 49 34.5 | |
| | comp=E,80nm,0.6s | | | | | | | | |
| YUK | | | | A | A | | | 18 49 34.5 | |
| | comp=E,120nm,0.6s | | | | | | | | |
| YUK | Yuzh-Kuril'sk | 7.81 | 240 | ePN | | Pn | | 18 47 57.8 | +5.0 |
| YSS | Yuzh-Sakhalins | 8.57 | 266 | eP | | Pn | | 18 48 06.4 | +3.2 |
| YSS | | | | AMB | AMB | | | 18 48 09.3 | |
| | comp=E,10.0nm,0.4s | | | | | | | | |
| YSS | Yuzh-Sakhalins | 8.57 | 266 | ePN | | Pn | | 18 48 09.5 | +6.3 |
| YSS | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,1.0s | | | | | | | | |
| ASAJ | Asahikawa | 9.74 | 249 | Pn | | Pn | | 18 48 20.7 | +1.5 |
| | comp=Z,0.7nm,0.3s,baz=63,slow=11,SNR=6.7 | | | | | | | | |
| SHEM | Shemya Is, Ala | 12.76 | 63 | Pn | | Pn | | 18 48 59.5 | -1.0 |
| | comp=Z,3.1nm,0.3s,baz=288,slow=5.8,SNR=5.6 | | | | | | | | |
| SHEM | | | | Sn | | Sn | | 18 51 12.5 | -8.6 |
| | comp=Z,1.4nm,0.3s,baz=276,slow=24,SNR=1.6 | | | | | | | | |
| | comp=Z,24nm,0.6s | | | | | | | | |
| SEY | Seymchan | 14.74 | 355 | eP | | Pn | | 18 49 26.5 | -0.9 |
| SEY | Seymchan | 14.74 | 355 | eP | | Pn | | 18 49 26.5 | -0.9 |
| KLR | Kul'dur | 15.53 | 282 | eP | | P | | 18 49 43.2 | +1.4 |
| MAJO | Matsushiro | 17.19 | 233 | eP | | P | | 18 50 04.1 | +3.8 |
| MAJO | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| YAK | Yakutsk | 19.87 | 323 | P | | Pn | | 18 50 30.1 | -1.2 |
| | comp=Z,7.3nm,0.5s,baz=123,slow=3.6,SNR=5.5 | | | | | | | | |
| YAK | Yakutsk | 19.87 | 323 | eP | | Pn | | 18 50 30.6 | -0.7 |
| YAK | Yakutsk | 19.87 | 323 | i P | | Pn | | 18 50 30.6 | -0.7 |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| BILL | Bilibino | 20.55 | 12 | eP | | P | | 18 50 34.3 | -2.6 |
| BILL | | | | e | | | | 18 50 53.1 | |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| KSRS | Korea Array | 22.67 | 252 | P | | P | | 18 50 58.9 | -1.0 |
| | comp=Z,1.7nm,0.8s,baz=53,slow=9.9,SNR=7.3 | | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | | |
| HIA | Hailar | 23.30 | 286 | i P | | P | | 18 51 09.8 | +3.5 |
| HIA | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| TIXI | Tiksi | 26.41 | 342 | eP | | P | | 18 51 34.1 | -0.4 |
| TIXI | Tiksi | 26.41 | 342 | i P | | P | | 18 51 34.1 | -0.4 |
| TIXI | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| MKAR | Makanchi Array | 47.53 | 297 | P | | P | | 18 54 31.1 | -2.2 |
| | comp=Z,0.5nm,0.6s,baz=60,slow=6.6,SNR=5.7 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| KURK | Kurchatov | 47.73 | 303 | eP | | P | | 18 54 33.0 | -1.7 |
| KURK | Kurchatov | 47.73 | 303 | P | | P | | 18 54 33.0 | -1.7 |
| KURBB | Kurchatov Arra | 47.82 | 303 | P | | P | | 18 54 33.0 | -2.5 |
| | comp=Z,0.7nm,0.8s,baz=68,slow=8.2,SNR=4.2 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| CMAR | Chiang Mai Arr | 54.16 | 257 | P | | P | | 18 55 21.3 | -2.1 |
| | comp=Z,0.2nm,0.3s,baz=48,slow=8.5,SNR=1.3 | | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | | |
| KSH | Kashi | 55.41 | 293 | P | | P | | 18 55 34.6 | +2.1 |
| ARCES | ARCESS Array B | 56.85 | 341 | P | | P | | 18 55 42.9 | +0.7 |
| | comp=Z,0.9nm,0.8s,baz=38,slow=9.2,SNR=1.2 | | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | |
| NVAR | Mina Array Bea | 60.42 | 64 | P | | P | | 18 56 08.9 | +1.1 |
| | comp=Z,0.4nm,0.6s,baz=312,slow=6.7,SNR=2.4 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| FINES | FINESS Array B | 63.24 | 335 | P | | P | | 18 56 24.7 | -1.3 |
| | comp=Z,1.5nm,0.7s,baz=28,slow=8.6,SNR=6.3 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| FINES | FINESS Array B | 63.24 | 335 | eP | | P | | 18 56 23.7 | -2.3 |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| OBN | Obninsk | 64.84 | 326 | eP | | P | | 18 56 38.6 | +2.0 |
| OBN | Obninsk | 64.84 | 326 | eP | | P | | 18 56 38.6 | +2.0 |
| OBN | | | | e | | | | 18 57 09.6 | |
| OBN | | | | e | | | | 18 59 03.4 | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| WRA | Warramunga Arr | 70.48 | 201 | P | | P | | 18 57 12.2 | -0.3 |
| | comp=Z,1.2nm,0.8s,baz=15,slow=6.3,SNR=6.1 | | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | | |
| ASAR | Alice Springs | 74.17 | 200 | P | | P | | 18 57 35.0 | +0.5 |
| | comp=Z,0.6nm,0.8s,baz=14,slow=5.2,SNR=16 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| ASAR | Alice Springs | 74.17 | 200 | P | | P | | 18 57 35.0 | +0.5 |
| EKA | Eskdalemuir Ar | 75.15 | 347 | P | | P | | 18 57 39.5 | -0.3 |
| | comp=Z,1.1nm,0.6s,baz=30,slow=5.6,SNR=7.6 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| ESK | Eskdalemuir | 75.17 | 347 | i P | | P | | 18 57 39.5 | -0.5 |
| TXAR | Lajitas Array | 75.46 | 62 | P | | P | | 18 57 43.5 | +1.3 |
| | comp=Z,1.3nm,0.6s,baz=301,slow=4.7,SNR=17 | | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | | |
| GERES | GERESS Array B | 77.67 | 335 | P | | P | | 18 57 53.7 | -0.7 |
| | comp=Z,0.6nm,0.6s,baz=37,slow=5.8,SNR=3.2 | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | |
| MMAI | Mount Meron Ar | 82.85 | 313 | P | | P | | 18 58 22.0 | -0.5 |
| | comp=Z,1.8nm,0.6s,baz=35,slow=7.1,SNR=4.1 | | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| H03N2 | Juan Fernandez | 137.29 | 90 | T | | T | | 21 38 25.6 | |
| | baz=310,slow=77,SNR=44 | | | | | | | | |
| H03N1 | Juan Fernandez | 137.31 | 90 | T | | T | | 21 38 27.0 | |
| | baz=310,slow=77,SNR=56 | | | | | | | | |
| H03N3 | Juan Fernandez | 137.31 | 90 | T | | T | | 21 38 25.0 | |
| | baz=310,slow=77,SNR=55 | | | | | | | | |
| PLCA | Paso Flores | 146.88 | 94 | PKPbc | | PKPdf | | 19 05 39.9 | +2.0 |
| | comp=Z,2.2nm,1.0s,baz=268,slow=6.3,SNR=3.4 | | | | | | | | |

*AEIC **10** 19:00:36.4±1.9,55.88N±0.07×149.9W±0.1,h12km±7km, Error ellipse: s-maj=11.4km s-min=7.9km az=152.0*

**NEIC 10 19:00:30.4±2.1,55.81N±0.07×149.9W±0.1,h10km±2km, ML3.5/50,ML3.4(AEIC),Error ellipse: s-maj=12.3km s-min=9.4km az=166.0,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OHAK | Old Harbor | 2.35 | 308 | | Pn | 19 01 08.9 | -0.1 |
| OHAK | | | | Sn | Sn | 19 01 34.0 | -3.9 |
| KDAK | Kodiak Island | 2.47 | 324 | | Pn | 19 01 10.8 | +0.2 |
| KDAK | | | | Sn | Sn | 19 01 36.8 | -3.9 |
| SII | Sitkinak Islan | 2.51 | 289 | | Pn | 19 01 11.1 | -0.1 |
| SII | | | | Sn | Sn | 19 01 38.8 | -3.1 |
| SII | | | | IAML | | 19 01 46.6 | |
| | comp=N,279nm,0.6s | | | | | | |
| SII | | | | IAML | | 19 01 56.3 | |
| | comp=E,218nm,0.7s | | | | | | |
| SYI | Shuyak Island | 3.12 | 335 | | Pn | 19 01 19.3 | -0.2 |
| SYI | | | | Sn | Sn | 19 01 53.8 | -3.0 |
| CHIR | Chirikof Islan | 3.23 | 273 | Pn | Pn | 19 01 21.9 | +0.9 |
| CHIR | | | | Sn | Sn | 19 01 56.9 | -2.7 |
| CHIR | | | | IAML | | 19 01 58.3 | |
| | comp=N,111nm,0.5s | | | | | | |
| CHIR | | | | IAML | | 19 02 08.5 | |
| | comp=E,145nm,0.7s | | | | | | |
| KAHG | Katmai Hook Gl | 3.69 | 319 | | Pn | 19 01 28.9 | +1.4 |
| Q19K | Cape Douglas, | 3.73 | 329 | | Pn | 19 01 28.9 | +1.0 |
| CNPM | China Poot | 3.79 | 350 | Pn | Pn | 19 01 28.4 | -0.5 |
| CNPM | China Poot | 3.79 | 350 | | Sn | 19 02 10.2 | -3.3 |
| ACHA | Angle Creek He | 3.82 | 311 | | Pn | 19 01 29.4 | +0.2 |
| BRSE | Bradley Lake S | 3.97 | 354 | | Sn | 19 02 13.9 | -3.9 |
| KAHC | Katmai Hardscr | 3.98 | 318 | | Pn | 19 01 32.5 | +1.1 |
| KAHC | Katmai Hardscr | 3.98 | 318 | | Pn | 19 01 32.0 | +0.6 |
| PLK3 | Peulik 3 | 3.98 | 301 | | Pn | 19 01 32.6 | +1.2 |
| BRLK | Bradley Lake | 4.00 | 353 | | Pn | 19 01 30.6 | -1.1 |
| BRLK | | | | IAML | | 19 02 23.3 | |
| | comp=N,42nm,1.4s | | | | | | |
| BRLK | | | | IAML | | 19 02 27.1 | |
| | comp=E,47nm,0.7s | | | | | | |
| PLK4 | Peulik 4 | 4.00 | 300 | Pn | Pn | 19 01 32.1 | +0.4 |
| PLK4 | | | | IAML | | 19 02 24.2 | |
| | comp=N,62nm,0.7s | | | | | | |
| PLK4 | | | | IAML | | 19 02 26.0 | |
| | comp=E,89nm,0.9s | | | | | | |
| CNTC | Contact Creek | 4.09 | 309 | | Pn | 19 01 34.1 | +1.1 |
| Q23K | Middleton Isla | 4.10 | 26 | Pn | Pn | 19 01 32.0 | -0.9 |
| Q23K | | | | IAML | | 19 03 20.6 | |
| | comp=E,99nm,2.3s | | | | | | |
| Q23K | | | | IAML | | 19 03 52.5 | |
| | comp=N,68nm,2.6s | | | | | | |
| MID | Middleton Isla | 4.10 | 26 | Pn | Pn | 19 01 32.0 | -0.9 |
| MID | | | | IAML | | 19 03 20.6 | |
| | comp=E,98nm,3.0s | | | | | | |
| MID | | | | IAML | | 19 03 45.1 | |
| | comp=N,64nm,2.7s | | | | | | |
| PLK1 | Peulik 1 | 4.20 | 301 | | Pn | 19 01 35.4 | +1.1 |
| P19K | Oil Pt | 4.25 | 336 | Pn | Pn | 19 01 36.6 | +0.6 |
| P23K | Montague Islan | 4.40 | 17 | | Pn | 19 01 36.9 | -0.3 |
| O20K | Slope Mountain | 4.52 | 342 | | Pn | 19 01 39.5 | +0.6 |
| ILSW | Iliamna Southw | 4.53 | 339 | Pn | Pn | 19 01 37.5 | -1.4 |
| ILSW | | | | IAML | | 19 02 32.4 | |
| | comp=E,35nm,0.9s | | | | | | |
| ILSW | | | | IAML | | 19 02 36.5 | |
| | comp=N,37nm,0.8s | | | | | | |
| P18K | Big Mountain, | 4.59 | 324 | | Pn | 19 01 39.8 | -0.1 |
| CHGN | Chignik | 4.80 | 279 | Pn | Pn | 19 01 43.1 | +0.5 |
| CHGN | | | | IAML | | 19 03 58.7 | |
| | comp=E,51nm,0.1s | | | | | | |
| CHGN | | | | IAML | | 19 04 06.7 | |
| | comp=N,50nm,0.1s | | | | | | |
| P17K | Kvichak River | 4.89 | 317 | | Pn | 19 01 44.7 | +0.8 |
| RSO | Redoubt South | 4.90 | 343 | | Pn | 19 01 43.8 | -0.4 |
| HIN | Hinchinbrook I | 4.94 | 20 | | Pn | 19 01 44.5 | -0.1 |
| HIN | | | | IAML | | 19 02 45.8 | |
| | comp=N,52nm,1.0s | | | | | | |
| O18K | Koktuh Hills | 4.95 | 327 | Pn | Pn | 19 01 44.4 | -0.3 |
| O18K | | | | IAML | | 19 02 47.7 | |
| | comp=E,25nm,1.0s | | | | | | |
| O18K | | | | IAML | | 19 02 59.5 | |
| | comp=N,34nm,0.8s | | | | | | |
| KAIM | Kayak Island | 5.06 | 33 | Pn | Pn | 19 01 46.6 | +0.4 |
| PWL | Port Wells | 5.13 | 9 | | Pn | 19 01 46.8 | -0.3 |
| PWL | | | | IAML | | 19 02 48.0 | |
| | comp=E,31nm,1.3s | | | | | | |
| PWL | | | | IAML | | 19 02 51.6 | |
| | comp=N,33nm,0.6s | | | | | | |
| EYAK | Cordova Ski Ar | 5.23 | 23 | | Pn | 19 01 48.8 | +0.3 |
| GLI | Glacier Island | 5.29 | 15 | Pn | Pn | 19 01 49.3 | -0.1 |
| GLI | | | | IAML | | 19 02 49.1 | |
| | comp=E,34nm,1.3s | | | | | | |
| GLI | | | | IAML | | 19 02 53.2 | |
| | comp=N,23nm,0.7s | | | | | | |
| RC01 | Rabbit Creek A | 5.29 | 1 | Pn | Pn | 19 01 48.4 | -1.0 |
| RC01 | | | | IAML | | 19 02 49.7 | |
| | comp=N,30nm,0.4s | | | | | | |
| RC01 | | | | IAML | | 19 02 55.3 | |
| | comp=E,22nm,0.6s | | | | | | |
| FIS | Fire Island | 5.35 | 358 | Pn | Pn | 19 01 52.2 | +2.0 |
| RAGM | Ragged Mountai | 5.36 | 29 | | Pn | 19 01 50.4 | +0.1 |
| SUCK | Suckling Hills | 5.37 | 35 | | Pn | 19 01 50.9 | +0.4 |
| SUCK | | | | IAML | | 19 03 18.3 | |
| | comp=E,47nm,2.8s | | | | | | |
| HMT | Hamilton | 5.43 | 31 | | Pn | 19 01 51.7 | +0.4 |
| P16K | Nushagak River | 5.44 | 310 | | Pn | 19 01 52.2 | +0.9 |
| NICHA | Nichawak Mount | 5.44 | 33 | | Pn | 19 01 52.0 | +0.6 |
| SPU | Mount Spurr | 5.50 | 349 | Pn | Pn | 19 01 51.0 | -1.3 |
| GOAT | Goat Mountain | 5.51 | 28 | | Pn | 19 01 52.9 | +0.6 |
| O17K | Koliganek Bris | 5.53 | 319 | | Pn | 19 01 53.1 | +0.5 |
| N19K | Bonanza Creek | 5.57 | 336 | Pn | Pn | 19 01 52.9 | -0.3 |
| BGLC | Bering Glacier | 5.57 | 36 | | Pn | 19 01 54.2 | +1.0 |
| CNBA | Chernabura Isl | 5.62 | 264 | Pn | Pn | 19 01 53.6 | -0.3 |
| KNK | Knik Glacier | 5.67 | 7 | Pn | Pn | 19 01 52.5 | -2.0 |
| SUA | Susitna One | 5.69 | 356 | Pn | Pn | 19 01 53.2 | -1.7 |
| SNH | Sunshine Point | 5.77 | 38 | | Pn | 19 01 56.4 | +0.5 |
| STLK | Strandline Lak | 5.79 | 351 | | Pn | 19 01 56.2 | -0.1 |
| O16K | Kokwok River B | 5.80 | 314 | | Pn | 19 01 57.3 | +0.9 |
| N18K | Kilae Creek | 5.82 | 330 | | Pn | 19 01 55.4 | -1.2 |
| KHIT | Khitrov Hills | 5.83 | 34 | | Pn | 19 01 57.1 | +0.3 |
| BMRM | Bremner River | 5.87 | 26 | | Pn | 19 01 57.8 | +0.5 |
| WAX | Waxell Ridge | 5.96 | 36 | | Pn | 19 01 58.9 | +0.3 |
| GHO | Glory Hole Cre | 6.00 | 4 | | Pn | 19 01 59.2 | 0.0 |
| SDPT | Sand Point | 6.02 | 270 | Pn | Pn | 19 01 58.8 | -0.6 |
| KLU | Klutina | 6.06 | 18 | | Pn | 19 01 59.5 | -0.5 |
| SML | Sawmill | 6.07 | 7 | | Pn | 19 02 00.1 | 0.0 |
| MESA | MESA | 6.08 | 41 | | Pn | 19 02 01.1 | +0.7 |
| N17K | Nushagak Hills | 6.10 | 324 | Pn | Pn | 19 01 59.8 | -0.7 |
| CRQM | Cirque | 6.10 | 33 | | Pn | 19 02 01.0 | +0.3 |
| SCM | Sheep Creek Mo | 6.18 | 11 | | Pn | 19 02 02.0 | +0.3 |
| TGL | Tana Glacier | 6.20 | 34 | | Pn | 19 02 01.7 | -0.3 |
| ISLE | Juniper Island | 6.24 | 37 | | Pn | 19 02 01.7 | -0.9 |
| SKT | Skwentna | 6.25 | 353 | Pn | Pn | 19 02 01.4 | -1.0 |
| M20K | Styx River | 6.32 | 346 | Pn | Pn | 19 02 02.9 | -0.6 |
| O15K | Ungalikthiuk R | 6.33 | 306 | | Pn | 19 02 04.5 | +0.9 |
| RKAV | Rock Avalanche | 6.39 | 42 | | Pn | 19 02 05.6 | +1.0 |
| VRDI | Verde Repeater | 6.39 | 29 | | Pn | 19 02 04.6 | 0.0 |
| N25K | Chitina, Valde | 6.43 | 23 | | Pn | 19 02 05.7 | +0.6 |
| GLB | Gilahina Butte | 6.48 | 27 | Pn | Pn | 19 02 06.1 | +0.4 |
| KIAG | Kiagim River | 6.48 | 35 | | Pn | 19 02 06.2 | +0.4 |
| SAMH | Samovar Hills | 6.50 | 44 | | Pn | 19 02 07.8 | +1.8 |
| GRNC | Granite Creek | 6.54 | 38 | | Pn | 19 02 06.8 | +0.2 |
| M19K | Big River Lodg | 6.54 | 341 | | Pn | 19 02 06.6 | +0.1 |
| TABL | Table Mountain | 6.56 | 41 | | Pn | 19 02 07.6 | +0.7 |
| BALM | Baldy | 6.57 | 34 | | Pn | 19 02 07.5 | +0.5 |
| M24K | Tolsona, Glenn | 6.60 | 15 | | Pn | 19 02 07.8 | +0.4 |
| N16K | Nishlik Lake | 6.62 | 319 | | Pn | 19 02 08.6 | +1.0 |
| MCARA | McCarthy VSAT | 6.64 | 30 | | Pn | 19 02 08.3 | +0.4 |
| PNL | Peninsula | 6.82 | 51 | | Pn | 19 02 11.7 | +1.3 |
| M17K | Holitna River | 6.85 | 328 | | Pn | 19 02 10.9 | +0.2 |
| CTGM | Chitina Glacie | 6.85 | 38 | | Pn | 19 02 10.1 | -0.8 |
| BCPM | Bancas Point | 6.87 | 49 | | Pn | 19 02 11.8 | +0.9 |
| LOGN | Logan Glacier | 6.87 | 39 | | Pn | 19 02 11.0 | -0.1 |
| L19K | White Mountain | 6.88 | 340 | | Pn | 19 02 10.2 | -1.0 |
| N15K | Kwethluk River | 6.96 | 313 | | Pn | 19 02 13.7 | +1.5 |
| O14K | Tigyukauivet M | 7.02 | 304 | Pn | Pn | 19 02 13.3 | +0.2 |
| HARP | HAARP | 7.04 | 18 | | Pn | 19 02 14.7 | +1.3 |
| M16K | Timber Creek | 7.06 | 321 | | Pn | 19 02 14.3 | +0.7 |
| L18K | Granite Mounta | 7.32 | 334 | Pn | Pn | 19 02 16.3 | -0.9 |
| DHY | Denali Highway | 7.40 | 9 | | Pn | 19 02 20.1 | +1.7 |
| O29M | Mount Kennedy | 7.50 | 48 | | Pn | 19 02 20.4 | +0.6 |
| P29M | Windy Craggy | 7.55 | 55 | Pn | Pn | 19 02 21.3 | +0.9 |
| RND | Reindeer | 7.64 | 4 | Pn | Pn | 19 02 22.6 | +1.0 |
| L16K | Owhat River | 7.73 | 324 | | Pn | 19 02 22.1 | -0.7 |
| M27K | Edge Creek, AK | 7.75 | 29 | Pn | Pn | 19 02 23.4 | +0.1 |
| S31K | Pelican | 7.79 | 68 | Pn | Pn | 19 02 21.5 | -2.0 |
| MENT | Mentasta | 7.81 | 21 | Pn | Pn | 19 02 24.2 | +0.3 |
| K20K | Telida | 7.86 | 346 | Pn | Pn | 19 02 23.3 | -1.2 |
| SIT | Sitka | 8.17 | 75 | Pn | Pn | 19 02 26.1 | -2.7 |
| BPAW | Bear Paw Mtn. | 8.33 | 357 | Pn | Pn | 19 02 29.1 | -2.0 |
| L27K | Beaver Creek, | 8.35 | 26 | Pn | Pn | 19 02 29.1 | -2.2 |
| BCAR | Beaver Creek A | 8.36 | 26 | Pn | Pn | 19 02 28.9 | -2.6 |
| M13K | Dall Lake | 8.48 | 308 | Pn | Pn | 19 02 29.7 | -3.3 |
| S32K | Killisnoo | 8.61 | 73 | Pn | Pn | 19 02 33.0 | -1.8 |
| J20K | Nowinta River | 8.66 | 348 | Pn | Pn | 19 02 34.4 | -1.1 |
| J19K | Poorman | 8.69 | 343 | Pn | Pn | 19 02 33.0 | -3.0 |
| SCRK | Sand Creek | 8.71 | 17 | | Pn | 19 02 35.1 | -1.2 |
| WRH | Wood River Hil | 8.73 | 5 | Pn | Pn | 19 02 35.2 | -1.3 |
| N30M | Aishikik Lake | 8.75 | 44 | Pn | Pn | 19 02 37.6 | +0.8 |
| HDA | Harding Lake | 8.75 | 8 | Pn | Pn | 19 02 35.9 | -0.9 |
| O30N | Mendenhall | 8.80 | 50 | Pn | Pn | 19 02 37.5 | 0.0 |
| NEA2 | Nenana | 8.82 | 2 | Pn | Pn | 19 02 36.4 | -1.4 |
| K15K | Wolf Creek Mou | 8.83 | 322 | Pn | Pn | 19 02 38.8 | +0.9 |
| M29M | Somme Creek | 8.86 | 37 | | Pn | 19 02 38.1 | -0.4 |
| J17K | VABM Dome | 8.91 | 332 | Pn | Pn | 19 02 36.7 | -2.3 |
| CCB | Clear Creek Bu | 8.93 | 6 | Pn | Pn | 19 02 38.8 | -0.3 |
| J25K | Salcha River, | 9.11 | 12 | Pn | Pn | 19 02 39.9 | -1.8 |
| IL31 | | 9.11 | 8 | Pn | Pn | 19 02 40.8 | -0.8 |
| ILAR | Eielson Array | 9.11 | 8 | Pn | Pn | 19 02 39.4 | -2.4 |
| MDM | Murphy Dome | 9.21 | 4 | Pn | Pn | 19 02 42.7 | -0.5 |
| J16K | Anvik River | 9.24 | 328 | Pn | Pn | 19 02 42.1 | -1.5 |
| MLY | Manley | 9.26 | 358 | Pn | Pn | 19 02 42.9 | -0.9 |
| J26L | Joseph Creek | 9.27 | 17 | Pn | Pn | 19 02 42.5 | -1.4 |
| WHY | Whitehorse | 9.28 | 52 | Pn | Pn | 19 02 44.6 | +0.4 |
| N31M | Braeburn, Yuko | 9.29 | 46 | Pn | Pn | 19 02 44.5 | +0.3 |
| I23K | Minto, Yukon-K | 9.37 | 1 | Pn | Pn | 19 02 45.7 | +0.5 |
| U33K | Whale Pass | 9.41 | 81 | Pn | Pn | 19 02 45.8 | -0.1 |
| L29M | L29M | 9.44 | 34 | Pn | Pn | 19 02 46.8 | +0.5 |
| P32M | Atlin | 9.45 | 60 | Pn | Pn | 19 02 47.6 | +1.3 |
| DAWY | Dawson | 9.80 | 28 | Pn | Pn | 19 02 53.3 | +2.2 |
| EGAK | Eagle | 9.97 | 22 | | Pn | 19 02 53.7 | +0.2 |
| H21K | Melozitna Rive | 9.98 | 353 | Pn | Pn | 19 02 53.5 | -0.1 |
| P33M | Tesiin, Yukon | 10.06 | 57 | | Pn | 19 02 54.9 | 0.0 |
| I26K | Coal Creek Min | 10.08 | 16 | Pn | Pn | 19 02 56.1 | +1.1 |
| H24K | Noodor Dome | 10.11 | 5 | Pn | Pn | 19 02 54.3 | -1.1 |
| K29M | Barlow Dome | 10.16 | 33 | Pn | Pn | 19 02 56.2 | 0.0 |
| IMAR | Indian Mountai | 10.38 | 351 | Pn | Pn | 19 02 59.9 | +0.9 |
| R33M | Jennings River | 10.76 | 63 | Pn | Pn | 19 03 04.8 | +0.4 |
| I28M | Miner Creek | 10.81 | 23 | Pn | Pn | 19 03 05.9 | +0.8 |
| G23K | Bananza Creek | 10.94 | 360 | Pn | Pn | 19 03 07.2 | +0.5 |
| J30M | Hart River | 11.05 | 32 | Pn | Pn | 19 03 09.3 | +0.9 |
| I30M | Mount Dempster | 11.52 | 30 | Pn | Pn | 19 03 14.8 | 0.0 |
| F20K | Avaraart Lake | 11.61 | 349 | Pn | Pn | 19 03 15.7 | -0.1 |
| F24K | Squaw Lake | 11.79 | 4 | Pn | Pn | 19 03 16.9 | -1.5 |
| H29M | Whitestone | 11.81 | 23 | Pn | Pn | 19 03 18.2 | -0.5 |
| BMAR | Burnt Mountain | 11.92 | 10 | Pn | Pn | 19 03 19.3 | -0.9 |
| E21K | Killik River | 12.81 | 353 | Pn | Pn | 19 03 31.4 | -0.9 |

*SKHL **10** 19:07:43.9±0.6,48.40N×155.30E,h47km±1km,mb4.0/3*

**KRSC 10 19:07:43.8±0.9,48.58N×156.03E,h16km±12km,MI3.7, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 2.11 | 1 | eP | Pn | 19 08 19.4 | +1.0 |
| SKR | | | | eS | Sb | 19 08 46.0 | -1.6 |
| SKR | Severo-Kuril's | 2.11 | 1 | eP | Pb | 19 08 20.2 | -1.4 |
| SKR | | | | AMB | AMB | 19 08 25.4 | |
| | 30nm,0.4s | | | | | | |
| SKR | | | | eS | Sb | 19 08 47.0 | -0.6 |
| SKR | | | | A | A | 19 08 56.2 | |
| | 60nm,0.3s | | | | | | |
| SKR | | | | A | A | 19 08 56.2 | |
| | 70nm,0.3s | | | | | | |
| KDTR | Khodutka, Kamc | 3.49 | 21 | eP | Pn | 19 08 40.3 | +2.9 |
| KDTR | | | | eS | Sn | 19 09 22.5 | +4.1 |
| KDTR | Khodutka, Kamc | 3.49 | 21 | eP | Pn | 19 08 41.1 | +3.7 |
| KDTR | | | | AMB | AMB | 19 08 48.8 | |
| | 10.0nm,0.3s | | | | | | |
| KDTR | | | | eS | Sb | 19 09 24.5 | -2.9 |
| KDTR | | | | A | A | 19 09 31.3 | |
| | 30nm,0.5s | | | | | | |
| KDTR | | | | A | A | 19 09 31.3 | |
| | 20nm,0.5s | | | | | | |
| ASAK | Asacha | 3.99 | 17 | eP | Pn | 19 08 48.2 | +3.8 |
| MTVR | Mutnovka | 4.15 | 19 | eP | Pn | 19 08 50.9 | +4.3 |
| GRL | Gorelyy | 4.19 | 17 | eP | Pn | 19 08 51.2 | +4.0 |
| PET | Petropavlovsk | 4.75 | 19 | eS | Sb | 19 09 56.6 | -7.0 |
| PET | | | | A | A | 19 10 07.9 | |
| | 10.0nm,0.5s | | | | | | |
| PET | | | | A | A | 19 10 07.9 | |
| | 10.0nm,0.5s | | | | | | |
| UGLR | Uglovaya | 4.96 | 20 | eP | Pn | 19 09 02.3 | +4.6 |
| AVH | Avacha | 5.00 | 19 | eP | Pn | 19 09 01.6 | +3.4 |
| KOK | Koryaka | 5.00 | 18 | eP | Pn | 19 09 03.1 | +4.9 |
| KRX | Arik | 5.07 | 18 | eP | Pn | 19 09 03.5 | +4.3 |
| GNL | Ganaly | 5.26 | 12 | eP | Pn | 19 09 06.1 | +4.3 |

*SKHL **10** 19:14:15.3±0.1,48.30N×155.20E,h45km±3km,mb4.2/3*

**KRSC 10 19:14:15.4±0.9,48.42N×156.02E,h20km±16km,MI3.8, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 2.27 | 2 | eP | Pb | 19 14 54.0 | -1.7 |
| SKR | Severo-Kuril's | 2.27 | 2 | eP | Pn | 19 14 52.6 | +0.8 |
| SKR | | | | AMB | AMB | 19 14 56.4 | |
| | 30nm,0.5s | | | | | | |
| SKR | | | | eS | Sn | 19 15 20.6 | +1.5 |
| SKR | | | | A | A | 19 15 26.4 | |
| | 80nm,0.5s | | | | | | |
| SKR | | | | A | A | 19 15 26.4 | |
| | 80nm,0.5s | | | | | | |
| KDTR | Khodutka, Kamc | 3.65 | 21 | eP | Pn | 19 15 14.1 | +3.5 |
| KDTR | | | | eS | Sb | 19 15 58.0 | -4.9 |
| KDTR | Khodutka, Kamc | 3.65 | 21 | eP | Pn | 19 15 14.6 | +4.0 |
| KDTR | | | | AMB | AMB | 19 15 15.3 | |
| | 50nm,0.5s | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KLU** | **Klutina** | **16.41** | **54** | Pn | Pn | 19 24 54.6 | +0.9 | |
| KLU | | | | IAmb | IAmb | 19 24 59.6 | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **16.44** | **51** | Pn | Pn | 19 24 54.6 | +0.5 | |
| M24K | | | | IAmb | IAmb | 19 25 05.4 | | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **HDA** | **Harding Lake** | **16.85** | **43** | | Pn | 19 25 00.0 | +0.8 | |
| HDA | | | | IAmb | IAmb | 19 25 01.5 | | |
| | comp=Z,4.5nm,0.5s | | | | | | | |
| **HMT** | **Hamilton** | **17.02** | **58** | Pn | Pn | 19 25 00.1 | -1.3 | |
| **ILAR** | **Eielson Array** | **17.02** | **42** | | P | 19 25 03.1 | 0.0 | |
| **N25K** | **Chitina, Valde** | **17.06** | **54** | | Pn | 19 25 02.3 | +0.5 | |
| **H24K** | **Noodor Dome** | **17.12** | **38** | | P | 19 25 04.3 | 0.0 | |
| **GLB** | **Gilahina Butte** | **17.40** | **54** | P | Pn | 19 25 05.8 | -0.3 | |
| GLB | | | | IAmb | IAmb | 19 25 43.4 | | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **17.53** | **23** | | P | 19 25 08.7 | +0.1 | |
| B21K | | | | IAmb | IAmb | 19 25 52.3 | | |
| | comp=Z,6.0nm,1.5s | | | | | | | |
| **J25K** | **Salcha River,** | **17.56** | **44** | Pn | Pn | 19 25 06.8 | -1.3 | |
| J25K | | | | IAmb | IAmb | 19 25 09.9 | | |
| | comp=Z,5.4nm,1.3s | | | | | | | |
| **SCRK** | **Sand Creek** | **17.92** | **46** | | Pn | 19 25 09.7 | -2.9 | |
| SCRK | | | | IAmb | IAmb | 19 25 11.5 | | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **J26L** | **Joseph Creek** | **18.26** | **45** | P | Pn | 19 25 14.3 | -2.4 | |
| **M27K** | **Edge Creek, AK** | **18.46** | **52** | P | P | 19 25 17.0 | -2.1 | |
| M27K | | | | IAmb | IAmb | 19 25 25.3 | | |
| | comp=Z,3.9nm,1.3s | | | | | | | |
| **I26K** | **Coal Creek Min** | **18.69** | **43** | P | P | 19 25 19.1 | -2.4 | |
| **I28M** | **Miner Creek** | **20.02** | **43** | P | P | 19 25 32.8 | -3.2 | |
| I28M | | | | IAmb | IAmb | 19 25 42.2 | | |
| | comp=Z,6.1nm,1.5s | | | | | | | |
| **K29M** | **Barlow Dome** | **20.67** | **49** | P | P | 19 25 38.5 | -4.7 | |
| K29M | | | | IAmb | IAmb | 19 26 11.0 | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **I30M** | **Mount Dempster** | **21.41** | **45** | P | P | 19 25 46.0 | -5.1 | |
| I30M | | | | IAmb | IAmb | 19 25 46.7 | | |
| | comp=Z,1.8nm,1.0s | | | | | | | |

*IDC **10** 19:33:54.7±1.3,3˚.25N×126˚.18E,h0km,mb3.8/5, mbtmp3.8/5,Error ellipse: s-maj=145.7km s-min=19.8km az=67.0*
*DJA **10** 19:33:57.8±0.4,4˚N±4˚×12˚7E±˚,h10km,M4.1/12,mb4.2/8, mB5.8/1,MLv4.0/12,Mw(mB)5.4/1*
*NEIC **10** 19:34:00.5±2.0,3˚.5N±0˚.1×126˚.9E±0˚.1,h42km±11km, mb4.2/11,Error ellipse: s-maj=18.0km s-min=11.0km az=221.0*

**ISC 10 19:34:00.2±0.6,3˚47N±0˚08×126˚9E±0˚1,h48km,n35, σ1949/37,mb4.1/10,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.72** | **170** | Pn | **Pn** | **19 34 40.9** | **-0.4** |
| **TNTI** | **Ternate** | **2.72** | **170** | P | **Pn** | **19 34 42.8** | **+1.4** |
| **KMSI** | **Cibinong** | **4.09** | **226** | P | **Pn** | **19 35 01.3** | **+1.0** |
| **GTOI** | **Gorontalo** | **4.79** | **234** | P | **Pn** | **19 35 11.3** | **+1.4** |
| **SANI** | **Sanana** | **5.55** | **189** | P | **Pn** | **19 35 21.1** | **+0.8** |
| | 19nm,0.7s,0.1nm | | | | | | |
| **MRSI** | **Marisa** | **5.78** | **239** | P | **Pn** | **19 35 25.2** | **+1.8** |
| | 26nm,0.9s,0.1nm | | | | | | |
| **LUWI** | **Luwuk** | **6.09** | **223** | | **Pn** | **19 35 28.3** | **+0.7** |
| **LUWI** | **Luwuk** | **6.09** | **223** | P | **Pn** | **19 35 29.1** | **+1.4** |
| | 38nm,1.0s,0.2nm | | | | | | |
| **SWI** | **Sorong** | **6.12** | **135** | P | **Pn** | **19 35 29.6** | **+1.4** |
| **TOLI2** | **Tolitoli** | **6.54** | **249** | Pn | **Pn** | **19 35 33.4** | **-0.5** |
| **NLAI** | **Namlea** | **6.66** | **178** | P | **Pn** | **19 35 35.5** | **-0.1** |
| | 8.3nm,0.5s,0.0nm | | | | | | |
| **MSAI** | **Masohi** | **7.06** | **163** | P | **Pn** | **19 35 42.7** | **+1.6** |
| | 14nm,0.5s,6μm | | | | | | |
| **FAKI** | **Fak Fak** | **8.30** | **140** | Pn | **Pn** | **19 35 59.9** | **+1.9** |
| **FAKI** | **Fak Fak** | **8.30** | **140** | P | **Pn** | **19 35 59.6** | **+1.6** |
| **MYLDM** | **Lahad Datu** | **8.55** | **282** | Pn | **Pn** | **19 35 59.9** | **-1.5** |
| **MTN** | **Manton Dam** | **16.74** | **166** | Pn | **Pn** | **19 37 49.3** | **-2.2** |
| **KNRA** | **Kununurra** | **19.11** | **175** | P | **P** | **19 38 15.5** | **-3.7** |
| KNRA | | | | IAmb | IAmb | 19 38 58.4 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **SSLB** | **Suanglung** | **21.00** | **345** | P | **P** | **19 38 37.4** | **-2.5** |
| SSLB | | | | IAmb | IAmb | 19 39 18.2 | |
| | comp=Z,30nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.46** | **183** | P | **P** | **19 38 44.8** | **+0.1** |
| **WRAB** | **Tennant Creek** | **24.38** | **163** | P | **P** | **19 39 13.8** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 19 39 19.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.38** | **163** | P | **P** | **19 39 14.4** | **+0.3** |
| | comp=Z,1.8nm,0.8s,baz=340,slow=9.0,SNR=21 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.39** | **163** | P | **P** | **19 39 13.9** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 19 39 22.0 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **27.82** | **166** | P | **P** | **19 39 45.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **27.82** | **166** | P | **P** | **19 39 47.6** | **+2.5** |
| **ASAR** | **Alice Springs** | **27.82** | **166** | P | **P** | **19 39 45.4** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=339,slow=8.4,SNR=1.8 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **KSAR** | **Wonju Array Be** | **33.83** | **1** | P | **P** | **19 40 37.4** | **-0.5** |
| **KS19** | **Wonju Array Si** | **33.89** | **1** | P | **P** | **19 40 38.7** | **+0.3** |
| **EIDS** | **Eidsvold** | **37.04** | **142** | P | **P** | **19 41 03.6** | **-2.1** |
| **STKA** | **Stephens Creek** | **37.82** | **159** | P | **P** | **19 41 13.7** | **+1.4** |
| | comp=Z,1.7nm,0.7s,baz=315,slow=10.0,SNR=1.7 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **47.60** | **341** | P | **P** | **19 42 32.4** | **+1.0** |
| | comp=Z,0.3nm,0.3s,baz=152,slow=8.2,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.87** | **325** | P | **P** | **19 43 47.2** | **0.0** |
| MKAR | | | | PcP | **PcP** | **19 44 41.2** | **+2.0** |
| **MKAR** | **Makanchi Array** | **57.87** | **325** | P | **P** | **19 43 47.2** | **0.0** |
| | comp=Z,0.9nm,0.4s,baz=127,slow=7.3,SNR=22 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **58.05** | **325** | P | **P** | **19 43 48.5** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 19 44 06.5 | |
| | comp=Z,2.3nm,1.3s | | | | | | |
| MAKZ | | | | PcP | **PcP** | **19 44 42.4** | **+2.5** |
| **KURK** | **Kurchatov** | **62.05** | **328** | P | **P** | **19 44 16.9** | **+1.1** |
| KURK | | | | IAmb | IAmb | 19 44 18.2 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.46** | **321** | P | **P** | **19 45 21.3** | **-0.4** |

**KRSC 10 19:35:44.9±1.6,48˚30N×155˚81E,h20km±29km,MI3.8, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.40** | **5** | *eP* | Pn | 19 36 24.9 | +1.9 |
| SKR | | | | *eS* | Sb | 19 36 54.2 | -2.3 |
| **KDTR** | **Khodutka, Kamc** | **3.81** | **22** | *eS* | Sn | 19 37 30.3 | +3.7 |
| **ASAK** | **Asacha** | **4.30** | **17** | *eP* | Pn | 19 36 53.6 | +4.3 |
| **MTVR** | **Mutnovka** | **4.46** | **19** | *eP* | Pn | 19 36 55.9 | +4.4 |
| MTVR | | | | *eS* | Sn | 19 37 48.5 | +5.7 |
| **GRL** | **Gorelyy** | **4.50** | **18** | *eP* | Pn | 19 36 56.7 | +4.7 |
| **KRMR** | **Karymshinskiy** | **4.77** | **17** | *eP* | Pn | 19 36 59.5 | +3.9 |
| **UGLR** | **Uglovaya** | **5.28** | **20** | *eP* | Pn | 19 37 08.0 | +5.3 |
| **KOK** | **Koryaka** | **5.31** | **19** | *eP* | Pn | 19 37 07.3 | +4.1 |
| **SMAR** | **Somma** | **5.32** | **20** | *eP* | Pn | 19 37 09.3 | +5.8 |
| **KRX** | **Arik** | **5.38** | **18** | *eP* | Pn | 19 37 09.2 | +5.1 |
| **SPN** | **Mys Shipunski** | **5.50** | **28** | *eP* | Pn | 19 37 09.6 | +3.9 |
| SPN | | | | *eS* | Sn | 19 38 13.4 | +5.1 |
| **GNL** | **Ganaly** | **5.57** | **13** | *eP* | Pn | 19 37 10.3 | +3.5 |

**KRSC 10 19:40:22.7±1.6,53˚71N×168˚02E,h40km±25km,MI4.0, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BKI** | **Bering** | **1.92** | **322** | *eP* | Pn | 19 40 54.1 | +1.3 |
| BKI | | | | *eS* | Sn | 19 41 18.9 | +3.3 |
| **SPN** | **Mys Shipunski** | **4.82** | **266** | *eP* | Pn | 19 41 37.1 | +4.5 |
| **TUMR** | **Tumrok** | **4.85** | **292** | *eP* | Pn | 19 41 38.2 | +5.1 |
| **SRDR** | **Sredinnyy** | **5.44** | **302** | *eP* | Pn | 19 41 46.0 | +4.7 |
| **UGLR** | **Uglovaya** | **5.51** | **269** | *eP* | Pn | 19 41 47.4 | +5.1 |
| **SMAR** | **Somma** | **5.52** | **269** | *eP* | Pn | 19 41 46.9 | +4.4 |
| **AVH** | **Avacha** | **5.56** | **269** | *eP* | Pn | 19 41 47.8 | +5.0 |
| **KRX** | **Arik** | **5.60** | **270** | *eP* | Pn | 19 41 47.9 | +4.4 |
| **KOK** | **Koryaka** | **5.62** | **270** | *eP* | Pn | 19 41 47.6 | +4.0 |
| **GNL** | **Ganaly** | **5.99** | **274** | *eP* | Pn | 19 41 53.0 | +4.2 |
| **KRMR** | **Karymshinskiy** | **6.00** | **266** | *eS* | Sn | 19 43 00.6 | +4.5 |
| **MTVR** | **Mutnovka** | **6.05** | **262** | *eP* | Pn | 19 41 55.4 | +5.7 |
| **GRL** | **Gorelyy** | **6.10** | **263** | *eP* | Pn | 19 41 55.5 | +5.2 |
| **ASAK** | **Asacha** | **6.24** | **262** | *eP* | Pn | 19 41 56.3 | +4.1 |
| **KDTR** | **Khodutka, Kamc** | **6.33** | **257** | *eS* | Sn | 19 43 08.4 | +4.2 |

*TAP **10** 19:48:00.5,23˚.84N×122˚.93E,h16km,ML3.5,D*
*JMA **10** 19:48:00.5±0.2,23˚.8N±0˚.6×122˚.9E±0˚.4,h22km±2km, MV3.7/15,NEAR ISHIGAKIJIMA ISLAND*

**ISC 10 19:47:57.1±1.1,23˚69N±0˚02×122˚98E±0˚02,h14km±9km, n119,σ0976/178,1D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS4** | **EOS4** | **0.74** | **305** | P | **Pn** | **19 48 13.1** | **+0.2** |
| | baz=296 | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.76** | **357** | P | **Pn** | **19 48 12.7** | **-0.7** |
| JYNG | | | | *eS* | **Sg** | **19 48 21.1** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **0.77** | **2** | *i* P | **Pn** | **19 48 13.1** | **-0.4** |
| | baz=14 | | | | | | |
| YOJ | | | | *i* S | **Sg** | **19 48 21.3** | **-0.9** |
| | baz=14 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.77** | **2** | P | **Pn** | **19 48 13.1** | **-0.4** |
| YOJ | | | | S | **Sb** | **19 48 22.1** | **-0.5** |
| **HATJ** | **Hateruma jima** | **0.84** | **64** | P | **Pn** | **19 48 15.9** | **+1.5** |
| HATJ | | | | S | **Sn** | **19 48 27.4** | **+0.9** |
| **EOS3** | **EOS3** | **0.85** | **314** | *i* P | **Pn** | **19 48 14.9** | **+0.4** |
| | baz=314 | | | | | | |
| EOS3 | | | | *i* S | **Sg** | **19 48 25.2** | **+0.5** |
| | baz=314 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.94** | **47** | P | **Pn** | **19 48 17.1** | **+1.3** |
| IRIF | | | | S | **Sn** | **19 48 28.7** | **-0.3** |
| **EOS2** | **EOS2** | **1.00** | **317** | *i* P | **Pg** | **19 48 17.9** | **+1.5** |
| | baz=308 | | | | | | |
| EOS2 | | | | S | **Sn** | **19 48 30.2** | **-0.2** |
| | baz=308 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.09** | **60** | P | **Pg** | **19 48 20.2** | **+2.1** |
| JKRS | | | | S | **Sn** | **19 48 34.5** | **+1.8** |
| **JIJ** | **Ishigaki jima** | **1.26** | **57** | P | **Pg** | **19 48 22.5** | **+1.2** |
| JIJ | | | | S | **Sg** | **19 48 38.3** | **+0.7** |
| **TEYL** | **Yanliau Villag** | **1.28** | **278** | *eP* | **Pg** | **19 48 23.6** | **+1.8** |
| | baz=273 | | | | | | |
| TEYL | | | | S | **Sg** | **19 48 38.8** | **+0.4** |
| | baz=273 | | | | | | |
| **HWA** | **Hwalien** | **1.29** | **283** | P | **Pg** | **19 48 22.5** | **+0.5** |
| | baz=259 | | | | | | |
| HWA | | | | S | **Sg** | **19 48 38.6** | **-0.2** |
| | baz=259 | | | | | | |
| **EAHA** | **Aohua** | **1.30** | **300** | *eP* | **Pg** | **19 48 23.0** | **+0.9** |
| | baz=293 | | | | | | |
| EAHA | | | | *eS* | **Sg** | **19 48 40.9** | **+1.8** |
| | baz=293 | | | | | | |
| **SHUL** | **Shoufeng** | **1.30** | **275** | *eP* | **Pg** | **19 48 22.6** | **+0.4** |
| | baz=267 | | | | | | |
| SHUL | | | | *eS* | **Sb** | **19 48 38.3** | **+0.4** |
| | baz=267 | | | | | | |
| **TWD** | **Chiawan** | **1.33** | **287** | *eP* | **Pg** | **19 48 23.0** | **+0.3** |
| | baz=281 | | | | | | |
| TWD | | | | S | **Sn** | **19 48 38.6** | **0.0** |
| | baz=281 | | | | | | |
| **ETL** | **Fush Village** | **1.33** | **291** | P | **Pg** | **19 48 23.3** | **+0.6** |
| | baz=284 | | | | | | |
| **EWUT** | **Wuta** | **1.33** | **305** | P | **Pg** | **19 48 22.4** | **-0.4** |
| | baz=299 | | | | | | |
| EWUT | | | | S | **Sg** | **19 48 39.6** | **-0.5** |
| | baz=299 | | | | | | |
| **ENA** | **Nanau** | **1.35** | **303** | *i* P | **Pg** | **19 48 23.5** | **+0.4** |
| | baz=298 | | | | | | |
| ENA | | | | *i* S | **Sb** | **19 48 39.9** | **+0.6** |
| | baz=298 | | | | | | |
| **NACB** | **Ninganchiao** | **1.36** | **291** | P | **Pg** | **19 48 23.5** | **+0.3** |
| **NACB** | **Ninganchiao** | **1.36** | **291** | *eP* | **Pg** | **19 48 23.1** | **-0.1** |
| | baz=284 | | | | | | |
| **ESAO** | **Su ao** | **1.36** | **311** | P | **Pg** | **19 48 23.2** | **-0.1** |
| | baz=306 | | | | | | |
| ESAO | | | | S | **Sn** | **19 48 39.2** | **-0.4** |
| | baz=306 | | | | | | |
| **TWC** | **Suao** | **1.38** | **312** | *i* P | **Pg** | **19 48 23.2** | **-0.4** |
| | baz=308 | | | | | | |
| TWC | | | | *i* S | **Sn** | **19 48 39.4** | **-0.6** |
| | baz=308 | | | | | | |
| **ETM** | **Tongmen** | **1.39** | **282** | P | **Pg** | **19 48 23.8** | **-0.1** |
| | baz=264 | | | | | | |
| ETM | | | | S | **Sn** | **19 48 40.4** | **+0.1** |
| | baz=264 | | | | | | |
| **EGFH** | **Guangfu** | **1.43** | **269** | *eP* | **Pg** | **19 48 24.6** | **+0.1** |
| | baz=263 | | | | | | |
| **ESL** | **Shilin** | **1.43** | **275** | *eP* | **Pg** | **19 48 24.0** | **-0.5** |
| | baz=269 | | | | | | |
| ESL | | | | S | **Sn** | **19 48 40.6** | **-0.5** |
| | baz=269 | | | | | | |
| **HGSD** | **Ruisui** | **1.44** | **262** | P | **Pb** | **19 48 24.1** | **+0.4** |
| | baz=256 | | | | | | |
| HGSD | | | | S | **Sn** | **19 48 41.3** | **-0.2** |
| | baz=256 | | | | | | |
| **ECBN** | **Changbin** | **1.45** | **255** | P | **Pb** | **19 48 24.1** | **+0.2** |
| | baz=249 | | | | | | |
| ECBN | | | | S | **Sb** | **19 48 42.5** | **+0.2** |
| | baz=249 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.46** | **271** | *eP* | **Pb** | **19 48 24.0** | **-0.1** |
| | baz=250 | | | | | | |
| WARBT | | | | *eS* | **Sb** | **19 48 42.7** | **+0.2** |
| | baz=250 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.47** | **291** | P | **Pg** | **19 48 25.0** | **-0.3** |
| | baz=284 | | | | | | |
| ETLH | | | | S | **Sb** | **19 48 43.8** | **+1.1** |
| | baz=284 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.47** | **283** | *eP* | **Pg** | **19 48 24.8** | **-0.7** |
| | baz=262 | | | | | | |
| **NDS** | **Dongshan** | **1.49** | **309** | *eP* | **Pg** | **19 48 25.5** | **-0.3** |
| | baz=305 | | | | | | |
| **EGS** | | **1.50** | **320** | P | **Pg** | **19 48 26.1** | **+0.2** |
| | baz=318 | | | | | | |
| EGS | | | | *i* S | **Sb** | **19 48 44.1** | **+0.6** |
| | baz=318 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.51** | **53** | P | **Pg** | **19 48 25.9** | **-0.2** |
| JISG | | | | S | **Sg** | **19 48 44.4** | **-1.3** |
| **EHYH** | **Wanrong** | **1.51** | **263** | *eP* | **Pg** | **19 48 25.6** | **-0.6** |
| | baz=257 | | | | | | |
| EHYH | | | | *eS* | **Sg** | **19 48 45.5** | **-0.5** |
| | baz=257 | | | | | | |
| **EHY** | **Hungye** | **1.53** | **263** | *eP* | **Pb** | **19 48 25.8** | **+0.5** |
| | baz=257 | | | | | | |
| EHY | | | | S | **Sb** | **19 48 45.0** | **+0.4** |
| | baz=257 | | | | | | |
| **CHKH** | **Chenggong** | **1.54** | **252** | *eP* | **Pg** | **19 48 27.2** | **+0.5** |
| | baz=245 | | | | | | |
| CHKH | | | | *eS* | **Sb** | **19 48 44.9** | **+0.2** |
| | baz=245 | | | | | | |
| **EYUL** | **Yuli** | **1.56** | **258** | *i* P | **Pb** | **19 48 26.3** | **+0.5** |
| | baz=252 | | | | | | |
| EYUL | | | | *eS* | **Sb** | **19 48 46.0** | **+0.5** |
| | baz=252 | | | | | | |
| **LATG** | **Datong** | **1.57** | **303** | *i* P | **Pg** | **19 48 27.0** | **-0.4** |
| | baz=297 | | | | | | |
| LATG | | | | *i* S | **Sb** | **19 48 46.8** | **+0.9** |
| | baz=297 | | | | | | |
| **YULB** | **Yu-li** | **1.57** | **260** | P | **Pg** | **19 48 26.7** | **-0.7** |
| **YULB** | **Yu-li** | **1.57** | **260** | *i* P | **Pb** | **19 48 26.5** | **+0.5** |
| | baz=253 | | | | | | |
| YULB | | | | *eS* | **Sb** | **19 48 46.4** | **+0.6** |
| | baz=253 | | | | | | |
| **TWE** | **Neicheng** | **1.58** | **311** | *i* P | **Pg** | **19 48 27.3** | **-0.2** |
| | baz=307 | | | | | | |
| TWE | | | | S | **Sb** | **19 48 46.3** | **+0.4** |
| | baz=307 | | | | | | |
| **TWF1** | **Yuli** | **1.58** | **258** | P | **Pb** | **19 48 26.4** | **+0.3** |
| | baz=252 | | | | | | |
| TWF1 | | | | *eS* | **Sb** | **19 48 45.8** | **-0.2** |
| | baz=252 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.59** | **326** | P | **Pg** | **19 48 27.0** | **-0.8** |
| | baz=340 | | | | | | |
| TWB1 | | | | S | **Sn** | **19 48 44.8** | **-0.5** |
| | baz=340 | | | | | | |
| **CHKT** | **Chengkung** | **1.60** | **249** | *eP* | **Pb** | **19 48 26.3** | **-0.1** |
| | baz=242 | | | | | | |
| CHKT | | | | *i* S | **Sn** | **19 48 45.1** | **-0.2** |
| | baz=242 | | | | | | |
| **ENTT** | **Nioudou** | **1.60** | **306** | *eP* | **Pg** | **19 48 27.4** | **-0.4** |
| | baz=302 | | | | | | |
| ENTT | | | | S | **Sb** | **19 48 47.6** | **+1.0** |
| | baz=302 | | | | | | |
| **NDT** | **Datong Townshi** | **1.62** | **304** | *eP* | **Pg** | **19 48 28.5** | **+0.3** |
| | baz=310 | | | | | | |
| NDT | | | | *eS* | **Sb** | **19 48 47.8** | **+0.7** |
| | baz=310 | | | | | | |
| **FULB** | **Fuli** | **1.62** | **253** | *eP* | **Pb** | **19 48 26.9** | **0.0** |
| | baz=247 | | | | | | |
| FULB | | | | *eS* | **Sn** | **19 48 46.7** | **+0.7** |
| | baz=247 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.64** | **286** | *eP* | **Pg** | **19 48 28.3** | **-0.3** |
| | baz=281 | | | | | | |
| **NNSB** | **Datong** | **1.64** | **297** | *eP* | **Pb** | **19 48 26.7** | **-0.4** |
| | baz=291 | | | | | | |
| NNSB | | | | *eS* | **Sb** | **19 48 48.6** | **+0.9** |
| | baz=291 | | | | | | |
| **NNS** | **Nan Shan** | **1.65** | **297** | P | **Pb** | **19 48 27.8** | **+0.5** |
| | baz=291 | | | | | | |
| NNS | | | | *eS* | **Sb** | **19 48 47.8** | **-0.2** |
| | baz=291 | | | | | | |
| **TIPB** | **Shuangxi** | **1.66** | **321** | *eP* | **Pg** | **19 48 28.1** | **-0.8** |
| | baz=318 | | | | | | |
| TIPB | | | | *eS* | **Sb** | **19 48 48.0** | **-0.2** |
| | baz=318 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.66** | **310** | *eP* | **Pg** | **19 48 28.9** | **-0.1** |
| | baz=306 | | | | | | |
| FUSB | | | | S | **Sb** | **19 48 48.4** | **+0.1** |
| | baz=306 | | | | | | |
| **OWD** | **Renai** | **1.68** | **279** | *eP* | **Pg** | **19 48 28.5** | **-0.8** |
| | baz=263 | | | | | | |
| OWD | | | | *eS* | **Sn** | **19 48 48.1** | **+0.6** |
| | baz=263 | | | | | | |
| **FUSS** | **Fushou** | **1.68** | **290** | *eP* | **Pg** | **19 48 29.3** | **-0.2** |
| | baz=284 | | | | | | |
| **VWDT** | **VWDT** | **1.69** | **273** | *i* P | **Pb** | **19 48 28.1** | **+0.2** |
| | baz=253 | | | | | | |
| VWDT | | | | *eS* | **Sn** | **19 48 48.4** | **+0.8** |
| | baz=253 | | | | | | |
| **CHGB** | **Renai** | **1.70** | **283** | *eP* | **Pb** | **19 48 28.5** | **+0.4** |
| | baz=278 | | | | | | |
| **EDH** | **Donghe** | **1.70** | **245** | *eP* | **Pb** | **19 48 28.5** | **+0.4** |
| | baz=239 | | | | | | |
| EDH | | | | S | **Sn** | **19 48 48.2** | **+0.4** |
| | baz=239 | | | | | | |
| **EHD** | **Haiduan** | **1.72** | **252** | *eP* | **Pb** | **19 48 28.6** | **+0.1** |
| | baz=246 | | | | | | |
| EHD | | | | *eS* | **Sn** | **19 48 49.0** | **+0.7** |
| | baz=246 | | | | | | |
| **LDUT** | **Ludao** | **1.72** | **234** | P | **Pb** | **19 48 28.6** | **+0.1** |
| | baz=229 | | | | | | |
| LDUT | | | | S | **Sb** | **19 48 49.9** | **0.0** |
| | baz=229 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.72** | **324** | *eP* | **Pb** | **19 48 28.7** | **+0.1** |
| | baz=339 | | | | | | |
| SXI1 | | | | *eS* | **Sb** | **19 48 49.6** | **-0.6** |
| | baz=339 | | | | | | |
| **NWLT** | **Wulai** | **1.73** | **309** | *eP* | **Pg** | **19 48 30.1** | **-0.3** |
| | baz=305 | | | | | | |
| NWLT | | | | *eS* | **Sb** | **19 48 51.0** | **+0.7** |
| | baz=305 | | | | | | |
| **WUSB** | **Renai** | **1.73** | **280** | *eP* | **Pb** | **19 48 29.2** | **+0.4** |
| | baz=275 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.76** | **322** | *i* P | **Pb** | **19 48 29.5** | **+0.4** |
| | baz=319 | | | | | | |
| NWF | | | | S | **Sb** | **19 48 50.3** | **-0.8** |
| | baz=319 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.76** | **322** | *eP* | **Pg** | **19 48 29.9** | **-1.0** |
| | baz=319 | | | | | | |
| WFSB | | | | *i* S | **Sb** | **19 48 51.2** | **+0.2** |
| | baz=319 | | | | | | |
| **TDCB** | **Techi** | **1.76** | **289** | *eP* | **Pg** | **19 48 29.9** | **-1.0** |
| | baz=284 | | | | | | |
| **YHNB** | **Yeheng** | **1.76** | **304** | P | **Pb** | **19 48 29.7** | **+0.5** |
| **YHNB** | **Yeheng** | **1.76** | **304** | *eP* | **Pb** | **19 48 29.2** | **0.0** |
| | baz=299 | | | | | | |
| YHNB | | | | *eS* | **Sb** | **19 48 52.0** | **+0.8** |
| | baz=299 | | | | | | |
| **NSK** | **Sanguang** | **1.78** | **304** | *eP* | **Pg** | **19 48 30.1** | **-1.1** |
| | baz=299 | | | | | | |
| NSK | | | | *eS* | **Sb** | **19 48 52.8** | **+1.1** |
| | baz=299 | | | | | | |
| **TWA** | **Mucha** | **1.81** | **316** | P | **Pg** | **19 48 31.2** | **-0.6** |
| | baz=328 | | | | | | |
| TWA | | | | *i* S | **Sb** | **19 48 52.0** | **-0.6** |
| | baz=328 | | | | | | |
| **TNOU** | **National Taiwa** | **1.82** | **323** | *eP* | **Pb** | **19 48 30.1** | **-0.1** |
| | baz=321 | | | | | | |
| TNOU | | | | *eS* | **Sn** | **19 48 51.2** | **+0.2** |
| | baz=321 | | | | | | |
| **JTJ** | **Tarama** | **1.83** | **59** | *eP* | **Pg** | **19 48 30.7** | **-1.6** |
| JTJ | | | | *eS* | **Sg** | **19 48 52.9** | **-3.3** |
| **NHDH** | **Xindian Distri** | **1.84** | **314** | *eP* | **Pb** | **19 48 30.8** | **+0.3** |
| | baz=310 | | | | | | |
| NHDH | | | | *i* S | **Sb** | **19 48 53.4** | **+0.1** |
| | baz=310 | | | | | | |
| **NHY** | **Taipei** | **1.86** | **316** | *eP* | **Pb** | **19 48 31.4** | **+0.6** |
| | baz=313 | | | | | | |
| NHY | | | | *eS* | **Sb** | **19 48 54.1** | **+0.1** |
| | baz=313 | | | | | | |
| **SSLB** | **Suanglung** | **1.86** | **273** | P | **Pb** | **19 48 31.2** | **+0.3** |
| **SSLB** | **Suanglung** | **1.86** | **273** | *eP* | **Pb** | **19 48 31.6** | **+0.7** |
| | baz=269 | | | | | | |
| **TATO** | **Taipei** | **1.87** | **314** | P | **Pg** | **19 48 33.1** | **+0.1** |
| **ELDTW** | **Lidau** | **1.87** | **255** | *eP* | **Pb** | **19 48 30.7** | **-0.4** |
| | baz=249 | | | | | | |
| **LONT** | **Longtian** | **1.87** | **246** | *eP* | **Pg** | **19 48 32.1** | **-0.9** |
| | baz=240 | | | | | | |
| **TTN** | **Taitung** | **1.93** | **241** | P | **Pg** | **19 48 33.2** | **-0.9** |
| | baz=235 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.93** | **281** | *eP* | **Pb** | **19 48 33.0** | **+0.9** |
| | baz=277 | | | | | | |
| **YM01** | **YM01** | **1.94** | **319** | *eP* | **Pb** | **19 48 31.2** | **-1.0** |
| | baz=315 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.94** | **299** | *eP* | **Pb** | **19 48 33.0** | **+0.7** |
| | baz=294 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.95** | **271** | *eP* | **Pb** | **19 48 33.4** | **+0.9** |
| | baz=253 | | | | | | |
| **WHP** | **Taichung City** | **1.95** | **288** | *eP* | **Pg** | **19 48 33.6** | **-1.0** |
| | baz=283 | | | | | | |
| **TWGBT** | **Beinan** | **1.95** | **244** | *eP* | **Pb** | **19 48 32.3** | **-0.2** |
| | baz=238 | | | | | | |
| **TWG** | **Pinlang** | **1.96** | **244** | *eP* | **Pb** | **19 48 32.8** | **+0.3** |
| | baz=238 | | | | | | |
| **TYC** | **Yuchr** | **1.96** | **277** | *eP* | **Pb** | **19 48 32.7** | **+0.2** |
| | baz=273 | | | | | | |
| **YM08** | **YM08** | **1.96** | **320** | *eP* | **Pb** | **19 48 32.2** | **-0.4** |
| | baz=316 | | | | | | |
| **ANP** | **Anpu** | **2.00** | **319** | *eP* | **Pb** | **19 48 32.8** | **-0.5** |
| | baz=315 | | | | | | |
| **TWS1** | **Kuangyinshan** | **2.00** | **315** | *eP* | **Pb** | **19 48 33.5** | **+0.2** |
| | baz=311 | | | | | | |
| **LIOB** | **Emei** | **2.03** | **298** | *eP* | **Pb** | **19 48 34.4** | **+0.6** |
| | baz=293 | | | | | | |
| **NSTT** | **Nanjuang** | **2.04** | **298** | *eP* | **Pg** | **19 48 35.4** | **-0.8** |
| | baz=292 | | | | | | |
| **WJS** | **Zhushan** | **2.07** | **274** | *eP* | **Pg** | **19 48 36.2** | **-0.6** |
| | baz=270 | | | | | | |
| **NCUH** | **Zhongli** | **2.08** | **308** | *eP* | **Pb** | **19 48 34.5** | **-0.1** |
| | baz=303 | | | | | | |
| **STYH** | **Taoyuan** | **2.09** | **256

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MASBT | **Mashibuluo** baz=229 | 2.41 | 244 | *e*P | | **Pb** | 19 48 38.7 | -1.6 |
| SCST | **Cishan** baz=246 | 2.42 | 251 | *e*P | | **Pb** | 19 48 40.9 | +0.5 |
| SLIU | **Shizi** baz=229 | 2.49 | 234 | *e*P | | **Pb** | 19 48 39.7 | -1.9 |
| TSCK | **Chigu Township** baz=256 | 2.71 | 259 | *e*P | | **Pb** | 19 48 45.0 | -0.5 |

**CATAC 10 19:56:00.7±0.4, 13°.31N×89°.65W, h36km±3km, ML3.6, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LALI** | **Alcalda de L** | **0.37** | **60** | *e*P | Pn | 19 56 11.3 | +2.0 |
| LALI | | | | *e*S | Sn | 19 56 18.3 | +2.4 |
| **LALI** | **Alcalda de L** | **0.37** | **60** | *i*P | Pn | 19 56 10.9 | +1.6 |
| LALI | | | | *i*S | Sn | 19 56 18.9 | +3.0 |
| LALI | | | | IAML | | 19 56 20.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.40** | **29** | *e*P | Pn | 19 56 11.7 | +1.8 |
| **JAYA** | **Jayaque - finc** | **0.40** | **29** | *i*P | Pn | 19 56 11.5 | +1.6 |
| JAYA | | | | *i*S | Sn | 19 56 19.7 | +3.0 |
| JAYA | | | | IAML | | 19 56 20.7 | |
| | comp=Z,32μm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **0.51** | **45** | *i*P | Pn | 19 56 12.5 | +0.8 |
| ITCA | | | | *i*S | Sn | 19 56 21.8 | +2.5 |
| ITCA | | | | IAML | | 19 56 24.1 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **0.52** | **39** | *i*P | Pn | 19 56 12.4 | +0.6 |
| PMON | | | | *i*S | Sn | 19 56 21.7 | +2.3 |
| PMON | | | | IAML | | 19 56 25.4 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **CEVE** | **Cerro Verde** | **0.52** | **3** | *e*P | Pn | 19 56 13.4 | +1.5 |
| CEVE | | | | *e*S | Sn | 19 56 22.2 | +2.6 |
| **CEVE** | **Cerro Verde** | **0.52** | **3** | *i*P | Pn | 19 56 12.9 | +1.0 |
| CEVE | | | | *i*S | Sn | 19 56 22.4 | +2.8 |
| CEVE | | | | IAML | | 19 56 24.6 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **0.53** | **3** | *e*P | Pn | 19 56 13.4 | +1.3 |
| **PANCS** | **Alcalda de** | **0.55** | **56** | *i*P | Pn | 19 56 12.9 | +0.7 |
| PANCS | | | | *i*S | Sn | 19 56 21.7 | +1.6 |
| PANCS | | | | IAML | | 19 56 23.2 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **0.55** | **27** | *e*S | Sn | 19 56 23.3 | +3.1 |
| **CEDA** | **San Andres** | **0.55** | **27** | *i*S | Sn | 19 56 22.5 | +2.3 |
| **SNET** | **Serv Nac Est T** | **0.56** | **47** | *e*P | Pn | 19 56 13.6 | +1.3 |
| SNET | | | | *e*S | Sn | 19 56 22.7 | +2.4 |
| **SNET** | **Serv Nac Est T** | **0.56** | **47** | *i*P | Pn | 19 56 13.2 | +0.9 |
| SNET | | | | *i*S | Sn | 19 56 22.4 | +2.1 |
| SNET | | | | IAML | | 19 56 25.1 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **BQQS** | **Boqueron** | **0.56** | **40** | *e*P | Pn | 19 56 13.7 | +1.2 |
| **SNJE** | **San Jose** | **0.56** | **4** | *e*P | Pn | 19 56 13.6 | +1.1 |
| **UEES** | **Universidad Ev** | **0.57** | **44** | *e*P | Pn | 19 56 13.4 | +0.9 |
| UEES | | | | *e*S | Sn | 19 56 23.1 | +2.4 |
| **UEES** | **Universidad Ev** | **0.57** | **44** | *i*P | Pn | 19 56 13.1 | +0.6 |
| UEES | | | | *i*S | Sn | 19 56 22.7 | +2.0 |
| UEES | | | | IAML | | 19 56 24.3 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **0.57** | **54** | *e*P | Pn | 19 56 13.8 | +1.1 |
| LOMA | | | | *e*S | Sn | 19 56 23.1 | +2.2 |
| **LOMA** | **Loma Larga** | **0.57** | **54** | *i*P | Pn | 19 56 13.5 | +0.9 |
| LOMA | | | | *i*S | Sn | 19 56 22.6 | +1.8 |
| LOMA | | | | IAML | | 19 56 25.5 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **UTEC** | **Universidad Te** | **0.59** | **48** | *i*P | Pn | 19 56 13.7 | +1.0 |
| UTEC | | | | *i*S | Sn | 19 56 23.0 | +1.9 |
| UTEC | | | | IAML | | 19 56 25.8 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **RTR** | **El Retiro** | **0.59** | **0** | *e*P | Pn | 19 56 14.3 | +1.4 |
| **NUBE** | **Las Nubes** | **0.61** | **348** | *e*P | Pn | 19 56 14.1 | +1.0 |
| NUBE | | | | *e*S | Sn | 19 56 23.7 | +2.0 |
| **NUBE** | **Las Nubes** | **0.61** | **348** | *i*P | Pn | 19 56 13.9 | +0.8 |
| NUBE | | | | *i*S | Sn | 19 56 23.3 | +1.6 |
| NUBE | | | | IAML | | 19 56 25.8 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **0.63** | **50** | *i*P | Pn | 19 56 14.0 | +0.7 |
| UDBS | | | | *i*S | Sn | 19 56 24.0 | +1.9 |
| UDBS | | | | IAML | | 19 56 28.9 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **0.64** | **35** | *i*S | Sn | 19 56 24.9 | +2.5 |
| **LFRS** | **El Faro** | **0.65** | **61** | *e*P | Pn | 19 56 14.8 | +1.1 |
| **UNIC** | **Universidad Ca** | **0.68** | **8** | *i*P | Pn | 19 56 14.1 | +0.1 |
| UNIC | | | | *i*S | Sn | 19 56 25.4 | +2.1 |
| UNIC | | | | IAML | | 19 56 29.2 | |
| | comp=Z,600nm,1.0s | | | | | | |
| **LFU** | **La Fuente** | **0.68** | **50** | *e*P | Pn | 19 56 15.1 | +1.1 |
| **LOAL** | **Lomas de Alarc** | **0.70** | **349** | *i*P | Pn | 19 56 15.2 | +1.0 |
| LOAL | | | | *i*S | Sn | 19 56 26.2 | +2.4 |
| LOAL | | | | IAML | | 19 56 30.9 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **0.73** | **350** | *e*S | Sn | 19 56 25.8 | +1.4 |
| **COEG** | **Centro de Oper** | **0.81** | **67** | *e*P | Pn | 19 56 16.6 | +1.0 |
| COEG | | | | *e*S | Sn | 19 56 28.3 | +1.7 |
| **COEG** | **Centro de Oper** | **0.81** | **67** | *i*P | Pn | 19 56 16.6 | +0.9 |
| COEG | | | | *i*S | Sn | 19 56 28.2 | +1.6 |
| COEG | | | | IAML | | 19 56 31.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.88** | **75** | *i*P | Pn | 19 56 17.2 | +0.7 |
| TECO | | | | *i*S | Sn | 19 56 29.3 | +1.2 |
| TECO | | | | IAML | | 19 56 33.7 | |
| | comp=Z,760nm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **0.90** | **68** | *i*P | Pn | 19 56 17.1 | +0.2 |
| UESV | | | | *i*S | Sn | 19 56 30.2 | +1.5 |
| UESV | | | | IAML | | 19 56 35.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.98** | **66** | *e*P | Pn | 19 56 18.7 | +0.7 |
| **SCLA** | **Alcaldia de Sa** | **0.98** | **66** | *i*P | Pn | 19 56 18.5 | +0.6 |
| SCLA | | | | *i*S | Sn | 19 56 31.7 | +1.1 |
| SCLA | | | | IAML | | 19 56 41.1 | |
| | comp=Z,380nm,1.0s | | | | | | |
| **LLGN** | **La Laguna** | **1.09** | **39** | *i*P | Pn | 19 56 19.1 | -0.5 |
| LLGN | | | | *i*S | Sn | 19 56 34.1 | +0.6 |
| LLGN | | | | IAML | | 19 57 10.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **1.11** | **73** | *i*P | Pn | 19 56 19.9 | +0.3 |
| PQSS | | | | *i*S | Sn | 19 56 34.2 | +0.5 |
| PQSS | | | | IAML | | 19 56 38.4 | |
| | comp=Z,760nm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **1.12** | **14** | *i*P | Pn | 19 56 20.4 | +0.3 |
| **MTO3** | **Montecristo** | **1.12** | **14** | *i*P | Pn | 19 56 19.9 | -0.2 |
| MTO3 | | | | IAML | | 19 56 20.4 | |
| | comp=Z,520nm,1.0s | | | | | | |
| MTO3 | | | | *i*S | Sn | 19 56 34.8 | +0.4 |
| **TECA** | **Tecapa** | **1.13** | **80** | *e*P | Pn | 19 56 20.9 | +0.7 |
| **ESQI** | **Esquipulas** | **1.28** | **13** | *e*P | Pn | 19 56 22.7 | +0.5 |
| **ESQI** | **Esquipulas** | **1.28** | **13** | *i*P | Pn | 19 56 22.6 | +0.4 |
| ESQI | | | | *i*S | Sn | 19 56 38.8 | +0.6 |
| ESQI | | | | IAML | | 19 56 40.4 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **PACA** | **Pacayal** | **1.30** | **83** | *e*P | Pn | 19 56 23.7 | +1.3 |
| **PACA** | **Pacayal** | **1.30** | **83** | *i*P | Pn | 19 56 22.8 | +0.4 |
| PACA | | | | *i*S | Sn | 19 56 40.3 | +1.6 |
| PACA | | | | IAML | | 19 56 43.0 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **LCY** | **Lacayo** | **1.32** | **85** | *e*P | Pn | 19 56 23.6 | +0.9 |
| **RANC** | **El Ranchito** | **1.33** | **84** | *i*P | Pn | 19 56 23.4 | +0.5 |
| RANC | | | | *i*S | Sn | 19 56 41.0 | +1.6 |
| RANC | | | | IAML | | 19 56 48.5 | |
| | comp=Z,630nm,1.0s | | | | | | |
| **JUCU** | **Jucuarɨn** | **1.36** | **92** | *i*P | Pn | 19 56 23.6 | +0.3 |
| JUCU | | | | *i*S | Sn | 19 56 40.0 | -0.2 |
| JUCU | | | | IAML | | 19 56 44.2 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **1.38** | **84** | *e*P | Pn | 19 56 24.4 | +1.0 |
| **CAHU** | **Cacacuatique** | **1.47** | **72** | *e*P | Pn | 19 56 25.4 | +0.5 |
| **LCND** | **La Caada** | **1.71** | **90** | *e*P | Pn | 19 56 28.6 | +0.6 |
| **CNCH** | **Conchagua** | **1.77** | **91** | *e*P | Pn | 19 56 29.5 | +0.6 |
| **TGUH** | **Tegucigalpa,Un** | **2.43** | **72** | *i*P | Pn | 19 56 36.9 | -1.1 |
| TGUH | | | | IAML | | 19 57 21.5 | |
| | comp=Z,92nm,1.0s | | | | | | |

**DJA 10 20:19:42.5±0.3, 8°.S±3°.×12°.3E±°, h10km, M3.7/9, mb4.0/1, MLv3.5/9, Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **1.09** | **262** | P | Pb | 20 20 02.9 | -0.6 |
| MMRI | | | | S | Sb | 20 20 17.8 | 0.0 |
| **SOEI** | **Soe** | **1.56** | **144** | P | Pn | 20 20 10.4 | -0.1 |
| **EDFI** | **Ende, Flores** | **1.64** | **261** | P | Pn | 20 20 11.5 | 0.0 |
| EDFI | | | | S | Sb | 20 20 33.4 | -0.4 |
| **BATI** | **Baumata** | **1.74** | **169** | P | Pn | 20 20 13.3 | +0.5 |
| **BBSI** | **Bau Bau** | **3.08** | **346** | P | Pn | 20 20 32.1 | +0.9 |
| BBSI | | | | S | Sn | 20 21 08.9 | +0.8 |
| **BASI** | **Baing, Sumba** | **3.21** | **237** | P | Pn | 20 20 32.5 | -0.6 |
| **BSSI** | **Bau Bau, Buton** | **3.66** | **309** | P | Pn | 20 20 39.8 | +0.6 |
| **BNSI** | **Bone** | **5.17** | **322** | P | Pn | 20 21 00.5 | +0.5 |

**KRSC 10 20:30:30.9±0.8, 48°.28N×156°.22E, h10km±13km, MI3.6, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDTR** | **Khodutka, Kamc** | **3.74** | **18** | *e*P | Pn | 20 31 31.7 | +3.1 |
| KDTR | | | | *e*S | Sn | 20 32 16.8 | +4.1 |
| **ASAK** | **Asacha** | **4.25** | **14** | *e*P | Pn | 20 31 40.0 | +4.2 |
| **MTVR** | **Mutnovka** | **4.40** | **16** | *e*P | Pn | 20 31 42.0 | +4.1 |
| **GRL** | **Gorelyy** | **4.44** | **15** | *e*P | Pn | 20 31 42.8 | +4.3 |
| **UGLR** | **Uglovaya** | **5.21** | **18** | *e*P | Pn | 20 31 53.2 | +4.2 |
| **KOK** | **Koryaka** | **5.25** | **16** | *e*P | Pn | 20 31 53.6 | +4.0 |
| **GNL** | **Ganaly** | **5.54** | **11** | *e*P | Pn | 20 31 57.6 | +4.1 |

*TIF **10** 20:56:35.9, 43°.54N×40°.01E, h17km±2km*
*MOS **10** 20:56:36.0, 43°.45N×40°.07E, h6km, MPVA3.9*
*AFAD **10** 20:56:42.6±0.0, 42°.80N×40°.33E, h8km±1km, ML2.7*

**ISC 10 20:56:35.4±1.1, 43°.40N±0°.03×40°.05E±0°.02, h9km±9km, n29, σ1°.54/54, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOC** | **Sochi** | **0.31** | **307** | *i*Pg | **Pg** | **20 56 41.7** | **+0.2** |
| SOC | | | | *i*Sg | **Sg** | **20 56 45.5** | **-0.1** |
| **RPOR** | **Krasnaya Polya** | **0.34** | **27** | *i*Pg | **Pg** | **20 56 42.3** | **+0.1** |
| RPOR | | | | *i*Sg | **Sg** | **20 56 46.4** | **-0.3** |
| **GUZR** | **Guzeripl'** | **0.60** | **5** | *i*Pg | **Pg** | **20 56 46.8** | **-0.3** |
| GUZR | | | | *e*Sg | **Sg** | **20 56 54.1** | **-0.9** |
| **MRNR** | **Maryino** | **0.68** | **323** | *i*Pg | **Pg** | **20 56 48.7** | **+0.1** |
| MRNR | | | | *e*Sg | **Sb** | **20 56 58.2** | **-0.7** |
| **ARXR** | **Arkhyz** | **0.91** | **79** | *e*Pg | **Pg** | **20 56 53.2** | **+0.3** |
| ARXR | | | | *e*Sg | **Sb** | **20 57 05.9** | **+0.4** |
| **GOYR** | **Goytkh** | **0.98** | **330** | *e*Pg | **Pb** | **20 56 54.8** | **+0.3** |
| GOYR | | | | *e*Sg | **Sn** | **20 57 08.2** | **-1.1** |
| **DOMR** | **Dombai** | **1.15** | **95** | *e*Pg | **Pn** | **20 56 58.2** | **+0.4** |
| DOMR | | | | *e*Sg | **Sn** | **20 57 14.2** | **+0.4** |
| **LABN** | **Labinsk** | **1.33** | **21** | *e*Pg | **Pg** | **20 57 01.2** | **+0.2** |
| LABN | | | | *e*Sg | **Sn** | **20 57 20.2** | **+2.1** |
| **BCHG** | **Becho** | **1.88** | **100** | P | **Pb** | **20 57 10.5** | **+0.5** |
| **SHA1** | **Shidzhatmaz** | **1.92** | **79** | *i*Pg | **Pb** | **20 57 11.4** | **+0.6** |
| SHA1 | | | | *e*Sg | **Sg** | **20 57 36.5** | **-0.8** |
| **SPGR** | **Shapsug** | **1.96** | **314** | *e*Pg | **Pn** | **20 57 09.6** | **+0.8** |
| SPGR | | | | *e*Sg | **Sb** | **20 57 34.7** | **-1.0** |
| **KIV** | **Kislovodsk** | **1.99** | **73** | *e*Pg | **Pb** | **20 57 11.5** | **-0.3** |
| KIV | | | | *e*Sg | **Sb** | **20 57 37.6** | **+0.9** |
| **KBZ** | **Khabaz** | **2.10** | **80** | *e*Pg | **Pb** | **20 57 13.3** | **-0.2** |
| KBZ | | | | *e*Sg | **Sg** | **20 57 42.1** | **-0.6** |
| **BEYR** | **Belyy Ugol+** | **2.10** | **72** | *e*Pg | **Pb** | **20 57 12.8** | **-0.8** |
| BEYR | | | | *e*Sg | **Sb** | **20 57 39.8** | **+0.1** |
| **PYA1** | **Pyatigorsk** | **2.31** | **72** | *i*Pn | **Pb** | **20 57 15.6** | **-1.5** |
| PYA1 | | | | *e*Sn | **Sb** | **20 57 45.7** | **0.0** |
| **ERBR** | **Yeremizino-Bor** | **2.34** | **7** | *e*Pn | **Pb** | **20 57 16.9** | **-0.8** |
| ERBR | | | | *e*Sn | **Sb** | **20 57 46.7** | **+0.2** |
| **ANN** | **Anapa** | **2.35** | **308** | *e*Pn | **Pn** | **20 57 16.0** | **+1.9** |
| ANN | | | | *e*Sn | **Sb** | **20 57 45.3** | **-1.7** |
| **DBOC** | **Borcka** | **2.38** | **149** | P | **Pn** | **20 57 15.4** | **+0.9** |
| DBOC | | | | S | **Sn** | **20 57 41.3** | **-2.5** |
| **MACK** | **Trabzon** | **2.46** | **185** | P | **Pn** | **20 57 18.0** | **+2.3** |
| MACK | | | | S | **Sn** | **20 57 45.8** | **-0.1** |
| MACK | | | | *i* AML | AML | 20 57 51.0 | |
| | comp=E,106nm,0.2s | | | | | | |
| MACK | | | | *i* AML | AML | 20 57 52.0 | |
| | comp=N,96nm,0.2s | | | | | | |
| **ALER** | **Alexandrovskoy** | **2.47** | **56** | *e*Pn | **Pb** | **20 57 19.6** | **-0.4** |
| ALER | | | | *e*Sn | **Sg** | **20 57 53.0** | **-1.8** |
| **ABS** | **Abastumani** | **2.62** | **128** | P | **Pn** | **20 57 21.0** | **+3.0** |
| **IZDR** | **Rize** | **2.64** | **172** | P | **Pn** | **20 57 19.8** | **+1.6** |
| IZDR | | | | S | **Sn** | **20 57 47.8** | **-2.5** |
| **DBAD** | **Bademkaya** | **2.67** | **152** | P | **Pn** | **20 57 20.4** | **+1.7** |
| DBAD | | | | S | **Sn** | **20 57 47.9** | **-3.3** |
| **DAGI** | **Agillar** | **2.70** | **149** | P | **Pn** | **20 57 21.3** | **+2.2** |
| DAGI | | | | S | **Sn** | **20 57 48.3** | **-3.6** |
| **DDEM** | **Demirkent** | **2.81** | **153** | P | **Pn** | **20 57 22.8** | **+2.3** |
| DDEM | | | | *i* AML | AML | 20 58 00.0 | |
| | comp=N,60nm,0.3s | | | | | | |
| DDEM | | | | *i* AML | AML | 20 58 00.0 | |
| | comp=E,46nm,0.3s | | | | | | |
| **ALIG** | **Mtskhetisjvari** | **2.95** | **115** | P | **Pn** | **20 57 24.4** | **+2.0** |
| **GOLE** | **Ardahan-G¶le** | **3.19** | **143** | P | **Pn** | **20 57 28.2** | **+2.3** |
| GOLE | | | | S | **Sn** | **20 58 01.9** | **-2.1** |
| **ALUC** | **Giresun/Alucra** | **3.20** | **198** | P | **Pn** | **20 57 27.5** | **+1.5** |
| ALUC | | | | S | **Sn** | **20 58 06.1** | **+1.8** |
| ALUC | | | | *i* AML | AML | 20 58 11.0 | |
| | comp=E,64nm,0.3s | | | | | | |
| **KELT** | **Kelkit** | **3.30** | **191** | P | **Pn** | **20 57 29.5** | **+2.1** |
| KELT | | | | S | **Sn** | **20 58 05.5** | **-1.3** |
| KELT | | | | *i* AML | AML | 20 58 13.0 | |
| | comp=E,25nm,0.2s | | | | | | |

**DJA 10 20:59:39.5±0.6, 8°.S±3°.×11°.6E±°, h16km±7km, M3.9/8, mb4.0/2, MLv3.9/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.84** | **113** | P | Pb | 20 59 55.4 | -0.3 |
| TWSI | | | | S | Sg | 21 00 07.7 | +0.8 |
| **DNP** | **Denpasar** | **0.92** | **253** | P | Pn | 20 59 57.9 | +0.1 |
| **JAGI** | **Jajag, Banyuwa** | **1.93** | **268** | P | Pn | 21 00 10.4 | -1.3 |
| **PWJI** | **Pagerwojo** | **4.27** | **275** | P | Pn | 21 00 43.7 | -0.2 |
| **BSSI** | **Bau Bau, Buton** | **4.90** | **63** | P | Pn | 21 00 52.0 | -0.6 |
| **EDFI** | **Ende, Flores** 16nm,0.8s,0.1nm | **5.54** | **94** | P | Pn | 21 01 02.1 | +0.6 |
| **BNSI** | **Bone** | **5.63** | **45** | P | Pn | 21 01 02.9 | +0.3 |

*IDC **10** 21:11:13.6±0.4, 37°.14N×141°.09E, h0km, mb4.6/33, mbtmp4.6/38, ML3.8/6, MS4.1/52, Error ellipse: s-maj=12.4km s-min=11.3km az=158.0*
*BJI **10** 21:11:14.1±0.0, 37°.20N×141°.25E, h19km, mb4.6/57, mB4.9/28, Ms4.7/46, Ms7 4.5/47*
*MOS **10** 21:11:15.1±0.9, 37°.37N×141°.03E, h12km, mb5.1/79, MS4.1/11, Error ellipse: s-maj=6.3km s-min=4.2km az=114.5*
*JMA **10** 21:11:16.1±0.1, 37°.2N±0°.2×141°.2E±0°.5, h20km, MD5.0/40, MW4.9/40, E OFF FUKUSHIMA PREF*
*JMA Felt IV J1 at E OFF FUKUSHIMA PREF .*
*NIED **10** 21:11:16.1, 37°.16N×141°.20E, h20km, MW4.8, Moment Tensor Solution. s3 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.95; $M_{\theta\theta}$1.60; $M_{\phi\phi}$0.35; $M_{r\theta}$0.42; $M_{\theta\phi}$0.69; $M_{\phi r}$0.22; Fault plane solution: $M_0$1.98000×$10^{16}$ NP1: $\phi_s$245.00000°, δ52.00000°, λ-91.00000°. NP2:$\phi_s$67.00000°, δ38.00000°, λ-89.00000°.*
*NEIC **10** 21:11:17.0±1.1, 37°.22N±0°.04×141°.11E±0°.08, h13km±4km, mb4.9/326, Mwr4.7/19 Error ellipse: s-maj=8.8km s-min=5.9km az=79.0, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.56; $M_{\theta\theta}$1.27; $M_{\phi\phi}$0.29; $M_{r\theta}$0.15; $M_{\theta\phi}$0.50; $M_{\phi r}$0.02; Fault plane solution: $M_0$1.53000×$10^{16}$ NP1:$\phi_s$248.47000°, δ47.78000°, λ-88.37000°. NP2:$\phi_s$66.04000°, δ42.24000°, λ-91.80000°. Principal axes: T 1.4853, Plg3.0000°, Azm337.0000°; N 0.0867, Plg1.0000°, Azm67.0000°; P -1.5721, Plg87.0000°, Azm181.0000°;*
*NEIC **10** 21:11:17.3, 37°.23N×141°.06E, h14km*
*GCMT **10** 21:11:18.0±0.3, 37°.23N±0°.02×141°.31E±0°.04, h17km±1km, MW4.9/103, Moment Tensor Solution. s34, c39; s103, c150; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.34±.20; $M_{\theta\theta}$2.30±.13; $M_{\phi\phi}$1.03±.12; $M_{r\theta}$-0.20±.29; $M_{\theta\phi}$.13±.07; $M_{\phi r}$-0.78±.36; Best double couple: $M_0$3.24400×$10^{16}$ NP1:$\phi_s$51.00000°, δ51.00000°, λ-101.00000°. NP2:$\phi_s$248.00000°, δ40.00000°, λ-77.00000°. Principal axes: T 3.0120, Plg5.0000°, Azm149.0000°; N 0.4530, Plg8.0000°, Azm58.0000°; P -3.4750, Plg80.0000°, Azm270.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 10 21:11:16.4±0.4, 37°.13N±0°.03×141°.09E±0°.03, h17km±2km, h17km:pP-P,n1105,σ1°.13/990,mb4.9/276,MS4.3/76, 20C-58D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ONAJ** | **Iwakimizuishiy** | **0.23** | **262** | P | **Pg** | **21 11 22.9** | **+1.1** |
| ONAJ | | | | S | **Sg** | **21 11 27.8** | **+2.3** |
| **ONAJ** | **Iwakimizuishiy** | **0.23** | **262** | A | A | 21 11 22.9 | |
| | comp=E,212nm,0.3s,comp=N,114nm,0.3s | | | | | | |
| **JFK** | **Kawauchi** | **0.29** | **324** | P | **Pb** | **21 11 23.1** | **-0.1** |
| JFK | | | | S | **Sb** | **21 11 28.2** | **+0.4** |
| **JFK** | **Kawauchi** | **0.29** | **324** | A | A | 21 11 23.1 | |
| | comp=E,102nm,0.9s,comp=N,107nm,4.8s | | | | | | |
| **JFFD** | **Fukushimafurud** | **0.42** | **264** | *i*P | **Pn** | **21 11 26.2** | **-1.5** |
| JFFD | | | | S | **Sn** | **21 11 33.4** | **-1.8** |
| **JFFD** | **Fukushimafurud** | **0.42** | **264** | A | A | 21 11 26.2 | |
| | comp=E,32nm,4.0s,comp=N,54nm,2.0s | | | | | | |
| **JMST** | **Minamisoumatoc** | **0.61** | **345** | *i*P | **Pg** | **21 11 27.9** | **-0.6** |
| JMST | | | | *e*S | **Sg** | **21 11 36.7** | **0.0** |
| **JMST** | **Minamisoumatoc** | **0.61** | **345** | A | A | 21 11 27.9 | |
| | comp=E,213nm,0.3s,comp=N,168nm,0.3s | | | | | | |
| **JHO** | **Hitachi** | **0.67** | **219** | ⇓P | **Pn** | **21 11 29.4** | **-1.7** |
| **JHO** | **Hitachi** | **0.67** | **219** | A | A | 21 11 29.4 | |
| | comp=E,25nm,5.5s,comp=N,33nm,1.9s | | | | | | |
| **JOTO** | **OTAMA OYAMA** | **0.74** | **306** | *i*P | **Pn** | **21 11 31.5** | **-0.6** |
| JOTO | | | | S | **Sn** | **21 11 42.3** | **-0.6** |
| **JOTO** | **OTAMA OYAMA** | **0.74** | **306** | A | A | 21 11 31.5 | |
| | comp=E,217nm,0.3s,comp=N,198nm,0.7s | | | | | | |
| **JMM** | **Marumori** | **0.77** | **342** | P | **Pg** | **21 11 30.9** | **-0.6** |
| **JMM** | **Marumori** | **0.77** | **342** | | **Pg** | **21 11 30.4** | **-1.0** |
| **JMM** | **Marumori** | **0.77** | **342** | P | **Pg** | **21 11 30.6** | **-0.9** |
| JMM | | | | S | **Sb** | **21 11 41.4** | **-0.1** |
| **JMM** | **Marumori** | **0.77** | **342** | A | A | 21 11 30.6 | |
| | comp=E,97nm,0.5s,comp=N,69nm,0.3s | | | | | | |
| **JHYU** | **Hitachinakayam** | **0.89** | **207** | A | A | 21 11 33.6 | |
| | comp=E,33nm,1.4s,comp=N,23nm,1.3s | | | | | | |
| **JSB** | **Shiboa** | **0.95** | **260** | ⇓P | **Pn** | **21 11 36.0** | **+1.0** |
| JSB | | | | ⇓S | **Sn** | **21 11 50.2** | **+2.1** |
| **JSB** | **Shiboa** | **0.95** | **260** | A | A | 21 11 36.0 | |
| | comp=E,99nm,2.4s,comp=N,106nm,0.9s | | | | | | |
| **JYAR** | **Yonezawaarcadi** | **1.08** | **316** | A | A | 21 11 36.5 | |
| | comp=E,272nm,0.4s,comp=N,336nm,0.5s | | | | | | |
| **JFY** | **Yanaizu** | **1.14** | **284** | P | **Pn** | **21 11 38.6** | **+1.1** |
| JFY | | | | *e*S | **Sn** | **21 11 54.9** | **+2.1** |
| **JFY** | **Yanaizu** | **1.14** | **284** | A | A | 21 11 38.6 | |
| | comp=E,36nm,3.8s,comp=N,32nm,1.7s | | | | | | |
| **JYT** | **Yasato** | **1.15** | **219** | A | A | 21 11 38.1 | |
| | comp=E,53nm,0.3s,comp=N,34nm,0.3s | | | | | | |
| **JIKH** | **Ishinomakikobu** | **1.21** | **14** | A | A | 21 11 37.2 | |
| | comp=E,39nm,2.5s,comp=N,30nm,3.9s | | | | | | |
| **JIHU** | **Kakohorinouch** | **1.25** | **201** | A | A | 21 11 39.4 | |
| | comp=E,90nm,0.9s,comp=N,123nm,1.9s | | | | | | |
| **JOU** | **Okura** | **1.27** | **345** | A | A | 21 11 38.9 | |
| | comp=E,170nm,1.2s,comp=N,165nm,1.3s | | | | | | |
| **JIO** | **Ouri** | **1.33** | **9** | A | A | 21 11 39.4 | |
| | comp=E,39nm,1.8s,comp=N,30nm,2.1s | | | | | | |
| **JYS** | **Shirataka** | **1.35** | **324** | A | A | 21 11 40.8 | |
| | comp=E,116nm,2.2s,comp=N,146nm,1.6s | | | | | | |
| **JOFO** | **Osakifurukawao** | **1.47** | **355** | A | A | 21 11 41.8 | |
| | comp=E,495nm,1.2s,comp=N,760nm,1.5s | | | | | | |
| **JAG** | **Ashikaga** | **1.49** | **242** | A | A | 21 11 43.5 | |
| | comp=E,17nm,1.2s,comp=N,18nm,0.8s | | | | | | |
| **JKT** | **Katashina** | **1.52** | **257** | A | A | 21 11 43.9 | |
| | comp=E,21nm,3.4s,comp=N,15nm,2.2s | | | | | | |
| **JNS** | **Sasagawa** | **1.56** | **296** | A | A | 21 11 44.4 | |
| | comp=E,35nm,2.5s,comp=N,39nm,0.8s | | | | | | |
| **JSMT** | **Sammumatsuo** | **1.57** | **199** | A | A | 21 11 44.2 | |
| | comp=E,66nm,5.1s,comp=N,74nm,2.5s | | | | | | |
| **JUON** | **Unuma** | **1.62** | **273** | A | A | 21 11 45.4 | |
| | comp=E,19nm,3.9s,comp=N,18nm,3.0s | | | | | | |
| **JKMT** | **Kesennumamotoy** | **1.70** | **10** | A | A | 21 11 44.9 | |
| | comp=E,49nm,1.4s,comp=N,26nm,1.3s | | | | | | |
| **TOK** | **Tokyo** | **1.80** | **217** | A | A | 21 11 47.9 | |
| | comp=E,39nm,3.4s,comp=N,39nm,2.9s | | | | | | |
| **JYA** | **Atsumi** | **1.82** | **324** | A | A | 21 11 47.6 | |
| | comp=E,77nm,1.0s,comp=N,86nm,0.8s | | | | | | |
| **JMK** | **Ichinoseki** | **1.82** | **3** | A | A | 21 11 46.8 | |
| | comp=E,60nm,1.7s,comp=N,24nm,0.9s | | | | | | |
| **JCN** | **Nagara** | **1.85** | **203** | A | A | 21 11 48.4 | |
| | comp=E,74nm,5.3s,comp=N,60nm,3.1s | | | | | | |
| **JYK** | **Kaneyama** | **1.87** | **342** | A | A | 21 11 47.9 | |
| | comp=E,44nm,1.8s,comp=N,60nm,1.6s | | | | | | |
| **JIZZ** | **Izumozaki** | **1.94** | **283** | A | A | 21 11 49.9 | |
| | comp=E,110nm,5.7s,comp=N,60nm,4.4s | | | | | | |
| **JHU** | **Hanno** | **1.94** | **229** | A | A | 21 11 49.9 | |
| | comp=E,12nm,4.0s,comp=N,11nm,1.2s | | | | | | |
| **OFUJ** | **Ofuato** | **2.00** | **13** | A | A | 21 11 49.0 | |
| | comp=E,32nm,2.8s,comp=N,20nm,1.0s | | | | | | |
| **JGK** | **Kuni** | **2.04** | **255** | A | A | 21 11 51.6 | |
| | comp=E,19nm,2.4s,comp=N,22nm,4.2s | | | | | | |
| **JRY** | **Ryogami san** | **2.08** | **238** | A | A | 21 11 52.1 | |
| | comp=E,8.0nm,6.0s,comp=N,10.0nm,4.2s | | | | | | |
| **JYYZ** | **Yamagatayuza** | **2.09** | **334** | A | A | 21 11 51.2 | |
| | comp=E,131nm,2.1s,comp=N,145nm,2.1s | | | | | | |
| **JKUC** | **kamogawauchiur** | **2.10** | **200** | A | A | 21 11 51.9 | |
| | comp=E,16nm,3.5s,comp=N,19nm,6.0s | | | | | | |
| **JSGW** | **Sagamiharawaka** | **2

JGF Kuroka 3.38 244 P Pb 21 12 11.9 -3.9
JGF Kuroka 3.38 244 Pn Pb 21 12 10.7 -5.1
JHG Hegura jima 3.39 283 A A 21 12 10.7
comp=E,6.0nm,3.7s,comp=N,7.0nm,2.5s
JSG Sagara 3.40 225 Pb 21 12 11.0 -5.2
JJH Hakui 3.45 268 A A 21 12 11.7
comp=E,4.0nm,2.6s,comp=N,8.0nm,2.9s
HMMJ Hamamatsu 2 3.55 231 A A 21 12 13.1
comp=E,4.0nm,3.1s,comp=N,4.0nm,4.2s
JIW Iwasaki 3.56 347 A A 21 12 11.9
comp=E,13nm,1.6s,comp=N,12nm,1.7s
JHHS Hirosakihyakuz 3.56 351 A A 21 12 11.8
comp=E,37nm,2.1s,comp=N,44nm,1.7s
JAO Obara 3.61 240 A A 21 12 14.1
comp=E,5.0nm,3.8s,comp=N,6.0nm,2.7s
JTM Tenmabayashi 3.65 360 P Pn 21 12 13.1 +1.0
JTM Tenmabayashi 3.65 360 Pn Pn 21 12 12.1 0.0
JTM Tenmabayashi 3.65 360 A A 21 12 12.9
comp=E,17nm,3.1s,comp=N,13nm,1.8s
INU Inuyama 3.74 243 P Pb 21 12 16.9 -5.1
INU Inuyama 3.74 243 Pn Pn 21 12 14.8 +1.4
JARK Aomorirokkasho 3.88 3 A A 21 12 16.1
comp=E,30nm,1.9s,comp=N,17nm,1.2s
JICN Ichinomiyachia 3.89 243 A A 21 12 17.9
comp=E,6.0nm,2.5s,comp=N,7.0nm,3.1s
JAHD Aomorihigashid 4.13 3 A A 21 12 19.6
comp=E,71nm,2.1s,comp=N,58nm,1.9s
JHJ Hachijo jima 2 4.14 195 Pn Pn 21 12 18.0 -0.9
comp=N,89nm,0.3s,baz=75,slow=18,SNR=24
JHJ Sn Sn 21 13 05.0 -2.0
comp=N,74nm,0.3s,baz=83,slow=22,SNR=1.9
comp=N,172nm,0.3s
JHJ2 Mitsune 4.14 195 P Pn 21 12 20.0 +1.1
JHJ2 Mitsune 4.14 195 Pn Pn 21 12 20.4 +1.5
JOT Ohata 4.24 360 A A 21 12 21.3
comp=E,13nm,2.4s,comp=N,10.0nm,4.1s
JOMM Oshimamatsumae 4.46 350 A A 21 12 24.6
comp=E,6.0nm,2.5s,comp=N,15nm,3.1s
ERM Erimo 5.13 18 P Pn 21 12 31.3 -1.1
ERM Erimo 5.13 18 Pn Pn 21 12 31.4 -1.1
ERM Erimo 5.13 18 *ce*P Pn 21 12 32.1 -0.3
ERM pmax pmax
comp=Z,104nm,1.0s
JEM Erimo 5.13 18 P Pn 21 12 31.8 -0.7
JHST Hiyamasetana 5.37 350 A A 21 12 37.2
comp=E,7.0nm,2.8s,comp=N,7.0nm,3.8s
JSHD Hidakashinhida 5.38 11 A A 21 12 37.0
comp=E,10.0nm,4.1s,comp=N,8.0nm,2.0s
JIAM Iburiatsuma 5.52 6 A A 21 12 39.1
comp=E,9.0nm,3.4s,comp=N,12nm,1.4s
JSH Shimam 5.56 352 A A 21 12 40.0
comp=E,4.0nm,5.1s,comp=N,5.0nm,4.1s
JCH Churui 5.75 17 A A 21 12 42.0
comp=E,2.0nm,4.2s,comp=N,3.0nm,3.1s
JISS Ishikarishitsu 6.14 2 A A 21 12 47.8
comp=E,9.0nm,2.5s,comp=N,9.0nm,2.3s
JAB Ashibetsu 6.42 7 A A 21 12 51.7
comp=E,5.0nm,3.8s,comp=N,4.0nm,2.3s
JMN Monobe 6.79 242 P Pn 21 12 58.2 +2.8
JMN Monobe 6.79 242 Pn 21 12 56.9 +1.6
ASAJ Asahikawa 7.07 9 Pn Pn 21 12 58.2 -0.9
comp=N,6.6nm,0.3s,baz=214,slow=9.5,SNR=37
ASAJ Sn Sn 21 14 16.1 -2.9
comp=N,4.3nm,0.3s,baz=217,slow=33,SNR=1.9
ASAJ LR LR 21 15 53.0
comp=N,830nm,21.6s,baz=283,slow=40
comp=N,16nm,0.3s
JKA Kamikawa-asahi 7.07 9 Pn 21 12 57.9 -1.2
NMR Nemuro--Hokkai 7.17 28 *e*P Pn 21 12 56.4 -4.0
NMR *e*S Sn 21 14 12.9 -8.5
RUSJ Misakicho 7.65 23 *e*P Pn 21 13 04.9 -2.1
RUSJ *e*S Sn 21 14 29.8 -3.4
YUK Yuzh-Kuril'sk 7.79 26 *e*P Pn 21 13 06.0 -3.0
YUK *e*S Sn 21 14 28.3 -8.4
YUK pmax pmax
comp=Z,185nm,0.3s
YUK pmax pmax
comp=N,43nm,0.2s
SHO Shikotan 8.03 31 *e*P Pn 21 13 08.1 -4.1
SHO *e*S Sn 21 14 32.7 -10
SHO pmax pmax
comp=N,8.0nm,0.3s
SHO pmax pmax
comp=Z,26nm,0.3s
TEY Ternei 8.59 338 *e*P Pn 21 13 25.3 +5.4
VLA Vladivostok 9.24 313 *i* P Pn 21 13 34.5 +5.7
JNU Nakatsue 9.27 247 Pn 21 13 30.9 +1.6
JNU Nakatsue 9.27 247 Pn Pn 21 13 28.5 -0.9
comp=Z,0.4nm,0.3s,baz=181,slow=12,SNR=2.4
JNU Sn Sn 21 15 08.2 -5.0
baz=33,slow=21
comp=Z,5.3nm,0.7s
MSHR Mys Shultsa 9.37 309 *d* iP Pn 21 13 35.4 +4.8
PSTR Posyet 9.63 308 *e*P Pn 21 13 38.9 +4.7
USA0B Ussuriysk Arra 9.87 318 *d* iP Pn 21 13 41.9 +4.4
USRK Ussuriysk Ar. 9.87 318 Pn Pn 21 13 40.8 +3.3
USRK Ussuriysk Ar. 9.87 318 Pn Pn 21 13 38.8 +1.3
comp=Z,0.8nm,0.3s,baz=134,slow=13,SNR=38
USRK LR LR 21 17 32.4
comp=Z,1μm,18.2s,baz=121,slow=38
comp=Z,13nm,0.7s
YSS Yuzh-Sakhalins 9.89 7 Pn Pn 21 13 37.8 0.0
YSS Yuzh-Sakhalins 9.89 7 *e*P Pn 21 13 38.8 +1.1
YSS *e*S Sn 21 15 25.9 -2.4
YSS pmax pmax
comp=N,300nm,3.2s
YSS pmax pmax
comp=Z,300nm,3.2s
YSS pmax pmax
comp=E,200nm,3.7s
YSS pmax pmax
comp=Z,40nm,0.7s
YSS smax smax
comp=N,100nm,3.1s
YSS smax smax
comp=E,300nm,2.8s
YSS MLR MLR
comp=N,1μm,13.0s
YSS MLR MLR
comp=Z,1μm,13.0s
YSS MLR MLR
comp=E,1μm,11.0s
JCJ Chichijima 10.05 174 Pn Pn 21 13 38.6 -1.4
JCJ Chichijima 10.05 174 Pn Pn 21 13 33.5 -6.6
comp=E,51nm,0.3s,baz=318,slow=12,SNR=7.2
JCJ Sn Sn 21 15 19.6 -13
comp=E,23nm,0.3s,baz=291,slow=23,SNR=2.1
JCJ LR LR 21 17 48.8
comp=E,1μm,21.3s,baz=7.0,slow=39
KSRS Korea Array 10.49 276 Pn Pn 21 13 50.0 +3.9
comp=E,1.0nm,0.3s,baz=92,slow=14,SNR=54
KSRS LR LR 21 17 21.0
comp=E,522nm,19.3s,baz=90,slow=35
KSAR Wonju Array Be 10.53 276 Pn Pn 21 13 50.4 +3.9
KSAR Wonju Array Be 10.53 276 P Pn 21 13 50.4 +3.9
KS19 Wonju Array Si 10.54 276 Pn 21 13 46.9 +0.2
MDJ Mudanjiang 11.46 314 P Pn 21 14 03.5 +4.2
MDJ S Sn 21 16 10.3 +3.4
MDJ SS SnSn 21 16 23.0 +4.2
MDJ pmax pmax
comp=E,31nm,1.0s
MDJ pmax pmax
comp=E,780nm,4.7s
MDJ LR LR
comp=E,1μm,13.1s
MDJ LR LR
comp=E,700nm,13.7s
MDJ LR LR
comp=E,1μm,17.3s
MDJ Mudanjiang 11.46 314 Pn Pn 21 14 02.4 +3.1
BNX BinXian 13.38 314 ⇓P Pn 21 14 26.4 +1.0
BNX pmax pmax
comp=E,6.0nm,1.2s
BNX pmax pmax
comp=E,280nm,7.6s
CN2 Changchun 13.63 304 P Pn 21 14 31.3 +2.4
CN2 pmax pmax
comp=E,10.0nm,1.2s
CN2 pmax pmax
comp=E,400nm,7.0s
CN2 LR LR
comp=E,2μm,13.0s
CN2 LR LR
comp=E,1μm,13.0s
CN2 LR LR
comp=E,900nm,15.0s

TYV Tymovskoe 13.77 4 *e*P Pn 21 14 33.3 +2.5
TYV *e*S Sn 21 17 10.7 +7.5
TYV pmax pmax
comp=Z,8.0nm,1.0s
TYV pmax pmax
comp=Z,100nm,2.6s
TYV smax smax
comp=N,100nm,6.6s
TYV smax smax
comp=E,200nm,6.6s
TYV MLR MLR
comp=Z,800nm,14.0s
KLR Kul'dur 13.86 334 Pn Pn 21 14 31.7 -0.3
comp=Z,0.1nm,0.3s,baz=150,slow=14,SNR=1.7
KLR LR LR 21 19 49.8
comp=Z,689nm,19.9s,baz=216,slow=37
KLR Kul'dur 13.86 334 *e*P P 21 14 37.6 -2.7
KLR pmax pmax
comp=Z,33nm,1.6s
GRNR Gornyy 14.04 348 ⇑*i*P Pn 21 14 37.1 +2.7
GRNR pmax pmax
comp=Z,3.0nm,0.8s
GRNR MLR MLR
comp=E,610nm,14.0s
GRNR MLR MLR
comp=N,340nm,12.0s
GRNR MLR MLR
comp=Z,600nm,10.0s
DL2 Dalian 15.44 283 P P 21 14 56.0 -1.8
DL2 S Sn 21 17 44.9 +0.9
DL2 pmax pmax
comp=Z,19nm,1.3s
DL2 pmax pmax
comp=Z,320nm,5.7s
DL2 LR LR
comp=Z,930nm,10.9s
DL2 LR LR
comp=Z,820nm,10.2s
DL2 LR LR
comp=Z,2μm,13.3s
HEH HeiHe 16.39 327 *e*P Pn 21 15 06.1 +0.6
HEH pP sP 21 15 14.0 -1.3
HEH S Sn 21 18 11.0 +4.1
HEH pmax pmax
comp=Z,4.0nm,1.1s
HEH pmax pmax
comp=Z,330nm,4.9s
HEH LR LR
comp=Z,480nm,13.4s
HEH LR LR
comp=Z,970nm,14.5s
HEH LR LR
comp=Z,1μm,13.4s
OKH Okha 16.47 4 *de*P Pn 21 15 03.5 -3.0
OKH *e*S Sn 21 17 59.5 -9.2
OKH MLR MLR
comp=N,600nm,16.0s
OKH MLR MLR
comp=Z,800nm,13.0s
OKH MLR MLR
comp=E,2μm,13.0s
SKR Severo-Kuril's 17.30 34 *e*P Pn 21 15 12.8 -4.1
SKR *e*S Sn 21 18 28.8 0.0
SKR pmax pmax
comp=Z,500nm,4.0s
SKR MLR MLR
comp=Z,700nm,16.0s
NJ2 Nanjing 18.98 261 *e*P Pn 21 15 37.8 +0.1
NJ2 pmax pmax
comp=Z,7.0nm,0.6s
NJ2 pmax pmax
comp=Z,170nm,4.2s
ZEA Zeya 19.18 334 *e*P P 21 15 37.3 -1.7
ZEA pmax pmax
comp=N,10.0nm,1.0s
ZEA pmax pmax
comp=E,10.0nm,1.2s
ZEA pmax pmax
comp=Z,30nm,1.2s
ZEA MLR MLR
comp=N,300nm,11.0s
ZEA MLR MLR
comp=Z,500nm,14.0s
TIA Tai'an 19.24 274 P Pn 21 15 39.4 -1.4
TIA pmax pmax
comp=Z,8.0nm,0.9s
TIA pmax pmax
comp=Z,140nm,3.8s
TIA LR LR
comp=Z,600nm,10.1s
TIA LR LR
comp=Z,1μm,12.9s
TIA LR LR
comp=Z,1μm,10.8s
BJI Beijing 19.67 286 P P 21 15 43.1 -1.4
BJI pmax pmax
comp=Z,6.0nm,1.4s
BJT Baijiatuan 19.68 286 P P 21 15 43.8 -0.8
BJT Baijiatuan 19.68 286 P P 21 15 43.8 -0.8
BJT pmax pmax
comp=Z,9.0nm,0.9s
PET Petropavlovsk 20.07 32 P P 21 15 48.0 -0.7
PET Petropavlovsk 20.07 32 *ce*P P 21 15 48.5 -0.2
PET pmax pmax
comp=Z,84nm,1.7s
PET Petropavlovsk 20.07 32 P P 21 15 49.0 +0.3
comp=Z,50nm,1.1s
XLT XiLinHaoTe 20.13 297 *e*P P 21 15 48.0 -1.6
XLT pP sP 21 15 53.9 -2.7
XLT sS sS 21 19 42.0 -0.9
XLT pmax pmax
comp=Z,31nm,1.0s
XLT LR LR
comp=Z,130nm,12.0s
XLT LR LR
comp=Z,580nm,15.7s
XLT LR LR
comp=Z,2μm,13.1s
WHN Wuhan 23.12 261 P P 21 16 26.2 +4.6
WHN LR LR
comp=Z,2μm,14.5s
WHN LR LR
comp=Z,3μm,12.3s
WHN LR LR
comp=Z,3μm,13.1s
HHC Hu-ho-hao-te 23.19 288 *e*P P 21 16 22.0 -0.4
HHC pmax pmax
comp=Z,13nm,0.5s
HHC pmax pmax
comp=Z,160nm,5.3s
HHC LR LR
comp=Z,320nm,13.0s
HHC LR LR
comp=Z,570nm,13.8s
HHC LR LR
comp=Z,610nm,11.5s
BTO Baotou 24.37 288 *e*P P 21 16 33.5 -0.2
BTO pP sP 21 16 44.9 +3.9
BTO PP PnPn 21 17 07.8 +3.8
BTO S S 21 20 47.5 -5.0
BTO sS sS 21 21 06.3 +5.3
BTO SS SnSn 21 21 40.4 +4.4
BTO pmax pmax
comp=Z,30nm,0.5s
BTO pmax pmax
comp=Z,830nm,6.7s
BTO LR LR
comp=Z,1μm,12.2s
BTO LR LR
comp=Z,900nm,14.3s
BTO LR LR
comp=Z,1μm,12.6s
CIT Chita 24.43 316 *e*P P 21 16 32.7 -1.3
CIT *e* 21 16 41.7
CIT *e* 21 17 11.5
CIT *e* 21 22 01.3
CIT pmax pmax
comp=Z,64nm,1.7s
YAK Yakutsk 25.92 348 P P 21 16 45.9 -1.4
YAK Yakutsk 25.92 348 LR LR 21 27 07.7
comp=Z,420nm,19.9s,baz=117,slow=37
YAK Yakutsk 25.92 348 *e*P P 21 16 46.6 -0.7
YAK *e**PP sP 21 16 54.9 +0.3
YAK *e* 21 17 24.2
YAK *e* 21 20 14.1
YAK *e*S S 21 21 15.3 -1.2

YAK *e*SS SnSn 21 22 12.6 -0.6
YAK *e* 21 27 42.5
YAK pmax pmax
comp=Z,29nm,1.1s
YAK pmax pmax
comp=N,8.0nm,1.3s
YAK pmax pmax
comp=E,9.0nm,1.6s
YAK pmax pmax
comp=Z,177nm,3.5s
YAK pmax pmax
comp=N,88nm,3.0s
YAK pmax pmax
comp=E,26nm,1.6s
YAK smax smax
comp=E,97nm,2.0s
YAK smax smax
comp=N,87nm,2.1s
YAK MLR MLR
comp=N,309nm,20.0s
YAK MLR MLR
comp=E,370nm,24.0s
XAN Xi'an 26.27 273 ⇑P P 21 16 57.6 +6.6
XAN pP sP 21 17 02.2 +4.0
XAN S S 21 21 36.5 +14
XAN pmax pmax
comp=Z,25nm,0.6s
XAN pmax pmax
comp=Z,200nm,7.6s
XAN LR LR
comp=N,1μm,16.3s
XAN LR LR
comp=E,660nm,16.4s
XAN LR LR
comp=Z,1μm,11.7s
SEY Seymchan 26.75 11 *ce*P P 21 16 55.5 +0.7
SEY pmax pmax
comp=Z,50nm,1.3s
ENH Enshi 27.08 265 P P 21 16 59.2 +1.0
ENH Enshi 27.08 265 P P 21 16 58.5 +0.3
ENH IAmb IAmb 21 17 05.2
comp=Z,21nm,0.7s
ULN Ulaanbaatar 27.08 304 P P 21 16 56.6 -1.7
ULN Ulaanbaatar 27.08 304 *d* iP P 21 16 59.2 +0.9
ULN pmax pmax
comp=Z,7.0nm,1.3s
BOD Bodaibo 27.31 328 *e*P P 21 16 58.7 -1.2
BOD pmax pmax
comp=Z,16nm,1.5s
SONM Songino Array 27.51 304 P P 21 17 01.3 -0.8
SONM Songino Array 27.51 304 P P 21 17 01.3 -0.8
comp=Z,3.4nm,0.6s,baz=107,slow=9.1,SNR=16
SONM PcP PcP 21 20 20.1 +0.2
comp=Z,0.6nm,0.5s,baz=90,slow=1.4,SNR=1.6
comp=Z,3.4nm,0.6s
SONM Songino Array 27.51 304 P P 21 17 01.3 -0.8
SONM pmax pmax
comp=Z,4.0nm,1.0s
LZH Lanzhou 29.79 279 *e*P P 21 17 27.1 +4.6
LZH pmax pmax
comp=Z,20nm,1.2s
LZH LR LR
comp=Z,1μm,18.9s
LZH LR LR
comp=Z,800nm,14.1s
LZH LR LR
comp=Z,930nm,16.4s
ZAK Zakamensk 30.00 308 *e*P P 21 17 23.3 -0.9
ZAK pmax pmax
comp=Z,5.0nm,1.2s
GTA Gaotai 32.28 287 P P 21 17 44.1 -0.3
GTA PcP PcP 21 20 33.4 +1.0
GTA LR LR
comp=Z,350nm,21.1s
GTA LR LR
comp=Z,360nm,21.4s
GTA LR LR
comp=Z,260nm,20.7s
QIZ Qiongzhong 32.73 245 P P 21 17 49.6 +1.3
QIZ S S 21 23 07.2 +2.9
QIZ LR LR
comp=Z,690nm,18.2s
QIZ LR LR
comp=Z,690nm,18.6s
QIZ LR LR
comp=Z,500nm,12.7s
BILL Bilibino 34.01 17 ⇑*i*P P 21 17 58.0 -0.9
BILL *e* 21 19 15.8
BILL *e*PPP PPP 21 19 24.9
BILL *e* 21 20 36.2
BILL pmax pmax
comp=Z,7.0nm,1.4s
BILL MLR MLR
comp=Z,231nm,16.0s
KMI Kunming 34.72 261 ⇑P P 21 18 05.6 -0.3
KMI sP sP 21 18 15.0 +1.8
KMI pmax pmax
comp=Z,11nm,0.9s
KMI LR LR
comp=Z,530nm,14.7s
KMI LR LR
comp=Z,290nm,15.4s
KMI LR LR
comp=Z,720nm,12.1s
PZH PanZhiHua 34.85 264 P P 21 18 10.5 +3.6
PZH S S 21 23 41.5 +4.2
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,110nm,7.2s
PZH LR LR
comp=Z,560nm,15.0s
PZH LR LR
comp=Z,420nm,13.0s
PZH LR LR
comp=Z,440nm,13.5s
TIXI Tiksi 35.16 353 ⇑*i*P P 21 18 08.0 -0.8
TIXI pmax pmax
comp=Z,4.0nm,0.9s
TNCH TengChong 38.11 264 ⇓P P 21 18 34.3 -0.5
TNCH pP sP 21 18 39.6 -2.5
TNCH sP pP 21 18 41.6 +1.5
TNCH PP PnPn 21 20 10.1 +6.7
TNCH S S 21 24 20.1 -7.1
TNCH pmax pmax
comp=Z,17nm,1.3s
TNCH pmax pmax
comp=Z,130nm,4.0s
TNCH LR LR
comp=Z,380nm,15.5s
TNCH LR LR
comp=Z,290nm,13.8s
TNCH LR LR
comp=Z,330nm,15.4s
TNTI Ternate 38.34 202 P P 21 18 37.0 +0.5
CRAI Chiangrai 39.15 256 P P 21 18 43.6 +0.3
DGZ Jazzator, Alta 40.12 306 *d* iP P 21 18 52.3 +1.0
DGZ pmax pmax
comp=Z,39nm,0.9s
WMQ Urumqi 40.56 297 *e*P P 21 18 57.3 +2.4
WMQ pP sP 21 19 02.4 +0.1
WMQ pmax pmax
comp=Z,15nm,0.9s
WMQ LR LR
comp=Z,1μm,17.1s
WMQ LR LR
comp=Z,340nm,17.1s
WMQ LR LR
comp=Z,290nm,19.1s
FAKI Fak Fak 40.69 194 P P 21 18 57.2 +1.1
FAKI Fak Fak 40.69 194 P P 21 18 56.6 +0.6
FAKI IAmb IAmb 21 18 57.5
comp=Z,18nm,0.8s
TNA Tin City 40.90 30 P P 21 18 57.8 +0.6
baz=252
CMAR Chiang Mai Arr 41.27 255 P P 21 19 00.3 -0.6
comp=Z,0.7nm,0.5s,baz=40,slow=8.8,SNR=1.4
CMAR LR LR 21 37 02.9
comp=Z,125nm,19.2s,baz=60,slow=38
comp=Z,0.7nm,0.5s
K13K Kusilvak Mount 41.38 36 P P 21 19 01.2 -0.1
baz=259
SANI Sanana 41.43 203 P P 21 19 02.3 +0.1
F14K Arctic Creek 41.50 30 P P 21 19 03.0 +0.8
baz=253
ZAA0 Zalesovo Array 41.66 312 P P 21 19 02.9 -0.8

ZAA0 IAmb IAmb 21 19 04.5
comp=Z,18nm,0.8s
**ZALV Zalesovo Beam 41.66 312** P **P** **21 19 03.2 -0.5**
**ZALV Zalesovo Beam 41.66 312** P **P** **21 19 03.6 -0.1**
comp=Z,13nm,0.7s,baz=93,slow=7.0,SNR=56
ZALV PcP **PcP** **21 20 59.8 -0.4**
comp=Z,2.2nm,0.6s,baz=102,slow=3.2,SNR=2.0
ZALV ScP **ScP** **21 24 50.4 +0.8**
comp=Z,0.4nm,0.4s,baz=98,slow=4.4,SNR=2.1
ZALV LR LR 21 37 23.4
comp=Z,223nm,21.3s,baz=86,slow=38
comp=Z,13nm,0.7s
**ZALV Zalesovo Beam 41.66 312** P **P** **21 19 03.2 -0.5**
**LSA Lhasa 41.94 275** P **P** **21 19 07.6 +0.7**
LSA pmax pmax
comp=Z,9.0nm,1.2s
**LSA Lhasa 41.94 275** P **P** **21 19 06.5 -0.4**
**LSA Lhasa 41.94 275** P **P** **21 19 06.5 -0.4**
LSA pmax pmax
comp=Z,9.0nm,0.7s
**ZSN Zaisan 42.01 303** *e*P **P** **21 19 07.0 +0.2**
comp=Z,15nm,0.8s,baz=303
**ZSN Zaisan 42.01 303** *e*P **P** **21 19 06.9 +0.2**
ZSN pmax pmax
comp=Z,15nm,0.8s
**J14K Nanvaranak Lak 42.03 34** P **P** **21 19 07.5 +0.9**
baz=259
**L14K Kuka Creek 42.20 37** P **P** **21 19 08.6 +0.5**
baz=262
**F15K North Star Dit 42.24 30** P **P** **21 19 08.8 +0.5**
F15K IAmb IAmb 21 19 16.3
comp=Z,35nm,1.4s
**F15K North Star Dit 42.24 30** P **P** **21 19 09.2 +0.8**
baz=255
**G15K Niukluk 42.31 31** P **P** **21 19 09.4 +0.5**
baz=256
**M14K Bethel 42.47 38** P **P** **21 19 09.8 -0.4**
baz=263
**C16K Lisburne Hills 42.73 26** P **P** **21 19 12.8 +0.6**
C16K IAmb IAmb 21 19 18.9
comp=Z,24nm,1.1s
**C16K Lisburne Hills 42.73 26** P **P** **21 19 11.9 -0.3**
baz=251
**H16K Elim 42.98 32** P **P** **21 19 14.8 +0.5**
baz=258
**M15K Kasigluk River 43.08 38** P **P** **21 19 15.9 +0.7**
baz=264
**SHL Shillong 43.15 269** P **P** **21 19 16.9 +0.5**
**SHL Shillong 43.15 269** P **P** **21 19 16.9 +0.5**
SHL pmax pmax
comp=Z,8.0nm,0.7s
**N15K Kwethluk River 43.33 39** P **P** **21 19 17.6 +0.4**
baz=265
**D17K Noatak River 43.37 27** P **P** **21 19 17.8 +0.3**
baz=254
**O15K Ungalikthiuk R 43.39 40** P **P** **21 19 18.1 +0.4**
baz=266
**J16K Anvik River 43.45 34** P **P** **21 19 19.2 +1.0**
baz=261
**RDOG Red Dog Mine 43.53 27** P **P** **21 19 19.2 +0.4**
RDOG IAmb IAmb 21 19 26.0
comp=Z,52nm,1.4s
**RDOG Red Dog Mine 43.53 27** P **P** **21 19 19.5 +0.7**
baz=254
**C17K DeLong Mountai 43.55 26** P **P** **21 19 19.3 +0.4**
baz=254
**E17K Hotham Inlet 43.69 28** P **P** **21 19 20.5 +0.6**
baz=256,SNR=15
**F17K Baldwin Pennin 43.76 29** P **P** **21 19 20.6 0.0**
F17K IAmb IAmb 21 19 28.2
comp=Z,39nm,1.5s
**F17K Baldwin Pennin 43.76 29** P **P** **21 19 20.8 +0.3**
baz=258,SNR=6.7
**L16K Owhat River 43.77 36** P **P** **21 19 20.5 -0.3**
**L16K Owhat River 43.77 36** P **P** **21 19 20.9 +0.1**
baz=264
**G17K Kiwalik Mounta 43.81 31** P **P** **21 19 21.1 +0.1**
baz=259,SNR=9.5
**MK31 Makanchi Array 43.84 302** P **P** **21 19 22.0 +0.4**
MK31 IAmb IAmb 21 19 28.2
comp=Z,13nm,0.8s
**MK31 Makanchi Array 43.84 302** *d i*P **P** **21 19 21.4 -0.2**
**MKAR Makanchi Array 43.84 302** P **P** **21 19 21.2 -0.4**
**MKAR Makanchi Array 43.84 302** P **P** **21 19 21.4 -0.2**
comp=Z,9.0nm,0.8s,baz=89,slow=9.9,SNR=92
MKAR LR LR 21 37 48.5
comp=Z,320nm,18.2s,baz=90,slow=36
comp=Z,9.0nm,0.8s
**H17K Granite Mounta 44.02 32** P **P** **21 19 22.8 +0.2**
**H17K Granite Mounta 44.02 32** P **P** **21 19 23.5 +0.8**
baz=260
**MAKZ Makanchi 44.05 302** P **P** **21 19 22.6 -0.7**
MAKZ IAmb IAmb 21 19 29.9
comp=Z,14nm,0.9s
**MAKZ Makanchi 44.05 302** P **P** **21 19 22.6 -0.7**
MAKZ pmax pmax
comp=Z,14nm,0.9s
**J17K VABM Dome 44.15 34** P **P** **21 19 24.6 +0.9**
J17K IAmb IAmb 21 19 31.5
comp=Z,43nm,1.4s
**J17K VABM Dome 44.15 34** P **P** **21 19 23.9 +0.1**
baz=263
**E18K Tukpahlearik C 44.23 28** P **P** **21 19 25.2 +0.9**
**E18K Tukpahlearik C 44.23 28** P **P** **21 19 24.9 +0.6**
baz=257,SNR=13
**B18K Kokolik River 44.28 25** P **P** **21 19 25.0 +0.3**
baz=254
**O16K Kokwok River B 44.30 39** P **P** **21 19 25.6 +0.6**
baz=268
**C18K Utukok River 44.30 26** P **P** **21 19 25.0 0.0**
**C18K Utukok River 44.30 26** P **P** **21 19 25.2 +0.2**
baz=255,SNR=16
**P16K Nushagak River 44.33 40** P **P** **21 19 26.2 +1.0**
baz=268
**L17K Donlin 44.37 36** P **P** **21 19 26.9 +1.3**
baz=265
**F18K Selawik 44.42 29** P **P** **21 19 26.5 +0.6**
baz=259,SNR=9.5
**K17K Iditarod 44.42 35** P **P** **21 19 26.4 +0.5**
K17K IAmb IAmb 21 19 28.5
comp=Z,21nm,1.1s
**K17K Iditarod 44.42 35** P **P** **21 19 26.7 +0.8**
baz=264,SNR=5.1
**SEM Semipalatinsk 44.67 307** *e*P **P** **21 19 27.8 -0.7**
comp=Z,15nm,0.9s,baz=307
**SEM Semipalatinsk 44.67 307** *e*P **P** **21 19 27.7 -0.7**
SEM pmax pmax
comp=Z,15nm,0.9s
**G18K Tagagawik 44.69 30** P **P** **21 19 28.3 +0.2**
G18K IAmb IAmb 21 19 36.0
comp=Z,17nm,1.1s
**G18K Tagagawik 44.69 30** P **P** **21 19 28.9 +0.8**
baz=261,SNR=15
**H18K Honhosa River 44.70 32** P **P** **21 19 28.9 +0.7**
H18K IAmb IAmb 21 19 34.8
comp=Z,14nm,1.0s
**H18K Honhosa River 44.70 32** P **P** **21 19 28.6 +0.4**
baz=262,SNR=8.6
**M17K Holitna River 44.72 37** P **P** **21 19 29.5 +1.1**
M17K IAmb IAmb 21 19 30.8
comp=Z,17nm,1.1s
**M17K Holitna River 44.72 37** P **P** **21 19 28.9 +0.5**
baz=266
**A19K Wainwright 44.76 24** P **P** **21 19 28.3 -0.2**
baz=254
**N17K Nushagak Hills 44.79 38** P **P** **21 19 28.7 -0.3**
baz=268
**O17K Koliganek Bris 44.81 39** P **P** **21 19 29.4 +0.3**
baz=268
**C19K Lookout Ridge 44.98 26** P **P** **21 19 31.3 +0.8**
**C19K Lookout Ridge 44.98 26** P **P** **21 19 31.2 +0.8**
baz=256
**L18K Granite Mounta 45.13 36** P **P** **21 19 32.8 +1.2**
L18K IAmb IAmb 21 19 34.2
comp=Z,16nm,1.4s
**L18K Granite Mounta 45.13 36** P **P** **21 19 31.2 -0.4**
baz=266
**F19K Shaleruckik Mo 45.20 29** P **P** **21 19 32.2 +0.2**
F19K IAmb IAmb 21 19 41.0
comp=Z,17nm,1.4s
**F19K Shaleruckik Mo 45.20 29** P **P** **21 19 32.4 +0.3**
baz=261,SNR=10
**J18K Innoko River 45.21 34** P **P** **21 19 32.7 +0.4**
**J18K Innoko River 45.21 34** P **P** **21 19 32.6 +0.4**
baz=265
**G19K Purcell Mounta 45.36 30** P **P** **21 19 33.5 +0.1**
G19K IAmb IAmb 21 19 35.0
comp=Z,14nm,1.2s
**G19K Purcell Mounta 45.36 30** P **P** **21 19 33.2 -0.3**
baz=262,SNR=7.7
**D19K Kuna River 45.37 27** P **P** **21 19 34.1 +0.6**
**D19K Kuna River 45.37 27** P **P** **21 19 33.4 -0.1**
baz=259,SNR=19
**Q17K Contact Creek 45.42 41** P **P** **21 19 33.6 -0.5**
baz=272
**KSM Kuching 45.43 226** P **P** **21 19 35.5 +1.0**
**N18K Kilae Creek 45.44 38** P **P** **21 19 35.0 +0.9**
N18K IAmb IAmb 21 19 36.7
comp=Z,20nm,1.1s
**N18K Kilae Creek 45.44 38** P **P** **21 19 33.7 -0.4**
baz=268
**M18K Stony River 45.50 37** P **P** **21 19 34.7 +0.2**
baz=268
**E19K Redstone River 45.51 28** P **P** **21 19 35.0 +0.4**
E19K IAmb IAmb 21 19 51.9
comp=Z,15nm,0.9s
**E19K Redstone River 45.51 28** P **P** **21 19 34.2 -0.4**
baz=260,SNR=12
**H19K Roundabout Mou 45.54 31** P **P** **21 19 35.2 +0.4**
**H19K Roundabout Mou 45.54 31** P **P** **21 19 34.8 0.0**
baz=263,SNR=15
**KURK Kurchatov 45.66 308** P **P** **21 19 35.8 -0.2**
**KURK Kurchatov 45.66 308** P **P** **21 19 35.8 -0.2**
KURK pmax pmax
comp=Z,36nm,0.8s
**KURBB Kurchatov Arra 45.73 308** P **P** **21 19 36.2 -0.3**
comp=Z,20nm,0.8s,baz=83,slow=8.4,SNR=122
KURBB LR LR 21 39 08.4
comp=Z,328nm,18.8s,baz=164,slow=37
comp=Z,20nm,0.8s
**J19K Poorman 45.74 33** P **P** **21 19 36.7 +0.2**
J19K IAmb IAmb 21 19 43.5
comp=Z,16nm,1.1s
**J19K Poorman 45.74 33** P **P** **21 19 36.6 +0.2**
baz=265,SNR=11
**P18K Big Mountain, 45.76 40** P **P** **21 19 36.8 +0.1**
baz=270
**O18K Koktuh Hills 45.77 39** P **P** **21 19 37.3 +0.6**
baz=270
**D20K Etivluk River 45.95 27** P **P** **21 19 38.4 +0.3**
baz=260,SNR=24
**L19K White Mountain 45.98 36** P **P** **21 19 39.2 +0.8**
**L19K White Mountain 45.98 36** P **P** **21 19 38.6 +0.1**
baz=268
**B20K Meade River 46.01 25** P **P** **21 19 38.9 +0.5**
**B20K Meade River 46.01 25** P **P** **21 19 38.3 -0.1**
baz=258,SNR=16
**F20K Avaraart Lake 46.03 29** P **P** **21 19 39.3 +0.7**
F20K IAmb IAmb 21 19 46.0
comp=Z,14nm,1.4s
**F20K Avaraart Lake 46.03 29** P **P** **21 19 39.0 +0.3**
baz=262,SNR=7.3
**E20K Nigu River 46.03 27** P **P** **21 19 39.1 +0.4**
baz=261,SNR=15
**N19K Bonanza Creek 46.13 38** P **P** **21 19 40.8 +1.1**
N19K IAmb IAmb 21 19 45.4
comp=Z,18nm,1.4s
**N19K Bonanza Creek 46.13 38** P **P** **21 19 39.4 -0.3**
baz=270
**H20K Anotleneega Mo 46.19 31** P **P** **21 19 40.1 +0.2**
baz=265,SNR=11
**M19K Big River Lodg 46.19 36** P **P** **21 19 40.7 +0.6**
baz=269
**R18K Karluk 46.21 42** P **P** **21 19 40.0 -0.2**
baz=273
**I20K Naaghedeneel 46.30 32** P **P** **21 19 41.6 +0.9**
**I20K Naaghedeneel 46.30 32** P **P** **21 19 41.3 +0.5**
baz=266
**K20K Telida 46.39 34** P **P** **21 19 42.4 +0.8**
K20K IAmb IAmb 21 19 49.1
comp=Z,18nm,1.1s
**K20K Telida 46.39 34** P **P** **21 19 42.0 +0.4**
baz=268,SNR=10
**J20K Nowinta River 46.40 33** P **P** **21 19 42.0 +0.4**
J20K IAmb IAmb 21 19 49.1
comp=Z,20nm,1.1s
**J20K Nowinta River 46.40 33** P **P** **21 19 42.1 +0.4**
baz=267
**KAPI Kappang 46.42 210** P **P** **21 19 42.9 +0.7**
**KAPI Kappang 46.42 210** P **P** **21 19 42.9 +0.7**
KAPI pmax pmax
comp=Z,34nm,1.1s
**L20K Farewell, AK 46.45 36** P **P** **21 19 42.7 +0.7**
baz=268,SNR=9.3
**SHLS Shalkode 46.56 298** *e*P **P** **21 19 41.0 -2.3**
baz=298
**SHLS Shalkode 46.56 298** *e*P **P** **21 19 41.0 -2.3**
**Q19K Cape Douglas, 46.58 40** P **P** **21 19 43.7 +0.5**
baz=272
**PMG Port Moresby 46.64 172** LR LR 21 37 51.8
comp=Z,64nm,21.2s,baz=342,slow=34
**IMAR Indian Mountai 46.70 31** P **P** **21 19 44.2 +0.3**
**M20K Styx River 46.79 36** P **P** **21 19 45.1 +0.3**
**M20K Styx River 46.79 36** P **P** **21 19 45.5 +0.7**
baz=270
**B21K Ikpikpuk River 46.81 26** P **P** **21 19 45.3 +0.6**
**B21K Ikpikpuk River 46.81 26** P **P** **21 19 45.1 +0.4**
baz=261,SNR=33
**G21K Allakaket 46.84 30** P **P** **21 19 45.5 +0.4**
G21K IAmb IAmb 21 19 47.2
comp=Z,19nm,1.2s
**G21K Allakaket 46.84 30** P **P** **21 19 46.1 +1.1**
baz=265
**TDK Taldyqorghan 46.86 300** *e*P **P** **21 19 45.9 +0.3**
comp=Z,8.9nm,0.6s,baz=300
**TDK Taldyqorghan 46.86 300** *e*P **P** **21 19 45.8 +0.3**
TDK pmax pmax
comp=Z,9.0nm,0.6s
**OHAK Old Harbor 46.86 43** P **P** **21 19 45.2 -0.1**
OHAK IAmb IAmb 21 19 46.4
comp=Z,8.9nm,0.9s
**OHAK Old Harbor 46.86 43** P **P** **21 19 46.0 +0.8**
baz=274
**E21K Killik River 46.87 27** P **P** **21 19 46.1 +0.8**
baz=263
**UZB Uzynbulak 46.87 298** *e*P **P** **21 19 45.8 -0.1**
comp=Z,13nm,1.2s,baz=298
**UZB Uzynbulak 46.87 298** *e*P **P** **21 19 45.7 -0.1**
UZB pmax pmax
comp=Z,13nm,1.2s
**F21K Alatna River 46.92 29** P **P** **21 19 45.2 -0.5**
**F21K Alatna River 46.92 29** P **P** **21 19 46.0 +0.3**
baz=264
**A22K Sinclair Lake 46.93 24** P **P** **21 19 45.6 0.0**
baz=259
**KPKS Kokpek 47.03 298** *e*P **P** **21 19 47.1 +0.1**
baz=298
**KPKS Kokpek 47.03 298** *e*P **P** **21 19 47.1 +0.1**
**H21K Melozitna Rive 47.06 31** P **P** **21 19 47.2 +0.4**
H21K IAmb IAmb 21 19 54.2
comp=Z,14nm,1.2s
**H21K Melozitna Rive 47.06 31** P **P** **21 19 46.7 -0.1**
baz=266
**CHUM Lake Minchumin 47.20 34** P **P** **21 19 49.4 +1.6**
baz=269
**KDAK Kodiak Island 47.20 42** P **P** **21 19 47.8 -0.1**
**KDAK Kodiak Island 47.20 42** P **P** **21 19 47.5 -0.4**
comp=Z,12nm,0.8s,baz=328,slow=4.5,SNR=9.3
comp=Z,12nm,0.8s
**KDAK Kodiak Island 47.20 42** P **P** **21 19 48.0 +0.1**
baz=274
**KDAK Kodiak Island 47.20 42** *c i*P **P** **21 19 48.0 +0.1**
KDAK pmax pmax
comp=Z,33nm,1.0s
**PPLA Purkeypile 47.24 35** P **P** **21 19 49.2 +0.9**
baz=270
**N20K Mount Spurr 47.24 37** P **P** **21 19 48.8 +0.5**
baz=271
**Q20K Shuyak Island 47.25 41** P **P** **21 19 47.7 -0.6**
baz=273
**SYI Shuyak Island 47.25 41** P **P** **21 19 47.8 -0.5**
**ZHN Zhinishke 47.28 298** *e*P **P** **21 19 49.2 +0.2**
comp=Z,11nm,1.3s,baz=298
**ZHN Zhinishke 47.28 298** *e*P **P** **21 19 49.2 +0.2**
ZHN pmax pmax
comp=Z,11nm,1.3s
**B22K Teshekpuk Lake 47.33 25** P **P** **21 19 49.0 +0.2**
baz=262
**SATY Saty 47.33 298** *e*P **P** **21 19 49.7 +0.3**
comp=Z,9.3nm,1.1s,baz=298
**SATY Saty 47.33 298** *e*P **P** **21 19 49.7 +0.3**
SATY pmax pmax
comp=Z,9.0nm,1.1s
**D22K Ayikyak River 47.39 27** P **P** **21 19 49.9 +0.5**
baz=264,SNR=21
**D22K Ayikyak River 47.39 27** P **P** **21 19 50.3 +1.0**
**F22K John River 47.45 29** P **P** **21 19 51.1 +1.3**
baz=265
**PRZ Przheval'sk 47.49 297** P **P** **21 19 51.2 +0.5**
**PRZ Przheval'sk 47.49 297** P **P** **21 19 51.2 +0.5**
PRZ pmax pmax
comp=Z,25nm,1.0s
**SKT Skwentna 47.55 36** P **P** **21 19 51.0 +0.4**
SKT IAmb IAmb 21 19 57.4
comp=Z,9.0nm,1.1s
**SKT Skwentna 47.55 36** P **P** **21 19 50.0 -0.6**
baz=271
**E22K Anaktuvuk Pass 47.64 28** P **P** **21 19 52.5 +1.2**
baz=265
**H22K Ishtalitna Cre 47.66 31** P **P** **21 19 51.7 +0.2**
baz=268
**G22K Bettles 47.67 29** P **P** **21 19 51.5 0.0**
baz=266
**BPAW Bear Paw Mtn. 47.78 33** P **P** **21 19 52.8 +0.4**
**BPAW Bear Paw Mtn. 47.78 33** P **P** **21 19 52.7 +0.2**
baz=270,SNR=6.1
**MLY Manley 47.90 32** P **P** **21 19 54.2 +0.8**
MLY IAmb IAmb 21 19 55.7
comp=Z,14nm,1.1s
**MLY Manley 47.90 32** P **P** **21 19 52.9 -0.5**
baz=269,SNR=12
**SUA Susitna One 47.94 37** P **P** **21 19 53.6 -0.1**
SUA IAmb IAmb 21 19 56.8
comp=Z,12nm,1.0s
**SUA Susitna One 47.94 37** P **P** **21 19 54.4 +0.7**
baz=272,SNR=9.3
**BRSE Bradley Lake S 48.03 39** P **P** **21 19 53.2 -1.2**
baz=274
**D23K Nanushuk River 48.12 27** P **P** **21 19 56.3 +1.3**
baz=266
**CHKK Chushkaly 48.12 299** *e*P **P** **21 19 55.1 -0.3**
baz=299
**CHKK Chushkaly 48.12 299** *e*P **P** **21 19 55.1 -0.3**
**C23K Itkillik River 48.22 26** P **P** **21 19 56.4 +0.7**
**C23K Itkillik River 48.22 26** P **P** **21 19 55.9 +0.2**
baz=265
**G23K Bananza Creek 48.24 30** P **P** **21 19 56.4 +0.4**
**G23K Bananza Creek 48.24 30** P **P** **21 19 56.7 +0.7**
baz=268,SNR=6.9
**MDOK Medeo 48.26 298** *e*P **P** **21 19 56.5 -0.1**
baz=298
**MDOK Medeo 48.26 298** *e*P **P** **21 19 56.5 -0.1**
**AAA Alma-Ata 48.34 298** *e*P **P** **21 19 57.1 -0.1**
comp=Z,6.7nm,0.5s,baz=298
**AAA Alma-Ata 48.34 298** *e*P **P** **21 19 57.0 -0.1**
AAA pmax pmax
comp=Z,7.0nm,0.5s
**TNSS Tian-Shan 48.37 298** *e*P **P** **21 19 57.8 0.0**
baz=298
**TNSS Tian-Shan 48.37 298** *e*P **P** **21 19 57.7 0.0**
**H23K Yukon River 48.42 31** P **P** **21 19 58.0 +0.7**
**H23K Yukon River 48.42 31** P **P** **21 19 57.9 +0.6**
baz=269,SNR=14
**RC01 Rabbit Creek A 48.44 37** P **P** **21 19 57.5 -0.1**
RC01 IAmb IAmb 21 20 03.7
comp=Z,20nm,1.1s
**RC01 Rabbit Creek A 48.44 37** P **P** **21 19 57.4 -0.1**
baz=273
**BWN Browne 48.45 33** P **P** **21 19 59.1 +1.5**
**E23K Chandalar 48.45 28** P **P** **21 19 58.2 +0.5**
baz=267
**I23K Minto, Yukon-K 48.49 32** P **P** **21 19 58.3 +0.5**
I23K IAmb IAmb 21 20 06.2
comp=Z,21nm,1.4s
**I23K Minto, Yukon-K 48.49 32** P **P** **21 19 57.7 -0.1**
baz=270
**TOLK Toolik Lake Re 48.50 27** P **P** **21 19 58.9 +0.9**
TOLK IAmb IAmb 21 20 05.3
comp=Z,20nm,1.1s
**TOLK Toolik Lake Re 48.50 27** P **P** **21 19 58.1 +0.1**
baz=267
**NEA2 Nenana 48.62 33** P **P** **21 19 59.5 +0.7**
**NEA2 Nenana 48.62 33** P **P** **21 19 59.4 +0.5**
baz=271,SNR=11
**MCK McKinley 48.70 34** P **P** **21 19 59.6 +0.1**
baz=272
**RND Reindeer 48.74 34** P **P** **21 19 59.3 -0.6**
RND IAmb IAmb 21 20 01.0
comp=Z,21nm,1.2s
**RND Reindeer 48.74 34** P **P** **21 19 59.3 -0.6**
RND pmax pmax
comp=Z,21nm,1.2s
**GHO Glory Hole Cre 48.79 36** P **P** **21 20 00.2 -0.1**
**D24K Happy Valley 48.80 27** P **P** **21 20 01.1 +0.9**
**D24K Happy Valley 48.80 27** P **P** **21 20 00.7 +0.5**
baz=267
**C24K Franklin Bluff 48.88 26** P **P** **21 20 01.5 +0.8**
baz=267
**E24K Your Creek 48.88 28** P **P** **21 20 01.7 +0.8**
**E24K Your Creek 48.88 28** P **P** **21 20 01.3 +0.4**
baz=268,SNR=27
**WAT1 Susitna Watana 48.91 35** P **P** **21 20 01.0 -0.2**
baz=273
**MDM Murphy Dome 48.97 32** P **P** **21 20 02.1 +0.5**
**KNK Knik Glacier 49.03 37** P **P** **21 20 01.8 -0.3**
KNK IAmb IAmb 21 20 08.1
comp=Z,13nm,1.0s
**KNK Knik Glacier 49.03 37** P **P** **21 20 02.3 +0.2**
baz=274
**WRH Wood River Hil 49.04 33** P **P** **21 20 02.2 +0.1**
**SML Sawmill 49.07 36** P **P** **21 20 03.0 +0.6**
SML IAmb IAmb 21 20 10.1
comp=Z,16nm,0.8s
**SML Sawmill 49.07 36** P **P** **21 20 02.0 -0.4**
baz=274
**SML Sawmill 49.07 36** P **P** **21 20 02.0 -0.4**
SML pmax pmax
comp=Z,16nm,0.8s
**F24K Squaw Lake 49.10 29** P **P** **21 20 02.9 +0.3**
**F24K Squaw Lake 49.10 29** P **P** **21 20 01.9 -0.6**
baz=269
**H24K Noodor Dome 49.10 31** P **P** **21 20 02.5 -0.1**
H24K IAmb IAmb 21 20 13.6
comp=Z,14nm,1.1s
**H24K Noodor Dome 49.10 31** P **P** **21 20 02.4 -0.1**
baz=271,SNR=11
**COLA College 49.13 32** *d i*P **P** **21 20 03.5 +0.7**
COLA pmax pmax
comp=Z,36nm,2.3s
**PWL Port Wells 49.14 38** P **P** **21 20 03.0 +0.1**
PWL IAmb IAmb 21 20 09.0
comp=Z,22nm,1.1s
**PWL Port Wells 49.14 38** P **P** **21 20 02.8 -0.1**
baz=275
**CCB Clear Creek Bu 49.16 33** P **P** **21 20 03.0 0.0**
CCB IAmb IAmb 21 20 11.1
comp=Z,13nm,1.4s
**BOOM Boomskoye usch 49.23 298** P **P** **21 20 04.9 +0.8**
BOOM IAmb IAmb 21 20 12.9
comp=Z,14nm,1.4s
**BOOM Boomskoye usch 49.23 298** P **P** **21 20 04.9 +0.8**
BOOM pmax pmax
comp=Z,14nm,1.4s
**SOEI Soe 49.24 202** P **P** **21 20 05.4 +1.2**
**SOEI Soe 49.24 202** P **P** **21 20 04.3 0.0**
**G24K Hadweenzic Riv 49.26 30** P **P** **21 20 04.5 +0.8**
**G24K Hadweenzic Riv 49.26 30** P **P** **21 20 04.4 +0.7**
baz=270
**WAT6 Susitna Watana 49.29 35** P **P** **21 20 03.9 -0.3**
baz=274
**POKR Poker Plat Res 49.30 32** P **P** **21 20 05.0 +0.9**
baz=272,SNR=6.9
**M23K Glacier View 49.36 36** P **P** **21 20 04.5 0.0**
baz=274
**DHY Denali Highway 49.43 35** P **P** **21 20 04.8 -0.5**
DHY IAmb IAmb 21 20 12.7
comp=Z,22nm,1.4s
**DHY Denali Highway 49.43 35** P **P** **21 20 04.9 -0.4**
baz=274
**NRN Naryn 49.50 296** P **P** **21 20 07.2 +0.8**
**NRN Naryn 49.50 296** P **P** **21 20 07.2 +0.8**
NRN pmax pmax
comp=Z,5.0nm,0.7s
**HDA Harding Lake 49.54 33** P **P** **21 20 05.3 -0.6**
HDA IAmb IAmb 21 20 06.9
comp=Z,17nm,1.1s
**HDA Harding Lake 49.54 33** P **P** **21 20 05.7 -0.2**
baz=273,SNR=7.3
**SCM Sheep Creek Mo 49.54 36** P **P** **21 20 05.6 -0.4**
SCM IAmb IAmb 21 20 07.6

comp=Z,18nm,1.1s
**SCM Sheep Creek Mo** 49.54 36 P P 21 20 06.2 +0.1
baz=275
**SCM Sheep Creek Mo** 49.54 36 P P 21 20 05.6 -0.4
SCM pmax pmax
comp=Z,18nm,1.1s
**IL31** 49.55 32 P P 21 20 05.7 -0.2
IL31 IAmb IAmb 21 20 07.0
comp=Z,17nm,1.1s
**ILAR Eielson Array** 49.55 32 P P 21 20 05.4 -0.6
**ILAR Eielson Array** 49.55 32 P P 21 20 05.7 -0.3
comp=Z,5.9nm,0.8s,baz=269,slow=6.2,SNR=55
comp=Z,5.9nm,0.8s
**HNR Honiara** 49.58 155 LR LR 21 41 53.8
comp=Z,1µm,19.0s,baz=342,slow=37
**D25K Kavik River** 49.68 26 P P 21 20 07.5 +0.5
**D25K Kavik River** 49.68 26 P P 21 20 07.3 +0.3
baz=269,SNR=18
**P23K Montague Islan** 49.68 39 P P 21 20 07.2 +0.1
baz=278
**GLI Glacier Island** 49.74 38 P P 21 20 07.6 +0.1
baz=276
**G25K Bearman Lake** 49.80 30 P P 21 20 08.6 +0.8
baz=272,SNR=7.4
**BTLS Baital** 49.84 301 eP P 21 20 08.3 -0.2
baz=301
**BTLS Baital** 49.84 301 eP P 21 20 08.3 -0.2
**SGDS Sogindy** 49.88 299 eP P 21 20 08.7 -0.3
baz=299
**SGDS Sogindy** 49.88 299 eP P 21 20 08.6 -0.3
**H25L Birch Creek** 49.93 30 P P 21 20 10.0 +1.2
baz=272,SNR=6.2
**F25K Christian Rive** 49.96 29 P P 21 20 10.1 +1.0
baz=271,SNR=15
**M24K Tolsona, Glenn** 50.06 36 P P 21 20 10.9 +0.9
baz=276
**PRP Porcupine Dome** 50.09 31 P P 21 20 10.7 +0.5
PRP IAmb IAmb 21 20 17.3
comp=Z,14nm,1.2s
**PRP Porcupine Dome** 50.09 31 P P 21 20 11.0 +0.7
baz=273
**K24K Donnelly Dome** 50.09 34 P P 21 20 09.8 -0.4
baz=274
**KSH Kashi** 50.13 294 P P 21 20 14.9 +4.0
KSH pP sP 21 20 20.9 +2.6
KSH pmax pmax
comp=Z,8.0nm,1.2s
KSH LR LR
comp=Z,530nm,19.9s
KSH LR LR
comp=Z,590nm,17.9s
KSH LR LR
comp=Z,640nm,15.8s
**FYU Fort Yukon** 50.15 30 P P 21 20 11.8 +1.3
**J25K Salcha River,** 50.21 33 P P 21 20 10.7 -0.4
**J25K Salcha River,** 50.21 33 P P 21 20 10.9 -0.2
baz=274
**AAK Ala-Archa** 50.21 298 LR LR 21 41 57.6
comp=Z,318nm,18.6s,baz=78,slow=37
**AAK Ala-Archa** 50.21 298 d iP P 21 20 11.9 +0.4
AAK pmax pmax
comp=Z,6.0nm,1.1s
**KDU Kakadu** 50.21 191 P P 21 20 11.8 +0.3
**KLU Klutina** 50.24 37 P P 21 20 11.9 +0.5
KLU IAmb IAmb 21 20 13.2
comp=Z,13nm,1.1s
**KLU Klutina** 50.24 37 P P 21 20 11.7 +0.3
baz=276
**PAX Paxson** 50.30 35 P P 21 20 11.5 -0.3
baz=275
**BVAR Borovoye Array** 50.31 312 LR LR 21 42 43.2
comp=Z,162nm,19.7s,baz=76,slow=38
**BRVK Borovoye** 50.37 312 P P 21 20 12.3 -0.1
**BRVK Borovoye** 50.37 312 c iP P 21 20 11.9 -0.5
BRVK pmax pmax
comp=Z,4.0nm,0.7s
**BMAR Burnt Mountain** 50.37 29 P P 21 20 13.0 +0.7
**EYAK Cordova Ski Ar** 50.44 38 P P 21 20 13.5 +0.8
baz=277
**HARP HAARP** 50.50 35 P P 21 20 13.8 +0.5
baz=276
**F26K Sheenjek River** 50.53 28 P P 21 20 13.6 +0.2
baz=273,SNR=24
**MTN Manton Dam** 50.58 193 P P 21 20 14.6 +0.3
**C27K Jago River** 50.62 26 P P 21 20 14.1 +0.1
baz=272,SNR=14
**G26K Porcupine Rive** 50.71 29 P P 21 20 14.7 0.0
baz=274,SNR=9.3
**COEN Coen** 50.85 177 P P 21 20 17.1 +0.8
**N25K Chitina, Valde** 50.86 36 P P 21 20 16.2 +0.1
baz=277
**SCRK Sand Creek** 50.87 33 IAmb IAmb 21 20 22.6
comp=Z,25nm,1.2s
**SCRK Sand Creek** 50.87 33 P P 21 20 15.7 -0.4
baz=276,SNR=20
**BMRM Bremner River** 50.94 37 P P 21 20 16.6 0.0
baz=278
**J26L Joseph Creek** 51.00 33 P P 21 20 17.0 0.0
baz=276
**I26K Coal Creek Min** 51.09 32 P P 21 20 17.6 -0.1
baz=276
**MENT Mentasta** 51.10 35 IAmb IAmb 21 20 27.1
comp=Z,22nm,1.2s
**KAIM Kayak Island** 51.18 39 P P 21 20 18.7 +0.3
baz=279
**GLB Gilahina Butte** 51.25 37 P P 21 20 19.0 0.0
**L26K Log Cabin Wild** 51.26 34 P P 21 20 19.3 +0.4
L26K IAmb IAmb 21 20 26.5
comp=Z,17nm,0.9s
**L26K Log Cabin Wild** 51.26 34 P P 21 20 19.6 +0.7
baz=277,SNR=7.4
**VRDI Verde Repeater** 51.46 37 P P 21 20 21.4 +0.7
VRDI IAmb IAmb 21 20 22.6
comp=Z,14nm,1.2s
**E27K Coleen River** 51.46 28 P P 21 20 21.3 +0.9
**E27K Coleen River** 51.46 28 P P 21 20 20.9 +0.6
baz=275,SNR=12
**M26K Nabesna, AK** 51.50 35 P P 21 20 21.6 +0.7
M26K IAmb IAmb 21 20 28.5
comp=Z,21nm,1.3s
**M26K Nabesna, AK** 51.50 35 P P 21 20 21.4 +0.5
baz=278,SNR=7.5
**G27K Doyon Strip** 51.56 30 P P 21 20 21.8 +0.7
**G27K Doyon Strip** 51.56 30 P P 21 20 21.5 +0.4
baz=276
**D27M Malcolm River** 51.60 26 P P 21 20 21.9 +0.4
**D27M Malcolm River** 51.60 26 P P 21 20 22.0 +0.5
baz=274
**MCARA McCarthy VSAT** 51.64 37 P P 21 20 22.6 +0.8
baz=279
**H27K Steamboat Moun** 51.67 30 P P 21 20 22.9 +0.9
baz=276,SNR=12
**CRQM Cirque** 51.68 37 P P 21 20 22.9 +0.6
CRQM IAmb IAmb 21 20 29.7
comp=Z,28nm,1.2s
**ARSB Arslanbob** 51.69 297 P P 21 20 23.2 +0.5
**ARSB Arslanbob** 51.69 297 P P 21 20 23.2 +0.5
ARSB pmax pmax
comp=Z,3.0nm,0.8s
**K27K Chicken** 51.70 33 P P 21 20 22.9 +0.7
baz=278
**I27K Kandik River** 51.70 31 P P 21 20 22.6 +0.3
baz=277
**CRQE Cirque** 51.70 37 P P 21 20 22.5 +0.1
baz=279
**L27K Beaver Creek,** 51.94 34 P P 21 20 24.8 +0.8
L27K IAmb IAmb 21 20 31.7
comp=Z,24nm,1.3s
**L27K Beaver Creek,** 51.94 34 P P 21 20 24.4 +0.3
baz=278,SNR=14
**BCAR Beaver Creek A** 51.96 34 P P 21 20 25.2 +1.0
**EGAK Eagle** 51.99 32 IAmb IAmb 21 20 32.1
comp=Z,18nm,1.4s
**EGAK Eagle** 51.99 32 P P 21 20 24.9 +0.6
baz=278,SNR=7.4
**M27K Edge Creek, AK** 52.02 35 IAmb IAmb 21 20 27.1
comp=Z,22nm,1.2s
**M27K Edge Creek, AK** 52.02 35 P P 21 20 25.4 +0.5
baz=279,SNR=11
**BKNI Bangkinang** 52.03 235 P P 21 20 26.9 +1.6
**F28M Old Crow** 52.16 28 P P 21 20 26.2 +0.6
F28M IAmb IAmb 21 20 28.4
comp=Z,14nm,1.2s
**F28M Old Crow** 52.16 28 P P 21 20 26.5 +0.9
baz=277,SNR=7.1
**E28M Babbage River** 52.18 27 P P 21 20 26.4 +0.7
E28M IAmb IAmb 21 20 27.7
comp=Z,18nm,1.4s
**E28M Babbage River** 52.18 27 P P 21 20 26.5 +0.7
baz=276,SNR=6.9
**I28M Miner Creek** 52.41 31 IAmb IAmb 21 20 34.6
comp=Z,9.6nm,0.8s
**I28M Miner Creek** 52.41 31 P P 21 20 28.0 +0.4
baz=278,SNR=16
**CTG Chitna Glacier** 52.51 37 P P 21 20 29.1 +0.7
baz=280
**YUK3 Moose Creek** 52.78 36 P P 21 20 31.2 +0.7
baz=281,SNR=9.0
**E29M Blow River** 52.80 27 P P 21 20 31.8 +1.4
**E29M Blow River** 52.80 27 P P 21 20 31.3 +0.9
baz=278,SNR=10
**KK31 Karatay Array** 52.85 300 P P 21 20 31.5 +0.4
**KK31 Karatay Array** 52.85 300 P P 21 20 31.5 +0.4
KK31 pmax pmax
comp=Z,9.0nm,1.1s
**KKAR Karatay Array** 52.85 300 P P 21 20 31.2 +0.1
**KKAR Karatay Array** 52.85 300 P P 21 20 30.8 -0.3
KKAR IAmb IAmb 21 20 33.0
comp=Z,8.5nm,1.1s
**KKAR Karatay Array** 52.85 300 P P 21 20 31.2 +0.1
**H29M Whitestone** 52.94 30 P P 21 20 32.6 +1.3
H29M IAmb IAmb 21 20 48.4
comp=Z,25nm,1.2s
**H29M Whitestone** 52.94 30 P P 21 20 32.1 +0.7
baz=279,SNR=7.8
**G29M Pine Creek** 52.97 29 P P 21 20 32.9 +1.2
**G29M Pine Creek** 52.97 29 P P 21 20 32.7 +1.1
baz=279,SNR=14
**O28M Mount Upton** 53.10 37 P P 21 20 33.1 +0.1
baz=282
**I29M Ogilvie Camp,** 53.10 31 P P 21 20 33.1 +0.5
baz=280,SNR=29
**BRLS Borolday** 53.34 300 eP P 21 20 36.0 +1.2
baz=300
**BRLS Borolday** 53.34 300 eP P 21 20 35.9 +1.2
**EPYK Eagle Plains** 53.57 30 P P 21 20 36.6 +0.5
**EPYK Eagle Plains** 53.57 30 P P 21 20 36.8 +0.8
baz=280,SNR=26
**M29M Somme Creek** 53.57 35 P P 21 20 37.1 +0.8
M29M IAmb IAmb 21 20 44.1
comp=Z,9.0nm,0.9s
**M29M Somme Creek** 53.57 35 P P 21 20 36.9 +0.7
baz=282,SNR=12
**L29M L29M** 53.59 34 P P 21 20 37.2 +0.9
**L29M L29M** 53.59 34 P P 21 20 37.3 +1.1
baz=282,SNR=20
**GSI Gunungsitoli** 53.63 239 P P 21 20 37.4 +0.3
**G30M tAoh Zrail Nji** 53.66 29 P P 21 20 37.1 +0.4
baz=280,SNR=21
**BTK Batken** 53.67 296 P P 21 20 36.5 -0.8
**F30M Barrier River** 53.71 28 P P 21 20 38.1 +1.0
baz=280,SNR=13
**K29M Barlow Dome** 53.71 33 P P 21 20 37.8 +0.5
K29M IAmb IAmb 21 20 39.8
comp=Z,18nm,1.1s
**K29M Barlow Dome** 53.71 33 P P 21 20 38.1 +0.8
baz=281,SNR=12
**YUK4 Talbot Arm** 53.72 36 P P 21 20 38.4 +1.0
baz=282,SNR=6.4
**I30M Mount Dempster** 53.92 31 P P 21 20 39.0 +0.3
**I30M Mount Dempster** 53.92 31 P P 21 20 39.4 +0.6
baz=281,SNR=52
**YUK6 Outpost Mounta** 53.94 37 P P 21 20 40.2 +1.1
baz=283,SNR=5.6
**O29M Mount Kennedy** 53.98 37 P P 21 20 40.5 +1.2
O29M IAmb IAmb 21 20 47.3
comp=Z,22nm,1.2s
**O29M Mount Kennedy** 53.98 37 P P 21 20 40.5 +1.2
baz=283
**J30M Hart River** 54.07 32 P P 21 20 39.9 0.0
**J30M Hart River** 54.07 32 P P 21 20 40.7 +0.8
baz=282,SNR=11
**NIL Nilore** 54.34 288 P P 21 20 42.6 +0.5
NIL IAmb IAmb 21 20 50.7
comp=Z,14nm,0.7s
**NIL Nilore** 54.34 288 P P 21 20 42.6 +0.5
NIL pmax pmax
comp=Z,14nm,0.7s
**INK Inuvik** 54.42 27 P P 21 20 42.1 0.0
INK IAmb IAmb 21 20 49.1
comp=Z,24nm,1.3s
**INK Inuvik** 54.42 27 P P 21 20 42.0 -0.1
comp=Z,2.0nm,0.3s,baz=280,slow=5.0,SNR=8.1
INK LR LR 21 47 14.0
comp=Z,176nm,18.8s,baz=236,slow=40
comp=Z,2.0nm,0.3s
**INK Inuvik** 54.42 27 P P 21 20 42.6 +0.5
baz=282
**INK Inuvik** 54.42 27 P P 21 20 42.1 0.0
INK pmax pmax
comp=Z,24nm,1.3s
**GAR Garm** 54.42 295 P P 21 20 43.3 +0.5
GAR IAmb IAmb 21 20 44.3
comp=Z,26nm,1.2s
**G31M Satah River** 54.42 29 P P 21 20 42.8 +0.6
**G31M Satah River** 54.42 29 P P 21 20 42.4 +0.3
baz=282,SNR=8.5
**N30M Aishikik Lake** 54.42 36 P P 21 20 43.6 +1.2
**N30M Aishikik Lake** 54.42 36 P P 21 20 43.3 +0.9
baz=284
**F31M Tsiigehtchic** 54.51 28 P P 21 20 43.4 +0.5
F31M IAmb IAmb 21 20 51.3
comp=Z,28nm,1.3s
**F31M Tsiigehtchic** 54.51 28 P P 21 20 43.0 +0.2
baz=282
**P29M Windy Craggy** 54.55 38 P P 21 20 44.7 +1.4
P29M IAmb IAmb 21 21 01.1
comp=Z,16nm,1.0s
**P29M Windy Craggy** 54.55 38 P P 21 20 44.7 +1.4
baz=284
**P30M Million Dollar** 54.81 37 P P 21 20 46.6 +1.4
baz=284
**SVE Sverdlovsk** 54.90 318 eP P 21 20 46.2 +0.4
SVE pmax pmax
comp=Z,26nm,1.4s
SVE MLR MLR
comp=Z,416nm,14.0s
**N31M Braeburn, Yuko** 55.02 36 P P 21 20 47.9 +1.2
N31M IAmb IAmb 21 20 54.8
comp=Z,26nm,1.4s
**N31M Braeburn, Yuko** 55.02 36 P P 21 20 48.0 +1.3
baz=284,SNR=6.2
**O30N Mendenhall** 55.06 36 P P 21 20 48.0 +1.0
baz=285
**PLBC Pleasant Camp** 55.27 38 P P 21 20 49.4 +1.0
baz=285
**CHGR Chuyangaron** 55.39 295 P P 21 20 50.1 +0.3
**CHGR Chuyangaron** 55.39 295 P P 21 20 50.1 +0.3
CHGR pmax pmax
comp=Z,42nm,1.0s
**M31M Drury Creek, Y** 55.48 34 P P 21 20 50.6 +0.7
M31M IAmb IAmb 21 20 58.8
comp=Z,7.9nm,0.9s
**M31M Drury Creek, Y** 55.48 34 P P 21 20 50.7 +0.7
baz=285
**SIMJ Simiganj** 55.49 295 P P 21 20 50.6 0.0
SIMJ IAmb IAmb 21 20 52.7
comp=Z,18nm,1.0s
**WHY Whitehorse** 55.66 36 P P 21 20 52.3 +0.9
WHY IAmb IAmb 21 20 58.6
comp=Z,9.3nm,1.1s
**WHY Whitehorse** 55.66 36 P P 21 20 52.3 +0.9
baz=286
**S31K Pelican** 55.75 40 P P 21 20 52.2 +0.3
baz=287
**ARU Arti** 56.11 318 P P 21 20 54.3 -0.3
**ARU Arti** 56.11 318 P P 21 20 54.3 -0.3
comp=Z,16nm,0.9s,baz=78,slow=4.6,SNR=22
ARU LR LR 21 47 13.0
comp=Z,167nm,18.5s,baz=71,slow=38
comp=Z,16nm,0.9s
**ARU Arti** 56.11 318 d iP P 21 20 54.1 -0.5
ARU pmax pmax
comp=Z,33nm,1.2s
**ARU Arti** 56.11 318 P P 21 20 54.2 -0.3
comp=Z,26nm,1.5s
**A36M Sachs Harbour** 56.27 22 P P 21 20 55.6 +0.3
baz=286
**R32K Eaglecrest** 56.53 39 P P 21 20 58.8 +1.3
baz=288
**P32M Atlin** 56.53 37 P P 21 20 58.2 +0.6
baz=287
**S32K Killisnoo** 56.74 40 P P 21 21 00.2 +1.2
baz=288
**MMPY Sheldon Lake,** 56.76 34 P P 21 20 59.9 +0.7
MMPY IAmb IAmb 21 21 08.1
comp=Z,13nm,1.3s
**MMPY Sheldon Lake,** 56.76 34 P P 21 21 00.0 +0.9
baz=287
**P33M Teslin, Yukon** 56.77 37 P P 21 20 59.8 +0.5
P33M IAmb IAmb 21 21 01.9
comp=Z,15nm,1.1s
**P33M Teslin, Yukon** 56.77 37 P P 21 21 00.3 +1.0
baz=288,SNR=9.2
**WB0 Warramunga Arr** 56.94 188 IAmb IAmb 21 21 06.8
comp=Z,17nm,0.8s
**WRAB Tennant Creek** 57.11 188 P P 21 21 02.2 +0.2
WRAB IAmb IAmb 21 21 07.9
comp=Z,15nm,0.8s
**WRAB Tennant Creek** 57.11 188 d iP P 21 21 00.3 -1.7
WRAB pmax pmax
comp=Z,16nm,1.3s
**WR0 Warramunga Arr** 57.12 187 P P 21 21 01.6 -0.5
WR0 IAmb IAmb 21 21 07.5
comp=Z,15nm,0.8s
**WB2 Warramunga Arr** 57.12 188 P P 21 21 02.3 +0.2
**WRA Warramunga Arr** 57.12 188 P P 21 21 01.7 -0.3
**WRA Warramunga Arr** 57.12 188 P P 21 21 01.4 -0.7
comp=Z,3.6nm,0.6s,baz=3.7,slow=7.3,SNR=54
comp=Z,3.6nm,0.6s
**WRA Warramunga Arr** 57.12 188 ce P P 21 21 01.0 -1.1
WRA pmax pmax
comp=Z,4.0nm,0.6s
**KBL Kabul** 57.14 291 P P 21 21 01.8 -0.7
KBL IAmb IAmb 21 21 03.3
comp=Z,21nm,1.4s
**KBL Kabul** 57.14 291 P P 21 21 01.8 -0.7
KBL pmax pmax
comp=Z,21nm,1.5s
**QIS Mount Isa** 57.40 182 P P 21 21 03.6 -0.4
**Q32M Nakina River** 57.43 38 P P 21 21 05.2 +1.1
baz=289
**ABKAR Akbulak array** 57.68 310 P P 21 21 05.2 -0.6
**ABKAR Akbulak array** 57.68 310 P P 21 21 05.5 -0.2
ABKAR IAmb IAmb 21 21 06.6
comp=Z,15nm,1.4s
**R33M Jennings River** 57.92 37 P P 21 21 08.3 +0.8
R33M IAmb IAmb 21 21 15.1
comp=Z,11nm,1.2s
**R33M Jennings River** 57.92 37 P P 21 21 09.0 +1.5
baz=290
**U33K Whale Pass** 57.94 41 P P 21 21 08.6 +1.1
baz=290
**AKTO Aktyubinsk** 58.41 312 LR LR 21 45 27.0
comp=Z,196nm,20.5s,baz=40,slow=35
**DLBC Dease Lake** 58.71 38 P P 21 21 13.6 +0.7
DLBC IAmb IAmb 21 21 20.6
comp=Z,18nm,1.3s
**DLBC Dease Lake** 58.71 38 P P 21 21 12.9 0.0
comp=Z,4.2nm,0.9s,baz=267,slow=10,SNR=7.1
comp=Z,4.2nm,0.9s
**DLBC Dease Lake** 58.71 38 P P 21 21 13.6 +0.7
baz=291
**T35M Bob Quinn** 59.12 40 P P 21 21 17.2 +1.4
T35M IAmb IAmb 21 21 19.1
comp=Z,18nm,1.1s
**T35M Bob Quinn** 59.12 40 P P 21 21 17.2 +1.4
baz=292
**KIRV Kirov** 60.01 323 P P 21 21 21.9 +0.1
comp=Z,23nm,0.7s,baz=81,slow=4.0,SNR=14
KIRV LR LR 21 49 37.8
comp=Z,186nm,18.4s,baz=64,slow=38
comp=Z,23nm,0.7s
**KIRV Kirov** 60.01 323 d iP P 21 21 21.6 -0.2
**KBS Kingsbay** 60.51 350 P P 21 21 25.4 +0.4
**KBS Kingsbay** 60.51 350 d iP P 21 21 25.1 +0.1
KBS pmax pmax
comp=Z,30nm,1.1s
**AS01 Alice Springs** 60.84 187 P P 21 21 29.6 +1.7
**AS31 Alice Springs** 60.85 188 P P 21 21 29.1 +1.2
**ASAR Alice Springs** 60.85 188 P P 21 21 27.5 -0.5
**ASAR Alice Springs** 60.85 188 P P 21 21 27.6 -0.3
comp=Z,2.3nm,0.7s,baz=13,slow=8.4,SNR=22
comp=Z,2.3nm,0.7s
**TOAD Toad River Com** 60.87 36 P P 21 21 28.8 +1.0
baz=294
**NOR Nord** 60.94 356 i P P 21 21 27.6 -0.3
NOR IAmb IAmb 21 21 28.6
comp=Z,16nm,1.2s
**HSPB Hornsund (broa** 61.30 348 eP P 21 21 30.8 +0.5
**HRA Herat** 62.24 294 P P 21 21 37.8 +0.2
HRA IAmb IAmb 21 21 44.3
comp=Z,6.2nm,0.7s
**APA Apatity** 62.49 336 ij iP P 21 21 35.8 -2.7
APA pmax pmax
comp=Z,7.0nm,0.9s
APA MLR MLR
comp=Z,500nm,16.0s
**RES Resolute Bay** 62.57 14 P P 21 21 39.0 +0.1
RES IAmb IAmb 21 21 39.8
comp=Z,12nm,1.1s
**RES Resolute Bay** 62.57 14 P P 21 21 37.6 -1.3
comp=Z,7.6nm,1.0s,baz=321,slow=5.9,SNR=4.9
RES LR LR 21 51 08.4
comp=Z,109nm,19.6s,baz=13,slow=38
comp=Z,7.6nm,1.0s
**RES Resolute Bay** 62.57 14 P P 21 21 39.0 +0.1
RES pmax pmax
comp=Z,12nm,1.1s
**WRKA Warakurna** 63.00 193 P P 21 21 43.6 +1.2
**NOUC Port Laguerre** 63.53 154 P P 21 21 46.8 +0.9
**BELG Belogornoye** 63.55 317 P P 21 21 44.5 -1.2
comp=Z,20nm,0.8s,baz=46,slow=1.3,SNR=11
BELG LR LR 21 49 31.7
comp=Z,98nm,21.5s,baz=59,slow=36
comp=Z,20nm,0.8s
**BELG Belogornoye** 63.55 317 d iP P 21 21 45.4 -0.3
BELG pmax pmax
comp=Z,8.0nm,1.2s
**DZM Mont Dzumac** 63.55 154 LR LR 21 47 18.1
comp=Z,141nm,20.9s,baz=336,slow=34
**ARCES ARCESS Array B** 63.81 339 P P 21 21 47.6 +0.3
ARCES IAmb IAmb 21 21 48.0
comp=Z,17nm,1.2s
**ARCES ARCESS Array B** 63.81 339 P P 21 21 47.1 -0.1
comp=Z,5.2nm,0.8s,baz=56,slow=7.8,SNR=17
ARCES LR LR 21 52 49.5
comp=Z,108nm,19.5s,baz=56,slow=39
comp=Z,5.2nm,0.8s
**INKA Innaminka** 64.53 180 P P 21 21 53.6 +1.3
**MSVF Nonsavu** 64.75 141 LR LR 21 47 52.8
comp=Z,86nm,18.9s,baz=334,slow=34
**SGF Sodankyl** 64.76 337 P P 21 21 53.4 0.0
**NEEM North Greenlan** 65.44 3 i P P 21 21 58.1 0.0
NEEM IAmb IAmb 21 21 59.0
comp=Z,27nm,1.2s
**DAG Danmarks Havn** 65.65 355 P P 21 21 58.7 -0.4
**DAG Danmarks Havn** 65.65 355 i P P 21 21 58.7 -0.4
**JOF Joensuu** 65.75 332 eP P 21 22 00.3 +0.3
**NLWA Neilton Lookou** 66.84 47 P P 21 22 07.5 +0.2
**MOS Moscow** 67.01 323 eP P 21 22 06.3 -1.8
MOS pmax pmax
comp=Z,36nm,1.0s
**LCRK Leigh Creek** 67.28 183 P P 21 22 09.2 -0.8
**VRH Novokhopyorsk** 67.33 318 eP P 21 22 09.1 -1.1
VRH pmax pmax
comp=Z,15nm,0.6s
**OBN Obninsk** 67.86 323 LR LR 21 52 45.0
comp=Z,72nm,20.4s,baz=4.5,slow=37
**OBN Obninsk** 67.86 323 d iP P 21 22 12.6 -0.9
OBN e 21 22 39.6
OBN e 21 24 40.8
OBN ePPP PPP 21 26 23.7
OBN pmax pmax
comp=Z,40nm,1.5s
OBN MLR MLR
comp=Z,224nm,15.0s
**OBN Obninsk** 67.86 323 P P 21 22 13.2 -0.3
comp=Z,18nm,0.6s
**KULLO Kullorsuaq** 67.90 5 i P P 21 22 08.7 -4.8
KULLO IAmb IAmb 21 22 09.6
comp=Z,15nm,0.3s
**LPSR Galich'ya Gora** 68.06 320 eP P 21 22 13.0 -1.8
LPSR pmax pmax
comp=Z,30nm,1.0s
**VORR Voronezh** 68.42 319 eP P 21 22 15.6 -1.4
VORR pmax pmax
comp=Z,30nm,0.4s
**KEF Keuruu** 68.59 333 eP P 21 22 18.0 +0.1
**FINES FINESS Array B** 68.61 332 P P 21 22 17.7 -0.4

FINES **FINESS Array B** 68.61 332 P **P** 21 22 18.1 0.0
comp=Z,8.2nm,0.7s,baz=52,slow=6.9,SNR=23
FINES LR LR 21 54 53.9
comp=Z,155nm,18.4s,baz=38,slow=38
comp=Z,8.2nm,0.7s
FORT **Forrest** 68.65 192 P **P** 21 22 19.6 +1.0
STKA **Stephens Creek** 68.65 180 P **P** 21 22 18.5 -0.1
comp=Z,4.7nm,1.0s,baz=350,slow=11,SNR=3.9
STKA LR LR 21 51 42.3
comp=Z,90nm,21.4s,baz=20,slow=35
comp=Z,4.7nm,1.0s
VSR **Storozhevoye** 68.69 319 *e*P **P** 21 22 16.5 -2.2
VSR pmax pmax
comp=Z,10.0nm,0.6s
B08A **Colville Reser** 68.95 45 P **P** 21 22 21.1 +0.6
B08A IAmb IAmb 21 22 28.9
comp=Z,9.5nm,1.5s
BUCK **Buck Mountain** 69.01 50 P **P** 21 22 21.6 +0.6
I03D **Drain, OR** 69.05 51 P **P** 21 22 21.7 +0.6
DBO **Dodson Butte** 69.42 51 P **P** 21 22 23.9 +0.4
DBO IAmb IAmb 21 22 26.1
comp=Z,17nm,1.5s
I04A **Tendick Farm,** 69.57 50 P **P** 21 22 25.3 +0.8
I04A IAmb IAmb 21 22 26.5
comp=Z,13nm,1.1s
KSXB **Camp Six Broad** 69.70 53 P **P** 21 22 26.4 +1.0
KSXB IAmb IAmb 21 22 33.3
comp=Z,19nm,1.3s
L02F **Cave Junction** 69.74 52 P **P** 21 22 26.1 +0.7
KRMB **Red Mountain** 69.84 53 P **P** 21 22 26.6 +0.3
KRMB IAmb IAmb 21 22 33.6
comp=Z,12nm,1.4s
HUMO **Hull Mountain** 69.87 51 P **P** 21 22 27.0 +0.7
G06A **Carlson Farm,** 69.88 48 P **P** 21 22 27.2 +0.8
G06A IAmb IAmb 21 22 33.8
comp=Z,19nm,1.5s
JMIC **Jan Mayen** 70.00 350 LR LR 21 54 19.7
comp=Z,25nm,18.9s,baz=10.0,slow=37
VSU **Vasula** 70.24 329 *d* iP **P** 21 22 28.2 0.0
VSU pmax pmax
comp=Z,36nm,1.3s
NEW **Newport** 70.24 44 P **P** 21 22 29.1 +0.7
baz=304
NEW **Newport** 70.24 44 P **P** 21 22 28.9 +0.4
KHMM **Horse Mountain** 70.30 53 P **P** 21 22 29.5 +0.4
KHMM IAmb IAmb 21 22 32.0
comp=Z,19nm,1.3s
PINE **Pine Mountain** 70.47 50 P **P** 21 22 31.1 +0.9
YBH **Yreka Blue Hor** 70.49 52 P **P** 21 22 31.2 +1.0
YBH IAmb IAmb 21 22 32.8
comp=Z,9.1nm,1.2s
YBH **Yreka Blue Hor** 70.49 52 P **P** 21 22 31.2 +1.0
YBH pmax pmax
comp=Z,9.0nm,1.3s
J05D **Fort Rock, OR** 70.57 50 P **P** 21 22 31.8 +1.0
J05D IAmb IAmb 21 22 33.3
comp=Z,16nm,1.2s
SUMG **Summit** 70.59 360 P **P** 21 22 30.6 +0.1
SUMG **Summit** 70.59 360 P **P** 21 22 30.7 +0.1
SUMG pmax pmax
comp=Z,22nm,1.1s
SUMG **Summit** 70.59 360 *i* P **P** 21 22 31.0 +0.4
SUMG IAmb IAmb 21 22 32.7
comp=Z,18nm,1.0s
E09A **Wood Farm, Sta** 70.63 46 P **P** 21 22 31.7 +0.9
KVAR **Kislovodsk Arr** 70.64 311 LR LR 21 53 53.6
comp=Z,180nm,20.9s,baz=268,slow=36
KBZ **Khabaz** 70.64 310 P **P** 21 22 31.1 +0.2
comp=Z,12nm,0.9s,baz=104,slow=3.1,SNR=11
KBZ LR LR 21 54 42.5
comp=Z,152nm,19.0s,baz=45,slow=37
comp=Z,12nm,0.9s
KBZ **Khabaz** 70.64 310 *d* iP **P** 21 22 31.1 +0.2
KBZ pmax pmax
comp=Z,24nm,1.1s
KIV **Kislovodsk** 70.64 311 P **P** 21 22 31.4 +0.2
KIV **Kislovodsk** 70.64 311 ⇑P **P** 21 22 31.0 -0.1
KIV **Kislovodsk** 70.64 311 *e*P **P** 21 22 31.0 -0.1
KIV pmax pmax
comp=Z,39nm,1.1s
KIV MLR MLR
comp=Z,145nm,18.0s
KIV **Kislovodsk** 70.64 311 P **P** 21 22 31.3 +0.2
comp=Z,40nm,0.9s,comp=Z,416nm
SHA1 **Shidzhatmaz** 70.78 311 *c e* P **P** 21 22 32.7 +0.6
I07A **Izee** 71.18 49 P **P** 21 22 35.1 +0.7
O02D **Mt. Diablo Mer** 71.28 54 P **P** 21 22 35.8 +0.8
GNI **Garni** 71.44 307 LR LR 21 54 26.5
comp=Z,148nm,21.9s,baz=71,slow=36
BMO **Blue Mountains** 72.05 47 P **P** 21 22 40.0 +0.5
BMO IAmb IAmb 21 22 41.6
comp=Z,10nm,1.1s
BMO **Blue Mountains** 72.05 47 P **P** 21 22 40.1 +0.5
BMO pmax pmax
comp=Z,10.0nm,1.2s
MNK **Minsk** 72.27 326 *i* P **P** 21 22 41.3 +0.8
MNK *i* 21 25 22.7
MNK *i* PPP PPP 21 27 06.1
MNK *i* S **S** 21 32 04.9 +2.4
MNK *i* SS **SS** 21 36 45.3 +5.9
MNK pmax pmax
comp=Z,21nm,0.9s
MNK pmax pmax
comp=E,9.0nm,0.9s
MNK pmax pmax
comp=N,10.0nm,0.7s
MNK MLR MLR
comp=N,95nm,17.0s
MNK MLR MLR
comp=Z,197nm,14.0s
MNK MLR MLR
comp=E,67nm,14.0s
ISAL **Salakas** 72.35 327 *e*P **P** 21 22 42.2 +1.1
WVOR **Wild Horse Val** 72.63 50 P **P** 21 22 43.4 +0.2
WVOR **Wild Horse Val** 72.63 50 P **P** 21 22 43.4 +0.2
WVOR pmax pmax
comp=Z,8.0nm,1.3s
SOC **Sochi** 72.64 312 *e*P **P** 21 22 42.2 -0.8
SOC *e* 21 25 23.3
SOC *e* PPP PPP 21 27 07.6
SOC *e* S **S** 21 32 07.8 +0.6
SOC *e* SS **SS** 21 36 45.6 -0.1
SOC MLR MLR
comp=Z,135nm,16.0s
MSO **Missoula** 72.83 44 P **P** 21 22 44.5 +0.3
baz=306
ANN **Anapa** 73.27 314 *e*P P 21 22 52.2 +5.5
ANN *e* PP sP 21 22 55.9 +1.6
ANN pmax pmax
comp=Z,86nm,1.1s
PABE **Paberze** 73.32 328 *e*P **P** 21 22 46.9 +0.1
LYMT **Lyon Mountain** 73.65 43 P **P** 21 22 49.4 +0.2
MFID **Camas Ranch** 73.75 48 P **P** 21 22 50.1 +0.4
FFC **Flin Flon** 73.76 33 P **P** 21 22 49.8 +0.4
FFC IAmb IAmb 21 22 50.7
comp=Z,22nm,1.2s
FFC **Flin Flon** 73.76 33 P **P** 21 22 49.8 +0.4
FFC pmax pmax
comp=Z,22nm,1.2s
HFS **Hagfors** 73.89 336 LR LR 21 58 14.2
comp=Z,247nm,18.8s,baz=30,slow=38
NB2 **NORSAR Subarra** 73.99 337 P **P** 21 22 50.1 -0.6
comp=Z,32nm,1.4s,baz=39,slow=6.2
NB2 **NORSAR Subarra** 73.99 337 P **P** 21 22 50.1 -0.6
baz=39,slow=6.2
NOA **NORSAR Array B** 73.99 337 P **P** 21 22 50.5 -0.3
comp=Z,18nm,0.5s,baz=277,slow=8.0,SNR=4.4
NOA LR LR 21 58 59.1
comp=Z,198nm,19.0s,baz=30,slow=39
CMB **Columbia Colle** 74.02 54 IAmb IAmb 21 22 58.6
comp=Z,18nm,1.4s
AK03 **Malin Array Si** 74.04 322 P **P** 21 22 50.6 -0.5
AKASG **Malin Array Be** 74.06 322 P **P** 21 22 51.2 0.0
AKASG **Malin Array Be** 74.06 322 P **P** 21 22 50.8 -0.4
comp=Z,6.9nm,0.4s,baz=48,slow=6.2,SNR=55
AKASG LR LR 21 57 07.9
comp=Z,132nm,20.1s,baz=48,slow=37
comp=Z,6.9nm,0.4s
AKBB **Malin Array Si** 74.06 322 *d* iP **P** 21 22 50.7 -0.5
AKBB pmax pmax
comp=Z,38nm,1.5s
AKBB **Malin Array Si** 74.06 322 P **P** 21 22 50.7 -0.5
GURO **Guroymak-BITLI** 74.07 306 P **P** 21 22 52.0 +0.3
GURO IAmb IAmb 21 22 53.5
comp=Z,18nm,1.4s

KIEV **Kiev** 74.07 322 P **P** 21 22 50.9 -0.4
KIEV **Kiev** 74.07 322 ⇓P **P** 21 22 51.0 -0.4
KIEV **Kiev** 74.07 322 P **P** 21 22 50.9 -0.4
KIEV pmax pmax
comp=Z,18nm,0.6s
KIEV **Kiev** 74.07 322 P **P** 21 22 49.9 -1.4
comp=Z,111nm,0.7s
KIEV pP **pP** 21 22 56.3 -0.5
comp=Z,111nm,0.7s
ICESG **Greenland Ices** 74.09 0 *i* P **P** 21 22 52.2 +0.7
ICESG IAmb IAmb 21 22 53.4
comp=Z,22nm,1.2s
NORES **NORESS Array B** 74.13 337 P **P** 21 22 52.3 +0.9
EGMT **Eagleton** 74.37 41 IAmb IAmb 21 22 54.9
comp=Z,26nm,1.2s
EGMT **Eagleton** 74.37 41 P **P** 21 22 53.4 +0.2
baz=308
DLMT **Dillon** 74.45 45 P **P** 21 22 54.5 +0.7
DLMT IAmb IAmb 21 22 55.7
comp=Z,19nm,1.1s
HLID **Hailey** 74.50 47 P **P** 21 22 54.6 +0.4
HLID **Hailey** 74.50 47 P **P** 21 22 54.6 +0.4
baz=307
MI30 **MI30,Zelenitsa** 74.53 323 P **P** 21 22 53.1 -0.9
SUW **Suwalki** 74.66 327 *e*P **P** 21 22 55.0 +0.3
BOZ **Bozeman (W)** 74.85 44 P **P** 21 22 56.2 +0.1
BOZ IAmb IAmb 21 22 58.0
comp=Z,12nm,1.1s
BOZ **Bozeman (W)** 74.85 44 P **P** 21 22 56.4 +0.3
baz=308
BOZ **Bozeman (W)** 74.85 44 P **P** 21 22 56.3 +0.1
BOZ pmax pmax
comp=Z,12nm,1.1s
KVN **Kaiserville** 74.91 52 P **P** 21 22 56.9 +0.3
KVN IAmb IAmb 21 22 58.8
comp=Z,15nm,1.4s
KVN **Kaiserville** 74.91 52 P **P** 21 22 56.9 +0.3
KVN pmax pmax
comp=Z,15nm,1.4s
MI29 **MI29, Kamyanyy** 74.91 322 P **P** 21 22 54.7 -1.5
LHV **Little Huntoon** 75.11 53 P **P** 21 22 58.7 +1.2
LHV IAmb IAmb 21 23 00.4
comp=Z,19nm,1.2s
NVAR **Mina Array Bea** 75.14 53 P **P** 21 22 58.1 +0.1
NVAR **Mina Array Bea** 75.14 53 P **P** 21 22 58.9 +0.9
comp=Z,3.1nm,1.0s,baz=283,slow=6.7,SNR=10.0
NVAR LR LR 21 53 38.7
comp=Z,126nm,18.4s,baz=280,slow=34
comp=Z,3.1nm,1.0s
RNPP9 **Sopachiv** 75.19 324 P **P** 21 22 56.7 -1.1
NV11 **Mina Array Sit** 75.23 53 P **P** 21 22 58.9 +0.4
RNPP8 **Varash** 75.26 324 P **P** 21 22 57.7 -0.5
LUBAR **Lubar, Ukraine** 75.28 322 P **P** 21 22 57.3 -1.0
RNPP5 **Staryi Chortor** 75.32 324 P **P** 21 22 58.0 -0.5
YHL **Hebgen Lake** 75.56 44 P **P** 21 23 00.8 +0.4
ELK **Elko** 75.68 50 P **P** 21 23 01.6 +0.5
ELK **Elko** 75.68 50 P **P** 21 23 01.9 +0.8
comp=Z,1.2nm,0.8s,baz=360,slow=2.5,SNR=4.8
comp=Z,1.2nm,0.8s
ELK **Elko** 75.68 50 P **P** 21 23 01.6 +0.5
ELK pmax pmax
comp=Z,9.0nm,1.5s
YHH **Holmes Hill** 75.78 44 P **P** 21 23 02.1 +0.4
DSP **Deep Springs** 75.97 54 P **P** 21 23 03.4 +0.9
ARPR **Arapgir-MALATY** 76.10 309 P **P** 21 23 03.7 +0.3
YPP **Pitchstone Pla** 76.13 45 P **P** 21 23 04.1 +0.4
VES **Vestal, Richgr** 76.14 56 P **P** 21 23 03.9 +0.4
baz=306
SORM **Soroca** 76.15 320 ⇓P **P** 21 22 02.9 -0.5
SORM **Soroca** 76.15 320 P **P** 21 22 02.8 -0.5
SORM **Soroca** 76.15 320 P **P** 21 23 02.1 -1.2
comp=Z,18nm,1.1s
MZP **Montezuma Peak** 76.15 53 P **P** 21 23 04.6 +0.7
H17A **Grant Village** 76.18 44 P **P** 21 23 05.4 +1.4
H17A **Grant Village** 76.18 44 P **P** 21 23 04.7 +0.7
baz=309
YMP **Mirror Lake Pl** 76.20 44 P **P** 21 23 05.1 +1.0
YMP IAmb IAmb 21 23 23.4
comp=Z,17nm,1.4s
PKM **Mcpherson Peak** 76.21 57 P **P** 21 23 04.3 +0.1
baz=306
IMW **Indian Meadow** 76.29 45 P **P** 21 23 05.0 +0.4
IMW IAmb IAmb 21 23 07.3
comp=Z,11nm,1.1s
FLWY **Flagg Ranch** 76.31 45 P **P** 21 23 05.4 +0.8
FLWY IAmb IAmb 21 23 13.1
comp=Z,20nm,1.3s
NDNU **Novodnistrovsk** 76.34 321 P **P** 21 23 03.1 -1.3
FXWY **Fox Creek** 76.40 45 P **P** 21 23 05.5 +0.4
FXWY IAmb IAmb 21 23 07.8
comp=Z,11nm,1.2s
HORU **Horodok** 76.40 322 P **P** 21 23 04.6 -0.1
CWC **Cottonwood Cre** 76.45 55 P **P** 21 23 06.3 +0.9
baz=306
RLMT **Red Lodge** 76.45 43 P **P** 21 23 05.9 +0.5
RLMT IAmb IAmb 21 23 07.7
comp=Z,14nm,1.4s
RLMT **Red Lodge** 76.45 43 P **P** 21 23 05.8 +0.4
baz=309
GMN **Gold Mountain** 76.47 53 P **P** 21 23 06.8 +1.1
HVU **Hansel Valley** 76.53 48 P **P** 21 23 06.8 +1.0
HVU IAmb IAmb 21 23 07.5
comp=Z,11nm,1.4s
HVU **Hansel Valley** 76.53 48 P **P** 21 23 06.9 +1.0
HVU pmax pmax
comp=Z,11nm,1.4s
TPAW **Teton Pass** 76.53 45 P **P** 21 23 06.7 +0.7
DY2G **Dye2** 76.56 3 *i* P **P** 21 23 05.9 +0.3
DY2G IAmb IAmb 21 23 07.6
comp=Z,50nm,1.5s
LOHW **Long Hollow** 76.66 45 P **P** 21 23 07.7 +1.1
MILM **Milestii Mici** 76.70 319 ⇑P **P** 21 23 06.9 +0.4
MILM **Milestii Mici** 76.70 319 P **P** 21 23 06.9 +0.4
FRB **Frobisher Bay** 76.74 13 LR LR 22 00 14.4
comp=Z,121nm,19.4s,baz=20,slow=38
KMPD **K-Podol'skiy** 76.82 322 P **P** 21 23 05.9 -1.2
KMPD P **pP** 21 23 06.2 -6.5
R11B **Troy Canyon, C** 76.91 52 P **P** 21 23 08.6 +0.5
R11B IAmb IAmb 21 23 14.8
comp=Z,16nm,1.4s
R11B **Troy Canyon, C** 76.91 52 P **P** 21 23 08.4 +0.3
baz=307
Q12A **Willow Creek R** 76.96 51 P **P** 21 23 09.2 +0.8
Q12A IAmb IAmb 21 23 27.0
comp=Z,6.4nm,0.8s
MPMC **Manual Prospec** 77.06 55 P **P** 21 23 09.8 +0.8
baz=307
LAO **LASA Array** 77.07 41 P **P** 21 23 09.1 +0.4
baz=311
LVV **L'vov** 77.14 324 *e*P **P** 21 23 09.4 +0.5
FURC **Furnace Creek,** 77.22 54 P **P** 21 23 10.6 +1.0
baz=307
TPNV **Topopah Spring** 77.33 53 P **P** 21 23 10.9 +0.5
baz=307
HWUT **Hardware Ranch** 77.35 47 P **P** 21 23 11.1 +0.6
HWUT IAmb IAmb 21 23 12.8
comp=Z,18nm,1.4s
SNCC **San Nicolas Is** 77.36 58 P **P** 21 23 11.0 +0.5
baz=306
EDW2 **Edwards Air Fo** 77.42 56 P **P** 21 23 11.2 +0.3
baz=307
DUG **Dugway, Tooele** 77.49 49 P **P** 21 23 12.1 +0.9
DUG **Dugway, Tooele** 77.49 49 P **P** 21 23 11.6 +0.4
baz=308
DUG **Dugway, Tooele** 77.49 49 P **P** 21 23 12.1 +0.9
DUG pmax pmax
comp=Z,7.0nm,1.2s
GWY **Greenwater Val** 77.51 54 P **P** 21 23 12.1 +0.6
GWY IAmb IAmb 21 23 14.2
comp=Z,9.5nm,1.2s
BORG **Borgarnes** 77.52 352 LR LR 21 59 27.3
comp=Z,66nm,19.7s,baz=352,slow=37
KSV **Kosov** 77.67 322 P **P** 21 23 12.5 +0.6
KSV **Kosov** 77.67 322 P **P** 21 23 11.0 -0.9
STNU **Staruna** 77.68 323 P **P** 21 23 10.5 -1.4
MORS **Morshin** 77.68 323 P **P** 21 23 12.9 +1.0
MORS **Morshin** 77.68 323 P **P** 21 23 11.4 -0.5
TCUT **Toone Canyon** 77.75 48 P **P** 21 23 13.3 +0.5
TCUT IAmb IAmb 21 23 14.3
comp=Z,7.7nm,1.0s
BW06 **Boulder Array** 77.78 45 P **P** 21 23 13.1 +0.2
baz=310
PD31 **Pinedale Array** 77.78 45 P **P** 21 23 13.2 +0.3
PDAR **Pinedale Array** 77.78 45 P **P** 21 23 12.9 0.0
PDAR **Pinedale Array** 77.78 45 P **P** 21 23 13.2 +0.3

comp=Z,1.9nm,0.9s,baz=298,slow=3.2,SNR=16
comp=Z,1.9nm,0.9s
VLDR **Vladesti** 77.79 319 ⇓P **P** 21 23 13.0 +0.4
PRN **Pahroc Range** 77.81 52 P **P** 21 23 13.9 +0.8
SHIU **Shidnytsya** 77.87 324 P **P** 21 23 12.4 -0.6
PSUT **Pine Spring** 77.87 51 P **P** 21 23 14.2 +0.7
VARL **Varlezi** 77.88 319 ⇑P **P** 21 23 13.0 0.0
KWP **Kalwaria Pacla** 77.90 324 *e*P **P** 21 23 14.1 +0.9
KWP **Kalwaria Pacla** 77.90 324 P **P** 21 23 13.0 -0.2
KWP **Kalwaria Pacla** 77.90 324 P **P** 21 23 13.0 -0.2
comp=Z,25nm,1.1s
GSC **Goldstone, Bar** 77.95 55 P **P** 21 23 14.8 +1.0
baz=307
BFSC **Mount Baldy Ra** 78.03 56 P **P** 21 23 14.8 +0.5
baz=307
BUR08 **Bucovina Ar. S** 78.06 322 IAmb IAmb 21 23 15.6
comp=Z,14nm,1.3s
BURAR **Bucovina Array** 78.07 322 P **P** 21 23 14.3 +0.1
BURAR IAmb IAmb 21 23 21.2
comp=Z,7.6nm,0.7s
BURAR **Bucovina Array** 78.07 322 ⇓P **P** 21 23 14.6 +0.3
BURAR **Bucovina Array** 78.07 322 P **P** 21 23 14.5 +0.3
TESR **Tescani** 78.09 320 ⇓P **P** 21 23 14.5 +0.2
TESR **Tescani** 78.09 320 P **P** 21 23 13.8 -0.5
comp=Z,28nm,0.7s
NEGRR **Negrea** 78.10 319 ⇓P **P** 21 23 14.8 +0.5
CFR **Carcaliu** 78.20 318 ⇑P **P** 21 23 14.9 0.0
CFR **Carcaliu** 78.20 318 P **P** 21 23 14.8 0.0
TPGR **Topolog** 78.26 318 ⇓P **P** 21 23 15.6 +0.3
MEZ **Mezhgor'ye** 78.29 323 P **P** 21 23 14.9 -0.5
SHPR **Sheep Range** 78.29 53 P **P** 21 23 16.3 +0.5
RAKU **Rahkiv** 78.31 322 P **P** 21 23 13.9 -1.6
VRI **Vrincioaia** 78.48 319 ⇓P **P** 21 23 16.9 +0.4
VRI **Vrincioaia** 78.48 319 P **P** 21 23 16.8 +0.4
VRI **Vrincioaia** 78.48 319 P **P** 21 23 17.1 +0.6
comp=Z,6.6nm,0.6s
PLOR5 **Plostina Array** 78.53 320 P **P** 21 23 16.8 0.0
comp=Z,17nm,1.1s
PLOR **Plostina** 78.53 320 ⇑P **P** 21 23 17.1 +0.3
PLOR **Plostina** 78.53 320 P **P** 21 23 17.0 +0.3
PLOR3 **Plostina Array** 78.53 320 P **P** 21 23 16.0 -0.8
comp=Z,8.9nm,2.0s
ELS **Elsinore Mount** 78.54 57 P **P** 21 23 18.1 +1.0
ELS IAmb IAmb 21 23 24.3
comp=Z,15nm,1.2s
HEC **Hector,Ludlow** 78.55 55 P **P** 21 23 17.9 +0.8
baz=307
SPBR **Spulber** 78.55 319 ⇑P **P** 21 23 17.8 +1.0
KOLS **Kolonicke sedl** 78.59 324 *e*P P 21 23 22.3 +5.3
KOLS pmax pmax
comp=Z,5.0nm,0.7s
KOLS **Kolonicke sedl** 78.59 324 *e*P P 21 23 22.2 +5.2
BR131 **Keskin Array S** 78.59 311 P **P** 21 23 17.4 +0.1
BR131 **Keskin Array S** 78.59 311 P **P** 21 23 17.4 +0.1
BR131 pmax pmax
comp=Z,5.0nm,0.8s
BRTR **Keskin Array B** 78.59 311 P **P** 21 23 16.1 -1.2
BRTR **Keskin Array B** 78.59 311 P **P** 21 23 17.2 -0.2
comp=Z,1.4nm,0.5s,baz=87,slow=3.9,SNR=12
BRTR LR LR 22 00 10.3
comp=Z,76nm,21.6s,baz=84,slow=37
comp=Z,1.4nm,0.5s
BRTR **Keskin Array B** 78.59 311 *c e* P **P** 21 23 17.7 +0.3
BRTR pmax pmax
comp=Z,2.0nm,0.5s
TLBR **Topalu** 78.67 318 ⇓P **P** 21 23 17.3 -0.1
BSRR **Bisoca** 78.70 319 ⇓P **P** 21 23 19.0 +1.2
KORU **Korolevo** 78.72 323 P **P** 21 23 16.4 -1.3
TURR **Turia** 78.72 320 ⇑P **P** 21 23 17.6 -0.2
MUKU **Mukachevo** 78.73 323 P **P** 21 23 17.2 -0.5
COVR **Voineasa-Covas** 78.77 320 ⇓P **P** 21 23 18.5 +0.4
CCUT **Cedar City** 78.78 51 P **P** 21 23 19.3 +0.7
OJC **Ojcow** 78.81 326 *e*P **P** 21 23 18.6 +0.4
OJC **Ojcow** 78.81 326 P **P** 21 23 17.1 -1.1
OJC **Ojcow** 78.81 326 P **P** 21 23 17.1 -1.1
OJC pmax pmax
comp=Z,28nm,1.2s
OJC **Ojcow** 78.81 326 P **P** 21 23 17.7 -0.5
comp=Z,17nm,0.9s
OZUR 78.81 320 ⇓P **P** 21 23 19.1 +0.8
HOLU **Holmets** 78.82 324 P **P** 21 23 18.0 -0.2
TRSU **Trosnyk** 78.85 323 P **P** 21 23 19.3 +0.9
TRSU **Trosnyk** 78.85 323 P **P** 21 23 19.7 +1.3
ARCR **ARCALIA** 78.86 322 ⇓P **P** 21 23 18.5 0.0
BOSR **Bodos** 78.89 320 ⇓P **P** 21 23 19.9 +1.1
BERU **Beregovo** 78.90 323 P **P** 21 23 19.1 +0.4
MSU **Marysvale** 78.92 50 P **P** 21 23 20.2 +0.9
MSU **Marysvale** 78.92 50 P **P** 21 23 20.2 +0.9
V12A **Nelson** 78.96 54 P **P** 21 23 19.9 +0.4
GMRC **Granite Mounta** 79.02 55 P **P** 21 23 20.2 +0.4
baz=308
ISR **Istrita** 79.08 319 P **P** 21 23 18.7 -1.1
ISR **Istrita** 79.08 319 P **P** 21 23 18.7 -1.1
ICOR **Ion Corvin** 79.08 318 ⇓P **P** 21 23 20.0 +0.3
DOPR **Dopca** 79.10 320 ⇓P **P** 21 23 20.9 +1.0
MLR **Muntele Rosu** 79.14 320 P **P** 21 23 20.1 -0.2
MLR **Muntele Rosu** 79.14 320 LR LR 22 01 43.0
comp=Z,251nm,18.2s,baz=44,slow=38
MLR **Muntele Rosu** 79.14 320 ⇓P **P** 21 23 20.4 +0.1
MLR **Muntele Rosu** 79.14 320 P **P** 21 23 20.1 -0.2
MLR pmax pmax
comp=Z,10.0nm,1.2s
NIE **Niedzica** 79.16 325 *e*P **P** 21 23 20.5 +0.4
RDMU **Red Mountain** 79.18 47 P **P** 21 23 21.4 +0.8
RDMU IAmb IAmb 21 23 22.8
comp=Z,25nm,1.2s
P17A **Butcher Ranch,** 79.18 48 P **P** 21 23 21.8 +1.1
P17A IAmb IAmb 21 23 22.9
comp=Z,15nm,1.1s
LCMT **Little Creek M** 79.19 52 P **P** 21 23 21.5 +0.8
PFO **Pinyon Flats O** 79.20 56 P **P** 21 23 21.8 +1.0
PFO **Pinyon Flats O** 79.20 56 P **P** 21 23 20.2 -0.6
comp=Z,0.7nm,0.3s,baz=337,slow=5.8,SNR=6.0
comp=Z,0.7nm,0.3s
PFO **Pinyon Flats O** 79.20 56 P **P** 21 23 21.6 +0.8
baz=308
TPFO **Pinon Flats** 79.21 56 P **P** 21 23 21.3 +0.5
baz=308
MTPU **Mount Pierson** 79.21 50 P **P** 21 23 21.6 +0.6
BELC **Belle Mtn. Jos** 79.27 56 P **P** 21 23 21.8 +0.6
baz=308
P18A **Preston Nutter** 79.38 48 P **P** 21 23 22.7 +0.8
P18A IAmb IAmb 21 23 24.2
comp=Z,16nm,1.3s
KNB **Kanab** 79.45 51 P **P** 21 23 23.1 +0.9
KNB IAmb IAmb 21 23 32.2
comp=Z,18nm,1.3s
KNB **Kanab** 79.45 51 P **P** 21 23 23.1 +0.9
KNB pmax pmax
comp=Z,18nm,1.3s
SRU **San Rafael Swe** 79.54 49 P **P** 21 23 22.9 +0.2
SRU IAmb IAmb 21 23 24.5
comp=Z,11nm,1.1s
SRU **San Rafael Swe** 79.54 49 P **P** 21 23 22.9 +0.2
SRU pmax pmax
comp=Z,11nm,1.1s
K22A **Casper** 79.56 44 P **P** 21 23 22.4 -0.2
baz=311
ULM **Lac du Bonnet** 79.56 33 P **P** 21 23 22.2 -0.1
ULM IAmb IAmb 21 23 23.1
comp=Z,10nm,1.0s
ULM **Lac du Bonnet** 79.56 33 P **P** 21 23 21.1 -1.2
comp=Z,7.2nm,1.0s,baz=323,slow=5.6,SNR=7.0
comp=Z,7.2nm,1.0s
MDND **Maddock** 79.59 37 P **P** 21 23 23.0 +0.5
baz=315
VOIR 79.64 320 ⇓P **P** 21 23 24.0 +1.0
VOIR 79.64 320 P **P** 21 23 23.9 +1.0
MONP2 **Monument Peak** 79.66 57 P **P** 21 23 24.6 +1.2
baz=308
LANS **Liptovska Anna** 79.73 325 *e*P **P** 21 23 24.5 +1.2
LANS pmax pmax
comp=Z,6.0nm,1.3s
LANS **Liptovska Anna** 79.73 325 *e*P **P** 21 23 24.5 +1.2
IRM **Iron Mountain** 79.73 55 P **P** 21 23 23.7 +0.1
baz=308
KECS **Kecovo** 79.74 324 *e*P **P** 21 23 26.5 +3.2
KECS **Kecovo** 79.74 324 *e*P **P** 21 23 26.5 +3.2
MARR **Marisel-Cluj** 79.76 322 ⇓P **P** 21 23 23.8 +0.3
BC3 **Big Chuckawall** 79.84 55 P **P** 21 23 24.4 +0.2
baz=308
CBX **Cerro Bola** 79.85 57 P **P** 21 23 24.6 +0.3
CBX IAmb IAmb 21 23 26.1
comp=Z,32nm,1.5s

**DRGR** 79.88 322 ⇓P P 21 23 24.6 +0.4
**DRGR** 79.88 322 P P 21 23 24.6 +0.4
**KSP Ksiaz** 79.88 328 *e*P P 21 23 24.6 +0.5
**ARR Arges** 79.90 320 ⇓P P 21 23 25.2 +0.9
**RSSD Black Hills** 79.93 42 P P 21 23 24.8 +0.1
baz=313
**W13A Hualapai Mount** 79.97 54 P P 21 23 25.2 +0.2
**IKP In-Ko-Pah, Jac** 80.02 57 P P 21 23 26.8 +1.6
baz=306
**SWSC Sam W. Stewart** 80.04 56 P P 21 23 26.5 +1.2
baz=308
**MORC Moravsky Berou** 80.13 327 P P 21 23 24.9 -0.5
MORC IAmb IAmb 21 23 27.1
comp=Z,12nm,1.2s
**MORC Moravsky Berou** 80.13 327 *e*P P 21 23 25.6 +0.1
**MORC Moravsky Berou** 80.13 327 P P 21 23 24.9 -0.5
MORC pmax pmax
comp=Z,12nm,1.2s
**YUH Yuha Desert** 80.14 57 IAmb IAmb 21 23 34.0
comp=Z,20nm,1.4s
**U15A North Rim** 80.15 52 P P 21 23 26.2 +0.1
U15A IAmb IAmb 21 23 33.3
comp=Z,20nm,1.5s
**HMU Henry Mountain** 80.16 50 P P 21 23 26.4 +0.3
HMU IAmb IAmb 21 23 45.0
comp=Z,14nm,1.2s
**O20A White River Ci** 80.23 47 P P 21 23 25.8 -0.6
**O20A White River Ci** 80.23 47 P P 21 23 26.8 +0.4
baz=311
**DPC Dobruska-Polom** 80.23 328 *e*P P 21 23 26.7 +0.7
DPC *e*pP sP 21 23 32.4 -1.2
DPC AMS AMS 22 03 20.0
comp=Z,400nm,14.8s
**DPC Dobruska-Polom** 80.23 328 *e*P P 21 23 26.7 +0.7
DPC *e* 21 23 32.4
DPC MLR MLR
comp=Z,400nm,14.8s
**KRLC Kraliky** 80.24 327 *e*P P 21 23 26.7 +0.7
KRLC *e*pP sP 21 23 32.0 -1.7
**KRLC Kraliky** 80.24 327 *e*P P 21 23 26.7 +0.7
KRLC *e* 21 23 32.0
**UPC Upice** 80.25 328 AMS AMS 22 03 30.0
comp=Z,300nm,13.7s
**PDMCI Parker Dam,Lak** 80.30 54 P P 21 23 27.3 +0.7
baz=309
**RAYN Ar Rayn** 80.38 292 P P 21 23 27.1 -0.1
RAYN IAmb IAmb 21 23 33.5
comp=Z,7.2nm,0.8s
**RAYN Ar Rayn** 80.38 292 P P 21 23 27.1 -0.1
RAYN pmax pmax
comp=Z,7.0nm,0.8s
**PSZ Piszkesteto** 80.42 324 P P 21 23 27.2 +0.1
PSZ IAmb IAmb 21 23 29.0
comp=Z,26nm,1.3s
**PSZ Piszkesteto** 80.42 324 ⇓P P 21 23 27.9 +0.8
**PSZ Piszkesteto** 80.42 324 P P 21 23 27.2 +0.1
PSZ pmax pmax
comp=Z,26nm,1.3s
**RAR Rarotonga** 80.43 126 LR LR 21 54 47.8
comp=Z,135nm,19.3s,baz=354,slow=32
**VYHS Vyhne** 80.50 325 *e*P P 21 23 27.9 +0.5
VYHS pmax pmax
comp=Z,14nm,1.4s
**VYHS Vyhne** 80.50 325 *e*P P 21 23 27.9 +0.5
**ESJX Sierra Juarez** 80.52 57 P P 21 23 28.8 +0.7
ESJX IAmb IAmb 21 23 31.0
comp=Z,20nm,1.5s
**GLA Glamis** 80.62 56 P P 21 23 28.9 +0.5
baz=308
**JAVC Velka Javorina** 80.75 326 *e*P P 21 23 30.2 +1.4
**GZR Gura Zlata** 80.82 321 ⇓P P 21 23 29.4 +0.1
**GZR Gura Zlata** 80.82 321 P P 21 23 29.4 +0.1
**BRG Berggiesshubel** 80.83 329 *e*P P 21 23 29.6 +0.5
BRG Amp 21 23 30.6
comp=Z,7.1nm,1.0s
**BRG Berggiesshubel** 80.83 329 P P 21 23 35.0 +5.9
BRG Amp 21 23 35.7
comp=Z,4.1nm,0.8s
**PVCC Panska Ves** 80.84 329 AMS AMS 22 04 30.0
comp=Z,300nm,11.2s
**CLL Collm** 80.88 330 IAmb IAmb 21 23 30.3
comp=Z,21nm,1.3s
**CLL Collm** 80.88 330 ⇓*i*P P 21 23 29.1 -0.3
comp=Z,20nm,1.3s
CLL *i* pP pP 21 23 34.6 -0.4
**CLL Collm** 80.88 330 ⇓*i*P P 21 23 29.1 -0.3
CLL pmax pmax
comp=Z,20nm,1.3s
CLL MLR MLR
comp=Z,300nm,16.6s
**VRAC Vranov** 80.89 327 *e*P P 21 23 29.8 +0.3
**VRAC Vranov** 80.89 327 LR LR 22 05 14.9
comp=Z,126nm,18.7s,baz=30,slow=40
**VRAC Vranov** 80.89 327 ⇓P P 21 23 30.0 +0.4
**VRAC Vranov** 80.89 327 P P 21 23 29.9 +0.4
**SURR Surduc** 80.90 322 ⇓P P 21 23 29.9 +0.4
**AGMN Agassiz Nation** 81.00 35 P P 21 23 29.4 -0.6
AGMN IAmb IAmb 21 23 30.6
comp=Z,9.5nm,1.1s
**AGMN Agassiz Nation** 81.00 35 P P 21 23 30.3 +0.2
baz=317
**N23A Red Feather La** 81.05 45 P P 21 23 31.2 +0.4
N23A IAmb IAmb 21 23 33.1
comp=Z,22nm,1.3s
**N23A Red Feather La** 81.05 45 P P 21 23 31.4 +0.6
baz=312
**KRUC Moravsky** 81.17 327 *e*P P 21 23 31.2 +0.3
**GOPC GO Pecny, Ondr** 81.22 328 *e*P P 21 23 31.8 +0.6
GOPC AMS AMS 22 04 20.0
comp=Z,300nm,12.5s
**GOPC GO Pecny, Ondr** 81.22 328 *e*P P 21 23 31.8 +0.6
GOPC MLR MLR
comp=Z,300nm,12.5s
**PRA Prague** 81.24 328 AMS AMS 22 04 00.0
comp=Z,300nm,15.4s
**BZS Buzias** 81.25 322 ⇓P P 21 23 31.2 -0.3
**BZS Buzias** 81.25 322 P P 21 23 31.1 -0.3
**PRU Pruhonice** 81.26 328 *e*P P 21 23 32.1 +0.7
PRU *e*pP PcP 21 23 37.4 -0.2
PRU AMS AMS 22 04 00.0
comp=Z,400nm,12.2s
**PRU Pruhonice** 81.26 328 *e*P P 21 23 32.1 +0.7
PRU *e* 21 23 37.4
PRU MLR MLR
comp=Z,400nm,12.2s
**Y14A Wickenburg** 81.26 54 P P 21 23 32.0 +0.2
**WUAZ Wupatki** 81.31 52 P P 21 23 32.4 +0.2
WUAZ IAmb IAmb 21 23 34.5
comp=Z,12nm,1.2s
**WUAZ Wupatki** 81.31 52 P P 21 23 33.0 +0.9
baz=310
**SMCO Snowmass** 81.60 47 P P 21 23 34.5 +0.5
**MMAI Mount Meron Ar** 81.69 305 P P 21 23 34.4 +0.2
comp=Z,4.0nm,0.8s,baz=20,slow=2.7,SNR=4.6
MMAI LR LR 22 02 11.1
comp=Z,110nm,21.9s,baz=348,slow=37
comp=Z,4.0nm,0.8s
**MDVR Moldovita** 81.79 321 ⇓P P 21 23 34.1 -0.3
**ZVC Zvikov** 81.83 328 AMS AMS 22 04 40.0
comp=Z,300nm,13.0s
**X16A Lo Mia Camp, P** 81.96 53 P P 21 23 36.0 +0.3
**ISCO Idaho Springs** 81.97 46 P P 21 23 36.1 +0.3
**ISCO Idaho Springs** 81.97 46 P P 21 23 36.0 +0.2
baz=312
**ISCO Idaho Springs** 81.97 46 P P 21 23 36.1 +0.3
ISCO pmax pmax
comp=Z,11nm,1.5s
**MVCO Mesa Verde** 81.99 49 P P 21 23 36.1 +0.3
baz=311
**URZ Urewera** 82.06 152 LR LR 21 53 35.2
comp=Z,104nm,21.9s,baz=50,slow=31
**BALJ Balqa** 82.12 304 P P 21 23 36.2 -0.2
BALJ IAmb IAmb 21 23 43.1
comp=Z,9.3nm,0.7s
**RONA Rosalia, Austr** 82.23 326 *i* P P 21 23 37.5 +0.9
comp=Z,12nm,1.2s,SNR=6.8
**CKRC Cesky Krumlov** 82.25 328 *e*P P 21 23 37.1 +0.4
CKRC *e*PCP PcP 21 23 42.3 +0.3
CKRC AMS AMS 22 05 10.0
comp=Z,200nm,10.4s
**CKRC Cesky Krumlov** 82.25 328 *e*P P 21 23 37.1 +0.4
CKRC *e* 21 23 42.3
CKRC MLR MLR
comp=Z,200nm,10.4s
**MORH Mrgy, Hungar** 82.25 324 ⇓P P 21 23 36.4 -0.3

**CONA Conrad Observa** 82.25 326 *i* P P 21 23 37.5 +0.7
comp=Z,11nm,1.4s,SNR=6.6
**KHC Kasperske Hory** 82.32 328 IAmb IAmb 21 23 43.8
comp=Z,6.9nm,0.8s
**KHC Kasperske Hory** 82.32 328 *e*P P 21 23 37.4 +0.3
KHC *e*pP PcP 21 23 42.8 +0.5
KHC AMS AMS 22 05 10.0
comp=Z,300nm,13.0s
**KHC Kasperske Hory** 82.32 328 *d i*P P 21 23 37.2 +0.1
KHC pmax pmax
comp=Z,26nm,1.4s
**FRGS Fruska Gora** 82.46 322 ⇓P P 21 23 38.2 +0.3
**GERES GERESS Array B** 82.49 328 P P 21 23 37.7 -0.4
comp=Z,1.5nm,0.6s,baz=134,slow=7.6,SNR=14
comp=Z,1.5nm,0.6s
**S22A 4UR Ranch, Cre** 82.63 48 P P 21 23 38.5 -0.8
S22A IAmb IAmb 21 23 41.8
comp=Z,9.6nm,1.2s
**S22A 4UR Ranch, Cre** 82.63 48 P P 21 23 39.4 +0.2
baz=312
**Q24A Divide** 82.80 46 P P 21 23 40.3 +0.2
baz=313
**GRFO Grafenberg** 82.86 330 P P 21 23 40.2 +0.4
**GRFO Grafenberg** 82.86 330 P P 21 23 40.2 +0.4
GRFO pmax pmax
comp=Z,23nm,1.2s
**ARSA Arzberg** 82.91 326 *i* P P 21 23 40.6 +0.4
comp=Z,7.4nm,1.4s
**EKA Eskdalemuir Ar** 82.95 340 P P 21 23 40.3 +0.1
comp=Z,2.9nm,0.9s,baz=27,slow=5.9,SNR=5.2
comp=Z,2.9nm,0.9s
**MOA Molln** 83.01 327 *i* P P 21 23 41.1 +0.4
comp=Z,9.5nm,1.4s
**OGNE Ogallala** 83.18 43 P P 21 23 42.2 +0.4
baz=314
**EYMN Ely** 83.19 33 P P 21 23 41.4 -0.2
baz=320
**BIOA Bad Ischl, Aus** 83.40 327 *e*P P 21 23 43.3 +0.5
comp=Z,4.2nm,0.5s,SNR=6.7
**SDCO Great Sand Dun** 83.41 47 P P 21 23 42.7 -0.6
SDCO IAmb IAmb 21 23 45.4
comp=Z,6.8nm,1.1s
**SDCO Great Sand Dun** 83.41 47 P P 21 23 43.3 0.0
baz=313
**SOKA Soboth** 83.57 326 *i* P P 21 23 43.5 -0.2
comp=Z,15nm,1.2s,SNR=14
**TUC Tucson** 83.73 54 P P 21 23 45.4 +0.6
**TUC Tucson** 83.73 54 P P 21 23 45.6 +0.8
baz=310
**TUC Tucson** 83.73 54 P P 21 23 45.4 +0.6
TUC pmax pmax
comp=Z,4.0nm,1.1s
**OBKA Obir** 83.91 326 *i* P P 21 23 45.3 -0.1
comp=Z,6.3nm,1.4s
**ECSD EROS Data Cent** 84.00 38 IAmb IAmb 21 23 46.8
comp=Z,13nm,1.1s
**ECSD EROS Data Cent** 84.00 38 P P 21 23 45.5 -0.3
baz=317
**KBA Koelnbreinsper** 84.00 327 *i* P P 21 23 46.0 0.0
comp=Z,6.5nm,1.1s
**LESA Schwarzleotal** 84.02 328 *i* P P 21 23 45.8 -0.2
comp=Z,14nm,1.5s
**EIL Elat** 84.10 303 LR LR 22 03 33.4
comp=Z,71nm,18.2s,baz=69,slow=37
**MYKA Terra Mystica** 84.22 327 *i* P P 21 23 46.1 -0.9
comp=Z,9.3nm,1.4s
**T25A Trinidad** 84.46 47 P P 21 23 48.6 0.0
**T25A Trinidad** 84.46 47 P P 21 23 48.9 +0.3
baz=313
**WATA Walderalm** 84.56 328 *e*P P 21 23 48.3 -0.5
comp=Z,2.4nm,0.8s
**WTTA Wattenberg** 84.59 328 *e*P P 21 23 49.3 +0.3
comp=Z,3.9nm,1.3s
**ABTA Abfaltersbach** 84.62 327 *i* P P 21 23 48.4 -0.7
comp=Z,7.9nm,1.2s
**DUN6 Lazy B Ranch** 84.66 53 P P 21 23 50.5 +0.9
**PUK Puka** 84.68 320 P P 21 23 49.4 0.0
PUK IAmb IAmb 21 23 56.4
comp=Z,7.7nm,0.7s
**ANMO Albuquerque** 84.72 50 P P 21 23 50.8 +0.9
ANMO IAmb IAmb 21 23 52.2
comp=Z,10nm,1.1s
**ANMO Albuquerque** 84.72 50 P P 21 23 50.0 +0.1
comp=Z,3.9nm,0.9s,baz=23,slow=5.4,SNR=13
comp=Z,3.9nm,0.9s
**ANMO Albuquerque** 84.72 50 P P 21 23 50.8 +0.9
baz=312
**MOTA Moosalm** 84.75 328 *i* P P 21 23 49.9 +0.2
comp=Z,9.9nm,1.3s
**RETA Reutte** 84.78 329 *i* P P 21 23 50.2 +0.3
comp=Z,11nm,1.1s
**BMRD Maredsous** 84.80 334 *d*P P 21 23 49.4 -0.4
**SQTA Sankt Quirin** 84.81 328 *i* P P 21 23 49.8 -0.2
comp=Z,3.0nm,0.7s
**FNA Florina** 84.82 319 IAmb IAmb 21 23 59.0
comp=Z,6.1nm,0.8s
**PPT Papeete** 84.91 116 LR LR 21 54 36.0
comp=Z,63nm,19.9s,baz=11,slow=31
**STAL STALIGIAL** 84.91 327 IAmb IAmb 21 23 50.1
comp=Z,14nm,1.3s
**CIMO Cimolais** 84.99 327 IAmb IAmb 21 23 50.5
comp=Z,7.1nm,1.3s
**BFO Black Forest** 85.09 331 P P 21 23 51.1 -0.2
BFO IAmb IAmb 21 23 57.6
comp=Z,11nm,0.9s
**BFO Black Forest** 85.09 331 P P 21 23 51.1 -0.2
BFO pmax pmax
comp=Z,11nm,0.9s
**FETA Feichten** 85.16 328 *i* P P 21 23 51.7 -0.2
comp=Z,5.1nm,1.2s
**DAVA Damuels** 85.30 329 *i* P P 21 23 52.7 +0.1
comp=Z,13nm,1.4s
**SCHQ Schefferville** 85.31 16 P P 21 23 51.9 -0.4
comp=Z,6.9nm,0.9s,baz=337,slow=8.8,SNR=3.8
SCHQ LR LR 22 03 52.8
comp=Z,94nm,21.1s,baz=320,slow=37
comp=Z,6.9nm,0.9s
**L34A Svendsen Farm,** 85.42 39 P P 21 23 52.6 -0.4
**121A Cookes Peak, D** 85.50 52 P P 21 23 54.4 +0.5
121A IAmb IAmb 21 23 56.0
comp=Z,19nm,1.4s
**121A Cookes Peak, D** 85.50 52 P P 21 23 53.9 +0.1
baz=312
**ECH Echery** 85.64 331 IAmb IAmb 21 24 00.2
comp=Z,6.3nm,0.8s
**COWI Conover** 85.64 32 P P 21 23 53.6 -0.5
COWI IAmb IAmb 21 23 54.9
comp=Z,8.1nm,1.0s
**FUORN Ofenpass-Fuorn** 85.68 328 IAmb IAmb 21 24 01.0
comp=Z,8.2nm,0.8s
**DAVOX Davos/Dischmat** 85.71 329 LR LR 22 06 05.9
comp=Z,180nm,18.2s,baz=3.0,slow=38
**RTBA Rita Blanca** 85.92 47 P P 21 23 56.1 +0.3
RTBA IAmb IAmb 21 23 57.3
comp=Z,10nm,1.1s
**SCIA Stein Center** 87.03 37 P P 21 24 01.3 +0.4
baz=320
**FDMO Fiordimonte** 87.25 325 IAmb IAmb 21 24 08.5
comp=Z,12nm,1.0s
**NRCA Norcia** 87.39 325 IAmb IAmb 21 24 08.8
comp=Z,8.3nm,0.9s
**H43A Windswept, Lux** 87.53 33 P P 21 24 03.9 +0.6
**MNTX Cornudas Mount** 87.57 51 P P 21 24 04.6 +0.8
baz=313
**MSTX Muleshoe** 87.61 48 P P 21 24 04.2 +0.2
baz=314
**AMTX Amarillo** 87.62 47 P P 21 24 04.1 0.0
AMTX IAmb IAmb 21 24 10.7
comp=Z,10.0nm,1.2s
**AMTX Amarillo** 87.62 47 P P 21 24 03.6 -0.4
baz=315
**VLDQ Val d'Or** 88.44 25 P P 21 24 06.8 -0.7
**VHRN Van Horn** 88.44 52 P P 21 24 08.3 +0.2
**WMOK Wichita Mounta** 89.39 45 P P 21 24 12.4 0.0
WMOK IAmb IAmb 21 24 13.8
comp=Z,12nm,1.4s
**WMOK Wichita Mounta** 89.39 45 P P 21 24 12.8 +0.4
baz=316
**WMOK Wichita Mounta** 89.39 45 P P 21 24 12.4 0.0
WMOK pmax pmax
comp=Z,12nm,1.4s
**P40A Paris** 89.41 38 P P 21 24 13.1 +0.8
P40A IAmb IAmb 21 24 13.7
comp=Z,12nm,1.1s
**TX31 Lajitas Ar. Si** 90.27 52 P P 21 24 16.9 +0.3
**TXAR Lajitas Array** 90.27 52 P P 21 24 16.6 0.0
**TXAR Lajitas Array** 90.27 52 P P 21 24 17.2 +0.5
comp=Z,2.2nm,1.0s,baz=298,slow=2.7,SNR=16
TXAR LR LR 22 02 09.9
comp=Z,44nm,19.2s,baz=330,slow=34
comp=Z,2.2nm,1.0s
**TXAR Lajitas Array** 90.27 52 P P 21 24 16.7 0.0
**ABTX Abilene, Hawle** 90.41 47 P P 21 24 16.9 -0.2
ABTX IAmb IAmb 21 24 18.8
comp=Z,12nm,1.1s
**ABTX Abilene, Hawle** 90.41 47 P P 21 24 17.7 +0.5
baz=316
**SADO Sadowa** 90.73 27 LR LR 22 06 46.2
comp=Z,67nm,20.8s,baz=324,slow=37
**VAE Valguarnera** 90.89 320 LR LR 22 09 35.7
comp=Z,135nm,18.4s,baz=15,slow=38
**CCM Cathedral Cave** 90.95 39 P P 21 24 19.4 -0.1
baz=321
**TRQ Mont Tremblant** 91.05 24 P P 21 24 19.9 0.0
TRQ IAmb IAmb 21 24 21.0
comp=Z,12nm,1.1s
**SFIN Lafayette** 91.10 35 P P 21 24 20.0 -0.2
baz=324
**LMQ La Malbaie** 91.14 21 P P 21 24 20.3 +0.1
**BRDY Brady** 91.75 48 P P 21 24 24.1 +0.6
**WHTX Lake Whitney,** 92.15 46 P P 21 24 25.3 +0.1
baz=317
**MIAR Mount Ida** 92.42 42 P P 21 24 26.1 -0.2
MIAR IAmb IAmb 21 24 27.8
comp=Z,10nm,1.1s
**MIAR Mount Ida** 92.42 42 P P 21 24 26.3 -0.2
baz=319
**MIAR Mount Ida** 92.42 42 P P 21 24 26.2 -0.2
MIAR pmax pmax
comp=Z,10.0nm,1.2s
**LONY Lake Ozonia** 92.46 25 P P 21 24 25.6 -0.8
baz=332
**F62A Pittston Farm,** 92.75 21 P P 21 24 27.1 -0.6
**G62A West of Eustis** 93.20 22 P P 21 24 29.1 -0.7
**KEST Kesra** 94.78 322 LR LR 22 12 44.7
comp=Z,129nm,18.1s,baz=332,slow=39
**U49A Red Boiling Sp** 94.82 36 P P 21 24 36.9 -0.5
U49A IAmb IAmb 21 24 39.3
comp=Z,3.0nm,0.7s
**V52A Sevierville** 96.39 35 P P 21 24 45.2 +0.6
**TKL Tuckaleechee C** 96.46 35 LR LR 22 09 07.2
comp=Z,68nm,21.0s,baz=330,slow=36
**ESDC Sonseca Array** 97.08 334 P Pdif 21 24 47.5 -0.3
comp=Z,0.4nm,0.7s,baz=47,slow=38,SNR=2.5
ESDC LR LR 22 15 04.0
comp=Z,108nm,18.7s,baz=18,slow=40
comp=Z,0.4nm,0.7s
**MAW Mawson** 119.52 206 PKP **PKiKP** 21 30 04.0 0.0
comp=Z,0.8nm,0.4s,baz=24,slow=6.9,SNR=1.8
**DBIC Dimbokro** 126.04 317 PKP **PKiKP** 21 30 19.4 +0.7
comp=Z,3.3nm,0.7s,baz=79,slow=3.4,SNR=4.5
**QSPA South Pole Qui** 126.88 180 PKP **PKPdf** 21 30 18.0 -0.3
comp=Z,2.4nm,0.9s,baz=140,slow=1.4,SNR=11
**ELIB Princess Elisa** 133.40 202 *d*PKPdf **PKiKP** 21 30 31.6 -0.2
**LPAZ La Paz** 146.87 59 PKPbc **PKPbc** 21 30 58.6 -0.4
comp=Z,9.7nm,0.7s,baz=358,slow=4.3,SNR=29
**H03N2 Juan Fernandez** 147.29 96 T T 00 15 34.2
baz=291,slow=76,SNR=516
**H03N3 Juan Fernandez** 147.31 96 T T 00 15 33.6
baz=291,slow=76,SNR=618
**H03N1 Juan Fernandez** 147.31 96 T T 00 15 36.4
baz=291,slow=76,SNR=502
**H03S2 Juan Fernandez** 147.42 96 T T 00 16 03.2
baz=286
**H03S3 Juan Fernandez** 147.43 96 T T 00 16 03.0
baz=286
**H03S1 Juan Fernandez** 147.44 96 T T 00 16 01.6
baz=286
**PLCA Paso Flores** 155.20 108 PKPab **PKPab** 21 31 32.9 -0.6
comp=Z,3.0nm,1.1s,baz=241,slow=4.4,SNR=3.2
**BDFB Brasilia** 157.12 23 PKPab **PKPab** 21 31 41.0 -1.2
comp=Z,0.9nm,0.3s,baz=72,slow=3.2,SNR=3.5

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*IDC* ***10*** *21:36:19.1±3.3,29°.41S×177°.44W,h412km±36km, mb2.9/3, mbtmp4.0/6, Error ellipse: s-maj=34.4km s-min=27.9km az=159.0*

**ISC 10 21:36:18.7±1.1,29°.68S±0°.07×177°.7W±0°.2,h400km,n52,**
**σ2s44/72,mb3.1/3,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **0.47** | **332** | P | **Pn** | **21 37 09.7** | **+1.2** |
| GLKZ | | | | S | S | 21 37 38.1 | -10 |
| **MXZ** | **Matakaoa Point** | **8.55** | **202** | P | **Pn** | **21 38 20.0** | **+0.2** |
| **PKGZ** | **Pakihiroa** | **8.90** | **202** | P | **Pn** | **21 38 25.0** | **+1.1** |
| **HAZ** | **Te Kaha** | **8.90** | **204** | P | **Pn** | **21 38 24.3** | **+0.5** |
| HAZ | | | | S | S | **21 40 02.9** | **-3.8** |
| **RUGZ** | **Raukumara Rang** | **9.13** | **204** | P | **P** | **21 38 27.0** | **+0.4** |
| RUGZ | | | | S | S | 21 40 03.8 | -7.9 |
| **TWGZ** | **Tauwhareparae** | **9.22** | **202** | P | **Pn** | **21 38 31.8** | **+4.2** |
| TWGZ | | | | S | **S** | **21 40 12.1** | **-1.3** |
| **OUZ** | **Omahuta** | **9.22** | **231** | P | **P** | **21 38 27.8** | **+0.3** |
| **TKGZ** | **Te Karaka** | **9.50** | **202** | P | **Pn** | **21 38 33.4** | **+2.7** |
| TKGZ | | | | S | **S** | **21 40 17.5** | **-1.6** |
| **MWZ** | **Matawai** | **9.51** | **204** | P | **P** | **21 38 30.6** | **-0.2** |
| MWZ | | | | S | **S** | **21 40 15.1** | **-4.4** |
| **URZ** | **Urewera** | **9.60** | **205** | P | **Pn** | **21 38 35.6** | **+3.7** |
| | 14nm,0.3s,baz=338,slow=4.9,SNR=40 | | | | | | |
| URZ | | | | S | **S** | **21 40 18.2** | **-2.9** |
| | 3.1nm,0.3s,baz=137,slow=21,SNR=5.5 | | | | | | |
| **URZ** | **Urewera** | **9.60** | **205** | P | **P** | **21 38 31.8** | **+0.2** |
| URZ | | | | S | **S** | **21 40 17.8** | **-3.3** |
| **RAGZ** | **Rawiri** | **9.70** | **204** | P | **Pn** | **21 38 34.8** | **+1.7** |
| **RIGZ** | **Rimuhau** | **9.77** | **202** | P | **P** | **21 38 35.0** | **+1.4** |
| **PRGZ** | **Paritu Road** | **9.93** | **201** | P | Pn | 21 38 41.2 | +5.4 |
| **RTZ** | **Ruatahuna** | **9.96** | **205** | P | **P** | **21 38 36.2** | **+0.5** |
| RTZ | | | | S | **S** | **21 40 26.1** | **-2.5** |
| **MHGZ** | **Mahia Peninsul** | **10.13** | **200** | P | **P** | **21 38 39.0** | **+1.4** |
| MHGZ | | | | S | **S** | **21 40 31.9** | **-0.2** |
| **MTHZ** | **Maungataniwha** | **10.22** | **205** | P | **Pn** | **21 38 40.6** | **+1.5** |
| MTHZ | | | | S | **S** | **21 40 32.7** | **-1.2** |
| **TLZ** | **Tolley Road** | **10.31** | **211** | P | Pn | 21 38 46.2 | +6.1 |
| **NMHZ** | **Naumai** | **10.45** | **204** | P | **Pn** | **21 38 44.5** | **+2.7** |
| NMHZ | | | | S | **S** | **21 40 39.8** | **+1.2** |
| **HIZ** | **Hauiti** | **10.77** | **213** | P | **Pn** | **21 38 47.7** | **+2.2** |
| **MCHZ** | **McNeill Hill** | **10.79** | **204** | P | **Pn** | **21 38 49.8** | **+4.0** |
| MCHZ | | | | S | **S** | **21 40 45.4** | **-0.2** |
| **CKHZ** | **Cape Kidnapper** | **10.86** | **202** | P | **Pn** | **21 38 50.9** | **+4.5** |
| **KWHZ** | **Kaweka Forest** | **10.87** | **205** | P | **Pn** | **21 38 49.1** | **+2.3** |
| KWHZ | | | | S | **S** | **21 40 44.2** | **-3.2** |
| **NTVZ** | **North Tongarir** | **10.89** | **209** | P | **Pn** | **21 38 49.8** | **+2.8** |
| **TMVZ** | **Te Maari** | **10.89** | **208** | P | **Pn** | **21 38 50.1** | **+3.2** |
| **NNVZ** | **North Ngauruho** | **10.94** | **209** | P | **Pn** | **21 38 50.6** | **+3.0** |
| **OTVZ** | **Oturere** | **10.95** | **208** | P | **Pn** | **21 38 49.3** | **+1.6** |
| **TWVZ** | **Taurewa** | **10.96** | **209** | P | **Pn** | **21 38 50.3** | **+2.4** |
| **SNVZ** | **South Ngauruho** | **10.97** | **208** | P | **Pn** | **21 38 49.7** | **+1.6** |
| **NGZ** | **Ngauruhoe** | **10.98** | **209** | P | **Pn** | **21 38 50.9** | **+2.8** |
| **KAHZ** | **Kahuranaki** | **11.04** | **202** | P | **Pn** | **21 38 51.4** | **+2.7** |
| **WHVZ** | **Whangaehu Hut** | **11.08** | **208** | P | **Pn** | **21 38 51.1** | **+1.8** |
| **KRHZ** | **Kereru** | **11.09** | **205** | P | **Pn** | **21 38 51.2** | **+2.1** |
| KRHZ | | | | S | **S** | **21 40 46.6** | **-5.0** |
| **WNVZ** | **Wahianoa** | **11.11** | **208** | P | **Pn** | **21 38 51.1** | **+1.5** |
| **MOVZ** | **Moawhango** | **11.12** | **207** | P | **Pn** | **21 38 51.8** | **+2.2** |
| MOVZ | | | | S | **S** | **21 40 49.6** | **-2.7** |
| **PKVZ** | **Pokaka** | **11.19** | **209** | P | **Pn** | **21 38 52.7** | **+2.3** |
| **PXZ** | **Pawanui** | **11.26** | **202** | P | P | 21 38 46.2 | -3.8 |
| PXZ | | | | S | **S** | **21 40 54.5** | **-0.5** |
| **VRZ** | **Vera Road** | **11.31** | **212** | P | **Pn** | **21 38 55.5** | **+3.8** |
| **PNHZ** | **Pukenui** | **11.39** | **205** | P | **Pn** | **21 38 53.7** | **+1.1** |
| PNHZ | | | | S | **S** | **21 40 55.0** | **-2.7** |
| **WPHZ** | **Waipukurau** | **11.44** | **203** | P | **P** | **21 38 52.2** | **+0.3** |
| WPHZ | | | | S | **S** | **21 40 57.6** | **-1.0** |
| **PRHZ** | **Porangahau** | **11.55** | **202** | P | **Pn** | **21 38 58.2** | **+3.8** |
| PRHZ | | | | S | **S** | **21 41 01.2** | **+0.2** |
| **TSZ** | **Takapari Road** | **11.60** | **205** | P | **Pn** | **21 38 57.3** | **+2.2** |
| **DVHZ** | **Dannevirke** | **11.74** | **204** | P | **Pn** | **21 38 58.8** | **+2.1** |
| DVHZ | | | | S | **S** | **21 41 00.6** | **-4.2** |
| **PRWZ** | **Pori Road** | **12.03** | **204** | P | **Pn** | **21 39 02.7** | **+2.6** |
| PRWZ | | | | S | **S** | **21 41 09.1** | **-1.7** |
| **BFZ** | **Birch Farm** | **12.05** | **203** | P | **Pn** | **21 39 02.7** | **+2.4** |
| BFZ | | | | S | **S** | **21 41 08.8** | **-2.3** |
| **TIWZ** | **Tintock** | **12.26** | **204** | P | **Pn** | **21 39 05.0** | **+2.3** |
| TIWZ | | | | S | **S** | **21 41 12.8** | **-2.6** |
| **HOWZ** | **Holdsworth Sta** | **12.50** | **205** | P | **Pn** | **21 39 06.7** | **+1.2** |
| HOWZ | | | | S | **S** | **21 41 16.1** | **-4.0** |
| **MSVF** | **Nonsavu** | **12.52** | **341** | P | **P** | **21 39 03.7** | **-0.6** |
| | 9.3nm,0.9s,baz=163,slow=13,SNR=7.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.17** | **294** | P | **P** | **21 39 43.5** | **-0.5** |
| | 2.7nm,0.5s,baz=135,slow=17,SNR=6.1 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **43.44** | **266** | P | | **P** | **21 43 46.0** | **+1.6** |
| | 0.4nm,0.5s,baz=99,slow=6.4,SNR=9.9 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.37** | **271** | P | | **P** | **21 43 52.4** | **+0.7** |
| | 0.5nm,0.5s,baz=111,slow=7.8,SNR=7.6 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.75** | **57** | P | | **P** | **21 48 39.9** | **-2.4** |
| | 0.5nm,0.8s,baz=201,slow=4.8,SNR=12 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |

*UCR **10** 21:43:11.2±0.6,9˚96N×86˚17W,h29km±3km,MW4.5*
*CATAC **10** 21:43:12.0±0.8,10˚04N×86˚12W,h12km±6km,ML3.7*

**ISC 10 21:43:13.2**±1.6,**10˚02N**±0˚07×**86˚09W**±0˚07,**h24**km,**n29**,
σ0§62/34,**Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **INDI** | **Punta indio, G** | **0.60** | **105** | *i* P | | **Pb** | **21 43 24.5** | **-0.6** |
| INDI | | | | *i* S | | **Sb** | **21 43 33.8** | **+0.6** |
| INDI | | | | IAML | | | 21 43 43.6 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **NICO** | **Nicoya** | **0.64** | **80** | *e*P | | **Pb** | **21 43 25.2** | **-0.6** |
| NICO | | | | *e*S | | **Sn** | **21 43 36.2** | **-0.1** |
| **DELF** | **Filadelfia** | **0.68** | **51** | *e*P | | **Pn** | **21 43 27.1** | **-0.3** |
| **ALIBA** | **Liberia Airpor** | **0.78** | **43** | *e*P | | **Pn** | **21 43 29.2** | **+0.4** |
| **ELI1** | **Hacienda Flor** | **0.82** | **40** | *e*P | | **Pb** | **21 43 28.8** | **0.0** |
| **GPS2** | **Hotel Rincn d** | **1.03** | **45** | *e*P | | **Pn** | **21 43 31.3** | **-0.9** |
| **VRLE** | **La Escondida,** | **1.05** | **43** | *e*P | | **Pn** | **21 43 31.4** | **-1.1** |
| **VORI** | **VORI** | **1.08** | **43** | *e*P | | **Pn** | **21 43 32.2** | **-0.9** |
| **COLC** | **Colonia** | **1.08** | **54** | *e*P | | **Pn** | **21 43 32.2** | **-0.8** |
| **CUI** | **Cuipilapa** | **1.11** | **55** | *e*P | | **Pn** | **21 43 32.8** | **-0.5** |
| CUI | | | | *e*S | | **Sn** | **21 43 48.7** | **+0.8** |
| **LCRUZ** | **La Cruz** | **1.15** | **23** | *e*P | | **Pb** | **21 43 34.2** | **-0.2** |
| **JTS** | **Las Juntas de** | **1.15** | **76** | *e*P | | **Pn** | **21 43 32.9** | **-1.0** |
| **TENO** | **El Achiote** | **1.29** | **58** | *e*P | | **Pn** | **21 43 34.5** | **-1.3** |
| **ARE1** | **Arenal 1** | **1.42** | **72** | *e*P | | **Pn** | **21 43 37.5** | **-0.1** |
| **SOCE** | **Pocosol** | **1.49** | **76** | *i* P | | **Pn** | **21 43 38.8** | **+0.2** |
| SOCE | | | | IAML | | | 21 44 18.1 | |
| | comp=Z,820nm,1.0s | | | | | | | |
| **SOCE** | **Pocosol** | **1.49** | **76** | *e*P | | **Pn** | **21 43 38.1** | **-0.5** |
| **JAPN** | **Al SSO del Vol** | **1.55** | **15** | *i* P | | **Pn** | **21 43 39.8** | **+0.4** |
| JAPN | | | | IAML | | | 21 43 48.2 | |
| | comp=Z,660nm,1.0s | | | | | | | |
| **COVE** | **Coope Vega, Sa** | **1.80** | **67** | *i* P | | **Pn** | **21 43 42.8** | **0.0** |
| COVE | | | | IAML | | | 21 44 27.0 | |
| | comp=Z,910nm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **2.07** | **97** | *i* P | | **Pn** | **21 43 46.9** | **+0.2** |
| LCR2 | | | | IAML | | | 21 44 33.7 | |
| | comp=Z,320nm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **2.07** | **97** | *e*P | | **Pn** | **21 43 46.8** | **0.0** |
| **ACON** | **Acoyapa** | **2.14** | **25** | *i* P | | **Pn** | **21 43 47.1** | **-0.3** |
| ACON | | | | IAML | | | 21 43 57.3 | |
| | comp=Z,340nm,1.0s | | | | | | | |
| ACON | | | | *i* S | | **Sn** | **21 44 14.6** | **+1.4** |
| **ACON** | **Acoyapa** | **2.14** | **25** | *e*P | | **Pn** | **21 43 47.1** | **-0.3** |
| **COPN** | **Copaltepe** | **2.20** | **347** | *i* P | | **Pn** | **21 43 48.3** | **-0.1** |
| COPN | | | | IAML | | | 21 44 36.7 | |
| | comp=Z,250nm,1.0s | | | | | | | |
| **HUEN** | | **2.31** | **358** | *i* P | | **Pn** | **21 43 49.6** | **-0.2** |
| HUEN | | | | IAML | | | 21 44 06.1 | |
| | comp=Z,300nm,1.0s | | | | | | | |
| **BUS1** | **Rivas** | **2.35** | **101** | *e*P | | **Pn** | **21 43 51.0** | **+0.2** |
| **BOAB** | **BOACO BROADBAN** | **2.45** | **10** | *i* P | | **Pn** | **21 43 51.3** | **-0.5** |
| BOAB | | | | IAML | | | 21 44 48.4 | |
| | comp=Z,180nm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **2.90** | **105** | *i* P | | **Pn** | **21 43 58.6** | **+0.4** |
| DRK0 | | | | IAML | | | 21 44 33.9 | |
| | comp=Z,920nm,1.0s | | | | | | | |
| **LIMN** | **Finca el Limon** | **3.04** | **355** | *i* P | | **Pn** | **21 44 00.0** | **+0.1** |
| LIMN | | | | IAML | | | 21 44 42.5 | |
| | comp=Z,120nm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **3.66** | **332** | *i* P | | **Pn** | **21 44 08.2** | **-0.3** |
| CNCH | | | | *i* S | | **Sn** | **21 44 50.8** | **-0.2** |
| CNCH | | | | IAML | | | 21 44 58.6 | |
| | comp=Z,400nm,1.0s | | | | | | | |

**IDC 10 21:44:31.0**±3.3,**5˚26S**×**134˚73E**,**h0**km,**mb3.5**/1,
**mbtmp3.4**/3,**ML3.3**/2,**MS3.2**/1,**Error ellipse:**
**s-maj=140.1km s-min=33.9km az=79.0,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.60** | **181** | Pn | | Pn | 21 47 57.3 | -1.7 |
| | 0.1nm,0.3s,baz=0.4,slow=13,SNR=8.7 | | | | | | | |
| WRA | | | | Sn | | Sn | 21 50 34.7 | -7.0 |
| | 0.2nm,0.3s,baz=358,slow=24,SNR=2.1 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **18.32** | **182** | P | | P | 21 48 47.4 | +0.5 |
| | 0.2nm,0.3s,baz=5.5,slow=11,SNR=10 | | | | | | | |
| | 1.1nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.29** | **357** | LR | | LR | 22 14 05.5 | |
| | comp=Z,25nm,19.0s,baz=149,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.46** | **324** | P | | P | 21 55 41.3 | 0.0 |
| | 0.4nm,0.8s,baz=119,slow=7.7,SNR=3.0 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |

*IDC **10** 21:49:07.2±1.6,21˚37S×178˚86W,h533km±15km,*
*mb3.3/10,mbtmp4.2/11,Error ellipse: s-maj=22.8km*
*s-min=15.4km az=138.0*
*NEIC **10** 21:49:07.5±1.7,21˚2S±0˚1×179˚0W±0˚2,h537km±9km,*
*mb4.1/35,Error ellipse: s-maj=23.5km s-min=18.1km*
*az=109.0*

**ISC 10 21:49:08.1**±0.5,**21˚41S**±0˚08×**179˚0W**±0˚1,**h550**km,**n88**,
σ1§24/89,**mb4.0**/29,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.59** | **322** | P | | **P** | **21 50 33.3** | **-1.4** |
| MSVF | 45nm,0.6s,baz=149,slow=5.3,SNR=68 | | | S | | **S** | **21 51 43.3** | **-1.9** |
| | 8.6nm,0.8s,baz=290,slow=21,SNR=1.6 | | | | | | | |
| **HAZ** | **Te Kaha** | **16.52** | **189** | P | | **P** | **21 52 31.6** | **-0.6** |
| **PKGZ** | **Pakihiroa** | **16.59** | **188** | P | | **P** | **21 52 33.9** | **+1.0** |
| **PUZ** | **Puketiti** | **16.77** | **187** | P | | **P** | **21 52 33.6** | **-0.9** |
| **TWGZ** | **Tauwhareparae** | **16.91** | **188** | P | | **P** | **21 52 37.3** | **+1.5** |
| **TOZ** | **Tahuroa Road** | **16.94** | **195** | P | | **P** | **21 52 38.0** | **+2.0** |
| **TOZ** | **Tahuroa Road** | **16.94** | **195** | P | | **P** | **21 52 37.4** | **+1.4** |
| **URZ** | **Urewera** | **17.12** | **190** | P | | **P** | **21 52 33.7** | **-4.0** |
| | 3.9nm,0.3s,baz=88,slow=2.7,SNR=7.8 | | | | | | | |
| URZ | | | | S | | **S** | **21 55 23.3** | **-5.2** |
| | 2.1nm,0.6s,baz=116,slow=18,SNR=1.0 | | | | | | | |
| **URZ** | **Urewera** | **17.12** | **190** | P | | **P** | **21 52 35.6** | **-2.1** |
| **BKZ** | **Black Stump Fm** | **18.11** | **191** | P | | **P** | **21 52 44.2** | **-2.6** |
| **TMVZ** | **Te Maari** | **18.21** | **193** | P | | **P** | **21 52 47.3** | **-0.5** |
| **OTVZ** | **Oturere** | **18.27** | **193** | P | | **P** | **21 52 46.4** | **-2.0** |
| **KWHZ** | **Kaweka Forest** | **18.37** | **191** | P | | **P** | **21 52 47.0** | **-2.2** |
| **WHVZ** | **Whangaehu Hut** | **18.40** | **193** | P | | **P** | **21 52 49.9** | **+0.2** |
| **WNVZ** | **Wahianoa** | **18.44** | **193** | P | | **P** | **21 52 49.3** | **-0.6** |
| **PKVZ** | **Pokaka** | **18.46** | **194** | P | | **P** | **21 52 54.3** | **+4.3** |
| **BFZ** | **Birch Farm** | **19.62** | **191** | P | | **P** | **21 53 00.6** | **0.0** |
| **TCW** | **Tory Channel** | **20.54** | **195** | P | | **P** | **21 53 09.6** | **+0.8** |
| **THZ** | **Tophouse** | **21.40** | **197** | P | | **P** | **21 53 17.3** | **+0.7** |
| **WHZ** | **Wether Hill Ro** | **26.64** | **201** | P | | **P** | **21 54 04.6** | **+1.5** |
| WHZ | | | | IAmb | | IAmb | 21 54 07.8 | |
| | comp=Z,3.8nm,0.9s | | | | | | | |
| **TOO** | **Toolangi** | **34.59** | **234** | P | | **P** | **21 55 12.4** | **+0.9** |
| TOO | | | | IAmb | | IAmb | 21 55 27.3 | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| **PATS** | **Pohnpei** | **35.82** | **319** | P | | P | 21 55 15.6 | -6.3 |
| **AS31** | **Alice Springs** | **43.39** | **258** | P | | **P** | **21 56 22.7** | **0.0** |
| **ASAR** | **Alice Springs** | **43.39** | **258** | P | | **P** | **21 56 21.1** | **-1.5** |
| **ASAR** | **Alice Springs** | **43.39** | **258** | P | | **P** | **21 56 24.1** | **+1.4** |
| | comp=Z,0.9nm,0.5s,baz=80,slow=8.2,SNR=17 | | | | | | | |
| ASAR | | | | PcP | | **pP** | **21 58 00.1** | **+0.3** |
| | comp=Z,0.7nm,0.8s,baz=102,slow=4.3,SNR=4.7 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.52** | **263** | P | | **P** | **21 56 23.8** | **+0.1** |
| WB0 | | | | IAmb | | IAmb | 21 56 31.7 | |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.53** | **263** | P | | **P** | **21 56 24.1** | **+0.4** |
| **WRA** | **Warramunga Arr** | **43.54** | **263** | P | | **P** | **21 56 24.4** | **+0.5** |
| **WRA** | **Warramunga Arr** | **43.54** | **263** | P | | **P** | **21 56 24.6** | **+0.8** |
| | comp=Z,0.6nm,0.3s,baz=95,slow=7.7,SNR=48 | | | | | | | |
| WRA | | | | PcP | | **pP** | **21 58 00.7** | **-0.6** |
| | comp=Z,1.1nm,1.2s,baz=96,slow=3.9,SNR=2.4 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **FORT** | **Forrest** | **48.06** | **247** | P | | **P** | **21 56 58.6** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **56.54** | **258** | P | | **P** | **21 57 59.6** | **+0.7** |
| **MBWA** | **Marble Bar** | **56.73** | **258** | P | | **P** | **21 58 00.8** | **+0.6** |
| MBWA | | | | IAmb | | IAmb | 21 58 12.8 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **MORW** | **Morawa** | **58.60** | **248** | P | | **P** | **21 58 13.1** | **+0.3** |
| MORW | | | | IAmb | | IAmb | 21 58 17.6 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.66** | **180** | P | | **P** | **21 59 17.6** | **+1.1** |
| **QSPA** | **South Pole Qui** | **68.66** | **180** | P | | **P** | **21 59 17.2** | **+0.8** |
| | comp=Z,0.9nm,0.6s,baz=339,slow=0.6,SNR=9.1 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.39** | **325** | P | | **P** | **21 59 27.4** | **+0.4** |
| | comp=Z,1.3nm,0.6s,baz=163,slow=6.6,SNR=3.4 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **HUMO** | **Hull Mountain** | **82.00** | **38** | P | | **P** | **22 00 30.9** | **+0.1** |
| **NVAR** | **Mina Array Bea** | **82.34** | **44** | P | | **P** | **22 00 33.1** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **82.34** | **44** | P | | **P** | **22 00 33.2** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=222,slow=9.3,SNR=9.1 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **O16K** | **Kokwok River B** | **82.52** | **11** | P | | **P** | **22 00 32.2** | **-0.7** |
| O16K | | | | IAmb | | IAmb | 22 00 35.2 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **N15K** | **Kwethluk River** | **82.74** | **9** | P | | **P** | **22 00 33.5** | **-0.6** |
| N15K | | | | IAmb | | IAmb | 22 00 51.3 | |
| | comp=Z,7.9nm,0.9s | | | | | | | |
| **KVN** | **Kaiserville** | **82.83** | **43** | P | | **P** | **22 00 35.0** | **-0.2** |
| **PINE** | **Pine Mountain** | **83.89** | **38** | P | | **P** | **22 00 40.2** | **-0.2** |
| PINE | | | | IAmb | | IAmb | 22 00 42.1 | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **U15A** | **North Rim** | **85.28** | **48** | P | | **P** | **22 00 48.2** | **+0.7** |
| **SUA** | **Susitna One** | **85.66** | **13** | P | | **P** | **22 00 48.3** | **-0.2** |
| SUA | | | | IAmb | | IAmb | 22 00 48.6 | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **87.12** | **179** | P | | **P** | **22 00 55.7** | **+0.3** |
| | comp=Z,1.0nm,0.8s,baz=189,slow=17,SNR=1.9 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **RND** | **Reindeer** | **87.80** | **13** | P | | **P** | **22 00 58.2** | **-0.3** |
| **TXAR** | **Lajitas Array** | **88.35** | **58** | P | | **P** | **22 01 03.0** | **+1.1** |
| **TXAR** | **Lajitas Array** | **88.35** | **58** | P | | **P** | **22 01 02.5** | **+0.6** |
| | comp=Z,1.3nm,0.9s,baz=202,slow=6.2,SNR=11 | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **88.55** | **16** | P | | **P** | **22 01 02.8** | **+0.6** |
| M27K | | | | IAmb | | IAmb | 22 01 03.4 | |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| **Q32M** | **Nakina River** | **88.83** | **22** | P | | **P** | **22 01 04.5** | **+0.9** |
| Q32M | | | | IAmb | | IAmb | 22 01 05.2 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **WRH** | **Wood River Hil** | **88.90** | **13** | P | | **P** | **22 01 03.1** | **-0.4** |
| **O30N** | **Mendenhall** | **88.93** | **20** | P | | **P** | **22 01 04.4** | **+0.6** |
| O30N | | | | IAmb | | IAmb | 22 01 05.1 | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **H21K** | **Melozitna Rive** | **89.07** | **11** | P | | **P** | **22 01 04.2** | **-0.1** |
| H21K | | | | IAmb | | IAmb | 22 01 06.0 | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **89.11** | **13** | P | | **P** | **22 01 03.8** | **-0.7** |
| **IMAR** | **Indian Mountai** | **89.22** | **10** | P | | **P** | **22 01 05.0** | **0.0** |
| **SCRK** | **Sand Creek** | **89.38** | **15** | P | | **P** | **22 01 05.0** | **-0.9** |
| SCRK | | | | IAmb | | IAmb | 22 01 08.3 | |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **89.41** | **8** | P | | **P** | **22 01 05.4** | **-0.4** |
| F19K | | | | IAmb | | IAmb | 22 01 24.1 | |
| | comp=Z,1.8nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **89.42** | **13** | P | | **P** | **22 01 05.2** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=217,slow=5.1,SNR=11 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.53** | **290** | P | | **P** | **22 01 09.8** | **+2.3** |
| | comp=Z,1.7nm,0.3s,baz=129,slow=2.9,SNR=5.5 | | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| **M29M** | **Somme Creek** | **89.55** | **18** | P | | **P** | **22 01 06.9** | **+0.2** |
| M29M | | | | IAmb | | IAmb | 22 01 08.1 | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **J25K** | **Salcha River,** | **89.61** | **14** | P | | **P** | **22 01 06.7** | **-0.2** |
| J25K | | | | IAmb | | IAmb | 22 01 07.2 | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **89.62** | **7** | P | | **P** | **22 01 06.9** | **+0.1** |
| E18K | | | | IAmb | | IAmb | 22 01 07.7 | |
| | comp=Z,3.5nm,1.1s | | | | | | | |
| **G21K** | **Allakaket** | **89.75** | **10** | P | | **P** | **22 01 07.3** | **-0.1** |
| G21K | | | | IAmb | | IAmb | 22 01 08.5 | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **J26L** | **Joseph Creek** | **89.92** | **15** | P | | **P** | **22 01 08.8** | **+0.5** |
| **PDAR** | **Pinedale Array** | **90.28** | **44** | P | | **P** | **22 01 10.5** | **-0.2** |
| | comp=Z,1.0nm,0.7s,baz=205,slow=3.4,SNR=10 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **CO03** | **El Pedregal** | **93.83** | **125** | | | pP | 22 03 23.8 | -3.6 |
| **MKAR** | **Makanchi Array** | **111.13** | **313** | PKiKP | | **PKiKP** | **22 06 38.0** | **-1.4** |
| | comp=Z,0.2nm,0.4s,baz=116,slow=3.4,SNR=6.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.64** | **349** | PKP | | **PKiKP** | **22 07 13.9** | **-1.0** |
| | comp=Z,0.8nm,0.4s,baz=13,slow=1.0,SNR=11 | | | | | | | |
| **FINES** | **FINESS Array B** | **136.37** | **343** | PKP | | **PKiKP** | **22 07 28.0** | **-0.8** |
| | comp=Z,4.8nm,1.0s,baz=122,slow=1.8,SNR=8.4 | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.34** | **330** | PKP | | PKPbc | 22 07 38.1 | -0.2 |
| | comp=Z,2.0nm,0.4s,baz=45,slow=4.0,SNR=11 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **145.99** | **4** | PKPbc | | **PKPbc** | **22 07 45.8** | **-0.4** |
| | comp=Z,2.0nm,0.6s,baz=319,slow=2.3,SNR=8.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.73** | **311** | PKPbc | | **PKiKP** | **22 07 49.7** | **-1.2** |
| | comp=Z,0.4nm,0.6s,baz=148,slow=7.3,SNR=3.8 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.42** | **298** | PKPbc | | **PKiKP** | **22 07 52.3** | **-0.2** |
| | comp=Z,1.1nm,0.5s,baz=35,slow=5.3,SNR=6.3 | | | | | | | |
| **OSTC** | **Ostas** | **148.54** | **341** | *e*PKP | | **PKiKP** | **22 07 54.9** | **+0.7** |
| **DPC** | **Dobruska-Polom** | **148.69** | **341** | *e*PKP | | **PKiKP** | **22 07 54.9** | **+0.4** |
| **ZVC** | **Zvikov** | **150.13** | **343** | *e*PKP | | **PKiKP** | **22 07 58.2** | **+0.8** |
| **KHC** | **Kasperske Hory** | **150.58** | **343** | *e*PKP | | **PKiKP** | **22 07 58.7** | **+0.3** |
| **CKRC** | **Cesky Krumlov** | **150.65** | **342** | *e*PKP | | **PKiKP** | **22 07 58.8** | **+0.2** |
| **GERES** | **GERESS Array B** | **150.80** | **343** | PKPbc | | **PKiKP** | **22 07 59.2** | **+0.2** |
| | comp=Z,1.4nm,0.6s,baz=156,slow=7.5,SNR=6.9 | | | | | | | |
| **CONA** | **Conrad Observa** | **150.96** | **339** | *i* PKiKP | | **PKiKP** | **22 07 59.7** | **+0.3** |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **151.01** | **338** | *i* PKiKP | | **PKiKP** | **22 07 59.7** | **+0.3** |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| **MOA** | **Molln** | **151.54** | **341** | *e*PKiKP | | **PKiKP** | **22 08 00.6** | **+0.2** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **LESA** | **Schwarzleotal** | **152.38** | **343** | *e*PKiKP | | **PKiKP** | **22 08 02.3** | **+0.1** |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **152.50** | **342** | *e*PKP | | **PKPbc** | **22 08 01.2** | **-1.3** |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **152.81** | **344** | *i* PKiKP | | **PKiKP** | **22 08 03.4** | **+0.1** |
| | comp=Z,1.5nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **152.87** | **345** | *e*PKiKP | | **PKiKP** | **22 08 03.5** | **+0.2** |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **153.04** | **342** | *i* PKiKP | | **PKiKP** | **22 08 03.4** | **-0.2** |
| | comp=Z,1.3nm,0.6s | | | | | | | |

*IDC **10** 21:50:35.7±1.3,37˚13N×141˚20E,h0km,mb3.6/6,*
*mbtmp3.7/10,ML3.3/3,MS3.0/1,Error ellipse:*
*s-maj=26.8km s-min=18.3km az=103.0*
*NIED **10** 21:50:38.6,37˚16N×141˚19E,h20km,MW3.6,Moment*
*Tensor Solution. s2 Moment tensor: Scale $10^{14}$Nm;*
*$M_{rr}$=2.32; $M_{\theta\theta}$=2.13; $M_{\phi\phi}$=0.19; $M_{r\theta}$=0.92; $M_{\theta\phi}$=0.65; $M_{r\phi}$=1.79;*
*Fault plane solution: $M_o$3.04000×$10^{14}$ NP1:*
*$\phi_s$=228.00000°,δ65.00000°,λ=-111.00000°. NP2:*
*$\phi_s$=91.00000°,δ32.00000°,λ=-51.00000°.*
*JMA **10** 21:50:38.6±0.1,37˚2N±0˚2×141˚2E±0˚5,h20km,MV3.6/40,*
*E OFF FUKUSHIMA PREF*
*JMA Felt I J1 at E OFF FUKUSHIMA PREF .*

**ISC 10 21:50:37.5**±2.1,**37˚15N**±0˚04×**141˚18E**±0˚06,**h11**km±13km,
**n23**,σ0§64/31,**mb3.6**/6,**Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ONAJ** | **Iwakimizuishiy** | **0.31** | **262** | P | | **Pb** | **21 50 45.3** | **+0.3** |
| ONAJ | | | | S | | **Sb** | **21 50 50.1** | **+0.1** |
| **JFK** | **Kawauchi** | **0.33** | **312** | P | | **Pb** | **21 50 45.4** | **0.0** |
| JFK | | | | *e*S | | **Sb** | **21 50 50.2** | **-0.4** |
| **JFFD** | **Fukushimafurud** | **0.50** | **264** | P | | **Pb** | **21 50 48.5** | **+0.3** |
| JFFD | | | | *e*S | | **Sb** | **21 50 55.5** | **0.0** |
| **JMST** | **Minamisoumatoc** | **0.62** | **338** | P | | **Pb** | **21 50 50.2** | **-0.1** |
| JMST | | | | S | | **Sb** | **21 50 58.7** | **-0.4** |
| **JHO** | **Hitachi** | **0.72** | **223** | *e*P | | **Pb** | **21 50 51.8** | **-0.3** |
| JHO | | | | *e*S | | **Sb** | **21 51 02.1** | **+0.1** |
| **JMM** | **Marumori** | **0.78** | **337** | P | | **Pb** | **21 50 52.9** | **-0.2** |
| JMM | | | | S | | **Sb** | **21 51 03.4** | **-0.3** |
| **JOTO** | **OTAMA OYAMA** | **0.79** | **302** | P | | **Pn** | **21 50 53.9** | **-0.7** |
| JOTO | | | | S | | **Sb** | **21 51 04.6** | **+0.6** |
| **JSB** | **Shiboa** | **1.02** | **260** | P | | **Pn** | **21 50 58.6** | **+0.8** |
| JSB | | | | S | | **Sn** | **21 51 12.6** | **+0.5** |
| **JFY** | **Yanaizu** | **1.20** | **283** | P | | **Pg** | **21 51 01.0** | **+0.4** |
| JFY | | | | *e*S | | **Sn** | **21 51 17.2** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **2.46** | **257** | Pn | | **Pn** | **21 51 17.6** | **+0.1** |
| | 2.6nm,0.5s,baz=89,slow=15,SNR=19 | | | | | | | |
| MJAR | | | | Sn | | **Sb** | **21 51 49.9** | **-2.1** |
| | 1.4nm,0.3s,baz=278,slow=7.1,SNR=8.2 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **4.18** | **196** | Pn | | **Pn** | **21 51 40.1** | **-1.0** |
| | 5.2nm,0.3s,baz=255,slow=22,SNR=2.1 | | | | | | | |
| JHJ | | | | Sn | | **Sn** | **21 52 30.6** | **+0.7** |
| | 13nm,0.3s,baz=49,slow=11,SNR=1.8 | | | | | | | |
| | 118nm,0.8s | | | | | | | |
| **ASAJ** | **Asahikawa** | **7.05** | **8** | Pn | | **Pn** | **21 52 20.0** | **-0.5** |
| | 0.4nm,0.3s,baz=333,slow=30,SNR=1.2 | | | | | | | |
| ASAJ | | | | Sn | | **Sn** | **21 53 41.3** | **+0.7** |
| | baz=47,slow=29,SNR=1.6 | | | | | | | |
| | 4.8nm,0.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.91** | **318** | Pn | | **Pn** | **21 52 59.8** | **0.0** |
| | 0.5nm,0.3s,baz=68,slow=20,SNR=12 | | | | | | | |
| | 0.7nm,0.2s | | | | | | | |
| **JCJ** | **Chichijima** | **10.06** | **175** | LR | | LR | 21 57 19.4 | |
| | comp=Z,80nm,19.9s,baz=43,slow=40 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.70** | **312** | P | | **P** | **21 58 26.1** | **+0.1** |
| | 0.9nm,0.6s,baz=100,slow=7.7,SNR=3.8 | | | | | | | |
| | 0.9nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.90** | **302** | P | | **P** | **21 58 44.0** | **0.0** |
| | 0.6nm,0.8s,baz=90,slow=9.3,SNR=6.6 | | | | | | | |
| | 0.6nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.78** | **308** | P | | **P** | **21 58 58.5** | **-0.5** |
| | 1.3nm,0.8s,baz=82,slow=8.5,SNR=8.2 | | | | | | | |
| | 1.3nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **49.50** | **32** | P | | **P** | **21 59 28.6** | **+1.0** |
| | 0.3nm,0.7s,baz=254,slow=5.6,SNR=3.4 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.15** | **188** | P | | **P** | **22 00 23.9** | **-0.4** |
| | 0.3nm,0.7s,baz=3.7,slow=7.1,SNR=5.3 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.09** | **322** | P | | **P** | **22 02 13.1** | **-0.4** |
| | 0.7nm,0.4s,baz=49,slow=6.1,SNR=4.9 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.22** | **96** | T | | T | 00 54 48.2 | |
| | baz=291,slow=76,SNR=11 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.23** | **96** | T | | T | 00 54 48.8 | |
| | baz=291,slow=76,SNR=12 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.24** | **96** | T | | T | 00 54 49.4 | |
| | baz=291,slow=76,SNR=12 | | | | | | | |

*IDC **10** 22:05:15.4±3.1,6˚11S×146˚68E,h87km±31km,mb3.4/7,*
*mbtmp3.7/10,Error ellipse: s-maj=35.1km s-min=22.5km*
*az=82.0*

**ISC 10 22:05:12.5**±0.9,**5˚92S**±0˚09×**146˚6E**±0˚2,**h52**km,**n11**,
σ1§26/12,**mb3.9/7,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.51** | **171** | P | | **Pn** | **22 06 06.7** | **+2.1** |
| | 130nm,0.3s,baz=19,slow=5.8,SNR=79 | | | | | | | |
| PMG | | | | S | | **Sn** | **22 06 43.3** | **-1.6** |
| | 218nm,0.6s,baz=215,slow=22,SNR=25 | | | | | | | |
| **CTA** | **Charters Tower** | **14.09** | **181** | P | | **Pn** | **22 08 30.2** | **+0.8** |
| | 0.4nm,0.4s,baz=3.0,slow=14,SNR=13 | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.33** | **219** | P | | **P** | **22 09 22.1** | **-0.5** |
| | 0.9nm,0.7s,baz=38,slow=11,SNR=14 | | | | | | | |
| WRA | | | | S | | Sn | 22 12 35.2 | -12 |
| | 0.4nm,0.4s,baz=37,slow=24,SNR=1.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.45** | **213** | P | | **P** | **22 09 56.0** | **-0.7** |
| | 0.6nm,0.7s,baz=29,slow=12,SNR=7.5 | | | | | | | |
| | 0.6nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **46.53** | **339** | P | | **P** | **22 13 35.7** | **+0.8** |
| | 1.1nm,0.7s,baz=151,slow=9.6,SNR=5.2 | | | | | | | |
| | 1.1nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.84** | **298** | P | | **P** | **22 14 23.8** | **+0.5** |
| | 0.7nm,0.3s,baz=113,slow=6.4,SNR=5.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ESPN | | | *i* S | **Sn** | **22 12 10.2** | **-0.2** |
| ESPN | | | IAML | | 22 12 16.6 | |
| | comp=Z,240nm,1.0s | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.34 335** | *i* P | **Pn** | **22 11 52.6** | **0.0** |
| BOAB | | | *i* S | **Sn** | **22 12 21.3** | **+0.7** |
| BOAB | | | IAML | | 22 12 22.3 | |
| | comp=Z,41nm,1.0s | | | | | |

*IDC* ***10*** *22:21:02.4±1.6,8˚.41S×116˚.47E, h0km,mb3.7/5, mbtmp3.8/6,ML3.5/1,MS3.1/3,Error ellipse: s-maj=48.4km s-min=22.3km az=60.0*

*DJA* ***10*** *22:21:04.8±0.3,8˚S±3˚×11˚7E±˚, h10km,M4.2/12,mb4.6/4, MLv4.1/12*

**ISC 10 22:21:04.4**±0.7,**8˚36S**±0˚.07×**116˚60E**±0˚.05,**h10**km,**n19,** σ0°**63**/20,**mb3.7**/4,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.47** | **144** | P | **Pb** | **22 21 15.0** | **+0.2** |
| TWSI | | | | S | **Sb** | **22 21 21.7** | **-0.2** |
| **PLAI** | **Plampang** | **1.26** | **112** | P | **Pb** | **22 21 28.7** | **+0.5** |
| **SRBI** | **Singaraja** | **1.40** | **281** | P | **Pn** | **22 21 29.6** | **-0.4** |
| SRBI | | | | S | **Sn** | **22 21 49.0** | **+0.5** |
| **DNP** | **Denpasar** | **1.41** | **257** | P | **Pn** | **22 21 30.0** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.42** | **267** | P | **Pn** | **22 21 44.0** | **-0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.44** | **61** | P | **Pn** | **22 22 12.5** | **+0.6** |
| **KAPI** | **Kappang** | **4.56** | **44** | Pn | **Pn** | **22 22 13.8** | **+0.3** |
| | 2.2nm,0.3s,baz=194,slow=7.9,SNR=15 | | | | | | |
| KAPI | | | | Sn | **Sn** | **22 23 05.6** | **-1.1** |
| | 5.7nm,0.3s,baz=212,slow=23,SNR=2.5 | | | | | | |
| KAPI | | | | LR | LR | 22 24 10.9 | |
| | comp=Z,36nm,20.4s,baz=132,slow=40 4.9nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.76** | **274** | P | **Pn** | **22 22 15.8** | **-0.4** |
| **EDFI** | **Ende, Flores** | **5.05** | **95** | P | **Pn** | **22 22 20.7** | **+0.3** |
| | 28nm,0.6s,0.1nm | | | | | | |
| **BNSI** | **Bone** | **5.25** | **42** | P | **Pn** | **22 22 24.3** | **+1.3** |
| | 18nm,1.1s,0.2nm | | | | | | |
| **UGM** | **Wanagama** | **6.03** | **274** | P | **Pn** | **22 22 34.0** | **+0.2** |
| **WRA** | **Warramunga Arr** | **20.68** | **126** | P | **P** | **22 25 45.0** | **+0.3** |
| | 3.5nm,0.7s,baz=301,slow=12,SNR=17 3.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **22 26 04.5** | **0.0** |
| | 2.2nm,0.8s,baz=315,slow=8.5,SNR=16 2.2nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.13** | **14** | P | **P** | **22 30 29.9** | **+0.3** |
| | 1.1nm,0.7s,baz=183,slow=5.8,SNR=5.5 1.1nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.67** | **352** | P | **P** | **22 30 48.7** | **+0.7** |
| | 0.4nm,0.4s,baz=170,slow=8.8,SNR=2.4 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.83** | **334** | P | **P** | **22 31 29.1** | **-1.2** |
| | 0.4nm,0.7s,baz=154,slow=8.0,SNR=3.6 0.4nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **84.15** | **316** | LR | LR | 23 12 59.0 | |
| | comp=Z,29nm,21.9s,baz=154,slow=37 | | | | | | |
| **AKASG** | **Malin Array Be** | **94.74** | **320** | LR | LR | 23 21 38.5 | |
| | comp=Z,25nm,21.8s,baz=120,slow=38 | | | | | | |
| **CPUP** | **Villa Florida** | **145.02** | **190** | PKP | **PKPab** | **22 40 41.7** | **-0.4** |
| | 1.8nm,0.6s,baz=144,slow=3.7,SNR=3.3 | | | | | | |

*AEIC* ***10*** *22:39:35.7±0.6,51˚.53N±0˚.06×179˚.98E±0˚.02,h70km±5km, Error ellipse: s-maj=9.4km s-min=2.2km az=178.0*

**NEIC 10 22:39:36.2**±0.5,**51˚.53N**±0˚.07×**179˚.98E**±0˚.03,**h73**km±7km, **ML3.7**(AEIC),**Error ellipse: s-maj=10.1km s-min=2.2km az=178.0,Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.45** | **251** | Pn | Pn | 22 39 48.5 | -0.2 |
| **AMKA** | **Amchitka** | **0.45** | **251** | | Sn | 22 39 58.2 | +0.1 |
| **CERB** | **Semis' Cerberu** | **0.46** | **332** | | Pn | 22 39 48.9 | 0.0 |
| CERB | | | | | Sn | 22 39 58.4 | +0.1 |
| **CEPE** | **Semis' Perret** | **0.48** | **335** | | Pn | 22 39 48.8 | -0.4 |
| **CEAP** | **Semis' Anvil P** | **0.54** | **332** | | Pn | 22 39 49.4 | -0.2 |
| **GANO** | **Gareloi North** | **0.81** | **68** | | Pn | 22 39 52.4 | -0.2 |
| GANO | | | | | Sn | 22 40 05.2 | +0.4 |
| **GAEA** | **Gareloi East** | **0.83** | **72** | | Pn | 22 39 52.8 | 0.0 |
| **LSSE** | **Little Sitkin** | **0.97** | **295** | | Pn | 22 39 54.3 | -0.1 |
| **LSPA** | **Little Sitkin** | **0.97** | **297** | | Pn | 22 39 54.6 | +0.1 |
| LSPA | | | | | Sn | 22 40 08.2 | +0.1 |
| **LSNW** | **Little Sitkin** | **1.01** | **297** | | Pn | 22 39 54.7 | -0.2 |
| **TANO** | **Tanaga North** | **1.24** | **71** | | Pn | 22 39 58.0 | +0.2 |
| TANO | | | | | Sn | 22 40 13.9 | -0.3 |
| **TAFP** | **Tanaga Falls P** | **1.32** | **73** | | Sn | 22 40 15.6 | -0.4 |
| **KICM** | **Kanaga Island** | **1.80** | **76** | | Sn | 22 40 27.3 | +0.1 |
| **KIWB** | **Kanaga Island** | **1.82** | **79** | | Pn | 22 40 05.3 | -0.1 |
| **KIRH** | **Kanaga Island** | **1.86** | **77** | | Pn | 22 40 06.0 | 0.0 |
| **ADK** | **Adak** | **2.11** | **79** | Pn | Pn | 22 40 09.0 | -0.2 |
| **GSSP** | **Great Sitkin S** | **2.45** | **75** | | Pn | 22 40 13.5 | -0.5 |
| **GSMY** | **Great Sitkin M** | **2.52** | **77** | | Pn | 22 40 14.4 | -0.4 |
| **GSTR** | **Great Sitkin T** | **2.52** | **75** | Pn | Pn | 22 40 14.7 | -0.2 |
| **KOKL** | **Mount Kliuchef** | **3.69** | **75** | | Pn | 22 40 30.5 | -0.3 |
| **NIKH** | **Nikolski High** | **7.01** | **74** | | Pn | 22 41 17.2 | +1.2 |
| **P08K** | **Saint George I** | **7.98** | **46** | | Pn | 22 41 30.3 | +1.0 |
| **SPIA** | **Saint Paul Isl** | **8.03** | **41** | | Pn | 22 41 31.5 | +1.5 |
| **MAPS** | **Pakushin South** | **8.27** | **69** | | Pn | 22 41 34.7 | +1.4 |
| **MREP** | **Makushin Rep't** | **8.39** | **69** | | Pn | 22 41 36.6 | +1.7 |
| **LVA** | **Lava Point** | **8.87** | **67** | Pn | Pn | 22 41 42.0 | +0.6 |
| **S12K** | **Black Hills** | **11.45** | **62** | Pn | Pn | 22 42 16.6 | 0.0 |

*BJI* ***10*** *23:00:43.7±0.0,36˚.51N×54˚.76E,h10km,mb4.4/23, mB4.7/5,Ms4.0/7,Ms7 3.8/7*

*TEH* ***10*** *23:00:46.2,36˚.73N×54˚.94E,h8km±25km,ML4.2*

*NEIC* ***10*** *23:00:46.6±0.7,36˚.8N±0˚.1×55˚.0E±0˚.1,h10km±2km, mb4.2/16,Error ellipse: s-maj=20.1km s-min=16.0km az=176.0*

*IDC* ***10*** *23:00:52.0±3.0,36˚.71N×54˚.93E,h42km±30km,mb3.7/14, mbtmp4.0/22,ML3.5/8,MS3.3/21,Error ellipse: s-maj=23.3km s-min=14.5km az=1.0*

*NNC* ***10*** *23:00:55.7±5.7,37˚.35N×55˚.38E,h20km±61km,mb4.1, Error ellipse: s-maj=48.9km s-min=23.6km az=43.0*

**ISC 10 23:00:48.0**±0.5,**36˚.88N**±0˚.05×**54˚.94E**±0˚.04,**h15**km,**n133,** σ1°**96**/132,**mb4.2**/24,**MS3.1**/12,**6C-3D,Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IMND** | **Minoodasht** | **0.53** | **44** | Pg | **Pg** | **23 00 59.2** | **+0.6** |
| **IGLO** | **Ghaloghah** | **0.97** | **248** | Pg | **Pb** | **23 01 05.0** | **-1.5** |
| **MRVT** | **Maraveh tapeh** | **1.20** | **49** | Pg | **Pb** | **23 01 11.7** | **+1.1** |
| **IANJ** | **Anjilo** | **1.63** | **211** | Pg | **Pn** | **23 01 14.9** | **-1.5** |
| **IALA** | **Alasht** | **1.89** | **246** | Pn | **Pn** | **23 01 21.5** | **+1.4** |
| **IFIR** | **Firoozkooh** | **2.15** | **236** | Pn | **Pn** | **23 01 24.5** | **+0.8** |
| **IPRN** | **Peran** | **2.19** | **254** | Pn | **Pn** | **23 01 25.8** | **+1.8** |
| **ILAS** | **Lasjerd** | **2.19** | **228** | Pn | **Pn** | **23 01 24.8** | **+0.7** |
| **SBZV** | **Sabzevar** | **2.20** | **102** | Pn | **Pn** | **23 01 25.8** | **+1.6** |
| **TAPT** | **Tabas- Tapeh t** | **2.68** | **137** | Pn | **Pn** | **23 01 30.9** | **+0.2** |
| **IDMV** | **Damavand** | **2.69** | **242** | Pn | **Pn** | **23 01 32.6** | **+1.7** |
| **MZPU** | **Pul - Mazandar** | **2.75** | **262** | Pn | **Pn** | **23 01 34.3** | **+2.6** |
| **IEMG** | **Emamgholi** | **3.01** | **79** | Pn | **Pn** | **23 01 37.9** | **+2.5** |
| **IAKL** | **Akhelmad** | **3.08** | **94** | Pn | **Pn** | **23 01 38.2** | **+1.9** |
| **TNSJ** | **Nastanj** | **3.21** | **154** | Pn | **Pn** | **23 01 37.9** | **0.0** |
| **IVRN** | **Varamin** | **3.21** | **235** | Pn | **Pn** | **23 01 39.6** | **+1.6** |
| **IPAY** | **Payeh** | **3.29** | **96** | Pn | **Pn** | **23 01 41.0** | **+1.9** |
| **ISFB** | **Sefidab** | **3.34** | **222** | Pn | **Pn** | **23 01 39.9** | **+0.1** |
| **IKRD** | **Kardeh** | **3.67** | **90** | Pn | **Pn** | **23 01 46.5** | **+2.0** |
| **KRSH** | **Karshahi** | **3.70** | **219** | Pn | **Pn** | **23 01 44.7** | **0.0** |
| **TKDS** | **Koohdasht(Taba** | **3.71** | **151** | Pn | **Pn** | **23 01 45.0** | **+0.1** |
| **IQOM** | **Qom** | **3.74** | **238** | Pn | **Pn** | **23 01 46.0** | **+0.6** |
| **TBHD** | **Torbat heydari** | **3.77** | **112** | Pn | **Pn** | **23 01 47.5** | **+1.7** |
| **ANAR** | **Anarak** | **3.81** | **195** | Pn | **Pn** | **23 01 45.8** | **-0.5** |
| **LHJ2** | **Lahijan - Gila** | **3.92** | **276** | Pn | **Pn** | **23 01 49.3** | **+1.8** |
| **TPRV** | **Parvadeh(Tabas** | **4.10** | **159** | Pn | **Pn** | **23 01 50.0** | **-0.2** |
| **IMYA** | **Miami** | **4.19** | **96** | Pn | **Pn** | **23 01 53.3** | **+1.8** |
| **IKLH** | **Kolahrood** | **4.49** | **219** | Pn | **Pn** | **23 01 56.1** | **+0.4** |
| **IZEF** | **Zefreh** | **4.51** | **209** | Pn | **Pn** | **23 01 56.4** | **+0.4** |
| **ICHK** | **Chekchek** | **4.64** | **186** | Pn | **Pn** | **23 01 58.1** | **+0.3** |
| **TBJM** | **Torbat-e-JAM** | **4.65** | **109** | Pn | **Pn** | **23 01 59.4** | **+1.6** |
| **AFRZ** | **Afriz** | **4.79** | **135** | Pn | **Pn** | **23 02 00.5** | **+0.7** |
| **ITEG** | **Tejag** | **5.05** | **141** | Pn | **Pn** | **23 02 04.2** | **+0.8** |
| **ISAD** | **Sadrabad** | **5.06** | **192** | Pn | **Pn** | **23 02 03.0** | **-0.6** |
| **SHRT** | **Shahrakht** | **5.43** | **125** | Pn | **Pn** | **23 02 09.0** | **+0.5** |
| **IMEH** | **Mehriz** | **5.48** | **183** | Pn | **Pn** | **23 02 09.3** | **0.0** |
| **IRAM** | **Ramesheh** | **5.48** | **203** | Pn | **Pn** | **23 02 09.7** | **+0.4** |
| **IKOO** | **Kooshah** | **5.56** | **142** | Pn | **Pn** | **23 02 10.8** | **+0.3** |
| **IDAH** | **Dahanechah** | **5.78** | **134** | Pn | **Pn** | **23 02 13.2** | **-0.3** |
| **IBRJ** | **Brojen** | **5.81** | **213** | Pn | **Pn** | **23 02 14.7** | **+0.8** |
| **JHBN** | **Jahan bin** | **5.82** | **219** | Pn | **Pn** | **23 02 15.1** | **+1.0** |
| **ZNGN** | **Zangian** | **5.82** | **217** | Pn | **Pn** | **23 02 15.7** | **+1.6** |
| **BSRN** | **Basiran** | **6.00** | **144** | Pn | **Pn** | **23 02 16.4** | **+0.1** |
| **IHRS** | **Heris** | **6.43** | **285** | Pn | **Pn** | **23 02 24.2** | **+1.8** |
| **HRA** | **Herat** | **6.45** | **111** | Pn | **Pn** | **23 02 20.9** | **-1.6** |
| **KLNJ** | **Kolanjah** | **6.48** | **206** | Pn | **Pn** | **23 02 24.0** | **+0.9** |
| **KRM1** | **Kerman Provinc** | **6.65** | **162** | Pn | **Pn** | **23 02 25.7** | **+0.4** |
| **IKFM** | **Kafar-mosalman** | **6.70** | **242** | Pn | **Pn** | **23 02 27.6** | **+1.8** |
| **TVBK** | **TV Kerman** | **7.04** | **167** | Pn | **Pn** | **23 02 31.7** | **+0.8** |
| **CHMN** | **Cheshme madani** | **7.33** | **162** | Pn | **Pn** | **23 02 35.1** | **+0.4** |
| **IMRD** | **Marand** | **7.54** | **287** | Pn | **Pn** | **23 02 40.2** | **+2.7** |
| **ILBA** | **Ilam Banvizeh** | **7.85** | **248** | Pn | **Pn** | **23 02 43.5** | **+1.9** |
| **VSHL** | **Vashlovani** | **7.94** | **306** | P | **Pn** | **23 02 44.1** | **+1.3** |
| VSHL | | | | S | **Sn** | **23 04 10.2** | **-2.2** |
| **LGD** | **Lagodekhi** | **8.36** | **309** | P | **Pn** | **23 02 49.6** | **+1.0** |
| LGD | | | | S | **Sn** | **23 04 19.1** | **-3.6** |
| **GNI** | **Garni** | **8.64** | **295** | P | **Pn** | **23 02 56.0** | **+3.5** |
| | 0.6nm,0.3s,baz=249,slow=21,SNR=1.5 | | | | | | |
| GNI | | | | S | **Sn** | **23 04 27.8** | **-1.9** |
| | 4.3nm,0.5s,baz=66,slow=20,SNR=1.2 | | | | | | |
| GNI | | | | LR | LR | 23 07 32.1 | |
| | comp=Z,173nm,19.7s,baz=94,slow=46 5.0nm,0.6s | | | | | | |
| **DGRG** | **David-gareji** | **8.72** | **305** | P | **Pn** | **23 02 54.6** | **+1.0** |
| DGRG | | | | S | **Sn** | **23 04 29.3** | **-2.3** |
| **ZHDN** | **Zahedan** | **8.93** | **145** | Pn | **Pn** | **23 02 56.8** | **+0.2** |
| **CHRG** | **Chargali** | **9.45** | **308** | P | **Pn** | **23 03 04.3** | **+0.6** |
| CHRG | | | | S | **Sn** | **23 04 44.3** | **-5.4** |
| **SHTL** | **Shatili** | **9.49** | **310** | P | **Pn** | **23 03 05.7** | **+1.5** |
| SHTL | | | | S | **Sn** | **23 04 49.3** | **-1.3** |
| **ALIG** | **Mtskhetisjvari** | **10.17** | **304** | P | **Pn** | **23 03 14.1** | **+0.7** |
| **SIMJ** | **Simiganj** | **11.28** | **77** | Pn | **Pn** | **23 03 27.3** | **-1.4** |
| **CHGR** | **Chuyangaron** | **11.39** | **77** | | **Pn** | **23 03 28.7** | **-1.5** |
| **KBZ** | **Khabaz** | **11.46** | **310** | P | **Pn** | **23 03 32.6** | **+1.7** |
| | 0.4nm,0.3s,baz=131,slow=7.2,SNR=3.8 | | | | | | |
| KBZ | | | | S | **Sn** | **23 05 32.8** | **-5.8** |
| | 3.4nm,0.7s,baz=169,slow=5.2,SNR=2.3 2.6nm,0.7s | | | | | | |
| **GAR** | **Garm** | **12.32** | **75** | | **Pn** | **23 03 41.3** | **-1.7** |
| **BTK** | **Batken** | **12.84** | **71** | | **Pn** | **23 03 48.8** | **-1.2** |
| **AB31** | **Akbulak array** | **12.90** | **15** | P | **Pn** | **23 03 50.4** | **-0.3** |
| | 0.8nm,0.3s,baz=200,slow=13,SNR=39 | | | ⇑S | | | |
| AB31 | | | | | **Sn** | **23 06 07.2** | **-6.6** |
| | 2.3nm,0.4s,baz=190,slow=24,SNR=14 | | | | | | |
| **ABKAR** | **Akbulak array** | **12.90** | **15** | | **Pn** | **23 03 51.0** | **+0.3** |
| **KK31** | **Karatay Array** | **13.45** | **58** | Pn | **Pn** | **23 03 57.5** | **-0.8** |
| **KK31** | **Karatay Array** | **13.45** | **58** | ⇑P | **Pn** | **23 03 56.8** | **-1.4** |
| | 4.4nm,0.7s,baz=246,slow=17,SNR=34 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **23 06 23.2** | **-4.3** |
| | 6.5nm,0.9s,baz=153,slow=11,SNR=6.4 | | | | | | |
| **KKAR** | **Karatay Array** | **13.45** | **58** | | **Pn** | **23 03 56.4** | **-1.9** |
| **KKAR** | **Karatay Array** | **13.45** | **58** | Pn | **Pn** | **23 03 57.2** | **-1.1** |
| **AKTO** | **Aktyubinsk** | **13.73** | **8** | P | **Pn** | **23 04 02.1** | **+0.1** |
| | 8.8nm,0.7s,baz=179,slow=13,SNR=11 | | | | | | |
| AKTO | | | | S | **Sn** | **23 06 28.4** | **-5.8** |
| | 4.7nm,0.8s,baz=78,slow=15,SNR=3.1 | | | | | | |
| AKTO | | | | LR | LR | 23 11 03.9 | |
| | comp=Z,115nm,20.2s,baz=108,slow=44 | | | | | | |
| **WSAR** | **Wadi Sarin** | **13.96** | **166** | LR | LR | 23 10 37.2 | |
| | comp=Z,165nm,20.1s,baz=358,slow=42 | | | | | | |
| **ARSB** | **Arslanbob** | **14.69** | **67** | | **Pn** | **23 04 12.0** | **-3.4** |
| **NIL** | **Nilore** | **15.30** | **97** | | **Pn** | **23 04 21.9** | **-1.6** |
| NIL | | | | IAmb | IAmb | 23 04 30.9 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **ASF** | **Jabal al Asfar** | **15.59** | **258** | P | **Pn** | **23 04 26.9** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=230,slow=0.2,SNR=1.4 | | | | | | |
| ASF | | | | LR | LR | 23 11 44.3 | |
| | comp=Z,287nm,18.2s,baz=19,slow=42 comp=Z,0.9nm,0.3s | | | | | | |
| **RAYN** | **Ar Rayn** | **15.60** | **214** | | **Pn** | **23 04 24.9** | **-2.5** |
| RAYN | | | | IAmb | IAmb | 23 04 32.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **16.09** | **63** | | **Pn** | **23 04 32.8** | **-0.9** |
| **AAK** | **Ala-Archa** | **16.09** | **63** | P | **Pn** | **23 04 34.7** | **+1.0** |
| | comp=Z,0.4nm,0.3s,baz=226,slow=7.8,SNR=10 | | | | | | |
| AAK | | | | LR | LR | 23 11 11.5 | |
| | comp=Z,136nm,20.5s,baz=260,slow=38 comp=Z,15nm,0.9s | | | | | | |
| **BELG** | **Belogornoye** | **16.35** | **344** | P | **Pn** | **23 04 39.8** | **+3.0** |
| | comp=Z,1.5nm,0.3s,baz=7.3,slow=7.7,SNR=8.7 | | | | | | |
| BELG | | | | S | Sn | 23 07 26.7 | -11 |
| | comp=Z,8.0nm,0.6s,baz=249,slow=17,SNR=1.7 comp=Z,17nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **16.47** | **262** | LR | LR | 23 12 00.8 | |
| | comp=Z,99nm,18.9s,baz=22,slow=41 | | | | | | |
| **KSH** | **Kashi** | **16.74** | **75** | P | **Pn** | **23 04 36.7** | **-5.3** |
| KSH | | | | sP | P | 23 04 42.9 | -1.3 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **16.94** | **63** | ⇑P | **Pn** | **23 04 43.4** | **-1.2** |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **NRN** | **Naryn** | **16.95** | **68** | | **Pn** | **23 04 41.7** | **-3.1** |
| NRN | | | | IAmb | IAmb | 23 04 50.7 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **16.96** | **286** | P | **P** | **23 04 48.5** | **+1.8** |
| | comp=Z,0.1nm,0.3s,baz=90,slow=1.2,SNR=2.0 comp=Z,0.2nm,0.3s | | | | | | |
| **OTUK** | **Ortayu** | **17.08** | **43** | ⇓P | **P** | **23 04 48.3** | **+0.5** |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BOOM** | **Boomskoye usch** | **17.09** | **64** | | **Pn** | **23 04 45.0** | **-1.4** |
| **MDOK** | **Medeo** | **18.04** | **63** | ⇑P | **Pn** | **23 04 59.1** | **+0.9** |
| | comp=Z,12nm,1.1s | | | | | | |
| **EIL** | **Elat** | **18.18** | **253** | P | **Pn** | **23 05 01.4** | **+1.6** |
| | comp=Z,0.1nm,0.3s,baz=70,slow=5.1,SNR=4.2 | | | | | | |
| EIL | | | | LR | LR | 23 13 11.6 | |
| | comp=Z,136nm,20.1s,baz=70,slow=41 comp=Z,4.9nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **19.41** | **29** | P | **P** | **23 05 12.4** | **-1.1** |
| BRVK | | | | IAmb | IAmb | 23 05 24.3 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **BVA0** | **Borovoye Array** | **19.43** | **29** | ⇑P | **P** | **23 05 15.0** | **+1.4** |
| | comp=Z,18nm,1.0s,baz=216,slow=8.8,SNR=91 | | | | | | |
| **BVAR** | **Borovoye Array** | **19.43** | **29** | LR | LR | 23 14 17.2 | |
| | comp=Z,43nm,18.9s,baz=222,slow=41 | | | | | | |
| **ARU** | **Arti** | **19.71** | **6** | P | **P** | **23 05 16.6** | **-0.1** |
| ARU | | | | IAmb | IAmb | 23 05 25.7 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **ARU** | **Arti** | **19.71** | **6** | P | **P** | **23 05 18.2** | **+1.6** |
| | baz=187,slow=9.3,SNR=10 | | | | | | |
| ARU | | | | LR | LR | 23 15 06.6 | |
| | comp=Z,105nm,18.5s,baz=206,slow=43 comp=Z,7.6nm,0.9s | | | | | | |
| **ARG** | **Arkhangelos** | **21.53** | **276** | P | **P** | **23 05 36.1** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **21.77** | **43** | P | **P** | **23 05 40.9** | **+2.0** |
| | comp=Z,2.6nm,0.9s,baz=244,slow=11,SNR=10 | | | | | | |
| KURBB | | | | LR | LR | 23 15 35.3 | |
| | comp=Z,45nm,20.9s,baz=160,slow=40 comp=Z,2.6nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **21.86** | **43** | P | **P** | **23 05 40.0** | **0.0** |
| KURK | | | | IAmb | IAmb | 23 05 45.1 | |
| | comp=Z,8.3nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **21.86** | **43** | ⇑P | **P** | **23 05 40.7** | **+0.7** |
| | comp=Z,12nm,1.3s | | | | | | |
| **KIRV** | **Kirov** | **22.02** | **352** | P | **P** | **23 05 45.8** | **+4.2** |
| | comp=Z,21nm,0.6s,baz=173,slow=3.7,SNR=8.3 comp=Z,21nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **22.36** | **55** | P | **P** | **23 05 45.3** | **0.0** |
| **MK31** | **Makanchi Array** | **22.56** | **55** | P | **P** | **23 05 46.4** | **-1.1** |
| **MK31** | **Makanchi Array** | **22.56** | **55** | ⇓P | **P** | **23 05 48.4** | **+0.9** |
| | comp=Z,12nm,1.4s,baz=240,slow=10,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **22.56** | **55** | P | **P** | **23 05 47.2** | **-0.3** |
| **MKAR** | **Makanchi Array** | **22.56** | **55** | P | **P** | **23 05 49.5** | **+2.0** |
| | comp=Z,1.4nm,0.8s,baz=243,slow=11,SNR=11 | | | | | | |
| MKAR | | | | LR | LR | 23 16 24.1 | |
| | comp=Z,32nm,20.8s,baz=252,slow=41 comp=Z,1.4nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **22.99** | **315** | P | **P** | **23 05 53.4** | **+1.4** |
| | comp=Z,0.7nm,0.5s,baz=112,slow=8.7,SNR=5.9 comp=Z,0.7nm,0.5s | | | | | | |
| **AKBB** | **Malin Array Si** | **22.99** | **315** | P | **P** | **23 05 52.0** | **0.0** |
| **KIEV** | **Kiev** | **23.00** | **315** | P | **P** | **23 05 52.1** | **+0.1** |
| KIEV | | | | IAmb | IAmb | 23 05 59.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **MLR** | **Muntele Rosu** | **23.36** | **301** | P | **P** | **23 05 56.1** | **+0.2** |
| **MLR** | **Muntele Rosu** | **23.36** | **301** | P | **P** | **23 05 57.6** | **+1.7** |
| | comp=Z,6.5nm,1.1s,baz=160,slow=4.7,SNR=4.2 comp=Z,6.5nm,1.1s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **24.36** | **306** | P | **P** | **23 06 05.3** | **-0.1** |
| BUR08 | | | | IAmb | IAmb | 23 06 18.1 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **WMQ** | **Urumqi** | **25.79** | **64** | *e*P | **P** | **23 06 23.3** | **+4.9** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.76** | **41** | P | **P** | **23 06 28.6** | **+1.8** |
| | comp=Z,1.1nm,0.6s,baz=254,slow=11,SNR=5.8 | | | | | | |
| ZALV | | | | LR | LR | 23 19 21.6 | |
| | comp=Z,38nm,19.6s,baz=274,slow=41 comp=Z,1.1nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **30.30** | **306** | LR | LR | 23 22 58.6 | |
| | comp=Z,27nm,18.5s,baz=118,slow=44 | | | | | | |
| **FINES** | **FINESS Array B** | **30.52** | **333** | P | **P** | **23 07 03.0** | **+2.7** |
| | comp=Z,4.2nm,1.0s,baz=148,slow=12,SNR=2.9 comp=Z,4.2nm,1.0s | | | | | | |
| **FURI** | **Furi** | **31.52** | **212** | LR | LR | 23 19 48.4 | |
| | comp=Z,32nm,20.9s,baz=298,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **32.12** | **305** | LR | LR | 23 23 02.9 | |
| | comp=Z,29nm,20.9s,baz=92,slow=41 | | | | | | |
| **GTA** | **Gaotai** | **35.11** | **72** | *e*P | **P** | **23 07 44.4** | **+3.5** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **PALK** | **Pallekele** | **37.67** | **135** | LR | LR | 23 23 44.0 | |
| | comp=Z,46nm,19.7s,baz=63,slow=36 | | | | | | |
| **LZH** | **Lanzhou** | **38.98** | **76** | *e*P | **P** | **23 08 12.1** | **-1.7** |
| LZH | | | | pP | pP | 23 08 17.5 | -1.4 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PZH** | **PanZhiHua** | **40.79** | **91** | P | **P** | **23 08 28.2** | **-0.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.65** | **103** | P | **P** | **23 08 44.9** | **+0.8** |
| | comp=Z,4.9nm,0.7s,baz=301,slow=8.3,SNR=29 comp=Z,4.9nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **42.91** | **315** | P | **P** | **23 08 46.7** | **+1.0** |
| | comp=Z,0.4nm,0.5s,baz=98,slow=8.2,SNR=1.6 comp=Z,0.4nm,0.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **43.62** | **67** | *e*P | **P** | **23 08 49.0** | **-2.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **45.61** | **292** | P | **P** | **23 09 07.8** | **+0.1** |
| | comp=Z,1.2nm,1.0s,baz=83,slow=7.6,SNR=4.9 comp=Z,1.2nm,1.0s | | | | | | |
| **HEH** | **HeiHe** | **52.18** | **51** | *e*P | **P** | **23 09 59.3** | **+1.5** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **56.73** | **66** | P | **P** | **23 10 32.0** | **+0.9** |
| | comp=Z,2.0nm,0.7s,baz=273,slow=7.1,SNR=5.1 | | | | | | |
| KSRS | | | | LR | LR | 23 39 38.8 | |
| | comp=Z,29nm,18.4s,baz=170,slow=41 comp=Z,2.0nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **57.02** | **57** | LR | LR | 23 35 08.3 | |
| | comp=Z,22nm,18.9s,baz=229,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **64.02** | **53** | LR | LR | 23 41 37.5 | |
| | comp=Z,26nm,20.3s,baz=230,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **64.54** | **62** | LR | LR | 23 41 01.2 | |
| | comp=Z,22nm,18.5s,baz=268,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **77.24** | **9** | P | **P** | **23 12 42.2** | **+1.1** |
| | comp=Z,0.9nm,1.0s,baz=334,slow=3.7,SNR=6.2 comp=Z,0.9nm,1.0s | | | | | | |
| **DLBC** | **Dease Lake** | **84.95** | **3** | LR | LR | 23 58 03.5 | |
| | comp=Z,36nm,18.0s,baz=272,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **93.66** | **112** | P | **P** | **23 14 03.0** | **-1.1** |
| | comp=Z,0.6nm,0.9s,baz=341,slow=8.2,SNR=2.2 comp=Z,0.6nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **95.61** | **115** | P | **P** | **23 14 12.1** | **-0.9** |
| | comp=Z,0.3nm,0.6s,baz=327,slow=5.1,SNR=4.4 comp=Z,0.3nm,0.6s | | | | | | |

*IDC* ***10*** *23:03:35.2±1.0,38˚.36N×142˚.19E,h0km,mb3.7/7, mbtmp3.7/10,ML3.5/2,MS2.7/3,Error ellipse: s-maj=24.4km s-min=19.8km az=88.0*

*NIED* ***10*** *23:03:42.0,38˚.43N×142˚.11E,h46km,MW3.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr3.64; Mθθ-4.62; Mφφ0.97; Mrθ-1.96; Mθφ-1.87; Mφr-2.48; Fault plane solution: M₀5.56000×10¹⁴ NP1

**n140,σ1ŝ47/184, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNVG** | **Manavgat-Antal** | **0.40** | **30** | Pg | **Pn** | **23 04 47.9** | **+0.2** |
| MNVG | | | | Sg | **Sn** | **23 04 58.1** | **-0.6** |
| **KEMT** | **Kemer-ANTALYA** | **0.52** | **287** | Pg | **Pn** | **23 04 49.5** | **+1.0** |
| **ANTB** | **Antalya** | **0.61** | **317** | Pg | **Pn** | **23 04 49.9** | **+0.7** |
| **AKUM** | **Antalya-Kumluc** | **0.68** | **259** | P | **Pn** | **23 04 50.9** | **+1.1** |
| AKUM | | | | S | **Sn** | **23 05 02.5** | **-0.1** |
| **ALAN** | **Alanya-ANTALYA** | **0.70** | **81** | Pg | **Pn** | **23 04 51.1** | **+1.0** |
| **KORT** | **Korkueli** | **0.86** | **310** | Pg | **Pn** | **23 04 52.4** | **+0.6** |
| KORT | | | | Sg | **Sn** | **23 05 06.2** | **+0.3** |
| **KORT** | **Korkueli** | **0.86** | **310** | P | **Pn** | **23 04 52.3** | **+0.6** |
| KORT | | | | S | **Sn** | **23 05 05.0** | **-0.9** |
| **GAZI** | **Gazipasa** | **0.95** | **103** | Pg | **Pn** | **23 04 53.7** | **+1.1** |
| **GAZI** | **Gazipasa** | **0.95** | **103** | P | **Pn** | **23 04 53.7** | **+1.1** |
| GAZI | | | | S | **Sn** | **23 05 07.5** | **+0.1** |
| GAZI | | | | *i* AML | AML | 23 05 11.0 | |
| | comp=N,400nm,0.3s | | | | | | |
| **BUCA** | **Burdur, Bucak-** | **1.00** | **331** | P | **Pn** | **23 04 53.8** | **+0.5** |
| BUCA | | | | S | **Sn** | **23 05 05.6** | **-2.9** |
| BUCA | | | | *i* AML | AML | 23 05 12.0 | |
| | comp=N,197nm,0.7s | | | | | | |
| **DEMR** | **Demre-Antalya** | **1.04** | **259** | Pg | **Pn** | **23 04 54.9** | **+1.3** |
| **ELL** | **Elmali** | **1.06** | **287** | Pg | **Pn** | **23 04 55.2** | **+1.3** |
| **SEYD** | **Seydisehir-KON** | **1.09** | **29** | Pg | **Pn** | **23 04 55.2** | **+0.9** |
| SEYD | | | | Sg | **Sn** | **23 05 10.3** | **-0.1** |
| **SEDI** | **Konya, Seydise** | **1.10** | **25** | P | **Pn** | **23 04 55.0** | **+0.5** |
| SEDI | | | | S | **Sn** | **23 05 09.2** | **-1.4** |
| **BCK** | **Bucak** | **1.11** | **335** | Pg | **Pn** | **23 04 55.2** | **+0.8** |
| BCK | | | | Sg | **Sn** | **23 05 10.7** | **0.0** |
| **HDMB** | **Hadim** | **1.18** | **64** | Pn | **Pn** | **23 04 56.8** | **+1.5** |
| **AKAS** | **Kas** | **1.28** | **261** | Pn | **Pn** | **23 04 57.3** | **+0.8** |
| **AKAS** | **Kas** | **1.28** | **261** | P | **Pn** | **23 04 57.0** | **+0.5** |
| AKAS | | | | S | **Sn** | **23 05 13.4** | **-0.9** |
| **KNIK** | **Mula-Seydike** | **1.34** | **288** | P | **Pn** | **23 04 59.1** | **+1.9** |
| KNIK | | | | S | **Sn** | **23 05 17.0** | **+1.5** |
| KNIK | | | | *i* AML | AML | 23 05 19.0 | |
| | comp=N,114nm,0.6s | | | | | | |
| **BOZY** | **Bozyazi-Mersin** | **1.50** | **103** | Pn | **Pn** | **23 05 00.4** | **+1.4** |
| **GOLH** | **Golhisar** | **1.51** | **302** | P | **Pn** | **23 05 01.6** | **+2.4** |
| GOLH | | | | S | **Sn** | **23 05 19.9** | **+0.7** |
| **BRDR** | **BURDUR-Merkez** | **1.53** | **325** | P | **Pn** | **23 05 00.2** | **+0.8** |
| BRDR | | | | S | **Sn** | **23 05 17.8** | **-1.8** |
| **IZZE** | **Mula-Seydike** | **1.57** | **270** | P | **Pn** | **23 05 01.1** | **+1.3** |
| IZZE | | | | S | **Sn** | **23 05 17.7** | **-2.6** |
| **CAME** | **Cameli-Denizli** | **1.58** | **289** | Pn | **Pn** | **23 05 01.5** | **+1.4** |
| **TEKE** | **Tekeli-Mersin** | **1.60** | **101** | Pn | **Pn** | **23 05 01.8** | **+1.5** |
| TEKE | | | | Sn | **Sn** | **23 05 22.2** | **+1.2** |
| **KMER** | **Konya-Meram** | **1.63** | **36** | P | **Pn** | **23 05 01.5** | **+0.8** |
| **CAEL** | **Denizli, Camel** | **1.63** | **295** | P | **Pn** | **23 05 02.6** | **+1.9** |
| CAEL | | | | S | **Sn** | **23 05 22.3** | **+0.4** |
| CAEL | | | | *i* AML | AML | 23 05 33.0 | |
| | comp=E,132nm,0.3s | | | | | | |
| CAEL | | | | *i* AML | AML | 23 05 36.0 | |
| | comp=N,99nm,0.5s | | | | | | |
| **FETY** | **Fethiye** | **1.69** | **277** | Pn | **Pn** | **23 05 02.6** | **+1.2** |
| **FETY** | **Fethiye** | **1.69** | **277** | P | **Pn** | **23 05 04.1** | **+2.7** |
| FETY | | | | S | **Sn** | **23 05 21.9** | **-1.1** |
| **DOGA** | **KONYA_Doganhis** | **1.70** | **13** | P | **Pn** | **23 05 02.4** | **+0.8** |
| DOGA | | | | S | **Sn** | **23 05 20.2** | **-3.3** |
| **AKMS** | **Akamas** | **1.72** | **146** | P | **Pn** | **23 05 02.7** | **+1.0** |
| AKMS | | | | S | **Sn** | **23 05 22.3** | **-1.4** |
| AKMS | | | | AML | AML | 23 05 25.9 | |
| | 0.3nm,0.3s | | | | | | |
| AKMS | | | | AML | AML | 23 05 26.6 | |
| | 0.3nm,0.2s | | | | | | |
| **BASM** | **Basmaki-Afyon** | **1.72** | **329** | Pn | **Pn** | **23 05 02.5** | **+0.7** |
| **ALFC** | **Alefka** | **1.74** | **138** | P | **Pn** | **23 05 02.2** | **+0.1** |
| ALFC | | | | S | **Sn** | **23 05 23.0** | **-1.2** |
| ALFC | | | | AML | AML | 23 05 25.6 | |
| | 0.3nm,0.2s | | | | | | |
| ALFC | | | | AML | AML | 23 05 26.4 | |
| | 0.2nm,0.2s | | | | | | |
| **KONT** | **Konya--Tatoy** | **1.77** | **32** | Pn | **Pn** | **23 05 03.3** | **+0.9** |
| **INCE** | **Denizli-Bozkur** | **1.79** | **315** | P | **Pn** | **23 05 03.8** | **+1.1** |
| INCE | | | | S | **Sn** | **23 05 24.5** | **-0.9** |
| **SABU** | **Mula-Dalaman** | **1.81** | **283** | P | **Pn** | **23 05 04.3** | **+1.4** |
| SABU | | | | S | **Sn** | **23 05 25.1** | **-0.6** |
| **APMY** | **Acipayam-Deniz** | **1.81** | **305** | Pn | **Pn** | **23 05 04.8** | **+1.8** |
| APMY | | | | Sn | **Sn** | **23 05 26.8** | **+0.9** |
| **KRMN** | **Karaman** | **1.83** | **66** | Pn | **Pn** | **23 05 04.8** | **+1.5** |
| KRMN | | | | Sn | **Sn** | **23 05 27.1** | **+0.7** |
| **AFYN** | **Afyon-Dinar-K** | **1.89** | **344** | P | **Pn** | **23 05 04.0** | **-0.1** |
| AFYN | | | | S | **Sn** | **23 05 26.4** | **-1.5** |
| AFYN | | | | *i* AML | AML | 23 05 30.0 | |
| | comp=N,96nm,0.7s | | | | | | |
| **DNZT** | **Denizli-Tavas-** | **1.91** | **296** | P | **Pn** | **23 05 05.4** | **+1.1** |
| DNZT | | | | S | **Sn** | **23 05 27.6** | **-0.6** |
| **KZIL** | **AFYON_Kizioren** | **1.98** | **336** | P | **Pn** | **23 05 05.6** | **+0.4** |
| KZIL | | | | S | **Sn** | **23 05 28.7** | **-1.2** |
| **LADK** | **Ladik-KONYA** | **1.99** | **28** | Pn | **Pn** | **23 05 06.2** | **+0.9** |
| **NATA** | **Nata** | **2.02** | **145** | P | **Pn** | **23 05 07.1** | **+1.5** |
| NATA | | | | S | **Sn** | **23 05 29.7** | **-1.0** |
| NATA | | | | AML | AML | 23 05 35.1 | |
| | 0.3nm,0.4s | | | | | | |
| NATA | | | | AML | AML | 23 05 36.8 | |
| | 0.5nm,0.4s | | | | | | |
| **TROD** | **Troodos** | **2.04** | **137** | P | **Pn** | **23 05 06.4** | **+0.4** |
| TROD | | | | S | **Sn** | **23 05 31.1** | **-0.3** |
| TROD | | | | AML | AML | 23 05 39.3 | |
| | 0.1nm,0.3s | | | | | | |
| TROD | | | | AML | AML | 23 05 40.1 | |
| | 0.1nm,0.5s | | | | | | |
| **DALY** | **Dalyan (Mula)** | **2.06** | **281** | Pn | **Pn** | **23 05 07.5** | **+1.5** |
| **DNIZ** | **Denizli-Tavas-** | **2.07** | **305** | P | **Pn** | **23 05 07.8** | **+1.4** |
| DNIZ | | | | S | **Sn** | **23 05 30.9** | **-1.0** |
| DNIZ | | | | *i* AML | AML | 23 05 39.0 | |
| | comp=E,60nm,0.3s | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **2.07** | **300** | P | **Pn** | **23 05 07.5** | **+1.1** |
| TAVA | | | | S | **Sn** | **23 05 30.8** | **-1.1** |
| **SHUT** | **Suhut-Afyon** | **2.15** | **347** | Pn | **Pn** | **23 05 08.6** | **+1.1** |
| **UCKU** | **Afyonkarahisar** | **2.19** | **5** | P | **Pn** | **23 05 08.4** | **+0.4** |
| **ATHAL** | **Athalassa** | **2.23** | **125** | P | **Pn** | **23 05 10.0** | **+1.6** |
| ATHAL | | | | S | **Sn** | **23 05 33.6** | **-2.0** |
| ATHAL | | | | AML | AML | 23 05 52.9 | |
| | 0.2nm,0.7s | | | | | | |
| ATHAL | | | | AML | AML | 23 06 02.8 | |
| | 0.2nm,1.3s | | | | | | |
| **KURO** | **Afyon-Bolvadin** | **2.29** | **355** | P | **Pn** | **23 05 10.0** | **+0.8** |
| **CSS** | **Mathiatis** | **2.30** | **130** | P | **Pn** | **23 05 09.6** | **+0.3** |
| **CSS** | **Mathiatis** | **2.30** | **130** | P | **Pn** | **23 05 09.4** | **+0.1** |
| **CSS** | **Mathiatis** | **2.30** | **130** | P | **Pn** | **23 05 09.7** | **+0.3** |
| CSS | | | | S | **Sn** | **23 05 36.7** | **-0.5** |
| CSS | | | | AML | AML | 23 05 46.0 | |
| CSS | | | | AML | AML | 23 05 46.8 | |
| **PASA** | **Karahalli, USA** | **2.32** | **325** | P | **Pn** | **23 05 09.7** | **+0.1** |
| PASA | | | | S | **Sn** | **23 05 36.0** | **-1.7** |
| **ASGA** | **Asgata** | **2.37** | **134** | P | **Pn** | **23 05 11.7** | **+1.4** |
| ASGA | | | | S | **Sn** | **23 05 38.3** | **-0.5** |
| ASGA | | | | AML | AML | 23 05 45.6 | |
| | 0.1nm,0.2s | | | | | | |
| ASGA | | | | AML | AML | 23 05 47.4 | |
| | 0.1nm,0.4s | | | | | | |
| **YER** | **Yerkesik** | **2.42** | **287** | Pn | **Pn** | **23 05 12.2** | **+1.4** |
| **MULA** | **Mugla, Merkez-** | **2.42** | **290** | P | **Pn** | **23 05 12.0** | **+1.0** |
| MULA | | | | S | **Sn** | **23 05 37.8** | **-2.3** |
| **BNAZ** | **Uak-Banaz** | **2.45** | **336** | P | **Pn** | **23 05 12.0** | **+0.6** |
| BNAZ | | | | S | **Sn** | **23 05 38.4** | **-2.4** |
| BNAZ | | | | *i* AML | AML | 23 05 42.0 | |
| | comp=N,125nm,0.7s | | | | | | |
| BNAZ | | | | *i* AML | AML | 23 05 44.0 | |
| | comp=E,110nm,0.3s | | | | | | |
| **MVOU** | **Mavrovouni** | **2.46** | **125** | P | **Pn** | **23 05 11.2** | **-0.2** |
| MVOU | | | | S | **Sn** | **23 05 40.0** | **-0.9** |
| MVOU | | | | AML | AML | 23 05 47.0 | |
| | 0.1nm,0.2s | | | | | | |
| MVOU | | | | AML | AML | 23 05 48.6 | |
| **ARG** | **Arkhangelos** | **2.47** | **265** | Pn | **Pn** | **23 05 13.8** | **+2.3** |
| **ESEN** | **Aydn-Nazilli** | **2.62** | **302** | P | **Pn** | **23 05 14.0** | **+0.5** |
| ESEN | | | | S | **Sn** | **23 05 40.1** | **-4.6** |
| **KIRA** | **zmir-Kiraz** | **2.81** | **309** | P | **Pn** | **23 05 16.3** | **+0.1** |
| KIRA | | | | S | **Sn** | **23 05 46.0** | **-3.4** |
| **DAT** | **Datca** | **2.90** | **277** | P | **Pn** | **23 05 18.8** | **+1.4** |
| DAT | | | | S | **Sn** | **23 05 48.8** | **-2.8** |
| **MANT** | **Manisa** | **2.91** | **315** | P | **Pn** | **23 05 17.4** | **-0.2** |
| MANT | | | | S | **Sn** | **23 05 49.1** | **-2.8** |
| **YAZI** | **Mula-Dat§a-** | **3.00** | **275** | P | **Pn** | **23 05 19.4** | **+0.8** |
| YAZI | | | | S | **Sn** | **23 05 49.1** | **-4.6** |
| **BDRM** | **Kayabasi** | **3.05** | **283** | P | **Pn** | **23 05 19.6** | **+0.3** |
| BDRM | | | | S | **Sn** | **23 05 50.2** | **-4.8** |
| **IZMR** | **zmir-demi** | **3.07** | **304** | P | **Pn** | **23 05 19.2** | **-0.2** |
| **GCAM** | **G?zelcaml?** | **3.38** | **293** | P | **Pn** | **23 05 24.0** | **+0.4** |
| **HNTI** | **Hanita** | **4.71** | **134** | P | **Pn** | **23 05 42.3** | **+0.7** |
| **HNTI** | **Hanita** | **4.71** | **134** | S | **Sn** | **23 06 32.7** | **-2.4** |
| **MMC7** | **Mount Meron ar** | **4.88** | **133** | P | **Pn** | **23 05 45.2** | **+1.2** |
| **MMA0** | **Mount Meron ar** | **4.89** | **133** | P | **Pn** | **23 05 45.4** | **+1.2** |
| **MMA0** | **Mount Meron ar** | **4.89** | **133** | P | **Pn** | **23 05 45.4** | **+1.2** |
| **MMA0B** | **Mount Meron ar** | **4.89** | **133** | S | **Sn** | **23 06 38.5** | **-1.0** |
| **MMA0B** | **Mount Meron ar** | **4.89** | **133** | P | **Pn** | **23 05 45.3** | **+1.2** |
| **GEM** | **Giv'at Ha'Em** | **4.91** | **130** | P | **Pn** | **23 05 45.5** | **+1.2** |
| GEM | | | | S | **Sn** | **23 06 29.7** | **-10** |
| **GEM** | **Giv'at Ha'Em** | **4.91** | **130** | S | **Sn** | **23 06 38.2** | **-1.8** |
| **GEM** | **Giv'at Ha'Em** | **4.91** | **130** | P | **Pn** | **23 05 45.5** | **+1.2** |
| **NATI** | **Neve Ativ** | **4.92** | **129** | P | **Pn** | **23 05 45.7** | **+1.2** |
| **NATI** | **Neve Ativ** | **4.92** | **129** | S | **Sn** | **23 06 38.7** | **-1.5** |
| **NATI** | **Neve Ativ** | **4.92** | **129** | P | **Pn** | **23 05 45.9** | **+1.4** |
| **OFRI** | **`Ofer** | **4.95** | **139** | P | **Pn** | **23 05 45.5** | **+0.6** |
| **OFRI** | **`Ofer** | **4.95** | **139** | S | **Sn** | **23 06 39.7** | **-1.3** |
| **OFRI** | **`Ofer** | **4.95** | **139** | P | **Pn** | **23 05 45.6** | **+0.6** |
| **BLGI** | **Bet Lehem HaGe** | **4.98** | **137** | P | **Pn** | **23 05 46.3** | **+1.0** |
| **BLGI** | **Bet Lehem HaGe** | **4.98** | **137** | S | **Sn** | **23 06 39.7** | **-1.9** |
| **KSHT** | **Keshet** | **5.16** | **131** | S | **Sn** | **23 06 45.3** | **-0.8** |
| **KSHT** | **Keshet** | **5.16** | **131** | P | **Pn** | **23 05 49.4** | **+1.6** |
| **SLTI** | **Sal'it** | **5.28** | **142** | P | **Pn** | **23 05 50.1** | **+0.7** |
| **SLTI** | **Sal'it** | **5.28** | **142** | P | **Pn** | **23 05 50.1** | **+0.7** |
| **SLTI** | **Sal'it** | **5.28** | **142** | S | **Sn** | **23 06 47.4** | **-1.6** |
| **MMLI** | **Mount Malkishu** | **5.33** | **138** | S | **Sn** | **23 06 48.4** | **-1.7** |
| **MMLI** | **Mount Malkishu** | **5.33** | **138** | P | **Pn** | **23 05 51.3** | **+1.2** |
| **QRNJ** | **Al-Qirein** | **5.49** | **137** | P | **Pn** | **23 05 54.4** | **+2.2** |
| QRNJ | | | | S | **Sn** | **23 06 42.8** | **-11** |
| **SALP** | **Salfit** | **5.50** | **142** | P | **Pn** | **23 05 53.8** | **+1.5** |
| **SALP** | **Salfit** | **5.50** | **142** | P | **Pn** | **23 05 53.6** | **+1.3** |
| **SALP** | **Salfit** | **5.50** | **142** | S | **Sn** | **23 06 53.3** | **-0.9** |
| **HMDT** | **Nahal Hemdat** | **5.52** | **138** | P | **Pn** | **23 05 54.5** | **+1.8** |
| **HMDT** | **Nahal Hemdat** | **5.52** | **138** | P | **Pn** | **23 05 54.3** | **+1.6** |
| **HMDT** | **Nahal Hemdat** | **5.52** | **138** | S | **Sn** | **23 06 54.2** | **-0.7** |
| **UJAP** | **Al Uja** | **5.73** | **140** | P | **Pn** | **23 05 57.2** | **+1.8** |
| **UJAP** | **Al Uja** | **5.73** | **140** | P | **Pn** | **23 05 57.1** | **+1.8** |
| **UJAP** | **Al Uja** | **5.73** | **140** | S | **Sn** | **23 06 58.8** | **-1.0** |
| **AMAZ** | **Amatzia** | **5.81** | **147** | P | **Pn** | **23 05 58.0** | **+1.4** |
| **AMAZ** | **Amatzia** | **5.81** | **147** | P | **Pn** | **23 05 58.0** | **+1.4** |
| **AMAZ** | **Amatzia** | **5.81** | **147** | S | **Sn** | **23 07 00.9** | **-1.0** |
| **DSI** | **Dead Sea** | **5.99** | **143** | P | **Pn** | **23 06 00.9** | **+1.8** |
| **DSI** | **Dead Sea** | **5.99** | **143** | P | **Pn** | **23 06 00.6** | **+1.5** |
| **DSI** | **Dead Sea** | **5.99** | **143** | S | **Sn** | **23 07 05.0** | **-1.3** |
| **YTIR** | **Yattir** | **6.04** | **146** | P | **Pn** | **23 06 01.3** | **+1.5** |
| **YTIR** | **Yattir** | **6.04** | **146** | P | **Pn** | **23 06 01.1** | **+1.2** |
| **YTIR** | **Yattir** | **6.04** | **146** | S | **Sn** | **23 07 06.7** | **-0.9** |
| **KZIT** | **Kziot** | **6.15** | **153** | P | **Pn** | **23 06 02.3** | **+1.1** |
| **KZIT** | **Kziot** | **6.15** | **153** | S | **Sn** | **23 07 08.0** | **-2.1** |
| **KZIT** | **Kziot** | **6.15** | **153** | P | **Pn** | **23 06 02.6** | **+1.4** |
| **MSBI** | **Mazada** | **6.20** | **145** | P | **Pn** | **23 06 03.6** | **+1.8** |
| **MSBI** | **Mazada** | **6.20** | **145** | P | **Pn** | **23 06 03.2** | **+1.5** |
| **MSBI** | **Mazada** | **6.20** | **145** | S | **Sn** | **23 07 10.3** | **-0.9** |
| **GHAJ** | **Ghor Haditha** | **6.30** | **143** | P | **Pn** | **23 06 06.0** | **+2.7** |
| **GHAJ** | **Ghor Haditha** | **6.30** | **143** | P | **Pn** | **23 06 05.9** | **+2.6** |
| **GHAJ** | **Ghor Haditha** | **6.30** | **143** | S | **Sn** | **23 07 13.1** | **-0.7** |
| **LISJ** | **El Lisan** | **6.32** | **144** | P | **Pn** | **23 06 05.8** | **+2.4** |
| **ZFRI** | **Zfri** | **6.77** | **149** | P | **Pn** | **23 06 10.6** | **+1.0** |
| **ZFRI** | **Zfri** | **6.77** | **149** | P | **Pn** | **23 06 10.6** | **+1.0** |
| **ZFRI** | **Zfri** | **6.77** | **149** | S | **Sn** | **23 07 23.9** | **-1.2** |
| **PRNI** | **Paran** | **6.88** | **151** | P | **Pn** | **23 06 12.1** | **+1.0** |
| **PRNI** | **Paran** | **6.88** | **151** | S | **Sn** | **23 07 27.2** | **-0.7** |
| **PRNI** | **Paran** | **6.88** | **151** | P | **Pn** | **23 06 12.3** | **+1.2** |
| **KRMI** | **Paran Flat** | **6.98** | **154** | P | **Pn** | **23 06 12.4** | **-0.2** |
| **KRMI** | **Paran Flat** | **6.98** | **154** | P | **Pn** | **23 06 13.9** | **+1.3** |
| **KRMI** | **Paran Flat** | **6.98** | **154** | S | **Sn** | **23 07 29.8** | **-0.7** |
| **HRFI** | **Mount Harif** | **7.17** | **152** | P | **Pn** | **23 06 16.3** | **+1.2** |
| **HRFI** | **Mount Harif** | **7.17** | **152** | S | **Sn** | **23 07 34.3** | **-0.7** |
| **HRFI** | **Mount Harif** | **7.17** | **152** | P | **Pn** | **23 06 16.3** | **+1.2** |
| **MBRI** | **Mt Berech** | **7.34** | **154** | P | **Pn** | **23 06 19.2** | **+1.6** |
| **MBRI** | **Mt Berech** | **7.34** | **154** | P | **Pn** | **23 06 19.2** | **+1.6** |
| **MBRI** | **Mt Berech** | **7.34** | **154** | S | **Sn** | **23 07 39.0** | **-0.4** |
| **EIL** | **Elat** | **7.47** | **154** | P | **Pn** | **23 06 20.7** | **+1.5** |
| **EIL** | **Elat** | **7.47** | **154** | S | **Sn** | **23 07 41.0** | **-1.3** |

**TEH 10 23:09:27.2, 36.72N×54.96E, h5km, ML3.5, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IMND** | **Minoodasht** | **0.65** | **34** | Pg | Pg | 23 09 39.5 | -0.2 |
| **IGLO** | **Ghaloghah** | **0.93** | **257** | Pg | Pb | 23 09 46.2 | +0.2 |
| **MRVT** | **Maraveh tapeh** | **1.30** | **44** | Pg | Pn | 23 09 51.9 | -0.3 |
| **IANJ** | **Anjilo** | **1.51** | **214** | Pg | Pb | 23 09 55.5 | -0.3 |
| **IALA** | **Alasht** | **1.85** | **251** | Pn | Pb | 23 10 01.9 | +0.3 |
| **IFIR** | **Firoozkooh** | **2.08** | **240** | Pn | Pb | 23 10 05.5 | -0.1 |
| **ILAS** | **Lasjerd** | **2.10** | **231** | Pn | Pb | 23 10 05.7 | -0.2 |
| **SBZV** | **Sabzevar** | **2.16** | **98** | Pn | Pb | 23 10 06.5 | -0.5 |
| **IPRN** | **Peran** | **2.17** | **258** | Pn | Pb | 23 10 06.2 | -0.7 |
| **TAPT** | **Tabas- Tapeh t** | **2.56** | **135** | Pn | Pb | 23 10 12.0 | -1.7 |
| **IDMV** | **Damavand** | **2.63** | **245** | Pn | Pb | 23 10 13.6 | -1.4 |
| **IEMG** | **Emamgholi** | **3.04** | **76** | Pn | Pb | 23 10 19.1 | -2.8 |
| **IAKL** | **Akhelmad** | **3.06** | **91** | Pn | Pb | 23 10 19.4 | -2.8 |
| **IVRN** | **Varamin** | **3.14** | **238** | Pn | Pn | 23 10 20.4 | +3.0 |
| **ISFB** | **Sefidab** | **3.24** | **224** | Pn | Pn | 23 10 21.3 | +2.5 |
| **IPAY** | **Payeh** | **3.26** | **94** | Pn | Pn | 23 10 21.8 | +2.6 |
| **KRSH** | **Karshahi** | **3.58** | **221** | Pn | Pn | 23 10 26.2 | +2.6 |
| **IKRD** | **Kardeh** | **3.66** | **88** | Pn | Pn | 23 10 27.4 | +2.7 |
| **ANAR** | **Anarak** | **3.66** | **196** | Pn | Pn | 23 10 26.9 | +2.3 |
| **TPRV** | **Parvadeh(Tabas** | **3.94** | **158** | Pn | Pn | 23 10 30.8 | +2.3 |
| **IMYA** | **Miami** | **4.16** | **94** | Pn | Pn | 23 10 34.6 | +3.1 |
| **IRAZ** | **Razeghan** | **4.28** | **254** | Pn | Pn | 23 10 35.9 | +2.7 |
| **IZEF** | **Zefreh** | **4.38** | **210** | Pn | Pn | 23 10 38.0 | +3.3 |
| **ICHK** | **Chekchek** | **4.49** | **186** | Pn | Pn | 23 10 38.5 | +2.4 |
| **TBJM** | **Torbat-e-JAM** | **4.59** | **107** | Pn | Pn | 23 10 39.8 | +2.4 |
| **AFRZ** | **Afriz** | **4.67** | **133** | Pn | Pn | 23 10 40.8 | +2.2 |
| **ISAD** | **Sadrabad** | **4.91** | **193** | Pn | Pn | 23 10 44.6 | +2.7 |
| **ITEG** | **Tejag** | **4.92** | **140** | Pn | Pn | 23 10 45.0 | +3.0 |
| **SHRT** | **Shahrakht** | **5.33** | **124** | Pn | Pn | 23 10 49.6 | +2.0 |
| **IKOO** | **Kooshah** | **5.43** | **141** | Pn | Pn | 23 10 51.0 | +1.9 |
| **ZNGN** | **Zangian** | **5.71** | **218** | Pn | Pn | 23 10 55.5 | +2.6 |
| **BSRN** | **Basiran** | **5.86** | **143** | Pn | Pn | 23 10 57.1 | +2.2 |
| **IHRS** | **Heris** | **6.49** | **287** | Pn | Pn | 23 11 07.0 | +3.4 |
| **NHDN** | **Nehbandan** | **6.79** | **140** | Pn | Pn | 23 11 10.2 | +2.6 |

*IDC **11** 00:01:45.9±0.9, 86.25N×38.45E, h0km, mb3.9/9, mbtmp3.9/10, ML3.6/1, MS3.1/21, Error ellipse: s-maj=28.7km s-min=17.6km az=79.0*
*NEIC **11** 00:01:45.9±0.7, 86.19N±0.09×37.7E, h10km±1km, mb4.3/34, Error ellipse: s-maj=21.2km s-min=16.0km az=93.0*
*FCIAR **11** 00:01:55.0, 85.41N×37.42E, h10km, station ZFI2 has station magnitude of 2.90 station OMEGA has station magnitude of 2.80*

**ISC 11 00:01:46.4±0.5, 86.09N±0.06×37.80E±0.07, h10km, n74, σ2ŝ13/65, mb4.3/27, MS3.1/20, North of Franz Josef Land**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZFI2** | **Zemlya Franca-** | **5.41** | **163** | *eP* | **Pn** | **00 03 07.3** | **+0.4** |
| ZFI2 | | | | *eS* | **Sn** | **00 04 03.4** | **-5.6** |
| | 7.7nm,0.2s | | | | | | |
| ZFI2 | | | | *etx* | tx | 00 07 09.4 | |
| **OMEGA** | **Omega** | **5.44** | **163** | *eP* | **Pn** | **00 03 07.5** | **+0.2** |
| OMEGA | | | | *eS* | **Sn** | **00 04 03.6** | **-6.1** |
| | 6.7nm,0.2s | | | | | | |
| OMEGA | | | | *etx* | tx | 00 07 09.1 | |
| **NOR** | **Nord** | **6.95** | **262** | *eP* | **Pn** | **00 03 31.4** | **+3.5** |
| **KBS** | **Kingsbay** | **7.79** | **218** | | **Pn** | **00 03 40.0** | **+0.4** |
| **KBS** | **Kingsbay** | **7.79** | **218** | *eP* | **Pn** | **00 03 40.8** | **+1.3** |
| KBS | | | | *eS* | **Sn** | **00 05 06.0** | **-1.6** |
| KBS | | | | IAML | | 00 05 09.4 | |
| | comp=Z,4.3nm,0.4s | | | | | | |
| **KBS** | **Kingsbay** | **7.79** | **218** | *eP* | **Pn** | **00 03 40.9** | **+1.3** |
| KBS | | | | *eS* | **Sn** | **00 05 03.7** | **-3.8** |
| KBS | | | | *etx* | tx | 00 06 15.7 | |
| **BRBB** | **Barentsburg B** | **8.52** | **214** | *eP* | **Pn** | **00 03 50.8** | **+1.3** |
| **BRBA** | **Barentsburg A** | **8.55** | **214** | *eP* | **Pn** | **00 03 51.4** | **+1.5** |
| **HSPB** | **Hornsund (broa** | **9.55** | **211** | *eP* | **Pn** | **00 04 06.3** | **+2.7** |
| HSPB | | | | *eS* | Sn | 00 05 43.2 | -7.6 |
| HSPB | | | | IAML | | 00 05 55.0 | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **HOPEN** | **Hopen** | **9.77** | **198** | *eP* | **Pn** | **00 04 08.0** | **+1.4** |
| HOPEN | | | | *eS* | **Sn** | **00 05 52.3** | **-3.8** |
| HOPEN | | | | IAML | | 00 06 29.2 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **HOPEN** | **Hopen** | **9.77** | **198** | *eP* | **Pn** | **00 04 07.7** | **+1.0** |
| HOPEN | | | | *eS* | **Sn** | **00 05 52.0** | **-4.2** |
| | comp=Z,7μm,0.4s | | | | | | |
| **DAG** | **Danmarks Havn** | **11.60** | **253** | *eP* | **Pn** | **00 04 33.5** | **+1.9** |
| **BJO1** | **Bjornoya** | **11.93** | **205** | *eP* | **Pn** | **00 04 35.0** | **-1.1** |
| BJO1 | | | | *eS* | Sn | 00 06 41.8 | -7.2 |
| BJO1 | | | | IAML | | 00 06 49.4 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **BJO1** | **Bjornoya** | **11.93** | **205** | *eP* | **Pn** | **00 04 36.8** | **+0.7** |
| BJO1 | | | | *eS* | **Sn** | **00 06 44.2** | **-4.8** |
| **ARCES** | **ARCESS Array B** | **16.76** | **195** | | **Pn** | **00 05 42.0** | **+1.2** |
| **ARCES** | **ARCESS Array B** | **16.76** | **195** | Pn | **Pn** | **00 05 42.4** | **+1.6** |
| | comp=Z,0.2nm,0.3s,baz=357,slow=11,SNR=12 | | | | | | |
| ARCES | | | | LR | LR | 00 12 27.8 | |
| | comp=Z,29nm,18.4s,baz=349,slow=38 | | | | | | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **SUMG** | **Summit** | **17.02** | **269** | | **Pn** | **00 05 43.3** | **-1.1** |
| **D25K** | **Kavik River** | **24.74** | **4** | P | **P** | **00 07 05.3** | **-2.1** |
| **FINES** | **FINESS Array B** | **24.87** | **193** | P | **P** | **00 07 12.1** | **+3.6** |
| | comp=Z,3.7nm,0.8s,baz=19,slow=12,SNR=4.9 | | | | | | |
| FINES | | | | LR | LR | 00 16 56.6 | |
| | comp=Z,24nm,20.9s,baz=360,slow=36 | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **25.14** | **9** | P | **P** | **00 07 09.3** | **-1.6** |
| **TOLK** | **Toolik Lake Re** | **25.40** | **6** | P | **P** | **00 07 11.9** | **-1.5** |
| **E28M** | **Babbage River** | **25.46** | **358** | P | **P** | **00 07 13.3** | **-0.6** |
| E28M | | | | IAmb | IAmb | 00 07 15.7 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **E29M** | **Blow River** | **25.68** | **356** | P | **P** | **00 07 14.7** | **-1.1** |
| E29M | | | | IAmb | IAmb | 00 07 17.9 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **26.46** | **358** | P | **P** | **00 07 21.3** | **-1.7** |
| F28M | | | | IAmb | IAmb | 00 07 23.7 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **E18K** | **Tukpahlearik C** | **26.48** | **16** | P | **P** | **00 07 21.3** | **-1.8** |
| E18K | | | | IAmb | IAmb | 00 07 27.2 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **26.94** | **12** | P | **P** | **00 07 25.8** | **-1.4** |
| **G29M** | **Pine Creek** | **27.16** | **356** | P | **P** | **00 07 27.8** | **-1.4** |
| G29M | | | | IAmb | IAmb | 00 07 29.6 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **KIRV** | **Kirov** | **27.74** | **167** | LR | LR | 00 20 27.7 | |
| | comp=Z,40nm,22.0s,baz=9.9,slow=40 | | | | | | |
| **YAK** | **Yakutsk** | **28.51** | **81** | LR | LR | 00 18 55.8 | |
| | comp=Z,47nm,18.7s,baz=357,slow=36 | | | | | | |
| **I30M** | **Mount Dempster** | **28.85** | **355** | P | **P** | **00 07 43.8** | **-0.7** |
| I30M | | | | IAmb | IAmb | 00 07 44.3 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **29.31** | **4** | P | **P** | **00 07 48.5** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=355,slow=7.3,SNR=6.4 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **J30M** | **Hart River** | **29.50** | **355** | P | **P** | **00 07 49.7** | **-0.5** |
| **ARU** | **Arti** | **30.09** | **157** | LR | LR | 00 22 56.6 | |
| | comp=Z,19nm,18.6s,baz=314,slow=42 | | | | | | |
| **YKA** | **Yellowknife Ar** | **31.21** | **335** | LR | LR | 00 21 24.4 | |
| | comp=Z,50nm,18.1s,baz=300,slow=38 | | | |

**ISC 11 00:07:08.1±1.4, 51.1N±0.1×179.96W±0.05, h35km, n39, σ1s00/39, mb3.8/4, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.54** | **300** | | | **Pn** | **00 07 18.8** | **-0.5** |
| AMKA | | | | | | **Sn** | **00 07 26.6** | **-0.4** |
| **CESW** | **Semis' Southwe** | **0.84** | **339** | | | **Pn** | **00 07 23.4** | **-0.1** |
| **CERB** | **Semis' Cerberu** | **0.86** | **343** | | | **Sn** | **00 07 35.4** | **+0.4** |
| **CEPE** | **Semis' Perret** | **0.89** | **344** | | | **Pn** | **00 07 24.1** | **-0.1** |
| **CEAP** | **Semis' Anvil P** | **0.93** | **342** | | | **Pn** | **00 07 24.8** | **+0.1** |
| CEAP | | | | | | **Sn** | **00 07 37.6** | **+0.7** |
| **GANO** | **Gareloi North** | **1.01** | **45** | | | **Pn** | **00 07 24.6** | **-1.2** |
| **GAEA** | **Gareloi East** | **1.01** | **48** | | | **Pn** | **00 07 24.9** | **-0.9** |
| **GANE** | **Gareloi Northe** | **1.02** | **46** | | | **Pn** | **00 07 24.9** | **-1.1** |
| **LSSE** | **Little Sitkin** | **1.23** | **312** | | | **Pn** | **00 07 29.8** | **+1.0** |
| **LSPA** | **Little Sitkin** | **1.25** | **313** | | | **Pn** | **00 07 30.1** | **+1.1** |
| LSPA | | | | | | **Sn** | **00 07 46.3** | **+1.7** |
| **LSNW** | **Little Sitkin** | **1.28** | **312** | | | **Pn** | **00 07 30.3** | **+0.7** |
| **TANO** | **Tanaga North** | **1.40** | **54** | | | **Pn** | **00 07 31.4** | **+0.3** |
| **TASE** | **Tanaga Southea** | **1.40** | **58** | | | **Pn** | **00 07 30.7** | **-0.5** |
| **TAFP** | **Tanaga Falls P** | **1.46** | **57** | | | **Pn** | **00 07 31.8** | **-0.2** |
| TAFP | | | | | | **Sn** | **00 07 50.1** | **+0.2** |
| **KICM** | **Kanaga Island** | **1.90** | **64** | | | **Pn** | **00 07 38.4** | **+0.3** |
| **KIWB** | **Kanaga Island** | **1.90** | **66** | | | **Pn** | **00 07 38.3** | **+0.2** |
| **ADK** | **Adak** | **2.18** | **68** | | | **Pn** | **00 07 42.3** | **+0.3** |
| **ADK** | **Adak** | **2.18** | **68** | | | **Sn** | **00 08 08.1** | **+0.4** |
| **ADAG** | **Mount Adagdak** | **2.27** | **66** | | | **Pn** | **00 07 43.9** | **+0.9** |
| **GSTD** | **Great Sitkin T** | **2.56** | **67** | | | **Sn** | **00 08 17.3** | **+0.3** |
| **GSTR** | **Great Sitkin T** | **2.62** | **67** | | | **Pn** | **00 07 48.7** | **+0.7** |
| **KOKL** | **Mount Kliuchef** | **3.78** | **69** | | | **Pn** | **00 08 04.8** | **+0.9** |
| **KOFP** | **Korovin Flat P** | **3.83** | **70** | | | **Pn** | **00 08 05.6** | **+1.1** |
| **SHEM** | **Shemya Is, Ala** comp=Z,68nm,19.4s,baz=226,slow=37 | **4.02** | **296** | LR | | LR | 00 09 49.6 | |
| **NIKH** | **Nikolski High** | **7.09** | **71** | | | **Pn** | **00 08 50.4** | **+1.1** |
| **OKWR** | **Okmok West Rim** | **7.57** | **68** | | | **Pn** | **00 08 57.6** | **+1.6** |
| **OKTU** | **Okmok Mt. Tuli** | **7.66** | **68** | | | **Pn** | **00 08 58.8** | **+1.6** |
| **MAPS** | **Pakushin South** | **8.39** | **66** | | | **Pn** | **00 09 08.2** | **+1.1** |
| **MREP** | **Makushin Rep't** | **8.51** | **66** | | | **Pn** | **00 09 10.0** | **+1.2** |
| **LVA** | **Lava Point** | **9.00** | **65** | Pn | | **Pn** | **00 09 16.5** | **+1.0** |
| **AKGG** | **Akutan Green G** | **9.03** | **65** | | | **Pn** | **00 09 17.2** | **+1.3** |
| **SDPT** | **Sand Point** | **12.40** | **62** | Pn | | **Pn** | **00 10 00.4** | **-1.6** |
| **CNBA** | **Chernabura Isl** | **12.81** | **65** | Pn | | **Pn** | **00 10 05.0** | **-2.6** |
| **ILAR** | **Eielson Array** 0.3nm,0.7s,baz=238,slow=9.5,SNR=2.7 0.3nm,0.7s | **21.90** | **39** | P | | P | 00 12 05.8 | +8.0 |
| **SONM** | **Songino Array** comp=Z,20nm,20.5s,baz=278,slow=37 | **46.11** | **296** | LR | | LR | 00 35 26.7 | |
| **PDAR** | **Pinedale Array** 0.9nm,0.6s,baz=298,slow=3.9,SNR=7.4 0.9nm,0.6s | **47.08** | **71** | P | | **P** | **00 15 35.9** | **-0.7** |
| **KURBB** | **Kurchatov Arra** 0.2nm,0.4s,baz=40,slow=7.0,SNR=4.5 0.2nm,0.4s | **58.78** | **313** | P | | **P** | **00 17 02.1** | **-0.2** |
| **MKAR** | **Makanchi Array** 0.6nm,0.4s,baz=48,slow=6.5,SNR=12 0.6nm,0.4s | **59.62** | **308** | P | | **P** | **00 17 07.9** | **-0.4** |
| **MSVF** | **Nonsavu** comp=Z,30nm,20.4s,baz=22,slow=30 | **68.57** | **182** | LR | | LR | 00 40 50.3 | |

**BER 11 00:38:29.3±2.8, 72.89N×3.82E, h10km, mb(Pn)3.9, Confirmed Earthquake, Norwegian Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JMIC** | **Jan Mayen** | **4.28** | **250** | *e*P | | Pn | 00 39 33.1 | -1.3 |
| **JMI** | **Jan Mayen** | **4.38** | **249** | *e*P | | Pn | 00 39 34.8 | -0.9 |
| **BJO1** | **Bjornoya** | **4.57** | **62** | *e*P | | Pn | 00 39 35.5 | -2.8 |
| BJO1 | | | | *e*S | | Sn | 00 40 25.9 | -5.4 |
| BJO1 | comp=Z,2.4nm,0.8s | | | IAML | | | 00 40 26.8 | |
| **HSPB** | **Hornsund (broa** | **5.13** | **31** | *e*P | | Pn | 00 39 43.7 | -2.3 |
| **LOF** | **Lofoten** | **5.77** | **141** | *e*P | | Pn | 00 39 53.3 | -1.6 |
| LOF | | | | *e*S | | Sn | 00 40 50.4 | -11 |
| LOF | comp=Z,4.3nm,0.7s | | | IAML | | | 00 41 02.2 | |
| **TRO** | **Tromso** | **5.85** | **117** | *e*P | | Pn | 00 39 52.4 | -3.5 |
| **STEI** | **Steigen** | **6.28** | **137** | *e*P | | Pn | 00 39 59.6 | -2.2 |
| STEI | | | | *e*S | | Sn | 00 41 06.0 | -7.4 |
| STEI | comp=Z,2.5nm,0.8s | | | IAML | | | 00 41 09.0 | |
| **KBS** | **Kingsbay** | **6.38** | **14** | *e*P | | Pn | 00 40 03.2 | +0.1 |
| **HOPEN** | **Hopen** | **6.65** | **47** | *e*P | | Pn | 00 40 04.1 | -2.7 |
| **KIF** | **Kilpisjarvi** | **6.77** | **117** | *e*P | | Pn | 00 40 05.3 | -3.2 |
| KIF | | | | *e*S | | Sn | 00 41 17.6 | -7.9 |
| **DAG** | **Danmarks Havn** | **7.02** | **314** | *e*P | | Pn | 00 40 08.8 | -3.1 |
| DAG | | | | *e*S | | Sn | 00 41 20.9 | -11 |
| **KONS** | **Konsvik** | **7.18** | **149** | *e*P | | Pn | 00 40 11.8 | -2.3 |
| KONS | | | | *e*S | | Sn | 00 41 25.4 | -10 |
| KONS | comp=Z,2.5nm,0.7s | | | IAML | | | 00 41 33.2 | |
| **STOK** | **Stokkvaagen** | **7.32** | **150** | *e*P | | Pn | 00 40 13.2 | -2.8 |
| STOK | | | | *e*S | | Sn | 00 41 27.6 | -11 |
| STOK | comp=Z,3.8nm,0.9s | | | IAML | | | 00 41 38.8 | |
| **MOR8** | **Moi Rana** | **7.69** | **146** | *e*P | | Pn | 00 40 18.5 | -2.7 |
| MOR8 | comp=Z,2.2nm,0.8s | | | IAML | | | 00 41 36.9 | |
| MOR8 | | | | *e*S | | Sn | 00 41 38.8 | -9.4 |

*IDC* ***11*** *00:58:44.8±0.6, 13.48N×125.17E, h0km, mb4.1/13, mbtmp4.1/13, Error ellipse: s-maj=32.7km s-min=13.0km az=71.0*

*NEIC* ***11*** *00:58:47±1.2, 13.53N±0.08×125.11E±0.04, h10km±1km, mb4.5/46, Error ellipse: s-maj=12.9km s-min=6.7km az=170.0*

**ISC 11 00:58:46.0±0.5, 13.52N±0.06×125.2E±0.1, h10km, n70, σ0s81/70, mb4.4/36, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWG** | **Pinlang** | **10.04** | **338** | | Pn | **Pn** | **01 01 11.2** | **+0.9** |
| **MYLDM** | **Lahad Datu** | **10.58** | **219** | | Pn | **Pn** | **01 01 19.4** | **+1.6** |
| **NACB** | **Ninganchiao** | **11.12** | **343** | | Pn | **Pn** | **01 01 25.7** | **+0.4** |
| **TATO** | **Taipei** | **11.91** | **344** | | Pn | **Pn** | **01 01 34.9** | **-1.1** |
| **TOLI2** | **Tolitoli** | **13.07** | **200** | | Pn | **Pn** | **01 01 51.9** | **-0.1** |
| **FAKI** | **Fak Fak** | **17.78** | **156** | | P | **P** | **01 02 55.5** | **+1.0** |
| **JNU** | **Nakatsue** | **20.20** | **14** | | P | **P** | **01 03 22.0** | **+1.0** |
| **KSAR** | **Wonju Array Be** | **23.95** | **5** | | P | **P** | **01 04 01.3** | **+0.9** |
| **KSRS** | **Korea Array** 0.9nm,0.5s,baz=182,slow=11,SNR=7.0 0.9nm,0.5s | **23.96** | **5** | | P | **P** | **01 04 01.9** | **+1.3** |
| **JSG** | **Sagara** | **24.13** | **27** | | P | **P** | **01 04 02.1** | **-0.1** |
| **INU** | **Inuyama** | **24.22** | **24** | | P | **P** | **01 04 02.9** | **-0.1** |
| INU | comp=Z,16nm,1.0s | | | | IAmb | IAmb | 01 04 04.6 | |
| **CMAR** | **Chiang Mai Arr** comp=Z,2.7nm,0.3s,baz=98,slow=8.4,SNR=4.4 comp=Z,2.7nm,0.3s | **25.68** | **284** | | P | **P** | **01 04 16.6** | **+0.1** |
| **USA0B** | **Ussuriysk Arra** | **31.13** | **10** | | P | **P** | **01 05 05.0** | **+0.2** |
| USA0B | comp=Z,5.6nm,0.8s | | | | IAmb | IAmb | 01 05 14.5 | |
| **USRK** | **Ussuriysk Ar.** | **31.13** | **10** | | P | **P** | **01 05 04.9** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** comp=Z,3.5nm,0.8s,baz=200,slow=7.0,SNR=6.8 comp=Z,3.5nm,0.8s | **31.13** | **10** | | P | **P** | **01 05 05.5** | **+0.7** |
| **WRA** | **Warramunga Arr** comp=Z,0.8nm,0.6s,baz=332,slow=11,SNR=11 comp=Z,0.8nm,0.6s | **34.45** | **165** | | P | **P** | **01 05 33.0** | **-1.1** |
| **LSA** | **Lhasa** | **35.32** | **303** | | P | **P** | **01 05 41.7** | **-0.5** |
| LSA | comp=Z,5.6nm,0.8s | | | | IAmb | IAmb | 01 06 00.5 | |
| **SONM** | **Songino Array** | **37.62** | **339** | | P | **P** | **01 06 01.6** | **+0.4** |
| **SONM** | **Songino Array** comp=Z,2.6nm,0.8s,baz=157,slow=8.8,SNR=12 comp=Z,2.6nm,0.8s | **37.62** | **339** | | P | **P** | **01 06 01.7** | **+0.6** |
| **AS31** | **Alice Springs** | **37.93** | **167** | | P | **P** | **01 06 04.6** | **+0.7** |
| **ASAR** | **Alice Springs** comp=Z,3.3nm,0.6s,baz=346,slow=7.0,SNR=40 comp=Z,2.3nm,0.6s | **37.93** | **167** | | P | **P** | **01 06 04.2** | **+0.4** |
| **CTA** | **Charters Tower** comp=Z,0.4nm,0.7s,baz=349,slow=9.2,SNR=6.0 comp=Z,0.4nm,0.7s | **39.31** | **148** | | P | **P** | **01 06 15.7** | **+0.1** |
| **CTAO** | **Charters Tower** | **39.31** | **148** | | P | **P** | **01 06 16.3** | **+0.8** |
| CTAO | comp=Z,6.5nm,0.8s | | | | IAmb | IAmb | 01 06 17.0 | |
| **MORW** | **Morawa** | **43.25** | **192** | | P | **P** | **01 06 46.2** | **-1.5** |
| MORW | comp=Z,13nm,1.1s | | | | IAmb | IAmb | 01 06 51.9 | |
| **FORT** | **Forrest** | **44.13** | **176** | | P | **P** | **01 06 55.2** | **+0.4** |
| **EIDS** | **Eidsvold** | **46.17** | **147** | | P | **P** | **01 07 11.5** | **+0.3** |
| EIDS | comp=Z,1.1nm,1.1s | | | | IAmb | IAmb | 01 07 20.8 | |
| **BBOO** | **Buckleboo** | **47.23** | **167** | | P | **P** | **01 07 19.4** | **+0.1** |
| **STKA** | **Stephens Creek** | **47.80** | **161** | | P | **P** | **01 07 24.3** | **+0.5** |
| **STKA** | **Stephens Creek** comp=Z,6.0nm,0.8s,baz=327,slow=7.8,SNR=7.0 comp=Z,6.0nm,0.8s | **47.80** | **161** | | P | **P** | **01 07 24.1** | **+0.3** |
| **MK31** | **Makanchi Array** | **48.82** | **322** | | P | **P** | **01 07 32.0** | **+0.5** |
| MK31 | comp=Z,3.0nm,0.9s | | | | IAmb | IAmb | 01 07 34.5 | |
| **MKAR** | **Makanchi Array** | **48.82** | **322** | | P | **P** | **01 07 31.9** | **+0.3** |
| **MKAR** | **Makanchi Array** comp=Z,2.4nm,0.8s,baz=115,slow=8.6,SNR=14 comp=Z,2.4nm,0.8s | **48.82** | **322** | | P | **P** | **01 07 32.4** | **+0.8** |
| **MAKZ** | **Makanchi** | **49.01** | **321** | | P | **P** | **01 07 33.8** | **+0.7** |
| MAKZ | comp=Z,4.0nm,1.0s | | | | IAmb | IAmb | 01 07 42.6 | |
| **ZAA0** | **Zalesovo Array** | **51.28** | **331** | | P | **P** | **01 07 49.8** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **51.28** | **331** | | P | **P** | **01 07 49.8** | **-0.3** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.3nm,0.7s,baz=135,slow=7.3,SNR=5.0 comp=Z,1.3nm,0.7s | **51.28** | **331** | | P | **P** | **01 07 50.1** | **0.0** |
| **KURK** | **Kurchatov** | **52.80** | **325** | | P | **P** | **01 08 01.7** | **+0.2** |
| **KURBB** | **Kurchatov Arra** comp=Z,5.1nm,0.8s,baz=121,slow=7.8,SNR=31 comp=Z,5.1nm,0.8s | **52.81** | **324** | | P | **P** | **01 08 02.3** | **+0.7** |
| **BRVK** | **Borovoye** | **58.48** | **325** | | P | **P** | **01 08 42.4** | **+0.2** |
| **ABKAR** | **Akbulak array** | **63.74** | **318** | | P | **P** | **01 09 17.7** | **-0.3** |
| **ABKAR** | **Akbulak array** | **63.74** | **318** | | P | **P** | **01 09 17.8** | **-0.2** |
| ABKAR | comp=Z,3.4nm,0.8s | | | | IAmb | IAmb | 01 09 26.7 | |
| **D19K** | **Kuna River** | **72.64** | **22** | | P | **P** | **01 10 14.4** | **+0.8** |
| **J18K** | **Innoko River** | **72.69** | **27** | | P | **P** | **01 10 15.2** | **+1.3** |
| **E19K** | **Redstone River** | **72.85** | **23** | | P | **P** | **01 10 16.0** | **+1.2** |
| E19K | comp=Z,5.7nm,1.1s | | | | IAmb | IAmb | 01 10 25.7 | |
| **H19K** | **Roundabout Mou** | **72.97** | **25** | | P | **P** | **01 10 16.7** | **+1.1** |
| H19K | comp=Z,5.3nm,0.9s | | | | IAmb | IAmb | 01 10 17.8 | |
| **F20K** | **Avaraart Lake** | **73.39** | **24** | | P | **P** | **01 10 18.9** | **+0.9** |
| F20K | comp=Z,2.9nm,0.9s | | | | IAmb | IAmb | 01 10 20.2 | |
| **J20K** | **Nowinta River** | **73.87** | **27** | | P | **P** | **01 10 22.3** | **+1.4** |
| **B21K** | **Ikpikpuk River** | **74.01** | **21** | | P | **P** | **01 10 22.8** | **+1.3** |
| **E21K** | **Killik River** | **74.16** | **22** | | P | **P** | **01 10 23.5** | **+0.9** |
| E21K | comp=Z,3.0nm,0.9s | | | | IAmb | IAmb | 01 10 24.4 | |
| **G21K** | **Allakaket** | **74.24** | **24** | | P | **P** | **01 10 23.9** | **+0.9** |
| G21K | comp=Z,5.6nm,0.9s | | | | IAmb | IAmb | 01 10 25.2 | |
| **H21K** | **Melozitna Rive** | **74.49** | **25** | | P | **P** | **01 10 25.5** | **+1.0** |
| H21K | comp=Z,3.7nm,1.1s | | | | IAmb | IAmb | 01 10 32.0 | |
| **BPAW** | **Bear Paw Mtn.** | **75.25** | **27** | | P | **P** | **01 10 29.6** | **+0.7** |
| **MLY** | **Manley** | **75.35** | **26** | | P | **P** | **01 10 30.0** | **+0.4** |
| MLY | comp=Z,5.1nm,1.0s | | | | IAmb | IAmb | 01 10 30.9 | |
| **G23K** | **Bananza Creek** | **75.63** | **24** | | P | **P** | **01 10 30.7** | **-0.4** |
| G23K | comp=Z,3.2nm,1.1s | | | | IAmb | IAmb | 01 10 32.9 | |
| **H23K** | **Yukon River** | **75.84** | **25** | | P | **P** | **01 10 32.9** | **+0.6** |
| **NEA2** | **Nenana** | **76.08** | **26** | | P | **P** | **01 10 34.0** | **+0.4** |
| NEA2 | comp=Z,4.8nm,1.0s | | | | IAmb | IAmb | 01 10 35.5 | |
| **JOKA** | **Jonika Flow** | **76.17** | **73** | | P | **P** | **01 10 33.9** | **-1.2** |
| **E24K** | **Your Creek** | **76.20** | **23** | | P | **P** | **01 10 35.2** | **+0.9** |
| E24K | comp=Z,3.3nm,1.1s | | | | IAmb | IAmb | 01 10 36.5 | |
| **RND** | **Reindeer** | **76.22** | **28** | | P | **P** | **01 10 33.8** | **-0.8** |
| **GURO** | **Guroymak-BITLI** | **76.39** | **307** | | P | **P** | **01 10 34.5** | **-1.6** |
| GURO | comp=Z,3.3nm,0.9s | | | | IAmb | IAmb | 01 10 41.0 | |
| **MDM** | **Murphy Dome** | **76.42** | **26** | | P | **P** | **01 10 36.9** | **+1.3** |
| **H24K** | **Noodor Dome** | **76.53** | **25** | | P | **P** | **01 10 37.7** | **+1.5** |
| H24K | comp=Z,3.3nm,1.1s | | | | IAmb | IAmb | 01 10 43.3 | |
| **D25K** | **Kavik River** | **76.91** | **21** | | P | **P** | **01 10 38.8** | **+0.4** |
| D25K | comp=Z,4.0nm,0.9s | | | | IAmb | IAmb | 01 10 48.9 | |
| **ILAR** | **Eielson Array** comp=Z,0.4nm,0.8s,baz=259,slow=6.4,SNR=5.6 comp=Z,0.4nm,0.8s | **77.01** | **26** | | P | **P** | **01 10 39.0** | **+0.1** |
| **I28M** | **Miner Creek** | **79.84** | **25** | | P | **P** | **01 10 54.8** | **+0.1** |
| **CTGM** | **Chitina Glacie** | **79.99** | **30** | | P | **P** | **01 10 56.1** | **+0.4** |
| CTGM | comp=Z,4.2nm,1.0s | | | | IAmb | IAmb | 01 11 05.9 | |
| **ATD** | **Arta Tunnel** | **80.01** | **280** | | P | **P** | **01 10 55.2** | **-1.3** |
| **G29M** | **Pine Creek** | **80.33** | **23** | | P | **P** | **01 10 58.0** | **+0.8** |
| G29M | comp=Z,7.0nm,1.1s | | | | IAmb | IAmb | 01 11 02.6 | |
| **VNDA** | **Vanda** comp=Z,1.3nm,0.7s,baz=326,slow=5.9,SNR=5.9 comp=Z,1.3nm,0.7s | **93.27** | **173** | | P | **P** | **01 12 00.7** | **+0.4** |
| **PLCA** | **Paso Flores** comp=Z,1.4nm,0.8s,baz=185,slow=5.9,SNR=4.8 | **149.59** | **156** | | PKPbc | **PKPbc** | **01 18 36.5** | **+0.2** |

*BJI* ***11*** *01:01:13.5±0.0, 2.91S×147.47E, h8km, mb4.6/33, mB5.1/13, Ms5.1/20, Ms7 5.0/21*

*IDC* ***11*** *01:01:13.1±0.8, 3.08S×147.58E, h0km, mb4.2/13, mbtmp4.2/14, ML2.1/1, Error ellipse: s-maj=33.4km s-min=15.6km az=91.0*

*NEIC* ***11*** *01:01:15.4±1.9, 2.94S±0.04×147.21E±0.02, h10km±1km, mb4.8/41, Error ellipse: s-maj=7.8km s-min=2.9km az=336.0*

*GCMT* ***11*** *01:01:19.4±0.3, 2.94S±0.02×147.35E±0.02, h16km±1km, MW5.0/106, Moment Tensor Solution. s49,c58; s106,c154; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-0.17±.16; Mθθ 0.78±.16; Mϕϕ -0.60±.17; Mrθ-0.65±.45; Mθϕ 4.71±.17; Mϕr-0.03±.43; Best double couple: Ms4.80500×10¹⁶ NP1:ϕs274.00000°, δ90.00000°, λ8.00000°. NP2:ϕs184.00000°, δ82.00000°, λ180.00000°. Principal axes: T 4.8980, Plg6.0000°, Azm139.0000°; N -0.1860, Plg82.0000°, Azm278.0000°; P -4.7120, Plg5.0000°, Azm49.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*DJA* ***11*** *01:01:30.5±1.7, 4.3S±13×14.6E±1.4, h49km±9km, M4.7/11, mB5.3/4, mb4.8/11, MLv4.8/3, Mw(mB)4.7/4*

**ISC 11 01:01:15.2±0.4, 3.01S±0.05×147.35E±0.07, h10km, n88, σ1s43/95, mb4.7/47, MS4.9/10, 2C-1D, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **0.96** | **1** | | | **Pg** | **01 01 31.3** | **-2.4** |
| MANU | | | | | Sg | **Sg** | **01 01 44.4** | **-1.8** |
| **RABL** | **Rabaul** | **4.95** | **104** | | Pn | **Pn** | **01 02 31.8** | **+2.1** |
| **PMG** | **Port Moresby** | **6.36** | **182** | | Pn | **Pn** | **01 02 49.0** | **-0.1** |
| **PMG** | **Port Moresby** 2.4nm,0.3s,baz=300,slow=15,SNR=1.9 8.7nm,0.4s | **6.36** | **182** | | Pn | **Pn** | **01 02 48.5** | **-0.6** |
| **JAY** | **Jayapura** 61nm,1.2s,741nm0.3nm | **6.65** | **274** | | P | **Pn** | **01 02 54.7** | **+1.6** |
| **GENI** | **Genyem** 251nm,1.3s,3μm0.8nm | **7.18** | **273** | | P | **Pn** | **01 03 01.6** | **+1.2** |
| **COEN** | **Coen** | **11.63** | **200** | | Pn | **Pn** | **01 04 01.0** | **-0.5** |
| **CTA** | **Charters Tower** baz=41,slow=11,SNR=2.8 | **17.01** | **184** | | Pn | **P** | **01 05 16.1** | **+0.8** |
| **CTAO** | **Charters Tower** | **17.01** | **184** | | P | **P** | **01 05 16.5** | **+1.2** |
| **MTN** | **Manton Dam** | **18.78** | **238** | | P | **P** | **01 05 33.3** | **-1.6** |
| **WB0** | **Warramunga Arr** | **20.92** | **216** | | P | **P** | **01 05 56.9** | **-1.2** |
| **WRA** | **Warramunga Arr** | **21.08** | **216** | | P | **P** | **01 05 58.3** | **-1.7** |
| **WRA** | **Warramunga Arr** 77nm,1.1s,baz=40,slow=9.4,SNR=57 | **21.08** | **216** | | P | **P** | **01 05 59.7** | **-0.3** |
| **KNRA** | **Kununurra** | **22.21** | **234** | | P | **P** | **01 06 09.9** | **-2.2** |
| KNRA | comp=Z,45nm,1.2s | | | | IAmb | IAmb | 01 06 14.2 | |
| **EIDS** | **Eidsvold** | **22.52** | **171** | | P | **P** | **01 06 14.6** | **-0.8** |
| EIDS | comp=Z,36nm,1.4s | | | | IAmb | IAmb | 01 06 24.1 | |
| **SOEI** | **Soe** | **23.88** | **253** | | P | **P** | **01 06 26.7** | **-2.7** |
| **SOEI** | **Soe** comp=Z,64nm,1.1s | **23.88** | **253** | | P | **P** | **01 06 31.1** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **24.02** | **138** | | P | **P** | **01 06 29.6** | **-0.8** |
| KOUNC | comp=Z,42nm,1.5s | | | | IAmb | IAmb | 01 06 41.6 | |
| **AS31** | **Alice Springs** | **24.30** | **211** | | P | **P** | **01 06 31.9** | **-1.2** |
| **ASAR** | **Alice Springs** | **24.31** | **211** | | P | **P** | **01 06 32.3** | **-0.9** |
| **ASAR** | **Alice Springs** comp=Z,19nm,0.8s,baz=39,slow=7.1,SNR=16 comp=Z,19nm,0.8s | **24.31** | **211** | | P | **P** | **01 06 32.9** | **-0.3** |
| **GTOI** | **Gorontalo** comp=Z,28nm,1.4s,comp=Z,476nm | **24.59** | **278** | | P | **P** | **01 06 39.4** | **+3.5** |
| **LUWI** | **Luwuk** | **24.64** | **274** | | P | **P** | **01 06 33.2** | **-3.1** |
| **LUWI** | **Luwuk** | **24.64** | **274** | | P | **P** | **01 06 37.3** | **+1.1** |
| **TARA** | **Tarawa** | **25.93** | **81** | | P | **P** | **01 06 48.9** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **26.03** | **233** | | P | **P** | **01 06 47.5** | **-1.3** |
| **DZM** | **Mont Dzumac** | **26.52** | **137** | | | **P** | **01 06 53.3** | **0.0** |
| **TOLI2** | **Tolitoli** | **26.87** | **278** | | P | **P** | **01 06 53.4** | **-3.1** |
| TOLI2 | comp=Z,52nm,1.9s | | | | IAmb | IAmb | 01 07 11.8 | |
| **STKA** | **Stephens Creek** | **29.22** | **190** | | P | **P** | **01 07 16.1** | **-1.2** |
| STKA | comp=Z,6.7nm,1.6s | | | | IAmb | IAmb | 01 08 05.4 | |
| **YULB** | **Yu-li** | **36.51** | **317** | | P | **P** | **01 08 19.9** | **-1.2** |
| YULB | comp=Z,12nm,0.8s | | | | IAmb | IAmb | 01 08 24.9 | |
| **NACB** | **Ninganchiao** | **36.84** | **319** | | P | **P** | **01 08 22.6** | **-1.3** |
| NACB | comp=Z,23nm,1.0s | | | | IAmb | IAmb | 01 08 27.4 | |
| **YHNB** | **Yeheng** | **37.33** | **319** | | P | **P** | **01 08 26.7** | **-1.4** |
| **INU** | **Inuyama** | **39.37** | **347** | | P | **P** | **01 08 42.1** | **-2.8** |
| INU | comp=Z,18nm,1.1s | | | | IAmb | IAmb | 01 08 53.2 | |
| **JGF** | **Kuroka** | **39.53** | **347** | | P | **P** | **01 08 44.0** | **-2.4** |
| JGF | comp=Z,17nm,1.1s | | | | IAmb | IAmb | 01 08 48.6 | |
| **MJAR** | **Matsushiro Arr** comp=Z,3.8nm,1.0s,baz=162,slow=9.2,SNR=5.1 comp=Z,3.8nm,1.0s | **40.26** | **349** | | P | **P** | **01 08 53.1** | **+0.6** |
| **KSRS** | **Korea Array** comp=Z,2.4nm,0.9s,baz=155,slow=9.5,SNR=8.9 comp=Z,2.4nm,0.9s | **44.12** | **338** | | P | **P** | **01 09 24.8** | **+1.0** |
| **NJ2** | **Nanjing** | **44.13** | **324** | *e*P | | **P** | **01 09 24.2** | **+0.1** |
| NJ2 | | | | PP | | **PP** | **01 11 07.1** | **+0.1** |
| NJ2 | comp=Z,11nm,0.6s | | | pmax | pmax | | | |
| NJ2 | comp=Z,130nm,3.8s | | | pmax | pmax | | | |
| NJ2 | comp=Z,1μm,19.9s | | | LR | LR | | | |
| NJ2 | comp=Z,1μm,20.4s | | | LR | LR | | | |
| NJ2 | comp=Z,2μm,20.6s | | | LR | LR | | | |
| **TUWZ** | **Tuamarina** | **45.10** | **152** | | P | **P** | **01 09 32.6** | **+0.9** |
| **USRK** | **Ussuriysk Ar.** | **48.97** | **345** | | P | **P** | **01 10 01.4** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** comp=Z,3.9nm,0.8s,baz=182,slow=5.5,SNR=5.0 comp=Z,3.9nm,0.8s | **48.97** | **345** | | P | **P** | **01 10 03.2** | **+1.3** |
| **HNS** | **HongShan** | **50.34** | **326** | ⇑P | | **P** | **01 10 13.0** | **+0.6** |
| HNS | | | | S | | **S** | **01 17 29.0** | **+3.5** |
| HNS | comp=Z,10.0nm,1.2s | | | pmax | pmax | | | |
| HNS | comp=Z,1μm,22.0s | | | LR | LR | | | |
| HNS | comp=Z,2μm,22.6s | | | LR | LR | | | |
| **XAN** | **Xi'an** | **51.64** | **319** | ⇑P | | **P** | **01 10 22.9** | **+0.5** |
| XAN | | | | S | | **S** | **01 17 46.0** | **+2.3** |
| XAN | comp=Z,12nm,0.8s | | | pmax | pmax | | | |
| XAN | comp=Z,190nm,3.6s | | | pmax | pmax | | | |
| **BNX** | **BinXian** | **51.67** | **342** | ⇓P | | **P** | **01 10 23.0** | **+0.7** |
| BNX | comp=Z,7.0nm,1.0s | | | pmax | pmax | | | |
| **CMAR** | **Chiang Mai Arr** | **52.20** | **296** | | P | **P** | **01 10 26.0** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** comp=Z,2.2nm,0.3s,baz=111,slow=6.1,SNR=6.6 comp=Z,2.2nm,0.3s | **52.20** | **296** | | P | **P** | **01 10 28.6** | **+1.8** |
| **PZH** | **PanZhiHua** | **52.92** | **307** | | P | **P** | **01 10 34.1** | **+2.0** |
| PZH | comp=Z,10.0nm,0.8s | | | pmax | pmax | | | |
| PZH | comp=Z,80nm,3.9s | | | pmax | pmax | | | |
| **CD2** | **Chengdu** | **53.48** | **312** | | P | **P** | **01 10 37.1** | **+1.0** |
| CD2 | | | | pP | sP | | 01 10 39.7 | -0.1 |
| CD2 | | | | S | **S** | | **01 18 10.9** | **+1.8** |
| CD2 | | | | sS | sS | | 01 18 13.6 | 0.0 |
| CD2 | comp=Z,10.0nm,0.8s | | | pmax | pmax | | | |
| CD2 | comp=Z,150nm,5.5s | | | pmax | pmax | | | |
| CD2 | comp=Z,1μm,21.1s | | | LR | LR | | | |
| CD2 | comp=Z,1μm,18.2s | | | LR | LR | | | |
| CD2 | comp=Z,2μm,20.6s | | | LR | LR | | | |
| **XLT** | **XiLinHaoTe** | **54.48** | **333** | *e*P | | **P** | **01 10 44.2** | **+1.0** |
| XLT | | | | sP | pwP | | 01 10 50.6 | +2.6 |
| XLT | | | | S | **S** | | **01 18 23.6** | **+1.4** |
| XLT | comp=Z,6.0nm,0.8s | | | pmax | pmax | | | |
| XLT | comp=Z,66nm,19.4s | | | LR | LR | | | |
| XLT | comp=Z,490nm,22.7s | | | LR | LR | | | |
| XLT | comp=Z,1μm,22.4s | | | LR | LR | | | |
| **HHC** | **Hu-ho-hao-te** | **54.51** | **327** | *e*P | | **P** | **01 10 45.3** | **+1.8** |
| HHC | | | | pP | pwP | | 01 10 50.4 | +2.1 |
| HHC | | | | S | **S** | | **01 18 23.8** | **+1.1** |
| HHC | | | | sS | sS | | 01 18 31.2 | +4.0 |
| HHC | comp=Z,17nm,0.5s | | | pmax | pmax | | | |
| HHC | comp=Z,63nm,4.0s | | | pmax | pmax | | | |
| HHC | comp=Z,900nm,18.2s | | | LR | LR | | | |
| HHC | comp=Z,590nm,17.8s | | | LR | LR | | | |
| HHC | comp=Z,2μm,19.5s | | | LR | LR | | | |
| **TNCH** | **TengChong** | **54.94** | **303** | *e*P | | **P** | **01 10 49.0** | **+2.0** |
| TNCH | | | | sP | pwP | | 01 10 53.6 | +1.9 |
| TNCH | comp=Z,39nm,0.5s | | | pmax | pmax | | | |
| TNCH | comp=Z,100nm,4.0s | | | pmax | pmax | | | |
| TNCH | comp=Z,350nm,16.2s | | | LR | LR | | | |
| TNCH | comp=Z,400nm,16.6s | | | LR | LR | | | |
| TNCH | comp=Z,650nm,22.5s | | | LR | LR | | | |
| **HEH** | **HeiHe** | **55.76** | **345** | *e*P | | **P** | **01 10 51.7** | **-0.5** |
| **LZH** | **Lanzhou** | **56.21** | **318** | *e*P | | **P** | **01 10 57.7** | **+1.8** |
| LZH | | | | sP | pwP | | 01 11 05.4 | +4.7 |
| LZH | comp=Z,33nm,1.0s | | | pmax | pmax | | | |
| LZH | comp=Z,580nm,15.5s | | | LR | LR | | | |
| LZH | comp=Z,730nm,14.1s | | | LR | LR | | | |
| LZH | comp=Z,

```
MKAR Makanchi Array    75.43 320  P    P    01 12 59.5 -0.1
     comp=Z,1.1nm,0.9s,baz=107,slow=7.7,SNR=5.0
     comp=Z,1.1nm,0.9s
MAKZ Makanchi          75.64 320  P    P    01 13 00.9 +0.2
ZALV Zalesovo Beam     76.69 327  P    P    01 13 06.9 +0.5
     comp=Z,0.5nm,0.3s,baz=102,slow=6.1,SNR=2.4
     comp=Z,0.5nm,0.3s
KSH  Kashi             77.66 311  P    P    01 13 14.7 +2.3
KSH                               pP   pwP  01 13 18.9 +1.6
KSH                               pmax pmax
     comp=Z,5.0nm,1.5s
KSH                               LR   LR
     comp=Z,700nm,18.9s
KSH                               LR   LR
     comp=Z,560nm,19.6s
KSH                               LR   LR
     comp=Z,520nm,21.3s
H17K Granite Mounta    77.86  20  P    P    01 13 13.9 +1.1
H17K                              IAmb IAmb 01 13 20.3
     comp=Z,13nm,1.4s
L19K White Mountain    78.25  24  P    P    01 13 15.7 +0.6
L19K                              IAmb IAmb 01 13 20.2
     comp=Z,10nm,1.1s
NIL  Nilore            78.49 305  P    P    01 13 15.5 -1.6
NIL                               IAmb IAmb 01 13 20.8
     comp=Z,9.3nm,0.8s
KURK Kurchatov         79.04 323  P    P    01 13 18.5 -1.1
KURBB Kurchatov Arra   79.06 323  P    P    01 13 19.5 -0.2
     comp=Z,0.5nm,0.2s,baz=104,slow=5.9,SNR=5.3
     comp=Z,0.5nm,0.2s
H19K Roundabout Mou    79.40  21  P    P    01 13 22.6 +1.4
H19K                              IAmb IAmb 01 13 25.7
     comp=Z,9.4nm,1.1s
G19K Purcell Mounta    79.51  20  P    P    01 13 22.5 +0.6
G19K                              IAmb IAmb 01 13 35.2
     comp=Z,18nm,1.8s
E19K Redstone River    80.19  19  P    P    01 13 25.7 +0.1
IMAR Indian Mountai    80.59  21  P    P    01 13 27.7  0.0
B21K Ikpikpuk River    82.16  17  P    P    01 13 36.5 +0.5
B21K                              IAmb IAmb 01 13 42.4
     comp=Z,8.6nm,1.1s
IL31                   82.61  23  P    P    01 13 37.9 -0.4
IL31                              IAmb IAmb 01 13 43.5
     comp=Z,8.4nm,1.4s
ILAR Eielson Array     82.61  23  P    P    01 13 37.8 -0.7
ILAR Eielson Array     82.61  23  P    P    01 13 38.0 -0.5
     comp=Z,2.0nm,0.8s,baz=256,slow=5.1,SNR=14
     comp=Z,2.0nm,0.8s
F24K Squaw Lake        83.36  21  P    P    01 13 43.2 +0.9
F24K                              IAmb IAmb 01 14 03.7
     comp=Z,18nm,1.9s
D25K Kavik River       84.61  19  P    P    01 13 48.5 -0.1
BRVK Borovoye          84.64 324  P    P    01 13 48.6 -0.5
BRVK                              IAmb IAmb 01 14 06.6
     comp=Z,4.2nm,1.1s
K29M Barlow Dome       86.17  25  P    P    01 13 57.0 +0.3
K29M                              IAmb IAmb 01 14 00.8
     comp=Z,5.3nm,1.1s
QSPA South Pole Qui    86.94 180  P    P    01 13 59.1 -1.4
QSPA                              IAmb IAmb 01 14 06.1
     comp=Z,12nm,1.3s
QSPA South Pole Qui    86.94 180  P    P    01 13 59.2 -1.2
     comp=Z,2.0nm,0.9s,baz=12,slow=1.5,SNR=6.3
     comp=Z,2.0nm,0.9s
YBH  Yreka Blue Hor    91.94  48  P    P    01 14 24.4  0.0
NVAR Mina Array Bea    95.27  52  P    P    01 14 37.5 -2.5
     comp=Z,0.1nm,0.3s,baz=238,slow=8.4,SNR=1.8
     comp=Z,0.1nm,0.3s
BMO  Blue Mountains    95.90  45  P    P    01 14 41.0 -1.6
BMO                               IAmb IAmb 01 14 47.2
     comp=Z,7.7nm,1.6s
```

*IDC* **11** *01:04:36.9±0.8, 3°.02S×147°.56E, h0km, mb4.4/16, mbtmp4.4/17, ML2.3/1, MS4.7/39, Error ellipse: s-maj=31.4km s-min=13.8km az=89.0*

*MOS* **11** *01:04:37.6±0.8, 2°.98S×147°.33E, h13km, mb4.9/23, Error ellipse: s-maj=13.6km s-min=7.2km az=101.5*

*NEIC* **11** *01:04:39.2±1.5, 2°.90S±0°.05×147°.41E±0°.09, h10km±1km, mb5.0/80, Error ellipse: s-maj=14.6km s-min=8.6km az=88.0*

*BJI* **11** *01:04:39.0±0.0, 2°.77S×147°.48E, h12km, mb4.7/55, mB5.3/18, Ms5.1/49, Ms7 4.9/48*

*GCMT* **11** *01:04:43.2±0.1, 2°.95S±0°.01×147°.43E±0°.01, h12km, MW5.3/144, Moment Tensor Solution. s96,c167; s144,c283; Duration: 1§1 Moment tensor: Scale 10^17 Nm; Mrr0.04±.01; Mθθ -0.12±.01; Mϕϕ 0.07±.02; Mrθ -0.21±.03; Mθϕ 1.20±.01; Mϕr 0.01±.04; Best double couple: Mo1.22200×10^17 NP1:ϕs88.00000°, δ90.00000°, λ-10.00000°. NP2:ϕs178.00000°, δ80.00000°, λ-180.00000°. Principal axes: T 1.2010, Plg7.0000°, Azm133.0000°; N 0.0410, Plg80.0000°, Azm265.0000°; P -1.2430, Plg7.0000°, Azm42.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*DJA* **11** *01:04:44.7±1.1, 3°.S×146°.7E±°, h43km±8km, M5.1/24, mb4.8/24, mB5.7/9, MLv5.2/3, Mw(mB)5.2/9, MwMwp5.1/2, Mwp5.4/2*

**ISC 11 01:04:39.7±0.5, 2°.98S±0°.04×147°.38E±0°.05, h14km±2km, h14km:pP-P, n452, σ1§63/430, mb4.9/90, MS4.9/69, 8D, Admiralty Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MANU | Manus Island | 0.94 | 359 | | Pb | 01 04 54.9 | -2.8 |
| KAVG | Kavieng | 3.45 | 83 | P | Pn | 01 05 30.0 | -3.0 |
| RABL | Rabaul | 4.93 | 104 | Pn | Pn | 01 05 51.7 | -1.7 |
| PMG | Port Moresby | 6.38 | 182 | Pn | Pn | 01 06 13.1 | -0.2 |
| PMG | Port Moresby | 6.38 | 182 | Pn | Pn | 01 06 13.8 | +0.4 |
| | 4.2nm,0.3s,baz=291,slow=23,SNR=2.1 | | | | | | |
| PMG | | | | LR | LR | 01 08 31.5 | |
| | comp=Z,5μm,19.7s,baz=3.5,slow=37 | | | | | | |
| | 16nm,0.5s | | | | | | |
| JAY | Jayapura | 6.68 | 274 | P | Pn | 01 06 19.5 | +2.0 |
| | 74nm,1.2s,0.4nm | | | | | | |
| GENI | Genyem | 7.21 | 273 | P | Pn | 01 06 26.8 | +2.1 |
| GENI | Genyem | 7.21 | 273 | P | Pn | 01 06 27.4 | +2.7 |
| MMPI | Merauke | 8.83 | 232 | P | Pn | 01 06 49.2 | +2.2 |
| COEN | Coen | 11.67 | 201 | Pn | Pn | 01 07 25.9 | 0.0 |
| MTSU | Mount Surprise | 15.35 | 191 | P | P | 01 08 22.8 | +2.0 |
| TV1H | Townsville Har | 16.19 | 182 | P | P | 01 08 33.3 | +3.3 |
| SWI | Sorong | 16.24 | 277 | P | P | 01 08 30.6 | -0.1 |
| | 44nm,1.3s | | | | | | |
| GUMO | Guam | 16.65 | 351 | LR | LR | 01 13 36.4 | |
| | comp=Z,1μm,19.7s,baz=172,slow=32 | | | | | | |
| CTA | Charters Tower | 17.04 | 184 | P | P | 01 08 43.0 | +3.6 |
| CTA | Charters Tower | 17.04 | 184 | P | P | 01 08 40.3 | +0.9 |
| | 0.6nm,0.8s,baz=11,slow=13,SNR=7.9 | | | | | | |
| CTA | | | | LR | LR | 01 14 43.2 | |
| | comp=Z,246nm,20.1s,baz=6.5,slow=36 | | | | | | |
| CTAO | Charters Tower | 17.04 | 184 | | Pn | 01 08 37.6 | -0.1 |
| CTAO | Charters Tower | 17.04 | 184 | P | Pn | 01 08 37.6 | -0.1 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| KDU | Kakadu | 17.62 | 236 | P | Pn | 01 08 44.0 | -0.9 |
| DRS | Darwin Rock St | 18.82 | 239 | P | Pn | 01 08 59.6 | 0.0 |
| MTN | Manton Dam | 18.82 | 238 | P | P | 01 08 58.8 | -0.4 |
| MTN | Manton Dam | 18.82 | 238 | P | P | 01 08 57.4 | -1.8 |
| QIS | Mount Isa | 19.04 | 203 | P | Pn | 01 09 03.4 | +1.1 |
| RK1H | Rockhampton Ha | 20.51 | 172 | P | P | 01 09 18.0 | +0.5 |
| WB0 | Warramunga Arr | 20.95 | 216 | P | P | 01 09 22.2 | -0.2 |
| WB0 | | | | IAmb | IAmb | 01 09 26.9 | |
| | comp=Z,119nm,1.3s | | | | | | |
| WRAB | Tennant Creek | 21.11 | 216 | *d* iP | P | 01 09 25.2 | +1.1 |
| WB2 | Warramunga Arr | 21.11 | 216 | P | P | 01 09 22.6 | -1.5 |
| WRA | Warramunga Arr | 21.12 | 216 | P | P | 01 09 22.9 | -1.3 |
| WRA | Warramunga Arr | 21.12 | 216 | P | P | 01 09 23.7 | -0.5 |
| | comp=Z,20nm,0.7s,baz=42,slow=11,SNR=29 | | | | | | |
| WRA | | | | PcP | PcP | 01 13 30.1 | -0.3 |
| | comp=Z,2.4nm,1.0s,baz=23,slow=1.9,SNR=5.4 | | | | | | |
| WRA | | | | LR | LR | 01 18 19.6 | |
| | comp=Z,4μm,18.5s,baz=37,slow=39 | | | | | | |
| | comp=Z,20nm,0.7s | | | | | | |
| SANI | Sanana | 21.39 | 272 | P | P | 01 09 29.2 | +2.1 |
| | comp=Z,44nm,1.3s | | | | | | |
| KNRA | Kununurra | 22.25 | 234 | P | P | 01 09 34.7 | -1.7 |
| EIDS | Eidsvold | 22.54 | 171 | P | P | 01 09 39.1 | -0.3 |
| EIDS | | | | IAmb | IAmb | 01 09 49.0 | |
| | comp=Z,98nm,1.8s | | | | | | |
| SOEI | Soe | 23.92 | 253 | P | P | 01 09 52.9 | -0.7 |
| SOEI | | | | IAmb | IAmb | 01 10 08.9 | |
| | comp=Z,48nm,0.9s | | | | | | |
| AS31 | Alice Springs | 24.34 | 211 | P | P | 01 09 56.5 | -0.8 |
| ASAR | Alice Springs | 24.34 | 211 | P | P | 01 09 56.2 | -1.2 |
| ASAR | Alice Springs | 24.34 | 211 | P | P | 01 09 56.5 | -0.9 |
| | comp=Z,8.0nm,0.7s,baz=38,slow=7.2,SNR=32 | | | | | | |
| ASAR | | | | LR | LR | 01 19 38.8 | |
| | comp=Z,4μm,19.7s,baz=41,slow=37 | | | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| BATI | Baumata | 24.61 | 252 | P | P | 01 10 02.3 | +2.4 |
| | comp=Z,83nm,1.1s | | | | | | |
| GTOI | Gorontalo | 24.62 | 278 | P | P | 01 10 02.2 | +2.3 |
| | comp=Z,40nm,1.4s,comp=Z,654nm | | | | | | |
| LUWI | Luwuk | 24.66 | 274 | P | P | 01 09 58.9 | -1.5 |
| LUWI | Luwuk | 24.66 | 274 | P | P | 01 09 50.7 | -10 |
| TARA | Tarawa | 25.90 | 81 | P | P | 01 10 11.4 | -0.1 |
| EDFI | Ende, Flores | 26.17 | 256 | P | P | 01 10 12.6 | -1.6 |
| LIFNC | LIFOU | 26.22 | 134 | P | P | 01 10 14.4 | +0.1 |
| DZM | Mont Dzumac | 26.51 | 137 | P | P | 01 10 15.8 | -1.3 |
| DZM | | | | IAmb | IAmb | 01 10 38.9 | |
| | comp=Z,45nm,1.5s | | | | | | |
| DZM | Mont Dzumac | 26.51 | 137 | *e*P | P | 01 10 15.3 | -1.8 |
| | comp=Z,55nm,1.4s | | | | | | |
| DZM | | | | *e*S | S | 01 14 39.9 | -11 |
| | comp=Z,3μm,23.3s | | | | | | |
| DZM | Mont Dzumac | 26.51 | 137 | LR | LR | 01 19 11.7 | |
| | comp=Z,6μm,21.8s,baz=308,slow=33 | | | | | | |
| TOLI2 | Tolitoli | 26.89 | 278 | P | P | 01 10 19.8 | -0.7 |
| BNSI | Bone | 27.25 | 266 | P | P | 01 10 25.1 | +1.4 |
| | comp=Z,39nm,1.1s,comp=Z,668nm | | | | | | |
| ARMA | Armidale | 27.58 | 172 | P | P | 01 10 26.6 | -0.1 |
| ARMA | | | | IAmb | IAmb | 01 10 29.1 | |
| | comp=Z,38nm,1.4s | | | | | | |
| KAPI | Kappang | 27.63 | 265 | P | P | 01 10 26.2 | -0.9 |
| KAPI | | | | IAmb | IAmb | 01 10 30.1 | |
| | comp=Z,43nm,1.4s | | | | | | |
| KAPI | Kappang | 27.63 | 265 | P | P | 01 10 27.7 | +0.5 |
| | comp=Z,8.4nm,0.2s,baz=71,slow=11,SNR=3.6 | | | | | | |
| KAPI | | | | LR | LR | 01 22 14.1 | |
| | comp=Z,707nm,20.8s,baz=93,slow=38 | | | | | | |
| | comp=Z,8.4nm,0.2s | | | | | | |
| KAPI | Kappang | 27.63 | 265 | P | P | 01 10 26.2 | -0.9 |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,43nm,1.5s | | | | | | |
| STKA | Stephens Creek | 29.25 | 190 | P | P | 01 10 41.0 | -0.4 |
| STKA | Stephens Creek | 29.25 | 190 | P | P | 01 10 40.5 | -0.9 |
| | comp=Z,2.8nm,0.8s,baz=50,slow=7.9,SNR=2.1 | | | | | | |
| STKA | | | | LR | LR | 01 22 54.2 | |
| | comp=Z,3μm,20.6s,baz=2.7,slow=38 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| STKA | Stephens Creek | 29.25 | 190 | *i* P | P | 01 10 41.5 | +0.1 |
| KKM | Kota Kinabalu | 32.38 | 286 | P | P | 01 11 07.9 | -1.5 |
| KKM | | | | IAmb | IAmb | 01 11 11.8 | |
| | comp=Z,29nm,1.2s | | | | | | |
| MSVF | Nonsavu | 33.46 | 118 | LR | LR | 01 24 24.6 | |
| | comp=Z,1μm,20.1s,baz=309,slow=36 | | | | | | |
| JOW | Kunigami | 34.91 | 329 | LR | LR | 01 22 51.3 | |
| | comp=Z,2μm,20.5s,baz=145,slow=31 | | | | | | |
| SBUM | Sibu | 35.55 | 278 | P | P | 01 11 36.1 | -0.7 |
| YULB | Yu-li | 36.51 | 317 | P | P | 01 11 44.0 | -1.0 |
| YULB | | | | IAmb | IAmb | 01 11 51.7 | |
| | comp=Z,34nm,1.1s | | | | | | |
| NACB | Ninganchiao | 36.84 | 319 | P | P | 01 11 46.5 | -1.2 |
| KSM | Kuching | 37.32 | 276 | P | P | 01 11 50.8 | -1.1 |
| KSM | | | | IAmb | IAmb | 01 11 54.0 | |
| | comp=Z,41nm,1.5s | | | | | | |
| YHNB | Yeheng | 37.33 | 319 | P | P | 01 11 50.5 | -1.5 |
| JNU | Nakatsue | 39.16 | 338 | P | P | 01 12 05.7 | -1.5 |
| JNU | | | | IAmb | IAmb | 01 12 17.9 | |
| | comp=Z,22nm,1.0s | | | | | | |
| JNU | Nakatsue | 39.16 | 338 | P | P | 01 12 07.5 | +0.3 |
| | comp=Z,8.5nm,0.9s,baz=151,slow=4.4,SNR=4.9 | | | | | | |
| JNU | | | | LR | LR | 01 27 14.9 | |
| | comp=Z,1μm,18.4s,baz=154,slow=35 | | | | | | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| INU | Inuyama | 39.35 | 347 | P | P | 01 12 06.9 | -1.8 |
| INU | | | | IAmb | IAmb | 01 12 12.0 | |
| | comp=Z,41nm,1.4s | | | | | | |
| JGF | Kuroka | 39.51 | 347 | P | P | 01 12 08.3 | -1.9 |
| JGF | | | | IAmb | IAmb | 01 12 19.5 | |
| | comp=Z,41nm,1.3s | | | | | | |
| MJAR | Matsushiro Arr | 40.24 | 349 | P | P | 01 12 16.3 | +0.2 |
| | comp=Z,1.5nm,0.6s,baz=166,slow=6.3,SNR=2.5 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| MAJO | Matsushiro | 40.24 | 349 | P | P | 01 12 15.8 | -0.4 |
| MAJO | Matsushiro | 40.24 | 349 | *i* P | P | 01 12 14.0 | -2.1 |
| NWAO | Narrogin (SRO) | 41.03 | 220 | LR | LR | 01 30 07.7 | |
| | comp=Z,2μm,19.6s,baz=42,slow=37 | | | | | | |
| RAO | Raoul Island | 42.05 | 132 | LR | LR | 01 27 06.7 | |
| | comp=Z,962nm,21.7s,baz=12,slow=32 | | | | | | |
| SSE | Sheshan | 42.08 | 326 | P | P | 01 12 30.1 | -1.2 |
| SSE | | | | S | S | 01 18 47.1 | -3.4 |
| SSE | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,110nm,3.3s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,640nm,18.9s | | | | | | |
| QIZ | Qiongzhong | 42.91 | 302 | P | P | 01 12 37.6 | -0.7 |
| QIZ | | | | S | S | 01 19 03.2 | +0.2 |
| QIZ | | | | LR | LR | | |
| | comp=Z,690nm,23.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,1μm,21.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,2μm,24.9s | | | | | | |
| QRZ | Quartz Range | 43.97 | 152 | P | P | 01 12 46.9 | +0.3 |
| KSRS | Korea Array | 44.10 | 338 | P | P | 01 12 47.1 | -0.5 |
| | comp=Z,2.1nm,0.7s,baz=154,slow=9.1,SNR=9.8 | | | | | | |
| KSRS | | | | LR | LR | 01 29 29.9 | |
| | comp=Z,1μm,19.0s,baz=145,slow=34 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| KSRS | Korea Array | 44.10 | 338 | *e*P | P | 01 12 48.0 | +0.4 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| KSAR | Wonju Array Be | 44.11 | 338 | P | P | 01 12 46.7 | -0.9 |
| KSAR | Wonju Array Be | 44.11 | 338 | P | P | 01 12 46.7 | -0.9 |
| NJ2 | Nanjing | 44.13 | 324 | *e*P | P | 01 12 49.0 | +1.1 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,180nm,6.6s | | | | | | |
| KS19 | Wonju Array Si | 44.17 | 338 | P | P | 01 12 46.7 | -1.4 |
| KS19 | | | | IAmb | IAmb | 01 12 49.8 | |
| | comp=Z,59nm,1.9s | | | | | | |
| URZ | Urewera | 44.39 | 146 | LR | LR | 01 29 00.0 | |
| | comp=Z,3μm,21.3s,baz=44,slow=33 | | | | | | |
| LTZ | Lake Taylor | 45.42 | 154 | P | P | 01 12 58.5 | +0.4 |
| LTZ | | | | IAmb | IAmb | 01 13 01.6 | |
| | comp=Z,19nm,1.1s | | | | | | |
| RPZ | Rata Peaks | 45.67 | 156 | LR | LR | 01 30 00.2 | |
| | comp=Z,773nm,20.6s,baz=316,slow=33 | | | | | | |
| WHN | Wuhan | 45.88 | 319 | P | P | 01 13 08.7 | +6.9 |
| BKNI | Bangkinang | 46.43 | 273 | P | P | 01 13 04.8 | -1.7 |
| ASAJ | Asahikawa | 47.08 | 355 | LR | LR | 01 32 20.3 | |
| | comp=Z,236nm,20.0s,baz=192,slow=35 | | | | | | |
| USA0B | Ussuriysk Arra | 48.96 | 345 | P | P | 01 13 24.6 | -1.0 |
| USA0B | Ussuriysk Arra | 48.96 | 345 | P | P | 01 13 24.6 | -1.0 |
| USA0B | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 48.96 | 345 | P | P | 01 13 24.7 | -0.9 |
| USRK | Ussuriysk Ar. | 48.96 | 345 | P | P | 01 13 25.3 | -0.3 |
| | comp=Z,4.2nm,0.9s,baz=191,slow=9.8,SNR=8.4 | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| ENH | Enshi | 49.01 | 315 | P | P | 01 13 25.2 | -1.1 |
| ENH | | | | IAmb | IAmb | 01 13 28.0 | |
| | comp=Z,24nm,1.2s | | | | | | |
| GYA | Guiyang | 49.03 | 309 | ⇓P | P | 01 13 28.2 | +1.6 |
| GYA | | | | S | S | 01 20 32.7 | +1.5 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,310nm,3.5s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,660nm,11.0s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,550nm,16.5s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,1μm,15.7s | | | | | | |
| LYN | LuoYang | 49.70 | 322 | P | P | 01 13 34.1 | +2.6 |
| LYN | | | | S | S | 01 20 44.4 | +4.3 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,250nm,3.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,2μm,18.9s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,2μm,18.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,4μm,19.9s | | | | | | |
| GSI | Gunungsitoli | 49.96 | 274 | P | P | 01 13 32.8 | -1.1 |
| HNS | HongShan | 50.34 | 326 | ⇓P | P | 01 13 36.9 | +0.7 |
| HNS | | | | PP | PP | 01 15 37.5 | +5.6 |
| HNS | | | | S | S | 01 20 52.0 | +3.1 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,17nm,1.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,1μm,18.6s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,950nm,19.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,2μm,19.1s | | | | | | |
| CN2 | Changchun | 50.57 | 340 | P | P | 01 13 40.2 | +2.3 |
| CN2 | | | | S | S | 01 20 52.1 | +0.2 |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,900nm,18.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,600nm,18.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,900nm,18.0s | | | | | | |
| BJT | Baijiatuau | 51.48 | 329 | P | P | 01 13 44.6 | -0.2 |
| BJT | | | | IAmb | IAmb | 01 13 57.0 | |
| | comp=Z,22nm,1.5s | | | | | | |
| BJT | Baijiatuau | 51.48 | 329 | P | P | 01 13 44.6 | -0.2 |
| BJT | | | | pmax | pmax | | |
| | comp=Z,22nm,1.5s | | | | | | |
| BJI | Beijing | 51.49 | 329 | P | P | 01 13 46.1 | +1.3 |
| BJI | | | | S | S | 01 21 05.5 | +0.8 |
| BJI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,530nm,17.5s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,300nm,16.7s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,510nm,17.9s | | | | | | |
| KMI | Kunming | 51.51 | 306 | ⇓P | P | 01 13 47.8 | +2.2 |
| KMI | | | | S | S | 01 21 07.8 | +1.8 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,410nm,13.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,820nm,19.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,1μm,26.3s | | | | | | |
| CRAI | Chiangrai | 51.55 | 299 | P | P | 01 13 45.8 | +0.1 |
| CRAI | | | | IAmb | IAmb | 01 13 48.3 | |
| | comp=Z,21nm,1.5s | | | | | | |
| XAN | Xi'an | 51.64 | 319 | ⇓P | P | 01 13 45.4 | -0.8 |
| XAN | | | | S | S | 01 21 10.4 | +3.2 |
| XAN | | | | SS | SS | 01 24 43.0 | -0.8 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,26nm,1.3s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,260nm,4.2s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,16.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,990nm,16.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,2μm,21.3s | | | | | | |
| BNX | BinXian | 51.65 | 342 | ⇓P | P | 01 13 46.1 | +0.1 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 52.22 | 296 | P | P | 01 13 50.7 | 0.0 |
| CMAR | Chiang Mai Arr | 52.22 | 296 | P | P | 01 13 52.1 | +1.5 |
| | comp=Z,2.6nm,0.9s,baz=116,slow=5.7,SNR=8.7 | | | | | | |
| CMAR | | | | LR | LR | 01 33 40.8 | |
| | comp=Z,319nm,22.0s,baz=105,slow=33 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 52.22 | 296 | *e*P | P | 01 13 53.0 | +2.3 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| PZH | PanZhiHua | 52.93 | 307 | P | P | 01 13 57.6 | +1.6 |
| PZH | | | | S | S | 01 21 26.0 | +0.8 |
| PZH | | | | SS | SS | 01 24 56.3 | -8.2 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,550nm,20.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,820nm,21.8s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,22.6s | | | | | | |
| KLR | Kul'dur | 53.74 | 347 | LR | LR | 01 34 30.4 | |
| | comp=Z,354nm,21.1s,baz=167,slow=33 | | | | | | |
| KLR | Kul'dur | 53.74 | 347 | *d* iP | P | 01 14 02.1 | +0.7 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| SKR | Severo-Kuril's | 53.98 | 7 | *e*P | P | 01 13 56.7 | -6.4 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,88nm,0.8s | | | | | | |
| RAR | Rarotonga | 54.46 | 114 | LR | LR | 01 35 08.5 | |
| | comp=Z,150nm,22.0s,baz=276,slow=34 | | | | | | |
| XLT | XiLinHaoTe | 54.47 | 333 | *e*P | P | 01 14 07.7 | +0.8 |
| XLT | | | | pP | sP | 01 14 12.2 | -0.3 |
| XLT | | | | S | S | 01 21 48.4 | +2.9 |
| XLT | | | | SS | SS | 01 25 25.1 | -3.1 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,730nm,18.8s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,1μm,20.9s | | | | | | |
| HHC | Hu-ho-hao-te | 54.50 | 327 | *e*P | P | 01 14 08.1 | +0.8 |
| HHC | | | | sP | sP | 01 14 16.7 | +3.9 |
| HHC | | | | S | S | 01 21 51.0 | +4.9 |
| HHC | | | | sS | sS | 01 21 59.2 | +6.6 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,110nm,3.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,960nm,17.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,1μm,17.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,2μm,16.9s | | | | | | |
| BTO | Baotou | 55.19 | 326 | *e*P | P | 01 14 08.5 | -3.7 |
| BTO | | | | pP | pP | 01 14 13.2 | -3.1 |
| BTO | | | | sP | sP | 01 14 15.5 | -2.3 |
| BTO | | | | S | S | 01 21 48.6 | -6.7 |
| BTO | | | | sS | pS | 01 21 58.3 | -1.8 |
| BTO | Baotou | 55.19 | 326 | SS | SS | 01 25 36.3 | -3.4 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,22nm,0.4s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,220nm,5.8s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=N,2μm,20.8s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=E,2μm,20.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,4μm,21.0s | | | | | | |
| HEH | HeiHe | 55.74 | 345 | *e*P | P | 01 14 16.7 | +0.8 |
| HEH | | | | pP | sP | 01 14 23.2 | +1.7 |
| HEH | | | | S | S | 01 22 05.6 | +3.5 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,670nm,17.7s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,750nm,19.9s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,890nm,16.2s | | | | | | |
| LZH | Lanzhou | 56.21 | 318 | *e*P | P | 01 14 20.5 | +0.8 |
| LZH | | | | pP | sP | 01 14 26.5 | +1.2 |
| LZH | | | | S | S | 01 22 13.6 | +4.4 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,32nm,1.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,580nm,15.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,730nm,14.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1μm,18.7s | | | | | | |
| HIA | Hailar | 57.28 | 339 | P | P | 01 14 26.1 | -0.8 |
| HIA | | | | IAmb | IAmb | 01 14 33.2 | |

comp=Z,20nm,1.6s
**HIA Hailar 57.28 339** P **P** **01 14 26.1 -0.8**
HIA pmax pmax
comp=Z,20nm,1.6s
**ZEA Zeya 58.97 346** *e*P **P** **01 14 39.3 +0.7**
ZEA *e*S **S** **01 22 48.7 +4.2**
ZEA smax smax
comp=E,300nm,15.8s
ZEA smax smax
comp=N,500nm,13.4s
**SHEM Shemya Is, Ala 59.91 18** LR LR 01 35 34.0
comp=N,466nm,20.6s,baz=214,slow=31
**AMKA Amchitka 60.60 22** P **P** **01 14 49.4 -0.4**
**GTA Gaotai 60.70 319** *e*P **P** **01 14 52.5 +1.5**
GTA pP sP 01 14 57.3 +0.7
GTA S **S** **01 22 59.8 -7.8**
GTA pmax pmax
comp=N,6.0nm,1.0s
GTA LR LR
comp=N,220nm,18.3s
GTA LR LR
comp=N,500nm,16.7s
GTA LR LR
comp=N,680nm,18.3s
**SHL Shillong 60.74 301** P **P** **01 14 50.3 -1.3**
SHL IAmb IAmb 01 15 25.6
comp=Z,11nm,0.9s
**SHL Shillong 60.74 301** P **P** **01 14 50.3 -1.3**
SHL pmax pmax
comp=Z,11nm,0.9s
**ULN Ulaanbaatar 61.68 330** P **P** **01 14 57.7 +0.3**
ULN IAmb IAmb 01 15 30.6
comp=Z,28nm,1.8s
**ULN Ulaanbaatar 61.68 330** *e*P **P** **01 14 58.3 +0.8**
ULN pmax pmax
comp=Z,4.0nm,1.2s
**SONM Songino Array 61.98 330** P **P** **01 14 59.2 -0.3**
**SONM Songino Array 61.98 330** P **P** **01 15 00.8 +1.3**
comp=Z,3.1nm,1.2s,baz=143,slow=3.2,SNR=7.0
SONM LR LR 01 40 00.8
comp=Z,935nm,22.0s,baz=130,slow=34
comp=Z,3.1nm,1.2s
**SONM Songino Array 61.98 330** *e*P **P** **01 15 01.0 +1.5**
SONM pmax pmax
comp=Z,2.0nm,1.1s
**KIWB Kanaga Island 62.36 24** P **P** **01 15 01.1 -0.6**
**GOMU GeErMu 62.57 314** P P 01 15 12.6 +8.6
GOMU pP sP 01 15 16.2 +6.6
GOMU sP pP 01 15 18.1 +10
GOMU PP PP 01 17 09.9 -12
GOMU sS S 01 23 23.6 -8.3
**GOMU GeErMu 62.57 314** SS SKiKP 01 25 15.8 -12
GOMU pmax pmax
comp=Z,16nm,0.5s
GOMU LR LR
comp=N,710nm,19.8s
GOMU LR LR
comp=E,2μm,20.6s
GOMU LR LR
comp=Z,4μm,21.3s
**LSA Lhasa 62.77 306** P **P** **01 15 04.8 -0.7**
LSA IAmb IAmb 01 15 24.3
comp=Z,9.0nm,1.0s
**LSA Lhasa 62.77 306** P **P** **01 15 04.8 -0.7**
LSA pmax pmax
comp=Z,9.0nm,1.0s
**PPT Papeete 63.43 108** LR LR 01 38 18.8
comp=Z,203nm,20.1s,baz=342,slow=32
**PPT2 Papeete2 63.43 108** *e*P **P** **01 15 08.4 -1.3**
comp=Z,61nm,26.5s
PPT2 *e*S **S** **01 23 44.2 +1.5**
comp=Z,161nm,25.2s
PPT2 *e*LQ LQ 01 31 07.1
comp=Z,2μm,30.0s
PPT2 *e*LR LR 01 34 05.2
comp=Z,573nm,27.2s
PPT2 *e*LR LR 01 34 06.1
comp=Z,743nm,25.0s
**TBI Tubuai 64.23 114** *e*S **S** **01 23 48.8 -3.5**
comp=Z,992nm,26.8s
TBI *e*SS **SS** **01 28 04.1 +2.1**
comp=Z,3μm,37.5s
TBI *e*LQ LQ 01 31 47.1
comp=Z,7μm,35.5s
TBI *e*LR LR 01 34 29.6
comp=Z,9μm,31.8s
TBI *e*LR LR 01 34 32.3
comp=Z,2μm,31.5s
**ZAK Zakamensk 65.20 331** *e*P **P** **01 15 20.2 -0.5**
ZAK pmax pmax
comp=Z,5.0nm,1.2s
**SEY Seymchan 65.85 3** ⇓ *i*P **P** **01 15 25.4 +0.9**
SEY pmax pmax
comp=Z,15nm,1.2s
**YAK Yakutsk 66.24 351** P **P** **01 15 25.7 -1.2**
**YAK Yakutsk 66.24 351** LR LR 01 43 06.2
comp=Z,303nm,19.9s,baz=157,slow=35
**YAK Yakutsk 66.24 351** *e*P **P** **01 15 28.2 +1.3**
YAK *e**PP **sP** **01 15 37.5 +4.9**
YAK *e* 01 15 58.2
YAK *e*S **S** **01 24 16.0 +0.5**
YAK *e**SS sS 01 24 31.4 +9.1
YAK *e* 01 25 22.9
YAK *e*SS **SS** **01 28 37.4 +5.6**
YAK pmax pmax
comp=Z,17nm,1.0s
YAK pmax pmax
comp=N,7.0nm,1.2s
YAK pmax pmax
comp=E,3.0nm,1.5s
YAK smax smax
comp=E,80nm,4.3s
YAK smax smax
comp=N,59nm,4.1s
YAK MLR MLR
comp=Z,290nm,17.0s
YAK MLR MLR
comp=E,233nm,18.0s
YAK MLR MLR
comp=N,251nm,18.0s
**MOY Mondy 67.13 331** *e*P **P** **01 15 34.0 +0.9**
MOY pmax pmax
comp=Z,22nm,1.7s
**PALK Pallekele 67.31 279** LR LR 01 47 14.7
comp=Z,129nm,18.4s,baz=205,slow=38
**CASY Casey 68.25 195** P **P** **01 15 38.9 -0.8**
CASY IAmb IAmb 01 17 09.1
comp=Z,8.5nm,1.3s
**WMQ Urumqi 70.78 319** *e*P **P** **01 15 58.1 +2.2**
WMQ LR LR
comp=Z,510nm,19.3s
WMQ LR LR
comp=Z,450nm,17.9s
WMQ LR LR
comp=Z,440nm,22.5s
**HYB Hyderabad 70.79 289** *e*P **P** **01 15 56.6 +0.3**
**BILL Bilibino 72.09 7** P **P** **01 16 03.6 +0.5**
**BILL Bilibino 72.09 7** *e*P **P** **01 16 03.7 +0.5**
BILL *e* 01 16 22.5
BILL *e* 01 18 43.7
BILL pmax pmax
comp=Z,8.0nm,1.2s
**TAOE Nuku Hiva Isla 72.24 98** *e*LR LR 01 38 09.5
comp=Z,516nm,23.2s
**S14K Fog Glacier 73.04 28** P **P** **01 16 09.4 +0.1**
baz=236
**CHGN Chignik 73.58 28** P **P** **01 16 12.4 +0.2**
baz=238
**M13K Dall Lake 73.83 23** P **P** **01 16 14.3 +0.7**
baz=232
**K13K Kusilvak Mount 74.30 21** P **P** **01 16 17.7 +1.4**
baz=230
**M14K Bethel 74.58 23** P **P** **01 16 19.5 +1.5**
baz=233
**L14K Kuka Creek 74.66 22** P **P** **01 16 20.0 +1.5**
baz=232
**CHIR Chirikof Islan 74.68 29** P **P** **01 16 19.9 +1.3**
baz=240
**VNDA Vanda 74.88 177** P **P** **01 16 18.9 -0.5**
VNDA IAmb IAmb 01 16 21.2
comp=Z,10nm,1.1s
**VNDA Vanda 74.88 177** P **P** **01 16 19.1 -0.4**
comp=Z,5.8nm,1.0s,baz=330,slow=6.4,SNR=9.1
comp=Z,5.8nm,1.0s
**VNDA Vanda 74.88 177** P **P** **01 16 19.0 -0.5**
VNDA pmax pmax

comp=Z,11nm,1.2s
**N15K Kwethluk River 74.99 24** P **P** **01 16 21.9 +1.4**
baz=235
**M15K Kasigluk River 75.06 24** P **P** **01 16 22.7 +1.9**
baz=234
**J14K Nanvaranak Lak 75.21 21** P **P** **01 16 23.7 +2.1**
baz=231
**R17L Mt. Peulik Vol 75.24 28** P **P** **01 16 23.8 +1.9**
baz=239
**L15K Ungalak Mounta 75.32 23** P **P** **01 16 23.8 +1.5**
baz=234
**MK31 Makanchi Array 75.44 320** P **P** **01 16 22.4 -0.9**
**MK31 Makanchi Array 75.44 320** P **P** **01 16 22.4 -0.9**
MK31 pmax pmax
comp=Z,3.0nm,1.2s
**MKAR Makanchi Array 75.44 320** P **P** **01 16 22.4 -0.9**
**MKAR Makanchi Array 75.44 320** P **P** **01 16 24.1 +0.8**
comp=Z,1.6nm,1.0s,baz=108,slow=6.5,SNR=7.0
comp=Z,1.6nm,1.0s
**O16K Kokwok River B 75.51 25** P **P** **01 16 24.9 +1.5**
baz=237
**TNA Tin City 75.62 18** P **P** **01 16 26.3 +2.4**
baz=226
**MAKZ Makanchi 75.64 320** P **P** **01 16 24.3 -0.2**
**MAKZ Makanchi 75.64 320** P **P** **01 16 24.3 -0.2**
MAKZ pmax pmax
comp=Z,12nm,1.5s
**K15K Wolf Creek Mou 75.67 22** P **P** **01 16 26.8 +2.5**
baz=233
**N16K Nishlik Lake 75.71 24** P **P** **01 16 26.4 +1.8**
baz=236
**ANM Nome 75.75 19** P **P** **01 16 26.7 +1.9**
baz=229
**Q17K Contact Creek 75.78 27** P **P** **01 16 26.3 +1.1**
baz=239
**M16K Timber Creek 75.94 24** P **P** **01 16 27.8 +2.0**
baz=238
**O17K Koliganek Bris 76.03 25** P **P** **01 16 28.0 +1.7**
baz=238
**R18K Karluk 76.10 28** P **P** **01 16 28.4 +1.6**
baz=241
**L16K Owhat River 76.12 23** P **P** **01 16 28.4 +1.6**
baz=235
**Q18K Katmai Hardscr 76.38 27** P **P** **01 16 29.4 +0.9**
baz=240
**N17K Nushagak Hills 76.40 25** P **P** **01 16 29.8 +1.4**
baz=238
**G15K Niukluk 76.47 19** P **P** **01 16 30.1 +1.4**
baz=230
**OHAK Old Harbor 76.49 29** P **P** **01 16 30.8 +1.8**
baz=242
**J16K Anvik River 76.61 21** P **P** **01 16 31.8 +2.2**
baz=234
**ZALV Zalesovo Beam 76.68 327** P **P** **01 16 29.4 -0.8**
**ZALV Zalesovo Beam 76.68 327** P **P** **01 16 29.6 -0.6**
comp=Z,0.5nm,0.4s,baz=84,slow=6.1,SNR=3.6
ZALV LR LR 01 50 16.4
comp=Z,710nm,19.4s,baz=108,slow=36
comp=Z,0.5nm,0.4s
**ZALV Zalesovo Beam 76.68 327** *e*P **P** **01 16 30.5 +0.3**
ZALV pmax pmax
comp=Z,1.0nm,0.3s
**PRZ Przheval'sk 76.69 315** P **P** **01 16 30.8 0.0**
PRZ IAmb IAmb 01 16 33.5
comp=Z,24nm,1.3s
**PRZ Przheval'sk 76.69 315** P **P** **01 16 30.8 0.0**
PRZ pmax pmax
comp=Z,24nm,1.3s
**F15K North Star Dit 76.73 18** P **P** **01 16 32.4 +2.2**
baz=230
**M17K Holitna River 76.76 24** P **P** **01 16 32.4 +1.9**
baz=237
**L17K Donlin 76.82 23** P **P** **01 16 32.4 +1.5**
baz=236
**H16K Elim 76.85 20** P **P** **01 16 32.2 +1.3**
baz=232
**O18K Koktuh Hills 76.89 26** P **P** **01 16 33.2 +1.9**
baz=240
**I17K Unalakleet 76.93 21** P **P** **01 16 32.9 +1.6**
baz=234
**N18K Kilae Creek 77.02 25** P **P** **01 16 33.6 +1.6**
baz=239
**KDAK Kodiak Island 77.09 28** LR LR 01 44 28.9
comp=Z,695nm,21.8s,baz=265,slow=31
**KDAK Kodiak Island 77.09 28** P **P** **01 16 33.4 +1.0**
baz=243
**Q19K Cape Douglas, 77.13 27** P **P** **01 16 34.0 +1.3**
baz=241
**K17K Iditarod 77.14 23** P **P** **01 16 32.1 -0.6**
K17K IAmb IAmb 01 16 36.8
comp=Z,16nm,1.1s
**K17K Iditarod 77.14 23** P **P** **01 16 34.4 +1.8**
baz=236
**J17K VABM Nome 77.23 22** P **P** **01 16 35.0 +1.9**
baz=235
**G16K Koyuk River 77.27 19** P **P** **01 16 35.3 +2.1**
baz=232
**M18K Stony River 77.47 24** P **P** **01 16 36.5 +2.1**
baz=239
**RKT Rikitea 77.48 113** *e*SS SS 01 31 28.4 +2.8
comp=Z,1μm,35.2s
RKT *e*LQ LQ 01 37 24.0
comp=Z,8μm,36.8s
RKT *e*LR LR 01 40 41.3
comp=Z,6μm,33.8s
**L18K Granite Mounta 77.50 23** P **P** **01 16 35.8 +1.2**
L18K IAmb IAmb 01 16 39.0
comp=Z,24nm,1.4s
**L18K Granite Mounta 77.50 23** P **P** **01 16 37.4 +2.8**
baz=238
**Q20K Shuyak Island 77.56 28** P **P** **01 16 37.0 +2.0**
baz=243
**P19K Oil Pt 77.67 27** P **P** **01 16 37.4 +1.8**
baz=242
**KSH Kashi 77.67 311** P **P** **01 16 38.1 +1.9**
KSH sP PcP 01 16 45.4 -1.0
KSH PcP sP 01 16 51.0 +9.1
KSH S **S** **01 26 30.5 +2.4**
KSH pmax pmax
comp=Z,5.0nm,0.9s
KSH LR LR
comp=Z,720nm,18.9s
KSH LR LR
comp=Z,560nm,18.9s
KSH LR LR
comp=Z,530nm,22.0s
**N19K Bonanza Creek 77.68 25** P **P** **01 16 37.6 +1.8**
baz=240
**H17K Granite Mounta 77.82 20** P **P** **01 16 36.5 +0.1**
H17K IAmb IAmb 01 16 40.3
comp=Z,9.0nm,1.1s
**H17K Granite Mounta 77.82 20** P **P** **01 16 37.7 +1.3**
baz=234
**G17K Kiwalik Mounta 77.91 20** P **P** **01 16 38.2 +1.3**
baz=234
**J18K Innoko River 78.16 22** P **P** **01 16 39.8 +1.5**
baz=238
**C16K Lisburne Hills 78.22 16** P **P** **01 16 40.6 +2.2**
baz=228
**L19K White Mountain 78.22 24** P **P** **01 16 40.4 +1.7**
baz=240
**M19K Big River Lodg 78.27 24** P **P** **01 16 41.0 +2.0**
baz=240
**F17K Baldwin Pennin 78.28 19** P **P** **01 16 40.7 +1.8**
baz=233
**BOOM Boomskoye usch 78.44 314** P **P** **01 16 40.0 -0.5**
**BOOM Boomskoye usch 78.44 314** P **P** **01 16 40.0 -0.5**
BOOM pmax pmax
comp=Z,4.0nm,0.9s
**E17K Hotham Inlet 78.48 18** P **P** **01 16 41.6 +1.6**
baz=232,SNR=7.6
**H18K Honhosa River 78.49 20** P **P** **01 16 42.1 +2.0**
baz=236
**D17K Noatak River 78.49 17** P **P** **01 16 41.8 +1.8**
baz=231
**NIL Nilore 78.50 305** P **P** **01 16 40.5 -0.4**
NIL IAmb IAmb 01 16 45.9
comp=Z,9.3nm,0.8s
**NIL Nilore 78.50 305** P **P** **01 16 40.5 -0.4**
NIL pmax pmax
comp=Z,9.0nm,0.9s
**CNPM China Poot 78.51 27** P **P** **01 16 39.6 -0.7**
CNPM IAmb IAmb 01 16 43.6
comp=Z,23nm,1.2s
**L20K Farewell, AK 78.76 24** P **P** **01 16 43.3 +1.6**
baz=240
**M20K Styx River 78.78 25** P **P** **01 16 43.4 +1.6**

baz=241
**GCSA Galena City Sc 78.79 21** P **P** **01 16 43.4 +1.7**
baz=237
**G18K Tagagawik 78.81 20** P **P** **01 16 43.1 +1.3**
baz=235,SNR=5.5
**J19K Poorman 78.85 22** P **P** **01 16 43.7 +1.6**
baz=239
**F18K Selawik 78.89 19** P **P** **01 16 43.4 +1.3**
baz=234
**C17K DeLong Mountai 78.96 17** P **P** **01 16 44.3 +1.7**
baz=231
**KURK Kurchatov 79.04 323** P **P** **01 16 42.5 -0.9**
**KURK Kurchatov 79.04 323** P **P** **01 16 42.5 -0.9**
KURK pmax pmax
comp=Z,11nm,1.4s
**KURBB Kurchatov Arra 79.06 323** P **P** **01 16 43.9 +0.3**
comp=Z,0.6nm,0.2s,baz=103,slow=4.9,SNR=6.2
KURBB LR LR 01 50 55.8
comp=Z,535nm,19.7s,baz=142,slow=35
comp=Z,0.6nm,0.2s
**E18K Tukpahlearik C 79.07 18** P **P** **01 16 44.8 +1.6**
baz=233
**K20K Telida 79.12 23** P **P** **01 16 44.7 +1.1**
baz=240
**H19K Roundabout Mou 79.36 21** P **P** **01 16 45.3 +0.5**
H19K IAmb IAmb 01 16 48.6
comp=Z,12nm,1.1s
**H19K Roundabout Mou 79.36 21** P **P** **01 16 46.0 +1.2**
baz=238,SNR=9.1
**G19K Purcell Mounta 79.48 20** P **P** **01 16 46.9 +1.4**
baz=237,SNR=6.6
**SKT Skwentna 79.49 25** P **P** **01 16 46.8 +1.2**
baz=243
**J20K Nowinta River 79.50 22** P **P** **01 16 46.7 +1.0**
baz=240
**AAK Ala-Archa 79.51 314** LR LR 01 51 36.6
comp=Z,1μm,21.4s,baz=100,slow=35
**SEW Seward 79.57 27** P **P** **01 16 47.5 +1.4**
baz=245
**F19K Shaleruckik Mo 79.63 19** P **P** **01 16 46.1 -0.2**
**F19K Shaleruckik Mo 79.63 19** P **P** **01 16 48.1 +1.8**
baz=236
**C18K Utukok River 79.64 17** P **P** **01 16 48.0 +1.6**
baz=232
**PPLA Purkeypile 79.65 24** P **P** **01 16 47.9 +1.3**
baz=242
**I20K Naaghedeneel 79.69 22** P **P** **01 16 47.8 +1.2**
baz=240
**RC01 Rabbit Creek A 79.86 26** P **P** **01 16 49.1 +1.4**
baz=244
**H20K Anotleneega Mo 79.90 21** P **P** **01 16 48.5 +0.7**
baz=239,SNR=6.3
**CHUM Lake Minchumin 80.06 23** P **P** **01 16 49.7 +1.0**
baz=242
**E19K Redstone River 80.16 19** P **P** **01 16 50.2 +1.0**
baz=236,SNR=7.0
**PMR Palmer 80.34 26** P **P** **01 16 51.7 +1.4**
baz=245
**C19K Lookout Ridge 80.38 17** P **P** **01 16 51.8 +1.5**
baz=234
**PWL Port Wells 80.39 27** P **P** **01 16 52.2 +1.7**
baz=246
**F20K Avaraart Lake 80.43 19** P **P** **01 16 52.3 +1.8**
baz=238
**KTH Kantishna Hill 80.46 24** P **P** **01 16 51.0 +0.1**
KTH IAmb IAmb 01 16 53.9
comp=Z,16nm,1.2s
**D19K Kuna River 80.46 18** P **P** **01 16 51.7 +0.9**
baz=236
**IMAR Indian Mountai 80.56 21** P **P** **01 16 51.6 +0.2**
**A19K Wainwright 80.62 16** P **P** **01 16 52.8 +1.2**
baz=232
**BPAW Bear Paw Mtn. 80.68 23** P **P** **01 16 52.9 +0.8**
baz=243
**H21K Melozitna Rive 80.73 21** P **P** **01 16 52.7 +0.4**
**H21K Melozitna Rive 80.73 21** P **P** **01 16 52.6 +0.3**
baz=241,SNR=5.6
**SML Sawmill 80.78 26** P **P** **01 16 52.4 -0.3**
SML IAmb IAmb 01 16 55.6
comp=Z,17nm,1.1s
**SML Sawmill 80.78 26** P **P** **01 16 53.1 +0.4**
baz=246
**G21K Allakaket 80.91 20** P **P** **01 16 54.1 +0.9**
baz=240
**E20K Nigu River 80.92 18** P **P** **01 16 54.2 +0.8**
baz=237,SNR=7.2
**D20K Etivluk River 81.04 18** P **P** **01 16 55.6 +1.7**
baz=237
**WAT1 Susitna Watana 81.11 25** P **P** **01 16 55.3 +0.9**
baz=245
**MLY Manley 81.20 22** P **P** **01 16 54.9 0.0**
**MLY Manley 81.20 22** P **P** **01 16 56.1 +1.2**
baz=243,SNR=6.8
**SCM Sheep Creek Mo 81.23 26** P **P** **01 16 56.3 +1.3**
baz=247
**F21K Alatna River 81.27 20** P **P** **01 16 56.7 +1.6**
baz=240
**MCK McKinley 81.34 24** P **P** **01 16 56.9 +1.3**
baz=245
**WAT6 Susitna Watana 81.35 25** P **P** **01 16 56.8 +0.9**
baz=246
**H22K Ishtalitna Cre 81.36 21** P **P** **01 16 57.0 +1.3**
baz=242
**EYAK Cordova Ski Ar 81.44 27** P **P** **01 16 56.8 +0.7**
baz=248
**B20K Meade River 81.60 17** P **P** **01 16 57.5 +0.7**
baz=236
**NEA2 Nenana 81.65 23** P **P** **01 16 58.1 +0.9**
baz=245
**DHY Denali Highway 81.70 25** P **P** **01 16 58.5 +0.8**
baz=246
**KLU Klutina 81.71 26** P **P** **01 16 58.8 +1.1**
baz=248
**E21K Killik River 81.72 19** P **P** **01 16 59.2 +1.6**
baz=240
**I23K Minto, Yukon-K 81.78 22** P **P** **01 16 59.5 +1.7**
baz=244
**G22K Bettles 81.80 20** P **P** **01 16 59.1 +1.2**
baz=242
**GAR Garm 81.84 310** P **P** **01 16 58.5 -0.4**
**F22K John River 81.85 20** P **P** **01 16 59.1 +1.0**
baz=241
**WRH Wood River Hil 81.98 23** P **P** **01 16 59.1 +0.2**
**H23K Yukon River 82.01 22** P **P** **01 16 60.0 +0.9**
baz=244
**BMRM Bremner River 82.11 27** P **P** **01 17 01.2 +1.4**
baz=249
**MDM Murphy Dome 82.13 23** P **P** **01 16 59.3 -0.4**
**B21K Ikpikpuk River 82.13 17** P **P** **01 16 59.9 +0.4**
**B21K Ikpikpuk River 82.13 17** P **P** **01 16 59.9 +0.4**
baz=239
**G23K Bananza Creek 82.22 21** P **P** **01 17 00.8 +0.6**
baz=244,SNR=5.8
**N25K Chitina, Valde 82.35 27** P **P** **01 17 01.9 +0.9**
baz=249
**D22K Ayikyak River 82.35 18** P **P** **01 17 02.0 +1.2**
baz=241
**HDA Harding Lake 82.41 24** P **P** **01 17 02.0 +0.8**
baz=247
**PAX Paxson 82.46 25** P **P** **01 17 02.4 +0.8**
baz=248
**KKAR Karatay Array 82.47 314** P **P** **01 17 01.4 -0.7**
**KKAR Karatay Array 82.47 314** P **P** **01 17 01.2 -0.7**
KKAR IAmb IAmb 01 17 07.2
comp=Z,6.2nm,1.3s
**KKAR Karatay Array 82.47 314** P **P** **01 17 01.3 -0.7**
KKAR pmax pmax
comp=Z,6.0nm,1.3s
**POKR Poker Plat Res 82.51 23** P **P** **01 17 03.1 +1.5**
baz=246
**ILAR Eielson Array 82.58 23** P **P** **01 17 01.1 -1.0**
**ILAR Eielson Array 82.58 23** P **P** **01 17 00.8 -1.3**
comp=Z,4.5nm,1.1s,baz=265,slow=4.8,SNR=15
ILAR LR LR 01 48 23.1
comp=Z,380nm,21.8s,baz=244,slow=32
comp=Z,4.5nm,1.1s
**ILAR Eielson Array 82.58 23** *e*P **P** **01 17 00.5 -1.6**
ILAR pmax pmax
comp=Z,4.0nm,1.0s
**H24K Noodor Dome 82.63 22** P **P** **01 17 03.5 +1.1**
baz=246
**CRQE Cirque 82.74 28** P **P** **01 17 03.7 +0.6**
baz=251
**B22K Teshekpuk Lake 82.86 17** P **P** **01 17 05.2 +1.8**
baz=240
**E23K Chandalar 82.97 20** P **P** **01 17 05.0 +0.8**
baz=244
**D23K Nanushuk River 83.03 19** P **P** **01 17 06.6 +2.3**

baz=243
**J25K Salcha River, 83.12 24** P **P 01 17 05.2 +0.2**
baz=248,SNR=9.3
**G24K Hadweenzic Riv 83.14 21** P **P 01 17 05.1 +0.2**
baz=246,SNR=6.4
**TOLK Toolik Lake Re 83.24 19** P **P 01 17 07.0 +1.6**
baz=244
**F24K Squaw Lake 83.33 20** P **P 01 17 07.4 +1.4**
baz=245,SNR=6.5
**M26K Nabesna, AK 83.33 26** P **P 01 17 07.4 +1.3**
baz=250
**E24K Your Creek 83.36 20** P **P 01 17 07.3 +1.2**
baz=245
**SCRK Sand Creek 83.45 24** P **P 01 17 07.2 +0.5**
baz=249
**C23K Itkillik River 83.45 18** P **P 01 17 06.6 +0.1**
**C23K Itkillik River 83.45 18** P **P 01 17 07.9 +1.4**
baz=243
**H25L Birch Creek 83.58 22** P **P 01 17 08.1 +0.9**
baz=248
**CTG Chitna Glacier 83.62 28** P **P 01 17 08.8 +1.1**
baz=252
**D24K Happy Valley 83.71 19** P **P 01 17 09.3 +1.5**
baz=244
**J26L Joseph Creek 83.81 24** P **P 01 17 09.1 +0.6**
baz=250
**M27K Edge Creek, AK 83.81 26** P **P 01 17 09.0 +0.3**
M27K IAmb IAmb 01 17 20.3
comp=Z,6.5nm,0.8s
**M27K Edge Creek, AK 83.81 26** P **P 01 17 09.7 +1.1**
baz=252
**PINM Pinnacle 83.87 29** P **P 01 17 10.2 +1.2**
baz=253
**L27K Beaver Creek, 84.06 26** P **P 01 17 10.4 +0.6**
baz=252
**BCAR Beaver Creek A 84.08 26** P **P 01 17 09.5 -0.3**
**O28M Mount Upton 84.10 28** P **P 01 17 11.1 +0.8**
baz=253
**F25K Christian Rive 84.15 21** P **P 01 17 11.5 +1.4**
baz=248
**PNL Peninsula 84.16 29** P **P 01 17 11.7 +1.3**
baz=254
**I26K Coal Creek Min 84.25 23** P **P 01 17 11.8 +1.2**
baz=250
**K27K Chicken 84.26 25** P **P 01 17 11.1 +0.4**
baz=251
**YUK3 Moose Creek 84.27 27** P **P 01 17 12.0 +1.0**
baz=253
**YUK8 Steele Glacier 84.44 28** P **P 01 17 13.2 +1.1**
baz=254
**BMAR Burnt Mountain 84.47 21** P **P 01 17 12.1 +0.3**
**D25K Kavik River 84.58 19** P **P 01 17 13.5 +1.2**
baz=247
**G26K Porcupine Rive 84.58 22** P **P 01 17 13.4 +1.1**
baz=249
**BRVK Borovoye 84.64 324** P **P 01 17 12.3 -0.6**
BRVK IAmb IAmb 01 17 39.9
comp=Z,8.8nm,1.2s
**BRVK Borovoye 84.64 324** P **P 01 17 12.3 -0.6**
BRVK pmax pmax
comp=Z,9.0nm,1.3s
**F26K Sheenjek River 84.72 21** P **P 01 17 14.4 +1.4**
baz=249
**EGAK Eagle 84.88 24** P **P 01 17 14.1 +0.3**
EGAK IAmb IAmb 01 17 18.6
comp=Z,9.8nm,1.2s
**EGAK Eagle 84.88 24** P **P 01 17 14.9 +1.1**
baz=252,SNR=6.3
**I27K Kandik River 84.95 23** P **P 01 17 15.1 +0.9**
baz=251,SNR=7.0
**P29M Windy Craggy 84.97 30** P **P 01 17 15.3 +0.9**
baz=255
**YUK6 Outpost Mounta 85.00 28** P **P 01 17 15.2 +0.3**
baz=255
**MAW Mawson 85.16 203** LR LR 01 54 33.9
comp=Z,390nm,18.4s,baz=82,slow=35
**H27K Steamboat Moun 85.19 23** P **P 01 17 16.1 +0.7**
baz=251
**S31K Pelican 85.33 31** P **P 01 17 17.5 +1.3**
baz=257
**G27K Doyon Strip 85.33 22** P **P 01 17 17.0 +0.9**
baz=251
**M29M Somme Creek 85.36 27** P **P 01 17 16.9 +0.5**
baz=255
**DAWY Dawson 85.40 25** P **P 01 17 17.1 +0.6**
DAWY IAmb IAmb 01 17 20.6
comp=Z,8.7nm,1.2s
**DAWY Dawson 85.40 25** P **P 01 17 17.5 +0.9**
baz=254
**P30M Million Dollar 85.47 29** P **P 01 17 18.2 +1.2**
baz=256
**C27K Jago River 85.56 19** P **P 01 17 17.9 +0.8**
baz=249
**I28M Miner Creek 85.57 24** P **P 01 17 18.3 +0.9**
baz=253
**PLBC Pleasant Camp 85.60 30** P **P 01 17 18.9 +1.3**
baz=257
**L29M L29M 85.68 26** P **P 01 17 19.0 +1.0**
baz=255,SNR=7.0
**N30M Aishikik Lake 85.73 28** P **P 01 17 19.2 +1.0**
baz=256
**E27K Coleen River 85.79 21** P **P 01 17 19.1 +0.7**
baz=251
**O30N Mendenhall 86.04 29** P **P 01 17 21.0 +1.2**
baz=257
**K29M Barlow Dome 86.13 25** P **P 01 17 21.5 +1.3**
baz=255,SNR=9.1
**F28M Old Crow 86.24 22** P **P 01 17 21.7 +1.1**
baz=253
**R32K Eaglecrest 86.28 31** P **P 01 17 22.4 +1.5**
baz=258
**D27M Malcolm River 86.35 20** P **P 01 17 22.0 +0.9**
baz=252
**N31M Braeburn, Yuko 86.35 28** P **P 01 17 22.0 +0.8**
baz=257
**H29M Whitestone 86.41 23** P **P 01 17 22.9 +1.5**
baz=254
**CRAG Craig 86.50 34** P **P 01 17 23.4 +1.3**
baz=260
**WHY Whitehorse 86.59 29** P **P 01 17 23.8 +1.2**
baz=258
**U33K Whale Pass 86.61 33** P **P 01 17 23.8 +1.2**
baz=260
**E28M Babbage River 86.65 21** P **P 01 17 24.0 +1.5**
baz=253
**G29M Pine Creek 86.73 22** P **P 01 17 23.7 +0.7**
G29M IAmb IAmb 01 17 33.5
comp=Z,12nm,1.2s
**G29M Pine Creek 86.73 22** P **P 01 17 24.8 +1.8**
baz=255
**J30M Hart River 86.82 25** P **P 01 17 24.7 +1.0**
baz=256,SNR=7.1
**P32M Atlin 86.95 30** P **P 01 17 25.4 +1.2**
baz=259
**I30M Mount Dempster 86.95 24** P **P 01 17 25.6 +1.4**
baz=256
**QSPA South Pole Qui 86.96 180** P **P 01 17 23.8 -0.5**
**QSPA South Pole Qui 86.96 180** P **P 01 17 24.2 -0.1**
comp=Z,5.5nm,0.9s,baz=311,slow=1.1,SNR=9.4
QSPA LR LR 01 56 49.2
comp=Z,626nm,18.2s,baz=4.5,slow=36
comp=Z,5.5nm,0.9s
**EPYK Eagle Plains 87.09 23** P **P 01 17 26.4 +1.6**
baz=256
**D28M Stokes Point 87.13 20** P **P 01 17 26.3 +1.4**
baz=254
**M31M Drury Creek, Y 87.15 27** P **P 01 17 26.4 +1.2**
baz=258
**E29M Blow River 87.17 21** P **P 01 17 26.7 +1.6**
baz=255
**V35K Ketchikan 87.32 34** P **P 01 17 27.3 +1.3**
baz=261
**G30M tAoh Zraii Nji 87.43 22** P **P 01 17 27.6 +1.2**
baz=256
**P33M Teslin, Yukon 87.51 29** P **P 01 17 28.3 +1.3**
baz=260
**N32M Quiet Lake 87.55 29** P **P 01 17 28.5 +1.4**
baz=259
**Q32M Nakina River 87.57 31** P **P 01 17 28.6 +1.1**
baz=260
**FARO Faro, Yukon 87.63 27** P **P 01 17 28.5 +1.0**
baz=259
**HRA Herat 87.65 304** P **P 01 17 27.5 -0.9**
HRA IAmb IAmb 01 17 30.3
comp=Z,12nm,1.3s
**F30M Barrier River 87.75 22** P **P 01 17 29.2 +1.3**
baz=257
**G31M Satah River 88.17 23** P **P 01 17 30.7 +0.9**
baz=258
**R33M Jennings River 88.30 30** P **P 01 17 31.4 +0.5**
baz=261
**T35M Bob Quinn 88.32 33** P **P 01 17 32.0 +1.1**
baz=262
**DLBC Dease Lake 88.64 31** LR LR 01 50 56.8
comp=Z,932nm,20.0s,baz=269,slow=31
**DLBC Dease Lake 88.64 31** P **P 01 17 33.8 +1.4**
baz=262
**INK Inuvik 88.73 21** P **P 01 17 33.2 +0.8**
INK IAmb IAmb 01 17 36.2
comp=Z,16nm,1.6s
**INK Inuvik 88.73 21** LR LR 01 53 39.1
comp=Z,1µm,20.8s,baz=242,slow=33
**INK Inuvik 88.73 21** P **P 01 17 33.5 +1.0**
baz=259
**INK Inuvik 88.73 21** P **P 01 17 33.2 +0.8**
INK pmax pmax
comp=Z,16nm,1.6s
**BBB Bella Bella 88.97 38** LR LR 01 50 40.6
comp=Z,1µm,20.2s,baz=261,slow=31
**YBH Yreka Blue Hor 91.90 48** LR LR 01 52 49.4
comp=Z,900nm,19.5s,baz=328,slow=32
**ISA Isabella, Lake 95.10 55** P **P 01 18 03.2 +0.3**
baz=270
**NVAR Mina Array Bea 95.23 52** P **P 01 18 02.8 -0.8**
**NVAR Mina Array Bea 95.23 52** P **P 01 18 07.3 +3.7**
comp=Z,2.3nm,1.0s,baz=265,slow=6.0,SNR=10
**EDW2 Edwards Air Fo 95.49 55** P **P 01 18 04.4 -0.3**
baz=270
**BFSC Mount Baldy Ra 95.77 56** P **P 01 18 06.0 0.0**
baz=270
**BMO Blue Mountains 95.87 45** P **P 01 18 06.0 -0.2**
BMO IAmb IAmb 01 18 28.7
comp=Z,5.2nm,1.4s
**BMO Blue Mountains 95.87 45** P **P 01 18 06.0 -0.2**
BMO pmax pmax
comp=Z,5.0nm,1.4s
**NEW Newport 95.88 42** LR LR 01 55 05.9
comp=Z,352nm,19.4s,baz=280,slow=32
**NEW Newport 95.88 42** P **P 01 18 06.8 +0.6**
baz=272
**MPMC Manual Prospec 95.90 54** P **P 01 18 06.5 -0.2**
baz=271
**YKA Yellowknife Ar 96.34 28** LR LR 01 58 31.4
comp=Z,414nm,19.8s,baz=295,slow=34
**PFO Pinyon Flats O 96.78 57** LR LR 01 55 26.4
comp=Z,687nm,18.7s,baz=256,slow=32
**TPFO Pinon Flats 96.78 57** P **P 01 18 11.3 +0.7**
baz=271
**MONP2 Monument Peak 96.82 57** P **P 01 18 11.5 +0.5**
baz=271
**TPNV Topopah Spring 96.88 53** P **P 01 18 11.6 +0.5**
baz=272
**IKP In-Ko-Pah, Jac 97.09 58** P Pdif 01 18 12.4 +0.3
baz=271
**SWSC Sam W. Stewart 97.34 57** P Pdif 01 18 13.8 +0.7
baz=271
**R11B Troy Canyon, C 97.36 52** P Pdif 01 18 13.4 0.0
baz=272
**GMRC Granite Mounta 97.41 55** P Pdif 01 18 14.2 +0.6
baz=272
**BC3 Big Chuckawall 97.61 57** P Pdif 01 18 14.9 +0.4
baz=272
**IRM Iron Mountain 97.86 56** P Pdif 01 18 15.7 +0.3
baz=272
**HLID Hailey 98.00 47** P Pdif 01 18 17.1 +1.0
baz=274
**MSO Missoula 98.11 43** P Pdif 01 18 17.0 +0.6
baz=274
**MAK Makhachkala 99.25 313** *e*P **Pdif 01 18 15.2 -6.1**
MAK *e* 01 28 50.6
MAK pmax pmax
comp=Z,198nm,1.2s
**DUG Dugway, Tooele 99.42 50** P **Pdif 01 18 22.3 0.0**
baz=274
**BOZ Bozeman (W) 99.82 44** P **Pdif 01 18 24.5 +0.5**
baz=276
**214A Organ Pipe Nat 99.90 58** P **Pdif 01 18 24.9 +0.3**
baz=273
**RES Resolute Bay 99.98 14** LR LR 02 02 03.7
comp=Z,233nm,20.8s,baz=342,slow=34
**MIAR Mount Ida 115.43 53** P **PKPdf 01 23 22.5 +0.8**
baz=285
**OKC Ostrava-Krasne 116.64 326** AMS AMS 02 12 20.0
comp=Z,600nm,23.4s
**KRLC Kraliky 117.27 327** AMS AMS 02 15 40.0
comp=Z,600nm,19.7s
**OSTC Ostas 117.33 327** AMS AMS 02 14 40.0
comp=Z,700nm,19.0s
**DPC Dobruska-Polom 117.38 327** AMS AMS 02 14 40.0
comp=Z,600nm,16.8s
**CHVC Chvalec 117.40 327** AMS AMS 02 14 40.0
comp=Z,700nm,19.7s
**UPC Upice 117.46 327** AMS AMS 02 14 40.0
comp=Z,1µm,40.1s
**PVCC Panska Ves 118.22 328** AMS AMS 02 15 20.0
comp=Z,600nm,19.0s
**TREC Trest 118.40 326** AMS AMS 02 13 40.0
comp=Z,900nm,19.9s
**PRU Pruhonice 118.54 327** AMS AMS 02 15 20.0
comp=Z,600nm,19.4s
**PRA Prague 118.55 328** AMS AMS 02 15 30.0
comp=Z,600nm,17.6s
**OXF Oxford 118.75 52** P **PKiKP 01 23 28.4 +0.2**
baz=288
**HSKC Hora Svate Kat 118.78 328** AMS AMS 02 14 00.0
comp=Z,700nm,21.1s
**CKRC Cesky Krumlov 119.31 326** *e*SP SP 01 34 40.0 +4.5
CKRC AMS AMS 02 14 20.0
comp=Z,900nm,24.5s
**KHC Kasperske Hory 119.54 327** *e*SP SP 01 36 44.8
KHC AMS AMS 02 15 50.0
comp=Z,700nm,20.4s
**TZTN Tazewell 122.52 48** P **PKiKP 01 23 35.9 +0.3**
baz=293
**L61B Northampton 126.91 37** P **PKiKP 01 23 43.9 -0.1**
baz=307

**KRSC 11 01:13:19.7±1.6, 48.48N×155.97E, h7km±27km, MI3.7, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **3.60** | **21** | *e*P | Pn | 01 14 19.2 | +3.4 |
| KDTR | | | | *e*S | Sn | 01 15 02.6 | +4.1 |
| **ASAK** | **Asacha** | **4.10** | **17** | *e*P | Pn | 01 14 27.1 | +4.3 |
| **MTVR** | **Mutnovka** | **4.25** | **19** | *e*P | Pn | 01 14 29.0 | +4.1 |
| **GRL** | **Gorelyy** | **4.29** | **17** | *e*P | Pn | 01 14 28.4 | +2.9 |
| **UGLR** | **Uglovaya** | **5.07** | **20** | *e*P | Pn | 01 14 41.1 | +5.0 |
| **KOK** | **Koryaka** | **5.10** | **18** | *e*P | Pn | 01 14 41.8 | +5.1 |
| **KRX** | **Arik** | **5.17** | **18** | *e*P | Pn | 01 14 41.7 | +4.1 |

*NEIC **11** 01:16:47.2±1.1, 41.92N±0.05×125.93W±0.09, h10km±2km, Error ellipse: s-maj=11.5km s-min=8.4km az=265.0*

**NCEDC 11 01:16:48.4±0.9, 41.91N±0.05×126.1W±0.1, h23km±9km, ML2.6/8, ML2.6/56(NEIC), Error ellipse: s-maj=12.9km s-min=7.6km az=89.0, Off coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBO** | **Bosley Butte** | **1.46** | **77** | | Pn | 01 17 11.3 | -2.1 |
| KBO | | | | IAML | | 01 17 23.4 | |
| | comp=E,37nm,0.3s | | | | | | |
| KBO | | | | | Sn | 01 17 28.6 | -3.2 |
| **KSXB** | **Camp Six Broad** | **1.69** | **92** | | Pn | 01 17 14.8 | -1.8 |
| KSXB | | | | | Sn | 01 17 34.6 | -3.1 |
| **KRMB** | **Red Mountain** | **1.72** | **102** | | Pn | 01 17 15.2 | -1.7 |
| KRMB | | | | | Sn | 01 17 35.4 | -2.9 |
| KRMB | | | | IAML | | 01 17 36.0 | |
| | comp=E,50nm,0.4s | | | | | | |
| **KRPM** | **Rodgers** | **1.76** | **115** | | Pn | 01 17 15.8 | -1.7 |
| KRPM | | | | | Sn | 01 17 37.3 | -2.0 |
| KRPM | | | | IAML | | 01 17 37.7 | |
| | comp=E,95nm,0.5s | | | | | | |
| KRPM | | | | IAML | | 01 17 38.0 | |
| | comp=N,65nm,0.3s | | | | | | |
| **L02F** | **Cave Junction** | **1.93** | **83** | | Pn | 01 17 18.1 | -1.7 |
| **JCC** | **Jacoby Creek,** | **1.93** | **124** | Pn | Pn | 01 17 18.0 | -1.7 |
| JCC | | | | IAML | | 01 17 41.1 | |
| | comp=E,21nm,0.6s | | | | | | |
| **K02D** | **Willamette Mer** | **2.00** | **66** | | Pn | 01 17 18.9 | -1.9 |
| **J01E** | **Myrtle Point** | **2.06** | **52** | | Pn | 01 17 19.6 | -1.9 |
| **KHMM** | **Horse Mountain** | **2.09** | **119** | | Pn | 01 17 20.7 | -1.4 |
| KHMM | | | | IAML | | 01 17 45.8 | |
| | comp=N,30nm,1.1s | | | | | | |
| KHMM | | | | IAML | | 01 17 48.7 | |
| | comp=E,28nm,0.6s | | | | | | |
| **KOMM** | **Orleans Mounta** | **2.12** | **106** | | Pn | 01 17 21.2 | -1.2 |
| **KMPM** | **Mount Pierce** | **2.13** | **134** | Pn | Pn | 01 17 20.8 | -1.8 |
| KMPM | | | | IAML | | 01 17 49.4 | |
| | comp=N,44nm,0.5s | | | | | | |
| KMPM | | | | IAML | | 01 17 52.0 | |
| | comp=E,47nm,0.6s | | | | | | |
| **KSMM** | **Slide Mountain** | **2.28** | **139** | | Pn | 01 17 23.0 | -1.6 |
| **DBO** | **Dodson Butte** | **2.46** | **60** | | Pn | 01 17 25.5 | -1.6 |
| DBO | | | | IAML | | 01 17 57.8 | |
| | comp=N,14nm,1.4s | | | | | | |
| **HUMO** | **Hull Mountain** | **2.47** | **73** | Pn | Pn | 01 17 25.7 | -1.5 |
| **KMRM** | **Mail Ridge** | **2.50** | **132** | Pn | Pn | 01 17 26.4 | -1.2 |
| KMRM | | | | IAML | | 01 18 00.4 | |
| | comp=E,35nm,0.6s | | | | | | |
| KMRM | | | | IAML | | 01 18 08.1 | |
| | comp=N,23nm,2.2s | | | | | | |
| **M02C** | **Callahan** | **2.52** | **101** | | Pn | 01 17 27.4 | -0.6 |
| **KHBM** | **Hayfork Bally** | **2.53** | **119** | | Pn | 01 17 27.4 | -0.9 |
| **YBH** | **Yreka Blue Hor** | **2.57** | **93** | | Pn | 01 17 28.4 | -0.3 |
| **YBH** | **Yreka Blue Hor** | **2.57** | **93** | Pn | Pn | 01 17 28.2 | -0.5 |
| **LAMM** | **Antelope Mount** | **2.65** | **95** | | Pn | 01 17 29.9 | 0.0 |
| **I03D** | **Drain, OR** | **2.72** | **48** | | Pn | 01 17 29.1 | -1.6 |
| I03D | | | | IAML | | 01 18 01.4 | |
| | comp=E,13nm,0.3s | | | | | | |
| I03D | | | | IAML | | 01 18 02.0 | |
| | comp=N,13nm,0.3s | | | | | | |
| **KCPM** | **Cahto Peak** | **2.95** | **138** | Pn | Pn | 01 17 32.4 | -1.5 |
| **O02D** | **Mt. Diablo Mer** | **3.07** | **123** | Pn | Pn | 01 17 34.0 | -1.5 |
| O02D | | | | IAML | | 01 18 11.4 | |
| | comp=N,7.6nm,0.8s | | | | | | |
| O02D | | | | IAML | | 01 18 12.0 | |
| | comp=E,9.7nm,0.8s | | | | | | |
| **BUCK** | **Buck Mountain** | **3.25** | **44** | Pn | Pn | 01 17 36.8 | -1.2 |
| BUCK | | | | IAML | | 01 18 20.2 | |
| | comp=E,12nm,0.7s | | | | | | |
| BUCK | | | | IAML | | 01 18 25.2 | |
| | comp=N,16nm,2.5s | | | | | | |
| **I04A** | **Tendick Farm,** | **3.33** | **54** | | Pn | 01 17 37.8 | -1.2 |
| I04A | | | | IAML | | 01 18 20.7 | |
| | comp=N,21nm,0.2s | | | | | | |
| **COR** | **Corvallis** | **3.38** | **37** | Pn | Pn | 01 17 38.5 | -1.2 |
| **H04D** | **Lebanon** | **3.61** | **42** | Pn | Pn | 01 17 42.5 | -0.4 |
| H04D | | | | IAML | | 01 18 27.5 | |
| | comp=E,18nm,0.6s | | | | | | |
| H04D | | | | IAML | | 01 18 28.2 | |
| | comp=N,17nm,0.5s | | | | | | |
| **HEBO** | **Mount Hebo** | **3.73** | **27** | Pn | Pn | 01 17 43.9 | -0.7 |
| **J05D** | **Fort Rock, OR** | **3.88** | **68** | | Pn | 01 17 45.0 | -1.6 |
| J05D | | | | IAML | | 01 20 02.3 | |
| | comp=E,7.6nm,4.5s | | | | | | |
| J05D | | | | IAML | | 01 20 05.4 | |
| | comp=N,7.7nm,4.7s | | | | | | |
| **G03D** | **McMinnville, O** | **3.91** | **31** | Pn | Pn | 01 17 47.1 | +0.2 |
| **H04A** | **Detroit Lake** | **4.00** | **45** | Pn | Pn | 01 17 46.9 | -1.4 |
| **PINE** | **Pine Mountain** | **4.26** | **62** | Pn | Pn | 01 17 51.4 | -0.6 |
| PINE | | | | IAML | | 01 19 03.8 | |
| | comp=N,6.5nm,3.5s | | | | | | |
| PINE | | | | IAML | | 01 19 54.5 | |
| | comp=E,6.6nm,4.3s | | | | | | |
| **I05D** | **Terrebonne, OR** | **4.27** | **54** | Pn | Pn | 01 17 49.9 | -2.1 |
| I05D | | | | IAML | | 01 19 04.3 | |
| | comp=E,10nm,4.0s | | | | | | |
| I05D | | | | IAML | | 01 19 25.1 | |
| | comp=N,8.9nm,4.2s | | | | | | |
| **LON** | **Longmire** | **5.75** | **31** | Pn | Pn | 01 18 12.2 | -0.2 |
| **YERR** | **Yerington** | **6.02** | **117** | Pn | Pn | 01 18 15.8 | -0.4 |

**IDC 11 01:22:43.9±6.8, 6.10S×141.60E, h0km, mb3.4/1, mbtmp3.4/3, ML3.4/2, Error ellipse: s-maj=241.4km s-min=36.5km az=94.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **15.46** | **206** | Pn | Pn | 01 26 22.1 | -1.4 |
| | 0.2nm,0.3s,baz=21,slow=13,SNR=6.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **18.97** | **202** | P | P | 01 27 07.2 | +0.1 |
| | 0.1nm,0.3s,baz=33,slow=10,SNR=9.5 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **74.21** | **322** | P | P | 01 34 23.0 | +0.2 |
| | 0.3nm,0.6s,baz=106,slow=8.4,SNR=3.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*NAO **11** 01:33:03.7±1.9, 79.32N×3.20E, ML4.0*
*DNK **11** 01:33:05.5±3.3, 79.12N×3.53E, h22km±25km, ML2.4*
*IDC **11** 01:33:06.9±0.6, 79.15N×3.15E, h0km, mb4.0/17, mbtmp4.0/20, ML2.9/3, MS3.8/9, Error ellipse: s-maj=17.6km s-min=12.1km az=41.0*
*NEIC **11** 01:33:07.0±1.5, 79.20N±0.10×3.8E±0.2, h10km±1km, mb4.4/33, Error ellipse: s-maj=16.9km s-min=5.3km az=172.0*
*BER **11** 01:33:07.7±2.3, 79.45N×3.51E, h27km±26km, mb(Pn)4.5, mb4.4(USGS), Confirmed Earthquake*
*FCIAR **11** 01:33:11.0, 79.23N×6.71E, h10km, station HOPEN has station magnitude of 7.50 station BJO1 has station magnitude of 5.30 station ZFI2 has station magnitude of 3.70 station OMEGA has station magnitude of 3.70*
*KOLA **11** 01:33:16.0, 79.05N×7.15E, h0km, ML3.0, Error ellipse: s-maj=26.5km s-min=22.5km az=10.0, Greenland sea, Knipovich ridge, north*

**ISC 11 01:33:06.8±2.8, 79.18N±0.04×3.68E±0.04, h9km±18km, n120, σ2995/147, mb4.3/33, MS4.7/3, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBS** | **Kingsbay** | **1.60** | **95** | Pn | **Pn** | **01 33 34.3** | **-0.8** |
| KBS | | | | Sn | **Sn** | **01 33 52.2** | **-3.5** |
| **KBS** | **Kingsbay** | **1.60** | **95** | P | **Pn** | **01 33 34.0** | **-1.1** |
| KBS | | | | S | **Sn** | **01 33 47.3** | **-8.4** |
| **KBS** | **Kingsbay** | **1.60** | **95** | *e*P | **Pn** | **01 33 34.2** | **-0.8** |
| KBS | | | | *e*S | **Sn** | **01 33 52.6** | **-3.1** |
| KBS | | | | IAML | | 01 33 53.6 | |
| | comp=Z,621nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **1.60** | **95** | Pn | **Pn** | **01 33 34.1** | **-1.0** |
| KBS | | | | Sn | **Sn** | **01 33 53.0** | **-2.8** |
| **KBS** | **Kingsbay** | **1.60** | **95** | *e*P | **Pn** | **01 33 34.4** | **-0.8** |
| KBS | | | | *e*S | **Sn** | **01 33 47.7** | **-8.1** |
| **KBS** | **Kingsbay** | **1.60** | **95** | *i* P | **Pn** | **01 33 33.5** | **-1.6** |
| KBS | | | | *i* S | **Sn** | **01 33 52.3** | **-3.5** |
| **BRBB** | **Barentsburg B** | **2.35** | **112** | P | **Pb** | **01 33 47.5** | **-1.7** |
| BRBB | | | | S | **Sn** | **01 34 09.9** | **-4.4** |
| **BRBB** | **Barentsburg B** | **2.35** | **112** | *e*P | **Pn** | **01 33 45.2** | **-0.2** |
| BRBB | | | | *e*S | **Sn** | **01 34 12.0** | **-2.4** |
| **BRBB** | **Barentsburg B** | **2.35** | **112** | Pn | **Pn** | **01 33 45.4** | **-0.1** |
| BRBB | | | | Sn | **Sn** | **01 34 13.8** | **-0.5** |
| **BRBA** | **Barentsburg A** | **2.37** | **113** | *e*P | **Pn** | **01 33 45.7** | **0.0** |
| BRBA | | | | *e*S | **Sn** | **01 34 13.7** | **-1.1** |
| BRBA | | | | IAML | | 01 34 16.1 | |
| | comp=Z,612nm,0.6s | | | | | | |
| **BRBA** | **Barentsburg A** | **2.37** | **113** | Pn | **Pn** | **01 33 45.5** | **-0.2** |
| BRBA | | | | Sn | **Sn** | **01 34 13.8** | **-1.1** |
| **HSPB** | **Hornsund (broa** | **3.29** | **126** | P | **Pn** | **01 33 59.0** | **+0.8** |
| HSPB | | | | S | **Sn** | **01 34 34.5** | **-2.8** |
| **HSPB** | **Hornsund (broa** | **3.29** | **126** | *e*P | **Pn** | **01 33 58.1** | **-0.1** |
| HSPB | | | | *e*S | **Sn** | **01 34 33.3** | **-4.0** |
| HSPB | | | | IAML | | 01 34 37.5 | |
| | comp=Z,174nm,0.4s | | | | | | |
| **HSPB** | **Hornsund (broa** | **3.29** | **126** | Pn | **Pn** | **01 33 57.5** | **-0.7** |
| HSPB | | | | Sn | **Sn** | **01 34 34.5** | **-2.8** |
| **NOR** | **Nord** | **4.17** | **315** | *i* P | **Pn** | **01 34 06.6** | **-3.7** |
| NOR | | | | *i* S | **Sn** | **01 34 52.7** | **-6.3** |
| NOR | | | | IAML | | 01 34 55.1 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **NOR** | **Nord** | **4.17** | **315** | Pn | **Pn** | **01 34 06.8** | **-3.5** |
| NOR | | | | Sn | **Sn** | **01 34 52.2** | **-6.8** |
| **NOR** | **Nord** | **4.17** | **315** | *i* P | **Pn** | **01 34 06.6** | **-3.7** |
| NOR | | | | *i* S | **Sn** | **01 34 52.7** | **-6.3** |
| NOR | | | | IAML | | 01 34 55.1 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **HOPEN** | **Hopen** | **5.21** | **110** | *e*P | **Pn** | **01 34 24.0** | **-0.7** |
| HOPEN | | | | *e*S | **Sn** | **01 35 19.3** | **-5.5** |
| HOPEN | | | | IAML | | 01 35 23.5 | |
| | comp=Z,166nm,0.3s | | | | | | |
| **HOPEN** | **Hopen** | **5.21** | **110** | Pn | **Pn** | **01 34 23.9** | **-0.8** |
| HOPEN | | | | Sn | **Sn** | **01 35 21.3** | **-3.5** |
| **HOPEN** | **Hopen** | **5.21** | **110** | *e*P | **Pn** | **01 34 24.0** | **-0.7** |
| HOPEN | | | | *e*S | **Sn** | **01 35 18.6** | **-6.1** |

comp=Z,404μm,0.2s
**DAG Danmarks Havn 5.23 254** *i* P **Pn** **01 34 21.4 -3.5**
DAG *i* S Sn 01 35 15.0 -10
DAG IAML 01 35 19.9
comp=Z,9.9nm,0.1s
**DAG Danmarks Havn 5.23 254** *i* P **Pn** **01 34 21.4 -3.5**
DAG *i* S Sn 01 35 15.0 -10
DAG IAML 01 35 19.9
comp=Z,9.9nm,0.1s
**BJO1 Bjornoya 5.83 136** *e*P **Pn** **01 34 34.3 +1.2**
BJO1 *e*S **Sn** **01 35 36.8 -3.2**
BJO1 IAML 01 36 27.0
comp=Z,12nm,0.6s
**BJO1 Bjornoya 5.83 136** Pn **Pn** **01 34 34.5 +1.4**
BJO1 Sn **Sn** **01 35 37.8 -2.2**
**BJO1 Bjornoya 5.83 136** *e*P **Pn** **01 34 33.3 +0.1**
BJO1 *e*S **Sn** **01 35 33.9 -6.0**
comp=Z,2μm,0.3s
BJO1 *e*tx tx 01 40 37.5
**DBG Daneborg 7.28 240** *i* P **Pn** **01 34 49.3 -3.8**
DBG *i* S Sn 01 36 04.9 -11
DBG IAML 01 36 12.8
comp=Z,7.1nm,0.3s
**DBG Daneborg 7.28 240** Pn **Pn** **01 34 50.5 -2.6**
DBG Sn **Sn** 01 36 05.2 -10
**DBG Daneborg 7.28 240** *i* P **Pn** **01 34 49.3 -3.8**
DBG *i* S Sn 01 36 04.9 -11
DBG IAML 01 36 12.8
comp=Z,7.1nm,0.3s
**ZFI2 Zemlya Franca- 7.66 57** *e*P **Pn** **01 34 56.6 -1.6**
ZFI2 *e*S **Sn** **01 36 16.4 -8.5**
comp=Z,22nm,0.2s
**OMEGA Omega 7.68 57** *e*P **Pn** **01 34 57.1 -1.3**
OMEGA *e*S **Sn** **01 36 17.2 -8.1**
comp=Z,20nm,0.3s
**JMIC Jan Mayen 8.78 207** *e*P **Pn** **01 35 12.1 -1.5**
JMIC *e*S **Sn** **01 36 45.8 -6.7**
JMIC IAML 01 36 54.0
comp=Z,9.3nm,0.6s
**JMIC Jan Mayen 8.78 207** Pn **Pn** **01 35 12.1 -1.5**
JMIC Sn **Sn** **01 36 46.6 -5.9**
**JMIC Jan Mayen 8.78 207** Pn **Pn** **01 35 12.1 -1.5**
comp=Z,12nm,0.3s,baz=193,slow=0.5,SNR=30
JMIC Sn **Sn** **01 36 46.2 -6.3**
baz=180,slow=20
JMIC LR LR 01 37 51.6
comp=Z,116nm,18.1s,baz=61,slow=33
**JMI Jan Mayen 8.86 207** *e*P **Pn** **01 35 13.4 -1.2**
**JMI Jan Mayen 8.86 207** Pn **Pn** **01 35 14.0 -0.6**
**HAMF Hammerfest 9.94 139** *e*S **Sn** **01 37 14.2 -6.7**
HAMF IAML 01 37 22.0
comp=Z,5.1nm,0.5s
**SCO Scoresbysund 10.85 231** Pn **Pn** **01 35 40.6 -1.3**
**NEEM North Greenlan 10.87 289** *e*P Pn 01 35 37.2 -5.2
NEEM *e*S Sn 01 37 29.0 -15
NEEM IAML 01 37 33.0
comp=Z,14nm,0.7s
**NEEM North Greenlan 10.87 289** *e*P Pn 01 35 37.2 -5.2
NEEM *e*S Sn 01 37 29.0 -15
NEEM IAML 01 37 33.0
comp=Z,14nm,0.7s
**VADS Vadso 11.19 130** *e*P **Pn** **01 35 46.7 +0.2**
VADS *e*S **Sn** **01 37 43.1 -8.3**
VADS IAML 01 37 47.3
comp=Z,7.1nm,0.6s
**KEV Kevo 11.20 135** Pn **Pn** **01 35 46.5 -0.1**
**KEV Kevo 11.20 135** *e*P **Pn** **01 35 47.3 +0.7**
KEV *e*S **Sn** **01 37 45.2 -6.4**
**KEV Kevo 11.20 135** Pn **Pn** **01 35 49.3 +2.7**
KEV Sn **Sn** **01 37 46.1 -5.5**
**ARA0 ARCESS Array S 11.20 138** *e*P **Pn** **01 35 47.1 +0.3**
ARA0 *e*S **Sn** **01 37 46.6 -5.3**
**ARA0 ARCESS Array S 11.20 138** Pn **Pn** **01 35 47.5 +0.7**
baz=342,slow=16
ARA0 Sn **Sn** **01 37 47.6 -4.3**
baz=354,slow=18
**ARCES ARCESS Array B 11.20 138** Pn **Pn** **01 35 46.3 -0.5**
**ARCES ARCESS Array B 11.20 138** Pn **Pn** **01 35 47.5 +0.8**
comp=Z,0.5nm,0.3s,baz=345,slow=9.1,SNR=15
ARCES Sn **Sn** **01 37 48.1 -3.8**
comp=Z,0.3nm,0.3s,baz=358,slow=19,SNR=2.7
ARCES LR LR 01 39 52.4
comp=Z,284nm,21.6s,baz=338,slow=36
comp=Z,2.3nm,0.5s
**KTK1 Kautokeino 11.42 142** *e*P **Pn** **01 35 52.6 +2.9**
**SUMG Summit 11.88 259** **Pn** **01 35 53.5 -2.8**
**SUMG Summit 11.88 259** *e*P Pn 01 35 46.3 -10
**SUMG Summit 11.88 259** *e*P Pn 01 35 46.3 -10
**LVZ Lovozero 14.01 126** Pn **Pn** **01 36 23.9 -1.1**
**TULEG Thule 14.54 297** Pn Pn 01 36 23.4 -8.8
**BORG Borgarnes 16.16 221** LR LR 01 41 49.7
comp=Z,64nm,18.4s,baz=145,slow=32
**NOA NORSAR Array B 16.38 168** P **P** **01 37 22.1 +0.6**
baz=360,slow=11,SNR=2.9
NOA LR LR 01 43 15.6
comp=Z,138nm,20.9s,baz=0.0,slow=33
**SFJD Kangerlussuaq 18.86 261** P **Pn** **01 37 29.7 +2.5**
comp=Z,5.8nm,0.7s,baz=6.2,slow=9.9,SNR=3.6
SFJD LR LR 01 45 07.9
comp=Z,125nm,21.6s,baz=19,slow=38
**FIA1 FINESS Array S 19.07 146** P **P** **01 37 28.9 0.0**
FIA1 IAmb IAmb 01 37 51.3
comp=Z,37nm,1.2s
**FINES FINESS Array B 19.07 146** P **Pn** **01 37 30.1 +0.5**
**FINES FINESS Array B 19.07 146** P **Pn** **01 37 31.2 +1.5**
comp=Z,0.2nm,0.3s,baz=353,slow=9.9,SNR=13
FINES LR LR 01 44 38.2
comp=Z,237nm,21.6s,baz=16,slow=36
comp=Z,2.8nm,0.7s
**RES Resolute Bay 20.09 310** P **P** **01 37 38.1 -1.9**
**EKA Eskdalemuir Ar 24.06 190** P **P** **01 38 22.9 +1.1**
comp=Z,1.4nm,0.8s,baz=9.2,slow=9.3,SNR=3.3
comp=Z,1.4nm,0.8s
**KIRV Kirov 25.10 118** P **P** **01 38 31.9 +0.8**
comp=Z,7.3nm,0.6s,baz=315,slow=13,SNR=3.0
comp=Z,7.3nm,0.6s
**OBN Obninsk 26.50 136** P **P** **01 38 44.6 +0.8**
**ARU Arti 28.73 109** P **P** **01 39 02.9 -0.9**
ARU IAmb IAmb 01 39 30.1
comp=Z,4.3nm,0.8s
**ARU Arti 28.73 109** P **P** **01 39 06.1 +2.3**
comp=Z,1.2nm,0.4s,baz=296,slow=8.9,SNR=3.8
comp=Z,1.2nm,0.4s
**OJC Ojcow 29.64 159** P **P** **01 39 11.9 0.0**
**AKASG Malin Array Be 29.97 147** P **P** **01 39 15.4 +0.6**
comp=Z,1.8nm,0.7s,baz=349,slow=9.3,SNR=4.2
comp=Z,1.8nm,0.7s
**KWP Kalwaria Pacla 30.43 155** P **P** **01 39 20.2 +1.2**
**GERES GERESS Array B 30.67 167** P **P** **01 39 21.2 0.0**
**G31M Satah River 32.10 330** P **P** **01 39 33.8 +0.4**
G31M IAmb IAmb 01 39 36.5
comp=Z,3.8nm,0.9s
**D19K Kuna River 32.16 348** P **P** **01 39 33.6 -0.4**
D19K IAmb IAmb 01 39 44.8
comp=Z,11nm,1.4s
**BUR08 Bucovina Ar. S 32.62 153** P **P** **01 39 40.0 +1.7**
BUR08 IAmb IAmb 01 39 49.9
comp=Z,6.4nm,1.2s
**BURAR Bucovina Array 32.65 153** P **P** **01 39 39.1 +0.6**
**E19K Redstone River 33.15 347** P **P** **01 39 43.4 +0.7**
**E18K Tukpahlearik C 33.32 349** P **P** **01 39 44.9 +0.8**
E18K IAmb IAmb 01 39 54.8
comp=Z,4.4nm,1.1s
**I30M Mount Dempster 33.95 331** P **P** **01 39 50.1 +0.3**
**J30M Hart River 34.59 331** P **P** **01 39 54.1 -1.2**
**ILAR Eielson Array 35.24 339** P **P** **01 40 03.0 +2.1**
comp=Z,0.2nm,0.6s,baz=358,slow=8.4,SNR=4.0
ILAR PcP **PcP** **01 42 32.2 +1.1**
comp=Z,0.4nm,0.7s,baz=349,slow=5.3,SNR=4.9
comp=Z,0.2nm,0.6s
**ABKAR Akbulak array 35.84 111** P **P** **01 40 05.8 -0.3**
**ABKAR Akbulak array 35.84 111** P **P** **01 40 05.8 -0.3**
ABKAR IAmb IAmb 01 40 10.0
comp=Z,2.4nm,0.9s
**ZALV Zalesovo Beam 35.98 84** P **P** **01 40 06.3 -0.8**
**L29M L29M 36.19 332** P **P** **01 40 08.7 -0.3**
L29M IAmb IAmb 01 40 23.9
comp=Z,5.2nm,1.2s
**KURBB Kurchatov Arra 37.96 92** P **P** **01 40 27.2 +3.1**
comp=Z,1.7nm,0.3s,baz=345,slow=7.5,SNR=8.7
comp=Z,1.7nm,0.3s
**KBZ Khabaz 38.51 133** P **P** **01 40 31.2 +2.5**
comp=Z,2.9nm,0.7s,baz=9.2,slow=5.5,SNR=4.7
comp=Z,2.9nm,0.7s
**ESDC Sonseca Array 39.74 189** P **P** **01 40 40.0 +0.9**
comp=Z,0.6nm,0.8s,baz=9.2,slow=7.1,SNR=4.3
comp=Z,0.6nm,0.8s
**BRTR Keskin Array B 41.29 144** P **P** **01 40 55.0 +2.9**
comp=Z,0.7nm,0.7s,baz=2.3,slow=6.2,SNR=2.6
comp=Z,0.7nm,0.7s
**MKAR Makanchi Array 42.34 90** P **P** **01 41 03.6 +3.1**
comp=Z,1.6nm,0.7s,baz=336,slow=6.6,SNR=2.0
comp=Z,1.6nm,0.7s
**ULM Lac du Bonnet 42.88 292** P **P** **01 41 05.8 +1.0**
ULM IAmb IAmb 01 41 14.3
comp=Z,7.4nm,1.0s
**ULM Lac du Bonnet 42.88 292** P **P** **01 41 06.2 +1.4**
comp=Z,3.0nm,0.9s,baz=22,slow=7.7,SNR=5.2
ULM LR LR 02 00 47.4
comp=Z,948nm,21.9s,baz=296,slow=39
comp=Z,3.0nm,0.9s
**SONM Songino Array 45.76 67** P **P** **01 41 30.6 +2.5**
comp=Z,1.0nm,0.7s,baz=342,slow=7.9,SNR=5.7
comp=Z,1.0nm,0.7s
**OVMT Ovando 48.80 306** P **P** **01 41 52.3 +0.6**
**MSO Missoula 49.17 306** P **P** **01 41 54.2 -0.3**
MSO IAmb IAmb 01 42 05.3
comp=Z,6.2nm,0.9s
**ECSD EROS Data Cent 49.31 290** P **P** **01 41 56.0 +0.6**
**RLMT Red Lodge 50.11 302** P **P** **01 42 02.0 +0.2**
RLMT IAmb IAmb 01 42 12.1
comp=Z,5.3nm,1.1s
**YHL Hebgen Lake 50.68 303** P **P** **01 42 05.4 -0.8**
YHL IAmb IAmb 01 42 17.1
comp=Z,6.4nm,1.0s
**PD31 Pinedale Array 52.45 301** P **P** **01 42 19.4 0.0**
**PDAR Pinedale Array 52.45 301** P **P** **01 42 18.8 -0.6**
**PDAR Pinedale Array 52.45 301** P **P** **01 42 20.2 +0.8**
comp=Z,1.8nm,1.1s,baz=27,slow=3.6,SNR=10
comp=Z,1.8nm,1.1s
**RWWY Rawlins 53.12 299** P **P** **01 42 24.1 -0.3**
RWWY IAmb IAmb 01 42 27.4
comp=Z,6.5nm,1.1s
**USRK Ussuriysk Ar. 53.27 45** P **P** **01 42 25.5 +0.3**
**HHC Hu-ho-hao-te 53.43 64** *e*P **P** **01 42 26.1 -0.4**
HHC pP pwP 01 42 31.5 -0.7
HHC pmax pmax
comp=Z,11nm,0.6s
HHC pmax pmax
comp=Z,200nm,6.1s
**O20A White River Ci 54.80 300** P **P** **01 42 37.3 +0.6**
**ELK Elko 55.32 306** P **P** **01 42 41.0 +0.6**
ELK IAmb IAmb 01 42 44.9
comp=Z,5.6nm,1.4s
**S22A 4UR Ranch, Cre 56.90 298** P **P** **01 42 52.1 +0.3**
S22A IAmb IAmb 01 42 55.9
comp=Z,5.5nm,1.5s
**MSU Marysvale 57.02 303** P **P** **01 42 52.8 +0.2**
**MTPU Mount Pierson 57.48 303** P **P** **01 42 56.3 +0.3**
MTPU IAmb IAmb 01 43 07.8
comp=Z,2.7nm,0.9s
**W35A Tecumseh 57.69 288** P **P** **01 42 57.8 +0.7**
**NVAR Mina Array Bea 58.05 308** P **P** **01 43 00.7 +0.9**
**NVAR Mina Array Bea 58.05 308** P **P** **01 43 02.1 +2.3**
comp=Z,1.2nm,1.0s,baz=41,slow=5.7,SNR=5.0
comp=Z,1.2nm,1.0s
**WUAZ Wupatki 59.82 301** P **P** **01 43 13.0 +0.9**
WUAZ IAmb IAmb 01 43 15.9
comp=Z,4.2nm,1.1s
**POST Post 60.55 291** P **P** **01 43 16.6 -0.3**
**MJAR Matsushiro Arr 61.61 41** P **P** **01 43 25.1 +1.0**
comp=Z,2.5nm,0.8s,baz=342,slow=6.9,SNR=5.9
comp=Z,2.5nm,0.8s
**TX31 Lajitas Ar. Si 64.57 293** P **P** **01 43 43.1 -0.8**
TX31 IAmb IAmb 01 43 53.5
comp=Z,1.7nm,0.8s
**TXAR Lajitas Array 64.57 293** P **P** **01 43 44.2 +0.3**
comp=Z,0.8nm,0.8s,baz=15,slow=8.4,SNR=5.5
comp=Z,0.8nm,0.8s
**PZH PanZhiHua 65.66 77** P **P** **01 43 51.5 +0.5**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.5s
**CMAR Chiang Mai Arr 72.99 81** P **P** **01 44 37.8 +1.5**
comp=Z,1.3nm,0.3s,baz=350,slow=8.0,SNR=8.3
comp=Z,1.3nm,0.3s
**SDV Santo Domingo 78.39 256** LR LR 02 18 07.2
comp=Z,199nm,21.7s,baz=284,slow=34
**BDFB Brasilia 98.64 230** LR LR 02 26 09.2
comp=Z,293nm,21.8s,baz=200,slow=32
**MAW Mawson 150.45 138** PKPbc **PKiKP** **01 52 57.5 +0.4**
comp=Z,1.8nm,0.8s,baz=336,slow=8.4,SNR=4.9
**SNAA Sanae 150.71 184** PKPbc **PKiKP** **01 52 58.5 +0.9**
comp=Z,1.4nm,0.8s,baz=241,slow=1.8,SNR=4.1

*KRNET **11** 01:34:53.9±0.1, 40.°39N×77.°01E, h21km, mb3.0*
*NNC **11** 01:34:55.8±2.1, 40.°48N×77.°21E, h0km, mb3.8, mpv3.5,*
*Error ellipse: s-maj=15.1km s-min=11.0km az=175.0*
**ISC 11 01:34:49.3**±2.4, **40.°1N**±0.°1×**76.°80E**±0.°04, **h3**km±12km, **n39**,
**σ1s28**/52, **24C-4D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s ISC |
| **NRN** | **Naryn** | **1.43** | **335** | ⇑*e*P | | **Pg** | **01 35 18.7 +2.0** |
| NRN | baz=23 | | | ⇑*i*S | | **Sg** | **01 35 36.9 +1.6** |
| **KDJ** | **Kajisay** | **2.01** | **8** | ⇑*e*P | | **Pb** | **01 35 26.4 -0.3** |
| KDJ | baz=5.0 | | | ⇑*e*S | | **Sn** | **01 35 50.1 -0.1** |
| **ULHL** | **Ulahol** | **2.15** | **349** | P | | **Pg** | **01 35 30.3 -0.2** |
| | SNR=13 | | | | | | |
| **ULHL** | **Ulahol** | **2.15** | **349** | ⇑*e*P | | **Pg** | **01 35 30.0 -0.5** |
| ULHL | baz=43 | | | ⇑*e*S | | **Sb** | **01 35 56.4 +0.2** |
| **BOOM** | **Boomskoye usch** | **2.44** | **345** | ⇑*e*P | | **Pb** | **01 35 34.4 +0.5** |
| BOOM | baz=40 | | | ⇑*e*S | | **Sb** | **01 36 03.9 -0.6** |
| **ARLS** | **Aral** | **2.54** | **313** | ⇑*e*P | | **Pg** | **01 35 37.9 -0.2** |
| ARLS | baz=7.0 | | | ⇑*e*S | | **Sg** | **01 36 10.1 -1.0** |
| **PRZ** | **Przheval'sk** | **2.63** | **27** | ⇑*e*P | | **Pb** | **01 35 35.9 -1.4** |
| PRZ | baz=26 | | | ⇑*e*S | | **Sn** | **01 36 06.9 +1.3** |
| **KBK** | **Karagaybulak** | **2.88** | **332** | P | | **Pb** | **01 35 42.1 +0.7** |
| | SNR=7.6 | | | | | | |
| **KBK** | **Karagaybulak** | **2.88** | **332** | ⇑*e*P | | **Pb** | **01 35 41.2 -0.2** |
| KBK | baz=26 | | | ⇑*e*S | | **Sb** | **01 36 15.8 -1.3** |
| **TNSS** | **Tian-Shan** | **2.90** | **2** | Pg | | **Pb** | **01 35 40.9 -1.0** |
| TNSS | 23nm,0.5s | | | Lg | | Lg | 01 36 15.2 |
| **TKM2** | **Tokmak 2** | **2.92** | **342** | P | | **Pb** | **01 35 41.9 -0.4** |
| | SNR=8.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.92** | **342** | ⇓Pn | | **Pb** | **01 35 41.2 -1.0** |
| TKM2 | 5.9nm,0.5s | | | ⇑Lg | | Lg | 01 36 21.6 |
| **TKM2** | **Tokmak 2** | **2.92** | **342** | ⇑*e*P | | **Pb** | **01 35 41.2 -1.0** |
| TKM2 | baz=38 | | | ⇑*e*S | | **Sb** | **01 36 15.8 -2.7** |
| **KST** | **Kastek** | **2.97** | **348** | Pg | | **Pb** | **01 35 44.7 +1.8** |
| KST | 7.4nm,0.3s | | | Lg | | Lg | 01 36 22.6 |
| **MTBS** | **Maitube** | **3.00** | **355** | Pg | | **Pb** | **01 35 44.5 +1.0** |
| MTBS | 5.3nm,0.2s | | | Lg | | Lg | 01 36 21.6 |
| **MDOK** | **Medeo** | **3.03** | **3** | ⇑Pn | | **Pn** | **01 35 36.4 -1.9** |
| MDOK | 8.9nm,0.5s | | | Pg | | **Pb** | **01 35 44.5 +0.5** |
| MDOK | 16nm,0.4s | | | ⇑Pg | | **Pg** | **01 35 45.5 -1.8** |
| MDOK | 14nm,0.5s | | | Lg | | Lg | 01 36 21.6 |
| MDOK | 36nm,0.5s | | | ⇑Lg | | Lg | 01 36 21.8 |
| **AAK** | **Ala-Archa** | **3.04** | **326** | ⇓P | | **Pb** | **01 35 43.5 -0.7** |
| AAK | 37nm,0.6s 18nm,0.7s | | | ⇓S | | **Sg** | **01 36 27.5 +0.5** |
| **AAK** | **Ala-Archa** | **3.04** | **326** | ⇑*e*P | | **Pb** | **01 35 43.9 -0.3** |
| AAK | baz=21 | | | ⇑*e*S | | **Sb** | **01 36 20.4 -1.4** |
| **AML** | **Almayashu** | **3.08** | **311** | P | | **Pn** | **01 35 38.1 -1.1** |
| | SNR=79 | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.10** | **4** | Pg | | **Pb** | **01 35 46.1 +0.9** |
| KOTS | 17nm,0.4s | | | Lg | | Lg | 01 36 24.1 |
| **SATY** | **Saty** | **3.16** | **22** | Pg | | **Pb** | **01 35 45.3 -0.9** |
| SATY | 12nm,0.3s | | | Lg | | Lg | 01 36 22.9 |
| **DGS** | **Degeres** | **3.20** | **346** | Pg | | **Pg** | **01 35 49.2 -1.4** |
| DGS | 11nm,0.5s | | | Lg | | Lg | 01 36 29.3 |
| **CHMS** | **Chumysh** | **3.25** | **332** | P | | **Pb** | **01 35 46.8 -0.8** |
| | SNR=11 | | | | | | |
| **ZHN** | **Zhinishke** | **3.27** | **21** | Pg | | **Pb** | **01 35 47.4 -0.6** |
| ZHN | 7.7nm,0.2s | | | Lg | | Lg | 01 36 26.3 |
| **EKS2** | **Erkin-Say** | **3.40** | **319** | P | | **Pn** | **01 35 45.5 +2.2** |
| | SNR=9.0 | | | | | | |
| **UZB** | **Uzynbulak** | **3.44** | **28** | Pg | | **Pb** | **01 35 49.9 -1.0** |
| UZB | 7.0nm,0.5s | | | Lg | | Lg | 01 36 30.6 |
| **KURS** | **Kuram** | **3.50** | **17** | Pg | | **Pb** | **01 35 52.3 +0.3** |
| KURS | 16nm,0.6s | | | Lg | | Lg | 01 36 34.9 |
| **SHLS** | **Shalkode** | **3.62** | **33** | Pg | | **Pg** | **01 35 58.0 -0.6** |
| SHLS | 9.7nm,0.4s | | | Lg | | Lg | 01 36 44.8 |
| **KRBS** | **Karabastau** | **3.65** | **347** | Pg | | **Pb** | **01 35 56.8 +2.2** |
| KRBS | 6.0nm,0.4s | | | Lg | | Lg | 01 36 42.6 |
| **SGDS** | **Sogindy** | **3.69** | **335** | Pg | | **Pg** | **01 35 58.2 -1.8** |
| SGDS | 5.5nm,0.4s | | | Lg | | Lg | 01 36 44.8 |
| **CHKK** | **Chushkaly** | **3.72** | **2** | Pg | | **Pb** | **01 35 57.1 +1.5** |
| CHKK | 15nm,0.5s | | | Lg | | Lg | 01 36 43.5 |
| **PDGK** | **Podgornoye** | **3.77** | **31** | Pg | | **Pb** | **01 35 56.8 +0.2** |
| PDGK | 2.0nm,0.5s | | | Lg | | Lg | 01 36 42.6 |
| **PDGK** | **Podgornoye** | **3.77** | **31** | ⇑Pn | | **Pn** | **01 35 50.7 +2.2** |
| PDGK | 4.0nm,0.6s | | | ⇓Pg | | **Pg** | **01 36 02.9 +1.3** |
| PDGK | 10nm,0.5s | | | ⇑Lg | | Lg | 01 36 42.9 |
| **ARXS** | **Arharly** | **4.14** | **10** | Pg | | **Pb** | **01 36 02.8 -0.1** |
| ARXS | 5.5nm,0.5s | | | Lg | | Lg | 01 36 53.4 |
| **BLB** | **Baldybastay** | **4.15** | **17** | Pg | | **Pb** | **01 36 03.4 +0.3** |
| BLB | 23nm,0.4s | | | Lg | | Lg | 01 36 54.2 |
| **KTMS** | **Ketmen** | **4.24** | **38** | Pg | | **Pb** | **01 36 03.6 -1.1** |
| KTMS | 2.0nm,0.5s | | | Lg | | Lg | 01 36 54.2 |
| **KNOS** | **Konyrlen** | **4.57** | **22** | Pg | | **Pb** | **01 36 11.6 +1.3** |
| | 1.6nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **4.74** | **27** | Pg | | **Pb** | **01 36 13.1 0.0** |
| DJR | 1.6nm,0.3s 2.1nm,0.3s | | | *e*S | | **Sg** | **01 40 49.8 -3.3** |
| **BTLS** | **Baital** | **5.30** | **338** | Pg | | **Pb** | **01 36 25.4 +2.7** |
| | 1.1nm,0.3s | | | | | | |

*ASRS **11** 01:38:06.3±0.3, 48.°N±2.°×8.°4E±.°, h5km, MLh3.2/8, Error ellipse: s-maj=5.5km s-min=2.4km az=135.3, confirmed*
*SOME **11** 01:38:10.0, 48.°33N×84.°22E, h5km*
*NNC **11** 01:38:11.8±4.1, 48.°40N×84.°41E, h0km, mb3.3, mpv2.9, Error ellipse: s-maj=29.7km s-min=16.1km az=54.0*
**ISC 11 01:38:07.1**±1.2, **48.°41N**±0.°03×**84.°39E**±0.°04, **h9**km±18km, **n19**, **σ1s10**/32, **2C-3D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s ISC |
| **ZSN** | **Zaisan** | **1.01** | **161** | *e*P | | **Pn** | **01 38 27.5 +0.1** |
| ZSN | 13nm,0.1s 27nm,0.3s | | | *e*S | | **Sb** | **01 38 40.2 +0.1** |
| **MK31** | **Makanchi Array** | **2.15** | **222** | Pn | | **Pg** | **01 38 48.8 +0.5** |
| MK31 | 1.2nm,0.2s,baz=46,slow=16,SNR=78 | | | ⇑Sn | | **Sg** | **01 39 17.1 +1.0** |
| **MKAR** | **Makanchi Array** | **2.15** | **222** | Pg | | **Pg** | **01 38 48.6 +0.3** |
| MKAR | 18nm,0.4s,baz=39,slow=28,SNR=22 | | | Sg | | **Sg** | **01 39 16.9 +0.7** |
| **MAKZ** | **Makanchi** | **2.29** | **227** | ⇓Pn | | **Pg** | **01 38 50.8 0.0** |
| MAKZ | 2.7nm,0.2s 17nm,0.4s | | | ⇑Sn | | **Sg** | **01 39 20.8 +0.3** |
| **MAKZ** | **Makanchi** | **2.29** | **227** | Pg | | **Pg** | **01 38 50.9 0.0** |
| MAKZ | | | | Sg | | **Sg** | **01 39 20.8 +0.3** |
| **DGZ** | **Jazzator, Alta** | **2.38** | **56** | Pg | | **Pg** | **01 38 53.3 +0.5** |
| DGZ | | | | Sg | | **Sg** | **01 39 24.6 +0.9** |
| **UKR** | **Ust'-Kan** | **2.55** | **5** | Pg | | **Pg** | **01 38 54.7 -1.2** |
| UKR | | | | Sg | | **Sg** | **01 39 27.9 -1.0** |
| **CHBI** | **Chibit, Altay** | **2.79** | **46** | Pg | | **Pg** | **01 39 01.3 +0.7** |
| CHBI | | | | Sg | | **Sg** | **01 39 36.9 +0.2** |
| **AKAR** | **Aktash** | **2.85** | **47** | Pg | | **Pg** | **01 39 02.9 +1.2** |
| AKAR | | | | Sg | | **Sg** | **01 39 38.7 +0.1** |
| **ELDR** | **Elanda** | **3.02** | **21** | Pg | | **Pg** | **01 39 05.5 +0.5** |
| ELDR | | | | Sg | | **Sg** | **01 39 43.1 -1.0** |
| **CUR** | **Chagan-Uzun** | **3.10** | **55** | Pg | | **Pg** | **01 39 05.7 -0.7** |
| CUR | | | | Sg | | **Sg** | **01 39 46.2 -0.4** |
| **ULGR** | **Ulagan, Altay** | **3.21** | **45** | Sg | | **Sg** | **01 39 51.4 +1.1** |
| **SEM** | **Semipalatinsk** | **3.37** | **308** | *e*P | | **Pg** | **01 39 11.9 +0.3** |
| SEM | 5.6nm,0.2s 16nm,0.2s | | | *e*S | | **Sg** | **01 39 56.7 +1.5** |
| **ARTR** | **Artybash** | **3.87** | **28** | Pg | | **Pg** | **01 39 21.1 -0.1** |
| ARTR | | | | Sg | | **Sg** | **01 40 10.9 -0.5** |
| **YALR** | **Yailyu, Altay** | **3.96** | **30** | Pg | | **Pg** | **01 39 22.2 -0.6** |
| YALR | | | | Sg | | **Sg** | **01 40 14.6 +0.6** |
| **KURK** | **Kurchatov** | **4.41** | **304** | ⇓Lg | | Lg | 01 40 32.0 |
| | 8.9nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **4.41** | **304** | Sg | | **Sg** | **01 40 29.8 +1.1** |
| **KURBB** | **Kurchatov Arra** | **4.42** | **302** | ⇓Lg | | Lg | 01 40 32.8 |
| | 29nm,0.6s | | | | | | |
| **DJR** | **Jarkent** | **5.17** | **220** | *e*P | | **Pg** | **01 39 43.3 -2.8** |
| | 1.3nm,0.3s | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.30** | **117** | *e*P | | **Pn** | **01 39 44.1 0.0** |
| JYNG | | | | *e*S | | **Sn** | **01 39 55.2 -0.3** |
| **YOJ** | **Yonaguni jima** | **0.35** | **111** | P | | **Pn** | **01 39 44.2 -0.2** |
| YOJ | baz=111 | | | S | | **Sn** | **01 39 55.9 0.0** |
| **YOJ** | **Yonaguni jima** | **0.35** | **111** | *e*P | | **Pn** | **01 39 44.3 -0.2** |
| YOJ | | | | *e*S | | **Sn** | **01 39 55.6 -0.3** |
| **EOS2** | **EOS2** | **0.41** | **246** | *i*P | | **Pn** | **01 39 45.0 +0.4** |
| EOS2 | baz=243 | | | S | | **Sn** | **01 39 57.5 +1.3** |
| **EOS3** | **EOS3** | **0.43** | **225** | P | | **Pn** | **01 39 45.2 +0.6** |
| EOS3 | baz=222 | | | *i*S | | **Sn** | **01 39 58.2 +1.9** |
| **EOS4** | **EOS4** | **0.56** | **213** | *i*P | | **Pn** | **01 39 45.4 +0.2** |
| EOS4 | baz=211 | | | *i*S | | **Sn** | **01 39 58.5 +1.0** |

*JMA **11** 01:39:28.8±0.2, 25.°N±1.°×122.°6E±0.°5, h104km±1km, MV2.3/14, NW OFF ISHIGAKIJIMA IS*
*TAP **11** 01:39:28.7, 24.°60N×122.°64E, h107km±1km, ML3.1, C*
**ISC 11 01:39:29.0**±1.5, **24.°59N**±0.°04×**122.°65E**±0.°03, **h105**km±8km, **n85**, **σ0s66**/143, **1C-1D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s ISC |
| **JYNG** | **Yonagunijimaku** | **0.30** | **117** | *e*P | | **Pn** | **01 39 44.1 0.0** |
| JYNG | | | | *e*S | | **Sn** | **01 39 55.2 -0.3** |
| **YOJ** | **Yonaguni jima** | **0.35** | **111** | P | | **Pn** | **01 39 44.2 -0.2** |
| YOJ | baz=111 | | | S | | **Sn** | **01 39 55.9 0.0** |
| **YOJ** | **Yonaguni jima** | **0.35** | **111** | *e*P | | **Pn** | **01 39 44.3 -0.2** |
| YOJ | | | | *e*S | | **Sn** | **01 39 55.6 -0.3** |
| **EOS2** | **EOS2** | **0.41** | **246** | *i*P | | **Pn** | **01 39 45.0 +0.4** |
| EOS2 | baz=243 | | | S | | **Sn** | **01 39 57.5 +1.3** |
| **EOS3** | **EOS3** | **0.43** | **225** | P | | **Pn** | **01 39 45.2 +0.6** |
| EOS3 | baz=222 | | | *i*S | | **Sn** | **01 39 58.2 +1.9** |
| **EOS4** | **EOS4** | **0.56** | **213** | *i*P | | **Pn** | **01 39 45.4 +0.2** |
| EOS4 | baz=211 | | | *i*S | | **Sn** | **01 39 58.5 +1.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=211 | | | | | | | |
| **EGS** | | **0.70** | **291** | *e*P | **Pn** | **01 39 46.8** | **0.0** |
| | baz=290 | | | | | | | |
| EGS | | | | *e*S | **Sn** | **01 39 59.8** | **-0.4** |
| | baz=290 | | | | | | | |
| **TWC** | **Suao** | **0.73** | **272** | ⇓*i*P | **Pn** | **01 39 46.7** | **-0.3** |
| | baz=270 | | | | | | | |
| TWC | | | | *i* S | **Sn** | **01 39 59.6** | **-1.1** |
| | baz=270 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.73** | **305** | P | **Pn** | **01 39 47.1** | **0.0** |
| | baz=304 | | | | | | | |
| TWB1 | | | | S | **Sn** | **01 40 00.2** | **-0.5** |
| | baz=304 | | | | | | | |
| **EWUT** | **Wuta** | **0.81** | **260** | P | **Pn** | **01 39 47.6** | **-0.2** |
| | baz=258 | | | | | | | |
| EWUT | | | | *e*S | **Sn** | **01 40 02.1** | **+0.2** |
| | baz=258 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.84** | **297** | *e*P | **Pn** | **01 39 48.1** | **-0.1** |
| | baz=296 | | | | | | | |
| TIPB | | | | *e*S | **Sn** | **01 40 02.2** | **-0.4** |
| | baz=296 | | | | | | | |
| **ENA** | **Nanau** | **0.84** | **259** | P | **Pn** | **01 39 48.2** | **0.0** |
| | baz=257 | | | | | | | |
| ENA | | | | *e*S | **Sn** | **01 40 01.6** | **-0.9** |
| | baz=257 | | | | | | | |
| **NDS** | **Dongshan** | **0.85** | **273** | *e*P | **Pn** | **01 39 48.4** | **+0.1** |
| | baz=272 | | | | | | | |
| NDS | | | | *e*S | **Sn** | **01 40 02.6** | **-0.2** |
| | baz=272 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.86** | **306** | *i* P | **Pn** | **01 39 48.4** | **-0.1** |
| | baz=305 | | | | | | | |
| SXI1 | | | | S | **Sn** | **01 40 03.5** | **+0.4** |
| | baz=305 | | | | | | | |
| **EAHA** | **Aohua** | **0.87** | **253** | P | **Pn** | **01 39 48.4** | **-0.1** |
| | baz=251 | | | | | | | |
| EAHA | | | | *i* S | **Sn** | **01 40 03.5** | **+0.4** |
| | baz=251 | | | | | | | |
| **TWE** | **Neicheng** | **0.90** | **279** | *i* P | **Pn** | **01 39 48.7** | **0.0** |
| | baz=277 | | | | | | | |
| TWE | | | | S | **Sn** | **01 40 03.5** | **-0.1** |
| | baz=277 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.92** | **301** | P | **Pn** | **01 39 49.2** | **+0.1** |
| | baz=300 | | | | | | | |
| NWF | | | | *e*S | **Sn** | **01 40 04.4** | **+0.2** |
| | baz=300 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.92** | **301** | *e*S | **Sn** | **01 40 02.9** | **-1.1** |
| | baz=300 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.98** | **280** | ⇑*i*P | **Pn** | **01 39 49.7** | **+0.1** |
| | baz=279 | | | | | | | |
| FUSB | | | | *i* S | **Sn** | **01 40 04.6** | **-0.6** |
| | baz=279 | | | | | | | |
| **ENTT** | **Nioudou** | **0.99** | **273** | *e*P | **Pn** | **01 39 50.2** | **+0.5** |
| | baz=272 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.02** | **104** | P | **Pn** | **01 39 49.9** | **-0.1** |
| IRIF | | | | S | **Sn** | **01 40 05.7** | **-0.1** |
| **LATG** | **Datong** | **1.02** | **267** | *i* P | **Pn** | **01 39 50.3** | **+0.1** |
| | baz=266 | | | | | | | |
| LATG | | | | S | **Sn** | **01 40 06.2** | **+0.2** |
| | baz=266 | | | | | | | |
| **ETL** | **Fush Village** | **1.03** | **246** | *e*P | **Pn** | **01 39 49.9** | **-0.2** |
| | baz=244 | | | | | | | |
| ETL | | | | S | **Sn** | **01 40 05.6** | **-0.5** |
| | baz=244 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.03** | **271** | P | **Pn** | **01 39 50.7** | **+0.6** |
| | baz=269 | | | | | | | |
| NDT | | | | S | **Sn** | **01 40 06.5** | **+0.4** |
| | baz=269 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.05** | **247** | P | **Pn** | **01 39 49.7** | **-0.6** |
| | baz=245 | | | | | | | |
| NACB | | | | *e*S | **Sn** | **01 40 05.7** | **-0.6** |
| | baz=245 | | | | | | | |
| **NWLT** | **Wulai** | **1.06** | **280** | *e*P | **Pn** | **01 39 50.4** | **-0.1** |
| | baz=279 | | | | | | | |
| NWLT | | | | *i* S | **Sn** | **01 40 05.8** | **-0.8** |
| | baz=279 | | | | | | | |
| **NHY** | **Taipei** | **1.08** | **295** | *e*S | **Sn** | **01 40 04.8** | **-2.1** |
| | baz=294 | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.09** | **290** | *i* P | **Pn** | **01 39 50.6** | **-0.1** |
| | baz=289 | | | | | | | |
| NHDH | | | | *e*S | **Sn** | **01 40 06.4** | **-0.7** |
| | baz=289 | | | | | | | |
| **TWD** | **Chiawan** | **1.09** | **242** | *e*P | **Pn** | **01 39 50.3** | **-0.4** |
| | baz=241 | | | | | | | |
| TWD | | | | S | **Sn** | **01 40 06.4** | **-0.6** |
| | baz=241 | | | | | | | |
| **YM01** | **YM01** | **1.12** | **300** | *e*P | **Pn** | **01 39 50.9** | **-0.3** |
| | baz=299 | | | | | | | |
| YM01 | | | | *i* S | **Sn** | **01 40 07.7** | **-0.3** |
| | baz=299 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.13** | **250** | *e*P | **Pn** | **01 39 51.4** | **+0.1** |
| | baz=249 | | | | | | | |
| ETLH | | | | S | **Sn** | **01 40 07.0** | **-1.1** |
| | baz=249 | | | | | | | |
| **YM08** | **YM08** | **1.13** | **302** | *e*P | **Pn** | **01 39 52.7** | **+1.5** |
| | baz=301 | | | | | | | |
| YM08 | | | | *e*S | **Sn** | **01 40 07.2** | **-0.8** |
| | baz=301 | | | | | | | |
| **HWA** | **Hwalien** | **1.13** | **238** | *e*P | **Pn** | **01 39 51.3** | **+0.1** |
| | baz=236 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.16** | **333** | *e*P | **Pn** | **01 39 51.4** | **-0.1** |
| | baz=333 | | | | | | | |
| **YHNB** | **Yeheng** | **1.16** | **274** | *i* P | **Pn** | **01 39 52.1** | **+0.5** |
| | baz=273 | | | | | | | |
| YHNB | | | | S | **Sn** | **01 40 08.7** | **0.0** |
| | baz=273 | | | | | | | |
| **NNSB** | **Datong** | **1.16** | **262** | *i* P | **Pn** | **01 39 51.7** | **0.0** |
| | baz=261 | | | | | | | |
| NNSB | | | | S | **Sn** | **01 40 08.8** | **-0.1** |
| | baz=261 | | | | | | | |
| **NNS** | **Nan Shan** | **1.17** | **263** | *e*P | **Pn** | **01 39 51.9** | **+0.1** |
| | baz=261 | | | | | | | |
| NNS | | | | *e*S | **Sn** | **01 40 09.1** | **+0.1** |
| | baz=261 | | | | | | | |
| **TWY** | **Chenhua** | **1.17** | **306** | *e*P | **Pn** | **01 39 52.1** | **+0.5** |
| | baz=305 | | | | | | | |
| **NSK** | **Sanguang** | **1.18** | **274** | *i* P | **Pn** | **01 39 52.0** | **+0.2** |
| | baz=273 | | | | | | | |
| NSK | | | | *i* S | **Sn** | **01 40 08.4** | **-0.6** |
| | baz=273 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.18** | **116** | *e*S | **Sn** | **01 40 09.5** | **+0.5** |
| **TEYL** | **Yanliau Villag** | **1.20** | **233** | *e*P | **Pn** | **01 39 51.8** | **-0.2** |
| | baz=233 | | | | | | | |
| TEYL | | | | *e*S | **Sn** | **01 40 09.4** | **+0.1** |
| | baz=233 | | | | | | | |
| **ETM** | **Tongmen** | **1.22** | **240** | *e*P | **Pn** | **01 39 51.9** | **-0.4** |
| | baz=238 | | | | | | | |
| ETM | | | | *e*S | **Sn** | **01 40 08.8** | **-1.0** |
| | baz=238 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.23** | **295** | *e*P | **Pn** | **01 39 52.0** | **-0.2** |
| | baz=294 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.26** | **244** | *e*P | **Pn** | **01 39 52.4** | **-0.5** |
| | baz=242 | | | | | | | |
| LXIB | | | | *i* S | **Sn** | **01 40 10.0** | **-0.8** |
| | baz=242 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.27** | **231** | *e*P | **Pn** | **01 39 52.8** | **-0.1** |
| | baz=230 | | | | | | | |
| SHUL | | | | S | **Sn** | **01 40 10.9** | **+0.1** |
| | baz=230 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.29** | **106** | *e*P | **Pn** | **01 39 53.5** | **+0.5** |
| JKRS | | | | S | **Sn** | **01 40 11.5** | **+0.4** |
| **FUSS** | **Fushou** | **1.32** | **255** | P | **Pn** | **01 39 54.0** | **+0.3** |
| | baz=254 | | | | | | | |
| FUSS | | | | *e*S | **Sn** | **01 40 12.7** | **+0.4** |
| | baz=254 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.34** | **251** | *e*P | **Pn** | **01 39 53.9** | **-0.1** |
| | baz=249 | | | | | | | |
| WHF | | | | *e*S | **Sn** | **01 40 11.6** | **-1.3** |
| | baz=249 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.38** | **99** | P | **Pn** | **01 39 54.2** | **+0.1** |
| JIJ | | | | S | **Sn** | **01 40 12.4** | **-0.7** |
| **TWT** | **Tachien** | **1.38** | **256** | *e*P | **Pn** | **01 39 54.9** | **+0.6** |
| | baz=255 | | | | | | | |
| TWT | | | | *e*S | **Sn** | **01 40 13.9** | **+0.4** |
| | baz=255 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.39** | **272** | *i* P | **Pn** | **01 39 54.6** | **+0.4** |
| | baz=271 | | | | | | | |
| NFF | | | | *i* S | **Sn** | **01 40 13.1** | **-0.4** |
| | baz=271 | | | | | | | |
| **TDCB** | **Techi** | **1.40** | **256** | *i* P | **Pn** | **01 39 55.1** | **+0.6** |
| | baz=255 | | | | | | | |
| TDCB | | | | *e*S | **Sn** | **01 40 13.4** | **-0.3** |
| | baz=255 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.44** | **233** | P | **Pn** | **01 39 54.3** | **-0.6** |
| | baz=232 | | | | | | | |
| WARBT | | | | S | **Sn** | **01 40 13.2** | **-1.3** |
| | baz=232 | | | | | | | |
| **CHGB** | **Renai** | **1.44** | **249** | *i* P | **Pn** | **01 39 55.5** | **+0.5** |
| | baz=247 | | | | | | | |
| CHGB | | | | *e*S | **Sn** | **01 40 15.3** | **+0.5** |
| | baz=247 | | | | | | | |
| **EGFH** | **Guangfu** | **1.44** | **231** | *e*P | **Pn** | **01 39 54.5** | **-0.4** |
| | baz=229 | | | | | | | |
| EGFH | | | | *e*S | **Sn** | **01 40 14.3** | **-0.2** |
| | baz=229 | | | | | | | |
| **OWD** | **Renai** | **1.48** | **245** | *e*P | **Pn** | **01 39 55.6** | **+0.1** |
| | baz=244 | | | | | | | |
| OWD | | | | *e*S | **Sn** | **01 40 14.9** | **-0.6** |
| | baz=244 | | | | | | | |
| **LIOB** | **Emei** | **1.49** | **272** | *i* P | **Pn** | **01 39 55.8** | **+0.4** |
| | baz=271 | | | | | | | |
| LIOB | | | | *i* S | **Sn** | **01 40 15.5** | **+0.1** |
| | baz=271 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.50** | **272** | *e*P | **Pn** | **01 39 55.8** | **+0.3** |
| | baz=271 | | | | | | | |
| NSTT | | | | *i* S | **Sn** | **01 40 15.4** | **-0.2** |
| | baz=271 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.51** | **90** | P | **Pn** | **01 39 55.8** | **+0.1** |
| JISG | | | | S | **Sn** | **01 40 15.0** | **-0.9** |
| **WUSB** | **Renai** | **1.52** | **247** | *i* P | **Pn** | **01 39 56.4** | **+0.5** |
| | baz=246 | | | | | | | |
| WUSB | | | | S | **Sn** | **01 40 16.3** | **+0.1** |
| | baz=246 | | | | | | | |
| **HGSD** | **Ruisui** | **1.56** | **226** | P | **Pn** | **01 39 56.4** | **+0.1** |
| | baz=225 | | | | | | | |
| HGSD | | | | *e*S | **Sn** | **01 40 17.2** | **+0.2** |
| | baz=225 | | | | | | | |
| **WHP** | **Taichung City** | **1.58** | **259** | *e*P | **Pn** | **01 39 57.7** | **+1.1** |
| | baz=258 | | | | | | | |
| WHP | | | | *e*S | **Sn** | **01 40 18.5** | **+1.0** |
| | baz=258 | | | | | | | |
| **VWDT** | **VWDT** | **1.61** | **239** | *i* P | **Pn** | **01 39 57.3** | **+0.5** |
| | baz=238 | | | | | | | |
| VWDT | | | | *e*S | **Sn** | **01 40 17.9** | **-0.1** |
| | baz=238 | | | | | | | |
| **EHY** | **Hungye** | **1.62** | **229** | *e*P | **Pn** | **01 39 56.4** | **-0.6** |
| | baz=227 | | | | | | | |
| EHY | | | | *e*S | **Sn** | **01 40 16.6** | **-1.7** |
| | baz=227 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.67** | **252** | P | **Pn** | **01 39 58.7** | **+1.1** |
| | baz=250 | | | | | | | |
| **ECBN** | **Changbin** | **1.68** | **221** | *e*P | **Pn** | **01 39 57.1** | **-0.6** |
| | baz=220 | | | | | | | |
| **YULB** | **Yu-li** | **1.72** | **226** | *e*P | **Pn** | **01 39 57.8** | **-0.4** |
| | baz=225 | | | | | | | |
| YULB | | | | *e*S | **Sn** | **01 40 19.0** | **-1.4** |
| | baz=225 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.73** | **262** | *e*P | **Pn** | **01 39 58.4** | **+0.1** |
| | baz=261 | | | | | | | |
| **EYUL** | **Yuli** | **1.73** | **225** | *e*P | **Pn** | **01 39 59.1** | **+0.7** |
| | baz=223 | | | | | | | |
| **SSLB** | **Suanglung** | **1.74** | **243** | *e*P | **Pn** | **01 39 59.0** | **+0.5** |
| | baz=242 | | | | | | | |
| **TWF1** | **Yuli** | **1.75** | **225** | *e*P | **Pn** | **01 39 58.3** | **-0.3** |
| | baz=224 | | | | | | | |
| **TYC** | **Yuchr** | **1.77** | **248** | *e*P | **Pn** | **01 40 00.1** | **+1.2** |
| | baz=246 | | | | | | | |
| **FULB** | **Fuli** | **1.86** | **222** | *e*P | **Pn** | **01 40 00.1** | **0.0** |
| | baz=221 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.86** | **242** | *e*P | **Pn** | **01 40 01.0** | **+0.9** |
| | baz=241 | | | | | | | |
| **JTJ** | **Tarama** | **1.87** | **88** | *e*P | **Pn** | **01 40 00.5** | **+0.4** |
| JTJ | | | | *e*S | **Sn** | **01 40 23.5** | **-0.3** |
| **CHKT** | **Chengkung** | **1.89** | **219** | *e*P | **Pn** | **01 39 59.8** | **-0.6** |
| | baz=217 | | | | | | | |
| **EHD** | **Haiduan** | **1.95** | **223** | *e*P | **Pn** | **01 40 00.7** | **-0.4** |
| | baz=222 | | | | | | | |
| **EDH** | **Donghe** | **2.03** | **218** | P | **Pn** | **01 40 01.8** | **-0.4** |
| | baz=216 | | | | | | | |
| **ELDTW** | **Lidau** | **2.04** | **227** | *e*P | **Pn** | **01 40 02.0** | **-0.5** |
| | baz=226 | | | | | | | |
| **CHN5** | **Tsauling** | **2.05** | **242** | *i* P | **Pn** | **01 40 03.9** | **+1.3** |
| | baz=240 | | | | | | | |
| **WCKO** | **Fanlu** | **2.19** | **239** | *i* P | **Pn** | **01 40 05.9** | **+1.6** |
| | baz=238 | | | | | | | |
| **LDUT** | **Ludao** | **2.19** | **210** | *e*P | **Pn** | **01 40 03.6** | **-0.6** |
| | baz=209 | | | | | | | |
| **TPUB** | **Ta-pu** | **2.25** | **236** | *e*P | **Pn** | **01 40 06.2** | **+1.2** |
| | baz=234 | | | | | | | |
| **TWG** | **Pinlang** | **2.28** | **220** | *e*P | **Pn** | **01 40 04.9** | **-0.5** |
| | baz=218 | | | | | | | |
| **SLGT** | **Liugui** | **2.43** | **229** | *e*P | **Pn** | **01 40 09.3** | **+2.0** |
| | baz=228 | | | | | | | |

*NEIC* ***11*** *01:50:43.7±1.7,52.0°N±0.1°×169.3°W±0.08,h23km±15km, mb3.6/11,ML3.5/6,ML3.1(AEIC),Error ellipse: s-maj=15.0km s-min=6.4km az=170.0*
*AEIC* ***11*** *01:50:44.2±1.6,51.99°N±0.05°×169.32°W±0.08,h14km±7km, Error ellipse: s-maj=8.5km s-min=5.1km az=139.0*
*IDC* ***11*** *01:51:01.4±46.0,51.30°N×168.87°W,h235km±148km, mb3.1/3,mbtmp3.5/4,Error ellipse: s-maj=935.5km s-min=74.8km az=157.0*
**ISC 11 01:50:44.1**±1.1,**52.02N**±0.09°×**169.29W**±0.06,**h30**km,**n47,** σ**0.92**/48,**mb3.8/3,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CLCO** | **Concord Point,** | **0.81** | **341** | | | **Pn** | **01 50 59.0** | **-0.5** |
| CLCO | | | | | | **Sn** | **01 51 11.0** | **+0.5** |
| **CLES** | **Cleveland East** | **0.89** | **336** | | | **Pn** | **01 50 60.0** | **-0.5** |
| CLES | | | | Sn | | **Sn** | **01 51 13.1** | **+0.7** |
| CLES | | | | IAML | | | 01 51 19.6 | |
| | comp=E,3μm,0.3s | | | | | | | |
| **NIKH** | **Nikolski High** | **0.99** | **15** | | | **Pn** | **01 51 01.4** | **-0.6** |
| **NIKH** | **Nikolski High** | **0.99** | **15** | | | **Sn** | **01 51 15.7** | **+0.7** |
| **OKCE** | **Okmok Cone E** | **1.57** | **26** | | | **Pn** | **01 51 10.7** | **+0.8** |
| **OKWE** | **Okmok W'ng Wal** | **1.59** | **23** | | | **Pn** | **01 51 10.6** | **+0.4** |
| **OKER** | **Okmok East Rim** | **1.62** | **27** | | | **Pn** | **01 51 11.2** | **+0.5** |
| **OKFG** | **Magazine Ridge** | **1.63** | **31** | | | **Pn** | **01 51 11.0** | **+0.3** |
| OKFG | | | | | | **Sn** | **01 51 32.2** | **+1.6** |
| **MAPS** | **Pakushin South** | **2.29** | **38** | | | **Pn** | **01 51 20.0** | **+0.2** |
| **MGOD** | **Makushin Gods** | **2.31** | **39** | | | **Pn** | **01 51 20.7** | **+0.7** |
| **MSW** | **Makushin Switc** | **2.43** | **38** | | | **Pn** | **01 51 22.4** | **+0.6** |
| **UNV** | **Unalaska Valle** | **2.49** | **42** | | | **Pn** | **01 51 22.9** | **+0.4** |
| **MTBL** | **Makushin Table** | **2.51** | **38** | | | **Pn** | **01 51 23.9** | **+0.9** |
| **LVA** | **Lava Point** | **2.91** | **41** | Pn | | **Pn** | **01 51 29.3** | **+0.9** |
| LVA | | | | IAML | | | 01 52 20.1 | |
| | comp=E,116nm,1.3s | | | | | | | |
| LVA | | | | IAML | | | 01 52 29.7 | |
| | comp=N,164nm,0.9s | | | | | | | |
| **AKGG** | **Akutan Green G** | **2.96** | **41** | | | **Pn** | **01 51 29.3** | **+0.4** |
| **KOFP** | **Korovin Flat P** | **2.97** | **277** | | | **Pn** | **01 51 29.4** | **+0.2** |
| **GSTR** | **Great Sitkin T** | **4.18** | **274** | Pn | | **Pn** | **01 51 45.8** | **+0.1** |
| **GSCK** | **Great Sitkin C** | **4.24** | **273** | | | **Pn** | **01 51 46.7** | **+0.1** |
| **ADAG** | **Mount Adagdak** | **4.52** | **272** | | | **Pn** | **01 51 50.8** | **+0.4** |
| **ADK** | **Adak** | **4.57** | **271** | | | **Pn** | **01 51 51.1** | **0.0** |
| **ADK** | **Adak** | **4.57** | **271** | IAML | | | 01 52 46.9 | |
| | comp=N,30nm,1.5s | | | | | | | |
| **KIWB** | **Kanaga Island** | **4.87** | **271** | Pn | | **Pn** | **01 51 55.3** | **+0.2** |
| **SPIA** | **Saint Paul Isl** | **5.20** | **354** | | | **Pn** | **01 52 00.3** | **+0.6** |
| **TASE** | **Tanaga Southea** | **5.41** | **271** | | | **Pn** | **01 52 03.3** | **+0.6** |
| **GANE** | **Gareloi Northe** | **5.87** | **272** | | | **Pn** | **01 52 09.6** | **+0.6** |
| **CEPE** | **Semis' Perret** | **6.83** | **274** | | | **Pn** | **01 52 23.2** | **+1.1** |
| **AMKA** | **Amchitka** | **7.12** | **269** | | | **Pn** | **01 52 26.8** | **+0.7** |
| **N15K** | **Kwethluk River** | **9.64** | **29** | Pn | | **Pn** | **01 53 03.3** | **+2.7** |
| **N17K** | **Nushagak Hills** | **10.85** | **33** | Pn | | **Pn** | **01 53 18.9** | **+1.8** |
| **SYI** | **Shuyak Island** | **11.65** | **49** | Pn | | **Pn** | **01 53 28.4** | **+0.2** |
| **P19K** | **Oil Pt** | **11.81** | **43** | Pn | | **Pn** | **01 53 29.8** | **-0.5** |
| **M19K** | **Big River Lodg** | **12.78** | **33** | Pn | | **Pn** | **01 53 45.0** | **+1.5** |
| **M24K** | **Tolsona, Glenn** | **16.03** | **42** | Pn | | **Pn** | **01 54 25.1** | **-2.0** |
| **DHY** | **Denali Highway** | **16.05** | **38** | Pn | | **Pn** | **01 54 26.2** | **-1.4** |
| **N25K** | **Chitina, Valde** | **16.48** | **45** | Pn | | **Pn** | **01 54 31.7** | **-1.1** |
| **ILAR** | **Eielson Array** | **17.22** | **33** | P | | P | 01 54 51.1 | +7.8 |
| | comp=N,0.2nm,0.5s,baz=233,slow=6.7,SNR=5.2 | | | | | | | |
| **CTGM** | **Chitina Glacie** | **17.71** | **49** | | | **Pn** | **01 54 48.1** | **-0.2** |
| CTGM | | | | IAmb | | IAmb | 01 54 56.6 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **17.95** | **44** | Pn | | **Pn** | **01 54 50.2** | **-1.1** |
| M27K | | | | IAmb | | IAmb | 01 55 18.9 | |
| | comp=Z,4.6nm,1.4s | | | | | | | |
| **EGAK** | **Eagle** | **19.29** | **38** | P | | **P** | **01 55 05.4** | **-0.7** |
| EGAK | | | | IAmb | | IAmb | 01 55 24.0 | |
| | comp=Z,3.8nm,1.3s | | | | | | | |
| **M29M** | **Somme Creek** | **19.48** | **46** | P | | **P** | **01 55 08.1** | **-0.2** |
| M29M | | | | IAmb | | IAmb | 01 55 29.4 | |
| | comp=Z,2.6nm,1.1s | | | | | | | |
| **I28M** | **Miner Creek** | **20.06** | **37** | P | | **P** | **01 55 13.6** | **-1.1** |
| I28M | | | | IAmb | | IAmb | 01 55 17.9 | |
| | comp=Z,3.9nm,1.4s | | | | | | | |
| **O30N** | **Mendenhall** | **20.15** | **51** | P | | **P** | **01 55 15.4** | **-0.2** |
| O30N | | | | IAmb | | IAmb | 01 55 19.3 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H29M** | **Whitestone** | **20.99** | **36** | P | | **P** | **01 55 24.5** | **-0.1** |
| H29M | | | | IAmb | | IAmb | 01 55 37.3 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **G29M** | **Pine Creek** | **21.44** | **34** | P | | **P** | **01 55 27.7** | **-1.8** |
| **KURBB** | **Kurchatov Arra** | **62.77** | **318** | P | | **P** | **02 01 06.2** | **0.0** |
| | comp=Z,0.6nm,0.8s,baz=54,slow=5.8,SNR=6.3 | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.08** | **314** | P | | **P** | **02 01 14.5** | **-0.4** |
| | comp=Z,0.1nm,0.4s,baz=48,slow=6.8,SNR=4.2 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **66.22** | **352** | P | | **P** | **02 01 28.3** | **-0.2** |
| | comp=Z,1.1nm,0.7s,baz=3.8,slow=8.4,SNR=5.2 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |

*IDC* ***11*** *02:17:26.3±1.1,28.67°S×71.63°W,h0km,mb3.8/5, mbtmp3.7/8,ML3.3/3,Error ellipse: s-maj=47.9km s-min=21.3km az=102.0*
*SJA* ***11*** *02:17:26.8±0.7,28.82°S×71.75°W,h10km±2km,ML3.9, MW3.6*
*NEIC* ***11*** *02:17:27.1±1.3,28.74°S±0.04°×71.79°W±0.06,h11km±6km, mb4.2/6,ML3.8(GUC),Error ellipse: s-maj=8.2km s-min=4.6km az=121.0*
*GUC* ***11*** *02:17:29.2±0.9,28.79°S×71.58W,h28km±9km,ML3.8*
**ISC 11 02:17:26.0**±1.3,**28.78S**±0.02°×**71.80W**±0.04,**h6**km±9km, **n99,** σ**1.74**/130,**mb3.9**/6,**2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **AC04** | **Llanos de Chal** | **0.86** | **48** | Pg | | **Pg** | **02 17 43.7** | **+1.2** |
| AC04 | | | | Sg | | **Sb** | **02 17 53.7** | **-1.4** |
| **AC04** | **Llanos de Chal** | **0.86** | **48** | *e*P | | **Pb** | **02 17 43.5** | **+0.1** |
| AC04 | | | | *e*S | | **Sb** | **02 17 54.4** | **-0.8** |
| AC04 | | | | IAML | | | 02 17 57.0 | |
| | comp=Z,2μm,0.2s | | | | | | | |
| **AC04** | **Llanos de Chal** | **0.86** | **48** | ⇓*i*P | | **Pg** | **02 17 43.8** | **+1.2** |
| AC04 | | | | *e*S | | **Sb** | **02 17 54.0** | **-1.1** |
| AC04 | | | | IAML | | | 02 17 58.4 | |
| | comp=E,5μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **0.99** | **104** | Pg | | **Pb** | **02 17 45.6** | **-0.1** |
| LCO | | | | Sg | | **Sb** | **02 17 57.6** | **-1.6** |
| **LCO** | **Las Campanas** | **0.99** | **104** | *e*P | | **Pb** | **02 17 45.5** | **-0.3** |
| LCO | | | | *e*S | | **Sg** | **02 17 58.1** | **+0.1** |
| LCO | | | | IAML | | | 02 18 00.6 | |
| | comp=Z,7μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **0.99** | **104** | *e*P | | **Pb** | **02 17 45.4** | **-0.3** |
| LCO | | | | *e*S | | **Sb** | **02 17 57.4** | **-1.8** |
| **CO05** | **La Serena** | **1.23** | **157** | | | **Pg** | **02 17 51.0** | **+1.2** |
| CO05 | | | | Sg | | **Sn** | **02 18 06.1** | **-0.7** |
| **CO05** | **La Serena** | **1.23** | **157** | *e*P | | **Pg** | **02 17 50.7** | **+1.0** |
| CO05 | | | | *e*S | | **Sg** | **02 18 06.6** | **+0.9** |
| CO05 | | | | IAML | | | 02 18 10.7 | |
| | comp=E,3μm,0.3s | | | | | | | |
| **AC05** | **El Transito** | **1.34** | **93** | | | **Pb** | **02 17 51.2** | **-0.4** |
| **AC05** | **El Transito** | **1.34** | **93** | *e*P | | **Pb** | **02 17 51.3** | **-0.4** |
| AC05 | | | | *e*S | | **Sg** | **02 18 09.6** | **+0.4** |
| AC05 | | | | IAML | | | 02 18 14.0 | |
| | comp=Z,897nm,0.5s | | | | | | | |
| **AC05** | **El Transito** | **1.34** | **93** | ⇓*i*P | | **Pb** | **02 17 51.3** | **-0.4** |
| AC05 | | | | *e*S | | **Sn** | **02 18 07.7** | **-1.9** |
| **GO04** | **Tololo Observa** | **1.64** | **148** | | | **Pb** | **02 17 56.9** | **+0.1** |
| **GO04** | **Tololo Observa** | **1.64** | **148** | *e*P | | **Pb** | **02 17 56.5** | **-0.3** |
| GO04 | | | | *e*S | | **Sg** | **02 18 19.3** | **+0.6** |
| **GO04** | **Tololo Observa** | **1.64** | **148** | *i* P | | **Pb** | **02 17 57.0** | **+0.1** |
| GO04 | | | | *e*S | | **Sb** | **02 18 17.5** | **-0.3** |
| **GO03** | **Copiap** | **1.82** | **50** | | | **Pb** | **02 17 58.7** | **-1.1** |
| **GO03** | **Copiap** | **1.82** | **50** | *e*P | | **Pb** | **02 17 59.1** | **-0.7** |
| GO03 | | | | *e*S | | **Sg** | **02 18 25.0** | **+0.4** |
| **GO03** | **Copiap** | **1.82** | **50** | *i* P | | **Pb** | **02 17 58.8** | **-1.1** |
| GO03 | | | | IAML | | | 02 18 27.6 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **CO06** | **Fray Jorge** | **1.89** | **176** | | | **Pn** | **02 17 59.9** | **+1.1** |
| **CO06** | **Fray Jorge** | **1.89** | **176** | *e*P | | **Pn** | **02 17 60.0** | **+1.1** |
| CO06 | | | | IAML | | | 02 18 34.3 | |
| | comp=E,866nm,0.3s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.91** | **129** | | | **Pb** | **02 18 01.2** | **-0.2** |
| **CO01** | **Juntas del Tor** | **1.91** | **129** | *e*P | | **Pb** | **02 18 01.4** | **-0.1** |
| CO01 | | | | *e*S | | **Sg** | **02 18 26.1** | **-1.3** |
| CO01 | | | | IAML | | | 02 18 30.2 | |
| | comp=Z,724nm,0.3s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.91** | **129** | *i* P | | **Pb** | **02 18 01.3** | **-0.2** |
| CO01 | | | | *e*S | | **Sb** | **02 18 24.8** | **-0.8** |
| CO01 | | | | IAML | | | 02 18 25.7 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **AC06** | **Mina Casimiro** | **1.91** | **42** | | | **Pn** | **02 17 59.0** | **-0.2** |
| **AC06** | **Mina Casimiro** | **1.91** | **42** | *e*P | | **Pb** | **02 18 00.4** | **-0.9** |
| AC06 | | | | IAML | | | 02 18 30.9 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **CO03** | **El Pedregal** | **2.27** | **155** | Pn | | **Pn** | **02 18 05.1** | **+1.0** |
| **CO03** | **El Pedregal** | **2.27** | **155** | *e*P | | **Pn** | **02 18 05.7** | **+1.6** |
| CO03 | | | | *e*S | | **Sb** | **02 18 33.1** | **-2.7** |
| CO03 | | | | IAML | | | 02 18 41.3 | |
| | comp=Z,605nm,0.4s | | | | | | | |
| **CO03** | **El Pedregal** | **2.27** | **155** | *i* P | | **Pn** | **02 18 05.5** | **+1.4** |
| CO03 | | | | IAML | | | 02 18 37.6 | |
| | comp=N,1μm,0.5s | | | | | | | |
| **AROD** | **Rodeo** | **2.45** | **125** | *e*P | | **Pb** | **02 18 10.5** | **-0.3** |
| AROD | | | | *e*S | | **Sg** | **02 18 42.5** | **-2.5** |
| **CO02** | **Combarbal** | **2.51** | **164** | | | **Pn** | **02 18 08.9** | **+1.4** |
| **CO02** | **Combarbal** | **2.51** | **164** | *e*P | | **Pn** | **02 18 09.3** | **+1.8** |
| CO02 | | | | *e*S | | **Sn** | **02 18 33.8** | **-4.7** |
| CO02 | | | | IAML | | | 02 18 52.5 | |
| | comp=Z,788nm,0.4s | | | | | | | |
| **CO02** | **Combarbal** | **2.51** | **164** | *e*P | | **Pn** | **02 18 09.3** | **+1.8** |
| **ACDV** | **Cuesta del Vie** | **2.72** | **121** | *e*P | | **Pb** | **02 18 14.4** | **-0.7** |
| ACDV | | | | *e*S | | **Sb** | **02 18 46.3** | **-2.5** |
| ACDV | | | | IAML | | | 02 18 53.9 | |
| | comp=Z,409nm,0.5s | | | | | | | |
| **AC01** | **Pan de Azucar** | **2.83** | **22** | | | **Pn** | **02 18 11.3** | **-0.6** |
| **AC01** | **Pan de Azucar** | **2.83** | **22** | *e*P | | **Pn** | **02 18 11.3** | **-0.6** |
| AC01 | | | | *e

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARCO | | | | | IAML | | 02 19 55.5 | |
| | comp=Z,108nm,0.6s | | | | | | | |
| **MT16** | **CCHEN** | **4.76** | **167** | | Pn | **Pn** | **02 18 38.7** | **+0.3** |
| **MT04** | **Ro Olivares** | **4.82** | **163** | *eP* | | **Pn** | **02 18 43.1** | **+3.6** |
| MT04 | | | | *eS* | | **Sb** | **02 19 52.4** | **+2.8** |
| MT04 | | | | | IAML | | 02 20 02.2 | |
| | comp=Z,66nm,1.1s | | | | | | | |
| **MT03** | **Universidad Ad** | **4.83** | **167** | | | **Pn** | **02 18 40.6** | **+1.3** |
| **MT03** | **Universidad Ad** | **4.83** | **167** | *eP* | | **Pn** | **02 18 42.2** | **+2.9** |
| MT03 | | | | *eS* | | **Sb** | **02 19 49.7** | **+0.3** |
| MT03 | | | | | IAML | | 02 20 02.5 | |
| | comp=Z,144nm,1.0s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **4.89** | **162** | Pn | | **Pn** | **02 18 42.8** | **+2.4** |
| **MT09** | **Talagante** | **5.03** | **172** | Pn | | **Pn** | **02 18 43.7** | **+1.6** |
| **ACHE** | **Chepes** | **5.05** | **119** | *eS* | | **Sn** | **02 19 46.3** | **+5.1** |
| **MT01** | **Popeta** | **5.09** | **175** | | | **Pn** | **02 18 43.8** | **+1.0** |
| **LMEL** | **Las Melosas** | **5.23** | **165** | | | **Pn** | **02 18 46.9** | **+1.9** |
| **CYA** | **Choya** | **5.29** | **88** | *eP* | | **Pn** | **02 18 48.4** | **+2.8** |
| CYA | | | | *eS* | | **Sn** | **02 19 49.3** | **+2.5** |
| CYA | | | | | IAML | | 02 19 58.0 | |
| | comp=Z,72nm,0.5s | | | | | | | |
| **BO04** | **La Punta** | **5.29** | **169** | | | **Pn** | **02 18 46.5** | **+0.8** |
| **BO01** | **Tunca** | **5.63** | **174** | Pn | | **Pn** | **02 18 50.7** | **+0.5** |
| **BO02** | **Sierra Bellavi** | **6.05** | **172** | Pn | | **Pn** | **02 18 56.4** | **+0.2** |
| **PB05** | **IPOC Station P** | **6.08** | **14** | Pn | | **Pn** | **02 18 54.4** | **-2.2** |
| **GO05** | **Huala** | **6.21** | **181** | Pn | | **Pn** | **02 18 57.9** | **-0.4** |
| **LVC** | **Limon Verde** | **6.68** | **24** | Pn | | **Pn** | **02 19 04.2** | **-0.9** |
| **LVC** | **Limon Verde** | **6.68** | **24** | Pn | | **Pn** | **02 19 03.8** | **-1.2** |
| | comp=Z,0.9nm,0.3s,baz=152,slow=14,SNR=7.9 | | | | | | | |
| LVC | | | | | Sn | **Sn** | **02 20 18.5** | **-3.1** |
| | comp=Z,2.3nm,0.3s,baz=153,slow=18,SNR=1.6 comp=Z,1.6nm,0.3s | | | | | | | |
| **PB09** | **IPOC Station P** | **7.33** | **19** | Pn | | **Pn** | **02 19 13.4** | **-0.4** |
| **H03N1** | **Juan Fernandez** | **7.66** | **231** | Pn | | **Pn** | **02 19 18.4** | **+0.5** |
| H03N1 | | | | T | | T | 02 27 23.6 | |
| | baz=59,slow=72,SNR=5735 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **7.67** | **231** | Pn | | **Pn** | **02 19 18.5** | **+0.4** |
| H03N2 | | | | T | | T | 02 27 24.1 | |
| | baz=59,slow=72,SNR=6584 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.68** | **231** | Pn | | **Pn** | **02 19 18.2** | **0.0** |
| H03N3 | | | | T | | T | 02 27 23.0 | |
| | baz=59,slow=72,SNR=4494 | | | | | | | |
| **BI02** | **San Fabin de** | **7.87** | **177** | Pn | | **Pn** | **02 19 21.5** | **+0.3** |
| **H03S3** | **Juan Fernandez** | **7.89** | **229** | Pn | | **Pn** | **02 19 21.5** | **+0.5** |
| **H03S1** | **Juan Fernandez** | **7.90** | **229** | Pn | | **Pn** | **02 19 20.4** | **-0.8** |
| **PATCX** | **Punta Patache** | **8.07** | **11** | Pn | | **Pn** | **02 19 23.2** | **-0.6** |
| **GO06** | **Curarrehue** | **10.78** | **179** | Pn | | **Pn** | **02 20 00.5** | **-0.6** |
| **TRQA** | **Tornquist** | **12.36** | **141** | Pn | | **Pn** | **02 20 22.3** | **-0.2** |
| **LPAZ** | **La Paz** | **12.89** | **16** | Pn | | **Pn** | **02 20 27.8** | **-2.6** |
| **LPAZ** | **La Paz** | **12.89** | **16** | Pn | | **Pn** | **02 20 28.8** | **-1.6** |
| | comp=Z,0.1nm,0.3s,baz=204,slow=14,SNR=2.1 comp=Z,0.3nm,0.4s | | | | | | | |
| **PLTB** | **Pedras Altas** | **16.00** | **105** | Pn | | **Pn** | **02 21 11.7** | **-0.1** |
| PLTB | | | | IAmb | | IAmb | 02 21 34.9 | |
| | comp=Z,26nm,1.3s | | | | | | | |
| **SIV** | **San Ignacio** | **16.12** | **40** | Pn | | **Pn** | **02 21 13.3** | **-0.1** |
| | baz=235,slow=11,SNR=2.9 comp=Z,0.9nm,0.6s | | | | | | | |
| **ITAB** | **Concordia** | **17.44** | **90** | Pn | | **Pn** | **02 21 29.3** | **-0.7** |
| ITAB | | | | IAmb | | IAmb | 02 21 55.2 | |
| | comp=Z,33nm,1.5s | | | | | | | |
| **ETMB** | **Extrema** | **19.58** | **17** | P | | **P** | **02 21 54.0** | **-0.9** |
| **SAML** | **Samuel** | **21.33** | **24** | P | | **P** | **02 22 12.8** | **-1.1** |
| SAML | | | | IAmb | | IAmb | 02 22 16.2 | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **BDFB** | **Brasilia** | **25.55** | **64** | P | | **P** | **02 22 54.9** | **-1.0** |
| | comp=Z,1.5nm,0.6s,baz=238,slow=9.5,SNR=2.1 comp=Z,1.5nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **56.35** | **159** | P | | **P** | **02 27 08.3** | **+0.7** |
| SNAA | | | | IAmb | | IAmb | 02 27 17.8 | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **SNAA** | **Sanae** | **56.35** | **159** | P | | **P** | **02 27 08.8** | **+1.2** |
| | comp=Z,0.5nm,0.5s,baz=268,slow=7.2,SNR=5.6 comp=Z,0.5nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **61.44** | **180** | P | | **P** | **02 27 43.8** | **+0.7** |
| **QSPA** | **South Pole Qui** | **61.44** | **180** | P | | **P** | **02 27 45.1** | **+2.0** |
| | comp=Z,0.4nm,0.6s,baz=180,slow=2.5,SNR=1.1 comp=Z,0.4nm,0.6s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **81.53** | **345** | P | | **P** | **02 29 44.4** | **+0.3** |
| | comp=Z,1.5nm,0.8s,baz=230,slow=7.9,SNR=3.3 comp=Z,1.5nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.26** | **70** | P | | **P** | **02 29 49.2** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=252,slow=4.5,SNR=4.2 comp=Z,0.7nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **148.77** | **37** | PKPbc | | **PKiKP** | **02 37 14.9** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=302,slow=2.9,SNR=6.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **149.61** | **28** | PKPbc | | **PKiKP** | **02 37 16.7** | **-0.4** |
| | comp=Z,1.7nm,0.6s,baz=293,slow=3.2,SNR=7.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **152.94** | **41** | PKPbc | | **PKiKP** | **02 37 25.1** | **+0.9** |
| | comp=Z,0.5nm,0.6s,baz=328,slow=1.0,SNR=6.2 | | | | | | | |

*IDC* ***11*** *02:22:15.2±0.9,54.°94S×120.°12W,h0km,mb4.1/6, mbtmp4.0/6,MS3.7/13,Error ellipse: s-maj=70.5km s-min=25.1km az=155.0*

**ISC 11 02:22:16.7±1.1,54.°9S±0.°4×120.°1W±0.°3,h10km,n33, σ0s54/8,mb4.2/6,MS3.7/13,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RKT** | **Rikitea** | **33.66** | **335** | *e*LR | LR | 02 37 53.4 | |
| | 1μm,24.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **35.25** | **180** | LR | LR | 02 42 38.7 | |
| | comp=Z,110nm,18.3s,baz=106,slow=35 | | | | | | |
| **PLCA** | **Paso Flores** | **35.38** | **87** | LR | LR | 02 40 19.8 | |
| | comp=Z,188nm,18.4s,baz=210,slow=31 | | | | | | |
| **H03S2** | **Juan Fernandez** | **35.50** | **71** | T | T | 03 06 35.1 | |
| | baz=220,slow=74,SNR=318 | | | | | | |
| **H03S1** | **Juan Fernandez** | **35.51** | **71** | T | T | 03 06 36.5 | |
| | baz=220,slow=74,SNR=339 | | | | | | |
| **H03S3** | **Juan Fernandez** | **35.52** | **71** | T | T | 03 06 35.5 | |
| | baz=220,slow=74,SNR=368 | | | | | | |
| **H03N3** | **Juan Fernandez** | **35.79** | **70** | T | T | 03 06 56.7 | |
| | baz=222,slow=72,SNR=310 | | | | | | |
| **H03N2** | **Juan Fernandez** | **35.80** | **70** | T | T | 03 06 55.8 | |
| | baz=222,slow=72,SNR=419 | | | | | | |
| **H03N1** | **Juan Fernandez** | **35.81** | **70** | T | T | 03 06 55.7 | |
| | baz=222,slow=72,SNR=283 | | | | | | |
| **TBI** | **Tubuai** | **38.36** | **313** | *e*LR | LR | 02 40 04.4 | |
| | 1μm,30.2s | | | | | | |
| **PPT2** | **Papeete2** | **43.57** | **317** | *e*LR | LR | 02 42 24.7 | |
| | 215nm,23.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 02 42 29.7 | |
| | 240nm,23.2s | | | | | | |
| **PPT** | **Papeete** | **43.59** | **317** | LR | LR | 02 43 35.1 | |
| | comp=Z,121nm,21.2s,baz=168,slow=29 | | | | | | |
| **URZ** | **Urewera** | **44.65** | **265** | LR | LR | 02 46 18.3 | |
| | comp=Z,50nm,19.4s,baz=211,slow=32 | | | | | | |
| **RAR** | **Rarotonga** | **44.91** | **302** | LR | LR | 02 44 25.0 | |
| | comp=Z,60nm,20.5s,baz=342,slow=30 | | | | | | |
| **SNAA** | **Sanae** | **46.28** | **157** | LR | LR | 02 50 47.4 | |
| | comp=Z,156nm,18.2s,baz=270,slow=37 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **48.65** | **333** | *e*LR | LR | 02 44 50.0 | |
| | 214nm,25.6s | | | | | | |
| **LPAZ** | **La Paz** | **55.32** | **67** | P | **P** | **02 31 51.5** | **+0.3** |
| | 3.4nm,1.0s,baz=195,slow=2.4,SNR=7.7 3.4nm,1.0s | | | | | | |
| **MAW** | **Mawson** | **57.75** | **181** | LR | LR | 02 55 23.9 | |
| | comp=Z,54nm,18.0s,baz=166,slow=34 | | | | | | |
| **ATAH** | **Atahualpa** | **58.12** | **51** | LR | LR | 02 50 48.9 | |
| | comp=Z,136nm,20.9s,baz=65,slow=30 | | | | | | |
| **SIV** | **San Ignacio** | **59.40** | **73** | P | **P** | **02 32 19.0** | **-0.4** |
| | 3.3nm,1.1s,baz=232,slow=8.2,SNR=4.9 3.3nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **62.76** | **270** | *e*LR | LR | 02 51 40.0 | |
| | 102nm,25.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **62.76** | **270** | LR | LR | 02 53 39.9 | |
| | comp=Z,51nm,21.5s,baz=267,slow=30 | | | | | | |
| **STKA** | **Stephens Creek** | **69.00** | **244** | LR | LR | 02 58 41.9 | |
| | comp=Z,45nm,19.0s,baz=196,slow=32 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **79.16** | **223** | T | T | 04 02 49.5 | |
| | baz=150,slow=76,SNR=6.6 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **79.16** | **223** | T | T | 04 02 48.8 | |
| | baz=150,slow=76,SNR=5.5 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **79.17** | **223** | T | T | 04 02 50.1 | |
| | baz=150,slow=76,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **79.61** | **244** | P | **P** | **02 34 24.2** | **0.0** |
| | 0.7nm,0.8s,baz=134,slow=5.3,SNR=4.4 | | | | | | |
| ASAR | | | | LR | LR | 03 04 13.6 | |
| | comp=Z,63nm,20.0s,baz=157,slow=32 0.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.45** | **246** | P | **P** | **02 34 39.5** | **+0.3** |
| | 2.8nm,1.0s,baz=144,slow=4.5,SNR=10 | | | | | | |
| WRA | | | | LR | LR | 03 06 58.4 | |
| | comp=Z,56nm,19.6s,baz=88,slow=32 2.8nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **83.94** | **262** | LR | LR | 03 07 51.2 | |
| | comp=Z,30nm,20.3s,baz=168,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.12** | **14** | P | **P** | **02 34 53.3** | **+0.7** |
| | 0.8nm,1.0s,baz=191,slow=4.2,SNR=3.8 0.8nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.02** | **1** | P | **P** | **02 35 29.3** | **-0.8** |
| | 0.4nm,0.6s,baz=175,slow=5.4,SNR=2.1 0.4nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **150.59** | **276** | PKPbc | **PKPbc** | **02 42 07.8** | **-0.2** |
| | 0.5nm,0.6s,baz=122,slow=1.9,SNR=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **151.29** | **83** | PKPbc | **PKPbc** | **02 42 09.6** | **+0.1** |
| | 1.1nm,0.8s,baz=196,slow=6.9,SNR=3.6 | | | | | | |

*IDC* ***11*** *02:24:03.0±1.5,22.°43N×122.°48E,h0km,mb4.1/9, mbtmp4.1/9,Error ellipse: s-maj=105.8km s-min=26.6km az=65.0*

*NEIC* ***11*** *02:24:18.7±1.4,22.°1N±0.°1×121.°60E±0.°09,h114km±6km, mb4.2/17,Error ellipse: s-maj=15.3km s-min=12.0km az=190.0*

*JMA* ***11*** *02:24:20.6±0.3,22.°N±2.°×12.°2E±.°,h100km,MV2.9/12, TAIWAN REGION*

*TAP* ***11*** *02:24:20.7,22.°31N×121.°56E,h116km,ML4.2,C*

**ISC 11 02:24:19.7±0.6,22.°27N±0.°04×121.°56E±0.°04,h121km±5km, n174,σ0s98/274,mb4.0/16,9C-2D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAY** | **Lan-yu** | **0.23** | **182** | *i* P | **Pn** | **02 24 37.0** | **+0.4** |
| | baz=179 | | | | | | |
| LAY | | | | *i* S | **Sn** | **02 24 49.3** | **-0.1** |
| | baz=179 | | | | | | |
| **LYUB** | **Lan-yu** | **0.27** | **175** | ⇑*i* P | **Pn** | **02 24 36.9** | **+0.1** |
| | baz=174 | | | | | | |
| LYUB | | | | *i* S | **Sn** | **02 24 48.8** | **-0.7** |
| | baz=174 | | | | | | |
| **LDUT** | **Ludao** | **0.41** | **348** | P | **Pn** | **02 24 37.4** | **+0.1** |
| | baz=347 | | | | | | |
| LDUT | | | | S | **Sn** | **02 24 50.4** | **-0.1** |
| | baz=347 | | | | | | |
| **TTN** | **Taitung** | **0.61** | **322** | *i* P | **Pn** | **02 24 39.6** | **+1.1** |
| | baz=320 | | | | | | |
| TTN | | | | *i* S | **Sn** | **02 24 53.4** | **+0.7** |
| | baz=320 | | | | | | |
| **TAWH** | **Dawu Township** | **0.62** | **276** | *i* P | **Pn** | **02 24 39.1** | **+0.5** |
| | baz=273 | | | | | | |
| TAWH | | | | *e*S | **Sn** | **02 24 52.5** | **-0.4** |
| | baz=273 | | | | | | |
| **ECL** | **Taimali** | **0.65** | **300** | P | **Pn** | **02 24 39.1** | **+0.3** |
| | baz=297 | | | | | | |
| ECL | | | | S | **Sn** | **02 24 52.2** | **-1.0** |
| | baz=297 | | | | | | |
| **EAST** | **Anshuo** | **0.67** | **280** | ⇑*i* P | **Pn** | **02 24 39.6** | **+0.6** |
| | baz=276 | | | | | | |
| EAST | | | | *i* S | **Sn** | **02 24 54.0** | **+0.5** |
| | baz=276 | | | | | | |
| **TWGBT** | **Beinan** | **0.70** | **321** | P | **Pn** | **02 24 39.3** | **0.0** |
| **TWGBT** | **Beinan** | **0.70** | **321** | ⇑*i* P | **Pn** | **02 24 39.2** | **0.0** |
| | baz=319 | | | | | | |
| TWGBT | | | | *i* S | **Sn** | **02 24 52.7** | **-1.3** |
| | baz=319 | | | | | | |
| **SLIU** | **Shizi** | **0.71** | **266** | P | **Pn** | **02 24 40.2** | **+0.9** |
| | baz=262 | | | | | | |
| SLIU | | | | S | **Sn** | **02 24 54.1** | **+0.1** |
| | baz=262 | | | | | | |
| **TWG** | **Pinlang** | **0.71** | **321** | Pn | **Pn** | **02 24 39.1** | **-0.1** |
| TWG | | | | Sn | **Sn** | **02 24 52.1** | **-2.0** |
| **TWG** | **Pinlang** | **0.71** | **321** | ⇑*i* P | **Pn** | **02 24 39.2** | **-0.1** |
| | baz=319 | | | | | | |
| TWG | | | | *i* S | **Sn** | **02 24 52.7** | **-1.3** |
| | baz=319 | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.71** | **250** | *i* P | **Pn** | **02 24 40.4** | **+1.1** |
| | baz=246 | | | | | | |
| SMST | | | | *i* S | **Sn** | **02 24 55.0** | **+0.9** |
| | baz=246 | | | | | | |
| **EDH** | **Donghe** | **0.74** | **341** | *i* P | **Pn** | **02 24 40.1** | **+0.6** |
| | baz=340 | | | | | | |
| EDH | | | | *i* S | **Sn** | **02 24 54.6** | **+0.1** |
| | baz=340 | | | | | | |
| **LONT** | **Longtian** | **0.74** | **328** | P | **Pn** | **02 24 39.7** | **+0.1** |
| | baz=326 | | | | | | |
| LONT | | | | *i* S | **Sn** | **02 24 54.0** | **-0.6** |
| | baz=326 | | | | | | |
| **TWKBT** | **Hengchun** | **0.77** | **245** | ⇑*i* P | **Pn** | **02 24 41.0** | **+1.2** |
| | baz=242 | | | | | | |
| TWKBT | | | | *i* S | **Sn** | **02 24 55.8** | **+0.9** |
| | baz=242 | | | | | | |
| **TWK1** | **Hengchun** | **0.77** | **245** | ⇑*i* P | **Pn** | **02 24 41.0** | **+1.2** |
| | baz=242 | | | | | | |
| TWK1 | | | | *i* S | **Sn** | **02 24 55.9** | **+1.0** |
| | baz=242 | | | | | | |
| **HEN** | **Hengchun** | **0.81** | **251** | P | **Pn** | **02 24 41.5** | **+1.5** |
| | baz=248 | | | | | | |
| HEN | | | | S | **Sn** | **02 24 56.1** | **+0.7** |
| | baz=248 | | | | | | |
| **CHKT** | **Chengkung** | **0.84** | **348** | *i* P | **Pn** | **02 24 40.9** | **+0.5** |
| | baz=347 | | | | | | |
| CHKT | | | | *i* S | **Sn** | **02 24 56.1** | **+0.1** |
| | baz=347 | | | | | | |
| **SCZT** | **Fangliau** | **0.88** | **277** | ⇑*i* P | **Pn** | **02 24 41.3** | **+0.6** |
| | baz=274 | | | | | | |
| SCZT | | | | *i* S | **Sn** | **02 24 56.0** | **-0.5** |
| | baz=274 | | | | | | |
| **ECS** | **Chishang** | **0.88** | **339** | P | **Pn** | **02 24 41.6** | **+0.9** |
| | baz=338 | | | | | | |
| ECS | | | | S | **Sn** | **02 24 56.9** | **+0.3** |
| | baz=338 | | | | | | |
| **MASBT** | **Mashibuluo** | **0.92** | **292** | ⇑*i* P | **Pn** | **02 24 41.8** | **+0.7** |
| | baz=289 | | | | | | |
| MASBT | | | | S | **Sn** | **02 24 56.6** | **-0.6** |
| | baz=289 | | | | | | |
| **CHKH** | **Chenggong** | **0.93** | **351** | *i* P | **Pn** | **02 24 42.0** | **+0.9** |
| | baz=350 | | | | | | |
| CHKH | | | | S | **Sn** | **02 24 57.3** | **-0.1** |
| | baz=350 | | | | | | |
| **EHD** | **Haiduan** | **0.93** | **340** | P | **Pn** | **02 24 41.4** | **+0.2** |
| | baz=339 | | | | | | |
| EHD | | | | S | **Sn** | **02 24 56.5** | **-1.1** |
| | baz=339 | | | | | | |
| **TSMG** | **Majia** | **0.95** | **297** | *e*P | **Pn** | **02 24 42.1** | **+0.7** |
| | baz=295 | | | | | | |
| TSMG | | | | *e*S | **Sn** | **02 24 57.3** | **-0.4** |
| | baz=295 | | | | | | |
| **FULB** | **Fuli** | **0.95** | **345** | P | **Pn** | **02 24 42.3** | **+0.9** |
| | baz=344 | | | | | | |
| FULB | | | | S | **Sn** | **02 24 58.8** | **+0.9** |
| | baz=344 | | | | | | |
| **ELDTW** | **Lidau** | **1.04** | **331** | *i* P | **Pn** | **02 24 42.8** | **+0.4** |
| | baz=330 | | | | | | |
| ELDTW | | | | *i* S | **Sn** | **02 24 59.6** | **+0.1** |
| | baz=330 | | | | | | |
| **ECBN** | **Changbin** | **1.04** | **355** | *e*P | **Pn** | **02 24 43.6** | **+1.3** |
| | baz=354 | | | | | | |
| ECBN | | | | *i* S | **Sn** | **02 24 59.7** | **+0.3** |
| | baz=354 | | | | | | |
| **SGLT** | **Jiouru** | **1.08** | **295** | P | **Pn** | **02 24 44.3** | **+1.6** |
| | baz=293 | | | | | | |
| SGLT | | | | *e*S | **Sn** | **02 25 01.5** | **+1.5** |
| | baz=293 | | | | | | |
| **EYUL** | **Yuli** | **1.09** | **348** | *e*P | **Pn** | **02 24 44.0** | **+1.2** |
| | baz=348 | | | | | | |
| EYUL | | | | S | **Sn** | **02 24 59.6** | **-0.7** |
| | baz=348 | | | | | | |
| **TWF1** | **Yuli** | **1.10** | **347** | *e*P | **Pn** | **02 24 43.1** | **+0.2** |
| | baz=347 | | | | | | |
| TWF1 | | | | S | **Sn** | **02 25 00.3** | **-0.1** |
| | baz=347 | | | | | | |
| **SLGT** | **Liugui** | **1.11** | **311** | *i* P | **Pn** | **02 24 43.8** | **+0.8** |
| | baz=309 | | | | | | |
| SLGT | | | | *i* S | **Sn** | **02 25 00.3** | **-0.2** |
| | baz=309 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.11** | **274** | *i* P | **Pn** | **02 24 45.1** | **+2.2** |
| | baz=272 | | | | | | |
| **YULB** | **Yu-li** | **1.14** | **348** | P | **Pn** | **02 24 43.7** | **+0.4** |
| **YULB** | **Yu-li** | **1.14** | **348** | | **Pn** | **02 24 43.3** | **0.0** |
| YULB | | | | Sn | **Sn** | **02 24 59.1** | **-2.1** |
| **YULB** | **Yu-li** | **1.14** | **348** | P | **Pn** | **02 24 43.2** | **0.0** |
| | baz=347 | | | | | | |
| YULB | | | | S | **Sn** | **02 24 59.7** | **-1.5** |
| | baz=347 | | | | | | |
| **STYH** | **Taoyuan** | **1.15** | **321** | *e*P | **Pn** | **02 24 44.3** | **+1.0** |
| | baz=320 | | | | | | |
| STYH | | | | *i* S | **Sn** | **02 25 01.0** | **-0.3** |
| | baz=320 | | | | | | |
| **SCST** | **Cishan** | **1.16** | **302** | *e*P | **Pn** | **02 24 44.5** | **+1.1** |
| | baz=300 | | | | | | |
| SCST | | | | *e*S | **Sn** | **02 25 02.8** | **+1.4** |
| | baz=300 | | | | | | |
| **TWM1** | **Shoushan** | **1.19** | **298** | P | **Pn** | **02 24 45.4** | **+1.6** |
| | baz=296 | | | | | | |
| TWM1 | | | | S | **Sn** | **02 25 03.6** | **+1.6** |
| | baz=296 | | | | | | |
| **SGST** | **Jiashian** | **1.21** | **312** | *i* P | **Pn** | **02 24 43.8** | **-0.2** |
| | baz=310 | | | | | | |
| SGST | | | | *i* S | **Sn** | **02 25 01.5** | **-0.9** |
| | baz=310 | | | | | | |
| **HGSD** | **Ruisui** | **1.22** | **354** | P | **Pn** | **02 24 44.9** | **+0.8** |
| | baz=354 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **02 25 03.9** | **+1.2** |
| | baz=354 | | | | | | |
| **SNJT** | **Kaohsiung City** | **1.23** | **293** | *e*P | **Pn** | **02 24 45.7** | **+1.5** |
| | baz=291 | | | | | | |
| SNJT | | | | *i* S | **Sn** | **02 25 04.0** | **+1.3** |
| | baz=291 | | | | | | |
| **EHYH** | **Wanrong** | **1.23** | **351** | *e*S | **Sn** | **02 25 01.5** | **-1.4** |
| | baz=350 | | | | | | |
| **EHY** | **Hungye** | **1.25** | **350** | *i* P | **Pn** | **02 24 44.4** | **-0.1** |
| | baz=350 | | | | | | |
| EHY | | | | S | **Sn** | **02 25 01.6** | **-1.6** |
| | baz=350 | | | | | | |
| **WTP** | **Ta-pu** | **1.30** | **318** | ⇑*i* P | **Pn** | **02 24 45.6** | **+0.6** |
| | baz=317 | | | | | | |
| WTP | | | | *e*S | **Sn** | **02 25 03.6** | **-0.7** |
| | baz=317 | | | | | | |
| **TPUB** | **Ta-pu** | **1.33** | **320** | P | **Pn** | **02 24 46.1** | **+0.7** |
| **TPUB** | **Ta-pu** | **1.33** | **320** | Pn | **Pn** | **02 24 45.7** | **+0.3** |
| TPUB | | | | Sn | **Sn** | **02 25 03.7** | **-1.2** |
| **TPUB** | **Ta-pu** | **1.33** | **320** | P | **Pn** | **02 24 45.9** | **+0.5** |
| | baz=319 | | | | | | |
| TPUB | | | | *i* S | **Sn** | **02 25 04.2** | **-0.7** |
| | baz=319 | | | | | | |
| **SHHT** | **Tainan City** | **1.34** | **304** | *e*P | **Pn** | **02 24 47.7** | **+2.3** |
| | baz=302 | | | | | | |
| **SNST** | **Tainan City** | **1.36** | **314** | P | **Pn** | **02 24 46.2** | **+0.5** |
| | baz=312 | | | | | | |
| SNST | | | | S | **Sn** | **02 25 04.5** | **-0.8** |
| | baz=312 | | | | | | |
| **EGFH** | **Guangfu** | **1.40** | **355** | *e*P | **Pn** | **02 24 45.9** | **-0.2** |
| | baz=355 | | | | | | |
| EGFH | | | | S | **Sn** | **02 25 04.8** | **-1.3** |
| | baz=355 | | | | | | |
| **TWK** | **Hsinying** | **1.40** | **315** | P | **Pn** | **02 24 46.5** | **+0.4** |
| | baz=314 | | | | | | |
| TWK | | | | S | **Sn** | **02 25 05.7** | **-0.5** |
| | baz=314 | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.45** | **302** | *e*S | **Sn** | **02 25 07.5** | **+0.5** |
| | baz=300 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.45** | **354** | ⇓P | **Pn** | **02 24 46.4** | **-0.2** |
| | baz=353 | | | | | | |
| WARBT | | | | *i* S | **Sn** | **02 25 05.2** | **-2.0** |
| | baz=353 | | | | | | |
| **SSHA** | **Shanhua** | **1.46** | **306** | *e*P | **Pn** | **02 24 47.3** | **+0.6** |
| | baz=305 | | | | | | |
| SSHA | | | | *e*S | **Sn** | **02 25 08.2** | **+1.0** |
| | baz=305 | | | | | | |
| **WCKO** | **Fanlu** | **1.46** | **323** | *e*P | **Pn** | **02 24 47.5** | **+0.8** |
| | baz=322 | | | | | | |
| WCKO | | | | S | **Sn** | **02 25 06.2** | **-1.2** |
| | baz=322 | | | | | | |
| **SHUL** | **Shoufeng** | **1.51** | **0** | *e*P | **Pn** | **02 24 48.3** | **+1.0** |
| SHUL | | | | *e*S | **Sn** | **02 25 08.6** | **+0.3** |
| **VWDT** | **VWDT** | **1.52** | **345** | ⇓P | **Pn** | **02 24 48.8** | **+1.3** |
| | baz=345 | | | | | | |
| VWDT | | | | *i* S | **Sn** | **02 25 09.2** | **+0.5** |
| | baz=345 | | | | | | |
| **ESL** | **Shilin** | **1.54** | **356** | P | **Pn** | **02 24 47.8** | **+0.1** |
| | baz=356 | | | | | | |
| ESL | | | | *i* S | **Sn** | **02 25 07.0** | **-2.0** |
| | baz=356 | | | | | | |
| **SCLT** | **Jiali** | **1.55** | **306** | *e*P | **Pn** | **02 24 48.5** | **+0.8** |
| | baz=304 | | | | | | |
| SCLT | | | | *i* S | **Sn** | **02 25 09.4** | **+0.3** |
| | baz=304 | | | | | | |
| **CHN5** | **Tsauling** | **1.55** | **329** | *i* P | **Pn** | **02 24 48.3** | **+0.4** |
| | baz=327 | | | | | | |
| CHN5 | | | | S | **Sn** | **02 25 08.9** | **-0.5** |
| | baz=327 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.56** | **335** | P | **Pn** | **02 24 48.4** | **+0.4** |
| | baz=334 | | | | | | |
| WHYT | | | | *e*S | **Sn** | **02 25 09.1** | **-0.4** |
| | baz=334 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.59** | **1** | *e*P | **Pn** | **02 24 49.6** | **+1.4** |
| | baz=1.0 | | | | | | |
| TEYL | | | | *e*S | **Sn** | **02 25 12.0** | **+2.0** |
| | baz=1.0 | | | | | | |
| **ICHU** | **Yijhu** | **1.60** | **313** | *e*P | **Pn** | **02 24 49.1** | **+0.7** |
| | baz=311 | | | | | | |
| ICHU | | | | *e*S | **Sn** | **02 25 09.9** | **-0.4** |
| | baz=311 | | | | | | |
| **CHN2** | **Minshiung** | **1.60** | **322** | *e*P | **Pn** | **02 24 49.7** | **+1.3** |
| | baz=320 | | | | | | |
| CHN2 | | | | *e*S | **Sn** | **02 25 09.5** | **-0.8** |
| | baz=320 | | | | | | |
| **CHY** | **Chiayi** | **1.61** | **320** | *e*S | **Sn** | **02 25 10.0** | **-0.4** |
| | baz=318 | | | | | | |
| **SSLB** | **Suanglung** | **1.61** | **340** | P | **Pn** | **02 24 49.1** | **+0.6** |
| **SSLB** | **Suanglung** | **1.61** | **340** | Pn | **Pn** | **02 24 48.8** | **+0.2** |
| **SSLB** | **Suanglung** | **1.61** | **340** | *e*P | **Pn** | **02 24 49.0** | **+0.4** |
| | baz=339 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **02 25 09.3** | **-1.2** |
| | baz=339 | | | | | | |
| **TSCK** | **Chigu Township** | **1.61** | **303** | *e*P | **Pn** | **02 24 49.0** | **+0.5** |
| | baz=301 | | | | | | |
| TSCK | | | | *i* S | **Sn** | **02 25 09.8** | **-0.7** |
| | baz=301 | | | | | | |
| **CHN8** | **Yiju** | **1.64** | **311** | *e*P | **Pn** | **02 24 49.4** | **+0.5** |
| | baz=310 | | | | | | |
| CHN8 | | | | *i* S | **Sn** | **02 25 10.8** | **-0.3** |
| | baz=310 | | | | | | |
| **ETM** | **Tongmen** | **1.69** | **358** | *e*P | **Pn** | **02 24 49.6** | **+0.2** |
| | baz=358 | | | | | | |
| ETM | | | | *e*S | **Sn** | **02 25 10.8** | **-1.4** |
| | baz=358 | | | | | | |
| **WDLH** | **Douliu** | **1.69** | **326** | *e*P | **Pn** | **02 24 50.0** | **+0.5** |
| | baz=325 | | | | | | |
| WDLH | | | | *i* S | **Sn** | **02 25 11.3** | **-0.9** |
| | baz=325 | | | | | | |
| **HWA** | **Hwalien** | **1.70** | **1** | *e*P | **Pn** | **02 24 50.6** | **+1.0** |
| | baz=1.0 | | | | | | |
| HWA | | | | *e*S | **Sn** | **02 25 13.2** | **+0.9** |
| | baz=1.0 | | | | | | |
| **OWD** | **Renai** | **1.71** | **348** | *e*P | **Pn** | **02 24 51.1** | **+1.2** |
| | baz=348 | | | | | | |
| OWD | | | | *i* S | **Sn** | **02 25 12.6** | **-0.3** |
| | baz=348 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.75** | **356** | *i* P | **Pn** | **02 24 50.5** | **+0.2** |
| | baz=355 | | | | | | |
| LXIB | | | | *i* S | **Sn** | **02 25 12.7** | **-1.0** |
| | baz=355 | | | | | | |
| **TYC** | **Yuchr** | **1.75** | **338** | *e*P | **Pn** | **

baz=1.0
**WHF Hehuan Shan 1.88 352** *e*P **Pn 02 24 53.0 +0.7**
baz=351
WHF *i* S **Sn 02 25 16.7 -0.4**
baz=351
**NACB Ninganchiao 1.89 1** P **Pn 02 24 52.3 +0.4**
**NACB Ninganchiao 1.89 1** Pn **Pn 02 24 52.0 +0.1**
NACB Sn **Sn 02 25 15.2 -1.3**
**NACB Ninganchiao 1.89 1** P **Pn 02 24 52.0 +0.1**
baz=1.0
NACB S **Sn 02 25 15.9 -0.7**
baz=1.0
**ETLH Xiulin Townshi 1.93 358** *i* P **Pn 02 24 52.6 +0.2**
baz=357
ETLH S **Sn 02 25 16.2 -1.2**
baz=357
**EOS4 EOS4 1.97 21** *e*P **Pn 02 24 53.3 +0.9**
baz=21
EOS4 *i* S **Sn 02 25 18.3 +0.7**
baz=21
**FUSS Fushou 1.99 352** *i* P **Pn 02 24 55.2 +1.8**
baz=351
FUSS *i* S **Sn 02 25 19.8 +0.7**
baz=351
**TWT Tachien 2.00 350** *e*P **Pn 02 24 55.6 +2.1**
baz=349
TWT *e*S **Sn 02 25 17.9 -1.3**
baz=349
**TDCB Techi 2.01 349** *i* P **Pn 02 24 54.8 +1.4**
baz=349
TDCB S **Sn 02 25 20.1 +0.8**
baz=349
**WDGT Dungji 2.01 300** P **Pn 02 24 52.6 -0.7**
baz=298
**WCHH Zhanghua 2.02 333** *e*P **Pn 02 24 55.2 +1.7**
baz=332
WCHH *i* S **Sn 02 25 19.1 -0.2**
baz=332
**TCU Taichung 2.04 337** *e*S **Sn 02 25 20.1 +0.4**
baz=336
**WHP Taichung City 2.07 344** *e*P **Pn 02 24 54.5 +0.3**
baz=344
WHP *i* S **Sn 02 25 21.1 +0.4**
baz=344
**EOS3 EOS3 2.12 19** *e*P **Pn 02 24 55.8 +1.2**
baz=19
**ENA Nanau 2.15 4** *e*P **Pn 02 24 56.1 +0.9**
baz=4.0
ENA *e*S **Sn 02 25 23.3 +1.0**
baz=4.0
**NNS Nan Shan 2.17 356** *e*P **Pn 02 24 56.0 +0.5**
baz=355
NNS *e*S **Sn 02 25 23.1 +0.3**
baz=355
**EWUT Wuta 2.17 5** *e*P **Pn 02 24 56.3 +0.9**
baz=5.0
EWUT *e*S **Sn 02 25 22.0 -0.7**
baz=5.0
**VCHM Qimei 2.17 296** *e*P **Pn 02 24 55.3 -0.1**
baz=294
**TWQ1 Liyutan 2.19 341** *e*P **Pn 02 24 56.1 +0.5**
baz=340
TWQ1 *e*S **Sn 02 25 22.6 -0.5**
baz=340
**PHUB P'eng-hu 2.21 304** *e*P **Pn 02 24 55.6 -0.2**
baz=303
**EOS2 EOS2 2.22 16** *e*P **Pn 02 24 57.4 +1.5**
baz=16
**LATG Datong 2.25 359** P **Pn 02 24 57.3 +0.8**
baz=359
LATG *e*S **Sn 02 25 25.5 +0.8**
baz=359
**PNG Penghu 2.25 305** *i* P **Pn 02 24 56.3 -0.1**
baz=304
PNG *i* S **Sn 02 25 22.6 -2.0**
baz=304
**NSY Sanyi 2.26 341** *e*P **Pn 02 24 57.5 +1.0**
baz=341
NSY *e*S **Sn 02 25 25.1 +0.5**
baz=341
**NDT Datong Townshi 2.32 359** *e*P **Pn 02 24 58.5 +1.2**
baz=359
NDT S **Sn 02 25 26.3 +0.2**
baz=359
**TWC Suao 2.34 6** *i* P **Pn 02 24 58.5 +1.0**
baz=6.0
TWC *e*S **Sn 02 25 26.8 +0.2**
baz=6.0
**NDS Dongshan 2.35 3** *e*P **Pn 02 24 58.6 +0.9**
baz=3.0
**ENTT Nioudou 2.36 0** *e*P **Pn 02 24 58.7 +1.0**
ENTT S **Sn 02 25 26.7 -0.3**
**NFF Wufeng Townshi 2.38 350** *e*P **Pn 02 24 59.4 +1.3**
baz=350
**YHNB Yeheng 2.39 356** P **Pn 02 24 59.9 +1.6**
**YHNB Yeheng 2.39 356** Pn **Pn 02 24 59.8 +1.5**
**YHNB Yeheng 2.39 356** *i* P **Pn 02 25 00.1 +1.8**
baz=356
YHNB *i* S **Sn 02 25 28.3 +0.4**
baz=356
**NSK Sanguang 2.40 356** *e*P **Pn 02 24 59.8 +1.4**
baz=355
NSK *i* S **Sn 02 25 28.3 +0.3**
baz=355
**TWE Neicheng 2.44 2** *e*P **Pn 02 25 00.1 +1.3**
baz=2.0
TWE *e*S **Sn 02 25 29.5 +0.7**
baz=2.0
**FUSB Fushanzhiwuyua 2.48 1** *i* P **Pn 02 25 00.6 +1.3**
FUSB *i* S **Sn 02 25 30.5 +0.8**
**NWLT Wulai 2.49 359** P **Pn 02 25 00.8 +1.2**
baz=358
**JYNG Yonaguanjimaku 2.52 30** *e*P **Pn 02 25 01.0 +1.3**
**YOJ Yonaguni jima 2.56 31** P **Pn 02 25 01.8 +1.5**
**YOJ Yonaguni jima 2.56 31** Pn **Pn 02 25 01.2 +0.9**
**YOJ Yonaguni jima 2.56 31** *e*P **Pn 02 25 01.6 +1.3**
baz=31
**YOJ Yonaguni jima 2.56 31** *e*P **Pn 02 25 01.7 +1.5**
**EGS 2.58 8** *e*P **Pn 02 25 03.0 +2.4**
baz=8.0
**TATO Taipei 2.69 359** P **Pn 02 25 04.0 +2.0**
**TATO Taipei 2.69 359** Pn **Pn 02 25 03.3 +1.3**
**TWA Mucha 2.70 0** *e*P **Pn 02 25 04.5 +2.4**
**TIPB Shuangxi 2.70 5** *i* P **Pn 02 25 03.8 +1.7**
baz=5.0
**HATJ Hateruma jima 2.73 49** *e*P **Pn 02 25 03.1 +0.7**
**TWB1 Santiao Chiao 2.75 8** *e*P **Pn 02 25 03.7 +0.9**
baz=8.0
**NWF Wu-fen Shan 2.79 4** P **Pn 02 25 04.8 +1.4**
baz=4.0
**WFSB Wu-fen Shan 2.79 4** *e*P **Pn 02 25 05.1 +1.8**
baz=4.0
**SXI1 Grass Mountain 2.82 6** *e*P **Pn 02 25 05.1 +1.3**
baz=6.0
**IRIF Iriomote-Funau 2.86 44** *e*P **Pn 02 25 04.9 +0.7**
**JKRS Kuro-shima 2.98 49** *e*P **Pn 02 25 06.7 +0.8**
**JIJ Ishigaki jima 3.16 48** *e*P **Pn 02 25 08.3 +0.2**
**VWUC VWUC 3.33 325** *e*P **Pn 02 25 10.0 -0.3**
baz=324
**PCYT Pengchaiyu 3.38 8** *e*P **Pn 02 25 11.4 +0.4**
baz=8.0
**PTMZ Houxiangcun 3.55 321** *e*P **Pn 02 25 13.6 +0.3**
baz=320
**JCJ Chichijima 19.34 71** P **P 02 28 34.7 -1.1**
**MAJO Matsushiro 20.27 42** P **P 02 28 47.3 +1.6**
MAJO IAmb IAmb 02 29 09.7
comp=Z,16nm,1.5s
**MJB9 Matsu-Tunnel 20.27 42** P **P 02 28 47.3 +1.7**
MJB9 IAmb IAmb 02 29 09.7
comp=Z,14nm,1.4s
**JKA Kamikawa-asahi 27.86 34** P **P 02 30 00.2 +2.3**
**SONM Songino Array 28.26 338** P **P 02 30 01.3 -0.2**
comp=Z,0.6nm,0.5s,baz=154,slow=9.2,SNR=4.1
comp=Z,0.6nm,0.5s
**MK31 Makanchi Array 39.96 317** P **P 02 31 43.1 +0.9**
**MKAR Makanchi Array 39.96 317** P **P 02 31 42.1 -0.2**
**MKAR Makanchi Array 39.96 317** P **P 02 31 43.2 +1.0**
comp=Z,1.3nm,0.4s,baz=111,slow=10,SNR=21
MKAR PcP **PcP 02 33 44.6 -0.6**
comp=Z,0.3nm,0.5s,baz=77,slow=2.6,SNR=3.8
comp=Z,1.3nm,0.4s
**MAKZ Makanchi 40.16 317** P **P 02 31 43.9 0.0**
**ZAA0 Zalesovo Array 42.04 328** P **P 02 31 58.8 -0.3**
ZAA0 IAmb IAmb 02 31 59.8
comp=Z,5.5nm,0.6s
**ZALV Zalesovo Beam 42.04 328** P **P 02 31 58.8 -0.3**
**ZALV Zalesovo Beam 42.04 328** P **P 02 31 59.3 +0.2**
comp=Z,5.6nm,0.4s,baz=117,slow=8.2,SNR=19
comp=Z,5.6nm,0.4s
**BOOM Boomskoye usch 42.88 309** P **P 02 32 06.3 0.0**
**WRA Warramunga Arr 43.77 162** P **P 02 32 10.8 -2.7**
comp=Z,1.8nm,1.3s,baz=349,slow=10.0,SNR=2.3
comp=Z,1.8nm,1.3s
**KURK Kurchatov 43.78 321** P **P 02 32 13.3 +0.1**
KURK IAmb IAmb 02 32 14.6
comp=Z,3.0nm,0.9s
**KURBB Kurchatov Arra 43.80 321** P **P 02 32 14.1 +0.8**
comp=Z,1.8nm,0.7s,baz=116,slow=7.8,SNR=12
comp=Z,1.8nm,0.7s
**KK31 Karatay Array 46.91 309** P **P 02 32 38.5 +0.4**
**KKAR Karatay Array 46.91 309** P **P 02 32 37.7 -0.4**
**ABKAR Akbulak array 55.03 315** P **P 02 33 38.9 +0.3**
**ABKAR Akbulak array 55.03 315** P **P 02 33 38.7 +0.1**
ABKAR IAmb IAmb 02 34 02.0
comp=Z,3.3nm,1.5s
**ARU Arti 56.84 324** P **P 02 33 51.3 -0.2**
ARU IAmb IAmb 02 33 52.0
comp=Z,3.7nm,0.9s
**N15K Kwethluk River 65.17 33** P **P 02 34 47.1 -0.6**
**KBZ Khabaz 66.95 309** P **P 02 35 00.7 +1.5**
comp=Z,2.8nm,0.8s,baz=62,slow=5.8,SNR=4.9
comp=Z,2.8nm,0.8s
**J20K Nowinta River 67.72 28** P **P 02 35 04.0 +0.2**
J20K IAmb IAmb 02 35 16.3
comp=Z,3.2nm,1.2s
**H21K Melozitna Rive 68.15 26** P **P 02 35 06.5 +0.1**
H21K IAmb IAmb 02 35 31.1
comp=Z,4.4nm,1.4s
**BPAW Bear Paw Mtn. 69.11 28** P **P 02 35 12.2 -0.3**
BPAW IAmb IAmb 02 35 20.8
comp=Z,4.9nm,1.4s
**PWL Port Wells 70.87 31** P **P 02 35 22.6 -0.7**
**BMAR Burnt Mountain 71.12 24** P **P 02 35 24.9 +0.2**
**ARCES ARCESS Array B 71.43 338** P **P 02 35 25.5 -1.0**
comp=Z,0.7nm,0.6s,baz=59,slow=8.7,SNR=4.2
comp=Z,0.7nm,0.6s
**FINES FINESS Array B 73.26 330** P **P 02 35 36.5 -0.9**
comp=Z,2.7nm,0.9s,baz=29,slow=3.2,SNR=7.8
comp=Z,2.7nm,0.9s
**GERES GERESS Array B 84.53 321** P **P 02 36 39.9 +0.5**
comp=Z,0.5nm,0.6s,baz=104,slow=4.1,SNR=3.9
comp=Z,0.5nm,0.6s

**IDC 11 02:32:57.3±7.0, 6°25S×141°87E, h0km, mb3.3/1, mbtmp3.2/3, ML3.2/2, MS3.0/1, Error ellipse: s-maj=247.3km s-min=37.5km az=95.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **15.45** | **208** | Pn | Pn | 02 36 35.4 | -1.4 |
| | 0.1nm,0.3s,baz=29,slow=13,SNR=5.5 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **18.94** | **203** | P | Pn | 02 37 20.4 | -0.2 |
| | baz=31,slow=10,SNR=5.5 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **50.14** | **1** | LR | LR | 03 02 33.7 | |
| | comp=Z,16nm,21.9s,baz=348,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **74.50** | **322** | P | P | 02 44 37.9 | +0.2 |
| | 0.1nm,0.4s,baz=134,slow=6.2,SNR=1.9 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **11** 02:34:14.1±1.5, 43°.95N×149°.39E, h0km, mb3.5/4, mbtmp3.5/4, MS2.8/1, Error ellipse: s-maj=47.3km s-min=37.3km az=39.0*
*JMA **11** 02:34:17.9±0.6, 44°.N±3°×15°0E±°, h30km, MV3.7/10, SE OFF ETOROFU*
*SKHL **11** 02:34:20.5±0.4, 44°.10N×149°.40E, h33km±4km, mb4.2/3*
**ISC 11 02:34:20.0±3.4, 44°02N±0°.10×149°4E±0°.2, h41km±30km, n18, σ1°§03/24, mb3.6/4, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.65** | **318** | *e*P | **Pn** | **02 34 46.0** | **-0.4** |
| KUR | | | | AMB | AMB | 02 34 49.1 | |
| | 150nm,0.5s | | | | | | |
| KUR | | | | *i* S | **Sn** | **02 35 05.5** | **-0.8** |
| KUR | | | | A | A | 02 35 09.1 | |
| | 330nm,0.5s | | | | | | |
| KUR | | | | A | A | 02 35 09.1 | |
| | 410nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.88** | **266** | *e*P | **Pn** | **02 34 49.8** | **+0.2** |
| SHO | | | | AMB | AMB | 02 34 51.1 | |
| | 40nm,0.2s | | | | | | |
| SHO | | | | *i* S | **Sn** | **02 35 12.0** | **-0.1** |
| SHO | | | | A | A | 02 35 14.7 | |
| | 300nm,0.4s | | | | | | |
| SHO | | | | A | A | 02 35 14.7 | |
| | 180nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.57** | **272** | *e*P | **Pn** | **02 34 59.9** | **+0.8** |
| YUK | | | | AMB | AMB | 02 35 04.2 | |
| | 70nm,0.6s | | | | | | |
| YUK | | | | *e*S | **Sn** | **02 35 29.2** | **+0.1** |
| YUK | | | | A | A | 02 35 32.3 | |
| | 160nm,0.5s | | | | | | |
| YUK | | | | A | A | 02 35 32.3 | |
| | 200nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.75** | **258** | *e*P | **Pn** | **02 35 01.1** | **-0.4** |
| NEM2 | | | | *e*S | **Sn** | **02 35 33.1** | **-0.4** |
| **NMR** | **Nemuro--Hokkai** | **2.76** | **258** | *e*P | **Pn** | **02 35 02.3** | **+0.6** |
| NMR | | | | *i* S | **Sn** | **02 35 33.7** | **-0.1** |
| **JRA** | **Rausu** | **3.11** | **270** | *e*P | **Pn** | **02 35 07.7** | **+1.3** |
| **JNK** | **Nakash** | **3.44** | **264** | *e*P | **Pn** | **02 35 12.1** | **+1.2** |
| **AKK** | **Akkeshi** | **3.48** | **255** | *e*P | **Pn** | **02 35 12.8** | **+1.2** |
| AKK | | | | *e*S | **Sn** | **02 35 51.6** | **0.0** |
| **JAK** | **Akkeshi** | **3.59** | **255** | *e*P | **Pn** | **02 35 13.2** | **+0.2** |
| JAK | | | | *e*S | **Sn** | **02 35 54.3** | **+0.1** |
| **JAR** | **Ashorobuto** | **4.17** | **262** | *e*P | **Pn** | **02 35 22.0** | **+1.0** |
| **JCH** | **Churui** | **4.64** | **255** | *e*P | **Pn** | **02 35 28.8** | **+1.3** |
| **JNBK** | **Urakawa-nobuka** | **5.18** | **253** | *e*P | **Pn** | **02 35 35.1** | **+0.1** |
| **JANG** | **Nango** | **6.91** | **241** | *e*S | **Sn** | **02 37 12.7** | **-3.4** |
| **JNU** | **Nakatsue** | **18.09** | **239** | LR | LR | 02 45 59.4 | |
| | comp=Z,29nm,18.4s,baz=22,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.92** | **298** | P | **P** | **02 42 38.3** | **-0.2** |
| | 0.7nm,0.8s,baz=68,slow=8.0,SNR=6.1 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.83** | **304** | P | **P** | **02 42 45.4** | **-0.1** |
| | 0.3nm,0.4s,baz=78,slow=7.9,SNR=1.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.13** | **196** | P | **P** | **02 44 56.2** | **-0.4** |
| | 0.7nm,0.9s,baz=14,slow=7.2,SNR=3.0 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.12** | **58** | P | **P** | **02 46 31.9** | **+0.6** |
| | 0.2nm,0.6s,baz=316,slow=3.8,SNR=3.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**GUC 11 02:43:09.8±0.9, 29°.47S×71°.44W, h48km±8km, ML3.5, 2C-3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO05** | **La Serena** | **0.48** | **158** | *i*P | Pn | 02 43 21.2 | +0.5 |
| CO05 | | | | *e*S | Sn | 02 43 29.3 | +0.8 |
| CO05 | | | | IAML | | 02 43 30.7 | |
| | comp=E,6μm,0.4s | | | | | | |
| **LCO** | **Las Campanas** | **0.79** | **55** | *e*P | Pn | 02 43 25.0 | 0.0 |
| LCO | | | | *e*S | Sn | 02 43 35.7 | -0.3 |
| **GO04** | **Tololo Observa** | **0.89** | **142** | *e*P | Pn | 02 43 27.0 | +0.7 |
| GO04 | | | | *e*S | Sn | 02 43 39.8 | +1.4 |
| **AC05** | **El Transito** | **1.20** | **58** | ↓*i*P | Pn | 02 43 31.2 | +0.8 |
| AC05 | | | | *e*S | Sn | 02 43 47.6 | +1.9 |
| AC05 | | | | IAML | | 02 43 48.2 | |
| | comp=N,930nm,0.2s | | | | | | |
| **CO06** | **Fray Jorge** | **1.21** | **188** | ↓*i*P | Pn | 02 43 30.7 | +0.3 |
| CO06 | | | | *e*S | Sn | 02 43 46.4 | +0.8 |
| CO06 | | | | IAML | | 02 43 49.7 | |
| | comp=E,1μm,0.2s | | | | | | |
| **CO01** | **Juntas del Tor** | **1.27** | **114** | *e*P | Pn | 02 43 32.9 | +1.5 |
| **AC04** | **Llanos de Chal** | **1.30** | **14** | ↑*i*P | Pn | 02 43 31.7 | +0.1 |
| AC04 | | | | IAML | | 02 43 52.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **1.51** | **155** | ↓*i*P | Pn | 02 43 35.5 | +1.0 |
| CO03 | | | | *e*S | Sn | 02 43 54.8 | +1.7 |
| CO03 | | | | IAML | | 02 43 55.5 | |
| | comp=N,916nm,0.2s | | | | | | |
| **CO02** | **Combarbal** | **1.77** | **168** | *i* P | Pn | 02 43 39.1 | +1.0 |
| CO02 | | | | *e*S | Sn | 02 44 01.4 | +1.9 |
| **GO03** | **Copiap** | **2.15** | **30** | *e*P | Pn | 02 43 44.0 | +0.7 |
| GO03 | | | | IAML | | 02 44 20.4 | |
| | comp=N,275nm,0.2s | | | | | | |
| **AC06** | **Mina Casimiro** | **2.31** | **25** | *e*P | Pn | 02 43 46.0 | +0.5 |
| AC06 | | | | IAML | | 02 44 26.2 | |
| | comp=E,268nm,0.6s | | | | | | |
| **VA06** | **Catapilco** | **3.08** | **178** | *e*P | Pn | 02 43 56.7 | +0.7 |
| VA06 | | | | IAML | | 02 44 48.8 | |
| | comp=E,218nm,0.2s | | | | | | |
| **VA03** | **San Esteban** | **3.37** | **167** | *e*P | Pn | 02 44 01.9 | +1.9 |
| VA03 | | | | IAML | | 02 44 58.3 | |
| | comp=E,213nm,0.2s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.40** | **13** | *e*P | Pn | 02 43 59.1 | -1.2 |
| AC01 | | | | IAML | | 02 45 03.6 | |
| | comp=E,82nm,0.5s | | | | | | |

*IDC **11** 02:45:12.8±0.5, 1°.35S×15°.81W, h0km, mb4.4/18, mbtmp4.4/19, ML3.8/1, MS3.9/41, Error ellipse: s-maj=22.8km s-min=13.0km az=122.0*
*NEIC **11** 02:45:14.7±1.6, 1°.42S±0°.09×15°.7W±0°.1, h10km±1km, mb4.9/58, Error ellipse: s-maj=18.2km s-min=14.4km az=298.0*
**ISC 11 02:45:15.0±0.4, 1°36S±0°.07×15°62W±0°.08, h12km, n181, σ1§18/143, mb4.7/66, MS3.9/39, 13C-7D, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N2** | **ASCENSION HYDR** | **6.53** | **170** | Pn | **Pn** | **02 46 49.0** | **-1.6** |
| | baz=350,slow=12 | | | | | | |
| H10N2 | | | | T | T | 02 53 27.5 | |
| | baz=348,slow=74,SNR=283 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **6.54** | **170** | Pn | **Pn** | **02 46 49.2** | **-1.5** |
| | baz=350,slow=12 | | | | | | |
| H10N3 | | | | T | T | 02 53 28.2 | |
| | baz=348,slow=74,SNR=242 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **6.54** | **170** | Pn | **Pn** | **02 46 48.8** | **-2.1** |
| | baz=350,slow=12 | | | | | | |
| H10N1 | | | | T | T | 02 53 28.9 | |
| | baz=348,slow=74,SNR=601 | | | | | | |
| **ASCN** | **Ascension** | **6.65** | **169** | Pn | **Pn** | **02 46 50.8** | **-1.8** |
| **H10S3** | **ASCENSION HYDR** | **7.61** | **173** | T | T | 02 54 47.4 | |
| | baz=352,slow=74,SNR=156 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **7.61** | **173** | T | T | 02 54 48.1 | |
| | baz=228,slow=74,SNR=128 | | | | | | |
| **DBIC** | **Dimbokro** | **13.38** | **53** | Pn | **Pn** | **02 48 24.8** | **0.0** |
| **DBIC** | **Dimbokro** | **13.38** | **53** | Pn | **Pn** | **02 48 25.0** | **+0.2** |
| | 0.5nm,0.3s,baz=246,slow=12,SNR=12 | | | | | | |
| DBIC | | | | Sn | Sn | 02 50 46.0 | -7.6 |
| | 0.6nm,0.3s,baz=301,slow=5.9,SNR=1.9 | | | | | | |
| DBIC | | | | LR | LR | 02 52 38.9 | |
| | comp=Z,695nm,20.6s,baz=244,slow=33 | | | | | | |
| | 33nm,1.1s | | | | | | |
| **BBTS** | **Babate** | **15.94** | **357** | LR | LR | 02 54 05.7 | |
| | comp=Z,348nm,20.9s,baz=68,slow=34 | | | | | | |
| **RCBR** | **Riachuelo** | **20.72** | **257** | P | **P** | **02 49 53.0** | **-2.6** |
| **RCBR** | **Riachuelo** | **20.72** | **257** | LR | LR | 02 56 15.3 | |
| | comp=Z,145nm,18.4s,baz=96,slow=32 | | | | | | |
| **NBAN** | **Anadia - AL** | **22.14** | **247** | *e*P | **P** | **02 50 15.3** | **+4.4** |
| **TORD** | **Torodi Ar. Bea** | **22.42** | **49** | P | **P** | **02 50 14.8** | **+1.0** |
| | 15nm,0.9s,baz=233,slow=9.8,SNR=30 | | | | | | |
| | 15nm,0.9s | | | | | | |
| **NBLA** | **Lagarto - SE** | **24.01** | **246** | *e*P | **P** | **02 50 32.4** | **+2.5** |
| **SDBA** | **SAO DESIDERIO** | **31.03** | **248** | *e*P | **P** | **02 51 36.1** | **+3.1** |
| **TAM** | **Tamanrasset** | **31.63** | **39** | P | **P** | **02 51 37.9** | **-0.5** |
| **BDFB** | **Brasilia** | **34.96** | **244** | P | **P** | **02 52 05.6** | **-1.8** |
| **BDFB** | **Brasilia** | **34.96** | **244** | P | **P** | **02 52 06.4** | **-1.0** |
| | 4.8nm,0.9s,baz=34,slow=2.5,SNR=4.3 | | | | | | |
| | 4.8nm,0.9s | | | | | | |
| **MDT** | **Midelt** | **35.55** | **16** | LR | LR | 03 04 48.1 | |
| | comp=Z,234nm,21.0s,baz=210,slow=33 | | | | | | |
| **IPMB** | **Ipameri, GO** | **36.02** | **241** | *e*P | **P** | **02 52 15.6** | **-0.8** |
| **TSUM** | **Tsumeb** | **37.04** | **121** | LR | LR | 03 04 24.3 | |
| | comp=Z,153nm,22.0s,baz=321,slow=31 | | | | | | |
| **ITTB** | **Itaituba** | **40.17** | **265** | *e*P | **P** | **02 52 54.6** | **+3.1** |
| **TATN** | **Tataouine** | **41.84** | **34** | P | **P** | **02 53 07.5** | **+2.5** |
| TATN | | | | IAmb | IAmb | 02 53 09.7 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **PAB** | **San Pablo** | **42.00** | **13** | P | **P** | **02 53 05.8** | **-0.5** |
| **ESDC** | **Sonseca Array** | **42.21** | **13** | PP | **PP** | **02 54 43.9** | **-2.0** |
| | comp=Z,1.4nm,1.0s,baz=200,slow=9.6,SNR=5.8 | | | | | | |
| ESDC | | | | LR | LR | 03 10 54.0 | |
| | comp=Z,132nm,19.7s,baz=193,slow=36 | | | | | | |
| **KEST** | **Kesra** | **43.64** | **30** | P | **P** | **02 53 20.1** | **+0.5** |
| **KEST** | **Kesra** | **43.64** | **30** | P | **P** | **02 53 21.7** | **+2.1** |
| | comp=Z,7.6nm,0.9s,baz=202,slow=4.7,SNR=8.5 | | | | | | |
| KEST | | | | LR | LR | 03 11 35.7 | |
| | comp=Z,332nm,21.7s,baz=174,slow=36 | | | | | | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| **BOAV** | **Boa Vista** | **45.05** | **275** | P | **P** | **02 53 30.6** | **-0.6** |
| **MACA** | **Manacapuru-AM** | **45.06** | **267** | P | **P** | **02 53 32.4** | **+1.0** |
| MACA | | | | IAmb | IAmb | 02 53 43.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SUR** | **Sutherland** | **46.12** | **136** | P | **P** | **02 53 40.2** | **+0.5** |
| **LBTB** | **Lobatse** | **46.20** | **124** | P | **P** | **02 53 40.1** | **-0.2** |
| **LBTB** | **Lobatse** | **46.20** | **124** | LR | LR | 03 11 13.9 | |
| | comp=Z,178nm,18.2s,baz=321,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **46.35** | **90** | P | **P** | **02 53 42.2** | **+0.5** |
| MBAR | | | | IAmb | IAmb | 02 53 46.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MBAR** | **Mbarara** | **46.35** | **90** | LR | LR | 03 11 13.8 | |
| | comp=Z,330nm,19.9s,baz=258,slow=34 | | | | | | |
| **WDD** | **Wied Dalam** | **46.47** | **34** | P | **P** | **02 53 43.0** | **+0.9** |
| **BBSD** | **Serra de San D** | **46.94** | **248** | *e*P | **P** | **02 53 48.4** | **+2.3** |
| **SIV** | **San Ignacio** | **47.08** | **249** | LR | LR | 03 11 23.6 | |
| | comp=Z,376nm,21.8s,baz=112,slow=34 | | | | | | |
| **CPUP** | **Villa Florida** | **47.15** | **235** | P | **P** | **02 53 47.5** | **-0.1** |
| | comp=Z,2.9nm,0.9s,baz=90,slow=6.1,SNR=1.9 | | | | | | |
| CPUP | | | | LR | LR | 03 11 03.8 | |
| | comp=Z,321nm,20.8s,baz=46,slow=33 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **47.48** | **129** | P | **P** | **02 53 50.1** | **-0.1** |
| **BOSA** | **Boshof** | **47.48** | **129** | P | **P** | **02 53 50.6** | **+0.4** |
| | comp=Z,10.0nm,0.6s,baz=305,slow=7.9,SNR=31 | | | | | | |
| BOSA | | | | LR | LR | 03 12 03.2 | |
| | comp=Z,147nm,18.7s,baz=305,slow=34 | | | | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **VAE** | **Valguarnera** | **47.60** | **33** | LR | LR | 03 13 34.5 | |
| | comp=Z,233nm,18.7s,baz=198,slow=36 | | | | | | |
| **SAML** | **Samuel** | **47.92** | **259** | *e*P | P | 02 53 58.2 | +4.4 |
| **CEL** | **Celeste** | **48.97** | **33** | P | **P** | **02 54 02.0** | **+0.5** |
| CEL | | | | IAmb | IAmb | 02 54 05.0 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **TIP** | **Timpagrande** | **50.10** | **33** | P | **P** | **02 54 10.6** | **+0.5** |
| **PCRV** | **Puerto La Cruz** | **50.11** | **284** | LR | LR | 03 11 49.2 | |
| | comp=Z,87nm,21.4s,slow=32 | | | | | | |
| **CUC** | **Castrocucco** | **50.19** | **31** | P | **P** | **02 54 10.9** | **+0.1** |
| **GRHM** | **Grahamstown, E** | **50.56** | **133** | P | **P** | **02 54 13.5** | **-0.3** |
| **CESX** | **Cesi** | **50.61** | **27** | P | **P** | **02 54 13.9** | **+0.1** |
| **FDMO** | **Fiordimonte** | **51.18** | **27** | P | **P** | **02 54 18.4** | **+0.2** |
| FDMO | | | | IAmb | IAmb | 02 54 21.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **51.31** | **27** | P | **P** | **02 54 18.4** | **-0.7** |
| GUMA | | | | IAmb | IAmb | 02 54 35.0 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **DAVA** | **Damuels** | **53.34** | **21** | *i* P | **P** | **02 54 34.2** | **-0.1** |
| | comp=Z,11nm,1.0s | | | | | | |
| **FETA** | **Feichten** | **53.43** | **22** | *i* P | **P** | **02 54 35.0** | **0.0** |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **FNA** | **Florina** | **53.77** | **35** | P | **P** | **02 54 37.6** | **+0.1** |
| FNA | | | | IAmb | IAmb | 02 54 39.9 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **53.78** | **251** | P | **P** | **02 54 37.0** | **-1.7** |
| **LPAZ** | **La Paz** | **53.78** | **251** | P | **P** | **02 54 37.0** | **-1.7** |
| | comp=Z,1.1nm,0.8s,baz=0.0,slow=4.0,SNR=3.6 | | | | | | |
| LPAZ | | | | PcP | **PcP** | **02 55 43.1** | **-1.5** |
| | comp=Z,1.2nm,0.9s,baz=55,slow=1.8,SNR=2.6 | | | | | | |
| LPAZ | | | | LR | LR | 03 15 33.8 | |
| | comp=Z,286nm,22.0s,baz=76,slow=34 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **53.78** | **251** | *e*P | **P** | **02 54 40.5** | **+1.8** |
| **SQTA** | **Sankt Quirin** | **53.78** | **22** | *e*P | **P** | **02 54 37.5** | **0.0** |
| | comp=Z,10nm,1.1s | | | | | | |
| **PUK** | **Puka** | **53.81** | **32** | P | **P** | **02 54 37.5** | **-0.3** |
| PUK | | | | IAmb | IAmb | 02 55 51.4 | |
| | comp=Z,23nm,1.7s | | | | | | |
| **RETA** | **Reutte** | **53.83** | **22** | *e*P | **P** | **02 54 38.0** | **+0.2** |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MOTA** | **Moosalm** | **53.84** | **22** | *e*P | **P** | **02 54 36.8** | **-1.2** |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **ABTA** | **Abfaltersbach** | **53.90** | **24** | *e*P | **P** | **02 54 39.8** | **+1.4** |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **WTTA** | **Wattenberg** | **53.98** | **23** | *i* P | **P** | **02 54 39.0** | **-0.1** |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **WATA** | **Walderalm** | **54.02** | **23** | *e*P | **P** | **02 54 38.9** | **-0.4** |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **PRED** | **Cave del Predi** | **54.09** | **25** | P | **P** | **02 54 39.8** | **+0.1** |
| **MYKA** | **Terra Mystica** | **54.27** | **25** | *e*P | **P** | **02 54 43.1** | **+2.1** |
| | comp=Z,3.4nm,0.9s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LESA | Schwarzleotal | 54.52 | 23 | *e*P | | P | 02 54 42.4 | -0.5 | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| OBKA | Obir | 54.55 | 25 | *i* P | | P | 02 54 44.8 | +1.6 | |
| | comp=Z,5.2nm,1.5s | | | | | | | | |
| SOKA | Soboth | 54.89 | 25 | *e*P | | P | 02 54 46.4 | +0.8 | |
| | comp=Z,5.5nm,1.0s | | | | | | | | |
| FURI | Furi | 55.05 | 78 | LR | | LR | 03 16 26.0 | | |
| | comp=Z,132nm,19.6s,baz=264,slow=34 | | | | | | | | |
| BIOA | Bad Ischl, Aus | 55.12 | 24 | *e*P | | P | 02 54 46.7 | -0.4 | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| MOA | Molln | 55.50 | 24 | *e*P | | P | 02 54 50.1 | +0.2 | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| ARSA | Arzberg | 55.55 | 25 | *e*P | | P | 02 54 51.1 | +0.8 | |
| | comp=Z,3.1nm,0.9s | | | | | | | | |
| SDV | Santo Domingo | 55.75 | 282 | LR | | LR | 03 15 26.5 | | |
| | comp=Z,58nm,19.8s,baz=104,slow=33 | | | | | | | | |
| LVC | Limon Verde | 55.86 | 244 | LR | | LR | 03 17 31.0 | | |
| | comp=Z,108nm,21.7s,baz=56,slow=35 | | | | | | | | |
| BOVS | Bovan | 55.87 | 32 | ⇑P | | P | 02 54 53.0 | +0.4 | |
| PB09 | IPOC Station P | 55.96 | 245 | P | | P | 02 54 54.3 | +0.4 | |
| PB09 | | | | IAmb | IAmb | | 02 55 01.4 | | |
| | comp=Z,24nm,1.3s | | | | | | | | |
| TRQA | Tornquist | 56.01 | 224 | P | | P | 02 54 55.2 | +1.5 | |
| TRQA | | | | IAmb | IAmb | | 02 56 14.6 | | |
| | comp=Z,30nm,1.6s | | | | | | | | |
| GEC2 | GERESS Array S | 56.07 | 23 | P | | P | 02 54 53.9 | -0.2 | |
| GERES | GERESS Array B | 56.07 | 23 | P | | P | 02 54 53.4 | -0.7 | |
| GERES | GERESS Array B | 56.07 | 23 | P | | P | 02 54 54.4 | +0.3 | |
| | comp=Z,3.7nm,1.0s,baz=181,slow=15,SNR=13 | | | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | | | |
| CONA | Conrad Observa | 56.22 | 25 | *e*P | | P | 02 54 56.1 | +1.0 | |
| | comp=Z,6.1nm,1.1s | | | | | | | | |
| RONA | Rosalia, Austr | 56.23 | 25 | *i* P | | P | 02 54 56.3 | +1.1 | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| KHC | Kasperske Hory | 56.26 | 23 | *e*P | | P | 02 54 56.2 | +0.9 | |
| CKRC | Cesky Krumlov | 56.29 | 23 | *e*P | | P | 02 54 55.6 | +0.1 | |
| PATCX | Punta Patache | 56.57 | 246 | P | | P | 02 54 58.1 | 0.0 | |
| PATCX | | | | IAmb | IAmb | | 02 55 03.8 | | |
| | comp=Z,25nm,1.2s | | | | | | | | |
| ZVC | Zvikov | 56.74 | 23 | *e*P | | P | 02 54 58.8 | +0.1 | |
| GO02 | Mina Guanaco | 57.12 | 241 | P | | P | 02 55 01.9 | -0.4 | |
| BZS | Buzias | 57.19 | 30 | ⇑P | | P | 02 55 02.6 | +0.7 | |
| EIL | Elat | 57.25 | 53 | LR | | LR | 03 20 25.3 | | |
| | comp=Z,163nm,18.7s,baz=248,slow=37 | | | | | | | | |
| KRUC | Moravsky | 57.33 | 24 | *e*P | | P | 02 55 02.7 | -0.1 | |
| EKA | Eskdalemuir Ar | 57.42 | 8 | P | | P | 02 55 03.3 | 0.0 | |
| | comp=Z,2.9nm,0.9s,baz=185,slow=6.9,SNR=4.9 | | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| VRAC | Vranov | 57.60 | 24 | *e*P | | P | 02 55 04.2 | -0.6 | |
| SIRR | Siria | 57.66 | 30 | ⇓P | | P | 02 55 06.8 | +1.5 | |
| JAVC | Velka Javorina | 57.71 | 25 | *e*P | | P | 02 55 06.8 | +1.2 | |
| BRG | Berggiesshubel | 57.81 | 22 | *e*P | | P | 02 55 06.6 | +0.4 | |
| BRG | | | | Amp | | | 02 55 09.4 | | |
| | comp=Z,4.2nm,1.0s | | | | | | | | |
| VYHS | Vyhne | 57.94 | 26 | *e*P | | P | 02 55 07.8 | +0.6 | |
| PSZ | Piszkesteto | 58.00 | 27 | P | | P | 02 55 07.0 | -0.6 | |
| PSZ | | | | IAmb | IAmb | | 02 55 09.5 | | |
| | comp=Z,6.7nm,0.9s | | | | | | | | |
| KRLC | Kraliky | 58.27 | 24 | *e*P | | P | 02 55 10.2 | +0.7 | |
| DPC | Dobruska-Polom | 58.30 | 23 | *e*P | | P | 02 55 10.4 | +0.6 | |
| MORC | Moravsky Berou | 58.36 | 25 | P | | P | 02 55 09.5 | -0.6 | |
| MORC | Moravsky Berou | 58.36 | 25 | *e*P | | P | 02 55 10.6 | +0.5 | |
| DRGR | | 58.55 | 30 | ⇓P | | P | 02 55 12.6 | +1.0 | |
| ARR | Arges | 58.59 | 32 | ⇑P | | P | 02 55 13.3 | +1.4 | |
| MARR | Marisel-Cluj | 58.68 | 30 | ⇓P | | P | 02 55 13.6 | +1.1 | |
| VOIR | | 58.86 | 32 | ⇓P | | P | 02 55 14.6 | +0.8 | |
| ROSC | El Rosal | 58.97 | 276 | LR | | LR | 03 18 50.9 | | |
| | comp=Z,139nm,19.2s,baz=72,slow=34 | | | | | | | | |
| AC04 | Llanos de Chal | 59.24 | 238 | P | | P | 02 55 16.1 | -0.6 | |
| MLR | Muntele Rosu | 59.37 | 33 | P | | P | 02 55 17.3 | -0.1 | |
| MLR | | | | IAmb | IAmb | | 02 55 19.6 | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| MLR | Muntele Rosu | 59.37 | 33 | LR | | LR | 03 23 13.5 | | |
| | comp=Z,129nm,19.5s,baz=238,slow=38 | | | | | | | | |
| MLR | Muntele Rosu | 59.37 | 33 | ⇓P | | P | 02 55 17.9 | +0.5 | |
| OJC | Ojcow | 59.65 | 26 | P | | P | 02 55 19.0 | 0.0 | |
| OJC | | | | IAmb | IAmb | | 02 55 20.4 | | |
| | comp=Z,6.5nm,0.9s | | | | | | | | |
| OZUR | | 59.68 | 32 | ⇑P | | P | 02 55 19.9 | +0.5 | |
| TURR | Turia | 59.77 | 32 | ⇑P | | P | 02 55 21.2 | +1.2 | |
| KOLS | Kolonicke sedl | 59.83 | 28 | *e*P | | P | 02 55 21.8 | +1.5 | |
| PLOR | Plostina | 59.98 | 33 | ⇑P | | P | 02 55 21.7 | +0.2 | |
| VRI | Vrincioaia | 60.04 | 33 | ⇑P | | P | 02 55 21.7 | -0.1 | |
| ONER | Baraj Valea Uz | 60.15 | 32 | ⇓P | | P | 02 55 23.9 | +1.3 | |
| BURAR | Bucovina Array | 60.37 | 31 | P | | P | 02 55 23.9 | -0.3 | |
| BURAR | Bucovina Array | 60.37 | 31 | ⇑P | | P | 02 55 25.4 | +1.3 | |
| BUR08 | Bucovina Ar. S | 60.38 | 31 | P | | P | 02 55 24.4 | +0.1 | |
| BUR08 | | | | IAmb | IAmb | | 02 55 40.9 | | |
| | comp=Z,10nm,1.3s | | | | | | | | |
| BRTR | Keskin Array B | 60.78 | 42 | P | | P | 02 55 28.8 | +1.6 | |
| | comp=Z,1.9nm,0.7s,baz=224,slow=6.9,SNR=6.3 | | | | | | | | |
| BRTR | | | | LR | | LR | 03 22 51.5 | | |
| | comp=Z,55nm,19.9s,baz=268,slow=37 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| NNA | Nana | 61.59 | 257 | LR | | LR | 03 21 36.0 | | |
| | comp=Z,92nm,18.5s,baz=50,slow=36 | | | | | | | | |
| ATAH | Atahualpa | 62.82 | 263 | LR | | LR | 03 21 48.9 | | |
| | comp=Z,234nm,20.8s,baz=90,slow=35 | | | | | | | | |
| PLCA | Paso Flores | 63.14 | 224 | P | | P | 02 55 45.7 | +2.7 | |
| | comp=Z,2.3nm,0.9s,baz=33,slow=6.2,SNR=5.0 | | | | | | | | |
| PLCA | | | | LR | | LR | 03 23 36.4 | | |
| | comp=Z,64nm,18.1s,baz=50,slow=37 | | | | | | | | |
| SUW | Suwalki | 63.84 | 24 | P | | P | 02 55 46.7 | -0.5 | |
| KIEV | Kiev | 64.36 | 30 | P | | P | 02 55 50.1 | -0.5 | |
| KIEV | | | | IAmb | IAmb | | 02 55 51.7 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| AKASG | Malin Array Be | 64.37 | 30 | P | | P | 02 55 50.2 | -0.6 | |
| AKASG | | | | IAmb | IAmb | | 02 55 51.5 | | |
| | comp=Z,6.7nm,1.1s | | | | | | | | |
| AKASG | Malin Array Be | 64.37 | 30 | P | | P | 02 55 50.8 | +0.1 | |
| | comp=Z,5.7nm,0.9s,baz=231,slow=6.8,SNR=14 | | | | | | | | |
| AKASG | | | | LR | | LR | 03 25 22.2 | | |
| | comp=Z,91nm,20.0s,baz=234,slow=37 | | | | | | | | |
| | comp=Z,5.7nm,0.9s | | | | | | | | |
| AKBB | Malin Array Si | 64.37 | 30 | P | | P | 02 55 50.0 | -0.7 | |
| LL04 | Puerto Octay | 64.51 | 225 | P | | P | 02 55 54.4 | +2.5 | |
| LL03 | Petrohue | 64.59 | 224 | P | | P | 02 55 54.1 | +1.7 | |
| LL02 | Futaleuf | 65.01 | 222 | P | | P | 02 55 54.3 | -0.8 | |
| LL01 | San Ignacio de | 65.07 | 223 | P | | P | 02 55 55.0 | -0.5 | |
| LL01 | | | | IAmb | IAmb | | 02 56 00.9 | | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| NB2 | NORSAR Subarra | 65.57 | 14 | P | | P | 02 55 58.7 | +0.3 | |
| | comp=Z,1.3nm,0.7s,baz=208,slow=6.9 | | | | | | | | |
| NOA | NORSAR Array B | 65.57 | 14 | P | | P | 02 55 58.6 | +0.2 | |
| | comp=Z,2.8nm,0.8s,baz=209,slow=6.5,SNR=8.4 | | | | | | | | |
| NOA | | | | LR | | LR | 03 24 11.5 | | |
| | comp=Z,54nm,21.2s,baz=210,slow=36 | | | | | | | | |
| BORG | Borgarnes | 66.08 | 357 | LR | | LR | 03 19 43.7 | | |
| | comp=Z,50nm,18.6s,baz=182,slow=31 | | | | | | | | |
| GNI | Garni | 68.66 | 46 | LR | | LR | 03 29 28.2 | | |
| | comp=Z,32nm,18.4s,baz=245,slow=39 | | | | | | | | |
| KBZ | Khabaz | 68.76 | 42 | P | | P | 02 56 19.1 | +0.2 | |
| | comp=Z,4.3nm,0.9s,baz=318,slow=6.2,SNR=5.9 | | | | | | | | |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| VNA1 | Neumayer--Stat | 69.35 | 177 | ⇑P | | P | 02 56 21.3 | -0.8 | |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| VNA2 | Neumayer--Watz | 69.66 | 177 | ⇑P | | P | 02 56 22.9 | -1.1 | |
| | comp=Z,14nm,1.1s,baz=347,slow=6.3 | | | | | | | | |
| VNA3 | Neumayer Olymp | 69.88 | 178 | ⇑P | | P | 02 56 25.3 | -0.1 | |
| | comp=Z,3.6nm,1.0s | | | | | | | | |
| JTS | Las Juntas de | 69.94 | 281 | LR | | LR | 03 25 33.7 | | |
| | comp=Z,25nm,20.9s,baz=90,slow=35 | | | | | | | | |
| FINES | FINESS Array B | 70.24 | 20 | P | | P | 02 56 27.9 | +0.1 | |
| | comp=Z,4.0nm,0.6s,baz=228,slow=4.6,SNR=33 | | | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| SNAA | Sanae | 70.68 | 176 | P | | P | 02 56 29.4 | -1.0 | |
| SNAA | | | | IAmb | IAmb | | 02 56 32.4 | | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| SNAA | Sanae | 70.68 | 176 | ⇑P | | P | 02 56 29.8 | -0.6 | |
| | comp=Z,138nm,1.0s | | | | | | | | |
| SNAA | Sanae | 70.68 | 176 | P | | P | 02 56 29.9 | -0.5 | |
| | comp=Z,6.2nm,1.0s,baz=349,slow=7.5,SNR=14 | | | | | | | | |
| | comp=Z,6.2nm,1.0s | | | | | | | | |
| TROLL | Troll, Antarti | 71.48 | 174 | ⇑P | | P | 02 56 34.7 | -0.6 | |
| | comp=Z,111nm,0.4s | | | | | | | | |
| BG3 | Lake Jocassee | 72.35 | 307 | P | | P | 02 56 40.3 | -0.8 | |
| BG3 | | | | IAmb | IAmb | | 02 56 48.7 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | | |
| TKL | Tuckaleechee C | 73.19 | 308 | LR | | LR | 03 25 53.9 | | |
| | comp=Z,41nm,18.1s,baz=136,slow=33 | | | | | | | | |
| ELIB | Princess Elisa | 74.65 | 168 | *d*P | | P | 02 56 54.4 | +0.3 | |
| SWET | Sewanee | 74.80 | 307 | P | | P | 02 56 55.0 | -0.6 | |
| SWET | | | | IAmb | IAmb | | 02 57 02.3 | | |
| | comp=Z,7.5nm,1.0s | | | | | | | | |
| U49A | Red Boiling Sp | 74.97 | 308 | P | | P | 02 56 55.7 | -0.7 | |
| U49A | | | | IAmb | IAmb | | 02 57 03.5 | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| BELG | Belogornoye | 75.09 | 34 | LR | | LR | 03 32 33.7 | | |
| | comp=Z,36nm,18.1s,baz=244,slow=38 | | | | | | | | |
| ARCES | ARCESS Array B | 75.95 | 14 | P | | P | 02 57 00.4 | -1.0 | |
| | comp=Z,2.6nm,0.7s,baz=235,slow=3.8,SNR=7.7 | | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | | |
| WSAR | Wadi Sarin | 76.09 | 66 | LR | | LR | 03 32 07.9 | | |
| | comp=Z,48nm,19.2s,baz=258,slow=37 | | | | | | | | |
| WVT | Waverly | 76.50 | 308 | P | | P | 02 57 04.3 | -0.9 | |
| BELA | Belgrano 2 | 77.12 | 184 | P | | P | 02 57 08.4 | +0.5 | |
| BELA | | | | IAmb | IAmb | | 02 57 16.1 | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| KIRV | Kirov | 78.41 | 29 | LR | | LR | 03 34 34.9 | | |
| | comp=Z,60nm,18.9s,baz=261,slow=38 | | | | | | | | |
| CCM | Cathedral Cave | 79.55 | 309 | P | | P | 02 57 20.9 | -1.3 | |
| CCM | | | | IAmb | IAmb | | 02 57 28.2 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| CMIG | Matias Romero | 80.14 | 287 | LR | | LR | 03 32 52.0 | | |
| | comp=Z,30nm,19.0s,baz=98,slow=36 | | | | | | | | |
| ARU | Arti | 82.42 | 33 | P | | P | 02 57 36.6 | -0.4 | |
| ARU | | | | IAmb | IAmb | | 02 57 38.2 | | |
| | comp=Z,5.6nm,0.9s | | | | | | | | |
| ARU | Arti | 82.42 | 33 | LR | | LR | 03 36 58.5 | | |
| | comp=Z,47nm,18.6s,baz=294,slow=38 | | | | | | | | |
| MAW | Mawson | 84.36 | 158 | P | | P | 02 57 47.7 | +0.9 | |
| | comp=Z,1.4nm,0.7s,baz=272,slow=4.0,SNR=4.0 | | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | | |
| APMT | Aspermont | 86.14 | 303 | P | | P | 02 57 55.1 | -1.4 | |
| APMT | | | | IAmb | IAmb | | 02 58 03.8 | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| CBKS | Cedar Bluff | 86.25 | 309 | P | | P | 02 57 55.8 | -1.2 | |
| CBKS | | | | IAmb | IAmb | | 02 58 04.1 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| MSTX | Muleshoe | 88.39 | 304 | P | | P | 02 58 06.5 | -1.0 | |
| QSPA | South Pole Qui | 88.72 | 180 | P | | P | 02 58 08.0 | -0.3 | |
| QSPA | | | | IAmb | IAmb | | 02 58 10.8 | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| QSPA | South Pole Qui | 88.72 | 180 | P | | P | 02 58 08.4 | 0.0 | |
| | comp=Z,8.3nm,1.0s,baz=206,slow=2.5,SNR=16 | | | | | | | | |
| | comp=Z,8.3nm,1.0s | | | | | | | | |
| TXAR | Lajitas Array | 88.95 | 299 | P | | P | 02 58 07.2 | -3.0 | |
| | comp=Z,0.5nm,0.9s,baz=109,slow=6.8,SNR=4.3 | | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | | |
| Q24A | Divide | 90.48 | 309 | P | | P | 02 58 15.3 | -2.1 | |
| Q24A | | | | IAmb | IAmb | | 02 58 26.0 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | | |
| AAK | Ala-Archa | 90.99 | 48 | LR | | LR | 03 44 51.2 | | |
| | comp=Z,30nm,18.7s,baz=280,slow=39 | | | | | | | | |
| ANMO | Albuquerque | 91.46 | 305 | LR | | LR | 03 34 22.5 | | |
| | comp=Z,64nm,19.4s,baz=188,slow=32 | | | | | | | | |
| RPN | Rapa Nui | 92.70 | 243 | LR | | LR | 03 33 10.5 | | |
| | comp=Z,66nm,22.0s,baz=103,slow=31 | | | | | | | | |
| MKAR | Makanchi Array | 96.41 | 43 | P | | P | 02 58 44.1 | -0.1 | |
| | comp=Z,0.2nm,0.6s,baz=284,slow=5.8,SNR=2.3 | | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | | |
| ZALV | Zalesovo Beam | 97.24 | 36 | LR | | LR | 03 46 16.3 | | |
| | comp=Z,39nm,19.8s,baz=302,slow=38 | | | | | | | | |
| PFO | Pinyon Flats O | 99.78 | 304 | LR | | LR | 03 37 11.5 | | |
| | comp=Z,30nm,21.0s,baz=104,slow=31 | | | | | | | | |
| TAOE | Nuku Hiva Isla | 123.81 | 258 | *e*LR | | LR | 03 42 37.9 | | |
| | comp=Z,314nm,30.5s | | | | | | | | |
| PPT2 | Papeete2 | 130.91 | 245 | *e*LR | | LR | 03 45 58.2 | | |
| | comp=Z,57nm,23.5s | | | | | | | | |
| ASAR | Alice Springs | 141.31 | 132 | PKhKP | | PKPpre | 03 04 39.0 | | |
| | comp=Z,2.9nm,0.7s,baz=224,slow=2.6,SNR=25 | | | | | | | | |
| WRA | Warramunga Arr | 143.72 | 127 | PKhKP | | PKPpre | 03 04 47.5 | | |
| | comp=Z,3.4nm,0.6s,baz=241,slow=2.8,SNR=50 | | | | | | | | |
| DZM | Mont Dzumac | 156.63 | 185 | *e*LR | | LR | 03 57 48.9 | | |
| | comp=Z,69nm,23.9s | | | | | | | | |

*STR* ***11*** *03:26:55.0±0.8, 46˚N±4˚×1˚*4E±˚, h8km, MLv3.7/30, Error ellipse: s-maj=0.0km s-min=0.0km az=79.2, preliminary*
*LDG* ***11*** *03:26:58.9±0.1, 46˚.19N×12˚.86E, h11km, Ml2.3/13, Error ellipse: s-maj=3.6km s-min=2.7km az=178.0*
*VIE* ***11*** *03:26:59.1±0.2, 46˚.34N×13˚.03E, h12km, mb2.4/21, ml3.1/21, Error ellipse: s-maj=1.4km s-min=1.2km az=23.0*
*ROM* ***11*** *03:26:59.1±0.1, 46˚.336N±0˚.004×13˚.052E±0˚.006, h9km, ML3.0/139, Error ellipse: s-maj=0.5km s-min=0.5km az=37.0*
*RHSSO* ***11*** *03:27:01.2±0.8, 46˚.33N×13˚.07E, h13km±2km, ML3.0/9*
*PRU* ***11*** *03:27:01.4, 46˚.37N×13˚.09E, h10km*
*BGR* ***11*** *03:27:02.4±0.3, 46˚.37N×13˚.06E, h10km, ML3.0/21, Error ellipse: s-maj=5.6km s-min=3.3km az=0.0*

**ISC 11 03:26:59.4±0.7, 46˚32N±0˚.01×13˚04E±0˚.01, h11km±3km, n264, σ1°35/407, 5C-5D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BOO** | **Bordano** | **0.04** | **94** | ⇑*e*P | | **Pg** | | **03 27 01.3** | **-0.2** |
| BOO | | | | *e*Sg | | **Sg** | | **03 27 02.7** | **-0.3** |
| **BOO** | **Bordano** | **0.04** | **94** | P | | **Pg** | | **03 27 01.4** | **-0.2** |
| BOO | | | | S | | **Sg** | | **03 27 02.7** | **-0.3** |
| **GEPF** | **Gemona** | **0.08** | **125** | P | | **Pg** | | **03 27 01.9** | **0.0** |
| GEPF | | | | S | | **Sg** | | **03 27 04.0** | **+0.3** |
| GEPF | | | | AML | AML | | | | |
| | comp=E,23150μm,0.3s | | | | | | | | |
| GEPF | | | | AML | AML | | | | |
| | comp=N,41600μm,0.2s | | | | | | | | |
| GEPF | | | | AML | AML | | | | |
| | comp=N,41574μm,0.2s | | | | | | | | |
| GEPF | | | | AML | AML | | | | |
| | comp=E,23128μm,0.3s | | | | | | | | |
| **MPRI** | **Monte Prat** | **0.09** | **203** | ⇑*e*P | | **Pg** | | **03 27 02.0** | **0.0** |
| MPRI | | | | *e*Sg | | **Sg** | | **03 27 04.1** | **+0.2** |
| **MPRI** | **Monte Prat** | **0.09** | **203** | P | | **Pg** | | **03 27 02.0** | **0.0** |
| MPRI | | | | S | | **Sg** | | **03 27 04.1** | **+0.2** |
| MPRI | | | | AML | AML | | | | |
| | comp=E,26150μm,1.3s | | | | | | | | |
| MPRI | | | | AML | AML | | | | |
| | comp=N,28650μm,0.4s | | | | | | | | |
| MPRI | | | | AML | AML | | | | |
| | comp=N,37850μm,0.4s | | | | | | | | |
| MPRI | | | | AML | AML | | | | |
| | comp=E,34100μm,1.3s | | | | | | | | |
| MPRI | | | | AML | AML | | | | |
| | comp=E,24228μm,0.3s | | | | | | | | |
| MPRI | | | | AML | AML | | | | |
| | comp=E,31854μm,0.3s | | | | | | | | |
| MPRI | | | | AML | AML | | | | |
| | comp=N,37855μm,0.4s | | | | | | | | |
| MPRI | | | | AML | AML | | | | |
| | comp=N,28646μm,0.4s | | | | | | | | |
| **FUSE** | **Fusea** | **0.10** | **344** | ⇓*e*P | | **Pg** | | **03 27 01.8** | **-0.4** |
| FUSE | | | | *e*Sg | | **Sg** | | **03 27 03.6** | **-0.4** |
| **FUSE** | **Fusea** | **0.10** | **344** | P | | **Pg** | | **03 27 01.8** | **-0.3** |
| FUSE | | | | S | | **Sg** | | **03 27 03.7** | **-0.4** |
| **DST2** | **Trieste** | **0.11** | **226** | P | | **Pg** | | **03 27 02.4** | **+0.1** |
| DST2 | | | | S | | **Sg** | | **03 27 04.8** | **+0.5** |
| DST2 | | | | AML | AML | | | | |
| | comp=N,36650μm,0.2s | | | | | | | | |
| DST2 | | | | AML | AML | | | | |
| | comp=E,35100μm,0.3s | | | | | | | | |
| DST2 | | | | AML | AML | | | | |
| | comp=E,35096μm,0.3s | | | | | | | | |
| DST2 | | | | AML | AML | | | | |
| | comp=N,36673μm,0.2s | | | | | | | | |
| **BUA** | **Buia** | **0.12** | **151** | *e*Pg | | **Pg** | | **03 27 02.5** | **+0.1** |
| BUA | | | | *e*Sg | | **Sg** | | **03 27 05.0** | **+0.5** |
| **BAD** | **Bernadia** | **0.17** | **121** | ⇑*e*Pg | | **Pg** | | **03 27 03.2** | **+0.1** |
| BAD | | | | *e*Sg | | **Sg** | | **03 27 06.2** | **+0.4** |
| **BAD** | **Bernadia** | **0.17** | **121** | P | | **Pg** | | **03 27 03.2** | **+0.1** |
| BAD | | | | S | | **Sg** | | **03 27 06.2** | **+0.4** |
| **CLUD** | **Cludinico** | **0.17** | **321** | ⇓*e*Pg | | **Pg** | | **03 27 03.0** | **-0.2** |
| CLUD | | | | *e*Sg | | **Sg** | | **03 27 05.9** | **-0.1** |
| **CLUD** | **Cludinico** | **0.17** | **321** | P | | **Pg** | | **03 27 03.0** | **-0.2** |
| CLUD | | | | S | | **Sg** | | **03 27 06.1** | **+0.1** |
| CLUD | | | | AML | AML | | | | |
| | comp=E,10840μm,0.6s | | | | | | | | |
| CLUD | | | | AML | AML | | | | |
| | comp=N,3275μm,0.6s | | | | | | | | |
| CLUD | | | | AML | AML | | | | |
| | comp=N,3440μm,0.6s | | | | | | | | |
| CLUD | | | | AML | AML | | | | |
| | comp=E,11015μm,0.6s | | | | | | | | |
| CLUD | | | | AML | AML | | | | |
| | comp=E,6326μm,0.3s | | | | | | | | |
| CLUD | | | | AML | AML | | | | |
| | comp=N,3423μm,0.5s | | | | | | | | |
| CLUD | | | | AML | AML | | | | |
| | comp=E,10819μm,0.6s | | | | | | | | |
| CLUD | | | | AML | AML | | | | |
| | comp=N,3210μm,0.5s | | | | | | | | |
| **VINO** | **Villanova** | **0.18** | **112** | ⇑*e*P | | **Pg** | | **03 27 03.3** | **0.0** |
| VINO | | | | *e*Sg | | **Sg** | | **03 27 06.6** | **+0.5** |
| **VINO** | **Villanova** | **0.18** | **112** | P | | **Pg** | | **03 27 03.4** | **0.0** |
| VINO | | | | S | | **Sg** | | **03 27 06.9** | **+0.7** |
| VINO | | | | AML | AML | | | | |
| | comp=N,7050μm,1.3s | | | | | | | | |
| VINO | | | | AML | AML | | | | |
| | comp=E,6595μm,0.2s | | | | | | | | |
| VINO | | | | AML | AML | | | | |
| | comp=E,6598μm,0.2s | | | | | | | | |
| VINO | | | | AML | AML | | | | |
| | comp=N,6884μm,0.3s | | | | | | | | |
| **STAL** | **STALIGIAL** | **0.24** | **255** | P | | **Pg** | | **03 27 04.1** | **-0.3** |
| STAL | | | | S | | **Sg** | | **03 27 08.3** | **+0.6** |
| STAL | | | | AML | AML | | | | |
| | comp=E,6920μm,0.1s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=E,6920μm,0.1s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=N,6080μm,0.4s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=N,3670μm,0.3s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=N,6080μm,0.4s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=E,4000μm,0.5s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=E,3729μm,0.4s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=N,3646μm,0.1s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=N,5501μm,0.2s | | | | | | | | |
| STAL | | | | AML | AML | | | | |
| | comp=E,6921μm,0.1s | | | | | | | | |
| **ZOU** | **Zoufplan** | **0.24** | **349** | *e*Pg | | **Pg** | | **03 27 03.9** | **-0.6** |
| ZOU | | | | *e*Sg | | **Sg** | | **03 27 07.9** | **-0.1** |
| **ZOU** | **Zoufplan** | **0.24** | **349** | P | | **Pg** | | **03 27 04.4** | **-0.1** |
| ZOU | | | | S | | **Sg** | | **03 27 08.4** | **+0.5** |
| ZOU | | | | AML | AML | | | | |
| | comp=N,3515μm,1.3s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=N,3510μm,1.3s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=E,3125μm,0.6s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=E,3160μm,0.6s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=N,3510μm,1.3s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=E,3160μm,1.4s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=E,3125μm,1.4s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=E,2823μm,0.5s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=E,2859μm,0.5s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=N,3291μm,0.3s | | | | | | | | |
| ZOU | | | | AML | AML | | | | |
| | comp=N,3332μm,0.3s | | | | | | | | |
| **PLRO** | **Paularo** | **0.24** | **18** | P | | **Pg** | | **03 27 04.5** | **0.0** |
| PLRO | | | | S | | **Sg** | | **03 27 08.3** | **+0.4** |
| **COLI** | **Coloredo** | **0.30** | **129** | ⇑*e*Pg | | **Pg** | | **03 27 05.7** | **+0.1** |
| COLI | | | | *e*Sg | | **Sg** | | **03 27 10.5** | **+0.9** |
| **FVI** | **Forni Avoltri** | **0.33** | **327** | P | | **Pg** | | **03 27 05.7** | **-0.4** |
| FVI | | | | S | | **Sg** | | **03 27 10.9** | **+0.5** |
| FVI | | | | AML | AML | | | | |
| | comp=E,2785μm,1.3s | | | | | | | | |
| FVI | | | | AML | AML | | | | |
| | comp=N,4345μm,0.1s | | | | | | | | |
| FVI | | | | AML | AML | | | | |
| | comp=E,2736μm,0.2s | | | | | | | | |
| FVI | | | | AML | AML | | | | |
| | comp=N,4344μm,0.1s | | | | | | | | |
| **CSMI** | **Casera Mimoias** | **0.33** | **305** | *e*Pg | | **Pg** | | **03 27 05.6** | **-0.5** |
| CSMI | | | | *e*Sg | | **Sg** | | **03 27 10.6** | **+0.1** |
| **ROBS** | **Robic** | **0.34** | **103** | *i* Pg | | **Pg** | | **03 27 05.6** | **-0.5** |
| ROBS | | | | *i* Sg | | **Sg** | | **03 27 10.5** | **-0.1** |
| ROBS | | | | IAML | | | | 03 27 12.8 | |
| | comp=Z,112nm,0.1s | | | | | | | | |
| **MLNI** | **Malnisio** | **0.34** | **240** | *e*Pg | | **Pg** | | **03 27 06.2** | **-0.2** |
| **PRED** | **Cave del Predi** | **0.38** | **72** | P | | **Pg** | | **03 27 06.8** | **-0.3** |
| PRED | | | | S | | **Sg** | | **03 27 12.8** | **+0.7** |
| **ACOM** | **Acomizza, Ital** | **0.40** | **55** | P | | **Pg** | | **03 27 07.1** | **-0.3** |
| ACOM | | | | S | | **Sb** | | **03 27 14.1** | **-0.7** |
| ACOM | | | | AML | AML | | | | |
| | comp=E,2445μm,0.3s | | | | | | | | |
| ACOM | | | | AML | AML | | | | |
| | comp=N,1740μm,0.2s | | | | | | | | |
| ACOM | | | | AML | AML | | | | |
| | comp=N,1745μm,0.2s | | | | | | | | |
| ACOM | | | | AML | AML | | | | |
| | comp=E,2480μm,0.3s | | | | | | | | |
| ACOM | | | | AML | AML | | | | |
| | comp=N,1745μm,0.2s | | | | | | | | |
| ACOM | | | | AML | AML | | | | |
| | comp=N,1740μm,0.2s | | | | | | | | |
| ACOM | | | | AML | AML | | | | |
| | comp=E,2445μm,0.3s | | | | | | | | |
| ACOM | | | | AML | AML | | | | |
| | comp=E,2481μm,0.3s | | | | | | | | |
| **CIMO** | **Cimolais** | **0.42** | **268** | P | | **Pg** | | **03 27 06.8** | **-0.8** |
| CIMO | | | | S | | **Sg** | | **03 27 13.0** | **-0.2** |
| CIMO | | | | AML | AML | | | | |
| | comp=E,492μm,0.6s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=N,606μm,0.4s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=E,490μm,0.6s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=N,606μm,1.6s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=N,614μm,1.3s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=N,533μm,0.3s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=N,527μm,0.2s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=E,473μm,0.4s | | | | | | | | |
| CIMO | | | | AML | AML | | | | |
| | comp=E,474μm,0.4s | | | | | | | | |
| **DRE** | **Drenchia** | **0.45** | **109** | P | | **Pg** | | **03 27 07.9** | **-0.3** |
| DRE | | | | S | | **Sb** | | **03 27 15.2**

VARN AML AML
comp=N,801µm,0.3s
VARN AML AML
comp=E,1145µm,0.4s
VARN AML AML
comp=N,842µm,0.3s
VARN AML AML
comp=E,1100µm,0.4s
VARN AML AML
comp=N,801µm,0.3s
VARN AML AML
comp=E,992µm,0.2s
VARN AML AML
comp=E,949µm,0.2s
VARN AML AML
comp=N,842µm,0.3s
**KBA Koelnbreinsper 0.78 15** *e*Pg **Pg 03 27 14.4 -0.2**
comp=N,4.1nm,0.1s,SNR=10
KBA *e*Sg **Sg 03 27 24.6 -0.3**
comp=N,245nm,0.2s
**KBA Koelnbreinsper 0.78 15** *e*Pg **Pg 03 27 14.4 -0.2**
KBA *e*Sg **Sg 03 27 25.0 +0.1**
**JAVS Javornik 0.83 121** *i* Pg **Pg 03 27 14.2 -1.3**
JAVS *i* Sg **Sb 03 27 27.8 +0.6**
JAVS IAML 03 27 30.0
comp=Z,69nm,0.2s
**CRNS Crni Vrh 0.88 106** *i* Pg **Pg 03 27 15.4 -1.0**
CRNS *i* Sg **Sn 03 27 30.0 -0.7**
CRNS IAML 03 27 35.4
comp=Z,52nm,0.1s
**CGRP Cima Grappa 0.97 243** P **Pn 03 27 18.8 -0.4**
CGRP AML AML
comp=E,1042µm,0.4s
CGRP AML AML
comp=N,848µm,0.7s
CGRP AML AML
comp=E,1038µm,0.4s
CGRP AML AML
comp=N,846µm,0.7s
CGRP AML AML
comp=E,1078µm,0.4s
CGRP AML AML
comp=N,842µm,0.7s
CGRP AML AML
comp=E,1038µm,1.6s
CGRP AML AML
comp=E,1078µm,1.6s
CGRP AML AML
comp=N,790µm,0.3s
CGRP AML AML
comp=N,776µm,0.3s
CGRP AML AML
comp=E,1077µm,0.4s
CGRP AML AML
comp=E,1041µm,0.4s
**MOZS Mozjanca 0.97 91** *i* Sg **Sn 03 27 33.1 +0.2**
**CTI Castel Tesino 1.00 255** P **Pb 03 27 19.1 +0.2**
CTI AML AML
comp=N,1650µm,0.2s
CTI AML AML
comp=E,1805µm,0.4s
CTI AML AML
comp=E,1532µm,0.1s
CTI AML AML
comp=N,1651µm,0.2s
**ZIAN Ziano 1.02 268** P **Pg 03 27 18.8 -0.3**
ZIAN AML AML
comp=N,446µm,0.3s
ZIAN AML AML
comp=N,404µm,0.4s
ZIAN AML AML
comp=E,405µm,0.4s
ZIAN AML AML
comp=E,464µm,1.0s
ZIAN AML AML
comp=N,403µm,0.4s
ZIAN AML AML
comp=N,446µm,0.3s
ZIAN AML AML
comp=N,446µm,0.3s
ZIAN AML AML
comp=E,369µm,0.3s
ZIAN AML AML
comp=E,448µm,0.3s
ZIAN AML AML
comp=N,366µm,0.3s
**SKDS Skadanscina 1.03 138** *i* Pg **Pb 03 27 17.7 -1.6**
SKDS IAML 03 27 37.0
comp=Z,84nm,0.2s
**SKDS Skadanscina 1.03 138** ||*i* Pg **Pn 03 27 19.7 -0.2**
SKDS *e*Sg **Sn 03 27 34.6 +0.3**
**GBAS Gorenja Brezov 1.05 111** *i* Pg **Pb 03 27 18.1 -1.5**
GBAS *i* Sg **Sn 03 27 34.6 -0.2**
GBAS IAML 03 27 39.2
comp=Z,61nm,0.2s
**OBKA Obir 1.06 79** *e*Pg **Pb 03 27 19.1 -0.8**
comp=Z,0.3nm,0.1s,SNR=12
OBKA *e*Sg **Sn 03 27 35.0 -0.2**
comp=Z,35nm,0.3s
**OBKA Obir 1.06 79** *e*Pg **Pg 03 27 20.0 +0.2**
OBKA *e*Sg **Sn 03 27 34.6 -0.5**
**OBKA Obir 1.06 79** *e*Pg **Pb 03 27 19.1 -0.8**
OBKA *e*Sg **Sn 03 27 35.4 +0.3**
**LJU Ljubljana 1.07 105** *i* Sg **Sn 03 27 35.1 -0.1**
LJU IAML 03 27 40.4
comp=Z,64nm,0.2s
**LESA Schwarzleotal 1.13 347** *e*Pg **Pb 03 27 20.7 -0.3**
comp=Z,13nm,0.3s
LESA *e*Sg **Sb 03 27 34.6 -1.2**
comp=Z,105nm,0.2s
**CEY Cerknica 1.13 121** ||*i* Pg **Pn 03 27 22.0 +0.8**
CEY *e*Sg **Sg 03 27 36.1 +0.3**
**KOSI Kohlern 1.16 278** P **Pb 03 27 21.5 -0.1**
KOSI AML AML
comp=N,629µm,0.4s
KOSI AML AML
comp=N,629µm,1.6s
KOSI AML AML
comp=E,386µm,0.3s
KOSI AML AML
comp=E,385µm,0.3s
KOSI AML AML
comp=N,629µm,0.4s
**VNDS Vrh nad Dolski 1.18 100** *i* Pg **Pb 03 27 21.3 -0.5**
VNDS *i* Sg **Sn 03 27 39.1 +1.3**
VNDS IAML 03 27 41.6
comp=Z,44nm,0.2s
**PANI Panarotta 1.22 258** P **Pg 03 27 23.5 +0.7**
PANI AML AML
comp=E,1380µm,0.3s
PANI AML AML
comp=N,2675µm,0.4s
PANI AML AML
comp=E,1380µm,1.7s
PANI AML AML
comp=N,2678µm,0.4s
PANI AML AML
comp=E,1381µm,0.3s
**KNDS Knezji Dol 1.23 130** *i* Pg **Pn 03 27 21.3 -1.3**
KNDS *i* Sg **Sn 03 27 41.2 +1.9**
KNDS IAML 03 27 44.8
comp=Z,84nm,0.3s
**ROSI Rosskopf 1.27 299** P **Pn 03 27 23.2 -0.1**
ROSI AML AML
comp=N,376µm,0.3s
ROSI AML AML
comp=E,534µm,0.4s
ROSI AML AML
comp=N,376µm,0.3s
ROSI AML AML
comp=E,533µm,0.4s
**WTTA Wattenberg 1.35 315** *e*Pg **Pb 03 27 24.7 0.0**
comp=E,8.0nm,0.2s,SNR=15
WTTA *e*Sg **Sb 03 27 41.8 -0.3**
comp=E,117nm,0.4s
**WTTA Wattenberg 1.35 315** AML AML
comp=E,445µm,0.9s
WTTA AML AML
comp=N,534µm,0.5s
WTTA AML AML
comp=N,534µm,0.5s
WTTA AML AML
comp=E,445µm,0.9s
**WTTA Wattenberg 1.35 315** *e*Pn **Pb 03 27 24.8 0.0**
WTTA *e*Pg **Pg 03 27 26.5 +1.2**
WTTA *e*Sg **Sn 03 27 42.4 +0.1**
**VISS Visnje 1.36 112** *i* Pg **Pb 03 27 24.9 +0.1**
VISS *i* Sg **Sg 03 27 43.8 +0.7**
VISS IAML 03 27 45.7
comp=Z,74nm,0.3s
**TEOL Teolo 1.36 225** P **Pg 03 27 25.4 -0.1**
TEOL AML AML
comp=E,1177µm,0.5s
TEOL AML AML
comp=N,1225µm,0.4s
TEOL AML AML
comp=N,1224µm,0.4s
TEOL AML AML
comp=E,1176µm,0.5s
**DOSS Dosso del Somm 1.36 252** P **Pb 03 27 25.3 +0.3**
DOSS AML AML
comp=N,854µm,0.6s
DOSS AML AML
comp=E,1002µm,1.5s
DOSS AML AML
comp=E,872µm,0.6s
DOSS AML AML
comp=N,1070µm,1.5s
DOSS AML AML
comp=N,1070µm,0.5s
DOSS AML AML
comp=E,1002µm,0.5s
DOSS AML AML
comp=E,809µm,0.4s
DOSS AML AML
comp=N,781µm,0.4s
DOSS AML AML
comp=E,937µm,0.3s
DOSS AML AML
comp=N,1005µm,0.3s
**OZOL Ozolo 1.38 274** P **Pb 03 27 25.5 +0.3**
OZOL AML AML
comp=E,1895µm,0.3s
OZOL AML AML
comp=N,1810µm,0.4s
OZOL AML AML
comp=N,1985µm,0.4s
OZOL AML AML
comp=E,2055µm,0.5s
OZOL AML AML
comp=E,2052µm,0.5s
OZOL AML AML
comp=N,1989µm,0.4s
OZOL AML AML
comp=N,1813µm,0.4s
OZOL AML AML
comp=E,1893µm,0.3s
**PDKS Podkum 1.39 100** *i* Sg **Sg 03 27 44.3 +0.3**
PDKS IAML 03 27 47.9
comp=Z,21nm,0.1s
**RIY Rijeka 1.42 134** *i* Pn **Pb 03 27 26.2 +0.3**
RIY Sn **Sg 03 27 46.0 +0.9**
**SOKA Soboth 1.42 75** *e*Pg **Pn 03 27 25.6 +0.3**
comp=Z,0.3nm,0.2s,SNR=12
SOKA *e*Sg **Sg 03 27 47.0 +1.8**
comp=Z,20nm,0.4s
**RJOB Jochberg 1.42 353** *e*Pn **Pb 03 27 25.8 -0.2**
RJOB *e*Sg **Sg 03 27 45.8 +0.5**
**WATA Walderalm 1.43 316** *e*Pg **Pb 03 27 26.3 +0.2**
comp=Z,4.9nm,0.2s,SNR=14
WATA *e*Sg **Sg 03 27 45.0 -0.3**
comp=Z,44nm,0.3s
**BIOA Bad Ischl, Aus 1.43 16** *e*Pg **Pb 03 27 26.4 +0.3**
comp=Z,2.3nm,0.2s,SNR=12
BIOA *e*Sg **Sg 03 27 46.0 +0.6**
comp=Z,43nm,0.4s
**GAGG Gaggia 1.47 261** P **Pb 03 27 27.1 +0.3**
GAGG AML AML
comp=E,1024µm,1.2s
GAGG AML AML
comp=N,697µm,0.4s
GAGG AML AML
comp=N,975µm,1.2s
GAGG AML AML
comp=E,1024µm,0.8s
GAGG AML AML
comp=N,975µm,0.8s
GAGG AML AML
comp=E,680µm,0.3s
GAGG AML AML
comp=N,871µm,0.2s
GAGG AML AML
comp=E,922µm,0.2s
GAGG AML AML
comp=E,679µm,0.3s
GAGG AML AML
comp=N,697µm,0.4s
**PERS Pernice 1.47 77** *i* Pg **Pn 03 27 26.0 +0.1**
**LUSI Trento, Gardas 1.50 257** P **Pb 03 27 27.4 0.0**
LUSI AML AML
comp=E,748µm,1.6s
LUSI AML AML
comp=N,1545µm,1.0s
LUSI AML AML
comp=E,748µm,0.4s
LUSI AML AML
comp=E,710µm,0.4s
LUSI AML AML
comp=N,1364µm,0.2s
**BRJN Brijuni 1.50 160** *e*Pn **Pn 03 27 26.6 +0.3**
BRJN Sn **Sg 03 27 47.4 -0.3**
**SMRN Sveta Marina 1.51 148** *i* Pn **Pb 03 27 26.9 -0.5**
SMRN Sn **Sg 03 27 47.9 +0.1**
**SQTA Sankt Quirin 1.55 306** *e*Pg **Pb 03 27 28.3 +0.2**
comp=N,32nm,0.3s,SNR=23
SQTA *e*Sg **Sg 03 27 48.5 -0.6**
comp=N,48nm,0.4s
**VARA Varagna 1.57 252** P **Pb 03 27 28.2 -0.4**
VARA AML AML
comp=E,942µm,0.3s
VARA AML AML
comp=N,1110µm,1.3s
VARA AML AML
comp=N,976µm,0.3s
VARA AML AML
comp=E,1155µm,1.3s
VARA AML AML
comp=E,1155µm,0.7s
VARA AML AML
comp=N,1110µm,0.7s
VARA AML AML
comp=N,1016µm,0.1s
VARA AML AML
comp=N,785µm,0.3s
VARA AML AML
comp=E,1016µm,0.1s
VARA AML AML
comp=E,816µm,0.3s
**CARE Lago del Cares 1.63 274** P **Pb 03 27 29.6 0.0**
CARE AML AML
comp=N,354µm,0.8s
CARE AML AML
comp=E,176µm,1.0s
CARE AML AML
comp=E,164µm,0.2s
CARE AML AML
comp=N,316µm,0.3s
CARE AML AML
comp=N,346µm,0.5s
**LEGS Legarje 1.63 102** *i* Pn **Pb 03 27 29.0 -0.5**
**MBAL Monte Baldo - 1.64 248** P **Pn 03 27 28.9 +0.6**
MBAL AML AML
comp=E,546µm,1.3s
MBAL AML AML
comp=N,462µm,1.0s
MBAL AML AML
comp=N,407µm,0.1s
MBAL AML AML
comp=N,407µm,1.9s
MBAL AML AML
comp=N,462µm,1.0s
MBAL AML AML
comp=E,536µm,0.7s
MBAL AML AML
comp=E,546µm,0.7s
MBAL AML AML
comp=N,378µm,0.1s
MBAL AML AML
comp=E,518µm,0.1s
MBAL AML AML
comp=N,407µm,0.1s
MBAL AML AML
comp=E,530µm,0.1s
**MOTA Moosalm 1.68 308** *e*Pg **Pg 03 27 31.9 +0.3**
comp=E,27nm,0.3s
MOTA *e*Sg **Sg 03 27 54.9 +1.5**
comp=E,28nm,0.3s
**DOBS Dobrina 1.69 95** *i* Pn **Pb 03 27 30.1 -0.5**
**RONC Roncone 1.71 259** P **Pb 03 27 31.2 +0.1**
RONC AML AML
comp=E,1850µm,0.7s
RONC AML AML
comp=N,778µm,0.5s
RONC AML AML
comp=E,850µm,0.6s
RONC AML AML
comp=N,2100µm,0.5s
RONC AML AML
comp=E,850µm,1.4s
RONC AML AML
comp=N,1664µm,0.2s
RONC AML AML
comp=N,753µm,0.2s
RONC AML AML
comp=E,1507µm,0.2s
RONC AML AML
comp=E,811µm,0.2s
**FETA Feichten 1.74 295** *e*Pg **Pb 03 27 31.6 +0.2**
comp=E,7.1nm,0.2s,SNR=9.6
FETA *e*Sg **Sg 03 27 55.3 0.0**
comp=E,17nm,0.3s
**MOA Molln 1.74 28** *e*Pg **Pb 03 27 31.7 +0.3**
comp=E,6.2nm,0.3s,SNR=7.9
MOA *e*Sg **Sg 03 27 56.0 +0.6**
comp=E,26nm,0.5s
**MOA Molln 1.74 28** *e*Pn **Pb 03 27 31.9 +0.5**
MOA *e*Sg **Sg 03 27 56.5 +1.0**
**MOSI Grossmontoni 1.75 281** P **Pb 03 27 31.9 +0.3**
MOSI AML AML
comp=N,790µm,0.5s
MOSI AML AML
comp=E,600µm,0.5s
MOSI AML AML
comp=E,600µm,1.5s
MOSI AML AML
comp=N,790µm,0.5s
MOSI AML AML
comp=E,600µm,0.5s
**BOJS Bojanci 1.75 117** AML AML
comp=E,538µm,0.2s
**BOJS Bojanci 1.75 117** *i* Pn **Pb 03 27 31.0 -0.5**
BOJS *i* Sn **Sg 03 27 54.6 -1.0**
BOJS IAML 03 28 01.9
comp=Z,26nm,0.2s
**BOJS Bojanci 1.75 117** ||*i* Pn **Pb 03 27 30.8 -0.7**
BOJS *e*Sn **Sb 03 27 53.3 -0.2**
**CRES Cresnjev 1.75 106** *i* Pn **Pb 03 27 30.9 -0.8**
CRES *i* Sn **Sb 03 27 53.6 -0.1**
CRES IAML 03 28 01.4
comp=Z,25nm,0.3s
**MABI Malga Bissina 1.77 262** P **Pb 03 27 32.0 -0.1**
MABI AML AML
comp=N,233µm,1.5s
MABI AML AML
comp=E,170µm,0.7s
MABI AML AML
comp=N,233µm,0.5s
MABI AML AML
comp=E,140µm,0.3s
MABI AML AML
comp=N,195µm,0.2s
**GOLS Golise 1.82 99** *i* Pn **Pb 03 27 31.9 -0.9**
GOLS IAML 03 28 07.1
comp=Z,23nm,0.2s
**KW1 Garching a.d. 1.82 351** *e*Pg **Pg 03 27 35.3 +0.9**
KW1 *e*Sg **Sg 03 27 58.5 +0.4**
**OZLJ Ozalj 1.83 112** *i* Pn **Pb 03 27 32.4 -0.6**
OZLJ Sn **Sb 03 27 56.2 +0.3**
**BRMO Bormio 1.85 276** P **Pb 03 27 32.9 -0.4**
BRMO AML AML
comp=E,132µm,1.0s
BRMO AML AML
comp=N,164µm,1.0s
BRMO AML AML
comp=E,132µm,1.0s
BRMO AML AML
comp=E,120µm,0.5s
BRMO AML AML
comp=N,132µm,0.5s
**GCIS Gornji Cirnik 1.86 103** *i* Pn **Pb 03 27 32.5 -0.9**
GCIS *i* Sn **Sb 03 27 56.6 0.0**
GCIS IAML 03 28 04.5
comp=Z,28nm,0.3s
**FUORN Ofenpass-Fuorn 1.94 280** P **Pb 03 27 34.5 -0.4**
FUORN AML AML
comp=N,144µm,0.5s
FUORN AML AML
comp=N,144µm,1.5s
FUORN AML AML
comp=E,146µm,0.5s
FUORN AML AML
comp=E,147µm,0.5s
FUORN AML AML
comp=N,144µm,0.5s
**ARSA Arzberg 1.94 61** *e*Pg **Pn 03 27 33.5 +1.1**
comp=N,4.3nm,0.4s
ARSA *e*Sg **Sn 03 27 57.1 +0.3**
comp=N,1.7nm,0.2s
**ARSA Arzberg 1.94 61** AML AML
comp=N,35µm,0.7s
ARSA AML AML
comp=E,30µm,0.8s
ARSA AML AML
comp=N,35µm,1.3s
**ARSA Arzberg 1.94 61** *e*Pn **Pn 03 27 33.5 +1.1**
ARSA *e*Sn **Sb 03 27 58.2 -0.9**
**ARSA Arzberg 1.94 61** *e*Pn **Pb 03 27 33.7 -1.1**
ARSA *e*Pg **Pg 03 27 38.3 +1.7**
ARSA *e*Sg **Sg 03 28 02.2 +0.4**
**RETA Reutte 1.95 308** *e*Pg **Pb 03 27 35.4 +0.5**
comp=N,24nm,0.2s,SNR=36
RETA Sg **Sg 03 28 03.0 +1.0**
comp=N,69nm,0.4s
**RABC Rab 1.99 141** *i* Pn **Pn 03 27 33.9 +0.9**
**BE1 Monatshausen 2.02 323** *e*Pn **Pb 03 27 35.9 -0.2**
BE1 *e*Sg **Sg 03 28 05.4 +1.2**
**PTJ Puntijarka 2.08 100** *e*Pn **Pb 03 27 35.9 -1.3**
PTJ Sn **Sg 03 28 04.8 -1.5**
**LOBO Lobor 2.11 93** *e*Pg **Pg 03 27 39.5 -0.3**
LOBO Sg **Sg 03 28 09.4 +2.3**
**ZONE Zone 2.11 256** P **Pn 03 27 35.6 +0.9**
ZONE AML AML
comp=E,204µm,0.2s
ZONE AML AML
comp=N,195µm,0.3s
ZONE AML AML
comp=E,204µm,1.8s
ZONE AML AML
comp=E,204µm,0.2s
ZONE AML AML
comp=N,195µm,0.3s
ZONE AML AML
comp=E,122µm,1.0s
**OBER Oberstdorf 2.17 301** P **Sg 03 28 07.1 -2.2**
**NVLJ Novalja 2.18 143** *e*Pn **Pn 03 27 36.3 +0.7**
NVLJ Sn **Sn 03 28 03.8 +1.2**
**FUR Furstenfeldbru 2.20 328** *e*Pn **Pb 03 27 38.3 -1.0**
FUR *e*Sg **Sg 03 28 10.6 +0.5**
**KOGS Kog 2.23 86** AML AML
comp=E,514µm,0.4s
KOGS AML AML
comp=N,520µm,1.2s
KOGS AML AML
comp=E,514µm,0.4s
KOGS AML AML
comp=N,491µm,0.4s
**PLIT Plitvice 2.32 128** *i* Pn **Pn 03 27 38.8 +1.2**
PLIT Sn **Sb 03 28 08.6 -1.3**
**DAVA Damuels 2.37 295** *e*Pg **Pb 03 27 41.3 -1.0**
comp=N,8.2nm,0.2s,SNR=8.8
DAVA *e*Sg **Sg 03 28 14.8 -0.9**
comp=N,79nm,0.3s
**DAVA Damuels 2.37 295** *e*Pn **Pb 03 27 41.2 -1.1**
DAVA *e*Sg **Sg 03 28 15.3 -0.4**
**KALN Kalnik 2.38 93** *e*Pg **Pg 03 27 44.0 -1.0**
KALN Sg **Sg 03 28 18.3 +2.5**
**UBR Ueberruh 2.42 305** *e*Pn **Pb 03 27 41.5 -1.6**
UBR *e*Sg **Sg 03 28 17.8 +0.6**
**LMD Lutirano 2.44 203** P **Pn 03 27 39.2 0.0**
LMD AML AML

comp=N,65µm,0.9s
LMD AML AML
comp=E,80µm,0.3s
LMD AML AML
comp=N,65µm,1.1s
LMD AML AML
comp=N,55µm,0.5s
LMD AML AML
comp=E,80µm,0.3s
**VIRC Vir 2.48 144** *i* Pn **Pn 03 27 40.2 +0.5**
VIRC Sn **Sn 03 28 12.0 +2.1**
**CONA Conrad Observa 2.51 49** *e*Pg **Pn 03 27 41.9 +1.7**
comp=E,0.9nm,0.2s
CONA *e*Sg **Sn 03 28 10.5 -0.3**
comp=E,3.6nm,0.4s
**GEC2 GERESS Array S 2.56 10** *e*Pn **Pn 03 27 42.2 +1.2**
GEC2 *e*Sg **Sg 03 28 20.9 -0.8**
**RONA Rosalia, Austr 2.62 57** *e*Pg **Pn 03 27 43.0 +1.3**
comp=E,0.7nm,0.1s
RONA *e*Sg **Sn 03 28 13.7 +0.2**
comp=E,5.6nm,0.5s
**PLONS Plons/SG 2.62 287** *e*Pn **Pb 03 27 44.6 -1.9**
**GSCL Gusciola 2.62 222** AML AML
comp=E,65µm,1.2s
GSCL AML AML
comp=N,64µm,1.1s
**UDBI Udbina 2.63 132** *e*Pn **Pn 03 27 43.0 +1.2**
UDBI Sn **Sb 03 28 16.7 -2.2**
**CKRC Cesky Krumlov 2.64 19** *e*PN **Pn 03 27 43.4 +1.4**
CKRC *e*SN **Sn 03 28 15.9 +1.9**
**MOSL Moslavina 2.69 104** *e*Pn **Pn 03 27 44.1 +1.5**
**COR1 Corinaldo 2.69 181** P **Pn 03 27 43.9 +1.3**
COR1 AML AML
comp=E,116µm,1.5s
COR1 AML AML
comp=N,134µm,1.3s
COR1 AML AML
comp=E,116µm,0.5s
COR1 AML AML
comp=N,128µm,0.8s
COR1 AML AML
comp=E,98µm,0.7s
**DUGI Dugi Otok 2.73 148** *e*Pn **Pn 03 27 43.9 +0.7**
DUGI Sn **Sn 03 28 17.7 +1.5**
**MPPT Montemurlo 2.74 211** P **Pn 03 27 44.9 +1.6**
MPPT AML AML
comp=N,57µm,0.4s
MPPT AML AML
comp=E,49µm,1.5s
MPPT AML AML
comp=N,57µm,0.4s
MPPT AML AML
comp=E,44µm,0.6s
**APEC Apecchio 2.80 189** P **Pn 03 27 44.6 +0.4**
APEC AML AML
comp=E,99µm,1.0s
APEC AML AML
comp=N,75µm,0.5s
APEC AML AML
comp=N,75µm,1.5s
APEC AML AML
comp=N,75µm,0.5s
APEC AML AML
comp=E,93µm,0.5s
**PIEI Pieia 2.81 188** P **Pn 03 27 44.4 0.0**
PIEI AML AML
comp=E,70µm,0.3s
PIEI AML AML
comp=N,39µm,0.4s
PIEI AML AML
comp=E,70µm,1.7s
PIEI AML AML
comp=N,39µm,1.6s
PIEI AML AML
comp=E,70µm,0.3s
PIEI AML AML
comp=N,39µm,0.4s
**FRON Frontone 2.81 185** P **Pn 03 27 44.7 +0.3**
FRON AML AML
comp=E,42µm,0.8s
FRON AML AML
comp=N,72µm,0.7s
FRON AML AML
comp=N,72µm,1.3s
FRON AML AML
comp=E,42µm,1.2s
FRON AML AML
comp=N,67µm,0.4s
FRON AML AML
comp=E,42µm,0.8s
**WET Wettzell 2.83 358** *e*Pn **Pn 03 27 45.8 +1.2**
WET *e*Sn **Sn 03 28 19.3 +0.8**
WET *e*Sg **Sg 03 28 29.3 -0.8**
**KHC Kasperske Hory 2.83 7** *e*PN **Pn 03 27 45.7 +1.1**
KHC *ex* x 03 27 55.5
KHC *e*SN **Sn 03 28 19.9 +1.1**
KHC *e*SG **Sg 03 28 28.6 -1.8**
comp=E,25nm,0.5s
**NORI Noerdlinger Ri 2.90 327** *e*Pn **Pn 03 27 47.5 +1.9**
NORI *e*Sn **Sn 03 28 22.3 +1.8**
NORI *e*Sg **Sg 03 28 31.6 -1.0**
**CRMI Carmignano 2.93 211** P **Pn 03 27 46.6 +0.6**
CRMI AML AML
comp=E,61µm,0.4s
CRMI AML AML
comp=N,56µm,0.5s
CRMI AML AML
comp=E,61µm,1.6s
CRMI AML AML
comp=N,56µm,1.5s
CRMI AML AML
comp=N,56µm,0.5s
CRMI AML AML
comp=E,72µm,0.4s
CRMI AML AML
comp=E,61µm,0.4s
CRMI AML AML
comp=N,59µm,0.5s
**ATVO AVT- Monte Val 2.98 189** P **Pn 03 27 47.1 +0.5**
ATVO AML AML
comp=E,64µm,0.8s
ATVO AML AML
comp=N,72µm,1.0s
ATVO AML AML
comp=N,72µm,1.0s
ATVO AML AML
comp=E,64µm,1.2s
ATVO AML AML
comp=N,64µm,0.4s
ATVO AML AML
comp=E,47µm,1.1s
**EL6 Elcito 2.99 179** P **Pn 03 27 47.2 +0.3**
EL6 AML AML
comp=E,78µm,1.0s
EL6 AML AML
comp=N,71µm,0.7s
EL6 AML AML
comp=N,71µm,0.7s
EL6 AML AML
comp=E,77µm,0.5s
**A051A Mrakovica 3.01 114** *e*Pn **Pn 03 27 48.2 +1.1**
A051A *e*Sn **Sn 03 28 24.1 +0.9**
**FOSV Fossato di Vic 3.04 184** P **Pn 03 27 47.5 +0.1**
FOSV AML AML
comp=N,49µm,1.4s
FOSV AML AML
comp=N,49µm,0.6s
FOSV AML AML
comp=E,36µm,0.8s
FOSV AML AML
comp=E,34µm,0.7s
FOSV AML AML
comp=N,43µm,0.5s
**WALHA Wallhausen, DE 3.04 300** *e*Pn **Pn 03 27 49.4 +2.0**
WALHA *e*Sg **Sg 03 28 37.0 +0.1**
**WILA Wila 3.04 293** *e*Pn **Pn 03 27 50.1 +2.6**
WILA *e*Sg **Sg 03 28 37.9 +1.0**
**A050A Klekovaca 3.07 126** *e*Pn **Pn 03 27 49.4 +1.4**
A050A *e*Sn **Sn 03 28 25.2 +0.5**
**MURB Monte Urbino 3.08 187** P **Pn 03 27 48.0 -0.1**
MURB AML AML
comp=E,188µm,0.3s
MURB AML AML
comp=N,124µm,1.6s
MURB AML AML
comp=E,188µm,1.7s
MURB AML AML
comp=N,124µm,0.4s
MURB AML AML
comp=E,195µm,0.3s
MURB AML AML
comp=N,119µm,0.3s
MURB AML AML
comp=E,188µm,0.3s
MURB AML AML
comp=N,239µm,0.6s
**CAFI Castiglion Fio 3.09 195** P **Pn 03 27 48.6 +0.4**
CAFI AML AML
comp=E,539µm,0.7s
CAFI AML AML
comp=N,634µm,0.8s
CAFI AML AML
comp=E,30µm,0.4s
CAFI AML AML
comp=N,36µm,1.6s
CAFI AML AML
comp=N,635µm,0.8s
CAFI AML AML
comp=N,35µm,0.3s
CAFI AML AML
comp=E,30µm,0.4s
CAFI AML AML
comp=E,539µm,0.7s
**MORI Morici 3.10 141** *e*Pn **Pn 03 27 49.8 +1.6**
MORI Sn **Sn 03 28 25.7 +0.5**
**GORR Gorreto 3.15 238** S **Sn 03 28 27.9 +1.4**
**GORR Gorreto 3.15 238** P **Pn 03 27 51.2 +2.2**
**GUT Gutenstein 3.20 305** P **Pn 03 27 51.2 +1.6**
**GUT Gutenstein 3.20 305** S **Sn 03 28 29.7 +2.0**
**ZVC Zvikov 3.21 14** *e*PN **Pn 03 27 51.2 +1.4**
ZVC *e*SN **Sn 03 28 29.9 +1.8**
**ZIRJ Zirje 3.25 144** *e*Pn **Pn 03 27 52.3 +2.1**
ZIRJ Sn **Sn 03 28 30.5 +1.6**
**EMING Emmingen-Lipti 3.27 300** *e*Pn **Pn 03 27 52.5 +1.8**
EMING *e*Sn **Sn 03 28 30.1 +0.6**
**FDMO Fiordimonte 3.29 179** P **Pn 03 27 50.9 +0.1**
FDMO AML AML
comp=E,39µm,0.9s
FDMO AML AML
comp=N,35µm,1.0s
FDMO AML AML
comp=E,39µm,1.1s
FDMO AML AML
comp=N,35µm,1.0s
FDMO AML AML
comp=E,36µm,0.3s
FDMO AML AML
comp=N,35µm,1.0s
**BLY Banja Luka 3.31 117** *e*Pn **Pn 03 27 52.3 +1.1**
BLY *e*Sn **Sn 03 28 30.9 +0.4**
**KIJV Kijevo 3.32 133** *e*Pn **Pn 03 27 53.2 +1.8**
KIJV Sn **Sn 03 28 32.7 +1.9**
**MF5 Montefalcone A 3.35 175** P **Pn 03 27 51.7 -0.1**
MF5 AML AML
comp=N,65µm,0.5s
MF5 AML AML
comp=E,64µm,0.5s
MF5 AML AML
comp=N,65µm,0.5s
MF5 AML AML
comp=E,64µm,0.5s
**TREC Trest 3.40 28** *e*PN **Pn 03 27 53.3 +0.9**
**OFFI Offida 3.42 172** AML AML
comp=E,95µm,0.8s
OFFI AML AML
comp=N,114µm,0.8s
OFFI AML AML
comp=E,95µm,0.8s
OFFI AML AML
comp=N,114µm,0.8s
**RNCA Ronca, Sant'Ol 3.42 239** S **Sn 03 28 34.5 +1.2**
**RNCA Ronca, Sant'Ol 3.42 239** P **Pn 03 27 54.6 +1.9**
**SLE Schleitheim 3.43 297** P **Pn 03 27 54.2 +1.4**
**SLE Schleitheim 3.43 297** S **Sn 03 28 34.6 +1.2**
**SLE Schleitheim 3.43 297** *e*Pn **Pn 03 27 54.4 +1.6**
SLE *e*Pg **Pg 03 28 03.6 -1.4**
SLE *e*Sg **Sg 03 28 49.5 0.0**
**ROTZ Rotzenmuhle 3.49 351** *e*Pn **Pn 03 27 54.2 +0.6**
ROTZ *e*Sn **Sn 03 28 34.2 -0.7**
**KRUC Moravsky 3.56 38** *e*SN **Sn 03 28 37.0 +0.5**
**GRF Grafenberg Arr 3.58 341** *e*Pn **Pn 03 27 56.0 +1.1**
GRF *e*Pg **Pg 03 28 08.7 +0.6**
GRF *e*Sn **Sn 03 28 37.6 +0.3**
GRF *e*Sg **Sg 03 28 55.3 +0.8**
**SULZ Cheisacher 3.58 291** P **Pn 03 27 57.2 +2.2**
**PCP Piancastagn 3.63 242** S **Sn 03 28 39.4 +0.9**
**PCP Piancastagn 3.63 242** P **Pn 03 27 57.2 +1.6**
**MANZ Manzenberg 3.72 351** *e*Pn **Pn 03 27 57.6 +0.8**
MANZ *e*Sn **Sn 03 28 39.7 -0.9**
**FELD Feldberg im Sc 3.77 296** P **Pn 03 27 58.8 +1.1**
**FELD Feldberg im Sc 3.77 296** S **Sn 03 28 42.2 +0.1**
**BFO Black Forest 3.78 304** *e*Pn **Pn 03 27 59.1 +1.5**
BFO *e*Sn **Sn 03 28 41.5 -0.6**
BFO *e*Sg **Sg 03 29 01.1 +0.4**
**PRU Pruhonice 3.80 15** *e*PN **Pn 03 27 58.4 +0.5**
**BALST Balsthal 3.81 287** P **Pn 03 27 59.5 +1.4**
**VRAC Vranov 3.83 37** *e*SN **Sn 03 28 43.4 +0.1**
**KIZ Kirchzarten 3.86 297** P **Pn 03 27 59.6 +0.9**
**ENDD Endenburg 3.88 293** P **Pn 03 28 00.4 +1.4**
**MORH Mrgy, Hungar 3.89 90** *e*Sn **Sn 03 28 44.3 -0.4**
**OPP Oppenau 3.95 305** P **Pn 03 28 01.6 +1.7**
**OPP Oppenau 3.95 305** S **Sn 03 28 47.4 +1.2**
**HVAR Hvar 3.97 141** *i* Pn **Pn 03 28 01.1 +0.8**
HVAR Sn **Sn 03 28 47.9 +1.1**
**CANO Canova, Maglio 4.00 240** P **Pn 03 28 01.1 +0.4**
**CANO Canova, Maglio 4.00 240** S **Sn 03 28 45.4 -2.1**
**VOGT Vogtsburg - To 4.06 298** P **Pn 03 28 03.2 +1.7**
**VOGT Vogtsburg - To 4.06 298** S **Sn 03 28 50.5 +1.5**
**BABA Baden-Baden-Ne 4.07 308** P **Pn 03 28 03.2 +1.6**
**BABA Baden-Baden-Ne 4.07 308** S **Sn 03 28 50.4 +1.3**
**BOURR Bourrignon 4.13 287** P **Pn 03 28 03.9 +1.5**
**BOURR Bourrignon 4.13 287** S **Sn 03 28 52.8 +2.1**
**RORO Rocca Rossa 4.15 240** P **Pn 03 28 02.6 -0.1**
**RORO Rocca Rossa 4.15 240** S **Sn 03 28 49.1 -2.1**
**ZELS Zelsheim 4.18 300** P **Pn 03 28 04.9 +1.9**
ZELS S **Sn 03 28 54.4 +2.6**
**ILLF Illfurth 4.18 291** P **Pn 03 28 04.5 +1.3**
ILLF S **Sn 03 28 54.4 +2.4**
**GBOS Grotte di Boss 4.22 242** S **Sn 03 28 52.5 -0.4**
**GBOS Grotte di Boss 4.22 242** P **Pn 03 28 03.9 +0.2**
**NEEW Neewiller pres 4.25 310** P **Pn 03 28 06.2 +2.2**
NEEW S **Sn 03 28 55.4 +1.8**
**MILB Miltenberg 4.31 326** *e*Pn **Pn 03 28 06.2 +1.2**
MILB *e*Sn **Sn 03 28 55.3 +0.1**
**MOF Molkenrain 4.31 293** P **Pn 03 28 06.6 +1.6**
MOF S **Sn 03 28 57.0 +1.6**
**BHB Bricherasio 4.32 252** P **Pn 03 28 04.2 -0.8**
**BHB Bricherasio 4.32 252** S **Sn 03 28 52.4 -3.0**
**WLS Welschbruch 4.39 300** P **Pn 03 28 07.8 +1.7**
WLS S **Sn 03 28 58.7 +1.5**
**A173A Vacheresse, 74 4.41 272** P **Pn 03 28 08.7 +2.4**
A173A S **Sn 03 29 01.9 +4.3**
**PIAF les Granges de 4.42 242** P **Pn 03 28 06.8 +0.3**
PIAF S **Sn 03 28 57.0 -1.0**
**MOX Moxa 4.43 348** *e*Pn **Pn 03 28 07.1 +0.6**
MOX *e*Sn **Sn 03 28 57.1 -1.0**
MOX *e*Sg **Sg 03 29 20.2 -1.3**
**ECH Echery 4.43 297** P **Pn 03 28 07.9 +1.4**
ECH S **Sn 03 28 58.6 +0.5**
**HOHE HOHENGOEFT 4.43 304** P **Pn 03 28 07.7 +1.1**
HOHE S **Sn 03 28 59.9 +1.8**
**CDF Champ du Feu 4.44 300** *e*P **Pn 03 28 07.7 +1.0**
CDF *e*Sn **Sn 03 28 51.9 -6.5**
**LPG La Plagne 4.47 262** *e*P **Pn 03 28 06.4 -0.9**
**LPL La Plagne 4.47 262** *e*P **Pn 03 28 07.2 -0.2**
**LEMB Lembach 4.48 309** P **Pn 03 28 08.9 +1.7**
LEMB S **Sn 03 29 00.2 +0.8**
**HINF Hinteralfeld 4.48 292** *e*P **Pn 03 28 08.3 +1.0**
HINF *e*Sn **Sn 03 28 52.1 -7.4**
comp=N,1.6nm,0.3s
**CHMF Charmoille 4.48 284** P **Pn 03 28 08.3 +0.9**
CHMF S **Sn 03 29 01.5 +2.0**
**ENR Entracque 4.49 244** P **Pn 03 28 06.9 -0.5**
**VYHS Vyhne 4.50 59** *e*PN **Pn 03 28 07.6 +0.2**
VYHS *e*SN **Sn 03 28 57.4 -2.3**
**LSTV Lastovo 4.50 141** *e*Pn **Pn 03 28 08.0 +0.5**
LSTV Sn **Sn 03 29 00.7 +1.0**
**SAOF Saorge 4.53 241** P **Pn 03 28 09.1 +1.2**
**PZZ Stroppo 4.55 249** P **Pn 03 28 08.8 +0.5**
**BRANT Les Verrieres 4.56 280** P **Pn 03 28 10.1 +1.6**
**BRANT Les Verrieres 4.56 280** S **Sn 03 29 03.7 +2.2**
**RONF Ronchamp 4.59 290** P **Pn 03 28 09.8 +1.1**
RONF S **Sn 03 29 03.7 +1.8**
**BRG Berggiesshubel 4.59 7** Pg **Pg 03 28 25.6 -1.7**
BRG Sn **Sn 03 29 01.2 -0.8**
BRG Sg **Sg 03 29 25.9 -0.8**
BRG Amp 03 29 33.8
comp=Z,6.7nm,0.5s
**TURF col de Turini 4.63 242** P **Pn 03 28 10.4 +0.9**
TURF S **Sn 03 29 01.7 -1.6**
**SBF Sospel 4.67 240** *e*P **Pn 03 28 08.9 -1.0**
SBF *e*Sn Sn 03 28 53.6 -10
comp=Z,1.1nm,0.3s
**MBDF Montbardon 4.69 252** *e*P **Pn 03 28 08.4 -1.8**
**SPIF crte de Spivo 4.69 243** P **Pn 03 28 09.7 -0.5**
**GIMEL St. Georges / 4.69 275** P **Pn 03 28 12.0 +1.8**
**PGF Pioggiola 4.75 219** *e*Sn Sn 03 28 55.9 -10
comp=Z,0.2nm,0.2s
**STON Ston 4.79 134** *e*Pn **Pn 03 28 13.5 +2.0**
STON Sn **Sn 03 29 08.3 +1.3**
**STON Ston 4.79 134** *e*Pn **Pn 03 28 12.8 +1.3**
STON *e*Sn **Sn 03 29 07.0 0.0**
**VOEL Voellerdingen 4.79 306** P **Pn 03 28 13.1 +1.6**
VOEL S **Sn 03 29 09.0 +2.0**
**CABF La Chapelle 4.81 276** *e*P **Pn 03 28 13.1 +1.2**
**HAU Haudompre 4.86 293** *e*P **Pn 03 28 13.5 +1.0**
HAU *e*Sn **Sn 03 29 01.0 -7.8**
comp=Z,2.5nm,0.4s
**RIVEL MONT RIVEL 4.93 278** P **Pn 03 28 14.5 +1.1**
RIVEL S **Sn 03 29 12.3 +1.8**
**TNS Taunus Mts 4.96 324** *e*Pn **Pn 03 28 16.2 +2.3**
TNS *e*Sn **Sn 03 29 10.2 -1.1**
**CLL Collm 4.99 360** *e*Pn **Pn 03 28 15.0 +0.8**
comp=Z,4.0nm,0.5s
CLL *e*Sn **Sn 03 29 11.0 -0.8**
CLL *i* Sg **Sg 03 29 37.9 -1.6**
comp=Z,9.0nm,0.8s
**DBRK Dubrovnik 5.17 133** *e*Pn **Pn 03 28 18.9 +2.2**
DBRK Sn **Sn 03 29 18.2 +1.9**
**ORIF Oris-en-Rattie 5.21 257** *e*P **Pn 03 28 18.2 +0.8**
**PAGF Fort de Pagny 5.44 297** *e*P **Pn 03 28 21.5 +1.1**
PAGF *e*Sn **Sn 03 29 16.0 -7.0**
**LMR La Mourre 5.52 240** *e*P **Pn 03 28 22.3 +0.8**
LMR *e*Sn Sn 03 29 13.0 -12
comp=Z,0.1nm,0.1s
**SFTF Sexfontaines 5.76 292** *e*P **Pn 03 28 25.9 +1.1**
**SMRF Simiane la Rot 5.78 249** *e*P **Pn 03 28 25.5 +0.4**
SMRF *e*Sn Sn 03 29 20.2 -11
comp=Z,0.3nm,0.2s
**MEZF Maizieres J'vi 5.84 295** *e*P **Pn 03 28 26.5 +0.6**
**DRME Dracevica, Mon 6.05 131** *e*Pn **Pn 03 28 29.7 +0.9**
DRME *e*Sn **Sn 03 29 36.4 -1.5**
**VIVF Saint-Julien-l 6.05 259** *e*P **Pn 03 28 29.0 +0.1**
**SMF Signal de Mont 6.36 276** *e*P **Pn 03 28 34.0 +0.9**
SMF *e*Sn Sn 03 29 34.8 -11
comp=Z,0.4nm,0.3s
**LOR Lormes 6.37 282** *e*P **Pn 03 28 34.1 +0.8**
baz=101
LOR *e*Sn Sn 03 29 36.3 -10
comp=Z,1.2nm,0.5s
**SSF Saint Saulge 6.60 280** *e*P **Pn 03 28 37.2 +0.9**
**GIVF Givet 6.67 308** *e*P **Pn 03 28 40.3 +3.1**
GIVF *e*Sn **Sn 03 29 45.6 -7.5**
**AVF Avril sur Loir 6.70 278** *e*P **Pn 03 28 38.4 +0.7**
**LASF Ste Croix 6.87 254** *e*P **Pn 03 28 39.6 -0.4**
**BAIF Baives 6.99 306** *e*P **Pn 03 28 44.5 +2.9**
**BGF Bois d'Agland 7.05 276** *e*P **Pn 03 28 43.7 +1.2**
BGF *e*Sn Sn 03 29 51.7 -11
comp=Z,1.0nm,0.3s
**TCF Toulx Ste Croi 7.50 274** *e*P **Pn 03 28 49.3 +0.6**
TCF *e*Sn Sn 03 30 02.6 -11
comp=Z,0.1nm,0.2s
**CAF Calviac 7.82 264** *e*P **Pn 03 28 53.4 +0.3**
**MFF Saint Martin d 9.11 277** *e*P **Pn 03 29 11.6 +0.9**
**FLN La Foliniere 9.47 290** *e*P **Pn 03 29 17.0 +1.4**
**GRR Gorron 9.66 287** *e*P **Pn 03 29 19.2 +1.0**

*STR* ***11*** *03:30:37.0±1.0, 46°N±3°×1°3E±°, h10km, MLv4.3/89, Error ellipse: s-maj=0.0km s-min=0.0km az=86.7, preliminary*
*LDG* ***11*** *03:30:37.9±0.2, 46°32N×12°99E, h12km, Ml3.7/40, Error ellipse: s-maj=2.5km s-min=2.1km az=68.0*
*PDG* ***11*** *03:30:38.9±3.5, 46°32N×13°10E, h19km±3km, ML4.1/10, Error ellipse: s-maj=2.3km s-min=3.2km az=0.0*
*ROM* ***11*** *03:30:38.8±0.0, 46°39N±0°002×13°036E±0°003, h10km, ML3.9/224, Mw3.6, Error ellipse: s-maj=0.2km s-min=0.2km az=177.0, Moment Tensor Solution. Moment tensor: Scale 10^14 Nm; Mrr 1.55; Mθθ-2.21; Mφφ 0.66; Mrθ 1.23; Mrφ -0.19; Mθφ 1.18; Fault plane solution: M0 2.60751×10^14 NP1 φs 295.00000°, δs 35.00000°, λ 140.00000°. NP2 φs 59.00000°, δs 68.00000°, λs 62.00000°.*
*NEIC* ***11*** *03:30:39.6±1.7, 46°28N±0°05×13°11E±0°08, h8km±1km, mb4.2/2, ML4.2/21(VIE) Error ellipse: s-maj=8.5km s-min=7.2km az=123.0*
*VIE* ***11*** *03:30:39.0±0.2, 46°34N×13°03E, h12km±3km, mb3.4/21, ml4.2/21, Error ellipse: s-maj=1.4km s-min=1.1km az=21.0*
*RHSSO* ***11*** *03:30:40.5±0.5, 46°35N×13°06E, h11km±2km, ML4.0/20*
*IDC* ***11*** *03:30:41.6±1.7, 46°53N×12°94E, h0km, mb3.6/1, mbtmp3.8/8, ML3.4/7, MS2.3/2, Error ellipse: s-maj=25.5km s-min=10.8km az=152.0*
*PRU* ***11*** *03:30:41.1, 46°36N×13°02E, h10km, M4.2*
*BGR* ***11*** *03:30:42.1±0.3, 46°34N×13°11E, h10km, ML4.2/42, Error ellipse: s-maj=5.6km s-min=4.4km az=6.0*
*BEO* ***11*** *03:30:43.3±0.6, 46°34N×13°42E, h0km, ML3.8/16*
*BNS* ***11*** *03:30:45.5±0.4, 46°61N×12°90E, h5km, ML4.0*
**ISC 11 03:30:40.0±0.6, 46°32N±0°01×13°066E±0°010, h12km±3km, n534, σ1§99/784, 36C-49D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BOO** | **Bordano** | **0.02** | **94** | ⇑*e*Pg | | **Pg** | **03 30 41.4** | **-0.8** |
| BOO | | | | *e*Sg | | **Sg** | **03 30 42.6** | **-1.0** |
| **BOO** | **Bordano** | **0.02** | **94** | ⇑P | | **Pg** | **03 30 41.4** | **-0.8** |
| BOO | | | | S | | **Sg** | **03 30 42.8** | **-0.9** |
| **GEPF** | **Gemona** | **0.07** | **133** | ⇑P | | **Pg** | **03 30 42.0** | **-0.5** |
| GEPF | | | | S | | **Sg** | **03 30 43.9** | **-0.3** |
| GEPF | | | | AML | AML | | | |
| GEPF | | | | AML | AML | | | |
| **MPRI** | **Monte Prat** | **0.10** | **214** | ⇑*e*Pg | | **Pg** | **03 30 42.1** | **-0.7** |
| MPRI | | | | *e*Sg | | **Sg** | **03 30 44.1** | **-0.7** |
| **MPRI** | **Monte Prat** | **0.10** | **214** | ⇑P | | **Pg** | **03 30 42.1** | **-0.7** |
| MPRI | | | | S | | **Sg** | **03 30 44.1** | **-0.7** |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| MPRI | | | | AML | AML | | | |
| **FUSE** | **Fusea** | **0.10** | **334** | ⇓*e*Pg | | **Pg** | **03 30 41.8** | **-1.1** |
| FUSE | | | | *e*Sg | | **Sg** | **03 30 43.3** | **-1.7** |
| **FUSE** | **Fusea** | **0.10** | **334** | ⇓P | | **Pg** | **03 30 41.8** | **-1.1** |
| FUSE | | | | S | | **Sg** | **03 30 43.4** | **-1.7** |
| **BUA** | **Buia** | **0.11** | **159** | ⇑*e*Pg | | **Pg** | **03 30 42.5** | **-0.5** |
| BUA | | | | *e*Sg | | **Sg** | **03 30 45.0** | **-0.1** |
| **DST2** | **Trieste** | **0.12** | **232** | ⇑P | | **Pg** | **03 30 42.4** | **-0.7** |
| DST2 | | | | S | | **Sg** | **03 30 44.9** | **-0.5** |
| DST2 | | | | AML | AML | | | |
| DST2 | | | | AML | AML | | | |
| DST2 | | | | AML | AML | | | |
| DST2 | | | | AML | AML | | | |
| DST2 | | | | AML | AML | | | |
| **BAD** | **Bernadia** | **0.15** | **125** | ⇑*e*Pg | | **Pg** | **03 30 43.2** | **-0.3** |
| BAD | | | | *e*Sg | | **Sg** | **03 30 46.1** | **+0.1** |
| **BAD** | **Bernadia** | **0.15** | **125** | ⇑P | | **Pg** | **03 30 43.2** | **-0.3** |
| BAD | | | | S | | **Sg** | **03 30 46.1** | **+0.1** |
| **VINO** | **Villanova** | **0.16** | **114** | ⇑*e*Pg | | **Pg** | **03 30 43.3** | **-0.5** |
| VINO | | | | *e*Sg | | **Sg** | **03 30 46.5** | **+0.1** |
| **VINO** | **Villanova** | **0.16** | **114** | ⇑P | | **Pg** | **03 30 43.3** | **-0.5** |
| VINO | | | | S | | **Sg** | **03 30 46.5** | **+0.1** |
| VINO | | | | AML | AML | | | |

comp=E,66350µm,0.4s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| VINO | | | | | AML | AML | | | |
| | comp=N,92000µm,0.8s | | | | | | | | |
| VINO | | | | | AML | AML | | | |
| | comp=E,66350µm,1.6s | | | | | | | | |
| VINO | | | | | AML | AML | | | |
| | comp=N,82343µm,0.3s | | | | | | | | |
| VINO | | | | | AML | AML | | | |
| | comp=E,66379µm,0.4s | | | | | | | | |
| **CLUD** | **Cludinico** | **0.19** | **317** | ⇓ | *e*Pg | **Pg** | **03 30 43.0** | **-1.1** | |
| CLUD | | | | | *e*Sg | **Sg** | **03 30 45.8** | **-1.2** | |
| **CLUD** | **Cludinico** | **0.19** | **317** | ⇓ | P | **Pg** | **03 30 43.0** | **-1.1** | |
| CLUD | | | | | S | **Sg** | **03 30 45.8** | **-1.2** | |
| CLUD | | | | | AML | AML | | | |
| CLUD | | | | | AML | AML | | | |
| | comp=N,49600µm,0.5s | | | | | | | | |
| CLUD | | | | | AML | AML | | | |
| | comp=N,53750µm,0.5s | | | | | | | | |
| CLUD | | | | | AML | AML | | | |
| CLUD | | | | | AML | AML | | | |
| CLUD | | | | | AML | AML | | | |
| | comp=N,48764µm,0.4s | | | | | | | | |
| CLUD | | | | | AML | AML | | | |
| | comp=N,52975µm,0.4s | | | | | | | | |
| CLUD | | | | | AML | AML | | | |
| **PLRO** | **Paularo** | **0.23** | **14** | ⇓ | *e*Pg | **Pg** | **03 30 44.3** | **-0.8** | |
| PLRO | | | | | *e*Sg | **Sg** | **03 30 47.6** | **-0.9** | |
| **PLRO** | **Paularo** | **0.23** | **14** | ⇓ | P | **Pg** | **03 30 44.3** | **-0.8** | |
| PLRO | | | | | S | **Sg** | **03 30 48.1** | **-0.4** | |
| **ZOU** | **Zoufplan** | **0.24** | **345** | ⇓ | *e*Pg | **Pg** | **03 30 44.4** | **-0.9** | |
| ZOU | | | | | *e*Sg | **Sg** | **03 30 47.9** | **-0.9** | |
| **ZOU** | **Zoufplan** | **0.24** | **345** | ⇓ | P | **Pg** | **03 30 44.4** | **-0.9** | |
| ZOU | | | | | S | **Sg** | **03 30 48.2** | **-0.6** | |
| ZOU | | | | | AML | AML | | | |
| | comp=E,28500µm,1.1s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=E,28150µm,1.1s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=E,28150µm,0.9s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=E,28500µm,0.9s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=N,35500µm,1.2s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=N,35550µm,1.2s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=E,27532µm,0.4s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=E,28044µm,0.4s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=N,35076µm,0.3s | | | | | | | | |
| ZOU | | | | | AML | AML | | | |
| | comp=N,34952µm,0.3s | | | | | | | | |
| **STAL** | **STALIGIAL** | **0.25** | **256** | | Pg | **Pg** | **03 30 44.0** | **-1.3** | |
| STAL | | | | | Sg | **Sg** | **03 30 47.8** | **-1.1** | |
| **STAL** | **STALIGIAL** | **0.25** | **256** | | P | **Pg** | **03 30 44.0** | **-1.3** | |
| STAL | | | | | S | **Sg** | **03 30 48.0** | **-0.9** | |
| STAL | | | | | AML | AML | | | |
| | comp=N,21250µm,0.3s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=N,21250µm,0.3s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=E,14450µm,1.1s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=E,16300µm,0.3s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=N,14600µm,1.5s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=N,14600µm,0.5s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=E,13070µm,0.3s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=E,16288µm,0.3s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=N,21243µm,0.3s | | | | | | | | |
| STAL | | | | | AML | AML | | | |
| | comp=N,14553µm,0.2s | | | | | | | | |
| **COLI** | **Coloredo** | **0.29** | **131** | ⇓ | *e*Pg | **Pg** | **03 30 45.7** | **-0.2** | |
| COLI | | | | | *e*Sg | **Sg** | **03 30 50.2** | **+0.4** | |
| **ROBS** | **Robic** | **0.32** | **104** | ⇑ | *i*Pg | **Pg** | **03 30 45.6** | **-0.8** | |
| ROBS | | | | | *i* Sg | **Sg** | **03 30 50.7** | **0.0** | |
| ROBS | | | | | IAML | | 03 30 52.6 | | |
| | comp=Z,1µm,0.1s | | | | | | | | |
| **FVI** | **Forni Avoltri** | **0.34** | **324** | ⇓ | P | **Pg** | **03 30 45.6** | **-1.3** | |
| FVI | | | | | S | **Sg** | **03 30 50.4** | **-1.1** | |
| FVI | | | | | AML | AML | | | |
| | comp=N,24250µm,0.3s | | | | | | | | |
| FVI | | | | | AML | AML | | | |
| | comp=E,18600µm,0.9s | | | | | | | | |
| FVI | | | | | AML | AML | | | |
| | comp=N,24249µm,0.3s | | | | | | | | |
| FVI | | | | | AML | AML | | | |
| | comp=E,16490µm,0.4s | | | | | | | | |
| **CSMI** | **Casera Mimoias** | **0.34** | **304** | ⇓ | *e*Pg | **Pg** | **03 30 45.6** | **-1.4** | |
| CSMI | | | | | *e*Sg | **Sg** | **03 30 49.9** | **-1.8** | |
| **LSR** | **Lussari** | **0.35** | **64** | ⇑ | *e*Pg | **Pg** | **03 30 46.4** | **-0.8** | |
| LSR | | | | | *e*Sg | **Sg** | **03 30 52.6** | **+0.6** | |
| **MLNI** | **Malnisio** | **0.36** | **242** | ⇑ | *e*Pg | **Pg** | **03 30 46.1** | **-1.2** | |
| MLNI | | | | | *e*Sg | **Sg** | **03 30 51.4** | **-0.7** | |
| **PRED** | **Cave del Predi** | **0.37** | **71** | ⇑ | *e*Pg | **Pg** | **03 30 46.4** | **-0.9** | |
| **PRED** | **Cave del Predi** | **0.37** | **71** | | | **Pg** | **03 30 46.4** | **-0.9** | |
| PRED | | | | | Sg | **Sg** | **03 30 52.3** | **0.0** | |
| **PRED** | **Cave del Predi** | **0.37** | **71** | ⇑ | P | **Pg** | **03 30 46.5** | **-0.9** | |
| PRED | | | | | S | **Sg** | **03 30 52.6** | **+0.3** | |
| **ACOM** | **Acomizza, Ital** | **0.38** | **54** | ⇑ | *e*Pg | **Pg** | **03 30 47.0** | **-0.7** | |
| ACOM | | | | | *e*Sg | **Sg** | **03 30 53.3** | **+0.4** | |
| **ACOM** | **Acomizza, Ital** | **0.38** | **54** | | P | **Pg** | **03 30 47.2** | **-0.5** | |
| ACOM | | | | | S | **Sg** | **03 30 53.9** | **+1.0** | |
| ACOM | | | | | AML | AML | | | |
| | comp=E,51400µm,0.2s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=E,50500µm,0.2s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=N,32550µm,0.3s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=N,34500µm,1.6s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=N,32550µm,1.7s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=E,51378µm,0.2s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=E,50456µm,0.2s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=N,32567µm,0.3s | | | | | | | | |
| ACOM | | | | | AML | AML | | | |
| | comp=N,34232µm,0.3s | | | | | | | | |
| **TLI** | **Talmassons** | **0.40** | **176** | ⇓ | *e*Pg | **Pg** | **03 30 47.2** | **-0.7** | |
| **DRE** | **Drenchia** | **0.43** | **110** | ⇓ | *e*Pg | **Pg** | **03 30 47.6** | **-0.8** | |
| DRE | | | | | *e*Sg | **Sg** | **03 30 54.9** | **+0.8** | |
| **DRE** | **Drenchia** | **0.43** | **110** | | P | **Pg** | **03 30 47.6** | **-0.8** | |
| DRE | | | | | S | **Sg** | **03 30 55.0** | **+0.8** | |
| **CIMO** | **Cimolais** | **0.43** | **269** | ⇑ | *e*Pg | **Pg** | **03 30 46.8** | **-1.8** | |
| CIMO | | | | | *e*Sg | **Sg** | **03 30 52.8** | **-1.6** | |
| **CIMO** | **Cimolais** | **0.43** | **269** | | P | **Pg** | **03 30 46.8** | **-1.8** | |
| CIMO | | | | | S | **Sg** | **03 30 52.9** | **-1.4** | |
| CIMO | | | | | AML | AML | | | |
| | comp=E,3320µm,0.4s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=N,3380µm,0.6s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=N,3345µm,0.5s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=N,3380µm,1.4s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=N,3345µm,1.5s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=E,3325µm,0.4s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=N,3345µm,0.5s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=N,3361µm,0.5s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=E,3328µm,0.4s | | | | | | | | |
| CIMO | | | | | AML | AML | | | |
| | comp=E,3320µm,0.4s | | | | | | | | |
| **CADS** | **Cadrg** | **0.47** | **101** | ⇑ | *i*Pg | **Pg** | **03 30 48.2** | **-1.1** | |
| CADS | | | | | *i* Sg | **Sg** | **03 30 56.3** | **+0.7** | |
| CADS | | | | | IAML | | 03 30 58.0 | | |
| | comp=Z,4µm,0.2s | | | | | | | | |
| **POLC** | **Polcenigo** | **0.49** | **233** | | P | **Pg** | **03 30 48.9** | **-0.8** | |
| POLC | | | | | AML | AML | | | |
| | comp=N,15600µm,0.5s | | | | | | | | |
| POLC | | | | | AML | AML | | | |
| | comp=E,14500µm,1.4s | | | | | | | | |
| POLC | | | | | AML | AML | | | |
| | comp=N,15600µm,1.5s | | | | | | | | |
| POLC | | | | | AML | AML | | | |
| | comp=E,13159µm,0.4s | | | | | | | | |
| POLC | | | | | AML | AML | | | |
| | comp=N,15620µm,0.5s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **0.50** | **52** | | *e*Pg | **Pg** | **03 30 49.3** | **-0.6** | |
| | comp=N,112nm,0.2s,SNR=329 | | | | | | | | |
| MYKA | | | | | *i* Sg | **Sg** | **03 30 56.1** | **-0.5** | |
| | comp=N,1µm,0.2s | | | | | | | | |
| **A300A** | **Muzzana del Tu** | **0.51** | **175** | | P | **Pg** | **03 30 49.2** | **-0.6** | |
| **SABO** | **M.te Sabotino** | **0.51** | **132** | | Pg | **Pg** | **03 30 49.2** | **-0.6** | |
| **SABO** | **M.te Sabotino** | **0.51** | **132** | | P | **Pg** | **03 30 49.5** | **-0.4** | |
| SABO | | | | | S | **Sb** | **03 30 58.6** | **+0.4** | |
| SABO | | | | | AML | AML | | | |
| SABO | | | | | AML | AML | | | |
| SABO | | | | | AML | AML | | | |
| | comp=E,35750µm,0.5s | | | | | | | | |
| SABO | | | | | AML | AML | | | |
| | comp=N,49400µm,0.5s | | | | | | | | |
| SABO | | | | | AML | AML | | | |
| | comp=N,49400µm,1.5s | | | | | | | | |
| SABO | | | | | AML | AML | | | |
| SABO | | | | | AML | AML | | | |
| SABO | | | | | AML | AML | | | |
| | comp=E,35747µm,0.5s | | | | | | | | |
| SABO | | | | | AML | AML | | | |
| | comp=N,49382µm,0.5s | | | | | | | | |
| SABO | | | | | AML | AML | | | |
| **CAE** | **Caneva** | **0.54** | **234** | | P | **Pg** | **03 30 49.5** | **-1.0** | |
| CAE | | | | | S | **Sg** | **03 30 58.0** | **+0.3** | |
| **ABTA** | **Abfaltersbach** | **0.57** | **318** | | *e*Pg | **Pg** | **03 30 49.9** | **-1.3** | |
| | comp=N,192nm,0.4s,SNR=452 | | | | | | | | |
| ABTA | | | | | *e*Sg | **Sg** | **03 30 57.3** | **-1.5** | |
| | comp=N,2µm,0.4s | | | | | | | | |
| **FRE8** | **Fregona** | **0.58** | **238** | | P | **Pg** | **03 30 50.2** | **-1.1** | |
| **VOJS** | **Vojsko** | **0.64** | **117** | | *i* Pg | **Pg** | **03 30 51.2** | **-1.2** | |
| VOJS | | | | | *i* Sg | **Sb** | **03 31 02.0** | **-0.1** | |
| VOJS | | | | | IAML | | 03 31 03.2 | | |
| | comp=Z,1µm,0.1s | | | | | | | | |
| **GORS** | **Gorjuse** | **0.64** | **90** | | *i* Pg | **Pg** | **03 30 51.1** | **-1.4** | |
| GORS | | | | | *i* Sg | **Sg** | **03 31 01.4** | **+0.3** | |
| GORS | | | | | IAML | | 03 31 03.6 | | |
| | comp=Z,678nm,0.1s | | | | | | | | |
| **VARN** | **Col Varnada, M** | **0.74** | **244** | | AML | AML | | | |
| | comp=N,5537µm,0.7s | | | | | | | | |
| VARN | | | | | AML | AML | | | |
| | comp=E,9855µm,0.4s | | | | | | | | |
| VARN | | | | | AML | AML | | | |
| | comp=N,5705µm,0.9s | | | | | | | | |
| VARN | | | | | AML | AML | | | |
| | comp=N,5535µm,0.9s | | | | | | | | |
| VARN | | | | | AML | AML | | | |
| | comp=E,10035µm,0.4s | | | | | | | | |
| VARN | | | | | AML | AML | | | |
| | comp=E,9831µm,0.4s | | | | | | | | |
| VARN | | | | | AML | AML | | | |
| | comp=E,10013µm,0.4s | | | | | | | | |
| VARN | | | | | AML | AML | | | |
| | comp=N,5418µm,0.7s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **0.78** | **14** | | *e*Pg | **Pg** | **03 30 54.3** | **-0.8** | |
| | comp=N,399nm,0.3s,SNR=146 | | | | | | | | |
| KBA | | | | | *e*Sg | **Sg** | **03 31 04.8** | **-0.5** | |
| | comp=N,2µm,0.3s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **0.78** | **14** | | *e*Pg | **Pg** | **03 30 54.4** | **-0.7** | |
| KBA | | | | | *e*Sg | **Sg** | **03 31 04.9** | **-0.5** | |
| **KBA** | **Koelnbreinsper** | **0.78** | **14** | | *e*Pg | **Pg** | **03 30 54.4** | **-0.7** | |
| KBA | | | | | *e*Sg | **Sg** | **03 31 04.9** | **-0.5** | |
| **JAVS** | **Javornik** | **0.82** | **121** | | *i* Pg | **Pg** | **03 30 54.1** | **-1.7** | |
| JAVS | | | | | *i* Sg | **Sb** | **03 31 07.8** | **+0.6** | |
| JAVS | | | | | IAML | | 03 31 08.7 | | |
| | comp=Z,2µm,0.3s | | | | | | | | |
| **CRNS** | **Crni Vrh** | **0.86** | **106** | | *i* Pg | **Pg** | **03 30 54.9** | **-1.8** | |
| CRNS | | | | | *i* Sg | **Sb** | **03 31 09.4** | **+0.8** | |
| CRNS | | | | | IAML | | 03 31 11.9 | | |
| | comp=Z,846nm,0.2s | | | | | | | | |
| **MOZS** | **Mozjanca** | **0.95** | **91** | | *i* Pg | **Pg** | **03 30 57.0** | **-1.4** | |
| MOZS | | | | | *i* Sg | **Sn** | **03 31 12.7** | **-0.2** | |
| MOZS | | | | | IAML | | 03 31 16.9 | | |
| | comp=Z,276nm,0.1s | | | | | | | | |
| **ASOL** | **Asolo** | **0.96** | **238** | | AML | AML | | | |
| | comp=E,45450µm,0.3s | | | | | | | | |
| ASOL | | | | | AML | AML | | | |
| | comp=N,60600µm,0.3s | | | | | | | | |
| ASOL | | | | | AML | AML | | | |
| | comp=N,60586µm,0.3s | | | | | | | | |
| ASOL | | | | | AML | AML | | | |
| | comp=E,45460µm,0.3s | | | | | | | | |
| **CGRP** | **Cima Grappa** | **0.98** | **244** | | AML | AML | | | |
| | comp=E,10798µm,0.5s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=N,10065µm,0.6s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=E,10850µm,0.5s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=N,10060µm,0.6s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=E,10800µm,0.5s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=N,10060µm,1.4s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=N,10065µm,1.4s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=E,10839µm,0.5s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=N,10064µm,0.6s | | | | | | | | |
| CGRP | | | | | AML | AML | | | |
| | comp=N,10075µm,0.6s | | | | | | | | |
| **BRES** | **Bressanone** | **0.99** | **293** | | AML | AML | | | |
| | comp=N,3410µm,0.4s | | | | | | | | |
| BRES | | | | | AML | AML | | | |
| | comp=E,3280µm,1.4s | | | | | | | | |
| BRES | | | | | AML | AML | | | |
| | comp=N,3440µm,1.2s | | | | | | | | |
| BRES | | | | | AML | AML | | | |
| | comp=E,2567µm,0.4s | | | | | | | | |
| **SKDS** | **Skadanscina** | **1.02** | **139** | | *i* Pg | **Pg** | **03 30 57.5** | **-2.1** | |
| SKDS | | | | | IAML | | 03 31 17.0 | | |
| | comp=Z,904nm,0.2s | | | | | | | | |
| **SKDS** | **Skadanscina** | **1.02** | **139** | ⇓ | *i* Pg | **Pg** | **03 30 59.6** | **0.0** | |
| SKDS | | | | | *e*Sg | **Sn** | **03 31 14.1** | **-0.3** | |
| **CTI** | **Castel Tesino** | **1.02** | **255** | | Pg | **Pg** | **03 30 58.3** | **-1.4** | |
| **CTI** | **Castel Tesino** | **1.02** | **255** | | AML | AML | | | |
| | comp=N,8982µm,0.3s | | | | | | | | |
| CTI | | | | | AML | AML | | | |
| | comp=E,11265µm,0.3s | | | | | | | | |
| CTI | | | | | AML | AML | | | |
| | comp=N,8985µm,0.3s | | | | | | | | |
| CTI | | | | | AML | AML | | | |
| | comp=E,11265µm,1.7s | | | | | | | | |
| CTI | | | | | AML | AML | | | |
| | comp=E,11285µm,0.3s | | | | | | | | |
| **CTI** | **Castel Tesino** | **1.02** | **255** | | P | **Pg** | **03 30 58.8** | **-0.8** | |
| CTI | | | | | S | **Sb** | **03 31 13.6** | **+0.5** | |
| **GBAS** | **Gorenja Brezov** | **1.03** | **112** | | *i* Pg | **Pb** | **03 30 57.7** | **-2.1** | |
| GBAS | | | | | *i* Sg | **Sn** | **03 31 14.7** | **0.0** | |
| GBAS | | | | | IAML | | 03 31 18.3 | | |
| | comp=Z,621nm,0.2s | | | | | | | | |
| **OBKA** | **Obir** | **1.04** | **79** | | *e*Pg | **Pb** | **03 30 59.2** | **-0.9** | |
| | comp=Z,14nm,0.3s,SNR=141 | | | | | | | | |
| OBKA | | | | | *e*Sg | **Sn** | **03 31 14.6** | **-0.6** | |
| | comp=Z,528nm,0.4s | | | | | | | | |
| **OBKA** | **Obir** | **1.04** | **79** | ⇑ | *i* Pg | **Pb** | **03 30 58.3** | **-1.8** | |
| OBKA | | | | | *e*Sg | **Sb** | **03 31 13.9** | **+0.1** | |
| **OBKA** | **Obir** | **1.04** | **79** | | *e*Pn | **Pb** | **03 30 59.2** | **-0.9** | |
| OBKA | | | | | *e*Pg | **Pn** | **03 31 01.7** | **+1.1** | |
| OBKA | | | | | *e*Sg | **Sb** | **03 31 13.9** | **+0.1** | |
| **OBKA** | **Obir** | **1.04** | **79** | | *e*Pn | **Pb** | **03 30 59.2** | **-0.9** | |
| OBKA | | | | | *e*Pg | **Pn** | **03 31 01.7** | **+1.1** | |
| OBKA | | | | | *e*Sg | **Sb** | **03 31 13.9** | **+0.1** | |
| **LJU** | **Ljubljana** | **1.05** | **105** | | *i* Pg | **Pb** | **03 30 59.0** | **-1.2** | |
| LJU | | | | | *i* Sg | **Sn** | **03 31 14.9** | **-0.3** | |
| LJU | | | | | IAML | | 03 31 20.5 | | |
| | comp=Z,684nm,0.2s | | | | | | | | |
| **CEY** | **Cerknica** | **1.11** | **121** | | *i* Pg | **Pb** | **03 30 59.4** | **-1.9** | |
| CEY | | | | | IAML | | 03 31 20.8 | | |
| | comp=Z,1µm,0.3s | | | | | | | | |
| **CEY** | **Cerknica** | **1.11** | **121** | | *e*Pg | **Pn** | **03 31 01.5** | **0.0** | |
| CEY | | | | | *e*Sg | **Sg** | **03 31 16.3** | **+0.4** | |
| **LESA** | **Schwarzleotal** | **1.14** | **347** | | *i* Pg | **Pb** | **03 31 00.7** | **-0.9** | |
| | comp=Z,244nm,0.4s | | | | | | | | |
| LESA | | | | | *e*Sg | **Sb** | **03 31 15.1** | **-1.2** | |
| | comp=Z,857nm,0.3s | | | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **1.16** | **100** | | *i* Pg | **Pb** | **03 31 00.7** | **-1.3** | |
| VNDS | | | | | *i* Sg | **Sn** | **03 31 18.5** | **+0.7** | |
| VNDS | | | | | IAML | | 03 31 22.5 | | |
| | comp=Z,656nm,0.2s | | | | | | | | |
| **KOSI** | **Kohlern** | **1.18** | **278** | | AML | AML | | | |
| KOSI | | | | | AML | AML | | | |
| | comp=N,5155µm,1.6s | | | | | | | | |
| KOSI | | | | | AML | AML | | | |
| | comp=E,4355µm,0.7s | | | | | | | | |
| KOSI | | | | | AML | AML | | | |
| | comp=N,5155µm,0.4s | | | | | | | | |
| KOSI | | | | | AML | AML | | | |
| | comp=N,5154µm,0.4s | | | | | | | | |
| KOSI | | | | | AML | AML | | | |
| | comp=E,4352µm,0.7s | | | | | | | | |
| **KNDS** | **Knezji Dol** | **1.21** | **130** | | *i* Pg | **Pn** | **03 31 01.1** | **-1.8** | |
| KNDS | | | | | *i* Sg | **Sn** | **03 31 21.6** | **+2.3** | |
| KNDS | | | | | IAML | | 03 31 22.4 | | |
| | comp=Z,1µm,0.4s | | | | | | | | |
| **BOSI** | **Bolzano** | **1.22** | **279** | | AML | AML | | | |
| | comp=E,8235µm,0.5s | | | | | | | | |
| BOSI | | | | | AML | AML | | | |
| | comp=N,7970µm,0.4s | | | | | | | | |
| BOSI | | | | | AML | AML | | | |
| | comp=E,8236µm,0.5s | | | | | | | | |
| BOSI | | | | | AML | AML | | | |
| | comp=N,7949µm,0.4s | | | | | | | | |
| **PANI** | **Panarotta** | **1.23** | **258** | | AML | AML | | | |
| | comp=E,8405µm,0.3s | | | | | | | | |
| PANI | | | | | AML | AML | | | |
| | comp=N,21750µm,0.4s | | | | | | | | |
| PANI | | | | | AML | AML | | | |
| | comp=E,8405µm,1.7s | | | | | | | | |
| PANI | | | | | AML | AML | | | |
| | comp=N,21723µm,0.4s | | | | | | | | |
| PANI | | | | | AML | AML | | | |
| | comp=E,8399µm,0.3s | | | | | | | | |
| **ROSI** | **Rosskopf** | **1.29** | **299** | | AML | AML | | | |
| | comp=N,4890µm,1.5s | | | | | | | | |
| ROSI | | | | | AML | AML | | | |
| | comp=N,4890µm,0.5s | | | | | | | | |
| ROSI | | | | | AML | AML | | | |
| | comp=E,4895µm,0.6s | | | | | | | | |
| ROSI | | | | | AML | AML | | | |
| | comp=N,4257µm,0.3s | | | | | | | | |
| ROSI | | | | | AML | AML | | | |
| | comp=E,4895µm,0.6s | | | | | | | | |
| **VISS** | **Visnje** | **1.34** | **112** | | *i* Pg | **Pn** | **03 31 03.4** | **-1.1** | |
| VISS | | | | | *i* Sg | **Sg** | **03 31 24.0** | **+0.9** | |
| VISS | | | | | IAML | | 03 31 25.8 | | |
| | comp=Z,1µm,0.3s | | | | | | | | |
| **WTTA** | **Wattenberg** | **1.36** | **314** | | *e*Pg | **Pn** | **03 31 04.6** | **-0.4** | |
| | comp=Z,261nm,0.3s,SNR=145 | | | | | | | | |
| WTTA | | | | | *e*Sg | **Sb** | **03 31 21.8** | **-1.2** | |
| | comp=Z,2µm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **1.36** | **314** | | AML | AML | | | |
| | comp=E,6165µm,1.3s | | | | | | | | |
| WTTA | | | | | AML | AML | | | |
| | comp=E,6165µm,0.7s | | | | | | | | |
| WTTA | | | | | AML | AML | | | |
| | comp=N,6785µm,0.5s | | | | | | | | |
| WTTA | | | | | AML | AML | | | |
| | comp=E,6163µm,0.7s | | | | | | | | |
| WTTA | | | | | AML | AML | | | |
| | comp=N,6786µm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **1.36** | **314** | | *e*Pn | **Pn** | **03 31 05.1** | **0.0** | |
| WTTA | | | | | *e*Pg | **Pg** | **03 31 06.5** | **+0.3** | |
| WTTA | | | | | *e*Sg | **Sb** | **03 31 22.2** | **-0.8** | |
| **WTTA** | **Wattenberg** | **1.36** | **314** | | *e*Pn | **Pn** | **03 31 05.1** | **0.0** | |
| WTTA | | | | | *e*Pg | **Pg** | **03 31 06.5** | **+0.3** | |
| WTTA | | | | | *e*Sg | **Sb** | **03 31 22.2** | **-0.8** | |
| **ZAVS** | **Zavodnje** | **1.36** | **85** | | *i* Pg | **Pn** | **03 31 04.2** | **-0.7** | |
| ZAVS | | | | | *i* Sg | **Sg** | **03 31 25.2** | **+1.4** | |
| ZAVS | | | | | IAML | | 03 31 29.2 | | |
| | comp=Z,318nm,0.1s | | | | | | | | |
| **PDKS** | **Podkum** | **1.37** | **100** | | *i* Pg | **Pn** | **03 31 04.4** | **-0.6** | |
| PDKS | | | | | *i* Sg | **Sg** | **03 31 24.4** | **+0.4** | |
| PDKS | | | | | IAML | | 03 31 28.9 | | |
| | comp=Z,394nm,0.2s | | | | | | | | |
| **TEOL** | **Teolo** | **1.37** | **226** | | | **Pn** | **03 31 04.3** | **-0.7** | |
| **DOSS** | **Dosso del Somm** | **1.38** | **252** | | P | **Pn** | **03 31 04.9** | **-0.3** | |
| DOSS | | | | | S | **Sn** | **03 31 23.7** | **+0.2** | |
| **SOKA** | **Soboth** | **1.41** | **75** | | *e*Pg | **Pn** | **03 31 05.2** | **-0.3** | |
| | comp=Z,8.2nm,0.2s,SNR=161 | | | | | | | | |
| SOKA | | | | | *e*Sn | **Sb** | **03 31 24.7** | **+0.5** | |
| | comp=Z,439nm,0.7s | | | | | | | | |
| **RIY** | **Rijeka** | **1.41** | **135** | | *i* Pn | **Pb** | **03 31 06.2** | **0.0** | |
| RIY | | | | | Sn | **Sg** | **03 31 25.9** | **+0.7** | |
| **BIOA** | **Bad Ischl, Aus** | **1.43** | **16** | | *e*Pg | **Pn** | **03 31 06.0** | **+0.2** | |
| | comp=Z,83nm,0.3s,SNR=134 | | | | | | | | |
| BIOA | | | | | *e*Sg | **Sg** | **03 31 26.0** | **+0.1** | |
| | comp=Z,521nm,0.3s | | | | | | | | |
| **RJOB** | **Jochberg** | **1.43** | **353** | | *e*Pn | **Pn** | **03 31 06.1** | **+0.3** | |
| RJOB | | | | | *e*Sn | **Sb** | **03 31 25.3** | **+0.5** | |
| **RJOB** | **Jochberg** | **1.43** | **353** | | *e*Pn | **Pn** | **03 31 06.1** | **+0.3** | |
| RJOB | | | | | *e*Sn | **Sb** | **03 31 25.3** | **+0.5** | |
| **WATA** | **Walderalm** | **1.44** | **315** | | *e*Pg | **Pn** | **03 31 05.9** | **-0.2** | |
| | comp=Z,12nm,0.3s,SNR=126 | | | | | | | | |
| WATA | | | | | *e*Sg | **Sn** | **03 31 24.8** | **-0.2** | |
| | comp=Z,899nm,0.4s | | | | | | | | |
| **GBRS** | **Gornja Briga** | **1.45** | **122** | | *i* Pg | **Pn** | **03 31 05.9** | **-0.2** | |
| GBRS | | | | | *i* Sg | **Sg** | **03 31 27.6** | **+0.9** | |
| GBRS | | | | | IAML | | 03 31 29.6 | | |
| | comp=Z,804nm,0.2s | | | | | | | | |
| **PERS** | **Pernice** | **1.45** | **77** | | *i* Pg | **Pn** | **03 31 05.8** | **-0.3** | |
| PERS | | | | | IAML | | 03 31 32.8 | | |
| | comp=Z,471nm,0.3s | | | | | | | | |
| **GAGG** | **Gaggia** | **1.48** | **262** | | P | **Pn** | **03 31 06.9** | **+0.2** | |
| GAGG | | | | | S | **Sb** | **03 31 26.8** | **+0.3** | |
| **BRJN** | **Brijuni** | **1.50** | **161** | | *i* Pn | **Pn** | **03 31 06.6** | **-0.1** | |
| **SMRN** | **Sveta Marina** | **1.50** | **149** | | *i* Pn | **Pn** | **03 31 06.8** | **+0.1** | |
| SMRN | | | | | Sn | **Sg** | **03 31 28.2** | **+0.1** | |
| **SQTA** | **Sankt Quirin** | **1.56** | **306** | | *e*Pg | **Pn** | **03 31 08.0** | **+0.3** | |
| | comp=Z,285nm,0.3s,SNR=310 | | | | | | | | |
| SQTA | | | | | *e*Sn | **Sn** | **03 31 26.7** | **-1.2** | |
| | comp=Z,439nm,0.5s | | | | | | | | |
| **LEGS** | **Legarje** | **1.61** | **103** | | *i* Pn | **Pn** | **03 31 08.6** | **+0.3** | |
| LEGS | | | | | *e*Sn | **Sb** | **03 31 30.7** | **+0.7** | |
| **OPPE** | **Oppeano** | **1.67** | **233** | | P | **Pn** | **03 31 09.4** | **+0.3** | |
| **DOBS** | **Dobrina** | **1.68** | **95** | | *i* Pn | **Pn** | **03 31 09.3** | **+0.1** | |
| DOBS | | | | | IAML | | 03 31 37.3 | | |
| | comp=Z,141nm,0.2s | | | | | | | | |
| **BALD** | **Monte Baldo** | **1.69** | **249** | | P | **Pn** | **03 31 09.4** | **-0.2** | |
| BALD | | | | | S | **Sb** | **03 31 33.0** | **+0.5** | |
| **GROS** | **Grobnik** | **1.69** | **84** | | *i* Pn | **Pn** | **03 31 10.0** | **+0.5** | |
| **MOTA** | **Moosalm** | **1.69** | **308** | | *e*Pg | **Pb** | **03 31 10.5** | **-0.6** | |
| | comp=Z,394nm,0.4s | | | | | | | | |
| MOTA | | | | | *e*Sg | **Sb** | **03 31 33.0** | **+0.5** | |
| | comp=Z,2µm,0.5s | | | | | | | | |
| **CESS** | **Cesta pri Krsk** | **1.70** | **101** | | *i* Pn | **Pn** | **03 31 10.4** | **+0.8** | |
| CESS | | | | | *i* Sn | **Sg** | **03 31 34.3** | **-0.4** | |
| CESS | | | | | IAML | | 03 31 37.2 | | |
| | comp=Z,420nm,0.3s | | | | | | | | |
| **BOJS** | **Bojanci** | **1.73** | **117** | | AML | AML | | | |
| | comp=N,37µm,1.6s | | | | | | | | |
| BOJS | | | | | AML | AML | | | |
| | comp=E,8002µm,0.5s | | | | | | | | |
| **BOJS** | **Bojanci** | **1.73** | **117** | | *i* Pn | **Pb** | **03 31 11.0** | **-0.8** | |
| BOJS | | | | | IAML | | 03 31 39.1 | | |
| | comp=Z,292nm,0.2s | | | | | | | | |
| **BOJS** | **Bojanci** | **1.73** | **117** | ⇓ | *i* Pn | **Pb** | **03 31 10.9** | **-0.8** | |
| BOJS | | | | | *e*Sn | **Sb** | **03 31 33.6** | **+0.2** | |
| **MOA** | **Molln** | **1.73** | **28** | | *e*Pg | **Pb** | **03 31 11.9** | **+0.1** | |
| | comp=Z,59nm,0.2s,SNR=116 | | | | | | | | |
| MOA | | | | | *e*Sn | **Sn** | **03 31 31.3** | **-0.8** | |
| | comp=Z,303nm,0.4s | | | | | | | | |
| **MOA** | **Molln** | **1.73** | **28** | | *e*Pg | **Pb** | **03 31 11.7** | **-0.1** | |
| MOA | | | | | *e*Sg | **Sg** | **03 31 35.3** | **-0.5** | |
| **MOA** | **Molln** | **1.73** | **28** | | *e*Pn | **Pb** | **03 31 11.9** | **+0.1** | |
| MOA | | | | | *e*Sn | **Sg** | **03 31 35.6** | **-0.2** | |
| **MOA** | **Molln** | **1.73** | **28** | | *e*Pn | **

comp=Z,163nm,0.2s
**BRMO Bormio 1.87 276** P **Pn** 03 31 12.8 +0.9
**BAG8 Bagolino 1.88 256** P **Pb** 03 31 13.3 -1.0
**ARSA Arzberg 1.93 60** *e*Pg **Pn** 03 31 13.8 +1.1
comp=Z,36nm,0.3s,SNR=47
ARSA *e*Sg **Sg** 03 31 42.2 +0.2
comp=Z,69nm,0.4s
**ARSA Arzberg 1.93 60** AML AML
comp=N,490µm,0.5s
ARSA AML AML
comp=E,412µm,0.4s
ARSA AML AML
comp=E,411µm,0.4s
ARSA AML AML
comp=N,490µm,0.5s
**ARSA Arzberg 1.93 60**⇑ *i*Pn **Pn** 03 31 13.5 +0.8
ARSA *e*Sn **Sn** 03 31 37.5 +0.6
**ARSA Arzberg 1.93 60** *e*Pn **Pn** 03 31 13.7 +1.1
**ARSA Arzberg 1.93 60** *e*Pn **Pn** 03 31 13.7 +1.1
**FUORN Ofenpass-Fuorn 1.96 280** **Pn** 03 31 13.9 +0.6
**RETA Reutte 1.96 307** *e*Pg **Pb** 03 31 15.5 -0.2
comp=N,434nm,0.4s,SNR=253
RETA *e*Sg **Sg** 03 31 42.4 -0.7
comp=N,2µm,0.8s
**RABC Rab 1.98 142** *i* Pn **Pn** 03 31 13.9 +0.6
RABC Sn **Sn** 03 31 39.3 +1.2
**PTJ Puntijarka 2.06 101** *i* Pn **Pn** 03 31 15.0 +0.4
**LOBO Lobor 2.09 93** *e*Pn **Pn** 03 31 16.0 +1.1
LOBO Sn **Sb** 03 31 42.9 -0.9
**ZAG Zagreb 2.09 103** *e*Pg **Pg** 03 31 19.7 -0.4
ZAG Sn **Sb** 03 31 43.3 -0.5
**BERNI Berninapass 2.11 274** P **Pn** 03 31 16.6 +1.2
**NVLJ Novalja 2.17 143** *e*Pn **Pn** 03 31 16.1 +0.1
NVLJ Sn **Sn** 03 31 43.8 +1.1
**KOGS Kog 2.21 86** AML AML
comp=N,6350µm,0.4s
KOGS AML AML
comp=E,5640µm,0.8s
KOGS AML AML
comp=E,5640µm,0.8s
KOGS AML AML
comp=N,6350µm,0.4s
**KOGS Kog 2.21 86** *i* Pn **Pn** 03 31 16.5 0.0
**FUR Furstenfeldbru 2.21 327** *e*Pn **Pn** 03 31 17.9 +1.4
**FUR Furstenfeldbru 2.21 327** *e*Pn **Pn** 03 31 17.9 +1.4
**DAVOX Davos/Dischmat 2.25 283** Pn **Pb** 03 31 19.0 -1.7
comp=N,48nm,0.3s,baz=100,slow=19,SNR=183
DAVOX Lg Lg 03 31 50.0
comp=N,54nm,0.3s,baz=306,slow=17,SNR=13
DAVOX LR LR 03 31 52.8
comp=N,41nm,19.7s,baz=110,slow=34
comp=N,89nm,0.3s
**PLIT Plitvice 2.30 128** *i* Pn **Pn** 03 31 18.8 +1.0
PLIT Sn **Sn** 03 31 48.1 +1.9
**KALN Kalnik 2.36 93** *e*Pn **Pn** 03 31 18.9 +0.3
KALN Sg **Sg** 03 31 56.0 +0.2
**DAVA Damuels 2.39 295** *e*Pg **Pb** 03 31 21.2 -1.9
comp=N,76nm,0.3s,SNR=114
DAVA *e*Sg **Sg** 03 31 55.2 -1.6
comp=N,368nm,0.4s
**DAVA Damuels 2.39 295** *e*Pn **Pb** 03 31 21.1 -1.9
**DAVA Damuels 2.39 295** *e*Pn **Pb** 03 31 21.1 -1.9
**UBR Ueberruh 2.44 305** *e*Pn **Pn** 03 31 21.5 +1.7
**UBR Ueberruh 2.44 305** *e*Pn **Pn** 03 31 21.5 +1.7
**ZCCA Zocca 2.46 218** Pn **Pn** 03 31 20.3 +0.3
**VIRC Vir 2.47 145** *i* Pn **Pn** 03 31 20.4 +0.3
VIRC Sn **Sn** 03 31 50.2 +0.1
**PRMA PARMA 2.48 232** **Pn** 03 31 20.6 +0.3
**CONA Conrad Observa 2.50 49** *e*Pg **Pn** 03 31 21.9 +1.3
comp=N,13nm,0.3s,SNR=51
CONA *e*Sn **Sn** 03 31 50.1 -0.8
comp=N,97nm,0.5s
**GEC2 GERESS Array S 2.56 9** Pn **Pn** 03 31 22.3 +0.9
**GEC2 GERESS Array S 2.56 9** *e*Pn **Pn** 03 31 22.3 +0.9
**GEC2 GERESS Array S 2.56 9** *e*Pn **Pn** 03 31 22.3 +0.9
**GERES GERESS Array B 2.56 9** Pn **Pn** 03 31 22.4 +0.9
comp=N,11nm,0.3s,baz=183,slow=23,SNR=109
GERES Lg Lg 03 31 50.9
comp=N,24nm,0.3s,baz=191,slow=30,SNR=5.6
comp=N,55nm,0.4s
**BEHE Becsehely 2.57 85** *e*Pn **Pn** 03 31 22.7 +1.2
BEHE *e*Sn **Sn** 03 31 54.0 +1.3
**RONA Rosalia, Austr 2.60 57** *e*Pg **Pn** 03 31 22.9 +0.9
comp=N,17nm,0.4s,SNR=18
RONA *e*Sn **Sn** 03 31 54.0 +0.4
comp=N,44nm,0.6s
**UDBI Udbina 2.61 132** *i* Pn **Pn** 03 31 23.2 +1.1
UDBI Sn **Sn** 03 31 55.9 +2.1
**CKRC Cesky Krumlov 2.64 18** *e*PN **Pn** 03 31 23.4 +1.0
CKRC *e*SN **Sn** 03 31 56.0 +1.6
**PLONS Plons/SG 2.64 287** *e*Pn **Pn** 03 31 24.5 +2.0
**PLONS Plons/SG 2.64 287** *e*Pn **Pn** 03 31 24.5 +2.0
**MOSL Moslavina 2.67 104** *i* Pn **Pn** 03 31 23.2 +0.4
MOSL Sn **Sn** 03 31 56.0 +0.9
**DUGI Dugi Otok 2.72 148** *i* Pn **Pn** 03 31 24.1 +0.5
DUGI Sn **Sn** 03 31 57.6 +1.2
**WET Wettzell 2.83 358** *e*Pn **Pn** 03 31 25.7 +0.6
WET *e*Sn **Sn** 03 31 59.2 +0.2
**WET Wettzell 2.83 358** *e*Pn **Pn** 03 31 25.7 +0.6
WET *e*Sn **Sn** 03 31 59.2 +0.2
**KHC Kasperske Hory 2.83 7** Pn **Pn** 03 31 26.0 +0.9
**KHC Kasperske Hory 2.83 7** *e*PN **Pn** 03 31 26.0 +0.9
KHC *e*PG **Pg** 03 31 36.0 +1.7
KHC *e*SN **Sn** 03 31 59.8 +0.6
KHC *e*SG **Sg** 03 32 08.7 -2.2
comp=N,230nm,0.5s
**PRIJ Prijedor 2.89 116** *e*Pn **Pn** 03 31 26.1 +0.2
PRIJ *e*Sn **Sn** 03 32 02.1 +1.5
**NORI Noerdlinger Ri 2.91 326** *e*Pn **Pn** 03 31 26.8 +0.6
NORI *e*Sn **Sn** 03 32 01.4 +0.3
**NORI Noerdlinger Ri 2.91 326** *e*Pn **Pn** 03 31 26.8 +0.6
NORI *e*Sn **Sn** 03 32 01.4 +0.3
**EUCT Pavia 2.97 249** AML AML
comp=E,966µm,1.3s
EUCT AML AML
comp=N,1520µm,1.0s
EUCT AML AML
comp=E,883µm,0.5s
EUCT AML AML
comp=N,1391µm,0.6s
**A051A Mrakovica 3.00 115** *e*Pn **Pn** 03 31 27.9 +0.5
A051A *e*Sn **Sn** 03 32 03.2 0.0
**WALHA Wallhausen, DE 3.05 299** *e*Pn **Pn** 03 31 29.3 +1.2
**WALHA Wallhausen, DE 3.05 299** *e*Pn **Pn** 03 31 29.3 +1.2
**WILA Wila 3.06 292** *e*Pn **Pn** 03 31 29.6 +1.4
**WILA Wila 3.06 292** *e*Pn **Pn** 03 31 29.6 +1.4
**A050A Klekovaca 3.06 126**⇓ *i*Pn **Pn** 03 31 29.2 +1.0
A050A *e*Sn **Sn** 03 32 06.2 +1.4
**MORI Morici 3.09 142** *i* Pn **Pn** 03 31 28.9 +0.3
MORI Sn **Sn** 03 32 05.1 -0.3
**GORR Gorreto 3.16 238** P **Pn** 03 31 30.4 +0.7
**GORR Gorreto 3.16 238** S **Sn** 03 32 06.3 -1.0
**MSSA Maissana 3.21 233** **Sn** 03 31 28.9 -1.4
**ZVC Zvikov 3.21 13** *e*PN **Pn** 03 31 31.2 +0.9
**GUT Gutenstein 3.21 304** P **Pn** 03 31 31.5 +1.2
**ZIRJ Zirje 3.23 145** *e*Pn **Pn** 03 31 31.6 +1.0
ZIRJ Sn **Sn** 03 32 09.3 +0.3
**ZUR Degenried 3.25 290** P **Pn** 03 31 32.1 +1.3
**GUMA Gualdo di Mace 3.26 177** Pn **Pn** 03 31 30.4 -0.6
**EMING Emmingen-Lipti 3.28 300** *e*Pn **Pn** 03 31 32.3 +1.0
**EMING Emmingen-Lipti 3.28 300** *e*Pn **Pn** 03 31 32.3 +1.0
**FDMO Fiordimonte 3.29 180** **Pn** 03 31 30.7 -0.6
**BLY Banja Luka 3.29 117** *e*Pn **Pn** 03 31 32.2 +0.8
BLY *e*Sn **Sn** 03 32 10.5 0.0
**BLY Banja Luka 3.29 117**⇑ *i*Pn **Pn** 03 31 32.1 +0.7
BLY *e*Sn **Sn** 03 32 11.1 +0.6
**KIJV Kijevo 3.31 133** *i* Pn **Pn** 03 31 32.4 +0.8
KIJV Sn **Sn** 03 32 11.2 +0.3
**ZST Bratislava 3.33 54** *e*PN **Pn** 03 31 32.7 +0.8
ZST *e*PG **Pg** 03 31 42.7 -1.0
ZST *e*SN **Sn** 03 32 10.4 -0.9
ZST *e*SG **Sg** 03 32 25.9 -0.9
ZST *e*LG **Lg** 03 32 31.7
**TREC Trest 3.39 28** *e*PN **Pn** 03 31 33.3 +0.5
**MGRS Mrkonjic Grad 3.41 122** *e*Pn **Pn** 03 31 34.1 +1.0
MGRS *e*Sn **Sn** 03 32 14.3 +0.8
**RNCA Ronca, Sant'Ol 3.44 239** P **Pn** 03 31 34.5 +1.1
**RNCA Ronca, Sant'Ol 3.44 239** S **Sn** 03 32 14.9 +0.8
**SLE Schleitheim 3.44 296** P **Pn** 03 31 34.2 +0.7
**SLE Schleitheim 3.44 296** *e*Pn **Pn** 03 31 34.2 +0.7
**SLE Schleitheim 3.44 296** *e*Pn **Pn** 03 31 34.2 +0.7
**NRCA Norcia 3.49 179** **Pn** 03 31 33.6 -0.6
**ROTZ Rotzenmuhle 3.50 351** *e*Pn **Pn** 03 31 34.2 0.0
ROTZ *e*Pg **Pb** 03 31 44.3 +2.5
ROTZ *e*Sn **Sn** 03 32 13.8 -1.7
ROTZ *e*Sg **Sg** 03 32 30.3 -1.9
**ROTZ Rotzenmuhle 3.50 351** *e*Pn **Pn** 03 31 34.2 0.0
ROTZ *e*Pg **Pb** 03 31 44.3 +2.5
ROTZ *e*Sn **Sn** 03 32 13.8 -1.7
ROTZ *e*Sg **Sg** 03 32 30.3 -1.9
**KRUC Moravsky 3.55 38** *e*PN **Pn** 03 31 35.0 +0.1
KRUC *e*SN **Sn** 03 32 16.1 -0.6
**METMA Mettma DE 3.57 295** *e*Pn **Pn** 03 31 35.8 +0.5
**METMA Mettma DE 3.57 295** *e*Pn **Pn** 03 31 35.8 +0.5
**STU Stuttgart 3.59 314** Pn **Pn** 03 31 36.0 +0.5
**STU Stuttgart 3.59 314** *e*Pn **Pn** 03 31 36.3 +0.9
STU *e*Sg **Sg** 03 32 36.6 +1.4
**STU Stuttgart 3.59 314** *e*Pn **Pn** 03 31 36.3 +0.9
STU *e*Sg **Sg** 03 32 36.6 +1.4
**GRA1 Grafenberg Arr 3.59 341** **Pn** 03 31 35.1 -0.5
**GRF Grafenberg Arr 3.59 341** *e*Pn **Pn** 03 31 35.6 +0.1
GRF *e*Sn **Sn** 03 32 17.0 -0.9
GRF *e*Sg **Sg** 03 32 35.4 +0.1
**GRF Grafenberg Arr 3.59 341** *e*Pn **Pn** 03 31 35.6 +0.1
GRF *e*Sn **Sn** 03 32 17.0 -0.9
GRF *e*Sg **Sg** 03 32 35.4 +0.1
**GRFO Grafenberg 3.59 340** **Pn** 03 31 35.5 -0.1
**GRFO Grafenberg 3.59 340** *e*Pn **Pn** 03 31 35.9 +0.4
**GRFO Grafenberg 3.59 340** *e*Pn **Pn** 03 31 35.9 +0.4
**SULZ Cheisacher 3.60 291** P **Pn** 03 31 36.4 +0.7
**SULZ Cheisacher 3.60 291** *e*Pn **Pn** 03 31 36.6 +0.9
**SULZ Cheisacher 3.60 291** *e*Pn **Pn** 03 31 36.6 +0.9
**EMBD Embd, Matterta 3.63 270** P **Pn** 03 31 38.0 +1.9
**SATI Passo dei Sala 3.64 265** P **Pn** 03 31 36.3 -0.2
**PCP Piancastagn 3.65 242** P **Pn** 03 31 37.1 +0.8
**PCP Piancastagn 3.65 242** S **Sn** 03 32 20.2 +1.0
**MANZ Manzenberg 3.72 350** *e*Pn **Pn** 03 31 37.1 -0.2
MANZ *e*Sn **Sn** 03 32 19.5 -1.6
**MANZ Manzenberg 3.72 350** *e*Pn **Pn** 03 31 37.1 -0.2
MANZ *e*Sn **Sn** 03 32 19.5 -1.6
**CESX Cesi 3.73 186** Pn **Pn** 03 31 36.5 -0.9
**GOPC GO Pecny, Ondr 3.77 17** *e*PN **Pn** 03 31 38.8 +0.8
**FELD Feldberg im Sc 3.79 296** P **Pn** 03 31 38.7 +0.3
**FELD Feldberg im Sc 3.79 296** S **Sn** 03 32 22.7 -0.3
**CAMP Campotosto 3.79 176** **Pn** 03 31 37.5 -0.9
**BFO Black Forest 3.80 304** Pn **Pn** 03 31 39.1 +0.8
**BFO Black Forest 3.80 304** *e*Pn **Pn** 03 31 39.1 +0.8
BFO *e*Sn **Sn** 03 32 21.4 -1.6
**BFO Black Forest 3.80 304** *e*Pn **Pn** 03 31 39.1 +0.8
BFO *e*Sn **Sn** 03 32 21.4 -1.6
**TRAV Traversella 3.80 260** P **Pn** 03 31 35.6 -2.9
**PRU Pruhonice 3.80 15** *e*PN **Pn** 03 31 39.1 +0.7
**VRAC Vranov 3.82 37** *e*PN **Pn** 03 31 39.7 +1.1
VRAC *e*SN **Sn** 03 32 24.5 +1.0
**VRAC Vranov 3.82 37** Pn **Pn** 03 31 42.5 +3.9
comp=N,2.2nm,0.3s,baz=231,slow=13,SNR=6.6
VRAC Sn **Sn** 03 32 23.3 -0.2
comp=N,6.4nm,0.3s,baz=224,slow=14,SNR=4.6
VRAC Lg Lg 03 32 36.8
comp=N,9.8nm,0.3s,baz=146,slow=15,SNR=5.0
comp=N,6.3nm,0.3s
**BALST Balsthal 3.82 287** P **Pn** 03 31 39.6 +0.8
**BALST Balsthal 3.82 287** *e*Pn **Pn** 03 31 39.5 +0.8
**BALST Balsthal 3.82 287** *e*Pn **Pn** 03 31 39.5 +0.8
**CASP Castiglione de 3.87 205** Pn **Pn** 03 31 37.9 -1.4
**MORH Mrgy, Hungar 3.87 90**⇑ *i*Pn **Pn** 03 31 39.1 -0.2
MORH *e*Sn **Sn** 03 32 23.7 -1.0
**KIZ Kirchzarten 3.88 297** P **Pn** 03 31 40.2 +0.8
**KIZ Kirchzarten 3.88 297** S **Sn** 03 32 26.2 +1.4
**DOB Doboj 3.88 112** *e*Pn **Pn** 03 31 39.7 +0.3
**SRO Srobarova 3.88 66** *e*PN **Pn** 03 31 39.6 +0.1
SRO *e*PG **Pg** 03 31 56.7 +2.3
SRO *e*SN **Sn** 03 32 24.9 -0.1
SRO *e*LG Lg 03 33 04.4
**ENDD Endenburg 3.90 293** P **Pn** 03 31 40.2 +0.4
**ENDD Endenburg 3.90 293** S **Sn** 03 32 25.5 -0.1
**DIX Grande Dixence 3.94 269** P **Pn** 03 31 41.9 +1.4
**HVAR Hvar 3.96 141** *i* Pn **Pn** 03 31 40.9 +0.3
HVAR Sn **Sn** 03 32 26.9 0.0
**OPP Oppenau 3.96 305** P **Pn** 03 31 41.2 +0.6
**SENIN Lac Senin/Sane 3.99 273** **Pn** 03 31 41.8 +1.5
**JAVC Velka Javorina 4.02 49** *e*PN **Pn** 03 31 43.2 +1.8
**RICI Ricice 4.04 133** *i* Pn **Pn** 03 31 42.5 +0.8
RICI Sn **Sn** 03 32 29.7 +0.7
**VOGT Vogtsburg - To 4.08 298** P **Pn** 03 31 42.6 +0.4
**VOGT Vogtsburg - To 4.08 298** S **Sn** 03 32 31.3 +1.4
**BABA Baden-Baden-Ne 4.08 308** P **Pn** 03 31 43.0 +0.8
**MAKA Makarska 4.14 136** *e*Pn **Pn** 03 31 43.2 +0.3
MAKA Sn **Sn** 03 32 32.1 +0.8
**REMY Saint-Rhmy-en 4.14 265** P **Pn** 03 31 44.2 +0.9
**BOURR Bourrignon 4.14 287** P **Pn** 03 31 44.0 +0.8
**BOURR Bourrignon 4.14 287** S **Sn** 03 32 32.8 +1.3
**RORO Rocca Rossa 4.17 240** P **Pn** 03 31 42.2 -1.2
**RORO Rocca Rossa 4.17 240** S **Sn** 03 32 29.1 -2.9
**ZELS Zelsheim 4.19 300** P **Pn** 03 31 44.5 +0.7
ZELS S **Sn** 03 32 34.1 +1.4
**ILLF Illfurth 4.20 291** P **Pn** 03 31 44.6 +0.8
ILLF S **Sn** 03 32 32.7 -0.2
**RSP Reno Superiore 4.23 256** P **Pn** 03 31 42.3 -2.0
**GBOS Grotte di Boss 4.23 242** P **Pn** 03 31 44.0 -0.4
**TORNY Torny/Romont 4.24 278** P **Pn** 03 31 45.7 +1.3
**NEEW Neewiller pres 4.26 310** P **Pn** 03 31 46.0 +1.3
NEEW S **Sn** 03 32 33.3 -1.1
**HSKC Hora Svate Kat 4.30 3** *e*PN **Pn** 03 31 45.3 +0.1
HSKC *e*SN **Sn** 03 32 34.3 -0.9
**MILB Miltenberg 4.33 326** *e*Pn **Pn** 03 31 46.1 +0.5
**MILB Miltenberg 4.33 326** *e*Pn **Pn** 03 31 46.1 +0.5
**MOF Molkenrain 4.33 293** P **Pn** 03 31 46.3 +0.5
**BHB Bricherasio 4.33 252** P **Pn** 03 31 43.9 -1.9
**ROTT Steinweiler 4.35 312** *e*Pn **Pn** 03 31 47.1 +1.3
**ROTT Steinweiler 4.35 312** *e*Pn **Pn** 03 31 47.1 +1.3
**INTR Introdacqua 4.35 172** Pn **Pn** 03 31 44.8 -1.3
**OGSI Sixt 4.39 269** P **Pn** 03 31 48.4 +1.8
**WLS Welschbruch 4.41 300** P **Pn** 03 31 47.3 +0.5
**MOX Moxa 4.43 348** *e*Pn **Pn** 03 31 47.0 -0.1
MOX *e*Sn **Sn** 03 32 36.1 -2.5
**MOX Moxa 4.43 348** *e*Pn **Pn** 03 31 47.0 -0.1
MOX *e*Sn **Sn** 03 32 36.1 -2.5
**PIAF les Granges de 4.44 242** P **Pn** 03 31 46.8 -0.4
**ECH Echery 4.45 297** **Pn** 03 31 47.7 +0.4
**ECH Echery 4.45 297** P **Pn** 03 31 48.2 +0.9
**ECH Echery 4.45 297** *e*Pn **Pn** 03 31 47.6 +0.4
**ECH Echery 4.45 297** *e*Pn **Pn** 03 31 47.6 +0.4
**HOHE HOHENGOEFT 4.45 304** P **Pn** 03 31 47.8 +0.6
**CDF Champ du Feu 4.46 300** *e*P **Pn** 03 31 47.5 0.0
**CDF Champ du Feu 4.46 300** *e*Pg **Pb** 03 31 59.6 +1.4
CDF *e*Sn **Sn** 03 32 30.7 -8.6
comp=N,49nm,0.3s
**VYHS Vyhne 4.48 59** *e*PN **Pn** 03 31 47.2 -0.5
VYHS *e*PG **Pg** 03 32 06.8 +1.0
VYHS *e*SN **Sn** 03 32 37.1 -2.7
VYHS *e*SG **Sg** 03 33 07.9 +4.1
**LSTV Lastovo 4.48 141** *e*Pn **Pn** 03 31 47.9 +0.1
LSTV Sn **Sn** 03 32 39.3 -0.5
**LPG La Plagne 4.48 262** *e*P **Pn** 03 31 48.0 0.0
**LPG La Plagne 4.48 262** *e*Pg **Pb** 03 32 00.1 +1.3
LPG *e*Sn **Sn** 03 32 32.1 -8.2
LPG *e*Sg **Sb** 03 32 58.3 +5.4
comp=N,79nm,0.7s
**LPL La Plagne 4.49 262** *e*P **Pn** 03 31 48.5 +0.4
**LPL La Plagne 4.49 262** *e*Pg **Pb** 03 32 00.1 +1.2
LPL *e*Sn **Sn** 03 32 32.2 -8.2
LPL *e*Sg **Sb** 03 32 57.6 +4.5
comp=N,34nm,0.6s
**HINF Hinteralfeld 4.50 292** *e*P **Pn** 03 31 47.9 -0.1
HINF *e*Sn **Sn** 03 32 32.1 -8.2
HINF *e*Sg **Sb** 03 32 56.4 +3.2
comp=N,28nm,0.3s
**CHMF Charmoille 4.50 284** P **Pn** 03 31 48.4 +0.3
**ENR Entracque 4.50 244** P **Pn** 03 31 47.4 -0.7
**RSL Roselend 4.53 264** P **Pn** 03 31 50.9 +2.4
**STFL Fournets-Luisa 4.54 282** P **Pn** 03 31 49.4 +0.8
**SAOF Saorge 4.54 241** P **Pn** 03 31 48.9 +0.3
SAOF S **Sn** 03 32 40.3 -1.0
**STV Sant Anna di V 4.55 245** P **Pn** 03 31 47.4 -1.4
**PZZ Stroppo 4.56 249** P **Pn** 03 31 47.2 -1.8
**MORC Moravsky Berou 4.58 39** **Pn** 03 31 48.6 -0.5
**MORC Moravsky Berou 4.58 39** *e*PN **Pn** 03 31 49.5 +0.4
**DPC Dobruska-Polom 4.58 27** *e*PN **Pn** 03 31 48.8 -0.3
**BRANT Les Verrieres 4.58 280** P **Pn** 03 31 50.0 +0.8
**BRG Berggiesshubel 4.59 7** Pn **Pn** 03 31 49.4 +0.2
BRG Pg **Pg** 03 32 05.1 -2.8
BRG Sn **Sn** 03 32 41.4 -1.1
BRG Sg **Sb** 03 33 00.5 +4.8
BRG Amp 03 33 11.1
comp=Z,83nm,0.6s
**BRG Berggiesshubel 4.59 7** *e*Pn **Pn** 03 31 49.5 +0.2
**BRG Berggiesshubel 4.59 7** *e*Pn **Pn** 03 31 49.5 +0.2
**CIEL Dossenheim-sur 4.60 305** P **Pn** 03 31 49.9 +0.4
CIEL S **Sn** 03 32 44.0 +1.2
**RONF Ronchamp 4.61 290** P **Pn** 03 31 49.7 +0.3
**RRL Rocca Remolon 4.62 255** P **Pn** 03 31 49.4 -0.5
**HROE Hohe Rhon--Fla 4.64 336** *e*Pn **Pn** 03 31 49.9 -0.1
**HROE Hohe Rhon--Fla 4.64 336** *e*Pn **Pn** 03 31 49.9 -0.1
**TURF col de Turini 4.65 242** P **Pn** 03 31 49.7 -0.5
TURF S **Sn** 03 32 42.5 -1.7
**BNI Bardonecchia 4.65 256** Pn **Pn** 03 31 49.8 -0.4
**SBF Sospel 4.68 240** *e*P **Pn** 03 31 50.5 -0.1
SBF *e*Sn **Sn** 03 32 36.2 -8.7
comp=Z,74nm,0.5s
**MBDF Montbardon 4.70 252** *e*P **Pn** 03 31 49.8 -1.1
MBDF *e*Sn **Sn** 03 32 37.7 -7.8
MBDF *e*Sg **Sb** 03 33 04.3 +5.2
comp=Z,57nm,0.7s
**SPIF crte de Spivo 4.70 243** P **Pn** 03 31 50.3 -0.6
**GIMEL St. Georges / 4.71 275** P **Pn** 03 31 51.7 +0.7
**CHVC Chvalec 4.71 24** *e*PN **Pn** 03 31 50.8 -0.1
**HAPS Han Pijesak,Bl 4.72 116** *e*Pn **Pn** 03 31 52.4 +1.3
**HAPS Han Pijesak,Bl 4.72 116** *e*Pn **Pn** 03 31 52.2 +1.1
HAPS *e*Sn **Sn** 03 32 44.7 -1.2
**ISO Isola 4.75 245** P **Pn** 03 31 49.5 -2.0
**PGF Pioggiola 4.76 219** *e*P **Pn** 03 31 51.3 -0.5
PGF *e*Sn **Sn** 03 32 39.3 -7.6
PGF *e*Sg **Sg** 03 33 07.4 -5.5
comp=Z,15nm,0.5s
**PGF Pioggiola 4.76 219** P **Pn** 03 31 51.2 -0.5
**PGF Pioggiola 4.76 219** S **Sn** 03 32 43.7 -3.2
**BOUC Bouclans 4.77 284** P **Pn** 03 31 52.2 +0.5
**STON Ston 4.78 135** *i* Pn **Pn** 03 31 52.0 +0.2
STON Sn **Sn** 03 32 46.7 -0.4
**STON Ston 4.78 135**⇓ *i*Pn **Pn** 03 31 51.6 -0.2
STON *e*Sn **Sn** 03 32 47.0 -0.1
**VOEL Voellerdingen 4.81 306** P **Pn** 03 31 53.4 +1.2
VOEL S **Sn** 03 32 47.3 -0.6
**SPAHL Spahl 4.81 335** *e*Pn **Pn** 03 31 54.9 +2.6
**SPAHL Spahl 4.81 335** *e*Pn **Pn** 03 31 54.9 +2.6
**CABF La Chapelle 4.83 276** *e*P **Pn** 03 31 52.6 0.0
**CABF La Chapelle 4.83 276** *e*Pg **Pb** 03 32 06.8 +2.2
CABF *e*Sn **Sn** 03 32 40.4 -8.1
CABF *e*Sg **Sb** 03 33 07.3 +4.6
comp=Z,56nm,0.6s
**JAUF Jausiers 4.83 249** P **Pn** 03 31 52.0 -0.7
**MVIF Mont Vial 4.84 242** P **Pn** 03 31 53.2 +0.5
MVIF S **Sn** 03 32 48.2 -0.6
**XAFF Xaffevillers 4.85 298** P **Pn** 03 31 53.5 +0.7
XAFF S **Sn** 03 32 49.3 +0.4
**FRGS Fruska Gora 4.86 101** *e*Pn **Pn** 03 31 54.2 +1.2
FRGS *e*Sn **Sn** 03 32 47.3 -1.9
**FRGS Fruska Gora 4.86 101** *e*Pn **Pn** 03 31 53.7 +0.7
FRGS *e*Sn **Sn** 03 32 48.0 -1.2
**CRIF Crivoux 4.87 251** P **Pn** 03 31 52.8 -0.4
**HAU Haudompre 4.88 293** *e*P **Pn** 03 31 53.3 -0.2
**HAU Haudompre 4.88 293** *e*Pg **Pb** 03 32 07.2 +1.8
HAU *e*Sn **Sn** 03 32 41.4 -8.3
HAU *e*Sg **Sb** 03 33 09.1 +5.0
comp=Z,34nm,0.4s
**TEKS Tekeris 4.88 109** *e*Pn **Pn** 03 31 53.8 +0.5
TEKS *e*Sn **Sn** 03 32 46.9 -2.8
**TEKS Tekeris 4.88 109** *e*Pn **Pn** 03 31 53.3 0.0
TEKS *e*Sn **Sn** 03 32 48.0 -1.7
**OKC Ostrava-Krasne 4.90 42** *e*PN **Pn** 03 31 56.7 +3.3
**PSZ Piszkesteto 4.93 69** **Pn** 03 31 52.7 -1.2
**UBBA Unterbreizbach 4.94 337** *e*Pn **Pn** 03 31 56.0 +2.1
**UBBA Unterbreizbach 4.94 337** *e*Pn **Pn** 03 31 56.0 +2.1
**RIVEL MONT RIVEL 4.95 278** P **Pn** 03 31 54.9 +0.7
**SGRT San Giovanni R 4.96 156** Pn **Pn** 03 31 52.7 -1.6
**ENAUX Enaux 4.96 246** P **Pn** 03 31 54.0 -0.5
ENAUX S **Sn** 03 32 51.1 -0.8
**NEUB Neuenburg 4.96 351** *e*Pn **Pn** 03 31 54.4 0.0
**NEUB Neuenburg 4.96 351** *e*Pn **Pn** 03 31 54.4 0.0
**TNS Taunus Mts 4.97 323** *e*Pn **Pn** 03 31 56.5 +2.0
TNS *e*Sn **Sn** 03 32 50.4 -1.6
TNS *e*Sg **Sg** 03 33 20.7 +1.1
**TNS Taunus Mts 4.97 323** *e*Pn **Pn** 03 31 56.5 +2.0
TNS *e*Sn **Sn** 03 32 50.4 -1.6
TNS *e*Sg **Sg** 03 33 20.7 +1.1
**CLL Collm 4.99 360** **Pn** 03 31 54.7 0.0
**CLL Collm 4.99 360** *i* Pn **Pn** 03 31 55.0 +0.3
comp=Z,30nm,0.5s
CLL *e*Pg **Pg** 03 32 14.0 -1.5
CLL *i* Sn **Sn** 03 32 50.7 -1.6
CLL *i* Sg **Sg** 03 33 19.1 -1.0
comp=Z,87nm,0.6s
**CLL Collm 4.99 360** *e*Pn **Pn** 03 31 55.0 +0.3
CLL *e*Sn **Sn** 03 32 51.2 -1.1
CLL *e*Sg **Sg** 03 33 17.4 -2.7
**CLL Collm 4.99 360** *e*Pn **Pn** 03 31 55.0 +0.3
CLL *e*Sn **Sn** 03 32 51.2 -1.1
CLL *e*Sg **Sg** 03 33 17.4 -2.7
**A194A Meolans-Revel, 5.01 250** P **Pn** 03 31 54.8 -0.4
**CALF Calern 5.05 242** P **Pn** 03 31 55.8 +0.1
CALF S **Sn** 03 32 53.4 -0.7
**BBLS Lazi&#263i 5.12 116** *e*Pn **Pn** 03 31 57.7 +1.2
**BBLS Lazi&#263i 5.12 116** *e*Pn **Pn** 03 31 56.7 +0.2
**ABH Alteburg 5.13 316** P **Pn** 03 31 58.1 +1.5
**ABH Alteburg 5.13 316** S **Sn** 03 32 53.7 -2.1
**ABH Alteburg 5.13 316** *e*Pn **Pn** 03 31 57.5 +0.9
**ABH Alteburg 5.13 316** *e*Pn **Pn** 03 31 57.5 +0.9
**DBRK Dubrovnik 5.15 133** *e*Pn **Pn** 03 31 58.6 +1.6
DBRK Sn **Sn** 03 32 57.6 +1.3
**LANS Liptovska Anna 5.16 54** *e*PN **Pn** 03 31 57.8 +0.7
**OGSM Saint Maurice 5.19 265** P **Pn** 03 31 58.1 +0.7
**BRY Bratogost 5.19 129**⇑ *i*Pn **Pn** 03 31 58.5 +0.9
**BRY Bratogost 5.19 129** *e*Pn **Pn** 03 31 57.7 +0.1
BRY *i* Sn **Sn** 03 32 56.7 -0.8
**UPM Unac-Piva 5.20 125** *e*Pn **Pn** 03 31 58.7 +1.0
**UPM Unac-Piva 5.20 125** *e*Pn **Pn** 03 31 57.8 +0.1
UPM *i* Sn **Sn** 03 32 56.5 -1.2
**NAST IGS Nastaetten 5.21 320** *e*Pn **Pn** 03 31 58.9 +1.2
**OG35 Corcelles 5.21 270** P **Pn** 03 31 58.1 +0.3
**POSS Possen 5.22 345** *e*Pn **Pn** 03 31 57.5 -0.4
**POSS Possen 5.22 345** *e*Pn **Pn** 03 31 57.5 -0.4
**TREB Trebinje 5.22 132** *e*Pn **Pn** 03 31 58.3 +0.4
TREB *e*Sn **Sn** 03 32 58.1 +0.1
**TREB Trebinje 5.22 132** *e*Pn **Pn** 03 31 57.8 -0.1
TREB *e*Sn **Sn** 03 32 56.7 -1.3
**RUDO Rudo 5.23 119**⇑ *i*Pn **Pn** 03 31 57.9 -0.1
RUDO *e*Sn **Sn** 03 32 57.0 -1.2
**ORIF Oris-en-Rattie 5.23 257** *e*P **Pn** 03 31 59.6 +1.5
**ORIF Oris-en-Rattie 5.23 257** *e*Pg **Pb** 03 32 13.7 +2.2
ORIF *e*Sn **Sn** 03 32 50.7 -7.7
comp=Z,46nm,0.6s
ORIF *e*Sg **Sb** 03 33 20.7 +6.4
**ORIF Oris-en-Rattie 5.23 257** P **Pn** 03 31 59.7 +1.5
**WIMM Wimmelburg 5.30 349** *e*Pn **Pn** 03 31 58.3 -0.7
**WIMM Wimmelburg 5.30 349** *e*Pn **Pn** 03 31 58.3 -0.7
**A213A Autrey-Les-Gra 5.33 285** P **Pn** 03 31 59.4 0.0
**DIVS Divibare 5.38 112** *e*Pn **Pn** 03 32 01.0 +0.9
**TRIGF Trigance 5.38 244** P **Pn** 03 31 59.7 -0.4
TRIGF S **Sn** 03 33 01.8 -0.1
**PAOL Paolisi 5.40 168** Pn **Pn** 03 31 59.2 -1.2
**PLE Pljevlja 5.40 121** *e*Pn **Pn** 03 32 00.5 0.0
PLE *i* Sn **Sn** 03 33 01.8 -0.8
**KOE Koeppel 5.43 321** *e*Pn **Pn** 03 32 01.7 +0.9
KOE *e*Sn **Sn** 03 32 59.9 -3.3
comp=Z,110nm,0.6s
**MANO Manonville 5.45 300** P **Pn** 03 32 02.6 +1.7
**BGG Burgeitz 5.45 318** *e*Pn **Pn** 03 32 01.9 +0.9
**PAGF Fort de Pagny 5.46 297** *e*P **Pn** 03 32 02.2 +1.1
**PAGF Fort de Pagny 5.46 297** *e*Pg **Pb** 03 32 18.0 +2.8
PAGF *e*Sn **Sn** 03 32 54.9 -8.9
PAGF *e*Sg **Sg** 03 33 28.3 -6.8
comp=Z,90nm,0.7s
**KECS Kecovo 5.48 64** *e*PN **Pn** 03 32 02.3 +0.8
KECS *e*SN **Sn** 03 32 03.2 -1.2
KECS *e

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TRUS** | **Trudelj** | **5.59** | **109** | *e*Pn | | **Pn** | **03 32 03.9** | **+0.9** |
| TRUS | | | | *e*Sn | | **Sn** | **03 33 04.1** | **-3.0** |
| **CEME** | **Cevo** | **5.64** | **130** | ⇑*i*Pn | | **Pn** | **03 32 03.6** | **-0.1** |
| CEME | | | | *i* Sn | | **Sn** | **03 33 07.4** | **-1.0** |
| **MLYF** | **Mely** | **5.66** | **248** | P | | **Pn** | **03 32 05.7** | **+1.6** |
| **WLF** | **Walferdange** | **5.72** | **308** | Pn | | **Pn** | **03 32 06.0** | **+1.3** |
| **WLF** | **Walferdange** | **5.72** | **308** | P | | **Pn** | **03 32 07.0** | **+2.3** |
| **WLF** | **Walferdange** | **5.72** | **308** | *d*P | | **Pn** | **03 32 06.7** | **+2.0** |
| **WLF** | **Walferdange** | **5.72** | **308** | *e*Pn | | **Pn** | **03 32 06.7** | **+2.0** |
| **WLF** | **Walferdange** | **5.72** | **308** | *e*Pn | | **Pn** | **03 32 06.7** | **+2.0** |
| **KOME** | **Kolasin** | **5.77** | **125** | ⇑*i*Pn | | **Pn** | **03 32 05.5** | **0.0** |
| KOME | | | | *i* Sn | | **Sn** | **03 33 10.6** | **-1.0** |
| **KASTN** | **Kahler Asten** | **5.77** | **330** | *e*Pn | | **Pn** | **03 32 06.4** | **+1.0** |
| **KASTN** | **Kahler Asten** | **5.77** | **330** | *e*Pn | | **Pn** | **03 32 06.4** | **+1.0** |
| **SFTF** | **Sexfontaines** baz=103 | **5.78** | **292** | *e*P | | **Pn** | **03 32 06.1** | **+0.5** |
| SFTF | | | | *e*Sn | | **Sn** | **03 33 03.0** | **-8.8** |
| SFTF | | | | *e*Sg | | **Sg** | **03 33 38.1** | **-7.3** |
| | comp=Z,26nm,0.6s | | | | | | | |
| **SJES** | **Sjenica** | **5.79** | **119** | *e*Pn | | **Pn** | **03 32 07.3** | **+1.5** |
| **SJES** | **Sjenica** | **5.79** | **119** | ⇑*i*Pn | | **Pn** | **03 32 06.4** | **+0.6** |
| SJES | | | | *e*Sn | | **Sn** | **03 33 10.7** | **-1.5** |
| **SMRF** | **Simiane la Rot** | **5.79** | **249** | *e*P | | **Pn** | **03 32 06.5** | **+0.7** |
| **SMRF** | **Simiane la Rot** | **5.79** | **249** | *e*Pg | | **Pb** | **03 32 23.6** | **+2.6** |
| SMRF | | | | *e*Sn | | **Sn** | **03 33 03.7** | **-8.5** |
| SMRF | | | | *e*Sg | | **Sb** | **03 33 38.0** | **+7.7** |
| | comp=Z,11nm,0.5s | | | | | | | |
| **BUM** | **Brajici-Budva** | **5.80** | **132** | *e*Pn | | **Pn** | **03 32 05.9** | **0.0** |
| BUM | | | | *i* Sn | | **Sn** | **03 33 11.0** | **-1.4** |
| **CLZ** | **Clausthal** | **5.80** | **343** | *e*Pn | | **Pn** | **03 32 07.5** | **+1.7** |
| **CLZ** | **Clausthal** | **5.80** | **343** | *e*Pn | | **Pn** | **03 32 07.5** | **+1.7** |
| **AHRW** | **Bad Neuenahr-A** | **5.80** | **319** | *e*Pn | | **Pn** | **03 32 06.9** | **+1.1** |
| **AHRW** | **Bad Neuenahr-A** | **5.80** | **319** | *e*Pn | | **Pn** | **03 32 06.9** | **+1.1** |
| **HILG** | **Hillesheim** | **5.82** | **315** | *e*Pn | | **Pn** | **03 32 07.4** | **+1.2** |
| **SAVF** | **Savonnieres en** | **5.85** | **296** | *e*P | | **Pn** | **03 32 07.2** | **+0.7** |
| **SAVF** | **Savonnieres en** | **5.85** | **296** | *e*Pg | | **Pb** | **03 32 24.7** | **+2.8** |
| SAVF | | | | *e*Sg | | **Sb** | **03 33 39.8** | **+7.8** |
| | comp=Z,27nm,0.5s | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **5.86** | **295** | *e*P | | **Pn** | **03 32 06.7** | **+0.1** |
| **MEZF** | **Maizieres J'vi** | **5.86** | **295** | *e*Pg | | **Pb** | **03 32 24.9** | **+2.8** |
| MEZF | | | | *e*Sn | | **Sn** | **03 33 05.2** | **-8.5** |
| MEZF | | | | *e*Sg | | **Sg** | **03 33 41.2** | **-6.8** |
| | comp=Z,29nm,0.5s | | | | | | | |
| **PDG** | **Podgorica** | **5.90** | **129** | | | **Pn** | **03 32 07.2** | **+0.1** |
| **PDG** | **Podgorica** | **5.90** | **129** | ⇓*i*Pn | | **Pn** | **03 32 07.6** | **+0.4** |
| PDG | | | | *e*Sn | | **Sn** | **03 33 12.8** | **-1.9** |
| **PDG** | **Podgorica** | **5.90** | **129** | ⇑*i*Pn | | **Pn** | **03 32 07.3** | **+0.1** |
| PDG | | | | *i* Sn | | **Sn** | **03 33 13.7** | **-1.0** |
| **GRUS** | **Gruza** | **5.94** | **111** | *e*Pn | | **Pn** | **03 32 09.2** | **+1.5** |
| GRUS | | | | *e*Sn | | **Sn** | **03 33 13.1** | **-2.5** |
| **IVA** | **Berane** | **5.97** | **123** | *e*Pn | | **Pn** | **03 32 08.2** | **-0.1** |
| IVA | | | | *i* Sn | | **Sn** | **03 33 15.1** | **-1.5** |
| **HOBG** | **Hohbusch** | **6.01** | **323** | *e*Pn | | **Pn** | **03 32 10.0** | **+1.2** |
| **DRME** | **Dracevica, Mon** | **6.03** | **131** | *e*Pn | | **Pn** | **03 32 09.4** | **+0.4** |
| DRME | | | | *e*Sn | | **Sn** | **03 33 16.0** | **-2.0** |
| **DRME** | **Dracevica, Mon** | **6.03** | **131** | *e*Pn | | **Pn** | **03 32 09.2** | **+0.2** |
| DRME | | | | *i* Sn | | **Sn** | **03 33 16.6** | **-1.4** |
| **SSB** | **Saint Sauveur** | **6.05** | **263** | Pn | | **Pn** | **03 32 08.7** | **-0.6** |
| **BNS** | **Bensberg** | **6.07** | **322** | *e*Pn | | **Pn** | **03 32 10.3** | **+0.8** |
| **VIVF** | **Saint-Julien-l** | **6.07** | **259** | *e*P | | **Pn** | **03 32 09.0** | **-0.6** |
| **VIVF** | **Saint-Julien-l** | **6.07** | **259** | *e*Pg | | **Pb** | **03 32 28.7** | **+3.0** |
| VIVF | | | | *e*Sn | | **Sn** | **03 33 10.2** | **-8.8** |
| VIVF | | | | *e*Sg | | **Sb** | **03 33 46.3** | **+8.0** |
| | comp=Z,4.5nm,0.4s | | | | | | | |
| **PVY** | **Plav** | **6.18** | **125** | ⇑*i*Pn | | **Pn** | **03 32 11.5** | **+0.3** |
| **BHOU** | **Houvegnez** | **6.20** | **313** | *d*P | | **Pn** | **03 32 13.0** | **+1.7** |
| BHOU | | | | *d*S | | **Sn** | **03 33 20.1** | **-2.0** |
| **KLL** | **Kalltalsperre** | **6.23** | **316** | *e*Pn | | **Pn** | **03 32 12.8** | **+1.0** |
| **MATE** | **Matera** | **6.26** | **154** | ⇓P | | **Pn** | **03 32 10.3** | **-1.8** |
| MATE | | | | ⇓S | | **Sn** | **03 33 19.7** | **-3.8** |
| **MDVR** | **Moldovita** | **6.26** | **101** | ⇓P | | **Pn** | **03 32 13.5** | **+1.3** |
| MDVR | | | | ⇓S | | **Sn** | **03 33 21.0** | **-2.8** |
| **BTNL** | **Ternell** | **6.28** | **315** | *d*P | | **Pn** | **03 32 14.2** | **+1.7** |
| BTNL | | | | *d*S | | **Sn** | **03 33 20.8** | **-3.4** |
| **DREG** | **Dreilaegerbach** | **6.28** | **316** | *e*Pn | | **Pn** | **03 32 13.9** | **+1.4** |
| **MEM** | **Membach** | **6.36** | **315** | *d*P | | **Pn** | **03 32 15.3** | **+1.8** |
| MEM | | | | *d*S | | **Sn** | **03 33 23.8** | **-2.1** |
| **SMF** | **Signal de Mont** | **6.38** | **276** | *e*P | | **Pn** | **03 32 13.5** | **-0.3** |
| **SMF** | **Signal de Mont** | **6.38** | **276** | *e*Pg | | **Pb** | **03 32 35.1** | **+4.2** |
| SMF | | | | *e*Sn | | Sn | 03 33 16.6 | -10 |
| SMF | | | | *e*Sg | | **Sb** | **03 33 55.5** | **+8.4** |
| | comp=Z,12nm,0.4s | | | | | | | |
| **BUG** | **Bochum--Univer** | **6.39** | **325** | *e*Pn | | **Pn** | **03 32 15.3** | **+1.4** |
| **BUG** | **Bochum--Univer** | **6.39** | **325** | *e*Pn | | **Pn** | **03 32 15.3** | **+1.4** |
| **LOR** | **Lormes** | **6.39** | **282** | *e*P | | **Pn** | **03 32 13.5** | **-0.5** |
| **LOR** | **Lormes** | **6.39** | **282** | *e*Pg | | **Pb** | **03 32 35.1** | **+4.0** |
| LOR | | | | *e*Sn | | Sn | 03 33 17.2 | -10 |
| LOR | | | | *e*Sg | | **Sb** | **03 33 55.3** | **+7.8** |
| | comp=Z,9.8nm,0.4s | | | | | | | |
| **LAUG** | **Laupendahl** | **6.45** | **323** | *e*Pn | | **Pn** | **03 32 16.0** | **+1.2** |
| **RCHB** | **Rochefort** | **6.49** | **309** | P | | **Pn** | **03 32 17.5** | **+2.2** |
| **RCHB** | **Rochefort** | **6.49** | **309** | *d*P | | **Pn** | **03 32 17.4** | **+2.2** |
| RCHB | | | | *d*S | | **Sn** | **03 33 25.5** | **-3.6** |
| **PUK** | **Puka** | **6.51** | **129** | | | **Pn** | **03 32 16.4** | **+0.8** |
| **SELS** | **Selova** | **6.52** | **116** | *e*Pn | | **Pn** | **03 32 16.9** | **+1.2** |
| **BSTI** | **Sart Tilman** | **6.56** | **313** | *d*P | | **Pn** | **03 32 18.6** | **+2.3** |
| **BCLA** | **Clavier** | **6.60** | **311** | *d*P | | **Pn** | **03 32 18.9** | **+2.2** |
| BCLA | | | | *d*S | | **Sn** | **03 33 29.8** | **-2.0** |
| **SSF** | **Saint Saulge** | **6.62** | **280** | *e*P | | **Pn** | **03 32 16.8** | **-0.3** |
| **SSF** | **Saint Saulge** | **6.62** | **280** | *e*Pg | | **Pb** | **03 32 39.3** | **+4.3** |
| SSF | | | | *e*Sg | | **Sg** | **03 34 03.7** | **-8.6** |
| | comp=Z,9.2nm,0.4s | | | | | | | |
| **CUC** | **Castrocucco** | **6.64** | **161** | | | **Pn** | **03 32 16.3** | **-1.1** |
| **BEBN** | **Eben Emael** | **6.64** | **315** | *d*P | | **Pn** | **03 32 19.5** | **+2.2** |
| BEBN | | | | *d*S | | **Sn** | **03 33 34.7** | **+1.8** |
| **DRGR** | | **6.67** | **82** | ⇑P | | **Pn** | **03 32 16.7** | **-1.1** |
| DRGR | | | | ⇑S | | Sn | 03 33 23.6 | -10 |
| **GIVF** | **Givet** | **6.68** | **307** | *e*P | | **Pn** | **03 32 19.7** | **+1.8** |
| **GIVF** | **Givet** | **6.68** | **307** | *e*Pg | | **Pb** | **03 32 39.4** | **+3.4** |
| GIVF | | | | *e*Sn | | Sn | 03 33 23.9 | -10 |
| GIVF | | | | *e*Sg | | Sg | 03 34 05.2 | -9.1 |
| | comp=Z,32nm,0.7s | | | | | | | |
| **BOVS** | **Bovan** | **6.69** | **111** | *e*Pn | | **Pn** | **03 32 18.9** | **+0.9** |
| **BOVS** | **Bovan** | **6.69** | **111** | ⇓P | | **Pn** | **03 32 19.0** | **+0.9** |
| BOVS | | | | ⇓S | | **Sn** | **03 33 31.8** | **-2.3** |
| **BGES** | **Gesves** | **6.69** | **310** | *d*P | | **Pn** | **03 32 20.4** | **+2.3** |
| BGES | | | | *d*S | | **Sn** | **03 33 32.4** | **-1.7** |
| **AVF** | **Avril sur Loir** | **6.71** | **278** | *e*P | | **Pn** | **03 32 17.6** | **-0.8** |
| **AVF** | **Avril sur Loir** | **6.71** | **278** | *e*Pg | | **Pb** | **03 32 40.4** | **+3.8** |
| AVF | | | | *e*Sn | | Sn | 03 33 24.7 | -10 |
| AVF | | | | *e*Sg | | **Sg** | **03 34 06.8** | **-8.6** |
| | comp=Z,7.6nm,0.5s | | | | | | | |
| **HERR** | **Herculane** | **6.72** | **99** | ⇓P | | **Pn** | **03 32 19.3** | **+0.9** |
| HERR | | | | ⇓S | | **Sn** | **03 33 32.9** | **-1.9** |
| **DOU** | **Dourbes** | **6.80** | **307** | P | | **Pn** | **03 32 21.7** | **+2.2** |
| **DOU** | **Dourbes** | **6.80** | **307** | *d*P | | **Pn** | **03 32 22.0** | **+2.4** |
| DOU | | | | *d*S | | **Sn** | **03 33 35.1** | **-1.8** |
| **BMRD** | **Maredsous** | **6.82** | **309** | *d*P | | **Pn** | **03 32 21.7** | **+2.0** |
| BMRD | | | | *d*S | | **Sn** | **03 33 35.5** | **-1.7** |
| **GZR** | **Gura Zlata** | **6.84** | **94** | ⇓P | | **Pn** | **03 32 20.2** | **-0.1** |
| GZR | | | | ⇓S | | **Sn** | **03 33 35.7** | **-2.4** |
| **LASF** | **Ste Croix** | **6.88** | **254** | *e*P | | **Pn** | **03 32 19.6** | **-1.1** |
| **LASF** | **Ste Croix** | **6.88** | **254** | *e*Pg | | **Pb** | **03 32 44.0** | **+4.5** |
| LASF | | | | *e*Sn | | Sn | 03 33 28.6 | -10 |
| LASF | | | | *e*Sg | | **Sg** | **03 34 13.1** | **-7.7** |
| | comp=Z,9.3nm,0.7s | | | | | | | |
| **MARR** | **Marisel-Cluj** | **6.95** | **83** | ⇓P | | **Pb** | **03 32 36.0** | **-4.6** |
| MARR | | | | ⇓S | | **Sn** | **03 33 38.7** | **-2.1** |
| **ZAGS** | **Zajecar** | **6.96** | **108** | *e*Pn | | **Pn** | **03 32 22.0** | **+0.3** |
| **BAIF** | **Baives** | **7.00** | **305** | *e*P | | **Pn** | **03 32 23.3** | **+1.0** |
| BAIF | | | | *e*Sn | | Sn | 03 33 32.0 | -10 |
| | comp=Z,53nm,0.6s | | | | | | | |
| **BGF** | **Bois d'Agland** | **7.07** | **276** | *e*P | | **Pn** | **03 32 23.3** | **+0.1** |
| BGF | | | | *e*Sn | | Sn | 03 33 33.4 | -10 |
| BGF | | | | *e*Sg | | Sb | 03 34 16.6 | +10 |
| | comp=Z,22nm,0.5s | | | | | | | |
| **BARS** | **Barje** | **7.16** | **116** | *e*Pn | | **Pn** | **03 32 25.8** | **+1.2** |
| BARS | | | | *e*Sn | | **Sn** | **03 33 42.8** | **-3.1** |
| **HYF** | **Humbligny** | **7.22** | **281** | *e*P | | **Pn** | **03 32 25.1** | **-0.2** |
| HYF | | | | *e*Sn | | Sn | 03 33 36.6 | -11 |
| HYF | | | | *e*Sg | | Sg | 03 34 22.3 | -9.3 |
| | comp=Z,92nm,0.6s | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **7.27** | **59** | | | **Pn** | **03 32 27.3** | **+1.3** |
| **BLKB** | **Belogradchik** | **7.33** | **108** | ⇓S | | **Sn** | **03 33 47.2** | **-2.8** |
| **VSL** | **Villasalto** | **7.34** | **203** | | | **Pn** | **03 32 26.6** | **-0.4** |
| **SCTE** | **Santa Cesarea** | **7.39** | **146** | Pn | | **Pn** | **03 32 25.9** | **-1.7** |
| **ZAPS** | **Zavoj** | **7.46** | **111** | *e*Pn | | **Pn** | **03 32 29.8** | **+1.2** |
| ZAPS | | | | *e*Sn | | **Sn** | **03 33 50.1** | **-3.0** |
| **TCF** | **Toulx Ste Croi** | **7.52** | **274** | *e*P | | **Pn** | **03 32 28.8** | **-0.7** |
| TCF | | | | *e*Sn | | Sn | 03 33 44.1 | -11 |
| TCF | | | | *e*Sg | | Sg | 03 34 31.7 | -9.5 |
| | comp=Z,5.4nm,0.4s | | | | | | | |
| **LOT** | **Lotru** | **7.52** | **93** | ⇓P | | **Pn** | 03 32 39.4 | +10 |
| LOT | | | | ⇓S | | **Sn** | **03 33 51.9** | **-2.9** |
| **CLF** | **Chambon-Foret** | **7.56** | **287** | Pn | | **Pn** | **03 32 30.7** | **+0.8** |
| **OHR** | **Ohrid** | **7.65** | **130** | *e*Pn | | **Pn** | **03 32 32.5** | **+1.2** |
| OHR | | | | *e*Sn | | **Sn** | **03 33 55.7** | **-2.2** |
| **BOSS** | **Bosilegrad** | **7.75** | **116** | *e*Pn | | **Pn** | **03 32 33.4** | **+0.8** |
| **CAF** | **Calviac** | **7.84** | **264** | *e*P | | **Pn** | **03 32 33.4** | **-0.5** |
| **RJF** | **Les Rejaudoux** | **8.13** | **267** | *e*P | | **Pn** | **03 32 38.0** | **+0.1** |
| RJF | | | | *e*Sn | | Sn | 03 33 57.6 | -12 |
| RJF | | | | *e*Sg | | Sg | 03 34 49.4 | -11 |
| | comp=Z,7.3nm,0.6s | | | | | | | |
| **FNA** | **Florina** | **8.19** | **130** | | | **Pn** | **03 32 38.1** | **-0.6** |
| **KEK** | **Kerkira** | **8.24** | **141** | Pn | | **Pn** | **03 32 38.1** | **-1.2** |
| **MTLF** | **Montolieu** | **8.27** | **253** | *e*P | | **Pn** | **03 32 39.4** | **-0.3** |
| **MTLF** | **Montolieu** | **8.27** | **253** | *e*Pg | | Pb | 03 33 10.2 | +7.2 |
| MTLF | | | | *e*Sn | | Sn | 03 34 01.1 | -12 |
| MTLF | | | | *e*Sg | | Sg | 03 34 55.0 | -10 |
| | comp=Z,13nm,0.9s | | | | | | | |
| **LFF** | **La Frestale** | **8.75** | **265** | *e*P | | **Pn** | **03 32 46.6** | **+0.3** |
| **LFF** | **La Frestale** | **8.75** | **265** | *e*Pg | | Pg | 03 33 16.8 | -11 |
| LFF | | | | *e*Sn | | Sn | 03 34 12.4 | -12 |
| LFF | | | | *e*Sg | | Sg | 03 35 08.7 | -12 |
| | comp=Z,9.1nm,0.5s | | | | | | | |
| **MFF** | **Saint Martin d** | **9.13** | **277** | *e*P | | **Pn** | **03 32 51.4** | **-0.1** |
| MFF | | | | *e*Sn | | Sn | 03 34 22.8 | -11 |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **LDF** | **La Druitiere** | **9.22** | **289** | *e*P | | **Pn** | **03 32 52.8** | **+0.1** |
| **LDF** | **La Druitiere** | **9.22** | **289** | *e*Pg | | Pn | 03 33 27.8 | +35 |
| LDF | | | | *e*Sn | | Sn | 03 34 25.7 | -11 |
| | comp=Z,5.2nm,0.4s | | | | | | | |
| **CEST** | **Esterri de Car** | **9.23** | **250** | Pn | | **Pn** | **03 32 53.6** | **+0.6** |
| **FLN** | **La Foliniere** baz=104 | **9.48** | **290** | *e*P | | **Pn** | **03 32 56.3** | **0.0** |
| FLN | | | | *e*Sn | | Sn | 03 34 30.5 | -12 |
| FLN | | | | *e*Sg | | | 03 35 32.7 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **EPF** | **Esparros** | **9.64** | **255** | *e*Pn | | Pn | 03 32 53.2 | -5.4 |
| **EPF** | **Esparros** | **9.64** | **255** | *e*P | | **Pn** | **03 32 59.8** | **+1.2** |
| **EPF** | **Esparros** | **9.64** | **255** | *e*Pg | | Pn | 03 33 35.2 | +37 |
| EPF | | | | *e*Sn | | Sn | 03 34 34.7 | -12 |
| EPF | | | | *e*Sg | | | 03 35 38.0 | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **GRR** | **Gorron** | **9.68** | **287** | *e*P | | **Pn** | **03 32 58.2** | **-0.8** |
| GRR | | | | *e*Sn | | Sn | 03 34 36.0 | -12 |
| GRR | | | | *e*Sg | | | 03 35 37.9 | |
| | comp=Z,9.1nm,0.5s | | | | | | | |
| **AGG** | **Agios Georgios** | **9.98** | **134** | Pn | | **Pn** | **03 33 02.6** | **-0.6** |
| **ETSF** | **Etsaut** | **10.30** | **255** | *e*P | | **Pn** | **03 33 07.9** | **+0.3** |
| ETSF | | | | *e*Sn | | Sn | 03 34 50.2 | -13 |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **SJPF** | **Ste Jean** | **10.66** | **258** | *e*Pn | | Pn | 03 33 07.1 | -5.5 |
| **SJPF** | **Ste Jean** | **10.66** | **258** | *e*P | | **Pn** | **03 33 13.2** | **+0.6** |
| **SGMF** | **Saint Gilles** | **10.79** | **286** | *e*P | | **Pn** | **03 33 14.2** | **0.0** |
| SGMF | | | | *e*Sn | | Sn | 03 35 01.4 | -13 |
| | comp=Z,11nm,0.6s | | | | | | | |
| **KEST** | **Kesra** | **10.94** | **196** | Pn | | **Pn** | **03 33 16.3** | **-0.2** |
| **KEST** | **Kesra** | **10.94** | **196** | Pn | | **Pn** | **03 33 20.8** | **+4.3** |
| | comp=Z,0.2nm,0.3s,baz=312,slow=2.6,SNR=6.2 | | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| **QUIF** | **Quistinic** | **11.18** | **284** | *e*P | | **Pn** | **03 33 19.3** | **-0.2** |
| QUIF | | | | *e*Sn | | Sn | 03 35 11.2 | -13 |
| | comp=Z,15nm,0.9s | | | | | | | |
| **ROSF** | **Rostrenen** | **11.27** | **286** | *e*P | | **Pn** | **03 33 19.2** | **-1.6** |
| **ROSF** | **Rostrenen** | **11.27** | **286** | *e*Pg | | Pn | 03 34 04.5 | +44 |
| ROSF | | | | *e*Sn | | Sn | 03 35 14.4 | -12 |
| | comp=Z,31nm,0.8s | | | | | | | |
| ROSF | | | | *e*Sg | | | 03 36 29.0 | |
| **EKA** | **Eskdalemuir Ar** baz=116,slow=14 | **13.63** | **317** | Pn | | **Pn** | **03 33 52.5** | **-0.4** |
| EKA | | | | | Sn | **Sn** | **03 36 21.6** | **-2.5** |
| | baz=120,slow=25 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **ESK** | **Eskdalemuir** | **13.64** | **317** | Pn | | **Pn** | **03 33 54.4** | **+1.3** |
| **ESDC** | **Sonseca Array** | **14.11** | **248** | Pn | | **Pn** | **03 34 02.4** | **+2.7** |
| | comp=Z,0.1nm,0.3s,baz=55,slow=11,SNR=2.3 | | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | | |
| **DSB** | **Dublin** | **14.32** | **306** | Pn | | **Pn** | **03 34 03.2** | **+0.8** |
| **PAB** | **San Pablo** | **14.43** | **248** | Pn | | **Pn** | **03 34 04.1** | **0.0** |
| **NC602** | **NORSAR Array S** | **14.47** | **357** | Pn | | **Pn** | **03 34 06.1** | **+1.7** |
| **NOA** | **NORSAR Array B** | **14.79** | **356** | LR | | LR | 03 40 09.3 | |
| | comp=Z,18nm,21.5s,baz=235,slow=39 | | | | | | | |
| **FINES** | **FINESS Array B** | **16.93** | **22** | Pn | | **Pn** | **03 34 35.7** | **-0.8** |
| **FINES** | **FINESS Array B** | **16.93** | **22** | Pn | | **Pn** | **03 34 35.2** | **-1.2** |
| | comp=Z,0.1nm,0.3s,baz=212,slow=10,SNR=5.1 | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **FIA1** | **FINESS Array S** | **16.93** | **22** | Pn | | **Pn** | **03 34 36.0** | **-0.4** |
| FIA1 | | | | IAmb | | IAmb | 03 34 37.4 | |
| | comp=Z,34nm,1.2s | | | | | | | |
| **CSS** | **Mathiatis** | **19.05** | **119** | | | **P** | **03 34 58.5** | **-3.6** |
| CSS | | | | IAmb | | IAmb | 03 35 22.3 | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.46** | **309** | P | | **P** | **03 43 18.7** | **+0.9** |
| | comp=Z,0.2nm,0.5s,baz=75,slow=3.9,SNR=4.7 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |

*LDG* ***11*** *03:37:41.3±0.1,44°.46N×7°.19E,h15km, Error ellipse: s-maj=1.4km s-min=0.9km az=45.0*
*GEN* ***11*** *03:37:41.8,44°.47N×7°.24E,h7km±1km, Ml0.1*
**STR 11 03:37:41.5±0.6, 44°N±2″×±″, h14km±6km, MLv0.9**/13,
**Error ellipse: s-maj=0.0km s-min=0.0km az=47.7,**
**preliminary, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PZZ** | **Stroppo** | **0.08** | **307** | Sg | Sg | 03 37 46.8 | 0.0 |
| **PZZ** | **Stroppo** | **0.08** | **307** | Pg | Pg | 03 37 44.8 | +0.1 |
| **PZZ** | **Stroppo** | **0.08** | **307** | P | Pg | 03 37 44.8 | +0.1 |
| PZZ | | | | S | Sg | 03 37 46.8 | 0.0 |
| **STV** | **Sant Anna di V** | **0.23** | **158** | Pg | Pg | 03 37 46.8 | +0.1 |
| **STV** | **Sant Anna di V** | **0.23** | **158** | Sg | Sg | 03 37 50.1 | 0.0 |
| **STV** | **Sant Anna di V** | **0.23** | **158** | P | Pg | 03 37 46.8 | +0.1 |
| STV | | | | S | Sg | 03 37 50.2 | +0.1 |
| **ENR** | **Entracque** | **0.28** | **146** | Pg | Pg | 03 37 47.6 | +0.1 |
| **ENR** | **Entracque** | **0.28** | **146** | Sg | Sg | 03 37 51.5 | 0.0 |
| **ENR** | **Entracque** | **0.28** | **146** | P | Pg | 03 37 47.6 | +0.1 |
| ENR | | | | S | Sg | 03 37 51.5 | 0.0 |
| **ISO** | **Isola** | **0.30** | **202** | Pg | Pg | 03 37 47.9 | +0.1 |
| ISO | | | | Sg | Sg | 03 37 51.8 | -0.3 |
| **ISO** | **Isola** | **0.30** | **202** | P | Pb | 03 37 48.5 | -0.2 |
| ISO | | | | S | Sg | 03 37 52.3 | +0.3 |
| **JAUF** | **Jausiers** | **0.33** | **265** | Pg | Pg | 03 37 48.4 | 0.0 |
| JAUF | | | | Sg | Sg | 03 37 52.8 | -0.3 |
| **BHB** | **Bricherasio** | **0.39** | **6** | Pg | Pg | 03 37 49.1 | -0.2 |
| **BHB** | **Bricherasio** | **0.39** | **6** | Sg | Sg | 03 37 54.2 | -0.5 |
| **BHB** | **Bricherasio** | **0.39** | **6** | P | Pg | 03 37 49.1 | -0.2 |
| BHB | | | | S | Sg | 03 37 54.3 | -0.3 |
| **SPIF** | **crte de Spivo** | **0.40** | **177** | Pg | Pg | 03 37 50.0 | +0.3 |
| SPIF | | | | Sg | Sg | 03 37 55.5 | +0.2 |
| **MBDF** | **Montbardon** | **0.41** | **311** | *e*Pg | Pg | 03 37 48.9 | -0.9 |
| MBDF | | | | *e*Sg | Sg | 03 37 55.3 | -0.2 |
| **CREF** | **Crivoux** | **0.43** | **282** | Pg | Pg | 03 37 50.0 | -0.1 |
| CREF | | | | Sg | Sg | 03 37 55.8 | -0.2 |
| **PIAF** | **les Granges de** | **0.45** | **139** | Pg | Pg | 03 37 50.5 | -0.1 |
| PIAF | | | | Sg | Sg | 03 37 56.5 | -0.2 |
| **ENAUX** | **Enaux** | **0.47** | **222** | Pg | Pg | 03 37 51.0 | +0.2 |
| ENAUX | | | | Sg | Sg | 03 37 57.1 | -0.1 |
| **TURF** | **col de Turini** | **0.50** | **164** | Pg | Pg | 03 37 51.6 | 0.0 |
| TURF | | | | Sg | Sg | 03 37 58.3 | +0.1 |
| **GBOS** | **Grotte di Boss** | **0.50** | **115** | Pg | Pg | 03 37 51.5 | 0.0 |
| **GBOS** | **Grotte di Boss** | **0.50** | **115** | Sg | Sg | 03 37 58.2 | 0.0 |
| **GBOS** | **Grotte di Boss** | **0.50** | **115** | P | Pg | 03 37 51.5 | 0.0 |
| GBOS | | | | S | Sg | 03 37 58.3 | 0.0 |
| **A194A** | **Meolans-Revel,** | **0.51** | **263** | Pg | Pg | 03 37 51.7 | +0.1 |
| A194A | | | | Sg | Sg | 03 37 58.3 | -0.1 |
| **SAOF** | **Saorge** | **0.54** | **152** | Pg | Pg | 03 37 52.2 | +0.1 |
| SAOF | | | | Sg | Sg | 03 37 59.2 | 0.0 |
| **RRL** | **Rocca Remolon** | **0.55** | **327** | Sg | Sg | 03 37 60.0 | +0.2 |
| **RRL** | **Rocca Remolon** | **0.55** | **327** | Pg | Pg | 03 37 52.3 | -0.1 |
| **SBF** | **Sospel** | **0.62** | **164** | *e*Pg | Pg | 03 37 52.6 | -1.1 |
| SBF | | | | *e*Sg | Sg | 03 38 00.7 | -1.2 |
| **PCP** | **Piancastagn** | **0.96** | **85** | Pg | Pb | 03 37 59.8 | -0.2 |
| **ORIF** | **Oris-en-Rattie** | **1.05** | **296** | *e*Pg | Pb | 03 38 01.0 | -0.6 |
| ORIF | | | | *e*Sg | Sb | 03 38 14.1 | -1.1 |
| **ORIF** | **Oris-en-Rattie** | **1.05** | **296** | Pg | Pb | 03 38 01.4 | -0.2 |

*LDG* ***11*** *03:38:02.4±0.2,46°.28N×13°.01E,h10km,Ml2.1/10, Error ellipse: s-maj=2.8km s-min=1.8km az=107.0*
*VIE* ***11*** *03:38:02.5±0.3,46°.33N×13°.02E,h12km,mb1.9/12, ml2.4/20, Error ellipse: s-maj=2.1km s-min=1.1km az=36.0*

*PRU* ***11*** *03:38:06.4,46°.45N×12°.94E,h10km*
**ISC 11 03:38:02.3±0.7, 46°31N±0°.01×12°.96E±0°.01, h18km±2km, n118, σ1§57/193, 6C-3D, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DST2** | **Trieste** | **0.07** | **203** | P | **Pb** | **03 38 06.2** | **+0.6** |
| DST2 | | | | S | **Sg** | **03 38 08.7** | **+0.8** |
| **MPRI** | **Monte Prat** | **0.07** | **164** | ⇑*e*Pg | **Pg** | **03 38 05.9** | **+0.2** |
| MPRI | | | | *e*Sg | **Sg** | **03 38 07.9** | **-0.1** |
| **MPRI** | **Monte Prat** | **0.07** | **164** | P | **Pg** | **03 38 05.9** | **+0.2** |
| MPRI | | | | S | **Sg** | **03 38 08.1** | **+0.1** |
| **BOO** | **Bordano** | **0.10** | **82** | ⇑*i*Pg | **Pg** | **03 38 05.2** | **-0.7** |
| BOO | | | | *i* Sg | **Sg** | **03 38 06.7** | **-1.7** |
| **BOO** | **Bordano** | **0.10** | **82** | P | **Pg** | **03 38 05.2** | **-0.7** |
| BOO | | | | S | **Sg** | **03 38 06.6** | **-1.7** |
| **FUSE** | **Fusea** | **0.11** | **14** | ⇓*e*Pg | **Pg** | **03 38 05.6** | **-0.5** |
| FUSE | | | | *e*Sg | **Sg** | **03 38 07.3** | **-1.3** |
| **FUSE** | **Fusea** | **0.11** | **14** | P | **Pg** | **03 38 05.5** | **-0.5** |
| FUSE | | | | S | **Sg** | **03 38 07.5** | **-1.2** |
| **GEPF** | **Gemona** | **0.13** | **104** | P | **Pg** | **03 38 05.8** | **-0.4** |
| GEPF | | | | S | **Sg** | **03 38 07.9** | **-0.9** |
| **BUA** | **Buia** | **0.14** | **128** | ⇑*e*Pg | **Pg** | **03 38 06.3** | **-0.1** |
| BUA | | | | *e*Sg | **Sg** | **03 38 08.6** | **-0.5** |
| **CLUD** | **Cludinico** | **0.16** | **340** | ⇓*e*Pg | **Pg** | **03 38 06.8** | **+0.1** |
| CLUD | | | | *e*Sg | **Sg** | **03 38 09.7** | **0.0** |
| **CLUD** | **Cludinico** | **0.16** | **340** | P | **Pg** | **03 38 06.8** | **+0.1** |
| CLUD | | | | S | **Sg** | **03 38 09.8** | **+0.1** |
| **STAL** | **STALIGIAL** | **0.18** | **255** | P | **Pg** | **03 38 07.8** | **+0.9** |
| STAL | | | | S | **Sg** | **03 38 12.0** | **+1.9** |
| STAL | | | | AML | AML | | |
| | comp=N,1144μm,0.3s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,698μm,0.5s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,774μm,1.1s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,765μm,1.3s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,765μm,0.7s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,774μm,0.9s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,1144μm,1.7s | | | | | | |
| **BAD** | **Bernadia** |

ROSI AML AML
comp=N,89μm,1.5s
ROSI AML AML
comp=E,71μm,1.7s
**KNDS Knezji Dol 1.26 128** *i* Sg **Sg 03 38 45.2 +2.2**
KNDS IAML 03 38 51.0
comp=Z,19nm,0.3s
**DOSS Dosso del Somm 1.31 252** AML AML
comp=N,169μm,0.6s
DOSS AML AML
comp=E,140μm,0.5s
DOSS AML AML
comp=E,164μm,0.5s
DOSS AML AML
comp=N,144μm,1.1s
**WTTA Wattenberg 1.32 317** *e*Pg **Pg 03 38 28.5 +0.7**
comp=N,6.2nm,0.2s,SNR=19
WTTA *e*Sg **Sg 03 38 45.6 +0.5**
comp=N,25nm,0.5s
**OZOL Ozolo 1.33 275** AML AML
comp=N,176μm,0.4s
OZOL AML AML
comp=E,224μm,0.3s
OZOL AML AML
comp=N,176μm,1.6s
**VISS Visnje 1.40 110** *i* Pg **Pg 03 38 28.8 -0.5**
VISS *i* Sg **Sg 03 38 48.0 +0.4**
VISS IAML 03 38 49.5
comp=Z,8.3nm,0.2s
**WATA Walderalm 1.40 318** *e*Pg **Pg 03 38 30.5 +1.2**
comp=Z,3.3nm,0.1s,SNR=13
WATA *e*Sg **Sg 03 38 48.5 +0.9**
comp=Z,7.4nm,0.2s
**GAGG Gaggia 1.41 262** AML AML
comp=E,111μm,0.3s
GAGG AML AML
comp=N,109μm,1.2s
GAGG AML AML
comp=N,109μm,0.8s
**ZAVS Zavodnje 1.43 84** *i* Pg **Pg 03 38 29.0 -0.9**
ZAVS *i* Sg **Sg 03 38 48.3 -0.3**
ZAVS IAML 03 38 53.4
comp=Z,5.0nm,0.1s
**PDKS Podkum 1.44 99** *i* Pg **Pb 03 38 28.8 +0.3**
PDKS *i* Sg **Sg 03 38 48.2 -0.5**
PDKS IAML 03 38 52.7
comp=Z,6.5nm,0.1s
**LUSI Trento, Gardas 1.45 257** AML AML
comp=E,119μm,0.2s
LUSI AML AML
comp=N,248μm,1.0s
LUSI AML AML
comp=N,248μm,1.0s
**RIY Rijeka 1.45 132** *e*Pg **Pg 03 38 30.1 -0.1**
RIY Sg **Sg 03 38 50.2 +1.2**
**BIOA Bad Ischl, Aus 1.46 18** *i* Pg **Pb 03 38 29.1 +0.2**
comp=N,2.7nm,0.3s
BIOA *e*Sg **Sg 03 38 50.1 +0.7**
comp=N,7.2nm,0.4s,SNR=5.5
**SOKA Soboth 1.48 75** *i* Pg **Pb 03 38 29.5 +0.3**
comp=N,0.3nm,0.2s
SOKA *e*Sg **Sg 03 38 49.3 -0.7**
comp=N,2.2nm,0.2s
**GBRS Gornja Briga 1.50 120** *i* Pg **Pg 03 38 30.9 -0.3**
GBRS *i* Sg **Sg 03 38 52.2 +1.4**
GBRS IAML 03 38 53.9
comp=Z,4.6nm,0.1s
**BRJN Brijuni 1.51 158** *i* Pg **Pg 03 38 31.2 -0.1**
BRJN Sg **Sg 03 38 51.6 +0.8**
**SQTA Sankt Quirin 1.51 308** *e*Pg **Pg 03 38 32.5 +1.1**
comp=Z,6.7nm,0.1s,SNR=11
SQTA *e*Sg **Sg 03 38 52.3 +1.1**
comp=Z,8.2nm,0.3s
**VARA Varagna 1.52 252** AML AML
comp=E,168μm,1.3s
VARA AML AML
comp=E,168μm,0.7s
VARA AML AML
comp=N,180μm,0.8s
**SMRN Sveta Marina 1.52 146** *i* Pg **Pb 03 38 30.8 +0.9**
SMRN Sg **Sg 03 38 51.7 +0.4**
**PERS Pernice 1.52 77** *i* Pg **Pb 03 38 30.1 +0.1**
PERS *i* Sg **Sg 03 38 52.0 +0.5**
PERS IAML 03 38 52.6
comp=Z,4.5nm,0.2s
**MOTA Moosalm 1.65 310** *e*Pg **Pg 03 38 35.8 +1.9**
comp=Z,4.0nm,0.3s
MOTA *e*Sg **Sg 03 38 58.2 +2.8**
comp=Z,3.6nm,0.3s
**LEGS Legarje 1.68 101** *i* Pn **Pb 03 38 33.1 +0.6**
LEGS *i* Sn **Sg 03 38 54.9 -1.4**
**FETA Feichten 1.70 296** *e*Pg **Pg 03 38 35.7 +0.8**
comp=Z,1.2nm,0.2s,SNR=6.1
FETA *e*Sg **Sg 03 38 57.8 +0.9**
comp=Z,2.3nm,0.3s
**DOBS Dobrina 1.75 94** *i* Pn **Pb 03 38 33.9 +0.1**
**MOA Molln 1.78 30** *e*Pg **Pg 03 38 36.0 -0.5**
comp=Z,0.4nm,0.1s
MOA *e*Sg **Sg 03 38 59.2 -0.5**
comp=Z,0.5nm,0.2s
**BOJS Bojanci 1.79 116** *i* Pn **Pb 03 38 35.1 +0.6**
BOJS *i* Sn **Sg 03 38 58.9 -1.0**
BOJS IAML 03 39 01.6
comp=Z,6.0nm,0.2s
**CRES Cresnjev 1.80 105** *i* Pn **Pb 03 38 34.9 +0.2**
CRES *i* Sn **Sb 03 38 57.1 +0.1**
CRES IAML 03 39 05.2
comp=Z,3.2nm,0.1s
**GOLS Golise 1.87 98** *i* Pn **Pb 03 38 35.7 -0.3**
GOLS IAML 03 39 10.9
comp=Z,2.3nm,0.1s
**OZLJ Ozalj 1.88 111** *i* Pn **Pb 03 38 36.1 +0.1**
OZLJ Sn **Sb 03 39 00.1 +1.0**
**GCIS Gornji Cirnik 1.91 102** *i* Pn **Pb 03 38 36.9 +0.4**
GCIS IAML 03 39 06.5
comp=Z,2.5nm,0.2s
**RETA Reutte 1.92 309** *e*Pg **Pg 03 38 39.3 +0.2**
comp=Z,2.0nm,0.2s,SNR=15
RETA *e*Sg **Sg 03 39 06.1 +2.2**
comp=Z,4.1nm,0.2s
**ARSA Arzberg 2.00 61** *i* Pg **Pg 03 38 39.8 -0.8**
comp=Z,0.1nm,0.1s
ARSA *e*Sn **Sb 03 39 01.9 -0.7**
comp=Z,0.3nm,0.2s
**RABC Rab 2.01 140** *i* Pn **Pb 03 38 38.0 -0.3**
RABC Sn **Sb 03 39 03.9 +0.9**
**DAVA Damuels 2.33 296** *e*Pg **Pb 03 38 45.8 +1.9**
comp=Z,1.9nm,0.2s
DAVA *e*Sg **Sg 03 39 19.0 +1.7**
comp=Z,1.1nm,0.2s
**PLIT Plitvice 2.35 126** Sg **Sg 03 39 17.2 -0.7**
**VIRC Vir 2.50 143** *i* Pn **Pn 03 38 44.3 +2.4**
VIRC Sn **Sb 03 39 16.6 -0.4**
**CONA Conrad Observa 2.56 50** *e*Pn **Pn 03 38 43.5 +0.6**
CONA *e*Sn **Sn 03 39 14.6 +0.9**
comp=Z,0.3nm,0.2s
**CKRC Cesky Krumlov 2.67 19** *e*SN **Sb 03 39 19.7 -2.4**
**DUGI Dugi Otok 2.75 147** *e*Pn **Pn 03 38 47.8 +2.3**
DUGI Sn **Sb 03 39 23.0 -1.2**
**KHC Kasperske Hory 2.86 8** *e*PN **Pn 03 38 49.8 +2.8**
KHC *e*SN **Sn 03 39 23.7 +2.8**
KHC *e*SG **Sg 03 39 32.0 -2.0**
comp=Z,2.2nm,0.5s
**MORI Morici 3.12 140** *e*Pn **Pn 03 38 53.5 +3.0**
MORI Sn **Sn 03 39 31.0 +3.7**
**ZIRJ Zirje 3.26 143** *i* Pn **Pn 03 38 56.0 +3.5**
ZIRJ Sn **Sn 03 39 34.2 +3.3**
**CDF Champ du Feu 4.40 301** *e*P **Pn 03 39 11.5 +3.3**
**CDF Champ du Feu 4.40 301** *e*Pg **Pg 03 39 24.9 -1.6**
CDF *e*Sn **Sn 03 39 56.8 -2.3**
comp=Z,0.4nm,0.2s
**LPG La Plagne 4.41 262** *e*Pn **Pn 03 39 08.4 -0.2**
**LPG La Plagne 4.41 262** *e*P **Pn 03 39 12.3 +3.7**
**LPG La Plagne 4.41 262** *e*Pg **Pg 03 39 24.8 -1.9**
LPG *e*Sg **Sg 03 40 21.7 -2.1**
comp=Z,0.3nm,0.2s
**LPL La Plagne 4.42 262** *e*Pn **Pn 03 39 08.2 -0.4**
**LPL La Plagne 4.42 262** *e*P **Pn 03 39 12.2 +3.6**
**LPL La Plagne 4.42 262** *e*Pg **Pg 03 39 25.1 -1.8**
LPL *e*Sg **Sg 03 40 22.4 -1.7**
comp=Z,0.3nm,0.3s
**HINF Hinteralfeld 4.44 292** *e*P **Pn 03 39 12.5 +3.8**
**HINF Hinteralfeld 4.44 292** *e*Pg **Pg 03 39 25.6 -1.7**
HINF *e*Sn **Sn 03 39 58.1 -1.9**
comp=Z,0.5nm,0.2s

**MBDF Montbardon 4.63 252** *e*Pn **Pn 03 39 11.2 -0.2**
**MBDF Montbardon 4.63 252** *e*Pg **Pg 03 39 28.2 -2.7**
MBDF *e*Sn **Sn 03 40 01.7 -3.1**
MBDF *e*Sg **Sg 03 40 27.8 -3.0**
comp=Z,0.3nm,0.2s
**HAU Haudompre 4.82 293** *e*Pn **Pn 03 39 13.6 -0.3**
**HAU Haudompre 4.82 293** *e*P **Pn 03 39 17.1 +3.1**
HAU *e*Sn **Sn 03 40 06.3 -3.0**
HAU *e*Sg **Sg 03 40 35.0 -1.9**
comp=Z,0.8nm,0.3s
**ORIF Oris-en-Rattie 5.16 257** *e*Pn **Pn 03 39 18.2 -0.5**
**ORIF Oris-en-Rattie 5.16 257** *e*Pg **Pg 03 39 38.5 -2.5**
ORIF *e*Sn **Sn 03 40 14.4 -3.4**
ORIF *e*Sg **Sg 03 40 44.8 -3.0**
comp=Z,0.3nm,0.2s
**LMR La Mourre 5.47 239** *e*P **Pn 03 39 26.2 +3.4**
**SMRF Simiane la Rot 5.72 249** *e*P **Pn 03 39 30.0 +3.7**
SMRF *e*Sg **Sg 03 41 02.5 -3.3**
comp=Z,0.4nm,0.3s
**VIVF Saint-Julien-l 6.00 259** *e*Pn **Pn 03 39 28.7 -1.4**
**VIVF Saint-Julien-l 6.00 259** *e*Pg **Pg 03 39 53.4 -3.6**
VIVF *e*Sn **Sn 03 40 34.5 -3.8**
comp=Z,0.2nm,0.2s
**BAIF Baives 6.95 306** *e*Pn **Pn 03 39 42.2 -0.9**
**BAIF Baives 6.95 306** *e*P **Pn 03 39 46.7 +3.5**
BAIF *e*Sn **Sn 03 40 57.6 -4.1**
comp=Z,0.3nm,0.2s
BAIF *e*Sg **Sg 03 41 40.8 -4.4**

**ROM 11 03:39:03.3±0.1, 37.728N±0.006×15.06E±0.01, h7km, ML2.5/76, Error ellipse: s-maj=0.9km s-min=0.4km az=293.0, Sicily**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EMCN** | **Etna Monte Con** | **0.07** | **340** | P | Pg | 03 39 05.4 | 0.0 |
| EMCN | | | | S | Sg | 03 39 07.0 | +0.1 |
| EMCN | | | | AML | AML | | |
| | comp=E,66300μm,0.3s | | | | | | |
| EMCN | | | | AML | AML | | |
| | comp=N,70550μm,0.4s | | | | | | |
| **ESLN** | **Serra La Nave** | **0.08** | **244** | P | Pg | 03 39 05.4 | 0.0 |
| ESLN | | | | S | Sg | 03 39 07.0 | 0.0 |
| ESLN | | | | AML | AML | | |
| | comp=N,16200μm,0.4s | | | | | | |
| ESLN | | | | AML | AML | | |
| | comp=E,20050μm,0.4s | | | | | | |
| **ESML** | **S. M. di Licod** | **0.18** | **233** | P | Pg | 03 39 07.8 | +0.8 |
| ESML | | | | S | Sg | 03 39 10.7 | +1.1 |
| ESML | | | | AML | AML | | |
| | comp=E,4875μm,0.4s | | | | | | |
| ESML | | | | AML | AML | | |
| | comp=N,4520μm,1.2s | | | | | | |
| ESML | | | | AML | AML | | |
| | comp=N,4520μm,0.8s | | | | | | |
| **EPZF** | **Pizzo Felice** | **0.19** | **301** | P | Pg | 03 39 07.3 | +0.1 |
| EPZF | | | | AML | AML | | |
| | comp=E,4150μm,0.5s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,5300μm,0.2s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,5300μm,1.8s | | | | | | |
| **EPOZ** | **Pozzillo** | **0.21** | **176** | P | Pg | 03 39 07.4 | -0.2 |
| EPOZ | | | | AML | AML | | |
| | comp=N,35000μm,0.6s | | | | | | |
| EPOZ | | | | AML | AML | | |
| | comp=N,35000μm,1.4s | | | | | | |
| EPOZ | | | | AML | AML | | |
| | comp=E,35250μm,0.4s | | | | | | |
| **AIO** | **Antillo** | **0.28** | **29** | P | Pg | 03 39 09.6 | +0.7 |
| AIO | | | | AML | AML | | |
| | comp=N,2515μm,1.5s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=E,1935μm,0.6s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=N,2515μm,0.5s | | | | | | |
| **NOV** | **Novara** | **0.30** | **11** | P | Pg | 03 39 10.1 | +0.7 |
| NOV | | | | AML | AML | | |
| | comp=E,5310μm,0.3s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,5455μm,0.7s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=E,5310μm,1.7s | | | | | | |
| **MUCR** | **Ucria** | **0.35** | **335** | P | Pg | 03 39 10.8 | +0.6 |
| MUCR | | | | S | Sb | 03 39 16.8 | -0.9 |
| MUCR | | | | AML | AML | | |
| | comp=E,2230μm,0.5s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=N,1880μm,0.5s | | | | | | |
| **MNO** | **Monte Soro** | **0.36** | **305** | P | Pg | 03 39 11.1 | +0.8 |
| MNO | | | | AML | AML | | |
| | comp=E,1319μm,1.0s | | | | | | |
| MNO | | | | AML | AML | | |
| | comp=N,1536μm,0.6s | | | | | | |
| **GALF** | **Gagliano Caste** | **0.39** | **268** | P | Pb | 03 39 12.2 | -0.5 |
| GALF | | | | AML | AML | | |
| | comp=E,280μm,1.1s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,376μm,0.8s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,280μm,1.1s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,377μm,0.8s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,1094μm,0.8s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,770μm,0.7s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,280μm,0.9s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,1094μm,1.2s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,376μm,0.8s | | | | | | |
| **HLNI** | **Lentini** | **0.41** | **202** | P | Pg | 03 39 11.4 | +0.1 |
| HLNI | | | | S | Sb | 03 39 18.4 | -0.8 |
| HLNI | | | | AML | AML | | |
| | comp=E,308μm,1.2s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=N,380μm,1.3s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=E,308μm,0.8s | | | | | | |
| **HAGA** | **Augusta** | **0.45** | **170** | P | Pg | 03 39 12.5 | +0.5 |
| HAGA | | | | AML | AML | | |
| | comp=E,308μm,0.4s | | | | | | |
| HAGA | | | | AML | AML | | |
| | comp=N,366μm,0.8s | | | | | | |
| **MPNC** | **Port Mandanici** | **0.48** | **29** | P | Pg | 03 39 13.0 | +0.5 |
| MPNC | | | | AML | AML | | |
| | comp=N,1390μm,0.7s | | | | | | |
| MPNC | | | | AML | AML | | |
| | comp=E,1710μm,0.5s | | | | | | |
| **AGST** | **Augusta-Monte** | **0.49** | **164** | P | Pg | 03 39 13.1 | +0.3 |
| AGST | | | | S | Sb | 03 39 21.1 | -0.4 |
| AGST | | | | AML | AML | | |
| | comp=E,622μm,0.8s | | | | | | |
| AGST | | | | AML | AML | | |
| | comp=N,689μm,0.9s | | | | | | |
| AGST | | | | AML | AML | | |
| | comp=E,622μm,1.2s | | | | | | |
| **MILZ** | **Milazzo** | **0.56** | **14** | P | Pg | 03 39 14.4 | +0.3 |
| MILZ | | | | AML | AML | | |
| | comp=E,617μm,0.6s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=N,486μm,0.5s | | | | | | |
| **MTTG** | **Motta San Giov** | **0.57** | **61** | P | Pb | 03 39 15.6 | -0.1 |
| **SSY** | **Sortino** | **0.57** | **179** | P | Pg | 03 39 14.7 | +0.3 |
| SSY | | | | AML | AML | | |
| | comp=E,1238μm,1.1s | | | | | | |
| SSY | | | | AML | AML | | |
| | comp=N,2760μm,1.0s | | | | | | |
| SSY | | | | AML | AML | | |
| | comp=E,1238μm,0.9s | | | | | | |
| **MSRU** | **Castanea** | **0.64** | **33** | P | Pg | 03 39 16.1 | +0.4 |
| MSRU | | | | AML | AML | | |
| | comp=E,1015μm,0.5s | | | | | | |
| MSRU | | | | AML | AML | | |
| | comp=N,539μm,1.1s | | | | | | |
| MSRU | | | | AML | AML | | |
| | comp=N,539μm,0.9s | | | | | | |
| MSRU | | | | AML | AML | | |
| | comp=E,1015μm,1.5s | | | | | | |
| **VPL** | **Vulcano Piano** | **0.65** | **355** | P | Pg | 03 39 16.3 | +0.3 |
| VPL | | | | AML | AML | | |
| | comp=E,1180μm,0.4s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=N,1445μm,1.3s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=N,1445μm,0.7s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=E,1180μm,1.6s | | | | | | |
| **LLI** | **Lipari** | **0.72** | **353** | P | Pb | 03 39 18.5 | +0.3 |
| LLI | | | | AML | AML | | |
| | comp=N,4185μm,0.4s | | | | | | |
| LLI | | | | AML | AML | | |
| | comp=E,3435μm,0.6s | | | | | | |
| **PLLN** | **Pollina** | **0.77** | **290** | P | Pb | 03 39 19.6 | +0.5 |
| PLLN | | | | AML | AML | | |
| | comp=E,551μm,0.7s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=N,428μm,0.5s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=E,550μm,0.7s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=E,550μm,1.3s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=N,428μm,1.5s | | | | | | |
| **HMDC** | **Modica** | **0.80** | **196** | P | Pg | 03 39 18.6 | -0.1 |
| HMDC | | | | AML | AML | | |
| | comp=E,516μm,0.9s | | | | | | |
| HMDC | | | | AML | AML | | |
| | comp=N,529μm,0.3s | | | | | | |
| **RESU** | **Resuttano** | **0.80** | **265** | P | Pn | 03 39 21.1 | 0.0 |
| RESU | | | | AML | AML | | |
| | comp=E,107μm,1.4s | | | | | | |
| RESU | | | | AML | AML | | |
| | comp=E,108μm,1.4s | | | | | | |
| RESU | | | | AML | AML | | |
| | comp=N,133μm,0.8s | | | | | | |
| RESU | | | | AML | AML | | |
| | comp=E,108μm,0.6s | | | | | | |
| **CSLB** | **Castelbuono** | **0.82** | **285** | P | Pg | 03 39 19.5 | +0.4 |
| CSLB | | | | AML | AML | | |
| | comp=E,92μm,0.6s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=N,109μm,0.7s | | | | | | |
| **CEL** | **Celeste** | **0.84** | **51** | P | Pg | 03 39 19.8 | +0.3 |
| CEL | | | | AML | AML | | |
| | comp=N,236μm,0.8s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=E,224μm,0.5s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,237μm,0.7s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=E,180μm,0.5s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,237μm,0.8s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,237μm,1.3s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,237μm,1.2s | | | | | | |
| **SOI** | **Samo** | **0.86** | **66** | P | Pb | 03 39 20.3 | -0.2 |
| SOI | | | | AML | AML | | |
| | comp=E,112μm,0.3s | | | | | | |
| SOI | | | | AML | AML | | |
| | comp=N,126μm,0.8s | | | | | | |
| **CROCE** | **Santa Croce Ca** | **0.99** | **205** | P | Pg | 03 39 21.6 | -0.7 |
| **HPAC** | **Pachino** | **1.03** | **178** | P | Pg | 03 39 22.2 | -0.8 |
| HPAC | | | | AML | AML | | |
| | comp=E,270μm,0.3s | | | | | | |
| HPAC | | | | AML | AML | | |
| | comp=N,272μm,0.2s | | | | | | |
| HPAC | | | | AML | AML | | |
| | comp=E,270μm,1.7s | | | | | | |
| **ALJA** | **Alia** | **1.04** | **272** | P | Pn | 03 39 25.1 | +0.8 |
| ALJA | | | | AML | AML | | |
| | comp=E,168μm,0.4s | | | | | | |
| ALJA | | | | AML | AML | | |
| | comp=E,168μm,1.6s | | | | | | |
| ALJA | | | | AML | AML | | |
| | comp=N,194μm,0.7s | | | | | | |
| **CLTA** | **Licata** | **1.04** | **237** | P | Pn | 03 39 24.1 | -0.2 |
| CLTA | | | | AML | AML | | |
| | comp=E,79μm,0.8s | | | | | | |
| CLTA | | | | AML | AML | | |
| | comp=N,78μm,0.8s | | | | | | |
| **JOPP** | **Joppolo** | **1.09** | **36** | P | Pg | 03 39 24.0 | -0.3 |
| JOPP | | | | AML | AML | | |
| | comp=E,145μm,0.4s | | | | | | |
| JOPP | | | | AML | AML | | |
| | comp=N,190μm,0.4s | | | | | | |
| JOPP | | | | AML | AML | | |
| | comp=E,145μm,1.6s | | | | | | |
| **FAVR** | **Favara** | **1.20** | **248** | P | Pn | 03 39 27.7 | +1.2 |
| FAVR | | | | AML | AML | | |
| | comp=E,72μm,0.6s | | | | | | |
| FAVR | | | | AML | AML | | |
| | comp=N,136μm,1.3s | | | | | | |
| FAVR | | | | AML | AML | | |
| | comp=N,136μm,0.7s | | | | | | |
| **PLAC** | **Placanica** | **1.30** | **56** | P | Pg | 03 39 28.3 | 0.0 |
| PLAC | | | | AML | AML | | |
| | comp=E,133μm,1.2s | | | | | | |
| PLAC | | | | AML | AML | | |
| | comp=N,144μm,0.9s | | | | | | |
| PLAC | | | | AML | AML | | |
| | comp=E,134μm,0.9s | | | | | | |
| PLAC | | | | AML | AML | | |
| | comp=N,119μm,0.6s | | | | | | |
| PLAC | | | | AML | AML | | |
| | comp=E,133μm,0.8s | | | | | | |
| **CORL** | **Corleone** | **1.40** | **277** | P | Pg | 03 39 30.2 | 0.0 |
| CORL | | | | AML | AML | | |
| | comp=N,128μm,0.9s | | | | | | |
| CORL | | | | AML | AML | | |
| | comp=E,114μm,0.5s | | | | | | |
| **MPG** | **Monte Pellegri** | **1.41** | **288** | P | Pn | 03 39 29.1 | -0.3 |
| MPG | | | | AML | AML | | |
| | comp=N,33μm,1.4s | | | | | | |
| MPG | | | | AML | AML | | |
| | comp=E,29μm,0.8s | | | | | | |
| MPG | | | | AML | AML | | |
| | comp=N,33μm,0.6s | | | | | | |
| **CAR1** | **CAROLEI** | **1.77** | **30** | P | Pn | 03 39 33.5 | -0.9 |
| CAR1 | | | | AML | AML | | |
| | comp=N,124μm,0.4s | | | | | | |
| CAR1 | | | | AML | AML | | |
| | comp=E,158μm,0.5s | | | | | | |
| CAR1 | | | | AML | AML | | |
| | comp=N,124μm,1.6s | | | | | | |
| **SERS** | **Sersale** | **1.83** | **44** | P | Pb | 03 39 36.4 | -0.7 |
| SERS | | | | AML | AML | | |
| | comp=E,42μm,0.5s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=N,27μm,1.1s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=N,27μm,0.9s | | | | | | |
| **CET2** | **Cetraro** | **1.93** | **21** | P | Pn | 03 39 36.0 | -0.6 |
| CET2 | | | | AML | AML | | |
| | comp=E,90μm,0.7s | | | | | | |
| CET2 | | | | AML | AML | | |
| | comp=N,154μm,0.5s | | | | | | |
| **CUC** | **Castrocucco** | **2.34** | **14** | P | Pn | 03 39 41.9 | -0.2 |
| CUC | | | | AML | AML | | |
| | comp=E,35μm,0.4s | | | | | | |
| CUC | | | | AML | AML | | |
| | comp=N,29μm,1.6s | | | | | | |
| CUC | | | | AML | AML | | |
| | comp=N,29μm,0.4s | | | | | | |
| **BULG** | **Bulgheria - Ca** | **2.36** | **6** | P | Pn | 03 39 41.9 | -0.6 |
| BULG | | | | AML | AML | | |
| | comp=E,26μm,1.3s | | | | | | |
| BULG | | | | AML | AML | | |
| | comp=N,53μm,1.4s | | | | | | |
| BULG | | | | AML | AML | | |
| | comp=E,26μm,0.7s | | | | | | |
| **ACER** | **Acerenza** | **3.13** | **12** | P | Pn | 03 39 54.9 | +1.9 |
| **LTRZ** | **Laterza** | **3.18** | **25** | P | Pn | 03 39 54.7 | +1.0 |
| **AMUR** | **Altamura** | **3.39** | **20** | P | Pn | 03 39 58.0 | +1.3 |
| **NOCI** | **Noci** | **3.43** | **26** | P | Pn | 03 39 57.5 | +0.3 |

**IDC 11 03:46:04.0±45.0, 10.15S×112.77E, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=1014.0km s-min=199.7km az=155.0, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **58.01** | **355** | P | P | 03 55 58.6 | -0.1 |
| | 1.1nm,0.6s,baz=172,slow=9.0,SNR=5.2 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.89** | **337** | P | P | 03 56 32.0 | 0.0 |
| | 0.7nm,0.4s,baz=149,slow=7.5,SNR=13 | | | | | | |

0.7nm,0.4s
**ZALV Zalesovo Beam 68.11 343** P P 03 57 05.5 -0.1
0.9nm,0.4s,baz=155,slow=4.8,SNR=2.3
0.9nm,0.4s

*KRNET **11** 03:46:36.8±0.1,39°.49N×73°.09E,h16km,mb3.0*
*NNC **11** 03:46:43.1±3.2,39°.70N×72°.86E,h0km,mb3.5,mpv3.3,*
*Error ellipse: s-maj=25.4km s-min=15.7km az=169.0*
*SOME **11** 03:46:45.4,40°.00N×72°.87E,h0km*
**ISC 11 03:46:40.3±1.0,39°.70N±0°.04×72°.97E±0°.03,h10km,n38,**
**σ2s11/71,29C-21D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **0.52** | **52** | ⇑*i*P | **Pg** | **03 46 48.8** | **-1.6** |
| | baz=31 | | | | | | |
| SFK | | | | ⇑*i*S | **Sg** | **03 46 57.6** | **+0.3** |
| | baz=31 | | | | | | |
| **OHH** | **Osh** | **0.84** | **350** | ⇓*e*P | **Pb** | **03 46 57.2** | **+0.2** |
| | baz=48 | | | | | | |
| OHH | | | | ⇓*e*S | **Sn** | **03 47 11.8** | **+1.1** |
| | baz=48 | | | | | | |
| **DRK** | **Karamyk** | **0.93** | **257** | ⇑*e*P | **Pg** | **03 46 55.7** | **-2.6** |
| | baz=70 | | | | | | |
| DRK | | | | ⇑*e*S | **Sg** | **03 47 09.9** | **-0.6** |
| | baz=70 | | | | | | |
| **BTK** | **Batken** | **1.70** | **283** | ⇑*i*P | **Pn** | **03 47 10.7** | **+0.6** |
| | baz=89 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **03 47 35.6** | **+0.7** |
| | baz=89 | | | | | | |
| **GAR** | **Garm** | **2.17** | **252** | ⇑*i*P | **Pn** | **03 47 17.6** | **+0.9** |
| | baz=58 | | | | | | |
| GAR | | | | ⇑*i*S | **Sb** | **03 47 47.0** | **+0.1** |
| | baz=58 | | | | | | |
| **ARK** | **Arkit** | **2.23** | **340** | ⇓*i*P | **Pb** | **03 47 20.3** | **-0.5** |
| | baz=40 | | | | | | |
| ARK | | | | ⇓*i*S | **Sg** | **03 47 51.8** | **-0.3** |
| | baz=40 | | | | | | |
| **TRKS** | **Terek-Say** | **2.30** | **323** | ⇑*e*P | **Pn** | **03 47 20.3** | **+1.8** |
| | baz=24 | | | | | | |
| TRKS | | | | ⇑*e*S | **Sg** | **03 47 51.8** | **-2.5** |
| | baz=24 | | | | | | |
| **ARLS** | **Aral** | **2.39** | **25** | ⇑*i*P | **Pn** | **03 47 21.6** | **+1.9** |
| | baz=21 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sb** | **03 47 54.3** | **+1.1** |
| | baz=21 | | | | | | |
| **AML** | **Almayashu** | **2.49** | **12** | ⇓*i*P | **Pn** | **03 47 23.9** | **+2.6** |
| | baz=10.0 | | | | | | |
| AML | | | | ⇓*i*S | **Sg** | **03 47 58.0** | **-2.4** |
| | baz=10.0 | | | | | | |
| **UCH** | **Uchtor** | **2.78** | **24** | ⇑*i*P | **Pn** | **03 47 27.5** | **+2.1** |
| | baz=21 | | | | | | |
| UCH | | | | ⇑*i*S | **Sb** | **03 48 04.2** | **-0.5** |
| | baz=21 | | | | | | |
| **MNAS** | **Manas** | **2.81** | **353** | ⇓*i*P | **Pb** | **03 47 28.7** | **-2.0** |
| | baz=52 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sb** | **03 48 05.6** | **+0.4** |
| | baz=52 | | | | | | |
| **NRN** | **Naryn** | **2.88** | **52** | ⇑*i*P | **Pn** | **03 47 26.7** | **+0.1** |
| | baz=48 | | | | | | |
| NRN | | | | ⇑*i*S | **Sn** | **03 48 03.0** | **+1.4** |
| | baz=48 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.02** | **11** | ⇑*i*P | **Pn** | **03 47 31.1** | **+2.8** |
| | baz=9.0 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **03 48 10.5** | **-0.8** |
| | baz=9.0 | | | | | | |
| **MRKS** | **Merke** | **3.05** | **4** | *e*P | **Pg** | **03 47 38.1** | **-0.6** |
| | 10nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **03 48 16.9** | **-1.4** |
| | 34nm,0.8s | | | | | | |
| **MRKS** | **Merke** | **3.05** | **4** | Pg | **Pg** | **03 47 38.2** | **-0.6** |
| | 10nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 03 48 18.8 | |
| | 34nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **3.15** | **21** | ⇓Pn | **Pb** | **03 47 34.4** | **-2.1** |
| | 9.4nm,0.5s | | | | | | |
| AAK | | | | ⇑Sn | **Sb** | **03 48 17.1** | **+2.0** |
| | 16nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **3.15** | **21** | ⇓*i*P | **Pn** | **03 47 32.4** | **+2.2** |
| | baz=18 | | | | | | |
| AAK | | | | ⇓*i*S | **Sb** | **03 48 13.0** | **-2.1** |
| | baz=18 | | | | | | |
| **KBK** | **Karagaybulak** | **3.31** | **26** | ⇑*i*P | **Pn** | **03 47 34.5** | **+2.1** |
| | baz=23 | | | | | | |
| KBK | | | | ⇑*i*S | **Sb** | **03 48 16.2** | **-3.4** |
| | baz=23 | | | | | | |
| **ULHL** | **Ulahol** | **3.55** | **43** | ⇓*i*P | **Pn** | **03 47 36.9** | **+1.2** |
| | baz=40 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sn** | **03 48 20.5** | **+2.7** |
| | baz=40 | | | | | | |
| **CHMS** | **Chumysh** | **3.56** | **22** | ⇓*i*P | **Pn** | **03 47 38.0** | **+2.4** |
| | baz=19 | | | | | | |
| CHMS | | | | ⇓*i*S | **Sb** | **03 48 22.4** | **-4.2** |
| | baz=19 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.58** | **38** | ⇑*i*P | **Pn** | **03 47 37.6** | **+1.6** |
| | baz=35 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sn** | **03 48 21.7** | **+3.2** |
| | baz=35 | | | | | | |
| **USP** | **Ospenovka** | **3.75** | **17** | ⇓*i*P | **Pn** | **03 47 40.6** | **+2.4** |
| | baz=15 | | | | | | |
| USP | | | | ⇓*i*S | **Sb** | **03 48 27.3** | **-4.7** |
| | baz=15 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.78** | **31** | ⇑Pn | **Pn** | **03 47 42.1** | **+3.3** |
| | 0.7nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Pg | **Pg** | **03 47 54.1** | **+1.4** |
| | 2.4nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 03 48 44.1 | |
| | 6.1nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.78** | **31** | ⇓*i*P | **Pn** | **03 47 40.5** | **+1.7** |
| | baz=28 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sn** | **03 48 27.1** | **+3.7** |
| | baz=28 | | | | | | |
| **KK31** | **Karatay Array** | **3.87** | **332** | Pn | **Pn** | **03 47 44.0** | **+4.1** |
| | 0.8nm,0.3s,baz=148,slow=11,SNR=18 | | | | | | |
| KK31 | | | | Pg | **Pg** | **03 47 53.7** | **-0.8** |
| | 0.8nm,0.2s,baz=148,slow=16,SNR=11 | | | | | | |
| KK31 | | | | ⇓Sn | **Sb** | **03 48 35.0** | **-0.7** |
| | 3.1nm,0.3s,baz=130,slow=17,SNR=6.9 | | | | | | |
| **KKAR** | **Karatay Array** | **3.87** | **332** | ⇑*i*P | **Pn** | **03 47 43.6** | **+3.7** |
| | baz=33 | | | | | | |
| KKAR | | | | ⇑*i*S | **Sb** | **03 48 32.3** | **-3.4** |
| | baz=33 | | | | | | |
| **KDJ** | **Kajisay** | **4.01** | **51** | ⇑*i*P | **Pn** | **03 47 42.8** | **+0.9** |
| | baz=49 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sn** | **03 48 30.8** | **+1.7** |
| | baz=49 | | | | | | |
| **KST** | **Kastek** | **4.03** | **33** | *e*P | **Pg** | **03 47 57.3** | **-0.2** |
| | 2.8nm,0.5s | | | | | | |
| KST | | | | *e*S | **Sg** | **03 48 48.9** | **-0.8** |
| | 11nm,0.5s | | | | | | |
| **BRLS** | **Boroldaу** | **4.08** | **326** | *e*P | **Pb** | **03 47 53.2** | **+1.0** |
| | 3.6nm,0.4s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **03 48 42.1** | **+0.5** |
| | 4.7nm,0.4s | | | | | | |
| **BRLS** | **Boroldaу** | **4.08** | **326** | Pg | **Pb** | **03 47 53.3** | **+1.0** |
| | 3.6nm,0.4s | | | | | | |
| BRLS | | | | Lg | Lg | 03 48 42.1 | |
| | 3.2nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.12** | **30** | *e*P | **Pg** | **03 47 59.2** | **0.0** |
| | 4.0nm,0.6s | | | | | | |
| DGS | | | | *e*S | **Sg** | **03 48 52.2** | **-0.3** |
| | 8.5nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **4.12** | **30** | Pg | **Pg** | **03 47 59.2** | **0.0** |
| | 4.0nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 03 48 52.2 | |
| | 8.5nm,0.6s | | | | | | |
| **BTLS** | **Baital** | **5.40** | **8** | *e*P | **Pg** | **03 48 21.1** | **-2.6** |
| | 1.0nm,0.3s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **03 49 29.9** | **-3.6** |
| | 2.2nm,0.3s | | | | | | |
| **BTLS** | **Baital** | **5.40** | **8** | Pg | **Pg** | **03 48 21.1** | **-2.6** |
| | 1.6nm,0.4s | | | | | | |
| BTLS | | | | Lg | Lg | 03 49 29.9 | |
| | 2.5nm,0.3s | | | | | | |
| **KURS** | **Kuram** | **5.43** | **44** | *e*P | **Pg** | **03 48 25.3** | **+1.0** |
| | 2.6nm,0.4s | | | | | | |
| KURS | | | | *e*S | **Sg** | **03 49 36.9** | **+2.2** |
| | 3.7nm,1.1s | | | | | | |
| **ARXS** | **Arharly** | **5.78** | **37** | *e*P | **Pg** | **03 48 29.0** | **-2.0** |
| | 1.6nm,0.5s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **03 49 43.4** | **-2.5** |
| | 5.7nm,0.7s | | | | | | |
| **ARXS** | **Arharly** | **5.78** | **37** | Pg | **Pg** | **03 48 29.0** | **-2.0** |
| | 1.7nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 03 49 43.4 | |
| | 5.6nm,0.6s | | | | | | |
| **BLB** | **Baldybastay** | **6.01** | **41** | Pg | **Pg** | **03 48 32.3** | **-3.2** |
| | 4.7nm,0.4s | | | | | | |
| BLB | | | | Lg | Lg | 03 49 49.0 | |
| | 4.3nm,0.8s | | | | | | |

**ROM 11 03:54:10.4±0.2,43°.313N±0°.004×12°.423E±0°.009,**
**h10km±1km,ML0.2/6,Error ellipse: s-maj=0.7km**
**s-min=0.3km az=79.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATVO** | **AVT- Monte Val** | **0.07** | **351** | P | Pg | 03 54 13.1 | +0.4 |
| ATVO | | | | S | Sg | 03 54 14.6 | +0.3 |
| ATVO | | | | AML | AML | | |
| | comp=E,30μm,0.1s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=N,19μm,1.4s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=N,19μm,0.6s | | | | | | |
| **MURB** | **Monte Urbino** | **0.09** | **124** | P | Pg | 03 54 13.2 | +0.3 |
| MURB | | | | AML | AML | | |
| | comp=N,66μm,0.3s | | | | | | |
| MURB | | | | AML | AML | | |
| | comp=E,48μm,0.3s | | | | | | |
| **ATMI** | **Monte Miggiano** | **0.12** | **281** | P | Pg | 03 54 13.1 | -0.1 |
| ATMI | | | | S | Sg | 03 54 16.1 | +0.9 |
| **ATTE** | **AVT- Monte Tez** | **0.12** | **204** | P | Pg | 03 54 14.0 | +0.6 |
| ATTE | | | | S | Sg | 03 54 16.3 | +0.9 |
| **ATPI** | **Pietralunga -** | **0.14** | **354** | P | Pg | 03 54 13.8 | +0.2 |
| ATPI | | | | S | Sg | 03 54 16.8 | +1.0 |
| **ATCC** | **AVT- Casa Cast** | **0.20** | **129** | P | Pg | 03 54 15.2 | +0.6 |
| ATCC | | | | S | Sg | 03 54 18.9 | +1.4 |
| ATCC | | | | AML | AML | | |
| | comp=N,11μm,0.1s | | | | | | |
| ATCC | | | | AML | AML | | |
| | comp=E,9μm,0.2s | | | | | | |
| **PIEI** | **Pieia** | **0.24** | **20** | P | Pg | 03 54 15.7 | +0.4 |
| PIEI | | | | S | Sg | 03 54 20.0 | +1.4 |
| **APEC** | **Apecchio** | **0.25** | **360** | P | Pg | 03 54 16.7 | +1.3 |

*STR **11** 03:54:54.3±0.9,46°.N±4°.×1°.4E±°.,h10km,MLv3.4/31,Error*
*ellipse: s-maj=0.0km s-min=0.0km az=80.0,preliminary*
*LDG **11** 03:54:56.9±0.2,46°.36N×13°.01E,h10km,Ml2.7/17,Error*
*ellipse: s-maj=3.3km s-min=2.6km az=84.0*
*ROM **11** 03:54:57.5±0.1,46°.338N±0°.003×13°.034E±0°.004,*
*h11km,ML3.0/82,Error ellipse: s-maj=0.3km s-min=0.3km*
*az=204.0*
*VIE **11** 03:54:57.5±0.2,46°.33N×13°.02E,h12km,mb2.2/19,*
*ml3.0/21,Error ellipse: s-maj=1.9km s-min=1.0km az=22.0*
*BGR **11** 03:55:00.9±0.3,46°.37N×13°.06E,h10km,ML2.8/21,Error*
*ellipse: s-maj=5.6km s-min=4.4km az=3.0*
*PRU **11** 03:55:01.3,46°.41N×13°.22E,h10km*
**ISC 11 03:54:59.5±0.7,46°.34N±0°.01×13°.06E±0°.01,h8km±4km,**
**n275,σ1s64/357,9C-9D,Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BOO** | **Bordano** | **0.03** | **126** | ⇑*e*Pg | **Pg** | **03 55 00.1** | **-1.0** |
| **BOO** | **Bordano** | **0.03** | **126** | P | **Pg** | **03 55 00.1** | **-1.0** |
| BOO | | | | S | **Sg** | **03 55 01.6** | **-0.6** |
| **FUSE** | **Fusea** | **0.09** | **331** | ⇓*i*Pg | **Pg** | **03 55 00.5** | **-1.2** |
| **FUSE** | **Fusea** | **0.09** | **331** | P | **Pg** | **03 55 00.5** | **-1.2** |
| FUSE | | | | S | **Sg** | **03 55 02.3** | **-1.0** |
| **GEPF** | **Gemona** | **0.09** | **140** | P | **Pg** | **03 55 00.7** | **-0.9** |
| GEPF | | | | S | **Sg** | **03 55 02.8** | **-0.3** |
| **MPRI** | **Monte Prat** | **0.11** | **207** | *e*Sg | **Sg** | **03 55 02.8** | **-1.1** |
| **MPRI** | **Monte Prat** | **0.11** | **207** | P | **Pg** | **03 55 00.8** | **-1.3** |
| MPRI | | | | S | **Sg** | **03 55 02.8** | **-1.1** |
| **MPRI** | **Monte Prat** | **0.11** | **207** | ⇑*e*Pg | **Pg** | **03 55 00.8** | **-1.3** |
| **BUA** | **Buia** | **0.13** | **160** | *e*Sg | **Sg** | **03 55 03.7** | **-0.6** |
| **BUA** | **Buia** | **0.13** | **160** | ⇑*e*Pg | **Pg** | **03 55 01.2** | **-1.1** |
| **DST2** | **Trieste** | **0.13** | **225** | P | **Pg** | **03 55 01.1** | **-1.3** |
| DST2 | | | | S | **Sg** | **03 55 03.5** | **-0.9** |
| **BAD** | **Bernadia** | **0.16** | **129** | *e*Sg | **Sg** | **03 55 04.7** | **-0.6** |
| **BAD** | **Bernadia** | **0.16** | **129** | P | **Pg** | **03 55 02.0** | **-1.0** |
| BAD | | | | S | **Sg** | **03 55 05.1** | **-0.2** |
| **BAD** | **Bernadia** | **0.16** | **129** | ⇑*e*Pg | **Pg** | **03 55 01.9** | **-1.0** |
| **CLUD** | **Cludinico** | **0.17** | **313** | *e*Sg | **Sg** | **03 55 04.3** | **-1.2** |
| **CLUD** | **Cludinico** | **0.17** | **313** | P | **Pg** | **03 55 01.6** | **-1.4** |
| CLUD | | | | S | **Sg** | **03 55 04.6** | **-0.9** |
| **CLUD** | **Cludinico** | **0.17** | **313** | ⇓*e*Pg | **Pg** | **03 55 01.7** | **-1.4** |
| **VINO** | **Villanova** | **0.17** | **118** | *e*Sg | **Sg** | **03 55 04.9** | **-0.7** |
| **VINO** | **Villanova** | **0.17** | **118** | P | **Pg** | **03 55 02.0** | **-1.1** |
| VINO | | | | S | **Sg** | **03 55 05.6** | **0.0** |
| **VINO** | **Villanova** | **0.17** | **118** | ⇑*e*Pg | **Pg** | **03 55 02.0** | **-1.1** |
| **PLRO** | **Paularo** | **0.22** | **16** | *e*Sg | **Sg** | **03 55 06.7** | **-0.4** |
| **PLRO** | **Paularo** | **0.22** | **16** | P | **Pg** | **03 55 02.9** | **-1.0** |
| PLRO | | | | S | **Sg** | **03 55 06.9** | **-0.1** |
| **PLRO** | **Paularo** | **0.22** | **16** | ⇓*e*Pg | **Pg** | **03 55 03.0** | **-1.0** |
| **ZOU** | **Zoufplan** | **0.23** | **345** | *e*Sg | **Sg** | **03 55 06.9** | **-0.4** |
| **ZOU** | **Zoufplan** | **0.23** | **345** | P | **Pg** | **03 55 03.0** | **-1.1** |
| ZOU | | | | S | **Sg** | **03 55 07.0** | **-0.2** |
| **ZOU** | **Zoufplan** | **0.23** | **345** | ⇓*e*Pg | **Pg** | **03 55 03.0** | **-1.1** |
| **STAL** | **STALIGIAL** | **0.26** | **252** | P | **Pg** | **03 55 02.7** | **-1.9** |
| STAL | | | | S | **Sg** | **03 55 06.6** | **-1.5** |
| STAL | | | | AML | AML | | |
| | comp=E,4420μm,0.9s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,5455μm,0.2s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,4425μm,0.9s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,3875μm,0.4s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,3545μm,0.4s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,5455μm,1.8s | | | | | | |
| **COLI** | **Coloredo** | **0.30** | **133** | *e*Sg | **Sg** | **03 55 09.7** | **+0.2** |
| **COLI** | **Coloredo** | **0.30** | **133** | ⇓*e*Pg | **Pg** | **03 55 04.4** | **-1.1** |
| **FVI** | **Forni Avoltri** | **0.32** | **323** | P | **Pg** | **03 55 04.3** | **-1.6** |
| FVI | | | | S | **Sg** | **03 55 09.6** | **-0.6** |
| FVI | | | | AML | AML | | |
| | comp=E,1665μm,1.3s | | | | | | |
| FVI | | | | AML | AML | | |
| | comp=N,3255μm,0.2s | | | | | | |
| FVI | | | | AML | AML | | |
| | comp=E,1665μm,0.7s | | | | | | |
| **ROBS** | **Robic** | **0.33** | **107** | IAML | | 03 55 11.3 | |
| | comp=Z,226nm,0.1s | | | | | | |
| **ROBS** | **Robic** | **0.33** | **107** | *i* Pg | **Pg** | **03 55 04.4** | **-1.5** |
| **ROBS** | **Robic** | **0.33** | **107** | *i* Sg | **Sg** | **03 55 09.4** | **-0.8** |
| **CSMI** | **Casera Mimoias** | **0.33** | **302** | ⇓*e*Pg | **Pg** | **03 55 04.3** | **-1.8** |
| CSMI | | | | *e*Sg | **Sg** | **03 55 09.0** | **-1.5** |
| **LSR** | **Lussari** | **0.35** | **67** | ⇑*e*Pg | **Pg** | **03 55 05.2** | **-1.3** |
| LSR | | | | *e*Sg | **Sg** | **03 55 11.3** | **+0.2** |
| **PRED** | **Cave del Predi** | **0.36** | **73** | *e*Sg | **Sg** | **03 55 11.2** | **-0.3** |
| **PRED** | **Cave del Predi** | **0.36** | **73** | P | **Pg** | **03 55 05.2** | **-1.5** |
| PRED | | | | S | **Sg** | **03 55 11.2** | **-0.3** |
| **PRED** | **Cave del Predi** | **0.36** | **73** | *e*Pg | **Pg** | **03 55 05.7** | **-1.0** |
| **MLNI** | **Malnisio** | **0.37** | **239** | *e*Sg | **Sg** | **03 55 10.6** | **-0.9** |
| **MLNI** | **Malnisio** | **0.37** | **239** | ⇑*e*Pg | **Pg** | **03 55 05.0** | **-1.7** |
| **ACOM** | **Acomizza, Ital** | **0.38** | **56** | ⇑*e*Pg | **Pg** | **03 55 05.8** | **-1.2** |
| **ACOM** | **Acomizza, Ital** | **0.38** | **56** | P | **Pg** | **03 55 05.9** | **-1.1** |
| **TLI** | **Talmassons** | **0.42** | **176** | ⇓*e*Pg | **Pg** | **03 55 06.0** | **-1.7** |
| **CIMO** | **Cimolais** | **0.43** | **266** | *e*Sg | **Sg** | **03 55 11.3** | **-2.2** |
| **CIMO** | **Cimolais** | **0.43** | **266** | P | **Pg** | **03 55 05.4** | **-2.5** |
| CIMO | | | | S | **Sg** | **03 55 11.2** | **-2.2** |
| **CIMO** | **Cimolais** | **0.43** | **266** | ⇑*e*Pg | **Pg** | **03 55 05.4** | **-2.5** |
| **DRE** | **Drenchia** | **0.44** | **112** | *e*Sg | **Sg** | **03 55 13.5** | **-0.3** |
| **DRE** | **Drenchia** | **0.44** | **112** | P | **Pg** | **03 55 06.3** | **-1.7** |
| DRE | | | | S | **Sg** | **03 55 13.5** | **-0.3** |
| **DRE** | **Drenchia** | **0.44** | **112** | ⇓*e*Pg | **Pg** | **03 55 06.3** | **-1.7** |
| **CADS** | **Cadrg** | **0.48** | **103** | IAML | | 03 55 16.7 | |
| | comp=Z,423nm,0.2s | | | | | | |
| **CADS** | **Cadrg** | **0.48** | **103** | *i* Pg | **Pg** | **03 55 07.0** | **-1.9** |
| **CADS** | **Cadrg** | **0.48** | **103** | *i* Sg | **Sg** | **03 55 15.1** | **-0.1** |
| **MYKA** | **Terra Mystica** | **0.50** | **54** | *e*Pg | **Pg** | **03 55 07.9** | **-1.2** |
| | comp=Z,4.5nm,0.2s,SNR=20 | | | | | | |
| MYKA | | | | *e*Sg | **Sg** | **03 55 14.8** | **-0.9** |
| | comp=Z,127nm,0.4s | | | | | | |
| **POLC** | **Polcenigo** | **0.50** | **231** | P | **Pg** | **03 55 07.6** | **-1.6** |
| POLC | | | | S | **Sg** | **03 55 15.9** | **+0.2** |
| **CSO** | **Casso** | **0.52** | **263** | *e*Pg | **Pg** | **03 55 07.0** | **-2.5** |
| **APGO** | **Alpago** | **0.52** | **249** | ⇓*e*Pg | **Pg** | **03 55 07.4** | **-2.1** |
| **SABO** | **M.te Sabotino** | **0.52** | **134** | *e*Pg | **Pg** | **03 55 08.2** | **-1.4** |
| **SABO** | **M.te Sabotino** | **0.52** | **134** | P | **Pg** | **03 55 08.1** | **-1.4** |
| SABO | | | | S | **Sg** | **03 55 17.3** | **+0.9** |
| **CAE** | **Caneva** | **0.55** | **233** | *e*Pg | **Pg** | **03 55 08.0** | **-2.0** |
| **CAE** | **Caneva** | **0.55** | **233** | P | **Pg** | **03 55 08.1** | **-2.0** |
| **ABTA** | **Abfaltersbach** | **0.56** | **317** | *e*Pg | **Pg** | **03 55 08.5** | **-1.8** |
| ABTA | | | | *e*Sg | **Sg** | **03 55 16.4** | **-1.2** |
| | comp=Z,0.8nm,0.1s,SNR=28 | | | | | | |
| **AFL** | **Alpe Faloria** | **0.64** | **288** | *e*Sg | **Sg** | **03 55 19.2** | **-1.0** |
| **AFL** | **Alpe Faloria** | **0.64** | **288** | *e*Pg | **Pg** | **03 55 10.2** | **-1.7** |
| **GORS** | **Gorjuse** | **0.65** | **92** | IAML | | 03 55 22.3 | |
| | comp=Z,84nm,0.1s | | | | | | |
| **GORS** | **Gorjuse** | **0.65** | **92** | *i* Pg | **Pg** | **03 55 09.9** | **-2.1** |
| **GORS** | **Gorjuse** | **0.65** | **92** | *i* Sg | **Sg** | **03 55 20.1** | **-0.5** |
| **VOJS** | **Vojsko** | **0.65** | **118** | IAML | | 03 55 21.9 | |
| | comp=Z,141nm,0.1s | | | | | | |
| **VOJS** | **Vojsko** | **0.65** | **118** | *i* Pg | **Pg** | **03 55 09.9** | **-2.2** |
| **VOJS** | **Vojsko** | **0.65** | **118** | *i* Sg | **Sg** | **03 55 20.8** | **+0.2** |
| **VARN** | **Col Varnada, M** | **0.75** | **243** | *e*Pg | **Pg** | **03 55 11.3** | **-2.6** |
| **KBA** | **Koelnbreinsper** | **0.76** | **15** | *i* Pg | **Pg** | **03 55 13.0** | **-1.2** |
| | comp=Z,1.5nm,0.1s,SNR=9.0 | | | | | | |
| KBA | | | | *i* Sg | **Sg** | **03 55 23.4** | **-0.8** |
| | comp=Z,229nm,0.2s | | | | | | |
| **KBA** | **Koelnbreinsper** | **0.76** | **15** | *e*Pg | **Pg** | **03 55 13.1** | **-1.1** |
| KBA | | | | *e*Sg | **Sg** | **03 55 23.6** | **-0.6** |
| **JAVS** | **Javornik** | **0.83** | **122** | *i* Pg | **Pg** | **03 55 12.9** | **-2.5** |
| JAVS | | | | *i* Sg | **Sg** | **03 55 26.4** | **+0.2** |
| JAVS | | | | IAML | | 03 55 28.4 | |
| | comp=Z,79nm,0.2s | | | | | | |
| **CRNS** | **Crni Vrh** | **0.87** | **107** | *i* Pg | **Pg** | **03 55 14.1** | **-2.2** |
| CRNS | | | | *i* Sg | **Sg** | **03 55 28.1** | **+0.5** |
| CRNS | | | | IAML | | 03 55 33.0 | |
| | comp=Z,57nm,0.1s | | | | | | |
| **MOZS** | **Mozjanca** | **0.96** | **92** | IAML | | 03 55 36.4 | |
| | comp=Z,32nm,0.2s | | | | | | |
| **MOZS** | **Mozjanca** | **0.96** | **92** | *i* Pg | **Pg** | **03 55 16.3** | **-1.7** |
| **MOZS** | **Mozjanca** | **0.96** | **92** | *i* Sg | **Sg** | **03 55 31.9** | **+1.4** |
| **BRES** | **Bressanone** | **0.98** | **292** | AML | AML | | |
| | comp=N,334μm,1.1s | | | | | | |
| BRES | | | | AML | AML | | |
| | comp=E,278μm,1.3s | | | | | | |
| BRES | | | | AML | AML | | |
| | comp=E,277μm,1.3s | | | | | | |
| BRES | | | | AML | AML | | |
| | comp=N,334μm,1.1s | | | | | | |
| **SKDS** | **Skadanscina** | **1.04** | **140** | *i* Pg | Pg | 03 55 16.4 | -3.0 |
| SKDS | | | | IAML | | 03 55 36.7 | |
| | comp=Z,83nm,0.1s | | | | | | |
| **ZIAN** | **Ziano** | **1.04** | **267** | AML | AML | | |
| | comp=N,256μm,0.9s | | | | | | |
| ZIAN | | | | AML | AML | | |
| | comp=E,303μm,1.1s | | | | | | |
| **GBAS** | **Gorenja Brezov** | **1.04** | **112** | *i* Pg | **Pg** | **03 55 16.9** | **-2.6** |
| GBAS | | | | *i* Sg | **Sg** | **03 55 33.8** | **+0.7** |
| GBAS | | | | IAML | | 03 55 38.7 | |
| | comp=Z,30nm,0.1s | | | | | | |
| **OBKA** | **Obir** | **1.04** | **80** | *i* Pg | **Pg** | **03 55 17.9** | **-1.7** |
| | comp=Z,0.4nm,0.1s | | | | | | |
| OBKA | | | | *i* Sg | **Sg** | **03 55 33.0** | **-0.1** |
| | comp=Z,0.1nm,0.0s | | | | | | |
| **OBKA** | **Obir** | **1.04** | **80** | *e*Pg | **Pg** | **03 55 18.0** | **-1.6** |
| OBKA | | | | *e*Sg | **Sg** | **03 55 33.9** | **+0.8** |
| **LESA** | **Schwarzleotal** | **1.12** | **347** | *i* Pg | **Pg** | **03 55 19.2** | **-1.8** |
| | comp=Z,4.7nm,0.2s | | | | | | |
| LESA | | | | *i* Sg | **Sg** | **03 55 33.8** | **-1.6** |
| | comp=Z,70nm,0.3s | | | | | | |
| **CEY** | **Cerknica** | **1.13** | **122** | *i* Pg | **Pb** | **03 55 18.1** | **-3.2** |
| CEY | | | | IAML | | 03 55 38.1 | |
| | comp=Z,80nm,0.3s | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **1.16** | **101** | *i* Pg | **Pb** | **03 55 19.9** | **-2.0** |
| VNDS | | | | *i* Sg | **Sb** | **03 55 38.0** | **+0.9** |
| VNDS | | | | IAML | | 03 55 41.2 | |
| | comp=Z,43nm,0.2s | | | | | | |
| **KNDS** | **Knezji Dol** | **1.23** | **131** | *i* Pg | **Pn** | **03 55 21.6** | **-1.4** |
| KNDS | | | | *i* Sg | **Sb** | **03 55 40.2** | **+1.2** |
| KNDS | | | | IAML | | 03 55 45.9 | |
| | comp=Z,65nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **1.35** | **314** | *e*Pg | **Pn** | **03 55 23.4** | **-1.4** |
| | comp=Z,23nm,0.2s,SNR=9.9 | | | | | | |
| WTTA | | | | *e*Sg | **Sb** | **03 55 40.6** | **-1.9** |
| | comp=Z,101nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **1.35** | **314** | AML | AML | | |
| | comp=E,350μm,0.6s | | | | | | |
| WTTA | | | | AML | AML | | |
| | comp=N,421μm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **1.35** | **314** | *e*Pn | **Pn** | **03 55 23.3** | **-1.4** |
| WTTA | | | | *e*Pg | **Pb** | **03 55 25.1** | **0.0** |
| WTTA | | | | *e*Sg | **Sb** | **03 55 41.2** | **-1.4** |
| **VISS** | **Visnje** | **1.35** | **113** | *i* Pg | **Pn** | **03 55 22.9** | **-1.8** |
| VISS | | | | *i* Sg | **Sb** | **03 55 42.5** | **0.0** |
| VISS | | | | IAML | | 03 55 44.5 | |
| | comp=Z,43nm,0.2s | | | | | | |
| **PDKS** | **Podkum** | **1.37** | **101** | *i* Pg | **Pn** | **03 55 23.5** | **-1.6** |
| PDKS | | | | *i* Sg | **Sb** | **03 55 42.9** | **-0.3** |
| PDKS | | | | IAML | | 03 55 47.8 | |
| | comp=Z,25nm,0.2s | | | | | | |
| **TEOL** | **Teolo** | **1.38** | **225** | AML | AML | | |
| | comp=E,1027μm,0.6s | | | | | | |
| TEOL | | | | AML | AML | | |
| | comp=N,1050μm,0.4s | | | | | | |
| **SOKA** | **Soboth** | **1.40** | **75** | *e*Pg | **Pn** | **03 55 23.9** | **-1.6** |
| | comp=N,1.0nm,0.2s,SNR=7.7 | | | | | | |
| SOKA | | | | *i* Sg | **Sb** | **03 55 44.6** | **+0.5** |
| | comp=N,9.2nm,0.4s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **1.41** | **16** | *i* Pg | **Pn** | **03 55 25.4** | **-0.1** |
| | comp=N,4.4nm,0.2s,SNR=7.6 | | | | | | |
| BIOA | | | | *e*Sg | **Sg** | **03 55 45.6** | **+0.8** |
| | comp=N,27nm,0.3s | | | | | | |
| **RJOB** | **Jochberg** | **1.41** | **353** | *e*Pn | **Pn** | **03 55 24.6** | **-0.9** |
| RJOB | | | | *e*Sg | **Sn** | **03 55 44.8** | **+0.4** |
| **RIY** | **Rijeka** | **1.42** | **135** | *e*Pn | **Pn** | **03 55 25.0** | **-0.6** |
| RIY | | | | Sn | **Sn** | **03 55 45.1** | **+0.7** |
| **WATA** | **Walderalm** | **1.43** | **315** | *e*Pg | **Pn** | **03 55 25.5** | **-0.3** |
| | comp=N,16nm,0.2s,SNR=7.6 | | | | | | |
| WATA | | | | *e*Sg | **Sb** | **03 55 43.5** | **-1.3** |
| | comp=N,26nm,0.3s | | | | | | |
| **PERS** | **Pernice** | **1.45** | **77** | IAML | | 03 55 47.5 | |
| | comp=Z,23nm,0.2s | | | | | | |
| **PERS** | **Pernice** | **1.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RABC** | **Rab** | **2.00** | **142** | *e*Pg | | **Pn** | **03 55 35.6** | **+2.1** |
| RABC | | | | Sn | | **Sn** | **03 55 58.7** | **0.0** |
| **BE1** | **Monatshausen** | **2.01** | **322** | *e*Sg | | **Sg** | **03 56 03.8** | **-0.3** |
| **FIU** | **Minerbio Fiu** | **2.03** | **214** | AML | AML | | | |
| | comp=E,290µm,0.3s | | | | | | | |
| FIU | | | | AML | AML | | | |
| | comp=N,292µm,0.6s | | | | | | | |
| **PTJ** | **Puntijarka** | **2.07** | **101** | *e*Pn | | **Pn** | **03 55 35.2** | **+0.6** |
| PTJ | | | | Sn | | **Sn** | **03 56 01.3** | **+0.7** |
| **NVLJ** | **Novalja** | **2.19** | **144** | *e*Pn | | **Pn** | **03 55 35.0** | **-1.2** |
| NVLJ | | | | Sn | | **Sn** | **03 56 03.0** | **-0.3** |
| **FUR** | **Furstenfeldbru** | **2.19** | **327** | *e*Pg | | **Pb** | **03 55 40.8** | **+1.3** |
| FUR | | | | *e*Sg | | **Sg** | **03 56 09.0** | **-1.0** |
| **KOGS** | **Kog** | **2.21** | **86** | AML | AML | | | |
| | comp=E,469µm,0.8s | | | | | | | |
| KOGS | | | | AML | AML | | | |
| | comp=N,466µm,0.8s | | | | | | | |
| **PLIT** | **Plitvice** | **2.32** | **128** | *e*Pn | | **Pn** | **03 55 37.6** | **-0.4** |
| **KALN** | **Kalnik** | **2.37** | **94** | *e*Pg | | **Pb** | **03 55 42.8** | **+0.4** |
| KALN | | | | Sg | | **Sg** | **03 56 16.3** | **+0.8** |
| **DAVA** | **Damuels** | **2.38** | **295** | *e*Pg | | **Pn** | **03 55 40.0** | **+1.0** |
| | comp=N,2.0nm,0.1s | | | | | | | |
| DAVA | | | | *e*Sg | | **Sb** | **03 56 14.0** | **+1.7** |
| | comp=N,26nm,0.4s | | | | | | | |
| **DAVA** | **Damuels** | **2.38** | **295** | *e*Pn | | **Pn** | **03 55 39.9** | **+1.0** |
| DAVA | | | | *e*Sg | | **Sb** | **03 56 13.8** | **+1.5** |
| **UBR** | **Ueberruh** | **2.42** | **305** | *e*Pn | | **Pn** | **03 55 40.3** | **+0.8** |
| UBR | | | | *e*Sg | | **Sg** | **03 56 16.3** | **-1.1** |
| **LMD** | **Lutirano** | **2.46** | **203** | AML | AML | | | |
| | comp=N,68µm,0.9s | | | | | | | |
| LMD | | | | AML | AML | | | |
| | comp=E,71µm,0.3s | | | | | | | |
| LMD | | | | AML | AML | | | |
| | comp=N,68µm,1.1s | | | | | | | |
| **VIRC** | **Vir** | **2.48** | **145** | *i* Pn | | **Pn** | **03 55 39.0** | **-1.2** |
| VIRC | | | | Sn | | **Sn** | **03 56 10.7** | **0.0** |
| **CONA** | **Conrad Observa** | **2.49** | **49** | *i* Pg | | **Pn** | **03 55 40.6** | **+0.2** |
| | comp=N,0.2nm,0.1s | | | | | | | |
| CONA | | | | *e*Sg | | **Sn** | **03 56 12.8** | **+1.9** |
| | comp=N,4.3nm,0.3s | | | | | | | |
| **GEC2** | **GERESS Array S** | **2.54** | **10** | *e*Pn | | **Pn** | **03 55 41.5** | **+0.3** |
| GEC2 | | | | *e*Sg | | **Sg** | **03 56 19.7** | **-1.5** |
| **RONA** | **Rosalia, Austr** | **2.60** | **57** | *i* Pn | | **Pn** | **03 55 40.4** | **-1.4** |
| | comp=N,0.3nm,0.1s | | | | | | | |
| RONA | | | | *e*Sn | | **Sn** | **03 56 11.8** | **-1.8** |
| | comp=N,2.2nm,0.3s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **2.62** | **18** | *e*PN | | **Pn** | **03 55 42.5** | **+0.3** |
| CKRC | | | | *e*SN | | **Sn** | **03 56 14.2** | **0.0** |
| **UDBI** | **Udbina** | **2.63** | **133** | *e*Pn | | **Pn** | **03 55 41.9** | **-0.4** |
| UDBI | | | | Sn | | **Sn** | **03 56 13.3** | **-1.0** |
| **PLONS** | **Plons/SG** | **2.63** | **287** | *e*Pn | | **Pn** | **03 55 43.3** | **+1.0** |
| **PE3** | **Peglio** | **2.67** | **189** | AML | AML | | | |
| | comp=N,187µm,0.6s | | | | | | | |
| PE3 | | | | AML | AML | | | |
| | comp=N,187µm,1.4s | | | | | | | |
| PE3 | | | | AML | AML | | | |
| | comp=E,205µm,0.5s | | | | | | | |
| **MOSL** | **Moslavina** | **2.68** | **104** | *e*Pn | | **Pn** | **03 55 43.1** | **+0.2** |
| MOSL | | | | Sn | | **Sn** | **03 56 16.9** | **+1.3** |
| **DUGI** | **Dugi Otok** | **2.74** | **148** | *i* Pn | | **Pn** | **03 55 42.7** | **-1.0** |
| DUGI | | | | Sn | | **Sn** | **03 56 16.2** | **-0.9** |
| **WET** | **Wettzell** | **2.81** | **358** | *e*Pn | | **Pn** | **03 55 44.5** | **-0.3** |
| WET | | | | *e*Sn | | **Sn** | **03 56 17.8** | **-1.0** |
| **KHC** | **Kasperske Hory** | **2.81** | **7** | *e*PN | | **Pn** | **03 55 44.8** | **0.0** |
| KHC | | | | *ex* | | x | 03 55 54.0 | |
| KHC | | | | *e*SN | | **Sn** | **03 56 19.4** | **+0.4** |
| KHC | | | | *e*SG | | **Sb** | **03 56 27.5** | **+2.8** |
| | comp=E,14nm,0.5s | | | | | | | |
| **PIEI** | **Pieia** | **2.83** | **188** | AML | AML | | | |
| | comp=E,82µm,0.3s | | | | | | | |
| PIEI | | | | AML | AML | | | |
| | comp=N,36µm,0.4s | | | | | | | |
| **ARVD** | **Arcevia** | **2.84** | **182** | AML | AML | | | |
| | comp=N,26µm,1.0s | | | | | | | |
| ARVD | | | | AML | AML | | | |
| | comp=E,29µm,0.5s | | | | | | | |
| **NORI** | **Noerdlinger Ri** | **2.90** | **326** | *e*Pn | | **Pn** | **03 55 46.1** | **+0.2** |
| NORI | | | | *e*Sn | | **Sn** | **03 56 21.1** | **+0.2** |
| NORI | | | | *e*Sg | | **Sb** | **03 56 30.3** | **+3.2** |
| **ATFO** | **Monte Foce - G** | **2.99** | **187** | AML | AML | | | |
| | comp=N,57µm,1.4s | | | | | | | |
| ATFO | | | | AML | AML | | | |
| | comp=N,57µm,0.6s | | | | | | | |
| ATFO | | | | AML | AML | | | |
| | comp=E,76µm,0.7s | | | | | | | |
| **EL6** | **Elcito** | **3.01** | **179** | AML | AML | | | |
| | comp=E,73µm,0.5s | | | | | | | |
| EL6 | | | | AML | AML | | | |
| | comp=N,71µm,1.5s | | | | | | | |
| EL6 | | | | AML | AML | | | |
| | comp=N,71µm,0.5s | | | | | | | |
| **WALHA** | **Wallhausen, DE** | **3.04** | **299** | *e*Pn | | **Pn** | **03 55 47.9** | **0.0** |
| WALHA | | | | *e*Sg | | **Sg** | **03 56 35.6** | **-1.5** |
| **MORI** | **Morici** | **3.10** | **142** | *e*Pn | | **Pn** | **03 55 48.2** | **-0.5** |
| MORI | | | | Sn | | **Sn** | **03 56 25.6** | **-0.4** |
| **GORR** | **Gorreto** | **3.17** | **238** | P | | **Pn** | **03 55 49.0** | **-0.7** |
| **GORR** | **Gorreto** | **3.17** | **238** | S | | **Sn** | **03 56 26.4** | **-1.2** |
| **ATCC** | **AVT- Casa Cast** | **3.17** | **186** | AML | AML | | | |
| | comp=N,83µm,0.4s | | | | | | | |
| ATCC | | | | AML | AML | | | |
| | comp=E,100µm,0.4s | | | | | | | |
| **ZIRJ** | **Zirje** | **3.25** | **145** | *e*Pn | | **Pn** | **03 55 51.0** | **+0.3** |
| ZIRJ | | | | Sn | | **Sn** | **03 56 28.4** | **-1.2** |
| **EMING** | **Emmingen-Lipti** | **3.27** | **300** | *e*Pn | | **Pn** | **03 55 51.1** | **0.0** |
| **FDMO** | **Fiordimonte** | **3.30** | **180** | AML | AML | | | |
| | comp=N,32µm,1.0s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=E,35µm,1.2s | | | | | | | |
| FDMO | | | | AML | AML | | | |
| | comp=E,35µm,0.8s | | | | | | | |
| **KIJV** | **Kijevo** | **3.32** | **133** | *e*Pn | | **Pn** | **03 55 52.0** | **+0.2** |
| KIJV | | | | Sn | | **Sn** | **03 56 31.4** | **-0.1** |
| **MF5** | **Montefalcone A** | **3.36** | **175** | AML | AML | | | |
| | comp=E,72µm,1.6s | | | | | | | |
| MF5 | | | | AML | AML | | | |
| | comp=N,54µm,1.5s | | | | | | | |
| MF5 | | | | AML | AML | | | |
| | comp=N,54µm,0.5s | | | | | | | |
| MF5 | | | | AML | AML | | | |
| | comp=E,72µm,0.4s | | | | | | | |
| **SLE** | **Schleitheim** | **3.43** | **296** | P | | **Pn** | **03 55 52.6** | **-0.7** |
| **SLE** | **Schleitheim** | **3.43** | **296** | S | | **Sn** | **03 56 33.1** | **-1.1** |
| **SLE** | **Schleitheim** | **3.43** | **296** | *e*Pn | | **Pn** | **03 55 53.0** | **-0.4** |
| SLE | | | | *e*Pg | | **Pb** | **03 56 02.0** | **+1.4** |
| SLE | | | | *e*Sg | | **Sg** | **03 56 48.0** | **-1.7** |
| **RNCA** | **Ronca, Sant'Ol** | **3.44** | **239** | P | | **Pn** | **03 55 53.3** | **-0.1** |
| **RNCA** | **Ronca, Sant'Ol** | **3.44** | **239** | S | | **Sn** | **03 56 34.3** | **-0.1** |
| **ROTZ** | **Rotzenmuhle** | **3.48** | **351** | *e*Pn | | **Pn** | **03 55 53.1** | **-0.8** |
| ROTZ | | | | *e*Sn | | **Sn** | **03 56 33.0** | **-2.2** |
| ROTZ | | | | *e*Sg | | **Sg** | **03 56 49.5** | **-1.6** |
| **NRCA** | **Norcia** | **3.51** | **179** | AML | AML | | | |
| | comp=N,47µm,0.7s | | | | | | | |
| NRCA | | | | AML | AML | | | |
| | comp=E,41µm,1.0s | | | | | | | |
| NRCA | | | | AML | AML | | | |
| | comp=N,47µm,1.3s | | | | | | | |
| NRCA | | | | AML | AML | | | |
| | comp=E,41µm,1.0s | | | | | | | |
| **METMA** | **Mettma DE** | **3.56** | **294** | *e*Pn | | **Pn** | **03 55 54.7** | **-0.4** |
| METMA | | | | *e*Sn | | **Sn** | **03 56 35.9** | **-1.5** |
| **GRF** | **Grafenberg Arr** | **3.57** | **340** | *e*Pg | | **Pg** | **03 56 08.9** | **+0.9** |
| GRF | | | | *e*Sn | | **Sn** | **03 56 36.2** | **-1.5** |
| GRF | | | | *e*Sg | | **Sg** | **03 56 53.5** | **-0.8** |
| **SULZ** | **Cheisacher** | **3.59** | **291** | P | | **Pn** | **03 55 55.1** | **-0.4** |
| **SULZ** | **Cheisacher** | **3.59** | **291** | S | | **Sn** | **03 56 37.8** | **-0.3** |
| **PCP** | **Piancastagn** | **3.65** | **242** | P | | **Pn** | **03 55 56.2** | **-0.2** |
| **PCP** | **Piancastagn** | **3.65** | **242** | S | | **Sn** | **03 56 38.4** | **-1.2** |
| **MANZ** | **Manzenberg** | **3.70** | **350** | *e*Pn | | **Pn** | **03 55 56.5** | **-0.5** |
| MANZ | | | | *e*Sn | | **Sn** | **03 56 38.5** | **-2.4** |
| **SMA1** | **SAN MARTINO** | **3.71** | **177** | AML | AML | | | |
| | comp=E,43µm,0.9s | | | | | | | |
| SMA1 | | | | AML | AML | | | |
| | comp=N,43µm,1.2s | | | | | | | |
| SMA1 | | | | AML | AML | | | |
| | comp=E,43µm,1.1s | | | | | | | |
| SMA1 | | | | AML | AML | | | |
| | comp=N,43µm,0.8s | | | | | | | |
| **FELD** | **Feldberg im Sc** | **3.78** | **296** | P | | **Pn** | **03 55 57.4** | **-0.8** |
| **FELD** | **Feldberg im Sc** | **3.78** | **296** | S | | **Sn** | **03 56 41.4** | **-1.5** |
| **BFO** | **Black Forest** | **3.78** | **303** | *e*Pn | | **Pn** | **03 55 57.8** | **-0.3** |
| BFO | | | | *e*Sn | | **Sn** | **03 56 40.1** | **-2.7** |
| BFO | | | | *e*Sg | | **Sg** | **03 56 59.8** | **-1.1** |
| **BALST** | **Balsthal** | **3.81** | **287** | P | | **Pn** | **03 55 58.7** | **0.0** |
| **BALST** | **Balsthal** | **3.81** | **287** | *e*Pn | | **Pn** | **03 55 58.4** | **-0.3** |
| **KIZ** | **Kirchzarten** | **3.86** | **297** | P | | **Pn** | **03 55 58.1** | **-1.1** |
| **KIZ** | **Kirchzarten** | **3.86** | **297** | S | | **Sn** | **03 56 44.5** | **-0.3** |
| **ENDD** | **Endenburg** | **3.89** | **293** | P | | **Pn** | **03 55 58.9** | **-0.7** |
| **OPP** | **Oppenau** | **3.95** | **305** | P | | **Pn** | **03 55 59.7** | **-0.7** |
| **OPP** | **Oppenau** | **3.95** | **305** | S | | **Sn** | **03 56 44.9** | **-2.0** |
| **HVAR** | **Hvar** | **3.98** | **141** | *e*Pn | | **Pn** | **03 55 60.0** | **-0.8** |
| HVAR | | | | Sn | | **Sn** | **03 56 47.0** | **-0.5** |
| **CANO** | **Canova, Maglio** | **4.02** | **240** | P | | **Pn** | **03 55 59.8** | **-1.5** |
| **CANO** | **Canova, Maglio** | **4.02** | **240** | S | | **Sn** | **03 56 44.7** | **-3.9** |
| **VOGT** | **Vogtsburg - To** | **4.07** | **297** | P | | **Pn** | **03 56 01.8** | **-0.2** |
| **BABA** | **Baden-Baden-Ne** | **4.07** | **308** | P | | **Pn** | **03 56 01.7** | **-0.3** |
| **BABA** | **Baden-Baden-Ne** | **4.07** | **308** | S | | **Sn** | **03 56 48.5** | **-1.3** |
| **BOURR** | **Bourrignon** | **4.14** | **287** | P | | **Pn** | **03 56 02.4** | **-0.6** |
| **BOURR** | **Bourrignon** | **4.14** | **287** | S | | **Sn** | **03 56 51.3** | **-0.3** |
| **REMY** | **Saint-Rhmy-en** | **4.14** | **265** | P | | **Pn** | **03 56 03.7** | **+0.5** |
| **GBOS** | **Grotte di Boss** | **4.24** | **242** | P | | **Pn** | **03 56 04.1** | **-0.4** |
| **GBOS** | **Grotte di Boss** | **4.24** | **242** | S | | **Sn** | **03 56 50.8** | **-3.4** |
| **MILB** | **Miltenberg** | **4.31** | **325** | *e*Pn | | **Pn** | **03 56 04.7** | **-0.6** |
| MILB | | | | *e*Sn | | **Sn** | **03 56 55.0** | **-0.7** |
| MILB | | | | *e*Sg | | **Sg** | **03 57 15.2** | **-2.6** |
| **MOF** | **Molkenrain** | **4.32** | **293** | P | | **Pn** | **03 56 04.9** | **-0.7** |
| MOF | | | | S | | **Sn** | **03 56 55.7** | **-0.5** |
| **BHB** | **Bricherasio** | **4.34** | **252** | P | | **Pn** | **03 56 02.5** | **-3.3** |
| **WLS** | **Welschbruch** | **4.40** | **300** | P | | **Pn** | **03 56 06.0** | **-0.6** |
| WLS | | | | S | | **Sn** | **03 56 57.1** | **-0.9** |
| **MOX** | **Moxa** | **4.41** | **348** | *e*Pn | | **Pn** | **03 56 05.7** | **-1.1** |
| MOX | | | | *e*Sn | | **Sn** | **03 56 55.7** | **-2.7** |
| MOX | | | | *e*Sg | | **Sg** | **03 57 19.2** | **-2.0** |
| **ECH** | **Echery** | **4.43** | **297** | P | | **Pn** | **03 56 06.5** | **-0.6** |
| ECH | | | | S | | **Sn** | **03 56 57.5** | **-1.3** |
| **HOHE** | **HOHENGOEFT** | **4.43** | **304** | P | | **Pn** | **03 56 05.3** | **-1.7** |
| HOHE | | | | S | | **Sn** | **03 56 57.5** | **-1.3** |
| **PIAF** | **les Granges de** | **4.44** | **242** | P | | **Pn** | **03 56 05.4** | **-1.8** |
| PIAF | | | | S | | **Sn** | **03 56 55.2** | **-3.9** |
| **CDF** | **Champ du Feu** | **4.44** | **300** | *e*P | | **Pn** | **03 56 04.9** | **-2.4** |
| **CDF** | **Champ du Feu** | **4.44** | **300** | *e*Pg | | **Pb** | **03 56 18.3** | **+0.5** |
| CDF | | | | *e*Sn | | Sn | 03 56 49.5 | -10 |
| CDF | | | | *e*Sg | | **Sb** | **03 57 14.5** | **+3.0** |
| | comp=N,4.7nm,0.4s | | | | | | | |
| **LEMB** | **Lembach** | **4.48** | **309** | P | | **Pn** | **03 56 07.6** | **-0.1** |
| LEMB | | | | S | | **Sn** | **03 56 59.1** | **-0.8** |
| **LPG** | **La Plagne** | **4.48** | **261** | *e*Pn | | Pn | 03 56 02.4 | -5.6 |
| **LPG** | **La Plagne** | **4.48** | **261** | *e*P | | **Pn** | **03 56 07.2** | **-0.8** |
| **LPG** | **La Plagne** | **4.48** | **261** | *e*Pg | | **Pb** | **03 56 19.5** | **+0.9** |
| LPG | | | | *e*Sg | | **Sb** | **03 57 16.8** | **+3.9** |
| | comp=N,3.0nm,0.5s | | | | | | | |
| **HINF** | **Hinteralfeld** | **4.49** | **291** | *e*P | | **Pn** | **03 56 07.0** | **-0.9** |
| HINF | | | | *e*Sn | | Sn | 03 56 50.7 | -10 |
| | comp=N,8.1nm,1.2s | | | | | | | |
| **LPL** | **La Plagne** | **4.49** | **262** | *e*Pn | | Pn | 03 56 03.2 | -4.8 |
| **LPL** | **La Plagne** | **4.49** | **262** | *e*P | | **Pn** | **03 56 06.5** | **-1.5** |
| **LPL** | **La Plagne** | **4.49** | **262** | *e*Pg | | **Pb** | **03 56 20.1** | **+1.4** |
| LPL | | | | *e*Sn | | Sn | 03 56 51.1 | -9.5 |
| LPL | | | | *e*Sg | | **Sb** | **03 57 17.4** | **+4.3** |
| | comp=N,2.2nm,0.5s | | | | | | | |
| **CHMF** | **Charmoille** | **4.49** | **284** | P | | **Pn** | **03 56 07.3** | **-0.7** |
| CHMF | | | | S | | **Sn** | **03 57 00.0** | **-0.4** |
| **LSTV** | **Lastovo** | **4.50** | **141** | *e*Pn | | **Pn** | **03 56 07.2** | **-0.7** |
| LSTV | | | | Sn | | **Sn** | **03 56 58.5** | **-1.9** |
| **SAOF** | **Saorge** | **4.55** | **241** | P | | **Pn** | **03 56 06.7** | **-2.0** |
| **BRG** | **Berggiesshubel** | **4.58** | **7** | Amp | | | 03 57 32.2 | |
| | comp=Z,3.8nm,0.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **4.58** | **7** | Pg | | **Pb** | **03 56 23.0** | **+3.1** |
| **BRG** | **Berggiesshubel** | **4.58** | **7** | Sn | | **Sn** | **03 57 00.0** | **-2.2** |
| **BRG** | **Berggiesshubel** | **4.58** | **7** | Sg | | **Sg** | **03 57 23.2** | **-3.1** |
| **BRANT** | **Les Verrieres** | **4.58** | **280** | P | | **Pn** | **03 56 08.4** | **-0.7** |
| **BRANT** | **Les Verrieres** | **4.58** | **280** | S | | **Sn** | **03 57 01.1** | **-1.4** |
| **CIEL** | **Dossenheim-sur** | **4.59** | **305** | P | | **Pn** | **03 56 09.0** | **-0.2** |
| CIEL | | | | S | | **Sn** | **03 57 01.1** | **-1.6** |
| **RONF** | **Ronchamp** | **4.59** | **290** | P | | **Pn** | **03 56 08.8** | **-0.5** |
| RONF | | | | S | | **Sn** | **03 57 01.7** | **-1.2** |
| **TURF** | **col de Turini** | **4.65** | **241** | P | | **Pn** | **03 56 08.6** | **-1.6** |
| TURF | | | | S | | **Sn** | **03 56 59.9** | **-4.6** |
| **SBF** | **Sospel** | **4.69** | **240** | *e*Pn | | Pn | 03 56 05.2 | -5.4 |
| **SBF** | **Sospel** | **4.69** | **240** | *e*P | | **Pn** | **03 56 09.3** | **-1.3** |
| **SBF** | **Sospel** | **4.69** | **240** | *e*Pg | | **Pb** | **03 56 23.3** | **+1.3** |
| SBF | | | | *e*Sn | | Sn | 03 56 53.0 | -12 |
| SBF | | | | *e*Sg | | **Sb** | **03 57 23.6** | **+5.0** |
| | comp=Z,23nm,0.7s | | | | | | | |
| **GIMEL** | **St. Georges /** | **4.70** | **275** | P | | **Pn** | **03 56 10.7** | **-0.1** |
| **GIMEL** | **St. Georges /** | **4.70** | **275** | S | | **Sn** | **03 57 05.9** | **+0.3** |
| **MBDF** | **Montbardon** | **4.70** | **252** | *e*P | | **Pn** | **03 56 08.4** | **-2.5** |
| MBDF | | | | *e*Sn | | Sn | 03 56 56.8 | -8.9 |
| MBDF | | | | *e*Sg | | **Sb** | **03 57 24.3** | **+5.2** |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **SPIF** | **crte de Spivo** | **4.71** | **243** | P | | **Pn** | **03 56 09.4** | **-1.5** |
| **PGF** | **Pioggiola** | **4.78** | **219** | *e*Pn | | Pn | 03 56 07.1 | -4.8 |
| **VOEL** | **Voellerdingen** | **4.80** | **305** | P | | **Pn** | **03 56 11.5** | **-0.5** |
| VOEL | | | | S | | **Sn** | **03 57 08.3** | **+0.6** |
| **CABF** | **La Chapelle** | **4.83** | **276** | P | | **Pn** | **03 56 11.5** | **-1.0** |
| **CABF** | **La Chapelle** | **4.83** | **276** | *e*Pg | | **Pb** | **03 56 25.3** | **+1.0** |
| CABF | | | | *e*Sn | | Sn | 03 56 58.5 | -10 |
| CABF | | | | *e*Sg | | **Sb** | **03 57 26.6** | **+4.1** |
| | comp=Z,3.3nm,0.5s | | | | | | | |
| **JAUF** | **Jausiers** | **4.84** | **249** | P | | **Pn** | **03 56 10.6** | **-2.2** |
| **MVIF** | **Mont Vial** | **4.84** | **242** | P | | **Pn** | **03 56 12.9** | **+0.1** |
| MVIF | | | | S | | **Sn** | **03 57 06.2** | **-2.9** |
| **HAU** | **Haudompre** | **4.87** | **292** | *e*Pn | | Pn | 03 56 07.5 | -5.6 |
| **HAU** | **Haudompre** | **4.87** | **292** | *e*P | | **Pn** | **03 56 12.3** | **-0.8** |
| HAU | | | | *e*Sg | | **Sb** | **03 57 28.8** | **+5.0** |
| | comp=Z,4.4nm,0.4s | | | | | | | |
| **RIVEL** | **MONT RIVEL** | **4.94** | **277** | P | | **Pn** | **03 56 13.5** | **-0.6** |
| RIVEL | | | | S | | **Sn** | **03 57 10.9** | **-0.5** |
| **ENAUX** | **Enaux** | **4.97** | **246** | P | | **Pn** | **03 56 13.2** | **-1.3** |
| ENAUX | | | | S | | **Sn** | **03 57 12.1** | **-0.1** |
| **A194A** | **Meolans-Revel,** | **5.01** | **250** | P | | **Pn** | **03 56 14.6** | **-0.5** |
| **CALF** | **Calern** | **5.06** | **241** | P | | **Pn** | **03 56 14.6** | **-1.2** |
| CALF | | | | S | | **Sn** | **03 57 11.6** | **-2.8** |
| **ABH** | **Alteburg** | **5.12** | **316** | P | | **Pn** | **03 56 16.4** | **0.0** |
| **ABH** | **Alteburg** | **5.12** | **316** | S | | **Sn** | **03 57 14.5** | **-1.2** |
| **SALSA** | **La sagne** | **5.14** | **244** | P | | **Pn** | **03 56 16.3** | **-0.5** |
| **OG35** | **Corcelles** | **5.21** | **269** | P | | **Pn** | **03 56 17.2** | **-0.5** |
| **ORIF** | **Oris-en-Rattie** | **5.23** | **257** | *e*Pn | | Pn | 03 56 12.5 | -5.6 |
| **ORIF** | **Oris-en-Rattie** | **5.23** | **257** | *e*P | | **Pn** | **03 56 17.6** | **-0.5** |
| ORIF | | | | *e*Sg | | **Sb** | **03 57 40.0** | **+5.7** |
| | comp=Z,3.0nm,0.4s | | | | | | | |
| **PAGF** | **Fort de Pagny** | **5.45** | **297** | *e*P | | **Pn** | **03 56 21.4** | **+0.4** |
| **LMR** | **La Mourre** | **5.54** | **240** | *e*Pn | | Pn | 03 56 17.3 | -5.0 |
| **LMR** | **La Mourre** | **5.54** | **240** | *e*P | | **Pn** | **03 56 21.1** | **-1.2** |
| **LMR** | **La Mourre** | **5.54** | **240** | *e*Pg | | **Pb** | **03 56 39.3** | **+2.8** |
| LMR | | | | *e*Sn | | Sn | 03 57 17.1 | -9.1 |
| LMR | | | | *e*Sg | | **Sb** | **03 57 50.4** | **+7.3** |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **SFTF** | **Sexfontaines** | **5.77** | **292** | *e*Pn | | Pn | 03 56 19.8 | -5.6 |
| | baz=106 | | | | | | | |
| **SFTF** | **Sexfontaines** | **5.77** | **292** | *e*P | | **Pn** | **03 56 24.6** | **-0.8** |
| SFTF | | | | *e*Sn | | Sn | 03 57 21.6 | -10 |
| | comp=Z,2.2nm,0.4s | | | | | | | |
| **SMRF** | **Simiane la Rot** | **5.80** | **249** | *e*Pn | | Pn | 03 56 20.0 | -5.8 |
| **SMRF** | **Simiane la Rot** | **5.80** | **249** | *e*P | | **Pn** | **03 56 25.3** | **-0.5** |
| SMRF | | | | *e*Sn | | Sn | 03 57 23.2 | -9.3 |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **5.85** | **295** | *e*Pn | | Pn | 03 56 21.1 | -5.4 |
| **MEZF** | **Maizieres J'vi** | **5.85** | **295** | *e*Pg | | **Pb** | **03 56 44.9** | **+3.2** |
| MEZF | | | | *e*Sn | | Sn | 03 57 23.6 | -10 |
| MEZF | | | | *e*Sg | | **Sb** | **03 57 59.2** | **+7.3** |
| | comp=Z,3.1nm,0.5s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **6.07** | **259** | *e*Pn | | Pn | 03 56 24.4 | -5.1 |
| **VIVF** | **Saint-Julien-l** | **6.07** | **259** | *e*P | | **Pn** | **03 56 28.2** | **-1.3** |
| **VIVF** | **Saint-Julien-l** | **6.07** | **259** | *e*Pg | | **Pb** | **03 56 49.1** | **+3.6** |
| **SMF** | **Signal de Mont** | **6.37** | **276** | *e*P | | **Pn** | **03 56 32.5** | **-1.2** |
| SMF | | | | *e*Sg | | **Sb** | **03 58 14.1** | **+7.1** |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **LOR** | **Lormes** | **6.38** | **282** | *e*P | | **Pn** | **03 56 32.5** | **-1.4** |
| LOR | | | | *e*Sn | | Sn | 03 57 35.6 | -11 |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **SSF** | **Saint Saulge** | **6.61** | **280** | *e*P | | **Pn** | **03 56 35.3** | **-1.6** |
| **GIVF** | **Givet** | **6.67** | **307** | *e*P | | **Pn** | **03 56 36.9** | **-0.8** |
| **AVF** | **Avril sur Loir** | **6.71** | **277** | *e*P | | **Pn** | **03 56 37.1** | **-1.2** |
| **LASF** | **Ste Croix** | **6.88** | **254** | *e*Pn | | Pn | 03 56 34.9 | -5.8 |
| **LASF** | **Ste Croix** | **6.88** | **254** | *e*P | | **Pn** | **03 56 40.7** | **0.0** |
| **LASF** | **Ste Croix** | **6.88** | **254** | *e*Pg | | Pb | 03 57 04.2 | +4.9 |
| LASF | | | | *e*Sn | | Sn | 03 57 49.1 | -10 |
| LASF | | | | *e*Sg | | Sb | 03 58 31.4 | +10 |
| | comp=Z,0.3nm,0.2s | | | | | | | |
| **BAIF** | **Baives** | **6.99** | **305** | *e*P | | **Pn** | **03 56 42.8** | **+0.7** |
| **BGF** | **Bois d'Agland** | **7.06** | **275** | *e*P | | **Pn** | **03 56 41.2** | **-1.9** |
| **CAF** | **Calviac** | **7.84** | **264** | *e*P | | **Pn** | **03 56 52.7** | **-1.1** |
| **GRR** | **Gorron** | **9.67** | **287** | *e*P | | **Pn** | **03 57 18.2** | **-0.6** |

*IDC **11** 03:58:51.2±3.6,34°.93N×21°.94E,h0km,mb4.1/4, mbtmp4.0/7,ML2.7/2,MS2.9/3,Error ellipse: s-maj=70.3km s-min=31.2km az=9.0*
*GII **11** 03:58:53.0±0.5,35°.81N×22°.48E,h20km,Mws3.4, confirmed*
*ISK **11** 03:59:06.5,36°.04N×22°.71E,h75km,ML3.4/12*
*ATH **11** 03:59:07.7,35°.87N×22°.59E,h32km±5km,ML3.4/18, Manual Solution by M.Charalampakis This location: 2020/07/01 17:05:42 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 2 km; Longitude uncertainty: 3 km*
*THE **11** 03:59:07.6,35°.88N×22°.54E,h22km±1km,ML3.3/7, Error ellipse: s-maj=1.6km s-min=0.5km az=48.0*
**ISC 11 03:59:07.2**±1.4,**35°.86N**±0°.05×**22°.55E**±0°.06,**h31**km±10km, **n91**,σ1°05′75,**mb4.1**/4,**Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTHA** | **Kythira Island** | **0.57** | **46** | Pg | **Pb** | **03 59 18.7** | **-0.2** |
| KTHA | | | | Sg | **Sn** | **03 59 28.1** | **+0.4** |
| **KTHA** | **Kythira Island** | **0.57** | **46** | P | **Pb** | **03 59 18.7** | **-0.2** |
| KTHA | | | | S | **Sb** | **03 59 27.1** | **+0.2** |
| | 5µm,0.5s | | | | | | |
| **KTHA** | **Kythira Island** | **0.57** | **46** | P | **Pb** | **03 59 18.7** | **-0.2** |
| KTHA | | | | S | **Sb** | **03 59 26.8** | **-0.1** |
| **ANKY** | **Antikythira Is** | **0.61** | **89** | P | **Pb** | **03 59 19.5** | **0.0** |
| ANKY | | | | S | **Sb** | **03 59 28.0** | **+0.1** |
| | 6µm,0.6s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.61** | **89** | P | **Pb** | **03 59 19.5** | **0.0** |
| ANKY | | | | S | **Sb** | **03 59 27.5** | **-0.4** |
| **VLI** | **Veliai** | **0.91** | **20** | P | **Pb** | **03 59 24.4** | **-0.1** |
| VLI | | | | S | **Sn** | **03 59 37.2** | **+1.2** |
| | 2µm,0.4s | | | | | | |
| **VLI** | **Veliai** | **0.91** | **20** | P | **Pb** | **03 59 24.4** | **-0.1** |
| **MNVA** | **Monemvasia** | **0.92** | **25** | P | **Pn** | **03 59 25.1** | **+1.2** |
| **RODP** | **Rodopos** | **1.03** | **107** | Pg | **Pn** | **03 59 26.5** | **+1.0** |
| RODP | | | | Sg | **Sb** | **03 59 39.8** | **+0.2** |
| **RODP** | **Rodopos** | **1.03** | **107** | P | **Pn** | **03 59 26.5** | **+1.0** |
| RODP | | | | S | **Sb** | **03 59 40.4** | **+0.8** |
| **KNDR** | **Palaiochora Ch** | **1.12** | **124** | Pn | **Pn** | **03 59 27.0** | **+0.3** |
| KNDR | | | | Sn | **Sb** | **03 59 42.2** | **0.0** |
| **KNDR** | **Palaiochora Ch** | **1.12** | **124** | P | **Pn** | **03 59 26.1** | **-0.6** |
| **PYL** | **PYLOS** | **1.22** | **328** | P | **Pn** | **03 59 28.1** | **0.0** |
| PYL | | | | S | **Sb** | **03 59 44.2** | **-1.0** |
| | 600nm,0.5s | | | | | | |
| **PYL** | **PYLOS** | **1.22** | **328** | P | **Pn** | **03 59 28.1** | **0.0** |
| **IMMV** | **Iera Moni Meta** | **1.23** | **108** | Pn | **Pn** | **03 59 28.5** | **+0.2** |
| **IMMV** | **Iera Moni Meta** | **1.23** | **108** | P | **Pn** | **03 59 28.9** | **+0.6** |
| IMMV | | | | S | **Sb** | **03 59 46.0** | **+0.5** |
| | 2µm,0.5s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.23** | **108** | P | **Pn** | **03 59 28.7** | **+0.4** |
| **CHAN** | **Chania** | **1.26** | **105** | P | **Pn** | **03 59 29.3** | **+0.6** |
| **ITM** | **Ithomi** | **1.41** | **339** | Pn | **Pn** | **03 59 30.2** | **-0.6** |
| **ITM** | **Ithomi** | **1.41** | **339** | P | **Pn** | **03 59 31.1** | **+0.3** |
| ITM | | | | S | **Sn** | **03 59 48.7** | **+0.4** |
| | 475nm,0.5s | | | | | | |
| **ITM** | **Ithomi** | **1.41** | **339** | P | **Pn** | **03 59 31.2** | **+0.5** |
| **KRND** | **KRANIDI** | **1.59** | **17** | P | **Pn** | **03 59 33.5** | **+0.2** |
| KRND | | | | S | **Sn** | **03 59 54.1** | **+1.3** |
| | 775nm,0.4s | | | | | | |
| **KRND** | **KRANIDI** | **1.59** | **17** | P | **

*NEIC* ***11*** *04:03:33.8±1.4,30.˚15N±0.˚07×60.˚68E±0.˚08,h10km±1km, mb4.6/80, Error ellipse: s-maj=13.0km s-min=10.2km az=130.0*
*THR* ***11*** *04:03:33.5±0.7,30.˚16N×60.˚81E,h23km±8km, ML4.8*
*OMAN* ***11*** *04:03:33.5±0.4,30.˚16N×60.˚79E, h11km, mb5.0/28, ms3.3/4, Error ellipse: s-maj=8.0km s-min=1.7km az=32.0*

**ISC 11 04:03:34.1±0.5,30.12N±0.04×60.66E±0.04,h15km±3km, h15km:pP-P,n429,σ1$48/430,mb4.6/108,MS3.8/54, 13C-9D,Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **ZHSF** | **Zahedan** | **0.52** | **169** | *e*Pg | **Pg** | | **04 03 44.5** | **+0.1** |
| ZHSF | | | | *e*Sg | **Sg** | | **04 03 52.3** | **+1.0** |
| **ZHDN** | **Zahedan** | **0.73** | **170** | Pg | **Pg** | | **04 03 47.9** | **-0.5** |
| **NHDN** | **Nehbandan** | **1.37** | **338** | Pg | **Pn** | | **04 03 57.6** | **-1.2** |
| **KBAM** | **BAM** | **2.16** | **244** | Pn | **Pn** | | **04 04 11.3** | **+1.8** |
| **BSRN** | **Basiran** | **2.26** | **325** | *e*Pn | **Pn** | | **04 04 11.2** | **+0.2** |
| **BSRN** | **Basiran** | **2.26** | **325** | Pn | **Pn** | | **04 04 11.3** | **+0.2** |
| **IDAH** | **Dahanechah** | **2.70** | **346** | Pn | **Pn** | | **04 04 16.8** | **-0.3** |
| **IKOO** | **Kooshah** | **2.70** | **329** | Pn | **Pn** | | **04 04 17.1** | **0.0** |
| **CHMN** | **Cheshme madani** | **2.72** | **265** | Pn | **Pn** | | **04 04 18.9** | **+1.3** |
| **KRM1** | **Kerman Provinc** | **2.96** | **278** | Pn | **Pn** | | **04 04 22.2** | **+1.6** |
| **SRVN** | **Saravan** | **3.11** | **150** | Pn | **Pn** | | **04 04 24.6** | **+1.9** |
| **ITEG** | **Tejag** | **3.21** | **330** | Pn | **Pn** | | **04 04 24.6** | **+0.4** |
| **KHNJ** | **Kahnooj** | **3.37** | **231** | Pn | **Pn** | | **04 04 28.4** | **+2.1** |
| **TVBK** | **TV Kerman** | **3.38** | **269** | Pn | **Pn** | | **04 04 28.5** | **+1.8** |
| **KRBR** | **Kerman** | **3.38** | **269** | *e*Pn | **Pn** | | **04 04 29.2** | **+2.6** |
| KRBR | comp=E,2μm,0.5s | | | IAML | | | 04 05 25.4 | |
| KRBR | comp=N,1μm,0.7s | | | IAML | | | 04 05 32.7 | |
| **NGRK** | **Negar Kerman** | **3.45** | **263** | Pn | **Pn** | | **04 04 29.6** | **+2.0** |
| **SHRT** | **Shahrakht** | **3.53** | **355** | *e*Pn | **Pn** | | **04 04 28.8** | **+0.4** |
| **SHRT** | **Shahrakht** | **3.53** | **355** | Pn | **Pn** | | **04 04 28.8** | **+0.4** |
| **AFRZ** | **Afriz** | **3.58** | **337** | Pn | **Pn** | | **04 04 28.8** | **-0.4** |
| **ZRDN** | **Zarand Kerman** | **3.66** | **284** | Pn | **Pn** | | **04 04 31.9** | **+1.6** |
| **HRA** | **Herat** | **4.46** | **17** | | **Pn** | | **04 04 41.6** | **+0.3** |
| **TPRV** | **Parvadeh(Tabas** | **4.46** | **312** | Pn | **Pn** | | **04 04 42.1** | **+0.8** |
| **IBND** | **Bandar-abas** | **4.49** | **235** | Pn | **Pn** | | **04 04 43.9** | **+2.3** |
| **CHBR** | **Chabahar** | **4.51** | **182** | *e*Pn | **Pn** | | **04 04 43.0** | **+1.1** |
| **CHBR** | **Chabahar** | **4.51** | **182** | Pn | **Pn** | | **04 04 43.1** | **+1.2** |
| **TKDS** | **Koohdasht(Taba** | **4.60** | **320** | Pn | **Pn** | | **04 04 43.8** | **+0.6** |
| **TABS** | **Tabas** | **4.63** | **320** | *e*Pn | **Pn** | | **04 04 44.5** | **+0.9** |
| TABS | comp=N,520nm,0.6s | | | IAML | | | 04 06 12.9 | |
| **NGCH** | **Negor - Chabah** | **4.76** | **175** | Pn | **Pn** | | **04 04 46.4** | **+1.1** |
| **NGCH** | **Negor - Chabah** | **4.76** | **175** | P | **Pn** | | **04 04 46.1** | **+0.9** |
| **GENO** | **Geno** | **4.78** | **237** | Pn | **Pn** | | **04 04 48.1** | **+2.3** |
| **BNDS** | **Bandar-Abbas** | **4.78** | **237** | *e*Pn | **Pn** | | **04 04 48.9** | **+3.1** |
| **TBJM** | **Torbat-e-JAM** | **5.14** | **357** | Pn | **Pn** | | **04 04 50.7** | **+0.1** |
| **TNSJ** | **Nastanj** | **5.15** | **319** | Pn | **Pn** | | **04 04 51.3** | **+0.6** |
| **IMEH** | **Mehriz** | **5.36** | **285** | Pn | **Pn** | | **04 04 54.9** | **+1.2** |
| **TAPT** | **Tabas- Tapeh t** | **5.59** | **329** | Pn | **Pn** | | **04 04 57.4** | **+0.5** |
| **BANOM** | **Banah** | **5.69** | **224** | P | **Pn** | | **04 05 01.9** | **+3.8** |
| **SHME** | **Shamm** | **5.69** | **226** | Pn | **Pn** | | **04 05 00.8** | **+2.8** |
| **SHME** | **Shamm** | **5.69** | **226** | P | **Pn** | | **04 05 01.8** | **+3.8** |
| **ICHK** | **Chekchek** | **5.76** | **293** | Pn | **Pn** | | **04 05 00.9** | **+1.7** |
| **LAR1** | **LAR** | **6.03** | **248** | Pn | **Pn** | | **04 05 04.9** | **+2.1** |
| **MDH** | **Madha** | **6.17** | **220** | Pn | **Pn** | | **04 04 05.0** | **+0.4** |
| **MASF** | **Masafi** | **6.19** | **221** | P | **Pn** | | **04 05 08.8** | **+3.9** |
| **MSFE** | **Esma-Masafi** | **6.20** | **221** | Pn | **Pn** | | **04 05 07.7** | **+2.6** |
| **ISAD** | **Sadrabad** | **6.25** | **288** | Pn | **Pn** | | **04 05 08.1** | **+2.1** |
| **UMQ** | **Umm Al-Quwin** | **6.37** | **225** | P | **Pn** | | **04 05 11.7** | **+4.3** |
| **IPAY** | **Payeh** | **6.46** | **348** | Pn | **Pn** | | **04 05 09.9** | **+1.0** |
| **UOSS** | **Minazif** | **6.50** | **219** | Pn | **Pn** | | **04 05 09.3** | **+0.2** |
| **UOSS** | **Minazif** | **6.50** | **219** | Pn | **Pn** | | **04 05 09.5** | **+0.3** |
| **UOSS** | **Minazif** | **6.50** | **219** | P | **Pn** | | **04 05 11.0** | **+1.8** |
| **HATD** | **Hatta, Dubai** | **6.63** | **218** | Pn | **Pn** | | **04 05 11.8** | **+0.8** |
| **HATD** | **Hatta, Dubai** | **6.63** | **218** | P | **Pn** | | **04 05 12.7** | **+1.6** |
| **ANAR** | **Anarak** | **6.65** | **299** | Pn | **Pn** | | **04 05 12.3** | **+0.9** |
| **IAKL** | **Akhelmad** | **6.66** | **347** | Pn | **Pn** | | **04 05 11.4** | **-0.2** |
| **SBZV** | **Sabzevar** | **6.75** | **339** | Pn | **Pn** | | **04 05 12.9** | **+0.1** |
| **NAZ** | **Nazwa, Dubai** SNR=12 | **6.77** | **222** | *i* Pn | **Pn** | | **04 05 15.9** | **+3.0** |
| **NAZ** | **Nazwa, Dubai** SNR=12 | **6.77** | **222** | P | **Pn** | | **04 05 17.0** | **+4.1** |
| **ASHO** | **Ashiyiah** | **6.79** | **218** | Pn | **Pn** | | **04 05 16.5** | **+3.4** |
| **ASHO** | **Ashiyiah** SNR=16 | **6.79** | **218** | P | **Pn** | | **04 05 17.6** | **+4.5** |
| **BIDO** | **Bidbid** | **6.95** | **200** | P | **Pn** | | **04 05 16.4** | **+1.0** |
| BIDO | | | | P | **Pn** | | **04 05 16.4** | **+1.0** |
| **FAQ** | **Al Faqa, Dubai** SNR=8.1 | **7.00** | **221** | *i* Pn | **Pn** | | **04 05 19.5** | **+3.5** |
| **FAQ** | **Al Faqa, Dubai** SNR=8.0 | **7.00** | **221** | P | **Pn** | | **04 05 19.5** | **+3.5** |
| **SOHO** | **SOHO** SNR=13 | **7.00** | **213** | *i* Pn | **Pn** | | **04 05 16.3** | **+0.1** |
| **SOHO** | **SOHO** | **7.00** | **213** | P | **Pn** | | **04 05 16.2** | **+0.1** |
| **WSAR** | **Wadi Sarin** comp=N,8.0nm,0.3s,baz=55,slow=9.7,SNR=61 | **7.09** | **195** | Pn | **Pn** | | **04 05 17.7** | **+0.4** |
| WSAR | comp=N,1.0nm,0.3s,baz=109,slow=5.9,SNR=3.6 | | | Sn | **Sn** | | **04 06 35.5** | **-2.1** |
| WSAR | comp=N,394nm,19.4s,baz=20,slow=45 comp=N,36nm,0.5s | | | LR | LR | | 04 08 47.9 | |
| **WSAR** | **Wadi Sarin** SNR=12 | **7.09** | **195** | P | **Pn** | | **04 05 17.9** | **+0.5** |
| **HOQ** | **Hoqain** | **7.17** | **205** | P | **Pn** | | **04 05 18.2** | **-0.1** |
| **ASUD** | **Al Ashush, Dub** SNR=6.5 | **7.24** | **222** | *i* Pn | **Pn** | | **04 05 23.0** | **+3.7** |
| **ASUD** | **Al Ashush, Dub** SNR=6.6 | **7.24** | **222** | P | **Pn** | | **04 05 23.4** | **+4.1** |
| **ISFR** | **Sfrayin** | **7.26** | **343** | Pn | **Pn** | | **04 05 20.7** | **+0.8** |
| **IRAM** | **Rameshed** | **7.31** | **285** | Pn | **Pn** | | **04 05 22.4** | **+1.9** |
| **SMDO** | **Samad** SNR=15 | **7.41** | **199** | P | **Pn** | | **04 05 22.4** | **+0.6** |
| SMDO | SNR=15 | | | P | **Pn** | | **04 05 22.4** | **+0.6** |
| **ALNE** | **Al Ain** | **7.46** | **217** | Pn | **Pn** | | **04 05 25.1** | **+2.8** |
| **ALNE** | **Al Ain** SNR=8.7 | **7.46** | **217** | P | **Pn** | | **04 05 25.6** | **+3.2** |
| **IEMG** | **Emamgholi** | **7.46** | **348** | Pn | **Pn** | | **04 05 23.2** | **+0.5** |
| **AJN** | **Ajban** | **7.49** | **224** | P | **Pn** | | **04 05 26.3** | **+3.6** |
| **IZEF** | **Zefreh** | **7.63** | **293** | Pn | **Pn** | | **04 05 26.6** | **+1.7** |
| **WBK** | **Wadi Bani Khal** SNR=17 | **7.63** | **192** | P | **Pn** | | **04 05 24.2** | **-0.5** |
| WBK | SNR=17 | | | P | **Pn** | | **04 05 24.2** | **-0.5** |
| **ARQ** | **Araqi** SNR=14 | **7.70** | **210** | P | **Pn** | | **04 05 28.6** | **+2.9** |
| **KLNJ** | **Kolanjah** | **7.87** | **279** | Pn | **Pn** | | **04 05 30.3** | **+2.0** |
| **JLN** | **Jalan Bani Buh** SNR=7.0 | **8.02** | **188** | P | **Pn** | | **04 05 28.4** | **-1.6** |
| **BJRD** | **Bojnurd** | **8.03** | **341** | *e*Pn | **Pn** | | **04 05 32.4** | **+2.1** |
| **JMDO** | **Jabal Madar** SNR=26 | **8.05** | **197** | P | **Pn** | | **04 05 32.2** | **+1.7** |
| JMDO | SNR=26 | | | P | **Pn** | | **04 05 32.2** | **+1.7** |
| **KRSH** | **Karshahi** | **8.19** | **300** | Pn | **Pn** | | **04 05 34.0** | **+1.5** |
| **AHBU** | **AHRAM** | **8.26** | **264** | Pn | **Pn** | | **04 05 35.3** | **+2.0** |
| **ISFB** | **Sefidab** | **8.29** | **303** | Pn | **Pn** | | **04 05 35.1** | **+1.4** |
| **ILAS** | **Lasjerd** | **8.34** | **311** | Pn | **Pn** | | **04 05 35.3** | **+0.6** |
| **KBL** | **Kabul** | **8.35** | **56** | Pn | **Pn** | | **04 05 34.7** | **0.0** |
| **KBL** | **Kabul** | **8.35** | **56** | Pn | **Pn** | | **04 05 34.7** | **0.0** |
| **KBL** | **Kabul** | **8.35** | **56** | P | **Pn** | | **04 05 34.7** | **0.0** |
| **IKLH** | **Kolahrood** | **8.37** | **295** | Pn | **Pn** | | **04 05 36.7** | **+1.7** |
| **DSBU** | **Dashti - Bushe** | **8.40** | **260** | Pn | **Pn** | | **04 05 36.6** | **+1.3** |
| **MRVT** | **Maraveh tapeh** | **8.42** | **334** | *e*Pn | **Pn** | | **04 05 37.3** | **+1.7** |
| **MRVT** | **Maraveh tapeh** | **8.42** | **334** | Pn | **Pn** | | **04 05 36.2** | **+0.6** |
| **IFIR** | **Firoozkooh** | **8.63** | **312** | Pn | **Pn** | | **04 05 40.3** | **+1.6** |
| **ZNGN** | **Zangian** | **8.64** | **286** | Pn | **Pn** | | **04 05 40.9** | **+2.1** |
| **QAMS** | **Qamsar** | **8.66** | **297** | Pn | **Pn** | | **04 05 40.4** | **+1.4** |
| **MZWR** | **Madinat Zayed** | **8.76** | **225** | P | **Pn** | | **04 05 42.1** | **+1.9** |
| **UMZA** | **Um Al Zommool** | **8.87** | **215** | P | **Pn** | | **04 05 43.2** | **+1.4** |
| **IVRN** | **Varamin** | **8.97** | **305** | Pn | **Pn** | | **04 05 44.6** | **+1.4** |
| **GHVR** | **GHOM** | **9.04** | **301** | *e*Pn | **Pn** | | **04 05 47.0** | **+2.9** |
| **IDMV** | **Damavand** | **9.07** | **309** | Pn | **Pn** | | **04 05 45.8** | **+1.1** |
| **DAMV** | **Damavand** | **9.14** | **309** | *e*Pn | **Pn** | | **04 05 47.5** | **+1.8** |
| **GHWR** | **Ruwais** | **9.26** | **230** | P | **Pn** | | **04 05 47.3** | **+0.2** |
| **IQOM** | **Qom** | **9.37** | **303** | Pn | **Pn** | | **04 05 50.0** | **+1.3** |
| **MHTO** | **MHTO** | **9.41** | **196** | P | **Pn** | | **04 05 51.0** | **+1.8** |
| **SHMA** | **Al-Shehemyia** SNR=16 | **9.56** | **246** | P | **Pn** | | **04 05 52.4** | **+1.2** |
| **MZR** | **Muzera** | **9.57** | **224** | P | **Pn** | | **04 05 53.3** | **+2.0** |
| **KHMZ** | **Khomeyn** | **9.78** | **294** | *e*Pn | **Pn** | | **04 05 57.0** | **+2.5** |
| **SAKB** | **Bahrain** | **9.85** | **248** | P | **Pn** | | **04 05 56.4** | **+1.2** |
| **CHTH** | **Charan** | **9.87** | **308** | *e*Pn | **Pn** | | **04 05 58.2** | **+2.6** |
| **TRNA** | **Turayna** SNR=12 | **9.96** | **240** | P | **Pn** | | **04 05 57.3** | **+0.7** |
| **ASAO** | **Ashtian** | **10.02** | **299** | *e*Pn | **Pn** | | **04 06 01.1** | **+3.4** |
| **SMRA** | **Abu-Samra** | **10.25** | **241** | P | **Pn** | | **04 06 01.2** | **+0.7** |
| | SNR=27 | | | | | | | |
| **IRAZ** | **Razeghan** | **10.46** | **303** | Pn | **Pn** | | **04 06 05.3** | **+1.7** |
| **SIMJ** | **Simiganj** | **10.95** | **37** | Pn | **Pn** | | **04 06 08.8** | **-1.5** |
| **CHGR** | **Chuyangaron** | **11.03** | **37** | Pn | **Pn** | | **04 06 11.6** | **+0.2** |
| **CHGR** | **Chuyangaron** | **11.03** | **37** | P | **Pn** | | **04 06 11.6** | **+0.2** |
| **NIL** | **Nilore** | **11.27** | **69** | Pn | **Pn** | | **04 06 15.2** | **+0.7** |
| **NIL** | **Nilore** | **11.27** | **69** | P | **Pn** | | **04 06 15.2** | **+0.7** |
| **GAR** | **Garm** | **11.90** | **39** | Pn | **Pn** | | **04 06 22.4** | **-0.9** |
| **SNQR** | **Sonqor, Kerman** | **11.97** | **297** | Pn | **Pn** | | **04 06 26.0** | **+1.6** |
| **AJM** | **Ajmer** | **12.84** | **103** | *e*P | **Pn** | | **04 06 35.2** | **-0.9** |
| **DOK** | **Doka** SNR=7.0 | **12.90** | **209** | P | **Pn** | | **04 06 35.4** | **-1.5** |
| **BTK** | **Batken** | **12.93** | **37** | | **Pn** | | **04 06 36.8** | **-0.5** |
| **BTK** | **Batken** | **12.93** | **37** | P | **Pn** | | **04 06 36.8** | **-0.5** |
| **THN** | **Thein Dam** | **13.08** | **76** | *e*P | **Pn** | | **04 06 39.8** | **+0.5** |
| THN | comp=E,64nm,0.3s | | | IAmb | IAmb | | 04 06 58.7 | |
| **DMTO** | **DMTO** | **13.40** | **204** | P | **Pn** | | **04 06 44.8** | **+1.0** |
| **DHRM** | **DHARAMSHALA** | **13.56** | **77** | *e*P | **Pn** | | **04 06 46.2** | **+0.2** |
| DHRM | comp=E,60nm,1.1s | | | IAmb | IAmb | | 04 07 01.2 | |
| **BHK** | **Bhakra** | **13.61** | **81** | *e*P | **Pn** | | **04 06 46.3** | **-0.3** |
| BHK | | | | *ex* | x | | 04 09 28.5 | |
| **WHFO** | **Wadi Hawf** | **13.68** | **209** | P | **Pn** | | **04 06 46.7** | **-0.8** |
| **RBK** | **Rabkut** | **13.88** | **207** | P | **Pn** | | **04 06 51.2** | **+0.9** |
| **KUDL** | **Kundal** | **13.97** | **94** | *ex* | **Pn** | | **04 06 48.6** | **-3.0** |
| **SMLA** | **Simla** | **14.25** | **82** | *e*P | **Pn** | | **04 06 55.1** | **-0.2** |
| SMLA | comp=Z,60nm,1.0s | | | IAmb | IAmb | | 04 07 05.3 | |
| **ABTO** | **Aybut** | **14.38** | **210** | P | **Pn** | | **04 06 56.4** | **-0.8** |
| **RAYN** | **Ar Rayn** | **15.04** | **248** | Pn | **Pn** | | **04 07 03.5** | **-2.6** |
| **RAYN** | **Ar Rayn** SNR=6.6 | **15.04** | **248** | *i* Pn | **Pn** | | **04 07 04.2** | **-1.9** |
| **RAYN** | **Ar Rayn** | **15.04** | **248** | P | **Pn** | | **04 07 04.2** | **-1.9** |
| **RAYN** | **Ar Rayn** | **15.04** | **248** | P | **Pn** | | **04 07 03.5** | **-2.6** |
| RAYN | comp=Z,67nm,0.8s | | | pmax | pmax | | | |
| **KK31** | **Karatay Array** | **15.16** | **29** | Pn | **Pn** | | **04 07 04.4** | **-3.3** |
| **KK31** | **Karatay Array** | **15.16** | **29** | P | **Pn** | | **04 07 04.4** | **-3.3** |
| KK31 | comp=Z,12nm,0.8s | | | pmax | pmax | | | |
| **KKAR** | **Karatay Array** | **15.16** | **29** | Pn | **Pn** | | **04 07 04.5** | **-3.2** |
| **KKAR** | **Karatay Array** | **15.16** | **29** | P | **Pn** | | **04 07 04.5** | **-3.2** |
| **KLP** | **Kalpa** | **15.18** | **80** | *e*P | **Pn** | | **04 07 09.7** | **+1.5** |
| KLP | | | | *e*S | **Sn** | | **04 10 00.1** | **+3.8** |
| **KSH** | **Kashi** | **15.66** | **49** | P | **Pn** | | **04 07 09.0** | **-5.4** |
| KSH | | | | pP | P | | 04 07 13.7 | -4.7 |
| KSH | | | | PP | **pP** | | **04 07 22.2** | **-0.8** |
| KSH | comp=Z,24nm,0.7s | | | pmax | pmax | | | |
| KSH | comp=Z,270nm,3.3s | | | pmax | pmax | | | |
| KSH | comp=Z,1μm,8.1s | | | LR | LR | | | |
| KSH | comp=Z,740nm,8.3s | | | LR | LR | | | |
| KSH | comp=Z,1μm,12.7s | | | LR | LR | | | |
| **GUNA** | **GUNA** | **15.77** | **106** | *e*P | **Pn** | | **04 07 15.9** | **+0.1** |
| **HNLY** | **HANLEY** | **15.85** | **76** | *e*P | **Pn** | | **04 07 16.1** | **-1.1** |
| **AML** | **Almayashu** SNR=11 | **15.93** | **38** | P | **Pn** | | **04 07 15.3** | **-2.7** |
| **EKS2** | **Erkin-Say** SNR=44 | **16.35** | **36** | P | **P** | | **04 07 28.0** | **+2.0** |
| **GNI** | **Garni** | **16.40** | **312** | Pn | **P** | | **04 07 25.1** | **-1.5** |
| GNI | comp=Z,0.6nm,0.3s,baz=183,slow=19,SNR=3.5 comp=Z,397nm,18.7s,baz=114,slow=40 comp=Z,15nm,0.9s | | | LR | LR | | 04 14 26.5 | |
| **GNI** | **Garni** | **16.40** | **312** | *e*P | **Pn** | | **04 07 23.0** | **-0.8** |
| GNI | comp=Z,28nm,1.7s | | | pmax | pmax | | | |
| **BHPL** | **Bhopal** | **16.47** | **111** | *e*P | **Pn** | | **04 07 22.4** | **-2.2** |
| BHPL | comp=Z,26nm,0.7s | | | IAmb | IAmb | | 04 07 30.5 | |
| **NRDN** | **NARMADA NAGAR** | **16.51** | **113** | *e*P | **Pn** | | **04 07 25.4** | **+0.2** |
| NRDN | comp=Z,16nm,1.0s | | | IAmb | IAmb | | 04 07 35.9 | |
| NRDN | | | | *e*S | **Sn** | | **04 10 27.5** | **-0.8** |
| **MAK** | **Makhachkala** | **16.59** | **324** | *e*P | **Pn** | | **04 07 23.2** | **-2.8** |
| MAK | | | | *e*S | **Sn** | | **04 10 27.9** | **-1.9** |
| MAK | comp=Z,318nm,1.5s | | | pmax | pmax | | | |
| MAK | comp=Z,400nm,10.0s | | | MLR | MLR | | | |
| **AAK** | **Ala-Archa** SNR=10 | **16.71** | **38** | P | **P** | | **04 07 32.4** | **+2.4** |
| **AAK** | **Ala-Archa** | **16.71** | **38** | Pn | **Pn** | | **04 07 26.2** | **-1.5** |
| AAK | comp=Z,44nm,0.9s | | | IAmb | IAmb | | 04 07 33.1 | |
| **AAK** | **Ala-Archa** comp=Z,0.4nm,0.3s,baz=228,slow=13,SNR=5.3 | **16.71** | **38** | Pn | **Pn** | | **04 07 27.9** | **+0.2** |
| AAK | comp=Z,194nm,18.8s,baz=242,slow=39 comp=Z,27nm,0.8s | | | LR | LR | | 04 14 28.3 | |
| **AAK** | **Ala-Archa** | **16.71** | **38** | *c i*P | **Pn** | | **04 07 27.8** | **+0.1** |
| **NRN** | **Naryn** | **16.77** | **44** | Pn | **Pn** | | **04 07 26.6** | **-2.2** |
| **NRN** | **Naryn** | **16.77** | **44** | P | **Pn** | | **04 07 26.6** | **-2.2** |
| NRN | comp=Z,19nm,1.0s | | | pmax | pmax | | | |
| **FRU1** | **Bishkek** | **16.90** | **38** | Pn | **Pn** | | **04 07 29.0** | **-1.0** |
| FRU1 | comp=Z,56nm,0.9s | | | IAmb | IAmb | | 04 07 40.2 | |
| **FRU1** | **Bishkek** | **16.90** | **38** | P | **Pn** | | **04 07 29.0** | **-1.0** |
| FRU1 | comp=Z,56nm,0.9s | | | pmax | pmax | | | |
| **PTH** | **Pithoragarh** | **16.98** | **87** | *e*P | **Pn** | | **04 07 28.6** | **-2.7** |
| PTH | comp=Z,26nm,0.6s | | | IAmb | IAmb | | 04 07 52.5 | |
| **LGTI** | **Lohaghat** | **17.02** | **87** | *e*P | **Pn** | | **04 07 28.5** | **-3.0** |
| **CHMS** | **Chumysh** SNR=6.4 | **17.09** | **37** | P | **P** | | **04 07 36.6** | **+2.4** |
| **USP** | **Ospennovka** SNR=6.3 | **17.15** | **36** | P | **P** | | **04 07 36.9** | **+2.1** |
| **SGDS** | **Sogindy** | **17.35** | **36** | *e*P | **Pn** | | **04 07 35.9** | **+0.2** |
| **BOOM** | **Boomskoye usch** | **17.40** | **41** | Pn | **Pn** | | **04 07 35.9** | **-0.6** |
| **BOOM** | **Boomskoye usch** | **17.40** | **41** | P | **Pn** | | **04 07 35.9** | **-0.6** |
| **ULHL** | **Ulahol** SNR=11 | **17.42** | **42** | P | **P** | | **04 07 40.2** | **+2.2** |
| **AKL** | **Akola** | **17.48** | **119** | *e*P | **Pn** | | **04 07 38.0** | **+0.6** |
| **TKM2** | **Tokmak 2** SNR=14 | **17.50** | **39** | P | **Pn** | | **04 07 36.0** | **-1.6** |
| **TKM2** | **Tokmak 2** | **17.50** | **39** | P | **Pn** | | **04 07 36.0** | **-1.6** |
| **GURO** | **Aluroymak-BITLI** | **17.51** | **304** | | **Pn** | | **04 07 37.5** | **-0.3** |
| **BTLS** | **Baital** | **18.25** | **32** | *e*P | **Pn** | | **04 07 45.4** | **-1.3** |
| **PRZ** | **Przheval'sk** | **18.84** | **44** | P | **Pn** | | **04 07 53.8** | **-0.3** |
| PRZ | comp=Z,38nm,1.2s | | | IAmb | IAmb | | 04 08 08.9 | |
| **PRZ** | **Przheval'sk** | **18.84** | **44** | P | **Pn** | | **04 07 53.8** | **-0.3** |
| PRZ | comp=Z,38nm,1.2s | | | pmax | pmax | | | |
| **NCK** | **Nalchik** | **19.05** | **319** | *i* P | **Pn** | | **04 07 56.2** | **-0.3** |
| **ABKAR** | **Akbulak array** | **19.12** | **359** | P | **Pn** | | **04 07 56.8** | **-0.4** |
| **ABKAR** | **Akbulak array** | **19.12** | **359** | P | **Pn** | | **04 07 56.9** | **-0.3** |
| ABKAR | comp=Z,12nm,0.8s | | | IAmb | IAmb | | 04 08 02.7 | |
| **ALBI** | **Allahabad** | **19.32** | **99** | *e*P | **P** | | **04 07 59.4** | **+0.7** |
| **ARXS** | **Arharly** | **19.57** | **39** | *e*P | **P** | | **04 08 01.1** | **-0.3** |
| **KBZ** | **Khabaz** comp=Z,0.2nm,0.3s,baz=139,slow=11,SNR=7.4 comp=Z,8.9nm,1.0s | **19.59** | **319** | P | **Pn** | | **04 08 02.9** | **0.0** |
| **KBZ** | **Khabaz** | **19.59** | **319** | ⇑ *i*P | **Pn** | | **04 08 02.8** | **-0.1** |
| **UZB** | **Uzynbulak** | **19.59** | **43** | *e*P | **Pn** | | **04 08 02.6** | **-0.6** |
| **SHA1** | **Shidzhatmaz** | **19.74** | **318** | *e*P | **Pn** | | **04 08 05.2** | **+0.3** |
| **KIV** | **Kislovodsk** | **19.86** | **319** | | **Pn** | | **04 08 05.6** | **-0.5** |
| KIV | comp=Z,26nm,0.9s | | | IAmb | IAmb | | 04 08 09.4 | |
| **KIV** | **Kislovodsk** | **19.86** | **319** | *e*P | **P** | | **04 08 05.1** | **+0.6** |
| KIV | | | | *e*S | **Sn** | | **04 11 48.9** | **-0.1** |
| KIV | comp=Z,26nm,1.0s | | | pmax | pmax | | | |
| **PDGK** | **Podgornoye** | **19.98** | **44** | P | **P** | | **04 08 04.8** | **-1.2** |
| **OTUK** | **Ortayu** | **20.19** | **23** | P | **P** | | **04 08 08.3** | **+0.2** |
| **AKTO** | **Aktyubinsk** comp=Z,5.0nm,0.5s,baz=175,slow=8.7,SNR=17 comp=Z,5.0nm,0.5s | **20.39** | **355** | P | Pn | | 04 08 12.3 | 0.0 |
| AKTO | comp=Z,154nm,19.6s,baz=295,slow=40 comp=Z,5.0nm,0.5s | | | LR | LR | | 04 17 19.4 | |
| **ARPR** | **Arapgir-MALATY** | **20.40** | **302** | P | **P** | | **04 08 11.2** | **+0.6** |
| **ASF** | **Jabal al Asfar** comp=Z,23nm,0.9s,baz=294,slow=0.0,SNR=20 | **20.44** | **282** | P | Pn | | 04 08 14.2 | +1.0 |
| **GAZ** | **Gaziantep** | **20.72** | **296** | P | Pn | | 04 08 15.6 | -0.8 |
| **SOC** | **Sochi** | **21.41** | **315** | *e*P | **P** | | **04 08 20.2** | **-1.0** |
| SOC | | | | *e*PPP | PPP | | 04 08 48.8 | |
| SOC | | | | *e*S | **S** | | **04 12 18.5** | **+0.2** |
| SOC | | | | *e*SS | **SnSn** | | **04 12 42.8** | **+1.5** |
| SOC | | | | *e*SSS | SSS | | 04 12 55.6 | |
| SOC | comp=Z,201nm,16.0s | | | MLR | MLR | | | |
| **GHAJ** | **Ghor Haditha** | **21.60** | **280** | P | **P** | | **04 08 24.6** | **+1.2** |
| **MMAI** | **Mount Meron Ar** comp=Z,4.9nm,0.8s,baz=108,slow=11,SNR=8.7 | **21.70** | **284** | P | **P** | | **04 08 27.3** | **+2.7** |
| MMAI | comp=Z,372nm,20.4s,baz=32,slow=41 | | | LR | LR | | 04 18 18.6 | |
| **BNN** | **Bunyan** | **22.18** | **300** | P | **P** | | **04 08 30.6** | **+0.8** |
| **EIL** | **Elat** comp=Z,9.5nm,0.8s,baz=46,slow=4.6,SNR=10 | **22.28** | **275** | P | **P** | | **04 08 32.3** | **+1.5** |
| EIL | comp=Z,489nm,19.0s,baz=82,slow=41 comp=Z,9.5nm,0.8s | | | LR | LR | | 04 18 43.4 | |
| **MAKZ** | **Makanchi** | **23.46** | **39** | P | **P** | | **04 08 42.9** | **0.0** |
| MAKZ | comp=Z,17nm,0.7s | | | IAmb | IAmb | | 04 08 45.3 | |
| **MAKZ** | **Makanchi** | **23.46** | **39** | P | **P** | | **04 08 42.9** | **0.0** |
| MAKZ | comp=Z,17nm,0.7s | | | pmax | pmax | | | |
| **MK31** | **Makanchi Array** | **23.63** | **39** | P | **P** | | **04 08 44.4** | **-0.1** |
| **MK31** | **Makanchi Array** | **23.63** | **39** | *i* P | **P** | | **04 08 44.8** | **+0.3** |
| **MKAR** | **Makanchi Array** | **23.63** | **39** | P | **P** | | **04 08 44.3** | **-0.3** |
| **MKAR** | **Makanchi Array** comp=Z,12nm,0.9s,baz=234,slow=8.3,SNR=44 | **23.63** | **39** | P | **P** | | **04 08 44.8** | **+0.3** |
| MKAR | comp=Z,214nm,19.6s,baz=240,slow=41 comp=Z,12nm,0.9s | | | LR | LR | | 04 19 40.5 | |
| **MKAR** | **Makanchi Array** | **23.63** | **39** | *ce*P | **P** | | **04 08 45.4** | **+0.9** |
| MKAR | comp=Z,12nm,0.9s | | | pmax | pmax | | | |
| **BVA0** | **Borovoye Array** | **23.97** | **15** | *i* P | **P** | | **04 08 48.3** | **+0.6** |
| **BRVK** | **Borovoye** | **23.98** | **14** | P | **P** | | **04 08 48.1** | **+0.3** |
| **BRVK** | **Borovoye** | **23.98** | **14** | *ce*P | **P** | | **04 08 48.9** | **+1.1** |
| BRVK | comp=Z,16nm,0.8s | | | pmax | pmax | | | |
| **BR131** | **Keskin Array S** | **24.06** | **301** | P | **P** | | **04 08 48.7** | **-0.2** |
| BR131 | comp=Z,22nm,1.0s | | | IAmb | IAmb | | 04 08 52.6 | |
| **BR131** | **Keskin Array S** | **24.06** | **301** | P | **P** | | **04 08 48.7** | **-0.2** |
| BR131 | comp=Z,22nm,1.0s | | | pmax | pmax | | | |
| **BRTR** | **Keskin Array B** | **24.06** | **301** | P | **P** | | **04 08 48.9** | **0.0** |
| **BRTR** | **Keskin Array B** comp=Z,15nm,1.0s,baz=115,slow=12,SNR=40 | **24.06** | **301** | P | **P** | | **04 08 49.2** | **+0.3** |
| BRTR | comp=Z,66nm,19.6s,baz=113,slow=37 comp=Z,15nm,1.0s | | | LR | LR | | 04 18 29.3 | |
| **BRTR** | **Keskin Array B** | **24.06** | **301** | P | **P** | | **04 08 48.9** | **0.0** |
| **BELG** | **Belogornoye** comp=Z,44nm,0.9s,baz=86,slow=2.7,SNR=8.9 comp=Z,44nm,0.9s | **24.24** | **340** | P | **P** | | **04 08 50.7** | **+0.6** |
| **BELG** | **Belogornoye** | **24.24** | **340** | *d* iP | **P** | | **04 08 51.0** | **+0.8** |
| BELG | comp=Z,8.0nm,1.0s | | | pmax | pmax | | | |
| **KURBB** | **Kurchatov Arra** comp=Z,7.4nm,0.6s,baz=225,slow=8.7,SNR=70 | **24.47** | **28** | P | **P** | | **04 08 53.4** | **+1.0** |
| KURBB | comp=Z,301nm,19.3s,baz=174,slow=40 comp=Z,7.4nm,0.6s | | | LR | LR | | 04 19 49.7 | |
| **KURBB** | **Kurchatov Arra** | **24.47** | **28** | P | **P** | | **04 08 52.8** | **+0.5** |
| **KURK** | **Kurchatov** | **24.58** | **28** | P | **P** | | **04 08 53.6** | **+0.3** |
| KURK | comp=Z,13nm,0.9s | | | IAmb | IAmb | | 04 09 06.2 | |
| **KURK** | **Kurchatov** | **24.58** | **28** | *c* iP | **P** | | **04 08 55.8** | **+2.5** |
| KURK | comp=Z,7.0nm,0.7s | | | pmax | pmax | | | |
| **BR231** | **Keskin MP Arra** | **24.73** | **301** | P | **P** | | **04 08 54.6** | **-0.4** |
| BR231 | comp=Z,14nm,0.8s | | | IAmb | IAmb | | 04 09 05.0 | |
| **ATD** | **Arta Tunnel** | **24.82** | **226** | P | **P** | | **04 08 57.6

BURAR **Bucovina Array** 32.30 313 P **P** 04 10 02.4 0.0
BUR08 **Bucovina Ar. S** 32.32 313 P **P** 04 10 01.9 -0.7
**GTA** **Gaotai** 33.26 63 P **P** 04 10 12.0 +1.1
GTA pP sP 04 10 16.8 -1.2
GTA pmax pmax
comp=Z,12nm,1.1s
GTA LR LR
comp=Z,110nm,11.5s
GTA LR LR
comp=Z,330nm,14.3s
GTA LR LR
comp=Z,320nm,13.9s
**FNA** **Florina** 33.48 299 P **P** 04 10 12.4 -0.3
**FNA** **Florina** 33.48 299 P **P** 04 10 12.4 -0.3
FNA pmax pmax
comp=Z,16nm,1.0s
**LVV** **L'vov** 33.82 316 *e*P **P** 04 10 16.3 +0.8
**MNK** **Minsk** 33.85 325 *i* P **P** 04 10 14.0 -1.8
comp=E,20nm,1.0s
MNK *i* P **P** 04 10 14.0 -1.8
comp=N,13nm,0.9s
MNK *i* P **P** 04 10 14.0 -1.8
comp=Z,9.0nm,0.8s,baz=122
MNK *i* PP **PnPn** 04 11 26.1 -2.2
MNK *i* PPP PPP 04 11 37.1
MNK *i* S **S** 04 15 38.9 -0.4
MNK *i* SS **SnSn** 04 17 45.0 +0.4
MNK *i* SSS SSS 04 18 01.8
MNK *i* LQ LQ 04 21 25.7
MNK *i* LR LR 04 24 11.7
MNK *i* LRM MLR 04 25 17.7
comp=E,384nm,20.2s
MNK *i* LRM MLR 04 25 17.7
comp=N,725nm,22.2s
MNK *i* LRM MLR 04 26 24.8
comp=Z,105nm,17.6s
**MNK** **Minsk** 33.85 325 *i* P **P** 04 10 13.9 -1.8
MNK *i* 04 11 26.1
MNK *i* S **S** 04 15 38.8 -0.4
MNK *i* SS **SnSn** 04 17 45.0 +0.4
MNK pmax pmax
comp=Z,9.0nm,0.8s
MNK pmax pmax
comp=E,20nm,1.0s
MNK pmax pmax
comp=N,13nm,0.9s
MNK MLR MLR
comp=E,384nm,20.0s
MNK MLR MLR
comp=N,725nm,22.0s
MNK MLR MLR
comp=Z,105nm,18.0s
**KBN** **Korca** 33.91 299 P **P** 04 10 16.2 -0.3
**KBN** **Korca** 33.91 299 P **P** 04 10 16.2 -0.3
KBN pmax pmax
comp=Z,53nm,1.0s
**KEK** **Kerkira** 34.59 297 P **P** 04 10 22.1 -0.3
**KOLS** **Kolonicke sedl** 34.59 314 *e*P **P** 04 10 24.1 +1.8
KOLS pmax pmax
comp=Z,7.0nm,0.7s
**KOLS** **Kolonicke sedl** 34.59 314 *e*P **P** 04 10 24.1 +1.8
NACGM **Naroch** 34.61 325 *e*P **P** 04 10 20.5 -1.7
baz=122
**PUK** **Puka** 34.72 301 P **P** 04 10 22.8 -0.8
PUK IAmb IAmb 04 10 28.4
comp=Z,14nm,1.4s
**PZH** **PanZhiHua** 36.21 85 P **P** 04 10 36.6 0.0
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,110nm,4.3s
**LZH** **Lanzhou** 36.43 69 *e*P **P** 04 10 39.4 +1.0
LZH pP sP 04 10 45.2 -0.4
LZH pmax pmax
comp=Z,15nm,1.0s
LZH LR LR
comp=Z,290nm,10.0s
LZH LR LR
comp=Z,370nm,9.6s
LZH LR LR
comp=Z,300nm,12.4s
**OJC** **Ojcow** 36.53 315 P **P** 04 10 38.3 -0.5
**OJC** **Ojcow** 36.53 315 P **P** 04 10 38.3 -0.5
OJC pmax pmax
comp=Z,28nm,1.5s
**CMAR** **Chiang Mai Arr** 36.61 100 P **P** 04 10 39.8 -0.1
**CMAR** **Chiang Mai Arr** 36.61 100 P **P** 04 10 40.5 +0.5
comp=Z,2.0nm,0.3s,baz=287,slow=9.2,SNR=6.9
CMAR LR LR 04 26 38.4
comp=Z,64nm,19.9s,baz=295,slow=38
comp=Z,2.0nm,0.3s
**VYHS** **Vyhne** 36.65 312 *e*P **P** 04 10 40.3 +0.4
VYHS pmax pmax
comp=Z,3.0nm,1.0s
**VYHS** **Vyhne** 36.65 312 *e*P **P** 04 10 40.3 +0.4
**CD2** **Chengdu** 36.97 78 *e*P **P** 04 10 41.5 -1.4
**CRAI** **Chiangrai** 37.11 96 P **P** 04 10 43.3 -0.8
**KMI** **Kunming** 37.46 87 ⇑P **P** 04 10 48.4 +1.1
KMI pP pP 04 10 51.9 -0.5
KMI LR LR
comp=Z,240nm,16.2s
KMI LR LR
comp=Z,120nm,11.3s
KMI LR LR
comp=Z,190nm,15.9s
**CUC** **Castrocucco** 37.67 298 P **P** 04 10 49.0 +0.3
CUC IAmb IAmb 04 10 55.6
comp=Z,12nm,0.9s
**RONA** **Rosalia, Austr** 38.13 310 *i* P **P** 04 10 52.9 +0.4
comp=Z,4.3nm,0.9s
**VRAC** **Vranov** 38.28 313 LR LR 04 29 39.3
comp=Z,67nm,19.3s,baz=114,slow=41
**CONA** **Conrad Observa** 38.47 310 *i* P **P** 04 10 56.5 +1.1
comp=Z,5.3nm,1.5s
**ARSA** **Arzberg** 38.57 309 *i* P **P** 04 10 57.0 +0.8
comp=Z,7.0nm,1.0s
**PAOL** **Paolisi** 38.64 299 **P** 04 10 56.5 -0.4
PAOL IAmb IAmb 04 10 58.7
comp=Z,16nm,1.2s
**FINES** **FINESS Array B** 38.68 334 P **P** 04 10 57.3 +0.5
comp=Z,3.2nm,0.6s,baz=132,slow=8.3,SNR=18
FINES LR LR 04 29 03.7
comp=Z,97nm,18.7s,baz=78,slow=40
comp=Z,3.2nm,0.6s
**FINES** **FINESS Array B** 38.68 334 *ce*P **P** 04 10 57.2 +0.3
FINES pmax pmax
comp=Z,3.0nm,0.6s
**SOKA** **Soboth** 38.80 308 *i* P **P** 04 10 59.1 +0.8
comp=Z,7.1nm,1.8s
**VAE** **Valguarnera** 38.81 294 LR LR 04 29 13.9
comp=Z,78nm,18.2s,baz=130,slow=40
**CHVC** **Chvalec** 38.93 315 *e*P **P** 04 11 00.8 +1.6
**CHVC** **Chvalec** 38.93 315 *e*P **P** 04 11 00.8 +1.6
**SONM** **Songino Array** 39.07 50 P **P** 04 11 00.2 -0.3
**SONM** **Songino Array** 39.07 50 P **P** 04 11 01.8 +1.3
comp=Z,6.2nm,0.9s,baz=256,slow=9.2,SNR=24
SONM LR LR 04 29 09.0
comp=Z,538nm,19.9s,baz=266,slow=39
comp=Z,6.2nm,0.9s
**SONM** **Songino Array** 39.07 50 P **P** 04 11 00.2 -0.3
SONM pmax pmax
comp=Z,5.0nm,0.9s
**OBKA** **Obir** 39.11 308 *i* P **P** 04 11 00.4 -0.5
comp=Z,11nm,1.5s
**MOA** **Molln** 39.51 310 *i* P **P** 04 11 05.2 +1.2
comp=Z,6.1nm,1.1s
**ULN** **Ulaanbaatar** 39.51 50 P **P** 04 11 03.8 -0.4
ULN IAmb IAmb 04 11 10.9
comp=Z,13nm,1.1s
**ULN** **Ulaanbaatar** 39.51 50 *d* ⇓P **P** 04 11 05.0 +0.8
ULN pmax pmax
comp=Z,9.0nm,0.8s
**CKRC** **Cesky Krumlov** 39.65 311 *e*P **P** 04 11 06.0 +0.8
**CKRC** **Cesky Krumlov** 39.65 311 *e*P **P** 04 11 06.0 +0.8
**MYKA** **Terra Mystica** 39.75 308 *e*P **P** 04 11 06.3 +0.1
comp=Z,5.1nm,1.0s
**PRED** **Cave del Predi** 39.77 308 P **P** 04 11 05.5 -0.8
**FDMO** **Fiordimonte** 39.82 302 P **P** 04 11 05.3 -1.4
**ZVC** **Zvikov** 39.84 312 *e*P **P** 04 11 07.3 +0.5
**BIOA** **Bad Ischl, Aus** 39.90 310 *e*P **P** 04 11 07.9 +0.5
comp=Z,6.9nm,1.1s
**KBA** **Koelnbreinsper** 40.01 309 *i* pP **P** 04 11 09.6 +1.2
comp=Z,6.6nm,1.1s
**GEC2** **GERESS Array S** 40.05 311 P **P** 04 11 08.4 -0.2
GEC2 IAmb IAmb 04 11 10.2
comp=Z,15nm,1.2s
**GERES** **GERESS Array B** 40.05 311 P **P** 04 11 07.2 -1.4
**GERES** **GERESS Array B** 40.05 311 P **P** 04 11 09.0 +0.4
comp=Z,4.3nm,0.9s,baz=138,slow=12,SNR=21
comp=Z,4.3nm,0.9s
**GERES** **GERESS Array B** 40.05 311 P **P** 04 11 09.0 +0.4
**CESX** **Cesi** 40.17 302 P **P** 04 11 08.9 -0.7
**KHC** **Kasperske Hory** 40.18 312 *e*P **P** 04 11 09.9 +0.3
**KHC** **Kasperske Hory** 40.18 312 ⇑*i*P **P** 04 11 10.0 +0.3
KHC pmax pmax
comp=Z,13nm,1.6s
**BRG** **Berggiesshubel** 40.30 315 *e*P **P** 04 11 12.2 +1.6
BRG Amp 04 11 14.5
comp=Z,3.1nm,1.1s
**LESA** **Schwarzleotal** 40.51 309 *e*P **P** 04 11 12.7 +0.2
comp=Z,11nm,0.9s
**ABTA** **Abfaltersbach** 40.53 308 *e*P **P** 04 11 12.9 +0.3
comp=Z,9.2nm,1.0s
**XAN** **Xi'an** 40.78 72 ⇓P **P** 04 11 14.1 -0.7
XAN pP pP 04 11 17.3 -2.7
XAN pmax pmax
comp=Z,13nm,1.1s
XAN pmax pmax
comp=Z,240nm,4.5s
**CLL** **Collm** 40.98 315 P **P** 04 11 16.4 +0.3
CLL IAmb IAmb 04 11 18.4
comp=Z,9.9nm,1.0s
**CLL** **Collm** 40.98 315 *i* P **P** 04 11 17.4 +1.3
comp=Z,17nm,1.3s
CLL L L 04 31 00.0
comp=Z,100nm,18.5s
**CLL** **Collm** 40.98 315 P **P** 04 11 16.4 +0.3
CLL pmax pmax
comp=Z,10.0nm,1.0s
**BTO** **Baotou** 41.12 61 *e*P **P** 04 11 18.0 +0.4
BTO pP **pP** 04 11 22.2 -0.5
BTO sP **sP** 04 11 25.2 +0.5
BTO S **S** 04 17 29.6 -0.5
BTO SS **SS** 04 20 26.3 -6.4
BTO pmax pmax
comp=Z,22nm,0.6s
BTO pmax pmax
comp=Z,280nm,5.5s
BTO LR LR
comp=Z,360nm,14.4s
BTO LR LR
comp=Z,400nm,14.5s
BTO LR LR
comp=Z,440nm,18.2s
**WTTA** **Wattenberg** 41.19 309 *i* P **P** 04 11 18.1 0.0
comp=Z,18nm,1.0s,SNR=7.5
**WATA** **Walderalm** 41.24 309 *i* P **P** 04 11 18.3 -0.3
comp=Z,20nm,1.2s,SNR=6.7
**SQTA** **Sankt Quirin** 41.47 309 *i* P **P** 04 11 19.6 -0.8
comp=Z,9.4nm,0.9s
**MOTA** **Moosalm** 41.56 309 *i* P **P** 04 11 20.4 -0.8
comp=Z,7.2nm,0.9s
**FETA** **Feichten** 41.78 308 *e*P **P** 04 11 23.0 0.0
comp=Z,15nm,1.0s,SNR=9.9
**MBAR** **Mbarara** 41.78 228 LR LR 04 31 16.4
comp=Z,290nm,18.4s,baz=28,slow=40
**RETA** **Reute** 41.80 309 *i* P **P** 04 11 22.5 -0.6
comp=Z,6.3nm,0.8s,SNR=5.4
**FUORN** **Ofenpass-Fuorn** 42.06 308 P **P** 04 11 23.4 -2.0
**HHC** **Hu-ho-hao-te** 42.28 61 *e*P **P** 04 11 28.4 +1.3
HHC sP sP 04 11 35.0 +0.7
HHC pmax pmax
comp=Z,10.0nm,0.8s
HHC pmax pmax
comp=Z,67nm,4.0s
**DAVOX** **Davos/Dischmat** 42.34 308 P **P** 04 11 27.2 -0.3
comp=Z,4.2nm,0.8s,baz=131,slow=6.6,SNR=9.7
DAVOX LR LR 04 32 56.0
comp=Z,60nm,18.7s,baz=82,slow=42
comp=Z,4.2nm,0.8s
**DAVA** **Damuels** 42.38 309 *i* P **P** 04 11 27.5 -0.4
comp=Z,14nm,0.8s,SNR=7.9
**TATN** **Tataouine** 42.57 287 P **P** 04 11 29.7 +0.2
**STU** **Stuttgart** 42.99 311 P **P** 04 11 33.0 +0.4
STU IAmb IAmb 04 11 40.2
comp=Z,10nm,0.7s
**STU** **Stuttgart** 42.99 311 P **P** 04 11 33.0 +0.4
STU pmax pmax
comp=Z,10.0nm,0.7s
**KEST** **Kesra** 43.04 291 P **P** 04 11 33.6 +0.3
KEST IAmb IAmb 04 11 40.2
comp=Z,8.7nm,0.9s
**KEST** **Kesra** 43.04 291 P **P** 04 11 35.1 +1.8
comp=Z,6.5nm,0.9s,baz=237,slow=6.0,SNR=5.2
KEST LR LR 04 35 54.5
comp=Z,54nm,18.4s,baz=260,slow=45
comp=Z,6.5nm,0.9s
**LYN** **LuoYang** 43.61 70 P **P** 04 11 38.9 +1.1
LYN pmax pmax
comp=Z,29nm,0.8s
LYN LR LR
comp=Z,350nm,16.5s
LYN LR LR
comp=Z,240nm,13.4s
LYN LR LR
comp=Z,330nm,16.8s
**SENIN** **Lac Senin/Sane** 44.09 307 P **P** 04 11 40.4 -1.4
**ARCES** **ARCESS Array B** 44.23 343 P **P** 04 11 42.6 +0.3
ARCES IAmb IAmb 04 11 52.7
comp=Z,16nm,1.2s
**ARCES** **ARCESS Array B** 44.23 343 P **P** 04 11 43.5 +1.1
comp=Z,6.0nm,1.0s,baz=141,slow=5.9,SNR=6.5
ARCES LR LR 04 31 29.1
comp=Z,57nm,21.2s,baz=114,slow=38
comp=Z,6.0nm,1.0s
**ARCES** **ARCESS Array B** 44.23 343 P **P** 04 11 42.6 +0.3
ARCES pmax pmax
comp=Z,16nm,1.2s
**ECH** **Echery** 44.29 310 P **P** 04 11 42.4 -0.7
ECH IAmb IAmb 04 11 43.7
comp=Z,10nm,1.0s
**ECH** **Echery** 44.29 310 P **P** 04 11 42.4 -0.7
ECH pmax pmax
comp=Z,10.0nm,1.0s
**BNI** **Bardonecchia** 44.49 305 P **P** 04 11 44.4 -0.5
BNI IAmb IAmb 04 11 45.4
comp=Z,10nm,0.9s
**BNI** **Bardonecchia** 44.49 305 P **P** 04 11 44.4 -0.5
BNI pmax pmax
comp=Z,10.0nm,0.9s
**NB2** **NORSAR Subarra** 44.74 328 P **P** 04 11 46.0 -0.5
comp=Z,10nm,1.1s,baz=119,slow=7.4
**NOA** **NORSAR Array B** 44.74 328 P **P** 04 11 45.5 -1.0
comp=Z,23nm,0.6s,baz=111,slow=7.9,SNR=9.3
comp=Z,23nm,0.6s
**HNS** **HongShan** 45.00 66 ⇑P **P** 04 11 49.6 +0.7
HNS pmax pmax
comp=Z,9.0nm,1.1s
**BTNL** **Ternell** 45.16 313 *d*P **P** 04 11 49.9 -0.1
**MEM** **Membach** 45.24 313 *d*P **P** 04 11 52.0 +1.4
**XLT** **XiLinHaoTe** 45.53 57 *e*P **P** 04 11 54.4 +1.2
XLT pmax pmax
comp=Z,9.0nm,0.9s
XLT LR LR
comp=Z,270nm,16.8s
XLT LR LR
comp=Z,370nm,14.4s
**BCLA** **Clavier** 45.67 313 *d*P **P** 04 11 54.9 +0.9
**BOD** **Bodaibo** 45.68 37 *e*P **P** 04 11 54.2 +0.2
BOD pmax pmax
comp=Z,12nm,1.8s
**BJT** **Baijiatuau** 45.84 62 P **P** 04 11 54.6 -1.0
BJT IAmb IAmb 04 12 01.7
comp=Z,4.4nm,0.7s
**BJT** **Baijiatuau** 45.84 62 P **P** 04 11 54.6 -1.0
BJT pmax pmax
comp=Z,4.0nm,0.7s
**BMRD** **Maredsous** 46.00 312 *d*P **P** 04 11 56.9 +0.3
**SSB** **Saint Sauveur** 46.00 305 P **P** 04 11 55.4 -1.4
**SSB** **Saint Sauveur** 46.00 305 P **P** 04 11 55.4 -1.4
SSB pmax pmax
comp=Z,12nm,1.0s
**DOU** **Dourbes** 46.09 312 *d*P **P** 04 11 57.9 +0.5
**TIA** **Tai'an** 47.09 67 P **P** 04 12 06.5 +1.1
**HIA** **Hailar** 48.02 49 P **P** 04 12 12.9 +0.4
HIA IAmb IAmb 04 12 19.1
comp=Z,7.0nm,0.8s
**HIA** **Hailar** 48.02 49 P **P** 04 12 12.9 +0.4
HIA pmax pmax
comp=Z,7.0nm,0.8s
**NJ2** **Nanjing** 49.35 72 *e*P **P** 04 12 22.3 -0.6
NJ2 pmax pmax
comp=Z,9.0nm,0.6s
NJ2 pmax pmax
comp=Z,160nm,6.6s
**TAM** **Tamanrasset** 49.51 275 P **P** 04 12 24.4 0.0
TAM IAmb IAmb 04 12 26.1
comp=Z,7.0nm,1.0s
**TAM** **Tamanrasset** 49.51 275 P **P** 04 12 24.4 0.0
TAM pmax pmax
comp=Z,7.0nm,1.0s
**EKA** **Eskdalemuir Ar** 51.08 319 P **P** 04 12 35.5 -0.3
comp=Z,2.2nm,0.8s,baz=103,slow=7.0,SNR=5.8
comp=Z,2.2nm,0.8s
**CN2** **Changchun** 52.29 56 P **P** 04 12 45.1 +0.2
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**ZEA** **Zeya** 52.69 43 *e*P **P** 04 12 49.3 +1.6
ZEA pmax pmax
comp=Z,10.0nm,0.8s
**ESDC** **Sonseca Array** 52.84 299 P **P** 04 12 48.4 -0.7
**ESDC** **Sonseca Array** 52.84 299 P **P** 04 12 48.4 -0.7
comp=Z,2.5nm,0.9s,baz=68,slow=6.8,SNR=13
ESDC LR LR 04 36 33.4
comp=Z,39nm,20.2s,baz=104,slow=38
comp=Z,2.5nm,0.9s
**YAK** **Yakutsk** 54.09 33 LR LR 04 38 07.8
comp=Z,113nm,20.0s,baz=252,slow=38
**YAK** **Yakutsk** 54.09 33 *e*P **P** 04 12 58.8 +1.0
YAK *e* 04 14 02.2
YAK *e*S **S** 04 20 35.7 +2.3
YAK *e**SS **sS** 04 20 42.9 +1.2
YAK *e* 04 22 48.7
YAK *e*SS **SS** 04 24 19.3 +4.8
YAK pmax pmax
comp=Z,24nm,1.2s
YAK pmax pmax
comp=E,6.0nm,1.0s
YAK pmax pmax
comp=N,6.0nm,1.5s
YAK smax smax
comp=N,100nm,3.6s
YAK smax smax
comp=E,75nm,3.2s
**TIXI** **Tiksi** 54.87 21 ⇑*i*P **P** 04 13 03.3 0.0
TIXI pmax pmax
comp=Z,13nm,2.5s
**JMIC** **Jan Mayen** 55.06 338 LR LR 04 38 29.2
comp=Z,86nm,18.4s,baz=86,slow=38
**KSAR** **Wonju Array Be** 55.30 63 P **P** 04 13 06.5 -0.6
**KSAR** **Wonju Array Be** 55.30 63 P **P** 04 13 06.5 -0.6
**KSRS** **Korea Array** 55.33 63 P **P** 04 13 07.0 -0.2
comp=Z,5.0nm,0.7s,baz=276,slow=7.1,SNR=20
KSRS LR LR 04 39 26.9
comp=Z,64nm,19.0s,baz=320,slow=39
comp=Z,5.0nm,0.7s
**KSRS** **Korea Array** 55.33 63 P **P** 04 13 07.0 -0.2
**KLR** **Kul'dur** 55.87 49 P **P** 04 13 11.2 +0.2
comp=Z,5.3nm,0.7s,baz=286,slow=8.6,SNR=9.0
KLR LR LR 04 38 57.2
comp=Z,128nm,19.3s,baz=277,slow=38
comp=Z,5.3nm,0.7s
**TORD** **Torodi Ar. Bea** 56.77 266 P **P** 04 13 16.8 -1.0
comp=Z,17nm,0.9s
comp=Z,17nm,0.9s
**USRK** **Ussuriysk Ar.** 56.88 54 P **P** 04 13 17.6 -0.6
comp=Z,2.6nm,0.7s,baz=282,slow=7.0,SNR=6.6
USRK LR LR 04 40 36.5
comp=Z,239nm,20.2s,baz=271,slow=39
comp=Z,2.6nm,0.7s
**JNU** **Nakatsue** 58.83 67 LR LR 04 43 20.6
comp=Z,72nm,18.8s,baz=302,slow=41
**BORG** **Borgarnes** 59.81 331 LR LR 04 42 05.0
comp=Z,91nm,18.1s,baz=62,slow=39
**TSUM** **Tsumeb** 64.22 226 LR LR 04 44 36.2
comp=Z,117nm,19.0s,baz=148,slow=38
**ASAJ** **Asahikawa** 64.28 52 LR LR 04 45 29.6
comp=Z,119nm,18.4s,baz=331,slow=39
**LBTB** **Lobatse** 64.31 215 LR LR 04 45 24.8
comp=Z,60nm,18.4s,baz=3.5,slow=39
**SEY** **Seymchan** 64.40 30 P **P** 04 14 09.9 +0.7
comp=Z,4.2nm,0.7s,baz=270,slow=9.9,SNR=11
comp=Z,4.2nm,0.7s
**SEY** **Seymchan** 64.40 30 ⇓*i*P **P** 04 14 10.1 +0.9
SEY pmax pmax
comp=Z,6.0nm,0.9s
**DBIC** **Dimbokro** 65.53 263 P **P** 04 14 17.0 -0.3
**DBIC** **Dimbokro** 65.53 263 LR LR 04 44 28.1
comp=Z,149nm,20.6s,baz=28,slow=38
**DBIC** **Dimbokro** 65.53 263 P **P** 04 14 17.0 -0.3
DBIC pmax pmax
comp=Z,40nm,1.5s
**BOSA** **Boshof** 67.48 213 P **P** 04 14 29.7 +0.2
**BOSA** **Boshof** 67.48 213 P **P** 04 14 29.9 +0.4
comp=Z,7.4nm,0.9s,baz=48,slow=6.3,SNR=7.2
BOSA LR LR 04 44 18.8
comp=Z,42nm,18.2s,baz=12,slow=36
comp=Z,7.4nm,0.9s
**BOSA** **Boshof** 67.48 213 P **P** 04 14 29.7 +0.2
BOSA pmax pmax
comp=Z,11nm,1.1s
**BILL** **Bilibino** 67.98 23 *e*P **P** 04 14 33.0 +0.9
BILL *e**PP **pP** 04 14 36.3 -1.1
BILL *e* 04 14 57.3
BILL *e* 04 17 02.4
BILL *e*PPP PPP 04 18 37.5
BILL pmax pmax
comp=Z,4.0nm,0.9s
**SFJD** **Kangerlussuaq** 70.40 337 LR LR 04 47 14.6
comp=Z,70nm,18.9s,baz=42,slow=37
**BBTS** **Babate** 71.85 277 LR LR 04 50 04.1
comp=Z,186nm,18.1s,baz=313,slow=39
**C18K** **Utukok River** 76.80 15 P **P** 04 15 24.9 +0.1
C18K IAmb IAmb 04 15 36.4
comp=Z,9.4nm,1.1s
**D19K** **Kuna River** 77.58 14 P **P** 04 15 28.8 -0.4
**E18K** **Tukpahlearik C** 77.93 15 P **P** 04 15 30.9 -0.1
E18K IAmb IAmb 04 15 36.1
comp=Z,6.9nm,0.8s
**FRB** **Frobisher Bay** 78.25 339 LR LR 04 51 03.8
comp=Z,36nm,18.1s,baz=344,slow=36
**D22K** **Ayikyak River** 78.29 12 P **P** 04 15 34.2 +1.1
D22K IAmb IAmb 04 15 41.0
comp=Z,9.8nm,1.2s
**E21K** **Killik River** 78.44 12 P **P** 04 15 33.4 -0.5
E21K IAmb IAmb 04 15 40.6
comp=Z,4.6nm,1.1s
**F17K** **Baldwin Pennin** 78.58 16 P **P** 04 15 34.8 +0.2
F17K IAmb IAmb 04 15 39.8
comp=Z,7.5nm,0.9s
**E19K** **Redstone River** 78.64 14 P **P** 04 15 34.8 -0.1
**D25K** **Kavik River** 78.89 9 P **P** 04 15 37.0 +0.6
D25K IAmb IAmb 04 15 49.4
comp=Z,5.2nm,1.1s
**TOLK** **Toolik Lake Re** 79.03 11 P **P** 04 15 37.5 +0.4
TOLK IAmb IAmb 04 15 43.4
comp=Z,4.8nm,0.9s
**F20K** **Avaraart Lake** 79.29 14 P **P** 04 15 39.2 +0.7
**F21K** **Alatna River** 79.59 13 P **P** 04 15 40.5 +0.3
**E24K** **Your Creek** 79.71 11 P **P** 04 15 41.5 +0.6
**G19K** **Purcell Mounta** 79.78 15 P **P** 04 15 41.8 +0.6
G19K IAmb IAmb 04 15 48.7
comp=Z,4.5nm,0.8s
**IMAR** **Indian Mountai** 80.62 14 P **P** 04 15 45.2 -0.5
**BMAR** **Burnt Mountain** 80.91 10 P **P** 04 15 48.4 +1.1
**MDM** **Murphy Dome** 82.59 12 P **P** 04 15 56.6 +0.4
MDM IAmb IAmb 04 16 09.1
comp=Z,7.5nm,1.2s
**BPAW** **Bear Paw Mtn.** 82.84 13 P **P** 04 15 56.8 -0.7
BPAW IAmb IAmb 04 16 06.6
comp=Z,4.9nm,1.2s
**ILAR** **Eielson Array** 83.00 12 P **P** 04 15 57.8 -0.5
comp=Z,0.3nm,0.5s,baz=330,slow=5.1,SNR=6.5
ILAR LR LR 05 00 02.5
comp=Z,25nm,18.9s,baz=318,slow=41
comp=Z,0.3nm,0.5s
**I28M** **Miner Creek** 83.41 9 P **P** 04 16 01.0 +0.5
**J26L** **Joseph Creek** 83.79 10 P **P** 04 16 02.7 +0.2
J26L IAmb IAmb 04 16 09.1
comp=Z,2.9nm,0.8s
**I30M** **Mount Dempster** 84.05 7 P **P** 04 16 04.2 +0.3
I30M IAmb IAmb 04 16 16.1
comp=Z,3.2nm,0.8s
**SCHQ** **Schefferville** 84.14 333 LR LR 04 55 39.7
comp=Z,24nm,18.1s,baz=177,slow=37
**WRA** **Warramunga Arr** 86.57 115 P **P** 04 16 16.9 -0.1
comp=Z,0.8nm,0.6s,baz=318,slow=4.3,SNR=14
comp=Z,0.8nm,0.6s

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|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **86.57** | **115** | *ce*P | | **P** | **04 16 15.3** | **-1.7** |
| WRA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.63** | **358** | LR | LR | | 05 01 54.7 | | |
| | comp=Z,39nm,18.1s,baz=325,slow=40 | | | | | | | | |
| **ASAR** | **Alice Springs** | **88.30** | **119** | P | | **P** | **04 16 25.6** | **+0.3** |
| | comp=Z,2.9nm,0.7s,baz=306,slow=5.1,SNR=21 | | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | | |
| **SADO** | **Sadowa** | **96.95** | **332** | LR | LR | | 05 02 26.5 | | |
| | comp=Z,39nm,18.4s,baz=196,slow=36 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **97.32** | **345** | LR | LR | | 05 04 47.0 | | |
| | comp=Z,42nm,19.0s,baz=358,slow=38 | | | | | | | | |
| **RCBR** | **Riachuelo** | **98.56** | **268** | LR | LR | | 05 02 26.5 | | |
| | comp=Z,26nm,19.6s,baz=152,slow=36 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **119.02** | **344** | PKP | | **PKPdf** | **04 22 22.0** | **-0.8** |
| | comp=Z,0.3nm,0.6s,baz=172,slow=0.6,SNR=2.5 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **119.02** | **344** | PKIKP | | **PKPdf** | **04 22 22.0** | **-0.8** |
| **QSPA** | **South Pole Qui** | **119.95** | **180** | PKP | | **PKPdf** | **04 22 22.0** | **-1.2** |
| | comp=Z,1.4nm,0.7s,baz=243,slow=1.5,SNR=9.3 | | | | | | | | |

*NEIC* ***11*** *04:05:28.9±2.3, 48.7°N±0.2°×154.6°E±0.2, h16km±7km, mb4.2/13, Error ellipse: s-maj=30.8km s-min=11.2km az=145.0*

*KRSC* ***11*** *04:05:30.0±1.2, 48.51°N×156.29°E, h7km±16km, Ml4.2*

*IDC* ***11*** *04:05:33.2±6.4, 48.49°N×155.04°E, h54km±61km, mb3.6/6, mbtmp3.9/7, ML3.4/1, MS2.8/1, Error ellipse: s-maj=50.7km s-min=32.8km az=161.0*

**ISC 11 04:05:30.6±0.9, 48.5N±0.1°×154.9E±0.1°, h35km, n46, σ1$70/48, mb4.1/13, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **3.93** | **30** | *e*P | | **Pn** | **04 06 27.3** | **-1.0** |
| KDTR | | | | *e*S | | **Sn** | **04 07 09.7** | **-3.5** |
| **ASAK** | **Asacha** | **4.38** | **25** | *e*P | | **Pn** | **04 06 35.9** | **+1.3** |
| **MTVR** | **Mutnovka** | **4.55** | **26** | *e*P | | **Pn** | **04 06 37.6** | **+0.7** |
| MTVR | | | | *e*S | | **Sn** | **04 07 28.4** | **-0.2** |
| **GRL** | **Gorelyy** | **4.58** | **25** | *e*P | | **Pn** | **04 06 38.7** | **+1.4** |
| **APC** | **Apacha** | **4.71** | **17** | *e*P | | **Pn** | **04 06 42.2** | **+3.2** |
| **PET** | **Petropavlovsk** | **5.16** | **26** | Pn | | **Pn** | **04 06 42.5** | **-2.7** |
| **PET** | **Petropavlovsk** | **5.16** | **26** | *e*S | | **Sn** | **04 07 43.5** | **+0.1** |
| **UGLR** | **Uglovaya** | **5.37** | **26** | *e*P | | **Pn** | **04 06 49.4** | **+1.1** |
| **KOK** | **Koryaka** | **5.39** | **24** | *e*P | | **Pn** | **04 06 50.0** | **+1.5** |
| **AVH** | **Avacha** | **5.40** | **25** | *e*P | | **Pn** | **04 06 50.6** | **+2.1** |
| **SMAR** | **Somma** | **5.41** | **26** | *e*P | | **Pn** | **04 06 50.6** | **+1.8** |
| **KRX** | **Arik** | **5.46** | **24** | *e*P | | **Pn** | **04 06 51.2** | **+1.8** |
| **GNL** | **Ganaly** | **5.59** | **19** | *e*P | | **Pn** | **04 06 53.9** | **+2.6** |
| **SPN** | **Mys Shipunski** | **5.67** | **33** | *e*P | | **Pn** | **04 06 51.5** | **-0.7** |
| SPN | | | | *e*S | | **Sn** | **04 07 53.6** | **-2.5** |
| **TUMR** | **Tumrok** | **7.57** | **23** | *e*P | | **Pn** | **04 07 20.3** | **+1.9** |
| **YSS** | **Yuzh-Sakhalins** | **8.34** | **264** | Pn | | **Pn** | **04 07 24.6** | **-4.2** |
| **JKA** | **Kamikawa-asahi** | **9.56** | **248** | Pn | | **Pn** | **04 07 42.9** | **-2.7** |
| **ASAJ** | **Asahikawa** | **9.56** | **248** | P | | Pn | 04 07 50.4 | +4.8 |
| | 0.4nm,0.3s,baz=90,slow=20,SNR=3.3 | | | | | | | |
| | 13nm,0.8s | | | | | | | |
| **ERM** | **Erimo** | **10.49** | **237** | Pn | | **Pn** | **04 07 57.5** | **-0.7** |
| **JTM** | **Tenmabayashi** | **12.48** | **237** | Pn | | **Pn** | **04 08 23.9** | **-1.6** |
| **KLR** | **Kul'dur** | **15.27** | **282** | P | | **P** | **04 09 09.5** | **+1.7** |
| | 1.0nm,0.3s,baz=80,slow=5.6,SNR=4.4 | | | | | | | |
| KLR | | | | LR | | LR | 04 15 17.4 | |
| | comp=Z,33nm,19.1s,baz=240,slow=38 | | | | | | | |
| **KSRS** | **Korea Array** | **22.49** | **251** | P | | **P** | **04 10 28.0** | **+1.2** |
| | 2.0nm,0.7s,baz=49,slow=9.6,SNR=7.6 | | | | | | | |
| | 2.0nm,0.7s | | | | | | | |
| **F17K** | **Baldwin Pennin** | **28.81** | **35** | P | | **P** | **04 11 24.8** | **0.0** |
| F17K | | | | IAmb | | IAmb | 04 11 38.1 | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| **G18K** | **Tagagawik** | **29.68** | **37** | P | | **P** | **04 11 33.2** | **+0.6** |
| G18K | | | | IAmb | | IAmb | 04 11 44.3 | |
| | comp=Z,5.3nm,1.5s | | | | | | | |
| **H19K** | **Roundabout Mou** | **30.50** | **38** | P | | **P** | **04 11 39.5** | **-0.3** |
| **J19K** | **Poorman** | **30.63** | **41** | P | | **P** | **04 11 40.9** | **-0.1** |
| J19K | | | | IAmb | | IAmb | 04 12 16.4 | |
| | comp=Z,3.8nm,1.2s | | | | | | | |
| **IMAR** | **Indian Mountai** | **31.68** | **37** | P | | **P** | **04 11 50.1** | **-0.1** |
| **B21K** | **Ikpikpuk River** | **32.08** | **31** | P | | **P** | **04 11 54.9** | **+1.3** |
| B21K | | | | IAmb | | IAmb | 04 11 56.5 | |
| | comp=Z,6.1nm,1.2s | | | | | | | |
| **D22K** | **Ayikyak River** | **32.58** | **32** | P | | **P** | **04 11 58.3** | **+0.2** |
| D22K | | | | IAmb | | IAmb | 04 12 01.5 | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **E24K** | **Your Creek** | **33.99** | **34** | P | | **P** | **04 12 11.0** | **+0.5** |
| **F24K** | **Squaw Lake** | **34.16** | **35** | P | | **P** | **04 12 12.8** | **+0.9** |
| **G24K** | **Hadweenzic Riv** | **34.27** | **37** | P | | **P** | **04 12 13.6** | **+0.8** |
| G24K | | | | IAmb | | IAmb | 04 12 15.0 | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **D25K** | **Kavik River** | **34.88** | **32** | P | | **P** | **04 12 19.0** | **+0.8** |
| D25K | | | | IAmb | | IAmb | 04 12 26.8 | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **35.43** | **35** | P | | **P** | **04 12 24.3** | **+1.5** |
| **MK31** | **Makanchi Array** | **47.26** | **297** | P | | **P** | **04 13 57.6** | **-2.5** |
| **MKAR** | **Makanchi Array** | **47.26** | **297** | P | | **P** | **04 13 57.2** | **-2.9** |
| **MKAR** | **Makanchi Array** | **47.26** | **297** | P | | **P** | **04 14 02.6** | **+2.6** |
| | comp=Z,0.5nm,0.7s,baz=69,slow=7.9,SNR=3.7 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **53.95** | **257** | P | | **P** | **04 14 52.2** | **+1.4** |
| | comp=Z,1.1nm,0.5s,baz=39,slow=7.5,SNR=4.8 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **58.28** | **310** | P | | **P** | **04 15 20.5** | **-0.8** |
| **SUMG** | **Summit** | **58.92** | **5** | P | | **P** | **04 15 26.4** | **+0.5** |
| **FINES** | **FINESS Array B** | **63.02** | **335** | P | | **P** | **04 15 53.6** | **+0.2** |
| **FINES** | **FINESS Array B** | **63.02** | **335** | P | | **P** | **04 15 53.1** | **-0.3** |
| | comp=Z,1.6nm,0.7s,baz=27,slow=6.8,SNR=7.2 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **74.97** | **347** | P | | **P** | **04 17 08.2** | **+0.5** |
| | comp=Z,1.0nm,0.5s,baz=22,slow=5.6,SNR=11 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **75.61** | **62** | P | | **P** | **04 17 12.0** | **+0.1** |
| **TXAR** | **Lajitas Array** | **75.61** | **62** | P | | **P** | **04 17 12.2** | **+0.3** |
| | comp=Z,0.4nm,0.7s,baz=294,slow=4.4,SNR=4.9 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **80.61** | **33** | P | | **P** | **04 17 39.5** | **+0.2** |

**KRSC 11 04:09:15.7±1.6, 48.46N×156.33E, h6km±25km, Ml3.9, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **3.53** | **18** | *e*P | | Pn | 04 10 13.9 | +3.0 |
| KDTR | | | | *e*S | | Sn | 04 10 57.1 | +4.1 |
| **ASAK** | **Asacha** | **4.05** | **14** | *e*P | | Pn | 04 10 21.3 | +3.1 |
| **MTVR** | **Mutnovka** | **4.20** | **16** | *e*P | | Pn | 04 10 24.1 | +3.9 |
| **GRL** | **Gorelyy** | **4.24** | **15** | *e*P | | Pn | 04 10 25.3 | +4.5 |
| **UGLR** | **Uglovaya** | **5.01** | **17** | *e*P | | Pn | 04 10 35.7 | +4.4 |
| **KOK** | **Koryaka** | **5.05** | **16** | *e*P | | Pn | 04 10 36.9 | +5.0 |
| **SMAR** | **Somma** | **5.05** | **17** | *e*P | | Pn | 04 10 35.4 | +3.3 |
| **KRER** | **Koryakskii** | **5.08** | **17** | *e*P | | Pn | 04 10 37.7 | +5.2 |
| **KRX** | **Arik** | **5.12** | **16** | *e*P | | Pn | 04 10 37.4 | +4.5 |
| **GNL** | **Ganaly** | **5.34** | **10** | *e*P | | Pn | 04 10 40.4 | +4.5 |
| **TUMR** | **Tumrok** | **7.23** | **18** | *e*P | | Pn | 04 11 06.4 | +4.6 |

*KRSC* ***11*** *04:35:00.0±2.2, 48.34°N×155.07°E, h60km±33km, Ml4.3*

*SKHL* ***11*** *04:35:02.8±0.3, 48.30°N×155.00°E, h44km±4km, mb4.5/5*

*IDC* ***11*** *04:35:09.0±5.1, 48.37°N×154.73°E, h90km±47km, mb3.3/7, mbtmp3.7/8, Error ellipse: s-maj=33.4km s-min=22.6km az=131.0*

**ISC 11 04:35:03.5±0.8, 48.3N±0.1°×155.0E±0.1°, h43km, n34, σ1$45/38, mb3.6/7, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.45** | **16** | *e*P | | **Pn** | **04 35 40.2** | **-0.7** |
| SKR | | | | *e*S | | **Sn** | **04 36 07.5** | **-2.1** |
| **SKR** | **Severo-Kuril's** | **2.45** | **16** | *e*P | | **Pn** | **04 35 40.0** | **-0.9** |
| SKR | | | | AMB | | AMB | 04 35 44.8 | |
| | 50nm,0.5s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **04 36 07.7** | **-1.9** |
| SKR | | | | A | | A | 04 36 11.8 | |
| | 200nm,0.2s | | | | | | | |
| SKR | | | | A | | A | 04 36 11.8 | |
| | 170nm,0.2s | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.99** | **28** | *e*P | | **Pn** | **04 36 01.3** | **-0.7** |
| KDTR | | | | *e*S | | **Sn** | **04 36 45.8** | **-1.7** |
| **KDTR** | **Khodutka, Kamc** | **3.99** | **28** | *e*P | | **Pn** | **04 36 01.5** | **-0.5** |
| KDTR | | | | AMB | | AMB | 04 36 02.6 | |
| | 60nm,0.5s | | | | | | | |
| KDTR | | | | *e*S | | **Sn** | **04 36 45.7** | **-1.7** |
| KDTR | | | | A | | A | 04 36 51.1 | |
| | 40nm,0.3s | | | | | | | |
| KDTR | | | | A | | A | 04 36 51.1 | |
| | 90nm,0.3s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ASAK** | **Asacha** | **4.45** | **23** | *e*P | | **Pn** | **04 36 08.9** | **+0.5** |
| **MTVR** | **Mutnovka** | **4.61** | **25** | *e*P | | **Pn** | **04 36 10.9** | **+0.2** |
| **GRL** | **Gorelyy** | **4.65** | **24** | *e*P | | **Pn** | **04 36 11.8** | **+0.6** |
| **KRMR** | **Karymshinskiy** | **4.91** | **22** | *e*P | | **Pn** | **04 36 16.2** | **+1.6** |
| **DALK** | **Dalny** | **5.26** | **25** | *e*P | | **Pn** | **04 36 18.9** | **-0.5** |
| **UGLR** | **Uglovaya** | **5.44** | **25** | *e*P | | **Pn** | **04 36 22.5** | **+0.5** |
| **KOK** | **Koryaka** | **5.46** | **23** | *e*P | | **Pn** | **04 36 23.5** | **+1.2** |
| **AVH** | **Avacha** | **5.46** | **24** | *e*P | | **Pn** | **04 36 23.3** | **+1.0** |
| **SMAR** | **Somma** | **5.48** | **24** | *e*P | | **Pn** | **04 36 23.4** | **+0.7** |
| **KRER** | **Koryakskii** | **5.50** | **24** | *e*P | | **Pn** | **04 36 24.2** | **+1.3** |
| **KRX** | **Arik** | **5.53** | **23** | *e*P | | **Pn** | **04 36 24.3** | **+1.1** |
| **GNL** | **Ganaly** | **5.67** | **18** | *e*P | | **Pn** | **04 36 26.3** | **+1.2** |
| **SPN** | **Mys Shipunski** | **5.72** | **32** | *e*P | | **Pn** | **04 36 24.8** | **-1.0** |
| SPN | | | | *e*S | | **Sn** | **04 37 28.4** | **-1.7** |
| **KUR** | **Kuril'sk** | **5.82** | **240** | *e*P | | **Pn** | **04 36 28.3** | **+1.2** |
| KUR | | | | AMB | | AMB | 04 36 30.2 | |
| | 30nm,0.6s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **04 37 30.9** | **-1.6** |
| KUR | | | | A | | A | 04 37 40.8 | |
| | 40nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 04 37 40.8 | |
| | 30nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **7.24** | **235** | *e*P | | **Pn** | **04 36 44.0** | **-2.7** |
| **SHO** | **Shikotan** | **7.24** | **235** | *e*P | | **Pn** | **04 36 46.9** | **+0.2** |
| SHO | | | | AMB | | AMB | 04 36 50.4 | |
| | 20nm,0.6s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **04 38 04.3** | **-3.3** |
| SHO | | | | A | | A | 04 38 10.0 | |
| | 30nm,0.5s | | | | | | | |
| SHO | | | | A | | A | 04 38 10.0 | |
| | 30nm,0.5s | | | | | | | |
| **TUMR** | **Tumrok** | **7.64** | **23** | *e*P | | **Pn** | **04 36 54.0** | **+1.8** |
| **ASAJ** | **Asahikawa** | **9.60** | **249** | P | | **Pn** | **04 37 21.9** | **+2.9** |
| | 12nm,0.6s,baz=73,slow=14,SNR=7.9 | | | | | | | |
| **KLR** | **Kul'dur** | **15.37** | **282** | P | | **P** | **04 38 41.6** | **+0.4** |
| | 1.3nm,0.5s,baz=64,slow=12,SNR=4.2 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **16.45** | **264** | P | | **P** | **04 38 55.0** | **+1.9** |
| | 2.7nm,0.6s,baz=60,slow=12,SNR=7.0 | | | | | | | |
| **KSRS** | **Korea Array** | **22.53** | **251** | P | | **P** | **04 39 59.6** | **+0.2** |
| | 1.4nm,0.6s,baz=46,slow=11,SNR=3.4 | | | | | | | |
| | 1.4nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.38** | **297** | P | | **P** | **04 43 31.7** | **-1.4** |
| | 0.2nm,0.5s,baz=64,slow=5.4,SNR=2.4 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **62.77** | **56** | P | | **P** | **04 45 25.7** | **+1.3** |
| | 0.3nm,0.8s,baz=273,slow=5.0,SNR=4.0 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **70.45** | **201** | P | | **P** | **04 46 13.1** | **-0.1** |
| | 1.0nm,0.8s,baz=21,slow=6.5,SNR=5.0 | | | | | | | |
| | 1.0nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **74.14** | **200** | P | | **P** | **04 46 35.5** | **+0.3** |
| | 0.5nm,0.7s,baz=16,slow=5.8,SNR=5.2 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **75.09** | **347** | P | | **P** | **04 46 40.6** | **+0.2** |
| | 0.6nm,0.5s,baz=26,slow=4.8,SNR=5.6 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **75.59** | **62** | P | | **P** | **04 46 45.0** | **+1.2** |
| | 0.7nm,0.6s,baz=299,slow=4.4,SNR=13 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **137.45** | **90** | T | | T | 07 27 33.1 | |
| | baz=310,slow=77,SNR=22 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **137.47** | **90** | T | | T | 07 27 34.6 | |
| | baz=310,slow=77,SNR=26 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **137.47** | **90** | T | | T | 07 27 35.7 | |
| | baz=310,slow=77,SNR=26 | | | | | | | |

*IDC* ***11*** *04:50:36.9±1.6, 37.07°N×141.35E, h0km, mb3.4/4, mbtmp3.3/5, ML2.0/1, Error ellipse: s-maj=29.6km s-min=27.2km az=132.0*

*NIED* ***11*** *04:50:39.6, 37.18°N×141.21E, h21km, MW3.3, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr=-0.69; Mθθ 0.18; Mϕϕ 0.51; Mrθ -0.62; Mθϕ 0.66; Mϕr-0.29; Fault plane solution: Mo 1.12000×10¹⁴ NP1:ϕs 59.00000°, δ 66.00000°, λ -67.00000°. NP2:ϕs 192.00000°, δ 33.00000°, λ -132.00000°.*

*JMA* ***11*** *04:50:39.6±0.1, 37.2°N±0.2°×141.2E±0.5, h21km, MV3.5/40, E OFF FUKUSHIMA PREF*

**ISC 11 04:50:38.4±2.5, 37.15N±0.05°×141.27E±0.09, h10km±14km, n13, σ0$66/22, mb3.3/4, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JFK** | **Kawauchi** | **0.38** | **304** | *i* P | | **Pb** | **04 50 46.5** | **-0.8** |
| JFK | | | | S | | **Sg** | **04 50 51.4** | **+0.3** |
| **ONAJ** | **Iwakimizuishiy** | **0.38** | **262** | *i* P | | **Pb** | **04 50 46.7** | **-0.6** |
| ONAJ | | | | S | | **Sg** | **04 50 51.8** | **+0.8** |
| **JFFD** | **Fukushimafurud** | **0.57** | **264** | *i* P | | **Pb** | **04 50 50.0** | **-0.5** |
| JFFD | | | | S | | **Sg** | **04 50 57.4** | **+0.4** |
| **JMST** | **Minamisoumatoc** | **0.65** | **332** | P | | **Pb** | **04 50 51.1** | **-0.7** |
| JMST | | | | S | | **Sg** | **04 50 59.6** | **+0.2** |
| **JHO** | **Hitachi** | **0.78** | **226** | P | | **Pb** | **04 50 53.3** | **-0.7** |
| JHO | | | | S | | **Sg** | **04 51 03.5** | **-0.1** |
| **JMM** | **Marumori** | **0.81** | **332** | *i* P | | **Pb** | **04 50 53.8** | **-0.8** |
| JMM | | | | S | | **Sg** | **04 51 04.2** | **-0.3** |
| **JOTO** | **OTAMA OYAMA** | **0.85** | **299** | *i* P | | **Pb** | **04 50 55.0** | **-0.3** |
| JOTO | | | | S | | **Sg** | **04 51 05.9** | **0.0** |
| **JSB** | **Shiboa** | **1.10** | **261** | P | | **Pn** | **04 50 59.9** | **+0.1** |
| JSB | | | | S | | **Sb** | **04 51 14.3** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **2.53** | **257** | Pn | | **Pn** | **04 51 20.6** | **+1.1** |
| | 0.3nm,0.3s,baz=75,slow=15,SNR=6.8 | | | | | | | |
| MJAR | | | | Sn | | **Sb** | **04 51 54.0** | **-1.1** |
| | 1.0nm,0.3s,baz=79,slow=30,SNR=6.7 | | | | | | | |
| | 2.3nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **27.63** | **304** | P | | **P** | **04 56 26.5** | **+0.4** |
| | 0.3nm,0.6s,baz=95,slow=7.5,SNR=2.4 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.96** | **302** | P | | **P** | **04 58 45.3** | **-0.3** |
| | 0.4nm,0.7s,baz=80,slow=8.7,SNR=3.8 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **49.45** | **32** | P | | **P** | **04 59 29.3** | **+1.0** |
| | 0.2nm,0.6s,baz=262,slow=6.3,SNR=2.5 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.16** | **188** | P | | **P** | **05 00 24.9** | **-0.6** |
| | 0.6nm,0.9s,baz=4.8,slow=7.3,SNR=3.0 | | | | | | | |
| | 0.6nm,0.9s | | | | | | | |

*LDG* ***11*** *04:52:10.2±0.1, 46.30°N×12.99E, h10km, Ml2.3/8, Error ellipse: s-maj=2.0km s-min=1.3km az=7.0*

*ROM* ***11*** *04:52:10.3±0.1, 46.330°N±0.004°×13.030E±0.004, h11km, ML2.7/14, Error ellipse: s-maj=0.4km s-min=0.1km az=32.0*

*VIE* ***11*** *04:52:10.7±0.2, 46.34°N×13.03E, h12km, mb2.0/20, ml2.7/20, Error ellipse: s-maj=1.7km s-min=0.9km az=31.0*

*PRU* ***11*** *04:52:14.8, 46.47°N×12.90E, h10km*

**ISC 11 04:52:10.1±0.7, 46.32N±0.01°×12.98E±0.01, h17km±3km, n99, σ1$66/174, 7C-8D, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MPRI** | **Monte Prat** | **0.08** | **177** | *e*Pg | | **Pg** | **04 52 13.5** | **0.0** |
| MPRI | | | | *e*Sg | | **Sg** | **04 52 15.4** | **-0.5** |
| **MPRI** | **Monte Prat** | **0.08** | **177** | P | | **Pg** | **04 52 13.5** | **0.0** |
| **BOO** | **Bordano** | **0.08** | **90** | *i* Pg | | **Pg** | **04 52 12.8** | **-0.7** |
| BOO | | | | *i* Sg | | **Sg** | **04 52 14.2** | **-1.7** |
| **BOO** | **Bordano** | **0.08** | **90** | P | | **Pg** | **04 52 12.8** | **-0.7** |
| **DST2** | **Trieste** | **0.09** | **208** | ↓P | | **Pb** | **04 52 13.8** | **+0.3** |
| DST2 | | | | S | | **Sg** | **04 52 16.2** | **+0.4** |
| DST2 | | | | AML | | AML | | |
| | comp=E,8965μm,0.2s | | | | | | | |
| DST2 | | | | AML | | AML | | |
| | comp=N,11340μm,0.2s | | | | | | | |
| **FUSE** | **Fusea** | **0.10** | **8** | ↓*e*Pg | | **Pg** | **04 52 13.3** | **-0.4** |
| FUSE | | | | *e*Sg | | **Sg** | **04 52 15.0** | **-1.1** |
| **FUSE** | **Fusea** | **0.10** | **8** | P | | **Pg** | **04 52 13.2** | **-0.4** |
| **GEPF** | **Gemona** | **0.12** | **112** | ↑↑P | | **Pg** | **04 52 13.4** | **-0.4** |
| GEPF | | | | S | | **Sg** | **04 52 15.3** | **-1.0** |
| GEPF | | | | AML | | AML | | |
| | comp=N,9680μm,0.2s | | | | | | | |
| GEPF | | | | AML | | AML | | |
| | comp=E,7215μm,0.3s | | | | | | | |
| **BUA** | **Buia** | **0.14** | **136** | *e*Pg | | **Pg** | **04 52 13.9** | **-0.2** |
| BUA | | | | *e*Sg | | **Sg** | **04 52 16.4** | **-0.5** |
| **CLUD** | **Cludinico** | **0.15** | **333** | ↓*e*Pg | | **Pg** | **04 52 14.5** | **+0.1** |
| CLUD | | | | *e*Sg | | **Sg** | **04 52 17.4** | **+0.1** |
| **CLUD** | **Cludinico** | **0.15** | **333** | P | | **Pg** | **04 52 14.5** | **+0.1** |
| CLUD | | | | S | | **Sg** | **04 52 17.6** | **+0.3** |
| **STAL** | **STALIGIAL** | **0.20** | **252** | P | | **Pg** | **04 52 15.5** | **+0.5** |
| STAL | | | | S | | **Sg** | **04 52 19.3** | **+1.1** |
| STAL | | | | AML | | AML | | |
| | comp=E,2330μm,0.2s | | | | | | | |
| STAL | | | | AML | | AML | | |
| | comp=E,1415μm,1.1s | | | | | | | |
| STAL | | | | AML | | AML | | |
| | comp=N,1655μm,0.2s | | | | | | | |
| STAL | | | | AML | | AML | | |
| | comp=N,3320μm,0.2s | | | | | | | |
| STAL | | | | AML | | AML | | |
| | comp=E,2330μm,1.8s | | | | | | | |
| STAL | | | | AML | | AML | | |
| | comp=E,1415μm,0.9s | | | | | | | |
| **BAD** | **Bernadia** | **0.20** | **115** | ↑*e*Pg | | **Pg** | **04 52 14.6** | **-0.4** |
| BAD | | | | *e*Sg | | **Sg** | **04 52 17.7** | **-0.7** |
| **BAD** | **Bernadia** | **0.20** | **115** | P | | **Pg** | **04 52 14.6** | **-0.4** |
| BAD | | | | S | | **Sg** | **04 52 17.8** | **-0.5** |
| **VINO** | **Villanova** | **0.22** | **107** | ↑*e*Pg | | **Pg** | **04 52 14.7** | **-0.5** |
| VINO | | | | *e*Sg | | **Sg** | **04 52 17.9** | **-0.9** |
| **VINO** | **Villanova** | **0.22** | **107** | ↑↑P | | **Pg** | **04 52 14.7** | **-0.5** |
| VINO | | | | S | | **Sg** | **04 52 18.4** | **-0.4** |
| VINO | | | | AML | | AML | | |
| | comp=N,3470μm,0.8s | | | | | | | |
| VINO | | | | AML | | AML | | |
| | comp=E,2550μm,0.2s | | | | | | | |
| **ZOU** | **Zoufplan** | **0.24** | **359** | ↓*e*Pg | | **Pg** | **04 52 15.8** | **+0.1** |
| ZOU | | | | *e*Sg | | **Sg** | **04 52 19.5** | **0.0** |
| **ZOU** | **Zoufplan** | **0.24** | **359** | P | | **Pg** | **04 52 15.8** | **+0.1** |
| **PLRO** | **Paularo** | **0.26** | **27** | ↓*e*Pg | | **Pg** | **04 52 15.8** | **-0.2** |
| PLRO | | | | *e*Sg | | **Sg** | **04 52 19.4** | **-0.6** |
| **PLRO** | **Paularo** | **0.26** | **27** | P | | **Pg** | **04 52 15.7** | **-0.2** |
| **CSMI** | **Casera Mimoias** | **0.30** | **310** | *e*Pg | | **Pg** | **04 52 17.1** | **+0.5** |
| **FVI** | **Forni Avoltri** | **0.31** | **333** | ↓P | | **Pg** | **04 52 17.1** | **+0.3** |
| FVI | | | | S | | **Sg** | **04 52 22.1** | **+0.7** |
| FVI | | | | AML | | AML | | |
| | comp=E,2080μm,0.6s | | | | | | | |
| FVI | | | | AML | | AML | | |
| | comp=N,3350μm,0.2s | | | | | | | |
| **COLI** | **Coloredo** | **0.33** | **124** | ↓*e*Pg | | **Pg** | **04 52 17.1** | **0.0** |
| COLI | | | | *e*Sg | | **Sg** | **04 52 21.7** | **-0.2** |
| **ROBS** | **Robic** | **0.37** | **101** | *i* Pg | | **Pg** | **04 52 17.1** | **-0.7** |
| ROBS | | | | *i* Sg | | **Sg** | **04 52 22.0** | **-1.0** |
| ROBS | | | | IAML | | | 04 52 24.8 | |
| | comp=Z,54nm,0.1s | | | | | | | |
| **CIMO** | **Cimolais** | **0.38** | **269** | ↑*e*Pg | | **Pg** | **04 52 18.2** | **+0.3** |
| CIMO | | | | *e*Sg | | **Sg** | **04 52 24.3** | **+1.1** |
| **CIMO** | **Cimolais** | **0.38** | **269** | P | | **Pg** | **04 52 18.2** | **+0.3** |
| CIMO | | | | S | | **Sg** | **04 52 24.5** | **+1.3** |
| **TLI** | **Talmassons** | **0.41** | **168** | *e*Pg | | **Pg** | **04 52 18.8** | **+0.4** |
| **LSR** | **Lussari** | **0.41** | **67** | ↓*e*Pg | | **Pg** | **04 52 18.0** | **-0.6** |
| LSR | | | | *e*Sg | | **Sb** | **04 52 24.1** | **-0.9** |
| **ACOM** | **Acomizza, Ital** | **0.43** | **58** | *e*Pg | | **Pg** | **04 52 18.5** | **-0.5** |
| ACOM | | | | *e*Sg | | **Sb** | **04 52 24.7** | **-0.9** |
| **ACOM** | **Acomizza, Ital** | **0.43** | **58** | P | | **Pg** | **04 52 18.7** | **-0.3** |
| **POLC** | **Polcenigo** | **0.45** | **229** | P | | **Pg** | **04 52 19.7** | **+0.6** |
| POLC | | | | AML | | AML | | |
| | comp=E,714μm,0.4s | | | | | | | |
| POLC | | | | AML | | AML | | |
| | comp=N,756μm,0.3s | | | | | | | |
| **CSO** | **Casso** | **0.46** | **264** | *e*Pg | | **Pg** | **04 52 20.1** | **+0.8** |
| **APGO** | **Alpago** | **0.46** | **249** | ↓*e*Pg | | **Pg** | **04 52 20.2** | **+0.8** |
| **DRE** | **Drenchia** | **0.48** | **107** | *e*Pg | | **Pg** | **04 52 19.3** | **-0.5** |
| DRE | | | | *e*Sg | | **Sb** | **04 52 26.4** | **-0.5** |
| **DRE** | **Drenchia** | **0.48** | **107** | P | | **Pg** | **04 52 19.3** | **-0.5** |
| **CAE** | **Caneva** | **0.49** | **231** | *e*Pg | | **Pg** | **04 52 20.8** | **+0.8** |
| **CAE** | **Caneva** | **0.49** | **231** | P | | **Pg** | **04 52 21.0** | **+1.0** |
| **CADS** | **Cadrg** | **0.53** | **100** | *i* Pg | | **Pg** | **04 52 19.8** | **-1.0** |
| CADS | | | | *i* Sg | | **Sb** | **04 52 27.8** | **-0.5** |
| CADS | | | | IAML | | | 04 52 29.3 | |
| | comp=Z,61nm,0.1s | | | | | | | |
| **FRE8** | **Fregona** | **0.53** | **235** | P | | **Pb** | **04 52 21.8** | **+0.9** |
| **ABTA** | **Abfaltersbach** | **0.54** | **323** | *e*Pg | | **Pg** | **04 52 21.4** | **+0.6** |
| | comp=Z,7.2nm,0.1s,SNR=24 | | | | | | | |
| ABTA | | | | *i* Sg | | **Sg** | **04 52 29.1** | **+1.0** |
| | comp=Z,23nm,0.1s | | | | | | | |
| **SABO** | **M.te Sabotino** | **0.55** | **128** | *e*Pg | | **Pb** | **04 52 21.1** | **-0.1** |
| **SABO** | **M.te Sabotino** | **0.55** | **128** | P | | **Pg** | **04 52 21.0** | **0.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MOA** | **Molln** | **1.76** | **29** | *e*Pg | | **Pg** | **04 52 43.3** | **-0.7** |
| | comp=Z,1.2nm,0.2s,SNR=12 | | | | | | | |
| MOA | | | | *e*Sg | | **Sg** | **04 53 07.9** | **+1.0** |
| | comp=Z,7.4nm,0.4s | | | | | | | |
| **OZLJ** | **Ozalj** | **1.87** | **111** | *e*Pn | | **Pb** | **04 52 43.9** | **+0.2** |
| OZLJ | | | | Sn | | **Sg** | **04 53 08.3** | **-2.0** |
| **RETA** | **Reutte** | **1.92** | **308** | *e*Pg | | **Pg** | **04 52 47.1** | **+0.2** |
| | comp=Z,14nm,0.4s | | | | | | | |
| RETA | | | | *e*Sg | | **Sg** | **04 53 14.6** | **+2.8** |
| | comp=Z,15nm,0.3s | | | | | | | |
| **ARSA** | **Arzberg** | **1.98** | **61** | *e*Pg | | **Pg** | **04 52 47.3** | **-0.7** |
| | comp=Z,0.6nm,0.2s | | | | | | | |
| ARSA | | | | *e*Sg | | **Sg** | **04 53 13.7** | **-0.1** |
| | comp=Z,2.6nm,0.3s | | | | | | | |
| **NVLJ** | **Novalja** | **2.20** | **142** | *e*Pn | | **Pn** | **04 52 47.8** | **+2.1** |
| NVLJ | | | | Sn | | **Sb** | **04 53 16.2** | **-0.2** |
| **DAVA** | **Damuels** | **2.34** | **296** | *e*Pn | | **Pn** | **04 52 48.8** | **+1.0** |
| | comp=Z,0.9nm,0.2s | | | | | | | |
| DAVA | | | | *e*Sn | | **Sn** | **04 53 18.6** | **+2.4** |
| | comp=Z,7.3nm,0.3s | | | | | | | |
| **CONA** | **Conrad Observa** | **2.54** | **50** | *e*Pn | | **Pn** | **04 52 51.1** | **+0.6** |
| | comp=Z,5μm,0.0s | | | | | | | |
| CONA | | | | *e*Sn | | **Sn** | **04 53 22.3** | **+1.3** |
| | comp=Z,0.2nm,0.1s | | | | | | | |
| **UDBI** | **Udbina** | **2.66** | **131** | *i* Pn | | **Pn** | **04 52 54.8** | **+2.7** |
| UDBI | | | | Sn | | **Sb** | **04 53 27.7** | **-1.7** |
| **CKRC** | **Cesky Krumlov** | **2.66** | **19** | *e*PN | | **Pb** | **04 52 56.5** | **-0.7** |
| CKRC | | | | *e*SN | | **Sb** | **04 53 27.9** | **-1.6** |
| **DUGI** | **Dugi Otok** | **2.75** | **147** | *e*Pn | | **Pn** | **04 52 55.3** | **+1.9** |
| DUGI | | | | Sn | | **Sn** | **04 53 29.4** | **+3.3** |
| **KHC** | **Kasperske Hory** | **2.84** | **8** | *e*PN | | **Pn** | **04 52 57.4** | **+2.8** |
| KHC | | | | *ex* | | | 04 53 07.0 | |
| KHC | | | | *e*SN | | **Sb** | **04 53 32.7** | **-2.1** |
| KHC | | | | *e*SG | | **Sg** | **04 53 40.6** | **-0.7** |
| **MORI** | **Morici** | **3.12** | **141** | *e*Pn | | **Pn** | **04 53 01.0** | **+2.6** |
| MORI | | | | Sn | | **Sn** | **04 53 37.4** | **+2.2** |
| **CDF** | **Champ du Feu** | **4.41** | **300** | *e*Pn | | **Pn** | **04 53 15.3** | **-0.8** |
| **CDF** | **Champ du Feu** | **4.41** | **300** | *e*P | | **Pn** | **04 53 19.1** | **+3.0** |
| **CDF** | **Champ du Feu** | **4.41** | **300** | *e*Pg | | **Pb** | **04 53 31.5** | **+4.5** |
| CDF | | | | *e*Sn | | **Sn** | **04 54 03.6** | **-3.4** |
| CDF | | | | *e*Sg | | **Sg** | **04 54 28.5** | **-2.9** |
| | comp=Z,1.3nm,0.3s | | | | | | | |
| **LPG** | **La Plagne** | **4.43** | **262** | *e*Pn | | **Pn** | **04 53 15.7** | **-0.9** |
| **LPG** | **La Plagne** | **4.43** | **262** | *e*P | | **Pn** | **04 53 19.6** | **+3.0** |
| LPG | | | | *e*Sn | | **Sn** | **04 54 05.0** | **-2.8** |
| LPG | | | | *e*Sg | | **Sg** | **04 54 29.4** | **-2.7** |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **LPL** | **La Plagne** | **4.43** | **262** | *e*Pn | | **Pn** | **04 53 15.9** | **-0.8** |
| **LPL** | **La Plagne** | **4.43** | **262** | *e*P | | **Pn** | **04 53 19.6** | **+2.9** |
| LPL | | | | *e*Sn | | **Sn** | **04 54 04.5** | **-3.5** |
| LPL | | | | *e*Sg | | **Sg** | **04 54 29.9** | **-2.5** |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **HINF** | **Hinteralfeld** | **4.45** | **292** | *e*Pn | | **Pn** | **04 53 15.9** | **-0.8** |
| **HINF** | **Hinteralfeld** | **4.45** | **292** | *e*P | | **Pn** | **04 53 20.1** | **+3.4** |
| HINF | | | | *e*Sn | | **Sn** | **04 54 04.8** | **-3.2** |
| HINF | | | | *e*Sg | | **Sg** | **04 54 29.5** | **-3.3** |
| | comp=Z,0.8nm,0.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **4.60** | **8** | Sg | | **Sg** | **04 54 37.5** | **-0.2** |
| BRG | | | | Amp | | | 04 54 44.8 | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **MBDF** | **Montbardon** | **4.65** | **252** | *e*P | | **Pn** | **04 53 21.9** | **+2.4** |
| **MBDF** | **Montbardon** | **4.65** | **252** | *e*Pg | | **Pg** | **04 53 36.4** | **-2.6** |
| MBDF | | | | *e*Sn | | **Sn** | **04 54 10.0** | **-3.1** |
| MBDF | | | | *e*Sg | | **Sg** | **04 54 36.6** | **-2.6** |
| | comp=Z,0.3nm,0.2s | | | | | | | |
| **CABF** | **La Chapelle** | **4.77** | **276** | *e*P | | **Pn** | **04 53 24.2** | **+3.0** |
| CABF | | | | *e*Sn | | **Sn** | **04 54 12.5** | **-3.6** |
| CABF | | | | *e*Sg | | **Sg** | **04 54 39.7** | **-3.5** |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **HAU** | **Haudompre** | **4.83** | **293** | *e*P | | **Pn** | **04 53 24.6** | **+2.7** |
| **SAVF** | **Savonnieres en** | **5.80** | **296** | *e*P | | **Pn** | **04 53 38.6** | **+3.4** |
| **SAVF** | **Savonnieres en** | **5.80** | **296** | *e*Pg | | **Pg** | **04 53 57.6** | **-3.5** |
| SAVF | | | | *e*Sn | | **Sn** | **04 54 36.9** | **-4.4** |
| | comp=Z,2.1nm,0.4s | | | | | | | |
| **LOR** | **Lormes** | **6.34** | **282** | *e*P | | **Pn** | **04 53 46.0** | **+3.4** |
| **LOR** | **Lormes** | **6.34** | **282** | *e*Pg | | **Pg** | **04 54 07.8** | **-3.5** |
| LOR | | | | *e*Sn | | **Sn** | **04 54 49.9** | **-4.6** |
| LOR | | | | *e*Sg | | **Sg** | **04 55 29.1** | **-4.2** |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **AVF** | **Avril sur Loir** | **6.66** | **278** | *e*P | | **Pn** | **04 53 50.0** | **+3.0** |
| **BAIF** | **Baives** | **6.96** | **306** | *e*P | | Pn | 04 53 56.2 | +5.2 |

**RSPR 11 04:56:10.0,18°.82N×64°.39W,h60km±20km,MD3.2/3,2C, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HUMP** | **Col San Antoni** | **1.54** | **244⇑** | *e*P | Pn | 04 56 33.8 | -1.4 |
| **HUMP** | **Col San Antoni** | **1.54** | **244** | *e*S | Sn | 04 56 53.2 | -1.0 |
| **CELP** | **Cerrillos** | **2.21** | **251⇑** | *e*P | Pn | 04 56 44.0 | -0.2 |
| **CELP** | **Cerrillos** | **2.21** | **251** | *e*S | Sn | 04 57 10.2 | -0.2 |

*IDC* **11** *04:59:57.0±1.3,8°.19S×116°.76E,h0km,mb3.5/4, mbtmp3.6/5,ML3.6/1,MS3.7/1,Error ellipse: s-maj=26.9km s-min=21.3km az=94.0*

*DJA* **11** *04:59:59.2±0.3,8°.5S×117°.7E±°,h10km,M3.8/7,MLv3.8/7*

**ISC 11 04:59:58.3±0.8,8°.20S±0°.06×116°.72E±0°.04,h10km,n14, σ0s64/18,mb3.6/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.56** | **164** | P | **Pg** | **05 00 09.2** | **0.0** |
| TWSI | | | | S | **Sg** | **05 00 16.1** | **-0.4** |
| **PLAI** | **Plampang** | **1.21** | **121** | P | **Pg** | **05 00 21.7** | **0.0** |
| PLAI | | | | S | **Sn** | **05 00 38.8** | **+0.9** |
| **SRBI** | **Singaraja** | **1.50** | **274** | P | **Pn** | **05 00 26.0** | **+0.7** |
| SRBI | | | | S | **Sn** | **05 00 45.8** | **+0.8** |
| **DNP** | **Denpasar** | **1.57** | **252** | P | **Pn** | **05 00 26.2** | **-0.1** |
| **IGBI** | **Denpasar** | **1.68** | **248** | P | **Pn** | **05 00 28.0** | **+0.2** |
| IGBI | | | | S | **Sn** | **05 00 50.5** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.56** | **264** | P | **Pn** | **05 00 39.0** | **-0.9** |
| **BSSI** | **Bau Bau, Buton** | **4.26** | **62** | P | **Pn** | **05 01 04.0** | **+0.7** |
| **KAPI** | **Kappang** | **4.37** | **44** | Pn | **Pn** | **05 01 05.3** | **+0.5** |
| | 2.9nm,0.3s,baz=350,slow=18,SNR=3.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **05 01 55.2** | **-0.6** |
| | 4.3nm,0.3s,baz=44,slow=11,SNR=3.7 | | | | | | |
| KAPI | | | | Lg | Lg | 05 02 15.3 | |
| | 3.0nm,0.3s,baz=73,slow=19,SNR=1.8 9.7nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.66** | **126** | P | **P** | **05 04 38.0** | **-0.6** |
| | 1.0nm,0.5s,baz=302,slow=12,SNR=18 1.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.53** | **135** | P | **P** | **05 04 58.2** | **-0.4** |
| | 2.2nm,0.8s,baz=312,slow=9.8,SNR=24 2.2nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **43.25** | **17** | LR | LR | 05 24 51.1 | |
| | comp=Z,100nm,21.5s,baz=88,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **352** | P | **P** | **05 09 41.1** | **+0.1** |
| | 0.2nm,0.3s,baz=176,slow=9.4,SNR=1.9 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.74** | **334** | P | **P** | **05 10 23.3** | **-0.4** |
| | 0.2nm,0.7s,baz=152,slow=6.5,SNR=2.1 0.2nm,0.7s | | | | | | |
| **CPUP** | **Villa Florida** | **145.19** | **189** | PKPbc | **PKPdf** | **05 19 37.2** | **+0.1** |
| | 1.2nm,0.5s,baz=180,slow=5.8,SNR=6.2 | | | | | | |

*ATH* **11** *05:10:11.9,38°.95N×26°.04E,h11km±2km,ML2.9/4,Error ellipse: s-maj=2.7km s-min=1.0km az=90.0*

*THE* **11** *05:10:11.7,38°.95N×26°.05E,h9km,ML2.8/5,Error ellipse: s-maj=1.2km s-min=0.4km az=93.0*

*AFAD* **11** *05:10:11.4±0.0,38°.95N×26°.10E,h7km±3km,ML2.7*

*ISK* **11** *05:10:11.6,38°.97N×26°.03E,h9km,ML2.8/30*

**ISC 11 05:10:11.8±0.9,38°.96N±0°.02×26°.05E±0°.02,h15km±8km, n70,σ0s75/96,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIGR** | **SIGRI** | **0.29** | **330** | Pg | **Pg** | **05 10 17.8** | **-0.1** |
| SIGR | | | | Sg | **Sg** | **05 10 22.5** | **+0.3** |
| **SIGR** | **SIGRI** | **0.29** | **330** | P | **Pg** | **05 10 18.0** | **+0.1** |
| SIGR | | | | S | **Sg** | **05 10 22.3** | **+0.1** |
| | 3μm,0.3s | | | | | | |
| **SIGR** | **SIGRI** | **0.29** | **330** | P | **Pg** | **05 10 18.0** | **+0.1** |
| SIGR | | | | S | **Sg** | **05 10 22.2** | **0.0** |
| SIGR | | | | AML | AML | 05 10 22.7 | |
| | comp=E,6650μm,0.5s | | | | | | |
| SIGR | | | | AML | AML | 05 10 23.2 | |
| | comp=N,6012μm,0.2s | | | | | | |
| **PRK** | **Paraskevi** | **0.34** | **31** | P | **Pg** | **05 10 18.5** | **-0.2** |
| PRK | | | | S | **Sg** | **05 10 23.6** | **+0.1** |
| | comp=N,2μm,0.6s | | | | | | |
| **PRK** | **Paraskevi** | **0.34** | **31** | P | **Pg** | **05 10 18.5** | **-0.2** |
| PRK | | | | S | **Sg** | **05 10 23.9** | **+0.4** |
| PRK | | | | AML | AML | 05 10 24.2 | |
| | comp=N,4625μm,0.5s | | | | | | |
| PRK | | | | AML | AML | 05 10 28.2 | |
| | comp=E,2858μm,0.5s | | | | | | |
| **KARB** | **zmir-Karabur** | **0.41** | **135** | P | **Pg** | **05 10 19.3** | **-0.7** |
| KARB | | | | S | **Sg** | **05 10 25.0** | **-0.6** |
| **EAG2** | **Marmaro, Chios** | **0.41** | **173** | P | **Pg** | **05 10 19.7** | **-0.4** |
| **GPNR** | **Gulpinar-Canak** | **0.50** | **8** | Pg | **Pg** | **05 10 21.5** | **-0.2** |
| GPNR | | | | Sg | **Sg** | **05 10 29.2** | **+0.7** |
| **KOCA** | **Canakkale, Ayv** | **0.55** | **8** | P | **Pg** | **05 10 22.5** | **-0.1** |
| KOCA | | | | *i* AML | AML | 05 10 34.0 | |
| | comp=E,377nm,0.3s | | | | | | |
| **CHOS** | **Chios island** | **0.57** | **179** | Pg | **Pg** | **05 10 22.8** | **-0.2** |
| CHOS | | | | Sg | **Sb** | **05 10 31.8** | **+0.4** |
| **CHOS** | **Chios island** | **0.57** | **179** | P | **Pg** | **05 10 22.6** | **-0.4** |
| CHOS | | | | S | **Sg** | **05 10 30.7** | **+0.1** |
| | comp=E,1μm,0.4s | | | | | | |
| **CHOS** | **Chios island** | **0.57** | **179** | P | **Pg** | **05 10 22.5** | **-0.4** |
| CHOS | | | | S | **Sg** | **05 10 30.3** | **-0.2** |
| CHOS | | | | AML | AML | 05 10 33.6 | |
| | comp=N,1540μm,0.5s | | | | | | |
| CHOS | | | | AML | AML | 05 10 34.1 | |
| | comp=E,3138μm,0.3s | | | | | | |
| **FOCM** | **Foa** | **0.59** | **114** | Pg | **Pb** | **05 10 23.7** | **-0.1** |
| FOCM | | | | Sg | **Sb** | **05 10 32.4** | **+0.5** |
| **CAND** | **Candarli** | **0.59** | **90** | Pg | **Pb** | **05 10 23.7** | **-0.1** |
| **AYVA** | **Ayvalik** | **0.61** | **55** | P | **Pg** | **05 10 23.5** | **-0.3** |
| AYVA | | | | S | **Sg** | **05 10 30.8** | **-1.1** |
| AYVA | | | | *i* AML | AML | 05 10 35.0 | |
| | comp=E,487nm,0.6s | | | | | | |
| AYVA | | | | *i* AML | AML | 05 10 35.0 | |
| | comp=E,713nm,0.3s | | | | | | |
| **CESE** | **eme** | **0.66** | **162** | Pg | **Pb** | **05 10 25.1** | **+0.2** |
| CESE | | | | Sg | **Sb** | **05 10 34.7** | **+0.8** |
| **DKL** | **Dikili** | **0.68** | **80** | Pg | **Pb** | **05 10 25.4** | **+0.1** |
| **IZMD** | **zmir-Dikili-** | **0.69** | **87** | P | **Pg** | **05 10 25.0** | **-0.2** |
| IZMD | | | | S | **Sg** | **05 10 33.6** | **-0.8** |
| **URLA** | **Izmir** | **0.73** | **144** | Pg | **Pb** | **05 10 26.5** | **+0.2** |
| URLA | | | | Sg | **Sb** | **05 10 37.2** | **+1.0** |
| **URLA** | **Izmir** | **0.73** | **144** | P | **Pg** | **05 10 24.8** | **-1.3** |
| URLA | | | | S | **Sg** | **05 10 35.2** | **-0.6** |
| URLA | | | | *i* AML | AML | 05 10 38.0 | |
| | comp=E,284nm,0.6s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.81** | **89** | P | **Pg** | **05 10 27.4** | **0.0** |
| **EZNE** | **Ezine-Canakkal** | **0.84** | **17** | Pg | **Pg** | **05 10 27.8** | **-0.2** |
| **BAYC** | **CANAKKALE_Bayr** | **0.88** | **26** | P | **Pg** | **05 10 28.0** | **-0.8** |
| BAYC | | | | S | **Sg** | **05 10 39.9** | **-0.3** |
| BAYC | | | | *i* AML | AML | 05 10 42.0 | |
| | comp=E,223nm,0.5s | | | | | | |
| **BOZC** | **Bozcaada** | **0.88** | **0** | P | **Pg** | **05 10 28.3** | **-0.6** |
| BOZC | | | | S | **Sg** | **05 10 39.3** | **-1.2** |
| BOZC | | | | *i* AML | AML | 05 10 42.0 | |
| | comp=E,258nm,0.3s | | | | | | |
| BOZC | | | | *i* AML | AML | 05 10 42.0 | |
| | comp=E,197nm,0.4s | | | | | | |
| **EZN** | **Ezine** | **0.90** | **14** | Pg | **Pg** | **05 10 28.6** | **-0.6** |
| **EZN** | **Ezine** | **0.90** | **14** | P | **Pg** | **05 10 28.5** | **-0.6** |
| EZN | | | | S | **Sb** | **05 10 41.8** | **+1.0** |
| | comp=E,578nm,0.4s | | | | | | |
| **BUHA** | **Balikesir, Bur** | **0.97** | **56** | P | **Pg** | **05 10 29.9** | **-0.6** |
| BUHA | | | | S | **Sg** | **05 10 42.5** | **-0.7** |
| BUHA | | | | *i* AML | AML | 05 10 46.0 | |
| | comp=E,313nm,0.4s | | | | | | |
| BUHA | | | | *i* AML | AML | 05 10 46.0 | |
| | comp=E,272nm,0.3s | | | | | | |
| **EFSA** | **Agios Efstrati** | **1.01** | **306** | P | **Pg** | **05 10 30.7** | **-0.5** |
| **ECEA** | **Canakkale, Ece** | **1.09** | **5** | P | **Pg** | **05 10 32.0** | **-0.8** |
| ECEA | | | | S | **Sg** | **05 10 46.8** | **-0.3** |
| ECEA | | | | *i* AML | AML | 05 10 49.0 | |
| | comp=E,274nm,0.3s | | | | | | |
| ECEA | | | | *i* AML | AML | 05 10 53.0 | |
| | comp=E,304nm,0.3s | | | | | | |
| **GMLD** | **Gumuldur** | **1.11** | **142** | Pn | **Pn** | **05 10 33.2** | **+0.4** |
| **DGB** | **zmir** | **1.12** | **144** | P | **Pg** | **05 10 32.0** | **-1.3** |
| DGB | | | | S | **Sg** | **05 10 46.1** | **-1.8** |
| **CNKL** | **anakkale-Mer** | **1.14** | **13** | P | **Pb** | **05 10 32.5** | **-0.7** |
| CNKL | | | | S | **Sg** | **05 10 47.2** | **-1.4** |
| CNKL | | | | *i* AML | AML | 05 10 50.0 | |
| | comp=E,207nm,0.3s | | | | | | |
| CNKL | | | | *i* AML | AML | 05 10 54.0 | |
| | comp=E,175nm,0.5s | | | | | | |
| **LIA** | **Limnos Island** | **1.15** | **325** | P | **Pb** | **05 10 32.7** | **-0.7** |
| LIA | | | | S | **Sg** | **05 10 49.5** | **+0.5** |
| | comp=E,838nm,0.4s | | | | | | |
| **LIA** | **Limnos Island** | **1.15** | **325** | P | **Pb** | **05 10 33.3** | **-0.1** |
| LIA | | | | AML | AML | 05 10 50.2 | |
| | comp=N,1624μm,0.3s | | | | | | |
| LIA | | | | AML | AML | 05 10 50.6 | |
| | comp=E,1860μm,0.4s | | | | | | |
| **SOMA** | **Soma-Manisa** | **1.18** | **80** | Pn | **Pn** | **05 10 34.8** | **+1.1** |
| **COMU** | **Canakkale** | **1.19** | **16** | Pn | **Pb** | **05 10 34.1** | **+0.1** |
| **GOAD** | **anakkale-G¶** | **1.21** | **355** | P | **Pb** | **05 10 34.2** | **-0.2** |
| GOAD | | | | S | **Sb** | **05 10 49.2** | **-0.6** |
| GOAD | | | | *i* AML | AML | 05 10 56.0 | |
| | comp=E,158nm,0.4s | | | | | | |
| **GADA** | **Gvkgeada** | **1.24** | **355** | Pn | **Pn** | **05 10 34.4** | **-0.2** |
| **YENI** | **Yenice-Canakka** | **1.35** | **43** | Pn | **Pn** | **05 10 36.9** | **+0.8** |
| **STEP** | **BALIKESIR_Sava** | **1.37** | **72** | P | **Pg** | **05 10 37.8** | **-0.3** |
| STEP | | | | S | **Sb** | **05 10 52.7** | **-1.7** |
| STEP | | | | *i* AML | AML | 05 10 58.0 | |
| | comp=E,147nm,0.9s | | | | | | |
| STEP | | | | *i* AML | AML | 05 11 02.0 | |
| | comp=E,115nm,0.6s | | | | | | |
| **AKHS** | **Akhisar** | **1.38** | **93** | P | **Pn** | **05 10 36.9** | **+0.4** |
| **BALY** | **Balya** | **1.45** | **57** | P | **Pn** | **05 10 37.0** | **-0.5** |
| **GELI** | **Tayfur-Gelibol** | **1.48** | **13** | Pn | **Pn** | **05 10 38.7** | **+0.9** |
| **LPK** | **Lapseki** | **1.52** | **21** | Pn | **Pn** | **05 10 39.3** | **+0.9** |
| **KYMI** | **Kymi, Euboea I** | **1.55** | **259** | P | **Pn** | **05 10 38.5** | **-0.4** |
| **SMTH** | **Samothraki Isl** | **1.56** | **345** | P | **Pn** | **05 10 38.7** | **-0.4** |
| **SMTH** | **Samothraki Isl** | **1.56** | **345** | P | **Pn** | **05 10 39.5** | **+0.4** |
| **GCAM** | **G?zelcaml?** | **1.56** | **143** | Pn | **Pb** | **05 10 40.5** | **+0.1** |
| **GCAM** | **G?zelcaml?** | **1.56** | **143** | P | **Pn** | **05 10 39.9** | **+0.9** |
| GCAM | | | | *i* AML | AML | 05 11 07.0 | |
| | comp=E,76nm,0.5s | | | | | | |
| **GORD** | **Gordes-Manisa** | **1.66** | **91** | Pn | **Pn** | **05 10 41.6** | **+1.1** |
| **GONE** | **Gonen-Balikesi** | **1.67** | **49** | Pn | **Pn** | **05 10 41.6** | **+1.1** |
| **IZMR** | **zmir-demi** | **1.71** | **118** | P | **Pg** | **05 10 45.0** | **+0.5** |
| **ODEM** | **Odemis-Izmir** | **1.73** | **113** | Pn | **Pn** | **05 10 42.5** | **+1.1** |
| **KRBG** | **Karabiga-Canak** | **1.73** | **34** | Pn | **Pn** | **05 10 41.4** | **+0.1** |
| **ERIK** | **Erikli-Kesan** | **1.75** | **12** | Pn | **Pn** | **05 10 42.6** | **+1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.77** | **124** | Pn | **Pn** | **05 10 43.2** | **+1.3** |
| **ENEZ** | **Enez** | **1.78** | **3** | Pn | **Pn** | **05 10 42.9** | **+0.9** |
| **ENEZ** | **Enez** | **1.78** | **3** | P | **Pn** | **05 10 42.4** | **+0.4** |
| **SUSR** | **Susurluk-Balik** | **1.87** | **57** | Pn | **Pn** | **05 10 44.5** | **+1.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.94** | **26** | Pn | **Pn** | **05 10 45.5** | **+1.3** |
| **ALN** | **Alexandroupoli** | **1.94** | **0** | Pn | **Pn** | **05 10 45.2** | **+1.0** |
| **ALN** | **Alexandroupoli** | **1.94** | **0** | P | **Pn** | **05 10 43.9** | **-0.3** |
| **ALN** | **Alexandroupoli** | **1.94** | **0** | P | **Pn** | **05 10 44.0** | **-0.2** |
| **EDC** | **Edincik** | **1.97** | **45** | Pn | **Pn** | **05 10 46.2** | **+1.5** |
| **MRMT** | **Marmara Adasi** | **2.03** | **36** | Pn | **Pn** | **05 10 46.6** | **+1.0** |
| **OUR** | **Ouranopolis** | **2.10** | **311** | Pn | **Pn** | **05 10 47.3** | **+0.8** |
| **OUR** | **Ouranopolis** | **2.10** | **311** | P | **Pn** | **05 10 46.9** | **+0.4** |
| **KCTX** | **Karacabey (Bur** | **2.21** | **53** | Pn | **Pn** | **05 10 49.2** | **+1.2** |
| **UKOP** | **Uzunkopru-Edir** | **2.22** | **12** | Pn | **Pn** | **05 10 49.1** | **+1.1** |
| **RDO** | **Rodhopi** | **2.22** | **350** | Pn | **Pn** | **05 10 49.2** | **+1.1** |

*IDC* **11** *05:18:32.4±0.6,35°.29N×140°.99E,h0km,mb4.1/18, mbtmp4.1/22,ML3.7/4,MS3.4/13,Error ellipse: s-maj=17.9km s-min=14.9km az=78.0*

*MOS* **11** *05:18:33.6±1.1,35°.35N×141°.19E,h22km,mb4.7/19,Error ellipse: s-maj=11.3km s-min=5.9km az=109.1*

*NIED* **11** *05:18:34.9,35°.34N×141°.18E,h37km,MW4.3,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.15; Mθθ-1.83; Mφφ1.69; Mrθ1.16; Mθφ0.74; Mφr1.79; Fault plane solution: Mo2.77000×10¹⁵ NP1:φs54.00000°, δ85.00000°, λ45.00000°. NP2:φs319.00000°, δ45.00000°, λ173.00000°.*

*JMA* **11** *05:18:34.9±0.2,35°.3N±0°.4×141°.2E±0°.8,h37km±1km, MD4.5/33,MV4.1/33,E OFF BOSO PENINSULA*

*JMA Felt I J1 at E OFF BOSO PENINSULA .*

*NEIC* **11** *05:18:34.6±2.1,35°.24N±0°.03×141°.23E±0°.09,h19km±5km, mb4.6/21,Error ellipse: s-maj=11.6km s-min=2.4km az=107.0*

**ISC 11 05:18:37.1±0.5,35°.22N±0°.04×141°.06E±0°.06,h35km,n130, σ1s28/126,mb4.5/48,MS3.5/12,9C-13D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSO1** | **Boso 1** | **0.57** | **187** | ⇓P | **Pn** | **05 18 48.2** | **-0.1** |
| BSO1 | | | | ⇓*e*X | | 05 18 57.2 | |
| **KTR** | **Katsuura** | **0.61** | **263** | P | **Pn** | **05 18 48.9** | **-0.4** |
| KTR | | | | *e*S | **Sn** | **05 18 58.8** | **+0.8** |
| **BSO3** | **Boso 3** | **0.61** | **227** | ⇓P | **Pn** | **05 18 49.4** | **+0.3** |
| **BSO4** | **Boso 4** | **0.63** | **249** | P | **Pn** | **05 18 49.6** | **+0.1** |
| BSO4 | | | | *e*X | | 05 19 00.9 | |
| **JSMT** | **Sammumatsuo** | **0.65** | **310** | P | **Pn** | **05 18 48.2** | **-1.6** |
| **JSMT** | **Sammumatsuo** | **0.65** | **310** | A | A | 05 18 48.2 | |
| | comp=E,50nm,3.8s,comp=N,31nm,1.8s | | | | | | |
| **JKUC** | **kamogawauchiur** | **0.71** | **265** | A | A | 05 18 50.0 | |
| | comp=E,29nm,0.9s,comp=N,24nm,1.2s | | | | | | |
| **JCN** | **Nagara** | **0.73** | **286** | P | **Pn** | **05 18 50.7** | **-0.1** |
| **JCN** | **Nagara** | **0.73** | **286** | A | A | 05 18 50.7 | |
| | comp=E,49nm,1.6s,comp=N,44nm,2.8s | | | | | | |
| **JIHU** | **Itakohorinouch** | **0.86** | **330** | A | A | 05 18 50.0 | |
| | comp=E,56nm,0.8s,comp=N,52nm,2.3s | | | | | | |
| **TATJ** | **Tateyama 2** | **0.98** | **259** | A | A | 05 18 54.2 | |
| | comp=E,28nm,1.4s,comp=N,34nm,1.8s | | | | | | |
| **JYO** | **Yokosk** | **1.14** | **270** | A | A | 05 18 56.5 | |
| | comp=E,21nm,2.8s,comp=N,22nm,1.7s | | | | | | |
| **JYT** | **Yasato** | **1.22** | **325** | P | **Pn** | **05 18 55.6** | **-2.1** |
| JYT | | | | *e*S | **Sn** | **05 19 12.6** | **-0.4** |
| **JYT** | **Yasato** | **1.22** | **325** | A | A | 05 18 55.6 | |
| | comp=E,13nm,0.6s,comp=N,16nm,0.6s | | | | | | |
| **JIM2** | **Oshima 3** | **1.43** | **250** | A | A | 05 19 01.1 | |
| | comp=E,8.0nm,0.4s,comp=N,11nm,0.4s | | | | | | |
| **JHU** | **Hanno** | **1.58** | **294** | A | A | 05 19 02.1 | |
| | comp=E,5.0nm,1.5s,comp=N,6.0nm,2.2s | | | | | | |
| **JHJ2** | **Mitsune** | **2.34** | **206** | Pn | **Pn** | **05 19 12.4** | **-0.7** |
| **JHJ** | **Hachijo jima 2** | **2.35** | **207** | Pn | **Pn** | **05 19 12.6** | **-0.6** |
| | comp=N,49nm,0.3s,baz=316,slow=22,SNR=18 | | | | | | |
| JHJ | | | | Sn | **Sn** | **05 19 39.3** | **-1.5** |
| | comp=N,148nm,0.3s,baz=70,slow=21,SNR=12 comp=N,91nm,0.3s | | | | | | |
| **JSG** | **Sagara** | **2.42** | **258** | | **Pn** | **05 19 15.1** | **+0.9** |
| **JMM** | **Marumori** | **2.65** | **355** | | **Pn** | **05 19 15.8** | **-1.4** |
| **MJAR** | **Matsushiro Arr** | **2.66** | **300** | Pn | **Pn** | **05 19 16.9** | **-0.6** |
| | comp=N,3.7nm,0.3s,baz=75,slow=11,SNR=66 | | | | | | |
| MJAR | | | | LR | LR | 05 20 22.5 | |
| | comp=N,322nm,20.6s,baz=174,slow=43 comp=N,22nm,0.4s | | | | | | |
| **MAJO** | **Matsushiro** | **2.66** | **300** | Pn | **Pn** | **05 19 17.7** | **+0.2** |
| **MAJO** | **Matsushiro** | **2.66** | **300** | *c i*P | **Pn** | **05 19 18.5** | **+1.0** |
| **MJB9** | **Matsu-Tunnel** | **2.67** | **300** | Pn | **Pn** | **05 19 17.6** | **0.0** |
| **JGF** | **Kuroka** | **3.05** | **278** | Pn | **Pn** | **05 19 23.5** | **+0.7** |
| **INU** | **Inuyama** | **3.31** | **273** | Pn | **Pn** | **05 19 27.5** | **+1.1** |
| **JSD** | **Sado** | **3.60** | **322** | Pn | **Pn** | **05 19 29.9** | **-0.4** |
| **JTM** | **Tenmabayashi** | **5.55** | **0** | Pn | **Pn** | **05 19 55.1** | **-2.0** |
| **ERM** | **Erimo** | **6.98** | **13** | Pn | **Pn** | **05 20 15.7** | **-1.0** |
| **ERM** | **Erimo** | **6.98** | **13** | *e*P | **Pn** | **05 20 13.8** | **-2.9** |
| **JCJ** | **Chichijima** | **8.16** | **173** | Pn | **Pn** | **05 20 31.3** | **-1.7** |
| **JCJ** | **Chichijima** | **8.16** | **173** | Pn | Pn | 05 20 26.1 | -6.9 |
| | comp=N,27nm,0.3s,baz=268,slow=18,SNR=6.6 | | | | | | |
| JCJ | | | | Sn | Sn | 05 21 54.9 | -9.2 |
| | comp=N,7.4nm,0.3s,baz=286,slow=20,SNR=1.5 | | | | | | |
| JCJ | | | | LR | LR | 05 24 10.3 | |
| | comp=N,173nm,20.0s,baz=44,slow=41 | | | | | | |
| **JNU** | **Nakatsue** | **8.69** | **259** | Pn | **Pn** | **05 20 40.4** | **0.0** |
| | comp=N,0.3nm,0.3s,baz=215,slow=18,SNR=2.0 comp=N,2.6nm,0.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **8.96** | **7** | Pn | **Pn** | **05 20 41.1** | **-2.8** |
| | comp=N,4.0nm,0.3s,baz=252,slow=9.3,SNR=21 comp=N,7.7nm,0.3s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **8.96** | **7** | | **Pn** | **05 20 40.7** | **-3.3** |
| **YUK** | **Yuzh-Kuril'sk** | **9.55** | **21⇑** | *i*P | **Pn** | **05 20 51.0** | **-0.9** |
| **SHO** | **Shikotan** | **9.71** | **26** | P | **Pn** | **05 20 53.7** | **-0.5** |
| SHO | | | | *e*S | Sn | 05 22 31.4 | -11 |
| **MSHR** | **Mys Shultsa** | **10.65** | **317** | ⇓*e*P | **Pn** | **05 21 07.9** | **+0.9** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **10.83** | **286** | Pn | **Pn** | **05 21 12.1** | **+2.5** |
| | comp=Z,0.3nm,0.3s,baz=99,slow=15,SNR=2.8 | | | | | | |
| KSRS | | | | LR | LR | 05 25 33

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PZH** | **PanZhiHua** | **34.67** | **267** | P | **P** | **05 25 24.0** | **+0.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.1s | | | | | | |
| **BILL** | **Bilibino** | **35.84** | **16** | *e*P | **P** | **05 25 33.0** | **0.0** |
| BILL | | | | *e* | | 05 26 53.6 | |
| BILL | | | | *e*PPP | PPP | 05 27 08.7 | |
| BILL | | | | *e* | | 05 27 59.4 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **TIXI** | **Tiksi** | **37.05** | **354**⇓ | *e*P | **P** | **05 25 41.1** | **-2.1** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.78** | **257** | LR | LR | 05 45 15.2 | |
| | comp=Z,20nm,19.9s,baz=75,slow=39 | | | | | | |
| **DGZ** | **Jazzator, Alta** | **41.24** | **308**⇑ | *i*P | **P** | **05 26 19.6** | **+0.9** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.94** | **314** | P | **P** | **05 26 32.2** | **0.0** |
| | comp=Z,2.4nm,0.5s,baz=92,slow=7.4,SNR=5.7 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **C16K** | **Lisburne Hills** | **44.46** | **25** | P | **P** | **05 26 43.9** | **-0.4** |
| C16K | | | | IAmb | IAmb | 05 26 47.5 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **44.86** | **304** | P | **P** | **05 26 47.7** | **-0.1** |
| **MK31** | **Makanchi Array** | **44.86** | **304** | *ce*P | **P** | **05 26 47.7** | **-0.1** |
| **MKAR** | **Makanchi Array** | **44.86** | **304** | P | **P** | **05 26 47.1** | **-0.8** |
| **MKAR** | **Makanchi Array** | **44.86** | **304** | P | **P** | **05 26 48.0** | **+0.1** |
| | comp=Z,2.2nm,0.7s,baz=85,slow=9.8,SNR=9.4 | | | | | | |
| MKAR | | | | LR | LR | 05 46 16.2 | |
| | comp=Z,77nm,18.6s,baz=75,slow=37 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **45.07** | **304** | P | **P** | **05 26 49.4** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 05 27 08.1 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **MAKZ** | **Makanchi** | **45.07** | **304** | P | **P** | **05 26 49.4** | **-0.1** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **F17K** | **Baldwin Pennin** | **45.44** | **28** | P | **P** | **05 26 53.6** | **+1.4** |
| F17K | | | | IAmb | IAmb | 05 27 03.6 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **K17K** | **Iditarod** | **46.01** | **34** | P | **P** | **05 26 54.5** | **-2.2** |
| **C18K** | **Utukok River** | **46.03** | **25** | P | **P** | **05 26 57.2** | **+0.3** |
| C18K | | | | IAmb | IAmb | 05 27 20.1 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **H18K** | **Honhosa River** | **46.34** | **31** | P | **P** | **05 27 00.1** | **+0.7** |
| H18K | | | | IAmb | IAmb | 05 27 06.8 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **G18K** | **Tagagawik** | **46.36** | **30** | P | **P** | **05 26 59.0** | **-0.4** |
| G18K | | | | IAmb | IAmb | 05 27 18.9 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **46.71** | **25** | P | **P** | **05 27 02.4** | **+0.2** |
| C19K | | | | IAmb | IAmb | 05 27 05.7 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **46.84** | **309** | P | **P** | **05 27 03.2** | **-0.1** |
| **KURK** | **Kurchatov** | **46.84** | **309** | *de*P | **P** | **05 27 03.2** | **-0.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.91** | **309** | P | **P** | **05 27 03.4** | **-0.5** |
| | comp=Z,4.0nm,0.4s,baz=83,slow=7.8,SNR=25 | | | | | | |
| KURBB | | | | LR | LR | 05 46 13.3 | |
| | comp=Z,37nm,18.3s,baz=182,slow=36 | | | | | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| **D19K** | **Kuna River** | **47.09** | **26** | P | **P** | **05 27 06.1** | **+1.0** |
| D19K | | | | IAmb | IAmb | 05 27 34.7 | |
| | comp=Z,6.2nm,1.2s | | | | | | |
| **E19K** | **Redstone River** | **47.20** | **28** | P | **P** | **05 27 06.3** | **+0.3** |
| **B21K** | **Ikpikpuk River** | **48.54** | **25** | P | **P** | **05 27 17.3** | **+1.0** |
| B21K | | | | IAmb | IAmb | 05 27 49.4 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **D22K** | **Ayikyak River** | **49.11** | **26** | P | **P** | **05 27 21.5** | **+0.8** |
| **AAK** | **Ala-Archa** | **51.11** | **300** | LR | LR | 05 50 45.1 | |
| | comp=Z,104nm,18.4s,baz=91,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **51.18** | **32** | P | **P** | **05 27 37.0** | **+0.6** |
| | comp=Z,0.6nm,0.5s,baz=263,slow=6.0,SNR=12 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **51.18** | **32** | *e*P | **P** | **05 27 36.7** | **+0.3** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **55.23** | **188** | P | **P** | **05 28 06.7** | **+0.1** |
| **WRA** | **Warramunga Arr** | **55.23** | **188** | P | **P** | **05 28 06.7** | **0.0** |
| **WRA** | **Warramunga Arr** | **55.23** | **188** | P | **P** | **05 28 07.1** | **+0.4** |
| | comp=Z,6.2nm,0.5s,baz=2.3,slow=7.5,SNR=79 | | | | | | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.23** | **188** | *e*P | **P** | **05 28 06.8** | **+0.1** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **G31M** | **Satah River** | **56.11** | **28** | P | **P** | **05 28 12.7** | **+0.3** |
| G31M | | | | IAmb | IAmb | 05 28 38.4 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **CHGR** | **Chuyangaron** | **56.20** | **296** | P | **P** | **05 28 13.1** | **-0.6** |
| **CHGR** | **Chuyangaron** | **56.20** | **296** | P | **P** | **05 28 13.1** | **-0.6** |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **SIMJ** | **Simiganj** | **56.30** | **296** | P | **P** | **05 28 14.2** | **-0.3** |
| SIMJ | | | | IAmb | IAmb | 05 28 27.9 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **ARU** | **Arti** | **57.53** | **319** | P | **P** | **05 28 22.6** | **-0.1** |
| | comp=Z,3.3nm,0.3s,baz=94,slow=1.2,SNR=5.7 | | | | | | |
| | comp=Z,3.3nm,0.3s | | | | | | |
| **ARU** | **Arti** | **57.53** | **319** | *d i*P | **P** | **05 28 22.7** | **0.0** |
| ARU | | | | S | **S** | **05 36 19.2** | **+1.5** |
| ARU | | | | SS | **SS** | **05 40 06.4** | **-0.9** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.89** | **311** | P | **P** | **05 28 31.7** | **-0.6** |
| **ASAR** | **Alice Springs** | **58.96** | **188** | P | **P** | **05 28 33.9** | **+0.8** |
| | comp=Z,1.1nm,0.5s,baz=6.5,slow=8.4,SNR=12 | | | | | | |
| ASAR | | | | LR | LR | 05 52 44.8 | |
| | comp=Z,28nm,21.2s,baz=355,slow=35 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **KIRV** | **Kirov** | **61.52** | **323**⇑ | *e*P | **P** | **05 28 49.9** | **-0.2** |
| **ARCES** | **ARCESS Array B** | **65.59** | **340** | P | **P** | **05 29 16.9** | **0.0** |
| | comp=Z,1.4nm,0.7s,baz=62,slow=8.4,SNR=5.2 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.59** | **340** | *e*P | **P** | **05 29 17.9** | **+1.0** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **66.75** | **180** | LR | LR | 05 58 11.9 | |
| | comp=Z,33nm,20.2s,baz=220,slow=36 | | | | | | |
| **FINES** | **FINESS Array B** | **70.28** | **332** | P | **P** | **05 29 45.5** | **-0.9** |
| | comp=Z,2.5nm,0.7s,baz=64,slow=5.6,SNR=9.5 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **70.28** | **332** | *e*P | **P** | **05 29 46.2** | **-0.2** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **71.86** | **311** | P | **P** | **05 29 57.2** | **+0.8** |
| | comp=Z,3.0nm,0.8s,baz=30,slow=4.4,SNR=4.2 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **71.86** | **311**⇓ | *e*P | **P** | **05 29 58.0** | **+1.7** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **GNI** | **Garni** | **72.56** | **307**⇓ | *e*P | **P** | **05 30 03.1** | **+2.3** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| **MNK** | **Minsk** | **73.83** | **326** | *i* P | **P** | **05 30 06.5** | **-1.3** |
| MNK | | | | *i* | | 05 32 51.9 | |
| MNK | | | | *i* PPP | PPP | 05 34 36.9 | |
| MNK | | | | *i* S | **S** | **05 39 37.0** | **+0.4** |
| MNK | | | | *i* SS | **SS** | **05 44 22.4** | **+2.4** |
| MNK | | | | pmax | pmax | | |
| | comp=E,14nm,0.9s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,18nm,0.9s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,84nm,10.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,102nm,12.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,102nm,13.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **75.55** | **322** | P | **P** | **05 30 17.5** | **-0.3** |
| | comp=Z,1.3nm,0.4s,baz=49,slow=5.8,SNR=7.7 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **75.55** | **322**⇑ | *e*P | **P** | **05 30 17.5** | **-0.4** |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.74** | **337** | P | **P** | **05 30 18.3** | **-0.5** |
| | comp=Z,0.6nm,0.5s,baz=41,slow=5.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **75.74** | **337** | P | **P** | **05 30 18.1** | **-0.7** |
| | comp=Z,18nm,0.4s,baz=61,slow=8.2,SNR=4.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **75.74** | **337** | *e*P | **P** | **05 30 20.4** | **+1.6** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,18nm,0.4s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **76.31** | **53** | P | **P** | **05 30 24.1** | **+1.4** |
| | comp=Z,1.0nm,0.8s,baz=296,slow=6.5,SNR=5.9 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **79.14** | **45** | P | **P** | **05 30 39.5** | **+1.0** |
| | comp=Z,0.4nm,0.6s,baz=255,slow=2.4,SNR=6.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **79.83** | **312** | P | **P** | **05 30 43.5** | **+1.3** |
| | comp=Z,0.4nm,0.5s,baz=86,slow=4.5,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **CLL** | **Collm** | **82.52** | **330** | *i* P | **P** | **05 30 54.5** | **-1.5** |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **CLL** | **Collm** | **82.52** | **330** | *i* P | **P** | **05 30 54.5** | **-1.5** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **83.93** | **328**⇓ | *e*P | **P** | **05 31 04.1** | **+0.7** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **84.09** | **328** | P | **P** | **05 31 03.4** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=140,slow=7.7,SNR=3.1 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **84.74** | **340** | P | **P** | **05 31 07.8** | **+0.5** |
| | comp=Z,0.2nm,0.4s,baz=2.4,slow=5.1,SNR=3.4 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **SOKA** | **Soboth** | **85.13** | **326** | *e*PcP | **P** | **05 31 09.6** | **0.0** |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **OBKA** | **Obir** | **85.48** | **326** | *e*P | **P** | **05 31 09.6** | **-1.7** |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **LESA** | **Schwarzleotal** | **85.62** | **328** | *e*P | **P** | **05 31 09.5** | **-2.5** |
| | comp=Z,2.3nm,1.0s | | | | | | |
| **MYKA** | **Terra Mystica** | **85.80** | **327** | *e*P | **P** | **05 31 10.4** | **-2.5** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **86.20** | **328** | *e*P | P | 05 31 10.0 | -5.0 |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **91.45** | **52** | P | **P** | **05 31 41.4** | **+1.2** |
| | comp=Z,0.3nm,0.7s,baz=302,slow=3.2,SNR=5.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **124.97** | **180** | PKP | **PKiKP** | **05 37 33.2** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=259,slow=2.7,SNR=5.7 | | | | | | |
| **LPAZ** | **La Paz** | **147.83** | **62** | PKPbc | **PKiKP** | **05 38 21.1** | **-0.5** |
| | comp=Z,0.8nm,0.6s,baz=248,slow=2.6,SNR=4.6 | | | | | | |

*BJI* ***11*** *05:21:16.5±0.0, 36°.30N×70°.89E, h123km, mb4.6/16, mB4.7/7*
*IDC* ***11*** *05:21:16.2±3.9, 36°.24N×70°.99E, h93km±36km, mb3.7/14, mbtmp4.1/17, Error ellipse: s-maj=26.2km s-min=14.7km az=24.0*
*NEIC* ***11*** *05:21:19.0±1.7, 36°.49N±0°.06×70°.94E±0°.09, h116km±8km, mb4.5/7, Error ellipse: s-maj=10.3km s-min=9.2km az=106.0*
*NNC* ***11*** *05:21:22.1±2.6, 36°.78N×70°.76E, h121km±65km, mb3.8, mpv4.5, Error ellipse: s-maj=22.1km s-min=20.6km az=176.0*

**ISC 11 05:21:17.2**±0.5, **36°.39N**±0°.05×**70°.98E**±0°.06, **h100**km, **n77, σ1§96/87, mb4.1**/18, **4C-3D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KBL** | **Kabul** | **2.42** | **221** | Pn | | Pn | 05 21 58.6 | +3.0 |
| **GAR** | **Garm** | **2.66** | **349** | Pn | | **Pn** | **05 21 60.0** | **+1.4** |
| **CHGR** | **Chuyangaron** | **2.69** | **328** | Pn | | **Pn** | **05 21 59.6** | **+0.8** |
| **SIMJ** | **Simiganj** | **2.76** | **326** | Pn | | **Pn** | **05 22 00.2** | **+0.4** |
| **NIL** | **Nilore** | **3.31** | **145** | Pn | | Pn | 05 22 11.5 | +4.5 |
| **BTK** | **Batken** | **3.67** | **358** | Pn | | **Pn** | **05 22 13.9** | **+1.9** |
| **JMU** | **Jammu** | **4.88** | **137** | *e*P | | Pn | 05 22 31.4 | +3.1 |
| JMU | | | | *e*S | | **Sn** | **05 23 24.6** | **+1.0** |
| JMU | | | | IAML | | | 05 23 28.4 | |
| | comp=N,507nm,0.8s | | | | | | | |
| JMU | | | | IAML | | | 05 23 29.3 | |
| | comp=E,370nm,0.4s | | | | | | | |
| **KSH** | **Kashi** | **5.04** | **50** | P | | **Pn** | **05 22 29.2** | **-1.3** |
| KSH | | | | S | | **Sn** | **05 23 19.7** | **-7.8** |
| KSH | | | | pmax | pmax | | | |
| | comp=E,140nm,0.4s | | | | | | | |
| **THN** | **Thein Dam** | **5.56** | **134** | *e*P | | Pn | 05 22 40.5 | +3.1 |
| THN | | | | *e*S | | **Sn** | **05 23 41.2** | **+1.3** |
| THN | | | | IAML | | | 05 23 44.8 | |
| | comp=E,258nm,0.5s | | | | | | | |
| THN | | | | IAML | | | 05 23 57.8 | |
| | comp=E,236nm,0.4s | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.03** | **132** | *e*P | | **Pn** | **05 22 46.0** | **+1.9** |
| DHRM | | | | *e*S | | **Sn** | **05 23 53.8** | **+1.9** |
| DHRM | | | | IAML | | | 05 23 55.2 | |
| | comp=E,680nm,0.5s | | | | | | | |
| DHRM | | | | IAML | | | 05 23 58.2 | |
| | comp=E,580nm,0.1s | | | | | | | |
| **AML** | **Almayashu** | **6.11** | **19** | P | | **Pn** | **05 22 46.2** | **+0.8** |
| | SNR=242 | | | | | | | |
| **NRN** | **Naryn** | **6.38** | **36** | Pn | | **Pn** | **05 22 48.9** | **0.0** |
| **UCH** | **Uchtor** | **6.45** | **24** | P | | **Sn** | **05 24 01.6** | **-0.6** |
| | SNR=5.7 | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.63** | **18** | P | | **Pn** | **05 22 53.2** | **+1.1** |
| | SNR=32 | | | | | | | |
| **BHK** | **Bhakra** | **6.71** | **136** | *e*P | | **Pn** | **05 22 54.1** | **+1.0** |
| BHK | | | | *e*S | | **Sn** | **05 24 08.4** | **+0.4** |
| **KK31** | **Karatay Array** | **6.72** | **357** | Pn | | **Pn** | **05 22 53.2** | **0.0** |
| **KK31** | **Karatay Array** | **6.72** | **357** | ⇑P | | **Pn** | **05 22 53.4** | **+0.2** |
| | comp=E,9.0nm,0.3s,baz=181,slow=12,SNR=209 | | | | | | | |
| KK31 | | | | ⇑S | | **Sn** | **05 24 03.8** | **-4.4** |
| | comp=E,22nm,0.5s,baz=190,slow=22,SNR=5.5 | | | | | | | |
| **KKAR** | **Karatay Array** | **6.72** | **357** | Pn | | **Pn** | **05 22 53.1** | **-0.1** |
| **KKAR** | **Karatay Array** | **6.72** | **357** | | | **Pn** | **05 22 53.1** | **-0.1** |
| **AAK** | **Ala-Archa** | **6.81** | **22** | P | | **Pn** | **05 22 55.9** | **+1.3** |
| | SNR=33 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.81** | **22** | Pn | | **Pn** | **05 22 55.4** | **+0.8** |
| **AAK** | **Ala-Archa** | **6.81** | **22** | P | | **Pn** | **05 22 56.1** | **+1.5** |
| | comp=E,46nm,0.4s,baz=194,slow=5.8,SNR=54 | | | | | | | |
| AAK | | | | S | | **Sn** | **05 24 09.8** | **-0.9** |
| | comp=E,37nm,0.6s,baz=337,slow=22,SNR=12 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.81** | **22** | ⇑P | | **Pn** | **05 22 55.7** | **+1.1** |
| | comp=E,33nm,0.5s | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | **05 24 09.8** | **-0.9** |
| | comp=E,83nm,0.7s | | | | | | | |
| **KBK** | **Karagaybulak** | **6.97** | **25** | P | | **Pn** | **05 22 59.3** | **+2.5** |
| | SNR=11 | | | | | | | |
| **FRU1** | **Bishkek** | **7.01** | **23** | Pn | | **Pn** | **05 22 58.5** | **+1.3** |
| **ULHL** | **Ulahol** | **7.13** | **33** | P | | **Pn** | **05 23 00.4** | **+1.4** |
| | SNR=17 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **7.20** | **31** | Pn | | **Pn** | **05 23 00.6** | **+0.6** |
| **CHMS** | **Chumysh** | **7.22** | **23** | P | | **Pn** | **05 23 02.2** | **+2.2** |
| | SNR=13 | | | | | | | |
| **SMLA** | **Simla** | **7.35** | **134** | *e*P | | **Pn** | **05 23 03.6** | **+1.8** |
| SMLA | | | | *e*S | | **Sn** | **05 24 20.9** | **-2.8** |
| SMLA | | | | IAML | | | 05 24 27.4 | |
| | comp=E,217nm,0.4s | | | | | | | |
| SMLA | | | | IAML | | | 05 24 29.6 | |
| | comp=E,181nm,0.5s | | | | | | | |
| **USP** | **Ospenovka** | **7.39** | **20** | P | | **Pn** | **05 23 03.6** | **+1.3** |
| | SNR=15 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.43** | **27** | P | | **Pn** | **05 23 05.2** | **+2.0** |
| | SNR=8.4 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.43** | **27** | ⇓P | | **Pn** | **05 23 03.7** | **+0.6** |
| | comp=E,17nm,0.8s | | | | | | | |
| TKM2 | | | | ⇓S | | **Sn** | **05 24 25.1** | **-0.8** |
| | comp=E,24nm,0.8s | | | | | | | |
| **HNLY** | **HANLEY** | **7.51** | **116** | *e*P | | **Pn** | **05 23 05.4** | **+0.9** |
| HNLY | | | | *e*S | | **Sn** | **05 24 27.0** | **-1.3** |
| **KLP** | **Kalpa** | **7.74** | **127** | *e*P | | Pn | 05 23 11.3 | +3.9 |
| KLP | | | | *e*S | | **Sn** | **05 24 31.0** | **-2.6** |
| KLP | | | | IAML | | | 05 24 36.4 | |
| | comp=E,183nm,0.6s | | | | | | | |
| KLP | | | | IAML | | | 05 24 49.1 | |
| | comp=E,181nm,0.6s | | | | | | | |
| **PRZ** | **Przheval'sk** | **8.37** | **41** | Pn | | **Pn** | **05 23 17.2** | **+1.4** |
| **DDI** | **Dehra Dun** | **8.46** | **134** | *e*S | | **Sn** | **05 24 49.7** | **-1.1** |
| DDI | | | | IAML | | | 05 24 55.1 | |
| | comp=N,204nm,0.9s | | | | | | | |
| **BKNR** | **BIKANER** | **8.56** | **166** | *e*P | | **Pn** | **05 23 19.5** | **+1.1** |
| BKNR | | | | *e*S | | **Sn** | **05 24 49.7** | **-3.6** |
| **AJM** | **Ajmer** | **10.36** | **161** | *ex* | | **Pn** | **05 23 41.7** | **-1.1** |
| **MK31** | **Makanchi Array** | **13.39** | **36** | Pn | | **Pn** | **05 24 21.9** | **-1.2** |
| **MKAR** | **Makanchi Array** | **13.39** | **36** | | | **Pn** | **05 24 21.6** | **-1.6** |
| **MKAR** | **Makanchi Array** | **13.39** | **36** | P | | **Pn** | **05 24 22.4** | **-0.8** |
| | comp=N,1.1nm,0.7s,baz=226,slow=15,SNR=10 | | | | | | | |
| **BHPL** | **Bhopal** | **14.24** | **155** | *e*S | | **Sn** | **05 27 02.3** | **-8.9** |
| **NRDN** | **NARMADA NAGAR** | **14.64** | **157** | *e*P | | **P** | **05 24 44.5** | **+1.6** |
| NRDN | | | | *e*S | | **Sn** | **05 27 16.1** | **-4.7** |
| **WMQ** | **Urumqi** | **14.78** | **55** | *e*P | | Pn | 05 24 42.1 | +1.1 |
| **AB31** | **Akbulak array** | **15.18** | **331** | ⇑P | | **Pn** | **05 24 44.6** | **-1.3** |
| | comp=N,1.7nm,0.4s,baz=151,slow=13,SNR=68 | | | | | | | |
| **ABKAR** | **Akbulak array** | **15.18** | **331** | Pn | | **Pn** | **05 24 44.2** | **-1.7** |
| **ABKAR** | **Akbulak array** | **15.18** | **331** | Pn | | **Pn** | **05 24 45.1** | **-0.8** |
| ABKAR | | | | IAmb | | IAmb | 05 24 53.7 | |
| | comp=Z,4.8nm,0.6s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **15.24** | **19** | P | | **Pn** | **05 24 43.9** | **-2.8** |
| | comp=Z,3.5nm,0.7s,baz=208,slow=11,SNR=7.3 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.87** | **330** | P | | **Pn** | **05 25 06.3** | **-0.7** |
| | comp=Z,5.3nm,0.4s,baz=145,slow=9.0,SNR=19 | | | | | | | |
| AKTO | | | | S | | Sn | 05 28 02.6 | -12 |
| | comp=Z,3.0nm,0.7s,baz=183,slow=19,SNR=2.7 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **20.03** | **24** | P | | **Pn** | **05 25 40.3** | **-1.6** |
| ZAA0 | | | | IAmb | | IAmb | 05 25 43.8 | |
| | comp=Z,9.1nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.03** | **24** | P | | **Pn** | **05 25 41.2** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **20.03** | **24** | P | | **Pn** | **05 25 42.1** | **+0.2** |
| | comp=Z,8.5nm,0.5s,baz=227,slow=9.8,SNR=35 | | | | | | | |
| | comp=Z,8.5nm,0.5s | | | | | | | |
| **GNI** | **Garni** | **20.91** | **288** | P | | Pn | 05 25 53.6 | -1.6 |
| | comp=Z,9.7nm,0.6s,baz=346,slow=14,SNR=4.1 | | | | | | | |
| | comp=Z,9.7nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **21.73** | **341** | P | | **Pn** | **05 26 01.4** | **+1.2** |
| | comp=Z,2.4nm,0.3s,baz=264,slow=21,SNR=5.6 | | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | | |
| **KBZ** | **Khabaz** | **22.64** | **298** | P | | **Pn** | **05 26 08.8** | **-0.9** |
| | comp=Z,2.4nm,0.9s,baz=162,slow=6.4,SNR=2.4 | | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **TNCH** | **TengChong** | **26.16** | **108** | P | | **Pn** | **05 26 40.8** | **-1.6** |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,88nm,3.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **27.93** | **102** | P | | **Pn** | **05 27 00.2** | **+2.0** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,50nm,3.5s | | | | | | | |
| **BRTR** | **Keskin Array B** | **29.45** | **288** | P | | **Pn** | **05 27 12.1** | **+0.4** |
| | comp=Z,0.6nm,0.7s,baz=98,slow=8.9,SNR=2.6 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.41** | **118** | P | | **Pn** | **05 27 20.2** | **+0.1** |
| | comp=Z,0.6nm,0.3s,baz=284,slow=7.3,SNR=1.3 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.82** | **69** | *e*P | | **P** | **05 27 34.0** | **+1.6** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,77nm,5.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.00** | **309** | P | | **P** | **05 27 42.1** | **-0.3** |
| | comp=Z,2.0nm,0.6s,baz=83,slow=6.8,SNR=8.5 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **FIA1** | **FINESS Array S** | **37.57** | **326** | P | | **P** | **05 28 21.6** | **+0.1** |
| **FINES** | **FINESS Array B** | **37.57** | **326** | P | | **P** | **05 28 21.0** | **-0.4** |
| **FINES** | **FINESS Array B** | **37.57** | **326** | P | | **P** | **05 28 22.8** | **+1.3** |
| | comp=Z,1.8nm,0.4s,baz=118,slow=8.7,SNR=21 | | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | | |
| **NJ2** | **Nanjing** | **39.51** | **82** | *e*P | | **P** | **05 28 38.1** | **0.0** |
| NJ2 | | | | pP | | **pP** | **05 29 03.7** | **+1.2** |
| NJ2 | | | | sP | | **sP** | **05 29 16.7** | **+2.2** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.6s | | | | | | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,140nm,3.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.24** | **338** | P | | **P** | **05 28 52.9** | **+1.0** |
| ARCES | | | | IAmb | IAmb | 05 29 13.0 | | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.24** | **338** | P | | **P** | **05 28 53.6** | **+1.7** |
| | comp=Z,1.7nm,0.5s,baz=116,slow=8.1,SNR=16 | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **NC405** | **NORSAR Array S** | **44.23** | **323** | P | | **P** | **05 29 16.4** | **+0.2** |
| NC405 | | | | IAmb | IAmb | 05 29 17.8 | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.46** | **323** | P | | **P** | **05 29 18.1** | **+0.1** |
| | comp=Z,2.0nm,0.5s,baz=97,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.46** | **323** | P | | **P** | **05 29 18.5** | **+0.4** |
| | comp=Z,14nm,0.3s,baz=106,slow=7.2,SNR=10 | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **47.63** | **303** | P | | **P** | **05 29 43.8** | **+0.4** |
| SENIN | | | | IAmb | IAmb | 05 29 44.8 | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.36** | **316** | P | | **P** | **05 30 18.6** | **-0.1** |
| | comp=Z,1.6nm,0.7s,baz=104,slow=6.8,SNR=6.4 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.70** | **269** | P | | **P** | **05 31 51.0** | **-0.4** |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| **IMAR** | **Indian Mountai** | **72.29** | **18** | P | | **P** | **05 32 31.8** | **+0.4** |
| **ILAR** | **Eielson Array** | **74.89** | **16** | P | | **P** | **05 32 47.5** | **+0.9** |
| | comp=Z,0.3nm,0.9s,baz=291,slow=2.5,SNR=3.3 | | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.94** | **122** | P | | **P** | **05 33 25.0** | **-1.0** |
| | comp=Z,0.5nm,0.5s,baz=324,slow=4.9,SNR=4.8 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **84.20** | **125** | P | | **P** | **05 33 36.5** | **-1.1** |
| | comp=Z,0.7nm,0.7s,baz

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GDB | GEDABAY | 4.64 | 275 | Pn | | Pn | 05 48 06.2 +0.9 |
| GDB | | | | Sn | | Sn | 05 48 56.1 -3.2 |
| ORD | Ordubad | 4.76 | 253 | Pn | | Pn | 05 48 08.5 +1.5 |
| ORD | | | | Sn | | Sn | 05 49 00.7 -1.6 |
| IFIR | Firoozkooh | 4.88 | 171 | Pn | | Pn | 05 48 09.9 +1.2 |
| IDMV | Damavand | 4.89 | 178 | Pn | | Pn | 05 48 10.1 +1.3 |
| QZX | Qazax, Azerbai | 4.94 | 279 | Pn | | Pn | 05 48 09.1 -0.3 |
| QZX | | | | Sn | | Sn | 05 49 04.8 -1.9 |
| QABG | Abgarm-Qazvin | 5.08 | 201 | Pn | | Pn | 05 48 12.4 +1.0 |
| IRAZ | Razeghan | 5.28 | 197 | Pn | | Pn | 05 48 15.5 +1.3 |

*REY* ***11*** *05:54:36.7, 71°.89N×1°.75E, h10km*
*NAO* ***11*** *05:54:45.6±1.0, 71°.67N×2°.42W, ML5.1*
*MOS* ***11*** *05:54:47.6±0.9, 71°.71N×2°.17W, h10km, mb5.3/69, MS4.8/33, Error ellipse: s-maj=12.4km s-min=3.6km az=97.1*
*IDC* ***11*** *05:54:47.9±0.3, 71°.74N×2°.11W, h0km, mb4.7/33, mbtmp4.7/37, ML4.5/4, MS4.5/81, Error ellipse: s-maj=11.3km s-min=8.5km az=28.0*
*NEIC* ***11*** *05:54:48.7±2.4, 71°.80N±0°.06×2°.3W±0°.2, h10km±1km, mb5.2/99, Error ellipse: s-maj=11.1km s-min=8.7km az=136.0*
*GCMT* ***11*** *05:54:48.7±0.1, 71°.70N±0°.01×2°.20W±0°.03, h12km, MW5.2/130, Moment Tensor Solution. s78,c128; s130,c268; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr=0.75±.01; Mθθ=0.51±.01; Mφφ=0.24±.01; Mrθ=-0.30±.03; Mrφ=0.59±.01; Mθφ=-0.17±.03; Best double couple: M=0.93100×10^17 NP1:φs=56.00000°, δ56.00000°, λ-84.00000°. NP2:φs=225.00000°, δ35.00000°, λ-99.00000°. Principal axes: T 1.0400, Plg11.0000°, Azm142.0000°; N -0.2180, Plg5.0000°, Azm233.0000°; P -0.8220, Plg78.0000°, Azm347.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DNK* ***11*** *05:54:49.4±4.3, 71°.98N×2°.35W, h20km±37km, ML3.3*
*BER* ***11*** *05:54:50.8±3.2, 71°.76N×2°.39W, h13km±33km, mb(Pn)5.2, MW5.3(USGS), Confirmed Earthquake*
*BGR* ***11*** *05:55:02.1, 71°.19N×0°.61E, h10km, mb5.0, Ms4.4*

**ISC 11 05:54:49.2±0.5, 71°.75N±0°.03×2°.24W±0°.03, h12km±2km, h12km:pP-P, n1205, σ1966/1230, mb5.1/221, MS4.7/132, 58C-36D, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JMIC | Jan Mayen | 2.15 | 252 | eP | | Pn | 05 55 22.1 | -2.7 |
| JMIC | | | | eS | | Sn | 05 55 46.5 | -4.9 |
| JMIC | | | | IAML | | | 05 55 51.4 | |
| | comp=Z,130nm,0.5s | | | | | | | |
| JMIC | Jan Mayen | 2.15 | 252 | Pn | | Pn | 05 55 20.2 | -4.6 |
| JMIC | | | | Sn | | Sn | 05 55 46.6 | -4.8 |
| JMIC | Jan Mayen | 2.15 | 252 | Pn | | Pn | 05 55 22.3 | -2.5 |
| | comp=Z,6.8nm,0.3s,baz=156,slow=20,SNR=13 | | | | | | | |
| JMIC | | | | Sn | | Sn | 05 55 46.6 | -4.8 |
| | comp=Z,26nm,0.3s,baz=195,slow=19,SNR=9.2 | | | | | | | |
| JMI | Jan Mayen | 2.25 | 252 | eP | | Pn | 05 55 23.4 | -2.6 |
| JMI | | | | eS | | Sn | 05 55 52.4 | -1.3 |
| JMI | | | | IAML | | | 05 55 57.6 | |
| | comp=Z,129nm,0.6s | | | | | | | |
| JMI | Jan Mayen | 2.25 | 252 | Pn | | Pn | 05 55 23.6 | -2.5 |
| JMI | | | | Sn | | Sn | 05 55 48.5 | -5.2 |
| DBG | Daneborg | 5.85 | 304 | ⇑P | | Pn | 05 56 12.0 | -3.5 |
| DBG | | | | *i* S | | Sn | 05 57 14.0 | -8.3 |
| DBG | | | | IAML | | | 05 57 27.9 | |
| | comp=Z,56nm,1.1s | | | | | | | |
| DBG | Daneborg | 5.85 | 304 | Pn | | Pn | 05 56 12.2 | -3.3 |
| DBG | | | | Sn | | Sn | 05 57 14.3 | -8.0 |
| DBG | Daneborg | 5.85 | 304 | ⇑*i*P | | Sn | 05 56 12.0 | -3.5 |
| DBG | | | | *i* S | | Sn | 05 57 14.0 | -8.3 |
| DBG | | | | IAML | | | 05 57 27.9 | |
| | comp=Z,56nm,1.1s | | | | | | | |
| SCO | Scoresbysund | 6.51 | 268 | Pn | | Pn | 05 56 22.3 | -2.3 |
| SCO | Scoresbysund | 6.51 | 268 | *i* P | | Pn | 05 56 23.0 | -1.6 |
| SCO | Scoresbysund | 6.51 | 268 | P | | Pn | 05 56 22.3 | -2.3 |
| SCO | Scoresbysund | 6.51 | 268 | *i* P | | Pn | 05 56 23.0 | -1.6 |
| LOF | Lofoten | 6.51 | 116 | eP | | Pn | 05 56 22.8 | -1.9 |
| LOF | | | | IAML | | | 05 57 39.7 | |
| | comp=Z,73nm,0.6s | | | | | | | |
| LOF | Lofoten | 6.51 | 116 | Pn | | Pn | 05 56 22.8 | -1.9 |
| LOF | | | | Sn | | Sn | 05 57 32.8 | -6.0 |
| DAG | Danmarks Havn | 6.71 | 326 | ⇑*i*P | | Pn | 05 56 23.7 | -3.6 |
| DAG | | | | *i* S | | Sn | 05 57 30.7 | -13 |
| DAG | | | | IAML | | | 05 57 39.9 | |
| | comp=Z,187nm,1.8s | | | | | | | |
| DAG | Danmarks Havn | 6.71 | 326 | ⇑*i*P | | Pn | 05 56 23.7 | -3.6 |
| DAG | | | | *i* S | | Sn | 05 57 30.7 | -13 |
| DAG | | | | IAML | | | 05 57 39.9 | |
| | comp=Z,187nm,1.8s | | | | | | | |
| BJO1 | Bjornoya | 6.75 | 56 | ⇓*i*P | | Pn | 05 56 27.6 | -0.2 |
| BJO1 | | | | IAML | | | 05 57 58.8 | |
| | comp=Z,6.9nm,0.7s | | | | | | | |
| BJO1 | Bjornoya | 6.75 | 56 | Pn | | Pn | 05 56 27.4 | -0.4 |
| BJO1 | Bjornoya | 6.75 | 56 | eP | | Pn | 05 56 25.6 | -2.3 |
| BJO1 | | | | eS | | Sn | 05 57 46.2 | +1.7 |
| HSPB | Hornsund (broa | 7.09 | 34 | eP | | Pn | 05 56 32.9 | +0.3 |
| HSPB | Hornsund (broa | 7.09 | 34 | eP | | Pn | 05 56 32.5 | -0.1 |
| HSPB | | | | eS | | Sn | 05 57 45.3 | -7.7 |
| HSPB | | | | IAMs_20 | IAMs_20 | | 05 59 22.0 | |
| | comp=Z,237nm,4.2s | | | | | | | |
| HSPB | Hornsund (broa | 7.09 | 34 | Pn | | Pn | 05 56 32.7 | +0.1 |
| STEI | Steigen | 7.13 | 114 | eP | | Pn | 05 56 32.2 | -0.9 |
| TRO | Tromso | 7.31 | 97 | eP | | Pn | 05 56 33.6 | -2.0 |
| TRO | | | | eS | | Sn | 05 57 51.1 | -7.2 |
| TRO | Tromso | 7.31 | 97 | Pn | | Pn | 05 56 33.1 | -2.4 |
| ILEI | Leirhofn | 7.38 | 230 | P | | Pn | 05 56 34.2 | -2.3 |
| | baz=239 | | | | | | | |
| FAUS | Fauske | 7.51 | 117 | eP | | Pn | 05 56 36.8 | -1.6 |
| FAUS | | | | eS | | Sn | 05 57 54.9 | -8.4 |
| FAUS | | | | IAML | | | 05 58 00.6 | |
| | comp=Z,94nm,0.4s | | | | | | | |
| KONS | Konsvik | 7.58 | 126 | eP | | Pn | 05 56 37.6 | -1.7 |
| KONS | Konsvik | 7.58 | 126 | Pn | | Pn | 05 56 37.0 | -2.2 |
| KONS | | | | Sn | | Sn | 05 57 57.3 | -7.7 |
| IGIL | Gilhagi | 7.61 | 229 | P | | Pn | 05 56 37.5 | -2.2 |
| | baz=237 | | | | | | | |
| BRBA | Barentsburg A | 7.62 | 26 | eP | | Pn | 05 56 39.1 | -0.7 |
| BRBA | Barentsburg A | 7.62 | 26 | Pn | | Pn | 05 56 40.3 | +0.6 |
| BRBB | Barentsburg B | 7.64 | 26 | eP | | Pn | 05 56 40.5 | +0.5 |
| BRBB | Barentsburg B | 7.64 | 26 | Pn | | Pn | 05 56 40.6 | +0.5 |
| IGRI | Grimsey | 7.66 | 235 | P | | Pn | 05 56 40.4 | +0.1 |
| | baz=242 | | | | | | | |
| STOK | Stokkvaagen | 7.69 | 127 | eP | | Pn | 05 56 39.1 | -1.6 |
| STOK | Stokkvaagen | 7.69 | 127 | Pn | | Pn | 05 56 38.9 | -1.9 |
| STOK | | | | Sn | | Sn | 05 57 58.6 | -9.0 |
| JETT | Jettan, Norway | 7.81 | 95 | Pn | | Pn | 05 56 40.9 | -1.6 |
| JETT | Jettan, Norway | 7.81 | 95 | Pn | | Pn | 05 56 40.9 | -1.6 |
| IGHA | Grjothals | 7.88 | 228 | P | | Pn | 05 56 41.9 | -1.5 |
| | baz=237 | | | | | | | |
| IGRS | Grimsstaoir | 7.93 | 226 | P | | Pn | 05 56 43.0 | -1.1 |
| | baz=235 | | | | | | | |
| IBRE | Brettingsstaoi | 7.96 | 233 | P | | Pn | 05 56 44.5 | +0.1 |
| | baz=240 | | | | | | | |
| KBS | Kingsbay | 8.02 | 20 | | | | 05 56 43.5 | -1.8 |
| KBS | Kingsbay | 8.02 | 20 | eP | | Pn | 05 56 43.5 | -1.8 |
| KBS | Kingsbay | 8.02 | 20 | Pn | | Pn | 05 56 44.0 | -1.3 |
| KBS | | | | Sn | | Sn | 05 58 11.5 | -4.3 |
| KBS | Kingsbay | 8.02 | 20 | eP | | Pn | 05 56 45.1 | -0.3 |
| KBS | Kingsbay | 8.02 | 20 | *c* iP | | Pn | 05 56 43.5 | -1.8 |
| KBS | Kingsbay | 8.02 | 20 | *i* P | | Pn | 05 56 43.8 | -1.5 |
| IKVO | Krokottuvotn | 8.04 | 228 | P | | Pn | 05 56 44.6 | -1.0 |
| | baz=237 | | | | | | | |
| IREN | Reynihlio | 8.10 | 228 | P | | Pn | 05 56 45.8 | -0.6 |
| | baz=236 | | | | | | | |
| IMEL | Melhnausar | 8.11 | 227 | P | | Pn | 05 56 45.6 | -0.8 |
| | baz=236 | | | | | | | |
| MOR8 | Moi Rana | 8.18 | 125 | eP | | Pn | 05 56 46.3 | -1.1 |
| MOR8 | | | | eS | | Sn | 05 58 13.1 | -6.5 |
| MOR8 | | | | IAML | | | 05 58 18.0 | |
| | comp=Z,79nm,0.5s | | | | | | | |
| MOR8 | Moi Rana | 8.18 | 125 | Pn | | Pn | 05 56 45.8 | -1.7 |
| MOR8 | | | | Sn | | Sn | 05 58 13.3 | -6.3 |
| ISIG | Siglufjorour | 8.21 | 235 | P | | Pn | 05 56 47.7 | -0.1 |
| | baz=242 | | | | | | | |
| IHLA | Hella | 8.22 | 233 | P | | Pn | 05 56 48.6 | +0.6 |
| | baz=240 | | | | | | | |
| IADA | Aoalbol | 8.33 | 223 | P | | Pn | 05 56 48.9 | -0.7 |
| | baz=231 | | | | | | | |
| HAMF | Hammerfest | 8.41 | 85 | eP | | Pn | 05 56 48.2 | -2.5 |
| HAMF | Hammerfest | 8.41 | 85 | Pn | | Pn | 05 56 47.9 | -2.8 |
| ISVA | Svartarkot | 8.44 | 228 | P | | Pn | 05 56 50.6 | -0.4 |
| | baz=236 | | | | | | | |
| SALU | Saltoluokta | 8.44 | 111 | eP | | Pn | 05 56 49.7 | -1.4 |
| SALU | | | | eS | | Sn | 05 58 17.5 | -8.6 |
| IMKO | Mokollar | 8.54 | 224 | P | | Pn | 05 56 51.3 | -1.1 |
| | baz=233 | | | | | | | |
| IASK | Askja | 8.54 | 225 | P | | Pn | 05 56 51.9 | -0.6 |
| | baz=234 | | | | | | | |
| IVSH | V-Sauoahnukur | 8.55 | 222 | P | | Pn | 05 56 52.1 | -0.6 |
| | baz=231 | | | | | | | |
| THOR | Thorvaldshraun | 8.65 | 225 | P | | Pn | 05 56 52.9 | -1.1 |
| | baz=233 | | | | | | | |
| IKRE | Kreppuhraun | 8.71 | 224 | P | | Pn | 05 56 53.7 | -1.2 |
| | baz=232 | | | | | | | |
| HOPEN | Hopen | 8.78 | 45 | eP | | Pn | 05 56 56.1 | +0.5 |
| HOPEN | Hopen | 8.78 | 45 | Pn | | Pn | 05 56 55.6 | 0.0 |
| HOPEN | Hopen | 8.78 | 45 | eP | | Pn | 05 56 55.6 | 0.0 |
| NSS | Namsos | 8.95 | 137 | eP | | Pn | 05 56 56.5 | -1.5 |
| NSS | | | | eS | | Sn | 05 58 29.1 | -9.4 |
| NSS | | | | IAML | | | 05 58 34.2 | |
| | comp=Z,64nm,0.4s | | | | | | | |
| KTK1 | Kautokeino | 8.96 | 95 | eP | | Pn | 05 56 56.9 | -1.3 |
| HEF | Hetta | 9.40 | 98 | eP | | Pn | 05 57 02.6 | -1.6 |
| HEF | Hetta | 9.40 | 98 | Pn | | Pn | 05 57 02.7 | -1.6 |
| HEF | | | | Sn | | Sn | 05 58 43.0 | -6.7 |
| ARA0 | ARCESS Array S | 9.42 | 90 | Pn | | Pn | 05 57 03.0 | -1.5 |
| | baz=289,slow=12 | | | | | | | |
| ARA0 | ARCESS Array S | 9.42 | 90 | Pn | | Pn | 05 57 03.0 | -1.5 |
| | baz=289,slow=12 | | | | | | | |
| ARCES | ARCESS Array B | 9.42 | 90 | Pn | | Pn | 05 57 02.6 | -1.9 |
| ARCES | ARCESS Array B | 9.42 | 90 | Pn | | Pn | 05 57 03.2 | -1.3 |
| | comp=Z,7.2nm,0.3s,baz=290,slow=11,SNR=412 | | | | | | | |
| ARCES | | | | LR | | LR | 06 00 19.4 | |
| | comp=Z,3μm,20.1s,baz=292,slow=35 | | | | | | | |
| | comp=Z,14nm,0.3s | | | | | | | |
| TBLU | Trondheim | 9.75 | 145 | eP | | Pn | 05 57 06.4 | -2.7 |
| KEV | Kevo | 9.80 | 88 | Pn | | Pn | 05 57 07.8 | -1.8 |
| KEV | Kevo | 9.80 | 88 | Pn | | Pn | 05 57 07.1 | -2.5 |
| KEV | Kevo | 9.80 | 88 | P | | Pn | 05 57 07.8 | -1.8 |
| SOFL | Sornfelli, Far | 9.89 | 193 | eP | | Pn | 05 57 10.6 | -0.4 |
| SOFL | Sornfelli, Far | 9.89 | 193 | eP | | Pn | 05 57 10.6 | -0.4 |
| SOFL | | | | eS | | Sn | 05 58 51.6 | -10 |
| BORG | Borgarnes | 9.92 | 235 | Pn | | Pn | 05 57 13.5 | +2.1 |
| BORG | Borgarnes | 9.92 | 235 | eP | | Pn | 05 57 16.9 | +5.6 |
| BORG | Borgarnes | 9.92 | 235 | Pn | | Pn | 05 57 13.9 | +2.6 |
| | comp=Z,0.9nm,0.3s,baz=37,slow=4.1,SNR=3.9 | | | | | | | |
| BORG | | | | LR | | LR | 06 00 07.4 | |
| | comp=Z,2μm,18.9s,baz=16,slow=32 | | | | | | | |
| | comp=Z,46nm,1.1s | | | | | | | |
| BORG | Borgarnes | 9.92 | 235 | P | | Pn | 05 57 13.5 | +2.1 |
| MOL | Molde | 9.95 | 153 | eP | | Pn | 05 57 09.3 | -2.4 |
| AKN | Aaknes | 10.25 | 155 | Pn | | Pn | 05 57 14.3 | -1.6 |
| AKN | Aaknes | 10.25 | 155 | Pn | | Pn | 05 57 14.3 | -1.6 |
| VADS | Vadso | 10.39 | 84 | eP | | Pn | 05 57 15.4 | -2.3 |
| VADS | | | | IAML | | | 05 59 12.6 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| NOR | Nord | 10.39 | 348 | *i* P | | Pn | 05 57 15.7 | -2.0 |
| NOR | Nord | 10.39 | 348 | Pn | | Pn | 05 57 14.6 | -3.1 |
| NOR | | | | Sn | | Sn | 05 59 05.3 | -8.5 |
| NOR | Nord | 10.39 | 348 | *i* P | | Pn | 05 57 15.7 | -2.0 |
| SOEG | Soedalen | 10.53 | 265 | *i* P | | Pn | 05 57 21.2 | +1.6 |
| SOEG | Soedalen | 10.53 | 265 | *i* P | | Pn | 05 57 21.2 | +1.6 |
| NOD | Norderasen | 10.53 | 134 | eP | | Pn | 05 57 18.9 | -0.8 |
| FOO | Floro | 10.58 | 161 | eP | | Pn | 05 57 18.6 | -1.7 |
| DOMB | Dombas | 10.68 | 150 | eP | | Pn | 05 57 19.8 | -2.0 |
| SUMG | Summit | 11.02 | 291 | Pn | | Pn | 05 57 25.2 | -1.5 |
| SUMG | Summit | 11.02 | 291 | *i* P | | Pn | 05 57 24.8 | -2.0 |
| SUMG | Summit | 11.02 | 291 | P | | Pn | 05 57 25.2 | -1.5 |
| SUMG | Summit | 11.02 | 291 | *i* P | | Pn | 05 57 24.8 | -2.0 |
| SUE | Sulen | 11.08 | 162 | eP | | Pn | 05 57 25.2 | -2.0 |
| SUE | | | | IAML | | | 05 59 25.5 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| HYA | Hoyanger | 11.13 | 158 | eP | | Pn | 05 57 26.4 | -1.4 |
| HYA | | | | IAML | | | 05 59 37.2 | |
| | comp=Z,17nm,0.5s | | | | | | | |
| LRW | Lerwick | 11.67 | 177 | eP | | Pn | 05 57 32.4 | -2.9 |
| LRW | Lerwick | 11.67 | 177 | eP | | Pn | 05 57 32.3 | -2.9 |
| LRW | | | | IAML | | | 05 59 38.0 | |
| | comp=Z,18nm,0.5s | | | | | | | |
| LRW | Lerwick | 11.67 | 177 | Pn | | Pn | 05 57 32.8 | -2.5 |
| LRW | | | | Sn | | Sn | 05 59 36.1 | -9.1 |
| NC204 | NORSAR Array S | 11.68 | 148 | | | Pn | 05 57 33.2 | -2.2 |
| NC204 | NORSAR Array S | 11.68 | 148 | eP | | Pn | 05 57 33.2 | -2.2 |
| ASK | Askoy | 11.69 | 162 | eP | | Pn | 05 57 32.5 | -3.0 |
| BER | Bergen | 11.80 | 161 | eP | | Pn | 05 57 35.8 | -1.3 |
| NC303 | NORSAR Array S | 11.83 | 146 | Pn | | Pn | 05 57 36.8 | -0.7 |
| NC303 | NORSAR Array S | 11.83 | 146 | eP | | Pn | 05 57 36.4 | -1.1 |
| NBO00 | NORSAR Array S | 11.91 | 148 | | | Pn | 05 57 36.7 | -1.9 |
| NBO00 | NORSAR Array S | 11.91 | 148 | eP | | Pn | 05 57 36.7 | -1.9 |
| NB2 | NORSAR Subarra | 11.98 | 147 | Pn | | Pn | 05 57 37.9 | -1.6 |
| | baz=336,slow=16 | | | | | | | |
| NB2 | NORSAR Subarra | 11.98 | 147 | Pn | | Pn | 05 57 37.9 | -1.6 |
| | baz=336,slow=16 | | | | | | | |
| NOA | NORSAR Array B | 11.98 | 147 | Pn | | Pn | 05 57 37.9 | -1.6 |
| | comp=Z,0.9nm,0.3s,baz=142,slow=24,SNR=38 | | | | | | | |
| NOA | | | | LR | | LR | 06 02 03.6 | |
| | comp=Z,6μm,20.4s,baz=340,slow=36 | | | | | | | |
| NB201 | NORSAR Array S | 11.98 | 147 | | | | 05 57 38.3 | -1.3 |
| NC405 | NORSAR Array S | 12.00 | 146 | | | Pn | 05 57 38.4 | -1.4 |
| NAO01 | NORSAR Array S | 12.11 | 148 | | | Pn | 05 57 39.0 | -2.2 |
| NRA0 | NORESS Array S | 12.32 | 147 | Pn | | Pn | 05 57 42.8 | -1.3 |
| | baz=336,slow=16 | | | | | | | |
| NRA0 | NORESS Array S | 12.32 | 147 | Pn | | Pn | 05 57 42.8 | -1.3 |
| | baz=336,slow=16 | | | | | | | |
| NC602 | NORSAR Array S | 12.32 | 147 | Pn | | Pn | 05 57 42.4 | -1.8 |
| NC602 | NORSAR Array S | 12.32 | 147 | eP | | Pn | 05 57 43.1 | -1.1 |
| ODD1 | Odda | 12.40 | 159 | eP | | Pn | 05 57 44.8 | -0.5 |
| ICESG | Greenland Ices | 12.67 | 276 | *i* P | | Pn | 05 57 47.3 | -1.9 |
| ICESG | Greenland Ices | 12.67 | 276 | *i* P | | Pn | 05 57 47.3 | -1.9 |
| APA0 | Apatity Array | 12.77 | 92 | Pn | | Pn | 05 57 47.7 | -2.6 |
| | baz=315,slow=14 | | | | | | | |
| APA0 | Apatity Array | 12.77 | 92 | Pn | | Pn | 05 57 47.7 | -2.6 |
| | baz=315,slow=14 | | | | | | | |
| VAF | Ylistaro | 12.83 | 120 | eP | | Pn | 05 57 49.8 | -1.4 |
| BLS5 | Blasjo | 12.86 | 160 | eP | | Pn | 05 57 49.7 | -1.9 |
| APA | Apatity | 12.93 | 91 | ⇓*i*P | | Pn | 05 57 49.4 | -3.0 |
| APA | | | | *i* | | | 06 00 10.3 | |
| APA | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | | |
| OSL | Oslo | 12.94 | 150 | eP | | Pn | 05 57 50.9 | -1.7 |
| KMY | Karmoy | 12.95 | 163 | eP | | Pn | 05 57 50.6 | -2.1 |
| KONO | Kongsberg | 13.04 | 153 | Pn | | Pn | 05 57 52.4 | -1.6 |
| KONO | Kongsberg | 13.04 | 153 | eP | | Pn | 05 57 52.3 | -1.7 |
| KONO | Kongsberg | 13.04 | 153 | *d* iP | | Pn | 05 57 52.2 | -1.8 |
| KONO | | | | pmax | | pmax | | |
| | comp=Z,100nm,1.0s | | | | | | | |
| LVZ | Lovozero | 13.13 | 89 | Pn | | Pn | 05 57 52.9 | -2.3 |
| LVZ | Lovozero | 13.13 | 89 | *ce*P | | Pn | 05 57 52.6 | -2.6 |
| LVZ | | | | pmax | | pmax | | |
| | comp=Z,84nm,0.8s | | | | | | | |
| HFS | Hagfors | 13.27 | 143 | Pn | | Pn | 05 57 55.3 | -1.8 |
| | baz=342,slow=12 | | | | | | | |
| HFS | Hagfors | 13.27 | 143 | Pn | | Pn | 05 57 55.3 | -1.8 |
| | baz=342,slow=12 | | | | | | | |
| BIGH | Upper Bighouse | 13.33 | 184 | eP | | Pn | 05 57 55.8 | -2.1 |
| LINV | Loch Inver, As | 13.71 | 187 | eP | | Pn | 05 58 00.9 | -2.1 |
| NEEM | North Greenlan | 13.73 | 316 | *i* P | | Pn | 05 57 58.7 | -4.8 |
| NEEM | North Greenlan | 13.73 | 316 | *i* P | | Pn | 05 57 58.7 | -4.8 |
| LEWI | Lewis, Hebride | 13.79 | 190 | eP | | Pn | 05 58 03.0 | -1.2 |
| SNART | Snartemo | 14.01 | 159 | eP | | Pn | 05 58 06.0 | -1.1 |
| KEF | Keuruu | 14.14 | 119 | eP | | Pn | 05 58 07.5 | -1.5 |
| ZFI2 | Zemlya Franca- | 14.22 | 30 | eP | | Pn | 05 58 10.8 | +0.8 |
| MCD | Coleburn Disti | 14.23 | 182 | eP | | Pn | 05 58 08.4 | -1.7 |
| OMEGA | Omega | 14.23 | 30 | eP | | Pn | 05 58 11.9 | +1.8 |
| RAF | Rauma | 14.28 | 127 | eP | | Pn | 05 58 09.8 | -1.0 |
| KPL | Plockton | 14.54 | 187 | eP | | Pn | 05 58 11.9 | -2.4 |
| KPL | Plockton | 14.54 | 187 | eP | | Pn | 05 58 12.3 | -2.1 |
| DRUM | Mains of Drumt | 14.89 | 181 | eP | | Pn | 05 58 17.4 | -1.8 |
| DRUM | Mains of Drumt | 14.89 | 181 | eP | | Pn | 05 58 17.0 | -2.2 |
| FIA0 | FINESS Array S | 15.07 | 119 | P | | Pn | 05 58 19.6 | -2.0 |
| | baz=330,slow=11 | | | | | | | |
| FIA0 | FINESS Array S | 15.07 | 119 | P | | Pn | 05 58 19.6 | -2.0 |
| | baz=330,slow=11 | | | | | | | |
| FIA1 | FINESS Array S | 15.07 | 119 | Pn | | Pn | 05 58 19.3 | -2.2 |
| FINES | FINESS Array B | 15.07 | 119 | Pn | | Pn | 05 58 19.1 | -2.4 |
| | comp=Z,3.0nm,0.3s,baz=335,slow=13,SNR=122 | | | | | | | |
| FINES | | | | Sn | | Sn | 06 00 53.3 | -15 |
| | comp=Z,0.7nm,0.3s,baz=331,slow=19,SNR=2.0 | | | | | | | |
| FINES | | | | LR | | LR | 06 03 35.2 | |
| | comp=Z,6μm,19.6s,baz=324,slow=35 | | | | | | | |
| | comp=Z,98nm,0.8s | | | | | | | |
| INVG | Invergeldie, C | 15.40 | 184 | eP | | Pn | 05 58 23.7 | -2.3 |
| JOF | Joensuu | 15.42 | 108 | eP | | Pn | 05 58 23.1 | -3.0 |
| LAWE | Loch Awe, Argy | 15.61 | 187 | eP | | Pn | 05 58 26.8 | -1.8 |
| MEF | Metsahovi | 15.64 | 124 | eP | | Pn | 05 58 28.0 | -1.1 |
| EDI | Edinburgh | 15.89 | 182 | eP | | Pn | 05 58 30.5 | -1.8 |
| EDI | Edinburgh | 15.89 | 182 | eP | | Pn | 05 58 30.3 | -2.1 |
| ESY | Stoneypath | 15.89 | 181 | eP | | Pn | 05 58 31.0 | -1.3 |
| UPNV | Upernavik | 16.00 | 299 | *i* P | | Pn | 05 58 29.7 | -3.9 |
| UPNV | Upernavik | 16.00 | 299 | *i* P | | Pn | 05 58 29.7 | -3.9 |
| PGBU | Glenifferbraes | 16.03 | 185 | eP | | Pn | 05 58 33.1 | -0.9 |
| MUD | Monsted U'grnd | 16.08 | 157 | eP | | Pn | 05 58 32.6 | -2.1 |
| DY2G | Dye2 | 16.22 | 273 | *i* P | | Pn | 05 58 35.6 | -1.2 |
| DY2G | Dye2 | 16.22 | 273 | *i* P | | Pn | 05 58 35.6 | -1.2 |
| EKA | Eskdalemuir Ar | 16.48 | 182 | P | | Pn | 05 58 38.2 | -1.7 |
| EKA | Eskdalemuir Ar | 16.48 | 182 | P | | Pn | 05 58 38.2 | -1.7 |
| EKA | Eskdalemuir Ar | 16.48 | 182 | Pn | | Pn | 05 58 38.5 | -1.4 |
| | baz=355,slow=12 | | | | | | | |
| EKA | | | | Sn | | Sn | 06 01 28.7 | -14 |
| | baz=6.7,slow=25 | | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | | |
| ESK | Eskdalemuir | 16.50 | 182 | | | Pn | 05 58 38.5 | -1.6 |
| ESK | Eskdalemuir | 16.50 | 182 | eP | | Pn | 05 58 38.3 | -1.8 |
| ESK | Eskdalemuir | 16.50 | 182 | P | | Pn | 05 58 38.5 | -1.6 |
| ESK | | | | pmax | | pmax | | |
| | comp=Z,98nm,1.0s | | | | | | | |
| VALR | Valaam | 16.50 | 112 | *d* iP | | Pn | 05 58 37.0 | -3.1 |
| NEWG | New Galloway | 16.72 | 184 | eP | | Pn | 05 58 42.4 | -0.5 |
| ARBE | Arbavere | 16.73 | 123 | eP | | Pn | 05 58 42.0 | -1.0 |
| MTSE | Matsula | 16.80 | 128 | eP | | P | 05 58 46.0 | 0.0 |
| ADZR | Andozero | 16.82 | 97 | eP | | Pn | 05 58 40.6 | -3.5 |
| ADZR | | | | eS | | Sn | 06 01 35.6 | -15 |
| ADZR | Andozero | 16.82 | 97 | ⇑*i*P | | Pn | 05 58 41.2 | -2.9 |
| ADZR | | | | *e* | | | 06 01 43.2 | |
| ADZR | | | | pmax | | pmax | | |
| | comp=Z,79nm,0.8s | | | | | | | |
| GAL1 | Galloway | 16.98 | 185 | eP | | Pn | 05 58 45.2 | -0.9 |
| EDMD | Edmundbyers | 16.98 | 179 | eP | | Pn | 05 58 44.4 | -1.8 |
| EDMD | Edmundbyers | 16.98 | 179 | eP | | Pn | 05 58 44.6 | -1.7 |
| SSRD | Sdr. Stenderup | 17.09 | 157 | *i* P | | P | 05 58 50.9 | +1.6 |
| SSRD | Sdr. Stenderup | 17.09 | 157 | *i* P | | P | 05 58 50.9 | +1.6 |
| KESW | Keswick, Cumbr | 17.23 | 182 | eP | | Pn | 05 58 49.8 | +0.5 |
| SFJD | Kangerlussuaq | 17.27 | 278 | Pn | | Pn | 05 58 47.4 | -2.3 |
| SFJD | Kangerlussuaq | 17.27 | 278 | *i* P | | Pn | 05 58 46.9 | -2.8 |
| SFJD | Kangerlussuaq | 17.27 | 278 | P | | Pn | 05 58 47.9 | -1.7 |
| | comp=Z,19nm,0.8s,baz=56,slow=11,SNR=6.4 | | | | | | | |
| SFJD | | | | LR | | LR | 06 04 41.0 | |
| | comp=Z,3μm,19.6s,baz=48,slow=34 | | | | | | | |
| SFJD | Kangerlussuaq | 17.27 | 278 | P | | Pn | 05 58 47.4 | -2.3 |
| SFJD | | | | pmax | | pmax | | |
| | comp=Z,118nm,1.8s | | | | | | | |
| SFJD | Kangerlussuaq | 17.27 | 278 | *i* P | | Pn | 05 58 46.9 | -2.8 |
| COP | Copenhagen | 17.28 | 151 | eP | | Pn | 05 58 47.9 | -2.1 |
| SLIT | Slitere, Latvi | 17.40 | 132 | eP | | Pn | 05 58 50.9 | -0.4 |
| GDLE | Glaisdale, N Y | 17.40 | 177 | eP | | Pn | 05 58 49.8 | -1.7 |
| GDLE | Glaisdale, N Y | 17.40 | 177 | eP | | Pn | 05 58 50.2 | -1.3 |
| PUL | Pulkovo | 17.64 | 116 | *de*P | | Pn | 05 58 52.3 | -2.0 |
| PUL | | | | pmax | | pmax | | |
| | comp=Z,315nm,1.3s | | | | | | | |
| VSU | Vasula | 17.77 | 123 | *ce*P | | Pn | 05 58 54.2 | -1.8 |
| VSU | | | | pmax | | pmax | | |
| | comp=Z,436nm,1.2s | | | | | | | |
| TULEG | Thule | 17.83 | 315 | | | Pn | 05 58 53.0 | -3.6 |
| TULEG | Thule | 17.83 | 315 | *i* P | | Pn | 05 58 51.7 | -4.9 |
| TULEG | Thule | 17.83 | 315 | *i* P | | Pn | 05 58 51.7 | -4.9 |
| BSD | Bornholm Skovb | 18.23 | 147 | *i* P | | Pn | 05 59 00.4 | -1.3 |
| BSD | Bornholm Skovb | 18.23 | 147 | eP | | Pn | 05 59 01.8 | +0.1 |
| BSD | Bornholm Skovb | 18.23 | 147 | *i* P | | Pn | 05 59 00.4 | -1.3 |
| LBWR | Ladybower, Pea | 18.41 | 179 | eP | | P | 05 59 02.0 | -1.1 |
| WPS | Cemaes, Angles | 18.44 | 184 | eP | | Pn | 05 59 04.4 | +0.2 |
| RGN | Rugen | 18.52 | 151 | eP | | Pn | 05 59 05.7 | +0.6 |
| WLF1 | Llynfaes | 18.55 | 184 | eP | | P | 05 59 02.2 | -3.1 |
| BSEG | Bad Segeberg | 18.69 | 156 | eP | | Pn | 05 59 07.7 | +0.5 |
| | comp=Z,40nm,0.8s,baz=351,slow=11 | | | | | | | |
| STNC | Stoke | 18.72 | 180 | eP | | P | 05 59 07.3 | 0.0 |
| PBUR | Paburge | 18.78 | 134 | eP | | P | 05 59 07.8 | 0.0 |
| FOEL | Foel Wylfa | 18.93 | 182 | eP | | P | 05 59 09.7 | +0.2 |
| VSVD | Vaisvydziai | 19.28 | 131 | eP | | P | 05 59 13.6 | +0.3 |
| HLM1 | Long Mynd | 19.30 | 181 | eP | | P | 05 59 12.8 | -0.8 |
| NUUK | Nuuk | 19.46 | 272 | *i* P | | P | 05 59 15.7 | +0.4 |
| NUUK | Nuuk | 19.46 | 272 | *i* P | | P | 05 59 15.7 | +0.4 |
| NRS | Narsarsuaq | 19.70 | 260 | P | | P | 05 59 18.4 | +0.5 |
| NRS | | | | IAmb | | IAmb | 05 59 25.1

MNK *i* SS **SnSn** **06 04 01.7 +1.5**
MNK *i* SSS SSS 06 04 15.3
MNK pmax pmax
comp=Z,148nm,0.9s
MNK pmax pmax
comp=E,163nm,1.1s
MNK pmax pmax
comp=N,162nm,1.0s
MNK MLR MLR
comp=Z,5µm,17.0s
MNK MLR MLR
comp=N,2µm,16.0s
MNK MLR MLR
comp=E,3µm,18.0s
**CLL Collm 21.62 153** P **P** **05 59 38.4 -0.3**
CLL IAmb IAmb 05 59 42.4
comp=Z,82nm,1.1s
**CLL Collm 21.62 153**⇑ *i*P **P** **05 59 38.6 -0.1**
comp=Z,239nm,1.7s
CLL *e*Plp 05 59 41.0
comp=Z,800nm,12.1s
CLL *e*Pmax 05 59 42.0
CLL *e*S **S** **06 03 36.0 -1.7**
comp=N,800nm,11.7s
CLL *e*S **S** **06 03 36.0 -1.7**
comp=E,800nm,14.2s
CLL L L 06 07 00.0
comp=Z,3µm,21.7s
**CLL Collm 21.62 153**⇑ *i*P **P** **05 59 38.6 -0.1**
CLL *e*S **S** **06 03 36.0 -1.7**
CLL pmax pmax
comp=Z,239nm,1.7s
CLL MLR MLR
comp=Z,3µm,15.8s
**CLL Collm 21.62 153** P **P** **05 59 38.2 -0.5**
comp=Z,77nm,1.3s,comp=Z,1µm
**CLL Collm 21.62 153** *e*P **P** **05 59 38.9 +0.2**
comp=Z,162nm,1.4s,baz=351,slow=11
**BCLA Clavier 21.67 167** *d*P **P** **05 59 39.6 +0.3**
comp=Z,90nm,0.9s
**CCA1 Carnmenellis 21.68 185** IAmb IAmb 05 59 43.7
comp=Z,87nm,0.9s
**BGES Gesves 21.69 167** *d*P **P** **05 59 39.8 +0.3**
comp=Z,88nm,1.1s
**AHRW Bad Neuenahr-A 21.69 164** *e*P **P** **05 59 40.3 +0.8**
comp=Z,100nm,0.8s,baz=351,slow=11
**UBBA Unterbreizbach 21.71 159** *e*P **P** **05 59 40.5 +0.8**
comp=Z,186nm,1.3s,baz=351,slow=11
**BMRD Maredsous 21.75 168** *d*P **P** **05 59 40.4 +0.2**
comp=Z,75nm,1.2s
**BHOU Houvegnez 21.79 166** *d*P **P** **05 59 41.1 +0.5**
comp=Z,74nm,1.2s
**RCHB Rochefort 21.93 167** *d*P **P** **05 59 42.0 0.0**
comp=Z,28nm,1.1s
**DOU Dourbes 21.95 168** *d*P **P** **05 59 42.3 +0.1**
comp=Z,60nm,1.2s
**MOX Moxa 22.08 156** *e*P **P** **05 59 44.1 +0.3**
baz=351,slow=11
MOX *e*L L 06 08 11.9
comp=Z,1µm,21.4s
**TNS Taunus Mts 22.14 162** *e*P **P** **05 59 45.0 +0.7**
comp=Z,36nm,0.7s,baz=351,slow=11
**BRG Berggiesshubel 22.18 152** *i* P **P** **05 59 44.4 -0.3**
BRG Amp 05 59 50.1
comp=Z,114nm,1.4s
**BRG Berggiesshubel 22.18 152** Amp 06 00 06.4
comp=Z,34nm,1.2s
**BRG Berggiesshubel 22.18 152** S **S** **06 03 48.0 -0.5**
**BRG Berggiesshubel 22.18 152** *e*P **P** **05 59 44.8 +0.1**
comp=Z,59nm,1.2s,baz=351,slow=11
**BRG Berggiesshubel 22.18 152** P P 05 59 56.9 +12
**BRG Berggiesshubel 22.18 152** Amp 05 59 57.3
comp=Z,49nm,1.2s
**BRG Berggiesshubel 22.18 152** PP **PnPn** **06 00 05.3 -1.4**
**PLN Plauen 22.31 155** *e*P **P** **05 59 46.8 +0.6**
baz=351,slow=11
**HSKC Hora Svate Kat 22.36 153** *e*P **P** **05 59 47.1 +0.3**
HSKC *e*S **S** **06 03 48.0 -4.1**
HSKC AMS AMS 06 09 20.0
comp=Z,3µm,16.3s
**BEL Belsk 22.45 141** *e*P **P** **05 59 48.2 +0.6**
**WLF Walferdange 22.49 166** P **P** **05 59 48.3 +0.3**
WLF IAmb IAmb 05 59 50.0
comp=Z,95nm,1.1s
**WLF Walferdange 22.49 166** *d*P **P** **05 59 48.4 +0.3**
comp=Z,44nm,1.2s
**WLF Walferdange 22.49 166** P **P** **05 59 48.3 +0.3**
WLF pmax pmax
comp=Z,95nm,1.1s
**WLF Walferdange 22.49 166** *e*P **P** **05 59 48.7 +0.7**
baz=351,slow=11
**KSP Ksiaz 22.58 148** *e*P **P** **05 59 49.1 +0.1**
**PVCC Panska Ves 22.61 151** AMS AMS 06 09 50.0
comp=Z,2µm,13.4s
**CHVC Chvalec 22.78 149** *e*P **P** **05 59 51.1 -0.1**
CHVC AMS AMS 06 09 20.0
comp=Z,3µm,15.9s
**CHVC Chvalec 22.78 149** *e*P **P** **05 59 51.1 -0.1**
CHVC MLR MLR
comp=Z,3µm,15.9s
**MANZ Manzenberg 22.79 156** *e*P **P** **05 59 51.7 +0.4**
comp=Z,40nm,1.5s,baz=351,slow=11
**OSTC Ostas 22.84 149** *e*P **P** **05 59 51.8 0.0**
OSTC *e*S **S** **06 04 02.5 +1.8**
OSTC *ex* x 06 05 39.3
OSTC AMS AMS 06 09 30.0
comp=Z,3µm,15.6s
**OSTC Ostas 22.84 149** *e*P **P** **05 59 51.8 0.0**
OSTC *e*S **S** **06 04 02.5 +1.8**
OSTC MLR MLR
comp=Z,3µm,15.6s
**UPC Upice 22.85 149** *e*P **P** **05 59 52.8 +0.9**
UPC *e*S **S** **06 04 04.1 +3.2**
UPC AMS AMS 06 09 30.0
comp=Z,3µm,16.5s
**UPC Upice 22.85 149** *e*P **P** **05 59 52.8 +0.9**
UPC *e*S **S** **06 04 04.1 +3.2**
UPC MLR MLR
comp=Z,3µm,16.5s
**GRF Grafenberg Arr 22.97 157** *e*P **P** **05 59 54.4 +1.3**
baz=351,slow=11
GRF *e*L L 06 08 28.0
comp=Z,1µm,21.9s
**GRFO Grafenberg 22.97 157** P **P** **05 59 52.8 -0.3**
GRFO IAmb IAmb 06 00 03.8
comp=Z,168nm,1.4s
**GRFO Grafenberg 22.97 157** P **P** **05 59 52.8 -0.3**
GRFO pmax pmax
comp=Z,168nm,1.4s
**ROTZ Rotzenmuhle 23.02 156** *e*P **P** **05 59 55.1 +1.5**
comp=Z,16nm,1.2s,baz=351,slow=11
**PRA Prague 23.03 152** *e*P **P** **05 59 55.2 +1.4**
PRA AMS AMS 06 10 10.0
comp=Z,2µm,13.9s
**PRA Prague 23.03 152** *e*P **P** **05 59 55.2 +1.4**
PRA MLR MLR
comp=Z,2µm,13.9s
**DPC Dobruska-Polom 23.06 149** *e*P **P** **05 59 54.4 +0.3**
DPC AMS AMS 06 09 30.0
comp=Z,3µm,16.3s
**DPC Dobruska-Polom 23.06 149** *e*P **P** **05 59 54.4 +0.3**
DPC MLR MLR
comp=Z,3µm,16.3s
**DPC Dobruska-Polom 23.06 149** P **P** **05 59 53.7 -0.4**
comp=Z,84nm,1.7s,comp=Z,1µm
**PRU Pruhonice 23.13 152** *e*P **P** **05 59 55.6 +0.8**
PRU AMS AMS 06 10 10.0
comp=Z,2µm,13.7s
**PRU Pruhonice 23.13 152** *e*P **P** **05 59 55.6 +0.8**
PRU MLR MLR
comp=Z,2µm,13.7s
**MOS Moscow 23.15 113** *e*P **P** **05 59 52.4 -2.5**
MOS *e* 06 00 35.3
MOS *e*S **S** **06 04 03.7 -2.1**
MOS pmax pmax
comp=Z,440nm,2.0s
MOS pmax pmax
comp=Z,151nm,1.2s
MOS smax smax
comp=E,500nm,3.2s
MOS smax smax
comp=N,600nm,3.2s
MOS MLR MLR
comp=N,5µm,15.0s
MOS MLR MLR
comp=Z,6µm,15.0s
MOS MLR MLR
comp=E,2µm,14.0s
**GOPC GO Pecny, Ondr 23.24 151** *e*P **P** **05 59 55.7 -0.2**
GOPC *e*S **S** **06 04 11.1 +3.6**
GOPC AMS AMS 06 10 20.0
comp=E,2µm,13.5s
**GOPC GO Pecny, Ondr 23.24 151** *e*P **P** **05 59 55.7 -0.2**
GOPC *e*S **S** **06 04 11.1 +3.6**
GOPC MLR MLR
comp=Z,2µm,13.5s
**LDF La Druitiere 23.25 176** *e*P **P** **05 59 54.9 -1.1**
**OBN Obninsk 23.38 115** P **P** **05 59 56.7 -0.5**
**OBN Obninsk 23.38 115** LR LR 06 08 34.9
comp=Z,5µm,18.9s,baz=334,slow=35
**OBN Obninsk 23.38 115**⇑ P **P** **05 59 57.3 0.0**
**OBN Obninsk 23.38 115**⇑ *e*P **P** **05 59 56.3 -0.9**
OBN *e*PPP PPP 06 00 28.6
OBN *e*S **S** **06 04 10.1 +0.4**
OBN pmax pmax
comp=Z,243nm,1.2s
OBN MLR MLR
comp=Z,5µm,17.0s
**OBN Obninsk 23.38 115** P **P** **05 59 58.2 +1.0**
comp=Z,164nm,1.3s,comp=Z,3µm
**KRLC Kraliky 23.40 148** *e*P **P** **05 59 57.6 0.0**
KRLC *e*S **S** **06 04 15.1 +4.9**
KRLC AMS AMS 06 09 50.0
comp=Z,3µm,16.0s
**KRLC Kraliky 23.40 148** *e*P **P** **05 59 57.6 0.0**
KRLC *e*S **S** **06 04 15.1 +4.9**
KRLC MLR MLR
comp=Z,3µm,16.0s
**SGMF Saint Gilles 23.57 181** *e*P **P** **05 59 59.4 +0.2**
**ZVC Zvikov 23.61 153** AMS AMS 06 10 40.0
comp=Z,2µm,13.8s
**STU Stuttgart 23.65 161** P **P** **05 59 59.1 -0.8**
STU IAmb IAmb 06 00 09.0
comp=Z,70nm,1.2s
**STU Stuttgart 23.65 161** P **P** **05 59 59.1 -0.8**
STU pmax pmax
comp=Z,71nm,1.2s
**WET Wettzell 23.72 155** *e*P **P** **06 00 01.7 +1.1**
baz=351,slow=11
**OJC Ojcow 23.80 143** *e*P **P** **06 00 01.9 +0.5**
**OJC Ojcow 23.80 143** P **P** **06 00 01.2 -0.2**
**OJC Ojcow 23.80 143** P **P** **06 00 01.2 -0.2**
OJC pmax pmax
comp=Z,241nm,1.7s
**OJC Ojcow 23.80 143** P **P** **06 00 01.6 +0.2**
comp=Z,86nm,1.1s,comp=Z,1µm
**MORC Moravsky Berou 23.82 147** P **P** **06 00 01.1 -0.5**
**MORC Moravsky Berou 23.82 147** *e*P **P** **06 00 01.4 -0.2**
MORC *e*S **S** **06 04 17.0 +0.2**
**MORC Moravsky Berou 23.82 147**⇓ P **P** **06 00 01.9 +0.2**
**MORC Moravsky Berou 23.82 147** P **P** **06 00 01.1 -0.5**
MORC pmax pmax
comp=Z,50nm,1.3s
**KHC Kasperske Hory 23.83 154** P **P** **06 00 01.8 +0.1**
KHC IAmb IAmb 06 00 06.8
comp=Z,118nm,1.8s
**KHC Kasperske Hory 23.83 154** *e*P **P** **06 00 02.5 +0.7**
KHC *e*S **S** **06 04 14.9 -2.1**
KHC AMS AMS 06 10 10.0
comp=Z,2µm,16.7s
**KHC Kasperske Hory 23.83 154***c* *i*P **P** **06 00 02.2 +0.5**
KHC pmax pmax
comp=Z,180nm,2.5s
**KHC Kasperske Hory 23.83 154** P **P** **06 00 02.4 +0.7**
comp=Z,26nm,1.6s,comp=Z,743nm
**OKC Ostrava-Krasne 23.86 146** AMS AMS 06 10 10.0
comp=Z,4µm,14.3s
**CLF Chambon-Foret 23.89 173** P **P** **06 00 00.8 -1.4**
**QUIF Quistinic 23.91 182** *e*P **P** **06 00 01.4 -1.0**
**RNPP9 Sopachiv 23.95 133** P **P** **06 00 02.6 -0.2**
**TREC Trest 23.95 151** *e*P **P** **06 00 03.7 +0.8**
TREC AMS AMS 06 10 30.0
comp=Z,3µm,14.1s
**TREC Trest 23.95 151** *e*P **P** **06 00 03.7 +0.8**
TREC MLR MLR
comp=Z,3µm,14.1s
**BFO Black Forest 24.00 162** P **P** **06 00 02.7 -0.6**
**BFO Black Forest 24.00 162** P **P** **06 00 02.7 -0.6**
BFO pmax pmax
comp=Z,156nm,1.2s
**BFO Black Forest 24.00 162** *e*P **P** **06 00 04.2 +0.9**
comp=Z,92nm,1.1s,baz=351,slow=11
**ECH Echery 24.01 164** P **P** **06 00 03.1 -0.3**
ECH IAmb IAmb 06 00 08.1
comp=Z,99nm,1.3s
**ECH Echery 24.01 164** P **P** **06 00 03.1 -0.3**
ECH pmax pmax
comp=Z,99nm,1.3s
**RNPP8 Varash 24.01 133** P **P** **06 00 02.7 -0.6**
**VRAC Vranov 24.11 149** *e*P **P** **06 00 04.6 +0.2**
VRAC *e*S **S** **06 04 22.4 +0.9**
**VRAC Vranov 24.11 149** LR LR 06 10 16.4
comp=Z,2µm,18.6s,baz=345,slow=38
**VRAC Vranov 24.11 149**⇑ P **P** **06 00 05.0 +0.6**
**VRAC Vranov 24.11 149** P **P** **06 00 04.9 +0.6**
**RNPP5 Staryi Chortor 24.11 133** P **P** **06 00 03.5 -0.8**
**GEC2 GERESS Array S 24.12 154** P **P** **06 00 04.0 -0.6**
GEC2 IAmb IAmb 06 00 14.7
comp=Z,94nm,1.5s
**GEC2 GERESS Array S 24.12 154** *e*P **P** **06 00 05.4 +0.8**
baz=351,slow=11
**GERES GERESS Array B 24.12 154** P **P** **06 00 04.9 +0.3**
**GERES GERESS Array B 24.12 154** P **P** **06 00 05.3 +0.8**
comp=Z,7.2nm,0.8s,baz=354,slow=1.3,SNR=30
comp=Z,7.2nm,0.8s
**GERES GERESS Array B 24.12 154** P **P** **06 00 04.9 +0.3**
**CKRC Cesky Krumlov 24.23 153** *e*P **P** **06 00 06.1 +0.6**
CKRC AMS AMS 06 11 00.0
comp=Z,2µm,12.9s
**CKRC Cesky Krumlov 24.23 153** *e*P **P** **06 00 06.1 +0.6**
CKRC MLR MLR
comp=Z,2µm,12.9s
**MAUC Maruska 24.26 147** *e*P **P** **06 00 05.6 -0.2**
**KRUC Moravsky 24.32 149** *e*P **P** **06 00 06.3 0.0**
KRUC *e*S **S** **06 04 27.3 +2.5**
**RES Resolute Bay 24.35 320** LR LR 06 09 14.4
comp=Z,4µm,20.6s,baz=30,slow=36
**KIRV Kirov 24.38 96** LR LR 06 09 09.8
comp=Z,1µm,18.8s,baz=324,slow=35
**KIRV Kirov 24.38 96**‖ *e*P **P** **06 00 06.4 -0.3**
**HINF Hinteralfeld 24.38 165** *e*P **P** **06 00 06.4 -0.5**
**NIE Niedzica 24.66 143** *e*P **P** **06 00 10.1 +0.7**
**NIE Niedzica 24.66 143** P **P** **06 00 09.8 +0.4**
comp=Z,40nm,1.1s,comp=Z,497nm
**JAVC Velka Javorina 24.73 147** *e*P **P** **06 00 11.2 +1.2**
**LANS Liptovska Anna 24.76 145** *e*P **P** **06 00 10.9 +0.6**
LANS pmax pmax
comp=Z,8.0nm,1.0s
**LANS Liptovska Anna 24.76 145** *e*P **P** **06 00 10.9 +0.6**
**MI28 Mi28,Pidlybu 24.81 131** P **P** **06 00 09.7 -1.0**
**UBR Ueberruh 24.82 160** *e*P **P** **06 00 12.6 +1.7**
comp=Z,37nm,0.8s,baz=351,slow=11
**KWP Kalwaria Pacla 24.93 139** *e*P **P** **06 00 12.3 +0.5**
**KWP Kalwaria Pacla 24.93 139** P **P** **06 00 12.2 +0.4**
**KWP Kalwaria Pacla 24.93 139** P **P** **06 00 12.2 +0.4**
KWP pmax pmax
comp=Z,394nm,1.5s
**KWP Kalwaria Pacla 24.93 139** P **P** **06 00 12.2 +0.4**
comp=Z,197nm,0.7s,comp=Z,3µm
**FRB Frobisher Bay 25.00 285** LR LR 06 09 24.0
comp=Z,2µm,19.1s,baz=41,slow=35
**LVV L'vov 25.03 137** *e*P **P** **06 00 12.1 -0.6**
LVV *e* 06 00 49.9
LVV *e*S **S** **06 04 31.5 -4.7**
LVV MLR MLR
comp=Z,4µm,14.0s
**RETA Reutte 25.09 159** *e*P **P** **06 00 14.5 +1.2**
comp=Z,36nm,1.0s,SNR=15
**RJOB Jochberg 25.09 156** *e*P **P** **06 00 14.6 +1.3**
comp=Z,32nm,0.8s,baz=351,slow=11
**MI30 MI30,Zelenitsa 25.10 131** P **P** **06 00 12.8 -0.5**
**AVF Avril sur Loir 25.17 171** *e*P **P** **06 00 13.4 -0.6**
**MOA Molln 25.18 153** *e*P **P** **06 00 14.7 +0.7**
comp=Z,57nm,1.5s,SNR=21
**DAVA Damuels 25.19 160** *i* P **P** **06 00 15.4 +1.1**
comp=Z,122nm,1.0s,SNR=43
**MFF Saint Martin d 25.24 177** *e*P **P** **06 00 14.5 -0.1**
**BIOA Bad Ischl, Aus 25.25 154** *e*P **P** **06 00 15.5 +0.9**
comp=Z,16nm,1.0s,SNR=10
**MOTA Moosalm 25.27 158** *i* P **P** **06 00 16.2 +1.2**
comp=Z,89nm,1.1s
**ZST Bratislava 25.27 149** *e*P **P** **06 00 15.6 +0.7**
ZST pmax pmax
comp=Z,116nm,1.7s
**ZST Bratislava 25.27 149** *e*P **P** **06 00 15.6 +0.7**
**VYHS Vyhne 25.28 146** *e*P **P** **06 00 15.2 +0.2**
VYHS pmax pmax
comp=Z,16nm,1.2s
**VYHS Vyhne 25.28 146** *e*P **P** **06 00 15.2 +0.2**
**AK21 Malin Array Si 25.28 129** P **P** **06 00 14.0 -0.9**
**AK22 Malin Array Si 25.30 129** P **P** **06 00 14.2 -0.9**
**AK20 Malin Array Si 25.30 130** P **P** **06 00 14.3 -0.8**
**AK23 Malin Array Si 25.31 129** P **P** **06 00 14.3 -0.9**
**AK19 Malin Array Si 25.32 130** P **P** **06 00 14.4 -0.9**
**MI29 MI29, Kamyanyy 25.33 131** P **P** **06 00 15.0 -0.3**
**WATA Walderalm 25.33 158** *e*P **P** **06 00 16.6 +1.0**
comp=Z,86nm,1.1s,SNR=41
**AK18 Malin Array Si 25.34 129** P **P** **06 00 14.7 -0.7**
**CONA Conrad Observa 25.34 151** *i* P **P** **06 00 16.3 +0.7**
comp=Z,43nm,1.1s,SNR=31
**LESA Schwarzleotal 25.38 156** *i* P **P** **06 00 17.1 +1.2**
comp=Z,27nm,1.6s
**AKASG Malin Array Be 25.39 129** P **P** **06 00 15.1 -0.9**
comp=Z,43nm,0.9s,baz=334,slow=10.0,SNR=53
AKASG PcP **PcP** **06 03 48.2 +0.5**
comp=Z,2.5nm,0.7s,baz=338,slow=2.3,SNR=2.4
AKASG LR LR 06 09 58.3
comp=Z,4µm,18.7s,baz=324,slow=36
comp=Z,43nm,0.9s
**AKBB Malin Array Si 25.39 129** P **P** **06 00 15.0 -1.0**
**AKBB Malin Array Si 25.39 129***c* *e*P **P** **06 00 15.3 -0.6**
AKBB pmax pmax
comp=Z,110nm,1.1s
**AKBB Malin Array Si 25.39 129** P **P** **06 00 14.8 -1.1**
**KIEV Kiev 25.40 129** P **P** **06 00 14.7 -1.2**
**KIEV Kiev 25.40 129**⇑ P **P** **06 00 15.6 -0.3**
**KIEV Kiev 25.40 129** P **P** **06 00 14.7 -1.2**
KIEV pmax pmax
comp=Z,134nm,1.3s
**KIEV Kiev 25.40 129** P **P** **06 00 15.2 -0.8**
comp=Z,352nm,1.3s,comp=Z,5µm
**SQTA Sankt Quirin 25.40 158** *i* P **P** **06 00 17.8 +1.6**
comp=Z,82nm,1.2s,SNR=31
**WTTA Wattenberg 25.41 158** *e*P **P** **06 00 17.9 +1.6**
comp=Z,87nm,1.1s,SNR=42
**SHIU Shidnytsya 25.45 139** P **P** **06 00 17.2 +0.7**
**KOLS Kolonicke sedl 25.51 141** *e*P **P** **06 00 17.5 +0.5**
KOLS pmax pmax
comp=Z,25nm,0.8s
**KOLS Kolonicke sedl 25.51 141** *e*P **P** **06 00 17.5 +0.5**
**FETA Feichten 25.54 159** *i* P **P** **06 00 18.7 +1.2**
comp=Z,42nm,1.1s,SNR=20
**KECS Kecovo 25.59 143** *e*P **P** **06 00 17.8 0.0**
KECS pmax pmax
comp=Z,21nm,0.7s
**KECS Kecovo 25.59 143** *e*P **P** **06 00 17.8 0.0**
**RONA Rosalia, Austr 25.63 150** *i* P **P** **06 00 19.2 +1.0**
comp=Z,23nm,1.0s,SNR=21
**MORS Morshin 25.65 138** P **P** **06 00 18.4 +0.1**
**KBA Koelnbreinsper 25.81 155** *i* P **P** **06 00 21.4 +1.4**
comp=Z,15nm,1.0s,SNR=8.5
**SRO Srobarova 25.85 147** *e*P **P** **06 00 21.0 +0.9**
SRO pmax pmax
comp=Z,29nm,1.1s
**SRO Srobarova 25.85 147** *e*P **P** **06 00 21.0 +0.9**
**SENIN Lac Senin/Sane 25.86 165** P **P** **06 00 20.9 +0.4**
**FUORN Ofenpass-Fuorn 25.89 160** P **P** **06 00 21.1 +0.3**
**HOLLI Holmelv 25.92 141** P **P** **06 00 21.4 +0.7**
**ARSA Arzberg 25.95 152** *i* P **P** **06 00 22.1 +1.0**
comp=Z,28nm,1.0s,SNR=19
**ABTA Abfaltersbach 26.02 156** *e*P **P** **06 00 23.2 +1.4**
comp=Z,11nm,1.0s,SNR=6.2
**PSZ Piszkesteto 26.02 145** P **P** **06 00 21.2 -0.6**
PSZ IAmb IAmb 06 00 55.6
comp=Z,38nm,1.1s
**PSZ Piszkesteto 26.02 145**⇑ P **P** **06 00 22.4 +0.6**
**PSZ Piszkesteto 26.02 145** P **P** **06 00 21.2 -0.6**
PSZ pmax pmax
comp=Z,38nm,1.1s
**MUKU Mukachevo 26.05 140** P **P** **06 00 22.5 +0.6**
**HORU Horodok 26.12 134** P **P** **06 00 23.1 +0.5**
**MEZ Mezhgor'ye 26.16 139** P **P** **06 00 23.5 +0.6**
**STNU Starunia 26.18 138** P **P** **06 00 23.3 +0.2**
**BRIU Brid 26.22 140** P **P** **06 00 23.7 +0.2**
**BERU Beregovo 26.25 140** P **P** **06 00 24.1 +0.4**
**LPSR Galich'ya Gora 26.26 115** *e*P **P** **06 00 23.6 -0.2**
LPSR pmax pmax
comp=Z,220nm,1.2s
LPSR MLR MLR
comp=Z,4µm,16.0s
**MYKA Terra Mystica 26.29 155** *i* P **P** **06 00 25.3 +1.2**
comp=Z,7.7nm,0.7s,SNR=6.8
**MPLH Magyarpolny 26.34 149** P **P** **06 00 25.2 +0.6**
comp=Z,117nm,2.2s,comp=Z,2µm
**KORU Korolevo 26.42 140** P **P** **06 00 24.3 -1.0**
**SOKA Soboth 26.43 153** *i* P **P** **06 00 26.0 +0.5**
comp=Z,9.6nm,1.0s,SNR=11
**TRSU Trosnyk 26.44 140** P **P** **06 00 26.1 +0.6**
**STAL STALIGIAL 26.53 156** P **P** **06 00 25.5 -0.8**
STAL IAmb IAmb 06 00 59.8
comp=Z,20nm,0.5s
**OBKA Obir 26.53 153** *i* pP **P** **06 00 27.9 +1.5**
comp=Z,13nm,1.0s,SNR=9.2
**CTI Castel Tesino 26.61 158** P **P** **06 00 26.8 -0.3**
CTI IAmb IAmb 06 00 31.0
comp=Z,109nm,1.6s
**CTI Castel Tesino 26.61 158** P **P** **06 00 26.8 -0.3**
CTI pmax pmax
comp=Z,109nm,1.6s
**LPL La Plagne 26.65 166** *e*P **P** **06 00 27.6 -0.1**
**KSV Kosov 26.67 137** P **P** **06 00 28.2 +0.6**
**LPG La Plagne 26.68 166** *e*P **P** **06 00 29.2 +1.3**
**MOZS Mozjanca 26.73 154** *i* P **P** **06 00 28.8 +0.7**
**SSB Saint Sauveur 26.74 169** P **P** **06 00 27.9 -0.3**
SSB IAmb IAmb 06 00 32.0
comp=Z,39nm,1.0s
**SSB Saint Sauveur 26.74 169** P **P** **06 00 28.0 -0.3**
SSB pmax pmax
comp=Z,39nm,1.0s
**KMPD K-Podol'skiy 26.75 135** P **pP** **06 00 28.0 -3.1**
KMPD P **P** **06 00 27.3 -0.9**
**NDNU Novodnistrovsk 26.92 134** P **P** **06 00 28.9 -0.9**
**LJU Ljubljana 26.98 154** *e*P **P** **06 00 30.8 +0.4**
**GBAS Gorenja Brezov 27.08 154** *i* P **P** **06 00 31.4 +0.2**
GBAS *e*S **S** **06 05 08.8 +0.1**
**BNI Bardonecchia 27.11 166** P **P** **06 00 32.1 +0.4**
BNI IAmb IAmb 06 00 37.6
comp=Z,80nm,1.2s
**BNI Bardonecchia 27.11 166** P **P** **06 00 32.1 +0.4**
BNI pmax pmax
comp=Z,80nm,1.2s
**VORR Voronezh 27.17 115** *e*P **P** **06 00 30.0 -2.0**
VORR pmax pmax
comp=Z,60nm,0.5s
VORR MLR MLR
comp=Z,3µm,13.0s
**VIVF Saint-Julien-l 27.17 169** *e*P **P** **06 00 33.0 +0.9**
**ORIF Oris-en-Rattie 27.17 167** *e*P **P** **06 00 31.9 -0.4**
**TEOL Teolo 27.29 158** P **P** **06 00 32.6 -0.5**
**BUR08 Bucovina Ar. S 27.34 137** P **P** **06 00 32.3 -1.4**
BUR08 IAmb IAmb 06 00 48.0
comp=Z,44nm,1.3s
**BURAR Bucovina Array 27.37 137**⇑ P **P** **06 00 33.8 -0.2**
**BURAR Bucovina Array 27.37 137** P **P** **06 00 33.8 -0.2**
**MORH Mrgy, Hungar 27.45 148**⇑ P **P** **06 00 35.7 +1.1**
**MORH Mrgy, Hungar 27.45 148** P **P** **06 00 34.3 -0.3**
comp=Z,8.2nm,1.1s
**VSR Storozhevoye 27.56 116** *e*P **P** **06 00 34.2 -1.3**
VSR pmax pmax
comp=Z,90nm,1.1s
VSR MLR MLR
comp=Z,4µm,15.0s
**SORM Soroca 27.58 133**⇑ P **P** **06 00 35.7 0.0**
**SORM Soroca 27.58 133** P **P** **06 00 35.6 0.0**
**SORM Soroca 27.58 133** P **P** **06 00 35.5 -0.2**
comp=Z,118nm,1.4s,comp=Z,1µm
**DRGR 27.64 141**⇑ P **P** **06 00 37.2 +0.8**
**DRGR 27.64 141** P **P** **06 00 37.2 +0.8**
**VORD Divnogorie 27.82 116** *e*P **P** **06 00 37.5 -0.3**
VORD pmax pmax
comp=Z,90nm,1.6s
VORD MLR MLR
comp=Z,850nm,11.0s
**MARR Marisel-Cluj 27.83 141**⇑ P **P** **06 00 38.9 +0.7**
**SIRR Siria 27.94 143**⇑ P **P** **06 00 39.7 +0.7**

**VRH Novokhopyorsk 28.31 113** *e*P **P** **06 00 41.8 -0.3**
VRH pmax pmax
comp=Z,91nm,1.8s
VRH MLR MLR
comp=Z,6µm,16.0s
**SURR Surduc 28.52 143** ⇑P **P** **06 00 45.0 +0.8**
**BZS Buzias 28.56 144** ⇑P **P** **06 00 45.2 +0.7**
**BZS Buzias 28.56 144** P **P** **06 00 45.1 +0.7**
**FRGS Fruska Gora 28.68 146** ⇑P **P** **06 00 45.8 +0.3**
**FRGS Fruska Gora 28.68 146** P **P** **06 00 46.4 +0.9**
comp=Z,16nm,1.2s,comp=Z,375nm
**TESR Tescani 28.73 136** ⇑P **P** **06 00 45.9 -0.1**
**TESR Tescani 28.73 136** P **P** **06 00 46.4 +0.4**
comp=Z,40nm,1.5s,comp=Z,755nm
**EPF Esparros 28.82 176** *e*P **P** **06 00 45.8 -1.1**
**MILM Milestii Mici 28.83 133** *e*P **P** **06 00 46.0 -0.8**
MILM *e*S **S** **06 05 38.0 +1.9**
comp=Z,800nm,6.5s
MILM *e*L L 06 07 29.0
MILM LRM MLR 06 11 51.0
comp=Z,2µm,18.0s
**MILM Milestii Mici 28.83 133** *e*P **P** **06 00 46.0 -0.8**
MILM *e*S **S** **06 05 38.0 +1.9**
MILM smax smax
comp=N,800nm,6.5s
**ONER Baraj Valea Uz 28.84 137** ⇑P **P** **06 00 47.9 +0.9**
**OZUR 28.94 137** ⇑P **P** **06 00 47.9 +0.1**
**GZR Gura Zlata 29.00 142** ⇑P **P** **06 00 49.2 +0.7**
**GZR Gura Zlata 29.00 142** P **P** **06 00 49.1 +0.7**
**ARU Arti 29.01 89** P **P** **06 00 49.0 +0.6**
ARU IAmb IAmb 06 01 25.9
comp=Z,43nm,1.0s
**ARU Arti 29.01 89** LR LR 06 12 07.6
comp=Z,1µm,18.9s,baz=320,slow=36
**ARU Arti 29.01 89***d i*P **P** **06 00 49.0 +0.6**
ARU PPP PPP 06 01 47.4
ARU S **S** **06 05 40.7 +1.8**
ARU SS **SnSn** **06 07 02.0 +0.3**
ARU pmax pmax
comp=Z,42nm,1.2s
ARU MLR MLR
comp=Z,1µm,18.0s
**ARU Arti 29.01 89** P **P** **06 00 48.8 +0.4**
comp=Z,48nm,1.0s,comp=Z,600nm
**BELG Belogornoye 29.02 105** LR LR 06 11 54.7
comp=Z,4µm,18.2s,baz=332,slow=35
**BELG Belogornoye 29.02 105***c i*P **P** **06 00 48.0 -0.4**
BELG pmax pmax
comp=Z,12nm,1.1s
**LOT Lotru 29.14 141** ⇑P **P** **06 00 50.2 +0.4**
**CEST Esterri de Car 29.27 175** P **P** **06 00 51.1 +0.1**
CEST IAmb IAmb 06 00 53.6
comp=Z,24nm,1.2s
**GHRR 29.32 135** P **P** **06 00 51.9 +0.7**
**SVE Sverdlovsk 29.34 87** *e*P **P** **06 00 51.5 +0.2**
SVE *e*S **S** **06 05 50.7 +6.7**
SVE pmax pmax
comp=Z,30nm,1.5s
SVE MLR MLR
comp=Z,1µm,16.0s
**PLOR3 Plostina Array 29.35 136** P **P** **06 00 52.2 +0.6**
comp=Z,41nm,1.4s,comp=Z,1µm
**PLOR Plostina 29.35 136** ⇑P **P** **06 00 52.6 +1.0**
**PLOR Plostina 29.35 136** P **P** **06 00 52.6 +1.0**
**VRI Vrincioaia 29.36 136** ⇑P **P** **06 00 51.7 +0.1**
**VRI Vrincioaia 29.36 136** P **P** **06 00 51.7 +0.1**
**VRI Vrincioaia 29.36 136** P **P** **06 00 52.3 +0.7**
comp=Z,18nm,1.4s
**PLOR5 Plostina Array 29.36 136** P **P** **06 00 52.3 +0.7**
comp=Z,27nm,1.5s
**MDVR Moldovita 29.38 144** ⇑P **P** **06 00 53.0 +1.2**
**VOIR 29.41 139** ⇓P **P** **06 00 52.9 +0.7**
**VOIR 29.41 139** P **P** **06 00 52.8 +0.7**
**VOIR 29.41 139** P **P** **06 00 52.3 +0.2**
comp=Z,7.6nm,1.4s
**HERR Herculane 29.42 143** ⇑P **P** **06 00 52.9 +0.8**
**MLR Muntele Rosu 29.55 138** P **P** **06 00 53.3 -0.1**
**MLR Muntele Rosu 29.55 138** LR LR 06 13 02.6
comp=Z,3µm,20.7s,baz=346,slow=37
**MLR Muntele Rosu 29.55 138** ⇓P **P** **06 00 53.8 +0.3**
**MLR Muntele Rosu 29.55 138** P **P** **06 00 53.3 -0.1**
MLR pmax pmax
comp=Z,27nm,1.1s
**MLR Muntele Rosu 29.55 138** P **P** **06 00 53.7 +0.3**
comp=Z,22nm,1.2s,comp=Z,505nm
**DJES Djerdap 29.65 143** ⇑P **P** **06 00 54.8 +0.7**
**BISRR Bisoca 29.66 137** P **P** **06 00 55.5 +1.2**
comp=Z,120nm,1.3s,comp=Z,3µm
**NEHR Nehoiu 29.68 137** ⇑P **P** **06 00 54.8 +0.3**
**FDMO Fiordimonte 29.75 157** P **P** **06 00 55.5 +0.4**
**NRCA Norcia 29.95 157** P **P** **06 00 57.3 +0.3**
NRCA IAmb IAmb 06 01 00.6
comp=Z,36nm,1.2s
**PGAV Gavieira, Arco 30.01 189** *e*S **S** **06 05 59.4 +4.5**
PGAV *e*LR LR 06 08 56.1
comp=Z,1µm,18.0s
**PBRG Braganca 30.10 187** *e*P **P** **06 00 59.8 +1.6**
comp=Z,42nm,1.7s
**CESX Cesi 30.11 158** P **P** **06 00 57.9 -0.3**
**CAMP Campotosto 30.28 157** P **P** **06 01 00.0 +0.1**
CAMP IAmb IAmb 06 01 37.0
comp=Z,37nm,1.4s
**CFR Carcaliu 30.32 135** ⇑P **P** **06 01 00.2 +0.1**
**CFR Carcaliu 30.32 135** P **P** **06 01 00.1 +0.1**
**BOVS Bovan 30.49 144** ⇑P **P** **06 01 01.5 -0.1**
**POLO Lamas de Olo 30.57 188** *e*P **P** **06 01 03.5 +1.0**
**TPGR Topolog 30.69 135** ⇑P **P** **06 01 03.5 +0.1**
**MVO Moncorvo 30.75 187** *e*P **P** **06 01 05.3 +1.3**
comp=Z,47nm,1.3s
MVO *e*S **S** **06 06 12.1 +5.5**
MVO *e*LR LR 06 09 33.9
comp=Z,796nm,22.0s
**PDG Podgorica 31.23 148** P **P** **06 01 07.0 -1.1**
PDG IAmb IAmb 06 01 09.4
comp=Z,25nm,1.2s
**PVIS Viseu 31.23 188** *e*P **P** **06 01 09.5 +1.3**
comp=Z,47nm,1.7s
**MTE Manteigas 31.53 188** P **P** **06 01 10.2 -0.7**
MTE IAmb IAmb 06 01 23.4
comp=Z,33nm,1.3s
**MTE Manteigas 31.53 188** *e*P **P** **06 01 12.3 +1.4**
comp=Z,46nm,1.6s
MTE *e*S **S** **06 06 22.7 +3.9**
MTE *e*LR LR 06 09 58.1
comp=Z,899nm,20.0s
**SCHQ Schefferville 31.54 272** P **P** **06 01 10.0 -0.8**
**SCHQ Schefferville 31.54 272** P **P** **06 01 11.0 +0.2**
comp=Z,13nm,0.9s,baz=19,slow=9.6,SNR=7.1
SCHQ LR LR 06 12 51.6
comp=Z,1µm,19.7s,baz=28,slow=34
comp=Z,13nm,0.9s
**A36M Sachs Harbour 31.95 330** P **P** **06 01 14.7 +0.6**
baz=30
**SIM Simferopol' 31.96 127** *e*P P 06 01 23.6 +9.1
SIM *e*S **S** **06 06 18.3 -6.9**
SIM pmax pmax
comp=Z,16nm,0.9s
SIM MLR MLR
comp=Z,2µm,15.6s
**ELND Elena 31.98 139** ⇑P **P** **06 01 15.1 +0.3**
**PCBR Castelo Branco 32.09 188** *e*P **P** **06 01 16.5 +0.8**
comp=Z,30nm,1.6s
**ESBB Sonseca Array 32.16 183** P **P** **06 01 15.9 -0.4**
ESBB IAmb IAmb 06 01 18.0
comp=Z,28nm,1.4s
**ESDC Sonseca Array 32.16 183** P **P** **06 01 16.7 +0.3**
comp=Z,9.9nm,1.0s,baz=0.5,slow=9.0,SNR=36
ESDC LR LR 06 13 48.9
comp=Z,975nm,18.9s,baz=1.0,slow=36
comp=Z,9.9nm,1.0s
**PAB San Pablo 32.29 183** P **P** **06 01 17.6 0.0**
PAB IAmb IAmb 06 01 21.1
comp=Z,29nm,1.1s
**PAB San Pablo 32.29 183** P **P** **06 01 17.6 0.0**
PAB pmax pmax
comp=Z,29nm,1.1s
**PSBE So Bento 32.48 189** *e*P **P** **06 01 20.1 +1.0**
**PMRV Marv??o 32.50 187** *e*P **P** **06 01 20.3 +1.0**
comp=Z,67nm,1.3s
PMRV *e*S **S** **06 06 36.8 +3.1**
PMRV *e*LR LR 06 10 12.2
comp=Z,776nm,20.0s
**PEHC Pehcevo 32.51 144** *i* P **P** **06 01 19.6 +0.2**
**OHR Ohrid 32.78 147** ⇑*i*P **P** **06 01 22.7 +0.9**
**VSL Villasalto 32.85 163** P **P** **06 01 22.4 0.0**

**VAY Valandovo 32.89 144** ⇑*i*P **P** **06 01 23.1 +0.4**
**PMTG Montargil 32.89 189** *e*P **P** **06 01 23.4 +0.7**
comp=Z,45nm,1.5s
**ERBR Yeremizino-Bor 32.92 119** *e*P **P** **06 01 24.4 +1.4**
ERBR *e*S **S** **06 06 43.6 +3.3**
ERBR pmax pmax
comp=Z,27nm,0.5s
ERBR MLR MLR
comp=Z,1µm,16.0s
**ANN Anapa 32.95 123** *e*P **P** **06 01 23.1 0.0**
ANN pmax pmax
comp=Z,90nm,1.1s
ANN MLR MLR
comp=Z,3µm,14.0s
**PESTR Estremoz 33.06 188** *e*P **P** **06 01 25.1 +0.8**
comp=Z,45nm,1.3s
**FNA Florina 33.20 146** P **P** **06 01 25.4 -0.1**
**FNA Florina 33.20 146** P **P** **06 01 25.4 -0.1**
FNA pmax pmax
comp=Z,114nm,1.1s
**TIXI Tiksi 33.43 26** P **P** **06 01 27.7 +0.6**
TIXI IAmb IAmb 06 01 32.4
comp=Z,28nm,1.0s
**TIXI Tiksi 33.43 26***d i*P **P** **06 01 26.5 -0.6**
TIXI pmax pmax
comp=Z,32nm,1.0s
**PBAR Barrancos 33.73 187** *e*P **P** **06 01 31.3 +1.2**
comp=Z,31nm,1.4s
**PBEJ Beja 33.91 188** *e*P **P** **06 01 32.6 +1.0**
comp=Z,39nm,1.3s
**AKTO Aktyubinsk 33.94 96** LR LR 06 15 12.2
comp=Z,2µm,18.3s,baz=12,slow=36
**LABN Labinsk 33.98 119** *e*P **P** **06 01 33.4 +1.2**
LABN *e*S **S** **06 07 00.8 +4.2**
LABN pmax pmax
comp=Z,77nm,0.6s
LABN MLR MLR
comp=Z,2µm,20.0s
**TIP Timpagrande 34.03 153** P **P** **06 01 32.6 -0.1**
**C36M Paulatuk 34.07 327** P **P** **06 01 33.4 +0.7**
baz=28
**MESJ Messejana 34.12 188** *e*P **P** **06 01 35.3 +1.9**
comp=Z,39nm,1.3s
**MESJ Messejana 34.12 188** *e*P **P** **06 01 34.4 +1.0**
MESJ IAmb IAmb 06 01 35.8
comp=Z,38nm,1.2s
MESJ *e*S **S** **06 07 01.1 +2.3**
**GOF Gofitskoye 34.24 116***c e*P **P** **06 01 35.4 +1.0**
**PCVE Castro Verde 34.31 188** *e*P **P** **06 01 38.1 +3.0**
**PVAQ Vaqueiros 34.53 188** *e*S **S** **06 07 10.4 +5.2**
PVAQ *e*LR LR 06 11 29.2
comp=Z,1µm,20.0s
**MORF Manelete 34.67 189** *e*P **P** **06 01 38.5 +0.3**
comp=Z,53nm,1.6s
**SOC Sochi 34.69 121** *e*P **P** **06 01 34.6 -3.7**
SOC *e* 06 02 51.7
SOC *e*S **S** **06 07 06.7 -0.8**
SOC *e*SS **SnSn** **06 09 20.1 +0.3**
SOC MLR MLR
comp=Z,2µm,16.0s
**AGG Agios Georgios 35.08 146** P **P** **06 01 41.1 -0.6**
AGG IAmb IAmb 06 01 42.9
comp=Z,40nm,0.9s
**AGG Agios Georgios 35.08 146** P **P** **06 01 41.1 -0.6**
AGG pmax pmax
comp=Z,40nm,0.9s
**KIV Kislovodsk 35.16 118** P **P** **06 01 42.2 -0.3**
**KIV Kislovodsk 35.16 118** ⇑P **P** **06 01 43.0 +0.6**
**KIV Kislovodsk 35.16 118** *e*P **P** **06 01 41.3 -1.2**
KIV *e* 06 02 58.2
KIV *e*S **S** **06 07 14.7 -0.3**
KIV pmax pmax
comp=Z,39nm,1.1s
KIV MLR MLR
comp=Z,808nm,16.0s
**KIV Kislovodsk 35.16 118** P **P** **06 01 43.6 +1.1**
**KVAR Kislovodsk Arr 35.16 118** LR LR 06 14 11.1
comp=Z,1µm,21.1s,baz=278,slow=33
**SHA1 Shidzhatmaz 35.35 118** *i* P **P** **06 01 43.2 -1.1**
**VAE Valguarnera 35.39 157** LR LR 06 17 17.1
comp=Z,2µm,19.8s,baz=14,slow=38
**KBZ Khabaz 35.42 118** P **P** **06 01 45.8 +1.2**
comp=Z,19nm,0.9s,baz=345,slow=6.8,SNR=22
KBZ LR LR 06 16 05.6
comp=Z,1µm,18.5s,baz=344,slow=36
comp=Z,19nm,0.9s
**KBZ Khabaz 35.42 118** *e*P **P** **06 01 43.9 -0.7**
KBZ pmax pmax
comp=Z,18nm,0.9s
**BRVK Borovoye 35.53 82** P **P** **06 01 45.4 0.0**
BRVK IAmb IAmb 06 01 52.8
comp=Z,19nm,0.8s
**BRVK Borovoye 35.53 82***d i*P **P** **06 01 46.5 +1.0**
BRVK pmax pmax
comp=Z,25nm,1.4s
**AB31 Akbulak array 35.58 95** *i* P **P** **06 01 46.4 +0.5**
**ABKAR Akbulak array 35.58 95** P **P** **06 01 45.6 -0.3**
**BVA0 Borovoye Array 35.59 82** *i* P **P** **06 01 46.8 +0.8**
**A21K Barrow 36.21 346** P **P** **06 01 51.6 +0.6**
baz=13
**D28M Stokes Point 36.29 336** P **P** **06 01 53.2 +1.4**
baz=22
**A22K Sinclair Lake 36.39 345** P **P** **06 01 53.4 +0.8**
baz=14
**C26K Camden Bay 36.48 339** P **P** **06 01 55.0 +1.6**
baz=19,SNR=8.2
**INK Inuvik 36.52 332** P **P** **06 01 53.5 -0.2**
INK IAmb IAmb 06 01 56.9
comp=Z,46nm,1.2s
**INK Inuvik 36.52 332** LR LR 06 18 02.2
comp=Z,848nm,18.6s,baz=30,slow=38
**INK Inuvik 36.52 332** P **P** **06 01 54.1 +0.5**
baz=23,SNR=24
**INK Inuvik 36.52 332** P **P** **06 01 53.5 -0.2**
INK pmax pmax
comp=Z,46nm,1.2s
**KEST Kesra 36.59 164** P **P** **06 01 54.7 -0.1**
KEST IAmb IAmb 06 02 08.1
comp=Z,69nm,1.8s
**KEST Kesra 36.59 164** P **P** **06 01 55.8 +1.1**
comp=Z,4.4nm,0.7s,baz=330,slow=5.1,SNR=7.8
comp=Z,4.4nm,0.7s
**C27K Jago River 36.62 339** P **P** **06 01 55.9 +1.2**
baz=19,SNR=16
**D27M Malcolm River 36.65 337** P **P** **06 01 56.0 +1.0**
baz=20
**BR106 Keskin Array S 36.76 131** P **P** **06 01 57.8 +1.6**
comp=Z,16nm,0.9s,comp=Z,144nm
**BRTR Keskin Array B 36.77 131** P **P** **06 01 57.6 +1.3**
comp=Z,13nm,0.9s,baz=339,slow=6.2,SNR=32
BRTR LR LR 06 17 46.9
comp=Z,801nm,21.0s,baz=2.5,slow=38
comp=Z,13nm,0.9s
**BR105 Keskin Array S 36.77 131** P **P** **06 01 57.8 +1.4**
comp=Z,18nm,0.9s,comp=Z,156nm
**BR104 Keskin Array S 36.78 131** P **P** **06 01 57.8 +1.3**
comp=Z,24nm,1.0s,comp=Z,193nm
**B22K Teshekpuk Lake 36.91 344** P **P** **06 01 57.6 +0.6**
baz=15,SNR=6.3
**E29M Blow River 37.06 335** P **P** **06 01 59.1 +0.8**
baz=21,SNR=16
**C24K Franklin Bluff 37.07 341** P **P** **06 01 59.3 +0.9**
baz=17
**E28M Babbage River 37.07 336** P **P** **06 01 59.3 +0.8**
**E28M Babbage River 37.07 336** P **P** **06 01 59.1 +0.6**
baz=21
**C23K Itkillik River 37.15 342** P **P** **06 02 00.4 +1.3**
baz=16,SNR=71
**D25K Kavik River 37.21 340** P **P** **06 02 01.1 +1.4**
baz=18
**F31M Tsiigehtchic 37.35 332** P **P** **06 01 59.8 -1.0**
F31M IAmb IAmb 06 02 04.1
comp=Z,34nm,1.0s
**F31M Tsiigehtchic 37.35 332** P **P** **06 02 01.1 +0.4**
baz=23,SNR=8.7
**MAK Makhachkala 37.44 113** *e*P **P** **06 01 57.9 -3.9**
MAK *e* 06 03 29.7
MAK *e*S **S** **06 07 44.6 -5.1**
MAK *e*SS **SnSn** **06 10 22.1 -4.4**
MAK pmax pmax
comp=Z,137nm,1.1s
MAK MLR MLR
comp=Z,2µm,15.0s
**F30M Barrier River 37.49 333** P **P** **06 02 02.7 +0.7**
baz=22,SNR=9.8
**B20K Meade River 37.53 346** P **P** **06 02 03.7 +1.3**
baz=13
**D24K Happy Valley 37.63 341** P **P** **06 02 04.4 +1.2**
baz=16,SNR=19
**B21K Ikpikpuk River 37.71 345** P **P** **06 02 04.6 +0.8**
baz=14,SNR=19
**E27K Coleen River 37.73 337** P **P** **06 02 04.9 +0.8**
baz=20,SNR=20
**G31M Satah River 37.91 332** P **P** **06 02 06.5 +1.0**
baz=22,SNR=29
**D23K Nanushuk River 37.99 342** P **P** **06 02 08.4 +2.1**
baz=16
**F28M Old Crow 38.05 335** P **P** **06 02 07.4 +0.6**
baz=20,SNR=18
**G30M tAoh Zraii Nji 38.14 333** P **P** **06 02 08.6 +1.0**
**G30M tAoh Zraii Nji 38.14 333** P **P** **06 02 08.7 +1.2**
baz=22,SNR=16
**TOLK Toolik Lake Re 38.20 341** P **P** **06 02 09.3 +1.2**
baz=16,SNR=22
**D22K Ayikyak River 38.27 343** P **P** **06 02 09.5 +0.9**
D22K IAmb IAmb 06 02 17.0
comp=Z,58nm,1.2s
**D22K Ayikyak River 38.27 343** P **P** **06 02 10.2 +1.6**
baz=14,SNR=23
**YKA Yellowknife Ar 38.29 316** P **P** **06 02 09.8 +1.0**
comp=Z,7.4nm,1.0s,baz=341,slow=8.7,SNR=4.6
YKA LR LR 06 17 20.3
comp=Z,2µm,20.3s,baz=34,slow=35
comp=Z,7.4nm,1.0s
**G29M Pine Creek 38.46 334** P **P** **06 02 11.1 +0.8**
baz=21,SNR=36
**B18K Kokolik River 38.49 349** P **P** **06 02 11.4 +0.9**
baz=10
**F26K Sheenjek River 38.51 338** P **P** **06 02 12.3 +1.6**
baz=18,SNR=22
**C19K Lookout Ridge 38.60 347** P **P** **06 02 12.7 +1.3**
baz=11,SNR=9.4
**E24K Your Creek 38.63 340** P **P** **06 02 11.8 0.0**
**E24K Your Creek 38.63 340** P **P** **06 02 13.0 +1.3**
baz=16
**D20K Etivluk River 38.76 345** P **P** **06 02 14.2 +1.5**
baz=13,SNR=22
**E23K Chandalar 38.77 341** P **P** **06 02 13.7 +0.8**
baz=16,SNR=61
**F25K Christian Rive 38.78 339** P **P** **06 02 13.6 +0.6**
baz=17,SNR=51
**EPYK Eagle Plains 38.78 333** P **P** **06 02 13.5 +0.5**
baz=21,SNR=18
**E21K Killik River 38.81 344** P **P** **06 02 14.0 +0.9**
E21K IAmb IAmb 06 02 17.4
comp=Z,59nm,1.4s
**E21K Killik River 38.81 344** P **P** **06 02 13.9 +0.8**
baz=14
**MDT Midelt 39.01 183** LR LR 06 17 07.6
comp=Z,424nm,21.8s,baz=24,slow=34
**G27K Doyon Strip 39.05 336** P **P** **06 02 15.7 +0.6**
baz=19,SNR=43
**D19K Kuna River 39.09 346** P **P** **06 02 16.6 +1.1**
baz=12,SNR=21
**F24K Squaw Lake 39.10 340** P **P** **06 02 16.9 +1.2**
baz=16,SNR=26
**C18K Utukok River 39.16 348** P **P** **06 02 17.5 +1.4**
baz=10,SNR=23
**H29M Whitestone 39.16 334** P **P** **06 02 17.1 +1.0**
baz=20,SNR=19
**IDI Anoyia 39.17 144** LR LR 06 20 00.7
comp=Z,1µm,18.0s,baz=330,slow=39
**E20K Nigu River 39.17 345** P **P** **06 02 18.5 +2.3**
baz=13,SNR=26
**G26K Porcupine Rive 39.18 337** P **P** **06 02 17.8 +1.7**
baz=18,SNR=37
**ZAA0 Zalesovo Array 39.19 69** P **P** **06 02 16.2 -0.2**
**ZALV Zalesovo Beam 39.19 69** P **P** **06 02 16.6 +0.2**
**ZALV Zalesovo Beam 39.19 69** P **P** **06 02 16.8 +0.4**
comp=Z,7.0nm,1.0s,baz=324,slow=9.2,SNR=17
ZALV PP **PnPn** **06 03 53.2 +4.6**
comp=Z,5.1nm,0.9s,baz=327,slow=11,SNR=5.8
ZALV LR LR 06 21 30.9
comp=Z,384nm,20.5s,baz=324,slow=41
comp=Z,7.0nm,1.0s
**ZALV Zalesovo Beam 39.19 69** P **P** **06 02 16.6 +0.2**
**GNI Garni 39.26 118** LR LR 06 19 07.6
comp=Z,924nm,18.5s,baz=332,slow=37
**GNI Garni 39.26 118***c e*P **P** **06 02 17.2 -0.1**
GNI pmax pmax
comp=Z,60nm,1.2s
**WRGLY Wrigley 39.45 322** P **P** **06 02 19.4 +0.9**
baz=25
**C17K DeLong Mountai 39.45 349** P **P** **06 02 20.4 +1.9**
baz=9.3,SNR=14
**F22K John River 39.55 342** P **P** **06 02 20.8 +1.5**
baz=14
**H27K Steamboat Moun 39.58 335** P **P** **06 02 21.2 +1.6**
baz=19,SNR=31
**COLD Coldfoot 39.63 341** P **P** **06 02 21.5 +1.5**
baz=15
**G25K Bearman Lake 39.63 338** P **P** **06 02 21.8 +1.9**
baz=17,SNR=33
**C16K Lisburne Hills 39.78 350** P **P** **06 02 22.1 +0.9**
baz=8.2
**I30M Mount Dempster 39.81 332** P **P** **06 02 22.2 +0.6**
baz=21,SNR=52
**G24K Hadweenzie Riv 39.85 339** P **P** **06 02 23.3 +1.5**
baz=16,SNR=35
**RDOG Red Dog Mine 39.86 349** P **P** **06 02 23.2 +1.3**
baz=9.3,SNR=7.5
**F21K Alatna River 39.95 343** P **P** **06 02 24.3 +1.6**
baz=14,SNR=32
**I29M Ogilvie Camp, 39.96 333** P **P** **06 02 23.1 +0.3**
baz=20,SNR=15
**E19K Redstone River 40.05 345** P **P** **06 02 24.4 +1.0**
baz=12,SNR=18
**G22K Bettles 40.06 342** P **P** **06 02 25.0 +1.5**
baz=14
**H25L Birch Creek 40.08 338** P **P** **06 02 25.2 +1.5**
baz=17,SNR=48
**I28M Miner Creek 40.11 334** P **P** **06 02 24.6 +0.5**
baz=19,SNR=10.0
**G23K Bananza Creek 40.11 341** P **P** **06 02 24.9 +0.8**
baz=15,SNR=18
**KURK Kurchatov 40.15 77***d i*P **P** **06 02 25.3 +0.9**
KURK pmax pmax
comp=Z,50nm,1.7s
**I27K Kandik River 40.19 335** P **P** **06 02 26.1 +1.5**
baz=18,SNR=63
**KURBB Kurchatov Arra 40.20 77** P **P** **06 02 25.6 +0.8**
comp=Z,13nm,0.8s,baz=333,slow=7.3,SNR=88
KURBB PcP **PcP** **06 04 28.7 +0.1**
comp=Z,2.5nm,0.7s,baz=328,slow=3.6,SNR=4.8
KURBB LR LR 06 20 07.9
comp=Z,421nm,20.6s,baz=309,slow=38
comp=Z,13nm,0.8s
**KURBB Kurchatov Arra 40.20 77** P **P** **06 02 24.8 -0.1**
**D17K Noatak River 40.22 349** P **P** **06 02 25.3 +0.5**
baz=9.2
**BILL Bilibino 40.25 7***d i*P **P** **06 02 26.3 +1.2**
BILL *e* 06 03 59.0
BILL *e*PPP PPP 06 04 21.9
BILL *e* 06 04 31.3
BILL pmax pmax
comp=Z,12nm,1.3s
BILL MLR MLR
comp=Z,882nm,18.0s
**F20K Avaraart Lake 40.32 344** P **P** **06 02 26.0 +0.4**
baz=12
**E18K Tukpahlearik C 40.33 347** P **P** **06 02 27.1 +1.4**
baz=10,SNR=24
**OTUK Ortayu 40.37 84** P **P** **06 02 26.5 +0.1**
**J30M Hart River 40.41 331** P **P** **06 02 27.6 +1.0**
baz=20,SNR=42
**G21K Allakaket 40.65 343** P **P** **06 02 29.1 +0.7**
baz=13,SNR=28
**PKME Peaks-Kenny Pk 40.65 267** P **P** **06 02 30.4 +1.8**
baz=26
**I26K Coal Creek Min 40.67 336** P **P** **06 02 29.6 +1.0**
baz=18
**F19K Shaleruckik Mo 40.70 345** P **P** **06 02 29.9 +1.0**
baz=12,SNR=22
**H24K Noodor Dome 40.73 339** P **P** **06 02 30.4 +1.3**
baz=16,SNR=30
**E17K Hotham Inlet 40.75 348** P **P** **06 02 31.0 +1.8**
baz=9.7
**PRP Porcupine Dome 40.76 338** P **P** **06 02 30.6 +1.1**
baz=17,SNR=47
**J29N Klondike Camp 40.81 333** P **P** **06 02 30.5 +0.6**
baz=20
**EGAK Eagle 40.91 335** P **P** **06 02 31.3 +0.7**
EGAK IAmb IAmb 06 02 34.3
comp=Z,44nm,1.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| EGAK | **Eagle** | 40.91 | 335 | P | | P | 06 02 31.8 | +1.2 |
| | baz=18,SNR=22 | | | | | | | |
| SEM | **Semipalatinsk** | 40.91 | 76 | *e*P | | P | 06 02 31.5 | +0.4 |
| | baz=76 | | | | | | | |
| SEM | **Semipalatinsk** | 40.91 | 76 | *e*P | | P | 06 02 31.4 | +0.4 |
| H23K | **Yukon River** | 40.92 | 340 | P | | P | 06 02 32.0 | +1.3 |
| | baz=15,SNR=28 | | | | | | | |
| H22K | **Ishtalitna Cre** | 41.05 | 341 | P | | P | 06 02 33.0 | +1.3 |
| | baz=14,SNR=39 | | | | | | | |
| F18K | **Selawik** | 41.08 | 346 | P | | P | 06 02 33.3 | +1.4 |
| | baz=11 | | | | | | | |
| CSS | **Mathiatis** | 41.24 | 134 | P | | P | 06 02 33.8 | +0.1 |
| | comp=Z,88nm,1.5s,comp=Z,863nm | | | | | | | |
| K29M | **Barlow Dome** | 41.28 | 332 | P | | P | 06 02 35.2 | +1.3 |
| | baz=20,SNR=58 | | | | | | | |
| G19K | **Purcell Mounta** | 41.33 | 345 | P | | P | 06 02 35.8 | +1.8 |
| | baz=12,SNR=64 | | | | | | | |
| DAWY | **Dawson** | 41.34 | 333 | P | | P | 06 02 35.0 | +0.8 |
| DAWY | **Dawson** | 41.34 | 333 | P | | P | 06 02 35.6 | +1.3 |
| | baz=19,SNR=21 | | | | | | | |
| F17K | **Baldwin Pennin** | 41.34 | 347 | P | | P | 06 02 35.5 | +1.4 |
| | baz=9.8,SNR=16 | | | | | | | |
| POKR | **Poker Plat Res** | 41.37 | 339 | P | | P | 06 02 36.4 | +2.0 |
| | baz=16,SNR=8.9 | | | | | | | |
| H21K | **Melozitna Rive** | 41.42 | 342 | P | | P | 06 02 36.3 | +1.5 |
| | baz=14,SNR=32 | | | | | | | |
| J26L | **Joseph Creek** | 41.49 | 336 | P | | P | 06 02 36.7 | +1.1 |
| J26L | **Joseph Creek** | 41.49 | 336 | P | | P | 06 02 37.2 | +1.7 |
| | baz=17,SNR=20 | | | | | | | |
| I23K | **Minto, Yukon-K** | 41.56 | 340 | P | | P | 06 02 38.1 | +2.2 |
| | baz=15,SNR=31 | | | | | | | |
| J25K | **Salcha River,** | 41.61 | 337 | P | | P | 06 02 38.3 | +1.8 |
| | baz=16,SNR=34 | | | | | | | |
| ILAR | **Eielson Array** | 41.64 | 338 | P | | P | 06 02 38.7 | +2.1 |
| | comp=Z,16nm,1.0s,baz=7.1,slow=7.0,SNR=85 | | | | | | | |
| ILAR | | | | PcP | | PcP | 06 04 33.1 | +0.1 |
| | comp=Z,2.8nm,1.0s,baz=324,slow=3.4,SNR=4.6 | | | | | | | |
| ILAR | | | | LR | | LR | 06 21 06.3 | |
| | comp=Z,541nm,20.6s,baz=24,slow=38 | | | | | | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| COLA | **College** | 41.66 | 339 | P | | P | 06 02 40.0 | +3.3 |
| COLA | **College** | 41.66 | 339 | P | | P | 06 02 38.1 | +1.4 |
| | baz=16 | | | | | | | |
| COLA | **College** | 41.66 | 339 | *e*P | | P | 06 02 37.9 | +1.2 |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| G18K | **Tagagawik** | 41.70 | 346 | P | | P | 06 02 37.3 | +0.2 |
| G18K | **Tagagawik** | 41.70 | 346 | P | | P | 06 02 38.8 | +1.8 |
| | baz=11,SNR=26 | | | | | | | |
| K27K | **Chicken** | 41.75 | 335 | P | | P | 06 02 38.1 | +0.6 |
| K27K | | | | IAmb | | IAmb | 06 02 42.0 | |
| | comp=Z,63nm,1.2s | | | | | | | |
| K27K | **Chicken** | 41.75 | 335 | P | | P | 06 02 39.0 | +1.5 |
| | baz=18 | | | | | | | |
| H20K | **Anotleneega Mo** | 41.77 | 343 | P | | P | 06 02 39.3 | +1.6 |
| | baz=12,SNR=32 | | | | | | | |
| MLY | **Manley** | 41.82 | 341 | P | | P | 06 02 39.6 | +1.5 |
| | baz=14,SNR=19 | | | | | | | |
| H19K | **Roundabout Mou** | 41.88 | 344 | P | | P | 06 02 40.0 | +1.5 |
| | baz=12,SNR=19 | | | | | | | |
| TGTN | **Hyland Airport** | 41.92 | 325 | P | | P | 06 02 40.4 | +1.4 |
| | baz=22 | | | | | | | |
| HDA | **Harding Lake** | 42.00 | 338 | P | | P | 06 02 40.9 | +1.3 |
| | baz=16,SNR=18 | | | | | | | |
| SCRK | **Sand Creek** | 42.05 | 336 | P | | P | 06 02 41.3 | +1.2 |
| | baz=17,SNR=17 | | | | | | | |
| NEA2 | **Nenana** | 42.06 | 339 | P | | P | 06 02 41.6 | +1.5 |
| | baz=15,SNR=9.0 | | | | | | | |
| L29M | **L29M** | 42.07 | 332 | P | | P | 06 02 41.8 | +1.6 |
| | baz=19,SNR=21 | | | | | | | |
| FARO | **Faro, Yukon** | 42.15 | 328 | P | | P | 06 02 42.9 | +2.1 |
| | baz=21,SNR=38 | | | | | | | |
| G17K | **Kiwalik Mounta** | 42.23 | 347 | P | | P | 06 02 43.1 | +1.6 |
| | baz=9.9,SNR=11 | | | | | | | |
| F15K | **North Star Dit** | 42.29 | 349 | P | | P | 06 02 44.1 | +2.2 |
| | baz=8.1,SNR=12 | | | | | | | |
| M31M | **Drury Creek, Y** | 42.34 | 329 | P | | P | 06 02 44.3 | +1.9 |
| | baz=20,SNR=12 | | | | | | | |
| LBNH | **Lisbon** | 42.40 | 268 | P | | P | 06 02 44.6 | +1.6 |
| | baz=26 | | | | | | | |
| KOTAN | **Kotaneelee Air** | 42.40 | 321 | P | | P | 06 02 43.5 | +0.6 |
| | baz=23 | | | | | | | |
| H18K | **Honhosa River** | 42.41 | 345 | P | | P | 06 02 44.5 | +1.6 |
| | baz=11,SNR=17 | | | | | | | |
| I20K | **Naaghedeneel** | 42.42 | 343 | P | | P | 06 02 44.1 | +1.2 |
| | baz=12 | | | | | | | |
| K24K | **Donnelly Dome** | 42.44 | 337 | P | | P | 06 02 44.0 | +0.8 |
| | baz=16,SNR=6.4 | | | | | | | |
| G16K | **Koyuk River** | 42.46 | 348 | P | | P | 06 02 44.3 | +1.1 |
| | baz=9.1,SNR=8.0 | | | | | | | |
| YAK | **Yakutsk** | 42.47 | 31 | P | | P | 06 02 41.9 | -1.4 |
| | comp=Z,14nm,0.5s,baz=334,slow=20,SNR=8.5 | | | | | | | |
| YAK | | | | LR | | LR | 06 21 41.3 | |
| | comp=Z,373nm,19.0s,baz=343,slow=38 | | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | | |
| YAK | **Yakutsk** | 42.47 | 31 | *e*P | | P | 06 02 43.3 | 0.0 |
| YAK | | | | *e**PP | | sP | 06 02 47.0 | -0.5 |
| YAK | | | | *e* | | | 06 04 20.7 | |
| YAK | | | | *e* | | | 06 04 35.9 | |
| YAK | | | | *e*S | | S | 06 09 05.7 | +1.3 |
| YAK | | | | *e**SS | | sS | 06 09 14.2 | +4.9 |
| YAK | | | | *e*SS | | SS | 06 12 10.5 | -2.5 |
| YAK | | | | *e* | | | 06 12 45.0 | |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,33nm,1.2s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,22nm,1.3s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,4.0nm,1.5s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,164nm,3.2s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,61nm,3.5s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,56nm,3.3s | | | | | | | |
| YAK | | | | smax | | smax | | |
| | comp=E,91nm,4.5s | | | | | | | |
| YAK | | | | smax | | smax | | |
| | comp=N,46nm,3.6s | | | | | | | |
| YAK | | | | MLR | | MLR | | |
| | comp=Z,408nm,17.0s | | | | | | | |
| YAK | | | | MLR | | MLR | | |
| | comp=N,247nm,21.0s | | | | | | | |
| YAK | | | | MLR | | MLR | | |
| | comp=E,149nm,14.0s | | | | | | | |
| F14K | **Arctic Creek** | 42.62 | 350 | P | | P | 06 02 44.9 | +0.4 |
| | baz=7.3 | | | | | | | |
| BCAR | **Beaver Creek A** | 42.63 | 334 | P | | P | 06 02 45.4 | +0.7 |
| L27K | **Beaver Creek,** | 42.64 | 334 | P | | P | 06 02 45.7 | +0.8 |
| | baz=18,SNR=51 | | | | | | | |
| GCSA | **Galena City Sc** | 42.68 | 344 | P | | P | 06 02 45.8 | +0.8 |
| | baz=12 | | | | | | | |
| H17K | **Granite Mounta** | 42.74 | 346 | P | | P | 06 02 46.7 | +1.2 |
| | baz=10,SNR=11 | | | | | | | |
| M29M | **Somme Creek** | 42.75 | 332 | P | | P | 06 02 46.9 | +1.1 |
| | baz=19,SNR=34 | | | | | | | |
| BPAW | **Bear Paw Mtn.** | 42.75 | 340 | P | | P | 06 02 47.1 | +1.4 |
| | baz=14,SNR=12 | | | | | | | |
| L26K | **Log Cabin Wild** | 42.88 | 335 | P | | P | 06 02 48.2 | +1.4 |
| | baz=17,SNR=12 | | | | | | | |
| MCK | **McKinley** | 42.88 | 339 | P | | P | 06 02 48.1 | +1.3 |
| | baz=15,SNR=9.6 | | | | | | | |
| LONY | **Lake Ozonia** | 42.90 | 271 | P | | P | 06 02 48.1 | +1.1 |
| | baz=26 | | | | | | | |
| G15K | **Niukluk** | 42.96 | 349 | P | | P | 06 02 48.6 | +1.3 |
| | baz=8.3,SNR=12 | | | | | | | |
| J20K | **Nowinta River** | 42.99 | 342 | P | | P | 06 02 49.0 | +1.4 |
| | baz=12,SNR=14 | | | | | | | |
| MENT | **Mentasta** | 43.02 | 335 | P | | P | 06 02 50.9 | +3.1 |
| CHUM | **Lake Minchumin** | 43.10 | 341 | P | | P | 06 02 49.6 | +1.1 |
| | baz=13 | | | | | | | |
| N32M | **Quiet Lake** | 43.11 | 328 | P | | P | 06 02 49.9 | +1.2 |
| | baz=20,SNR=8.3 | | | | | | | |
| H16K | **Elim** | 43.20 | 348 | P | | P | 06 02 50.0 | +0.7 |
| | baz=9.0 | | | | | | | |
| PAX | **Paxson** | 43.21 | 336 | P | | P | 06 02 50.1 | +0.6 |
| | baz=16,SNR=18 | | | | | | | |
| N31M | **Braeburn, Yuko** | 43.24 | 329 | P | | P | 06 02 50.6 | +0.9 |
| | baz=19,SNR=18 | | | | | | | |
| J19K | **Poorman** | 43.31 | 343 | P | | P | 06 02 51.1 | +1.0 |
| | baz=12,SNR=25 | | | | | | | |
| M27K | **Edge Creek, AK** | 43.32 | 334 | P | | P | 06 02 51.6 | +1.2 |
| | baz=17,SNR=9.0 | | | | | | | |
| WTLY | **Watson Lake, Y** | 43.33 | 324 | P | | P | 06 02 51.4 | +1.0 |
| | baz=22 | | | | | | | |
| DHY | **Denali Highway** | 43.34 | 338 | P | | P | 06 02 51.9 | +1.2 |
| | baz=15,SNR=24 | | | | | | | |
| BOD | **Bodaibo** | 43.35 | 44 | *e*P | | P | 06 02 49.7 | -0.9 |
| BOD | | | | pmax | | pmax | | |
| | comp=Z,73nm,1.9s | | | | | | | |
| M26K | **Nabesna, AK** | 43.43 | 335 | P | | P | 06 02 52.7 | +1.5 |
| | baz=17,SNR=23 | | | | | | | |
| ANM | **Nome** | 43.47 | 350 | P | | P | 06 02 52.2 | +0.7 |
| | baz=7.6 | | | | | | | |
| LIRD | **Liard River Hi** | 43.47 | 322 | P | | P | 06 02 52.4 | +0.8 |
| | baz=22 | | | | | | | |
| N30M | **Aishikik Lake** | 43.47 | 330 | P | | P | 06 02 52.5 | +0.9 |
| | baz=19,SNR=12 | | | | | | | |
| MMAI | **Mount Meron Ar** | 43.59 | 132 | P | | P | 06 02 53.8 | +1.0 |
| | comp=Z,21nm,1.0s,baz=346,slow=8.9,SNR=17 | | | | | | | |
| MMAI | | | | LR | | LR | 06 23 13.6 | |
| | comp=Z,579nm,20.2s,baz=297,slow=39 | | | | | | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| YUK3 | **Moose Creek** | 43.68 | 333 | P | | P | 06 02 54.2 | +0.7 |
| | baz=18,SNR=12 | | | | | | | |
| DGZ | **Jazzator, Alta** | 43.70 | 70*d* | *i*P | | P | 06 02 54.7 | +1.0 |
| DGZ | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| WAT1 | **Susitna Watana** | 43.72 | 338 | P | | P | 06 02 54.2 | +0.7 |
| | baz=15 | | | | | | | |
| HARP | **HAARP** | 43.72 | 336 | P | | P | 06 02 54.1 | +0.6 |
| | baz=16 | | | | | | | |
| BTLS | **Baital** | 43.76 | 85 | *e*P | | P | 06 02 55.1 | +1.0 |
| | baz=85 | | | | | | | |
| BTLS | **Baital** | 43.76 | 85 | *e*P | | P | 06 02 55.0 | +1.0 |
| K20K | **Telida** | 43.79 | 342 | P | | P | 06 02 54.3 | +0.2 |
| | baz=12,SNR=15 | | | | | | | |
| TOAD | **Toad River Com** | 43.82 | 321 | P | | P | 06 02 55.4 | +1.0 |
| | baz=22,SNR=19 | | | | | | | |
| YUK4 | **Talbot Arm** | 43.82 | 331 | P | | P | 06 02 54.3 | -0.3 |
| | baz=18 | | | | | | | |
| I17K | **Unalakleet** | 43.84 | 346 | P | | P | 06 02 54.7 | +0.3 |
| | baz=9.6 | | | | | | | |
| HRV | **Adam Dziewonsk** | 43.85 | 267 | P | | P | 06 02 55.6 | +0.8 |
| | baz=25 | | | | | | | |
| WAT6 | **Susitna Watana** | 43.86 | 338 | P | | P | 06 02 56.0 | +1.1 |
| | baz=15,SNR=31 | | | | | | | |
| WHY | **Whitehorse** | 43.88 | 328 | P | | P | 06 02 56.0 | +1.1 |
| | baz=20,SNR=12 | | | | | | | |
| J18K | **Innoko River** | 43.93 | 344 | P | | P | 06 02 55.7 | +0.5 |
| | baz=11,SNR=14 | | | | | | | |
| P33M | **Teslin, Yukon** | 43.95 | 327 | P | | P | 06 02 56.3 | +0.8 |
| | baz=20,SNR=12 | | | | | | | |
| O30N | **Mendenhall** | 43.97 | 329 | P | | P | 06 02 56.2 | +0.6 |
| | baz=19,SNR=20 | | | | | | | |
| YUK8 | **Steele Glacier** | 44.05 | 332 | P | | P | 06 02 56.7 | +0.2 |
| | baz=18,SNR=9.4 | | | | | | | |
| PPLA | **Purkeypile** | 44.05 | 341 | P | | P | 06 02 56.4 | +0.1 |
| | baz=13 | | | | | | | |
| M24K | **Tolsona, Glenn** | 44.13 | 337 | P | | P | 06 02 57.3 | +0.4 |
| | baz=15 | | | | | | | |
| YUK6 | **Outpost Mounta** | 44.16 | 331 | P | | P | 06 02 57.9 | +0.6 |
| | baz=18,SNR=7.0 | | | | | | | |
| J17K | **VABM Dome** | 44.20 | 345 | P | | P | 06 02 57.8 | +0.5 |
| | baz=10,SNR=11 | | | | | | | |
| SADO | **Sadowa** | 44.20 | 276 | LR | | LR | 06 20 23.6 | |
| | comp=Z,750nm,18.6s,baz=45,slow=35 | | | | | | | |
| BRLS | **Boroldav** | 44.24 | 90 | *e*P | | P | 06 03 00.2 | +2.2 |
| | baz=90 | | | | | | | |
| BRLS | **Boroldav** | 44.24 | 90 | *e*P | | P | 06 03 00.1 | +2.2 |
| L61B | **Northampton** | 44.25 | 268 | P | | P | 06 02 59.5 | +1.5 |
| | baz=25 | | | | | | | |
| CUT | **Chulitna** | 44.33 | 339 | P | | P | 06 02 59.2 | +0.8 |
| | baz=14 | | | | | | | |
| ULM | **Lac du Bonnet** | 44.37 | 294 | P | | P | 06 02 59.4 | +0.6 |
| | comp=Z,14nm,0.9s,baz=34,slow=7.6,SNR=17 | | | | | | | |
| ULM | | | | LR | | LR | 06 21 14.0 | |
| | comp=Z,1µm,18.3s,baz=28,slow=36 | | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| KK31 | **Karatay Array** | 44.39 | 89 | *i*P | | P | 06 03 00.6 | +1.5 |
| KKAR | **Karatay Array** | 44.39 | 89 | P | | P | 06 03 00.2 | +1.1 |
| KKAR | **Karatay Array** | 44.39 | 89 | P | | P | 06 03 00.2 | +1.1 |
| R33M | **Jennings River** | 44.40 | 325 | P | | P | 06 02 59.5 | +0.4 |
| | baz=20 | | | | | | | |
| N25K | **Chitina, Valde** | 44.41 | 335 | P | | P | 06 02 59.7 | +0.5 |
| | baz=16,SNR=10 | | | | | | | |
| MCARA | **McCarthy VSAT** | 44.42 | 334 | P | | P | 06 02 59.9 | +0.8 |
| | baz=16 | | | | | | | |
| J16K | **Anvik River** | 44.42 | 346 | P | | P | 06 02 59.4 | +0.3 |
| | baz=9.5,SNR=8.6 | | | | | | | |
| SEY | **Seymchan** | 44.47 | 16 | P | | P | 06 03 00.5 | +1.1 |
| | comp=Z,15nm,1.0s,baz=329,slow=6.0,SNR=17 | | | | | | | |
| SEY | | | | PcP | | PcP | 06 04 42.6 | 0.0 |
| | comp=Z,3.8nm,0.8s,baz=351,slow=5.8,SNR=3.0 | | | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| SEY | **Seymchan** | 44.47 | 16 | *e*P | | P | 06 02 58.6 | -0.8 |
| SEY | | | | *e* | | | 06 04 42.4 | |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| SCM | **Sheep Creek Mo** | 44.54 | 337 | P | | P | 06 03 00.9 | +0.7 |
| | baz=15,SNR=12 | | | | | | | |
| GAMB | **Gambell** | 44.55 | 353 | P | | P | 06 03 00.9 | +0.8 |
| | baz=4.7 | | | | | | | |
| CTG | **Chitna Glacier** | 44.58 | 333 | P | | P | 06 03 00.5 | -0.1 |
| | baz=17 | | | | | | | |
| O28M | **Mount Upton** | 44.60 | 332 | P | | P | 06 03 01.1 | +0.2 |
| | baz=17 | | | | | | | |
| M23K | **Glacier View** | 44.63 | 337 | P | | P | 06 03 00.9 | +0.1 |
| | baz=15 | | | | | | | |
| L20K | **Farewell, AK** | 44.63 | 342 | P | | P | 06 03 01.2 | +0.3 |
| | baz=12,SNR=8.7 | | | | | | | |
| MAKZ | **Makanchi** | 44.64 | 77 | P | | P | 06 03 01.7 | +0.6 |
| MAKZ | **Makanchi** | 44.64 | 77 | P | | P | 06 03 01.7 | +0.6 |
| MAKZ | | | | pmax | | pmax | | |
| | comp=Z,29nm,1.4s | | | | | | | |
| SML | **Sawmill** | 44.69 | 338 | P | | P | 06 03 01.6 | +0.3 |
| | baz=14,SNR=7.7 | | | | | | | |
| P32M | **Atlin** | 44.69 | 327 | P | | P | 06 03 01.5 | +0.2 |
| | baz=20 | | | | | | | |
| KLU | **Klutina** | 44.70 | 336 | P | | P | 06 03 01.5 | +0.1 |
| | baz=15,SNR=6.6 | | | | | | | |
| P30M | **Million Dollar** | 44.73 | 330 | P | | P | 06 03 01.5 | -0.1 |
| | baz=18 | | | | | | | |
| MK31 | **Makanchi Array** | 44.75 | 76 | *ce*P | | P | 06 03 02.7 | +0.8 |
| MKAR | **Makanchi Array** | 44.75 | 76 | P | | P | 06 03 02.0 | +0.1 |
| MKAR | **Makanchi Array** | 44.75 | 76 | P | | P | 06 03 02.8 | +0.9 |
| | comp=Z,7.6nm,0.7s,baz=342,slow=5.7,SNR=66 | | | | | | | |
| MKAR | | | | PcP | | PcP | 06 04 44.5 | +0.6 |
| | comp=Z,3.3nm,0.9s,baz=343,slow=3.8,SNR=4.1 | | | | | | | |
| MKAR | | | | LR | | LR | 06 25 39.8 | |
| | comp=Z,264nm,19.0s,baz=332,slow=41 | | | | | | | |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| K17K | **Iditarod** | 44.80 | 345 | P | | P | 06 03 02.2 | 0.0 |
| | baz=10 | | | | | | | |
| O29M | **Mount Kennedy** | 44.81 | 331 | P | | P | 06 03 02.6 | +0.3 |
| | baz=18 | | | | | | | |
| SKT | **Skwentna** | 44.88 | 340 | P | | P | 06 03 02.7 | -0.1 |
| | baz=13,SNR=12 | | | | | | | |
| ZSN | **Zaisan** | 44.94 | 74 | *e*P | | P | 06 03 04.3 | +0.8 |
| | comp=Z,11nm,0.9s,baz=74 | | | | | | | |
| ZSN | **Zaisan** | 44.94 | 74 | *e*P | | P | 06 03 04.2 | +0.8 |
| ZSN | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| PMR | **Palmer** | 44.99 | 338 | P | | P | 06 03 06.2 | +2.6 |
| PMR | **Palmer** | 44.99 | 338 | P | | P | 06 03 04.2 | +0.6 |
| | baz=14 | | | | | | | |
| L19K | **White Mountain** | 45.02 | 342 | P | | P | 06 03 05.3 | +1.4 |
| L19K | | | | IAmb | | IAmb | 06 03 08.0 | |
| | comp=Z,38nm,1.4s | | | | | | | |
| L19K | **White Mountain** | 45.02 | 342 | P | | P | 06 03 04.0 | +0.1 |
| | baz=12,SNR=10 | | | | | | | |
| BMRM | **Bremner River** | 45.03 | 335 | P | | P | 06 03 03.9 | -0.1 |
| | baz=16 | | | | | | | |
| CRQE | **Cirque** | 45.03 | 334 | P | | P | 06 03 04.1 | -0.1 |
| | baz=16,SNR=15 | | | | | | | |
| Q32M | **Nakina River** | 45.04 | 326 | P | | P | 06 03 04.5 | +0.2 |
| | baz=20,SNR=12 | | | | | | | |
| TABL | **Table Mountain** | 45.06 | 333 | P | | P | 06 03 03.7 | -0.7 |
| TABL | | | | IAmb | | IAmb | 06 03 09.2 | |
| | comp=Z,47nm,1.4s | | | | | | | |
| KNK | **Knik Glacier** | 45.08 | 338 | P | | P | 06 03 03.9 | -0.6 |
| | baz=14 | | | | | | | |
| SKAG | **Skagway** | 45.09 | 328 | P | | P | 06 03 07.3 | +2.9 |
| SKAG | **Skagway** | 45.09 | 328 | P | | P | 06 03 04.9 | +0.5 |
| | baz=19 | | | | | | | |
| DLBC | **Dease Lake** | 45.12 | 324 | LR | | LR | 06 22 24.1 | |
| | comp=Z,2µm,18.2s,baz=21,slow=37 | | | | | | | |
| DLBC | **Dease Lake** | 45.12 | 324 | P | | P | 06 03 05.3 | +0.5 |
| | baz=20 | | | | | | | |
| M20K | **Styx River** | 45.14 | 341 | P | | P | 06 03 05.0 | 0.0 |
| M20K | **Styx River** | 45.14 | 341 | P | | P | 06 03 04.5 | -0.4 |
| | baz=12 | | | | | | | |
| EYMN | **Ely** | 45.15 | 289 | P | | P | 06 03 05.7 | +0.6 |
| | baz=26 | | | | | | | |
| L18K | **Granite Mounta** | 45.15 | 343 | P | | P | 06 03 05.1 | +0.1 |
| | baz=11,SNR=6.9 | | | | | | | |
| TDK | **Taldyqorghan** | 45.16 | 81 | *e*P | | P | 06 03 06.1 | +0.9 |
| | comp=Z,19nm,1.2s,baz=81 | | | | | | | |
| TDK | **Taldyqorghan** | 45.16 | 81 | *e*P | | P | 06 03 06.1 | +0.9 |
| TDK | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | | |
| J14K | **Nanvaranak Lak** | 45.16 | 348 | P | | P | 06 03 05.1 | +0.2 |
| | baz=8.2 | | | | | | | |
| M19K | **Big River Lodg** | 45.25 | 342 | P | | P | 06 03 05.0 | -0.7 |
| | baz=12 | | | | | | | |
| PINM | **Pinnacle** | 45.26 | 332 | P | | P | 06 03 06.1 | +0.2 |
| | baz=17 | | | | | | | |
| PLBC | **Pleasant Camp** | 45.26 | 329 | P | | P | 06 03 06.3 | +0.5 |
| | baz=18,SNR=9.4 | | | | | | | |
| SUA | **Susitna One** | 45.30 | 339 | P | | P | 06 03 05.8 | -0.4 |
| | baz=13,SNR=7.8 | | | | | | | |
| P29M | **Windy Craggy** | 45.32 | 330 | P | | P | 06 03 07.1 | +0.8 |
| P29M | | | | IAmb | | IAmb | 06 03 25.9 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| P29M | **Windy Craggy** | 45.32 | 330 | P | | P | 06 03 06.1 | -0.2 |
| | baz=18 | | | | | | | |
| SGDS | **Sogindy** | 45.37 | 85 | *e*P | | P | 06 03 08.0 | +1.0 |
| | baz=85 | | | | | | | |
| SGDS | **Sogindy** | 45.37 | 85 | *e*P | | P | 06 03 07.9 | +1.0 |
| L17K | **Donlin** | 45.38 | 344 | P | | P | 06 03 06.7 | 0.0 |
| | baz=10,SNR=12 | | | | | | | |
| MESA | **MESA** | 45.42 | 333 | P | | P | 06 03 07.2 | -0.2 |
| | baz=17 | | | | | | | |
| GLI | **Glacier Island** | 45.44 | 337 | P | | P | 06 03 06.8 | -0.4 |
| | baz=15 | | | | | | | |
| K15K | **Wolf Creek Mou** | 45.48 | 347 | P | | P | 06 03 07.6 | +0.1 |
| | baz=9.0,SNR=5.5 | | | | | | | |
| BINY | **Binghamton** | 45.52 | 271 | P | | P | 06 03 09.0 | +0.8 |
| | baz=25 | | | | | | | |
| PNL | **Peninsula** | 45.54 | 331 | P | | P | 06 03 10.9 | +2.9 |
| PNL | **Peninsula** | 45.54 | 331 | P | | P | 06 03 08.2 | +0.2 |
| | baz=17 | | | | | | | |
| RC01 | **Rabbit Creek A** | 45.55 | 339 | P | | P | 06 03 08.1 | 0.0 |
| | baz=14 | | | | | | | |
| EYAK | **Cordova Ski Ar** | 45.59 | 336 | P | | P | 06 03 08.2 | -0.1 |
| | baz=15 | | | | | | | |
| PWL | **Port Wells** | 45.61 | 338 | P | | P | 06 03 08.5 | -0.1 |
| | baz=14 | | | | | | | |
| BGLC | **Bering Glacier** | 45.67 | 334 | P | | P | 06 03 09.1 | +0.1 |
| | baz=16 | | | | | | | |
| ARXS | **Arharly** | 45.68 | 82 | *e*P | | P | 06 03 10.5 | +1.0 |
| N20K | **Mount Spurr** | 45.72 | 340 | P | | P | 06 03 09.7 | +0.2 |
| | baz=13 | | | | | | | |
| CHKK | **Chushkaly** | 45.75 | 83 | *e*P | | P | 06 03 10.7 | +0.8 |
| | baz=83 | | | | | | | |
| CHKK | **Chushkaly** | 45.75 | 83 | *e*P | | P | 06 03 10.7 | +0.8 |
| MOY | **Mondy** | 45.77 | 58 | *e*P | | P | 06 03 12.0 | +1.9 |
| MOY | | | | pmax | | pmax | | |
| | comp=Z,103nm,2.0s | | | | | | | |
| M18K | **Stony River** | 45.79 | 343 | P | | P | 06 03 09.9 | -0.1 |
| | baz=11,SNR=10.0 | | | | | | | |
| M17K | **Holitna River** | 46.03 | 344 | P | | P | 06 03 12.0 | +0.1 |
| | baz=11 | | | | | | | |
| K13K | **Kusilvak Mount** | 46.05 | 349 | P | | P | 06 03 12.6 | +0.6 |
| | baz=7.6 | | | | | | | |
| JIS | **Juneau Island** | 46.05 | 327 | P | | P | 06 03 15.3 | +3.3 |
| AAK | **Ala-Archa** | 46.06 | 86 | LR | | LR | 06 22 39.8 | |
| | comp=Z,467nm,18.2s,baz=332,slow=36 | | | | | | | |
| AAK | **Ala-Archa** | 46.06 | 86 | *ce*P | | P | 06 03 14.4 | +1.8 |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,32nm,2.2s | | | | | | | |
| R32K | **Eaglecrest** | 46.08 | 327 | P | | P | 06 03 12.5 | +0.2 |
| | baz=19 | | | | | | | |
| L15K | **Ungalak Mounta** | 46.08 | 346 | P | | P | 06 03 12.3 | 0.0 |
| | baz=8.9,SNR=11 | | | | | | | |
| I49A | **Point Hope** | 46.09 | 278 | P | | P | 06 03 13.8 | +1.2 |
| I49A | | | | IAmb | | IAmb | 06 03 17.0 | |
| | comp=Z,32nm,1.0s | | | | | | | |
| IRK | **Irkutsk** | 46.10 | 55 | *e*P | | P | 06 03 12.1 | -0.5 |
| IRK | | | | *e* | | | 06 05 03.2 | |
| IRK | | | | pmax | | pmax | | |
| | comp=Z,79nm,1.4s | | | | | | | |
| AGMN | **Agassiz Nation** | 46.12 | 292 | P | | P | 06 03 13.4 | +0.7 |
| | baz=26,SNR=13 | | | | | | | |
| TKM2 | **Tokmak 2** | 46.15 | 85 | P | | P | 06 03 14.5 | +1.2 |
| SVW2 | **Sparrevohn** | 46.16 | 342 | P | | P | 06 03 15.9 | +3.0 |
| AAA | **Alma-Ata** | 46.30 | 83 | *e*P | | P | 06 03 15.4 | +1.1 |
| | comp=Z,17nm,1.1s,baz=83 | | | | | | | |
| AAA | **Alma-Ata** | 46.30 | 83 | *e*P | | P | 06 03 15.4 | +1.1 |
| AAA | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| N19K | **Bonanza Creek** | 46.33 | 342 | P | | P | 06 03 13.7 | -0.7 |
| | baz=12 | | | | | | | |
| P23K | **Montague Islan** | 46.33 | 337 | P | | P | 06 03 14.5 | +0.3 |
| | baz=14 | | | | | | | |
| MDOK | **Medeo** | 46.39 | 83 | *e*P | | P | 06 03 16.1 | +0.9 |
| | baz=83 | | | | | | | |
| MDOK | **Medeo** | 46.39 | 83 | *e*P | | P | 06 03 16.0 | +0.9 |
| TNSS | **Tian-Shan** | 46.47 | 83 | *e*P | | P | 06 03 16.5 | +0.4 |
| | baz=83 | | | | | | | |
| TNSS | **Tian-Shan** | 46.47 | 83 | *e*P | | P | 06 03 16.4 | +0.4 |
| SEW | **Seward** | 46.48 | 338 | P | | P | 06 03 15.3 | 0.0 |
| | baz=14 | | | | | | | |
| L14K | **Kuka Creek** | 46.50 | 347 | P | | P | 06 03 15.9 | +0.4 |
| | baz=8.3 | | | | | | | |
| M16K | **Timber Creek** | 46.53 | 345 | P | | P | 06 03 16.2 | +0.3 |
| | baz=9.8 | | | | | | | |
| T35M | **Bob Quinn** | 46.53 | 324 | P | | P | 06 03 16.8 | +0.9 |
| | baz=20 | | | | | | | |
| N18K | **Kilae Creek** | 46.60 | 343 | P | | P | 06 03 17.2 | +0.9 |
| N18K | | | | IAmb | | IAmb | 06 03 22.6 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| N18K | **Kilae Creek** | 46.60 | 343 | P | | P | 06 03 16.7 | +0.3 |
| | baz=11,SNR=7.2 | | | | | | | |
| S31K | **Pelican** | 46.66 | 328 | P | | P | 06 03 17.2 | +0.4 |
| | baz=18 | | | | | | | |
| EIL | **Elat** | 46.69 | 134 | LR | | LR | 06 24 26.4 | |
| | comp=Z,413nm,21.3s,baz=6.0,slow=38 | | | | | | | |
| Q23K | **Middleton Isla** | 46.75 | 336 | P | | P | 06 03 17.6 | +0.1 |
| | baz=15 | | | | | | | |
| ZHN | **Zhinishke** | 46.82 | 82 | *e*P | | P | 06 03 19.4 | +0.9 |
| | baz=82 | | | | | | | |
| ZHN | **Zhinishke** | 46.82 | 82 | *e*P | | P | 06 03 19.3 | +0.9 |
| S32K | **Killisnoo** | 46.85 | 327 | P | | P | 06 03 17.9 | -0.4 |
| | baz=19 | | | | | | | |
| O20K | **Slope Mountain** | 46.85 | 340 | P | | P | 06 03 17.8 | -0.6 |
| | baz=12 | | | | | | | |
| N17K | **Nushagak Hills** | 46.87 | 343 | P | | P | 06 03 18.1 | -0.3 |
| | baz=10 | | | | | | | |
| SATY | **Saty** | 46.91 | 82 | *e*P | | P | 06 03 20.1 | +1.0 |
| | comp=Z,9.6nm,1.1s,baz=82 | | | | | | | |
| SATY | **Saty** | 46.91 | 82 | *e*P | | P | 06 03 20.1 | +1.0 |
| SATY | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| BRSE | **Bradley Lake S** | 46.98 | 339 | P | | P | 06 03 19.0 | -0.3 |
| | baz=13 | | | | | | | |
| M15K | **Kasigluk River** | 47.00 | 346 | P | | P | 06 03 19.2 | -0.2 |
| | baz=9.1 | | | | | | | |
| PDGK | **Podgornoye** | 47.00 | 81 | P | | P | 06 03 20.6 | +0.7 |
| UZ

baz=8.6
O16K **Kokwok River B** 47.87 344 P P 06 03 25.9 -0.3
baz=10.0
U33K **Whale Pass** 47.88 325 P P 06 03 26.3 -0.1
baz=19
SPMN **Marine on St.** 47.99 288 P P 06 03 27.7 +0.4
baz=25,SNR=5.9
P17K **Kvichak River** 48.11 342 P P 06 03 28.2 +0.1
baz=11
Q20K **Shuyak Island** 48.27 340 P P 06 03 29.5 +0.2
baz=12
DGMT **Dagmar** 48.33 299 P P 06 03 29.8 -0.2
baz=24
V35K **Ketchikan** 48.35 324 P P 06 03 29.8 -0.2
baz=19
P16K **Nushagak River** 48.42 344 P P 06 03 29.5 -1.0
baz=9.9
O15K **Ungalikthiuk R** 48.43 345 P P 06 03 29.8 -0.8
baz=9.2
O14K **Tigyukauivet M** 48.47 346 P P 06 03 29.7 -1.2
baz=8.6
CRAG **Craig** 48.49 325 P P 06 03 29.6 -1.5
baz=18
CIT **Chita** 48.59 48 eP P 06 03 33.3 +1.3
CIT e 06 05 03.6
CIT e 06 05 29.2
CIT pmax pmax
comp=Z,59nm,2.1s
O53A **New Philadelph** 48.94 275 P P 06 03 33.7 -1.0
baz=24,SNR=8.9
MCWV **Mont Chateau** 49.04 273 P P 06 03 35.3 -0.3
baz=24
WMQ **Urumqi** 49.07 73 ⇓P P 06 03 37.8 +2.0
WMQ pmax pmax
comp=Z,34nm,0.9s
WMQ pmax pmax
comp=Z,340nm,4.1s
WMQ LR LR
comp=Z,710nm,15.9s
WMQ LR LR
comp=Z,660nm,14.5s
WMQ LR LR
comp=Z,540nm,15.1s
KDAK **Kodiak Island** 49.10 339 LR LR 06 24 27.2
comp=Z,800nm,22.0s,baz=40,slow=36
KDAK **Kodiak Island** 49.10 339 P P 06 03 34.5 -1.3
baz=12
L44A **Lake County Fo** 49.27 282 P P 06 03 36.7 -0.5
baz=24
JFWS **Jewell Farm** 49.31 284 P P 06 03 37.2 -0.4
baz=24
KSH **Kashi** 49.36 86 P P 06 03 41.8 +3.6
KSH sP pwP 06 03 50.0 +6.1
KSH pmax pmax
comp=Z,13nm,1.0s
KSH LR LR
comp=Z,520nm,18.5s
KSH LR LR
comp=Z,940nm,18.2s
KSH LR LR
comp=Z,620nm,16.5s
ACSO **Alum Creek Sta** 49.51 276 P P 06 03 39.3 +0.2
baz=24
CBN **Corbin Frederi** 49.59 270 P P 06 03 39.8 +0.1
baz=23
OHAK **Old Harbor** 49.73 340 P P 06 03 43.5 +3.0
OHAK **Old Harbor** 49.73 340 P P 06 03 39.6 -0.9
baz=12
P52A **Corning** 49.78 275 P P 06 03 40.2 -1.0
baz=24,SNR=7.1
ZEA **Zeya** 49.88 37d iP P 06 03 43.7 +2.0
ZEA eS S 06 10 58.0 +7.0
ZEA pmax pmax
comp=E,10.0nm,0.5s
ZEA pmax pmax
comp=Z,50nm,1.0s
ZEA pmax pmax
comp=Z,100nm,4.6s
ZEA smax smax
comp=E,100nm,8.8s
ZEA MLR MLR
comp=N,300nm,15.0s
EGMT **Eagleton** 50.23 304 P P 06 03 43.7 -0.9
baz=23,SNR=20
ECSD **EROS Data Cent** 50.48 290 P P 06 03 45.6 -0.8
baz=24,SNR=14
LAO **LASA Array** 50.51 300 P P 06 03 45.4 -1.3
baz=23
SUSD **Miller** 50.52 293 P P 06 03 46.0 -0.8
baz=24
BBB **Bella Bella** 50.65 320 LR LR 06 25 45.4
comp=N,1μm,19.1s,baz=26,slow=37
SFIN **Lafayette** 50.65 280 P P 06 03 47.4 -0.4
baz=24
P49A **Miami Univ. Ec** 50.69 278 P P 06 03 47.9 -0.1
baz=24,SNR=11
SONM **Songino Array** 50.69 56 P P 06 03 48.3 +0.1
SONM IAmb IAmb 06 03 50.7
comp=Z,26nm,1.2s
SONM **Songino Array** 50.69 56 P P 06 03 48.9 +0.7
comp=Z,11nm,1.0s,baz=328,slow=6.3,SNR=49
SONM PcP PcP 06 05 06.2 +1.0
comp=Z,2.9nm,1.1s,baz=300,slow=3.2,SNR=1.6
SONM LR LR 06 28 20.5
comp=Z,320nm,18.3s,baz=337,slow=40
comp=Z,11nm,1.0s
SONM **Songino Array** 50.69 56 P P 06 03 48.3 +0.1
SONM pmax pmax
comp=Z,26nm,1.2s
SCIA **State Center** 51.13 287 P P 06 03 51.5 +0.1
baz=24
CHGN **Chignik** 51.15 343 P P 06 03 50.7 -0.6
baz=9.4
HDIL **Hopedale** 51.17 282 P P 06 03 51.8 +0.2
baz=24
T57A **Hurt** 51.29 271 P P 06 03 54.2 +1.6
CHIR **Chirikof Islan** 51.36 341 P P 06 03 51.9 -1.0
baz=10
BLA **Blacksburg** 51.46 273 P P 06 03 54.2 +0.2
baz=23
P08K **Saint George I** 51.63 351 P P 06 03 54.4 -0.5
baz=5.0
NEW **Newport** 51.87 310 P P 06 03 58.0 +1.1
comp=Z,3.7nm,0.9s,baz=30,slow=8.4,SNR=8.4
NEW LR LR 06 26 00.5
comp=Z,2μm,18.2s,baz=14,slow=36
comp=Z,3.7nm,0.9s
NEW **Newport** 51.87 310 P P 06 03 56.5 -0.3
baz=21
NEW **Newport** 51.87 310 P P 06 03 58.0 +1.1
RSSD **Black Hills** 52.27 297 P P 06 04 00.5 +0.4
RSSD **Black Hills** 52.27 297 P P 06 03 59.6 -0.5
baz=23
RSSD **Black Hills** 52.27 297 P P 06 04 00.5 +0.4
RSSD pmax pmax
comp=Z,21nm,1.4s
V58A **Windy Hill, Pi** 52.35 271 P P 06 04 01.2 +0.6
V58A IAmb IAmb 06 04 05.1
comp=Z,39nm,1.0s
WCI **Wyandotte Cave** 52.37 278 P P 06 04 00.7 0.0
baz=23
MSO **Missoula** 52.41 306 P P 06 04 00.5 -0.5
baz=22,SNR=20
CNNC **Cliffs of the** 52.48 269 P P 06 04 01.4 -0.1
baz=22
HIA **Hailar** 52.57 44 P P 06 04 02.8 +0.8
RLMT **Red Lodge** 52.78 302 P P 06 04 03.5 -0.3
baz=22
BOZ **Bozeman (W)** 52.96 304 P P 06 04 04.8 -0.4
baz=22,SNR=8.1
TZTN **Tazewell** 53.06 275 P P 06 04 05.9 +0.1
baz=23,SNR=10
HEH **HeiHe** 53.23 38 eP P 06 04 07.8 +1.0
HEH pmax pmax
comp=Z,54nm,0.9s
HEH LR LR
comp=Z,560nm,17.7s
HEH LR LR
comp=Z,260nm,16.7s
HEH LR LR
comp=Z,620nm,15.9s
KMSC **Kings Mountain** 53.65 272 P P 06 04 10.7 +0.5
baz=22,SNR=5.8
S44A **Carbondale** 53.78 281 P P 06 04 10.7 -0.3
H17A **Grant Village** 53.80 303 P P 06 04 11.9 +0.4
baz=22,SNR=16
TKL **Tuckaleechee C** 53.95 275 LR LR 06 25 58.2
comp=Z,667nm,20.2s,baz=31,slow=35

CCM **Cathedral Cave** 54.06 283 P P 06 04 13.2 +0.1
baz=23
R40A **Maddies Statio** 54.16 284 P P 06 04 13.1 -0.8
R40A IAmb IAmb 06 04 19.7
comp=Z,27nm,1.4s
UNV **Unalaska Valle** 54.22 349 P P 06 04 13.6 -0.4
baz=6.0
K22A **Casper** 54.32 298 P P 06 04 14.7 -0.5
K22A IAmb IAmb 06 04 16.4
comp=Z,24nm,1.0s
K22A **Casper** 54.32 298 P P 06 04 14.2 -1.0
baz=22,SNR=17
GRNR **Gornyy** 54.34 31 ⇓iP P 06 04 16.2 +1.2
GRNR pmax pmax
comp=Z,20nm,1.1s
GRNR MLR MLR
comp=Z,160nm,14.0s
OGNE **Ogallala** 54.62 294 P P 06 04 14.7 -2.6
baz=22
KSU1 **Kansas State U** 54.73 288 P P 06 04 16.5 -1.5
baz=22
WVT **Waverly** 54.78 279 P P 06 04 17.4 -0.9
baz=22
KLR **Kul'dur** 55.03 35 LR LR 06 28 11.0
comp=Z,326nm,20.4s,baz=354,slow=36
KLR **Kul'dur** 55.03 35d iP P 06 04 20.6 +0.7
KLR pmax pmax
comp=Z,19nm,1.6s
BW06 **Boulder Array** 55.04 301 P P 06 04 19.0 -1.4
baz=21,SNR=11
PDAR **Pinedale Array** 55.04 301 P P 06 04 19.5 -0.9
PDAR **Pinedale Array** 55.04 301 P P 06 04 20.4 -0.1
comp=Z,3.3nm,0.9s,baz=46,slow=6.4,SNR=22
PDAR LR LR 06 27 58.0
comp=Z,753nm,18.1s,baz=14,slow=36
comp=Z,3.3nm,0.9s
NHSC **New Hope** 55.17 270 P P 06 04 20.3 -0.8
baz=22
HLID **Hailey** 55.58 305 P P 06 04 23.5 -0.7
baz=21,SNR=18
N23A **Red Feather La** 55.78 297 P P 06 04 25.3 -0.6
baz=22,SNR=18
SHEM **Shemya Is, Ala** 55.80 3 LR LR 06 29 04.9
comp=Z,160nm,18.2s,baz=1.5,slow=37
LCAR **Lake Charles** 55.87 282 P P 06 04 26.2 +0.1
GOGA **Godfrey** 55.92 274 P P 06 04 26.1 -0.4
baz=22,SNR=8.7
CBKS **Cedar Bluff** 55.92 291 P P 06 04 26.4 -0.2
baz=22
KSCO **Kaye Shedlock'** 56.59 293 P P 06 04 30.9 -0.6
baz=22
GTA **Gaotai** 56.69 65 P P 06 04 33.0 +0.8
GTA sP pwP 06 04 40.0 +1.7
GTA PcP PcP 06 05 28.6 +0.4
GTA pmax pmax
comp=Z,15nm,1.5s
GTA LR LR
comp=Z,350nm,15.1s
GTA LR LR
comp=Z,280nm,18.3s
GTA LR LR
comp=Z,370nm,21.5s
ISCO **Idaho Springs** 56.71 296 P P 06 04 31.9 -0.6
baz=21,SNR=9.7
OXF **Oxford** 56.76 280 P P 06 04 32.4 -0.2
baz=22,SNR=12
XLT **XiLinHaoTe** 56.79 50 eP P 06 04 34.0 +1.2
XLT pmax pmax
comp=Z,35nm,0.9s
XLT LR LR
comp=Z,440nm,20.6s
XLT LR LR
comp=Z,220nm,23.4s
O20A **White River Ci** 57.13 299 P P 06 04 34.5 -0.8
baz=21,SNR=39
SPUT **South Promonto** 57.17 303 P P 06 04 36.1 +0.5
SPUT IAmb IAmb 06 04 43.4
comp=Z,58nm,1.6s
Q24A **Divide** 57.35 296 P P 06 04 36.4 -0.7
baz=21,SNR=8.9
LRAL **Lakeview Retre** 57.38 277 P P 06 04 36.6 -0.3
baz=22
TUL3 **Leonard** 57.43 286 P P 06 04 37.5 +0.2
baz=22
BNX **BinXian** 57.54 40 ⇓P P 06 04 38.4 +0.5
BNX pmax pmax
comp=Z,43nm,0.8s
SMCO **Snowmass** 57.67 297 P P 06 04 40.0 +0.6
SMCO IAmb IAmb 06 04 57.4
comp=Z,40nm,1.4s
BBTS **Babate** 57.70 196 LR LR 06 25 01.8
comp=Z,349nm,21.8s,baz=243,slow=31
TIGA **Tifton** 57.78 273 P P 06 04 39.6 -0.3
baz=21
MIAR **Mount Ida** 58.02 283 P P 06 04 41.2 -0.3
baz=22,SNR=9.1
DUG **Dugway, Tooele** 58.31 303 P P 06 04 44.5 +0.9
DUG IAmb IAmb 06 04 54.2
comp=Z,33nm,1.1s
DUG **Dugway, Tooele** 58.31 303 P P 06 04 42.8 -0.8
baz=20,SNR=19
DUG **Dugway, Tooele** 58.31 303 P P 06 04 44.5 +0.9
DUG pmax pmax
comp=Z,33nm,1.1s
BTO **Baotou** 58.37 56 eP P 06 04 43.9 -0.1
BTO pP sP 06 04 48.5 +0.3
BTO sP pwP 06 04 51.1 +1.0
BTO pmax pmax
comp=Z,22nm,1.5s
BTO pmax pmax
comp=Z,290nm,6.5s
BTO LR LR
comp=Z,1μm,17.4s
BTO LR LR
comp=Z,850nm,15.4s
BTO LR LR
comp=Z,2μm,18.8s
ELK **Elko** 58.43 305 P P 06 04 45.9 +1.3
comp=Z,4.8nm,1.1s,baz=5.4,slow=6.6,SNR=12
comp=Z,4.8nm,1.1s
HHC **Hu-ho-hao-te** 58.54 54 eP P 06 04 46.4 +1.3
HHC sP pwP 06 04 54.8 +3.5
HHC pmax pmax
comp=Z,19nm,0.5s
HHC pmax pmax
comp=Z,100nm,5.6s
HHC LR LR
comp=Z,450nm,17.3s
HHC LR LR
comp=Z,210nm,15.7s
HHC LR LR
comp=Z,720nm,16.0s
SDCO **Great Sand Dun** 58.59 295 P P 06 04 44.5 -1.2
baz=21,SNR=18
TORD **Torodi Ar. Bea** 58.62 176 P P 06 04 45.4 -0.4
comp=Z,10nm,0.9s
comp=Z,10nm,0.9s
T25A **Trinidad** 58.84 294 P P 06 04 46.8 -0.6
baz=21
S22A **4UR Ranch, Cre** 58.96 296 P P 06 04 47.3 -1.1
baz=21,SNR=41
CN2 **Changchun** 59.00 42 P P 06 04 48.8 +0.7
CN2 pP pwP 06 04 54.5 +0.3
CN2 S S 06 12 50.9 -3.0
CN2 pmax pmax
comp=Z,40nm,0.8s
CN2 pmax pmax
comp=Z,300nm,5.0s
CN2 LR LR
comp=Z,300nm,16.0s
CN2 LR LR
comp=Z,500nm,16.0s
CN2 LR LR
comp=Z,500nm,17.0s
YSS **Yuzh-Sakhalins** 59.03 27 eP P 06 04 49.8 +1.5
YSS eS S 06 12 55.0 +0.7
YSS pmax pmax
comp=Z,20nm,1.1s
YSS pmax pmax
comp=Z,200nm,6.2s
YSS MLR MLR
comp=N,200nm,14.0s
YSS MLR MLR
comp=Z,400nm,14.0s
MDJ **Mudanjiang** 59.06 38 P P 06 04 49.5 +1.0
MDJ **Mudanjiang** 59.06 38 P P 06 04 48.9 +0.4
MDJ pmax pmax
comp=Z,26nm,1.2s
MDJ pmax pmax
comp=Z,280nm,4.8s
WSAR **Wadi Sarin** 59.10 111 LR LR 06 34 02.1
comp=Z,168nm,20.2s,baz=354,slow=40
BRAL **Brewton** 59.12 276 P P 06 04 48.5 -0.6
baz=21
YBH **Yreka Blue Hor** 59.35 311 P P 06 04 51.0 +0.2
comp=Z,1.3nm,0.8s,baz=5.0,slow=2.1,SNR=5.5
YBH LR LR 06 30 42.2
comp=Z,2μm,18.8s,baz=14,slow=36
comp=Z,1.3nm,0.8s
YBH **Yreka Blue Hor** 59.35 311 P P 06 04 51.0 +0.2
WMOK **Wichita Mounta** 59.42 288 P P 06 04 50.8 -0.4
baz=21,SNR=26
HMU **Henry Mountain** 59.87 300 P P 06 04 55.0 +0.5
USRK **Ussuriysk Ar.** 59.92 37 P P 06 04 54.5 0.0
USRK **Ussuriysk Ar.** 59.92 37 P P 06 04 54.9 +0.4
comp=Z,14nm,0.9s,baz=328,slow=6.1,SNR=27
USRK LR LR 06 31 37.5
comp=Z,238nm,19.9s,baz=354,slow=37
comp=Z,14nm,0.9s
MVCO **Mesa Verde** 59.93 298 P P 06 04 54.7 -0.3
baz=20,SNR=61
TEY **Ternei** 59.93 33⇑eP P 06 04 55.1 +0.6
TEY pmax pmax
comp=Z,30nm,1.1s
TEY pmax pmax
comp=N,10.0nm,1.1s
AMTX **Amarillo** 60.15 291 P P 06 04 56.0 -0.3
baz=21
MTPU **Mount Pierson** 60.16 301 P P 06 04 58.3 +1.6
DWPF **Disney Wildern** 60.20 269 P P 06 04 56.9 +0.4
baz=21
BJI **Beijing** 60.46 51 P P 06 04 59.4 +1.2
BJI pmax pmax
comp=N,9.0nm,1.1s
BJI LR LR
comp=N,220nm,14.9s
BJI LR LR
comp=N,120nm,16.3s
BJI LR LR
comp=N,300nm,16.8s
BJT **Baijiatuau** 60.48 51 P P 06 04 59.5 +1.1
SNY **Shenyang** 60.48 44 ⇓P P 06 04 58.3 0.0
SNY S S 06 13 06.9 -6.1
SNY pmax pmax
comp=N,20nm,0.9s
SNY pmax pmax
comp=N,100nm,3.5s
SNY LR LR
comp=N,170nm,13.7s
SNY LR LR
comp=N,380nm,24.2s
SNY LR LR
comp=N,170nm,16.3s
R11B **Troy Canyon, C** 60.78 304 P P 06 05 01.3 +0.6
R11B IAmb IAmb 06 05 08.4
comp=Z,31nm,1.2s
R11B **Troy Canyon, C** 60.78 304 P P 06 05 00.2 -0.5
baz=19,SNR=39
LZH **Lanzhou** 60.93 63 ⇑P P 06 05 03.5 +1.8
LZH sP pwP 06 05 12.3 +4.4
LZH pmax pmax
comp=Z,32nm,0.9s
LZH pmax pmax
comp=Z,280nm,4.3s
LZH LR LR
comp=Z,610nm,14.6s
LZH LR LR
comp=Z,330nm,12.4s
LZH LR LR
comp=Z,550nm,16.8s
NATX **Nacogdoches** 60.94 283 P P 06 05 01.8 +0.2
baz=21
PLPT **Palo Pinto** 61.07 287 P P 06 05 03.0 +0.5
PLPT IAmb IAmb 06 05 06.6
comp=Z,38nm,1.6s
MSTX **Muleshoe** 61.32 291 P P 06 05 04.5 +0.2
baz=20,SNR=8.2
MSHR **Mys Shultsa** 61.32 38 ⇓iP P 06 05 04.3 +0.3
MSHR pmax pmax
comp=Z,23nm,1.1s
NVAR **Mina Array Bea** 61.40 307 P P 06 05 05.6 +0.7
comp=Z,6.5nm,1.1s,baz=25,slow=4.8,SNR=18
NVAR LR LR 06 32 04.4
comp=Z,771nm,19.8s,baz=38,slow=36
comp=Z,6.5nm,1.1s
ANMO **Albuquerque** 61.47 295 P P 06 05 06.3 +0.9
comp=Z,6.7nm,1.0s,baz=120,slow=7.1,SNR=21
ANMO LR LR 06 31 48.8
comp=Z,1μm,18.9s,baz=120,slow=36
comp=Z,6.7nm,1.0s
ANMO **Albuquerque** 61.47 295 P P 06 05 04.8 -0.7
baz=20
ANMO **Albuquerque** 61.47 295c iP P 06 05 06.2 +0.7
ANMO pmax pmax
comp=Z,13nm,1.3s
PRN **Pahroc Range** 61.53 303 P P 06 05 06.6 +0.9
WHTX **Lake Whitney,** 61.58 286 P P 06 05 05.7 -0.2
baz=21
ABTX **Abilene, Hawle** 61.65 288 P P 06 05 06.1 -0.3
baz=21,SNR=12
ASAJ **Asahikawa** 61.78 28 LR LR 06 34 22.1
comp=Z,321nm,18.1s,baz=354,slow=38
W18A **Petrified Fore** 62.24 298 P P 06 05 09.8 -0.8
baz=20
TPNV **Topopah Spring** 62.27 304 P P 06 05 10.0 -0.8
baz=19,SNR=36
MLAC **Mammoth, Mammo** 62.29 307 P P 06 05 10.5 -0.4
baz=18
WUAZ **Wupatki** 62.31 300 P P 06 05 10.6 -0.4
baz=20,SNR=23
SHPR **Sheep Range** 62.40 303 P P 06 05 11.7 0.0
SHPR IAmb IAmb 06 05 20.1
comp=Z,19nm,1.2s
Y22D **IRIS PASSCAL I** 62.42 295 P P 06 05 11.3 -0.4
baz=20
GRAC **Grapevine Rang** 62.52 305 P P 06 05 12.8 +0.5
baz=19,SNR=6.9
HNS **HongShan** 62.60 53 ⇓P P 06 05 13.4 +0.7
HNS pmax pmax
comp=Z,24nm,1.3s
HNS LR LR
comp=Z,610nm,16.9s
HNS LR LR
comp=Z,550nm,17.7s
435B **Jarrell** 62.74 285 P P 06 05 13.9 +0.2
baz=20
DL2 **Dalian** 62.83 47 P P 06 05 14.9 +0.7
DL2 eS S 06 13 47.7 +4.8
DL2 pmax pmax
comp=Z,27nm,0.7s
DL2 LR LR
comp=Z,310nm,18.2s
DL2 LR LR
comp=Z,930nm,19.2s
DL2 LR LR
comp=Z,490nm,15.9s
FURC **Furnace Creek,** 62.89 305 P P 06 05 14.8 +0.2
baz=19
LSA **Lhasa** 63.15 77 P P 06 05 19.5 +2.4
CWC **Cottonwood Cre** 63.23 306 P P 06 05 16.9 -0.2
baz=18
SHOC **Shoshone, Teco** 63.27 304 P P 06 05 17.6 +0.4
baz=19
MPMC **Manual Prospec** 63.44 305 P P 06 05 19.0 +0.5
baz=18,SNR=34
TUQ **Turquoise Moun** 63.62 303 P P 06 05 19.8 +0.1
baz=19
JCT **Junction City** 63.69 287 P P 06 05 20.4 +0.2
baz=20
ERM **Erimo** 63.92 28 P P 06 05 23.1 +1.7
ERM **Erimo** 63.92 28 ⇓iP P 06 05 21.4 0.0
ERM pmax pmax
comp=Z,48nm,1.0s
GSC **Goldstone, Bar** 63.97 304 P P 06 05 21.7 -0.3
baz=18,SNR=10.0
LRMC **Laurel Mtn Rad** 64.03 305 P P 06 05 22.1 -0.3
baz=18
VES **Vestal, Richgr** 64.05 306 P P 06 05 22.2 -0.2
baz=18
ISA **Isabella, Lake** 64.06 306 P P 06 05 21.9 -0.6
baz=18,SNR=21
121A **Cookes Peak, D** 64.11 295 P P 06 05 23.1 0.0
baz=20,SNR=22
GMRC **Granite Mounta** 64.16 303 P P 06 05 23.0 -0.3

baz=19,SNR=35
**MNTX Cornudas Mount 64.20 293 P P 06 05 24.2 +0.8**
baz=20,SNR=11
**PDMCI Parker Dam,Lak 64.21 301 P P 06 05 24.2 +0.8**
baz=19,SNR=22
**XAN Xi'an 64.26 59 ⇑P P 06 05 23.7 -0.1**
XAN pP pP 06 05 27.4 +0.5
XAN S S **06 14 03.9 +3.0**
XAN ScS **SKKSac 06 15 14.2 -3.1**
XAN pmax pmax
comp=Z,31nm,1.4s
XAN pmax pmax
comp=Z,240nm,6.3s
XAN LR LR
comp=Z,490nm,19.8s
XAN LR LR
comp=Z,1μm,17.7s
XAN LR LR
comp=Z,420nm,19.2s
**HEC Hector,Ludlow 64.30 304 P P 06 05 23.5 -0.6**
baz=18
**TIA Tai'an 64.33 51 *e*P P 06 05 24.0 -0.2**
TIA pmax pmax
comp=Z,26nm,1.2s
TIA LR LR
comp=Z,420nm,21.1s
TIA LR LR
comp=Z,280nm,14.7s
TIA LR LR
comp=Z,550nm,17.2s
**RRX Edison Barstow 64.43 304 P P 06 05 25.4 +0.5**
baz=18
**IRM Iron Mountain 64.62 302 P P 06 05 25.9 -0.3**
baz=19,SNR=18
**EDW2 Edwards Air Fo 64.68 305 P P 06 05 26.5 -0.1**
baz=18,SNR=6.5
**LYN LuoYang 64.72 56 P P 06 05 28.2 +1.5**
LYN pmax pmax
comp=Z,30nm,1.2s
LYN pmax pmax
comp=Z,180nm,6.9s
LYN LR LR
comp=Z,1μm,19.6s
LYN LR LR
comp=Z,360nm,16.1s
LYN LR LR
comp=Z,960nm,17.9s
**SMMC Simmler 64.78 307 P P 06 05 27.6 +0.5**
baz=18
**SAND Sanderson 64.88 289 P P 06 05 27.9 0.0**
SAND IAmb IAmb 06 05 31.9
comp=Z,23nm,1.3s
**VHRN Van Horn 64.94 292 P P 06 05 28.6 +0.1**
**BBRC Big Bear Solar 64.99 304 P P 06 05 29.0 +0.2**
baz=18
**BELC Belle Mtn. Jos 64.99 303 P P 06 05 29.0 +0.3**
baz=18,SNR=21
**DBIC Dimbokro 65.03 183 P P 06 05 28.1 -0.7**
comp=Z,4.9nm,1.0s,baz=20,slow=7.3,SNR=4.3
DBIC LR LR 06 33 19.4
comp=Z,336nm,20.5s,baz=354,slow=36
comp=Z,4.9nm,1.0s
**PKM Mcpherson Peak 65.14 307 P P 06 05 29.4 -0.3**
baz=18,SNR=8.3
**TUC Tucson 65.17 298 P P 06 05 30.1 +0.2**
baz=19
**BC3 Big Chuckawall 65.17 302 P P 06 05 29.9 0.0**
baz=18,SNR=12
**BFSC Mount Baldy Ra 65.20 304 P P 06 05 30.3 +0.3**
baz=18,SNR=11
**DECC Green Verdugo 65.36 305 P P 06 05 31.6 +0.6**
baz=18
**PFO Pinyon Flats O 65.48 303 P P 06 05 32.5 +0.6**
PFO IAmb IAmb 06 05 40.0
comp=Z,18nm,1.1s
**PFO Pinyon Flats O 65.48 303 P P 06 05 33.3 +1.4**
comp=Z,6.7nm,0.9s,baz=24,slow=4.8,SNR=9.0
PFO LR LR 06 34 49.2
comp=Z,556nm,18.6s,baz=7.5,slow=37
comp=Z,6.7nm,0.9s
**PFO Pinyon Flats O 65.48 303 P P 06 05 32.8 +0.9**
baz=18,SNR=6.5
**PFO Pinyon Flats O 65.48 303 P P 06 05 32.5 +0.6**
PFO pmax pmax
comp=Z,18nm,1.2s
**TPFO Pinon Flats 65.48 303 P P 06 05 33.1 +1.2**
baz=18,SNR=6.0
**GLA Glamis 65.58 302 P P 06 05 33.1 +0.7**
baz=18,SNR=15
**833A Chaparral WMA, 65.59 286 P P 06 05 31.7 -0.7**
**833A Chaparral WMA, 65.59 286 P P 06 05 32.9 +0.5**
baz=20
**KSRS Korea Array 65.61 42 P P 06 05 32.1 -0.3**
comp=Z,5.1nm,0.7s,baz=349,slow=6.6,SNR=20
KSRS PP **PP 06 07 54.5 -1.8**
comp=Z,3.6nm,1.0s,baz=343,slow=9.1,SNR=8.1
KSRS LR LR 06 36 15.7
comp=Z,378nm,19.4s,baz=340,slow=38
comp=Z,5.1nm,0.7s
**319A Douglas 65.63 296 P P 06 05 33.2 +0.4**
**MURC Murrieta 65.69 304 P P 06 05 33.1 0.0**
baz=18
**CD2 Chengdu 65.77 65 P P 06 05 34.4 +0.8**
CD2 pP pP 06 05 37.0 +0.3
CD2 S S **06 14 17.5 -2.0**
CD2 pmax pmax
comp=Z,20nm,1.0s
CD2 pmax pmax
comp=Z,140nm,8.3s
CD2 LR LR
comp=Z,350nm,17.1s
CD2 LR LR
comp=Z,440nm,14.3s
CD2 LR LR
comp=Z,400nm,19.0s
**TXAR Lajitas Array 65.92 290 P P 06 05 35.2 +0.5**
comp=Z,8.3nm,1.1s,baz=47,slow=5.5,SNR=32
TXAR LR LR 06 34 14.1
comp=Z,488nm,19.4s,baz=15,slow=36
comp=Z,8.3nm,1.1s
**SWSC Sam W. Stewart 65.94 302 P P 06 05 35.1 +0.4**
baz=18
**SCZ2 Santa Cruz Isl 65.94 306 P P 06 05 35.2 +0.5**
baz=18
**ATD Arta Tunnel 66.01 131 LR LR** 06 35 28.1
comp=Z,12nm,19.7s,baz=352,slow=37
**214A Organ Pipe Nat 66.06 299 P P 06 05 36.5 +1.0**
baz=19,SNR=6.3
**MONP2 Monument Peak 66.15 303 P P 06 05 37.2 +0.9**
baz=18,SNR=6.7
**CIS Catalina Islan 66.19 305 P P 06 05 37.1 +0.8**
baz=18
**IKP In-Ko-Pah, Jac 66.30 303 P P 06 05 37.4 +0.3**
baz=18,SNR=9.3
**109C Camp Elliot, M 66.33 304 P P 06 05 37.4 +0.2**
baz=18
**TJN Taejon 66.53 43 P P 06 05 39.4 +1.0**
**TJN Taejon 66.53 43 *d* P P 06 05 38.8 +0.4**
**SNCC San Nicolas Is 66.62 306 P P 06 05 39.1 0.0**
baz=18
**SCI2 San Clemente I 66.62 305 P P 06 05 41.0 +2.0**
baz=18
**JSD Sado 67.03 33 P P 06 05 42.2 +0.7**
**FURI Furi 67.60 136 LR LR** 06 38 24.3
comp=Z,225nm,20.1s,baz=348,slow=39
**ENH Enshi 67.97 60 P P 06 05 48.8 +1.1**
**MAJO Matsushiro 68.47 33 P P 06 05 51.8 +1.1**
**MAJO Matsushiro 68.47 33 P P 06 05 50.8 +0.1**
**MAJO Matsushiro 68.47 33 P P 06 05 50.8 +0.1**
MAJO pmax pmax
comp=Z,69nm,1.4s
**MJAR Matsushiro Arr 68.47 33 P P 06 05 51.8 +1.1**
comp=Z,25nm,1.0s,baz=345,slow=6.7,SNR=36
MJAR LR LR 06 37 29.6
comp=Z,177nm,19.7s,baz=348,slow=37
comp=Z,25nm,1.0s
**NJ2 Nanjing 68.71 51 *e*P P 06 05 52.6 +0.4**
NJ2 pP **pwP 06 05 57.8 -0.6**
NJ2 pmax pmax
comp=Z,26nm,1.0s
NJ2 pmax pmax
comp=Z,280nm,4.0s
**WHN Wuhan 69.01 56 P P 06 05 53.8 -0.3**
WHN pmax pmax
comp=Z,70nm,1.2s
**JGF Kuroka 69.24 34 P P 06 05 56.7 +1.2**
**PZH PanZhiHua 69.33 68 P P 06 05 56.6 +0.3**
PZH pmax pmax
comp=Z,20nm,0.6s
PZH pmax pmax
comp=Z,150nm,4.9s
**TEIG Tepich 69.72 273 LR LR** 06 35 53.8
comp=Z,562nm,18.7s,baz=39,slow=35
**TNCH TengChong 69.76 72 P P 06 05 58.4 -0.7**
TNCH PP **PP 06 08 34.0 +1.1**
TNCH S **S 06 15 01.1 -6.7**
TNCH pmax pmax
comp=Z,42nm,0.7s
TNCH pmax pmax
comp=Z,160nm,4.8s
TNCH LR LR
comp=Z,1μm,21.7s
TNCH LR LR
comp=Z,590nm,17.3s
TNCH LR LR
comp=Z,210nm,21.9s
**JNU Nakatsue 70.40 41 P P 06 06 04.2 +1.5**
**JNU Nakatsue 70.40 41 P P 06 06 03.5 +0.7**
comp=Z,18nm,1.1s,baz=348,slow=14,SNR=5.1
JNU LR LR 06 39 07.9
comp=Z,168nm,20.0s,baz=352,slow=38
comp=Z,18nm,1.1s
**HYB Hyderabad 70.70 93 *e*P P 06 06 04.9 +0.2**
HYB *e*PP **PP 06 08 41.7 +0.7**
HYB *e*S **S 06 15 20.2 +1.6**
**GYA Guiyang 70.79 64 ⇑P P 06 06 06.1 +0.8**
GYA pmax pmax
comp=Z,23nm,1.0s
**PCRV Puerto La Cruz 71.92 247 LR LR** 06 31 52.3
comp=Z,104nm,21.4s,slow=31
**LPIG La Paz 72.78 295 LR LR** 06 38 51.7
comp=Z,937nm,18.0s,baz=21,slow=36
**MDP Montagnes des 73.51 233 LR LR** 06 32 01.7
comp=Z,223nm,18.3s,baz=8.5,slow=30
**CMIG Matias Romero 74.73 278 LR LR** 06 41 16.4
comp=Z,132nm,19.2s,baz=28,slow=37
**SDV Santo Domingo 74.91 252 LR LR** 06 34 44.2
comp=Z,154nm,21.5s,baz=60,slow=32
**MBAR Mbarara 75.26 146 LR LR** 06 42 27.9
comp=Z,282nm,21.1s,baz=336,slow=38
**APG El Apazote 75.31 273 LR LR** 06 39 40.0
comp=Z,61nm,19.6s,baz=40,slow=36
**JOW Kunigami 75.93 44 LR LR** 06 45 51.6
comp=Z,158nm,18.1s,baz=178,slow=40
**CMAR Chiang Mai Arr 76.08 74 P P 06 06 37.1 +0.8**
comp=Z,5.7nm,1.0s,baz=320,slow=7.0,SNR=15
CMAR LR LR 06 46 58.5
comp=Z,91nm,20.0s,baz=305,slow=41
comp=Z,5.7nm,1.0s
**SSLB Suanglung 77.14 52 P P 06 06 44.2 +1.9**
**NONG Nongkai 77.70 70 P P 06 06 46.9 +1.4**
**HDC Heredia 78.02 265 *e*P P 06 06 49.2 +1.7**
**JCJ Chichijima 78.38 32 LR LR** 06 42 55.0
comp=Z,40nm,18.1s,baz=120,slow=37
**MCPB Macapa, AP 78.61 231 *e*P P 06 06 52.0 +1.4**
**QIZ Qiongzhong 78.72 63 P P 06 06 49.7 -1.4**
QIZ S **S 06 16 46.4 -1.7**
QIZ LR LR
comp=Z,670nm,21.8s
QIZ LR LR
comp=Z,290nm,13.3s
QIZ LR LR
comp=Z,560nm,17.7s
**ROSC El Rosal 79.85 254 P P 06 06 59.9 +2.1**
comp=Z,14nm,0.8s,baz=154,slow=1.1,SNR=10
ROSC LR LR 06 38 15.0
comp=Z,122nm,21.4s,baz=62,slow=33
comp=Z,14nm,0.8s
**RCBR Riachuelo 80.49 214 LR LR** 06 34 08.7
comp=Z,74nm,21.6s,baz=48,slow=29
**PALK Pallekele 80.92 94 LR LR** 06 46 24.8
comp=Z,267nm,19.7s,baz=87,slow=38
**ITTB Itaituba 83.39 234 *e*P P 06 07 17.7 +1.8**
**TEFE Tefe 84.95 243 *e*P P 06 07 24.9 +1.0**
**SMTB Santa Maria do 85.78 225 *e*P P 06 07 29.6 +1.6**
**SNDB Serra Nova Dou 89.63 228 *e*P P 06 07 47.7 +1.3**
**SAML Samuel 89.74 240 *e*P P 06 07 48.8 +1.8**
**JANB Januaria 91.09 220 *e*P P 06 07 55.0 +1.7**
**GUMO Guam 92.05 32 LR LR** 06 50 19.0
comp=Z,65nm,20.6s,baz=14,slow=36
**ATAH Atahualpa 92.42 255 LR LR** 06 49 14.2
comp=Z,62nm,19.3s,baz=15,slow=35
**BDFB Brasilia 92.44 224 LR LR** 06 42 50.2
comp=Z,244nm,20.1s,baz=343,slow=31
**MATP Matopo 94.31 151 LR LR** 06 54 32.3
comp=Z,138nm,19.8s,baz=50,slow=38
**SIV San Ignacio 95.91 236 LR LR** 06 46 24.6
comp=Z,266nm,18.2s,baz=75,slow=32
**NNA Nana 96.55 252 LR LR** 06 50 26.9
comp=Z,66nm,21.0s,baz=349,slow=35
**LPAZ La Paz 98.10 242 LR LR** 06 50 45.6
comp=Z,42nm,20.0s,baz=6.0,slow=34
**LBTB Lobatse 98.41 155 LR LR** 06 55 47.7
comp=Z,256nm,20.1s,baz=348,slow=37
**TAOE Nuku Hiva Isla 112.10 314 *e*LR LR** 06 46 45.8
comp=Z,78nm,26.6s
**WRA Warramunga Arr 122.49 50 PKP PKPdf 06 13 43.4 -0.5**
comp=Z,4.2nm,1.1s,baz=344,slow=2.6,SNR=14
**PPT2 Papeete2 122.56 322 *e*SS SS** 06 32 07.5 +6.0
comp=Z,1μm,35.2s
**PPT2 Papeete2 122.56 322 *e*LR LR** 06 51 30.2
comp=Z,609nm,30.8s
PPT2 *e*LR LR 06 51 37.0
comp=Z,343nm,38.5s
**QIS Mount Isa 124.30 44 P PKiKP 06 13 50.7 +3.1**
**QIS Mount Isa 124.30 44 P PKiKP 06 13 49.1 +1.5**
QIS P **pPKPdf 06 13 50.4 -0.2**
comp=Z,3.7nm,SNR=3.7
**RKT Rikitea 124.57 305 *e*LR LR** 06 52 34.5
comp=Z,2μm,37.8s
**ASAR Alice Springs 125.96 52 PKP PKPdf 06 13 49.9 -0.6**
comp=Z,2.8nm,0.8s,baz=350,slow=1.8,SNR=19
**TBI Tubuai 128.14 321 *e*SS SS** 06 32 59.6 -12
comp=Z,2μm,37.2s
**TBI Tubuai 128.14 321 *e*LR LR** 06 53 55.4
comp=Z,2μm,30.2s
**DZM Mont Dzumac 129.88 14 *e*LR LR** 06 54 50.5
comp=Z,144nm,21.4s
**VNA3 Neumayer Olymp 142.84 184 ⇑PKPdf PKPdf 06 14 14.1 -6.3**
comp=Z,5.5nm,0.7s
**SNAA Sanae 143.19 180 ⇑PKPdf PKPab** 06 14 14.5 -2.3
comp=Z,68nm,0.8s
**SNAA Sanae 143.19 180 PKP PKPdf 06 14 20.2 -0.8**
comp=Z,2.4nm,0.8s,baz=149,slow=3.8,SNR=11
**TROLL Troll, Antarti 143.56 178 ⇑PKPdf PKPab** 06 14 18.2 -0.1
comp=Z,69nm,0.7s
**ELIB Princess Elisa 144.40 167 *d*PKPdf PKPdf 06 14 24.0 +0.8**
**MAW Mawson 145.67 142 PKPbc PKPab 06 14 27.0 +1.0**
comp=Z,5.0nm,0.5s,baz=17,slow=1.0,SNR=9.7

**ROM 11 05:58:52.1±0.1, 46.336N±0.003×13.039E±0.005, h13km±1km, ML0.9/6, 1C-1D, Error ellipse: s-maj=0.4km s-min=0.2km az=57.0, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BOO** | **Bordano** | **0.04** | **110⇑** | *e*Pg | Pg | 05 58 54.7 | +0.2 |
| BOO | | | | *e*Sg | Sg | 05 58 56.0 | -0.2 |
| **FUSE** | **Fusea** | **0.08** | **341⇓** | *e*Pg | Pg | 05 58 55.1 | +0.2 |
| FUSE | | | | *e*Sg | Sg | 05 58 56.6 | -0.3 |
| **GEPF** | **Gemona** | **0.09** | **131** | P | Pg | 05 58 55.3 | +0.4 |
| GEPF | | | | S | Sg | 05 58 57.7 | +0.8 |
| **MPRI** | **Monte Prat** | **0.10** | **201** | *e*Pg | Pg | 05 58 55.5 | +0.4 |
| MPRI | | | | *e*Sg | Sg | 05 58 57.5 | +0.3 |
| **MPRI** | **Monte Prat** | **0.10** | **201** | P | Pg | 05 58 55.4 | +0.4 |
| MPRI | | | | S | Sg | 05 58 57.6 | +0.3 |
| MPRI | | | | AML | AML | | |
| | comp=E,50μm,0.1s | | | | | | |
| MPRI | | | | AML | AML | | |
| | comp=N,51μm,0.4s | | | | | | |
| MPRI | | | | AML | AML | | |
| | comp=E,38μm,0.1s | | | | | | |
| **DST2** | **Trieste** | **0.12** | **221** | P | Pg | 05 58 55.7 | +0.4 |
| DST2 | | | | S | Sg | 05 58 58.2 | +0.7 |
| DST2 | | | | AML | AML | | |
| | comp=N,109μm,1.0s | | | | | | |
| DST2 | | | | AML | AML | | |
| | comp=E,75μm,0.2s | | | | | | |
| **BUA** | **Buia** | **0.13** | **154** | *e*Pg | Pg | 05 58 55.9 | +0.4 |
| **CLUD** | **Cludinico** | **0.16** | **318** | *e*Pg | Pg | 05 58 56.4 | +0.4 |
| CLUD | | | | *e*Sg | Sg | 05 58 59.1 | +0.4 |
| **CLUD** | **Cludinico** | **0.16** | **318** | P | Pg | 05 58 56.4 | +0.4 |
| CLUD | | | | S | Sg | 05 58 59.2 | +0.5 |
| CLUD | | | | AML | AML | | |
| | comp=E,12μm,0.1s | | | | | | |
| CLUD | | | | AML | AML | | |
| | comp=N,11μm,0.5s | | | | | | |
| **BAD** | **Bernadia** | **0.17** | **125** | *e*Pg | Pg | 05 58 56.5 | +0.4 |
| BAD | | | | *e*Sg | Sg | 05 58 59.7 | +0.8 |
| **VINO** | **Villanova** | **0.19** | **115** | *e*Pg | Pg | 05 58 56.6 | +0.3 |
| VINO | | | | *e*Sg | Sb | 05 59 00.1 | -0.8 |
| **VINO** | **Villanova** | **0.19** | **115** | P | Pg | 05 58 56.6 | +0.3 |
| VINO | | | | S | Sb | 05 59 00.2 | -0.7 |
| **ZOU** | **Zoufplan** | **0.23** | **348** | *e*Pg | Pg | 05 58 57.6 | +0.5 |
| ZOU | | | | *e*Sg | Sg | 05 59 01.4 | +0.8 |
| **ZOU** | **Zoufplan** | **0.23** | **348** | P | Pg | 05 58 57.5 | +0.4 |
| ZOU | | | | S | Sb | 05 59 01.5 | -0.8 |
| ZOU | | | | AML | AML | | |
| | comp=E,11μm,1.1s | | | | | | |
| ZOU | | | | AML | AML | | |
| | comp=N,9μm,1.3s | | | | | | |
| ZOU | | | | AML | AML | | |
| | comp=N,7μm,1.1s | | | | | | |
| **PLRO** | **Paularo** | **0.23** | **19** | *e*Pg | Pb | 05 58 57.7 | -0.5 |
| PLRO | | | | *e*Sg | Sg | 05 59 00.9 | +0.4 |
| **STAL** | **STALIGIAL** | **0.24** | **252** | P | Pg | 05 58 57.6 | +0.4 |
| STAL | | | | S | Sg | 05 59 01.6 | +0.9 |
| STAL | | | | AML | AML | | |
| | comp=E,376μm,0.6s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,177μm,0.7s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=N,89μm,1.8s | | | | | | |
| STAL | | | | AML | AML | | |
| | comp=E,36μm,0.0s | | | | | | |
| **FVI** | **Forni Avoltri** | **0.32** | **326** | P | Pg | 05 58 58.9 | +0.3 |
| FVI | | | | S | Sb | 05 59 04.0 | -0.8 |
| **ACOM** | **Acomizza, Ital** | **0.39** | **57** | P | Pg | 05 58 59.7 | -0.2 |
| **CIMO** | **Cimolais** | **0.42** | **267** | P | Pg | 05 59 00.6 | +0.2 |

*BUT **11** 06:04:16.7±1.3, 46.65N±0.02×113.48W±0.02, h7km±5km, Error ellipse: s-maj=2.9km s-min=2.4km az=207.0*

**NEIC 11 06:04:16.2±0.8, 46.69N±0.02×113.48W±0.05, h13km±7km, ML3.7/63, MLb3.8/30(BUT), Error ellipse: s-maj=5.8km s-min=2.0km az=62.0, Montana**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BPMT** | **Black Pine Rid** | **0.26** | **174** | Pg | Pg | 06 04 20.7 | -1.0 |
| **MSO** | **Missoula** | **0.34** | **294** | Pg | Pg | 06 04 23.3 | +0.1 |
| MSO | | | | Sg | Sg | 06 04 28.4 | +0.5 |
| MSO | | | | IAML | | 06 04 29.1 | |
| | 8μm,0.3s | | | | | | |
| MSO | | | | IAML | | 06 04 30.0 | |
| | 7μm,0.6s | | | | | | |
| **OVMT** | **Ovando** | **0.50** | **42** | Pg | Pb | 06 04 26.7 | -0.2 |
| **LYMT** | **Lyon Mountain** | **0.86** | **71** | | Pg | 06 04 33.1 | +0.1 |
| **DLMT** | **Dillon** | **1.47** | **155** | Pn | Pn | 06 04 42.9 | +0.4 |
| DLMT | | | | | Sg | 06 05 03.3 | -0.2 |
| DLMT | | | | IAML | | 06 05 04.6 | |
| | 990nm,0.5s | | | | | | |
| DLMT | | | | IAML | | 06 05 04.8 | |
| | 854nm,0.5s | | | | | | |
| **BOZ** | **Bozeman (W)** | **1.69** | **130** | | Pn | 06 04 45.9 | +0.4 |
| BOZ | | | | | Sb | 06 05 08.8 | +0.3 |
| BOZ | | | | IAML | | 06 05 11.2 | |
| | 821nm,0.5s | | | | | | |
| **YHL** | **Hebgen Lake** | **2.45** | **138** | Pn | Pn | 06 04 57.1 | +1.0 |
| YHL | | | | IAML | | 06 05 34.5 | |
| | comp=N,547nm,0.5s | | | | | | |
| **YHB** | **Horse Butte** | **2.52** | **140** | | Pn | 06 04 58.1 | +1.2 |
| **GCR** | **Grayling Creek** | **2.52** | **138** | | Pn | 06 04 58.2 | +1.1 |
| **YPDC** | **Denny Creek** | **2.53** | **141** | | Pn | 06 04 58.3 | +1.2 |
| **YMC** | **Maple Creek** | **2.60** | **137** | | Pn | 06 04 59.5 | +1.5 |
| **YHH** | **Holmes Hill** | **2.65** | **135** | | Pn | 06 05 00.3 | +1.4 |
| **HSPGA** | **Hill Springs,** | **2.67** | **358** | | Pb | 06 05 04.3 | +0.4 |
| **YPWB** | **West Boundary** | **2.67** | **140** | | Pn | 06 05 00.8 | +1.7 |
| **YMR** | **Madison River** | **2.69** | **138** | | Pn | 06 05 00.7 | +1.4 |
| YMR | | | | IAML | | 06 05 43.1 | |
| | comp=E,458nm,0.6s | | | | | | |
| **F10A** | **Beach Ranch, E** | **2.69** | **256** | | Pn | 06 05 00.8 | +1.6 |
| **MKRVA** | **Milk River, Al** | **2.71** | **24** | | Pb | 06 05 04.8 | +0.3 |
| **YPM** | **Purple Mountai** | **2.74** | **137** | | Pn | 06 05 02.2 | +2.1 |
| **YNR** | **Norris Junctio** | **2.79** | **134** | | Pn | 06 05 01.9 | +1.2 |
| YNR | | | | IAML | | 06 05 43.8 | |
| | comp=E,333nm,0.4s | | | | | | |
| YNR | | | | IAML | | 06 05 44.5 | |
| | comp=N,338nm,0.4s | | | | | | |
| **EGMT** | **Eagleton** | **2.86** | **61** | | Pn | 06 05 02.6 | +1.0 |
| EGMT | | | | IAML | | 06 05 47.0 | |
| | comp=N,367nm,0.7s | | | | | | |
| **YFT** | **Old Faithful** | **2.91** | **139** | | Pn | 06 05 03.9 | +1.4 |
| **NEW** | **Newport** | **2.93** | **304** | | Pn | 06 05 03.6 | +1.2 |
| **NEW** | **Newport** | **2.93** | **304** | IAML | | 06 05 51.9 | |
| | comp=N,267nm,0.8s | | | | | | |
| NEW | | | | IAML | | 06 05 52.8 | |
| | comp=N,185nm,0.8s | | | | | | |
| **MCID** | **Moose Creek** | **2.98** | **146** | | Pn | 06 05 04.8 | +1.4 |
| **YMP** | **Mirror Lake Pl** | **3.04** | **129** | | Pn | 06 05 05.9 | +1.6 |
| YMP | | | | IAML | | 06 05 52.8 | |
| | comp=E,244nm,0.6s | | | | | | |
| YMP | | | | IAML | | 06 05 52.9 | |
| | comp=N,354nm,0.7s | | | | | | |
| **YPP** | **Pitchstone Pla** | **3.07** | **141** | Pn | Pn | 06 05 06.8 | +2.2 |
| **H17A** | **Grant Village** | **3.08** | **137** | | Pn | 06 05 07.4 | +2.7 |
| **HLID** | **Hailey** | **3.20** | **192** | Pn | Pn | 06 05 07.2 | +0.9 |
| HLID | | | | IAML | | 06 05 54.9 | |
| | comp=N,320nm,0.4s | | | | | | |
| HLID | | | | IAML | | 06 05 56.2 | |
| | comp=N,289nm,0.3s | | | | | | |
| **E09A** | **Wood Farm, Sta** | **3.22** | **268** | | Pn | 06 05 07.6 | +1.2 |
| E09A | | | | IAML | | 06 06 05.0 | |
| | comp=E,163nm,0.5s | | | | | | |
| E09A | | | | IAML | | 06 06 08.4 | |
| | comp=N,200nm,0.6s | | | | | | |
| **BMO** | **Blue Mountains** | **3.25** | **237** | | Pn | 06 05 07.8 | +1.0 |
| **FLWY** | **Flagg Ranch** | **3.27** | **142** | | Pn | 06 05 08.7 | +1.4 |
| **IMW** | **Indian Meadow** | **3.32** | **146** | Pn | Pn | 06 05 09.7 | +1.6 |
| IMW | | | | IAML | | 06 06 04.6 | |
| | comp=N,249nm,0.5s | | | | | | |
| **RLMT** | **Red Lodge** | **3.34** | **117** | | Pn | 06 05 10.8 | +2.6 |
| RLMT | | | | IAML | | 06 06 01.9 | |
| | comp=N,129nm,0.5s | | | | | | |
| RLMT | | | | IAML | | 06 06 02.3 | |
| | comp=N,148nm,0.5s | | | | | | |
| **LNOR** | **Lincton Mounta** | **3.43** | **258** | | Pn | 06 05 11.9 | +2.6 |
| **C09A** | **Chrisman Ranch** | **3.45** | **290** | | Pn | 06 05 10.2 | +0.6 |
| **TPAW** | **Teton Pass** | **3.67** | **150** | | Pn | 06 05 15.8 | +2.9 |
| TPAW | | | | IAML | | 06 06 24.6 | |
| | comp=N,81nm,0.7s | | | | | | |
| **MFID** | **Camas Ranch** | **3.67** | **208** | | Pn | 06 05 13.2 | +0.4 |
| **SNOW** | **Snow King Moun** | **3.76** | **148** | | Pn | 06 05 17.3 | +3.2 |
| SNOW | | | | IAML | | 06 06 15.6 | |
| | comp=N,74nm,0.5s | | | | | | |
| **E08A** | **Dider Farm, El** | **3.85** | **269** | | Pn | 06 05 15.6 | +0.5 |
| E08A | | | | IAML | | 06 06 25.7 | |
| | comp=N,144nm,0.7s | | | | | | |
| E08A | | | | IAML | | 06 06 30.1 | |
| | comp=E,95nm,1.0s | | | | | | |
| **HAWA** | **Hanford** | **4.18** | **268** | | Pn | 06 05 21.1 | +1.4 |
| HAWA | | | | IAML | | 06 06 35.5 | |
| | comp=E,131nm,0.5s | | | | | | |
| HAWA | | | | IAML | | 06 06 40.0 | |
| | comp=E,83nm,0.7s | | | | | | |
| **B08A** | **Colville Reser** | **4.30** | **295** | | Pn | 06 05 22.1 | +0.8 |
| B08A | | | | IAML | | 06 06 37.6 | |
| | comp=N,102nm,0.7s | | | | | | |
| B08A | | | | IAML | | 06 06 38.2 | |
| | comp=E,95nm,0.8s | | | | | | |
| **E07A** | **Sunnyside** | **4.39** | **271** | | Pn | 06 05 23.7 | +1.2 |
| **MXC** | **Moxie City** | **4.69** | **271** | Pn | Pn | 06 05 27.7 | +1.0 |
| MXC | | | | IAML | | 06 06 54.9 | |
| | comp=N,83nm,0.9s | | | | | | |
| MXC | | | | IAML | | 06 06 58.4 | |
| | comp=E,66nm,0.7s | | | | | | |
| **J08A** | **Circle Bar Ran** | **4.86** | **228** | Pn | Pn | 06 05 31.0 | +1.9 |
| J08A | | | | IAML | | 06 06 54.1 | |
| | comp=E,37nm,0.7s | | | | | | |
| J08A | | | | IAML | | 06 06 54.4 | |
| | comp=N,37nm,0.6s | | | | | | |
| **I07A** | **Izee** | **4.98** | **241** | Pn | Pn | 06 05 32.4 | +1.7 |
| **G06A** | **Carlson Farm,** | **5.20** | **256** | Pn | Pn | 06 05 35.0 | +1.4 |
| **G05A** | **Wamic** | **5.65** | **258** | | Pn | 06 05 40.9 | +1.1 |
| **LON** | **Longmire** | **5.73** | **274** | | Pn | 06 05 43.8 | +2.9 |
| **I05D** | **Terrebonne, OR** | **6.00** | **250** | | Pn | 06 05 46.3 | +1.6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PINE** | **Pine Mountain** | **6.01** | **244** | Pn | Pn | 06 05 47.6 | +2.7 |
| **J05D** | **Fort Rock, OR** | **6.47** | **241** | Pn | Pn | 06 05 52.3 | +1.1 |
| **H04D** | **Lebanon** | **6.84** | **255** | Pn | Pn | 06 05 59.1 | +2.9 |
| **I04A** | **Tendick Farm,** | **6.94** | **249** | Pn | Pn | 06 05 59.7 | +2.2 |
| **RSSD** | **Black Hills** | **7.13** | **108** | Pn | Pn | 06 06 01.2 | +0.9 |
| **NLWA** | **Neilton Lookou** | **7.13** | **279** | Pn | Pn | 06 06 02.7 | +2.5 |
| **BUCK** | **Buck Mountain** | **7.13** | **253** | Pn | Pn | 06 06 02.3 | +2.1 |

*NEIC* ***11*** *06:04:18.3±0.7,36.51N±0.02×99.03W±0.03,h5km±2km, Error ellipse: s-maj=4.3km s-min=3.3km az=310.0*
**TUL 11 06:04:19±0.7,36.52N±0.02×99.00W±0.04,h5km±6km, ML2.4,mb_Lg2.3/10(NEIC),ML2.6/10(NEIC),Error ellipse: s-maj=4.6km s-min=1.9km az=103.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOKA** | **Waynoka** | **0.13** | **24** | | Pg | 06 04 22.2 | +0.5 |
| **OK038** | **West end E0370** | **0.21** | **101** | | Pg | 06 04 23.4 | +0.3 |
| OK038 | 2μm,0.4s | | | IAML | | 06 04 29.3 | |
| OK038 | 1μm,0.2s | | | IAML | | 06 04 30.4 | |
| **OK032** | **Salt Plains WL** | **0.69** | **65** | Pg | Pg | 06 04 31.9 | -0.4 |
| OK032 | 294nm,0.1s | | | IAML | | 06 04 45.4 | |
| **CROK** | **Carrier** | **0.82** | **91** | | Pg | 06 04 34.3 | -0.4 |
| CROK | comp=E,175nm,0.3s | | | IAML | | 06 04 55.2 | |
| CROK | comp=N,171nm,0.3s | | | IAML | | 06 04 59.0 | |
| **CSTR** | **Hydro, Custer** | **0.91** | **164** | Pg | Pg | 06 04 36.1 | -0.2 |
| **KAN14** | **Manchester OK** | **0.94** | **62** | Pg | Pg | 06 04 36.9 | -0.1 |
| **GC02** | **Grant County #** | **0.97** | **70** | Pg | Pg | 06 04 37.2 | -0.4 |
| **KAN08** | **Anthony NE Sta** | **1.09** | **49** | Pg | Pg | 06 04 39.3 | -0.5 |
| **KAN12** | **Harper NE Stat** | **1.12** | **45** | | Pg | 06 04 39.8 | -0.6 |
| **KAN17** | **Caldwell West** | **1.12** | **62** | | Pg | 06 04 39.8 | -0.7 |
| **KAN01** | **Argonia South** | **1.18** | **57** | Pg | Pg | 06 04 40.8 | -0.8 |
| **KAN09** | **Caldwell North** | **1.27** | **60** | Pg | Pg | 06 04 42.3 | -1.0 |
| **KAN13** | **South Haven SW** | **1.32** | **67** | | Pn | 06 04 43.1 | -0.9 |
| **KS21** | **Milan North St** | **1.32** | **54** | | Pn | 06 04 43.2 | -0.9 |
| **OK029** | **Liberty Lake** | **1.44** | **119** | | Pn | 06 04 45.2 | -0.5 |
| **BLOK** | **Blackwell** | **1.45** | **80** | | Pn | 06 04 45.7 | -0.3 |
| **OK048** | **Pawnee Station** | **1.66** | **93** | | Pn | 06 04 49.0 | +0.2 |
| **SMWD** | **Samnorwood** | **1.73** | **216** | | Pn | 06 04 49.8 | 0.0 |
| **OK051** | **E0350 and S346** | **1.74** | **90** | Pn | Pn | 06 04 49.9 | 0.0 |
| **WMOK** | **Wichita Mounta** | **1.78** | **174** | Pn | Pn | 06 04 50.2 | -0.3 |
| WMOK | comp=Z,8.5nm,0.8s | | | IAmb_Lg | | 06 05 18.4 | |
| **FNO** | **Franklin** | **1.81** | **134** | Pn | Pn | 06 04 50.9 | +0.1 |
| **OK031** | **S. Brethren Rd** | **1.83** | **107** | Pn | Pn | 06 04 50.8 | -0.4 |
| **OK052** | **Battle Ridge R** | **1.85** | **106** | Pn | Pn | 06 04 51.3 | -0.1 |
| **QUOK** | **Quay** | **1.88** | **100** | Pn | Pn | 06 04 51.8 | 0.0 |
| **R32A** | **Long Quarter,** | **1.92** | **7** | Pn | Pn | 06 04 53.1 | +0.8 |
| **W35A** | **Tecumseh** | **2.20** | **128** | | Pn | 06 04 56.2 | +0.1 |
| **KSU1** | **Kansas State U** | **3.20** | **36** | IAmb_Lg | | 06 06 04.7 | |
| **KSCO** | comp=Z,6.2nm,0.9s **Kaye Shedlock'** comp=Z,12nm,1.0s | **3.80** | **312** | IAmb_Lg | | 06 06 27.0 | |
| **CCM** | **Cathedral Cave** comp=Z,7.1nm,1.2s | **6.37** | **74** | IAmb_Lg | | 06 07 43.7 | |

*IDC* ***11*** *06:11:29.9±0.6,28.62N×103.31E,h0km,mb4.3/15, mbtmp4.3/16,ML3.9/1,MS3.6/2,Error ellipse: s-maj=23.2km s-min=12.9km az=54.0*
*BJI* ***11*** *06:11:32.1±0.0,28.62N×103.29E,h14km,mb4.4/29, mB4.7/10,ML4.3/19,Ms4.1/25,Ms7 3.9/23*
*NEIC* ***11*** *06:11:32.7±2.5,28.77N±0.08×103.43E±0.09,h10km±1km, mb4.4/21,Error ellipse: s-maj=13.5km s-min=12.8km az=126.0*
**ISC 11 06:11:31.6±0.4,28.60N±0.03×103.39E±0.04,h10km,n80, σ1.958/84,mb4.5/34,2C,Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CD2** | **Chengdu** | **2.33** | **8** | Pg | **Pb** | **06 12 12.3** | **-1.4** |
| CD2 | | | | Sg | **Sb** | **06 12 42.4** | **-0.1** |
| CD2 | comp=N,3μm,0.6s | | | smax | smax | | |
| CD2 | comp=E,3μm,0.5s | | | smax | smax | | |
| CD2 | comp=N,3μm,5.1s | | | LR | LR | | |
| CD2 | comp=E,2μm,4.9s | | | LR | LR | | |
| CD2 | comp=Z,2μm,5.5s | | | LR | LR | | |
| **PZH** | **PanZhiHua** | **2.55** | **215** | Pg | **Pb** | **06 12 16.7** | **-0.7** |
| PZH | | | | Sg | **Sg** | **06 12 51.4** | **-2.0** |
| PZH | comp=N,1μm,0.7s | | | smax | smax | | |
| PZH | comp=E,900nm,0.6s | | | smax | smax | | |
| PZH | comp=N,2μm,7.3s | | | LR | LR | | |
| PZH | comp=E,2μm,7.5s | | | LR | LR | | |
| PZH | comp=Z,2μm,7.7s | | | LR | LR | | |
| **KMI** | **Kunming** | **3.51** | **190** | ⇑Pn | **Pb** | **06 12 31.4** | **-2.5** |
| KMI | | | | Sn | **Sb** | **06 13 17.0** | **+0.4** |
| KMI | comp=N,170nm,0.8s | | | smax | smax | | |
| KMI | comp=E,120nm,1.1s | | | smax | smax | | |
| KMI | comp=N,1μm,5.6s | | | LR | LR | | |
| KMI | comp=E,1μm,5.0s | | | LR | LR | | |
| KMI | comp=Z,1μm,8.1s | | | LR | LR | | |
| **ENH** | **Enshi** | **5.58** | **71** | Pn | **Pn** | **06 12 56.0** | **+1.4** |
| **TNCH** | **TengChong** | **5.62** | **232** | Pn | **Pn** | **06 12 55.5** | **+0.2** |
| TNCH | | | | Pg | **Pg** | **06 13 15.4** | **-3.8** |
| TNCH | | | | Sn | **Sn** | **06 14 03.5** | **+3.5** |
| TNCH | | | | Sg | **Sg** | **06 14 29.1** | **-2.8** |
| TNCH | comp=Z,240nm,2.1s | | | smax | smax | | |
| TNCH | comp=Z,180nm,1.8s | | | smax | smax | | |
| TNCH | comp=Z,820nm,3.9s | | | LR | LR | | |
| TNCH | comp=Z,1μm,4.5s | | | LR | LR | | |
| **SLVN** | **Son La** | **7.25** | **176** | Pn | **Pn** | **06 13 22.0** | **+4.3** |
| **LZH** | **Lanzhou** | **7.48** | **3** | *e*P | Pn | 06 13 14.2 | -6.7 |
| LZH | comp=Z,29nm,1.0s | | | pmax | pmax | | |
| LZH | comp=N,440nm,6.0s | | | LR | LR | | |
| LZH | comp=E,1μm,7.9s | | | LR | LR | | |
| LZH | comp=Z,440nm,10.1s | | | LR | LR | | |
| **CNSH** | **ChangSha** | **8.42** | **91** | P | **Pn** | **06 13 36.6** | **+3.0** |
| CNSH | | | | S | **Sn** | **06 15 05.9** | **-2.8** |
| CNSH | comp=Z,140nm,0.9s | | | smax | smax | | |
| CNSH | comp=Z,110nm,0.7s | | | smax | smax | | |
| **CRAI** | **Chiangrai** | **8.77** | **199** | Pn | Pn | 06 13 43.1 | +4.6 |
| **WHN** | **Wuhan** | **9.74** | **76** | P | **Pn** | **06 13 53.3** | **+1.6** |
| **LYN** | **LuoYang** | **9.76** | **50** | P | **Pn** | **06 13 54.8** | **+2.9** |
| LYN | | | | S | **Sn** | **06 15 38.2** | **-3.4** |
| LYN | comp=Z,360nm,1.2s | | | smax | smax | | |
| LYN | comp=Z,220nm,1.0s | | | smax | smax | | |
| LYN | comp=Z,410nm,6.2s | | | LR | LR | | |
| LYN | comp=Z,1μm,11.7s | | | LR | LR | | |
| **SHL** | **Shillong** | **10.69** | **256** | | **Pn** | **06 14 06.9** | **+2.0** |
| **LSA** | **Lhasa** | **10.76** | **279** | Pn | **Pn** | **06 14 06.5** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** baz=16,slow=12 | **10.88** | **203** | Pn | Pn | 06 14 12.6 | +5.1 |
| CMAR | comp=Z,174nm,19.3s,baz=10,0,slow=41 | | | LR | LR | 06 18 55.1 | |
| **QIZ** | **Qiongzhong** | **11.20** | **147** | P | **Pn** | **06 14 11.4** | **-0.4** |
| QIZ | | | | S | **Sn** | **06 16 19.1** | **+1.9** |
| QIZ | comp=Z,500nm,8.7s | | | LR | LR | | |
| QIZ | comp=Z,910nm,9.3s | | | LR | LR | | |
| **HNS** | **HongShan** | **12.93** | **44** | *e*P | Pn | 06 14 41.1 | +5.8 |
| HNS | | | | *e*S | Sn | 06 17 09.5 | +10 |
| HNS | comp=Z,370nm,9.6s | | | LR | LR | | |
| HNS | comp=Z,250nm,10.0s | | | LR | LR | | |
| HNS | comp=Z,210nm,10.4s | | | LR | LR | | |
| **NJ2** | **Nanjing** | **13.80** | **72** | *e*P | **Pn** | **06 14 47.1** | **-0.1** |
| NJ2 | comp=Z,9.0nm,1.0s | | | pmax | pmax | | |
| NJ2 | comp=Z,550nm,8.5s | | | LR | LR | | |
| NJ2 | comp=Z,680nm,9.0s | | | LR | LR | | |
| NJ2 | comp=Z,490nm,9.8s | | | LR | LR | | |
| **HHC** | **Hu-ho-hao-te** | **13.94** | **27** | *e*P | **Pn** | **06 14 49.8** | **+0.5** |
| HHC | | | | pP | P | 06 14 53.7 | -3.8 |
| HHC | | | | *e*S | **Sn** | **06 17 24.1** | **0.0** |
| HHC | comp=Z,7.0nm,0.6s | | | pmax | pmax | | |
| HHC | comp=Z,85nm,5.8s | | | pmax | pmax | | |
| HHC | comp=Z,380nm,8.8s | | | LR | LR | | |
| HHC | comp=Z,300nm,8.0s | | | LR | LR | | |
| HHC | comp=Z,320nm,10.0s | | | LR | LR | | |
| **BJT** | **Baijiatuan** | **15.52** | **39** | | **Pn** | **06 15 11.4** | **+1.0** |
| BJT | comp=Z,9.9nm,0.9s | | | IAmb | IAmb | 06 15 19.6 | |
| **SSLB** | **Suanglung** | **16.48** | **103** | P | **P** | **06 15 25.3** | **-0.3** |
| SSLB | comp=Z,37nm,0.9s | | | IAmb | IAmb | 06 15 30.0 | |
| **YHNB** | **Yeheng** | **16.55** | **100** | P | **P** | **06 15 26.1** | **-0.4** |
| YHNB | comp=Z,19nm,0.8s | | | IAmb | IAmb | 06 15 30.4 | |
| **XLT** | **XiLinHaoTe** | **18.35** | **30** | *e*P | **P** | **06 15 49.0** | **+2.7** |
| XLT | comp=Z,7.0nm,0.9s | | | pmax | pmax | | |
| XLT | comp=Z,220nm,9.1s | | | LR | LR | | |
| XLT | comp=Z,160nm,15.1s | | | LR | LR | | |
| **SONM** | **Songino Array** | **19.35** | **6** | Pn | **P** | **06 15 57.5** | **+0.2** |
| **SONM** | **Songino Array** comp=Z,0.4nm,0.3s,baz=184,slow=11,SNR=12 comp=Z,3.0nm,0.6s | **19.35** | **6** | P | **Pn** | **06 15 58.6** | **+0.2** |
| **WMQ** | **Urumqi** | **19.73** | **325** | *e*P | **Pn** | **06 16 06.2** | **+3.4** |
| WMQ | | | | sP | sP | 06 16 09.6 | +3.5 |
| WMQ | comp=Z,32nm,0.9s | | | pmax | pmax | | |
| WMQ | comp=Z,650nm,12.7s | | | LR | LR | | |
| WMQ | comp=Z,660nm,13.9s | | | LR | LR | | |
| WMQ | comp=Z,540nm,14.9s | | | LR | LR | | |
| **KSAR** | **Wonju Array Be** | **22.31** | **60** | P | **P** | **06 16 29.9** | **+0.7** |
| **KS19** | **Wonju Array Si** | **22.31** | **60** | P | **P** | **06 16 29.4** | **+0.1** |
| KS19 | comp=Z,16nm,0.9s | | | IAmb | IAmb | 06 16 36.4 | |
| **KSRS** | **Korea Array** comp=Z,6.9nm,0.5s,baz=243,slow=10.0,SNR=36 comp=Z,6.9nm,0.5s | **22.34** | **60** | P | **P** | **06 16 29.6** | **+0.1** |
| **CN2** | **Changchun** | **23.29** | **43** | P | **P** | **06 16 40.1** | **+0.7** |
| CN2 | | | | S | **S** | **06 20 46.2** | **-5.6** |
| CN2 | comp=Z,10.0nm,0.6s | | | pmax | pmax | | |
| CN2 | comp=Z,300nm,17.0s | | | LR | LR | | |
| CN2 | comp=Z,500nm,17.0s | | | LR | LR | | |
| CN2 | comp=Z,500nm,17.0s | | | LR | LR | | |
| **HIA** | **Hailar** | **24.15** | **27** | P | **P** | **06 16 48.3** | **+0.6** |
| HIA | comp=Z,3.9nm,0.6s | | | IAmb | IAmb | 06 17 03.6 | |
| **MK31** | **Makanchi Array** | **24.54** | **323** | P | **P** | **06 16 50.6** | **-0.8** |
| MK31 | comp=Z,4.7nm,0.7s | | | IAmb | IAmb | 06 16 57.8 | |
| **MKAR** | **Makanchi Array** | **24.54** | **323** | P | **P** | **06 16 50.8** | **-0.5** |
| **MKAR** | **Makanchi Array** comp=Z,5.7nm,0.6s,baz=124,slow=11,SNR=42 | **24.54** | **323** | P | **P** | **06 16 51.2** | **-0.1** |
| MKAR | comp=Z,0.8nm,0.8s,baz=113,slow=2.8,SNR=3.9 comp=Z,5.7nm,0.6s | | | ScP | **ScP** | **06 24 06.7** | **-1.6** |
| **MAKZ** | **Makanchi** | **24.72** | **323** | P | **P** | **06 16 52.9** | **0.0** |
| MAKZ | comp=Z,5.3nm,0.7s | | | IAmb | IAmb | 06 16 57.4 | |
| **BNX** | **BinXian** | **25.52** | **41** | ⇑P | **P** | **06 17 00.9** | **+0.7** |
| BNX | comp=Z,12nm,0.9s | | | pmax | pmax | | |
| **BOOM** | **Boomskoye usch** | **26.15** | **309** | P | **P** | **06 17 05.6** | **-0.6** |
| **NIL** | **Nilore** | **26.23** | **289** | P | **P** | **06 17 08.5** | **+1.6** |
| NIL | comp=Z,11nm,0.7s | | | IAmb | IAmb | 06 17 23.1 | |
| **USA0B** | **Ussuriysk Arra** | **27.61** | **48** | P | **P** | **06 17 18.0** | **-1.0** |
| USA0B | comp=Z,9.9nm,0.8s | | | IAmb | IAmb | 06 17 19.9 | |
| **USRK** | **Ussuriysk Ar.** | **27.61** | **48** | P | **P** | **06 17 18.1** | **-0.9** |
| **USRK** | **Ussuriysk Ar.** comp=Z,8.0nm,0.6s,baz=250,slow=7.4,SNR=15 comp=Z,8.0nm,0.6s | **27.61** | **48** | P | **P** | **06 17 19.2** | **+0.1** |
| **ZALV** | **Zalesovo Beam** comp=Z,0.9nm,0.4s,baz=134,slow=8.5,SNR=5.4 comp=Z,0.9nm,0.4s | **28.74** | **337** | P | **P** | **06 17 28.5** | **-0.5** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.9nm,0.5s,baz=130,slow=10,SNR=10 comp=Z,0.9nm,0.5s | **28.92** | **326** | P | **P** | **06 17 30.2** | **-0.4** |
| **KLR** | **Kul'dur** comp=Z,1.6nm,0.7s,baz=269,slow=10,SNR=3.8 comp=Z,1.6nm,0.7s | **29.91** | **39** | P | **P** | **06 17 38.6** | **-0.8** |
| **KK31** | **Karatay Array** | **30.11** | **308** | P | **P** | **06 17 42.0** | **+0.7** |
| **KKAR** | **Karatay Array** | **30.11** | **308** | P | **P** | **06 17 43.4** | **+2.0** |
| **ERM** | **Erimo** | **34.80** | **57** | P | **P** | **06 18 22.1** | **-0.3** |
| **ABKAR** | **Akbulak array** | **38.92** | **314** | P | **P** | **06 18 57.9** | **+0.6** |
| **ABKAR** | **Akbulak array** | **38.92** | **314** | P | **P** | **06 18 58.9** | **+1.5** |
| **WRA** | **Warramunga Arr** | **56.77** | **145** | P | **P** | **06 21 16.1** | **+0.1** |
| **WRA** | **Warramunga Arr** comp=Z,6.1nm,0.7s,baz=334,slow=8.3,SNR=80 comp=Z,6.1nm,0.7s | **56.77** | **145** | P | **P** | **06 21 16.6** | **+0.6** |
| **WB2** | **Warramunga Arr** | **56.77** | **145** | P | **P** | **06 21 16.5** | **+0.5** |
| **COEN** | **Coen** | **57.19** | **132** | P | **P** | **06 21 18.8** | **-0.3** |
| COEN | comp=Z,14nm,1.4s | | | IAmb | IAmb | 06 21 19.2 | |
| **AKASG** | **Malin Array Be** comp=Z,0.6nm,0.5s,baz=68,slow=6.9,SNR=2.1 comp=Z,0.6nm,0.5s | **58.66** | **314** | P | **P** | **06 21 27.9** | **-1.1** |
| **KEV** | **Kevo** | **58.77** | **337** | P | **P** | **06 21 28.4** | **-1.0** |
| **ARCES** | **ARCESS Array B** | **59.29** | **336** | P | **P** | **06 21 32.8** | **-0.3** |
| **ARCES** | **ARCESS Array B** comp=Z,2.1nm,0.7s,baz=89,slow=7.3,SNR=9.0 comp=Z,2.1nm,0.7s | **59.29** | **336** | P | **P** | **06 21 32.9** | **-0.3** |
| **FINES** | **FINESS Array B** | **59.31** | **327** | P | **P** | **06 21 32.7** | **-0.6** |
| **FINES** | **FINESS Array B** comp=Z,2.2nm,0.8s,baz=80,slow=12,SNR=7.1 comp=Z,2.2nm,0.8s | **59.31** | **327** | P | **P** | **06 21 33.0** | **-0.2** |
| **AS31** | **Alice Springs** | **59.70** | **147** | P | **P** | **06 21 37.4** | **+0.9** |
| AS31 | comp=Z,2.6nm,0.5s | | | IAmb | IAmb | 06 21 37.8 | |
| **ASAR** | **Alice Springs** | **59.70** | **147** | P | **P** | **06 21 36.8** | **+0.3** |
| **ASAR** | **Alice Springs** comp=Z,3.8nm,0.4s,baz=328,slow=6.7,SNR=76 comp=Z,3.8nm,0.4s | **59.70** | **147** | P | **P** | **06 21 37.3** | **+0.8** |
| **CTA** | **Charters Tower** comp=Z,0.4nm,0.7s,baz=335,slow=8.9,SNR=7.1 comp=Z,0.4nm,0.7s | **63.69** | **134** | P | **P** | **06 22 03.1** | **-0.3** |
| **CTAO** | **Charters Tower** | **63.69** | **134** | P | **P** | **06 22 03.8** | **+0.4** |
| **NB2** | **NORSAR Subarra** comp=Z,0.8nm,0.5s,baz=75,slow=6.5 | **66.44** | **328** | P | **P** | **06 22 19.6** | **-1.2** |
| **NOA** | **NORSAR Array B** comp=Z,20nm,0.5s,baz=76,slow=5.2,SNR=4.4 | **66.44** | **328** | P | **P** | **06 22 19.3** | **-1.5** |
| **CONA** | **Conrad Observa** comp=Z,2.7nm,1.1s | **67.80** | **313** | *e*P | **P** | **06 22 30.2** | **+0.5** |
| **SOKA** | **Soboth** comp=Z,4.5nm,1.1s | **68.73** | **312** | *e*P | **P** | **06 22 35.8** | **+0.2** |
| **GERES** | **GERESS Array B** comp=Z,0.8nm,0.6s,baz=151,slow=2.2,SNR=5.4 comp=Z,0.8nm,0.6s | **68.86** | **315** | P | **P** | **06 22 36.3** | **-0.1** |
| **LESA** | **Schwarzleotal** comp=Z,1.1nm,0.4s | **69.99** | **314** | *i* pP | **P** | **06 22 45.6** | **+2.1** |
| **STKA** | **Stephens Creek** comp=Z,3.8nm,0.7s,baz=300,slow=11,SNR=4.3 comp=Z,3.8nm,0.7s | **70.27** | **146** | P | **P** | **06 22 45.9** | **+0.8** |
| **ABTA** | **Abfaltersbach** comp=Z,1.5nm,0.6s | **70.34** | **313** | *e*pP | pP | 06 22 47.8 | -1.5 |
| **WTTA** | **Wattenberg** comp=Z,3.2nm,0.7s | **70.71** | **314** | *e*pP | pP | 06 22 50.9 | -0.9 |
| **SQTA** | **Sankt Quirin** comp=Z,4.0nm,0.6s | **71.00** | **314** | *e*P | **P** | **06 22 49.5** | **-0.2** |
| **MOTA** | **Moosalm** comp=Z,4.1nm,0.6s | **71.02** | **314** | *i* P | **P** | **06 22 49.9** | **+0.1** |
| **FETA** | **Feichten** comp=Z,4.2nm,0.8s | **71.38** | **314** | *i* pP | pP | 06 22 54.6 | -1.2 |
| **DAVOX** | **Davos/Dischmat** comp=Z,5.2nm,0.6s,baz=108,slow=7.1,SNR=16 comp=Z,5.2nm,0.6s | **72.00** | **314** | P | **P** | **06 22 55.7** | **-0.1** |
| **BBB** | **Bella Bella** comp=Z,57nm,18.5s,baz=30,slow=38 | **87.81** | **29** | LR | LR | 07 07 34.7 | |
| **TXAR** | **Lajitas Array** comp=Z,0.1nm,0.5s,baz=270,slow=0.9,SNR=1.8 | **116.86** | **26** | PKP | **PKPdf** | **06 30 16.3** | **-0.7** |
| **QSPA** | **South Pole Qui** comp=Z,1.5nm,0.7s,baz=277,slow=1.3,SNR=10 | **118.38** | **180** | PKP | **PKPdf** | **06 30 17.7** | **-0.9** |
| **ROSC** | **El Rosal** comp=Z,6.8nm,0.4s,baz=107,slow=19,SNR=4.9 | **146.68** | **356** | PKPbc | **PKPab** | **06 31 15.4** | **-0.5** |

**IDC 11 06:34:52.2±2.9,17.81N×83.70W,h0km,mb2.8/2, mbtmp3.1/3,ML3.6/1,Error ellipse: s-maj=108.9km s-min=51.9km az=36.0,North of Honduras**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TEIG** | **Tepich** | **4.95** | **300** | Pn | Pn | 06 36 05.9 | -2.0 |
| TEIG | 2.2nm,0.3s,baz=118,slow=1.3,SNR=60 | | | Sn | Sn | 06 37 03.4 | -2.5 |
| **TXAR** | 3.6nm,0.3s,baz=315,slow=3.3,SNR=8.8 5.7nm,0.3s **Lajitas Array** 0.1nm,0.7s,baz=118,slow=12,SNR=2.1 0.1nm,0.7s | **21.56** | **306** | P | P | 06 39 45.4 | +1.9 |
| **ILAR** | **Eielson Array** 0.1nm,0.6s,baz=106,slow=4.4,SNR=1.8 0.1nm,0.6s | **62.69** | **335** | P | P | 06 45 18.1 | -0.5 |
| **WRA** | **Warramunga Arr** 0.3nm,0.9s,baz=91,slow=5.7,SNR=1.8 | **143.99** | **260** | PKP | PKPdf | 06 54 30.0 | -0.7 |
| **ASAR** | **Alice Springs** 0.4nm,0.7s,baz=110,slow=3.5,SNR=4.2 | **144.42** | **254** | PKP | PKPdf | 06 54 31.1 | -0.2 |

*BUT* ***11*** *06:46:35.2±0.9,46.65N±0.03×113.48W±0.03,h6km±5km, Error ellipse: s-maj=5.0km s-min=2.5km az=198.0*
**NEIC 11 06:46:34.5±1.2,46.68N±0.04×113.50W±0.01,h9km±8km, ML2.8/22,ML3.0/21(BUT),Error ellipse: s-maj=5.5km s-min=1.1km az=187.0,Montana**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BPMT** | **Black Pine Rid** | **0.24** | **172** | | Pg | 06 46 39.3 | -0.2 |
| **MSO** | **Missoula** | **0.34** | **296** | Pg | Pb | 06 46 42.2 | -0.6 |
| MSO | | | | Sg | Sg | 06 46 46.8 | +1.0 |
| MSO | 829nm,0.2s | | | IAML | | 06 46 47.6 | |
| **OVMT** | **Ovando** | **0.52** | **41** | | Pb | 06 46 45.2 | -0.5 |
| **LYMT** | **Lyon Mountain** | **0.88** | **70** | | Pg | 06 46 51.5 | +0.1 |
| **DLMT** | **Dillon** | **1.46** | **154** | | Pn | 06 47 01.3 | +0.2 |
| DLMT | 94nm,0.3s | | | IAML | | 06 47 23.0 | |
| DLMT | 77nm,0.3s | | | IAML | | 06 47 23.2 | |
| **BOZ** | **Bozeman (W)** | **1.69** | **129** | | Pb | 06 47 05.6 | -0.2 |
| BOZ | | | | | Sb | 06 47 26.8 | -0.3 |
| BOZ | 103nm,0.3s | | | IAML | | 06 47 29.5 | |
| **YHL** | **Hebgen Lake** | **2.44** | **138** | Pn | Pn | 06 47 15.6 | +0.8 |
| YHL | comp=N,50nm,0.5s | | | IAML | | 06 47 52.0 | |
| **YHB** | **Horse Butte** | **2.51** | **139** | | Pn | 06 47 16.9 | +1.3 |
| **CMI** | **Centennial Mou** | **2.52** | **148** | | Pn | 06 47 16.9 | +1.1 |
| **YPDC** | **Denny Creek** | **2.52** | **140** | | Pn | 06 47 17.1 | +1.3 |
| **YMC** | **Maple Creek** | **2.59** | **137** | | Pn | 06 47 18.0 | +1.3 |
| **YHH** | **Holmes Hill** | **2.65** | **135** | | Pn | 06 47 18.7 | +1.2 |
| **YPWB** | **West Boundary** | **2.67** | **140** | | Pn | 06 47 18.7 | +0.8 |
| **YMR** | **Madison River** | **2.68** | **138** | | Pn | 06 47 19.3 | +1.3 |
| **YMR** | **Madison River** comp=E,43nm,0.7s | **2.68** | **138** | IAML | | 06 48 06.2 | |
| **EGMT** | **Eagleton** | **2.88** | **61** | Pn | Pn | 06 47 20.9 | +0.3 |
| EGMT | comp=E,40nm,0.6s | | | IAML | | 06 48 05.5 | |
| **NEW** | **Newport** | **2.93** | **304** | | Pn | 06 47 22.7 | +1.5 |
| NEW | comp=E,24nm,0.8s | | | IAML | | 06 48 10.4 | |
| NEW | comp=E,16nm,0.5s | | | IAML | | 06 48 11.0 | |
| **HLID** | **Hailey** | **3.18** | **192** | | Pn | 06 47 25.9 | +1.1 |
| HLID | comp=E,31nm,0.3s | | | IAML | | 06 48 13.4 | |
| HLID | comp=E,31nm,0.3s | | | IAML | | 06 48 14.6 | |
| **BMO** | **Blue Mountains** | **3.23** | **237** | | Pn | 06 47 25.9 | +0.5 |
| **FLWY** | **Flagg Ranch** | **3.26** | **142** | | Pn | 06 47 27.4 | +1.5 |
| **IMW** | **Indian Meadow** | **3.31** | **146** | Pn | Pn | 06 47 28.7 | +1.9 |
| IMW | comp=E,19nm,0.5s | | | IAML | | 06 48 20.5 | |

*NOU* ***11*** *06:58:32.5,42.43S×174.01E,h8km,MLv3.6/9,Off E. Coast of S. Island, N.Z.*
*WEL* ***11*** *06:58:33.6±0.4,42.3°S×17.4E°,h16km±3km,M3.0/15, ML3.2/17,MLv3.0/15,Error ellipse: s-maj=0.0km s-min=0.0km az=133.1,confirmed*
**ISC 11 06:58:33.2±1.1,42.39S±0.03×173.93E±0.03,h17km±8km, n80,σ0.992/97,South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIKS** | **Kaikoura** | **0.19** | **259** | P | **Pb** | **06 58 39.1** | **+0.9** |
| KIKS | | | | S | **Sg** | **06 58 42.8** | **+1.8** |
| **KHZ** | **Kahutara** | **0.29** | **265** | P | **Pb** | **06 58 39.9** | **-0.1** |
| **KHZ** | **Kahutara** | **0.29** | **265** | P | **Pb** | **06 58 39.9** | **-0.1** |
| KHZ | | | | S | **Sg** | **06 58 43.8** | **-0.1** |
| **KEKS** | **Kekerengu Vall** | **0.44** | **5** | P | **Pb** | **06 58 42.6** | **+0.2** |
| KEKS | | | | S | **Sb** | **06 58 49.4** | **+0.7** |
| **CMWZ** | **Cape Campbell** | **0.67** | **18** | P | **Pn** | **06 58 48.2** | **+0.2** |
| CMWZ | | | | S | **Sn** | **06 58 58.6** | **+0.5** |
| **BSWZ** | **Blackbirch Sta** | **0.68** | **356** | P | **Pg** | **06 58 46.2** | **-0.3** |
| BSWZ | | | | S | **Sg** | **06 58 55.4** | **-0.1** |
| **GVZ** | **Greta Valley S** | **0.88** | **229** | P | **Pn** | **06 58 51.5** | **+0.7** |
| **TUWZ** | **Tuamarina** | **0.96** | **0** | P | **Pn** | **06 58 52.0** | **+0.1** |
| TUWZ | | | | S | **Sb** | **06 59 04.7** | **+0.9** |
| **THZ** | **Tophouse** | **0.99** | **309** | P | **Pg** | **06 58 50.9** | **-1.5** |
| THZ | | | | S | **Sg** | **06 59 02.6** | **-2.8** |
| **BHW** | **Baring Head** | **1.21** | **36** | P | **Pn** | **06 58 55.5** | **+0.3** |
| BHW | | | | S | **Sb** | **06 59 11.4** | **+0.6** |
| **TCW** | **Tory Channel** | **1.21** | **12** | P | **Pn** | **06 58 55.1** | **-0.2** |
| TCW | | | | S | **Sb** | **06 59 10.3** | **-0.6** |
| **SNZO** | **South Karori** | **1.22** | **28** | P | **Pn** | **06 58 55.8** | **+0.3** |
| **AMCZ** | **Amberley** | **1.23** | **230** | P | **Pb** | **06 58 56.2** | **+0.2** |
| **NNZ** | **Nelson** | **1.24** | **340** | P | **Pn** | **06 58 55.1** | **-0.7** |
| **WEL** | **Wellington** | **1.27** | **30** | P | **Pn** | **06 58 56.5** | **+0.3** |
| WEL | | | | S | **Sb** | **06 59 12.5** | **-0.1** |
| **PLWZ** | **Palliser** | **1.28** | **51** | P | **Pn** | **06 58 56.6** | **+0.3** |
| PLWZ | | | | S | **Sg** | **06 59 14.5** | **-0.2** |
| **LTZ** | **Lake Taylor** | **1.29** | **252** | P | **Pn** | **06 58 56.6** | **+0.1** |
| LTZ | | | | S | **Sb** | **06 59 13.0** | **-0.3** |
| **MRNZ** | **Matariki Terra** | **1.32** | **318** | P | **Pn** | **06 58 56.7** | **-0.2** |
| MRNZ | | | | S | **Sb** | **06 59 14.3** | **0.0** |
| **MSWZ** | **Moikau Station** | **1.38** | **46** | P | **Pn** | **06 58 57.9** | **+0.2** |
| MSWZ | | | | S | **Sn** | **06 59 15.4** | **-0.2** |
| **OKCZ** | **Okains Bay** | **1.48** | **205** | P | **Pn** | **06 58 59.9** | **+0.8** |
| **PAWZ** | **Paruwai Farm** | **1.50** | **48** | P | **Pn** | **06 58 59.4** | **-0.1** |
| PAWZ | | | | S | **Sn** | **06 59 19.1** | **+0.4** |
| **CAW** | **Cannon Point** | **1.54** | **34** | P | **Pn** | **06 59 00.0** | **+0.2** |
| CAW | | | | S | **Sn** | **06 59 19.0** | **-0.5** |
| **TKNZ** | **Takaka Hill** | **1.54** | **331** | P | **Pn** | **06 58 60.0** | **+0.1** |
| **DUWZ** | **D'Urville Isla** | **1.59** | **360** | P | **Pn** | **06 59 00.4** | **-0.2** |
| **MQZ** | **McQueen's Vall** | **1.61** | **215** | P | **Pn** | **06 59 00.6** | **-0.3** |
| **AKCZ** | **Akaroa Harbour** | **1.66** | **207** | P | **Pn** | **06 59 02.0** | **+0.5** |
| **OXZ** | **Oxford** | **1.68** | **236** | P | **Pn** | **06 59 01.4** | **-0.4** |
| **KIW** | **Kapiti Island** | **1.69** | **26** | P | **Pn** | **06 59 02.3** | **+0.3** |
| **MTW** | **Mount Morrison** | **1.70** | **44** | P | **Pn** | **06 59 01.9** | **-0.2** |
| **DSZ** | **Denniston Nort** | **1.71** | **291** | P | **Pn** | **06 59 02.3** | **0.0** |
| DSZ | | | | S | **Sn** | **06 59 24.1** | **+0.2** |
| **OGWZ** | **Otaki Gorge** | **1.83** | **31** | P | **Pn** | **06 59 03.9** | **+0.1** |
| **INZ**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RACZ | Rakaia | 1.87 | 224 | P | Pn | 06 59 04.5 | 0.0 |
| QRZ | Quartz Range | 1.89 | 326 | P | Pn | 06 59 05.2 | +0.6 |
| QRZ | Quartz Range | 1.89 | 326 | P | Pn | 06 59 05.1 | +0.4 |
| HOWZ | Holdsworth Sta | 1.91 | 39 | P | Pn | 06 59 04.8 | -0.2 |
| TMWZ | Te Maipa | 1.95 | 49 | P | Pn | 06 59 05.2 | -0.3 |
| MHCZ | Mount Hutt | 2.08 | 236 | P | Pn | 06 59 06.8 | -0.5 |
| MRZ | Mangatainoka R | 2.12 | 36 | P | Pn | 06 59 07.6 | -0.3 |
| WACZ | Wakanui South | 2.18 | 224 | P | Pn | 06 59 08.7 | 0.0 |
| BFZ | Birch Farm | 2.44 | 46 | P | Pn | 06 59 11.7 | -0.5 |
| BFZ | Birch Farm | 2.44 | 46 | P | Pn | 06 59 11.4 | -0.8 |
| WVZ | Waitaha Valley | 2.45 | 253 | P | Pn | 06 59 12.8 | +0.4 |
| RPZ | Rata Peaks | 2.49 | 237 | P | Pn | 06 59 12.8 | -0.2 |
| RPZ | Rata Peaks | 2.49 | 237 | P | Pn | 06 59 12.6 | -0.4 |
| ARCZ | Arundel | 2.55 | 231 | P | Pn | 06 59 13.4 | -0.4 |
| WAZ | Wanganui | 2.75 | 17 | P | Pn | 06 59 18.2 | +1.6 |
| GCSZ | Gaunt Creek Bo | 2.81 | 250 | P | Pn | 06 59 17.7 | +0.4 |
| TMZ | Timaru | 2.92 | 226 | P | Pn | 06 59 18.8 | -0.1 |
| PREZ | Palmer Road | 3.05 | 3 | P | Pn | 06 59 22.9 | +2.2 |
| KHEZ | Kahui Hut | 3.09 | 1 | P | Pn | 06 59 22.6 | +1.3 |
| KHEZ | Kahui Hut | 3.09 | 1 | P | Pn | 06 59 24.0 | +2.6 |
| NEZ | North Egmont | 3.12 | 2 | P | Pn | 06 59 24.9 | +3.2 |
| PKE | Pukeiti | 3.19 | 1 | P | Pn | 06 59 24.6 | +1.9 |
| FOZ | Fox Glacier | 3.23 | 248 | P | Pn | 06 59 24.0 | +0.9 |
| PKVZ | Pokaka | 3.28 | 20 | P | Pn | 06 59 25.4 | +1.6 |
| MOVZ | Moawhango | 3.28 | 25 | P | Pn | 06 59 24.0 | 0.0 |
| WNVZ | Wahianoa | 3.31 | 23 | P | Pn | 06 59 25.1 | +0.7 |
| VRZ | Vera Road | 3.32 | 11 | P | Pn | 06 59 25.9 | +1.5 |
| WHVZ | Whangaehu Hut | 3.35 | 23 | P | Pn | 06 59 25.7 | +0.7 |
| TUVZ | Tukino | 3.38 | 23 | P | Pn | 06 59 26.2 | +0.8 |
| COVZ | Chateau Observ | 3.41 | 21 | P | Pn | 06 59 26.4 | +0.6 |
| NGZ | Ngauruhoe | 3.45 | 22 | P | Pn | 06 59 27.7 | +1.3 |
| SNVZ | South Ngauruho | 3.45 | 23 | P | Pn | 06 59 27.3 | +0.9 |
| OTVZ | Oturere | 3.48 | 23 | P | Pn | 06 59 27.4 | +0.6 |
| NNVZ | North Ngauruho | 3.50 | 22 | P | Pn | 06 59 27.8 | +0.9 |
| WTVZ | West Tongariro | 3.51 | 22 | P | Pn | 06 59 28.6 | +1.6 |
| ETVZ | East Tongariro | 3.52 | 23 | P | Pn | 06 59 27.9 | +0.6 |
| TMVZ | Te Maari | 3.54 | 23 | P | Pn | 06 59 28.1 | +0.7 |
| NTVZ | North Tongarir | 3.54 | 22 | P | Pn | 06 59 28.2 | +0.6 |
| ODZ | Otahua Downs | 3.57 | 221 | P | Pn | 06 59 28.3 | +0.6 |
| ODZ | Otahua Downs | 3.57 | 221 | P | Pn | 06 59 27.6 | -0.1 |
| BKZ | Black Stump Fm | 3.76 | 32 | P | Pn | 06 59 29.0 | -1.5 |
| HIZ | Hauiti | 3.94 | 11 | P | Pn | 06 59 34.2 | +1.3 |
| HIZ | Hauiti | 3.94 | 11 | P | Pn | 06 59 34.0 | +1.2 |
| JCZ | Jackson Bay | 4.12 | 244 | P | Pn | 06 59 37.3 | +1.8 |
| TLZ | Tolley Road | 4.24 | 17 | P | Pn | 06 59 37.3 | +0.3 |
| AWAZ | Awhitu Peninsu | 5.35 | 6 | P | Pn | 06 59 53.5 | +1.2 |
| MKAZ | Moumakai | 5.36 | 11 | P | Pn | 06 59 52.8 | +0.4 |
| WIAZ | Waiheke Island | 5.67 | 10 | P | Pn | 06 59 57.1 | +0.5 |

**IDC 11 07:03:50.5±6.3, 20°08S×179°31W, h614km±45km, mb2.8/3, mbtmp3.7/4, Error ellipse: s-maj=204.0km s-min=43.0km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.42 | 313 | P | P | 07 05 13.5 | -0.1 |
| | 3.4nm,0.5s,baz=90,slow=20,SNR=11 | | | | | | |
| CTA | Charters Tower | 32.31 | 264 | P | P | 07 09 30.5 | -0.8 |
| | 0.1nm,0.4s,baz=121,slow=12,SNR=2.5 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| ASAR | Alice Springs | 43.42 | 256 | P | P | 07 11 01.1 | -0.1 |
| | 2.8nm,0.6s,baz=96,slow=7.9,SNR=44 | | | | | | |
| ASAR | | | | PcP | PcP | 07 12 34.7 | -0.6 |
| | 0.3nm,0.6s,baz=116,slow=4.2,SNR=1.9 | | | | | | |
| | 2.8nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 43.45 | 262 | P | P | 07 11 01.7 | +0.3 |
| | 0.7nm,0.3s,baz=97,slow=7.3,SNR=17 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| AKASG | Malin Array Be | 142.04 | 330 | PKP | PKPdf | 07 22 13.3 | -0.4 |
| | 1.1nm,0.4s,baz=44,slow=4.0,SNR=4.2 | | | | | | |

*IDC 11 07:10:25.2±6.7, 3°28N×123°10E, h565km±99km, mb3.1/6, mbtmp4.1/6, Error ellipse: s-maj=137.5km s-min=21.1km az=66.0*

**ISC 11 07:10:24.4±1.0, 3°1N±0°5×12°3E±°, h550km, n6, σ0s58/7, mb3.8/6, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 25.61 | 154 | P | P | 07 15 09.8 | -0.8 |
| | 2.6nm,0.5s,baz=337,slow=9.5,SNR=64 | | | | | | |
| | 2.6nm,0.5s | | | | | | |
| ASAR | Alice Springs | 28.77 | 158 | P | P | 07 15 38.3 | 0.0 |
| | 1.5nm,0.5s,baz=340,slow=7.1,SNR=29 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| STKA | Stephens Creek | 39.16 | 154 | P | P | 07 17 05.8 | +0.5 |
| | 1.2nm,0.3s,baz=321,slow=10,SNR=3.0 | | | | | | |
| | 1.2nm,0.3s | | | | | | |
| SONM | Songino Array | 46.72 | 345 | P | P | 07 18 04.3 | +0.2 |
| | 0.4nm,0.4s,baz=161,slow=8.1,SNR=2.8 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 55.82 | 327 | P | P | 07 19 10.2 | +0.3 |
| | 1.5nm,0.3s,baz=126,slow=8.0,SNR=25 | | | | | | |
| MKAR | | | | PcP | PcP | 07 20 00.2 | -0.5 |
| | 0.4nm,0.6s,baz=116,slow=5.5,SNR=4.1 | | | | | | |
| | 1.5nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 60.14 | 329 | P | P | 07 19 38.7 | -0.3 |
| | 1.1nm,0.5s,baz=127,slow=6.4,SNR=14 | | | | | | |
| | 1.1nm,0.5s | | | | | | |

*IDC 11 07:25:31.1±11.0, 25°53S×72°52E, h0km, mb4.0/6, mbtmp4.0/6, MS3.4/8, Error ellipse: s-maj=390.4km s-min=30.3km az=48.0*

**ISC 11 07:25:31.0±12.0, 26°S±2°×7°2E±°, h10km, n22, σ0s40/6, mb4.0/6, MS3.5/8, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 18.08 | 1 | T | T | 07 48 48.2 | |
| | baz=182,slow=76,SNR=7.7 | | | | | | |
| H08S2 | Diego Garcia H | 18.08 | 1 | T | T | 07 48 49.4 | |
| | baz=182,slow=76,SNR=12 | | | | | | |
| H08S3 | Diego Garcia H | 18.10 | 1 | T | T | 07 48 49.0 | |
| | baz=182,slow=76,SNR=35 | | | | | | |
| H04N2 | CROZET ISLANDS | 26.03 | 214 | T | T | 07 57 18.9 | |
| | baz=46,slow=74,SNR=650 | | | | | | |
| H04N1 | CROZET ISLANDS | 26.04 | 214 | T | T | 07 57 19.7 | |
| | baz=46,slow=74,SNR=665 | | | | | | |
| H04N3 | CROZET ISLANDS | 26.05 | 214 | T | T | 07 57 24.2 | |
| | baz=46,slow=74,SNR=543 | | | | | | |
| PALK | Pallekele | 32.92 | 15 | LR | LR | 07 42 57.9 | |
| | comp=Z,103nm,18.1s,baz=322,slow=31 | | | | | | |
| H01W2 | Cape Leeuwin H | 37.07 | 114 | T | T | 08 12 09.6 | |
| | baz=272,slow=74,SNR=6.9 | | | | | | |
| H01W3 | Cape Leeuwin H | 37.07 | 114 | T | T | 08 12 11.7 | |
| | baz=272,slow=74,SNR=6.0 | | | | | | |
| H01W1 | Cape Leeuwin H | 37.08 | 114 | T | T | 08 12 12.1 | |
| | baz=272,slow=74,SNR=7.6 | | | | | | |
| SUR | Sutherland | 45.03 | 249 | LR | LR | 07 48 03.3 | |
| | comp=Z,87nm,20.4s,baz=136,slow=30 | | | | | | |
| CMAR | Chiang Mai Arr | 51.12 | 33 | LR | LR | 07 54 49.2 | |
| | comp=Z,19nm,18.1s,baz=195,slow=35 | | | | | | |
| ASAR | Alice Springs | 55.61 | 102 | P | P | 07 35 07.5 | 0.0 |
| | 1.2nm,1.0s,baz=250,slow=8.3,SNR=5.5 | | | | | | |
| ASAR | | | | LR | LR | 07 56 05.6 | |
| | comp=Z,55nm,19.1s,baz=188,slow=33 | | | | | | |
| | 1.2nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 57.09 | 98 | P | P | 07 35 17.9 | -0.1 |
| | 1.5nm,0.9s,baz=256,slow=7.3,SNR=6.4 | | | | | | |
| | 1.5nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 72.85 | 7 | P | P | 07 36 59.5 | -0.4 |
| | 2.0nm,0.9s,baz=207,slow=7.5,SNR=13 | | | | | | |
| | 2.0nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 76.31 | 4 | P | P | 07 37 20.1 | +0.2 |
| | 1.1nm,0.8s,baz=198,slow=5.4,SNR=10 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| SONM | Songino Array | 79.50 | 23 | P | P | 07 37 38.2 | +0.3 |
| | 0.4nm,0.6s,baz=191,slow=5.3,SNR=3.5 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 80.19 | 8 | P | P | 07 37 40.8 | -0.4 |
| | 1.5nm,0.7s,baz=177,slow=2.5,SNR=5.1 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| JNU | Nakatsue | 80.93 | 47 | LR | LR | 08 12 49.7 | |
| | comp=Z,17nm,19.3s,baz=159,slow=35 | | | | | | |
| DBIC | Dimbokro | 81.35 | 282 | LR | LR | 08 11 54.9 | |
| | comp=Z,22nm,18.3s,baz=173,slow=34 | | | | | | |
| KSRS | Korea Array | 81.85 | 42 | LR | LR | 08 14 04.0 | |
| | comp=Z,14nm,18.1s,baz=265,slow=36 | | | | | | |
| MLR | Muntele Rosu | 82.51 | 329 | LR | LR | 08 13 48.8 | |
| | comp=Z,18nm,18.3s,baz=156,slow=35 | | | | | | |

*RSPR 11 07:34:38.3, 19°34N×67°79W, h83km±8km, MD3.3/13*
*NEIC 11 07:34:40.6±2.0, 19°23N±0°08×67°77W±0°03, h35km±2km, ML2.3/28, Md3.3/13(RSPR), Error ellipse: s-maj=12.8km s-min=5.1km az=187.0*

**ISC 11 07:34:40.4±1.9, 19°3N±0°1×67°77W±0°04, h35km, n46, σ1s04/49, 10C-2D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCDR | Punta Cana, DR | 0.95 | 218 | eP | Pn | 07 34 55.9 | -1.3 |
| PCDR | Punta Cana, DR | 0.95 | 218 | eS | Sn | 07 35 09.8 | +0.2 |
| PCDR | Punta Cana, DR | 0.95 | 218 | | Pn | 07 34 55.9 | -1.3 |
| PCDR | | | | | Sn | 07 35 09.8 | +0.2 |
| PCDR | Punta Cana, DR | 0.95 | 218 | IAML | | 07 35 14.0 | |
| | comp=N,135nm,1.3s | | | | | | |
| PCDR | | | | IAML | | 07 35 33.1 | |
| | comp=E,72nm,2.1s | | | | | | |
| AGPR | Aguadilla, PR | 1.01 | 142 | eP | Pn | 07 34 57.4 | -0.7 |
| AGPR | Aguadilla, PR | 1.01 | 142 | eS | Sn | 07 35 12.6 | +1.4 |
| AGPR | Aguadilla, PR | 1.01 | 142 | | Pn | 07 34 57.4 | -0.7 |
| AGPR | | | | | Sn | 07 35 12.6 | +1.4 |
| AGPR | Aguadilla, PR | 1.01 | 142 | IAML | | 07 35 24.6 | |
| | comp=N,97nm,2.2s | | | | | | |
| PRSN | Puerto Rico Se | 1.21 | 150 | Pn | Pn | 07 35 00.2 | -0.5 |
| LSP | Las Mesas | 1.27 | 149 | eP | Pn | 07 35 01.3 | -0.4 |
| LSP | Las Mesas | 1.27 | 149 | eS | Sn | 07 35 18.5 | +1.0 |
| LSP | Las Mesas | 1.27 | 149 | | Pn | 07 35 01.3 | -0.4 |
| LSP | | | | | Sn | 07 35 18.5 | +1.0 |
| AOPR | Arecibo Observ | 1.33 | 133 | eP | Pn | 07 35 01.9 | -0.7 |
| AOPR | Arecibo Observ | 1.33 | 133 | | Pn | 07 35 01.9 | -0.7 |
| AOPR | Arecibo Observ | 1.33 | 133 | IAML | | 07 35 24.0 | |
| | comp=N,45nm,0.4s | | | | | | |
| AOPR | | | | IAML | | 07 35 33.4 | |
| | comp=E,61nm,0.3s | | | | | | |
| CRPR | Cabo Rojo, PR | 1.41 | 153 | eP | Pn | 07 35 03.8 | +0.3 |
| CRPR | Cabo Rojo, PR | 1.41 | 153 | eS | Sn | 07 35 22.0 | +1.2 |
| CRPR | Cabo Rojo, PR | 1.41 | 153 | | Pn | 07 35 03.8 | +0.3 |
| CRPR | | | | | Sn | 07 35 22.0 | +1.2 |
| EMPR | Esperanza - Ma | 1.42 | 124 | eP | Pn | 07 35 02.9 | -0.7 |
| EMPR | Esperanza - Ma | 1.42 | 124 | eS | Sn | 07 35 22.6 | +1.6 |
| EMPR | Esperanza - Ma | 1.42 | 124 | | Pn | 07 35 02.9 | -0.7 |
| EMPR | | | | | Sn | 07 35 22.6 | +1.6 |
| EMPR | Esperanza - Ma | 1.42 | 124 | IAML | | 07 35 24.7 | |
| | comp=E,68nm,1.1s | | | | | | |
| EMPR | | | | IAML | | 07 35 30.7 | |
| | comp=N,71nm,1.9s | | | | | | |
| UUPR | Utuado, UPR, P | 1.42 | 135 | eP | Pn | 07 35 03.1 | -0.6 |
| UUPR | Utuado, UPR, P | 1.42 | 135 | eS | Sn | 07 35 20.7 | -0.5 |
| UUPR | Utuado, UPR, P | 1.42 | 135 | | Pn | 07 35 03.1 | -0.6 |
| UUPR | | | | | Sn | 07 35 20.7 | -0.5 |
| MLPR | Magueyes Islan | 1.47 | 152 | eP | Pn | 07 35 02.9 | -1.4 |
| MLPR | Magueyes Islan | 1.47 | 152 | eS | Sn | 07 35 23.6 | +1.3 |
| MLPR | Magueyes Islan | 1.47 | 152 | | Pn | 07 35 02.9 | -1.4 |
| MLPR | | | | | Sn | 07 35 23.6 | +1.3 |
| CELP | Cerrillos | 1.64 | 136 | eP | Pn | 07 35 05.4 | -1.3 |
| CELP | Cerrillos | 1.64 | 136 | eS | Sn | 07 35 27.8 | +1.1 |
| CELP | Cerrillos | 1.64 | 136 | | Pn | 07 35 05.4 | -1.3 |
| CELP | | | | | Sn | 07 35 27.8 | +1.1 |
| CELP | Cerrillos | 1.64 | 136 | IAML | | 07 35 31.8 | |
| | comp=N,26nm,0.3s | | | | | | |
| OBIP | Obispado Ponce | 1.65 | 138 | eP | Pn | 07 35 04.5 | -2.3 |
| OBIP | Obispado Ponce | 1.65 | 138 | eS | Sn | 07 35 27.5 | +0.7 |
| OBIP | Obispado Ponce | 1.65 | 138 | | Pn | 07 35 04.5 | -2.3 |
| OBIP | | | | | Sn | 07 35 27.5 | +0.7 |
| OBIP | Obispado Ponce | 1.65 | 138 | IAML | | 07 35 33.0 | |
| | comp=N,23nm,1.4s | | | | | | |
| GCPR | Guaynabo City | 1.86 | 121 | Pn | Pn | 07 35 09.0 | -0.8 |
| GCPR | | | | IAML | | 07 35 34.7 | |
| | comp=N,20nm,2.2s | | | | | | |
| GCPR | | | | IAML | | 07 35 39.1 | |
| | comp=E,21nm,1.9s | | | | | | |
| IGPR | InterUniversit | 2.04 | 129 | eP | Pn | 07 35 11.9 | -0.4 |
| IGPR | InterUniversit | 2.04 | 129 | eS | Sn | 07 35 36.5 | 0.0 |
| IGPR | InterUniversit | 2.04 | 129 | | Pn | 07 35 11.9 | -0.4 |
| IGPR | | | | | Sn | 07 35 36.5 | 0.0 |
| IGPR | InterUniversit | 2.04 | 129 | IAML | | 07 35 42.6 | |
| | comp=N,24nm,0.3s | | | | | | |
| IGPR | | | | IAML | | 07 35 47.3 | |
| | comp=E,26nm,0.3s | | | | | | |
| HUMP | Col San Antoni | 2.14 | 121 | eP | Pn | 07 35 12.8 | -0.7 |
| HUMP | Col San Antoni | 2.14 | 121 | eS | Sn | 07 35 39.0 | +0.1 |
| HUMP | Col San Antoni | 2.14 | 121 | | Pn | 07 35 12.8 | -0.7 |
| HUMP | | | | | Sn | 07 35 39.0 | +0.1 |
| HUMP | Col San Antoni | 2.14 | 121 | IAML | | 07 35 52.4 | |
| | comp=N,15nm,1.4s | | | | | | |
| SDDR | Presa de Saban | 3.34 | 266 | Pn | Pn | 07 35 30.6 | +0.5 |

**IDC 11 07:56:33.9±6.3, 22°74S×178°39W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=262.1km s-min=42.7km az=147.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 43.70 | 259 | P | P | 08 04 40.0 | -1.0 |
| | 1.0nm,0.6s,baz=91,slow=7.7,SNR=16 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 43.98 | 264 | P | P | 08 04 44.0 | +0.6 |
| | 1.4nm,0.4s,baz=102,slow=7.6,SNR=35 | | | | | | |
| | 1.4nm,0.4s | | | | | | |
| ILAR | Eielson Array | 90.57 | 13 | P | P | 08 09 37.5 | +0.1 |
| | 0.3nm,0.8s,baz=198,slow=5.6,SNR=3.1 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

**GII 11 08:33:51.6±0.3, 31°656N±0°001×35°519E±0°001, h16km, Mws1.6, confirmed, Dead Sea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DSI | Dead Sea | 0.15 | 234 | P | Pg | 08 33 55.7 | 0.0 |
| DSI | Dead Sea | 0.15 | 234 | S | Sg | 08 33 58.2 | -0.1 |
| VJRH | Vered Jericho | 0.18 | 337 | P | Pb | 08 33 56.5 | -0.2 |
| VJRH | | | | S | Sb | 08 34 00.1 | +0.1 |
| JER | Jerusalem | 0.30 | 293 | P | Pg | 08 33 58.3 | +0.2 |
| JER | | | | S | Sb | 08 34 03.2 | -0.2 |
| UJAP | Al Uja | 0.30 | 351 | P | Pg | 08 33 57.6 | -0.4 |
| UJAP | Al Uja | 0.30 | 351 | S | Sb | 08 34 02.9 | -0.4 |
| YITV | Yitav | 0.30 | 344 | P | Pg | 08 33 58.1 | 0.0 |
| YITV | | | | S | Sb | 08 34 03.1 | -0.3 |
| MSBI | Mazada | 0.37 | 202 | S | Sb | 08 34 05.2 | -0.1 |
| MSBI | Mazada | 0.37 | 202 | P | Pg | 08 33 59.2 | 0.0 |
| YTIR | Yattir | 0.45 | 230 | S | Sb | 08 34 07.7 | -0.2 |
| YTIR | Yattir | 0.45 | 230 | P | Pg | 08 34 00.8 | +0.1 |
| SALP | Salfit | 0.50 | 326 | P | Pg | 08 34 00.5 | -1.1 |
| AMAZ | Amatzia | 0.53 | 257 | P | Pg | 08 34 02.0 | -0.2 |
| AMAZ | Amatzia | 0.53 | 257 | S | Sb | 08 34 10.3 | +0.3 |
| HMDT | Nahal Hemdat | 0.59 | 1 | S | Sb | 08 34 11.8 | -0.1 |
| HMDT | Nahal Hemdat | 0.59 | 1 | P | Pg | 08 34 03.0 | -0.4 |
| MMLI | Mount Malkishu | 0.78 | 354 | S | Sb | 08 34 17.4 | 0.0 |
| MMLI | Mount Malkishu | 0.78 | 354 | P | Pg | 08 34 06.3 | -0.6 |
| OFRI | `Ofer | 1.06 | 335 | S | Sb | 08 34 25.7 | +0.3 |
| OFRI | `Ofer | 1.06 | 335 | P | Pb | 08 34 11.2 | +0.6 |
| ZFRI | Zfri | 1.14 | 195 | S | Sb | 08 34 27.7 | +0.2 |
| ZFRI | Zfri | 1.14 | 195 | P | Pn | 08 34 12.1 | -0.8 |
| KZIT | Kziot | 1.22 | 232 | S | Sb | 08 34 29.5 | -0.3 |
| KZIT | Kziot | 1.22 | 232 | P | Pn | 08 34 13.3 | -0.7 |
| KNHM | Kefar Nahum | 1.23 | 2 | P | Pn | 08 34 12.8 | -1.4 |
| KNHM | | | | S | Sb | 08 34 30.1 | +0.1 |
| KSHT | Keshet | 1.34 | 11 | S | Sb | 08 34 33.9 | +0.3 |
| KSHT | Keshet | 1.34 | 11 | P | Pn | 08 34 15.6 | -0.2 |
| MMA0B | Mount Meron ar | 1.36 | 356 | P | Pn | 08 34 15.6 | -0.4 |
| MMA0B | Mount Meron ar | 1.36 | 356 | S | Sn | 08 34 33.3 | -0.5 |
| MMC7 | Mount Meron ar | 1.37 | 356 | P | Pn | 08 34 15.6 | -0.5 |
| PRNI | Paran | 1.37 | 199 | S | Sn | 08 34 33.8 | -0.2 |
| PRNI | Paran | 1.37 | 199 | P | Pn | 08 34 15.6 | -0.6 |
| HRFI | Mount Harif | 1.67 | 195 | S | Sb | 08 34 41.2 | -0.1 |
| HRFI | Mount Harif | 1.67 | 195 | P | Pn | 08 34 19.7 | -0.6 |
| KRMI | Paran Flat | 1.68 | 204 | P | Pn | 08 34 20.1 | -0.3 |
| KRMI | Paran Flat | 1.68 | 204 | S | Sn | 08 34 41.5 | -0.1 |
| MBRI | Mt Berech | 1.93 | 196 | P | Pn | 08 34 23.7 | -0.2 |
| MBRI | Mt Berech | 1.93 | 196 | S | Sn | 08 34 47.4 | -0.4 |

*IDC 11 08:39:11.7±2.0, 0°67N×97°35E, h0km, mb3.8/8, mbtmp3.9/9, ML4.8/1, MS3.2/2, Error ellipse: s-maj=64.6km s-min=20.1km az=59.0*
*DJA 11 08:39:15.8±1.1, 1°N±4°×97°7E±°, h10km, M4.2/5, MLv4.2/5*

**ISC 11 08:39:13.7±1.3, 0.78N±0°08×97.4E±0°2, h10km, n24, σ1s01/14, mb3.9/8, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSI | Gunungsitoli | 0.57 | 24 | P | Pn | 08 39 28.1 | +0.2 |
| GSI | | | | S | Sn | 08 39 37.5 | +0.2 |
| PBSI | Pulau Batu | 1.25 | 132 | P | Pn | 08 39 37.7 | +0.5 |
| PBSI | | | | S | Sb | 08 39 52.2 | -1.3 |
| PDSI | Padang | 3.54 | 118 | P | Pn | 08 40 11.0 | +2.2 |
| CMAR | Chiang Mai Arr | 17.64 | 5 | P | Pn | 08 43 19.2 | -0.5 |
| | 1.2nm,0.3s,baz=199,slow=12,SNR=6.4 | | | | | | |
| | 2.4nm,0.3s | | | | | | |
| H08S2 | Diego Garcia H | 26.16 | 251 | T | T | 09 11 53.0 | |
| | baz=72,slow=76,SNR=118 | | | | | | |
| H08S3 | Diego Garcia H | 26.17 | 251 | T | T | 09 11 54.2 | |
| | baz=72,slow=76,SNR=307 | | | | | | |
| H08S1 | Diego Carcia H | 26.18 | 251 | T | T | 09 11 54.7 | |
| | baz=72,slow=76,SNR=47 | | | | | | |
| H01W3 | Cape Leeuwin H | 38.80 | 158 | T | T | 09 27 55.1 | |
| | baz=333,slow=76,SNR=5.4 | | | | | | |
| H01W2 | Cape Leeuwin H | 38.82 | 158 | T | T | 09 27 56.4 | |
| | baz=333,slow=76,SNR=11 | | | | | | |
| H01W1 | Cape Leeuwin H | 38.82 | 158 | T | T | 09 27 56.6 | |
| | baz=333,slow=76,SNR=11 | | | | | | |
| WRA | Warramunga Arr | 41.69 | 122 | P | P | 08 47 01.2 | -1.8 |
| | 0.3nm,0.3s,baz=294,slow=8.6,SNR=8.3 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| ASAR | Alice Springs | 43.03 | 127 | P | P | 08 47 13.4 | -0.5 |
| | 0.5nm,0.7s,baz=301,slow=8.0,SNR=6.5 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| KSRS | Korea Array | 46.11 | 34 | P | P | 08 47 38.5 | +0.3 |
| | 1.3nm,0.6s,baz=230,slow=8.9,SNR=7.7 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| SONM | Songino Array | 47.52 | 8 | P | P | 08 47 49.6 | +0.2 |
| | 0.8nm,0.8s,baz=200,slow=6.3,SNR=3.0 | | | | | | |
| SONM | | | | LR | LR | 09 08 05.9 | |
| | comp=Z,31nm,20.3s,baz=226,slow=36 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 47.68 | 346 | P | P | 08 47 51.0 | +0.5 |
| | 1.5nm,0.7s,baz=163,slow=8.6,SNR=11 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 52.17 | 345 | P | P | 08 48 24.5 | +0.1 |
| | 0.4nm,0.4s,baz=162,slow=7.5,SNR=6.0 | | | | | | |
| KURBB | | | | LR | LR | 09 13 53.6 | |
| | comp=Z,21nm,18.7s,baz=180,slow=40 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| USRK | Ussuriysk Ar. | 53.05 | 31 | P | P | 08 48 31.4 | +0.3 |
| | 1.3nm,0.7s,baz=216,slow=7.1,SNR=1.9 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 53.99 | 351 | P | P | 08 48 38.1 | +0.3 |
| | 1.4nm,0.5s,baz=162,slow=6.9,SNR=6.8 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| H04N2 | CROZET ISLANDS | 61.51 | 214 | T | T | 09 56 21.0 | |
| | baz=54,slow=75,SNR=429 | | | | | | |
| H04N1 | CROZET ISLANDS | 61.52 | 214 | T | T | 09 56 21.0 | |
| | baz=54,slow=75,SNR=403 | | | | | | |
| H04N3 | CROZET ISLANDS | 61.53 | 214 | T | T | 09 56 23.5 | |
| | baz=54,slow=75,SNR=476 | | | | | | |
| H04S1 | CROZET ISLANDS | 61.85 | 214 | T | T | 09 56 35.3 | |
| | baz=53,slow=75,SNR=86 | | | | | | |
| H04S3 | CROZET ISLANDS | 61.86 | 214 | T | T | 09 56 34.9 | |
| | baz=53,slow=75,SNR=99 | | | | | | |
| H04S2 | CROZET ISLANDS | 61.87 | 214 | T | T | 09 56 36.3 | |
| | baz=53,slow=75,SNR=79 | | | | | | |

*VAO 11 08:40:48.0±0.7, 6°69S×75°47W, h119km, mb4.1*

**ISC 11 08:40:39.5±1.0, 6°5S±0°1×76°2W±0°1, h100km, n19, σ1s02/20, Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CZSB | Cruzeiro do Su | 3.65 | 110 | eP | Pn | 08 41 34.2 | +0.1 |
| BOSC | San Juan Bosco | 4.06 | 325 | P | Pn | 08 41 40.3 | +0.7 |
| BOSC | | | | S | Sn | 08 42 25.0 | -1.2 |
| ARNL | Arenillas | 4.87 | 307 | P | Pn | 08 41 51.0 | +0.6 |
| TBTG | Tabatinga, AM | 6.65 | 70 | eP | Pn | 08 42 16.0 | +1.3 |
| TEFE | Tefe | 11.88 | 76 | eP | Pn | 08 43 24.0 | -1.7 |
| LPAZ | La Paz | 12.51 | 142 | eP | Pn | 08 43 33.8 | -0.8 |
| SAML | Samuel | 13.10 | 101 | eP | Pn | 08 43 41.0 | -0.9 |
| VILB | Vilhena | 16.99 | 113 | eP | Pn | 08 44 30.3 | -0.9 |
| BOAV | Boa Vista | 17.96 | 61 | eP | Pn | 08 44 43.6 | +0.7 |
| BBSD | Serra de San D | 18.55 | 126 | eP | P | 08 44 48.9 | +0.3 |
| PDRB | Porto dos Gac | 19.86 | 106 | eP | P | 08 45 02.2 | -0.6 |
| ITTB | Itaituba | 20.46 | 85 | eP | P | 08 45 08.5 | -0.8 |
| NPGB | Novo Progresso | 20.68 | 93 | eP | P | 08 45 11.1 | -0.7 |
| MURT | Porto Murtinho | 23.43 | 132 | eP | P | 08 45 39.5 | -0.5 |
| AQDB | Aquidauana | 24.23 | 127 | eP | P | 08 45 48.9 | +1.7 |
| MCPB | Macapa, AP | 24.83 | 77 | eP | P | 08 45 54.3 | +1.6 |
| SNDB | Serra Nova Dou | 25.14 | 104 | eP | P | 08 45 55.2 | -0.4 |
| PRPB | Parauapebas | 26.20 | 91 | eP | P | 08 46 04.6 | -0.6 |
| PTGB | Pitanga | 29.35 | 131 | eP | P | 08 46 34.0 | +0.7 |

*IDC 11 09:06:34.3±0.6, 15°76S×167°38E, h0km, mb4.4/16, mbtmp4.3/17, ML4.7/1, MS3.5/12, Error ellipse: s-maj=23.1km s-min=16.1km az=100.0*
*NOU 11 09:06:37.4, 15°79S×167°16E, h14km, mb4.7/20, Vanuatu Islands*
*NEIC 11 09:06:41.2±1.6, 15°89S±0°09×167°09E±0°05, h35km±1km, mb4.6/45, Error ellipse: s-maj=16.3km s-min=5.9km az=156.0*

**ISC 11 09:06:39.3±0.4, 15°90S±0°05×167°19E±0°07, h27km, n130, σ1s58/119, mb4.6/47, MS3.5/11, 7C-1D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LIFNC | LIFOU | 4.86 | 179 | P | Pn | 09 07 50.6 | 0.0 |
| LIFNC | LIFOU | 4.86 | 179 | Pn | Pn | 09 07 50.3 | -0.3 |
| LIFNC | | | | Sn | Sn | 09 08 41.5 | -4.4 |
| KOUNC | Koumac, New Ca | 5.39 | 210 | P | Pn | 09 07 59.0 | +1.0 |
| KOUNC | Koumac, New Ca | 5.39 | 210 | | Pn | 09 07 59.1 | +1.2 |
| MARNC | Mare, Loyalty | 5.61 | 172 | P | Pn | 09 08 01.8 | +0.8 |
| YATNC | Mamie plateau, | 6.14 | 183 | P | Pn | 09 08 07.8 | -0.4 |
| DZM | M

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MWZ** | **Matawai** | **24.14** | **160** | P | **P** | **09 11 54.9** | **+1.9** |
| **PUZ** | **Puketiti** | **24.15** | **158** | P | **P** | **09 11 54.9** | **+1.8** |
| **RTZ** | **Ruatahuna** | **24.21** | **161** | P | **P** | **09 11 54.9** | **+1.1** |
| **TKGZ** | **Te Karaka** | **24.34** | **159** | P | **P** | **09 11 56.7** | **+1.9** |
| **SNGZ** | **Shannon Statio** | **24.48** | **161** | P | **P** | **09 11 55.3** | **-0.9** |
| **RIGZ** | **Rimuhau** | **24.55** | **160** | P | **P** | **09 11 58.8** | **+2.0** |
| **BKZ** | **Black Stump Fm** | **24.57** | **162** | P | **P** | **09 11 58.7** | **+1.6** |
| **BKZ** | **Black Stump Fm** | **24.57** | **162** | P | **P** | **09 11 59.1** | **+2.0** |
| BKZ | | | | IAmb | IAmb | 09 12 00.8 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **MRZ** | **Mangatainoka R** | **25.73** | **165** | P | **P** | **09 12 08.9** | **+1.5** |
| MRZ | | | | IAmb | IAmb | 09 12 30.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **BFZ** | **Birch Farm** | **25.92** | **164** | P | **P** | **09 12 10.2** | **+1.0** |
| **LTZ** | **Lake Taylor** | **27.15** | **172** | P | **P** | **09 12 23.4** | **+3.1** |
| LTZ | | | | IAmb | IAmb | 09 12 26.7 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **28.20** | **231** | P | **P** | **09 12 30.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **28.20** | **231** | P | **P** | **09 12 32.5** | **+2.8** |
| | comp=Z,3.1nm,0.9s,baz=48,slow=8.7,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 09 23 01.3 | |
| | comp=Z,109nm,18.4s,baz=42,slow=35 | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **LBZ** | **Lake Benmore** | **28.51** | **176** | P | **P** | **09 12 34.4** | **+2.0** |
| **TOO** | **Toolangi** | **28.88** | **217** | P | **P** | **09 12 35.5** | **-0.4** |
| **WR0** | **Warramunga Arr** | **31.30** | **258** | P | **P** | **09 12 54.8** | **-2.6** |
| **WB0** | **Warramunga Arr** | **31.43** | **258** | P | **P** | **09 12 57.0** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 09 13 09.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **31.48** | **258** | P | **P** | **09 12 58.6** | **-0.4** |
| **WRA** | **Warramunga Arr** | **31.49** | **258** | P | **P** | **09 12 57.9** | **-1.2** |
| **WRA** | **Warramunga Arr** | **31.49** | **258** | P | **P** | **09 12 58.3** | **-0.8** |
| | comp=Z,1.4nm,0.8s,baz=87,slow=8.0,SNR=7.9 | | | | | | |
| WRA | | | | ScP | **ScP** | **09 19 35.8** | **+2.4** |
| | comp=Z,0.6nm,1.0s,baz=72,slow=4.0,SNR=2.7 | | | | | | |
| WRA | | | | LR | LR | 09 24 39.8 | |
| | comp=Z,125nm,21.4s,baz=195,slow=34 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **RAR** | **Rarotonga** | **31.72** | **105** | LR | LR | 09 24 07.8 | |
| | comp=Z,22nm,21.0s,baz=158,slow=33 | | | | | | |
| **AS31** | **Alice Springs** | **32.20** | **251** | P | **P** | **09 13 04.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **32.21** | **251** | P | **P** | **09 13 04.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **32.21** | **251** | P | **P** | **09 13 04.5** | **-0.9** |
| | comp=Z,11nm,1.0s,baz=78,slow=8.9,SNR=38 | | | | | | |
| ASAR | | | | ScP | **ScP** | **09 19 40.4** | **+4.6** |
| | comp=Z,0.8nm,0.8s,baz=72,slow=3.0,SNR=1.4 | | | | | | |
| ASAR | | | | LR | LR | 09 25 28.4 | |
| | comp=Z,117nm,19.4s,baz=78,slow=35 | | | | | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **GUMO** | **Guam** | **36.68** | **322** | LR | LR | 09 27 05.7 | |
| | comp=Z,138nm,19.1s,baz=145,slow=34 | | | | | | |
| **KNRA** | **Kununurra** | **36.95** | **265** | P | **P** | **09 13 46.1** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 09 13 49.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **38.65** | **240** | P | **P** | **09 13 58.5** | **-2.1** |
| **FITZ** | **Fitzroy Crossi** | **39.74** | **261** | P | **P** | **09 14 08.9** | **-1.0** |
| **PPT** | **Papeete** | **41.37** | **99** | LR | LR | 09 27 51.6 | |
| | comp=Z,105nm,21.3s,baz=132,slow=31 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **55.33** | **332** | LR | LR | 09 39 10.0 | |
| | comp=Z,13nm,20.4s,baz=87,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **58.90** | **333** | P | **P** | **09 16 34.5** | **-1.5** |
| | comp=Z,1.0nm,0.4s,baz=185,slow=7.2,SNR=4.8 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **JNU** | **Nakatsue** | **59.83** | **325** | P | **P** | **09 16 42.2** | **-0.3** |
| **JNU** | **Nakatsue** | **59.83** | **325** | LR | LR | 09 39 26.5 | |
| | comp=Z,23nm,20.5s,baz=312,slow=33 | | | | | | |
| **VNDA** | **Vanda** | **61.70** | **181** | P | **P** | **09 16 55.4** | **+0.8** |
| VNDA | | | | IAmb | IAmb | 09 16 58.1 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **61.70** | **181** | P | **P** | **09 16 54.3** | **-0.3** |
| | comp=Z,3.3nm,0.8s,baz=8.1,slow=5.1,SNR=8.1 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **SBA** | **Scott Base** | **61.98** | **180** | P | **P** | **09 16 57.0** | **+0.6** |
| **CASY** | **Casey** | **62.43** | **202** | P | **P** | **09 16 59.2** | **-0.4** |
| CASY | | | | IAmb | IAmb | 09 17 01.4 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **64.66** | **326** | P | **P** | **09 17 14.1** | **-0.6** |
| | comp=Z,0.9nm,0.6s,baz=146,slow=6.3,SNR=3.8 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **66.46** | **316** | *e*P | **P** | **09 17 27.2** | **+0.7** |
| NJ2 | | | | pP | **sP** | **09 17 37.1** | **-0.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,42nm,0.7s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,210nm,6.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **67.89** | **333** | P | **P** | **09 17 35.5** | **+0.2** |
| | comp=Z,2.7nm,0.6s,baz=134,slow=8.9,SNR=5.8 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **68.60** | **5** | LR | LR | 09 40 00.1 | |
| | comp=Z,36nm,20.7s,baz=174,slow=29 | | | | | | |
| **CN2** | **Changchun** | **70.60** | **329** | P | **P** | **09 17 53.9** | **+1.8** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **LYN** | **LuoYang** | **72.24** | **315** | P | **P** | **09 18 02.8** | **+0.6** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,29nm,0.5s | | | | | | |
| **HNS** | **HongShan** | **72.42** | **318** | ⇑P | **P** | **09 18 03.6** | **+0.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.14** | **180** | P | **P** | **09 18 13.9** | **+0.8** |
| **QSPA** | **South Pole Qui** | **74.14** | **180** | P | **P** | **09 18 14.1** | **+1.0** |
| | comp=Z,10nm,0.9s,baz=11,slow=1.1,SNR=36 | | | | | | |
| | comp=Z,10nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **74.42** | **313** | ⇑P | **P** | **09 18 15.4** | **+0.2** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **74.86** | **302** | ⇑P | **P** | **09 18 19.3** | **+1.2** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.36** | **294** | P | **P** | **09 18 22.8** | **+1.9** |
| | comp=Z,1.0nm,0.4s,baz=133,slow=5.0,SNR=4.0 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **PZH** | **PanZhiHua** | **76.27** | **303** | P | **P** | **09 18 27.7** | **+1.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **76.42** | **320** | *e*P | **P** | **09 18 30.1** | **+3.5** |
| HHC | | | | pP | sP | 09 18 38.0 | 0.0 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,88nm,4.4s | | | | | | |
| **LZH** | **Lanzhou** | **79.05** | **312** | *e*P | P | 09 18 48.3 | +6.9 |
| LZH | | | | sP | sP | 09 19 03.0 | +10 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **N15K** | **Kwethluk River** | **80.27** | **16** | P | **P** | **09 18 47.5** | **+0.2** |
| **L14K** | **Kuka Creek** | **80.63** | **14** | P | **P** | **09 18 49.4** | **+0.3** |
| L14K | | | | IAmb | IAmb | 09 18 52.3 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **K13K** | **Kusilvak Mount** | **80.71** | **13** | P | **P** | **09 18 50.4** | **+0.8** |
| **K15K** | **Wolf Creek Mou** | **81.73** | **14** | P | **P** | **09 18 55.4** | **+0.4** |
| K15K | | | | IAmb | IAmb | 09 19 19.3 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **CNPM** | **China Poot** | **82.37** | **20** | P | **P** | **09 18 58.5** | **0.0** |
| CNPM | | | | IAmb | IAmb | 09 19 27.5 | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **83.03** | **324** | P | **P** | **09 19 02.5** | **+0.1** |
| ULN | | | | IAmb | IAmb | 09 19 03.4 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **83.12** | **343** | P | **P** | **09 19 00.3** | **-1.9** |
| **J17K** | **VABM Dome** | **83.27** | **15** | P | **P** | **09 19 03.8** | **+0.8** |
| J17K | | | | IAmb | IAmb | 09 19 32.6 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **83.39** | **324** | P | **P** | **09 19 04.5** | **+0.3** |
| SONM | | | | IAmb | IAmb | 09 19 05.1 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **83.39** | **324** | P | **P** | **09 19 03.4** | **-0.8** |
| | comp=Z,2.5nm,0.8s,baz=146,slow=6.2,SNR=16 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **GTA** | **Gaotai** | **83.42** | **314** | *e*P | **P** | **09 19 04.9** | **+0.4** |
| GTA | | | | pP | pP | 09 19 12.9 | -0.1 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **BILL** | **Bilibino** | **83.70** | **360** | P | **P** | **09 19 08.0** | **+2.8** |
| **J18K** | **Innoko River** | **83.91** | **15** | P | **P** | **09 19 06.7** | **+0.4** |
| **SHL** | **Shillong** | **84.06** | **299** | P | **P** | **09 19 08.2** | **+0.1** |
| **PMR** | **Palmer** | **84.62** | **19** | P | **P** | **09 19 09.9** | **0.0** |
| PMR | | | | IAmb | IAmb | 09 19 11.4 | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **BELA** | **Belgrano 2** | **85.57** | **175** | P | **P** | **09 19 16.4** | **+1.7** |
| **G19K** | **Purcell Mounta** | **86.04** | **14** | IAmb | IAmb | 09 19 37.0 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **86.46** | **13** | P | **P** | **09 19 19.2** | **+0.2** |
| F19K | | | | IAmb | IAmb | 09 19 31.4 | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **87.10** | **13** | IAmb | IAmb | 09 19 43.4 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **IL31** | | **87.65** | **18** | IAmb | IAmb | 09 19 23.5 | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **87.65** | **18** | P | **P** | **09 19 23.0** | **-1.9** |
| | comp=Z,1.8nm,0.5s,baz=238,slow=5.0,SNR=61 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **88.00** | **19** | IAmb | IAmb | 09 19 42.9 | |
| | comp=Z,2.3nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.08** | **49** | P | **P** | **09 19 25.6** | **-2.2** |
| | comp=Z,0.2nm,0.6s,baz=227,slow=7.3,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **ELIB** | **Princess Elisa** | **89.06** | **191** | *d*P | **P** | **09 19 31.6** | **-0.2** |
| | comp=Z,2.5nm,1.0s | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.70** | **185** | ⇑P | **P** | **09 19 43.1** | **-1.0** |
| | comp=Z,57nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **92.39** | **183** | ⇑P | **P** | **09 19 46.5** | **-0.6** |
| | comp=Z,14nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **92.39** | **183** | P | **P** | **09 19 46.7** | **-0.4** |
| | comp=Z,0.9nm,0.6s,baz=136,slow=5.3,SNR=17 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.05** | **181** | ⇑P | **P** | **09 19 48.7** | **-1.5** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **VNA2** | **Neumayer–Watz** | **93.32** | **182** | ⇑P | **P** | **09 19 50.9** | **-0.5** |
| | comp=Z,2.2nm,0.7s,baz=176,slow=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **97.99** | **316** | P | **P** | **09 20 12.2** | **-0.9** |
| | comp=Z,0.5nm,0.5s,baz=83,slow=5.8,SNR=7.1 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **98.28** | **324** | P | **P** | **09 20 12.6** | **-1.6** |
| | comp=Z,0.5nm,0.4s,baz=100,slow=6.0,SNR=3.7 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.61** | **27** | P | **P** | **09 20 12.0** | **-3.4** |
| | comp=Z,2.9nm,0.8s,baz=262,slow=4.3,SNR=3.6 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **121.36** | **345** | PKP | **PKPdf** | **09 25 28.3** | **-1.1** |
| | comp=Z,2.8nm,0.7s,baz=76,slow=2.0,SNR=20 | | | | | | |
| **FINES** | **FINESS Array B** | **126.77** | **338** | PKP | **PKPdf** | **09 25 39.3** | **-0.6** |
| | comp=Z,3.1nm,0.9s,baz=159,slow=5.9,SNR=4.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **131.72** | **345** | PKP | **PKPdf** | **09 25 49.4** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=38,slow=2.1,SNR=2.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **133.21** | **310** | PKP | **PKPdf** | **09 25 52.3** | **-0.8** |
| | comp=Z,0.5nm,0.4s,baz=107,slow=4.3,SNR=2.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **139.94** | **351** | PKP | **PKPdf** | **09 26 05.6** | **+0.8** |
| | comp=Z,0.4nm,0.4s,baz=12,slow=3.9,SNR=4.6 | | | | | | |
| **KEST** | **Kesra** | **152.05** | **319** | PKPbc | **PKPbc** | **09 26 31.5** | **-1.1** |
| | comp=Z,3.6nm,0.6s,baz=50,slow=7.9,SNR=4.5 | | | | | | |
| **ESDC** | **Sonseca Array** | **155.08** | **344** | PKPab | **PKPab** | **09 26 54.4** | **-0.2** |
| | comp=Z,0.7nm,0.8s,baz=7.0,slow=3.1,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.70** | **261** | PKP | **PKPdf** | **09 26 40.9** | **-1.6** |
| | comp=Z,0.6nm,0.7s,baz=48,slow=2.6,SNR=2.7 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **09 27 40.6** | **-1.1** |
| | comp=Z,1.4nm,0.7s,baz=83,slow=3.7,SNR=6.4 | | | | | | |

*NEIC **11** 09:33:29.8±1.2, 17.°82N±0.°02×65.°87W±0.°02, h17km±3km, ML2.3/22, Md2.5/12(RSPR), Error ellipse: s-maj=4.0km s-min=1.7km az=219.0*

*RSPR **11** 09:33:32.1, 17.°91N×65.°92W, h11km±1km, MD2.5/12*

**ISC 11 09:33:31.3±1.1, 17.°90N±0.°06×65.°89W±0.°04, h19km, n41, σ0.°58/49, 6C-6D, Puerto Rico region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IGPR** | **InterUniversit** | **0.22** | **288** | ⇑*i*P | **Pb** | **09 33 36.4** | **+0.4** |
| **IGPR** | **InterUniversit** | **0.22** | **288** | *e*S | **Sb** | **09 33 40.0** | **+0.8** |
| **IGPR** | **InterUniversit** | **0.22** | **288** | | **Pb** | **09 33 36.2** | **+0.1** |
| IGPR | | | | | **Sb** | **09 33 39.9** | **+0.7** |
| **HUMP** | **Col San Antoni** | **0.25** | **9** | ⇓*e*P | **Pg** | **09 33 36.9** | **-0.1** |
| **HUMP** | **Col San Antoni** | **0.25** | **9** | *e*S | **Sg** | **09 33 40.9** | **-0.2** |
| **HUMP** | **Col San Antoni** | **0.25** | **9** | | **Pg** | **09 33 37.0** | **-0.1** |
| HUMP | | | | | **Sg** | **09 33 40.8** | **-0.2** |
| HUMP | | | | IAML | | 09 33 41.2 | |
| | comp=N,797nm,0.2s | | | | | | |
| **GCPR** | **Guaynabo City** | **0.45** | **336** | ⇓*e*P | **Pb** | **09 33 40.4** | **-0.2** |
| **GCPR** | **Guaynabo City** | **0.45** | **336** | *e*S | **Sb** | **09 33 47.1** | **+0.2** |
| **GCPR** | **Guaynabo City** | **0.45** | **336** | | **Pb** | **09 33 40.4** | **-0.2** |
| GCPR | | | | | **Sb** | **09 33 46.9** | **-0.1** |
| GCPR | | | | IAML | | 09 33 47.4 | |
| | comp=E,178nm,0.2s | | | | | | |
| GCPR | | | | IAML | | 09 33 47.4 | |
| | comp=N,152nm,0.1s | | | | | | |
| **CELP** | **Cerrillos** | **0.68** | **285** | ⇓*e*P | **Pb** | **09 33 44.0** | **-0.5** |
| **CELP** | **Cerrillos** | **0.68** | **285** | *e*S | **Sb** | **09 33 53.1** | **-0.4** |
| **CELP** | **Cerrillos** | **0.68** | **285** | | **Pb** | **09 33 43.8** | **-0.7** |
| CELP | | | | | **Sb** | **09 33 53.2** | **-0.2** |
| **OBIP** | **Obispado Ponce** | **0.69** | **282** | ⇓*e*P | **Pb** | **09 33 43.4** | **-1.3** |
| **OBIP** | **Obispado Ponce** | **0.69** | **282** | *e*S | **Sb** | **09 33 52.7** | **-1.2** |
| **OBIP** | **Obispado Ponce** | **0.69** | **282** | | **Pb** | **09 33 43.5** | **-1.3** |
| OBIP | | | | | **Sb** | **09 33 52.8** | **-1.2** |
| OBIP | | | | IAML | | 09 33 58.0 | |
| | comp=E,62nm,0.5s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **0.84** | **314** | ⇓*e*P | **Pb** | **09 33 47.1** | **-0.1** |
| **EMPR** | **Esperanza - Ma** | **0.84** | **314** | *e*S | **Sb** | **09 33 57.8** | **-0.3** |
| **EMPR** | **Esperanza - Ma** | **0.84** | **314** | | **Pb** | **09 33 47.1** | **-0.1** |
| EMPR | | | | | **Sb** | **09 33 58.1** | **0.0** |
| EMPR | | | | IAML | | 09 34 01.5 | |
| | comp=N,75nm,1.2s | | | | | | |
| EMPR | | | | IAML | | 09 34 10.3 | |
| | comp=E,80nm,1.0s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **0.86** | **294** | ⇑*e*P | **Pb** | **09 33 47.3** | **-0.4** |
| **UUPR** | **Utuado, UPR, P** | **0.86** | **294** | *e*S | **Sb** | **09 33 57.9** | **-1.0** |
| **UUPR** | **Utuado, UPR, P** | **0.86** | **294** | | **Pb** | **09 33 47.5** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **0.93** | **299** | ⇑*e*P | **Pb** | **09 33 48.2** | **-0.6** |
| **AOPR** | **Arecibo Observ** | **0.93** | **299** | *e*S | **Sb** | **09 34 00.7** | **-0.3** |
| **AOPR** | **Arecibo Observ** | **0.93** | **299** | | **Pb** | **09 33 48.5** | **-0.4** |
| AOPR | | | | IAML | | 09 34 07.1 | |
| | comp=E,261nm,0.3s | | | | | | |
| AOPR | | | | IAML | | 09 34 08.5 | |
| | comp=N,124nm,0.3s | | | | | | |
| **GBPR** | **Guanica, Bosqu** | **0.94** | **275** | ⇓*e*P | **Pb** | **09 33 49.3** | **+0.3** |
| **GBPR** | **Guanica, Bosqu** | **0.94** | **275** | *e*S | **Sb** | **09 34 01.8** | **+0.6** |
| **GBPR** | **Guanica, Bosqu** | **0.94** | **275** | | **Pb** | **09 33 49.3** | **+0.3** |
| GBPR | | | | | **Sb** | **09 34 01.8** | **+0.6** |
| **MLPR** | **Magueyes Islan** | **1.10** | **274** | ⇑*e*P | **Pn** | **09 33 50.8** | **-0.9** |
| **MLPR** | **Magueyes Islan** | **1.10** | **274** | *e*S | **Sb** | **09 34 06.0** | **+0.4** |
| **MLPR** | **Magueyes Islan** | **1.10** | **274** | | **Pn** | **09 33 50.6** | **-1.1** |
| MLPR | | | | IAML | | 09 34 10.7 | |
| | comp=E,28nm,0.5s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.16** | **276** | ⇑*e*P | **Pn** | **09 33 53.0** | **+0.4** |
| **CRPR** | **Cabo Rojo, PR** | **1.16** | **276** | *e*S | **Sn** | **09 34 08.5** | **+0.6** |
| **CRPR** | **Cabo Rojo, PR** | **1.16** | **276** | | **Pn** | **09 33 52.3** | **-0.2** |
| CRPR | | | | IAML | | 09 33 58.2 | |
| | comp=E,26nm,2.8s | | | | | | |
| **LSP** | **Las Mesas** | **1.17** | **284** | ⇓*e*P | **Pn** | **09 33 53.1** | **+0.4** |
| **LSP** | **Las Mesas** | **1.17** | **284** | *e*S | **Sn** | **09 34 08.5** | **+0.4** |
| **LSP** | **Las Mesas** | **1.17** | **284** | | **Pn** | **09 33 53.1** | **+0.4** |
| LSP | | | | | **Sn** | **09 34 08.5** | **+0.4** |
| **AGPR** | **Aguadilla, PR** | **1.29** | **296** | ⇑*e*P | **Pn** | **09 33 54.5** | **+0.2** |
| **AGPR** | **Aguadilla, PR** | **1.29** | **296** | *e*S | **Sb** | **09 34 11.5** | **+0.4** |
| **AGPR** | **Aguadilla, PR** | **1.29** | **296** | | **Pn** | **09 33 54.1** | **-0.2** |
| AGPR | | | | IAML | | 09 34 19.2 | |
| | comp=E,73nm,1.5s | | | | | | |
| AGPR | | | | IAML | | 09 34 39.9 | |
| | comp=N,85nm,2.2s | | | | | | |
| **ANWB** | **Willy Bob** | **3.92** | **93** | *e*P | **Pn** | **09 34 31.2** | **+0.7** |
| **ANBD** | **Bethesda, Anti** | **4.03** | **101** | *e*P | **Pn** | **09 34 32.5** | **+0.5** |

*MOS **11** 09:45:46.6±0.8, 20.°47S×176.°34W, h183km, mb5.2/22, Error ellipse: s-maj=9.6km s-min=8.7km az=105.6*

*BJI **11** 09:45:47.9±0.0, 20.°07S×176.°23W, h190km, mb5.0/44, mB5.1/20*

*NEIC **11** 09:45:47.5±1.1, 20.°46S±0.°08×176.°21W±0.°09, h178km±5km, mb5.0/473, Error ellipse: s-maj=12.2km s-min=12.2km az=143.0*

*IDC **11** 09:45:52.1±0.4, 20.°50S×176.°27W, h226km±3km, mb4.5/19, mbtmp5.1/22, Error ellipse: s-maj=9.7km s-min=9.5km az=43.0*

*NOU **11** 09:45:53.5, 20.°58S×176.°13W, h244km, mb5.2/88, Fiji Islands Region*

*GCMT **11** 09:45:53.5±0.1, 20.°59S±0.°01×175.°91W±0.°01, h225km, MW5.3/136, Moment Tensor Solution. s115,c177; s136,c233; Duration: 1ꜝ1 Moment tensor: Scale 10^17^Nm; Mrr 0.21±.01; Mθθ 0.22±.02; Mϕϕ -0.42±.02; Mrθ -0.58±.01; Mθϕ 0.06±.02; Mϕr -1.07±.01; Best double couple: M0 1.27200×10^17^ NP1:ϕ=208.00000°, δ=85.00000°, λ=104.00000°. NP2:ϕ=318.00000°, δ=15.00000°, λ=21.00000°. Principal axes: T 1.2540, Plg48.0000°, Azm132.0000°; N 0.0350, Plg14.0000°, Azm26.0000°; P -1.2890, Plg38.0000°, Azm285.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR **11** 09:45:54.7, 20.°25S×176.°12W, h232km, 9km*

**ISC 11 09:45:51.3±0.3, 20.°72S±0.°04×176.°20W±0.°04, h221km±2km, h222km±, pP-P, n1179, σ1ꜝ36/1127, mb5.0/296, 62C-61D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **6.12** | **76** | | Pn | 09 47 15.5 | -5.0 |
| NIUE | | | | Sn | S | 09 48 18.6 | -13 |
| **NIUE** | **Niue** | **6.12** | **76** | P | **Pn** | **09 47 15.9** | **-4.5** |
| NIUE | | | | S | S | 09 48 19.4 | -12 |
| **MSVF** | **Nonsavu** | **6.19** | **298** | P | **Pn** | **09 47 22.3** | **+0.8** |
| **MSVF** | **Nonsavu** | **6.19** | **298** | | **Pn** | **09 47 22.1** | **+0.6** |
| **MSVF** | **Nonsavu** | **6.19** | **298** | P | **Pn** | **09 47 22.2** | **+0.8** |
| | 103nm,0.7s,baz=122,slow=15,SNR=143 | | | | | | |
| MSVF | | | | S | **S** | **09 48 32.2** | **-0.8** |
| | 48nm,0.8s,baz=260,slow=23,SNR=0.9 | | | | | | |
| **AFI** | **Afiamalu** | **7.98** | **33** | | Pn | 09 47 35.2 | -9.2 |
| **AFI** | **Afiamalu** | **7.98** | **33** | P | Pn | 09 47 35.2 | -9.2 |
| **RAO** | **Raoul Island** | **8.64** | **190** | Pn | **Pn** | **09 47 52.3** | **-0.3** |
| **RAO** | **Raoul Island** | **8.64** | **190** | P | **Pn** | **09 47 51.9** | **-0.7** |
| | 183nm,0.3s,baz=257,slow=22,SNR=2.4 | | | | | | |
| RAO | | | | S | **S** | **09 49 28.2** | **-1.9** |
| | 626nm,0.3s,baz=41,slow=20,SNR=10 | | | | | | |
| **RAO** | **Raoul Island** | **8.64** | **190** | P | **Pn** | **09 47 52.3** | **-0.3** |
| **GLKZ** | **Green Lake** | **8.65** | **190** | P | **Pn** | **09 47 52.1** | **-0.7** |
| GLKZ | | | | S | **S** | **09 49 26.2** | **-4.2** |
| **FUNA** | **Funafuti** | **12.91** | **339** | P | **Pn** | **09 48 46.3** | **-0.8** |
| **FUNA** | **Funafuti** | **12.91** | **339** | Pn | Pn | 09 48 41.0 | -6.1 |
| **MARNC** | **Mare, Loyalty** | **14.74** | **264** | P | **P** | **09 49 11.8** | **+1.8** |
| **RTV** | **Rentapao** | **14.81** | **279** | P | **P** | **09 49 14.3** | **+3.5** |
| **DVP** | **Devils Point** | **15.04** | **279** | P | **P** | **09 49 17.0** | **+3.6** |
| **PINNC** | **Pines Island,** | **15.32** | **260** | P | **Pn** | **09 49 20.3** | **+3.8** |
| **PINNC** | **Pines Island,** | **15.32** | **260** | | **Pn** | **09 49 20.9** | **+4.4** |
| **RAR** | **Rarotonga** | **15.35** | **95** | P | **P** | **09 49 16.6** | **-0.2** |
| **RAR** | **Rarotonga** | **15.35** | **95** | | **P** | **09 49 13.5** | **-3.3** |
| **RAR** | **Rarotonga** | **15.35** | **95** | P | **P** | **09 49 16.8** | **+0.1** |
| | 124nm,1.0s,baz=254,slow=10,SNR=18 | | | | | | |
| RAR | | | | S | **S** | **09 51 59.9** | **-6.7** |
| | 24nm,0.4s,baz=103,slow=19,SNR=2.2 | | | | | | |
| **RAR** | **Rarotonga** | **15.35** | **95** | P | **P** | **09 49 13.5** | **-3.3** |
| **LIFNC** | **LIFOU** | **15.49** | **267** | P | **Pn** | **09 49 20.4** | **+1.8** |
| **LIFNC** | **LIFOU** | **15.49** | **267** | P | **P** | **09 49 17.7** | **-0.6** |
| **YATNC** | **Mamie plateau,** | **15.81** | **262** | P | **Pn** | **09 49 25.1** | **+2.7** |
| **ONTNC** | **Ouen Toro** | **16.22** | **261** | P | **Pn** | **09 49 30.7** | **+3.3** |
| **DZM** | **Mont Dzumac** | **16.22** | **262** | P | **Pn** | **09 49 29.7** | **+2.3** |
| **DZM** | **Mont Dzumac** | **16.22** | **262** | P | **P** | **09 49 25.4** | **-1.1** |
| **DZM** | **Mont Dzumac** | **16.22** | **262** | *e*P | **Pn** | **09 49 27.9** | **+0.5** |
| | 2μm,1.8s | | | | | | |
| DZM | | | | *e*S | **S** | **09 52 19.8** | **-5.7** |
| | 406nm,30.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.22** | **262** | P | **Pn** | **09 49 29.7** | **+2.3** |
| | 265nm,0.6s,baz=98,slow=8.1,SNR=200 | | | | | | |
| DZM | | | | S | **S** | **09 52 21.4** | **-4.1** |
| | 33nm,1.1s,baz=130,slow=17,SNR=3.9 | | | | | | |
| **NFK** | **Norfolk Island** | **16.60** | **237** | P | **Pn** | **09 49 36.1** | **+4.4** |
| **OUZ** | **Omahuta** | **17.01** | **210** | P | **Pn** | **09 49 36.1** | **-0.4** |
| **WCZ** | **Waipu Caves** | **17.28** | **207** | P | **Pn** | **09 49 40.9** | **+1.2** |
| **MXZ** | **Matakaoa Point** | **17.45** | **195** | P | **Pn** | **09 49 40.7** | **-0.9** |
| **MXZ** | **Matakaoa Point** | **17.45** | **195** | P | **Pn** | **09 49 42.5** | **+0.9** |
| MXZ | | | | S | **S** | **09 52 39.8** | **-10** |
| **KUZ** | **Kuaotunu** | **17.46** | **202** | P | **Pn** | **09 49 42.8** | **+1.1** |
| **WMGZ** | **Waiomatatini S** | **17.67** | **194** | P | **P** | **09 49 42.6** | **+0.6** |
| WMGZ | | | | S | **S** | **09 52 46.3** | **-7.5** |
| **HAZ** | **Te Kaha** | **17.76** | **196** | P | **P** | **09 49 42.0** | **-1.0** |
| HAZ | | | | S | **S** | **09 52 48.4** | **-7.3** |
| **PKGZ** | **Pakihiroa** | **17.79** | **195** | P | **P** | **09 49 40.6** | **-2.8** |
| PKGZ | | |

comp=Z,33nm,1.0s
TBI **Tubuai** **24.91 101** *e*P P 09 50 46.9 -7.3
comp=Z,756nm,28.0s
TBI *e*sS sS 09 56 06.7 -11
comp=Z,4µm,27.5s
TBI *e*sS sS 09 56 07.8 -10
comp=Z,999nm,33.8s
**RPZ Rata Peaks 25.28 202** P **P** **09 51 00.3 +3.0**
**PAE Paea 25.31 88** *e*P **P** **09 50 56.7 -1.2**
comp=Z,82nm,1.1s
**PPT2 Papeete2 25.33 87** *e*P P 09 50 50.9 -7.2
comp=Z,247nm,37.5s
**PPT2 Papeete2 25.33 87** *e*P **P** **09 50 57.6 -0.5**
comp=Z,267nm,1.2s
PPT2 *e*pP **pP** **09 51 40.0 0.0**
comp=Z,187nm,27.2s
PPT2 *e*sS sS 09 56 16.4 -9.2
comp=Z,1µm,28.8s
PPT2 *e*sS **sS** **09 56 21.7 -3.9**
comp=Z,662nm,31.0s
PPT2 *e*LR LR 09 57 28.3
comp=Z,342nm,26.0s
**PPT Papeete 25.34 87** P **P** **09 50 58.6 +0.5**
comp=Z,189nm,0.9s,baz=333,slow=4.5,SNR=14
comp=Z,189nm,0.9s
**PPTF Pamatai, Papee 25.34 87** P **P** **09 50 58.4 +0.2**
**PPTF Pamatai, Papee 25.34 87** P **P** **09 50 57.0 -1.2**
**FOZ Fox Glacier 25.57 204** P **P** **09 51 01.0 +1.1**
**TVO Taravao 25.60 88** *e*P **P** **09 50 58.6 -1.9**
**LBZ Lake Benmore 26.17 203** P **P** **09 51 06.0 +0.7**
LBZ IAmb IAmb 09 51 22.7
comp=Z,30nm,1.0s
**JCZ Jackson Bay 26.43 205** P **P** **09 51 08.8 +1.1**
**ODZ Otahua Downs 26.58 201** P **P** **09 51 11.5 +2.5**
**ODZ Otahua Downs 26.58 201** P **P** **09 51 09.8 +0.8**
**WKZ Wanaka 26.98 204** P **P** **09 51 17.0 +4.5**
**PMOR Pomariorio Ree 27.51 83** *e*P **P** **09 51 16.7 -0.8**
comp=Z,299nm,1.3s
**MLZ Mavora Lakes 27.77 204** P **P** **09 51 20.4 +0.8**
MLZ IAmb IAmb 09 51 23.6
comp=Z,66nm,1.3s
**WHZ Wether Hill Ro 28.28 204** P **P** **09 51 25.4 +1.4**
**AUWSH Wavell State H 28.82 251** P **P** **09 51 30.3 +1.3**
**GD1S Gladstone Soft 30.32 258** P **P** **09 51 43.8 +1.5**
**EIDS Eidsvold 30.42 255** P **P** **09 51 43.3 +0.1**
**EIDS Eidsvold 30.42 255** P **P** **09 51 43.7 +0.5**
EIDS IAmb IAmb 09 51 44.6
comp=Z,48nm,0.8s
**EIDS Eidsvold 30.42 255** P **P** **09 51 43.9 +0.7**
comp=Z,71nm,1.4s,SNR=11
**ARMA Armidale 30.50 245** P **P** **09 51 45.4 +1.5**
**ARMA Armidale 30.50 245** P **P** **09 51 44.9 +1.0**
ARMA IAmb IAmb 09 51 46.3
comp=Z,39nm,0.8s
**ARMA Armidale 30.50 245** P **P** **09 51 45.5 +1.6**
comp=Z,57nm,1.1s,SNR=5.5
**RK1H Rockhampton Ha 30.95 259** P **P** **09 51 48.1 +0.3**
**AUPHS Peel High Scho 31.25 244** P **P** **09 51 51.7 +1.2**
**SYDH Sydney Hard Ro 31.99 239** P **P** **09 51 58.2 +1.4**
**AUDCS Dubbo College 33.36 243** P **P** **09 52 09.6 +0.8**
**AULRC Lightning Ridg 33.48 248** P **P** **09 52 10.3 +0.5**
**CNB Canberra Magne 33.51 237** P **P** **09 52 11.4 +1.3**
comp=Z,61nm,1.1s,SNR=1.9
**CAN Canberra 33.80 237** P **P** **09 52 13.6 +1.1**
**CAN Canberra 33.80 237** P **P** **09 52 13.3 +0.8**
**CAN Canberra 33.80 237** P **P** **09 52 13.6 +1.1**
comp=Z,57nm,1.0s,SNR=1.6
**CAN Canberra 33.80 237** P **P** **09 52 13.4 +0.8**
CAN pmax pmax
comp=Z,160nm,1.6s
**CAN Canberra 33.80 237** P **P** **09 52 13.2 +0.6**
**AUAYR Ayr State High 34.14 265** P **P** **09 52 16.4 +0.8**
**TV1H Townsville Har 34.76 266** P **P** **09 52 21.5 +0.6**
**CTA Charters Tower 35.15 264** P **P** **09 52 24.4 +0.2**
**CTAO Charters Tower 35.15 264** P **P** **09 52 24.5 +0.2**
**CTAO Charters Tower 35.15 264** P **P** **09 52 23.5 -0.7**
**CTAO Charters Tower 35.15 264** P **P** **09 52 23.5 -0.7**
CTAO pmax pmax
comp=Z,151nm,0.7s
**CTAO Charters Tower 35.15 264** P **P** **09 52 24.6 +0.2**
**CMSA Cobar Meteorol 35.71 245** P **P** **09 52 29.3 +0.4**
**CMSA Cobar Meteorol 35.71 245** P **P** **09 52 29.0 +0.1**
comp=Z,94nm,1.3s,SNR=9.0
**QLP Quilpie 36.61 253** P **P** **09 52 36.6 +0.1**
**QLP Quilpie 36.61 253** P **P** **09 52 36.4 -0.2**
comp=Z,110nm,1.2s,SNR=8.8
**TAOE Nuku Hiva Isla 36.70 77** *e*SS SS 10 00 56.1 +0.8
comp=Z,911nm,23.9s
TAOE *e*LR LR 10 02 50.9
comp=Z,156nm,22.0s
**PMG Port Moresby 37.04 282** P **P** **09 52 40.5 +0.2**
**PMG Port Moresby 37.04 282** P **P** **09 52 38.6 -1.7**
**PMG Port Moresby 37.04 282** *d iP* **P** **09 52 39.5 -0.8**
PMG pmax pmax
comp=Z,247nm,1.3s
**PMG Port Moresby 37.04 282** P **P** **09 52 39.7 -0.6**
**PATS Pohnpei 37.11 315** P **P** **09 52 38.4 -2.4**
**TOO Toolangi 37.14 235** P **P** **09 52 41.9 +1.0**
**TOO Toolangi 37.14 235** P **P** **09 52 41.4 +0.5**
TOO IAmb IAmb 09 52 43.7
comp=Z,44nm,1.0s
**TOO Toolangi 37.14 235** P **P** **09 52 41.6 +0.7**
comp=Z,37nm,0.9s,SNR=2.4
**TOO Toolangi 37.14 235** P **P** **09 52 41.4 +0.5**
TOO pmax pmax
comp=Z,44nm,1.0s
**MTSU Mount Surprise 37.26 267** P **P** **09 52 42.6 +0.4**
**TAU Tasmania Unive 37.66 226** P **P** **09 52 45.8 +0.6**
TAU IAmb IAmb 09 54 14.2
comp=Z,88nm,1.4s
**TAU Tasmania Unive 37.66 226** P **P** **09 52 45.8 +0.6**
TAU pmax pmax
comp=Z,88nm,1.5s
**GEXS Deakin Univers 38.22 234** P **P** **09 52 51.1 +1.2**
**RKT Rikitea 38.23 101** *e*P **P** **09 52 49.7 -0.5**
comp=Z,214nm,1.0s
**RKT Rikitea 38.23 101** *e*P **P** **09 52 50.8 +0.6**
comp=Z,332nm,23.5s
RKT *e*SS SS 10 01 25.5 +0.1
comp=Z,1µm,29.2s
RKT *e*LR LR 10 03 28.2
comp=Z,36µm,31.7s
RKT *e*LR LR 10 03 29.6
comp=Z,1µm,39.0s
**BRAT Ballarat 38.33 235** P **P** **09 52 51.9 +1.1**
**STKA Stephens Creek 39.22 245** P **P** **09 52 58.6 +0.3**
**STKA Stephens Creek 39.22 245** P **P** **09 52 58.4 +0.1**
**STKA Stephens Creek 39.22 245** P **P** **09 52 58.4 +0.1**
comp=Z,12nm,1.3s,SNR=5.5
**STKA Stephens Creek 39.22 245** P **P** **09 52 58.5 +0.3**
comp=Z,9.0nm,0.3s,baz=88,slow=8.6,SNR=17
comp=Z,9.0nm,0.3s
**COEN Coen 39.28 273** P **P** **09 52 58.8 -0.2**
**COEN Coen 39.28 273** P **P** **09 52 58.4 -0.6**
**COEN Coen 39.28 273** P **P** **09 52 59.1 +0.1**
comp=Z,268nm,1.2s,SNR=44
**INKA Innaminka 39.73 251** P **P** **09 53 03.4 +0.9**
**MANU Manus Island 40.08 293** P **P** **09 53 03.7 -1.9**
**QIS Mount Isa 41.26 262** P **P** **09 53 14.6 -0.6**
**QIS Mount Isa 41.26 262** P **P** **09 53 14.3 -0.9**
comp=Z,20nm,1.9s,SNR=5.3
**HTT Hallett 41.62 243** P **P** **09 53 19.0 +1.0**
**HTT Hallett 41.62 243** P **P** **09 53 18.1 +0.1**
comp=Z,39nm,0.3s,SNR=2.1
**LCRK Leigh Creek 42.00 247** P **P** **09 53 20.7 -0.4**
**BBOO Buckleboo 43.96 244** P **P** **09 53 36.3 -0.4**
BBOO IAmb IAmb 09 53 39.6
comp=Z,38nm,0.5s
**OOD Oodnadatta 44.20 251** P **P** **09 53 39.5 +0.8**
**MULG Mulgathing 45.59 248** P **P** **09 53 49.3 -0.3**
**JAY Jayapura 45.72 288** P **P** **09 53 50.0 -0.8**
comp=Z,199nm,1.2s,comp=Z,2µm
**WR0 Warramunga Arr 46.05 262** P **P** **09 53 52.5 -0.8**
**AS01 Alice Springs 46.07 257** P **P** **09 53 53.0 -0.5**
**AS31 Alice Springs 46.11 257** P **P** **09 53 53.3 -0.5**
AS31 IAmb IAmb 09 53 55.2
comp=Z,19nm,0.6s
**ASAR Alice Springs 46.11 257** P **P** **09 53 53.3 -0.5**
**ASAR Alice Springs 46.11 257** P **P** **09 53 54.0 +0.2**
comp=Z,84nm,0.9s,baz=88,slow=8.5,SNR=265
ASAR PcP **PcP** **09 55 25.4 -0.8**
comp=Z,8.2nm,0.8s,baz=102,slow=4.6,SNR=4.7
ASAR ScP **ScP** **09 58 55.6 -2.6**
comp=Z,0.6nm,0.8s,baz=100,slow=4.4,SNR=1.7
ASAR S **S** **10 00 19.6 -3.2**
comp=Z,1.9nm,0.9s,baz=92,slow=15,SNR=6.9
ASAR ScS **ScS** **10 03 26.6 +0.7**
comp=Z,1.3nm,0.9s,baz=119,slow=6.8,SNR=6.0
comp=Z,84nm,0.9s
**ASPA Alice Springs 46.11 257** P **P** **09 53 53.7 -0.1**
comp=Z,28nm,0.9s,SNR=31
**GENI Genyem 46.16 287** P **P** **09 53 54.3 +0.1**
**GENI Genyem 46.16 287** P **P** **09 53 53.7 -0.5**
comp=Z,301nm,1.3s,comp=Z,5µm
**WB2 Warramunga Arr 46.23 262** P **P** **09 53 53.5 -1.2**
**WRAB Tennant Creek 46.23 262** P **P** **09 53 53.6 -1.2**
WRAB IAmb IAmb 09 53 54.8
comp=Z,72nm,0.9s
**WRAB Tennant Creek 46.23 262** *d iP* **P** **09 53 53.5 -1.2**
WRAB pmax pmax
comp=Z,80nm,0.9s
**WRA Warramunga Arr 46.24 262** P **P** **09 53 53.3 -1.5**
**WRA Warramunga Arr 46.24 262** P **P** **09 53 54.0 -0.8**
comp=Z,29nm,0.4s,baz=97,slow=8.2,SNR=110
WRA PcP **PcP** **09 55 25.6 -1.0**
comp=Z,5.3nm,0.9s,baz=98,slow=6.0,SNR=1.6
WRA ScP **ScP** **09 58 56.7 -2.1**
comp=Z,3.8nm,1.1s,baz=94,slow=3.7,SNR=6.6
WRA S **S** **10 00 20.9 -3.7**
comp=Z,1.2nm,0.8s,baz=98,slow=15,SNR=4.7
WRA ScS **ScS** **10 03 27.4 +0.6**
comp=Z,1.0nm,1.0s,baz=156,slow=9.0,SNR=3.4
comp=Z,29nm,0.4s
**KDU Kakadu 49.64 271** P **P** **09 54 19.9 -0.9**
**KDU Kakadu 49.64 271** P **P** **09 54 20.2 -0.7**
comp=Z,179nm,1.3s,SNR=34
**FORT Forrest 50.76 247** P **P** **09 54 30.9 +1.9**
**FORT Forrest 50.76 247** P **P** **09 54 28.2 -0.8**
**FORT Forrest 50.76 247** P **P** **09 54 28.3 -0.8**
comp=Z,126nm,0.6s,SNR=4.7
**MTN Manton Dam 50.85 270** P **P** **09 54 29.2 -0.7**
**MTN Manton Dam 50.85 270** P **P** **09 54 29.4 -0.5**
**MTN Manton Dam 50.85 270** P **P** **09 54 29.1 -0.9**
comp=Z,208nm,0.8s,SNR=26
**WRKA Warakurna 51.03 254** P **P** **09 54 30.8 -0.4**
**WRKA Warakurna 51.03 254** P **P** **09 54 30.2 -1.0**
comp=Z,68nm,1.5s,SNR=6.6
**DRS Darwin Rock St 51.19 271** P **P** **09 54 31.8 -0.6**
**GUMO Guam 51.25 308** P **P** **09 54 32.4 -0.4**
**GUMO Guam 51.25 308** P **P** **09 54 31.3 -1.5**
**GUMO Guam 51.25 308** P **P** **09 54 31.3 -1.5**
GUMO pmax pmax
comp=Z,578nm,1.2s
**GUMO Guam 51.25 308** P **P** **09 54 31.8 -1.0**
**KNRA Kununurra 52.33 266** P **P** **09 54 40.8 0.0**
**KNRA Kununurra 52.33 266** P **P** **09 54 40.6 -0.2**
comp=Z,122nm,0.6s,SNR=13
**FAKI Fak Fak 53.19 282** P **P** **09 54 46.9 -0.3**
**FAKI Fak Fak 53.19 282** P **P** **09 54 46.4 -0.8**
**FAKI Fak Fak 53.19 282** P **P** **09 54 46.5 -0.8**
comp=Z,106nm,1.2s,comp=Z,1µm
**FITZ Fitzroy Crossi 54.67 262** P **P** **09 54 58.3 +0.5**
**FITZ Fitzroy Crossi 54.67 262** P **P** **09 54 57.8 0.0**
**MSAI Masohi 56.07 280** P P 09 55 12.8 +4.9
**SBA Scott Base 57.77 184** P **P** **09 55 22.0 +3.2**
**SBA Scott Base 57.77 184** P **P** **09 55 22.0 +3.2**
SBA pmax pmax
comp=Z,50nm,1.0s
**SBA Scott Base 57.77 184** P **P** **09 55 23.0 +4.2**
**VNDA Vanda 57.85 186** P **P** **09 55 22.1 +2.8**
VNDA IAmb IAmb 09 55 24.0
comp=Z,24nm,0.9s
**VNDA Vanda 57.85 186** P **P** **09 55 22.5 +3.2**
comp=Z,16nm,0.8s,baz=4.8,slow=6.9,SNR=39
VNDA PKiKP **PKiKP** **10 02 33.2 +0.3**
comp=Z,2.3nm,0.7s,baz=356,slow=5.5,SNR=7.2
comp=Z,16nm,0.8s
**VNDA Vanda 57.85 186** P **P** **09 55 22.1 +2.8**
VNDA pmax pmax
comp=Z,24nm,1.0s
**VNDA Vanda 57.85 186** P **P** **09 55 22.6 +3.3**
**SOEI Soe 58.19 271** P **P** **09 55 24.4 +1.6**
**SOEI Soe 58.19 271** P **P** **09 55 23.3 +0.4**
**SOEI Soe 58.19 271** P **P** **09 55 24.5 +1.6**
**BATI Baumata 58.62 271** P **P** **09 55 28.3 +2.6**
comp=Z,183nm,0.8s,comp=Z,2µm
**PSA00 Pilbara Seismi 59.26 257** P **P** **09 55 30.4 +0.4**
PSA00 IAmb IAmb 09 56 31.6
comp=Z,55nm,1.4s
**SANI Sanana 59.28 280** P **P** **09 55 29.9 -0.3**
**SANI Sanana 59.28 280** P **P** **09 55 30.7 +0.5**
comp=Z,62nm,1.0s
**MBWA Marble Bar 59.45 257** P **P** **09 55 30.4 -0.8**
MBWA IAmb IAmb 09 55 32.9
comp=Z,22nm,0.7s
**MBWA Marble Bar 59.45 257** P **P** **09 55 30.6 -0.7**
comp=Z,49nm,0.8s,SNR=2.6
**MBWA Marble Bar 59.45 257** P **P** **09 55 30.3 -1.0**
**KLBR Kellerberrin 59.49 245** P **P** **09 55 31.6 +0.2**
**KLBR Kellerberrin 59.49 245** P **P** **09 55 30.5 -1.0**
comp=Z,41nm,0.8s,SNR=3.6
**NWAO Narrogin (SRO) 59.78 243** P **P** **09 55 33.0 -0.4**
**NWAO Narrogin (SRO) 59.78 243** P **P** **09 55 33.0 -0.4**
NWAO pmax pmax
comp=Z,113nm,1.6s
**MMRI Maumere 60.45 272** P **P** **09 55 38.8 +0.7**
**MMRI Maumere 60.45 272** P **P** **09 55 37.5 -0.7**
**MORW Morawa 61.30 247** P **P** **09 55 43.0 -0.7**
**CCD Concordia, Ant 62.68 195** P **P** **09 55 55.1 +2.5**
**GTOI Gorontalo 63.07 282** P P 09 56 02.1 +6.5
**BNSI Bone 63.87 275** P **P** **09 56 02.3 +1.5**
**GIRL Giralia 64.12 254** P **P** **09 56 02.5 +0.2**
**CASY Casey 64.49 205** P **P** **09 56 06.2 +2.3**
**TOLI2 Tolitoli 65.30 281** P **P** **09 56 09.3 -0.8**
TOLI2 IAmb IAmb 09 56 18.8
comp=Z,31nm,1.2s
**TWSI Taliwang, Sumb 65.43 270** P **P** **09 56 13.2 +2.3**
**MYLDM Lahad Datu 69.02 284** P **P** **09 56 32.7 -0.8**
MYLDM IAmb IAmb 09 56 53.5
comp=Z,30nm,0.9s
**QSPA South Pole Qui 69.35 180** P **P** **09 56 37.4 +2.6**
**QSPA South Pole Qui 69.35 180** P **P** **09 56 37.1 +2.3**
comp=Z,67nm,0.9s,baz=28,slow=1.2,SNR=180
QSPA pP **pwP** **09 57 28.3 -0.2**
comp=Z,26nm,0.9s,baz=7.5,slow=2.1,SNR=3.3
comp=Z,67nm,0.9s
**QSPA South Pole Qui 69.35 180** P **P** **09 56 37.3 +2.5**
**MJAR Matsushiro Arr 71.40 323** P **P** **09 56 45.5 -1.9**
comp=Z,9.8nm,0.9s,baz=158,slow=5.5,SNR=16
MJAR pP **pP** **09 57 38.7 +0.4**
comp=Z,2.0nm,0.7s,baz=137,slow=5.7,SNR=1.5
comp=Z,9.8nm,0.9s
**MAJO Matsushiro 71.40 323** P **P** **09 56 46.0 -1.4**
**MAJO Matsushiro 71.40 323** P **P** **09 56 45.9 -1.5**
MAJO IAmb IAmb 09 56 47.0
comp=Z,79nm,1.9s
**MAJO Matsushiro 71.40 323** *d iP* **P** **09 56 45.7 -1.7**
MAJO pmax pmax
comp=Z,38nm,1.8s
**MAJO Matsushiro 71.40 323** P **P** **09 56 45.8 -1.5**
**MJB9 Matsu-Tunnel 71.40 323** P **P** **09 56 45.8 -1.7**
MJB9 IAmb IAmb 09 56 47.0
comp=Z,78nm,1.9s
**UGM Wanagama 71.64 268** P **P** **09 56 49.6 +0.2**
**AMKA Amchitka 71.89 357** P **P** **09 56 48.9 -1.0**
**SMRI Semarang 72.00 269** P **P** **09 56 51.0 -0.6**
**JMN Monobe 72.07 318** P **P** **09 56 51.6 +0.1**
**JMN Monobe 72.07 318** P **P** **09 56 50.5 -1.0**
JMN IAmb IAmb 09 56 52.3
comp=Z,47nm,1.1s
**KIWB Kanaga Island 72.26 359** P **P** **09 56 51.3 -0.9**
**ADK Adak 72.29 360** P **P** **09 56 52.0 -0.3**
ADK IAmb IAmb 09 57 49.3
comp=Z,60nm,1.4s
**ADK Adak 72.29 360** P **P** **09 56 52.0 -0.3**
ADK pmax pmax
comp=Z,60nm,1.5s
**NIKH Nikolski High 73.66 5** P **P** **09 57 01.2 +0.9**
baz=187
**SBUM Sibu 73.70 279** P **P** **09 57 00.6 -0.9**
**UNV Unalaska Valle 74.72 6** P **P** **09 57 07.6 +1.2**
baz=189
**JKA Kamikawa-asahi 74.73 331** P **P** **09 57 06.7 0.0**
JKA IAmb IAmb 09 58 24.5
comp=Z,56nm,1.5s
**ASAJ Asahikawa 74.73 331** P **P** **09 57 06.7 0.0**
ASAJ pmax pmax
comp=Z,56nm,1.5s
**YULB Yu-li 75.03 302** P **P** **09 57 07.5 -1.4**
**KSM Kuching 75.11 277** P **P** **09 57 09.9 +0.3**
**KSM Kuching 75.11 277** P **P** **09 57 09.4 -0.2**
KSM IAmb IAmb 09 57 10.7
comp=Z,40nm,0.9s
**NACB Ninganchiao 75.20 303** P **P** **09 57 09.1 -0.7**
**NACB Ninganchiao 75.20 303** IAmb IAmb 09 57 09.9
comp=Z,68nm,1.3s
**SSLB Suanglung 75.51 303** P **P** **09 57 11.4 -0.2**
**SSLB Suanglung 75.51 303** IAmb IAmb 09 57 10.5
comp=Z,16nm,0.6s
**TPUB Ta-pu 75.52 302** P **P** **09 57 09.7 -2.0**
**TPUB Ta-pu 75.52 302** IAmb IAmb 09 57 10.5
comp=Z,43nm,0.9s
**YHNB Yeheng 75.63 304** P **P** **09 57 11.2 -1.2**
**YHNB Yeheng 75.63 304** IAmb IAmb 09 57 12.1
comp=Z,45nm,1.2s
**SNCC San Nicolas Is 76.17 46** P **P** **09 57 16.5 +1.3**
baz=234
**SCZ2 Santa Cruz Isl 76.54 45** P **P** **09 57 18.1 +0.9**
baz=234
**CHNA Chernabura Isl 76.58 10** P **P** **09 57 18.4 +1.5**
baz=196
**PET Petropavlovsk 76.61 345** P **P** **09 57 15.9 -1.2**
PET IAmb IAmb 09 57 17.7
comp=Z,48nm,1.3s
**PET Petropavlovsk 76.61 345** ‖ *eP* **P** **09 57 16.8 -0.3**
PET pmax pmax
comp=Z,55nm,1.5s
**SCI2 San Clemente I 76.68 47** P **P** **09 57 18.8 +0.8**
baz=234,SNR=7.6
**SBC Santa Barbara 76.75 45** P **P** **09 57 19.6 +1.2**
baz=233
**YSS Yuzh-Sakhalins 76.86 332** P **P** **09 57 18.6 0.0**
**YSS Yuzh-Sakhalins 76.86 332** P **P** **09 57 17.9 -0.7**
YSS IAmb IAmb 09 57 19.4
comp=Z,47nm,1.3s
**YSS Yuzh-Sakhalins 76.86 332** *eP* **P** **09 57 17.9 -0.7**
YSS *e*S **S** **10 06 45.0 -2.6**
YSS pmax pmax
comp=Z,10.0nm,1.1s
YSS pmax pmax
comp=Z,200nm,3.7s
YSS smax smax
comp=N,200nm,5.7s
YSS MLR MLR
comp=Z,200nm,14.0s
**SDPT Sand Point 76.94 9** P **P** **09 57 20.6 +1.7**
baz=195
**PKM Mcpherson Peak 76.95 45** P **P** **09 57 20.7 +0.9**
baz=233
**CIS Catalina Islan 77.01 47** P **P** **09 57 20.5 +0.6**
baz=234
**SAO San Andreas Ge 77.04 42** IAmb IAmb 09 57 21.8
comp=Z,24nm,0.8s
**S12K Black Hills 77.06 8** P **P** **09 57 21.1 +1.5**
baz=194
**SMMC Simmler 77.09 44** P **P** **09 57 21.5 +1.2**
baz=233
**PMPB Monarch Peak 77.11 43** P **P** **09 57 20.4 -0.1**
PMPB IAmb IAmb 09 57 22.1
comp=Z,21nm,0.8s
**BBGB Big Mountain B 77.19 43** IAmb IAmb 09 57 23.4
comp=Z,35nm,1.1s
**P08K Saint George I 77.22 4** P **P** **09 57 21.4 +1.0**
baz=186
**BCW Bitter Crk WRg 77.25 45** IAmb IAmb 09 57 23.5
comp=Z,35nm,0.9s
**FMP Fort Macarthur 77.28 46** P **P** **09 57 21.4 +0.1**
baz=234
**CCX Cicese 77.35 49** IAmb IAmb 09 57 23.6
comp=Z,20nm,0.8s
**CBX Cerro Bola 77.60 48** IAmb IAmb 09 57 25.1
comp=Z,24nm,0.9s
**PASC Pasadena Art C 77.61 46** IAmb IAmb 09 57 24.7
comp=Z,24nm,1.1s
**109C Camp Elliot, M 77.62 48** P **P** **09 57 23.9 +0.7**
baz=235
**VTX Valle De La Tr 77.71 50** IAmb IAmb 09 57 25.8
comp=Z,20nm,0.9s
**ARVC Arvin 77.74 45** P **P** **09 57 24.5 +0.7**
baz=234,SNR=9.8
**KMPM Mount Pierce 77.75 38** P **P** **09 57 23.5 -0.4**
KMPM IAmb IAmb 09 57 26.0
comp=Z,29nm,0.9s
**SMAI San Martin Ant 77.80 159** P **P** **09 57 26.1 +2.5**
**ELS Elsinore Mount 77.83 47** IAmb IAmb 09 57 26.2
comp=Z,25nm,1.0s
**KMRM Mail Ridge 77.87 38** P **P** **09 57 26.1 +1.6**
**TJN Taejon 77.88 317** ‖ *eP* **P** **09 57 25.3 +0.7**
**ESJX Sierra Juarez 77.93 49** IAmb IAmb 09 57 27.4
comp=Z,22nm,0.9s
**MURC Murrieta 77.96 47** P **P** **09 57 25.8 +0.6**
baz=235,SNR=13
**VES Vestal, Richgr 78.00 44** P **P** **09 57 25.7 +0.5**
baz=234,SNR=29
**BFSC Mount Baldy Ra 78.01 46** P **P** **09 57 25.8 +0.3**
baz=235,SNR=10
**MONP2 Monument Peak 78.09 48** P **P** **09 57 26.6 +0.5**
baz=236,SNR=34
**VOG Valley Oaks Go 78.09 44** P **P** **09 57 26.1 +0.3**
baz=233
**EDW2 Edwards Air Fo 78.16 46** P **P** **09 57 26.9 +0.7**
baz=234,SNR=25
**SRIG Santa Rosalia 78.17 55** P **P** **09 57 26.3 -0.1**
SRIG IAmb IAmb 09 57 28.0
comp=Z,34nm,0.8s
**SLBS Sierra La Lagu 78.17 59** P **P** **09 57 27.8 +1.3**
SLBS IAmb IAmb 09 57 28.6
comp=Z,36nm,1.1s
**IKP In-Ko-Pah, Jac 78.17 48** P **P** **09 57 27.3 +0.9**
baz=236,SNR=16
**KSRS Korea Array 78.18 318** P **P** **09 57 26.0 -0.1**
comp=Z,7.9nm,1.1s,baz=141,slow=5.7,SNR=17
KSRS pP **pP** **09 58 19.1 +1.0**
comp=Z,1.1nm,0.7s,baz=120,slow=5.0,SNR=2.1
comp=Z,7.9nm,1.1s
**CHGN Chignik 78.18 10** P **P** **09 57 25.1 -0.6**
CHGN IAmb IAmb 09 59 39.7
comp=Z,41nm,1.0s
**CHGN Chignik 78.18 10** P **P** **09 57 27.0 +1.3**
baz=197
**KSAR Wonju Array Be 78.19 318** P **P** **09 57 25.7 -0.6**
**KSAR Wonju Array Be 78.19 318** P **P** **09 57 25.7 -0.6**
**KHMM Horse Mountain 78.28 38** P **P** **09 57 28.2 +1.3**
KHMM IAmb IAmb 09 57 28.9
comp=Z,24nm,1.0s
**ISA Isabella, Lake 78.29 45** IAmb IAmb 09 57 29.0
comp=Z,43nm,1.1s
**ISA Isabella, Lake 78.29 45** P **P** **09 57 27.8 +0.8**
baz=234,SNR=33
**KRPM Rodgers 78.30 38** IAmb IAmb 09 57 29.1
comp=Z,37nm,1.2s
**CCAC Calif City Air 78.30 45** IAmb IAmb 09 57 29.0
comp=Z,59nm,1.4s
**YUH Yuha Desert 78.30 48** IAmb IAmb 09 57 28.8
comp=Z,22nm,0.9s
**O02D Mt. Diablo Mer 78.38 39** IAmb IAmb 09 57 29.6
comp=Z,29nm,0.9s
**PFO Pinyon Flats O 78.47 47** P **P** **09 57 27.8 -0.3**
PFO IAmb IAmb 09 57 29.9
comp=Z,22nm,1.0s
**PFO Pinyon Flats O 78.47 47** P **P** **09 57 28.8 +0.7**
baz=236,SNR=12
**PFO Pinyon Flats O 78.47 47** *c iP* **P** **09 57 28.6 +0.5**
**TPFO Pinon Flats 78.47 47** P **P** **09 57 28.8 +0.7**
baz=236,SNR=11
**BBRC Big Bear Solar 78.52 47** P **P** **09 57 29.1 +0.7**
baz=235,SNR=5.8
**SWSC Sam W. Stewart 78.56 48** P **P** **09 57 29.2 +0.8**
baz=236,SNR=7.7
**KRMB Red Mountain 78.60 37** IAmb IAmb 09 57 30.8
comp=Z,42nm,1.4s
**CPBX Cerro Prieto 78.61 49** IAmb IAmb 09 57 30.9
comp=Z,42nm,1.2s
**LRMC Laurel Mtn Rad 78.71 45** P **P** **09 57 30.1 +0.8**
baz=234,SNR=18
**KSXB Camp Six Broad 78.82 37** P **P** **09 57 29.8 +0.1**
KSXB IAmb IAmb 09 57 31.8
comp=Z,50nm,1.7s
**RRX Edison Barstow 78.82 46** P **P** **09 57 30.7 +0.9**
baz=235
**KBO Bosley Butte 78.87 37** IAmb IAmb 09 57 32.4
comp=Z,49nm,1.6s
**BELC Belle Mtn. Jos 79.01 47** P **P** **09 57 31.9 +0.9**
baz=236,SNR=29
**CWC Cottonwood Cre 79.01 44** P **P** **09 57 31.6 +0.6**
baz=234
**MDPB Devils Postpil 79.07 43** IAmb IAmb 09 57 33.1

comp=Z,23nm,0.9s
**MPMC Manual Prospec 79.17 45** P **P** 09 57 32.8 +0.8
baz=235,SNR=49
**BC3 Big Chuckawall 79.19 48** P **P**
baz=236,SNR=21
**GSC Goldstone, Bar 79.19 46** P **P** 09 57 31.3 -0.6
GSC IAmb IAmb 09 57 33.7
comp=Z,26nm,1.0s
**GSC Goldstone, Bar 79.19 46** P **P** 09 57 32.6 +0.7
baz=235,SNR=27
**GSC Goldstone, Bar 79.19 46** P **P** 09 57 31.3 -0.6
GSC pmax pmax
comp=Z,27nm,1.0s
**MLAC Mammoth, Mammo 79.22 43** P **P** 09 57 33.1 +0.9
baz=233
**EMB Emerald Bay 79.24 41** IAmb IAmb 09 57 34.0
comp=Z,39nm,1.7s
**HEC Hector,Ludlow 79.24 46** P **P** 09 57 32.9 +0.7
baz=236,SNR=9.3
**TIN Tinemaha, Big 79.27 44** P **P** 09 57 33.2 +0.9
baz=234
**GLA Glamis 79.30 49** IAmb IAmb 09 57 34.8
comp=Z,41nm,1.1s
**GLA Glamis 79.30 49** P **P** 09 57 33.6 +1.1
baz=237,SNR=10
**YBH Yreka Blue Hor 79.42 38** IAmb IAmb 09 57 35.0
comp=Z,18nm,0.8s
**PIX Pinacate 79.47 51** IAmb IAmb 09 57 35.0
comp=Z,22nm,0.9s
**MPK Martis Peak 79.48 41** IAmb IAmb 09 57 36.4
comp=Z,39nm,0.8s
**MSHR Mys Shultsa 79.49 323** *ce*P **P** 09 57 32.7 -0.5
MSHR pmax pmax
comp=Z,31nm,1.2s
**HATC Hat Creek Radi 79.56 39** IAmb IAmb 09 57 35.6
comp=Z,37nm,0.9s
**DSP Deep Springs 79.62 44** IAmb IAmb 09 57 36.2
comp=Z,26nm,1.1s
**GMRC Granite Mounta 79.68 47** P **P** 09 57 35.4 +0.8
baz=236,SNR=20
**IRM Iron Mountain 79.68 48** P **P** 09 57 35.6 +1.1
baz=236,SNR=41
**PSTR Posyet 79.73 323** *i* P **P** 09 57 34.8 +0.3
**YERR Yerington 79.78 42** IAmb IAmb 09 57 36.7
comp=Z,31nm,0.7s
**GWY Greenwater Val 79.79 45** IAmb IAmb 09 57 36.7
comp=Z,31nm,1.4s
**R17L Mt. Peulik Vol 79.79 11** P **P** 09 57 34.9 +0.4
baz=199
**GRAC Grapevine Rang 79.80 44** IAmb IAmb 09 57 37.3
comp=Z,63nm,1.2s
**GRAC Grapevine Rang 79.80 44** P **P** 09 57 36.2 +1.1
baz=234,SNR=24
**LHV Little Huntoon 79.80 43** IAmb IAmb 09 57 37.2
comp=Z,34nm,1.1s
**FURC Furnace Creek, 79.82 45** P **P** 09 57 35.9 +0.8
baz=235,SNR=11
**TUQ Turquoise Moun 79.86 46** P **P** 09 57 36.3 +0.7
baz=236,SNR=10
**SHOC Shoshone, Teco 79.89 46** P **P** 09 57 36.2 +0.7
baz=235,SNR=17
**BLYC Blythe 79.89 48** IAmb IAmb 09 57 37.7
comp=Z,33nm,0.9s
**113A Mohawk Valley, 79.89 49** IAmb IAmb 09 57 37.6
comp=Z,22nm,0.9s
**TYV Tymovskoe 79.94 335** *e*P **P** 09 57 34.7 -0.7
TYV pmax pmax
comp=Z,15nm,1.6s
TYV pmax pmax
comp=Z,100nm,4.5s
**OHAK Old Harbor 79.99 12** P **P** 09 57 36.1 +0.6
baz=202
**RYN Ryan 80.02 42** IAmb IAmb 09 57 38.1
comp=Z,48nm,1.6s
**NVAR Mina Array Bea 80.04 42** P **P** 09 57 36.8 +0.3
comp=Z,14nm,0.8s,baz=223,slow=8.9,SNR=119
NVAR pP **pP** 09 58 29.8 +1.0
comp=Z,4.5nm,0.8s,baz=225,slow=9.7,SNR=3.7
comp=Z,14nm,0.8s
**R18K Karluk 80.08 12** P **P** 09 57 36.3 +0.3
baz=201
**USA0B Ussuriysk Arra 80.10 325** P **P** 09 57 36.1 -0.3
USA0B IAmb IAmb 09 57 37.7
comp=Z,38nm,1.4s
**USA0B Ussuriysk Arra 80.10 325** *d* P **P** 09 57 36.2 -0.2
**USRK Ussuriysk Ar. 80.10 325** P **P** 09 57 35.8 -0.6
**USRK Ussuriysk Ar. 80.10 325** P **P** 09 57 36.7 +0.3
comp=Z,2.8nm,0.5s,baz=132,slow=2.8,SNR=21
USRK pP **pP** 09 58 29.4 +0.8
comp=Z,0.9nm,0.6s,baz=146,slow=3.7,SNR=1.1
comp=Z,2.8nm,0.5s
**PAHR Pah Rah Range 80.13 41** IAmb IAmb 09 57 38.6
comp=Z,22nm,1.0s
**NV11 Mina Array Sit 80.13 43** IAmb IAmb 09 57 38.7
comp=Z,28nm,1.2s
**214A Organ Pipe Nat 80.14 50** IAmb IAmb 09 57 39.3
comp=Z,26nm,1.2s
**214A Organ Pipe Nat 80.14 50** P **P** 09 57 37.8 +0.8
baz=238,SNR=9.1
**I03D Drain, OR 80.33 36** IAmb IAmb 09 57 39.4
comp=Z,42nm,1.5s
**NEE2 Needles Airpor 80.38 47** P **P** 09 57 39.3 +1.1
baz=237
**PMSA Palmer Station 80.41 156** P **P** 09 57 40.1 +2.2
PMSA IAmb IAmb 09 57 41.0
comp=Z,41nm,1.0s
**PDMCI Parker Dam,Lak 80.46 48** P **P** 09 57 39.6 +1.0
baz=237,SNR=23
**TPNV Topopah Spring 80.50 45** P **P** 09 57 39.7 +0.7
baz=235,SNR=26
**O14K Tigyukauivet M 80.62 8** P **P** 09 57 40.1 +1.2
baz=194
**KDAK Kodiak Island 80.65 13** P **P** 09 57 40.2 +1.2
baz=202
**O15K Ungalikthiuk R 80.74 8** P **P** 09 57 40.6 +1.1
baz=196
**BUCK Buck Mountain 80.86 36** IAmb IAmb 09 57 42.4
comp=Z,22nm,0.9s
**Q18K Katmai Hardscr 81.00 11** P **P** 09 57 40.7 -0.3
baz=200
**Y14A Wickenburg 81.05 49** IAmb IAmb 09 57 43.9
comp=Z,28nm,0.9s
**W13A Hualapai Mount 81.06 47** IAmb IAmb 09 57 44.3
comp=Z,23nm,1.1s
**H04D Lebanon 81.21 36** IAmb IAmb 09 57 44.1
comp=Z,35nm,1.3s
**N14K Kuskokwak Cree 81.22 7** P **P** 09 57 42.6 +0.6
baz=194
**S11A Rachel 81.23 44** IAmb IAmb 09 57 44.7
comp=Z,34nm,1.2s
**MYKOM Kota Tinggi 81.24 275** IAmb IAmb 09 57 44.3
comp=Z,54nm,1.2s
**J05D Fort Rock, OR 81.25 37** IAmb IAmb 09 57 44.7
comp=Z,46nm,0.8s
**P17K Kvichak River 81.27 10** P **P** 09 57 43.0 +0.7
baz=199
**NJ2 Nanjing 81.32 309** ⇑ *i* P **P** 09 57 43.3 +0.1
NJ2 pmax pmax
comp=Z,24nm,1.0s
NJ2 pmax pmax
comp=Z,270nm,6.6s
**G03D McMinnville, O 81.37 35** IAmb IAmb 09 57 45.0
comp=Z,38nm,1.1s
**O16K Kokwok River B 81.39 9** P **P** 09 57 42.6 -0.3
baz=197
**Q20K Shuyak Island 81.45 12** P **P** 09 57 43.3 +0.1
baz=202
**Q19K Cape Douglas, 81.51 12** P **P** 09 57 43.6 0.0
baz=201
**H04A Detroit Lake 81.61 36** P **P** 09 57 44.6 +0.2
H04A IAmb IAmb 09 57 45.7
comp=Z,18nm,0.8s
**P18K Big Mountain, 81.66 11** P **P** 09 57 44.0 -0.3
baz=200
**N15K Kwethluk River 81.66 8** P **P** 09 57 45.1 +0.7
baz=195
**MDJ Mudanjiang 81.67 324** P **P** 09 57 45.0 +0.3
**MDJ Mudanjiang 81.67 324** P **P** 09 57 45.1 +0.3
MDJ S **SKSac** 10 07 44.2 +1.0
MDJ sS sS 10 08 59.0 -11
MDJ pmax pmax
comp=Z,35nm,1.1s
MDJ pmax pmax
comp=Z,240nm,6.5s
**MDJ Mudanjiang 81.67 324** P **P** 09 57 44.5 -0.2
MDJ IAmb IAmb 09 57 46.0
comp=Z,38nm,1.1s
**O17K Koliganek Bris 81.71 10** P **P** 09 57 45.5 +0.9
baz=198
**R11B Troy Canyon, C 81.73 44** P **P** 09 57 45.9 +0.4
baz=236,SNR=15
**PINE Pine Mountain 81.73 37** IAmb IAmb 09 57 47.4
comp=Z,49nm,0.9s
**TUC Tucson 81.80 51** P **P** 09 57 46.5 +0.7
TUC IAmb IAmb 09 57 48.4
comp=Z,33nm,1.0s
**TUC Tucson 81.80 51** P **P** 09 57 47.0 +1.2
baz=239
**TUC Tucson 81.80 51** P **P** 09 57 46.5 +0.7
TUC pmax pmax
comp=Z,33nm,1.0s
**I05D Terrebonne, OR 81.86 36** IAmb IAmb 09 57 47.5
comp=Z,24nm,0.9s
**BMN Battle Mountai 81.89 41** IAmb IAmb 09 57 48.0
comp=Z,40nm,1.3s
**MAW Mawson 81.92 199** P **P** 09 57 47.5 +1.7
comp=Z,3.9nm,0.5s,baz=137,slow=7.4,SNR=15
MAW pP **pwP** 09 58 42.5 +1.4
comp=Z,24nm,0.9s,baz=134,slow=7.1,SNR=11
comp=Z,3.9nm,0.5s
**M14K Bethel 82.00 7** P **P** 09 57 46.4 +0.4
baz=193
**E03A Lebam 82.09 34** IAmb IAmb 09 57 48.6
comp=Z,26nm,0.9s
**M15K Kasigluk River 82.09 8** P **P** 09 57 47.1 +0.6
baz=195
**O18K Koktuh Hills 82.10 11** P **P** 09 57 47.1 +0.4
baz=200
**MG05 Puerto Natales 82.11 142** P **P** 09 57 48.9 +1.8
**N16K Nishlik Lake 82.14 9** P **P** 09 57 47.5 +0.7
baz=196
**WVOR Wild Horse Val 82.23 39** IAmb IAmb 09 57 49.6
comp=Z,22nm,1.0s
**F04A Amboy 82.29 35** IAmb IAmb 09 57 50.1
comp=Z,26nm,0.8s
**HOOD Mount Hood Mea 82.31 35** P **P** 09 57 47.9 -0.3
HOOD IAmb IAmb 09 57 49.7
comp=Z,38nm,1.1s
**GO09 Cerro Castillo 82.37 142** IAmb IAmb 09 57 52.0
comp=Z,35nm,0.9s
**N17K Nushagak Hills 82.42 9** P **P** 09 57 48.6 +0.4
baz=198
**319A Douglas 82.43 53** IAmb IAmb 09 57 51.7
comp=Z,42nm,1.0s
**G05A Waialc 82.44 36** IAmb IAmb 09 57 50.4
comp=Z,26nm,1.0s
**L14K Kuka Creek 82.50 7** IAmb IAmb 09 57 49.8
comp=Z,45nm,1.6s
**L14K Kuka Creek 82.50 7** P **P** 09 57 48.6 0.0
baz=193
**NLWA Neilton Lookou 82.50 33** P **P** 09 57 48.9 -0.1
NLWA IAmb IAmb 09 57 50.9
comp=Z,24nm,1.1s
**LCMT Little Creek M 82.54 46** IAmb IAmb 09 57 51.9
comp=Z,28nm,1.0s
**O19K Port Alsworth 82.57 11** P **P** 09 57 49.6 +0.6
baz=201
**HOM Homer 82.57 12** P **P** 09 57 49.1 +0.1
baz=203
**Q12A Willow Creek R 82.61 44** IAmb IAmb 09 57 51.8
comp=Z,74nm,1.7s
**M16K Timber Creek 82.64 8** IAmb IAmb 09 57 58.6
comp=Z,49nm,1.4s
**M16K Timber Creek 82.64 8** P **P** 09 57 50.1 +0.7
baz=196
**I07A Izee 82.73 37** P **P** 09 57 50.8 +0.4
I07A IAmb IAmb 09 57 52.2
comp=Z,22nm,0.9s
**CCUT Cedar City 82.75 45** IAmb IAmb 09 57 53.3
comp=Z,29nm,0.9s
**N18K Kilae Creek 82.77 10** P **P** 09 57 49.9 -0.2
baz=199
**O20K Slope Mountain 82.78 12** P **P** 09 57 50.3 +0.1
baz=202
**G06A Carlson Farm, 82.81 36** IAmb IAmb 09 57 52.3
comp=Z,30nm,1.0s
**KNB Kanab 82.82 46** IAmb IAmb 09 57 53.6
comp=Z,37nm,1.0s
**BRSE Bradley Lake S 82.83 13** P **P** 09 57 49.9 -0.6
baz=204
**J08A Circle Bar Ran 82.88 38** IAmb IAmb 09 57 52.9
comp=Z,35nm,1.3s
**K13K Kusilvak Mount 82.88 5** P **P** 09 57 50.3 -0.2
baz=191
**L15K Ungalak Mounta 82.95 7** P **P** 09 57 51.4 +0.4
baz=194
**SZCU Shurtz Canyon 82.96 46** IAmb IAmb 09 57 54.2
comp=Z,30nm,1.0s
**WUAZ Wupatki 83.03 48** IAmb IAmb 09 57 54.7
comp=Z,55nm,1.1s
**WUAZ Wupatki 83.03 48** P **P** 09 57 51.8 -0.4
baz=239,SNR=34
**N19K Bonanza Creek 83.12 11** P **P** 09 57 52.7 +0.7
baz=200
**GNW Green Mountain 83.14 33** IAmb IAmb 09 57 53.9
comp=Z,20nm,1.1s
**M17K Holitna River 83.21 9** P **P** 09 57 53.3 +1.0
baz=198
**L16K Owhat River 83.23 8** IAmb IAmb 09 57 53.9
comp=Z,28nm,1.4s
**L16K Owhat River 83.23 8** P **P** 09 57 53.0 +0.7
baz=196,SNR=6.2
**ELK Elko 83.31 42** IAmb IAmb 09 57 55.2
comp=Z,24nm,0.9s
**SEW Seward 83.43 13** P **P** 09 57 54.1 +0.7
baz=205
**CN2 Changchun 83.51 322** P **P** 09 57 54.1 -0.1
CN2 pmax pmax
comp=Z,30nm,1.0s
**X18A Snowflake 83.52 50** IAmb IAmb 09 57 57.2
comp=Z,32nm,0.8s
**K15K Wolf Creek Mou 83.55 7** P **P** 09 57 54.0 0.0
K15K IAmb IAmb 09 57 56.3
comp=Z,35nm,0.8s
**K15K Wolf Creek Mou 83.55 7** P **P** 09 57 54.7 +0.7
baz=194,SNR=14
**BNX BinXian 83.58 324** ⇓ P **P** 09 57 53.3 -1.3
BNX pmax pmax
comp=Z,30nm,1.1s
**KLR Kul'dur 83.58 329** *d* *i* P **P** 09 57 54.1 -0.4
KLR pmax pmax
comp=Z,13nm,1.7s
**F07A Phinny Hill Vi 83.61 36** IAmb IAmb 09 57 56.3
comp=Z,21nm,0.8s
**G08A Pilot Rock 83.77 37** IAmb IAmb 09 57 57.4
comp=Z,38nm,0.9s
**J14K Nanvaranak Lak 83.79 6** P **P** 09 57 55.2 0.0
baz=192
**P23K Montague Islan 83.79 14** P **P** 09 57 55.8 +0.5
baz=207
**ZAIG Zacatecas 83.79 63** IAmb IAmb 09 57 58.7
comp=Z,39nm,1.4s
**L17K Donlin 83.80 8** P **P** 09 57 55.8 +0.5
baz=197,SNR=7.3
**MTPU Mount Pierson 83.80 46** IAmb IAmb 09 57 59.2
comp=Z,41nm,0.8s
**AY03 Cochrane 83.83 138** IAmb IAmb 09 57 59.8
comp=Z,25nm,1.0s
**MXC Moxie City 83.84 35** IAmb IAmb 09 57 57.5
comp=Z,24nm,0.9s
**N20K Mount Spurr 83.89 11** P **P** 09 57 56.7 +0.8
baz=202
**TCRU Three Creeks R 83.93 45** IAmb IAmb 09 57 59.3
comp=Z,32nm,0.9s
**WHN Wuhan 83.94 306** ⇑ *i* P **P** 09 57 56.9 +0.2
WHN S **SKSac** 10 07 59.5 +0.8
WHN pmax pmax
comp=Z,42nm,0.7s
**W18A Petrified Fore 83.97 49** IAmb IAmb 09 57 59.3
comp=Z,70nm,1.4s
**W18A Petrified Fore 83.97 49** P **P** 09 57 56.9 -0.2
baz=240,SNR=9.8
**LTY Liberty 84.07 34** IAmb IAmb 09 57 58.4
comp=Z,22nm,1.0s
**L18K Granite Mounta 84.11 9** P **P** 09 57 58.0 +1.2
baz=198
**121A Cookes Peak, D 84.11 52** IAmb IAmb 09 58 00.5
comp=Z,44nm,1.0s
**121A Cookes Peak, D 84.11 52** P **P** 09 57 57.8 0.0
baz=241
**HAWA Hanford 84.14 36** IAmb IAmb 09 57 59.1
comp=Z,36nm,0.9s
**M19K Big River Lodg 84.17 10** P **P** 09 57 57.2 0.0
baz=200
**CRAG Craig 84.25 23** P **P** 09 57 58.3 +0.7
baz=220
**RC01 Rabbit Creek A 84.27 13** P **P** 09 57 57.7 0.0
baz=205
**GAMB Gambell 84.29 2** P **P** 09 57 57.4 -0.2
baz=184
**L19K White Mountain 84.35 10** P **P** 09 57 58.0 -0.1
baz=200
**K17K Iditarod 84.36 8** P **P** 09 57 58.0 -0.1
baz=197
**PWL Port Wells 84.36 13** P **P** 09 57 57.8 -0.3
baz=206
**M20K Styx River 84.36 11** P **P** 09 57 57.9 -0.3
baz=202
**SUA Susitna One 84.41 12** P **P** 09 57 58.6 +0.1
baz=204
**KAIM Kayak Island 84.44 15** P **P** 09 57 58.9 +0.4
baz=210
**BMO Blue Mountains 84.45 38** IAmb IAmb 09 58 00.5
comp=Z,69nm,1.9s
**E08A Dider Farm, El 84.45 36** IAmb IAmb 09 58 00.6
comp=Z,25nm,0.9s
**MFID Camas Ranch 84.47 40** IAmb IAmb 09 58 00.8
comp=Z,21nm,0.9s
**H03S2 Juan Fernandez 84.47 124** T T 11 30 57.6
baz=248,slow=75,SNR=239
**H03S1 Juan Fernandez 84.49 124** T T 11 30 49.1
baz=248,slow=75,SNR=98
**H03S3 Juan Fernandez 84.49 124** T T 11 30 59.1
baz=248,slow=75,SNR=324
**DUG Dugway, Tooele 84.54 43** P **P** 09 57 59.6 -0.1
baz=237,SNR=13
**H03N2 Juan Fernandez 84.61 124** T T 11 30 47.5
baz=258,slow=71
**H03N3 Juan Fernandez 84.61 124** T T 11 30 56.7
baz=258,slow=71
**J16K Anvik River 84.62 7** P **P** 09 57 59.4 +0.1
J16K IAmb IAmb 09 58 00.8
comp=Z,66nm,2.0s
**J16K Anvik River 84.62 7** P **P** 09 57 59.3 0.0
baz=195
**H03N1 Juan Fernandez 84.63 124** T T 11 30 44.8
baz=258,slow=71
**GLI Glacier Island 84.65 14** P **P** 09 57 59.8 +0.2
baz=207
**EYAK Cordova Ski Ar 84.66 15** P **P** 09 57 59.8 +0.2
baz=208
**V35K Ketchikan 84.70 24** P **P** 09 57 60.0 +0.1
baz=221
**HMU Henry Mountain 84.72 46** IAmb IAmb 09 58 02.6
comp=Z,70nm,1.6s
**U33K Whale Pass 84.74 23** P **P** 09 58 00.4 +0.3
baz=220
**L20K Farewell, AK 84.79 10** P **P** 09 58 00.4 +0.1
baz=201
**M22K Willow 84.80 12** IAmb IAmb 09 58 10.2
comp=Z,56nm,1.3s
**M22K Willow 84.80 12** P **P** 09 58 00.6 +0.3
baz=204
**UBPT Khong Chiam 84.80 288** P **P** 09 58 02.0 +0.7
**KNK Knik Glacier 84.83 13** P **P** 09 58 00.5 0.0
baz=206
**COYC Coyhaique 84.84 137** P **P** 09 58 03.0 +1.9
**PMR Palmer 84.85 13** P **P** 09 58 00.0 -0.5
**PMR Palmer 84.85 13** IAmb IAmb 09 58 14.5
comp=Z,38nm,1.8s
**PMR Palmer 84.85 13** P **P** 09 58 00.4 -0.1
baz=205
**D08A Wollman Farm, 84.88 35** IAmb IAmb 09 58 02.8
comp=Z,31nm,0.9s
**J17K VABM Dome 84.91 8** P **P** 09 58 01.0 +0.2
baz=196
**E09A Wood Farm, Sta 84.97 36** IAmb IAmb 09 58 02.9
comp=Z,22nm,1.1s
**GHO Glory Hole Cre 85.06 13** IAmb IAmb 09 58 11.3
comp=Z,18nm,0.8s
**SNH Sunshine Point 85.06 16** IAmb IAmb 09 58 05.4
comp=Z,30nm,0.8s
**TLIG Tlapa 85.08 69** IAmb IAmb 09 58 05.2
comp=Z,41nm,1.2s
**S31K Pelican 85.13 20** P **P** 09 58 02.3 +0.4
baz=217
**F10A Beach Ranch, E 85.16 37** IAmb IAmb 09 58 03.7
comp=Z,38nm,0.9s
**I17K Unalakleet 85.19 7** P **P** 09 58 02.1 -0.1
baz=194
**SML Sawmill 85.21 13** P **P** 09 58 01.7 -0.7
baz=206
**S32K Killisnoo 85.29 21** P **P** 09 58 02.8 +0.1
baz=219
**J18K Innoko River 85.29 9** P **P** 09 58 02.5 -0.2
baz=198,SNR=10
**MESA MESA 85.29 16** IAmb IAmb 09 58 04.6
comp=Z,31nm,0.7s
**MESA MESA 85.29 16** P **P** 09 58 03.0 0.0
baz=212
**BMRM Bremner River 85.30 15** P **P** 09 58 02.7 -0.2
baz=210,SNR=5.1
**CUT Chulitna 85.37 12** P **P** 09 58 02.9 -0.1
baz=204
**HLID Hailey 85.40 40** P **P** 09 58 03.4 -0.6
baz=236,SNR=25
**SCM Sheep Creek Mo 85.45 13** IAmb IAmb 09 58 04.2
comp=Z,28nm,1.7s
**SCM Sheep Creek Mo 85.45 13** P **P** 09 58 03.7 0.0
baz=207
**KLU Klutina 85.45 14** P **P** 09 58 03.8 +0.1
baz=208
**B08A Colville Reser 85.46 34** IAmb IAmb 09 58 04.8
comp=Z,16nm,0.8s
**PPLA Purkeypile 85.47 11** P **P** 09 58 04.1 +0.3
baz=202
**SRU San Rafael Swe 85.47 45** IAmb IAmb 09 58 06.1
comp=Z,36nm,0.8s
**KULM Kulim 85.47 277** P **P** 09 58 04.5 -0.2
KULM IAmb IAmb 09 58 08.1
comp=Z,45nm,1.3s
**Y22D IRIS PASSCAL I 85.48 51** P **P** 09 58 04.1 -0.5
baz=242
**CRQE Cirque 85.49 16** P **P** 09 58 03.7 -0.1
baz=211,SNR=5.6
**MNTX Cornudas Mount 85.51 54** P **P** 09 58 05.5 +0.9
baz=242
**P17A Butcher Ranch, 85.51 45** IAmb IAmb 09 58 06.7
comp=Z,26nm,1.1s
**ISLE Juniper Island 85.55 16** IAmb IAmb 10 00 09.7
comp=Z,14nm,0.6s
**PNL Peninsula 85.56 18** P **P** 09 58 04.2 0.0
**PNL Peninsula 85.56 18** P **P** 09 58 04.2 0.0
baz=214
**K20K Telida 85.58 10** P **P** 09 58 04.2 0.0
baz=201
**JLU Jordanelle 85.64 44** IAmb IAmb 09 58 06.8
comp=Z,51nm,1.8s
**C09A Chrisman Ranch 85.68 35** IAmb IAmb 09 58 06.4
comp=Z,45nm,1.5s
**PINM Pinnacle 85.68 17** P **P** 09 58 04.7 -0.1
baz=213
**TABL Table Mountain 85.73 17** P **P** 09 58 05.2 0.0
TABL IAmb IAmb 09 58 06.1
comp=Z,16nm,0.7s
**TX31 Lajitas Ar. Si 85.76 57** IAmb IAmb 09 58 08.3
comp=Z,51nm,1.1s
**TXAR Lajitas Array 85.76 57** P **P** 09 58 06.9 +0.9
comp=Z,24nm,0.9s,baz=213,slow=6.0,SNR=194
TXAR pP **pwP** 09 59 01.6 -0.1
comp=Z,3.0nm,1.0s,baz=256,slow=5.0,SNR=2.1
comp=Z,24nm,0.9s
**H16K Elim 85.77 6** P **P** 09 58 05.1 +0.1
baz=193
**N25K Chitina, Valde 85.86 15** IAmb IAmb 09 58 06.5
comp=Z,12nm,0.7s
**N25K Chitina, Valde 85.86 15** P **P** 09 58 05.5 -0.2
baz=209,SNR=9.0
**MVCO Mesa Verde 85.88 48** P **P** 09 58 06.6 0.0
baz=240,SNR=5.9
**LL01 San Ignacio de 85.93 134** IAmb IAmb 09 58 09.3
comp=Z,31nm,1.1s
**TCUT Toone Canyon 85.94 43** IAmb IAmb 09 58 09.4
comp=Z,29nm,1.1s
**R32K Eaglecrest 85.94 21** P **P** 09 58 06.5 +0.5
baz=219
**M24K Tolsona, Glenn 85.94 14** P **P** 09 58 06.3 +0.2
baz=208
**J19K Poorman 85.95 9** P **P** 09 58 05.9 0.0
baz=199
**G15K Niukluk 85.95 5** P **P** 09 58 06.1 +0.2
baz=191
**LL02 Futaleuf 85.98 135** P **P** 09 58 08.5 +1.7
**P29M Windy Craggy 86.01 18** P **P** 09 58 06.6 +0.2

baz=216,SNR=5.2
**WAT6 Susitna Watana** 86.03 13 P P 09 58 06.1 -0.4
baz=206
**MCARA McCarthy VSAT** 86.05 15 P P 09 58 06.0 -0.4
baz=211
**WAT1 Susitna Watana** 86.09 12 P P 09 58 06.6 -0.1
baz=206
**CTG Chitna Glacier** 86.12 16 P P 09 58 06.7 -0.3
baz=212,SNR=10
**CTGM Chitina Glacie** 86.12 16 IAmb IAmb 09 58 07.9
comp=Z,13nm,0.8s
**ANMO Albuquerque** 86.23 51 P P 09 58 08.8 +0.5
ANMO IAmb IAmb 09 59 05.9
comp=Z,24nm,1.1s
**ANMO Albuquerque** 86.23 51 P P 09 58 07.6 -0.6
baz=242
**ANMO Albuquerque** 86.23 51*c i* P P 09 58 08.8 +0.5
ANMO pmax pmax
comp=Z,1.0nm,1.0s
**ALPN Alpine** 86.25 56 IAmb IAmb 09 58 10.3
comp=Z,41nm,0.9s
**O28M Mount Upton** 86.26 17 P P 09 58 07.8 -0.1
baz=213,SNR=10
**PLBC Pleasant Camp** 86.29 19 P P 09 58 07.7 +0.1
baz=217,SNR=5.6
**H17K Granite Mounta** 86.30 7 P P 09 58 08.0 +0.4
baz=195
**O29M Mount Kennedy** 86.32 18 P P 09 58 07.9 -0.1
baz=215
**J20K Nowinta River** 86.34 9 P P 09 58 07.8 -0.1
baz=201,SNR=6.5
**CHUM Lake Minchumin** 86.36 10 P P 09 58 08.1 +0.2
baz=202
**HEH HeiHe** 86.39 328 *e* P P 09 58 07.5 -0.9
HEH pmax pmax
comp=Z,16nm,1.3s
**HARP HAARP** 86.43 14 P P 09 58 08.6 +0.2
baz=209
**T35M Bob Quinn** 86.44 23 P P 09 58 08.7 +0.1
baz=222
**PECS Pecos** 86.51 55 IAmb IAmb 09 58 11.4
comp=Z,47nm,1.5s
**DHY Denali Highway** 86.55 13 P P 09 58 08.9 -0.2
baz=207
**RND Reindeer** 86.55 12 IAmb IAmb 09 58 11.8
comp=Z,22nm,1.0s
**NEW Newport** 86.57 35 P P 09 58 09.0 -0.5
baz=234,SNR=9.2
**ELIB Princess Elisa** 86.61 186 *d* P P 09 58 10.8 +1.3
comp=Z,26nm,0.9s
ELIB *dx* x 09 59 05.9
**SKAG Skagway** 86.61 20 P P 09 58 09.5 +0.3
baz=218
**P30M Million Dollar** 86.64 18 P P 09 58 09.6 +0.1
baz=216
**H18K Honhosa River** 86.69 7 P P 09 58 09.7 +0.2
baz=197
**G17K Kiwalik Mounta** 86.77 6 P P 09 58 10.2 +0.3
baz=194
**BPAW Bear Paw Mtn.** 86.79 11 P P 09 58 09.9 -0.1
baz=204
**YUK8 Steele Glacier** 86.81 17 P P 09 58 09.7 -0.8
baz=214
**MCK McKinley** 86.83 12 P P 09 58 09.6 -0.7
baz=205
**RDMU Red Mountain** 86.85 44 IAmb IAmb 09 58 12.3
comp=Z,14nm,0.8s
**PAX Paxson** 86.86 14 P P 09 58 10.0 -0.6
baz=209
**I20K Naaghedeneel** 86.88 9 P P 09 58 10.0 -0.3
baz=200
**YUK6 Outpost Mounta** 86.91 17 P P 09 58 10.5 -0.5
baz=215
**M26K Nabesna, AK** 86.93 15 IAmb IAmb 09 59 07.9
comp=Z,22nm,1.3s
**M26K Nabesna, AK** 86.93 15 P P 09 58 10.5 -0.3
baz=211,SNR=6.9
**HNS HongShan** 86.94 312 ⇓P P 09 58 11.4 0.0
HNS S S 10 08 30.8 -0.1
HNS pmax pmax
comp=Z,18nm,1.0s
**SEY Seymchan** 86.98 346 *d i* P P 09 58 09.9 -1.0
SEY pmax pmax
comp=Z,61nm,1.4s
**YUK3 Moose Creek** 87.03 16 P P 09 58 11.3 -0.2
baz=213,SNR=17
**YUK4 Talbot Arm** 87.16 17 P P 09 58 12.7 +0.5
baz=215
**M27K Edge Creek, AK** 87.17 15 IAmb IAmb 09 59 09.6
comp=Z,39nm,1.6s
**M27K Edge Creek, AK** 87.17 15 P P 09 58 11.8 -0.2
baz=212,SNR=9.8
**LYN LuoYang** 87.21 308 P P 09 58 12.7 0.0
LYN SKS SKSac 10 08 21.7 +2.7
LYN S ScS 10 08 37.2 -2.7
LYN pmax pmax
comp=Z,49nm,1.1s
LYN pmax pmax
comp=Z,190nm,4.8s
**Q32M Nakina River** 87.22 21 P P 09 58 12.1 -0.3
baz=221
**P32M Atlin** 87.23 20 P P 09 58 12.1 -0.2
baz=219
**BJI Beijing** 87.24 315 P P 09 58 12.0 -0.7
BJI pmax pmax
comp=Z,7.0nm,1.9s
**SAND Sanderson** 87.24 57 IAmb IAmb 09 58 14.6
comp=Z,17nm,0.9s
**H19K Roundabout Mou** 87.29 8 P P 09 58 12.6 +0.2
baz=198,SNR=6.9
**S22A 4UR Ranch, Cre** 87.30 48 IAmb IAmb 09 58 15.4
comp=Z,22nm,1.1s
**S22A 4UR Ranch, Cre** 87.30 48 P P 09 58 13.9 +0.4
baz=241,SNR=44
**G18K Tagagawik** 87.37 7 P P 09 58 12.7 -0.1
baz=196
**L26K Log Cabin Wild** 87.39 14 P P 09 58 12.7 -0.2
baz=210
**O30N Mendenhall** 87.42 18 P P 09 58 13.2 0.0
baz=217,SNR=11
**H20K Anotleneega Mo** 87.47 9 P P 09 58 13.7 +0.4
baz=200,SNR=5.6
**DLMT Dillon** 87.48 39 IAmb IAmb 09 58 15.7
comp=Z,32nm,1.4s
**O20A White River Ci** 87.51 45 IAmb IAmb 09 58 15.5
comp=Z,19nm,0.8s
**O20A White River Ci** 87.51 45 P P 09 58 14.5 +0.2
baz=240,SNR=19
**MSO Missoula** 87.51 37 IAmb IAmb 09 58 14.8
comp=Z,21nm,1.6s
**MSO Missoula** 87.51 37 P P 09 58 13.5 -0.5
baz=236
**TROLL Troll, Antarti** 87.51 180 ⇑P P 09 58 14.8 +1.0
comp=Z,584nm,0.6s
TROLL ⇑sP pwP 09 59 10.8 +0.7
comp=Z,163nm,0.7s
**K24K Donnelly Dome** 87.53 13 P P 09 58 13.8 +0.2
baz=208
**ENH Enshi** 87.56 304 P P 09 58 13.9 -0.6
**NEA2 Nenana** 87.59 11 P P 09 58 14.0 +0.2
baz=205
**DLBC Dease Lake** 87.60 22 P P 09 58 14.2 +0.1
baz=222,SNR=6.3
**F17K Baldwin Pennin** 87.62 6 P P 09 58 13.4 -0.5
baz=194
**SRIT Nakonsritamara** 87.63 280 P P 09 58 17.1 +1.9
**WRH Wood River Hil** 87.66 12 IAmb IAmb 09 59 14.2
comp=Z,16nm,1.1s
**N30M Aishikik Lake** 87.69 18 P P 09 58 14.3 -0.1
baz=216
**MLY Manley** 87.69 11 P P 09 58 14.2 -0.1
baz=204
**WHY Whitehorse** 87.70 19 P P 09 58 14.5 -0.1
baz=218
**SNAA Sanae** 87.74 178 P P 09 58 15.7 +1.0
SNAA IAmb IAmb 09 58 16.8
comp=Z,19nm,1.0s
**SNAA Sanae** 87.74 178 ⇑P P 09 58 15.5 +0.7
comp=Z,268nm,0.9s
SNAA ⇑sP pwP 09 59 11.7 +0.6
comp=Z,109nm,1.1s
**SNAA Sanae** 87.74 178 P P 09 58 15.3 +0.5
comp=Z,14nm,0.9s,baz=191,slow=3.9,SNR=45
SNAA pP pwP 09 59 10.9 -0.2
comp=Z,6.3nm,1.1s,baz=194,slow=2.6,SNR=2.9
comp=Z,14nm,0.9s
**SNAA Sanae** 87.74 178 *ce* P P 09 58 15.6 +0.8
SNAA pmax pmax
comp=Z,21nm,1.0s
**L27K Beaver Creek,** 87.78 15 P P 09 58 14.5 -0.3
baz=212
**BCAR Beaver Creek A** 87.79 15 P P 09 58 14.6 -0.3
**G19K Purcell Mounta** 87.80 8 IAmb IAmb 09 59 12.5
comp=Z,20nm,1.5s
**G19K Purcell Mounta** 87.80 8 P P 09 58 14.3 -0.5
baz=198
**VNA3 Neumayer Olymp** 87.81 176 ⇑P P 09 58 15.9 +0.9
comp=Z,30nm,0.8s
VNA3 ⇑sP pwP 09 59 11.8 +0.6
comp=Z,12nm,0.9s
**SURA Surathani** 87.81 281 P P 09 58 17.1 +1.1
**HDA Harding Lake** 87.83 12 P P 09 58 14.5 -0.4
baz=207
**SMCO Snowmass** 87.89 47 IAmb IAmb 09 58 17.7
comp=Z,15nm,0.8s
**PLCA Paso Flores** 87.89 133 P P 09 58 18.0 +1.8
PLCA IAmb IAmb 09 58 19.4
comp=Z,38nm,1.1s
**PLCA Paso Flores** 87.89 133 P P 09 58 17.9 +1.8
comp=Z,19nm,1.0s,baz=242,slow=5.4,SNR=26
comp=Z,19nm,1.0s
**PLCA Paso Flores** 87.89 133 P P 09 58 18.0 +1.8
PLCA pmax pmax
comp=Z,38nm,1.2s
**H21K Melozitna Rive** 87.94 9 P P 09 58 15.4 -0.1
baz=202
**F18K Selawik** 87.94 7 P P 09 58 15.5 +0.1
baz=195
**FLWY Flagg Ranch** 87.94 41 IAmb IAmb 09 58 20.3
comp=Z,21nm,1.1s
**BW06 Boulder Array** 87.97 43 P P 09 58 15.8 -0.7
baz=239,SNR=8.7
**PDAR Pinedale Array** 87.97 43 P P 09 58 16.0 -0.4
**PDAR Pinedale Array** 87.97 43 P P 09 58 16.2 -0.3
comp=Z,3.2nm,0.8s,baz=204,slow=3.3,SNR=30
PDAR pP pP 09 59 10.1 +0.3
comp=Z,1.6nm,0.8s,baz=236,slow=2.7,SNR=2.7
comp=Z,3.2nm,0.8s
**R33M Jennings River** 87.99 21 P P 09 58 15.7 -0.3
baz=222
**P33M Teslin, Yukon** 88.00 20 P P 09 58 15.7 -0.3
baz=220,SNR=6.4
**I23K Minto, Yukon-K** 88.04 11 P P 09 58 15.9 0.0
baz=205
**YHL Hebgen Lake** 88.05 40 IAmb IAmb 09 58 19.2
comp=Z,25nm,1.1s
**SCRK Sand Creek** 88.07 14 P P 09 58 16.1 -0.1
baz=210
**COLA College** 88.07 12 P P 09 58 15.3 -0.7
**COLA College** 88.07 12 P P 09 58 14.8 -1.2
**COLA College** 88.07 12 P P 09 58 15.8 -0.2
baz=206
**COLA College** 88.07 12 ⇓*e* P P 09 58 17.5 +1.5
COLA pmax pmax
comp=Z,7.0nm,0.9s
**N31M Braeburn, Yuko** 88.09 18 P P 09 58 16.1 -0.2
baz=217,SNR=6.8
**YMR Madison River** 88.09 40 IAmb IAmb 09 58 19.3
comp=Z,49nm,1.7s
**IMAR Indian Mountai** 88.10 9 P P 09 58 15.7 -0.5
**M29M Somme Creek** 88.11 17 P P 09 58 16.3 -0.2
baz=215,SNR=10
**ILAR Eielson Array** 88.16 12 P P 09 58 15.3 -1.2
comp=Z,1.1nm,0.6s,baz=214,slow=5.4,SNR=29
ILAR pP pP 09 59 09.6 -0.2
comp=Z,2.7nm,1.0s,baz=225,slow=6.0,SNR=3.2
comp=Z,1.1nm,0.6s
**BOZ Bozeman (W)** 88.18 39 IAmb IAmb 09 58 19.1
comp=Z,22nm,1.1s
**BOZ Bozeman (W)** 88.18 39 P P 09 58 16.9 -0.4
baz=238,SNR=28
**H17A Grant Village** 88.18 41 P P 09 58 17.4 -0.1
baz=239,SNR=5.1
**E17K Hotham Inlet** 88.19 6 P P 09 58 16.4 -0.2
baz=193
**DRIO Del Rio** 88.20 58 IAmb IAmb 09 58 20.1
comp=Z,25nm,1.1s
**GYA Guiyang** 88.23 299 ⇓P P 09 58 17.6 -0.3
GYA pmax pmax
comp=Z,23nm,0.9s
**SDCO Great Sand Dun** 88.23 48 P P 09 58 17.3 -0.6
**SDCO Great Sand Dun** 88.23 48 P P 09 58 17.2 -0.6
baz=242
**VNA2 Neuayer--Watz** 88.27 176 ⇑P P 09 58 18.5 +1.4
comp=Z,27nm,0.6s,baz=186,slow=4.3
VNA2 ⇑sP pwP 09 59 14.1 +0.8
comp=Z,7.7nm,0.8s,baz=206,slow=3.1
**J25K Salcha River,** 88.33 13 P P 09 58 17.2 -0.2
**J25K Salcha River,** 88.33 13 P P 09 58 17.6 +0.2
baz=209
**POKR Poker Plat Res** 88.37 12 P P 09 58 16.9 -0.6
baz=207
**F19K Shaleruckik Mo** 88.38 7 P P 09 58 17.0 -0.4
**F19K Shaleruckik Mo** 88.38 7 P P 09 58 16.9 -0.6
baz=197
**LKWY Lake** 88.38 41 IAmb IAmb 09 58 21.4
comp=Z,16nm,1.2s
**H22K Ishtalitna Cre** 88.38 10 P P 09 58 16.8 -0.8
baz=203,SNR=6.9
**OZNA Ozona** 88.43 56 IAmb IAmb 09 58 20.4
comp=Z,22nm,1.4s
**VNA1 Neumayer--Stat** 88.48 176 ⇑P P 09 58 19.6 +1.4
comp=Z,43nm,0.9s
VNA1 ⇑sP pwP 09 59 14.8 +0.4
comp=Z,16nm,1.1s
**MSTX Muleshoe** 88.49 53 IAmb IAmb 09 58 20.5
comp=Z,27nm,0.9s
**MSTX Muleshoe** 88.49 53 P P 09 58 18.6 -0.3
baz=244
**K27K Chicken** 88.54 14 P P 09 58 18.2 -0.1
baz=212
**J26L Joseph Creek** 88.62 14 IAmb IAmb 09 58 31.6
comp=Z,16nm,1.1s
**J26L Joseph Creek** 88.62 14 P P 09 58 18.7 -0.1
baz=210,SNR=19
**YMP Mirror Lake Pl** 88.62 41 IAmb IAmb 09 59 07.2
comp=Z,21nm,1.7s
**G21K Allakaket** 88.63 9 P P 09 58 18.6 -0.1
baz=201
**N32M Quiet Lake** 88.64 19 P P 09 58 19.0 +0.1
baz=220
**E18K Tukpahlearik C** 88.64 6 P P 09 58 18.2 -0.5
baz=194
**ZEA Zeya** 88.65 330 *e* P P 09 58 19.2 +0.2
ZEA pmax pmax
comp=Z,10.0nm,1.8s
**833A Chaparral WMA,** 88.72 59 P P 09 58 19.3 -0.7
baz=246
**T25A Trinidad** 88.72 49 IAmb IAmb 09 58 21.4
comp=Z,24nm,1.7s
**T25A Trinidad** 88.72 49 P P 09 58 19.2 -0.9
baz=243
**L29M L29M** 88.75 16 IAmb IAmb 09 59 17.2
comp=Z,40nm,1.6s
**L29M L29M** 88.75 16 P P 09 58 19.3 -0.1
baz=215,SNR=16
**F20K Avaraart Lake** 88.83 8 P P 09 58 19.6 0.0
baz=199,SNR=8.2
**SGCY Sterling City** 88.85 55 IAmb IAmb 09 58 23.1
comp=Z,31nm,1.4s
**RWWY Rawlins** 88.95 44 IAmb IAmb 09 58 22.2
comp=Z,20nm,1.1s
**RDOG Red Dog Mine** 89.05 5 P P 09 58 20.9 +0.3
baz=192
**M31M Drury Creek, Y** 89.06 18 P P 09 58 20.5 -0.3
baz=219
**PRP Porcupine Dome** 89.09 12 P P 09 58 20.9 -0.1
baz=208
**ISCO Idaho Springs** 89.11 47 P P 09 58 21.9 -0.1
**ISCO Idaho Springs** 89.11 47 P P 09 58 21.5 -0.5
baz=242,SNR=5.6
**ISCO Idaho Springs** 89.11 47 P P 09 58 21.9 -0.1
ISCO pmax pmax
comp=Z,3.0nm,0.9s
**BI02 San Fabin de** 89.13 129 IAmb IAmb 09 58 25.5
comp=Z,14nm,0.9s
**DAWY Dawson** 89.22 15 P P 09 58 21.8 +0.2
**DAWY Dawson** 89.22 15 P P 09 58 21.3 -0.3
baz=214,SNR=20
**XLT XiLinHaoTe** 89.22 318 *e* P P 09 58 22.6 +0.5
XLT pmax pmax
comp=Z,13nm,1.0s
**WTLY Watson Lake, Y** 89.26 22 IAmb IAmb 09 58 27.0
comp=Z,18nm,1.4s
**WTLY Watson Lake, Y** 89.26 22 P P 09 58 21.9 +0.1
baz=224
**JCT Junction City** 89.28 57 IAmb IAmb 09 58 24.0
comp=Z,41nm,1.9s
**JCT Junction City** 89.28 57 P P 09 58 22.0 -0.6
baz=246
**F21K Alatna River** 89.30 9 P P 09 58 22.4 +0.6
baz=201
**HNDO Hondo** 89.30 58 IAmb IAmb 09 58 25.6
comp=Z,30nm,1.1s
**G22K Bettles** 89.31 9 P P 09 58 22.1 +0.3
baz=203
**G23K Bananza Creek** 89.35 10 P P 09 58 22.0 -0.1
baz=204
**RLMT Red Lodge** 89.35 41 IAmb IAmb 09 58 24.8
comp=Z,17nm,1.1s
**RLMT Red Lodge** 89.35 41 P P 09 58 22.0 -0.9
baz=240,SNR=12
**FARO Faro, Yukon** 89.39 19 P P 09 58 22.3 -0.1
baz=220
**EGAK Eagle** 89.39 14 P P 09 58 22.4 +0.1
baz=212,SNR=8.5
**I26K Coal Creek Min** 89.40 13 P P 09 58 22.2 -0.1
baz=211
**N23A Red Feather La** 89.41 46 P P 09 58 22.8 -0.5
baz=242,SNR=10
**BILL Bilibino** 89.44 353 *e* P P 09 58 21.7 -0.7
BILL pmax pmax
comp=Z,6.0nm,0.9s
**C17K DeLong Mountai** 89.44 5 P P 09 58 22.7 +0.3
baz=192
**SN05 Snyder 5** 89.45 54 IAmb IAmb 09 58 24.4
comp=Z,23nm,0.8s
**K29M Barlow Dome** 89.51 16 P P 09 58 23.4 +0.4
baz=216,SNR=13
**SN07 Snyder 07** 89.53 54 IAmb IAmb 09 58 24.6
comp=Z,18nm,0.9s
**RTBA Rita Blanca** 89.61 51 IAmb IAmb 09 58 24.9
comp=Z,12nm,1.0s
**XAN Xi'an** 89.61 307 ⇓P P 09 58 24.0 -0.1
XAN S S 10 08 59.1 +2.9
XAN pmax pmax
comp=Z,44nm,1.6s
XAN pmax pmax
comp=Z,240nm,4.9s
**TOAD Toad River Com** 89.66 24 P P 09 58 23.7 0.0
baz=227,SNR=38
**AMTX Amarillo** 89.70 52 IAmb IAmb 09 58 25.9
comp=Z,21nm,0.9s
**AMTX Amarillo** 89.70 52 P P 09 58 23.9 -0.7
baz=244
**LIRD Liard River Hi** 89.72 23 P P 09 58 24.0 +0.1
baz=226,SNR=5.8
**DKNS Dickens** 89.75 54 IAmb IAmb 09 58 26.9
comp=Z,26nm,1.3s
**F22K John River** 89.75 9 P P 09 58 24.3 +0.3
baz=202
**G24K Hadwenzic Riv** 89.78 11 P P 09 58 24.1 0.0
baz=207
**C18K Utukok River** 89.78 5 P P 09 58 24.0 -0.1
baz=194
**COLD Coldfoot** 89.80 10 P P 09 58 24.1 0.0
baz=204
**J29N Klondike Camp** 89.83 15 IAmb IAmb 09 58 25.7
comp=Z,12nm,0.7s
**J29N Klondike Camp** 89.83 15 P P 09 58 24.5 +0.1
baz=215
**HIA Hailar** 89.86 324 *d i* P P 09 58 24.0 -0.9
**K22A Casper** 89.86 44 IAmb IAmb 09 58 26.6
comp=Z,15nm,1.1s
**K22A Casper** 89.86 44 P P 09 58 24.6 -0.6
baz=241,SNR=6.5
**E20K Nigu River** 89.92 7 P P 09 58 24.3 -0.5
baz=199
**D19K Kuna River** 89.93 7 P P 09 58 24.4 -0.4
baz=197
**I27K Kandik River** 89.99 14 P P 09 58 24.7 -0.4
baz=212
**G25K Bearman Lake** 90.09 11 P P 09 58 25.3 -0.2
baz=208
**I28M Miner Creek** 90.24 14 P P 09 58 25.9 -0.5
baz=214,SNR=5.5
**BRDY Brady** 90.24 57 IAmb IAmb 09 58 28.2
comp=Z,12nm,1.0s
**ABTX Abilene, Hawle** 90.29 55 P P 09 58 26.8 -0.5
baz=246
**D20K Etivluk River** 90.31 7 P P 09 58 26.0 -0.5
baz=198
**C19K Lookout Ridge** 90.37 6 P P 09 58 26.8 0.0
baz=196
**E21K Killik River** 90.38 8 P P 09 58 26.9 +0.1
baz=201
**E22K Anaktuvuk Pass** 90.39 9 P P 09 58 26.7 -0.2
baz=203
**J30M Hart River** 90.41 16 P P 09 58 27.0 -0.2
baz=217,SNR=11
**F24K Squaw Lake** 90.44 11 IAmb IAmb 09 58 36.5
comp=Z,22nm,1.9s
**F24K Squaw Lake** 90.44 11 P P 09 58 27.1 -0.1
baz=206
**TGTN Hyland Airport** 90.46 21 P P 09 58 27.4 0.0
baz=224
**H27K Steamboat Moun** 90.54 13 P P 09 58 27.8 +0.2
baz=213,SNR=5.9
**EGMT Eagleton** 90.55 38 IAmb IAmb 09 58 29.7
comp=Z,22nm,1.2s
**EGMT Eagleton** 90.55 38 P P 09 58 28.0 -0.1
baz=239,SNR=6.1
**I29M Ogilvie Camp,** 90.55 15 P P 09 58 27.8 +0.1
baz=215
**E23K Chandalar** 90.65 10 P P 09 58 28.1 -0.1
baz=205
**G26K Porcupine Rive** 90.69 12 P P 09 58 28.4 +0.2
baz=210
**HHC Hu-ho-hao-te** 90.72 314 *e* P P 09 58 29.6 +0.4
HHC pP pP 09 59 13.6 -8.9
HHC S S 10 09 08.8 +2.6
HHC pmax pmax
comp=Z,13nm,0.6s
HHC pmax pmax
comp=Z,120nm,4.6s
**KSCO Kaye Shedlock'** 90.82 48 P P 09 58 29.2 -0.5
baz=244
**E24K Your Creek** 90.84 10 P P 09 58 29.2 +0.1
baz=206
**SMWD Samnorwood** 90.87 53 IAmb IAmb 09 58 31.2
comp=Z,18nm,0.9s
**F25K Christian Rive** 90.91 11 P P 09 58 29.5 +0.1
baz=208
**I30M Mount Dempster** 90.92 16 P P 09 58 29.2 -0.4
baz=217,SNR=13
**KMI Kunming** 90.95 296 ⇑P P 09 58 30.6 -0.2
KMI pmax pmax
comp=Z,11nm,1.7s
**D22K Ayikyak River** 90.96 8 P P 09 58 29.6 +0.1
baz=202
**BMAR Burnt Mountain** 90.96 12 P P 09 58 29.6 0.0
**KOTAN Kotaneelee Air** 90.97 23 P P 09 58 29.7 0.0
baz=228
**G27K Doyon Strip** 91.01 13 P P 09 58 29.9 +0.1
baz=212
**435B Jarrell** 91.15 58 P P 09 58 30.5 -0.8
baz=247
**TOLK Toolik Lake Re** 91.19 9 P P 09 58 30.5 -0.2
baz=205
**H29M Whitestone** 91.24 14 IAmb IAmb 09 58 40.7
comp=Z,8.6nm,0.8s
**H29M Whitestone** 91.24 14 P P 09 58 30.6 -0.2
baz=215,SNR=6.1
**F26K Sheenjek River** 91.27 12 P P 09 58 31.1 +0.1
baz=210
**A19K Wainwright** 91.31 5 P P 09 58 30.9 -0.1
baz=194
**D23K Nanushuk River** 91.32 9 P P 09 58 31.5 +0.3
baz=204
**B21K Ikpikpuk River** 91.41 7 P P 09 58 31.3 -0.1
baz=200
**B20K Meade River** 91.49 6 P P 09 58 31.8 0.0
baz=198
**WTFS Witchita Falls** 91.66 55 IAmb IAmb 09 58 34.8
comp=Z,20nm,0.9s
**BTO Baotou** 91.66 313 *e* P P 09 58 34.7 +1.2
BTO pP pP 09 59 25.3 -1.6
BTO pmax pmax
comp=Z,22nm,0.4s
BTO pmax pmax
comp=Z,150nm,8.8s
**WHTX Lake Whitney,** 91.73 56 IAmb IAmb 09 58 35.1
comp=Z,19nm,0.8s
**WHTX Lake Whitney,** 91.73 56 P P 09 58 33.0 -0.9

baz=247
**FW07 Weatherford 91.75 56** lAmb lAmb 09 58 35.3
comp=Z,19nm,0.8s
**EPYK Eagle Plains 91.75 15** lAmb lAmb 09 59 33.6
comp=Z,22nm,1.6s
**EPYK Eagle Plains 91.75 15** P **P** **09 58 33.2 -0.1**
baz=216
**D24K Happy Valley 91.77 9** P **P** **09 58 33.2 0.0**
baz=206
**CMAR Chiang Mai Arr 91.78 289** P **P** **09 58 34.8 +0.3**
**CMAR Chiang Mai Arr 91.78 289** P **P** **09 58 35.1 +0.7**
comp=Z,7.4nm,0.9s,baz=117,slow=2.8,SNR=32
CMAR pP **pwP** **09 59 29.6 -1.8**
comp=Z,1.8nm,0.4s,baz=106,slow=2.2,SNR=1.9
CMAR PP **PP** **10 02 17.9 +1.1**
comp=Z,1.6nm,0.3s,baz=126,slow=6.0,SNR=6.2
CMAR PKKPbc **PKKPbc** **10 15 53.2 +1.5**
comp=Z,0.8nm,0.4s,baz=302,slow=5.2,SNR=4.1
comp=Z,7.4nm,0.9s
**CMAR Chiang Mai Arr 91.78 289** *i* P **P** **09 58 35.5 +1.0**
CMAR pmax pmax
comp=Z,8.0nm,0.9s
**WMOK Wichita Mounta 91.81 54** P **P** **09 58 33.8 -0.5**
baz=246
**G29M Pine Creek 91.89 14** P **P** **09 58 34.0 +0.2**
baz=215
**LAO LASA Array 91.97 40** P **P** **09 58 34.7 -0.1**
baz=242,SNR=17
**F28M Old Crow 92.06 13** P **P** **09 58 34.5 -0.2**
baz=214
**FW14 Alvarado 92.09 56** lAmb lAmb 09 58 36.7
comp=Z,20nm,0.9s
**C23K Itkillik River 92.13 9** lAmb lAmb 09 59 39.5
comp=Z,17nm,1.6s
**C23K Itkillik River 92.13 9** P **P** **09 58 34.7 -0.1**
baz=204
**RSSD Black Hills 92.15 43** P **P** **09 58 35.7 -0.2**
**RSSD Black Hills 92.15 43** P **P** **09 58 35.3 -0.5**
baz=243
**RSSD Black Hills 92.15 43** P **P** **09 58 35.7 -0.2**
RSSD pmax pmax
comp=Z,42nm,1.0s
**E27K Coleen River 92.19 12** P **P** **09 58 35.1 -0.1**
baz=212
**HKT Hockley 92.22 59** P **P** **09 58 36.5 +0.4**
**HKT Hockley 92.22 59** *c i* P **P** **09 58 36.5 +0.4**
HKT pmax pmax
comp=Z,35nm,1.5s
**B22K Teshekpuk Lake 92.23 8** P **P** **09 58 35.4 +0.1**
baz=201
**C24K Franklin Bluff 92.30 9** P **P** **09 58 35.5 -0.1**
baz=206
**PZH PanZhiHua 92.31 297** P **P** **09 58 36.8 -0.1**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,100nm,3.5s
**D25K Kavik River 92.31 10** P **P** **09 58 36.1 +0.3**
baz=208
**CD2 Chengdu 92.33 302** *e* P **P** **09 58 37.4 +0.6**
**G30M tAoh Zraii Nji 92.36 15** lAmb lAmb 09 59 33.4
comp=Z,24nm,1.4s
**G30M tAoh Zraii Nji 92.36 15** P **P** **09 58 36.0 0.0**
baz=217
**X34A Smith Ranch, M 92.47 54** **P** **09 58 38.0 +0.7**
**OK038 West end E0370 92.54 52** P **P** **09 58 38.2 +0.6**
**PETF Flores 92.54 73** P **P** **09 58 38.5 +0.6**
**A22K Sinclair Lake 92.67 7** P **P** **09 58 37.5 +0.2**
baz=200
**CBKS Cedar Bluff 92.77 50** lAmb lAmb 09 58 39.9
comp=Z,15nm,0.9s
**CBKS Cedar Bluff 92.77 50** P **P** **09 58 38.2 -0.4**
baz=246
**G31M Satah River 92.79 15** lAmb lAmb 09 59 37.4
comp=Z,13nm,1.1s
**G31M Satah River 92.79 15** P **P** **09 58 37.7 -0.2**
baz=219
**LCO Las Campanas 92.83 122** P **P** **09 58 40.1 +0.6**
**LCO Las Campanas 92.83 122** P **P** **09 58 40.1 +0.6**
LCO pmax pmax
comp=Z,25nm,1.1s
**YAK Yakutsk 92.95 338** *ce* P **P** **09 58 38.2 -0.6**
YAK pmax pmax
comp=Z,13nm,0.5s
**E28M Babbage River 92.96 13** P **P** **09 58 39.1 +0.3**
baz=214
**F30M Barrier River 92.97 14** P **P** **09 58 39.3 +0.5**
baz=217
**C27K Jago River 93.03 11** P **P** **09 58 39.5 +0.4**
baz=210
**FNO Franklin 93.06 54** lAmb lAmb 09 58 41.5
comp=Z,14nm,0.9s
**C26K Camden Bay 93.08 10** P **P** **09 58 39.6 +0.3**
baz=209
**E29M Blow River 93.13 13** P **P** **09 58 39.9 +0.4**
baz=216
**D27M Malcolm River 93.21 12** P **P** **09 58 40.5 +0.5**
baz=213
**F31M Tsiigehtchic 93.33 15** lAmb lAmb 09 59 40.6
comp=Z,27nm,1.4s
**F31M Tsiigehtchic 93.33 15** P **P** **09 58 40.7 +0.3**
baz=219
**D28M Stokes Point 93.72 12** P **P** **09 58 42.7 +0.5**
baz=215
**OK031 S. Brethren Rd 93.75 53** lAmb lAmb 09 58 44.1
comp=Z,14nm,1.1s
**OK052 Battle Ridge R 93.79 53** lAmb lAmb 09 58 44.4
comp=Z,26nm,1.3s
**AC06 Mina Casimiro 93.82 121** lAmb lAmb 09 58 47.2
comp=Z,28nm,1.4s
**NATX Nacogdoches 93.83 58** P **P** **09 58 43.7 +0.1**
baz=248
**DGMT Dagmar 94.02 39** P **P** **09 58 44.6 +0.5**
baz=243,SNR=9.7
**INK Inuvik 94.05 15** P **P** **09 58 44.2 +0.5**
baz=220
**Z38A Mt. Pleasant 94.14 56** lAmb lAmb 09 58 46.9
comp=Z,21nm,1.1s
**LZH Lanzhou 94.25 307** *e* P **P** **09 58 44.5 -1.1**
LZH sP pwP 09 59 51.9 +9.4
LZH pmax pmax
comp=Z,27nm,1.0s
**TNCH TengChong 94.48 295** *e* P **P** **09 58 47.0 0.0**
TNCH pmax pmax
comp=Z,120nm,3.5s
**TUL3 Leonard 94.52 53** lAmb lAmb 09 58 47.3
comp=Z,9.3nm,1.2s
**TUL3 Leonard 94.52 53** P **P** **09 58 46.7 +0.1**
baz=248
**BGNE Belgrade 94.93 48** P **P** **09 58 48.5 +0.1**
baz=247
**KSU1 Kansas State U 95.12 50** P **P** **09 58 49.5 +0.1**
baz=248
**SUSD Miller 95.59 45** P **P** **09 58 51.5 +0.2**
baz=247
**MIAR Mount Ida 95.70 55** P **P** **09 58 52.2 +0.1**
baz=249
**U38A Gravette 95.77 53** lAmb lAmb 09 59 50.3
comp=Z,12nm,1.5s
**MDND Maddock 96.53 41** P **P** **09 58 55.4 -0.1**
baz=246
**ULN Ulaanbaatar 96.64 319** *d i* P **P** **09 58 56.1 -0.1**
ULN pmax pmax
comp=Z,3.0nm,1.3s
**PATCX Punta Patache 96.76 115** P **P** **09 58 59.7 +2.3**
**ECSD EROS Data Cent 96.87 46** P **P** **09 58 57.0 -0.2**
baz=248
**SONM Songino Array 97.03 319** P **P** **09 58 56.3 -1.6**
comp=Z,0.7nm,0.5s,baz=117,slow=5.9,SNR=5.2
SONM PP **PP** **10 02 53.3 -3.8**
comp=Z,0.3nm,0.4s,baz=103,slow=6.5,SNR=3.9
comp=Z,0.7nm,0.5s
**LVC Limon Verde 97.04 117** P Pdif 09 59 02.3 +3.3
LVC lAmb lAmb 09 59 03.2
comp=Z,13nm,1.1s
**LVC Limon Verde 97.04 117** P Pdif 09 59 02.3 +3.2
LVC pmax pmax
comp=Z,13nm,1.2s
**HMBC Humberstone 97.22 115** P Pdif 09 59 02.1 +2.6
**MGMO Mountain Grove 97.61 53** lAmb lAmb 09 59 02.7
comp=Z,6.1nm,0.9s
**R40A Maddies Statio 98.00 52** lAmb lAmb 09 59 03.7
comp=Z,5.0nm,1.0s
**SCIA State Center 98.55 49** P Pdif 09 59 04.6 -0.1
baz=250
**CCM Cathedral Cave 98.68 53** P Pdif 09 59 05.3 -0.1
baz=251

**AGMN Agassiz Nation 99.03 42** P **Pdif** **09 59 06.4 -0.3**
baz=249
**TIXI Tiksi 99.40 345** *i* P **Pdif** **09 59 06.3 -1.5**
TIXI pmax pmax
comp=Z,8.0nm,1.5s
**ULM Lac du Bonnet 99.71 40** P **Pdif** **09 59 08.8 -0.9**
comp=Z,2.4nm,0.8s,baz=277,slow=6.1,SNR=6.2
comp=Z,2.4nm,0.8s
**SPMN Marine on St. 99.95 45** P **Pdif** **09 59 11.1 +0.2**
baz=251
**LRAL Lakeview Retre 100.36 59** P **Pdif** **09 59 13.0 -0.1**
baz=252
**LPAZ La Paz 100.42 112** P **Pdif** **09 59 15.8 +1.4**
comp=Z,3.4nm,0.8s,baz=251,slow=4.0,SNR=16
LPAZ PP **PP** **10 03 25.3 +1.6**
comp=Z,4.5nm,1.1s,baz=258,slow=4.4,SNR=9.0
**WVT Waverly 100.66 55** P **Pdif** **09 59 14.1 -0.2**
baz=252
**JFWS Jewell Farm 100.96 48** P **Pdif** **09 59 15.5 0.0**
baz=252
**WMQ Urumqi 108.35 311** Pdif **Pdif** **09 59 49.8 +1.4**
**ZSN Zaisan 110.92 314** *e* PKiKP **PKiKP** **10 03 57.9 -0.1**
baz=314
**ZSN Zaisan 110.92 314** *i* PKiKP **PKiKP** **10 03 57.8 -0.2**
**ZALV Zalesovo Beam 111.72 321** PKiKP **PKiKP** **10 03 58.3 -1.0**
comp=Z,1.1nm,0.5s,baz=108,slow=0.6,SNR=7.6
**MK31 Makanchi Array 112.58 313** *d i* PKiKP **PKiKP** **10 03 59.7 -1.5**
**MKAR Makanchi Array 112.58 313** *d* PKiKP **PKiKP** **10 04 00.1 -1.1**
comp=Z,1.8nm,0.4s,baz=76,slow=1.8,SNR=33
MKAR PKKPbc **PKKPbc** **10 14 51.1 -0.8**
comp=Z,1.3nm,0.8s,baz=280,slow=4.2,SNR=8.2
MKAR PKKPab **PKKPab** **10 15 00.2 +1.8**
comp=Z,0.8nm,0.9s,baz=245,slow=2.0,SNR=4.2
**SHLS Shalkode 114.17 309** *e* PKiKP PKPdf 10 04 03.3 -1.2
baz=309
**SHLS Shalkode 114.17 309** *i* PKiKP PKPdf 10 04 03.3 -1.2
**SEM Semipalatinsk 114.25 317** *e* PKP PKPdf 10 04 03.6 -0.9
baz=317
**SEM Semipalatinsk 114.25 317** *e* PKiKP PKPdf 10 04 03.5 -1.0
**UZB Uzunbulak 114.48 309** *e* PKP PKPdf 10 04 04.4 -0.8
baz=309
**UZB Uzunbulak 114.48 309** *e* PKiKP PKPdf 10 04 04.3 -0.8
**SATY Saty 114.92 309** *e* PKP PKPdf 10 04 05.0 -1.0
baz=309
**SATY Saty 114.92 309** *e* PKiKP PKPdf 10 04 04.9 -1.0
**TDK Taldyqorghan 115.10 311** *e* PKP **PKPdf** **10 04 05.1 -1.0**
baz=311
**TDK Taldyqorghan 115.10 311** *e* PKiKP **PKPdf** **10 04 05.0 -1.0**
**KURK Kurchatov 115.30 317** **PKPdf** **10 04 05.3 -0.9**
**KURK Kurchatov 115.30 317** ‖ *i* PKiKP **PKPdf** **10 04 03.7 -2.5**
**KURBB Kurchatov Arra 115.35 317** PKP **PKPdf** **10 04 05.2 -1.1**
comp=Z,3.3nm,0.7s,baz=96,slow=1.8,SNR=32
KURBB PKKPbc **PKKPbc** **10 14 42.1 -0.4**
comp=Z,1.2nm,0.9s,baz=270,slow=4.1,SNR=7.1
KURBB PKKPab **PKKPab** **10 14 46.6 +0.7**
comp=Z,1.0nm,0.7s,baz=268,slow=5.1,SNR=8.7
**MDOK Medeo 115.92 309** *e* PKP **PKPdf** **10 04 07.1 -0.8**
baz=309
**MDOK Medeo 115.92 309** *e* PKiKP **PKPdf** **10 04 07.1 -0.8**
**TNSS Tian-Shan 115.99 309** *e* PKP **PKPdf** **10 04 07.5 -0.9**
baz=309
**TNSS Tian-Shan 115.99 309** *e* PKiKP **PKPdf** **10 04 07.4 -0.9**
**CHKK Chushkaly 116.02 310** *e* PKP **PKPdf** **10 04 07.3 -0.6**
baz=310
**CHKK Chushkaly 116.02 310** *e* PKiKP **PKPdf** **10 04 07.2 -0.6**
**AAA Alma-Ata 116.02 309** *e* PKP **PKPdf** **10 04 07.0 -1.0**
baz=309
**AAA Alma-Ata 116.02 309** *e* PKiKP **PKPdf** **10 04 07.0 -1.0**
**BOOM Boomskoye usch 116.68 308** **PKiKP** **10 04 09.7 +0.3**
**BOOM Boomskoye usch 116.68 308** PKiKP **PKiKP** **10 04 09.7 +0.3**
**SGDS Sogindy 117.70 309** *e* PKP **PKPdf** **10 04 10.5 -0.8**
baz=309
**SGDS Sogindy 117.70 309** *e* PKiKP **PKPdf** **10 04 10.4 -0.8**
**AAK Ala-Archa 117.76 308** PKKPbc PKKPbc 10 14 34.9 +0.8
comp=Z,2.3nm,0.4s,baz=243,slow=2.3,SNR=3.6
**AAK Ala-Archa 117.76 308** *i* PKiKP **PKPdf** **10 04 11.4 -0.1**
**BTLS Baital 118.19 311** *e* PKP **PKPdf** **10 04 10.9 -1.1**
baz=311
**BTLS Baital 118.19 311** *e* PKiKP **PKPdf** **10 04 10.9 -1.1**
**BRVK Borovoye 120.39 320** **PKPdf** **10 04 15.9 -0.1**
**BRVK Borovoye 120.39 320** *i* PKiKP **PKPdf** **10 04 15.9 -0.1**
**KK31 Karatay Array 120.70 309** **PKPdf** **10 04 17.0 +0.1**
**KK31 Karatay Array 120.70 309** PKiKP **PKPdf** **10 04 17.0 +0.1**
**KKAR Karatay Array 120.70 309** PKPdf **PKPdf** **10 04 16.9 0.0**
**KKAR Karatay Array 120.70 309** **PKPdf** **10 04 16.8 -0.1**
**KKAR Karatay Array 120.70 309** PKiKP **PKPdf** **10 04 16.8 -0.1**
**BRLS Borolday 121.19 308** *e* PKP **PKPdf** **10 04 17.2 -0.7**
baz=308
BRLS *e* PP **PP** **10 05 50.5 -1.2**
baz=308
**BRLS Borolday 121.19 308** *e* PKiKP **PKPdf** **10 04 17.2 -0.7**
BRLS *e* 10 05 50.4
**KBL Kabul 121.47 298** PKPdf **PKiKP** **10 04 19.3 +0.2**
**KBL Kabul 121.47 298** PKiKP **PKiKP** **10 04 19.3 +0.2**
**SIMJ Simiganj 121.75 303** PKPdf **PKPdf** **10 04 19.1 -0.1**
**ARTI Arti 126.34 326** PKPdf **PKPdf** **10 04 27.4 +0.1**
**ARU Arti 126.34 326** *i* PKiKP **PKPdf** **10 04 27.3 +0.1**
ARU 10 06 28.2
ARU 10 11 15.9
ARU SP SP 10 16 09.1 +4.2
ARU SS **SS** **10 23 17.8 +6.7**
**BOSA Boshof 126.76 204** PKP **PKiKP** **10 04 30.4 +0.6**
comp=Z,2.0nm,0.6s,baz=175,slow=5.3,SNR=4.6
**ABKAR Akbulak array 127.40 317** PKPdf **PKPdf** **10 04 29.4 -0.1**
**ARCES ARCESS Array B 129.43 350** PKP **PKPdf** **10 04 32.1 -0.7**
comp=Z,0.7nm,0.4s,baz=7.6,slow=2.7,SNR=10
**KIRV Kirov 129.98 331** *i* PKiKP **PKiKP** **10 04 35.6 +0.7**
**BELG Belogornoye 133.77 324** *i* PKiKP **PKPdf** **10 04 41.2 -0.2**
**FINES FINESS Array B 136.44 345** PKhKP PKPpre 10 04 32.7
comp=Z,2.2nm,0.9s,baz=186,slow=32,SNR=2.1
FINES PKP **PKPdf** **10 04 43.9 -2.3**
comp=Z,1.1nm,0.4s,baz=48,slow=2.1,SNR=10
**OBN Obninsk 137.74 332** *e* PKiKP **PKPdf** **10 04 49.7 +1.0**
OBN *e* 10 07 38.2
OBN *e* PPP PPP 10 10 40.0
OBN pmax pmax
comp=Z,9.0nm,0.8s
**VSU Vasula 138.79 342** ‖ *e* PKiKP **PKPdf** **10 04 51.2 +0.6**
**NB2 NORSAR Subarra 139.38 354** PKP PKPpre 10 04 42.3
comp=Z,1.1nm,0.9s,baz=10,slow=3.2
NB2 SKPa **SKPbc** **10 08 08.2 +2.1**
comp=Z,0.9nm,0.8s,baz=9.1,slow=2.9
**NOA NORSAR Array B 139.38 354** PKhKP PKPpre 10 04 42.4
comp=Z,12nm,0.3s,baz=14,slow=2.2,SNR=4.3
NOA SKPbc **SKPbc** **10 08 05.1 -1.0**
comp=Z,2.6nm,1.0s,baz=11,slow=4.1,SNR=5.6
**KBZ Khabaz 140.26 314** ‖ *e* PKiKP **PKiKP** **10 04 55.0 -1.3**
**KIV Kislovodsk 140.31 315** *i* PKiKP **PKPdf** **10 04 54.2 +0.2**
KIV pmax pmax
comp=Z,11nm,1.0s
KIV MLR MLR
comp=Z,36nm,24.0s
**SHA1 Shidzhatmaz 140.41 314** ‖ *e* PKiKP **PKPdf** **10 04 54.4 0.0**
**RAYN Ar Rayn 141.36 282** PKPdf **PKPdf** **10 04 57.3 +0.9**
**RAYN Ar Rayn 141.36 282** PKiKP **PKPdf** **10 04 57.3 +0.9**
**MNK Minsk 141.64 337** *i* PKiKP **PKPdf** **10 04 53.6 -2.3**
MNK *i* 10 08 00.4
MNK *i* PPP PPP 10 11 08.1
MNK *i* SS SS 10 26 12.1 -2.0
MNK *i* SSS SSS 10 31 34.3
MNK pmax pmax
comp=Z,16nm,0.9s
MNK MLR MLR
comp=E,656nm,22.0s
MNK MLR MLR
comp=N,465nm,22.0s
MNK MLR MLR
comp=Z,55nm,18.0s
**ANN Anapa 143.31 319** *i* PKiKP **PKiKP** **10 05 05.1 +2.6**
ANN pmax pmax
comp=Z,136nm,1.7s
**SUW Suwalki 143.62 341** *e* PKP PKPab 10 04 56.8 +0.3
**AKASG Malin Array Be 144.01 332** PKP **PKPab** **10 04 57.2 -0.9**
comp=Z,2.1nm,0.3s,baz=39,slow=4.1,SNR=39
AKASG SKPbc **SKPbc** **10 08 18.0 0.0**
comp=Z,0.2nm,0.3s,baz=38,slow=2.4,SNR=9.9
**AKBB Malin Array Si 144.01 332** PKPpre 10 04 57.2
**AKBB Malin Array Si 144.01 332** *d i* PKiKP **PKPab** **10 04 57.0 -1.1**
**KIEV Kiev 144.02 332** PKPpre 10 04 57.2
**KIEV Kiev 144.02 332** ⇑P **PKPab** **10 04 57.3 -0.9**
**KIEV Kiev 144.02 332** PKiKP **PKPab** **10 04 57.2 -0.9**
**EKA Eskdalemuir Ar 145.04 7** PKP **PKPbc** **10 05 01.2 -0.5**
comp=Z,2.2nm,0.4s,baz=338,slow=2.8,SNR=43
EKA pPKP **pPKPdf** **10 05 59.2 +1.2**
comp=Z,5.6nm,0.9s,baz=4.6,slow=4.2,SNR=3.2

**SIM Simferopol' 145.23 321** *e* PKiKP **PKPab** **10 05 02.9 -0.1**
SIM pmax pmax
comp=Z,54nm,0.8s
SIM pmax pmax
comp=Z,22nm,0.7s
**GKP Gorka Klasztor 145.90 346** *e* PKP **PKPab** **10 05 05.0 -0.3**
**BEL Belsk 146.24 341** *e* PKP **PKPbc** **10 05 05.8 +0.4**
**SORM Soroca 146.25 330** ⇑P **PKPbc** **10 05 05.0 -0.6**
**SORM Soroca 146.25 330** ⇑PKP2 **PKPbc** **10 05 05.0 -0.6**
**BSEG Bad Segeberg 146.47 353** *e* PKPbc **PKPbc** **10 05 06.5 +0.4**
baz=14,slow=2.6
BSEG *ep* PKPbc pPKPab 10 06 05.6 +3.7
baz=15,slow=3.7
**PURM Purcari 146.61 327** ‖P **PKPbc** **10 05 07.1 +0.4**
**LVV L'vov 146.81 336** *e* PKP2 **PKPbc** **10 05 06.2 -1.0**
**MILM Milestii Mici 146.89 328** ‖P **PKPdf** **10 05 03.7 -1.5**
**MILM Milestii Mici 146.89 328** ‖PKiKP **PKPdf** **10 05 03.7 -1.5**
**GORT1 Trebel 147.27 352** *e* PKPbc **PKPbc** **10 05 09.1 +0.8**
baz=14,slow=2.6
GORT1 *e* PKPab **PKPab** **10 05 11.2 +0.7**
baz=13,slow=3.9
GORT1 *ep* PKPbc **pPKPab** **10 06 07.9 +3.0**
baz=15,slow=3.7
**RUE Ruedersdorf 147.37 349** *e* PKPbc **PKPbc** **10 05 09.3 +0.7**
baz=14,slow=2.6
RUE *ep* PKPbc **pPKPab** **10 06 08.2 +3.0**
baz=15,slow=3.7
**KWP Kalwaria Pacla 147.46 337** *e* PKP **PKPbc** **10 05 09.1 +0.1**
**NRDL Niedersach Rie 147.91 353** *e* PKPab **PKPab** **10 05 13.5 +0.4**
baz=13,slow=3.9
NRDL *ep* PKPbc **pPKPab** **10 06 09.3 +1.9**
baz=15,slow=3.7
**FLTG Flechtingen 147.92 351** *e* PKPbc **PKPbc** **10 05 10.2 +0.1**
baz=14,slow=2.6
FLTG *e* PKPab **PKPab** **10 05 13.7 +0.5**
baz=13,slow=3.9
FLTG *ep* PKPbc **pPKPab** **10 06 09.4 +1.9**
baz=15,slow=3.7
**OJC Ojcow 147.95 341** *e* PKP **PKPbc** **10 05 10.2 -0.1**
**OJC Ojcow 147.95 341** **PKPbc** **10 05 10.3 +0.1**
**OJC Ojcow 147.95 341** PKP2 **PKPbc** **10 05 10.3 +0.1**
**TLCR 148.06 326** ‖P **PKPbc** **10 05 10.4 -0.3**
**TLCR 148.06 326** ‖PKP2 **PKPbc** **10 05 10.4 -0.3**
**BURAR Bucovina Array 148.06 332** PKPdf **PKPdf** **10 05 08.0 +0.7**
**BURAR Bucovina Array 148.06 332** ⇑P **PKPbc** **10 05 10.5 -0.3**
**SCTR Scanteiesti 148.15 327** ‖P **PKiKP** **10 05 11.8 -0.7**
**GHRR 148.18 328** ⇑P **PKiKP** **10 05 11.8 -0.7**
**KOLS Kolonicke sedl 148.20 337** *e* PKP2 **PKPbc** **10 05 10.2 -0.8**
**KOLS Kolonicke sedl 148.20 337** *e* PKP **PKPbc** **10 05 10.2 -0.8**
**BR131 Keskin Array S 148.23 313** **PKPbc** **10 05 10.9 -0.6**
**BR131 Keskin Array S 148.23 313** *de* PKP2 **PKPbc** **10 05 10.6 -0.9**
**BRTR Keskin Array B 148.23 313** **PKPbc** **10 05 11.3 -0.2**
**BRTR Keskin Array B 148.23 313** PKPbc **PKPbc** **10 05 11.2 -0.3**
comp=Z,14nm,0.9s,baz=135,slow=3.6,SNR=28
BRTR pPKPbc **pPKPab** **10 06 09.0 -0.4**
comp=Z,2.9nm,1.0s,baz=343,slow=1.5,SNR=1.4
**TESR Tescani 148.23 329** ⇑P **PKPbc** **10 05 11.4 +0.3**
**KIRS Kirsehir-Merke 148.31 312** ‖P **PKPbc** **10 05 11.3 -0.3**
**IBBN Ibbenburen 148.32 355** *e* PKPab **PKPab** **10 05 15.7 +0.8**
baz=13,slow=3.9
IBBN *ep* PKPbc **pPKPab** **10 06 10.6 +1.5**
baz=15,slow=3.7
**KSP Ksiaz 148.37 345** *e* PKP **PKPbc** **10 05 12.0 +0.7**
**COSR Cosmesti PH 148.37 328** ⇑P **PKiKP** **10 05 12.3 -0.6**
**ONER Baraj Valea Uz 148.48 329** ‖P **PKPbc** **10 05 12.3 +0.6**
**NIE Niedzica 148.49 339** *e* PKP **PKPbc** **10 05 12.2 +0.5**
**TPGR Topolog 148.49 325** ‖P **PKPbc** **10 05 12.0 +0.2**
**CLZ Clausthal 148.52 352** *e* PKPbc **PKPbc** **10 05 12.1 +0.4**
baz=14,slow=2.6
CLZ *e* PKPab **PKPab** **10 05 16.2 +0.5**
baz=13,slow=3.9
CLZ *ep* PKPbc **pPKPab** **10 06 11.1 +1.2**
baz=15,slow=3.7
**CLL Collm 148.63 349** **PKPbc** **10 05 12.4 +0.5**
**CLL Collm 148.63 349** *i* PKPbc **PKPbc** **10 05 12.4 +0.5**
comp=Z,22nm,0.8s
CLL *i* PKPab **PKPab** **10 05 15.9 -0.3**
comp=Z,30nm,1.0s
CLL *i* pPKPbc **pPKPab** **10 06 10.7 +0.4**
comp=Z,52nm,1.6s
**CLL Collm 148.63 349** *i* PKP2 **PKPbc** **10 05 12.4 +0.5**
CLL pmax pmax
comp=Z,22nm,0.8s
CLL pmax pmax
comp=Z,30nm,1.0s
**CLL Collm 148.63 349** *e* PKPbc **PKPbc** **10 05 12.4 +0.5**
baz=14,slow=2.6
CLL *e* PKPab **PKPab** **10 05 16.3 +0.2**
baz=13,slow=3.9
CLL *ep* PKPbc **pPKPab** **10 06 11.4 +1.1**
baz=15,slow=3.7
**OSTC Ostas 148.65 345** ⇑ *e* PKP **PKiKP** **10 05 13.2 -0.2**
**OSTC Ostas 148.65 345** *e* PKP2 **PKiKP** **10 05 13.2 -0.2**
**VRI Vrincioaia 148.65 328** ‖P **PKPbc** **10 05 11.9 -0.3**
**VRI Vrincioaia 148.65 328** ‖PKP2 **PKPbc** **10 05 11.9 -0.3**
**CHVC Chvalec 148.66 345** ⇑ *e* PKP **PKiKP** **10 05 13.1 -0.3**
**CHVC Chvalec 148.66 345** *e* PKP2 **PKiKP** **10 05 13.1 -0.3**
**PLOR Plostina 148.70 329** ⇑P **PKPbc** **10 05 12.5 +0.1**
**PLOR Plostina 148.70 329** ⇑PKP2 **PKPbc** **10 05 12.5 +0.1**
**ANTO Ankara 148.73 314** ⇑P **PKiKP** **10 05 13.4 -0.6**
**ANTO Ankara 148.73 314** ⇑PKP2 **PKiKP** **10 05 13.4 -0.6**
**DPC Dobruska-Polom 148.81 344** ⇑ *e* PKP **PKiKP** **10 05 12.8 +0.3**
DPC *e* PKPAB **PKPab** **10 05 17.9 +0.9**
**DPC Dobruska-Polom 148.81 344** *e* PKP2 **PKPbc** **10 05 12.8 +0.3**
**ARCR ARCALIA 148.84 332** ⇑P **PKiKP** **10 05 13.6 -0.3**
**HARR Harsova 148.86 326** ‖P **PKiKP** **10 05 13.8 -0.1**
**HARR Harsova 148.86 326** ‖PKP2 **PKiKP** **10 05 13.8 -0.1**
**TURR Turia 148.86 329** ‖P **PKPbc** **10 05 13.1 +0.4**
**BRG Berggiesshubel 148.87 348** *i* PKP **PKPbc** **10 05 12.9 +0.4**
BRG Amp 10 05 14.2
comp=Z,13nm,0.9s
**BRG Berggiesshubel 148.87 348** P **PKPab** **10 05 17.2 +0.1**
BRG Amp 10 05 17.6
comp=Z,15nm,0.9s
BRG pPKP **pPKPab** **10 06 11.5 0.0**
BRG Amp 10 06 12.7
comp=Z,11nm,1.0s
**BRG Berggiesshubel 148.87 348** *e* PKPbc **PKPbc** **10 05 13.1 +0.5**
baz=14,slow=2.6
BRG *e* PKPab **PKPab** **10 05 17.2 +0.1**
baz=13,slow=3.9
BRG *ep* PKPbc **pPKPab** **10 06 12.4 +0.9**
baz=15,slow=3.7
**BISRR Bisoca 148.89 328** ⇑P **PKPbc** **10 05 12.8 -0.1**
**COVR Voineasa-Covas 148.92 329** ‖P **PKPbc** **10 05 12.3 -0.6**
**NEUB Neuenburg 148.93 350** *e* PKPbc **PKiKP** **10 05 13.3 -0.6**
baz=14,slow=2.6
NEUB *ep* PKPbc **pPKPab** **10 06 12.9 +1.4**
baz=15,slow=3.7
**OZUR 148.94 330** ⇑P **PKPbc** **10 05 13.2 +0.2**
**LANS Liptovska Anna 148.99 340** *e* PKP2 **PKPab** **10 05 16.5 -1.3**
**LANS Liptovska Anna 148.99 340** *e* PKP **PKPab** **10 05 16.5 -1.3**
**MORC Moravsky Berou 149.01 343** *e* PKP **PKPbc** **10 05 13.5 +0.5**
MORC *e* 10 06 09.9
**MORC Moravsky Berou 149.01 343** ⇑P **PKiKP** **10 05 13.7 -0.5**
**MORC Moravsky Berou 149.01 343** ⇑PKP2 **PKiKP** **10 05 13.7 -0.5**
**BOSR Bodos 149.01 330** ‖P **PKiKP** **10 05 14.1 -0.2**
**BUG Bochum--Univer 149.22 356** *ep* PKPbc pPKPbc 10 06 12.9 +3.9
baz=15,slow=3.7
**HSKC Hora Svate Kat 149.22 348** ⇑ *e* PKP **PKiKP** **10 05 14.3 -0.3**
**DOPR Dopca 149.22 330** ‖P **PKPbc** **10 05 13.8 +0.2**
**KECS Kecovo 149.22 338** *e* PKHKP PKPpre 10 05 12.3
**KECS Kecovo 149.22 338** *e* PKP **PKPbc** **10 05 12.2 -1.3**
**ISR Istrita 149.28 328** ⇑P **PKPbc** **10 05 14.0 +0.2**
**ISR Istrita 149.28 328** ⇑PKP2 **PKPbc** **10 05 14.0 +0.2**
**MAUC Maruska 149.30 342** ⇑ *e* PKP **PKPbc** **10 05 14.2 +0.5**
**MLR Muntele Rosu 149.31 329** **PKPbc** **10 05 13.9 -0.1**
**MLR Muntele Rosu 149.31 329** ‖P **PKPbc** **10 05 13.8 -0.1**
**MLR Muntele Rosu 149.31 329** PKP2 **PKPbc** **10 05 13.9 -0.1**
**KASTN Kahler Asten 149.36 354** *ep* PKPbc pPKPbc 10 06 13.1 +3.6
baz=15,slow=3.7
**MMAI Mount Meron Ar 149.38 300** PKPbc **PKPbc** **10 05 14.5 0.0**
comp=Z,27nm,0.9s,baz=56,slow=5.4,SNR=11
**CJR Cluj-Napoca 149.46 333** ⇑P **PKiKP** **10 05 15.3 +0.1**
**CJR Cluj-Napoca 149.46 333** ⇑PKP2 **PKiKP** **10 05 15.3 +0.1**
**MOX Moxa 149.51 350** *e* PKPbc **PKiKP** **10 05 14.7 -0.4**
baz=14,slow=2.6
MOX *e* PKPab **PKPab** **10 05 19.4 -0.4**
baz=13,slow=3.9
MOX *ep* PKPbc **pPKPab** **10 06 13.5 -0.4**
baz=15,slow=3.7
**UBBA Unterbreizbach 149.57 352** *ep* PKPbc pPKPbc 10 06 13.9 +4.0
baz=15,slow=3.7
**PLN Plauen 149.57 349** *e* PKPbc **PKiKP** **10 05 15.0 -0.3**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=14,slow=2.6 | | | | | | | |
| PLN | | | | *e*PKPab | **PKPab** | 10 05 20.1 | 0.0 | |
| | baz=13,slow=3.9 | | | | | | | |
| PLN | | | | *ep*PKPbc | **pPKPab** | 10 06 13.7 | -0.5 | |
| | baz=15,slow=3.7 | | | | | | | |
| **PRU** | **Pruhonice** | **149.57 346** | ⇓ | *e*PKP | **PKPbc** | 10 05 14.6 | +0.3 | |
| PRU | | | | *e*PKPAB | **PKPab** | 10 05 20.6 | +0.5 | |
| **PRU** | **Pruhonice** | **149.57 346** | | *e*PKP2 | **PKPbc** | 10 05 14.6 | +0.3 | |
| **TANN** | **Tannenbergstha** | **149.59 349** | | *e*PKPbc | **PKiKP** | 10 05 15.2 | -0.1 | |
| | baz=14,slow=2.6 | | | | | | | |
| TANN | | | | *e*PKPab | **PKPab** | 10 05 20.2 | 0.0 | |
| | baz=13,slow=3.9 | | | | | | | |
| TANN | | | | *ep*PKPbc | **pPKPab** | 10 06 14.3 | 0.0 | |
| | baz=15,slow=3.7 | | | | | | | |
| **LTVH** | **Ltavrtes, Hu** | **149.62 335** | ⇑ | P | **PKPdf** | 10 05 10.5 | +0.8 | |
| **MARR** | **Marisel-Cluj** | **149.69 333** | ⇑ | P | **PKPbc** | 10 05 14.7 | -0.2 | |
| **VRAC** | **Vranov** | **149.70 343** | | *e*PKP | **PKiKP** | 10 05 15.2 | -0.4 | |
| VRAC | | | | *e* | | 10 05 20.6 | | |
| VRAC | | | | *e* | | 10 06 11.3 | | |
| **VRAC** | **Vranov** | **149.70 343** | ⇓ | P | **PKiKP** | 10 05 15.5 | -0.1 | |
| **VRAC** | **Vranov** | **149.70 343** | ⇓ | PKP2 | **PKiKP** | 10 05 15.5 | -0.1 | |
| **VYHS** | **Vyhne** | **149.77 340** | | *e*PKP2 | **PKPbc** | 10 05 15.0 | +0.1 | |
| **VYHS** | **Vyhne** | **149.77 340** | | *e*PKP | **PKPbc** | 10 05 15.0 | +0.1 | |
| VYHS | | | | *e* | | 10 05 20.2 | | |
| **DRGR** | | **149.77 334** | ⇓ | P | **PKPbc** | 10 05 13.8 | -1.2 | |
| **DRGR** | | **149.77 334** | ⇓ | PKHKP | PKPpre | 10 05 13.8 | | |
| **VOIR** | | **149.77 330** | ⇑ | P | **PKPbc** | 10 05 15.5 | +0.4 | |
| **VOIR** | | **149.77 330** | ⇑ | PKP2 | **PKPbc** | 10 05 15.5 | +0.4 | |
| **JAVC** | **Velka Javorina** | **149.80 342** | | *e*PKP | **PKiKP** | 10 05 16.5 | +0.6 | |
| **PSZ** | **Piszkesteto** | **149.91 338** | ⇓ | P | **PKPbc** | 10 05 14.8 | -0.5 | |
| **PSZ** | **Piszkesteto** | **149.91 338** | ⇓ | PKHKP | PKPpre | 10 05 14.8 | | |
| **KRUC** | **Moravsky** | **149.98 343** | | *e*PKP | **PKPbc** | 10 05 15.6 | +0.3 | |
| KRUC | | | | *e* | | 10 05 21.4 | | |
| **ARR** | **Arges** | **150.02 330** | ⇑ | P | **PKiKP** | 10 05 16.5 | +0.1 | |
| **MANZ** | **Manzenberg** | **150.06 349** | | *e*PKPbc | **PKiKP** | 10 05 16.5 | +0.2 | |
| | baz=14,slow=2.6 | | | | | | | |
| MANZ | | | | *ep*PKPbc | **pPKPab** | 10 06 14.9 | -1.3 | |
| | baz=15,slow=3.7 | | | | | | | |
| **MEM** | **Membach** | **150.12 357** | | *d*PKP | **PKPab** | 10 05 22.2 | -0.1 | |
| **AHRW** | **Bad Neuenahr-A** | **150.13 356** | | *ep*PKPbc | pPKPbc | 10 06 15.0 | +3.6 | |
| | baz=15,slow=3.7 | | | | | | | |
| **BTNL** | **Ternell** | **150.14 357** | | *d*PKP | **PKPab** | 10 05 21.5 | -0.9 | |
| **ROTZ** | **Rotzenmuhle** | **150.25 349** | | *e*PKPbc | **PKiKP** | 10 05 16.9 | +0.2 | |
| | baz=14,slow=2.6 | | | | | | | |
| ROTZ | | | | *ep*PKPbc | **pPKPab** | 10 06 15.4 | -1.6 | |
| | baz=15,slow=3.7 | | | | | | | |
| **TNS** | **Taunus Mts** | **150.33 354** | | *e*PKPbc | **PKiKP** | 10 05 16.9 | 0.0 | |
| | baz=14,slow=2.6 | | | | | | | |
| TNS | | | | *e*PKPab | **PKPab** | 10 05 23.4 | +0.2 | |
| | baz=13,slow=3.9 | | | | | | | |
| TNS | | | | *ep*PKPbc | **pPKPab** | 10 06 15.8 | -1.5 | |
| | baz=15,slow=3.7 | | | | | | | |
| **LOT** | **Lotru** | **150.36 331** | ⇑ | P | **PKPbc** | 10 05 16.2 | -0.3 | |
| **CSS** | **Mathiatis** | **150.41 305** | | | **PKPbc** | 10 05 17.1 | +0.2 | |
| CSS | | | | PKPab | **PKPab** | 10 05 24.0 | -0.1 | |
| **BMRD** | **Maredsous** | **150.47 359** | | *d*PKPdf | **PKPdf** | 10 05 12.2 | +1.3 | |
| BMRD | | | | *d*PKiKP | **PKiKP** | 10 05 18.5 | +1.4 | |
| BMRD | | | | *d*PKP | **PKPab** | 10 05 23.8 | 0.0 | |
| **GRF** | **Grafenberg Arr** | **150.49 350** | | *e*PKPbc | **PKiKP** | 10 05 17.7 | +0.5 | |
| | baz=14,slow=2.6 | | | | | | | |
| GRF | | | | *ep*PKPbc | **pPKPab** | 10 06 15.9 | -2.1 | |
| | baz=15,slow=3.7 | | | | | | | |
| **SRO** | **Srobarova** | **150.53 340** | | *e*PKIKP | **PKPbc** | 10 05 16.9 | +0.2 | |
| **SRO** | **Srobarova** | **150.53 340** | | *e*PKP | **PKPbc** | 10 05 16.9 | +0.2 | |
| SRO | | | | *e* | | 10 05 25.0 | | |
| **KHC** | **Kasperske Horo** | **150.59 347** | ⇑ | *e*PKP | **PKiKP** | 10 05 17.4 | -0.1 | |
| KHC | | | | *e*PKPAB | **PKPab** | 10 05 24.1 | -0.3 | |
| KHC | | | | *ep*PKP | **pPKPbc** | 10 06 14.0 | +1.4 | |
| **KHC** | **Kasperske Hory** | **150.59 347** | | *e*PKIKP | **PKiKP** | 10 05 17.4 | -0.1 | |
| KHC | | | | *e* | | 10 05 24.1 | | |
| **SIRR** | **Siria** | **150.62 334** | ⇓ | P | **PKPbc** | 10 05 17.2 | +0.2 | |
| **DOU** | **Dourbes** | **150.68 359** | | *d*PKiKP | **PKiKP** | 10 05 18.4 | +0.9 | |
| DOU | | | | *d*PKP | **PKPab** | 10 05 24.0 | -0.6 | |
| **CKRC** | **Cesky Krumlov** | **150.72 346** | ⇑ | *e*PKP | **PKiKP** | 10 05 17.5 | -0.2 | |
| **CKRC** | **Cesky Krumlov** | **150.72 346** | | *e*PKIKP | **PKiKP** | 10 05 17.5 | -0.2 | |
| **WET** | **Wettzell** | **150.72 348** | | *e*PKPbc | **PKiKP** | 10 05 17.9 | +0.2 | |
| | baz=14,slow=2.6 | | | | | | | |
| WET | | | | *e*PKPab | **PKPab** | 10 05 25.3 | +0.4 | |
| | baz=13,slow=3.9 | | | | | | | |
| WET | | | | *ep*PKPbc | **pPKPab** | 10 06 16.3 | -2.7 | |
| | baz=15,slow=3.7 | | | | | | | |
| **GEC2** | **GERESS Array S** | **150.84 347** | | *e*PKPbc | **PKiKP** | 10 05 18.4 | +0.3 | |
| | baz=14,slow=2.6 | | | | | | | |
| GEC2 | | | | *ep*PKPbc | **pPKPab** | 10 06 16.6 | -3.0 | |
| | baz=15,slow=3.7 | | | | | | | |
| **GERES** | **GERESS Array B** | **150.84 347** | | PKPbc | **PKPbc** | 10 05 17.4 | -0.2 | |
| | comp=Z,5.7nm,0.9s,baz=32,slow=5.8,SNR=23 | | | | | | | |
| GERES | | | | pPKPbc | **pPKPbc** | 10 06 16.0 | +2.7 | |
| | comp=Z,4.8nm,0.9s,baz=160,slow=4.3,SNR=4.2 | | | | | | | |
| **SURR** | **Surduc** | **150.84 333** | ⇓ | P | **PKPbc** | 10 05 16.6 | -0.9 | |
| **GZR** | **Gura Zlata** | **150.85 332** | ⇑ | P | **PKPbc** | 10 05 17.4 | -0.2 | |
| **GZR** | **Gura Zlata** | **150.85 332** | ⇑ | PKIKP | **PKPbc** | 10 05 17.4 | -0.2 | |
| **WLF** | **Walferdange** | **151.06 357** | | *d*PKPdf | **PKPdf** | 10 05 13.8 | +1.9 | |
| WLF | | | | *d*PKiKP | **PKiKP** | 10 05 19.8 | +1.4 | |
| WLF | | | | *d*PKP | **PKPab** | 10 05 25.9 | -0.3 | |
| **WLF** | **Walferdange** | **151.06 357** | | *e*PKPbc | **PKiKP** | 10 05 19.3 | +0.9 | |
| | baz=14,slow=2.6 | | | | | | | |
| WLF | | | | *e*PKPab | **PKPab** | 10 05 26.0 | -0.2 | |
| | baz=13,slow=3.9 | | | | | | | |
| WLF | | | | *ep*PKPbc | **pPKPab** | 10 06 17.6 | -2.7 | |
| | baz=15,slow=3.7 | | | | | | | |
| **ELND** | **Elena** | **151.14 325** | ⇓ | P | **PKiKP** | 10 05 18.6 | -0.2 | |
| **CONA** | **Conrad Observa** | **151.16 343** | | *e*PKP | **PKPbc** | 10 05 18.4 | +0.2 | |
| | comp=Z,28nm,1.2s | | | | | | | |
| CONA | | | | *i* PKP | **PKPab** | 10 05 25.7 | -1.1 | |
| | comp=Z,26nm,1.3s | | | | | | | |
| CONA | | | | *i* sPKP | **pPKPbc** | 10 06 17.5 | +3.4 | |
| | comp=Z,26nm,1.4s | | | | | | | |
| **BZS** | **Buzias** | **151.17 334** | ⇑ | P | **PKPbc** | 10 05 17.9 | -0.3 | |
| **BZS** | **Buzias** | **151.17 334** | ⇑ | PKIKP | **PKPbc** | 10 05 17.9 | -0.3 | |
| **RONA** | **Rosalia, Austr** | **151.25 342** | | *e*PKP | **PKPbc** | 10 05 18.4 | 0.0 | |
| | comp=Z,26nm,1.2s | | | | | | | |
| RONA | | | | *e*PKP | **PKPab** | 10 05 28.0 | +0.8 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| RONA | | | | *i* sPKP | **pPKPbc** | 10 06 16.6 | +2.4 | |
| | comp=Z,15nm,1.5s | | | | | | | |
| **MOA** | **Molln** | **151.64 345** | | *e*PKP | **PKiKP** | 10 05 19.8 | +0.1 | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| MOA | | | | *i* PKP | **PKPab** | 10 05 29.1 | +0.3 | |
| | comp=Z,34nm,1.5s | | | | | | | |
| MOA | | | | *es*PKP | **pPKPbc** | 10 06 17.5 | +2.3 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **MDVR** | **Moldovita** | **151.79 332** | ⇑ | P | **PKPbc** | 10 05 18.9 | -0.8 | |
| **MORH** | **Mrgy, Hungar** | **151.81 338** | ⇓ | P | **PKPbc** | 10 05 19.4 | -0.3 | |
| **ARSA** | **Arzberg** | **151.87 343** | | *e*PKP | **PKiKP** | 10 05 20.1 | 0.0 | |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| ARSA | | | | *i* PKP | **PKPab** | 10 05 30.8 | +1.0 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| ARSA | | | | *es*PKP | **pPKPbc** | 10 06 17.5 | +1.8 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **151.94 346** | | *e*PKP | **PKiKP** | 10 05 20.4 | +0.1 | |
| | comp=Z,6.7nm,1.0s | | | | | | | |
| BIOA | | | | *i* PKP | **PKPab** | 10 05 30.1 | +0.1 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| BIOA | | | | *es*PKP | **pPKPbc** | 10 06 18.0 | +2.1 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **FUR** | **Furstenfeldbru** | **151.96 349** | | *ep*PKPbc | pPKPbc | 10 06 19.7 | +3.9 | |
| | baz=15,slow=3.7 | | | | | | | |
| **RJOB** | **Jochberg** | **152.08 347** | | *e*PKPbc | **PKPbc** | 10 05 20.5 | +0.1 | |
| | baz=14,slow=2.6 | | | | | | | |
| **BFO** | **Black Forest** | **152.21 354** | | *e*PKPbc | **PKiKP** | 10 05 21.4 | +0.6 | |
| | baz=14,slow=2.6 | | | | | | | |
| BFO | | | | *e*PKPab | **PKPab** | 10 05 30.6 | -0.5 | |
| | baz=13,slow=3.9 | | | | | | | |
| BFO | | | | *ep*PKPbc | **pPKPbc** | 10 06 19.9 | +3.6 | |
| | baz=15,slow=3.7 | | | | | | | |
| **FRGS** | **Fruska Gora** | **152.28 335** | ⇑ | P | **PKiKP** | 10 05 21.2 | +0.1 | |
| **KOGS** | **Kog** | **152.39 341** | | *i* PKPbc | **PKPbc** | 10 05 20.2 | -0.8 | |
| KOGS | | | | *i* PKPab | **PKPab** | 10 05 31.5 | -0.4 | |
| **LESA** | **Schwarzleotal** | **152.40 347** | | *e*PKP | **PKPbc** | 10 05 21.1 | 0.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| LESA | | | | *i* PKP | **PKPab** | 10 05 32.5 | +0.4 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| LESA | | | | *es*PKP | **pPKPbc** | 10 06 19.4 | +2.4 | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **SOKA** | **Soboth** | **152.53 343** | | *e*PKP | **PKiKP** | 10 05 21.8 | +0.2 | |
| | comp=Z,9.7nm,1.2s | | | | | | | |
| SOKA | | | | *i* PKP | **PKPab** | 10 05 32.5 | -0.1 | |
| | comp=Z,24nm,1.3s | | | | | | | |
| SOKA | | | | *es*PKP | **pPKPbc** | 10 06 19.6 | +2.3 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **152.58 346** | | *e*PKP | **PKPbc** | 10 05 21.6 | -0.1 | |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| KBA | | | | *i* PKP | **PKPab** | 10 05 33.5 | +0.6 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| KBA | | | | *es*PKP | **pPKPbc** | 10 06 18.6 | +1.1 | |
| | comp=Z,6.7nm,0.7s | | | | | | | |
| **UBR** | **Ueberruh** | **152.62 351** | | *e*PKPbc | **PKiKP** | 10 05 22.4 | +0.7 | |
| | baz=14,slow=2.6 | | | | | | | |
| UBR | | | | *ep*PKPbc | **pPKPbc** | 10 06 20.4 | +3.0 | |
| | baz=15,slow=3.7 | | | | | | | |
| **BOVS** | **Bovan** | **152.70 331** | ⇓ | P | **PKPbc** | 10 05 20.9 | -0.8 | |
| **RETA** | **Reutte** | **152.71 350** | | *e*PKP | **PKPbc** | 10 05 21.7 | 0.0 | |
| | comp=Z,9.3nm,1.4s | | | | | | | |
| RETA | | | | *e*PKP | **PKPab** | 10 05 32.0 | -1.3 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| RETA | | | | *i* sPKP | **pPKPbc** | 10 06 18.9 | +1.3 | |
| | comp=Z,9.8nm,1.1s | | | | | | | |
| **WATA** | **Walderalm** | **152.71 348** | | *e*PKP | **PKiKP** | 10 05 22.5 | +0.4 | |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| WATA | | | | *i* PKP | **PKPab** | 10 05 32.8 | -0.6 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| WATA | | | | *es*PKP | **pPKPbc** | 10 06 19.3 | +1.5 | |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **152.77 348** | | *e*PKP | **PKiKP** | 10 05 22.9 | +0.7 | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| WTTA | | | | *e*PKP | **PKPab** | 10 05 33.4 | -0.3 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| WTTA | | | | *i* sPKP | **pPKPbc** | 10 06 19.1 | +1.1 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **MOTA** | **Moosalm** | **152.78 349** | | *e*PKP | **PKiKP** | 10 05 22.6 | +0.4 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| MOTA | | | | *i* PKP | **PKPab** | 10 05 33.6 | -0.1 | |
| | comp=Z,6.4nm,0.6s | | | | | | | |
| MOTA | | | | *es*PKP | **pPKPbc** | 10 06 19.0 | +1.1 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **152.89 349** | | *e*PKP | **PKPbc** | 10 05 22.0 | -0.2 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| SQTA | | | | *i* PKP | **PKPab** | 10 05 33.0 | -1.1 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| SQTA | | | | *i* sPKP | **pPKPbc** | 10 06 19.7 | +1.6 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| **MYKA** | **Terra Mystica** | **152.93 345** | | *i* PKP | **PKPbc** | 10 05 22.3 | 0.0 | |
| | comp=Z,8.1nm,1.5s | | | | | | | |
| MYKA | | | | *i* PKP | **PKPab** | 10 05 33.9 | -0.4 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| MYKA | | | | *es*PKP | **pPKPbc** | 10 06 19.0 | +0.8 | |
| | comp=Z,9.5nm,1.7s | | | | | | | |
| **DAVA** | **Damuels** | **153.04 351** | | *e*PKP | **PKiKP** | 10 05 23.5 | +0.7 | |
| | comp=Z,10nm,1.3s | | | | | | | |
| DAVA | | | | *e*PKP | **PKPab** | 10 05 34.4 | -0.4 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| DAVA | | | | *i* sPKP | **pPKPbc** | 10 06 19.3 | +0.8 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **153.08 347** | | *i* PKP | **PKPbc** | 10 05 22.2 | -0.4 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| ABTA | | | | *i* PKP | **PKPab** | 10 05 34.3 | -0.6 | |
| | comp=Z,26nm,1.2s | | | | | | | |
| ABTA | | | | *es*PKP | **pPKPbc** | 10 06 20.9 | +2.4 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **FETA** | **Feichten** | **153.16 349** | | *i* PKP | **PKPbc** | 10 05 22.8 | -0.1 | |
| | comp=Z,10nm,1.5s | | | | | | | |
| FETA | | | | *i* PKP | **PKPab** | 10 05 35.4 | +0.1 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| FETA | | | | *es*PKP | **pPKPbc** | 10 06 19.4 | +0.6 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **LJU** | **Ljubljana** | **153.25 343** | | *i* PKPbc | **PKPbc** | 10 05 22.8 | -0.1 | |
| LJU | | | | *i* PKPab | **PKPab** | 10 05 34.6 | -0.9 | |
| LJU | | | | *i* pPKPab | **pPKPbc** | 10 06 21.9 | +3.0 | |
| **GBAS** | **Gorenja Brezov** | **153.38 343** | | *e*PKPbc | **PKPbc** | 10 05 22.9 | -0.3 | |
| GBAS | | | | *e*PKPab | **PKPab** | 10 05 35.1 | -1.0 | |
| GBAS | | | | *i* pPKPab | **pPKPbc** | 10 06 22.1 | +3.0 | |
| **FUORN** | **Ofenpass-Fuorn** | **153.63 350** | | | **PKiKP** | 10 05 24.8 | +0.7 | |
| **CTI** | **Castel Tesino** | **153.93 348** | | PKPab | **PKPab** | 10 05 37.8 | -0.8 | |
| **CTI** | **Castel Tesino** | **153.93 348** | | PKP2 | **PKPab** | 10 05 37.8 | -0.8 | |
| **FNA** | **Florina** | **155.03 327** | | PKPdf | **PKPdf** | 10 05 17.4 | -0.5 | |
| FNA | | | | | PKPdf | 10 05 26.7 | +8.7 | |
| **FNA** | **Florina** | **155.03 327** | | PKIKP | PKPdf | 10 05 26.7 | +8.7 | |
| **PGAV** | **Gavieira, Arco** | **156.49 23** | | *e*PKPab | **PKPab** | 10 05 49.6 | -0.1 | |
| **CESX** | **Cesi** | **156.96 343** | | PKPdf | **PKPdf** | 10 05 21.1 | +0.8 | |
| CESX | | | | PKPab | **PKPab** | 10 05 50.9 | -0.6 | |
| **PBRG** | **Braganca** | **157.17 21** | | *e*PKPab | **PKPab** | 10 05 52.6 | +0.1 | |
| **POLO** | **Lamas de Olo** | **157.18 23** | | *e*PKPab | **PKPab** | 10 05 52.4 | -0.3 | |
| **PVRL** | **Vila Real** | **157.30 23** | | *e*PKPab | **PKPab** | 10 05 53.3 | +0.2 | |
| **PVIS** | **Viseu** | **157.72 24** | | *e*PKPab | **PKPab** | 10 05 54.9 | 0.0 | |
| **PCAS** | **Casmilo, Conde** | **158.04 26** | | *e*PKPab | **PKPab** | 10 05 56.3 | 0.0 | |
| **MTE** | **Manteigas** | **158.12 24** | | *e*PKPab | **PKPab** | 10 05 56.7 | 0.0 | |
| **PMRV** | **Marv??o** | **159.02 25** | | *e*PKPab | **PKPab** | 10 06 00.4 | -0.2 | |
| **PESTR** | **Estremoz** | **159.42 26** | | *e*PKPab | **PKPab** | 10 06 02.2 | -0.2 | |
| **EVO** | **Evora** | **159.53 27** | | *e*PKPab | **PKPab** | 10 06 02.6 | -0.2 | |
| **ESDC** | **Sonseca Array** | **159.97 18** | | PKP | **PKPdf** | 10 05 24.1 | 0.0 | |
| | comp=Z,0.8nm,0.9s,baz=343,slow=4.0,SNR=4.5 | | | | | | | |
| ESDC | | | | PKPab | **PKPab** | 10 06 04.5 | -0.3 | |
| | comp=Z,2.7nm,0.8s,baz=338,slow=5.4,SNR=14 | | | | | | | |
| **MORF** | **Marmelete** | **160.24 31** | | *e*PKPab | **PKPab** | 10 06 06.4 | +0.4 | |
| **PCVE** | **Castro Verde** | **160.26 29** | | *e*PKPab | **PKPab** | 10 06 06.4 | +0.4 | |
| **PVAQ** | **Vaqueiros** | **160.59 29** | | *e*PKPab | **PKPab** | 10 06 08.0 | +0.5 | |
| **DBIC** | **Dimbokro** | **163.71 148** | | PKP | **PKPdf** | 10 05 26.9 | -1.7 | |
| | comp=Z,3.3nm,0.8s,baz=169,slow=5.2,SNR=3.7 | | | | | | | |
| DBIC | | | | PKPab | **PKPab** | 10 06 22.9 | +1.2 | |
| | comp=Z,3.5nm,0.7s,baz=197,slow=7.5,SNR=3.8 | | | | | | | |
| **DBIC** | **Dimbokro** | **163.71 148** | ⇑ | PKIKP | **PKPdf** | 10 05 28.0 | -0.6 | |
| **KEST** | **Kesra** | **164.27 343** | | PKPab | **PKPab** | 10 06 23.4 | -0.3 | |
| | comp=Z,6.0nm,0.7s,baz=334,slow=1.2,SNR=8.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.21 165** | | PKP | **PKPdf** | 10 05 33.4 | -1.0 | |
| | comp=Z,1.7nm,0.8s,baz=333,slow=1.4,SNR=7.7 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | 10 07 00.5 | +1.4 | |
| | comp=Z,8.1nm,0.9s,baz=158,slow=2.0,SNR=21 | | | | | | | |
| TORD | | | | pPKPab | **pPKPab** | 10 07 55.7 | +2.9 | |
| | comp=Z,2.3nm,0.9s,baz=151,slow=1.2,SNR=2.6 | | | | | | | |
| TORD | | | | PP | **PP** | 10 10 50.9 | +1.7 | |
| | comp=Z,1.0nm,1.2s,baz=219,slow=3.7,SNR=2.0 | | | | | | | |

*IDC **11** 10:04:11.4±1.0,26°.69N×90°.76E,h0km,mb3.8/10, mbtmp3.8/11,ML4.2/1,Error ellipse: s-maj=36.8km s-min=16.5km az=55.0*
*NEIC **11** 10:04:15.1±2.3,26°.79N±0°.07×91°.0E±0°.1,h10km±2km, mb3.8/5,Error ellipse: s-maj=17.7km s-min=8.0km az=238.0*
*DMN **11** 10:04:16.4±0.5,27°.14N×91°.08E,h10km,Ml4.6/3,Error ellipse: s-maj=24.3km s-min=8.4km az=10.0*
*NDI **11** 10:04:17.7±3.4,26°.67N×90°.96E,h10km,ML3.9,MW3.7, mb3.8(NEIC)*

**ISC 11 10:04:14.9±2.3,26°.77N±0°.05×90°.89E±0°.03,h13km±14km, n39,σ1s89/50,mb3.8/13,Northeastern India**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SHL** | **Shillong** | **1.49** | **143** | | | Pn | **Pn** | 10 04 42.5 | +1.0 |
| SHL | | | | | | Sn | **Sn** | 10 05 01.5 | +0.5 |
| **SHL** | **Shillong** | **1.49** | **143** | *eP* | | Pn | **Pn** | 10 04 42.6 | +1.0 |
| SHL | | | | *eS* | | Sg | **Sg** | 10 05 01.8 | -1.2 |
| SHL | | | | | IAML | | | 10 05 03.0 | |
| | comp=E,6µm,0.3s | | | | | | | | |
| SHL | | | | | IAML | | | 10 05 05.1 | |
| | comp=E,6µm,0.3s | | | | | | | | |
| **GTK** | **Tadong** | **2.12** | **286** | *eP* | | **Pn** | **Pn** | 10 04 52.4 | +2.3 |
| GTK | | | | *eS* | | **Sb** | **Sb** | 10 05 24.1 | +4.6 |
| GTK | | | | | IAML | | | 10 05 24.2 | |
| | comp=E,887nm,0.3s | | | | | | | | |
| GTK | | | | | IAML | | | 10 05 30.2 | |
| | comp=E,779nm,0.2s | | | | | | | | |
| **ZIRO** | **ZIRO** | **2.74** | **73** | *eP* | | **Pn** | **Pn** | 10 05 00.7 | +1.9 |
| ZIRO | | | | *eS* | | **Sn** | **Sn** | 10 05 37.0 | +5.1 |
| **TAPN** | **Taplejung** | **2.90** | **282** | *ePn* | | **Pn** | **Pn** | 10 05 02.2 | +1.2 |
| **LSA** | **Lhasa** | **2.93** | **4** | Pn | | **Pn** | **Pn** | 10 05 02.8 | +1.1 |
| **JORH** | **JORHAT** | **3.00** | **90** | *eP* | | **Pn** | **Pn** | 10 05 04.0 | +1.8 |
| JORH | | | | *eS* | | **Sn** | **Sn** | 10 05 39.5 | +1.4 |
| **KOHI** | **KOHIMA** | **3.07** | **109** | *eP* | | **Pn** | **Pn** | 10 05 04.7 | +1.4 |
| KOHI | | | | | IAML | | | 10 05 44.1 | |
| | comp=E,709nm,0.3s | | | | | | | | |
| KOHI | | | | | IAML | | | 10 05 45.5 | |
| | comp=E,474nm,0.6s | | | | | | | | |
| **ODAN** | **Odare** | **3.13** | **272** | *ePn* | | **Pn** | **Pn** | 10 05 06.6 | +2.4 |
| ODAN | | | | *eSn* | | **Sn** | **Sn** | 10 05 44.4 | +2.8 |
| **MOKO** | **MOKOCHONG** | **3.28** | **97** | *eP* | | **Pn** | **Pn** | 10 05 07.4 | +1.3 |
| MOKO | | | | *eS* | | **Sn** | **Sn** | 10 05 44.2 | -0.9 |
| MOKO | | | | | IAML | | | 10 05 47.5 | |
| | comp=E,520nm,0.3s | | | | | | | | |
| MOKO | | | | | IAML | | | 10 05 55.8 | |
| | comp=E,597nm,0.4s | | | | | | | | |
| **IMP** | **Imphal** | **3.36** | **124** | *eP* | | **Pn** | **Pn** | 10 05 09.8 | +2.5 |
| IMP | | | | *eS* | | **Sn** | **Sn** | 10 05 48.5 | +1.4 |
| IMP | | | | | IAML | | | 10 06 06.6 | |
| | comp=E,263nm,0.4s | | | | | | | | |
| IMP | | | | | IAML | | | 10 06 13.2 | |
| | comp=E,237nm,0.5s | | | | | | | | |
| **RAMN** | **Ramite** | **3.84** | **274** | *ePn* | | **Pn** | **Pn** | 10 05 15.6 | +1.6 |
| **JIRN** | **Jiri** | **4.28** | **283** | *ePn* | | **Pn** | **Pn** | 10 05 21.3 | +1.1 |
| **GUN** | **Gumba** | **4.60** | **285** | *ePn* | | **Pn** | **Pn** | 10 05 26.2 | +1.7 |
| GUN | | | | *eSn* | | **Sn** | **Sn** | 10 06 16.0 | -2.1 |
| **PKI** | **Pulchoki** | **4.95** | **281** | *ePn* | | **Pn** | **Pn** | 10 05 30.8 | +1.5 |
| PKI | | | | *eSn* | | **Sn** | **Sn** | 10 06 25.2 | -1.4 |
| **PKIN** | **Phulchoki** | **4.96** | **281** | *ePn* | | **Pn** | **Pn** | 10 05 30.9 | +1.5 |
| PKIN | | | | *eSn* | | **Sn** | **Sn** | 10 06 25.6 | -1.2 |
| **KKN** | **Kakani** | **5.10** | **283** | *ePn* | | **Pn** | **Pn** | 10 05 32.9 | +1.7 |
| **DANN** | **Dangsing** | **6.53** | **286** | *ePn* | | **Pn** | **Pn** | 10 05 51.5 | +0.6 |
| DANN | | | | *eSn* | | **Sn** | **Sn** | 10 07 02.9 | -2.5 |
| | comp=E,75nm,0.3s | | | | | | | | |
| **KOLN** | **Koldanda** | **6.57** | **280** | *ePn* | | **Pn** | **Pn** | 10 05 51.8 | +0.4 |
| KOLN | | | | *eSn* | | **Sn** | **Sn** | 10 07 03.6 | -2.7 |
| | comp=E,197nm,0.4s | | | | | | | | |
| **PYUN** | **Piuthan** | **7.15** | **283** | *ePn* | | **Pn** | **Pn** | 10 05 59.4 | 0.0 |
| PYUN | | | | *eSn* | | **Sn** | **Sn** | 10 07 17.4 | -3.2 |
| | comp=E,70nm,0.5s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **11.12** | **136** | Pn | | **Pn** | **Pn** | 10 06 53.1 | -0.6 |
| | comp=E,0.5nm,0.3s,baz=310,slow=15,SNR=1.2 comp=E,0.7nm,0.3s | | | | | | | | |
| **HYB** | **Hyderabad** | **14.73** | **233** | *eP* | | **P** | **P** | 10 07 50.4 | +1.1 |
| HYB | | | | *eS* | | **S** | **S** | 10 10 47.5 | +2.4 |
| **MK31** | **Makanchi Array** | **21.12** | **343** | P | | P | **P** | 10 08 58.0 | -1.3 |
| **MKAR** | **Makanchi Array** | **21.12** | **343** | P | | P | **P** | 10 08 59.0 | -0.3 |
| **MKAR** | **Makanchi Array** | **21.12** | **343** | P | | P | **P** | 10 08 58.5 | -0.8 |
| | comp=E,0.9nm,0.6s,baz=149,slow=13,SNR=8.7 comp=E,0.9nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **21.21** | **343** | P | | P | **P** | 10 09 00.4 | +0.1 |
| MAKZ | | | | | | IAmb | IAmb | 10 09 15.0 | |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| **BTK** | **Batken** | **21.30** | **314** | P | | P | **P** | 10 09 00.4 | -1.1 |
| **SIMJ** | **Simiganj** | **21.84** | **308** | P | | P | **P** | 10 09 07.5 | +0.2 |
| SIMJ | | | | | | IAmb | IAmb | 10 09 19.4 | |
| | comp=Z,5.1nm,1.1s | | | | | | | | |
| **SONM** | **Songino Array** | **24.29** | **26** | P | | P | **P** | 10 09 31.7 | -0.4 |
| | comp=Z,0.6nm,0.5s,baz=211,slow=7.8,SNR=2.8 comp=Z,0.6nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **25.63** | **342** | P | | P | **P** | 10 09 44.2 | +0.1 |
| | comp=Z,0.2nm,0.5s,baz=158,slow=10.0,SNR=4.9 comp=Z,0.2nm,0.5s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **32.78** | **322** | P | | P | | 10 10 47.0 | -0.7 |
| ABKAR | | | | | | IAmb | IAmb | 10 10 51.2 | |
| | comp=Z,1.2nm,0.9s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.09** | **64** | P | | P | **P** | 10 11 58.1 | -0.4 |
| | comp=Z,2.0nm,0.7s,baz=272,slow=11,SNR=7.1 comp=Z,2.0nm,0.7s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **52.01** | **315** | P | | P | | 10 13 22.3 | -1.7 |
| | comp=Z,0.2nm,0.3s,baz=87,slow=6.2,SNR=2.7 comp=Z,0.2nm,0.3s | | | | | | | | |
| **FINES** | **FINESS Array B** | **54.85** | **328** | P | | P | | 10 13 43.2 | -1.5 |
| | comp=Z,3.4nm,1.0s,baz=116,slow=9.4,SNR=3.9 comp=Z,3.4nm,1.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KWHZ | Kaweka Forest | 8.03 | 192 | P | | Pn | 10 29 55.4 -0.9 |
| TUVZ | Tukino | 8.04 | 196 | P | | Pn | 10 29 56.9 +0.3 |
| FWVZ | Far West T-bar | 8.05 | 197 | P | | Pn | 10 29 56.8 0.0 |
| WHVZ | Whangaehu Hut | 8.06 | 197 | P | | Pn | 10 29 57.1 0.0 |
| WNVZ | Wahianoa | 8.11 | 196 | P | | Pn | 10 29 57.3 -0.3 |
| PKVZ | Pokaka | 8.13 | 198 | P | | Pn | 10 29 58.3 +0.5 |
| VRZ | Vera Road | 8.15 | 201 | P | | Pn | 10 30 01.0 +3.1 |
| KRHZ | Kereru | 8.25 | 192 | P | | Pn | 10 29 57.5 -1.9 |
| KAHZ | Kahuranaki | 8.32 | 189 | P | | Pn | 10 29 57.7 -2.7 |
| PKE | Pukeiti | 8.47 | 205 | P | | Pn | 10 30 07.6 +5.2 |
| PNHZ | Pukenui | 8.54 | 192 | P | | Pn | 10 29 59.9 -3.5 |
| PXZ | Pawanui | 8.55 | 189 | P | | Pn | 10 30 00.1 -3.5 |
| WAZ | Wanganui | 8.66 | 198 | P | | Pn | 10 30 04.2 -0.9 |
| TSZ | Takapari Road | 8.73 | 193 | P | | Pn | 10 30 02.7 -3.3 |
| DVHZ | Dannevirke | 8.92 | 192 | P | | Pn | 10 30 04.5 -4.1 |
| ANWZ | Angora Road | 9.03 | 190 | P | | Pn | 10 30 06.1 -4.0 |
| BFZ | Birch Farm | 9.28 | 191 | P | | Pn | 10 30 08.5 -5.0 |
| BFZ | Birch Farm | 9.28 | 191 | P | | Pn | 10 30 08.2 -5.3 |
| QRZ | Quartz Range | 10.43 | 206 | P | | Pn | 10 30 25.8 -3.5 |
| KHZ | Kahutara | 11.54 | 199 | P | | Pn | 10 30 36.8 -7.6 |

*CNRM* ***11*** *10:36:19.3,41.96N×8.66W, h89km, ML3.5*
*SFS* ***11*** *10:36:21.7,41.58N×8.45W, h0km, ML3.6/11, ML3.6/11, MLv3.6/11*
*MDD* ***11*** *10:36:22.5±0.3,41.66N×8.51W, h12km, mb_Lg3.2/58, Error ellipse: s-maj=2.5km s-min=1.2km az=107.0*
*IGIL* ***11*** *10:36:23.1,41.68N×8.45W, h13km, ML2.5*
*INMG* ***11*** *10:36:23.0±1.9,41.68N×8.46W, h20km±2km, ML2.9, Error ellipse: s-maj=3.7km s-min=1.6km az=90.0*

**ISC 11 10:36:22.5±1.0, 41.69N±0.02×8.49W±0.03, h20km±4km, n82, σ2.922/162, 4C-4D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.32** | **31** | ⇑*e*Pg | | **Pb** | **10 36 29.3** | **-0.3** |
| PGAV | | | | *e*Sg | | **Sb** | **10 36 33.9** | **-0.5** |
| PGAV | | | | A | | A | 10 36 34.8 | |
| | 390nm,0.5s | | | | | | | |
| **PCAB** | **Cabril** | **0.35** | **87** | ⇑*e*Pg | | **Pb** | **10 36 29.5** | **-0.4** |
| PCAB | | | | *e*Sg | | **Sb** | **10 36 34.1** | **-0.9** |
| PCAB | | | | A | | A | 10 36 34.7 | |
| | 1μm,0.5s | | | | | | | |
| **ELOB** | **Lobios** | **0.36** | **61** | ⇑Pg | | **Pb** | **10 36 29.9** | **-0.4** |
| ELOB | | | | Sg | | **Sb** | **10 36 34.6** | **-0.9** |
| ELOB | | | | *i* Vmb_Lg | | | 10 36 35.5 | |
| **EZAM** | **Zamans** | **0.48** | **341** | Pg | | **Pb** | **10 36 32.2** | **-0.1** |
| EZAM | | | | Sg | | **Sb** | **10 36 38.8** | **-0.1** |
| EZAM | | | | *i* Vmb_Lg | | | 10 36 40.4 | |
| **POLO** | **Lamas de Olo** | **0.61** | **121** | ⇓*i*Pg | | **Pb** | **10 36 34.0** | **-0.6** |
| POLO | | | | *e*Sg | | **Sb** | **10 36 42.0** | **-0.9** |
| POLO | | | | A | | A | 10 36 42.9 | |
| | 102nm,0.1s | | | | | | | |
| **PVRL** | **Vila Real** | **0.71** | **125** | ⇓*e*Pg | | **Pb** | **10 36 35.8** | **-1.7** |
| PVRL | | | | *e*Sg | | **Sb** | **10 36 44.6** | **-1.1** |
| PVRL | | | | A | | A | 10 36 46.0 | |
| | 430nm,0.1s | | | | | | | |
| **PVIS** | **Viseu** | **1.07** | **155** | *e*P | | **Pn** | **10 36 41.7** | **-0.7** |
| PVIS | | | | *e*S | | **Sn** | **10 36 55.6** | **-1.2** |
| PVIS | | | | A | | A | 10 36 57.6 | |
| | 371nm,0.1s | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **1.15** | **15** | Pn | | **Pn** | **10 36 43.0** | **-0.5** |
| EAGO | | | | Pg | | **Pb** | **10 36 43.9** | **+0.2** |
| EAGO | | | | Sn | | **Sb** | **10 36 58.0** | **-0.2** |
| EAGO | | | | Sg | | **Sn** | **10 36 59.4** | **+0.8** |
| EAGO | | | | *i* Vmb_Lg | | | 10 37 00.5 | |
| **MVO** | **Moncorvo** | **1.22** | **115** | *e*P | | **Pb** | **10 36 43.7** | **-1.2** |
| MVO | | | | *e*S | | **Sn** | **10 36 59.5** | **-0.8** |
| MVO | | | | A | | A | 10 37 05.3 | |
| | 289nm,0.4s | | | | | | | |
| **EMAZ** | **Mazaricos** | **1.31** | **344** | Pn | | **Pn** | **10 36 45.5** | **-0.1** |
| EMAZ | | | | Pg | | **Pb** | **10 36 47.0** | **+0.6** |
| EMAZ | | | | Sg | | **Sb** | **10 37 04.6** | **+1.9** |
| EMAZ | | | | *i* Vmb_Lg | | | 10 37 05.6 | |
| **PBRG** | **Braganca** | **1.31** | **85** | *e*Pn | | **Pn** | **10 36 44.9** | **-0.8** |
| **PBRG** | **Braganca** | **1.31** | **85** | *e*Pg | | **Pb** | **10 36 46.4** | **-0.1** |
| PBRG | | | | *e*Sg | | **Sb** | **10 37 03.1** | **+0.2** |
| PBRG | | | | A | | A | 10 37 04.9 | |
| | 110nm,0.3s | | | | | | | |
| **ECAL** | **Calabor** | **1.33** | **79** | Sg | | **Sb** | **10 37 02.4** | **-1.1** |
| ECAL | | | | Pg | | **Pn** | **10 36 45.0** | **-1.0** |
| **ECAL** | **Calabor** | **1.33** | **79** | ⇑Pn | | **Pn** | **10 36 45.1** | **-0.9** |
| ECAL | | | | Pg | | **Pb** | **10 36 46.4** | **-0.4** |
| ECAL | | | | Sn | | **Sb** | **10 37 02.4** | **-1.1** |
| ECAL | | | | *i* Vmb_Lg | | | 10 37 06.6 | |
| **MTE** | **Manteigas** | **1.48** | **151** | *e*Pg | | **Pb** | **10 36 49.6** | **+0.3** |
| MTE | | | | *e*Sg | | **Sb** | **10 37 08.0** | **+0.4** |
| MTE | | | | A | | A | 10 37 09.8 | |
| | 110nm,0.2s | | | | | | | |
| **COI** | **Coimbra** | **1.48** | **178** | *e*Pg | | **Pb** | **10 36 49.3** | **-0.1** |
| COI | | | | *e*Sg | | **Sb** | **10 37 08.4** | **+0.6** |
| COI | | | | A | | A | 10 37 12.3 | |
| | 244nm,0.2s | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **1.64** | **180** | *e*Pn | | **Pb** | **10 36 49.8** | **-2.2** |
| **PCAS** | **Casmilo, Conde** | **1.64** | **180** | *e*Pg | | **Pb** | **10 36 51.8** | **-0.2** |
| PCAS | | | | *e*Sg | | **Sb** | **10 37 13.4** | **+1.2** |
| PCAS | | | | A | | A | 10 37 16.2 | |
| | 88nm,0.2s | | | | | | | |
| **EPON** | **Pontenova** | **1.91** | **31** | Pn | | **Pn** | **10 36 53.2** | **-0.7** |
| EPON | | | | Pg | | **Pb** | **10 36 58.1** | **+1.5** |
| EPON | | | | Sn | | **Sn** | **10 37 16.6** | **-0.7** |
| EPON | | | | Sg | | **Sb** | **10 37 21.0** | **+1.0** |
| EPON | | | | *i* Vmb_Lg | | | 10 37 25.4 | |
| **PCBR** | **Castelo Branco** | **2.00** | **157** | *e*Pn | | **Pn** | **10 36 54.7** | **-0.5** |
| **PCBR** | **Castelo Branco** | **2.00** | **157** | *e*Pg | | **Pb** | **10 36 59.0** | **+0.8** |
| PCBR | | | | *e*Sg | | **Sb** | **10 37 23.5** | **+0.8** |
| PCBR | | | | A | | A | 10 37 28.2 | |
| | 62nm,0.4s | | | | | | | |
| **EJUZ** | **Juzbado, Salam** | **2.05** | **106** | Pn | | **Pn** | **10 36 54.8** | **-1.0** |
| EJUZ | | | | Pg | | **Pb** | **10 37 00.4** | **+1.4** |
| EJUZ | | | | Sg | | **Sb** | **10 37 25.1** | **+1.0** |
| **PSBE** | **So Bento** | **2.19** | **186** | *e*Pn | | **Pn** | **10 36 57.9** | **+0.1** |
| PSBE | | | | *e*Sg | | **Sb** | **10 37 30.6** | **+2.5** |
| PSBE | | | | A | | A | 10 37 37.0 | |
| | 64nm,0.5s | | | | | | | |
| **PMRV** | **Marv??o** | **2.41** | **159** | *e*Pn | | **Pn** | **10 37 00.6** | **-0.2** |
| **PMRV** | **Marv??o** | **2.41** | **159** | *e*Pg | | **Pb** | **10 37 05.6** | **+0.4** |
| PMRV | | | | *e*Sg | | **Sb** | **10 37 35.6** | **+1.1** |
| PMRV | | | | A | | A | 10 37 41.8 | |
| | 39nm,0.4s | | | | | | | |
| **EPLA** | **Plasencia** | **2.45** | **131** | Pg | | **Pb** | **10 37 04.4** | **-1.4** |
| EPLA | | | | Sn | | **Sn** | **10 37 29.7** | **-0.9** |
| EPLA | | | | Sg | | **Sb** | **10 37 36.2** | **+0.7** |
| EPLA | | | | *i* Vmb_Lg | | | 10 37 41.4 | |
| **PMTG** | **Montargil** | **2.63** | **176** | *e*Pn | | **Pn** | **10 37 03.3** | **-0.5** |
| **PMTG** | **Montargil** | **2.63** | **176** | *e*Pg | | **Pb** | **10 37 08.7** | **-0.2** |
| PMTG | | | | *e*Sn | | **Sn** | **10 37 32.9** | **-2.1** |
| PMTG | | | | *e*Sg | | **Sb** | **10 37 42.9** | **+2.2** |
| PMTG | | | | A | | A | 10 37 51.8 | |
| | 23nm,0.7s | | | | | | | |
| **PESTR** | **Estremoz** | **2.91** | **166** | *e*Pn | | **Pn** | **10 37 07.2** | **-0.4** |
| PESTR | | | | *e*Sn | | **Sn** | **10 37 40.4** | **-1.5** |
| PESTR | | | | *e*Sg | | **Sb** | **10 37 50.6** | **+1.9** |
| PESTR | | | | A | | A | 10 37 56.3 | |
| | 32nm,0.7s | | | | | | | |
| **PESTR** | **Estremoz** | **2.91** | **166** | Sn | | **Sn** | **10 37 39.8** | **-2.1** |
| PESTR | | | | Pn | | **Pn** | **10 37 07.3** | **-0.3** |
| **PESTR** | **Estremoz** | **2.91** | **166** | P | | **Pn** | **10 37 07.6** | **0.0** |
| **PESTR** | **Estremoz** | **2.91** | **166** | S | | **Sb** | **10 37 45.4** | **-3.3** |
| **EARI** | **Arriondas** | **2.91** | **55** | Pn | | **Pn** | **10 37 09.0** | **+1.4** |
| EARI | | | | Sn | | **Sn** | **10 37 42.8** | **+0.8** |
| EARI | | | | Sg | | **Sb** | **10 37 53.3** | **+4.5** |
| **EBAD** | **Badajoz** | **3.14** | **158** | Pn | | **Pn** | **10 37 10.0** | **-0.8** |
| EBAD | | | | Sn | | **Sn** | **10 37 45.6** | **-2.2** |
| **EBAD** | **Badajoz** | **3.14** | **158** | Pn | | **Pn** | **10 37 10.1** | **-0.8** |
| EBAD | | | | Sn | | **Sn** | **10 37 46.0** | **-1.8** |
| EBAD | | | | Sg | | **Sb** | **10 37 59.2** | **+3.7** |
| EBAD | | | | *i* Vmb_Lg | | | 10 38 00.6 | |
| **EVO** | **Evora** | **3.18** | **173** | *e*Pn | | **Pn** | **10 37 10.9** | **-0.4** |
| EVO | | | | *e*Sn | | **Sn** | **10 37 46.2** | **-2.4** |
| EVO | | | | *e*Sg | | **Sb** | **10 38 00.3** | **+3.8** |
| EVO | | | | A | | A | 10 38 07.0 | |
| | 45nm,0.4s | | | | | | | |
| **GUD** | **Guadarrama** | **3.44** | **106** | Pn | | **Pn** | **10 37 14.8** | **-0.2** |
| GUD | | | | Sn | | **Sn** | **10 37 53.9** | **-1.3** |
| GUD | | | | Sg | | **Sb** | **10 38 08.0** | **+3.9** |
| GUD | | | | *i* Vmb_Lg | | | 10 38 11.1 | |
| **PNCL** | **Nicolau / Gran** | **3.58** | **181** | *e*Pn | | **Pn** | **10 37 16.4** | **-0.4** |
| PNCL | | | | *e*Sn | | **Sn** | **10 37 55.6** | **-2.8** |
| PNCL | | | | *e*Sg | | **Sb** | **10 38 12.4** | **+4.4** |
| PNCL | | | | A | | A | 10 38 20.4 | |
| | 11nm,0.5s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **3.58** | **181** | Pn | | **Pn** | **10 37 15.8** | **-1.0** |
| PNCL | | | | Sn | | **Sn** | **10 37 54.7** | **-3.8** |
| **PBAR** | **Barrancos** | **3.69** | **162** | ⇓*e*Pn | | **Pn** | **10 37 18.0** | **-0.3** |
| PBAR | | | | *e*Sn | | **Sn** | **10 37 58.0** | **-3.1** |
| PBAR | | | | *e*Sg | | **Sb** | **10 38 15.9** | **+4.8** |
| PBAR | | | | A | | A | 10 38 23.4 | |
| | 19nm,0.5s | | | | | | | |
| **PBAR** | **Barrancos** | **3.69** | **162** | Pn | | **Pn** | **10 37 17.4** | **-0.9** |
| PBAR | | | | Sn | | **Sn** | **10 37 57.0** | **-4.1** |
| **PBEJ** | **Beja** | **3.69** | **172** | *e*Sn | | **Sn** | **10 37 58.3** | **-3.0** |
| PBEJ | | | | *e*Sg | | **Sb** | **10 38 16.1** | **+4.7** |
| PBEJ | | | | A | | A | 10 38 22.1 | |
| | 15nm,0.6s | | | | | | | |
| **PAB** | **San Pablo** | **3.81** | **123** | Pn | | **Pn** | **10 37 19.8** | **-0.3** |
| PAB | | | | Sn | | **Sn** | **10 38 02.9** | **-1.5** |
| PAB | | | | Sg | | **Sb** | **10 38 18.1** | **+3.2** |
| PAB | | | | *i* Vmb_Lg | | | 10 38 26.9 | |
| **MESJ** | **Messejana** | **3.85** | **177** | ⇓*e*Pn | | **Pn** | **10 37 20.4** | **-0.2** |
| MESJ | | | | *e*Sn | | **Sn** | **10 38 02.4** | **-2.9** |
| MESJ | | | | A | | A | 10 38 27.0 | |
| | 11nm,0.4s | | | | | | | |
| **MESJ** | **Messejana** | **3.85** | **177** | *e*P | | **Pn** | **10 37 20.3** | **-0.3** |
| MESJ | | | | *e*S | | **Sn** | **10 38 02.0** | **-3.2** |
| MESJ | | | | IAML | | | 10 38 08.8 | |
| | comp=N,8.6nm,0.6s | | | | | | | |
| **ESDC** | **Sonseca Array** | **3.99** | **119** | Pn | | **Pn** | **10 37 22.5** | **0.0** |
| ESDC | | | | Sn | | **Sn** | **10 38 07.0** | **-1.6** |
| ESDC | | | | Sg | | **Sb** | **10 38 25.0** | **+5.1** |
| ESDC | | | | *i* Vmb_Lg | | | 10 38 31.3 | |
| **ELAN** | **Lanestosa** | **4.04** | **66** | Pn | | **Pn** | **10 37 24.2** | **+1.0** |
| ELAN | | | | Pg | | **Pb** | **10 37 35.1** | **+2.1** |
| ELAN | | | | Sn | | **Sn** | **10 38 09.5** | **-0.5** |
| ELAN | | | | Sg | | **Sb** | **10 38 26.0** | **+4.5** |
| ELAN | | | | *i* Vmb_Lg | | | 10 38 32.8 | |
| **PCVE** | **Castro Verde** | **4.07** | **175** | *e*Pn | | **Pn** | **10 37 23.1** | **-0.5** |
| PCVE | | | | *e*Sn | | **Sn** | **10 38 07.8** | **-2.8** |
| PCVE | | | | *e*Sg | | Sb | 10 38 29.2 | +7.0 |
| PCVE | | | | A | | A | 10 38 34.5 | |
| | comp=N,15nm,0.5s | | | | | | | |
| **PCVE** | **Castro Verde** | **4.07** | **175** | Pn | | **Pn** | **10 37 22.5** | **-1.1** |
| PCVE | | | | Sn | | **Sn** | **10 38 06.2** | **-4.4** |
| **PTEO** | **Sao Teotonio** | **4.15** | **183** | *e*Pn | | **Pn** | **10 37 24.4** | **-0.2** |
| PTEO | | | | *e*Sg | | Sb | 10 38 31.8 | +7.4 |
| PTEO | | | | A | | A | 10 38 37.3 | |
| | comp=N,16nm,0.6s | | | | | | | |
| **EMIN** | **Mina Concepcio** | **4.16** | **160** | Pn | | **Pn** | **10 37 23.2** | **-1.6** |
| EMIN | | | | Sn | | **Sn** | **10 38 07.7** | **-5.2** |
| **EMIN** | **Mina Concepcio** | **4.16** | **160** | Pn | | **Pn** | **10 37 24.5** | **-0.4** |
| EMIN | | | | Sn | | **Sn** | **10 38 09.7** | **-3.2** |
| EMIN | | | | Sg | | **Sb** | **10 38 31.2** | **+6.4** |
| EMIN | | | | *i* Vmb_Lg | | | 10 38 40.3 | |
| **UCM** | **Universidad Co** | **4.20** | **107** | Pn | | **Pn** | **10 37 26.2** | **+0.7** |
| UCM | | | | Sn | | **Sn** | **10 38 13.2** | **-0.8** |
| **EGRO** | **El Granado** | **4.22** | **169** | Pn | | **Pn** | **10 37 25.4** | **-0.4** |
| EGRO | | | | Sn | | **Sn** | **10 38 11.7** | **-2.7** |
| **EGRO** | **El Granado** | **4.22** | **169** | Pn | | **Pn** | **10 37 25.3** | **-0.4** |
| EGRO | | | | Sn | | **Sn** | **10 38 12.8** | **-1.7** |
| EGRO | | | | Sg | | **Sb** | **10 38 31.9** | **+5.2** |
| EGRO | | | | *i* Vmb_Lg | | | 10 38 39.3 | |
| **ECAB** | **El Cabril** | **4.32** | **146** | Pn | | **Pn** | **10 37 26.1** | **-0.9** |
| ECAB | | | | Sn | | **Sn** | **10 38 13.4** | **-3.3** |
| **ECAB** | **El Cabril** | **4.32** | **146** | Pn | | **Pn** | **10 37 26.4** | **-0.6** |
| ECAB | | | | Sn | | **Sn** | **10 38 13.8** | **-2.9** |
| ECAB | | | | Sg | | **Sb** | **10 38 35.7** | **+6.4** |
| ECAB | | | | *i* Vmb_Lg | | | 10 38 43.4 | |
| **PVAQ** | **Vaqueiros** | **4.33** | **172** | *e*Pn | | **Pn** | **10 37 26.7** | **-0.4** |
| PVAQ | | | | *e*Sn | | **Sn** | **10 38 14.0** | **-2.9** |
| PVAQ | | | | *e*Sg | | Sb | 10 38 37.4 | +7.9 |
| PVAQ | | | | A | | A | 10 38 43.5 | |
| | comp=N,20nm,0.5s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **4.33** | **172** | Pn | | **Pn** | **10 37 26.4** | **-0.6** |
| PVAQ | | | | Sn | | **Sn** | **10 38 13.6** | **-3.3** |
| **PVAQ** | **Vaqueiros** | **4.33** | **172** | P | | **Pn** | **10 37 26.7** | **-0.4** |
| **PVAQ** | **Vaqueiros** | **4.33** | **172** | S | | **Sn** | **10 38 19.0** | **+2.1** |
| **MORF** | **Marmelete** | **4.38** | **182** | *e*Pn | | **Pn** | **10 37 27.4** | **-0.6** |
| MORF | | | | *e*Sn | | **Sn** | **10 38 15.2** | **-3.2** |
| MORF | | | | A | | A | 10 38 43.4 | |
| | comp=N,6.9nm,0.4s | | | | | | | |
| **MORF** | **Marmelete** | **4.38** | **182** | *e*P | | **Pn** | **10 37 27.4** | **-0.6** |
| MORF | | | | *e*S | | **Sn** | **10 38 14.5** | **-3.9** |
| MORF | | | | IAML | | | 10 38 17.4 | |
| | comp=N,10nm,0.2s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **4.46** | **174** | *e*Pn | | **Pn** | **10 37 28.9** | **-0.1** |
| PBDV | | | | *e*Sn | | **Sn** | **10 38 17.3** | **-3.1** |
| PBDV | | | | A | | A | 10 38 52.0 | |
| | comp=N,12nm,0.7s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.56** | **183** | *e*Pn | | **Pn** | **10 37 29.9** | **-0.4** |
| PFVI | | | | *e*Sn | | **Sn** | **10 38 18.5** | **-4.2** |
| PFVI | | | | A | | A | 10 38 53.4 | |
| | comp=N,9.4nm,0.8s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.56** | **183** | Pn | | **Pn** | **10 37 28.9** | **-1.4** |
| PFVI | | | | Sn | | **Sn** | **10 38 17.5** | **-5.2** |
| **PFVI** | **Vila Bisbo** | **4.56** | **183** | P | | **Pn** | **10 37 29.7** | **-0.6** |
| **PFVI** | **Vila Bisbo** | **4.56** | **183** | S | | **Sn** | **10 38 25.0** | **+2.3** |
| **EADA** | **Adamuz** | **4.63** | **138** | Pn | | **Pn** | **10 37 30.5** | **-0.8** |
| EADA | | | | Sn | | **Sn** | **10 38 21.2** | **-3.2** |
| **EADA** | **Adamuz** | **4.63** | **138** | Pn | | **Pn** | **10 37 30.8** | **-0.5** |
| EADA | | | | Sn | | **Sn** | **10 38 21.5** | **-3.0** |
| EADA | | | | Sg | | Sb | 10 38 45.6 | +7.2 |
| EADA | | | | *i* Vmb_Lg | | | 10 38 50.0 | |
| **ESPR** | **Espera** | **5.23** | **156** | Pn | | **Pn** | **10 37 39.0** | **-0.5** |
| ESPR | | | | Sn | | **Sn** | **10 38 37.3** | **-2.0** |
| ESPR | | | | *i* Vmb_Lg | | | 10 39 19.1 | |
| **EORO** | **Oroz-Betelu** | **5.46** | **75** | Pn | | **Pn** | **10 37 43.0** | **+0.3** |
| EORO | | | | Sn | | **Sn** | **10 38 44.0** | **-0.9** |
| EORO | | | | Sg | | Sb | 10 39 12.1 | +10 |
| EORO | | | | *i* Vmb_Lg | | | 10 39 27.5 | |
| **EQUE** | **Quentar** | **5.95** | **137** | Sg | | Sb | 10 39 29.2 | +13 |
| EQUE | | | | *i* Vmb_Lg | | | 10 39 51.1 | |
| **ESAC** | **San Caprasio** | **6.00** | **87** | Sg | | Sb | 10 39 28.2 | +10 |
| ESAC | | | | *i* Vmb_Lg | | | 10 39 37.6 | |
| **ECHE** | **Chera** | **6.09** | **108** | Sg | | Sb | 10 39 29.0 | +8.6 |
| ECHE | | | | *i* Vmb_Lg | | | 10 39 46.2 | |
| **EVIV** | **Cofrentes, Val** | **6.12** | **111** | Sg | | Sb | 10 39 34.6 | +13 |
| EVIV | | | | *i* Vmb_Lg | | | 10 39 49.0 | |
| **EMOS** | **Mosqueruela** | **6.21** | **100** | Sn | | **Sn** | **10 39 00.0** | **-3.5** |
| **ECHI** | **Chisagues Biel** | **6.52** | **79** | Pn | | **Pn** | **10 37 58.8** | **+1.3** |
| ECHI | | | | Sn | | **Sn** | **10 39 06.0** | **-5.3** |
| ECHI | | | | *i* Vmb_Lg | | | 10 39 59.4 | |
| **MD31** | **MD31** | **9.30** | **160** | P | | **Pn** | **10 38 34.7** | **-0.7** |
| **MD31** | **MD31** | **9.30** | **160** | S | | **Sn** | **10 40 21.5** | **+2.1** |
| **MDT** | **Midelt** | **9.39** | **160** | P | | **Pn** | **10 38 35.5** | **-1.1** |
| **MDT** | **Midelt** | **9.39** | **160** | S | | **Sn** | **10 40 24.2** | **+2.5** |

*IDC* ***11*** *11:03:19.1±5.5,20.58N×94.30E, h58km±48km, mb3.3/5, mbtmp3.6/6, ML3.7/1, Error ellipse: s-maj=46.6km s-min=28.9km az=58.0*

**ISC 11 11:03:20.7±1.3, 20.6N±0.2×94.4E±0.2, h72km, n6, σ1.918/6, mb3.6/5, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **4.78** | **116** | P | | **Pn** | **11 04 30.2** | **-0.1** |
| | 0.8nm,0.3s,baz=288,slow=14,SNR=6.8 1.8nm,0.4s | | | | | | | |
| **KSRS** | **Korea Array** | **33.56** | **53** | P | | **P** | **11 09 52.9** | **-0.8** |
| | 0.4nm,0.5s,baz=252,slow=7.0,SNR=2.2 0.4nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.14** | **133** | P | | **P** | **11 12 52.8** | **-0.3** |
| | 0.5nm,0.7s,baz=318,slow=7.6,SNR=10 0.5nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **58.45** | **137** | P | | **P** | **11 13 10.1** | **+0.6** |
| | 0.3nm,0.9s,baz=314,slow=6.6,SNR=4.7 0.3nm,0.9s | | | | | | | |
| **KEST** | **Kesra** | **74.39** | **303** | P | | **P** | **11 14 50.5** | **-0.8** |
| | 2.7nm,0.6s,baz=80,slow=9.2,SNR=4.1 2.7nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.93** | **22** | P | | **P** | **11 15 39.0** | **+1.5** |
| | 0.1nm,0.5s,baz=288,slow=4.9,SNR=2.0 0.1nm,0.5s | | | | | | | |

**HEL 11 11:08:57.9±0.3, 67.56N×30.32E, h0km, ML1.6, Explosion, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VRF** | **Varrio** | **0.33** | **304** | PG | PG | Pg | 11 09 03.8 | -0.4 |
| | baz=119 | | | | | | | |
| VRF | | | | SG | | Sg | 11 09 08.5 | +0.1 |
| **RAJF** | **Raja-Jooseppi** | **1.19** | **321** | PG | | Pg | 11 09 19.3 | -1.3 |
| RAJF | | | | SN | | Sn | 11 09 39.9 | +1.3 |
| **OLKF** | **Oulanka, Finla** | **1.30** | **197** | PN | | Pb | 11 09 23.0 | -0.2 |
| OLKF | | | | MSG | | | 11 09 37.3 | |
| | comp=Z,8.6nm,0.2s | | | | | | | |
| OLKF | | | | SN | | Sn | 11 09 42.7 | +1.4 |
| **SGF** | **Sodankyl** | **1.47** | **267** | PG | | Pn | 11 09 24.1 | -1.4 |
| SGF | | | | SN | | Sg | 11 09 44.4 | -0.5 |
| **KU6** | **Riekki** | **1.56** | **187** | PN | | Pn | 11 09 26.8 | 0.0 |
| KU6 | | | | MSG | | | 11 09 44.6 | |
| | comp=Z,2.6nm,0.2s | | | | | | | |
| KU6 | | | | SN | | Sg | 11 09 49.4 | +1.6 |
| **MSF** | **Maaselka** | **1.74** | **198** | PG | | Pn | 11 09 29.0 | -0.3 |
| | baz=19 | | | | | | | |
| MSF | | | | SN | | Sn | 11 09 52.2 | +0.1 |
| **RNF** | **Rovaniemi** | **1.94** | **242** | PG | | Pn | 11 09 32.6 | +0.5 |
| **RANF** | **Ranua** | **2.09** | **224** | PG | | Pn | 11 09 35.1 | +0.9 |
| RANF | | | | SG | | Sb | 11 10 02.5 | -0.6 |
| **KEV** | **Kevo** | **2.51** | **333** | MSG | | | 11 10 12.0 | |
| | comp=Z,1.5nm,0.2s | | | | | | | |
| KEV | | | | SG | | Sb | 11 10 14.8 | -0.4 |
| **HEF** | **Hetta** | **2.65** | **292** | MSG | | | 11 10 15.9 | |
| | comp=Z,2.0nm,0.2s | | | | | | | |
| HEF | | | | SG | | Sb | 11 10 18.6 | -0.6 |
| **PAJU** | **Pajala** | **2.85** | **262** | PB | | Pn | 11 09 45.2 | +0.6 |
| PAJU | | | | SG | | Sb | 11 10 25.3 | +0.3 |

*IDC* ***11*** *11:09:47.0±2.6,67.56N×30.09E, h0km, mbtmp2.6/2, ML1.8/2, Error ellipse: s-maj=42.8km s-min=11.7km az=70.0*
*KOLA* ***11*** *11:09:47.4,67.51N×30.49E, h0km, ML2.3, Error ellipse: s-maj=4.5km s-min=2.9km az=40.0, Kovdor City, Mines*

**ISC 11 11:09:44.5±0.9, 67.68N±0.05×30.31E±0.05, h0km, n12, σ0.979/16, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **APA0** | **Apatity Array** | **1.03** | **93** | P | | **Pg** | **11 10 04.1** | **-0.1** |
| APA0 | | | | S | | **Sb** | **11 10 18.3** | **-0.9** |
| **LVZ** | **Lovozero** | **1.67** | **80** | P | | **Pn** | **11 10 15.2** | **+0.2** |
| LVZ | | | | S | | **Sb** | **11 10 37.5** | **0.0** |
| **PRVG** | **Vayda Guba** | **2.19** | **17** | S | | **Sg** | **11 10 55.7** | **+0.9** |
| **TERR** | **Teriberka** | **2.34** | **47** | S | | **Sb** | **11 10 56.8** | **-0.2** |
| **VADS** | **Vadso** | **2.48** | **352** | P | | **Pb** | **11 10 30.2** | **+0.4** |
| VADS | | | | S | | **Sg** | **11 11 03.1** | **-0.9** |
| **VADS** | **Vadso** | **2.48** | **352** | P | | **Pb** | **11 10 30.2** | **+0.4** |
| VADS | | | | S | | **Sg** | **11 11 03.1** | **-0.9** |
| **ARCES** | **ARCESS Array B** | **2.57** | **319** | S | | **Sg** | **11 11 07.0** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **2.57** | **319** | Pn | | **Pb** | **11 10 30.1** | **-1.3** |
| | 0.3nm,0.3s,baz=136,slow=14,SNR=7.0 | | | | | | | |
| ARCES | | | | Lg | | Lg | 11 11 08.8 | |
| | 0.9nm,0.3s,baz=140,slow=28,SNR=8.8 0.5nm,0.2s | | | | | | | |
| **I37NO** | **I37NO** | **4.55** | **293** | I | | I | 11 38 10.0 | |
| | baz=104,slow=314,SNR=4.2 | | | | | | | |
| **FAUS** | **Fauske** | **5.77** | **274** | S | | **Sn** | **11 12 19.0** | **+1.1** |
| **FAUS** | **Fauske** | **5.77** | **274** | S | | **Sn** | **11 12 19.0** | **+1.1** |
| **FINES** | **FINESS Array B** | **6.52** | **198** | Pn | | **Pn** | **11 11 21.4** | **-0.1** |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=1.1 | | | | | | | |
| FINES | | | | Sn | | **Sn** | **11 12 36.9** | **+0.5** |
| | 0.1nm,0.3s,baz=23,slow=23,SNR=1.4 1.2nm,0.9s | | | | | | | |

**IDC 11 11:28:48.1±11.0, 16.09S×174.30W, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=490.9km s-min=37.4km az=140.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **48.84** | **257** | P | | P | 11 37 35.5 | -0.2 |
| | 0.3nm,0.8s,baz=90,slow=7.1,SNR=6.3 0.3nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **49.08** | **252** | P | | P | 11 37 37.5 | 0.0 |
| | 1.1nm,0.6s,baz=88,slow=8.0,SNR=18 1.1nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.29** | **11** | P | | P | 11 41 16.3 | 0.0 |
| | 0.2nm,0.5s,baz=222,slow=5.8,SNR=5.3 0.2nm,0.5s | | | | | | | |

*DNK* ***11*** *11:53:02.7±1.0,50.69N×20.08E, h14km, ML3.0*
*VIE* ***11*** *11:53:03.6±0.8,50.37N×18.81E, h0km, mb2.8/17, ml3.4/10, ms3.9/8, Error ellipse: s-maj=6.7km s-min=3.0km az=160.0, Suspected Mining induced.*
*LDG* ***11*** *11:53:03.8±1.0,50.30N×18.79E, h2km, Ml3.9/8, Error ellipse: s-maj=9999.9km s-min=9999.9km az=99.0*
*IDC* ***11*** *11:53:03.3±0.7,50.26N×18.73E, h0km, mb3.4/2, mbtmp3.5/8, ML3.3/7, Error ellipse: s-maj=13.6km s-min=6.0km az=149.0*
*IPEC* ***11*** *11:53:03.7±0.1,50.33N×18.80E, h1km, ML3.5/5, Error ellipse: s-maj=1.8km s-min=0.8km az=169.0*
*PRU* ***11*** *11:53:04.1,50.37N×18.77E, h0km*
*BGR* ***11*** *11:53:04.2±0.3,50.36N×18.79E, h1

| | | | | | | |
|---|---|---|---|---|---|---|
| **UPC** | **Upice** | **1.79 276** | *e*PG | **Pn** | **11 53 35.2 +1.2** | |
| **VYHS** | **Vyhne** | **1.86 179** | *e*PG | **Pn** | **11 53 36.2 +1.2** | |
| VYHS | | | *e*SG | **Sn** | **11 53 59.7 +0.6** | |
| **KRUC** | **Moravsky** | **2.02 231** | *e*Pn | **Pn** | **11 53 38.5 +1.3** | |
| | baz=50 | | | | | |
| KRUC | | | *e*Sg | **Sb** | **11 54 06.6 +1.4** | |
| | 233nm,0.6s,baz=50 | | | | | |
| **KRUC** | **Moravsky** | **2.02 231** | *e*PN | **Pn** | **11 53 38.6 +1.3** | |
| KRUC | | | *e*SG | **Sb** | **11 54 06.7 +1.5** | |
| **KECS** | **Kecovo** | **2.17 149** | *e*PN | **Pn** | **11 53 40.4 +1.1** | |
| KECS | | | *e*PG | **Pg** | **11 53 45.8 +2.3** | |
| KECS | | | *e*SG | **Sg** | **11 54 12.1 +0.6** | |
| KECS | | | *e*LG | Lg | 11 54 25.9 | |
| **ZST** | **Bratislava** | **2.42 208** | *e*PN | **Pn** | **11 53 44.4 +1.7** | |
| ZST | | | *e*PG | **Pg** | **11 53 48.4 +0.1** | |
| ZST | | | *e*SG | **Sg** | **11 54 22.8 +3.1** | |
| ZST | | | *e*LG | Lg | 11 54 42.1 | |
| **PSZ** | **Piszkesteto** | **2.54 163** | ⇑P | **Pn** | **11 53 42.7 -1.7** | |
| **SRO** | **Srobarova** | **2.56 187** | *e*PG | **Pg** | **11 53 52.3 +1.4** | |
| SRO | | | *e*SG | **Sg** | **11 54 28.2 +4.2** | |
| SRO | | | *e*LG | Lg | 11 54 42.0 | |
| **GOPC** | **GO Pecny, Ondr** | **2.62 262** | *e*PN | **Pn** | **11 53 46.2 +0.8** | |
| GOPC | | | *e*PG | **Pb** | **11 53 51.1 +1.4** | |
| GOPC | | | *e*SG | **Sg** | **11 54 25.7 -0.2** | |
| | comp=Z,117nm,0.7s | | | | | |
| **KOLS** | **Kolonicke sedl** | **2.67 121** | *e*PN | **Pn** | **11 53 47.7 +1.6** | |
| KOLS | | | *e*PG | **Pg** | **11 53 56.6 +3.6** | |
| KOLS | | | *e*SN | **Sn** | **11 54 19.8 +0.6** | |
| KOLS | | | *e*SG | **Sg** | **11 54 29.0 +1.4** | |
| KOLS | | | *e*LG | Lg | 11 54 36.7 | |
| **PVCC** | **Panska Ves** | **2.71 275** | *e*SG | **Sg** | **11 54 30.4 +1.5** | |
| | comp=Z,218nm,0.6s | | | | | |
| **PRU** | **Pruhonice** | **2.76 264** | *e*SG | **Sg** | **11 54 30.4 -0.1** | |
| | comp=Z,97nm,0.6s | | | | | |
| **HOLU** | **Holmets** | **2.97 127** | P | **Pn** | **11 53 51.2 +1.0** | |
| **CONA** | **Conrad Observa** | **3.10 220** | *e*Pn | **Pn** | **11 53 53.4 +1.3** | |
| | 2.4nm,0.5s | | | | | |
| CONA | | | *i* Sn | **Sb** | **11 54 35.5 -0.7** | |
| | 46nm,0.5s | | | | | |
| **RONA** | **Rosalia, Austr** | **3.12 213** | *e*Pn | **Pn** | **11 53 53.8 +1.5** | |
| | 7.7nm,0.3s | | | | | |
| RONA | | | *e*Sn | **Sn** | **11 54 32.6 +2.2** | |
| | 75nm,1.0s | | | | | |
| **BRG** | **Berggiesshubel** | **3.13 282** | Pg | **Pg** | **11 54 02.3 +0.3** | |
| BRG | | | Sg | **Sg** | **11 54 44.3 +1.7** | |
| BRG | | | Amp | | 11 54 50.8 | |
| | comp=Z,74nm,0.5s | | | | | |
| **BRG** | **Berggiesshubel** | **3.13 282** | *e*Pg | **Pg** | **11 54 02.1 +0.1** | |
| BRG | | | *e*Sg | **Sg** | **11 54 44.3 +1.7** | |
| **SHIU** | **Shidnytsya** | **3.17 109** | P | **Pn** | **11 53 55.5 +2.5** | |
| **MUKU** | **Mukachevo** | **3.17 125** | P | **Pn** | **11 53 55.7 +2.7** | |
| **MPLH** | **Magyarpolny** | **3.29 195** | P | **Pn** | **11 53 55.7 +1.1** | |
| **BERU** | **Beregovo** | **3.29 129** | P | **Pn** | **11 53 56.0 +1.3** | |
| **CKRC** | **Cesky Krumlov** | **3.29 244** | *e*PN | **Pn** | **11 53 57.8 +3.0** | |
| CKRC | | | *e*PG | **Pb** | **11 54 03.8 +2.6** | |
| CKRC | | | *e*SG | **Sg** | **11 54 46.3 -1.4** | |
| | comp=Z,140nm,0.5s | | | | | |
| **FBE** | **Freiberg** | **3.51 281** | *e*Pg | **Pg** | **11 54 09.7 +0.6** | |
| FBE | | | *e*Sg | **Sg** | **11 54 57.2 +2.6** | |
| **MORS** | **Morshin** | **3.52 108** | P | **Pn** | **11 54 00.2 +2.3** | |
| **MEZ** | **Mezhgor'ye** | **3.58 119** | P | **Pn** | **11 54 02.0 +3.2** | |
| **KHC** | **Kasperske Hory** | **3.60 252** | *e*PN | **Pn** | **11 54 00.5 +1.6** | |
| KHC | | | *e*PG | **Pb** | **11 54 06.7 +0.3** | |
| KHC | | | *e*SG | **Sg** | **11 54 58.4 +1.0** | |
| | comp=Z,138nm,0.6s | | | | | |
| **GEC2** | **GERESS Array S** | **3.64 248** | *e*Pn | **Pn** | **11 54 01.0 +1.4** | |
| GEC2 | | | *e*Pg | **Pg** | **11 54 11.8 +0.1** | |
| GEC2 | | | *e*Sg | **Sg** | **11 54 58.2 -0.6** | |
| **GERES** | **GERESS Array B** | **3.64 248** | Pn | **Pn** | **11 54 00.6 +1.0** | |
| | comp=Z,0.9nm,0.3s,baz=94,slow=14,SNR=9.7 | | | | | |
| GERES | | | Pg | **Pb** | **11 54 08.4 +1.2** | |
| | comp=Z,5.1nm,0.3s,baz=86,slow=15,SNR=25 | | | | | |
| GERES | | | Sn | **Sn** | **11 54 40.7 -2.6** | |
| | comp=Z,3.4nm,0.3s,baz=37,slow=27,SNR=4.6 | | | | | |
| GERES | | | Lg | Lg | 11 54 57.0 | |
| | comp=Z,5.8nm,0.3s,baz=60,slow=18,SNR=6.7 | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | |
| **ARSA** | **Arzberg** | **3.78 216** | *i* Pn | **Pn** | **11 54 03.2 +1.7** | |
| | comp=Z,1.4nm,0.3s | | | | | |
| ARSA | | | *e*Sn | **Sn** | **11 54 49.3 +2.7** | |
| | comp=Z,24nm,0.7s | | | | | |
| **CLL** | **Collm** | **3.80 287** | *e*Pg | **Pg** | **11 54 14.0 -0.6** | |
| CLL | | | *i* x | x | 11 54 16.3 | |
| CLL | | | *e*Sg | **Sg** | **11 55 05.0 +1.2** | |
| | comp=Z,221nm,0.9s | | | | | |
| **CLL** | **Collm** | **3.80 287** | *e*Pg | **Pg** | **11 54 14.5 -0.1** | |
| CLL | | | *e*Sg | **Sg** | **11 55 05.4 +1.6** | |
| **RUE** | **Ruedersdorf** | **3.80 306** | *e*P | **Pg** | **11 54 18.1 +3.4** | |
| **MOA** | **Molln** | **3.89 232** | *i* Pn | **Pn** | **11 54 04.7 +1.8** | |
| | comp=Z,1.3nm,0.4s | | | | | |
| MOA | | | Sg | **Sg** | **11 55 05.0 -1.7** | |
| | comp=Z,81nm,0.6s | | | | | |
| **WET** | **Wettzell** | **4.02 255** | *e*Pn | **Pn** | **11 54 06.3 +1.6** | |
| WET | | | *e*Sg | **Sg** | **11 55 10.0 -1.0** | |
| **TANN** | **Tannenbergstha** | **4.05 273** | *e*Pn | **Pn** | **11 54 07.0 +1.7** | |
| TANN | | | *e*Pg | **Pg** | **11 54 21.1 +1.5** | |
| TANN | | | *e*Sg | **Sg** | **11 55 1.7 -0.4** | |
| **BMR** | **Baia Mare** | **4.09 129** | ⇓P | **Pn** | **11 54 06.2 +0.5** | |
| **MORH** | **Mrgy, Hungar** | **4.14 181** | ⇑P | **Pn** | **11 54 04.3 -2.0** | |
| **MORH** | **Mrgy, Hungar** | **4.14 181** | P | **Pn** | **11 54 06.7 +0.4** | |
| **WERD** | **Werda** | **4.15 274** | *e*Pg | **Pg** | **11 54 22.7 +1.2** | |
| WERD | | | *e*Sg | **Sg** | **11 55 16.6 +1.3** | |
| **MESR** | **Meseseni** | **4.22 138** | ⇑P | **Pn** | **11 54 07.8 +0.3** | |
| **ROTZ** | **Rotzenmuhle** | **4.29 265** | *e*Pn | **Pn** | **11 54 08.8 +0.4** | |
| **BIOA** | **Bad Ischl, Aus** | **4.31 234** | *i* Pn | **Pn** | **11 54 08.6 -0.2** | |
| | comp=Z,2.9nm,0.3s | | | | | |
| BIOA | | | *e*Sg | **Sg** | **11 55 21.2 +0.8** | |
| | comp=Z,64nm,0.5s | | | | | |
| **SOKA** | **Soboth** | **4.44 216** | *i* Pn | **Pn** | **11 54 12.7 +2.1** | |
| | comp=Z,1.5nm,0.5s | | | | | |
| SOKA | | | *e*Sg | **Sb** | **11 55 17.0 +2.0** | |
| | comp=Z,7.4nm,0.7s | | | | | |
| **SIRR** | **Siria** | **4.51 154** | ⇑P | **Pn** | **11 54 10.2 -1.2** | |
| **SUW** | **Suwalki** | **4.55 35** | *e*P | **Pn** | **11 54 13.9 +1.8** | |
| **MOX** | **Moxa** | **4.59 276** | *e*Pn | **Pn** | **11 54 14.3 +1.7** | |
| MOX | | | *e*Sg | **Sg** | **11 55 29.9 +0.5** | |
| **MARR** | **Marisel-Cluj** | **4.67 140** | ⇑P | **Pn** | **11 54 12.9 -0.7** | |
| **OBKA** | **Obir** | **4.77 218** | *i* Pn | **Pn** | **11 54 17.4 +2.3** | |
| | comp=Z,1.9nm,0.3s | | | | | |
| OBKA | | | *e*Sg | **Sg** | **11 55 30.7 -4.3** | |
| | comp=Z,7.0nm,0.5s | | | | | |
| **KBA** | **Koelnbreinsper** | **4.87 230** | *e*Pg | **Pb** | **11 54 32.4 +4.2** | |
| | comp=Z,3.7nm,0.4s | | | | | |
| KBA | | | *e*Sg | **Sg** | **11 55 38.1 -0.2** | |
| | comp=Z,30nm,0.6s | | | | | |
| **ARCR** | **ARCALIA** | **4.92 129** | ⇑P | **Pn** | **11 54 17.1 0.0** | |
| **GRF** | **Grafenberg Arr** | **4.93 265** | *e*Sg | **Sg** | **11 55 40.5 +0.4** | |
| **LESA** | **Schwarzleotal** | **4.99 236** | *e*Pn | **Pn** | **11 54 22.4 +4.3** | |
| | comp=Z,0.1nm,0.1s | | | | | |
| LESA | | | *e*Sg | **Sg** | **11 55 40.4 -1.6** | |
| | comp=Z,28nm,0.6s | | | | | |
| **BURAR** | **Bucovina Array** | **5.04 120** | ⇑P | **Pn** | **11 54 19.8 +1.1** | |
| **MYKA** | **Terra Mystica** | **5.06 225** | *e*Pg | **Pb** | **11 54 31.9 +0.6** | |
| | comp=Z,1.7nm,0.4s | | | | | |
| MYKA | | | *e*Sg | **Sg** | **11 55 43.2 -1.1** | |
| | comp=Z,7.2nm,0.5s | | | | | |
| **BZS** | **Buzias** | **5.10 157** | ⇓P | **Pn** | **11 54 18.7 -0.9** | |
| **SURR** | **Surduc** | **5.11 153** | ⇓P | **Pn** | **11 54 18.9 -0.8** | |
| **FRGS** | **Fruska Gora** | **5.24 172** | ⇑P | **Pn** | **11 54 19.8 -1.7** | |
| **FRGS** | **Fruska Gora** | **5.24 172** | P | **Pn** | **11 54 22.5 +1.0** | |
| | comp=Z,23nm,0.7s,comp=Z,350nmcomp=Z,0.1nm | | | | | |
| **KMPD** | **K-Podol'skiy** | **5.31 107** | P | **Pn** | **11 54 23.3 +0.9** | |
| **BSD** | **Bornholm Skovb** | **5.32 335** | *e*P | **Pn** | **11 54 23.6 +1.0** | |
| **BSD** | **Bornholm Skovb** | **5.32 335** | *i* P | **Pn** | **11 54 22.7 +0.2** | |
| BSD | | | *e*S | **Sn** | **11 55 21.5 -3.0** | |
| BSD | | | IAML | | 11 55 28.6 | |
| | comp=Z,9.9nm,0.6s | | | | | |
| **ABTA** | **Abfaltersbach** | **5.51 232** | *i* Pn | Pn | 11 54 32.1 +6.8 | |
| | comp=Z,2.9nm,0.4s | | | | | |
| ABTA | | | *e*Sg | **Sg** | **11 55 57.4 -1.5** | |
| | comp=Z,56nm,0.9s | | | | | |
| **GZR** | **Gura Zlata** | **5.63 150** | ⇓P | **Pn** | **11 54 25.6 -1.3** | |
| **WATA** | **Walderalm** | **5.64 240** | *e*Pn | Pn | 11 54 32.9 +5.9 | |
| | comp=Z,1.8nm,0.4s | | | | | |
| WATA | | | *e*Sg | **Sg** | **11 56 02.9 -0.1** | |
| | comp=Z,29nm,0.6s | | | | | |
| **WTTA** | **Wattenberg** | **5.65 240** | *e*Pn | **Pn** | **11 54 29.3 +2.1** | |
| | comp=Z,0.5nm,0.3s | | | | | |
| WTTA | | | *e*Sg | **Sg** | **11 56 01.4 -1.8** | |
| | comp=Z,46nm,0.5s | | | | | |
| **LUBAR** | **Lubar, Ukraine** | **5.78 91** | P | **Pn** | **11 54 29.5 +0.6** | |
| **NDNU** | **Novodnistrovsk** | **5.86 104** | P | **Pn** | **11 54 30.9 +1.0** | |
| **MOTA** | **Moosalm** | **5.90 242** | *e*Pn | **Pb** | **11 54 43.3 -2.4** | |
| | comp=Z,1.4nm,0.4s | | | | | |
| MOTA | | | Sg | **Sg** | **11 56 09.6 -1.7** | |
| | comp=Z,52nm,0.5s | | | | | |
| **MDVR** | **Moldovita** | **5.91 159** | ⇓P | **Pn** | **11 54 28.5 -2.2** | |
| **SQTA** | **Sankt Quirin** | **5.91 241** | *e*Pn | **Pb** | **11 54 45.4 -0.4** | |
| | comp=Z,0.8nm,0.2s | | | | | |
| SQTA | | | *e*Sg | **Sg** | **11 56 11.2 -0.5** | |
| | comp=Z,22nm,0.6s | | | | | |
| **LOT** | **Lotru** | **5.93 144** | ⇓P | **Pn** | **11 54 30.3 -0.8** | |
| **RETA** | **Reutte** | **6.02 245** | *e*Pn | **Pb** | **11 54 48.6 +0.9** | |
| | comp=Z,1.2nm,0.2s | | | | | |
| RETA | | | Sg | **Sg** | **11 56 13.4 -1.8** | |
| | comp=Z,27nm,0.4s | | | | | |
| **LUNU** | **Lund** | **6.20 331** | *i* P | **Pn** | **11 54 35.6 +1.0** | |
| **DOPR** | **Dopca** | **6.22 132** | ⇓P | **Pn** | **11 54 35.4 +0.5** | |
| **FETA** | **Feichten** | **6.29 241** | *e*Pn | Pn | 11 54 42.4 +6.3 | |
| | comp=Z,0.3nm,0.3s | | | | | |
| FETA | | | *e*Sg | **Sg** | **11 56 22.3 -1.6** | |
| | comp=Z,29nm,0.8s | | | | | |
| **VOIR** | | **6.47 137** | ⇑P | **Pn** | **11 54 38.0 -0.4** | |
| **TESR** | **Tescani** | **6.48 123** | P | **Pn** | **11 54 40.1 +1.6** | |
| | comp=Z,5.5nm,0.9s,comp=Z,0.1nm | | | | | |
| **AK20** | **Malin Array Si** | **6.52 83** | P | **Pn** | **11 54 40.6 +1.5** | |
| **AK19** | **Malin Array Si** | **6.53 83** | P | **Pn** | **11 54 41.9 +2.8** | |
| **AK21** | **Malin Array Si** | **6.54 82** | P | **Pn** | **11 54 41.4 +2.1** | |
| **AK18** | **Malin Array Si** | **6.56 83** | P | **Pn** | **11 54 42.1 +2.5** | |
| **AK22** | **Malin Array Si** | **6.56 82** | P | **Pn** | **11 54 42.4 +2.8** | |
| **AK14** | **Malin Array Si** | **6.59 84** | P | **Pn** | **11 54 42.3 +2.4** | |
| **AK04** | **Malin Array Si** | **6.62 83** | P | **Pn** | **11 54 42.3 +1.9** | |
| **AK11** | **Malin Array Si** | **6.62 83** | P | **Pn** | **11 54 41.0 +0.5** | |
| **DAVA** | **Damuels** | **6.64 246** | *e*Pn | **Pn** | **11 54 40.2 -0.6** | |
| | comp=Z,1.0nm,0.2s | | | | | |
| DAVA | | | *e*Sg | **Sg** | **11 56 32.3 -2.7** | |
| | comp=Z,41nm,0.6s | | | | | |
| **SORM** | **Soroca** | **6.64 106** | ⇑P | **Pn** | **11 54 42.2 +1.5** | |
| **AK05** | **Malin Array Si** | **6.65 84** | P | **Pn** | **11 54 41.5 +0.7** | |
| **AK02** | **Malin Array Si** | **6.65 83** | P | **Pn** | **11 54 42.2 +1.4** | |
| **KIEV** | **Kiev** | **6.65 83** | P | **Pn** | **11 54 43.4 +2.6** | |
| **AK03** | **Malin Array Si** | **6.66 83** | P | **Pn** | **11 54 42.0 +1.1** | |
| **AKASG** | **Malin Array Be** | **6.66 83** | Pn | **Pn** | **11 54 41.1 +0.1** | |
| | comp=Z,2.1nm,0.3s,baz=265,slow=12,SNR=3.0 | | | | | |
| AKASG | | | Pg | **Pg** | **11 55 05.7 -3.8** | |
| | comp=Z,3.0nm,0.3s,baz=276,slow=15,SNR=4.6 | | | | | |
| AKASG | | | Sn | **Sn** | **11 55 53.7 -3.8** | |
| | comp=Z,6.1nm,0.3s,baz=236,slow=47,SNR=2.4 | | | | | |
| AKASG | | | Lg | Lg | 11 56 37.1 | |
| | comp=Z,7.0nm,0.3s,baz=32,slow=19,SNR=2.6 | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | |
| **NACGM** | **Naroch** | **6.67 44** | *e*P | **Pn** | **11 54 39.9 -1.1** | |
| **AK08** | **Malin Array Si** | **6.68 84** | P | **Pn** | **11 54 41.4 +0.2** | |
| **BJUU** | **Bjuv** | **6.70 331** | *i* P | **Pn** | **11 54 42.2 +0.7** | |
| **COVR** | **Voineasa-Covas** | **6.70 129** | ⇓P | **Pn** | **11 54 41.3 -0.3** | |
| **AK09** | **Malin Array Si** | **6.70 84** | P | **Pn** | **11 54 42.4 +0.9** | |
| **DAVOX** | **Davos/Dischmat** | **6.91 242** | Pn | **Pn** | **11 54 44.8 +0.3** | |
| | comp=Z,0.9nm,0.3s,baz=88,slow=7.3,SNR=7.0 | | | | | |
| DAVOX | | | Sn | **Sn** | **11 56 02.8 -1.1** | |
| | comp=Z,0.7nm,0.3s,baz=337,slow=23,SNR=2.7 | | | | | |
| DAVOX | | | Lg | Lg | 11 56 40.8 | |
| | comp=Z,1.7nm,0.3s,baz=343,slow=19,SNR=12 | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | |
| **CDF** | **Champ du Feu** | **7.76 260** | *e*Pn | **Pn** | **11 54 56.0 -0.2** | |
| CDF | | | *e*Sg | **Sg** | **11 57 07.8 -3.3** | |
| **HINF** | **Hinteralfeld** | **8.24 257** | *e*Sg | **Sg** | **11 57 22.1 -4.2** | |
| | comp=Z,18nm,0.6s | | | | | |
| **HAU** | **Haudompre** | **8.49 259** | *e*Sg | **Sg** | **11 57 31.8 -2.4** | |
| | comp=Z,22nm,0.7s | | | | | |
| **MTSE** | **Matsula** | **8.87 17** | *e*P | **Pn** | **11 55 09.2 -2.1** | |
| **CABF** | **La Chapelle** | **9.23 251** | *e*Pn | **Pn** | **11 55 15.7 -0.6** | |
| CABF | | | *e*Sg | Sn | 11 57 55.5 +55 | |
| | comp=Z,38nm,0.9s | | | | | |
| **SFTF** | **Sexfontaines** | **9.25 262** | *e*Sg | Sn | 11 57 51.6 +50 | |
| | comp=Z,6.2nm,0.4s | | | | | |
| **LPG** | **La Plagne** | **9.43 244** | *e*Pn | **Pn** | **11 55 20.2 +1.0** | |
| **LPL** | **La Plagne** | **9.43 244** | *e*Pn | **Pn** | **11 55 20.8 +1.7** | |
| LPL | | | *e*Sg | Sn | 11 58 00.7 +55 | |
| | comp=Z,0.9nm,0.3s | | | | | |
| **MBDF** | **Montbardon** | **9.88 240** | *e*Pn | Pn | 11 55 30.2 +4.9 | |
| **ARBE** | **Arbavere** | **10.00 22** | *e*P | **Pn** | **11 55 26.2 -0.4** | |
| **ORIF** | **Oris-en-Rattie** | **10.27 243** | *e*Pn | **Pn** | **11 55 32.9 +2.4** | |
| **LOR** | **Lormes** | **10.32 258** | *e*Pn | Pn | 11 55 27.0 -4.2 | |
| **MEF** | **Metsahovi** | **10.39 16** | *e*P | **Pn** | **11 55 29.3 -2.7** | |
| **SMF** | **Signal de Mont** | **10.59 255** | *e*Pn | Pn | 11 55 29.1 -5.8 | |
| SMF | | | *e*Sg | | 11 58 36.9 | |
| | comp=Z,26nm,0.9s | | | | | |
| **SSF** | **Saint Saulge** | **10.63 258** | *e*Pn | Pn | 11 55 31.0 -4.3 | |
| **RAF** | **Rauma** | **10.83 8** | *e*P | **Pn** | **11 55 35.7 -2.3** | |
| **AVF** | **Avril sur Loir** | **10.83 257** | *e*Sg | Sn | 11 58 39.0 +59 | |
| | comp=Z,28nm,1.2s | | | | | |
| **BGF** | **Bois d'Agland** | **11.25 256** | *e*Pn | Pn | 11 55 39.1 -4.7 | |
| BGF | | | *e*Sg | | 11 58 56.0 | |
| | comp=Z,13nm,0.8s | | | | | |
| **NOA** | **NORSAR Array B** | **11.53 341** | Pn | **Pn** | **11 55 45.4 -2.2** | |
| | baz=153,slow=12,SNR=5.7 | | | | | |
| **FINES** | **FINESS Array B** | **11.84 17** | Pn | **Pn** | **11 55 49.3 -2.5** | |
| | comp=Z,0.9nm,0.3s,baz=187,slow=11,SNR=37 | | | | | |
| FINES | | | Sn | Sn | 11 57 55.6 -8.8 | |
| | comp=Z,0.5nm,0.3s,baz=207,slow=18,SNR=3.1 | | | | | |
| | comp=Z,4.1nm,0.6s | | | | | |
| **KEF** | **Keuruu** | **12.31 13** | *e*P | **Pn** | **11 55 55.4 -2.8** | |
| **EKA** | **Eskdalemuir Ar** | **14.15 299** | Pn | **Pn** | **11 56 21.2 -2.2** | |
| | baz=96,slow=13 | | | | | |
| **JOF** | **Joensuu** | **14.32 24** | *e*P | **Pn** | **11 56 22.9 -2.8** | |
| **BRTR** | **Keskin Array B** | **14.90 130** | Pn | **Pn** | **11 56 35.9 +2.0** | |
| | comp=Z,0.1nm,0.3s,baz=312,slow=11,SNR=3.3 | | | | | |
| BRTR | | | Lg | Lg | 12 01 04.5 | |
| | comp=Z,0.2nm,0.3s,baz=246,slow=20,SNR=9.3 | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | |
| **ARCES** | **ARCESS Array B** | **19.52 7** | Pn | **P** | **11 57 27.6 -2.8** | |
| | comp=Z,0.4nm,0.3s,baz=193,slow=12,SNR=14 | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | |
| **AKTO** | **Aktyubinsk** | **24.81 75** | P | **P** | **11 58 26.2 +0.7** | |
| | comp=Z,0.6nm,0.4s,baz=284,slow=8.3,SNR=2.3 | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | |
| **MKAR** | **Makanchi Array** | **41.03 69** | P | **P** | **12 00 47.2 +0.5** | |
| | comp=Z,0.1nm,0.4s,baz=308,slow=7.0,SNR=2.2 | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | |

*IDC **11** 11:59:58.2±2.0, 18°.72S×178°.24W, h502km±17km, mb2.8/5, mbtmp3.6/6, Error ellipse: s-maj=42.9km s-min=25.0km az=154.0*
**ISC 11 11:59:58.0**±1.1, **18°.7S**±0°.2×**178°.2W**±0°.2, **h500**km, **n6,** σ1**°28/7, mb3.1/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.66** | **285** | P | **P** | **12 01 12.8** | **-1.1** |
| | 3.8nm,0.5s,baz=40,slow=16,SNR=15 | | | | | | |
| MSVF | | | | S | **S** | **12 02 17.2** | **+1.7** |
| | 1.5nm,0.7s,baz=127,slow=20,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **12 07 25.4** | **-0.4** |
| | 0.3nm,0.5s,baz=97,slow=6.2,SNR=12 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.73** | **255** | P | **P** | **12 07 26.6** | **+0.2** |
| | 1.5nm,0.5s,baz=90,slow=8.6,SNR=48 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.35** | **180** | P | **P** | **12 10 26.6** | **0.0** |
| | 0.8nm,0.7s,baz=110,slow=3.9,SNR=2.1 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.29** | **58** | P | **P** | **12 11 48.0** | **+1.2** |
| | 0.3nm,0.9s,baz=224,slow=4.8,SNR=3.6 | | | | | | |
| | 0.3nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **86.63** | **13** | P | **P** | **12 11 46.6** | **-0.9** |
| | 0.2nm,0.6s,baz=206,slow=6.0,SNR=2.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **11** 12:05:58.0±5.3, 36°.92N×71°.91E, h120km±46km, mb3.3/9, mbtmp3.7/13, Error ellipse: s-maj=37.4km s-min=18.1km az=21.0*
*NNC **11** 12:06:02.8±6.0, 37°.36N×71°.49E, h144km±107km, mb3.3, mpv4.0, Error ellipse: s-maj=64.8km s-min=42.2km az=169.0*
**ISC 11 12:06:01.9**±1.0, **37°.22N**±0°.10×**71°.79E**±0°.10, **h150**km, **n19,** σ1**°56/22, mb3.4**/10, **3C-2D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **5.80** | **20** | P | **Pn** | **12 07 26.6** | **+0.5** |
| | 14nm,0.4s,baz=178,slow=5.4,SNR=17 | | | | | | |
| AAK | | | | S | **Sn** | **12 08 31.8** | **0.0** |
| | 12nm,0.5s,baz=1.1,slow=23,SNR=12 | | | | | | |
| **KK31** | **Karatay Array** | **5.96** | **351** | ⇓P | **Pn** | **12 07 26.9** | **-1.1** |
| | 11nm,0.3s,baz=177,slow=12,SNR=229 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **12 08 31.8** | **-3.7** |
| | 10nm,0.4s,baz=247,slow=64,SNR=4.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.40** | **26** | ⇓P | **Pn** | **12 07 34.3** | **+0.1** |
| | 3.2nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **12 08 47.3** | **+1.0** |
| | 5.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.34** | **36** | P | **Pn** | **12 08 52.6** | **+0.1** |
| | 0.5nm,0.7s,baz=218,slow=10,SNR=4.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.25** | **18** | P | **P** | **12 09 20.6** | **+1.0** |
| | 1.1nm,0.4s,baz=206,slow=10,SNR=9.0 | | | | | | |
| **AB31** | **Akbulak array** | **14.79** | **328** | ⇑P | **Pn** | **12 09 21.5** | **-2.0** |
| | 1.1nm,0.3s,baz=166,slow=10,SNR=71 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.50** | **328** | P | **P** | **12 09 45.3** | **+0.8** |
| | 1.7nm,0.3s,baz=136,slow=12,SNR=4.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.00** | **24** | P | **Pn** | **12 10 13.5** | **-0.7** |
| | 1.3nm,0.4s,baz=214,slow=10,SNR=7.3 | | | | | | |
| **SONM** | **Songino Array** | **27.41** | **56** | P | **P** | **12 11 32.3** | **-1.2** |
| | 0.3nm,0.4s,baz=266,slow=9.4,SNR=1.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **33.00** | **308** | P | **P** | **12 12 22.8** | **+0.4** |
| | 0.7nm,0.5s,baz=104,slow=11,SNR=1.7 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **37.25** | **325** | P | **P** | **12 13 00.1** | **+1.4** |
| | 1.6nm,0.3s,baz=118,slow=9.7,SNR=17 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.73** | **337** | P | **P** | **12 13 29.4** | **+1.9** |
| | 1.8nm,0.9s,baz=108,slow=8.6,SNR=1.3 | | | | | | |
| | 1.8nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **43.04** | **305** | P | **P** | **12 13 48.7** | **+2.1** |
| | 0.4nm,0.6s,baz=75,slow=4.2,SNR=1.9 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.20** | **323** | P | **P** | **12 13 56.9** | **+1.3** |
| | comp=Z,0.5nm,0.5s,baz=92,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.20** | **323** | P | **P** | **12 13 57.0** | **+1.4** |
| | comp=Z,29nm,0.5s,baz=94,slow=7.8,SNR=4.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **57.69** | **298** | P | **P** | **12 15 37.4** | **+0.7** |
| | comp=Z,0.3nm,0.6s,baz=49,slow=7.3,SNR=4.8 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.37** | **269** | P | **P** | **12 16 33.5** | **-1.4** |
| | comp=Z,0.2nm,0.4s,baz=92,slow=4.9,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.83** | **122** | P | **P** | **12 18 03.3** | **-1.2** |
| | comp=Z,0.6nm,1.0s,baz=319,slow=5.9,SNR=2.6 | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **84.15** | **125** | P | **P** | **12 18 14.2** | **-2.1** |
| | comp=Z,0.6nm,0.9s,baz=318,slow=6.5,SNR=4.4 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |

*IDC **11** 12:09:42.4±1.2, 28°.10N×56°.28E, h0km, mb3.8/7, mbtmp3.8/8, ML3.4/1, MS2.8/1, Error ellipse: s-maj=29.7km s-min=22.3km az=166.0*
*TEH **11** 12:09:44.9, 28°.17N×56°.29E, h8km±48km, ML3.6*
*DSN **11** 12:09:49.9±1.1, 27°.89N×55°.98E, h10km, ML2.9/7, Error ellipse: s-maj=29.3km s-min=10.1km az=79.0*
**ISC 11 12:09:45.0**±0.7, **28°.11N**±0°.04×**56°.33E**±0°.05, **h10**km, **n45,** σ2**°14/48, mb3.9/7, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBND** | **Bandar-abas** | **0.69** | **164** | Pg | **Pb** | **12 10 00.4** | **+1.4** |
| **GENO** | **Geno** | **0.72** | **191** | Pg | **Pg** | **12 10 00.1** | **+1.2** |
| GENO | | | | Sg | **Sn** | **12 10 13.7** | **+1.1** |
| **KHNJ** | **Kahnooj** | **1.23** | **97** | Pg | **Pn** | **12 10 09.6** | **+1.3** |
| **NGRK** | **Negar Kerman** | **1.57** | **13** | Pg | **Pn** | **12 10 14.6** | **+1.3** |
| **LAR1** | **LAR** | **1.78** | **256** | Pg | **Pn** | **12 10 18.0** | **+2.1** |
| **TVBK** | **TV Kerman** | **1.91** | **11** | Pn | **Pn** | **12 10 20.4** | **+2.4** |
| **CHMN** | **Cheshme madani** | **2.04** | **31** | Pn | **Pn** | **12 10 22.4** | **+2.6** |
| **SHME** | **Shamm** | **2.06** | **185** | P | **Pn** | **12 10 22.3** | **+2.7** |
| SHME | | | | S | **Sn** | **12 10 46.0** | **+0.6** |
| **KBAM** | **BAM** | **2.13** | **61** | Pn | **Pn** | **12 10 23.4** | **+2.7** |
| **KHGB** | **Koh Gabri** | **2.26** | **3** | Pn | **Pn** | **12 10 25.1** | **+2.4** |
| **KRM1** | **Kerman Provinc**

comp=Z,0.2nm,0.5s
**BMAR Burnt Mountain 66.87 23** P **P** **12 24 17.9 +1.1**
**BCAR Beaver Creek A 67.28 28** P **P** **12 24 19.7 +0.3**
**G31M Satah River 70.80 24** P **P** **12 24 40.3 -0.6**
G31M IAmb IAmb 12 24 42.3
comp=Z,4.0nm,1.1s
**ABKAR Akbulak array 74.56 317** P **P** **12 25 04.4 +0.9**

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*IDC* ***11*** *12:15:35.1±0.4,55°.05S×146°.34E,h0km,mb4.9/12, mbtmp4.9/13,ML4.0/1,MS5.2/40,Error ellipse: s-maj=20.7km s-min=9.2km az=87.0*

*BJI* ***11*** *12:15:37.4±0.0,55°.24S×145°.88E,h14km,mb5.3/27, mB5.8/10,Ms5.4/28,Ms7 5.2/30*

*NEIC* ***11*** *12:15:37.9,55°.25S×146°.42E,h12km,Moment Tensor Solution. Duration: 3s5 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.76; $M_{\theta\theta}$1.52; $M_{\phi\phi}$-0.76; $M_{r\theta}$0.32; $M_{r\phi}$-3.47; $M_{\theta\phi}$1.35; Fault plane solution: $M_0$3.95000×$10^{17}$ NP1: $\phi_s$168.57000°,$\delta$78.71000°,$\lambda$-21.33000°. NP2: $\phi_s$262.95000°,$\delta$69.10000°,$\lambda$-167.91000°. Principal axes: T 4.0921, Plg7.0000°, Azm217.0000°; N -0.2827, Plg66.0000°, Azm322.0000°; P -3.8095, Plg23.0000°, Azm124.0000°;*

*MOS* ***11*** *12:15:37.8±1.5,54°.96S×146°.33E,h15km,mb5.5/16, MS5.3/6 Error ellipse: s-maj=28.9km s-min=7.5km az=92.2*

*NEIC* ***11*** *12:15:37.8±2.7,55°.15S±0°.08×146°.6E±0°.1,h10km±1km, mb5.5/55,Ms_20 5.4/797,Mww5.7/41,Error ellipse: s-maj=16.0km s-min=11.0km az=217.0*

*NEIC* ***11*** *12:15:37.9,55°.15S×146°.59E,h12km*

*GCMT* ***11*** *12:15:39.8±0.1,55°.09S×146°.20E,h13km,MW5.7/149, Moment Tensor Solution. s135,c267; s149,c306; Duration: 1s7 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.41±.03; $M_{\theta\theta}$1.65±.03; $M_{\phi\phi}$-1.24±.03; $M_{r\theta}$0.34±.07; $M_{\theta\phi}$-3.94±.04; $M_{r\phi}$0.03±.07; Best double couple: $M_0$4.21000×$10^{17}$ NP1:$\phi_s$260.00000°,$\delta$90.00000°, $\lambda$-175.00000°. NP2:$\phi_s$170.00000°,$\delta$85.00000°,$\lambda$0.00000°. Principal axes: T 4.4160, Plg3.0000°, Azm35.0000°; N -0.4090, Plg85.0000°, Azm263.0000°; P -4.0050, Plg3.0000°, Azm125.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 11 12:15:38.2**±0.7,**55°.13S**±0°.04×**146°.66E**±0°.05,**h14**km±3km, **n889**,σ1°**54**/523,**mb5.4**/66,**MS5.4**/457,**49C-32D,West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCQ** | **Macquarie Isla** | **7.14** | **90** | Pn | **Pn** | **12 17 20.8** | **-1.3** |
| **MCQ** | **Macquarie Isla** | **7.14** | **90** | P | **Pn** | **12 17 22.1** | **+0.1** |
| **MCQ** | **Macquarie Isla** | **7.14** | **90** | P | **Pn** | **12 17 20.8** | **-1.3** |
| **TAU** | **Tasmania Unive** | **12.24** | **2** | P | **Pn** | **12 18 33.2** | **+1.2** |
| **TAU** | **Tasmania Unive** | **12.24** | **2** | Pn | **Pn** | **12 18 30.1** | **-1.9** |
| **TAU** | **Tasmania Unive** | **12.24** | **2** | P | **Pn** | **12 18 30.1** | **-1.9** |
| **MOO** | **Moorlands** | **12.71** | **2** | P | **Pn** | **12 18 39.9** | **+1.5** |
| **MOO** | **Moorlands** 66nm,0.3s,SNR=1.6 | **12.71** | **2** | P | **Pn** | **12 18 37.0** | **-1.4** |
| **CORO** | **Coronation Par** | **13.70** | **2** | P | **Pn** | **12 18 53.5** | **+1.7** |
| **GLAD** | **Gladstone** | **14.19** | **4** | P | **Pn** | **12 19 01.4** | **+2.8** |
| **DCZ** | **Deep Cove** | **16.22** | **62** | P | **P** | **12 19 27.7** | **-0.9** |
| **SYZ** | **Scrubby Hill** | **16.54** | **68** | P | **P** | **12 19 33.0** | **+0.9** |
| **GES** | **Deakin Univers** | **17.02** | **354** | P | **Pn** | **12 19 35.0** | **-0.6** |
| **MLBS** | **Spotswood, Mel** | **17.35** | **355** | P | **P** | **12 19 41.4** | **+0.3** |
| **TOO** | **Toolangi** | **17.59** | **357** | P | **Pn** | **12 19 41.7** | **-1.1** |
| **TOO** | **Toolangi** | **17.59** | **357** | | **Pn** | **12 19 42.4** | **-0.4** |
| **TOO** | **Toolangi** 90nm,1.8s,SNR=4.9 | **17.59** | **357** | P | **Pn** | **12 19 41.6** | **-1.2** |
| **TOO** | **Toolangi** | **17.59** | **357** | P | **Pn** | **12 19 42.4** | **-0.4** |
| TOO | comp=Z,201nm,1.8s | | | pmax | pmax | | |
| **BRAT** | **Ballarat** | **17.69** | **353** | P | **Pn** | **12 19 43.2** | **-0.8** |
| **JCZ** | **Jackson Bay** | **18.03** | **61** | P | **P** | **12 19 53.7** | **+5.0** |
| **MILA** | **Mila** | **18.16** | **6** | P | **P** | **12 19 50.2** | **0.0** |
| **MILA** | **Mila** comp=Z,109nm,1.3s,SNR=2.4 | **18.16** | **6** | P | **Pn** | **12 19 48.7** | **-1.2** |
| **ARPS** | **Mount Arapiles** | **18.66** | **348** | P | **P** | **12 19 55.2** | **-0.4** |
| **ARPS** | **Mount Arapiles** comp=Z,129nm,1.1s,SNR=7.7 | **18.66** | **348** | P | **P** | **12 19 54.8** | **-0.7** |
| **AUMAG** | **Moama Anglican** | **19.08** | **355** | P | **P** | **12 20 00.3** | **+0.1** |
| **RPZ** | **Rata Peaks** comp=Z,0.4nm,0.3s,baz=176,slow=6.4,SNR=8.9 | **19.44** | **64** | P | **P** | **12 20 04.4** | **+0.3** |
| RPZ | comp=Z,31μm,19.5s,baz=220,slow=32 comp=Z,40nm,1.0s | | | LR | LR | 12 26 09.1 | |
| **CAN** | **Canberra** | **19.88** | **6** | P | **P** | **12 20 09.3** | **+0.3** |
| **CAN** | **Canberra** | **19.88** | **6** | P | **P** | **12 20 09.0** | **0.0** |
| **CAN** | **Canberra** comp=Z,119nm,1.0s,SNR=3.2 | **19.88** | **6** | P | **P** | **12 20 08.7** | **-0.3** |
| **CAN** | **Canberra** | **19.88** | **6** | P | **P** | **12 20 09.0** | **0.0** |
| CAN | comp=Z,112nm,1.0s | | | pmax | pmax | | |
| **CNB** | **Canberra Magne** | **19.91** | **7** | P | **P** | **12 20 09.9** | **+0.6** |
| **CNB** | **Canberra Magne** comp=Z,104nm,0.9s,SNR=2.5 | **19.91** | **7** | P | **P** | **12 20 09.0** | **-0.4** |
| **AUUHS** | **Ulladulla High** | **19.95** | **9** | P | **Pn** | **12 20 10.7** | **-0.7** |
| **OXZ** | **Oxford** comp=Z,15μm,20.0s | **20.22** | **65** | IAMs_20 | IAMs_20 | 12 26 32.1 | |
| **INZ** | **Inchbonnie** | **20.35** | **63** | P | Pn | 12 20 15.0 | -1.0 |
| INZ | comp=Z,245nm,1.4s | | | IAmb | IAmb | 12 20 18.5 | |
| INZ | comp=Z,17μm,21.0s | | | IAMs_20 | IAMs_20 | 12 26 36.5 | |
| **CASY** | **Casey** | **20.55** | **223** | P | **P** | **12 20 14.2** | **-1.8** |
| CASY | comp=Z,564nm,1.7s | | | IAmb | IAmb | 12 20 21.5 | |
| **LTZ** | **Lake Taylor** | **20.73** | **64** | P | **P** | **12 20 18.1** | **-0.1** |
| **YNG** | **Young** | **20.87** | **4** | P | **P** | **12 20 19.4** | **-0.3** |
| **YNG** | **Young** comp=Z,640nm,1.9s,SNR=4.5 | **20.87** | **4** | P | **P** | **12 20 18.7** | **-1.0** |
| **WOLH** | **Wollongong Har** | **20.93** | **10** | P | **P** | **12 20 20.7** | **+0.4** |
| **DSZ** | **Denniston Nort** | **21.24** | **61** | P | **P** | **12 20 24.4** | **+0.7** |
| DSZ | comp=Z,197nm,1.2s | | | IAmb | IAmb | 12 20 33.7 | |
| **SYDH** | **Sydney Hard Ro** | **21.56** | **9** | P | **P** | **12 20 27.0** | **-0.1** |
| **KHZ** | **Kahutara** comp=Z,18μm,22.0s | **21.65** | **65** | IAMs_20 | IAMs_20 | 12 27 19.7 | |
| **THZ** | **Tophouse** comp=Z,16μm,19.0s | **21.79** | **63** | IAMs_20 | IAMs_20 | 12 27 31.7 | |
| **TKNZ** | **Takaka Hill** | **22.35** | **62** | P | **P** | **12 20 36.0** | **+0.4** |
| **HTT** | **Hallett** | **22.37** | **343** | P | **P** | **12 20 34.8** | **-1.0** |
| **HTT** | **Hallett** comp=Z,88nm,1.4s,SNR=4.1 | **22.37** | **343** | P | **P** | **12 20 33.8** | **-2.0** |
| **NNZ** | **Nelson** comp=Z,13μm,18.0s | **22.43** | **63** | IAMs_20 | IAMs_20 | 12 28 01.7 | |
| **NTLH** | **Newcastle Hard** | **22.51** | **11** | P | **P** | **12 20 38.5** | **+1.2** |
| **TUWZ** | **Tuamarina** | **22.57** | **64** | P | **P** | **12 20 40.0** | **+2.2** |
| **AUDCS** | **Dubbo College** | **22.94** | **4** | P | **P** | **12 20 41.7** | **-0.1** |
| **WHYH** | **Whyalla** | **23.00** | **340** | P | **P** | **12 20 42.0** | **-0.4** |
| **SNZO** | **South Karori** | **23.05** | **65** | P | **P** | **12 20 48.2** | **+5.4** |
| **SNZO** | **South Karori** | **23.05** | **65** | P | **P** | **12 20 43.8** | **+1.0** |
| SNZO | comp=Z,204nm,1.4s | | | IAmb | IAmb | 12 20 52.6 | |
| **SNZO** | **South Karori** comp=Z,19μm,22.0s | **23.05** | **65** | IAMs_20 | IAMs_20 | 12 28 24.8 | |
| **VNDA** | **Vanda** | **23.13** | **172** | P | **P** | **12 20 43.1** | **-0.2** |
| VNDA | comp=Z,236nm,1.2s | | | IAmb | IAmb | 12 20 54.9 | |
| **VNDA** | **Vanda** comp=Z,16nm,0.8s,baz=339,slow=10,SNR=39 | **23.13** | **172** | P | **P** | **12 20 43.2** | **-0.2** |
| VNDA | comp=Z,2.6nm,1.0s,baz=303,slow=16,SNR=1.8 | | | S | **S** | **12 24 56.7** | **+2.8** |
| VNDA | comp=Z,2μm,18.6s,baz=347,slow=31 comp=Z,16nm,0.8s | | | LR | LR | 12 27 41.5 | |
| **STKA** | **Stephens Creek** | **23.52** | **349** | P | **P** | **12 20 47.1** | **-0.6** |
| **STKA** | **Stephens Creek** | **23.52** | **349** | P | **P** | **12 20 47.0** | **-0.8** |
| **STKA** | **Stephens Creek** comp=Z,20nm,1.4s,SNR=7.7 | **23.52** | **349** | P | **P** | **12 20 46.5** | **-1.2** |
| **STKA** | **Stephens Creek** comp=Z,33nm,0.9s,baz=162,slow=12,SNR=15 | **23.52** | **349** | P | **P** | **12 20 46.4** | **-1.4** |
| STKA | comp=Z,4.3nm,1.1s,baz=285,slow=20,SNR=1.6 | | | S | **S** | **12 25 00.2** | **-0.9** |
| STKA | comp=Z,7μm,19.6s,baz=170,slow=32 comp=Z,33nm,0.9s | | | LR | LR | 12 27 51.7 | |
| **STKA** | **Stephens Creek** | **23.52** | **349** | ↑*e*P | **P** | **12 20 46.6** | **-1.2** |
| **BBOO** | **Buckleboo** | **23.53** | **337** | P | **P** | **12 20 49.3** | **+1.5** |
| **BBOO** | **Buckleboo** | **23.53** | **337** | P | **P** | **12 20 46.1** | **-1.7** |
| **CMSA** | **Cobar Meteorol** | **23.60** | **358** | P | **P** | **12 20 48.2** | **-0.2** |
| **CMSA** | **Cobar Meteorol** | **23.60** | **358** | P | **P** | **12 20 47.1** | **-1.4** |
| | comp=Z,75nm,1.7s,SNR=6.8 | | | | | | |
| **SBA** | **Scott Base** | **23.89** | **170** | P | **P** | **12 20 52.0** | **+1.1** |
| SBA | comp=Z,270nm,1.6s | | | IAmb | IAmb | 12 21 12.4 | |
| **SBA** | **Scott Base** | **23.89** | **170** | P | **P** | **12 20 52.0** | **+1.1** |
| SBA | comp=Z,270nm,1.7s | | | pmax | pmax | | |
| **MRZ** | **Mangatainoka R** comp=Z,16μm,19.0s | **23.97** | **65** | IAMs_20 | IAMs_20 | 12 29 02.8 | |
| **AUPHS** | **Peel High Scho** | **24.21** | **9** | P | **P** | **12 20 53.9** | **-0.4** |
| **BFZ** | **Birch Farm** | **24.31** | **66** | P | **P** | **12 20 56.6** | **+1.5** |
| **BFZ** | **Birch Farm** comp=Z,11μm,18.0s | **24.31** | **66** | IAMs_20 | IAMs_20 | 12 29 33.7 | |
| **ARMA** | **Armidale** | **24.96** | **10** | P | **P** | **12 21 01.3** | **+0.1** |
| **ARMA** | **Armidale** | **24.96** | **10** | P | **P** | **12 21 00.8** | **-0.4** |
| ARMA | comp=Z,71nm,1.0s | | | IAmb | IAmb | 12 21 05.5 | |
| **ARMA** | **Armidale** comp=Z,77nm,1.3s,SNR=6.8 | **24.96** | **10** | P | **P** | **12 21 00.9** | **-0.3** |
| **LHI** | **Lord Howe Isla** | **25.19** | **26** | P | **P** | **12 21 03.9** | **+0.8** |
| LHI | comp=Z,105nm,1.2s | | | IAmb | IAmb | 12 21 05.8 | |
| **LCRK** | **Leigh Creek** | **25.40** | **343** | P | **P** | **12 21 05.1** | **+0.1** |
| **BKZ** | **Black Stump Fm** | **25.55** | **64** | P | **P** | **12 21 08.3** | **+1.9** |
| **AULRC** | **Lightning Ridg** | **25.71** | **3** | P | **P** | **12 21 08.2** | **+0.4** |
| **MULG** | **Mulgathing** | **26.42** | **335** | P | **P** | **12 21 14.2** | **-0.1** |
| **URZ** | **Urewera** comp=Z,16μm,19.6s,baz=300,slow=35 | **26.55** | **63** | LR | LR | 12 30 59.3 | |
| **OUZ** | **Omahuta** comp=Z,11μm,18.0s | **27.23** | **54** | IAMs_20 | IAMs_20 | 12 29 50.5 | |
| **INKA** | **Innaminka** | **27.71** | **349** | P | **P** | **12 21 25.4** | **-0.4** |
| **FORT** | **Forrest** | **27.71** | **324** | P | **P** | **12 21 25.3** | **-0.6** |
| **FORT** | **Forrest** | **27.71** | **324** | P | **P** | **12 21 23.7** | **-2.2** |
| FORT | comp=Z,105nm,0.8s | | | IAmb | IAmb | 12 21 30.1 | |
| **FORT** | **Forrest** comp=Z,127nm,0.7s,SNR=5.0 | **27.71** | **324** | P | **P** | **12 21 23.6** | **-2.4** |
| **AUWSH** | **Wavell State H** | **28.10** | **12** | P | **P** | **12 21 29.8** | **+0.5** |
| **OOD** | **Oodnadatta** | **28.46** | **339** | P | **P** | **12 21 30.0** | **-2.5** |
| **QLP** | **Quilpie** | **28.58** | **355** | P | **P** | **12 21 33.3** | **-0.4** |
| **QLP** | **Quilpie** comp=Z,74nm,1.7s,SNR=5.8 | **28.58** | **355** | P | **P** | **12 21 32.9** | **-0.8** |
| **KMBL** | **Kambalda** | **29.54** | **313** | P | **P** | **12 21 42.4** | **+0.2** |
| **KMBL** | **Kambalda** comp=Z,36nm,1.1s,SNR=1.9 | **29.54** | **313** | P | **P** | **12 21 41.5** | **-0.7** |
| **EIDS** | **Eidsvold** | **29.91** | **8** | P | **P** | **12 21 45.2** | **-0.3** |
| **EIDS** | **Eidsvold** | **29.91** | **8** | P | **P** | **12 21 45.2** | **-0.3** |
| EIDS | comp=Z,134nm,1.8s | | | IAmb | IAmb | 12 21 52.5 | |
| **EIDS** | **Eidsvold** comp=Z,40nm,1.5s,SNR=5.3 | **29.91** | **8** | P | **P** | **12 21 44.7** | **-0.8** |
| **H01W1** | **Cape Leeuwin H** baz=142,slow=76,SNR=1020 | **30.20** | **299** | T | T | 12 53 20.4 | |
| **H01W2** | **Cape Leeuwin H** baz=142,slow=76,SNR=972 | **30.20** | **299** | T | T | 12 53 20.6 | |
| **H01W3** | **Cape Leeuwin H** baz=142,slow=76,SNR=551 | **30.21** | **299** | T | T | 12 53 19.6 | |
| **NWAO** | **Narrogin (SRO)** | **30.28** | **305** | P | **P** | **12 21 46.8** | **-1.9** |
| NWAO | comp=Z,97nm,1.6s | | | IAmb | IAmb | 12 21 50.0 | |
| **NWAO** | **Narrogin (SRO)** comp=Z,9μm,21.0s | **30.28** | **305** | IAMs_20 | IAMs_20 | 12 30 51.2 | |
| **NWAO** | **Narrogin (SRO)** comp=Z,10μm,21.8s,baz=126,slow=31 | **30.28** | **305** | LR | LR | 12 31 03.1 | |
| **NWAO** | **Narrogin (SRO)** | **30.28** | **305** | P | **P** | **12 21 46.8** | **-1.9** |
| NWAO | comp=Z,97nm,1.6s | | | pmax | pmax | | |
| **AUHAR** | **St Anne's Scho** | **30.79** | **303** | P | **P** | **12 21 54.2** | **+1.0** |
| **KLBR** | **Kellerberrin** | **31.15** | **307** | P | **P** | **12 21 56.1** | **-0.3** |
| **KLBR** | **Kellerberrin** comp=Z,76nm,0.9s,SNR=6.0 | **31.15** | **307** | P | **P** | **12 21 54.2** | **-2.3** |
| **MUN** | **Mundaring** | **31.55** | **305** | P | **P** | **12 21 59.9** | **0.0** |
| **MUN** | **Mundaring** comp=Z,62nm,1.6s,SNR=3.3 | **31.55** | **305** | P | **P** | **12 21 58.3** | **-1.7** |
| **RK1H** | **Rockhampton Ha** | **31.84** | **7** | P | **P** | **12 22 02.5** | **+0.1** |
| **BLDU** | **Ballidu** | **32.46** | **307** | P | **P** | **12 22 07.3** | **-0.6** |
| **BLDU** | **Ballidu** comp=Z,82nm,1.7s,SNR=4.3 | **32.46** | **307** | P | **P** | **12 22 06.1** | **-1.8** |
| **AS01** | **Alice Springs** | **32.82** | **338** | P | **P** | **12 22 09.6** | **-1.6** |
| **ASAR** | **Alice Springs** | **32.83** | **338** | P | **P** | **12 22 09.5** | **-1.8** |
| **ASAR** | **Alice Springs** comp=Z,12nm,0.7s,baz=162,slow=9.7,SNR=74 | **32.83** | **338** | P | **P** | **12 22 08.7** | **-2.5** |
| ASAR | comp=Z,5.5nm,0.9s,baz=148,slow=2.9,SNR=3.9 | | | PcP | **PcP** | **12 24 53.2** | **-2.7** |
| ASAR | comp=Z,2.7nm,1.1s,baz=182,slow=4.6,SNR=5.2 | | | ScP | **ScP** | **12 28 41.3** | **+2.1** |
| ASAR | comp=Z,2μm,19.9s,baz=169,slow=33 comp=Z,12nm,0.7s | | | LR | LR | 12 33 23.5 | |
| **ASPA** | **Alice Springs** comp=Z,8.8nm,0.8s,SNR=8.8 | **32.83** | **338** | P | **P** | **12 22 08.9** | **-2.3** |
| **AS31** | **Alice Springs** | **32.83** | **338** | P | **P** | **12 22 09.5** | **-1.8** |
| **WRKA** | **Warakurna** | **32.97** | **328** | P | **P** | **12 22 10.6** | **-1.9** |
| **WRKA** | **Warakurna** comp=Z,92nm,0.9s,SNR=6.9 | **32.97** | **328** | P | **P** | **12 22 10.2** | **-2.3** |
| **MORW** | **Morawa** | **34.07** | **307** | P | **P** | **12 22 22.3** | **+0.3** |
| **MORW** | **Morawa** | **34.07** | **307** | P | **P** | **12 22 20.7** | **-1.3** |
| MORW | comp=Z,50nm,1.1s | | | IAmb | IAmb | 12 22 23.3 | |
| **QIS** | **Mount Isa** | **34.93** | **348** | P | **P** | **12 22 27.8** | **-1.7** |
| **QSPA** | **South Pole Qui** | **34.97** | **180** | P | **P** | **12 22 28.6** | **-1.1** |
| QSPA | comp=Z,92nm,1.1s | | | IAmb | IAmb | 12 22 34.1 | |
| **QSPA** | **South Pole Qui** comp=Z,76nm,1.1s,baz=350,slow=2.3,SNR=54 | **34.97** | **180** | P | **P** | **12 22 28.7** | **-0.9** |
| QSPA | comp=Z,3.0nm,1.1s,baz=123,slow=2.8,SNR=3.0 | | | ScP | **ScP** | **12 28 47.1** | **+0.8** |
| QSPA | comp=Z,2μm,19.4s,baz=11,slow=34 comp=Z,76nm,1.1s | | | LR | LR | 12 35 28.1 | |
| **CTA** | **Charters Tower** comp=Z,1.5nm,0.9s,baz=173,slow=8.7,SNR=11 | **34.99** | **359** | P | **P** | **12 22 29.0** | **-1.0** |
| CTA | comp=Z,740nm,19.7s,baz=180,slow=35 | | | LR | LR | 12 35 46.8 | |
| **CTA** | **Charters Tower** | **34.99** | **359** | P | **P** | **12 22 29.0** | **-1.0** |
| **CTAO** | **Charters Tower** | **34.99** | **359** | P | **P** | **12 22 29.9** | **-0.1** |
| **CTAO** | **Charters Tower** comp=Z,68nm,1.4s | **34.99** | **359** | P | **P** | **12 22 29.5** | **-0.5** |
| CTAO | | | | IAmb | IAmb | 12 22 42.4 | |
| **CTAO** | **Charters Tower** | **34.99** | **359** | P | **P** | **12 22 29.5** | **-0.5** |
| CTAO | comp=Z,68nm,1.4s | | | pmax | pmax | | |
| CTAO | comp=Z,12μm,20.0s | | | MLR | MLR | | |
| **MEEK** | **Meekatharra** | **35.04** | **313** | P | **P** | **12 22 30.4** | **-0.1** |
| **TV1H** | **Townsville Har** | **35.81** | **0** | P | **P** | **12 22 36.9** | **-0.1** |
| **NOUC** | **Port Laguerre** | **36.12** | **32** | P | **P** | **12 22 41.8** | **+2.2** |
| **DZM** | **Mont Dzumac** | **36.19** | **32** | P | **P** | **12 22 41.0** | **+0.6** |
| **DZM** | **Mont Dzumac** comp=Z,281nm,24.6s | **36.19** | **32** | *e*P | P | 12 22 35.4 | -5.0 |
| **DZM** | **Mont Dzumac** comp=Z,255nm,24.1s | **36.19** | **32** | *e*PP | PP | 12 23 56.6 | -6.1 |
| DZM | comp=Z,2μm,24.9s | | | *e*S | **S** | **12 28 16.2** | **-3.7** |
| DZM | comp=Z,20μm,25.9s | | | *e*LR | LR | 12 32 16.5 | |
| **DZM** | **Mont Dzumac** comp=Z,7μm,20.2s,baz=180,slow=31 | **36.19** | **32** | LR | LR | 12 34 25.0 | |
| **RAO** | **Raoul Island** comp=Z,7μm,22.0s | **36.20** | **59** | IAMs_20 | IAMs_20 | 12 34 24.4 | |
| **RAO** | **Raoul Island** comp=Z,4μm,21.2s,baz=175,slow=33 | **36.20** | **59** | LR | LR | 12 35 34.1 | |
| **WR0** | **Warramunga Arr** | **36.30** | **341** | P | **P** | **12 22 38.8** | **-2.4** |
| WR0 | comp=Z,80nm,1.1s | | | IAmb | IAmb | 12 22 46.4 | |
| **YATNC** | **Mamie plateau,** | **36.34** | **33** | P | **P** | **12 22 41.0** | **-0.5** |
| **WB2** | **Warramunga Arr** comp=Z,89nm,1.0s | **36.35** | **340** | P | **P** | **12 22 39.3** | **-2.4** |
| WB2 | | | | IAmb | IAmb | 12 22 46.8 | |
| **WRA** | **Warramunga Arr** | **36.35** | **340** | P | **P** | **12 22 39.0** | **-2.7** |
| **WRA** | **Warramunga Arr** comp=Z,22nm,0.5s,baz=166,slow=7.7,SNR=164 | **36.35** | **340** | P | **P** | **12 22 38.7** | **-3.0** |
| WRA | comp=Z,8.3nm,1.0s,baz=166,slow=2.6,SNR=4.7 | | | PcP | **PcP** | **12 25 03.6** | **-2.5** |
| WRA | comp=Z,0.6nm,0.9s,baz=172,slow=14,SNR=1.9 | | | S | **S** | **12 28 20.2** | **-2.2** |
| WRA | comp=Z,6.3nm,1.4s,baz=198,slow=3.4,SNR=5.8 | | | ScP | **ScP** | **12 28 53.7** | **+1.9** |
| WRA | comp=Z,2μm,21.5s,baz=170,slow=34 comp=Z,22nm,0.5s | | | LR | LR | 12 35 46.6 | |
| **WRAB** | **Tennant Creek** | **36.36** | **340** | P | **P** | **12 22 39.3** | **-2.4** |
| WRAB | comp=Z,83nm,0.9s | | | IAmb | IAmb | 12 22 46.9 | |
| **WRAB** | **Tennant Creek** | **36.36** | **340** | *c* i*P* | **P** | **12 22 39.0** | **-2.8** |
| WRAB | | | | pmax | pmax | | |
| **WB0** | **Warramunga Arr** | **36.51** | **340** | P | **P** | **12 22 40.4** | **-2.7** |
| WB0 | comp=Z,64nm,0.9s | | | IAmb | IAmb | 12 22 48.5 | |
| **MTSU** | **Mount Surprise** | **36.98** | **356** | P | **P** | **12 22 46.7** | **-0.3** |
| **KOUNC** | **Koumac, New Ca** | **37.01** | **28** | P | **P** | **12 22 47.6** | **+0.4** |
| **KOUNC** | **Koumac, New Ca** | **37.01** | **28** | P | **P** | **12 22 46.4** | **-0.9** |
| KOUNC | comp=Z,124nm,1.2s | | | IAmb | IAmb | 12 22 51.2 | |
| KOUNC | comp=Z,5μm,20.0s | | | IAMs_20 | IAMs_20 | 12 34 28.3 | |
| **MAW** | **Mawson** comp=Z,8.3nm,0.9s,baz=103,slow=11,SNR=9.2 | **38.74** | **218** | P | **P** | **12 23 00.7** | **-0.7** |
| MAW | comp=Z,0.7nm,0.6s,baz=241,slow=20,SNR=1.2 | | | S | **S** | **12 28 57.2** | **-0.4** |
| MAW | comp=Z,10μm,18.1s,baz=86,slow=36 comp=Z,8.3nm,0.9s | | | LR | LR | 12 38 34.6 | |
| **PSA00** | **Pilbara Seismi** | **39.08** | **318** | P | **P** | **12 23 04.6** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **39.08** | **318** | P | **P** | **12 23 02.6** | **-2.1** |
| **PSA00** | **Pilbara Seismi** | **39.08** | **318** | P | **P** | **12 23 02.8** | **-1.9** |
| PSA00 | comp=Z,73nm,0.9s | | | IAmb | IAmb | 12 23 06.0 | |
| **MBWA** | **Marble Bar** | **39.50** | **318** | P | **P** | **12 23 07.9** | **-0.3** |
| **MBWA** | **Marble Bar** | **39.50** | **318** | P | **P** | **12 23 06.1** | **-2.1** |
| **FITZ** | **Fitzroy Crossi** | **40.30** | **328** | P | **P** | **12 23 13.3** | **-1.6** |
| **GIRL** | **Giralia** | **40.43** | **310** | P | **P** | **12 23 15.4** | **-0.5** |
| **COEN** | **Coen** | **41.18** | **355** | P | **P** | **12 23 21.3** | **-0.8** |
| **COEN** | **Coen** | **41.18** | **355** | P | **P** | **12 23 21.1** | **-1.0** |
| **KNRA** | **Kununurra** | **41.73** | **334** | P | **P** | **12 23 25.0** | **-1.7** |
| **KDU** | **Kakadu** | **43.78** | **340** | P | **P** | **12 23 41.2** | **-2.1** |
| **MTN** | **Manton Dam** | **43.91** | **338** | P | **P** | **12 23 42.5** | **-1.8** |
| **MTN** | **Manton Dam** | **43.91** | **338** | P | **P** | **12 23 42.0** | **-1.5** |
| MTN | comp=Z,85nm,0.9s | | | IAmb | IAmb | 12 23 50.5 | |
| **MSVF** | **Nonsavu** comp=Z,4μm,21.1s,baz=215,slow=31 | **44.35** | **45** | LR | LR | 12 38 24.7 | |
| **MSVF** | **Nonsavu** | **44.35** | **45** | ↓*e*P | **P** | **12 23 47.7** | **-0.3** |
| **DRS** | **Darwin Rock St** | **44.36** | **338** | P | P | **12 23 47.0** | **-0.9** |
| **PMG** | **Port Moresby** comp=Z,8μm,18.7s,baz=182,slow=35 | **45.61** | **1** | *d* i*P* | **P** | **12 23 59.1** | **+1.2** |
| PMG | comp=Z,71nm,1.7s | | | pmax | pmax | | |
| **HNR** | **Honiara** comp=Z,19μm,20.2s,baz=199,slow=32 | **46.79** | **18** | LR | LR | 12 40 22.1 | |
| **ELIB** | **Princess Elisa** comp=Z,32nm,1.2s | **47.19** | **201** | *d*P | **P** | **12 24 10.3** | **+0.3** |
| **BELA** | **Belgrano 2** | **47.25** | **180** | P | **P** | **12 24 09.3** | **-0.9** |
| BELA | comp=Z,35nm,1.2s | | | IAmb | IAmb | 12 24 13.2 | |
| **SOEI** | **Soe** | **48.61** | **330** | P | **P** | **12 24 23.5** | **+2.0** |
| **SOEI** | **Soe** | **48.61** | **330** | P | **P** | **12 24 20.9** | **-0.6** |
| **SOEI** | **Soe** comp=Z,59nm,1.0s,comp=Z,2μm | **48.61** | **330** | P | **P** | **12 24 25.0** | **+3.5** |
| **NVL** | **N'lazarevskaya** | **50.34** | **198** | ↓*i*P | **P** | **12 24 35.9** | **+2.0** |
| NVL | comp=Z,144nm,1.2s | | | pmax | pmax | | |
| **TROLL** | **Troll, Antarti** comp=Z,511nm,0.7s | **50.69** | **194** | ⇑P | **P** | **12 24 36.0** | **-0.7** |
| TROLL | comp=Z,0.3nm,0.1s | | | ⇑S | **S** | **12 31 52.5** | **+1.5** |
| **SNAA** | **Sanae** | **51.68** | **192** | P | **P** | **12 24 43.8** | **-0.2** |
| SNAA | comp=Z,85nm,1.2s | | | IAmb | IAmb | 12 24 47.7 | |
| **SNAA** | **Sanae** comp=Z,666nm,1.0s | **51.68** | **192** | ⇑P | **P** | **12 24 44.7** | **+0.7** |
| SNAA | comp=Z,32μm,9.8s | | | ⇑S | **S** | **12 32 06.2** | **+1.8** |
| **SNAA** | **Sanae** comp=Z,40nm,1.1s,baz=149,slow=8.0,SNR=57 | **51.68** | **192** | P | **P** | **12 24 42.6** | **-1.4** |
| SNAA | comp=Z,5μm,18.6s,baz=206,slow=35 comp=Z,40nm,1.1s | | | LR | LR | 12 46 06.0 | |
| **SNAA** | **Sanae** | **51.68** | **192** | *d* i*P* | **P** | **12 24 44.8** | **+0.7** |
| SNAA | comp=Z,100nm,1.4s | | | pmax | pmax | | |
| **RAR** | **Rarotonga** comp=Z,1μm,18.8s,baz=217,slow=34 | **52.22** | **72** | LR | LR | 12 45 11.5 | |
| **GENI** | **Genyem** | **52.64** | **352** | P | **P** | **12 24 52.6** | **+0.8** |
| **GENI** | **Genyem** comp=Z,101nm,1.3s | **52.64** | **352** | P | **P** | **12 24 54.4** | **+2.6** |
| **JAY** | **Jayapura** comp=Z,19nm,1.4s | **52.68** | **353** | P | **P** | **12 24 51.0** | **-1.1** |
| **VNA3** | **Numayer Olymp** comp=Z,14nm,0.8s | **52.80** | **189** | ⇑P | **P** | **12 24 51.7** | **-0.7** |
| VNA3 | comp=Z,0.0nm,0.1s | | | ⇑S | **S** | **12 32 21.0** | **+1.2** |
| **VNA2** | **Neumayer--Watz** comp=Z,15nm,0.8s,baz=165,slow=5.7 | **52.88** | **190** | ⇑P | **P** | **12 24 52.4** | **-0.5** |
| VNA2 | comp=Z,335μm,0.0s,baz=242,slow=34 | | | ⇓S | **S** | **12 32 24.3** | **+3.4** |
| **BSSI** | **Bau Bau, Buton** | **53.17** | **327** | P | P | 12 25 02.7 | +7.1 |
| **VNA1** | **Neumayer--Stat** comp=Z,39nm,0.9s | **53.24** | **190** | ⇑P | **P** | **12 24 55.4** | **-0.1** |
| **FAKI** | **Fak Fak** | **53.35** | **342** | P | **P** | **12 24 55.8** | **-1.2** |
| **FAKI** | **Fak Fak** | **53.35** | **342** | P | **P** | **12 24 56.1** | **-0.9** |
| FAKI | comp=Z,57nm,0.8s | | | IAmb | IAmb | 12 25 03.5 | |
| **FAKI** | **Fak Fak** | **53.35** | **342** | P | **P** | **12 24 57.0** | **0.0** |
| **KAPI** | **Kappang** | **54.46** | **326** | P | **P** | **12 25 06.7** | **+1.6** |
| **KAPI** | **Kappang** | **54.46** | **326** | P | **P** | **12 25 05.3** | **+0.2** |
| **KAPI** | **Kappang** comp=Z,942nm,19.0s,baz=160,slow=36 | **54.46** | **326** | LR | LR | 12 48 03.9 | |
| **KAPI** | **Kappang** | **54.46** | **326** | P | **P** | **12 25 05.3** | **+0.2** |
| KAPI | comp=Z,96nm,1.3s | | | pmax | pmax | | |
| **SMAI** | **San Martin Ant** | **54.53** | **165** | P | **P** | **12 25 04.3** | **-0.7** |
| **BNSI** | **Bone** | **54.93** | **327** | P | P | 12 25 14.5 | +6.0 |
| **UGM** | **Wanagama** comp=Z,3μm,20.

comp=Z,2µm,20.7s,baz=212,slow=30
MYKOM **Kota Tinggi** **66.69 312** P **P** **12 26 27.2 -1.4**
**GUMO Guam** **68.47 358** LR LR 12 53 38.2
comp=Z,797nm,21.8s,baz=183,slow=33
**GSI Gunungsitoli** **69.05 306** P **P** **12 26 46.5 +3.0**
**KULM Kulim** **71.20 311** P **P** **12 26 56.4 -0.2**
**LHMI Lhok Sumawe** **72.80 307** IAMs_20 IAMs_20 12 54 40.9
comp=Z,2µm,20.0s
**H08S2 Diego Garcia H** **74.72 279** T T 13 48 57.4
baz=145,slow=76,SNR=561
**H08S1 Diego Carcia H** **74.73 279** T T 13 48 57.8
baz=145,slow=76,SNR=153
**H08S3 Diego Garcia H** **74.74 279** T T 13 48 58.9
baz=145,slow=76,SNR=1155
**RPN Rapa Nui** **75.67 117** LR LR 12 53 06.1
comp=Z,2µm,19.0s,baz=229,slow=30
**VOI Vohitsoka** **77.74 249** IAMs_20 IAMs_20 12 57 04.2
comp=Z,2µm,19.0s
**UBPT Khong Chiam** **78.31 320** P **P** **12 27 39.8 +2.2**
**UBPT Khong Chiam** **78.31 320** P **P** **12 27 36.2 -1.4**
**NAYO Nakonayok** **79.04 315** P **P** **12 27 43.7 +2.0**
**PLCA Paso Flores** **79.36 152** P **P** **12 27 44.6 +1.2**
comp=Z,4.5nm,1.2s,baz=218,slow=12,SNR=3.9
PLCA LR LR 12 55 02.7
comp=Z,615nm,21.2s,baz=194,slow=30
comp=Z,4.5nm,1.2s
**LR05 Currie** **79.43 151** P **P** **12 27 43.8 +0.1**
LR05 IAmb IAmb 12 27 53.6
comp=Z,62nm,1.3s
**ABPO Ambohimpanom** **79.85 251** IAMs_20 IAMs_20 12 58 42.2
comp=Z,2µm,18.0s
**SRDT SRDT** **79.97 313** P **P** **12 27 48.1 +1.3**
**GO06 Curarrehue** **80.18 151** P **P** **12 27 46.3 -1.6**
**QIZ Qiongzhong** **80.24 325** P **P** **12 27 47.7 -0.4**
QIZ S **S** **12 37 54.0 +1.2**
QIZ SS **SS** **12 43 07.2 +2.8**
QIZ LR LR
comp=Z,830nm,21.2s
QIZ LR LR
comp=Z,490nm,17.3s
QIZ LR LR
comp=Z,950nm,31.4s
**YULB Yu-li** **81.17 337** P **P** **12 27 54.3 +1.3**
**TPUB Ta-pu** **81.23 336** P **P** **12 27 55.2 +1.8**
**SUR Sutherland** **81.27 224** LR LR 12 58 01.2
comp=Z,2µm,20.0s,baz=152,slow=31
**SSLB Suanglung** **81.63 336** P **P** **12 27 57.2 +1.7**
**JCJ Chichijima** **81.98 356** LR LR 13 02 48.7
comp=Z,538nm,20.7s,baz=151,slow=35
**PALK Pallekele** **82.58 294** LR LR 12 57 41.3
comp=Z,3µm,20.2s,baz=260,slow=31
**BOSA Boshof** **82.70 229** P **P** **12 28 01.2 -0.3**
BOSA IAmb IAmb 12 28 07.5
comp=Z,35nm,1.1s
**BOSA Boshof** **82.70 229** P **P** **12 28 01.1 -0.4**
comp=Z,8.0nm,0.7s,baz=140,slow=4.1,SNR=10
BOSA LR LR 12 57 50.9
comp=Z,1µm,21.9s,baz=154,slow=31
comp=Z,8.0nm,0.7s
**BOSA Boshof** **82.70 229** P **P** **12 28 01.2 -0.3**
BOSA pmax pmax
comp=Z,35nm,1.1s
**BI02 San Fabin de** **82.96 150** P **P** **12 28 03.3 +0.6**
BI02 IAmb IAmb 12 30 32.4
comp=Z,22nm,0.9s
**JOW Kunigami** **83.14 344** LR LR 13 02 38.2
comp=Z,1µm,21.8s,baz=151,slow=34
**H03S2 Juan Fernandez** **83.15 143** T T 14 00 35.6
baz=202,slow=74,SNR=988
**H03S1 Juan Fernandez** **83.15 143** T T 14 00 41.3
baz=202,slow=74,SNR=968
**H03S3 Juan Fernandez** **83.17 143** T T 14 00 35.9
baz=202,slow=74,SNR=1002
**PHRA Phrae** **83.26 316** P **P** **12 28 04.4 +0.3**
**QZH Quanzhou** **83.30 335** P **P** **12 28 06.8 +2.7**
QZH S **SKSac** **12 38 27.8 +2.2**
QZH SS **SS** **12 43 50.1 +0.2**
QZH LR LR
comp=Z,800nm,21.3s
**H03N3 Juan Fernandez** **83.50 143** T T 14 01 06.2
baz=206,slow=72,SNR=74
**H03N2 Juan Fernandez** **83.51 143** T T 14 00 58.8
baz=206,slow=72,SNR=87
**H03N1 Juan Fernandez** **83.52 143** T T 14 01 04.1
baz=206,slow=72,SNR=42
**CMAR Chiang Mai Arr** **83.74 315** P **P** **12 28 05.4 -1.2**
**CMAR Chiang Mai Arr** **83.74 315** P **P** **12 28 05.0 -1.6**
comp=Z,9.3nm,1.1s,baz=179,slow=4.1,SNR=31
CMAR PP **PP** **12 31 18.7 -1.2**
comp=Z,0.4nm,0.3s,baz=198,slow=5.7,SNR=4.9
CMAR S **SKSac** **12 38 25.5 -3.3**
comp=Z,0.7nm,0.3s,baz=282,slow=14,SNR=4.2
CMAR LR LR 13 02 26.2
comp=Z,1µm,21.5s,baz=150,slow=34
comp=Z,9.3nm,1.1s
**CRAI Chiangrai** **84.76 317** P **P** **12 28 10.3 -1.4**
**BO02 Sierra Bellavi** **84.85 150** P **P** **12 28 12.5 +0.1**
BO02 IAmb IAmb 12 28 20.0
comp=Z,45nm,1.6s
**BO04 La Punta** **85.65 150** P **P** **12 28 15.8 -0.5**
BO04 IAmb IAmb 12 28 27.1
comp=Z,33nm,1.3s
**LBTB Lobatse** **85.67 231** P **P** **12 28 16.0 -0.6**
**LBTB Lobatse** **85.67 231** LR LR 13 02 24.4
comp=Z,1µm,18.1s,baz=151,slow=33
**LBTB Lobatse** **85.67 231** P **P** **12 28 16.0 -0.6**
LBTB pmax pmax
comp=Z,24nm,1.2s
**GYA Guiyang** **88.19 325** ⇑P **P** **12 28 31.0 +2.5**
GYA SKS **SKSac** **12 38 55.1 -1.5**
GYA S **ScS** **12 39 15.5 -2.9**
GYA SS **SS** **12 45 02.3 +0.2**
GYA pmax pmax
comp=Z,36nm,1.4s
GYA pmax pmax
comp=Z,420nm,6.6s
GYA LR LR
comp=Z,530nm,22.5s
GYA LR LR
comp=Z,230nm,12.6s
GYA LR LR
comp=Z,990nm,20.9s
**MATP Matopo** **88.29 236** LR LR 13 02 15.6
comp=Z,905nm,18.8s,baz=123,slow=32
**KMI Kunming** **88.32 321** ⇑P **P** **12 28 31.9 +2.6**
KMI SKS **SKSac** **12 38 57.1 -0.5**
KMI S **S** **12 39 12.3 -1.6**
KMI SS **SS** **12 45 02.8 -1.4**
KMI pmax pmax
comp=Z,29nm,1.8s
KMI pmax pmax
comp=Z,310nm,6.4s
KMI LR LR
comp=Z,660nm,18.7s
KMI LR LR
comp=Z,490nm,18.3s
KMI LR LR
comp=Z,750nm,25.2s
**SSE Sheshan** **88.63 338** P **P** **12 28 30.4 +0.1**
SSE S **S** **12 39 14.8 -1.2**
SSE pmax pmax
comp=Z,10.0nm,0.7s
SSE LR LR
comp=Z,200nm,15.9s
SSE LR LR
comp=Z,140nm,19.4s
**JNU Nakatsue** **88.94 347** LR LR 13 08 29.8
comp=Z,455nm,19.7s,baz=162,slow=36
**JMN Monobe** **89.18 349** P **P** **12 28 34.2 +1.3**
**WHN Wuhan** **89.73 333** P **P** **12 28 36.5 +1.0**
WHN S **S** **12 39 24.7 -1.6**
WHN sS **sS** **12 39 34.5 +1.7**
WHN SS **SS** **12 45 19.1 -5.0**
WHN pmax pmax
comp=Z,130nm,1.4s
WHN LR LR
comp=Z,1µm,15.7s
**TNCH TengChong** **89.82 317** ⇓P **P** **12 28 36.2 -0.1**
TNCH pP pP 12 28 40.5 +0.3
TNCH sP sP 12 28 41.6 0.0
TNCH S **S** **12 39 27.8 -0.1**
TNCH pmax pmax
comp=Z,19nm,0.8s
TNCH pmax pmax
comp=Z,170nm,2.9s
TNCH LR LR
comp=Z,650nm,20.6s
TNCH LR LR
comp=Z,460nm,21.2s
TNCH LR LR
comp=Z,2µm,19.9s
**PZH PanZhiHua** **89.94 321** P **P** **12 28 37.0 +0.2**
PZH PP **PP** **12 32 15.8 +5.7**
PZH SKS **SKSac** **12 39 08.6 +1.7**
PZH S **S** **12 39 28.1 -0.7**
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,260nm,5.9s
PZH LR LR
comp=Z,670nm,22.9s
PZH LR LR
comp=Z,560nm,21.4s
PZH LR LR
comp=Z,1µm,24.0s
**NJ2 Nanjing** **90.06 337** *e*P **P** **12 28 38.3 +1.3**
NJ2 sP **pwP** **12 28 43.8 -0.1**
NJ2 SS SS 12 45 30.4 +1.5
NJ2 pmax pmax
comp=Z,16nm,1.4s
NJ2 pmax pmax
comp=Z,270nm,3.8s
NJ2 LR LR
comp=Z,690nm,19.0s
NJ2 LR LR
comp=Z,480nm,18.0s
NJ2 LR LR
comp=Z,680nm,19.6s
**INU Inuyama** **90.50 352** P **P** **12 28 41.4 +2.4**
**ENH Enshi** **90.85 328** P **P** **12 28 42.7 +1.9**
**MJAR Matsushiro Arr** **91.60 353** P **P** **12 28 43.3 -0.8**
comp=Z,11nm,1.1s,baz=180,slow=4.2,SNR=11
MJAR LR LR 13 09 45.1
comp=Z,415nm,20.0s,baz=154,slow=36
comp=Z,11nm,1.1s
**MAJO Matsushiro** **91.60 353** P **P** **12 28 45.3 +1.2**
**MAJO Matsushiro** **91.60 353**⇓ *e*P **P** **12 28 44.6 +0.5**
MAJO pmax pmax
comp=Z,29nm,1.3s
**HYB Hyderabad** **92.24 298** *e*P **P** **12 28 47.8 +0.3**
HYB *e*PP **PP** **12 32 29.5 +1.2**
**CD2 Chengdu** **93.26 324** P **P** **12 28 53.2 +1.2**
CD2 pP pP 12 28 55.4 -0.5
CD2 sP sP 12 28 57.8 +0.6
CD2 SKS **SKSac** **12 39 26.8 +1.4**
CD2 S **ScS** **12 40 01.0 +0.8**
CD2 sS sS 12 40 06.8 +1.9
CD2 SS **SS** **12 46 18.0 +2.8**
CD2 pmax pmax
comp=Z,20nm,0.7s
CD2 LR LR
comp=Z,770nm,18.7s
CD2 LR LR
comp=Z,690nm,16.3s
CD2 LR LR
comp=Z,820nm,18.8s
**KSRS Korea Array** **93.61 345** P **P** **12 28 52.4 -1.0**
comp=Z,2.8nm,1.1s,baz=156,slow=6.4,SNR=4.0
KSRS LR LR 13 08 28.3
comp=Z,611nm,21.9s,baz=150,slow=34
comp=Z,2.8nm,1.1s
**LYN LuoYang** **94.02 332** P **P** **12 28 55.3 0.0**
LYN SKS **SKSac** **12 39 31.0 +1.8**
LYN S **S** **12 40 03.3 -1.6**
LYN SS **SS** **12 46 28.4 +2.6**
LYN pmax pmax
comp=Z,350nm,4.5s
LYN LR LR
comp=Z,490nm,17.5s
LYN LR LR
comp=Z,330nm,14.8s
LYN LR LR
comp=Z,1µm,22.3s
**TSUM Tsumeb** **94.27 227** IAMs_20 IAMs_20 13 08 45.7
comp=Z,2µm,19.0s
**TSUM Tsumeb** **94.27 227** LR LR 13 06 27.2
comp=Z,1µm,18.9s,baz=150,slow=32
**XAN Xi'an** **94.53 329** ⇓P **P** **12 28 59.2 +1.4**
XAN pP sP 12 29 03.5 +0.5
XAN sP pwP 12 29 06.3 +1.6
XAN SKS **SKSac** **12 39 29.7 -2.5**
XAN S **ScS** **12 40 15.0 +4.3**
XAN SS **SS** **12 46 30.7 -2.6**
XAN pmax pmax
comp=Z,18nm,1.7s
XAN pmax pmax
comp=Z,210nm,3.9s
XAN LR LR
comp=Z,570nm,18.6s
XAN LR LR
comp=Z,710nm,22.1s
XAN LR LR
comp=Z,910nm,21.4s
**HNS HongShan** **96.15 335** ⇑P **P** **12 29 07.1 +2.2**
HNS S **S** **12 40 20.2 -3.0**
HNS SS **SS** **12 46 56.7 +0.7**
HNS pmax pmax
comp=Z,10.0nm,1.4s
HNS LR LR
comp=Z,270nm,16.9s
HNS LR LR
comp=Z,680nm,19.8s
HNS LR LR
comp=Z,690nm,19.6s
**CPUP Villa Florida** **96.30 158** LR LR 13 06 39.5
comp=Z,490nm,21.6s,baz=192,slow=32
**LVC Limon Verde** **96.82 147** LR LR 13 03 02.5
comp=Z,500nm,21.6s,baz=184,slow=29
**LZH Lanzhou** **97.98 326** P **P** **12 29 12.2 -1.3**
LZH sP pwP 12 29 25.4 +4.9
LZH SKS **SKSac** **12 39 50.3 -0.1**
LZH S **S** **12 40 38.5 -0.9**
LZH LR LR
comp=Z,460nm,16.3s
LZH LR LR
comp=Z,540nm,16.3s
LZH LR LR
comp=Z,730nm,17.7s
**KIBK Kibwezi** **98.62 253** IAMs_20 IAMs_20 13 06 12.1
comp=Z,1µm,21.0s
**ASAJ Asahikawa** **98.94 357** LR LR 13 17 13.4
comp=Z,448nm,18.3s,baz=182,slow=37
**USRK Ussuriysk Ar.** **99.74 349** LR LR 13 12 50.8
comp=Z,338nm,20.0s,baz=166,slow=34
**HHC Hu-ho-hao-te** **100.19 334** *e*P **Pdif** **12 29 23.0 -0.2**
HHC PP **PP** **12 33 34.7 +5.0**
HHC S **Sdif** **12 40 55.9 -1.8**
HHC SS **SS** **12 47 51.6 -1.5**
HHC pmax pmax
comp=Z,16nm,0.6s
HHC pmax pmax
comp=Z,150nm,5.0s
HHC LR LR
comp=Z,420nm,17.3s
HHC LR LR
comp=Z,340nm,19.8s
HHC LR LR
comp=Z,720nm,17.6s
**MDJ Mudanjiang** **100.43 348** P **Pdif** **12 29 26.9 +2.9**
**MBAR Mbarara** **104.03 248** IAMs_20 IAMs_20 13 09 44.7
comp=Z,1µm,21.0s
**LODK Lodwar** **104.88 254** IAMs_20 IAMs_20 13 08 43.3
comp=Z,1µm,20.0s
**SONM Songino Array** **108.04 333** PP **PP** **12 34 25.8 -2.2**
comp=Z,0.2nm,0.3s,baz=159,slow=4.3,SNR=2.0
**UOSS Minazif** **110.33 285** IAMs_20 IAMs_20 13 12 10.2
comp=Z,1µm,20.0s
**WMQ Urumqi** **110.52 319** *e*PKP **PKiKP** **12 34 09.6 +0.2**
WMQ LR LR
comp=Z,500nm,22.3s
WMQ LR LR
comp=Z,360nm,14.9s
WMQ LR LR
comp=Z,650nm,24.1s
**SAML Samuel** **111.44 148** IAMs_20 IAMs_20 13 30 52.1
comp=Z,1µm,20.0s
**MK31 Makanchi Array** **115.10 317**⇓ *i*PKIKP **PKiKP** **12 34 19.4 +1.5**
**MKAR Makanchi Array** **115.10 317** PKP **PKiKP** **12 34 18.3 +0.3**
comp=Z,0.7nm,0.8s,baz=108,slow=4.7,SNR=5.4
**DGZ Jazzator, Alta** **115.59 322**⇑ *i*PKIKP **PKPdf** **12 34 17.2 -1.7**
**KKAR Karatay Array** **117.17 307** PKPdf **PKPdf** **12 34 21.5 -0.5**
**KKAR Karatay Array** **117.17 307** PKIKP **PKPdf** **12 34 21.5 -0.5**
**CNBA Chernabura Isl** **118.11 32** IAMs_20 IAMs_20 13 18 14.8
comp=Z,925nm,20.0s
**SRIG Santa Rosalia** **118.17 82** IAMs_20 IAMs_20 13 12 59.5
comp=Z,1µm,22.0s
**TLIG Tlapa** **118.37 100** IAMs_20 IAMs_20 13 15 15.5
comp=Z,1µm,21.0s
**MOIG Morelia** **118.56 96** IAMs_20 IAMs_20 13 16 36.5
comp=Z,1µm,19.0s
**TJX Tijuana** **119.41 75** IAMs_20 IAMs_20 13 16 44.1
comp=Z,908nm,20.0s
**BRU2 Volcan** **119.61 120** IAMs_20 IAMs_20 13 15 14.0
comp=Z,940nm,20.0s
**ESJX Sierra Juarez** **119.64 76** IAMs_20 IAMs_20 13 16 06.3
comp=Z,824nm,20.0s
KURBB **Kurchatov Arra** **119.66 317** PKP **PKPdf** **12 34 25.3 -1.2**
comp=Z,0.9nm,0.2s,baz=151,slow=2.1,SNR=1.7
KURBB PP **PP** **12 35 51.4 +1.1**
comp=Z,2.1nm,0.2s,baz=151,slow=5.8,SNR=8.7
**109C Camp Elliot, M** **119.67 74** IAMs_20 IAMs_20 13 19 36.9
comp=Z,1µm,18.0s
**KURK Kurchatov** **119.70 317**⇑ *i*PKIKP **PKPdf** **12 34 25.3 -1.3**
**ZALV Zalesovo Beam** **120.01 323** PKP **PKPdf** **12 34 26.3 -0.8**
comp=Z,0.3nm,0.2s,baz=180,slow=1.4,SNR=2.0
ZALV PP **PP** **12 35 53.8 +1.2**
comp=Z,0.4nm,0.3s,baz=174,slow=3.9,SNR=2.0
**PASC Pasadena Art C** **120.03 73** IAMs_20 IAMs_20 13 20 26.6
comp=Z,754nm,19.0s
**ELS Elsinore Mount** **120.06 73** IAMs_20 IAMs_20 13 18 30.3
comp=Z,722nm,19.0s
**YUH Yuha Desert** **120.14 75** IAMs_20 IAMs_20 13 16 40.5
comp=Z,1µm,20.0s
**ZAIG Zacatecas** **120.20 93** IAMs_20 IAMs_20 13 19 41.2
comp=Z,1µm,18.0s
**SAO San Andreas Ge** **120.21 68** IAMs_20 IAMs_20 13 26 16.1
comp=Z,914nm,18.0s
**BBGB Big Mountain B** **120.29 69** IAMs_20 IAMs_20 13 25 29.2
comp=Z,1µm,18.0s
**MCCM Marconi Confer** **120.48 66** IAMs_20 IAMs_20 13 18 36.2
comp=Z,1µm,20.0s
**PFO Pinyon Flats O** **120.56 74** IAMs_20 IAMs_20 13 20 28.7
comp=Z,1µm,19.0s
**CCAC Calif City Air** **120.86 72** IAMs_20 IAMs_20 13 19 59.4
comp=Z,940nm,20.0s
**MTO3 Montecristo** **120.89 111** IAMs_20 IAMs_20 13 17 00.0
comp=Z,842nm,22.0s
**ISA Isabella, Lake** **120.99 71** IAMs_20 IAMs_20 13 23 57.8
comp=Z,972nm,18.0s
**HOPS Hopland Field** **121.01 65** IAMs_20 IAMs_20 13 15 55.2
comp=Z,1µm,21.0s
**GDXM Geysers** **121.02 66** IAMs_20 IAMs_20 13 19 40.4
comp=Z,1µm,20.0s
**GLA Glamis** **121.05 76** IAMs_20 IAMs_20 13 17 08.6
comp=Z,873nm,20.0s
**214A Organ Pipe Nat** **121.36 78** IAMs_20 IAMs_20 13 20 02.8
comp=Z,728nm,19.0s
**O14K Tigyukauivet M** **121.40 28** IAMs_20 IAMs_20 13 18 26.5
comp=Z,863nm,21.0s
**GSC Goldstone, Bar** **121.63 73** IAMs_20 IAMs_20 13 21 25.9
comp=Z,937nm,18.0s
**HPIG** **121.64 88** IAMs_20 IAMs_20 13 16 16.3
comp=Z,749nm,19.0s
**ESPN Las Esperanzas** **121.70 117** IAMs_20 IAMs_20 13 16 22.5
comp=Z,1µm,20.0s
**CMB Columbia Colle** **121.72 68** IAMs_20 IAMs_20 13 19 32.0
comp=Z,714nm,19.0s
**M13K Dall Lake** **121.84 27** IAMs_20 IAMs_20 13 22 43.0
comp=Z,1µm,20.0s
**JCC Jacoby Creek,** **121.86 63** IAMs_20 IAMs_20 13 18 19.6
comp=Z,1µm,20.0s
**OMMB Old Mammoth Mi** **122.15 69** IAMs_20 IAMs_20 13 24 49.4
comp=Z,779nm,18.0s
**M14K Bethel** **122.49 27** IAMs_20 IAMs_20 13 22 52.2
comp=Z,740nm,20.0s
**N15K Kwethluk River** **122.50 28** IAMs_20 IAMs_20 13 19 31.4
comp=Z,1µm,21.0s
**DSP Deep Springs** **122.52 70** IAMs_20 IAMs_20 13 25 04.3
comp=Z,962nm,18.0s
**EMB Emerald Bay** **122.56 67** IAMs_20 IAMs_20 13 21 00.2
comp=Z,833nm,19.0s
**WAKR Walker** **122.57 68** IAMs_20 IAMs_20 13 19 58.5
comp=Z,988nm,19.0s
**O16K Kokwok River B** **122.57 30** IAMs_20 IAMs_20 13 19 27.5
comp=Z,1µm,20.0s
**GRAC Grapevine Rang** **122.58 71** IAMs_20 IAMs_20 13 16 38.8
comp=Z,877nm,21.0s
**Y14A Wickenburg** **122.73 76** IAMs_20 IAMs_20 13 27 41.0
comp=Z,670nm,18.0s
**TUC Tucson** **122.77 79** IAMs_20 IAMs_20 13 16 39.1
comp=Z,1µm,20.0s
**K13K Kusilvak Mount** **122.82 25** IAMs_20 IAMs_20 13 21 02.9
comp=Z,895nm,22.0s
**LHV Little Huntoon** **122.88 69** IAMs_20 IAMs_20 13 27 45.8
comp=Z,864nm,18.0s
**PNTR Pine Nut** **122.91 68** IAMs_20 IAMs_20 13 24 03.5
comp=Z,774nm,20.0s
**319A Douglas** **122.92 81** IAMs_20 IAMs_20 13 16 05.2
comp=Z,880nm,21.0s
**V12A Nelson** **123.02 74** IAMs_20 IAMs_20 13 19 26.5
comp=Z,957nm,20.0s
**YERR Yerington** **123.02 68** IAMs_20 IAMs_20 13 21 07.6
comp=Z,949nm,20.0s
**W13A Hualapai Mount** **123.09 75** IAMs_20 IAMs_20 13 21 42.6
comp=Z,886nm,18.0s
**NVAR Mina Array Bea** **123.12 69** PKP **PKPdf** **12 34 32.6 -1.3**
comp=Z,0.5nm,0.8s,baz=218,slow=3.2,SNR=4.8
**RYN Ryan** **123.15 69** IAMs_20 IAMs_20 13 26 46.9
comp=Z,642nm,18.0s
**HATC Hat Creek Radi** **123.19 65** IAMs_20 IAMs_20 13 21 05.8
comp=Z,962nm,19.0s
**YBH Yreka Blue Hor** **123.21 63** **PKiKP** **12 34 35.0 +1.0**
YBH IAMs_20 IAMs_20 13 18 32.3
comp=Z,1µm,20.0s
**YBH Yreka Blue Hor** **123.21 63** PKP **PKPdf** **12 34 32.5 -1.2**
comp=Z,1.1nm,0.8s,baz=94,slow=3.2,SNR=7.2
**YBH Yreka Blue Hor** **123.21 63** PKIKP **PKiKP** **12 34 35.0 +1.0**
**PAHR Pah Rah Range** **123.47 67** **PKPdf** **12 34 34.5 +0.1**
PAHR IAMs_20 IAMs_20 13 21 46.5
comp=Z,723nm,19.0s
**M16K Timber Creek** **123.52 28** IAMs_20 IAMs_20 13 19 52.4
comp=Z,1µm,21.0s
**N17K Nushagak Hills** **123.60 30** IAMs_20 IAMs_20 13 21 57.7
comp=Z,1µm,20.0s
**O18K Koktuh Hills** **123.62 31** IAMs_20 IAMs_20 13 16 57.3
comp=Z,857nm,22.0s
**KVN Kaiserville** **123.68 69** PKPdf **PKPdf** **12 34 34.5 -0.4**
KVN IAMs_20 IAMs_20 13 20 45.9
comp=Z,736nm,20.0s
**KVN Kaiserville** **123.68 69** PKIKP **PKPdf** **12 34 34.5 -0.4**
**HUMO Hull Mountain** **123.72 63** PKPdf **PKPdf** **12 34 33.9 -0.8**
HUMO IAMs_20 IAMs_20 13 18 23.7
comp=Z,1µm,21.0s
**BILL Bilibino** **123.72 9**⇓ *i*PKIKP **PKiKP** **12 34 35.0 +1.0**
BILL *e* 12 36 19.6
BILL *e*PPP PPP 12 38 53.7
BILL pmax pmax
comp=Z,8.0nm,1.3s
BILL MLR MLR
comp=Z,405nm,20.0s
**J14K Nanvaranak Lak** **123.79 25** IAMs_20 IAMs_20 13 21 53.5
comp=Z,990nm,22.0s
**S11A Rachel** **123.93 71** IAMs_20 IAMs_20 13 21 46.7
comp=Z,1µm,21.0s
**X16A Lo Mia Camp, P** **123.95 77** IAMs_20 IAMs_20 13 22 48.5
comp=Z,697nm,18.0s
**Q09A Carvers** **124.02 70** IAMs_20 IAMs_20 13 27 01.9
comp=Z,1µm,18.0s
**P19K Oil Pt** **124.06 32** IAMs_20 IAMs_20 13 20 26.7
comp=Z,1µm,20.0s
**N18K Kilae Creek** **124.10 30** IAMs_20 IAMs_20 13 16 58.8
comp=Z,1µm,22.0s
**K04D Chiloquin, OR** **124.34 63** IAMs_20 IAMs_20 13 20 08.3
comp=Z,954nm,20.0s
**R11B Troy Canyon, C** **124.53 71** IAMs_20 IAMs_20 13 17 51.5
comp=Z,782nm,20.0s
**TXAR Lajitas Array** **124.60 87** PKP **PKPdf** **12 34 35.0 -1.8**
comp=Z,1.1nm,0.8s,baz=178,slow=3.2,SNR=12
TXAR PKKPab **PKKPab** **12 44 20.9 +2.9**
comp=Z,0.3nm,0.7s,baz=59,slow=4.8,SNR=4.4
**N19K Bonanza Creek** **124.61 31** IAMs_20 IAMs_20 13 17 26.5
comp=Z,1µm,22.0s
**121A Cookes Peak, D** **124.63 81** IAMs_20 IAMs_20 13 17 20.5
comp=Z,1µm,21.0s
**EPT El Paso** **124.80 83** IAMs_20 IAMs_20 13 18 31.8
comp=Z,788nm,20.0s
**BRVK Borovoye** **124.83 314** PKPdf **PKiKP** **12 34 37.4 +0.7**
**BRVK Borovoye** **124.83 314***c* *i*PKIKP **PKiKP** **12 34 36.9 +0.2**
BRVK pmax pmax
comp=Z,12nm,1.7s

**LCMT Little Creek M 124.84 74** IAMs_20 IAMs_20 13 19 57.9
comp=Z,864nm,20.0s
**I04A Tendick Farm, 124.84 62** IAMs_20 IAMs_20 13 18 58.6
comp=Z,964nm,20.0s
**X18A Snowflake 124.87 78** IAMs_20 IAMs_20 13 23 04.8
comp=Z,866nm,18.0s
**ANM Nome 124.92 23** IAMs_20 IAMs_20 13 23 57.2
comp=Z,808nm,20.0s
**U15A North Rim 124.95 75** IAMs_20 IAMs_20 13 23 44.7
comp=Z,676nm,18.0s
**COR Corvallis 124.96 61** IAMs_20 IAMs_20 13 17 44.6
comp=Z,1µm,22.0s
**KNB Kanab 125.08 74** IAMs_20 IAMs_20 13 24 13.2
comp=Z,668nm,19.0s
**J05D Fort Rock, OR 125.08 63** IAMs_20 IAMs_20 13 19 21.9
comp=Z,1µm,20.0s
**BMN Battle Mountai 125.14 68** IAMs_20 IAMs_20 13 22 42.7
comp=Z,859nm,21.0s
**CCUT Cedar City 125.17 73** IAMs_20 IAMs_20 13 26 42.5
comp=Z,950nm,18.0s
**SDV Santo Domingo 125.25 133** IAMs_20 IAMs_20 13 40 37.3
comp=Z,845nm,21.0s
**SZCU Shurtz Canyon 125.35 73** IAMs_20 IAMs_20 13 25 34.3
comp=Z,839nm,18.0s
**W18A Petrified Fore 125.42 78** IAMs_20 IAMs_20 13 23 47.4
comp=Z,665nm,18.0s
**G03D McMinnville, O 125.43 60** IAMs_20 IAMs_20 13 28 16.9
comp=Z,793nm,18.0s
**Q12A Willow Creek R 125.43 71** IAMs_20 IAMs_20 13 26 25.5
comp=Z,841nm,18.0s
**J17K VABM Dome 125.45 27** IAMs_20 IAMs_20 13 20 49.5
comp=Z,1µm,22.0s
**M19K Big River Lodg 125.52 30** IAMs_20 IAMs_20 13 18 40.3
comp=Z,1µm,22.0s
**H04A Detroit Lake 125.59 61** IAMs_20 IAMs_20 13 18 06.3
comp=Z,1µm,21.0s
**PINE Pine Mountain 125.59 63** PKPdf **PKiKP 12 34 38.7 -0.1**
PINE IAMs_20 IAMs_20 13 19 48.4
comp=Z,1µm,21.0s
**PSUT Pine Spring 125.60 72** IAMs_20 IAMs_20 13 22 52.0
comp=Z,1µm,19.0s
**L19K White Mountain 125.61 29** IAMs_20 IAMs_20 13 19 15.7
comp=Z,938nm,20.0s
**SPR3 Spring Creek 3 125.68 71** PKPdf **PKPdf 12 34 37.8 -1.1**
SPR3 IAMs_20 IAMs_20 13 20 11.9
comp=Z,920nm,21.0s
**I05D Terrebonne, OR 125.78 62** IAMs_20 IAMs_20 13 19 08.2
comp=Z,1µm,21.0s
**F03A Seaside 125.79 59** IAMs_20 IAMs_20 13 19 39.4
comp=Z,873nm,20.0s
**WVOR Wild Horse Val 125.82 65** PKPdf **PKPdf 12 34 36.9 -1.9**
**WVOR Wild Horse Val 125.82 65** PKIKP **PKPdf 12 34 36.9 -1.9**
**M20K Styx River 125.86 30** IAMs_20 IAMs_20 13 21 57.4
comp=Z,898nm,22.0s
**RADR Rader Ridge 126.02 59** IAMs_20 IAMs_20 13 20 25.4
comp=Z,1µm,20.0s
**F15K North Star Dit 126.05 23** IAMs_20 IAMs_20 13 21 30.2
comp=Z,807nm,21.0s
**Q23K Middleton Isla 126.08 36** IAMs_20 IAMs_20 13 21 57.6
comp=Z,877nm,20.0s
**J18K Innoko River 126.13 28** IAMs_20 IAMs_20 13 21 14.4
comp=Z,721nm,21.0s
**F04D Rainier, OR 126.17 60** IAMs_20 IAMs_20 13 19 43.4
comp=Z,822nm,21.0s
**MTPU Mount Pierson 126.17 74** IAMs_20 IAMs_20 13 21 01.0
comp=Z,933nm,20.0s
**E03A Lebam 126.22 59** IAMs_20 IAMs_20 13 20 42.8
comp=Z,1µm,20.0s
**SUA Susitna One 126.24 32** IAMs_20 IAMs_20 13 23 52.6
comp=Z,862nm,20.0s
**833A Chaparral WMA, 126.29 92** IAMs_20 IAMs_20 13 23 09.6
comp=Z,638nm,18.0s
**F04A Amboy 126.36 60** IAMs_20 IAMs_20 13 29 11.4
comp=Z,683nm,18.0s
**ELK Elko 126.43 69** IAMs_20 IAMs_20 13 29 10.7
comp=Z,908nm,18.0s
**TCRU Three Creeks R 126.43 73** IAMs_20 IAMs_20 13 22 16.9
comp=Z,1µm,19.0s
**MVU Marysvale 126.48 73** **PKiKP 12 34 41.2 +0.3**
**MSU Marysvale 126.51 73** PKPdf **PKPdf 12 34 40.5 +0.1**
**MSU Marysvale 126.51 73** PKIKP **PKPdf 12 34 40.5 +0.1**
**H17K Granite Mounta 126.51 25** IAMs_20 IAMs_20 13 22 36.4
comp=Z,1µm,21.0s
**WISH Wishkah 126.52 58** IAMs_20 IAMs_20 13 21 18.7
comp=Z,1µm,20.0s
**PWL Port Wells 126.53 34** IAMs_20 IAMs_20 13 22 33.1
comp=Z,714nm,21.0s
**ABKAR Akbulak array 126.65 305** PKPdf **PKPdf 12 34 40.0 0.0**
**NLWA Neilton Lookou 126.66 58** IAMs_20 IAMs_20 13 19 02.5
comp=Z,1µm,21.0s
**K20K Telida 126.76 29** PKPdf **PKiKP 12 34 41.3 +1.0**
K20K IAMs_20 IAMs_20 13 24 25.2
comp=Z,1µm,21.0s
**G06A Carlson Farm, 126.76 62** IAMs_20 IAMs_20 13 19 16.3
comp=Z,970nm,21.0s
**J19K Poorman 126.84 28** IAMs_20 IAMs_20 13 21 58.3
comp=Z,1µm,22.0s
**HMU Henry Mountain 126.89 75** IAMs_20 IAMs_20 13 20 43.2
comp=Z,711nm,20.0s
**KNK Knik Glacier 126.91 33** IAMs_20 IAMs_20 13 22 10.2
comp=Z,1µm,21.0s
**TIXI Tiksi 127.11 353** PKPdf **PKiKP 12 34 40.5 -0.2**
**TIXI Tiksi 127.11 353** IAMs_20 IAMs_20 13 29 13.9
comp=Z,738nm,21.0s
**TIXI Tiksi 127.11 353** ↑*i*PKIKP **PKiKP 12 34 41.1 +0.4**
TIXI pmax pmax
comp=Z,15nm,1.7s
**CUT Chulitna 127.11 31** IAMs_20 IAMs_20 13 24 30.7
comp=Z,864nm,21.0s
**ANMO Albuquerque 127.15 80** IAMs_20 IAMs_20 13 19 43.1
comp=Z,1µm,20.0s
**LON Longmire 127.23 60** IAMs_20 IAMs_20 13 21 07.5
comp=Z,890nm,20.0s
**GNW Green Mountain 127.29 58** IAMs_20 IAMs_20 13 19 35.2
comp=Z,1µm,21.0s
**DUG Dugway, Tooele 127.35 71** PKPdf **PKiKP 12 34 43.1 +0.7**
DUG IAMs_20 IAMs_20 13 26 54.2
comp=Z,772nm,18.0s
**DUG Dugway, Tooele 127.35 71** PKIKP **PKiKP 12 34 43.1 +0.7**
**F17K Baldwin Pennin 127.43 24** IAMs_20 IAMs_20 13 28 13.7
comp=Z,801nm,20.0s
**D05A Enumclaw 127.44 59** IAMs_20 IAMs_20 13 20 13.2
comp=Z,910nm,21.0s
**F07A Phinny Hill Vi 127.58 62** IAMs_20 IAMs_20 13 18 56.9
comp=Z,1µm,22.0s
**SCM Sheep Creek Mo 127.58 33** IAMs_20 IAMs_20 13 23 18.0
comp=Z,831nm,21.0s
**NLU North Lily Min 127.58 72** IAMs_20 IAMs_20 13 25 35.4
comp=Z,906nm,19.0s
**G18K Tagagawik 127.60 25** **PKiKP 12 34 42.6 +0.8**
G18K IAMs_20 IAMs_20 13 24 59.2
comp=Z,968nm,20.0s
**MVCO Mesa Verde 127.62 77** PKPdf **PKiKP 12 34 43.4 +0.3**
**G08A Pilot Rock 127.65 63** IAMs_20 IAMs_20 13 19 17.9
comp=Z,897nm,21.0s
**JCT Junction City 127.67 89** IAMs_20 IAMs_20 13 24 19.2
comp=Z,767nm,18.0s
**BGU Big Grassy Mou 127.74 71** IAMs_20 IAMs_20 13 29 14.5
comp=Z,758nm,18.0s
**I20K Naaghedeneel 127.78 28** **PKPdf 12 34 41.7 +0.1**
I20K IAMs_20 IAMs_20 13 22 47.2
comp=Z,1µm,22.0s
**KTH Kantishna Hill 127.81 30** IAMs_20 IAMs_20 13 23 16.8
comp=Z,906nm,22.0s
**H19K Roundabout Mou 127.85 26** PKPdf **PKiKP 12 34 43.5 +1.2**
H19K IAMs_20 IAMs_20 13 22 45.9
comp=Z,1µm,22.0s
**P17A Butcher Ranch, 127.98 73** IAMs_20 IAMs_20 13 22 08.9
comp=Z,939nm,19.0s
**E07A Sunnyside 128.07 61** IAMs_20 IAMs_20 13 19 32.9
comp=Z,993nm,22.0s
**GNI Garni 128.07 288** IAMs_20 IAMs_20 13 24 50.9
comp=Z,708nm,21.0s
**HAWA Hanford 128.12 61** IAMs_20 IAMs_20 13 19 35.2
comp=Z,1µm,22.0s
**G19K Purcell Mounta 128.18 25** PKPdf **PKiKP 12 34 45.0 +2.0**
G19K IAMs_20 IAMs_20 13 23 46.6
comp=Z,1µm,20.0s
**BMO Blue Mountains 128.20 64** IAMs_20 IAMs_20 13 21 36.4
comp=Z,861nm,21.0s
**BPAW Bear Paw Mtn. 128.21 30** PKPdf **PKiKP 12 34 43.4 +0.2**
BPAW IAMs_20 IAMs_20 13 24 58.4
comp=Z,985nm,21.0s
**CTU Camp Tracy 128.28 72** IAMs_20 IAMs_20 13 27 41.8
comp=Z,852nm,18.0s
**RND Reindeer 128.30 31** PKPdf **PKiKP 12 34 44.4 +1.0**
RND IAMs_20 IAMs_20 13 26 19.9
comp=Z,1µm,20.0s
**RND Reindeer 128.30 31** PKIKP **PKiKP 12 34 44.4 +1.0**
**SPUT South Promonto 128.33 71** IAMs_20 IAMs_20 13 28 34.0
comp=Z,744nm,18.0s
**P18A Preston Nutter 128.36 74** IAMs_20 IAMs_20 13 21 53.0
comp=Z,1µm,21.0s
**JLU Jordanelle 128.38 72** IAMs_20 IAMs_20 13 26 11.4
comp=Z,857nm,19.0s
**VRDI Verde Repeater 128.39 35** IAMs_20 IAMs_20 13 20 46.4
comp=Z,982nm,21.0s
**RDOG Red Dog Mine 128.40 22** IAMs_20 IAMs_20 13 24 58.2
comp=Z,694nm,20.0s
**E08A Dider Farm, El 128.43 62** IAMs_20 IAMs_20 13 19 37.3
comp=Z,905nm,22.0s
**HVU Hansel Valley 128.48 70** IAMs_20 IAMs_20 13 28 55.0
comp=Z,895nm,18.0s
**DHY Denali Highway 128.50 32** IAMs_20 IAMs_20 13 26 14.2
comp=Z,839nm,20.0s
**MAK Makhachkala 128.53 292** *i* P **Pdif 12 31 21.0 -8.0**
MAK *e* 12 41 48.0
MAK *e*SSS SSS 12 58 54.7
MAK pmax pmax
comp=Z,83nm,1.3s
**MSTX Muleshoe 128.54 84** PKPdf **PKiKP 12 34 45.2 +0.3**
MSTX IAMs_20 IAMs_20 13 23 06.9
comp=Z,733nm,19.0s
**F19K Shaleruckik Mo 128.57 25** PKPdf **PKiKP 12 34 45.3 +1.6**
F19K IAMs_20 IAMs_20 13 28 58.7
comp=Z,866nm,19.0s
**MCARA McCarthy VSAT 128.64 35** IAMs_20 IAMs_20 13 20 55.2
comp=Z,965nm,22.0s
**TCUT Toone Canyon 128.76 71** IAMs_20 IAMs_20 13 21 10.5
comp=Z,908nm,21.0s
**D08A Wollman Farm, 128.88 61** IAMs_20 IAMs_20 13 20 09.3
comp=Z,807nm,22.0s
**H21K Melozitna Rive 128.90 28** PKPdf **PKiKP 12 34 46.6 +2.1**
H21K IAMs_20 IAMs_20 13 23 29.7
comp=Z,1µm,22.0s
**E09A Wood Farm, Sta 128.90 62** IAMs_20 IAMs_20 13 20 54.0
comp=Z,851nm,21.0s
**IMAR Indian Mountai 128.90 27** PKPdf **PKiKP 12 34 46.6 +2.2**
**S22A 4UR Ranch, Cre 128.94 78** PKPdf **PKiKP 12 34 46.4 +0.6**
S22A IAMs_20 IAMs_20 13 28 57.4
comp=Z,704nm,18.0s
**MLY Manley 128.99 29** IAMs_20 IAMs_20 13 20 49.9
comp=Z,1µm,22.0s
**F10A Beach Ranch, E 129.00 63** IAMs_20 IAMs_20 13 21 35.7
comp=Z,1µm,21.0s
**HWUT Hardware Ranch 129.01 71** IAMs_20 IAMs_20 13 27 50.2
comp=Z,674nm,18.0s
**WRAK Wrangell Islan 129.10 45** IAMs_20 IAMs_20 13 19 28.2
comp=Z,1µm,21.0s
**NEA2 Nenana 129.13 30** **PKiKP 12 34 45.6 +0.6**
NEA2 IAMs_20 IAMs_20 13 24 16.8
comp=Z,804nm,20.0s
**E19K Redstone River 129.19 24** IAMs_20 IAMs_20 13 26 31.3
comp=Z,947nm,20.0s
**F20K Avaraart Lake 129.23 25** PKPdf **PKiKP 12 34 46.8 +1.8**
F20K IAMs_20 IAMs_20 13 22 49.4
comp=Z,1µm,21.0s
**C18K Utukok River 129.25 22** IAMs_20 IAMs_20 13 27 42.8
comp=Z,780nm,19.0s
**ABTX Abilene, Hawle 129.35 88** IAMs_20 IAMs_20 13 22 46.5
comp=Z,1µm,19.0s
**G21K Allakaket 129.38 27** **PKiKP 12 34 47.1 +1.7**
**RDMU Red Mountain 129.39 73** **PKiKP 12 34 47.1 +0.6**
**I23K Minto, Yukon-K 129.46 29** IAMs_20 IAMs_20 13 26 17.5
comp=Z,1µm,21.0s
**CCB Clear Creek Bu 129.53 31** **PKiKP 12 34 47.4 +1.7**
**HKT Hockley 129.56 93** IAMs_20 IAMs_20 13 24 38.3
comp=Z,684nm,19.0s
**APMT Aspermont 129.59 87** PKPdf **PKiKP 12 34 47.1 +0.2**
**HDA Harding Lake 129.61 31** **PKiKP 12 34 47.6 +1.6**
HDA IAMs_20 IAMs_20 13 27 55.6
comp=Z,756nm,20.0s
**SDCO Great Sand Dun 129.68 79** IAMs_20 IAMs_20 13 26 26.2
comp=Z,709nm,19.0s
**COLA College 129.69 30** IAMs_20 IAMs_20 13 21 45.5
comp=Z,907nm,21.0s
**COLA College 129.69 30** ||*i*PKIKP **PKiKP 12 34 45.8 -0.2**
**C09A Chrisman Ranch 129.71 61** IAMs_20 IAMs_20 13 28 54.1
comp=Z,658nm,18.0s
**D19K Kuna River 129.81 23** IAMs_20 IAMs_20 13 30 18.5
comp=Z,732nm,21.0s
**O20A White River Ci 129.82 75** IAMs_20 IAMs_20 13 21 00.6
comp=Z,653nm,20.0s
**AMTX Amarillo 129.82 84** IAMs_20 IAMs_20 13 24 25.9
comp=Z,704nm,19.0s
**SMCO Snowmass 129.86 76** IAMs_20 IAMs_20 13 25 27.7
comp=Z,837nm,19.0s
**T25A Trinidad 129.87 80** IAMs_20 IAMs_20 13 21 21.2
comp=Z,1µm,20.0s
**IL31 129.90 31** **PKiKP 12 34 47.0 +0.6**
**ILAR Eielson Array 129.90 31** PKPdf **PKiKP 12 34 46.8 +0.3**
**ILAR Eielson Array 129.90 31** PKP **PKPdf 12 34 44.4 -1.3**
comp=Z,1.4nm,0.7s,baz=267,slow=2.6,SNR=15
ILAR SKPbc SKPbc 12 38 07.8 +0.4
comp=Z,2.2nm,1.3s,baz=241,slow=5.6,SNR=4.4
**C19K Lookout Ridge 129.97 22** IAMs_20 IAMs_20 13 30 02.7
comp=Z,839nm,20.0s
**POKR Poker Plat Res 129.99 30** IAMs_20 IAMs_20 13 21 07.5
comp=Z,1µm,22.0s
**TOA0 Torodi Ar. Sit 130.02 227** PKPdf **PKPdf 12 34 47.6 +0.1**
**TORD Torodi Ar. Bea 130.02 227** PKP **PKPdf 12 34 47.1 -0.4**
comp=Z,3.6nm,1.0s,baz=223,slow=0.7,SNR=7.4
**WHTX Lake Whitney, 130.14 90** **PKiKP 12 34 48.0 0.0**
WHTX IAMs_20 IAMs_20 13 25 56.5
comp=Z,632nm,19.0s
**GAZ Gaziantep 130.19 280** IAMs_20 IAMs_20 13 23 48.0
comp=Z,964nm,22.0s
**SCRK Sand Creek 130.20 33** PKPdf **PKiKP 12 34 48.4 +1.2**
SCRK IAMs_20 IAMs_20 13 24 10.1
comp=Z,931nm,20.0s
**MTDJ Mount Denham 130.23 120** IAMs_20 IAMs_20 13 19 48.3
comp=Z,900nm,21.0s
**J25K Salcha River, 130.23 32** IAMs_20 IAMs_20 13 28 52.0
comp=Z,696nm,20.0s
**BCAR Beaver Creek A 130.25 34** PKPdf **PKPdf 12 34 46.5 0.0**
**G23K Bananza Creek 130.44 28** IAMs_20 IAMs_20 13 21 48.4
comp=Z,892nm,22.0s
**NEW Newport 130.59 61** IAMs_20 IAMs_20 13 31 38.6
comp=Z,793nm,19.0s
**TPAW Teton Pass 130.63 69** IAMs_20 IAMs_20 13 30 03.8
comp=Z,583nm,18.0s
**P32M Atlin 130.71 41** IAMs_20 IAMs_20 13 24 11.0
comp=Z,985nm,20.0s
**E21K Killik River 130.74 25** IAMs_20 IAMs_20 13 22 55.1
comp=Z,979nm,22.0s
**K27K Chicken 130.83 33** IAMs_20 IAMs_20 13 27 60.0
comp=Z,834nm,21.0s
**PRP Porcupine Dome 130.83 31** IAMs_20 IAMs_20 13 21 08.9
comp=Z,1µm,22.0s
**PDAR Pinedale Array 130.89 71** PKP **PKPdf 12 34 47.5 -1.1**
comp=Z,0.1nm,0.3s,baz=142,slow=3.4,SNR=2.7
PDAR SKPbc **SKPab 12 38 12.5 +0.1**
comp=Z,0.6nm,0.9s,baz=199,slow=5.3,SNR=3.6
**LOHW Long Hollow 130.90 70** IAMs_20 IAMs_20 13 33 26.8
comp=Z,684nm,18.0s
**M29M Somme Creek 130.93 36** IAMs_20 IAMs_20 13 23 42.6
comp=Z,1µm,20.0s
**DLMT Dillon 131.00 67** IAMs_20 IAMs_20 13 26 14.7
comp=Z,975nm,19.0s
**E22K Anaktuvuk Pass 131.04 26** **PKiKP 12 34 50.2 +1.4**
**ISCO Idaho Springs 131.05 77** IAMs_20 IAMs_20 13 26 16.2
comp=Z,812nm,19.0s
**G24K Hadweenzic Riv 131.13 29** IAMs_20 IAMs_20 13 28 25.6
comp=Z,858nm,20.0s
**YPP Pitchstone Pla 131.23 69** IAMs_20 IAMs_20 13 26 38.8
comp=Z,823nm,20.0s
**YFT Old Faithful 131.33 69** IAMs_20 IAMs_20 13 27 17.5
comp=Z,983nm,20.0s
**WMOK Wichita Mounta 131.37 87** PKPdf **PKPdf 12 34 49.4 -0.1**
**WMOK Wichita Mounta 131.37 87** PKIKP **PKPdf 12 34 49.4 -0.1**
**D22K Ayikyak River 131.38 25** IAMs_20 IAMs_20 13 32 07.1
comp=Z,882nm,20.0s
**I26K Coal Creek Min 131.39 32** IAMs_20 IAMs_20 13 23 59.6
comp=Z,975nm,21.0s
**YHL Hebgen Lake 131.41 68** IAMs_20 IAMs_20 13 24 11.6
comp=Z,731nm,20.0s
**H17A Grant Village 131.43 69** IAMs_20 IAMs_20 13 28 42.2
comp=Z,673nm,20.0s
**RWWY Rawlins 131.45 74** IAMs_20 IAMs_20 13 24 40.8
comp=Z,971nm,20.0s
**B21K Ikpikpuk River 131.48 24** IAMs_20 IAMs_20 13 28 10.8
comp=Z,934nm,20.0s
**KBZ Khabaz 131.53 290** PKP **PKPdf 12 34 49.5 +0.1**
comp=Z,3.4nm,0.9s,baz=151,slow=6.1,SNR=4.0
KBZ SKPbc **SKPab 12 38 19.1 +4.4**
comp=Z,0.6nm,0.3s,baz=180,slow=2.0,SNR=4.4
**KBZ Khabaz 131.53 290** ↑*e*PKIKP **PKPdf 12 34 49.8 +0.4**
**YNM Yellowstone No 131.59 68** IAMs_20 IAMs_20 13 34 00.2
comp=Z,782nm,19.0s
**EGAK Eagle 131.64 33** IAMs_20 IAMs_20 13 22 52.3
comp=Z,852nm,22.0s
**SHA1 Shidzhatmaz 131.66 290** ↑*e*PKIKP **PKPdf 12 34 49.7 -0.3**
**DAWY Dawson 131.72 34** **PKiKP 12 34 50.9 +0.7**
**KIV Kislovodsk 131.79 290** *i* PKIKP **PKiKP 12 34 51.7 +0.6**
KIV *e* 12 37 10.3
KIV *e*SS SS 12 54 47.0 +0.6
KIV *e*SSS SSS 12 59 38.5
KIV pmax pmax
comp=Z,7.0nm,1.1s
**E24K Your Creek 131.84 27** IAMs_20 IAMs_20 13 22 34.5
comp=Z,913nm,22.0s
**YMP Mirror Lake Pl 131.89 69** IAMs_20 IAMs_20 13 27 38.2
comp=Z,786nm,18.0s
**TOLK Toolik Lake Re 131.97 26** PKPdf **PKiKP 12 34 51.3 +0.6**
**ARU Arti 132.08 312** PKPdf **PKiKP 12 34 51.9 +0.8**
**ARU Arti 132.08 312** *i* PKIKP **PKiKP 12 34 51.2 +0.1**
ARU 12 37 09.9
**PHWY Pilot Hill 132.16 75** IAMs_20 IAMs_20 13 25 57.6
comp=Z,629nm,19.0s
**KSCO Kaye Shedlock' 132.18 80** IAMs_20 IAMs_20 13 22 16.4
comp=Z,882nm,20.0s
**K29M Barlow Dome 132.19 35** IAMs_20 IAMs_20 13 25 51.8
comp=Z,1µm,21.0s
**CAMR Camarioca 132.26 112** IAMs_20 IAMs_20 13 28 08.6
comp=Z,769nm,18.0s
**BRIGG Briggsdale 132.31 77** IAMs_20 IAMs_20 13 24 41.5
comp=Z,672nm,20.0s
**K22A Casper 132.47 73** IAMs_20 IAMs_20 13 22 42.9
comp=Z,1µm,21.0s
**I28M Miner Creek 132.48 33** PKPdf **PKiKP 12 34 51.9 +0.1**
**C23K Itkillik River 132.58 25** PKPdf **PKiKP 12 34 51.2 -0.5**
**RLMT Red Lodge 132.61 69** IAMs_20 IAMs_20 13 25 15.4
comp=Z,797nm,20.0s
**OK038 West end E0370 132.63 85** IAMs_20 IAMs_20 13 25 59.4
comp=Z,945nm,19.0s
**G27K Doyon Strip 132.87 31** IAMs_20 IAMs_20 13 26 53.6
comp=Z,911nm,21.0s
**GTBY Guantanamo Bay 132.87 121** IAMs_20 IAMs_20 13 22 31.3
comp=Z,657nm,20.0s
**I29M Ogilvie Camp, 132.93 34** IAMs_20 IAMs_20 13 26 34.4
comp=Z,863nm,21.0s
**OK032 Salt Plains WL 133.16 85** IAMs_20 IAMs_20 13 26 25.5
comp=Z,893nm,19.0s
**X37A Clayton 133.22 89** IAMs_20 IAMs_20 13 28 37.1
comp=Z,757nm,19.0s
**D25K Kavik River 133.28 27** IAMs_20 IAMs_20 13 24 29.2
comp=Z,851nm,22.0s
**KIRS Kirsehir-Merke 133.41 279** ⇑P **PKPdf 12 34 51.4 -1.9**
**I30M Mount Dempster 133.46 34** PKPdf **PKiKP 12 34 53.6 -0.3**
I30M IAMs_20 IAMs_20 13 24 10.5
comp=Z,1µm,21.0s
**CBKS Cedar Bluff 133.69 82** IAMs_20 IAMs_20 13 27 48.2
comp=Z,686nm,20.0s
**E27K Coleen River 133.80 29** IAMs_20 IAMs_20 13 24 01.2
comp=Z,812nm,22.0s
**OGNE Ogallala 133.83 78** IAMs_20 IAMs_20 13 29 11.0
comp=Z,758nm,18.0s
**F28M Old Crow 133.92 31** IAMs_20 IAMs_20 13 30 15.5
comp=Z,763nm,20.0s
**TUL3 Leonard 133.92 88** IAMs_20 IAMs_20 13 24 06.4
comp=Z,674nm,20.0s
**BR131 Keskin Array S 133.97 279** ||*i*PKIKP **PKiKP 12 34 55.8 +0.1**
**BRTR Keskin Array B 133.97 279** PKP **PKiKP 12 34 55.2 -0.5**
comp=Z,1.2nm,0.8s,baz=151,slow=3.3,SNR=4.9
**R32A Long Quarter, 134.00 83** IAMs_20 IAMs_20 13 23 00.6
comp=Z,743nm,22.0s
**EPYK Eagle Plains 134.08 33** **PKiKP 12 34 54.7 -0.2**
EPYK IAMs_20 IAMs_20 13 24 24.8
comp=Z,683nm,20.0s
**EGMT Eagleton 134.22 66** IAMs_20 IAMs_20 13 24 36.7
comp=Z,696nm,21.0s
**RLO Rose Lookout 134.54 88** IAMs_20 IAMs_20 13 20 28.0
comp=Z,2µm,22.0s
**BELG Belogornoye 134.60 302** ||*i*PKIKP **PKiKP 12 34 56.9 +0.6**
**G30M tAoh Zrail Nji 134.62 33** PKPdf **PKiKP 12 34 56.1 +0.1**
**E28M Babbage River 134.65 30** PKPdf **PKiKP 12 34 56.0 0.0**
E28M IAMs_20 IAMs_20 13 24 25.8
comp=Z,946nm,22.0s
**D27M Malcolm River 134.66 29** IAMs_20 IAMs_20 13 24 21.0
comp=Z,1µm,22.0s
**RSSD Black Hills 134.81 73** IAMs_20 IAMs_20 13 34 36.6
comp=Z,895nm,18.0s
**E29M Blow River 134.99 30** IAMs_20 IAMs_20 13 24 32.7
comp=Z,918nm,22.0s
**G31M Satah River 135.19 33** PKPdf **PKiKP 12 34 56.8 -0.3**
**HHAR Hobbs 135.25 89** PKPdf **PKPdf 12 34 56.6 -0.1**
HHAR IAMs_20 IAMs_20 13 30 47.7
comp=Z,591nm,18.0s
**LAO LASA Array 135.25 69** IAMs_20 IAMs_20 13 29 48.2
comp=Z,788nm,18.0s
**KSU1 Kansas State U 135.66 84** IAMs_20 IAMs_20 13 36 08.6
comp=Z,832nm,18.0s
**F31M Tsiigehtchic 135.67 33** IAMs_20 IAMs_20 13 24 28.7
comp=Z,687nm,21.0s
**FCAR Ozark Folk Cen 136.01 91** **PKPdf 12 34 57.6 -0.5**
FCAR IAMs_20 IAMs_20 13 29 43.0
comp=Z,734nm,21.0s
**INK Inuvik 136.24 32** PKPdf **PKiKP 12 34 59.6 +0.4**
**INK Inuvik 136.24 32** PKIKP **PKiKP 12 34 59.6 +0.4**
**BGNE Belgrade 136.33 80** IAMs_20 IAMs_20 13 27 55.1
comp=Z,915nm,19.0s
**K30B Basset 136.33 78** IAMs_20 IAMs_20 13 30 39.0
comp=Z,793nm,18.0s
**S39A Bolivar 136.58 88** PKPdf **PKPdf 12 34 57.7 -1.5**
S39A IAMs_20 IAMs_20 13 27 32.0
comp=Z,1µm,21.0s
**MET Memphis--Engin 136.72 93** IAMs_20 IAMs_20 13 30 41.9
comp=Z,624nm,19.0s
**KIRV Kirov 137.33 310** ||*e*PKIKP **PKPdf 12 34 59.5 -0.3**
**N35A Tabor 137.39 83** IAMs_20 IAMs_20 13 28 42.3
comp=Z,896nm,21.0s
**R40A Maddies Statio 137.60 88** IAMs_20 IAMs_20 13 26 49.9
comp=Z,949nm,21.0s
**PLAL Pickwick Lake 137.69 95** PKPdf **PKPdf 12 35 00.1 -1.1**
**L34A Svendsen Farm, 137.70 81** IAMs_20 IAMs_20 13 27 34.4
comp=Z,612nm,20.0s
**SUSD Miller 137.83 76** IAMs_20 IAMs_20 13 24 27.6
comp=Z,632nm,21.0s
**E28A Huff 138.18 73** IAMs_20 IAMs_20 13 27 31.9
comp=Z,805nm,20.0s
**CGM3 Cape Girardeau 138.41 91** IAMs_20 IAMs_20 13 31 45.5
comp=Z,662nm,20.0s
**P40A Paris 138.56 87** IAMs_20 IAMs_20 13 27 36.4
comp=Z,934nm,20.0s
**ECSD EROS Data Cent 138.69 79** IAMs_20 IAMs_20 13 26 51.7
comp=Z,858nm,22.0s
**N38A Joes South For 138.72 85** IAMs_20 IAMs_20 13 36 46.6
comp=Z,715nm,18.0s
**S44A Carbondale 138.92 91** IAMs_20 IAMs_20 13 31 57.9
comp=Z,597nm,19.0s
**SLM Saint Louis 139.00 89** IAMs_20 IAMs_20 13 29 56.0
comp=Z,625nm,20.0s
**W50A Signal Mountai 139.42 97** **PKPdf 12 35 02.9 -1.6**
**SCIA State Center 139.46 83** IAMs_20 IAMs_20 13 22 24.0
comp=Z,779nm,18.0s
**CLTN Cedars of Leba 139.48 96** IAMs_20 IAMs_20 13 33 09.7
comp=Z,551nm,19.0s
**C36M Paulatuk 139.72 33** IAMs_20 IAMs_20 13 31 24.7
comp=Z,828nm,21.0s
**Q44A Meyer Farm, Va 139.88 90** IAMs_20 IAMs_20 13 29 56.4
comp=Z,702nm,21.0s
**P43A Skaggs, Pawnee 140.09 89** IAMs_20 IAMs_20 13 34 54.6
comp=Z,822nm,19.0s
**F33A 5 Mile Ranch, 140.17 76** IAMs_20 IAMs_20 13 28 28.5
comp=Z,949nm,21.0s
**A36M Sachs Harbour 140.54 29** IAMs_20 IAMs_20 13 29 38.5
comp=Z,738nm,22.0s
**I37A Lemond, Waseca 140.69 81** IAMs_20 IAMs_20 13 28 55.3
comp=Z,613nm,20.0s
**HDIL Hopedale 140.82 88** IAMs_20 IAMs_20 13 28 57.1
comp=Z,996nm,21.0s
**WCI Wyandotte Cave 140.99 93** IAMs_20 IAMs_20 13 33 00.5
comp=Z,618nm,21.0s
**Y57A Sumter 141.34 103** IAMs_20 IAMs_20 13 33 10.6
comp=Z,606nm,20.0s
**MOS Moscow 141.36 301** *e*PKIKP **PKPdf 12 35 07.9 +0.7**
MOS *e* 12 38 12.8
MOS MLR MLR
comp=Z,900nm,21.0s
**TZTN Tazewell 141.38 98** IAMs_20 IAMs_20 13 33 28.0
comp=Z,538nm,19.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **P46A** | **Rosedale** | **141.40** | **91** | IAMs_20 | IAMs_20 | 13 31 24.4 | | | |
| | comp=Z,767nm,20.0s | | | | | | | | |
| **PETR** | **Petresti** | **141.43** | **282** | ⇓P | PKiKP | 12 35 19.1 | +8.6 | | |
| **BLO** | **Bloomington** | **141.49** | **92** | IAMs_20 | IAMs_20 | 13 31 15.9 | | | |
| | comp=Z,609nm,20.0s | | | | | | | | |
| **OBN** | **Obninsk** | **141.57** | **300** | *e*PKIKP | **PKPdf** | **12 35 05.7** | **-1.9** | | |
| OBN | | | | *e* | | 12 38 09.2 | | | |
| **R49A** | **Shelbyville** | **141.67** | **94** | IAMs_20 | IAMs_20 | 13 33 26.6 | | | |
| | comp=Z,608nm,21.0s | | | | | | | | |
| **SPMN** | **Marine on St.** | **141.76** | **80** | IAMs_20 | IAMs_20 | 13 30 54.7 | | | |
| | comp=Z,889nm,20.0s | | | | | | | | |
| **VRI** | **Vrincioaia** | **141.80** | **282** | ⇓P | PKPdf | 12 34 60.0 | -8.5 | | |
| **PLOR** | **Plostina** | **141.84** | **282** | ⇓P | **PKPdf** | **12 35 05.5** | **-3.0** | | |
| **PLOR** | **Plostina** | **141.84** | **282** | ⇓PKIKP | **PKPdf** | **12 35 05.5** | **-3.0** | | |
| **SFIN** | **Lafayette** | **141.97** | **90** | IAMs_20 | IAMs_20 | 13 34 48.5 | | | |
| | comp=Z,767nm,18.0s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **142.02** | **281** | IAMs_20 | IAMs_20 | 13 37 05.5 | | | |
| | comp=Z,728nm,19.0s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **142.02** | **281** | ⇑P | **PKPdf** | **12 35 04.3** | **-4.7** | | |
| **MLR** | **Muntele Rosu** | **142.02** | **281** | ⇑PKIKP | **PKPdf** | **12 35 04.3** | **-4.7** | | |
| **S51A** | **Beattyville** | **142.12** | **96** | IAMs_20 | IAMs_20 | 13 50 54.6 | | | |
| | comp=Z,665nm,20.0s | | | | | | | | |
| **I40A** | **Norwalk** | **142.19** | **83** | IAMs_20 | IAMs_20 | 13 32 00.1 | | | |
| | comp=Z,912nm,20.0s | | | | | | | | |
| **P48A** | **Milroy** | **142.32** | **92** | IAMs_20 | IAMs_20 | 13 31 51.7 | | | |
| | comp=Z,568nm,19.0s | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **142.77** | **93** | IAMs_20 | IAMs_20 | 13 30 38.8 | | | |
| | comp=Z,604nm,21.0s | | | | | | | | |
| **TIR** | **Tirane** | **142.91** | **271** | ⇓P | **PKiKP** | **12 35 12.2** | **-1.5** | | |
| **TIR** | **Tirane** | **142.91** | **271** | ⇓PKIKP | **PKiKP** | **12 35 12.2** | **-1.5** | | |
| **ULM** | **Lac du Bonnet** | **142.91** | **71** | PKhKP | PKPpre | 12 35 04.1 | | | |
| | comp=Z,4.6nm,0.9s,baz=135,slow=1.8,SNR=5.3 | | | | | | | | |
| **N47A** | **Urbana** | **143.10** | **90** | IAMs_20 | IAMs_20 | 13 35 49.5 | | | |
| | comp=Z,748nm,19.0s | | | | | | | | |
| **CEL** | **Celeste** | **143.13** | **264** | IAMs_20 | IAMs_20 | 13 39 26.0 | | | |
| | comp=Z,687nm,20.0s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.14** | **290** | PKhKP | PKPpre | 12 35 05.0 | | | |
| | comp=Z,3.2nm,0.6s,baz=98,slow=2.1,SNR=5.3 | | | | | | | | |
| **AKBB** | **Malin Array Si** | **143.14** | **290** | ⇑*e*PKIKP | **PKPdf** | **12 35 09.1** | **-1.5** | | |
| **KIEV** | **Kiev** | **143.14** | **290** | IAMs_20 | IAMs_20 | 13 34 27.7 | | | |
| | comp=Z,758nm,22.0s | | | | | | | | |
| **TIP** | **Timpagrande** | **143.26** | **266** | IAMs_20 | IAMs_20 | 13 44 08.9 | | | |
| | comp=Z,562nm,20.0s | | | | | | | | |
| **E38A** | **The Farm, Brul** | **143.28** | **79** | IAMs_20 | IAMs_20 | 13 29 14.9 | | | |
| | comp=Z,797nm,21.0s | | | | | | | | |
| **BOVS** | **Bovan** | **143.30** | **275** | ⇓P | PKPab | 12 35 07.1 | 0.0 | | |
| **PUK** | **Puka** | **143.34** | **272** | | PKPbc | 12 35 09.6 | +1.0 | | |
| **O49A** | **Covington** | **143.43** | **92** | IAMs_20 | IAMs_20 | 13 37 08.1 | | | |
| | comp=Z,675nm,19.0s | | | | | | | | |
| **L46A** | **Eue Claire** | **143.49** | **89** | IAMs_20 | IAMs_20 | 13 30 39.6 | | | |
| | comp=Z,824nm,20.0s | | | | | | | | |
| **BLA** | **Blacksburg** | **143.63** | **100** | | **PKPdf** | **12 35 11.4** | **-0.6** | | |
| **BLA** | **Blacksburg** | **143.63** | **100** | PKIKP | **PKPdf** | **12 35 11.4** | **-0.6** | | |
| **HERR** | **Herculane** | **143.66** | **277** | ⇓P | PKPbc | 12 35 09.6 | +0.4 | | |
| **BURAR** | **Bucovina Array** | **143.66** | **283** | PKPdf | **PKPdf** | **12 35 11.4** | **-0.4** | | |
| **BURAR** | **Bucovina Array** | **143.66** | **283** | ⇑P | **PKPdf** | **12 35 11.0** | **-0.8** | | |
| **BURAR** | **Bucovina Array** | **143.66** | **283** | ⇑PKIKP | **PKPdf** | **12 35 11.0** | **-0.8** | | |
| **BUR08** | **Bucovina Ar. S** | **143.69** | **283** | PKPdf | **PKPdf** | **12 35 11.0** | **-0.8** | | |
| **P51A** | **Williamsport** | **143.69** | **94** | IAMs_20 | IAMs_20 | 13 35 15.0 | | | |
| | comp=Z,574nm,20.0s | | | | | | | | |
| **GZR** | **Gura Zlata** | **143.75** | **278** | ⇑P | PKPbc | 12 35 09.3 | -0.4 | | |
| **GZR** | **Gura Zlata** | **143.75** | **278** | ⇑PKHKP | PKPpre | 12 35 09.3 | | | |
| **Q52A** | **Bidwell** | **143.79** | **96** | | **PKPdf** | **12 35 11.3** | **-0.9** | | |
| **ARCR** | **ARCALIA** | **143.84** | **282** | ⇑P | **PKPdf** | **12 35 11.9** | **-0.1** | | |
| **MDVR** | **Moldovita** | **144.00** | **277** | ⇑P | PKPab | 12 35 09.0 | -0.8 | | |
| **N49A** | **Columbus Grove** | **144.00** | **92** | | PKPab | 12 35 10.0 | +0.2 | | |
| N49A | | | | IAMs_20 | IAMs_20 | 13 36 06.2 | | | |
| | comp=Z,761nm,18.0s | | | | | | | | |
| **EYMN** | **Ely** | **144.07** | **77** | PKPdf | PKPbc | 12 35 10.7 | +0.2 | | |
| **T57A** | **Hurt** | **144.14** | **101** | | PKPbc | 12 35 11.2 | +0.2 | | |
| T57A | | | | IAMs_20 | IAMs_20 | 13 35 54.9 | | | |
| | comp=Z,548nm,20.0s | | | | | | | | |
| **CLTB** | **Caltabellotta** | **144.18** | **260** | | **PKPdf** | **12 35 12.6** | **-0.4** | | |
| **ACSO** | **Alum Creek Sta** | **144.23** | **94** | IAMs_20 | IAMs_20 | 13 33 25.4 | | | |
| | comp=Z,728nm,21.0s | | | | | | | | |
| **MATE** | **Matera** | **144.28** | **267** | ⇓P | **PKPab** | **12 35 03.3** | **-7.6** | | |
| **MARR** | **Marisel-Cluj** | **144.31** | **280** | ⇓P | **PKPab** | **12 35 08.6** | **-2.3** | | |
| **P52A** | **Corning** | **144.32** | **95** | | **PKPab** | **12 35 10.9** | **-0.2** | | |
| P52A | | | | IAMs_20 | IAMs_20 | 13 48 36.7 | | | |
| | comp=Z,699nm,18.0s | | | | | | | | |
| **SURR** | **Surduc** | **144.34** | **278** | ⇑P | **PKPab** | **12 35 08.8** | **-2.2** | | |
| **CUC** | **Castrocucco** | **144.35** | **266** | | **PKPab** | **12 35 10.7** | **-0.6** | | |
| **L48A** | **N Adams** | **144.51** | **90** | | **PKPab** | **12 35 11.2** | **-0.5** | | |
| L48A | | | | IAMs_20 | IAMs_20 | 13 36 56.8 | | | |
| | comp=Z,805nm,20.0s | | | | | | | | |
| **ADZR** | **Andozero** | **144.53** | **314** | *e*PKIKP | **PKPab** | **12 35 09.9** | **-1.2** | | |
| ADZR | | | | pmax | pmax | | | | |
| | comp=Z,56nm,1.4s | | | | | | | | |
| **BZS** | **Buzias** | **144.54** | **278** | ⇑P | PKPbc | 12 35 12.0 | 0.0 | | |
| **BZS** | **Buzias** | **144.54** | **278** | ⇑PKIKP | PKPbc | 12 35 12.0 | 0.0 | | |
| **R55A** | **Marlinton** | **144.55** | **99** | | PKPbc | 12 35 12.3 | 0.0 | | |
| **DRGR** | | **144.60** | **280** | ⇑P | **PKPab** | **12 35 09.2** | **-2.9** | | |
| **DRGR** | | **144.60** | **280** | ⇑PKHKP | PKPpre | 12 35 09.2 | | | |
| **Q54A** | **Coxs Mills** | **144.62** | **97** | PKPdf | **PKPab** | **12 35 10.9** | **-1.3** | | |
| Q54A | | | | IAMs_20 | IAMs_20 | 13 52 49.7 | | | |
| | comp=Z,642nm,20.0s | | | | | | | | |
| **P53A** | **Whipple** | **144.65** | **96** | PKPdf | **PKPab** | **12 35 11.0** | **-1.4** | | |
| P53A | | | | IAMs_20 | IAMs_20 | 13 53 40.4 | | | |
| | comp=Z,632nm,20.0s | | | | | | | | |
| **F42A** | **Maple Grove Fa** | **144.72** | **82** | IAMs_20 | IAMs_20 | 13 32 32.2 | | | |
| | comp=Z,686nm,20.0s | | | | | | | | |
| **Q52A** | **Adamsville** | **144.81** | **95** | | **PKPab** | **12 35 11.2** | **-1.7** | | |
| Q52A | | | | IAMs_20 | IAMs_20 | 13 53 38.8 | | | |
| | comp=Z,783nm,22.0s | | | | | | | | |
| **S57A** | **Dark Hollow, R** | **144.84** | **100** | | **PKPab** | **12 35 12.3** | **-0.8** | | |
| S57A | | | | IAMs_20 | IAMs_20 | 13 52 42.6 | | | |
| | comp=Z,891nm,21.0s | | | | | | | | |
| **SIRR** | **Siria** | **144.90** | **279** | ⇑P | **PKPab** | **12 35 12.8** | **-0.3** | | |
| **KEST** | **Kesra** | **145.03** | **254** | PKP | **PKPbc** | **12 35 12.4** | **-1.5** | | |
| | comp=Z,105nm,1.1s,baz=180,slow=2.9,SNR=37 | | | | | | | | |
| **N51A** | **Ashland** | **145.03** | **93** | | **PKPbc** | **12 35 13.4** | **-0.3** | | |
| N51A | | | | IAMs_20 | IAMs_20 | 13 54 34.6 | | | |
| | comp=Z,596nm,19.0s | | | | | | | | |
| **T59A** | **Double "B" Far** | **145.07** | **103** | IAMs_20 | IAMs_20 | 13 51 20.4 | | | |
| | comp=Z,671nm,20.0s | | | | | | | | |
| **J47A** | **Sunmer** | **145.10** | **88** | IAMs_20 | IAMs_20 | 13 32 34.4 | | | |
| | comp=Z,698nm,20.0s | | | | | | | | |
| **AAM** | **Ann Arbor** | **145.19** | **90** | IAMs_20 | IAMs_20 | 13 31 47.6 | | | |
| | comp=Z,726nm,20.0s | | | | | | | | |
| **O53A** | **New Philadelph** | **145.26** | **95** | | **PKPbc** | **12 35 12.8** | **-1.7** | | |
| O53A | | | | IAMs_20 | IAMs_20 | 13 53 08.5 | | | |
| | comp=Z,602nm,20.0s | | | | | | | | |
| **FRGS** | **Fruska Gora** | **145.31** | **276** | ⇓P | **PKPbc** | **12 35 12.1** | **-2.4** | | |
| **LTVH** | **Ltavrtes, Hu** | **145.40** | **281** | ⇑P | **PKPbc** | **12 35 13.5** | **-1.1** | | |
| **LVV** | **L'vov** | **145.51** | **286** | *e*PKIKP | **PKPbc** | **12 35 15.0** | **+0.1** | | |
| **SGRT** | **San Giovanni R** | **145.54** | **268** | PKPdf | **PKPbc** | **12 35 15.4** | **0.0** | | |
| **R58B** | **Mineral** | **145.59** | **101** | IAMs_20 | IAMs_20 | 13 36 45.1 | | | |
| | comp=Z,635nm,20.0s | | | | | | | | |
| **Q56A** | **Snyder Ridge,** | **145.60** | **99** | IAMs_20 | IAMs_20 | 13 52 07.6 | | | |
| | comp=Z,638nm,22.0s | | | | | | | | |
| **MCWV** | **Mont Chateau** | **145.64** | **97** | IAMs_20 | IAMs_20 | 13 39 21.7 | | | |
| | comp=Z,608nm,19.0s | | | | | | | | |
| **MNK** | **Minsk** | **145.71** | **295** | *i* PKIKP | **PKPdf** | **12 35 14.0** | **-0.9** | | |
| MNK | | | | *i* | | 12 38 33.7 | | | |
| MNK | | | | *i* | | 12 42 24.4 | | | |
| MNK | | | | *i* SS | SS | 12 57 26.0 | -4.2 | | |
| MNK | | | | *i* SSS | SSS | 13 02 53.5 | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=Z,96nm,1.3s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=E,15nm,0.6s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=N,49nm,1.1s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=Z,296nm,19.0s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=E,431nm,19.0s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=N,390nm,20.0s | | | | | | | | |
| **N53A** | **Lisbon** | **145.84** | **95** | | **PKPdf** | **12 35 15.1** | **-0.6** | | |
| N53A | | | | IAMs_20 | IAMs_20 | 13 53 24.0 | | | |
| | comp=Z,793nm,20.0s | | | | | | | | |
| **M52A** | **Chesterland** | **146.02** | **93** | IAMs_20 | IAMs_20 | 13 53 57.7 | | | |
| | comp=Z,647nm,20.0s | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **146.03** | **283** | *e*PKP2 | **PKPab** | **12 35 16.9** | **-0.3** | | |
| **KOLS** | **Kolonicke sedl** | **146.03** | **283** | *e*PKP | **PKPab** | **12 35 16.9** | **-0.3** | | |
| **CBN** | **Corbin Frederi** | **146.05** | **101** | IAMs_20 | IAMs_20 | 13 46 43.1 | | | |
| | comp=Z,665nm,22.0s | | | | | | | | |
| **K50A** | **Casco** | **146.08** | **90** | IAMs_20 | IAMs_20 | 13 32 06.2 | | | |
| | comp=Z,649nm,20.0s | | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **146.15** | **284** | *e*PKP | **PKPab** | **12 35 17.7** | **+0.1** | | |
| **KWP** | **Kalwaria Pacla** | **146.15** | **284** | IAMs_20 | IAMs_20 | 13 38 15.8 | | | |
| | comp=Z,535nm,18.0s | | | | | | | | |
| **M53A** | **WI Miller and** | **146.34** | **94** | IAMs_20 | IAMs_20 | 13 39 38.3 | | | |
| | comp=Z,672nm,19.0s | | | | | | | | |
| **P57A** | **Homestead Farm** | **146.57** | **99** | IAMs_20 | IAMs_20 | 13 38 04.2 | | | |
| | comp=Z,571nm,20.0s | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **146.59** | **277** | ⇑P | **PKPdf** | **12 35 16.3** | **-0.4** | | |
| **S61A** | **Accomac** | **146.63** | **104** | IAMs_20 | IAMs_20 | 13 50 45.6 | | | |
| | comp=Z,644nm,20.0s | | | | | | | | |
| **INTR** | **Introdacqua** | **146.76** | **267** | | **PKPbc** | **12 35 18.3** | **-0.8** | | |
| **KECS** | **Kecovo** | **146.79** | **281** | *e*PKP2 | **PKPbc** | **12 35 18.3** | **-0.5** | | |
| **KECS** | **Kecovo** | **146.79** | **281** | *e* | **PKPab** | **12 35 19.9** | **-0.2** | | |
| **KECS** | **Kecovo** | **146.79** | **281** | *e*PKP | **PKPbc** | **12 35 18.3** | **-0.5** | | |
| **PSZ** | **Piszkesteto** | **146.82** | **280** | IAMs_20 | IAMs_20 | 13 54 43.8 | | | |
| | comp=Z,640nm,22.0s | | | | | | | | |
| **VALR** | **Valaam** | **146.90** | **307** | ⇑*i*PKP2 | **PKPbc** | **12 35 19.0** | **+0.3** | | |
| **LVZ** | **Lovozero** | **147.06** | **320** | *ce*PKP2 | **PKPdf** | **12 35 17.6** | **+0.7** | | |
| **ISAL** | **Salakas** | **147.09** | **296** | *e*P | **PKiKP** | **12 35 21.9** | **+0.1** | | |
| **ERPA** | **Erie** | **147.17** | **94** | IAMs_20 | IAMs_20 | 13 38 35.3 | | | |
| | comp=Z,562nm,19.0s | | | | | | | | |
| **SDMD** | **Soldier's Deli** | **147.18** | **100** | | **PKPdf** | **12 35 16.7** | **-1.3** | | |
| **JOF** | **Joensuu** | **147.18** | **310** | *e*P | **PKPbc** | **12 35 19.9** | **+0.5** | | |
| **E46A** | **Sault Ste Mari** | **147.25** | **84** | PKPdf | **PKPdf** | **12 35 17.4** | **-0.4** | | |
| E46A | | | | IAMs_20 | IAMs_20 | 13 43 32.2 | | | |
| | comp=Z,731nm,18.0s | | | | | | | | |
| **R61A** | **Willards** | **147.28** | **103** | IAMs_20 | IAMs_20 | 13 38 05.7 | | | |
| | comp=Z,789nm,21.0s | | | | | | | | |
| **NIE** | **Niedzica** | **147.39** | **283** | *e*PKP | **PKPab** | **12 35 21.6** | **-1.0** | | |
| **SSPA** | **Standing Stone** | **147.41** | **98** | | **PKPbc** | **12 35 20.3** | **-0.5** | | |
| **SSPA** | **Standing Stone** | **147.41** | **98** | IAMs_20 | IAMs_20 | 13 38 16.6 | | | |
| | comp=Z,726nm,20.0s | | | | | | | | |
| **SRO** | **Srobarova** | **147.66** | **279** | *e*PKP2 | **PKiKP** | **12 35 23.0** | **-0.2** | | |
| **SRO** | **Srobarova** | **147.66** | **279** | *e*PKP | **PKiKP** | **12 35 23.0** | **-0.2** | | |
| **VSL** | **Villasalto** | **147.68** | **259** | IAMs_20 | IAMs_20 | 13 36 48.3 | | | |
| | comp=Z,903nm,22.0s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **147.72** | **282** | *e*PKP2 | **PKPbc** | **12 35 22.0** | **+0.6** | | |
| **LANS** | **Liptovska Anna** | **147.72** | **282** | *e*PKP | **PKPbc** | **12 35 22.0** | **+0.6** | | |
| **VYHS** | **Vyhne** | **147.73** | **280** | *e*PKP2 | **PKPbc** | **12 35 21.9** | **+0.5** | | |
| **VYHS** | **Vyhne** | **147.73** | **280** | *e*PKP | **PKPbc** | **12 35 21.9** | **+0.5** | | |
| **GUMA** | **Guido di Mace** | **147.75** | **268** | | **PKPbc** | **12 35 21.4** | **-0.3** | | |
| **MVL** | **Millersville** | **147.86** | **100** | IAMs_20 | IAMs_20 | 13 51 04.4 | | | |
| | comp=Z,592nm,20.0s | | | | | | | | |
| **VSU** | **Vasula** | **147.89** | **301** | *ce*PKIKP | **PKPdf** | **12 35 18.7** | **+0.3** | | |
| **CESX** | **Cesi** | **147.90** | **266** | | **PKPbc** | **12 35 21.6** | **-0.5** | | |
| **SUW** | **Suwalki** | **147.98** | **292** | *e*PKP | **PKPbc** | **12 35 22.0** | **+0.1** | | |
| **SUW** | **Suwalki** | **147.98** | **292** | IAMs_20 | IAMs_20 | 13 53 15.1 | | | |
| | comp=Z,738nm,21.0s | | | | | | | | |
| **SUW** | **Suwalki** | **147.98** | **292** | *e*P | **PKPbc** | **12 35 22.7** | **+0.9** | | |
| **OJC** | **Ojcow** | **148.07** | **284** | *e*PKP | **PKiKP** | **12 35 23.3** | **-0.7** | | |
| **OJC** | **Ojcow** | **148.07** | **284** | | **PKPbc** | **12 35 22.4** | **+0.1** | | |
| **OJC** | **Ojcow** | **148.07** | **284** | PKP2 | **PKPbc** | **12 35 22.4** | **+0.1** | | |
| **KOGS** | **Kog** | **148.08** | **275** | *i* PKPbc | **PKiKP** | **12 35 23.9** | **-0.3** | | |
| **WVNY** | **West Valley, N** | **148.15** | **94** | IAMs_20 | IAMs_20 | 13 52 19.1 | | | |
| | comp=Z,832nm,20.0s | | | | | | | | |
| **PABE** | **Paberze** | **148.18** | **295** | | **PKPbc** | **12 35 22.3** | **0.0** | | |
| **PABE** | **Paberze** | **148.18** | **295** | *e*P | **PKiKP** | **12 35 23.4** | **-0.6** | | |
| **N58A** | **Sunbury** | **148.21** | **98** | IAMs_20 | IAMs_20 | 13 50 53.8 | | | |
| | comp=Z,758nm,22.0s | | | | | | | | |
| **BEL** | **Belsk** | **148.30** | **287** | *e*PKP | **PKiKP** | **12 35 24.0** | **-0.4** | | |
| **M57A** | **Sunshine Farm,** | **148.31** | **97** | IAMs_20 | IAMs_20 | 13 51 45.2 | | | |
| | comp=Z,744nm,20.0s | | | | | | | | |
| **VSVD** | **Vaisvydziai** | **148.39** | **296** | *e*P | **PKiKP** | **12 35 23.7** | **-0.7** | | |
| **P61A** | **Hammonton** | **148.51** | **102** | IAMs_20 | IAMs_20 | 13 50 21.5 | | | |
| | comp=Z,599nm,20.0s | | | | | | | | |
| **L56A** | **Greenwood** | **148.58** | **96** | IAMs_20 | IAMs_20 | 13 51 10.4 | | | |
| | comp=Z,906nm,21.0s | | | | | | | | |
| **JAVC** | **Velka Javorina** | **148.58** | **280** | *e*PKP | **PKPbc** | **12 35 24.3** | **+0.6** | | |
| **ARBE** | **Arbavere** | **148.59** | **303** | *e*P | **PKPbc** | **12 35 23.5** | **+0.2** | | |
| **J54A** | **Appleton** | **148.67** | **93** | IAMs_20 | IAMs_20 | 13 48 52.9 | | | |
| | comp=Z,711nm,20.0s | | | | | | | | |
| **CEY** | **Cerknica** | **148.73** | **273** | *i* PKPbc | **PKiKP** | **12 35 25.3** | **-0.3** | | |
| **RONA** | **Rosalia, Austr** | **148.75** | **277** | *i* PKP | **PKPbc** | **12 35 24.6** | **+0.4** | | |
| | comp=Z,26nm,1.5s,SNR=16 | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **148.81** | **282** | AMS | AMS | 13 58 30.0 | | | |
| | comp=Z,400nm,18.2s | | | | | | | | |
| **SOKA** | **Soboth** | **148.91** | **275** | *e*PKP | **PKPdf** | **12 35 21.4** | **+0.8** | | |
| | comp=Z,41nm,1.3s,SNR=16 | | | | | | | | |
| **ARSA** | **Arzberg** | **148.94** | **276** | *i* pPKP | pPKPdf | 12 35 23.3 | -1.4 | | |
| | comp=Z,29nm,1.3s,SNR=16 | | | | | | | | |
| **OBKA** | **Obir** | **149.09** | **274** | *i* PKiKP | **PKiKP** | **12 35 26.2** | **-0.2** | | |
| | comp=Z,17nm,1.6s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **149.12** | **282** | PKPdf | **PKPdf** | **12 35 19.1** | **-1.7** | | |
| **MORC** | **Moravsky Berou** | **149.12** | **282** | *e*PKP | **PKPbc** | **12 35 24.5** | **-0.5** | | |
| **MORC** | **Moravsky Berou** | **149.12** | **282** | PKHKP | PKPpre | 12 35 19.1 | | | |
| **CONA** | **Conrad Observa** | **149.12** | **277** | *ep*PKP | pPKPdf | 12 35 22.9 | -2.0 | | |
| | comp=Z,17nm,1.4s,SNR=9.1 | | | | | | | | |
| **FIA1** | **FINESS Array S** | **149.13** | **306** | PKPdf | **PKPdf** | **12 35 20.0** | **-0.4** | | |
| **FINES** | **FINESS Array B** | **149.13** | **306** | PKPdf | **PKPdf** | **12 35 20.2** | **-0.2** | | |
| **FINES** | **FINESS Array B** | **149.13** | **306** | PKPbc | **PKPdf** | **12 35 21.5** | **+1.1** | | |
| | comp=Z,15nm,0.7s,baz=97,slow=3.4,SNR=32 | | | | | | | | |
| **FINES** | **FINESS Array B** | **149.13** | **306** | PKIKP | **PKPdf** | **12 35 20.2** | **-0.2** | | |
| **KSPA** | **Keystone Colle** | **149.22** | **98** | IAMs_20 | IAMs_20 | 13 47 04.5 | | | |
| | comp=Z,618nm,21.0s | | | | | | | | |
| **SADO** | **Sadowa** | **149.29** | **90** | IAMs_20 | IAMs_20 | 13 35 24.3 | | | |
| | comp=Z,717nm,20.0s | | | | | | | | |
| **KRUC** | **Moravsky** | **149.40** | **280** | *e*PKP | **PKPbc** | **12 35 25.3** | **-0.4** | | |
| **VRAC** | **Vranov** | **149.42** | **280** | *e*PKP | **PKPbc** | **12 35 25.6** | **-0.2** | | |
| **VRAC** | **Vranov** | **149.42** | **280** | ⇑P | **PKPbc** | **12 35 26.0** | **+0.2** | | |
| **VRAC** | **Vranov** | **149.42** | **280** | ⇑PKP2 | **PKPbc** | **12 35 26.0** | **+0.2** | | |
| **BINY** | **Binghamton** | **149.51** | **97** | IAMs_20 | IAMs_20 | 13 38 55.2 | | | |
| | comp=Z,741nm,20.0s | | | | | | | | |
| **K57A** | **Scipio Center** | **149.55** | **96** | IAMs_20 | IAMs_20 | 13 39 56.2 | | | |
| | comp=Z,612nm,20.0s | | | | | | | | |
| **ODNJ** | **Ogdensburg** | **149.57** | **100** | IAMs_20 | IAMs_20 | 13 49 01.7 | | | |
| | comp=Z,715nm,21.0s | | | | | | | | |
| **MEF** | **Metsahovi** | **149.59** | **303** | *e*P | **PKiKP** | **12 35 27.9** | **+1.1** | | |
| **MYKA** | **Terra Mystica** | **149.68** | **274** | *e*PKP | **PKPbc** | **12 35 26.6** | **0.0** | | |
| | comp=Z,43nm,1.1s,SNR=20 | | | | | | | | |
| **KRLC** | **Kraliky** | **149.69** | **282** | AMS | AMS | 13 55 40.0 | | | |
| | comp=Z,500nm,21.5s | | | | | | | | |
| **J56A** | **Wolcott** | **149.70** | **95** | IAMs_20 | IAMs_20 | 13 39 05.0 | | | |
| | comp=Z,758nm,21.0s | | | | | | | | |
| **PAL** | **Palisades** | **149.91** | **101** | IAMs_20 | IAMs_20 | 13 51 37.7 | | | |
| | comp=Z,808nm,21.0s | | | | | | | | |
| **MOA** | **Molln** | **149.98** | **276** | *i* PKP | **PKPbc** | **12 35 26.9** | **-0.3** | | |
| | comp=Z,13nm,1.0s,SNR=6.7 | | | | | | | | |
| **TREC** | **Trest** | **150.03** | **279** | AMS | AMS | 13 54 20.0 | | | |
| | comp=Z,500nm,20.2s | | | | | | | | |
| **KEV** | **Kevo** | **150.04** | **323** | IAMs_20 | IAMs_20 | 13 48 17.2 | | | |
| | comp=Z,548nm,20.0s | | | | | | | | |
| **L59A** | **Walton** | **150.05** | **98** | IAMs_20 | IAMs_20 | 13 56 01.3 | | | |
| | comp=Z,648nm,20.0s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **150.08** | **282** | ⇑*e*PKP | **PKPbc** | **12 35 26.8** | **-0.6** | | |
| DPC | | | | AMS | AMS | 13 56 40.0 | | | |
| | comp=Z,700nm,21.1s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **150.08** | **282** | *e*PKP2 | **PKPbc** | **12 35 26.8** | **-0.6** | | |
| DPC | | | | MLR | MLR | | | | |
| | comp=Z,700nm,21.1s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **150.10** | **274** | *i* PKP | **PKPbc** | **12 35 27.4** | **-0.3** | | |
| | comp=Z,36nm,1.5s | | | | | | | | |
| **N62A** | **Caumsett State** | **150.11** | **102** | IAMs_20 | IAMs_20 | 13 51 29.7 | | | |
| | comp=Z,650nm,20.0s | | | | | | | | |
| **OSTC** | **Ostas** | **150.24** | **282** | AMS | AMS | 13 57 10.0 | | | |
| | comp=Z,500nm,24.2s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **150.26** | **275** | *i* PKP | **PKPbc** | **12 35 27.8** | **-0.1** | | |
| | comp=Z,19nm,1.2s,SNR=12 | | | | | | | | |
| **J57A** | **Williamstown** | **150.27** | **95** | IAMs_20 | IAMs_20 | 13 39 43.3 | | | |
| | comp=Z,743nm,19.0s | | | | | | | | |
| **UPC** | **Upice** | **150.33** | **282** | AMS | AMS | 13 57 10.0 | | | |
| | comp=Z,500nm,19.6s | | | | | | | | |
| **KSP** | **Ksiaz** | **150.33** | **283** | *e*PKP | **PKiKP** | **12 35 28.9** | **+0.3** | | |
| **CHVC** | **Chvalec** | **150.35** | **282** | ⇑*e*PKP | **PKiKP** | **12 35 28.9** | **+0.1** | | |
| CHVC | | | | AMS | AMS | 13 57 10.0 | | | |
| | comp=Z,500nm,15.9s | | | | | | | | |
| **CHVC** | **Chvalec** | **150.35** | **282** | *e*PKIKP | **PKiKP** | **12 35 28.9** | **+0.1** | | |
| CHVC | | | | MLR | MLR | | | | |
| | comp=Z,500nm,15.9s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.39** | **273** | *e*PKiKP | **PKiKP** | **12 35 28.8** | **-0.2** | | |
| | comp=Z,34nm,1.1s,SNR=20 | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **150.46** | **278** | ⇑*e*PKP | **PKPbc** | **12 35 27.9** | **-0.4** | | |
| CKRC | | | | AMS | AMS | 14 03 10.0 | | | |
| | comp=Z,500nm,19.3s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **150.46** | **278** | *e*PKIKP | **PKPbc** | **12 35 27.9** | **-0.4** | | |
| CKRC | | | | MLR | MLR | | | | |
| | comp=Z,500nm,19.3s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **150.56** | **322** | PKPbc | **PKPbc** | **12 35 25.7** | **-2.2** | | |
| | comp=Z,19nm,0.9s,baz=108,slow=2.9,SNR=18 | | | | | | | | |
| **J58A** | **Remsen** | **150.65** | **96** | IAMs_20 | IAMs_20 | 13 56 14.2 | | | |
| | comp=Z,728nm,21.0s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **150.67** | **274** | *ep*PKP | pPKPdf | 12 35 26.5 | -0.9 | | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **150.74** | **280** | AMS | AMS | 14 02 30.0 | | | |
| | comp=Z,700nm,20.2s | | | | | | | | |
| **GERES** | **GERESS Array B** | **150.82** | **277** | PKPbc | **PKPdf** | **12 35 26.4** | **+2.7** | | |
| | comp=Z,8.6nm,0.8s,baz=158,slow=4.2,SNR=28 | | | | | | | | |
| **ZVC** | **Zvikov** | **150.84** | **279** | AMS | AMS | 13 57 20.0 | | | |
| | comp=Z,500nm,18.0s | | | | | | | | |
| **GKP** | **Gorka Klasztor** | **150.88** | **288** | *e*PKP | **PKiKP** | **12 35 31.6** | **+1.9** | | |
| **GKP** | **Gorka Klasztor** | **150.88** | **288** | *e*P | **PKiKP** | **12 35 30.7** | **+1.0** | | |
| **PRU** | **Pruhonice** | **150.91** | **280** | AMS | AMS | 13 58 30.0 | | | |
| | comp=Z,500nm,19.0s | | | | | | | | |
| **PRA** | **Prague** | **151.01** | **280** | AMS | AMS | 13 58 40.0 | | | |
| | comp=Z,600nm,16.8s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **151.04** | **278** | *ex* | x | 12 30 38.0 | | | |
| KHC | | | | ⇑*e*PKP | **PKiKP** | **12 35 30.1** | **-0.2** | | |
| KHC | | | | AMS | AMS | 14 03 10.0 | | | |
| | comp=Z,600nm,21.7s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **151.04** | **278** | *d* iPKIKP | **PKPbc** | **12 35 29.2** | **-0.5** | | |
| **PVCC** | **Panska Ves** | **151.15** | **281** | AMS | AMS | 13 59 00.0 | | | |
| | comp=Z,500nm,17.6s | | | | | | | | |
| **TRY** | **Troy** | **151.17** | **99** | IAMs_20 | IAMs_20 | 13 42 37.1 | | | |
| | comp=Z,633nm,19.0s | | | | | | | | |
| **WTTA** | **Wattenberg** | **151.18** | **273** | *i* PKP | **PKPbc** | **12 35 30.4** | **+0.2** | | |
| | comp=Z,69nm,1.4s,SNR=16 | | | | | | | | |
| **M63A** | **Gales Ferry** | **151.22** | **102** | IAMs_20 | IAMs_20 | 13 52 50.2 | | | |
| | comp=Z,724nm,20.0s | | | | | | | | |
| **WATA** | **Walderalm** | **151.25** | **273** | *ep*PKP | pPKPdf | 12 35 28.4 | +0.1 | | |
| | comp=Z,48nm,1.3s,SNR=15 | | | | | | | | |
| **UCCT** | **U. Connecticut** | **151.38** | **101** | IAMs_20 | IAMs_20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FRON | | | S | Sg | 12 33 36.5 | +1.3 |
| **ATCC** | **AVT- Casa Cast** | **0.21 155** | P | Pg | 12 33 33.4 | +0.9 |
| ATCC | | | S | Sg | 12 33 36.9 | +1.6 |
| **ATTE** | **AVT- Monte Tez** | **0.22 213** | P | Pg | 12 33 33.2 | +0.7 |
| **BADI** | **Badiali** | **0.24 304** | P | Pg | 12 33 33.2 | +0.3 |
| BADI | | | S | Sg | 12 33 37.8 | +1.7 |
| **CPGN** | **Carpegna, Ital** | **0.45 342** | P | Pg | 12 33 37.6 | +0.7 |

**IDC 11 12:44:02.8±8.2, 19°27S×178°06W, h0km, mb3.6/2, mbtmp3.6/2, Error ellipse: s-maj=351.1km s-min=70.8km az=145.0, Fiji Islands region**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.73 261** | P | P | 12 52 17.7 | -0.5 |
| | 0.2nm,0.4s,baz=98,slow=7.4,SNR=5.5 0.2nm,0.4s | | | | | |
| **ASAR** | **Alice Springs** | **44.76 256** | P | P | 12 52 18.6 | +0.2 |
| | 1.1nm,0.8s,baz=88,slow=8.3,SNR=11 1.1nm,0.8s | | | | | |
| **BRTR** | **Keskin Array B** | **145.97 314** | PKPbc | PKPdf | 13 03 44.1 | -0.1 |
| | 0.4nm,0.4s,baz=38,slow=2.6,SNR=2.2 | | | | | |

*IDC 11 12:55:10.2±1.6, 8°82S×157°87E, h0km, mb3.8/5, mbtmp3.6/6, ML2.4/1, Error ellipse: s-maj=69.2km s-min=27.9km az=133.0*

**ISC 11 12:55:13.9±1.4, 8°8S±0°3×157°8E±0°4, h23km, n6, σ1°13/6, mb3.7/5, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **15.78 224** | Pn | **Pn** | **12 58 53.4** | **-1.4** |
| | baz=45,slow=14,SNR=1.5 0.1nm,0.5s | | | | | |
| **WRA** | **Warramunga Arr** | **25.20 241** | P | **P** | **13 00 38.8** | **+0.7** |
| | 1.7nm,0.8s,baz=68,slow=10,SNR=10.0 1.7nm,0.8s | | | | | |
| **ASAR** | **Alice Springs** | **27.18 234** | P | **P** | **13 00 56.4** | **+0.4** |
| | 0.6nm,1.0s,baz=64,slow=10,SNR=2.6 0.6nm,1.0s | | | | | |
| **STKA** | **Stephens Creek** | **27.41 211** | P | **P** | **13 00 59.0** | **+1.1** |
| | 2.8nm,0.7s,baz=32,slow=10,SNR=4.1 2.8nm,0.7s | | | | | |
| **MKAR** | **Makanchi Array** | **86.59 318** | P | **P** | **13 07 55.5** | **0.0** |
| | 0.2nm,0.5s,baz=108,slow=3.2,SNR=2.2 0.2nm,0.5s | | | | | |
| **NVAR** | **Mina Array Bea** | **90.71 51** | P | **P** | **13 08 15.2** | **-0.3** |
| | 0.5nm,0.8s,baz=232,slow=5.6,SNR=5.9 0.5nm,0.8s | | | | | |

*IDC 11 13:15:39.6±0.6, 67°66N×18°50W, h0km, mb3.8/16, mbtmp3.8/20, ML3.2/5, MS3.3/1, Error ellipse: s-maj=17.3km s-min=13.2km az=15.0*
*NEIC 11 13:15:40.3±2.9, 67°79N±0°06×19°0W±0°2, h10km±1km, mb4.3/21, Error ellipse: s-maj=10.8km s-min=9.9km az=322.0*
*REY 11 13:15:41.4, 67°58N×18°33W, h10km*
*NAO 11 13:15:45.4, 67°92N×18°35W, h33km, mb4.0*

**ISC 11 13:15:40.6±0.5, 67°60N±0°05×18°60W±0°05, h10km, n105, σ1°79/103, mb4.2/40, 1D, Iceland region**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **IGRI** | **Grimsey** | **1.09 167** | P | **Pb** | **13 15 59.5** | **-1.9** |
| | baz=173 | | | | | |
| IGRI | | | S | **Sg** | **13 16 10.8** | **-4.7** |
| | baz=173 | | | | | |
| **ILEI** | **Leirhofn** | **1.46 144** | P | **Pn** | **13 16 04.5** | **-2.5** |
| | baz=148 | | | | | |
| **ISIG** | **Siglufjorour** | **1.48 185** | P | **Pn** | **13 16 05.4** | **-1.8** |
| | baz=189 | | | | | |
| **IBRE** | **Brettingsstaoi** | **1.51 169** | P | **Pn** | **13 16 06.1** | **-1.5** |
| | baz=173 | | | | | |
| **IHED** | **Heoinshofoi** | **1.61 161** | P | **Pn** | **13 16 07.1** | **-1.9** |
| | baz=165 | | | | | |
| **IHRN** | **Hraun** | **1.61 203** | P | **Pn** | **13 16 07.8** | **-1.2** |
| | baz=206 | | | | | |
| **IHLA** | **Hella** | **1.67 177** | P | **Pn** | **13 16 08.9** | **-0.8** |
| | baz=181 | | | | | |
| **IGIL** | **Gilhagi** | **1.77 149** | P | **Pn** | **13 16 09.1** | **-2.1** |
| | baz=152 | | | | | |
| **IDIM** | **Dimmadalss** | **1.77 157** | P | **Pn** | **13 16 09.3** | **-1.9** |
| | baz=161 | | | | | |
| **ISKI** | **Skildingahlsh** | **1.85 160** | P | **Pn** | **13 16 10.6** | **-1.7** |
| | baz=163 | | | | | |
| **IGHA** | **Grjothals** | **1.93 156** | P | **Pn** | **13 16 11.6** | **-1.7** |
| | baz=158 | | | | | |
| **IKVO** | **Krokottuvotn** | **2.01 159** | P | **Pn** | **13 16 13.1** | **-1.6** |
| | baz=162 | | | | | |
| **IREN** | **Reynihlio** | **2.08 160** | P | **Pn** | **13 16 14.1** | **-1.3** |
| | baz=163 | | | | | |
| **IMEL** | **Melhnausar** | **2.18 158** | P | **Pn** | **13 16 15.9** | **-1.0** |
| | baz=161 | | | | | |
| **ISVA** | **Svartarkot** | **2.34 166** | P | **Pn** | **13 16 18.5** | **-0.5** |
| | baz=169 | | | | | |
| **IMKO** | **Mokollar** | **2.79 160** | P | **Pn** | **13 16 24.6** | **-0.6** |
| | baz=162 | | | | | |
| **ISTE** | **Stelbrattur** | **2.79 189** | P | **Pn** | **13 16 26.5** | **+1.2** |
| | baz=192 | | | | | |
| **THOR** | **Thorvaldshraun** | **2.79 163** | P | **Pn** | **13 16 25.3** | **0.0** |
| | baz=165 | | | | | |
| **IURH** | **Urdarhals** | **2.85 167** | P | **Pn** | **13 16 26.4** | **+0.1** |
| | baz=170 | | | | | |
| **IADA** | **Aoalbol** | **2.87 153** | P | **Pn** | **13 16 25.3** | **-1.0** |
| | baz=155 | | | | | |
| **IKRE** | **Kreppuhraun** | **2.97 161** | P | **Pn** | **13 16 27.4** | **-0.4** |
| | baz=163 | | | | | |
| **BORG** | **Borgarnes** | **3.07 202** | Pn | **Pn** | **13 16 28.9** | **-0.2** |
| **BORG** | **Borgarnes** | **3.07 202** | Pn | **Pn** | **13 16 28.7** | **-0.4** |
| | 15nm,0.3s,baz=356,slow=6.1,SNR=83 | | | | | |
| BORG | | | Sn | **Sn** | **13 17 07.8** | **+2.0** |
| | 13nm,0.3s,baz=38,slow=21,SNR=8.2 136nm,0.6s | | | | | |
| **SCO** | **Scoresbysund** | **3.14 339** | Pn | Pn | 13 16 24.5 | -5.5 |
| **SCO** | **Scoresbysund** | **3.14 339** | *i* P | Pn | 13 16 24.4 | -5.6 |
| SCO | | | IAML | | 13 16 54.1 | |
| | comp=Z,23nm,0.8s | | | | | |
| **SOEG** | **Soedalen** | **4.86 283** | *eP* | Pg | 13 17 22.2 | +8.6 |
| **DBG** | **Daneborg** | **6.76 356** | *i* P | **Pn** | **13 17 22.9** | **+3.2** |
| **SUMG** | **Summit** | **8.38 315** | Pn | **Pn** | **13 17 38.8** | **-3.4** |
| **SUMG** | **Summit** | **8.38 315** | *i* P | **Pn** | **13 17 42.7** | **+0.4** |
| **DAG** | **Danmarks Havn** | **9.22 360** | *i* P | **Pn** | **13 17 52.0** | **-1.4** |
| **NC204** | **NORSAR Array S** | **14.05 103** | | **P** | **13 19 09.2** | **+1.8** |
| **EKA** | **Eskdalemuir Ar** | **14.28 142** | Pn | **Pn** | **13 19 03.8** | **+1.2** |
| | baz=341,slow=11 comp=Z,0.1nm,0.3s | | | | | |
| **NB2** | **NORSAR Subarra** | **14.37 103** | P | **Pn** | **13 19 05.8** | **+2.0** |
| | comp=Z,11nm,1.2s,baz=311,slow=11 | | | | | |
| **NOA** | **NORSAR Array B** | **14.37 103** | Pn | **Pn** | **13 19 02.3** | **-1.5** |
| | baz=289,slow=13,SNR=7.0 | | | | | |
| NOA | | | LR | LR | 13 24 43.1 | |
| | comp=Z,117nm,19.3s,baz=95,slow=38 | | | | | |
| **NB201** | **NORSAR Array S** | **14.39 103** | | **P** | **13 19 12.8** | **+1.7** |
| **ARCES** | **ARCESS Array B** | **15.97 63** | Pn | **Pn** | **13 19 24.2** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **15.97 63** | Pn | **Pn** | **13 19 24.2** | **-0.7** |
| | comp=Z,0.1nm,0.3s,baz=278,slow=8.8,SNR=1.9 comp=Z,3.8nm,0.9s | | | | | |
| **KEV** | **Kevo** | **16.42 62** | | **P** | **13 19 34.2** | **+0.8** |
| KEV | | | IAmb | IAmb | 13 19 34.8 | |
| | comp=Z,22nm,1.1s | | | | | |
| **FINES** | **FINESS Array B** | **19.78 87** | P | **P** | **13 20 11.1** | **+0.6** |
| **FINES** | **FINESS Array B** | **19.78 87** | P | **Pn** | **13 20 11.3** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=308,slow=7.1,SNR=10 comp=Z,15nm,1.1s | | | | | |
| **FIA1** | **FINESS Array S** | **19.78 87** | P | **P** | **13 20 10.9** | **+0.4** |
| **FRB** | **Frobisher Bay** | **20.45 283** | P | Pn | 13 20 18.8 | -1.1 |
| | comp=Z,10nm,0.9s,baz=24,slow=9.4,SNR=4.2 comp=Z,10nm,0.9s | | | | | |
| **EUNU** | **Eureka** | **20.82 333** | P | **P** | **13 20 18.8** | **-2.9** |
| **CLF** | **Chambon-Foret** | **22.33 141** | P | **P** | **13 20 39.0** | **+1.0** |
| **CLL** | **Collm** | **22.50 121** | P | **P** | **13 20 40.5** | **+0.6** |
| CLL | | | IAmb | IAmb | 13 20 43.9 | |
| | comp=Z,10nm,1.2s | | | | | |
| **CLL** | **Collm** | **22.50 121** | *i* P | **P** | **13 20 41.0** | **+1.2** |
| | comp=Z,8.0nm,1.1s | | | | | |
| **PABE** | **Paberze** | **23.05 101** | P | **P** | **13 20 45.4** | **-0.2** |
| **BRG** | **Berggiesshubel** | **23.18 120** | *eP* | **P** | **13 20 48.5** | **+1.5** |
| BRG | | | Amp | | 13 20 50.9 | |
| | comp=Z,5.7nm,1.3s | | | | | |
| **HSKC** | **Hora Svate Kat** | **23.23 121** | *eP* | P | 13 21 08.7 | +21 |
| **BFO** | **Black Forest** | **23.66 131** | P | **P** | **13 20 52.9** | **+1.0** |
| **CHVC** | **Chvalec** | **24.13 118** | *eP* | **P** | **13 20 57.2** | **+0.9** |
| **PRU** | **Pruhonice** | **24.13 120** | *eP* | **P** | **13 20 57.5** | **+1.2** |
| **UPC** | **Upice** | **24.18 118** | *eP* | **P** | **13 20 57.6** | **+0.8** |
| **GOPC** | **GO Pecny, Ondr** | **24.28 120** | *eP* | **P** | **13 20 59.3** | **+1.6** |
| **DPC** | **Dobruska-Polom** | **24.42 117** | *eP* | **P** | **13 21 00.0** | **+1.0** |
| **KHC** | **Kasperske Hory** | **24.56 123** | *eP* | **P** | **13 21 04.4** | **+4.1** |
| **NACGM** | **Naroch** | **24.56 99** | *eP* | P | 13 21 09.0 | +8.8 |
| | comp=E,3μm,0.9s | | | | | |
| **GEC2** | **GERESS Array S** | **24.85 123** | P | **P** | **13 21 03.0** | **0.0** |
| **GERES** | **GERESS Array B** | **24.85 123** | P | **P** | **13 21 04.0** | **+1.0** |
| **GERES** | **GERESS Array B** | **24.85 123** | P | **P** | **13 21 04.2** | **+1.3** |
| | comp=E,5.3nm,0.8s,baz=308,slow=4.8,SNR=20 comp=E,5.3nm,0.8s | | | | | |
| **DAVA** | **Damuels** | **25.06 130** | *eP* | **P** | **13 21 07.8** | **+3.0** |
| | comp=E,11nm,1.3s | | | | | |
| **CKRC** | **Cesky Krumlov** | **25.07 122** | *eP* | **P** | **13 21 07.0** | **+2.2** |
| **RETA** | **Reutte** | **25.14 128** | *eP* | **P** | **13 21 08.7** | **+3.2** |
| | comp=E,5.8nm,1.1s | | | | | |
| **MORC** | **Moravsky Berou** | **25.32 117** | P | **P** | **13 21 07.5** | **+0.3** |
| MORC | | | IAmb | IAmb | 13 21 10.8 | |
| | comp=Z,11nm,1.2s | | | | | |
| **MORC** | **Moravsky Berou** | **25.32 117** | *eP* | **P** | **13 21 07.3** | **+0.1** |
| **MOTA** | **Moosalm** | **25.37 128** | *eP* | **P** | **13 21 11.0** | **+3.3** |
| | comp=Z,9.8nm,1.2s | | | | | |
| **SQTA** | **Sankt Quirin** | **25.51 128** | *i* P | **P** | **13 21 11.4** | **+2.4** |
| | comp=Z,8.1nm,1.1s | | | | | |
| **WATA** | **Walderalm** | **25.52 127** | *eP* | **P** | **13 21 11.8** | **+2.7** |
| | comp=Z,9.1nm,1.1s | | | | | |
| **FETA** | **Feichten** | **25.55 129** | *eP* | **P** | **13 21 13.5** | **+4.1** |
| | comp=Z,6.2nm,1.6s | | | | | |
| **WTTA** | **Wattenberg** | **25.60 127** | *eP* | **P** | **13 21 12.6** | **+2.7** |
| | comp=Z,8.5nm,1.4s | | | | | |
| **LESA** | **Schwarzleotal** | **25.78 126** | *i* P | **P** | **13 21 13.9** | **+2.5** |
| | comp=Z,8.6nm,1.1s | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **25.84 124** | *eP* | **P** | **13 21 15.6** | **+3.7** |
| | comp=Z,1.4nm,0.5s | | | | | |
| **ABTA** | **Abfaltersbach** | **26.33 127** | *eP* | **P** | **13 21 18.4** | **+2.0** |
| | comp=Z,6.0nm,1.7s | | | | | |
| **CONA** | **Conrad Observa** | **26.35 121** | *i* P | **P** | **13 21 18.5** | **+1.9** |
| | comp=Z,3.5nm,1.1s | | | | | |
| **RONA** | **Rosalia, Austr** | **26.70 121** | *eP* | **P** | **13 21 21.5** | **+2.0** |
| | comp=Z,4.2nm,1.1s | | | | | |
| **MYKA** | **Terra Mystica** | **26.79 125** | *eP* | **P** | **13 21 25.0** | **+4.5** |
| | comp=Z,4.4nm,0.9s | | | | | |
| **OBKA** | **Obir** | **27.18 124** | *i* P | **P** | **13 21 26.9** | **+2.9** |
| | comp=Z,6.6nm,1.3s | | | | | |
| **AKASG** | **Malin Array Be** | **28.78 102** | P | **P** | **13 21 37.5** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=328,slow=9.2,SNR=4.3 comp=Z,0.3nm,0.3s | | | | | |
| **ESDC** | **Sonseca Array** | **29.13 156** | P | **P** | **13 21 42.3** | **+0.9** |
| | comp=Z,1.1nm,1.0s,baz=353,slow=10,SNR=5.6 comp=Z,1.1nm,1.0s | | | | | |
| **C23K** | **Itkillik River** | **38.98 336** | P | **P** | **13 23 04.7** | **-1.6** |
| C23K | | | IAmb | IAmb | 13 23 11.8 | |
| | comp=Z,10nm,1.2s | | | | | |
| **KVAR** | **Kislovodsk Arr** | **39.48 95** | P | **P** | **13 23 11.5** | **+0.6** |
| | comp=Z,5.4nm,0.8s,baz=247,slow=17,SNR=1.9 comp=Z,5.4nm,0.8s | | | | | |
| **BRTR** | **Keskin Array B** | **39.74 108** | P | **P** | **13 23 14.1** | **+0.9** |
| | comp=Z,1.7nm,0.9s,baz=340,slow=10,SNR=4.6 comp=Z,1.7nm,0.9s | | | | | |
| **TOLK** | **Toolik Lake Re** | **39.88 334** | P | **P** | **13 23 12.9** | **-0.9** |
| **E24K** | **Your Creek** | **40.21 333** | P | **P** | **13 23 16.5** | **-0.1** |
| **ARG** | **Arkhangelos** | **40.91 116** | P | **P** | **13 23 25.0** | **+2.4** |
| **G24K** | **Hadweenzic Riv** | **41.26 332** | P | **P** | **13 23 25.4** | **+0.2** |
| G24K | | | IAmb | IAmb | 13 23 30.9 | |
| | comp=Z,6.8nm,1.1s | | | | | |
| **G23K** | **Bananza Creek** | **41.70 333** | P | **P** | **13 23 29.0** | **+0.2** |
| **F21K** | **Alatna River** | **41.80 336** | P | **P** | **13 23 29.6** | **-0.1** |
| F21K | | | IAmb | IAmb | 13 23 32.4 | |
| | comp=Z,8.5nm,1.4s | | | | | |
| **F20K** | **Avaraart Lake** | **42.31 337** | | **P** | **13 23 30.9** | **-2.9** |
| F20K | | | IAmb | IAmb | 13 23 36.4 | |
| | comp=Z,4.6nm,0.9s | | | | | |
| **ILAR** | **Eielson Array** | **42.88 330** | P | **P** | **13 23 39.4** | **+0.9** |
| | comp=Z,1.3nm,1.0s,baz=22,slow=6.9,SNR=8.9 | | | | | |
| ILAR | | | PcP | **PcP** | **13 25 28.4** | **-0.6** |
| | comp=Z,0.1nm,0.5s,baz=3.4,slow=4.5,SNR=3.7 comp=Z,1.3nm,1.0s | | | | | |
| **H21K** | **Melozitna Rive** | **43.13 334** | | **P** | **13 23 41.0** | **+0.5** |
| H21K | | | IAmb | IAmb | 13 23 43.7 | |
| | comp=Z,5.2nm,1.0s | | | | | |
| **BCAR** | **Beaver Creek A** | **43.38 326** | P | **P** | **13 23 42.5** | **-0.1** |
| **NEA2** | **Nenana** | **43.45 331** | P | **P** | **13 23 41.8** | **-1.3** |
| NEA2 | | | IAmb | IAmb | 13 23 47.9 | |
| | comp=Z,5.5nm,1.2s | | | | | |
| **N49A** | **Columbus Grove** | **43.72 267** | P | **P** | **13 23 44.7** | **-0.8** |
| N49A | | | IAmb | IAmb | 13 23 48.4 | |
| | comp=Z,6.8nm,0.9s | | | | | |
| **KTH** | **Kantishna Hill** | **44.74 332** | P | **P** | **13 23 51.0** | **-2.5** |
| KTH | | | IAmb | IAmb | 13 24 23.4 | |
| | comp=Z,8.2nm,1.4s | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.18 53** | P | **P** | **13 24 04.4** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=333,slow=8.7,SNR=1.9 | | | | | |
| ZALV | | | PcP | **PcP** | **13 25 39.8** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=346,slow=4.7,SNR=4.3 comp=Z,0.3nm,0.4s | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.02 60** | P | **P** | **13 24 11.4** | **-0.1** |
| | comp=Z,1.2nm,0.8s,baz=328,slow=7.4,SNR=8.8 comp=Z,1.2nm,0.8s | | | | | |
| **MKAR** | **Makanchi Array** | **51.58 59** | P | **P** | **13 24 46.6** | **+0.1** |
| | comp=Z,1.2nm,1.0s,baz=358,slow=7.8,SNR=5.8 comp=Z,1.2nm,1.0s | | | | | |
| **PDAR** | **Pinedale Array** | **51.67 290** | P | **P** | **13 24 48.2** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=57,slow=5.5,SNR=4.5 comp=Z,0.5nm,0.8s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **56.02 156** | P | **P** | **13 25 20.3** | **+1.1** |
| | comp=Z,0.8nm,0.8s,baz=348,slow=9.9,SNR=4.6 comp=Z,0.8nm,0.8s | | | | | |
| **SONM** | **Songino Array** | **57.69 41** | P | **P** | **13 25 30.9** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=343,slow=6.8,SNR=2.5 comp=Z,0.3nm,0.3s | | | | | |
| **NVAR** | **Mina Array Bea** | **58.60 295** | P | **P** | **13 25 38.1** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=48,slow=7.7,SNR=3.7 comp=Z,0.4nm,0.8s | | | | | |
| **TXAR** | **Lajitas Array** | **61.38 278** | P | **P** | **13 25 58.0** | **+1.4** |
| | comp=Z,0.5nm,0.8s,baz=16,slow=2.1,SNR=6.4 comp=Z,0.5nm,0.8s | | | | | |
| **BNX** | **BinXian** | **64.10 26** | ⇓P | **P** | **13 26 14.6** | **+0.3** |
| BNX | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | |
| **CMAR** | **Chiang Mai Arr** | **82.97 58** | P | **P** | **13 28 04.3** | **-1.3** |
| | comp=Z,1.8nm,1.0s,baz=318,slow=4.6,SNR=5.8 comp=Z,1.8nm,1.0s | | | | | |

**IDC 11 13:31:48.5±2.2, 52°15S×140°10E, h0km, mb3.7/3, mbtmp3.7/3, MS3.4/1, Error ellipse: s-maj=190.2km s-min=26.3km az=86.0, West of Macquarie Island**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **20.29 4** | LR | LR | 13 42 47.1 | |
| | comp=Z,102nm,18.9s,baz=201,slow=32 | | | | | |
| **H01W1** | **Cape Leeuwin H** | **25.32 303** | T | T | 14 03 20.7 | |
| | baz=143 | | | | | |
| **H01W2** | **Cape Leeuwin H** | **25.32 303** | T | T | 14 03 16.0 | |
| | baz=143 | | | | | |
| **H01W3** | **Cape Leeuwin H** | **25.33 303** | T | T | 14 03 26.0 | |
| | baz=143 | | | | | |
| **ASAR** | **Alice Springs** | **28.84 348** | P | P | 13 37 48.6 | +0.1 |
| | 0.6nm,0.7s,baz=165,slow=9.9,SNR=8.9 0.6nm,0.7s | | | | | |
| **WRA** | **Warramunga Arr** | **32.46 350** | P | P | 13 38 20.1 | -0.4 |
| | 2.3nm,0.9s,baz=175,slow=7.1,SNR=12 2.3nm,0.9s | | | | | |
| **QSPA** | **South Pole Qui** | **37.96 180** | P | P | 13 39 07.6 | -0.1 |
| | 0.7nm,1.0s,baz=344,slow=12,SNR=1.2 0.7nm,1.0s | | | | | |
| **ARCES** | **ARCESS Array B** | **145.84 325** | PKPbc | PKPbc | 13 51 28.0 | -0.2 |
| | 0.4nm,0.4s,baz=101,slow=3.8,SNR=5.2 | | | | | |
| **ESDC** | **Sonseca Array** | **152.36 258** | PKPbc | PKPbc | 13 51 45.4 | -0.5 |
| | 0.5nm,1.1s,baz=83,slow=1.2,SNR=5.2 | | | | | |

*NEIC 11 13:39:59.7±2.7, 67°75N±0°07×18°2W±0°2, h10km±1km, mb4.1/12, Error ellipse: s-maj=12.9km s-min=10.0km az=230.0*
*IDC 11 13:40:01.2±0.8, 67°62N×18°65W, h0km, mb3.6/11, mbtmp3.7/13, ML3.3/2, MS4.2/2, Error ellipse: s-maj=21.1km s-min=15.9km az=22.0*

**ISC 11 13:40:00.7±0.5, 67°76N±0°05×18°54W±0°07, h10km, n38, σ2°20/36, mb3.8/15, Iceland region**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **SCO** | **Scoresbysund** | **3.00 338** | | **Pn** | **13 40 46.3** | **-1.8** |
| **SCO** | **Scoresbysund** | **3.00 338** | *i* P | **Pn** | **13 40 45.0** | **-3.1** |
| **BORG** | **Borgarnes** | **3.23 202** | | **Pn** | **13 40 49.9** | **-1.4** |
| **BORG** | **Borgarnes** | **3.23 202** | Pn | **Pn** | **13 40 50.4** | **-0.9** |
| | 14nm,0.3s,baz=5.8,slow=6.6,SNR=64 | | | | | |
| BORG | | | Sn | **Sn** | **13 41 28.1** | **-1.6** |
| | 7.0nm,0.3s,baz=54,slow=19,SNR=6.8 109nm,0.6s | | | | | |
| **SUMG** | **Summit** | **8.28 315** | Pn | **Pn** | **13 42 01.2** | **+0.2** |
| **SFJD** | **Kangerlussuaq** | **12.29 281** | Pn | **Pn** | **13 42 56.0** | **+0.5** |
| **KBS** | **Kingsbay** | **13.91 24** | Pn | **Pn** | **13 43 17.8** | **+0.5** |
| **NOA** | **NORSAR Array B** | **14.39 104** | Pn | **P** | **13 43 31.6** | **+0.5** |
| | baz=306,slow=11,SNR=6.3 | | | | | |
| **EKA** | **Eskdalemuir Ar** | **14.39 142** | Pn | **P** | **13 43 28.4** | **-2.8** |
| | baz=339,slow=9.9 | | | | | |
| **FINES** | **FINESS Array B** | **19.75 87** | P | **P** | **13 44 24.9** | **-5.3** |
| **FINES** | **FINESS Array B** | **19.75 87** | P | **Pn** | **13 44 32.8** | **+1.1** |
| | 0.2nm,0.3s,baz=308,slow=6.2,SNR=6.3 5.3nm,0.9s | | | | | |
| **FRB** | **Frobisher Bay** | **20.44 283** | P | Pn | 13 44 39.6 | -0.2 |
| | 7.3nm,0.8s,baz=108,slow=4.7,SNR=3.5 7.3nm,0.8s | | | | | |
| **EUNU** | **Eureka** | **20.68 333** | P | **P** | **13 44 35.5** | **-4.8** |
| **CLL** | **Collm** | **22.56 121** | P | **P** | **13 44 58.0** | **-2.5** |
| CLL | | | IAmb | IAmb | 13 45 07.8 | |
| | comp=Z,4.5nm,0.8s | | | | | |
| **GEC2** | **GERESS Array S** | **24.92 123** | P | **P** | **13 45 21.6** | **-2.0** |
| GEC2 | | | IAmb | IAmb | 13 45 28.0 | |
| | comp=Z,6.4nm,0.9s | | | | | |
| **GERES** | **GERESS Array B** | **24.92 123** | P | **P** | **13 45 24.0** | **+0.4** |
| **GERES** | **GERESS Array B** | **24.92 123** | P | **P** | **13 45 26.1** | **+2.5** |
| | comp=Z,3.9nm,0.8s,baz=302,slow=5.6,SNR=15 comp=Z,3.9nm,0.8s | | | | | |
| **MORC** | **Moravsky Berou** | **25.38 117** | P | **P** | **13 45 28.6** | **+0.9** |
| MORC | | | IAmb | IAmb | 13 45 30.3 | |
| | comp=Z,3.5nm,0.9s | | | | | |
| **SCHQ** | **Schefferville** | **25.74 264** | P | **P** | **13 45 31.1** | **+0.2** |
| **OBN** | **Obninsk** | **28.12 89** | LR | LR | 13 55 24.7 | |
| | comp=Z,293nm,21.2s,baz=340,slow=33 | | | | | |
| **ESDC** | **Sonseca Array** | **29.27 157** | P | **P** | **13 46 03.6** | **+0.9** |
| | comp=Z,0.6nm,1.0s,baz=353,slow=9.2,SNR=2.5 comp=Z,0.6nm,1.0s | | | | | |
| **ULM** | **Lac du Bonnet** | **40.31 284** | P | **P** | **13 47 39.7** | **+2.1** |
| | comp=Z,1.5nm,0.6s,baz=37,slow=3.2,SNR=3.5 comp=Z,1.5nm,0.6s | | | | | |
| **F20K** | **Avaraart Lake** | **42.17 337** | P | **P** | **13 47 54.4** | **+1.7** |
| **SDMD** | **Soldier's Deli** | **42.30 258** | P | **P** | **13 47 50.5** | **-3.6** |
| **M31M** | **Drury Creek, Y** | **42.35 321** | P | **P** | **13 47 53.9** | **-0.4** |
| M31M | | | IAmb | IAmb | 13 47 54.2 | |
| | comp=Z,5.1nm,1.4s | | | | | |
| **ILAR** | **Eielson Array** | **42.76 330** | P | **P** | **13 48 00.7** | **+3.2** |
| | comp=Z,0.6nm,1.0s,baz=22,slow=9.0,SNR=4.2 comp=Z,0.6nm,1.0s | | | | | |
| **BCAR** | **Beaver Creek A** | **43.26 326** | P | **P** | **13 48 02.2** | **+0.5** |
| **L27K** | **Beaver Creek,** | **43.27 326** | P | **P** | **13 48 03.7** | **+1.9** |
| L27K | | | IAmb | IAmb | 13 48 08.5 | |
| | comp=Z,5.3nm,1.2s | | | | | |
| **N31M** | **Braeburn, Yuko** | **43.31 322** | P | **P** | **13 48 03.2** | **+1.2** |
| **TABL** | **Table Mountain** | **45.47 324** | P | **P** | **13 48 18.6** | **-0.9** |
| **KURBB** | **Kurchatov Arra** | **46.92 60** | P | **P** | **13 48 33.3** | **+2.5** |
| | comp=Z,0.5nm,0.9s,baz=325,slow=7.7,SNR=3.9 comp=Z,0.5nm,0.9s | | | | | |
| **MKAR** | **Makanchi Array** | **51.48 60** | P | **P** | **13 49 07.7** | **+1.9** |
| | comp=Z,0.4nm,0.8s,baz=335,slow=6.4,SNR=3.8 comp=Z,0.4nm,0.8s | | | | | |
| **PDAR** | **Pinedale Array** | **51.64 290** | P | **P** | **13 49 09.1** | **+1.9** |
| | comp=Z,0.3nm,0.6s,baz=30,slow=9.3,SNR=2.5 comp=Z,0.3nm,0.6s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **56.16 156** | P | **P** | **13 49 41.6** | **+1.4** |
| | comp=Z,0.9nm,0.9s,baz=350,slow=9.3,SNR=3.8 comp=Z,0.9nm,0.9s | | | | | |
| **KVN** | **Kaiserville** | **57.93 295** | P | **P** | **13 49 52.2** | **-0.6** |
| KVN | | | IAmb | IAmb | 13 49 58.1 | |
| | comp=Z,4.1nm,1.2s | | | | | |
| **NVAR** | **Mina Array Bea** | **58.55 295** | P | **P** | **13 49 59.5** | **+2.3** |
| | comp=Z,0.3nm,0.7s,baz=27,slow=6.2,SNR=2.6 comp=Z,0.3nm,0.7s | | | | | |
| **TXAR** | **Lajitas Array** | **61.38 278** | P | **P** | **13 50 18.6** | **+1.9** |
| | comp=Z,0.4nm,0.9s,baz=77,slow=3.9,SNR=3.4 comp=Z,0.4nm,0.9s | | | | | |
| **TSUM** | **Tsumeb** | **90.67 146** | LR | LR | 14 32 38.6 | |
| | comp=Z,269nm,21.7s,baz=332,slow=35 | | | | | |

*IDC 11 13:45:06.3±1.5, 6°32S×154°22E, h0km, mb3.6/7, mbtmp3.6/7, Error ellipse: s-maj=57.8km s-min=27.7km az=113.0*

**ISC 11 13:45:13.3±1.3, 6°3S±0°2×154°1E±0°4, h48km, n8, σ1°12/8, mb3.6/7, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.52 233** | P | **P** | **13 50 18.1** | **-1.1** |
| | 1.0nm,1.0s,baz=57,slow=9.5,SNR=4.1 1.0nm,1.0s | | | | | |
| **ASAR** | **Alice Springs** | **26.00 226** | P | **P** | **13 50 41.5** | **-0.4** |
| | 0.4nm,0.8s,baz=57,slow=9.7,SNR=5.2 0.4nm,0.8s | | | | | |
| **MKAR** | **Makanchi Array** | **82.31 319** | P | **P** | **13 57 31.6** | **+1.6** |
| | 0.4nm,0.5s,baz=90,slow=5.8,SNR=5.5 0.4nm,0.5s | | | | | |
| **ILAR** | **Eielson Array** | **83.05 22** | P | **P** | **13 57 32.3** | **-1.1** |
| | 0.1nm,0.5s,baz=250,slow=4.6,SNR=1.5 0.1nm,0.5s | | | | | |
| **ZALV** | **Zalesovo Beam** | **83.12 326** | P | **P** | **13 57 34.5** | **+0.5** |
| | 0.5nm,0.5s,baz=111,slow=6.3,SNR=2.1 0.5nm,0.5s | | | | | |
| **QSPA** | **South Pole Qui** | **83.67 180** | P | **P** | **13 57 37.5** | **+0.7** |
| | 1.3nm,1.0s,baz=34,slow=3.6,SNR=2.3 1.3nm,1.0s | | | | | |
| **KURBB** | **Kurchatov Arra** | **85.78 322** | P | **P** | **13 57 47.2** | **-0.2** |
| | 0.2nm,0.5s,baz=101,slow=4.8,SNR=2.2 0.2nm,0.5s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.00 286** | PKPbc | **PKiKP** | **14 05 04.9** | **+0.3** |
| | 0.4nm,0.6s,baz=68,slow=2.7,SNR=2.4 | | | | | |

*IDC 11 13:59:52.1±1.9, 20°75S×177°74W, h484km±18km, mb3.1/8, mbtmp3.9/10, Error ellipse: s-maj=25.1km s-min=16.2km az=99.0*

**ISC 11 13:59:53.5±0.9, 20°7S±0°1×177°8W±0°2, h500km, n10, σ1°21/13, mb3.5/8, Fiji Islands region**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.86 306** | P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KAZ2 | Kazeron-Fars-I | 0.98 | 28 | Pg | | Pg | | 14 46 26.7 | -0.8 |
| SHI | Shiraz | 1.50 | 53 | Pg | | Pb | | 14 46 36.9 | +0.3 |
| QIR1 | Qir | 1.71 | 99 | Pg | | Pb | | 14 46 40.7 | +0.6 |
| ABEH | Behbahan | 2.00 | 338 | Pn | | Pb | | 14 46 46.1 | +1.1 |
| KLNJ | Kolanjah | 2.29 | 10 | Pn | | Pn | | 14 46 47.7 | +0.9 |
| IBRJ | Brojen | 3.15 | 2 | Pn | | Pn | | 14 46 59.5 | +1.0 |
| IRAM | Ramesheh | 3.24 | 19 | Pn | | Pn | | 14 47 00.7 | +1.0 |
| ZNGN | Zangian | 3.37 | 356 | Pn | | Pn | | 14 47 02.6 | +1.0 |
| JHBN | Jahan bin | 3.50 | 354 | Pn | | Pn | | 14 47 04.1 | +0.8 |
| ISAD | Sadrabad | 3.85 | 34 | Pn | | Pn | | 14 47 09.8 | +1.6 |
| IPIR | Pirpir | 3.93 | 357 | Pn | | Pn | | 14 47 09.9 | +0.6 |
| IMEH | Mehriz | 4.01 | 48 | Pn | | Pn | | 14 47 11.9 | +1.7 |
| IZEF | Zefreh | 4.26 | 14 | Pn | | Pn | | 14 47 15.2 | +1.4 |
| KRSH | Karshahi | 5.28 | 9 | Pn | | Pn | | 14 47 28.4 | +0.7 |
| ISFB | Sefidab | 5.67 | 9 | Pn | | Pn | | 14 47 33.3 | +0.4 |
| HSAM | Samen | 5.86 | 339 | Pn | | Pn | | 14 47 36.1 | +0.4 |
| IVRN | Varamin | 6.25 | 5 | Pn | | Pn | | 14 47 41.4 | +0.5 |
| SNQR | Sonqor, Kerman | 6.78 | 335 | Pn | | Pn | | 14 47 49.6 | +1.2 |
| MMAI | Mount Meron Ar | 14.16 | 291 | Pn | | Pn | | 14 49 29.9 | +0.6 |
| | 0.3nm,0.3s,baz=91,slow=13,SNR=1.7 1.1nm,0.6s | | | | | | | | |
| KBZ | Khabaz | 16.34 | 338 | Pn | | Pn | | 14 49 58.4 | +0.3 |
| | 0.2nm,0.3s,baz=211,slow=6.5,SNR=2.2 2.7nm,1.0s | | | | | | | | |
| BRTR | Keskin Array B | 18.11 | 312 | P | | Pn | | 14 50 19.7 | -0.6 |
| | 0.1nm,0.3s,baz=108,slow=14,SNR=2.0 0.3nm,0.5s | | | | | | | | |
| AKTO | Aktyubinsk | 22.28 | 12 | LR | | LR | | 15 02 56.2 | |
| | comp=Z,46nm,19.9s,baz=120,slow=45 | | | | | | | | |
| MKAR | Makanchi Array | 30.24 | 45 | P | | P | | 14 52 18.4 | -1.1 |
| | 0.5nm,0.8s,baz=245,slow=7.7,SNR=4.3 0.5nm,0.8s | | | | | | | | |
| ZALV | Zalesovo Beam | 35.13 | 35 | P | | P | | 14 53 00.8 | -1.4 |
| | 0.6nm,0.6s,baz=237,slow=9.9,SNR=3.8 0.6nm,0.6s | | | | | | | | |
| FINES | FINESS Array B | 36.69 | 340 | P | | P | | 14 53 15.8 | +0.5 |
| | 1.8nm,0.9s,baz=134,slow=9.9,SNR=4.4 1.8nm,0.9s | | | | | | | | |
| MDT | Midelt | 47.60 | 290 | LR | | LR | | 15 19 04.0 | |
| | comp=Z,26nm,18.7s,baz=166,slow=42 | | | | | | | | |
| TORD | Torodi Ar. Bea | 48.36 | 262 | P | | P | | 14 54 49.4 | -1.5 |
| | 0.8nm,0.6s,baz=53,slow=9.3,SNR=6.7 0.8nm,0.6s | | | | | | | | |

*NSSP* ***11*** *15:03:30.3, 38°.57N×44°.67E, h9km, Ms3.5*
*TEH* ***11*** *15:03:32.9, 38°.65N×44°.71E, h9km±26km, ML3.2*
*AFAD* ***11*** *15:03:34.0±0.0, 38°.63N×44°.58E, h9km±2km, ML3.1*

**ISC 11 15:03:33.3±1.1, 38°.62N±0°.03×44°.68E±0°.02, h8km±11km, n41, σ1s70/53, 1C-3D, Turkey-Iran border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| OZAP | Van, Ozalp-Mer | 0.54 | 275 | P | | Pg | | 15 03 42.8 | -0.9 |
| MAKU | Maku | 0.74 | 0 | Pg | | Pg | | 15 03 45.9 | -1.6 |
| CLDR | Caldiran | 0.80 | 312 | P | | Pg | | 15 03 43.0 | -5.7 |
| CLDR | | | | S | | Sg | | 15 03 54.8 | -4.2 |
| CLDR | | | | *i* | AML | AML | | 15 03 58.0 | |
| | comp=N,866nm,0.3s | | | | | | | | |
| IMRD | Marand | 0.81 | 83 | Pg | | Pg | | 15 03 47.8 | -1.0 |
| ISHB | Shabestar | 0.81 | 114 | Pg | | Pg | | 15 03 47.3 | -1.6 |
| NAX | Nakhchivan | 0.85 | 48 | Pg | | Pg | | 15 03 48.7 | -0.9 |
| VMUR | Van-Muradiye | 0.94 | 294 | P | | Pg | | 15 03 50.8 | -0.6 |
| VMUR | | | | S | | Sg | | 15 04 03.3 | -0.4 |
| VMUR | Van-Muradiye | 0.94 | 294 | Pg | | Pg | | 15 03 50.8 | -0.6 |
| TVAN | Van | 1.00 | 265 | P | | Pn | | 15 03 53.0 | -0.8 |
| TVAN | Van | 1.00 | 265 | Pg | | Pn | | 15 03 53.0 | -0.8 |
| SBZ | Shahbuz | 1.04 | 41 | Pg | | Pg | | 15 03 51.9 | -1.3 |
| YOVA | Hakkari_Yksek | 1.07 | 197 | P | | Pn | | 15 03 54.4 | -0.3 |
| YOVA | Hakkari_Yksek | 1.07 | 197 | Pg | | Pn | | 15 03 54.4 | -0.3 |
| ORD | Ordubad | 1.07 | 73 | Pg | | Pg | | 15 03 52.8 | -1.1 |
| HYR | Heyderabad | 1.11 | 7 | Pg | | Pg | | 15 03 53.1 | -1.5 |
| DYDN | Diyadin | 1.21 | 321 | P | | Pg | | 15 03 55.8 | -0.6 |
| DYDN | Diyadin | 1.21 | 321 | Pg | | Pg | | 15 03 55.8 | -0.6 |
| HAKT | HAKKARI | 1.30 | 216 | P | | Pg | | 15 03 58.0 | -0.3 |
| HAKT | | | | S | | Sn | | 15 04 16.5 | +0.9 |
| HAKT | HAKKARI | 1.30 | 216 | Pg | | Pg | | 15 03 58.0 | -0.3 |
| GEVA | Gevas | 1.31 | 257 | P | | Pn | | 15 03 57.2 | -0.7 |
| GEVA | | | | S | | Sn | | 15 04 15.4 | -0.2 |
| GEVA | Gevas | 1.31 | 257 | Pg | | Pn | | 15 03 57.2 | -0.7 |
| IGDI | IGDIR | 1.34 | 340 | P | | Pn | | 15 03 56.6 | -1.6 |
| IGDI | IGDIR | 1.34 | 340 | Pg | | Pn | | 15 03 56.6 | -1.6 |
| IAZR | Azarshahr | 1.39 | 132 | Pg | | Pb | | 15 03 59.2 | -0.4 |
| GNI | Garni | 1.53 | 2 | ⇑*i* | P | Pg | | 15 04 01.9 | -0.8 |
| GNI | | | | ⇓*i* | S | Sg | | 15 04 23.6 | +1.0 |
| ADCV | BITLIS_Adilcev | 1.54 | 278 | P | | Pg | | 15 04 02.2 | -0.7 |
| ADCV | | | | S | | Sg | | 15 04 24.0 | +1.2 |
| ADCV | | | | *i* | AML | AML | | 15 04 27.0 | |
| | comp=N,241nm,0.6s | | | | | | | | |
| ADCV | BITLIS_Adilcev | 1.54 | 278 | Pg | | Pg | | 15 04 02.1 | -0.7 |
| GRS | Goris | 1.56 | 55 | ⇓*i* | P | Pn | | 15 04 00.0 | -1.4 |
| GRS | | | | ⇓*i* | S | Sn | | 15 04 21.0 | -0.9 |
| VNNZ | Vanand | 1.63 | 336 | *e* | P | Pg | | 15 04 05.4 | +0.9 |
| VNNZ | | | | *e* | S | Sg | | 15 04 31.3 | +5.7 |
| KOTA | Agri, Merkez-K | 1.65 | 316 | P | | Pg | | 15 04 04.1 | -0.8 |
| DORK | Agr/Tutak/Do | 1.67 | 298 | P | | Pn | | 15 04 02.7 | -0.2 |
| KAPZ | Kaputan | 1.71 | 1 | *e* | P | Pg | | 15 04 06.3 | +0.3 |
| KAPZ | | | | *e* | S | Sg | | 15 04 31.1 | +3.0 |
| ARUZ | Aruch | 1.73 | 345 | *e* | P | Pg | | 15 04 07.0 | +0.6 |
| ARUZ | | | | *e* | S | Sg | | 15 04 33.4 | +4.6 |
| AMBZ | Amberd | 1.80 | 350 | *e* | P | Pg | | 15 04 08.0 | +0.2 |
| AMBZ | | | | *e* | S | Sg | | 15 04 35.2 | +4.1 |
| PERV | Siirt/Pervari- | 1.81 | 249 | P | | Pg | | 15 04 08.8 | +0.8 |
| PERV | | | | S | | Sg | | 15 04 33.9 | +2.5 |
| PERV | | | | *i* | AML | AML | | 15 04 41.0 | |
| | comp=N,357nm,0.5s | | | | | | | | |
| IHRS | Heris | 1.88 | 98 | Pn | | Pb | | 15 04 07.0 | -0.9 |
| EATA | Eleskirt | 2.11 | 307 | P | | Pb | | 15 04 11.3 | -0.6 |
| SRTM | Siirt_Merkez | 2.26 | 255 | P | | Pb | | 15 04 13.5 | -0.8 |
| SRTM | | | | S | | Sg | | 15 04 46.6 | +0.9 |
| SRTM | | | | *i* | AML | AML | | 15 04 52.0 | |
| | comp=N,173nm,0.8s | | | | | | | | |
| SRTM | Siirt_Merkez | 2.26 | 255 | Pn | | Pb | | 15 04 13.5 | -0.8 |
| IHSH | Hashtrud | 2.42 | 122 | Pn | | Pn | | 15 04 14.7 | +1.3 |
| GRMI | Germi | 2.52 | 85 | Pn | | Pn | | 15 04 16.1 | +1.5 |

**BUL 11 15:20:30.4±0.9, 16°.53S×27°.60E, h10km, MD3.4, Zambia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| KRI | Karoi | 1.95 | 99 | *i* | P | Pg | | 15 21 11.2 | +3.3 |
| KRI | | | | *i* | S | Sg | | 15 21 39.1 | +5.8 |
| KRI | Karoi | 1.95 | 99 | *i* | P | Pg | | 15 21 11.2 | +3.3 |
| KRI | | | | *i* | S | Sg | | 15 21 39.1 | +5.8 |
| CHIPN | CHIPINGE | 6.04 | 128 | *i* | P | Pn | | 15 22 05.2 | +5.2 |
| CHIPN | CHIPINGE | 6.04 | 128 | *i* | P | Pn | | 15 22 05.2 | +5.2 |
| MUSN | Musina, Limpop | 6.11 | 160 | *i* | P | Pn | | 15 21 60.0 | -0.9 |
| MUSN | | | | *i* | S | Sn | | 15 23 05.9 | -5.0 |
| MUSN | Musina, Limpop | 6.11 | 160 | *i* | P | Pn | | 15 21 60.0 | -0.9 |
| MUSN | | | | *i* | S | Sn | | 15 23 05.9 | -5.0 |
| MOPA | Mopani | 7.81 | 153 | *i* | P | Pn | | 15 22 28.4 | +4.1 |
| MOPA | Mopani | 7.81 | 153 | *i* | P | Pn | | 15 22 28.4 | +4.1 |
| LBTB | Lobatse | 8.65 | 192 | *i* | P | Pn | | 15 22 33.2 | -2.6 |
| LBTB | Lobatse | 8.65 | 192 | *i* | P | Pn | | 15 22 33.2 | -2.6 |
| BOSA | Boshof | 12.22 | 190 | *i* | P | Pn | | 15 23 20.6 | -4.1 |
| BOSA | Boshof | 12.22 | 190 | *i* | P | Pn | | 15 23 20.6 | -4.1 |

*TAP* ***11*** *15:25:14.0, 22°.25N×121°.35E, h17km, ML3.4, C*
*JMA* ***11*** *15:25:15.9±0.3, 22°.5N±0°.7×12°2E±°, h13km±4km, MV3.9/14, TAIWAN REGION*

**ISC 11 15:25:13.5±0.9, 22°.22N±0°.03×121°.40E±0°.02, h24km±9km, n102, σ0s95/141, 3C-2D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| LAY | Lan-yu | 0.23 | 141 | *i* | P | Pb | | 15 25 20.0 | +0.6 |
| | baz=129 | | | | | | | | |
| LAY | | | | *e* | S | Sb | | 15 25 24.1 | +0.8 |
| | baz=129 | | | | | | | | |
| LYUB | Lan-yu | 0.27 | 141 | ⇓*i* | P | Pb | | 15 25 19.5 | -0.5 |
| | baz=131 | | | | | | | | |
| LYUB | | | | *i* | S | Sb | | 15 25 23.2 | -1.2 |
| | baz=131 | | | | | | | | |
| LDUT | Ludao | 0.46 | 8 | P | | Pb | | 15 25 22.9 | -0.1 |
| | baz=26 | | | | | | | | |
| LDUT | | | | S | | Sb | | 15 25 30.4 | +0.9 |
| | baz=26 | | | | | | | | |
| TAW | Tawu | 0.49 | 287 | ⇑*i* | P | Pb | | 15 25 23.0 | -0.5 |
| | baz=284 | | | | | | | | |
| TAW | | | | S | | Sb | | 15 25 29.3 | -0.9 |
| | baz=284 | | | | | | | | |
| TAWH | Dawu Township | 0.49 | 285 | ⇑P | | Pb | | 15 25 23.1 | -0.4 |
| | baz=281 | | | | | | | | |
| TAWH | | | | S | | Sb | | 15 25 29.5 | -0.7 |
| | baz=281 | | | | | | | | |
| EAST | Anshuo | 0.54 | 288 | ⇑*i* | P | Pb | | 15 25 23.8 | -0.6 |
| | baz=285 | | | | | | | | |
| EAST | | | | *e* | S | Sb | | 15 25 30.8 | -0.9 |
| | baz=285 | | | | | | | | |
| SMST | Manzhou Townsh | 0.56 | 250 | *i* | P | Pb | | 15 25 24.4 | -0.2 |
| | baz=244 | | | | | | | | |
| SMST | | | | *e* | S | Sb | | 15 25 31.3 | -0.9 |
| | baz=244 | | | | | | | | |
| ECL | Taimali | 0.56 | 313 | ⇓*i* | P | Pb | | 15 25 24.0 | -0.7 |
| | baz=298 | | | | | | | | |
| ECL | | | | *e* | S | Sb | | 15 25 31.7 | -0.6 |
| | baz=298 | | | | | | | | |
| TTN | Taitung | 0.58 | 337 | *e* | P | Pn | | 15 25 26.2 | -0.1 |
| | baz=347 | | | | | | | | |
| TTN | | | | *e* | S | Sn | | 15 25 35.5 | +0.4 |
| | baz=347 | | | | | | | | |
| TWKBT | Hengchun | 0.61 | 243 | *i* | P | Pb | | 15 25 25.4 | -0.1 |
| | baz=238 | | | | | | | | |
| TWKBT | | | | *i* | S | Sb | | 15 25 33.7 | 0.0 |
| | baz=238 | | | | | | | | |
| TWK1 | Hengchun | 0.61 | 244 | *i* | P | Pb | | 15 25 25.4 | -0.2 |
| | baz=238 | | | | | | | | |
| TWK1 | | | | S | | Sb | | 15 25 33.4 | -0.4 |
| | baz=238 | | | | | | | | |
| HEN | Hengchun | 0.65 | 251 | P | | Pb | | 15 25 26.2 | 0.0 |
| | baz=247 | | | | | | | | |
| HEN | | | | *i* | S | Sb | | 15 25 34.5 | -0.3 |
| | baz=247 | | | | | | | | |
| TWGBT | Beinan | 0.67 | 334 | P | | Pb | | 15 25 26.1 | -0.5 |
| TWGBT | Beinan | 0.67 | 334 | *i* | P | Pb | | 15 25 26.0 | -0.5 |
| | baz=319 | | | | | | | | |
| TWGBT | | | | *e* | S | Sb | | 15 25 34.8 | -0.7 |
| | baz=319 | | | | | | | | |
| TWG | Pinlang | 0.67 | 333 | *e* | P | Pb | | 15 25 26.0 | -0.6 |
| | baz=319 | | | | | | | | |
| TWG | | | | *e* | S | Sn | | 15 25 36.6 | -0.8 |
| | baz=319 | | | | | | | | |
| LONT | Longtian | 0.73 | 340 | *e* | P | Pb | | 15 25 27.1 | -0.5 |
| | baz=325 | | | | | | | | |
| SCZT | Fangliau | 0.74 | 282 | *e* | P | Pb | | 15 25 27.1 | -0.6 |
| | baz=280 | | | | | | | | |
| SCZT | | | | *e* | S | Sb | | 15 25 37.6 | +0.3 |
| | baz=280 | | | | | | | | |
| EDH | Donghe | 0.76 | 353 | P | | Pb | | 15 25 28.0 | 0.0 |
| | baz=8.0 | | | | | | | | |
| EDH | | | | *e* | S | Sb | | 15 25 37.9 | -0.1 |
| | baz=8.0 | | | | | | | | |
| MASBT | Mashibuluo | 0.81 | 299 | *e* | P | Pb | | 15 25 28.3 | -0.7 |
| | baz=298 | | | | | | | | |
| MASBT | | | | *e* | S | Sb | | 15 25 37.5 | -2.0 |
| | baz=298 | | | | | | | | |
| TSMG | Majia | 0.85 | 305 | *e* | P | Pb | | 15 25 28.6 | -1.0 |
| | baz=305 | | | | | | | | |
| CHKT | Chengkung | 0.88 | 358 | *e* | P | Pb | | 15 25 29.6 | -0.6 |
| | baz=12 | | | | | | | | |
| CHKT | | | | *e* | S | Sb | | 15 25 41.2 | -0.2 |
| | baz=12 | | | | | | | | |
| ECS | Chishang | 0.89 | 349 | *e* | P | Pn | | 15 25 30.7 | +0.1 |
| | baz=337 | | | | | | | | |
| EHD | Haiduan | 0.95 | 349 | *e* | P | Pn | | 15 25 31.1 | -0.2 |
| | baz=358 | | | | | | | | |
| CHKH | Chenggong | 0.97 | 360 | *e* | P | Pb | | 15 25 31.3 | -0.4 |
| | baz=12 | | | | | | | | |
| CHKH | | | | *i* | S | Sn | | 15 25 44.3 | -0.4 |
| | baz=12 | | | | | | | | |
| SGLT | Jiouru | 0.98 | 301 | *e* | P | Pb | | 15 25 31.4 | -0.4 |
| | baz=308 | | | | | | | | |
| FULB | Fuli | 0.98 | 354 | *e* | P | Pb | | 15 25 31.5 | -0.4 |
| | baz=340 | | | | | | | | |
| FULB | | | | *e* | S | Sn | | 15 25 44.5 | -0.6 |
| | baz=340 | | | | | | | | |
| ELDTW | Lidau | 1.03 | 340 | *e* | P | Pb | | 15 25 31.3 | -1.5 |
| | baz=342 | | | | | | | | |
| SLGT | Liugui | 1.04 | 318 | *e* | P | Pb | | 15 25 32.2 | -0.7 |
| | baz=325 | | | | | | | | |
| SCST | Cishan | 1.07 | 309 | *e* | P | Pn | | 15 25 33.7 | +0.6 |
| | baz=313 | | | | | | | | |
| TWM1 | Shoushan | 1.09 | 304 | *e* | P | Pn | | 15 25 36.0 | +2.7 |
| | baz=314 | | | | | | | | |
| ECBN | Changbin | 1.10 | 3 | *e* | P | Pn | | 15 25 33.1 | -0.3 |
| | baz=15 | | | | | | | | |
| ECBN | | | | *e* | S | Sb | | 15 25 47.2 | -0.5 |
| | baz=15 | | | | | | | | |
| EYUL | Yuli | 1.13 | 356 | *e* | P | Pb | | 15 25 34.5 | +0.2 |
| | baz=345 | | | | | | | | |
| TWF1 | Yuli | 1.14 | 355 | *e* | P | Pn | | 15 25 33.8 | -0.2 |
| | baz=345 | | | | | | | | |
| SGST | Jiashian | 1.15 | 319 | *e* | P | Pb | | 15 25 34.8 | +0.1 |
| | baz=323 | | | | | | | | |
| SGST | | | | *e* | S | Sn | | 15 25 49.8 | +0.8 |
| | baz=323 | | | | | | | | |
| YULB | Yu-li | 1.18 | 355 | P | | Pb | | 15 25 34.9 | -0.3 |
| YULB | Yu-li | 1.18 | 355 | *e* | P | Pn | | 15 25 33.5 | -1.0 |
| | baz=345 | | | | | | | | |
| WTP | Ta-pu | 1.26 | 325 | *e* | P | Pb | | 15 25 36.7 | +0.1 |
| | baz=325 | | | | | | | | |
| WTP | | | | *e* | S | Sn | | 15 25 54.0 | +2.2 |
| | baz=325 | | | | | | | | |
| SHHT | Tainan City | 1.26 | 310 | *e* | P | Pb | | 15 25 39.0 | +2.4 |
| | baz=309 | | | | | | | | |
| HGSD | Ruisui | 1.27 | 1 | *e* | P | Pn | | 15 25 35.7 | -0.1 |
| | baz=10.0 | | | | | | | | |
| EHYH | Wanrong | 1.27 | 358 | *e* | P | Pb | | 15 25 36.5 | -0.4 |
| | baz=346 | | | | | | | | |
| CHN3 | Shinhua | 1.28 | 312 | *e* | P | Pb | | 15 25 38.8 | +1.9 |
| | baz=311 | | | | | | | | |
| EHY | Hungye | 1.29 | 357 | *e* | P | Pn | | 15 25 35.9 | -0.2 |
| | baz=347 | | | | | | | | |
| TPUB | Ta-pu | 1.29 | 327 | P | | Pb | | 15 25 38.2 | +1.0 |
| TPUB | Ta-pu | 1.29 | 327 | *e* | P | Pb | | 15 25 37.2 | +0.1 |
| | baz=327 | | | | | | | | |
| TPUB | | | | *e* | S | Sb | | 15 25 53.3 | -0.1 |
| | baz=327 | | | | | | | | |
| SNST | Tainan City | 1.30 | 320 | *e* | P | Pb | | 15 25 38.3 | +1.0 |
| | baz=320 | | | | | | | | |
| TWK | Hsinying | 1.34 | 321 | *e* | P | Pb | | 15 25 38.4 | +0.4 |
| | baz=322 | | | | | | | | |
| WCKO | Fanlu | 1.42 | 329 | *e* | P | Pb | | 15 25 39.9 | +0.5 |
| | baz=329 | | | | | | | | |
| WCKO | | | | *e* | S | Sb | | 15 25 58.2 | +1.2 |
| | baz=329 | | | | | | | | |
| WARBT | Fenglin Townsh | 1.50 | 360 | *e* | P | Pn | | 15 25 39.1 | +0.2 |
| | baz=350 | | | | | | | | |
| TSCK | Chigu Township | 1.53 | 308 | *e* | P | Pb | | 15 25 40.5 | -0.6 |
| | baz=290 | | | | | | | | |
| TSCK | | | | *e* | S | Sb | | 15 26 00.7 | +0.7 |
| | baz=290 | | | | | | | | |
| ICHU | Yijhu | 1.54 | 318 | *e* | P | Pb | | 15 25 40.8 | -0.6 |
| | baz=317 | | | | | | | | |
| VWDT | VWDT | 1.55 | 351 | *e* | P | Pb | | 15 25 40.9 | -0.7 |
| | baz=353 | | | | | | | | |
| WHYT | Xinyi Township | 1.56 | 341 | *e* | P | Pb | | 15 25 41.4 | -0.3 |
| | baz=342 | | | | | | | | |
| CHN8 | Yiju | 1.57 | 316 | *e* | P | Pn | | 15 25 40.1 | +0.2 |
| | baz=316 | | | | | | | | |
| SHUL | Shoufeng | 1.57 | 5 | *e* | P | Pn | | 15 25 40.7 | +0.8 |
| | baz=15 | | | | | | | | |
| SHUL | | | | *e* | S | Sb | | 15 26 01.5 | +0.1 |
| | baz=15 | | | | | | | | |
| ESL | Shilin | 1.59 | 1 | *e* | P | Pn | | 15 25 41.0 | +0.8 |
| | baz=351 | | | | | | | | |
| SSLB | Suanglung | 1.62 | 345 | P | | Pb | | 15 25 43.0 | +0.3 |
| SSLB | Suanglung | 1.62 | 345 | *e* | P | Pb | | 15 25 42.6 | -0.1 |
| | baz=358 | | | | | | | | |
| WDLH | Douliu | 1.67 | 332 | *e* | P | Pb | | 15 25 43.3 | -0.2 |
| | baz=332 | | | | | | | | |
| WTK | Tuku | 1.74 | 328 | *e* | P | Pn | | 15 25 43.1 | +0.9 |
| | baz=328 | | | | | | | | |
| OWD | Renai | 1.74 | 353 | *e* | P | Pb | | 15 25 44.0 | -0.9 |
| | baz=7.0 | | | | | | | | |
| ETM | Tongmen | 1.74 | 3 | *e* | P | Pn | | 15 25 42.7 | +0.4 |
| | baz=354 | | | | | | | | |
| TYC | Yuchr | 1.75 | 344 | *e* | P | Pb | | 15 25 44.3 | -0.7 |
| | baz=356 | | | | | | | | |
| WNT | Mingjian | 1.78 | 338 | *e* | P | Pb | | 15 25 45.2 | -0.3 |
| | baz=339 | | | | | | | | |
| WUSB | Renai | 1.79 | 352 | *e* | P | Pn | | 15 25 44.1 | +1.0 |
| | baz=6.0 | | | | | | | | |
| LXIB | Xiulin Townshi | 1.80 | 0 | *e* | P | Pn | | 15 25 43.9 | +0.7 |
| | baz=2.0 | | | | | | | | |
| LXIB | | | | *i* | S | Sn | | 15 26 06.3 | +0.9 |
| | baz=2.0 | | | | | | | | |
| CHGB | Renai | 1.85 | 354 | *e* | P | Pb | | 15 25 45.3 | -1.4 |
| | baz=9.0 | | | | | | | | |
| TWD | Chiawan | 1.86 | 6 | *e* | P | Pn | | 15 25 44.1 | +0.1 |
| | baz=20 | | | | | | | | |
| WCS | Beigang Elemen | 1.89 | 346 | *e* | P | Pb | | 15 25 47.4 | +0.1 |
| | baz=347 | | | | | | | | |
| WHF | Hehuan Shan | 1.93 | 356 | *e* | P | Pb | | 15 25 46.6 | -1.6 |
| | baz=11 | | | | | | | | |
| NACB | Ninganchiao | 1.96 | 5 | *e* | P | Pn | | 15 25 45.5 | +0.2 |
| | baz=356 | | | | | | | | |
| ETLH | Xiulin Townshi | 1.98 | 2 | *e* | P | Pn | | 15 25 46.6 | +0.9 |
| | baz=4.0 | | | | | | | | |
| TWT | Tachien | 2.04 | 354 | *e* | P | Pb | | 15 25 49.2 | -0.8 |
| | baz=7.0 | | | | | | | | |
| TDCB | Techi | 2.04 | 354 | *e* | P | Pb | | 15 25 49.2 | -0.8 |
| | baz=7.0 | | | | | | | | |
| VCHM | Qimei | 2.07 | 299 | *e* | P | Pn | | 15 25 46.5 | -0.3 |
| | baz=296 | | | | | | | | |
| VCHM | | | | *e* | S | Sn | | 15 26 10.4 | -1.4 |
| | baz=296 | | | | | | | | |
| EOS4 | EOS4 | 2.08 | 24 | *e* | P | Pn | | 15 25 47.4 | +0.8 |
| | baz=27 | | | | | | | | |
| EOS4 | | | | *e* | S | Sn | | 15 26 11.7 | +0.2 |
| | baz=27 | | | | | | | | |
| WHP | Taichung City | 2.10 | 349 | *e* | P | Pb | | 15 25 50.5 | -0.4 |
| | baz=350 | | | | | | | | |
| WHP | | | | S | | Sb | | 15 26 17.0 | +0.5 |
| | baz=350 | | | | | | | | |
| PNG | Penghu | 2.17 | 309 | *e* | P | Pn | | 15 25 49.4 | +1.3 |
| | baz=293 | | | | | | | | |
| NNSB | Datong | 2.20 | 360 | *e* | P | Pn | | 15 25 50.1 | +1.3 |
| | baz=10.0 | | | | | | | | |
| NNS | Nan Shan | 2.21 | 359 | *e* | P | Pb | | 15 25 53.1 | +0.2 |
| | baz=11 | | | | | | | | |
| ENA | Nanau | 2.23 | 8 | *e* | P | Pn | | 15 25 49.4 | +0.5 |
| | baz=358 | | | | | | | | |
| EOS3 | EOS3 | 2.23 | 22 | *e* | P | Pn | | 15 25 50.0 | +1.1 |
| | baz=23 | | | | | | | | |
| EWUT | Wuta | 2.25 | 9 | *e* | P | Pn | | 15 25 49.4 | +0.2 |
| | baz=21 | | | | | | | | |
| LATG | Datong | 2.31 | 3 | *e* | P | Pn | | 15 25 51.0 | +0.7 |
| | baz=5.0 | | | | | | | | |
| NDT | Datong Townshi | 2.38 | 2 | *e* | P | Pn | | 15 25 53.1 | +2.1 |
| | baz=4.0 | | | | | | | | |
| YHNB | Yeheng | 2.44 | 360 | P | | Pn | | 15 25 54.0 | +1.9 |
| YHNB | Yeheng | 2.44 | 360 | *e* | P | Pn | | 15 25 53.9 | +1.9 |
| | baz=14 | | | | | | | | |
| LIOB | Emei | 2.44 | 352 | *e* | P | Pb | | 15 25 55.3 | -1.5 |
| | baz=336 | | | | | | | | |
| NSK | Sanguang | 2.45 | 359 | *e* | P | Pn | | 15 25 53.4 | +1.3 |
| | baz=14 | | | | | | | | |
| FUSB | Fushanzhiwuyua | 2.54 | 4 | *e* | P | Pn | | 15 25 54.0 | +0.7 |
| | baz=6.0 | | | | | | | | |
| NWLT | Wulai | 2.55 | 2 | *e* | P | Pn | | 15 25 55.1 | +1.6 |
| | baz=4.0 | | | | | | | | |
| JYNG | Yonagunijimaku | 2.64 | 32 | *e* | P | Pn | | 15 25 56.1 | +1.5 |
| JYNG | | | | *e* | S | Sn | | 15 26 25.9 | 0.0 |
| YOJ | Yonaguni jima | 2.68 | 33 | P | | Pn | | 15 25 57.7 | +2.5 |
| TIPB | Shuangxi | 2.77 | 8 | *e* | P | Pn | | 15 25 58.5 | +2.0 |
| | baz=360 | | | | | | | | |
| HATJ | Hateruma jima | 2.88 | 50 | P | | Pn | | 15 25 58.9 | +1.0 |
| HATJ | | | | *e* | S | Sn | | 15 26 31.1 | -0.7 |
| SXI1 | Grass Mountain | 2.90 | 9 | *e* | P | Pn | | 15 26 00.5 | +2.2 |
| | baz=1.0 | | | | | | | | |
| IRIF | Iriomote-Funau | 3.01 | 45 | P | | Pn | | 15 26 00.9 | +1.2 |
| IRIF | | | | S | | Sn | | 15 26 34.5 | -0.5 |
| JKRS | Kuro-shima | 3.13 | 50 | P | | Pn | | 15 26 02.5 | +1.1 |
| JKRS | | | | *e* | S | Sn | | 15 26 36.3 | -1.8 |
| JIJ | Ishigaki jima | 3.31 | 49 | P | | Pn | | 15 26 04.5 | +0.7 |
| JIJ | | | | S | | Sn | | 15 26 40.5 | -1.9 |
| JISG | Ishigakijimahi | 3.57 | 48 | *e* | P | Pn | | 15 26 07.9 | +0.5 |
| JISG | | | | S | | Sn | | 15 26 47.6 | -1.2 |
| ZPLA | Ao Xicun | 3.77 | 298 | *e* | P | Pn | | 15 26 09.9 | -0.2 |
| | baz=294 | | | | | | | | |
| JTJ | Tarama | 3.88 | 51 | P | | Pn | | 15 26 12.6 | +1.0 |
| JTJ | | | | *e* | S | Sn | | 15 26 55.9 | -0.5 |
| JIRB | Irabujima | 4.33 | 52 | *e* | P | Pn | | 15 26 18.8 | +0.9 |
| JIRB | | | | *e* | S | Sn | | 15 27 07.5 | -0.2 |

**DJA 11 15:31:03.4±0.5, 8°S±6°×11°6E±°, h10km, M3.7/7, MLv3.7/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.83 | 150 | P | | Pg | | 15 31 18.7 | -0.8 |
| TWSI | | | | S | | Sg | | 15 31 26.3 | -4.1 |
| SRBI | Singaraja | 1.24 | 266 | P | | Pn | | 15 31 25.9 | -0.9 |
| SRBI | | | | S | | Sn | | 15 31 44.2 | +0.7 |
| PLAI | Plampang | 1.54 | 122 | P | | Pn | | 15 31 30.5 | -0.4 |
| PLAI | | | | S | | Sb | | 15 31 52.1 | +0.6 |
| JAGI | Jajag, Banyuwa | 2.33 | 259 | P | | Pn | | 15 31 41.4 | -0.4 |
| BSSI | Bau Bau, Buton | 4.41 | 65 | P | | Pn | | 15 32 10.0 | -0.4 |
| BNSI | Bone | 5.10 | 46 | P | | Pn | | 15 32 15.7 | -4.2 |

**ATH 11 15:37:54.0, 38°.51N×20°.53E, h10km±3km, ML1.5/2, Error ellipse: s-maj=5.5km s-min=0.9km az=105.0, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| FSK | Fiskardo | 0.06 | 152 | P | | Pg | | 15 37 56.0 | -0.1 |
| FSK | | | | S | | Sg | | 15 37 57.4 | -0.2 |
| FSK | | | | AML | | AML | | 15 37 57.7 | |
| | comp=N,768μm,0.1s | | | | | | | | |
| FSK | | | | AML | | AML | | 15 37 57.9 | |
| | comp=E,1041μm,0.1s | | | | | | | | |
| EVGI | Lefkada island | 0.15 | 43 | P | | Pg | | 15 37 57.3 | -0.1 |
| EVGI | | | | S | | Sg | | 15 37 59.8 | +0.2 |
| NYDR | Nydri-Lefkada | 0.24 | 34 | P | | Pg | | 15 37 58.6 | -0.3 |
| NYDR | | | | S | | Sg | | 15 38 02.4 | +0.1 |
| LKD2 | Lefkada island | 0.29 | 20 | P | | Pg | | 15 37 59.7 | -0.3 |
| LKD2 | | | | S | | Sg | | 15 38 04.5 | +0.6 |
| DMLN | Damoulianata-K | 0.30 | 204 | P | | Pg | | 15 37 60.0 | 0.0 |
| VLS | Valsamata | 0.34 | 171 | P | | Pg | | 15 38 00.5 | -0.3 |
| VLS | | | | S | | Sg | | 15 38 05.7 | +0.5 |
| VLS | | | | AML | | AML | | 15 38 06.0 | |
| | comp=E,404μm,0.2s | | | | | | | | |
| VLS | | | | AML | | AML | | 15 38 07.2 | |
| | comp=N,183μm,0.2s | | | | | | | | |

*BGR* ***11*** *15:38:26.1±0.8, 40°.77N×20°.68E, h10km, ML5.8, Error ellipse: s-maj=21.1km s-min=15.6km az=55.0*
*BGS* ***11*** *15:38:30.9±2.0, 41°.34N×20°.20E, h

*waves: s59,c82; Duration: 1ˢ4 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.28±.20; $M_{\theta\theta}$-4.21±.15; $M_{\phi\phi}$3.93±.13; $M_{r\theta}$1.55±.25; $M_{r\phi}$3.34±.12; $M_{\theta\phi}$2.33±.15; Best double couple: $M_o$5.92000×$10^{16}$ NP1:$\phi_s$67.00000°,$\delta$79.00000°, $\lambda$23.00000°. NP2:$\phi_s$332.00000°,$\delta$67.00000°,$\lambda$168.00000°. Principal axes: T 6.3500, Plg24.0000°, Azm291.0000°; N -0.8500, Plg64.0000°, Azm92.0000°; P -5.4900, Plg8.0000°, Azm198.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=35s.*

*ROM* ***11*** *15:38:35.6,41°.54N×20°.05E,h18ᵏᵐ,mb5.2/52, Mwp5.1/30,Mwpd5.4/1 Error ellipse: s-maj=1.4km s-min=0.3km az=78.0*

*PRU* ***11*** *15:38:35.7,41°.43N×20°.10E,h10ᵏᵐ,M5.1*

*GCMT* ***11*** *15:38:37.5±0.1,41°.56N±0°.01×20°.11E±0°.01,h24ᵏᵐ, MW5.1/122,Moment Tensor Solution. s62,c96; s122,c209; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.95±.13; $M_{\theta\theta}$-4.32±.10; $M_{\phi\phi}$3.37±.09; $M_{r\theta}$2.27±.16; $M_{\theta\phi}$3.14±.08; $M_{r\phi}$2.42±.14; Best double couple: $M_o$6.01000×$10^{16}$ NP1:$\phi_s$68.00000°,$\delta$78.00000°, $\lambda$32.00000°. NP2:$\phi_s$331.00000°,$\delta$59.00000°,$\lambda$166.00000°. Principal axes: T 6.2770, Plg30.0000°, Azm293.0000°; N -0.5340, Plg56.0000°, Azm86.0000°; P -5.7430, Plg13.0000°, Azm196.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 11 15:38:33.8±0.5,41°.57N±0°.01×20°.14E±0°.02,h13ᵏᵐ±2ᵏᵐ, h13ᵏᵐ;pP-P,n1952,σ1ˢ86/1897,mb5.2/366,MS4.7/101, 160C-111D,Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.30** | **223** | | **Pg** | **15 38 40.3** | **+0.3** |
| TIR | | | | Sg | **Sb** | **15 38 47.5** | **+1.5** |
| **TIR** | **Tirane** | **0.30** | **223** | P | **Pb** | **15 38 40.8** | **-0.3** |
| | baz=227 | | | | | | |
| TIR | | | | S | **Sb** | **15 38 46.4** | **+0.5** |
| | baz=227 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,341nm,0.5s,baz=227 | | | | | | |
| **TIR** | **Tirane** | **0.30** | **223** | P | **Pb** | **15 38 40.8** | **-0.3** |
| TIR | | | | S | **Sb** | **15 38 46.6** | **+0.7** |
| | comp=E,86μm,0.6s | | | | | | |
| **TIR** | **Tirane** | **0.30** | **223** | *e*Pg | **Pb** | **15 38 40.8** | **-0.3** |
| TIR | | | | *e*Sg | **Sb** | **15 38 47.6** | **+1.7** |
| **TIR** | **Tirane** | **0.30** | **223** | ⇑P | **Pb** | **15 38 40.5** | **-0.5** |
| **TIR** | **Tirane** | **0.30** | **223** | ⇑P | **Pb** | **15 38 42.1** | **+1.0** |
| TIR | | | | ⇓S | **Sn** | **15 38 48.1** | **-2.2** |
| **TIR** | **Tirane** | **0.30** | **223** | P | **Pg** | **15 38 40.3** | **+0.3** |
| **PUK** | **Puka** | **0.51** | **339** | | **Pg** | **15 38 44.0** | **+0.2** |
| PUK | | | | Sg | **Sb** | **15 38 52.9** | **+0.9** |
| **PUK** | **Puka** | **0.51** | **339** | P | **Pg** | **15 38 44.0** | **+0.2** |
| | baz=335 | | | | | | |
| PUK | | | | S | **Sb** | **15 38 52.2** | **+0.2** |
| | baz=335 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,2μm,0.5s,baz=335 | | | | | | |
| **OHR** | **Ohrid** | **0.67** | **133** | ⇑*i*Pg | **Pg** | **15 38 46.7** | **-0.2** |
| OHR | | | | *i* Sg | **Sb** | **15 38 57.8** | **+1.1** |
| OHR | | | | *e*Lg | Lg | 15 38 59.6 | |
| | comp=N,41μm,0.7s | | | | | | |
| OHR | | | | *e*Lg | Lg | 15 38 59.9 | |
| | comp=E,30μm,0.6s | | | | | | |
| **BCI** | **Bajram Curri** | **0.80** | **356** | P | **Pg** | **15 38 48.9** | **-0.4** |
| | baz=354 | | | | | | |
| BCI | | | | S | **Sb** | **15 39 00.5** | **+0.3** |
| | baz=354 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=E,1μm,0.6s,baz=354 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.94** | **311** | ⇑*i*Pg | **Pb** | **15 38 51.7** | **-0.3** |
| DRME | | | | *e*Sg | **Sn** | **15 39 08.0** | **+1.9** |
| **DRME** | **Dracevica, Mon** | **0.94** | **311** | ⇑*i*Pg | **Pb** | **15 38 51.8** | **-0.3** |
| DRME | | | | *i* Sg | **Sn** | **15 39 08.2** | **+2.1** |
| **PVY** | **Plav** | **1.03** | **352** | ⇑*i*Pg | **Pb** | **15 38 53.2** | **-0.4** |
| PVY | | | | *i* Sg | **Sn** | **15 39 09.8** | **+1.3** |
| **KBN** | **Korca** | **1.06** | **152** | | **Pn** | **15 38 54.6** | **+0.2** |
| **KBN** | **Korca** | **1.06** | **152** | P | **Pn** | **15 38 54.3** | **-0.1** |
| | baz=154 | | | | | | |
| KBN | | | | S | **Sn** | **15 39 09.0** | **-0.1** |
| | baz=154 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,223nm,0.7s,baz=154 | | | | | | |
| **KBN** | **Korca** | **1.06** | **152** | P | **Pb** | **15 38 53.5** | **-0.6** |
| KBN | | | | S | **Sn** | **15 39 08.9** | **-0.2** |
| | comp=E,52μm,1.3s | | | | | | |
| **KBN** | **Korca** | **1.06** | **152** | P | **Pn** | **15 38 54.6** | **+0.2** |
| **PDG** | **Podgorica** | **1.08** | **323** | | **Pb** | **15 38 53.7** | **-0.7** |
| **PDG** | **Podgorica** | **1.08** | **323** | *e*Pg | **Pg** | **15 38 54.8** | **+0.1** |
| PDG | | | | *e*Sg | **Sn** | **15 39 11.2** | **+1.7** |
| **PDG** | **Podgorica** | **1.08** | **323** | ⇑P | **Pb** | **15 38 54.1** | **-0.3** |
| **PDG** | **Podgorica** | **1.08** | **323** | ⇑Pg | **Pn** | **15 38 54.6** | **-0.1** |
| PDG | | | | *e*Sg | **Sn** | **15 39 11.6** | **+2.1** |
| **PDG** | **Podgorica** | **1.08** | **323** | ⇑P | **Pg** | **15 38 54.8** | **+0.1** |
| **PDG** | **Podgorica** | **1.08** | **323** | ⇓*i*Pg | **Pb** | **15 38 54.4** | **0.0** |
| PDG | | | | *i* Sg | **Sn** | **15 39 12.7** | **+3.2** |
| **BUM** | **Brajici-Budva** | **1.18** | **309** | ⇓*i*Pg | **Pg** | **15 38 56.4** | **-0.2** |
| BUM | | | | *i* Sg | **Sn** | **15 39 16.2** | **+4.1** |
| **VLO** | **Vlora** | **1.20** | **204** | | **Pg** | **15 38 57.5** | **+0.6** |
| **VLO** | **Vlora** | **1.20** | **204** | P | **Pg** | **15 38 57.8** | **+0.9** |
| | baz=206 | | | | | | |
| **VLO** | **Vlora** | **1.20** | **204** | P | **Pg** | **15 38 57.0** | **+0.1** |
| VLO | | | | S | **Sg** | **15 39 16.0** | **+3.4** |
| **VLO** | **Vlora** | **1.20** | **204** | P | **Pg** | **15 38 57.5** | **+0.6** |
| **FNA** | **Florina** | **1.22** | **130** | *e*P | **Pn** | **15 38 55.6** | **-1.0** |
| **FNA** | **Florina** | **1.22** | **130** | | **Pn** | **15 38 55.5** | **-1.0** |
| **FNA** | **Florina** | **1.22** | **130** | P | **Pn** | **15 38 55.9** | **-0.6** |
| | baz=131 | | | | | | |
| FNA | | | | S | **Sg** | **15 39 13.1** | **0.0** |
| | baz=131 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,113nm,0.5s,baz=131 | | | | | | |
| **FNA** | **Florina** | **1.22** | **130** | P | **Pn** | **15 38 55.5** | **-1.0** |
| FNA | | | | S | **Sg** | **15 39 13.0** | **0.0** |
| | comp=E,58μm,0.5s | | | | | | |
| **FNA** | **Florina** | **1.22** | **130** | *e*Pg | **Pn** | **15 38 55.9** | **-0.6** |
| FNA | | | | *e*Sg | **Sb** | **15 39 10.4** | **-1.9** |
| **FNA** | **Florina** | **1.22** | **130** | ⇑P | **Pn** | **15 38 55.5** | **-1.0** |
| **FNA** | **Florina** | **1.22** | **130** | ⇑*i*Pg | **Pn** | **15 38 55.6** | **-1.0** |
| FNA | | | | *i* Sg | **Sg** | **15 39 13.7** | **+0.7** |
| **FNA** | **Florina** | **1.22** | **130** | P | **Pn** | **15 38 55.5** | **-1.0** |
| **BEY** | **Berane** | **1.31** | **352** | ⇑*i*Pg | **Pb** | **15 38 58.4** | **0.0** |
| **IVA** | **Berane** | **1.31** | **352** | ⇓*i*Pg | **Pn** | **15 38 58.1** | **+0.2** |
| IVA | | | | *i* Sg | **Sg** | **15 39 18.2** | **+2.0** |
| **CEME** | **Cevo** | **1.34** | **317** | ⇑*i*Pg | **Pb** | **15 38 58.9** | **+0.2** |
| CEME | | | | *i* Sg | **Sg** | **15 39 20.0** | **+3.1** |
| **NEST** | **Nestorio** | **1.34** | **149** | P | **Pb** | **15 38 58.8** | **0.0** |
| NEST | | | | S | **Sg** | **15 39 17.4** | **+0.4** |
| | comp=E,18μm,0.5s | | | | | | |
| **KOME** | **Kolasin** | **1.36** | **340** | ⇓*i*Pg | **Pn** | **15 38 58.9** | **+0.3** |
| KOME | | | | *i* Sg | **Sg** | **15 39 19.6** | **+1.9** |
| **NKME** | **Niksic** | **1.49** | **324** | ⇓*i*Pg | **Pb** | **15 39 01.2** | **-0.1** |
| NKME | | | | *i* Sg | **Sg** | **15 39 23.0** | **+1.3** |
| **PENT** | **Pentalofos** | **1.57** | **151** | P | **Pb** | **15 39 02.1** | **-0.5** |
| **SRN** | **Sarande** | **1.69** | **184** | P | **Pb** | **15 39 04.4** | **-0.3** |
| | baz=185 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,48nm,1.0s,baz=185 | | | | | | |
| **SRN** | **Sarande** | **1.69** | **184** | P | **Pb** | **15 39 04.1** | **-0.6** |
| SRN | | | | S | **Sg** | **15 39 27.5** | **-0.7** |
| | comp=E,12μm,1.1s | | | | | | |
| **SJES** | **Sjenica** | **1.70** | **356** | *e*Pg | **Pb** | **15 39 05.5** | **+0.6** |
| SJES | | | | *e*Sg | **Sg** | **15 39 28.6** | **+0.2** |
| **SJES** | **Sjenica** | **1.70** | **356** | ⇓*i*Pn | **Pb** | **15 39 04.8** | **-0.1** |
| SJES | | | | *e*Sn | **Sg** | **15 39 28.8** | **+0.4** |
| **BARS** | **Barje** | **1.76** | **44** | *e*Pn | **Pb** | **15 39 05.0** | **-0.9** |
| BARS | | | | *e*Sn | **Sn** | **15 39 25.4** | **-0.8** |
| **BARS** | **Barje** | **1.76** | **44** | *i* Pn | **Pb** | **15 39 05.0** | **-0.9** |
| BARS | | | | *i* Sn | **Sg** | **15 39 31.5** | **+1.1** |
| **KZN** | **Kozani** | **1.76** | **135** | P | **Pn** | **15 39 04.4** | **+0.3** |
| KZN | | | | S | **Sb** | **15 39 28.4** | **+0.3** |
| | comp=E,20μm,0.7s | | | | | | |
| **BRY** | **Bratogost** | **1.79** | **319** | ⇑*i*Pn | **Pb** | **15 39 06.6** | **+0.1** |
| BRY | | | | *e*Sn | **Sg** | **15 39 31.4** | **+0.1** |
| **BRY** | **Bratogost** | **1.79** | **319** | ⇑*i*Pn | **Pb** | **15 39 06.4** | **0.0** |
| BRY | | | | *i* Sn | **Sg** | **15 39 30.3** | **-1.0** |
| **BRY** | **Bratogost** | **1.79** | **319** | P | **Pb** | **15 39 06.5** | **+0.1** |
| BRY | | | | S | **Sg** | **15 39 31.0** | **-0.3** |
| **SELS** | **Selova** | **1.80** | **23** | *e*Pg | **Pb** | **15 39 05.7** | **-0.9** |
| SELS | | | | *e*Sg | **Sn** | **15 39 27.8** | **+0.5** |
| **VAY** | **Valandovo** | **1.84** | **97** | ⇓*i*Pn | **Pn** | **15 39 05.9** | **+0.8** |
| VAY | | | | *i* Sn | **Sg** | **15 39 33.2** | **+0.2** |
| VAY | | | | *e*Lg | Lg | 15 39 35.9 | |
| | comp=N,20μm,1.1s | | | | | | |
| VAY | | | | *e*Lg | Lg | 15 39 36.2 | |
| | comp=E,9μm,0.7s | | | | | | |
| **PLE** | **Pljevlja** | **1.85** | **343** | ⇓*i*Pn | **Pb** | **15 39 07.4** | **-0.1** |
| PLE | | | | *i* Sn | **Sb** | **15 39 31.7** | **+1.2** |
| **KPRO** | **Kipourio** | **1.86** | **150** | P | **Pn** | **15 39 06.3** | **+0.9** |
| KPRO | | | | S | **Sb** | **15 39 30.6** | **-0.2** |
| | comp=E,17μm,1.2s | | | | | | |
| **KEK** | **Kerkira** | **1.87** | **188** | *e*P | **Pn** | **15 39 05.3** | **-0.2** |
| **KEK** | **Kerkira** | **1.87** | **188** | | **Pn** | **15 39 06.2** | **+0.7** |
| **KEK** | **Kerkira** | **1.87** | **188** | P | **Pn** | **15 39 06.2** | **+0.7** |
| KEK | | | | S | **Sb** | **15 39 32.4** | **+1.3** |
| | comp=E,15μm,1.0s | | | | | | |
| **KEK** | **Kerkira** | **1.87** | **188** | ⇓P | **Pn** | **15 39 06.2** | **+0.7** |
| **UPM** | **Unac-Piva** | **1.87** | **331** | ⇑*i*Pn | **Pb** | **15 39 08.3** | **+0.3** |
| UPM | | | | *e*Sn | **Sg** | **15 39 33.5** | **-0.5** |
| **UPM** | **Unac-Piva** | **1.87** | **331** | ⇑*i*Pn | **Pb** | **15 39 08.2** | **+0.3** |
| UPM | | | | *i* Sn | **Sb** | **15 39 32.3** | **+1.0** |
| **KTI** | **Kastanea** | **1.90** | **128** | P | **Pn** | **15 39 06.5** | **+0.5** |
| **SCTE** | **Santa Cesarea** | **1.96** | **221** | | **Pn** | **15 39 07.2** | **+0.5** |
| **SCTE** | **Santa Cesarea** | **1.96** | **221** | P | **Pn** | **15 39 07.0** | **+0.3** |
| | baz=222 | | | | | | |
| **KLINJ** | **Klinje** | **1.97** | **325** | *e*Pn | **Pb** | **15 39 09.6** | **0.0** |
| KLINJ | | | | *e*Sn | **Sb** | **15 39 35.5** | **+1.4** |
| **BOSS** | **Bosilegrad** | **1.97** | **61** | *e*Pn | **Pn** | **15 39 08.1** | **+1.2** |
| BOSS | | | | *e*Sn | **Sn** | **15 39 29.4** | **-2.1** |
| **IGT** | **Igoumenitsa** | **2.04** | **176** | P | **Pb** | **15 39 09.5** | **-1.2** |
| | baz=176 | | | | | | |
| IGT | | | | S | **Sg** | **15 39 38.0** | **-1.3** |
| | baz=176 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=E,42nm,0.7s,baz=176 | | | | | | |
| **IGT** | **Igoumenitsa** | **2.04** | **176** | P | **Pn** | **15 39 08.9** | **+1.1** |
| **IGT** | **Igoumenitsa** | **2.04** | **176** | P | **Pn** | **15 39 08.9** | **+1.1** |
| **PEHC** | **Pehcevo** | **2.08** | **83** | *i* Pn | **Pb** | **15 39 10.4** | **-0.9** |
| PEHC | | | | *i* Sn | **Sg** | **15 39 40.5** | **0.0** |
| PEHC | | | | *e*Lg | Lg | 15 39 44.6 | |
| | comp=N,63μm,1.6s | | | | | | |
| PEHC | | | | *e*Lg | Lg | 15 39 45.3 | |
| | comp=E,17μm,0.8s | | | | | | |
| **KNT** | **Kendrikon** | **2.11** | **100** | P | **Pn** | **15 39 09.1** | **+0.2** |
| KNT | | | | S | **Sn** | **15 39 35.5** | **+0.6** |
| | comp=E,7μm,0.8s | | | | | | |
| **KNT** | **Kendrikon** | **2.11** | **100** | *i* Pn | **Pn** | **15 39 09.0** | **+0.2** |
| KNT | | | | *i* Sn | **Sg** | **15 39 41.1** | **-0.6** |
| **RUDO** | **Rudo** | **2.13** | **345** | *e*Pn | **Pb** | **15 39 11.1** | **-1.1** |
| RUDO | | | | *e*Sn | **Sb** | **15 39 39.2** | **+0.8** |
| **STON** | **Ston** | **2.23** | **306** | ⇑*i*Pn | **Pn** | **15 39 11.9** | **+1.5** |
| STON | | | | *e*Sn | **Sb** | **15 39 42.0** | **+0.5** |
| **KKB** | **Krupnik** | **2.25** | **82** | *i* Pn | **Pn** | **15 39 11.2** | **+0.5** |
| **THE** | **Thessaloniki** | **2.33** | **113** | P | **Pn** | **15 39 11.9** | **+0.2** |
| **THE** | **Thessaloniki** | **2.33** | **113** | ⇑*i*Pn | **Pn** | **15 39 12.1** | **+0.4** |
| THE | | | | *i* Sn | **Sb** | **15 39 45.0** | **+0.8** |
| **THE** | **Thessaloniki** | **2.33** | **113** | P | **Pn** | **15 39 11.9** | **+0.2** |
| **GRUS** | **Gruza** | **2.36** | **10** | *e*Pn | **Pn** | **15 39 13.5** | **+1.4** |
| GRUS | | | | *e*Sn | **Sn** | **15 39 42.2** | **+1.3** |
| **BBLS** | **Lazi&#263i** | **2.36** | **347** | *e*Pn | **Pb** | **15 39 15.4** | **-0.8** |
| BBLS | | | | *e*Sn | **Sb** | **15 39 44.4** | **-0.8** |
| **BBLS** | **Lazi&#263i** | **2.36** | **347** | ⇑*i*Pn | **Pb** | **15 39 14.9** | **-1.3** |
| BBLS | | | | *e*Sn | **Sb** | **15 39 44.9** | **-0.3** |
| **BOVS** | **Bovan** | **2.37** | **29** | | **Pn** | **15 39 12.6** | **+0.3** |
| **BOVS** | **Bovan** | **2.37** | **29** | *e*Pn | **Pn** | **15 39 12.7** | **+0.4** |
| **BOVS** | **Bovan** | **2.37** | **29** | ⇑P | **Pn** | **15 39 12.6** | **+0.3** |
| **HORT** | **Hortiatis** | **2.44** | **112** | *e*P | **Pn** | **15 39 15.1** | **+1.8** |
| **HORT** | **Hortiatis** | **2.44** | **112** | P | **Pn** | **15 39 13.3** | **0.0** |
| **TYRN** | **Tyrnavos** | **2.44** | **139** | P | **Pn** | **15 39 14.0** | **+0.7** |
| **NOCI** | **Noci** | **2.45** | **252** | P | **Pn** | **15 39 14.7** | **+1.2** |
| | baz=253 | | | | | | |
| **THL** | **Klokotos Trika** | **2.46** | **144** | P | **Pn** | **15 39 14.4** | **+0.9** |
| **ZAPS** | **Zavoj** | **2.51** | **46** | *e*Pn | **Pn** | **15 39 16.1** | **+1.8** |
| ZAPS | | | | *e*Sn | **Sn** | **15 39 44.4** | **-0.4** |
| **DIVS** | **Divibare** | **2.53** | **358** | *e*Pn | **Pn** | **15 39 16.2** | **+1.6** |
| DIVS | | | | *e*Sn | **Sb** | **15 39 48.1** | **-2.1** |
| **SOH** | **Sokhos** | **2.54** | **106** | P | **Pn** | **15 39 15.2** | **+0.5** |
| **SOH** | **Sokhos** | **2.54** | **106** | *i* Pn | **Pn** | **15 39 15.3** | **+0.7** |
| **SOH** | **Sokhos** | **2.54** | **106** | P | **Pn** | **15 39 15.2** | **+0.5** |
| **LRSO** | **Larissa Observ** | **2.55** | **137** | P | **Pn** | **15 39 15.7** | **+0.9** |
| **SRS** | **Serrai** | **2.64** | **99** | P | **Pn** | **15 39 16.1** | **+0.1** |
| SRS | | | | S | **Sn** | **15 39 49.5** | **+1.7** |
| | comp=E,4μm,1.1s | | | | | | |
| **SRS** | **Serrai** | **2.64** | **99** | *e*Pn | **Pn** | **15 39 17.3** | **+1.3** |
| **SRS** | **Serrai** | **2.64** | **99** | *i* Pn | **Pn** | **15 39 16.3** | **+0.3** |
| **SRS** | **Serrai** | **2.64** | **99** | P | **Pn** | **15 39 16.1** | **+0.1** |
| SRS | | | | S | **Sn** | **15 39 49.5** | **+1.7** |
| **TRUS** | **Trudelj** | **2.66** | **4** | *e*Pn | **Pn** | **15 39 18.5** | **+2.2** |
| TRUS | | | | *e*Sn | **Sn** | **15 39 51.2** | **+2.8** |
| **HAPS** | **Han Pijesak,BI** | **2.66** | **341** | ⇑*i*Pn | **Pb** | **15 39 19.0** | **-2.4** |
| HAPS | | | | *e*Sn | **Sb** | **15 39 52.8** | **-1.2** |
| **MMB** | **Musomishta** | **2.71** | **89** | *i* Pn | **Pn** | **15 39 18.1** | **+1.1** |
| **ZAGS** | **Zajecar** | **2.72** | **34** | *e*Pn | **Pn** | **15 39 18.1** | **+1.0** |
| ZAGS | | | | *e*Sn | **Sn** | **15 39 49.4** | **-0.5** |
| **MATE** | **Matera** | **2.75** | **252** | | **Pn** | **15 39 18.4** | **+0.8** |
| **MATE** | **Matera** | **2.75** | **252** | ⇑P | **Pn** | **15 39 17.8** | **+0.2** |
| **MATE** | **Matera** | **2.75** | **252** | ⇑P | **Pn** | **15 39 18.4** | **+0.8** |
| **TSLK** | **Tsoukalades, L** | **2.77** | **172** | P | **Pn** | **15 39 18.8** | **+1.0** |
| **LKD2** | **Lefkada island** | **2.81** | **172** | P | **Pn** | **15 39 19.4** | **+1.0** |
| | baz=172 | | | | | | |
| **LKD2** | **Lefkada island** | **2.81** | **172** | P | **Pn** | **15 39 19.1** | **+0.8** |
| **NYDR** | **Nydri-Lefkada** | **2.88** | **171** | P | **Pn** | **15 39 20.1** | **+0.7** |
| **KOKK** | **Kokkinochori,** | **3.00** | **103** | P | **Pn** | **15 39 21.5** | **+0.4** |
| **TEKS** | **Tekeris** | **3.01** | **352** | *e*Pn | **Pn** | **15 39 22.8** | **+1.6** |
| **TEKS** | **Tekeris** | **3.01** | **352** | *e*Pn | **Pn** | **15 39 23.2** | **+2.0** |
| TEKS | | | | *e*Sn | **Sn** | **15 40 00.5** | **+3.4** |
| **AGG** | **Agios Georgios** | **3.04** | **146** | *e*P | **Pn** | **15 39 22.6** | **+1.0** |
| **AGG** | **Agios Georgios** | **3.04** | **146** | | **Pn** | **15 39 23.4** | **+1.7** |
| **AGG** | **Agios Georgios** | **3.04** | **146** | P | **Pn** | **15 39 22.4** | **+0.8** |
| **AGG** | **Agios Georgios** | **3.04** | **146** | ⇓P | **Pn** | **15 39 22.7** | **+1.1** |
| **AGG** | **Agios Georgios** | **3.04** | **146** | P | **Pn** | **15 39 23.4** | **+1.7** |
| **KUBS** | **Kucevo** | **3.06** | **21** | *e*Pn | **Pn** | **15 39 21.4** | **-0.4** |
| KUBS | | | | *e*Sn | **Sn** | **15 39 58.3** | **+0.1** |
| **PVO** | **Paravola** | **3.13** | **160** | P | **Pn** | **15 39 24.1** | **+1.7** |
| **AVAS** | **Avala Beograd** | **3.14** | **5** | *e*Pn | **Pn** | **15 39 24.4** | **+1.5** |
| AVAS | | | | *e*Sn | **Sn** | **15 40 01.5** | **+1.3** |
| **OUR** | **Ouranopolis** | **3.16** | **112** | *e*P | **Pn** | **15 39 24.6** | **+1.5** |
| **OUR** | **Ouranopolis** | **3.16** | **112** | P | **Pn** | **15 39 23.6** | **+0.5** |
| **OUR** | **Ouranopolis** | **3.16** | **112** | P | **Pn** | **15 39 23.6** | **+0.5** |
| **NEO** | **Neokhori** | **3.26** | **133** | P | **Pn** | **15 39 25.4** | **+0.8** |
| **SGRT** | **San Giovanni R** | **3.30** | **275** | Pn | **Pn** | **15 39 25.2** | **0.0** |
| **KAVA** | **Kavala** | **3.34** | **98** | P | **Pn** | **15 39 26.2** | **+0.5** |
| **PUNG** | **Punghina** | **3.40** | **36** | ⇑P | **Pn** | **15 39 27.5** | **+1.1** |
| **AXAR** | **Agios Charalam** | **3.40** | **145** | P | **Pn** | **15 39 27.3** | **+0.8** |
| **BAIL** | **Bailesti** | **3.40** | **43** | ⇓P | **Pn** | **15 39 28.0** | **+1.6** |
| **VLS** | **Valsamata** | **3.41** | **174** | P | **Pn** | **15 39 26.2** | **-0.4** |
| **MDVR** | **Moldovita** | **3.41** | **19** | ⇑P | **Pn** | **15 39 28.2** | **+1.5** |
| **PLD** | **Plovdiv** | **3.49** | **79** | *e*P | **Pn** | **15 39 30.6** | **+2.9** |
| **DOB** | **Doboj** | **3.50** | **335** | *e*Pn | **Pn** | **15 39 29.4** | **+1.6** |
| DOB | | | | *e*Sn | **Sn** | **15 40 12.2** | **+3.2** |
| **TIP** | **Timpagrande** | **3.52** | **228** | Pn | **Pn** | **15 39 27.9** | **-0.3** |
| **TIP** | **Timpagrande** | **3.52** | **228** | ⇑P | **Pn** | **15 39 27.2** | **-1.0** |
| **TIP** | **Timpagrande** | **3.52** | **228** | ⇓P | **Pn** | **15 39 28.7** | **+0.5** |
| **KALE** | **Kalithea** | **3.52** | **154** | P | **Pn** | **15 39 30.0** | **+1.7** |
| **DJES** | **Djerdap** | **3.55** | **29** | *e*Pn | **Pn** | **15 39 30.5** | **+1.9** |
| DJES | | | | *e*Sn | **Sn** | **15 40 10.9** | **+0.5** |
| **DJES** | **Djerdap** | **3.55** | **29** | ⇓P | **Pn** | **15 39 30.6** | **+2.0** |
| **THAS** | **Thassos island** | **3.59** | **104** | P | **Pn** | **15 39 29.1** | **0.0** |
| **FRGS** | **Fruska Gora** | **3.60** | **356** | *e*Pn | **Pn** | **15 39 30.4** | **+1.2** |
| FRGS | | | | *e*Sn | **Sn** | **15 40 12.0** | **+0.5** |
| **FRGS** | **Fruska Gora** | **3.60** | **356** | *e*Pn | **Pn** | **15 39 30.7** | **+1.5** |
| FRGS | | | | *e*Sn | **Sn** | **15 40 14.2** | **+2.7** |
| **FRGS** | **Fruska Gora** | **3.60** | **356** | ⇑P | **Pn** | **15 39 31.0** | **+1.8** |
| **FRGS** | **Fruska Gora** | **3.60** | **356** | P | **Pn** | **15 39 31.2** | **+2.0** |
| **RMGR** | **Halanga-Turnu** | **3.61** | **30** | | **Pn** | **15 39 31.8** | **+2.4** |
| **RMGR** | **Halanga-Turnu** | **3.61** | **30** | ⇓P | **Pn** | **15 39 31.8** | **+2.4** |
| **MGRS** | **Mrkonjic Grad** | **3.62** | **323** | ⇑*i*Pn | **Pn** | **15 39 32.3** | **+2.7** |
| MGRS | | | | *e*Sn | **Sn** | **15 40 15.9** | **+3.7** |
| **CUC** | **Castrocucco** | **3.64** | **246** | | **Pn** | **15 39 30.4** | **+0.5** |
| **CUC** | **Castrocucco** | **3.64** | **246** | ⇑P | **Pn** | **15 39 30.3** | **+0.4** |
| **RLS** | **Riolos of Patr** | **3.65** | **163** | P | **Pn** | **15 39 31.1** | **+1.2** |
| **VRSS** | **Vrsac** | **3.66** | **13** | *e*Pn | **Pn** | **15 39 30.5** | **+0.5** |
| **HERR** | **Herculane** | **3.70** | **26** | ⇓P | **Pn** | **15 39 32.1** | **+1.5** |
| **SRE** | **Strehaia** | **3.82** | **35** | ⇓P | **Pn** | **15 39 34.0** | **+1.7** |
| **SRE** | **Strehaia** | **3.82** | **35** | P | **Pn** | **15 39 33.9** | **+1.7** |
| **BLY** | **Banja Luka** | **3.84** | **327** | ⇑P | **Pn** | **15 39 34.9** | **+2.3** |
| **BLY** | **Banja Luka** | **3.84** | **327** | ⇑*i*Pn | **Pn** | **15 39 34.9** | **+2.3** |
| BLY | | | | *e*Sn | **Sn** | **15 40 20.9** | **+3.3** |
| **KLV** | **Kalavryta, Ach** | **3.84** | **156** | P | **Pn** | **15 39 33.5** | **+0.8** |
| **BANR** | **Banloc** | **3.88** | **10** | ⇑P | **Pn** | **15 39 34.6** | **+1.6** |
| **KDZ** | **Kurdzhali** | **3.90** | **87** | *e*P | **Pn** | **15 39 37.3** | **+4.0** |
| **A050A** | **Klekovaca** | **3.94** | **319** | ⇑*i*Pn | **Pn** | **15 39 36.6** | **+2.7** |
| A050A | | | | *e*Sn | **Sn** | **15 40 22.7** | **+2.7** |
| **VLAD** | **Vladila** | **3.97** | **51** | ⇑P | **Pn** | **15 39 36.1** | **+1.8** |
| **GUR** | **Goura** | **4.00** | **154** | P | **Pn** | **15 39 36.2** | **+1.3** |
| **RDO** | **Rodhopi** | **4.08** | **94** | *e*P | **Pn** | **15 39 38.1** | **+2.2** |
| **RDO** | **Rodhopi** | **4.08** | **94** | | **Pn** | **15 39 36.9** | **+1.0** |
| **RDO** | **Rodhopi** | **4.08** | **94** | P | **Pn** | **15 39 36.3** | **+0.5** |
| **RDO** | **Rodhopi** | **4.08** | **94** | ⇑P | **Pn** | **15 39 36.2** | **+0.3** |
| **A051A** | **Mrakovica** | **4.17** | **327** | ⇑*i*Pn | **Pn** | **15 39 39.4** | **+2.2** |
| A051A | | | | *e*Sn | **Sn** | **15 40 28.7** | **+2.9** |
| **LIA** | **Limnos Island** | **4.18** | **112** | P | **Pn** | **15 39 37.7** | **+0.5** |
| **VILL** | **Villia** | **4.18** | **143** | P | **Pn** | **15 39 37.9** | **+0.6** |
| **BZS** | **Buzias** | **4.19** | **14** | ⇓P | **Pn** | **15 39 37.7** | **+0.4** |
| **BZS** | **Buzias** | **4.19** | **14** | ⇓P | **Pn** | **15 39 38.4** | **+1.1** |
| **BZS** | **Buzias** | **4.19** | **14** | P | **Pn** | **15 39 38.3** | **+1.1** |
| **KYMI** | **Kymi, Euboea I** | **4.22** | **133** | P | **Pn** | **15 39 39.1** | **+1.3** |
| **SMTH** | **Samothraki Isl** | **4.22** | **103** | P | **Pn** | **15 39 37.9** | **+0.1** |
| **PRIJ** | **Prijedor** | **4.23** | **325** | ⇓*i*Pn | **Pn** | **15 39 40.4** | **+2.6** |
| PRIJ | | | | *e*Sn | **Sn** | **15 40 29.2** | **+2.2** |
| **PAOL** | **Paolisi** | **4.23** | **265** | Pn | **Pn** | **15 39 39.1** | **+1.1** |
| **TIM** | **Timisoara** | **4.24** | **10** | | **Pn** | **15 39 39.4** | **+1.4** |
| **TIM** | **Timisoara** | **4.24** | **10** | ⇑P | **Pn** | **15 39 39.4** | **+1.4** |
| **TIM** | **Timisoara** | **4.24** | **10** | P | **Pn** | **15 39 39.4** | **+1.4** |
| **GZR** | **Gura Zlata** | **4.28** | **26** | ⇑P | **Pn** | **15 39 39.4** | **+0.7** |
| **GZR** | **Gura Zlata** | **4.28** | **26** | P | **Pn** | **15 39 39.3** | **+0.7** |
| **SURR** | **Surduc** | **4.42** | **18** | | **Pn** | **15 39 41.2** | **+0.7** |
| **SURR** | **Surduc** | **4.42** | **18** | ⇓P | **Pn** | **15 39 41.2** | **+0.7** |
| **ELND** | **Elena** | **4.47** | **70** | | **Pn** | **15 39 43.1** | **+1.9** |
| **ELND** | **Elena** | **4.47** | **70** | ⇓P | **Pn** | **15 39 43.1** | **+1.9** |
| **ALN** | **Alexandroupoli** | **4.50** | **97** | *e*P | **Pn** | **15 39 44.7** | **+3.1** |
| **ALN** | **Alexandroupoli** | **4.50** | **97** | | **Pn** | **15 39 42.7** | **+1.1** |
| **ALN** | **Alexandroupoli** | **4.50** | **97** | P | **Pn** | **15 39 42.2** | **+0.6** |
| **ALN** | **Alexandroupoli** | **4.50** | **97** | ⇑P | **Pn** | **15 39 42.6** | **+0.9** |
| **ALN** | **Alexandroupoli** | **4.50** | **97** | P | **Pn** | **15 39 42.7** | **+1.1** |
| **ATH** | **Athens Observa** | **4.53** | **141** | P | **Pn** | **15 39 42.8** | **+0.8** |
| **COPA** | **Copaceanca** | **4.53** | **54** | ⇑P | **Pn** | **15 39 45.0** | **+3.0** |
| **ATHU** | **Athens Univers** | **4.56** | **141** | P | **Pn** | **15 39 43.9** | **+1.4** |
| **GADA** | **Gvkgeada** | **4.58** | **106** | *e*P | **Pn** | **15 39 44.9** | **+2.3** |
| **IT

**EDC Edincik 5.97 99** *e*P **Pn 15 40 05.7 +3.9**
**BOSR Bodos 6.02 40** ⇓P **Pn 15 40 04.6 +2.1**
**VAE Valguarnera 6.03 229** Pn **Pn 15 40 03.0 +0.3**
comp=E,15nm,0.4s,baz=32,slow=13,SNR=4.1
VAE Sn **Sn 15 41 13.4 +2.0**
comp=E,6.8nm,0.3s,baz=100,slow=22,SNR=3.5
VAE Lg Lg 15 41 42.9
comp=E,7.6nm,0.3s,baz=47,slow=19,SNR=3.8
**SLVT Silivri 6.08 91** *e*P **Pn 15 40 07.4 +4.1**
**AMRR Amara 6.08 58** ⇓P **Pn 15 40 05.8 +2.5**
**AMRR Amara 6.08 58** P **Pn 15 40 05.7 +2.5**
**OZUR 6.09 40** ⇑P **Pn 15 40 04.9 +1.4**
**CTYL Yalikoy Yolu 6.12 88** *e*P **Pn 15 40 08.0 +4.2**
**COVR Voineasa-Covas 6.13 44** **Pn 15 40 06.0 +2.0**
**COVR Voineasa-Covas 6.13 44** ⇓P **Pn 15 40 06.0 +2.0**
**APE Apeiranthos 6.13 135** *e*P **Pn 15 40 06.1 +2.0**
**APE Apeiranthos 6.13 135** **Pn 15 40 06.9 +2.8**
**APE Apeiranthos 6.13 135** P **Pn 15 40 05.9 +1.8**
**APE Apeiranthos 6.13 135** ⇑P **Pn 15 40 06.3 +2.1**
**APE Apeiranthos 6.13 135** ⇑P **Pn 15 40 06.9 +2.8**
**APE Apeiranthos 6.13 135**⇑ *e*P **Pn 15 40 06.2 +2.1**
**SOMA Soma-Manisa 6.14 111** *e*P **Pn 15 40 07.2 +3.1**
**BAND Balkesir-Ban 6.14 99** **Pn 15 40 08.3 +4.1**
**BAND Balkesir-Ban 6.14 99** ⇓P **Pn 15 40 08.3 +4.1**
**TURR Turia 6.18 41** ⇓P **Pn 15 40 06.5 +1.8**
**ICOR Ion Corvin 6.18 63** ⇑P **Pn 15 40 07.1 +2.5**
**BISRR Bisoca 6.21 48** ⇓P **Pn 15 40 07.8 +2.6**
**BISRR Bisoca 6.21 48** P **Pn 15 40 07.7 +2.6**
comp=E,2μm,0.7s,comp=E,15μmcomp=E,8.7nm
**RAFF Raffo Rosso 6.23 228** **Pn 15 40 04.6 -0.9**
**SUSR Susurluk-Balik 6.24 102** *e*P **Pn 15 40 08.6 +3.1**
**GRER 6.26 50** **Pn 15 40 08.9 +3.1**
**GRER 6.26 50** ⇓P **Pn 15 40 08.9 +3.1**
**ARCR ARCALIA 6.29 27** **Pn 15 40 07.9 +1.7**
**ARCR ARCALIA 6.29 27** ⇑P **Pn 15 40 07.9 +1.7**
**SOKA Soboth 6.29 326** *i* Pn **Pn 15 40 08.3 +2.0**
comp=E,1μm,0.5s,SNR=1864
SOKA *e*Sn **Sn 15 41 21.0 +3.0**
comp=E,229nm,0.6s
**CTKS Kestanelik-??a 6.30 90** *e*P **Pn 15 40 10.3 +4.0**
**CEI Carei 6.33 14** **Pn 15 40 07.6 +0.8**
**CEI Carei 6.33 14** ⇓P **Pn 15 40 07.6 +0.8**
**CEI Carei 6.33 14** P **Pn 15 40 07.6 +0.8**
**PSZ Piszkesteto 6.35 358** **Pn 15 40 07.9 +0.8**
**PSZ Piszkesteto 6.35 358** **Pn 15 40 08.9 +1.8**
**PSZ Piszkesteto 6.35 358** ⇓P **Pn 15 40 08.1 +1.0**
**PSZ Piszkesteto 6.35 358** ⇓P **Pn 15 40 08.9 +1.8**
**PSZ Piszkesteto 6.35 358** P **Pn 15 40 08.9 +1.8**
**KCTX Karacabey (Bur 6.36 99** *e*P **Pn 15 40 10.6 +3.5**
**PLOR Plostina 6.37 46** ⇑P **Pn 15 40 09.4 +2.0**
**PLOR Plostina 6.37 46** P **Pn 15 40 09.3 +2.0**
**PLOR3 Plostina Array 6.37 46** P **Pn 15 40 09.2 +1.9**
comp=E,565nm,1.0s,comp=E,4μmcomp=E,1.7nm
**PLOR5 Plostina Array 6.37 46** P **Pn 15 40 09.3 +2.0**
comp=E,411nm,0.7s,comp=E,4μmcomp=E,3.0nm
**OBKA Obir 6.37 323** *i* Pn **Pn 15 40 09.3 +1.8**
comp=E,555nm,0.6s,SNR=356
OBKA *i* Sn **Sn 15 41 22.7 +2.6**
comp=E,702nm,0.7s
**OBKA Obir 6.37 323**⇑ *i* Pn **Pn 15 40 08.7 +1.3**
OBKA *e*Sn **Sn 15 41 21.2 +1.1**
**OBKA Obir 6.37 323** *e*Pn **Pn 15 40 09.2 +1.8**
**SRO Srobarova 6.38 349** *e*P **Pn 15 40 10.3 +2.9**
SRO *e* 15 41 23.9
SRO MLR MLR
comp=Z,1μm,0.7s
**SRO Srobarova 6.38 349** *e*LG Lg 15 41 44.1
**SRO Srobarova 6.38 349** *e*PN **Pn 15 40 10.3 +2.9**
**SRO Srobarova 6.38 349** *e*SN **Sn 15 41 23.9 +3.9**
**CVDA Cernavoda 6.42 62** **Pn 15 40 10.5 +2.6**
**CVDA Cernavoda 6.42 62** ⇓P **Pn 15 40 10.5 +2.6**
**VRI Vrincioaia 6.42 46** ⇓P **Pn 15 40 10.3 +2.3**
**VRI Vrincioaia 6.42 46** P **Pn 15 40 10.3 +2.3**
**VRI Vrincioaia 6.42 46** P **Pn 15 40 10.0 +2.0**
comp=Z,250nm,0.7s,comp=Z,2μmcomp=Z,1.0nm
**HARR Harsova 6.50 59** **Pn 15 40 11.2 +2.2**
**HARR Harsova 6.50 59** ⇑P **Pn 15 40 11.2 +2.2**
**HARR Harsova 6.50 59** P **Pn 15 40 11.2 +2.2**
**BGKT Bogazkoy 6.50 91** *e*P **Pn 15 40 13.5 +4.4**
**TLBR Topalu 6.51 60** **Pn 15 40 11.1 +1.9**
**TLBR Topalu 6.51 60** ⇑P **Pn 15 40 11.1 +1.9**
**ODBI Odobesti 6.53 48** **Pn 15 40 12.6 +3.0**
**ODBI Odobesti 6.53 48** ⇑P **Pn 15 40 12.6 +3.0**
**ASQU Asqua 6.55 293** P **Pn 15 40 10.7 +1.0**
**BMR Baia Mare 6.55 20** ⇑P **Pn 15 40 11.0 +1.1**
**BMR Baia Mare 6.55 20** P **Pn 15 40 10.9 +1.1**
**ONER Baraj Valea Uz 6.56 41** ⇓P **Pn 15 40 11.5 +1.6**
**ARSA Arzberg 6.57 331** *e*Pn **Pn 15 40 11.9 +1.9**
comp=Z,111nm,0.4s,SNR=283
ARSA *i* Sn **Sn 15 41 28.7 +3.9**
comp=Z,259nm,0.5s
**ARSA Arzberg 6.57 331** ⇑P **Pn 15 40 11.4 +1.4**
**ARSA Arzberg 6.57 331**⇑ *i* Pn **Pn 15 40 11.5 +1.4**
ARSA *e*Sn **Sn 15 41 25.2 +0.3**
**ARSA Arzberg 6.57 331** *e*Pn **Pn 15 40 11.9 +1.9**
ARSA *e*Sn **Sn 15 41 29.1 +4.2**
**MFTR Murfatlar 6.62 64** **Pn 15 40 13.3 +2.7**
**MFTR Murfatlar 6.62 64** ⇓P **Pn 15 40 13.4 +2.7**
**RODP Rodopos 6.63 154** *e*P **Pn 15 40 12.6 +1.7**
**SANT Santorini 6.64 140** *e*P **Pn 15 40 13.5 +2.5**
**SANT Santorini 6.64 140** **Pn 15 40 15.2 +4.2**
**SANT Santorini 6.64 140** ⇑P **Pn 15 40 15.1 +4.0**
**SANT Santorini 6.64 140** ⇑P **Pn 15 40 15.2 +4.2**
**PANC Panciu 6.65 47** **Pn 15 40 14.2 +3.1**
**PANC Panciu 6.65 47** ⇓P **Pn 15 40 14.2 +3.1**
**ARMT Armutlu 6.67 96** *e*P **Pn 15 40 15.8 +4.4**
**CLTB Caltabellotta 6.67 236** ⇑P **Pn 15 40 13.0 +1.5**
**LMD Lutirano 6.69 295** P **Pn 15 40 12.4 +0.7**
**GORD Gordes-Manisa 6.70 111** *e*P **Pn 15 40 15.1 +3.3**
**GCAM G?zelcaml? 6.70 123** *e*P **Pn 15 40 14.6 +2.8**
**KLYT Kilyos 6.70 90** *e*P **Pn 15 40 16.1 +4.3**
**RONA Rosalia, Austr 6.71 337** *i* Pn **Pn 15 40 13.9 +1.8**
comp=Z,67nm,0.6s,SNR=107
RONA *e*Sn **Sn 15 41 31.2 +2.8**
comp=Z,443nm,0.8s
**COSR Cosmesti PH 6.73 48** ⇓P **Pn 15 40 15.4 +3.2**
**ISK Istanbul-Kandi 6.73 91** *e*P **Pn 15 40 16.4 +4.1**
**KAVV Kandilli-Istan 6.73 91** *e*P **Pn 15 40 16.7 +4.4**
**RUFI Rufina 6.75 293** P **Pn 15 40 13.3 +0.8**
**TSCT Constanta Port 6.77 65** **Pn 15 40 16.0 +3.3**
**TSCT Constanta Port 6.77 65** ⇑P **Pn 15 40 16.0 +3.3**
**TUDR 6.79 51** **Pn 15 40 15.4 +2.5**
**TUDR 6.79 51** ⇓P **Pn 15 40 15.4 +2.5**
**IMMV Iera Moni Meta 6.80 153** *e*P **Pn 15 40 15.5 +2.3**
**TESR Tescani 6.81 41** ⇑P **Pn 15 40 15.2 +1.9**
**TESR Tescani 6.81 41** P **Pn 15 40 15.0 +1.7**
comp=Z,159nm,0.7s,comp=Z,2μmcomp=Z,1.5nm
**SCHLR Schela 6.81 53** ⇑P **Pn 15 40 15.0 +1.7**
**TRSU Trosnyk 6.83 16** P **Pn 15 40 15.6 +2.1**
**SLCR Slobozia Conac 6.84 51** ⇑P **Pn 15 40 15.4 +1.7**
**NEGRR Negrea 6.88 52** ⇓P **Pn 15 40 15.7 +1.5**
**TPGR Topolog 6.88 59** **Pn 15 40 15.5 +1.2**
**TPGR Topolog 6.88 59** ⇑P **Pn 15 40 15.5 +1.2**
**MYKA Terra Mystica 6.89 319** *i* Pn **Pn 15 40 16.0 +1.5**
comp=Z,205nm,0.6s,SNR=273
MYKA *e*Sn **Sn 15 41 33.9 +1.1**
comp=Z,178nm,0.6s
**BERU Beregovo 6.90 14** P **Pn 15 40 14.8 +0.3**
**KNDR Palaiochora Ch 6.91 155** *e*P **Pn 15 40 16.1 +1.4**
**GHRR 6.91 47** ⇑P **Pn 15 40 16.6 +1.9**
**GHRR 6.91 47** P **Pn 15 40 16.4 +1.7**
**KECS Kecovo 6.92 2** *e*P **Pn 15 40 18.4 +3.6**
KECS *e* 15 41 34.7
KECS MLR MLR
comp=Z,700nm,0.6s
**KECS Kecovo 6.92 2** *e*LG Lg 15 41 35.3
**KECS Kecovo 6.92 2** *e*PN **Pn 15 40 18.4 +3.6**
**KECS Kecovo 6.92 2** *e*SN **Sn 15 41 34.7 +1.4**
**ODEM Odemis-Izmir 6.93 116** *e*P **Pn 15 40 18.1 +3.1**
**MTRZ Monterenzio 6.95 297** P **Pn 15 40 17.0 +1.7**
**ZST Bratislava 6.97 343** *e*P **Pn 15 40 18.9 +3.4**
ZST *e* 15 41 34.7
ZST MLR MLR
comp=Z,1μm,0.6s
**ZST Bratislava 6.97 343** *e*LG Lg 15 41 39.7
**ZST Bratislava 6.97 343** *e*PN **Pn 15 40 18.9 +3.4**
**ZST Bratislava 6.97 343** *e*SN **Sn 15 41 34.7 +0.2**
**AYDB Zeytinkoy-Aydi 6.98 119** *e*P **Pn 15 40 19.2 +3.4**
**VYHS Vyhne 6.99 353** *e*P **Pn 15 40 18.7 +3.0**
VYHS *e* 15 41 35.7
**VYHS Vyhne 6.99 353** *e*PN **Pn 15 40 18.7 +3.0**
VYHS *e*PG **Pg 15 40 49.5 +2.0**
VYHS *e*SN **Sn 15 41 35.7 +0.7**
**TATR Tatarca 7.01 52** **Pn 15 40 19.5 +3.4**
**TATR Tatarca 7.01 52** ⇓P **Pn 15 40 19.5 +3.4**
**SCTR Scanteiesti 7.02 52** **Pn 15 40 17.7 +1.5**
**SCTR Scanteiesti 7.02 52** ⇓P **Pn 15 40 17.7 +1.5**
**BURAR Bucovina Array 7.04 29** **Pn 15 40 18.7 +2.0**
**BURAR Bucovina Array 7.04 29** ⇓P **Pn 15 40 19.1 +2.4**
**BURAR Bucovina Array 7.04 29** P **Pn 15 40 19.0 +2.4**
**GIUM Giurgiulesti 7.05 54** **Pn 15 40 19.1 +2.5**
**GIUM Giurgiulesti 7.05 54** ⇓P **Pn 15 40 19.1 +2.5**
**CONA Conrad Observa 7.05 336** *i* Pn **Pn 15 40 18.5 +1.8**
comp=Z,19nm,0.3s,SNR=58
CONA *i* Sn **Sn 15 41 39.2 +2.5**
comp=Z,405nm,0.7s
**VARL Varlezi 7.06 50** **Pn 15 40 19.8 +3.0**
**VARL Varlezi 7.06 50** ⇑P **Pn 15 40 19.8 +3.0**
**BUR08 Bucovina Ar. S 7.06 29** **Pn 15 40 18.9 +2.0**
**BRIU Brid 7.07 16** P **Pn 15 40 18.5 +1.7**
**MUKU Mukachevo 7.12 14** P **Pn 15 40 18.8 +1.3**
**HOLU Holmets 7.14 12** P **Pn 15 40 19.1 +1.3**
**JURR Jurilovca 7.14 60** ⇑P **Pn 15 40 20.3 +2.5**
**BODT Bodrum 7.15 127** *e*P **Pn 15 40 20.7 +2.7**
**BODT Bodrum 7.15 127** P **Pn 15 40 19.7 +1.7**
**BIR Birlad 7.16 46** **Pn 15 40 21.1 +3.0**
**BIR Birlad 7.16 46** ⇑P **Pn 15 40 21.1 +3.0**
**BIR Birlad 7.16 46** P **Pn 15 40 21.1 +3.0**
**MTCR Monte La Croce 7.16 293** P **Pn 15 40 19.2 +1.0**
**SILT Sile 7.16 90** *e*P **Pn 15 40 23.1 +5.0**
**VLDR Vladesti 7.16 51** **Pn 15 40 20.7 +2.6**
**VLDR Vladesti 7.16 51** ⇑P **Pn 15 40 20.7 +2.6**
**SIMA Simav-Kutahya 7.20 107** *e*P **Pn 15 40 22.1 +3.4**
**SMOL Smolenice 7.21 345** *e*P **Pn 15 40 22.3 +3.6**
SMOL *e* 15 41 41.7
SMOL MLR MLR
comp=Z,300nm,0.9s
**KULA Kula-Manisa 7.21 112** *e*P **Pn 15 40 22.7 +3.8**
**UZHM Uzhgorod 7.22 11** P **Pn 15 40 19.8 +0.9**
**HRT Hereke 7.22 93** *e*P **Pn 15 40 23.2 +4.1**
**NAZL Nazilli-Aydin 7.24 117** *e*P **Pn 15 40 21.9 +2.7**
**PRAR RASCA 7.24 35** **Pn 15 40 23.0 +3.7**
**PRAR RASCA 7.24 35** ⇓P **Pn 15 40 23.0 +3.7**
**ZCCA Zocca 7.28 296** P **Pn 15 40 22.1 +2.3**
**TLCR 7.28 57** **Pn 15 40 22.8 +3.1**
**TLCR 7.28 57** ⇓P **Pn 15 40 22.8 +3.1**
**TLCR 7.28 57** P **Pn 15 40 22.8 +3.1**
**MLSB Milas 7.29 123** *e*P **Pn 15 40 22.9 +3.0**
**IDI Anoyia 7.29 148** *e*P **Pn 15 40 21.5 +1.5**
**IDI Anoyia 7.29 148** **Pn 15 40 19.5 -0.5**
**IDI Anoyia 7.29 148** S **Sn 15 41 42.2 -0.5**
IDI P **Pn 15 40 19.5 -0.5**
**IDI Anoyia 7.29 148** Pn **Pn 15 40 19.4 -0.6**
comp=Z,12nm,0.3s,baz=352,slow=12,SNR=15
IDI Sn **Sn 15 41 41.3 -1.4**
comp=Z,12nm,0.3s,baz=343,slow=17,SNR=2.0
IDI LR LR 15 43 22.6
comp=Z,3μm,20.8s,baz=343,slow=40
**RAVA Ravarino 7.33 299** P **Pn 15 40 22.8 +2.4**
**MEZ Mezhgor'ye 7.34 18** P **Pn 15 40 22.8 +2.2**
**ADVT Abdulvahap 7.35 96** *e*P **Pn 15 40 24.9 +4.2**
**KBA Koelnbreinsper 7.35 321** *i* Pn **Pn 15 40 22.6 +1.7**
comp=Z,384nm,0.4s,SNR=450
KBA *e*Sn **Sn 15 41 46.6 +2.4**
comp=Z,313nm,0.8s
**KBA Koelnbreinsper 7.35 321** ⇑P **Pn 15 40 22.1 +1.1**
**KBA Koelnbreinsper 7.35 321** *e*Pn **Pn 15 40 22.9 +2.0**
**GVD Gavdhos 7.40 154** *e*P **Pn 15 40 23.2 +1.7**
**CAVI Cavuskoy 7.48 97** *e*P **Pn 15 40 26.4 +3.9**
**MAIM Mastiano 7.48 291** P **Pn 15 40 22.8 +0.3**
**JAVC Velka Javorina 7.50 347** *e*PN **Pn 15 40 25.2 +2.4**
**KOLS Kolonicke sedl 7.52 11** *e*P **Pn 15 40 25.6 +2.6**
KOLS *e* 15 41 49.5
KOLS MLR MLR
comp=Z,400nm,0.6s
**KOLS Kolonicke sedl 7.52 11** *e*PN **Pn 15 40 25.6 +2.6**
KOLS *e*SN **Sn 15 41 49.5 +1.5**
KOLS *e*LG Lg 15 42 04.3
**DAT Datca 7.53 128** *e*P **Pn 15 40 25.8 +2.5**
**GSCL Gusciola 7.54 295** P **Pn 15 40 25.2 +1.9**
**ABTA Abfaltersbach 7.54 316** *i* Pn **Pn 15 40 24.9 +1.4**
comp=Z,596nm,0.4s,SNR=527
ABTA *e*Sn **Sn 15 41 47.5 -1.3**
comp=Z,334nm,0.7s
**MOA Molln 7.54 328** *i* Pn **Pn 15 40 26.3 +2.8**
comp=Z,540nm,0.7s,SNR=341
MOA *i* Sn **Sn 15 41 51.4 +2.6**
comp=Z,403nm,0.5s
**MOA Molln 7.54 328** *e*Pn **Pn 15 40 26.5 +3.1**
MOA *e*Sn **Sn 15 41 52.2 +3.4**
**KSV Kosov 7.59 26** P **Pn 15 40 26.7 +2.6**
**LANS Liptovska Anna 7.60 357** *e*P **Pn 15 40 27.8 +3.6**
LANS *e* 15 41 50.3
LANS MLR MLR
comp=Z,200nm,1.0s
**LANS Liptovska Anna 7.60 357** *e*PN **Pn 15 40 27.8 +3.6**
LANS *e*SN **Sn 15 41 50.3 +0.2**
LANS *e*LG Lg 15 42 08.7
**VLC Villacollemand 7.62 293** S **Sn 15 41 54.2 +3.6**
**VLC Villacollemand 7.62 293** P **Pn 15 40 24.7 +0.2**
**BIOA Bad Ischl, Aus 7.68 325** *i* Pn **Pn 15 40 27.0 +1.8**
comp=Z,797nm,0.6s,SNR=767
BIOA *e*Sn **Sn 15 41 55.7 +3.7**
comp=Z,409nm,0.8s
**YER Yerkesik 7.70 122** *e*P **Pn 15 40 29.3 +3.6**
**IAS Iasi 7.73 41** ⇑P **Pn 15 40 28.8 +2.9**
**IAS Iasi 7.73 41** P **Pn 15 40 28.8 +2.9**
**SAUV Serdivan-Sakar 7.73 93** *e*P **Pn 15 40 30.7 +4.7**
**STNU Starunia 7.78 22** P **Pn 15 40 29.7 +3.1**
**EQUI Equi 7.78 293** P **Pn 15 40 26.7 0.0**
**NIE Niedzica 7.85 1** *e*P **Pn 15 40 31.4 +3.8**
NIE *e*S **Sn 15 42 02.5 +6.2**
**NIE Niedzica 7.85 1** P **Pn 15 40 30.5 +2.9**
comp=Z,285nm,0.8s,comp=Z,2μmcomp=Z,0.8nm
**LESA Schwarzleotal 7.92 320** *i* Pn **Pn 15 40 30.6 +2.0**
comp=Z,766nm,0.5s
LESA *i* Sn **Sn 15 42 01.3 +3.3**
comp=Z,140nm,0.5s
**GULT Gulveren 7.93 95** *e*P **Pn 15 40 32.7 +4.0**
**KRUC Moravsky 7.94 342** *e*PN **Pn 15 40 30.0 +1.1**
KRUC *e*SN **Sn 15 41 59.2 +0.7**
**MAUC Maruska 7.96 349** *e*PN **Pn 15 40 34.4 +2.2**
MAUC *e*SN **Sn 15 41 59.7 +0.6**
**MORS Morshin 8.01 18** P **Pn 15 40 32.1 +2.3**
**ZKR Zakros 8.02 142** *e*P **Pn 15 40 32.2 +2.3**
**RJOB Jochberg 8.09 322** *e*Pn **Pn 15 40 34.1 +3.2**
**VRAC Vranov 8.13 343** *e*PN **Pn 15 40 32.1 +0.7**
VRAC *e*SN **Sn 15 42 04.3 +1.1**
**VRAC Vranov 8.13 343** Pn **Pn 15 40 32.8 +1.4**
comp=Z,5.8nm,0.3s,baz=178,slow=13,SNR=60
VRAC Sn **Sn 15 42 02.6 -0.5**
comp=Z,7.9nm,0.3s,baz=124,slow=15,SNR=2.4
VRAC Lg Lg 15 42 47.4
baz=128,slow=17
VRAC LR LR 15 43 54.6
comp=Z,7μm,18.8s,baz=166,slow=40
comp=Z,62nm,0.6s
**VRAC Vranov 8.13 343** ⇑P **Pn 15 40 33.2 +1.8**
**DALY Dalyan (Mula) 8.13 123** *e*P **Pn 15 40 33.9 +2.4**
**KARP Karpathos 8.14 135** *e*P **Pn 15 40 33.9 +2.2**
**KARP Karpathos 8.14 135** **Pn 15 40 34.4 +2.7**
**KARP Karpathos 8.14 135** ⇑P **Pn 15 40 34.8 +3.1**
**KARP Karpathos 8.14 135** P **Pn 15 40 33.9 +2.2**
**APMY Acipayam-Deniz 8.18 117** *e*P **Pn 15 40 34.7 +2.5**
**ARG Arkhangelos 8.20 128** *e*P **Pn 15 40 34.7 +2.3**
**MILM Milestii Mici 8.20 46** *e*P **Pn 15 40 34.4 +2.0**
MILM *e*S **Sn 15 42 12.0 +7.1**
MILM *e*L L 15 43 44.0
MILM LRM MLR 15 44 38.0
comp=Z,5μm,11.0s
**MILM Milestii Mici 8.20 46** *e*P **Pn 15 40 34.4 +2.0**
MILM *e*S **Sn 15 42 12.0 +7.1**
MILM MLR MLR
comp=Z,5μm,11.0s
**KIS Kishinev 8.26 46** **Pn 15 40 35.5 +2.3**
**KIS Kishinev 8.26 46** *e*P **Pn 15 40 34.9 +1.8**
comp=Z,170nm,0.7s
KIS *e*S **Sn 15 42 15.0 +8.8**
KIS *e*L L 15 43 52.0
KIS LRM MLR 15 44 44.0
comp=Z,2μm,10.4s
**KIS Kishinev 8.26 46**⇑ P **Pn 15 40 35.5 +2.3**
**KIS Kishinev 8.26 46** *e*P **Pn 15 40 34.9 +1.8**
KIS *e*S **Sn 15 42 15.0 +8.8**
KIS pmax pmax
comp=Z,170nm,0.7s
KIS MLR MLR
comp=Z,2μm,10.4s
**KIS Kishinev 8.26 46** P **Pn 15 40 35.2 +2.1**
comp=Z,222nm,0.7s,comp=Z,3μm
**KWP Kalwaria Pacla 8.26 12** *e*P **Pn 15 40 36.9 +3.7**
**KWP Kalwaria Pacla 8.26 12** **Pn 15 40 36.2 +3.0**
**KWP Kalwaria Pacla 8.26 12** ⇑P **Pn 15 40 37.2 +4.0**
**KWP Kalwaria Pacla 8.26 12** P **Pn 15 40 36.2 +3.0**
**KMPD K-Podol'skiy 8.30 30** P **Pn 15 40 35.0 +1.3**
KMPD P **Pn 15 40 34.6 +0.9**
**WTTA Wattenberg 8.33 316** *i* Pn **Pn 15 40 35.8 +1.5**
comp=Z,185nm,0.4s,SNR=289
WTTA *e*Sn **Sn 15 42 09.4 +1.0**
comp=Z,603nm,0.6s
**WTTA Wattenberg 8.33 316** *e*Pn **Pn 15 40 36.3 +1.9**
WTTA *e*Sn **Sn 15 42 11.6 +3.3**
**CKRC Cesky Krumlov 8.34 332** *e*PN **Pn 15 40 37.3 +3.0**
CKRC AMS AMS 15 44 00.0
comp=Z,13μm,12.9s
**CKRC Cesky Krumlov 8.34 332** *e*P **Pn 15 40 37.3 +3.0**
CKRC MLR MLR
comp=Z,13μm,12.9s
**PGF Pioggiola 8.35 280** *e*Pn **Pn 15 40 36.2 +1.6**
**PGF Pioggiola 8.35 280** ⇑P **Pn 15 40 35.3 +0.8**
**OKC Ostrava-Krasne 8.39 351** *e*PN **Pn 15 40 37.4 +2.5**
**OKC Ostrava-Krasne 8.39 351** *e*P **Pn 15 40 37.4 +2.5**
**TREC Trest 8.39 339** *e*PN **Pn 15 40 37.5 +2.5**
TREC AMS AMS 15 44 10.0
comp=Z,16μm,12.2s
**TREC Trest 8.39 339** *e*P **Pn 15 40 37.5 +2.5**
TREC MLR MLR
comp=Z,16μm,12.2s
**MORC Moravsky Berou 8.41 348** **Pn 15 40 34.2 -1.0**
**MORC Moravsky Berou 8.41 348** *e*PN **Pn 15 40 36.6 +1.3**
MORC *e*SN **Sn 15 42 12.3 +2.3**
**MORC Moravsky Berou 8.41 348** ⇑P **Pn 15 40 37.1 +1.9**
**MORC Moravsky Berou 8.41 348** P **Pn 15 40 34.2 -1.0**
**WATA Walderalm 8.41 316** *i* Pn **Pn 15 40 37.4 +2.0**
comp=Z,414nm,0.3s,SNR=526
WATA *e*Sn **Sn 15 42 11.1 +0.8**
comp=Z,578nm,0.8s
**MDUB Mudurnu 8.43 94** *e*P **Pn 15 40 39.1 +3.4**
**VSL Villasalto 8.46 259** ⇑P **Pn 15 40 35.8 -0.1**
**BASM Basmaki-Afyon 8.46 112** *e*P **Pn 15 40 39.1 +3.1**
**CAME Cameli-Denizli 8.47 120** *e*P **Pn 15 40 39.3 +3.0**
**FETY Fethiye 8.52 122** *e*P **Pn 15 40 38.8 +2.0**
**SHUT Suhut-Afyon 8.53 107** *e*P **Pn 15 40 39.5 +2.4**
**SQTA Sankt Quirin 8.53 314** *i* Pn **Pn 15 40 38.9 +1.9**
comp=Z,146nm,0.3s,SNR=397
SQTA *e*Sn **Sn 15 42 12.4 -0.7**
comp=Z,318nm,0.5s
**GEC2 GERESS Array S 8.58 330** *e*Pn **Pn 15 40 40.1 +2.4**
**GERES GERESS Array B 8.58 330** **Pn 15 40 39.1 +1.5**
**GERES GERESS Array B 8.58 330** Pn **Pn 15 40 39.5 +1.9**
comp=Z,42nm,0.3s,baz=161,slow=21,SNR=920
GERES Sn **Sn 15 42 13.8 -0.4**
comp=Z,11nm,0.3s,baz=157,slow=35,SNR=2.2
GERES Lg Lg 15 43 02.9
comp=Z,4.1nm,0.3s,baz=146,slow=23,SNR=1.5
GERES LR LR 15 44 26.3
comp=Z,7μm,20.3s,baz=145,slow=41
**PURM Purcari 8.58 51** **Pn 15 40 38.9 +1.3**
**PURM Purcari 8.58 51** ⇑P **Pn 15 40 38.8 +1.3**
**PURM Purcari 8.58 51** P **Pn 15 40 38.3 +0.7**
comp=Z,280nm,0.7s,comp=Z,6μm
**OJC Ojcow 8.66 359** *e*P **Pn 15 40 41.7 +3.0**
OJC *e*S **Sn 15 42 15.4 -0.6**
**OJC Ojcow 8.66 359** **Pn 15 40 40.5 +1.9**
**OJC Ojcow 8.66 359** ⇓P **Pn 15 40 41.5 +2.9**
**OJC Ojcow 8.66 359** P **Pn 15 40 40.5 +1.9**
**MOTA Moosalm 8.66 315** *i* Pn **Pn 15 40 40.4 +1.5**
comp=Z,1μm,0.8s
MOTA *e*Sn **Sn 15 42 20.0 +3.5**
comp=Z,549nm,0.7s
**FETA Feichten 8.67 312** *i* Pn **Pn 15 40 39.7 +0.7**
comp=Z,140nm,0.5s,SNR=188
FETA *i* Sn **Sn 15 42 18.3 +1.5**
comp=Z,226nm,0.8s
**NDNU Novodnistrovsk 8.68 34** P **Pn 15 40 39.3 +0.3**
**LVV L'vov 8.69 17** *e*P **Pn 15 40 41.1 +2.1**
LVV *e*S **Sn 15 42 18.9 +2.1**
LVV MLR MLR
comp=Z,2μm,11.0s
**LVV L'vov 8.69 17** P **Pn 15 40 41.8 +2.8**
**SORM Soroca 8.78 39** **Pn 15 40 41.7 +1.5**
**SORM Soroca 8.78 39** ⇑P **Pn 15 40 41.7 +1.5**
**SORM Soroca 8.78 39** P **Pn 15 40 41.7 +1.5**
**SORM Soroca 8.78 39** P **Pn 15 40 41.6 +1.3**
comp=Z,114nm,0.8s,comp=Z,1μm
**KRLC Kraliky 8.82 346** *e*PN **Pn 15 40 44.2 +3.2**
KRLC AMS AMS 15 44 50.0
comp=Z,9μm,10.1s
**KRLC Kraliky 8.82 346** *e*P **Pn 15 40 44.2 +3.2**
KRLC MLR MLR
comp=Z,9μm,10.1s
**KHC Kasperske Hory 8.86 331** ⇑P **Pn 15 40 43.0 +1.6**
**KHC Kasperske Hory 8.86 331** *e*PN **Pn 15 40 43.5 +2.0**
KHC *e*SN **Sn 15 42 21.3 +0.2**
KHC *ex* x 15 42 37.5
KHC AMS AMS 15 44 30.0
comp=Z,14μm,16.9s
**KHC Kasperske Hory 8.86 331***c* *i* P **Pn 15 40 43.1 +1.6**
KHC pmax pmax
comp=Z,784nm,0.8s
**KHC Kasperske Hory 8.86 331** P **Pn 15 40 43.1 +1.6**
comp=Z,516nm,0.8s,comp=Z,4μm
**ZVC Zvikov 8.91 334** AMS AMS 15 44 30.0
comp=Z,16μm,14.1s
**RETA Reutte 8.93 315** *i* Pn **Pn 15 40 43.2 +0.7**
comp=Z,99nm,0.4s,SNR=119
RETA *i* Sn **Sn 15 42 26.4 +3.4**
comp=Z,206nm,0.5s
**ELL Elmali 8.98 119** *e*P **Pn 15 40 45.7 +2.4**
**DAVOX Davos/Dischmat 9.03 309** Pn **Pn 15 40 45.0 +1.1**
comp=Z,190nm,0.5s,baz=118,slow=12,SNR=242
DAVOX Sn **Sn 15 42 25.1 -0.4**
comp=Z,14nm,0.3s,baz=169,slow=23,SNR=1.8
DAVOX Lg Lg 15 43 18.4
comp=Z,7.3nm,0.3s,baz=70,slow=17,SNR=3.5
DAVOX LR LR 15 44 37.9
comp=Z,3μm,21.6s,baz=111,slow=41
**AKAS Kas 9.10 123** *e*P **Pn 15 40 47.1 +2.3**
**FUR Furstenfeldbru 9.11 319** *e*Pn **Pn 15 40 46.5 +1.6**
**KORT Korkueli 9.13 117** *e*P **Pn 15 40 47.1 +1.8**
**WETT Wettzell 9.13 328** *e*Pn **Pn 15 40 46.5 +1.3**
**GOPC GO Pecny, Ondr 9.14 338** *e*PN **Pn 15 40 48.3 +3.0**
GOPC AMS AMS 15 44 40.0
comp=Z,14μm,10.7s
**GOPC GO Pecny, Ondr 9.14 338** *e*P **Pn 15 40 48.3 +3.0**
GOPC MLR MLR
comp=Z,14μm,10.7s
**DPC Dobruska-Polom 9.18 344** *e*PN **Pn 15 40 48.6 +2.8**
DPC AMS AMS 15 45 00.0
comp=Z,10μm,14.9s
**DPC Dobruska-Polom 9.18 344** *e*P **Pn 15 40 48.6 +2.8**
DPC MLR MLR
comp=Z,10μm,14.9s
**DPC Dobruska-Polom 9.18 344** P **Pn 15 40 47.6 +1.8**
comp=Z,104nm,1.0s,comp=Z,1μm
**PRU Pruhonice 9.28 337** *e*PN **Pn 15 40 49.4 +2.2**
PRU AMS AMS 15 44 40.0
comp=Z,16μm,11.2s
**PRU Pruhonice 9.28 337** *e*P **Pn 15 40 49.4 +2.2**
PRU MLR MLR
comp=Z,16μm,11.2s
**DAVA Damuels 9.30 311** *i* Pn **Pn 15 40 48.4 +0.8**
comp=Z,50nm,0.3s,SNR=101
DAVA *e*Sn **Sn 15 42 33.3 +1.2**
comp=Z,305nm,0.7s
**DAVA Damuels 9.30 311** ⇑P **Pn 15 40 48.2 +0.5**
**DAVA Damuels 9.30 311** *e*Pn **Pn 15 40 49.0 +1.4**
DAVA *e*Sn **Sn 15 42 33.5 +1.4**
**PRA Prague 9.39 337** *e*PN **Pn 15 40 51.4 +2.8**
PRA AMS AMS 15 44 50.0
comp=Z,15μm,12.1s
**PRA Prague 9.39 337** *e*P **Pn 15 40 51.4 +2.8**
PRA MLR MLR
comp=Z,15μm,12.1s
**UPC Upice 9.39 344** *e*PN **Pn 15 40 51.5 +2.8**
UPC AMS AMS 15 45 10.0
comp=Z,9μm,12.1s

**UPC Upice** 9.39 344 *e*P Pn 15 40 51.5 +2.8
UPC MLR MLR
comp=Z,9μm,12.1s
**OSTC Ostas** 9.39 344 *e*PN Pn 15 40 51.8 +3.1
OSTC AMS AMS 15 45 00.0
comp=Z,9μm,15.3s
**OSTC Ostas** 9.39 344 *e*P Pn 15 40 51.8 +3.1
OSTC MLR MLR
comp=Z,9μm,15.3s
**UBR Ueberruh** 9.40 314 *e*Pn Pn 15 40 49.8 +0.8
**CHVC Chvalec** 9.46 344 AMS AMS 15 45 00.0
comp=Z,8μm,14.9s
**PLONS Plons/SG** 9.46 309 *e*Pn Pn 15 40 51.4 +1.7
**MONC Moncucco Torin** 9.57 296 ⇑P Pn 15 40 50.7 -0.4
**SBF Sospel** 9.63 288 *e*Pn Pn 15 40 51.8 -0.3
SBF *e*Sn Sn 15 42 33.4 -6.7
comp=Z,271nm,0.7s
**KSP Ksiaz** 9.65 345 *e*P Pn 15 40 54.6 +2.3
**KSP Ksiaz** 9.65 345 ⇓P Pn 15 40 55.0 +2.8
**ANTO Ankara** 9.76 96 P Pn 15 41 00.5 +6.7
**PVCC Panska Ves** 9.76 339 *e*PN Pn 15 40 56.1 +2.4
**PVCC Panska Ves** 9.76 339 *e*P Pn 15 40 56.1 +2.4
**NORI Noerdlinger Ri** 9.81 320 *e*Pn Pn 15 40 54.9 +0.5
**ROTZ Rotzenmuhle** 9.90 329 *e*Pn Pn 15 40 55.9 +0.3
**LUBAR Lubar, Ukraine** 9.90 30 P Pn 15 40 56.0 +0.4
**RICC Richard** 9.91 337 *e*PN Pn 15 40 57.9 +2.2
**WILA Wila** 9.93 310 *e*Pn Pn 15 40 56.5 +0.4
**WALHA Wallhausen, DE** 9.99 312 *e*Pn Pn 15 40 57.3 +0.5
**MANZ Manzenberg** 10.11 329 *e*Pn Pn 15 40 59.2 +0.6
**HSKC Hora Svate Kat** 10.17 335 *e*PN Pn 15 41 01.1 +1.8
HSKC AMS AMS 15 45 10.0
comp=Z,14μm,13.5s
**EMING Emmingen-Lipti** 10.22 312 *e*Pn Pn 15 41 00.1 -0.1
**LMR La Mourre** 10.23 284 *e*Pn Pn 15 41 00.2 0.0
LMR *e*Sn Sn 15 42 47.9 -6.8
comp=Z,17nm,0.4s
**GRFO Grafenberg** 10.24 325 Pn Pn 15 41 00.0 -0.3
**GRFO Grafenberg** 10.24 325 P Pn 15 41 00.0 -0.3
**GRFO Grafenberg** 10.24 325 *e*Pn Pn 15 41 00.5 +0.1
**GRA1 Grafenberg Arr** 10.24 325 Pn Pn 15 41 00.1 -0.2
**GRF Grafenberg Arr** 10.24 325 P Pn 15 41 00.1 -0.2
**GRF Grafenberg Arr** 10.24 325 *e*Pn Pn 15 41 00.5 +0.1
**BRG Berggiesshubel** 10.24 337 *i*P Pn 15 41 02.5 +2.0
BRG Amp 15 41 04.2
comp=Z,63nm,0.8s
BRG r 15 41 45.6
BRG r 15 43 16.2
BRG r 15 44 03.1
BRG Amp 15 44 29.3
comp=Z,225nm,1.2s
**BRG Berggiesshubel** 10.24 337 *e*Pn Pn 15 41 02.4 +2.0
**KEST Kesra** 10.26 239 Pn Pn 15 41 02.9 +2.3
comp=Z,1.2nm,0.3s,baz=338,slow=3.0,SNR=32
**KEST Kesra** 10.26 239 P Pn 15 41 04.0 +3.3
SNR=13
**MBDF Montbardon** 10.27 292 *e*Pn Pn 15 40 59.9 -1.0
MBDF *e*Sn Sn 15 42 48.6 -7.3
comp=Z,192nm,0.6s
**BEL Belsk** 10.28 2 *e*P Pn 15 41 05.3 +4.4
**BEL Belsk** 10.28 2 ⇓P Pn 15 41 05.3 +4.4
**TANN Tannenbergstha** 10.33 332 *e*Pn Pn 15 41 02.6 +1.0
**MI29 MI29, Kamyanyy** 10.34 29 P Pn 15 41 04.4 +2.7
**SLE Schleitheim** 10.35 311 *e*Pn Pn 15 41 01.4 -0.4
**BNI Bardonecchia** 10.41 294 ⇑P Pn 15 41 01.7 -1.1
**BR131 Keskin Array S** 10.42 96 Pn Pn 15 41 07.1 +4.1
**BR131 Keskin Array S** 10.42 96 P Pn 15 41 05.4 +2.4
**BR131 Keskin Array S** 10.42 96⇑*e*P Pn 15 41 07.8 +4.8
**BRTR Keskin Array B** 10.42 96 Pn Pn 15 41 04.8 +1.9
comp=Z,0.4nm,0.3s,baz=279,slow=10,SNR=16
BRTR Lg Lg 15 44 05.0
baz=185,slow=25
BRTR LR LR 15 45 50.8
comp=Z,3μm,18.3s,baz=296,slow=42
**RNPP5 Staryi Chortor** 10.44 20 P Pn 15 41 04.4 +1.4
**SULZ Cheisacher** 10.45 309 *e*Pn Pn 15 41 03.4 +0.2
**METMA Mettma DE** 10.46 310 *e*Pn Pn 15 41 02.9 +0.5
**LPG La Plagne** 10.48 296 *e*Pn Pn 15 41 01.2 -2.8
LPG *e*Sn Sn 15 42 52.4 -9.0
comp=Z,504nm,0.7s
**PLN Plauen** 10.50 331 *e*Pn Pn 15 41 04.6 +0.8
**LPL La Plagne** 10.50 297 *e*Pn Pn 15 41 02.8 -1.4
LPL *e*Sn Sn 15 42 51.7 -10
comp=Z,359nm,0.6s
**LPL La Plagne** 10.50 297 P Pn 15 41 02.1 -2.1
**RNPP8 Varash** 10.53 20 P Pn 15 41 06.0 +1.7
**STU Stuttgart** 10.56 317 ⇑P Pn 15 41 03.6 -1.0
**STU Stuttgart** 10.56 317 *e*Pn Pn 15 41 05.3 +0.6
**BALST Balsthal** 10.60 307 *e*Pn Pn 15 41 05.6 +0.3
**RNPP9 Sopachiv** 10.61 20 P Pn 15 41 07.1 +1.8
**MI30 MI30,Zelenitsa** 10.73 29 P Pn 15 41 08.8 +1.7
**SIM Simferopol'** 10.74 67 *e*P Pn 15 41 06.9 -0.2
SIM *e*S Sn 15 43 11.3 +4.2
SIM pmax pmax
comp=Z,34nm,1.0s
SIM smax smax
comp=E,159nm,1.1s
**BFO Black Forest** 10.75 313 Pn Pn 15 41 06.7 -0.7
**BFO Black Forest** 10.75 313 ⇑P Pn 15 41 06.6 -0.7
**BFO Black Forest** 10.75 313 P Pn 15 41 06.7 -0.7
**BFO Black Forest** 10.75 313 *e*Pn Pn 15 41 07.1 -0.3
**KIRS Kirsehir-Merke** 10.79 98 Pn Pn 15 41 11.0 +3.0
**KIRS Kirsehir-Merke** 10.79 98 ⇓P Pn 15 41 11.0 +3.0
**MOX Moxa** 10.83 330 *e*Pn Pn 15 41 08.9 +0.5
**CLL Collm** 10.91 336 *i*Pn Pn 15 41 10.8 +1.3
comp=Z,135nm,1.5s
CLL *e*Pg 15 41 57.0
CLL *e*Sb Sn 15 43 40.0 +29
CLL *i*x x 15 44 03.5
CLL *e*Sg 15 44 19.0
CLL AMS AMS 15 45 00.0
**CLL Collm** 10.91 336 *i*P Pn 15 41 10.8 +1.3
CLL pmax pmax
comp=Z,135nm,1.5s
CLL MLR MLR
comp=Z,11μm,15.3s
**CLL Collm** 10.91 336 P Pn 15 41 10.4 +0.9
comp=Z,55nm,0.8s,comp=Z,937nm
**CLL Collm** 10.91 336 *e*Pn Pn 15 41 11.4 +2.0
**ORIF Oris-en-Rattie** 10.93 293 *e*Pn Pn 15 41 09.2 -0.7
ORIF *e*Sn Sn 15 43 03.7 -8.3
comp=Z,402nm,0.9s
**AK13 Malin Array Si** 10.95 31 P Pn 15 41 11.5 +1.4
**AK07 Malin Array Si** 10.96 32 P Pn 15 41 11.6 +1.4
**SMRF Simiane la Rot** 10.98 288 *e*Pn Pn 15 41 10.1 -0.4
SMRF *e*Sn Sn 15 43 06.0 -7.1
comp=Z,75nm,0.9s
**AK14 Malin Array Si** 10.99 31 P Pn 15 41 12.0 +1.5
**AK12 Malin Array Si** 11.01 31 P Pn 15 41 12.4 +1.5
**AK05 Malin Array Si** 11.02 32 P Pn 15 41 12.4 +1.5
**AK10 Malin Array Si** 11.02 32 P Pn 15 41 12.5 +1.6
**AK19 Malin Array Si** 11.02 31 P Pn 15 41 12.5 +1.5
**AK20 Malin Array Si** 11.04 31 P Pn 15 41 12.5 +1.3
**RUSF Rustrel** 11.04 287 ⇑P Pn 15 41 14.8 +3.5
**AK09 Malin Array Si** 11.04 32 P Pn 15 41 12.7 +1.4
**AK15 Malin Array Si** 11.04 31 P Pn 15 41 12.7 +1.4
**AK18 Malin Array Si** 11.04 31 P Pn 15 41 12.6 +1.3
**AK02 Malin Array Si** 11.04 32 P Pn 15 41 12.8 +1.5
**AK08 Malin Array Si** 11.05 32 P Pn 15 41 12.8 +1.5
**AK11 Malin Array Si** 11.05 31 P Pn 15 41 12.7 +1.4
**AK01 Malin Array Si** 11.07 31 P Pn 15 41 13.1 +1.4
**AK22 Malin Array Si** 11.07 31 P Pn 15 41 13.1 +1.4
**KIEV Kiev** 11.07 31 Pn Pn 15 41 13.3 +1.6
**KIEV Kiev** 11.07 31 *i*P Pn 15 41 13.9 +2.2
SNR=14
**KIEV Kiev** 11.07 31 ⇑P Pn 15 41 13.9 +2.2
**KIEV Kiev** 11.07 31 P Pn 15 41 13.3 +1.6
**KIEV Kiev** 11.07 31 P Pn 15 41 13.3 +1.6
comp=Z,197nm,1.0s,comp=Z,3μm
**AK21 Malin Array Si** 11.08 31 P Pn 15 41 13.1 +1.4
**AK04 Malin Array Si** 11.08 31 P Pn 15 41 13.1 +1.3
**AKASG Malin Array Be** 11.09 31 Pn Pn 15 41 12.4 +0.5
comp=Z,2.4nm,0.3s,baz=221,slow=13,SNR=19
AKASG Sn Sn 15 43 12.4 -3.2
baz=70,slow=31
AKASG Lg Lg 15 44 24.1
baz=211,slow=28
AKASG LR LR 15 45 55.8
comp=Z,3μm,18.7s,baz=215,slow=40
comp=Z,34nm,1.0s
**AKASG Malin Array Be** 11.09 31 *i*P Pn 15 41 12.6 +0.7
AKASG pmax pmax
comp=Z,22nm,0.7s
**AKBB Malin Array Si** 11.09 31 *de*P Pn 15 41 13.4 +1.5
**AKBB Malin Array Si** 11.09 31 P Pn 15 41 13.3 +1.4
**AK23 Malin Array Si** 11.10 31 P Pn 15 41 13.5 +1.5
**AK03 Malin Array Si** 11.11 31 P Pn 15 41 13.5 +1.4
**MILB Miltenberg** 11.21 321 *e*Pn Pn 15 41 14.7 +1.2
**NEUB Neuenburg** 11.23 332 *e*Pn Pn 15 41 15.8 +2.0
**CABF La Chapelle** 11.29 301 *e*Pn Pn 15 41 14.1 -0.7
CABF *e*Sn Sn 15 43 12.7 -8.1
comp=Z,424nm,0.9s
**ROTT Steinweiler** 11.32 316 *e*Pn Pn 15 41 16.5 +1.4
**HINF Hinteralfeld** 11.33 308 *e*Pn Pn 15 41 15.0 -0.3
HINF *e*Sn Sn 15 43 13.6 -8.1
comp=Z,150nm,0.6s
**ECH Echery** 11.35 310 Pn Pn 15 41 14.5 -1.0
**ECH Echery** 11.35 310 ⇑P Pn 15 41 14.6 -1.0
**ECH Echery** 11.35 310 P Pn 15 41 14.5 -1.0
**ECH Echery** 11.35 310 *e*Pn Pn 15 41 14.7 -0.8
**CDF Champ du Feu** 11.38 311 *e*Pn Pn 15 41 15.9 -0.2
CDF *e*Sn Sn 15 43 14.1 -9.0
comp=Z,163nm,0.9s
**KTD Kalmit** 11.47 317 *e*Pn Pn 15 41 18.5 +1.3
**UBBA Unterbreizbach** 11.61 326 *e*Pn Pn 15 41 18.7 -0.2
**HAU Haudompre** 11.72 308 *e*Pn Pn 15 41 20.4 -0.2
HAU *e*Sn Sn 15 43 23.1 -8.1
comp=Z,190nm,0.6s
**BODE Bodenheim** 11.74 319 *e*Pn Pn 15 41 22.2 +1.4
**VIVF Saint-Julien-l** 11.76 291 *e*Pn Pn 15 41 19.7 -1.4
VIVF *e*Sn Sn 15 43 24.0 -8.2
comp=Z,126nm,0.9s
**TATN Tataouine** 11.80 224 Pn Pn 15 41 20.2 -1.6
**GKP Gorka Klasztor** 11.87 351 *e*P Pn 15 41 26.4 +3.8
**GKP Gorka Klasztor** 11.87 351 *e*P Pn 15 41 27.3 +4.8
**TNS Taunus Mts** 11.87 321 *e*Pn Pn 15 41 23.6 +0.9
**SSB Saint Sauveur** 11.93 293 ⇑P Pn 15 41 21.7 -1.9
**ABH Alteburg** 12.09 318 *e*Pn Pn 15 41 26.4 +0.7
**GTTG Gottingen** 12.18 328 *e*Pn Pn 15 41 28.4 +1.6
**LASF Ste Croix** 12.22 287 *e*Pn Pn 15 41 26.2 -1.3
LASF *e*Sn Sn 15 43 36.2 -7.3
comp=Z,105nm,1.1s
**CLZ Clausthal** 12.26 330 *e*Pn Pn 15 41 34.0 +6.0
**CSS Mathistis** 12.28 118 P P 15 41 36.7 -3.9
**PAGF Fort de Pagny** 12.35 309 *e*Pn Pn 15 41 30.4 +1.3
**RIVT Riveris** 12.39 316 *e*Pn Pn 15 41 32.1 +2.3
**KASTN Kahler Asten** 12.57 324 *e*Pn Pn 15 41 33.1 +0.9
**SFTF Sexfontaines** 12.59 307 *e*Pn Pn 15 41 32.4 -0.1
SFTF *e*Sn Sn 15 43 44.0 -8.4
comp=Z,47nm,0.6s
**SUW Suwalki** 12.62 8 *e*P Pn 15 41 34.9 +2.1
**SUW Suwalki** 12.62 8 ⇑P Pn 15 41 35.5 +2.7
**SUW Suwalki** 12.62 8 *e*P Pn 15 41 35.0 +2.2
**WLF Walferdange** 12.69 314 P Pn 15 41 35.7 +1.8
**WLF Walferdange** 12.69 314 ⇑P Pn 15 41 34.6 +0.8
**WLF Walferdange** 12.69 314 *d*P Pn 15 41 36.1 +2.3
comp=Z,72nm,0.9s
**WLF Walferdange** 12.69 314 *e*Pn Pn 15 41 36.8 +3.0
**MEZF Maizieres J'vi** 12.71 308 *e*Pn Pn 15 41 34.4 +0.2
MEZF *e*Sn Sn 15 43 46.2 -9.3
comp=Z,118nm,0.8s
**AHRW Bad Neuenahr-A** 12.74 319 *e*Pn Pn 15 41 35.8 +1.2
**SMF Signal de Mont** 12.76 299 *e*Pn Pn 15 41 33.3 -1.5
SMF *e*Sn Sn 15 43 45.5 -11
comp=Z,247nm,0.8s
**EJON La Jonquera** 12.87 280 P Pn 15 41 36.2 -0.1
**NRDL Niedersach Rie** 12.88 331 *e*Pn Pn 15 41 39.2 +2.9
**LOR Lormes** 12.95 302 *e*Pn Pn 15 41 35.6 -1.8
LOR *e*Sn Sn 15 43 52.6 -8.7
comp=Z,82nm,0.4s
**LOR Lormes** 12.95 302 ⇑P Pn 15 41 34.5 -3.0
**ANN Anapa** 13.03 70 *e*P Pn 15 41 42.5 +4.1
ANN *e*S Sn 15 44 11.2 +8.1
ANN pmax pmax
comp=Z,24nm,0.7s
ANN MLR MLR
comp=Z,1μm,11.0s
**SSF Saint Saulge** 13.11 300 *e*Pn Pn 15 41 37.3 -2.3
SSF *e*Sn Sn 15 43 56.9 -8.3
comp=Z,85nm,0.6s
**AVF Avril sur Loir** 13.13 299 *e*Pn Pn 15 41 38.5 -1.3
AVF *e*Sn Sn 15 43 55.3 -10
comp=Z,83nm,0.7s
**AVF Avril sur Loir** 13.13 299 P Pn 15 41 37.9 -1.9
**BHOU Houvegnez** 13.17 317 *d*P Pn 15 41 41.2 +0.9
comp=Z,54nm,0.6s
**BTNL Ternell** 13.24 318 *d*P Pn 15 41 41.6 +0.2
comp=Z,73nm,0.8s
**BUG Bochum--Univer** 13.25 323 *e*Pn Pn 15 41 41.7 +0.3
**ETOS Mallorca** 13.28 268 P Pn 15 41 43.1 +1.1
**MEM Membach** 13.32 318 *d*P Pn 15 41 43.7 +1.3
comp=Z,84nm,0.8s
**MTLF Montolieu** 13.36 284 *e*Pn Pn 15 41 44.0 +1.0
**MTLF Montolieu** 13.36 284 ⇑P Pn 15 41 42.6 -0.3
**BGF Bois d'Agland** 13.39 298 *e*Pn Pn 15 41 40.9 -2.6
BGF *e*Sn Sn 15 44 01.8 -10
comp=Z,107nm,0.5s
**RCHB Rochefort** 13.46 315 *d*P Pn 15 41 44.0 -0.3
comp=Z,118nm,0.7s
**BCLA Clavier** 13.57 316 *d*P Pn 15 41 46.6 +0.8
**CAF Calviac** 13.60 290 *e*Pn Pn 15 41 46.5 +0.2
CAF *e*Sn Sn 15 44 05.9 -11
comp=Z,53nm,0.9s
**BEBN Eben Emael** 13.60 318 *d*P Pn 15 41 48.3 +2.1
comp=Z,200nm,0.6s
**GIVF Givet** 13.65 314 *e*Pn Pn 15 41 47.4 +0.5
**GIVF Givet** 13.65 314 P Pn 15 41 48.9 +2.0
**IBBN Ibbenburen** 13.65 326 ⇑P Pn 15 41 48.3 +1.4
**IBBN Ibbenburen** 13.65 326 *e*Pn Pn 15 41 49.9 +3.1
**BGES Gesves** 13.66 315 *d*P Pn 15 41 47.4 +0.2
comp=Z,112nm,0.6s
**HYF Humbligny** 13.74 300 *e*Pn Pn 15 41 47.8 -0.3
HYF *e*Sn Sn 15 44 10.0 -10
comp=Z,348nm,0.6s
**TCF Toulx Ste Croi** 13.75 296 *e*Pn Pn 15 41 45.4 -3.0
TCF *e*Sn Sn 15 44 12.2 -8.7
comp=Z,52nm,0.7s
**DOU Dourbes** 13.77 314 *d*P Pn 15 41 48.9 +0.4
**BMRD Maredsous** 13.79 314 *d*P Pn 15 41 49.6 +0.9
comp=Z,177nm,0.6s
**MNK Minsk** 13.93 19 *i*P Pn 15 41 46.7 -3.9
MNK *i*P Pn 15 41 46.7 -3.9
MNK *i*P Pn 15 41 46.7 -3.9
comp=Z,88nm,1.0s,baz=205
MNK *i*PP PnPn 15 41 54.4 -4.1
MNK *i*PPP PPP 15 42 01.8
MNK *i*S Sn 15 44 20.3 -4.7
MNK *i*SS SnSn 15 44 33.7 -3.7
MNK *i*SSS SSS 15 44 46.1
MNK *i*LQ LQ 15 45 46.9
MNK *i*LR LR 15 46 50.8
MNK *i*LRM MLR 15 47 40.8
comp=E,2μm,15.9s
MNK *i*LRM MLR 15 47 46.5
comp=Z,3μm,16.9s
MNK *i*LRM MLR 15 48 42.8
comp=N,2μm,15.0s
**MNK Minsk** 13.93 19 *i*P Pn 15 41 46.7 -3.9
MNK *i*S Sn 15 44 20.2 -4.7
MNK pmax pmax
comp=Z,88nm,1.0s
MNK MLR MLR
comp=N,2μm,15.0s
**BAIF Baives** 13.96 313 *e*Pn Pn 15 41 52.3 +1.1
**BSD Bornholm Skovb** 13.99 347 *i*P P 15 41 59.2 -0.2
**RJF Les Rejaudoux** 14.04 292 *e*Pn Pn 15 41 50.3 -1.9
RJF *e*Sn Sn 15 44 19.8 -8.0
comp=N,23nm,0.7s
**NACGM Naroch** 14.05 16⇑*e*P Pn 15 41 52.9 +0.6
**PABE Paberze** 14.17 9 Pn Pn 15 41 55.4 +1.4
**PABE Paberze** 14.17 9 *e*P P 15 41 59.2 -2.3
**CLF Chambon-Foret** 14.23 303 ⇓P Pn 15 41 53.9 -0.9
**PBUR Paburge** 14.51 4 *e*P Pn 15 42 01.8 +3.1
**ISAL Salakas** 14.55 14 *e*P Pn 15 42 00.7 +1.5
**SOC Sochi** 14.56 76 *e*P Pn 15 41 58.7 -0.7
SOC *e* 15 44 41.3
SOC MLR MLR
comp=Z,860nm,16.0s
**VSVD Vaisvydziai** 14.63 8 *e*P Pn 15 42 02.2 +1.8
**HNTI Hanita** 14.64 121 P P 15 42 07.5 +0.6
**HNTI Hanita** 14.64 121 P Pn 15 42 00.4 -0.1
**EPF Esparros** 14.73 282 *e*Pn Pn 15 42 01.6 -0.2
**IZAR Zarasai** 14.74 14 *e*P P 15 42 05.2 -2.7
**OFRI `Ofer** 14.82 122 P Pn 15 42 02.7 -0.3
**MMA0 Mount Meron ar** 14.83 120 P Pn 15 42 05.9 +2.7
**MMA0B Mount Meron ar** 14.83 120 P Pn 15 42 02.9 -0.3
**MMAI Mount Meron Ar** 14.83 120 Pn Pn 15 42 04.5 +1.3
comp=Z,4.4nm,0.3s,baz=315,slow=11,SNR=19
MMAI LR LR 15 48 42.9
comp=Z,2μm,20.3s,baz=261,slow=41
comp=Z,56nm,1.0s
**BLGI Bet Lehem HaGe** 14.88 122 P P 15 42 07.4 -2.1
**BLGI Bet Lehem HaGe** 14.88 122 P Pn 15 42 03.4 -0.4
**GEM Giv'at Ha'Em** 14.88 119 P P 15 42 10.3 +0.8
**GEM Giv'at Ha'Em** 14.88 119 P Pn 15 42 03.4 -0.4
**NATI Neve Ativ** 14.89 119 P P 15 42 09.9 +0.3
**NATI Neve Ativ** 14.89 119 P Pn 15 42 04.0 +0.1
**COP Copenhagen** 15.00 343 *i*P P 15 42 14.5 +3.8
**SLTI Sal'it** 15.11 123 P P 15 42 11.7 -0.3
**SLTI Sal'it** 15.11 123 P Pn 15 42 06.3 -0.5
**KSHT Keshet** 15.12 119 P Pn 15 42 06.7 -0.3
**MMLI Mount Malkishu** 15.21 122 P Pn 15 42 08.1 -0.2
**ERBR Yeremizino-Bor** 15.29 67 *e*P Pn 15 42 09.4 +0.2
ERBR pmax pmax
comp=Z,34nm,0.6s
ERBR MLR MLR
comp=E,5μm,10.0s
**SALP Salfit** 15.31 123 P P 15 42 14.9 +0.5
**LABN Labinsk** 15.34 72 *e*P Pn 15 42 09.4 -0.5
LABN pmax pmax
comp=Z,29nm,0.5s
LABN MLR MLR
comp=Z,1μm,19.0s
**QRNJ Al-Qirein** 15.38 122 P P 15 42 17.3 +2.3
**ETSF Etsaut** 15.39 282 *e*Pn Pn 15 42 11.7 +1.1
**HMDT Nahal Hemdat** 15.40 122 P Pn 15 42 11.9 +1.2
**HMDT Nahal Hemdat** 15.40 122 P Pn 15 42 10.2 -0.5
**MFF Saint Martin d** 15.41 296 *e*Pn Pn 15 42 07.0 -3.8
MFF *e*Sn Sn 15 44 48.7 -13
comp=Z,114nm,1.2s
**MFF Saint Martin d** 15.41 296 ⇑P Pn 15 42 09.1 -1.6
**UJAP Al Uja** 15.56 123 P P 15 42 18.7 +1.6
**BALJ Balqa** 15.59 122 Pn Pn 15 42 12.4 -0.7
**BALJ Balqa** 15.59 122 P P 15 42 17.2 -0.2
**KZIT Kziot** 15.65 128 P Pn 15 42 11.9 -2.0
**KZIT Kziot** 15.65 128 P Pn 15 42 11.6 -2.4
**YTIR Yattir** 15.75 125 P P 15 42 19.8 +0.5
**YTIR Yattir** 15.75 125 P Pn 15 42 15.0 -0.4
**DSI Dead Sea** 15.77 124 P P 15 42 20.5 +1.1
**DSI Dead Sea** 15.77 124 P Pn 15 42 15.1 -0.5
**SJPF Ste Jean** 15.87 283 *e*Pn Pn 15 42 17.3 +0.5
**LDF La Druitiere** 15.92 303 *e*Pn Pn 15 42 16.6 -0.7
LDF *e*Sn Sn 15 45 04.5 -9.0
comp=Z,47nm,0.7s
**HSUJ Al Zarqa** 15.93 121 P P 15 42 24.9 +3.7
**MSBI Mazada** 15.94 125 ⇑P Pn 15 42 17.5 -0.1
**MSBI Mazada** 15.94 125 P Pn 15 42 17.7 +0.1
**MSBI Mazada** 15.94 125 P Pn 15 42 16.9 -0.7
**LISJ El Lisan** 16.06 125 P P 15 42 23.7 +1.1
**SLIT Slitere, Latvi** 16.14 4 ⇑P P 15 42 22.8 -0.5
**SLIT Slitere, Latvi** 16.14 4 *e*P P 15 42 23.1 -0.1
**ECHE Chera** 16.16 270 P P 15 42 24.8 +1.1
**VORD Divnogorie** 16.20 48 *e*P Pn 15 42 18.9 -2.0
VORD pmax pmax
comp=Z,50nm,0.9s
**FLN La Foliniere** 16.20 303 *e*Pn Pn 15 42 20.4 -0.5
FLN *e*Sn Sn 15 45 10.0 -10
comp=Z,63nm,1.0s
**VSR Storozhevoye** 16.25 47 *e*P Pn 15 42 19.9 -1.6
VSR pmax pmax
comp=Z,40nm,0.8s
**GRR Gorron** 16.32 302 *e*Pn Pn 15 42 20.6 -1.9
GRR *e*Sn Sn 15 45 12.5 -11
comp=Z,34nm,0.7s
**ASF Jabal al Asfar** 16.34 120 Pn Pn 15 42 23.6 +0.7
comp=Z,1.2nm,0.3s,baz=135,slow=0.0,SNR=2.8
comp=Z,5.2nm,0.6s
**ASF Jabal al Asfar** 16.34 120 P P 15 42 31.2 +5.4
**ZFRI Zfri** 16.36 127 P P 15 42 25.4 -0.6
**ZFRI Zfri** 16.36 127 P Pn 15 42 22.4 -0.7
**PRNI Paran** 16.41 128 P Pn 15 42 25.0 +1.3
**PRNI Paran** 16.41 128 P Pn 15 42 23.5 -0.2
**KRMI Paran Flat** 16.42 129 P Pn 15 42 23.5 -0.3
**VORR Voronezh** 16.49 46 *e*P Pn 15 42 22.5 -2.2
VORR pmax pmax
comp=Z,90nm,1.1s
**MUD Monsted U'grnd** 16.51 338 ⇓P P 15 42 28.3 +0.9
**MUD Monsted U'grnd** 16.51 338 *i*P Pn 15 42 26.0 +1.2
MUD IAmb IAmb 15 42 30.0
comp=Z,55nm,0.8s
**HRFI Mount Harif** 16.66 129 P P 15 42 30.2 +0.9
**HRFI Mount Harif** 16.66 129 P Pn 15 42 26.5 -0.4
**KIV Kislovodsk** 16.72 74 P P 15 42 32.7 +2.6
**KIV Kislovodsk** 16.72 74 P P 15 42 32.6 +2.6
KIV P P 15 42 32.6 +2.6
**KIV Kislovodsk** 16.72 74 *e*P P 15 42 31.3 +1.3
KIV *e*S Sn 15 45 38.1 +4.9
KIV pmax pmax
comp=Z,27nm,1.1s
KIV MLR MLR
comp=Z,375nm,14.0s
**KVAR Kislovodsk Arr** 16.73 74 Pn Pn 15 42 28.2 +0.4
baz=284,slow=21
comp=Z,8.7nm,0.7s
**MBRI Mt Berech** 16.77 130 P Pn 15 42 27.7 -0.7
**MBRI Mt Berech** 16.77 130 P Pn 15 42 27.9 -0.4
**LPSR Galich'ya Gora** 16.84 43 *e*P Pn 15 42 28.8 -0.2
LPSR pmax pmax
comp=Z,120nm,0.8s
**ETOB Tobarra** 16.84 267 P Pn 15 42 29.6 +0.3
**EMUR La Murta** 16.86 264 P Pn 15 42 28.9 -0.6
**KBZ Khabaz** 16.87 75 Pn P 15 42 30.8 -0.7
comp=Z,0.2nm,0.3s,baz=275,slow=14,SNR=1.9
KBZ LR LR 15 51 19.1
comp=Z,547nm,20.0s,baz=273,slow=45
comp=Z,6.0nm,0.9s
**KBZ Khabaz** 16.87 75*ce*P P 15 42 32.4 +0.9
KBZ pmax pmax
comp=Z,41nm,1.3s
**EIL Elat** 16.88 130 ⇑P Pn 15 42 29.1 -0.6
**EIL Elat** 16.88 130 Pn Pn 15 42 28.4 -1.3
comp=Z,0.6nm,0.3s,baz=331,slow=14,SNR=8.2
EIL Sn Sn 15 45 30.8 -6.4
comp=Z,0.8nm,0.3s,baz=272,slow=19,SNR=2.3
EIL LR LR 15 50 42.3
comp=Z,426nm,19.5s,baz=289,slow=43
comp=Z,12nm,0.9s
**EIL Elat** 16.88 130 P P 15 42 31.5 -0.2
**EIL Elat** 16.88 130 P Pn 15 42 29.1 -0.6
**AQBJ Aqaba** 16.89 130 P Pn 15 42 27.3 -2.6
**OVD Ostervraa, Den** 17.00 341 *i*P P 15 42 35.4 +2.5
**GOF Gofitskoye** 17.02 70*ce*P P 15 42 40.1 +7.0
**MTSE Matsula** 17.32 6 *e*P P 15 42 37.0 +0.6
**OBN Obninsk** 17.34 33 Pn Pn 15 42 34.5 -0.8
OBN IAmb IAmb 15 42 44.3
comp=Z,173nm,1.0s
**OBN Obninsk** 17.34 33 P Pn 15 42 34.6 -0.6
comp=Z,2.6nm,0.3s,baz=223,slow=7.9,SNR=12
OBN S Sn 15 45 48.0 +0.1
comp=Z,7.1nm,0.5s,baz=133,slow=21,SNR=1.0
OBN Lg Lg 15 47 41.5
comp=Z,2.5nm,0.3s,baz=127,slow=23,SNR=1.6
OBN LR LR 15 49 43.6
comp=Z,812nm,21.9s,baz=210,slow=39
comp=Z,81nm,0.8s
**OBN Obninsk** 17.34 33*ce*P Pn 15 42 34.5 -0.8
OBN pmax pmax
comp=Z,326nm,1.5s
OBN MLR MLR
comp=Z,710nm,15.0s
**SGMF Saint Gilles** 17.38 300 *e*Pn Pn 15 42 34.0 -1.8
SGMF *e*Sn Sn 15 45 36.4 -13
comp=Z,19nm,0.7s
**JSA Saint Aubin** 17.39 304 ⇑P Pn 15 42 35.0 -0.9
**VSU Vasula** 17.42 12 ⇑P P 15 42 38.1 +0.7
**VSU Vasula** 17.42 12*de*P P 15 42 37.9 +0.4
VSU pmax pmax
comp=Z,222nm,0.8s
**VRH Novokhopyorsk** 17.67 50 *e*P Pn 15 42 38.6 -0.8
VRH pmax pmax
comp=Z,95nm,1.4s
VRH MLR MLR
comp=Z,2μm,14.0s
**QUIF Quistinic** 17.70 299 *e*Pn Pn 15 42 38.2 -1.6
QUIF *e*Sn Sn 15 45 47.6 -9.1
comp=Z,47nm,0.8s
**QUIF Quistinic** 17.70 299 P Pn 15 42 39.5 -0.3
**UCM Universidad Co** 17.71 274 P Pn 15 42 38.8 -1.2
**ROSF Rostrenen** 17.86 300 *e*Pn Pn 15 42 38.9 -2.9
ROSF *e*Sn Sn 15 45 49.7 -11
comp=Z,7.5nm,0.4s

**ROSF Rostrenen 17.86 300** ⇑P **Pn 15 42 40.9 -0.9**
**ENIJ Nijar 17.89 262** P **P 15 42 43.3 +0.4**
**SWN1 Swindon 18.01 311** *e*P **P 15 42 44.8 +0.7**
SWN1 IAmb IAmb 15 42 47.0
comp=Z,551nm,1.4s
**MOS Moscow 18.21 33** *e*P **Pn 15 42 44.6 -1.4**
MOS *e*S **Sn 15 46 05.9 -3.0**
MOS pmax pmax
comp=Z,62nm,0.9s
MOS MLR MLR
comp=Z,500nm,12.0s
**ARBE Arbavere 18.26 10** *e*P **P 15 42 47.3 +0.6**
**CWF Charnwood Fore 18.30 315** *e*P **Pn 15 42 47.1 0.0**
CWF IAmb IAmb 15 42 48.0
comp=Z,147nm,1.2s
CWF IAMs_20 IAMs_20 15 50 18.4
comp=Z,4µm,14.7s
**STRD Stroud 18.33 311** *e*P **Pn 15 42 47.0 -0.5**
STRD IAmb IAmb 15 42 49.8
comp=Z,333nm,0.9s
**ESDC Sonseca Array 18.39 272** P **P 15 42 46.7 -1.7**
**ESDC Sonseca Array 18.39 272** P **P 15 42 47.2 -1.1**
comp=Z,0.1nm,0.3s,baz=71,slow=10,SNR=32
ESDC LR LR 15 50 57.5
comp=Z,1µm,18.3s,baz=78,slow=41
comp=Z,6.7nm,0.9s
**GNI Garni 18.65 86** P **Pn 15 42 55.1 +3.4**
**GNI Garni 18.65 86** ⇑P **Pn 15 42 55.3 +3.6**
**GNI Garni 18.65 86** P **Pn 15 42 52.3 +0.6**
comp=Z,1.4nm,0.3s,baz=334,slow=3.4,SNR=12
GNI LR LR 15 50 56.3
comp=Z,788nm,18.4s,baz=293,slow=40
comp=Z,37nm,0.8s
**GNI Garni 18.65 86** P **Pn 15 42 55.5 +3.8**
**GNI Garni 18.65 86** *de*P **Pn 15 42 54.6 +2.9**
GNI pmax pmax
comp=Z,225nm,1.9s
**SNART Snartemo 18.68 338** *e*P **Pn 15 42 51.8 +0.1**
SNART IAmb IAmb 15 43 09.6
comp=Z,109nm,0.8s
SNART *e*S **S 15 46 26.6 +3.0**
**PAB San Pablo 18.71 272** P **P 15 42 51.0 -0.9**
**PAB San Pablo 18.71 272** ⇓P **P 15 42 51.3 -0.6**
**PAB San Pablo 18.71 272** P **P 15 42 51.0 -0.9**
PAB pmax pmax
comp=Z,77nm,1.7s
**MONM Monmouth 18.72 311** *e*P **P 15 42 51.9 +0.1**
MONM IAmb IAmb 15 42 54.7
comp=Z,135nm,0.7s
**LBWR Ladybower, Pea 18.84 316** *e*P **P 15 42 53.2 0.0**
LBWR IAmb IAmb 15 42 54.1
comp=Z,120nm,0.8s
**MEF Metsahovi 18.86 7** *e*P **P 15 42 52.7 -0.5**
**DYA Yadsworthy 18.86 306** *e*P **P 15 42 53.1 -0.3**
DYA IAmb IAmb 15 42 54.6
comp=Z,228nm,1.2s
**STNC Stoke 18.95 315** *e*P **Pn 15 42 54.9 -0.1**
**HLM1 Long Mynd 19.05 313** *e*P **P 15 42 55.3 -0.1**
HLM1 IAmb IAmb 15 42 57.9
comp=Z,117nm,0.9s
**HPK Haverah Park 19.08 318** *e*P **P 15 42 55.8 0.0**
HPK IAmb IAmb 15 42 56.8
comp=Z,297nm,1.2s
**KONO Kongsberg 19.25 344** P **P 15 42 56.8 -0.8**
**KONO Kongsberg 19.25 344** *e*P **P 15 42 57.1 -0.6**
KONO IAmb IAmb 15 43 06.3
comp=Z,92nm,1.0s
KONO *e*S **Sn 15 46 30.4 -3.8**
**KONO Kongsberg 19.25 344** ⇑P **P 15 42 57.0 -0.7**
**KONO Kongsberg 19.25 344** *c i*P **P 15 42 56.5 -1.2**
KONO pmax pmax
comp=Z,63nm,1.0s
**PUL Pulkovo 19.29 16** ⇓*i*P **Pn 15 42 59.0 -0.1**
PUL pmax pmax
comp=Z,65nm,0.7s
**OSL Oslo 19.30 346** *e*P **P 15 42 57.8 -0.3**
OSL IAmb IAmb 15 43 05.6
comp=Z,122nm,1.0s
OSL *e*S **S 15 46 36.2 +0.1**
**HTL Hartland 19.38 307** *e*P **Pn 15 43 00.3 +0.1**
HTL IAmb IAmb 15 43 02.1
comp=Z,146nm,0.8s
**FOEL Foel Wylfa 19.39 314** *e*P **P 15 42 59.6 +0.4**
FOEL IAmb IAmb 15 43 01.4
comp=Z,144nm,0.8s
FOEL IAMs_20 IAMs_20 15 51 02.6
comp=Z,3µm,16.1s
**RAF Rauma 19.51 2** *e*P **P 15 43 00.4 0.0**
**CCA1 Carmenellis 19.58 305** *e*P **Pn 15 43 02.3 -0.3**
CCA1 IAmb IAmb 15 43 03.1
comp=Z,193nm,0.9s
**LLW Llanuwchllyn 19.62 313** *e*P **P 15 43 01.8 +0.1**
**EDMD Edmundbyers 19.72 320** *e*P **P 15 43 02.4 -0.4**
EDMD IAmb IAmb 15 43 03.2
comp=Z,148nm,0.9s
EDMD IAMs_20 IAMs_20 15 52 10.1
comp=Z,5µm,12.1s
**BLS5 Blasjo 19.81 339** *e*P **P 15 43 04.5 +0.7**
BLS5 IAmb IAmb 15 43 05.3
comp=Z,46nm,0.9s
BLS5 *e*S **Sn 15 46 47.1 -0.4**
BLS5 IAMs_20 IAMs_20 15 52 01.9
comp=Z,7µm,11.8s
**RSBS Rosebush, Pemb 19.87 310** *e*P **P 15 43 04.8 +0.4**
RSBS IAmb IAmb 15 43 06.0
comp=Z,97nm,0.7s
**NC602 NORSAR Array S 19.90 348** IAmb IAmb 15 43 06.5
comp=Z,98nm,0.7s
**NC602 NORSAR Array S 19.90 348** *e*P **P 15 43 04.5 -0.2**
NC602 IAmb IAmb 15 43 06.2
comp=Z,96nm,0.7s
NC602 *e*S **S 15 46 46.5 -1.8**
NC602 IAMs_20 IAMs_20 15 51 54.9
comp=Z,4µm,12.4s
**KMY Karmoy 19.97 337** *e*P **P 15 43 05.5 +0.1**
KMY *e*S **S 15 46 50.0 +0.5**
KMY IAMs_20 IAMs_20 15 52 04.2
comp=Z,4µm,12.3s
**YLL Llanberis 20.02 314** *e*P **P 15 43 05.9 -0.2**
**PBRG Braganca 20.05 280** *e*P **P 15 43 06.9 +0.3**
comp=Z,87nm,1.4s
**NAO01 NORSAR Array S 20.11 347** IAmb IAmb 15 43 09.7
comp=Z,180nm,1.0s
**KESW Keswick, Cumbr 20.15 318** *e*P **P 15 43 07.7 +0.2**
KESW IAmb IAmb 15 43 09.0
comp=Z,196nm,1.0s
**ODD1 Odda 20.18 340** *e*P **P 15 43 08.1 +0.2**
**WME Myndd Eilian 20.20 314** *e*P **P 15 43 08.0 -0.1**
**WLF1 Llynfaes 20.21 314** *e*P **P 15 43 08.2 +0.1**
**FINES FINESS Array B 20.23 8** P **P 15 43 07.8 -0.4**
**FINES FINESS Array B 20.23 8** P **P 15 43 08.2 0.0**
comp=Z,27nm,0.6s,baz=176,slow=12,SNR=91
FINES S **S 15 46 52.3 -2.4**
comp=Z,9.7nm,0.7s,baz=190,slow=17,SNR=3.3
FINES PcP **PcP 15 47 21.4 -0.4**
comp=Z,5.8nm,0.8s,baz=160,slow=2.8,SNR=5.1
FINES LR LR 15 51 16.5
comp=Z,1µm,20.8s,baz=194,slow=38
comp=Z,27nm,0.6s
**FINES FINESS Array B 20.23 8** *i* P **P 15 43 07.5 -0.7**
FINES pmax pmax
comp=Z,27nm,0.6s
**FIA1 FINESS Array S 20.23 8** P **P 15 43 07.8 -0.5**
**NC405 NORSAR Array S 20.23 348** P **P 15 43 07.9 -0.5**
**NB201 NORSAR Array S 20.24 348** IAmb IAmb 15 43 11.5
comp=Z,74nm,0.8s
**NB2 NORSAR Subarra 20.24 347** P **P 15 43 07.5 -1.0**
comp=Z,94nm,1.0s,baz=160,slow=11
**NB2 NORSAR Subarra 20.24 347** P **P 15 43 07.5 -1.0**
baz=160,slow=11
**NOA NORSAR Array B 20.24 347** P **P 15 43 08.5 0.0**
comp=Z,21nm,0.5s,baz=146,slow=10,SNR=91
NOA LR LR 15 51 30.5
comp=Z,1µm,20.6s,baz=165,slow=38
comp=Z,21nm,0.5s
**MAK Makhachkala 20.27 77** *c i*P **P 15 43 05.3 -3.6**
MAK *e*S **S 15 46 51.9 -3.9**
MAK pmax pmax
comp=Z,203nm,0.8s
MAK MLR MLR
comp=Z,639nm,13.0s
**NBO00 NORSAR Array S 20.31 347** IAmb IAmb 15 43 14.0
comp=Z,109nm,0.9s
**WPS Cemaes, Angles 20.31 314** *e*P **P 15 43 09.2 0.0**
**MVO Moncorvo 20.37 278** *e*P **P 15 43 10.9 +0.8**
comp=Z,156nm,1.5s
MVO *e*S **S 15 46 57.4 -0.6**
MVO *e*LR LR 15 48 47.2
comp=Z,816nm,16.0s
**NC303 NORSAR Array S 20.39 348** P **P 15 43 10.1 0.0**
**EKA Eskdalemuir Ar 20.57 320** P **P 15 43 12.1 +0.1**
comp=Z,155nm,0.9s,baz=118,slow=11,SNR=213
comp=Z,155nm,0.9s
**ESK Eskdalemuir 20.58 320** P **P 15 43 12.3 +0.1**
**ESK Eskdalemuir 20.58 320** *e*P **P 15 43 12.2 +0.1**
ESK IAmb IAmb 15 43 13.1
comp=Z,333nm,1.1s
ESK IAMs_20 IAMs_20 15 52 38.5
comp=Z,4µm,13.6s
**ESK Eskdalemuir 20.58 320** ⇑P **P 15 43 11.7 -0.4**
**ESK Eskdalemuir 20.58 320** P **P 15 43 12.3 +0.1**
ESK pmax pmax
comp=Z,340nm,1.1s
**EKB Eskdalemuir 20.58 320** P **P 15 43 12.3 +0.2**
**ESY Stoneypath 20.63 322** *e*P **P 15 43 12.1 -0.6**
ESY IAmb IAmb 15 43 16.1
comp=Z,85nm,0.9s
**IOMK Kirk Michael 20.73 316** *e*P **P 15 43 13.9 +0.1**
IOMK IAmb IAmb 15 43 14.8
comp=Z,551nm,1.0s
**WIM Isle of Man 20.74 316** *e*P **P 15 43 14.1 +0.2**
**KEF Keuruu 20.82 6** *e*P **P 15 43 14.3 -0.4**
**PVRL Vila Real 20.86 278** *e*P Pn 15 43 17.1 -0.8
comp=Z,174nm,1.8s
**VALR Valaam 20.86 15** *ce*P **P 15 43 14.3 -0.8**
VALR pmax pmax
comp=Z,184nm,1.0s
**EDI Edinburgh 20.90 321** *e*P **P 15 43 15.5 -0.1**
EDI IAmb IAmb 15 43 19.4
comp=Z,251nm,0.9s
EDI IAMs_20 IAMs_20 15 52 59.1
comp=Z,6µm,13.8s
**POLO Lamas de Olo 20.90 279** *e*P **P 15 43 15.2 -0.7**
comp=Z,91nm,1.7s
**MTE Manteigas 20.90 276** IAmb IAmb 15 43 21.6
comp=Z,135nm,1.3s
**MTE Manteigas 20.90 276** *e*P **P 15 43 15.3 -0.6**
comp=Z,126nm,1.4s
MTE *e*S Sn 15 47 14.3 0.0
MTE *e*LR LR 15 49 45.9
comp=Z,1µm,16.0s
**MTE Manteigas 20.90 276** ⇓P **P 15 43 16.1 +0.3**
**BER Bergen 20.93 339** *e*P **P 15 43 16.2 +0.4**
BER IAmb IAmb 15 43 28.3
comp=Z,109nm,1.0s
BER *e*S **S 15 47 07.8 -0.7**
BER IAMs_20 IAMs_20 15 52 43.7
comp=Z,7µm,13.2s
**NEWG New Galloway 20.98 319** *e*P **P 15 43 16.1 -0.3**
NEWG IAmb IAmb 15 43 18.3
comp=Z,100nm,1.0s
**PCBR Castelo Branco 20.98 274** *e*P **P 15 43 17.5 +0.9**
comp=Z,85nm,1.6s
**PMRV Marv??o 21.02 273** *e*P **P 15 43 16.8 -0.2**
comp=Z,102nm,1.4s
PMRV *e*S **S 15 47 11.9 +1.2**
PMRV *e*LR LR 15 49 18.5
comp=Z,1µm,18.0s
**PCAB Cabril 21.02 280** *e*P **P 15 43 17.8 +0.7**
comp=Z,156nm,1.9s
**ASK Askoy 21.05 339** *e*P **P 15 43 17.4 +0.3**
ASK IVmBBB 15 43 18.1
comp=Z,1µm,1.0s
ASK *e*S **S 15 47 12.4 +1.5**
**GAL1 Galloway 21.10 318** *e*P **P 15 43 17.5 -0.2**
GAL1 IAmb IAmb 15 43 18.4
comp=Z,183nm,1.0s
GAL1 IAMs_20 IAMs_20 15 52 13.2
comp=Z,3µm,17.3s
**PVIS Viseu 21.10 277** *e*P **P 15 43 17.8 -0.2**
comp=Z,93nm,1.5s
**PBAR Barrancos 21.10 270** *e*P **P 15 43 17.6 -0.3**
comp=Z,161nm,2.0s
**DRUM Mains of Drumt 21.16 324** *e*P **P 15 43 17.3 -1.1**
DRUM IAmb IAmb 15 43 18.2
comp=Z,286nm,1.7s
DRUM IAMs_20 IAMs_20 15 53 34.7
comp=Z,8µm,12.7s
**PGAV Gavieira, Arco 21.16 281** *e*P **P 15 43 18.9 +0.2**
comp=Z,259nm,1.6s
PGAV *e*S Sn 15 47 19.4 -1.1
PGAV *e*LR LR 15 49 26.3
comp=Z,1µm,18.0s
**IWEX Carrickbyrne, 21.18 310** *e*P **P 15 43 18.5 -0.2**
**DSB Dublin 21.28 312** IAmb IAmb 15 43 31.0
comp=Z,99nm,1.0s
**DSB Dublin 21.28 312** ⇓P **P 15 43 20.1 +0.4**
**PESTR Estremoz 21.31 272** P **P 15 43 20.7 +0.5**
**PESTR Estremoz 21.31 272** *e*P **P 15 43 19.2 -1.0**
comp=Z,98nm,1.5s
**PESTR Estremoz 21.31 272** ⇓P **P 15 43 19.6 -0.6**
**HYA Hoyanger 21.38 341** *e*P **P 15 43 21.2 +0.5**
HYA IAmb IAmb 15 43 32.5
comp=Z,148nm,0.9s
HYA *e*S **S 15 47 17.0 -0.5**
**PGBU Glenifferbraes 21.46 320** *e*P **P 15 43 21.3 -0.3**
PGBU IAmb IAmb 15 43 24.0
comp=Z,167nm,1.3s
**MDT Midelt 21.51 254** P **P 15 43 22.1 -0.3**
comp=Z,39nm,0.9s,baz=77,slow=10,SNR=48
MDT LR LR 15 51 25.4
comp=Z,620nm,21.8s,baz=62,slow=36
comp=Z,39nm,0.9s
**BELG Belogornoye 21.52 50** P **P 15 43 23.0 +0.8**
comp=Z,158nm,0.9s,baz=55,slow=1.8,SNR=36
BELG LR LR 15 52 19.6
comp=Z,815nm,19.8s,baz=250,slow=38
comp=Z,158nm,0.9s
**BELG Belogornoye 21.52 50** *d i*P **P 15 43 23.3 +1.1**
BELG pmax pmax
comp=Z,54nm,0.9s
**DOMB Dombas 21.56 346** *e*P **P 15 43 23.2 +0.5**
DOMB IAmb IAmb 15 43 25.8
comp=Z,174nm,1.2s
DOMB *e*S **S 15 47 17.0 -4.1**
DOMB IAMs_20 IAMs_20 15 52 52.8
comp=Z,3µm,15.7s
**INVG Invergeldie, C 21.58 322** *e*P **P 15 43 22.6 -0.3**
INVG IAmb IAmb 15 43 24.1
comp=Z,127nm,0.9s
**COI Coimbra 21.59 276** IAmb IAmb 15 43 28.4
comp=Z,66nm,0.8s
**COI Coimbra 21.59 276** *e*P **P 15 43 23.7 +0.5**
comp=Z,131nm,1.4s
**SUE Sulen 21.65 340** *e*P **P 15 43 23.5 0.0**
SUE IAmb IAmb 15 43 24.1
comp=Z,69nm,0.9s
SUE *e*S **S 15 47 23.7 +0.9**
**PCAS Casmilo, Conde 21.69 276** *e*P **P 15 43 26.0 +1.7**
comp=Z,93nm,1.7s
**EVO Evora 21.73 271** *e*P **P 15 43 25.2 +0.6**
comp=Z,69nm,1.4s
**PMTG Montargil 21.73 273** *e*P **P 15 43 24.6 -0.1**
comp=Z,126nm,1.8s
**PBEJ Beja 21.77 270** *e*P **P 15 43 25.3 +0.2**
comp=Z,58nm,1.6s
**PVAQ Vaqueiros 21.86 268** P **P 15 43 25.3 -0.7**
**PVAQ Vaqueiros 21.86 268** *e*P **P 15 43 25.8 -0.2**
comp=Z,38nm,1.2s
PVAQ *e*S **S 15 47 27.8 +0.5**
PVAQ *e*LR LR 15 49 26.3
comp=Z,853nm,20.0s
**PVAQ Vaqueiros 21.86 268** ⇑P **P 15 43 25.9 -0.2**
**MCD Coleburn Disti 21.89 325** *e*P **P 15 43 25.3 -0.9**
MCD IAmb IAmb 15 43 26.5
comp=Z,121nm,0.7s
**CLGH Cloghs, Cushen 21.91 317** *e*P **P 15 43 26.1 -0.4**
CLGH IAmb IAmb 15 43 27.8
comp=Z,374nm,1.3s
CLGH IAMs_20 IAMs_20 15 52 47.9
comp=Z,2µm,13.5s
**PCVE Castro Verde 22.02 269** *e*P **P 15 43 27.0 -0.8**
comp=Z,77nm,1.8s
**FOO Floro 22.04 341** IAmb IAmb 15 43 27.7
comp=Z,61nm,1.5s
FOO *e*P **P 15 43 28.3 +0.6**
FOO *e*S **S 15 47 32.3 +2.1**
**PSBE So Bento 22.05 274** *e*P **P 15 43 27.3 -0.8**
comp=Z,126nm,1.8s
**PBDV Barranco-do-Ve 22.07 268** *e*P **P 15 43 27.5 -0.9**
comp=Z,96nm,1.1s
**MESJ Messejana 22.09 270** IAmb IAmb 15 43 32.8
comp=Z,46nm,1.1s
**MESJ Messejana 22.09 270** *e*P **P 15 43 28.6 0.0**
comp=Z,68nm,1.6s
**MESJ Messejana 22.09 270** *e*P **P 15 43 28.7 0.0**
MESJ IAmb IAmb 15 43 32.5
comp=Z,90nm,1.4s
MESJ *e*S **S 15 47 33.8 +2.0**
**MESJ Messejana 22.09 270** ⇓P **P 15 43 28.8 +0.2**
**LAWE Loch Awe, Argy 22.13 320** *e*P **P 15 43 28.0 -0.8**
LAWE IAmb IAmb 15 43 30.1
comp=Z,237nm,1.4s
**PNCL Nicolau / Gran 22.24 271** *e*P **P 15 43 30.1 0.0**
comp=Z,128nm,1.4s
**MOL Molde 22.33 345** *e*P **P 15 43 31.3 +0.4**
**TAM Tamanrasset 22.38 218** ⇑P **P 15 43 34.4 +2.5**
**TBLU Trondheim 22.49 348** *e*P **P 15 43 34.0 +1.4**
**LIS Lisbon 22.53 272** *e*S **S 15 47 42.1 +2.3**
LIS IAMs_20 IAMs_20 15 54 37.3
comp=E,3µm,13.4s
**PTEO Sao Teotonio 22.57 269** *e*P **P 15 43 33.8 +0.2**
comp=E,54nm,1.4s
**IDGL Inch Island, C 22.63 316** *e*P **P 15 43 33.3 -0.9**
**BIGH Upper Bighouse 22.72 326** *e*P **P 15 43 33.3 -1.8**
BIGH IAmb IAmb 15 43 35.2
comp=Z,52nm,0.7s
BIGH IAMs_20 IAMs_20 15 54 44.1
comp=Z,3µm,11.8s
**LRW Lerwick 22.76 332** *e*P **P 15 43 34.3 -1.2**
LRW IAmb IAmb 15 43 36.3
comp=Z,175nm,1.0s
**LRW Lerwick 22.76 332** ⇑P **P 15 43 34.2 -1.3**
**PFVI Vila Bisbo 22.78 268** *e*P **P 15 43 35.0 -0.9**
**KPL Plockton 22.82 323** *e*P **P 15 43 34.3 -1.8**
KPL IAmb IAmb 15 43 37.1
comp=Z,48nm,0.8s
**IGLA Glengowla, Co 23.02 311** *e*P **P 15 43 37.4 -0.9**
**LINV Loch Inver, As 23.07 325** *e*P **P 15 43 36.9 -1.8**
LINV IAmb IAmb 15 43 38.7
comp=Z,63nm,1.0s
**NSS Namsos 23.48 351** *e*P **P 15 43 42.1 -0.7**
**LEWI Lewis, Hebride 23.80 323** *e*P **P 15 43 44.3 -1.7**
LEWI IAmb IAmb 15 43 46.9
comp=Z,43nm,0.8s
**MOR8 Moi Rana 24.86 354** *e*P **P 15 43 57.5 +1.8**
**KIRV Kirov 25.05 37** LR LR 15 54 47.5
comp=Z,2µm,18.8s,baz=243,slow=39
**KIRV Kirov 25.05 37** *c i*P **P 15 43 56.8 -0.6**
**STOK Stokkvaagen 25.13 353** *e*P **P 15 43 58.6 +0.5**
STOK IAmb IAmb 15 44 00.2
comp=Z,65nm,1.2s
STOK *e*S **S 15 48 24.2 +2.0**
**KONS Konsvik 25.29 353** *e*P **P 15 43 59.7 +0.3**
**KBD Kabd 25.53 110** P **P 15 44 02.1 +0.1**
**FAUS Fauske 26.00 356** IAmb IAmb 15 44 05.8
comp=Z,26nm,0.9s
FAUS *e*P **P 15 44 05.9 0.0**
FAUS *e*S **S 15 48 35.0 -1.0**
**STEI Steigen 26.55 356** *e*P **P 15 44 10.1 -0.8**
**APA Apatity 27.04 11** ⇓*i*P **P 15 44 14.3 -1.0**
APA *i* S **S 15 48 49.0 -3.4**
APA pmax pmax
comp=Z,16nm,0.7s
APA MLR MLR
comp=Z,2µm,13.0s
**AKTO Aktyubinsk 27.50 58** LR LR 15 56 43.7
comp=Z,1µm,20.3s,baz=234,slow=40
**LVZ Lovozero 27.53 12** ⇓*e*P **P 15 44 21.5 +1.7**
LVZ pmax pmax
comp=Z,75nm,2.0s
**KTK1 Kautokeino 27.55 2** *e*P **P 15 44 19.5 -0.4**
KTK1 *e*S **S 15 48 59.8 -0.7**
**RAYN Ar Rayn 27.79 123** P **P 15 44 25.0 +2.5**
**TRO Tromso 28.14 359** *e*P **P 15 44 24.1 -1.0**
TRO IAmb IAmb 15 44 24.9
comp=Z,44nm,1.0s
TRO *e*S **S 15 49 13.0 +3.4**
TRO IAMs_20 IAMs_20 15 56 45.6
comp=Z,3µm,16.2s
**ARA0 ARCESS Array S 28.17 4** *e*P **P 15 44 24.3 -1.2**
**ARCES ARCESS Array B 28.17 4** P **P 15 44 24.2 -1.2**
ARCES IAmb IAmb 15 44 25.5
comp=Z,44nm,1.2s
**ARCES ARCESS Array B 28.17 4** P **P 15 44 24.4 -1.1**
comp=Z,19nm,0.9s,baz=183,slow=10,SNR=25
ARCES PcP **PcP 15 47 38.1 -0.8**
comp=Z,4.3nm,0.6s,baz=211,slow=2.5,SNR=6.8
ARCES LR LR 15 56 37.6
comp=Z,2µm,19.1s,baz=180,slow=39
comp=Z,19nm,0.9s
**ARCES ARCESS Array B 28.17 4** P **P 15 44 24.3 -1.2**
ARCES pmax pmax
comp=Z,45nm,1.3s
**KEV Kevo 28.48 5** P **P 15 44 26.9 -1.2**
KEV IAmb IAmb 15 44 28.4
comp=Z,72nm,1.4s
**KEV Kevo 28.48 5** P **P 15 44 27.0 -1.2**
KEV pmax pmax
comp=Z,72nm,1.4s
**AB31 Akbulak array 28.71 61** *e*P **P 15 44 30.2 -0.2**
**ABKAR Akbulak array 28.71 61** P **P 15 44 30.4 -0.1**
**ABKAR Akbulak array 28.71 61** P **P 15 44 30.1 -0.3**
**ABKAR Akbulak array 28.71 61** ⇓P **P 15 44 30.4 -0.1**
**ARU Arti 28.81 46** P **P 15 44 31.1 -0.1**
ARU IAmb IAmb 15 44 36.3
comp=Z,29nm,0.8s
**ARU Arti 28.81 46** ⇓P **P 15 44 31.3 +0.1**
**ARU Arti 28.81 46** LR LR 15 56 59.9
comp=Z,1µm,18.6s,baz=248,slow=38
**ARU Arti 28.81 46** *d i*P **P 15 44 31.3 +0.1**
ARU 15 45 22.1
ARU S **S 15 49 21.8 +1.3**
ARU SS **SnSn 15 50 45.8 +4.0**
ARU SSS SSS 15 51 09.6
ARU pmax pmax
comp=Z,37nm,0.9s
ARU MLR MLR
comp=Z,1µm,16.0s
**ARU Arti 28.81 46** P **P 15 44 30.7 -0.6**
comp=Z,40nm,0.9s,comp=Z,470nm
**VADS Vadso 29.01 6** *e*P **P 15 44 32.4 -0.5**
VADS IAMs_20 IAMs_20 15 57 58.5
comp=Z,3µm,10.5s
**HAMF Hammerfest 29.20 2** *e*P **P 15 44 33.7 -0.8**
HAMF IAmb IAmb 15 44 37.2
comp=Z,31nm,1.1s
HAMF *e*S **S 15 49 23.4 -3.0**
HAMF IAMs_20 IAMs_20 15 57 19.2
comp=Z,4µm,13.9s
**SVE Sverdlovsk 30.02 46** ⇑*e*P **P 15 44 42.9 +0.9**
SVE *e*S **S 15 49 42.3 +2.9**
SVE pmax pmax
comp=Z,75nm,0.9s
SVE MLR MLR
comp=Z,1µm,14.0s
**JRN Qarnain Island 31.74 111** P **P 15 45 00.7 +3.2**
JRN P **P 15 45 00.7 +3.2**
**TOA0 Torodi Ar. Sit 32.56 215** P **P 15 45 05.8 +1.1**
**TORD Torodi Ar. Bea 32.56 215** P **P 15 45 05.4 +0.6**
TORD PcP **PcP 15 47 51.5 +0.3**
**TORD Torodi Ar. Bea 32.56 215** P **P 15 45 04.6 -0.1**
comp=Z,4.6nm,0.6s,baz=23,slow=9.5,SNR=29
TORD LR LR 16 00 16.9
comp=Z,714nm,18.7s,baz=29,slow=40
comp=Z,4.6nm,0.6s
**JMIC Jan Mayen 32.82 343** *e*P **P 15 45 06.9 +0.4**
**JMIC Jan Mayen 32.82 343** LR LR 15 59 18.0
comp=Z,342nm,18.1s,baz=166,slow=38
**BJO1 Bjornoya 33.03 359** *e*P **P 15 45 07.7 -0.5**
**BORG Borgarnes 33.04 329** LR LR 16 00 07.0
comp=Z,592nm,18.1s,baz=126,slow=39
**MZWR Madinat Zayed 33.22 112** P **P 15 45 14.7 +4.3**
MZWR P **P 15 45 14.7 +4.3**
**SHME Shamm 33.40 106** *i* P **P 15 45 11.8 -0.3**
SNR=13
**SHME Shamm 33.40 106** P **P 15 45 12.3 +0.3**
SHME P **P 15 45 12.3 +0.3**
**MZR Muzera 33.44 113** P **P 15 45 16.1 +3.7**
**AJN Ajban 33.49 109** P **P 15 45 13.2 +0.4**
**BANOM Banah 33.59 106** P **P 15 45 15.3 +1.5**
**ASUD Al Ashush, Dub 33.69 109** P **P 15 45 13.3 -1.2**
**ASUD Al Ashush, Dub 33.69 109** P **P 15 45 16.4 +1.8**
**NAZ Nazwa, Dubai 33.70 108** *i* P **P 15 45 14.3 -0.4**
SNR=9.9

**NAZ Nazwa, Dubai 33.70 108** P **P** **15 45 16.6 +1.9**
**FAQ Al Faqa, Dubai 33.80 109** P **P** **15 45 15.2 -0.4**
FAQ P **P** **15 45 15.2 -0.4**
**MASF Masafi 33.82 107** P **P** **15 45 16.5 +0.7**
**MSFE Esma-Masafi 33.83 107** P **P** **15 45 15.2 -0.7**
**MDH Madha 33.97 107** P **P** **15 45 15.2 -1.8**
**MDH Madha 33.97 107** P **P** **15 45 16.6 -0.3**
MDH P **P** **15 45 16.6 -0.3**
**UOSS Minazif 34.12 108** P **P** **15 45 17.9 -0.4**
UOSS IAmb IAmb 15 45 21.7
comp=Z,31nm,0.7s
**UOSS Minazif 34.12 108** *i* P **P** **15 45 17.0 -1.3**
SNR=6.8
**UOSS Minazif 34.12 108** ⇓P **P** **15 45 17.9 -0.4**
**UOSS Minazif 34.12 108** P **P** **15 45 17.9 -0.4**
UOSS P **P** **15 45 17.9 -0.4**
**HATD Hatta, Dubai 34.14 108** *i* P **P** **15 45 17.6 -0.9**
SNR=13
**HATD Hatta, Dubai 34.14 108** P **P** **15 45 18.0 -0.4**
HATD P **P** **15 45 18.0 -0.4**
**ASHO Ashiyiah 34.17 108** *i* P **P** **15 45 17.1 -1.7**
SNR=16
**ASHO Ashiyiah 34.17 108** P **P** **15 45 18.3 -0.5**
SNR=15
ASHO P **P** **15 45 18.3 -0.5**
SNR=15
**ALNE Al Ain 34.35 109** *i* P **P** **15 45 19.3 -1.0**
SNR=12
**ALNE Al Ain 34.35 109** P **P** **15 45 20.1 -0.2**
SNR=12
**SOHO SOHO 34.85 108** *i* P **P** **15 45 23.7 -1.0**
SNR=20
**SOHO SOHO 34.85 108** P **P** **15 45 25.0 +0.4**
SOHO P **P** **15 45 25.0 +0.4**
**BRVK Borovoye 35.18 54** P **P** **15 45 28.0 +0.8**
BRVK IAmb IAmb 15 45 38.1
comp=Z,35nm,0.8s
**BRVK Borovoye 35.18 54** ⇑P **P** **15 45 27.9 +0.7**
**BRVK Borovoye 35.18 54** P **P** **15 45 28.2 +1.0**
**BRVK Borovoye 35.18 54***c i* P **P** **15 45 27.4 +0.2**
BRVK pmax pmax
comp=Z,42nm,1.0s
**BVA0 Borovoye Array 35.25 54** *i* P **P** **15 45 28.4 +0.6**
**BVAR Borovoye Array 35.25 54** LR LR 16 01 10.7
comp=Z,330nm,20.1s,baz=274,slow=38
**ARQ Araqi 35.35 110** P **P** **15 45 28.5 -0.5**
SNR=6.8
ARQ P **P** **15 45 28.5 -0.5**
SNR=6.8
**HSPB Hornsund (broa 35.59 358** *e*P **P** **15 45 30.0 -0.4**
**HOQ Hoqain 35.75 108** P **P** **15 45 31.6 -0.8**
HOQ P **P** **15 45 31.6 -0.8**
**SCO Scoresbysund 35.93 337** P **P** **15 45 34.2 +0.9**
**SCO Scoresbysund 35.93 337** P **P** **15 45 34.3 +0.9**
SCO pmax pmax
comp=Z,22nm,1.0s
**SCO Scoresbysund 35.93 337** *i* P **P** **15 45 32.5 -0.9**
SCO IAmb IAmb 15 45 37.2
comp=Z,11nm,0.8s
**BRLS Borolday 36.35 71** *e*P **P** **15 45 38.4 +1.0**
baz=71
**BRLS Borolday 36.35 71** *e*P **P** **15 45 38.4 +1.0**
**BIDO Bidbid 36.37 108** P **P** **15 45 37.5 -0.1**
BIDO P **P** **15 45 37.5 -0.1**
**CHM Chimkent 36.38 72** *e*P **P** **15 45 38.6 +1.0**
baz=72
**CHM Chimkent 36.38 72** *e*P **P** **15 45 38.6 +1.0**
**FURI Furi 36.43 148** LR LR 16 03 05.8
comp=Z,678nm,21.2s,baz=332,slow=40
**SMDO Samad 36.61 108** P **P** **15 45 41.5 +1.7**
SMDO P **P** **15 45 41.5 +1.7**
**KK31 Karatay Array 36.81 70** *i* P **P** **15 45 42.3 +1.0**
**KKAR Karatay Array 36.81 70** P **P** **15 45 42.2 +0.9**
**KKAR Karatay Array 36.81 70** ⇓P **P** **15 45 43.5 +2.2**
**KKAR Karatay Array 36.81 70** P **P** **15 45 42.2 +0.9**
**DOK Doka 36.89 118** P **P** **15 45 42.4 +0.2**
**WSAR Wadi Sarin 36.91 108** LR LR 16 03 57.1
comp=Z,473nm,19.5s,baz=336,slow=41
**WSAR Wadi Sarin 36.91 108** P **P** **15 45 45.4 +3.1**
**OTUK Ortayu 36.96 61** P **P** **15 45 42.6 +0.1**
**JMDO Jabal Madar 37.08 109** P **P** **15 45 43.8 0.0**
JMDO P **P** **15 45 43.8 0.0**
**SIMJ Simiganj 37.09 78** P **P** **15 45 43.6 -0.2**
**WHFO Wadi Hawf 37.16 119** P **P** **15 45 44.7 +0.2**
**CHGR Chuyangaron 37.20 78** IAmb IAmb 15 46 22.9
comp=Z,27nm,0.8s
**WBK Wadi Bani Khal 37.55 108** P **P** **15 45 47.9 +0.2**
WBK P **P** **15 45 47.9 +0.2**
**KBS Kingsbay 37.61 357** P **P** **15 45 47.3 -0.3**
KBS IAmb IAmb 15 45 48.9
comp=Z,38nm,1.1s
**KBS Kingsbay 37.61 357** *e*P **P** **15 45 47.3 -0.3**
KBS IAmb IAmb 15 45 48.5
comp=Z,37nm,1.1s
**KBS Kingsbay 37.61 357** ⇑P **P** **15 45 47.7 +0.1**
**KBS Kingsbay 37.61 357***c i* P **P** **15 45 47.6 0.0**
KBS pmax pmax
comp=Z,53nm,1.7s
**KBS Kingsbay 37.61 357** *i* P **P** **15 45 47.8 +0.1**
**KBS Kingsbay 37.61 357** *i* P **P** **15 45 46.5 -1.1**
**MHTO MHTO 37.89 111** P **P** **15 45 54.1 +3.5**
MHTO P **P** **15 45 54.1 +3.5**
**GAR Garm 37.93 77** IAmb IAmb 15 46 24.7
comp=Z,40nm,1.0s
**SOEG Soedalen 38.04 332** *i* P **P** **15 45 50.9 -0.5**
**DMTO DMTO 38.08 118** P **P** **15 45 52.0 -0.1**
**JLN Jalan Bani Buh 38.15 108** P **P** **15 45 52.0 -0.8**
JLN P **P** **15 45 52.0 -0.8**
**DQM DQM 38.29 113** P **P** **15 45 56.9 +2.8**
DQM P **P** **15 45 56.9 +2.8**
**BTLS Baital 38.78 66** *e*P **P** **15 45 58.9 +1.1**
baz=66
**BTLS Baital 38.78 66** *e*P **P** **15 45 58.9 +1.1**
**DAG Danmarks Havn 38.93 347** ⇑P **P** **15 45 58.1 -0.6**
**DAG Danmarks Havn 38.93 347** *i* P **P** **15 45 56.7 -2.0**
DAG IAmb IAmb 15 45 59.7
comp=Z,13nm,0.7s
**DAG Danmarks Havn 38.93 347** *i* P **P** **15 45 57.8 -0.9**
**SGDS Sogindy 39.61 68** *e*P **P** **15 46 05.8 +0.9**
baz=68
**SGDS Sogindy 39.61 68** *e*P **P** **15 46 05.8 +0.9**
**AAK Ala-Archa 39.75 70** P **P** **15 46 06.9 +0.7**
**AAK Ala-Archa 39.75 70** P **P** **15 46 08.1 +1.9**
**AAK Ala-Archa 39.75 70** LR LR 16 05 01.3
comp=Z,331nm,20.2s,baz=300,slow=40
**AAK Ala-Archa 39.75 70** ⇑*e*P **P** **15 46 07.9 +1.7**
AAK pmax pmax
comp=Z,24nm,1.7s
**LODK Lodwar 40.36 156** P **P** **15 46 11.7 +0.3**
**LODK Lodwar 40.36 156** P **P** **15 46 12.1 +0.7**
**KURBB Kurchatov Arra 40.53 57** P **P** **15 46 12.2 -0.1**
comp=Z,2.1nm,0.5s,baz=286,slow=8.9,SNR=4.3
KURBB PP **PnPn** **15 47 49.5 +0.1**
comp=Z,7.9nm,1.1s,baz=288,slow=12,SNR=7.3
KURBB LR LR 16 03 59.4
comp=Z,290nm,20.9s,baz=193,slow=38
comp=Z,2.1nm,0.5s
**KURBB Kurchatov Arra 40.53 57** P **P** **15 46 11.7 -0.6**
**KURK Kurchatov 40.57 56** P **P** **15 46 12.8 +0.2**
**KURK Kurchatov 40.57 56** ⇑P **P** **15 46 12.4 -0.2**
**KURK Kurchatov 40.57 56***d i* P **P** **15 46 13.1 +0.5**
KURK pmax pmax
comp=Z,16nm,0.9s
**KUU Kurty 40.67 67** *e*P **P** **15 46 14.9 +1.3**
baz=67
**KUU Kurty 40.67 67** *e*P **P** **15 46 14.9 +1.3**
**CHKK Chushkaly 41.13 67** *e*P **P** **15 46 18.6 +1.1**
baz=67
**CHKK Chushkaly 41.13 67** *e*P **P** **15 46 18.5 +1.1**
**ICESG Greenland Ices 41.19 332** ⇓P **P** **15 46 18.2 +0.2**
**ICESG Greenland Ices 41.19 332** *i* P **P** **15 46 15.7 -2.3**
ICESG IAmb IAmb 15 46 25.7
comp=Z,30nm,0.8s
**ICESG Greenland Ices 41.19 332** *i* P **P** **15 46 17.6 -0.5**
**DBIC Dimbokro 41.25 220** P **P** **15 46 19.0 +0.4**
**DBIC Dimbokro 41.25 220** ⇑P **P** **15 46 19.1 +0.4**
**DBIC Dimbokro 41.25 220** P **P** **15 46 18.4 -0.2**
comp=Z,11nm,0.7s,baz=15,slow=8.5,SNR=12
DBIC LR LR 16 05 32.2
comp=Z,356nm,18.7s,baz=18,slow=39
comp=Z,11nm,0.7s
**DBIC Dimbokro 41.25 220** P **P** **15 46 19.0 +0.4**
DBIC pmax pmax
comp=Z,13nm,0.8s

**TNSS Tian-Shan 41.35 68** *e*P **P** **15 46 20.5 +0.7**
baz=68
**TNSS Tian-Shan 41.35 68** *e*P **P** **15 46 20.4 +0.7**
**TIC Toumodi 41.35 220** ⇑*e*P **P** **15 46 19.3 -0.2**
comp=Z,29nm,0.9s
**MDOK Medeo 41.38 68** *e*P **P** **15 46 20.6 +1.0**
baz=68
**MDOK Medeo 41.38 68** *e*P **P** **15 46 20.6 +1.0**
**KIC Kosan Boka 41.47 219** ⇑*e*P **P** **15 46 21.6 +1.2**
comp=Z,18nm,0.6s
**BBTS Babate 41.52 241** LR LR 16 05 18.3
comp=Z,863nm,18.8s,baz=284,slow=39
**SUMG Summit 41.57 337** P **P** **15 46 21.1 -0.1**
SUMG PcP **PcP** **15 48 18.2 +0.1**
**SUMG Summit 41.57 337** *i* P **P** **15 46 18.6 -2.5**
SUMG IAmb IAmb 15 46 23.9
comp=Z,13nm,0.6s
**SUMG Summit 41.57 337** *i* P **P** **15 46 20.1 -1.0**
**ARXS Arharly 41.60 66** *e*P **P** **15 46 21.4 0.0**
**SEM Semipalatinsk 41.65 57** *e*P **P** **15 46 22.5 +0.6**
baz=57
**SEM Semipalatinsk 41.65 57** *e*P **P** **15 46 22.4 +0.6**
**LIC Lamto 41.72 219** ⇑*e*P **P** **15 46 23.3 +0.8**
comp=Z,38nm,0.8s
**TDK Taldyqorghan 41.77 65** *e*P **P** **15 46 23.5 +0.9**
comp=Z,12nm,0.7s,baz=65
**TDK Taldyqorghan 41.77 65** *e*P **P** **15 46 23.5 +0.9**
TDK pmax pmax
comp=Z,12nm,0.7s
**KSH Kashi 41.85 74** P **P** **15 46 23.6 +0.1**
KSH pP pP 15 46 27.7 -0.3
KSH pmax pmax
comp=Z,7.0nm,1.0s
KSH LR LR
comp=Z,710nm,17.5s
KSH LR LR
comp=Z,520nm,17.9s
KSH LR LR
comp=Z,360nm,15.5s
**NOR Nord 42.08 352** *i* P **P** **15 46 21.6 -3.1**
**NOR Nord 42.08 352** *i* P **P** **15 46 23.0 -1.7**
**NIL Nilore 42.24 83** P **P** **15 46 26.8 +0.1**
**NIL Nilore 42.24 83** P **P** **15 46 26.8 +0.1**
NIL pmax pmax
comp=Z,17nm,0.9s
**ZHN Zhinishke 42.34 68** *e*P **P** **15 46 28.3 +0.8**
baz=68
**ZHN Zhinishke 42.34 68** *e*P **P** **15 46 28.3 +0.8**
**SATY Saty 42.35 68** *e*P **P** **15 46 28.8 +1.1**
baz=68
**SATY Saty 42.35 68** *e*P **P** **15 46 28.7 +1.1**
**UZB Uzynbulak 42.75 67** *e*P **P** **15 46 31.9 +1.0**
baz=68
**UZB Uzynbulak 42.75 67** *e*P **P** **15 46 31.8 +1.0**
**PDGK Podgornoye 43.02 67** P **P** **15 46 33.3 +0.3**
**SHLS Shalkode 43.05 67** *e*P **P** **15 46 36.7 +3.4**
baz=67
**SHLS Shalkode 43.05 67** *e*P **P** **15 46 36.7 +3.4**
**MBAR Mbarara 43.06 164** LR LR 16 07 45.9
comp=Z,321nm,18.7s,baz=334,slow=41
**NRS Narsarsuaq 43.23 320** IAmb IAmb 15 46 35.5
comp=Z,49nm,0.9s
**NRS Narsarsuaq 43.23 320** ⇑P **P** **15 46 34.5 +0.3**
**NRS Narsarsuaq 43.23 320** *i* P **P** **15 46 33.6 -0.6**
**DY2G Dye2 43.45 328** ⇓P **P** **15 46 36.1 -0.1**
**DY2G Dye2 43.45 328** *i* P **P** **15 46 32.6 -3.7**
DY2G IAmb IAmb 15 46 37.4
comp=Z,31nm,0.6s
**DY2G Dye2 43.45 328** *i* P **P** **15 46 34.7 -1.6**
**MAKZ Makanchi 43.64 61** P **P** **15 46 37.7 -0.1**
**MAKZ Makanchi 43.64 61** P **P** **15 46 37.7 -0.1**
MAKZ pmax pmax
comp=Z,17nm,0.9s
**ZAA0 Zalesovo Array 43.71 51** P **P** **15 46 37.8 -0.4**
ZAA0 IAmb IAmb 15 46 46.9
comp=Z,21nm,0.7s
**ZALV Zalesovo Beam 43.71 51** P **P** **15 46 37.5 -0.7**
**ZALV Zalesovo Beam 43.71 51** P **P** **15 46 38.1 -0.2**
comp=Z,16nm,0.4s,baz=281,slow=8.6,SNR=53
ZALV LR LR 16 07 22.8
comp=Z,878nm,18.2s,baz=280,slow=40
comp=Z,16nm,0.4s
**ZALV Zalesovo Beam 43.71 51** *i* P **P** **15 46 38.0 -0.2**
ZALV pmax pmax
comp=Z,15nm,0.4s
**MK31 Makanchi Array 43.85 61** P **P** **15 46 39.4 -0.1**
**MK31 Makanchi Array 43.85 61***d i* P **P** **15 46 39.5 -0.1**
**MKAR Makanchi Array 43.85 61** P **P** **15 46 37.7 -1.8**
**MKAR Makanchi Array 43.85 61** P **P** **15 46 39.5 0.0**
comp=Z,20nm,0.7s,baz=292,slow=6.4,SNR=107
MKAR ScP **ScP** **15 52 14.6 -2.4**
comp=Z,1.8nm,0.8s,baz=311,slow=2.6,SNR=5.1
MKAR LR LR 16 06 46.5
comp=Z,768nm,20.0s,baz=296,slow=39
comp=Z,20nm,0.7s
**IVI Ivigtut 44.55 320** P **P** **15 46 44.4 -0.4**
**IVI Ivigtut 44.55 320** ⇓P **P** **15 46 45.1 +0.3**
**IVI Ivigtut 44.55 320** *i* P **P** **15 46 42.6 -2.3**
IVI IAmb IAmb 15 46 46.3
comp=Z,49nm,0.8s
**IVI Ivigtut 44.55 320** *i* P **P** **15 46 43.9 -1.0**
**SFJD Kangerlussuaq 45.17 328** P **P** **15 46 49.1 -0.6**
SFJD IAmb IAmb 15 46 51.4
comp=Z,20nm,0.8s
**SFJD Kangerlussuaq 45.17 328** LR LR 16 05 38.7
comp=Z,1μm,20.9s,baz=88,slow=36
**SFJD Kangerlussuaq 45.17 328** P **P** **15 46 49.1 -0.6**
SFJD pmax pmax
comp=Z,20nm,0.8s
**ZSN Zaisan 45.34 60** *e*P **P** **15 46 52.0 +0.5**
comp=Z,12nm,0.8s,baz=60
**ZSN Zaisan 45.34 60** *e*P **P** **15 46 51.9 +0.5**
ZSN pmax pmax
comp=Z,12nm,0.8s
**NEEM North Greenlan 45.74 343** *i* P **P** **15 46 50.5 -4.0**
NEEM IAmb IAmb 15 46 59.0
comp=Z,13nm,0.6s
**DGZ Jazzator, Alta 46.30 56***d i* P **P** **15 47 00.5 +1.3**
DGZ pmax pmax
comp=Z,21nm,0.9s
**KULLO Kullorsuaq 47.09 339** ⇓P **P** **15 47 04.6 -0.1**
**KULLO Kullorsuaq 47.09 339** *i* P **P** **15 47 02.9 -1.9**
**KRAR Krasnoyarsk 47.78 46** ⇑*e*P **P** **15 47 13.1 +2.8**
**WMQ Urumqi 48.43 63** *e*P **P** **15 47 19.3 +3.6**
WMQ PP **PP** **15 49 11.8 +3.6**
WMQ pmax pmax
comp=Z,27nm,0.7s
WMQ LR LR
comp=Z,940nm,17.5s
WMQ LR LR
comp=Z,520nm,12.7s
WMQ LR LR
comp=Z,300nm,17.5s
**EUNU Eureka 52.14 348** P **P** **15 47 43.0 -0.2**
**FRB Frobisher Bay 53.15 326** LR LR 16 10 49.7
comp=Z,789nm,19.0s,baz=53,slow=36
**MOY Mondy 53.74 50** *e*P **P** **15 47 56.7 +1.2**
MOY pmax pmax
comp=Z,17nm,1.8s
**HYB Hyderabad 55.12 98** *e*P **P** **15 48 06.6 +0.7**
HYB *e*S **S** **15 55 49.8 +1.3**
**IRK Irkutsk 55.35 48** *e*P **P** **15 48 06.6 -0.5**
IRK pmax pmax
comp=Z,30nm,2.2s
**ZAK Zakamensk 55.58 50** *e*P **P** **15 48 09.6 +0.7**
ZAK pmax pmax
comp=Z,8.0nm,1.3s
**SCHQ Schefferville 55.80 316** P **P** **15 48 10.0 -0.3**
comp=Z,33nm,0.7s,baz=62,slow=7.3,SNR=25
SCHQ LR LR 16 11 42.4
comp=Z,601nm,18.1s,baz=66,slow=36
comp=Z,33nm,0.7s
**RES Resolute Bay 56.44 343** P **P** **15 48 13.8 -0.7**
RES IAmb IAmb 15 48 15.7
comp=Z,63nm,1.9s
**RES Resolute Bay 56.44 343** LR LR 16 13 46.9
comp=Z,159nm,18.6s,baz=44,slow=38
**RES Resolute Bay 56.44 343** P **P** **15 48 13.8 -0.7**
RES pmax pmax
comp=Z,63nm,2.0s
**TIXI Tiksi 56.59 21** P **P** **15 48 15.2 -0.3**
**TIXI Tiksi 56.59 21** ⇓*i* P **P** **15 48 15.5 -0.1**
TIXI pmax pmax
comp=Z,24nm,1.7s
**GBN Guysborough 56.91 304** P **P** **15 48 17.3 -1.0**

**LSA Lhasa 57.43 77** P **P** **15 48 23.4 +0.6**
**GTA Gaotai 58.52 63** *e*P **P** **15 48 30.8 +0.9**
GTA pP pP 15 48 35.1 +0.5
GTA pmax pmax
comp=Z,6.0nm,0.6s
GTA LR LR
comp=Z,510nm,16.3s
GTA LR LR
comp=Z,410nm,15.9s
GTA LR LR
comp=Z,210nm,19.5s
**SONM Songino Array 58.57 52** P **P** **15 48 31.0 +0.9**
**SONM Songino Array 58.57 52** P **P** **15 48 29.9 -0.2**
comp=Z,5.6nm,0.7s,baz=293,slow=9.3,SNR=28
comp=Z,5.6nm,0.7s
**SONM Songino Array 58.57 52** P **P** **15 48 31.0 +0.9**
SONM pmax pmax
comp=Z,11nm,1.1s
**LMN Caledonia Moun 58.74 305** P **P** **15 48 31.4 +0.2**
**ULN Ulaanbaatar 58.94 52** P **P** **15 48 33.2 +0.5**
**ULN Ulaanbaatar 58.94 52***c e* P **P** **15 48 33.2 +0.5**
ULN pmax pmax
comp=Z,13nm,1.5s
**GGN Saint George 60.35 306** IAmb IAmb 15 48 43.2
comp=Z,27nm,1.0s
**CIT Chita 60.52 45** *e*P **P** **15 48 43.6 +0.2**
CIT *e* 15 48 48.5
CIT *e* 15 49 26.7
CIT *e* 15 50 55.1
CIT pmax pmax
comp=Z,42nm,3.1s
**D62A Allapoint, All 60.67 308** IAmb IAmb 15 48 46.0
comp=Z,22nm,0.9s
**G65A Princeton 60.74 306** IAmb IAmb 15 48 59.6
comp=Z,15nm,1.0s
**F64A Sherman 60.88 307** IAmb IAmb 15 48 47.2
comp=Z,25nm,1.3s
**EMMW East Machias 60.93 305** IAmb IAmb 15 48 47.5
comp=Z,20nm,1.0s
**LMQ La Malbaie 61.18 309** IAmb IAmb 15 48 49.1
comp=Z,17nm,0.9s
**LDAQ Lac Daran 61.49 310** P **P** **15 48 50.6 +0.6**
LDAQ IAmb IAmb 15 48 51.4
comp=Z,15nm,0.8s
**PKME Peaks-Kenny Pk 61.76 307** P **P** **15 48 52.0 +0.2**
baz=58
**YAK Yakutsk 62.31 30** P **P** **15 48 54.3 -0.9**
**YAK Yakutsk 62.31 30** LR LR 16 18 40.8
comp=Z,623nm,20.6s,baz=307,slow=39
**YAK Yakutsk 62.31 30** *e*P **P** **15 48 53.9 -1.3**
YAK *e**PP **pP** **15 48 57.2 -2.7**
YAK *e* 15 51 11.0
YAK *e*S **S** **15 57 21.1 +0.3**
YAK *e* 15 58 47.5
YAK *e*SS **SS** **16 01 22.7 -0.6**
YAK pmax pmax
comp=Z,13nm,0.8s
YAK pmax pmax
comp=N,2.0nm,1.1s
YAK pmax pmax
comp=E,6.0nm,1.2s
YAK pmax pmax
comp=Z,64nm,3.1s
YAK pmax pmax
comp=N,42nm,3.4s
YAK pmax pmax
comp=E,62nm,3.0s
YAK smax smax
comp=E,112nm,4.0s
YAK smax smax
comp=N,50nm,3.6s
YAK MLR MLR
comp=Z,697nm,21.0s
YAK MLR MLR
comp=E,394nm,20.0s
**G62A West of Eustis 62.52 307** IAmb IAmb 15 48 58.9
comp=Z,24nm,1.2s
**LZH Lanzhou 62.98 65** *e*P **P** **15 49 01.6 +1.2**
LZH sP sP 15 49 08.3 +1.9
LZH pmax pmax
comp=Z,26nm,1.0s
LZH LR LR
comp=Z,450nm,13.7s
LZH LR LR
comp=Z,560nm,16.8s
LZH LR LR
comp=Z,610nm,17.7s
**PALK Pallekele 63.32 105** LR LR 16 19 40.4
comp=Z,145nm,19.4s,baz=74,slow=39
**I62A Tamworth 63.73 306** IAmb IAmb 15 49 18.6
comp=Z,22nm,1.2s
**LBNH Lisbon 63.89 307** P **P** **15 49 06.3 +0.3**
baz=56
**A36M Sachs Harbour 64.15 349** P **P** **15 49 07.4 +0.2**
**A36M Sachs Harbour 64.15 349** P **P** **15 49 07.2 0.0**
baz=28
**TRQ Mont Tremblant 64.34 310** IAmb IAmb 15 49 10.4
comp=Z,21nm,0.9s
**HNH Hanover 64.40 307** IAmb IAmb 15 49 11.6
comp=Z,16nm,1.0s
**BTO Baotou 64.55 57** *e*P **P** **15 49 10.1 -0.5**
BTO pP **pP** **15 49 14.8 -0.5**
BTO S **S** **15 57 46.9 -2.7**
BTO pmax pmax
comp=Z,36nm,1.0s
BTO pmax pmax
comp=Z,200nm,8.5s
BTO LR LR
comp=Z,2μm,18.6s
BTO LR LR
comp=Z,1μm,17.3s
BTO LR LR
comp=Z,760nm,19.1s
**WES Weston 64.55 305** IAmb IAmb 15 49 12.1
comp=Z,16nm,0.9s
**HRV Adam Dziewonsk 64.62 305** P **P** **15 49 11.0 +0.1**
baz=56
**J61A Chester 64.76 306** IAmb IAmb 15 50 11.5
comp=Z,20nm,1.3s
**OPO Ambohidratompo 64.87 152** LR LR 16 19 15.4
comp=Z,153nm,21.5s,baz=186,slow=38
**K62A Royalston 64.95 306** IAmb IAmb 15 49 15.3
comp=Z,24nm,1.2s
**LONY Lake Ozonia 65.25 308** P **P** **15 49 14.7 -0.3**
LONY IAmb IAmb 15 49 16.7
comp=Z,20nm,1.1s
**LONY Lake Ozonia 65.25 308** P **P** **15 49 14.8 -0.2**
baz=55,SNR=8.9
**HIA Hailar 65.32 45** IAmb IAmb 15 49 23.7
comp=Z,17nm,1.0s
**L61B Northampton 65.34 306** P **P** **15 49 16.2 +0.7**
baz=56
**HHC Hu-ho-hao-te 65.38 57** *e*P **P** **15 49 16.9 +0.9**
HHC pP sP 15 49 21.5 -0.6
HHC S **S** **15 58 01.1 +1.2**
HHC sS sS 15 58 10.3 +2.7
HHC pmax pmax
comp=Z,18nm,0.8s
HHC pmax pmax
comp=Z,130nm,4.4s
HHC LR LR
comp=Z,320nm,16.7s
HHC LR LR
comp=Z,290nm,15.2s
HHC LR LR
comp=Z,520nm,14.8s
**NCB Newcomb 65.41 308** P **P** **15 49 15.4 -0.6**
NCB IAmb IAmb 15 49 53.6
comp=Z,44nm,1.9s
**ACCN Adirondack Com 65.41 307** P **P** **15 49 16.4 +0.4**
ACCN IAmb IAmb 15 49 18.3
comp=Z,20nm,0.9s
**TNCH TengChong 65.46 78** P **P** **15 49 16.8 0.0**
TNCH pmax pmax
comp=Z,15nm,0.4s
TNCH pmax pmax
comp=Z,83nm,3.3s
**CD2 Chengdu 65.82 69** P **P** **15 49 19.5 +0.6**
CD2 S **S** **15 58 03.9 -1.5**
CD2 pmax pmax
comp=Z,30nm,0.7s
CD2 pmax pmax
comp=Z,190nm,5.1s
**C36M Paulatuk 66.29 347** P **P** **15 49 20.5 -0.7**
baz=29
**XLT XiLinHaoTe 66.38 52** *e*P **P** **15 49 23.2 +0.8**

XLT S **S** **15 58 12.1 +0.2**
XLT pmax pmax
comp=Z,15nm,1.0s
XLT LR LR
comp=Z,58nm,19.6s
XLT LR LR
comp=Z,520nm,22.4s
XLT LR LR
comp=Z,390nm,24.7s
**ZEA Zeya** 66.38 38 *e*P **P** **15 49 23.5 +1.4**
ZEA eS **S** **15 58 16.3 +4.9**
ZEA pmax pmax
comp=Z,10.0nm,1.1s
**J58A Remsen** 66.39 308 P **P** **15 49 22.4 +0.1**
J58A IAmb IAmb 15 49 24.6
comp=Z,21nm,1.0s
**LBTB Lobatse** 66.44 175 LR LR 16 20 38.5
comp=Z,425nm,18.9s,baz=356,slow=38
**J57A Williamstown** 66.79 308 P **P** **15 49 24.2 -0.6**
J57A IAmb IAmb 15 49 26.8
comp=Z,20nm,1.1s
**PAL Palisades** 66.92 305 P **P** **15 49 25.8 +0.1**
baz=54
**PZH PanZhiHua** 66.94 74 P **P** **15 49 24.8 -1.4**
PZH S **S** **15 58 18.7 -0.6**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,3.5s
PZH LR LR
comp=Z,230nm,19.4s
PZH LR LR
comp=Z,190nm,18.4s
PZH LR LR
comp=Z,200nm,19.1s
**PECO Prince Edward** 67.06 309 P **P** **15 49 25.1 -1.5**
PECO IAmb IAmb 15 49 28.6
comp=Z,26nm,1.0s
**DELO Deloro Mine** 67.08 310 IAmb IAmb 15 49 28.7
comp=Z,18nm,1.1s
**A21K Barrow** 67.39 359 P **P** **15 49 27.9 -0.3**
baz=2.7
**BINY Binghamton** 67.49 307 IAmb IAmb 15 49 31.4
comp=Z,20nm,1.1s
**BINY Binghamton** 67.49 307 P **P** **15 49 29.4 0.0**
baz=54,SNR=5.7
**XAN Xi'an** 67.57 64 ⇑P **P** **15 49 29.8 -0.2**
XAN pmax pmax
comp=Z,17nm,1.2s
XAN LR LR
comp=Z,510nm,13.9s
XAN LR LR
comp=Z,410nm,16.5s
XAN LR LR
comp=Z,550nm,22.5s
**A22K Sinclair Lake** 67.68 358 P **P** **15 49 30.3 +0.3**
baz=4.0,SNR=6.5
**KSPA Keystone Colle** 67.74 306 IAmb IAmb 15 49 33.0
comp=Z,26nm,1.1s
**BILL Bilibino** 67.78 13 P **P** **15 49 28.7 -2.0**
BILL IAmb IAmb 15 49 41.2
comp=Z,22nm,1.0s
**BILL Bilibino** 67.78 13*c i*P **P** **15 49 30.5 -0.2**
BILL *e**PP **pP** **15 49 33.9 -1.3**
BILL *e**SP **sP** **15 49 36.7 -0.3**
BILL *e* 15 49 57.3
BILL pmax pmax
comp=Z,27nm,1.1s
BILL MLR MLR
comp=Z,274nm,19.0s
**SADO Sadowa** 67.81 311 IAmb IAmb 15 49 33.2
comp=Z,25nm,1.0s
**SADO Sadowa** 67.81 311 LR LR 16 18 58.7
comp=Z,385nm,18.0s,baz=73,slow=36
**C26K Camden Bay** 68.29 354 P **P** **15 49 34.2 +0.4**
baz=12
**B22K Teshekpuk Lake** 68.31 358 IAmb IAmb 15 49 35.8
comp=Z,24nm,1.1s
**B22K Teshekpuk Lake** 68.31 358 P **P** **15 49 34.2 +0.3**
baz=5.2,SNR=6.9
**D28M Stokes Point** 68.32 352 P **P** **15 49 34.2 +0.2**
baz=17
**L56A Greenwood** 68.47 308 IAmb IAmb 15 49 37.6
comp=Z,20nm,1.0s
**C27K Jago River** 68.48 354 P **P** **15 49 35.5 +0.4**
baz=13,SNR=27
**KMI Kunming** 68.48 75 ⇑P **P** **15 49 36.0 -0.1**
KMI pmax pmax
comp=Z,9.0nm,1.0s
KMI LR LR
comp=Z,250nm,21.2s
KMI LR LR
comp=Z,230nm,19.0s
KMI LR LR
comp=Z,270nm,31.9s
**A19K Wainwright** 68.54 0 P **P** **15 49 35.8 +0.4**
baz=359
**D27M Malcolm River** 68.62 353 IAmb IAmb 15 49 49.7
comp=Z,15nm,0.9s
**D27M Malcolm River** 68.62 353 P **P** **15 49 36.2 +0.1**
baz=15,SNR=10
**HEH HeiHe** 68.66 41 *e*P **P** **15 49 36.1 -0.4**
HEH pmax pmax
comp=Z,37nm,1.0s
HEH LR LR
comp=Z,1μm,20.2s
HEH LR LR
comp=Z,720nm,19.6s
HEH LR LR
comp=Z,600nm,18.8s
**INK Inuvik** 68.68 350 IAmb IAmb 15 49 36.6
comp=Z,46nm,1.9s
**INK Inuvik** 68.68 350 LR LR 16 21 42.0
comp=Z,223nm,20.4s,baz=34,slow=38
**INK Inuvik** 68.68 350 P **P** **15 49 35.9 -0.4**
baz=21
**C23K Itkillik River** 68.70 357 P **P** **15 49 36.5 0.0**
baz=7.5,SNR=31
**BJI Beijing** 68.71 55 P **P** **15 49 37.2 +0.2**
BJI PcP **PcP** **15 50 02.0 +0.3**
BJI S **S** **15 58 38.3 -1.5**
BJI pmax pmax
comp=Z,5.0nm,0.7s
BJI LR LR
comp=Z,290nm,16.0s
BJI LR LR
comp=Z,270nm,16.6s
BJI LR LR
comp=Z,320nm,19.2s
**B20K Meade River** 68.72 359 IAmb IAmb 15 49 42.3
comp=Z,23nm,1.0s
**B20K Meade River** 68.72 359 P **P** **15 49 36.6 +0.1**
baz=2.2,SNR=9.4
**C24K Franklin Bluff** 68.72 356 P **P** **15 49 36.7 +0.2**
baz=9.0
**N58A Sunbury** 68.74 306 IAmb IAmb 15 49 39.1
comp=Z,22nm,1.0s
**D25K Kavik River** 68.98 355 IAmb IAmb 15 49 39.7
comp=Z,21nm,1.1s
**D25K Kavik River** 68.98 355 P **P** **15 49 38.5 +0.3**
baz=11,SNR=15
**B21K Ikpikpuk River** 69.06 358 IAmb IAmb 15 49 40.5
comp=Z,18nm,0.8s
**B21K Ikpikpuk River** 69.06 358 P **P** **15 49 39.1 +0.4**
baz=4.2,SNR=14
**SEY Seymchan** 69.08 21*c i*P **P** **15 49 39.1 +0.2**
SEY pmax pmax
comp=Z,20nm,0.9s
**E28M Babbage River** 69.10 352 IAmb IAmb 15 49 40.6
comp=Z,15nm,0.9s
**E28M Babbage River** 69.10 352 P **P** **15 49 39.2 +0.2**
baz=16,SNR=17
**E29M Blow River** 69.13 351 P **P** **15 49 39.2 0.0**
baz=18,SNR=32
**D24K Happy Valley** 69.29 356 IAmb IAmb 15 49 57.5
comp=Z,13nm,0.8s
**D24K Happy Valley** 69.29 356 P **P** **15 49 40.8 +0.6**
baz=8.9,SNR=7.9
**B18K Kokolik River** 69.38 1 P **P** **15 49 40.7 0.0**
baz=358,SNR=9.3
**HNS HongShan** 69.38 58 ⇑P **P** **15 49 41.1 -0.1**
HNS S **S** **15 58 51.8 +4.1**
HNS pmax pmax
comp=Z,11nm,1.3s
HNS LR LR
comp=Z,930nm,18.1s
HNS LR LR
comp=Z,660nm,19.1s
HNS LR LR
comp=Z,350nm,21.6s
**RCBR Riachuelo** 69.49 242 LR LR 16 20 51.3
comp=Z,61nm,18.1s,baz=68,slow=37
**F31M Tsiigehtchic** 69.52 350 P **P** **15 49 40.7 -0.8**
**F31M Tsiigehtchic** 69.52 350 P **P** **15 49 41.1 -0.4**
baz=21,SNR=36
**SSPA Standing Stone** 69.57 306 P **P** **15 49 43.6 +1.2**
**SSPA Standing Stone** 69.57 306 P **P** **15 49 43.0 +0.7**
baz=52
**D23K Nanushuk River** 69.57 356 P **P** **15 49 42.3 +0.4**
baz=7.4
**F30M Barrier River** 69.63 350 P **P** **15 49 41.9 -0.3**
baz=19,SNR=5.6
**LYN LuoYang** 69.63 62 P **P** **15 49 45.6 +2.8**
LYN sS sS 15 59 00.4 +1.8
LYN pmax pmax
comp=Z,28nm,0.9s
LYN pmax pmax
comp=Z,150nm,5.8s
LYN LR LR
comp=Z,490nm,14.4s
LYN LR LR
comp=Z,570nm,14.1s
LYN LR LR
comp=Z,410nm,16.5s
**C19K Lookout Ridge** 69.65 360 IAmb IAmb 15 49 44.6
comp=Z,26nm,1.2s
**C19K Lookout Ridge** 69.65 360 P **P** **15 49 42.3 -0.1**
baz=0.2
**E27K Coleen River** 69.71 353 IAmb IAmb 15 49 44.4
comp=Z,25nm,1.1s
**E27K Coleen River** 69.71 353 P **P** **15 49 42.6 -0.2**
baz=14,SNR=24
**CRAI Chiangrai** 69.71 81 IAmb IAmb 15 49 47.2
comp=Z,13nm,0.7s
**CM31 Chiang Mai Arr** 69.73 83 IAmb IAmb 15 49 46.0
comp=Z,12nm,0.8s
**CMAR Chiang Mai Arr** 69.73 83 P **P** **15 49 42.5 -1.1**
**CMAR Chiang Mai Arr** 69.73 83 P **P** **15 49 43.3 -0.4**
comp=Z,8.6nm,0.7s,baz=306,slow=7.5,SNR=34
CMAR LR LR 16 26 20.3
comp=Z,119nm,21.3s,baz=315,slow=41
comp=Z,8.6nm,0.7s
**CMAR Chiang Mai Arr** 69.73 83 *i* P **P** **15 49 42.7 -1.0**
CMAR pmax pmax
comp=Z,9.0nm,0.7s
**D22K Ayikyak River** 69.74 357 IAmb IAmb 15 49 44.9
comp=Z,24nm,1.1s
**D22K Ayikyak River** 69.74 357 P **P** **15 49 42.9 0.0**
baz=5.8,SNR=17
**TOLK Toolik Lake Re** 69.84 356 P **P** **15 49 43.9 +0.3**
TOLK IAmb IAmb 15 49 46.6
comp=Z,16nm,0.9s
**TOLK Toolik Lake Re** 69.84 356 P **P** **15 49 43.3 -0.3**
baz=8.2,SNR=11
**ERPA Erie** 69.91 309 P **P** **15 49 44.6 +0.2**
baz=52
**BOSA Boshof** 69.99 175 P **P** **15 49 44.6 -0.3**
comp=Z,5.0nm,1.0s,baz=1.5,slow=7.5,SNR=9.5
BOSA LR LR 16 22 55.1
comp=Z,617nm,18.2s,baz=360,slow=38
comp=Z,5.0nm,1.0s
**D20K Etivluk River** 70.01 359 P **P** **15 49 44.4 -0.3**
baz=2.6
**G31M Satah River** 70.08 350 P **P** **15 49 44.1 -0.9**
baz=20,SNR=12
**F28M Old Crow** 70.09 352 IAmb IAmb 15 49 47.8
comp=Z,14nm,0.8s
**F28M Old Crow** 70.09 352 P **P** **15 49 44.8 -0.4**
baz=16,SNR=17
**C18K Utukok River** 70.10 1 P **P** **15 49 45.8 +0.6**
baz=359,SNR=13
**YKA Yellowknife Ar** 70.11 339 P **P** **15 49 45.1 -0.1**
comp=Z,10nm,0.8s,baz=35,slow=6.6,SNR=10
YKA LR LR 16 22 01.7
comp=Z,522nm,19.6s,baz=43,slow=37
comp=Z,10nm,0.8s
**YKA Yellowknife Ar** 70.11 339 *i* P **P** **15 49 45.0 -0.3**
YKA pmax pmax
comp=Z,10.0nm,0.8s
**ENH Enshi** 70.19 67 IAmb IAmb 15 49 50.3
comp=Z,19nm,0.7s
**E21K Killik River** 70.22 358 IAmb IAmb 15 50 13.1
comp=Z,13nm,0.8s
**E21K Killik River** 70.22 358 P **P** **15 49 45.7 -0.3**
baz=4.7,SNR=16
**C17K DeLong Mountai** 70.25 1 P **P** **15 49 46.0 0.0**
baz=357,SNR=14
**D19K Kuna River** 70.25 359 P **P** **15 49 46.5 +0.4**
baz=1.4
**G30M tAoh Zraii Nji** 70.28 350 IAmb IAmb 15 49 57.1
comp=Z,12nm,0.9s
**G30M tAoh Zraii Nji** 70.28 350 P **P** **15 49 45.6 -0.7**
baz=19,SNR=8.6
**E24K Your Creek** 70.34 355 P **P** **15 49 46.6 -0.1**
E24K IAmb IAmb 15 49 48.1
comp=Z,11nm,0.8s
**E24K Your Creek** 70.34 355 P **P** **15 49 46.8 +0.1**
baz=9.1,SNR=19
**P57A Homestead Farm** 70.35 306 IAmb IAmb 15 49 49.2
comp=Z,21nm,1.1s
**C16K Lisburne Hills** 70.40 2 IAmb IAmb 15 49 48.5
comp=Z,27nm,1.1s
**C16K Lisburne Hills** 70.40 2 P **P** **15 49 47.0 0.0**
baz=356
**F26K Sheenjek River** 70.41 354 P **P** **15 49 46.8 -0.3**
baz=12,SNR=21
**E23K Chandalar** 70.42 356 P **P** **15 49 47.5 +0.3**
baz=8.2,SNR=25
**E20K Nigu River** 70.46 359 P **P** **15 49 47.6 +0.2**
baz=3.0,SNR=17
**G29M Pine Creek** 70.56 351 P **P** **15 49 47.7 -0.3**
baz=17,SNR=31
**F25K Christian Rive** 70.63 354 P **P** **15 49 48.4 -0.1**
baz=11,SNR=12
**RDOG Red Dog Mine** 70.68 1 IAmb IAmb 15 49 60.0
comp=Z,16nm,0.8s
**RDOG Red Dog Mine** 70.68 1 P **P** **15 49 48.9 +0.2**
baz=358
**BMAR Burnt Mountain** 70.71 354 P **P** **15 49 49.4 +0.4**
**M53A WI Miller and** 70.73 309 P **P** **15 49 49.4 0.0**
baz=51
**CBN Corbin Frederi** 70.74 304 P **P** **15 49 49.5 -0.1**
baz=52
**GLMI Grayling** 70.83 313 P **P** **15 49 50.3 +0.3**
baz=50
**F24K Squaw Lake** 70.86 355 P **P** **15 49 50.5 +0.7**
F24K IAmb IAmb 15 49 52.0
comp=Z,19nm,0.8s
**F24K Squaw Lake** 70.86 355 P **P** **15 49 50.1 +0.3**
baz=9.5,SNR=25
**EPYK Eagle Plains** 70.92 350 P **P** **15 49 49.7 -0.5**
baz=18,SNR=6.8
**D17K Noatak River** 71.03 1 P **P** **15 49 51.0 +0.3**
baz=358,SNR=19
**G27K Doyon Strip** 71.05 352 P **P** **15 49 50.7 -0.3**
baz=14,SNR=18
**F22K John River** 71.09 357 P **P** **15 49 51.8 +0.6**
baz=6.1,SNR=36
**G26K Porcupine Rive** 71.11 353 P **P** **15 49 52.0 +0.7**
baz=13,SNR=25
**R58B Mineral** 71.20 304 IAmb IAmb 15 50 05.6
comp=Z,12nm,0.8s
**H29M Whitestone** 71.27 351 P **P** **15 49 51.9 -0.4**
baz=17,SNR=27
**COLD Coldfoot** 71.28 356 P **P** **15 49 52.5 +0.1**
baz=7.7,SNR=32
**E19K Redstone River** 71.28 359 P **P** **15 49 52.6 +0.2**
baz=2.1
**MA2 Magadan** 71.31 24 P **P** **15 49 52.7 +0.1**
**MA2 Magadan** 71.31 24 P **P** **15 49 52.7 +0.1**
MA2 pmax pmax
comp=Z,29nm,0.9s
**E18K Tukpahlearik C** 71.34 0 P **P** **15 49 52.8 +0.1**
baz=359,SNR=24
**O54A Avella** 71.34 307 IAmb IAmb 15 49 55.2
comp=Z,30nm,1.2s
**MCWV Mont Chateau** 71.35 307 P **P** **15 49 53.6 +0.3**
baz=51
**F21K Alatna River** 71.43 357 P **P** **15 49 53.4 +0.2**
baz=5.1,SNR=27
**KLR Kul'dur** 71.46 40 LR LR 16 24 09.3
comp=Z,255nm,18.7s,baz=314,slow=38
**KLR Kul'dur** 71.46 40*de*P **P** **15 49 53.4 -0.3**
KLR pmax pmax
comp=Z,17nm,0.9s
**G25K Bearman Lake** 71.48 354 P **P** **15 49 54.2 +0.7**
baz=11,SNR=14
**BNX BinXian** 71.58 45 ⇓P **P** **15 49 54.7 +0.2**
BNX pmax pmax
comp=Z,23nm,0.8s
**WRGLY Wrigley** 71.59 344 P **P** **15 49 54.8 +0.6**
baz=28,SNR=7.2
**H27K Steamboat Moun** 71.60 352 P **P** **15 49 54.8 +0.5**
baz=14,SNR=26
**T59A Double "B" Far** 71.62 303 IAmb IAmb 15 49 56.6
comp=Z,23nm,1.3s
**G24K Hadweenzic Riv** 71.64 355 IAmb IAmb 15 49 57.5
comp=Z,12nm,0.8s
**G24K Hadweenzic Riv** 71.64 355 P **P** **15 49 54.4 -0.2**
baz=9.8,SNR=14
**G22K Bettles** 71.65 357 P **P** **15 49 54.8 +0.2**
baz=6.6
**F20K Avaraart Lake** 71.67 358 P **P** **15 49 54.7 +0.1**
baz=3.3,SNR=16
**E17K Hotham Inlet** 71.67 1 P **P** **15 49 54.4 -0.2**
baz=358,SNR=9.2
**G23K Bananza Creek** 71.79 356 P **P** **15 49 55.4 -0.1**
baz=7.8,SNR=12
**CN2 Changchun** 71.79 47 P **P** **15 49 55.7 -0.1**
CN2 S **S** **15 59 13.4 -2.3**
CN2 pmax pmax
comp=Z,30nm,0.8s
CN2 LR LR
comp=Z,500nm,15.0s
CN2 LR LR
comp=Z,400nm,15.0s
CN2 LR LR
comp=Z,300nm,15.0s
**O53A New Philadelph** 71.80 308 P **P** **15 49 56.1 +0.2**
baz=51,SNR=10.0
**AAM Ann Arbor** 71.91 311 P **P** **15 49 56.5 0.0**
baz=50
**F19K Shaleruckik Mo** 71.92 359 IAmb IAmb 15 49 57.1
comp=Z,24nm,0.9s
**F19K Shaleruckik Mo** 71.92 359 P **P** **15 49 55.8 -0.4**
baz=1.7,SNR=21
**H25L Birch Creek** 71.95 354 P **P** **15 49 57.2 +0.8**
baz=11,SNR=18
**I30M Mount Dempster** 71.97 350 P **P** **15 49 56.1 -0.7**
**I30M Mount Dempster** 71.97 350 P **P** **15 49 56.6 -0.1**
baz=18,SNR=37
**SNY Shenyang** 72.01 50 ⇓P **P** **15 49 57.1 0.0**
SNY S **S** **15 59 13.0 -5.2**
SNY pmax pmax
comp=Z,8.0nm,0.9s
SNY pmax pmax
comp=Z,110nm,4.4s
SNY LR LR
comp=Z,510nm,17.6s
SNY LR LR
comp=Z,480nm,15.8s
SNY LR LR
comp=Z,410nm,17.3s
**N51A Ashland** 72.06 309 IAmb IAmb 15 49 59.1
comp=Z,24nm,0.9s
**I29M Ogilvie Camp,** 72.09 351 P **P** **15 49 56.8 -0.5**
baz=17,SNR=28
**F42A Maple Grove Fa** 72.11 316 IAmb IAmb 15 49 59.1
comp=Z,18nm,0.9s
**FFC Flin Flon** 72.12 329 P **P** **15 49 57.3 -0.3**
FFC IAmb IAmb 15 49 58.6
comp=Z,17nm,0.8s
**FFC Flin Flon** 72.12 329 P **P** **15 49 57.3 -0.3**
FFC pmax pmax
comp=Z,17nm,0.8s
**G21K Allakaket** 72.14 357 IAmb IAmb 15 49 59.2
comp=Z,23nm,0.8s
**G21K Allakaket** 72.14 357 P **P** **15 49 57.8 +0.3**
baz=5.0,SNR=25
**F18K Selawik** 72.16 360 P **P** **15 49 57.0 -0.5**
baz=0.2,SNR=23
**I28M Miner Creek** 72.19 351 IAmb IAmb 15 49 59.0
comp=Z,19nm,1.0s
**I28M Miner Creek** 72.19 351 P **P** **15 49 57.6 -0.4**
baz=16,SNR=16
**I27K Kandik River** 72.22 352 P **P** **15 49 58.5 +0.4**
baz=14,SNR=20
**F17K Baldwin Pennin** 72.32 1 IAmb IAmb 15 49 59.7
comp=Z,22nm,0.8s
**F17K Baldwin Pennin** 72.32 1 P **P** **15 49 58.4 -0.1**
baz=359
**EYMN Ely** 72.34 319 IAmb IAmb 15 50 00.3
comp=Z,22nm,0.8s
**EYMN Ely** 72.34 319 P **P** **15 49 58.7 -0.4**
baz=47,SNR=9.4
**Q54A Coxs Mills** 72.37 307 IAmb IAmb 15 50 01.0
comp=Z,22nm,1.1s
**R55A Marlinton** 72.38 306 IAmb IAmb 15 50 01.6
comp=Z,35nm,1.2s
**H24K Noodor Dome** 72.53 355 P **P** **15 50 00.3 +0.4**
baz=9.4,SNR=16
**GRNR Gornyy** 72.56 37 ⇑*i*P **P** **15 50 00.4 +0.1**
GRNR pmax pmax
comp=Z,10.0nm,0.9s
GRNR MLR MLR
comp=Z,280nm,13.0s
**J30M Hart River** 72.59 350 P **P** **15 50 00.6 +0.2**
baz=18,SNR=60
**G19K Purcell Mounta** 72.60 359 IAmb IAmb 15 50 02.0
comp=Z,20nm,0.9s
**G19K Purcell Mounta** 72.60 359 P **P** **15 50 00.7 +0.4**
baz=2.2,SNR=16
**H23K Yukon River** 72.64 356 IAmb IAmb 15 50 02.7
comp=Z,20nm,0.8s
**H23K Yukon River** 72.64 356 P **P** **15 50 01.1 +0.5**
baz=8.1,SNR=28
**T57A Hurt** 72.66 304 IAmb IAmb 15 50 03.0
comp=Z,20nm,1.3s
**I26K Coal Creek Min** 72.67 353 P **P** **15 50 01.3 +0.6**
baz=13
**PRP Porcupine Dome** 72.67 354 IAmb IAmb 15 50 02.7
comp=Z,32nm,1.4s
**PRP Porcupine Dome** 72.67 354 P **P** **15 50 01.1 +0.2**
baz=11,SNR=13
**H22K Ishtalitna Cre** 72.67 356 P **P** **15 50 01.3 +0.6**
baz=6.7,SNR=23
**IMAR Indian Mountai** 72.68 357 P **P** **15 50 00.3 -0.4**
**P52A Corning** 72.74 308 P **P** **15 50 01.3 -0.2**
baz=50,SNR=6.8
**ULM Lac du Bonnet** 72.81 323 P **P** **15 50 01.0 -0.8**
**ULM Lac du Bonnet** 72.81 323 P **P** **15 50 01.6 -0.2**
comp=Z,30nm,0.8s,baz=40,slow=5.8,SNR=47
ULM LR LR 16 21 48.3
comp=Z,587nm,19.1s,baz=43,slow=36
comp=Z,30nm,0.8s
**ULM Lac du Bonnet** 72.81 323 P **P** **15 50 01.0 -0.8**
ULM pmax pmax
comp=Z,36nm,0.9s
**ACSO Alum Creek Sta** 72.85 309 IAmb IAmb 15 50 03.7
comp=Z,32nm,1.1s
**ACSO Alum Creek Sta** 72.85 309 P **P** **15 50 02.4 +0.2**
baz=50,SNR=5.7
**G18K Tagagawik** 72.87 359 IAmb IAmb 15 50 03.4
comp=Z,26nm,0.8s
**G18K Tagagawik** 72.87 359 P **P** **15 50 02.1 +0.3**
baz=1.0,SNR=22
**CNNC Cliffs of the** 72.91 302 P **P** **15 50 02.8 +0.2**
baz=51
**J29N Klondike Camp** 72.95 350 P **P** **15 50 02.7 +0.2**
baz=17
**H21K Melozitna Rive** 72.97 357 P **P** **15 50 02.9 +0.4**
baz=5.5,SNR=46
**EGAK Eagle** 72.98 352 P **P** **15 50 01.9 -0.6**
baz=15,SNR=7.6
**F15K North Star Dit** 72.99 2 IAmb IAmb 15 50 04.1
comp=Z,24nm,1.1s
**F15K North Star Dit** 72.99 2 P **P** **15 50 02.3 -0.3**
baz=356,SNR=7.0
**TNA Tin City** 73.02 3 P **P** **15 50 02.2 -0.5**
baz=354
**N49A Columbus Grove** 73.10 310 IAmb IAmb 15 50 05.1
comp=Z,34nm,1.1s
**F14K Arctic Creek** 73.17 3 P **P** **15 50 03.5 -0.1**
baz=355,SNR=6.2
**H20K Anotlenegga Mo** 73.20 358 P **P** **15 50 03.7 -0.2**
baz=3.9,SNR=12
**H19K Roundabout Mou** 73.21 359 IAmb IAmb 15 50 05.6
comp=Z,17nm,0.8s
**H19K Roundabout Mou** 73.21 359 P **P** **15 50 03.9 +0.1**
baz=2.7,SNR=17
**POKR Poker Plat Res** 73.21 355 IAmb IAmb 15 50 05.6
comp=Z,22nm,1.0s
**POKR Poker Plat Res** 73.21 355 P **P** **15 50 04.3 +0.4**

baz=9.7
**Q52A Bidwell** 73.25 307 IAmb IAmb 15 50 06.1
comp=Z,34nm,1.2s
**BLA Blacksburg** 73.25 305 P **P** **15 50 04.5 -0.2**
baz=50
**G17K Kiwalik Mounta** 73.27 0 P **P** **15 50 03.9 -0.3**
baz=359,SNR=5.2
**E38A The Farm, Brul** 73.29 318 IAmb IAmb 15 50 05.6
comp=Z,16nm,0.9s
**I23K Minto, Yukon-K** 73.30 355 IAmb IAmb 15 50 06.2
comp=Z,17nm,1.0s
**I23K Minto, Yukon-K** 73.30 355 P **P** **15 50 04.6 +0.2**
baz=8.2,SNR=12
**WHN Wuhan** 73.34 64 P P 15 50 11.8 +6.6
**G16K Koyuk River** 73.36 1 IAmb IAmb 15 50 06.3
comp=Z,20nm,0.8s
**G16K Koyuk River** 73.36 1 P **P** **15 50 04.7 0.0**
baz=359,SNR=6.0
**P51A Williamsport** 73.38 308 IAmb IAmb 15 50 06.4
comp=Z,21nm,1.1s
**MDM Murphy Dome** 73.42 355 IAmb IAmb 15 50 06.6
comp=Z,27nm,1.0s
**K29M Barlow Dome** 73.44 350 IAmb IAmb 15 50 11.2
comp=Z,16nm,0.9s
**K29M Barlow Dome** 73.44 350 P **P** **15 50 05.9 +0.4**
baz=17,SNR=18
**DAWY Dawson** 73.47 351 P **P** **15 50 05.8 +0.3**
baz=16,SNR=20
**COLA College** 73.48 355 P **P** **15 50 04.1 -1.4**
COLA IAmb IAmb 15 50 06.8
comp=Z,15nm,0.9s
**COLA College** 73.48 355 P **P** **15 50 05.3 -0.1**
baz=9.4
**COLA College** 73.48 355 *c**e*P **P** **15 50 05.5 +0.1**
COLA pmax pmax
comp=Z,16nm,0.9s
**MDJ Mudanjiang** 73.49 45 P **P** **15 50 06.5 +0.6**
MDJ sS sS 15 59 49.5 +6.6
MDJ pmax pmax
comp=Z,6.0nm,1.0s
MDJ LR LR
comp=Z,420nm,18.5s
MDJ LR LR
comp=Z,320nm,10.8s
MDJ LR LR
comp=Z,300nm,20.3s
**J26L Joseph Creek** 73.49 353 IAmb IAmb 15 50 06.9
comp=Z,20nm,0.8s
**J26L Joseph Creek** 73.49 353 P **P** **15 50 05.7 0.0**
baz=13,SNR=28
**MLY Manley** 73.50 356 IAmb IAmb 15 50 07.6
comp=Z,22nm,1.1s
**MLY Manley** 73.50 356 P **P** **15 50 06.1 +0.4**
baz=7.1,SNR=19
**ILAR Eielson Array** 73.51 354 P **P** **15 50 05.3 -0.4**
**ILAR Eielson Array** 73.51 354 P **P** **15 50 05.6 -0.1**
comp=Z,6.0nm,0.7s,baz=0.2,slow=4.7,SNR=58
ILAR LR LR 16 22 06.4
comp=Z,267nm,21.9s,baz=356,slow=36
comp=Z,6.0nm,0.7s
**ILAR Eielson Array** 73.51 354 P **P** **15 50 05.3 -0.4**
**J25K Salcha River,** 73.55 354 P **P** **15 50 06.1 +0.1**
baz=11
**SUR Sutherland** 73.59 179 LR LR 16 25 30.7
comp=Z,551nm,19.5s,baz=358,slow=38
**H18K Honhosa River** 73.61 359 IAmb IAmb 15 50 08.0
comp=Z,16nm,0.8s
**H18K Honhosa River** 73.61 359 P **P** **15 50 06.1 -0.2**
baz=1.2,SNR=6.3
**MMPY Sheldon Lake,** 73.65 347 IAmb IAmb 15 50 09.1
comp=Z,16nm,0.8s
**MMPY Sheldon Lake,** 73.65 347 P **P** **15 50 06.8 +0.2**
baz=22,SNR=27
**O49A Covington** 73.67 309 IAmb IAmb 15 50 08.2
comp=Z,36nm,1.1s
**CCB Clear Creek Bu** 73.70 355 IAmb IAmb 15 50 17.0
comp=Z,35nm,1.8s
**G15K Niukluk** 73.72 2 P **P** **15 50 06.8 -0.1**
baz=357
**MDP Montagnes des** 73.76 262 LR LR 16 18 26.3
comp=Z,129nm,20.0s,baz=68,slow=32
**I42A Draeger Farm,** 73.77 315 IAmb IAmb 15 50 08.9
comp=Z,14nm,0.8s
**K27K Chicken** 73.81 352 P **P** **15 50 07.7 +0.3**
baz=14
**H17K Granite Mounta** 73.83 0 P **P** **15 50 07.7 +0.2**
baz=360
**NEA2 Nenana** 73.84 355 IAmb IAmb 15 50 08.8
comp=Z,16nm,1.0s
**NEA2 Nenana** 73.84 355 P **P** **15 50 07.8 +0.2**
baz=8.4,SNR=14
**HDA Harding Lake** 73.87 354 P **P** **15 50 07.5 -0.3**
baz=10,SNR=23
**I20K Naaghedeneel** 73.89 358 P **P** **15 50 08.3 +0.5**
baz=4.2,SNR=9.7
**WRH Wood River Hil** 73.89 355 IAmb IAmb 15 50 08.9
comp=Z,21nm,0.9s
**SSFO Shawnee State** 73.97 308 IAmb IAmb 15 50 10.3
comp=Z,33nm,1.3s
**N47A Urbana** 74.00 311 IAmb IAmb 15 50 09.9
comp=Z,25nm,1.0s
**GCSA Galena City Sc** 74.00 359 P **P** **15 50 09.2 +0.7**
baz=2.4
**SCRK Sand Creek** 74.05 353 P **P** **15 50 08.4 -0.5**
baz=12,SNR=12
**TGTN Hyland Airport** 74.11 345 P **P** **15 50 09.0 -0.3**
baz=24
**H16K Elim** 74.12 1 P **P** **15 50 09.4 +0.2**
baz=358
**ANM Nome** 74.12 2 P **P** **15 50 09.3 +0.1**
baz=356
**AGMN Agassiz Nation** 74.19 321 P **P** **15 50 09.5 -0.5**
**AGMN Agassiz Nation** 74.19 321 P **P** **15 50 09.7 -0.2**
baz=44,SNR=6.8
**L29M L29M** 74.23 350 IAmb IAmb 15 50 11.6
comp=Z,17nm,1.0s
**L29M L29M** 74.23 350 P **P** **15 50 10.2 +0.2**
baz=17,SNR=15
**K43A Burlington** 74.25 313 IAmb IAmb 15 50 11.9
comp=Z,39nm,1.1s
**P49A Miami Univ. Ec** 74.32 309 P **P** **15 50 09.8 -1.0**
baz=49
**FARO Faro, Yukon** 74.36 347 IAmb IAmb 15 50 13.1
comp=Z,28nm,1.1s
**FARO Faro, Yukon** 74.36 347 P **P** **15 50 11.0 +0.2**
baz=20,SNR=14
**L44A Lake County Fo** 74.38 313 P **P** **15 50 10.3 -0.8**
baz=48
**K24K Donnelly Dome** 74.38 354 P **P** **15 50 10.1 -0.7**
baz=11
**BPAW Bear Paw Mtn.** 74.44 356 IAmb IAmb 15 50 11.9
comp=Z,17nm,0.8s
**BPAW Bear Paw Mtn.** 74.44 356 P **P** **15 50 10.8 -0.4**
baz=6.9,SNR=16
**KOTAN Kotaneelee Air** 74.48 342 P **P** **15 50 10.8 -0.6**
baz=27
**J20K Nowinta River** 74.50 357 P **P** **15 50 11.2 -0.2**
**J20K Nowinta River** 74.50 357 P **P** **15 50 11.8 +0.3**
baz=4.5,SNR=10
**U54A Nelsons Funny** 74.55 305 IAmb IAmb 15 50 13.8
comp=Z,36nm,1.3s
**M31M Drury Creek, Y** 74.56 348 IAmb IAmb 15 50 14.0
comp=Z,16nm,0.9s
**M31M Drury Creek, Y** 74.56 348 P **P** **15 50 12.6 +0.7**
baz=20,SNR=26
**GAMB Gambell** 74.58 5 P **P** **15 50 11.4 -0.4**
baz=351
**MCK McKinley** 74.68 355 P **P** **15 50 12.0 -0.5**
baz=8.5,SNR=9.2
**BCAR Beaver Creek A** 74.71 352 P **P** **15 50 12.5 -0.3**
**L27K Beaver Creek,** 74.72 352 IAmb IAmb 15 50 14.8
comp=Z,17nm,0.8s
**L27K Beaver Creek,** 74.72 352 P **P** **15 50 13.4 +0.6**
baz=14,SNR=26
**J19K Poorman** 74.73 358 IAmb IAmb 15 50 14.7
comp=Z,26nm,1.1s
**J19K Poorman** 74.73 358 P **P** **15 50 13.3 +0.6**
baz=3.3,SNR=13
**SPMN Marine on St.** 74.88 318 IAmb IAmb 15 50 15.2
comp=Z,21nm,0.9s
**SPMN Marine on St.** 74.88 318 P **P** **15 50 13.5 -0.4**
baz=46
**I17K Unalakleet** 74.89 0 P **P** **15 50 13.0 -0.7**
baz=359
**M29M Somme Creek** 74.91 350 P **P** **15 50 13.8 -0.2**
baz=16,SNR=44
**L26K Log Cabin Wild** 74.92 352 IAmb IAmb 15 50 15.9
comp=Z,20nm,0.8s
**L26K Log Cabin Wild** 74.92 352 P **P** **15 50 13.4 -0.6**
baz=13,SNR=7.7
**USA0B Ussuriysk Arra** 75.02 44 IAmb IAmb 15 50 22.3
comp=Z,27nm,1.4s
**USA0B Ussuriysk Arra** 75.02 44 ⇑*i*P **P** **15 50 14.5 -0.3**
**USRK Ussuriysk Ar.** 75.02 44 P **P** **15 50 14.7 -0.2**
comp=Z,7.4nm,0.7s,baz=278,slow=5.5,SNR=15
USRK LR LR 16 27 08.4
comp=Z,805nm,18.6s,baz=317,slow=39
comp=Z,7.4nm,0.7s
**MENT Mentasta** 75.04 352 IAmb IAmb 15 50 19.0
comp=Z,15nm,0.8s
**TRF Thorofare Moun** 75.05 356 P **P** **15 50 14.3 -0.6**
baz=7.4
**SFIN Lafayette** 75.13 311 IAmb IAmb 15 50 16.5
comp=Z,25nm,1.1s
**SFIN Lafayette** 75.13 311 P **P** **15 50 15.0 -0.5**
baz=48,SNR=6.5
**KMSC Kings Mountain** 75.14 304 P **P** **15 50 15.9 +0.2**
baz=49
**JFWS Jewell Farm** 75.14 315 IAmb IAmb 15 50 16.4
comp=Z,21nm,0.9s
**JFWS Jewell Farm** 75.14 315 P **P** **15 50 15.0 -0.5**
baz=47,SNR=5.3
**PAX Paxson** 75.17 353 P **P** **15 50 15.6 +0.1**
baz=11,SNR=8.3
**DHY Denali Highway** 75.22 354 P **P** **15 50 16.0 +0.1**
baz=9.7,SNR=22
**J18K Innoko River** 75.28 359 IAmb IAmb 15 50 17.9
comp=Z,16nm,0.8s
**J18K Innoko River** 75.28 359 P **P** **15 50 16.3 +0.3**
baz=2.5,SNR=15
**K20K Telida** 75.32 357 IAmb IAmb 15 50 17.9
comp=Z,18nm,1.0s
**K20K Telida** 75.32 357 P **P** **15 50 16.2 -0.1**
baz=4.5,SNR=13
**N32M Quiet Lake** 75.33 347 P **P** **15 50 16.8 +0.4**
baz=20
**NJ2 Nanjing** 75.37 60 *e*P **P** **15 50 17.2 +0.2**
NJ2 pP **pP** **15 50 21.1 -0.7**
NJ2 pmax pmax
comp=Z,18nm,0.9s
NJ2 pmax pmax
comp=Z,270nm,4.7s
**J17K VABM Dome** 75.38 360 IAmb IAmb 15 50 18.3
comp=Z,31nm,1.0s
**J17K VABM Dome** 75.38 360 P **P** **15 50 16.6 +0.1**
baz=0.6,SNR=9.2
**R49A Shelbyville** 75.41 308 IAmb IAmb 15 50 18.4
comp=Z,35nm,1.4s
**M27K Edge Creek, AK** 75.41 351 IAmb IAmb 15 50 19.2
comp=Z,48nm,1.6s
**M27K Edge Creek, AK** 75.41 351 P **P** **15 50 17.3 +0.3**
baz=14,SNR=9.9
**N31M Braeburn, Yuko** 75.45 348 IAmb IAmb 15 50 29.4
comp=Z,32nm,1.1s
**N31M Braeburn, Yuko** 75.45 348 P **P** **15 50 16.8 -0.2**
baz=18,SNR=7.8
**L42A Oliver, Polo** 75.45 314 IAmb IAmb 15 50 18.4
comp=Z,24nm,1.0s
**J16K Anvik River** 75.49 0 IAmb IAmb 15 50 18.8
comp=Z,24nm,0.8s
**J16K Anvik River** 75.49 0 P **P** **15 50 17.3 +0.1**
baz=360,SNR=8.5
**M26K Nabesna, AK** 75.49 352 IAmb IAmb 15 50 19.1
comp=Z,18nm,1.0s
**M26K Nabesna, AK** 75.49 352 P **P** **15 50 16.9 -0.4**
baz=13,SNR=12
**WTLY Watson Lake, Y** 75.51 345 P **P** **15 50 17.7 +0.3**
baz=24
**WAT1 Susitna Watana** 75.55 355 P **P** **15 50 17.2 -0.5**
baz=8.8
**IGPR InterUniversit** 75.56 281 IAmb IAmb 15 50 20.2
comp=Z,32nm,0.9s
**LIRD Liard River Hi** 75.58 343 P **P** **15 50 18.1 +0.3**
baz=26,SNR=9.5
**TZTN Tazewell** 75.59 306 P **P** **15 50 18.5 +0.2**
baz=49
**BLO Bloomington** 75.61 310 IAmb IAmb 15 50 19.5
comp=Z,38nm,1.1s
**N30M Aishikik Lake** 75.67 349 IAmb IAmb 15 50 20.1
comp=Z,40nm,1.5s
**N30M Aishikik Lake** 75.67 349 P **P** **15 50 18.2 -0.2**
baz=17,SNR=12
**HARP HAARP** 75.71 353 P **P** **15 50 18.3 -0.2**
baz=11
**NHSC New Hope** 75.73 302 P **P** **15 50 19.6 +0.6**
baz=50
**WAT6 Susitna Watana** 75.74 354 P **P** **15 50 17.9 -1.0**
baz=9.4,SNR=6.4
**YUK3 Moose Creek** 75.81 351 P **P** **15 50 19.1 -0.2**
baz=15,SNR=24
**J14K Nanvaranak Lak** 75.99 2 P **P** **15 50 20.3 +0.3**
baz=357
**YUK4 Talbot Arm** 76.00 350 P **P** **15 50 20.3 -0.1**
baz=16,SNR=13
**T50A Nancy** 76.05 307 IAmb IAmb 15 50 22.4
comp=Z,34nm,1.4s
**K17K Iditarod** 76.06 359 IAmb IAmb 15 50 22.1
comp=Z,33nm,1.1s
**K17K Iditarod** 76.06 359 P **P** **15 50 20.4 0.0**
baz=1.2,SNR=7.7
**M24K Tolsona, Glenn** 76.08 353 P **P** **15 50 20.7 0.0**
baz=11
**CUT Chulitna** 76.09 355 P **P** **15 50 20.0 -0.6**
baz=7.4
**WHY Whitehorse** 76.10 348 P **P** **15 50 20.4 -0.4**
baz=19,SNR=5.6
**WCI Wyandotte Cave** 76.11 309 P **P** **15 50 20.4 -0.7**
**WCI Wyandotte Cave** 76.11 309 P **P** **15 50 20.5 -0.7**
baz=48
**WCI Wyandotte Cave** 76.11 309 P **P** **15 50 20.4 -0.7**
WCI pmax pmax
comp=Z,53nm,1.5s
**F33A 5 Mile Ranch,** 76.16 320 IAmb IAmb 15 50 22.4
comp=Z,21nm,0.9s
**P33M Teslin, Yukon** 76.17 346 IAmb IAmb 15 50 22.9
comp=Z,26nm,1.3s
**P33M Teslin, Yukon** 76.17 346 P **P** **15 50 21.2 -0.1**
baz=21,SNR=13
**O30N Mendenhall** 76.18 348 IAmb IAmb 15 50 22.5
comp=Z,46nm,1.6s
**O30N Mendenhall** 76.18 348 P **P** **15 50 20.9 -0.4**
baz=18,SNR=13
**L20K Farewell, AK** 76.19 357 P **P** **15 50 20.7 -0.6**
baz=4.6
**YUK8 Steele Glacier** 76.20 350 P **P** **15 50 20.6 -1.1**
baz=15
**HDIL Hopedale** 76.24 312 P **P** **15 50 21.8 0.0**
baz=47
**MDND Maddock** 76.24 323 P **P** **15 50 20.8 -0.9**
baz=42
**L40A Anamosa** 76.25 314 IAmb IAmb 15 50 22.7
comp=Z,28nm,0.9s
**TKL Tuckaleechee C** 76.31 306 LR LR 16 25 23.9
comp=Z,621nm,18.3s,baz=60,slow=37
**YUK6 Outpost Mounta** 76.34 349 P **P** **15 50 22.2 -0.3**
baz=16,SNR=15
**N25K Chitina, Valde** 76.43 353 P **P** **15 50 22.3 -0.4**
baz=12,SNR=5.8
**SCM Sheep Creek Mo** 76.45 354 P **P** **15 50 22.4 -0.4**
baz=9.7
**K15K Wolf Creek Mou** 76.48 1 P **P** **15 50 22.3 -0.5**
baz=359
**MCARA McCarthy VSAT** 76.49 352 IAmb IAmb 15 50 36.1
comp=Z,20nm,1.0s
**MCARA McCarthy VSAT** 76.49 352 P **P** **15 50 22.4 -0.5**
baz=13
**L19K White Mountain** 76.52 358 P **P** **15 50 23.0 -0.1**
baz=3.9,SNR=21
**M23K Glacier View** 76.52 354 P **P** **15 50 22.8 -0.3**
baz=9.3,SNR=7.0
**L18K Granite Mounta** 76.53 358 P **P** **15 50 23.1 0.0**
baz=2.5,SNR=18
**SML Sawmill** 76.55 354 IAmb IAmb 15 50 27.7
comp=Z,28nm,0.9s
**SML Sawmill** 76.55 354 P **P** **15 50 23.6 +0.2**
baz=8.9,SNR=7.6
**SKT Skwentna** 76.58 356 IAmb IAmb 15 50 32.5
comp=Z,17nm,0.9s
**SKT Skwentna** 76.58 356 P **P** **15 50 22.0 -1.5**
baz=6.4,SNR=12
**R33M Jennings River** 76.60 345 P **P** **15 50 24.3 +0.6**
baz=22,SNR=26
**L17K Donlin** 76.64 359 P **P** **15 50 23.8 +0.1**
baz=1.2,SNR=12
**KLU Klutina** 76.67 353 IAmb IAmb 15 50 25.3
comp=Z,16nm,0.8s
**KLU Klutina** 76.67 353 P **P** **15 50 23.6 -0.4**
baz=11,SNR=5.6
**CTGM Chitina Glacie** 76.71 351 IAmb IAmb 15 50 26.0
comp=Z,28nm,1.4s
**CTG Chitna Glacier** 76.71 351 P **P** **15 50 24.1 -0.3**
baz=14
**M22K Willow** 76.73 355 P **P** **15 50 24.0 -0.2**
baz=7.5
**O28M Mount Upton** 76.75 350 P **P** **15 50 24.2 -0.5**
baz=15,SNR=14
**M20K Styx River** 76.76 357 IAmb IAmb 15 50 35.2
comp=Z,22nm,1.1s
**M20K Styx River** 76.76 357 P **P** **15 50 23.6 -1.0**
baz=5.2
**K13K Kusilvak Mount** 76.78 2 P **P** **15 50 24.3 -0.3**
baz=356
**M19K Big River Lodg** 76.78 357 P **P** **15 50 24.1 -0.5**
baz=4.2,SNR=7.5
**LOGN Logan Glacier** 76.80 351 IAmb IAmb 15 50 26.5
comp=Z,16nm,0.8s
**OLIL Olney** 76.81 310 IAmb IAmb 15 50 26.1
comp=Z,24nm,1.0s
**PMR Palmer** 76.82 355 IAmb IAmb 15 50 25.7
comp=Z,18nm,1.0s
**PMR Palmer** 76.82 355 P **P** **15 50 24.5 -0.2**
baz=8.3,SNR=7.6
**CPCT Cooper Cave** 76.90 306 IAmb IAmb 15 50 27.5
comp=Z,35nm,1.6s
**P32M Atlin** 76.91 347 IAmb IAmb 15 50 26.3
comp=Z,15nm,0.8s
**P32M Atlin** 76.91 347 P **P** **15 50 24.4 -1.0**
baz=20,SNR=10
**P30M Million Dollar** 76.93 348 P **P** **15 50 25.5 0.0**
baz=17
**KNK Knik Glacier** 76.95 354 IAmb IAmb 15 50 36.5
comp=Z,23nm,0.8s
**KNK Knik Glacier** 76.95 354 P **P** **15 50 24.8 -0.8**
baz=8.8
**O29M Mount Kennedy** 76.99 349 IAmb IAmb 15 50 27.3
comp=Z,15nm,0.8s
**O29M Mount Kennedy** 76.99 349 P **P** **15 50 25.7 -0.2**
baz=16,SNR=7.8
**SUA Susitna One** 77.05 356 IAmb IAmb 15 50 27.6
comp=Z,29nm,0.9s
**SUA Susitna One** 77.05 356 P **P** **15 50 25.7 -0.6**
baz=7.0,SNR=5.6
**BMRM Bremner River** 77.06 352 P **P** **15 50 25.9 -0.4**
baz=12,SNR=6.4
**L16K Owhat River** 77.07 360 P **P** **15 50 26.1 0.0**
baz=0.3
**TGL Tana Glacier** 77.08 352 IAmb IAmb 15 50 28.9
comp=Z,34nm,1.4s
**L15K Ungalak Mounta** 77.10 1 P **P** **15 50 26.1 -0.3**
baz=359,SNR=8.3
**CRQE Cirque** 77.11 352 P **P** **15 50 26.4 -0.2**
baz=13,SNR=10
**TABL Table Mountain** 77.19 351 IAmb IAmb 15 50 38.6
comp=Z,16nm,0.9s
**M18K Stony River** 77.24 358 P **P** **15 50 27.1 0.0**
baz=3.1,SNR=13
**Q32M Nakina River** 77.25 346 IAmb IAmb 15 50 29.7
comp=Z,13nm,0.8s
**Q32M Nakina River** 77.25 346 P **P** **15 50 27.2 -0.3**
baz=21,SNR=8.3
**DLBC Dease Lake** 77.30 344 IAmb IAmb 15 50 30.0
comp=Z,52nm,1.9s
**DLBC Dease Lake** 77.30 344 LR LR 16 26 26.6
comp=Z,277nm,20.2s,baz=28,slow=37
**DLBC Dease Lake** 77.30 344 P **P** **15 50 27.8 +0.2**
baz=22,SNR=7.2
**SKAG Skagway** 77.31 347 IAmb IAmb 15 50 29.2
comp=Z,18nm,1.1s
**SKAG Skagway** 77.31 347 P **P** **15 50 27.4 -0.1**
baz=19
**KS19 Wonju Array Si** 77.35 51 IAmb IAmb 15 50 30.1
comp=Z,16nm,0.8s
**RC01 Rabbit Creek A** 77.36 355 P **P** **15 50 27.7 -0.2**
baz=7.8,SNR=5.9
**M17K Holitna River** 77.36 359 P **P** **15 50 27.4 -0.4**
baz=1.9,SNR=15
**GLI Glacier Island** 77.38 354 P **P** **15 50 27.5 -0.4**
baz=9.8
**N20K Mount Spurr** 77.39 356 P **P** **15 50 27.3 -0.8**
baz=5.9
**SPCR Spurr Chakacha** 77.39 356 P **P** **15 50 27.7 -0.4**
baz=5.9
**KSAR Wonju Array Be** 77.40 51 P **P** **15 50 27.6 -0.9**
**KSAR Wonju Array Be** 77.40 51 P **P** **15 50 27.6 -0.9**
**QIZ Qiongzhong** 77.41 76 P **P** **15 50 29.9 +1.1**
QIZ S **S** **16 00 18.2 -1.1**
QIZ LR LR
comp=Z,330nm,19.0s
QIZ LR LR
comp=Z,430nm,19.8s
QIZ LR LR
comp=Z,250nm,19.6s
**KSRS Korea Array** 77.41 51 P **P** **15 50 28.4 -0.2**
comp=Z,7.8nm,0.6s,baz=316,slow=5.0,SNR=37
KSRS LR LR 16 28 07.3
comp=Z,255nm,18.8s,baz=315,slow=38
comp=Z,7.8nm,0.6s
**L14K Kuka Creek** 77.42 1 P **P** **15 50 27.6 -0.5**
baz=358
**SCIA State Center** 77.42 315 P **P** **15 50 28.6 0.0**
baz=45
**PLBC Pleasant Camp** 77.48 348 P **P** **15 50 28.7 +0.2**
baz=18,SNR=8.6
**PWL Port Wells** 77.49 354 P **P** **15 50 27.8 -0.8**
baz=8.8
**P29M Windy Craggy** 77.52 349 P **P** **15 50 28.6 -0.2**
baz=17,SNR=17
**MESA MESA** 77.55 351 P **P** **15 50 29.2 0.0**
baz=14
**W50A Signal Mountai** 77.55 306 IAmb IAmb 15 50 43.2
comp=Z,24nm,1.0s
**EYAK Cordova Ski Ar** 77.58 353 P **P** **15 50 28.8 -0.3**
baz=11
**GOGA Godfrey** 77.61 304 P **P** **15 50 29.7 0.0**
baz=48
**PNL Peninsula** 77.72 350 P **P** **15 50 29.6 -0.3**
baz=16,SNR=8.4
**BGLC Bering Glacier** 77.75 352 P **P** **15 50 29.4 -0.6**
baz=13
**M16K Timber Creek** 77.76 360 IAmb IAmb 15 50 32.1
comp=Z,24nm,0.8s
**M16K Timber Creek** 77.76 360 P **P** **15 50 29.7 -0.4**
baz=0.7,SNR=9.3
**CAPN Captain Cook N** 77.77 356 P **P** **15 50 30.6 +0.6**
baz=6.7
**DGMT Dagmar** 77.78 326 P **P** **15 50 30.3 -0.2**
baz=39
**TJN Taejon** 77.82 52‖ *e*P **P** **15 50 29.7 -1.1**
**ECSD EROS Data Cent** 77.85 319 IAmb IAmb 15 50 32.1
comp=Z,16nm,0.8s
**ECSD EROS Data Cent** 77.85 319 P **P** **15 50 30.8 -0.1**
baz=43,SNR=13
**N19K Bonanza Creek** 77.88 357 P **P** **15 50 30.3 -0.5**
baz=4.2,SNR=6.5
**O22K Cooper Landing** 77.97 355 P **P** **15 50 31.2 0.0**
baz=7.8
**M14K Bethel** 78.02 1 P **P** **15 50 31.1 -0.3**
baz=358,SNR=7.1
**N18K Kilae Creek** 78.06 358 P **P** **15 50 31.4 -0.3**
baz=3.1,SNR=5.5
**KAIM Kayak Island** 78.06 352 P **P** **15 50 31.5 -0.3**
baz=12
**M15K Kasigluk River** 78.09 0 P **P** **15 50 31.5 -0.4**
baz=359,SNR=12
**V48A Smith Brothers** 78.09 307 IAmb IAmb 15 50 33.5
comp=Z,35nm,1.4s
**FPAL Fort Paine** 78.18 306 IAmb IAmb 15 50 46.5
comp=Z,16nm,1.0s
**S44A Carbondale** 78.18 310 IAmb IAmb 15 50 33.8
comp=Z,24nm,1.2s
**YSS Yuzh-Sakhalins** 78.20 36 P **P** **15 50 32.3 -0.4**
**YSS Yuzh-Sakhalins** 78.20 36 *e*P **P** **15 50 32.4 -0.4**
YSS *e* 15 53 29.1
YSS *e*S **S** **16 00 24.0 -2.9**
YSS *e*PPS PPS 16 01 05.7
YSS pmax pmax
comp=Z,200nm,3.8s
YSS pmax pmax
comp=Z,60nm,1.1s
YSS MLR MLR
comp=Z,300nm,15.0s
**N17K Nushagak Hills** 78.24 359 IAmb IAmb 15 50 34.7
comp=Z,14nm,0.8s
**N17K Nushagak Hills** 78.24 359 P **P** **15 50 32.8 0.0**

baz=2.1,SNR=5.1
**M11K Mekoryuk 78.27 3** P **P** **15 50 32.7 -0.1**
baz=355
**P23K Montague Islan 78.27 354** P **P** **15 50 32.5 -0.4**
baz=9.5
**R32K Eaglecrest 78.30 347** IAmb IAmb 15 50 35.3
comp=Z,13nm,0.7s
**R32K Eaglecrest 78.30 347** P **P** **15 50 33.6 +0.5**
baz=19,SNR=9.6
**N16K Nishlik Lake 78.31 359** P **P** **15 50 32.8 -0.3**
baz=0.9,SNR=7.1
**SEW Seward 78.32 355** P **P** **15 50 32.3 -0.8**
baz=8.0
**M13K Dall Lake 78.33 2** P **P** **15 50 32.7 -0.5**
baz=357
**WVT Waverly 78.43 308** P **P** **15 50 33.2 -1.0**
WVT IAmb IAmb 15 50 34.8
comp=Z,32nm,1.6s
**WVT Waverly 78.43 308** P **P** **15 50 34.0 -0.2**
baz=47
**WVT Waverly 78.43 308** P **P** **15 50 33.2 -1.0**
WVT pmax pmax
comp=Z,32nm,1.6s
**SUSD Miller 78.47 320** P **P** **15 50 34.4 +0.1**
baz=42
**P40A Paris 78.47 313** IAmb IAmb 15 50 35.1
comp=Z,23nm,1.2s
**O20K Slope Mountain 78.53 356** P **P** **15 50 33.9 -0.5**
baz=5.5
**N15K Kwethluk River 78.62 0** P **P** **15 50 34.8 -0.1**
baz=360
**CGM3 Cape Girardeau 78.69 310** IAmb IAmb 15 50 36.7
comp=Z,28nm,1.2s
**T35M Bob Quinn 78.70 344** P **P** **15 50 35.6 +0.2**
baz=22
**Q23K Middleton Isla 78.74 353** P **P** **15 50 35.8 +0.3**
baz=10
**BRSE Bradley Lake S 78.77 355** P **P** **15 50 35.9 +0.2**
baz=7.0
**N14K Kuskokwak Cree 78.85 1** P **P** **15 50 36.0 -0.1**
baz=359
**O18K Koktuh Hills 78.86 358** P **P** **15 50 36.0 -0.2**
baz=3.6,SNR=10
**S31K Pelican 78.88 347** IAmb IAmb 15 50 41.4
comp=Z,15nm,0.8s
**S31K Pelican 78.88 347** P **P** **15 50 36.4 +0.1**
baz=18
**HOM Homer 78.90 356** P **P** **15 50 36.6 +0.2**
baz=6.3
**P19K Oil Pt 78.99 357** P **P** **15 50 37.6 +0.7**
baz=5.1
**O17K Koliganek Bris 78.99 359** P **P** **15 50 36.8 0.0**
baz=2.1
**CCM Cathedral Cave 79.06 312** P **P** **15 50 36.1 -1.6**
CCM IAmb IAmb 15 50 50.1
comp=Z,12nm,0.7s
**CCM Cathedral Cave 79.06 312** P **P** **15 50 37.2 -0.5**
baz=45
**CCM Cathedral Cave 79.06 312** P **P** **15 50 36.1 -1.6**
**S32K Killisnoo 79.07 346** P **P** **15 50 37.2 -0.1**
baz=19
**X48A Hartselle 79.11 306** IAmb IAmb 15 50 51.5
comp=Z,22nm,0.9s
**Y49A Blount Mountai 79.12 306** IAmb IAmb 15 50 39.8
comp=Z,59nm,1.9s
**O16K Kokwok River B 79.19 359** IAmb IAmb 15 50 39.6
comp=Z,18nm,0.8s
**O16K Kokwok River B 79.19 359** P **P** **15 50 37.7 -0.3**
baz=1.4,SNR=8.4
**P38A Dawn 79.21 314** IAmb IAmb 15 50 40.1
comp=Z,25nm,0.8s
**P18K Big Mountain, 79.33 358** P **P** **15 50 38.6 -0.1**
baz=3.6
**PLAL Pickwick Lake 79.36 307** IAmb IAmb 15 50 40.1
comp=Z,37nm,1.4s
**N35A Tabor 79.44 316** IAmb IAmb 15 50 41.6
comp=Z,18nm,0.8s
**R40A Maddies Statio 79.47 312** IAmb IAmb 15 50 41.2
comp=Z,29nm,1.2s
**PBMO Poplar Bluff 79.49 310** IAmb IAmb 15 50 41.4
comp=Z,36nm,1.4s
**O14K Tigyukauivet M 79.53 1** P **P** **15 50 39.9 +0.1**
baz=359
**P17K Kvichak River 79.56 358** P **P** **15 50 40.0 +0.1**
baz=2.6
**SIT Sitka 79.59 347** IAmb IAmb 15 50 42.4
comp=Z,24nm,0.9s
**SIT Sitka 79.59 347** P **P** **15 50 39.9 -0.3**
baz=18
**O15K Ungalikthiuk R 79.61 360** P **P** **15 50 40.3 0.0**
baz=0.1
**T42A Van Buren 79.69 311** IAmb IAmb 15 50 42.4
comp=Z,26nm,1.2s
**Q20K Shuyak Island 79.99 356** P **P** **15 50 41.7 -0.6**
baz=5.7
**LAO LASA Array 80.03 326** P **P** **15 50 43.2 +0.3**
baz=38,SNR=7.7
**LRAL Lakeview Retre 80.04 305** IAmb IAmb 15 50 56.9
comp=Z,24nm,0.9s
**LRAL Lakeview Retre 80.04 305** P **P** **15 50 42.7 -0.4**
baz=47,SNR=9.4
**Q18K Katmai Hardscr 80.06 357** P **P** **15 50 42.5 -0.3**
baz=3.7
**U33K Whale Pass 80.08 345** P **P** **15 50 42.5 -0.4**
baz=20
**MGMO Mountain Grove 80.27 311** IAmb IAmb 15 50 46.1
comp=Z,25nm,1.1s
**ASAJ Asahikawa 80.30 38** LR LR 16 28 55.5
comp=Z,292nm,19.5s,baz=332,slow=38
**JKA Kamikawa-asahi 80.30 38** IAmb IAmb 15 50 54.6
comp=Z,32nm,1.0s
**BGNE Belgrade 80.33 318** P **P** **15 50 44.3 -0.2**
baz=42
**EGMT Eagleton 80.39 329** P **P** **15 50 44.9 +0.1**
baz=36,SNR=36
**Q17K Contact Creek 80.48 358** P **P** **15 50 44.4 -0.7**
baz=3.0
**OXF Oxford 80.48 308** P **P** **15 50 44.9 -0.5**
baz=46
**S39A Bolivar 80.48 312** IAmb IAmb 15 50 58.3
comp=Z,21nm,0.8s
**V35K Ketchikan 80.52 344** P **P** **15 50 44.7 -0.5**
baz=21
**KDAK Kodiak Island 80.83 356** P **P** **15 50 47.1 +0.3**
KDAK IAmb IAmb 15 50 48.4
comp=Z,31nm,0.9s
**KDAK Kodiak Island 80.83 356** LR LR 16 26 26.7
comp=Z,169nm,21.6s,baz=32,slow=36
**KDAK Kodiak Island 80.83 356** P **P** **15 50 46.9 +0.1**
baz=5.5
**KDAK Kodiak Island 80.83 356** P **P** **15 50 47.1 +0.3**
KDAK pmax pmax
comp=Z,31nm,0.9s
**Y45A Yeager Farm, C 81.01 308** IAmb IAmb 15 51 01.3
comp=Z,28nm,0.8s
**RSSD Black Hills 81.08 323** P **P** **15 50 48.4 -0.4**
**RSSD Black Hills 81.08 323** P **P** **15 50 48.4 -0.4**
baz=39
**RSSD Black Hills 81.08 323** P **P** **15 50 48.4 -0.4**
RSSD pmax pmax
comp=Z,10.0nm,1.0s
**FCAR Ozark Folk Cen 81.09 310** IAmb IAmb 15 50 50.2
comp=Z,26nm,1.3s
**R17L Mt. Peulik Vol 81.12 358** P **P** **15 50 48.1 -0.3**
baz=2.7
**R18K Karluk 81.13 357** P **P** **15 50 48.0 -0.4**
baz=4.1
**KSU1 Kansas State U 81.23 315** P **P** **15 50 49.6 +0.2**
baz=43,SNR=9.6
**OHAK Old Harbor 81.42 356** IAmb IAmb 15 50 55.5
comp=Z,43nm,1.3s
**OHAK Old Harbor 81.42 356** P **P** **15 50 49.4 -0.6**
baz=5.0
**WHAR Wooly Hollow 81.61 310** IAmb IAmb 15 50 53.0
comp=Z,39nm,1.2s
**HHAR Hobbs 81.83 312** IAmb IAmb 15 50 53.8
comp=Z,26nm,1.3s
**YHNB Yeheng 81.87 64** IAmb IAmb 15 50 58.8
comp=Z,24nm,0.9s
**U38A Gravette 81.97 312** IAmb IAmb 15 50 54.6
comp=Z,44nm,1.4s
**SII Sitkinak Islan 82.12 357** P **P** **15 50 54.1 +0.3**
baz=4.3
**JNU Nakatsue 82.15 52** LR LR 16 30 37.5
comp=Z,357nm,18.3s,baz=318,slow=38
**LYMT Lyon Mountain 82.24 329** P **P** **15 50 53.8 -1.1**
**CHGN Chignik 82.49 359** P **P** **15 50 54.4 -1.2**
baz=1.1

**S14K Fog Glacier 82.52 360** P **P** **15 50 55.8 -0.1**
baz=0.3
**RLO Rose Lookout 82.52 312** IAmb IAmb 15 51 09.6
comp=Z,26nm,1.0s
**RLMT Red Lodge 82.56 327** IAmb IAmb 15 50 58.7
comp=Z,25nm,1.4s
**RLMT Red Lodge 82.56 327** P **P** **15 50 56.9 +0.3**
baz=36,SNR=8.8
**OGNE Ogallala 82.60 320** P **P** **15 50 56.8 +0.1**
baz=40
**BBB Bella Bella 82.65 341** LR LR 16 29 32.8
comp=Z,361nm,19.6s,baz=30,slow=37
**VBMS Vicksburg 82.74 307** P **P** **15 50 57.6 +0.2**
baz=45
**MIAR Mount Ida 82.88 310** P **P** **15 50 58.2 +0.1**
baz=44,SNR=17
**NEW Newport 82.90 333** LR LR 16 29 23.9
comp=Z,462nm,18.4s,baz=34,slow=37
**NEW Newport 82.90 333** P **P** **15 50 58.1 0.0**
baz=31,SNR=6.9
**CHIR Chirikof Islan 82.91 358** P **P** **15 50 57.5 -0.3**
baz=3.2
**MSO Missoula 82.98 330** P **P** **15 50 58.4 -0.2**
baz=33
**S12K Black Hills 83.08 1** P **P** **15 50 58.2 -0.6**
baz=358
**BOZ Bozeman (W) 83.12 328** P **P** **15 50 59.6 +0.2**
baz=34,SNR=9.8
**TUL3 Leonard 83.13 313** IAmb IAmb 15 51 12.5
comp=Z,25nm,1.0s
**TUL3 Leonard 83.13 313** P **P** **15 50 59.4 0.0**
baz=43
**YMP Mirror Lake Pl 83.23 327** IAmb IAmb 15 51 03.3
comp=Z,18nm,1.1s
**K22A Casper 83.36 323** P **P** **15 51 00.3 -0.4**
baz=37,SNR=15
**SHEM Shemya Is, Ala 83.41 16** LR LR 16 32 13.1
comp=Z,166nm,19.8s,baz=48,slow=39
**YHL Hebgen Lake 83.56 327** IAmb IAmb 15 51 04.2
comp=Z,23nm,1.1s
**H17A Grant Village 83.69 327** P **P** **15 51 02.3 -0.2**
baz=35,SNR=9.3
**DLMT Dillon 83.70 329** IAmb IAmb 15 51 04.3
comp=Z,25nm,1.2s
**OK032 Salt Plains WL 83.78 315** IAmb IAmb 15 51 04.3
comp=Z,30nm,1.3s
**MJB9 Matsu-Tunnel 83.82 46** IAmb IAmb 15 51 10.3
comp=Z,30nm,1.4s
**MAJO Matsushiro 83.82 46**↑ *e*P **P** **15 51 00.8 -2.2**
MAJO pmax pmax
comp=Z,21nm,1.3s
**MJAR Matsushiro Arr 83.83 46** P **P** **15 51 02.7 -0.3**
comp=Z,10.0nm,0.9s,baz=318,slow=5.4,SNR=22
comp=Z,10.0nm,0.9s
**X37A Clayton 83.86 312** IAmb IAmb 15 51 16.8
comp=Z,19nm,0.8s
**CBB Campbell River 83.89 338** IAmb IAmb 15 51 04.9
comp=Z,20nm,1.1s
**IMW Indian Meadow 84.25 327** IAmb IAmb 15 51 08.1
comp=Z,20nm,0.9s
**KSCO Kaye Shedlock' 84.38 319** P **P** **15 51 06.2 +0.3**
baz=39,SNR=9.4
**RWWY Rawlins 84.43 323** IAmb IAmb 15 51 07.6
comp=Z,22nm,1.1s
**N23A Red Feather La 84.49 322** IAmb IAmb 15 51 08.5
comp=Z,22nm,1.1s
**N23A Red Feather La 84.49 322** P **P** **15 51 06.9 +0.3**
baz=37,SNR=9.8
**FXWY Fox Creek 84.49 327** IAmb IAmb 15 51 09.0
comp=Z,19nm,1.3s
**TPAW Teton Pass 84.58 327** IAmb IAmb 15 51 08.3
comp=Z,14nm,0.9s
**BW06 Boder Array 84.59 325** P **P** **15 51 06.7 -0.4**
baz=35,SNR=14
**PD31 Pinedale Array 84.59 325** IAmb IAmb 15 51 08.0
comp=Z,15nm,1.1s
**PDAR Pinedale Array 84.59 325** P **P** **15 51 06.1 -1.0**
**PDAR Pinedale Array 84.59 325** P **P** **15 51 06.5 -0.5**
comp=Z,5.7nm,0.9s,baz=48,slow=4.4,SNR=35
PDAR LR LR 16 28 13.6
comp=Z,385nm,21.4s,baz=19,slow=35
comp=Z,5.7nm,0.9s
**CLRS Cowichan Lake 84.64 337** IAmb IAmb 15 51 07.7
comp=Z,14nm,1.0s
**BDFB Brasilia 84.73 244** P **P** **15 51 07.8 0.0**
comp=Z,12nm,1.0s,baz=36,slow=7.1,SNR=9.4
comp=Z,12nm,1.0s
**SDV Santo Domingo 84.76 277** P **P** **15 51 08.2 -0.1**
**SDV Santo Domingo 84.76 277** LR LR 16 24 28.1
comp=Z,170nm,21.3s,baz=68,slow=32
**SDV Santo Domingo 84.76 277** *e*P **P** **15 51 09.8 +1.6**
**OZB Mount Ozzard 84.90 338** IAmb IAmb 15 51 10.2
comp=Z,18nm,0.8s
**F10A Beach Ranch, E 84.91 332** IAmb IAmb 15 51 09.4
comp=Z,19nm,1.1s
**ISCO Idaho Springs 85.20 321** IAmb IAmb 15 51 12.0
comp=Z,24nm,1.9s
**ISCO Idaho Springs 85.20 321** P **P** **15 51 10.0 -0.3**
baz=38
**HAWA Hanford 85.34 333** IAmb IAmb 15 51 12.3
comp=Z,23nm,0.9s
**GNW Green Mountain 85.37 336** IAmb IAmb 15 51 12.4
comp=Z,24nm,1.0s
**WMOK Wichita Mounta 85.64 314** IAmb IAmb 15 51 14.1
comp=Z,27nm,1.2s
**WMOK Wichita Mounta 85.64 314** P **P** **15 51 13.0 +0.9**
baz=41,SNR=22
**Q24A Divide 85.64 320** P **P** **15 51 12.4 -0.1**
baz=38
**LON Longmire 85.78 335** IAmb IAmb 15 51 14.9
comp=Z,32nm,1.9s
**BMO Blue Mountains 85.90 331** IAmb IAmb 15 51 22.3
comp=Z,12nm,0.8s
**HLID Hailey 85.92 329** P **P** **15 51 13.6 0.0**
baz=32,SNR=5.3
**SMWD Samnorwood 86.14 315** IAmb IAmb 15 51 16.6
comp=Z,16nm,1.2s
**O20A White River Ci 86.15 323** P **P** **15 51 15.0 +0.2**
baz=36
**MFID Camas Ranch 86.58 330** IAmb IAmb 15 51 18.4
comp=Z,18nm,0.9s
**T25A Trinidad 86.72 319** P **P** **15 51 16.6 -1.1**
baz=38
**G06A Carlson Farm, 86.73 333** IAmb IAmb 15 51 19.3
comp=Z,21nm,1.4s
**SDCO Great Sand Dun 86.77 320** P **P** **15 51 17.4 -0.6**
baz=38
**WHTX Lake Whitney, 86.95 311** P **P** **15 51 18.5 -0.1**
baz=42
**JLU Jordanelle 87.18 325** IAmb IAmb 15 51 20.9
comp=Z,24nm,1.7s
**S22A 4UR Ranch, Cre 87.41 321** P **P** **15 51 21.0 -0.2**
baz=37
**HKT Hockley 87.53 309** *ce*P **P** **15 51 22.7 +1.3**
HKT pmax pmax
comp=Z,21nm,1.4s
**BGU Big Grassy Mou 87.57 326** IAmb IAmb 15 51 23.1
comp=Z,11nm,1.2s
**ABTX Abilene, Hawle 87.70 313** IAmb IAmb 15 51 24.1
comp=Z,18nm,1.2s
**ABTX Abilene, Hawle 87.70 313** P **P** **15 51 22.5 +0.2**
baz=40
**435B Jarrell 87.93 310** P **P** **15 51 23.7 +0.3**
baz=42
**SRU San Rafael Swe 88.00 324** IAmb IAmb 15 51 24.2
comp=Z,11nm,1.0s
**DUG Dugway, Tooele 88.09 326** IAmb IAmb 15 51 25.4
comp=Z,8.4nm,0.8s
**DUG Dugway, Tooele 88.09 326** P **P** **15 51 23.6 -0.6**
baz=33,SNR=12
**WVOR Wild Horse Val 88.48 331** IAmb IAmb 15 51 52.0
comp=Z,19nm,1.8s
**MVCO Mesa Verde 88.63 321** P **P** **15 51 26.7 -0.2**
baz=36
**J05D Fort Rock, OR 88.65 333** IAmb IAmb 15 51 28.9
comp=Z,9.9nm,0.9s
**SGCY Sterling City 89.05 313** IAmb IAmb 15 51 34.1
comp=Z,9.2nm,0.9s
**TCRU Three Creeks R 89.26 325** IAmb IAmb 15 51 31.4
comp=Z,16nm,1.1s
**JCT Junction City 89.41 312** P **P** **15 51 30.8 +0.4**
baz=40
**ANMO Albuquerque 89.46 319** P **P** **15 51 30.0 -0.8**
**ANMO Albuquerque 89.46 319** LR LR 16 31 58.1
comp=Z,392nm,18.6s,baz=132,slow=36
**ANMO Albuquerque 89.46 319** P **P** **15 51 30.7 -0.1**
baz=37
**ANMO Albuquerque 89.46 319**↑ *e*P **P** **15 51 30.9 +0.1**

ANMO pmax pmax
comp=Z,3.0nm,1.3s
**MTPU Mount Pierson 89.62 324** IAmb IAmb 15 51 33.4
comp=Z,15nm,1.1s
**TEIG Tepich 89.74 297** LR LR 16 31 38.7
comp=Z,98nm,18.9s,baz=46,slow=36
**OZNA Ozona 89.81 313** IAmb IAmb 15 51 34.3
comp=Z,14nm,0.9s
**Q12A Willow Creek R 89.91 327** IAmb IAmb 15 51 34.6
comp=Z,14nm,1.0s
**PSUT Pine Spring 89.92 326** IAmb IAmb 15 51 38.9
comp=Z,9.9nm,0.9s
**ROSC El Rosal 90.16 277** LR LR 16 27 52.7
comp=Z,262nm,21.9s,baz=70,slow=33
**PKCU Pink Cliffs 90.17 324** IAmb IAmb 15 51 35.5
comp=Z,16nm,0.9s
**YBH Yreka Blue Hor 90.53 333** LR LR 16 35 02.5
comp=Z,285nm,18.2s,baz=25,slow=38
**R11B Troy Canyon, C 90.80 327** P **P** **15 51 36.9 -0.1**
baz=32,SNR=7.5
**833A Chaparral WMA, 90.81 310** P **P** **15 51 37.3 +0.4**
baz=41
**SAML Samuel 90.92 259** P **P** **15 51 37.9 +0.4**
SAML IAmb IAmb 15 51 39.8
comp=Z,17nm,1.5s
**SAML Samuel 90.92 259** P **P** **15 51 37.9 +0.4**
SAML pmax pmax
comp=Z,17nm,1.5s
**SAML Samuel 90.92 259** *e*P **P** **15 51 38.5 +1.0**
**U15A North Rim 91.00 323** IAmb IAmb 15 51 39.0
comp=Z,9.6nm,1.0s
**SAND Sanderson 91.10 313** IAmb IAmb 15 51 40.1
comp=Z,11nm,1.0s
**WUAZ Wupatki 91.34 322** IAmb IAmb 15 51 41.1
comp=Z,14nm,1.1s
**WUAZ Wupatki 91.34 322** P **P** **15 51 39.6 +0.1**
baz=32
**PRN Pahroc Range 91.38 326** IAmb IAmb 15 51 54.1
comp=Z,12nm,1.2s
**MNTX Cornudas Mount 91.49 316** P **P** **15 51 39.7 -0.3**
baz=38
**ALPN Alpine 91.60 314** IAmb IAmb 15 51 42.4
comp=Z,15nm,1.0s
**KHMM Horse Mountain 91.64 333** IAmb IAmb 15 51 42.4
comp=Z,9.7nm,1.0s
**YERR Yerington 91.70 329** IAmb IAmb 15 51 50.6
comp=Z,11nm,1.2s
**NVAR Mina Array Bea 91.83 329** P **P** **15 51 39.8 -1.9**
**NVAR Mina Array Bea 91.83 329** P **P** **15 51 41.5 -0.3**
comp=Z,0.9nm,0.9s,baz=82,slow=3.1,SNR=4.7
NVAR LR LR 16 34 07.4
comp=Z,767nm,20.2s,baz=28,slow=36
comp=Z,0.9nm,0.9s
**121A Cookes Peak, D 92.05 318** P **P** **15 51 42.8 0.0**
baz=36
**LHV Little Huntoon 92.06 329** IAmb IAmb 15 51 58.6
comp=Z,16nm,1.3s
**WAKR Walker 92.20 329** IAmb IAmb 15 51 45.5
comp=Z,16nm,1.7s
**TPNV Topopah Spring 92.27 326** P **P** **15 51 43.6 -0.2**
baz=31
**PTLB Pontes e Lacer 92.31 251** IAmb IAmb 15 51 46.1
comp=Z,17nm,1.2s
**TX31 Lajitas Ar. Si 92.43 313** IAmb IAmb 15 51 46.4
comp=Z,16nm,1.1s
**TXAR Lajitas Array 92.43 313** P **P** **15 51 44.6 +0.1**
**TXAR Lajitas Array 92.43 313** P **P** **15 51 44.9 +0.3**
comp=Z,7.3nm,0.9s,baz=67,slow=4.0,SNR=64
TXAR LR LR 16 33 55.4
comp=Z,214nm,20.8s,baz=38,slow=36
comp=Z,7.3nm,0.9s
**TXAR Lajitas Array 92.43 313** P **P** **15 51 44.6 +0.1**
**GRAC Grapevine Rang 92.69 327** P **P** **15 51 45.8 +0.3**
baz=32
**FURC Furnace Creek, 92.94 327** P **P** **15 51 47.0 +0.4**
baz=31
**JCJ Chichijima 93.18 49** LR LR 16 35 02.0
comp=Z,132nm,20.4s,baz=124,slow=36
**CWC Cottonwood Cre 93.46 327** P **P** **15 51 48.8 -0.5**
baz=30
**MPMC Manual Prospec 93.55 327** P **P** **15 51 49.3 -0.4**
baz=30
**PDMCI Parker Dam,Lak 93.61 324** P **P** **15 51 49.7 -0.1**
baz=32
**TUC Tucson 93.71 320** P **P** **15 51 49.4 -1.0**
TUC IAmb IAmb 15 51 52.1
comp=Z,12nm,1.6s
**TUC Tucson 93.71 320** P **P** **15 51 50.1 -0.3**
baz=34
**TUC Tucson 93.71 320** P **P** **15 51 49.4 -1.0**
TUC pmax pmax
comp=Z,13nm,1.6s
**ETMB Extrema 93.72 260** IAmb IAmb 15 51 51.5
comp=Z,9.6nm,1.2s
**GMRC Granite Mounta 93.86 325** P **P** **15 51 50.7 -0.4**
baz=32
**GSC Goldstone, Bar 93.91 326** P **P** **15 51 50.9 -0.4**
baz=31
**SIV San Ignacio 94.06 252** LR LR 16 35 28.8
comp=Z,146nm,18.3s,baz=97,slow=36
**HEC Hector,Ludlow 94.12 325** P **P** **15 51 51.9 -0.3**
baz=31
**LRMC Laurel Mtn Rad 94.12 327** P **P** **15 51 52.5 +0.3**
baz=30
**IRM Iron Mountain 94.17 324** P **P** **15 51 52.0 -0.4**
baz=32
**ISA Isabella, Lake 94.29 327** P **P** **15 51 53.3 +0.3**
baz=30
**JTS Las Juntas de 94.30 288** LR LR 16 33 15.1
comp=Z,93nm,19.1s,baz=73,slow=35
**BELC Belle Mtn. Jos 94.68 325** P **P** **15 51 55.0 +0.1**
baz=31
**EDW2 Edwards Air Fo 94.77 327** P **P** **15 51 55.3 +0.1**
baz=30
**214A Organ Pipe Nat 94.96 321** P **P** **15 51 55.8 -0.3**
baz=33
**GLA Glamis 94.97 323** P **P** **15 51 55.4 -0.6**
baz=32
**BFSC Mount Baldy Ra 95.18 326** P **P** **15 51 56.9 -0.2**
baz=30
**PFO Pinyon Flats O 95.21 325** LR LR 16 36 06.1
comp=Z,417nm,18.7s,baz=28,slow=36
**PFO Pinyon Flats O 95.21 325** P **P** **15 51 57.1 -0.2**
baz=31
**PFO Pinyon Flats O 95.21 325**↓ *e*P **P** **15 51 58.0 +0.7**
PFO pmax pmax
comp=Z,14nm,1.4s
**TPFO Pinon Flats 95.21 325** P **P** **15 51 57.1 -0.2**
baz=31
**PKM Mcpherson Peak 95.50 328** P **P** **15 51 58.5 -0.2**
baz=29
**MONP2 Monument Peak 95.81 324** P **P** **15 52 00.0 -0.1**
baz=31
**IKP In-Ko-Pah, Jac 95.88 324** P **P** **15 52 00.3 0.0**
baz=31
**CIS Catalina Islan 96.22 326** P **P** **15 52 01.9 +0.1**
baz=30
**CMIG Matias Romero 96.34 299** LR LR 16 32 19.0
comp=Z,139nm,21.7s,baz=9.5,slow=34
**CPUP Villa Florida 98.37 242** LR LR 16 37 36.2
comp=Z,240nm,20.2s,baz=53,slow=36
**LPAZ La Paz 99.35 257** LR LR 16 35 32.9
comp=Z,112nm,21.9s,baz=55,slow=34
**WRA Warramunga Arr 120.89 90** PKP **PKPdf** **15 57 25.4 -0.6**
comp=Z,1.2nm,0.8s,baz=298,slow=2.1,SNR=8.4
**ASAR Alice Springs 122.76 94** PKP **PKPdf** **15 57 28.6 -1.0**
comp=Z,2.7nm,0.8s,baz=330,slow=2.1,SNR=20
ASAR PP **PP** **15 59 13.4 +5.6**
comp=Z,1.2nm,0.8s,baz=312,slow=7.9,SNR=4.7
**QSPA South Pole Qui 131.42 180** PKP **PKPdf** **15 57 44.3 -0.5**
comp=Z,1.8nm,0.9s,baz=156,slow=1.2,SNR=4.4
**STKA Stephens Creek 132.88 98** PKP **PKPdf** **15 57 47.8 -0.8**
comp=Z,2.2nm,0.8s,baz=310,slow=13,SNR=2.9
**VNDA Vanda 140.65 168** PKP **PKPdf** **15 58 01.6 +0.1**
comp=Z,0.5nm,0.6s,baz=208,slow=2.1,SNR=3.1
**TAOE Nuku Hiva Isla 143.05 326** *e*LR LR 16 44 42.7
comp=Z,223nm,23.7s
**DZM Mont Dzumac 145.69 66** PKPdf **PKPab** **15 58 13.6 +0.6**
**DZM Mont Dzumac 145.69 66** *e*LR LR 16 45 59.3
comp=Z,164nm,25.1s
**PPT2 Papeete2 154.53 337** *e*LR LR 16 50 05.1
comp=Z,204nm,23.0s
PPT2 *e*LR LR 16 50 10.6
comp=Z,160nm,23.5s
**TBI Tubuai 159.85 331** *e*LR LR 16 52 19.1
comp=Z,1µm,24.2s

*DJA **11** 15:42:08.6±0.3,8°S±3′×11′6E±″, h10km, M4.4/12, mb4.6/3, mB4.8/1, MLv4.2/12, Mw(mB)4.1/1*
*NEIC **11** 15:42:08.0±2.7, 8°.3S±0°.1×116°.35E±0°.06, h10km±1km, mb4.4/12, Error ellipse: s-maj=17.1km s-min=10.8km az=354.0*
*IDC **11** 15:42:16.6±6.2, 8°.11S×116°.67E, h81km±56km, mb3.7/12, mbtmp4.0/13, ML3.6/1, MS2.8/2, Error ellipse: s-maj=46.6km s-min=14.2km az=68.0*

**ISC 11 15:42:07.5**±0.5,**8°.28S**±0°.06×**116°.35E**±0°.05,**h10km**,**n50,** σ**1$95/53**,**mb4.2**/14,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.70** | **131** | Pg | **Pn** | | **15 42 23.9** | **+0.5** |
| TWSI | | | | S | | Sn | 15 42 35.0 | +0.8 |
| **SRBI** | **Singaraja** | **1.14** | **280** | Pg | **Pb** | | **15 42 29.3** | **0.0** |
| SRBI | | | | S | | Sb | 15 42 43.0 | -1.2 |
| **DNP** | **Denpasar** | **1.19** | **251** | P | **Pb** | | **15 42 28.8** | **-1.4** |
| **PLAI** | **Plampang** | **1.51** | **111** | P | **Pg** | | **15 42 36.9** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.18** | **265** | Pn | **Pn** | | **15 42 44.3** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.18** | **265** | P | **Pn** | | **15 42 44.4** | **+0.5** |
| **GRJI** | **Gresik** | **4.07** | **289** | P | **Pn** | | **15 43 11.2** | **+1.4** |
| **PWJI** | **Pagerwojo** | **4.51** | **273** | P | **Pn** | | **15 43 17.8** | **+2.0** |
| **BSSI** | **Bau Bau, Buton** | **4.62** | **63** | P | **Pn** | | **15 43 18.1** | **+0.6** |
| **KAPI** | **Kappang** | **4.69** | **46** | Pn | **Pn** | | **15 43 18.7** | **+0.4** |
| **KAPI** | **Kappang** | **4.69** | **46** | P | **Pn** | | **15 43 18.9** | **+0.7** |
| | 3.0nm,0.3s,baz=193,slow=1.0,SNR=2.2 | | | | | | | |
| KAPI | | | | S | | **Sn** | **15 44 10.7** | **-2.0** |
| | 62nm,0.4s,baz=98,slow=24,SNR=9.5 | | | | | | | |
| KAPI | | | | LR | | LR | 15 45 27.5 | |
| | comp=Z,106nm,20.7s,baz=194,slow=44 7.9nm,0.2s | | | | | | | |
| **BNSI** | **Bone** | **5.37** | **44** | P | | **Pn** | **15 43 27.7** | **+0.1** |
| | 33nm,0.9s,900nm0.3nm | | | | | | | |
| **UGM** | **Wanagama** | **5.78** | **273** | Pn | | **Pn** | **15 43 32.9** | **-0.5** |
| **UGM** | **Wanagama** | **5.78** | **273** | P | | **Pn** | **15 43 34.9** | **+1.5** |
| **MMRI** | **Maumere** | **5.84** | **94** | Pn | | **Pn** | **15 43 33.3** | **-0.8** |
| **SOEI** | **Soe** | **7.96** | **101** | Pn | | **Pn** | **15 44 03.8** | **+0.4** |
| **MBWA** | **Marble Bar** | **13.21** | **166** | Pn | | **Pn** | **15 45 14.2** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** | **13.30** | **138** | Pn | | **Pn** | **15 45 15.5** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **166** | Pn | | **Pn** | **15 45 20.5** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **166** | Pn | | **Pn** | **15 45 19.1** | **-2.0** |
| **KNRA** | **Kununurra** | **14.19** | **122** | Pn | | **Pn** | **15 45 27.8** | **-0.9** |
| **GIRL** | **Giralia** | **14.43** | **188** | Pn | | **Pn** | **15 45 31.2** | **-0.6** |
| **MTN** | **Manton Dam** | **15.22** | **109** | Pn | | **Pn** | **15 45 41.2** | **-1.5** |
| MTN | | | | IAmb | | IAmb | 15 46 20.5 | |
| | comp=Z,20nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.88** | **125** | P | | **P** | **15 46 50.8** | **+0.8** |
| WB0 | | | | IAmb | | IAmb | 15 46 59.1 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.92** | **126** | P | | **P** | **15 46 50.9** | **+0.4** |
| **WRA** | **Warramunga Arr** | **20.92** | **126** | P | | **P** | **15 46 51.4** | **+0.9** |
| | comp=Z,7.4nm,0.8s,baz=300,slow=12,SNR=58 comp=Z,7.4nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.93** | **126** | P | | **P** | **15 46 50.8** | **+0.3** |
| **WB2** | **Warramunga Arr** | **20.93** | **126** | P | | **P** | **15 46 51.4** | **+0.8** |
| WB2 | | | | IAmb | | IAmb | 15 46 58.4 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.09** | **125** | P | | **P** | **15 46 52.9** | **+0.6** |
| WR0 | | | | IAmb | | IAmb | 15 47 01.6 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **22.74** | **134** | P | | **P** | **15 47 10.2** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.74** | **134** | P | | **P** | **15 47 11.7** | **+1.7** |
| **ASAR** | **Alice Springs** | **22.74** | **134** | P | | **P** | **15 47 10.9** | **+1.0** |
| | comp=Z,3.7nm,0.5s,baz=310,slow=8.9,SNR=52 comp=Z,3.7nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **24.92** | **156** | P | | **P** | **15 47 29.2** | **-1.6** |
| **COEN** | **Coen** | **26.91** | **104** | P | | **P** | **15 47 49.8** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **31.64** | **327** | P | | **P** | **15 48 33.3** | **+2.3** |
| | comp=Z,0.8nm,0.7s,baz=156,slow=7.5,SNR=4.5 comp=Z,0.8nm,0.7s | | | | | | | |
| **STKA** | **Stephens Creek** | **33.20** | **138** | P | | **P** | **15 48 44.7** | **+0.1** |
| **STKA** | **Stephens Creek** | **33.20** | **138** | P | | **P** | **15 48 44.8** | **+0.1** |
| | comp=Z,2.5nm,0.9s,baz=339,slow=17,SNR=3.2 | | | | | | | |
| STKA | | | | LR | | LR | 16 01 50.9 | |
| | comp=Z,22nm,21.9s,baz=21,slow=36 comp=Z,2.5nm,0.9s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.12** | **14** | P | | **P** | **15 51 31.2** | **-1.4** |
| | comp=Z,2.2nm,0.8s,baz=206,slow=6.3,SNR=1.6 comp=Z,2.2nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **56.56** | **352** | P | | **P** | **15 51 49.4** | **-0.9** |
| | comp=Z,1.0nm,0.8s,baz=176,slow=9.2,SNR=2.1 comp=Z,1.0nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **60.49** | **325** | P | | **P** | **15 52 19.5** | **+1.6** |
| KSH | | | | sP | | sP | 15 52 29.8 | +7.3 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | | **P** | **15 52 32.2** | **0.0** |
| | comp=Z,0.5nm,0.6s,baz=158,slow=6.7,SNR=2.1 comp=Z,0.5nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.19** | **335** | P | | **P** | **15 53 02.7** | **+1.0** |
| | comp=Z,0.3nm,0.7s,baz=134,slow=6.6,SNR=1.8 comp=Z,0.3nm,0.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.46** | **340** | P | | **P** | **15 53 02.9** | **-0.4** |
| ZAA0 | | | | IAmb | | IAmb | 15 53 34.9 | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.46** | **340** | P | | **P** | **15 53 02.6** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **67.46** | **340** | P | | **P** | **15 53 03.1** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=145,slow=5.3,SNR=2.7 comp=Z,0.5nm,0.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.71** | **180** | P | | **P** | **15 54 27.0** | **+0.9** |
| QSPA | | | | IAmb | | IAmb | 15 54 36.1 | |
| | comp=Z,4.7nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.71** | **180** | P | | **P** | **15 54 27.1** | **+0.9** |
| | comp=Z,1.4nm,1.1s,baz=251,slow=3.9,SNR=1.9 comp=Z,1.4nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **90.97** | **196** | P | | **P** | **15 55 12.7** | **+1.1** |
| | comp=Z,2.5nm,1.2s,baz=33,slow=6.4,SNR=2.8 comp=Z,2.5nm,1.2s | | | | | | | |
| **FINES** | **FINESS Array B** | **97.34** | **331** | P | | **P** | **15 55 40.1** | **-0.7** |
| | comp=Z,3.6nm,1.1s,baz=291,slow=12,SNR=3.8 comp=Z,3.6nm,1.1s | | | | | | | |
| **LPAZ** | **La Paz** | **155.19** | **170** | PKPab | | **PKPab** | **16 02 27.7** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=207,slow=5.8,SNR=4.6 | | | | | | | |

*TIR **11** 15:46:32.4, 41°.57N×20°.16E, h27km±1km, Md3.5, Ml3.0*
*PDG **11** 15:46:32.8±0.1, 41°.59N×20°.26E, h6km, MD3.2/2, ML3.1/11, Error ellipse: s-maj=0.2km s-min=0.6km az=0.0*
*BEO **11** 15:46:33.7±0.3, 41°.56N×20°.26E, h10km±4km, ML2.8/12*
*THE **11** 15:46:33.7, 41°.59N×20°.19E, h1km±1km, ML2.7/6, Error ellipse: s-maj=2.9km s-min=0.8km az=357.0*
*SKO **11** 15:46:34.1, 41°.58N×20°.17E, h0km, ML3.0*

**ISC 11 15:46:33.5**±1.1,**41°.59N**±0°.02×**20°.20E**±0°.02,**h5**km±9km, **n50,** σ**0$95/91**,**6C-8D, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.35** | **226** | P | | **Pg** | **15 46 40.3** | **0.0** |
| | baz=226 | | | | | | | |
| TIR | | | | S | | **Sg** | **15 46 45.6** | **+0.8** |
| | baz=226 | | | | | | | |
| TIR | | | | AMP | | | | |
| | comp=N,3.6nm,0.2s,baz=226 | | | | | | | |
| **TIR** | **Tirane** | **0.35** | **226** | P | | **Pg** | **15 46 40.3** | **0.0** |
| TIR | | | | S | | **Sg** | **15 46 44.9** | **0.0** |
| | comp=N,1μm,0.4s | | | | | | | |
| **TIR** | **Tirane** | **0.35** | **226** | *e*Pg | | **Pg** | **15 46 40.4** | **0.0** |
| TIR | | | | *e*Sg | | **Sg** | **15 46 45.7** | **+0.8** |
| **PUK** | **Puka** | **0.51** | **333** | P | | **Pg** | **15 46 43.6** | **+0.3** |
| | baz=338 | | | | | | | |
| PUK | | | | S | | **Sg** | **15 46 51.1** | **+1.2** |
| | baz=338 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=E,6.4nm,0.3s,baz=338 | | | | | | | |
| **OHR** | **Ohrid** | **0.66** | **137** | ⇑*i* Pg | | **Pg** | **15 46 46.4** | **+0.2** |
| OHR | | | | *i* Sg | | **Sb** | **15 46 57.0** | **+0.1** |
| OHR | | | | *e*Lg | | Lg | 15 46 57.9 | |
| | comp=N,607nm,0.3s | | | | | | | |
| OHR | | | | *e*Lg | | Lg | 15 46 58.3 | |
| | comp=E,843nm,0.5s | | | | | | | |
| **BCI** | **Bajram Curri** | **0.78** | **353** | P | | **Pg** | **15 46 48.3** | **-0.2** |
| | baz=356 | | | | | | | |
| BCI | | | | S | | **Sb** | **15 47 00.2** | **-0.4** |
| | baz=356 | | | | | | | |
| BCI | | | | AMP | | | | |
| | comp=N,2.3nm,0.5s,baz=356 | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.97** | **308** | ⇓*i* Pg | | **Pg** | **15 46 51.2** | **-0.9** |
| DRME | | | | *i* Sg | | **Sn** | **15 47 07.0** | **-0.9** |
| **PVY** | **Plav** | **1.02** | **350** | ⇓*i* Pg | | **Pg** | **15 46 51.3** | **-1.8** |
| PVY | | | | *i* Sg | | **Sb** | **15 47 07.8** | **+0.2** |
| **KBN** | **Korca** | **1.06** | **155** | P | | **Pg** | **15 46 54.0** | **+0.1** |
| | baz=153 | | | | | | | |
| KBN | | | | S | | **Sg** | **15 47 08.1** | **+0.4** |
| | baz=153 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=E,1.6nm,0.4s,baz=153 | | | | | | | |
| **KBN** | **Korca** | **1.06** | **155** | P | | **Pg** | **15 46 53.8** | **-0.1** |
| KBN | | | | S | | **Sb** | **15 47 09.2** | **+0.5** |
| | comp=E,528nm,0.5s | | | | | | | |
| **PDG** | **Podgorica** | **1.10** | **320** | *e*Pg | | **Pg** | **15 46 53.9** | **-0.7** |
| PDG | | | | *e*Sg | | **Sn** | **15 47 10.6** | **-0.5** |
| **PDG** | **Podgorica** | **1.10** | **320** | ⇑*i* Pg | | **Pg** | **15 46 53.5** | **-1.1** |
| PDG | | | | *i* Sg | | **Sn** | **15 47 11.1** | **0.0** |
| **FNA** | **Florina** | **1.20** | **132** | P | | **Pg** | **15 46 55.8** | **-0.7** |
| | baz=129 | | | | | | | |
| FNA | | | | S | | **Sb** | **15 47 12.6** | **+0.1** |
| | baz=129 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=E,1.6nm,0.4s,baz=129 | | | | | | | |
| **FNA** | **Florina** | **1.20** | **132** | P | | **Pg** | **15 46 55.7** | **-0.7** |
| FNA | | | | S | | **Sn** | **15 47 14.1** | **+0.4** |
| **FNA** | **Florina** | **1.20** | **132** | *e*Pg | | **Pg** | **15 46 55.5** | **-1.0** |
| FNA | | | | *e*Sg | | **Sg** | **15 47 10.9** | **-1.1** |
| **FNA** | **Florina** | **1.20** | **132** | ⇑*i* Pg | | **Pg** | **15 46 55.8** | **-0.7** |
| FNA | | | | *i* Sg | | **Sb** | **15 47 12.8** | **+0.3** |
| **BUM** | **Brajici-Budva** | **1.21** | **306** | ⇓*i* Pg | | **Pg** | **15 46 55.7** | **-1.0** |
| BUM | | | | *i* Sg | | **Sn** | **15 47 15.3** | **+1.3** |
| **BEY** | **Berane** | **1.30** | **350** | *i* Pg | | **Pn** | **15 46 58.0** | **-0.5** |
| **IVA** | **Berane** | **1.30** | **350** | ⇑*i* Pg | | **Pn** | **15 46 57.1** | **-1.4** |
| IVA | | | | *i* Sg | | **Sn** | **15 47 17.2** | **+0.9** |
| **NEST** | **Nestorio** | **1.34** | **151** | P | | **Pn** | **15 46 58.9** | **-0.1** |
| NEST | | | | S | | **Sn** | **15 47 18.1** | **+0.9** |
| | comp=E,292nm,0.5s | | | | | | | |
| **CEME** | **Cevo** | **1.35** | **315** | ⇑*i* Pg | | **Pn** | **15 46 58.1** | **-1.1** |
| CEME | | | | *i* Sg | | **Sn** | **15 47 19.8** | **+2.2** |
| **KOME** | **Kolasin** | **1.36** | **338** | ⇓*i* Pg | | **Pn** | **15 46 58.3** | **-1.0** |
| KOME | | | | *i* Sg | | **Sn** | **15 47 19.9** | **+2.1** |
| **NKME** | **Niksic** | **1.50** | **322** | ⇑*i* Pg | | **Pn** | **15 47 00.8** | **-0.4** |
| NKME | | | | *i* Sg | | **Sg** | **15 47 24.4** | **+2.7** |
| **PENT** | **Pentalofos** | **1.56** | **153** | P | | **Pn** | **15 47 02.4** | **+0.3** |
| **SJES** | **Sjenica** | **1.68** | **354** | *e*Pg | | **Pn** | **15 47 04.5** | **+0.8** |
| SJES | | | | *e*Sg | | **Sb** | **15 47 26.9** | **+0.4** |
| **BARS** | **Barje** | **1.71** | **44** | *e*Pn | | **Pn** | **15 47 04.4** | **+0.3** |
| BARS | | | | *e*Sn | | **Sn** | **15 47 25.1** | **-1.3** |
| **BARS** | **Barje** | **1.71** | **44** | *e*Pg | | **Pn** | **15 47 04.7** | **+0.6** |
| BARS | | | | *i* Sg | | **Sg** | **15 47 30.4** | **+1.9** |
| **SRN** | **Sarande** | **1.72** | **185** | P | | **Pb** | **15 47 05.2** | **-0.3** |
| | baz=185 | | | | | | | |
| SRN | | | | S | | **Sn** | **15 47 26.5** | **+0.1** |
| | baz=185 | | | | | | | |
| SRN | | | | AMP | | | | |
| | comp=E,0.5nm,0.6s,baz=185 | | | | | | | |
| **KZN** | **Kozani** | **1.75** | **137** | P | | **Pn** | **15 47 04.6** | **0.0** |
| KZN | | | | S | | **Sb** | **15 47 28.1** | **-0.3** |
| | comp=E,340nm,0.5s | | | | | | | |
| **SELS** | **Selova** | **1.76** | **22** | *e*Pn | | **Pn** | **15 47 05.6** | **+0.8** |
| SELS | | | | *e*Sn | | **Sn** | **15 47 27.5** | **-0.2** |
| **VAY** | **Valandovo** | **1.80** | **98** | *e*Pn | | **Pb** | **15 47 06.6** | **-0.4** |
| VAY | | | | *i* Sg | | **Sb** | **15 47 30.9** | **+1.1** |
| VAY | | | | *e*Lg | | Lg | 15 47 33.9 | |
| | comp=E,76nm,0.6s | | | | | | | |
| VAY | | | | *e*Lg | | Lg | 15 47 38.3 | |
| | comp=N,128nm,0.7s | | | | | | | |
| **BRY** | **Bratogost** | **1.80** | **317** | ⇓*i* Pn | | **Pn** | **15 47 05.9** | **+0.5** |
| BRY | | | | *i* Sn | | **Sg** | **15 47 32.0** | **+0.6** |
| **PLE** | **Pljevlja** | **1.84** | **341** | ⇓*i* Pn | | **Pn** | **15 47 06.3** | **+0.4** |
| PLE | | | | *i* Sn | | **Sg** | **15 47 32.5** | **-0.1** |
| **UPM** | **Unac-Piva** | **1.88** | **330** | ⇓*i* Pn | | **Pn** | **15 47 06.2** | **+0.2** |
| UPM | | | | *i* Sn | | **Sg** | **15 47 33.8** | **0.0** |
| **KEK** | **Kerkira** | **1.90** | **189** | P | | **Pn** | **15 47 06.2** | **-0.4** |
| KEK | | | | S | | **Sb** | **15 47 32.4** | **-0.3** |
| | comp=N,110nm,0.6s | | | | | | | |
| **BOSS** | **Bosilegrad** | **1.92** | **61** | *e*Pn | | **Pn** | **15 47 06.3** | **-0.7** |
| **PEHC** | **Pehcevo** | **2.03** | **84** | *i* Pn | | **Pb** | **15 47 10.2** | **-0.8** |
| PEHC | | | | *i* Sg | | **Sg** | **15 47 39.0** | **+0.2** |
| PEHC | | | | *e*Lg | | Lg | 15 47 45.7 | |
| | comp=N,110nm,0.6s | | | | | | | |
| PEHC | | | | *e*Lg | | Lg | 15 47 46.3 | |
| | comp=E,63nm,0.5s | | | | | | | |
| **IGT** | **Igoumenitsa** | **2.06** | **177** | P | | **Pn** | **15 47 09.1** | **+0.3** |
| | baz=176 | | | | | | | |
| **IGT** | **Igoumenitsa** | **2.06** | **177** | P | | **Pn** | **15 47 09.0** | **+0.2** |
| IGT | | | | S | | **Sb** | **15 47 36.0** | **-1.3** |
| | comp=E,120nm,0.6s | | | | | | | |
| **IGT** | **Igoumenitsa** | **2.06** | **177** | *e*Pn | | **Pn** | **15 47 09.0** | **+0.2** |
| IGT | | | | *e*Sn | | **Sb** | **15 47 35.9** | **-1.4** |
| **KNT** | **Kendrikon** | **2.07** | **101** | *i* Pn | | **Pn** | **15 47 09.3** | **+0.3** |
| KNT | | | | *i* Sg | | **Sb** | **15 47 39.0** | **+1.3** |
| **KKB** | **Krupnik** | **2.21** | **82** | *e*Pn | | **Pn** | **15 47 10.7** | **-0.1** |
| KKB | | | | *i* Sg | | **Sg** | **15 47 44.1** | **-0.3** |
| **BOVS** | **Bovan** | **2.33** | **28** | *e*Pn | | **Pn** | **15 47 11.8** | **-0.7** |
| **BBLS** | **Lazi&#263i** | **2.35** | **346** | *e*Pn | | **Pn** | **15 47 14.5** | **+1.6** |
| **SOH** | **Sokhos** | **2.50** | **107** | *e*Pn | | **Pn** | **15 47 14.8** | **-0.1** |
| SOH | | | | *e*Sn | | **Sb** | **15 47 49.3** | **-0.7** |
| **SRS** | **Serrai** | **2.59** | **99** | ⇓*e*Pn | | **Pn** | **15 47 18.5** | **+2.3** |
| **MMB** | **Musomishta** | **2.66** | **90** | *e*Pn | | **Pn** | **15 47 17.8** | **+0.6** |
| MMB | | | | *e*Sn | | **Sn** | **15 47 52.3** | **+2.5** |
| **LKD2** | **Lefkada island** | **2.82** | **173** | P | | **Pn** | **15 47 19.0** | **-0.3** |
| | baz=172 | | | | | | | |
| **KUBS** | **Kucevo** | **3.02** | **20** | *e*Pn | | **Pn** | **15 47 20.9** | **-1.1** |
| KUBS | | | | *e*Sn | | **Sn** | **15 47 56.5** | **-2.1** |
| **AVAS** | **Avala Beograd** | **3.11** | **4** | *e*Pn | | **Pn** | **15 47 24.6** | **+1.3** |

*NAO **11** 15:52:46.2±4.9, 65°.46N×0°.73E, ML3.5*
*BER **11** 15:52:50.0±2.8, 65°.50N×0°.64E, h24km±16km, ML2.2, ML3.5(NAO), Confirmed Earthquake*

**ISC 11 15:52:45.8**±1.3,**65°.42N**±0°.06×**0°.81E**±0°.07,**h10**km,**n42,** σ**2$87**/74,**Norwegian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MOL** | **Molde** | **4.12** | **131** | *e*P | | **Pn** | **15 53 50.3** | **+1.6** |
| MOL | | | | *e*S | | **Sn** | **15 54 35.7** | **-1.2** |
| MOL | | | | IAML | | | 15 54 38.7 | |
| | comp=Z,10nm,0.2s | | | | | | | |
| **MOL** | **Molde** | **4.12** | **131** | Pn | | **Pn** | **15 53 51.9** | **+3.2** |
| MOL | | | | Sn | | **Sn** | **15 54 34.9** | **-2.0** |
| **AKN** | **Aaknes** | **4.26** | **137** | Pn | | **Pn** | **15 53 53.3** | **+2.7** |
| AKN | | | | Sn | | **Sn** | **15 54 39.8** | **-0.6** |
| **AKN** | **Aaknes** | **4.26** | **137** | Pn | | **Pn** | **15 53 53.3** | **+2.7** |
| AKN | | | | Sn | | **Sn** | **15 54 39.8** | **-0.6** |
| **FOO** | **Floro** | **4.28** | **152** | *e*P | | **Pn** | **15 53 52.9** | **+2.0** |
| FOO | | | | *e*S | | **Sn** | **15 54 39.1** | **-1.7** |
| FOO | | | | IAML | | | 15 54 43.3 | |
| | comp=Z,11nm,0.2s | | | | | | | |
| **FOO** | **Floro** | **4.28** | **152** | Pn | | **Pn** | **15 53 53.7** | **+2.8** |
| FOO | | | | Sn | | **Sn** | **15 54 39.8** | **-1.0** |
| **TBLU** | **Trondheim** | **4.65** | **114** | *e*P | | **Pn** | **15 53 58.7** | **+2.7** |
| TBLU | | | | *e*S | | **Sn** | **15 54 48.9** | **-1.1** |
| TBLU | | | | IAML | | | 15 54 52.1 | |
| | comp=Z,12nm,0.3s | | | | | | | |
| **SUE** | **Sulen** | **4.73** | **156** | *e*P | | **Pn** | **15 53 59.3** | **+2.2** |
| SUE | | | | *e*S | | **Sn** | **15 54 50.2** | **-1.7** |
| SUE | | | | IAML | | | 15 54 52.0 | |
| | comp=Z,7.7nm,0.4s | | | | | | | |
| **SOFL** | **Sornfelli, Far** | **4.82** | **229** | *e*P | | **Pn** | **15 53 59.0** | **+0.6** |
| SOFL | | | | *e*S | | **Sn** | **15 54 48.3** | **-5.9** |
| **NSS** | **Namsos** | **4.82** | **96** | *e*P | | **Pn** | **15 54 00.4** | **+2.0** |
| NSS | | | | *e*S | | **Sn** | **15 54 51.5** | **-2.7** |
| NSS | | | | IAML | | | 15 54 57.6 | |
| | comp=Z,8.9nm,0.4s | | | | | | | |
| **HYA** | **Hoyanger** | **4.91** | **148** | *e*P | | **Pn** | **15 54 01.8** | **+2.2** |
| HYA | | | | *e*S | | **Sn** | **15 54 55.4** | **-1.0** |
| HYA | | | | IAML | | | 15 55 00.7 | |
| | comp=Z,6.7nm,0.5s | | | | | | | |
| **DOMB** | **Dombas** | **4.99** | **129** | *e*P | | **Pn** | **15 54 02.4** | **+1.6** |
| DOMB | | | | *e*S | | **Sn** | **15 54 58.0** | **-0.5** |
| DOMB | | | | IAML | | | 15 55 03.3 | |
| | comp=Z,6.4nm,0.2s | | | | | | | |
| **STOK** | **Stokkvaagen** | **5.09** | **74** | *e*P | | **Pn** | **15 54 04.0** | **+1.9** |
| STOK | | | | *e*S | | **Sn** | **15 54 55.9** | **-4.9** |
| STOK | | | | IAML | | | 15 55 00.6 | |
| | comp=Z,9.1nm,0.6s | | | | | | | |
| **STOK** | **Stokkvaagen** | **5.09** | **74** | Pn | | **Pn** | **15 54 03.9** | **+1.8** |
| STOK | | | | Sn | | **Sn** | **15 54 57.1** | **-3.7** |
| **KONS** | **Konsvik** | **5.15** | **72** | *e*P | | **Pn** | **15 54 04.7** | **+1.9** |
| KONS | | | | *e*S | | **Sn** | **15 54 57.7** | **-4.5** |
| KONS | | | | IAML | | | 15 55 01.1 | |
| | comp=Z,10.0nm,0.3s | | | | | | | |
| **KONS** | **Konsvik** | **5.15** | **72** | Pn | | **Pn** | **15 54 04.7** | **+1.9** |
| KONS | | | | Sn | | **Sn** | **15 54 58.3** | **-3.9** |
| **ASK** | **Askoy** | **5.34** | **156** | *e*P | | **Pn** | **15 54 07.8** | **+2.3** |
| ASK | | | | *e*S | | **Sn** | **15 55 05.1** | **-1.9** |
| ASK | | | | IAML | | | 15 55 17.8 | |
| | comp=Z,4.2nm,1.0s | | | | | | | |
| **LRW** | **Lerwick** | **5.38** | **191** | *e*P | | **Pn** | **15 54 08.0** | **+1.9** |
| LRW | | | | *e*S | | **Sn** | **15 55 05.0** | **-3.0** |
| LRW | | | | IAML | | | 15 55 11.3 | |
| | comp=Z,7.5nm,0.4s | | | | | | | |
| **LRW** | **Lerwick** | **5.38** | **191** | Pn | | **Pn** | **15 54 07.9** | **+1.9** |
| LRW | | | | Sn | | **Sn** | **15 55 05.3** | **-2.7** |
| **BER** | **Bergen** | **5.46** | **156** | *e*S | | **Sn** | **15 55 07.0** | **-3.0** |
| BER | | | | IAML | | | 15 55 08.7 | |
| | comp=Z,4.2nm,0.4s | | | | | | | |
| **MOR8** | **Moi Rana** | **5.66** | **76** | *e*P | | **Pn** | **15 54 14.1** | **+4.2** |
| MOR8 | | | | *e*S | | **Sn** | **15 55 15.5** | **+0.7** |
| MOR8 | | | | IAML | | | 15 55 18.7 | |
| | comp=Z,19nm,0.5s | | | | | | | |
| **LOF** | **Lofoten** | **5.72** | **56** | *e*P | | **Pn** | **15 54 11.1** | **+0.4** |
| LOF | | | | *e*S | | **Sn** | **15 55 10.2** | **-6.1** |
| LOF | | | | IAML | | | 15 55 18.3 | |
| | comp=Z,6.1nm,0.9s | | | | | | | |
| **FAUS** | **Fauske** | **6.14** | **65** | *e*P | | **Pn** | **15 54 18.4** | **+2.0** |
| FAUS | | | | *e*S | | **Sn** | **15 55 21.1** | **-5.4** |
| FAUS | | | | IAML | | | 15 55 29.8 | |
| | comp=Z,8.5nm,0.4s | | | | | | | |
| **STEI** | **Steigen** | **6.26** | **60** | *e*P | | **Pn** | **15 54 19.4** | **+1.4** |
| STEI | | | | *e*S | | **Sn** | **15 55 24.3** | **-5.1** |
| STEI | | | | IAML | | | 15 55 29.6 | |
| | comp=Z,6.2nm,0.3s | | | | | | | |
| **NOD** | **Norderasen** | **6.40** | **102** | *e*P | | **Pn** | **15 54 23.3** | **+3.3** |
| NOD | | | | *e*S | | **Sn** | **15 55 30.2** | **-2.7** |
| **NB2** | **NORSAR Subarra** | **6.43** | **128** | Pn | | **Pn** | **15 54 21.9** | **+1.3** |
| | baz=316,slow=14 | | | | | | | |
| NB2 | | | | Sn | | **Sn** | **15 55 33.7** | **-0.2** |
| | baz=314,slow=28 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.43** | **128** | Pn | | **Pn** | **15 54 21.9** | **+1.3** |
| | baz=316,slow=14 | | | | | | | |
| NB2 | | | | Sn | | **Sn** | **15 55 33.7** | **-0.2** |
| | baz=314,slow=28 | | | | | | | |
| **BLS5** | **Blasjo** | **6.56** | **154** | *e*P | | **Pn** | **15 54 24.2** | **+1.9** |
| BLS5 | | | | *e*S | | **Sn** | **15 55 33.2** | **-4.0** |
| BLS5 | | | | IAML | | | 15 55 38.1 | |
| | comp=Z,2.9nm,0.4s | | | | | | | |
| **KMY** | **Karmoy** | **6.56** | **160** | *e*S | | **Sn** | **15 55 34.2** | **-2.8** |
| KMY | | | | IAML | | | 15 55 35.9 | |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| **NC602** | **NORSAR Array S** | **6.77** | **129** | *e*P | | **Pn** | **15 54 26.6** | **+1.6** |
| NC602 | | | | *e*S | | **Sn** | **15 55 39.0** | **-3.1** |
| NC602 | | | | IAML | | | 15 55 43.8 | |
| | comp=Z,3.5nm,0.7s | | | | | | | |
| **NRA0** | **NORESS Array S** | **6.77** | **129** | Pn | | **Pn** | **15 54 26.5** | **+1.4** |
| | baz=315,slow=12 | | | | | | | |
| NRA0 | | | | Sn | | **Sn** | **15 55 40.6** | **-1.4** |
| | baz=308,slow=22 | | | | | | | |
| **NRA0** | **NORESS Array S** | **6.77** | **129** | Pn | | **Pn** | **15 54 26.5** | **+1.4** |
| | baz=315,slow=12 | | | | | | | |
| NRA0 | | | | Sn | | **Sn** | **15 55 40.6** | **-1.4** |
| | baz=308,slow=22 | | | | | | | |
| **KONO** | **Kongsberg** | **7.07** | **141** | *e*S | | **Sn** | **15 55 46.7** | **-2.8** |
| KONO | | | | IAML | | | 15 56 05.5 | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **BIGH** | **Upper Bighouse** | **7.30** | **200** | *e*S | | **Sn** | **15 55 48.3** | **-6.8** |
| **SALU** | **Saltoluokta** | **7.36** | **67** | *e*P | | **Pn** | **15 54 35.1** | **+1.9** |
| SALU | | | | *e*S | | **Sn** | **15 55 52.0** | **-4.7** |
| **HFS** | **Hagfors** | **7.93** | **126** | Pn | | **Pn** | **15 54 43.9** | **+2.9** |
| | baz=320,slow=14 | | | | | | | |
| **HFS** | **Hagfors** | **7.93** | **126** | Pn | | **Pn** | **15 54 43.9** | **+2.9** |
| | baz=320,slow=14 | | | | | | | |
| **DRUM** | **Mains of Drumt** | **8.68** | **192** | *e*P | | **Pn** | **15 54 52.3** | **+1.0** |
| DRUM | | | | *e*S | | **Sn** | **15 56 23.0** | **-6.1** |
| **ARA0** | **ARCESS Array S** | **10.28** | **55** | Pn | | **Pn** | **15 55 15.8** | **+2.6** |
| | baz=245,slow=14 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.28** | **55** | Pn | | **Pn** | **15 55 15.8** | **+2.6** |
| | baz=245,slow=14 | | | | | | | |
| **APA0** | **Apatity Array** | **12.93** | **66** | Pn | | **Pn** | **15 55 50.3** | **+1.0** |
| | baz=282,slow=10 | | | | | | | |
| **APA0** | **Apatity Array** | **12.93** | **66** | Pn | | **Pn** | **15 55 50.3** | **+1.0** |
| | baz=282,slow=10 | | | | | | | |

*THE **11** 15:53:58.3, 41°.84N×20°.24E, h1km±2km, ML2.7/5, Error ellipse: s-maj=3.8km s-min=1.5km az=319.0*
*TIR **11** 15:53:59.9, 41°.60N×20°.25E, h2km±1km, Md3.2, Ml2.9*
*PDG **11** 15:54:00.7±0.1, 41°.62N×20°.24E, h9km, MD3.2/1, ML3.1/10, Error ellipse: s-maj=0.2km s-min=0.6km az=0.0*
*BEO **11** 15:54:02.4±0.3, 41°.55N×20°.14E, h7km±5km,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=187 | | | | | | | | |
| SRN | | | | AMP | | | | | |
| | comp=N,0.2nm,0.5s,baz=187 | | | | | | | | |
| **BARS** | **Barje** | **1.73** | **45** | *e*Pn | | **Pb** | **15 54 34.0** | **0.0** | |
| BARS | | | | *e*Sn | | **Sg** | **15 54 57.7** | **+0.1** | |
| **BARS** | **Barje** | **1.73** | **45** | *e*Pn | | **Pn** | **15 54 32.1** | **-0.4** | |
| BARS | | | | *e*Sg | | **Sg** | **15 54 58.5** | **+1.0** | |
| **SELS** | **Selova** | **1.77** | **23** | *e*Pn | | **Pn** | **15 54 33.3** | **+0.3** | |
| SELS | | | | *e*Sn | | **Sg** | **15 54 58.5** | **-0.3** | |
| **BRY** | **Bratogost** | **1.77** | **318** | ⇑*i*Pn | | **Pn** | **15 54 33.3** | **+0.2** | |
| BRY | | | | *i* Sn | | **Sg** | **15 54 58.5** | **-0.3** | |
| **KZN** | **Kozani** | **1.78** | **136** | P | | **Pn** | **15 54 31.0** | **-2.2** | |
| KZN | | | | S | | **Sb** | **15 54 57.5** | **0.0** | |
| | comp=N,118nm,0.6s | | | | | | | | |
| **PLE** | **Pljevlja** | **1.82** | **342** | ⇑*i*Pn | | **Pn** | **15 54 33.3** | **-0.5** | |
| PLE | | | | *i* Sn | | **Sb** | **15 54 59.0** | **+0.3** | |
| **VAY** | **Valandovo** | **1.84** | **98** | *e*Pn | | **Pb** | **15 54 34.4** | **-1.4** | |
| VAY | | | | *e*Sg | | **Sg** | **15 55 00.0** | **-0.9** | |
| VAY | | | | *e*Pn | | **Sg** | **15 55 04.8** | **+3.9** | |
| | comp=E,31nm,0.5s | | | | | | | | |
| VAY | | | | *e*Pn | | **Sg** | **15 55 06.0** | **+5.1** | |
| | comp=N,65nm,0.7s | | | | | | | | |
| **UPM** | **Unac-Piva** | **1.85** | **330** | ⇓*i*Pn | | **Pn** | **15 54 34.2** | **-0.1** | |
| UPM | | | | *i* Sn | | **Sb** | **15 55 00.3** | **+0.7** | |
| **BOSS** | **Bosilegrad** | **1.95** | **62** | *e*Pn | | **Pb** | **15 54 37.6** | **-0.2** | |
| **SCTE** | **Santa Cesarea** | **1.99** | **221** | P | | **Pn** | **15 54 36.8** | **+0.8** | |
| | baz=223 | | | | | | | | |
| **PEHC** | **Pehcevo** | **2.06** | **84** | *e*Pn | | **Pn** | **15 54 37.6** | **+0.5** | |
| PEHC | | | | *e*Sg | | **Sg** | **15 55 08.3** | **+0.1** | |
| PEHC | | | | *e*Pn | | **Sg** | **15 55 11.9** | **+3.7** | |
| | comp=N,66nm,0.7s | | | | | | | | |
| PEHC | | | | *e*Pn | | **Sg** | **15 55 14.5** | **+6.3** | |
| | comp=E,87nm,0.9s | | | | | | | | |
| **IGT** | **Igoumenitsa** | **2.07** | **176** | P | | **Pn** | **15 54 37.3** | **+0.2** | |
| | baz=178 | | | | | | | | |
| IGT | | | | S | | **Sg** | **15 55 08.5** | **+0.1** | |
| | baz=178 | | | | | | | | |
| IGT | | | | AMP | | | | | |
| | comp=E,0.4nm,0.7s,baz=178 | | | | | | | | |
| **IGT** | **Igoumenitsa** | **2.07** | **176** | P | | **Pn** | **15 54 37.2** | **+0.1** | |
| IGT | | | | S | | **Sg** | **15 55 07.1** | **-1.3** | |
| | comp=E,80nm,0.7s | | | | | | | | |
| **KNT** | **Kendrikon** | **2.11** | **101** | *e*Pn | | **Pb** | **15 54 38.8** | **-1.7** | |
| **KKB** | **Krupnik** | **2.24** | **83** | *e*Pn | | **Pn** | **15 54 39.3** | **-0.1** | |
| KKB | | | | *e*Sg | | **Sg** | **15 55 12.6** | **-1.2** | |
| **BBLS** | **Lazi&#263i** | **2.33** | **347** | *e*Pn | | **Pn** | **15 54 41.9** | **+1.1** | |
| **SOH** | **Sokhos** | **2.54** | **107** | *e*Pn | | **Pn** | **15 54 44.8** | **+1.3** | |
| **SRS** | **Serrai** | **2.63** | **99** | *e*Pn | | **Pn** | **15 54 46.1** | **+1.3** | |
| **MMB** | **Musomishta** | **2.70** | **90** | *e*Pn | | **Pn** | **15 54 47.5** | **+1.8** | |
| **SOKA** | **Soboth** | **6.27** | **326** | *i* Pn | | **Pn** | **15 55 35.4** | **+0.5** | |
| | comp=E,1.6nm,0.5s | | | | | | | | |
| **OBKA** | **Obir** | **6.36** | **322** | *e*Pn | | **Pn** | **15 55 37.0** | **+0.9** | |
| | comp=E,0.3nm,0.2s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **7.90** | **320** | *e*Pn | | **Pn** | **15 55 58.1** | **+0.9** | |
| | comp=E,1.3nm,0.5s | | | | | | | | |

*SKHL **11** 16:00:53.9±0.4,53°.30N×142°.60E,h12km,mb4.8/3*
*SKHL Felt (II) at Okha, Tungor.*
*IDC **11** 16:00:55.9±1.8,53°.38N×142°.42E,h0km,mb3.8/5,*
*mbtmp3.8/5,Error ellipse: s-maj=58.6km s-min=32.2km az=70.0*
**ISC 11 16:00:56.7**±0.7,**53°.31N**±0°.04×**142°.65E**±0°.04,**h10**km,**n9,**
**σ1$59/18,mb4.0/5,Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OKH** | **Okha** | **0.30** | **35** | *i* Pg | | **Pg** | **Pg** | **16 01 01.5** | **-1.2** |
| OKH | | | | AMB | | AMB | AMB | 16 01 01.7 | |
| | 1μm,0.3s | | | | | | | | |
| OKH | | | | P | | **Pb** | | **16 01 04.8** | **+0.7** |
| OKH | | | | *i* Sg | | **Sg** | | **16 01 07.1** | **+0.4** |
| OKH | | | | A | | A | | 16 01 07.3 | |
| | 3μm,0.3s | | | | | | | | |
| OKH | | | | A | | A | | 16 01 07.3 | |
| | 10μm,0.3s | | | | | | | | |
| **NKL** | **Nikolayevsk** | **1.19** | **263** | *e*Pg | | **Pb** | | **16 01 18.3** | **-1.1** |
| NKL | | | | AMB | | AMB | | 16 01 19.4 | |
| | 330nm,0.3s | | | | | | | | |
| NKL | | | | P | | **Pn** | | **16 01 22.5** | **+3.1** |
| NKL | | | | *e*Sg | | **Sn** | | **16 01 35.1** | **-0.6** |
| NKL | | | | A | | A | | 16 01 36.7 | |
| | 4μm,0.4s | | | | | | | | |
| NKL | | | | A | | A | | 16 01 36.7 | |
| | 3μm,0.4s | | | | | | | | |
| **TYV** | **Tymovskoe** | **2.45** | **180** | *e*P | | **Pn** | | **16 01 37.1** | **+0.4** |
| TYV | | | | *e*Pg | | **Pb** | | **16 01 41.8** | **+1.0** |
| TYV | | | | AMB | | AMB | | 16 01 42.7 | |
| | 10.0nm,0.3s | | | | | | | | |
| TYV | | | | *e*S | | **Sn** | | **16 02 05.2** | **-1.5** |
| TYV | | | | *e*Sg | | **Sg** | | **16 02 15.3** | **-0.1** |
| TYV | | | | A | | A | | 16 02 15.6 | |
| | 40nm,0.8s | | | | | | | | |
| TYV | | | | A | | A | | 16 02 15.6 | |
| | 50nm,0.8s | | | | | | | | |
| **EKMR** | **Ekimchan** | **5.84** | **272** | *e*S | | **Sn** | | **16 03 26.5** | **-3.7** |
| EKMR | | | | *e*Sg | | **Sg** | | **16 04 06.1** | **+2.2** |
| EKMR | | | | A | | A | | 16 04 12.5 | |
| | 40nm,0.6s | | | | | | | | |
| EKMR | | | | A | | A | | 16 04 12.5 | |
| | 30nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.27** | **285** | P | | **P** | | **16 08 15.6** | **-1.3** |
| | 0.4nm,0.6s,baz=61,slow=8.5,SNR=5.0 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.42** | **293** | P | | **P** | | **16 08 17.9** | **-0.2** |
| | 1.8nm,0.6s,baz=66,slow=9.1,SNR=12 | | | | | | | | |
| KURBB | | | | PcP | | **PcP** | | **16 10 31.3** | **+0.2** |
| | 0.4nm,0.6s,baz=68,slow=2.8,SNR=5.4 | | | | | | | | |
| | 1.8nm,0.6s | | | | | | | | |
| **FINES** | **FINESS Array B** | **55.07** | **328** | P | | **P** | | **16 10 28.0** | **-0.2** |
| | 2.2nm,0.8s,baz=36,slow=7.8,SNR=10 | | | | | | | | |
| | 2.2nm,0.8s | | | | | | | | |
| **HFS** | **Hagfors** | **59.75** | **333** | P | | **P** | | **16 11 00.8** | **-0.5** |
| | 0.8nm,0.4s,baz=36,slow=7.6,SNR=8.4 | | | | | | | | |
| | 0.8nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **77.03** | **188** | P | | **P** | | **16 12 50.7** | **+1.1** |
| | 0.3nm,0.7s,baz=358,slow=5.9,SNR=4.3 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |

*SKO **11** 16:11:37.9,41°.55N×20°.07E,h15km,ML2.3*
*TIR **11** 16:11:37.7,41°.60N×20°.16E,h25km±1km,Md3.3,Ml2.4*
*PDG **11** 16:11:38.4±0.1,41°.61N×20°.16E,h6km,ML2.5/10,Error ellipse: s-maj=0.4km s-min=0.6km az=0.0*
*BEO **11** 16:11:39.1±0.4,41°.57N×20°.20E,h9km±5km,ML2.2/7*
**ISC 11 16:11:38.5**±1.0,**41°.60N**±0°.02×**20°.15E**±0°.02,**h10**km±9km,
**n34,σ0$93/63,3C-7D,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.33** | **221** | P | | **Pg** | | **16 11 45.2** | **+0.1** |
| | baz=222 | | | | | | | | |
| TIR | | | | S | | **Sb** | | **16 11 51.1** | **-0.8** |
| | baz=222 | | | | | | | | |
| TIR | | | | AMP | | | | | |
| | comp=N,1.3nm,0.1s,baz=222 | | | | | | | | |
| **TIR** | **Tirane** | **0.33** | **221** | *e*Pg | | **Pg** | | **16 11 44.8** | **-0.3** |
| TIR | | | | *e*Sg | | **Sb** | | **16 11 51.6** | **-0.3** |
| **PUK** | **Puka** | **0.48** | **336** | P | | **Pg** | | **16 11 47.8** | **-0.1** |
| | baz=336 | | | | | | | | |
| PUK | | | | S | | **Sg** | | **16 11 55.0** | **+0.7** |
| | baz=336 | | | | | | | | |
| PUK | | | | AMP | | | | | |
| | comp=E,2.0nm,0.4s,baz=336 | | | | | | | | |
| **OHR** | **Ohrid** | **0.69** | **135** | *i* Pg | | **Pb** | | **16 11 52.4** | **-0.3** |
| OHR | | | | *i* Sg | | **Sb** | | **16 12 02.3** | **0.0** |
| OHR | | | | *e*Lg | | Lg | | 16 12 03.1 | |
| | comp=N,126nm,0.7s | | | | | | | | |
| OHR | | | | *e*Lg | | Lg | | 16 12 05.7 | |
| | comp=E,51nm,0.5s | | | | | | | | |
| **BCI** | **Bajram Curri** | **0.77** | **355** | P | | **Pg** | | **16 11 52.9** | **-0.5** |
| | baz=355 | | | | | | | | |
| BCI | | | | S | | **Sb** | | **16 12 04.4** | **-0.1** |
| | baz=355 | | | | | | | | |
| BCI | | | | AMP | | | | | |
| | comp=N,0.6nm,0.4s,baz=355 | | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.93** | **309** | ⇓*i*Pg | | **Pg** | | **16 11 55.5** | **-0.9** |
| DRME | | | | *i* Sg | | **Sn** | | **16 12 10.2** | **-0.8** |
| **PVY** | **Plav** | **1.00** | **352** | ⇓*i*Pg | | **Pg** | | **16 11 56.9** | **-0.9** |
| PVY | | | | *i* Sg | | **Sn** | | **16 12 12.7** | **-0.3** |
| **PDG** | **Podgorica** | **1.06** | **321** | *e*Pg | | **Pg** | | **16 11 58.2** | **-0.8** |
| PDG | | | | *e*Sg | | **Sn** | | **16 12 15.0** | **+0.7** |
| **PDG** | **Podgorica** | **1.06** | **321** | ⇑*i*Pg | | **Pg** | | **16 11 57.8** | **-1.2** |
| PDG | | | | *i* Sg | | **Sn** | | **16 12 14.7** | **+0.4** |
| **KBN** | **Korca** | **1.09** | **154** | P | | **Pn** | | **16 12 01.3** | **+1.4** |
| | baz=154 | | | | | | | | |
| KBN | | | | S | | **Sb** | | **16 12 14.2** | **+0.5** |
| | baz=154 | | | | | | | | |
| **BUM** | **Brajici-Budva** | **1.17** | **307** | ⇑*i*Pg | | **Pb** | | **16 12 00.1** | **-0.8** |
| BUM | | | | *i* Sg | | **Sn** | | **16 12 18.2** | **+1.1** |
| **FNA** | **Florina** | **1.23** | **131** | P | | **Pn** | | **16 12 01.3** | **-0.6** |
| | baz=131 | | | | | | | | |
| FNA | | | | S | | **Sn** | | **16 12 18.4** | **-0.2** |
| | baz=131 | | | | | | | | |
| FNA | | | | AMP | | | | | |
| | comp=N,0.2nm,0.2s,baz=131 | | | | | | | | |
| **FNA** | **Florina** | **1.23** | **131** | *i* Pg | | **Pn** | | **16 12 01.2** | **-0.6** |
| FNA | | | | *i* Sg | | **Sn** | | **16 12 18.9** | **+0.3** |
| **BEY** | **Berane** | **1.28** | **352** | *i* Pg | | **Pg** | | **16 12 03.1** | **-0.1** |
| **IVA** | **Berane** | **1.28** | **352** | ⇓*i*Pg | | **Pn** | | **16 12 01.7** | **-0.9** |
| IVA | | | | *i* Sg | | **Sn** | | **16 12 22.3** | **+2.4** |
| **CEME** | **Cevo** | **1.32** | **316** | ⇓*i*Pg | | **Pn** | | **16 12 02.9** | **-0.1** |
| CEME | | | | *i* Sg | | **Sg** | | **16 12 23.3** | **+2.4** |
| **KOME** | **Kolasin** | **1.33** | **339** | ⇓*i*Pg | | **Pn** | | **16 12 02.8** | **-0.5** |
| KOME | | | | *i* Sg | | **Sg** | | **16 12 23.8** | **+2.3** |
| **NKME** | **Niksic** | **1.47** | **323** | ⇑*i*Pg | | **Pn** | | **16 12 05.2** | **+0.1** |
| NKME | | | | *i* Sg | | **Sg** | | **16 12 28.1** | **+2.4** |
| **SJES** | **Sjenica** | **1.67** | **356** | *e*Pn | | **Pg** | | **16 12 09.8** | **-0.6** |
| SJES | | | | *e*Sn | | **Sb** | | **16 12 30.4** | **0.0** |
| **SRN** | **Sarande** | **1.72** | **184** | P | | **Pb** | | **16 12 09.2** | **-1.0** |
| | baz=185 | | | | | | | | |
| SRN | | | | S | | **Sg** | | **16 12 33.2** | **-0.6** |
| | baz=185 | | | | | | | | |
| **BARS** | **Barje** | **1.73** | **45** | *e*Pn | | **Pb** | | **16 12 10.4** | **0.0** |
| BARS | | | | *e*Sn | | **Sb** | | **16 12 31.8** | **-0.5** |
| **BARS** | **Barje** | **1.73** | **45** | *e*Pn | | **Pb** | | **16 12 10.8** | **+0.4** |
| BARS | | | | *i* Sg | | **Sg** | | **16 12 34.7** | **+0.5** |
| **BRY** | **Bratogost** | **1.77** | **318** | ⇓*i*Pn | | **Pb** | | **16 12 11.0** | **-0.1** |
| BRY | | | | *i* Sn | | **Sg** | | **16 12 35.9** | **+0.6** |
| **SELS** | **Selova** | **1.77** | **24** | *e*Pn | | **Pn** | | **16 12 09.1** | **-0.1** |
| SELS | | | | *e*Sn | | **Sb** | | **16 12 33.9** | **+0.6** |
| **VAY** | **Valandovo** | **1.84** | **98** | *i* Pg | | **Pb** | | **16 12 12.1** | **-0.1** |
| VAY | | | | *i* Sg | | **Sb** | | **16 12 35.6** | **+0.4** |
| VAY | | | | *e*Lg | | Lg | | 16 12 36.0 | |
| | comp=E,20nm,0.5s | | | | | | | | |
| VAY | | | | *e*Lg | | Lg | | 16 12 36.0 | |
| | comp=N,30nm,0.6s | | | | | | | | |
| **UPM** | **Unac-Piva** | **1.85** | **330** | ⇓*i*Pn | | **Pb** | | **16 12 11.8** | **-0.7** |
| UPM | | | | *i* Sn | | **Sg** | | **16 12 38.1** | **+0.2** |
| **BOSS** | **Bosilegrad** | **1.95** | **62** | *e*Pn | | **Pn** | | **16 12 11.5** | **-0.2** |
| **PEHC** | **Pehcevo** | **2.07** | **84** | *e*Pn | | **Pb** | | **16 12 14.8** | **-1.3** |
| PEHC | | | | *i* Sg | | **Sg** | | **16 12 44.2** | **-0.7** |
| PEHC | | | | *e*Lg | | Lg | | 16 12 49.5 | |
| | comp=E,19nm,0.7s | | | | | | | | |
| PEHC | | | | *e*Lg | | Lg | | 16 12 49.7 | |
| | comp=N,47nm,1.2s | | | | | | | | |
| **IGT** | **Igoumenitsa** | **2.07** | **176** | P | | **Pn** | | **16 12 13.9** | **+0.6** |
| | baz=176 | | | | | | | | |
| IGT | | | | S | | **Sb** | | **16 12 42.3** | **+0.3** |
| | baz=176 | | | | | | | | |
| IGT | | | | AMP | | | | | |
| | comp=N,0.1nm,0.6s,baz=176 | | | | | | | | |
| **KNT** | **Kendrikon** | **2.11** | **101** | *e*Pn | | **Pn** | | **16 12 13.9** | **0.0** |
| KNT | | | | *i* Sg | | **Sb** | | **16 12 44.2** | **+1.1** |
| **KKB** | **Krupnik** | **2.24** | **83** | *e*Pn | | **Pn** | | **16 12 15.6** | **-0.1** |
| **BBLS** | **Lazi&#263i** | **2.33** | **347** | *e*Pn | | **Pb** | | **16 12 19.1** | **-1.5** |
| **DIVS** | **Divibare** | **2.50** | **357** | *e*Pn | | **Pb** | | **16 12 21.5** | **-2.0** |
| DIVS | | | | *e*Sn | | **Sn** | | **16 12 50.7** | **+0.8** |
| **SRS** | **Serrai** | **2.63** | **99** | *e*Pn | | **Pn** | | **16 12 22.0** | **+0.9** |

*BEO **11** 16:21:06.8±0.6,41°.56N×20°.29E,h4km±6km,ML2.0/7*
*PDG **11** 16:21:07.1±0.1,41°.62N×20°.16E,h9km,ML2.5/10,Error ellipse: s-maj=0.1km s-min=0.4km az=0.0*
*SKO **11** 16:21:08.9,41°.59N×20°.15E,h5km,ML2.0*
**ISC 11 16:21:06.8**±1.2,**41°.59N**±0°.03×**20°.15E**±0°.03,**h3**km±11km,
**n19,σ0$95/37,6C-3D,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.33** | **222** | *e*Pg | | **Pg** | | **16 21 13.7** | **+0.7** |
| TIR | | | | *e*Sg | | **Sb** | | **16 21 20.1** | **-0.8** |
| **OHR** | **Ohrid** | **0.68** | **134** | *i* Pg | | **Pb** | | **16 21 20.9** | **-0.4** |
| OHR | | | | *i* Sg | | **Sb** | | **16 21 31.9** | **+0.7** |
| OHR | | | | *e*Lg | | Lg | | 16 21 32.8 | |
| | comp=N,52nm,0.3s | | | | | | | | |
| OHR | | | | *e*Lg | | Lg | | 16 21 33.2 | |
| | comp=E,55nm,0.5s | | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.94** | **310** | ⇓*i*Pg | | **Pg** | | **16 21 24.3** | **-0.4** |
| DRME | | | | *i* Sg | | **Sb** | | **16 21 38.7** | **+0.2** |
| **PVY** | **Plav** | **1.01** | **352** | ⇑*i*Pg | | **Pg** | | **16 21 25.7** | **-0.5** |
| PVY | | | | *i* Sg | | **Sb** | | **16 21 41.2** | **+0.3** |
| **PDG** | **Podgorica** | **1.07** | **322** | *e*Pg | | **Pg** | | **16 21 26.2** | **-1.2** |
| PDG | | | | *e*Sg | | **Sb** | | **16 21 43.1** | **+0.7** |
| **PDG** | **Podgorica** | **1.07** | **322** | ⇑*i*Pg | | **Pg** | | **16 21 26.7** | **-0.7** |
| PDG | | | | *i* Sg | | **Sb** | | **16 21 43.2** | **+0.8** |
| **BUM** | **Brajici-Budva** | **1.18** | **307** | ⇑*i*Pg | | **Pg** | | **16 21 28.6** | **-0.7** |
| BUM | | | | *i* Sg | | **Sn** | | **16 21 47.2** | **+0.4** |
| **FNA** | **Florina** | **1.23** | **131** | *i* Pg | | **Pg** | | **16 21 30.3** | **+0.1** |
| FNA | | | | *i* Sg | | **Sn** | | **16 21 47.7** | **-0.3** |
| **IVA** | **Berane** | **1.29** | **352** | ⇑*i*Pg | | **Pg** | | **16 21 30.5** | **-1.1** |
| IVA | | | | *i* Sg | | **Sn** | | **16 21 50.5** | **+0.7** |
| **CEME** | **Cevo** | **1.33** | **317** | *e*Pg | | **Pn** | | **16 21 31.3** | **-1.0** |
| CEME | | | | *i* Sg | | **Sn** | | **16 21 51.8** | **+1.3** |
| **KOME** | **Kolasin** | **1.35** | **340** | ⇑*i*Pg | | **Pn** | | **16 21 31.5** | **-1.1** |
| KOME | | | | *i* Sg | | **Sn** | | **16 21 52.2** | **+1.2** |
| **NKME** | **Niksic** | **1.48** | **323** | ⇑*i*Pg | | **Pn** | | **16 21 34.0** | **-0.3** |
| NKME | | | | *i* Sg | | **Sg** | | **16 21 56.4** | **+2.2** |
| **SJES** | **Sjenica** | **1.68** | **356** | *e*Pn | | **Pn** | | **16 21 37.8** | **+0.7** |
| SJES | | | | *e*Sn | | **Sg** | | **16 22 01.3** | **+0.7** |
| **BARS** | **Barje** | **1.74** | **45** | *e*Pn | | **Pb** | | **16 21 38.8** | **-0.6** |
| **BARS** | **Barje** | **1.74** | **45** | *e*Pn | | **Pg** | | **16 21 40.4** | **+0.3** |
| BARS | | | | *e*Sn | | **Sg** | | **16 22 03.0** | **+0.3** |
| BARS | | | | *i* Sg | | **Sb** | | **16 22 04.1** | **+2.5** |
| **BRY** | **Bratogost** | **1.78** | **318** | ⇓*i*Pn | | **Pn** | | **16 21 38.7** | **+0.2** |
| BRY | | | | *i* Sn | | **Sg** | | **16 22 03.8** | **0.0** |
| **SELS** | **Selova** | **1.78** | **23** | *e*Pn | | **Pn** | | **16 21 37.1** | **-1.4** |
| SELS | | | | *e*Sn | | **Sn** | | **16 22 00.7** | **-0.9** |
| **UPM** | **Unac-Piva** | **1.86** | **331** | ⇓*i*Pn | | **Pn** | | **16 21 39.9** | **+0.2** |
| UPM | | | | *i* Sn | | **Sb** | | **16 22 05.7** | **+0.5** |
| **KNT** | **Kendrikon** | **2.11** | **101** | *e*Pn | | **Pb** | | **16 21 44.4** | **-1.2** |

*SKO **11** 16:31:47.0,41°.37N×19°.91E,h16km,ML2.2*
*BEO **11** 16:31:47.3±0.7,41°.54N×20°.31E,h3km±7km,ML2.0/6*
*PDG **11** 16:31:48.1±0.1,41°.58N×20°.14E,h7km,ML2.6/9,Error ellipse: s-maj=0.1km s-min=0.4km az=0.0*
**ISC 11 16:31:47.4**±1.2,**41°.53N**±0°.03×**20°.13E**±0°.03,**h6**km±10km,
**n20,σ0$93/39,5C-5D,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.27** | **227** | *e*Pg | | **Pb** | | **16 31 53.8** | **-0.8** |
| TIR | | | | *e*Sg | | **Sb** | | **16 32 00.4** | **+1.0** |
| **OHR** | **Ohrid** | **0.66** | **129** | *e*Pg | | **Pg** | | **16 32 00.4** | **+0.3** |
| OHR | | | | *e*Sg | | **Sb** | | **16 32 11.1** | **+0.4** |
| OHR | | | | *e*Lg | | Lg | | 16 32 11.8 | |
| | comp=N,100nm,0.6s | | | | | | | | |
| OHR | | | | *e*Lg | | Lg | | 16 32 13.0 | |
| | comp=E,55nm,0.5s | | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.96** | **313** | ⇓*i*Pg | | **Pg** | | **16 32 05.4** | **-0.5** |
| DRME | | | | *i* Sg | | **Sb** | | **16 32 19.7** | **+0.3** |
| **PVY** | **Plav** | **1.07** | **353** | ⇑*i*Pg | | **Pg** | | **16 32 07.0** | **-1.0** |
| PVY | | | | *i* Sg | | **Sb** | | **16 32 22.7** | **0.0** |
| **PDG** | **Podgorica** | **1.11** | **324** | *e*Pg | | **Pg** | | **16 32 08.0** | **-0.7** |
| PDG | | | | *e*Sg | | **Sn** | | **16 32 25.9** | **+0.9** |
| **PDG** | **Podgorica** | **1.11** | **324** | ⇑*i*Pg | | **Pg** | | **16 32 07.9** | **-0.7** |
| PDG | | | | *i* Sg | | **Sn** | | **16 32 24.6** | **-0.4** |
| **BUM** | **Brajici-Budva** | **1.20** | **310** | ⇑*i*Pg | | **Pg** | | **16 32 09.7** | **-0.7** |
| BUM | | | | *i* Sg | | **Sn** | | **16 32 28.2** | **+0.8** |
| **FNA** | **Florina** | **1.20** | **128** | *e*Pg | | **Pg** | | **16 32 09.7** | **-0.7** |
| FNA | | | | *e*Sg | | **Sn** | | **16 32 26.7** | **-0.7** |
| **BEY** | **Berane** | **1.35** | **353** | *e*Pg | | **Pg** | | **16 32 14.2** | **+0.9** |
| **IVA** | **Berane** | **1.35** | **353** | ⇓*i*Pg | | **Pn** | | **16 32 12.0** | **-0.9** |
| IVA | | | | *i* Sg | | **Sn** | | **16 32 32.6** | **+1.4** |
| **CEME** | **Cevo** | **1.36** | **319** | ⇓*i*Pg | | **Pn** | | **16 32 12.4** | **-0.5** |
| CEME | | | | *i* Sg | | **Sn** | | **16 32 33.1** | **+1.8** |
| **KOME** | **Kolasin** | **1.40** | **341** | ⇓*i*Pg | | **Pn** | | **16 32 13.0** | **-0.5** |
| KOME | | | | *i* Sg | | **Sg** | | **16 32 34.4** | **+2.1** |
| **NKME** | **Niksic** | **1.51** | **325** | ⇑*i*Pg | | **Pn** | | **16 32 15.2** | **+0.2** |
| NKME | | | | *i* Sg | | **Sg** | | **16 32 38.4** | **+2.4** |
| **SJES** | **Sjenica** | **1.73** | **356** | *e*Pn | | **Pb** | | **16 32 19.3** | **-0.4** |
| SJES | | | | *e*Sn | | **Sb** | | **16 32 41.5** | **-0.2** |
| **BARS** | **Barje** | **1.80** | **44** | *e*Pn | | **Pb** | | **16 32 20.7** | **0.0** |
| BARS | | | | *e*Sn | | **Sg** | | **16 32 45.4** | **+0.2** |
| **BRY** | **Bratogost** | **1.81** | **320** | ⇑*i*Pn | | **Pb** | | **16 32 20.2** | **-0.8** |
| BRY | | | | *i* Sn | | **Sg** | | **16 32 45.5** | **0.0** |
| **SELS** | **Selova** | **1.84** | **23** | *e*Pn | | **Pn** | | **16 32 19.6** | **+0.1** |
| SELS | | | | *e*Sn | | **Sn** | | **16 32 41.9** | **-1.3** |
| **VAY** | **Valandovo** | **1.85** | **96** | *e*Pn | | **Pn** | | **16 32 19.9** | **+0.3** |
| VAY | | | | *e*Sn | | **Sb** | | **16 32 44.5** | **-0.5** |
| VAY | | | | *e*Lg | | Lg | | 16 32 47.9 | |
| | comp=N,14nm,0.6s | | | | | | | | |
| VAY | | | | *e*Lg | | Lg | | 16 32 48.3 | |
| | comp=E,11nm,0.6s | | | | | | | | |
| **UPM** | **Unac-Piva** | **1.90** | **332** | ⇓*i*Pn | | **Pb** | | **16 32 21.4** | **-1.2** |
| UPM | | | | *i* Sn | | **Sg** | | **16 32 47.9** | **-0.6** |
| **KNT** | **Kendrikon** | **2.12** | **99** | *e*Pn | | **Pn** | | **16 32 24.0** | **+0.7** |
| KNT | | | | *e*Sn | | **Sb** | | **16 32 52.7** | **-0.1** |

*SKO **11** 16:34:53.7,41°.75N×20°.29E,h19km,ML2.1*
*BEO **11** 16:34:53.1±0.5,41°.75N×20°.28E,h5km±7km,ML2.0/8*
*PDG **11** 16:34:53.7±0.1,41°.79N×20°.15E,h2km,ML2.5/10,Error ellipse: s-maj=0.2km s-min=0.7km az=0.0*
**ISC 11 16:34:53.1**±1.2,**41.72N**±0°.03×**20.16E**±0°.03,**h11**km±10km,
**n21,σ0$97/40,6C-4D,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.43** | **210** | *e*Pg | | **Pg** | | **16 35 02.1** | **-0.7** |
| TIR | | | | *e*Sg | | **Sb** | | **16 35 10.5** | **+1.1** |
| **OHR** | **Ohrid** | **0.78** | **142** | *e*Pg | | **Pb** | | **16 35 08.4** | **-0.3** |
| OHR | | | | *i* Sg | | **Sn** | | **16 35 20.7** | **-1.2** |
| OHR | | | | *e*Lg | | Lg | | 16 35 23.2 | |
| | comp=E,51nm,0.7s | | | | | | | | |
| OHR | | | | *e*Lg | | Lg | | 16 35 25.3 | |
| | comp=N,59nm,0.4s | | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.86** | **303** | ⇓*i*Pg | | **Pg** | | **16 35 09.0** | **-0.8** |
| DRME | | | | *i* Sg | | **Sg** | | **16 35 21.7** | **+0.7** |
| **PDG** | **Podgorica** | **0.97** | **317** | *e*Pg | | **Pg** | | **16 35 10.8** | **-1.2** |
| PDG | | | | *e*Sg | | **Sb** | | **16 35 26.2** | **+1.2** |
| **PDG** | **Podgorica** | **0.97** | **317** | ⇑*i*Pg | | **Pg** | | **16 35 10.7** | **-1.2** |
| PDG | | | | *i* Sg | | **Sg** | | **16 35 25.3** | **+0.7** |
| **BUM** | **Brajici-Budva** | **1.10** | **302** | ⇑*i*Pg | | **Pb** | | **16 35 13.5** | **-0.8** |
| BUM | | | | *i* Sg | | **Sn** | | **16 35 29.9** | **-0.1** |
| **BEY** | **Berane** | **1.17** | **350** | *e*Pg | | **Pg** | | **16 35 16.3** | **+0.8** |
| **IVA** | **Berane** | **1.17** | **350** | ⇑*i*Pg | | **Pb** | | **16 35 14.2** | **-1.2** |
| IVA | | | | *i* Sg | | **Sg** | | **16 35 31.4** | **+0.7** |
| **KOME** | **Kolasin** | **1.22** | **337** | ⇑*i*Pg | | **Pn** | | **16 35 15.1** | **-1.2** |
| KOME | | | | *i* Sg | | **Sg** | | **16 35 33.2** | **+0.6** |
| **CEME** | **Cevo** | **1.24** | **312** | ⇓*i*Pg | | **Pn** | | **16 35 15.8** | **-0.7** |
| CEME | | | | *i* Sg | | **Sn** | | **16 35 34.5** | **+1.3** |
| **FNA** | **Florina** | **1.31** | **135** | *e*Pg | | **Pg** | | **16 35 17.8** | **-0.5** |
| FNA | | | | *i* Sg | | **Sn** | | **16 35 36.3** | **+1.2** |
| **NKME** | **Niksic** | **1.37** | **320** | ⇓*i*Pg | | **Pn** | | **16 35 18.1** | **-0.2** |
| NKME | | | | *i* Sg | | **Sg** | | **16 35 38.9** | **+1.5** |
| **SJES** | **Sjenica** | **1.54** | **355** | *e*Pn | | **Pn** | | **16 35 21.4** | **+0.7** |
| SJES | | | | *e*Sn | | **Sb** | | **16 35 41.9** | **+0.5** |
| **BARS** | **Barje** | **1.65** | **48** | *e*Pn | | **Pn** | | **16 35 21.1** | **-0.9** |
| BARS | | | | *e*Sn | | **Sb** | | **16 35 44.0** | **-0.3** |
| **BARS** | **Barje** | **1.65** | **48** | *e*Pn | | **Pn** | | **16 35 22.0** | **-0.1** |
| BARS | | | | *i* Sg | | **Sb** | | **16 35 45.2** | **+0.9** |
| **SELS** | **Selova** | **1.66** | **25** | *e*Pn | | **Pn** | | **16 35 21.2** | **-1.0** |
| SELS | | | | *e*Sn | | **Sn** | | **16 35 44.1** | **+0.6** |
| **BRY** | **Bratogost** | **1.68** | **315** | ⇑*i*Pn | | **Pb** | | **16 35 23.8** | **-0.4** |
| BRY | | | | *i* Sn | | **Sg** | | **16 35 48.9** | **+1.7** |
| **PLE** | **Pljevlja** | **1.70** | **341** | ⇓*i*Pn | | **Pb** | | **16 35 24.1** | **-0.5** |
| PLE | | | | *i* Sn | | **Sg** | | **16 35 49.1** | **+1.2** |
| **UPM** | **Unac-Piva** | **1.75** | **328** | ⇑*i*Pn | | **Pb** | | **16 35 24.9** | **-0.4** |
| UPM | | | | *i* Sn | | **Sg** | | **16 35 50.5** | **+1.2** |
| **KNT** | **Kendrikon** | **2.13** | **104** | *i* Pn | | **Pn** | | **16 35 29.4** | **+0.6** |
| **GRUS** | **Gruza

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SJES** | **Sjenica** | | **1.50** | **354** | ⇑*i*Pn | | **Pb** | **16 40 29.3** | **+0.3** |
| SJES | | | | | *e*Sn | | **Sg** | **16 40 49.2** | **-0.3** |
| **BARS** | **Barje** | | **1.60** | **48** | *e*Pn | | **Pn** | **16 40 29.4** | **+0.2** |
| BARS | | | | | *e*Sn | | **Sn** | **16 40 48.9** | **-0.9** |
| **BARS** | **Barje** | | **1.60** | **48** | ⇓*i*Pn | | **Pn** | **16 40 29.4** | **+0.2** |
| BARS | | | | | *i* Sg | | **Sg** | **16 40 53.6** | **+1.1** |
| **SELS** | **Selova** | | **1.61** | **25** | *e*Pn | | **Pn** | **16 40 29.7** | **+0.4** |
| SELS | | | | | *e*Sn | | **Sn** | **16 40 50.1** | **+0.1** |
| **BRY** | **Bratogost** | | **1.67** | **313** | *e*Pn | | **Pb** | **16 40 31.6** | **-0.3** |
| BRY | | | | | *e*Sn | | **Sg** | **16 40 54.4** | **-0.4** |
| **BRY** | **Bratogost** | | **1.67** | **313** | ⇑*i*Pn | | **Pb** | **16 40 31.3** | **-0.6** |
| BRY | | | | | *i* Sn | | **Sg** | **16 40 54.5** | **-0.4** |
| **PLE** | **Pljevlja** | | **1.67** | **339** | ⇓*i*Pn | | **Pb** | **16 40 31.5** | **-0.4** |
| PLE | | | | | *i* Sn | | **Sg** | **16 40 55.3** | **+0.4** |
| **UPM** | **Unac-Piva** | | **1.73** | **327** | ⇑*i*Pn | | **Pb** | **16 40 32.7** | **-0.1** |
| UPM | | | | | *e*Sn | | **Sb** | **16 40 55.5** | **+1.0** |
| **UPM** | **Unac-Piva** | | **1.73** | **327** | *e*Pn | | **Pn** | **16 40 31.9** | **+0.8** |
| UPM | | | | | *i* Sn | | **Sg** | **16 40 56.2** | **-0.4** |
| **VAY** | **Valandovo** | | **1.84** | **103** | *i* Pg | | **Pn** | **16 40 33.4** | **+0.9** |
| VAY | | | | | *i* Sg | | **Sg** | **16 40 59.9** | **-0.2** |
| VAY | | | | | *e*Lg | | Lg | 16 41 02.5 | |
| | comp=E,211nm,1.0s | | | | | | | | |
| VAY | | | | | *e*Lg | | Lg | 16 41 03.2 | |
| | comp=N,155nm,0.5s | | | | | | | | |
| **BOSS** | **Bosilegrad** | | **1.85** | **66** | *e*Pn | | **Pn** | **16 40 32.4** | **-0.3** |
| BOSS | | | | | *e*Sn | | **Sn** | **16 40 54.7** | **-1.4** |
| **KZN** | **Kozani** | | **1.88** | **140** | P | | **Pb** | **16 40 34.4** | **-1.0** |
| KZN | | | | | S | | **Sb** | **16 40 58.8** | **-0.2** |
| | comp=N,198nm,0.5s | | | | | | | | |
| **SRN** | **Sarande** | | **1.89** | **184** | P | | **Pb** | **16 40 35.0** | **-0.4** |
| | baz=186 | | | | | | | | |
| SRN | | | | | S | | **Sg** | **16 41 01.2** | **-0.5** |
| | baz=186 | | | | | | | | |
| SRN | | | | | AMP | | | | |
| | comp=E,0.5nm,0.7s,baz=186 | | | | | | | | |
| **RUDO** | **Rudo** | | **1.95** | **342** | ⇓*i*Pn | | **Pn** | **16 40 35.2** | **+1.2** |
| RUDO | | | | | *e*Sn | | **Sb** | **16 41 00.9** | **+0.1** |
| **PEHC** | **Pehcevo** | | **2.03** | **89** | *i* Pn | | **Pb** | **16 40 38.1** | **+0.3** |
| PEHC | | | | | *i* Sg | | **Sg** | **16 41 06.5** | **+0.3** |
| PEHC | | | | | *e*Lg | | Lg | 16 41 07.9 | |
| | comp=N,280nm,0.8s | | | | | | | | |
| PEHC | | | | | *e*Lg | | Lg | 16 41 08.9 | |
| | comp=E,128nm,0.6s | | | | | | | | |
| **KEK** | **Kerkira** | | **2.07** | **188** | P | | **Pn** | **16 40 35.9** | **+0.2** |
| **KNT** | **Kendrikon** | | **2.12** | **106** | P | | **Pn** | **16 40 36.5** | **+0.1** |
| KNT | | | | | S | | **Sn** | **16 41 02.6** | **-0.1** |
| **KNT** | **Kendrikon** | | **2.12** | **106** | *i* Pn | | **Pn** | **16 40 37.1** | **+0.8** |
| KNT | | | | | *e*Sn | | **Sn** | **16 41 02.5** | **-0.2** |
| **STON** | **Ston** | | **2.15** | **302** | ⇑*i*Pn | | **Pn** | **16 40 37.5** | **+0.7** |
| STON | | | | | *e*Sn | | **Sb** | **16 41 05.7** | **-1.0** |
| **GRUS** | **Gruza** | | **2.16** | **10** | *e*Pn | | **Pn** | **16 40 37.2** | **+0.3** |
| GRUS | | | | | *e*Sn | | **Sn** | **16 41 05.1** | **+1.5** |
| **BOVS** | **Bovan** | | **2.18** | **30** | *e*Pn | | **Pn** | **16 40 36.8** | **-0.3** |
| **BOVS** | **Bovan** | | **2.18** | **30** | ⇑P | | **Pn** | **16 40 35.9** | **-1.2** |
| **BBLS** | **Lazi&#263i** | | **2.18** | **345** | *e*Pn | | **Pn** | **16 40 38.7** | **+1.5** |
| BBLS | | | | | *e*Sn | | **Sb** | **16 41 07.5** | **0.0** |
| **BBLS** | **Lazi&#263i** | | **2.18** | **345** | ⇓*i*Pn | | **Pn** | **16 40 38.4** | **+1.2** |
| BBLS | | | | | *e*Sn | | **Sb** | **16 41 06.4** | **-1.1** |
| **KKB** | **Krupnik** | | **2.20** | **87** | *i* Pn | | **Pn** | **16 40 38.2** | **+0.8** |
| KKB | | | | | *e*Sn | | **Sn** | **16 41 04.2** | **-0.4** |
| **IGT** | **Igoumenitsa** | | **2.23** | **177** | P | | **Pb** | **16 40 39.7** | **-1.6** |
| | baz=178 | | | | | | | | |
| IGT | | | | | AMP | | | | |
| | comp=E,0.7nm,0.5s,baz=178 | | | | | | | | |
| **DIVS** | **Divibare** | | **2.34** | **356** | *e*Pn | | **Pn** | **16 40 40.2** | **+0.8** |
| DIVS | | | | | *e*Sn | | **Sb** | **16 41 10.2** | **-1.9** |
| **ZAPS** | **Zavoj** | | **2.35** | **49** | *e*Pn | | **Pn** | **16 40 39.9** | **+0.3** |
| **THE** | **Thessaloniki** | | **2.38** | **117** | *e*Pn | | **Pn** | **16 40 40.1** | **+0.2** |
| **TRUS** | **Trudelj** | | **2.46** | **4** | *e*Pn | | **Pn** | **16 40 41.8** | **+0.7** |
| TRUS | | | | | *e*Sn | | **Sn** | **16 41 11.8** | **+0.7** |
| **HORT** | **Hortiatis** | | **2.48** | **117** | P | | **Pn** | **16 40 41.5** | **+0.1** |
| **HAPS** | **Han Pijesak,BI** | | **2.49** | **339** | ⇑*i*Pn | | **Pn** | **16 40 43.6** | **+2.0** |
| HAPS | | | | | *e*Sn | | **Sb** | **16 41 14.5** | **-2.1** |
| **ZAGS** | **Zajecar** | | **2.54** | **36** | *e*Pn | | **Pn** | **16 40 42.1** | **0.0** |
| **SOH** | **Sokhos** | | **2.56** | **111** | P | | **Pn** | **16 40 43.8** | **+1.3** |
| **SOH** | **Sokhos** | | **2.56** | **111** | *i* Pn | | **Pn** | **16 40 44.6** | **+2.1** |
| SOH | | | | | *i* Sg | | **Sg** | **16 41 23.4** | **0.0** |
| **THL** | **Klokotos Trika** | | **2.60** | **147** | P | | **Pn** | **16 40 43.9** | **+1.0** |
| THL | | | | | S | | **Sn** | **16 41 15.5** | **+1.1** |
| **SRS** | **Serrai** | | **2.64** | **103** | P | | **Pn** | **16 40 44.2** | **+0.7** |
| **SRS** | **Serrai** | | **2.64** | **103** | *i* Pn | | **Pn** | **16 40 44.6** | **+1.2** |
| SRS | | | | | *i* Sg | | **Sg** | **16 41 26.0** | **+0.3** |
| **MMB** | **Musomishta** | | **2.67** | **93** | *i* Pn | | **Pn** | **16 40 46.3** | **+2.3** |
| **TEKS** | **Tekeris** | | **2.83** | **350** | *e*Pn | | **Pn** | **16 40 46.3** | **+0.2** |
| TEKS | | | | | *e*Sn | | **Sn** | **16 41 20.9** | **+0.8** |
| **TEKS** | **Tekeris** | | **2.83** | **350** | *e*Pn | | **Pn** | **16 40 46.7** | **+0.6** |
| TEKS | | | | | *e*Sn | | **Sn** | **16 41 22.0** | **+1.9** |
| **MATE** | **Matera** | | **2.86** | **248** | ⇑P | | **Pn** | **16 40 44.3** | **-2.2** |
| **KUBS** | **Kucevo** | | **2.86** | **22** | *e*Pn | | **Pn** | **16 40 45.8** | **-0.7** |
| **AVAS** | **Avala Beograd** | | **2.94** | **4** | *e*Pn | | **Pn** | **16 40 48.1** | **+0.5** |
| AVAS | | | | | *e*Sn | | **Sn** | **16 41 23.9** | **+1.0** |
| **LKD2** | **Lefkada island** | | **2.99** | **173** | P | | **Pn** | **16 40 49.4** | **+1.0** |
| **MDVR** | **Moldovita** | | **3.21** | **20** | ⇑P | | **Pn** | **16 40 51.1** | **-0.3** |
| **DOB** | **Doboj** | | **3.34** | **333** | *e*Pn | | **Pn** | **16 40 54.5** | **+1.4** |
| DOB | | | | | *e*Sn | | **Sn** | **16 41 34.7** | **+2.1** |
| **FRGS** | **Fruska Gora** | | **3.40** | **355** | *e*Pn | | **Pn** | **16 40 54.6** | **+0.6** |
| FRGS | | | | | *e*Sn | | **Sn** | **16 41 35.7** | **+1.4** |
| **FRGS** | **Fruska Gora** | | **3.40** | **355** | ⇑*i*Pn | | **Pn** | **16 40 54.8** | **+0.8** |
| FRGS | | | | | *e*Sn | | **Sn** | **16 41 35.0** | **+0.7** |
| **FRGS** | **Fruska Gora** | | **3.40** | **355** | ⇑P | | **Pn** | **16 40 54.9** | **+0.9** |
| **VRSS** | **Vrsac** | | **3.46** | **13** | *e*Pn | | **Pn** | **16 40 54.7** | **0.0** |
| **MGRS** | **Mrkonjic Grad** | | **3.49** | **320** | *e*Pn | | **Pn** | **16 40 57.2** | **+1.9** |
| MGRS | | | | | *e*Sn | | **Sn** | **16 41 37.9** | **+1.3** |
| **HERR** | **Herculane** | | **3.51** | **27** | ⇑P | | **Pn** | **16 40 54.3** | **-1.2** |
| **TIP** | **Timpagrande** | | **3.68** | **227** | ⇑P | | Pn | 16 40 52.5 | -5.3 |
| **BLY** | **Banja Luka** | | **3.71** | **325** | ⇑*i*Pn | | **Pn** | **16 41 00.2** | **+2.1** |
| BLY | | | | | *e*Sn | | **Sn** | **16 41 43.7** | **+2.0** |
| **A050A** | **Klekovaca** | | **3.81** | **317** | ⇑*i*Pn | | **Pn** | **16 41 01.6** | **+1.9** |
| A050A | | | | | *e*Sn | | **Sn** | **16 41 45.8** | **+1.2** |
| **BZS** | **Buzias** | | **3.99** | **15** | ⇑P | | **Pn** | **16 41 01.8** | **-0.2** |
| **A051A** | **Mrakovica** | | **4.03** | **325** | *e*Pn | | **Pn** | **16 41 04.3** | **+1.6** |
| A051A | | | | | *e*Sn | | **Sn** | **16 41 51.5** | **+1.6** |
| **GZR** | **Gura Zlata** | | **4.08** | **26** | ⇓P | | **Pn** | **16 41 01.9** | **-1.5** |
| **SURR** | **Surduc** | | **4.23** | **19** | ⇑P | | **Pn** | **16 41 05.0** | **-0.3** |
| **ELND** | **Elena** | | **4.37** | **73** | ⇑P | | Pn | 16 40 59.6 | -7.7 |
| **MORH** | **Mrgy, Hungar** | | **4.59** | **346** | ⇑P | | **Pn** | **16 41 11.2** | **+1.0** |
| **SIRR** | **Siria** | | **4.62** | **13** | ⇑P | | **Pn** | **16 41 10.7** | **-0.1** |
| **ARR** | **Arges** | | **4.83** | **40** | ⇑P | | **Pn** | **16 41 10.6** | **-3.1** |
| **VOIR** | | | **5.09** | **42** | ⇓P | | **Pn** | **16 41 12.5** | **-3.7** |
| **BOJS** | **Bojanci** | | **5.18** | **318** | *i* Pn | | **Pn** | **16 41 20.2** | **+1.9** |
| **BOJS** | **Bojanci** | | **5.18** | **318** | *e*Pn | | **Pn** | **16 41 19.5** | **+1.1** |
| BOJS | | | | | *e*Sn | | **Sn** | **16 42 18.8** | **+0.8** |
| **CRES** | **Cresnjev** | | **5.31** | **321** | *i* Pn | | **Pn** | **16 41 22.2** | **+2.0** |
| **DRGR** | | | **5.34** | **19** | ⇑P | | **Pn** | **16 41 19.9** | **-0.8** |
| **GBRS** | **Gornja Briga** | | **5.42** | **316** | *i* Pn | | **Pn** | **16 41 23.7** | **+1.9** |
| **MLR** | **Muntele Rosu** | | **5.59** | **46** | ⇑P | | **Pn** | **16 41 19.7** | **-4.6** |
| **VISS** | **Visnje** | | **5.59** | **318** | *i* Pn | | **Pn** | **16 41 25.9** | **+1.8** |
| **PDKS** | **Podkum** | | **5.70** | **321** | *i* Pn | | **Pn** | **16 41 27.5** | **+1.9** |
| **CEY** | **Cerknica** | | **5.76** | **316** | *e*Pn | | **Pn** | **16 41 27.1** | **+0.7** |
| CEY | | | | | *e*Sn | | **Sn** | **16 42 32.0** | **-0.5** |
| **SKDS** | **Skadanscina** | | **5.86** | **312** | *e*Pn | | **Pn** | **16 41 28.0** | **+0.2** |
| SKDS | | | | | *e*Sn | | **Sn** | **16 42 34.4** | **-0.5** |
| **JAVS** | **Javornik** | | **6.05** | **315** | *e*Pn | | **Pn** | **16 41 31.8** | **+1.3** |
| JAVS | | | | | *i* Sn | | **Sn** | **16 42 38.6** | **-1.2** |
| JAVS | | | | | IAML | | | 16 42 42.6 | |
| | comp=Z,7.6nm,0.3s | | | | | | | | |
| **PERS** | **Pernice** | | **6.08** | **325** | *i* Pn | | **Pn** | **16 41 32.4** | **+1.6** |
| **SOKA** | **Soboth** | | **6.15** | **325** | *e*Pn | | **Pn** | **16 41 33.9** | **+2.0** |
| | comp=Z,1.7nm,0.3s,SNR=9.9 | | | | | | | | |
| SOKA | | | | | *i* Sn | | **Sn** | **16 42 43.5** | **+1.3** |
| | comp=Z,1.1nm,0.5s | | | | | | | | |
| **PSZ** | **Piszkesteto** | | **6.16** | **358** | ⇑P | | **Pn** | **16 41 32.9** | **+1.0** |
| **SRO** | **Srobarova** | | **6.19** | **348** | *e*SN | | **Sn** | **16 42 46.0** | **+3.0** |
| SRO | | | | | *e*LG | | Lg | 16 42 53.2 | |
| **OBKA** | **Obir** | | **6.24** | **321** | *i* Pn | | **Pn** | **16 41 35.4** | **+2.3** |
| | comp=Z,2.0nm,0.4s,SNR=5.1 | | | | | | | | |
| OBKA | | | | | *e*Sn | | **Sn** | **16 42 43.9** | **-0.5** |
| | comp=Z,4.1nm,0.5s | | | | | | | | |
| **OBKA** | **Obir** | | **6.24** | **321** | *e*Pn | | **Pn** | **16 41 34.5** | **+1.4** |
| OBKA | | | | | *e*Sn | | **Sn** | **16 42 43.9** | **-0.5** |
| **ARSA** | **Arzberg** | | **6.42** | **330** | *i* Pn | | **Pn** | **16 41 37.9** | **+2.5** |
| | comp=Z,1.3nm,0.4s | | | | | | | | |
| ARSA | | | | | *i* Sn | | **Sn** | **16 42 49.5** | **+0.9** |
| | comp=Z,3.3nm,0.5s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | | **6.55** | **336** | *i* Pn | | **Pn** | **16 41 38.0** | **+0.7** |
| | comp=Z,1.3nm,0.4s | | | | | | | | |
| RONA | | | | | *i* Sn | | **Sn** | **16 42 52.6** | **+0.7** |
| | comp=Z,1.4nm,0.2s | | | | | | | | |
| **MYKA** | **Terra Mystica** | | **6.77** | **318** | *i* Pn | | **Pn** | **16 41 41.7** | **+1.5** |
| | comp=Z,0.9nm,0.1s | | | | | | | | |
| **VYHS** | **Vyhne** | | **6.80** | **352** | *e*PN | | Pn | 16 41 35.3 | -5.3 |
| VYHS | | | | | *e*SN | | **Sn** | **16 42 57.1** | **-0.8** |
| **CONA** | **Conrad Observa** | | **6.89** | **335** | *e*Pn | | **Pn** | **16 41 41.5** | **-0.4** |
| | comp=Z,0.4nm,0.4s | | | | | | | | |
| CONA | | | | | *e*Sn | | **Sn** | **16 43 00.6** | **+0.3** |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | | **7.23** | **320** | *i* Pn | | **Pn** | **16 41 48.6** | **+1.9** |
| | comp=Z,2.0nm,0.3s,SNR=6.9 | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | | **7.32** | **11** | *e*PN | | **Pn** | **16 41 51.8** | **+4.1** |
| **MOA** | **Molln** | | **7.40** | **327** | *i* Pn | | **Pn** | **16 41 52.3** | **+3.4** |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| MOA | | | | | *i* Sn | | **Sn** | **16 43 14.8** | **+2.0** |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | | **7.43** | **315** | *i* Pn | | **Pn** | **16 41 50.7** | **+1.4** |
| | comp=Z,2.2nm,0.3s,SNR=6.6 | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | | **7.54** | **324** | *i* Pn | | **Pn** | **16 41 52.9** | **+2.0** |
| | comp=Z,2.4nm,0.3s | | | | | | | | |
| BIOA | | | | | *e*Sn | | **Sn** | **16 43 14.3** | **-1.9** |
| | comp=Z,0.1nm,0.1s | | | | | | | | |
| **LESA** | **Schwarzleotal** | | **7.79** | **319** | *i* Pn | | **Pn** | **16 41 56.1** | **+1.7** |
| | comp=Z,1.9nm,0.4s | | | | | | | | |
| LESA | | | | | *e*Sn | | **Sn** | **16 43 22.4** | **-0.1** |
| | comp=Z,0.2nm,0.2s | | | | | | | | |
| **WTTA** | **Wattenberg** | | **8.22** | **315** | *i* Pn | | **Pn** | **16 42 00.7** | **+0.4** |
| | comp=Z,1.2nm,0.2s | | | | | | | | |
| **WATA** | **Walderalm** | | **8.30** | **315** | *i* Pn | | **Pn** | **16 42 03.9** | **+2.6** |
| | comp=Z,4.7nm,0.5s,SNR=6.6 | | | | | | | | |
| WATA | | | | | *e*Sn | | **Sn** | **16 43 31.0** | **-4.0** |
| | comp=Z,3.2nm,0.5s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | | **8.42** | **313** | *e*Pn | | **Pn** | **16 42 06.1** | **+3.1** |
| | comp=Z,2.5nm,0.2s | | | | | | | | |
| SQTA | | | | | *e*Sn | | **Sn** | **16 43 37.4** | **-0.7** |
| | comp=Z,1.1nm,0.3s | | | | | | | | |
| **MOTA** | **Moosalm** | | **8.55** | **314** | *i* Pn | | **Pn** | **16 42 06.6** | **+1.8** |
| | comp=Z,1.5nm,0.3s | | | | | | | | |
| MOTA | | | | | *e*Sn | | **Sn** | **16 43 42.2** | **+0.8** |
| | comp=Z,1.3nm,0.4s | | | | | | | | |
| **FETA** | **Feichten** | | **8.57** | **311** | *i* Pn | | **Pn** | **16 42 06.2** | **+1.1** |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| FETA | | | | | *e*Sn | | **Sn** | **16 43 41.9** | **+0.1** |
| | comp=Z,0.3nm,0.3s | | | | | | | | |
| **KHC** | **Kasperske Hory** | | **8.71** | **330** | *e*SN | | **Sn** | **16 43 46.3** | **+1.4** |
| **RETA** | **Reutte** | | **8.82** | **314** | *e*Pn | | **Pn** | **16 42 06.2** | **-2.3** |
| | comp=Z,0.8nm,0.3s | | | | | | | | |
| **DAVA** | **Damuels** | | **9.20** | **310** | *i* Pn | | **Pn** | **16 42 15.9** | **+2.2** |
| | comp=Z,2.5nm,0.4s | | | | | | | | |
| DAVA | | | | | *e*Sn | | **Sn** | **16 43 57.4** | **+0.2** |
| | comp=Z,0.5nm,0.1s | | | | | | | | |
| **SHMJ** | **Saham** | | **15.32** | **121** | P | | **Pn** | **16 43 36.6** | **-0.5** |
| **LISJ** | **El Lisan** | | **16.14** | **126** | P | | **P** | **16 43 50.0** | **-1.0** |

*IDC **11** 16:40:44.0±1.7,6°.25S×125°.84E,h0km,mb3.7/3, mbtmp3.7/5,ML3.8/2,Error ellipse: s-maj=79.6km s-min=25.7km az=75.0*
*NEIC **11** 16:41:21.4±1.9,6°.8S±0°.1×126°.8E±0°.1,h423km±15km, mb4.5/11,Error ellipse: s-maj=17.7km s-min=15.1km az=60.0*
**ISC 11 16:41:20.2**±0.6,**6°.85S**±0°.06×**126°.80E**±0°.08,**h400**km,**n33,** σ1°.18/30,**mb4.1**/8,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **3.82** | **221** | | **Pn** | **16 42 32.8** | **+2.0** |
| **SAUI** | **Saumlaki** | **4.61** | **104** | P | **Pn** | **16 42 40.0** | **+1.8** |
| **MMRI** | **Maumere** | **4.85** | **248** | P | **Pn** | **16 42 41.4** | **+0.7** |
| **FAKI** | **Fak Fak** | **6.69** | **55** | | **Pn** | **16 43 00.5** | **+0.1** |
| **LUWI** | **Luwuk** | **7.03** | **325** | P | **Pn** | **16 43 05.7** | **+1.4** |
| **MTN** | **Manton Dam** | **7.33** | **145** | | **Pn** | **16 43 08.8** | **+1.3** |
| **KNRA** | **Kununurra** | **8.98** | **168** | | **Pn** | **16 43 26.0** | **-0.5** |
| **TOLI2** | **Tolitoli** | **9.93** | **323** | P | **P** | **16 43 38.3** | **+1.2** |
| **FITZ** | **Fitzroy Crossi** | **11.24** | **186** | | **P** | **16 43 52.4** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **12.63** | **262** | P | **P** | **16 44 05.6** | **-1.4** |
| **WB0** | **Warramunga Arr** | **14.81** | **151** | P | **P** | **16 44 31.0** | **+0.3** |
| **WRA** | **Warramunga Arr** | **14.93** | **151** | Pn | **P** | **16 44 31.7** | **-0.3** |
| | 0.4nm,0.3s,baz=324,slow=12,SNR=15 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **14.94** | **151** | P | **P** | **16 44 32.1** | **0.0** |
| **MBWA** | **Marble Bar** | **15.78** | **205** | | **P** | **16 44 41.4** | **+0.2** |
| MBWA | | | | IAmb | IAmb | 16 44 56.8 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.11** | **204** | P | **P** | **16 44 43.5** | **-1.1** |
| **COEN** | **Coen** | **17.58** | **115** | | **P** | **16 45 00.8** | **+0.4** |
| COEN | | | | IAmb | IAmb | 16 45 05.0 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **18.06** | **159** | P | **P** | **16 45 06.0** | **+0.5** |
| **ASAR** | **Alice Springs** | **18.06** | **159** | P | **P** | **16 45 06.3** | **+0.8** |
| **ASAR** | **Alice Springs** | **18.06** | **159** | P | **P** | **16 45 06.2** | **+0.8** |
| | comp=Z,0.4nm,0.3s,baz=338,slow=10,SNR=37 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **GIRL** | **Girilia** | **19.83** | **216** | | **P** | **16 45 22.9** | **-0.2** |
| **FORT** | **Forrest** | **23.84** | **177** | P | **P** | **16 45 59.8** | **+0.4** |
| FORT | | | | IAmb | IAmb | 16 46 04.9 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **GUMO** | **Guam** | **27.10** | **41** | P | **P** | **16 46 25.9** | **-2.7** |
| **KULM** | **Kulim** | **28.75** | **294** | P | **P** | **16 46 44.1** | **+0.9** |
| KULM | | | | IAmb | IAmb | 16 46 49.9 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **YULB** | **Yu-li** | **30.53** | **350** | P | **P** | **16 46 58.7** | **0.0** |
| YULB | | | | IAmb | IAmb | 16 47 03.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **HKPS** | **Hong Kong Po S** | **31.49** | **337** | P | **P** | **16 47 04.8** | **-2.2** |
| HKPS | | | | IAmb | IAmb | 16 47 15.8 | |
| | comp=Z,104nm,1.3s | | | | | | |
| **MGBR** | **Mount Gambier** | **33.19** | **160** | P | **P** | **16 47 20.0** | **-1.4** |
| **CRAI** | **Chiangrai** | **37.41** | **317** | P | **P** | **16 47 55.9** | **-1.3** |
| **MJAR** | **Matsushiro Arr** | **44.47** | **13** | P | **P** | **16 48 54.0** | **+0.2** |
| | comp=Z,1.6nm,0.6s,baz=188,slow=9.1,SNR=10 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.03** | **5** | P | **P** | **16 49 44.1** | **+0.9** |
| | comp=Z,0.7nm,0.5s,baz=193,slow=8.9,SNR=5.0 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **GOMU** | **GeErMu** | **52.30** | **327** | pmax | pmax | | |
| | comp=Z,6.0nm,0.4s | | | | | | |
| **GOMU** | **GeErMu** | **52.30** | **327** | P | P | 16 49 44.0 | -9.1 |
| **GTA** | **Gaotai** | **52.37** | **334** | pP | PcP | 16 50 56.6 | -1.5 |
| **MKAR** | **Makanchi Array** | **66.39** | **328** | P | **P** | **16 51 28.7** | **+1.0** |
| | comp=Z,0.1nm,0.5s,baz=132,slow=6.0,SNR=1.6 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |

*IDC **11** 16:41:47.5±1.2,6°.90S×126°.86E,h411km±12km,mb4.2/16, mbtmp5.0/19,Error ellipse: s-maj=15.1km s-min=7.2km az=68.0*
*DJA **11** 16:41:47.1±0.6,7°.5±4°×12°.7E±°,h407km±10km,M4.8/16, mB5.0/7,mb5.0/8,MLv5.3/16,Mw(mB)4.3/7*
*NEIC **11** 16:41:47.4±1.5,6°.88S±0°.08×126°.83E±0°.07,h406km±6km, mb4.6/111,Error ellipse: s-maj=11.7km s-min=10.2km az=211.0*
**ISC 11 16:41:47.7**±0.6,**6°.90S**±0°.04×**126°.86E**±0°.05,**h415**km±6km, **n524,** σ0°.75/510,**mb4.6**/91,**4C-10D,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NLAI** | **Namlea** | **3.64** | **4** | P | **P** | **16 42 58.2** | **+0.8** |
| **SOEI** | **Soe** | **3.83** | **222** | P | **P** | **16 42 58.4** | **-0.8** |
| **SOEI** | **Soe** | **3.83** | **222** | | **P** | **16 42 58.4** | **-0.8** |
| **SOEI** | **Soe** | **3.83** | **222** | P | **P** | **16 42 58.3** | **-0.9** |
| **BNDI** | **Bandanaira** | **3.84** | **52** | P | **P** | **16 42 59.3** | **+0.1** |
| **MSAI** | **Masohi** | **4.09** | **30** | P | **P** | **16 43 00.2** | **-1.3** |
| **BBSI** | **Bau Bau** | **4.49** | **288** | P | **P** | **16 43 06.1** | **+0.8** |
| **SAUI** | **Saumlaki** | **4.53** | **104** | | **P** | **16 43 05.5** | **-0.2** |
| **BATI** | **Baumata** | **4.56** | **224** | P | **P** | **16 43 06.1** | **+0.2** |
| **MMRI** | **Maumere** | **4.89** | **249** | P | **P** | **16 43 07.9** | **-1.3** |
| **MMRI** | **Maumere** | **4.89** | **249** | Pn | **P** | **16 43 07.0** | **-2.2** |
| **MMRI** | **Maumere** | **4.89** | **249** | P | **P** | **16 43 07.8** | **-1.4** |
| **SANI** | **Sanana** | **4.90** | **350** | P | **P** | **16 43 08.4** | **-0.9** |
| **SANI** | **Sanana** | **4.90** | **350** | P | **P** | **16 43 08.3** | **-1.0** |
| **BSSI** | **Bau Bau, Buton** | **6.37** | **276** | P | **P** | **16 43 25.1** | **+0.4** |
| | 323nm,0.7s,3μm1.0nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.67** | **54** | P | **P** | **16 43 28.7** | **+0.2** |
| **FAKI** | **Fak Fak** | **6.67** | **54** | Pn | **P** | **16 43 26.2** | **-2.3** |
| **FAKI** | **Fak Fak** | **6.67** | **54** | P | **P** | **16 43 26.0** | **-2.5** |
| | 169nm,0.9s,2μm0.6nm | | | | | | |
| **LUWI** | **Luwuk** | **7.11** | **325** | P | **P** | **16 43 33.6** | **+0.3** |
| **LUWI** | **Luwuk** | **7.11** | **325** | Pn | **P** | **16 43 33.4** | **+0.1** |
| **LUWI** | **Luwuk** | **7.11** | **325** | P | **P** | **16 43 33.4** | **+0.1** |
| | 380nm,0.7s,3μm1.2nm | | | | | | |
| **BNSI** | **Bone** | **7.17** | **290** | P | **P** | **16 43 33.6** | **-0.3** |
| | 546nm,0.8s,6μm2.1nm | | | | | | |
| **MTN** | **Manton Dam** | **7.25** | **145** | | **P** | **16 43 34.4** | **-0.4** |
| **KAPI** | **Kappang** | **7.32** | **284** | P | **P** | **16 43 35.7** | **+0.1** |
| **KAPI** | **Kappang** | **7.32** | **284** | P | **P** | **16 43 35.2** | **-0.4** |
| **KAPI** | **Kappang** | **7.32** | **284** | P | **P** | **16 43 35.6** | **+0.1** |
| | 87nm,0.6s,baz=110,slow=5.6,SNR=40 | | | | | | |
| KAPI | | | | S | **S** | **16 45 04.0** | **+0.8** |
| | 9.1nm,0.3s,baz=62,slow=22,SNR=1.9 | | | | | | |
| **SWI** | **Sorong** | **7.43** | **36** | P | **P** | **16 43 34.5** | **-2.3** |
| | 79nm,0.7s,1μm0.3nm | | | | | | |
| **GTOI** | **Gorontalo** | **8.41** | **333** | P | **P** | **16 43 49.9** | **+2.4** |
| **KNRA** | **Kununurra** | **8.92** | **168** | | **P** | **16 43 53.1** | **0.0** |
| **TOLI2** | **Tolitoli** | **10.01** | **322** | P | **P** | **16 44 06.1** | **+0.9** |
| **TOLI2** | **Tolitoli** | **10.01** | **322** | P | **P** | **16 44 05.2** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **11.20** | **186** | P | **P** | **16 44 18.0** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **11.20** | **186** | P | **P** | **16 44 17.9** | **-0.2** |
| **GENI** | **Genyem** | **13.93** | **73** | P | **P** | **16 44 50.7** | **+2.4** |
| **TABU** | **Tabubil** | **14.37** | **84** | P | **P** | **16 44 54.6** | **+1.5** |
| **WB0** | **Warramunga Arr** | **14.73** | **151** | P | **P** | **16 44 56.2** | **-0.7** |
| **WRAB** | **Tennant Creek** | **14.86** | **151** | P | **P** | **16 44 57.7** | **-0.5** |
| **WRA** | **Warramunga Arr** | **14.86** | **151** | P | **P** | **16 44 57.6** | **-0.7** |
| **WRA** | **Warramunga Arr** | **14.86** | **151** | P | **P** | **16 44 57.8** | **-0.5** |
| | 74nm,0.7s,baz=323,slow=12,SNR=147 | | | | | | |
| WRA | | | | S | **S** | **16 47 32.5** | **-3.4** |
| | 44nm,0.8s,baz=323,slow=19,SNR=19 | | | | | | |
| **WB2** | **Warramunga Arr** | **14.87** | **151** | P | **P** | **16 44 57.6** | **-0.7** |
| **WR0** | **Warramunga Arr** | **14.97** | **151** | P | **P** | **16 44 58.9** | **-0.5** |
| **MBWA** | **Marble Bar** | **15.77** | **205** | P | **P** | **16 45 07.5** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **16.09** | **204** | P | **P** | **16 45 11.2** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **16.09** | **204** | P | **P** | **16 45 11.0** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **16.09** | **204** | P | **P** | **16 45 09.3** | **-2.0** |
| PSA00 | | | | IAmb | IAmb | 16 45 11.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **SBUM** | **Sibu** | **17.32** | **302** | P | **P** | **16 45 27.0** | **+2.5** |
| **COEN** | **Coen** | **17.50** | **115** | P | **P** | **16 45 26.2** | **-0.3** |
| **COEN** | **Coen** | **17.50** | **115** | P | **P** | **16 45 26.2** | **-0.3** |
| **AS31** | **Alice Springs** | **17.99** | **159** | P | **P** | **16 45 31.4** | **-0.3** |
| **ASAR** | **Alice Springs** | **17.99** | **159** | P | **P** | **16 45 31.2** | **-0.4** |
| **ASAR** | **Alice Springs** | **17.99** | **159** | P | **P** | **16 45 31.4** | **-0.2** |
| | comp=Z,74nm,0.5s,baz=334,slow=11

comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,110nm,4.7s
**TNCH TengChong 42.05 320** ⇓*i*P **P 16 49 01.5 +0.1**
TNCH pP pP 16 50 17.1 -2.6
TNCH sP sP 16 51 02.4 -3.8
TNCH S **S 16 54 51.9 +2.4**
TNCH sS sS 16 57 08.5 -3.6
TNCH SS SS 16 58 00.2 -13
TNCH pmax pmax
comp=Z,22nm,0.7s
TNCH pmax pmax
comp=Z,65nm,2.7s
**TJN Taejon 43.05 1** P **P 16 49 09.4 +0.5**
**TJN Taejon 43.05 1** P **P 16 49 09.1 +0.3**
**INU Inuyama 43.10 12** P **P 16 49 09.6 +0.3**
**INU Inuyama 43.10 12** P **P 16 49 09.4 +0.1**
INU IAmb IAmb 16 49 10.1
comp=Z,47nm,1.3s
**JGF Kuroka 43.41 12** P **P 16 49 12.2 +0.4**
**JGF Kuroka 43.41 12** P **P 16 49 11.1 -0.8**
**LYN LuoYang 43.41 343** P **P 16 49 11.4 -0.4**
LYN pmax pmax
comp=Z,49nm,0.7s
**CD2 Chengdu 43.62 331** P **P 16 49 12.9 -0.7**
CD2 S **S 16 55 12.7 +1.0**
CD2 pmax pmax
comp=Z,40nm,0.6s
CD2 pmax pmax
comp=Z,110nm,5.8s
**TIA Tai'an 43.85 349** P **P 16 49 13.8 -1.4**
TIA pmax pmax
comp=Z,22nm,0.7s
**XAN Xi'an 44.12 338** ⇓P **P 16 49 16.2 -1.2**
XAN pmax pmax
comp=Z,54nm,0.7s
**KSAR Wonju Array Be 44.12 1** P **P 16 49 17.7 +0.5**
**KSRS Korea Array 44.13 1** P **P 16 49 17.8 +0.4**
comp=Z,11nm,0.6s,baz=177,slow=9.6,SNR=59
KSRS PcP **PcP 16 50 54.6 +0.8**
comp=Z,2.9nm,0.8s,baz=190,slow=3.3,SNR=7.5
comp=Z,11nm,0.6s
**KS19 Wonju Array Si 44.18 1** P **P 16 49 17.8 0.0**
KS19 IAmb IAmb 16 49 18.7
comp=Z,24nm,1.1s
**MJAR Matsushiro Arr 44.50 13** P **P 16 49 19.6 -0.7**
comp=Z,51nm,0.8s,baz=188,slow=9.2,SNR=184
MJAR PcP **PcP 16 50 55.8 +0.5**
comp=Z,0.9nm,0.6s,baz=191,slow=3.2,SNR=4.2
comp=Z,51nm,0.8s
**MAJO Matsushiro 44.51 13** P **P 16 49 19.6 -0.7**
**MAJO Matsushiro 44.51 13** P **P 16 49 18.9 -1.4**
**HNS HongShan 45.51 346** ⇓P **P 16 49 27.2 -0.8**
HNS pmax pmax
comp=Z,57nm,0.9s
**JMM Marumori 46.39 15** P **P 16 49 35.4 +0.6**
**JMM Marumori 46.39 15** P **P 16 49 35.2 +0.3**
**BJT Baijiatuau 47.72 349** P **P 16 49 44.5 -0.4**
comp=Z,20nm,0.9s
**BJI Beijing 47.74 349** P **P 16 49 44.0 -1.0**
BJI pmax pmax
comp=Z,9.0nm,0.7s
**LZH Lanzhou 47.92 335** ⇓*i*P **P 16 49 47.0 +0.3**
LZH pmax pmax
comp=Z,59nm,1.0s
**JTM Tenmabayashi 49.22 14** P **P 16 49 56.9 +0.8**
**JTM Tenmabayashi 49.22 14** P **P 16 49 56.3 +0.2**
JTM PcP **PcP 16 51 12.4 +0.5**
**HHC Hu-ho-hao-te 49.55 345** *e*P **P 16 49 59.1 +0.3**
HHC sP sP 16 52 13.1 +6.8
HHC pmax pmax
comp=Z,18nm,0.6s
HHC pmax pmax
comp=Z,120nm,4.6s
**LSA Lhasa 50.02 318** P **P 16 50 03.8 +0.9**
LSA pmax pmax
comp=Z,24nm,0.7s
**LSA Lhasa 50.02 318** P **P 16 50 03.2 +0.3**
LSA IAmb IAmb 16 50 04.2
comp=Z,26nm,0.6s
**CN2 Changchun 50.48 359** P **P 16 50 04.0 -1.4**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**ERM Erimo 50.91 16** P **P 16 50 09.3 +0.7**
**MSVF Nonsavu 51.01 107** P **P 16 50 10.2 +0.2**
**USA0B Ussuriysk Arra 51.07 5** P **P 16 50 09.7 -0.1**
USA0B IAmb IAmb 16 50 10.8
comp=Z,24nm,0.7s
**USRK Ussuriysk Ar. 51.07 5** P **P 16 50 10.0 +0.2**
comp=Z,22nm,0.5s,baz=188,slow=7.0,SNR=124
comp=Z,22nm,0.5s
**MDJ Mudanjiang 51.34 2** P **P 16 50 12.5 +0.8**
**MDJ Mudanjiang 51.34 2** P **P 16 50 12.3 +0.6**
MDJ pmax pmax
comp=Z,32nm,1.1s
MDJ pmax pmax
comp=Z,160nm,4.3s
**XLT XiLinHaoTe 51.49 350** *e*P **P 16 50 13.0 0.0**
XLT pmax pmax
comp=Z,38nm,0.8s
**MLZ Mavora Lakes 52.35 144** P **P 16 50 18.8 -0.5**
MLZ IAmb IAmb 16 50 44.1
comp=Z,86nm,1.5s
**GOMU GeErMu 52.37 327** PcP **P 16 50 20.5 +0.6**
**FOZ Fox Glacier 52.38 141** P **P 16 50 19.5 +0.1**
FOZ IAmb IAmb 16 50 20.4
comp=Z,17nm,0.7s
**BNX BinXian 52.40 0** ⇑P **P 16 50 18.7 -0.8**
BNX pmax pmax
comp=Z,6.0nm,0.8s
**GTA Gaotai 52.44 334** ⇓P **P 16 50 20.1 0.0**
GTA PcP **PcP 16 51 25.1 +0.8**
GTA pmax pmax
comp=Z,35nm,0.7s
**WHZ Wether Hill Ro 52.55 145** P **P 16 50 21.0 +0.4**
WHZ IAmb IAmb 16 50 43.3
comp=Z,45nm,1.3s
**JKA Kamikawa-asahi 52.73 14** P **P 16 50 22.0 +0.1**
JKA IAmb IAmb 16 50 23.3
comp=Z,25nm,0.9s
**QRZ Quartz Range 52.83 137** P **P 16 50 23.0 +0.3**
QRZ IAmb IAmb 16 50 25.2
comp=Z,31nm,0.6s
**MRNZ Matariki Terra 53.24 138** P **P 16 50 26.5 +0.8**
**THZ Tophouse 53.51 138** P **P 16 50 28.6 +1.0**
**TUWZ Tuamarina 54.05 137** P **P 16 50 32.5 +1.0**
**KHZ Kahutara 54.22 138** P **P 16 50 33.1 +0.5**
**OTVZ Oturere 54.31 134** P **P 16 50 35.3 +1.8**
**BHW Baring Head 54.67 137** P **P 16 50 35.1 -0.8**
BHW IAmb IAmb 16 50 36.1
comp=Z,16nm,0.6s
**MRZ Mangatainoka R 54.85 136** P **P 16 50 37.0 -0.2**
**BKZ Black Stump Fm 54.90 134** P **P 16 50 38.0 +0.4**
**KWHZ Kaweka Forest 54.95 134** P **P 16 50 38.8 +0.8**
**URZ Urewera 55.01 132** P **P 16 50 38.4 +0.1**
**MTHZ Maungataniwha 55.03 133** P **P 16 50 39.3 +0.8**
**MCHZ McNeill Hill 55.15 134** P **P 16 50 40.5 +1.2**
**RAGZ Rawiri 55.32 133** P **P 16 50 41.3 +0.6**
**RUGZ Raukumara Rang 55.33 132** P **P 16 50 40.4 -0.3**
**HAZ Te Kaha 55.33 132** P **P 16 50 40.9 +0.3**
**MWZ Matawai 55.35 132** P **P 16 50 41.3 +0.6**
**SNGZ Shannon Statio 55.37 133** P **P 16 50 41.0 +0.1**
**YSS Yuzh-Sakhalins 55.45 13** P **P 16 50 41.9 +0.8**
**YSS Yuzh-Sakhalins 55.45 13** P **P 16 50 41.1 0.0**
YSS IAmb IAmb 16 50 42.2
comp=Z,17nm,0.7s
**TWGZ Tauwhareparae 55.62 132** P **P 16 50 44.2 +1.5**
**HEH HeiHe 56.92 0** *e*P **P 16 50 51.0 -0.3**
HEH pmax pmax
comp=Z,38nm,0.8s
**ULN Ulaanbaatar 57.27 344** P **P 16 50 54.2 +0.2**
ULN IAmb IAmb 16 50 55.4
comp=Z,23nm,0.9s
**SONM Songino Array 57.42 344** P **P 16 50 55.4 +0.4**
SONM IAmb IAmb 16 50 56.4
comp=Z,19nm,1.0s
**SONM Songino Array 57.42 344** P **P 16 50 55.4 +0.4**
comp=Z,14nm,0.8s,baz=169,slow=7.2,SNR=62
SONM PcP **PcP 16 51 43.7 +0.3**
comp=Z,2.0nm,0.6s,baz=159,slow=4.3,SNR=3.8
comp=Z,14nm,0.8s
**CASY Casey 60.36 188** P **P 16 51 14.7 +0.3**
**WMQ Urumqi 61.65 329** ⇓P **P 16 51 23.8 +0.2**
WMQ pmax pmax
comp=Z,31nm,0.7s
**NIL Nilore 64.81 312** P **P 16 51 43.5 -0.7**
NIL IAmb IAmb 16 51 44.2
comp=Z,13nm,0.6s
**PET Petropavlovsk 65.50 20** P **P 16 51 49.3 +1.2**
**PET Petropavlovsk 65.50 20** P **P 16 51 49.2 +1.2**
PET IAmb IAmb 16 51 50.1
comp=Z,18nm,0.8s
**ZSN Zaisan 65.60 330** *e*P **P 16 51 49.0 +0.1**
baz=330
**SHLS Shalkode 65.77 324** *e*P **P 16 51 48.8 -1.4**
baz=324
**KSH Kashi 65.87 319** P **P 16 51 51.0 +0.1**
KSH pmax pmax
comp=Z,13nm,0.8s
**UZB Uzynbulak 66.02 324** *e*P **P 16 51 51.8 0.0**
baz=324
**SATY Saty 66.33 323** *e*P **P 16 51 54.0 +0.2**
baz=323
**ZHN Zhinishke 66.38 323** *e*P **P 16 51 54.0 0.0**
baz=323
**MK31 Makanchi Array 66.47 328** P **P 16 51 54.4 0.0**
MK31 IAmb IAmb 16 51 54.8
comp=Z,8.0nm,0.7s
**MKAR Makanchi Array 66.47 328** P **P 16 51 54.5 +0.2**
comp=Z,13nm,0.6s,baz=124,slow=7.8,SNR=170
comp=Z,13nm,0.6s
**MAKZ Makanchi 66.64 328** P **P 16 51 55.2 -0.3**
MAKZ IAmb IAmb 16 51 55.8
comp=Z,7.0nm,0.6s
**TNSS Tian-Shan 67.19 323** *e*P **P 16 51 59.3 -0.1**
baz=322
**MDOK Medeo 67.20 323** *e*P **P 16 51 59.4 +0.2**
baz=323
**TDK Taldyqorghan 67.48 325** *e*P **P 16 52 00.7 +0.1**
baz=325
**CHKK Chushkaly 67.63 323** *e*P **P 16 52 02.0 +0.3**
baz=323
**KUU Kurty 68.04 323** *e*P **P 16 52 04.5 +0.4**
comp=Z,17nm,0.9s,baz=323
**ARSB Arslanbob 68.76 319** P **P 16 52 09.9 +1.1**
**YAK Yakutsk 68.76 1** P **P 16 52 08.2 +0.1**
**SGDS Sogindy 68.83 322** *e*P **P 16 52 09.1 0.0**
baz=322
**MA2 Magadan 68.95 13** P **P 16 52 09.4 +0.1**
**BTLS Baital 70.05 323** *e*P **P 16 52 16.2 0.0**
baz=323
**ZAA0 Zalesovo Array 70.15 335** P **P 16 52 15.9 -0.8**
**ZALV Zalesovo Beam 70.15 335** P **P 16 52 15.9 -0.7**
**ZALV Zalesovo Beam 70.15 335** P **P 16 52 16.1 -0.6**
comp=Z,28nm,0.6s,baz=130,slow=4.9,SNR=119
comp=Z,28nm,0.6s
**KURBB Kurchatov Arra 70.83 330** P **P 16 52 20.9 +0.1**
comp=Z,25nm,0.7s,baz=132,slow=5.2,SNR=190
comp=Z,25nm,0.7s
**KURK Kurchatov 70.84 330** P **P 16 52 20.9 +0.1**
**KK31 Karatay Array 71.23 320** P **P 16 52 23.8 +0.3**
**KKAR Karatay Array 71.23 320** P **P 16 52 23.2 -0.2**
**KKAR Karatay Array 71.23 320** P **P 16 52 23.6 +0.2**
KKAR IAmb IAmb 16 52 24.4
comp=Z,6.3nm,1.2s
**CHM Chimkent 71.44 319** *e*P **P 16 52 24.9 +0.2**
comp=Z,13nm,1.1s,baz=319
**BRLS Borolday 71.63 320** *e*P **P 16 52 25.7 -0.1**
baz=319
**VNDA Vanda 72.94 173** P **P 16 52 32.6 -0.1**
**VNDA Vanda 72.94 173** P **P 16 52 32.8 0.0**
comp=Z,2.8nm,0.6s,baz=316,slow=5.3,SNR=14
comp=Z,2.8nm,0.6s
**SBA Scott Base 73.86 172** P **P 16 52 36.9 -1.2**
**MAW Mawson 73.92 201** P **P 16 52 38.7 +0.2**
comp=Z,1.7nm,0.5s,baz=63,slow=6.8,SNR=2.7
comp=Z,1.7nm,0.5s
**KIWB Kanaga Island 75.47 32** P **P 16 52 48.9 +1.3**
**UOSS Minazif 75.61 298** P **P 16 52 48.4 -0.6**
**GSTR Great Sitkin T 76.17 32** P **P 16 52 51.7 +0.1**
**BRVK Borovoye 76.41 329** P **P 16 52 52.6 -0.3**
BRVK IAmb IAmb 16 52 53.7
comp=Z,16nm,0.8s
**TIXI Tiksi 78.40 1** P **P 16 53 02.5 -0.7**
TIXI IAmb IAmb 16 53 03.7
comp=Z,14nm,0.9s
**CLES Cleveland East 79.84 33** P **P 16 53 11.4 0.0**
**NIKH Nikolski High 80.47 34** P **P 16 53 14.6 -0.1**
baz=245
**ABKAR Akbulak array 80.51 322** P **P 16 53 14.3 -0.7**
**ABKAR Akbulak array 80.51 322** IAmb IAmb 16 53 17.4
comp=Z,6.0nm,1.0s
**SPIA Saint Paul Isl 81.59 29** P **P 16 53 21.1 +0.7**
baz=243
**P08K Saint George I 81.67 30** P **P 16 53 21.1 +0.2**
baz=244
**UNV Unalaska Valle 82.11 33** P **P 16 53 23.1 -0.1**
baz=247
**QSPA South Pole Qui 83.08 180** P **P 16 53 28.1 0.0**
QSPA IAmb IAmb 16 53 28.4
comp=Z,6.1nm,0.6s
**QSPA South Pole Qui 83.08 180** P **P 16 53 27.6 -0.5**
comp=Z,5.1nm,0.6s,baz=290,slow=0.7,SNR=47
comp=Z,5.1nm,0.6s
**ARU Arti 83.99 329** P **P 16 53 32.0 -0.6**
ARU IAmb IAmb 16 53 33.0
comp=Z,17nm,1.1s
**GAMB Gambell 84.03 23** P **P 16 53 33.2 +0.5**
baz=241
**RAYN Ar Rayn 84.86 294** P **P 16 53 37.3 -0.4**
RAYN IAmb IAmb 16 53 38.5
comp=Z,7.4nm,0.8s
**S12K Black Hills 85.19 33** P **P 16 53 38.8 +0.2**
baz=250
**SDPT Sand Point 85.93 33** P **P 16 53 41.7 -0.5**
**SDPT Sand Point 85.93 33** P **P 16 53 41.7 -0.5**
baz=252
**K13K Kusilvak Mount 86.15 26** P **P 16 53 43.5 +0.3**
K13K IAmb IAmb 16 54 22.7
comp=Z,15nm,1.3s
**K13K Kusilvak Mount 86.15 26** P **P 16 53 43.4 +0.3**
baz=248
**M13K Dall Lake 86.18 28** P **P 16 53 43.8 +0.5**
baz=249
**CHNA Chernabura Isl 86.25 34** P **P 16 53 43.9 +0.2**
baz=253
**TNA Tin City 86.29 22** P **P 16 53 44.1 +0.4**
baz=245
**S14K Fog Glacier 86.71 32** P **P 16 53 46.2 +0.1**
baz=253
**O14K Tigyukauivet M 86.77 29** P **P 16 53 46.0 -0.1**
**O14K Tigyukauivet M 86.77 29** P **P 16 53 46.4 +0.2**
baz=251
**N14K Kuskokwak Cree 86.79 29** P **P 16 53 46.1 -0.1**
baz=250
**L14K Kuka Creek 86.81 27** P **P 16 53 46.1 -0.1**
baz=250
**F14K Arctic Creek 86.86 23** P **P 16 53 46.7 +0.3**
baz=246
**M14K Bethel 86.94 28** P **P 16 53 47.1 +0.2**
**M14K Bethel 86.94 28** P **P 16 53 47.0 +0.2**
baz=250
**O15K Ungalikthiuk R 87.45 30** P **P 16 53 49.2 -0.2**
baz=252
**L15K Ungalak Mounta 87.47 27** P **P 16 53 49.1 -0.3**
baz=251
**M15K Kasigluk River 87.51 28** P **P 16 53 49.4 -0.2**
baz=251
**F15K North Star Dit 87.60 23** P **P 16 53 50.1 +0.2**
baz=248
**N15K Kwethluk River 87.63 29** P **P 16 53 50.1 0.0**
baz=252
**ELIB Princess Elisa 87.65 198** *d*P **P 16 53 51.4 +1.1**
comp=Z,5.3nm,0.9s
ELIB *d*pP **pP 16 55 25.7 +0.3**
**K15K Wolf Creek Mou 87.66 26** P **P 16 53 50.5 +0.3**
baz=251
**P16K Nushagak River 88.31 30** P **P 16 53 53.2 -0.1**
baz=254
**C16K Lisburne Hills 88.34 20** P **P 16 53 53.4 +0.1**
baz=247
**N16K Nishlik Lake 88.35 29** P **P 16 53 53.6 0.0**
baz=253
**G16K Koyuk River 88.37 23** P **P 16 53 53.3 -0.2**
baz=250
**J16K Anvik River 88.38 26** P **P 16 53 53.5 -0.1**
baz=251
**L16K Owhat River 88.39 27** P **P 16 53 53.2 -0.4**
baz=252
**M16K Timber Creek 88.42 28** P **P 16 53 54.3 +0.4**
M16K IAmb IAmb 16 54 26.0
comp=Z,16nm,1.4s
**M16K Timber Creek 88.42 28** P **P 16 53 54.4 +0.5**
baz=253
**O16K Kokwok River B 88.42 29** P **P 16 53 53.2 -0.6**
baz=254
**CHIR Chirikof Islan 88.70 33** P **P 16 53 55.2 0.0**
baz=256
**R17L Mt. Peulik Vol 88.77 32** P **P 16 53 55.6 +0.1**
baz=255
**D17K Noatak River 88.91 21** P **P 16 53 56.1 +0.1**
baz=249
**O17K Koliganek Bris 88.96 29** P **P 16 53 56.9 +0.5**
baz=254
**L17K Donlin 89.05 27** P **P 16 53 56.3 -0.5**
baz=253
**J17K VABM Dome 89.07 26** P **P 16 53 56.1 -0.7**
**J17K VABM Dome 89.07 26** P **P 16 53 56.0 -0.7**
baz=253
**G17K Kiwalik Mounta 89.08 23** P **P 16 53 56.6 -0.2**
baz=251
**RDOG Red Dog Mine 89.10 21** P **P 16 53 56.7 -0.3**
baz=249
**N17K Nushagak Hills 89.11 29** P **P 16 53 57.7 +0.6**
baz=254
**P17K Kvichak River 89.13 30** P **P 16 53 57.1 -0.1**
baz=255
**E17K Hotham Inlet 89.15 22** P **P 16 53 56.9 -0.2**
baz=250
**F17K Baldwin Pennin 89.15 22** P **P 16 53 56.8 -0.3**
baz=251
**C17K DeLong Mountai 89.16 20** P **P 16 53 56.6 -0.6**
baz=249
**Q17K Contact Creek 89.17 31** P **P 16 53 57.3 -0.3**
baz=256
**H17K Granite Mounta 89.19 24** P **P 16 53 57.1 -0.3**
baz=252
**K17K Iditarod 89.21 26** P **P 16 53 57.4 -0.1**
baz=253
**M17K Holitna River 89.23 28** P **P 16 53 57.8 +0.2**
baz=254
**SII Sitkinak Islan 89.66 33** P **P 16 53 59.2 -0.6**
baz=257
**Q18K Katmai Hardscr 89.71 31** P **P 16 53 59.9 -0.2**
baz=256
**E18K Tukpahlearik C 89.72 22** IAmb IAmb 16 54 00.8
comp=Z,7.4nm,0.8s
**E18K Tukpahlearik C 89.72 22** P **P 16 53 59.5 -0.3**
baz=251
**R18K Karluk 89.75 32** P **P 16 53 59.6 -0.5**
baz=257
**N18K Kilae Creek 89.77 29** P **P 16 54 00.3 +0.1**
baz=256
**P18K Big Mountain, 89.78 30** P **P 16 54 00.3 +0.1**
baz=256
**L18K Granite Mounta 89.80 27** P **P 16 54 00.1 -0.2**
baz=255
**F18K Selawik 89.81 23** P **P 16 53 59.9 -0.2**
baz=252
**O18K Koktuh Hills 89.90 30** P **P 16 53 60.0 -0.8**
baz=256
**C18K Utukok River 89.91 20** P **P 16 54 00.2 -0.5**
baz=251
**B18K Kokolik River 89.94 20** P **P 16 54 00.2 -0.6**
baz=250
**G18K Tagagawik 89.98 23** P **P 16 54 00.8 -0.2**
baz=253
**M18K Stony River 90.01 28** P **P 16 54 00.9 -0.3**
baz=256
**J18K Innoko River 90.11 26** P **P 16 54 01.1 -0.6**
baz=255
**OHAK Old Harbor 90.28 32** P **P 16 54 02.1 -0.5**
baz=258
**GCSA Galena City Sc 90.38 25** P **P 16 54 03.0 +0.1**
baz=255
**A19K Wainwright 90.46 19** P **P 16 54 03.1 0.0**
baz=251
**Q19K Cape Douglas, 90.47 31** P **P 16 54 03.4 -0.1**
baz=258
**N19K Bonanza Creek 90.47 29** P **P 16 54 03.1 -0.5**
N19K IAmb IAmb 16 54 06.2
comp=Z,8.1nm,0.9s
**N19K Bonanza Creek 90.47 29** P **P 16 54 04.0 +0.4**
baz=257
**F19K Shaleruckik Mo 90.59 23** P **P 16 54 04.0 +0.2**
baz=254
**C19K Lookout Ridge 90.60 20** P **P 16 54 04.0 +0.1**
baz=252
**L19K White Mountain 90.62 27** P **P 16 54 04.5 +0.4**
baz=256
**G19K Purcell Mounta 90.67 23** IAmb IAmb 16 54 05.7
comp=Z,7.9nm,0.8s
**G19K Purcell Mounta 90.67 23** P **P 16 54 04.3 +0.1**
baz=254,SNR=7.9
**J19K Poorman 90.72 25** P **P 16 54 04.2 -0.3**
baz=256
**H19K Roundabout Mou 90.76 24** P **P 16 54 04.9 +0.3**
H19K IAmb IAmb 16 54 07.4
comp=Z,3.6nm,0.6s
**H19K Roundabout Mou 90.76 24** P **P 16 54 04.2 -0.4**
baz=255
**M19K Big River Lodg 90.77 28** P **P 16 54 04.5 -0.2**
baz=257
**D19K Kuna River 90.94 21** P **P 16 54 05.1 -0.4**
baz=254
**E19K Redstone River 90.97 22** P **P 16 54 05.7 +0.1**
baz=254,SNR=12
**Q20K Shuyak Island 91.04 31** P **P 16 54 06.0 0.0**
baz=259
**L20K Farewell, AK 91.13 27** P **P 16 54 06.3 -0.2**
baz=257
**K20K Telida 91.24 26** P **P 16 54 07.0 +0.1**
baz=257
**M20K Styx River 91.34 28** P **P 16 54 07.6 +0.1**
baz=258
**H20K Anotleneega Mo 91.39 24** P **P 16 54 07.4 -0.2**
baz=256
**J20K Nowinta River 91.39 25** P **P 16 54 07.5 -0.1**
baz=257
**F20K Avaraart Lake 91.43 23** IAmb IAmb 16 54 08.7
comp=Z,3.9nm,0.7s
**F20K Avaraart Lake 91.43 23** P **P 16 54 07.6 0.0**
baz=256,SNR=5.3
**D20K Etivluk River 91.53 21** P **P 16 54 07.5 -0.6**
baz=255,SNR=23
**E20K Nigu River 91.56 21** P **P 16 54 08.2 -0.2**
baz=255,SNR=31
**B20K Meade River 91.68 20** P **P 16 54 08.9 +0.2**
baz=254
**CAPN Captain Cook N 92.06 29** P **P 16 54 10.8 +0.1**
baz=260
**SKT Skwentna 92.11 28** P **P 16 54 10.1 -0.9**
baz=259
**G21K Allakaket 92.16 23** P **P 16 54 10.2 -0.9**
baz=258
**A21K Barrow 92.20 18** P **P 16 54 10.7 -0.4**
baz=255
**H21K Melozitna Rive 92.26 24** P **P 16 54 10.8 -0.8**
baz=258
**F21K Alatna River 92.32 23** P **P 16 54 11.1 -0.8**
baz=258
**SUA Susitna One 92.38 28** P **P 16 54 11.5 -0.9**
baz=260
**E21K Killik River 92.40 21** IAmb IAmb 16 54 12.9
comp=Z,6.0nm,0.8s
**E21K Killik River 92.40 21** P **P 16 54 11.5 -0.7**
baz=258,SNR=7.9
**B21K Ikpikpuk River 92.44 20** P **P 16 54 11.8 -0.4**
baz=257,SNR=9.9
**A22K Sinclair Lake 92.64 19** P **P 16 54 12.9 -0.3**
baz=257,SNR=6.7
**O22K Cooper Landing 92.71 30** P **P 16 54 13.3 -0.4**
baz=261
**M22K Willow 92.73 28** P **P 16 54 13.4 -0.4**
baz=261
**BPAW Bear Paw Mtn. 92.73 26** P **P 16 54 13.3 -0.5**
baz=260
**CUT Chulitna 92.76 28** P **P 16 54 13.5 -0.4**
baz=261
**SEW Seward 92.78 30** P **P 16 54 13.4 -0.6**
baz=261
**F22K John River 92.87 22** P **P 16 54 14.0 -0.3**
baz=259
**H22K Ishtalitna Cre 92.89 24** P **P 16 54 14.3 -0.1**
baz=260
**D22K Ayikyak River 92.96 21** P **P 16 54 14.5 -0.2**
baz=259
**B22K Teshekpuk Lake 93.00 19** IAmb IAmb 16 54 15.5
comp=Z,8.1nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| B22K | Teshekpuk Lake<br>baz=258,SNR=6.3 | 93.00 | 19 | P | P | 16 54 14.5 | -0.3 |
| MLY | Manley<br>comp=Z,5.0nm,1.1s | 93.00 | 25 | IAmb | IAmb | 16 54 15.5 | |
| MLY | Manley<br>baz=260 | 93.00 | 25 | P | P | 16 54 14.0 | -1.0 |
| PMR | Palmer<br>baz=262 | 93.17 | 28 | P | P | 16 54 14.9 | -0.9 |
| PWL | Port Wells<br>baz=262 | 93.44 | 29 | P | P | 16 54 16.3 | -0.8 |
| KNK | Knik Glacier<br>baz=262 | 93.46 | 29 | P | P | 16 54 16.2 | -1.0 |
| TROLL | Troll, Antarti<br>comp=Z,48nm,0.7s | 93.47 | 195 | ⇑P | P | 16 54 18.0 | +0.8 |
| G23K | Bananza Creek<br>comp=Z,5.6nm,0.9s | 93.56 | 23 | IAmb | IAmb | 16 54 18.7 | |
| G23K | Bananza Creek<br>baz=261,SNR=6.4 | 93.56 | 23 | P | P | 16 54 16.8 | -0.8 |
| MCK | McKinley<br>baz=262 | 93.57 | 26 | P | P | 16 54 17.0 | -0.7 |
| SML | Sawmill<br>baz=262 | 93.57 | 28 | P | P | 16 54 17.0 | -0.8 |
| COLD | Coldfoot<br>baz=261,SNR=5.3 | 93.58 | 23 | P | P | 16 54 17.1 | -0.5 |
| I23K | Minto, Yukon-K<br>baz=262,SNR=5.7 | 93.59 | 25 | P | P | 16 54 16.8 | -0.8 |
| WAT1 | Susitna Watana<br>baz=262 | 93.61 | 27 | P | P | 16 54 17.0 | -0.8 |
| H23K | Yukon River<br>baz=261 | 93.62 | 24 | P | P | 16 54 17.0 | -0.9 |
| NEA2 | Nenana<br>baz=262 | 93.64 | 25 | P | P | 16 54 17.9 | 0.0 |
| D23K | Nanushuk River<br>baz=260,SNR=8.2 | 93.68 | 21 | P | P | 16 54 18.0 | 0.0 |
| C23K | Itkillik River<br>baz=261,SNR=8.5 | 93.85 | 20 | P | P | 16 54 18.0 | -0.7 |
| M23K | Glacier View<br>baz=263 | 93.86 | 28 | P | P | 16 54 18.7 | -0.3 |
| E23K | Chandalar<br>baz=262,SNR=6.9 | 93.93 | 22 | P | P | 16 54 18.8 | -0.5 |
| WAT6 | Susitna Watana<br>baz=263 | 93.95 | 28 | P | P | 16 54 19.1 | -0.5 |
| TOLK | Toolik Lake Re<br>comp=Z,5.4nm,0.8s | 94.03 | 21 | IAmb | IAmb | 16 54 20.7 | |
| TOLK | Toolik Lake Re<br>baz=262 | 94.03 | 21 | P | P | 16 54 19.2 | -0.5 |
| GLI | Glacier Island<br>baz=263 | 94.05 | 29 | P | P | 16 54 19.9 | +0.1 |
| SCM | Sheep Creek Mo<br>baz=263 | 94.05 | 28 | P | P | 16 54 19.6 | -0.4 |
| DHY | Denali Highway<br>comp=Z,9.6nm,1.4s | 94.18 | 27 | IAmb | IAmb | 16 54 32.5 | |
| DHY | Denali Highway<br>baz=263 | 94.18 | 27 | P | P | 16 54 20.0 | -0.6 |
| H24K | Noodor Dome<br>baz=263 | 94.30 | 24 | P | P | 16 54 20.8 | -0.2 |
| E24K | Your Creek<br>baz=262 | 94.35 | 22 | P | P | 16 54 21.3 | +0.1 |
| D24K | Happy Valley<br>comp=Z,6.7nm,0.8s | 94.37 | 21 | IAmb | IAmb | 16 54 22.2 | |
| D24K | Happy Valley<br>baz=262 | 94.37 | 21 | P | P | 16 54 20.9 | -0.2 |
| POKR | Poker Plat Res<br>baz=263 | 94.40 | 25 | P | P | 16 54 20.6 | -0.8 |
| F24K | Squaw Lake<br>comp=Z,3.7nm,1.1s | 94.50 | 23 | IAmb | IAmb | 16 54 23.2 | |
| F24K | Squaw Lake<br>baz=263 | 94.50 | 23 | P | P | 16 54 21.3 | -0.6 |
| HDA | Harding Lake<br>baz=264 | 94.52 | 26 | P | P | 16 54 21.3 | -0.7 |
| G24K | Hadweenzic Riv<br>comp=Z,8.4nm,1.1s | 94.57 | 23 | IAmb | IAmb | 16 54 23.1 | |
| G24K | Hadweenzic Riv<br>baz=263 | 94.57 | 23 | P | P | 16 54 21.1 | -1.0 |
| ILAR | Eielson Array<br>comp=Z,0.8nm,0.7s,baz=247,slow=5.1,SNR=9.1<br>comp=Z,0.8nm,0.7s | 94.59 | 25 | P | P | 16 54 20.6 | -1.7 |
| M24K | Tolsona, Glenn<br>baz=264 | 94.62 | 28 | P | P | 16 54 21.7 | -0.8 |
| KLU | Klutina<br>baz=264 | 94.68 | 29 | P | P | 16 54 22.3 | -0.5 |
| BELA | Belgrano 2<br>comp=Z,2.9nm,0.7s | 94.73 | 184 | IAmb | IAmb | 16 54 23.3 | |
| SNAA | Sanae<br>comp=Z,23nm,0.6s | 95.02 | 194 | ⇑P | P | 16 54 24.1 | -0.1 |
| SNAA | Sanae<br>comp=Z,1.8nm,0.9s,baz=183,slow=8.8,SNR=7.6<br>comp=Z,1.8nm,0.9s | 95.02 | 194 | P | P | 16 54 24.4 | +0.2 |
| PAX | Paxson<br>baz=265 | 95.03 | 27 | P | P | 16 54 23.8 | -0.6 |
| G25K | Bearman Lake<br>baz=265 | 95.12 | 23 | P | P | 16 54 24.9 | +0.4 |
| H25L | Birch Creek<br>baz=265 | 95.18 | 24 | P | P | 16 54 24.8 | -0.1 |
| J25K | Salcha River,<br>baz=265 | 95.22 | 26 | P | P | 16 54 23.9 | -1.3 |
| PRP | Porcupine Dome<br>baz=265 | 95.24 | 25 | P | P | 16 54 24.6 | -0.8 |
| D25K | Kavik River<br>baz=265 | 95.26 | 21 | P | P | 16 54 25.3 | +0.1 |
| BMRM | Bremner River<br>baz=265 | 95.27 | 29 | P | P | 16 54 24.7 | -0.8 |
| KAIM | Kayak Island<br>baz=266 | 95.28 | 30 | P | P | 16 54 25.0 | -0.5 |
| N25K | Chitina, Valde<br>baz=266 | 95.32 | 29 | P | P | 16 54 25.1 | -0.7 |
| F25K | Christian Rive<br>baz=265 | 95.37 | 23 | P | P | 16 54 25.2 | -0.6 |
| BMAR | Burnt Mountain | 95.77 | 23 | P | P | 16 54 26.5 | -1.1 |
| SCRK | Sand Creek<br>baz=266 | 95.78 | 26 | P | P | 16 54 26.6 | -1.2 |
| BGLC | Bering Glacier<br>baz=266 | 95.86 | 30 | P | P | 16 54 27.3 | -0.7 |
| F26K | Sheenjek River<br>baz=266 | 95.95 | 23 | P | P | 16 54 27.5 | -0.9 |
| CRQE | Cirque<br>baz=267 | 95.99 | 30 | P | P | 16 54 27.7 | -1.1 |
| J26L | Joseph Creek<br>comp=Z,3.0nm,0.8s | 95.99 | 26 | IAmb | IAmb | 16 54 29.1 | |
| J26L | Joseph Creek<br>baz=267 | 95.99 | 26 | P | P | 16 54 27.9 | -0.8 |
| L26K | Log Cabin Wild<br>baz=267 | 96.00 | 27 | P | P | 16 54 28.2 | -0.5 |
| G26K | Porcupine Rive<br>baz=267 | 96.04 | 23 | P | P | 16 54 28.5 | -0.2 |
| MCARA | McCarthy VSAT<br>baz=267 | 96.06 | 29 | P | P | 16 54 28.6 | -0.4 |
| M26K | Nabesna, AK<br>baz=267 | 96.13 | 28 | P | P | 16 54 28.9 | -0.5 |
| I26K | Coal Creek Min<br>baz=267 | 96.21 | 25 | P | P | 16 54 29.3 | -0.3 |
| C27K | Jago River<br>baz=267 | 96.22 | 21 | P | P | 16 54 30.4 | +0.9 |
| K27K | Chicken<br>baz=268 | 96.62 | 26 | P | P | 16 54 32.1 | +0.6 |
| M27K | Edge Creek, AK<br>baz=268 | 96.65 | 28 | P | P | 16 54 32.2 | +0.4 |
| L27K | Beaver Creek,<br>baz=268 | 96.69 | 27 | P | P | 16 54 32.3 | +0.5 |
| BRTR | Keskin Array B<br>comp=Z,0.7nm,0.7s,baz=96,slow=2.4,SNR=2.6<br>comp=Z,0.7nm,0.7s | 96.83 | 309 | P | P | 16 54 31.8 | -1.4 |
| CTG | Chitna Glacier<br>baz=268 | 96.86 | 29 | P | P | 16 54 32.6 | -0.2 |
| I27K | Kandik River<br>baz=269 | 96.86 | 25 | P | P | 16 54 32.6 | 0.0 |
| G27K | Doyon Strip<br>baz=269 | 96.88 | 24 | P | P | 16 54 32.8 | +0.2 |
| H27K | Steamboat Moun<br>baz=269 | 96.92 | 24 | P | P | 16 54 33.3 | +0.5 |
| E27K | Coleen River<br>baz=269 | 96.93 | 22 | P | P | 16 54 33.4 | +0.5 |
| D27M | Malcolm River<br>baz=270 | 97.18 | 21 | P | Pdif | 16 54 34.5 | +0.6 |
| O28M | Mount Upton<br>baz=269 | 97.41 | 30 | P | Pdif | 16 54 35.8 | +0.4 |
| I28M | Miner Creek<br>comp=Z,2.5nm,0.8s | 97.56 | 25 | IAmb | IAmb | 16 54 36.4 | |
| I28M | Miner Creek<br>baz=270 | 97.56 | 25 | P | P | 16 54 35.7 | -0.1 |
| F28M | Old Crow<br>baz=270 | 97.58 | 23 | P | P | 16 54 35.6 | -0.1 |
| YUK8 | Steele Glacier<br>baz=270 | 97.63 | 29 | P | P | 16 54 35.7 | -0.6 |
| E28M | Babbage River<br>baz=271 | 97.70 | 22 | P | P | 16 54 36.0 | -0.1 |
| PNL | Peninsula<br>baz=270 | 97.80 | 31 | P | P | 16 54 36.6 | -0.2 |
| M29M | Somme Creek<br>baz=271 | 98.24 | 28 | P | Pdif | 16 54 39.2 | +0.4 |
| I29M | Ogilvie Camp,<br>baz=272 | 98.25 | 25 | P | P | 16 54 38.4 | -0.4 |
| E29M | Blow River<br>baz=272 | 98.31 | 22 | P | P | 16 54 38.6 | -0.3 |
| G29M | Pine Creek<br>baz=272 | 98.31 | 23 | P | P | 16 54 38.9 | -0.1 |
| L29M | L29M<br>baz=271 | 98.38 | 27 | P | P | 16 54 39.0 | -0.4 |
| K29M | Barlow Dome<br>baz=272 | 98.63 | 26 | P | Pdif | 16 54 40.3 | -0.3 |
| P29M | Windy Craggy<br>baz=271 | 98.64 | 31 | P | Pdif | 16 54 40.4 | -0.3 |
| EPYK | Eagle Plains<br>baz=273 | 98.86 | 24 | P | Pdif | 16 54 41.4 | 0.0 |
| N30M | Aishikik Lake<br>baz=272 | 98.91 | 29 | P | Pdif | 16 54 41.8 | -0.1 |
| G30M | tAoh Zraii Nji<br>baz=274 | 99.02 | 23 | P | **Pdif** | **16 54 42.1** | **0.0** |
| J30M | Hart River<br>baz=273 | 99.12 | 26 | P | **Pdif** | **16 54 43.0** | **+0.3** |
| S31K | Pelican<br>baz=272 | 99.47 | 32 | P | **Pdif** | **16 54 44.0** | **-0.2** |
| N31M | Braeburn, Yuko<br>baz=273 | 99.54 | 29 | P | **Pdif** | **16 54 44.3** | **-0.3** |
| G31M | Satah River<br>baz=276 | 99.79 | 23 | P | **Pdif** | **16 54 44.6** | **-0.9** |
| INK | Inuvik<br>baz=276 | 99.93 | 22 | P | **Pdif** | **16 54 45.7** | **-0.4** |
| F31M | Tsiigehtchic<br>baz=276 | 99.94 | 23 | P | **Pdif** | **16 54 45.5** | **-0.6** |
| ARCES | ARCESS Array B<br>comp=Z,5.4nm,1.0s,baz=78,slow=5.6,SNR=4.6 | 100.40 | 339 | P | **Pdif** | **16 54 46.2** | **-2.0** |
| FINES | FINESS Array B<br>comp=Z,2.7nm,0.9s,baz=68,slow=4.8,SNR=1.9 | 101.18 | 331 | P | **Pdif** | **16 54 50.0** | **-1.8** |
| CRAG | Craig<br>baz=274 | 101.33 | 35 | P | **Pdif** | **16 54 51.8** | **-0.8** |
| S34M | Telegraph Cree<br>baz=277 | 102.19 | 32 | P | **Pdif** | **16 54 55.9** | **-0.5** |
| V35K | Ketchikan<br>baz=276 | 102.20 | 35 | P | **Pdif** | **16 54 55.7** | **-0.7** |
| DLBC | Dease Lake<br>baz=278 | 102.71 | 32 | P | **Pdif** | **16 54 58.0** | **-0.8** |
| T35M | Bob Quinn<br>baz=277 | 102.78 | 33 | P | **Pdif** | **16 54 58.7** | **-0.3** |
| CIS | Catalina Islan<br>baz=278 | 114.38 | 57 | P | PKPdf | 16 59 38.4 | -1.3 |
| EDW2 | Edwards Air Fo<br>baz=279 | 114.50 | 55 | P | PKPdf | 16 59 39.8 | -0.1 |
| GRAC | Grapevine Rang<br>baz=280 | 114.65 | 52 | P | PKPdf | 16 59 39.4 | -0.8 |
| LRMC | Laurel Mtn Rad<br>baz=280 | 114.66 | 54 | P | PKPdf | 16 59 39.9 | -0.3 |
| MPMC | Manual Prospec<br>baz=280 | 114.72 | 54 | P | PKPdf | 16 59 40.2 | -0.3 |
| BFSC | Mount Baldy Ra<br>baz=279 | 114.88 | 56 | P | PKPdf | 16 59 40.3 | -0.5 |
| HLID | Hailey<br>baz=286 | 115.39 | 45 | P | **PKiKP** | **16 59 41.5** | **0.0** |
| GSC | Goldstone, Bar<br>baz=280 | 115.40 | 54 | P | **PKPdf** | **16 59 41.0** | **-0.6** |
| TPNV | Topopah Spring<br>baz=281 | 115.54 | 52 | P | **PKPdf** | **16 59 41.3** | **-0.7** |
| R11B | Troy Canyon, C<br>baz=282 | 115.78 | 51 | P | **PKiKP** | **16 59 42.9** | **+0.4** |
| PFO | Pinyon Flats O<br>baz=279 | 115.96 | 56 | P | **PKPdf** | **16 59 42.1** | **-0.7** |
| TPFO | Pinon Flats<br>baz=279 | 115.97 | 56 | P | **PKPdf** | **16 59 42.0** | **-0.8** |
| BELC | Belle Mtn. Jos<br>baz=280 | 116.28 | 56 | P | **PKPdf** | **16 59 43.2** | **-0.3** |
| IKP | In-Ko-Pah, Jac<br>baz=279 | 116.41 | 57 | P | **PKPdf** | **16 59 43.1** | **-0.6** |
| GMRC | Granite Mounta<br>baz=280 | 116.41 | 55 | P | **PKPdf** | **16 59 43.3** | **-0.4** |
| EGMT | Eagleton<br>baz=292 | 117.08 | 39 | P | **PKPdf** | **16 59 44.2** | **-0.3** |
| GLA | Glamis<br>baz=280 | 117.40 | 56 | P | **PKiKP** | **16 59 45.5** | **0.0** |
| DUG | Dugway, Tooele<br>baz=285 | 117.43 | 48 | P | **PKPdf** | **16 59 45.4** | **-0.1** |
| EKA | Eskdalemuir Ar<br>comp=Z,0.3nm,0.4s,baz=42,slow=4.3,SNR=5.9 | 117.56 | 330 | PKP | **PKiKP** | **16 59 45.5** | **+0.4** |
| BW06 | Boulder Array<br>baz=289 | 119.02 | 45 | P | **PKPdf** | **16 59 48.2** | **-0.4** |
| PDAR | Pinedale Array<br>comp=Z,0.3nm,0.4s,baz=272,slow=1.3,SNR=5.7 | 119.02 | 45 | PKP | **PKPdf** | **16 59 48.4** | **-0.2** |
| 214A | Organ Pipe Nat<br>baz=281 | 119.28 | 57 | P | **PKPdf** | **16 59 48.8** | **-0.4** |
| WUAZ | Wupatki<br>baz=284 | 119.70 | 53 | P | **PKPdf** | **16 59 49.7** | **-0.3** |
| LAO | LASA Array<br>baz=294 | 119.81 | 39 | P | **PKPdf** | **16 59 49.6** | **-0.2** |
| W18A | Petrified Fore<br>baz=285 | 121.09 | 53 | P | **PKPdf** | **16 59 51.8** | **-1.0** |
| K22A | Casper<br>baz=292 | 121.16 | 44 | P | **PKPdf** | **16 59 52.4** | **-0.2** |
| MVCO | Mesa Verde<br>baz=287 | 121.50 | 50 | P | **PKPdf** | **16 59 52.9** | **-0.6** |
| N23A | Red Feather La<br>baz=291 | 122.20 | 46 | P | **PKPdf** | **16 59 54.3** | **-0.5** |
| RSSD | Black Hills<br>baz=294 | 122.26 | 41 | P | **PKPdf** | **16 59 54.3** | **-0.5** |
| S22A | 4UR Ranch, Cre<br>baz=288 | 122.60 | 49 | P | **PKPdf** | **16 59 55.2** | **-0.5** |
| 121A | Cookes Peak, D<br>baz=284 | 123.31 | 56 | P | **PKPdf** | **16 59 56.5** | **-0.6** |
| ANMO | Albuquerque<br>baz=292 | 123.73 | 52 | P | **PKPdf** | **16 59 57.1** | **-0.7** |
| ULM | Lac du Bonnet<br>comp=Z,2.5nm,0.5s,baz=346,slow=2.0,SNR=6.4 | 124.03 | 32 | PKP | **PKPdf** | **16 59 57.2** | **-0.4** |
| MNTX | Cornudas Mount<br>baz=286 | 125.49 | 56 | P | **PKPdf** | **17 00 00.6** | **-0.5** |
| TORD | Torodi Ar. Bea<br>comp=Z,1.6nm,0.7s,baz=60,slow=2.9,SNR=7.5 | 125.73 | 281 | PKP | **PKPdf** | **17 00 01.4** | **-0.6** |
| ECSD | EROS Data Cent<br>baz=301 | 127.19 | 39 | P | **PKPdf** | **17 00 03.5** | **-0.4** |
| TXAR | Lajitas Array<br>comp=Z,0.6nm,0.6s,baz=197,slow=2.0,SNR=8.4 | 127.54 | 58 | PKP | **PKiKP** | **17 00 05.7** | **0.0** |
| EYMN | Ely<br>baz=309 | 127.72 | 32 | P | **PKiKP** | **17 00 05.4** | **-0.1** |
| WMOK | Wichita Mounta<br>baz=293 | 129.74 | 50 | P | **PKPdf** | **17 00 08.6** | **-0.5** |
| JCT | Junction City<br>baz=289 | 130.43 | 56 | P | **PKPdf** | **17 00 10.0** | **-0.5** |
| SCHQ | Schefferville<br>comp=Z,1.2nm,0.4s,baz=315,slow=5.7,SNR=1.4 | 130.95 | 10 | PKP | **PKiKP** | **17 00 11.2** | **-0.5** |
| HDIL | Hopedale<br>baz=306 | 133.48 | 38 | P | **PKPdf** | **17 00 15.6** | **-0.3** |
| CCM | Cathedral Cave<br>baz=302 | 133.63 | 42 | P | **PKPdf** | **17 00 16.2** | **-0.1** |
| MIAR | Mount Ida<br>baz=297 | 133.72 | 48 | P | **PKPdf** | **17 00 16.7** | **+0.1** |
| WCI | Wyandotte Cave<br>baz=308 | 136.73 | 39 | P | **PKPdf** | **17 00 22.2** | **+0.1** |
| WVT | Waverly<br>baz=299 | 136.97 | 42 | P | **PKiKP** | **17 00 23.9** | **-0.6** |
| M53A | WI Miller and<br>baz=317 | 137.78 | 31 | P | **PKiKP** | **17 00 25.1** | **-0.9** |
| P52A | Corning<br>baz=314 | 138.28 | 34 | P | **PKiKP** | **17 00 26.5** | **-0.6** |
| LRAL | Lakeview Retre<br>baz=302 | 139.23 | 46 | P | **PKiKP** | **17 00 28.1** | **-1.0** |
| LBNH | Lisbon<br>baz=331 | 139.34 | 21 | P | **PKPdf** | **17 00 27.7** | **+1.1** |
| L61B | Northampton<br>baz=329 | 140.60 | 23 | P | **PKiKP** | **17 00 30.5** | **-1.2** |
| HRV | Adam Dziewonsk<br>baz=330 | 140.98 | 22 | P | **PKiKP** | **17 00 31.7** | **-0.8** |
| GOGA | Godfrey<br>baz=307 | 141.46 | 43 | P | **PKiKP** | **17 00 33.0** | **-0.7** |
| GO02 | Mina Guanaco | 144.33 | 154 | PKPbc | **PKPdf** | **17 00 36.6** | **+0.1** |
| CPUP | Villa Florida<br>comp=Z,6.1nm,1.0s,baz=116,slow=2.1,SNR=7.6 | 146.72 | 173 | PKPbc | **PKPbc** | **17 00 42.8** | **+0.2** |
| LPAZ | La Paz<br>comp=Z,2.3nm,0.5s,baz=176,slow=1.2,SNR=11 | 152.60 | 147 | PKPab | **PKPab** | **17 01 11.0** | **+1.0** |

*SKHL **11** 16:55:28.9±0.7, 48°.30N×155°.30E, h59km±6km, mb4.5/5*
*KRSC **11** 16:55:28.7±1.4, 48°.44N×156°.16E, h16km±15km, Ml4.1*
*IDC **11** 16:55:35.2±3.8, 48°.32N×154°.77E, h94km±36km, mb3.3/11, mbtmp3.6/14, Error ellipse: s-maj=26.1km s-min=16.5km az=144.0*

**ISC 11 16:55:29.2±0.8, 48°.4N±0°.1×155°.1E±0°.1, h35km, n39, σ1§46/48, mb3.6/11, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SKR | Severo-Kuril's | 2.42 | 16 | eP | | Pn | 16 56 05.6 | -0.7 |
| SKR | | | | eS | | Sn | 16 56 33.3 | -1.4 |
| SKR | Severo-Kuril's | 2.42 | 16 | eP | | Pn | 16 56 05.7 | -0.6 |
| SKR | 60nm,0.4s | | | AMB | AMB | 16 56 09.7 | |
| SKR | | | | eS | | Sn | 16 56 32.9 | -1.7 |
| SKR | 200nm,0.5s | | | A | A | 16 56 38.1 | |
| SKR | 160nm,0.5s | | | A | A | 16 56 38.1 | |
| KDTR | Khodutka, Kamc | 3.95 | 28 | eP | | Pn | 16 56 26.8 | -0.5 |
| KDTR | | | | eS | | Sn | 16 57 09.3 | -3.1 |
| KDTR | Khodutka, Kamc | 3.95 | 28 | eP | | Pn | 16 56 26.8 | -0.5 |
| KDTR | 40nm,0.3s | | | AMB | AMB | 16 56 31.6 | |
| KDTR | | | | eS | | Sn | 16 57 10.4 | -2.0 |
| KDTR | 80nm,0.4s | | | A | A | 16 57 20.7 | |
| KDTR | 90nm,0.4s | | | A | A | 16 57 20.7 | |
| ASAK | Asacha | 4.41 | 23 | eP | | Pn | 16 56 34.8 | +1.1 |
| ASAK | | | | eS | | Sn | 16 57 23.8 | -0.1 |
| MTVR | Mutnovka | 4.58 | 24 | eP | | Pn | 16 56 36.8 | +0.8 |
| MTVR | | | | eS | | Sn | 16 57 27.1 | -0.9 |
| GRL | Gorelyy | 4.61 | 23 | eP | | Pn | 16 56 37.8 | +1.3 |
| GRL | | | | eS | | Sn | 16 57 29.5 | +0.7 |
| APC | Apacha | 4.76 | 15 | eP | | Pn | 16 56 40.5 | +2.1 |
| KRMR | Karymshinskiy | 4.88 | 22 | eP | | Pn | 16 56 42.1 | +2.1 |
| PET | Petropavlovsk | 5.19 | 24 | eP | | Pn | 16 56 45.0 | +0.7 |
| PET | | | | eS | | Sn | 16 57 42.0 | -0.8 |
| PET | Petropavlovsk | 5.19 | 24 | eP | | Pn | 16 56 45.0 | +0.7 |
| PET | 10.0nm,0.7s | | | AMB | AMB | 16 56 47.3 | |
| PET | | | | eS | | Sn | 16 57 42.9 | +0.1 |
| PET | 50nm,0.8s | | | A | A | 16 58 01.5 | |
| PET | 50nm,0.8s | | | A | A | 16 58 01.5 | |
| DALK | Dalny | 5.22 | 25 | eP | | Pn | 16 56 45.2 | +0.5 |
| DALK | | | | eS | | Sn | 16 57 42.5 | -1.2 |
| UGLR | Uglovaya | 5.40 | 25 | eP | | Pn | 16 56 48.5 | +1.2 |
| KOK | Koryaka | 5.43 | 23 | eP | | Pn | 16 56 50.0 | +2.4 |
| AVH | Avacha | 5.43 | 24 | eP | | Pn | 16 56 50.2 | +2.5 |
| SMAR | Somma | 5.44 | 24 | eP | | Pn | 16 56 49.2 | +1.2 |
| KRX | Arik | 5.49 | 23 | eP | | Pn | 16 56 49.9 | +1.4 |
| GNL | Ganaly | 5.64 | 17 | eP | | Pn | 16 56 52.6 | +2.0 |
| SPN | Mys Shipunski | 5.68 | 32 | eP | | Pn | 16 56 50.7 | -0.3 |
| KUR | Kuril'sk | 5.87 | 241 | eP | | Pn | 16 56 55.7 | +2.1 |
| KUR | 50nm,0.7s | | | AMB | AMB | 16 57 00.1 | |
| KUR | | | | eS | | Sn | 16 58 00.4 | +0.9 |
| KUR | 50nm,0.6s | | | A | A | 16 58 15.1 | |
| KUR | 40nm,0.6s | | | A | A | 16 58 15.1 | |
| SHO | Shikotan | 7.29 | 235 | eP | | Pn | 16 57 12.5 | -0.6 |
| SHO | 10.0nm,0.4s | | | AMB | AMB | 16 57 14.1 | |
| TUMR | Tumrok | 7.61 | 22 | eP | | Pn | 16 57 19.6 | +2.1 |
| ASAJ | Asahikawa<br>9.3nm,0.7s,baz=72,slow=12,SNR=16 | 9.64 | 249 | P | | Pn | 16 57 48.3 | +2.9 |
| ASAJ | | | | S | | Sn | 16 59 31.4 | -1.0 |
| USRK | 3.2nm,0.9s,baz=90,slow=20,SNR=1.3<br>Ussuriysk Ar. | 16.49 | 264 | P | | Pn | 16 59 18.5 | +0.9 |
| MJAR | 2.1nm,0.7s,baz=76,slow=12,SNR=3.2<br>Matsushiro Arr | 17.12 | 233 | P | | Pn | 16 59 26.5 | +0.8 |
| KSRS | 0.7nm,0.8s,baz=35,slow=12,SNR=3.5<br>Korea Array | 22.57 | 251 | P | | P | 17 00 25.5 | -0.8 |
| ILAR | 1.9nm,0.9s,baz=50,slow=10.0,SNR=6.6<br>1.9nm,0.9s<br>Eielson Array | 34.45 | 40 | P | | P | 17 02 14.8 | +1.7 |
| MKAR | 0.2nm,0.4s,baz=289,slow=7.9,SNR=4.3<br>0.2nm,0.4s<br>Makanchi Array | 47.41 | 297 | P | | P | 17 03 58.3 | -1.6 |
| KURBB | 0.4nm,0.6s,baz=66,slow=5.9,SNR=5.5<br>0.4nm,0.6s<br>Kurchatov Arra | 47.70 | 303 | P | | P | 17 04 01.4 | -0.6 |
| CMAR | 0.3nm,0.2s,baz=61,slow=7.6,SNR=2.5<br>0.3nm,0.2s<br>Chiang Mai Arr | 54.05 | 257 | P | | P | 17 04 48.4 | -1.8 |
| NVAR | 0.7nm,0.7s,baz=29,slow=7.5,SNR=4.9<br>0.7nm,0.7s<br>Mina Array Bea | 60.51 | 64 | P | | P | 17 05 37.6 | +1.7 |
| PDAR | 0.3nm,0.7s,baz=313,slow=4.5,SNR=2.0<br>0.3nm,0.7s<br>Pinedale Array | 62.72 | 56 | P | | P | 17 05 51.4 | +0.7 |
| FINES | 0.4nm,0.8s,baz=349,slow=1.8,SNR=2.3<br>0.4nm,0.8s<br>FINESS Array B | 63.15 | 335 | P | | P | 17 05 51.6 | -1.3 |
| WRA | 0.3nm,0.3s,baz=33,slow=7.8,SNR=0.9<br>0.3nm,0.3s<br>Warramunga Arr | 70.48 | 201 | P | | P | 17 06 39.3 | -0.7 |
| ASAR | 1.1nm,0.9s,baz=14,slow=6.8,SNR=5.1<br>1.1nm,0.9s<br>Alice Springs | 74.17 | 200 | P | | P | 17 07 00.5 | -1.5 |
| TXAR | 0.8nm,1.0s,baz=14,slow=5.3,SNR=6.0<br>0.8nm,1.0s<br>Lajitas Array | 75.54 | 62 | P | | P | 17 07 10.6 | +0.4 |
| H03N2 | 0.5nm,0.7s,baz=294,slow=4.3,SNR=7.4<br>0.5nm,0.7s<br>Juan Fernandez | 137.41 | 90 | T | | T | 19 47 48.5 | |
| H03N1 | baz=310,slow=77,SNR=34<br>Juan Fernandez | 137.43 | 90 | T | | T | 19 47 54.6 | |
| H03N3 | baz=310,slow=77,SNR=36<br>Juan Fernandez | 137.43 | 90 | T | | T | 19 47 55.8 | |
| | baz=310,slow=77,SNR=31 | | | | | | | |

**LDG 11 17:05:41.0±0.2, 45°.08N×6°.94E, h10km, Md1.8/3, Ml1.2/2,**
**Error ellipse: s-maj=3.6km s-min=2.2km az=85.0,**
**France**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LPG | La Plagne | 0.44 | 343 | ePg | Pb | 17 05 50.7 | -0.4 |
| LPG | 1.1nm,0.3s | | | eSg | Sg | 17 05 56.1 | +0.5 |
| LPL | La Plagne | 0.46 | 342 | ePg | Pg | 17 05 50.2 | +0.1 |
| LPL | 1.4nm,0.3s | | | eSg | Sg | 17 05 56.3 | 0.0 |
| ORIF | Oris-en-Rattie | 0.77 | 258 | ePg | Pg | 17 05 55.6 | -0.2 |
| ORIF | 1.4nm,0.2s | | | eSg | Sg | 17 06 05.5 | -0.3 |
| SBF | Sospel | 1.27 | 163 | ePg | Pn | 17 06 04.5 | -0.3 |
| SMRF | Simiane la Rot | 1.47 | 222 | ePn | Pn | 17 06 06.0 | -1.6 |
| SMRF | 0.2nm,0.3s | | | eSn | Sn | 17 06 25.2 | -1.7 |
| CABF | La Chapelle | 1.65 | 339 | ePg | Pb | 17 06 10.9 | -0.6 |
| CABF | 0.9nm,0.4s | | | eSn | Sn | 17 06 28.3 | -3.0 |

**STR 11 17:06:38.9±1.0, 44°N±6°×±°, h16km±13km, MLv1.3/13,**
**Error ellipse: s-maj=0.0km s-min=0.0km az=157.7,**
**preliminary, Near south coast of France**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BURY | Giardini Botan | 0.24 | 323 | Pg | Pg | 17 06 44.0 | -0.3 |
| BURY | | | | Sg | Sg | 17 06 47.8 | -0.1 |
| ESCA | l'Escarene | 0.36 | 311 | Pg | Pg | 17 06 46.3 | -0.1 |
| ESCA | | | | Sg | Sg | 17 06 52.0 | +0.4 |
| SAOF | Saorge | 0.42 | 340 | Pg | Pg | 17 06 47.6 | +0.2 |
| SAOF | | | | Sg | Sg | 17 06 53.3 | +0.1 |
| TURF | col de Turini | 0.46 | 326 | Pg | Pg | 17 06 48.3 | 0.0 |
| TURF | | | | Sg | Sg | 17 06 54.7 | +0.1 |
| MVIF | Mont Vial | 0.53 | 305 | Sg | Sb | 17 06 57.7 | +0.3 |
| PIAF | les Granges de | 0.53 | 350 | Pg | Pg | 17 06 49.4 | -0.1 |
| PIAF | | | | Sg | Sg | 17 06 56.4 | -0.3 |
| RORO | Rocca Rossa | 0.57 | 23 | Pg | Pg | 17 06 50.2 | +0.1 |
| SPIF | crte de Spivo | 0.59 | 321 | Pg | Pg | 17 06 50.7 | 0.0 |
| SPIF | | | | Sg | Sg | 17 06 58.8 | +0.1 |
| CALF | Calern | 0.62 | 285 | Pg | Pb | 17 06 51.4 | -0.1 |
| CALF | | | | Sg | Sg | 17 06 59.7 | +0.2 |
| GBOS | Grotte di Boss | 0.65 | 6 | Pg | Pg | 17 06 51.6 | -0.2 |
| GBOS | | | | Sg | Sg | 17 07 00.2 | -0.2 |
| ISO | Isola | 0.78 | 320 | Pg | Pb | 17 06 54.1 | 0.0 |
| ISO | | | | Sg | Sb | 17 07 04.5 | 0.0 |
| ENAUX | Enaux | 0.88 | 307 | Pg | Pb | 17 06 55.8 | +0.1 |
| ENAUX | | | | Sg | Sg | 17 07 07.6 | +0.1 |
| TRIGF | Trigance | 0.99 | 279 | Pg | Pg | 17 06 57.4 | -0.3 |
| TRIGF | | | | Sg | Sg | 17 07 10.8 | -0.2 |
| JAUF | Jausiers | 1.11 | 320 | Pg | Pb | 17 06 59.2 | -0.5 |
| JAUF | | | | Sg | Sn | 17 07 15.0 | +0.2 |
| PCP | Piancastagn | 1.11 | 31 | Pg | Pg | 17 07 00.3 | 0.0 |

*NOU* ***11*** *17:08:09.7, 32°.61S×175°.66W, h0km, mb4.9/28, South of Kermadec Islands*
*BJI* ***11*** *17:08:18.5±0.0, 32°.04S×176°.64W, h5km, mb5.3/22, mB5.1/2, Ms4.9/1, Ms7.4.7/2*
*IDC* ***11*** *17:08:20.1±0.4, 32°.175×177°.26W, h0km, mb4.5/15, mbtmp4.5/18, ML5.1/2, MS3.7/32, Error ellipse: s-maj=16.9km s-min=15.7km az=66.0*
*NEIC* ***11*** *17:08:21.7±2.3, 32°.28S±0°.07×177°.2W±0°.1, h10km±1km, mb4.9/97, Error ellipse: s-maj=17.2km s-min=11.1km az=106.0*
*WEL* ***11*** *17:08:22.0±0.6, 32°.5S×17°.8W±1°.0, h33km, M4.5/24, mB5.0/24, ML5.7/15, MLv5.4/14, Mw(mB)4.2/24, Error ellipse: s-maj=0.0km s-min=0.0km az=111.4, confirmed*
*GCMT* ***11*** *17:08:22.7±0.3, 32°.10S±0°.02×176°.95W±0°.04, h18km±1km, MW4.9/91, Moment Tensor Solution. s31,c33; s91,c109; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-2.67±.15; $M_{\theta\theta}$1.52±.10; $M_{\phi\phi}$1.14±.11; $M_{r\theta}$0.88±.24; $M_{\theta\phi}$0.61±.08; $M_{\phi r}$-1.71±.31; Best double couple: $M_0$2.77700×$10^{16}$ NP1:$\phi_6$22.00000°, δ57.00000°, λ-117.00000°. NP2: $\phi_5$246.00000°, δ41.00000°, λ-55.00000°. Principal axes: T 2.0160, Plg9.0000°, Azm131.0000°; N 1.5120, Plg23.0000°, Azm37.0000°; P -3.5380, Plg66.0000°, Azm241.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 11 17:08:21.6±0.8, 32°.32S±0°.04×177°.24W±0°.07, h13km±4km, n287, s2e31/232, mb4.9/68, MS3.8/29, 6C-9D, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLKZ** | **Green Lake** | **3.11** | **349** | P | **Pn** | **17 09 05.6** | **-4.7** |
| GLKZ | | | | S | **Sn** | **17 09 40.2** | **-7.0** |
| **RAO** | **Raoul Island** | **3.12** | **349** | P | **Pn** | **17 09 10.9** | **+0.5** |
| **RAO** | **Raoul Island** | **3.12** | **349** | | **Pn** | **17 09 07.3** | **-3.2** |
| **RAO** | **Raoul Island** | **3.12** | **349** | Pn | **Pn** | **17 09 07.4** | **-3.0** |
| | 113nm,0.3s,baz=218,slow=19,SNR=8.1 | | | | | | |
| RAO | | | | Sn | **Sn** | **17 09 39.7** | **-7.8** |
| | 739nm,0.3s,baz=86,slow=22,SNR=10 | | | | | | |
| RAO | | | | LR | LR | 17 10 11.8 | |
| | comp=Z,1μm,21.1s,baz=122,slow=38 | | | | | | |
| | 888nm,0.6s | | | | | | |
| **MXZ** | **Matakaoa Point** | **6.38** | **214** | Pn | **Pn** | **17 09 52.6** | **-2.7** |
| **MXZ** | **Matakaoa Point** | **6.38** | **214** | P | Pn | 17 09 51.3 | -4.0 |
| MXZ | | | | S | **Sn** | **17 11 03.5** | **-4.4** |
| **WMGZ** | **Waiomatatini S** | **6.54** | **212** | P | **Pn** | **17 09 55.4** | **-2.0** |
| WMGZ | | | | S | **Sn** | **17 11 10.7** | **-1.1** |
| **PKGZ** | **Pakihiroa** | **6.73** | **213** | P | **Pn** | **17 09 57.9** | **-2.2** |
| PKGZ | | | | S | **Sn** | **17 11 15.4** | **-1.2** |
| **HAZ** | **Te Kaha** | **6.79** | **216** | P | **Pn** | **17 10 00.1** | **-0.7** |
| HAZ | | | | S | **Sn** | **17 11 19.0** | **+1.1** |
| **RUGZ** | **Raukumara Rang** | **7.00** | **215** | P | **Pn** | **17 10 01.0** | **-2.9** |
| RUGZ | | | | S | **Sn** | **17 11 22.3** | **-1.1** |
| **TWGZ** | **Tauwhareparae** | **7.03** | **212** | P | **Pn** | **17 10 01.8** | **-2.4** |
| TWGZ | | | | S | **Sn** | **17 11 20.4** | **-3.6** |
| **CNGZ** | **Carnagh Statio** | **7.18** | **210** | P | **Pn** | **17 10 03.5** | **-2.8** |
| CNGZ | | | | S | **Sn** | **17 11 22.0** | **-5.7** |
| **TKGZ** | **Te Karaka** | **7.30** | **212** | P | **Pn** | **17 10 04.8** | **-3.1** |
| TKGZ | | | | S | **Sn** | **17 11 27.9** | **-2.8** |
| **URZ** | **Urewera** | **7.51** | **216** | P | **Pn** | **17 10 09.9** | **-0.9** |
| **URZ** | **Urewera** | **7.51** | **216** | Pn | **Pn** | **17 10 08.6** | **-2.1** |
| | 6.3nm,0.3s,baz=22,slow=2.8,SNR=27 | | | | | | |
| URZ | | | | Sn | **Sn** | **17 11 32.2** | **-3.5** |
| | 24nm,0.3s,baz=1.2,slow=3.4,SNR=15 | | | | | | |
| **RAGZ** | **Rawiri** | **7.55** | **214** | P | **Pn** | **17 10 08.2** | **-3.2** |
| RAGZ | | | | S | **Sn** | **17 11 34.2** | **-2.6** |
| **RIGZ** | **Rimuhau** | **7.56** | **211** | P | **Pn** | **17 10 09.0** | **-2.5** |
| RIGZ | | | | S | **Sn** | **17 11 30.9** | **-6.2** |
| **PRGZ** | **Paritu Road** | **7.69** | **210** | P | Pn | 17 10 09.0 | -4.3 |
| PRGZ | | | | S | Sn | 17 11 32.3 | -7.9 |
| **SNGZ** | **Shannon Statio** | **7.81** | **213** | P | **Pn** | **17 10 12.0** | **-2.9** |
| SNGZ | | | | S | **Sn** | **17 11 40.9** | **-2.4** |
| **MUGZ** | **Murupara** | **7.85** | **217** | P | **Pn** | **17 10 13.4** | **-2.0** |
| MUGZ | | | | S | **Sn** | **17 11 40.6** | **-3.5** |
| **RTZ** | **Ruatahuna** | **7.85** | **215** | Pn | **Pn** | **17 10 13.3** | **-2.2** |
| **WCZ** | **Waipu Caves** | **7.85** | **240** | P | **Pn** | **17 10 19.2** | **+3.7** |
| **MHGZ** | **Mahia Peninsul** | **7.87** | **209** | P | Pn | 17 10 11.5 | -4.3 |
| MHGZ | | | | S | **Sn** | **17 11 38.4** | **-6.4** |
| **TOZ** | **Tahuroa Road** | **8.03** | **226** | Pn | **Pn** | **17 10 17.2** | **-0.8** |
| **WHHZ** | **Waihua** | **8.10** | **212** | P | **Pn** | **17 10 16.7** | **-2.1** |
| WHHZ | | | | S | **Sn** | **17 11 47.2** | **-3.0** |
| **MTHZ** | **Maungataniwha** | **8.10** | **215** | P | **Pn** | **17 10 16.5** | **-2.5** |
| MTHZ | | | | S | **Sn** | **17 11 48.3** | **-2.1** |
| **OUZ** | **Omahuta** | **8.16** | **247** | P | Pn | 17 10 24.8 | +5.1 |
| **OUZ** | **Omahuta** | **8.16** | **247** | P | **Pn** | **17 10 22.8** | **+3.2** |
| **MRHZ** | **Matea Rd** | **8.30** | **217** | P | **Pn** | **17 10 18.1** | **-3.5** |
| MRHZ | | | | S | **Sn** | **17 11 51.9** | **-3.3** |
| **NMHZ** | **Naumai** | **8.31** | **214** | P | **Pn** | **17 10 18.7** | **-3.2** |
| NMHZ | | | | S | **Sn** | **17 11 53.3** | **-2.3** |
| **ARHZ** | **Aropaoanui** | **8.36** | **212** | P | Pn | 17 10 18.1 | -4.3 |
| **BKZ** | **Black Stump Fm** | **8.52** | **215** | P | **Pn** | **17 10 22.5** | **-2.2** |
| **BKZ** | **Black Stump Fm** | **8.52** | **215** | Pn | **Pn** | **17 10 21.4** | **-3.3** |
| **MCHZ** | **McNeill Hill** | **8.64** | **213** | P | **Pn** | **17 10 23.4** | **-2.9** |
| MCHZ | | | | S | **Sn** | **17 12 00.5** | **-3.1** |
| **CKHZ** | **Cape Kidnapper** | **8.64** | **211** | P | Pn | 17 10 21.7 | -4.6 |
| CKHZ | | | | S | **Sn** | **17 11 58.3** | **-5.4** |
| **KWHZ** | **Kaweka Forest** | **8.75** | **214** | P | **Pn** | **17 10 24.5** | **-3.4** |
| KWHZ | | | | S | **Sn** | **17 12 03.5** | **-2.9** |
| **KAHZ** | **Kahuranaki** | **8.85** | **211** | P | Pn | 17 10 24.5 | -4.7 |
| KAHZ | | | | S | **Sn** | **17 12 04.9** | **-3.7** |
| **HIZ** | **Hauiti** | **8.93** | **224** | P | **Pn** | **17 10 30.5** | **+0.2** |
| **HIZ** | **Hauiti** | **8.93** | **224** | | **Pn** | **17 10 30.4** | **+0.2** |
| **KRHZ** | **Kereru** | **8.95** | **214** | P | Pn | 17 10 26.4 | -4.2 |
| KRHZ | | | | S | **Sn** | **17 12 06.3** | **-4.9** |
| **PNHZ** | **Pukenui** | **9.25** | **213** | P | **Pn** | **17 10 31.4** | **-3.2** |
| PNHZ | | | | S | **Sn** | **17 12 12.4** | **-6.1** |
| **WPHZ** | **Waipukurau** | **9.26** | **212** | P | Pn | 17 10 30.0 | -4.7 |
| WPHZ | | | | S | **Sn** | **17 12 12.7** | **-6.1** |
| **PRHZ** | **Porangahau** | **9.34** | **210** | P | Pn | 17 10 30.3 | -5.6 |
| PRHZ | | | | S | **Sn** | **17 12 16.0** | **-4.8** |
| **DVHZ** | **Dannevirke** | **9.57** | **212** | P | Pn | 17 10 33.1 | -6.0 |
| DVHZ | | | | S | Sn | 17 12 19.0 | -7.4 |
| **BFZ** | **Birch Farm** | **9.85** | **210** | | Pn | 17 10 36.4 | -6.5 |
| BFZ | | | | | **Sn** | **17 12 28.4** | **-4.9** |
| **MRZ** | **Mangatainoka R** | **10.13** | **213** | Pn | Pn | 17 10 40.5 | -6.2 |
| **KIW** | **Kapiti Island** | **10.60** | **214** | P | Pn | 17 10 47.6 | -5.5 |
| KIW | | | | S | Sn | 17 12 42.2 | -9.5 |
| **MSWZ** | **Moikau Station** | **10.88** | **211** | Pn | Pn | 17 10 49.6 | -7.4 |
| **PLWZ** | **Palliser** | **11.01** | **211** | Pn | Pn | 17 10 51.5 | -7.2 |
| **DUWZ** | **D'Urville Isla** | **11.04** | **218** | P | **Pn** | **17 10 56.3** | **-3.0** |
| DUWZ | | | | S | Sn | 17 12 54.7 | -7.9 |
| **BHW** | **Baring Head** | **11.05** | **213** | Pn | Pn | 17 10 53.0 | -6.3 |
| **BHW** | **Baring Head** | **11.05** | **213** | P | **Pn** | **17 10 57.0** | **-2.2** |
| BHW | | | | S | Sn | 17 12 52.1 | -10 |
| **SNZO** | **South Karori** | **11.05** | **213** | Pn | Pn | 17 10 52.6 | -6.6 |
| **TCW** | **Tory Channel** | **11.17** | **215** | Pn | Pn | 17 10 55.2 | -5.8 |
| **TCW** | **Tory Channel** | **11.17** | **215** | P | Pn | 17 10 57.2 | -3.8 |
| TCW | | | | S | Sn | 17 12 56.4 | -9.3 |
| **CTZ** | **Chatham Island** | **11.40** | **178** | Pn | Pn | 17 11 00.1 | -4.0 |
| CTZ | | | | | Sn | 17 12 58.2 | -13 |
| **TUWZ** | **Tuamarina** | **11.50** | **215** | | Pn | 17 10 58.3 | -7.1 |
| **TUWZ** | **Tuamarina** | **11.50** | **215** | P | Pn | 17 11 01.6 | -3.9 |
| TUWZ | | | | S | Sn | 17 13 03.3 | -10 |
| **CMWZ** | **Cape Campbell** | **11.62** | **214** | Pn | Pn | 17 11 01.6 | -5.4 |
| **NNZ** | **Nelson** | **11.63** | **218** | Pn | Pn | 17 11 02.0 | -5.2 |
| **NNZ** | **Nelson** | **11.63** | **218** | P | Pn | 17 11 02.7 | -4.5 |
| NNZ | | | | S | Sn | 17 13 07.0 | -10 |
| **TKNZ** | **Takaka Hill** | **11.72** | **219** | | Pn | 17 11 02.4 | -6.0 |
| **TKNZ** | **Takaka Hill** | **11.72** | **219** | P | **Pn** | **17 11 05.4** | **-3.1** |
| TKNZ | | | | S | Sn | 17 13 09.6 | -9.5 |
| **BSWZ** | **Blackbirch Sta** | **11.75** | **215** | Pn | Pn | 17 11 03.0 | -5.9 |
| **BSWZ** | **Blackbirch Sta** | **11.75** | **215** | P | **Pn** | **17 11 06.8** | **-2.1** |
| BSWZ | | | | S | Sn | 17 13 08.9 | -11 |
| **QRZ** | **Quartz Range** | **11.81** | **221** | P | **Pn** | **17 11 08.9** | **-0.8** |
| **QRZ** | **Quartz Range** | **11.81** | **221** | Pn | Pn | 17 11 03.6 | -6.1 |
| **MRNZ** | **Matariki Terra** | **12.08** | **219** | | Pn | 17 11 07.9 | -5.5 |
| **MRNZ** | **Matariki Terra** | **12.08** | **219** | P | Pn | 17 11 08.9 | -4.6 |
| MRNZ | | | | S | Sn | 17 13 18.1 | -10 |
| **THZ** | **Tophouse** | **12.27** | **217** | | Pn | 17 11 10.4 | -5.7 |
| **THZ** | **Tophouse** | **12.27** | **217** | P | Pn | 17 11 11.3 | -4.7 |
| THZ | | | | S | Sn | 17 13 24.1 | -8.5 |
| **KHZ** | **Kahutara** | **12.45** | **213** | P | **Pn** | **17 11 15.0** | **-3.5** |
| **KHZ** | **Kahutara** | **12.45** | **213** | Pn | Pn | 17 11 12.2 | -6.2 |
| **KHZ** | **Kahutara** | **12.45** | **213** | P | **Pn** | **17 11 15.0** | **-3.5** |
| KHZ | | | | S | Sn | 17 13 23.4 | -14 |
| **DSZ** | **Denniston Nort** | **12.84** | **220** | P | **Pn** | **17 11 21.8** | **-1.9** |
| DSZ | | | | S | Sn | 17 13 32.7 | -14 |
| **GVZ** | **Greta Valley S** | **13.12** | **213** | P | Pn | 17 11 23.9 | -3.6 |
| GVZ | | | | S | Sn | 17 13 41.7 | -12 |
| **LTZ** | **Lake Taylor** | **13.34** | **216** | Pn | Pn | 17 11 24.2 | -6.4 |
| **LTZ** | **Lake Taylor** | **13.34** | **216** | P | Pn | 17 11 25.2 | -5.4 |
| **INZ** | **Inchbonnie** | **13.71** | **218** | Pn | Pn | 17 11 29.5 | -6.1 |
| **INZ** | **Inchbonnie** | **13.71** | **218** | P | **Pn** | **17 11 32.1** | **-3.6** |
| **OXZ** | **Oxford** | **13.86** | **215** | | Pn | 17 11 31.4 | -6.3 |
| **OXZ** | **Oxford** | **13.86** | **215** | P | Pn | 17 11 29.5 | -8.2 |
| **MQZ** | **McQueen's Vall** | **13.87** | **212** | P | Pn | 17 11 32.6 | -5.1 |
| **RACZ** | **Rakaia** | **14.12** | **213** | P | **Pn** | **17 11 38.8** | **-2.3** |
| **MHCZ** | **Mount Hutt** | **14.24** | **215** | P | **Pn** | **17 11 40.5** | **-2.5** |
| **WVZ** | **Waitaha Valley** | **14.33** | **218** | P | **Pn** | **17 11 41.2** | **-2.9** |
| **RPZ** | **Rata Peaks** | **14.63** | **216** | P | **Pn** | **17 11 45.3** | **-2.9** |
| **RPZ** | **Rata Peaks** | **14.63** | **216** | Pn | Pn | 17 11 41.6 | -6.6 |
| **RPZ** | **Rata Peaks** | **14.63** | **216** | Pn | Pn | 17 11 43.6 | -4.6 |
| | 4.4nm,0.3s,baz=43,slow=5.7,SNR=22 | | | | | | |
| RPZ | | | | Sn | Sn | 17 14 13.8 | -16 |
| | 2.3nm,0.3s,baz=312,slow=6.6,SNR=8.9 | | | | | | |
| **RPZ** | **Rata Peaks** | **14.63** | **216** | P | Pn | 17 11 41.3 | -6.9 |
| **ARCZ** | **Arundel** | **14.74** | **215** | P | Pn | 17 11 43.7 | -6.0 |
| **MSVF** | **Nonsavu** | **15.14** | **343** | P | **Pn** | **17 11 53.6** | **-1.7** |
| **MSVF** | **Nonsavu** | **15.14** | **343** | Pn | **Pn** | **17 11 52.9** | **-2.3** |
| **MSVF** | **Nonsavu** | **15.14** | **343** | Pn | **Pn** | **17 11 53.5** | **-1.7** |
| | 0.4nm,0.3s,baz=136,slow=16,SNR=15 | | | | | | |
| MSVF | | | | LR | LR | 17 16 40.5 | |
| | comp=Z,489nm,19.1s,baz=175,slow=33 | | | | | | |
| | 8.6nm,0.7s | | | | | | |
| **ODZ** | **Otahua Downs** | **15.81** | **213** | P | **Pn** | **17 11 59.3** | **-4.6** |
| **ODZ** | **Otahua Downs** | **15.81** | **213** | P | **Pn** | **17 11 59.6** | **-4.2** |
| **ONTNC** | **Ouen Toro** | **17.57** | **301** | P | **P** | **17 12 32.7** | **+5.4** |
| **DZM** | **Mont Dzumac** | **17.73** | **301** | P | **P** | **17 12 31.2** | **+2.1** |
| **DZM** | **Mont Dzumac** | **17.73** | **301** | *e*Pn | **Pn** | **17 12 29.0** | **+0.7** |
| | 97nm,1.4s | | | | | | |
| DZM | | | | *e*LR | LR | 17 16 35.0 | |
| | 687nm,27.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **17.73** | **301** | LR | LR | 17 18 30.7 | |
| | comp=Z,408nm,18.5s,baz=134,slow=35 | | | | | | |
| **NOUC** | **Port Laguerre** | **17.81** | **301** | P | **P** | **17 12 33.1** | **+3.2** |
| **DCZ** | **Deep Cove** | **17.84** | **218** | Pn | **Pn** | **17 12 27.1** | **-2.4** |
| DCZ | | | | IAmb | IAmb | 17 12 39.7 | |
| | comp=Z,178nm,1.9s | | | | | | |
| **AFI** | **Afiamalu** | **19.00** | **16** | P | **P** | **17 12 39.7** | **-3.4** |
| **RAR** | **Rarotonga** | **19.09** | **59** | P | **P** | **17 12 39.6** | **-4.4** |
| **RAR** | **Rarotonga** | **19.09** | **59** | P | **P** | **17 12 42.3** | **-1.7** |
| | comp=Z,29nm,0.9s,baz=211,slow=5.9,SNR=4.8 | | | | | | |
| RAR | | | | LR | LR | 17 20 20.2 | |
| | comp=Z,105nm,18.3s,baz=230,slow=38 | | | | | | |
| **LHI** | **Lord Howe Isla** | **20.13** | **266** | P | **P** | **17 12 55.2** | **0.0** |
| LHI | | | | IAmb | IAmb | 17 12 59.7 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **20.24** | **301** | P | Pn | 17 12 59.4 | +0.8 |
| **KOUNC** | **Koumac, New Ca** | **20.24** | **301** | P | Pn | 17 12 58.3 | -0.3 |
| **TBI** | **Tubuai** | **26.08** | **77** | *e*LR | LR | 17 20 17.7 | |
| | comp=Z,731nm,31.8s | | | | | | |
| **ARMA** | **Armidale** | **26.60** | **266** | P | **P** | **17 14 00.6** | **+0.7** |
| ARMA | | | | IAmb | IAmb | 17 14 32.7 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **EIDS** | **Eidsvold** | **28.53** | **276** | P | **P** | **17 14 19.7** | **+2.7** |
| **EIDS** | **Eidsvold** | **28.53** | **276** | P | **P** | **17 14 17.0** | **0.0** |
| **PPT2** | **Papeete2** | **28.94** | **66** | *e*LR | LR | 17 21 14.4 | |
| | comp=Z,183nm,32.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 17 21 30.2 | |
| | comp=Z,89nm,22.2s | | | | | | |
| **PPT** | **Papeete** | **28.96** | **66** | LR | LR | 17 24 32.1 | |
| | comp=Z,89nm,18.7s,baz=191,slow=34 | | | | | | |
| **HNR** | **Honiara** | **31.06** | **312** | LR | LR | 17 26 41.8 | |
| | comp=Z,1μm,18.0s,baz=75,slow=36 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.37** | **261** | P | **P** | **17 14 44.4** | **+2.3** |
| **QLP** | **Quilpie** | **33.90** | **270** | P | **P** | **17 15 05.6** | **+1.3** |
| **STKA** | **Stephens Creek** | **34.72** | **259** | P | **P** | **17 15 11.5** | **+0.1** |
| **STKA** | **Stephens Creek** | **34.72** | **259** | P | **P** | **17 15 12.3** | **+1.0** |
| | comp=Z,5.4nm,0.8s,baz=102,slow=12,SNR=5.6 | | | | | | |
| STKA | | | | LR | LR | 17 29 02.2 | |
| | comp=Z,329nm,18.3s,baz=43,slow=36 | | | | | | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **TV1H** | **Townsville Har** | **34.73** | **283** | P | **P** | **17 15 14.2** | **+2.7** |
| **TARA** | **Tarawa** | **34.77** | **343** | P | **P** | **17 15 10.4** | **-1.4** |
| **CTA** | **Charters Tower** | **34.78** | **281** | P | **P** | **17 15 12.7** | **+0.6** |
| | comp=Z,1.7nm,0.9s,baz=108,slow=11,SNR=19 | | | | | | |
| CTA | | | | LR | LR | 17 29 24.0 | |
| | comp=Z,13nm,18.1s,baz=112,slow=36 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **34.78** | **281** | P | **P** | **17 15 14.0** | **+2.0** |
| **CTAO** | **Charters Tower** | **34.78** | **281** | P | **P** | **17 15 12.6** | **+0.6** |
| **INKA** | **Innaminka** | **36.49** | **266** | P | **P** | **17 15 28.7** | **+2.1** |
| **MTSU** | **Mount Surprise** | **37.33** | **283** | P | **P** | **17 15 35.4** | **+1.6** |
| **LCRK** | **Leigh Creek** | **37.87** | **261** | P | **P** | **17 15 38.9** | **+0.6** |
| **BBOO** | **Buckleboo** | **39.11** | **256** | P | **P** | **17 15 47.5** | **-1.2** |
| **QIS** | **Mount Isa** | **40.13** | **276** | P | **P** | **17 15 58.2** | **+0.8** |
| **OOD** | **Oodnadatta** | **40.74** | **264** | P | **P** | **17 16 03.4** | **+1.1** |
| **TAOE** | **Nuku Hiva Isla** | **41.51** | **64** | *e*LR | LR | 17 27 28.2 | |
| | comp=Z,337nm,27.4s | | | | | | |
| **AS01** | **Alice Springs** | **43.65** | **269** | P | **P** | **17 16 26.2** | **+0.1** |
| **AS31** | **Alice Springs** | **43.68** | **269** | P | **P** | **17 16 25.3** | **-1.1** |
| **ASAR** | **Alice Springs** | **43.68** | **269** | P | **P** | **17 16 25.2** | **-1.2** |
| **ASAR** | **Alice Springs** | **43.68** | **269** | P | **P** | **17 16 26.2** | **-0.2** |
| | comp=Z,16nm,0.9s,baz=106,slow=7.4,SNR=120 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 18 14.6** | **+1.1** |
| | comp=Z,1.2nm,0.8s,baz=116,slow=4.0,SNR=1.4 | | | | | | |
| ASAR | | | | S | **S** | **17 22 53.4** | **-2.9** |
| | comp=Z,0.6nm,0.9s,baz=112,slow=15,SNR=4.0 | | | | | | |
| ASAR | | | | LR | LR | 17 35 36.3 | |
| | comp=Z,165nm,18.2s,baz=103,slow=38 | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.67** | **274** | P | **P** | **17 16 33.6** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 17 16 35.0 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.84** | **274** | P | **P** | **17 16 34.8** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 17 16 36.3 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.84** | **274** | P | **P** | **17 16 34.8** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 17 16 36.3 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.84** | **274** | P | **P** | **17 16 34.5** | **-1.2** |
| **WRA** | **Warramunga Arr** | **44.84** | **274** | P | **P** | **17 16 35.0** | **-0.7** |
| | comp=Z,24nm,0.9s,baz=116,slow=7.5,SNR=59 | | | | | | |
| | comp=Z,24nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.88** | **274** | P | **P** | **17 16 35.0** | **-1.0** |
| **MANU** | **Manus Island** | **44.88** | **305** | P | **P** | **17 16 35.2** | **-0.8** |
| **FORT** | **Forrest** | **46.21** | **257** | P | **P** | **17 16 45.8** | **-0.6** |
| **WRKA** | **Warakurna** | **47.91** | **264** | P | **P** | **17 16 59.1** | **-0.7** |
| **MTN** | **Manton Dam** | **50.94** | **280** | P | **P** | **17 17 21.3** | **-1.7** |
| MTN | | | | IAmb | IAmb | 17 18 38.7 | |
| | comp=Z,43nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **51.52** | **275** | P | **P** | **17 17 26.6** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 17 17 30.1 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.02** | **271** | P | **P** | **17 17 38.7** | **+0.2** |
| **FITZ** | **Fitzroy Crossi** | **53.02** | **271** | P | **P** | **17 17 38.9** | **+0.5** |
| **CASY** | **Casey** | **53.76** | **209** | P | **P** | **17 17 43.6** | **+0.4** |
| CASY | | | | IAmb | IAmb | 17 17 57.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **56.62** | **254** | P | **P** | **17 18 03.4** | **-1.1** |
| **QSPA** | **South Pole Qui** | **57.79** | **180** | P | **P** | **17 18 14.8** | **+2.5** |
| QSPA | | | | IAmb | IAmb | 17 18 33.9 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **57.79** | **180** | P | **P** | **17 18 14.9** | **+2.6** |
| | comp=Z,4.5nm,1.0s,baz=39,slow=0.9,SNR=13 | | | | | | |
| QSPA | | | | LR | LR | 17 38 29.3 | |
| | comp=Z,49nm,21.5s,baz=30,slow=31 | | | | | | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **GUMO** | **Guam** | **58.30** | **315** | LR | LR | 17 43 21.4 | |
| | comp=Z,66nm,18.0s,baz=264,slow=36 | | | | | | |
| **RPN** | **Rapa Nui** | **58.32** | **104** | LR | LR | 17 39 58.4 | |
| | comp=Z,53nm,18.3s,baz=133,slow=32 | | | | | | |
| **GIRL** | **Giralia** | **60.66** | **260** | P | **P** | **17 18 32.5** | **-0.1** |
| **KAPI** | **Kappang** | **64.60** | **281** | LR | LR | 17 47 46.9 | |
| | comp=Z,68nm,19.0s,baz=104,slow=37 | | | | | | |
| **BELA** | **Belgrano 2** | **67.80** | **172** | P | **P** | **17 19 19.4** | **+0.8** |
| BELA | | | | IAmb | IAmb | 17 19 40.9 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **MAW** | **Mawson** | **70.74** | **201** | P | **P** | **17 19 36.9** | **0.0** |
| | comp=Z,3.3nm,0.8s,baz=95,slow=14,SNR=3.4 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **ELIB** | **Princess Elisa** | **75.02** | **187** | *d*P | **P** | **17 20 04.2** | **+1.7** |
| ELIB | | | | *d*PcP | **pwP** | **17 20 14.4** | **+0.5** |
| **TROLL** | **Troll, Antarti** | **75.96** | **180** | ⇑P | **P** | **17 20 09.4** | **+1.6** |
| | comp=Z,358nm,0.8s | | | | | | |
| TROLL | | | | ⇓PcP | **PcP** | **17 20 20.6** | **+0.3** |
| | comp=Z,376nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **76.22** | **178** | P | **P** | **17 20 09.8** | **+0.5** |
| **SNAA** | **Sanae** | **76.22** | **178** | ⇑P | **P** | **17 20 10.3** | **+1.1** |
| | comp=Z,98nm,0.8s | | | | | | |
| SNAA | | | | ⇓PcP | **pwP** | **17 20 21.3** | **+0.6** |
| | comp=Z,122nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **76.22** | **178** | P | **P** | **17 20 10.6** | **+1.3** |
| | comp=Z,4.4nm,0.8s,baz=190,slow=6.5,SNR=15 | | | | | | |
| SNAA | | | | LR | LR | 17 48 10.4 | |
| | comp=Z,33nm,21.7s,baz=130,slow=31 | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **76.35** | **176** | ⇑P | **P** | **17 20 10.8** | **+0.9** |
| | comp=Z,7.1nm,0.8s | | | | | | |
| VNA3 | | | | ⇓PcP | **PcP** | **17 20 25.9** | **+4.1** |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **76.79** | **177** | ⇑P | **P** | **17 20 13.5** | **+1.1** |
| | comp=Z,7.8nm,0.7s,baz=186,slow=4.8 | | | | | | |
| VNA2 | | | | ⇓PcP | **PcP** | **17 20 25.8** | **+2.1** |
| | comp=Z,8.6nm,0.9s,baz=180,slow=4.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **77.02** | **176** | ⇑P | **P** | **17 20 14.3** | **+0.7** |
| | comp=Z,9.9nm,1.0s | | | | | | |
| VNA1 | | | | ⇓PcP | **PcP** | **17 20 25.9** | **+1.3** |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **80.19** | **325** | P | **P** | **17 20 30.8** | **-0.8** |
| | comp=Z,6.5nm,1.0s,baz=157,slow=4.4,SNR=15 | | | | | | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **80.19** | **325** | P | **P** | **17 20 31.3** | **-0.3** |
| MAJO | | | | IAmb | IAmb | 17 20 32.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PLCA** | **Paso Flores** | **80.73** | **132** | P | **P** | **17 20 35.9** | **+1.1** |
| | comp=Z,3.1nm,1.0s,baz=180,slow=7.1,SNR=5.5 | | | | | | |
| PLCA | | | | LR | LR | 17 49 19.3 | |
| | comp=Z,48nm,18.7s,baz=208,slow=30 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **81.42** | **318** | P | **P** | **17 20 37.7** | **-0.5** |
| **JNU** | **Nakatsue** | **81.42** | **318** | LR | LR | 17 52 31.0 | |
| | comp=Z,14nm,18.8s,baz=157,slow=33 | | | | | | |
| **ASAJ** | **Asahikawa** | **84.44** | **332** | LR | LR | 17 57 19.5 | |
| | comp=Z,33nm,18.6s,baz=178,slow=35 | | | | | | |
| **LPIG** | **La Paz** | **85.00** | **58** | LR | LR | 17 50 09.7 | |
| | comp=Z,50nm,21.2s,baz=210,slow=30 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **85.03** | **355** | LR | LR | 17 51 05.7 | |
| | comp=Z,80nm,21.1s,baz=155,slow=30 | | | | | | |
| **TJN** | **Taejon** | **85.77** | **318** | P | **P** | **17 21 00.8** | **+0.4** |
| **KSRS** | **Korea Array** | **86.23** | **319** | P | **P** | **17 21 03.4** | **+0.7** |
| | comp=Z,8.4nm,0.8s,baz=143,slow=5.6,SNR=42 | | | | | | |
| KSRS | | | | LR | LR | 17 59 52.9 | |
| | comp=Z,13nm,18.1s,baz=145,slow=36 | | | | | | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **86.24** | **319** | P | **P** | **17 21 03.3** | **+0.6** |
| **KS19** | **Wonju Array Si** | **86.29** | **319** | P | **P** | **17 21 03.5** | **+0.5** |
| **GSI** | **Gununggsitoli** | **86.62** | **274** | P | **P** | **17 21 04.9** | **-0.4** |
| **PFO** | **Pinyon Flats O** | **87.03** | **47** | LR | LR | 17 56 02.0 | |
| | comp=Z,56nm,18.0s,baz=265,slow=33 | | | | | | |
| **ISA** | **Isabella, Lake** | **87.21** | **44** | P | **P** | **17 21 09.4** | **+1.7** |
| **CMB** | **Columbia Colle** | **87.76** | **41** | IAmb | IAmb | 17 21 12.6 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **GSC** | **Goldstone, Bar** | **87.96** | **45** | IAmb | IAmb | 17 21 14.3 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **87.98** | **39** | P | **P** | **17 21 13.1** | **+1.8** |
| **MDPB** | **Devils Postpil** | **88.22** | **42** | IAmb | IAmb | 17 21 14.8 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **88.25** | **42** | IAmb | IAmb | 17 21 15.8 | |
| | comp=Z,15nm,1.6s | | | | | | |
| **WAKR** | **Walker** | **88.62** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **HNS** | **HongShan** | **94.00** | **312** | ‖P | | **P** | | **17 21 41.0** | **+1.8** | |
| HNS | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| **BMO** | **Blue Mountains** | **94.15** | **38** | IAmb | | IAmb | | 17 21 41.8 | | |
| | comp=Z,13nm,1.9s | | | | | | | | | |
| **ANMO** | **Albuquerque** | **94.27** | **51** | LR | | LR | | 17 59 34.4 | | |
| | comp=Z,50nm,18.3s,baz=322,slow=33 | | | | | | | | | |
| **BBB** | **Bella Bella** | **94.48** | **28** | LR | | LR | | 17 55 10.7 | | |
| | comp=Z,30nm,20.4s,baz=210,slow=30 | | | | | | | | | |
| **HLID** | **Hailey** | **94.84** | **40** | P | | **P** | | **17 21 44.1** | **+0.9** | |
| **XAN** | **Xi'an** | **95.79** | **307** | ‖P | | **P** | | **17 21 50.0** | **+2.4** | |
| XAN | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| **NEW** | **Newport** | **96.55** | **36** | LR | | LR | | 17 57 45.4 | | |
| | comp=Z,42nm,20.6s,baz=188,slow=31 | | | | | | | | | |
| **PZH** | **PanZhiHua** | **96.76** | **297** | P | | **P** | | **17 21 55.1** | **+2.8** | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | | |
| **LPAZ** | **La Paz** | **96.77** | **114** | LR | | LR | | 17 56 30.3 | | |
| | comp=Z,28nm,21.5s,baz=193,slow=30 | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **97.08** | **43** | P | | **P** | | **17 21 53.5** | **0.0** | |
| | comp=Z,0.6nm,0.7s,baz=207,slow=3.7,SNR=5.7 | | | | | | | | | |
| PDAR | | | | LR | | LR | | 17 58 47.5 | | |
| | comp=Z,27nm,18.7s,baz=214,slow=31 | | | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **98.03** | **314** | *e*P | | **P** | | **17 21 56.6** | **-1.1** | |
| HHC | | | | sP | | pwP | | 17 22 04.8 | -5.8 | |
| HHC | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **99.65** | **13** | P | | **Pdif** | | **17 22 04.2** | **+0.1** | |
| | comp=Z,0.5nm,0.9s,baz=240,slow=7.1,SNR=4.3 | | | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | | | |
| **WMQ** | **Urumqi** | **114.92** | **307** | *e*PKP | | **PKiKP** | | **17 27 03.1** | **+1.1** | |
| **MKAR** | **Makanchi Array** | **119.50** | **309** | PKPdf | | **PKPdf** | | **17 27 09.9** | **-0.8** | |
| **MKAR** | **Makanchi Array** | **119.50** | **309** | PKP | | **PKPdf** | | **17 27 09.8** | **-0.9** | |
| | comp=Z,2.0nm,0.9s,baz=59,slow=4.0,SNR=14 | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **119.89** | **318** | PKP | | **PKPdf** | | **17 27 09.8** | **-1.3** | |
| | comp=Z,1.3nm,0.8s,baz=204,slow=3.3,SNR=5.5 | | | | | | | | | |
| **KSH** | **Kashi** | **121.76** | **299** | PKP | | **PKiKP** | | **17 27 17.1** | **+1.6** | |
| **KURK** | **Kurchatov** | **122.84** | **313** | PKPdf | | **PKPdf** | | **17 27 16.3** | **-0.6** | |
| **KURBB** | **Kurchatov Arra** | **122.87** | **313** | PKP | | **PKPdf** | | **17 27 16.3** | **-0.6** | |
| | comp=Z,3.3nm,0.2s,baz=108,slow=2.1,SNR=15 | | | | | | | | | |
| **KKAR** | **Karatay Array** | **126.66** | **302** | PKPdf | | **PKPdf** | | **17 27 24.0** | **-0.5** | |
| **ARCES** | **ARCESS Array B** | **140.60** | **348** | PKP | | **PKPdf** | | **17 27 51.6** | **+1.8** | |
| | comp=Z,5.6nm,0.9s,baz=25,slow=9.0,SNR=3.8 | | | | | | | | | |
| **KBZ** | **Khabaz** | **146.70** | **302** | PKPbc | | **PKPab** | | **17 28 04.3** | **+0.2** | |
| | comp=Z,11nm,0.9s,baz=228,slow=4.8,SNR=14 | | | | | | | | | |
| **KEF** | **Keuruu** | **146.93** | **341** | *e*P | | **PKPbc** | | **17 28 02.7** | **-0.3** | |
| **FINES** | **FINESS Array B** | **147.17** | **339** | PKPbc | | **PKPbc** | | **17 28 03.9** | **+0.2** | |
| | comp=Z,14nm,0.7s,baz=55,slow=3.8,SNR=59 | | | | | | | | | |
| **MEF** | **Metsahovi** | **148.65** | **339** | *e*P | | **PKPbc** | | **17 28 08.5** | **+0.8** | |
| **ARBE** | **Arbavere** | **148.76** | **337** | *e*P | | **PKPbc** | | **17 28 07.0** | **-1.0** | |
| **MTSE** | **Matsula** | **150.03** | **338** | *e*P | | **PKPbc** | | **17 28 12.1** | **+0.9** | |
| **NB2** | **NORSAR Subarra** | **150.74** | **352** | PKP | | **PKPbc** | | **17 28 13.7** | **+0.8** | |
| | comp=Z,2.8nm,0.7s,baz=16,slow=2.6 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **150.74** | **352** | PKPbc | | **PKPbc** | | **17 28 12.8** | **-0.1** | |
| | comp=Z,6.9nm,0.9s,baz=13,slow=4.1,SNR=21 | | | | | | | | | |
| **HFS** | **Hagfors** | **151.25** | **349** | PKPbc | | **PKPbc** | | **17 28 14.2** | **+0.2** | |
| | comp=Z,9.7nm,0.9s,baz=11,slow=1.5,SNR=11 | | | | | | | | | |
| **VSVD** | **Vaisvydziai** | **152.11** | **334** | *e*P | | **PKiKP** | | **17 28 17.7** | **+1.3** | |
| **PABE** | **Paberze** | **152.46** | **334** | *e*P | | **PKiKP** | | **17 28 18.1** | **+1.0** | |
| **MMAI** | **Mount Meron Ar** | **152.57** | **280** | PKPbc | | **PKiKP** | | **17 28 19.9** | **+1.6** | |
| | comp=Z,2.0nm,0.4s,baz=75,slow=3.1,SNR=3.9 | | | | | | | | | |
| MMAI | | | | PKPab | | **pPKPab** | | **17 28 29.9** | **-0.3** | |
| | comp=Z,5.2nm,0.6s,baz=92,slow=5.1,SNR=4.7 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **153.21** | **321** | PKPbc | | **PKPbc** | | **17 28 18.4** | **-0.3** | |
| | comp=Z,5.7nm,0.8s,baz=50,slow=2.1,SNR=10 | | | | | | | | | |
| AKASG | | | | PKPab | | **PKPab** | | **17 28 30.9** | **+0.4** | |
| | comp=Z,10.0nm,0.8s,baz=50,slow=3.9,SNR=20 | | | | | | | | | |
| **DBIC** | **Dimbokro** | **153.51** | **163** | PKPbc | | **PKPbc** | | **17 28 21.1** | **+0.6** | |
| | comp=Z,6.7nm,0.9s,baz=277,slow=5.8,SNR=4.0 | | | | | | | | | |
| DBIC | | | | PKPab | | **PKPab** | | **17 28 33.0** | **+0.3** | |
| | comp=Z,5.3nm,0.8s,baz=186,slow=9.9,SNR=4.2 | | | | | | | | | |
| **SUW** | **Suwalki** | **153.88** | **332** | *e*P | | **PKiKP** | | **17 28 21.0** | **+0.9** | |
| **BRTR** | **Keskin Array B** | **154.05** | **295** | PKPbc | | **PKPbc** | | **17 28 21.9** | **+0.7** | |
| | comp=Z,1.1nm,0.8s,baz=138,slow=5.2,SNR=4.9 | | | | | | | | | |
| BRTR | | | | PKPab | | **PKPab** | | **17 28 33.9** | **-0.8** | |
| | comp=Z,4.0nm,0.8s,baz=115,slow=5.4,SNR=11 | | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **157.86** | **324** | *e*PKP | | **PKPab** | | **17 28 51.2** | **+0.7** | |
| **TORD** | **Torodi Ar. Bea** | **160.89** | **177** | PKP | | **PKPdf** | | **17 28 22.9** | **+0.8** | |
| | comp=Z,1.1nm,1.0s,baz=236,slow=0.8,SNR=4.6 | | | | | | | | | |
| TORD | | | | PKPab | | **sPKPab** | | **17 29 06.8** | **-0.4** | |
| **CONA** | **Conrad Observa** | **161.51** | **331** | *ep*PKP | | **PKPab** | | **17 29 07.7** | **+1.2** | |
| | comp=Z,5.1nm,1.0s | | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **161.51** | **330** | *e*PKP | | **PKPab** | | **17 29 07.4** | **+1.0** | |
| | comp=Z,7.0nm,1.1s | | | | | | | | | |
| **GERES** | **GERESS Array B** | **161.56** | **337** | PKPab | | **PKPab** | | **17 29 05.7** | **-0.9** | |
| | comp=Z,1.6nm,1.0s,baz=47,slow=3.4,SNR=4.9 | | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **162.56** | **335** | *ep*PKP | | **PKPab** | | **17 29 12.4** | **+1.4** | |
| | comp=Z,5.6nm,1.3s | | | | | | | | | |
| **SOKA** | **Soboth** | **162.85** | **330** | *e*PKP | | **PKPab** | | **17 29 12.9** | **+0.5** | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| **MYKA** | **Terra Mystica** | **163.45** | **333** | *e*PKP | | **PKPab** | | **17 29 13.5** | **-1.5** | |
| | comp=Z,4.2nm,0.9s | | | | | | | | | |
| **WTTA** | **Wattenberg** | **163.61** | **338** | *e*PKP | | **PKPab** | | **17 29 16.3** | **+0.5** | |
| | comp=Z,7.1nm,1.6s | | | | | | | | | |
| **RETA** | **Reutte** | **163.67** | **340** | *ep*PKP | | **PKPab** | | **17 29 17.1** | **+1.1** | |
| | comp=Z,0.1nm,0.2s | | | | | | | | | |
| **MOTA** | **Moosalm** | **163.70** | **339** | *i* PKP | | **PKPab** | | **17 29 16.8** | **+0.6** | |
| | comp=Z,6.6nm,1.1s | | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **163.77** | **335** | *e*PKP | | **PKPab** | | **17 29 16.1** | **-0.3** | |
| | comp=Z,6.4nm,1.0s | | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **163.78** | **339** | *ep*PKP | | **PKPab** | | **17 29 17.6** | **+1.1** | |
| | comp=Z,4.5nm,0.8s | | | | | | | | | |
| **DAVA** | **Damuels** | **164.10** | **342** | *e*PKP | | **PKPab** | | **17 29 15.0** | **-2.9** | |
| | comp=Z,3.7nm,1.1s | | | | | | | | | |
| **FETA** | **Feichten** | **164.10** | **340** | *e*PKP | | **PKPab** | | **17 29 18.6** | **+0.7** | |
| | comp=Z,3.8nm,1.1s | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **170.87** | **35** | PKPab | | **PKPab** | | **17 29 47.6** | **-0.3** | |
| | comp=Z,1.0nm,1.0s,baz=324,slow=4.5,SNR=4.7 | | | | | | | | | |

*IDC **11** 17:25:59.4±1.1,31.°18S×59.°37E, h0km, mb3.9/7, mbtmp3.9/7, Error ellipse: s-maj=35.5km s-min=29.6km az=67.0*

**ISC 11 17:26:01.1±1.0, 31.°2S±0.°2×59.°4E±0.°2, h10km, n16, σ1s13/7, mb3.9/7, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H04N2** | **CROZET ISLANDS** | **16.07** | **199** | T | T | 17 45 25.4 | |
| | baz=22,slow=75,SNR=609 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **16.07** | **199** | T | T | 17 45 24.7 | |
| | baz=22,slow=75,SNR=495 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **16.09** | **199** | T | T | 17 45 25.1 | |
| | baz=22,slow=75,SNR=640 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.43** | **30** | T | T | 17 59 54.4 | |
| | baz=206,slow=76,SNR=17 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.44** | **30** | T | T | 17 59 57.2 | |
| | baz=206,slow=76,SNR=12 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.45** | **30** | T | T | 17 59 57.8 | |
| | baz=206,slow=76,SNR=25 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **45.60** | **110** | T | T | 18 23 30.7 | |
| | baz=258,slow=75,SNR=11 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **45.61** | **110** | T | T | 18 23 34.1 | |
| | baz=258,slow=75,SNR=9.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **45.62** | **110** | T | T | 18 23 33.8 | |
| | baz=258,slow=75,SNR=13 | | | | | | |
| **QSPA** | **South Pole Qui** | **58.99** | **180** | P | **P** | **17 36 01.3** | **+0.5** |
| | 2.8nm,1.1s,baz=246,slow=3.8,SNR=4.4 | | | | | | |
| | 2.8nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **62.30** | **43** | P | **P** | **17 36 25.4** | **+1.6** |
| | 1.0nm,0.6s,baz=223,slow=8.7,SNR=5.5 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **65.49** | **104** | P | **P** | **17 36 44.1** | **-0.8** |
| | 0.7nm,0.9s,baz=244,slow=6.0,SNR=7.3 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **67.45** | **100** | P | **P** | **17 36 56.8** | **-0.7** |
| | 0.8nm,0.9s,baz=236,slow=5.6,SNR=3.4 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **70.72** | **299** | P | **P** | **17 37 17.6** | **-0.1** |
| | 0.3nm,0.4s,baz=142,slow=4.9,SNR=2.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **80.33** | **16** | P | **P** | **17 38 11.2** | **-0.9** |
| | 0.6nm,0.9s,baz=205,slow=6.4,SNR=3.8 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.19** | **12** | P | **P** | **17 38 26.5** | **-0.6** |
| | 0.9nm,0.2s,baz=210,slow=5.6,SNR=5.1 | | | | | | |
| | 0.9nm,0.2s | | | | | | |

*IDC **11** 17:32:53.3±1.0,4.°97N×62.°27E, h0km, mb3.9/9, mbtmp3.9/9, Error ellipse: s-maj=31.4km s-min=23.9km az=37.0*

**ISC 11 17:32:54.7±1.2, 5.°0N±0.°2×62.°3E±0.°2, h10km, n10, σ1s05/10, mb4.0/9, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **45.14** | **19** | P | **P** | **17 41 12.7** | **+1.2** |
| | 0.4nm,0.6s,baz=217,slow=9.1,SNR=1.7 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.53** | **14** | P | **P** | **17 41 30.0** | **-0.1** |
| | 1.0nm,0.2s,baz=209,slow=7.4,SNR=2.0 | | | | | | |
| | 1.0nm,0.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.20** | **17** | P | **P** | **17 42 05.1** | **-0.5** |
| | 1.0nm,0.7s,baz=205,slow=6.4,SNR=4.1 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.97** | **34** | P | **P** | **17 42 41.7** | **+1.1** |
| | 0.7nm,0.7s,baz=234,slow=8.7,SNR=3.6 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.25** | **282** | P | **P** | **17 43 04.1** | **+0.2** |
| | 1.3nm,1.1s,baz=92,slow=7.1,SNR=4.7 | | | | | | |
| | 1.3nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **67.75** | **52** | P | **P** | **17 43 51.0** | **-1.8** |
| | 1.0nm,0.8s,baz=265,slow=7.3,SNR=4.6 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **68.63** | **311** | P | **P** | **17 43 58.5** | **+0.1** |
| | 0.4nm,0.6s,baz=78,slow=5.7,SNR=4.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **74.96** | **112** | P | **P** | **17 44 37.2** | **+0.4** |
| | 4.3nm,0.8s,baz=289,slow=5.3,SNR=18 | | | | | | |
| | 4.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **75.31** | **116** | P | **P** | **17 44 39.5** | **+0.7** |
| | 2.5nm,0.8s,baz=287,slow=5.4,SNR=21 | | | | | | |
| | 2.5nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **143.34** | **339** | PKP | **PKPdf** | **17 52 29.4** | **-1.0** |
| | 0.3nm,0.9s,baz=42,slow=4.1,SNR=2.4 | | | | | | |

**TEH 11 17:34:07.3, 36.°77N×54.°94E, h6km±136km, ML3.6, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IMND** | **Minoodasht** | **0.61** | **38** | Pg | Pb | 17 34 19.8 | -0.7 |
| **IGLO** | **Ghaloghah** | **0.93** | **253** | Pg | Pb | 17 34 26.3 | +0.3 |
| **MRVT** | **Maraveh tapeh** | **1.28** | **46** | Pg | Pb | 17 34 32.2 | +0.4 |
| **IANJ** | **Anjilo** | **1.54** | **213** | Pg | Pb | 17 34 36.7 | -0.2 |
| **IALA** | **Alasht** | **1.85** | **249** | Pn | Pb | 17 34 43.0 | +0.3 |
| **IFIR** | **Firoozkooh** | **2.10** | **238** | Pn | Pb | 17 34 46.3 | +0.4 |
| **ILAS** | **Lasjerd** | **2.12** | **230** | Pn | Pb | 17 34 46.3 | 0.0 |
| **IPRN** | **Peran** | **2.16** | **257** | Pn | Pb | 17 34 47.6 | +0.7 |
| **SBZV** | **Sabzevar** | **2.19** | **99** | Pn | Pb | 17 34 47.6 | +0.2 |
| **TAPT** | **Tabas- Tapeh t** | **2.61** | **136** | Pn | Pb | 17 34 52.5 | -2.1 |
| **IDMV** | **Damavand** | **2.64** | **244** | Pn | Pb | 17 34 54.4 | -0.7 |
| **MZPU** | **Pul - Mazandar** | **2.73** | **264** | Pn | Pb | 17 34 55.8 | -0.8 |
| **IEMG** | **Emamgholi** | **3.04** | **77** | Pn | Pb | 17 34 59.1 | -2.8 |
| **IAKL** | **Akhelmad** | **3.08** | **92** | Pn | Pb | 17 34 59.7 | -2.9 |
| **KLST** | **Kelardasht - M** | **3.13** | **266** | Pn | Pb | 17 35 01.0 | -2.5 |
| **IVRN** | **Varamin** | **3.15** | **237** | Pn | Pn | 17 35 00.5 | +3.0 |
| **ISFB** | **Sefidab** | **3.27** | **223** | Pn | Pn | 17 35 01.4 | +2.3 |
| **KRSH** | **Karshahi** | **3.62** | **220** | Pn | Pn | 17 35 06.4 | +2.4 |
| **TKDS** | **Koohdasht(Taba** | **3.62** | **150** | Pn | Pn | 17 35 07.2 | +3.1 |
| **IKRD** | **Kardeh** | **3.67** | **89** | Pn | Pn | 17 35 07.7 | +2.8 |
| **ANAR** | **Anarak** | **3.71** | **196** | Pn | Pn | 17 35 07.6 | +2.3 |
| **TPRV** | **Parvdeh(Tabas** | **4.00** | **158** | Pn | Pn | 17 35 12.8 | +3.5 |
| **QAMS** | **Qamsar** | **4.19** | **225** | Pn | Pn | 17 35 14.4 | +2.3 |
| **IZEF** | **Zefreh** | **4.42** | **210** | Pn | Pn | 17 35 18.9 | +3.7 |
| **TBJM** | **Torbat-e-JAM** | **4.62** | **107** | Pn | Pn | 17 35 21.2 | +3.3 |
| **AFRZ** | **Afriz** | **4.72** | **134** | Pn | Pn | 17 35 21.3 | +2.0 |
| **IMEH** | **Mehriz** | **5.38** | **183** | Pn | Pn | 17 35 30.9 | +2.6 |
| **IRAM** | **Ramesheh** | **5.38** | **204** | Pn | Pn | 17 35 31.8 | +3.4 |
| **BSRN** | **Basiran** | **5.92** | **143** | Pn | Pn | 17 35 38.0 | +2.4 |
| **GRMI** | **Germi** | **5.94** | **292** | Pn | Pn | 17 35 39.7 | +3.9 |
| **IHRS** | **Heris** | **6.46** | **286** | Pn | Pn | 17 35 46.3 | +3.1 |

*IDC **11** 17:35:57.3±0.8,4.°88N×62.°18E, h0km, mb4.1/13, mbtmp4.1/13, MS3.6/13, Error ellipse: s-maj=22.9km s-min=19.6km az=20.0*

**ISC 11 17:35:59.9±0.8, 4.°9N±0.°2×62.°2E±0.°1, h16km, n26, σ0s96/14, mb4.0/13, MS3.6/12, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALK** | **Pallekele** | **18.59** | **82** | LR | LR | 17 45 44.5 | |
| | comp=Z,147nm,21.0s,baz=17,slow=32 | | | | | | |
| **MBAR** | **Mbarara** | **31.86** | **261** | LR | LR | 17 55 12.2 | |
| | comp=Z,61nm,18.1s,baz=55,slow=36 | | | | | | |
| **EIL** | **Elat** | **35.62** | **317** | LR | LR | 17 56 44.3 | |
| | comp=Z,67nm,18.0s,baz=65,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.36** | **66** | P | **P** | **17 43 22.1** | **+1.6** |
| | 0.6nm,0.4s,baz=254,slow=9.3,SNR=2.6 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **39.15** | **14** | LR | LR | 17 59 56.9 | |
| | comp=Z,58nm,21.0s,baz=211,slow=37 | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **42.52** | **339** | LR | LR | 18 01 42.2 | |
| | comp=Z,114nm,22.0s,baz=272,slow=36 | | | | | | |
| **BRTR** | **Keskin Array B** | **43.19** | **327** | P | **P** | **17 44 00.9** | **+0.6** |
| | 0.9nm,0.9s,baz=132,slow=7.6,SNR=3.2 | | | | | | |
| | 0.9nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.23** | **19** | P | **P** | **17 44 16.1** | **-0.3** |
| | 0.7nm,0.8s,baz=208,slow=9.4,SNR=4.8 | | | | | | |
| MKAR | | | | LR | LR | 18 03 22.2 | |
| | comp=Z,44nm,21.9s,baz=208,slow=36 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **46.33** | **228** | LR | LR | 18 00 16.1 | |
| | comp=Z,105nm,19.3s,baz=100,slow=32 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.60** | **14** | P | **P** | **17 44 35.4** | **+0.4** |
| | 1.0nm,0.2s,baz=209,slow=9.3,SNR=1.9 | | | | | | |
| | 1.0nm,0.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **48.46** | **7** | LR | LR | 18 05 44.6 | |
| | comp=Z,45nm,20.5s,baz=194,slow=37 | | | | | | |
| **BOSA** | **Boshof** | **48.69** | **225** | P | **P** | **17 44 44.3** | **+0.5** |
| | 14nm,1.4s,baz=75,slow=9.1,SNR=3.6 | | | | | | |
| | 14nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.28** | **17** | P | **P** | **17 45 09.7** | **-0.7** |
| | 1.3nm,0.7s,baz=232,slow=7.0,SNR=5.8 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **SUR** | **Sutherland** | **54.00** | **224** | LR | LR | 18 05 49.7 | |
| | comp=Z,87nm,21.3s,baz=134,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **57.07** | **34** | P | **P** | **17 45 45.9** | **+0.4** |
| | 1.2nm,0.7s,baz=222,slow=7.3,SNR=5.9 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.16** | **282** | P | **P** | **17 46 08.2** | **+0.7** |
| | 1.3nm,1.0s,baz=85,slow=5.6,SNR=4.6 | | | | | | |
| | 1.3nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **66.17** | **336** | P | **P** | **17 46 46.2** | **-0.3** |
| | 2.1nm,0.9s,baz=119,slow=7.4,SNR=1.9 | | | | | | |
| | 2.1nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **67.86** | **52** | P | **P** | **17 46 56.8** | **-0.9** |
| | 1.1nm,0.9s,baz=254,slow=6.1,SNR=4.5 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| **ESDC** | **Sonseca Array** | **68.59** | **311** | P | **P** | **17 47 01.9** | **-0.5** |
| | 1.0nm,0.8s,baz=84,slow=4.8,SNR=8.4 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **73.04** | **40** | LR | LR | 18 20 46.4 | |
| | comp=Z,55nm,18.3s,baz=233,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **75.04** | **112** | P | **P** | **17 47 41.3** | **-0.1** |
| | 7.1nm,0.8s,baz=290,slow=5.0,SNR=32 | | | | | | |
| | 7.1nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **75.27** | **27** | LR | LR | 18 21 59.5 | |
| | comp=Z,40nm,18.5s,baz=216,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **75.38** | **116** | P | **P** | **17 47 42.9** | **-0.5** |
| | 4.0nm,0.9s,baz=289,slow=5.9,SNR=27 | | | | | | |
| | 4.0nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **81.79** | **77** | LR | LR | 18 21 22.3 | |
| | comp=Z,21nm,20.9s,baz=176,slow=33 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **99.16** | **35** | LR | LR | 18 37 48.9 | |
| | comp=Z,22nm,18.1s,baz=296,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.35** | **339** | PKP | **PKPdf** | **17 55 32.4** | **-2.1** |
| | 0.5nm,0.9s,baz=352,slow=2.7,SNR=4.0 | | | | | | |

*IDC **11** 18:00:21.8±2.2,45.°26N×124.°75E, h0km, mbtmp3.0/4, ML2.9/3, Error ellipse: s-maj=22.1km s-min=19.9km az=1.0*

*KEA **11** 18:00:26.2,44.°77N×124.°79E, h3km, ML3.4/6*

**ISC 11 18:00:22.3±1.1, 45.°11N±0.°05×124.°84E±0.°07, h10km, n10, σ1s92/18, Northeastern China**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KGE** | **Kanggye** | **4.36** | **162** | Pg | **Pg** | **18 01 44.5** | **-1.4** |
| KGE | | | | Sg | **Sg** | **18 02 42.9** | **+0.4** |
| KGE | | | | AML | AML | | |
| | comp=N,11nm,0.6s | | | | | | |
| KGE | | | | AML | AML | | |
| | comp=E,198nm,0.7s | | | | | | |
| KGE | | | | AML | AML | | |
| | comp=Z,65nm,0.2s | | | | | | |
| **SUJ** | **Sinuiju** | **5.01** | **183** | Pg | **Pg** | **18 01 56.1** | **-2.2** |
| SUJ | | | | Sg | **Sg** | **18 03 03.1** | **-0.2** |
| SUJ | | | | AML | AML | | |
| | comp=N,57nm,0.1s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=E,78nm,0.3s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=Z,66nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **5.18** | **98** | Pn | **Pn** | **18 01 41.5** | **+1.6** |
| | comp=Z,0.4nm,0.3s,baz=282,slow=13,SNR=8.4 | | | | | | |
| USRK | | | | Pg | **Pg** | **18 01 58.8** | **-2.7** |
| | comp=Z,2.4nm,0.3s,baz=289,slow=17,SNR=16 | | | | | | |
| USRK | | | | Lg | Lg | 18 03 07.2 | |
| | comp=Z,2.1nm,0.3s,baz=282,slow=23,SNR=4.1 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **PYS** | **Pyongsong** | **5.91** | **172** | Pn | **Pn** | **18 01 50.4** | **+0.6** |
| PYS | | | | Pg | **Pg** | **18 02 12.8** | **-2.6** |
| PYS | | | | Sg | **Sg** | **18 03 32.2** | **+0.3** |
| PYS | | | | AML | AML | | |
| | comp=N,52nm,0.4s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=E,178nm,0.7s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=Z,45nm,0.7s | | | | | | |
| **PYAG** | **Pyongyang** | **6.10** | **173** | Pg | **Pg** | **18 02 16.8** | **-2.3** |
| PYAG | | | | Sg | **Sg** | **18 03 38.2** | **+0.3** |
| PYAG | | | | AML | AML | | |
| | comp=N,25nm,0.2s | | | | | | |
| PYAG | | | | AML | AML | | |
| | comp=E,37nm,0.5s | | | | | | |
| PYAG | | | | AML | AML | | |
| | comp=Z,21nm,0.4s | | | | | | |
| **WOSN** | **Wonsan** | **6.25** | **161** | Pg | **Pg** | **18 02 20.5** | **-1.4** |
| WOSN | | | | Sg | **Sg** | **18 03 43.6** | **+0.9** |
| WOSN | | | | AML | AML | | |
| | comp=N,27nm,0.5s | | | | | | |
| WOSN | | | | AML | AML | | |
| | comp=E,50nm,0.3s | | | | | | |
| WOSN | | | | AML | AML | | |
| | comp=Z,31nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **6.26** | **46** | Pn | **Pn** | **18 01 54.8** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=243,slow=18,SNR=3.1 | | | | | | |
| KLR | | | | Lg | Lg | 18 03 37.8 | |
| | comp=Z,2.5nm,0.3s,baz=328,slow=19,SNR=3.6 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **HJU** | **Haeju** | **7.10** | **174** | Pg | **Pg** | **18 02 35.0** | **-3.1** |
| HJU | | | | Sg | **Sg** | **18 04 12.2** | **+2.3** |
| HJU | | | | AML | AML | | |
| | comp=N,45nm,0.6s | | | | | | |
| HJU | | | | AML | AML | | |
| | comp=E,69nm,0.5s | | | | | | |
| HJU | | | | AML | AML | | |
| | comp=Z,28nm,0.4s | | | | | | |
| **KSRS** | **Korea Array** | **8.00** | **162** | Pn | **Pn** | **18 02 21.4** | **+2.9** |
| | comp=Z,0.1nm,0.3s,baz=338,slow=14,SNR=2.2 | | | | | | |
| KSRS | | | | Pg | Pg | 18 02 52.5 | -2.9 |
| | comp=Z,1.1nm,0.3s,baz=346,slow=18,SNR=21 | | | | | | |
| KSRS | | | | Lg | Lg | 18 04 39.4 | |
| | comp=Z,2.3nm,0.3s,baz=339,slow=30,SNR=9.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **13.00** | **289** | Pn | **Pn** | **18 03 27.4** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=98,slow=16,SNR=0.9 | | | | | | |
| SONM | | | | Lg | Lg | 18 07 08.3 | |
| | comp=Z,0.2nm,0.3s,baz=96,slow=26,SNR=5.3 | | | | | | |

**IDC 11 18:00:38.4±2.0, 1.°58S×126.°27E, h0km, mb3.1/2, mbtmp3.1/3, ML3.4/1, Error ellipse: s-maj=174.6km s-min=27.9km az=65.0, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **19.88** | **157** | P | P | 18 05 11.7 | +0.2 |
| | 0.1nm,0.3s,baz=336,slow=11,SNR=5.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **23.17** | **162** | P | P | 18 05 46.7 | -0.1 |
| | 0.1nm,0.4s,baz=344,slow=11,SNR=4.9 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.69** | **327** | P | P | 18

**ISC 11 18:17:45.2**±1.2,**9.0S**±0.1×**123.56E**±0.09,**h100**km,**n8,**
σ2**9.44**/10,**Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **1.02** | **137** | P | **Pn** | **18 18 07.6** | **+1.7** |
| SOEI | | | | S | **Sn** | **18 18 24.1** | **+2.6** |
| **BATI** | **Baumata** | **1.20** | **175** | P | **Pn** | **18 18 09.2** | **+1.3** |
| BATI | | | | S | **Sn** | **18 18 27.1** | **+2.2** |
| **MMRI** | **Maumere** | **1.36** | **286** | P | **Pn** | **18 18 11.2** | **+1.4** |
| MMRI | | | | S | **Sn** | **18 18 30.1** | **+1.7** |
| **BASI** | **Baing, Sumba** | **3.18** | **248** | P | **Pn** | **18 18 33.1** | **-0.3** |
| **WRA** | **Warramunga Arr** | **15.06** | **137** | Pn | **Pn** | **18 21 08.3** | **-4.4** |
| | 0.1nm,0.3s,baz=316,slow=14,SNR=6.8 | | | | | | |
| WRA | | | | Sn | Sn | 18 23 41.8 | -17 |
| | 0.2nm,0.3s,baz=320,slow=23,SNR=2.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **17.62** | **147** | P | **P** | **18 21 43.0** | **-1.0** |
| | 0.2nm,0.3s,baz=325,slow=13,SNR=20 | | | | | | |
| ASAR | | | | S | Sn | 18 24 48.6 | -12 |
| | 0.4nm,0.6s,baz=319,slow=23,SNR=2.9 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **58.60** | **347** | P | P | 18 27 25.7 | -6.0 |
| | 0.3nm,0.7s,baz=165,slow=6.0,SNR=1.4 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.61** | **330** | P | **P** | **18 28 24.8** | **0.0** |
| | 0.2nm,0.6s,baz=113,slow=4.5,SNR=2.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*PDG **11** 18:23:38.6±0.1, 41.49N×20.17E, h13km, ML2.7/9, Error ellipse: s-maj=0.4km s-min=0.4km az=0.0*
*TIR **11** 18:23:40.1, 41.57N×20.17E, h25km±1km, Md3.2, Ml2.6*
*SKO **11** 18:23:41.5, 41.55N×20.09E, h4km, ML2.5*
*RHSSO **11** 18:23:41.0±0.7, 41.53N×20.17E, h5km±3km, ML2.8/13*
*THE **11** 18:23:41.8, 41.53N×20.19E, h3km±1km, ML2.2/3, Error ellipse: s-maj=3.5km s-min=0.8km az=1.0*
*BEO **11** 18:23:42.1±0.4, 41.53N×20.19E, h6km±5km, ML2.2/11*

**ISC 11 18:23:40.2**±1.1, **41.53N**±0.02×**20.17E**±0.02, **h3**km±10km,
**n55,σ0.86**/105,**10C-4D, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.30** | **231** | P | **Pb** | **18 23 47.7** | **-0.5** |
| | baz=226 | | | | | | |
| TIR | | | | S | **Sb** | **18 23 52.4** | **-1.0** |
| | baz=226 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,1.3nm,0.4s,baz=226 | | | | | | |
| **TIR** | **Tirane** | **0.30** | **231** | P | **Pb** | **18 23 47.6** | **-0.6** |
| TIR | | | | S | **Sg** | **18 23 52.2** | **+2.4** |
| | comp=E,288nm,0.3s | | | | | | |
| **TIR** | **Tirane** | **0.30** | **231** | *e*Pg | **Pb** | **18 23 47.7** | **-0.5** |
| TIR | | | | *e*Sg | **Sb** | **18 23 53.7** | **+0.2** |
| **PUK** | **Puka** | **0.55** | **338** | P | **Pg** | **18 23 51.0** | **+0.2** |
| | baz=337 | | | | | | |
| PUK | | | | S | **Sg** | **18 23 58.8** | **+0.9** |
| | baz=337 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=E,3.5nm,0.3s,baz=337 | | | | | | |
| **OHR** | **Ohrid** | **0.63** | **132** | *i* Pg | **Pb** | **18 23 54.0** | **0.0** |
| OHR | | | | *e*Sg | **Sn** | **18 24 04.7** | **-2.1** |
| OHR | | | | *e*Lg | Lg | 18 24 07.6 | |
| | comp=E,138nm,0.4s | | | | | | |
| OHR | | | | *e*Lg | Lg | 18 24 08.6 | |
| | comp=N,224nm,0.4s | | | | | | |
| **BCI** | **Bajram Curri** | **0.83** | **355** | P | **Pg** | **18 23 55.8** | **-0.4** |
| | baz=355 | | | | | | |
| BCI | | | | S | **Sg** | **18 24 07.3** | **+0.2** |
| | baz=355 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=E,1.0nm,0.5s,baz=355 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.98** | **312**↑ | *i*Pg | **Pg** | **18 23 58.2** | **-0.9** |
| DRME | | | | *e*Sg | **Sg** | **18 24 12.6** | **+0.7** |
| **DRME** | **Dracevica, Mon** | **0.98** | **312**↓ | *i*Pg | **Pg** | **18 23 57.3** | **-1.8** |
| DRME | | | | *i* Sg | **Sb** | **18 24 13.4** | **+0.1** |
| **KBN** | **Korca** | **1.02** | **153** | P | **Pn** | **18 24 00.9** | **-0.6** |
| | baz=153 | | | | | | |
| KBN | | | | S | **Sn** | **18 24 15.5** | **-0.9** |
| | baz=153 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,0.6nm,0.6s,baz=153 | | | | | | |
| **PVY** | **Plav** | **1.07** | **352**↑ | *i*Pg | **Pg** | **18 23 59.1** | **-1.7** |
| PVY | | | | *i* Sg | **Sb** | **18 24 16.4** | **+0.5** |
| **PDG** | **Podgorica** | **1.13** | **323** | *e*Pg | **Pg** | **18 24 00.9** | **-0.9** |
| PDG | | | | *e*Sg | **Sb** | **18 24 18.5** | **+1.1** |
| **PDG** | **Podgorica** | **1.13** | **323**↓ | *i*Pg | **Pg** | **18 24 00.9** | **-0.9** |
| PDG | | | | *e*Sg | **Sg** | **18 24 17.2** | **+0.8** |
| **PDG** | **Podgorica** | **1.13** | **323**↑ | *i*Pg | **Pg** | **18 24 00.1** | **-1.7** |
| PDG | | | | *i* Sg | **Sb** | **18 24 17.9** | **+0.5** |
| **FNA** | **Florina** | **1.18** | **129** | P | **Pn** | **18 24 03.4** | **-0.2** |
| | baz=130 | | | | | | |
| FNA | | | | S | **Sn** | **18 24 20.2** | **0.0** |
| | baz=130 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.5nm,0.3s,baz=130 | | | | | | |
| **FNA** | **Florina** | **1.18** | **129** | P | **Pn** | **18 24 03.4** | **-0.2** |
| FNA | | | | S | **Sn** | **18 24 21.1** | **+0.9** |
| | comp=E,368nm,0.4s | | | | | | |
| **FNA** | **Florina** | **1.18** | **129** | *i* Pg | **Pn** | **18 24 03.5** | **-0.2** |
| FNA | | | | *e*Sg | **Sn** | **18 24 20.4** | **+0.2** |
| **NEST** | **Nestorio** | **1.30** | **149** | P | **Pb** | **18 24 06.3** | **+0.9** |
| NEST | | | | S | **Sn** | **18 24 24.4** | **+1.1** |
| | comp=E,82nm,0.5s | | | | | | |
| **BEY** | **Berane** | **1.35** | **351** | *i* Pg | **Pg** | **18 24 06.8** | **+0.7** |
| **IVA** | **Berane** | **1.35** | **351**↓ | *i*Pg | **Pn** | **18 24 05.0** | **-1.1** |
| IVA | | | | *i* Sg | **Sn** | **18 24 25.1** | **+0.5** |
| **CEME** | **Cevo** | **1.38** | **318**↑ | *i*Pg | **Pn** | **18 24 05.2** | **-1.2** |
| CEME | | | | *i* Sg | **Sn** | **18 24 26.1** | **+1.0** |
| **KOME** | **Kolasin** | **1.40** | **340**↓ | *i*Pg | **Pn** | **18 24 05.5** | **-1.3** |
| KOME | | | | *i* Sg | **Sn** | **18 24 26.9** | **+1.1** |
| **NKME** | **Niksic** | **1.53** | **324**↑ | *i*Pg | **Pn** | **18 24 07.4** | **-1.1** |
| NKME | | | | *i* Sg | **Sb** | **18 24 29.8** | **+0.8** |
| **SRN** | **Sarande** | **1.66** | **185** | P | **Pb** | **18 24 11.0** | **-0.3** |
| | baz=185 | | | | | | |
| SRN | | | | S | **Sg** | **18 24 34.8** | **+1.3** |
| | baz=185 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,0.2nm,0.5s,baz=185 | | | | | | |
| **SJES** | **Sjenica** | **1.73** | **355** | *e*Pn | **Pb** | **18 24 12.7** | **0.0** |
| SJES | | | | *e*Sn | **Sg** | **18 24 36.0** | **+0.1** |
| **SJES** | **Sjenica** | **1.73** | **355**↑ | *i*Pn | **Pb** | **18 24 12.2** | **-0.5** |
| SJES | | | | *e*Sn | **Sn** | **18 24 34.1** | **+0.1** |
| **BARS** | **Barje** | **1.77** | **43** | *e*Pn | **Pb** | **18 24 13.6** | **+0.2** |
| **BARS** | **Barje** | **1.77** | **43** | *i* Pn | **Pb** | **18 24 13.5** | **+0.2** |
| BARS | | | | *i* Sg | **Sg** | **18 24 38.0** | **+0.8** |
| **VAY** | **Valandovo** | **1.82** | **96** | *i* Pn | **Pg** | **18 24 14.9** | **-0.1** |
| VAY | | | | *e*Sn | **Sg** | **18 24 38.1** | **-0.4** |
| VAY | | | | *e*Lg | Lg | 18 24 43.7 | |
| | comp=E,32nm,0.6s | | | | | | |
| VAY | | | | *e*Lg | Lg | 18 24 48.4 | |
| | comp=N,45nm,0.8s | | | | | | |
| **SELS** | **Selova** | **1.82** | **22** | *e*Pn | **Pn** | **18 24 12.4** | **-0.1** |
| SELS | | | | *e*Sn | **Sg** | **18 24 38.5** | **-0.4** |
| **BRY** | **Bratogost** | **1.83** | **319** | *e*Pn | **Pn** | **18 24 12.8** | **+0.1** |
| BRY | | | | *e*Sn | **Sn** | **18 24 36.6** | **+0.2** |
| **PLE** | **Pljevlja** | **1.89** | **342**↑ | *i*Pn | **Pn** | **18 24 12.1** | **-1.3** |
| PLE | | | | *i* Sn | **Sn** | **18 24 38.5** | **+0.7** |
| **UPM** | **Unac-Piva** | **1.91** | **331**↑ | *i*Pn | **Pn** | **18 24 14.7** | **+0.8** |
| UPM | | | | *e*Sn | **Sn** | **18 24 38.9** | **+0.3** |
| **UPM** | **Unac-Piva** | **1.91** | **331**↑ | *i*Pn | **Pn** | **18 24 12.5** | **-1.4** |
| UPM | | | | *i* Sn | **Sn** | **18 24 39.3** | **+0.7** |
| **SCTE** | **Santa Cesarea** | **1.95** | **222** | P | **Pb** | **18 24 16.2** | **-0.2** |
| | baz=222 | | | | | | |
| SCTE | | | | S | **Sb** | **18 24 42.3** | **+1.2** |
| | baz=222 | | | | | | |
| SCTE | | | | AMP | | | |
| | comp=E,0.1nm,0.6s,baz=222 | | | | | | |
| **BOSS** | **Bosilegrad** | **1.97** | **60** | *e*Pn | **Pb** | **18 24 16.5** | **-0.2** |
| BOSS | | | | *e*Sn | **Sb** | **18 24 41.4** | **-0.3** |
| **IGT** | **Igoumenitsa** | **2.00** | **176** | P | **Pb** | **18 24 16.4** | **-0.9** |
| | baz=176 | | | | | | |
| IGT | | | | S | **Sb** | **18 24 42.5** | **-0.1** |
| | baz=176 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=N,0.1nm,0.4s,baz=176 | | | | | | |
| **KLINJ** | **Klinje** | **2.01** | **325** | *e*Pn | **Pn** | **18 24 15.8** | **+0.6** |
| KLINJ | | | | *e*Sn | **Sn** | **18 24 41.1** | **+0.2** |
| **PEHC** | **Pehcevo** | **2.06** | **82** | *i* Pn | **Pn** | **18 24 15.4** | **-0.4** |
| PEHC | | | | *e*Sn | **Sg** | **18 24 46.0** | **-0.4** |
| PEHC | | | | *e*Lg | Lg | 18 24 48.6 | |
| | comp=N,59nm,0.8s | | | | | | |
| PEHC | | | | *e*Lg | Lg | 18 24 53.9 | |
| | comp=E,44nm,0.8s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNT** | **Kendrikon** | **2.09** | **99** | *i* Pn | **Pn** | **18 24 16.4** | **+0.4** |
| KNT | | | | *e*Sn | **Sb** | **18 24 45.3** | **+0.3** |
| **RUDO** | **Rudo** | **2.17** | **344** | *e*Pn | **Pn** | **18 24 17.2** | **0.0** |
| RUDO | | | | *e*Sn | **Sn** | **18 24 44.8** | **+0.3** |
| **KKB** | **Krupnik** | **2.24** | **81** | *i* Pn | **Pn** | **18 24 19.3** | **+1.2** |
| KKB | | | | *e*Sn | **Sb** | **18 24 49.1** | **-0.2** |
| **STON** | **Ston** | **2.27** | **307** | *e*Pn | **Pn** | **18 24 19.4** | **+0.8** |
| STON | | | | *e*Sn | **Sn** | **18 24 47.6** | **+0.5** |
| **BOVS** | **Bovan** | **2.38** | **28** | *e*Pn | **Pn** | **18 24 21.6** | **+1.4** |
| BOVS | | | | *e*Sn | **Sn** | **18 24 50.4** | **+0.5** |
| **GRUS** | **Gruza** | **2.39** | **9** | *e*Pn | **Pn** | **18 24 20.6** | **+0.4** |
| **BBLS** | **Lazi&#263i** | **2.40** | **347** | *e*Pn | **Pn** | **18 24 22.4** | **+2.0** |
| BBLS | | | | *e*Sn | **Sb** | **18 24 52.9** | **-1.1** |
| **BBLS** | **Lazi&#263i** | **2.40** | **347** | *e*Pn | **Pn** | **18 24 20.9** | **+0.5** |
| BBLS | | | | *e*Sn | **Sn** | **18 24 51.4** | **+1.1** |
| **ZAPS** | **Zavoj** | **2.52** | **46** | *e*Pn | **Pb** | **18 24 24.7** | **-1.4** |
| **DIVS** | **Divibare** | **2.57** | **357** | *e*Pn | **Pn** | **18 24 23.6** | **+0.8** |
| DIVS | | | | *e*Sn | **Sn** | **18 24 55.8** | **+1.3** |
| **HAPS** | **Han Pijesak,Bl** | **2.70** | **341** | *e*Pn | **Pn** | **18 24 25.2** | **+0.5** |
| HAPS | | | | *e*Sn | **Sn** | **18 24 58.5** | **+0.6** |
| **TEKS** | **Tekeris** | **3.05** | **351** | *e*Pn | **Pn** | **18 24 29.7** | **+0.3** |
| TEKS | | | | *e*Sn | **Sn** | **18 25 06.7** | **+0.3** |
| **KUBS** | **Kucevo** | **3.08** | **20** | *e*Pn | **Pn** | **18 24 29.6** | **-0.2** |
| **FRGS** | **Fruska Gora** | **3.63** | **356** | *e*Pn | **Pn** | **18 24 37.8** | **+0.5** |
| FRGS | | | | *e*Sn | **Sn** | **18 25 20.3** | **-0.4** |
| **BLY** | **Banja Luka** | **3.89** | **327** | *e*Pn | **Pn** | **18 24 41.3** | **+0.5** |
| BLY | | | | *e*Sn | **Sn** | **18 25 26.1** | **-0.8** |
| **A050A** | **Klekovaca** | **3.98** | **319** | *e*Pn | **Pn** | **18 24 43.0** | **+0.9** |
| A050A | | | | *e*Sn | **Sn** | **18 25 28.2** | **-1.0** |
| **A051A** | **Mrakovica** | **4.21** | **327**↑ | *i*Pn | **Pn** | **18 24 45.3** | **-0.1** |
| A051A | | | | *e*Sn | **Sn** | **18 25 33.7** | **-1.4** |

*IDC **11** 18:27:39.8±0.4, 81.57N×118.48W, h0km, mb4.2/27, mbtmp4.3/29, ML4.4/2, MS3.2/33, Error ellipse: s-maj=12.5km s-min=10.8km az=71.0*
*NEIC **11** 18:27:39.4±2.1, 81.32N±0.07×118.1W±0.5, h10km±1km, mb4.2/123, Error ellipse: s-maj=13.8km s-min=10.0km az=323.0*
*OTT **11** 18:27:43.1±0.2, 81.34N×118.16W, h18km, ML4.6/7, 400km northwest from Isachsen, Nu*

**ISC 11 18:27:40.3**±0.3, **81.30N**±0.04×**118.70W**±0.05, **h10**km,
**n504,σ1.97**/497,**mb4.3**/62,**MS3.2**/31,**1C, Arctic Ocean**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EUNU** | **Eureka** | **5.33** | **87** | | **Pn** | **18 28 59.4** | **-0.5** |
| EUNU | | | | Sn | **Sn** | **18 29 56.2** | **-5.1** |
| **EUNU** | **Eureka** | **5.33** | **87** | PN | **Pn** | **18 29 00.1** | **+0.2** |
| EUNU | | | | SN | **Sn** | **18 29 57.0** | **-4.3** |
| EUNU | | | | Trac | | 18 30 00.1 | |
| | comp=Z,67nm,0.5s | | | | | | |
| **A36M** | **Sachs Harbour** | **9.48** | **192** | Pn | **Pn** | **18 29 57.7** | **+1.2** |
| A36M | | | | Sn | **Sn** | **18 31 38.8** | **-4.2** |
| **A36M** | **Sachs Harbour** | **9.48** | **192** | P | **Pn** | **18 29 55.9** | **-0.6** |
| | baz=6.5 | | | | | | |
| **A36M** | **Sachs Harbour** | **9.48** | **192** | PN | **Pn** | **18 29 58.4** | **+1.9** |
| A36M | | | | SN | **Sn** | **18 31 38.2** | **-4.7** |
| A36M | | | | Trac | | 18 31 47.6 | |
| | comp=Z,26nm,0.3s | | | | | | |
| **TULEG** | **Thule** | **10.32** | **90** | | **Pn** | **18 30 05.3** | **-2.7** |
| TULEG | | | | Sn | Sn | 18 31 50.9 | -13 |
| **C36M** | **Paulatuk** | **12.09** | **189** | Pn | **Pn** | **18 30 32.5** | **+0.2** |
| **C36M** | **Paulatuk** | **12.09** | **189** | P | **Pn** | **18 30 31.8** | **-0.4** |
| | baz=4.3 | | | | | | |
| **C36M** | **Paulatuk** | **12.09** | **189** | PN | **Pn** | **18 30 33.7** | **+1.5** |
| C36M | | | | SN | **Sn** | **18 32 39.6** | **-7.2** |
| C36M | | | | Trac | | 18 33 06.2 | |
| | comp=Z,25nm,0.5s | | | | | | |
| **D28M** | **Stokes Point** | **12.91** | **213** | P | **Pn** | **18 30 43.0** | **-0.4** |
| | baz=14 | | | | | | |
| **C26K** | **Camden Bay** | **12.92** | **223** | P | **Pn** | **18 30 43.2** | **-0.3** |
| | baz=18,SNR=18 | | | | | | |
| **A21K** | **Barrow** | **13.01** | **242** | P | **Pn** | **18 30 44.4** | **-0.3** |
| | baz=25 | | | | | | |
| **C27K** | **Jago River** | **13.08** | **221** | P | **Pn** | **18 30 45.1** | **-0.6** |
| | baz=17,SNR=23 | | | | | | |
| **A22K** | **Sinclair Lake** | **13.08** | **239** | P | **Pn** | **18 30 46.2** | **+0.4** |
| | baz=24,SNR=39 | | | | | | |
| **D27M** | **Malcolm River** | **13.19** | **216** | | **Pn** | **18 30 46.3** | **-1.0** |
| **D27M** | **Malcolm River** | **13.19** | **216** | P | **Pn** | **18 30 47.0** | **-0.3** |
| | baz=15,SNR=35 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **13.50** | **236** | | **Pn** | **18 30 51.3** | **-0.2** |
| **B22K** | **Teshekpuk Lake** | **13.50** | **236** | P | **Pn** | **18 30 51.6** | **+0.2** |
| | baz=22,SNR=41 | | | | | | |
| **C24K** | **Franklin Bluff** | **13.52** | **228** | P | **Pn** | **18 30 51.8** | **+0.1** |
| | baz=19 | | | | | | |
| **INK** | **Inuvik** | **13.54** | **204** | Pn | **Pn** | **18 30 51.0** | **-1.0** |
| INK | | | | | **Sn** | **18 33 16.6** | **-5.6** |
| **INK** | **Inuvik** | **13.54** | **204** | Pn | **Pn** | **18 30 53.0** | **+1.0** |
| | 1.7nm,0.3s,baz=20,slow=13,SNR=6.2 | | | | | | |
| INK | | | | Sn | Sn | 18 33 13.1 | -9.1 |
| | 1.9nm,0.3s,baz=52,slow=14,SNR=3.1 | | | | | | |
| INK | | | | LR | LR | 18 39 15.7 | |
| | comp=Z,40nm,18.9s,baz=54,slow=50 | | | | | | |
| | 4.4nm,0.4s | | | | | | |
| **INK** | **Inuvik** | **13.54** | **204** | P | **Pn** | **18 30 51.5** | **-0.5** |
| | baz=9.8 | | | | | | |
| **INK** | **Inuvik** | **13.54** | **204** | PN | **Pn** | **18 30 53.4** | **+1.4** |
| INK | | | | SN | **Sn** | **18 33 15.2** | **-6.9** |
| INK | | | | Trac | | 18 33 24.9 | |
| | comp=Z,9.6nm,0.2s | | | | | | |
| **C23K** | **Itkillik River** | **13.63** | **231** | | **Pn** | **18 30 53.9** | **+0.6** |
| **C23K** | **Itkillik River** | **13.63** | **231** | P | **Pn** | **18 30 53.6** | **+0.4** |
| | baz=20,SNR=20 | | | | | | |
| **D25K** | **Kavik River** | **13.64** | **224** | | **Pn** | **18 30 52.2** | **-1.3** |
| **D25K** | **Kavik River** | **13.64** | **224** | P | **Pn** | **18 30 53.4** | **-0.1** |
| | baz=18,SNR=9.3 | | | | | | |
| **KULLO** | **Kullorsuaq** | **13.65** | **85** | PN | **Pn** | **18 30 52.1** | **-1.4** |
| KULLO | | | | Trac | | 18 33 17.5 | |
| | comp=Z,7.0nm,0.3s | | | | | | |
| **E28M** | **Babbage River** | **13.68** | **213** | | **Pn** | **18 30 53.2** | **-0.8** |
| **E28M** | **Babbage River** | **13.68** | **213** | P | **Pn** | **18 30 53.8** | **-0.3** |
| | baz=13,SNR=70 | | | | | | |
| **E29M** | **Blow River** | **13.76** | **211** | | **Pn** | **18 30 53.9** | **-1.1** |
| **E29M** | **Blow River** | **13.76** | **211** | P | **Pn** | **18 30 54.7** | **-0.4** |
| | baz=12,SNR=26 | | | | | | |
| **D24K** | **Happy Valley** | **14.07** | **228** | | **Pn** | **18 30 58.0** | **-1.3** |
| **D24K** | **Happy Valley** | **14.07** | **228** | P | **Pn** | **18 30 59.4** | **+0.1** |
| | baz=18,SNR=8.3 | | | | | | |
| **E27K** | **Coleen River** | **14.27** | **216** | Pn | **Pn** | **18 31 01.3** | **-0.8** |
| **E27K** | **Coleen River** | **14.27** | **216** | P | **Pn** | **18 31 02.2** | **+0.1** |
| | baz=14,SNR=28 | | | | | | |
| **B20K** | **Meade River** | **14.29** | **240** | | **Pn** | **18 31 03.7** | **+1.4** |
| **B20K** | **Meade River** | **14.29** | **240** | P | **Pn** | **18 31 02.8** | **+0.5** |
| | baz=23,SNR=11 | | | | | | |
| **B21K** | **Ikpikpuk River** | **14.32** | **236** | | **Pn** | **18 31 02.7** | **0.0** |
| **B21K** | **Ikpikpuk River** | **14.32** | **236** | P | **Pn** | **18 31 03.4** | **+0.7** |
| | baz=21,SNR=23 | | | | | | |
| **F30M** | **Barrier River** | **14.37** | **207** | P | **Pn** | **18 31 04.0** | **+0.5** |
| | baz=11,SNR=7.8 | | | | | | |
| **F31M** | **Tsiigehtchic** | **14.41** | **204** | Pn | **Pn** | **18 31 03.9** | **0.0** |
| **F31M** | **Tsiigehtchic** | **14.41** | **204** | P | **Pn** | **18 31 04.0** | **+0.1** |
| | baz=9.4 | | | | | | |
| **D23K** | **Nanushuk River** | **14.46** | **230** | P | **Pn** | **18 31 05.4** | **+0.8** |
| | baz=19 | | | | | | |
| **A19K** | **Wainwright** | **14.64** | **245** | P | **Pn** | **18 31 07.3** | **+0.3** |
| | baz=24 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **14.65** | **228** | | **Pn** | **18 31 07.4** | **+0.2** |
| **TOLK** | **Toolik Lake Re** | **14.65** | **228** | P | **Pn** | **18 31 07.2** | **0.0** |
| | baz=18,SNR=17 | | | | | | |
| **F28M** | **Old Crow** | **14.68** | **213** | Pn | **Pn** | **18 31 06.4** | **-1.3** |
| **F28M** | **Old Crow** | **14.68** | **213** | P | **Pn** | **18 31 07.4** | **-0.3** |
| | baz=13,SNR=9.5 | | | | | | |
| **D22K** | **Ayikyak River** | **14.78** | **233** | Pn | **Pn** | **18 31 09.6** | **+0.6** |
| **D22K** | **Ayikyak River** | **14.78** | **233** | P | **Pn** | **18 31 09.1** | **0.0** |
| | baz=20 | | | | | | |
| **G31M** | **Satah River** | **14.96** | **204** | | **Pn** | **18 31 10.5** | **-0.8** |
| **G31M** | **Satah River** | **14.96** | **204** | P | **Pn** | **18 31 11.0** | **-0.3** |
| | baz=9.3,SNR=14 | | | | | | |
| **F26K** | **Sheenjek River** | **14.99** | **219** | P | **Pn** | **18 31 11.5** | **-0.3** |
| | baz=15 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **15.03** | **207** | | **Pn** | **18 31 11.6** | **-0.8** |
| G30M | | | | IAmb | IAmb | 18 31 18.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **15.03** | **207** | P | **Pn** | **18 31 12.0** | **-0.3** |
| | baz=10,SNR=9.9 | | | | | | |
| **E24K** | **Your Creek** | **15.07** | **226** | | **Pn** | **18 31 12.0** | **-0.9** |
| E24K | | | | IAmb | IAmb | 18 31 27.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **15.07** | **226** | P | **Pn** | **18 31 12.9** | **0.0** |
| | baz=17,SNR=14 | | | | | | |
| **E23K** | **Chandalar** | **15.21** | **227** | P | **Pn** | **18 31 15.1** | **+0.3** |
| | baz=17,SNR=8.0 | | | | | | |
| **G29M** | **Pine Creek** | **15.23** | **210** | | **Pn** | **18 31 14.5** | **-0.5** |
| **G29M** | **Pine Creek** | **15.23** | **210** | P | **Pn** | **18 31 15.3** | **+0.3** |
| | baz=11,SNR=11 | | | | | | |
| **F25K** | **Christian Rive** | **15.23** | **221** | P | **Pn** | **18 31 14.8** | **-0.3** |
| | baz=15 | | | | | | |
| **BMAR** | **Burnt Mountain** | **15.29** | **220** | Pn | **Pn** | **18 31 14.3** | **-1.6** |
| **E21K** | **Killik River** | **15.36** | **234** | Pn | **Pn** | **18 31 17.1** | **+0.4** |
| **E21K** | **Killik River** | **15.36** | **234** | P | **Pn** | **18 31 17.2** | **+0.4** |
| | baz=19,SNR=12 | | | | | | |
| **D20K** | **Etivluk River** | **15.43** | **237** | P | **Pn** | **18 31 18.1** | **+0.4** |
| | baz=21,SNR=20 | | | | | | |
| **C19K** | **Lookout Ridge** | **15.45** | **242** | Pn | **Pn** | **18 31 18.2** | **+0.2** |
| C19K | | | | IAmb | IAmb | 18 31 53.0 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **15.45** | **242** | P | **Pn** | **18 31 18.2** | **+0.2** |
| | baz=22 | | | | | | |
| **B18K** | **Kokolik River** | **15.52** | **245** | P | **Pn** | **18 31 18.9** | **+0.2** |
| | baz=23 | | | | | | |
| **F24K** | **Squaw Lake** | **15.54** | **224** | Pn | **Pn** | **18 31 18.4** | **-0.7** |
| F24K | | | | IAmb | IAmb | 18 31 33.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **15.54** | **224** | P | **Pn** | **18 31 18.7** | **-0.4** |
| | baz=16,SNR=10 | | | | | | |
| **G27K** | **Doyon Strip** | **15.62** | **215** | | **Pn** | **18 31 19.5** | **-0.7** |
| **G27K** | **Doyon Strip** | **15.62** | **215** | P | **Pn** | **18 31 19.9** | **-0.3** |
| | baz=13 | | | | | | |
| **EPYK** | **Eagle Plains** | **15.67** | **207** | | **Pn** | **18 31 20.1** | **-0.6** |
| EPYK | | | | IAmb | IAmb | 18 31 41.3 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **15.67** | **207** | P | **Pn** | **18 31 20.3** | **-0.4** |
| | baz=10,SNR=21 | | | | | | |
| **EPYK** | **Eagle Plains** | **15.67** | **207** | PN | **Pn** | **18 31 22.0** | **+1.2** |
| EPYK | | | | SN | **Sn** | **18 34 05.0** | **-9.1** |
| EPYK | | | | Trac | | 18 34 15.7 | |
| | comp=Z,15nm,0.2s | | | | | | |
| **G26K** | **Porcupine Rive** | **15.68** | **218** | P | **Pn** | **18 31 20.8** | **-0.1** |
| | baz=14 | | | | | | |
| **E20K** | **Nigu River** | **15.81** | **236** | P | **Pn** | **18 31 22.9** | **+0.3** |
| | baz=20,SNR=9.6 | | | | | | |
| **D19K** | **Kuna River** | **15.83** | **239** | Pn | **Pn** | **18 31 22.6** | **-0.2** |
| D19K | | | | IAmb | IAmb | 18 31 45.3 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **15.83** | **239** | P | **Pn** | **18 31 23.1** | **+0.2** |
| | baz=21,SNR=16 | | | | | | |
| **H29M** | **Whitestone** | **15.94** | **210** | Pn | **Pn** | **18 31 24.2** | **0.0** |
| **H29M** | **Whitestone** | **15.94** | **210** | P | **Pn** | **18 31 24.5** | **+0.3** |
| | baz=11 | | | | | | |
| **F22K** | **John River** | **16.03** | **230** | P | **Pn** | **18 31 25.6** | **+0.1** |
| | baz=18,SNR=14 | | | | | | |
| **COLD** | **Coldfoot** | **16.07** | **227** | Pn | **Pn** | **18 31 25.9** | **-0.1** |
| COLD | | | | IAmb | IAmb | 18 32 01.0 | |
| | comp=Z,8.7nm,0.6s | | | | | | |
| **COLD** | **Coldfoot** | **16.07** | **227** | P | **Pn** | **18 31 26.2** | **+0.2** |
| | baz=17 | | | | | | |
| **G25K** | **Bearman Lake** | **16.08** | **221** | P | **Pn** | **18 31 25.5** | **-0.6** |
| | baz=15 | | | | | | |
| **C18K** | **Utukok River** | **16.10** | **243** | Pn | **Pn** | **18 31 26.8** | **+0.4** |
| C18K | | | | IAmb | IAmb | 18 31 38.2 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **C18K** | **Utukok River** | **16.10** | **243** | P | **Pn** | **18 31 26.6** | **+0.3** |
| | baz=22 | | | | | | |
| **H27K** | **Steamboat Moun** | **16.18** | **214** | P | **Pn** | **18 31 27.8** | **+0.4** |
| | baz=12,SNR=19 | | | | | | |
| **FYU** | **Fort Yukon** | **16.19** | **220** | | **Pn** | **18 31 26.8** | **-0.6** |
| FYU | | | | IAmb | IAmb | 18 31 53.5 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **16.29** | **223** | Pn | **Pn** | **18 31 28.1** | **-0.6** |
| **G24K** | **Hadweenzic Riv** | **16.29** | **223** | P | **Pn** | **18 31 28.6** | **-0.2** |
| | baz=15 | | | | | | |
| **F21K** | **Alatna River** | **16.46** | **232** | Pn | **Pn** | **18 31 31.1** | **+0.2** |
| F21K | | | | IAmb | IAmb | 18 31 42.8 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **F21K** | **Alatna River** | **16.46** | **232** | P | **Pn** | **18 31 31.2** | **+0.3** |
| | baz=18,SNR=18 | | | | | | |
| **G22K** | **Bettles** | **16.51** | **229** | P | **Pn** | **18 31 32.1** | **+0.5** |
| | baz=17 | | | | | | |
| **C17K** | **DeLong Mountai** | **16.53** | **245** | P | **Pn** | **18 31 32.4** | **+0.6** |
| | baz=22 | | | | | | |
| **H25L** | **Birch Creek** | **16.54** | **220** | P | **Pn** | **18 31 32.0** | **+0.1** |
| | baz=14 | | | | | | |
| **G23K** | **Bananza Creek** | **16.55** | **227** | Pn | **Pn** | **18 31 33.0** | **+0.9** |
| **G23K** | **Bananza Creek** | **16.55** | **227** | P | **Pn** | **18 31 32.4** | **+0.3** |
| | baz=16 | | | | | | |
| **E19K** | **Redstone River** | **16.70** | **237** | | **Pn** | **18 31 34.1** | **+0.2** |
| E19K | | | | IAmb | IAmb | 18 31 51.2 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **16.70** | **237** | P | **Pn** | **18 31 34.4** | **+0.5** |
| | baz=19,SNR=21 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **16.78** | **209** | | **Pn** | **18 31 34.5** | **-0.5** |
| I29M | | | | IAmb | IAmb | 18 31 57.1 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **16.78** | **209** | P | **Pn** | **18 31 34.9** | **-0.1** |
| | baz=10 | | | | | | |
| **I30M

POKR IAmb IAmb 18 32 10.4
comp=Z,21nm,1.3s
**H21K Melozitna Rive 17.88 229 Pn 18 31 49.4 +0.7**
**H21K Melozitna Rive 17.88 229** P **Pn 18 31 49.2 +0.5**
baz=16
**G19K Purcell Mounta 17.93 235 Pn 18 31 49.6 +0.4**
**G19K Purcell Mounta 17.93 235** P **Pn 18 31 49.3 +0.1**
baz=18
**I23K Minto, Yukon-K 17.99 224** P **Pn 18 31 49.8 -0.2**
I23K IAmb IAmb 18 32 13.0
comp=Z,21nm,1.0s
**I23K Minto, Yukon-K 17.99 224** P **Pn 18 31 50.5 +0.5**
baz=15,SNR=5.5
**J26L Joseph Creek 18.06 216 Pn 18 31 51.1 +0.2**
J26L IAmb IAmb 18 32 04.5
comp=Z,12nm,0.6s
**J26L Joseph Creek 18.06 216** P **Pn 18 31 51.2 +0.2**
baz=12,SNR=22
**MDM Murphy Dome 18.06 223** P **Pn 18 31 50.6 -0.3**
**IL03 Eielson Array 18.10 221** P **P 18 31 52.1 +0.4**
**COLA College 18.10 222** P **P 18 31 52.3 +0.6**
COLA IAmb IAmb 18 32 11.8
comp=Z,12nm,0.8s
**IL31 18.11 221** P **Pn 18 31 50.5 -0.9**
**ILAR Eielson Array 18.11 221** P **P 18 31 52.3 +0.5**
comp=Z,2.4nm,0.7s,baz=9.3,slow=11,SNR=14
ILAR S **Sn 18 35 06.5 -6.6**
comp=Z,2.4nm,0.7s,baz=11,slow=23,SNR=8.0
ILAR LR LR 18 40 54.1
comp=Z,70nm,19.4s,baz=312,slow=43
**J25K Salcha River, 18.11 218** P **P 18 31 52.9 +1.0**
J25K **Sn 18 35 09.7 -3.7**
**J25K Salcha River, 18.11 218** P **Pn 18 31 51.4 -0.2**
baz=13,SNR=11
**DAWY Dawson 18.14 210** P **Pn 18 31 49.9 -2.0**
DAWY IAmb IAmb 18 32 01.7
comp=Z,13nm,0.8s
DAWY **Sn 18 35 11.1 -2.9**
**DAWY Dawson 18.14 210** P **Pn 18 31 52.0 +0.1**
baz=10
**DAWY Dawson 18.14 210** PN **P 18 31 53.0 +0.7**
DAWY SN Sn 18 35 03.7 -10
DAWY Trac 18 35 15.1
comp=Z,3.5nm,0.2s
**SUMG Summit 18.16 72** P **Pn 18 31 49.3 -3.2**
SUMG IAmb IAmb 18 31 58.8
comp=Z,27nm,0.9s
**F17K Baldwin Pennin 18.18 241** P **Pn 18 31 52.5 +0.2**
F17K IAmb IAmb 18 32 03.4
comp=Z,23nm,0.8s
**F17K Baldwin Pennin 18.18 241** P **P 18 31 53.3 +0.7**
baz=19
**WRGLY Wrigley 18.21 187 Sn 18 35 16.7 +1.1**
**WRGLY Wrigley 18.21 187** P **Pn 18 31 52.6 -0.1**
baz=2.6
**K29M Barlow Dome 18.23 207 Pn 18 31 52.6 -0.4**
K29M IAmb IAmb 18 32 06.2
comp=Z,14nm,0.6s
**K29M Barlow Dome 18.23 207** P **P 18 31 53.8 +0.6**
baz=9.2,SNR=18
**MLY Manley 18.25 226 Pn 18 31 53.5 +0.2**
**MLY Manley 18.25 226** P **Pn 18 31 53.9 +0.6**
baz=15
**H20K Anotleneega Mo 18.28 232** P **Pn 18 31 52.6 -1.1**
baz=17
**CCB Clear Creek Bu 18.32 222** P **P 18 31 53.4 -0.7**
**G18K Tagagawik 18.36 237 Pn 18 31 56.5 +1.9**
**G18K Tagagawik 18.36 237** P **P 18 31 54.2 -0.5**
baz=18
**K27K Chicken 18.39 214** P **Pn 18 31 56.0 +1.0**
**K27K Chicken 18.39 214** P **P 18 31 55.2 +0.2**
baz=11
**H19K Roundabout Mou 18.44 234** P **Pn 18 31 56.9 +1.5**
H19K IAmb IAmb 18 32 07.7
comp=Z,14nm,0.9s
**H19K Roundabout Mou 18.44 234** P **P 18 31 55.6 +0.2**
baz=17
**HDA Harding Lake 18.47 220** P **P 18 31 55.6 -0.2**
**HDA Harding Lake 18.47 220** P **P 18 31 55.5 -0.2**
baz=13
**NEA2 Nenana 18.50 223** P **P 18 31 55.2 -1.0**
**NEA2 Nenana 18.50 223** P **Pn 18 31 57.4 +1.1**
baz=14
**WRH Wood River Hil 18.52 222** P **P 18 31 56.5 +0.1**
WRH IAmb IAmb 18 32 08.8
comp=Z,18nm,1.2s
**SCRK Sand Creek 18.61 216** P **Pn 18 31 59.8 +2.1**
SCRK IAmb IAmb 18 32 12.6
comp=Z,9.1nm,0.7s
**SCRK Sand Creek 18.61 216** P **P 18 31 57.8 +0.4**
baz=12,SNR=13
**YKAW3 Yellowknife Wh 18.87 174** PN **Pn 18 32 01.7 +1.0**
YKAW3 SN Sn 18 35 20.0 -12
**I20K Naaghedeneel 18.91 231** P **P 18 31 58.6 -2.0**
I20K IAmb IAmb 18 32 23.3
comp=Z,15nm,0.8s
**I20K Naaghedeneel 18.91 231** P **P 18 31 59.8 -0.7**
baz=16
**YKA Yellowknife Ar 18.94 174** P **Pn 18 31 59.0 -2.0**
**YKA Yellowknife Ar 18.94 174** P **Pn 18 32 04.2 +2.6**
comp=Z,1.1nm,0.3s,baz=355,slow=12,SNR=13
YKA S Sn 18 35 21.4 -12
comp=Z,1.3nm,0.6s,baz=58,slow=25,SNR=2.4
YKA LR LR 18 40 07.7
comp=Z,94nm,19.9s,baz=300,slow=39
comp=Z,21nm,0.5s
**YKAW1 Yellowknife Wh 18.95 174** PN **Pn 18 32 02.3 +0.6**
YKAW1 SN Sn 18 35 21.3 -12
**BWN Browne 18.95 224** P **Pn 18 32 02.7 +0.9**
BWN IAmb IAmb 18 32 25.8
comp=Z,15nm,0.7s
**L29M L29M 19.00 208** P **Pn 18 32 04.3 +2.0**
L29M IAmb IAmb 18 32 19.1
comp=Z,14nm,0.8s
L29M **Sn 18 35 29.9 -4.8**
**L29M L29M 19.00 208** P **P 18 32 00.8 -0.9**
baz=9.1
**G17K Kiwalik Mounta 19.00 239** P **P 18 32 02.4 +0.8**
baz=18
**YKAB2 New Yellowknif 19.01 174** P **Pn 18 31 59.9 -1.8**
**H18K Honhosa River 19.04 236** P **P 18 32 02.6 +0.5**
H18K IAmb IAmb 18 32 46.1
comp=Z,18nm,1.4s
**H18K Honhosa River 19.04 236** P **P 18 32 02.8 +0.7**
baz=17
**MMPY Sheldon Lake, 19.08 198** P **P 18 32 03.0 +0.4**
MMPY IAmb IAmb 18 32 36.0
comp=Z,10nm,1.0s
**MMPY Sheldon Lake, 19.08 198** P **P 18 32 02.5 -0.1**
baz=6.0
**BPAW Bear Paw Mtn. 19.19 226** P **P 18 32 04.5 +0.8**
**BPAW Bear Paw Mtn. 19.19 226** P **P 18 32 03.3 -0.4**
baz=14
**BCAR Beaver Creek A 19.32 213** P **Pn 18 32 07.4 +1.2**
**G16K Koyuk River 19.32 241** P **Pn 18 32 08.5 +2.4**
**G16K Koyuk River 19.32 241** P **Pn 18 32 06.2 +0.1**
baz=18
**L27K Beaver Creek, 19.33 213** P **Pn 18 32 08.1 +1.8**
**L27K Beaver Creek, 19.33 213** P **P 18 32 05.1 -0.1**
baz=11
**MCK McKinley 19.33 223** P **Pn 18 32 08.3 +2.0**
MCK IAmb IAmb 18 32 18.1
comp=Z,18nm,0.8s
**MCK McKinley 19.33 223** P **Pn 18 32 06.8 +0.5**
baz=14,SNR=6.1
**F15K North Star Dit 19.34 244** P **Pn 18 32 09.0 +2.7**
F15K IAmb IAmb 18 32 19.7
comp=Z,22nm,1.4s
**F15K North Star Dit 19.34 244** P **P 18 32 05.3 0.0**
baz=19
**H17K Granite Mounta 19.44 237** P **Pn 18 32 09.3 +1.7**
**H17K Granite Mounta 19.44 237** P **P 18 32 06.6 +0.2**
baz=18
**J20K Nowinta River 19.47 230** P **Pn 18 32 09.3 +1.4**
J20K **Sn 18 35 39.9 -6.0**
**J20K Nowinta River 19.47 230** P **P 18 32 05.9 -0.8**
baz=15
**L26K Log Cabin Wild 19.49 215** P **Pn 18 32 08.1 -0.1**
L26K IAmb IAmb 18 32 21.0
comp=Z,24nm,1.4s
**L26K Log Cabin Wild 19.49 215** P **P 18 32 07.7 +0.6**
baz=11
**FARO Faro, Yukon 19.57 201** P **Pn 18 32 09.2 -0.1**
FARO IAmb IAmb 18 32 20.8
comp=Z,12nm,0.5s
**FARO Faro, Yukon 19.57 201** P **Pn 18 32 10.2 +1.0**
baz=6.8
**MENT Mentasta 19.61 215** P **Pn 18 32 11.3 +1.7**
MENT IAmb IAmb 18 32 18.7
comp=Z,9.5nm,0.7s
**RND Reindeer 19.64 222** P **Pn 18 32 11.2 +1.1**
RND IAmb IAmb 18 32 27.5
comp=Z,11nm,1.1s
**M31M Drury Creek, Y 19.66 202** P **Pn 18 32 11.1 +0.9**
**M31M Drury Creek, Y 19.66 202** P **Pn 18 32 10.4 +0.1**
baz=7.2,SNR=23
**M29M Somme Creek 19.68 208** P **Pn 18 32 12.1 +1.6**
M29M IAmb IAmb 18 32 20.1
comp=Z,7.7nm,0.8s
M29M **S 18 35 44.3 -6.5**
**M29M Somme Creek 19.68 208** P **Pn 18 32 10.6 0.0**
baz=8.9,SNR=14
**PAX Paxson 19.73 218** P **Pn 18 32 11.6 +0.4**
PAX IAmb IAmb 18 32 25.0
comp=Z,9.4nm,1.0s
**PAX Paxson 19.73 218** P **P 18 32 10.6 +0.8**
baz=12
**F14K Arctic Creek 19.79 246** P **Pn 18 32 12.8 +1.1**
baz=19
**DHY Denali Highway 19.81 220** P **P 18 32 11.6 +0.9**
DHY IAmb IAmb 18 32 34.6
comp=Z,7.7nm,0.8s
DHY **S 18 35 50.0 -3.6**
**DHY Denali Highway 19.81 220** P **Pn 18 32 12.0 -0.2**
baz=13
**J19K Poorman 19.82 231** P **P 18 32 10.7 +0.2**
**J19K Poorman 19.82 231** P **Pn 18 32 12.4 +0.3**
baz=16
**TNA Tin City 19.93 248** P **P 18 32 12.1 +0.4**
TNA IAmb IAmb 18 32 31.7
comp=Z,25nm,1.4s
**G15K Niukluk 19.93 242** P Pn 18 32 13.6 +0.2
baz=18
**M27K Edge Creek, AK 20.02 212** P **P 18 32 12.4 -0.6**
**M27K Edge Creek, AK 20.02 212** P **P 18 32 14.2 +1.2**
baz=10
**H16K Elim 20.03 240** P Pn 18 32 14.5 -0.1
baz=18
**TGTN Hyland Airport 20.05 193** P **P 18 32 13.9 +0.8**
baz=4.4
**M26K Nabesna, AK 20.08 214** P **P 18 32 11.7 -1.7**
M26K IAmb IAmb 18 32 32.4
comp=Z,20nm,1.1s
**M26K Nabesna, AK 20.08 214** P Pn 18 32 15.4 +0.2
baz=11
**WAT1 Susitna Watana 20.17 222** P **P 18 32 14.4 0.0**
baz=13
**K20K Telida 20.25 229** P Pn 18 32 17.7 +0.5
K20K IAmb IAmb 18 32 28.0
comp=Z,9.5nm,1.0s
**K20K Telida 20.25 229** P **P 18 32 16.6 +1.2**
baz=15
**HARP HAARP 20.27 217** P Pn 18 32 17.2 -0.2
baz=11
**WAT6 Susitna Watana 20.34 220** P Pn 18 32 18.2 -0.1
baz=12
**N31M Braeburn, Yuko 20.45 204** P **P 18 32 17.6 +0.1**
**N31M Braeburn, Yuko 20.45 204** P Pn 18 32 19.9 +0.3
baz=7.5
**J18K Innoko River 20.46 232** P Pn 18 32 21.0 +1.4
**J18K Innoko River 20.46 232** P **P 18 32 18.8 +1.3**
baz=16
**YUK3 Moose Creek 20.49 210** P **P 18 32 17.7 -0.4**
baz=9.4,SNR=13
**ANM Nome 20.52 244** P **P 18 32 18.9 +0.8**
baz=18
**I17K Unalakleet 20.55 238** P **P 18 32 19.1 +0.7**
baz=17
**N30M Aishikik Lake 20.56 206** P **P 18 32 18.4 -0.3**
N30M IAmb IAmb 18 32 30.3
comp=Z,14nm,0.8s
**N30M Aishikik Lake 20.56 206** P **P 18 32 18.9 +0.2**
baz=8.0,SNR=12
**N32M Quiet Lake 20.63 200** P Pn 18 32 21.2 -0.5
baz=6.3
**M24K Tolsona, Glenn 20.65 218** P **P 18 32 19.8 +0.1**
baz=12
**CUT Chulitna 20.76 223** P **P 18 32 22.0 +1.2**
baz=13
**YUK4 Talbot Arm 20.78 208** P **P 18 32 21.3 0.0**
baz=8.6
**J17K VABM Dome 20.82 235** P **P 18 32 22.3 +0.9**
J17K IAmb IAmb 18 32 51.3
comp=Z,13nm,1.1s
**J17K VABM Dome 20.82 235** P Pn 18 32 23.6 -0.2
baz=16
**YUK8 Steele Glacier 20.92 209** P **P 18 32 23.9 +1.0**
baz=8.9
**N25K Chitina, Valde 21.00 216** P **P 18 32 24.0 +0.6**
baz=11
**SCM Sheep Creek Mo 21.03 219** P **P 18 32 24.6 +0.9**
baz=12
**MCARA McCarthy VSAT 21.08 213** P **P 18 32 26.6 +2.3**
baz=10
**L20K Farewell, AK 21.09 228** P **P 18 32 23.4 -0.9**
baz=14,SNR=10.0
**M23K Glacier View 21.11 220** P **P 18 32 24.5 0.0**
baz=12
**J16K Anvik River 21.12 237** P **P 18 32 26.6 +2.0**
J16K IAmb IAmb 18 32 34.7
comp=Z,14nm,0.8s
**J16K Anvik River 21.12 237** P **P 18 32 25.3 +0.7**
baz=16
**SML Sawmill 21.15 221** P **P 18 32 26.7 +1.6**
baz=12,SNR=11
**YUK6 Outpost Mounta 21.16 207** P **P 18 32 25.4 0.0**
baz=8.3,SNR=9.2
**O30N Mendenhall 21.18 204** P **P 18 32 26.8 +1.4**
baz=7.4,SNR=7.2
**WHY Whitehorse 21.22 202** P **P 18 32 28.2 +2.3**
baz=6.9
**KLU Klutina 21.23 217** P **P 18 32 27.6 +1.6**
baz=11
**SKT Skwentna 21.31 225** P **P 18 32 28.0 +1.2**
baz=13,SNR=8.2
**KOTAN Kotaneelee Air 21.33 187** P **P 18 32 28.8 +1.9**
baz=2.4
**CTG Chitna Glacier 21.36 211** P **P 18 32 28.0 +0.6**
baz=9.4
**CTGM Chitina Glacie 21.36 211** P **P 18 32 27.6 +0.2**
**K17K Iditarod 21.38 234** P **P 18 32 29.3 +1.9**
baz=16
**SFJD Angerlussuaq 21.39 91** P **P 18 32 27.4 0.0**
comp=Z,11nm,0.7s,baz=333,slow=9.0,SNR=2.8
SFJD LR LR 18 40 31.9
comp=Z,46nm,18.5s,baz=330,slow=36
comp=Z,11nm,0.7s
**PMR Palmer 21.44 221** P **P 18 32 29.0 +0.9**
baz=12
**O28M Mount Upton 21.46 209** P **P 18 32 30.0 +1.3**
baz=8.9
**WTLY Watson Lake, Y 21.48 194** P **P 18 32 30.6 +2.0**
baz=4.4
**L19K White Mountain 21.49 229** P **P 18 32 30.8 +2.2**
baz=14,SNR=9.5
**KNK Knik Glacier 21.55 221** P **P 18 32 31.9 +2.6**
baz=12
**P33M Teslin, Yukon 21.56 199** P **P 18 32 30.7 +1.3**
baz=6.0,SNR=8.1
**M20K Styx River 21.58 227** P **P 18 32 32.0 +2.3**
baz=14
**BMRM Bremner River 21.63 215** P **P 18 32 32.4 +2.2**
baz=10
**L18K Granite Mounta 21.66 231** P **P 18 32 32.9 +2.5**
baz=15
**M19K Big River Lodg 21.70 228** P **P 18 32 32.6 +1.7**
baz=14,SNR=7.7
**CRQE Cirque 21.71 213** P **P 18 32 32.4 +1.2**
baz=9.9
**SUA Susitna One 21.73 223** P **P 18 32 32.9 +1.5**
baz=13
**FRB Frobisher Bay 21.78 113** P **P 18 32 33.0 +1.3**
comp=Z,10nm,0.8s,baz=334,slow=13,SNR=6.5
FRB LR LR 18 42 36.6
comp=Z,31nm,18.1s,baz=222,slow=41
comp=Z,10nm,0.8s
**O29M Mount Kennedy 21.81 207** P **P 18 32 33.3 +1.1**
baz=8.2
**P30M Million Dollar 21.89 205** P **P 18 32 35.0 +2.1**
baz=7.5
**L17K Donlin 21.94 233** P **P 18 32 36.1 +2.7**
baz=15
**RC01 Rabbit Creek A 22.00 222** P **P 18 32 36.2 +2.1**
baz=12
**PWL Port Wells 22.08 220** P **P 18 32 37.1 +2.1**
baz=12
**EYAK Cordova Ski Ar 22.14 217** P **P 18 32 38.2 +2.5**
baz=11
**N20K Mount Spurr 22.15 225** P **P 18 32 39.3 +3.5**
baz=13
**K15K Wolf Creek Mou 22.19 237** P **P 18 32 38.6 +2.4**
baz=16
**P32M Atlin 22.23 200** P **P 18 32 39.3 +2.7**
baz=6.2
**M18K Stony River 22.27 230** P **P 18 32 38.7 +1.7**
baz=14,SNR=5.8
**R33M Jennings River 22.29 197** P **P 18 32 38.7 +1.4**
baz=5.1
**P29M Windy Craggy 22.43 206** P **P 18 32 41.1 +2.4**
baz=7.6
**L16K Owhat River 22.50 234** P **P 18 32 40.9 +1.5**
baz=15
**PLBC Pleasant Camp 22.51 204** P **P 18 32 42.9 +3.3**
baz=7.1
**M17K Holitna River 22.55 232** P **P 18 32 41.2 +1.2**
baz=14
**O22K Cooper Landing 22.59 222** P **P 18 32 43.4 +2.9**
baz=12
**TOAD Toad River Com 22.64 189** P **P 18 32 44.3 +3.3**
baz=2.8
**N19K Bonanza Creek 22.78 228** P **P 18 32 45.7 +3.1**
baz=13
**L15K Ungalak Mounta 22.78 237** P **P 18 32 44.6 +2.2**
baz=16
**Q32M Nakina River 22.78 198** P **P 18 32 45.1 +2.4**
baz=5.5,SNR=9.8
**P23K Montague Islan 22.84 218** P **P 18 32 46.5 +3.5**
baz=11
**SEW Seward 22.94 221** P **P 18 32 47.3 +3.3**
baz=12
**K13K Kusilvak Mount 22.95 241** P **P 18 32 47.8 +3.6**
baz=16
**N18K Kilae Creek 23.07 229** P **P 18 32 48.1 +2.6**
baz=14
**M16K Timber Creek 23.10 233** P **P 18 32 49.6 +3.8**
baz=15
**DLBC Dease Lake 23.20 195** LR LR 18 43 38.1
comp=Z,66nm,18.8s,baz=322,slow=41
**DLBC Dease Lake 23.20 195** P **P 18 32 52.4 +5.5**
baz=4.5
**TIXI Tiksi 23.21 312** P **P 18 32 48.4 +1.6**
TIXI IAmb IAmb 18 32 54.2
comp=Z,5.3nm,0.8s
**O20K Slope Mountain 23.29 225** P **P 18 32 50.3 +2.6**
baz=12
**N17K Nushagak Hills 23.37 231** P **P 18 32 53.1 +4.6**
baz=14
**BRSE Bradley Lake S 23.42 223** P **P 18 32 53.1 +4.1**
baz=12
**JMIC Jan Mayen 23.58 50** LR LR 18 42 06.4
comp=Z,35nm,18.2s,baz=70,slow=37
**R32K Eaglecrest 23.58 201** P **P 18 32 54.8 +4.2**
baz=6.1
**N16K Nishlik Lake 23.61 233** P **P 18 32 54.9 +4.0**
baz=14
**M15K Kasigluk River 23.63 235** P **P 18 32 55.6 +4.5**
baz=15
**S34M Telegraph Cree 23.77 197** P **P 18 32 56.2 +3.7**
baz=4.8
**O18K Koktuh Hills 23.80 228** P **P 18 32 56.6 +3.9**
baz=13
**S31K Pelican 23.99 203** P **P 18 32 57.9 +3.4**
baz=6.6
**M13K Dall Lake 24.24 238** P **P 18 33 01.4 +4.6**
baz=15
**P18K Big Mountain, 24.25 228** P **P 18 32 60.0 +3.0**
baz=13
**O16K Kokwok River B 24.39 231** P **P 18 33 01.2 +3.1**
baz=14
**S32K Killisnoo 24.39 201** P **P 18 33 01.5 +3.3**
baz=5.9
**P17K Kvichak River 24.58 229** P **P 18 33 04.0 +4.1**
baz=13
**KDAK Kodiak Island 25.54 224** LR LR 18 44 36.7
comp=Z,70nm,20.6s,baz=41,slow=40
**OHAK Old Harbor 26.17 224** P **P 18 33 17.6 +3.3**
baz=11
**ARCES ARCESS Array B 28.14 26** P **P 18 33 30.3 -1.6**
comp=Z,2.2nm,0.9s,baz=328,slow=3.2,SNR=2.1
ARCES PcP **PcP 18 36 44.7 -0.6**
comp=Z,3.7nm,1.0s,baz=345,slow=3.1,SNR=5.5
ARCES LR LR 18 43 57.3
comp=Z,64nm,18.9s,baz=312,slow=35
comp=Z,2.2nm,0.9s
**SCHQ Schefferville 30.62 117** P **P 18 33 55.6 +1.5**
comp=Z,2.2nm,0.6s,baz=354,slow=10,SNR=2.1
comp=Z,2.2nm,0.6s
**ULM Lac du Bonnet 32.02 152** P **P 18 34 08.2 +1.9**
comp=Z,1.9nm,0.6s,baz=343,slow=9.8,SNR=2.6
ULM PcP **PcP 18 36 56.8 +1.1**
comp=Z,3.7nm,0.9s,baz=9.7,slow=2.8,SNR=3.0
ULM LR LR 18 47 47.6
comp=Z,45nm,18.0s,baz=314,slow=38
comp=Z,1.9nm,0.6s
**NEW Newport 33.17 178** LR LR 18 49 04.7
comp=Z,113nm,18.1s,baz=5.0,slow=38
**AGMN Agassiz Nation 33.96 152** P **P 18 34 25.8 +2.5**
baz=354
**MSO Missoula 34.64 174** P **P 18 34 28.9 -0.5**
MSO IAmb IAmb 18 34 39.1
comp=Z,4.7nm,1.1s
**MSO Missoula 34.64 174** P **P 18 34 33.4 +4.1**
baz=359,SNR=5.6
**EYMN Ely 34.65 147** P **P 18 34 28.6 -0.6**
**EYMN Ely 34.65 147** P **P 18 34 30.9 +1.6**
baz=353
**SHEM Shemya Is, Ala 34.87 259** LR LR 18 49 17.4
comp=Z,16nm,19.5s,baz=258,slow=37
**NB2 NORSAR Subarra 35.33 40** P **P 18 34 34.4 -0.7**
comp=Z,2.1nm,0.8s,baz=346,slow=8.6
**NOA NORSAR Array B 35.33 40** P **P 18 34 33.5 -1.5**
comp=Z,19nm,0.4s,baz=352,slow=7.7,SNR=4.8
NOA LR LR 18 47 29.8
comp=Z,23nm,21.2s,baz=5.0,slow=34
**BOZ Bozeman (W) 35.92 172** P **P 18 34 43.4 +3.0**
baz=358,SNR=5.4
**FINES FINESS Array B 36.20 28** P **P 18 34 40.2 -2.2**
comp=Z,5.3nm,0.8s,baz=1.8,slow=8.8,SNR=13
FINES PcP **PcP 18 37 08.1 +0.8**
comp=Z,3.5nm,1.0s,baz=336,slow=3.0,SNR=4.4
FINES LR LR 18 48 56.8
comp=Z,43nm,20.4s,baz=360,slow=36
comp=Z,5.3nm,0.8s
**HFS Hagfors 36.46 38** P **P 18 34 43.8 -0.9**
comp=Z,2.7nm,0.7s,baz=27,slow=6.8,SNR=7.1
HFS PcP **PcP 18 37 09.1 +0.9**
comp=Z,0.9nm,0.5s,baz=5.4,slow=3.0,SNR=5.4
HFS LR LR 18 50 10.8
comp=Z,27nm,18.9s,baz=6.0,slow=37
comp=Z,2.7nm,0.7s
**RSSD Black Hills 37.65 163** P P 18 34 59.7 +4.4
baz=356
**HLID Hailey 37.90 175** P **P 18 34 57.7 +0.4**
**HLID Hailey 37.90 175** P P 18 35 02.9 +5.6
baz=359
**ECSD EROS Data Cent 38.45 154** P **P 18 35 05.4 +3.6**
baz=355
**BW06 Boulder Array 38.80 169** P P 18 35 09.8 +4.8
baz=358
**PDAR Pinedale Array 38.80 169** P **P 18 35 04.7 -0.2**
**PDAR Pinedale Array 38.80 169** P **P 18 35 08.9 +3.9**
comp=Z,1.4nm,0.7s,baz=17,slow=6.6,SNR=13
PDAR PcP **PcP 18 37 18.5 +2.6**
comp=Z,0.7nm,0.9s,baz=20,slow=2.9,SNR=1.7
PDAR LR LR 18 51 24.4
comp=Z,28nm,19.1s,baz=352,slow=36
comp=Z,1.4nm,0.7s
**K22A Casper 39.01 166** P **P 18 35 09.8 +3.1**
baz=357
**EKA Eskdalemuir Ar 39.32 54** P **P 18 35 08.8 -0.1**
comp=Z,2.5nm,0.7s,baz=348,slow=8.7,SNR=7.4
comp=Z,2.5nm,0.7s
**LONY Lake Ozonia 39.66 129** P P 18 35 16.2 +4.5
baz=351
**HVU Hansel Valley 39.71 173** P **P 18 35 11.4 -1.0**
**YBH Yreka Blue Hor 39.73 185** LR LR 18 53 29.9
comp=Z,30nm,19.7s,baz=348,slow=39
**JFWS Jewell Farm 39.75 147** P **P 18 35 16.4 +3.9**
baz=354
**KIRV Kirov 40.19 10** LR LR 18 53 28.9
comp=Z,28nm,20.9s,baz=344,slow=39
**BGU Big Grassy Mou 40.56 173** P **P 18 35 18.5 -1.0**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BGU | | | | | IAmb | IAmb | 18 35 32.2 | | |
| | comp=Z,4.1nm,1.1s | | | | | | | | |
| **N23A** | **Red Feather La** | **40.79** | **165** | | P | **P** | **18 35 24.8** | **+3.3** | |
| | baz=357 | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **41.29** | **173** | | P | **P** | **18 35 29.9** | **+4.4** | |
| | baz=359 | | | | | | | | |
| **M53A** | **Wt Miller and** | **42.11** | **136** | | P | **P** | **18 35 34.0** | **+2.0** | |
| | baz=352 | | | | | | | | |
| **KVN** | **Kaiserville** | **42.38** | **179** | | P | **P** | **18 35 34.0** | **-0.5** | |
| KVN | | | | | IAmb | IAmb | 18 35 41.2 | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **ARU** | **Arti** | **42.50** | **2** | | P | **P** | **18 35 34.4** | **-0.6** | |
| **ARU** | **Arti** | **42.50** | **2** | | LR | LR | 18 53 29.9 | | |
| | comp=Z,24nm,20.2s,baz=359,slow=37 | | | | | | | | |
| **O49A** | **Covington** | **42.98** | **141** | | P | **P** | **18 35 37.8** | **-1.4** | |
| **NVAR** | **Mina Array Bea** | **43.00** | **180** | | P | **P** | **18 35 43.4** | **+3.8** | |
| | comp=Z,1.3nm,0.8s,baz=359,slow=5.5,SNR=11 | | | | | | | | |
| NVAR | | | | | PcP | **PcP** | **18 37 32.4** | **+2.8** | |
| | comp=Z,1.0nm,0.7s,baz=4.3,slow=4.8,SNR=5.0 | | | | | | | | |
| NVAR | | | | | LR | LR | 18 54 45.0 | | |
| | comp=Z,77nm,18.6s,baz=78,slow=38 | | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **43.07** | **139** | | P | **P** | **18 35 42.8** | **+2.9** | |
| | baz=353 | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **43.10** | **176** | | P | **P** | **18 35 39.2** | **-1.1** | |
| **R11B** | **Troy Canyon, C** | **43.10** | **176** | | P | **P** | **18 35 42.9** | **+2.6** | |
| | baz=359 | | | | | | | | |
| **SSPA** | **Standing Stone** | **43.21** | **133** | | P | **P** | **18 35 43.6** | **+2.6** | |
| | baz=352 | | | | | | | | |
| **MNK** | **Minsk** | **43.22** | **28** | *i* | P | **P** | **18 35 41.4** | **+0.5** | |
| | comp=E,16nm,1.0s | | | | | | | | |
| MNK | | | | *i* | P | **P** | **18 35 41.4** | **+0.5** | |
| | comp=N,21nm,1.1s | | | | | | | | |
| MNK | | | | *i* | P | **P** | **18 35 41.4** | **+0.5** | |
| | comp=Z,14nm,0.8s,baz=353 | | | | | | | | |
| MNK | | | | *i* | PP | **PP** | **18 37 21.4** | **+0.5** | |
| MNK | | | | *i* | PPP | PPP | 18 37 54.1 | | |
| MNK | | | | *i* | S | **S** | **18 42 06.6** | **-0.6** | |
| MNK | | | | *i* | SS | **SS** | **18 45 19.9** | **+0.4** | |
| MNK | | | | *i* | SSS | SSS | 18 45 54.6 | | |
| MNK | | | | *i* | LQ | LQ | 18 50 43.7 | | |
| MNK | | | | *i* | LR | LR | 18 53 25.1 | | |
| MNK | | | | *i* | LRM | MLR | 18 55 25.8 | | |
| | comp=N,34nm,21.2s | | | | | | | | |
| MNK | | | | *i* | LRM | MLR | 18 55 25.8 | | |
| | comp=Z,16nm,14.1s | | | | | | | | |
| MNK | | | | *i* | LRM | MLR | 18 55 38.0 | | |
| | comp=E,28nm,20.9s | | | | | | | | |
| **O53A** | **New Philadelph** | **43.23** | **137** | | P | **P** | **18 35 43.6** | **+2.5** | |
| | baz=352 | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **43.59** | **141** | | P | **P** | **18 35 46.2** | **+2.1** | |
| | baz=353 | | | | | | | | |
| **P52A** | **Corning** | **43.75** | **138** | | P | **P** | **18 35 46.1** | **+0.8** | |
| | baz=353 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **43.90** | **166** | | P | **P** | **18 35 50.4** | **+3.5** | |
| | baz=358 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **43.95** | **165** | | P | **P** | **18 35 50.3** | **+3.0** | |
| | baz=357 | | | | | | | | |
| **HEH** | **HeiHe** | **44.09** | **302** | *e*P | | **P** | **18 35 48.4** | **+0.5** | |
| HEH | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **44.38** | **340** | | P | **P** | **18 35 49.0** | **-1.2** | |
| **ZALV** | **Zalesovo Beam** | **44.38** | **340** | | P | **P** | **18 35 48.7** | **-1.6** | |
| ZALV | | | | | PcP | **PcP** | **18 37 34.5** | **+0.7** | |
| **ZALV** | **Zalesovo Beam** | **44.38** | **340** | | P | **P** | **18 35 49.3** | **-0.9** | |
| | comp=Z,3.0nm,0.4s,baz=6.5,slow=7.9,SNR=20 | | | | | | | | |
| ZALV | | | | | PcP | **PcP** | **18 37 34.4** | **+0.7** | |
| | comp=Z,1.2nm,0.7s,baz=7.8,slow=3.2,SNR=3.5 | | | | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | | |
| **TPNV** | **Topopah Spring** | **44.49** | **177** | | P | **P** | **18 35 56.0** | **+4.5** | |
| | baz=360,SNR=6.4 | | | | | | | | |
| **KLR** | **Kul'dur** | **44.52** | **298** | | P | **P** | **18 35 52.5** | **+1.1** | |
| | comp=Z,5.5nm,0.6s,baz=359,slow=8.0,SNR=17 | | | | | | | | |
| | comp=Z,5.5nm,0.6s | | | | | | | | |
| **Q56A** | **Snyder Ridge,** | **44.65** | **135** | | P | **P** | **18 35 50.4** | **-2.1** | |
| **WCI** | **Wyandotte Cave** | **44.74** | **143** | | P | P | 18 35 58.1 | +4.8 | |
| | baz=354 | | | | | | | | |
| **FURC** | **Furnace Creek,** | **44.96** | **178** | | P | **P** | **18 35 59.5** | **+4.5** | |
| | baz=360 | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **44.99** | **179** | | P | **P** | **18 35 59.7** | **+4.2** | |
| | baz=360 | | | | | | | | |
| **U15A** | **North Rim** | **45.06** | **173** | | P | **P** | **18 35 55.6** | **-0.6** | |
| U15A | | | | | IAmb | IAmb | 18 36 02.3 | | |
| | comp=Z,4.3nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **45.10** | **41** | | P | **P** | **18 35 55.7** | **-0.4** | |
| **CLL** | **Collm** | **45.10** | **41** | *i* | P | **P** | **18 35 55.9** | **-0.1** | |
| | comp=Z,9.0nm,1.3s | | | | | | | | |
| **GWY** | **Greenwater Val** | **45.25** | **178** | | P | **P** | **18 35 55.5** | **-2.0** | |
| GWY | | | | | IAmb | IAmb | 18 36 08.8 | | |
| | comp=Z,2.6nm,1.0s | | | | | | | | |
| **MPMC** | **Manual Prospec** | **45.37** | **179** | | P | P | 18 36 03.3 | +4.8 | |
| | baz=360 | | | | | | | | |
| **ISA** | **Isabella, Lake** | **45.76** | **180** | | P | P | 18 36 07.4 | +5.9 | |
| | baz=0.1 | | | | | | | | |
| **BRVK** | **Borovoye** | **45.79** | **352** | | P | **P** | **18 36 01.1** | **-0.4** | |
| BRVK | | | | | IAmb | IAmb | 18 36 08.7 | | |
| | comp=Z,4.7nm,1.1s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **45.83** | **352** | | LR | LR | 18 55 41.4 | | |
| | comp=Z,28nm,20.3s,baz=359,slow=37 | | | | | | | | |
| **LRMC** | **Laurel Mtn Rad** | **45.95** | **179** | | P | P | 18 36 08.9 | +5.8 | |
| | baz=360 | | | | | | | | |
| **WUAZ** | **Wupatki** | **45.99** | **172** | | P | **P** | **18 36 07.7** | **+4.3** | |
| | baz=359,SNR=6.7 | | | | | | | | |
| **CHVC** | **Chvalec** | **46.12** | **39** | *e*P | | **P** | **18 36 06.8** | **+2.7** | |
| **GSC** | **Goldstone, Bar** | **46.13** | **178** | | P | P | 18 36 09.3 | +4.9 | |
| | baz=360 | | | | | | | | |
| **BLA** | **Blacksburg** | **46.32** | **137** | | P | **P** | **18 36 08.6** | **+2.7** | |
| | baz=353 | | | | | | | | |
| **BELG** | **Belogorsk** | **46.34** | **12** | | LR | LR | 18 56 44.9 | | |
| | comp=Z,26nm,21.6s,baz=53,slow=38 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **46.38** | **39** | *e*P | | **P** | **18 36 06.8** | **+0.6** | |
| **W18A** | **Petrified Fore** | **46.43** | **170** | | P | **P** | **18 36 11.3** | **+4.4** | |
| | baz=358 | | | | | | | | |
| **U49A** | **Red Boiling Sp** | **46.49** | **143** | | P | **P** | **18 36 04.9** | **-2.2** | |
| **EDW2** | **Edwards Air Fo** | **46.54** | **179** | | P | **P** | **18 36 12.2** | **+4.5** | |
| | baz=360,SNR=12 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **46.60** | **177** | | P | P | 18 36 12.8 | +4.7 | |
| | baz=360,SNR=5.4 | | | | | | | | |
| **WVT** | **Waverly** | **46.69** | **145** | | P | **P** | **18 36 07.8** | **-0.8** | |
| **ANMO** | **Albuquerque** | **46.70** | **166** | | P | **P** | **18 36 07.4** | **-1.6** | |
| ANMO | | | | | IAmb | IAmb | 18 36 15.0 | | |
| | comp=Z,2.2nm,0.8s | | | | | | | | |
| **ANMO** | **Albuquerque** | **46.70** | **166** | | LR | LR | 18 56 47.7 | | |
| | comp=Z,68nm,19.3s,baz=90,slow=37 | | | | | | | | |
| **ANMO** | **Albuquerque** | **46.70** | **166** | | P | **P** | **18 36 12.3** | **+3.2** | |
| | baz=358 | | | | | | | | |
| **MORC** | **Moravsky Berou** | **47.06** | **38** | | P | **P** | **18 36 10.5** | **-1.0** | |
| **MORC** | **Moravsky Berou** | **47.06** | **38** | *e*P | | **P** | **18 36 11.6** | **+0.1** | |
| **AKASG** | **Malin Array Be** | **47.10** | **27** | | P | **P** | **18 36 10.3** | **-1.4** | |
| | comp=Z,2.7nm,0.7s,baz=358,slow=8.7,SNR=3.5 | | | | | | | | |
| AKASG | | | | | PcP | **PcP** | **18 37 42.7** | **-0.6** | |
| | comp=Z,0.4nm,0.4s,baz=357,slow=3.6,SNR=1.6 | | | | | | | | |
| AKASG | | | | | LR | LR | 18 55 27.8 | | |
| | comp=Z,34nm,18.9s,baz=346,slow=36 | | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **47.15** | **175** | | P | **P** | **18 36 16.6** | **+4.3** | |
| | baz=359 | | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **47.18** | **179** | | P | P | 18 36 18.6 | +5.8 | |
| | baz=360 | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **47.27** | **158** | | P | **P** | **18 36 16.9** | **+3.6** | |
| | baz=356 | | | | | | | | |
| **IRM** | **Iron Mountain** | **47.28** | **176** | | P | **P** | **18 36 17.9** | **+4.5** | |
| | baz=359 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **47.32** | **41** | *e*P | | **P** | **18 36 14.5** | **+1.0** | |
| **BELC** | **Belle Mtn. Jos** | **47.43** | **177** | | P | **P** | **18 36 18.4** | **+3.7** | |
| | baz=360,SNR=9.6 | | | | | | | | |
| **VRAC** | **Vranov** | **47.44** | **39** | *e*P | | **P** | **18 36 14.3** | **-0.1** | |
| **VRAC** | **Vranov** | **47.44** | **39** | | LR | LR | 18 56 41.0 | | |
| | comp=Z,22nm,18.1s,baz=360,slow=37 | | | | | | | | |
| **MAUC** | **Maruska** | **47.49** | **38** | *e*P | | **P** | **18 36 15.3** | **+0.4** | |
| **GEC2** | **GERESS Array S** | **47.61** | **41** | | P | **P** | **18 36 14.9** | **-1.0** | |
| **GERES** | **GERESS Array B** | **47.61** | **41** | | P | **P** | **18 36 15.1** | **-0.8** | |
| **GERES** | **GERESS Array B** | **47.61** | **41** | | P | **P** | **18 36 15.5** | **-0.4** | |
| | comp=Z,2.1nm,0.9s,baz=33,slow=2.3,SNR=8.9 | | | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |
| **KRUC** | **Moravsky** | **47.66** | **39** | *e*P | | **P** | **18 36 16.1** | **0.0** | |
| **BC3** | **Big Chuckawall** | **47.78** | **176** | | P | P | 18 36 22.3 | +4.9 | |
| | baz=359 | | | | | | | | |
| **MIAR** | **Mount Ida** | **47.80** | **152** | | P | **P** | **18 36 21.2** | **+3.8** | |
| | baz=355 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **47.82** | **177** | | LR | LR | 18 58 20.3 | | |
| | comp=Z,63nm,18.5s,baz=30,slow=38 | | | | | | | | |
| **TPFO** | **Pinon Flats** | **47.82** | **177** | | P | **P** | **18 36 19.9** | **+2.2** | |
| | baz=360 | | | | | | | | |
| **KURK** | **Kurchatov** | **47.89** | **345** | | P | **P** | **18 36 16.3** | **-1.5** | |
| **KURBB** | **Kurchatov Arra** | **47.99** | **345** | | P | **P** | **18 36 17.8** | **-0.9** | |
| | comp=Z,3.4nm,0.7s,baz=4.5,slow=7.6,SNR=42 | | | | | | | | |
| KURBB | | | | | PcP | **PcP** | **18 37 46.1** | **-0.4** | |
| | comp=Z,0.6nm,0.6s,baz=352,slow=3.2,SNR=4.6 | | | | | | | | |
| KURBB | | | | | LR | LR | 18 57 38.6 | | |
| | comp=Z,23nm,21.5s,baz=176,slow=38 | | | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **48.01** | **287** | | P | **P** | **18 36 18.9** | **0.0** | |
| | comp=Z,3.6nm,0.7s,baz=27,slow=11,SNR=4.7 | | | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | | | |
| **OXF** | **Oxford** | **48.16** | **147** | | P | **P** | **18 36 22.4** | **+2.3** | |
| | baz=354 | | | | | | | | |
| **KMSC** | **Kings Mountain** | **48.28** | **138** | | P | **P** | **18 36 24.4** | **+3.3** | |
| | baz=353 | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **48.32** | **34** | *e*P | | **P** | **18 36 21.9** | **+0.7** | |
| **GLA** | **Glamis** | **48.39** | **176** | | P | **P** | **18 36 25.7** | **+3.7** | |
| | baz=359 | | | | | | | | |
| **SCI2** | **San Clemente I** | **48.44** | **180** | | P | **P** | **18 36 26.4** | **+4.1** | |
| | baz=0.1 | | | | | | | | |
| **VYHS** | **Vyhne** | **48.45** | **37** | *e*P | | **P** | **18 36 22.4** | **+0.1** | |
| **MONP2** | **Monument Peak** | **48.53** | **177** | | P | P | 18 36 28.5 | +5.2 | |
| | baz=360 | | | | | | | | |
| **ZST** | **Bratislava** | **48.59** | **38** | *e*P | | **P** | **18 36 21.1** | **-2.2** | |
| **RETA** | **Reutte** | **48.65** | **44** | *e*pP | | pP | 18 36 25.6 | -0.6 | |
| | comp=Z,1.9nm,0.8s | | | | | | | | |
| **MOA** | **Molln** | **48.65** | **41** | *i* | pP | pP | 18 36 24.0 | -2.1 | |
| | comp=Z,5.5nm,1.1s | | | | | | | | |
| **CONA** | **Conrad Observa** | **48.73** | **40** | *i* | pP | **P** | **18 36 24.2** | **-0.3** | |
| | comp=Z,1.6nm,0.9s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **48.75** | **42** | *i* | pP | **P** | **18 36 24.3** | **-0.2** | |
| | comp=Z,3.6nm,1.2s | | | | | | | | |
| **DAVA** | **Damuels** | **48.75** | **45** | *i* | P | **P** | **18 36 22.2** | **-2.6** | |
| | comp=Z,7.1nm,1.7s | | | | | | | | |
| **MOTA** | **Moosalm** | **48.83** | **44** | *i* | pP | **P** | **18 36 24.7** | **-0.7** | |
| | comp=Z,3.6nm,1.1s | | | | | | | | |
| **SONM** | **Songino Array** | **48.86** | **321** | | P | **P** | **18 36 25.5** | **-0.1** | |
| | comp=Z,2.3nm,0.9s,baz=349,slow=6.8,SNR=11 | | | | | | | | |
| SONM | | | | | PcP | **PcP** | **18 37 50.3** | **+0.4** | |
| | comp=Z,0.9nm,0.6s,baz=317,slow=2.0,SNR=2.3 | | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | | |
| **WATA** | **Walderalm** | **48.88** | **44** | *e*pP | | **P** | **18 36 25.3** | **-0.5** | |
| **LESA** | **Schwarzleotal** | **48.91** | **43** | *e*pP | | **P** | **18 36 24.8** | **-1.1** | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **48.96** | **44** | *i* | P | **P** | **18 36 24.3** | **-2.0** | |
| | comp=Z,5.4nm,1.4s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **49.00** | **39** | *i* | P | **P** | **18 36 24.6** | **-2.0** | |
| | comp=Z,2.9nm,1.2s | | | | | | | | |
| **121A** | **Cookes Peak, D** | **49.06** | **168** | | P | P | **18 36 30.9** | **+3.6** | |
| | baz=358 | | | | | | | | |
| **FETA** | **Feichten** | **49.11** | **44** | *e*pP | | **P** | **18 36 27.4** | **-0.1** | |
| | comp=Z,3.4nm,1.1s | | | | | | | | |
| **TUC** | **Tucson** | **49.20** | **171** | | P | **P** | **18 36 32.1** | **+3.9** | |
| | baz=358 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **49.25** | **45** | | LR | LR | 18 58 18.1 | | |
| | comp=Z,31nm,18.2s,baz=328,slow=38 | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **49.32** | **42** | *i* | pP | pP | 18 36 31.5 | +0.1 | |
| | comp=Z,2.5nm,0.6s | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **49.33** | **159** | | P | **P** | **18 36 31.0** | **+1.8** | |
| | baz=356 | | | | | | | | |
| **ARSA** | **Arzberg** | **49.37** | **40** | *e*P | | **P** | **18 36 27.1** | **-2.2** | |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **49.42** | **297** | | P | **P** | **18 36 29.1** | **-0.7** | |
| **USRK** | **Ussuriysk Ar.** | **49.42** | **297** | | P | **P** | **18 36 29.2** | **-0.5** | |
| **USRK** | **Ussuriysk Ar.** | **49.42** | **297** | | P | **P** | **18 36 29.9** | **+0.2** | |
| | comp=Z,5.7nm,0.8s,baz=356,slow=5.1,SNR=13 | | | | | | | | |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **49.51** | **173** | | P | P | **18 36 33.6** | **+3.1** | |
| | baz=359 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **49.69** | **1** | | P | **P** | **18 36 31.0** | **-0.7** | |
| ABKAR | | | | | IAmb | IAmb | 18 37 02.8 | | |
| | comp=Z,4.7nm,1.4s | | | | | | | | |
| **GOGA** | **Godfrey** | **49.78** | **141** | | P | **P** | **18 36 35.3** | **+2.7** | |
| | baz=354 | | | | | | | | |
| **MYKA** | **Terra Mystica** | **49.80** | **42** | *e*P | | **P** | **18 36 29.3** | **-3.3** | |
| | comp=Z,5.8nm,1.0s | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **49.83** | **145** | | P | **P** | **18 36 35.8** | **+2.8** | |
| | baz=354 | | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **49.84** | **31** | | P | **P** | **18 36 31.7** | **-1.3** | |
| BUR08 | | | | | IAmb | IAmb | 18 36 40.8 | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **49.87** | **31** | | P | **P** | **18 36 31.6** | **-1.7** | |
| BURAR | | | | | IAmb | IAmb | 18 36 41.4 | | |
| | comp=Z,4.7nm,1.1s | | | | | | | | |
| **SOKA** | **Soboth** | **49.89** | **41** | *i* | pP | pP | 18 36 33.7 | -1.9 | |
| | comp=Z,4.0nm,1.2s | | | | | | | | |
| **PRED** | **Cave del Predi** | **49.97** | **42** | | P | **P** | **18 36 33.4** | **-0.6** | |
| **MNTX** | **Comudas Mount** | **49.98** | **165** | | P | **P** | **18 36 36.7** | **+2.6** | |
| | baz=358 | | | | | | | | |
| **OBKA** | **Obir** | **50.01** | **41** | *i* | pP | pP | 18 36 35.3 | -1.3 | |
| | comp=Z,9.4nm,1.0s | | | | | | | | |
| **CTI** | **Castel Tesino** | **50.17** | **44** | | P | **P** | **18 36 34.7** | **-0.8** | |
| **MK31** | **Makanchi Array** | **51.65** | **342** | | P | **P** | **18 36 45.4** | **-1.1** | |
| MK31 | | | | | PcP | **PcP** | **18 37 59.0** | **-1.0** | |
| **MKAR** | **Makanchi Array** | **51.65** | **342** | | P | **P** | **18 36 45.4** | **-1.1** | |
| MKAR | | | | | PcP | **PcP** | **18 37 59.2** | **-0.7** | |
| **MKAR** | **Makanchi Array** | **51.65** | **342** | | P | **P** | **18 36 45.3** | **-1.2** | |
| | comp=Z,4.0nm,0.6s,baz=360,slow=6.3,SNR=46 | | | | | | | | |
| MKAR | | | | | PcP | **PcP** | **18 37 59.4** | **-0.6** | |
| | comp=Z,1.3nm,0.7s,baz=2.6,slow=3.0,SNR=4.2 | | | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **51.65** | **342** | | P | **P** | **18 36 45.2** | **-1.4** | |
| **MLR** | **Muntele Rosu** | **52.04** | **31** | | LR | LR | 18 59 10.4 | | |
| | comp=Z,41nm,19.7s,baz=16,slow=36 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **52.40** | **163** | | P | **P** | **18 36 55.8** | **+3.3** | |
| | comp=Z,1.4nm,0.7s,baz=339,slow=4.8,SNR=22 | | | | | | | | |
| TXAR | | | | | PcP | **PcP** | **18 38 04.3** | **+1.2** | |
| | comp=Z,0.2nm,0.5s,baz=316,slow=5.0,SNR=1.1 | | | | | | | | |
| TXAR | | | | | LR | LR | 18 58 57.8 | | |
| | comp=Z,32nm,20.8s,baz=360,slow=36 | | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **54.60** | **59** | | P | **P** | **18 37 08.0** | **-0.4** | |
| **ESDC** | **Sonseca Array** | **54.60** | **59** | | P | **P** | **18 37 08.2** | **-0.2** | |
| | comp=Z,1.8nm,0.6s,baz=351,slow=7.3,SNR=18 | | | | | | | | |
| ESDC | | | | | LR | LR | 19 00 13.0 | | |
| | comp=Z,38nm,18.5s,baz=46,slow=36 | | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| **PAB** | **San Pablo** | **54.67** | **60** | | P | **P** | **18 37 07.0** | **-2.0** | |
| **KBZ** | **Khabaz** | **54.83** | **16** | | P | **P** | **18 37 11.1** | **+1.3** | |
| | comp=Z,6.5nm,0.9s,baz=346,slow=4.0,SNR=7.7 | | | | | | | | |
| | comp=Z,6.5nm,0.9s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **55.24** | **315** | *e*P | | **P** | **18 37 12.2** | **-0.9** | |
| HHC | | | | | pP | sP | 18 37 16.7 | +0.5 | |
| HHC | | | | | PP | **PP** | **18 39 11.6** | **-4.5** | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.6s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,110nm,4.8s | | | | | | | | |
| **KK31** | **Karatay Array** | **55.75** | **352** | | | **P** | **18 37 15.8** | **-0.8** | |
| **KKAR** | **Karatay Array** | **55.75** | **352** | | P | **P** | **18 37 16.4** | **-0.2** | |
| KKAR | | | | | PcP | **PcP** | **18 38 16.7** | **+1.1** | |
| **KKAR** | **Karatay Array** | **55.75** | **352** | | P | **P** | **18 37 16.0** | **-0.6** | |
| KKAR | | | | | IAmb | IAmb | 18 37 24.0 | | |
| | comp=Z,4.9nm,0.7s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **56.07** | **289** | | P | **P** | **18 37 19.9** | **+0.9** | |
| | comp=Z,2.0nm,0.9s,baz=35,slow=3.0,SNR=8.4 | | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **AAK** | **Ala-Archa** | **56.11** | **348** | | LR | LR | 19 03 19.2 | | |
| | comp=Z,34nm,19.2s,baz=336,slow=38 | | | | | | | | |
| **FNA** | **Florina** | **56.33** | **36** | | P | **P** | **18 37 19.7** | **-1.1** | |
| **KSRS** | **Korea Array** | **56.60** | **299** | | P | **P** | **18 37 22.5** | **-0.2** | |
| | comp=Z,1.4nm,0.9s,baz=8.8,slow=6.9,SNR=4.4 | | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | | |
| **NRN** | **Naryn** | **57.26** | **347** | | P | **P** | **18 37 27.5** | **-0.2** | |
| **KSH** | **Kashi** | **59.17** | **347** | | P | **P** | **18 37 44.4** | **+3.5** | |
| KSH | | | | | sP | pwP | 18 37 52.7 | +5.7 | |
| KSH | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **KEST** | **Kesra** | **60.11** | **48** | | P | **P** | **18 37 47.8** | **+0.5** | |
| | comp=Z,5.6nm,0.7s,baz=269,slow=3.8,SNR=9.0 | | | | | | | | |
| | comp=Z,5.6nm,0.7s | | | | | | | | |
| **MDT** | **Midelt** | **61.27** | **61** | | LR | LR | 19 02 48.4 | | |
| | comp=Z,25nm,21.6s,baz=11,slow=34 | | | | | | | | |
| **XAN** | **Xi'an** | **62.26** | **316** | | P | P | 18 37 49.3 | -13 | |
| XAN | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **PZH** | **PanZhiHua** | **70.44** | **322** | | P | **P** | **18 38 54.6** | **+0.2** | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.5s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **78.66** | **324** | | P | **P** | **18 39 41.5** | **-0.7** | |
| | comp=Z,0.6nm,0.3s,baz=0.6,slow=9.0,SNR=5.4 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.47** | **58** | | P | **P** | **18 39 57.2** | **-0.1** | |
| | comp=Z,1.7nm,0.7s,baz=346,slow=6.2,SNR=12 | | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | |
| **ASAR** | **Alice Springs** | **115.86** | **284** | | PKP | **PKiKP** | **18 46 22.6** | **+0.2** | |
| | comp=Z,0.6nm,0.9s,baz=15,slow=1.7,SNR=7.9 | | | | | | | | |
| ASAR | | | | | PKKPbc | **PKKPab** | **18 56 54.6** | **-3.1** | |
| | comp=Z,0.3nm,0.7s,baz=177,slow=3.7,SNR=4.9 | | | | | | | | |

*TIR* **11** *18:29:07.8,41.°60N×20.°22E,h21km±1km,Ml2.5*
*PDG* **11** *18:29:08.5±0.0,41.°61N×20.°19E,h7km, ML2.5/10,Error ellipse: s-maj=0.0km s-min=0.1km az=0.0*
*BEO* **11** *18:29:09.9±0.5,41.°57N×20.°20E,h1km±6km, ML2.2/6*
*SKO* **11** *18:29:09.5,41.°54N×20.°07E,h7km,ML2.3*
**ISC 11 18:29:09.1**±1.0,**41.°59N**±0.°02×**20.°16E**±0.°02,**h15**km±8km, **n31**,σ**098**/58,**7C, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TIR** | **Tirane** | **0.33** | **222** | P | | **Pg** | **18 29 15.8** | **-0.1** |
| | baz=227 | | | | | | | |
| TIR | | | | S | | **Sb** | **18 29 21.9** | **+0.1** |
| | baz=227 | | | | | | | |
| TIR | | | | AMP | | | | |
| | comp=E,1.1nm,0.2s,baz=227 | | | | | | | |
| **TIR** | **Tirane** | **0.33** | **222** | *e*Pg | | **Pg** | **18 29 15.8** | **-0.1** |
| TIR | | | | *e*Sg | | **Sb** | **18 29 21.7** | **-0.1** |
| **PUK** | **Puka** | **0.49** | **336** | P | | **Pg** | **18 29 18.7** | **-0.3** |
| | baz=332 | | | | | | | |
| PUK | | | | S | | **Sb** | **18 29 26.2** | **-0.4** |
| | baz=332 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=E,2.1nm,0.4s,baz=332 | | | | | | | |
| **OHR** | **Ohrid** | **0.68** | **135** | *i* Pg | | **Pg** | **18 29 22.1** | **-0.4** |
| OHR | | | | *i* Sg | | **Sb** | **18 29 33.0** | **+0.9** |
| OHR | | | | *e*Lg | | Lg | 18 29 33.6 | |
| | comp=N,112nm,0.5s | | | | | | | |
| OHR | | | | *e*Lg | | Lg | 18 29 34.0 | |
| | comp=E,112nm,0.5s | | | | | | | |
| **BCI** | **Bajram Curri** | **0.78** | **355** | P | | **Pg** | **18 29 23.1** | **-1.2** |
| | baz=352 | | | | | | | |
| BCI | | | | S | | **Sg** | **18 29 34.4** | **-0.1** |
| | baz=352 | | | | | | | |
| BCI | | | | AMP | | | | |
| | comp=N,0.9nm,0.4s,baz=352 | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.94** | **310** | *e*Pg | | **Pb** | **18 29 25.9** | **-1.3** |
| DRME | | | | *i* Sg | | **Sn** | **18 29 40.7** | **-0.4** |
| **PVY** | **Plav** | **1.01** | **352** | ⇑*i*Pg | | **Pb** | **18 29 27.0** | **-1.5** |
| PVY | | | | *i* Sg | | **Sn** | **18 29 42.8** | **-0.3** |
| **PDG** | **Podgorica** | **1.07** | **322** | *e*Pg | | **Pb** | **18 29 28.8** | **-0.7** |
| PDG | | | | *e*Sg | | **Sn** | **18 29 45.7** | **+1.3** |
| **PDG** | **Podgorica** | **1.07** | **322** | ⇑*i*Pg | | **Pb** | **18 29 28.3** | **-1.2** |
| PDG | | | | *i* Sg | | **Sn** | **18 29 45.2** | **+0.8** |
| **BUM** | **Brajici-Budva** | **1.18** | **307** | ⇑*i*Pg | | **Pn** | **18 29 30.5** | **-0.7** |
| BUM | | | | *i* Sg | | **Sg** | **18 29 49.0** | **+1.7** |
| **FNA** | **Florina** | **1.22** | **131** | P | | **Pn** | **18 29 30.9** | **-0.9** |
| | baz=132 | | | | | | | |
| FNA | | | | S | | **Sn** | **18 29 47.8** | **-0.4** |
| | baz=132 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=N,0.3nm,0.4s,baz=132 | | | | | | | |
| **FNA** | **Florina** | **1.22** | **131** | *i* Pg | | **Pn** | **18 29 31.3** | **-0.5** |
| FNA | | | | *i* Sg | | **Sg** | **18 29 48.7** | **+0.1** |
| **BEY** | **Berane** | **1.29** | **351** | *i* Pg | | **Pg** | **18 29 33.7** | **-0.4** |
| **IVA** | **Berane** | **1.29** | **351** | *e*Pg | | **Pn** | **18 29 32.3** | **-0.5** |
| IVA | | | | *i* Sg | | **Sg** | **18 29 52.4** | **+1.4** |
| **CEME** | **Cevo** | **1.33** | **316** | *e*Pg | | **Pn** | **18 29 33.1** | **-0.2** |
| CEME | | | | *i* Sg | | **Sg** | **18 29 53.8** | **+1.8** |
| **KOME** | **Kolasin** | **1.35** | **339** | ⇑*i*Pg | | **Pn** | **18 29 33.2** | **-0.3** |
| KOME | | | | *i* Sg | | **Sg** | **18 29 54.1** | **+1.5** |
| **NKME** | **Niksic** | **1.48** | **323** | ⇑*i*Pg | | **Pn** | **18 29 35.7** | **+0.4** |
| NKME | | | | *i* Sg | | **Sg** | **18 29 58.9** | **+2.1** |
| **SJES** | **Sjenica** | **1.67** | **355** | *e*Pn | | **Pb** | **18 29 40.2** | **+0.4** |
| SJES | | | | *e*Sn | | **Sg** | **18 30 03.0** | **-0.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CEME** | **Cevo** | **1.33** | **319** | *e*Pg | | **Pn** | **18 45 36.0** | **-1.1** |
| CEME | | | | *i* Sg | | **Sn** | **18 45 56.6** | **+1.3** |
| **KOME** | **Kolasin** | **1.37** | **342** | ⇑*i*Pg | | **Pn** | **18 45 37.0** | **-0.7** |
| KOME | | | | *i* Sg | | **Sg** | **18 45 58.3** | **+2.5** |
| **NKME** | **Niksic** | **1.49** | **325** | ⇓*i*Pg | | **Pn** | **18 45 38.9** | **-0.3** |
| NKME | | | | *i* Sg | | **Sg** | **18 46 02.0** | **+2.5** |
| **SRN** | **Sarande** | **1.67** | **183** | P | | **Pb** | **18 45 42.2** | **-0.7** |
| | baz=186 | | | | | | | |
| SRN | | | | S | | **Sg** | **18 46 06.5** | **+1.2** |
| | baz=186 | | | | | | | |
| **SJES** | **Sjenica** | **1.71** | **357** | *e*Pn | | **Pb** | **18 45 43.6** | **-0.2** |
| SJES | | | | *e*Sn | | **Sg** | **18 46 07.6** | **+0.9** |
| **BRY** | **Bratogost** | **1.78** | **320** | ⇑*i*Pn | | **Pb** | **18 45 44.0** | **-1.0** |
| BRY | | | | *i* Sn | | **Sg** | **18 46 09.7** | **+0.7** |
| **BARS** | **Barje** | **1.79** | **45** | *e*Pn | | **Pb** | **18 45 45.1** | **0.0** |
| BARS | | | | *e*Sn | | **Sg** | **18 46 09.0** | **-0.2** |
| **BARS** | **Barje** | **1.79** | **45** | *i* Pn | | **Pg** | **18 45 45.7** | **-0.3** |
| BARS | | | | *e*Sn | | **Sg** | **18 46 09.1** | **-0.2** |
| **SELS** | **Selova** | **1.83** | **24** | *e*Pn | | **Pb** | **18 45 45.5** | **-0.2** |
| SELS | | | | *e*Sn | | **Sb** | **18 46 09.0** | **+0.1** |
| **VAY** | **Valandovo** | **1.87** | **96** | *i* Pn | | **Pb** | **18 45 46.1** | **-0.2** |
| VAY | | | | *e*Sn | | **Sn** | **18 46 07.5** | **-0.8** |
| VAY | | | | *e*Lg | | Lg | 18 46 12.2 | |
| | comp=E,7.9nm,0.6s | | | | | | | |
| VAY | | | | *e*Lg | | Lg | 18 46 12.6 | |
| | comp=N,16nm,0.7s | | | | | | | |
| **UPM** | **Unac-Piva** | **1.88** | **332** | ⇓*i*Pn | | **Pb** | **18 45 45.5** | **-1.1** |
| UPM | | | | *i* Sn | | **Sg** | **18 46 12.1** | **+0.1** |
| **BOSS** | **Bosilegrad** | **2.01** | **61** | *e*Pn | | **Pb** | **18 45 48.4** | **-0.3** |
| **IGT** | **Igoumenitsa** | **2.02** | **175** | P | | **Pb** | **18 45 47.8** | **-1.2** |
| | baz=177 | | | | | | | |
| IGT | | | | S | | **Sb** | **18 46 14.2** | **-0.3** |
| | baz=177 | | | | | | | |
| IGT | | | | AMP | | | | |
| | comp=N,0.0nm,0.6s,baz=177 | | | | | | | |
| **PEHC** | **Pehcevo** | **2.11** | **83** | *i* Pn | | **Pn** | **18 45 48.2** | **+0.4** |
| PEHC | | | | *e*Sn | | **Sn** | **18 46 14.5** | **+0.1** |
| PEHC | | | | *e*Lg | | Lg | 18 46 23.0 | |
| | comp=N,24nm,0.9s | | | | | | | |
| PEHC | | | | *e*Lg | | Lg | 18 46 26.0 | |
| | comp=E,22nm,1.1s | | | | | | | |
| **KNT** | **Kendrikon** | **2.14** | **100** | *i* Pn | | **Pn** | **18 45 48.8** | **+0.7** |
| **KKB** | **Krupnik** | **2.28** | **82** | *i* Pn | | **Pn** | **18 45 51.0** | **+0.9** |
| **SRS** | **Serrai** | **2.66** | **98** | *i* Pn | | **Pn** | **18 45 56.1** | **+0.9** |

**IDC 11 18:46:45.3±10.0, 60°35S×155°23E, h0km, mb3.3/2, mbtmp3.3/3, ML2.9/1, MS3.4/4, Error ellipse: s-maj=664.0km s-min=38.2km az=75.0, Macquarie Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **17.39** | **175** | P | Pn | 18 50 49.0 | 0.0 |
| | baz=337,slow=13,SNR=1.1 0.4nm,0.5s | | | | | | |
| **URZ** | **Urewera** | **26.07** | **42** | LR | LR | 19 02 15.8 | |
| | comp=Z,50nm,18.1s,baz=330,slow=36 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **36.66** | **295** | T | T | 19 32 18.1 | |
| | baz=147,slow=75,SNR=13 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **36.66** | **295** | T | T | 19 32 18.0 | |
| | baz=147,slow=75,SNR=8.4 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **36.68** | **295** | T | T | 19 32 19.3 | |
| | baz=147,slow=75,SNR=5.4 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **36.97** | **301** | LR | LR | 19 06 19.2 | |
| | comp=Z,54nm,18.2s,baz=240,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **39.55** | **328** | P | P | 18 54 17.4 | -0.5 |
| | 0.4nm,1.0s,baz=165,slow=7.7,SNR=1.9 0.4nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.01** | **331** | P | P | 18 54 46.6 | +0.3 |
| | 0.6nm,1.1s,baz=163,slow=7.2,SNR=1.2 0.6nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **47.38** | **189** | LR | LR | 19 13 50.0 | |
| | comp=Z,56nm,18.9s,baz=212,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **51.20** | **350** | LR | LR | 19 14 13.0 | |
| | comp=Z,28nm,18.4s,baz=297,slow=32 | | | | | | |

*TIR* ***11*** *18:52:54.8, 41°.61N×20°.18E, h25km, Md2.8, Ml2.3*
*PDG* ***11*** *18:52:55.4±0.0, 41°.57N×20°.10E, h6km, ML2.4/9, Error ellipse: s-maj=0.0km s-min=0.1km az=0.0*
*BEO* ***11*** *18:52:56.2±0.6, 41°.55N×20°.22E, h10km±7km, ML1.9/6*
*SKO* ***11*** *18:52:56.0, 41°.51N×19°.96E, h14km, ML1.9*

**ISC 11 18:52:55.6±1.1, 41°.61N±0°.02×20°.15E±0°.02, h10km±10km, n26, σ1°59/51, 3C, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.34** | **220** | P | **Pb** | **18 53 03.0** | **-0.7** |
| | baz=223 | | | | | | |
| TIR | | | | S | **Sb** | **18 53 08.8** | **-0.4** |
| | baz=223 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,0.4nm,0.1s,baz=223 | | | | | | |
| **TIR** | **Tirane** | **0.34** | **220** | *e*Pg | **Pb** | **18 53 02.8** | **-0.9** |
| TIR | | | | *e*Sg | **Sb** | **18 53 08.7** | **-0.4** |
| **PUK** | **Puka** | **0.48** | **336** | P | **Pb** | **18 53 05.5** | **-0.7** |
| | baz=334 | | | | | | |
| PUK | | | | S | **Sb** | **18 53 12.8** | **-0.5** |
| | baz=334 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,1.5nm,0.2s,baz=334 | | | | | | |
| **OHR** | **Ohrid** | **0.69** | **135** | *i* Pg | **Pb** | **18 53 09.6** | **-0.2** |
| OHR | | | | *i* Sg | **Sn** | **18 53 20.8** | **-1.6** |
| OHR | | | | *e*Sn | **Sb** | **18 53 21.4** | **+2.0** |
| | comp=N,26nm,0.4s | | | | | | |
| OHR | | | | *e*Sn | **Sg** | **18 53 25.1** | **+7.0** |
| | comp=E,18nm,0.4s | | | | | | |
| **BCI** | **Bajram Curri** | **0.76** | **355** | P | **Pb** | **18 53 10.0** | **-1.0** |
| | baz=354 | | | | | | |
| BCI | | | | S | **Sb** | **18 53 21.0** | **-0.4** |
| | baz=354 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,0.8nm,0.5s,baz=354 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.93** | **309** | *e*Pg | **Pg** | **18 53 12.3** | **-1.1** |
| DRME | | | | *i* Sg | **Sb** | **18 53 26.8** | **+0.6** |
| **PDG** | **Podgorica** | **1.06** | **321** | *e*Pg | **Pb** | **18 53 15.7** | **-0.3** |
| PDG | | | | *e*Sg | **Sn** | **18 53 31.8** | **+0.4** |
| **PDG** | **Podgorica** | **1.06** | **321** | *e*Pg | **Pg** | **18 53 14.9** | **-1.1** |
| PDG | | | | *i* Sg | **Sn** | **18 53 31.7** | **+0.4** |
| **BUM** | **Brajici-Budva** | **1.17** | **307** | *e*Pg | **Pg** | **18 53 16.7** | **-1.3** |
| BUM | | | | *i* Sg | **Sn** | **18 53 34.9** | **+0.8** |
| **FNA** | **Florina** | **1.23** | **131** | P | **Pn** | **18 53 18.5** | **-0.5** |
| | baz=131 | | | | | | |
| FNA | | | | S | **Sn** | **18 53 35.5** | **-0.3** |
| | baz=131 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.1nm,0.3s,baz=131 | | | | | | |
| **FNA** | **Florina** | **1.23** | **131** | *i* Pg | **Pn** | **18 53 18.8** | **-0.2** |
| FNA | | | | *i* Sg | **Sn** | **18 53 37.6** | **+1.8** |
| **BEY** | **Berane** | **1.28** | **351** | *i* Pg | **Pb** | **18 53 20.4** | **+0.5** |
| **IVA** | **Berane** | **1.28** | **351** | *e*Pg | **Pb** | **18 53 19.5** | **-0.3** |
| IVA | | | | *i* Sg | **Sn** | **18 53 39.8** | **+2.9** |
| **CEME** | **Cevo** | **1.32** | **316** | ⇑*i*Pg | **Pn** | **18 53 19.6** | **-0.5** |
| CEME | | | | *i* Sg | **Sn** | **18 53 40.1** | **+2.3** |
| **KOME** | **Kolasin** | **1.33** | **339** | *e*Pg | **Pn** | **18 53 20.2** | **-0.2** |
| KOME | | | | *i* Sg | **Sn** | **18 53 41.2** | **+3.0** |
| **NKME** | **Niksic** | **1.46** | **323** | ⇑*i*Pg | **Pb** | **18 53 22.4** | **-0.6** |
| NKME | | | | *i* Sg | **Sg** | **18 53 45.4** | **+2.7** |
| **SJES** | **Sjenica** | **1.66** | **355** | *e*Pn | **Pg** | **18 53 27.3** | **-0.1** |
| SJES | | | | *e*Sn | **Sg** | **18 53 48.6** | **-0.4** |
| **BARS** | **Barje** | **1.73** | **45** | *i* Pn | **Pg** | **18 53 28.2** | **-0.5** |
| BARS | | | | *e*Sn | **Sg** | **18 53 52.1** | **+1.0** |
| **SELS** | **Selova** | **1.76** | **24** | *e*Pn | **Pb** | **18 53 27.0** | **-1.1** |
| SELS | | | | *e*Sn | **Sn** | **18 53 49.4** | **+0.6** |
| **BRY** | **Bratogost** | **1.77** | **318** | ⇑*i*Pn | **Pb** | **18 53 27.4** | **-0.7** |
| BRY | | | | *i* Sn | **Sg** | **18 53 52.9** | **+0.6** |
| **VAY** | **Valandovo** | **1.84** | **98** | *i* Pn | **Pg** | **18 53 29.2** | **-1.6** |
| VAY | | | | *e*Sn | **Sb** | **18 53 52.6** | **+0.3** |
| VAY | | | | *e*Lg | Lg | 18 54 00.1 | |
| | comp=E,7.8nm,0.8s | | | | | | |
| VAY | | | | *e*Lg | Lg | 18 54 00.3 | |
| | comp=N,12nm,0.8s | | | | | | |
| **UPM** | **Unac-Piva** | **1.84** | **330** | *e*Pn | **Pb** | **18 53 28.7** | **-0.8** |
| UPM | | | | *i* Sn | **Sg** | **18 53 55.0** | **+0.1** |
| **PEHC** | **Pehcevo** | **2.06** | **84** | *i* Pn | **Pb** | **18 53 33.1** | **-0.1** |
| PEHC | | | | *e*Sn | **Sg** | **18 53 59.8** | **-2.1** |
| PEHC | | | | *e*Lg | Lg | 18 54 01.2 | |
| | comp=N,14nm,0.9s | | | | | | |
| PEHC | | | | *e*Lg | Lg | 18 54 12.1 | |
| | comp=E,17nm,1.2s | | | | | | |
| **IGT** | **Igoumenitsa** | **2.08** | **176** | P | **Pb** | **18 53 31.6** | **-1.8** |
| | baz=176 | | | | | | |
| IGT | | | | S | **Sb** | **18 53 59.3** | **+0.1** |
| | baz=176 | | | | | | |
| **KNT** | **Kendrikon** | **2.11** | **101** | *i* Pn | **Pb** | **18 53 33.1** | **-0.8** |
| **KKB** | **Krupnik** | **2.24** | **83** | *i* Pn | **Pb** | **18 53 34.1** | **-2.0** |

**DJA 11 18:53:54.2±0.4, 8°S±6°×111°6E±°, h12km±4km, M4.1/7, mb4.5/2, MLv3.9/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.62** | **137** | P | Pg | 18 54 05.8 | -0.6 |
| **SRBI** | **Singaraja** | **1.24** | **279** | P | Pn | 18 54 17.1 | -0.3 |
| **PLAI** | **Plampang** | **1.42** | **113** | P | Pn | 18 54 19.8 | -0.1 |
| PLAI | | | | S | Sb | 18 54 39.1 | +0.4 |
| **JAGI** | **Jajag, Banyuwa** | **2.28** | **265** | P | Pn | 18 54 31.8 | +0.1 |
| JAGI | | | | S | Sn | 18 54 59.6 | -0.2 |
| **BSSI** | **Bau Bau, Buton** | **4.54** | **62** | P | Pn | 18 55 01.7 | -1.1 |
| BSSI | | | | S | Sn | 18 55 51.5 | -4.0 |
| **PWJI** | **Pagerwojo** | **4.61** | **273** | P | Pn | 18 55 04.0 | +0.3 |
| **BNSI** | **Bone** | **5.30** | **44** | P | Pn | 18 55 13.4 | +0.2 |
| | 20nm,0.9s,0.1nm | | | | | | |
| **UGM** | **Wanagama** | **5.88** | **273** | P | Pn | 18 55 22.4 | +1.1 |

*TIR* ***11*** *18:57:20.4, 41°.56N×20°.15E, h30km±1km, Md3.0, Ml2.1*
*BEO* ***11*** *18:57:21.4±0.6, 41°.54N×20°.29E, h1km±6km, ML2.0/6*
*PDG* ***11*** *18:57:22.5±0.1, 41°.65N×20°.14E, h7km, ML2.4/7, Error ellipse: s-maj=0.1km s-min=0.3km az=0.0*

**ISC 11 18:57:20.7±1.2, 41°.56N±0°.03×20°.17E±0°.04, h6km±11km, n18, σ0°64/35, 1C, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.31** | **228** | P | **Pb** | **18 57 28.3** | **-0.3** |
| | baz=226 | | | | | | |
| TIR | | | | S | **Sb** | **18 57 34.0** | **+0.1** |
| | baz=226 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=N,0.7nm,0.1s,baz=226 | | | | | | |
| **TIR** | **Tirane** | **0.31** | **228** | *e*Pg | **Pb** | **18 57 28.1** | **-0.5** |
| TIR | | | | *e*Sg | **Sb** | **18 57 34.0** | **+0.1** |
| **PUK** | **Puka** | **0.53** | **337** | P | **Pg** | **18 57 31.6** | **+0.7** |
| | baz=338 | | | | | | |
| PUK | | | | S | **Sb** | **18 57 39.4** | **-1.0** |
| | baz=338 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.8nm,0.2s,baz=338 | | | | | | |
| **BCI** | **Bajram Curri** | **0.81** | **355** | P | **Pg** | **18 57 35.7** | **-0.6** |
| | baz=356 | | | | | | |
| BCI | | | | S | **Sb** | **18 57 48.6** | **0.0** |
| | baz=356 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,0.3nm,0.6s,baz=356 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.97** | **311** | *e*Pg | **Pg** | **18 57 39.0** | **-0.3** |
| DRME | | | | *i* Sg | **Sb** | **18 57 53.0** | **+0.1** |
| **PDG** | **Podgorica** | **1.11** | **322** | *e*Pg | **Pg** | **18 57 41.6** | **-0.3** |
| PDG | | | | *e*Sg | **Sn** | **18 57 58.5** | **+0.2** |
| **PDG** | **Podgorica** | **1.11** | **322** | *e*Pg | **Pg** | **18 57 41.4** | **-0.6** |
| PDG | | | | *i* Sg | **Sb** | **18 57 57.3** | **+0.4** |
| **FNA** | **Florina** | **1.20** | **130** | P | **Pg** | **18 57 43.9** | **+0.2** |
| | baz=129 | | | | | | |
| FNA | | | | S | **Sn** | **18 58 00.4** | **-0.2** |
| | baz=129 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.1nm,0.3s,baz=129 | | | | | | |
| **IVA** | **Berane** | **1.33** | **351** | *e*Pg | **Pn** | **18 57 45.3** | **-0.6** |
| IVA | | | | *i* Sg | **Sn** | **18 58 04.6** | **+0.6** |
| **CEME** | **Cevo** | **1.36** | **317** | *e*Pg | **Pn** | **18 57 46.1** | **-0.2** |
| CEME | | | | *i* Sg | **Sn** | **18 58 06.1** | **+1.4** |
| **KOME** | **Kolasin** | **1.38** | **340** | *e*Pg | **Pn** | **18 57 46.3** | **-0.3** |
| KOME | | | | *i* Sg | **Sg** | **18 58 06.3** | **+1.2** |
| **NKME** | **Niksic** | **1.51** | **324** | ⇑*i*Pg | **Pb** | **18 57 48.9** | **-0.3** |
| NKME | | | | *i* Sg | **Sg** | **18 58 11.0** | **+1.8** |
| **SJES** | **Sjenica** | **1.71** | **355** | *e*Pn | **Pb** | **18 57 52.5** | **-0.1** |
| SJES | | | | *e*Sn | **Sg** | **18 58 16.1** | **+0.4** |
| **SELS** | **Selova** | **1.81** | **23** | *e*Pn | **Pn** | **18 57 52.7** | **+0.3** |
| SELS | | | | *e*Sn | **Sg** | **18 58 18.2** | **-0.6** |
| **BRY** | **Bratogost** | **1.81** | **319** | *e*Pn | **Pb** | **18 57 54.1** | **-0.2** |
| BRY | | | | *i* Sn | **Sg** | **18 58 19.0** | **+0.2** |
| **UPM** | **Unac-Piva** | **1.89** | **331** | *e*Pn | **Pb** | **18 57 55.0** | **-0.8** |
| UPM | | | | *i* Sn | **Sg** | **18 58 20.9** | **-0.7** |
| **BOSS** | **Bosilegrad** | **1.96** | **61** | *e*Pn | **Pn** | **18 57 55.1** | **+0.5** |
| **IGT** | **Igoumenitsa** | **2.02** | **176** | P | **Pb** | **18 57 57.6** | **-0.3** |
| | baz=176 | | | | | | |
| IGT | | | | S | **Sb** | **18 58 23.1** | **-0.3** |
| | baz=176 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=N,0.0nm,0.6s,baz=176 | | | | | | |

*IDC* ***11*** *19:03:11.4±1.4, 41°.00N×48°.44E, h0km, mb3.9/7, mbtmp3.9/14, ML3.7/7, MS3.0/11, Error ellipse: s-maj=24.6km s-min=10.9km az=148.0*
*DRS* ***11*** *19:03:11.4, 40°.72N×48°.66E, h69km*
*AZER* ***11*** *19:03:12.0, 40°.80N×48°.47E, h9km, ml3.8*
*TEH* ***11*** *19:03:13.3, 40°.72N×48°.44E, h20km±133km, ML3.8*
*MOS* ***11*** *19:03:14.0, 40°.87N×48°.47E, h8km, MPVA4.7*

**ISC 11 19:03:12.9±0.8, 40°.79N±0°.01×48°.56E±0°.02, h18km±3km, n171, σ2°05/259, mb4.0/8, MS2.9/6, 4C-4D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PQL** | **Pirkuli** | **0.03** | **99** | Pg | **Pg** | **19 03 16.6** | **+0.3** |
| **PQL** | **Pirkuli** | **0.03** | **99** | P | **Pg** | **19 03 16.6** | **+0.3** |
| PQL | | | | S | **Sg** | **19 03 19.3** | **+0.6** |
| **IML** | **Ismayilli** | **0.28** | **270** | Pg | **Pg** | **19 03 18.9** | **-0.4** |
| **IML** | **Ismayilli** | **0.28** | **270** | P | **Pg** | **19 03 19.0** | **-0.4** |
| IML | | | | S | **Sg** | **19 03 24.1** | **+0.5** |
| **ATGJ** | **Altiaghaj** | **0.30** | **77** | P | **Pn** | **19 03 21.3** | **-1.2** |
| ATGJ | | | | S | **Sn** | **19 03 27.3** | **-1.2** |
| **SIZA** | **Siyzn** | **0.38** | **42** | Pg | **Pn** | **19 03 23.2** | **-0.4** |
| **SIZA** | **Siyzn** | **0.38** | **42** | P | **Pn** | **19 03 23.2** | **-0.4** |
| SIZA | | | | S | **Sn** | **19 03 31.1** | **+0.5** |
| **GBS** | **Qobustan** | **0.39** | **131** | Pg | **Pn** | **19 03 22.9** | **-0.8** |
| **GBS** | **Qobustan** | **0.39** | **131** | P | **Pn** | **19 03 23.0** | **-0.8** |
| GBS | | | | S | **Sn** | **19 03 31.5** | **+0.8** |
| **XNQ** | **Khinaliq** | **0.49** | **320** | Pg | **Pg** | **19 03 23.3** | **+0.3** |
| **XNQ** | **Khinaliq** | **0.49** | **320** | P | **Pg** | **19 03 23.3** | **+0.3** |
| XNQ | | | | S | **Sg** | **19 03 30.6** | **+0.8** |
| **KDMR** | **Kurdemir** | **0.51** | **214** | P | **Pg** | **19 03 23.2** | **+0.1** |
| KDMR | | | | S | **Sb** | **19 03 32.3** | **+2.1** |
| **QUBA** | **Quba, Azerbaij** | **0.56** | **355** | P | **Pn** | **19 03 26.5** | **+0.4** |
| QUBA | | | | S | **Sn** | **19 03 36.0** | **+1.0** |
| **QBL** | **Gabala** | **0.57** | **286** | Pg | **Pg** | **19 03 23.9** | **-0.3** |
| **QBL** | **Gabala** | **0.57** | **286** | P | **Pg** | **19 03 24.0** | **-0.3** |
| QBL | | | | S | **Sg** | **19 03 33.0** | **+1.0** |
| **QSAR** | **Qusar** | **0.76** | **343** | P | **Pn** | **19 03 29.1** | **+0.4** |
| QSAR | | | | S | **Sn** | **19 03 40.4** | **+0.8** |
| **ZRD** | **Zardab** | **0.84** | **233** | Pg | **Pb** | **19 03 29.2** | **+0.3** |
| **ZRD** | **Zardab** | **0.84** | **233** | P | **Pb** | **19 03 29.2** | **+0.3** |
| ZRD | | | | S | **Sn** | **19 03 42.8** | **+1.2** |
| **KSMR** | **Kasumkent** | **0.87** | **338** | *i* Pg | **Pn** | **19 03 30.9** | **+0.6** |
| KSMR | | | | *e*Sg | **Sn** | **19 03 43.1** | **+0.5** |
| **KSMR** | **Kasumkent** | **0.87** | **338** | *e*PG | **Pn** | **19 03 30.8** | **+0.5** |
| KSMR | | | | *i* S | **Sn** | **19 03 43.7** | **+1.1** |
| KSMR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | |
| KSMR | | | | smax | smax | | |
| | comp=E,12μm,0.4s | | | | | | |
| **ALIB** | **&Aumlli-Bayram** | **0.90** | **158** | Pg | **Pn** | **19 03 32.8** | **+2.2** |
| **ALIB** | **&Aumlli-Bayram** | **0.90** | **158** | P | **Pn** | **19 03 32.9** | **+2.2** |
| ALIB | | | | S | **Sn** | **19 03 48.4** | **+5.2** |
| **SAAT** | **Saatly** | **0.94** | **186** | P | **Pb** | **19 03 30.7** | **+0.1** |
| SAAT | | | | S | **Sn** | **19 03 45.6** | **+1.6** |
| **GOBA** | **Gobu** | **0.98** | **113** | P | **Pn** | **19 03 35.8** | **+4.1** |
| GOBA | | | | S | **Sn** | **19 03 48.5** | **+3.5** |
| **NDR** | **Nardaran** | **1.11** | **101** | Pn | **Pg** | **19 03 36.5** | **+2.2** |
| **SEKA** | **Sheki** | **1.11** | **292** | P | **Pn** | **19 03 32.8** | **-0.7** |
| SEKA | | | | S | **Sb** | **19 03 48.6** | **+0.8** |
| **SEKA** | **Sheki** | **1.11** | **292** | PG | **Pn** | **19 03 32.9** | **-0.7** |
| **MNGR** | **Mingechevir, A** | **1.12** | **269** | P | **Pn** | **19 03 33.9** | **+0.2** |
| MNGR | | | | S | **Sn** | **19 03 50.0** | **+1.5** |
| **MNGR** | **Mingechevir, A** | **1.12** | **269** | PG | **Pn** | **19 03 33.8** | **+0.2** |
| **BRDA** | **Brd** | **1.18** | **244** | P | **Pn** | **19 03 35.1** | **+0.7** |
| BRDA | | | | S | **Sg** | **19 03 53.0** | **+1.9** |
| **DRN** | **Derbent** | **1.25** | **352** | *e*Pg | **Pg** | **19 03 37.9** | **+0.9** |
| DRN | | | | *e*Sg | **Sg** | **19 03 54.9** | **+1.6** |
| **DRN** | **Derbent** | **1.25** | **352** | *e*PG | **Pg** | **19 03 37.9** | **+0.9** |
| DRN | | | | *i* S | **Sg** | **19 03 56.1** | **+2.7** |
| DRN | | | | pmax | pmax | | |
| | comp=Z,1μm,0.2s | | | | | | |
| DRN | | | | smax | smax | | |
| | comp=E,2μm,0.3s | | | | | | |
| **AGDM** | **Agdam** | **1.30** | **239** | P | **Pn** | **19 03 36.4** | **+0.2** |
| AGDM | | | | S | **Sb** | **19 03 55.2** | **+2.0** |
| **BLQ** | **Beylaqan** | **1.32** | **216** | P | **Pn** | **19 03 36.1** | **-0.2** |
| BLQ | | | | S | **Sn** | **19 03 53.8** | **+0.4** |
| **URKR** | **Urkarakh** | **1.54** | **333** | *e*Pg | **Pg** | **19 03 42.6** | **0.0** |
| URKR | | | | *e*Sg | **Sg** | **19 04 03.3** | **+0.7** |
| **URKR** | **Urkarakh** | **1.54** | **333** | *e*PN | **Pb** | **19 03 42.2** | **+1.3** |
| URKR | | | | *i* S | **Sg** | **19 04 04.1** | **+1.5** |
| URKR | | | | pmax | pmax | | |
| | comp=Z,729nm,0.4s | | | | | | |
| URKR | | | | smax | smax | | |
| | comp=N,877nm,0.4s | | | | | | |
| **GLBA** | **Clilabad** | **1.56** | **185** | Pg | **Pn** | **19 03 39.8** | **+0.2** |
| **GLBA** | **Clilabad** | **1.56** | **185** | Pg | **Pn** | **19 03 39.9** | **+0.2** |
| GLBA | | | | Sn | **Sg** | **19 04 02.1** | **-1.0** |
| **QRD** | **Qoradiz** | **1.63** | **216** | Pg | **Pn** | **19 03 40.3** | **-0.4** |
| **QRD** | **Qoradiz** | **1.63** | **216** | Pg | **Pn** | **19 03 40.3** | **-0.4** |
| QRD | | | | Sn | **Sn** | **19 04 02.8** | **+1.5** |
| **ZKTA** | **Zakatala** | **1.69** | **301** | Pn | **Pn** | **19 03 42.9** | **+1.4** |
| ZKTA | | | | Sn | **Sb** | **19 04 05.6** | **+1.3** |
| **VSHL** | **Vashlovani** | **1.69** | **286** | P | **Pb** | **19 03 43.4** | **-0.1** |
| VSHL | | | | S | **Sg** | **19 04 08.3** | **+0.9** |
| **GANJ** | **Ganja** | **1.71** | **266** | Pn | **Pn** | **19 03 41.5** | **-0.3** |
| GANJ | | | | Sn | **Sn** | **19 04 03.7** | **+0.6** |
| **GANJ** | **Ganja** | **1.71** | **266** | PN | **Pn** | **19 03 41.6** | **-0.2** |
| **KMKR** | **Kumukh** | **1.73** | **321** | *i* Pg | **Pg** | **19 03 46.3** | **+0.1** |
| KMKR | | | | *e*Sg | **Sg** | **19 04 09.9** | **+1.2** |
| **KMKR** | **Kumukh** | **1.73** | **321** | *e*PN | **Pb** | **19 03 45.7** | **+1.5** |
| KMKR | | | | *i* S | **Sg** | **19 04 10.5** | **+1.8** |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,658nm,0.5s | | | | | | |
| KMKR | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| **SGKR** | **Sergokala** | **1.80** | **338** | *i* Pg | **Pb** | **19 03 46.5** | **+1.2** |
| SGKR | | | | *e*Sg | **Sb** | **19 04 09.8** | **+2.4** |
| **SGKR** | **Sergokala** | **1.80** | **338** | ⇓*i*PN | **Pb** | **19 03 46.5** | **+1.2** |
| **YRD** | **Yardimli** | **1.89** | **188** | Pn | **Pn** | **19 03 44.6** | **+0.1** |
| YRD | | | | Sn | **Sb** | **19 04 10.3** | **0.0** |
| **GNBR** | **Gunib** | **1.99** | **324** | *i* Pg | **Pb** | **19 03 50.1** | **+1.4** |
| GNBR | | | | *e*Sg | **Sb** | **19 04 15.9** | **+2.8** |
| **GNBR** | **Gunib** | **1.99** | **324** | *e*PN | **Pb** | **19 03 50.1** | **+1.4** |
| GNBR | | | | *e*S | **Sg** | **19 04 17.2** | **+0.1** |
| GNBR | | | | *i* S | **Sb** | **19 04 17.8** | **+4.7** |
| GNBR | | | | pmax | pmax | | |
| | comp=Z,263nm,0.6s | | | | | | |
| GNBR | | | | smax | smax | | |
| | comp=N,520nm,0.6s | | | | | | |
| GNBR | | | | smax | smax | | |
| | comp=E,609nm,0.7s | | | | | | |
| GNBR | | | | smax | smax | | |
| | comp=E,782nm,0.6s | | | | | | |
| **LGD** | **Lagodekhi** | **2.03** | **302** | P | **Pb** | **19 03 48.8** | **-0.5** |
| **LGD** | **Lagodekhi** | **2.03** | **302** | *e*PN | **Pb** | **19 03 50.0** | **+0.7** |
| **GRMI** | **Germi** | **2.05** | **195** | Pn | **Pn** | **19 03 46.9** | **+0.3** |
| **LKRN** | **Lenkeran, Azer** | **2.09** | **175** | Pn | **Pn** | **19 03 47.8** | **+0.8** |
| LKRN | | | | Sn | **Sb** | **19 04 15.8** | **0.0** |
| **LKRN** | **Lenkeran, Azer** | **2.09** | **175** | PN | **Pn** | **19 03 47.7** | **+0.8** |
| **GDB** | **GEDABAY** | **2.13** | **269** | Pn | **Pn** | **19 03 48.0** | **+0.3** |
| GDB | | | | Sn | **Sn** | **19 04 15.2** | **+1.4** |
| **ARKR** | **Arakani** | **2.15** | **328** | *i* Pg | **Pb** | **19 03 52.0** | **+0.6** |
| ARKR | | | | *e*Sg | **Sg** | **19 04 22.5** | **+0.3** |
| **ARKR** | **Arakani** | **2.15** | **328** | ⇑*i*PN | **Pb** | **19 03 52.0** | **+0.6** |
| ARKR | | | | *e*S | **Sg** | **19 04 22.5** | **+0.3** |
| **LRK** | **Lerik** | **2.15** | **185** | Pn | **Pn** | **19 03 48.3** | **+0.3** |
| LRK | | | | Sn | **Sb** | **19 04 17.6** | **-0.3** |
| **ASTR** | **Astara** | **2.24** | **175** | Pn | **Pn** | **19 03 49.1** | **+0.1** |
| ASTR | | | | Sn | **Sb** | **19 04 21.6** | **+1.5** |
| **BUJR** | **Buynaksk** | **2.30** | **332** | *e*Pg | **Pb** | **19 03 54.0** | **+0.1** |
| BUJR | | | | *e*Sg | **Sb** | **19 04 24.1** | **+2.2** |
| **BUJR** | **Buynaksk** | **2.30** | **332** | *e*PN | **Pb** | **19 03 52.9** | **-1.0** |
| BUJR | | | | *e*S | **Sb** | **19 04 23.1** | **+1.1** |
| BUJR | | | | *i* S | **Sg** | **19 04 34.6** | **+7.6** |
| BUJR | | | | pmax | pmax | | |
| | comp=Z,147nm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=N,620nm,0.4s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,783nm,0.5s | | | | | | |
| BUJR | | | | smax | smax | | |
| | comp=E,765nm,0.8s | | | | | | |
| **MAK** | **Makhachkala** | **2.30** | **340** | *e*Pg | **Pb** | **19 03 53.8** | **-0.1** |
| MAK | | | | *e*Sg | **Sb** | **19 04 24.8** | **+2.7** |
| **MAK** | **Makhachkala** | **2.30** | **340** | ⇑*i*PN | **Pb** | **19 03 53.8** | **-0.1** |
| MAK | | | | *e* | | 19 03 57.9 | |
| MAK | | | | *e*S | **Sg** | **19 04 29.1** | **+2.1** |
| MAK | | | | *e* | | 19 04 35.5 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,252nm,0.3s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,992nm,0.5s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,838nm,0.6s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,593nm,12.0s | | | | | | |
| **UNCR** | **Uncukul** | **2.33** | **326** | *e*Pg | **Pb** | **19 03 54.4** | **0.0** |
| UNCR | | | | *e*Sg | **Sb** | **19 04 23.7** | **+0.9** |
| **UNCR** | **Uncukul** | **2.33** | **326** | *e*PN | **Pb** | **19 03

SBZ Sn **Sb** **19 04 31.9 -1.5**
**ORD** **Ordubad** **2.71 227** Pn **Pn** **19 03 56.6 +0.9**
ORD Sn **Sn** **19 04 31.9 +3.9**
**IHRS** **Heris** **2.73 206** Pn **Pn** **19 03 56.6 +0.5**
**DVE** **Vedeno** **2.82 321** *e*Pn **Pn** **19 04 00.1 +2.9**
DVE *e*Sn **Sb** **19 04 36.2 -0.8**
**DVE** **Vedeno** **2.82 321** *e*PN **Pn** **19 04 00.1 +2.9**
DVE *e*S **Sb** **19 04 36.2 -0.8**
**NAX** **Nakhchivan** **2.85 236** Pn **Pn** **19 04 00.0 +2.4**
NAX Sn **Sn** **19 04 34.0 +2.5**
**NAX** **Nakhchivan** **2.85 236** PN **Pn** **19 04 00.0 +2.4**
**GNI** **Garni** **2.98 259** *e*Pn **Pb** **19 04 06.7 +1.1**
GNI *e*Sn **Sb** **19 04 43.5 +1.8**
**GNI** **Garni** **2.98 259** Pn **Pn** **19 04 03.0 +3.6**
comp=E,6.3nm,0.3s,baz=90,slow=1.1,SNR=15
GNI Sn **Sb** **19 04 42.4 +0.7**
comp=E,14nm,0.3s,baz=336,slow=13,SNR=2.4
comp=E,13nm,0.4s
**GNI** **Garni** **2.98 259** *e*PN **Pb** **19 04 06.7 +1.1**
GNI *e*S **Sb** **19 04 43.5 +1.8**
**IMRD** **Marand** **3.03 228** Pn **Pn** **19 04 01.0 +1.0**
**HYR** **Heyderabad** **3.03 250** Pn **Pn** **19 04 02.0 +2.0**
HYR Sn **Sn** **19 04 39.4 +3.6**
**ISRB** **Sarab** **3.04 193** Pn **Pn** **19 04 01.7 +1.3**
**CHRG** **Chargali** **3.13 301** P **Pn** **19 04 03.6 +2.2**
**SHTL** **Shatili** **3.16 307** P **Pn** **19 04 05.0 +3.1**
**SHTL** **Shatili** **3.16 307** *e*PN **Pn** **19 04 04.9 +3.1**
**ITBZ** **Tabriz** **3.16 217** Pn **Pn** **19 04 02.9 +0.9**
**GROC** **Groznyy** **3.17 320** *e*Pn **Pg** **19 04 12.7 -0.9**
GROC *e*Sn **Sb** **19 04 45.0 -1.9**
**GROC** **Groznyy** **3.17 320** *e*PN **Pg** **19 04 12.7 -0.9**
GROC *e*S **Sb** **19 04 45.0 -1.9**
**MAKU** **Maku** **3.30 245** Pn **Pn** **19 04 05.2 +1.3**
**DMNI** **Dmanisi** **3.34 281** P **Pn** **19 04 06.4 +2.0**
**DMNI** **Dmanisi** **3.34 281** *e*PN **Pn** **19 04 06.4 +2.0**
**ISHB** **Shabestar** **3.38 223** Pn **Pn** **19 04 04.8 -0.2**
**TRLG** **Trialeti** **3.44 284** P **Pn** **19 04 07.4 +1.5**
**TRLG** **Trialeti** **3.44 284** *e*PN **Pn** **19 04 07.3 +1.5**
**IHSH** **Hashtrud** **3.63 197** Pn **Pn** **19 04 09.7 +1.2**
**IAZR** **Azarshahr** **3.70 214** Pn **Pn** **19 04 10.7 +1.3**
**LACR** **Lac** **3.78 304** *e*Pn **Pb** **19 04 15.8 -3.3**
LACR *e*Sn **Sn** **19 04 59.2 +4.9**
**AKH** **Akhalkalaki** **3.88 281** *e*PN **Pn** **19 04 15.9 +4.2**
**ALIG** **Mtskhetisjvari** **3.92 291** P **Pn** **19 04 14.0 +1.8**
**ALIG** **Mtskhetisjvari** **3.92 291** *e*PN **Pn** **19 04 13.9 +1.8**
**BTKR** **Batakoyurt** **3.95 312** *e*Pn **Pn** **19 04 15.4 +2.9**
BTKR *e*Sn **Sn** **19 05 02.3 +3.9**
**BTKR** **Batakoyurt** **3.95 312** *e*PN **Pn** **19 04 15.4 +2.9**
BTKR *e*S **Sn** **19 05 02.3 +3.9**
**ARNR** **Ardon** **3.98 308** *i* Pn **Pn** **19 04 15.7 +2.7**
ARNR *e*Sn **Sb** **19 05 06.0 -4.2**
**ARNR** **Ardon** **3.98 308** *i* PN **Pn** **19 04 15.7 +2.7**
ARNR *e*S **Sb** **19 05 06.0 -4.2**
**KORR** **Kora** **4.06 306** *i* Pn **Pn** **19 04 18.5 +4.4**
KORR *e*Sn **Sb** **19 05 12.4 -0.1**
**KORR** **Kora** **4.06 306** *i* PN **Pn** **19 04 18.5 +4.4**
KORR *e*S **Sb** **19 05 12.4 -0.1**
**KLST** **Kelardasht - M** **4.70 155** Pn **Pn** **19 04 23.0 -0.1**
**MZPU** **Pul - Mazandar** **4.95 151** Pn **Pn** **19 04 26.4 -0.1**
**KBZ** **Khabaz** **5.12 307** *e*Pn **Pn** **19 04 31.8 +3.1**
KBZ *e*Sn **Sn** **19 05 25.7 -1.5**
**KBZ** **Khabaz** **5.12 307** Pn **Pn** **19 04 28.2 -0.4**
comp=E,0.5nm,0.3s,baz=108,slow=3.2,SNR=2.7
comp=E,0.9nm,0.5s
**KBZ** **Khabaz** **5.12 307**⇑ *e*PN Pn 19 04 33.6 +5.0
**PYA1** **Pyatigorsk** **5.20 311**⇑ *e*PN Pn 19 04 35.9 +6.2
**SHA1** **Shidzhatmaz** **5.27 306** *e*Pn **Pn** **19 04 32.9 +1.9**
SHA1 *e*Sn **Sn** **19 05 34.0 +2.6**
**SHA1** **Shidzhatmaz** **5.27 306** *e*PN **Pn** **19 04 32.9 +1.9**
SHA1 *e*S **Sn** **19 05 34.0 +2.6**
**BEYR** **Belyy Ugol+** **5.33 309** *e*Pn **Pn** **19 04 32.7 +1.1**
BEYR *e*Sn **Sn** **19 05 33.5 +1.0**
**BEYR** **Belyy Ugol+** **5.33 309** *e*PN **Pn** **19 04 32.7 +1.1**
BEYR *e*S **Sn** **19 05 33.5 +1.0**
**KVAR** **Kislovodsk Arr** **5.37 308** Pn Pn 19 04 20.6 -12
baz=94,slow=19
**KIV** **Kislovodsk** **5.38 308** *e*Pn **Pn** **19 04 35.7 +3.4**
KIV *e*Sn **Sn** **19 05 35.4 +1.7**
**KIV** **Kislovodsk** **5.38 308** *e*P **Pn** **19 04 36.3 +4.1**
KIV *e*S **Sn** **19 05 40.5 +6.8**
KIV pmax pmax
comp=Z,15nm,1.1s
KIV MLR MLR
comp=Z,28nm,9.0s
**IPRN** **Peran** **5.42 146** Pn **Pn** **19 04 32.8 -0.2**
**ALER** **Alexandrovskoy** **5.74 316** *e*Pn **Pn** **19 04 38.0 +0.8**
ALER *e*Sn **Sn** **19 05 42.6 0.0**
**ALER** **Alexandrovskoy** **5.74 316** *e*P **Pn** **19 04 38.0 +0.5**
**IALA** **Alasht** **5.77 143** Pn **Pn** **19 04 38.4 +0.5**
**IGLO** **Ghaloghah** **5.95 134** Pn **Pn** **19 04 40.7 +0.5**
**BELG** **Belogornoye** **11.62 357** Pn **Pn** **19 05 55.7 -2.0**
comp=Z,3.4nm,0.3s,baz=191,slow=19,SNR=9.8
BELG Sn **Sn** **19 07 58.8 -8.1**
comp=Z,1.5nm,0.3s,baz=254,slow=9.8,SNR=1.9
BELG LR LR 19 12 07.0
comp=Z,59nm,18.4s,baz=101,slow=47
comp=Z,7.3nm,0.3s
**BELG** **Belogornoye** **11.62 357**⇓ *e*P **Pn** **19 06 01.6 +3.9**
BELG pmax pmax
comp=Z,2.0nm,0.6s
**AKTO** **Aktyubinsk** **11.69 31** Pn **Pn** **19 05 55.8 -2.8**
comp=Z,0.2nm,0.3s,baz=207,slow=10,SNR=2.2
AKTO Sn **Sn** **19 08 02.5 -6.1**
comp=Z,0.5nm,0.3s,baz=172,slow=14,SNR=1.8
comp=Z,0.7nm,0.3s
**OBN** **Obninsk** **16.39 335** *e*P **Pn** **19 07 03.4 +1.6**
OBN pmax pmax
comp=Z,7.0nm,0.9s
OBN MLR MLR
comp=Z,46nm,5.0s
**AKASG** **Malin Array Be** **16.69 313** Pn **Pn** **19 07 01.3 -4.4**
comp=Z,0.2nm,0.3s,baz=122,slow=12,SNR=1.7
comp=Z,0.3nm,0.3s
**AKASG** **Malin Array Be** **16.69 313** *e*P **P** **19 07 09.6 +1.7**
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**AKBB** **Malin Array Si** **16.69 313** *i* P **P** **19 07 07.8 -0.1**
AKBB pmax pmax
comp=Z,10.0nm,1.8s
**ARU** **Arti** **16.96 19** Pn **Pn** **19 07 05.7 -3.3**
baz=221,slow=10,SNR=9.3
ARU Sn Sn 19 10 02.5 -14
baz=86,slow=23,SNR=1.7
ARU LR LR 19 15 41.7
comp=Z,31nm,21.1s,baz=202,slow=45
comp=Z,3.9nm,0.3s
**ARU** **Arti** **16.96 19***d* *i*P **Pn** **19 07 06.1 -2.9**
ARU S **Sn** **19 10 12.4 -4.4**
ARU pmax pmax
comp=Z,11nm,2.5s
**KIRV** **Kirov** **17.82 1** P **Pn** **19 07 18.8 -0.8**
comp=Z,1.9nm,0.3s,baz=177,slow=17,SNR=5.8
KIRV LR LR 19 16 09.3
comp=Z,56nm,19.7s,baz=203,slow=44
comp=Z,15nm,0.6s
**SVE** **Sverdlovsk** **17.86 22** *e*P **P** **19 07 22.9 +2.1**
SVE *e*S **Sn** **19 10 41.2 +2.4**
SVE pmax pmax
comp=Z,14nm,0.8s
**BVAR** **Borovoye Array** **19.20 43** LR LR 19 16 21.2
comp=Z,48nm,18.0s,baz=213,slow=41
**AAK** **Ala-Archa** **19.43 76** LR LR 19 16 28.6
comp=Z,29nm,21.5s,baz=268,slow=41
**KURBB** **Kurchatov Arra** **22.98 55** P **P** **19 08 16.4 +0.1**
comp=Z,0.3nm,0.3s,baz=260,slow=8.7,SNR=4.1
comp=Z,0.3nm,0.3s
**KURK** **Kurchatov** **23.06 54** P **P** **19 08 16.4 -0.7**
**ARBE** **Arbavere** **23.41 330** *e*P **P** **19 08 21.2 +0.7**
**MTSE** **Matsula** **23.79 327** *e*P **P** **19 08 24.7 +0.5**
**JOF** **Joensuu** **24.42 341** *e*P **P** **19 08 29.9 -0.2**
**MEF** **Metsahovi** **24.53 331** *e*P **P** **19 08 31.4 +0.3**
**FINES** **FINESS Array B** **24.79 334** P **P** **19 08 32.9 -0.6**
comp=Z,3.8nm,0.4s,baz=139,slow=11,SNR=38
FINES LR LR 19 19 08.7
comp=Z,41nm,21.2s,baz=115,slow=39
comp=Z,3.8nm,0.4s
**MKAR** **Makanchi Array** **24.95 65** P **P** **19 08 36.2 +1.2**
comp=Z,1.5nm,0.7s,baz=272,slow=7.1,SNR=11
comp=Z,1.5nm,0.7s
**KEF** **Keuruu** **25.71 334** *e*P **P** **19 08 41.8 +0.1**
**GERES** **GERESS Array B** **25.82 300** P **P** **19 08 42.9 -0.1**
comp=Z,0.2nm,0.4s,baz=110,slow=8.6,SNR=1.9
comp=Z,0.2nm,0.4s
**RAF** **Rauma** **26.04 330** *e*P **P** **19 08 44.4 -0.4**

**VAF** **Ylistaro** **27.05 334** *e*P **P** **19 08 53.8 0.0**
**ZALV** **Zalesovo Beam** **27.52 49** LR LR 19 20 55.5
comp=Z,14nm,21.8s,baz=304,slow=39
**HFS** **Hagfors** **28.93 324** P **P** **19 09 10.0 -0.7**
comp=Z,4.0nm,0.6s,baz=113,slow=10.0,SNR=21
HFS LR LR 19 21 46.0
comp=Z,28nm,20.6s,baz=88,slow=39
comp=Z,4.0nm,0.6s
**HFS** **Hagfors** **28.93 324** P **P** **19 09 10.0 -0.7**
**NB2** **NORSAR Subarra** **30.42 324** P **P** **19 09 22.7 -1.2**
comp=Z,1.1nm,0.5s,baz=114,slow=8.6
**NOA** **NORSAR Array B** **30.42 324** P **P** **19 09 22.8 -1.1**
comp=Z,23nm,0.5s,baz=116,slow=8.5,SNR=9.4
NOA LR LR 19 22 33.0
comp=Z,28nm,18.2s,baz=120,slow=38
**ARCES** **ARCESS Array B** **31.25 345** P **P** **19 09 30.8 -0.3**
comp=Z,2.0nm,0.7s,baz=150,slow=9.3,SNR=6.0
comp=Z,2.0nm,0.7s
**ARCES** **ARCESS Array B** **31.25 345** *e*P **P** **19 09 32.2 +1.1**
ARCES pmax pmax
comp=Z,3.0nm,0.9s
**EKA** **Eskdalemuir Ar** **36.59 311** P **P** **19 10 16.1 -1.6**
comp=Z,1.8nm,0.8s,baz=99,slow=8.7,SNR=4.0
comp=Z,1.8nm,0.8s
**TKL** **Tuckaleechee C** **92.22 323** LR LR 19 57 54.4
comp=Z,18nm,18.0s,baz=52,slow=36
**PDAR** **Pinedale Array** **94.50 344** LR LR 20 01 27.1
comp=Z,8.4nm,18.9s,baz=105,slow=37

*ISN **11** 19:10:48.6±0.9, 33.°64N×45.°73E, h15km±21km, ML3.6*
*TEH **11** 19:10:48.4, 33.°63N×45.°67E, h9km±27km, ML3.7*
*IDC **11** 19:10:50.6±1.9, 34.°09N×45.°64E, h0km, mb3.7/9, mbtmp3.7/9, MS3.0/3, Error ellipse: s-maj=47.8km s-min=21.6km az=168.0*
*AFAD **11** 19:10:51.0±0.0, 34.°03N×45.°49E, h5km±5km, ML3.1*

**ISC 11 19:10:49.5±0.6, 33.°69N±0.°03×45.°68E±0.°03, h10km, n48, σ1s76/52, mb3.6/8, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ILBA** | **Ilam Banvizeh** | **0.44** | **98** | Pg | **Pg** | **19 10 57.9** | **-0.3** |
| ILBA | | | | Sg | **Sg** | **19 11 04.2** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.47** | **24** | Pg | **Pg** | **19 10 58.5** | **-0.2** |
| **IBDR** | **Badra** | **0.61** | **160** | *e*Pg | **Pg** | **19 11 00.0** | **-1.3** |
| IBDR | | | | *e*Sg | **Sg** | **19 11 07.0** | **-2.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.82** | **355** | Pg | **Pg** | **19 11 05.5** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.98** | **49** | Pg | **Pg** | **19 11 08.0** | **-0.4** |
| **BHD** | **Baghdad** | **1.16** | **250** | *e*Pn | **Pb** | **19 11 12.0** | **+0.3** |
| BHD | | | | *e*Sn | **Sn** | **19 11 30.0** | **+2.2** |
| BHD | | | | AML | AML | 19 11 35.6 | |
| | comp=E,3μm,0.6s | | | | | | |
| **IDHR** | **Dehrash** | **1.17** | **30** | Pg | **Pb** | **19 11 11.3** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **1.27** | **62** | Pg | **Pn** | **19 11 13.5** | **-0.1** |
| **ILIN** | **Lien** | **1.62** | **40** | Pg | **Pb** | **19 11 20.3** | **+0.6** |
| **IKFM** | **Kafar-mosalman** | **1.81** | **94** | Pn | **Pn** | **19 11 22.0** | **+1.2** |
| **IBZA** | **Bozab** | **1.97** | **66** | Pn | **Pn** | **19 11 25.0** | **+1.8** |
| **SNQR** | **Sonqor, Kerman** | **1.99** | **53** | Pn | **Pn** | **19 11 25.1** | **+1.6** |
| **IKRK** | **Kirkuk** | **2.04** | **327** | *e*Pn | **Pn** | **19 11 25.0** | **+1.1** |
| IKRK | | | | *e*Sn | **Sb** | **19 11 52.0** | **-0.1** |
| IKRK | | | | AML | AML | 19 11 59.1 | |
| | comp=N,422nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 19 12 08.7 | |
| | comp=E,355nm,0.5s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **2.46** | **356** | Pn | **Pn** | **19 11 31.9** | **+2.0** |
| **HSAM** | **Samen** | **2.48** | **77** | Pn | **Pn** | **19 11 31.5** | **+1.2** |
| **QABG** | **Abgarm-Qazvin** | **3.79** | **57** | Pn | **Pn** | **19 11 50.2** | **+1.9** |
| **IRAZ** | **Razeghan** | **3.90** | **63** | Pn | **Pn** | **19 11 51.9** | **+2.1** |
| **IAZR** | **Azarshahr** | **3.99** | **3** | Pn | **Pn** | **19 11 53.2** | **+2.2** |
| **HAKT** | **HAKKARI** | **4.19** | **338** | P | **Pn** | **19 11 52.5** | **-1.2** |
| HAKT | | | | S | **Sn** | **19 12 40.3** | **-2.5** |
| HAKT | | | | *i* AML | AML | 19 12 47.0 | |
| | comp=E,27nm,0.2s | | | | | | |
| **ISRB** | **Sarab** | **4.43** | **21** | Pn | **Pn** | **19 11 58.8** | **+1.7** |
| **IPIR** | **Pirpir** | **4.48** | **101** | Pn | **Pn** | **19 11 58.4** | **+0.6** |
| **ISHB** | **Shabestar** | **4.59** | **359** | Pn | **Pn** | **19 12 00.1** | **+0.9** |
| **ZNGN** | **Zangian** | **4.62** | **108** | Pn | **Pn** | **19 12 00.3** | **+0.6** |
| **SIRN** | **Sirnak** | **4.64** | **326** | P | **Pn** | **19 11 59.0** | **-0.8** |
| SIRN | | | | S | **Sn** | **19 12 50.6** | **-3.2** |
| SIRN | | | | *i* AML | AML | 19 13 39.0 | |
| | comp=E,47nm,0.7s | | | | | | |
| **QAMS** | **Qamsar** | **4.76** | **88** | Pn | **Pn** | **19 12 02.9** | **+1.3** |
| **PERV** | **Siirt/Pervari-** | **4.96** | **330** | P | Pn | 19 11 59.5 | -4.6 |
| PERV | | | | S | **Sn** | **19 13 00.9** | **-0.7** |
| PERV | | | | *i* AML | AML | 19 13 08.0 | |
| | comp=E,38nm,0.5s | | | | | | |
| **GEVA** | **Gevas** | **5.08** | **336** | P | **Pn** | **19 12 08.8** | **+2.8** |
| GEVA | | | | S | **Sn** | **19 13 02.0** | **-2.7** |
| GEVA | | | | *i* AML | AML | 19 13 59.0 | |
| | comp=E,11nm,1.6s | | | | | | |
| **KRSH** | **Karshahi** | **5.38** | **85** | Pn | **Pn** | **19 12 11.2** | **+1.2** |
| **MARD** | **Mardin** | **5.39** | **314** | P | **Pn** | **19 12 10.9** | **+0.8** |
| MARD | | | | S | **Sn** | **19 13 06.4** | **-6.0** |
| **ISFB** | **Sefidab** | **5.49** | **81** | Pn | **Pn** | **19 12 12.6** | **+1.2** |
| **IDMV** | **Damavand** | **5.56** | **68** | Pn | **Pn** | **19 12 13.5** | **+0.8** |
| **IZEF** | **Zefreh** | **5.62** | **96** | Pn | **Pn** | **19 12 15.1** | **+1.7** |
| **KLNJ** | **Kolanjah** | **5.67** | **116** | Pn | **Pn** | **19 12 14.8** | **+0.7** |
| **IRAM** | **Ramesheh** | **5.95** | **107** | Pn | **Pn** | **19 12 19.4** | **+1.5** |
| **MMAI** | **Mount Meron Ar** | **8.63** | **268** | Lg | Lg | 19 15 18.6 | |
| | comp=E,1.0nm,0.3s,baz=95,slow=40,SNR=1.8 | | | | | | |
| **EIL** | **Elat** | **9.98** | **249** | LR | LR | 19 18 13.4 | |
| | comp=E,49nm,19.5s,baz=67,slow=44 | | | | | | |
| **WSAR** | **Wadi Sarin** | **15.41** | **129** | Pn | **Pn** | **19 14 24.4** | **-2.7** |
| | comp=E,0.5nm,0.3s,baz=320,slow=10,SNR=7.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **20.84** | **330** | P | **P** | **19 15 31.0** | **-0.3** |
| | comp=E,0.9nm,0.5s,baz=138,slow=10.0,SNR=2.5 | | | | | | |
| | comp=E,0.9nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **26.17** | **35** | LR | LR | 19 28 33.1 | |
| | comp=E,24nm,18.4s,baz=210,slow=41 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.34** | **45** | P | **P** | **19 16 53.2** | **+0.9** |
| | comp=E,0.8nm,0.2s,baz=252,slow=9.1,SNR=4.8 | | | | | | |
| | comp=E,0.8nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **30.57** | **54** | P | **P** | **19 17 03.9** | **+0.6** |
| | comp=E,0.9nm,0.6s,baz=248,slow=9.9,SNR=9.1 | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **33.71** | **331** | P | **P** | **19 17 30.4** | **-0.2** |
| | comp=E,1.0nm,0.4s,baz=134,slow=11,SNR=10 | | | | | | |
| | comp=E,1.0nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.15** | **42** | P | **P** | **19 17 34.1** | **-0.4** |
| | comp=E,0.6nm,0.3s,baz=260,slow=8.3,SNR=5.1 | | | | | | |
| | comp=E,0.6nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.85** | **293** | P | **P** | **19 18 23.4** | **+0.1** |
| | comp=E,0.3nm,0.6s,baz=79,slow=8.2,SNR=1.8 | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.95** | **318** | P | **P** | **19 18 22.4** | **-1.4** |
| | comp=E,0.2nm,0.3s,baz=101,slow=7.4,SNR=1.5 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.83** | **254** | P | **P** | **19 19 07.8** | **+3.8** |
| | comp=E,0.3nm,0.5s,baz=67,slow=7.5,SNR=2.8 | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | |
| **JMIC** | **Jan Mayen** | **47.04** | **339** | LR | LR | 19 41 51.4 | |
| | comp=E,32nm,18.7s,baz=70,slow=40 | | | | | | |
| **ILAR** | **Eielson Array** | **81.37** | **5** | P | **P** | **19 23 07.2** | **+1.1** |
| | comp=E,3.0nm,0.7s,baz=4.6,slow=4.5,SNR=2.8 | | | | | | |
| | comp=E,0.3nm,0.7s | | | | | | |

*IDC **11** 19:11:15.4±1.2, 43.°99N×105.°37W, h0km, mbtmp3.1/5, ML2.3/4, Error ellipse: s-maj=21.5km s-min=9.8km az=151.0*
*NEIC **11** 19:11:17.5±1.4, 43.°61N±0.°05×105.°28W±0.°07, h0km±1km, ML3.4/54, Error ellipse: s-maj=9.3km s-min=8.2km az=342.0*

**ISC 11 19:11:19.4±1.1, 43.°63N±0.°05×105.°24W±0.°07, h0km, n42, σ1s05/39, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RSSD** | **Black Hills** | **1.00** | **60** | Pg | **Pg** | **19 11 37.2** | **-1.3** |
| **PHWY** | **Pilot Hill** | **2.34** | **184** | Pn | **Pn** | **19 11 58.0** | **-1.2** |
| **RWWY** | **Rawlins** | **2.42** | **217** | Pn | **Pn** | **19 12 00.8** | **+0.3** |
| RWWY | | | | IAML | | 19 12 41.4 | |
| | 319nm,0.9s | | | | | | |
| RWWY | | | | IAML | | 19 12 43.0 | |
| | 202nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **2.79** | **191** | Pn | **Pn** | **19 12 05.2** | **-0.2** |
| N23A | | | | IAML | | 19 12 55.8 | |
| | comp=N,163nm,0.8s | | | | | | |
| N23A | | | | IAML | | 19 13 04.7 | |
| | comp=E,124nm,1.0s | | | | | | |
| **BRIGG** | **Briggsdale** | **3.13** | **167** | | **Pn** | **19 12 10.7** | **+0.7** |
| **LAO** | **LASA Array** | **3.13** | **348** | | **Pn** | **19 12 09.9** | **-0.1** |
| **RLMT** | **Red Lodge** | **3.25** | **299** | | **Pn** | **19 12 10.6** | **-1.1** |
| RLMT | | | | IAML | | 19 13 14.0 | |
| | comp=E,90nm,1.1s | | | | | | |
| **PD31** | **Pinedale Array** | **3.27** | **256** | Pn | **Pn** | **19 12 11.3** | **-0.8** |
| **PDAR** | **Pinedale Array** | **3.27** | **256** | Pn | Pn | **19 12 11.9** | **-0.2** |
| **PDAR** | **Pinedale Array** | **3.27** | **256** | Pn | **Pn** | **19 12 11.2** | **-0.8** |
| | comp=E,4.3nm,0.3s,baz=73,slow=18,SNR=13 | | | | | | |
| PDAR | | | | Lg | Lg | 19 12 58.6 | |
| | comp=E,14nm,0.3s,baz=68,slow=36,SNR=12 | | | | | | |
| **OGNE** | **Ogallala** | **3.59** | **137** | Pn | **Pn** | **19 12 16.9** | **+0.6** |
| **YMP** | **Mirror Lake PI** | **3.70** | **289** | | **Pn** | **19 12 17.5** | **-0.5** |
| **ISCO** | **Idaho Springs** | **3.84** | **184** | Pn | **Pn** | **19 12 18.0** | **-2.0** |
| ISCO | | | | IAML | | 19 13 31.1 | |
| | comp=E,38nm,0.8s | | | | | | |
| ISCO | | | | IAML | | 19 14 26.4 | |
| | comp=E,44nm,3.7s | | | | | | |
| **LOHW** | **Long Hollow** | **3.89** | **272** | | **Pn** | **19 12 19.8** | **-0.8** |
| LOHW | | | | IAML | | 19 13 35.2 | |
| | comp=E,39nm,0.9s | | | | | | |
| **YPP** | **Pitchstone Pla** | **4.07** | **281** | | **Pn** | **19 12 22.7** | **-0.4** |
| YPP | | | | IAML | | 19 13 34.2 | |
| | comp=E,34nm,1.5s | | | | | | |
| **TPAW** | **Teton Pass** | **4.15** | **270** | Pn | **Pn** | **19 12 22.8** | **-1.5** |
| TPAW | | | | IAML | | 19 14 01.3 | |
| | comp=E,35nm,1.3s | | | | | | |
| TPAW | | | | IAML | | 19 14 01.4 | |
| | comp=E,59nm,1.1s | | | | | | |
| **O20A** | **White River Ci** | **4.15** | **214** | | **Pn** | **19 12 22.5** | **-1.7** |
| **FXWY** | **Fox Creek** | **4.20** | **272** | | **Pn** | **19 12 24.5** | **-0.4** |
| **K30B** | **Basset** | **4.23** | **101** | | **Pn** | **19 12 25.8** | **+0.7** |
| **AHID** | **Auburn Hatcher** | **4.37** | **261** | | **Pn** | **19 12 27.5** | **+0.3** |
| AHID | | | | IAML | | 19 13 42.0 | |
| | comp=E,53nm,1.3s | | | | | | |
| AHID | | | | IAML | | 19 13 49.7 | |
| | comp=E,54nm,1.1s | | | | | | |
| **RDMU** | **Red Mountain** | **4.44** | **228** | | **Pn** | **19 12 27.5** | **-0.7** |
| RDMU | | | | IAML | | 19 13 54.5 | |
| | comp=N,44nm,1.4s | | | | | | |
| RDMU | | | | IAML | | 19 14 27.0 | |
| | comp=E,46nm,1.3s | | | | | | |
| **SUSD** | **Miller** | **4.61** | **78** | | **Pn** | **19 12 30.4** | **+0.2** |
| **Q24A** | **Divide** | **4.67** | **179** | | **Pn** | **19 12 28.9** | **-2.4** |
| Q24A | | | | IAML | | 19 13 52.1 | |
| | comp=E,39nm,0.8s | | | | | | |
| Q24A | | | | IAML | | 19 15 00.4 | |
| | comp=N,22nm,3.7s | | | | | | |
| **DGMT** | **Dagmar** | **4.89** | **8** | | **Pn** | **19 12 34.5** | **+0.3** |
| **HWUT** | **Hardware Ranch** | **5.08** | **249** | | **Pn** | **19 12 36.0** | **-1.0** |
| HWUT | | | | IAML | | 19 14 28.7 | |
| | comp=N,30nm,1.2s | | | | | | |
| **TCUT** | **Toone Canyon** | **5.21** | **243** | | **Pn** | **19 12 38.7** | **-0.1** |
| **P18A** | **Preston Nutter** | **5.48** | **225** | | **Pn** | **19 12 42.2** | **-0.4** |
| **JLU** | **Jordanelle** | **5.52** | **239** | | **Pn** | **19 12 42.5** | **-0.5** |
| **SPUT** | **South Promonto** | **5.81** | **249** | | **Pn** | **19 12 46.5** | **-0.4** |
| **PV04** | **Paradox Valley** | **5.92** | **209** | Pn | **Pn** | **19 12 48.5** | **0.0** |
| **LYMT** | **Lyon Mountain** | **5.98** | **306** | | **Pn** | **19 12 48.8** | **-0.5** |
| **S22A** | **4UR Ranch, Cre** | **6.00** | **192** | | **Pn** | **19 12 49.4** | **-0.3** |
| **SRU** | **San Rafael Swe** | **6.01** | **223** | | **Pn** | **19 12 47.8** | **-2.0** |
| **ECSD** | **EROS Data Cent** | **6.26** | **86** | Pn | **Pn** | **19 12 52.6** | **-0.3** |
| **NLU** | **North Lily Min** | **6.29** | **237** | Pn | **Pn** | **19 12 51.9** | **-1.7** |
| **HLID** | **Hailey** | **6.66** | **273** | Pn | **Pn** | **19 12 58.8** | **+0.2** |
| **ELK** | **Elko** | **7.96** | **252** | Pn | **Pn** | **19 13 15.2** | **-1.4** |
| | comp=N,0.1nm,0.3s,baz=133,slow=18,SNR=2.2 | | | | | | |
| ELK | | | | Lg | Lg | 19 15 23.4 | |
| | comp=N,0.1nm,0.3s,baz=24,slow=12,SNR=1.6 | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.21** | **41** | Pn | Pn | 19 13 23.7 | -10 |
| | comp=N,0.1nm,0.3s,baz=230,slow=7.9,SNR=2.0 | | | | | | |
| ULM | | | | Lg | Lg | 19 15 56.5 | |
| | baz=217,slow=5.1 | | | | | | |
| | comp=N,2.2nm,0.8s | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **9.48** | **303** | I | I | 20 09 30.0 | |
| | baz=116,slow=314,SNR=3.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.15** | **247** | Pn | **Pn** | **19 13 59.8** | **-0.3** |
| | baz=54,slow=32,SNR=1.3 | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | |
| **TXAR** | **Lajitas Array** | **14.33** | **174** | Pn | **Pn** | **19 14 45.8** | **+2.2** |
| | baz=18,slow=9.5,SNR=3.9 | | | | | | |
| TXAR | | | | Pg | Pg | 19 15 44.1 | |
| | comp=N,0.1nm,0.3s,baz=355,slow=18,SNR=2.5 | | | | | | |
| TXAR | | | | Lg | Lg | 19 18 47.1 | |
| | baz=2.7,slow=21 | | | | | | |
| | comp=N,0.3nm,0.9s | | | | | | |
| **TKL** | **Tuckaleechee C** | **18.32** | **108** | Lg | Lg | 19 20 45.3 | |
| | comp=N,0.1nm,0.3s,baz=294,slow=20,SNR=1.5 | | | | | | |

**DJA 11 19:20:12.1±1.1, 1°N±2°×9°9E±°, h31km±19km, M3.8/9, mb3.8/1, MLv3.7/9, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **1.09** | **286** | P | Pn | 19 20 30.5 | -0.7 |
| **PBSI** | **Pulau Batu** | **1.10** | **198** | P | Pn | 19 20 30.7 | -0.7 |
| PBSI | | | | S | Sb | 19 20 47.2 | +0.6 |
| **SISI** | **Saibi** | **2.36** | **169** | P | Pn | 19 20 47.7 | -1.0 |
| **PDSI** | **Padang** | **2.65** | **136** | P | Pn | 19 20 52.8 | +0.1 |
| **SNSI** | **Sinabang, Aceh** | **2.69** | **301** | P | Pn | 19 20 52.2 | -1.0 |
| **LHMI** | **Lhok Sumawe** | **4.52** | **338** | P | Pn | 19 21 18.2 | -0.3 |

*MDD **11** 19:34:07.4±0.4, 38.°31N×1.°36W, h10km, mb_Lg2.1/8, Error ellipse: s-maj=3.5km s-min=2.2km az=113.0*
*SFS **11** 19:34:07.1, 38.°33N×1.°32W, h0km, ML2.5/10, ML2.5/10, MLv2.5/10*

**ISC 11 19:34:05.2±1.1, 38°28N±0.°03×1°28W±0.°03, h9km±10km, n24, σ0s82/43, Spain**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ETOB** | **Tobarra** | **0.42** | **330** | Sg | **Sg** | **19 34 18.7** | **-0.3** |
| ETOB | | | | Pg | **Pg** | **19 34 13.7** | **+0.3** |
| **ETOB** | **Tobarra** | **0.42** | **330** | Pg | **Pg** | **19 34 13.6** | **+0.2** |
| ETOB | | | | Sg | **Sg** | **19 34 19.9** | **+0.9** |
| **EMUR** | **La Murta** | **0.44** | **176** | Sg | **Sb** | **19 34 23.6** | **+1.8** |
| EMUR | | | | Pg | **Pb** | **19 34 15.2** | **+0.1** |
| **EMUR** | **La Murta** | **0.44** | **176** | Pg | **Pb** | **19 34 15.3** | **+0.2** |
| EMUR | | | | Sg | **Sb** | **19 34 22.7** | **+0.9** |
| EMUR | | | | *i* Vmb_Lg | | 19 34 

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PVO** | **Paravola** | **0.08** | **24** | P | Pg | 19 41 42.3 | -0.4 |
| PVO | | | | S | Sg | 19 41 44.2 | +0.1 |
| **ANX** | **Ano Chora** | **0.34** | **82** | P | Pg | 19 41 47.5 | +0.1 |
| ANX | | | | S | Sg | 19 41 52.3 | +0.3 |
| ANX | | | | AML | AML | 19 41 54.1 | |
| | comp=N,746μm,0.3s | | | | | | |
| ANX | | | | AML | AML | 19 41 54.7 | |
| | comp=E,546μm,0.2s | | | | | | |
| **EFP** | **Efpalio** | **0.35** | **110** | P | Pg | 19 41 47.1 | -0.4 |
| EFP | | | | S | Sg | 19 41 52.9 | +0.8 |
| EFP | | | | AML | AML | 19 41 54.0 | |
| | comp=E,741μm,0.3s | | | | | | |
| EFP | | | | AML | AML | 19 41 54.1 | |
| | comp=N,531μm,0.2s | | | | | | |
| **EVR** | **Evrytania** | **0.45** | **34** | P | Pg | 19 41 49.5 | +0.2 |
| EVR | | | | S | Sg | 19 41 55.9 | +0.6 |
| EVR | | | | AML | AML | 19 41 59.6 | |
| | comp=N,205μm,0.3s | | | | | | |
| EVR | | | | AML | AML | 19 42 00.3 | |
| | comp=E,183μm,0.4s | | | | | | |
| **RLS** | **Riolos of Patr** | **0.49** | **182** | P | Pg | 19 41 50.4 | +0.4 |
| **KALE** | **Kalithea** | **0.54** | **107** | P | Pg | 19 41 50.4 | -0.6 |
| KALE | | | | S | Sg | 19 41 58.9 | +0.9 |
| KALE | | | | AML | AML | 19 42 04.2 | |
| | comp=N,178μm,0.3s | | | | | | |
| KALE | | | | AML | AML | 19 42 04.3 | |
| | comp=E,133μm,0.5s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.64** | **285** | P | Pg | 19 41 52.6 | -0.3 |
| NYDR | | | | S | Sg | 19 42 00.7 | -0.5 |
| **EVGI** | **Lefkada island** | **0.65** | **277** | P | Pb | 19 41 53.8 | -0.5 |
| **LKD2** | **Lefkada island** | **0.69** | **291** | P | Pg | 19 41 53.4 | -0.6 |
| LKD2 | | | | S | Sg | 19 42 02.9 | -0.1 |
| LKD2 | | | | AML | AML | 19 42 07.8 | |
| | comp=N,164μm,0.2s | | | | | | |
| LKD2 | | | | AML | AML | 19 42 10.4 | |
| | comp=E,155μm,0.3s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.71** | **293** | P | Pg | 19 41 53.7 | -0.5 |
| **KLV** | **Kalavryta, Ach** | **0.72** | **134** | P | Pg | 19 41 53.8 | -0.8 |
| KLV | | | | S | Sg | 19 42 04.4 | +0.4 |
| **FSK** | **Fiskardo** | **0.73** | **263** | P | Pg | 19 41 54.3 | -0.3 |
| FSK | | | | S | Sg | 19 42 04.9 | +0.8 |
| **VLS** | **Valsamata** | **0.80** | **243** | P | Pg | 19 41 55.9 | 0.0 |
| VLS | | | | S | Sg | 19 42 06.6 | +0.4 |
| **AGG** | **Agios Georgios** | **0.81** | **54** | P | Pg | 19 41 56.1 | -0.2 |
| AGG | | | | S | Sg | 19 42 06.8 | 0.0 |
| **GUR** | **Goura** | **0.91** | **132** | P | Pg | 19 41 57.1 | -1.0 |
| GUR | | | | S | Sg | 19 42 10.3 | +0.4 |
| **DMLN** | **Damoulianata-K** | **0.93** | **251** | P | Pg | 19 41 57.9 | -0.5 |

*PRU* ***11*** *19:42:21.1, 41.35N×20.69E, h10km*
*TIR* ***11*** *19:42:24.4, 41.63N×20.16E, h19km±1km, Md3.5, Ml3.1*
*RHSSO* ***11*** *19:42:24.2±0.6, 41.53N×20.11E, h4km±3km, ML3.6/11*
*MCSM* ***11*** *19:42:24.5±0.5, 41°N±6'×2'0E±', h10km±4km, mb3.5, MLv3.8*
*BEO* ***11*** *19:42:25.5±0.3, 41.64N×20.21E, h4km±5km, ML3.1/19*
*ATH* ***11*** *19:42:25.4±0.3, 41.65N×20.13E, h6km, ML3.0/7, Manual Solution by S.Liakopoulos This location: 2020/08/08 15:33:42 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 3 km; Longitude uncertainty: 3 km*
*THE* ***11*** *19:42:25.9, 41.62N×20.13E, h8km±3km, ML2.9/4, Error ellipse: s-maj=5.0km s-min=0.9km az=287.0*
*SKO* ***11*** *19:42:25.6, 41.62N±0.08E, h10km, ML3.1*
*PDG* ***11*** *19:42:25.3±0.1, 41.61N×20.05E, h13km, MD3.7/4, ML3.6/7, Error ellipse: s-maj=0.1km s-min=0.5km az=0.0*

**ISC 11 19:42:25.2**±1.0,**41.62N**±0.02×**20.10E**±0.02,**h11**km±8km, **n153,σ1§19**/240,**20C-13D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.32** | **213** | P | **Pg** | **19 42 31.9** | **+0.3** |
| | baz=219 | | | | | | |
| TIR | | | | S | **Sb** | **19 42 38.2** | **-0.1** |
| | baz=219 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,12nm,0.4s,baz=219 | | | | | | |
| **TIR** | **Tirane** | **0.32** | **213** | P | **Pg** | **19 42 31.9** | **+0.3** |
| TIR | | | | S | **Sb** | **19 42 37.5** | **-0.7** |
| | comp=E,3μm,0.6s | | | | | | |
| **TIR** | **Tirane** | **0.32** | **213** | *e*Pg | **Pg** | **19 42 32.0** | **+0.3** |
| TIR | | | | *e*Sg | **Sb** | **19 42 37.8** | **-0.4** |
| **TIR** | **Tirane** | **0.32** | **213** | ⇓P | **Pg** | **19 42 32.2** | **+0.5** |
| TIR | | | | ⇓S | **Sb** | **19 42 37.5** | **-0.7** |
| **TIR** | **Tirane** | **0.32** | **213** | P | **Pg** | **19 42 31.7** | **0.0** |
| **PUK** | **Puka** | **0.45** | **340** | P | **Pg** | **19 42 34.0** | **-0.1** |
| | baz=335 | | | | | | |
| PUK | | | | S | **Sb** | **19 42 41.5** | **-0.6** |
| | baz=335 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,32nm,0.3s,baz=335 | | | | | | |
| **OHR** | **Ohrid** | **0.73** | **134** | *i* Pg | **Pg** | **19 42 39.3** | **-0.1** |
| OHR | | | | *i* Sg | **Sb** | **19 42 51.0** | **+1.0** |
| OHR | | | | *e*Lg | Lg | 19 42 51.5 | |
| | comp=N,1μm,1.0s | | | | | | |
| OHR | | | | *e*Lg | Lg | 19 42 52.3 | |
| | comp=E,536nm,0.7s | | | | | | |
| **BCI** | **Bajram Curri** | **0.75** | **358** | P | **Pg** | **19 42 39.3** | **-0.5** |
| | baz=355 | | | | | | |
| BCI | | | | S | **Sb** | **19 42 50.2** | **-0.4** |
| | baz=355 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,7.1nm,0.4s,baz=355 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.89** | **310** | ⇑*i* Pg | **Pg** | **19 42 41.2** | **-1.2** |
| DRME | | | | *e*Sg | **Sb** | **19 42 54.5** | **-0.1** |
| **DRME** | **Dracevica, Mon** | **0.89** | **310** | *e*Pg | **Pg** | **19 42 41.4** | **-1.0** |
| DRME | | | | *i* Sg | **Sb** | **19 42 55.1** | **+0.5** |
| **DRME** | **Dracevica, Mon** | **0.89** | **310** | P | **Pg** | **19 42 41.8** | **-0.6** |
| DRME | | | | S | **Sb** | **19 42 54.6** | **0.0** |
| **PDG** | **Podgorica** | **1.03** | **323** | *e*Pg | **Pb** | **19 42 44.0** | **-1.0** |
| PDG | | | | *e*Sg | **Sn** | **19 42 59.6** | **-0.4** |
| **PDG** | **Podgorica** | **1.03** | **323** | ⇑*i* Pg | **Pb** | **19 42 43.8** | **-1.2** |
| PDG | | | | *e*Sg | **Sb** | **19 42 59.1** | **+0.6** |
| **PDG** | **Podgorica** | **1.03** | **323** | ⇑S | **Sb** | **19 42 58.9** | **+0.3** |
| **PDG** | **Podgorica** | **1.03** | **323** | ⇓*i* Pg | **Pb** | **19 42 44.0** | **-1.0** |
| PDG | | | | *i* Sg | **Sn** | **19 43 00.0** | **0.0** |
| **PDG** | **Podgorica** | **1.03** | **323** | ⇓P | **Pb** | **19 42 44.2** | **-0.8** |
| **LMS2** | **Laimos Florina** | **1.11** | **134** | P | **Pb** | **19 42 45.9** | **-0.6** |
| LMS2 | | | | S | **Sb** | **19 43 00.9** | **-0.1** |
| **KBN** | **Korca** | **1.12** | **152** | P | **Pb** | **19 42 46.5** | **-0.2** |
| | baz=154 | | | | | | |
| KBN | | | | S | **Sg** | **19 43 01.8** | **+0.4** |
| | baz=154 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,1.7nm,0.8s,baz=154 | | | | | | |
| **KBN** | **Korca** | **1.12** | **152** | P | **Pn** | **19 42 47.3** | **+0.3** |
| KBN | | | | S | **Sn** | **19 43 02.7** | **+0.2** |
| | comp=E,562nm,0.7s | | | | | | |
| **BUM** | **Brajici-Budva** | **1.13** | **308** | *e*Pg | **Pb** | **19 42 45.8** | **-1.0** |
| BUM | | | | *i* Sg | **Sn** | **19 43 03.0** | **+0.4** |
| **VLO** | **Vlora** | **1.23** | **202** | P | **Pg** | **19 42 49.8** | **+0.8** |
| | baz=204 | | | | | | |
| **BEY** | **Berane** | **1.26** | **353** | *i* Pg | **Pn** | **19 42 48.4** | **-0.5** |
| **FNA** | **Florina** | **1.27** | **130** | P | **Pn** | **19 42 48.6** | **-0.5** |
| | baz=132 | | | | | | |
| FNA | | | | S | **Sn** | **19 43 05.9** | **-0.3** |
| | baz=132 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.7nm,0.3s,baz=132 | | | | | | |
| **FNA** | **Florina** | **1.27** | **130** | P | **Pn** | **19 42 48.5** | **-0.5** |
| FNA | | | | S | **Sg** | **19 43 06.3** | **0.0** |
| | comp=E,588nm,0.7s | | | | | | |
| **FNA** | **Florina** | **1.27** | **130** | *e*Pg | **Pn** | **19 42 48.2** | **-0.9** |
| FNA | | | | *e*Sg | **Sb** | **19 43 05.2** | **-0.5** |
| **FNA** | **Florina** | **1.27** | **130** | *i* Pg | **Pn** | **19 42 48.5** | **-0.5** |
| FNA | | | | *i* Sg | **Sg** | **19 43 06.7** | **+0.4** |
| **FNA** | **Florina** | **1.27** | **130** | P | **Pn** | **19 42 48.9** | **-0.2** |
| FNA | | | | S | **Sg** | **19 43 06.5** | **+0.3** |
| **CEME** | **Cevo** | **1.28** | **317** | ⇑*i* Pg | **Pn** | **19 42 48.6** | **-0.6** |
| CEME | | | | *i* Sg | **Sg** | **19 43 08.3** | **+1.9** |
| **CEME** | **Cevo** | **1.28** | **317** | P | **Pn** | **19 42 48.7** | **-0.4** |
| CEME | | | | S | **Sb** | **19 43 05.7** | **-0.2** |
| **KOME** | **Kolasin** | **1.31** | **341** | P | **Pn** | **19 42 49.2** | **-0.4** |
| **NEST** | **Nestorio** | **1.40** | **149** | P | **Pb** | **19 42 51.3** | **-0.2** |
| NEST | | | | S | **Sg** | **19 43 10.2** | **-0.1** |
| | comp=E,242nm,0.6s | | | | | | |
| **NEST** | **Nestorio** | **1.40** | **149** | P | **Pb** | **19 42 51.5** | **0.0** |
| NEST | | | | S | **Sg** | **19 43 10.3** | **0.0** |
| **NKME** | **Niksic** | **1.43** | **324** | *e*Pg | **Pn** | **19 42 50.9** | **-0.3** |
| NKME | | | | *i* Sg | **Sg** | **19 43 12.9** | **+1.7** |
| **PENT** | **Pentalofos** | **1.62** | **151** | P | **Pb** | **19 42 55.5** | **+0.2** |
| **SJES** | **Sjenica** | **1.65** | **357** | *e*Pn | **Pb** | **19 42 55.8** | **+0.1** |
| SJES | | | | *e*Sn | **Sg** | **19 43 17.5** | **-0.7** |
| **SJES** | **Sjenica** | **1.65** | **357** | ⇑*i* Pn | **Pn** | **19 42 54.9** | **+0.7** |
| SJES | | | | *e*Sn | **Sg** | **19 43 17.4** | **-0.7** |
| **BRY** | **Bratogost** | **1.73** | **318** | *e*Pn | **Pn** | **19 42 55.7** | **+0.3** |
| BRY | | | | *e*Sn | **Sb** | **19 43 19.5** | **+0.6** |
| **BRY** | **Bratogost** | **1.73** | **318** | *e*Pn | **Pn** | **19 42 55.9** | **+0.5** |
| BRY | | | | *i* Sn | **Sb** | **19 43 20.0** | **+1.1** |
| **SRN** | **Sarande** | **1.74** | **182** | P | **Pg** | **19 42 58.8** | **+0.3** |
| | baz=184 | | | | | | |
| SRN | | | | S | **Sg** | **19 43 22.1** | **+1.0** |
| | baz=184 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,0.5nm,0.8s,baz=184 | | | | | | |
| **BARS** | **Barje** | **1.75** | **46** | *e*Pn | **Pn** | **19 42 55.2** | **-0.4** |
| BARS | | | | *e*Sn | **Sn** | **19 43 17.6** | **-0.3** |
| **BARS** | **Barje** | **1.75** | **46** | *i* Pn | **Pn** | **19 42 55.6** | **0.0** |
| BARS | | | | *i* Sg | **Sg** | **19 43 22.1** | **+0.6** |
| **SELS** | **Selova** | **1.77** | **25** | *e*Pn | **Pn** | **19 42 56.1** | **+0.2** |
| SELS | | | | *e*Sn | **Sn** | **19 43 18.8** | **+0.3** |
| **UPM** | **Unac-Piva** | **1.81** | **331** | *e*Pn | **Pb** | **19 42 57.9** | **-0.7** |
| UPM | | | | *e*Sn | **Sb** | **19 43 20.7** | **-0.7** |
| **UPM** | **Unac-Piva** | **1.81** | **331** | *e*Pn | **Pn** | **19 42 57.1** | **+0.5** |
| UPM | | | | *i* Sn | **Sb** | **19 43 22.3** | **+0.9** |
| **KZN** | **Kozani** | **1.82** | **135** | P | **Pb** | **19 42 57.8** | **-0.8** |
| **VAY** | **Valandovo** | **1.88** | **98** | *e*Pn | **Pn** | **19 42 56.7** | **-0.7** |
| VAY | | | | *e*Sn | **Sb** | **19 43 23.2** | **+0.1** |
| VAY | | | | *e*Lg | Lg | 19 43 27.9 | |
| | comp=N,106nm,0.6s | | | | | | |
| VAY | | | | *e*Lg | Lg | 19 43 31.0 | |
| | comp=E,115nm,0.7s | | | | | | |
| **KLINJ** | **Klinje** | **1.91** | **325** | *e*Pn | **Pn** | **19 42 58.8** | **+0.9** |
| KLINJ | | | | *e*Sn | **Sb** | **19 43 24.1** | **-0.1** |
| **KEK** | **Kerkira** | **1.92** | **187** | P | **Pn** | **19 42 58.5** | **+0.7** |
| **KEK** | **Kerkira** | **1.92** | **187** | P | **Pn** | **19 42 58.5** | **+0.7** |
| **KPRO** | **Kipourio** | **1.92** | **150** | P | **Pb** | **19 42 59.5** | **-0.7** |
| **SCTE** | **Santa Cesarea** | **1.98** | **219** | P | **Pb** | **19 43 00.6** | **-0.6** |
| | baz=221 | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.98** | **219** | P | **Pn** | **19 42 59.5** | **+0.8** |
| **BOSS** | **Bosilegrad** | **1.98** | **63** | *e*Pn | **Pn** | **19 42 58.3** | **-0.4** |
| **JAN** | **Janina** | **2.04** | **163** | P | **Pn** | **19 43 00.5** | **+0.9** |
| **RUDO** | **Rudo** | **2.07** | **345** | *e*Pn | **Pn** | **19 43 01.0** | **+1.0** |
| RUDO | | | | *e*Sn | **Sb** | **19 43 27.9** | **-0.7** |
| **IGT** | **Igoumenitsa** | **2.09** | **175** | P | **Pb** | **19 43 02.1** | **-1.1** |
| | baz=176 | | | | | | |
| **IGT** | **Igoumenitsa** | **2.09** | **175** | P | **Pn** | **19 43 01.5** | **+1.3** |
| **PEHC** | **Pehcevo** | **2.10** | **85** | *i* Pn | **Pb** | **19 43 02.6** | **-0.9** |
| PEHC | | | | *i* Sg | **Sg** | **19 43 32.1** | **-0.8** |
| PEHC | | | | *e*Lg | Lg | 19 43 34.6 | |
| | comp=N,216nm,0.7s | | | | | | |
| PEHC | | | | *e*Lg | Lg | 19 43 36.3 | |
| | comp=E,173nm,0.9s | | | | | | |
| **KNT** | **Kendrikon** | **2.16** | **101** | P | **Pn** | **19 43 00.9** | **-0.3** |
| **KNT** | **Kendrikon** | **2.16** | **101** | *i* Pn | **Pn** | **19 43 00.8** | **-0.3** |
| KNT | | | | *e*Sg | **Sg** | **19 43 33.2** | **-1.3** |
| **KNT** | **Kendrikon** | **2.16** | **101** | P | **Pn** | **19 43 00.9** | **-0.3** |
| **STON** | **Ston** | **2.18** | **306** | ⇑*i* Pn | **Pn** | **19 43 01.3** | **-0.1** |
| STON | | | | *e*Sn | **Sn** | **19 43 30.1** | **+1.7** |
| **KKB** | **Krupnik** | **2.28** | **83** | *i* Pn | **Pn** | **19 43 03.6** | **+0.7** |
| KKB | | | | *e*Sg | **Sg** | **19 43 38.0** | **-0.5** |
| **BBLS** | **Lazi&#263i** | **2.31** | **347** | *e*Pn | **Pn** | **19 43 04.5** | **+1.2** |
| BBLS | | | | *e*Sn | **Sn** | **19 43 32.1** | **+0.4** |
| **BBLS** | **Lazi&#263i** | **2.31** | **347** | ⇑*i* Pn | **Pn** | **19 43 04.3** | **+1.0** |
| BBLS | | | | *e*Sn | **Sb** | **19 43 33.7** | **-1.7** |
| **GRUS** | **Gruza** | **2.31** | **11** | *e*Pn | **Pn** | **19 43 04.3** | **+1.0** |
| GRUS | | | | *e*Sn | **Sn** | **19 43 32.0** | **+0.2** |
| **BOVS** | **Bovan** | **2.34** | **30** | *e*Pn | **Pn** | **19 43 04.5** | **+0.8** |
| BOVS | | | | *e*Sn | **Sn** | **19 43 31.8** | **-0.6** |
| **BOVS** | **Bovan** | **2.34** | **30** | ⇑P | **Pn** | **19 43 03.9** | **+0.2** |
| **THE** | **Thessaloniki** | **2.38** | **113** | P | **Pn** | **19 43 04.5** | **+0.3** |
| **THE** | **Thessaloniki** | **2.38** | **113** | *i* Pn | **Pn** | **19 43 05.1** | **+0.9** |
| **DIVS** | **Divibare** | **2.48** | **358** | *e*Pn | **Pn** | **19 43 06.7** | **+1.0** |
| DIVS | | | | *e*Sn | **Sn** | **19 43 36.6** | **+0.5** |
| **HORT** | **Hortiatis** | **2.49** | **113** | P | **Pn** | **19 43 05.7** | **-0.1** |
| **ZAPS** | **Zavoj** | **2.50** | **48** | *e*Pn | **Pn** | **19 43 06.2** | **+0.2** |
| **SOH** | **Sokhos** | **2.58** | **107** | *i* Pn | **Pn** | **19 43 07.6** | **+0.5** |
| **HAPS** | **Han Pijesak,BI** | **2.61** | **342** | ⇑*i* Pn | **Pn** | **19 43 08.8** | **+1.3** |
| HAPS | | | | *e*Sn | **Sb** | **19 43 41.7** | **-2.5** |
| **TRUS** | **Trudelj** | **2.62** | **5** | *e*Pn | **Pn** | **19 43 09.0** | **+1.5** |
| TRUS | | | | *e*Sn | **Sn** | **19 43 39.8** | **+0.6** |
| **SRS** | **Serrai** | **2.68** | **100** | P | **Pn** | **19 43 08.3** | **0.0** |
| **SRS** | **Serrai** | **2.68** | **100** | *i* Pn | **Pn** | **19 43 08.4** | **+0.1** |
| **ZAGS** | **Zajecar** | **2.70** | **35** | *e*Pn | **Pn** | **19 43 08.7** | **+0.1** |
| **MATE** | **Matera** | **2.74** | **250** | ⇑P | **Pn** | **19 43 08.9** | **-0.2** |
| **TEKS** | **Tekeris** | **2.96** | **352** | *e*Pn | **Pn** | **19 43 13.1** | **+0.9** |
| TEKS | | | | *e*Sn | **Sn** | **19 43 50.6** | **+2.8** |
| **TEKS** | **Tekeris** | **2.96** | **352** | *e*Pn | **Pn** | **19 43 12.5** | **+0.3** |
| TEKS | | | | *e*Sn | **Sn** | **19 43 49.9** | **+2.1** |
| **KUBS** | **Kucevo** | **3.02** | **22** | *e*Pn | **Pn** | **19 43 11.9** | **-1.2** |
| KUBS | | | | *e*Sn | **Sn** | **19 43 49.8** | **+0.5** |
| **AVAS** | **Avala Beograd** | **3.09** | **6** | *e*Pn | **Pn** | **19 43 14.9** | **+0.9** |
| AVAS | | | | *e*Sn | **Sn** | **19 43 52.2** | **+1.2** |
| **MDVR** | **Moldovita** | **3.38** | **20** | ⇑P | **Pn** | **19 43 17.5** | **-0.5** |
| **DJES** | **Djerdap** | **3.52** | **29** | ⇓P | **Pn** | **19 43 21.2** | **+1.2** |
| **TIP** | **Timpagrande** | **3.53** | **227** | ⇓P | **Pn** | **19 43 21.7** | **+1.7** |
| **FRGS** | **Fruska Gora** | **3.54** | **357** | *e*Pn | **Pn** | **19 43 20.7** | **+0.4** |
| FRGS | | | | *e*Sn | **Sn** | **19 44 02.6** | **+0.4** |
| **FRGS** | **Fruska Gora** | **3.54** | **357** | ⇑*i* Pn | **Pn** | **19 43 21.0** | **+0.7** |
| FRGS | | | | *e*Sn | **Sn** | **19 44 03.4** | **+1.2** |
| **FRGS** | **Fruska Gora** | **3.54** | **357** | ⇑P | **Pn** | **19 43 21.4** | **+1.1** |
| **FRGS** | **Fruska Gora** | **3.54** | **357** | P | **Pn** | **19 43 21.2** | **+0.9** |
| **MGRS** | **Mrkonjic Grad** | **3.56** | **323** | *e*Pn | **Pn** | **19 43 21.3** | **+0.7** |
| MGRS | | | | *e*Sn | **Sn** | **19 44 03.4** | **+0.7** |
| **HERR** | **Herculane** | **3.68** | **27** | ⇑P | **Pn** | **19 43 22.0** | **0.0** |
| **BLY** | **Banja Luka** | **3.79** | **327** | ⇑*i* Pn | **Pn** | **19 43 24.1** | **+0.5** |
| BLY | | | | *e*Sn | **Sn** | **19 44 09.0** | **+0.9** |
| **A050A** | **Klekovaca** | **3.88** | **319** | *e*Pn | **Pn** | **19 43 25.6** | **+0.7** |
| A050A | | | | *e*Sn | **Sn** | **19 44 11.6** | **+1.2** |
| **A051A** | **Mrakovica** | **4.12** | **327** | ⇑*i* Pn | **Pn** | **19 43 28.8** | **+0.7** |
| A051A | | | | *e*Sn | **Sn** | **19 44 16.7** | **+0.4** |
| **BZS** | **Buzias** | **4.15** | **15** | ⇓P | **Pn** | **19 43 29.0** | **+0.5** |
| **SURR** | **Surduc** | **4.39** | **19** | ⇓P | **Pn** | **19 43 32.2** | **+0.3** |
| **LOT** | **Lotru** | **4.67** | **34** | ⇑P | **Pn** | **19 43 35.9** | **+0.2** |
| **MORH** | **Mrgy, Hungar** | **4.71** | **348** | ⇓P | **Pn** | **19 43 36.9** | **+0.6** |
| **MORH** | **Mrgy, Hungar** | **4.71** | **348** | P | **Pn** | **19 43 35.9** | **-0.4** |
| **SIRR** | **Siria** | **4.78** | **13** | ⇑P | **Pn** | **19 43 37.6** | **+0.3** |
| **BOJS** | **Bojanci** | **5.24** | **319** | *i* Pn | **Pn** | **19 43 44.5** | **+0.9** |
| **BOJS** | **Bojanci** | **5.24** | **319** | *e*Pn | **Pn** | **19 43 43.2** | **-0.4** |
| BOJS | | | | *e*Sn | **Sn** | **19 44 00.0** | **-0.1** |
| **CRES** | **Cresnjev** | **5.38** | **323** | *i* Pn | **Pn** | **19 43 46.2** | **+0.7** |
| **GBRS** | **Gornja Briga** | **5.48** | **317** | *i* Pn | **Pn** | **19 43 48.1** | **+1.2** |
| GBRS | | | | *e*Sn | **Sn** | **19 44 52.2** | **+2.2** |
| **DRGR** | | **5.50** | **19** | ⇓P | **Pn** | **19 43 48.4** | **+1.2** |
| **MARR** | **Marisel-Cluj** | **5.50** | **22** | ⇓P | **Pn** | **19 43 47.5** | **+0.3** |
| **MLR** | **Muntele Rosu** | **5.75** | **46** | ⇓P | **Pn** | **19 43 51.8** | **+1.2** |
| **PDKS** | **Podkum** | **5.77** | **322** | *i* Pn | **Pn** | **19 43 51.9** | **+1.0** |
| **CEY** | **Cerknica** | **5.82** | **317** | *e*Pn | **Pn** | **19 43 51.5** | **0.0** |
| CEY | | | | *e*Sn | **Sn** | **19 44 56.8** | **-1.5** |
| **MPLH** | **Magyarpolny** | **5.85** | **343** | P | **Pn** | **19 43 54.2** | **+2.4** |
| | comp=E,50nm,0.9s,comp=E,0.2nm | | | | | | |
| **GROS** | **Grobnik** | **5.87** | **327** | *i* Pn | **Pn** | **19 43 52.7** | **+0.5** |
| **SKDS** | **Skadanscina** | **5.91** | **314** | *e*Sn | **Sn** | **19 44 59.7** | **-0.8** |
| SKDS | | | | IAML | | 19 45 06.2 | |
| | comp=Z,1.9nm,0.1s | | | | | | |
| **SKDS** | **Skadanscina** | **5.91** | **314** | *e*Pn | **Pn** | **19 43 52.3** | **-0.5** |
| SKDS | | | | *e*Sn | **Sn** | **19 44 58.5** | **-2.0** |
| **COVR** | **Voineasa-Covas** | **6.12** | **44** | ⇓P | **Pn** | **19 43 56.1** | **+0.5** |
| **PERS** | **Pernice** | **6.17** | **326** | *i* Pn | **Pn** | **19 43 57.0** | **+0.7** |
| **SOKA** | **Soboth** | **6.23** | **326** | *e*Pn | **Pn** | **19 43 57.9** | **+0.7** |
| | comp=Z,6.4nm,0.5s,SNR=8.3 | | | | | | |
| SOKA | | | | *i* Sn | **Sn** | **19 45 09.3** | **+0.8** |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **PSZ** | **Piszkesteto** | **6.30** | **359** | ⇑P | **Pn** | **19 43 58.7** | **+0.6** |
| **OBKA** | **Obir** | **6.32** | **323** | *i* Pn | **Pn** | **19 43 59.7** | **+1.3** |
| | comp=Z,2.3nm,0.4s,SNR=5.3 | | | | | | |
| OBKA | | | | *i* Sn | **Sn** | **19 45 11.8** | **+1.3** |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **OBKA** | **Obir** | **6.32** | **323** | *e*Pn | **Pn** | **19 43 57.7** | **-0.7** |
| OBKA | | | | *e*Sn | **Sn** | **19 45 09.4** | **-1.1** |
| **VRI** | **Vrincioaia** | **6.41** | **46** | ⇑P | **Pn** | **19 44 00.8** | **+1.2** |
| **ARSA** | **Arzberg** | **6.51** | **331** | *i* Pn | **Pn** | **19 44 01.2** | **+0.2** |
| | comp=Z,1.6nm,0.4s | | | | | | |
| ARSA | | | | *e*Sn | **Sn** | **19 45 19.5** | **+4.2** |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **RONA** | **Rosalia, Austr** | **6.66** | **337** | *e*Pn | **Pn** | **19 44 03.9** | **+0.9** |
| | comp=Z,1.7nm,0.4s | | | | | | |
| RONA | | | | *e*Sn | **Sn** | **19 45 20.7** | **+1.8** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **MYKA** | **Terra Mystica** | **6.83** | **319** | *i* Pn | **Pn** | **19 44 07.0** | **+1.5** |
| | comp=Z,2.3nm,0.3s | | | | | | |
| MYKA | | | | *i* Sn | **Sn** | **19 45 27.5** | **+4.3** |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **KECS** | **Kecovo** | **6.87** | **2** | *e*SN | **Sn** | **19 45 23.7** | **-0.4** |
| **KECS** | **Kecovo** | **6.87** | **2** | *e*PN | **Pn** | **19 44 05.0** | **-0.9** |
| **KECS** | **Kecovo** | **6.87** | **2** | *e*PG | **Pg** | **19 44 37.7** | **+1.0** |
| **VYHS** | **Vyhne** | **6.93** | **353** | *e*PN | **Pn** | **19 44 09.2** | **+2.4** |
| VYHS | | | | *e*PG | **Pg** | **19 44 38.0** | **+0.1** |
| VYHS | | | | *e*SN | **Sn** | **19 45 23.9** | **-1.8** |
| **CONA** | **Conrad Observa** | **6.99** | **336** | *e*Pn | **Pn** | **19 44 10.2** | **+2.5** |
| | comp=Z,0.5nm,0.3s | | | | | | |
| CONA | | | | *i* Sn | **Sn** | **19 45 26.8** | **-0.3** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **HOLU** | **Holmets** | **7.10** | **12** | P | **Pn** | **19 44 11.3** | **+2.3** |
| **KBA** | **Koelnbreinsper** | **7.29** | **321** | *i* Pn | **Pn** | **19 44 12.9** | **+1.0** |
| | comp=Z,2.7nm,0.4s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **7.47** | **11** | *e*PN | **Pn** | **19 44 16.9** | **+2.7** |
| KOLS | | | | *e*SN | **Sn** | **19 45 37.6** | **-1.4** |
| KOLS | | | | *e*LG | Lg | 19 45 56.1 | |
| **ABTA** | **Abfaltersbach** | **7.48** | **316** | *i* Pn | **Pn** | **19 44 14.7** | **+0.3** |
| | comp=Z,1.6nm,0.5s | | | | | | |
| ABTA | | | | *i* Sn | **Sn** | **19 45 40.9** | **+1.6** |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **MOA** | **Molln** | **7.49** | **328** | *i* Pn | **Pn** | **19 44 16.2** | **+1.9** |
| | comp=Z,2.0nm,0.4s | | | | | | |
| MOA | | | | *i* Sn | **Sn** | **19 45 40.2** | **+1.0** |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **7.62** | **325** | *e*Pn | **Pn** | **19 44 17.2** | **+1.0** |
| | comp=Z,3.9nm,0.6s,SNR=6.1 | | | | | | |
| BIOA | | | | *e*Sn | **Sn** | **19 45 41.6** | **-1.0** |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **NIE** | **Niedzica** | **7.80** | **1** | P | **Pn** | **19 44 21.4** | **+2.7** |
| | comp=Z,2.8nm,0.9s,comp=Z,0.0nm | | | | | | |
| **LESA** | **Schwarzleotal** | **7.86** | **320** | *i* Pn | **Pn** | **19 44 20.1** | **+0.6** |
| | comp=Z,5.5nm,0.6s | | | | | | |
| LESA | | | | *i* Sn | **Sn** | **19 45 51.2** | **+2.7** |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **KWP** | **Kalwaria Pacla** | **8.22** | **12** | P | **Pn** | **19 44 24.7** | **+0.3** |
| | comp=Z,18nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **8.27** | **316** | *e*Pn | **Pn** | **19 44 26.6** | **+1.3** |
| | comp=Z,1.9nm,0.3s,SNR=6.1 | | | | | | |
| WTTA | | | | *e*Sn | **Sn** | **19 45 59.5** | **+0.7** |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **8.28** | **332** | *e*SN | **Sn** | **19 46 00.1** | **+1.4** |
| **WATA** | **Walderalm** | **8.35** | **316** | *e*Pn | **Pn** | **19 44 27.5** | **+1.2** |
| | comp=Z,2.3nm,0.3s,SNR=6.1 | | | | | | |
| WATA | | | | *e*Sn | **Sn** | **19 46 00.4** | **-0.3** |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **8.47** | **314** | *e*Pn | **Pn** | **19 44 29.1** | **+1.0** |
| | comp=Z,4.5nm,0.5s | | | | | | |
| SQTA | | | | *i* Sn | **Sn** | **19 46 04.8** | **+1.1** |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **8.61** | **315** | *i* Pn | **Pn** | **19 44 30.4** | **+0.6** |
| | comp=Z,3.8nm,0.6s | | | | | | |
| MOTA | | | | *i* Sn | **Sn** | **19 46 08.0** | **+1.0** |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **FETA** | **Feichten** | **8.62** | **312** | *i* Pn | **Pn** | **19 44 32.8** | **+2.8** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| FETA | | | | *i* Sn | **Sn** | **19 46 09.0** | **+1.8** |
| **KHC** | **Kasperske Hory** | **8.80** | **331** | *e*PN | **Pn** | **19 44 33.9** | **+1.5** |
| KHC | | | | *e*SN | **Sn** | **19 46 12.7** | **+1.1** |
| **KHC** | **Kasperske Hory** | **8.80** | **331** | P | **Pn** | **19 44 32.9** | **+0.5** |
| | comp=Z,3.4nm,1.1s | | | | | | |
| **DAVA** | **Damuels** | **9.24** | **311** | *i* Pn | **Pn** | **19 44 40.2** | **+1.6** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| DAVA | | | | *e*Sn | **Sn**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **62.60** | **337** | P | | **P** | **19 55 07.8** | **+1.1** |
| | comp=Z,0.9nm,0.7s,baz=176,slow=6.5,SNR=4.6 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **89.60** | **351** | P | | **P** | **19 57 41.2** | **+1.4** |
| | comp=Z,0.3nm,0.4s,baz=139,slow=8.8,SNR=2.0 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.72** | **261** | PKP | | **PKiKP** | **20 03 34.1** | **+1.0** |
| | comp=Z,0.6nm,1.1s,baz=99,slow=1.7,SNR=5.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **135.95** | **74** | PKP | | **PKPdf** | **20 04 03.5** | **0.0** |
| | comp=Z,0.1nm,0.4s,baz=224,slow=2.5,SNR=1.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **142.84** | **95** | PKP | | **PKPdf** | **20 04 13.9** | **-2.3** |
| | comp=Z,0.2nm,0.6s,baz=208,slow=5.1,SNR=2.4 | | | | | | | |
| **PDAR** | **Pinedale Array** | **143.65** | **71** | PKhKP | PKPpre | | 20 04 07.4 | |
| | comp=Z,0.3nm,0.5s,baz=259,slow=1.8,SNR=2.4 | | | | | | | |
| PDAR | | | | PKP | PKPbc | | 20 04 15.4 | +0.5 |
| | comp=Z,0.3nm,0.6s,baz=321,slow=3.8,SNR=2.5 | | | | | | | |

*LSZ* ***11*** *20:14:13.0±0.3, 13°.75S×30°.97E, h10km, MD4.6*
**ISC 11 20:14:13.5**±1.0, **13°.61S**±0°.06×**30°.4E**±0°.1, **h10km**, **n15,** σ1§**81**/30, **Zambia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRI** | **Karoi** | **3.29** | **193** | *i* P | **Pb** | **20 15 13.5** | **+1.5** |
| KRI | | | | *i* S | **Sg** | **20 15 59.3** | **+0.1** |
| **KRI** | **Karoi** | **3.29** | **193** | *i* P | **Pb** | **20 15 13.5** | **+1.5** |
| KRI | | | | *i* S | **Sg** | **20 15 59.3** | **+0.1** |
| **KSMZ** | **Kasama** | **3.52** | **14** | *i* P | **Pn** | **20 15 08.8** | **+0.4** |
| KSMZ | | | | *i* | | 20 15 08.8 | |
| | baz=184,slow=1.4 | | | | | | |
| KSMZ | | | | *i* S | **Sn** | **20 15 49.5** | **-0.6** |
| **CHIPN** | **CHIPINGE** | **6.94** | **162** | *i* P | **Pn** | **20 15 54.8** | **-0.6** |
| CHIPN | | | | *i* S | **Sn** | **20 17 13.1** | **-1.4** |
| **CHIPN** | **CHIPINGE** | **6.94** | **162** | *i* P | **Pn** | **20 15 54.8** | **-0.6** |
| CHIPN | | | | *i* S | **Sn** | **20 17 13.1** | **-1.4** |
| **MATP** | **Matopo** | **7.01** | **195** | *i* P | **Pn** | **20 15 57.5** | **+1.1** |
| MATP | | | | *i* S | **Sn** | **20 17 18.4** | **+2.1** |
| **MATP** | **Matopo** | **7.01** | **195** | *i* P | **Pn** | **20 15 57.5** | **+1.1** |
| MATP | | | | *i* S | **Sn** | **20 17 18.4** | **+2.1** |
| **MUSN** | **Musina, Limpop** | **8.65** | **183** | *i* P | **Pn** | **20 16 17.5** | **-1.3** |
| MUSN | | | | *i* S | **Sn** | **20 17 54.1** | **-2.3** |
| **MUSN** | **Musina, Limpop** | **8.65** | **183** | *i* P | **Pn** | **20 16 17.5** | **-1.3** |
| MUSN | | | | *i* S | **Sn** | **20 17 54.1** | **-2.3** |
| **MOPA** | **Mopani** | **9.90** | **175** | *i* P | **Pn** | **20 16 37.3** | **+1.3** |
| MOPA | | | | *i* S | **Sn** | **20 18 26.6** | **-0.7** |
| **MOPA** | **Mopani** | **9.90** | **175** | *i* P | **Pn** | **20 16 37.3** | **+1.3** |
| MOPA | | | | *i* S | **Sn** | **20 18 26.6** | **-0.7** |
| **LBTB** | **Lobatse** | **12.21** | **201** | *i* P | **Pn** | **20 17 07.0** | **-0.6** |
| LBTB | | | | *i* S | **Sn** | **20 19 24.7** | **+0.8** |
| **LBTB** | **Lobatse** | **12.21** | **201** | *i* P | **Pn** | **20 17 07.0** | **-0.6** |
| LBTB | | | | *i* S | **Sn** | **20 19 24.7** | **+0.8** |
| **BOSA** | **Boshof** | **15.67** | **197** | *i* P | **Pn** | **20 17 50.1** | **-4.5** |
| BOSA | | | | *i* S | **Sn** | **20 20 46.8** | **-1.7** |
| **BOSA** | **Boshof** | **15.67** | **197** | *i* P | **Pn** | **20 17 50.1** | **-4.5** |
| BOSA | | | | *i* S | **Sn** | **20 20 46.8** | **-1.7** |

*SNET* ***11*** *20:26:27.7±0.8, 12°.95N×88°.83W, h32km, ML3.7*
*CATAC* ***11*** *20:26:27.6±0.5, 12°.96N×88°.86W, h29km±3km, ML3.7*
**ISC 11 20:26:27.8**±1.4, **12°.96N**±0°.06×**88°.86W**±0°.03, **h28km**±12km, **n52,** σ0§**53**/85, **Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TECO** | **Alcaldia de Te** | **0.58** | **7** | *e*P | **Pn** | **20 26 40.0** | **-0.3** |
| TECO | | | | *e*S | **Sn** | **20 26 48.6** | **-0.3** |
| **TECO** | **Alcaldia de Te** | **0.58** | **7** | *i* P | **Pn** | **20 26 40.0** | **-0.3** |
| TECO | | | | *i* S | **Sn** | **20 26 49.4** | **+0.5** |
| TECO | | | | IAML | | 20 26 52.4 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **0.64** | **33** | *e*P | **Pn** | **20 26 41.0** | **-0.2** |
| TECA | | | | *e*S | **Sn** | **20 26 50.3** | **-0.2** |
| **SNVI** | **San Vicente** | **0.65** | **2** | *e*P | **Pn** | **20 26 41.0** | **-0.4** |
| SNVI | | | | *e*S | **Sn** | **20 26 50.9** | **+0.1** |
| **COEG** | **Centro de Oper** | **0.66** | **358** | *e*P | **Pn** | **20 26 41.0** | **-0.4** |
| **COEG** | **Centro de Oper** | **0.66** | **358** | *i* P | **Pn** | **20 26 40.9** | **-0.4** |
| COEG | | | | *i* S | **Sn** | **20 26 50.9** | **0.0** |
| COEG | | | | IAML | | 20 26 54.2 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **JUCU** | **Jucuarįn** | **0.66** | **63** | *e*P | **Pb** | **20 26 40.7** | **-0.2** |
| JUCU | | | | *e*S | **Sn** | **20 26 50.7** | **-0.3** |
| **JUCU** | **Jucuarįn** | **0.66** | **63** | *i* P | **Pn** | **20 26 40.8** | **-0.6** |
| JUCU | | | | *i* S | **Sn** | **20 26 50.9** | **-0.1** |
| JUCU | | | | IAML | | 20 26 53.9 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **0.68** | **6** | *i* P | **Pn** | **20 26 41.5** | **-0.1** |
| UESV | | | | *i* S | **Sn** | **20 26 51.9** | **+0.6** |
| UESV | | | | IAML | | 20 26 53.1 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **LFRS** | **El Faro** | **0.69** | **343** | *e*P | **Pb** | **20 26 41.3** | **-0.1** |
| **LALI** | **Alcalda de L** | **0.70** | **320** | *e*P | **Pb** | **20 26 41.1** | **-0.3** |
| LALI | | | | *e*S | **Sn** | **20 26 51.3** | **-0.3** |
| **LALI** | **Alcalda de L** | **0.70** | **320** | *i* P | **Pn** | **20 26 41.6** | **-0.2** |
| LALI | | | | *i* S | **Sb** | **20 26 50.9** | **+0.3** |
| LALI | | | | IAML | | 20 26 52.5 | |
| | comp=Z,460nm,1.0s | | | | | | |
| **LCY** | **Lacayo** | **0.72** | **50** | *e*P | **Pn** | **20 26 41.8** | **-0.4** |
| **PANCS** | **Alcalda de** | **0.72** | **334** | *i* P | **Pn** | **20 26 41.8** | **-0.4** |
| PANCS | | | | *i* S | **Sn** | **20 26 52.0** | **-0.5** |
| PANCS | | | | IAML | | 20 26 53.3 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.73** | **23** | *e*P | **Pb** | **20 26 41.9** | **0.0** |
| PQSS | | | | *e*S | **Sn** | **20 26 52.4** | **0.0** |
| **PQSS** | **Presa 15 de Se** | **0.73** | **23** | *i* P | **Pb** | **20 26 42.2** | **+0.3** |
| PQSS | | | | *i* S | **Sn** | **20 26 53.3** | **+0.9** |
| PQSS | | | | IAML | | 20 26 55.1 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **PACA** | **Pacayal** | **0.73** | **45** | *e*P | **Pn** | **20 26 42.3** | **-0.1** |
| PACA | | | | *e*S | **Sn** | **20 26 53.4** | **+0.7** |
| **PACA** | **Pacayal** | **0.73** | **45** | *i* P | **Pn** | **20 26 42.5** | **+0.1** |
| PACA | | | | *i* S | **Sn** | **20 26 52.0** | **-0.7** |
| PACA | | | | IAML | | 20 26 54.8 | |
| | comp=Z,21μm,1.0s | | | | | | |
| **RANC** | **El Ranchito** | **0.73** | **49** | *i* S | **Sn** | **20 26 53.6** | **+0.9** |
| **VSM** | **San Miguel** | **0.74** | **50** | *e*P | **Pn** | **20 26 42.3** | **-0.3** |
| **LOMA** | **Loma Larga** | **0.75** | **336** | *e*P | **Pn** | **20 26 42.2** | **-0.4** |
| **LOMA** | **Loma Larga** | **0.75** | **336** | *i* P | **Pn** | **20 26 42.3** | **-0.4** |
| LOMA | | | | *i* S | **Sn** | **20 26 53.5** | **+0.3** |
| LOMA | | | | IAML | | 20 26 54.1 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.75** | **10** | *e*P | **Pb** | **20 26 42.5** | **+0.1** |
| SCLA | | | | *e*S | **Sn** | **20 26 54.2** | **+1.1** |
| **SCLA** | **Alcaldia de Sa** | **0.75** | **10** | *i* P | **Pb** | **20 26 42.8** | **+0.4** |
| SCLA | | | | *i* S | **Sn** | **20 26 54.4** | **+1.2** |
| SCLA | | | | IAML | | 20 26 56.4 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **0.77** | **51** | *e*P | **Pb** | **20 26 42.5** | **-0.2** |
| **UDBS** | **Universidad Do** | **0.81** | **339** | *i* P | **Pb** | **20 26 43.3** | **0.0** |
| UDBS | | | | *i* S | **Sn** | **20 26 54.2** | **-0.4** |
| UDBS | | | | IAML | | 20 26 55.8 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **IGN** | **Direccin Gen** | **0.81** | **338** | *i* P | **Pn** | **20 26 43.0** | **-0.5** |
| IGN | | | | *i* S | **Sn** | **20 26 54.7** | **0.0** |
| IGN | | | | IAML | | 20 26 58.7 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.81** | **333** | *i* P | **Pn** | **20 26 43.0** | **-0.5** |
| SNET | | | | *i* S | **Sn** | **20 26 54.4** | **-0.3** |
| SNET | | | | IAML | | 20 26 56.2 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **0.82** | **330** | *i* P | **Pn** | **20 26 42.2** | **-1.4** |
| ITCA | | | | *i* S | **Sn** | **20 26 55.1** | **+0.1** |
| ITCA | | | | IAML | | 20 27 07.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LFU** | **La Fuente** | **0.83** | **342** | *e*P | **Pb** | **20 26 43.5** | **-0.1** |
| **UEES** | **Universidad Ev** | **0.84** | **334** | *e*P | **Pn** | **20 26 43.4** | **-0.5** |
| **UEES** | **Universidad Ev** | **0.84** | **334** | *i* P | **Pn** | **20 26 43.6** | **-0.3** |
| UEES | | | | *i* S | **Sb** | **20 26 55.4** | **+0.5** |
| UEES | | | | IAML | | 20 26 56.7 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **0.87** | **329** | *i* P | **Pb** | **20 26 44.3** | **-0.2** |
| PMON | | | | *i* S | **Sb** | **20 26 56.3** | **+0.5** |
| PMON | | | | IAML | | 20 27 00.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **0.88** | **332** | *e*P | **Pn** | **20 26 44.2** | **-0.3** |
| **JAYA** | **Jayaque - finc** | **0.90** | **320** | *e*P | **Pn** | **20 26 44.3** | **-0.4** |
| JAYA | | | | *e*S | **Sn** | **20 26 56.8** | **-0.2** |
| **JAYA** | **Jayaque - finc** | **0.90** | **320** | *i* P | **Pn** | **20 26 44.4** | **-0.4** |
| JAYA | | | | *i* S | **Sn** | **20 26 56.8** | **-0.2** |
| JAYA | | | | IAML | | 20 26 59.6 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **LCND** | **La Caada** | **1.01** | **69** | *e*P | **Pn** | **20 26 45.7** | **-0.4** |
| LCND | | | | *e*S | **Sb** | **20 26 59.1** | **-0.4** |
| **LCND** | **La Caada** | **1.01** | **69** | *i* P | **Pn** | **20 26 45.6** | **-0.4** |
| LCND | | | | *i* S | **Sb** | **20 26 58.8** | **-0.7** |
| LCND | | | | IAML | | 20 27 02.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **1.05** | **72** | *e*P | **Pn** | **20 26 46.0** | **-0.7** |
| **CNCH** | **Conchagua** | **1.05** | **72** | *i* P | **Pn** | **20 26 46.0** | **-0.7** |
| CNCH | | | | *i* S | **Sb** | **20 27 00.3** | **-0.5** |
| CNCH | | | | IAML | | 20 27 06.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.14** | **319** | *e*P | **Pn** | **20 26 48.5** | **+0.3** |
| CEVE | | | | *e*S | **Sb** | **20 27 04.9** | **+1.3** |
| **CEVE** | **Cerro Verde** | **1.14** | **319** | *i* P | **Pn** | **20 26 48.4** | **+0.2** |
| CEVE | | | | *i* S | **Sn** | **20 27 03.2** | **+0.1** |
| CEVE | | | | IAML | | 20 27 12.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **1.15** | **320** | *e*P | **Pn** | **20 26 48.4** | **+0.1** |
| **SNJE** | **San Jose** | **1.16** | **321** | *e*P | **Pn** | **20 26 48.4** | **0.0** |
| **LLGN** | **La Laguna** | **1.20** | **356** | *i* P | **Pn** | **20 26 48.3** | **-0.6** |
| LLGN | | | | IAML | | 20 26 48.6 | |
| | comp=Z,940nm,1.0s | | | | | | |
| LLGN | | | | *i* S | **Sn** | **20 27 04.0** | **-0.3** |
| **RTR** | **El Retiro** | **1.21** | **321** | *e*P | **Pn** | **20 26 49.2** | **+0.1** |
| **NUBE** | **Las Nubes** | **1.30** | **316** | *e*P | **Pn** | **20 26 50.1** | **-0.1** |
| **NUBE** | **Las Nubes** | **1.30** | **316** | *i* P | **Pn** | **20 26 50.3** | **0.0** |
| NUBE | | | | *i* S | **Sn** | **20 27 05.9** | **-0.9** |
| NUBE | | | | IAML | | 20 27 07.9 | |
| | comp=Z,840nm,1.0s | | | | | | |
| **CNGA** | **Al SSO del Vol** | **2.15** | **102** | *i* P | **Pb** | **20 27 06.8** | **+0.7** |
| **SOMN** | **Somoto** | **2.23** | **78** | *i* S | **Sn** | **20 27 31.5** | **+1.7** |
| **COPN** | **Copaltepe** | **2.34** | **109** | *i* P | **Pn** | **20 27 04.6** | **+0.2** |
| COPN | | | | IAML | | 20 27 39.5 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **2.43** | **87** | *i* P | **Pn** | **20 27 04.8** | **-0.9** |
| LIMN | | | | IAML | | 20 27 36.5 | |
| | comp=Z,62nm,1.0s | | | | | | |

*IDC* ***11*** *20:42:57.7±1.3, 3°.13S×138°.93E, h0km, mb3.9/4, mbtmp3.9/7, ML2.6/2, MS2.9/2, Error ellipse: s-maj=40.4km s-min=23.6km az=75.0*
*NEIC* ***11*** *20:43:03.5±1.8, 3°.13S±0°.05×138°.82E±0°.08, h35km±2km, mb4.4/10, Error ellipse: s-maj=15.9km s-min=4.2km az=121.0*
*DJA* ***11*** *20:43:04.3±1.5, 4°S±22°×13°9E±°, h26km±22km, M4.8/5, mb5.3/1, MLv4.6/5*
**ISC 11 20:43:04.4**±0.7, **3°.34S**±0°.07×**138°.73E**±0°.05, **h35km**, **n38,** σ2§**05**/42, **mb3.9**/4, **Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **1.61** | **63** | P | **Pn** | **20 43 33.3** | **+2.9** |
| **GENI** | **Genyem** | **1.61** | **63** | P | **Pn** | **20 43 33.2** | **+2.9** |
| GENI | | | | S | **Sn** | **20 43 53.4** | **+3.4** |
| **JAY** | **Jayapura** | **2.13** | **68** | P | **Pn** | **20 43 39.1** | **+1.5** |
| JAY | | | | S | **Sn** | **20 44 05.2** | **+2.3** |
| **KMPI** | **Kaimana, Papua** | **5.03** | **266** | P | **Pn** | **20 44 21.9** | **+4.5** |
| **FAKI** | **Fak Fak** | **6.49** | **273** | P | **Pn** | **20 44 39.8** | **+2.3** |
| **FAKI** | **Fak Fak** | **6.49** | **273** | Pn | **Pn** | **20 44 37.9** | **+0.4** |
| **FAKI** | **Fak Fak** | **6.49** | **273** | P | **Pn** | **20 44 39.7** | **+2.3** |
| **PMG** | **Port Moresby** | **10.32** | **126** | Pn | **Pn** | **20 45 30.0** | **-0.1** |
| **PMG** | **Port Moresby** | **10.32** | **126** | P | **Pn** | **20 45 28.4** | **-1.6** |
| | 0.6nm,0.3s,baz=290,slow=18,SNR=1.7 | | | | | | |
| PMG | | | | Sn | **Sn** | **20 47 24.8** | **+0.3** |
| | 0.7nm,0.3s,baz=18,slow=20,SNR=1.3 | | | | | | |
| PMG | | | | LR | LR | 20 50 01.8 | |
| | comp=Z,49nm,18.8s,baz=9.0,slow=41 | | | | | | |
| | 8.0nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **11.16** | **213** | P | **Pn** | **20 45 42.2** | **+0.6** |
| **COEN** | **Coen** | **11.43** | **158** | P | **Pn** | **20 45 47.6** | **+2.3** |
| **COEN** | **Coen** | **11.43** | **158** | | **Pn** | **20 45 47.0** | **+1.8** |
| **DRS** | **Darwin Rock St** | **11.91** | **220** | P | **Pn** | **20 45 54.1** | **+2.3** |
| **MTN** | **Manton Dam** | **12.07** | **218** | P | **Pn** | **20 45 56.2** | **+2.1** |
| **MTN** | **Manton Dam** | **12.07** | **218** | | **Pn** | **20 45 55.4** | **+1.4** |
| **MTSU** | **Mount Surprise** | **15.69** | **160** | P | **Pn** | **20 46 45.2** | **+2.2** |
| **KNRA** | **Kununurra** | **15.71** | **218** | Pn | **Pn** | **20 46 43.1** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 20 46 50.3 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **15.72** | **245** | P | **Pn** | **20 46 44.2** | **+0.7** |
| **SOEI** | **Soe** | **15.72** | **245** | | **Pn** | **20 46 44.1** | **+0.7** |
| SOEI | | | | IAmb | IAmb | 20 47 00.4 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **16.87** | **194** | Pn | **Pn** | **20 46 56.3** | **-1.7** |
| WB0 | | | | IAmb | IAmb | 20 47 03.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.05** | **194** | P | **Pn** | **20 46 59.6** | **-0.7** |
| | comp=Z,6.8nm,0.4s,baz=19,slow=12,SNR=13 | | | | | | |
| WRA | | | | S | Sn | 20 49 56.0 | -13 |
| | comp=Z,5.1nm,0.8s,baz=7.5,slow=23,SNR=9.1 | | | | | | |
| **QIS** | **Mount Isa** | **17.14** | **177** | P | **Pn** | **20 47 02.5** | **+1.2** |
| **CTA** | **Charters Tower** | **18.20** | **157** | P | **Pn** | **20 47 14.2** | **-0.2** |
| | baz=335,slow=11,SNR=9.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **18.20** | **157** | P | **P** | **20 47 16.8** | **+2.4** |
| **CTAO** | **Charters Tower** | **18.20** | **157** | P | **P** | **20 47 15.4** | **+1.0** |
| **AS31** | **Alice Springs** | **20.74** | **193** | P | **P** | **20 47 43.1** | **+0.8** |
| AS31 | | | | IAmb | IAmb | 20 47 45.5 | |
| | comp=Z,10nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **20.74** | **193** | P | **P** | **20 47 42.9** | **+0.7** |
| **ASAR** | **Alice Springs** | **20.74** | **193** | P | **P** | **20 47 43.2** | **+1.0** |
| | comp=Z,14nm,0.6s,baz=20,slow=8.9,SNR=243 | | | | | | |
| ASAR | | | | S | **S** | **20 51 27.0** | **-5.1** |
| | comp=Z,8.4nm,1.0s,baz=13,slow=25,SNR=12 | | | | | | |
| ASAR | | | | LR | LR | 20 57 01.8 | |
| | comp=Z,41nm,19.0s,baz=26,slow=40 | | | | | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **25.60** | **225** | P | **P** | **20 48 30.5** | **-0.1** |
| **ARMA** | **Armidale** | **29.57** | **157** | P | **P** | **20 49 06.7** | **+0.5** |
| **MKAR** | **Makanchi Array** | **70.30** | **323** | P | **P** | **20 54 12.2** | **-2.2** |
| **MKAR** | **Makanchi Array** | **70.30** | **323** | P | **P** | **20 54 14.1** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=100,slow=7.5,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **75.16** | **175** | P | **P** | **20 54 41.6** | **-1.0** |
| **ILAR** | **Eielson Array** | **86.39** | **24** | P | **P** | **20 55 39.8** | **-3.0** |
| | comp=Z,0.3nm,0.7s,baz=251,slow=4.5,SNR=4.4 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **86.53** | **19** | P | **P** | **20 55 40.8** | **-2.7** |
| C23K | | | | IAmb | IAmb | 20 55 55.1 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.61** | **180** | P | **P** | **20 55 42.8** | **-1.3** |
| QSPA | | | | IAmb | IAmb | 20 56 07.3 | |
| | comp=Z,2.3nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.61** | **180** | P | **P** | **20 55 42.5** | **-1.7** |
| | comp=Z,0.8nm,0.9s,baz=296,slow=3.1,SNR=1.6 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **87.97** | **22** | P | **P** | **20 55 49.6** | **-0.9** |

*IDC* ***11*** *21:17:11.7±1.7, 4°.71N×126°.56E, h0km, mb3.7/6, mbtmp3.7/6, Error ellipse: s-maj=188.2km s-min=18.8km az=66.0*
*DJA* ***11*** *21:17:30.1±0.9, 4°N±8°×12°6E±°, h85km±8km, M4.2/8, mB5.0/2, mb4.5/4, MLv4.1/8, Mw(mB)4.4/2*
**ISC 11 21:17:22.9**±1.2, **4°.40N**±0°.10×**126°.49E**±0°.10, **h85km**, **n10,** σ3§**36**/13, **mb3.8**/6, **Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **3.71** | **166** | P | **Pn** | **21 18 22.4** | **+4.5** |
| **GTOI** | **Gorontalo** | **5.11** | **223** | P | **Pn** | **21 18 40.1** | **+3.1** |
| GTOI | | | | S | **Sn** | **21 19 33.2** | **-1.4** |
| **MRSI** | **Marisa** | **5.99** | **230** | P | **Pn** | **21 18 52.4** | **+3.4** |
| | 67nm,0.5s,789nm0.3nm | | | | | | |
| MRSI | | | | S | **Sn** | **21 19 54.8** | **-1.4** |
| | 67nm,0.5s,789nm0.3nm | | | | | | |
| **SANI** | **Sanana** | **6.42** | **185** | P | **Pn** | **21 18 55.5** | **+0.5** |
| SANI | | | | S | **Sn** | **21 20 00.0** | **-6.9** |
| **WRA** | **Warramunga Arr** | **25.39** | **163** | P | **P** | **21 22 43.5** | **+1.0** |
| | 0.7nm,0.6s,baz=341,slow=10,SNR=5.8 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **28.82** | **166** | P | **P** | **21 23 14.2** | **+0.9** |
| | 0.2nm,0.4s,baz=346,slow=6.8,SNR=5.1 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **38.83** | **159** | P | **P** | **21 24 40.8** | **+1.0** |
| | 2.0nm,0.8s,baz=347,slow=14,SNR=4.4 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.88** | **325** | P | **P** | **21 26 57.2** | **-1.7** |
| | 0.5nm,0.4s,baz=117,slow=7.9,SNR=8.6 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.89** | **333** | P | **P** | **21 27 16.4** | **-3.3** |
| | 0.4nm,0.3s,baz=117,slow=5.5,SNR=3.0 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.05** | **327** | P | **P** | **21 27 26.0** | **-1.7** |
| | 0.3nm,0.5s,baz=128,slow=6.2,SNR=4.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**IDC 11 21:28:43.7**±2.2, **5°.19S×151°.56E, h0km, mb3.4**/4, **mbtmp3.4**/4, **Error ellipse: s-maj=101.8km s-min=29.2km az=120.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.05** | **226** | Pn | Pn | 21 30 10.5 | -4.1 |
| | 1.2nm,0.3s,baz=322,slow=18,SNR=1.4 | | | | | | |
| PMG | | | | Sn | Sn | 21 31 17.7 | -6.9 |
| | 0.8nm,0.3s,baz=287,slow=1.8,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.27** | **227** | P | P | 21 33 43.2 | +0.6 |
| | 0.4nm,0.5s,baz=53,slow=9.9,SNR=5.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **25.04** | **221** | P | P | 21 34 09.2 | -0.6 |
| | 0.3nm,0.4s,baz=55,slow=9.5,SNR=5.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.79** | **327** | P | P | 21 40 58.2 | -1.0 |
| | 0.3nm,0.3s,baz=111,slow=8.1,SNR=1.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **82.98** | **22** | P | P | 21 41 11.1 | +0.6 |
| | 0.2nm,0.8s,baz=245,slow=5.8,SNR=2.1 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.25** | **287** | PKPbc | PKPbc | 21 48 35.5 | 0.0 |
| | 0.5nm,0.6s,baz=69,slow=3.1,SNR=6.4 | | | | | | |

*IDC* ***11*** *21:44:43.1±1.0, 33°.06N×84°.00E, h0km, mb3.5/7, mbtmp3.5/10, ML2.7/2, MS3.0/5, Error ellipse: s-maj=34.7km s-min=18.7km az=60.0*
**ISC 11 21:44:48.2**±1.0, **33°.2N**±0°.1×**84°.1E**±0°.2, **h35km**, **n14,** σ0§**98**/11, **mb3.6**/7, **MS3.0**/4, **Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **12.12** | **324** | LR | LR | 21 53 03.7 | |
| | comp=Z,42nm,21.1s,baz=122,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.70** | **355** | Pn | **Pn** | **21 47 58.7** | **-1.2** |
| | baz=182,slow=11,SNR=1.8 | | | | | | |
| | 0.9nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.93** | **348** | P | **P** | **21 48 56.2** | **+1.2** |
| | baz=170,slow=12,SNR=9.3 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **19.79** | **134** | P | **P** | **21 49 14.8** | **-0.9** |
| | 1.3nm,0.8s,baz=309,slow=10,SNR=7.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.80** | **1** | P | **P** | **21 49 26.1** | **-0.2** |
| | 0.3nm,0.3s,baz=186,slow=8.4,SNR=1.7 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **22.32** | **42** | P | **P** | **21 49 42.8** | **-0.1** |
| | 0.2nm,0.4s,baz=227,slow=9.7,SNR=1.2 | | | | | | |
| SONM | | | | LR | LR | 21 59 23.4 | |
| | comp=Z,28nm,18.6s,baz=272,slow=39 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **25.80** | **320** | LR | LR | 22 01 43.1 | |
| | comp=Z,46nm,18.4s,baz=192,slow=40 | | | | | | |
| **AKASG** | **Malin Array Be** | **43.36** | **311** | LR | LR | 22 13 20.8 | |
| | comp=Z,23nm,18.6s,baz=156,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **46.30** | **326** | P | **P** | **21 53 10.9** | **+0.7** |
| | 2.7nm,1.1s,baz=101,slow=12,SNR=1.6 | | | | | | |
| | 2.7nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **53.44** | **325** | P | **P** | **21 54 05.4** | **+1.0** |
| | 0.6nm,0.6s,baz=86,slow=7.3,SNR=2.6 | | | | | | |
| NOA | | | | LR | LR | 22 17 58.8 | |
| | comp=Z,12nm,18.5s,baz=115,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **71.33** | **130** | P | **P** | **21 56 05.5** | **+0.8** |
| | 0.6nm,0.5s,baz=324,slow=6.3,SNR=7.2 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **73.80** | **133** | P | **P** | **21 56 19.5** | **+0.3** |
| | 0.3nm,0.6s,baz=320,slow=5.7,SNR=4.6 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **74.62** | **20** | P | **P** | **21 56 24.0** | **+0.6** |
| | 0.4nm,0.9s,baz=302,slow=5.2,SNR=2.5 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.63** | **277** | P | **P** | **21 56 34.6** | **-1.2** |
| | 0.6nm,1.0s,baz=59,slow=5.5,SNR=2.4 | | | | | | |
| | 0.6nm,1.0s | | | | | | |

*JMA* ***11*** *21:47:05.5±0.6, 45°N±3°×14°9E±°, h30km, MV3.9/13, NEAR ETOROFU ISLAND*
*SKHL* ***11*** *21:47:06.3±0.3, 44°.80N×149°.10E, h50km±4km, mb4.3/3*
**ISC 11 21:47:03.5**±4.2, **44°.72N**±0°.09×**149°.3E**±0°.2, **h35km**, **n15,** σ2§**39**/27, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|

**Unknown, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUNU** | **Dundret** | **0.05** | **183** | P | Pg | 22 02 24.2 | 0.0 |
| DUNU | | | | S | Sg | 22 02 25.2 | +0.3 |
| **MASU** | **Masugnsbyn** | **0.62** | **62** | P | Pg | 22 02 34.7 | -0.3 |
| **SALU** | **Saltoluokta** | **0.83** | **285** | P | Pg | 22 02 38.4 | -0.6 |
| **PAJU** | **Pajala** | **1.00** | **97** | P | Pg | 22 02 41.3 | -1.0 |
| **PAJU** | **Pajala** baz=278 | **1.00** | **97** | PG | Pg | 22 02 41.4 | -0.9 |
| PAJU | | | | SG | Sg | 22 02 55.2 | -0.1 |
| **HARU** | **Harads** | **1.03** | **171** | P | Pg | 22 02 42.1 | -0.7 |
| **LANU** | **Lannavaara** | **1.03** | **31** | P | Pg | 22 02 41.7 | -1.2 |
| **LANU** | **Lannavaara** | **1.03** | **31** | PG | Pg | 22 02 41.8 | -1.1 |
| **KOVU** | **Salmi** | **1.07** | **352** | P | Pg | 22 02 43.0 | -0.6 |
| **KLF** | **Kolari** | **1.32** | **86** | PG | Pg | 22 02 47.5 | -0.9 |
| KLF | comp=Z,0.6nm,0.2s | | | MSG | | 22 03 04.1 | |
| KLF | | | | SG | Sg | 22 03 05.4 | 0.0 |
| **HEF** | **Hetta** baz=230 | **1.71** | **42** | PG | Pb | 22 02 54.8 | -0.3 |
| HEF | comp=Z,0.6nm,0.2s | | | MSG | | 22 03 15.3 | |
| HEF | | | | SG | Sb | 22 03 16.7 | -0.2 |
| **SJUU** | **Sjulsmark** | **1.72** | **166** | P | Pn | 22 02 54.3 | +0.4 |
| **KALU** | **Kalix** | **1.73** | **139** | P | Pn | 22 02 54.0 | 0.0 |
| **TOF** | **Tornio** comp=Z,0.5nm,0.2s | **1.85** | **125** | MSG | | 22 03 18.6 | |
| TOF | | | | SG | Sg | 22 03 22.2 | -0.4 |
| **LILU** | **Lilltraesk** | **1.92** | **189** | P | Pn | 22 02 57.4 | +0.8 |
| **KTK1** | **Kautokeino** | **2.10** | **27** | SG | Sb | 22 03 28.6 | +0.3 |
| **RNF** | **Rovaniemi** | **2.22** | **102** | SG | Sb | 22 03 32.3 | +0.7 |
| **SGF** | **Sodankyl** | **2.32** | **81** | SG | Sb | 22 03 35.3 | +0.7 |
| **TRO** | **Tromso** | **2.54** | **347** | SB | Sn | 22 03 37.5 | +0.8 |
| **RANF** | **Ranua** | **2.74** | **112** | SG | Sb | 22 03 47.5 | +0.9 |
| **OBF0** | **Syolatti, Pyha** | **3.08** | **149** | SB | Sn | 22 03 50.9 | +1.1 |
| OBF0 | comp=Z,0.4nm,0.2s | | | MSG | | 22 03 53.1 | |

**HEL 11 22:03:31.1**±0.3**, 67.75N**×**33.83E, h0**km**, ML1.0,**
**Suspected explosion, Baltic**
**States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVZ** | **Lovozero** | **0.34** | **65** | PG | Pg | 22 03 37.5 | -0.2 |
| **VRF** | **Varrio** | **1.60** | **272** | SN | Pn | 22 04 00.6 | 0.0 |
| **VRF** | **Varrio** baz=88 | **1.60** | **272** | PG | Pn | 22 04 00.6 | 0.0 |
| VRF | comp=Z,0.9nm,0.2s | | | MSG | | 22 04 19.1 | |
| VRF | | | | SN | Sn | 22 04 22.0 | -0.1 |
| **RAJF** | **Raja-Jooseppi** | **2.19** | **292** | PG | Pn | 22 04 10.0 | +1.3 |
| RAJF | | | | SG | Sb | 22 04 38.8 | -0.3 |
| **OLKF** | **Oulanka, Finla** | **2.25** | **232** | SB | Pn | 22 04 09.7 | +0.1 |
| **OLKF** | **Oulanka, Finla** | **2.25** | **232** | PB | Pn | 22 04 09.7 | +0.1 |
| OLKF | comp=Z,0.6nm,0.2s | | | MSG | | 22 04 38.0 | |
| OLKF | | | | SG | Sb | 22 04 40.0 | -1.1 |
| **KU6** | **Riekki** comp=Z,0.4nm,0.2s | **2.33** | **224** | MSG | | 22 04 40.0 | |
| KU6 | | | | SG | Sb | 22 04 42.0 | -1.1 |
| **MSF** | **Maaselka** | **2.65** | **228** | SG | Sb | 22 04 51.6 | -0.7 |
| **ARA0** | **ARCESS Array S** baz=121 | **3.53** | **304** | PN | Pn | 22 04 26.2 | -0.9 |
| **HEF** | **Hetta** | **3.87** | **284** | SG | Sb | 22 05 30.7 | +3.3 |
| **KTK1** | **Kautokeino** | **4.12** | **293** | SG | Sb | 22 05 38.5 | +4.0 |

**KRSC 11 22:33:36.7**±1.1**, 48.46N**×**156.47E, h7**km**±16**km**, Ml3.6,**
**East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDTR** | **Khodutka, Kamc** | **3.51** | **17** | *eP* | Pn | 22 34 34.4 | +2.8 |
| KDTR | | | | *eS* | Sb | 22 35 18.4 | -3.4 |
| **ASAK** | **Asacha** | **4.03** | **13** | *eP* | Pn | 22 34 42.6 | +3.7 |
| **MTVR** | **Mutnovka** | **4.17** | **15** | *eP* | Pn | 22 34 44.0 | +3.1 |
| MTVR | | | | *eS* | Sn | 22 35 34.9 | +4.9 |
| **GRL** | **Gorelyy** | **4.22** | **13** | *eP* | Pn | 22 34 45.4 | +3.9 |
| **KOK** | **Koryaka** | **5.03** | **15** | *eP* | Pn | 22 34 57.6 | +5.0 |

**IDC 11 23:38:57.9**±13.0**, 16.94S**×**178.92W, h576**km**±142**km**,**
**mb3.3/4, mbtmp4.3/4, Error ellipse: s-maj=129.3km**
**s-min=53.4km az=129.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** 2.3nm,0.4s,baz=105,slow=12,SNR=4.8 2.3nm,0.4s | **38.68** | **240** | P | P | 23 45 32.9 | -0.4 |
| **WRA** | **Warramunga Arr** 1.6nm,0.6s,baz=92,slow=7.0,SNR=18 1.6nm,0.6s | **44.34** | **259** | P | P | 23 46 17.8 | -0.3 |
| **ASAR** | **Alice Springs** 12nm,0.4s,baz=89,slow=7.7,SNR=196 | **44.59** | **253** | P | P | 23 46 20.1 | +0.1 |
| ASAR | 0.5nm,0.6s,baz=102,slow=4.3,SNR=2.6 12nm,0.4s | | | PcP | PcP | 23 47 50.0 | -0.3 |
| **ILAR** | **Eielson Array** 0.3nm,0.5s,baz=229,slow=5.2,SNR=2.4 0.3nm,0.5s | **85.06** | **13** | P | P | 23 50 32.9 | 0.0 |

*BEO **11** 23:48:32.4±0.8, 41.54N×20.35E, h5km±8km, ML1.7/6*
*TIR **11** 23:48:32.2, 41.58N×20.21E, h25km±1km, Md3.1, Ml1.8*
*SKO **11** 23:48:33.9, 41.46N×20.03E, h13km, ML1.9*
*PDG **11** 23:48:35.3±0.1, 41.67N×20.02E, h9km, ML2.1/10, Error ellipse: s-maj=0.1km s-min=0.3km az=0.0*
**ISC 11 23:48:32.1**±1.1**, 41.57N**±0.02×**20.19E**±0.03**, h9**km±10**km**,**
**n25, σ0s74/48, 2C-1D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** baz=228 | **0.33** | **228** | P | **Pb** | **23 48 40.1** | **0.0** |
| TIR | baz=228 | | | S | **Sb** | **23 48 45.7** | **+0.2** |
| TIR | comp=E,0.2nm,0.2s,baz=228 | | | AMP | | | |
| **TIR** | **Tirane** | **0.33** | **228** | *e*Pg | **Pb** | **23 48 39.9** | **-0.2** |
| TIR | | | | *e*Sg | **Sb** | **23 48 46.3** | **+0.8** |
| **PUK** | **Puka** baz=333 | **0.52** | **335** | P | **Pb** | **23 48 43.4** | **-0.2** |
| PUK | baz=333 | | | S | **Sb** | **23 48 51.0** | **-0.2** |
| PUK | comp=E,0.5nm,0.1s,baz=333 | | | AMP | | | |
| **OHR** | **Ohrid** | **0.65** | **135** | *e*Pg | **Pn** | **23 48 46.6** | **-0.9** |
| OHR | | | | *e*Sg | **Sn** | **23 48 56.9** | **-1.1** |
| OHR | comp=N,53nm,0.6s | | | *e*Lg | Lg | 23 48 57.8 | |
| OHR | comp=E,30nm,0.5s | | | *e*Lg | Lg | 23 48 58.7 | |
| **BCI** | **Bajram Curri** baz=353 | **0.80** | **354** | P | **Pb** | **23 48 48.1** | **-0.2** |
| BCI | baz=353 | | | S | **Sb** | **23 48 59.3** | **+0.1** |
| BCI | comp=E,0.1nm,0.2s,baz=353 | | | AMP | | | |
| **DRME** | **Dracevica, Mon** | **0.97** | **310** | *e*Pg | **Pg** | **23 48 50.2** | **-0.6** |
| DRME | | | | *i* Sg | **Sg** | **23 49 03.0** | **-0.4** |
| **PVY** | **Plav** | **1.04** | **351** | *e*Pg | **Pb** | **23 48 52.4** | **0.0** |
| PVY | | | | *i* Sg | **Sn** | **23 49 07.0** | **-0.7** |
| **PDG** | **Podgorica** | **1.10** | **321** | *e*Pg | **Pb** | **23 48 53.3** | **-0.1** |
| PDG | | | | *e*Sg | **Sn** | **23 49 10.4** | **+1.3** |
| **PDG** | **Podgorica** | **1.10** | **321** | ⇑*i*Pg | **Pb** | **23 48 52.8** | **-0.6** |
| PDG | | | | *i* Sg | **Sb** | **23 49 07.6** | **-0.3** |
| **FNA** | **Florina** baz=131 | **1.19** | **131** | P | **Pg** | **23 48 55.7** | **+0.7** |
| FNA | baz=131 | | | S | **Sn** | **23 49 12.0** | **+0.6** |
| FNA | comp=N,0.1nm,0.3s,baz=131 | | | AMP | | | |
| **FNA** | **Florina** | **1.19** | **131** | *e*Pg | **Pg** | **23 48 55.8** | **+0.7** |
| FNA | | | | *e*Sg | **Sn** | **23 49 12.0** | **+0.6** |
| **BUM** | **Brajici-Budva** | **1.21** | **308** | *e*Pg | **Pn** | **23 48 54.7** | **-0.6** |
| BUM | | | | *i* Sg | **Sb** | **23 49 11.0** | **0.0** |
| **BEY** | **Berane** | **1.32** | **351** | *e*Pg | **Pg** | **23 48 59.2** | **+1.7** |
| **IVA** | **Berane** | **1.32** | **351** | ⇑*i*Pg | **Pg** | **23 48 57.6** | **+0.1** |
| IVA | | | | *i* Sg | **Sg** | **23 49 16.4** | **+1.8** |
| **CEME** | **Cevo** | **1.36** | **316** | *e*Pg | **Pn** | **23 48 57.4** | **+0.1** |
| CEME | | | | *i* Sg | **Sg** | **23 49 16.2** | **+0.4** |
| **KOME** | **Kolasin** | **1.37** | **339** | *e*Pg | **Pg** | **23 48 58.3** | **-0.2** |
| KOME | | | | *i* Sg | **Sg** | **23 49 17.5** | **+1.2** |
| **NKME** | **Niksic** | **1.51** | **323** | ⇑*i*Pg | **Pb** | **23 49 00.2** | **-0.1** |
| NKME | | | | *i* Sg | **Sg** | **23 49 21.4** | **+0.8** |
| **SJES** | **Sjenica** | **1.70** | **355** | *e*Pg | **Pg** | **23 49 04.5** | **-0.2** |
| SJES | | | | *e*Sg | **Sg** | **23 49 26.3** | **-0.4** |
| **BARS** | **Barje** | **1.74** | **44** | *i* Pn | **Pg** | **23 49 05.5** | **+0.1** |
| **SELS** | **Selova** | **1.79** | **22** | *e*Pg | **Pn** | **23 49 03.7** | **+0.5** |
| SELS | | | | *e*Sg | **Sg** | **23 49 28.4** | **-1.2** |
| **BRY** | **Bratogost** | **1.81** | **318** | *e*Pn | **Pb** | **23 49 05.5** | **0.0** |
| BRY | | | | *i* Sn | **Sg** | **23 49 29.5** | **-0.8** |
| **VAY** | **Valandovo** | **1.81** | **97** | *i* Pn | **Pg** | **23 49 06.5** | **-0.3** |
| VAY | | | | *i* Sn | **Sg** | **23 49 29.9** | **-0.4** |
| VAY | comp=N,9.7nm,0.6s | | | *e*Lg | Lg | 23 49 31.4 | |
| VAY | comp=E,7.8nm,0.6s | | | *e*Lg | Lg | 23 49 34.6 | |
| **UPM** | **Unac-Piva** | **1.89** | **330** | *e*Pn | **Pb** | **23 49 06.7** | **-0.2** |
| UPM | | | | *i* Sn | **Sg** | **23 49 31.8** | **-1.0** |
| **IGT** | **Igoumenitsa** baz=177 | **2.04** | **177** | P | **Pb** | **23 49 08.7** | **-0.6** |
| IGT | baz=177 | | | S | **Sb** | **23 49 36.2** | **+1.4** |
| IGT | comp=E,0.0nm,1.2s,baz=177 | | | AMP | | | |
| **PEHC** | **Pehcevo** | **2.04** | **83** | *i* Pn | **Pb** | **23 49 10.0** | **+0.6** |
| PEHC | | | | *i* Sn | **Sg** | **23 49 36.8** | **-1.1** |
| PEHC | comp=N,14nm,0.8s | | | *e*Lg | Lg | 23 49 40.0 | |
| PEHC | comp=E,7.8nm,0.8s | | | *e*Lg | Lg | 23 49 41.2 | |

*BER **12** 00:25:10.3±2.4, 75.69N×6.48E, h10km, mb(Pn)3.5, ML2.4(DNK), Confirmed Earthquake*
*DNK **12** 00:25:12.7±2.1, 75.73N×6.52E, h36km±38km, ML2.4*
**ISC 12 00:25:07.7**±1.4**, 76.4N**±0.1×**5.69E**±0.09**, h10**km**, n8,**
**σ2s47/10, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HSPB** | **Hornsund (broa** | **2.35** | **71** | *e*P | **Pb** | **00 25 48.4** | **-1.5** |
| HSPB | | | | IAML | | 00 26 10.7 | |
| **BRBB** | **Barentsburg B** | **2.52** | **44** | *e*P | **Pg** | **00 25 56.6** | **+0.7** |
| **KBS** | **Kingsbay** | **2.85** | **25** | *e*P | **Pg** | **00 26 02.8** | **+0.7** |
| KBS | | | | *e*S | **Sg** | **00 26 39.9** | **+0.9** |
| KBS | comp=Z,1.1nm,0.2s | | | IAML | | 00 26 40.7 | |
| **KBS** | **Kingsbay** | **2.85** | **25** | *i* P | **Pg** | **00 26 01.8** | **-0.4** |
| KBS | | | | *i* S | **Sg** | **00 26 38.4** | **-0.7** |
| **NOR** | **Nord** | **6.66** | **331** | *i* P | Pb | 00 26 56.8 | -6.5 |
| **NOR** | **Nord** | **6.66** | **331** | *i* P | Pb | 00 26 56.8 | -6.5 |
| **DBG** | **Daneborg** | **6.86** | **265** | *i* P | **Pn** | **00 26 51.0** | **+2.9** |
| DBG | | | | *i* S | **Sn** | **00 28 02.7** | **-3.3** |
| DBG | comp=Z,12nm,2.0s | | | IAML | | 00 28 24.1 | |
| **DBG** | **Daneborg** | **6.86** | **265** | *i* P | **Pn** | **00 26 51.0** | **+2.9** |
| DBG | | | | *i* S | **Sn** | **00 28 02.7** | **-3.3** |
| DBG | comp=Z,12nm,2.0s | | | IAML | | 00 28 24.1 | |

*NEIC **12** 00:25:32.4±1.6, 38.17S±0.05×74.01W±0.03, h10km±2km, mb4.0/4, ML3.6(GUC), Error ellipse: s-maj=7.8km s-min=4.1km az=356.0*
*GUC **12** 00:25:33.0±0.7, 38.10S×74.12W, h24km±5km, ML3.6*
**ISC 12 00:25:32.9**±0.9**, 38.13S**±0.05×**74.07W**±0.09**, h18**km**, n43,**
**σ0s60/46, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BI04** | **Isla Mocha** | **0.32** | **153** | *e*P | **Pb** | **00 25 40.1** | **0.0** |
| BI04 | | | | *e*S | **Sg** | **00 25 44.2** | **-0.2** |
| BI04 | comp=N,12µm,0.2s | | | IAML | | 00 25 46.1 | |
| **LC02** | **Puerto Saavedr** | **0.85** | **141** | | **Pg** | **00 25 49.2** | **-0.4** |
| LC02 | | | | Sn | **Sb** | **00 26 00.1** | **-0.2** |
| **LC02** | **Puerto Saavedr** | **0.85** | **141** | *e*P | **Pb** | **00 25 49.0** | **-0.2** |
| LC02 | | | | *e*S | **Sg** | **00 26 00.3** | **-0.5** |
| LC02 | comp=N,9µm,0.5s | | | IAML | | 00 26 05.7 | |
| **LR04** | **Corral** | **1.82** | **164** | | **Pn** | **00 26 02.4** | **-0.9** |
| **LR04** | **Corral** | **1.82** | **164** | *e*P | **Pn** | **00 26 03.1** | **-0.2** |
| LR04 | comp=E,665nm,0.4s | | | IAML | | 00 26 39.7 | |
| **GO06** | **Curarrehue** | **2.50** | **126** | | **Pn** | **00 26 13.2** | **+0.5** |
| **GO06** | **Curarrehue** | **2.50** | **126** | *e*P | **Pn** | **00 26 13.7** | **+0.9** |
| **LR05** | **Currie** | **2.64** | **143** | | **Pn** | **00 26 15.4** | **+0.8** |
| **LR05** | **Currie** | **2.64** | **143** | *e*P | **Pn** | **00 26 15.8** | **+1.2** |
| LR05 | comp=E,232nm,0.6s | | | IAML | | 00 27 00.1 | |
| **BI02** | **San Fabin de** | **2.67** | **58** | | **Pn** | **00 26 15.3** | **+0.2** |
| **LL04** | **Puerto Octay** | **3.06** | **156** | | **Pn** | **00 26 20.0** | **-0.4** |
| **LL04** | **Puerto Octay** | **3.06** | **156** | *e*P | **Pn** | **00 26 20.2** | **-0.1** |
| LL04 | comp=N,190nm,0.2s | | | IAML | | 00 26 54.8 | |
| **ML02** | **Panimavida** | **3.18** | **43** | | **Pn** | **00 26 22.1** | **+0.1** |
| **ML02** | **Panimavida** | **3.18** | **43** | *e*P | **Pn** | **00 26 22.6** | **+0.6** |
| **LL05** | **Los Muermos** | **3.30** | **172** | Pn | **Pn** | **00 26 23.7** | **0.0** |
| **GO05** | **Huala** | **3.56** | **30** | | **Pn** | **00 26 27.4** | **+0.1** |
| **GO05** | **Huala** | **3.56** | **30** | *e*P | **Pn** | **00 26 27.6** | **+0.3** |
| GO05 | comp=N,52nm,0.5s | | | IAML | | 00 27 35.6 | |
| **PLCA** | **Paso Flores** | **3.77** | **135** | | **Pn** | **00 26 30.5** | **+0.3** |
| **BO03** | **Pichilemu** | **4.01** | **26** | *e*P | **Pn** | **00 26 33.1** | **-0.3** |
| **LL06** | **Loncomilla** | **4.09** | **175** | Pn | **Pn** | **00 26 34.9** | **+0.3** |
| **BO02** | **Sierra Bellavi** | **4.26** | **40** | Pn | **Pn** | **00 26 37.5** | **+0.5** |
| **BO02** | **Sierra Bellavi** | **4.26** | **40** | *e*P | **Pn** | **00 26 37.5** | **+0.5** |
| **LL01** | **San Ignacio de** | **4.43** | **164** | Pn | **Pn** | **00 26 39.7** | **+0.6** |
| **BO01** | **Tunca** | **4.44** | **34** | Pn | **Pn** | **00 26 39.2** | **-0.2** |
| **BO01** | **Tunca** | **4.44** | **34** | *e*P | **Pn** | **00 26 39.7** | **+0.3** |
| **MT01** | **Popeta** | **4.83** | **29** | | **Pn** | **00 26 44.2** | **-0.6** |
| **BO04** | **La Punta** | **4.99** | **35** | Pn | **Pn** | **00 26 46.5** | **-0.6** |
| **MT09** | **Talagante** | **5.01** | **31** | | **Pn** | **00 26 47.0** | **-0.4** |
| **LMEL** | **Las Melosas** | **5.30** | **37** | | **Pn** | **00 26 51.8** | **+0.4** |
| **MT13** | **San Alfonso** | **5.35** | **36** | | **Pn** | **00 26 52.3** | **+0.4** |
| **MT02** | **Curacav** | **5.42** | **27** | Pn | **Pn** | **00 26 52.0** | **-0.8** |
| **PEL** | **Peldehue** | **5.69** | **30** | Pn | **Pn** | **00 26 57.0** | **+0.4** |
| **MT08** | **Bocatoma Ro** | **5.72** | **36** | Pn | **Pn** | **00 26 57.6** | **+0.4** |
| **VA04** | **Juan Fernndez** | **5.91** | **318** | Pn | **Pn** | **00 27 01.1** | **+1.5** |
| **VA06** | **Catapilco** | **6.00** | **23** | Pn | **Pn** | **00 26 59.9** | **-0.9** |
| **VA03** | **San Esteban** | **6.08** | **29** | | **Pn** | **00 27 01.5** | **-0.4** |
| **CO03** | **El Pedregal** | **7.79** | **22** | | **Pn** | **00 27 25.2** | **-0.3** |
| **AY02** | **Valle Explorad** | **8.37** | **176** | Pn | **Pn** | **00 27 33.3** | **0.0** |
| **CO01** | **Juntas del Tor** | **8.78** | **23** | Pn | **Pn** | **00 27 39.7** | **+0.6** |
| **PB09** | **IPOC Station P** | **16.80** | **16** | | **Pn** | **00 29 27.7** | **+0.2** |
| PB09 | comp=Z,16nm,1.2s | | | IAmb | IAmb | 00 29 41.4 | |
| **PATCX** | **Punta Patache** | **17.58** | **12** | Pn | **Pn** | **00 29 35.6** | **-1.6** |
| **ETMB** | **Extrema** | **29.06** | **16** | P | **P** | **00 31 33.0** | **+0.7** |
| **QSPA** | **South Pole Qui** | **52.11** | **180** | P | **P** | **00 34 42.4** | **+0.6** |
| QSPA | comp=Z,2.9nm,1.4s | | | IAmb | IAmb | 00 35 04.8 | |

*NEIC **12** 00:54:12.7±1.4, 54.68N±0.08×156.65W±0.09, h10km±2km, Error ellipse: s-maj=14.1km s-min=6.7km az=156.0*
*IDC **12** 00:54:13.3±1.4, 54.66N×156.90W, h0km, mb3.7/5, mbtmp3.6/8, ML3.5/3, MS2.8/1, Error ellipse: s-maj=28.8km s-min=24.9km az=83.0*
*AEIC **12** 00:54:16.7±1.1, 54.6N±0.1×156.68W±0.09, h12km±7km, ML3.2, mb3.8/8(NEIC), ML3.4/30(NEIC), Error ellipse: s-maj=15.2km s-min=6.3km az=162.0*
**ISC 12 00:54:14.3**±0.8**, 54.85N**±0.08×**156.73W**±0.04**, h10**km**, n83,**
**σ1s40/91, mb3.7/5, South of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHIR** | **Chirikof Islan** | **1.16** | **33** | | **Pn** | **00 54 36.8** | **+0.2** |
| CHIR | | | | | **Sb** | **00 54 52.4** | **+0.8** |
| CHIR | comp=E,654nm,0.7s | | | IAML | | 00 54 53.5 | |
| CHIR | comp=N,465nm,0.7s | | | IAML | | 00 55 12.7 | |
| **CNBA** | **Chernabura Isl** | **1.65** | **270** | | **Pn** | **00 54 41.5** | **-1.8** |
| **CHGN** | **Chignik** | **1.74** | **327** | | **Pn** | **00 54 45.0** | **+0.5** |
| CHGN | | | | | **Sn** | **00 55 07.3** | **+0.6** |
| CHGN | comp=E,409nm,0.5s | | | IAML | | 00 55 07.9 | |
| CHGN | | | | IAML | | 00 55 07.9 | |

| | comp=N,388nm,0.4s | | | | | | |
|---|---|---|---|---|---|---|---|
| **ANPB** | **Aniakchak Plen** | **2.14** | **337** | | **Pn** | **00 54 50.9** | **+0.8** |
| **ANNE** | **Aniakchak Nort** | **2.20** | **341** | | **Pn** | **00 54 51.7** | **+0.8** |
| **SDPT** | **Sand Point** | **2.21** | **285** | | **Pn** | **00 54 50.4** | **-0.5** |
| SDPT | | | | | **Sn** | **00 55 16.9** | **-1.3** |
| SDPT | comp=N,166nm,1.0s | | | IAML | | 00 55 48.8 | |
| SDPT | comp=E,222nm,1.4s | | | IAML | | 00 55 56.0 | |
| **SII** | **Sitkinak Islan** | **2.24** | **39** | Pn | **Pn** | **00 54 51.5** | **+0.1** |
| SII | comp=E,197nm,1.0s | | | IAML | | 00 55 59.6 | |
| SII | comp=N,238nm,1.3s | | | IAML | | 00 56 12.9 | |
| **PLK4** | **Peulik 4** | **2.80** | **4** | | **Pn** | **00 55 00.4** | **+1.2** |
| **PS1A** | **Pavlof South-1** | **2.93** | **283** | | **Pn** | **00 54 59.8** | **-1.1** |
| PS1A | | | | | **Sn** | **00 55 34.8** | **-1.3** |
| **PS4A** | **Pavlof South-4** | **2.98** | **282** | | **Sn** | **00 55 35.1** | **-2.3** |
| **OHAK** | **Old Harbor** | **3.06** | **38** | | **Pn** | **00 55 03.0** | **+0.3** |
| OHAK | | | | | **Sn** | **00 55 37.4** | **-2.0** |
| **S12K** | **Black Hills** | **3.17** | **288** | | **Pn** | **00 55 03.8** | **-0.3** |
| S12K | | | | | **Sn** | **00 55 40.2** | **-1.7** |
| **CNTC** | **Contact Creek** | **3.46** | **7** | | **Pn** | **00 55 09.3** | **+1.2** |
| **KDAK** | **Kodiak Island** | **3.74** | **36** | | **Pn** | **00 55 11.1** | **-0.8** |
| **KDAK** | **Kodiak Island** comp=N,34nm,0.6s | **3.74** | **36** | IAML | | 00 56 03.4 | |
| **KDAK** | **Kodiak Island** comp=N,0.8nm,0.3s,baz=222,slow=11,SNR=27 | **3.74** | **36** | Pn | **Pn** | **00 55 12.0** | **0.0** |
| KDAK | comp=N,4.5nm,0.3s,baz=271,slow=24,SNR=7.9 comp=N,2.5nm,0.3s | | | Sn | **Sn** | **00 55 53.9** | **-2.1** |
| **KAHG** | **Katmai Hook Gl** | **3.85** | **17** | | **Pn** | **00 55 14.2** | **+0.6** |
| **KAHC** | **Katmai Hardscr** | **3.92** | **13** | | **Pn** | **00 55 15.8** | **+1.1** |
| **ISLZ** | **Isanotski Lazz** | **4.04** | **271** | | **Pn** | **00 55 14.4** | **-1.8** |
| **P17K** | **Kvichak River** | **4.36** | **2** | | **Pn** | **00 55 21.5** | **+1.1** |
| **Q19K** | **Cape Douglas,** | **4.43** | **21** | | **Pn** | **00 55 22.2** | **+0.7** |
| **SYI** | **Shuyak Island** | **4.46** | **31** | | **Pn** | **00 55 22.2** | **+0.3** |
| SYI | comp=N,45nm,1.2s | | | IAML | | 00 56 16.5 | |
| SYI | comp=E,29nm,1.4s | | | IAML | | 00 57 21.8 | |
| **P18K** | **Big Mountain,** | **4.63** | **10** | Pn | **Pn** | **00 55 24.6** | **+0.4** |
| P18K | comp=E,15nm,1.2s | | | IAML | | 00 57 03.8 | |
| **O15K** | **Ungalikthiuk R** | **4.66** | **340** | | **Pn** | **00 55 25.6** | **+1.0** |
| **O16K** | **Kokwok River B** | **4.81** | **352** | | **Pn** | **00 55 28.1** | **+1.3** |
| O16K | comp=N,14nm,1.0s | | | IAML | | 00 57 04.0 | |
| **O14K** | **Tigyukauivet M** | **5.06** | **333** | | **Pn** | **00 55 30.7** | **+0.6** |
| O14K | comp=N,22nm,1.2s | | | IAML | | 00 57 40.9 | |
| **O18K** | **Koktuh Hills** | **5.09** | **9** | Pn | **Pn** | **00 55 31.5** | **+1.0** |
| O18K | comp=E,15nm,1.4s | | | IAML | | 00 57 15.8 | |
| O18K | comp=N,17nm,1.3s | | | IAML | | 00 57 18.9 | |
| **CNPM** | **China Poot** | **5.56** | **30** | | **Pn** | **00 55 37.4** | **+0.4** |
| CNPM | | | | | **Sn** | **00 56 39.0** | **-1.9** |
| **N15K** | **Kwethluk River** | **5.63** | **343** | Pn | **Pn** | **00 55 39.6** | **+1.6** |
| **BRLK** | **Bradley Lake** | **5.86** | **30** | Pn | **Pn** | **00 55 40.4** | **-0.7** |
| **N18K** | **Kilae Creek** | **5.87** | **4** | Pn | **Pn** | **00 55 41.8** | **+0.6** |
| **N19K** | **Bonanza Creek** | **6.10** | **10** | Pn | **Pn** | **00 55 44.6** | **+0.2** |
| **M16K** | **Timber Creek** | **6.30** | **350** | Pn | **Pn** | **00 55 48.3** | **+1.2** |
| **M14K** | **Bethel** | **6.54** | **337** | Pn | **Pn** | **00 55 51.2** | **+0.8** |
| **M17K** | **Holitna River** | **6.58** | **357** | Pn | **Pn** | **00 55 52.0** | **+1.1** |
| **M13K** | **Dall Lake** | **6.61** | **330** | Pn | **Pn** | **00 55 52.3** | **+1.0** |
| **SPU** | **Mount Spurr** | **6.82** | **19** | Pn | **Pn** | **00 55 54.6** | **+0.4** |
| **M19K** | **Big River Lodg** | **7.18** | **9** | | **Pn** | **00 55 59.9** | **+0.7** |
| **L14K** | **Kuka Creek** | **7.23** | **337** | | **Pn** | **00 56 00.4** | **+0.6** |
| **RC01** | **Rabbit Creek A** | **7.28** | **28** | Pn | **Pn** | **00 56 01.0** | **+0.5** |
| **M20K** | **Styx River** | **7.30** | **14** | Pn | **Pn** | **00 56 02.3** | **+1.3** |
| **SUA** | **Susitna One** | **7.35** | **23** | Pn | **Pn** | **00 56 02.1** | **+0.5** |
| **L18K** | **Granite Mounta** | **7.39** | **0** | Pn | **Pn** | **00 56 02.9** | **+0.8** |
| **L19K** | **White Mountain** | **7.42** | **7** | Pn | **Pn** | **00 56 03.6** | **+1.1** |
| **PWL** | **Port Wells** | **7.50** | **33** | | **Pn** | **00 56 03.5** | **-0.2** |
| **SKT** | **Skwentna** | **7.65** | **19** | Pn | **Pn** | **00 56 07.0** | **+1.3** |
| **K15K** | **Wolf Creek Mou** | **7.87** | **343** | Pn | **Pn** | **00 56 09.7** | **+1.0** |
| **K17K** | **Iditarod** | **7.93** | **355** | Pn | **Pn** | **00 56 10.4** | **+0.9** |
| **GHO** | **Glory Hole Cre** | **8.06** | **27** | Pn | **Pn** | **00 56 12.0** | **+0.6** |
| **K13K** | **Kusilvak Mount** | **8.23** | **333** | Pn | **Pn** | **00 56 14.1** | **+0.6** |
| **SCM** | **Sheep Creek Mo** | **8.56** | **31** | Pn | **Pn** | **00 56 18.5** | **+0.2** |
| **J19K** | **Poorman** | **9.19** | **3** | Pn | **Pn** | **00 56 28.1** | **+1.4** |
| **RND** | **Reindeer** | **9.48** | **22** | Pn | **Pn** | **00 56 31.0** | **+0.2** |
| **NEA2** | **Nenana** | **10.50** | **18** | Pn | **Pn** | **00 56 43.3** | **-1.3** |
| **BCPM** | **Bancas Point** | **10.53** | **54** | Pn | **Pn** | **00 56 45.0** | **-0.2** |
| **CCB** | **Clear Creek Bu** | **10.79** | **21** | Pn | **Pn** | **00 56 48.7** | **0.0** |
| **ILAR** | **Eielson Array** | **11.10** | **22** | Pn | **Pn** | **00 56 51.8** | **-1.1** |
| **ILAR** | **Eielson Array** comp=N,0.3nm,0.3s,baz=213,slow=14,SNR=11 | **11.10** | **22** | Pn | **Pn** | **00 56 50.5** | **-2.4** |
| ILAR | baz=208,slow=23,SNR=1.9 | | | Sn | **Sn** | **00 58 50.4** | **-6.5** |
| ILAR | comp=N,45nm,19.3s,baz=140,slow=39 comp=N,0.4nm,0.3s | | | LR | LR | 01 01 35.6 | |
| **IMAR** | **Indian Mountai** | **11.27** | **6** | Pn | **Pn** | **00 56 55.6** | **+0.5** |
| **J25K** | **Salcha River,** | **11.32** | **26** | Pn | **Pn** | **00 56 56.5** | **+0.5** |
| **H24K** | **Noodor Dome** | **11.85** | **18** | Pn | **Pn** | **00 57 01.3** | **-1.8** |
| **M29M** | **Somme Creek** | **12.15** | **44** | Pn | **Pn** | **00 57 08.7** | **+1.4** |
| **G23K** | **Bananza Creek** | **12.33** | **13** | Pn | **Pn** | **00 57 09.9** | **+0.2** |
| **EGAK** | **Eagle** | **12.62** | **32** | Pn | **Pn** | **00 57 14.0** | **+0.3** |
| **E18K** | **Tukpahlearik C** | **12.75** | **353** | Pn | **Pn** | **00 57 18.4** | **+3.0** |
| **BMAR** | **Burnt Mountain** | **13.88** | **20** | Pn | **Pn** | **00 57 29.1** | **-1.7** |
| **G27K** | **Doyon Strip** | **14.01** | **25** | Pn | **Pn** | **00 57 31.8** | **-0.8** |
| **FARO** | **Faro, Yukon** | **14.21** | **49** | | **P** | **00 57 40.1** | **-2.7** |
| **G29M** | **Pine Creek** | **15.05** | **29** | Pn | **Pn** | **00 57 47.7** | **+1.0** |
| **F28M** | **Old Crow** | **15.07** | **25** | Pn | **Pn** | **00 57 47.1** | **+0.1** |
| **B20K** | **Meade River** | **15.22** | **359** | Pn | **Pn** | **00 57 51.7** | **+2.9** |
| **D25K** | **Kavik River** | **15.27** | **14** | Pn | **Pn** | **00 57 49.6** | **-0.1** |
| **G30M** | **tAoh Zrail Nji** | **15.62** | **31** | Pn | **P** | **00 57 57.4** | **-1.0** |
| G

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **26.61** | **129** | LR | LR | 01 34 48.6 | | |
| | comp=Z,48nm,18.1s,baz=131,slow=43 | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.51** | **165** | P | **P** | **01 21 58.8** | **-1.8** | |
| | comp=Z,0.5nm,0.6s,baz=344,slow=9.9,SNR=2.7 | | | | | | | |
| WRA | | | | PcP | **PcP** | **01 25 11.2** | **+0.3** | |
| | comp=Z,0.7nm,0.8s,baz=331,slow=3.0,SNR=2.4 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.94** | **294** | P | **P** | **01 22 05.4** | **+0.9** | |
| | comp=Z,0.7nm,0.3s,baz=130,slow=8.2,SNR=5.1 | | | | | | | |
| CMAR | | | | PcP | **PcP** | **01 25 13.3** | **+1.2** | |
| | comp=Z,0.8nm,0.3s,baz=129,slow=1.3,SNR=4.6 | | | | | | | |
| CMAR | | | | LR | LR | 01 32 33.3 | | |
| | comp=Z,32nm,21.7s,baz=110,slow=34 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **KSRS** | **Korea Array** | **29.63** | **2** | P | **P** | **01 22 09.0** | **-1.3** | |
| | comp=Z,1.6nm,0.8s,baz=180,slow=10.0,SNR=7.9 | | | | | | | |
| KSRS | | | | LR | LR | 01 34 54.7 | | |
| | comp=Z,58nm,19.6s,baz=195,slow=38 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **30.59** | **19** | P | **P** | **01 22 16.0** | **-2.8** | |
| | comp=Z,2.3nm,0.8s,baz=199,slow=9.4,SNR=7.3 | | | | | | | |
| MJAR | | | | LR | LR | 01 33 20.3 | | |
| | comp=Z,84nm,20.7s,baz=186,slow=34 | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **31.99** | **167** | P | **P** | **01 22 29.9** | **-1.5** | |
| | comp=Z,0.7nm,0.6s,baz=347,slow=7.8,SNR=7.9 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 25 19.8** | **-0.1** | |
| | comp=Z,0.9nm,0.7s,baz=348,slow=2.5,SNR=5.4 | | | | | | | |
| ASAR | | | | LR | LR | 01 37 31.1 | | |
| | comp=Z,53nm,18.9s,baz=348,slow=40 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **36.65** | **6** | P | **P** | **01 23 09.3** | **-2.0** | |
| | comp=Z,2.1nm,0.8s,baz=185,slow=9.4,SNR=6.8 | | | | | | | |
| USRK | | | | LR | LR | 01 38 00.4 | | |
| | comp=Z,45nm,20.0s,baz=213,slow=36 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **SHL** | **Shillong** | **37.54** | **302** | P | **P** | **01 23 18.7** | **-0.7** | |
| **MORW** | **Morawa** | **37.96** | **195** | P | **P** | **01 23 23.8** | **+1.2** | |
| MORW | | | | IAmb | IAmb | 01 23 24.5 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **38.30** | **178** | P | **P** | **01 23 25.9** | **+0.5** | |
| **JKA** | **Kamikawa-asahi** | **38.86** | **18** | P | **P** | **01 23 29.4** | **-0.6** | |
| JKA | | | | IAmb | IAmb | 01 23 48.9 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **41.29** | **168** | P | **P** | **01 23 51.4** | **+1.2** | |
| **NWAO** | **Narrogin (SRO)** | **41.38** | **192** | | sP | 01 24 12.3 | -4.3 | |
| **STKA** | **Stephens Creek** | **41.89** | **161** | P | **P** | **01 23 53.7** | **-1.4** | |
| | comp=Z,2.5nm,0.8s,baz=324,slow=15,SNR=2.3 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **HEH** | **HeiHe** | **42.41** | **1** | *e*P | **P** | **01 23 59.2** | **+0.1** | |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **43.52** | **340** | P | **P** | **01 24 08.3** | **-0.1** | |
| | comp=Z,0.7nm,0.7s,baz=148,slow=8.4,SNR=3.7 | | | | | | | |
| SONM | | | | PcP | **PcP** | **01 25 53.6** | **-1.5** | |
| | comp=Z,0.7nm,0.6s,baz=128,slow=2.4,SNR=2.3 | | | | | | | |
| SONM | | | | LR | LR | 01 44 40.8 | | |
| | comp=Z,40nm,18.2s,baz=148,slow=40 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **DZM** | **Mont Dzumac** | **48.99** | **128** | LR | LR | 01 46 12.8 | | |
| | comp=Z,27nm,18.5s,baz=330,slow=37 | | | | | | | |
| **MK31** | **Makanchi Array** | **54.27** | **324** | P | **P** | **01 25 31.5** | **+1.0** | |
| MK31 | | | | IAmb | IAmb | 01 25 32.1 | | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.27** | **324** | P | **P** | **01 25 31.1** | **+0.6** | |
| **MKAR** | **Makanchi Array** | **54.27** | **324** | P | **P** | **01 25 31.2** | **+0.7** | |
| | comp=Z,5.4nm,0.7s,baz=127,slow=8.1,SNR=37 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **01 26 34.5** | **+0.6** | |
| | comp=Z,1.7nm,0.7s,baz=117,slow=4.2,SNR=3.9 | | | | | | | |
| MKAR | | | | LR | LR | 01 50 59.4 | | |
| | comp=Z,54nm,18.3s,baz=116,slow=39 | | | | | | | |
| | comp=Z,5.4nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **54.46** | **324** | P | **P** | **01 25 32.4** | **+0.6** | |
| MAKZ | | | | IAmb | IAmb | 01 25 33.4 | | |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **MA2** | **Magadan** | **54.90** | **15** | P | **P** | **01 25 35.4** | **+0.5** | |
| MA2 | | | | IAmb | IAmb | 01 25 37.2 | | |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| **NIL** | **Nilore** | **55.47** | **306** | P | **P** | **01 25 40.9** | **+1.5** | |
| NIL | | | | IAmb | IAmb | 01 25 54.0 | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **MSVF** | **Nonsavu** | **56.74** | **117** | LR | LR | 01 47 48.4 | | |
| | comp=Z,31nm,20.7s,baz=307,slow=34 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.02** | **332** | P | **P** | **01 25 49.3** | **-0.8** | |
| ZAA0 | | | | IAmb | IAmb | 01 25 50.9 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.02** | **332** | P | **P** | **01 25 49.5** | **-0.5** | |
| **ZALV** | **Zalesovo Beam** | **57.02** | **332** | P | **P** | **01 25 49.4** | **-0.7** | |
| | comp=Z,3.2nm,0.7s,baz=120,slow=8.5,SNR=15 | | | | | | | |
| ZALV | | | | LR | LR | 01 51 28.0 | | |
| | comp=Z,37nm,19.4s,baz=91,slow=37 | | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **57.38** | **316** | LR | LR | 01 51 30.7 | | |
| | comp=Z,92nm,21.9s,baz=80,slow=37 | | | | | | | |
| **KURK** | **Kurchatov** | **58.36** | **326** | P | **P** | **01 25 59.4** | **-0.1** | |
| **KURBB** | **Kurchatov Arra** | **58.36** | **326** | P | **P** | **01 25 59.8** | **+0.2** | |
| | comp=Z,4.0nm,0.7s,baz=124,slow=6.4,SNR=41 | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **GAR** | **Garm** | **59.20** | **311** | P | **P** | **01 26 06.0** | **+0.3** | |
| **KK31** | **Karatay Array** | **60.29** | **316** | P | **P** | **01 26 13.3** | **+0.3** | |
| **KKAR** | **Karatay Array** | **60.29** | **316** | P | **P** | **01 26 13.1** | **+0.1** | |
| **TIXI** | **Tiksi** | **63.89** | **1** | P | **P** | **01 26 36.5** | **0.0** | |
| TIXI | | | | IAmb | IAmb | 01 26 50.7 | | |
| | comp=Z,7.3nm,1.1s | | | | | | | |
| **BVAR** | **Borovoye Array** | **63.95** | **326** | P | **P** | **01 26 37.8** | **+0.5** | |
| | comp=Z,3.8nm,0.7s,baz=124,slow=8.8,SNR=18 | | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **64.03** | **326** | P | **P** | **01 26 37.6** | **-0.1** | |
| BRVK | | | | IAmb | IAmb | 01 26 39.3 | | |
| | comp=Z,4.4nm,0.7s | | | | | | | |
| **URZ** | **Urewera** | **65.54** | **138** | LR | LR | 01 56 41.6 | | |
| | comp=Z,48nm,18.8s,baz=33,slow=37 | | | | | | | |
| **ABKAR** | **Akbulak array** | **69.03** | **320** | P | **P** | **01 27 10.3** | **+0.6** | |
| **AKTO** | **Aktyubinsk** | **70.50** | **321** | P | **P** | **01 27 18.3** | **-0.5** | |
| | comp=Z,1.7nm,0.6s,baz=86,slow=5.8,SNR=6.1 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **71.54** | **327** | P | **P** | **01 27 24.8** | **-0.1** | |
| ARU | | | | IAmb | IAmb | 01 27 25.3 | | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **71.54** | **327** | P | **P** | **01 27 24.1** | **-0.8** | |
| | comp=Z,3.1nm,0.6s,baz=87,slow=4.9,SNR=8.8 | | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| **K13K** | **Kusilvak Mount** | **73.30** | **27** | P | **P** | **01 27 36.7** | **+1.4** | |
| K13K | | | | IAmb | IAmb | 01 27 37.4 | | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **L14K** | **Kuka Creek** | **74.06** | **28** | P | **P** | **01 27 40.9** | **+1.2** | |
| L14K | | | | IAmb | IAmb | 01 27 41.9 | | |
| | comp=Z,9.7nm,0.8s | | | | | | | |
| **M14K** | **Bethel** | **74.27** | **29** | P | **P** | **01 27 42.1** | **+1.1** | |
| **CASY** | **Casey** | **74.73** | **187** | P | **P** | **01 27 44.7** | **+1.2** | |
| **K15K** | **Wolf Creek Mou** | **74.81** | **27** | P | **P** | **01 27 45.3** | **+1.2** | |
| K15K | | | | IAmb | IAmb | 01 27 45.8 | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **N15K** | **Kwethluk River** | **75.06** | **30** | P | **P** | **01 27 47.0** | **+1.4** | |
| **J16K** | **Anvik River** | **75.44** | **26** | P | **P** | **01 27 49.6** | **+1.9** | |
| J16K | | | | IAmb | IAmb | 01 28 10.5 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **I17K** | **Unalakleet** | **75.52** | **26** | P | **P** | **01 27 49.0** | **+0.8** | |
| **L16K** | **Owhat River** | **75.64** | **28** | P | **P** | **01 27 49.7** | **+0.8** | |
| L16K | | | | IAmb | IAmb | 01 27 50.8 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **M16K** | **Timber Creek** | **75.76** | **29** | P | **P** | **01 27 50.9** | **+1.3** | |
| M16K | | | | IAmb | IAmb | 01 27 51.9 | | |
| | comp=Z,9.9nm,0.8s | | | | | | | |
| **O16K** | **Kokwok River B** | **75.95** | **30** | P | **P** | **01 27 51.3** | **+0.6** | |
| O16K | | | | IAmb | IAmb | 01 27 52.4 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **J17K** | **VABM Dome** | **76.13** | **27** | P | **P** | **01 27 53.2** | **+1.5** | |
| J17K | | | | IAmb | IAmb | 01 27 54.0 | | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **76.34** | **22** | P | **P** | **01 27 53.2** | **+0.4** | |
| **K17K** | **Iditarod** | **76.36** | **27** | P | **P** | **01 27 54.6** | **+1.6** | |
| K17K | | | | IAmb | IAmb | 01 27 55.9 | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **M17K** | **Holitna River** | **76.55** | **29** | P | **P** | **01 27 55.8** | **+1.7** | |
| **L18K** | **Granite Mounta** | **77.02** | **28** | P | **P** | **01 27 58.2** | **+1.5** | |
| L18K | | | | IAmb | IAmb | 01 28 02.6 | | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **C19K** | **Lookout Ridge** | **77.08** | **21** | P | **P** | **01 27 58.3** | **+1.3** | |
| **J18K** | **Innoko River** | **77.19** | **27** | P | **P** | **01 27 58.4** | **+0.7** | |
| **N18K** | **Kilae Creek** | **77.20** | **30** | P | **P** | **01 27 59.1** | **+1.4** | |
| N18K | | | | IAmb | IAmb | 01 27 59.9 | | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **D19K** | **Kuna River** | **77.48** | **21** | P | **P** | **01 28 00.4** | **+1.2** | |
| D19K | | | | IAmb | IAmb | 01 28 21.1 | | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| **H19K** | **Roundabout Mou** | **77.62** | **25** | P | **P** | **01 28 01.3** | **+1.4** | |
| H19K | | | | IAmb | IAmb | 01 28 06.4 | | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **J19K** | **Poorman** | **77.75** | **26** | P | **P** | **01 28 02.4** | **+1.7** | |
| **L19K** | **White Mountain** | **77.87** | **28** | P | **P** | **01 28 02.9** | **+1.4** | |
| L19K | | | | IAmb | IAmb | 01 28 09.7 | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **N19K** | **Bonanza Creek** | **77.90** | **29** | P | **P** | **01 28 02.4** | **+0.6** | |
| N19K | | | | IAmb | IAmb | 01 28 03.9 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **M19K** | **Big River Lodg** | **78.06** | **28** | P | **P** | **01 28 04.4** | **+1.8** | |
| M19K | | | | IAmb | IAmb | 01 28 13.8 | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **F20K** | **Avaraart Lake** | **78.13** | **23** | P | **P** | **01 28 04.6** | **+1.8** | |
| **Q19K** | **Cape Douglas,** | **78.14** | **31** | P | **P** | **01 28 01.9** | **-1.1** | |
| **K20K** | **Telida** | **78.36** | **27** | P | **P** | **01 28 05.5** | **+1.3** | |
| K20K | | | | IAmb | IAmb | 01 28 07.8 | | |
| | comp=Z,15nm,1.5s | | | | | | | |
| **J20K** | **Nowinta River** | **78.42** | **26** | P | **P** | **01 28 06.2** | **+1.8** | |
| **KDAK** | **Kodiak Island** | **78.62** | **33** | P | **P** | **01 28 06.2** | **+0.6** | |
| **M20K** | **Styx River** | **78.65** | **28** | P | **P** | **01 28 07.2** | **+1.3** | |
| M20K | | | | IAmb | IAmb | 01 28 07.9 | | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **SYI** | **Shuyak Island** | **78.77** | **32** | P | **P** | **01 28 06.9** | **+0.5** | |
| **RAYN** | **Ar Rayn** | **78.84** | **292** | P | **P** | **01 28 07.5** | **-0.2** | |
| RAYN | | | | IAmb | IAmb | 01 28 09.2 | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **78.91** | **20** | P | **P** | **01 28 06.8** | **-0.2** | |
| B21K | | | | IAmb | IAmb | 01 28 09.4 | | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **G21K** | **Allakaket** | **78.94** | **24** | P | **P** | **01 28 08.7** | **+1.4** | |
| G21K | | | | IAmb | IAmb | 01 28 21.5 | | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| **H21K** | **Melozitna River** | **79.14** | **25** | P | **P** | **01 28 09.2** | **+0.8** | |
| H21K | | | | IAmb | IAmb | 01 28 22.7 | | |
| | comp=Z,8.9nm,1.5s | | | | | | | |
| **SKT** | **Skwentna** | **79.41** | **28** | P | **P** | **01 28 09.9** | **-0.1** | |
| SKT | | | | IAmb | IAmb | 01 28 16.2 | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **CNPM** | **China Poot** | **79.42** | **31** | P | **P** | **01 28 09.2** | **-0.8** | |
| CNPM | | | | IAmb | IAmb | 01 28 10.8 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **79.75** | **22** | P | **P** | **01 28 12.9** | **+1.2** | |
| **SUA** | **Susitna One** | **79.76** | **29** | IAmb | IAmb | 01 28 13.0 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **79.79** | **26** | IAmb | IAmb | 01 28 13.8 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **MLY** | **Manley** | **79.95** | **25** | P | **P** | **01 28 13.2** | **+0.3** | |
| MLY | | | | IAmb | IAmb | 01 28 14.3 | | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **80.23** | **29** | P | **P** | **01 28 14.9** | **+0.5** | |
| **D23K** | **Nanushuk River** | **80.23** | **21** | P | **P** | **01 28 15.0** | **+0.7** | |
| D23K | | | | IAmb | IAmb | 01 28 21.1 | | |
| | comp=Z,9.5nm,1.4s | | | | | | | |
| **C23K** | **Itkillik River** | **80.32** | **20** | IAmb | IAmb | 01 28 16.9 | | |
| | comp=Z,4.3nm,0.6s | | | | | | | |
| **G23K** | **Banana Creek** | **80.34** | **24** | P | **P** | **01 28 16.3** | **+1.3** | |
| **BWN** | **Browne** | **80.46** | **26** | P | **P** | **01 28 16.8** | **+1.2** | |
| **H23K** | **Yukon River** | **80.49** | **25** | IAmb | IAmb | 01 28 51.1 | | |
| | comp=Z,10nm,1.5s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **80.54** | **25** | IAmb | IAmb | 01 28 20.4 | | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **80.61** | **22** | P | **P** | **01 28 17.6** | **+1.2** | |
| **NEA2** | **Nenana** | **80.64** | **26** | P | **P** | **01 28 18.3** | **+1.8** | |
| **D24K** | **Happy Valley** | **80.91** | **21** | P | **P** | **01 28 19.4** | **+1.6** | |
| D24K | | | | IAmb | IAmb | 01 28 24.0 | | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **PWL** | **Port Wells** | **80.91** | **30** | P | **P** | **01 28 18.8** | **+0.7** | |
| **SML** | **Sawmill** | **80.92** | **29** | P | **P** | **01 28 18.8** | **+0.7** | |
| SML | | | | IAmb | IAmb | 01 28 23.5 | | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **H24K** | **Noodor Dome** | **81.18** | **25** | P | **P** | **01 28 20.7** | **+1.3** | |
| **CCB** | **Clear Creek Bu** | **81.19** | **26** | P | **P** | **01 28 19.4** | **0.0** | |
| **G24K** | **Hadweenzic Riv** | **81.35** | **24** | P | **P** | **01 28 21.7** | **+1.4** | |
| G24K | | | | IAmb | IAmb | 01 28 28.6 | | |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| **GLI** | **Glacier Island** | **81.51** | **30** | P | **P** | **01 28 21.4** | **+0.2** | |
| **HDA** | **Harding Lake** | **81.56** | **26** | P | **P** | **01 28 20.4** | **-1.0** | |
| HDA | | | | IAmb | IAmb | 01 28 22.4 | | |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **81.59** | **26** | P | **P** | **01 28 20.6** | **-1.0** | |
| **ILAR** | **Eielson Array** | **81.59** | **26** | P | **P** | **01 28 20.7** | **-0.9** | |
| | comp=Z,0.8nm,0.6s,baz=247,slow=5.2,SNR=18 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **Q23K** | **Middleton Isla** | **81.91** | **31** | P | **P** | **01 28 23.4** | **+0.2** | |
| **FYU** | **Fort Yukon** | **82.25** | **24** | P | **P** | **01 28 27.4** | **+2.4** | |
| FYU | | | | IAmb | IAmb | 01 28 32.0 | | |
| | comp=Z,7.8nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **82.48** | **23** | P | **P** | **01 28 28.1** | **+1.9** | |
| **SCRK** | **Sand Creek** | **82.87** | **26** | P | **P** | **01 28 28.2** | **-0.2** | |
| **J26L** | **Joseph Creek** | **83.03** | **26** | P | **P** | **01 28 29.3** | **+0.2** | |
| **GLB** | **Gilahina Butte** | **83.09** | **29** | P | **P** | **01 28 29.0** | **-0.5** | |
| GLB | | | | IAmb | IAmb | 01 28 54.2 | | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **I26K** | **Coal Creek Min** | **83.15** | **25** | P | **P** | **01 28 30.5** | **+0.9** | |
| **E27K** | **Coleen River** | **83.57** | **22** | P | **P** | **01 28 33.8** | **+1.9** | |
| E27K | | | | IAmb | IAmb | 01 28 36.4 | | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **K27K** | **Chicken** | **83.70** | **26** | IAmb | IAmb | 01 28 42.3 | | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **L27K** | **Beaver Creek,** | **83.90** | **27** | P | **P** | **01 28 36.0** | **+2.4** | |
| **BCAR** | **Beaver Creek A** | **83.91** | **27** | P | **P** | **01 28 35.9** | **+2.1** | |
| **EGAK** | **Eagle** | **84.04** | **25** | P | **P** | **01 28 34.7** | **+0.5** | |
| **F28M** | **Old Crow** | **84.27** | **23** | IAmb | IAmb | 01 28 38.0 | | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| **CTGM** | **Chitina Glacie** | **84.32** | **29** | P | **P** | **01 28 37.4** | **+1.4** | |
| **TABL** | **Table Mountain** | **84.46** | **30** | P | **P** | **01 28 39.1** | **+2.3** | |
| **H29M** | **Whitestone** | **85.03** | **24** | IAmb | IAmb | 01 28 41.6 | | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| **M29M** | **Somme Creek** | **85.50** | **28** | P | **P** | **01 28 43.7** | **+1.9** | |
| **ARCES** | **ARCESS Array B** | **86.70** | **340** | P | **P** | **01 28 46.7** | **-0.7** | |
| **ARCES** | **ARCESS Array B** | **86.70** | **340** | P | **P** | **01 28 46.0** | **-1.4** | |
| | comp=Z,3.8nm,0.7s,baz=70,slow=5.8,SNR=5.1 | | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **FURI** | **Furi** | **86.80** | **278** | LR | LR | 02 09 05.5 | | |
| | comp=Z,28nm,18.4s,baz=166,slow=37 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **86.86** | **303** | P | **P** | **01 28 49.4** | **+0.3** | |
| | comp=Z,3.9nm,0.7s,baz=93,slow=10,SNR=3.2 | | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | | |
| **VNDA** | **Vanda** | **87.36** | **173** | P | **P** | **01 28 50.7** | **+0.3** | |
| **VNDA** | **Vanda** | **87.36** | **173** | P | **P** | **01 28 50.4** | **0.0** | |
| | comp=Z,1.4nm,0.8s,baz=299,slow=5.9,SNR=9.9 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **87.41** | **310** | P | **P** | **01 28 52.1** | **+0.4** | |
| **BRTR** | **Keskin Array B** | **87.41** | **310** | P | **P** | **01 28 51.7** | **0.0** | |
| | comp=Z,0.8nm,0.8s,baz=72,slow=4.7,SNR=4.2 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **WHY** | **Whitehorse** | **87.49** | **29** | P | **P** | **01 28 53.3** | **+1.8** | |
| WHY | | | | IAmb | IAmb | 01 29 08.0 | | |
| | comp=Z,3.8nm,1.2s | | | | | | | |
| **FIA1** | **FINESS Array S** | **88.29** | **332** | P | **P** | **01 28 54.3** | **-0.8** | |
| **FINES** | **FINESS Array B** | **88.29** | **332** | P | **P** | **01 28 54.8** | **-0.3** | |
| | comp=Z,2.7nm,0.8s,baz=83,slow=6.0,SNR=7.5 | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **CSS** | **Mathiatis** | **88.31** | **305** | P | **P** | **01 28 56.7** | **+0.8** | |
| **AKASG** | **Malin Array Be** | **88.75** | **321** | LR | LR | 02 12 42.6 | | |
| | comp=Z,20nm,18.4s,baz=60,slow=38 | | | | | | | |
| **MLR** | **Muntele Rosu** | **91.96** | **316** | LR | LR | 02 14 31.2 | | |
| | comp=Z,29nm,20.2s,baz=78,slow=38 | | | | | | | |
| **BURAR** | **Bucovina Array** | **91.97** | **318** | P | **P** | **01 29 13.6** | **+0.8** | |
| **HFS** | **Hagfors** | **94.46** | **332** | LR | LR | 02 15 57.7 | | |
| | comp=Z,28nm,18.1s,baz=46,slow=38 | | | | | | | |
| **NOA** | **NORSAR Array B** | **95.19** | **334** | LR | LR | 02 15 58.6 | | |
| | comp=Z,28nm,20.1s,baz=55,slow=38 | | | | | | | |
| **GERES** | **GERESS Array B** | **98.90** | **322** | P | **P** | **01 29 44.4** | **0.0** | |
| | comp=Z,0.1nm,0.3s,baz=60,slow=5.8,SNR=2.0 | | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | | |
| **TXAR** | **Lajitas Array** | **119.22** | **50** | PKP | **PKiKP** | **01 34 54.0** | **+0.5** | |
| | comp=Z,0.3nm,0.6s,baz=247,slow=1.9,SNR=4.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.50** | **290** | PKP | **PKiKP** | **01 34 58.3** | **0.0** | |
| | comp=Z,1.0nm,0.7s,baz=76,slow=3.4,SNR=7.0 | | | | | | | |

*DJA **12** 01:20:49.3±0.6,2°S±5°×10°2E±°, h184km±6km, M4.4/8, mb4.8/2, mbB5.2/1, MLv4.2/8, Mw(mB)4.7/1*
*IDC **12** 01:20:52.0±10.0, 2°34S×101°94E, h238km±101km, mb3.5/7, mbtmp4.1/7, Error ellipse: s-maj=74.9km s-min=16.5km az=58.0*
**ISC 12 01:20:48.4±0.7, 2°19S±0°09×102°08E±0°09, h200km, n15, σ0s99/20, mb3.7/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PDSI** | **Padang** | **2.06** | **308** | P | | **Pn** | | **01 21 27.3** | **-0.2** |
| PDSI | | | | S | | **Sn** | | **01 21 56.1** | **-1.9** |
| **PPSI** | **Pulau Pagai** | **2.15** | **255** | P | | **Pn** | | **01 21 29.4** | **+1.0** |
| PPSI | | | | S | | **Sn** | | **01 21 58.8** | **-0.7** |
| **MNAI** | **Manna** | **2.33** | **158** | P | | **Pn** | | **01 21 30.3** | **-0.1** |
| MNAI | | | | S | | **Sn** | | **01 22 01.9** | **-1.3** |
| **SISI** | **Saibi** | **3.11** | **286** | P | | **Pn** | | **01 21 40.1** | **+0.8** |
| SISI | | | | S | | **Sn** | | **01 22 18.2** | **-1.0** |
| **PBSI** | **Pulau Batu** | **4.35** | **299** | P | | **Pn** | | **01 21 55.4** | **+0.8** |
| PBSI | | | | S | | **Sn** | | **01 22 45.1** | **-1.6** |
| **GSI** | **Gunungsitoli** | **5.69** | **308** | P | | **Pn** | | **01 22 11.6** | **-0.1** |
| **GSI** | **Gunungsitoli** | **5.69** | **308** | P | | **Pn** | | **01 22 11.8** | **+0.1** |
| **WRA** | **Warramunga Arr** | **36.11** | **122** | P | | **P** | | **01 27 31.5** | **-0.1** |
| | 0.4nm,0.3s,baz=298,slow=12,SNR=3.2 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **ASAR** | **Alice Springs** | **37.47** | **127** | P | | **P** | | **01 27 43.5** | **+0.5** |
| | 2.0nm,0.5s,baz=301,slow=8.0,SNR=30 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **01 29 56.4** | **-0.8** |
| | 0.3nm,0.5s,baz=322,slow=2.1,SNR=1.9 | | | | | | | | |
| | 2.0nm,0.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **47.48** | **133** | P | | **P** | | **01 29 03.4** | **-0.1** |
| | 2.2nm,0.6s,baz=316,slow=8.5,SNR=5.0 | | | | | | | | |
| | 2.2nm,0.6s | | | | | | | | |
| **SONM** | **Songino Array** | **49.96** | **4** | P | | **P** | | **01 29 24.0** | **+1.9** |
| | 0.9nm,0.5s,baz=190,slow=10.0,SNR=4.8 | | | | | | | | |
| | 0.9nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.34** | **342** | P | | **P** | | **01 30 08.5** | **+0.1** |
| | 1.4nm,0.2s,baz=163,slow=6.8,SNR=1.3 | | | | | | | | |
| | 1.4nm,0.2s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.76** | **348** | P | | **P** | | **01 30 17.5** | **-0.8** |
| | 0.5nm,0.3s,baz=166,slow=3.6,SNR=2.9 | | | | | | | | |
| | 0.5nm,0.3s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.99** | **312** | P | | **P** | | **01 32 08.2** | **0.0** |
| | 0.5nm,0.6s,baz=139,slow=7.5,SNR=3.0 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **143.55** | **40** | PKP | | PKPbc | | 01 39 58.8 | +0.7 |
| | 0.3nm,0.4s,baz=217,slow=0.4,SNR=14 | | | | | | | | |

*IDC **12** 02:20:10.1±6.5, 12°33N×143°73E, h53km±43km, mb3.7/10, mbtmp4.0/10, Error ellipse: s-maj=61.2km s-min=26.5km az=171.0*
**ISC 12 02:20:06.9±2.0, 12°3N±0°3×143°6E±0°2, h27km, n11, σ0s91/12, mb4.1/10, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.78** | **43** | P | | **Pn** | | **02 20 36.2** | **+0.4** |
| | 238nm,0.3s,baz=214,slow=5.0,SNR=19 | | | | | | | | |
| GUMO | | | | S | | **Sn** | | **02 20 57.8** | **+0.2** |
| | 225nm,0.3s,baz=12,slow=23,SNR=6.4 | | | | | | | | |
| **SONM** | **Songino Array** | **47.10** | **326** | P | | **P** | | **02 28 36.0** | **-0.7** |
| | 0.3nm,0.5s,baz=134,slow=8.3,SNR=2.0 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.58** | **317** | P | | **P** | | **02 30 23.3** | **+1.3** |
| | 0.4nm,0.7s,baz=92,slow=9.1,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.97** | **325** | P | | **P** | | **02 30 24.7** | **+0.3** |
| | 0.4nm,0.4s,baz=142,slow=4.9,SNR=1.7 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.82** | **320** | P | | **P** | | **02 30 44.5** | **+1.2** |
| | 1.3nm,0.8s,baz=103,slow=7.0,SNR=11 | | | | | | | | |
| | 1.3nm,0.8s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **70.18** | **322** | P | | **P** | | **02 31 17.9** | **+0.7** |
| | 1.0nm,0.5s,baz=96,slow=9.1,SNR=6.6 | | | | | | | | |
| | 1.0nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **70.26** | **25** | P | | **P** | | **02 31 16.0** | **-1.4** |
| | 0.7nm,0.5s,baz=252,slow=6.0,SNR=16 | | | | | | | | |
| | 0.7nm,0.5s | | | | | | | | |
| **YKA** | **Yellowknife 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LTZ | Lake Taylor | 6.46 | 50 | Pn | | Pn | 02 36 45.1 | -0.6 | |
| LTZ | Lake Taylor | 6.46 | 50 | P | | Pn | 02 36 45.8 | +0.2 | |
| GVZ | Greta Valley S | 6.74 | 55 | | | Pn | 02 36 50.7 | +1.2 | |
| GVZ | Greta Valley S | 6.74 | 55 | P | | Pn | 02 36 49.8 | +0.3 | |
| DSZ | Denniston Nort | 7.00 | 42 | Pn | | Pn | 02 36 53.6 | +0.5 | |
| DSZ | Denniston Nort | 7.00 | 42 | P | | Pn | 02 36 53.6 | +0.5 | |
| KHZ | Kahutara | 7.39 | 53 | P | | Pn | 02 36 57.9 | -0.4 | |
| KHZ | Kahutara | 7.39 | 53 | Pn | | Pn | 02 36 59.4 | +1.1 | |
| KHZ | Kahutara | 7.39 | 53 | P | | Pn | 02 36 58.1 | -0.2 | |
| THZ | Tophouse | 7.52 | 47 | Pn | | Pn | 02 37 01.5 | +1.3 | |
| THZ | Tophouse | 7.52 | 47 | P | | Pn | 02 37 00.2 | -0.1 | |
| MRNZ | Matariki Terra | 7.72 | 45 | | | Pn | 02 37 03.4 | +0.5 | |
| MRNZ | Matariki Terra | 7.72 | 45 | P | | Pn | 02 37 03.0 | +0.1 | |
| BSWZ | Blackbirch Sta | 8.05 | 51 | | | Pn | 02 37 08.7 | +1.2 | |
| BSWZ | Blackbirch Sta | 8.05 | 51 | P | | Pn | 02 37 09.7 | +2.2 | |
| QRZ | Quartz Range | 8.07 | 41 | P | | Pn | 02 37 07.9 | +0.3 | |
| QRZ | Quartz Range | 8.07 | 41 | Pn | | Pn | 02 37 08.0 | +0.4 | |
| QRZ | Quartz Range | 8.07 | 41 | P | | Pn | 02 37 08.0 | +0.3 | |
| TKNZ | Takaka Hill | 8.10 | 44 | | | Pn | 02 37 08.6 | +0.4 | |
| TKNZ | Takaka Hill | 8.10 | 44 | P | | Pn | 02 37 09.0 | +0.9 | |
| NNZ | Nelson | 8.16 | 46 | | | Pn | 02 37 10.7 | +1.7 | |
| NNZ | Nelson | 8.16 | 46 | P | | Pn | 02 37 08.7 | -0.3 | |
| CMWZ | Cape Campbell | 8.21 | 52 | P | | Pn | 02 37 12.6 | +3.0 | |
| TUWZ | Tuamarina | 8.29 | 50 | | | Pn | 02 37 12.4 | +1.7 | |
| TUWZ | Tuamarina | 8.29 | 50 | P | | Pn | 02 37 13.8 | +3.0 | |
| MCQ | Macquarie Isla | 8.47 | 207 | P | | Pn | 02 37 11.2 | -1.9 | |
| TCW | Tory Channel | 8.62 | 50 | | | Pn | 02 37 16.7 | +1.4 | |
| TCW | Tory Channel | 8.62 | 50 | P | | Pn | 02 37 17.0 | +1.7 | |
| DUWZ | D'Urville Isla | 8.74 | 47 | P | | Pn | 02 37 18.5 | +1.5 | |
| BHW | Baring Head | 8.80 | 53 | P | | Pn | 02 37 19.1 | +1.4 | |
| PLWZ | Palliser | 8.90 | 55 | | | Pn | 02 37 20.7 | +1.5 | |
| PLWZ | Palliser | 8.90 | 55 | P | | Pn | 02 37 21.0 | +1.9 | |
| MSWZ | Moikau Station | 9.00 | 54 | | | Pn | 02 37 21.9 | +1.4 | |
| MSWZ | Moikau Station | 9.00 | 54 | P | | Pn | 02 37 22.1 | +1.5 | |
| CAW | Cannon Point | 9.12 | 52 | P | | Pn | 02 37 23.3 | +1.3 | |
| PAWZ | Paruwai Farm | 9.12 | 55 | P | | Pn | 02 37 23.6 | +1.4 | |
| KIW | Kapiti Island | 9.21 | 50 | P | | Pn | 02 37 23.7 | +0.4 | |
| TRWZ | Traveller | 9.26 | 55 | P | | Pn | 02 37 25.9 | +1.9 | |
| MTW | Mount Morrison | 9.32 | 54 | P | | Pn | 02 37 26.0 | +1.1 | |
| OGWZ | Otaki Gorge | 9.38 | 51 | P | | Pn | 02 37 26.7 | +1.1 | |
| HOWZ | Holdsworth Sta | 9.51 | 53 | P | | Pn | 02 37 28.1 | +0.7 | |
| TMWZ | Te Maipa | 9.57 | 55 | P | | Pn | 02 37 29.6 | +1.3 | |
| MRZ | Mangatainoka R | 9.71 | 52 | Pn | | Pn | 02 37 30.0 | -0.2 | |
| MRZ | Mangatainoka R | 9.71 | 52 | P | | Pn | 02 37 29.8 | -0.4 | |
| NMEZ | Namu Road | 9.82 | 41 | P | | Pn | 02 37 33.5 | +1.9 | |
| NBEZ | Newall Road No | 9.93 | 41 | P | | Pn | 02 37 34.9 | +1.7 | |
| KHEZ | Kahui Hut | 9.97 | 41 | P | | Pn | 02 37 34.9 | +1.0 | |
| PRWZ | Pori Road | 9.99 | 53 | P | | Pn | 02 37 34.4 | +0.4 | |
| PREZ | Palmer Road | 10.00 | 42 | P | | Pn | 02 37 35.9 | +1.6 | |
| LREZ | Lake Rotokare | 10.02 | 43 | P | | Pn | 02 37 36.3 | +1.9 | |
| NEZ | North Egmont | 10.03 | 42 | P | | Pn | 02 37 36.8 | +2.1 | |
| PKE | Pukeiti | 10.04 | 41 | P | | Pn | 02 37 36.2 | +1.4 | |
| BFZ | Birch Farm | 10.05 | 54 | P | | Pn | 02 37 35.3 | +0.3 | |
| WAZ | Wanganui | 10.07 | 46 | P | | Pn | 02 37 39.1 | +4.0 | |
| DVHZ | Dannevirke | 10.28 | 52 | P | | Pn | 02 37 38.6 | +0.6 | |
| VRZ | Vera Road | 10.45 | 43 | P | | Pn | 02 37 41.4 | +1.0 | |
| PNHZ | Pukenui | 10.57 | 51 | P | | Pn | 02 37 42.8 | +0.8 | |
| PKVZ | Pokaka | 10.61 | 46 | P | | Pn | 02 37 45.3 | +2.8 | |
| WNVZ | Wahianoa | 10.70 | 47 | P | | Pn | 02 37 44.4 | +0.4 | |
| MOVZ | Moawhango | 10.72 | 48 | P | | Pn | 02 37 44.0 | -0.1 | |
| WHVZ | Whangaehu Hut | 10.73 | 47 | P | | Pn | 02 37 47.2 | +2.8 | |
| TUVZ | Tukino | 10.77 | 47 | P | | Pn | 02 37 47.3 | +2.4 | |
| NGZ | Ngauruhoe | 10.82 | 46 | P | | Pn | 02 37 47.4 | +1.9 | |
| TWVZ | Taurewa | 10.82 | 45 | P | | Pn | 02 37 47.9 | +2.4 | |
| SNVZ | South Ngauruho | 10.83 | 46 | P | | Pn | 02 37 46.3 | +0.6 | |
| PXZ | Pawanui | 10.85 | 53 | P | | Pn | 02 37 46.8 | +1.1 | |
| KRHZ | Kereru | 10.86 | 50 | P | | Pn | 02 37 46.4 | +0.4 | |
| NNVZ | North Ngauruho | 10.86 | 46 | P | | Pn | 02 37 47.4 | +1.3 | |
| OTVZ | Oturere | 10.86 | 46 | P | | Pn | 02 37 46.3 | +0.2 | |
| WTVZ | West Tongariro | 10.86 | 46 | P | | Pn | 02 37 47.1 | +1.0 | |
| ETVZ | East Tongariro | 10.90 | 47 | P | | Pn | 02 37 48.2 | +1.5 | |
| NTVZ | North Tongarir | 10.91 | 46 | P | | Pn | 02 37 48.9 | +2.1 | |
| TMVZ | Te Maari | 10.92 | 46 | P | | Pn | 02 37 49.5 | +2.7 | |
| HIZ | Hauiti | 10.99 | 42 | | | Pn | 02 37 47.3 | -0.4 | |
| HIZ | Hauiti | 10.99 | 42 | P | | Pn | 02 37 47.4 | -0.3 | |
| KATZ | Kakaramea | 11.02 | 46 | P | | Pn | 02 37 51.3 | +3.0 | |
| KAHZ | Kahuranaki | 11.02 | 52 | P | | Pn | 02 37 49.1 | +0.9 | |
| KWHZ | Kaweka Forest | 11.05 | 50 | P | | Pn | 02 37 52.0 | +3.4 | |
| RATZ | Rangitukua | 11.14 | 46 | P | | Pn | 02 37 55.2 | +5.4 | |
| BKZ | Black Stump Fm | 11.28 | 49 | Pn | | Pn | 02 37 52.0 | +0.3 | |
| BKZ | Black Stump Fm | 11.28 | 49 | P | | Pn | 02 37 52.3 | +0.6 | |
| TLZ | Tolley Road | 11.45 | 43 | P | | Pn | 02 37 54.1 | 0.0 | |
| NMHZ | Naumai | 11.49 | 50 | P | | Pn | 02 37 56.2 | +1.6 | |
| WPRZ | Whakapapatarin | 11.60 | 46 | P | | Pn | 02 37 55.2 | -0.9 | |
| MTHZ | Maungataniwha | 11.69 | 45 | P | | Pn | 02 37 57.7 | +0.4 | |
| TOZ | Tahuroa Road | 11.92 | 42 | | | Pn | 02 38 00.4 | -0.1 | |
| TOZ | Tahuroa Road | 11.92 | 42 | P | | Pn | 02 38 02.2 | +1.8 | |
| RTZ | Ruatahuna | 11.94 | 49 | Pn | | Pn | 02 38 00.7 | -0.1 | |
| RTZ | Ruatahuna | 11.94 | 49 | P | | Pn | 02 38 01.7 | +0.9 | |
| SNGZ | Shannon Statio | 12.00 | 50 | P | | Pn | 02 38 02.7 | +1.1 | |
| MHGZ | Mahia Peninsul | 12.04 | 53 | P | | Pn | 02 38 01.6 | -0.5 | |
| AWAZ | Awhitu Peninsu | 12.11 | 37 | P | | Pn | 02 38 04.8 | +1.8 | |
| PRGZ | Paritu Road | 12.19 | 52 | P | | Pn | 02 38 03.8 | -0.4 | |
| WTAZ | Waiatarua | 12.19 | 37 | P | | Pn | 02 38 06.4 | +2.2 | |
| RAGZ | Rawiri | 12.26 | 50 | P | | Pn | 02 38 05.0 | -0.1 | |
| URZ | Urewera | 12.28 | 48 | Pn | | Pn | 02 38 03.0 | -2.3 | |
| | 2.9nm,0.3s,baz=320,slow=8.8,SNR=24 | | | | | | | | |
| URZ | | | | Sn | | Sn | 02 40 14.2 | -7.9 | |
| | 0.5nm,0.3s,baz=154,slow=10.0,SNR=2.1 | | | | | | | | |
| URZ | | | | LR | | LR | 02 43 37.2 | | |
| | comp=Z,3µm,19.1s,baz=312,slow=42 | | | | | | | | |
| | 18nm,0.6s | | | | | | | | |
| URZ | Urewera | 12.28 | 48 | P | | Pn | 02 38 03.9 | -1.4 | |
| RIGZ | Rimuhau | 12.28 | 51 | P | | Pn | 02 38 04.7 | -0.7 | |
| MKAZ | Moumakai | 12.29 | 39 | P | | Pn | 02 38 06.4 | +0.9 | |
| MWZ | Matawai | 12.44 | 49 | P | | Pn | 02 38 06.5 | -1.0 | |
| MBAZ | Motutapu North | 12.47 | 37 | P | | Pn | 02 38 09.9 | +2.0 | |
| WIAZ | Waiheke Island | 12.54 | 38 | P | | Pn | 02 38 10.1 | +1.1 | |
| CNGZ | Carnagh Statio | 12.68 | 52 | P | | | 02 38 17.1 | | |
| TWGZ | Tauwhareparae | 12.79 | 50 | P | | Pn | 02 38 12.7 | +0.4 | |
| RUGZ | Raukumara Rang | 12.79 | 49 | P | | Pn | 02 38 12.2 | -0.2 | |
| CTZ | Chatham Island | 12.98 | 81 | | | Pn | 02 38 15.9 | +1.1 | |
| HAZ | Te Kaha | 13.00 | 48 | P | | Pn | 02 38 15.1 | -0.2 | |
| PUZ | Pukeiti | 13.01 | 50 | P | | Pn | 02 38 15.9 | -1.5 | |
| PKGZ | Pakihiroa | 13.07 | 49 | P | | Pn | 02 38 14.7 | -1.5 | |
| WMGZ | Waiomatatini S | 13.28 | 50 | P | | Pn | 02 38 18.1 | -1.0 | |
| OUZ | Omahuta | 13.35 | 30 | P | | Pn | 02 38 20.4 | +0.5 | |
| MXZ | Matakaoa Point | 13.42 | 49 | P | | Pn | 02 38 20.1 | -0.8 | |
| TAU | Tasmania Unive | 13.56 | 281 | P | | Pn | 02 38 19.7 | -3.1 | |
| MOO | Moorlands | 13.85 | 283 | P | | Pn | 02 38 25.1 | -1.6 | |
| GLAD | Gladstone | 14.02 | 290 | P | | Pn | 02 38 26.7 | -2.3 | |
| MILA | Mila | 15.76 | 304 | P | | Pn | 02 38 51.3 | -1.3 | |
| CNB | Canberra Magne | 16.92 | 308 | P | | Pn | 02 39 07.1 | -0.2 | |
| CAN | Canberra | 17.11 | 308 | P | | Pn | 02 39 09.6 | -0.1 | |
| TOO | Toolangi | 17.59 | 296 | P | | P | 02 39 16.3 | -0.4 | |
| TOO | Toolangi | 17.59 | 296 | | | Pn | 02 39 14.4 | -1.3 | |
| RAO | Raoul Island | 22.00 | 42 | LR | | LR | 02 48 54.0 | | |
| | comp=Z,1µm,18.1s,baz=129,slow=38 | | | | | | | | |
| STKA | Stephens Creek | 23.82 | 301 | P | | P | 02 40 23.9 | +0.3 | |
| | 2.4nm,0.7s,baz=136,slow=13,SNR=2.3 | | | | | | | | |
| STKA | | | | LR | | LR | 02 48 17.8 | | |
| | comp=Z,256nm,21.0s,baz=154,slow=33 | | | | | | | | |
| | 2.4nm,0.7s | | | | | | | | |
| DZM | Mont Dzumac | 25.01 | 2 | P | | P | 02 40 35.0 | +0.4 | |
| DZM | Mont Dzumac | 25.01 | 2 | *eP* | | P | 02 40 36.2 | +1.5 | |
| | 112nm,1.1s | | | | | | | | |
| DZM | | | | *e*LR | | LR | 02 47 10.3 | | |
| | 224nm,24.1s | | | | | | | | |
| DZM | Mont Dzumac | 25.01 | 2 | LR | | LR | 02 48 22.7 | | |
| | comp=Z,136nm,19.1s,baz=210,slow=32 | | | | | | | | |
| VNDA | Vanda | 30.53 | 182 | P | | P | 02 41 23.7 | +0.3 | |
| | 0.3nm,0.9s,baz=349,slow=3.9,SNR=1.8 | | | | | | | | |
| VNDA | | | | LR | | LR | 02 51 23.1 | | |
| | comp=Z,160nm,19.9s,baz=16,slow=32 | | | | | | | | |
| | 0.3nm,0.9s | | | | | | | | |
| MSVF | Nonsavu | 31.08 | 24 | LR | | LR | 02 52 44.2 | | |
| | comp=Z,232nm,19.6s,baz=187,slow=34 | | | | | | | | |
| CTA | Charters Tower | 31.22 | 323 | LR | | LR | 02 53 28.4 | | |
| | comp=Z,11nm,18.2s,baz=146,slow=35 | | | | | | | | |
| CASY | Casey | 34.25 | 216 | P | | P | 02 41 56.1 | 0.0 | |
| CASY | | | | IAmb | | IAmb | 02 42 06.7 | | |
| | comp=Z,6.3nm,1.0s | | | | | | | | |
| AS31 | Alice Springs | 34.45 | 302 | P | | P | 02 41 56.9 | -1.5 | |
| AS31 | | | | IAmb | | IAmb | 02 42 05.7 | | |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| ASAR | Alice Springs | 34.45 | 302 | P | | P | 02 41 57.6 | -0.8 | |
| ASAR | Alice Springs | 34.45 | 302 | P | | P | 02 41 58.5 | +0.1 | |
| | comp=Z,2.1nm,0.5s,baz=132,slow=7.9,SNR=42 | | | | | | | | |
| ASAR | | | | PcP | | PcP | 02 44 33.7 | 0.0 | |
| | comp=Z,0.3nm,0.5s,baz=144,slow=3.8,SNR=1.3 | | | | | | | | |
| ASAR | | | | LR | | LR | 02 55 23.2 | | |
| | comp=Z,168nm,19.3s,baz=136,slow=35 | | | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | | | |
| WRA | Warramunga Arr | 37.14 | 306 | P | | P | 02 42 20.9 | -0.6 | |
| | comp=Z,2.4nm,0.8s,baz=137,slow=7.9,SNR=9.5 | | | | | | | | |
| WRA | | | | PcP | | PcP | 02 44 41.1 | -0.6 | |
| | comp=Z,0.5nm,0.9s,baz=145,slow=2.9,SNR=1.8 | | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| RAR | Rarotonga | 38.12 | 59 | LR | | LR | 02 55 54.8 | | |
| | comp=Z,235nm,20.1s,baz=247,slow=33 | | | | | | | | |
| NWAO | Narrogin (SRO) | 39.00 | 274 | LR | | LR | 02 55 08.6 | | |
| | comp=Z,99nm,18.6s,baz=233,slow=31 | | | | | | | | |
| H01W1 | Cape Leeuwin H | 39.98 | 269 | T | | T | 03 25 08.2 | | |
| | baz=124,slow=75,SNR=110 | | | | | | | | |
| H01W2 | Cape Leeuwin H | 39.99 | 269 | T | | T | 03 25 07.0 | | |
| | baz=124,slow=75,SNR=79 | | | | | | | | |
| H01W3 | Cape Leeuwin H | 39.99 | 269 | T | | T | 03 25 05.8 | | |
| | baz=124,slow=75,SNR=40 | | | | | | | | |
| TBI | Tubuai | 42.97 | 72 | *e*SS | | SS | 02 52 47.4 | +0.7 | |
| | comp=Z,348nm,30.0s | | | | | | | | |
| TBI | | | | *e*LR | | LR | 02 55 02.3 | | |
| | comp=Z,975nm,22.8s | | | | | | | | |
| QSPA | South Pole Qui | 42.99 | 180 | P | | P | 02 43 12.0 | +2.3 | |
| QSPA | | | | IAmb | | IAmb | 02 43 20.6 | | |
| | comp=Z,8.5nm,1.0s | | | | | | | | |
| QSPA | South Pole Qui | 42.99 | 180 | P | | P | 02 43 11.0 | +1.3 | |
| | comp=Z,1.2nm,0.7s,baz=9.2,slow=2.0,SNR=7.0 | | | | | | | | |
| QSPA | | | | LR | | LR | 02 58 06.6 | | |
| | comp=Z,92nm,18.9s,baz=31,slow=32 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| PPT2 | Papeete2 | 47.09 | 67 | *e*S | | S | 02 50 36.0 | +1.2 | |
| | comp=Z,56nm,23.5s | | | | | | | | |
| PPT2 | | | | *e*SS | | SS | 02 54 01.8 | 0.0 | |
| | comp=Z,88nm,23.5s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 02 56 55.6 | | |
| | comp=Z,236nm,30.8s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 02 56 57.7 | | |
| | comp=Z,214nm,22.5s | | | | | | | | |
| PPT | Papeete | 47.10 | 67 | LR | | LR | 03 01 55.1 | | |
| | comp=Z,126nm,18.5s,baz=223,slow=34 | | | | | | | | |
| MAW | Mawson | 51.87 | 208 | LR | | LR | 03 04 28.5 | | |
| | comp=Z,208nm,18.9s,baz=115,slow=34 | | | | | | | | |
| RKT | Rikitea | 52.81 | 85 | *e*LR | | LR | 02 59 39.8 | | |
| | comp=Z,1µm,27.2s | | | | | | | | |
| KAPI | Kappang | 57.47 | 302 | LR | | LR | 03 10 43.6 | | |
| | comp=Z,92nm,18.3s,baz=128,slow=37 | | | | | | | | |
| TAOE | Nuku Hiva Isla | 59.64 | 68 | *e*LR | | LR | 03 02 45.4 | | |
| | comp=Z,212nm,21.8s | | | | | | | | |
| TROLL | Troll, Antarti | 60.56 | 186 | ⇑P | | P | 02 45 20.7 | 0.0 | |
| | comp=Z,191nm,0.7s | | | | | | | | |
| SNAA | Sanae | 61.22 | 184 | | | P | 02 45 26.4 | +1.4 | |
| SNAA | | | | IAmb | | IAmb | 02 45 47.6 | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| SNAA | Sanae | 61.22 | 184 | ⇑P | | P | 02 45 24.8 | -0.2 | |
| | comp=Z,69nm,0.7s | | | | | | | | |
| SNAA | Sanae | 61.22 | 184 | P | | P | 02 45 24.5 | -0.5 | |
| | comp=Z,2.6nm,1.0s,baz=181,slow=10,SNR=7.4 | | | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | | | |
| VNA3 | Neumayer Olymp | 61.88 | 182 | ⇑P | | P | 02 45 28.8 | -0.7 | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| VNA2 | Neumayer--Watz | 62.14 | 183 | ⇑P | | P | 02 45 30.9 | -0.3 | |
| | comp=Z,4.6nm,0.6s,baz=171,slow=6.0 | | | | | | | | |
| VNA1 | Neumayer--Stat | 62.44 | 182 | ⇑P | | P | 02 45 33.5 | +0.4 | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| H04S1 | CROZET ISLANDS | 69.91 | 222 | T | | T | 04 03 34.7 | | |
| | baz=140,slow=75,SNR=9.0 | | | | | | | | |
| H04S2 | CROZET ISLANDS | 69.91 | 222 | T | | T | 04 03 33.1 | | |
| | baz=140,slow=75,SNR=9.3 | | | | | | | | |
| H04S3 | CROZET ISLANDS | 69.93 | 222 | T | | T | 04 03 31.9 | | |
| | baz=140,slow=75,SNR=9.6 | | | | | | | | |
| H08S2 | Diego Garcia H | 86.53 | 263 | T | | T | 04 23 19.0 | | |
| | baz=137,slow=76,SNR=18 | | | | | | | | |
| H08S1 | Diego Garcia H | 86.54 | 263 | T | | T | 04 23 21.1 | | |
| | baz=137,slow=76,SNR=15 | | | | | | | | |
| H08S3 | Diego Garcia H | 86.55 | 263 | T | | T | 04 23 21.4 | | |
| | baz=137,slow=76,SNR=46 | | | | | | | | |
| MJAR | Matsushiro Arr | 86.83 | 338 | P | | P | 02 47 55.6 | +0.9 | |
| | comp=Z,0.4nm,0.6s,baz=173,slow=11,SNR=2.3 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| CMAR | Chiang Mai Arr | 88.43 | 299 | P | | P | 02 48 03.3 | +0.5 | |
| | comp=Z,1.1nm,0.3s,baz=166,slow=3.7,SNR=2.2 | | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | | |
| NJ2 | Nanjing | 89.32 | 322 | *e*P | | P | 02 48 10.4 | +3.7 | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| PZH | PanZhiHua | 93.11 | 306 | P | | P | 02 48 26.5 | +1.9 | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,100nm,4.5s | | | | | | | | |
| LZH | Lanzhou | 99.57 | 314 | *e*P | | Pdif | 02 48 57.0 | +3.2 | |
| LZH | | | | sP | | sP | 02 49 05.9 | +8.3 | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| HHC | Hu-ho-hao-te | 99.87 | 321 | *e*P | | Pdif | 02 48 56.6 | +1.7 | |
| HHC | | | | pP | | sP | 02 49 01.8 | +3.1 | |
| HHC | | | | sP | | pP | 02 49 06.0 | +8.2 | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,89nm,4.4s | | | | | | | | |
| ILAR | Eielson Array | 117.56 | 21 | PKP | | PKPdf | 02 53 54.8 | -0.5 | |
| | comp=Z,0.8nm,0.7s,baz=222,slow=2.4,SNR=6.9 | | | | | | | | |
| MKAR | Makanchi Array | 118.41 | 309 | PKP | | PKiKP | 02 53 57.3 | -0.2 | |
| | comp=Z,0.2nm,0.5s,baz=135,slow=1.1,SNR=1.6 | | | | | | | | |
| KURBB | Kurchatov Arra | 122.72 | 311 | PKP | | PKPdf | 02 54 04.1 | -1.6 | |
| | comp=Z,0.6nm,0.5s,baz=116,slow=1.8,SNR=6.5 | | | | | | | | |
| TORD | Torodi Ar. Bea | 143.51 | 207 | PKhKP | | PKPpre | 02 54 41.4 | | |
| | comp=Z,0.9nm,0.5s,baz=132,slow=2.6,SNR=26 | | | | | | | | |
| BRTR | Keskin Array B | 144.76 | 276 | PKP | | PKPbc | 02 54 46.2 | 0.0 | |
| | comp=Z,1.4nm,0.6s,baz=136,slow=3.6,SNR=16 | | | | | | | | |
| SCHQ | Scheefferville | 146.83 | 57 | PKPbc | | PKPbc | 02 54 52.0 | +0.1 | |
| | comp=Z,1.5nm,0.5s,baz=239,slow=5.4,SNR=6.3 | | | | | | | | |
| ARCES | ARCESS Array B | 150.23 | 333 | PKPbc | | PKiKP | 02 55 00.5 | -0.7 | |
| | comp=Z,11nm,0.8s,baz=67,slow=2.7,SNR=21 | | | | | | | | |
| AKASG | Malin Array Be | 151.39 | 293 | PKPbc | | PKiKP | 02 55 03.5 | -0.6 | |
| | comp=Z,2.0nm,0.6s,baz=83,slow=2.6,SNR=7.2 | | | | | | | | |
| FINES | FINESS Array B | 152.89 | 317 | PKPbc | | PKiKP | 02 55 06.6 | -0.2 | |
| | comp=Z,2.3nm,0.5s,baz=97,slow=3.3,SNR=38 | | | | | | | | |
| GERES | GERESS Array B | 161.12 | 286 | PKPab | | PKPab | 02 55 52.7 | -1.2 | |
| | comp=Z,0.1nm,0.3s,baz=100,slow=4.5,SNR=1.6 | | | | | | | | |

*NEIC* ***12*** *02:37:00.8±0.7,36°30N±0.01×98°22W±0.01,h5km±1km, Error ellipse: s-maj=2.7km s-min=2.1km az=87.0*

**TUL 12 02:37:00.8±0.7,36°30N±0.01×98°22W±0.01,h7km±5km, ML2.6,mb_Lg2.1/27(NEIC),ML2.5/41(NEIC),Error ellipse: s-maj=1.8km s-min=1.5km az=138.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CROK | Carrier | 0.28 | 43 | Pg | Pg | 02 37 05.9 | -0.4 |
| CROK | | | | Sg | Sg | 02 37 10.1 | 0.0 |
| CROK | | | | IAML | | 02 37 11.2 | |
| | comp=E,1µm,0.3s | | | | | | |
| CROK | | | | IAML | | 02 37 11.2 | |
| | comp=N,903nm,0.3s | | | | | | |
| OK038 | West end E0370 | 0.46 | 293 | Pg | Pg | 02 37 09.9 | +0.2 |
| OK038 | | | | | Sg | 02 37 16.4 | +0.7 |
| OK038 | | | | IAML | | 02 37 16.8 | |
| | comp=N,466nm,0.3s | | | | | | |
| OK038 | | | | IAML | | 02 37 21.5 | |
| | comp=N,455nm,0.3s | | | | | | |
| OK032 | Salt Plains WL | 0.50 | 1 | Pg | Pg | 02 37 10.8 | +0.2 |
| OK032 | | | | IAML | | 02 37 24.4 | |
| | comp=N,247nm,0.2s | | | | | | |
| GC02 | Grant County # | 0.62 | 28 | Pg | Pg | 02 37 12.9 | +0.1 |
| KAN14 | Manchester OK | 0.69 | 17 | | Pg | 02 37 14.0 | -0.1 |
| CSTR | Hydro, Custer | 0.76 | 210 | Sg | Sg | 02 37 25.9 | +0.8 |
| OK029 | Liberty Lake | 0.80 | 129 | Pg | Pg | 02 37 16.4 | +0.2 |
| OK029 | | | | IAML | | 02 37 29.9 | |
| | comp=N,154nm,0.5s | | | | | | |
| KAN13 | South Haven SW | 0.93 | 40 | | Sg | 02 37 30.7 | -0.1 |
| BLOK | Blackwell | 0.93 | 60 | Pg | Pg | 02 37 18.5 | -0.2 |
| BLOK | | | | | Sg | 02 37 31.2 | +0.4 |
| KAN09 | Caldwell North | 0.97 | 30 | | Pg | 02 37 19.1 | -0.2 |
| ELIS | Ellis County | 1.00 | 257 | | Pg | 02 37 19.8 | -0.1 |
| ELIS | | | | IAML | | 02 37 38.4 | |
| | comp=N,126nm,0.2s | | | | | | |
| ELIS | | | | IAML | | 02 37 42.3 | |
| | comp=E,99nm,0.2s | | | | | | |
| KAN12 | Harper NE Stat | 1.01 | 10 | Pg | Pg | 02 37 20.0 | -0.3 |
| KAN12 | | | | IAML | | 02 37 34.1 | |
| | comp=E,168nm,0.2s | | | | | | |
| KAN12 | | | | | Sb | 02 37 34.5 | +0.3 |
| KAN12 | | | | IAML | | 02 37 42.3 | |
| | comp=N,183nm,0.3s | | | | | | |
| OK048 | Pawnee Station | 1.04 | 83 | | Pg | 02 37 20.3 | -0.4 |
| OK051 | E0350 and S346 | 1.14 | 79 | | Pg | 02 37 22.2 | -0.4 |
| OK031 | S. Brethren Rd | 1.17 | 107 | | Pg | 02 37 22.7 | -0.6 |
| OK031 | | | | IAML | | 02 37 40.3 | |
| | comp=N,110nm,0.1s | | | | | | |
| OK052 | Battle Ridge R | 1.19 | 104 | | Pg | 02 37 23.0 | -0.6 |
| OK052 | | | | IAML | | 02 37 40.5 | |
| | comp=N,115nm,0.2s | | | | | | |
| OK052 | | | | IAML | | 02 37 42.1 | |
| | comp=N,90nm,0.2s | | | | | | |
| QUOK | Quay | 1.23 | 95 | Pg | Pb | 02 37 23.9 | -0.5 |
| QUOK | | | | IAML | | 02 37 42.0 | |
| | comp=N,104nm,0.2s | | | | | | |
| WMOK | Wichita Mounta | 1.62 | 197 | | Pn | 02 37 29.8 | -0.1 |
| WMOK | | | | IAmb_Lg | | 02 37 51.5 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| TUL3 | Leonard | 2.00 | 100 | | Pn | 02 37 35.0 | -0.1 |
| TUL3 | | | | IAmb_Lg | | 02 38 08.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| SMWD | Samnorwood | 2.03 | 235 | | Pn | 02 37 35.2 | -0.3 |
| WTFS | Witchita Falls | 2.54 | 185 | | Pn | 02 37 43.2 | +0.9 |
| U38A | Gravette | 3.10 | 86 | | Pn | 02 37 50.3 | +0.1 |
| U38A | | | | IAmb_Lg | | 02 38 39.6 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| DKNS | Dickens | 3.44 | 221 | IAmb_Lg | | 02 38 49.0 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| ABTX | Abilene, Hawle | 3.85 | 198 | IAmb_Lg | | 02 39 05.5 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| SN07 | Snyder 07 | 3.88 | 215 | IAmb_Lg | | 02 39 08.6 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| S39A | Bolivar | 4.16 | 69 | IAmb_Lg | | 02 39 14.2 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| X40A | Basin Creek Fa | 4.76 | 111 | IAmb_Lg | | 02 39 36.0 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| P38A | Dawn | 4.97 | 47 | IAmb_Lg | | 02 39 52.2 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| T25A | Trinidad | 5.04 | 281 | IAmb_Lg | | 02 39 43.1 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| PHWY | Pilot Hill | 7.54 | 314 | IAmb_Lg | | 02 40 59.0 | |
| | comp=Z,3.5nm,1.0s | | | | | | |

*IDC* ***12*** *02:56:56.8±0.4,12°.92S×14°.63W,h0km,mb4.8/27, mbtmp4.8/27,MS4.5/69,Error ellipse: s-maj=16.7km s-min=11.1km az=122.0*

*MOS* ***12*** *02:56:56.9±1.0,12°.83S×14°.68W,h10km,mb5.3/64, MS4.7/10,Error ellipse: s-maj=8.7km s-min=5.2km az=60.7*

*BJI* ***12*** *02:56:57.9±0.0,12°.57S×14°.94W,h8km,mB5.6/2,Ms5.2/6, Ms7 4.9/7*

*NEIC* ***12*** *02:56:59.3,12°.88S×14°.67W,h18km*

*NEIC* ***12*** *02:56:59.3±1.1,12°.87S±0°.08×14°.67W±0°.08,h10km±1km, mb5.3/440,Mww5.2/12,Error ellipse: s-maj=14.1km s-min=12.4km az=229.0*

*NEIC* ***12*** *02:56:59.3,12°.78S×14°.67W,h18km,Moment Tensor Solution. Duration: 2s3 Moment tensor: Scale 10^16Nm; Mrr-7.16; Mθθ0.57; Mφφ6.60; Mrθ3.96; Mrφ-1.07; Mθφ-4.96; Fault plane solution: Mo9.39000×1016 NP1: φs332.41000°,δ66.40000°,λ-103.52000°. NP2: φs183.41000°,δ27.01000°,λ-61.85000°. Principal axes: T 8.8545, Plg20.0000°, Azm73.0000°; N 1.0726, Plg12.0000°, Azm338.0000°; P -9.9270, Plg66.0000°, Azm218.0000°;*

*GCMT* ***12*** *02:57:01.3±0.1,12°.82S±0°.01×14°.61W±0°.01,h12km, MW5.2/132,Moment Tensor Solution. s83,c113; s132,c232; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-6.22±.09; Mθθ0.64±.08; Mφφ5.58±.08; Mrθ0.95±.27; Mrφ-1.08±.07; Mθφ3.74±.26; Best double couple: Mo7.12600×10^16 NP1:φs181.00000°,δ61.00000°, λ-78.00000°. NP2:φs338.00000°,δ31.00000°, λ-110.00000°. Principal axes: T 6.7650, Plg15.0000°, Azm262.0000°; N 0.7260, Plg10.0000°, Azm355.0000°; P -7.4870, Plg71.0000°, Azm118.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 12 02:56:59.5±0

comp=Z,92nm,1.1s
SMTB Santa Maria do 32.59 274 eP P 03 03 30.0 -0.6
RCLB Rio Claro- Sao 32.68 249 eP P 03 03 30.5 -0.8
IPMB Ipameri, GO 32.72 257 eP P 03 03 30.9 -0.9
SPB Sao Paulo 32.84 246 P P 03 03 32.0 -0.6
SPB IAmb IAmb 03 03 33.6
comp=Z,49nm,0.9s
SPB Sao Paulo 32.84 246 eP P 03 03 31.8 -0.8
PET01 Itanhaem-SP 32.86 245 eP P 03 03 32.3 -0.6
FRTB Fartura 34.70 248 eP P 03 03 48.5 -0.3
TMAB Tom-Au,PA,Br 34.72 285 eP P 03 03 49.1 0.0
ITRB Iturama 34.90 254 eP P 03 03 50.6 0.0
PRPB Parauapebas 35.30 278 eP P 03 03 53.5 -0.6
SNDB Serra Nova Dou 35.79 267 eP P 03 03 58.4 0.0
PCMB Pacaembu 35.96 251 eP P 03 04 00.3 +0.6
AUGR Augrabies 36.08 121 eP P 03 03 59.5 -1.2
ARAG Araguaiana, MT 36.10 261 eP P 03 04 00.8 -0.1
LDASE Londrina, Braz 36.11 248 eP P 03 04 00.4 -0.6
KEIM Keimoes 36.64 121 eP P 03 04 04.6 -1.0
KEIM IAmb IAmb 03 04 14.4
comp=Z,2µm,4.8s
UPI Upington 36.78 120 eP P 03 04 05.3 -1.4
UPI IAmb IAmb 03 04 07.0
comp=Z,177nm,2.1s
PTGB Pitanga 37.21 246 eP P 03 04 10.8 +0.4
CNLB Canela 37.34 238 eP P 03 04 12.3 +0.9
TRCB Terra Rica 37.39 249 eP P 03 04 12.3 +0.4
SUR Sutherland 37.79 127 LR LR 03 16 22.8
comp=Z,1µm,19.8s,baz=300,slow=31
ITAB Concordia 37.83 242 P P 03 04 16.1 +0.5
ITAB IAmb IAmb 03 04 17.7
comp=Z,53nm,1.2s
ITAB Concordia 37.83 242 eP P 03 04 14.8 -0.8
MERW Merweville 38.45 127 eP P 03 04 20.5 -0.4
MERW IAmb IAmb 03 04 29.1
comp=Z,1µm,3.5s
GRAN Grantham 38.83 126 eP P 03 04 23.5 -0.5
GRAN IAmb IAmb 03 04 24.8
comp=Z,12nm,1.0s
ALGR Alto Alegre (B 39.01 240 eP P 03 04 26.1 +0.5
MCPB Macapa, AP 39.12 286 eP P 03 04 26.9 +0.3
CRSM Crissiumal (Br 39.55 242 eP P 03 04 30.2 +0.2
LBTB Lobatse 39.77 114 eP P 03 04 30.4 -1.6
LBTB IAmb IAmb 03 04 34.1
comp=Z,2µm,5.1s
LBTB Lobatse 39.77 114 LR LR 03 18 10.9
comp=Z,1µm,20.9s,baz=276,slow=32
CPSB Cacapava Do Su 39.81 238 eP P 03 04 32.8 +0.7
SALV Santo Antonio 39.83 261 eP P 03 04 32.3 +0.7
AQDB Aquidauana 39.96 254 P P 03 04 33.4 -0.2
AQDB Aquidauana 39.96 254 eP P 03 04 33.9 +0.4
SWZ Schweizer 39.97 117 eP P 03 04 32.0 -1.6
SWZ IAmb IAmb 03 04 33.8
comp=Z,30nm,0.8s
BOSA Boshof 40.24 119 P P 03 04 35.3 -0.6
BOSA Boshof 40.24 119 eP P 03 04 34.0 -1.8
BOSA IAmb IAmb 03 04 56.9
comp=Z,4µm,6.5s
BOSA Boshof 40.24 119 P P 03 04 34.3 -1.6
comp=Z,8.9nm,1.0s,baz=304,slow=10,SNR=6.3
BOSA PcP PcP 03 06 39.5 -0.2
comp=Z,2.0nm,0.7s,baz=273,slow=7.4,SNR=1.6
BOSA LR LR 03 18 35.8
comp=Z,1µm,19.0s,baz=282,slow=32
comp=Z,8.9nm,1.0s
BOSA Boshof 40.24 119 P P 03 04 35.3 -0.6
BOSA pmax pmax
comp=Z,19nm,1.2s
CLDB Colider 40.30 268 eP P 03 04 36.5 +0.1
PLTB Pedras Altas 40.36 236 eP P 03 04 38.0 +1.3
NPGB Novo Progresso 40.49 274 eP P 03 04 37.8 -0.2
TAM Tamanrasset 40.59 29 P P 03 04 39.3 +0.5
TAM Tamanrasset 40.59 29 P P 03 04 39.3 +0.5
TAM pmax pmax
comp=Z,9.0nm,1.3s
MAL2 Monte Alegre, 40.60 282 P P 03 04 38.4 -0.5
MAL2 IAmb IAmb 03 04 40.0
comp=Z,94nm,1.0s
MTLB Matlabas, Limp 40.90 111 eP P 03 04 43.7 +2.3
PDRB Porto dos Gac 41.12 267 eP P 03 04 43.9 +0.7
RODS Rosario do Sul 41.25 238 eP P 03 04 44.7 +0.6
NHAM Northam, North 41.30 113 eP P 03 04 41.3 -3.3
ITTB Itaituba 41.45 278 eP P 03 04 45.4 -0.5
LSZ Lusaka 41.56 99 P P 03 04 46.9 -0.1
LSZ Lusaka 41.56 99 P P 03 04 46.9 -0.1
LSZ pmax pmax
comp=Z,43nm,1.1s
LEPH Lephalale, Lim 41.58 111 eP P 03 04 46.4 -0.6
LEPH IAmb IAmb 03 05 05.5
comp=Z,626nm,3.4s
MDP Montagnes des 41.77 293 LR LR 03 19 16.8
comp=Z,501nm,21.8s,baz=108,slow=32
HRAO HartRAO 41.78 114 eP P 03 04 49.8 +1.1
CRAIL Swartwater, Li 41.86 110 eP P 03 04 42.9 -6.4
MATP Matopo 41.90 106 LR LR 03 20 13.8
comp=Z,619nm,19.6s,baz=244,slow=33
CPUP Villa Florida 42.18 245 P P 03 04 51.6 -0.2
CPUP Villa Florida 42.18 245 P P 03 04 51.2 -0.5
comp=Z,26nm,1.1s,baz=78,slow=8.4,SNR=24
CPUP LR LR 03 19 40.6
comp=Z,1µm,21.4s,baz=88,slow=32
comp=Z,26nm,1.1s
CPUP Villa Florida 42.18 245 P P 03 04 51.6 -0.2
CPUP pmax pmax
comp=Z,38nm,1.1s
CPUP Villa Florida 42.18 245 eP P 03 04 52.4 +0.7
ITQB Itaqui 42.27 240 P P 03 04 52.4 0.0
ITQB IAmb IAmb 03 04 54.5
comp=Z,55nm,1.0s
ITQB Itaqui 42.27 240 eP P 03 04 53.0 +0.6
SNKL Senekal, Frees 42.31 118 eP P 03 04 51.8 -1.2
SNKL IAmb IAmb 03 04 52.9
comp=Z,36nm,1.0s
RUST Rust De Winter 42.43 113 eP P 03 04 52.2 -1.7
PAPY Pozo Azul 42.65 248 eP P 03 04 56.9 +1.2
KRI Karoi 42.89 101 eP P 03 04 56.7 -1.1
PTLB Pontes e Lacer 43.16 261 P P 03 05 00.3 +0.4
PTLB IAmb IAmb 03 05 02.1
comp=Z,83nm,1.3s
PTLB Pontes e Lacer 43.16 261 eP P 03 05 00.9 +1.0
MUSN Musina, Limpop 43.30 109 eP P 03 05 00.2 -0.8
MUSN IAmb IAmb 03 05 01.0
comp=Z,24nm,0.9s
MPHEP Siloam, Limpop 43.65 110 eP P 03 05 01.8 -2.0
DULL Dullstroom, Mp 43.92 113 eP P 03 05 05.2 -0.9
DULL IAmb IAmb 03 05 06.1
comp=Z,37nm,1.2s
NWCL Newcastle 44.05 117 eP P 03 05 03.0 -3.9
NWCL IAmb IAmb 03 05 11.1
comp=Z,517nm,2.8s
PILG Pilgrimsrest, 44.35 112 eP P 03 05 09.1 -0.4
PILG IAmb IAmb 03 05 09.3
comp=Z,35nm,1.2s
VILB Vilhena 44.36 265 P P 03 05 09.6 +0.1
VILB IAmb IAmb 03 05 12.0
comp=Z,74nm,1.2s
VILB Vilhena 44.36 265 eP P 03 05 10.4 +0.9
HOED Hoedspruit, Li 44.49 112 eP P 03 05 10.3 -0.2
BBSD Serra de San D 44.52 259 eP P 03 05 11.8 +1.0
SIV San Ignacio 45.00 260 LR LR 03 23 50.8
comp=Z,513nm,18.4s,baz=109,slow=36
PMPST Porto Santo, M 45.74 358 eP P 03 05 19.0 -1.1
comp=Z,284nm,1.4s
MDT Midelt 46.45 12 LR LR 03 23 43.1
comp=Z,583nm,19.6s,baz=203,slow=35
MACA Manacapuru-AM 46.53 278 P P 03 05 26.5 -0.3
MACA IAmb IAmb 03 05 28.1
comp=Z,26nm,0.9s
MACA Manacapuru-AM 46.53 278 eP P 03 05 26.9 +0.1
MBAR Mbarara 46.59 78 P P 03 05 27.4 0.0
MBAR IAmb IAmb 03 05 30.4
comp=Z,24nm,1.0s
MBAR Mbarara 46.59 78 eP P 03 05 26.0 -1.4
MBAR Mbarara 46.59 78 LR LR 03 23 25.2
comp=Z,1µm,19.0s,baz=244,slow=34
MBAR Mbarara 46.59 78 ceP P 03 05 30.2 +2.8
MBAR pmax pmax
comp=Z,32nm,1.3s
SAML Samuel 47.77 270 P P 03 05 36.6 +0.2
SAML Samuel 47.77 270 P P 03 05 36.6 +0.2
SAML pmax pmax
comp=Z,45nm,1.0s
SAML Samuel 47.77 270 eP P 03 05 37.2 +0.8
BOAV Boa Vista 48.01 285 P P 03 05 37.6 -0.7
BOAV IAmb IAmb 03 05 39.9
comp=Z,32nm,1.1s
BOAV Boa Vista 48.01 285 eP P 03 05 38.5 +0.2
TRQA Tornquist 48.87 230 P P 03 05 44.4 -0.3
TRQA Tornquist 48.87 230 P P 03 05 44.4 -0.3
TRQA pmax pmax
comp=Z,67nm,1.1s
TEFE Tefe 50.27 276 eP P 03 05 56.0 +0.5
PVAQ Vaqueiros 50.45 7 eS S 03 13 10.0 +0.5
PVAQ eLR LR 03 22 39.4
comp=Z,248nm,16.0s
ETMB Extrema 50.59 268 P P 03 05 58.1 0.0
ETMB Extrema 50.59 268 eP P 03 05 58.5 +0.5
PBEJ Beja 51.05 7 eP P 03 06 01.8 +0.8
comp=Z,32nm,1.9s
PNCL Nicolau / Gran 51.06 6 eP P 03 06 04.2 +3.2
TATN Tataouine 51.22 27 P P 03 06 04.3 +1.8
TATN IAmb IAmb 03 06 06.7
comp=Z,62nm,1.0s
PBAR Barrancos 51.29 8 eP P 03 06 04.6 +1.8
comp=Z,33nm,1.6s
EVO Evora 51.53 7 eP P 03 06 05.6 +1.0
comp=Z,39nm,1.5s
LPAZ La Paz 51.76 259 P P 03 06 06.5 -1.0
LPAZ La Paz 51.76 259 P P 03 06 06.8 -0.7
comp=Z,14nm,0.9s,baz=86,slow=6.1,SNR=41
LPAZ LR LR 03 26 20.1
comp=Z,452nm,21.2s,baz=98,slow=34
comp=Z,14nm,0.9s
LPAZ La Paz 51.76 259 P P 03 06 06.5 -1.0
LPAZ pmax pmax
comp=Z,24nm,1.2s
LPAZ La Paz 51.76 259 eP P 03 06 07.0 -0.5
PESTR Estremoz 51.91 7 eP P 03 06 09.8 +2.4
LODK Lodwar 52.23 75 P P 03 06 11.0 +0.7
LVC Limon Verde 52.34 251 P P 03 06 11.0 -0.5
LVC Limon Verde 52.34 251 LR LR 03 28 12.8
comp=Z,676nm,18.6s,baz=94,slow=36
LVC Limon Verde 52.34 251 P P 03 06 11.0 -0.5
LVC pmax pmax
comp=Z,22nm,1.2s
LVC Limon Verde 52.34 251 eP P 03 06 10.8 -0.6
PSBE Sc Bento 52.42 6 eP P 03 06 14.4 +3.2
comp=Z,71nm,2.0s
PMRV Marv??o 52.48 7 eP P 03 06 13.3 +1.6
comp=Z,40nm,1.4s
PMRV eS S 03 13 45.8 +8.2
PMRV Marv??o 52.48 7 eLR LR 03 24 27.7
comp=Z,269nm,18.0s
PB09 IPOC Station P 52.64 252 P P 03 06 13.1 -0.5
PB09 IAmb IAmb 03 06 23.7
comp=Z,32nm,1.0s
ZON Zonda 52.82 240 P P 03 06 13.6 -0.9
ZON IAmb IAmb 03 06 15.4
comp=Z,39nm,1.3s
ZON Zonda 52.82 240 P P 03 06 13.6 -0.9
ZON pmax pmax
comp=Z,39nm,1.3s
PCBR Castelo Branco 52.88 7 eP P 03 06 16.6 +2.0
comp=Z,26nm,1.6s
PB18 Visviri 52.97 258 P P 03 06 15.1 -1.3
PB18 IAmb IAmb 03 06 17.5
comp=Z,77nm,1.5s
PCAS Casmilo, Conde 52.98 6 eP P 03 06 18.0 +2.7
comp=Z,75nm,1.5s
GO02 Mina Guanaco 53.04 248 P P 03 06 15.8 -0.8
H05S1 Guadeloupe/Mar 53.20 299 T T 04 03 33.2
SNR=26
ESDC Sonseca Array 53.23 10 P P 03 06 17.8 +0.6
ESDC Sonseca Array 53.23 10 P P 03 06 17.7 +0.4
comp=Z,2.1nm,0.9s,baz=189,slow=7.5,SNR=17
ESDC PcP PcP 03 07 24.6 -0.5
comp=Z,1.0nm,0.9s,baz=207,slow=2.2,SNR=2.4
ESDC LR LR 03 29 14.5
comp=Z,318nm,18.6s,baz=178,slow=36
comp=Z,2.1nm,0.9s
HMBC Humberstone 53.26 254 P P 03 06 16.8 -1.2
HMBC IAmb IAmb 03 06 19.0
comp=Z,27nm,1.0s
KEST Kesra 53.42 24 P P 03 06 19.7 +0.9
KEST Kesra 53.42 24 P P 03 06 20.3 +1.6
comp=Z,44nm,0.9s,baz=210,slow=5.5,SNR=55
KEST LR LR 03 28 27.6
comp=Z,844nm,19.6s,baz=157,slow=35
comp=Z,44nm,0.9s
MTE Manteigas 53.43 7 P P 03 06 19.5 +0.8
MTE IAmb IAmb 03 06 27.1
comp=Z,33nm,1.4s
MTE Manteigas 53.43 7 eP P 03 06 20.5 +1.8
comp=Z,39nm,1.7s
MTE eS S 03 13 54.6 +4.1
MTE Manteigas 53.43 7 eLR LR 03 26 21.6
comp=Z,285nm,18.0s
PB04 IPOC Station P 53.49 252 P P 03 06 19.4 -0.3
PATCX Punta Patache 53.50 254 P P 03 06 19.4 -0.4
PB05 IPOC Station P 53.54 251 P P 03 06 19.4 -0.7
PVIS Viseu 53.70 6 eP P 03 06 26.7 +6.0
comp=Z,34nm,1.6s
AP01 Chacalluta 53.75 257 P P 03 06 20.7 -0.8
GO03 Copiap 53.76 245 P P 03 06 21.4 -0.1
GO03 IAmb IAmb 03 06 22.8
comp=Z,43nm,1.1s
PB14 IPOC Station P 53.76 249 P P 03 06 21.6 -0.3
CO01 Juntas del Tor 53.84 242 P P 03 06 22.9 +0.6
AC06 Mina Casimiro 53.85 246 P P 03 06 21.8 -0.3
AC05 El Transito 53.89 244 P P 03 06 22.6 0.0
MT08 Bocatoma Ro 54.21 238 P P 03 06 24.9 0.0
MT08 IAmb IAmb 03 06 27.7
comp=Z,32nm,1.2s
MVO Moncorvo 54.24 7 eP P 03 06 27.1 +2.4
comp=Z,67nm,1.6s
MVO eS S 03 14 00.3 -1.2
MVO eLQ LQ 03 23 22.7
MVO eLR LR 03 27 18.0
comp=Z,275nm,18.0s
PVRL Vila Real 54.27 6 eP P 03 06 26.6 +1.8
comp=Z,38nm,1.6s
LCO Las Campanas 54.28 244 P P 03 06 25.1 -0.5
LCO Las Campanas 54.28 244 P P 03 06 25.1 -0.5
LCO pmax pmax
comp=Z,53nm,1.0s
H05N1 Guadeloupe/Mar 54.30 301 T T 04 04 52.0
SNR=9.6
POLO Lamas de Olo 54.36 6 eP P 03 06 27.4 +1.8
comp=Z,14nm,1.2s
LMEL Las Melosas 54.42 238 P P 03 06 26.0 -0.3
LMEL IAmb IAmb 03 06 27.8
comp=Z,37nm,1.0s
CO03 El Pedregal 54.45 241 P P 03 06 26.0 -0.5
CO03 IAmb IAmb 03 06 28.6
comp=Z,34nm,1.1s
MT13 San Alfonso 54.48 238 P P 03 06 26.6 -0.1
MT13 IAmb IAmb 03 06 35.8
comp=Z,36nm,1.2s
VA03 San Esteban 54.56 239 P P 03 06 27.5 +0.2
VA03 IAmb IAmb 03 06 29.9
comp=Z,56nm,1.1s
MT03 Universidad Ad 54.62 238 P P 03 06 27.3 -0.5
MT03 IAmb IAmb 03 06 29.0
comp=Z,37nm,1.1s
PCAB Cabril 54.67 6 eP P 03 06 30.3 +2.6
comp=Z,66nm,1.7s
PCRV Puerto La Cruz 54.68 292 LR LR 03 29 52.5
comp=Z,419nm,18.8s,slow=36
PEL Peldehue 54.72 238 P P 03 06 27.8 -0.6
PEL IAmb IAmb 03 06 29.5
comp=Z,49nm,1.0s
PEL Peldehue 54.72 238 P P 03 06 27.8 -0.6
PEL pmax pmax
comp=Z,49nm,1.0s
CO02 Combarbal 54.75 241 P P 03 06 28.5 -0.2
BO04 La Punta 54.78 237 P P 03 06 28.2 -0.6
BO04 IAmb IAmb 03 06 29.6
comp=Z,40nm,1.1s
PGAV Gavieira, Arco 54.90 6 eP P 03 06 32.0 +2.6
PGAV eS S 03 14 15.3 +4.9
PGAV eLQ LQ 03 20 01.5
PGAV eLR LR 03 25 25.7
comp=Z,158nm,18.0s
PBRG Braganca 54.91 7 eP P 03 06 31.0 +1.5
comp=Z,26nm,1.8s
BO02 Sierra Bellavi 55.04 237 P P 03 06 30.5 -0.2
BO02 IAmb IAmb 03 06 31.7
comp=Z,42nm,0.9s
MT09 Talagante 55.06 238 P P 03 06 30.1 -0.9
MT02 Curacav 55.11 238 P P 03 06 30.9 -0.3
MT02 IAmb IAmb 03 06 32.0
comp=Z,40nm,1.1s
VA06 Catapilco 55.16 239 P P 03 06 30.6 -0.8
VA06 IAmb IAmb 03 06 32.0
comp=Z,36nm,1.1s
BO01 Tunca 55.23 237 P P 03 06 31.0 -1.0
BO01 IAmb IAmb 03 06 32.5
comp=Z,38nm,0.9s
TBTG Tabatinga, AM 55.24 274 P P 03 06 32.0 -0.4
TBTG Tabatinga, AM 55.24 274 eP P 03 06 32.4 0.0
MT01 Popeta 55.29 238 P P 03 06 31.0 -1.4
MT01 IAmb IAmb 03 06 33.7
comp=Z,44nm,1.3s
ML02 Panimavida 55.70 235 P P 03 06 34.7 -0.7
BI02 San Fabin de 55.73 234 P P 03 06 35.2 -0.5
PLCA Paso Flores 55.98 229 P P 03 06 36.6 -0.8
PLCA Paso Flores 55.98 229 P P 03 06 36.3 -1.1
comp=Z,5.0nm,1.0s,baz=82,slow=3.2,SNR=5.7
PLCA LR LR 03 27 20.1
comp=Z,544nm,21.3s,baz=86,slow=33
comp=Z,5.0nm,1.0s
PLCA Paso Flores 55.98 229 P P 03 06 36.6 -0.8
PLCA pmax pmax
comp=Z,10.0nm,1.1s
PLCA Paso Flores 55.98 229 eP P 03 06 37.1 -0.3
GO05 Huala 56.00 236 P P 03 06 37.1 -0.5
GO05 IAmb IAmb 03 06 38.2
comp=Z,48nm,1.1s
GO06 Curarrehue 56.43 231 P P 03 06 40.6 0.0
VSL Villasalto 56.72 22 P P 03 06 42.7 +0.2
VAE Valguarnera 57.05 27 LR LR 03 31 30.8
comp=Z,1µm,18.1s,baz=218,slow=36
CEST Esterri de Car 57.11 14 P P 03 06 45.5 +0.1
CEST IAmb IAmb 03 06 53.3
comp=Z,24nm,1.2s
FURI Furi 57.21 70 LR LR 03 29 21.8
comp=Z,1µm,18.7s,baz=252,slow=34
CZSB Cruzeiro do Su 57.26 269 P P 03 06 45.9 -1.0
CZSB Cruzeiro do Su 57.26 269 eP P 03 06 45.8 -1.0
BAUV El Baul 57.31 290 P P 03 06 47.1 0.0
LL02 Futaleuf 57.49 227 P P 03 06 48.1 +0.1
LL01 San Ignacio de 57.71 228 P P 03 06 48.8 -0.8
LL01 IAmb IAmb 03 06 49.5
comp=Z,28nm,1.2s
VNA1 Neumayer--Stat 57.86 177 ⇑P P 03 06 50.5 +0.4
comp=Z,18nm,1.1s
VNA2 Neumayer--Watz 58.17 177 ⇑P P 03 06 52.9 +0.6
comp=Z,7.3nm,0.8s,baz=354,slow=8.6
CEL Celeste 58.37 28 P P 03 06 54.8 +0.6
CEL IAmb IAmb 03 06 56.4
comp=Z,26nm,1.0s
CEL Celeste 58.37 28 P P 03 06 55.1 +1.0
VNA3 Neumayer Olymp 58.40 178 ⇑P P 03 06 53.9 0.0
comp=Z,3.1nm,0.8s
VOI Vohitsoka 58.98 108 P P 03 06 59.4 +0.5
VOI IAmb IAmb 03 07 01.2
comp=Z,41nm,1.4s
AY03 Cochrane 59.02 222 P P 03 06 59.0 +0.5
AY03 IAmb IAmb 03 07 01.3
comp=Z,46nm,1.3s
SNAA Sanae 59.18 176 P P 03 07 00.1 +0.7
SNAA IAmb IAmb 03 07 07.4
comp=Z,23nm,1.0s
SNAA Sanae 59.18 176 eP P 03 07 00.1 +0.7
SNAA IAmb IAmb 03 07 06.8
comp=Z,1µm,1.1s
SNAA Sanae 59.18 176 ⇑P P 03 06 59.7 +0.3
comp=Z,348nm,1.0s
SNAA Sanae 59.18 176 P P 03 06 59.4 0.0
comp=Z,8.0nm,1.0s,baz=331,slow=5.3,SNR=10.0
SNAA LR LR 03 26 08.7
comp=Z,240nm,21.1s,baz=312,slow=30
comp=Z,8.0nm,1.0s
SNAA Sanae 59.18 176 ceP P 03 06 59.7 +0.3
SNAA pmax pmax
comp=Z,30nm,1.2s
HUMP Col San Antoni 59.19 300 P P 03 06 59.3 -0.8
LFF La Frestale 59.22 13 eP P 03 07 00.5 +0.6
GO08 Villa O'Higgin 59.33 221 P P 03 07 01.3 +0.6
GO08 IAmb IAmb 03 07 02.5
comp=Z,24nm,1.4s
GCPR Guaynabo City 59.46 300 P P 03 07 02.0 0.0
TIP Timpagrande 59.51 28 P P 03 07 01.8 -0.2
TIP Timpagrande 59.51 28 ⇓P P 03 07 01.9 -0.2
TIP Timpagrande 59.51 28 P P 03 07 01.9 -0.2
comp=Z,12nm,1.2s
OPO Ambohidratompo 59.54 104 LR LR 03 29 46.0
comp=Z,291nm,20.5s,baz=56,slow=33
SDV Santo Domingo 59.68 288 P P 03 07 04.0 +0.1
SDV Santo Domingo 59.68 288 LR LR 03 32 47.4
comp=Z,367nm,19.5s,baz=67,slow=36
CUC Castrocucco 59.74 27 P P 03 07 03.5 -0.2
CELP Cerrillos 59.77 300 P P 03 07 04.2 0.0
CELP IAmb IAmb 03 07 06.3
comp=Z,33nm,1.1s
OBIP Obispado Ponce 59.78 300 P P 03 07 03.8 -0.4
UUPR Aguado, UPR, P 59.97 300 P P 03 07 05.0 -0.6
TROLL Troll, Antarti 59.98 174 ⇑P P 03 07 05.3 +0.3
comp=Z,580nm,0.9s
GO09 Cerro Castillo 60.01 218 P P 03 07 05.0 -0.4
AOPR Arecibo Observ 60.04 300 P P 03 07 05.6 -0.5
PAOL Paolisi 60.07 25 P P 03 07 06.6 +0.7
VIVF Saint-Julien-I 60.09 16 eP P 03 07 06.4 +0.5
NVL N'lazarevskaya 60.10 170 ⇓i P P 03 07 07.7 +2.1
NVL pmax pmax
comp=Z,30nm,1.0s
NVL MLR MLR
comp=Z,106nm,18.0s
SSB Saint Sauveur 60.45 15 P P 03 07 08.9 +0.5
SSB IAmb IAmb 03 07 16.8
comp=Z,27nm,1.2s
SSB Saint Sauveur 60.45 15 P P 03 07 08.9 +0.5
SSB pmax pmax
comp=Z,27nm,1.2s
NNA Nana 60.61 263 LR LR 03 32 02.1
comp=Z,854nm,20.2s,baz=122,slow=35
NNA Nana 60.61 263 ⇓eP P 03 07 08.7 -1.5
NNA pmax pmax
comp=Z,39nm,1.5s
CESX Cesi 60.62 23 P P 03 07 09.4 -0.1
INTR Introdacqua 60.62 24 P P 03 07 09.3 -0.4
IDI Anoyia 60.80 37 LR LR 03 35 20.0
comp=Z,177nm,19.7s,baz=238,slow=38
BNI Bardonecchia 60.82 17 P P 03 07 11.6 +0.5
BNI IAmb IAmb 03 07 19.9
comp=Z,20nm,1.1s
BNI Bardonecchia 60.82 17 P P 03 07 11.6 +0.5
BNI pmax pmax
comp=Z,20nm,1.1s
NRCA Norcia 61.01 23 P P 03 07 12.4 0.0
FDMO Fiordimonte 61.18 23 P P 03 07 13.5 +0.1
LPL La Plagne 61.26 17 eP P 03 07 15.0 +0.9
AVF Avril sur Loir 61.56 14 eP P 03 07 16.2 +0.3
PMSA Palmer Station 61.82 202 LR LR 03 29 58.4
comp=Z,112nm,20.3s,baz=46,slow=32
PMSA Palmer Station 61.82 202 eP P 03 07 17.9 +0.4
ROSC El Rosal 61.84 283 P P 03 07 18.7 -0.2
ROSC El Rosal 61.84 283 P P 03 07 18.9 0.0
comp=Z,34nm,0.8s,baz=117,slow=2.3,SNR=20
ROSC LR LR 03 34 17.0
comp=Z,1µm,18.3s,baz=114,slow=36
comp=Z,34nm,0.8s
ROSC El Rosal 61.84 283 P P 03 07 18.7 -0.2
ROSC pmax pmax
comp=Z,49nm,0.9s
ATD Arta Tunnel 61.99 69 P P 03 07 19.9 +0.4
ATD Arta Tunnel 61.99 69 LR LR 03 31 53.7
comp=Z,47nm,20.0s,baz=222,slow=34
SENIN Lac Senin/Sane 62.20 17 P P 03 07 20.2 -0.2
SENIN IAmb IAmb 03 07 27.4
comp=Z,30nm,1.1s
KBN Korca 62.55 30 P P 03 07 23.1 +0.5
KBN IAmb IAmb 03 07 24.9
comp=Z,17nm,1.0s
KBN Korca 62.55 30 P P 03 07 23.2 +0.5
KBN pmax pmax
comp=Z,17nm,1.0s
ATAH Atahualpa 62.92 269 LR LR 03 34 49.4
comp=Z,677nm,19.2s,baz=109,slow=36
FNA Florina 62.96 30 P P 03 07 25.5 +0.1
FNA Florina 62.96 30 P P 03 07 25.5 +0.1
FNA pmax pmax
comp=Z,13nm,1.0s
ELIB Princess Elisa 63.24 168 dP P 03 07 27.7 +0.8

comp=Z,19nm,1.2s
ELIB dx x 03 07 33.1
**PDG Podgorica 63.24 28** P **P 03 07 27.8 +0.6**
**PDG Podgorica 63.24 28** ⇑P **P 03 07 28.4 +1.2**
**CTI Castel Tesino 63.27 20** P **P 03 07 27.3 -0.1**
**CTI Castel Tesino 63.27 20** P **P 03 07 27.3 -0.1**
CTI pmax pmax
comp=Z,12nm,0.9s
**FUORN Ofenpass-Fuorn 63.32 19** P **P 03 07 27.8 -0.1**
**DAVOX Davos/Dischmat 63.34 19** LR LR 03 33 58.7
comp=Z,810nm,21.4s,baz=222,slow=35
**DAVA Damuels 63.79 18** *e*P **P 03 07 30.6 -0.4**
comp=Z,26nm,0.9s,SNR=18
**STAL STALIGIAL 63.81 21** P **P 03 07 31.4 +0.4**
STAL IAmb IAmb 03 07 39.0
comp=Z,39nm,1.2s
**FETA Feichten 63.82 19** *e*P **P 03 07 30.8 -0.3**
comp=Z,21nm,0.9s,SNR=15
**EIL Elat 63.84 48** LR LR 03 33 40.1
comp=Z,537nm,20.1s,baz=241,slow=34
**ECH Echery 63.85 16** IAmb IAmb 03 07 38.8
comp=Z,29nm,1.4s
**TULM Tulcn-Chalpat 64.05 277** P **P 03 07 32.2 -1.5**
**SQTA Sankt Quirin 64.15 19** *e*P **P 03 07 32.9 -0.4**
comp=Z,19nm,1.0s,SNR=11
**ABTA Abfaltersbach 64.17 20** *i* P **P 03 07 34.0 +0.6**
comp=Z,9.5nm,1.1s
**VISS Visnje 64.19 22** *i* P **P 03 07 34.1 +0.7**
**MOTA Moosalm 64.23 19** *i* P **P 03 07 33.1 -0.7**
comp=Z,9.1nm,1.1s
**RETA Reutte 64.25 19** *e*P **P 03 07 33.3 -0.5**
comp=Z,12nm,0.9s,SNR=6.3
**PRED Cave del Predi 64.27 21** P **P 03 07 33.8 -0.2**
**BFO Black Forest 64.28 17** P **P 03 07 33.3 -0.7**
BFO IAmb IAmb 03 07 41.5
comp=Z,39nm,1.2s
**BFO Black Forest 64.28 17** P **P 03 07 33.3 -0.7**
BFO pmax pmax
comp=Z,39nm,1.2s
**GORS Gorjuse 64.32 22** *e*P **P 03 07 34.6 +0.2**
**WTTA Wattenberg 64.33 20** *e*P **P 03 07 34.3 -0.2**
comp=Z,19nm,1.1s,SNR=9.2
**IMBA Imbabura, San 64.33 277** P **P 03 07 35.9 +0.4**
**WATA Walderalm 64.37 19** *e*P **P 03 07 34.2 -0.6**
comp=Z,12nm,1.4s,SNR=6.8
**PULU Pululahua 64.57 276** P **P 03 07 36.5 -0.5**
**SMAI San Martin Ant 64.65 199** P **P 03 07 36.2 +0.1**
SMAI IAmb IAmb 03 07 59.3
comp=Z,21nm,1.3s
**GOLS Golise 64.66 23** *e*P **P 03 07 37.2 +0.7**
**OBKA Obir 64.68 22** *i* P **P 03 07 37.2 +0.5**
comp=Z,5.3nm,1.1s
**KBA Koelnbreinsper 64.74 21** *i* P **P 03 07 37.1 -0.1**
comp=Z,7.3nm,1.1s
**LESA Schwarzleotal 64.81 20** *e*P **P 03 07 37.0 -0.6**
comp=Z,5.0nm,0.9s
**STU Stuttgart 64.92 17** IAmb IAmb 03 07 45.5
comp=Z,27nm,1.1s
**WLF Walferdange 64.92 15** *d*P **P 03 07 39.1 +1.0**
WLF *dx* x 03 07 44.3
**DOU Dourbes 64.95 14** *dx* x 03 07 44.7
**SOKA Soboth 65.00 22** *e*P **P 03 07 39.5 +0.7**
comp=Z,15nm,1.0s,SNR=10
**GIVF Givet 65.01 14** *e*P **P 03 07 39.3 +0.6**
**RCHB Rochefort 65.16 14** *dx* x 03 07 46.0
**BMRD Maredsous 65.19 14** *dx* x 03 07 45.8
**ARNL Arenillas 65.27 272** P **P 03 07 40.8 -0.3**
**BOVS Bovan 65.30 28** ⇓P **P 03 07 40.6 -0.1**
**BGES Gesves 65.34 14** *dx* x 03 07 47.3
**BIOA Bad Ischl, Aus 65.37 21** *e*P **P 03 07 40.3 -0.8**
comp=Z,7.0nm,0.9s,SNR=6.1
**BCLA Clavier 65.42 14** *dx* x 03 07 47.1
**BHOU Houvegnez 65.53 14** *dx* x 03 07 49.1
**FRGS Fruska Gora 65.65 26** ⇑P **P 03 07 44.5 +1.5**
**FRGS Fruska Gora 65.65 26** P **P 03 07 43.0 0.0**
comp=Z,20nm,1.8s,comp=Z,364nm
**ARSA Arzberg 65.67 22** *e*P **P 03 07 43.4 +0.3**
comp=Z,12nm,1.0s,SNR=8.9
**BALJ Balqa 65.69 46** P **P 03 07 43.7 +0.2**
BALJ IAmb IAmb 03 07 46.0
comp=Z,18nm,1.0s
**MOA Molln 65.72 21** *e*P **P 03 07 42.8 -0.6**
comp=Z,12nm,0.9s,SNR=7.2
**MEM Membach 65.76 14** *dx* x 03 07 49.6
**BTNL Ternell 65.77 14** *dP* **P 03 07 44.7 +1.1**
**MORH Mrgy, Hungar 66.02 25** ⇓P **P 03 07 46.1 +0.9**
**MORH Mrgy, Hungar 66.02 25** P **P 03 07 45.2 0.0**
comp=Z,9.8nm,1.6s
**MMAI Mount Meron Ar 66.05 45** P **P 03 07 44.5 -1.3**
comp=Z,3.2nm,0.8s,baz=282,slow=4.0,SNR=4.5
MMAI LR LR 03 36 56.8
comp=Z,302nm,19.1s,baz=184,slow=36
comp=Z,3.2nm,0.8s
**RONA Rosalia, Austr 66.33 22** *e*P **P 03 07 48.1 +0.9**
comp=Z,18nm,1.0s,SNR=10
**GRFO Grafenberg 66.34 18** P **P 03 07 47.7 +0.4**
GRFO IAmb IAmb 03 07 54.9
comp=Z,15nm,1.0s
**GRFO Grafenberg 66.34 18** P **P 03 07 47.7 +0.4**
GRFO pmax pmax
comp=Z,15nm,1.0s
**GRA1 Grafenberg Arr 66.34 18** P **P 03 07 47.2 -0.1**
GRA1 IAmb IAmb 03 07 54.9
comp=Z,16nm,1.0s
**GRF Grafenberg Arr 66.34 18** P **P 03 07 47.2 -0.1**
GRF pmax pmax
comp=Z,16nm,1.0s
**MPLH Magyarpolny 66.36 23** P **P 03 07 47.7 +0.3**
comp=Z,55nm,1.0s
**CONA Conrad Observa 66.36 22** *e*P **P 03 07 48.0 +0.5**
comp=Z,12nm,1.0s,SNR=8.0
**GEC2 GERESS Array S 66.39 20** IAmb IAmb 03 07 54.6
comp=Z,24nm,1.2s
**GERES GERESS Array B 66.39 20** P **P 03 07 47.3 -0.5**
**GERES GERESS Array B 66.39 20** P **P 03 07 47.4 -0.3**
comp=Z,4.2nm,0.9s,baz=209,slow=10,SNR=21
comp=Z,4.2nm,0.9s
**DJES Djerdap 66.47 28** ⇓P P 03 07 55.8 +7.6
**CKRC Cesky Krumlov 66.57 20** *e*P **P 03 07 49.0 +0.2**
CKRC *ex* x 03 07 55.5
CKRC AMS AMS 03 34 40.0
comp=Z,800nm,21.9s
**CKRC Cesky Krumlov 66.57 20** *e*P **P 03 07 49.0 +0.2**
CKRC *e* 03 07 55.5
CKRC MLR MLR
comp=Z,800nm,21.9s
**HERR Herculane 66.59 28** ⇓P **P 03 07 48.7 -0.3**
**KHC Kasperske Hory 66.59 20** P **P 03 07 48.9 -0.1**
**KHC Kasperske Hory 66.59 20** *e*P **P 03 07 48.6 -0.4**
KHC *eS* **S 03 16 39.4 -0.1**
KHC AMS AMS 03 37 00.0
comp=Z,700nm,19.4s
**KHC Kasperske Hory 66.59 20***ce*P **P 03 07 48.3 -0.7**
KHC pmax pmax
comp=Z,31nm,1.4s
**KHC Kasperske Hory 66.59 20** P **P 03 07 48.7 -0.3**
comp=Z,6.8nm,1.0s
**BZS Buzias 66.80 27** ⇑P **P 03 07 50.9 +0.6**
**BZS Buzias 66.80 27** ⇑P **P 03 07 50.9 +0.6**
**ZVC Zvikov 67.06 20** *e*P **P 03 07 51.6 -0.3**
ZVC *ex* x 03 07 58.2
ZVC AMS AMS 03 37 30.0
comp=Z,500nm,20.5s
**SURR Surduc 67.13 27** ⇑P **P 03 07 52.9 +0.5**
**GZR Gura Zlata 67.14 28** ⇓P **P 03 07 52.7 +0.1**
**GZR Gura Zlata 67.14 28** ⇓P **P 03 07 52.7 +0.1**
**SIRR Siria 67.33 26** ⇓P **P 03 07 53.9 +0.3**
**TREC Trest 67.38 21** AMS AMS 03 38 10.0
comp=Z,600nm,17.1s
**KRUC Moravsky 67.51 22** *e*P **P 03 07 54.3 -0.4**
**DEV Deva 67.58 27** ⇓P **P 03 07 55.8 +0.6**
**LOT Lotru 67.64 28** ⇑P **P 03 07 56.6 +0.8**
**PRU Pruhonice 67.65 20** *eS* **S 03 16 57.6 +5.5**
PRU AMS AMS 03 37 40.0
comp=Z,500nm,16.6s
**GOPC GO Pecny, Ondr 67.67 20** *eS* **S 03 16 55.2 +2.8**
GOPC AMS AMS 03 38 00.0
comp=Z,500nm,19.0s
**PRA Prague 67.69 20** *eS* **S 03 16 57.5 +5.0**
PRA AMS AMS 03 38 50.0
comp=Z,400nm,16.6s
**VRAC Vranov 67.78 22** *e*P **P 03 07 55.8 -0.7**
**VRAC Vranov 67.78 22** LR LR 03 38 20.2
comp=Z,680nm,18.0s,baz=220,slow=37
**VRAC Vranov 67.78 22** ⇑P **P 03 07 55.6 -0.9**
**VRAC Vranov 67.78 22** ⇑P **P 03 07 55.6 -0.9**
**JAVC Velka Javorina 67.80 22** *e*P **P 03 07 57.6 +1.0**
**HSKC Hora Svate Kat 67.83 19** AMS AMS 03 37 20.0
comp=Z,600nm,21.4s
**PSZ Piszkesteto 67.89 24** P **P 03 07 57.7 +0.4**
PSZ IAmb IAmb 03 08 04.8
comp=Z,23nm,1.2s
**PSZ Piszkesteto 67.89 24** ⇑P **P 03 07 58.1 +0.9**
**PSZ Piszkesteto 67.89 24** P **P 03 07 57.7 +0.4**
PSZ pmax pmax
comp=Z,23nm,1.2s
**VYHS Vyhne 67.94 23** *e*P **P 03 07 57.9 +0.4**
VYHS pmax pmax
comp=Z,19nm,1.0s
**VYHS Vyhne 67.94 23** *e*P **P 03 07 57.8 +0.3**
**NMDO Nuevo Mundo 67.99 299** P **P 03 07 57.6 -0.7**
NMDO IAmb IAmb 03 07 59.9
comp=Z,27nm,1.1s
**PVCC Panska Ves 68.13 20** *e*P **P 03 07 59.2 +0.6**
**PVCC Panska Ves 68.13 20** *e*P **P 03 07 59.2 +0.6**
**BRG Berggiesshubel 68.22 19** *i* P **P 03 07 59.5 +0.4**
BRG Amp 03 08 00.5
comp=Z,6.8nm,0.9s
**BRG Berggiesshubel 68.22 19** P P 03 08 05.8 +6.6
BRG Amp 03 08 06.8
comp=Z,8.3nm,1.0s
BRG PP **PP 03 10 28.9 -1.1**
BRG Amp 03 10 35.6
comp=Z,6.8nm,1.2s
**BRG Berggiesshubel 68.22 19** S **S 03 17 05.0 +6.1**
**BRG Berggiesshubel 68.22 19** SS SS 03 21 22.0 -0.4
**VOIR 68.23 29** ⇑P **P 03 07 59.7 +0.3**
**VOIR 68.23 29** ⇑P **P 03 07 59.7 +0.3**
**VOIR 68.23 29** P **P 03 07 58.9 -0.5**
comp=Z,7.1nm,0.9s,comp=Z,296nm
**MAUC Maruska 68.28 22** *e*P **P 03 08 00.4 +0.8**
**MARR Marisel-Cluj 68.28 27** ⇓P **P 03 08 00.0 +0.2**
**CLL Collm 68.31 18** P **P 03 08 00.1 +0.4**
**CLL Collm 68.31 18** *i* P **P 03 08 00.0 +0.4**
CLL *eS* **S 03 17 03.0 +3.1**
CLL pmax pmax
comp=Z,28nm,2.0s
CLL MLR MLR
comp=Z,500nm,19.1s
**CLL Collm 68.31 18** P **P 03 07 59.0 -0.7**
comp=Z,5.6nm,1.4s
**KRLC Kraliky 68.49 21** *e*P **P 03 08 01.6 +0.7**
**KRLC Kraliky 68.49 21** *e*P **P 03 08 01.6 +0.7**
**BR231 Keskin MP Arra 68.50 38** P **P 03 08 01.6 +0.4**
BR231 IAmb IAmb 03 08 03.6
comp=Z,24nm,0.9s
**MORC Moravsky Berou 68.52 22** IAmb IAmb 03 08 08.5
comp=Z,21nm,1.2s
**MORC Moravsky Berou 68.52 22** *e*P **P 03 08 01.0 -0.1**
**MORC Moravsky Berou 68.52 22** ⇑P **P 03 08 02.0 +0.9**
**MORC Moravsky Berou 68.52 22** ⇑P **P 03 08 02.0 +0.9**
**CJR Cluj-Napoca 68.52 27** ⇑P **P 03 08 01.9 +0.7**
**CJR Cluj-Napoca 68.52 27** ⇑P **P 03 08 01.9 +0.7**
**ANTO Ankara 68.52 38** P **P 03 08 01.8 +0.4**
ANTO IAmb IAmb 03 08 03.8
comp=Z,24nm,0.9s
**ANTO Ankara 68.52 38** ⇓P **P 03 08 02.2 +0.8**
**ANTO Ankara 68.52 38** P **P 03 08 01.8 +0.4**
ANTO pmax pmax
comp=Z,24nm,0.9s
**DPC Dobruska-Polom 68.56 21** *e*P **P 03 08 01.9 +0.5**
DPC *eS* **S 03 17 04.1 +1.0**
DPC AMS AMS 03 37 20.0
comp=Z,600nm,20.9s
**DPC Dobruska-Polom 68.56 21** *e*P **P 03 08 01.9 +0.5**
DPC *eS* **S 03 17 04.1 +1.0**
DPC MLR MLR
comp=Z,600nm,20.9s
**DPC Dobruska-Polom 68.56 21** P **P 03 08 01.3 -0.1**
comp=Z,10nm,1.2s
**KECS Kecovo 68.58 24** *e*P **P 03 08 02.6 +1.1**
**KECS Kecovo 68.58 24** *e*P **P 03 08 02.6 +1.1**
**UPC Upice 68.59 20** *e*P **P 03 08 01.8 +0.3**
UPC *eS* **S 03 17 04.3 +1.0**
UPC AMS AMS 03 37 00.0
comp=Z,600nm,21.1s
**UPC Upice 68.59 20** *e*P **P 03 08 01.8 +0.3**
UPC *eS* **S 03 17 04.3 +1.0**
UPC MLR MLR
comp=Z,600nm,21.1s
**EKA Eskdalemuir Ar 68.65 7** P **P 03 08 02.2 +0.5**
comp=Z,7.6nm,0.9s,baz=170,slow=5.9,SNR=11
comp=Z,7.6nm,0.9s
**CHVC Chvalec 68.67 20** *e*P **P 03 08 02.6 +0.6**
CHVC AMS AMS 03 37 00.0
comp=Z,500nm,20.4s
**CHVC Chvalec 68.67 20** *e*P **P 03 08 02.6 +0.6**
CHVC MLR MLR
comp=Z,500nm,20.4s
**MLR Muntele Rosu 68.69 29** IAmb IAmb 03 08 03.6
comp=Z,24nm,1.0s
**MLR Muntele Rosu 68.69 29** LR LR 03 37 56.1
comp=Z,462nm,20.5s,baz=212,slow=36
**MLR Muntele Rosu 68.69 29** ⇓P **P 03 08 02.0 -0.4**
**MLR Muntele Rosu 68.69 29** P **P 03 08 02.5 +0.1**
**MLR Muntele Rosu 68.69 29** P **P 03 08 01.7 -0.7**
comp=Z,27nm,1.2s
**OSTC Ostas 68.70 21** *e*P **P 03 08 02.1 -0.1**
OSTC AMS AMS 03 36 50.0
comp=Z,500nm,20.0s
**OSTC Ostas 68.70 21** *e*P **P 03 08 02.1 -0.1**
OSTC MLR MLR
comp=Z,500nm,20.0s
**LANS Liptovska Anna 68.72 23** *e*P **P 03 08 03.0 +0.6**
LANS pmax pmax
comp=Z,4.0nm,0.8s
**LANS Liptovska Anna 68.72 23** *e*P **P 03 08 03.0 +0.6**
**KIRS Kirsehir-Merke 68.74 39** ⇑P **P 03 08 03.4 +0.6**
**DOPR Dopca 68.78 29** ⇓P **P 03 08 02.2 -0.6**
**OKC Ostrava-Krasne 68.79 22** *eS* **S 03 17 09.1 +3.5**
OKC AMS AMS 03 39 20.0
comp=Z,500nm,18.4s
**TGMR Targu Mures 68.80 28** ⇑P P 03 08 08.4 +5.5
**NEHR Nehoiu 68.82 30** ⇑P **P 03 08 04.2 +1.2**
**BR105 Keskin Array S 68.92 38** P **P 03 08 04.6 +0.6**
comp=Z,14nm,0.9s,comp=Z,118nm
**BR104 Keskin Array S 68.93 38** P **P 03 08 04.6 +0.6**
comp=Z,13nm,0.9s,comp=Z,109nm
**BR106 Keskin Array S 68.93 38** P **P 03 08 04.6 +0.6**
comp=Z,9.7nm,1.1s,comp=Z,90nm
**BRTR Keskin Array B 68.94 38** P **P 03 08 04.7 +0.6**
**BRTR Keskin Array B 68.94 38** P **P 03 08 04.8 +0.8**
comp=Z,7.0nm,0.8s,baz=223,slow=6.4,SNR=40
BRTR LR LR 03 40 50.2
comp=Z,110nm,18.3s,baz=236,slow=38
comp=Z,7.0nm,0.8s
**BR131 Keskin Array S 68.94 38** P **P 03 08 04.2 +0.2**
**BR131 Keskin Array S 68.94 38***d* *i*P **P 03 08 04.6 +0.5**
**KSP Ksiaz 68.97 20** *e*P P 03 08 10.4 +6.5
**CHIV Chivirico 68.99 297** P **P 03 08 04.1 -0.5**
CHIV IAmb IAmb 03 08 06.6
comp=Z,26nm,1.2s
**RAYN Ar Rayn 69.05 58** P **P 03 08 05.7 +0.7**
RAYN IAmb IAmb 03 08 07.7
comp=Z,19nm,1.1s
**RAYN Ar Rayn 69.05 58** P **P 03 08 05.7 +0.7**
RAYN pmax pmax
comp=Z,19nm,1.1s
**OZUR 69.06 29** ⇑P **P 03 08 03.9 -0.7**
**COVR Voineasa-Covas 69.08 29** ⇑P **P 03 08 04.2 -0.4**
**ARCR ARCALIA 69.14 27** ⇓P **P 03 08 05.4 +0.4**
**BMR Baia Mare 69.21 27** ⇑P **P 03 08 05.6 +0.2**
**BMR Baia Mare 69.21 27** ⇑P **P 03 08 05.6 +0.2**
**NIE Niedzica 69.26 24** *e*P **P 03 08 07.2 +1.5**
**NIE Niedzica 69.26 24** P **P 03 08 06.1 +0.4**
comp=Z,4.6nm,1.6s
**BERU Beregovo 69.28 26** P **P 03 08 06.1 +0.3**
**PLOR Plostina 69.30 30** ⇓P **P 03 08 04.7 -1.3**
**PLOR Plostina 69.30 30** ⇓P **P 03 08 04.7 -1.3**
**PLOR3 Plostina Array 69.30 30** P **P 03 08 04.5 -1.5**
comp=Z,11nm,1.8s
**PLOR5 Plostina Array 69.30 30** P **P 03 08 05.0 -1.0**
comp=Z,14nm,0.9s
**TRSU Trosnyk 69.30 26** P **P 03 08 05.9 0.0**
**VRI Vrincioaia 69.34 30** ⇓P **P 03 08 05.2 -1.1**
**VRI Vrincioaia 69.34 30** ⇓P **P 03 08 05.2 -1.1**
**VRI Vrincioaia 69.34 30** P **P 03 08 05.2 -1.1**
comp=Z,7.5nm,1.2s
**HOLU Holmets 69.39 25** P **P 03 08 06.3 -0.2**
**KORU Korolevo 69.42 26** P **P 03 08 06.5 -0.2**
**ODBI Odobesti 69.43 30** ⇓P **P 03 08 07.0 +0.3**
**BRIU Brid 69.52 26** P **P 03 08 07.3 0.0**
**ONER Baraj Valea Uz 69.53 29** ⇑P **P 03 08 07.1 -0.3**
**GAZ Gaziantep 69.65 42** P **P 03 08 08.1 -0.4**
**KOLS Kolonicke sedl 69.67 25** *e*P **P 03 08 09.0 +0.8**
KOLS pmax pmax
comp=Z,5.0nm,1.0s
**KOLS Kolonicke sedl 69.67 25** *e*P **P 03 08 09.0 +0.8**
**OJC Ojcow 69.71 23** *e*P **P 03 08 09.1 +0.7**
**OJC Ojcow 69.71 23** P **P 03 08 08.3 -0.2**
OJC IAmb IAmb 03 08 09.9
comp=Z,16nm,0.9s
**OJC Ojcow 69.71 23** P **P 03 08 08.3 -0.2**
OJC pmax pmax
comp=Z,16nm,0.9s
**OJC Ojcow 69.71 23** P **P 03 08 08.0 -0.5**
comp=Z,19nm,0.9s
**BNN Bunyan 69.76 40** P **P 03 08 09.6 +0.4**
**TESR Tescani 69.78 29** ⇑P **P 03 08 05.9 -3.0**
**SCTR Scanteiesti 69.82 30** ⇑P **P 03 08 09.0 -0.3**
**BURAR Bucovina Array 69.93 27** P **P 03 08 10.0 +0.1**
**BURAR Bucovina Array 69.93 27** ⇑P **P 03 08 09.6 -0.3**
**BURAR Bucovina Array 69.93 27** ⇑P **P 03 08 09.6 -0.3**
**BUR08 Bucovina Ar. S 69.94 27** P **P 03 08 10.0 -0.1**
**SHIU Shidnytsya 70.34 25** P **P 03 08 12.5 +0.1**
**KWP Kalwaria Pacla 70.39 25** *e*P **P 03 08 12.6 -0.1**
**KWP Kalwaria Pacla 70.39 25** IAmb IAmb 03 08 20.0
comp=Z,33nm,1.3s
**KWP Kalwaria Pacla 70.39 25** P **P 03 08 12.5 -0.1**
comp=Z,24nm,1.2s
**STNU Starunia 70.44 26** P **P 03 08 12.8 -0.1**
**LVV L'vov 71.08 25** *e*P **P 03 08 16.8 0.0**
LVV *e* 03 08 39.9
LVV *eS* **S 03 17 31.3 -1.3**
LVV *eSS* **SS 03 22 04.5 -2.0**
LVV MLR MLR
comp=Z,300nm,19.0s
**MILM Milestii Mici 71.11 30** ⇓P **P 03 08 16.4 -0.6**
**MILM Milestii Mici 71.11 30** ⇓P **P 03 08 16.4 -0.6**
**KMPD K-Podol'skiy 71.19 27** P **P 03 08 15.6 -1.9**
**PURM Purcari 71.35 31** ⇑P **P 03 08 18.1 -0.4**
**ARPR Arapgir-MALATY 71.47 41** P **P 03 08 20.5 +0.8**
ARPR IAmb IAmb 03 08 22.0
comp=Z,25nm,0.8s
**SORM Soroca 71.75 29** ⇑P **P 03 08 19.4 -1.4**
**SORM Soroca 71.75 29** ⇑P **P 03 08 19.4 -1.4**
**SORM Soroca 71.75 29** P **P 03 08 19.0 -1.9**
comp=Z,12nm,0.8s
**SIM Simferopol' 72.52 34** *e*P P 03 08 19.4 -6.2
SIM pmax pmax
comp=Z,11nm,0.6s
**LUBAR Lubar, Ukraine 72.76 27** P **P 03 08 25.1 -1.8**
**RNPP8 Varash 72.99 25** P **P 03 08 27.3 -0.9**
**RNPP9 Sopachiv 73.06 25** P **P 03 08 27.6 -1.0**
**MAW Mawson 73.41 157** P **P 03 08 30.4 -0.1**
comp=Z,5.8nm,0.7s,baz=278,slow=7.9,SNR=10.0
MAW LR LR 03 34 19.4
comp=Z,304nm,19.7s,baz=288,slow=31
comp=Z,5.8nm,0.7s
**ESPN Las Esperanzas 73.45 287** P **P 03 08 30.7 -1.1**
ESPN IAmb IAmb 03 08 32.7
comp=Z,24nm,0.8s
**MI28 Mi28,Pidlybu 73.46 26** P **P 03 08 29.9 -1.1**
**JTS Las Juntas de 73.50 285** P **P 03 08 30.3 -1.8**
JTS IAmb IAmb 03 08 33.4
comp=Z,25nm,1.1s
**JTS Las Juntas de 73.50 285** P **P 03 08 30.3 -1.8**
JTS pmax pmax
comp=Z,25nm,1.2s
**AK13 Malin Array Si 73.84 27** P **P 03 08 32.6 -0.7**
**AK07 Malin Array Si 73.86 27** P **P 03 08 32.5 -0.9**
**AK14 Malin Array Si 73.88 27** P **P 03 08 32.6 -0.9**
**AK19 Malin Array Si 73.90 27** P **P 03 08 32.7 -0.9**
**AK12 Malin Array Si 73.91 27** P **P 03 08 32.7 -0.9**
**AK05 Malin Array Si 73.91 27** P **P 03 08 32.5 -1.2**
**AK20 Malin Array Si 73.91 27** P **P 03 08 32.7 -1.0**
**AK10 Malin Array Si 73.92 27** P **P 03 08 32.4 -1.3**
**AK18 Malin Array Si 73.92 27** P **P 03 08 32.6 -1.1**
**AK15 Malin Array Si 73.93 27** P **P 03 08 31.8 -2.0**
**AK11 Malin Array Si 73.94 27** P **P 03 08 32.5 -1.3**
**AK02 Malin Array Si 73.94 27** P **P 03 08 32.5 -1.3**
**AK08 Malin Array Si 73.94 27** P **P 03 08 32.8 -1.0**
**AK09 Malin Array Si 73.94 27** P **P 03 08 31.8 -2.1**
**AK21 Malin Array Si 73.95 27** P **P 03 08 32.8 -1.1**
**AK22 Malin Array Si 73.95 27** P **P 03 08 32.7 -1.2**
**AK01 Malin Array Si 73.97 27** P **P 03 08 32.8 -1.2**
**KIEV Kiev 73.97 27** P **P 03 08 33.6 -0.4**
KIEV IAmb IAmb 03 08 34.7
comp=Z,26nm,0.9s
**KIEV Kiev 73.97 27** ⇑P **P 03 08 34.0 0.0**
**KIEV Kiev 73.97 27** P **P 03 08 33.6 -0.4**
KIEV pmax pmax
comp=Z,26nm,1.0s
**KIEV Kiev 73.97 27** P **P 03 08 33.2 -0.8**
comp=Z,126nm,1.1s
**AK04 Malin Array Si 73.97 27** P **P 03 08 32.8 -1.2**
**AK23 Malin Array Si 73.98 27** P **P 03 08 33.4 -0.6**
**AKASG Malin Array Be 73.98 27** P **P 03 08 33.4 -0.7**
**AKASG Malin Array Be 73.98 27** P **P 03 08 33.7 -0.4**
comp=Z,12nm,0.7s,baz=228,slow=6.4,SNR=36
AKASG LR LR 03 42 22.1
comp=Z,373nm,19.6s,baz=230,slow=37
comp=Z,12nm,0.7s
**AKASG Malin Array Be 73.98 27***ce*P **P 03 08 33.7 -0.4**
AKASG pmax pmax
comp=Z,13nm,0.7s
**AKBB Malin Array Si 73.98 27** IAmb IAmb 03 08 34.7
comp=Z,29nm,0.9s
**AKBB Malin Array Si 73.98 27***ce*P **P 03 08 33.3 -0.8**
AKBB pmax pmax
comp=Z,35nm,1.0s
**AKBB Malin Array Si 73.98 27** P **P 03 08 33.2 -0.8**
**AK03 Malin Array Si 74.00 27** P **P 03 08 33.3 -0.8**
**SUW Suwalki 74.00 22** *e*P **P 03 08 34.1 +0.1**
**SUW Suwalki 74.00 22** *e*P **P 03 08 34.5 +0.4**
**ACON Acoyapa 74.20 286** IAmb IAmb 03 08 37.0
comp=Z,65nm,1.4s
**GGN Saint George 74.54 325** P **P 03 08 37.2 -0.2**
**BOAB BOACO BROADBAN 74.80 287** P **P 03 08 38.7 -0.9**
**SOC Sochi 74.89 38** *e*P **P 03 08 38.3 -1.2**
SOC *e* 03 11 25.7
SOC *e*PPP PPP 03 13 09.3
SOC *eS* **S 03 18 15.9 -0.3**
SOC pmax pmax
comp=Z,14nm,0.8s
**G65A Princeton 75.00 324** P **P 03 08 40.1 0.0**
**PBUR Paburge 75.15 20** *e*P **P 03 08 41.9 +1.1**
**BATG Bathurst New B 75.42 327** P **P 03 08 42.2 -0.4**
BATG IAmb IAmb 03 08 50.7
comp=Z,39nm,1.3s
**PABE Paberze 75.45 22** IAmb IAmb 03 08 43.7
comp=Z,22nm,0.9s
**PABE Paberze 75.45 22** *e*P **P 03 08 42.8 +0.4**
**M63A Gales Ferry 75.58 319** P **P 03 08 43.5 -0.1**
**VSVD Vaisvydziai 75.81 21** *e*P **P 03 08 45.0 +0.5**
**F64A Sherman 75.84 324** P **P 03 08 44.4 -0.5**
F64A IAmb IAmb 03 08 47.3
comp=Z,27nm,1.0s
**HRV Adam Dziewonsk 75.86 320** P **P 03 08 45.1 0.0**
HRV IAmb IAmb 03 08 46.8
comp=Z,23nm,0.9s
**HRV Adam Dziewonsk 75.86 320** P **P 03 08 45.1 0.0**
HRV pmax pmax
comp=Z,23nm,1.0s
**PQI Presque Isle 76.12 325** P **P 03 08 46.6 +0.1**
PQI IAmb IAmb 03 08 48.6
comp=Z,46nm,1.5s
**MNK Minsk 76.17 24** *i* P **P 03 08 42.1 -4.5**
MNK *i* 03 08 55.1
MNK *i* S **S 03 18 22.3 -7.6**
MNK *i* 03 18 55.0
MNK *i* SSS SSS 03 26 35.6
MNK pmax pmax
comp=E,14nm,1.1s
MNK pmax pmax
comp=Z,35nm,0.8s
MNK pmax pmax
comp=N,12nm,1.0s
MNK MLR MLR
comp=Z,530nm,18.0s
MNK MLR MLR
comp=E,313nm,16.0s

MNK MLR MLR
comp=N,122nm,16.0s
**F63A Nahmakanta, Br 76.17 324** P **P** **03 08 46.7 -0.1**
F63A IAmb IAmb 03 08 49.1
comp=Z,21nm,1.1s
**GNI Garni 76.21 43** LR LR 03 43 00.8
comp=Z,147nm,19.9s,baz=262,slow=36
**HFS Hagfors 76.25 14** P **P** **03 08 47.1 +0.1**
comp=Z,3.2nm,0.8s,baz=203,slow=5.7,SNR=4.7
HFS LR LR 03 43 04.6
comp=Z,226nm,18.4s,baz=206,slow=36
comp=Z,3.2nm,0.8s
**I62A Tamworth 76.46 322** P **P** **03 08 48.9 +0.4**
I62A IAmb IAmb 03 08 51.6
comp=Z,31nm,1.4s
**NB2 NORSAR Subarra 76.50 13** P **P** **03 08 48.9 +0.4**
comp=Z,23nm,1.4s,baz=208,slow=5.9
**NB2 NORSAR Subarra 76.50 13** P **P** **03 08 48.9 +0.4**
baz=208,slow=5.9
**NOA NORSAR Array B 76.50 13** P **P** **03 08 48.8 +0.4**
comp=Z,30nm,0.5s,baz=206,slow=6.0,SNR=18
NOA LR LR 03 44 10.6
comp=Z,146nm,18.0s,baz=185,slow=37
comp=Z,30nm,0.5s
**NC204 NORSAR Array S 76.62 12** P **P** **03 08 49.7 +0.6**
NC204 IAmb IAmb 03 08 56.4
comp=Z,38nm,1.5s
**KSCT Kent School, K 76.67 319** P **P** **03 08 49.5 -0.2**
**NC303 NORSAR Array S 76.70 13** P **P** **03 08 50.9 +1.4**
NC303 IAmb IAmb 03 08 57.4
comp=Z,23nm,1.1s
**G62A West of Eustis 76.72 323** P **P** **03 08 50.3 +0.3**
**H62A Milan 76.74 322** P **P** **03 08 50.2 +0.1**
**SHA1 Shidzhatmaz 76.75 39***ce***P** **P** **03 08 51.5 +1.0**
**TGUH Tegucigalpa,Un 76.77 288** P **P** **03 08 50.1 -0.9**
TGUH IAmb IAmb 03 08 53.1
comp=Z,23nm,0.9s
**F62A Pittston Farm, 76.78 324** P **P** **03 08 50.3 0.0**
F62A IAmb IAmb 03 08 53.1
comp=Z,27nm,1.5s
**TRNY Table Rock, Ra 76.85 318** P **P** **03 08 50.7 -0.1**
TRNY IAmb IAmb 03 08 52.4
comp=Z,22nm,1.0s
**KIV Kislovodsk 76.89 39** P **P** **03 08 51.5 +0.4**
KIV IAmb IAmb 03 08 59.4
comp=Z,20nm,1.0s
**KIV Kislovodsk 76.89 39** *eP* **P** **03 08 50.6 -0.5**
KIV *eS* **S** **03 18 39.3 +0.8**
KIV pmax pmax
comp=Z,16nm,1.1s
KIV MLR MLR
comp=Z,93nm,18.0s
**KBZ Khabaz 76.89 39** P **P** **03 08 51.6 +0.6**
comp=Z,6.8nm,0.8s,baz=216,slow=4.9,SNR=12
KBZ LR LR 03 44 34.3
comp=Z,109nm,20.1s,baz=254,slow=37
comp=Z,6.8nm,0.8s
**KBZ Khabaz 76.89 39***ce***P** **P** **03 08 51.1 +0.2**
KBZ pmax pmax
comp=Z,11nm,0.9s
**J61A Chester 76.92 321** P **P** **03 08 50.4 -0.7**
**E62A Clayton Lake 76.94 325** P **P** **03 08 51.2 0.0**
**D62A Allapoint, All 76.94 325** IAmb IAmb 03 08 53.7
comp=Z,30nm,1.3s
**ODNJ Ogdensburg 77.07 318** P **P** **03 08 52.6 +0.6**
**T59A Double "B" Far 77.13 313** P **P** **03 08 52.7 +0.2**
T59A IAmb IAmb 03 08 54.3
comp=Z,24nm,0.9s
**WUPA West Chester U 77.17 316** P **P** **03 08 52.2 -0.4**
**NCK Nalchik 77.20 39**⇓*eP* **P** **03 08 53.8 +1.0**
NCK pmax pmax
comp=Z,9.0nm,0.5s
**QSPA South Pole Qui 77.26 180** P **P** **03 08 53.6 +0.7**
QSPA IAmb IAmb 03 09 01.5
comp=Z,33nm,0.9s
**QSPA South Pole Qui 77.26 180** P **P** **03 08 53.7 +0.8**
comp=Z,11nm,0.7s,baz=194,slow=4.7,SNR=32
QSPA LR LR 03 37 49.2
comp=Z,151nm,20.2s,baz=207,slow=32
comp=Z,11nm,0.7s
**TRY Troy 77.30 320** P **P** **03 08 53.5 +0.2**
TRY IAmb IAmb 03 08 55.7
comp=Z,47nm,1.4s
**X58A Rowland 77.36 310** P **P** **03 08 53.7 -0.1**
X58A IAmb IAmb 03 08 55.7
comp=Z,37nm,1.3s
**NHSC New Hope 77.39 308** P **P** **03 08 54.1 +0.2**
**VT1 Waterbury 77.57 321** P **P** **03 08 54.5 -0.3**
**ACCN Adirondack Com 77.64 320** P **P** **03 08 54.9 -0.3**
**MVL Millersville 77.70 316** P **P** **03 08 55.6 +0.1**
**V58A Windy Hill, Pi 77.73 311** P **P** **03 08 55.7 -0.2**
V58A IAmb IAmb 03 08 58.4
comp=Z,24nm,1.1s
**SDMD Soldier's Deli 77.75 315** P **P** **03 08 55.8 -0.1**
**656A Willston 77.75 304** P **P** **03 08 56.1 0.0**
**R58B Mineral 77.81 314** P **P** **03 08 56.8 +0.6**
**L59A Walton 77.90 319** P **P** **03 08 57.0 +0.3**
L59A IAmb IAmb 03 08 58.7
comp=Z,30nm,1.0s
**LMQ La Malbaie 77.92 325** P **P** **03 08 56.4 -0.2**
**KSPA Keystone Colle 78.06 318** P **P** **03 08 57.5 -0.1**
KSPA IAmb IAmb 03 08 60.0
comp=Z,48nm,1.4s
**W57A Gilead 78.10 310** P **P** **03 08 57.7 -0.2**
W57A IAmb IAmb 03 08 59.7
comp=Z,31nm,1.4s
**J59A Piesco 78.20 320** P **P** **03 08 58.3 -0.1**
J59A IAmb IAmb 03 09 00.4
comp=Z,36nm,1.3s
**BIRD Birdtown, Kers 78.24 310** P **P** **03 08 59.2 +0.5**
BIRD IAmb IAmb 03 09 00.7
comp=Z,19nm,0.9s
**NCB Newcomb 78.28 321** P **P** **03 08 58.5 -0.3**
**N58A Sunbury 78.34 317** P **P** **03 08 58.9 -0.2**
N58A IAmb IAmb 03 09 00.8
comp=Z,21nm,1.0s
**T57A Hurt 78.36 312** P **P** **03 08 59.5 +0.2**
**S57A Dark Hollow, R 78.48 313** P **P** **03 09 00.8 +0.8**
**BINY Binghamton 78.52 318** P **P** **03 09 00.7 +0.6**
**P57A Homestead Farm 78.59 315** P **P** **03 09 00.8 +0.3**
P57A IAmb IAmb 03 09 02.8
comp=Z,22nm,1.0s
**UOSS Minazif 78.61 61** P **P** **03 09 01.2 +0.2**
UOSS IAmb IAmb 03 09 03.1
comp=Z,19nm,0.8s
**J58A Remsen 78.64 320** P **P** **03 09 00.4 -0.3**
**LDAQ Lac Daran 78.67 325** P **P** **03 09 01.4 +0.5**
**255A Hazlehurst 78.69 307** P **P** **03 09 01.4 +0.1**
255A IAmb IAmb 03 09 03.6
comp=Z,50nm,1.3s
**JSC Jenkinsville 78.69 309** P **P** **03 09 01.7 +0.5**
JSC IAmb IAmb 03 09 03.4
comp=Z,27nm,1.0s
**JSC Jenkinsville 78.69 309** P **P** **03 09 01.7 +0.5**
JSC pmax pmax
comp=Z,27nm,1.0s
**VSU Vasula 78.70 21**⇓*eP* **P** **03 09 00.6 0.0**
VSU pmax pmax
comp=Z,78nm,2.7s
**MTO3 Montecristo 78.80 288** P **P** **03 09 01.5 -1.0**
**LONY Lake Ozonia 78.84 321** P **P** **03 09 01.4 -0.4**
**M57A Sunshine Farm, 78.85 317** P **P** **03 09 02.3 +0.3**
**U56A King 78.90 311** P **P** **03 09 02.5 +0.2**
U56A IAmb IAmb 03 09 04.7
comp=Z,33nm,1.1s
**SSPA Standing Stone 79.03 316** P **P** **03 09 03.0 0.0**
**VSR Storozhevoye 79.06 31** *eP* **P** **03 09 01.0 -1.8**
VSR pmax pmax
comp=Z,10.0nm,0.8s
**KMSC Kings Mountain 79.10 310** P **P** **03 09 03.9 +0.5**
KMSC IAmb IAmb 03 09 05.6
comp=Z,32nm,1.1s
**J57A Williamstown 79.12 319** P **P** **03 09 03.2 -0.1**
**K57A Scipio Center 79.12 319** P **P** **03 09 04.2 +0.8**
**ARBE Arbavere 79.18 20** *eP* **P** **03 09 04.3 +1.0**
**Q56A Snyder Ridge, 79.21 314** P **P** **03 09 04.6 +0.6**
Q56A IAmb IAmb 03 09 06.3
comp=Z,30nm,0.9s
**BLA Blacksburg 79.29 312** P **P** **03 09 05.6 +1.1**
BLA IAmb IAmb 03 09 08.0
comp=Z,27nm,1.1s
**BLA Blacksburg 79.29 312** P **P** **03 09 05.6 +1.1**
BLA pmax pmax
comp=Z,27nm,1.1s
**V55A Taylorsville 79.30 311** P **P** **03 09 04.1 -0.5**

**VORR Voronezh 79.35 31** *eP* **P** **03 09 01.5 -2.9**
VORR pmax pmax
comp=Z,40nm,0.4s
**TIGA Tifton 79.38 306** IAmb IAmb 03 09 07.4
comp=Z,51nm,1.1s
**MAK Makhachkala 79.40 41** *eP* **P** **03 09 01.9 -3.0**
MAK *eS* **S** **03 18 59.8 -5.5**
MAK pmax pmax
comp=Z,231nm,1.2s
**154A Montrose 79.45 307** IAmb IAmb 03 09 08.9
comp=Z,48nm,1.0s
**WBO Williamsburg 79.45 321** P **P** **03 09 05.8 +0.6**
**L56A Greenwood 79.52 318** IAmb IAmb 03 09 07.2
comp=Z,32nm,1.0s
**TEIG Tepich 79.53 294** P **P** **03 09 05.6 -0.4**
TEIG IAmb IAmb 03 09 06.9
comp=Z,41nm,1.4s
**TEIG Tepich 79.53 294** LR LR 03 47 01.9
comp=Z,74nm,18.3s,baz=57,slow=38
**J56A Wolcott 79.60 319** P **P** **03 09 06.1 +0.1**
J56A IAmb IAmb 03 09 08.8
comp=Z,28nm,0.9s
**TRQ Mont Tremblant 79.64 322** IAmb IAmb 03 09 13.9
comp=Z,35nm,1.2s
**LPSR Galich'ya Gora 79.77 30** *eP* **P** **03 09 05.2 -1.5**
LPSR pmax pmax
comp=Z,20nm,0.8s
**MCWV Mont Chateau 79.94 315** P **P** **03 09 07.6 -0.3**
**APG El Apazote 80.00 288** LR LR 03 46 03.9
comp=Z,20nm,18.8s,baz=87,slow=37
**PECO Prince Edward 80.00 319** P **P** **03 09 07.6 -0.6**
**MMNY Mt. Morris Dam 80.02 318** P **P** **03 09 08.2 -0.1**
**U54A Nelsons Funny 80.02 311** P **P** **03 09 09.1 +0.5**
U54A IAmb IAmb 03 09 10.9
comp=Z,40nm,1.0s
**GOGA Godfrey 80.03 308** P **P** **03 09 09.1 +0.5**
**GOGA Godfrey 80.03 308** P **P** **03 09 09.1 +0.5**
GOGA pmax pmax
comp=Z,7.0nm,1.0s
**WSAR Wadi Sarin 80.14 63** LR LR 03 43 33.9
comp=Z,547nm,18.9s,baz=248,slow=35
**S54A Dingess, Beckl 80.18 312** P **P** **03 09 09.5 +0.2**
S54A IAmb IAmb 03 09 11.2
comp=Z,22nm,0.8s
**J55A Hilton 80.21 319** P **P** **03 09 09.3 0.0**
**BG3 Lake Jocassee 80.24 309** P **P** **03 09 10.5 +0.8**
BG3 IAmb IAmb 03 09 12.8
comp=Z,56nm,1.3s
**OBN Obninsk 80.24 27** LR LR 03 46 03.8
comp=Z,338nm,19.4s,baz=184,slow=37
**OBN Obninsk 80.24 27**⇑*eP* **P** **03 09 07.8 -1.3**
OBN *e* 03 12 13.8
OBN pmax pmax
comp=Z,25nm,1.6s
OBN MLR MLR
comp=Z,344nm,20.0s
**WVNY West Valley, N 80.33 318** P **P** **03 09 10.3 +0.4**
WVNY IAmb IAmb 03 09 11.7
comp=Z,31nm,1.1s
**VRH Novokhopyorsk 80.36 32** *eP* **P** **03 09 08.8 -1.1**
VRH pmax pmax
comp=Z,10.0nm,0.7s
**V53A Saluda 80.42 310** P **P** **03 09 10.9 +0.2**
**352A Blakely 80.46 305** P **P** **03 09 11.5 +0.6**
**SCHQ Scheffer ville 80.50 332** P **P** **03 09 11.2 +0.5**
comp=Z,5.3nm,0.7s,baz=111,slow=4.5,SNR=6.3
SCHQ LR LR 03 38 44.1
comp=Z,164nm,21.7s,baz=166,slow=31
comp=Z,5.3nm,0.7s
**O54A Avella 80.53 315** P **P** **03 09 10.6 -0.6**
O54A IAmb IAmb 03 09 13.0
comp=Z,20nm,0.9s
**Y52A Lilburn 80.67 308** P **P** **03 09 10.7 -1.3**
Y52A IAmb IAmb 03 09 14.1
comp=Z,32nm,1.0s
**FINES FINESS Array B 80.75 19** P **P** **03 09 11.8 0.0**
comp=Z,7.5nm,0.7s,baz=211,slow=4.3,SNR=18
FINES LR LR 03 46 38.0
comp=Z,267nm,18.1s,baz=217,slow=37
comp=Z,7.5nm,0.7s
**PUL Pulkovo 80.92 21**⇑*eP* **P** **03 09 14.3 +1.6**
PUL pmax pmax
comp=Z,52nm,0.5s
**P53A Whipple 80.94 314** IAmb IAmb 03 09 15.0
comp=Z,20nm,0.9s
**KEF Keuruu 80.95 18** *eP* **P** **03 09 13.1 +0.3**
**ALLY Alegheny Colle 81.01 316** IAmb IAmb 03 09 15.5
comp=Z,46nm,0.9s
**VAF Ylistaro 81.02 16** *eP* **P** **03 09 14.0 +0.9**
**W52A Murphy 81.03 309** IAmb IAmb 03 09 15.8
comp=Z,32nm,1.0s
**MOS Moscow 81.10 27** *eP* **P** **03 09 13.1 -0.6**
**ERPA Erie 81.11 317** IAmb IAmb 03 09 15.7
comp=Z,43nm,0.9s
**N53A Lisbon 81.12 315** IAmb IAmb 03 09 16.3
comp=Z,37nm,1.0s
**TKL Tuckaleechee C 81.13 310** IAmb IAmb 03 09 17.2
comp=Z,33nm,1.2s
**TKL Tuckaleechee C 81.13 310** LR LR 03 37 43.4
comp=Z,266nm,21.4s,baz=134,slow=30
**O53A New Philadelph 81.14 315** IAmb IAmb 03 09 16.4
comp=Z,41nm,0.9s
**Q52A Bidwell 81.34 313** IAmb IAmb 03 09 17.2
comp=Z,42nm,0.9s
**O52A Adamsville 81.52 314** IAmb IAmb 03 09 18.4
comp=Z,41nm,0.9s
**P52A Corning 81.52 314** IAmb IAmb 03 09 18.1
comp=Z,32nm,0.9s
**X51A Calhoun 81.54 308** IAmb IAmb 03 09 18.3
comp=Z,22nm,1.1s
**SADO Sadowa 81.76 319** IAmb IAmb 03 09 19.2
comp=Z,54nm,1.4s
**SADO Sadowa 81.76 319** LR LR 03 38 34.0
comp=Z,172nm,19.6s,baz=68,slow=30
**S51A Beattyville 81.77 312** IAmb IAmb 03 09 19.7
comp=Z,20nm,0.9s
**M52A Chesterland 81.79 316** IAmb IAmb 03 09 19.4
comp=Z,21nm,0.9s
**CCIG Comitan 81.90 289** IAmb IAmb 03 09 21.2
comp=Z,38nm,1.0s
**N51A Ashland 82.22 315** IAmb IAmb 03 09 21.8
comp=Z,24nm,0.9s
**VLDQ Val d'Or 82.30 323** IAmb IAmb 03 09 22.0
comp=Z,15nm,0.9s
**ACSO Alum Creek Sta 82.36 314** IAmb IAmb 03 09 22.4
comp=Z,27nm,0.9s
**Y49A Blount Mountai 82.48 307** IAmb IAmb 03 09 22.7
comp=Z,19nm,0.8s
**DY2G Dye2 82.52 348** *i* P **P** **03 09 21.6 +0.3**
DY2G IAmb IAmb 03 09 28.4
comp=Z,161nm,2.0s
**SWET Sewanee 82.60 309** IAmb IAmb 03 09 23.2
comp=Z,18nm,0.9s
**LRAL Lakeview Retre 82.65 306** IAmb IAmb 03 09 24.8
comp=Z,31nm,1.1s
**X48A Hartselle 83.18 308** IAmb IAmb 03 09 26.3
comp=Z,24nm,1.0s
**CLTN Cedars of Leba 83.22 309** IAmb IAmb 03 09 26.4
comp=Z,16nm,1.0s
**O49A Covington 83.30 314** IAmb IAmb 03 09 26.8
comp=Z,23nm,0.8s
**P49A Miami Univ. Ec 83.31 313** IAmb IAmb 03 09 26.7
comp=Z,24nm,1.1s
**V48A Smith Brothers 83.47 309** IAmb IAmb 03 09 27.7
comp=Z,27nm,0.9s
**N49A Columbus Grove 83.48 314** IAmb IAmb 03 09 27.6
comp=Z,12nm,0.8s
**JOF Joensuu 83.50 19** *eP* **P** **03 09 26.1 -0.1**
**JMIC Jan Mayen 83.78 2** LR LR 03 41 45.0
comp=Z,41nm,21.9s,baz=207,slow=32
**P48A Milroy 83.80 313** IAmb IAmb 03 09 28.7
comp=Z,23nm,0.8s
**SFJD Kangerlussuaq 83.90 347** LR LR 03 40 01.1
comp=Z,150nm,19.6s,baz=131,slow=31
**WCI Wyandotte Cave 83.97 311** P **P** **03 09 29.3 +0.1**
WCI IAmb IAmb 03 09 29.9
comp=Z,16nm,0.8s
**WCI Wyandotte Cave 83.97 311** P **P** **03 09 29.3 +0.1**
WCI pmax pmax
comp=Z,16nm,0.8s
**L48A N Adams 84.05 315** IAmb IAmb 03 09 29.9
comp=Z,18nm,0.8s
**BELG Belogornoye 84.09 33** LR LR 03 49 35.5
comp=Z,134nm,18.7s,baz=269,slow=38
**BELG Belogornoye 84.09 33** *eP* **P** **03 09 29.7 +0.3**
BELG pmax pmax
comp=Z,4.0nm,0.9s

**T47A Sharon Grove 84.12 310** IAmb IAmb 03 09 30.8
comp=Z,17nm,0.9s
**PLAL Pickwick Lake 84.16 308** IAmb IAmb 03 09 30.8
comp=Z,23nm,0.9s
**WVT Waverly 84.37 309** P **P** **03 09 30.8 -0.4**
WVT IAmb IAmb 03 09 31.9
comp=Z,29nm,0.9s
**WVT Waverly 84.37 309** P **P** **03 09 30.8 -0.4**
WVT pmax pmax
comp=Z,29nm,1.0s
**BLO Bloomington 84.48 312** IAmb IAmb 03 09 31.8
comp=Z,15nm,1.0s
**N47A Urbana 84.52 314** IAmb IAmb 03 09 32.5
comp=Z,24nm,0.8s
**CMIG Matias Romero 84.65 289** LR LR 03 49 31.8
comp=Z,44nm,18.4s,baz=122,slow=37
**USIN University of 84.88 311** IAmb IAmb 03 09 35.4
comp=Z,33nm,1.2s
**P46A Rosedale 85.13 312** IAmb IAmb 03 09 35.1
comp=Z,22nm,0.8s
**L46A Eue Claire 85.36 315** IAmb IAmb 03 09 37.8
comp=Z,15nm,1.0s
**S44A Carbondale 85.97 310** IAmb IAmb 03 09 39.7
comp=Z,24nm,0.9s
**CGM3 Cape Girardeau 86.14 309** IAmb IAmb 03 09 41.0
comp=Z,21nm,1.1s
**PBMO Poplar Bluff 86.56 309** IAmb IAmb 03 09 42.2
comp=Z,18nm,0.8s
**SUMG Summit 86.71 353** IAmb IAmb 03 09 51.0
comp=Z,27nm,1.5s
**SUMG Summit 86.71 353** *i* P **P** **03 09 44.2 +1.6**
SUMG IAmb IAmb 03 09 46.5
comp=Z,5.9nm,0.6s
**FRB Frobisher Bay 86.74 339** LR LR 03 41 45.6
comp=Z,78nm,18.9s,baz=167,slow=31
**ARCES ARCESS Array B 86.87 13** P **P** **03 09 43.4 +0.5**
comp=Z,6.0nm,0.8s,baz=230,slow=3.0,SNR=7.8
ARCES LR LR 03 49 41.1
comp=Z,212nm,18.8s,baz=214,slow=36
comp=Z,6.0nm,0.8s
**LCAR Lake Charles 86.89 308** IAmb IAmb 03 09 45.5
comp=Z,22nm,1.3s
**HDIL Hopedale 86.96 313** IAmb IAmb 03 09 44.1
comp=Z,24nm,0.8s
**H43A Windswept, Lux 87.26 317** IAmb IAmb 03 09 46.4
comp=Z,18nm,0.9s
**UALR University of 87.42 306** IAmb IAmb 03 09 47.1
comp=Z,16nm,1.1s
**WHAR Wooly Hollow 87.53 307** IAmb IAmb 03 09 47.5
comp=Z,23nm,1.0s
**CCM Cathedral Cave 87.58 310** P **P** **03 09 47.1 0.0**
**CCM Cathedral Cave 87.58 310** P **P** **03 09 47.1 0.0**
CCM pmax pmax
comp=Z,42nm,1.0s
**F42A Maple Grove Fa 87.96 318** IAmb IAmb 03 09 49.7
comp=Z,19nm,0.8s
**KIRV Kirov 88.02 28** LR LR 03 50 58.4
comp=Z,284nm,19.8s,baz=241,slow=37
**KIRV Kirov 88.02 28**⇑*eP* **P** **03 09 46.8 -1.8**
**MGMO Mountain Grove 88.08 309** IAmb IAmb 03 09 50.3
comp=Z,11nm,0.9s
**TLIG Tlapa 88.17 288** IAmb IAmb 03 09 53.1
comp=Z,25nm,1.3s
**RPN Rapa Nui 88.31 243** LR LR 03 44 23.8
comp=Z,191nm,19.9s,baz=79,slow=32
**JFWS Jewell Farm 88.42 315** IAmb IAmb 03 09 51.6
comp=Z,20nm,0.8s
**R40A Maddies Statio 88.42 310** IAmb IAmb 03 09 52.0
comp=Z,15nm,0.9s
**P40A Paris 88.63 311** IAmb IAmb 03 09 55.0
comp=Z,13nm,1.1s
**COWI Conover 88.73 318** IAmb IAmb 03 09 53.0
comp=Z,16nm,0.9s
**HKT Hockley 88.89 301** P **P** **03 09 54.3 +0.9**
HKT IAmb IAmb 03 09 55.2
comp=Z,13nm,1.1s
**HKT Hockley 88.89 301***c* *i*P **P** **03 09 53.8 +0.4**
HKT pmax pmax
comp=Z,15nm,1.1s
**HHAR Hobbs 89.10 307** IAmb IAmb 03 09 55.6
comp=Z,33nm,1.2s
**AKTO Aktyubinsk 89.11 38** LR LR 03 51 35.5
comp=Z,142nm,22.0s,baz=205,slow=37
**237A Washetta, Mont 89.41 303** IAmb IAmb 03 09 57.2
comp=Z,15nm,0.8s
**SBA Scott Base 89.42 180** P **P** **03 09 57.1 +2.0**
**SBA Scott Base 89.42 180** P **P** **03 09 57.1 +2.0**
SBA pmax pmax
comp=Z,32nm,1.1s
**U38A Gravette 89.49 307** IAmb IAmb 03 09 57.0
comp=Z,28nm,1.2s
**DAG Danmarks Havn 89.53 359** *i* P **P** **03 09 56.0 +0.6**
DAG IAmb IAmb 03 10 03.4
comp=Z,62nm,1.8s
**VNDA Vanda 89.73 179** P **P** **03 09 58.8 +2.2**
**VNDA Vanda 89.73 179** P **P** **03 09 57.5 +0.9**
comp=Z,3.6nm,1.0s,baz=192,slow=3.6,SNR=19
VNDA LR LR 03 43 55.7
comp=Z,153nm,20.3s,baz=187,slow=31
comp=Z,3.6nm,1.0s
**VNDA Vanda 89.73 179** P **P** **03 09 58.8 +2.2**
VNDA pmax pmax
comp=Z,8.0nm,1.1s
**TREL Terrell 89.83 304** IAmb IAmb 03 10 00.1
comp=Z,24nm,0.9s
**ABKAR Akbulak array 89.86 39** P **P** **03 09 57.7 +0.1**
**ABKAR Akbulak array 89.86 39** IAmb IAmb 03 09 59.0
comp=Z,5.6nm,0.8s
**RLO Rose Lookout 89.91 307** IAmb IAmb 03 09 59.5
comp=Z,27nm,1.3s
**SCIA State Center 90.19 313** IAmb IAmb 03 10 01.8
comp=Z,18nm,0.8s
**TUL3 Leonard 90.44 307** IAmb IAmb 03 10 02.0
comp=Z,16nm,1.1s
**HBVL Hebbronville 90.57 298** IAmb IAmb 03 10 03.8
comp=Z,32nm,1.3s
**JRQG Juriquilla Cam 90.64 291** IAmb IAmb 03 10 05.1
comp=Z,18nm,1.3s
**FW13 Cleburne 90.83 303** IAmb IAmb 03 10 03.5
comp=Z,25nm,1.1s
**I37A Lemond, Waseca 90.94 315** IAmb IAmb 03 10 04.4
comp=Z,32nm,1.3s
**FW06 Azle 91.09 303** IAmb IAmb 03 10 04.7
comp=Z,18nm,1.0s
**833A Chaparral WMA, 91.49 299** IAmb IAmb 03 10 07.8
comp=Z,19nm,1.1s
**FW03 Perrin-Whitt E 91.52 303** IAmb IAmb 03 10 06.8
comp=Z,20nm,0.9s
**FNO Franklin 91.54 306** IAmb IAmb 03 10 07.5
comp=Z,14nm,1.2s
**ARU Arti 91.59 32** P **P** **03 10 05.8 +0.3**
**ARU Arti 91.59 32** LR LR 03 51 27.4
comp=Z,75nm,21.4s,baz=249,slow=36
**ARU Arti 91.59 32***d* *i*P **P** **03 10 06.1 +0.6**
ARU 03 13 44.0
ARU S **SKSac** **03 20 38.9 +1.6**
ARU SS **SS** **03 27 05.6 -6.2**
ARU pmax pmax
comp=Z,9.0nm,0.9s
**ARU Arti 91.59 32** P **P** **03 10 04.7 -0.8**
comp=Z,13nm,0.9s
**N35A Tabor 91.65 311** IAmb IAmb 03 10 07.0
comp=Z,16nm,0.8s
**HNDO Hondo 91.68 300** IAmb IAmb 03 10 08.3
comp=Z,24nm,1.0s
**X34A Smith Ranch, M 91.72 305** IAmb IAmb 03 10 08.0
comp=Z,23nm,1.1s
**ABTX Abilene, Hawle 92.71 303** IAmb IAmb 03 10 12.8
comp=Z,16nm,0.9s
**DRIO Del Rio 92.79 299** IAmb IAmb 03 10 13.4
comp=Z,16nm,1.2s
**SVE Sverdlovsk 92.81 32** *eP* **P** **03 10 11.9 +0.8**
**ZAIG Zacatecas 93.03 293** IAmb IAmb 03 10 15.7
comp=Z,12nm,1.0s
**ECSD EROS Data Cent 93.10 314** IAmb IAmb 03 10 13.7
comp=Z,13nm,0.8s
**APMT Aspermont 93.26 303** IAmb IAmb 03 10 16.8
comp=Z,23nm,1.1s
**R32A Long Quarter, 93.33 309** IAmb IAmb 03 10 16.3
comp=Z,19nm,1.0s
**AGMN Agassiz Nation 93.77 319** IAmb IAmb 03 10 23.3
comp=Z,12nm,1.1s
**SN05 Snyder 5 93.79 303** IAmb IAmb 03 10 18.9
comp=Z,26nm,1.3s
**SN07 Snyder 07 93.84 303** IAmb IAmb 03 10 18.9
comp=Z,10nm,1.0s
**DKNS Dickens 93.99 303** IAmb IAmb 03 10 18.6

comp=Z,17nm,0.9s
**SAND Sanderson 94.19 300** IAmb IAmb 03 10 19.1
comp=Z,8.6nm,0.9s
**ULM Lac du Bonnet 94.28 320** IAmb IAmb 03 10 19.0
comp=Z,13nm,1.1s
**ULM Lac du Bonnet 94.28 320** P **P** **03 10 17.9 -0.1**
comp=Z,6.3nm,0.9s,baz=96,slow=4.1,SNR=4.6
ULM LR LR 03 45 07.2
comp=Z,210nm,21.5s,baz=90,slow=31
comp=Z,6.3nm,0.9s
**ULM Lac du Bonnet 94.28 320** ‖ *e*P **P** **03 10 17.2 -0.8**
**POST Post 94.33 303** IAmb IAmb 03 10 20.4
comp=Z,23nm,1.2s
**ODSA Odessa 95.00 302** IAmb IAmb 03 10 22.8
comp=Z,21nm,1.1s
**MNHN Monahans 95.01 301** IAmb IAmb 03 10 23.0
comp=Z,16nm,0.9s
**TXAR Lajitas Array 95.37 299** P **P** **03 10 23.8 +0.1**
comp=Z,3.5nm,0.9s,baz=123,slow=7.5,SNR=33
TXAR PKKPbc **PKKPbc** **03 27 16.9 +0.1**
comp=Z,0.5nm,1.0s,baz=267,slow=2.5,SNR=3.4
TXAR LR LR 03 49 27.3
comp=Z,30nm,21.7s,baz=94,slow=33
comp=Z,3.5nm,0.9s
**PECS Pecos 95.95 301** IAmb IAmb 03 10 28.0
comp=Z,9.4nm,0.9s
**HPIG 96.63 296** IAmb IAmb 03 10 32.3
comp=Z,12nm,1.2s
**PALK Pallekele 96.77 84** LR LR 03 51 37.3
comp=Z,279nm,18.9s,baz=6.7,slow=34
**VHRN Van Horn 96.78 300** IAmb IAmb 03 10 32.8
comp=Z,16nm,1.1s
**BVAR Borovoye Array 97.22 37** PP **PP** **03 14 26.3 -1.6**
comp=Z,0.6nm,0.7s,baz=253,slow=10,SNR=3.8
BVAR LR LR 03 58 54.6
comp=Z,200nm,19.0s,baz=249,slow=38
**AAK Ala-Archa 97.97 48** LR LR 03 57 10.0
comp=Z,197nm,18.4s,baz=265,slow=37
**SDCO Great Sand Dun 98.44 307** IAmb IAmb 03 10 39.3
comp=Z,6.5nm,1.1s
**ANMO Albuquerque 98.73 304** Pdif 03 10 39.7 +0.8
ANMO IAmb IAmb 03 10 41.2
comp=Z,9.7nm,1.4s
**ANMO Albuquerque 98.73 304** LR LR 03 48 09.7
comp=Z,218nm,21.9s,baz=190,slow=31
**ANMO Albuquerque 98.73 304** *d iP* Pdif 03 10 39.7 +0.8
ANMO pmax pmax
comp=Z,4.0nm,1.4s
**N23A Red Feather La 99.29 310** IAmb IAmb 03 10 44.8
comp=Z,12nm,1.4s
**KURBB Kurchatov Arra 101.84 41** PP **PP** **03 14 58.2 -4.9**
comp=Z,0.6nm,0.8s,baz=269,slow=8.0,SNR=4.3
KURBB PKKPbc **PKKPbc** **03 26 56.0 -3.3**
comp=Z,0.4nm,0.8s,baz=88,slow=3.3,SNR=5.0
**PDAR Pinedale Array 102.21 311** PKKPbc PKKPbc 03 26 57.1 -1.2
comp=Z,0.4nm,0.8s,baz=194,slow=0.6,SNR=3.7
**ZALV Zalesovo Beam 105.87 37** PKKPbc PKKPbc 03 26 44.0 -3.3
comp=Z,0.5nm,0.3s,baz=120,slow=5.2,SNR=2.1
**WMQ Urumqi 107.68 48** Pdif **Pdif** **03 11 19.8 +1.5**
WMQ LR LR
comp=Z,160nm,23.5s
**NVAR Mina Array Bea 108.55 306** PKKPbc PKKPbc 03 26 38.0 -0.8
comp=Z,0.7nm,0.7s,baz=254,slow=5.5,SNR=6.0
**RKT Rikitea 111.52 239** *e*LR LR 03 48 36.4
comp=Z,994nm,29.8s
**CMAR Chiang Mai Arr 116.11 76** PKP **PKPdf** **03 15 42.3 -0.5**
comp=Z,1.5nm,0.4s,baz=256,slow=3.8,SNR=4.5
**ILAR Eielson Array 118.77 339** PKP **PKPdf** **03 15 45.4 -1.2**
comp=Z,0.2nm,0.8s,baz=322,slow=1.6,SNR=3.0
**PZH PanZhiHua 119.12 67** PKP **PKPdf** **03 15 48.5 -0.1**
**SONM Songino Array 120.17 42** PKP **PKPdf** **03 15 49.1 -0.8**
comp=Z,1.3nm,0.8s,baz=243,slow=2.2,SNR=6.5
**ULN Ulaanbaatar 120.59 42** ⇑ *i*PKIKP **PKiKP** **03 15 53.0 +2.1**
**CAPN Captain Cook N 122.71 336** **PKPdf** **03 15 52.7 -1.5**
**TBI Tubuai 122.98 231** *e*LR LR 03 53 59.1
comp=Z,1μm,23.0s
**BILL Bilibino 124.90 360** ⇓ *i*PKIKP **PKiKP** **03 16 02.9 +4.3**
BILL pmax pmax
comp=Z,10.0nm,1.2s
**HHC Hu-ho-hao-te 125.55 49** *e*PKP **PKPdf** **03 15 57.3 -3.2**
HHC PP **PP** **03 17 53.4 +1.6**
HHC LR LR
comp=Z,150nm,20.4s
HHC LR LR
comp=Z,200nm,18.2s
HHC LR LR
comp=Z,330nm,19.0s
**PPT2 Papeete2 126.18 237** *e*LR LR 03 55 25.7
comp=Z,259nm,25.5s
PPT2 *e*LR LR 03 55 28.9
comp=Z,323nm,24.2s
**HNS HongShan 128.79 52** ⇑ PKP **PKPdf** **03 16 06.9 +0.3**
HNS LR LR
comp=Z,180nm,21.5s
HNS LR LR
comp=Z,210nm,20.1s
HNS LR LR
comp=Z,270nm,20.1s
**SEY Seymchan 129.18 8** *e*PKIKP **PKPdf** **03 16 06.9 +0.3**
SEY pmax pmax
comp=Z,9.0nm,1.2s
**HEH HeiHe 131.57 32** *e*PKP **PKiKP** **03 16 12.8 +0.3**
**ASAR Alice Springs 132.39 140** PKP **PKPdf** **03 16 13.4 -0.6**
comp=Z,1.3nm,0.8s,baz=201,slow=1.8,SNR=8.7
**NJ2 Nanjing 133.39 58** *e*PKP **PKiKP** **03 16 16.4 -0.3**
**CN2 Changchun 133.98 40** *e*PKP **PKPdf** **03 16 12.7 -3.5**
**KLR Kul'dur 134.41 31** *i* PKIKP **PKPdf** **03 16 17.0 +0.1**
KLR pmax pmax
comp=Z,5.0nm,1.5s
**WRA Warramunga Arr 135.31 136** PKhKP PKPpre 03 16 09.0
comp=Z,0.4nm,0.8s,baz=240,slow=2.1,SNR=2.0
**USRK Ussuriysk Ar. 137.71 36** PKP **PKPdf** **03 16 22.1 -1.1**
comp=Z,1.5nm,0.7s,baz=274,slow=7.1,SNR=3.5
**KSRS Korea Array 138.62 47** PKhKP PKPpre 03 16 13.3
comp=Z,0.5nm,0.5s,baz=88,slow=24,SNR=2.3
KSRS PKP **PKPdf** **03 16 25.4 +0.4**
comp=Z,1.3nm,0.8s,baz=312,slow=4.1,SNR=5.3
**YSS Yuzh-Sakhalins 141.09 25** *e*PKIKP **PKPdf** **03 16 30.3 +1.1**
YSS pmax pmax
comp=Z,10.0nm,1.2s
**JTM Tenmabayashi 145.00 33** **PKPbc** **03 16 35.2 -0.4**
**ERM Erimo 145.15 30** ⇑ *i*PKIKP **PKiKP** **03 16 42.3 +1.9**
**DZM Mont Dzumac 145.24 182** *e*LR LR 04 04 15.8
comp=Z,127nm,25.0s
**COEN Coen 145.43 140** **PKPbc** **03 16 38.0 +0.3**
**JGF Kuroka 146.11 43** PKPdf **PKPdf** **03 16 38.8 +0.3**
**MAJO Matsushiro 146.12 41** PKPdf **PKPdf** **03 16 38.6 +0.2**
**MAJO Matsushiro 146.12 41** *de*PKP2 **PKPdf** **03 16 38.5 +0.1**
**MJAR Matsushiro Arr 146.12 41** PKPbc **PKPdf** **03 16 38.8 +0.4**
comp=Z,14nm,1.0s,baz=316,slow=3.3,SNR=28
**KOUNC Koumac, New Ca 146.75 178** **PKPdf** **03 16 40.8 +0.9**

*BEO* **12** *03:15:27.5±0.7,41.°60N×20.°30E,h1km±8km,ML1.8/4*
*SKO* **12** *03:15:27.3,41.°48N×19.°90E,h7km,ML1.8*
*PDG* **12** *03:15:27.3±0.1,41.°61N×20.°22E,h12km,ML2.3/11,Error ellipse: s-maj=0.1km s-min=0.2km az=0.0*
*TIR* **12** *03:15:27.0,41.°63N×20.°16E,h19km±1km,Ml2.1*
**ISC 12 03:15:26.9**±1.1,**41.°61N**±0.°02×**20.°19E**±0.°03,**h6**km±10km,
**n28,σ1s16/52,3C-1D,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.36** | **223** | P | | **Pb** | **03 15 35.0** | **-0.8** |
| | baz=219 | | | | | | | |
| TIR | | | | S | | **Sb** | **03 15 40.7** | **-1.0** |
| | baz=219 | | | | | | | |
| TIR | | | | AMP | | | | |
| | comp=N,0.3nm,0.3s,baz=219 | | | | | | | |
| **TIR** | **Tirane** | **0.36** | **223** | *e*Pg | | **Pg** | **03 15 34.7** | **+0.7** |
| TIR | | | | *e*Sg | | **Sb** | **03 15 40.6** | **-1.1** |
| **PUK** | **Puka** | **0.48** | **333** | P | | **Pb** | **03 15 37.5** | **-0.4** |
| | baz=334 | | | | | | | |
| PUK | | | | S | | **Sb** | **03 15 44.3** | **-1.0** |
| | baz=334 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=E,1.4nm,0.4s,baz=334 | | | | | | | |
| **OHR** | **Ohrid** | **0.68** | **138** | *i* Pg | | **Pb** | **03 15 41.3** | **+0.1** |
| OHR | | | | *e*Sg | | **Sn** | **03 15 52.8** | **-1.2** |
| OHR | | | | *e*Lg | | Lg | 03 15 53.5 | |
| | comp=N,29nm,0.4s | | | | | | | |
| OHR | | | | *e*Lg | | Lg | 03 15 53.8 | |
| | comp=E,25nm,0.6s | | | | | | | |
| **BCI** | **Bajram Curri** | **0.76** | **353** | P | | **Pg** | **03 15 41.4** | **-0.1** |
| | baz=355 | | | | | | | |
| BCI | | | | S | | **Sb** | **03 15 52.5** | **-0.6** |
| | baz=355 | | | | | | | |
| BCI | | | | AMP | | | | |
| | comp=N,0.4nm,0.6s,baz=355 | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.94** | **308** | *e*Pg | | **Pb** | **03 15 45.2** | **-0.5** |
| DRME | | | | *i* Sg | | **Sn** | **03 16 00.5** | **0.0** |
| **PVY** | **Plav** | **0.99** | **350** | ⇑ *i*Pg | | **Pb** | **03 15 46.0** | **-0.6** |
| PVY | | | | *i* Sg | | **Sn** | **03 16 01.7** | **-0.3** |
| **PDG** | **Podgorica** | **1.07** | **320** | *e*Pg | | **Pn** | **03 15 47.7** | **-0.8** |
| PDG | | | | *e*Sg | | **Sn** | **03 16 04.4** | **+0.7** |
| **PDG** | **Podgorica** | **1.07** | **320** | *e*Pg | | **Pb** | **03 15 47.5** | **-0.4** |
| PDG | | | | *i* Sg | | **Sn** | **03 16 04.7** | **+1.0** |
| **BUM** | **Brajici-Budva** | **1.19** | **306** | *e*Pg | | **Pn** | **03 15 49.7** | **-0.4** |
| BUM | | | | *i* Sg | | **Sn** | **03 16 08.7** | **+2.1** |
| **FNA** | **Florina** | **1.22** | **132** | P | | **Pg** | **03 15 50.8** | **+0.5** |
| | baz=132 | | | | | | | |
| FNA | | | | S | | **Sn** | **03 16 08.7** | **+1.3** |
| | baz=132 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=E,0.1nm,0.3s,baz=132 | | | | | | | |
| **FNA** | **Florina** | **1.22** | **132** | P | | **Pg** | **03 15 50.8** | **+0.5** |
| | baz=132 | | | | | | | |
| FNA | | | | S | | **Sn** | **03 16 08.7** | **+1.3** |
| | baz=132 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=N,0.1nm,0.5s,baz=132 | | | | | | | |
| **FNA** | **Florina** | **1.22** | **132** | *i* Pg | | **Pg** | **03 15 50.9** | **+0.6** |
| FNA | | | | *e*Sg | | **Sn** | **03 16 08.3** | **+1.0** |
| **BEY** | **Berane** | **1.28** | **350** | *i* Pg | | **Pg** | **03 15 52.0** | **+0.6** |
| **IVA** | **Berane** | **1.28** | **350** | *e*Pg | | **Pg** | **03 15 51.1** | **-0.3** |
| IVA | | | | *i* Sg | | **Sn** | **03 16 11.5** | **+2.7** |
| **CEME** | **Cevo** | **1.33** | **315** | *e*Pg | | **Pg** | **03 15 52.2** | **-0.2** |
| CEME | | | | *i* Sg | | **Sn** | **03 16 13.4** | **+3.3** |
| **KOME** | **Kolasin** | **1.33** | **338** | ⇑ *i*Pg | | **Pg** | **03 15 52.2** | **-0.3** |
| KOME | | | | *i* Sg | | **Sn** | **03 16 13.3** | **+3.0** |
| **NKME** | **Niksic** | **1.48** | **322** | ⇑ *i*Pg | | **Pg** | **03 15 54.9** | **-0.3** |
| NKME | | | | *i* Sg | | **Sg** | **03 16 17.3** | **+3.0** |
| **SJES** | **Sjenica** | **1.65** | **354** | *e*Pg | | **Pg** | **03 15 58.5** | **-0.1** |
| SJES | | | | *e*Sg | | **Sg** | **03 16 19.8** | **-0.3** |
| **BARS** | **Barje** | **1.70** | **45** | *e*Pn | | **Pg** | **03 16 00.7** | **+1.2** |
| **SRN** | **Sarande** | **1.74** | **185** | P | | **Pg** | **03 16 00.1** | **-0.1** |
| | baz=185 | | | | | | | |
| SRN | | | | S | | **Sg** | **03 16 24.1** | **+1.3** |
| | baz=185 | | | | | | | |
| **SELS** | **Selova** | **1.75** | **23** | *e*Pg | | **Pb** | **03 15 59.2** | **-0.2** |
| SELS | | | | *e*Sg | | **Sg** | **03 16 22.3** | **-0.7** |
| **BRY** | **Bratogost** | **1.78** | **317** | *e*Pn | | **Pb** | **03 15 59.3** | **-0.7** |
| BRY | | | | *i* Sn | | **Sg** | **03 16 24.6** | **+0.5** |
| **PLE** | **Pljevlja** | **1.81** | **341** | ‖ *i*Pn | | **Pb** | **03 15 59.7** | **-0.9** |
| PLE | | | | *i* Sn | | **Sg** | **03 16 25.3** | **+0.1** |
| **UPM** | **Unac-Piva** | **1.85** | **329** | *e*Pn | | **Pb** | **03 16 00.2** | **-1.1** |
| UPM | | | | *i* Sn | | **Sg** | **03 16 26.3** | **-0.1** |
| **PEHC** | **Pehcevo** | **2.04** | **84** | *e*Pn | | **Pg** | **03 16 05.5** | **-0.4** |
| PEHC | | | | *e*Lg | | Lg | 03 16 39.6 | |
| | comp=E,8.6nm,0.8s | | | | | | | |
| PEHC | | | | *e*Lg | | Lg | 03 16 42.5 | |
| | comp=N,9.4nm,0.8s | | | | | | | |
| **IGT** | **Igoumenitsa** | **2.08** | **177** | P | | **Pb** | **03 16 03.9** | **-1.2** |
| | baz=176 | | | | | | | |

*SKHL* **12** *03:17:45.4±0.3,48.°20N×155.°60E,h56km±2km,mb4.4/4*
*KRSC* **12** *03:17:47.4±1.8,48.°45N×156.°18E,h40km±25km,Ml4.1*
**ISC 12 03:17:45.7**±2.3,**48.°2N**±0.°2×**155.°5E**±0.°2,**h35**km,**n18,**
**σ1s80/25,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **2.48** | **9** | *e*P | | **Pn** | **03 18 24.0** | **+0.5** |
| SKR | | | | *e*S | | **Sn** | **03 18 50.2** | **-2.3** |
| **SKR** | **Severo-Kuril's** | **2.48** | **9** | *e*P | | **Pn** | **03 18 23.5** | **0.0** |
| SKR | | | | AMB | AMB | | 03 18 26.3 | |
| | 50nm,0.3s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **03 18 52.3** | **-0.2** |
| SKR | | | | A | A | | 03 18 57.6 | |
| | 120nm,0.4s | | | | | | | |
| SKR | | | | A | A | | 03 18 57.6 | |
| | 200nm,0.4s | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.94** | **24** | *e*P | | **Pn** | **03 18 44.0** | **+0.4** |
| KDTR | | | | *e*S | | **Sn** | **03 19 27.8** | **-0.6** |
| **KDTR** | **Khodutka, Kamc** | **3.94** | **24** | *e*P | | **Pn** | **03 18 44.3** | **+0.8** |
| KDTR | | | | AMB | AMB | | 03 18 45.4 | |
| | 20nm,0.2s | | | | | | | |
| KDTR | | | | *e*S | | **Sn** | **03 19 28.3** | **-0.1** |
| KDTR | | | | A | A | | 03 19 32.5 | |
| | 90nm,0.4s | | | | | | | |
| KDTR | | | | A | A | | 03 19 32.5 | |
| | 50nm,0.4s | | | | | | | |
| **ASAK** | **Asacha** | **4.42** | **19** | *e*P | | **Pn** | **03 18 51.8** | **+1.6** |
| **MTVR** | **Mutnovka** | **4.58** | **21** | *e*P | | **Pn** | **03 18 53.4** | **+0.9** |
| **GRL** | **Gorelyy** | **4.62** | **20** | *e*P | | **Pn** | **03 18 54.5** | **+1.5** |
| GRL | | | | *e*S | | **Sn** | **03 19 44.1** | **-1.3** |
| **DALK** | **Dalny** | **5.22** | **22** | *e*P | | **Pn** | **03 19 02.3** | **+1.1** |
| **UGLR** | **Uglovaya** | **5.40** | **22** | *e*P | | **Pn** | **03 19 05.0** | **+1.3** |
| **AVH** | **Avacha** | **5.43** | **21** | *e*P | | **Pn** | **03 19 07.3** | **+3.1** |
| **KOK** | **Koryaka** | **5.43** | **20** | *e*P | | **Pn** | **03 19 06.2** | **+2.0** |
| **SMAR** | **Somma** | **5.45** | **21** | *e*P | | **Pn** | **03 19 07.1** | **+2.7** |
| **KRX** | **Arik** | **5.50** | **20** | *e*P | | **Pn** | **03 19 06.8** | **+1.7** |
| **SPN** | **Mys Shipunski** | **5.64** | **29** | *e*P | | **Pn** | **03 19 07.4** | **+0.5** |
| SPN | | | | *e*S | | **Sn** | **03 20 06.8** | **-3.6** |
| **GNL** | **Ganaly** | **5.68** | **15** | *e*P | | **Pn** | **03 19 09.3** | **+1.8** |
| **KUR** | **Kuril'sk** | **6.06** | **243** | *e*P | | **Pn** | **03 19 13.4** | **+0.7** |
| KUR | | | | AMB | AMB | | 03 19 15.6 | |
| | 20nm,0.6s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **03 20 19.6** | **-1.2** |
| KUR | | | | A | A | | 03 20 32.5 | |
| | 20nm,0.7s | | | | | | | |
| KUR | | | | A | A | | 03 20 32.5 | |
| | 50nm,0.7s | | | | | | | |
| **TUMD** | **Tumrok D** | **7.60** | **22** | *e*P | | **Pn** | **03 19 37.3** | **+3.4** |
| **TUMR** | **Tumrok** | **7.62** | **20** | *e*P | | **Pn** | **03 19 34.5** | **+0.4** |

*TIR* **12** *03:28:10.6,40.°10N×19.°87E,h14km±1km,Md2.7,Ml2.4*
*ATH* **12** *03:28:11.2,40.°12N×19.°79E,h5km±2km,ML2.3/10,Error ellipse: s-maj=2.3km s-min=1.1km az=170.0*
*BEO* **12** *03:28:12.8±1.0,40.°20N×19.°76E,h6km±4km,ML2.2/5*
**ISC 12 03:28:10.8**±1.2,**40.°12N**±0.°02×**19.°81E**±0.°03,**h1**km±10km,
**n39,σ0s92/61,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SRN** | **Sarande** | **0.28** | **149** | P | | **Pg** | **03 28 15.8** | **-0.4** |
| | baz=155 | | | | | | | |
| SRN | | | | S | | **Sg** | **03 28 20.1** | **+0.2** |
| | baz=155 | | | | | | | |
| SRN | | | | AMP | | | | |
| | comp=N,2.9nm,0.3s,baz=155 | | | | | | | |
| **KASA** | **Kassiopi** | **0.39** | **165** | P | | **Pg** | **03 28 18.0** | **-0.2** |
| KASA | | | | S | | **Sg** | **03 28 24.3** | **+1.0** |
| KASA | | | | AML | AML | | 03 28 24.6 | |
| | comp=E,1568μm,0.2s | | | | | | | |
| KASA | | | | AML | AML | | 03 28 25.3 | |
| | comp=N,1533μm,0.2s | | | | | | | |
| **KEK** | **Kerkira** | **0.41** | **181** | P | | **Pg** | **03 28 18.5** | **-0.1** |
| KEK | | | | S | | **Sg** | **03 28 25.5** | **+1.5** |
| KEK | | | | AML | AML | | 03 28 26.5 | |
| | comp=E,1674μm,0.1s | | | | | | | |
| KEK | | | | AML | AML | | 03 28 26.7 | |
| | comp=N,1144μm,0.2s | | | | | | | |
| **VLO** | **Vlora** | **0.42** | **325** | P | | **Pb** | **03 28 20.9** | **-0.1** |
| | baz=323 | | | | | | | |
| VLO | | | | S | | **Sb** | **03 28 28.2** | **+0.4** |
| | baz=323 | | | | | | | |
| VLO | | | | AMP | | | | |
| | comp=E,3.0nm,0.2s,baz=323 | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.72** | **145** | P | | **Pg** | **03 28 23.6** | **-0.8** |
| | baz=147 | | | | | | | |
| IGT | | | | S | | **Sg** | **03 28 34.7** | **+1.0** |
| | baz=147 | | | | | | | |
| IGT | | | | AMP | | | | |
| | comp=N,0.7nm,0.4s,baz=147 | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.72** | **145** | P | | **Pg** | **03 28 23.7** | **-0.8** |
| IGT | | | | S | | **Sg** | **03 28 34.3** | **+0.6** |
| IGT | | | | AML | AML | | 03 28 38.8 | |
| | comp=N,355μm,0.4s | | | | | | | |
| IGT | | | | AML | AML | | 03 28 42.8 | |
| | comp=E,301μm,0.4s | | | | | | | |
| **KBN** | **Korca** | **0.90** | **56** | P | | **Pg** | **03 28 26.4** | **-1.7** |
| | baz=52 | | | | | | | |
| KBN | | | | S | | **Sg** | **03 28 40.8** | **+1.1** |
| | baz=52 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=N,0.6nm,0.5s,baz=52 | | | | | | | |
| **JAN** | **Janina** | **0.93** | **120** | P | | **Pg** | **03 28 28.7** | **+0.2** |
| JAN | | | | S | | **Sg** | **03 28 41.8** | **+1.2** |
| JAN | | | | AML | AML | | 03 28 45.3 | |
| | comp=N,465μm,0.3s | | | | | | | |
| JAN | | | | AML | AML | | 03 28 47.2 | |
| | comp=E,743μm,0.3s | | | | | | | |
| **NEST** | **Nestorio** | **0.99** | **73** | P | | **Pg** | **03 28 29.1** | **-0.7** |
| NEST | | | | S | | **Sg** | **03 28 43.8** | **+1.1** |
| NEST | | | | AML | AML | | 03 28 47.1 | |
| | comp=E,195μm,0.4s | | | | | | | |
| NEST | | | | AML | AML | | 03 28 48.9 | |
| | comp=N,268μm,0.5s | | | | | | | |
| **PENT** | **Pentalofos** | **1.02** | **86** | P | | **Pg** | **03 28 29.3** | **-1.1** |
| PENT | | | | S | | **Sb** | **03 28 45.5** | **+0.2** |
| **SCTE** | **Santa Cesarea** | **1.03** | **268** | P | | **Pb** | **03 28 31.0** | **-0.4** |
| | baz=270 | | | | | | | |
| SCTE | | | | S | | **Sn** | **03 28 47.5** | **+0.1** |
| | baz=270 | | | | | | | |
| SCTE | | | | AMP | | | | |
| | comp=N,0.3nm,0.2s,baz=270 | | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.03** | **268** | P | | **Pg** | **03 28 30.3** | **-0.2** |
| SCTE | | | | AML | AML | | 03 28 48.9 | |
| | comp=N,151μm,0.3s | | | | | | | |
| SCTE | | | | AML | AML | | 03 28 49.9 | |
| | comp=E,192μm,0.3s | | | | | | | |
| **KPRO** | **Kipourio** | **1.21** | **98** | P | | **Pg** | **03 28 33.0** | **-0.9** |
| KPRO | | | | S | | **Sg** | **03 28 49.8** | **+0.3** |
| KPRO | | | | AML | AML | | 03 28 55.2 | |
| | comp=N,174μm,0.2s | | | | | | | |
| KPRO | | | | AML | AML | | 03 28 55.7 | |
| | comp=E,370μm,0.5s | | | | | | | |
| **TIR** | **Tirane** | **1.22** | **2** | P | | **Pg** | **03 28 34.0** | **-0.2** |
| | baz=0.0 | | | | | | | |
| TIR | | | | S | | **Sn** | **03 28 53.3** | **+1.1** |
| | baz=0.0 | | | | | | | |
| TIR | | | | AMP | | | | |
| | comp=E,0.2nm,0.3s,baz=0.0 | | | | | | | |
| **TIR** | **Tirane** | **1.22** | **2** | *e*Pg | | **Pg** | **03 28 34.6** | **+0.4** |
| TIR | | | | *e*Sg | | **Sg** | **03 28 48.5** | **-1.6** |
| **OHR** | **Ohrid** | **1.24** | **37** | *i* Pn | | **Pg** | **03 28 35.1** | **+0.5** |
| OHR | | | | *e*Sg | | **Sn** | **03 28 55.8** | **+3.1** |
| **FNA** | **Florina** | **1.37** | **61** | P | | **Pn** | **03 28 36.0** | **-1.1** |
| | baz=58 | | | | | | | |
| FNA | | | | S | | **Sn** | **03 28 55.7** | **-0.1** |
| | baz=58 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=N,0.2nm,0.4s,baz=58 | | | | | | | |
| **FNA** | **Florina** | **1.37** | **61** | *e*Pg | | **Pn** | **03 28 36.0** | **-1.1** |
| FNA | | | | *e*Sg | | **Sn** | **03 28 57.1** | **+1.3** |
| **FNA** | **Florina** | **1.37** | **61** | P | | **Pn** | **03 28 35.9** | **-1.1** |
| FNA | | | | AML | AML | | 03 29 00.4 | |
| | comp=N,291μm,0.6s | | | | | | | |
| FNA | | | | AML | AML | | 03 29 00.7 | |
| | comp=E,352μm,0.5s | | | | | | | |
| **TSLK** | **Tsoukalades, L** | **1.45** | **153** | P | | **Pn** | **03 28 37.6** | **-0.6** |
| TSLK | | | | AML | AML | | 03 29 01.0 | |
| | comp=E,216μm,0.5s | | | | | | | |
| TSLK | | | | AML | AML | | 03 29 03.6 | |
| | comp=N,221μm,0.4s | | | | | | | |
| **LKD2** | **Lefkada island** | **1.49** | **153** | P | | **Pn** | **03 28 38.0** | **-0.7** |
| | baz=154 | | | | | | | |
| LKD2 | | | | S | | **Sg** | **03 28 59.1** | **+0.6** |
| | baz=154 | | | | | | | |
| **LKD2** | **Lefkada island** | **1.49** | **153** | P | | **Pn** | **03 28 37.6** | **-1.1** |
| **KZN** | **Kozani** | **1.51** | **82** | P | | **Pn** | **03 28 38.7** | **-0.4** |
| **NYDR** | **Nydri-Lefkada** | **1.57** | **154** | P | | **Pn** | **03 28 38.7** | **-1.1** |
| **EVGI** | **Lefkada island** | **1.64** | **156** | P | | **Pn** | **03 28 40.1** | **-0.7** |
| **FSK** | **Fiskardo** | **1.76** | **160** | P | | **Pn** | **03 28 41.2** | **-1.2** |
| **THL** | **Klokotos Trika** | **1.79** | **108** | P | | **Pn** | **03 28 42.9** | **+0.1** |
| **TYRN** | **Tyrnavos** | **1.91** | **102** | P | | **Pn** | **03 28 44.7** | **+0.3** |
| TYRN | | | | AML | AML | | 03 29 13.9 | |
| | comp=N,135μm,0.5s | | | | | | | |
| TYRN | | | | AML | AML | | 03 29 15.3 | |
| | comp=E,122μm,0.5s | | | | | | | |
| **PUK** | **Puka** | **1.92** | **2** | P | | **Pn** | **03 28 44.8** | **+0.2** |
| | baz=0.0 | | | | | | | |
| PUK | | | | S | | **Sb** | **03 29 11.3** | **+0.2** |
| | baz=0.0 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=N,0.1nm,0.2s,baz=0.0 | | | | | | | |
| **VLS** | **Valsamata** | **2.04** | **162** | P | | **Pn** | **03 28 45.0** | **-1.3** |
| **AGG** | **Agios Georgios** | **2.24** | **119** | P | | **Pn** | **03 28 49.4** | **+0.3** |
| **ANX** | **Ano Chora** | **2.24** | **132** | P | | **Pn** | **03 28 48.8** | **-0.3** |
| **BCI** | **Bajram Curri** | **2.25** | **5** | P | | **Pn** | **03 28 48.3** | **-0.8** |
| | baz=3.0 | | | | | | | |
| **PDG** | **Podgorica** | **2.34** | **350** | *e*Pn | | **Pn** | **03 28 50.8** | **+0.4** |
| PDG | | | | *e*Sn | | **Sn** | **03 29 19.0** | **-0.8** |
| **KALE** | **Kalithea** | **2.50** | **133** | P | | **Pn** | **03 28 52.8** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **2.76** | **138** | P | | **Pn** | **03 28 56.3** | **0.0** |
| **GUR** | **Goura** | **2.94** | **137** | P | | **Pn** | **03 28 58.3** | **-0.4** |
| **SJES** | **Sjenica** | **3.14** | **2** | *e*Pn | | **Pn** | **03 29 02.3** | **+0.9** |
| SJES | | | | *e*Sn | | **Sn** | **03 29 38.0** | **-1.6** |
| **SELS** | **Selova** | **3.25** | **17** | *e*Pn | | **Pn** | **03 29 02.9** | **+0.1** |
| SELS | | | | *e*Sn | | **Sn** | **03 29 41.2** | **-0.9** |

*AEIC* **12** *03:29:00.3±2.0,56.°4N×0.°1×149.°3W±0.°1,h2km±8km,Error ellipse: s-maj=15.3km s-min=8.7km az=167.0*
**NEIC 12 03:28:54.2**±2.0,**56.°3N**±0.°1×**149.°22W**±0.°09,**h10**km±2km,
**ML2.9**/31,**ML2.8**(AEIC),**Error ellipse: s-maj=17.8km**
**s-min=8.1km az=172.0,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **2.38** | **311** | | | Pn | 03 29 34.1 | +0.8 |
| KDAK | | | | | | Sn | 03 29 59.6 | -3.0 |
| **OHAK** | **Old Harbor** | **2.44** | **295** | | | Pn | 03 29 33.9 | -0.1 |
| OHAK | | | | | | Sn | 03 30 00.3 | -3.4 |
| **SYI** | **Shuyak Island** | **2.91** | **325** | | | Pn | 03 29 41.0 | +0.5 |
| SYI | | | | | | Sn | 03 30 13.3 | -2.1 |
| **CNPM** | **China Poot** | **3.44** | **343** | | | Pn | 03 29 47.1 | -0.7 |
| CNPM | | | | | | Sn | 03 30 24.5 | -4.1 |
| CNPM | | | | | | IAML | 03 30 36.0 | |
| | comp=E,8.8nm,1.1s | | | | | | | |
| **Q23K** | **Middleton Isla** | **3.52** | **25** | | | Pn | 03 29 48.9 | 0.0 |
| **MID** | **Middleton Isla** | **3.52** | **25** | | | Pn | 03 29 48.6 | -0.3 |
| **Q19K** | **Cape Douglas,** | **3.57** | **320** | | | Pn | 03 29 51.9 | +2.2 |
| Q19K | | | | | | IAML | 03 31 53.1 | |
| | comp=N,56nm,1.1s | | | | | | | |
| **BRSE** | **Bradley Lake S** | **3.58** | **348** | | | Pn | 03 29 49.8 | +0.1 |
| BRSE | | | | | | Sn | 03 30 29.3 | -2.7 |
| **BRLK** | **Bradley Lake** | **3.62** | **347** | | | Pn | 03 29 49.4 | -0.9 |
| BRLK | | | | | | IAML | 03 30 55.2 | |
| | comp=E,12nm,1.2s | | | | | | | |
| BRLK | | | | | | IAML | 03 31 28.8 | |
| | comp=N,15nm,1.2s | | | | | | | |
| **PLK4** | **Peulik 4** | **4.14** | **292** | | | Pn | 03 29 58.0 | +0.5 |
| PLK4 | | | | | | IAML | 03 32 38.8 | |
| | comp=E,17nm,1.2s | | | | | | | |
| PLK4 | | | | | | IAML | 03 32 39.7 | |
| | comp=N,19nm,1.1s | | | | | | | |
| **KAIM** | **Kayak Island** | **4.47** | **33** | | | Pn | 03 30 02.5 | +0.6 |
| KAIM | | | | | | IAML | 03 31 17.3 | |
| | comp=E,45nm,1.2s | | | | | | | |
| **P18K** | **Big Mountain,** | **4.48** | **317** | | | Pn | 03 30 01.4 | -0.8 |
| P18K | | | | | | IAML | 03 30 58.6 | |
| | comp=N,7.4nm,1.2s | | | | | | | |
| **CAPN** | **Captain Cook N** | **4.62** | **348** | | | Pn | 03 30 03.8 | -0.3 |
| **PWL** | **Port Wells** | **4.63** | **5** | | | Pn | 03 30 03.8 | -0.3 |
| PWL | | | | | | IAML | 03 31 02.5 | |
| | comp=E,9.5nm,1.2s | | | | | | | |
| **RDT** | **Redoubt** | **4.63** | **340** | | | Pn | 03 30 04.7 | +0.4 |
| **GLI** | **Glacier Island** | **4.76** | **13** | | | Pn | 03 30 05.5 | -0.4 |
| **O18K** | **Koktuh Hills** | **4.80** | **321** | | | Pn | 03 30 06.9 | +0.4 |
| O18K | | | | | | IAML | 03 32 08.4 | |
| | comp=E,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **M24K** | **Tolsona, Glenn** | **6.06** | **14** | Pn | Pn | 03 30 25.0 | +1.1 |
| **S31K** | **Pelican** | **7.27** | **71** | Pn | Pn | 03 30 41.3 | +0.9 |

*JMA **12** 03:30:27.3±0.1, 42.4N±0.3×145.5E±0.8, h49km±1km, MV3.7/36, OFF NEMURO PENINSULA*
*NIED **12** 03:30:27.3, 42.36N×145.52E, h49km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=2.57; $M_{\theta\theta}$=3.03; $M_{\phi\phi}$=-0.46; $M_{r\theta}$=0.88; $M_{\theta\phi}$=-0.07; $M_{r\phi}$=2.24; Fault plane solution: $M_0$3.64000×$10^{14}$ NP1: $\phi_s$240.00000°, δ62.00000°, λ-125.00000°. NP2: $\phi_s$116.00000°, δ43.00000°, λ-43.00000°.*
*SKHL **12** 03:30:29.1±0.6, 42.4N×145.50E, h44km±4km, mb4.4/2*
**ISC 12 03:30:29.2±2.4, 42.4N±0.1×145.45E±0.0, h49km±29km, n13, σ0°60/24, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKHN** | **Kushirohamanak** | **0.68** | **342** | *i* P | **Pn** | **03 30 42.3** | **-0.3** |
| JKHN | | | | *e*S | **Sn** | **03 30 52.9** | **+0.7** |
| **AKK** | **Akkeshi** | **0.73** | **323** | *e*P | **Pn** | **03 30 42.9** | **-0.4** |
| AKK | | | | *e*S | **Sn** | **03 30 53.7** | **+0.2** |
| **JAK** | **Akkeshi** | **0.78** | **315** | P | **Pn** | **03 30 43.7** | **-0.3** |
| JAK | | | | *e*S | **Sn** | **03 30 55.7** | **+0.9** |
| **NEM2** | **Nemuro 2** | **0.95** | **13** | P | **Pn** | **03 30 45.6** | **-0.6** |
| NEM2 | | | | *e*S | **Sn** | **03 30 58.8** | **+0.1** |
| **NMR** | **Nemuro--Hokkai** | **0.95** | **12** | *e*P | **Pn** | **03 30 45.9** | **-0.3** |
| NMR | | | | *e*S | **Sn** | **03 30 58.9** | **+0.2** |
| **JNK** | **Nakash** | **1.26** | **335** | P | **Pn** | **03 30 49.9** | **-0.6** |
| JNK | | | | *e*S | **Sn** | **03 31 06.0** | **-0.3** |
| **JOB** | **Onbets** | **1.27** | **292** | *e*P | **Pn** | **03 30 50.5** | **-0.1** |
| **JAR** | **Ashorobuto** | **1.50** | **305** | P | **Pn** | **03 30 53.2** | **-0.5** |
| JAR | | | | *e*S | **Sn** | **03 31 12.0** | **-0.1** |
| **JRA** | **Rausu** | **1.52** | **351** | *e*P | **Pn** | **03 30 53.6** | **-0.3** |
| JRA | | | | *e*S | **Sn** | **03 31 13.1** | **+0.7** |
| **JCH** | **Churui** | **1.55** | **277** | *e*P | **Pn** | **03 30 54.2** | **-0.1** |
| **YUK** | **Yuzh-Kuril'sk** | **1.62** | **11** | *e*P | **Pn** | **03 30 55.4** | **+0.1** |
| YUK | | | | AMB | AMB | 03 30 56.3 | |
| | 240nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **03 31 14.8** | **-0.2** |
| YUK | | | | A | A | 03 31 21.2 | |
| | 1μm,0.5s | | | | | | |
| YUK | | | | A | A | 03 31 21.2 | |
| | 1μm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.75** | **35** | *e*P | **Pn** | **03 30 56.6** | **-0.5** |
| SHO | | | | AMB | AMB | 03 31 01.6 | |
| | 40nm,0.5s | | | | | | |
| SHO | | | | *e*S | **Sn** | **03 31 16.9** | **-1.3** |
| SHO | | | | A | A | 03 31 26.9 | |
| | 810nm,0.5s | | | | | | |
| SHO | | | | A | A | 03 31 26.9 | |
| | 440nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **3.30** | **31** | *e*P | **Pn** | **03 31 19.3** | **+1.1** |
| KUR | | | | AMB | AMB | 03 31 20.4 | |
| | 40nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **03 31 56.9** | **+0.8** |
| KUR | | | | A | A | 03 32 02.7 | |
| | 90nm,0.3s | | | | | | |
| KUR | | | | A | A | 03 32 02.7 | |
| | 30nm,0.3s | | | | | | |

**IDC 12 03:31:11.9±2.2, 15.88S×173.10W, h0km, mb3.8/3, mbtmp3.8/3, MS2.8/1, Error ellipse: s-maj=62.8km s-min=53.6km az=25.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **8.68** | **256** | LR | LR | 03 36 14.8 | |
| | comp=Z,66nm,20.9s,baz=155,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.02** | **257** | P | P | 03 40 08.0 | -0.6 |
| | 0.5nm,0.8s,baz=96,slow=8.0,SNR=1.9 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **50.24** | **252** | P | P | 03 40 10.6 | +0.3 |
| | 1.1nm,0.7s,baz=86,slow=7.9,SNR=10 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.17** | **180** | P | P | 03 42 50.3 | +0.1 |
| | 2.0nm,1.0s,baz=305,slow=14,SNR=2.7 | | | | | | |
| | 2.0nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **146.71** | **321** | PKPbc | PKPdf | 03 50 55.2 | +0.6 |
| | 1.5nm,0.8s,baz=70,slow=2.1,SNR=8.1 | | | | | | |

*NEIC **12** 03:41:44.3±2.6, 19.79S±0.08×177.9W±0.2, h599km±8km, mb4.3/24, Error ellipse: s-maj=26.8km s-min=5.2km az=111.0*
*IDC **12** 03:41:45.4±1.9, 19.68S×178.21W, h614km±21km, mb3.2/9, mbtmp4.1/10, Error ellipse: s-maj=22.1km s-min=17.9km az=120.0*
**ISC 12 03:41:44.5±0.5, 19.75S±0.10×178.2W±0.1, h600km, n59, σ1°04/54, mb4.2/23, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.12** | **299** | P | **P** | **03 43 12.6** | **+1.6** |
| **MSVF** | **Nonsavu** | **4.12** | **299** | P | **P** | **03 43 12.2** | **+1.3** |
| | 66nm,0.7s,baz=161,slow=3.5,SNR=54 | | | | | | |
| **NIUE** | **Niue** | **7.79** | **86** | P | **P** | **03 43 43.4** | **+1.6** |
| **URZ** | **Urewera** | **18.89** | **192** | P | **P** | **03 45 25.5** | **-2.5** |
| | 5.9nm,0.6s,baz=27,slow=5.4,SNR=5.5 | | | | | | |
| **BKZ** | **Black Stump Fm** | **19.89** | **192** | P | **P** | **03 45 34.8** | **-2.3** |
| BKZ | | | | IAmb | IAmb | 03 46 14.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **QRZ** | **Quartz Range** | **22.46** | **199** | P | **P** | **03 45 59.5** | **-0.6** |
| **NNZ** | **Nelson** | **22.58** | **197** | P | **P** | **03 45 59.8** | **-1.3** |
| **THZ** | **Tophouse** | **23.22** | **197** | P | **P** | **03 46 05.8** | **-1.0** |
| **GVZ** | **Greta Valley S** | **24.31** | **196** | P | **P** | **03 46 15.7** | **-0.7** |
| **WHZ** | **Wether Hill Ro** | **28.48** | **201** | P | **P** | **03 46 53.9** | **+1.0** |
| **CTAO** | **Charters Tower** | **33.43** | **263** | P | **P** | **03 47 36.3** | **+0.9** |
| **WB0** | **Warramunga Arr** | **44.54** | **262** | P | **P** | **03 49 03.8** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 03 49 29.3 | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.55** | **256** | P | **P** | **03 49 04.5** | **-0.2** |
| | comp=Z,2.5nm,0.8s,baz=91,slow=8.5,SNR=14 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 50 34.0** | **-0.5** |
| | comp=Z,0.5nm,0.9s,baz=91,slow=8.3,SNR=2.2 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.57** | **261** | P | **P** | **03 49 04.2** | **-0.7** |
| | comp=Z,1.7nm,0.8s,baz=97,slow=8.2,SNR=6.9 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **SBA** | **Scott Base** | **58.60** | **184** | P | **P** | **03 50 46.4** | **+1.8** |
| **MJAR** | **Matsushiro Arr** | **69.53** | **324** | P | **P** | **03 51 53.8** | **-0.5** |
| | comp=Z,2.4nm,0.6s,baz=155,slow=4.9,SNR=10.0 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **69.53** | **324** | P | **P** | **03 51 54.2** | **-0.1** |
| **MJB9** | **Matsu-Tunnel** | **69.53** | **324** | P | **P** | **03 51 55.5** | **+1.2** |
| **QSPA** | **South Pole Qui** | **70.31** | **180** | P | **P** | **03 51 59.0** | **+0.3** |
| **QSPA** | **South Pole Qui** | **70.31** | **180** | P | **P** | **03 51 59.0** | **+0.3** |
| | comp=Z,6.0nm,0.9s,baz=324,slow=0.8,SNR=15 | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **ADK** | **Adak** | **71.34** | **1** | P | **P** | **03 52 03.2** | **-1.4** |
| **GSTR** | **Great Sitkin T** | **71.56** | **1** | P | **P** | **03 52 04.9** | **-1.0** |
| **JKA** | **Kamikawa-asahi** | **73.00** | **332** | P | **P** | **03 52 16.0** | **+1.7** |
| JKA | | | | IAmb | IAmb | 03 52 16.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **78.27** | **326** | P | **P** | **03 52 42.7** | **-0.7** |
| | comp=Z,2.3nm,0.7s,baz=106,slow=5.3,SNR=6.0 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.58** | **44** | P | **P** | **03 52 54.9** | **-1.1** |
| | comp=Z,0.4nm,0.6s,baz=212,slow=6.4,SNR=2.4 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **O16K** | **Kokwok River B** | **80.75** | **10** | P | **P** | **03 52 54.7** | **-1.3** |
| O16K | | | | IAmb | IAmb | 03 53 01.7 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **N15K** | **Kwethluk River** | **80.98** | **9** | P | **P** | **03 52 56.6** | **-0.6** |
| N15K | | | | IAmb | IAmb | 03 53 39.8 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **M16K** | **Timber Creek** | **81.97** | **9** | P | **P** | **03 53 03.0** | **+0.8** |
| M16K | | | | IAmb | IAmb | 03 53 04.1 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **82.83** | **8** | P | **P** | **03 53 07.2** | **+0.7** |
| K15K | | | | IAmb | IAmb | 03 53 36.7 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **L18K** | **Granite Mounta** | **83.46** | **10** | P | **P** | **03 53 10.1** | **+0.4** |
| L18K | | | | IAmb | IAmb | 03 53 41.0 | |
| | comp=Z,9.7nm,1.5s | | | | | | |
| **L19K** | **White Mountain** | **83.73** | **11** | P | **P** | **03 53 10.7** | **-0.4** |
| L19K | | | | IAmb | IAmb | 03 53 41.4 | |
| | comp=Z,9.7nm,1.5s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **84.95** | **14** | P | **P** | **03 53 17.2** | **+0.2** |
| SCM | | | | IAmb | IAmb | 03 53 17.4 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **K20K** | **Telida** | **84.96** | **11** | P | **P** | **03 53 16.6** | **-0.5** |
| **TXAR** | **Lajitas Array** | **86.78** | **57** | P | **P** | **03 53 27.2** | **+0.6** |
| | comp=Z,0.6nm,0.8s,baz=218,slow=7.9,SNR=6.7 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **HDA** | **Harding Lake** | **87.29** | **13** | P | **P** | **03 53 26.7** | **-1.3** |
| HDA | | | | IAmb | IAmb | 03 53 28.1 | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **87.32** | **13** | P | **P** | **03 53 27.1** | **-1.0** |
| CCB | | | | IAmb | IAmb | 03 53 28.0 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **87.62** | **13** | P | **P** | **03 53 28.6** | **-0.9** |
| | comp=Z,0.7nm,0.5s,baz=217,slow=5.2,SNR=14 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **88.47** | **180** | ⇑P | **P** | **03 53 32.7** | **-1.0** |
| | comp=Z,79nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **88.52** | **43** | P | **P** | **03 53 34.2** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=188,slow=3.0,SNR=4.0 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **88.76** | **179** | ⇑P | **P** | **03 53 34.1** | **-0.9** |
| | comp=Z,24nm,1.1s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **88.89** | **176** | ⇑P | **P** | **03 53 34.8** | **-0.7** |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **89.33** | **177** | ⇑P | **P** | **03 53 37.1** | **-0.5** |
| | comp=Z,3.5nm,0.6s,baz=185,slow=4.4 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **89.56** | **177** | ⇑P | **P** | **03 53 38.3** | **-0.3** |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **138.78** | **351** | PKhKP | PKPpre | 03 59 51.8 | |
| | comp=Z,2.6nm,1.0s,baz=48,slow=2.2,SNR=4.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.29** | **331** | PKhKP | PKPpre | 04 00 04.3 | |
| | comp=Z,0.5nm,0.3s,baz=48,slow=3.6,SNR=4.5 | | | | | | |
| **AKBB** | **Malin Array Si** | **142.29** | **331** | PKPpre | PKPpre | 04 00 05.0 | |
| **KIEV** | **Kiev** | **142.31** | **331** | PKPpre | PKPpre | 04 00 04.9 | |
| **ARPR** | **Arapgir-MALATY** | **143.16** | **309** | | PKPab | 04 00 08.5 | -1.2 |
| **EKA** | **Eskdalemuir Ar** | **144.28** | **5** | PKP | PKPbc | 04 00 10.7 | -2.1 |
| | comp=Z,0.5nm,0.5s,baz=326,slow=2.8,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.23** | **313** | PKPbc | **PKPbc** | **04 00 18.8** | **-0.4** |
| **BRTR** | **Keskin Array B** | **146.23** | **313** | PKPbc | **PKPdf** | **04 00 17.9** | **+1.1** |
| | comp=Z,0.9nm,0.7s,baz=98,slow=2.9,SNR=4.9 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **146.33** | **331** | PKPbc | **PKPbc** | **04 00 19.6** | **+0.5** |
| **BURAR** | **Bucovina Array** | **146.34** | **331** | PKPbc | **PKPbc** | **04 00 19.9** | **+0.7** |
| **KHC** | **Kasperske Hory** | **149.21** | **345** | PKPbc | **PKPbc** | **04 00 25.9** | **-0.5** |
| **GEC2** | **GERESS Array S** | **149.45** | **345** | PKPbc | **PKPbc** | **04 00 27.1** | **+0.1** |
| **GERES** | **GERESS Array B** | **149.45** | **345** | PKPbc | **PKPbc** | **04 00 26.4** | **-0.6** |
| **GERES** | **GERESS Array B** | **149.45** | **345** | PKPbc | **PKPbc** | **04 00 25.7** | **-1.3** |
| | comp=Z,0.9nm,0.7s,baz=147,slow=2.7,SNR=6.0 | | | | | | |
| **PRED** | **Cave del Predi** | **151.69** | **343** | PKPab | **PKPab** | **04 00 42.8** | **-1.1** |
| **SABO** | **M.te Sabotino** | **152.11** | **342** | PKPbc | **PKPbc** | **04 00 31.9** | **-1.1** |

**HEL 12 03:51:18.5±0.2, 67.59N×33.94E, h0km, ML1.1, Suspected explosion, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVZ** | **Lovozero** | **0.41** | **41** | PG | Pg | 03 51 26.0 | -0.4 |
| | baz=225 | | | | | | |
| LVZ | | | | SG | Sg | 03 51 31.3 | -0.4 |
| **VRF** | **Varrio** | **1.66** | **277** | PG | Pn | 03 51 48.5 | -0.4 |
| VRF | | | | MSG | | 03 52 08.3 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| VRF | | | | SG | Sn | 03 52 09.2 | -1.7 |
| **OLKF** | **Oulanka, Finla** | **2.19** | **237** | PG | Pb | 03 51 58.0 | -1.0 |
| OLKF | | | | MSG | | 03 52 23.6 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| OLKF | | | | SG | Sb | 03 52 26.6 | -0.1 |
| **KU6** | **Riekki** | **2.25** | **227** | PG | Pb | 03 51 58.4 | -1.4 |
| | baz=46 | | | | | | |
| KU6 | | | | MSG | | 03 52 24.8 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| KU6 | | | | SG | Sb | 03 52 27.6 | -0.6 |
| **RAJF** | **Raja-Jooseppi** | **2.30** | **295** | PG | Pn | 03 51 58.9 | +1.4 |
| RAJF | | | | SN | Sn | 03 52 25.9 | -0.5 |
| **SGF** | **Sodankyl** | **2.85** | **270** | SB | Sb | 03 52 43.4 | -2.2 |
| **RANF** | **Ranua** | **3.24** | **244** | PB | Pb | 03 52 14.8 | -2.0 |
| **KEV** | **Kevo** | **3.34** | **314** | SN | Sn | 03 52 51.6 | -0.5 |
| **ARA0** | **ARCESS Array S** | **3.66** | **306** | PN | Pn | 03 52 15.2 | -1.1 |
| | baz=119 | | | | | | |
| ARA0 | | | | SN | Sn | 03 52 57.4 | -2.7 |

**HEL 12 03:51:41.0±0.5, 67.19N×20.48E, h0km, ML1.0, Suspected explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LANU** | **Lannavaara** | **1.04** | **33** | SB | Sg | 03 52 14.2 | -0.1 |
| **PAJU** | **Pajala** | **1.05** | **98** | PG | Pg | 03 51 59.6 | -1.4 |
| PAJU | | | | SG | Sg | 03 52 12.8 | -1.8 |
| **KLF** | **Kolari** | **1.36** | **87** | PB | Sg | 03 52 23.9 | -0.7 |
| **KLF** | **Kolari** | **1.36** | **87** | PG | Pg | 03 52 05.2 | -1.8 |
| | baz=269 | | | | | | |
| KLF | | | | MSG | | 03 52 22.0 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| KLF | | | | SB | Sg | 03 52 23.9 | -0.7 |
| **HEF** | **Hetta** | **1.72** | **43** | MSG | | 03 52 32.3 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| HEF | | | | SN | Sn | 03 52 34.8 | 0.0 |
| **KALU** | **Kalix** | **1.77** | **138** | PB | Sb | 03 52 36.5 | -0.4 |
| **KALU** | **Kalix** | **1.77** | **138** | PG | Pn | 03 52 12.9 | +0.2 |
| | baz=322 | | | | | | |
| KALU | | | | SN | Sb | 03 52 36.5 | -0.4 |
| **TOF** | **Tornio** | **1.90** | **124** | PG | Pn | 03 52 15.1 | +0.5 |
| | baz=305 | | | | | | |
| TOF | | | | MSG | | 03 52 37.5 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| TOF | | | | SG | Sn | 03 52 39.5 | +0.3 |
| **RNF** | **Rovaniemi** | **2.26** | **103** | SN | Sb | 03 52 49.9 | -1.2 |
| **RNF** | **Rovaniemi** | **2.26** | **103** | SG | Sb | 03 52 49.9 | -1.2 |
| **SGF** | **Sodankyl** | **2.36** | **81** | PG | Pn | 03 52 22.1 | +1.2 |
| SGF | | | | SG | Sb | 03 52 52.6 | -1.3 |
| **RANF** | **Ranua** | **2.78** | **112** | SG | Sb | 03 53 06.1 | 0.0 |
| **MSF** | **Maaselka** | **3.66** | **107** | SG | Pn | 03 52 40.1 | +1.4 |
| **MSF** | **Maaselka** | **3.66** | **107** | PN | Pn | 03 52 40.1 | +1.4 |

*TIR **12** 03:56:46.3, 41.60N×20.17E, h23km±3km, Md2.8, Ml1.7*
*PDG **12** 03:56:46.8±0.0, 41.59N×20.15E, h10km, ML2.2/11, Error ellipse: s-maj=0.0km s-min=0.1km az=0.0*
*BEO **12** 03:56:46.3±0.8, 41.53N×20.30E, h5km±8km, ML1.7/4*
**ISC 12 03:56:46.7±1.1, 41.59N±0.03×20.16E±0.04, h12km±9km, n18, σ1°07/36, 2D, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.33** | **222** | P | **Pg** | **03 56 52.9** | **-0.4** |
| | baz=223 | | | | | | |
| TIR | | | | S | **Sb** | **03 56 59.5** | **-0.3** |
| | baz=223 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=N,0.2nm,0.2s,baz=223 | | | | | | |
| **TIR** | **Tirane** | **0.33** | **222** | *e*Pg | **Pg** | **03 56 52.9** | **-0.4** |
| TIR | | | | *e*Sg | **Sb** | **03 56 59.0** | **-0.7** |
| **BCI** | **Bajram Curri** | **0.78** | **355** | P | **Pb** | **03 57 01.7** | **-0.5** |
| | baz=355 | | | | | | |
| BCI | | | | S | **Sb** | **03 57 12.9** | **+0.1** |
| | baz=355 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,0.1nm,0.4s,baz=355 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.94** | **310** | *e*Pg | **Pg** | **03 57 04.0** | **-0.8** |
| DRME | | | | *i* Sg | **Sn** | **03 57 18.7** | **-0.5** |
| **PVY** | **Plav** | **1.01** | **352** | *e*Pg | **Pg** | **03 57 05.5** | **-0.8** |
| PVY | | | | *i* Sg | **Sn** | **03 57 21.5** | **+0.3** |
| **PDG** | **Podgorica** | **1.07** | **322** | *e*Pg | **Pb** | **03 57 06.8** | **-0.4** |
| PDG | | | | *e*Sg | **Sn** | **03 57 23.3** | **+0.8** |
| **PDG** | **Podgorica** | **1.07** | **322** | ⇓*i*Pg | **Pb** | **03 57 06.6** | **-0.6** |
| PDG | | | | *i* Sg | **Sn** | **03 57 23.3** | **+0.8** |
| **BUM** | **Brajici-Budva** | **1.18** | **307** | ⇓*i*Pg | **Pb** | **03 57 08.5** | **-0.6** |
| BUM | | | | *i* Sg | **Sn** | **03 57 26.8** | **+1.6** |
| **FNA** | **Florina** | **1.22** | **131** | P | **Pg** | **03 57 10.3** | **+0.1** |
| | baz=131 | | | | | | |
| FNA | | | | S | **Sn** | **03 57 27.0** | **+0.8** |
| | baz=131 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.1nm,0.3s,baz=131 | | | | | | |
| **IVA** | **Berane** | **1.29** | **351** | *e*Pg | **Pb** | **03 57 10.7** | **-0.4** |
| IVA | | | | *i* Sg | **Sg** | **03 57 31.0** | **+2.6** |
| **CEME** | **Cevo** | **1.33** | **316** | *e*Pg | **Pn** | **03 57 11.2** | **0.0** |
| CEME | | | | *i* Sg | **Sg** | **03 57 31.9** | **+2.4** |
| **KOME** | **Kolasin** | **1.35** | **339** | *e*Pg | **Pb** | **03 57 11.7** | **-0.2** |
| KOME | | | | *i* Sg | **Sg** | **03 57 32.6** | **+2.5** |
| **NKME** | **Niksic** | **1.48** | **323** | *e*Pg | **Pb** | **03 57 14.1** | **-0.1** |
| NKME | | | | *i* Sg | **Sg** | **03 57 36.3** | **+2.0** |
| **SJES** | **Sjenica** | **1.68** | **355** | *e*Pg | **Pg** | **03 57 18.4** | **-0.4** |
| SJES | | | | *e*Sg | **Sg** | **03 57 40.8** | **+0.2** |
| **SELS** | **Selova** | **1.78** | **23** | *e*Pg | **Pb** | **03 57 18.5** | **-0.7** |
| SELS | | | | *e*Sg | **Sg** | **03 57 43.4** | **-0.4** |
| **BRY** | **Bratogost** | **1.78** | **318** | *e*Pn | **Pb** | **03 57 18.4** | **-0.9** |
| BRY | | | | *i* Sn | **Sg** | **03 57 43.6** | **-0.3** |
| **PLE** | **Pljevlja** | **1.83** | **342** | *e*Pn | **Pb** | **03 57 19.3** | **-0.9** |
| PLE | | | | *i* Sn | **Sg** | **03 57 44.9** | **-0.6** |
| **UPM** | **Unac-Piva** | **1.86** | **330** | *e*Pn | **Pb** | **03 57 19.7** | **-1.0** |
| UPM | | | | *i* Sn | **Sg** | **03 57 45.6** | **-0.9** |

*NOU **12** 04:10:08.9, 32.48S×176.25W, h0km, mb4.8/15, South of Kermadec Islands*
*IDC **12** 04:10:14.6±0.6, 32.17S×177.27W, h0km, mb4.4/10, mbtmp4.4/14, ML4.6/4, MS3.6/13, Error ellipse: s-maj=23.0km s-min=18.2km az=76.0*
*WEL **12** 04:10:15.9±0.8, 32.2S±4.1×177.7W±1.1, h33km, M4.5/19, mB4.8/12, ML5.1/20, MLv5.2/19, Mw(mB)4.1/12, Error ellipse: s-maj=0.0km s-min=0.0km az=104.7, confirmed*
*NEIC **12** 04:10:16.2±2.7, 32.08S±0.10×177.2W±0.2, h10km±1km, mb5.0/22, Error ellipse: s-maj=23.8km s-min=13.8km az=64.0*
*MOS **12** 04:10:17.5±1.6, 31.33S×177.59W, h12km, mb4.8/13, Error ellipse: s-maj=16.0km s-min=13.0km az=42.3*
**ISC 12 04:10:15.5±0.4, 32.26S±0.05×177.21W±0.07, h10km, n182, σ2°27/194, mb4.7/28, MS3.7/12, 15C-3D, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **3.05** | **348** | P | **Pn** | **04 11 00.2** | **-3.6** |
| GLKZ | | | | S | **Sn** | **04 11 34.4** | **-6.0** |
| **RAO** | **Raoul Island** | **3.06** | **348** | Pn | **Pn** | **04 11 01.2** | **-2.7** |
| RAO | | | | Sn | **Sn** | **04 11 37.5** | **-3.2** |
| **RAO** | **Raoul Island** | **3.06** | **348** | Pn | **Pn** | **04 11 01.4** | **-2.5** |
| | 247nm,0.3s,baz=82,slow=5.2,SNR=9.3 | | | | | | |
| RAO | | | | Sn | **Sn** | **04 11 35.2** | **-5.4** |
| | 752nm,0.3s,baz=52,slow=22,SNR=6.7 | | | | | | |
| | 698nm,0.3s | | | | | | |
| **RAO** | **Raoul Island** | **3.06** | **348** | P | **Pn** | **04 11 01.3** | **-2.7** |
| **RIZ** | **Raoul Island** | **3.07** | **348** | P | **Pn** | **04 11 01.2** | **-2.9** |
| RIZ | | | | S | **Sn** | **04 11 35.5** | **-5.3** |
| **MXZ** | **Matakaoa Point** | **6.44** | **214** | Pn | **Pn** | **04 11 48.2** | **-2.3** |
| **WMGZ** | **Waiomatatini S** | **6.60** | **212** | P | **Pn** | **04 11 50.7** | **-2.0** |
| WMGZ | | | | S | **Sn** | **04 13 07.6** | **-0.4** |
| **PKGZ** | **Pakihiroa** | **6.79** | **213** | P | **Pn** | **04 11 54.0** | **-1.3** |
| PKGZ | | | | S | **Sn** | **04 13 10.9** | **-1.9** |
| **HAZ** | **Te Kaha** | **6.85** | **215** | P | **Pn** | **04 11 52.1** | **-3.9** |
| HAZ | | | | S | **Sn** | **04 13 13.5** | **-0.5** |
| **PUZ** | **Puketiti** | **6.88** | **211** | P | **Pn** | **04 11 53.6** | **-2.9** |
| PUZ | | | | S | **Sn** | **04 13 12.1** | **-2.8** |
| **RUGZ** | **Raukumara Rang** | **7.07** | **215** | P | **Pn** | **04 11 57.5** | **-1.6** |
| RUGZ | | | | S | **Sn** | **04 13 16.1** | **-3.4** |
| **TWGZ** | **Tauwhareparae** | **7.09** | **212** | P | **Pn** | **04 11 59.1** | **-0.3** |
| TWGZ | | | | S | **Sn** | **04 13 17.9** | **-2.2** |
| **KUZ** | **Kuaotunu** | **7.35** | **231** | P | **Pn** | **04 12 05.5** | **+2.6** |
| **TKGZ** | **Te Karaka** | **7.37** | **212** | P | **Pn** | **04 12 01.9** | **-1.2** |
| TKGZ | | | | S | **Sn** | **04 13 23.3** | **-3.5** |
| **MWZ** | **Matawai** | **7.43** | **214** | P | **Pn** | **04 12 01.9** | **-2.1** |
| MWZ | | | | S | **Sn** | **04 13 24.9** | **-3.5** |
| **OPRZ** | **Ohinepanea** | **7.56** | **221** | P | **Pn** | **04 12 05.4** | **-0.4** |
| OPRZ | | | | S | **Sn** | **04 13 30.6** | **-0.8** |
| **URZ** | **Urewera** | **7.57** | **216** | P | **Pn** | **04 12 04.5** | **-1.5** |
| **URZ** | **Urewera** | **7.57** | **216** | Pn | **Pn** | **04 12 03.4** | **-2.6** |
| | 1.2nm,0.3s,baz=346,slow=4.5,SNR=18 | | | | | | |
| URZ | | | | Sn | **Sn** | **04 13 27.9** | **-3.9** |
| | 19nm,0.3s,baz=302,slow=4.0,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **7.57** | **216** | P | **Pn** | **04 12 03.6** | **-2.3** |
| URZ | | | | S | **Sn** | **04 13 28.4** | **-3.5** |
| **RAGZ** | **Rawiri** | **7.61** | **214** | P | **Pn** | **04 12 04.1** | **-2.4** |
| RAGZ | | | | S | **Sn** | **04 13 29.8** | **-3.1** |
| **RIGZ** | **Rimuhau** | **7.62** | **211** | P | **Pn** | **04 12 04.6** | **-2.1** |
| RIGZ | | | | S | **Sn** | **04 13 29.7** | **-3.5** |
| **WIAZ** | **Waiheke Island** | **7.77** | **232** | P | **Pn** | **04 12 11.2** | **+2.6** |
| **SNGZ** | **Shannon Statio** | **7.88** | **213** | P | **Pn** | **04 12 08.8** | **-1.4** |
| SNGZ | | | | S | **Sn** | **04 13 35.5** | **-3.8** |
| **WCZ** | **Waipu Caves** | **7.90** | **240** | P | **Pn** | **04 12 14.6** | **+4.1** |
| **RTZ** | **Ruatahuna** | **7.91** | **215** | Pn | **Pn** | **04 12 08.4** | **-2.3** |
| **RTZ** | **Ruatahuna** | **7.91** | **215** | P | **Pn** | **04 12 08.9** | **-1.8** |
| RTZ | | | | S | **Sn** | **04 13 37.2** | **-3.2** |
| **MKAZ** | **Moumakai** | **7.92** | **230** | P | **Pn** | **04 12 15.0** | **+4.2** |
| **MHGZ** | **Mahia Peninsul** | **7.94** | **209** | P | **Pn** | **04 12 07.3** | **-3.7** |
| MHGZ | | | | S | **Sn** | **04 13 36.5** | **-4.4** |
| **MTHZ** | **Maungataniwha** | **8.17** | **215** | P | **Pn** | **04 12 12.5** | **-1.7** |
| **OUZ** | **Omahuta** | **8.20** | **246** | P | **Pn** | **04 12 17.9** | **+3.3** |
| **BKZ** | **Black Stump Fm** | **8.58** | **215** | P | **Pn** | **04 12 16.0** | **-3.8** |
| BKZ | | | | S | **Sn** | **04 13 50.7** | **-6.1** |
| **KWHZ** | **Kaweka Forest** | **8.82** | **214** | P | **Pn** | **04 12 21.7** | **-1.4** |
| KWHZ | | | | S | **Sn** | **04 13 59.0** | **-3.5** |
| **KAHZ** | **Kahuranaki** | **8.91** | **211** | P | **Pn** | **04 12 20.5** | **-3.9** |
| KAHZ | | | | S | **Sn** | **04 13 58.9** | **-5.9** |
| **TMVZ** | **Te

**TOO Toolangi 30.90 250** P **P** **04 16 35.2 +2.8**
TOO pmax pmax
comp=Z,56nm,1.6s
**CMSA Cobar Meteorol 31.40 261** P **P** **04 16 39.1 +2.3**
**QLP Quilpie 33.93 269** P **P** **04 17 01.2 +2.2**
**STKA Stephens Creek 34.76 259** P **P** **04 17 06.8 +0.7**
**STKA Stephens Creek 34.76 259** P **P** **04 17 06.6 +0.5**
comp=Z,3.9nm,0.8s,baz=100,slow=8.9,SNR=5.0
STKA LR LR 04 29 31.1
comp=Z,89nm,19.7s,baz=34,slow=33
comp=Z,3.9nm,0.8s
**STKA Stephens Creek 34.76 259** *e*P **P** **04 17 07.0 +0.9**
STKA pmax pmax
comp=Z,4.0nm,0.8s
**CTA Charters Tower 34.79 281** LR LR 04 29 41.6
comp=Z,7.0nm,19.1s,baz=102,slow=34
**CTAO Charters Tower 34.79 281** P **P** **04 17 08.3 +1.8**
**CTAO Charters Tower 34.79 281** P **P** **04 17 07.6 +1.1**
CTAO IAmb IAmb 04 17 09.7
comp=Z,36nm,1.2s
**CTAO Charters Tower 34.79 281** P **P** **04 17 07.6 +1.1**
CTAO pmax pmax
comp=Z,36nm,1.2s
**INKA Innaminka 36.52 266** P **P** **04 17 22.9 +1.6**
**MTSU Mount Surprise 37.33 283** P **P** **04 17 29.9 +1.6**
**LCRK Leigh Creek 37.90 261** P **P** **04 17 33.8 +0.8**
**BBOO Buckleboo 39.15 256** P **P** **04 17 42.9 -0.6**
**PMG Port Moresby 40.02 297** *i* P **P** **04 17 48.2 -2.7**
PMG pmax pmax
comp=Z,28nm,1.5s
**COEN Coen 40.45 287** P **P** **04 17 55.1 +0.7**
COEN IAmb IAmb 04 18 38.3
comp=Z,48nm,1.9s
**OOD Oodnadatta 40.77 264** P **P** **04 17 58.0 +1.0**
**TAOE Nuku Hiva Isla 41.47 64** *e*LR LR 04 29 23.6
comp=Z,122nm,24.1s
**AS31 Alice Springs 43.71 269** P **P** **04 18 19.6 -1.4**
**ASAR Alice Springs 43.71 269** P **P** **04 18 20.3 -0.7**
**ASAR Alice Springs 43.71 269** P **P** **04 18 20.9 -0.1**
comp=Z,11nm,0.8s,baz=105,slow=7.6,SNR=97
ASAR PcP **PcP** **04 20 08.2 +0.2**
comp=Z,0.7nm,0.4s,baz=117,slow=3.6,SNR=5.6
comp=Z,11nm,0.8s
**WR0 Warramunga Arr 44.69 274** P **P** **04 18 28.4 -0.5**
WR0 IAmb IAmb 04 19 12.0
comp=Z,19nm,0.6s
**WB2 Warramunga Arr 44.85 274** P **P** **04 18 29.4 -0.8**
WB2 IAmb IAmb 04 18 31.3
comp=Z,33nm,1.2s
**WRAB Tennant Creek 44.86 274** *i* P **P** **04 18 29.0 -1.3**
WRAB pmax pmax
comp=Z,17nm,0.8s
**WRA Warramunga Arr 44.86 274** LR LR 04 35 59.0
comp=Z,95nm,20.2s,baz=157,slow=34
**WB0 Warramunga Arr 44.89 274** P **P** **04 18 29.9 -0.7**
WB0 IAmb IAmb 04 18 30.9
comp=Z,26nm,0.8s
**FORT Forrest 46.25 257** P **P** **04 18 41.0 -0.1**
**VNDA Vanda 46.32 186** LR LR 04 33 27.7
comp=Z,46nm,21.8s,baz=264,slow=30
**MTN Manton Dam 50.95 280** P **P** **04 19 16.2 -1.3**
**FITZ Fitzroy Crossi 53.05 271** P **P** **04 19 32.0 -1.1**
**CASY Casey 53.82 209** P **P** **04 19 39.4 +1.3**
CASY IAmb IAmb 04 19 43.4
comp=Z,8.9nm,0.8s
**MORW Morawa 56.66 254** P **P** **04 19 57.8 -1.4**
MORW IAmb IAmb 04 21 47.0
comp=Z,30nm,1.4s
**QSPA South Pole Qui 57.86 180** P **P** **04 20 09.1 +1.8**
QSPA IAmb IAmb 04 20 28.5
comp=Z,7.4nm,0.8s
**QSPA South Pole Qui 57.86 180** P **P** **04 20 08.9 +1.6**
comp=Z,2.6nm,0.9s,baz=53,slow=2.7,SNR=3.2
comp=Z,2.6nm,0.9s
**RPN Rapa Nui 58.31 104** LR LR 04 39 50.4
comp=Z,53nm,19.6s,baz=264,slow=30
**KAPI Kappang 64.61 281** LR LR 04 48 00.2
comp=Z,59nm,20.9s,baz=110,slow=35
**BELA Belgrano 2 67.86 172** P **P** **04 21 14.2 +0.7**
**MAW Mawson 70.81 201** P **P** **04 21 32.3 +0.5**
comp=Z,2.2nm,0.8s,baz=191,slow=10,SNR=3.7
comp=Z,2.2nm,0.8s
**ELIB Princess Elisa 75.08 187** *d*P **P** **04 21 58.9 +1.6**
ELIB *d*PcP **PcP** **04 22 13.9 +2.9**
**TROLL Troll, Antarti 76.02 180** ⇑P **P** **04 22 04.4 +1.7**
comp=Z,211nm,0.8s
**SNAA Sanae 76.28 178** P **P** **04 22 05.2 +1.1**
SNAA IAmb IAmb 04 22 24.8
comp=Z,5.6nm,0.8s
**SNAA Sanae 76.28 178** ⇑P **P** **04 22 05.3 +1.2**
comp=Z,64nm,0.9s
**SNAA Sanae 76.28 178** P **P** **04 22 04.9 +0.8**
comp=Z,2.4nm,0.8s,baz=179,slow=5.6,SNR=8.8
SNAA LR LR 04 51 21.9
comp=Z,38nm,21.4s,baz=100,slow=32
comp=Z,2.4nm,0.8s
**SNAA Sanae 76.28 178** *c**e*P P 04 22 13.3 +9.2
SNAA pmax pmax
comp=Z,3.0nm,0.8s
**VNA3 Neumayer Olymp 76.41 176** ⇑P **P** **04 22 05.4 +0.6**
comp=Z,3.7nm,0.7s
**VNA2 Neumayer--Watz 76.85 177** ⇑P **P** **04 22 07.3 +0.1**
comp=Z,3.2nm,0.7s,baz=201,slow=4.2
**VNA1 Neumayer--Stat 77.08 176** ⇑P **P** **04 22 09.2 +0.7**
comp=Z,2.7nm,0.8s
**MJA0 Matsu Arr-Jizo 80.13 325** *e*P **P** **04 22 24.1 -1.6**
MJA0 pmax pmax
comp=Z,5.0nm,1.0s
**MJAR Matsushiro Arr 80.15 325** P **P** **04 22 25.1 -0.7**
comp=Z,2.8nm,0.7s,baz=160,slow=4.5,SNR=8.2
comp=Z,2.8nm,0.7s
**PLCA Paso Flores 80.75 132** P **P** **04 22 30.9 +1.5**
comp=Z,1.4nm,0.9s,baz=188,slow=8.1,SNR=3.3
PLCA LR LR 04 51 02.0
comp=Z,65nm,19.6s,baz=266,slow=30
comp=Z,1.4nm,0.9s
**PLCA Paso Flores 80.75 132** *e*P **P** **04 22 34.1 +4.7**
PLCA pmax pmax
comp=Z,1.0nm,0.9s
**KSRS Korea Array 86.19 319** P **P** **04 22 57.9 +0.9**
comp=Z,4.8nm,0.8s,baz=142,slow=5.6,SNR=21
comp=Z,4.8nm,0.8s
**YSS Yuzh-Sakhalins 86.71 334** *i* P P 04 22 54.4 -4.9
YSS pmax pmax
comp=Z,5.0nm,0.9s
**USRK Ussuriysk Ar. 89.08 326** P **P** **04 23 11.0 +0.3**
comp=Z,3.1nm,0.8s,baz=146,slow=3.1,SNR=9.1
comp=Z,3.1nm,0.8s
**NVAR Mina Array Bea 89.15 42** P **P** **04 23 12.5 +1.0**
comp=Z,0.5nm,0.7s,baz=213,slow=7.3,SNR=4.8
comp=Z,0.5nm,0.7s
**TIA Tai'an 91.72 313** P **P** **04 23 24.8 +1.6**
TIA pmax pmax
comp=Z,13nm,0.7s
**LVC Limon Verde 92.45 119** LR LR 04 57 07.6
comp=Z,29nm,18.1s,baz=214,slow=30
**KLR Kul'dur 92.97 329** *i* P **P** **04 23 27.0 -1.7**
KLR pmax pmax
comp=Z,1.0nm,0.9s
**NEW Newport 96.48 36** LR LR 04 59 24.4
comp=Z,33nm,19.5s,baz=266,slow=31
**SEY Seymchan 97.94 346** *i* P **P** **04 23 46.7 -4.3**
SEY pmax pmax
comp=Z,2.0nm,1.5s
**BILL Bilibino 100.76 354** ⇑*e*P **Pdif** **04 24 01.5 -2.0**
BILL *e* 04 28 10.5
BILL *e*S **SKSac** **04 34 47.4 +5.5**
BILL pmax pmax
comp=Z,3.0nm,1.1s
BILL MLR MLR
comp=Z,57nm,19.0s
**MK31 Makanchi Array 119.47 309** ⇑Pg **PKiKP** **04 29 07.6 +2.4**
comp=Z,0.2nm,0.4s,baz=196,slow=17,SNR=5.3
MK31 Lg Lg 04 29 40.9
comp=Z,0.9nm,0.8s,baz=197,slow=28,SNR=6.0
**MKAR Makanchi Array 119.47 309** PKP **PKPdf** **04 29 04.9 -0.2**
comp=Z,1.0nm,0.8s,baz=67,slow=4.8,SNR=5.0
**MAKZ Makanchi 119.68 309** ⇑Pg **PKiKP** **04 29 07.9 +2.4**
comp=Z,0.2nm,0.4s
MAKZ ⇓Lg Lg 04 29 39.7
comp=Z,1.4nm,0.9s
**KURK Kurchatov 122.81 313** PKPdf **PKPdf** **04 29 10.2 -1.1**
**KURK Kurchatov 122.81 313** *c* iPKIKP **PKPdf** **04 29 11.0 -0.3**
KURK pmax pmax
comp=Z,3.0nm,1.0s
**KURBB Kurchatov Arra 122.85 313** PKP **PKPdf** **04 29 11.2 -0.2**
comp=Z,1.9nm,0.8s,baz=101,slow=2.0,SNR=20

**KK31 Karatay Array 126.65 302** PKPdf **PKPdf** **04 29 18.6 -0.4**
**KK31 Karatay Array 126.65 302** PKIKP **PKPdf** **04 29 18.6 -0.4**
**KKAR Karatay Array 126.65 302** PKPdf **PKPdf** **04 29 18.4 -0.6**
**KKAR Karatay Array 126.65 302** PKIKP **PKPdf** **04 29 18.4 -0.6**
**BVAR Borovoye Array 128.20 315** PKP **PKPdf** **04 29 21.7 +0.1**
comp=Z,1.9nm,0.7s,baz=82,slow=3.1,SNR=9.4
**BRVK Borovoye 128.26 315** *i* PKIKP **PKiKP** **04 29 22.6 +0.3**
**ARU Arti 134.94 320** *i* PKIKP **PKPdf** **04 29 33.9 -0.3**
**VRH Novokhopyorsk 145.84 315** *e*PKIKP **PKPdf** **04 29 53.3 -0.7**
VRH pmax pmax
comp=Z,20nm,0.8s
**NCK Nalchik 146.20 301** *i* PKIKP **PKPbc** **04 29 56.1 +0.1**
**MOS Moscow 146.24 324** *i* PKP2 **PKPdf** **04 29 53.9 -0.6**
MOS pmax pmax
comp=Z,53nm,1.2s
**KBZ Khabaz 146.68 302** PKPbc **PKPab** **04 29 58.0 -0.5**
comp=Z,9.7nm,0.9s,baz=146,slow=3.9,SNR=12
**KIV Kislovodsk 146.81 302** *e*PKIKP **PKPdf** **04 29 56.5 +0.4**
KIV pmax pmax
comp=Z,11nm,1.1s
**SHA1 Shidzhatmaz 146.85 302** *c* *i*PKP2 **PKPbc** **04 29 58.9 +0.7**
**LPSR Galich'ya Gora 146.96 319** *e*PKP2 **PKPbc** **04 29 58.2 +0.3**
LPSR pmax pmax
comp=Z,30nm,0.9s
**OBN Obninsk 147.07 324** ⇑*i*PKP2 **PKPbc** **04 29 57.2 -0.9**
OBN *e* 04 33 21.8
OBN *e*PPP PPP 04 36 34.0
OBN *e* 04 37 05.1
OBN pmax pmax
comp=Z,36nm,1.7s
**FIA1 FINESS Array S 147.12 340** PKPbc **PKPbc** **04 29 57.8 -0.2**
**FINES FINESS Array B 147.12 340** PKPbc **PKPbc** **04 29 58.2 +0.2**
comp=Z,7.2nm,0.6s,baz=53,slow=3.7,SNR=77
**VORR Voronezh 147.16 317** *e*PKP2 **PKPbc** **04 29 58.6 +0.1**
VORR pmax pmax
comp=Z,40nm,0.4s
**VSR Storozhevoye 147.35 316** *e*PKP2 **PKPbc** **04 29 58.6 -0.4**
VSR pmax pmax
comp=Z,10.0nm,0.8s
**VORD Divnogorie 147.37 316** *e*PKP2 **PKPbc** **04 29 58.9 -0.1**
VORD pmax pmax
comp=Z,10.0nm,0.8s
**VSU Vasula 149.19 335** *c* *i*PKIKP **PKPdf** **04 29 59.3 0.0**
VSU pmax pmax
comp=Z,21nm,1.3s
**NC303 NORSAR Array S 150.49 352** PKPbc **PKPbc** **04 30 06.2 -0.5**
**NB2 NORSAR Subarra 150.49 352** PKP **PKPbc** **04 30 07.6 +0.4**
comp=Z,0.9nm,0.5s,baz=15,slow=2.6
**NOA NORSAR Array B 150.69 352** PKPbc **PKPbc** **04 30 06.7 -0.6**
comp=Z,20nm,0.5s,baz=16,slow=4.1,SNR=4.0
**NC602 NORSAR Array S 150.94 351** PKPbc **PKPbc** **04 30 07.7 0.0**
**HFS Hagfors 151.19 349** PKPbc **PKPbc** **04 30 08.2 -0.2**
comp=Z,6.0nm,0.9s,baz=110,slow=2.2,SNR=11
**KONO Kongsberg 152.23 353** PKPbc **PKPbc** **04 30 10.9 +0.2**
**KONO Kongsberg 152.23 353** PKIKP **PKPbc** **04 30 10.9 +0.2**
**MMAI Mount Meron Ar 152.58 280** PKPbc **PKiKP** **04 30 13.8 +1.0**
comp=Z,9.9nm,0.4s,baz=99,slow=5.2,SNR=4.7
**AKASG Malin Array Be 153.18 321** PKPbc **PKiKP** **04 30 13.9 +0.6**
comp=Z,0.8nm,0.6s,baz=65,slow=1.6,SNR=4.2
**AKASG Malin Array Be 153.18 321** *c* *i*PKIKP **PKiKP** **04 30 14.6 +1.3**
AKASG pmax pmax
comp=Z,1.0nm,0.6s
**BRTR Keskin Array B 154.04 295** PKPbc **PKPbc** **04 30 13.8 -1.8**
**BRTR Keskin Array B 154.04 295** PKPbc **PKiKP** **04 30 16.1 +0.4**
comp=Z,0.7nm,0.5s,baz=59,slow=7.4,SNR=7.1
**BRTR Keskin Array B 154.04 295** *c* *i*PKIKP **PKiKP** **04 30 19.3 +3.6**
BRTR pmax pmax
comp=Z,1.0nm,0.5s
**BURAR Bucovina Array 157.08 318** PKPab **PKPab** **04 30 42.1 +0.3**
**CLL Coll m 159.54 341** *i* PKPab **PKPab** **04 30 54.7 +2.6**
**CLL Coll m 159.54 341** *i* PKP2 **PKPab** **04 30 54.7 +2.6**
**VYHS Vyhne 159.76 328** *e*PKP2 **PKPab** **04 30 54.0 +0.7**
**VYHS Vyhne 159.76 328** *e*PKP **PKPab** **04 30 53.9 +0.7**
**SRO Srobarova 160.50 327** *e*PKP2 **PKPab** **04 30 58.1 +1.7**
**SRO Srobarova 160.50 327** *e*PKP **PKPab** **04 30 58.1 +1.7**
**TORD Torodi Ar. Bea 160.95 177** PKPdf **PKPdf** **04 30 15.6 -1.1**
**TORD Torodi Ar. Bea 160.95 177** PKPab **PKPab** **04 31 00.2 +1.1**
comp=Z,0.4nm,0.5s,baz=169,slow=3.3,SNR=2.9

*JMA* ***12*** *04:13:48.5±0.1, 23°.7N±0°.6×122°.6E±0°.4, h43km, MV2.5/15, NEAR ISHIGAKIJIMA ISLAND*
*TAP* ***12*** *04:13:49.2, 23°.77N×122°.58E, h40km, ML3.1, D*
**ISC 12 04:13:47.0±0.9, 23°.69N±0°.02×122°.58E±0°.02, h20km±10km, n89, σ0s65/157, 1D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EOS4** | **EOS4** | **0.49** | **331** | P | | **Pn** | **04 13 58.8** | **+0.2** |
| | baz=322 | | | | | | | |
| EOS4 | | | | S | | **Sn** | **04 14 05.7** | **-0.6** |
| | baz=322 | | | | | | | |
| **EOS3** | **EOS3** | **0.64** | **338** | P | | **Pn** | **04 14 01.3** | **+0.5** |
| | baz=328 | | | | | | | |
| EOS3 | | | | *e*S | | **Sn** | **04 14 09.8** | **-0.5** |
| | baz=328 | | | | | | | |
| **EOS2** | **EOS2** | **0.79** | **336** | P | | **Pn** | **04 14 03.8** | **+0.8** |
| | baz=317 | | | | | | | |
| EOS2 | | | | S | | **Sn** | **04 14 14.3** | **+0.2** |
| | baz=317 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.82** | **24** | *e*P | | **Pn** | **04 14 03.5** | **-0.1** |
| JYNG | | | | *e*S | | **Sb** | **04 14 13.6** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.86** | **27** | *i* P | | **Pn** | **04 14 04.1** | **+0.1** |
| | baz=29 | | | | | | | |
| YOJ | | | | *i* S | | **Sb** | **04 14 14.9** | **+0.5** |
| | baz=29 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.86** | **27** | P | | **Pn** | **04 14 04.2** | **+0.1** |
| YOJ | | | | S | | **Sb** | **04 14 14.4** | **0.0** |
| **TEYL** | **Yanliau Villag** | **0.92** | **281** | *e*P | | **Pn** | **04 14 05.2** | **+0.4** |
| | baz=278 | | | | | | | |
| **SHUL** | **Shoufeng** | **0.94** | **276** | *e*P | | **Pn** | **04 14 05.4** | **+0.3** |
| | baz=279 | | | | | | | |
| SHUL | | | | *e*S | | **Sn** | **04 14 18.2** | **+0.3** |
| | baz=279 | | | | | | | |
| **TWD** | **Chiawan** | **0.98** | **293** | *i* P | | **Pb** | **04 14 05.5** | **+0.2** |
| | baz=278 | | | | | | | |
| TWD | | | | *e*S | | **Sb** | **04 14 16.6** | **-1.2** |
| | baz=278 | | | | | | | |
| **ETL** | **Fush Village** | **0.99** | **298** | P | | **Pn** | **04 14 06.1** | **+0.2** |
| | baz=293 | | | | | | | |
| ETL | | | | *e*S | | **Sb** | **04 14 18.4** | **+0.1** |
| | baz=293 | | | | | | | |
| **EAHA** | **Aohua** | **1.00** | **310** | *e*P | | **Pn** | **04 14 06.4** | **+0.5** |
| | baz=305 | | | | | | | |
| EAHA | | | | *e*S | | **Sb** | **04 14 19.0** | **+0.6** |
| | baz=305 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.02** | **298** | P | | **Pb** | **04 14 06.0** | **-0.1** |
| | baz=293 | | | | | | | |
| NACB | | | | *e*S | | **Sb** | **04 14 18.2** | **-0.8** |
| | baz=293 | | | | | | | |
| **ETM** | **Tongmen** | **1.03** | **285** | P | | **Pb** | **04 14 06.2** | **0.0** |
| | baz=274 | | | | | | | |
| ETM | | | | *e*S | | **Sb** | **04 14 19.0** | **-0.4** |
| | baz=274 | | | | | | | |
| **EWUT** | **Wuta** | **1.05** | **316** | *e*P | | **Pb** | **04 14 07.3** | **+0.8** |
| | baz=312 | | | | | | | |
| EWUT | | | | *e*S | | **Sb** | **04 14 19.6** | **-0.2** |
| | baz=312 | | | | | | | |
| **ESL** | **Shilin** | **1.06** | **277** | P | | **Pn** | **04 14 06.5** | **-0.3** |
| | baz=263 | | | | | | | |
| ESL | | | | *e*S | | **Sb** | **04 14 19.3** | **-0.8** |
| | baz=263 | | | | | | | |
| **ENA** | **Nanau** | **1.06** | **314** | *e*P | | **Pb** | **04 14 07.3** | **+0.6** |
| | baz=310 | | | | | | | |
| ENA | | | | *e*S | | **Sb** | **04 14 20.7** | **+0.5** |
| | baz=310 | | | | | | | |
| **HGSD** | **Ruisui** | **1.08** | **260** | P | | **Pn** | **04 14 07.2** | **+0.2** |
| | baz=255 | | | | | | | |
| HGSD | | | | *e*S | | **Sb** | **04 14 20.4** | **-0.4** |
| | baz=255 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.10** | **272** | P | | **Pn** | **04 14 07.1** | **-0.1** |
| | baz=257 | | | | | | | |
| WARBT | | | | *e*S | | **Sb** | **04 14 21.2** | **0.0** |
| | baz=257 | | | | | | | |
| **ECBN** | **Changbin** | **1.10** | **250** | P | | **Pb** | **04 14 08.0** | **+0.6** |
| | baz=236 | | | | | | | |
| ECBN | | | | *e*S | | **Sb** | **04 14 21.4** | **0.0** |
| | baz=236 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.12** | **287** | P | | **Pn** | **04 14 07.7** | **0.0** |
| | baz=277 | | | | | | | |
| LXIB | | | | *e*S | | **Sb** | **04 14 21.4** | **-0.5** |
| | baz=277 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.13** | **297** | *e*P | | **Pn** | **04 14 07.9** | **+0.1** |
| | baz=293 | | | | | | | |
| ETLH | | | | *e*S | | **Sb** | **04 14 20.7** | **-1.5** |
| | baz=293 | | | | | | | |

**TWC Suao 1.13 324** *e*P **Pn** **04 14 07.9 +0.2**
baz=321
TWC *e*S **Sb** **04 14 21.2 -1.0**
baz=321
**EHYH Wanrong 1.15 260** P **Pb** **04 14 08.9 +0.6**
baz=256
EHYH *e*S **Sn** **04 14 23.9 +0.8**
baz=256
**EHY Hungye 1.17 261** P **Pb** **04 14 09.0 +0.4**
baz=256
EHY *e*S **Sb** **04 14 23.5 +0.1**
baz=256
**HATJ Hateruma jima 1.18 72** P **Pb** **04 14 09.0 +0.3**
HATJ *e*S **Sb** **04 14 23.4 0.0**
**CHKH Chenggong 1.20 246** *e*P **Pn** **04 14 08.6 -0.1**
baz=241
CHKH *e*S **Sb** **04 14 22.8 -1.3**
baz=241
**YULB Yu-li 1.22 256** P **Pb** **04 14 09.6 +0.2**
baz=251
YULB *e*S **Sn** **04 14 25.2 +0.4**
baz=251
**TWF1 Yuli 1.23 254** *e*P **Pn** **04 14 09.4 +0.3**
baz=241
TWF1 *e*S **Sn** **04 14 25.1 0.0**
baz=241
**IRIF Iriomote-Funau 1.23 58** P **Pb** **04 14 09.7 +0.2**
IRIF S **Sn** **04 14 24.5 -0.5**
**CHKT Chengkung 1.26 242** *e*P **Pn** **04 14 09.8 +0.2**
baz=229
CHKT *e*S **Sn** **04 14 24.7 -1.2**
baz=229
**LATG Datong 1.28 311** *e*P **Pb** **04 14 10.6 +0.1**
baz=308
**FULB Fuli 1.28 248** *e*P **Pn** **04 14 10.0 +0.2**
baz=235
FULB *e*S **Sn** **04 14 25.1 -1.3**
baz=235
**WHF Hehuan Shan 1.29 291** P **Pn** **04 14 10.6 +0.4**
baz=277
WHF *e*S **Sn** **04 14 26.1 -1.1**
baz=277
**OWD Renai 1.31 282** P **Pn** **04 14 10.8 +0.5**
baz=277
OWD *e*S **Sn** **04 14 26.9 -0.5**
baz=277
**NNSB Datong 1.32 304** P **Pn** **04 14 11.0 +0.6**
baz=300
NNSB S **Sn** **04 14 26.7 -0.8**
baz=300
**NNSH Datong 1.32 304** P **Pb** **04 14 11.1 -0.1**
baz=300
NNSH S **Sn** **04 14 26.8 -0.7**
baz=300
**TWE Neicheng 1.32 321** *e*P **Pb** **04 14 11.0 -0.1**
baz=319
TWE *e*S **Sn** **04 14 26.8 -0.6**
baz=319
**VWDT VWDT 1.32 273** P **Pb** **04 14 11.2 +0.1**
baz=261
VWDT *e*S **Sn** **04 14 27.0 -0.4**
baz=261
**ENTT Nioudou 1.32 316** *e*P **Pb** **04 14 11.7 +0.5**
baz=313
ENTT *e*S **Sn** **04 14 25.4 -2.1**
baz=313
**NDT Datong Townshi 1.33 313** *e*S **Sn** **04 14 27.4 -0.2**
baz=310
**NNS Nan Shan 1.33 304** P **Pb** **04 14 11.4 0.0**
baz=301
NNS *e*S **Sn** **04 14 27.2 -0.7**
baz=301
**CHGB Renai 1.34 286** *e*P **Pn** **04 14 11.4 +0.6**
baz=274
**FUSS Fushou 1.34 295** P **Pb** **04 14 11.6 -0.1**
baz=291
FUSS S **Sn** **04 14 28.1 -0.2**
baz=291
**WUSB Renai 1.37 283** P **Pn** **04 14 11.9 +0.7**
baz=279
**EHD Haiduan 1.38 247** *e*P **Pn** **04 14 11.5 +0.4**
baz=235
EHD *e*S **Sn** **04 14 28.3 -0.4**
baz=235
**EDH Donghe 1.38 239** *e*P **Pn** **04 14 11.4 +0.3**
baz=229
EDH *e*S **Sn** **04 14 27.6 -1.1**
baz=229
**ECS Chishang 1.39 245** *e*P **Pb** **04 14 13.7 +1.5**
baz=233
ECS *e*S **Sb** **04 14 30.6 +1.1**
baz=233
**FUSB Fushanzhiwuyua 1.40 320** *e*P **Pn** **04 14 11.7 +0.2**
baz=317
FUSB *e*S **Sn** **04 14 28.8 -0.6**
baz=317
**TWT Tachien 1.40 294** P **Pb** **04 14 12.7 0.0**
baz=289
TWT *e*S **Sn** **04 14 29.6 -0.1**
baz=289
**JKRS Kuro-shima 1.41 67** *e*P **Pb** **04 14 12.3 -0.4**
JKRS *e*S **Sb** **04 14 30.1 -0.2**
**TDCB Techi 1.42 294** *e*P **Pn** **04 14 12.6 +0.8**
baz=290
TDCB *e*S **Sn** **04 14 29.2 -0.7**
baz=290
**LDUT Ludao 1.44 225** *e*P **Pn** **04 14 12.1 +0.1**
baz=222
LDUT *e*S **Sn** **04 14 28.6 -1.8**
baz=222
**TIPB Shuangxi 1.45 332** *e*P **Pn** **04 14 12.5 +0.3**
baz=330
TIPB *e*S **Sn** **04 14 29.8 -0.8**
baz=330
**NWLT Wulai 1.46 318** *e*P **Pn** **04 14 13.1 +0.7**
baz=315
NWLT *e*S **Sn** **04 14 30.6 -0.3**
baz=315
**YHNB Yeheng 1.47 312** *e*P **Pb** **04 14 13.4 -0.4**
baz=309
YHNB *e*S **Sn** **04 14 30.4 -0.8**
baz=309
**NSK Sanguang 1.49 311** *e*P **Pn** **04 14 13.5 +0.8**
baz=309
NSK *e*S **Sn** **04 14 30.9 -0.7**
baz=309
**SSLB Suanglung 1.50 274** *e*P **Pn** **04 14 13.3 +0.6**
baz=270
**YUS Yu-Shan 1.51 263** ⇓*i*P **Pb** **04 14 14.5 -0.1**
baz=258
YUS S **Sn** **04 14 32.6 -0.1**
baz=258
**ELDTW Lidau 1.52 251** *e*P **Pn** **04 14 13.7 +0.5**
baz=247
ELDTW *e*S **Sn** **04 14 31.4 -1.1**
baz=247
**SXI1 Grass Mountain 1.54 335** *e*P **Pn** **04 14 13.5 +0.1**
baz=334
**LONT Longtian 1.55 240** *e*P **Pn** **04 14 14.3 +0.9**
baz=230
LONT *e*S **Sb** **04 14 34.2 0.0**
baz=230
**DPDB Guoxing 1.55 283** *e*P **Pb** **04 14 14.9 -0.2**
baz=279
**WCS Beigang Elemen 1.57 284** *e*P **Pb** **04 14 15.1 -0.3**
baz=280
**TWA Mucha 1.57 325** *e*S **Sb** **04 14 34.7 -0.2**
baz=338
**JIJ Ishigaki jima 1.58 65** P **Pn** **04 14 14.3 +0.4**
JIJ S **Sn** **04 14 33.0 -0.7**
**WHYT Xinyi Township 1.58 270** *e*P **Pb** **04 14 15.5 -0.1**
baz=261
**TYC Yuchr 1.59 278** *e*P **Pb** **04 14 15.3 -0.5**
baz=266
**WHP Taichung City 1.61 292** *e*P **Pb** **04 14 15.9 -0.2**
baz=281
**NFF Wufeng Townshi 1.63 305** *e*P **Pb** **04 14 16.2 -0.3**
baz=302
NFF *e*S **Sn** **04 14 35.2 0.0**
baz=302
**TWGBT Beinan 1.63 238** *e*P **Pn** **04 14 15.6 +1.0**
baz=227
TWGBT *e*S **Sn** **04 14 34.5 -0.6**
baz=227
**TWG Pinlang 1.64 238** *e*P **Pn** **04 14 15.8 +1.1**
baz=227
TWG *e*S **Sn** **04 14 35.0 -0.2**
baz=227

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WJS** | **Zhushan** | **1.70** | **275** | *eP* | **Pb** | **04 14 18.8** | **+1.1** |
| | baz=268 | | | | | | |
| **LIOB** | **Emei** | **1.72** | **304** | *eP* | **Pb** | **04 14 18.2** | **+0.3** |
| | baz=291 | | | | | | |
| LIOB | | | | *eS* | **Sb** | **04 14 38.4** | **-0.7** |
| | baz=291 | | | | | | |
| **YM01** | **YM01** | **1.72** | **328** | *eP* | **Pn** | **04 14 17.0** | **+1.1** |
| | baz=339 | | | | | | |
| **NSTT** | **Nanjuang** | **1.72** | **303** | *eP* | **Pb** | **04 14 18.3** | **+0.4** |
| | baz=290 | | | | | | |
| NSTT | | | | *eS* | **Sn** | **04 14 38.2** | **+1.0** |
| | baz=290 | | | | | | |
| **WNT** | **Mingjian** | **1.75** | **276** | *eP* | **Pb** | **04 14 19.0** | **+0.6** |
| | baz=273 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.81** | **60** | *eP* | **Pn** | **04 14 17.4** | **+0.3** |
| JISG | | | | S | **Sn** | **04 14 38.4** | **-1.1** |
| **NSY** | **Sanyi** | **1.81** | **294** | *eP* | **Pb** | **04 14 19.4** | **-0.1** |
| | baz=291 | | | | | | |
| **TPUB** | **Ta-pu** | **1.83** | **258** | P | **Pb** | **04 14 19.9** | **0.0** |
| | baz=248 | | | | | | |
| TPUB | | | | *eS* | **Sb** | **04 14 42.3** | **-0.1** |
| | baz=248 | | | | | | |
| **ECL** | **Taimali** | **1.85** | **234** | *eP* | **Pn** | **04 14 17.9** | **+0.3** |
| | baz=242 | | | | | | |
| **WTP** | **Ta-pu** | **1.86** | **257** | *eP* | **Pb** | **04 14 19.8** | **-0.6** |
| | baz=253 | | | | | | |
| WTP | | | | *eS* | **Sb** | **04 14 44.5** | **+1.2** |
| | baz=253 | | | | | | |
| **SLGT** | **Liugui** | **1.91** | **249** | *eP* | **Pb** | **04 14 21.1** | **-0.1** |
| | baz=241 | | | | | | |
| SLGT | | | | *eS* | **Sb** | **04 14 44.0** | **-0.6** |
| | baz=241 | | | | | | |
| **SGST** | **Jiashian** | **1.93** | **252** | *eP* | **Pb** | **04 14 20.7** | **-0.9** |
| | baz=240 | | | | | | |
| SGST | | | | *eS* | **Sb** | **04 14 44.5** | **-0.9** |
| | baz=240 | | | | | | |
| **TWK** | **Hsinying** | **1.97** | **258** | *eP* | **Pb** | **04 14 22.1** | **-0.1** |
| | baz=254 | | | | | | |
| TWK | | | | *eS* | **Sb** | **04 14 46.5** | **+0.1** |
| | baz=254 | | | | | | |
| **SNST** | **Tainan City** | **1.97** | **257** | *eP* | **Pb** | **04 14 22.1** | **-0.2** |
| | baz=253 | | | | | | |
| SNST | | | | *eS* | **Sb** | **04 14 46.9** | **+0.6** |
| | baz=253 | | | | | | |
| **TSMG** | **Majia** | **2.04** | **242** | *eP* | **Pb** | **04 14 22.6** | **-0.7** |
| | baz=233 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.09** | **239** | *eP* | **Pn** | **04 14 22.7** | **+1.7** |
| | baz=231 | | | | | | |
| **JTJ** | **Tarama** | **2.15** | **64** | *eP* | **Pn** | **04 14 22.6** | **+0.8** |
| JTJ | | | | *eS* | **Sn** | **04 14 47.3** | **-0.7** |
| **TSCK** | **Chigu Township** | **2.36** | **257** | *eP* | **Pb** | **04 14 27.4** | **-1.3** |
| | baz=254 | | | | | | |

*JMA* ***12*** *04:14:49.0±0.1, 23°.8N±0°.4×122°.5E±0°.2, h36km, NW OFF ISHIGAKIJIMA IS*
*TAP* ***12*** *04:14:49.2, 23°.77N×122°.55E, h40km, ML2.7, D*
**ISC 12 04:14:46.0**±1.3**, 23°.73N**±0°.03×**122°.58E**±0°.03**, h15**km±9km**, n70, σ0°89/106, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EOS4** | **EOS4** | **0.46** | **329** | *eP* | **Pn** | **04 14 58.5** | **+0.8** |
| | baz=328 | | | | | | |
| EOS4 | | | | *eS* | **Sn** | **04 15 05.5** | **0.0** |
| | baz=328 | | | | | | |
| **EOS3** | **EOS3** | **0.61** | **337** | *eP* | **Pn** | **04 15 01.0** | **+1.1** |
| | baz=330 | | | | | | |
| EOS3 | | | | *eS* | **Sn** | **04 15 09.5** | **+0.1** |
| | baz=330 | | | | | | |
| **EOS2** | **EOS2** | **0.76** | **336** | *eP* | **Pn** | **04 15 03.5** | **+1.4** |
| | baz=318 | | | | | | |
| EOS2 | | | | *eS* | **Sn** | **04 15 13.5** | **+0.3** |
| | baz=318 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.80** | **25** | *eP* | **Pn** | **04 15 03.1** | **+0.3** |
| JYNG | | | | S | **Sn** | **04 15 13.1** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **0.83** | **28** | P | **Pn** | **04 15 03.5** | **+0.2** |
| | baz=31 | | | | | | |
| YOJ | | | | S | **Sn** | **04 15 15.4** | **+0.2** |
| | baz=31 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.83** | **28** | P | **Pn** | **04 15 03.7** | **+0.5** |
| **SHUL** | **Shoufeng** | **0.93** | **274** | *eP* | **Pn** | **04 15 05.0** | **+0.5** |
| | baz=278 | | | | | | |
| SHUL | | | | *eS* | **Sg** | **04 15 17.1** | **+0.9** |
| | baz=278 | | | | | | |
| **TWD** | **Chiawan** | **0.96** | **292** | P | **Pg** | **04 15 05.1** | **+0.4** |
| | baz=279 | | | | | | |
| **EAHA** | **Aohua** | **0.97** | **308** | *eP* | **Pn** | **04 15 05.8** | **+0.7** |
| | baz=306 | | | | | | |
| **NACB** | **Ninganchiao** | **1.00** | **297** | P | **Pg** | **04 15 05.6** | **+0.2** |
| | baz=294 | | | | | | |
| NACB | | | | *eS* | **Sg** | **04 15 18.1** | **-0.4** |
| | baz=294 | | | | | | |
| **ETM** | **Tongmen** | **1.02** | **284** | *eP* | **Pb** | **04 15 05.8** | **+0.4** |
| | baz=275 | | | | | | |
| ETM | | | | *eS* | **Sb** | **04 15 18.5** | **-0.1** |
| | baz=275 | | | | | | |
| **EWUT** | **Wuta** | **1.02** | **315** | *eP* | **Pn** | **04 15 06.7** | **+0.9** |
| | baz=313 | | | | | | |
| EWUT | | | | *eS* | **Sn** | **04 15 20.5** | **+0.6** |
| | baz=313 | | | | | | |
| **ENA** | **Nanau** | **1.03** | **313** | P | **Pn** | **04 15 07.0** | **+1.0** |
| | baz=311 | | | | | | |
| ENA | | | | *eS* | **Sn** | **04 15 20.5** | **+0.2** |
| | baz=311 | | | | | | |
| **ESL** | **Shilin** | **1.05** | **275** | *eP* | **Pb** | **04 15 06.2** | **+0.3** |
| | baz=263 | | | | | | |
| ESL | | | | *eS* | **Sb** | **04 15 18.9** | **-0.6** |
| | baz=263 | | | | | | |
| **HGSD** | **Ruisui** | **1.08** | **258** | *eP* | **Pb** | **04 15 06.9** | **+0.5** |
| | baz=254 | | | | | | |
| HGSD | | | | *eS* | **Sb** | **04 15 20.2** | **-0.2** |
| | baz=254 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.09** | **270** | *eP* | **Pb** | **04 15 06.9** | **+0.4** |
| | baz=258 | | | | | | |
| WARBT | | | | S | **Sb** | **04 15 20.0** | **-0.6** |
| | baz=258 | | | | | | |
| **TWC** | **Suao** | **1.10** | **323** | *eP* | **Pn** | **04 15 08.0** | **+1.1** |
| | baz=323 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.10** | **286** | *eP* | **Pn** | **04 15 07.7** | **+0.6** |
| | baz=274 | | | | | | |
| **ECBN** | **Changbin** | **1.11** | **249** | *eP* | **Pb** | **04 15 06.5** | **-0.4** |
| | baz=235 | | | | | | |
| ECBN | | | | *eS* | **Sb** | **04 15 21.0** | **-0.1** |
| | baz=235 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.11** | **296** | *eP* | **Pg** | **04 15 07.5** | **+0.1** |
| | baz=294 | | | | | | |
| **EHYH** | **Wanrong** | **1.15** | **259** | *eP* | **Pn** | **04 15 08.1** | **+0.5** |
| | baz=247 | | | | | | |
| **EHY** | **Hungye** | **1.17** | **259** | P | **Pn** | **04 15 08.6** | **+0.8** |
| | baz=256 | | | | | | |
| EHY | | | | S | **Sb** | **04 15 22.8** | **-0.2** |
| | baz=256 | | | | | | |
| **CHKH** | **Chenggong** | **1.21** | **244** | *eS* | **Sb** | **04 15 23.0** | **-1.0** |
| | baz=241 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.22** | **60** | P | **Pg** | **04 15 10.2** | **+0.7** |
| **YULB** | **Yu-li** | **1.22** | **254** | P | **Pn** | **04 15 09.3** | **+0.8** |
| | baz=251 | | | | | | |
| YULB | | | | *eS* | **Sb** | **04 15 23.5** | **-0.8** |
| | baz=251 | | | | | | |
| **TWF1** | **Yuli** | **1.23** | **253** | *eP* | **Pn** | **04 15 09.7** | **+1.0** |
| | baz=241 | | | | | | |
| TWF1 | | | | *eS* | **Sb** | **04 15 24.8** | **+0.1** |
| | baz=241 | | | | | | |
| **LATG** | **Datong** | **1.25** | **310** | *eP* | **Pg** | **04 15 10.3** | **+0.1** |
| | baz=309 | | | | | | |
| **EGS** | | **1.26** | **332** | *eP* | **Pn** | **04 15 08.3** | **-0.8** |
| | baz=332 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.27** | **289** | *eP* | **Pn** | **04 15 10.2** | **+0.6** |
| | baz=278 | | | | | | |
| WHF | | | | *eS* | **Sb** | **04 15 25.5** | **-0.7** |
| | baz=278 | | | | | | |
| **CHKT** | **Chengkung** | **1.27** | **241** | *eP* | **Pn** | **04 15 09.4** | **+0.2** |
| | baz=228 | | | | | | |
| CHKT | | | | *eS* | **Sb** | **04 15 24.3** | **-1.6** |
| | baz=228 | | | | | | |
| **FULB** | **Fuli** | **1.29** | **246** | *eP* | **Pn** | **04 15 09.6** | **+0.1** |
| | baz=235 | | | | | | |
| FULB | | | | *eS* | **Sb** | **04 15 25.2** | **-1.1** |
| | baz=235 | | | | | | |
| **TWE** | **Neicheng** | **1.29** | **320** | *eP* | **Pg** | **04 15 11.1** | **+0.1** |
| | baz=320 | | | | | | |
| **ENTT** | **Nioudou** | **1.29** | **315** | *eP* | **Pg** | **04 15 11.0** | **+0.1** |
| | baz=313 | | | | | | |
| ENTT | | | | *eS* | **Sg** | **04 15 26.8** | **-1.1** |
| | baz=313 | | | | | | |
| **NNSH** | **Datong** | **1.29** | **303** | *eP* | **Pb** | **04 15 10.5** | **+0.4** |
| | baz=294 | | | | | | |
| **OWD** | **Renai** | **1.30** | **280** | *eP* | **Pn** | **04 15 10.7** | **+0.9** |
| | baz=278 | | | | | | |
| **NDT** | **Datong Townshi** | **1.30** | **312** | *eP* | **Pg** | **04 15 11.4** | **+0.2** |
| | baz=311 | | | | | | |
| **NNS** | **Nan Shan** | **1.31** | **303** | *eP* | **Pg** | **04 15 10.9** | **-0.3** |
| | baz=301 | | | | | | |
| NNS | | | | *eS* | **Sb** | **04 15 26.5** | **-0.5** |
| | baz=301 | | | | | | |
| **VWDT** | **VWDT** | **1.31** | **272** | P | **Pn** | **04 15 10.7** | **+0.9** |
| | baz=261 | | | | | | |
| VWDT | | | | S | **Sb** | **04 15 26.4** | **-0.7** |
| | baz=261 | | | | | | |
| **FUSS** | **Fushou** | **1.32** | **293** | *eP* | **Pb** | **04 15 11.2** | **+0.5** |
| | baz=291 | | | | | | |
| FUSS | | | | *eS* | **Sb** | **04 15 27.2** | **-0.4** |
| | baz=291 | | | | | | |
| **CHGB** | **Renai** | **1.32** | **285** | *eP* | **Pn** | **04 15 11.0** | **+0.8** |
| | baz=275 | | | | | | |
| CHGB | | | | *eS* | **Sb** | **04 15 27.3** | **-0.3** |
| | baz=275 | | | | | | |
| **WUSB** | **Renai** | **1.36** | **282** | P | **Pn** | **04 15 11.4** | **+0.8** |
| | baz=279 | | | | | | |
| WUSB | | | | S | **Sb** | **04 15 28.2** | **-0.4** |
| | baz=279 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.37** | **319** | *eP* | **Pg** | **04 15 11.9** | **-0.5** |
| | baz=318 | | | | | | |
| FUSB | | | | S | **Sg** | **04 15 28.4** | **-1.8** |
| | baz=318 | | | | | | |
| **TWT** | **Tachien** | **1.38** | **293** | *eP* | **Pb** | **04 15 12.3** | **+0.6** |
| | baz=283 | | | | | | |
| **EDH** | **Donghe** | **1.39** | **238** | *eP* | **Pn** | **04 15 11.0** | **+0.2** |
| | baz=228 | | | | | | |
| EDH | | | | *eS* | **Sn** | **04 15 27.3** | **-1.6** |
| | baz=228 | | | | | | |
| **TDCB** | **Techi** | **1.40** | **292** | *eP* | **Pb** | **04 15 12.1** | **+0.2** |
| | baz=283 | | | | | | |
| **TIPB** | **Shuangxi** | **1.42** | **331** | *eP* | **Pg** | **04 15 13.1** | **-0.2** |
| | baz=331 | | | | | | |
| **NWLT** | **Wulai** | **1.43** | **317** | *eP* | **Pg** | **04 15 13.0** | **-0.6** |
| | baz=316 | | | | | | |
| NWLT | | | | *eS* | **Sb** | **04 15 30.1** | **-0.4** |
| | baz=316 | | | | | | |
| **YHNB** | **Yeheng** | **1.44** | **311** | *eP* | **Pg** | **04 15 13.0** | **-0.8** |
| | baz=309 | | | | | | |
| YHNB | | | | *eS* | **Sn** | **04 15 29.6** | **-0.8** |
| | baz=309 | | | | | | |
| **LDUT** | **Ludao** | **1.46** | **224** | *eP* | **Pn** | **04 15 11.9** | **0.0** |
| | baz=222 | | | | | | |
| LDUT | | | | *eS* | **Sn** | **04 15 28.5** | **-2.2** |
| | baz=222 | | | | | | |
| **NSK** | **Sanguang** | **1.46** | **311** | *eP* | **Pb** | **04 15 12.9** | **0.0** |
| | baz=309 | | | | | | |
| **SSLB** | **Suanglung** | **1.49** | **273** | *eP* | **Pn** | **04 15 13.1** | **+0.8** |
| | baz=270 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.50** | **335** | *eP* | **Pg** | **04 15 15.0** | **+0.1** |
| | baz=335 | | | | | | |
| **YUS** | **Yu-Shan** | **1.51** | **261** | *eP* | **Pn** | **04 15 14.1** | **+1.2** |
| | baz=258 | | | | | | |
| YUS | | | | *eS* | **Sn** | **04 15 32.1** | **-0.4** |
| | baz=258 | | | | | | |
| **ELDTW** | **Lidau** | **1.53** | **250** | *eP* | **Pn** | **04 15 14.6** | **+1.7** |
| | baz=247 | | | | | | |
| ELDTW | | | | *eS* | **Sn** | **04 15 31.3** | **-1.3** |
| | baz=247 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.54** | **276** | *eP* | **Pn** | **04 15 12.5** | **-0.6** |
| | baz=266 | | | | | | |
| **LONT** | **Longtian** | **1.56** | **239** | *eP* | **Pn** | **04 15 13.7** | **+0.5** |
| | baz=229 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.56** | **283** | *eP* | **Pb** | **04 15 14.6** | **0.0** |
| | baz=280 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.58** | **269** | *eP* | **Pb** | **04 15 15.7** | **+0.8** |
| | baz=261 | | | | | | |
| **TYC** | **Yuchr** | **1.58** | **277** | *eP* | **Pb** | **04 15 16.2** | **+1.2** |
| | baz=267 | | | | | | |
| **WHP** | **Taichung City** | **1.59** | **291** | *eP* | **Pg** | **04 15 16.8** | **+0.2** |
| | baz=281 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.61** | **304** | *eP* | **Pb** | **04 15 15.9** | **+0.5** |
| | baz=303 | | | | | | |
| NFF | | | | *eS* | **Sb** | **04 15 35.0** | **-0.6** |
| | baz=303 | | | | | | |
| **TWGBT** | **Beinan** | **1.65** | **237** | *eP* | **Pn** | **04 15 15.6** | **+1.2** |
| | baz=227 | | | | | | |
| **TWG** | **Pinlang** | **1.65** | **237** | *eP* | **Pn** | **04 15 15.4** | **+0.9** |
| | baz=227 | | | | | | |
| TWG | | | | *eS* | **Sn** | **04 15 34.6** | **-0.8** |
| | baz=227 | | | | | | |
| **LIOB** | **Emei** | **1.69** | **303** | *eP* | **Pg** | **04 15 17.7** | **-0.8** |
| | baz=314 | | | | | | |
| **NSTT** | **Nanjuang** | **1.70** | **302** | *eP* | **Pg** | **04 15 17.9** | **-0.7** |
| | baz=314 | | | | | | |
| **STYT** | **Tauyuan** | **1.76** | **252** | *eP* | **Pn** | **04 15 17.8** | **+1.8** |
| | baz=241 | | | | | | |
| **TPUB** | **Ta-pu** | **1.83** | **257** | *eP* | **Pn** | **04 15 18.6** | **+1.5** |
| | baz=248 | | | | | | |
| TPUB | | | | *eS* | **Sn** | **04 15 42.1** | **+2.1** |
| | baz=248 | | | | | | |
| **WTP** | **Ta-pu** | **1.86** | **256** | *eP* | **Pb** | **04 15 19.9** | **+0.2** |
| | baz=253 | | | | | | |
| **TWK** | **Hsinying** | **1.97** | **257** | *eP* | **Pn** | **04 15 21.3** | **+2.4** |
| | baz=254 | | | | | | |
| **MASBT** | **Mashibuluo** | **2.10** | **239** | *eP* | **Pn** | **04 15 23.7** | **+3.0** |
| | baz=231 | | | | | | |

*ISN* ***12*** *04:16:22.0±0.6, 32°.95N×46°.12E, h8km±12km, ML2.9*
*TEH* ***12*** *04:16:22.9, 32°.98N×46°.13E, h11km, ML2.9*
**ISC 12 04:16:23.5**±1.0**, 32°.98N**±0°.04×**46°.12E**±0°.04**, h10**km**, n12, σ0°82/15, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.20** | **308** | *ePg* | **Pg** | **04 16 27.0** | **-0.8** |
| IBDR | | | | *eSg* | **Sg** | **04 16 30.0** | **-0.8** |
| IBDR | | | | AML | AML | 04 16 35.9 | |
| | comp=N,777nm,0.9s | | | | | | |
| IBDR | | | | AML | AML | 04 16 38.5 | |
| | comp=E,642nm,0.6s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **0.64** | **6** | Pg | **Pg** | **04 16 35.9** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **1.14** | **351** | Pg | **Pn** | **04 16 46.1** | **+0.4** |
| **RAFI** | **Al-Rafai** | **1.26** | **180** | *ePn* | **Pg** | **04 16 47.0** | **-0.7** |
| RAFI | | | | *eSn* | **Sn** | **04 17 06.0** | **+1.9** |
| **IGHG** | **Ghaleghazi** | **1.39** | **15** | Pg | **Pg** | **04 16 51.0** | **+0.7** |
| **BHD** | **Baghdad** | **1.49** | **281** | *ePn* | **Pb** | **04 16 51.0** | **-0.3** |
| BHD | | | | *eSn* | **Sg** | **04 17 12.0** | **+0.5** |
| **KCHF** | **Cheshme Sefid,** | **1.50** | **30** | Pg | **Pg** | **04 16 52.1** | **-0.2** |
| **IKFM** | **Kafar-mosalman** | **1.54** | **69** | Pg | **Pg** | **04 16 52.6** | **-0.5** |
| **IDHR** | **Dehrash** | **1.73** | **7** | Pg | **Pg** | **04 16 56.3** | **-0.3** |
| **ILIN** | **Lien** | **2.05** | **20** | Pn | **Pb** | **04 17 00.7** | **-0.4** |
| **IBZA** | **Bozab** | **2.07** | **44** | Pn | **Pb** | **04 17 00.5** | **-0.9** |
| **SNQR** | **Sonqor, Kerman** | **2.25** | **33** | Pn | **Pb** | **04 17 03.9** | **-0.5** |

*NOU* ***12*** *04:52:49.2, 42°.85S×172°.73E, h2km, MLv3.8/8, South Island, New Zealand*
*WEL* ***12*** *04:52:50.3±0.3, 43°.S±2°.×17°.3E±°, h12km, M3.2/13, ML3.4/13, MLv3.2/13, Error ellipse: s-maj=0.0km s-min=0.0km az=99.6, confirmed*
**ISC 12 04:52:49.5**±0.8**, 42°.75S**±0°.02×**172°.77E**±0°.02**, h15**km±4km**, n77, σ1°31/92, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CULC** | **Culverden Airl** | **0.02** | **108** | P | **Pg** | **04 52 51.8** | **-0.3** |
| CULC | | | | S | **Sg** | **04 52 53.7** | **-0.2** |
| **WIGC** | **Waiau Gorge** | **0.06** | **22** | P | **Pg** | **04 52 50.9** | **-1.4** |
| WIGC | | | | S | **Sg** | **04 52 52.7** | **-1.5** |
| **LSRC** | **Lake Sumner Ro** | **0.20** | **235** | P | **Pb** | **04 52 54.5** | **-0.6** |
| LSRC | | | | S | **Sb** | **04 52 58.6** | **-0.1** |
| **SCAC** | **Scargill** | **0.22** | **150** | P | **Pb** | **04 52 55.0** | **-0.2** |
| SCAC | | | | S | **Sb** | **04 52 59.9** | **+0.9** |
| **WAKC** | **Waikari** | **0.22** | **193** | P | **Pb** | **04 52 56.1** | **+0.9** |
| WAKC | | | | S | **Sb** | **04 53 00.6** | **+1.6** |
| **HSES** | **Hanmer Springs** | **0.23** | **11** | P | **Pg** | **04 52 54.4** | **-0.2** |
| HSES | | | | S | **Sg** | **04 52 57.9** | **-0.3** |
| **WTMC** | **Te Mara Farm W** | **0.25** | **57** | P | **Pb** | **04 52 55.9** | **+0.2** |
| WTMC | | | | S | **Sb** | **04 53 00.4** | **+0.6** |
| **GVZ** | **Greta Valley S** | **0.29** | **138** | P | **Pn** | **04 52 57.7** | **-1.6** |
| GVZ | | | | S | **Sn** | **04 53 03.5** | **-1.9** |
| **LTZ** | **Lake Taylor** | **0.37** | **265** | P | **Pb** | **04 52 57.4** | **-0.5** |
| LTZ | | | | S | **Sg** | **04 53 02.7** | **+0.5** |
| **CECS** | **Cheviot Emerge** | **0.38** | **100** | P | **Pn** | **04 52 59.1** | **-1.3** |
| **AMBC** | **Amberley HDC** | **0.40** | **184** | P | **Pb** | **04 52 59.0** | **+0.6** |
| AMBC | | | | S | **Sn** | **04 53 06.3** | **-1.9** |
| **AMCZ** | **Amberley** | **0.43** | **192** | P | **Pn** | **04 53 00.5** | **-0.8** |
| **KHZ** | **Kahutara** | **0.66** | **60** | P | **Pb** | **04 53 03.3** | **+0.6** |
| **KHZ** | **Kahutara** | **0.66** | **60** | P | **Pb** | **04 53 03.3** | **+0.6** |
| **OXZ** | **Oxford** | **0.79** | **223** | P | **Pn** | **04 53 06.0** | **-0.1** |
| OXZ | | | | S | **Sn** | **04 53 17.5** | **-0.2** |
| **MQZ** | **McQueen's Vall** | **0.96** | **185** | P | **Pn** | **04 53 08.3** | **-0.2** |
| MQZ | | | | S | **Sn** | **04 53 22.2** | **+0.4** |
| **INZ** | **Inchbonnie** | **0.98** | **271** | P | **Pb** | **04 53 08.2** | **0.0** |
| **OKCZ** | **Okains Bay** | **0.99** | **168** | P | **Pn** | **04 53 09.7** | **+0.7** |
| **THZ** | **Tophouse** | **0.99** | **6** | P | **Pb** | **04 53 07.8** | **-0.7** |
| **RACZ** | **Rakaia** | **1.08** | **205** | P | **Pn** | **04 53 10.0** | **-0.1** |
| **AKCZ** | **Akaroa Harbour** | **1.12** | **175** | P | **Pg** | **04 53 10.8** | **-0.4** |
| AKCZ | | | | S | **Sn** | **04 53 26.4** | **+0.4** |
| **MHCZ** | **Mount Hutt** | **1.18** | **228** | P | **Pb** | **04 53 11.3** | **-0.4** |
| **DSZ** | **Denniston Nort** | **1.24** | **324** | P | **Pn** | **04 53 12.6** | **+0.2** |
| DSZ | | | | S | **Sb** | **04 53 28.7** | **+0.3** |
| **BSWZ** | **Blackbirch Sta** | **1.32** | **39** | P | **Pb** | **04 53 14.6** | **+0.6** |
| **MRNZ** | **Matariki Terra** | **1.35** | **360** | P | **Pn** | **04 53 14.4** | **+0.5** |
| **WACZ** | **Wakanui South** | **1.37** | **209** | P | **Pn** | **04 53 14.0** | **-0.2** |
| **WVZ** | **Waitaha Valley** | **1.53** | **257** | P | **Pb** | **04 53 17.1** | **-0.5** |
| WVZ | | | | S | **Sb** | **04 53 36.9** | **+0.1** |
| **RPZ** | **Rata Peaks** | **1.58** | **232** | P | **Pn** | **04 53 17.1** | **0.0** |
| **RPZ** | **Rata Peaks** | **1.58** | **232** | P | **Pn** | **04 53 17.0** | **-0.1** |
| **TUWZ** | **Tuamarina** | **1.58** | **34** | P | **Pb** | **04 53 18.6** | **+0.1** |
| **NNZ** | **Nelson** | **1.60** | **17** | P | **Pn** | **04 53 18.1** | **+0.8** |
| **TKNZ** | **Takaka Hill** | **1.72** | **5** | P | **Pb** | **04 53 20.4** | **-0.5** |
| **GCSZ** | **Gaunt Creek Bo** | **1.88** | **252** | P | **Pn** | **04 53 22.1** | **+1.0** |
| **TCW** | **Tory Channel** | **1.91** | **37** | P | **Pn** | **04 53 21.7** | **+0.2** |
| **QRZ** | **Quartz Range** | **1.93** | **355** | P | **Pb** | **04 53 23.6** | **-0.9** |
| **QRZ** | **Quartz Range** | **1.93** | **355** | P | **Pb** | **04 53 23.8** | **-0.7** |
| **BHW** | **Baring Head** | **2.06** | **50** | P | **Pn** | **04 53 23.6** | **0.0** |
| **TMZ** | **Timaru** | **2.08** | **218** | P | **Pn** | **04 53 23.6** | **-0.2** |
| **DUWZ** | **D'Urville Isla** | **2.13** | **24** | P | **Pn** | **04 53 26.1** | **+1.5** |
| **PLWZ** | **Palliser** | **2.19** | **58** | P | **Pn** | **04 53 24.9** | **-0.6** |
| **MSWZ** | **Moikau Station** | **2.28** | **55** | P | **Pn** | **04 53 26.0** | **-0.6** |
| **FOZ** | **Fox Glacier** | **2.30** | **249** | P | **Pn** | **04 53 27.8** | **+0.9** |
| **CAW** | **Cannon Point** | **2.37** | **47** | P | **Pn** | **04 53 27.7** | **-0.3** |
| **PAWZ** | **Paruwai Farm** | **2.40** | **56** | P | **Pn** | **04 53 27.5** | **-0.9** |
| **KIW** | **Kapiti Island** | **2.48** | **41** | P | **Pn** | **04 53 29.5** | **+0.1** |
| **LBZ** | **Lake Benmore** | **2.49** | **228** | P | **Pn** | **04 53 29.6** | **0.0** |
| **OGWZ** | **Otaki Gorge** | **2.64** | **44** | P | **Pn** | **04 53 31.3** | **-0.2** |
| **ODZ** | **Otahua Downs** | **2.76** | **213** | P | **Pn** | **04 53 32.8** | **-0.4** |
| **ODZ** | **Otahua Downs** | **2.76** | **213** | P | **Pn** | **04 53 32.8** | **-0.4** |
| **HOWZ** | **Holdsworth Sta** | **2.76** | **49** | P | **Pb** | **04 53 40.1** | **+1.4** |
| **MRZ** | **Mangatainoka R** | **2.96** | **46** | P | **Pn** | **04 53 35.2** | **-0.8** |
| **JCZ** | **Jackson Bay** | **3.19** | **244** | P | **Pn** | **04 53 39.3** | **0.0** |
| **JCZ** | **Jackson Bay** | **3.19** | **244** | P | **Pn** | **04 53 39.3** | **0.0** |
| **HHSZ** | **Highcliff Hill** | **3.50** | **206** | P | **Pn** | **04 53 42.9** | **-0.5** |
| **EAZ** | **Earnscleugh** | **3.52** | **224** | P | **Pn** | **04 53 43.0** | **-0.7** |
| **DVHZ** | **Dannevirke** | **3.54** | **47** | P | **Pn** | **04 53 42.4** | **-1.5** |
| **NBEZ** | **Newall Road No** | **3.58** | **14** | P | **Pn** | **04 53 50.7** | **-1.8** |
| **KHEZ** | **Kahui Hut** | **3.58** | **16** | P | **Pn** | **04 53 47.5** | **+2.9** |
| **KHEZ** | **Kahui Hut** | **3.58** | **16** | P | **Pb** | **04 53 49.6** | **-3.0** |
| **PKE** | **Pukeiti** | **3.67** | **15** | P | **Pb** | **04 53 51.9** | **-2.2** |
| **TUZ** | **Tuapeka** | **3.91** | **214** | P | **Pn** | **04 53 48.8** | **-0.3** |
| **VRZ** | **Vera Road** | **3.92** | **23** | P | **Pn** | **04 53 53.6** | **+4.3** |
| **PKVZ** | **Pokaka** | **3.97** | **30** | P | **Pb** | **04 53 56.2** | **-3.0** |
| **WNVZ** | **Wahianoa** | **4.03** | **33** | P | **Pn** | **04 53 51.8** | **+0.8** |
| **TUVZ** | **Tukino** | **4.11** | **33** | P | **Pn** | **04 53 52.6** | **+0.6** |
| **NGZ** | **Ngauruhoe** | **4.17** | **32** | P | **Pn** | **04 53 55.6** | **+2.9** |
| **SNVZ** | **South Ngauruho** | **4.17** | **32** | P | **Pn** | **04 53 55.9** | **+3.1** |
| **OTVZ** | **Oturere** | **4.20** | **32** | P | **Pn** | **04 53 53.8** | **+0.6** |
| **NNVZ** | **North Ngauruho** | **4.21** | **32** | P | **Pn** | **04 53 54.3** | **+1.0** |
| **MLZ** | **Mavora Lakes** | **4.25** | **230** | P | **Pn** | **04 53 53.5** | **-0.3** |
| **TMVZ** | **Te Maari** | **4.26** | **32** | P | **Pn** | **04 53 54.4** | **+0.5** |
| **HIZ** | **Hauiti** | **4.52** | **21** | P | **Pn** | **04 54 00.7** | **+3.2** |
| **HIZ** | **Hauiti** | **4.52** | **21** | P | **Pn** | **04 54 00.4** | **+3.0** |
| **SYZ** | **Scrubby Hill** | **4.59** | **213** | P | **Pn** | **04 53 58.0** | **-0.3** |
| **SYZ** | **Scrubby Hill** | **4.59** | **213** | P | **Pn** | **04 53 58.1** | **-0.3** |
| **TJZ** | **Tolley Road** | **4.89** | **26** | P | **Pn** | **04 54 04.8** | **+2.2** |
| **MKAZ** | **Moumakai** | **5.93** | **19** | P | **Pn** | **04 54 20.6** | **+3.8** |

*BUT* ***12*** *04:53:38.7±1.7, 46°.87N±0°.03×112°.54W±0°.03, h13km±6km, Error ellipse: s-maj=4.5km s-min=2.5km az=176.0*
**NEIC 12 04:53:37.7**±0.7**, 46°.86N**±0°.03×**112°.51W**±0°.02**, h15**km±3km**, ML2.6/22, ML2.7/12(BUT), Error ellipse: s-maj=4.5km s-min=1.9km az=171.0, Montana**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LYMT** | **Lyon Mountain** | **0.18** | **54** | | Pb | 04 53 43.2 | +0.3 |
| LYMT | | | | Sg | Sb | 04 53 46.0 | -0.4 |
| **OVMT** | **Ovando** | **0.39** | **301** | Pg | Pg | 04 53 45.8 | 0.0 |
| OVMT | | | | Sg | Sg | 04 53 51.4 | +0.2 |
| **BPMT** | **Black Pine Rid** | **0.78** | **237** | Pg | Pg | 04 53 52.7 | -0.1 |
| BPMT | | | | Sg | Sg | 04 54 02.8 | -0.3 |
| **MSO** | **Missoula** | **0.98** | **269** | Pg | Pn | 04 53 57.2 | +0.1 |
| MSO | | | | Sg | Sb | 04 54 09.4 | 0.0 |
| MSO | | | | IAML | | 04 54 12.9 | |
| | 104nm,0.3s | | | | | | |
| MSO | | | | IAML | | 04 54 13.1 | |
| | 145nm,0.5s | | | | | | |
| **BOZ** | **Bozeman (W)** | **1.41** | **154** | | Pg | 04 54 04.4 | -0.4 |
| BOZ | | | | IAML | | 04 54 25.4 | |
| | 68nm,0.3s | | | | | | |
| BOZ | | | | IAML | | 04 54 25.6 | |
| | 121nm,0.3s | | | | | | |
| **DLMT** | **Dillon** | **1.50** | **182** | Pn | Pb | 04 54 05.5 | +0.2 |
| **EGMT** | **Eagleton** | **2.20** | **57** | Pn | Pn | 04 54 13.8 | +0.1 |
| **YHL** | **Hebgen Lake** | **2.21** | **155** | Pn | Pb | 04 54 16.1 | -1.5 |
| YHL | | | | IAML | | 04 54 50.4 | |
| | comp=N,58nm,0.7s | | | | | | |
| YHL | | | | IAML | | 04 54 52.5 | |
| | comp=E,52nm,0.4s | | | | | | |
| **YHH** | **Holmes Hill** | **2.38** | **150** | Pn | Pn | 04 54 16.7 | +0.3 |
| **YMR** | **Madison River** | **2.44** | **153** | Pn | Pn | 04 54 17.8 | +0.5 |
| YMR | | | | IAML | | 04 54 

D23K IAML 05 05 03.2
comp=E,417nm,0.5s
D23K IAML 05 05 03.3
comp=N,492nm,0.7s
**F26K Sheenjek River 1.49 126 Pn 05 04 43.7 +0.2**
F26K IAML 05 05 07.4
comp=N,314nm,0.9s
F26K IAML 05 05 07.4
comp=E,236nm,0.7s
**BMAR Burnt Mountain 1.56 138 Pn 05 04 45.5 +1.0**
**C26K Camden Bay 1.58 32 Pn 05 04 45.3 +0.7**
C26K IAML 05 05 14.8
comp=E,204nm,0.9s
**C27K Jago River 1.65 50 Pn 05 04 46.0 +0.4**
C27K **Sb 05 05 08.7 +0.7**
C27K IAML 05 05 11.7
comp=E,226nm,0.7s
C27K IAML 05 05 15.4
comp=N,257nm,0.8s
**C23K Itkillik River 1.71 318** Pn **Pn 05 04 47.2 +0.7**
**E22K Anaktuvuk Pass 1.73 256 Pn 05 04 47.7 +0.8**
E22K IAML 05 05 15.2
comp=N,174nm,0.8s
**COLD Coldfoot 1.76 220 Pn 05 04 47.6 +0.5**
**G25K Bearman Lake 1.90 165 Pn 05 04 49.4 +0.3**
**G24K Hadweenzic Riv 1.91 182 Pn 05 04 49.7 +0.5**
G24K IAML 05 05 22.1
comp=E,162nm,1.0s
G24K IAML 05 05 23.0
comp=N,219nm,0.8s
**D22K Ayikyak River 1.98 281 Pb 05 04 52.4 -0.3**
**G26K Porcupine Rive 2.13 139 Pn 05 04 52.8 +0.6**
**F22K John River 2.13 241 Pn 05 04 52.7 +0.4**
**E27K Coleen River 2.16 98 Pn 05 04 52.8 +0.2**
E27K IAML 05 05 28.2
comp=E,126nm,0.6s
E27K IAML 05 05 32.0
comp=N,103nm,0.6s
**G23K Bananza Creek 2.16 210 Pn 05 04 53.5 +0.7**
G23K IAML 05 05 33.4
comp=E,176nm,0.7s
G23K IAML 05 05 40.4
comp=N,121nm,0.8s
**FYU Fort Yukon 2.19 158 Pn 05 04 54.1 +1.0**
FYU IAML 05 05 37.9
comp=N,124nm,1.1s
**D27M Malcolm River 2.38 71** Pn **Pn 05 04 57.4 +1.6**
D27M IAML 05 05 34.4
comp=E,112nm,0.5s
D27M IAML 05 05 38.7
comp=N,140nm,0.9s
**E21K Killik River 2.46 269 Pn 05 04 57.2 +0.4**
E21K IAML 05 05 35.2
comp=E,143nm,0.9s
**F21K Alatna River 2.71 242 Pn 05 05 01.6 +1.3**
F21K IAML 05 05 47.9
comp=N,113nm,0.7s
F21K IAML 05 05 48.3
comp=E,92nm,0.9s
**B22K Teshekpuk Lake 2.77 312 Pn 05 05 01.8 +0.7**
**H24K Noodor Dome 2.78 185 Pn 05 05 02.2 +1.0**
H24K IAML 05 05 50.3
comp=E,69nm,0.9s
**G27K Doyon Strip 2.81 127 Pn 05 05 01.6 +0.1**
**B21K Ikpikpuk River 2.81 295 Pn 05 05 02.5 +0.9**
B21K IAML 05 05 58.6
comp=E,72nm,1.2s
B21K IAML 05 06 03.6
comp=N,92nm,1.1s
**E28M Babbage River 2.85 86 Pn 05 05 03.1 +1.0**
E28M IAML 05 05 57.0
comp=N,79nm,1.0s
**H23K Yukon River 2.92 198** Pn **Pn 05 05 02.9 -0.2**
H23K IAML 05 05 54.5
comp=E,81nm,0.9s
H23K IAML 05 05 59.2
comp=N,74nm,0.8s
**F28M Old Crow 2.96 106 Pn 05 05 04.2 +0.6**
F28M IAML 05 05 58.0
comp=E,89nm,0.7s
**H22K Ishtalitna Cre 3.14 212 Pn 05 05 06.8 +0.6**
**G21K Allakaket 3.17 232 Pn 05 05 06.6 +0.1**
**PRP Porcupine Dome 3.17 166** Pn **Pn 05 05 07.4 +0.7**
**H27K Steamboat Moun 3.26 134 Pn 05 05 08.2 +0.4**
**E20K Nigu River 3.30 268 Pn 05 05 08.7 +0.3**
**E29M Blow River 3.47 89 Pn 05 05 12.0 +1.3**
**POKR Poker Plat Res 3.50 181 Pn 05 05 11.9 +0.9**
POKR IAML 05 06 12.5
comp=E,47nm,0.8s
**I23K Minto, Yukon-K 3.56 194** Pn **Pn 05 05 12.0 +0.1**
I23K IAML 05 06 14.9
comp=E,49nm,0.8s
I23K IAML 05 06 18.3
comp=N,37nm,0.9s
**A22K Sinclair Lake 3.59 316 Pn 05 05 12.2 0.0**
**IMAR Indian Mountai 3.62 227** Pn **Pn 05 05 14.9 +2.2**
**H21K Melozitna Rive 3.65 219 Pn 05 05 13.9 +0.8**
H21K IAML 05 06 14.8
comp=E,46nm,1.1s
H21K IAML 05 06 15.3
comp=N,30nm,1.1s
**MDM Murphy Dome 3.67 186 Pn 05 05 14.5 +1.0**
MDM IAML 05 06 20.5
comp=E,35nm,0.7s
**I26K Coal Creek Min 3.69 152 Pn 05 05 14.1 +0.4**
**I27K Kandik River 3.74 141 Pn 05 05 14.7 +0.3**
**COLA College 3.75 184 Pn 05 05 15.7 +1.2**
**COLA College 3.75 184 Pn 05 05 15.8 +1.4**
COLA IAML 05 06 04.7
comp=E,91nm,0.5s
COLA IAML 05 06 21.4
comp=E,93nm,0.6s
**B20K Meade River 3.77 297 Pn 05 05 14.7 0.0**
B20K IAML 05 06 35.3
comp=E,46nm,1.0s
B20K IAML 05 06 41.1
comp=N,46nm,1.1s
**MLY Manley 3.83 202 Pn 05 05 15.7 0.0**
**IL31 3.85 177 Pn 05 05 16.9 +1.1**
**ILAR Eielson Array 3.85 177 Pn 05 05 16.8 +0.9**
**ILAR Eielson Array 3.85 177** Pn Pn **05 05 16.6 +0.7**
comp=N,1.6nm,0.3s,baz=353,slow=10,SNR=40
ILAR Sn **Sn 05 06 00.8 -0.3**
comp=N,1.3nm,0.3s,baz=354,slow=16,SNR=2.5
ILAR Lg Lg 05 06 15.4
comp=N,2.6nm,0.3s,baz=356,slow=30,SNR=13
comp=N,2.0nm,0.3s
**IL03 Eielson Array 3.85 177** Pn **Pn 05 05 16.8 +0.9**
**I21K Tanana 3.90 210 Pn 05 05 17.0 +0.5**
**E19K Redstone River 3.90 258 Pn 05 05 17.6 +1.1**
**G29M Pine Creek 3.92 111 Pn 05 05 17.6 +0.8**
**D19K Kuna River 3.97 274 Pn 05 05 18.0 +0.5**
**CCB Clear Creek Bu 3.98 183 Pn 05 05 18.5 +0.9**
**J25K Salcha River, 4.08 168 Pn 05 05 20.0 +1.0**
J25K IAML 05 06 31.3
comp=E,30nm,1.1s
**NEA2 Nenana 4.08 191 Pn 05 05 19.7 +0.6**
**WRH Wood River Hil 4.16 185 Pn 05 05 20.9 +0.8**
WRH IAML 05 06 33.0
comp=E,22nm,0.7s
**H29M Whitestone 4.20 121 Pn 05 05 21.5 +0.9**
H29M IAML 05 06 40.0
comp=E,35nm,1.0s
**HDA Harding Lake 4.21 178 Pn 05 05 21.7 +0.9**
HDA IAML 05 06 27.7
comp=E,36nm,1.1s
HDA IAML 05 06 36.5
comp=N,22nm,1.0s
**I28M Miner Creek 4.28 134 Pn 05 05 23.8 +1.8**
I28M IAML 05 06 39.0
comp=E,28nm,1.0s
I28M IAML 05 06 40.5
comp=N,20nm,1.1s
**F19K Shaleruckik Mo 4.36 251 Pn 05 05 23.7 +0.8**
F19K IAML 05 06 39.1
comp=N,19nm,1.2s
F19K IAML 05 06 53.8
comp=E,22nm,1.1s
**J26L Joseph Creek 4.38 158 Pn 05 05 23.9 +0.7**
J26L IAML 05 06 44.0
comp=E,20nm,0.8s
**F30M Barrier River 4.43 98 Pn 05 05 24.4 +0.6**
**C19K Lookout Ridge 4.48 282 Pn 05 05 25.0 +0.5**
C19K IAML 05 06 18.0
comp=E,22nm,0.8s
C19K IAML 05 06 18.8
comp=N,18nm,0.6s
**G19K Purcell Mounta 4.51 241 Pn 05 05 25.2 +0.3**
G19K IAML 05 06 45.4
comp=N,28nm,0.9s
**EGAK Eagle 4.55 145 Pn 05 05 26.2 +0.7**
EGAK IAML 05 06 46.2
comp=N,16nm,0.9s
EGAK IAML 05 06 52.5
comp=N,19nm,1.1s
**EPYK Eagle Plains 4.64 114 Pn 05 05 26.6 -0.2**
**H19K Roundabout Mou 4.72 234** Pn **Pn 05 05 28.6 +0.9**
H19K IAML 05 06 56.2
comp=N,25nm,0.8s
**BPAW Bear Paw Mtn. 4.75 200 Pn 05 05 29.0 +0.6**
BPAW IAML 05 06 55.1
comp=E,13nm,0.7s
BPAW IAML 05 07 01.3
comp=N,14nm,0.8s
**I20K Naaghedeneel 4.76 220** Pn **Pn 05 05 28.8 +0.5**
**I29M Ogilvie Camp, 4.80 128 Pn 05 05 29.3 +0.4**
**SCRK Sand Creek 4.83 162 Pn 05 05 30.4 +0.9**
SCRK IAML 05 06 46.3
comp=E,20nm,0.8s
SCRK IAML 05 06 55.4
comp=N,15nm,0.8s
**K27K Chicken 5.05 153 Pn 05 05 33.5 +1.1**
**C18K Utukok River 5.08 277 Pn 05 05 33.3 +0.5**
C18K IAML 05 06 31.5
comp=E,13nm,1.1s
C18K IAML 05 07 23.1
comp=N,17nm,1.0s
**INK Inuvik 5.09 87** Pn **Pn 05 05 34.3 +1.5**
**E18K Tukpahlearik C 5.13 263 Pn 05 05 35.1 +1.6**
E18K IAML 05 06 35.6
comp=E,18nm,0.6s
**DOT Dot Lake 5.14 164 Pn 05 05 34.6 +1.0**
**J20K Nowinta River 5.22 215** Pn **Pn 05 05 35.1 +0.4**
J20K IAML 05 07 12.8
comp=N,12nm,0.9s
**F31M Tsiigehtchic 5.23 96** Pn **Pn 05 05 35.5 +0.8**
F31M IAML 05 06 38.8
comp=N,15nm,0.8s
F31M IAML 05 07 11.1
comp=E,16nm,0.9s
**G31M Satah River 5.23 103 Pn 05 05 35.2 +0.4**
G31M IAML 05 06 39.1
comp=E,16nm,0.8s
**RND Reindeer 5.25 188 Pn 05 05 36.2 +1.0**
RND IAML 05 06 40.1
comp=N,10.0nm,0.8s
**I30M Mount Dempster 5.47 123 Pn 05 05 38.4 +0.2**
**DHY Denali Highway 5.55 180 Pn 05 05 40.5 +1.2**
**H18K Honhosa River 5.56 237** Pn **Pn 05 05 40.0 +0.7**
**PAX Paxson 5.70 172** Pn **Pn 05 05 42.0 +0.6**
**F17K Baldwin Pennin 5.77 255** Pn **Pn 05 05 42.6 +0.5**
**RDOG Red Dog Mine 5.80 272 Pn 05 05 43.2 +0.5**
**C17K DeLong Mountai 5.83 276 Pn 05 05 42.9 -0.1**
**MENT Mentasta 5.87 164** Pn **Pn 05 05 43.9 +0.3**
**J30M Hart River 5.95 128 Pn 05 05 45.8 +1.0**
**L27K Beaver Creek, 6.00 155 Pn 05 05 46.1 +0.7**
**BCAR Beaver Creek A 6.00 155 Pn 05 05 46.5 +1.1**
**K29M Barlow Dome 6.20 136 Pn 05 05 49.5 +1.3**
**M26K Nabesna, AK 6.48 162 Pn 05 05 53.5 +1.5**
**C16K Lisburne Hills 6.65 276** Pn **Pn 05 05 53.9 -0.4**
**L29M L29M 6.67 141** Pn **Pn 05 05 55.6 +1.0**
**SKT Skwentna 6.88 197** Pn **Pn 05 05 58.8 +1.3**
**J17K VABM Dome 7.08 228** Pn **Pn 05 06 00.5 +0.3**
**KLU Klutina 7.16 175** Pn **Pn 05 06 01.6 +0.2**
**I17K Unalakleet 7.17 235** Pn **Pn 05 06 01.6 +0.3**
**M29M Somme Creek 7.18 145 Pn 05 06 01.7 0.0**
**F15K North Star Dit 7.33 255** Pn **Pn 05 06 05.0 +1.3**
**YUK2 White River 7.36 155 Pn 05 06 05.5 +1.5**
**YUK3 Moose Creek 7.43 154 Pn 05 06 06.0 +0.8**
**L18K Granite Mounta 7.50 216** Pn **Pn 05 06 06.9 +1.0**
**CTGM Chitina Glacie 8.07 159** Pn **Pn 05 06 14.1 +0.1**
**N30M Aishikik Lake 8.36 144** Pn **Pn 05 06 18.9 +1.1**
**C36M Paulatuk 8.37 74** Pn **Pn 05 06 16.6 -1.2**
**O30N Mendenhall 9.19 143** Pn **Pn 05 06 28.9 -0.3**
**YKA Yellowknife Ar 14.70 99** Pn **Pn 05 07 41.7 -2.6**
comp=N,0.1nm,0.3s,baz=308,slow=13,SNR=4.1
comp=N,1.6nm,0.9s
**NVAR Mina Array Bea 34.12 137** P **P 05 11 03.1 +1.7**
comp=N,0.2nm,0.5s,baz=325,slow=7.7,SNR=2.0
comp=N,0.2nm,0.5s
**TXAR Lajitas Array 46.74 124** P **P 05 12 48.2 +2.4**
comp=N,0.3nm,1.0s,baz=354,slow=7.3,SNR=2.0
comp=N,0.3nm,1.0s

*SJA* ***12*** *05:13:41.5±0.7,29.°75S×71.°33W,h17km±3km, ML4.1, MW4.0*
*IDC* ***12*** *05:13:43.8±1.0,29.°75S×71.°09W,h44km±7km, mb3.7/6, mbtmp3.8/11, ML3.5/5, MS2.8/2, Error ellipse: s-maj=30.6km s-min=15.8km az=99.0*
*GUC* ***12*** *05:13:43.2±0.7,29.°72S×71.°30W,h53km±1km, ML4.2*
*NEIC* ***12*** *05:13:43.7±1.6,29.°70S±0.°03×71.°37W±0.°09,h45km±10km, mb4.1/11, ML4.2(GUC), Error ellipse: s-maj=11.0km s-min=4.4km az=92.0*

**ISC 12 05:13:42.2±0.6, 29.68S±0.°03×71.53W±0.°04, h41km±5km, n124, σ1s98/163, mb4.1/12, 4C-7D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.35** | **134** | | | **Pn** | **05 13 51.6** | **+0.5** |
| CO05 | | | | | | **Sn** | **05 13 57.2** | **-0.1** |
| **CO05** | **La Serena** | **0.35** | **134** | ↓*i* | *P* | **Pn** | **05 13 51.6** | **+0.5** |
| CO05 | | | | *i* | *S* | **Sn** | **05 13 57.4** | **0.0** |
| CO05 | | | | | IAML | | 05 13 57.7 | |
| comp=E,24μm,0.3s | | | | | | | | |
| **GO04** | **Tololo Observa** | **0.80** | **128** | | | **Pn** | **05 13 56.7** | **-0.6** |
| GO04 | | | | | | **Sn** | **05 14 06.4** | **-1.8** |
| **GO04** | **Tololo Observa** | **0.80** | **128** | *e* | *P* | **Pn** | **05 13 56.0** | **-1.3** |
| **GO04** | **Tololo Observa** | **0.80** | **128** | *i* | *P* | **Pn** | **05 13 56.7** | **-0.6** |
| GO04 | | | | *i* | *S* | **Sn** | **05 14 06.2** | **-2.0** |
| **LCO** | **Las Campanas** | **0.98** | **47** | | | **Pn** | **05 13 59.6** | **-0.1** |
| LCO | | | | | | **Sn** | **05 14 11.6** | **-0.9** |
| **LCO** | **Las Campanas** | **0.98** | **47** | *e* | *P* | **Pn** | **05 13 58.9** | **-0.8** |
| LCO | | | | | IAML | | 05 14 13.1 | |
| comp=Z,6μm,0.3s | | | | | | | | |
| **LCO** | **Las Campanas** | **0.98** | **47** | *e* | *P* | **Pn** | **05 13 59.4** | **-0.4** |
| LCO | | | | | *e* | **Sn** | **05 14 10.7** | **-1.9** |
| **CO06** | **Fray Jorge** | **1.00** | **185** | | | **Pn** | **05 14 01.6** | **+1.8** |
| **CO06** | **Fray Jorge** | **1.00** | **185** | ↓*i* | *P* | **Pn** | **05 14 01.3** | **+1.5** |
| CO06 | | | | *i* | *S* | **Sn** | **05 14 14.7** | **+2.0** |
| CO06 | | | | | IAML | | 05 14 20.3 | |
| comp=N,5μm,0.1s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.28** | **104** | | | **Pn** | **05 14 03.6** | **-0.3** |
| **CO01** | **Juntas del Tor** | **1.28** | **104** | *e* | *P* | **Pn** | **05 14 03.4** | **-0.5** |
| CO01 | | | | *e* | *S* | **Sn** | **05 14 18.5** | **-1.5** |
| **CO01** | **Juntas del Tor** | **1.28** | **104** | ↓*i* | *P* | **Pn** | **05 14 03.6** | **-0.3** |
| CO01 | | | | *i* | *S* | **Sn** | **05 14 17.6** | **-2.4** |
| **CO03** | **El Pedregal** | **1.36** | **148** | | Pn | **Pn** | **05 14 04.9** | **0.0** |
| **CO03** | **El Pedregal** | **1.36** | **148** | *e* | *P* | **Pn** | **05 14 05.0** | **0.0** |
| CO03 | | | | *e* | *S* | **Sn** | **05 14 20.9** | **-0.9** |
| CO03 | | | | | IAML | | 05 14 22.0 | |
| comp=Z,3μm,0.7s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.36** | **148** | ↓*i* | *P* | **Pn** | **05 14 04.9** | **0.0** |
| CO03 | | | | *i* | *S* | **Sn** | **05 14 20.6** | **-1.3** |
| CO03 | | | | | IAML | | 05 14 21.7 | |
| comp=N,5μm,0.5s | | | | | | | | |
| **AC05** | **El Transito** | **1.38** | **53** | | | **Pn** | **05 14 05.3** | **+0.2** |
| **AC05** | **El Transito** | **1.38** | **53** | *e* | *P* | **Pn** | **05 14 04.8** | **-0.3** |
| **AC05** | **El Transito** | **1.38** | **53** | ↓*i* | *P* | **Pn** | **05 14 05.5** | **+0.4** |
| AC05 | | | | *i* | *S* | **Sn** | **05 14 21.8** | **-0.4** |
| **AC04** | **Llanos de Chal** | **1.52** | **15** | | | **Pn** | **05 14 08.5** | **+1.5** |
| **AC04** | **Llanos de Chal** | **1.52** | **15** | *e* | *P* | **Pn** | **05 14 07.8** | **+0.9** |
| AC04 | | | | | IAML | | 05 14 31.9 | |
| comp=Z,2μm,0.5s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.52** | **15** | ↓*i* | *P* | **Pn** | **05 14 08.5** | **+1.5** |
| AC04 | | | | *i* | *S* | **Sn** | **05 14 28.0** | **+2.5** |
| **CO02** | **Combarbal** | **1.59** | **164** | | | **Pn** | **05 14 08.7** | **+0.7** |
| **CO02** | **Combarbal** | **1.59** | **164** | *e* | *P* | **Pn** | **05 14 07.8** | **-0.2** |
| CO02 | | | | | IAML | | 05 14 30.9 | |
| comp=Z,2μm,0.4s | | | | | | | | |
| **CO02** | **Combarbal** | **1.59** | **164** | ↓*i* | *P* | **Pn** | **05 14 08.5** | **+0.5** |
| CO02 | | | | *i* | *S* | **Sn** | **05 14 27.1** | **-0.3** |
| CO02 | | | | | IAML | | 05 14 32.8 | |
| comp=N,9μm,0.4s | | | | | | | | |
| **AROD** | **Rodeo** | **1.85** | **106** | *e* | *P* | **Pn** | **05 14 12.9** | **+1.2** |
| **ACDV** | **Cuesta del Vie** | **2.15** | **104** | *e* | *P* | **Pn** | **05 14 17.2** | **+1.5** |
| ACDV | | | | *e* | *S* | **Sn** | **05 14 40.1** | **-1.1** |
| **ACCO** | **Cerro Coronel** | **2.32** | **114** | *e* | *P* | **Pn** | **05 14 20.3** | **+2.1** |
| ACCO | | | | *e* | *S* | Sn | 05 14 35.7 | -10 |
| ACCO | | | | | IAML | | 05 14 58.4 | |
| comp=Z,450nm,0.3s | | | | | | | | |
| **GO03** | **Copiap** | **2.37** | **29** | | | **Pn** | **05 14 20.0** | **+1.3** |
| **GO03** | **Copiap** | **2.37** | **29** | *e* | *P* | **Pn** | **05 14 20.0** | **+1.3** |
| GO03 | | | | *e* | *S* | **Sn** | **05 14 50.7** | **+4.2** |
| **GO03** | **Copiap** | **2.37** | **29** | *e* | *P* | **Pn** | **05 14 19.9** | **+1.3** |
| GO03 | | | | *e* | *S* | **Sn** | **05 14 47.6** | **+1.2** |
| GO03 | | | | | IAML | | 05 15 10.0 | |
| comp=E,847nm,0.3s | | | | | | | | |
| **DOCA** | **Reserva Natura** | **2.46** | **122** | *e* | *P* | **Pn** | **05 14 21.9** | **+1.7** |
| DOCA | | | | *e* | *S* | **Sn** | **05 14 50.2** | **+0.9** |
| DOCA | | | | | IAML | | 05 15 05.7 | |
| comp=Z,1μm,0.6s | | | | | | | | |
| **AC06** | **Mina Casimiro** | **2.53** | **24** | | | **Pn** | **05 14 23.2** | **+2.4** |
| **AC06** | **Mina Casimiro** | **2.53** | **24** | *i* | *P* | **Pn** | **05 14 22.3** | **+1.5** |
| AC06 | | | | | IAML | | 05 15 00.8 | |
| comp=N,664nm,0.4s | | | | | | | | |
| **RTLS** | **Leoncito** | **2.85** | **138** | *e* | *P* | **Pn** | **05 14 28.4** | **+2.8** |
| RTLS | | | | | IAML | | 05 15 13.7 | |
| comp=Z,1μm,0.4s | | | | | | | | |
| **VA06** | **Catapilco** | **2.88** | **176** | | | **Pn** | **05 14 27.3** | **+1.7** |
| **VA06** | **Catapilco** | **2.88** | **176** | *e* | *P* | **Pn** | **05 14 27.3** | **+1.7** |
| VA06 | | | | | IAML | | 05 15 14.6 | |
| comp=E,2μm,0.4s | | | | | | | | |
| **ZON** | **Zonda** | **3.08** | **128** | *e* | *P* | **Pn** | **05 14 31.6** | **+3.2** |
| **RTLL** | **Cerro Villicun** | **3.10** | **123** | *e* | *P* | **Pn** | **05 14 30.9** | **+2.2** |
| RTLL | | | | *e* | *S* | **Sn** | **05 15 06.4** | **+1.7** |
| **VA03** | **San Esteban** | **3.19** | **165** | | | **Pn** | **05 14 32.2** | **+2.2** |
| **VA03** | **San Esteban** | **3.19** | **165** | *e* | *P* | **Pn** | **05 14 31.8** | **+1.8** |
| VA03 | | | | *e* | *S* | **Sn** | **05 15 07.5** | **+0.7** |
| VA03 | | | | | IAML | | 05 15 27.8 | |
| comp=Z,477nm,0.6s | | | | | | | | |
| **VA03** | **San Esteban** | **3.19** | **165** | *e* | *P* | **Pn** | **05 14 31.2** | **+1.3** |
| VA03 | | | | *e* | *S* | **Sn** | **05 15 06.7** | **-0.1** |
| VA03 | | | | | IAML | | 05 15 27.1 | |
| comp=N,1μm,0.3s | | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **3.37** | **131** | *e* | *P* | **Pn** | **05 14 36.2** | **+3.8** |
| **PEL** | **Peldehue** | **3.53** | **168** | | | **Pn** | **05 14 36.5** | **+1.9** |
| **PEL** | **Peldehue** | **3.53** | **168** | | IAML | | 05 15 30.9 | |
| comp=E,806nm,0.8s | | | | | | | | |
| **MT02** | **Curacav** | **3.59** | **175** | | | **Pn** | **05 14 36.8** | **+1.5** |
| **MT02** | **Curacav** | **3.59** | **175** | *e* | *P* | **Pn** | **05 14 36.8** | **+1.5** |
| MT02 | | | | *e* | *S* | **Sn** | **05 15 21.1** | **+4.7** |
| MT02 | | | | | IAML | | 05 15 35.4 | |
| comp=Z,369nm,0.4s | | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.61** | **13** | Pn | | **Pn** | **05 14 35.6** | **-0.1** |
| **AC01** | **Pan de Azucar** | **3.61** | **13** | *e* | *P* | **Pn** | **05 14 35.7** | **-0.1** |
| AC01 | | | | *e* | *S* | Sn | 05 15 27.0 | +10 |
| AC01 | | | | | IAML | | 05 15 34.0 | |
| comp=Z,212nm,0.6s | | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.61** | **13** | *e* | *P* | **Pn** | **05 14 35.6** | **-0.1** |
| **AVFE** | **Valle Fertil** | **3.66** | **107** | *e* | *P* | **Pn** | **05 14 37.7** | **+1.3** |
| AVFE | | | | *e* | *S* | **Sn** | **05 15 22.3** | **+4.0** |
| AVFE | | | | | IAML | | 05 15 27.4 | |
| comp=Z,298nm,0.9s | | | | | | | | |
| **MT10** | **Hacienda Santa** | **3.68** | **167** | *e* | *P* | **Pn** | **05 14 37.8** | **+1.0** |
| MT10 | | | | *e* | *S* | **Sn** | **05 15 19.2** | **+0.2** |
| **ASAL** | **Salagasta** | **3.71** | **142** | *e* | *P* | **Pn** | **05 14 40.1** | **+3.0** |
| ASAL | | | | *e* | *S* | **Sn** | **05 15 27.0** | **+7.4** |
| ASAL | | | | | IAML | | 05 15 44.6 | |
| comp=Z,223nm,1.5s | | | | | | | | |
| **MT05** | **Renca** | **3.76** | **170** | | | **Pn** | **05 14 41.9** | **+4.0** |
| **MT05** | **Renca** | **3.76** | **170** | *e* | *P* | **Pn** | **05 14 42.2** | **+4.4** |
| MT05 | | | | *e* | *S* | **Sn** | **05 15 23.5** | **+2.6** |
| MT05 | | | | | IAML | | 05 15 47.4 | |
| comp=Z,385nm,0.3s | | | | | | | | |
| **MT05** | **Renca** | **3.76** | **170** | *e* | *P* | **Pn** | **05 14 41.9** | **+4.0** |
| MT05 | | | | *e* | *S* | **Sn** | **05 15 20.5** | **-0.4** |
| **FCH** | **Farellones** | **3.79** | **164** | *e* | *P* | **Pn** | **05 14 41.0** | **+2.6** |
| **MT14** | **Cerro Cal¡n** | **3.80** | **167** | *e* | *P* | **Pn** | **05 14 40.9** | **+2.5** |
| MT14 | | | | *e* | *S* | **Sn** | **05 15 21.5** | **-0.4** |
| **MT16** | **CCHEN** | **3.84** | **167** | | | **Pn** | **05 14 41.9** | **+3.0** |
| **ARCO** | **CERRO ARCO** | **3.86** | **146** | *e* | *P* | **Pn** | **05 14 43.0** | **+3.8** |
| ARCO | | | | *e* | *S* | Sn | 05 15 32.5 | +9.1 |
| ARCO | | | | | IAML | | 05 15 44.3 | |
| comp=Z,393nm,0.4s | | | | | | | | |
| **MT04** | **Ro Olivares** | **3.90** | **163** | *e* | *P* | **Pn** | **05 14 42.9** | **+3.0** |
| MT04 | | | | *e* | *S* | **Sn** | **05 15 26.2** | **+1.7** |
| MT04 | | | | | IAML | | 05 15 43.6 | |
| comp=Z,274nm,0.3s | | | | | | | | |
| **MT03** | **Universidad Ad** | **3.90** | **167** | *e* | *S* | **Sn** | **05 15 28.6** | **+4.2** |
| MT03 | | | | | IAML | | 05 15 48.5 | |
| comp=Z,595nm,0.8s | | | | | | | | |
| **VA05** | **Santo Domingo** | **3.97** | **181** | | | **Pn** | **05 14 42.0** | **+1.4** |
| **VA05** | **Santo Domingo** | **3.97** | **181** | *i* | *P* | **Pn** | **05 14 41.3** | **+0.7** |
| **MT08** | **Bocatoma Ro** | **3.97** | **161** | *e* | *P* | **Pn** | **05 14 44.2** | **+3.3** |
| MT08 | | | | *e* | *S* | **Sn** | **05 15 25.5** | **-0.7** |
| **ACLC** | **CERRO LA CRUZ** | **3.99** | **88** | *e* | *P* | **Pn** | **05 14 42.1** | **+1.0** |
| ACLC | | | | *e* | *S* | **Sn** | **05 15 31.2** | **+4.4** |
| ACLC | | | | | IAML | | 05 15 35.8 | |
| comp=Z,221nm,1.0s | | | | | | | | |
| **MT15** | **Las Vizcachas** | **4.00** | **168** | *e* | *P* | **Pn** | **05 14 42.0** | **+0.8** |
| MT15 | | | | *e* | *S* | **Sn** | **05 15 26.5** | **-0.3** |
| **MT09** | **Talagante** | **4.11** | **174** | Pn | | **Pn** | **05 14 44.8** | **+2.1** |
| **MT09** | **Talagante** | **4.11** | **174** | *e* | *P* | **Pn** | **05 14 44.5** | **+1.8** |
| **MT12** | **Pirque** | **4.13** | **169** | *e* | *P* | **Pn** | **05 14 44.8** | **+1.9** |
| MT12 | | | | *e* | *S* | **Sn** | **05 15 29.6** | **-0.4** |
| **MT01** | **Popeta** | **4.18** | **177** | | | **Pn** | **05 14 45.2** | **+1.7** |
| **MT01** | **Popeta** | **4.18** | **177** | *e* | *S* | **Sn** | **05 15 35.8** | **+4.7** |
| MT01 | | | | | IAML | | 05 15 45.2 | |
| comp=Z,362nm,0.7s | | | | | | | | |
| **MT13** | **San Alfonso** | **4.19** | **166** | *e* | *P* | **Pn** | **05 14 46.7** | **+2.9** |
| **BO04** | **La Punta** | **4.37** | **170** | Pn | | **Pn** | **05 14 48.0** | **+1.9** |
| **BO01** | **Tunca** | **4.71** | **176** | Pn | | **Pn** | **05 14 52.3** | **+1.5** |
| **BO01** | **Tunca** | **4.71** | **176** | *e* | *S* | Sn | 05 15 55.0 | +11 |
| BO01 | | | | | IAML | | 05 16 03.6 | |
| comp=Z,154nm,0.6s | | | | | | | | |
| **GO02** | **Mina Guanaco** | **4.81** | **21** | Pn | | **Pn** | **05 14 53.2** | **+0.7** |
| **BO02** | **Sierra Bellavi** | **5.14** | **173** | Pn | | **Pn** | **05 14 58.5** | **+1.7** |
| **BO02** | **Sierra Bellavi** | **5.14** | **173** | *e* | *P* | **Pn** | **05 14 59.0** | **+2.3** |
| **GO05** | **Huala** | **5.33** | **184** | | | **Pn** | **05 14 59.4** | **+0.1** |
| **BI02** | **San Fabin de** | **6.97** | **178** | | | **Pn** | **05 15 23.1** | **+1.2** |
| **H03N1** | **Juan Fernandez** | **7.33** | **237** | P | | **Pn** | **05 15 27.8** | **+1.2** |
| baz=114,slow=19,SNR=126 | | | | | | | | |
| H03N1 | | | | S | | **Sn** | **05 16 43.7** | **-4.7** |
| baz=174,slow=74,SNR=6.9 | | | | | | | | |
| H03N1 | | | | T | | T | 05 23 05.9 | |
| baz=65,slow=72,SNR=2811 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **7.35** | **237** | P | | **Pn** | **05 15 27.8** | **+1.1** |
| baz=114,slow=19,SNR=73 | | | | | | | | |
| H03N2 | | | | S | | Sn | 05 16 43.7 | -5.0 |
| baz=88,slow=74,SNR=4.6 | | | | | | | | |
| H03N2 | | | | T | | T | 05 23 08.3 | |
| baz=65,slow=72,SNR=2956 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.35** | **237** | P | | **Pn** | **05 15 27.6** | **+0.8** |
| baz=114,slow=19,SNR=94 | | | | | | | | |
| H03N3 | | | | S | | Sn | 05 16 43.5 | -5.3 |
| H03N3 | | | | T | | T | 05 23 13.9 | |
| baz=65,slow=72,SNR=1941 | | | | | | | | |
| **VA04** | **Juan Fernndez** | **7.38** | **236** | | | **Pn** | **05 15 28.1** | **+0.8** |
| **LVC** | **Limon Verde** | **7.42** | **19** | Pn | | **Pn** | **05 15 28.2** | **-0.1** |
| **LVC** | **Limon Verde** | **7.42** | **19** | P | | **Pn** | **05 15 27.8** | **-0.6** |
| comp=Z,0.4nm,0.3s,baz=274,slow=21,SNR=2.3 | | | | | | | | |
| LVC | | | | S | | **Sn** | **05 16 52.8** | **+1.4** |
| comp=Z,7.2nm,0.5s,baz=180,slow=21,SNR=1.3 | | | | | | | | |
| comp=Z,1.1nm,0.3s | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **7.53** | **235** | P | | **Pn** | **05 15 30.3** | **+1.1** |
| baz=105,slow=72,SNR=13 | | | | | | | | |
| H03S3 | | | | S | | **Sn** | **05 16 49.4** | **-3.7** |
| baz=345,slow=74,SNR=5.3 | | | | | | | | |
| H03S3 | | | | T | | T | 05 23 21.0 | |
| baz=70 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **7.53** | **235** | P | | **Pn** | **05 15 30.1** | **+0.8** |
| baz=105,slow=72,SNR=11 | | | | | | | | |
| H03S1 | | | | S | | **Sn** | **05 16 49.1** | **-4.1** |
| baz=195,slow=74,SNR=5.0 | | | | | | | | |
| H03S1 | | | | T | | T | 05 23 18.1 | |
| baz=70,slow=74 | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **7.54** | **235** | P | | **Pn** | **05 15 30.3** | **+0.9** |
| baz=105,slow=72,SNR=16 | | | | | | | | |
| H03S2 | | | | S | | **Sn** | **05 16 49.9** | **-3.6** |
| H03S2 | | | | T | | T | 05 23 22.9 | |
| baz=70,slow=74 | | | | | | | | |
| **GO06** | **Curarrehue** | **9.88** | **180** | Pn | | **Pn** | **05 16 02.4** | **+0.6** |
| **PLCA** | **Paso Flores** | **11.06** | **176** | Pn | | **Pn** | **05 16 18.8** | **+0.9** |
| **PLCA** | **Paso Flores** | **11.06** | **176** | P | | **Pn** | **05 16 17.6** | **-0.3** |
| comp=Z,0.1nm,0.3s,baz=24,slow=4.6,SNR=2.4 | | | | | | | | |
| comp=Z,2.0nm,1.1s | | | | | | | | |
| **LL04** | **Puerto Octay** | **11.23** | **183** | Pn | | **Pn** | **05 16 19.4** | **-0.8** |
| **TRQA** | **Tornquist** | **11.52** | **139** | | | **Pn** | **05 16 23.7** | **-0.4** |
| **ITQB** | **Itaq

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CPUP** | **Villa Florida** | **12.98** | **79** | Pn | **Pn** | 05 | **16** | **40.8** | **-3.2** |
| **CPUP** | **Villa Florida** | **12.98** | **79** | P | **Pn** | 05 | **16** | **40.5** | **-3.5** |
| | comp=Z,0.1nm,0.3s,baz=342,slow=5.1,SNR=1.1 | | | | | | | | |
| CPUP | | | | LR | LR | 05 | 22 | 25.6 | |
| | comp=Z,51nm,20.7s,baz=234,slow=41 | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | |
| **LPAZ** | **La Paz** | **13.69** | **14** | Pn | **Pn** | 05 | **16** | **54.7** | **+0.3** |
| **LPAZ** | **La Paz** | **13.69** | **14** | P | **Pn** | 05 | **16** | **57.1** | **+2.7** |
| | comp=Z,0.1nm,0.3s,baz=187,slow=8.7,SNR=3.4 | | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **15.55** | **102** | Pn | **Pn** | 05 | **17** | **17.9** | **-0.7** |
| **SIV** | **San Ignacio** | **16.67** | **37** | P | **Pn** | 05 | **17** | **33.9** | **+0.9** |
| | baz=195,slow=7.7,SNR=12 | | | | | | | | |
| SIV | | | | LR | LR | 05 | 24 | 31.5 | |
| | comp=Z,32nm,21.0s,baz=107,slow=39 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| **ITAB** | **Concordia** | **17.23** | **87** | P | **Pn** | 05 | **17** | **37.5** | **-2.4** |
| ITAB | | | | IAmb | IAmb | 05 | 17 | 47.5 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **18.18** | **42** | P | **P** | 05 | **17** | **50.9** | **-0.6** |
| **VAO** | **Valinhos** | **22.97** | **79** | P | **P** | 05 | **18** | **42.5** | **-0.8** |
| VAO | | | | IAmb | IAmb | 05 | 18 | 58.5 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **BDFB** | **Brasilia** | **25.73** | **62** | P | **P** | 05 | **19** | **08.4** | **-0.7** |
| BDFB | | | | IAmb | IAmb | 05 | 19 | 08.6 | |
| | comp=Z,3.5nm,0.9s | | | | | | | | |
| **BDFB** | **Brasilia** | **25.73** | **62** | P | **P** | 05 | **19** | **07.8** | **-1.3** |
| | comp=Z,1.7nm,0.6s,baz=246,slow=10.0,SNR=4.9 | | | | | | | | |
| BDFB | | | | pP | **pP** | 05 | **19** | **18.0** | **-2.4** |
| | comp=Z,2.5nm,0.7s,baz=176,slow=18,SNR=2.9 | | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| **SLOR** | **San Lorenzo -** | **29.54** | **346** | P | **P** | 05 | **19** | **44.0** | **+0.4** |
| SLOR | | | | IAmb | IAmb | 05 | 20 | 06.5 | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **PULU** | **Pululahua** | **30.27** | **346** | P | **P** | 05 | **19** | **50.6** | **+0.6** |
| **BOAV** | **Boa Vista** | **33.59** | **20** | P | **P** | 05 | **20** | **19.1** | **+0.5** |
| BOAV | | | | IAmb | IAmb | 05 | 20 | 19.4 | |
| | comp=Z,2.3nm,0.9s | | | | | | | | |
| **BAUV** | **El Baul** | **38.54** | **6** | P | **P** | 05 | **21** | **01.3** | **+0.3** |
| **BELA** | **Belgrano 2** | **51.05** | **171** | P | **P** | 05 | **22** | **39.0** | **-0.9** |
| BELA | | | | IAmb | IAmb | 05 | 22 | 39.3 | |
| | comp=Z,1.3nm,0.8s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **53.21** | **159** | ⇑P | **P** | 05 | **22** | **56.7** | **+0.7** |
| | comp=Z,1.2nm,0.4s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **53.84** | **159** | ⇑P | **P** | 05 | **23** | **00.7** | **+0.1** |
| | comp=Z,2.8nm,0.6s,baz=282,slow=8.2 | | | | | | | | |
| **SNAA** | **Sanae** | **55.43** | **159** | P | **P** | 05 | **23** | **12.6** | **+0.4** |
| SNAA | | | | IAmb | IAmb | 05 | 23 | 13.6 | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **SNAA** | **Sanae** | **55.43** | **159** | ⇑P | **P** | 05 | **23** | **12.5** | **+0.4** |
| | comp=Z,57nm,0.6s | | | | | | | | |
| **SNAA** | **Sanae** | **55.43** | **159** | P | **P** | 05 | **23** | **11.9** | **-0.3** |
| | comp=Z,3.8nm,0.9s,baz=265,slow=7.9,SNR=16 | | | | | | | | |
| | comp=Z,3.8nm,0.9s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **57.15** | **159** | ⇑P | **P** | 05 | **23** | **24.3** | **-0.2** |
| | comp=Z,93nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.55** | **180** | P | **P** | 05 | **23** | **49.1** | **+0.9** |
| | comp=Z,0.7nm,0.8s,baz=169,slow=9.3,SNR=1.8 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.21** | **329** | P | **P** | 05 | **24** | **27.7** | **+1.7** |
| | comp=Z,0.2nm,0.8s,baz=159,slow=5.7,SNR=2.2 | | | | | | | | |
| | comp=Z,0.2nm,0.8s | | | | | | | | |
| **BOSA** | **Boshof** | **81.70** | **118** | P | **P** | 05 | **25** | **56.0** | **-0.9** |
| | comp=Z,2.6nm,0.9s,baz=251,slow=5.5,SNR=1.8 | | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.33** | **70** | P | **P** | 05 | **25** | **58.7** | **-1.4** |
| | comp=Z,0.9nm,0.8s,baz=281,slow=5.3,SNR=7.8 | | | | | | | | |
| TORD | | | | pP | **pP** | 05 | **26** | **12.9** | **+0.4** |
| | comp=Z,0.9nm,0.7s,baz=235,slow=4.9,SNR=2.1 | | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **149.32** | **39** | PKPbc | **PKPbc** | 05 | **33** | **27.1** | **+0.8** |
| | comp=Z,1.3nm,0.2s,baz=298,slow=2.8,SNR=4.4 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.29** | **29** | PKPbc | **PKPbc** | 05 | **33** | **29.3** | **+0.9** |
| | comp=Z,2.7nm,0.5s,baz=301,slow=3.6,SNR=16 | | | | | | | | |
| ZALV | | | | pPKPbc | **sPKPdf** | 05 | **33** | **43.0** | **+2.3** |
| | comp=Z,1.4nm,0.6s,baz=319,slow=5.7,SNR=5.8 | | | | | | | | |

*NEIC* ***12*** *05:36:49.5±2.0,38.42N±0.01×118.84W±0.01,h10km±2km, Error ellipse: s-maj=3.1km s-min=2.3km az=100.0*

*NEIC* ***12*** *05:36:51,38.44N×118.84W,h14km,Moment Tensor Solution. Moment tensor: Scale 10^13Nm; Mrr=1.50; Mθθ=3.27; Mφφ 1.77; Mrθ=-3.01; Mrφ=3.78; Mθφ=-3.90; Fault plane solution: M0 6.83000×10^13 NP1:φ=207.00000°, δ82.00000°, λ52.00000°. NP2:φ=108.00000°, δ39.00000°, λ168.00000°. Principal axes: T 5.6034, Plg40.0000°, Azm82.0000°; N 1.9991, Plg38.0000°, Azm213.0000°; P -7.6025, Plg27.0000°, Azm327.0000°;*

**REN 12 05:36:49.8±1.8,38.44N±0.02×118.84W±0.02,h11km±8km, Mwr3.2,ML3.1**/48(NEIC) **Error ellipse: s-maj=2.3km s-min=1.9km az=178.0,California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TVH1** | **TV Hill, Hawth** | **0.06** | **73** | | Pg | 05 36 54.7 | +2.2 |
| **RYN** | **Ryan** | **0.31** | **53** | | Pg | 05 36 56.6 | +0.5 |
| RYN | | | | Sg | Sg | 05 37 01.4 | +1.0 |
| **LHV** | **Little Huntoon** | **0.33** | **125** | Sg | Sg | 05 37 01.6 | +1.0 |
| **NV09** | **Mina Array Sit** | **0.40** | **90** | | Pg | 05 36 58.0 | +0.3 |
| **NV08** | **Mina Array Sit** | **0.41** | **95** | | Pg | 05 36 58.2 | +0.2 |
| **NVAR** | **Mina Array Bea** | **0.42** | **91** | | Pg | 05 36 58.3 | +0.2 |
| **WAKR** | **Walker** | **0.47** | **278** | Pg | Pg | 05 36 59.4 | +0.3 |
| WAKR | | | | Sg | Sg | 05 37 05.6 | +0.3 |
| WAKR | | | | IAML | | 05 37 06.5 | |
| | comp=N,1μm,0.4s | | | | | | |
| WAKR | | | | IAML | | 05 37 06.8 | |
| | comp=E,2μm,0.4s | | | | | | |
| **NV11** | **Mina Array Sit** | **0.54** | **91** | | Pg | 05 37 00.3 | 0.0 |
| NV11 | | | | | Sg | 05 37 07.9 | +0.4 |
| **YERR** | **Yerington** | **0.63** | **330** | Pg | Pg | 05 37 02.1 | +0.1 |
| YERR | | | | | Sb | 05 37 11.1 | -0.7 |
| **BENR** | **Benton** | **0.75** | **164** | | Pg | 05 37 04.3 | 0.0 |
| **MDYM** | **Dry Creek** | **0.79** | **190** | | Pg | 05 37 05.3 | +0.2 |
| **MCBM** | **Casa Benchmark** | **0.80** | **183** | | Pg | 05 37 05.3 | +0.2 |
| **MLAC** | **Mammoth, Mammo** | **0.81** | **190** | | Pb | 05 37 05.9 | -0.1 |
| **MDPB** | **Devils Postpil** | **0.83** | **193** | | Pg | 05 37 05.5 | -0.3 |
| **OMMB** | **Old Mammoth Mi** | **0.83** | **189** | | Pg | 05 37 05.6 | -0.3 |
| **KVN** | **Kaiserville** | **0.84** | **43** | Pg | Pg | 05 37 06.1 | 0.0 |
| KVN | | | | IAML | | 05 37 17.9 | |
| | comp=N,510nm,0.4s | | | | | | |
| KVN | | | | IAML | | 05 37 21.5 | |
| | comp=E,762nm,0.7s | | | | | | |
| **PNTR** | **Pine Nut** | **0.88** | **318** | Pg | Pg | 05 37 06.7 | -0.1 |
| PNTR | | | | IAML | | 05 37 19.4 | |
| | comp=N,870nm,0.8s | | | | | | |
| **EMB** | **Emerald Bay** | **1.12** | **299** | | Pb | 05 37 11.1 | -0.2 |
| EMB | | | | IAML | | 05 37 27.3 | |
| | comp=E,423nm,0.3s | | | | | | |
| **KCC** | **Kaiser Creek** | **1.18** | **199** | | Pn | 05 37 12.2 | 0.0 |
| **MPK** | **Martis Peak** | **1.26** | **313** | Pn | Pg | 05 37 14.8 | +0.8 |
| MPK | | | | IAML | | 05 37 34.3 | |
| | comp=E,239nm,0.4s | | | | | | |
| **DSP** | **Deep Springs** | **1.27** | **147** | Pn | Pg | 05 37 13.9 | -0.2 |
| **CMB** | **Columbia Colle** | **1.28** | **252** | Pn | Pn | 05 37 13.4 | -0.3 |
| CMB | | | | IAML | | 05 37 30.9 | |
| | comp=N,371nm,0.3s | | | | | | |
| CMB | | | | IAML | | 05 37 31.0 | |
| | comp=E,360nm,0.1s | | | | | | |
| **TPH** | **Tonopah** | **1.33** | **105** | Pn | Pn | 05 37 14.2 | -0.2 |
| **PAHR** | **Pah Rah Range** | **1.33** | **342** | Pn | Pn | 05 37 14.6 | +0.1 |
| PAHR | | | | IAML | | 05 37 34.7 | |
| | comp=E,280nm,0.3s | | | | | | |
| PAHR | | | | IAML | | 05 37 35.3 | |
| | comp=N,274nm,0.3s | | | | | | |
| **Q09A** | **Carvers** | **1.36** | **73** | | Pn | 05 37 15.0 | +0.2 |
| **MZP** | **Montezuma Peak** | **1.37** | **122** | | Pn | 05 37 14.9 | -0.1 |
| MZP | | | | IAML | | 05 37 37.5 | |
| | comp=E,220nm,0.4s | | | | | | |
| **PEAR** | **Peavine Mounta** | **1.46** | **324** | | Pb | 05 37 16.6 | -0.4 |
| PEAR | | | | | Sg | 05 37 37.1 | +0.4 |
| **DONR** | **Donner Summit** | **1.47** | **309** | | Pn | 05 37 16.7 | +0.3 |
| **GMN** | **Gold Mountain** | **1.69** | **132** | | Pn | 05 37 19.9 | +0.4 |
| **AFDM** | **Forest Hills D** | **1.74** | **288** | Pn | Pn | 05 37 20.4 | +0.4 |
| **BEKR** | **Beckworth** | **1.85** | **321** | | Pn | 05 37 21.9 | +0.3 |
| **GRAC** | **Grapevine Rang** | **1.86** | **140** | | Pn | 05 37 22.3 | +0.7 |
| GRAC | | | | IAML | | 05 37 53.8 | |
| | comp=E,194nm,0.4s | | | | | | |
| GRAC | | | | IAML | | 05 37 54.9 | |
| | comp=N,144nm,0.5s | | | | | | |
| **SGV** | **South Grapevin** | **2.04** | **135** | | Pn | 05 37 24.6 | +0.4 |
| **BMN** | **Battle Mountai** | **2.35** | **32** | | Pn | 05 37 28.1 | -0.3 |
| **ORV** | **Oroville** | **2.35** | **299** | | Pn | 05 37 28.7 | +0.3 |
| ORV | | | | IAML | | 05 38 03.6 | |
| | comp=E,81nm,0.7s | | | | | | |
| **WCT** | **Wildcat Mounta** | **2.41** | **132** | | Pn | 05 37 29.6 | +0.4 |
| **R11B** | **Troy Canyon, C** | **2.56** | **91** | | Pn | 05 37 30.6 | -0.8 |
| R11B | | | | IAML | | 05 38 11.0 | |
| | comp=N,94nm,1.0s | | | | | | |
| R11B | | | | IAML | | 05 38 12.1 | |
| | comp=E,59nm,0.4s | | | | | | |
| **SAO** | **San Andreas Ge** | **2.66** | **232** | Pn | Pb | 05 37 36.2 | -1.2 |
| **PMPB** | **Monarch Peak** | **2.71** | **216** | Pn | Pb | 05 37 37.9 | -0.4 |
| **AMDNV** | **Amargosa** | **2.84** | **133** | | Pn | 05 37 36.3 | +1.3 |
| **HATC** | **Hat Creek Radi** | **3.12** | **320** | | Pn | 05 37 38.4 | -0.6 |
| HATC | | | | IAML | | 05 38 48.2 | |
| | comp=E,44nm,2.6s | | | | | | |
| **PRN** | **Pahroc Range** | **3.17** | **108** | Pn | Pn | 05 37 39.9 | +0.2 |
| **SHPR** | **Sheep Range** | **3.51** | **122** | | Pn | 05 37 45.1 | +0.8 |
| **SPR3** | **Spring Creek 3** | **3.57** | **80** | | Pn | 05 37 44.8 | -0.6 |
| **PSUT** | **Pine Spring** | **3.91** | **87** | Pn | Pn | 05 37 50.0 | 0.0 |
| **CCUT** | **Cedar City** | **4.42** | **100** | Pn | Pn | 05 37 57.1 | +0.1 |
| **LCMT** | **Little Creek M** | **4.66** | **106** | Pn | Pn | 05 38 00.1 | -0.1 |
| **BGU** | **Big Grassy Mou** | **5.12** | **59** | Pn | Pn | 05 38 06.6 | 0.0 |

*NEIC* ***12*** *05:43:09.9±0.3,37.08N±0.01×97.82W±0.01,h5km±1km, Error ellipse: s-maj=2.8km s-min=2.1km az=346.0*

**NEIC 12 05:43:10.1±0.4,37.08N±0.03×97.82W±0.01,h7km±5km, mb_Lg2.5/67,ML2.5/14,ML2.8/41,Error ellipse: s-maj=4.3km s-min=1.7km az=178.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN17** | **Caldwell West** | **0.06** | **131** | | Pg | 05 43 11.9 | +0.1 |
| **KAN01** | **Argonia South** | **0.09** | **33** | Pg | Pg | 05 43 12.4 | +0.2 |
| KAN01 | | | | Sg | Sg | 05 43 13.8 | +0.1 |
| KAN01 | | | | IAML | | 05 43 14.1 | |
| | comp=E,4μm,0.3s | | | | | | |
| **KAN09** | **Caldwell North** | **0.17** | **71** | | Pg | 05 43 13.8 | +0.3 |
| KAN09 | | | | Sg | Sg | 05 43 13.6 | +0.4 |
| KAN09 | | | | IAML | | 05 43 16.5 | |
| | comp=E,2μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 05 43 18.2 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KAN14** | **Manchester OK** | **0.17** | **223** | | Pg | 05 43 13.8 | +0.3 |
| KAN14 | | | | IAML | | 05 43 16.5 | |
| | comp=N,3μm,0.2s | | | | | | |
| KAN14 | | | | IAML | | 05 43 16.6 | |
| | comp=E,3μm,0.1s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.19** | **320** | | Pg | 05 43 14.2 | +0.3 |
| **GC02** | **Grant County #** | **0.23** | **188** | Pg | Pg | 05 43 14.9 | +0.3 |
| GC02 | | | | Sg | Sg | 05 43 18.3 | +0.5 |
| **KS21** | **Milan North St** | **0.24** | **31** | | Pg | 05 43 15.1 | +0.2 |
| **KS21** | **Milan North St** | **0.24** | **31** | IAML | | 05 43 18.8 | |
| | comp=E,474nm,0.3s | | | | | | |
| KS21 | | | | IAML | | 05 43 18.8 | |
| | comp=E,691nm,0.4s | | | | | | |
| **KAN12** | **Harper NE Stat** | **0.26** | **326** | | Pg | 05 43 15.4 | +0.2 |
| KAN12 | | | | IAML | | 05 43 19.4 | |
| | comp=N,2μm,0.3s | | | | | | |
| KAN12 | | | | IAML | | 05 43 23.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| **KAN13** | **South Haven SW** | **0.28** | **104** | | Pg | 05 43 15.8 | +0.2 |
| KAN13 | | | | IAML | | 05 43 20.2 | |
| | comp=N,1μm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 05 43 24.4 | |
| | comp=E,1μm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.42** | **229** | Pg | Pg | 05 43 18.4 | +0.2 |
| OK032 | | | | | Sg | 05 43 24.2 | +0.5 |
| OK032 | | | | IAML | | 05 43 26.6 | |
| | comp=E,741nm,0.1s | | | | | | |
| **BLOK** | **Blackwell** | **0.58** | **123** | | Pg | 05 43 21.2 | 0.0 |
| BLOK | | | | | Sg | 05 43 29.0 | +0.2 |
| BLOK | | | | IAML | | 05 43 32.8 | |
| | comp=E,840nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.59** | **193** | Pg | Pg | 05 43 21.5 | 0.0 |
| CROK | | | | Sg | Sg | 05 43 29.5 | +0.4 |
| CROK | | | | IAML | | 05 43 29.9 | |
| | comp=N,906nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **0.95** | **231** | | Pg | 05 43 28.4 | 0.0 |
| OK038 | | | | IAML | | 05 43 49.1 | |
| | comp=N,384nm,0.3s | | | | | | |
| **OK048** | **Pawnee Station** | **0.97** | **133** | Pg | Pg | 05 43 28.2 | -0.4 |
| OK048 | | | | IAML | | 05 43 47.1 | |
| | comp=N,236nm,0.2s | | | | | | |
| **OK051** | **E0350 and S346** | **0.98** | **126** | | Pg | 05 43 28.4 | -0.4 |
| OK051 | | | | IAML | | 05 43 48.3 | |
| | comp=N,383nm,0.2s | | | | | | |
| OK051 | | | | IAML | | 05 43 52.7 | |
| | comp=N,292nm,0.2s | | | | | | |
| **NOKA** | **Waynoka** | **1.00** | **244** | Pg | Pg | 05 43 28.9 | -0.3 |
| NOKA | | | | IAML | | 05 43 53.9 | |
| | comp=N,244nm,0.2s | | | | | | |
| **QUOK** | **Quay** | **1.27** | **135** | Pg | Pn | 05 43 33.6 | -0.6 |
| **OK029** | **Liberty Lake** | **1.31** | **167** | Pg | Pn | 05 43 34.5 | -0.3 |
| OK029 | | | | IAML | | 05 43 55.5 | |
| | comp=N,201nm,0.2s | | | | | | |
| **OK052** | **Battle Ridge R** | **1.36** | **143** | Pg | Pn | 05 43 35.0 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.37** | **145** | | Pn | 05 43 35.3 | -0.4 |
| **ADOK** | **Arcadia Dam** | **1.47** | **166** | | Pn | 05 43 37.3 | +0.3 |
| **R32A** | **Long Quarter,** | **1.52** | **332** | | Pn | 05 43 37.9 | +0.3 |
| **CSTR** | **Hydro, Custer** | **1.60** | **206** | | Pb | 05 43 39.3 | -0.5 |
| **DEOK** | **Depew** | **1.63** | **139** | | Pn | 05 43 39.3 | +0.2 |
| **ELIS** | **Ellis County** | **1.64** | **232** | | Pb | 05 43 40.2 | -0.5 |
| **OKCSW** | **OKLAHOMA CITY** | **1.70** | **169** | | Pn | 05 43 40.7 | +0.5 |
| **KSU1** | **Kansas State U** | **2.23** | **25** | IAmb_Lg | | 05 44 22.0 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **X34A** | **Smith Ranch, M** | **2.48** | **180** | IAmb_Lg | | 05 44 33.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **2.83** | **102** | Pn | Pn | 05 43 57.1 | +1.4 |
| U38A | | | | IAmb_Lg | | 05 44 46.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.18** | **141** | Pn | Pn | 05 44 01.6 | +1.0 |
| **HHAR** | **Hobbs** | **3.22** | **103** | Pn | Pn | 05 44 02.2 | +1.1 |
| HHAR | | | | IAmb_Lg | | 05 45 00.7 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.82** | **236** | IAmb_Lg | | 05 45 12.4 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.00** | **262** | | Pn | 05 44 12.8 | +0.9 |
| **FW06** | **Azle** | **4.11** | **177** | IAmb_Lg | | 05 45 28.8 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **APMT** | **Aspermont** | **4.20** | **207** | IAmb_Lg | | 05 45 24.7 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.26** | **298** | IAmb_Lg | | 05 45 35.8 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.28** | **125** | IAmb_Lg | | 05 45 29.9 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **4.28** | **186** | Pn | Pn | 05 44 15.3 | -0.3 |
| **FW07** | **Weatherford** | **4.37** | **180** | IAmb_Lg | | 05 45 30.2 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.44** | **87** | Pn | Pn | 05 44 18.5 | +0.7 |
| MGMO | | | | IAmb_Lg | | 05 45 40.4 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.46** | **148** | Pn | Pn | 05 44 16.7 | -1.4 |
| **R40A** | **Maddies Stadio** | **4.56** | **73** | IAmb_Lg | | 05 45 33.7 | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.74** | **103** | IAmb_Lg | | 05 45 38.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.81** | **121** | IAmb_Lg | | 05 45 51.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **UALR** | **University of** | **5.00** | **116** | IAmb_Lg | | 05 45 58.3 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.12** | **130** | IAmb_Lg | | 05 45 50.0 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.15** | **43** | IAmb_Lg | | 05 45 58.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.27** | **273** | IAmb_Lg | | 05 46 03.7 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.31** | **77** | IAmb_Lg | | 05 46 07.8 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **LCAR** | **Lake Charles** | **5.46** | **99** | IAmb_Lg | | 05 46 05.6 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **BRDY** | **Brady** | **5.86** | **190** | IAmb_Lg | | 05 46 24.4 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.93** | **91** | IAmb_Lg | | 05 46 32.5 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **6.08** | **290** | IAmb_Lg | | 05 46 34.4 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **6.16** | **307** | IAmb_Lg | | 05 46 30.3 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.69** | **296** | IAmb_Lg | | 05 46 55.9 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **7.38** | **304** | IAmb_Lg | | 05 47 13.9 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **HDIL** | **Hopedale** | **7.50** | **60** | IAmb_Lg | | 05 47 26.4 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **K22A** | **Casper** | **8.70** | **312** | IAmb_Lg | | 05 48 02.7 | |
| | comp=Z,5.6nm,1.1s | | | | | | |

*LDG* ***12*** *06:06:58.0±0.1,51.61N×16.23E,h2km,Ml4.2/23,Error ellipse: s-maj=3.8km s-min=2.2km az=153.0*

*DNK* ***12*** *06:07:05.8±2.5,51.58N×15.83E,h0km±92km,ML3.1*

*BGR* ***12*** *06:07:06.0±0.5,51.51N×16.15E,h1km,ML3.7/14,Error ellipse: s-maj=5.6km s-min=2.2km az=27.0*

*VIE* ***12*** *06:07:05.6±0.4,51.48N×16.23E,h0km,mb3.3/21, ml3.6/17,ms3.8/3,Error ellipse: s-maj=5.1km s-min=3.2km az=62.0,Suspected Mining induced.*

*IPEC* ***12*** *06:07:05.1±0.2,51.53N×16.10E,h1km,ML3.4/4,Error ellipse: s-maj=2.9km s-min=1.3km az=56.0*

*IDC* ***12*** *06:07:05.4±0.5,51.53N×15.96E,h0km,mb3.7/11, mbtmp3.8/20,ML3.5/9,MS3.2/1,Error ellipse: s-maj=9.1km s-min=5.6km az=109.0*

*BNS* ***12*** *06:07:06.7±0.7,51.65N×16.08E,h2km,ML3.6*

*MCSM* ***12*** *06:07:06.2±0.3,52.N±3°×1.6E±°,h10km,mb3.9,MLv3.9*

*PRU* ***12*** *06:07:07.8,51.45N×16.10E,h0km*

*UPP* ***12*** *06:07:09.7±2.6,51.77N×15.73E,h0km,ML3.3*

**ISC 12 06:07:04.3±0.5,51.58N±0.03×16.17E±0.02,h0km,n208, σ1.9 97/267,mb3.7/11,5C-5D,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.74** | **174** | *e*Pg | **Pg** | **06 07 18.9** | **+0.3** |
| KSP | | | | *e*Sg | **Sg** | **06 07 27.8** | **-0.4** |
| **KSP** | **Ksiaz** | **0.74** | **174** | *e*Pg | **Pg** | **06 07 19.0** | **+0.3** |
| KSP | | | | *e*Sg | **Sg** | **06 07 28.3** | **0.0** |
| **KSP** | **Ksiaz** | **0.74** | **174** | P | **Pg** | **06 07 18.2** | **-0.4** |
| KSP | | | | S | **Sg** | **06 07 28.3** | **0.0** |
| **CHVC** | **Chvalec** | **1.00** | **184** | *e*PG | **Pg** | **06 07 23.7** | **+0.2** |
| CHVC | | | | *e*SG | **Sg** | **06 07 36.0** | **-0.4** |
| **OSTC** | **Ostas** | **1.03** | **178** | *e*PG | **Pg** | **06 07 24.4** | **+0.4** |
| OSTC | | | | *e*SG | **Sg** | **06 07 36.5** | **-0.8** |
| **UPC** | **Upice** | **1.08** | **185** | *e*PG | **Pg** | **06 07 25.0** | **0.0** |
| UPC | | | | *e*SG | **Sg** | **06 07 38.3** | **-0.7** |
| **DPC** | **Dobruska-Polom** | **1.24** | **175** | *e*PG | **Pg** | **06 07 27.8** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **06 07 42.7** | **-1.4** |
| | comp=Z,390nm,0.6s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.24** | **175** | *e*Pg | **Pg** | **06 07 27.8** | **-0.3** |
| DPC | | | | *e*Sg | **Sg** | **06 07 42.8** | **-1.3** |
| **DPC** | **Dobruska-Polom** | **1.24** | **175** | P | **Pg** | **06 07 27.6** | **-0.4** |
| **PVCC** | **Panska Ves** | **1.46** | **224** | *e*PG | **Pn** | **06 07 31.7** | **-0.2** |
| PVCC | | | | *e*SG | **Sb** | **06 07 51.0** | **-0.5** |
| | comp=Z,764nm,0.4s | | | | | | |
| **KRLC** | **Kraliky** | **1.56** | **165** | *e*PG | **Pn** | **06 07 33.7** | **+0.3** |
| KRLC | | | | *e*SG | **Sg** | **06 07 53.7** | **-0.7** |
| | comp=Z,488nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.57** | **244** | Pn | **Pn** | **06 07 32.7** | **-0.8** |
| BRG | | | | Pg | **Pb** | **06 07 34.6** | **+0.4** |
| BRG | | | | Sg | **Sg** | **06 07 54.5** | **-0.2** |
| BRG | | | | Amp | | 06 07 55.8 | |
| | comp=Z,361nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.57** | **244** | *e*Pn | **Pn** | **06 07 32.8** | **-0.6** |
| BRG | | | | *e*Sg | **Sg** | **06 07 54.1** | **-0.6** |
| **RICC** | **Richard** | **1.67** | **232** | *e*PG | **Pn** | **06 07 35.2** | **+0.4** |
| **RUE** | **Ruedersdorf** | **1.73** | **302** | *e*P | **Pn** | **06 07 35.3** | **-0.3** |
| **GKP** | **Gorka Klasztor** | **1.81** | **21** | *e*P | **Pn** | **06 07 40.1** | **+3.4** |
| **PRA** | **Prague** | **1.87** | **217** | *e*PN | **Pn** | **06 07 37.3** | **-0.3** |
| PRA | | | | *e*PG | **Pb** | **06 07 39.9** | **+0.5** |
| **FBE** | **Freiberg** | **1.89** | **251** | *e*Pn | **Pn** | **06 07 37.5** | **-0.3** |
| FBE | | | | *e*Sg | **Sb** | **06 08 04.1** | **+0.3** |
| **GOPC** | **GO Pecny, Ondr** | **1.89** | **208** | *e*PG | **Pn** | **06 07 39.0** | **+1.2** |
| **PRU** | **Pruhonice** | **1.90** | **214** | *e*PG | **Pn** | **06 07 39.2** | **+1.2** |
| PRU | | | | *e*SG | **Sn** | **06 08 03.0** | **+0.4** |
| | comp=Z,340nm,0.6s | | | | | | |
| **RAC** | **Raciborz** | **1.98** | **139** | *e*PG | **Pb** | **06 07 41.9** | **+0.8** |
| RAC | | | | *e*SG | **Sb** | **06 08 08.3** | **+2.0** |
| **HSKC** | **Hora Svate Kat** | **1.98** | **242** | *e*PG | **Pb** | **06 07 41.2** | **-0.1** |
| HSKC | | | | *e*SG | **Sb** | **06 08 06.0** | **-0.5** |
| | comp=Z,249nm,0.5s | | | | | | |
| **CLL** | **Collm** | **2.00** | **263** | *i* Pn | **Pn** | **06 07 39.1** | **-0.3** |
| | comp=Z,46nm,0.6s | | | | | | |
| CLL | | | | *i* Pg | **Pb** | **06 07 41.6** | **0.0** |
| CLL | | | | *i* x | x | 06 07 46.5 | |
| CLL | | | | *i* Sg | **Sg** | **06 08 08.4** | **-0.1** |
| | comp=Z,167nm,0.6s | | | | | | |
| **CLL** | **Collm** | **2.00** | **263** | *e*Pn | **Pn** | **06 07 38.9** | **-0.4** |
| CLL | | | | *e*Sg | **Sg** | **06 08 08.7** | **+0.2** |
| **CLL** | **Collm** | **2.00** | **263** | P | **Pn** | **06 07 38.6** | **-0.8** |
| **MORC** | **Moravsky Berou** | **2.01** | **154** | *e*Pn | **Pn** | **06 07 39.4** | **-0.2** |
| | baz=333 | | | | | | |
| MORC | | | | *e*Sg | **Sn** | **06 08 07.1** | **+1.7** |
| | comp=Z,260nm,0.5s,baz=333 | | | | | | |
| **MORC** | **Moravsky Berou** | **2.01** | **154** | ⇑P | **Pn** | **06 07 39.4** | **-0.2** |
| MORC | | | | ⇑S | **Sg** | **06 08 09.3** | **+

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BSD | Bornholm Skovb | 3.62 | 349 | *e*P | | Pn | 06 08 01.0 | -0.6 |
| BSD | Bornholm Skovb | 3.62 | 349 | *i* P | | Pn | 06 08 02.0 | +0.5 |
| BSD | | | | *e*S | | Sn | 06 08 42.6 | -2.3 |
| BSD | | | | IAML | | | 06 08 56.4 | |
| | comp=Z,23nm,0.6s | | | | | | | |
| CONA | Conrad Observa | 3.66 | 183 | *i* Pn | | Pn | 06 08 02.5 | +0.1 |
| | comp=Z,6.8nm,0.3s,SNR=36 | | | | | | | |
| GRF | Grafenberg Arr | 3.67 | 241 | *e*Pn | | Pn | 06 08 02.7 | +0.3 |
| RONA | Rosalia, Austr | 3.89 | 179 | *e*Pn | | Pn | 06 08 05.1 | -0.2 |
| | comp=Z,1.1nm,0.2s,SNR=15 | | | | | | | |
| MOA | Mollin | 3.94 | 199 | *i* Pn | | Pn | 06 08 05.9 | -0.1 |
| | comp=Z,22nm,0.4s,SNR=24 | | | | | | | |
| SRO | Srobarova | 4.02 | 159 | *e*PG | | Pg | 06 08 20.8 | -0.6 |
| SRO | | | | *e*SN | | Sn | 06 08 43.8 | -11 |
| SRO | | | | *e*SG | | Sg | 06 09 18.4 | +4.9 |
| KECS | Kecovo | 4.17 | 136 | *e*PN | | Pn | 06 08 09.1 | -0.1 |
| KECS | | | | *e*PG | | Pg | 06 08 25.4 | +1.2 |
| KECS | | | | *e*SN | | Sn | 06 08 42.5 | -16 |
| KECS | | | | *e*SG | | Sg | 06 09 19.7 | +1.5 |
| BIOA | Bad Ischl, Aus | 4.23 | 204 | *i* Pn | | Pn | 06 08 10.0 | 0.0 |
| | comp=Z,15nm,0.3s,SNR=39 | | | | | | | |
| ARSA | Arzberg | 4.36 | 186 | *i* Pn | | Pn | 06 08 12.5 | +0.7 |
| | comp=Z,6.9nm,0.3s,SNR=21 | | | | | | | |
| LUNU | Lund | 4.37 | 339 | *i* P | | Pn | 06 08 11.9 | 0.0 |
| LUNU | | | | *e*S | | Sn | 06 09 02.8 | -0.6 |
| PSZ | Piszkesteto | 4.39 | 145 | ⇓P | | Pn | 06 08 13.1 | +0.7 |
| MPLH | Magyarpolny | 4.51 | 168 | P | | Pn | 06 08 14.2 | +0.4 |
| KOLS | Kolonicke sedl | 4.73 | 122 | *e*PN | | Pn | 06 08 17.6 | +0.7 |
| KOLS | | | | *e*PG | | Pg | 06 08 34.3 | -0.6 |
| KOLS | | | | *e*SG | | Sg | 06 09 35.2 | -1.0 |
| LESA | Schwarzleotal | 4.74 | 210 | *i* Pn | | Pn | 06 08 17.0 | -0.1 |
| | comp=Z,4.0nm,0.2s | | | | | | | |
| BJUU | Bjuv | 4.87 | 339 | *i* P | | Pn | 06 08 18.7 | 0.0 |
| BJUU | | | | *e*S | | Sn | 06 09 13.9 | -1.8 |
| KBA | Koelnbreinsper | 4.87 | 203 | *i* Pn | | Pn | 06 08 19.1 | +0.1 |
| | comp=Z,23nm,0.4s,SNR=18 | | | | | | | |
| SUW | Suwalki | 4.90 | 57 | *e*P | | Pb | 06 08 28.0 | -3.0 |
| SOKA | Soboth | 4.97 | 189 | *i* Pn | | Pn | 06 08 20.8 | +0.6 |
| | comp=Z,3.4nm,0.3s | | | | | | | |
| HOLU | Holmets | 5.04 | 125 | P | | Pn | 06 08 22.0 | +0.9 |
| DEL | Delary | 5.08 | 345 | P | | Pn | 06 08 22.0 | +0.3 |
| DEL | | | | S | | Sn | 06 09 18.8 | -2.1 |
| DEL | Delary | 5.08 | 345 | P | | Pn | 06 08 22.0 | +0.3 |
| DEL | | | | *i* P | | Pb | 06 08 22.7 | -11 |
| DEL | | | | S | | Sn | 06 09 18.8 | -2.1 |
| GROS | Grobnik | 5.14 | 185 | *i* Pn | | Pn | 06 08 23.1 | +0.5 |
| OBKA | Obir | 5.19 | 192 | *e*Pn | | Pn | 06 08 23.5 | +0.2 |
| | comp=Z,1.2nm,0.2s | | | | | | | |
| WATA | Walderalm | 5.20 | 217 | *e*Pn | | Pn | 06 08 23.6 | +0.1 |
| | comp=Z,1.1nm,0.3s,SNR=14 | | | | | | | |
| MYKA | Terra Mystica | 5.23 | 199 | *e*Pn | | Pn | 06 08 23.5 | -0.3 |
| | comp=Z,2.3nm,0.3s | | | | | | | |
| WTTA | Wattenberg | 5.24 | 216 | *e*Pn | | Pn | 06 08 24.1 | +0.1 |
| | comp=Z,11nm,0.5s,SNR=9.1 | | | | | | | |
| MOTA | Moosalm | 5.38 | 220 | *e*Pn | | Pn | 06 08 25.5 | -0.4 |
| | comp=Z,14nm,0.5s | | | | | | | |
| VXJU | Vaexsjoe | 5.40 | 353 | P | | Pn | 06 08 27.1 | +1.1 |
| VXJU | | | | S | | Sn | 06 09 26.7 | -2.0 |
| VXJU | Vaexsjoe | 5.40 | 353 | P | | Pn | 06 08 27.1 | +1.1 |
| VXJU | | | | S | | Sn | 06 09 26.7 | -2.0 |
| ABTA | Abfaltersbach | 5.40 | 208 | *e*Pn | | Pn | 06 08 26.7 | +0.5 |
| | comp=Z,8.0nm,0.4s,SNR=14 | | | | | | | |
| RETA | Reutte | 5.40 | 223 | *e*Pn | | Pn | 06 08 25.8 | -0.4 |
| | comp=Z,5.8nm,0.3s,SNR=6.6 | | | | | | | |
| SQTA | Sankt Quirin | 5.43 | 218 | *i* Pn | | Pn | 06 08 27.0 | +0.3 |
| | comp=Z,5.6nm,0.3s,SNR=9.5 | | | | | | | |
| KOE | Koeppel | 5.45 | 261 | *e*Pn | | Pn | 06 08 26.7 | -0.1 |
| KOE | | | | *e*Sn | | Sn | 06 09 28.2 | -2.0 |
| MORS | Morshin | 5.52 | 113 | P | | Pn | 06 08 30.3 | +2.6 |
| MORH | Mrgy, Hungar | 5.62 | 162 | P | | Pn | 06 08 29.8 | +0.8 |
| | comp=Z,6.4nm,0.7s,comp=Z,0.0nm | | | | | | | |
| OSKU | Oskarshamn | 5.62 | 360 | P | | Pn | 06 08 30.4 | +1.3 |
| OSKU | | | | S | | Sn | 06 09 32.1 | -2.2 |
| OSKU | Oskarshamn | 5.62 | 360 | P | | Pn | 06 08 30.4 | +1.3 |
| OSKU | | | | S | | Sn | 06 09 32.1 | -2.2 |
| KORU | Korolevo | 5.66 | 125 | P | | Pn | 06 08 31.7 | +2.1 |
| BYXU | Byxelkrok | 5.74 | 5 | P | | Pn | 06 08 32.3 | +1.6 |
| BYXU | | | | S | | Sn | 06 09 35.0 | -2.1 |
| BYXU | Byxelkrok | 5.74 | 5 | P | | Pn | 06 08 32.3 | +1.6 |
| BYXU | | | | S | | Sn | 06 09 35.0 | -2.1 |
| BGG | Burgeitz | 5.76 | 260 | *e*Pn | | Pn | 06 08 31.0 | +0.1 |
| LAUG | Laupendahl | 5.77 | 271 | *e*Pn | | Pn | 06 08 31.0 | -0.1 |
| CRES | Cresnjev | 5.78 | 185 | *e*Pn | | Pn | 06 08 32.0 | +0.7 |
| FETA | Feichten | 5.79 | 220 | *e*Pn | | Pn | 06 08 31.6 | +0.1 |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| GNOU | Gnosjoe | 5.89 | 347 | P | | Pn | 06 08 33.5 | +0.7 |
| GNOU | Gnosjoe | 5.89 | 347 | P | | Pn | 06 08 33.5 | +0.7 |
| DAVA | Damuels | 5.94 | 226 | *e*Pn | | Pn | 06 08 33.0 | -0.6 |
| | comp=Z,2.1nm,0.2s | | | | | | | |
| STNU | Starunia | 6.08 | 115 | P | | Pn | 06 08 37.6 | +2.2 |
| PABE | Paberze | 6.09 | 47 | *e*P | | Pn | 06 08 41.4 | +5.9 |
| BOJS | Bojanci | 6.11 | 186 | *i* Pn | | Pn | 06 08 36.3 | +0.4 |
| HILG | Hillesheim | 6.14 | 262 | *e*Pn | | Pn | 06 08 37.4 | +1.2 |
| DREG | Dreilaegerbach | 6.32 | 266 | *e*Pn | | Pn | 06 08 39.2 | +0.4 |
| DAVOX | Davos/Dischmat | 6.33 | 223 | Pn | | Pn | 06 08 38.7 | -0.3 |
| | comp=Z,1.2nm,0.3s,baz=28,slow=12,SNR=17 | | | | | | | |
| DAVOX | | | | Sn | | Sn | 06 09 49.2 | -2.9 |
| | baz=58,slow=13 | | | | | | | |
| DAVOX | | | | Lg | | Lg | 06 10 17.6 | |
| | comp=Z,1.2nm,0.3s,baz=122,slow=19,SNR=3.6 | | | | | | | |
| | comp=Z,6.1nm,0.5s | | | | | | | |
| BORU | Boraas | 6.38 | 343 | *i* P | | Pn | 06 08 41.0 | +1.6 |
| DRGR | | 6.43 | 136 | ⇑P | | Pn | 06 08 40.7 | +0.4 |
| SIRR | Siria | 6.43 | 144 | ⇑P | | Pn | 06 08 40.9 | +0.7 |
| CDF | Champ du Feu | 6.55 | 245 | *e*P | | Pn | 06 08 41.8 | -0.2 |
| CDF | | | | *e*Sn | | Sn | 06 09 45.3 | -12 |
| CDF | | | | *e*Sg | | Sb | 06 10 25.5 | +7.5 |
| | comp=Z,124nm,1.0s | | | | | | | |
| KSV | Kosov | 6.61 | 116 | P | | Pn | 06 08 44.6 | +1.9 |
| LNKU | Linkoeping | 6.67 | 357 | P | | Pn | 06 08 44.4 | +1.0 |
| LNKU | Linkoeping | 6.67 | 357 | P | | Pn | 06 08 44.4 | +1.0 |
| MARR | Marisel-Cluj | 6.70 | 134 | ⇓P | | Pn | 06 08 44.9 | +0.8 |
| FKPU | Falk | 6.74 | 349 | P | | Pn | 06 08 45.8 | +1.4 |
| FKPU | | | | S | | Sn | 06 10 00.7 | -1.2 |
| FKPU | Falk | 6.74 | 349 | P | | Pn | 06 08 45.8 | +1.4 |
| FKPU | | | | S | | Sn | 06 10 00.7 | -1.2 |
| FRGS | Fruska Gora | 6.87 | 158 | P | | Pn | 06 08 47.0 | +0.7 |
| VIKU | Vikbolandet | 6.94 | 2 | P | | Pn | 06 08 48.5 | +1.3 |
| VIKU | | | | S | | Sn | 06 10 05.3 | -1.4 |
| VIKU | Vikbolandet | 6.94 | 2 | P | | Pn | 06 08 48.5 | +1.3 |
| VIKU | | | | S | | Sn | 06 10 05.3 | -1.4 |
| SURR | Surduc | 7.04 | 144 | ⇓P | | Pn | 06 08 49.3 | +0.7 |
| BURAR | Bucovina Array | 7.09 | 121 | ⇓P | | Pn | 06 08 49.3 | -0.1 |
| HINF | Hinteralfeld | 7.12 | 242 | *e*P | | Pn | 06 08 46.8 | -2.9 |
| HINF | Hinteralfeld | 7.12 | 242 | *e*Pg | | Pb | 06 09 10.6 | +1.8 |
| HINF | | | | *e*Sg | | Sb | 06 10 42.5 | +8.2 |
| | comp=Z,43nm,0.8s | | | | | | | |
| NACGM | Naroch | 7.18 | 58 | *e*P | | Pn | 06 08 52.6 | +2.1 |
| | comp=E,1μm,0.8s,baz=246 | | | | | | | |
| HAU | Haudompre | 7.29 | 244 | *e*P | | Pn | 06 08 49.5 | -2.6 |
| HAU | | | | *e*Sg | | Sb | 06 10 47.8 | +8.5 |
| | comp=E,41nm,0.7s | | | | | | | |
| GIVF | Givet | 7.34 | 263 | *e*Pn | | Pn | 06 08 44.4 | -8.2 |
| GIVF | Givet | 7.34 | 263 | *e*P | | Pn | 06 08 48.9 | -3.7 |
| GIVF | Givet | 7.34 | 263 | *e*Pg | | Pb | 06 09 13.9 | +1.5 |
| GIVF | | | | *e*Sn | | Sn | 06 10 03.7 | -13 |
| GIVF | | | | *e*Sg | | Sb | 06 10 48.8 | +8.4 |
| | comp=E,139nm,1.4s | | | | | | | |
| PAGF | Fort de Pagny | 7.37 | 250 | *e*P | | Pn | 06 08 50.2 | -2.9 |
| PAGF | | | | *e*Sg | | Sb | 06 10 49.3 | +7.8 |
| | comp=E,92nm,0.9s | | | | | | | |
| NASU | Vaermlandsnaes | 7.55 | 348 | P | | Pn | 06 08 56.4 | +0.8 |
| NASU | Vaermlandsnaes | 7.55 | 348 | P | | Pn | 06 08 56.4 | +0.8 |
| MI30 | MI30,Zelenitsa | 7.61 | 92 | P | | Pn | 06 08 56.8 | +0.5 |
| BAIF | Baives | 7.73 | 263 | *e*Pn | | Pn | 06 08 49.7 | -8.3 |
| BAIF | Baives | 7.73 | 263 | *e*P | | Pn | 06 08 54.7 | -3.3 |
| BAIF | | | | *e*Sn | | Sn | 06 10 12.8 | -13 |
| BAIF | | | | *e*Sg | | Sb | 06 11 00.1 | +8.4 |
| | comp=E,68nm,1.4s | | | | | | | |
| MEZF | Maizieres J'vi | 7.79 | 251 | *e*P | | Pn | 06 08 55.7 | -3.2 |
| MEZF | | | | *e*Sn | | Sn | 06 10 14.9 | -13 |
| MEZF | | | | *e*Sg | | Sb | 06 11 02.9 | +9.4 |
| | comp=E,61nm,1.1s | | | | | | | |
| NDNU | Novodnistrovsk | 7.80 | 108 | P | | Pn | 06 09 00.1 | +1.1 |
| SFTF | Sexfontaines | 7.94 | 249 | *e*P | | Pn | 06 09 00.6 | -0.4 |
| SFTF | | | | *e*Sg | | Sb | 06 11 08.1 | +10 |
| | comp=E,167nm,1.6s | | | | | | | |
| NRAU | Nora | 8.03 | 356 | P | | Pn | 06 09 03.5 | +1.3 |
| NRAU | Nora | 8.03 | 356 | P | | Pn | 06 09 03.5 | +1.3 |
| AK19 | Malin Array Si | 8.12 | 91 | P | | Pn | 06 09 03.2 | -0.2 |
| AK21 | Malin Array Si | 8.13 | 91 | P | | Pn | 06 09 03.5 | 0.0 |
| AK18 | Malin Array Si | 8.16 | 91 | P | | Pn | 06 09 03.7 | -0.2 |
| NRTU | Norrtaelje | 8.23 | 9 | P | | Pn | 06 09 05.8 | +0.9 |
| NRTU | Norrtaelje | 8.23 | 9 | P | | Pn | 06 09 05.8 | +0.9 |
| AKASG | Malin Array Be | 8.26 | 91 | Pn | | Pn | 06 09 05.0 | -0.2 |
| | comp=E,5.1nm,0.3s,baz=282,slow=12,SNR=17 | | | | | | | |
| AKASG | | | | Sn | | Sn | 06 10 35.8 | -3.5 |
| | comp=E,2.7nm,0.3s,baz=277,slow=22,SNR=4.3 | | | | | | | |
| AKASG | | | | Lg | | Lg | 06 11 31.3 | |
| | comp=E,0.5nm,0.3s,baz=280,slow=16,SNR=1.6 | | | | | | | |
| | comp=E,4.9nm,0.5s | | | | | | | |
| AKBB | Malin Array Si | 8.26 | 91 | P | | Pn | 06 09 05.0 | -0.3 |
| AK05 | Malin Array Si | 8.26 | 92 | P | | Pn | 06 09 05.0 | -0.3 |
| CABF | La Chapelle | 8.28 | 237 | *e*P | | Pn | 06 09 02.7 | -2.9 |
| CABF | La Chapelle | 8.28 | 237 | *e*Pg | | Pb | 06 09 31.4 | +2.9 |
| CABF | | | | *e*Sg | | Sb | 06 11 18.3 | +11 |
| | comp=E,79nm,0.9s | | | | | | | |
| MTSE | Matsula | 8.38 | 28 | *e*P | | Pn | 06 09 08.7 | +1.9 |
| HFS | Hagfors | 8.68 | 352 | Pn | | Pn | 06 09 11.0 | 0.0 |
| | comp=E,0.5nm,0.3s,baz=173,slow=14,SNR=16 | | | | | | | |
| HFS | | | | Sn | | Sn | 06 10 44.7 | -4.8 |
| | comp=E,0.2nm,0.3s,baz=176,slow=23,SNR=1.5 | | | | | | | |
| | comp=E,2.9nm,0.5s | | | | | | | |
| LPL | La Plagne | 8.71 | 230 | *e*Pn | | Pn | 06 09 01.8 | -10 |
| LPL | La Plagne | 8.71 | 230 | *e*P | | Pn | 06 09 08.4 | -3.4 |
| LPL | | | | *e*Sg | | Sg | 06 11 31.6 | -12 |
| | comp=E,16nm,0.9s | | | | | | | |
| LPG | La Plagne | 8.72 | 229 | *e*P | | Pn | 06 09 08.1 | -3.8 |
| LPG | La Plagne | 8.72 | 229 | *e*Pg | | Pg | 06 09 39.4 | -12 |
| LPG | | | | *e*Sg | | Sg | 06 11 31.2 | -13 |
| | comp=E,32nm,1.1s | | | | | | | |
| LOR | Lormes | 9.11 | 247 | *e*P | | Pn | 06 09 14.4 | -2.6 |
| LOR | | | | *e*Sg | | Sn | 06 11 44.3 | +44 |
| | comp=E,24nm,0.9s | | | | | | | |
| MBDF | Montbardon | 9.29 | 226 | *e*P | | Pn | 06 09 17.7 | -2.0 |
| MBDF | | | | *e*Sg | | Sn | 06 11 49.3 | +44 |
| | comp=E,21nm,1.0s | | | | | | | |
| SSF | Saint Saulge | 9.42 | 246 | *e*Pn | | Pn | 06 09 12.5 | -8.8 |
| SSF | Saint Saulge | 9.42 | 246 | *e*P | | Pn | 06 09 18.7 | -2.6 |
| SSF | | | | *e*Sn | | Sn | 06 10 53.6 | -14 |
| SSF | | | | *e*Sg | | | 06 11 54.5 | |
| | comp=E,10nm,0.6s | | | | | | | |
| SMF | Signal de Mont | 9.47 | 243 | *e*P | | Pn | 06 09 19.1 | -2.8 |
| SMF | Signal de Mont | 9.47 | 243 | *e*Pg | | Pn | 06 09 53.6 | +32 |
| SMF | | | | *e*Sg | | Sn | 06 11 55.6 | +47 |
| | comp=E,25nm,0.8s | | | | | | | |
| ORIF | Oris-en-Rattie | 9.56 | 230 | *e*Pn | | Pn | 06 09 13.5 | -10 |
| ORIF | Oris-en-Rattie | 9.56 | 230 | *e*P | | Pn | 06 09 21.8 | -1.5 |
| ORIF | | | | *e*Sg | | Sn | 06 11 57.6 | +46 |
| | comp=E,21nm,0.9s | | | | | | | |
| AVF | Avril sur Loir | 9.66 | 245 | *e*Pn | | Pn | 06 09 15.3 | -9.2 |
| AVF | Avril sur Loir | 9.66 | 245 | *e*P | | Pn | 06 09 22.1 | -2.4 |
| AVF | Avril sur Loir | 9.66 | 245 | *e*Pg | | Pn | 06 09 57.5 | +33 |
| AVF | | | | *e*Sg | | Sn | 06 12 01.8 | +48 |
| | comp=E,45nm,1.2s | | | | | | | |
| SBF | Sospel | 9.70 | 221 | *e*P | | Pn | 06 09 24.9 | -0.3 |
| MEF | Metsahovi | 9.80 | 25 | *e*P | | Pn | 06 09 27.7 | +1.3 |
| NOA | NORSAR Array B | 9.87 | 346 | Pn | | Pn | 06 09 25.3 | -2.0 |
| | baz=181,slow=11,SNR=9.4 | | | | | | | |
| NOA | | | | Sn | | Sn | 06 11 12.6 | -6.2 |
| | baz=152,slow=19,SNR=1.6 | | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | | |
| RAF | Rauma | 9.96 | 16 | *e*P | | Pn | 06 09 28.3 | -0.2 |
| BGF | Bois d'Agland | 10.08 | 245 | *e*Pn | | Pn | 06 09 21.6 | -8.7 |
| BGF | Bois d'Agland | 10.08 | 245 | *e*P | | Pn | 06 09 27.3 | -3.0 |
| BGF | | | | *e*Sg | | Sn | 06 12 14.3 | +50 |
| | comp=E,21nm,0.6s | | | | | | | |
| LMR | La Mourre | 10.52 | 222 | *e*Pn | | Pn | 06 09 26.8 | -9.5 |
| LMR | La Mourre | 10.52 | 222 | *e*P | | Pn | 06 09 35.4 | -0.9 |
| TCF | Toulx Ste Croi | 10.60 | 245 | *e*Pn | | Pn | 06 09 28.5 | -8.8 |
| TCF | Toulx Ste Croi | 10.60 | 245 | *e*P | | Pn | 06 09 34.6 | -2.7 |
| TCF | Toulx Ste Croi | 10.60 | 245 | *e*Pg | | Pn | 06 10 14.6 | +37 |
| TCF | | | | *e*Sg | | Sn | 06 12 30.6 | +54 |
| | comp=E,28nm,1.3s | | | | | | | |
| LDF | La Druitiere | 10.89 | 260 | *e*Pn | | Pn | 06 09 32.2 | -9.1 |
| LDF | La Druitiere | 10.89 | 260 | *e*P | | Pn | 06 09 38.2 | -3.1 |
| LDF | | | | *e*Sg | | Sn | 06 12 39.4 | +56 |
| | comp=E,58nm,1.4s | | | | | | | |
| FLN | La Foliniere | 11.04 | 262 | *e*Pn | | Pn | 06 09 34.4 | -9.0 |
| FLN | La Foliniere | 11.04 | 262 | *e*P | | Pn | 06 09 40.4 | -3.0 |
| FLN | | | | *e*Sn | | Sn | 06 11 32.4 | -15 |
| FLN | | | | *e*Sg | | | 06 12 44.6 | |
| | comp=E,86nm,1.4s | | | | | | | |
| FINES | FINESS Array B | 11.28 | 25 | Pn | | Pn | 06 09 46.0 | -0.6 |
| | comp=E,0.8nm,0.3s,baz=200,slow=11,SNR=30 | | | | | | | |
| FINES | | | | Sn | | Sn | 06 11 46.5 | -6.7 |
| | comp=E,1.1nm,0.3s,baz=208,slow=20,SNR=6.9 | | | | | | | |
| FINES | | | | Lg | | Lg | 06 13 03.8 | |
| | baz=222,slow=22 | | | | | | | |
| | comp=E,1.8nm,0.3s | | | | | | | |
| GRR | Gorron | 11.42 | 260 | *e*P | | Pn | 06 09 45.8 | -2.7 |
| GRR | Gorron | 11.42 | 260 | *e*Pg | | Pn | 06 10 29.2 | +41 |
| GRR | | | | *e*Sg | | Sn | 06 12 55.8 | +59 |
| | comp=E,189nm,1.9s | | | | | | | |
| KEF | Keuruu | 11.62 | 21 | *e*P | | Pn | 06 09 51.1 | 0.0 |
| VAF | Ylistaro | 12.01 | 14 | *e*P | | Pn | 06 09 54.9 | -1.6 |
| EKA | Eskdalemuir Ar | 12.11 | 296 | Pn | | Pn | 06 09 54.3 | -3.6 |
| | baz=101,slow=14 | | | | | | | |
| EKA | | | | Sn | | Sn | 06 12 06.8 | -6.7 |
| | baz=97,slow=25 | | | | | | | |
| ROSF | Rostrenen | 12.93 | 263 | *e*Pn | | Pn | 06 10 00.5 | -8.7 |
| ROSF | Rostrenen | 12.93 | 263 | *e*P | | Pn | 06 10 06.2 | -3.0 |
| ROSF | Rostrenen | 12.93 | 263 | *e*Pg | | Pn | 06 10 56.9 | +48 |
| ROSF | | | | *e*Sg | | | 06 13 43.3 | |
| | comp=E,88nm,1.3s | | | | | | | |
| JOF | Joensuu | 13.96 | 30 | *e*P | | Pn | 06 10 22.1 | -1.1 |
| ARCES | ARCESS Array B | 18.54 | 10 | Pn | | P | 06 11 20.3 | -1.8 |
| | comp=E,0.4nm,0.3s,baz=192,slow=13,SNR=16 | | | | | | | |
| | comp=E,2.7nm,0.6s | | | | | | | |
| BELG | Belogornoye | 19.32 | 75 | P | | P | 06 11 32.4 | +1.6 |
| | comp=E,0.6nm,0.3s,baz=290,slow=6.5,SNR=4.2 | | | | | | | |
| | comp=E,8.7nm,0.8s | | | | | | | |
| ARU | Arti | 25.07 | 62 | P | | P | 06 12 30.9 | +0.8 |
| | comp=E,3.1nm,0.4s,baz=285,slow=12,SNR=5.9 | | | | | | | |
| | comp=E,3.1nm,0.4s | | | | | | | |
| AKTO | Aktyubinsk | 26.10 | 76 | P | | P | 06 12 40.9 | +1.4 |
| | comp=E,2.2nm,0.6s,baz=288,slow=8.7,SNR=6.2 | | | | | | | |
| | comp=E,2.2nm,0.6s | | | | | | | |
| BVAR | Borovoye Array | 32.53 | 66 | P | | P | 06 13 38.6 | +2.1 |
| | comp=E,1.2nm,0.6s,baz=302,slow=7.6,SNR=8.1 | | | | | | | |
| | comp=E,1.2nm,0.6s | | | | | | | |
| KURBB | Kurchatov Arra | 38.11 | 66 | P | | P | 06 14 26.4 | +1.7 |
| | comp=E,0.8nm,0.7s,baz=298,slow=8.7,SNR=6.5 | | | | | | | |
| | comp=E,0.8nm,0.7s | | | | | | | |
| TORD | Torodi Ar. Bea | 40.08 | 202 | P | | P | 06 14 41.2 | -0.2 |
| | comp=E,1.5nm,0.8s,baz=12,slow=9.4,SNR=7.9 | | | | | | | |
| | comp=E,1.5nm,0.8s | | | | | | | |
| ZALV | Zalesovo Beam | 40.13 | 59 | P | | P | 06 14 43.7 | +2.3 |
| | comp=E,0.4nm,0.4s,baz=347,slow=6.1,SNR=4.4 | | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | | |
| MKAR | Makanchi Array | 42.15 | 69 | P | | P | 06 14 59.7 | +1.4 |
| | comp=E,0.8nm,0.9s,baz=337,slow=5.8,SNR=4.4 | | | | | | | |
| | comp=E,0.8nm,0.9s | | | | | | | |
| SONM | Songino Array | 54.84 | 55 | P | | P | 06 16 39.0 | +2.9 |
| | comp=E,0.6nm,0.6s,baz=301,slow=12,SNR=3.5 | | | | | | | |
| | comp=E,0.6nm,0.6s | | | | | | | |
| SADO | Sadowa | 59.51 | 305 | LR | | LR | 06 41 00.9 | |
| | comp=E,20nm,18.4s,baz=70,slow=34 | | | | | | | |
| ILAR | Eielson Array | 63.24 | 352 | P | | P | 06 17 34.6 | +0.6 |
| | comp=E,0.1nm,0.5s,baz=356,slow=9.1,SNR=4.0 | | | | | | | |
| | comp=E,0.1nm,0.5s | | | | | | | |
| PDAR | Pinedale Array | 74.91 | 322 | P | | P | 06 18 48.0 | +1.0 |
| | comp=E,0.5nm,0.6s,baz=55,slow=5.9,SNR=6.6 | | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | | |
| TXAR | Lajitas Array | 83.69 | 310 | P | | P | 06 19 35.0 | -0.1 |
| | comp=E,0.1nm,0.6s,baz=101,slow=3.8,SNR=2.7 | | | | | | | |
| | comp=E,0.1nm,0.6s | | | | | | | |

*WEL* **12** *07:13:43.7±0.3, 42.°S±3.°×17.°4E±.°, h10km±2km, M3.3/18, ML3.6/18, MLv3.3/18, Error ellipse: s-maj=0.0km s-min=0.0km az=147.6, confirmed*
*NOU* **12** *07:13:43.1, 41.°75S×174.°48E, h4km, MLv3.8/10, Cook Strait, New Zealand*
**ISC 12 07:13:42.8**±0.9, **41.°63S**±0.°02×**174.°40E**±0.°02, **h16**km±8km, **n130**, σ1°**23**/148, **Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| CMWZ | Cape Campbell | 0.18 | 230 | P | | Pb | 07 13 49.0 | +1.2 |
| CMWZ | | | | S | | Sb | 07 13 53.9 | +2.7 |
| SEDS | Seddon Fire St | 0.25 | 260 | P | | Pb | 07 13 49.5 | +0.6 |
| SEDS | | | | S | | Sb | 07 13 53.7 | +0.8 |
| WDFS | Ward Fire Stat | 0.28 | 225 | P | | Pb | 07 13 50.6 | +1.2 |
| WDFS | | | | S | | Sb | 07 13 56.2 | +2.4 |
| SNZO | South Karori | 0.39 | 36 | P | | Pb | 07 13 51.9 | +0.6 |
| TUWZ | Tuamarina | 0.40 | 300 | P | | Pb | 07 13 51.9 | +0.5 |
| TUWZ | | | | S | | Sb | 07 13 57.1 | -0.1 |
| BSWZ | Blackbirch Sta | 0.40 | 258 | P | | Pn | 07 13 51.8 | -2.1 |
| BSWZ | | | | S | | Sb | 07 13 57.9 | +0.5 |
| BHW | Baring Head | 0.42 | 58 | P | | Pn | 07 13 52.9 | -1.2 |
| BHW | | | | S | | Sn | 07 13 59.3 | -2.1 |
| BWRS | Waikakaho Road | 0.42 | 297 | P | | Pb | 07 13 51.5 | -0.3 |
| BWRS | | | | S | | Sg | 07 13 57.0 | 0.0 |
| TCW | Tory Channel | 0.43 | 347 | P | | Pg | 07 13 51.7 | +0.2 |
| TCW | | | | S | | Sg | 07 13 56.8 | -0.5 |
| WNKS | Wellington Kar | 0.43 | 37 | P | | Pg | 07 13 50.9 | -0.6 |
| MKVS | Makara Village | 0.43 | 32 | P | | Pg | 07 13 51.1 | -0.4 |
| MKVS | | | | S | | Sg | 07 13 57.0 | -0.3 |
| WEL | Wellington | 0.44 | 39 | P | | Pn | 07 13 52.9 | -1.5 |
| WEL | | | | S | | Sb | 07 13 59.7 | +1.2 |
| TEPS | Wellington Te | 0.44 | 40 | P | | Pn | 07 13 53.1 | -1.4 |
| TEPS | | | | S | | Sb | 07 13 59.5 | +1.0 |
| FKPS | Wellington Fra | 0.44 | 40 | P | | Pg | 07 13 51.6 | -0.1 |
| FKPS | | | | S | | Sg | 07 13 58.1 | +0.3 |
| MISS | Wellington Mir | 0.44 | 45 | P | | Pn | 07 13 53.1 | -1.3 |
| SEAW | Seatoun School | 0.45 | 47 | P | | Pb | 07 13 52.0 | -0.2 |
| SEAW | | | | S | | Sb | 07 13 58.3 | -0.3 |
| BOWS | Bowen St Turnb | 0.45 | 39 | P | | Pb | 07 13 52.0 | -0.2 |
| VUWS | Victoria Unive | 0.45 | 39 | P | | Pg | 07 13 51.6 | -0.2 |
| VUWS | | | | S | | Sb | 07 13 58.8 | 0.0 |
| KEKS | Kekerengu Vall | 0.45 | 224 | P | | Pn | 07 13 53.7 | -0.9 |
| POTA | Wellington Pot | 0.45 | 38 | P | | Pb | 07 13 52.9 | +0.6 |
| POTA | | | | S | | Sb | 07 13 59.2 | +0.3 |
| TFSS | Wellington Tho | 0.46 | 39 | P | | Pg | 07 13 52.0 | 0.0 |
| TFSS | | | | S | | Sb | 07 13 58.9 | 0.0 |
| WEMS | Wellington Eme | 0.46 | 39 | P | | Pn | 07 13 53.3 | -1.3 |
| WEMS | | | | S | | Sb | 07 13 59.4 | +0.5 |
| MKBS | Makara Bunker | 0.46 | 29 | P | | Pb | 07 13 52.9 | +0.4 |
| MKBS | | | | S | | Sb | 07 13 59.9 | +0.8 |
| PIPS | Aotea Quay Pip | 0.46 | 39 | S | | Sg | 07 13 58.6 | +0.2 |
| NEWS | Newlands | 0.51 | 39 | P | | Pb | 07 13 53.9 | +0.6 |
| NEWS | | | | S | | Sb | 07 14 01.2 | +0.8 |
| SOMS | Somes Island | 0.51 | 43 | P | | Pn | 07 13 54.0 | -1.3 |
| PLWZ | Palliser | 0.64 | 85 | P | | Pn | 07 13 57.1 | -0.2 |
| MSWZ | Moikau Station | 0.67 | 72 | P | | Pn | 07 13 57.8 | +0.2 |
| CAW | Cannon Point | 0.72 | 44 | P | | Pn | 07 13 57.8 | -0.5 |
| PAWZ | Paruwai Farm | 0.81 | 73 | P | | Pn | 07 14 00.2 | +0.7 |
| KIW | Kapiti Island | 0.86 | 27 | P | | Pn | 07 13 59.7 | -0.4 |
| NNZ | Nelson | 0.87 | 298 | P | | Pg | 07 13 59.3 | -0.4 |
| DUWZ | D'Urville Isla | 0.90 | 336 | P | | Pb | 07 13 59.9 | -0.1 |
| MTW | Mount Morrison | 0.95 | 61 | P | | Pg | 07 14 02.4 | +1.2 |
| TRWZ | Traveller | 0.99 | 77 | P | | Pg | 07 14 03.1 | +1.1 |
| OGWZ | Otaki Gorge | 1.00 | 36 | P | | Pg | 07 14 02.3 | +0.2 |
| KHZ | Kahutara | 1.01 | 219 | P | | Pg | 07 14 03.1 | +0.6 |
| KHZ | Kahutara | 1.01 | 219 | P | | Pg | 07 14 03.3 | +0.8 |
| HOWZ | Holdsworth Sta | 1.11 | 49 | P | | Pg | 07 14 04.7 | +0.4 |
| THZ | Tophouse | 1.13 | 263 | P | | Pg | 07 14 04.0 | -0.6 |
| TMWZ | Te Maipa | 1.24 | 66 | P | | Pg | 07 14 06.1 | -0.6 |
| TKNZ | Takaka Hill | 1.24 | 298 | P | | Pb | 07 14 05.6 | -0.1 |
| MRNZ | Matariki Terra | 1.26 | 280 | P | | Pg | 07 14 06.1 | -1.0 |
| MRZ | Mangatainoka R | 1.31 | 43 | P | | Pg | 07 14 07.5 | -0.6 |
| TIWZ | Tintock | 1.41 | 53 | P | | Pb | 07 14 08.8 | +0.2 |
| OHWZ | Ohakea | 1.58 | 26 | P | | Pg | 07 14 12.9 | -0.4 |
| PRWZ | Pori Road | 1.60 | 48 | P | | Pb | 07 14 11.3 | -0.6 |
| POWZ | Post Office Ro | 1.61 | 40 | P | | Pb | 07 14 11.8 | -0.4 |
| QRZ | Quartz Range | 1.62 | 299 | P | | Pb | 07 14 12.1 | -0.2 |
| QRZ | Quartz Range | 1.62 | 299 | P | | Pb | 07 14 11.9 | -0.5 |
| GVZ | Greta Valley S | 1.68 | 217 | P | | Pb | 07 14 12.0 | -1.2 |
| BFZ |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **4.81** | **103** | *eP* | | **Pn** | **07 22 47.0** | **-2.4** |
| **NNA** | **Nana** | **4.95** | **311** | Pn | | **Pn** | **07 22 49.4** | **-1.3** |
| **NNA** | **Nana** | **4.95** | **311** | P | | **Pn** | **07 22 52.3** | **+1.6** |
| | 22nm,0.6s,baz=155,slow=13,SNR=14 | | | | | | | |
| NNA | | | | S | | **Sn** | **07 23 44.7** | **-2.0** |
| | 37nm,0.3s,baz=186,slow=17,SNR=7.7 | | | | | | | |
| **GO01** | **Chusmiza** | **5.70** | **141** | Pn | | **Pn** | **07 23 00.3** | **-0.9** |
| **HMBC** | **Humberstone** | **5.80** | **150** | | | **Pn** | **07 23 00.7** | **-1.7** |
| **TA01** | **Diego Aracena** | **5.92** | **153** | Pn | | **Pn** | **07 23 01.9** | **-1.9** |
| **PATCX** | **Punta Patache** | **6.15** | **154** | Pn | | **Pn** | **07 23 04.9** | **-2.2** |
| **CZSB** | **Cruzeiro do Su** | **7.50** | **2** | Pn | | **Pn** | **07 23 24.8** | **-0.6** |
| **CZSB** | **Cruzeiro do Su** | **7.50** | **2** | *eP* | | **Pn** | **07 23 24.6** | **-0.9** |
| **PB04** | **IPOC Station P** | **7.53** | **159** | Pn | | **Pn** | **07 23 23.7** | **-2.2** |
| **LVC** | **Limon Verde** | **8.27** | **153** | P | | **Pn** | **07 23 35.3** | **-0.8** |
| | 5.1nm,0.3s,baz=17,slow=8.3,SNR=24 | | | | | | | |
| LVC | | | | S | | **Sn** | **07 25 03.5** | **-4.6** |
| | 8.8nm,0.2s,baz=252,slow=20,SNR=14 | | | | | | | |
| **LVC** | **Limon Verde** | **8.27** | **153** | *eP* | | **Pn** | **07 23 38.0** | **+1.9** |
| **ETMB** | **Extrema** | **8.58** | **52** | Pn | | **Pn** | **07 23 39.5** | **-0.5** |
| **ETMB** | **Extrema** | **8.58** | **52** | *eP* | | **Pn** | **07 23 39.1** | **-0.9** |
| **AC01** | **Pan de Azucar** | **11.05** | **169** | Pn | | **Pn** | **07 24 11.6** | **-2.1** |
| **TBTG** | **Tabatinga, AM** | **11.43** | **16** | *eP* | | **Pn** | **07 24 18.3** | **-0.5** |
| **SAML** | **Samuel** | **11.49** | **58** | Pn | | **Pn** | **07 24 17.0** | **-2.5** |
| **SAML** | **Samuel** | **11.49** | **58** | *eP* | | **Pn** | **07 24 17.0** | **-2.5** |
| **SIV** | **San Ignacio** | **11.53** | **95** | P | | **Pn** | **07 24 17.8** | **-2.4** |
| | 2.5nm,0.4s,baz=275,slow=10.0,SNR=31 | | | | | | | |
| **BBSD** | **Serra de San D** | **12.07** | **101** | *eP* | | **Pn** | **07 24 26.1** | **-1.3** |
| **VILB** | **Vilhena** | **12.65** | **81** | Pn | | **Pn** | **07 24 31.4** | **-3.6** |
| **VILB** | **Vilhena** | **12.65** | **81** | *eP* | | **Pn** | **07 24 32.3** | **-2.7** |
| **PTLB** | **Pontes e Lacer** | **13.39** | **93** | | | **Pn** | **07 24 42.4** | **-2.3** |
| **PTLB** | **Pontes e Lacer** | **13.39** | **93** | *eP* | | **Pn** | **07 24 43.7** | **-1.0** |
| **PDRB** | **Porto dos Gac** | **16.26** | **79** | *eP* | | **Pn** | **07 25 18.8** | **-2.4** |
| **TULM** | **Tulcn-Chalpat** | **16.57** | **343** | P | | **Pn** | **07 25 23.2** | **-2.3** |
| **SALV** | **Santo Antonio** | **16.70** | **94** | *eP* | | **Pn** | **07 25 25.6** | **-1.1** |
| **MACA** | **Manacapuru-AM** | **17.11** | **46** | P | | **Pn** | **07 25 28.7** | **-2.9** |
| MACA | | | | IAmb | | IAmb | 07 25 33.6 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **MACA** | **Manacapuru-AM** | **17.11** | **46** | *eP* | | **Pn** | **07 25 29.6** | **-2.0** |
| **AQDB** | **Aquidauana** | **17.27** | **110** | P | | **P** | **07 25 33.2** | **-0.5** |
| **AQDB** | **Aquidauana** | **17.27** | **110** | *eP* | | **P** | **07 25 33.1** | **-0.5** |
| **MT16** | **CCHEN** | **18.22** | **173** | P | | **P** | **07 25 39.3** | **-4.6** |
| MT16 | | | | IAmb | | IAmb | 07 26 03.3 | |
| | comp=Z,9.3nm,1.1s | | | | | | | |
| **CPUP** | **Villa Florida** | **18.32** | **129** | P | | **Pn** | **07 25 46.4** | **+0.2** |
| | comp=Z,2.0nm,1.1s,baz=318,slow=15,SNR=1.8 | | | | | | | |
| **NPGB** | **Novo Progresso** | **19.15** | **67** | *eP* | | **P** | **07 25 54.5** | **+0.2** |
| **ITTB** | **Itaituba** | **20.17** | **59** | *eP* | | **P** | **07 26 04.9** | **-0.3** |
| **ARAG** | **Araguaiana, MT** | **20.44** | **94** | *eP* | | **P** | **07 26 08.8** | **+0.5** |
| **TRCB** | **Terra Rica** | **20.66** | **114** | *eP* | | **P** | **07 26 12.1** | **+1.5** |
| **SNDB** | **Serra Nova Dou** | **21.36** | **84** | *eP* | | **P** | **07 26 16.9** | **-1.3** |
| **CRSM** | **Crissiumal (Br** | **21.41** | **128** | *eP* | | **P** | **07 26 20.0** | **+1.4** |
| **BOAV** | **Boa Vista** | **21.48** | **36** | *eP* | | **P** | **07 26 19.1** | **-0.2** |
| **PCMB** | **Pacaembu** | **21.57** | **110** | *eP* | | **P** | **07 26 24.0** | **-0.3** |
| **PTGB** | **Pitanga** | **21.79** | **119** | *eP* | | **P** | **07 26 24.4** | **+1.7** |
| **ITRB** | **Iturama** | **22.05** | **105** | *eP* | | **P** | **07 26 26.4** | **+1.0** |
| **LDASE** | **Londrina, Braz** | **22.17** | **115** | *eP* | | **P** | **07 26 27.8** | **+1.2** |
| **RODS** | **Rosario do Sul** | **22.20** | **136** | *eP* | | **P** | **07 26 29.0** | **+2.1** |
| **ALGR** | **Alto Alegre (B** | **22.86** | **129** | *eP* | | **P** | **07 26 35.7** | **+2.0** |
| **CPSB** | **Cacapava Do Su** | **23.45** | **133** | *eP* | | **P** | **07 26 41.6** | **+2.5** |
| **FRTB** | **Fartura** | **23.52** | **114** | *eP* | | **P** | **07 26 40.7** | **+0.8** |
| **IPMB** | **Ipameri, GO** | **23.92** | **100** | *eP* | | **P** | **07 26 43.2** | **-0.4** |
| **BDFB** | **Brasilia** | **24.10** | **94** | P | | **P** | **07 26 43.1** | **-2.2** |
| BDFB | | | | IAmb | | IAmb | 07 26 52.5 | |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| **BDFB** | **Brasilia** | **24.10** | **94** | P | | **P** | **07 26 44.2** | **-1.1** |
| | comp=Z,2.1nm,0.6s,baz=250,slow=13,SNR=4.6 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **GO06** | **Curarrehue** | **24.26** | **177** | P | | **P** | **07 26 47.1** | **+0.7** |
| GO06 | | | | IAmb | | IAmb | 07 26 50.1 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **BAUV** | **El Baul** | **24.56** | **12** | P | | **P** | **07 26 50.3** | **+1.0** |
| **TRQA** | **Tornquist** | **24.70** | **159** | P | | **P** | **07 26 51.2** | **+0.8** |
| TRQA | | | | IAmb | | IAmb | 07 27 07.1 | |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **LR05** | **Currie** | **24.88** | **178** | P | | **P** | **07 26 52.7** | **+0.7** |
| LR05 | | | | IAmb | | IAmb | 07 26 54.4 | |
| | comp=Z,9.4nm,0.6s | | | | | | | |
| **PLCA** | **Paso Flores** | **25.46** | **176** | P | | **P** | **07 26 58.3** | **+1.0** |
| **PLCA** | **Paso Flores** | **25.46** | **176** | *eP* | | **P** | **07 26 58.7** | **+1.4** |
| | comp=Z,2.8nm,0.9s,baz=352,slow=12,SNR=5.5 | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | |
| **PLCA** | **Paso Flores** | **25.46** | **176** | *eP* | | **P** | **07 26 59.3** | **+2.0** |
| **MCPB** | **Macapa, AP** | **25.46** | **56** | *eP* | | **P** | **07 26 58.2** | **+0.7** |
| **PMNB** | **Patos De Minas** | **25.63** | **101** | *eP* | | **P** | **07 26 59.8** | **+0.6** |
| **SMTB** | **Santa Maria do** | **25.66** | **79** | *eP* | | **P** | **07 26 59.3** | **0.0** |
| **JANB** | **Januaria** | **27.70** | **93** | *eP* | | **P** | **07 27 17.5** | **-0.3** |
| **DIAM** | **Diamantina, MG** | **28.24** | **100** | *eP* | | **P** | **07 27 23.3** | **+0.7** |
| **ICQ** | **Pointe Anglais** | **64.71** | **4** | P | | **P** | **07 32 06.2** | **+0.3** |
| **DRLN** | **Deer Lake** | **65.70** | **11** | P | | **P** | **07 32 13.4** | **+1.2** |
| **SNAA** | **Sanae** | **69.40** | **161** | P | | **P** | **07 32 37.1** | **+1.7** |
| SNAA | | | | IAmb | | IAmb | 07 32 38.0 | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **69.40** | **161** | P | | **P** | **07 32 37.2** | **+1.7** |
| | comp=Z,2.3nm,0.6s,baz=276,slow=7.7,SNR=29 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.88** | **180** | P | | **P** | **07 33 10.3** | **+2.0** |
| QSPA | | | | IAmb | | IAmb | 07 33 13.0 | |
| | comp=Z,1.9nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.88** | **180** | P | | **P** | **07 33 09.8** | **+1.5** |
| | comp=Z,0.8nm,0.5s,baz=44,slow=0.4,SNR=5.9 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.12** | **73** | P | | **P** | **07 33 32.9** | **0.0** |
| TORD | | | | IAmb | | IAmb | 07 33 34.1 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.12** | **73** | P | | **P** | **07 33 32.9** | **0.0** |
| | comp=Z,2.6nm,0.6s,baz=257,slow=4.2,SNR=25 | | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| **VNDA** | **Vanda** | **82.26** | **190** | P | | **P** | **07 33 50.5** | **+2.0** |
| | comp=Z,0.5nm,0.9s,baz=119,slow=6.5,SNR=3.6 | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **84.27** | **46** | P | | **P** | **07 34 01.0** | **+1.6** |
| | comp=Z,0.9nm,0.9s,baz=253,slow=3.9,SNR=6.1 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |

*IDC **12** 07:28:42.9±7.2, 17°.32S×175°.72W, h294km±45km, mb3.3/3, mbtmp3.9/4, Error ellipse: s-maj=117.6km s-min=33.8km az=132.0, Tonga Islands*

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **5.96** | **265** | P | | Pn | 07 30 11.6 | 0.0 |
| | 6.8nm,0.8s,baz=95,slow=16,SNR=2.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **47.42** | **254** | P | | P | 07 36 48.6 | -0.1 |
| | 2.8nm,0.6s,baz=88,slow=8.6,SNR=59 | | | | | | | |
| | 2.8nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.00** | **322** | P | | P | 07 39 16.8 | -0.2 |
| | 1.1nm,0.9s,baz=138,slow=7.2,SNR=2.0 | | | | | | | |
| | 1.1nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.76** | **12** | P | | P | 07 40 43.9 | 0.0 |
| | 0.4nm,0.7s,baz=223,slow=6.4,SNR=7.1 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |

*IDC 12 07:36:30.1±367.0, 28°.43N×80°.37W, h0km, Error ellipse: s-maj=353.1km s-min=135.3km az=67.0, Florida Peninsula*

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I10CA** | **LAC DU BONNET** | **24.79** | **336** | I | | I | 10 09 10.0 | |
| | baz=147,slow=326,SNR=3.4 | | | | | | | |
| **I56US** | **NEWPORT INFRASO** | **84.53** | **315** | I | | I | 11 05 50.0 | |
| | baz=113,slow=321,SNR=1.3 | | | | | | | |
| **I08BO** | **LAS PENAS INFR** | **45.85** | **164** | I | | I | 12 17 20.0 | |
| | baz=354,slow=325,SNR=1.4 | | | | | | | |

*KRSC 12 07:42:47.3±1.6, 48°.50N×156°.42E, h7km±25km, MI3.5, East of Kuril Islands*

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **3.48** | **17** | *eP* | | Pn | 07 43 44.6 | +2.8 |
| KDTR | | | | *eS* | | Sb | 07 44 28.1 | -3.6 |
| **ASAK** | **Asacha** | **4.00** | **13** | *eP* | | Pn | 07 43 52.8 | +3.7 |
| **MTVR** | **Mutnovka** | **4.14** | **15** | *eP* | | Pn | 07 43 54.5 | +3.4 |
| **GRL** | **Gorelyy** | **4.19** | **14** | *eP* | | Pn | 07 43 55.4 | +3.6 |
| **UGLR** | **Uglovaya** | **4.96** | **17** | *eP* | | Pn | 07 44 06.8 | +4.5 |
| **KOK** | **Koryaka** | **5.00** | **15** | *eP* | | Pn | 07 44 07.8 | +4.9 |
| **SMAR** | **Somma** | **5.00** | **17** | *eP* | | Pn | 07 44 08.2 | +5.2 |
| **KRX** | **Arik** | **5.07** | **15** | *eP* | | Pn | 07 44 08.0 | +4.2 |

*TEH **12** 07:57:03.8, 33°.69N×45°.69E, h8km±52km, ML2.8*

*ISN **12** 07:57:03.6±0.5, 33°.66N×45°.66E, h13km±11km, ML3.0*
**ISC 12 07:57:04.2±0.9, 33°69N±0°.04×45°.70E±0°.04, h13km, n11, σ0s80/15, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ILBA** | **Ilam Banvizeh** | **0.43** | **98** | Pg | | **Pg** | **07 57 12.7** | **-0.1** |
| ILBA | | | | Sg | | **Sg** | **07 57 19.0** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.46** | **23** | Pg | | **Pg** | **07 57 12.5** | **-0.8** |
| **IBDR** | **Badra** | **0.61** | **161** | *e*Pg | | **Pg** | **07 57 15.0** | **-1.1** |
| IBDR | | | | *e*Sg | | **Sg** | **07 57 24.0** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **0.97** | **48** | Pg | | **Pg** | **07 57 22.9** | **+0.1** |
| **IDHR** | **Dehrash** | **1.16** | **29** | Pg | | **Pn** | **07 57 26.4** | **+0.1** |
| **BHD** | **Baghdad** | **1.18** | **250** | *e*Pn | | **Pg** | **07 57 27.0** | **+0.2** |
| BHD | | | | *e*Sn | | **Sn** | **07 57 44.0** | **+1.8** |
| **KCHF** | **Cheshme Sefid,** | **1.26** | **62** | Pg | | **Pg** | **07 57 28.6** | **+0.1** |
| **ILIN** | **Lien** | **1.61** | **40** | Pg | | **Pb** | **07 57 34.5** | **+0.6** |
| **IKFM** | **Kafar-mosalman** | **1.80** | **95** | Pg | | **Pg** | **07 57 38.1** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.98** | **53** | Pn | | **Pb** | **07 57 39.9** | **-0.3** |
| **IKRK** | **Kirkuk** | **2.04** | **327** | *e*Pn | | **Pb** | **07 57 40.0** | **-1.1** |
| IKRK | | | | *e*Sn | | **Sb** | **07 58 06.0** | **-0.4** |
| IKRK | | | | AML | | AML | 07 58 13.1 | |
| | comp=N,198nm,0.3s | | | | | | | |
| IKRK | | | | AML | | AML | 07 58 13.8 | |
| | comp=E,93nm,0.4s | | | | | | | |

*IDC **12** 08:00:04.2±3.0, 27°.93N×53°.36E, h0km, mb3.7/5, mbtmp3.7/5, Error ellipse: s-maj=81.2km s-min=30.1km az=153.0*
*TEH **12** 08:00:07.9, 28°.13N×53°.42E, h6km±999km, ML3.0*
**ISC 12 08:00:07.6±0.9, 28°.09N±0°.05×53°.41E±0°.07, h10km, n12, σ1s62/12, mb3.3/5, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JHRM** | **Jahrom** | **0.44** | **19** | Pg | | **Pg** | **08 00 16.0** | **-0.2** |
| **QIR1** | **Qir** | **0.50** | **320** | Pg | | **Pb** | **08 00 19.0** | **+0.4** |
| **LMD1** | **Lamerd** | **0.78** | **196** | Pg | | **Pg** | **08 00 23.9** | **+1.3** |
| **LAR1** | **LAR** | **0.95** | **116** | Pg | | **Pn** | **08 00 27.9** | **+0.8** |
| **DSBU** | **Dashti - Bushe** | **1.92** | **279** | Pn | | **Pg** | **08 00 43.9** | **-0.4** |
| **IRAM** | **Ramesheh** | **3.81** | **347** | Pn | | **Pn** | **08 01 09.0** | **+2.5** |
| **ISAD** | **Sadrabad** | **3.82** | **3** | Pn | | **Pn** | **08 01 09.6** | **+2.9** |
| **MKAR** | **Makanchi Array** | **29.32** | **43** | P | | **P** | **08 06 09.8** | **-0.5** |
| | 0.2nm,0.5s,baz=232,slow=7.0,SNR=1.8 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.47** | **33** | P | | **P** | **08 06 11.4** | **-0.1** |
| | 0.2nm,0.4s,baz=236,slow=6.6,SNR=2.7 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.56** | **33** | P | | **P** | **08 06 55.5** | **-0.6** |
| | 1.3nm,0.4s,baz=239,slow=7.9,SNR=5.9 | | | | | | | |
| | 1.3nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **38.01** | **339** | P | | **P** | **08 07 24.7** | **-0.8** |
| | 3.7nm,1.1s,baz=146,slow=10,SNR=6.3 | | | | | | | |
| | 3.7nm,1.1s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **50.28** | **264** | P | | **P** | **08 09 02.2** | **-2.3** |
| | 0.1nm,0.3s,baz=81,slow=8.7,SNR=2.0 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |

*NEIC **12** 08:05:06.6±2.2, 15°.58N±0°.04×98°.66W±0°.04, h10km±2km, mb4.0/17, Md4.3/81(MEX), Error ellipse: s-maj=7.3km s-min=5.1km az=129.0*
*MEX **12** 08:05:07.0±1.5, 15°.41N×98°.80W, h18km±38km, MD4.3*
**ISC 12 08:05:03.3±1.3, 15°.50N±0°.05×98°.69W±0°.03, h11km±6km, n87, σ2s43/126, mb3.9/4, Off coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PNIG** | **Pinotepa** | **1.03** | **31** | | | **Pn** | **08 05 24.7** | **+0.8** |
| PNIG | | | | | | **Sn** | **08 05 39.2** | **+0.9** |
| **PNIG** | **Pinotepa** | **1.03** | **31** | *eP* | | **Pn** | **08 05 24.7** | **+0.8** |
| PNIG | | | | *eS* | | **Sn** | **08 05 39.2** | **+0.9** |
| **CRIG** | **Cruz Grande** | **1.30** | **341** | | | **Pg** | **08 05 27.7** | **-0.6** |
| CRIG | | | | | | **Sg** | **08 05 42.9** | **-2.3** |
| **CRIG** | **Cruz Grande** | **1.30** | **341** | *eP* | | **Pg** | **08 05 27.7** | **-0.6** |
| CRIG | | | | *eS* | | **Sg** | **08 05 42.9** | **-2.3** |
| **PEIG** | **Puerto Escondi** | **1.56** | **71** | | | **Pn** | **08 05 32.4** | **+1.3** |
| PEIG | | | | | | **Sg** | **08 05 52.0** | **-1.6** |
| **PEIG** | **Puerto Escondi** | **1.56** | **71** | *i* P | | **Pn** | **08 05 32.4** | **+1.3** |
| PEIG | | | | *e*S | | **Sg** | **08 05 52.0** | **-1.6** |
| **MGIG** | **Malinaltepec** | **1.72** | **2** | | | **Pn** | **08 05 35.0** | **+1.5** |
| MGIG | | | | | | **Sn** | **08 05 55.6** | **+0.1** |
| **MGIG** | **Malinaltepec** | **1.72** | **2** | *eP* | | **Pn** | **08 05 35.0** | **+1.5** |
| MGIG | | | | *eS* | | **Sn** | **08 05 55.6** | **+0.1** |
| **YOIG** | **Yosondua** | **1.73** | **39** | | | **Pn** | **08 05 35.2** | **+1.5** |
| YOIG | | | | | | **Sg** | **08 05 58.8** | **-0.5** |
| **YOIG** | **Yosondua** | **1.73** | **39** | *eP* | | **Pn** | **08 05 35.2** | **+1.5** |
| YOIG | | | | *eS* | | **Sg** | **08 05 58.8** | **-0.5** |
| **DAIG** | **Los Arroyos** | **1.77** | **329** | | | **Pn** | **08 05 34.4** | **+0.5** |
| DAIG | | | | | | **Sn** | **08 05 53.1** | **-3.4** |
| **DAIG** | **Los Arroyos** | **1.77** | **329** | *eP* | | **Pn** | **08 05 34.4** | **+0.5** |
| DAIG | | | | *eS* | | **Sn** | **08 05 53.1** | **-3.4** |
| **TXIG** | **Tlaxiaco** | **1.95** | **27** | | | **Pn** | **08 05 38.9** | **+2.2** |
| TXIG | | | | | | **Sg** | **08 06 04.1** | **-2.0** |
| **TXIG** | **Tlaxiaco** | **1.95** | **27** | *i* P | | **Pn** | **08 05 38.9** | **+2.2** |
| TXIG | | | | *e*S | | **Sg** | **08 06 04.1** | **-2.0** |
| **TLIG** | **Tlapa** | **2.05** | **3** | Pn | | **Pn** | **08 05 40.2** | **+2.3** |
| TLIG | | | | Sn | | **Sb** | **08 06 05.4** | **-0.9** |
| **TLIG** | **Tlapa** | **2.05** | **3** | *eP* | | **Pn** | **08 05 40.2** | **+2.3** |
| TLIG | | | | *eS* | | **Sn** | **08 06 02.0** | **-1.2** |
| **FTIG** | **Fresnillo de T** | **2.45** | **12** | | | **Pn** | **08 05 46.5** | **+3.1** |
| FTIG | | | | | | **Sb** | **08 06 15.3** | **-2.5** |
| **FTIG** | **Fresnillo de T** | **2.45** | **12** | *eP* | | **Pn** | **08 05 46.5** | **+3.1** |
| FTIG | | | | *eS* | | **Sb** | **08 06 15.3** | **-2.5** |
| **HLIG** | **Huajuapan de L** | **2.46** | **20** | | | **Pn** | **08 05 46.2** | **+2.6** |
| HLIG | | | | | | **Sb** | **08 06 16.5** | **-1.7** |
| **HLIG** | **Huajuapan de L** | **2.46** | **20** | *eP* | | **Pn** | **08 05 46.2** | **+2.6** |
| HLIG | | | | *eS* | | **Sb** | **08 06 16.5** | **-1.7** |
| **HUIG** | **Huatulco** | **2.50** | **84** | | | **Pn** | **08 05 45.4** | **+1.4** |
| HUIG | | | | | | **Sn** | **08 06 11.2** | **-3.3** |
| **HUIG** | **Huatulco** | **2.50** | **84** | *eP* | | **Pn** | **08 05 45.4** | **+1.4** |
| HUIG | | | | *eS* | | **Sn** | **08 06 11.2** | **-3.3** |
| **MEIG** | **Mezcala** | **2.57** | **340** | | | **Pn** | **08 05 47.4** | **+2.4** |
| MEIG | | | | | | **Sn** | **08 06 15.8** | **-0.5** |
| **MEIG** | **Mezcala** | **2.57** | **340** | *eP* | | **Pn** | **08 05 47.4** | **+2.4** |
| MEIG | | | | *eS* | | **Sn** | **08 06 15.8** | **-0.5** |
| **PLIG** | **Platanillo** | **2.98** | **345** | | | **Pn** | **08 05 54.0** | **+3.3** |
| PLIG | | | | | | **Sn** | **08 06 26.4** | **0.0** |
| **PLIG** | **Platanillo** | **2.98** | **345** | *eP* | | **Pn** | **08 05 54.0** | **+3.3** |
| PLIG | | | | *eS* | | **Sn** | **08 06 26.4** | **0.0** |
| **TOIG** | **Toxpalan** | **3.01** | **31** | | | **Pn** | **08 05 53.6** | **+2.5** |
| TOIG | | | | | | **Sb** | **08 06 31.8** | **-2.0** |
| **TOIG** | **Toxpalan** | **3.01** | **31** | *eP* | | **Pn** | **08 05 53.6** | **+2.5** |
| TOIG | | | | *eS* | | **Sb** | **08 06 31.8** | **-2.0** |
| **TPIG** | **Tehuac#an** | **3.16** | **23** | | | **Pn** | **08 05 56.9** | **+3.6** |
| TPIG | | | | | | **Sn** | **08 06 32.1** | **+0.9** |
| **TPIG** | **Tehuac#an** | **3.16** | **23** | *eP* | | **Pn** | **08 05 56.9** | **+3.6** |
| TPIG | | | | *eS* | | **Sn** | **08 06 32.1** | **+0.9** |
| **ARIG** | **Puente Sto Nin** | **3.19** | **330** | | | **Pn** | **08 05 56.6** | **+3.2** |
| ARIG | | | | | | **Sn** | **08 06 30.9** | **-0.6** |
| **ARIG** | **Puente Sto Nin** | **3.19** | **330** | *eP* | | **Pn** | **08 05 56.6** | **+3.2** |
| ARIG | | | | *eS* | | **Sn** | **08 06 30.9** | **-0.6** |
| **YAIG** | **Yautepec** | **3.36** | **354** | | | **Pn** | **08 05 58.9** | **+3.0** |
| YAIG | | | | | | **Sn** | **08 06 33.5** | **-2.5** |
| **YAIG** | **Yautepec** | **3.36** | **354** | *eP* | | **Pn** | **08 05 58.9** | **+3.0** |
| YAIG | | | | *eS* | | **Sn** | **08 06 33.5** | **-2.5** |
| **ZIIG** | **Zihuatanejo** | **3.39** | **308** | | | **Pn** | **08 05 55.4** | **-0.8** |
| ZIIG | | | | | | Sn | 08 06 29.5 | -6.9 |
| **ZIIG** | **Zihuatanejo** | **3.39** | **308** | *eP* | | **Pn** | **08 05 55.4** | **-0.8** |
| ZIIG | | | | *eS* | | Sn | 08 06 29.5 | -6.9 |
| **MAVM** | **Malinalco, Edo** | **3.52** | **347** | *e* | | Pn | 08 05 45.6 | -13 |
| MAVM | | | | *e* | | | 08 06 22.3 | |
| **PPIG** | **Popocatepetl** | **3.54** | **1** | | | **Pn** | **08 06 02.3** | **+3.5** |
| PPIG | | | | | | **Sn** | **08 06 39.0** | **-1.9** |
| **PPM** | **Popocatepetl** | **3.54** | **1** | *eP* | | **Pn** | **08 06 02.3** | **+3.5** |
| PPM | | | | *eS* | | **Sn** | **08 06 39.0** | **-1.9** |
| **TEJU** | **Tejupilco** | **3.66** | **338** | *i* P | | **Pn** | **08 06 04.6** | **+4.4** |
| TEJU | | | | *i* S | | **Sn** | **08 06 41.8** | **-1.6** |
| **MPVM** | **San Francisco** | **3.69** | **355** | *e* | | **Pn** | **08 06 04.8** | **+4.2** |
| MPVM | | | | *e* | | | 08 06 35.7 | |
| **TLVM** | **San Miguel Top** | **3.71** | **353** | *e* | | Pn | 08 06 06.1 | +5.2 |
| TLVM | | | | *e* | | | 08 06 41.4 | |
| **THVM** | **De Xico** | **3.79** | **356** | *e* | | **Pn** | **08 06 06.1** | **+4.1** |
| THVM | | | | *e* | | | 08 06 44.6 | |
| **INVM** | **La Marquesa** | **3.82** | **350** | *e* | | **Pn** | **08 06 04.7** | **+2.1** |
| INVM | | | | *e* | | | 08 06 41.4 | |
| **TOVM** | **TOLUCA** | **3.88** | **346** | *e* | | **Pn** | **08 06 05.9** | **+2.6** |
| TOVM | | | | *e* | | | 08 06 47.1 | |
| **CMIG** | **Matias Romero** | **3.98** | **66** | | | **Pn** | **08 06 06.2** | **+1.9** |
| CMIG | | | | | | **Sn** | **08 06 52.5** | **+1.6** |
| **CMIG** | **Matias Romero** | **3.98** | **66** | *eP* | | **Pn** | **08 06 06.2** | **+1.9** |
| CMIG | | | | *eS* | | **Sn** | **08 06 52.5** | **+1.6** |
| **PMUV** | **Sontecomapan** | **4.56** | **48** | *eP* | | **Pn** | **08 06 14.1** | **+1.8** |
| PMUV | | | | *eS* | | **Sn** | **08 07 04.8** | **-0.5** |
| **UXUV** | **UXUV** | **4.71** | **67** | *eP* | | **Pn** | **08 06 17.1** | **+2.6** |
| UXUV | | | | *eS* | | **Sn** | **08 07 04.7** | **-4.4** |
| **DEIG** | **Demacu** | **4.78** | **356** | *eP* | | Pn | 08 06 22.2 | +6.6 |
| DEIG | | | | *eS* | | **Sn** | **08 07 12.1** | **+0.9** |
| **DHIG** | **Demacu** | **4.78** | **356** | | | Pn | 08 06 22.2 | +6.6 |
| DHIG | | | | | | **Sn** | **08 07 12.1** | **+0.9** |
| **MOIG** | **Morelia** | **4.79** | **330** | Pn | | **Pn** | **08 06 16.3** | **+0.6** |
| **PCIG** | | **5.27** | **87** | | | **Pn** | **08 06 23.6** | **+1.5** |
| **PCIG** | | **5.27** | **87** | *eP* | | **Pn** | **08 06 23.6** | **+1.5** |
| PCIG | | | | *eS* | | Sn | 08 07 09.5 | -13 |
| **JRQG** | **Juriquilla Cam** | **5.44** | **342** | Pn | | **Pn** | **08 06 27.3** | **+2.8** |
| **TGIG** | | **5.49** | **76** | | | **Pn** | **08 06 28.5** | **+3.2** |
| TGIG | | | | | | Sn | 08 07 18.7 | -10 |
| **TGIG** | | **5.49** | **76** | *eP* | | **Pn** | **08 06 28.5** | **+3.2** |
| TGIG | | | | *eS* | | Sn | 08 07 18.7 | -10 |
| **CDAR** | **Ciudad de Arme** | **6.13** | **305** | *eP* | | Pn | 08 06 39.0 | +5.1 |
| CDAR | | | | *eS* | | Sn | 08 07 36.6 | -7.5 |
| **JUBC** | **Volcan de Coli** | **6.13** | **311** | *eP* | | **Pn** | **08 06 38.5** | **+4.3** |
| **MNGA** | **Volcan de Coli** | **6.14** | **311** | *eP* | | Pn | 08 06 41.1 | +6.8 |
| MNGA | | | | *eS* | | **Sn** | **08 07 42.1** | **-2.6** |
| **INCO** | **Volcan de Coli** | **6.17** | **311** | *eP* | | Pn | 08 06 39.9 | +5.1 |
| INCO | | | | *eS* | | Sn | 08 07 35.8 | -10 |
| **SOMAC** | **Volcano de Col** | **6.18** | **311** | *eP* | | Pn | 08 06 42.1 | +7.1 |
| SOMAC | | | | *eS* | | **Sn** | **08 07 43.0** | **-2.9** |
| **R15V** | | **6.24** | **307** | | | **Pn** | **08 06 38.5** | **+3.1** |
| **R15V** | | **6.24** | **307** | *eP* | | **Pn** | **08 06 38.5** | **+3.1** |
| R15V | | | | *eS* | | **Sn** | **08 07 41.9** | **-4.9** |
| **CEGR** | **Campo Tres** | **6.27** | **309** | *eP* | | Pn | 08 06 41.8 | +5.4 |
| CEGR | | | | *eS* | | Sn | 08 07 39.5 | -8.2 |
| **PAVE** | **Pavencul** | **6.29** | **92** | *eP* | | **Pn** | **08 06 40.1** | **+3.9** |
| PAVE | | | | *eS* | | **Sn** | **08 07 45.1** | **-3.2** |
| **CCIG** | **Comitan** | **6.35** | **82** | Pn | | **Pn** | **08 06 39.2** | **+2.1** |
| **CHUJ** | **Union Juarez** | **6.36** | **93** | *eP* | | **Pn** | **08 06 40.1** | **+2.8** |
| CHUJ | | | | *eS* | | **Sn** | **08 07 47.0** | **-3.1** |
| **HUEH** | **Huehuetenango** | **6.93** | **91** | Pn | | **Pn** | **08 06 49.0** | **+3.9** |
| **PETF** | **Flores** | **8.59** | **79** | Pn | | **Pn** | **08 07 11.5** | **+3.8** |
| **MTO3** | **Montecristo** | **9.08** | **96** | Pn | | Pn | 08 07 19.0 | +4.4 |
| **TEIG** | **Tepich** | **10.96** | **63** | Pn | | **Pn** | **08 07 42.4** | **+2.1** |
| **FW13** | **Cleburne** | **16.81** | **4** | | | **Pn** | **08 09 01.7** | **+2.9** |
| FW13 | | | | IAmb | | IAmb | 08 09 06.9 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **ODSA** | **Odessa**

0.2nm,0.7s,baz=299,slow=7.6,SNR=1.3
0.2nm,0.7s
KSRS **Korea Array** 45.02 36 P P 08 37 14.4 -0.2
0.4nm,0.6s,baz=222,slow=2.6,SNR=1.9
0.4nm,0.6s
MKAR **Makanchi Array** 45.56 346 P P 08 37 18.9 0.0
1.1nm,0.5s,baz=161,slow=8.9,SNR=16
1.1nm,0.5s
SONM **Songino Array** 45.72 9 P P 08 37 21.1 +0.9
2.0nm,0.8s,baz=186,slow=9.4,SNR=7.9
2.0nm,0.8s
KURBB **Kurchatov Arra** 50.04 345 P P 08 37 53.6 +0.2
1.0nm,0.7s,baz=166,slow=7.1,SNR=9.5
1.0nm,0.7s
ZALV **Zalesovo Beam** 51.91 351 P P 08 38 07.3 -0.2
1.2nm,0.4s,baz=182,slow=6.7,SNR=5.6
1.2nm,0.4s
BVAR **Borovoye Array** 54.54 341 P P 08 38 25.9 -0.9
0.4nm,0.4s,baz=132,slow=6.2,SNR=3.6
0.4nm,0.4s
H04N2 **CROZET ISLANDS** 62.65 213 T T 09 46 47.9
baz=52,slow=75,SNR=341
H04N1 **CROZET ISLANDS** 62.66 213 T T 09 46 47.6
baz=52,slow=75,SNR=332
H04N3 **CROZET ISLANDS** 62.66 213 T T 09 46 45.8
baz=52,slow=75,SNR=318
H04S1 **CROZET ISLANDS** 63.00 213 T T 09 47 11.3
baz=51,slow=76,SNR=58
H04S3 **CROZET ISLANDS** 63.01 213 T T 09 47 11.1
baz=51,slow=76,SNR=87
H04S2 **CROZET ISLANDS** 63.02 213 T T 09 47 12.4
baz=51,slow=76,SNR=76
JMIC **Jan Mayen** 92.25 342 LR LR 09 28 48.5
comp=Z,7.5nm,18.2s,baz=342,slow=39

*IDC **12** 09:01:27.9±0.8, 16˚.31S×177˚.01E, h0km, mb3.7/10, mbtmp3.8/11, ML3.3/1, MS3.6/24, Error ellipse: s-maj=23.2km s-min=19.8km az=111.0*
*GCMT **12** 09:01:36.0±0.3, 16˚.53S±0˚.02×176˚.85E±0˚.02, h19km±1km, MW4.8/77, Moment Tensor Solution. s11,c11; s77,c100; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.31±.10; $M_{\theta\theta}$-0.01±.08; $M_{\phi\phi}$0.32±.07; $M_{r\theta}$-0.15±.15; $M_{\theta\phi}$1.69±.07; $M_{\phi r}$-0.23±.15; Best double couple: M0 1.71600×$10^{16}$ NP1: $\phi_s$267.00000°, $\delta$84.00000°, $\lambda$4.00000°. Principal axes: T 1.8880, Plg7.0000°, Azm132.0000°; N -0.3430, Plg83.0000°, Azm327.0000°; P -1.5440, Plg2.0000°, Azm222.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*
**ISC 12 09:01:30.4±0.7, 16˚.38S±0˚.10×177˚.0E±0˚.1, h14km, n44, σ2$^{s}$07/24, mb3.9/9, MS3.7/24, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **1.66** | **145** | Pn | **Pn** | **09 01 58.5** | **-0.7** |
| MSVF | 710nm,0.3s,baz=287,slow=11,SNR=3415 | | | Sn | **Sn** | **09 02 19.8** | **-0.6** |
| MSVF | 170nm,0.3s,baz=346,slow=23,SNR=5.7 | | | LR | LR | 09 02 32.3 | |
| **DZM** | comp=Z,1μm,19.7s,baz=248,slow=37 **Mont Dzumac** | **11.50** | **239** | Pn | **Pn** | **09 04 14.6** | **+0.2** |
| DZM | 0.2nm,0.3s,baz=269,slow=22,SNR=3.8 | | | LR | LR | 09 07 54.3 | |
| **URZ** | comp=Z,485nm,21.8s,baz=62,slow=34 **Urewera** | **21.80** | **180** | P | **P** | **09 06 22.9** | **+0.8** |
| URZ | 5.9nm,0.7s<br>6.0nm,0.7s,baz=107,slow=6.8,SNR=4.3 | | | LR | LR | 09 13 19.3 | |
| **RAR** | comp=Z,104nm,20.5s,baz=76,slow=32 **Rarotonga** | **22.46** | **106** | LR | LR | 09 14 59.2 | |
| **CTA** | 6.0nm,0.7s<br>comp=Z,36nm,18.0s,baz=253,slow=36 **Charters Tower** | **29.45** | **258** | LR | LR | 09 17 02.4 | |
| **PMG** | comp=Z,5.9nm,19.6s,baz=84,slow=32 **Port Moresby** | **29.92** | **280** | LR | LR | 09 17 29.7 | |
| **PPT** | comp=Z,145nm,18.6s,baz=54,slow=32 **Papeete** | **31.93** | **97** | LR | LR | 09 18 48.5 | |
| **STKA** | comp=Z,50nm,21.1s,baz=262,slow=33 **Stephens Creek** | **35.65** | **238** | P | **P** | **09 08 28.6** | **+0.4** |
| STKA | 6.2nm,0.8s,baz=71,slow=9.1,SNR=8.4 | | | LR | LR | 09 21 17.2 | |
| **ASAR** | comp=Z,154nm,20.5s,baz=32,slow=33 **Alice Springs** | **41.05** | **253** | P | **P** | **09 09 12.8** | **-1.1** |
| **NWAO** | 1.7nm,0.7s,baz=80,slow=9.0,SNR=20<br>1.7nm,0.7s **Narrogin (SRO)** | **56.11** | **241** | LR | LR | 09 33 16.6 | |
| **JHJ** | comp=Z,182nm,20.9s,baz=208,slow=34 **Hachijo jima 2** | **60.74** | **324** | LR | LR | 09 34 25.0 | |
| **VNDA** | comp=Z,31nm,20.7s,baz=313,slow=33 **Vanda** | **61.64** | **184** | P | **P** | **09 11 47.1** | **-0.2** |
| **MJAR** | 0.6nm,1.0s,baz=357,slow=6.9,SNR=1.7<br>0.6nm,1.0s **Matsushiro Arr** | **64.15** | **326** | P | **P** | **09 12 02.0** | **-2.5** |
| **SHEM** | 1.1nm,0.9s,baz=135,slow=6.8,SNR=1.5<br>1.1nm,0.9s **Shemya Is, Ala** | **68.87** | **358** | LR | LR | 09 37 10.3 | |
| **QSPA** | comp=Z,34nm,20.2s,baz=98,slow=31 **South Pole Qui** | **73.66** | **180** | P | **P** | **09 13 03.8** | **+0.3** |
| **KDAK** | 2.4nm,1.0s,baz=36,slow=5.2,SNR=5.2<br>2.4nm,1.0s **Kodiak Island** | **78.05** | **16** | LR | LR | 09 41 42.2 | |
| **YBH** | comp=Z,36nm,19.3s,baz=229,slow=31 **Yreka Blue Hor** | **80.17** | **41** | LR | LR | 09 42 04.2 | |
| **PFO** | comp=Z,31nm,19.5s,baz=241,slow=30 **Pinyon Flats O** | **80.50** | **51** | LR | LR | 09 42 18.0 | |
| **NVAR** | comp=Z,33nm,18.8s,baz=228,slow=30 **Mina Array Bea** | **81.42** | **46** | P | **P** | **09 13 48.4** | **+1.0** |
| NVAR | baz=227,slow=5.1,SNR=1.2 | | | LR | LR | 09 42 17.5 | |
| **LPIG** | comp=Z,53nm,20.9s,baz=263,slow=30 **La Paz** | **81.50** | **62** | LR | LR | 09 41 57.3 | |
| **BBB** | comp=Z,30nm,19.6s,baz=206,slow=30 **Bella Bella** | **83.14** | **30** | LR | LR | 09 42 55.7 | |
| **MAW** | comp=Z,41nm,20.2s,baz=245,slow=30 **Mawson** | **83.79** | **201** | LR | LR | 09 47 04.9 | |
| **ELK** | comp=Z,64nm,18.6s,baz=152,slow=33 **Elko** | **84.59** | **45** | LR | LR | 09 44 23.3 | |
| **ILAR** | comp=Z,51nm,20.2s,baz=246,slow=30 **Eielson Array** | **85.45** | **15** | P | **P** | **09 14 07.5** | **+0.2** |
| **PMSA** | 0.2nm,0.6s,baz=210,slow=5.0,SNR=2.3<br>0.2nm,0.6s **Palmer Station** | **86.88** | **158** | LR | LR | 09 48 29.8 | |
| **NEW** | comp=Z,51nm,18.5s,baz=244,slow=32 **Newport** | **86.90** | **38** | LR | LR | 09 48 22.1 | |
| **ANMO** | comp=Z,30nm,18.4s,baz=226,slow=32 **Albuquerque** | **88.61** | **53** | LR | LR | 09 45 16.2 | |
| **TXAR** | comp=Z,34nm,21.9s,baz=330,slow=30 **Lajitas Array** | **88.90** | **59** | P | **P** | **09 14 24.8** | **-0.1** |
| **PDAR** | 0.2nm,0.9s,baz=242,slow=3.8,SNR=1.5<br>0.2nm,0.9s **Pinedale Array** | **89.29** | **45** | P | **P** | **09 14 25.0** | **-1.6** |
| PDAR | 0.1nm,0.3s,baz=230,slow=7.0,SNR=0.8 | | | LR | LR | 09 50 42.8 | |
| **SNAA** | comp=Z,15nm,18.3s,baz=272,slow=33<br>0.1nm,0.3s **Sanae** | **92.17** | **180** | LR | LR | 09 54 05.1 | |
| **CMIG** | comp=Z,22nm,18.9s,baz=140,slow=34 **Matias Romero** | **92.92** | **73** | LR | LR | 09 48 31.0 | |
| **PLCA** | comp=Z,30nm,19.4s,baz=220,slow=30 **Paso Flores** | **95.50** | **135** | LR | LR | 09 48 28.8 | |
| **GERES** | comp=Z,35nm,21.5s,baz=208,slow=30 **GERESS Array B** | **144.88** | **341** | PKP | PKPbc | 09 21 08.3 | +2.0 |
| **CONA** | 1.6nm,0.8s,baz=160,slow=4.3,SNR=7.3 **Conrad Observa** | **144.93** | **338** | *e*PKP | **PKiKP** | **09 21 11.2** | **0.0** |
| **RONA** | 4.8nm,0.9s **Rosalia, Austr** | **144.96** | **337** | *e*PKP | **PKiKP** | **09 21 12.1** | **+1.0** |
| **MOA** | 4.9nm,1.2s **Molln** | **145.56** | **339** | *e*PKP | **PKiKP** | **09 21 14.4** | **+2.0** |
| **ARSA** | 12nm,1.2s **Arzberg** | **145.63** | **338** | *e*PKP | **PKiKP** | **09 21 13.4** | **+0.9** |
| **SOKA** | 3.2nm,0.9s **Soboth** | **146.29** | **337** | *e*PKP | **PKiKP** | **09 21 16.4** | **+2.4** |
| **WTTA** | 4.7nm,1.3s **Wattenberg** | **146.92** | **342** | *e*PKP | **PKiKP** | **09 21 18.4** | **+3.0** |
| **RETA** | 1.5nm,0.6s **Reutte** | **146.97** | **343** | *e*PKiKP | **PKiKP** | **09 21 20.4** | **+5.0** |
| **MOTA** | 7.8nm,1.5s **Moosalm** | **147.00** | **342** | *e*PKP | **PKiKP** | **09 21 17.4** | **+1.9** |
| **ABTA** | 3.8nm,1.2s **Abfaltersbach** | **147.10** | **340** | *e*PKP | **PKiKP** | **09 21 18.1** | **+2.4** |
| **DAVA** | 4.3nm,1.2s **Damuels** | **147.40** | **344** | *e*PKiKP | **PKiKP** | **09 21 20.6** | **+4.3** |
| **FETA** | 5.3nm,1.1s **Feichten** | **147.41** | **343** | PKP | **PKiKP** | **09 21 18.3** | **+1.9** |
| | 4.8nm,1.3s | | | | | | |

*IDC **12** 09:04:25.3±1.4, 2˚.60N×96˚.23E, h0km, mb4.3/9, mbtmp4.3/10, ML4.8/1, MS3.7/17, Error ellipse: s-maj=41.0km s-min=24.1km az=53.0*
*NEIC **12** 09:04:29.4±1.4, 2˚.38N±0˚.07×96˚.2E±0˚.1, h35km±2km, mb4.7/30, Error ellipse: s-maj=24.0km s-min=10.1km az=251.0*
*DJA **12** 09:04:30.8±0.6, 2˚.N±4˚×96˚.6E±1˚.1, h19km±5km, M4.5/6, mb4.9/1, MLv4.4/6*
**ISC 12 09:04:27.4±0.8, 2˚.40N±0˚.06×96˚.08E±0˚.08, h21km±4km, n97, σ1$^{s}$52/81, mb4.7/38, MS3.8/23, 1C-5D, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNSI** | **Sinabang, Aceh** | **0.25** | **89** | P | **Pb** | **09 04 34.8** | **+1.3** |
| SNSI | | | | S | **Sb** | **09 04 38.9** | **+1.1** |
| **GSI** | **Gunungsitoli** | **1.85** | **126** | Pn | **Pn** | **09 04 57.0** | **-1.0** |
| **GSI** | **Gunungsitoli** | **1.85** | **126** | P | **Pn** | **09 04 59.7** | **+1.7** |
| GSI | | | | S | **Sn** | **09 05 21.9** | **+1.1** |
| **MLSI** | **Meulaboh, Aceh** | **1.88** | **10** | P | **Pn** | **09 04 59.7** | **+1.4** |
| MLSI | | | | S | **Sn** | **09 05 22.6** | **+1.2** |
| **KCSI** | **Kotacane, Aceh** | **2.03** | **57** | P | **Pn** | **09 05 01.4** | **+1.1** |
| **LHMI** | **Lhok Sumawe** | **2.94** | **17** | Pn | **Pn** | **09 05 13.7** | **+0.9** |
| **LHMI** | **Lhok Sumawe** | **2.94** | **17** | P | **Pn** | **09 05 15.9** | **+3.0** |
| **PBSI** | **Pulau Batu** | **3.29** | **138** | P | **Pn** | **09 05 20.7** | **+3.0** |
| **KULM** | **Kulim** | **5.39** | **58** | Pn | **Pn** | **09 05 46.1** | **-0.5** |
| **MNAI** | **Manna** | **9.61** | **134** | Pn | **Pn** | **09 06 42.0** | **-2.6** |
| **UBPT** | **Khong Chiam** | **15.80** | **35** | | **Pn** | **09 08 09.1** | **+0.4** |
| UBPT | | | | IAmb | IAmb | 09 08 12.7 | |
| **PALK** | comp=Z,57nm,1.4s **Pallekele** | **16.06** | **288** | LR | LR | 09 14 10.8 | |
| **CMAR** | comp=Z,319nm,18.2s,baz=219,slow=36 **Chiang Mai Arr** | **16.20** | **10** | Pn | **Pn** | **09 08 11.3** | **-2.5** |
| CMAR | comp=Z,1.4nm,0.3s,baz=187,slow=12,SNR=2.3 | | | LR | LR | 09 15 08.8 | |
| **CRAI** | comp=Z,403nm,19.3s,baz=185,slow=40 **Chiangrai** | **18.21** | **13** | P | **Pn** | **09 08 37.7** | **-1.2** |
| **SAIH** | comp=Z,5.2nm,0.6s **SAIHA** | **20.19** | **352** | *e*P | **P** | **09 09 00.8** | **-0.1** |
| SAIH | | | | IAmb | IAmb | 09 09 06.7 | |
| **SLVN** | comp=Z,13nm,1.0s **Son La** | **20.30** | **21** | P | **P** | **09 09 00.6** | **-1.5** |
| **QIZ** | **Qiongzhong** | **21.32** | **38** | P | **P** | **09 09 12.2** | **-0.9** |
| QIZ | comp=Z,850nm,16.8s | | | LR | LR | | |
| QIZ | comp=Z,680nm,16.8s | | | LR | LR | | |
| QIZ | comp=Z,720nm,18.6s | | | LR | LR | | |
| **IMP** | **Imphal** | **22.39** | **355** | *e*P | **P** | **09 09 21.2** | **-3.4** |
| **KOHI** | **KOHIMA** | **23.26** | **356** | *e*P | **P** | **09 09 30.8** | **-2.9** |
| **SHL** | **Shillong** | **23.38** | **350** | P | **P** | **09 09 32.4** | **-2.6** |
| SHL | | | | IAmb | IAmb | 09 09 35.6 | |
| **KMI** | comp=Z,40nm,1.1s **Kunming** | **23.48** | **15** | ⇓P | **P** | **09 09 36.5** | **+0.4** |
| KMI | | | | pmax | pmax | | |
| KMI | comp=Z,13nm,0.7s | | | LR | LR | | |
| KMI | comp=Z,410nm,16.5s | | | LR | LR | | |
| KMI | comp=Z,200nm,9.7s | | | LR | LR | | |
| **MOKO** | comp=Z,390nm,15.1s **MOKOCHONG** | **23.83** | **357** | *e*P | **P** | **09 09 35.9** | **-3.4** |
| MOKO | | | | IAmb | IAmb | 09 09 38.9 | |
| **PZH** | comp=Z,10nm,0.9s **PanZhiHua** | **24.57** | **12** | P | **P** | **09 09 49.0** | **+2.9** |
| PZH | | | | S | **S** | **09 14 06.5** | **+0.4** |
| PZH | comp=Z,30nm,0.5s | | | pmax | pmax | | |
| PZH | comp=Z,110nm,3.5s | | | pmax | pmax | | |
| PZH | comp=Z,320nm,15.1s | | | LR | LR | | |
| PZH | comp=Z,340nm,14.5s | | | LR | LR | | |
| PZH | comp=Z,380nm,15.2s | | | LR | LR | | |
| **H08S2** | **Diego Garcia H** | **25.56** | **247** | T | T | 09 36 22.6 | |
| **H08S3** | baz=67,slow=76,SNR=356 **Diego Garcia H** | **25.56** | **247** | T | T | 09 36 21.0 | |
| **H08S1** | baz=67,slow=76,SNR=1604 **Diego Garcia H** | **25.57** | **247** | T | T | 09 36 23.1 | |
| **CD2** | baz=67,slow=76,SNR=108 **Chengdu** | **29.27** | **14** | P | **P** | **09 10 29.1** | **+0.9** |
| CD2 | comp=Z,10.0nm,0.6s | | | pmax | pmax | | |
| **XAN** | **Xi'an** | **33.68** | **19** | ⇑P | **P** | **09 11 04.6** | **-2.5** |
| XAN | comp=Z,18nm,0.6s | | | pmax | pmax | | |
| **SMLA** | **Simla** | **33.70** | **330** | *e*P | **P** | **09 11 07.2** | **+0.1** |
| SMLA | comp=Z,8.0nm,1.0s | | | IAmb | IAmb | 09 11 17.1 | |
| **LZH** | **Lanzhou** | **34.28** | **11** | *e*P | **P** | **09 11 14.9** | **+2.6** |
| LZH | | | | sP | sP | 09 11 23.3 | +1.8 |
| LZH | comp=Z,14nm,1.1s | | | pmax | pmax | | |
| LZH | comp=Z,160nm,8.9s | | | LR | LR | | |
| LZH | comp=Z,280nm,12.9s | | | LR | LR | | |
| **DHRM** | comp=Z,250nm,15.6s **DHARAMSHALA** | **35.03** | **330** | *e*P | **P** | **09 11 19.2** | **+0.2** |
| DHRM | | | | IAmb | IAmb | 09 11 31.1 | |
| **LYN** | comp=Z,35nm,1.5s **LuoYang** | **35.45** | **24** | P | **P** | **09 11 22.1** | **-0.1** |
| LYN | comp=Z,23nm,0.6s | | | pmax | pmax | | |
| LYN | comp=Z,240nm,4.0s | | | pmax | pmax | | |
| LYN | comp=Z,530nm,11.0s | | | LR | LR | | |
| LYN | comp=Z,410nm,12.4s | | | LR | LR | | |
| LYN | comp=Z,430nm,15.1s | | | LR | LR | | |
| **NJ2** | **Nanjing** | **36.46** | **34** | *e*P | **P** | **09 11 31.6** | **+0.6** |
| NJ2 | comp=Z,6.0nm,0.6s | | | pmax | pmax | | |
| **GTA** | **Gaotai** | **36.99** | **5** | ⇓P | **P** | **09 11 34.8** | **-0.8** |
| GTA | | | | sP | pP | 09 11 41.7 | -0.1 |
| GTA | comp=Z,24nm,1.0s | | | pmax | pmax | | |
| GTA | comp=Z,140nm,13.5s | | | LR | LR | | |
| GTA | comp=Z,140nm,14.3s | | | LR | LR | | |
| GTA | comp=Z,170nm,15.5s | | | LR | LR | | |
| **HNS** | **HongShan** | **38.81** | **24** | ⇓P | **P** | **09 11 50.6** | **-0.2** |
| HNS | comp=Z,13nm,1.1s | | | pmax | pmax | | |
| **BTO** | **Baotou** | **40.07** | **17** | *e*P | **P** | **09 12 02.3** | **+0.9** |
| BTO | | | | pP | **pP** | **09 12 06.8** | **-1.1** |
| BTO | | | | sP | **sP** | **09 12 09.3** | **-1.3** |
| BTO | | | | S | **S** | **09 18 10.3** | **+3.9** |
| BTO | | | | sS | **sS** | **09 18 17.2** | **+0.5** |
| BTO | | | | SS | **SS** | **09 20 59.4** | **-4.8** |
| BTO | comp=Z,22nm,1.2s | | | pmax | pmax | | |
| BTO | comp=Z,340nm,4.8s | | | pmax | pmax | | |
| BTO | comp=Z,450nm,17.6s | | | LR | LR | | |
| BTO | comp=Z,350nm,14.2s | | | LR | LR | | |
| BTO | comp=Z,500nm,15.2s | | | LR | LR | | |
| **HHC** | **Hu-ho-hao-te** | **40.75** | **18** | *e*P | **P** | **09 12 06.8** | **-0.2** |
| HHC | | | | sP | pP | 09 12 14.7 | +1.1 |
| HHC | comp=Z,19nm,0.6s | | | pmax | pmax | | |
| HHC | comp=Z,87nm,6.1s | | | pmax | pmax | | |
| HHC | comp=Z,160nm,11.9s | | | LR | LR | | |
| HHC | comp=Z,210nm,13.6s | | | LR | LR | | |
| HHC | comp=Z,170nm,13.5s | | | LR | LR | | |
| **H01W3** | **Cape Leeuwin H** | **40.78** | **157** | T | T | 09 55 26.4 | |
| | baz=333,slow=76,SNR=37 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.79** | **157** | T | T | 09 55 27.5 | |
| | baz=333,slow=76,SNR=59 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.80** | **157** | T | T | 09 55 27.6 | |
| | baz=333,slow=76,SNR=65 | | | | | | |
| **BJT** | **Baijiatuao** | **41.65** | **23** | P | **P** | **09 12 13.4** | **-0.8** |
| **BJI** | **Beijing** | **41.67** | **23** | P | **P** | **09 12 14.2** | **-0.2** |
| BJI | | | | pmax | pmax | | |
| BJI | comp=Z,11nm,1.0s | | | pmax | pmax | | |
| **NRN** | comp=Z,34nm,4.5s **Naryn** | **42.85** | **338** | P | **P** | **09 12 24.6** | **+0.1** |
| **DRK** | **Karamyk** | **43.01** | **332** | P | **P** | **09 12 27.0** | **+1.2** |
| **GAR** | **Garm** | **43.34** | **330** | P | **P** | **09 12 27.6** | **-0.7** |
| GAR | | | | IAmb | IAmb | 09 12 33.5 | |
| **CHGR** | comp=Z,24nm,1.2s **Chuyangaron** | **43.66** | **329** | P | **P** | **09 12 30.6** | **-0.2** |
| **SIMJ** | **Simiganj** | **43.74** | **329** | P | **P** | **09 12 31.7** | **+0.3** |
| SIMJ | | | | IAmb | IAmb | 09 12 32.9 | |
| **BTK** | comp=Z,16nm,1.2s **Batken** | **43.92** | **332** | P | **P** | **09 12 34.4** | **+1.5** |
| **ARSB** | **Arslanbob** | **43.98** | **335** | P | **P** | **09 12 34.5** | **+1.1** |
| **AAK** | **Ala-Archa** | **44.46** | **337** | LR | LR | 09 32 44.3 | |
| **XLT** | comp=Z,102nm,20.1s,baz=154,slow=38 **XiLinHaoTe** | **44.97** | **20** | *e*P | **P** | **09 12 40.8** | **-0.4** |
| XLT | | | | sP | pP | 09 12 49.1 | +1.3 |
| XLT | comp=Z,9.0nm,0.9s | | | pmax | pmax | | |
| XLT | comp=Z,140nm,3.9s | | | pmax | pmax | | |
| **ASAR** | **Alice Springs** | **45.01** | **127** | P | **P** | **09 12 42.9** | **+1.1** |
| | comp=Z,0.7nm,0.6s,baz=301,slow=8.3,SNR=9.9<br>comp=Z,0.7nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **45.52** | **36** | P | **P** | **09 12 44.1** | **-1.4** |
| | comp=Z,3.1nm,1.0s,baz=228,slow=9.0,SNR=10<br>comp=Z,3.1nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **45.82** | **347** | P | **P** | **09 12 47.6** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 09 12 49.2 | |
| **MKAR** | comp=Z,11nm,0.9s **Makanchi Array** | **45.82** | **347** | P | **P** | **09 12 47.5** | **-0.3** |
| **MKAR** | **Makanchi Array** | **45.82** | **347** | P | **P** | **09 12 47.8** | **0.0** |
| MKAR | comp=Z,5.1nm,0.5s,baz=156,slow=8.5,SNR=59 | | | LR | LR | 09 36 34.7 | |
| **MAKZ** | comp=Z,53nm,19.1s,baz=175,slow=42<br>comp=Z,5.1nm,0.5s **Makanchi** | **45.90** | **347** | P | **P** | **09 12 48.5** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 09 12 49.8 | |
| **SONM** | comp=Z,7.4nm,0.7s **Songino Array** | **46.13** | **10** | P | **P** | **09 12 50.1** | **-0.3** |
| SONM | | | | IAmb | IAmb | 09 12 51.4 | |
| **SONM** | comp=Z,8.9nm,1.0s **Songino Array** | **46.13** | **10** | P | **P** | **09 12 49.7** | **-0.7** |
| SONM | comp=Z,7.3nm,0.8s,baz=194,slow=8.3,SNR=30 | | | PcP | **PcP** | **09 14 26.7** | **+0.5** |
| **ULN** | comp=Z,1.5nm,0.8s,baz=203,slow=5.8,SNR=3.4<br>comp=Z,7.3nm,0.8s **Ulaanbaatar** | **46.27** | **10** | P | **P** | **09 12 50.7** | **-0.8** |
| ULN | | | | IAmb | IAmb | 09 12 52.4 | |
| **KK31** | comp=Z,6.3nm,1.0s **Karatay Array** | **46.49** | **334** | P | **P** | **09 12 53.5** | **+0.4** |
| KK31 | | | | IAmb | IAmb | 09 12 56.1 | |
| **KKAR** | comp=Z,7.0nm,1.1s **Karatay Array** | **46.49** | **334** | P | **P** | **09 12 53.8** | **+0.6** |
| **KKAR** | **Karatay Array** | **46.49** | **334** | P | **P** | **09 12 53.7** | **+0.6** |
| KKAR | | | | IAmb | IAmb | 09 12 56.1 | |
| **KURBB** | comp=Z,7.0nm,1.1s **Kurchatov Arra** | **50.29** | **346** | P | **P** | **09 13 22.3** | **0.0** |
| KURBB | comp=Z,2.7nm,0.2s,baz=167,slow=6.9,SNR=18 | | | LR | LR | 09 38 58.6 | |
| **KURK** | comp=Z,55nm,19.9s,baz=166,slow=41<br>comp=Z,2.7nm,0.2s **Kurchatov** | **50.35** | **346** | P | **P** | **09 13 22.6** | **-0.1** |
| KURK | | | | IAmb | IAmb | 09 13 23.9 | |
| **BNX** | comp=Z,5.7nm,0.9s **BinXian** | **51.14** | **28** | ⇓P | **P** | **09 13 27.3** | **-1.5** |
| BNX | | | | pmax | pmax | | |
| **ZAA0** | comp=Z,9.0nm,0.8s **Zalesovo Array** | **52.20** | **352** | P | **P** | **09 13 35.9** | **-0.7** |
| ZAA0 | | | | IAmb | IAmb | 09 13 37.3 | |
| **ZALV** | comp=Z,10.0nm,1.0s **Zalesovo Beam** | **52.20** | **352** | P | **P** | **09 13 35.9** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **52.20** | **352** | P | **P** | **09 13 36.7** | **+0.2** |
| ZALV | comp=Z,4.8nm,0.5s,baz=181,slow=5.7,SNR=28 | | | LR | LR | 09 40 31.9 | |
| **USRK** | comp=Z,60nm,18.3s,baz=110,slow=42<br>comp=Z,4.8nm,0.5s **Ussuriysk Ar.** | **52.34** | **32** | P | **P** | **09 13 37.4** | **-0.4** |
| | comp=Z,2.4nm,0.9s,baz=221,slow=7.5,SNR=4.8<br>comp=Z,2.4nm,0.9s | | | | | | |
| **HEH** | **HeiHe** | **54.57** | **24** | *e*P | **P** | **09 13 52.4** | **-1.6** |
| HEH | | | | pmax | pmax | | |
| **STKA** | comp=Z,5.0nm,1.1s **Stephens Creek** | **54.99** | **132** | LR | LR | 09 39 09.8 | |
| | comp=Z,55nm,20.4s,baz=3.7,slow=38 | | | | | | |
| **ABKAR** | **Akbulak array** | **55.93** | **332** | P | **P** | **09 14 04.1** | **+0.3** |
| **ABKAR** | **Akbulak array** | **55.93** | **332** | P | **P** | **09 14 03.8** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 09 14 05.8 | |
| **FURI** | comp=Z,11nm,1.0s **Furi** | **57.43** | **279** | LR | LR | 09 35 18.4 | |
| | comp=Z,34nm,20.8s,baz=222,slow=32 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **62.14** | **213** | T | T | 10 22 20.1 | |
| | baz=52,slow=75,SNR=2554 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **62.15** | **213** | T | T | 10 22 18.2 | |
| | baz=52,slow=75,SNR=2640 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **62.16** | **213** | T | T | 10 22 25.9 | |
| | baz=52,slow=75,SNR=2337 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **62.50** | **213** | T | T | 10 22 49.5 | |
| | baz=51,slow=76,SNR=488 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **62.51** | **213** | T | T | 10 22 48.3 | |
| | baz=51,slow=76,SNR=728 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **62.52** | **213** | T | T | 10 22 47.1 | |
| | baz=51,slow=76,SNR=583 | | | | | | |
| **EIL** | **Elat** | **63.87** | **302** | LR | LR | 09 42 58.3 | |
| | comp=Z,66nm,18.5s,baz=68,slow=36 | | | | | | |
| **BELG** | **Belogornoye** | **63.96** | **329** | LR | LR | 09 47 08.2 | |
| | comp=Z,45nm,20.4s,baz=138,slow=40 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **64.29** | **306** | LR | LR | 09 45 08.9 | |
| | comp=Z,53nm,18.3s,baz=63,slow=38 | | | | | | |
| **MBAR** | **Mbarara** | **65.39** | **268** | LR | LR | 09 41 50.2 | |
| | comp=Z,40nm,18.8s,baz=131,slow=34 | | | | | | |
| **BRTR** | **Keskin Array B** | **67.47** | **312** | P | **P** | **09 15 23.2** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=96,slow=6.1,SNR=2.1<br>comp=Z,0.7nm,0.8s | | | | | | |
| **TIXI** | **Tiksi** | **72.21** | **10** | P | P | 09 15 44.4 | -6.0 |
| TIXI | | | | IAmb | IAmb | 09 15 50.8 | |
| **LBTB** | comp=Z,17nm,1.4s **Lobatse** | **73.42** | **243** | LR | LR | 09 44 29.2 | |
| | comp=Z,108nm,18.9s,baz=98,slow=33 | | | | | | |
| **FINES** | **FINESS Array B** | **78.42** | **333** | P | **P** | **09 16 27.1** | **+0.8** |
| | comp=Z,1.8nm,0.9s,baz=108,slow=4.5,SNR=1.7<br>comp=Z,1.8nm,0.9s | | | | | | |
| **SUR** | **Sutherland** | **78.88** | **237** | LR | LR | 09 44 56.3 | |
| | comp=Z,107nm,19.1s,baz=137,slow=31 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.03** | **340** | LR | LR | 09 56 12.9 | |
| | comp=Z,30nm,19.0s,baz=78,slow=38 | | | | | | |
| **CLL** | **Colln** | **83.80** | **321** | *e*P | **P** | **09 16 56.0** | **+0.8** |
| **URZ** | **Urewera** | **84.44** | **129** | LR | LR | 09 55 51.0 | |
| | comp=Z,30nm,20.7s,baz=17,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **85.41** | **331** | LR | LR | 09 58 32.2 | |
| | comp=Z,25nm,20.2s,baz=80,slow=38 | | | | | | |
| **ELIB** | **Princess Elisa** | **86.97** | **197** | *d*P | **P** | **09 17 10.3** | **-0.5** |
| **VNDA** | **Vanda** | **87.22** | **169** | P | **P** | **09 17 10.5** | **-1.2** |
| **QSPA** | **South Pole Qui** | **92.34** | **180** | P | **P** | **09 17 37.6** | **+1.6** |

*JMA **12** 09:14:51.0±0.6, 33˚.N±1˚×14˚.2E±˚, h76km, MV2.9/12, E OFF HACHIJOJIMA ISLAND*
*IDC **12** 09:14:53.3±2.2, 32˚.79N×140˚.39E, h0km, mb3.5/3, mbtmp3.4/4, ML2.0/1, MS2.9/1, Error ellipse: s-maj=67.0km s-min=24.2km az=72.0*
**ISC 12 09:14:54.0±1.5, 33˚.45N±0˚.07×141˚.9E±0˚.1, h50km, n12, σ1$^{s}$52/15, mb3.5/3, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSO1** | **Boso 1** | **1.45** | **327** | P | **Pn** | **09 15 16.1** | **-1.2** |
| BSO1 | | | | *e*S | **Sn** | **09 15 35.4** | **+0.5** |
| **BSO3** | **Boso 3** | **1.80** | **319** | P | **Pn** | **09 15 21.7** | **-0.7** |
| BSO3 | | | | *e*S | **Sn** | **09 15 44.2** | **+0.3** |
| **JHJ2** | **Mitsune** | **1.81** | **260** | P | **Pn** | **09 15 21.3** | **-1.5** |
| JHJ2 | | | | *e*S | **Sn** | **09 15 43.6** | **-1.0** |
| **JMKN** | **Mikurajimanish** | **2.01** | **283** | *e*P | **Pn** | **09 15 23.7** | **-1.8** |
| **JAG** | **Ashikaga** | **3.61** | **326** | P | **Pn** | **09 15 46.6** | **-0.8** |
| **MJAR** | **Matsushiro Arr** | **4.35** | **316** | Pn | **Pn** | **09 15 57.3** | **-0.3** |
| MJAR | 0.1nm,0.3s,baz=150,slow=12,SNR=5.6 | | | Sn | **Sn** | **09 16 46.7** | **-0.4** |

0.1nm,0.3s,baz=155,slow=36,SNR=1.7
0.6nm,0.3s
**JMK Ichinoseki 5.52 354** *eS* **Sn 09 17 12.3 -3.5**
**SONM Songino Array 30.26 309** P **P 09 21 02.6 +2.3**
0.3nm,0.5s,baz=106,slow=15,SNR=2.2
0.3nm,0.5s
**MKAR Makanchi Array 46.46 305** P **P 09 23 16.7 +0.7**
0.6nm,0.9s,baz=88,slow=8.8,SNR=2.7
0.6nm,0.9s
**KURBB Kurchatov Arra 48.60 311** P **P 09 23 32.8 +0.3**
0.3nm,0.4s,baz=83,slow=7.0,SNR=1.9
0.3nm,0.4s
**ILAR Eielson Array 52.32 31** LR LR 09 54 55.8
comp=Z,9.5nm,18.0s,baz=256,slow=45
**WRA Warramunga Arr 53.58 189** P **P 09 24 10.0 -0.1**

*BJI* ***12*** *09:37:51.5±0.0,2°.17N×96°.16E, h29km, mb4.9/45, mB5.0/17, Ms4.5/8, Ms7 4.2/8*
*IDC* ***12*** *09:37:52.1±0.7,2°.60N×96°.19E, h0km, mb4.3/20, mbtmp4.3/21, ML4.6/1, MS3.6/22, Error ellipse: s-maj=25.0km s-min=15.9km az=63.0*
*DJA* ***12*** *09:37:56.0±0.7,2°.N±2°×9°.6E±°, h23km±3km, M4.9/10, mb5.1/3, mB5.2/1, MLv4.8/10, Mw(mB)4.5/1*
*NEIC* ***12*** *09:37:57.9±1.4,2°.57N±0°.07×96°.3E±0°.1, h35km±2km, mb4.7/33, Error ellipse: s-maj=20.0km s-min=9.6km az=251.0*
**ISC 12 09:37:56.8±0.7, 2°.56N±0°.04×96°.21E±0°.06, h32km±4km, n129, σ1°20/115, mb4.7/50, MS3.7/26, 1C-4D, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SNSI** | **Sinabang, Aceh** | **0.18** | **142** | P | **Pb** | **09 38 02.7** | **-0.4** |
| SNSI | | | | S | **Sb** | **09 38 07.5** | **+0.1** |
| **MLSI** | **Meulaboh, Aceh** | **1.71** | **6** | P | **Pn** | **09 38 24.6** | **+0.1** |
| MLSI | | | | S | **Sb** | **09 38 49.9** | **+1.1** |
| **KCSI** | **Kotacane, Aceh** | **1.83** | **58** | P | **Pb** | **09 38 27.7** | **-2.0** |
| KCSI | | | | S | **Sb** | **09 38 52.9** | **+0.7** |
| **GSI** | **Gunungsitoli** | **1.84** | **132** | Pn | **Pn** | **09 38 27.0** | **+0.7** |
| **GSI** | **Gunungsitoli** | **1.84** | **132** | P | **Pn** | **09 38 26.9** | **+0.7** |
| GSI | | | | S | **Sn** | **09 38 49.7** | **+1.1** |
| **LHMI** | **Lhok Sumawe** | **2.75** | **15** | Pn | **Pn** | **09 38 40.1** | **+1.3** |
| **LHMI** | **Lhok Sumawe** | **2.75** | **15** | P | **Pn** | **09 38 39.1** | **+0.3** |
| **PBSI** | **Pulau Batu** | **3.32** | **141** | P | **Pn** | **09 38 47.0** | **+0.5** |
| PBSI | | | | S | **Sn** | **09 39 23.5** | **-1.4** |
| **SISI** | **Saibi** | **4.81** | **143** | P | **Pn** | **09 39 07.3** | **+0.2** |
| SISI | | | | S | **Sn** | **09 40 01.0** | **-0.8** |
| **KULM** | **Kulim** | **5.19** | **58** | Pn | **Pn** | **09 39 13.3** | **+0.9** |
| **PDSI** | **Padang** | **5.47** | **129** | P | **Pn** | **09 39 16.8** | **+0.6** |
| | 60nm,0.7s,0.4nm | | | | | | |
| **SRIT** | **Nakonsritamara** | **6.88** | **29** | Pn | **Pn** | **09 39 35.6** | **0.0** |
| **MNAI** | **Manna** | **9.62** | **136** | Pn | **Pn** | **09 40 13.6** | **+0.3** |
| **MNAI** | **Manna** | **9.62** | **136** | P | **Pn** | **09 40 14.1** | **+0.9** |
| **UBPT** | **Khong Chiam** | **15.59** | **35** | P | **P** | **09 41 37.5** | **-0.9** |
| **SBUM** | **Sibu** | **15.99** | **90** | | **Pn** | **09 41 36.9** | **-2.7** |
| **CM31** | **Chiang Mai Arr** | **16.03** | **9** | | **P** | **09 41 42.0** | **-1.2** |
| **CMAR** | **Chiang Mai Arr** | **16.03** | **9** | | **Pn** | **09 41 41.6** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **16.03** | **9** | Pn | **Pn** | **09 41 38.5** | **-1.6** |
| | 0.9nm,0.3s,baz=197,slow=11,SNR=31 | | | | | | |
| | 9.5nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **16.14** | **287** | LR | LR | 09 47 19.5 | |
| | comp=Z,262nm,20.3s,baz=217,slow=35 | | | | | | |
| **SAIH** | **SAIHA** | **20.06** | **351** | *eP* | **P** | **09 42 27.6** | **-0.1** |
| SAIH | | | | IAmb | IAmb | 09 42 32.8 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **KKM** | **Kota Kinabalu** | **20.24** | **79** | P | **P** | **09 42 29.2** | **-0.6** |
| KKM | | | | IAmb | IAmb | 09 42 35.5 | |
| | comp=Z,48nm,1.3s | | | | | | |
| **QIZ** | **Qiongzhong** | **21.12** | **38** | P | **P** | **09 42 38.4** | **-0.7** |
| QIZ | | | | S | **S** | **09 46 35.3** | **+2.7** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,47nm,2.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,450nm,10.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,710nm,13.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,690nm,15.9s | | | | | | |
| **IMP** | **Imphal** | **22.25** | **355** | *eP* | **P** | **09 42 48.1** | **-3.2** |
| IMP | | | | IAmb | IAmb | 09 42 52.3 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **KOHI** | **KOHIMA** | **23.12** | **355** | *eP* | **P** | **09 42 58.5** | **-2.0** |
| KOHI | | | | IAmb | IAmb | 09 43 00.9 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **SHL** | **Shillong** | **23.25** | **350** | P | **P** | **09 42 59.2** | **-2.7** |
| SHL | | | | IAmb | IAmb | 09 43 02.6 | |
| | comp=Z,42nm,1.0s | | | | | | |
| **MOKO** | **MOKOCHONG** | **23.68** | **356** | *eP* | **P** | **09 43 02.7** | **-3.3** |
| MOKO | | | | IAmb | IAmb | 09 43 05.9 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **24.39** | **12** | P | **P** | **09 43 15.8** | **+3.2** |
| PZH | | | | S | **S** | **09 47 32.2** | **+1.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,190nm,4.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,270nm,13.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,280nm,13.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,350nm,14.7s | | | | | | |
| **TOLI2** | **Tolitoli** | **24.60** | **93** | P | **P** | **09 43 13.6** | **-0.9** |
| TOLI2 | | | | IAmb | IAmb | 09 43 16.1 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **KAPI** | **Kappang** | **24.69** | **108** | LR | LR | 09 53 46.4 | |
| | comp=Z,109nm,19.7s,baz=276,slow=39 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.74** | **247** | T | T | 10 09 56.9 | |
| | baz=67,slow=75,SNR=113 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.75** | **247** | T | T | 10 09 59.2 | |
| | baz=67,slow=75,SNR=1093 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.76** | **247** | T | T | 10 10 00.4 | |
| | baz=67,slow=75,SNR=46 | | | | | | |
| **GYA** | **Guiyang** | **25.80** | **22** | ⇓P | **P** | **09 43 26.8** | **+1.5** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,44nm,0.8s | | | | | | |
| **CD2** | **Chengdu** | **29.09** | **13** | P | **P** | **09 43 56.3** | **+1.6** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| **XAN** | **Xi'an** | **33.49** | **19** | ⇑P | **P** | **09 44 32.0** | **-1.5** |
| XAN | | | | pP | sP | 09 44 43.8 | -2.8 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,38nm,0.6s | | | | | | |
| **SMLA** | **Simla** | **33.63** | **330** | *eP* | **P** | **09 44 34.6** | **0.0** |
| **DHRM** | **DHARAMSHALA** | **34.97** | **330** | *eP* | **P** | **09 44 46.8** | **+0.3** |
| **LYN** | **LuoYang** | **35.25** | **24** | P | **P** | **09 44 49.1** | **+0.5** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,31nm,0.6s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,220nm,4.3s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,550nm,11.0s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,440nm,13.7s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,430nm,15.1s | | | | | | |
| **NJ2** | **Nanjing** | **36.26** | **34** | *eP* | **P** | **09 44 59.6** | **+2.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **GTA** | **Gaotai** | **36.83** | **5** | ⇓P | **P** | **09 45 01.9** | **-0.3** |
| GTA | | | | pP | pP | 09 45 10.6 | -0.9 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **HNS** | **HongShan** | **38.62** | **24** | ⇓P | **P** | **09 45 17.7** | **+0.5** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| **BTO** | **Baotou** | **39.88** | **16** | *eP* | **P** | **09 45 28.7** | **+0.8** |
| BTO | | | | pP | **sP** | **09 45 38.6** | **-2.5** |
| BTO | | | | sP | **pP** | **09 45 42.4** | **+5.2** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,48nm,0.8s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,200nm,5.0s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,310nm,11.7s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,410nm,11.8s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,340nm,16.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **40.51** | **152** | LR | LR | 10 00 03.1 | |
| | comp=Z,103nm,21.6s,baz=302,slow=33 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **40.56** | **18** | *eP* | **P** | **09 45 34.5** | **+1.0** |
| HHC | | | | pP | sP | 09 45 43.3 | -3.5 |
| HHC | | | | sP | pP | 09 45 47.5 | +4.7 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,100nm,4.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,140nm,13.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,190nm,12.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,140nm,13.0s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.87** | **157** | T | T | 10 28 57.1 | |
| | baz=333,slow=76,SNR=31 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.88** | **157** | T | T | 10 28 51.4 | |
| | baz=333,slow=76,SNR=47 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.88** | **157** | T | T | 10 28 51.3 | |
| | baz=333,slow=76,SNR=40 | | | | | | |
| **BJT** | **Baijiatuao** | **41.45** | **23** | P | **P** | **09 45 40.6** | **-0.1** |
| **BJI** | **Beijing** | **41.47** | **23** | P | **P** | **09 45 41.4** | **+0.6** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,31nm,3.6s | | | | | | |
| **WMQ** | **Urumqi** | **41.78** | **351** | *eP* | **P** | **09 45 45.6** | **+2.2** |
| **NRN** | **Naryn** | **42.77** | **338** | P | **P** | **09 45 52.1** | **+0.3** |
| NRN | | | | IAmb | IAmb | 09 45 55.4 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **DRK** | **Karamyk** | **42.94** | **332** | P | **P** | **09 45 54.0** | **+0.8** |
| **GAR** | **Garm** | **43.28** | **330** | P | **P** | **09 45 55.5** | **-0.3** |
| GAR | | | | IAmb | IAmb | 09 45 60.0 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **CHGR** | **Chuyangaron** | **43.60** | **329** | P | **P** | **09 45 57.7** | **-0.6** |
| **SIMJ** | **Simiganj** | **43.68** | **329** | P | **P** | **09 45 58.5** | **-0.5** |
| SIMJ | | | | IAmb | IAmb | 09 46 00.5 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **BTK** | **Batken** | **43.86** | **332** | P | **P** | **09 46 01.3** | **+0.9** |
| BTK | | | | IAmb | IAmb | 09 46 06.0 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **ARSB** | **Arslanbob** | **43.90** | **335** | P | **P** | **09 46 01.0** | **+0.3** |
| **JNU** | **Nakatsue** | **44.47** | **43** | LR | LR | 10 06 26.0 | |
| | comp=Z,70nm,18.2s,baz=228,slow=39 | | | | | | |
| **XLT** | **XiLinHaoTe** | **44.78** | **20** | *eP* | **P** | **09 46 07.8** | **+0.1** |
| XLT | | | | sP | sP | 09 46 25.3 | +4.3 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **45.00** | **128** | P | **P** | **09 46 10.4** | **+0.7** |
| | comp=Z,1.3nm,0.7s,baz=298,slow=7.8,SNR=21 | | | | | | |
| ASAR | | | | LR | LR | 10 06 06.2 | |
| | comp=Z,59nm,21.0s,baz=316,slow=38 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.29** | **36** | P | **P** | **09 46 10.9** | **-0.8** |
| **KSRS** | **Korea Array** | **45.32** | **36** | P | **P** | **09 46 10.9** | **-1.0** |
| | comp=Z,3.7nm,0.8s,baz=230,slow=9.2,SNR=17 | | | | | | |
| KSRS | | | | LR | LR | 10 07 08.7 | |
| | comp=Z,137nm,18.2s,baz=215,slow=39 | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **45.70** | **347** | P | **P** | **09 46 14.8** | **0.0** |
| **MKAR** | **Makanchi Array** | **45.70** | **347** | P | **P** | **09 46 14.7** | **-0.2** |
| **MKAR** | **Makanchi Array** | **45.70** | **347** | P | **P** | **09 46 14.8** | **0.0** |
| | comp=Z,15nm,0.8s,baz=159,slow=7.8,SNR=79 | | | | | | |
| MKAR | | | | LR | LR | 10 10 01.9 | |
| | comp=Z,38nm,20.0s,baz=131,slow=42 | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **45.79** | **346** | P | **P** | **09 46 15.4** | **-0.1** |
| **SONM** | **Songino Array** | **45.95** | **10** | P | **P** | **09 46 16.6** | **-0.4** |
| SONM | | | | IAmb | IAmb | 09 46 18.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **45.95** | **10** | P | **P** | **09 46 16.9** | **0.0** |
| | comp=Z,14nm,0.9s,baz=191,slow=8.1,SNR=56 | | | | | | |
| SONM | | | | PcP | **PcP** | **09 47 53.7** | **+0.2** |
| | comp=Z,2.2nm,0.8s,baz=192,slow=4.8,SNR=5.0 | | | | | | |
| SONM | | | | LR | LR | 10 07 39.9 | |
| | comp=Z,137nm,21.2s,baz=188,slow=39 | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **46.10** | **10** | P | **P** | **09 46 17.9** | **-0.3** |
| ULN | | | | IAmb | IAmb | 09 46 19.3 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **KK31** | **Karatay Array** | **46.41** | **334** | P | **P** | **09 46 21.0** | **+0.5** |
| **KKAR** | **Karatay Array** | **46.41** | **334** | P | **P** | **09 46 21.2** | **+0.7** |
| **KKAR** | **Karatay Array** | **46.41** | **334** | P | **P** | **09 46 20.8** | **+0.2** |
| KKAR | | | | IAmb | IAmb | 09 46 37.9 | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **GUMO** | **Guam** | **49.30** | **74** | LR | LR | 10 06 52.4 | |
| | comp=Z,34nm,20.7s,baz=242,slow=35 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.18** | **345** | P | **P** | **09 46 49.6** | **+0.2** |
| | comp=Z,7.5nm,0.7s,baz=167,slow=7.0,SNR=55 | | | | | | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **50.24** | **346** | P | **P** | **09 46 49.8** | **0.0** |
| KURK | | | | IAmb | IAmb | 09 46 50.9 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **BNX** | **BinXian** | **50.94** | **28** | ⇓P | **P** | **09 46 54.6** | **-0.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.38** | **44** | P | **P** | **09 46 58.2** | **-0.6** |
| | comp=Z,1.6nm,1.0s,baz=262,slow=8.7,SNR=4.6 | | | | | | |
| MJAR | | | | PcP | **PcP** | **09 48 13.2** | **0.0** |
| | comp=Z,1.6nm,0.8s,baz=245,slow=0.9,SNR=6.5 | | | | | | |
| MJAR | | | | LR | LR | 10 10 46.0 | |
| | comp=Z,58nm,19.0s,baz=159,slow=38 | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **52.08** | **351** | P | **P** | **09 47 02.9** | **-0.7** |
| ZAA0 | | | | IAmb | IAmb | 09 47 04.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.08** | **351** | P | **P** | **09 47 03.2** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **52.08** | **351** | P | **P** | **09 47 03.4** | **-0.1** |
| | comp=Z,11nm,0.7s,baz=181,slow=6.2,SNR=43 | | | | | | |
| ZALV | | | | LR | LR | 10 13 49.3 | |
| | comp=Z,52nm,19.3s,baz=134,slow=42 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **52.14** | **32** | P | **P** | **09 47 03.6** | **-0.7** |
| **USRK** | **Ussuriysk Ar.** | **52.14** | **32** | P | **P** | **09 47 03.3** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **52.14** | **32** | P | **P** | **09 47 04.0** | **-0.3** |
| | comp=Z,3.4nm,0.8s,baz=236,slow=7.8,SNR=8.3 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **53.99** | **117** | P | **P** | **09 47 19.0** | **+0.7** |
| CTAO | | | | IAmb | IAmb | 09 47 20.1 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **HEH** | **HeiHe** | **54.37** | **24** | *eP* | **P** | **09 47 20.4** | **-0.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **54.66** | **341** | P | **P** | **09 47 22.3** | **-0.3** |
| | comp=Z,3.0nm,0.8s,baz=142,slow=7.5,SNR=15 | | | | | | |
| BVAR | | | | LR | LR | 10 13 22.2 | |
| | comp=Z,55nm,19.3s,baz=172,slow=39 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **54.72** | **341** | P | **P** | **09 47 23.5** | **+0.5** |
| BRVK | | | | IAmb | IAmb | 09 47 46.6 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **54.99** | **132** | P | **P** | **09 47 25.4** | **0.0** |
| | comp=Z,2.7nm,1.0s,baz=332,slow=11,SNR=3.3 | | | | | | |
| STKA | | | | LR | LR | 10 13 09.2 | |
| | comp=Z,41nm,21.4s,baz=330,slow=38 | | | | | | |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **55.50** | **28** | LR | LR | 10 14 39.5 | |
| | comp=Z,82nm,18.7s,baz=230,slow=40 | | | | | | |
| **ABKAR** | **Akbulak array** | **55.86** | **332** | P | **P** | **09 47 31.4** | **+0.1** |
| **ABKAR** | **Akbulak array** | **55.86** | **332** | P | **P** | **09 47 31.3** | **0.0** |
| **ARU** | **Arti** | **61.56** | **337** | LR | LR | 10 19 11.1 | |
| | comp=Z,50nm,18.8s,baz=185,slow=40 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **62.35** | **213** | T | T | 10 55 48.8 | |
| | baz=52,slow=75,SNR=1364 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **62.36** | **213** | T | T | 10 55 44.7 | |
| | baz=52,slow=75,SNR=1288 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **62.36** | **213** | T | T | 10 55 44.3 | |
| | baz=52,slow=75,SNR=1530 | | | | | | |
| **KBZ** | **Khabaz** | **62.41** | **319** | P | **P** | **09 48 15.6** | **-1.2** |
| | comp=Z,2.8nm,1.0s,baz=271,slow=8.9,SNR=2.1 | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **62.70** | **213** | T | T | 10 56 10.3 | |
| | baz=51,slow=75,SNR=374 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **62.71** | **213** | T | T | 10 56 08.9 | |
| | baz=51,slow=75,SNR=515 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **62.72** | **213** | T | T | 10 56 17.7 | |
| | baz=51,slow=75,SNR=342 | | | | | | |
| **EIL** | **Elat** | **63.91** | **302** | LR | LR | 10 17 19.3 | |
| | comp=Z,57nm,18.1s,baz=68,slow=37 | | | | | | |
| **MBAR** | **Mbarara** | **65.53** | **268** | LR | LR | 10 13 34.0 | |
| | comp=Z,62nm,21.1s,baz=128,slow=33 | | | | | | |
| **BRTR** | **Keskin Array B** | **67.47** | **312** | P | **P** | **09 48 50.0** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=126,slow=3.9,SNR=3.2 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **TIXI** | **Tiksi** | **72.03** | **10** | P | **P** | **09 49 15.9** | **-1.4** |
| TIXI | | | | IAmb | IAmb | 09 49 17.1 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **73.59** | **322** | P | **P** | **09 49 26.6** | **-0.3** |
| | comp=Z,1.1nm,0.6s,baz=94,slow=4.1,SNR=1.3 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **AKBB** | **Malin Array Si** | **73.59** | **322** | P | **P** | **09 49 27.0** | **+0.1** |
| **LBTB** | **Lobatse** | **73.61** | **243** | LR | LR | 10 17 56.4 | |
| | comp=Z,74nm,19.6s,baz=116,slow=33 | | | | | | |
| **VRI** | **Vrincioaia** | **73.96** | **317** | P | **P** | **09 49 29.7** | **+0.5** |
| **NDNU** | **Novodnistrovsk** | **74.19** | **320** | P | **P** | **09 49 30.4** | **-0.1** |
| **MI30** | **MI30,Zelenitsa** | **74.23** | **322** | P | **P** | **09 49 31.0** | **+0.3** |
| **LUBAR** | **Lubar, Ukraine** | **74.28** | **321** | P | **P** | **09 49 30.0** | **-1.0** |
| **BOSA** | **Boshof** | **74.60** | **240** | LR | LR | 10 19 20.5 | |
| | comp=Z,44nm,20.4s,baz=169,slow=33 | | | | | | |
| **KMPD** | **K-Podol'skiy** | **74.77** | **320** | P | **P** | **09 49 34.0** | **+0.2** |
| **RNPP5** | **Staryi Chortor** | **75.76** | **322** | P | **P** | **09 49 39.8** | **+0.3** |
| **KOLS** | **Kolonicke sedl** | **77.55** | **320** | *eP* | **P** | **09 49 52.0** | **+2.3** |
| **FINES** | **FINESS Array B** | **78.35** | **333** | P | **P** | **09 49 53.9** | **0.0** |
| | comp=Z,2.3nm,0.9s,baz=100,slow=7.9,SNR=3.5 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **SUR** | **Sutherland** | **79.08** | **237** | LR | LR | 10 20 29.4 | |
| | comp=Z,59nm,21.2s,baz=142,slow=32 | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.94** | **340** | P | **P** | **09 50 08.0** | **+0.3** |
| | comp=Z,4.3nm,1.0s,baz=100,slow=5.4,SNR=1.9 | | | | | | |
| ARCES | | | | LR | LR | 10 28 58.1 | |
| | comp=Z,28nm,20.1s,baz=66,slow=38 | | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **GERES** | **GERESS Array B** | **83.15** | **319** | P | **P** | **09 50 20.1** | **+0.1** |
| | comp=Z,1.0nm,0.8s,baz=147,slow=7.9,SNR=4.3 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **85.35** | **331** | P | **P** | **09 50 30.1** | **-0.6** |
| | comp=Z,0.9nm,0.9s,baz=93,slow=5.3,SNR=2.7 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **85.43** | **348** | P | **P** | **09 50 31.0** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=72,slow=6.2,SNR=1.4 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **VNDA** | **Vanda** | **87.34** | **169** | P | **P** | **09 50 41.0** | **+0.8** |
| **VNDA** | **Vanda** | **87.34** | **169** | P | **P** | **09 50 41.1** | **+0.9** |
| | comp=Z,0.5nm,0.8s,baz=262,slow=6.7,SNR=2.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **92.49** | **180** | P | **P** | **09 51 03.8** | **-0.8** |
| QSPA | | | | IAmb | IAmb | 09 51 11.3 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **92.49** | **180** | P | **P** | **09 51 05.0** | **+0.4** |
| | comp=Z,0.8nm,0.9s,baz=269,slow=4.6,SNR=1.6 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **MDT** | **Midelt** | **97.70** | **303** | LR | LR | 10 38 11.0 | |
| | comp=Z,14nm,21.4s,baz=142,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **128.25** | **35** | PKP | **PKiKP** | **09 57 02.1** | **+0.7** |
| | comp=Z,0.6nm,0.9s,baz=267,slow=4.0,SNR=3.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.01** | **30** | PKP | PKPbc | 09 57 26.0 | +0.9 |
| | comp=Z,0.3nm,0.8s,baz=350,slow=1.5,SNR=4.0 | | | | | | |
| **CPUP** | **Villa Florida** | **145.30** | **225** | PKPbc | **PKPbc** | **09 57 31.6** | **-0.4** |
| | comp=Z,1.2nm,0.7s,baz=77,slow=6.0,SNR=3.5 | | | | | | |

*HEL* ***12*** *09:57:19.0±0.3,60°.98N×29°.01E, h0km, ML2.1, Explosion*
*IDC* ***12*** *09:57:21.0±1.9,60°.99N×28°.92E, h0km, mbtmp3.2/3, ML2.2/3, Error ellipse: s-maj=17.0km s-min=11.5km az=163.0*
**ISC 12 09:57:18.1±1.2, 61°.05N±0°.05×29°.11E±0°.06, h0km, n30, σ1°49/40, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RUF** | **Ruokolahti** | **0.39** | **348** | PG | **Pb** | **09 57 27.6** | **-0.3** |
| RUF | | | | SG | **Sb** | **09 57 33.3** | **-1.1** |
| **VJF** | **Virojoki** | **0.92** | **237** | PG | **Pg** | **09 57 34.8** | **-0.9** |
| | baz=55 | | | | | | |
| VJF | | | | MSG | | 09 57 44.9 | |
| | comp=Z,23nm,0.2s | | | | | | |
| VJF | | | | SB | **Sg** | **09 57 46.2** | **-1.3** |
| **FIA0** | **FINESS Array S** | **1.52** | **287** | PG | **Pn** | **09 57 45.6** | **-0.9** |
| FIA0 | | | | MSG | | 09 58 03.8 | |
| | comp=Z,25nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **1.52** | **287** | Pg | **Pn** | **09 57 46.1** | **-0.3** |
| | comp=Z,1.5nm,0.3s,baz=109,slow=16,SNR=54 | | | | | | |
| FINES | | | | Lg | Lg | 09 58 06.7 | |
| | comp=Z,4.7nm,0.3s,baz=104,slow=29,SNR=32 | | | | | | |
| FINES | | | | Rg | Rg | 09 58 12.9 | |
| | comp=Z,48nm,1.0s,baz=120,slow=38,SNR=14 | | | | | | |
| **PVF** | **Pernaja** | **1.67** | **254** | PG | **Pn** | **09 57 47.6** | **-1.0** |
| | baz=70 | | | | | | |
| PVF | | | | MSG | | 09 58 07.0 | |
| | comp=Z,13nm,0.2s | | | | | | |
| PVF | | | | SN | **Sn** | **09 58 12.0** | **+1.4** |
| **KAF** | **Kangasniemi** | **1.72** | **310** | PN | **Pb** | **09 57 50.8** | **+0.4** |
| KAF | | | | MSG | | 09 58 10.6 | |
| | comp=Z,22nm,0.2s | | | | | | |
| **JOF** | **Joensuu** | **2.15** | **28** | *eP* | **Pg** | **09 57 59.1** | **0.0** |
| **JOF** | **Joensuu** | **2.15** | **28** | PG | **Pg** | **09 57 58.9** | **-0.3** |
| JOF | | | | SG | **Sg** | **09 58 26.9** | **-0.1** |
| **SUF** | **Sumiainen** | **2.19** | **321** | PG | **Pb** | **09 57 58.9** | **+0.4** |
| | baz=142 | | | | | | |
| SUF | | | | MSG | | 09 58 24.6 | |
| | comp=Z,6.7nm,0.2s | | | | | | |
| SUF | | | | SG | **Sg** | **09 58 28.4** | **+0.1** |
| **ARBE** | **Arbavere** | **2.25** | **225** | *eP* | **Pn** | **09 57 54.8** | **-1.7** |
| **ARBE** | **Arbavere** | **2.25** | **225** | PG | **Pn** | **09 57 58.0** | **+1.6** |
| **NUR** | **Nurmijrvi** | **2.25** | **258** | PB | **Pn** | **09 57 57.2** | **+0.6** |
| | baz=75 | | | | | | |
| NUR | | | | MSG | | 09 58 23.8 | |
| | comp=Z,5.6nm,0.2s | | | | | | |
| NUR | | | | SG | **Sb** | **09 58 27.9** | **-0.1** |
| **HEL1** | **Helsinki** | **2.26** | **249** | PG | **Pn** | **09 57 57.8** | **+1.2** |
| | baz=70 | | | | | | |
| HEL1 | | | | SG | **Sn** | **09 58 26.8** | **+1.7** |
| **KEF** | **Keuruu** | **2.32** | **301** | *eP* | **Pb** | **09 57 59.9** | **-0.8** |
| **KEF** | **Keuruu** | **2.32** | **301** | PG | **Pb** | **09 57 60.0** | **-0.8** |
| | baz=121 | | | | | | |
| KEF | | | | MSG | | 09 58 27.4 | |
| | comp=Z,7.4nm,0.2s | | | | | | |
| KEF | | | | SG | **Sb** | **09 58 30.2** | **+0.3** |
| **NIF** | **Nilsia** | **2.43** | **346** | PG | **Pb** | **09 58 02.7** | **+0.1** |
| | baz=162 | | | | | | |
| NIF | | | | SG | **Sg** | **09 58 35.7** | **-0.4** |
| **MEF** | **Metsahovi** | **2.47** | **252** | *eP* | **Pn** | **09 58 00.4** | **+0.9** |
| **MEF** | **Metsahovi** | **2.47** | **252** | PB | **Pn** | **09 58 00.

*Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-0.12; $M_{\theta\theta}$1.31; $M_{\phi\phi}$-1.19; $M_{r\theta}$0.63; $M_{\theta\phi}$-0.23; $M_{\phi r}$0.47; Fault plane solution: $M_0$1.50000×$10^{15}$ NP1: $\phi_s$231.00000°,$\delta$88.00000°,$\lambda$-148.00000°. NP2: $\phi_s$140.00000°,$\delta$58.00000°,$\lambda$-2.00000°.*

*JMA* ***12*** *10:21:51.8±0.2, 44.0N±0.05×147.7E±.*, *h93km±3km, MD4.0/39, MV4.5/39, E OFF HOKKAIDO*

*JMA Felt I J1 at E OFF HOKKAIDO .*

*NEIC* ***12*** *10:21:52.4±1.1, 44.0N±0.1×147.3E±0.2, h111km±10km, mb4.4/74, Error ellipse: s-maj=16.7km s-min=14.1km az=128.0*

**ISC 12 10:21:50.2±0.6, 44°04N±0'.05×147°42E±0'.05, h97km±5km, n364, σ1$33/390, mb4.4/78, 13C-3D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **SHO** | **Shikotan** | **0.46** | **248** | *i* P | **Pn** | **10 22 06.2** | **+0.8** |
| SHO | | | | AMB | AMB | 10 22 06.3 | |
| | 960nm,0.1s | | | | | | |
| SHO | | | | *i* S | **Sn** | **10 22 16.6** | **-0.2** |
| SHO | | | | A | A | 10 22 17.1 | |
| | 46μm,0.3s | | | | | | |
| SHO | | | | A | A | 10 22 17.1 | |
| | 37μm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **0.46** | **248** | *c i* PN | **Pn** | **10 22 06.1** | **+0.7** |
| SHO | | | | *i* S | **Sn** | **10 22 16.5** | **-0.2** |
| SHO | | | | pmax | pmax | | |
| | comp=N,331nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,458nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,959nm,0.1s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,43μm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,50μm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.12** | **270** | *i* P | **Pn** | **10 22 12.2** | **+0.4** |
| YUK | | | | AMB | AMB | 10 22 12.5 | |
| | comp=E,3μm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **10 22 27.4** | **-0.6** |
| YUK | | | | A | A | 10 22 30.4 | |
| | comp=E,6μm,0.5s | | | | | | |
| YUK | | | | A | A | 10 22 30.4 | |
| | comp=E,8μm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.12** | **270** | *d i* PN | **Pn** | **10 22 12.2** | **+0.4** |
| YUK | | | | *i* S | **Sn** | **10 22 27.3** | **-0.7** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,5μm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,2μm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,2μm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,10μm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,7μm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.23** | **15** | *i* P | **Pn** | **10 22 13.7** | **+0.6** |
| KUR | | | | AMB | AMB | 10 22 14.2 | |
| | comp=N,1μm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **10 22 30.1** | **-0.2** |
| KUR | | | | A | A | 10 22 31.1 | |
| | comp=N,5μm,0.5s | | | | | | |
| KUR | | | | A | A | 10 22 31.1 | |
| | comp=N,7μm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **1.23** | **15** | *c i* PN | **Pn** | **10 22 13.7** | **+0.6** |
| KUR | | | | *i* S | **Sn** | **10 22 30.1** | **-0.2** |
| KUR | | | | pmax | pmax | | |
| | comp=N,515nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,1μm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,8μm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.39** | **241** | *i* P | **Pn** | **10 22 15.4** | **+0.4** |
| NEM2 | | | | S | **Sn** | **10 22 32.9** | **-0.8** |
| **NEM2** | **Nemuro 2** | **1.39** | **241** | A | A | 10 22 15.4 | |
| | comp=E,3.0nm,0.7s,comp=N,4.0nm,5.1s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **1.40** | **242** | *i* P | **Pn** | **10 22 15.4** | **+0.3** |
| NMR | | | | *i* S | **Sn** | **10 22 32.9** | **-0.9** |
| **NMR** | **Nemuro--Hokkai** | **1.40** | **242** | *d i* PN | **Pn** | **10 22 15.4** | **+0.3** |
| NMR | | | | *i* S | **Sn** | **10 22 32.9** | **-0.9** |
| **RUSJ** | **Misakicho** | **1.56** | **273** | *d i* PN | **Pn** | **10 22 17.9** | **+0.8** |
| RUSJ | | | | *i* S | **Sn** | **10 22 37.9** | **+0.4** |
| **JRA** | **Rausu** | **1.66** | **267** | *i* P | **Pn** | **10 22 19.4** | **+1.1** |
| JRA | | | | *e*S | **Sn** | **10 22 40.1** | **+0.5** |
| **JNSB** | **Nemuroshibetsu** | **1.76** | **262** | *i* P | **Pn** | **10 22 21.0** | **+1.4** |
| JNSB | | | | S | **Sn** | **10 22 42.8** | **+0.8** |
| **JNSB** | **Nemuroshibetsu** | **1.76** | **262** | A | A | 10 22 21.0 | |
| | comp=E,9.0nm,2.7s,comp=N,12nm,2.3s | | | | | | |
| **JKHN** | **Kushirohamanak** | **1.90** | **240** | *i* P | **Pn** | **10 22 22.2** | **+0.8** |
| JKHN | | | | S | **Sn** | **10 22 44.3** | **-0.8** |
| **JKHN** | **Kushirohamanak** | **1.90** | **240** | A | A | 10 22 22.2 | |
| | comp=E,6.0nm,7.3s,comp=N,4.0nm,0.4s | | | | | | |
| **JNK** | **Nakash** | **2.01** | **258** | *i* P | **Pn** | **10 22 23.6** | **+0.8** |
| JNK | | | | *e*S | **Sn** | **10 22 47.9** | **+0.3** |
| **AKK** | **Akkeshi** | **2.13** | **242** | *e*P | **Pn** | **10 22 24.9** | **+0.5** |
| AKK | | | | *e*S | **Sn** | **10 22 49.3** | **-1.3** |
| **JAK** | **Akkeshi** | **2.24** | **243** | *i* P | **Pn** | **10 22 26.3** | **+0.6** |
| JAK | | | | S | **Sn** | **10 22 52.0** | **-1.0** |
| **JAK** | **Akkeshi** | **2.24** | **243** | A | A | 10 22 26.3 | |
| | comp=E,3.0nm,0.7s,comp=N,3.0nm,0.7s | | | | | | |
| **JTKR** | **Abashiri--Toko** | **2.53** | **270** | *i* P | **Pn** | **10 22 30.8** | **+1.1** |
| JTKR | | | | *e*S | **Sn** | **10 23 00.9** | **+1.0** |
| **JAR** | **Ashorobuto** | **2.75** | **256** | *i* P | **Pn** | **10 22 34.2** | **+1.7** |
| JAR | | | | S | **Sn** | **10 23 06.2** | **+1.1** |
| **JOB** | **Onbets** | **2.84** | **248** | *i* P | **Pn** | **10 22 35.0** | **+1.2** |
| JOB | | | | S | **Sn** | **10 23 06.8** | **-0.6** |
| **JMP** | **Maruseppu** | **2.93** | **271** | *i* P | **Pn** | **10 22 36.1** | **+1.2** |
| **JCH** | **Churui** | **3.29** | **246** | *i* P | **Pn** | **10 22 40.4** | **+0.7** |
| JCH | | | | *e*S | **Sn** | **10 23 16.8** | **-1.1** |
| **JKK2** | **Kamakawa 2** | **3.38** | **269** | *i* P | **Pn** | **10 22 42.4** | **+1.5** |
| **JKA** | **Kamikawa-asahi** | **3.47** | **273** | Pn | **Pn** | **10 22 44.0** | **+1.9** |
| **JKA** | **Kamikawa-asahi** | **3.47** | **273** | *e*P | **Pn** | **10 22 44.1** | **+1.9** |
| **ASAJ** | **Asahikawa** | **3.47** | **273** | P | **Pn** | **10 22 43.9** | **+1.6** |
| | comp=N,74nm,0.4s,baz=73,slow=22,SNR=415 | | | | | | |
| ASAJ | | | | S | Sn | 10 23 34.5 | +12 |
| | comp=N,50nm,0.6s,baz=48,slow=31,SNR=1.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **3.47** | **273** | PN | **Pn** | **10 22 44.1** | **+1.9** |
| **ASAJ** | **Asahikawa** | **3.47** | **273** | *i* P | **Pn** | **10 22 43.8** | **+1.6** |
| **JSE** | **Soyaes** | **3.58** | **287** | P | **Pn** | **10 22 44.5** | **+0.9** |
| **JFR** | **Furan** | **3.61** | **258** | P | **Pn** | **10 22 45.8** | **+1.7** |
| **ERM** | **Erimo** | **3.72** | **238** | Pn | **Pn** | **10 22 48.4** | **+2.9** |
| ERM | | | | Sn | **Sn** | **10 23 29.5** | **+1.0** |
| **ERM** | **Erimo** | **3.72** | **238** | *c e* PN | **Pn** | **10 22 47.4** | **+1.8** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,171nm,0.5s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **3.84** | **244** | *i* P | **Pn** | **10 22 47.4** | **+0.3** |
| JNBK | | | | S | **Sn** | **10 23 30.3** | **-1.0** |
| **JSS** | **Shosan** | **4.01** | **277** | P | **Pn** | **10 22 52.0** | **+2.5** |
| **JWK2** | **Keihoku** | **4.14** | **290** | P | **Pn** | **10 22 53.3** | **+2.2** |
| **YSS** | **Yuzh-Sakhalins** | **4.38** | **313** | Pn | **Pn** | **10 22 55.8** | **+1.4** |
| **YSS** | **Yuzh-Sakhalins** | **4.38** | **313** | *e*P | **Pn** | **10 22 55.4** | **+0.9** |
| YSS | | | | AMB | AMB | 10 22 58.2 | |
| | comp=Z,100nm,0.4s | | | | | | |
| YSS | | | | AMB | AMB | 10 23 00.6 | |
| | comp=Z,100nm,2.0s | | | | | | |
| YSS | | | | *e*S | **Sn** | **10 23 42.4** | **-2.0** |
| YSS | | | | A | A | 10 23 44.0 | |
| | comp=Z,70nm,0.7s | | | | | | |
| YSS | | | | A | A | 10 23 44.0 | |
| | comp=Z,60nm,0.7s | | | | | | |
| YSS | | | | A | A | 10 23 44.6 | |
| | comp=Z,200nm,3.0s | | | | | | |
| YSS | | | | A | A | 10 23 44.6 | |
| | comp=Z,100nm,3.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.38** | **313** | *e*PN | **Pn** | **10 22 55.4** | **+0.9** |
| YSS | | | | *e*S | **Sn** | **10 23 42.2** | **-2.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,40nm,0.5s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,100nm,2.4s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,70nm,0.7s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,60nm,0.6s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,200nm,2.6s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,100nm,3.3s | | | | | | |
| **JEW** | **Eniwo** | **4.51** | **257** | P | **Pn** | **10 22 58.2** | **+2.0** |
| **JTM** | **Tenmabayashi** | **5.71** | **237** | Pn | **Pn** | **10 23 11.6** | **-1.0** |
| **UGL** | **Uglegorsk** | **6.24** | **326** | *e*P | **Pn** | **10 23 21.3** | **+1.6** |
| UGL | | | | AMB | AMB | 10 23 22.8 | |
| | comp=E,70nm,0.6s | | | | | | |
| **TYV** | **Tymovskoe** | **7.55** | **336** | *e*P | **Pn** | **10 23 38.2** | **+0.8** |
| TYV | | | | AMB | AMB | 10 23 40.1 | |
| | comp=E,10.0nm,0.6s | | | | | | |
| TYV | | | | AMB | AMB | 10 23 44.5 | |
| | comp=E,100nm,3.0s | | | | | | |
| TYV | | | | *e*S | **Sn** | **10 24 59.5** | **-1.7** |
| TYV | | | | A | A | 10 25 01.9 | |
| | comp=E,100nm,3.0s | | | | | | |
| TYV | | | | A | A | 10 25 04.3 | |
| | comp=E,10.0nm,0.6s | | | | | | |
| TYV | | | | A | A | 10 25 04.3 | |
| | comp=E,10.0nm,0.6s | | | | | | |
| **TYV** | **Tymovskoe** | **7.55** | **336** | *e*PN | **Pn** | **10 23 38.2** | **+0.8** |
| TYV | | | | *e*S | **Sn** | **10 24 59.5** | **-1.7** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,2.8s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,5.0nm,1.0s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,6.0nm,1.0s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,100nm,3.1s | | | | | | |
| **JMM** | **Marumori** | **7.95** | **221** | | **Pn** | **10 23 41.3** | **-1.6** |
| **SKR** | **Severo-Kuril's** | **8.88** | **39** | *e*P | **Pn** | **10 23 57.2** | **+1.6** |
| SKR | | | | AMB | AMB | 10 23 59.9 | |
| | comp=N,30nm,0.5s | | | | | | |
| SKR | | | | *e*S | **Sn** | **10 25 30.5** | **-3.3** |
| SKR | | | | A | A | 10 25 32.7 | |
| | comp=N,80nm,0.5s | | | | | | |
| SKR | | | | A | A | 10 25 32.7 | |
| | comp=N,60nm,0.5s | | | | | | |
| SKR | | | | AMS | AMS | 10 26 26.9 | |
| | comp=N,800nm,15.0s | | | | | | |
| **SKR** | **Severo-Kuril's** | **8.88** | **39** | *e*PN | **Pn** | **10 23 53.9** | **-1.7** |
| SKR | | | | MLR | MLR | | |
| | comp=Z,800nm,15.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **10.27** | **226** | P | **Pn** | **10 24 14.2** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=27,slow=13,SNR=7.5 | | | | | | |
| MJAR | | | | S | **Sn** | **10 26 04.4** | **-3.4** |
| | comp=Z,2.1nm,0.7s,baz=41,slow=22,SNR=5.0 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **MAJO** | **Matsushiro** | **10.27** | **226** | Pn | **Pn** | **10 24 14.6** | **0.0** |
| **MAJO** | **Matsushiro** | **10.27** | **226** | *i* PN | **Pn** | **10 24 15.9** | **+1.3** |
| **KDTR** | **Khodutka, Kamc** | **10.55** | **39** | *e*P | **Pn** | **10 24 17.6** | **-0.7** |
| KDTR | | | | AMB | AMB | 10 24 18.8 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **11.10** | **276** | Pn | **Pn** | **10 24 24.8** | **-1.0** |
| **USA0B** | **Ussuriysk Arra** | **11.10** | **276** | *i* PN | **Pn** | **10 24 25.9** | **+0.2** |
| **USRK** | **Ussuriysk Ar.** | **11.10** | **276** | Pn | **Pn** | **10 24 25.2** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** | **11.10** | **276** | P | **Pn** | **10 24 25.9** | **+0.2** |
| | comp=Z,5.1nm,0.8s,baz=88,slow=13,SNR=18 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.10** | **276** | PN | **Pn** | **10 24 25.2** | **-0.5** |
| **PET** | **Petropavlovsk** | **11.66** | **36** | *e*P | **Pn** | **10 24 32.1** | **-1.1** |
| **PET** | **Petropavlovsk** | **11.66** | **36** | *i* PN | **Pn** | **10 24 32.1** | **-1.1** |
| PET | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **11.95** | **301** | P | **Pn** | **10 24 37.4** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=120,slow=16,SNR=2.1 | | | | | | |
| **KLR** | **Kul'dur** | **11.95** | **301** | *e*P | **Pn** | **10 24 38.2** | **+1.1** |
| **KLR** | **Kul'dur** | **11.95** | **301** | *i* PN | **Pn** | **10 24 38.2** | **+1.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **PSTR** | **Posyet** | **12.18** | **269** | *i* PN | **Pn** | **10 24 39.9** | **-0.3** |
| **KSRS** | **Korea Array** | **16.16** | **253** | P | **Pn** | **10 25 30.7** | **-0.7** |
| | comp=Z,0.1nm,0.3s,baz=65,slow=12,SNR=7.5 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **ZEA** | **Zeya** | **16.38** | **313** | *e*P | P | 10 25 42.6 | +7.4 |
| **TJN** | **Taejon** | **17.10** | **250** | *e*P | **Pn** | **10 25 41.7** | **-1.3** |
| **SEY** | **Seymchan** | **19.14** | **7** | P | **P** | **10 26 02.1** | **-3.3** |
| | comp=Z,0.3nm,0.3s,baz=23,slow=22,SNR=5.4 | | | | | | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| **SEY** | **Seymchan** | **19.14** | **7** | *c e* P | **P** | **10 26 05.1** | **-0.3** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | |
| **YAK** | **Yakutsk** | **20.81** | **336** | P | **P** | **10 26 19.5** | **-3.8** |
| | comp=Z,14nm,0.3s,baz=107,slow=2.2,SNR=6.8 | | | | | | |
| | comp=Z,14nm,0.3s | | | | | | |
| **YAK** | **Yakutsk** | **20.81** | **336** | *e*P | **P** | **10 26 24.3** | **+0.9** |
| **YAK** | **Yakutsk** | **20.81** | **336** | *i* P | **P** | **10 26 24.3** | **+0.9** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **BILL** | **Bilibino** | **26.02** | **16** | *e*P | **P** | **10 27 13.1** | **-0.7** |
| BILL | | | | *e**PP | **pP** | **10 27 36.1** | **+0.8** |
| BILL | | | | *e* | | 10 27 58.2 | |
| BILL | | | | *e*S | **PcP** | **10 30 34.5** | **-4.6** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **26.52** | **276** | *e*P | **P** | **10 27 20.0** | **+1.3** |
| HHC | | | | pP | pP | 10 27 42.1 | +1.8 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,51nm,3.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.09** | **292** | *e*P | **P** | **10 27 33.2** | **+0.5** |
| **ULN** | **Ulaanbaatar** | **28.09** | **292** | *i* P | **P** | **10 27 33.2** | **+0.5** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **29.11** | **348** | *e*P | **P** | **10 27 42.8** | **+1.5** |
| **TIXI** | **Tiksi** | **29.11** | **348** | *i* P | **P** | **10 27 42.8** | **+1.5** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **NIKH** | **Nikolski High** | **29.90** | **57** | P | **P** | **10 27 49.0** | **+0.5** |
| | baz=270 | | | | | | |
| **L14K** | **Kuka Creek** | **33.81** | **42** | P | **P** | **10 28 23.6** | **+1.1** |
| | baz=263 | | | | | | |
| **F15K** | **North Star Dit** | **33.84** | **33** | P | **P** | **10 28 23.5** | **+0.7** |
| | baz=254 | | | | | | |
| **M14K** | **Bethel** | **34.09** | **43** | P | **P** | **10 28 25.6** | **+0.6** |
| | baz=264 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **34.15** | **44** | P | **P** | **10 28 26.0** | **+0.5** |
| | baz=266 | | | | | | |
| **L15K** | **Ungalak Mounta** | **34.42** | **41** | P | **P** | **10 28 29.2** | **+1.3** |
| | baz=263 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **34.48** | **40** | P | **P** | **10 28 29.7** | **+1.3** |
| | baz=262 | | | | | | |
| **G16K** | **Koyuk River** | **34.69** | **34** | P | **P** | **10 28 31.6** | **+1.5** |
| **D17K** | **Noatak River** | **35.01** | **30** | P | **P** | **10 28 33.7** | **+0.9** |
| | baz=253 | | | | | | |
| **J16K** | **Anvik River** | **35.04** | **38** | P | **P** | **10 28 33.8** | **+0.6** |
| | baz=262 | | | | | | |
| **C17K** | **DeLong Mountai** | **35.21** | **29** | P | **P** | **10 28 35.3** | **+0.7** |
| | baz=252 | | | | | | |
| **CHNA** | **Chernabura Isl** | **35.30** | **53** | P | **P** | **10 28 36.6** | **+1.2** |
| | baz=275 | | | | | | |
| **E17K** | **Hotham Inlet** | **35.30** | **32** | P | **P** | **10 28 36.7** | **+1.3** |
| | baz=255 | | | | | | |
| **F17K** | **Baldwin Pennin** | **35.37** | **33** | P | **P** | **10 28 36.4** | **+0.5** |
| | baz=257 | | | | | | |
| **L16K** | **Owhat River** | **35.38** | **41** | P | **P** | **10 28 36.7** | **+0.7** |
| **L16K** | **Owhat River** | **35.38** | **41** | P | **P** | **10 28 36.8** | **+0.7** |
| | baz=265 | | | | | | |
| **G17K** | **Kiwalik Mounta** | **35.40** | **35** | P | **P** | **10 28 37.3** | **+1.0** |
| | baz=259 | | | | | | |
| **M16K** | **Timber Creek** | **35.57** | **42** | P | **P** | **10 28 38.7** | **+0.9** |
| | baz=266 | | | | | | |
| **H17K** | **Granite Mounta** | **35.60** | **36** | P | **P** | **10 28 39.0** | **+1.0** |
| | baz=260 | | | | | | |
| **J17K** | **VABM Dome** | **35.74** | **38** | P | **P** | **10 28 40.0** | **+0.8** |
| J17K | | | | IAmb | IAmb | 10 28 46.6 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **E18K** | **Tukpahlearik C** | **35.85** | **31** | P | **P** | **10 28 40.8** | **+0.7** |
| | baz=256 | | | | | | |
| **C18K** | **Utukok River** | **35.96** | **29** | P | **P** | **10 28 40.7** | **-0.3** |
| C18K | | | | IAmb | IAmb | 10 28 42.1 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **C18K** | **Utukok River** | **35.96** | **29** | P | **P** | **10 28 41.1** | **+0.1** |
| | baz=254 | | | | | | |
| **F18K** | **Selawik** | **36.03** | **33** | P | **P** | **10 28 42.8** | **+1.3** |
| | baz=258 | | | | | | |
| **H18K** | **Honhosa River** | **36.29** | **35** | P | **P** | **10 28 45.2** | **+1.3** |
| | baz=261 | | | | | | |
| **G18K** | **Tagagawik** | **36.29** | **34** | P | **P** | **10 28 45.3** | **+1.4** |
| **G18K** | **Tagagawik** | **36.29** | **34** | P | **P** | **10 28 45.4** | **+1.5** |
| | baz=260,SNR=6.7 | | | | | | |
| **M17K** | **Holitna River** | **36.33** | **42** | P | **P** | **10 28 46.6** | **+2.3** |
| **M17K** | **Holitna River** | **36.33** | **42** | P | **P** | **10 28 46.5** | **+2.3** |
| | baz=267 | | | | | | |
| **C19K** | **Lookout Ridge** | **36.64** | **29** | P | **P** | **10 28 47.4** | **+0.6** |
| C19K | | | | IAmb | IAmb | 10 28 48.4 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **C19K** | **Lookout Ridge** | **36.64** | **29** | P | **P** | **10 28 47.2** | **+0.3** |
| | baz=255 | | | | | | |
| **L18K** | **Granite Mounta** | **36.73** | **40** | P | **P** | **10 28 49.8** | **+2.1** |
| | baz=267 | | | | | | |
| **P17K** | **Kvichak River** | **36.80** | **46** | P | **P** | **10 28 49.8** | **+1.6** |
| | baz=271 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **36.80** | **33** | P | **P** | **10 28 49.0** | **+0.9** |
| F19K | | | | IAmb | IAmb | 10 28 50.1 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **36.80** | **33** | P | **P** | **10 28 49.1** | **+1.0** |
| | baz=260,SNR=7.6 | | | | | | |
| **G19K** | **Purcell Mounta** | **36.96** | **34** | P | **P** | **10 28 50.6** | **+1.1** |
| G19K | | | | IAmb | IAmb | 10 28 51.6 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **G19K** | **Purcell Mounta** | **36.96** | **34** | P | **P** | **10 28 51.5** | **+2.0** |
| | baz=261,SNR=5.6 | | | | | | |
| **N18K** | **Kilae Creek** | **37.06** | **43** | P | **P** | **10 28 51.5** | **+1.0** |
| | baz=270 | | | | | | |
| **M18K** | **Stony River** | **37.11** | **42** | P | **P** | **10 28 51.0** | **+0.1** |
| | baz=269 | | | | | | |
| **E19K** | **Redstone River** | **37.13** | **32** | P | **P** | **10 28 52.2** | **+1.3** |
| | baz=260 | | | | | | |
| **H19K** | **Roundabout Mou** | **37.13** | **35** | P | **P** | **10 28 52.5** | **+1.5** |
| **H19K** | **Roundabout Mou** | **37.13** | **35** | P | **P** | **10 28 52.9** | **+1.9** |
| | baz=263,SNR=6.4 | | | | | | |
| **J19K** | **Poorman** | **37.33** | **38** | P | **P** | **10 28 54.0** | **+1.3** |
| | baz=266 | | | | | | |
| **D20K** | **Etivluk River** | **37.60** | **30** | P | **P** | **10 28 55.6** | **+0.7** |
| | baz=258 | | | | | | |
| **F20K** | **Avaraart Lake** | **37.64** | **33** | P | **P** | **10 28 56.1** | **+0.9** |
| | baz=262 | | | | | | |
| **E20K** | **Nigu River** | **37.66** | **31** | P | **P** | **10 28 56.2** | **+0.7** |
| | baz=260 | | | | | | |
| **B20K** | **Meade River** | **37.70** | **28** | P | **P** | **10 28 55.6** | **0.0** |
| B20K | | | | IAmb | IAmb | 10 28 56.5 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **B20K** | **Meade River** | **37.70** | **28** | P | **P** | **10 28 56.0** | **+0.4** |
| | baz=256 | | | | | | |
| **H20K** | **Anotleneega Mo** | **37.78** | **35** | P | **P** | **10 28 58.0** | **+1.5** |
| | baz=264 | | | | | | |
| **K20K** | **Telida** | **37.98** | **39** | P | **P** | **10 28 59.7** | **+1.5** |
| | baz=268 | | | | | | |
| **J20K** | **Nowinta River** | **37.99** | **37** | P | **P** | **10 28 59.7** | **+1.4** |
| J20K | | | | IAmb | IAmb | 10 29 03.2 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **J20K** | **Nowinta River** | **37.99** | **37** | P | **P** | **10 28 59.6** | **+1.4** |
| | baz=267 | | | | | | |
| **IMAR** | **Indian Mountai** | **38.29** | **34** | P | **P** | **10 29 02.2** | **+1.5** |
| **M20K** | **Styx River** | **38.40** | **41** | P | **P** | **10 29 03.4** | **+1.6** |
| | baz=271 | | | | | | |
| **G21K** | **Allakaket** | **38.44** | **34** | P | **P** | **10 29 03.4** | **+1.4** |
| | baz=264 | | | | | | |
| **B21K** | **Ikpikpuk River** | **38.48** | **29** | P | **P** | **10 29 02.8** | **+0.6** |
| **B21K** | **Ikpikpuk River** | **38.48** | **29** | P | **P** | **10 29 03.2** | **+1.0** |
| | baz=259 | | | | | | |
| **E21K** | **Killik River** | **38.51** | **30** | P | **P** | **10 29 02.4** | **-0.2** |
| E21K | | | | IAmb | IAmb | 10 29 04.0 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **E21K** | **Killik River** | **38.51** | **30** | P | **P** | **10 29 03.4** | **+0.8** |
| | baz=262 | | | | | | |
| **F21K** | **Alatna River** | **38.53** | **32** | P | **P** | **10 29 03.7** | **+1.0** |
| F21K | | | | IAmb | IAmb | 10 29 04.9 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **38.53** | **32** | P | **P** | **10 29 03.9** | **+1.1** |
| | baz=264,SNR=6.6 | | | | | | |
| **A22K** | **Sinclair Lake** | **38.64** | **26** | P | **P** | **10 29 04.2** | **+0.6** |
| | baz=257 | | | | | | |
| **H21K** | **Melozitna Rive** | **38.66** | **35** | P | **P** | **10 29 05.0** | **+1.2** |
| H21K | | | | IAmb | IAmb | 10 29 06.0 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **38.66** | **35** | P | **P** | **10 29 05.2** | **+1.4** |
| | baz=266 | | | | | | |
| **CHUM** | **Lake Minchumin** | **38.78** | **38** | P | **P** | **10 29 06.4** | **+1.5** |
| | baz=269 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **38.85** | **42** | P | **P** | **10 29 07.3** | **+1.7** |
| | baz=272 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **39.01** | **27** | P | **P** | **10 29 07.5** | **+0.8** |
| | baz=260 | | | | | | |
| **D22K** | **Ayikyak River** | **39.04** | **30** | P | **P** | **10 29 07.3** | **+0.4** |
| **D22K** | **Ayikyak River** | **39.04** | **30** | P | **P** | **10 29 08.0** | **+1.0** |
| | baz=262,SNR=8.0 | | | | | | |
| **F22K** | **John River** | **39.06** | **32** | P | **P** | **10 29 08.6** | **+1.5** |
| | baz=264 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **39.26** | **35** | P | **P** | **10 29 10.0** | **+1.2** |
| | baz=267 | | | | | | |
| **G22K** | **Bettles** | **39.27** | **33** | P | **P** | **10 29 09.6** | **+0.7** |
| | baz=266 | | | | | | |
| **MLY** | **Manley** | **39.49** | **36** | P | **P** | **10 29 12.2** | **+1.4** |
| **MLY** | **Manley** | **39.49** | **36** | P | **P** | **10 29 12.0** | **+1.1** |
| | baz=269 | | | | | | |
| **SUA** | **Susitna One** | **39.55** | **42** | P | **P** | **10 29 13.1** | **+1.7** |
| | baz=273 | | | | | | |
| **D23K** | **Nanushuk River** | **39.77** | **30** | P | **P** | **10 29 13.8** | **+0.8** |
| | baz=264 | | | | | | |
| **COLD** | **Coldfoot** | **39.80** | **33** | P | **P** | **10 29 14.2** | **+0.9** |
| | baz=267 | | | | | | |
| **G23K** | **Bananza Creek** | **39.84** | **33** | P | **P** | **10 29 14.7** | **+1.0** |
| G23K | | | | IAmb | IAmb | 10 29 15.6 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **G23K** | **Bananza Creek** | **39.84** | **33** | P | **P** | **10 29 14.8** | **+1.1** |
| | baz=268,SNR=6.3 | | | | | | |
| **C23K** | **Itkillik River** | **39.89** | **29** | P | **P** | **10 29 14.5** | **+0.6** |
| C23K | | | | IAmb | IAmb | 10 29 15.6 | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **C23K** | **Itkillik River** | **39.89** | **29** | P | **P** | **10 29 14.6** | **+0.6** |
| | baz=263 | | | | | | |
| **H23K** | **Yukon River** | **40.01** | **35** | P | **P** | **10 29 16.5** | **+1.4** |
| H23K | | | | IAmb | IAmb | 10 29 17.5 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **40.01** | **35** | P | **P** | **10 29 16.4** | **+1.4** |
| | baz=269,SNR=6.2 | | | | | | |
| **E23K** | **Chandalar** | **40.08** | **31** | P | **P** | **10 29 17.1** | **+1.4** |
| | baz=266,SNR=11 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **40.08** | **36** | P | **P** | **10 29 17.3** | **+1.7** |
| **I23K** | **Minto, Yukon-K** | **40.08** | **36** | P | **P** | **10 29 17.1** | **+1.5** |
| | baz=270 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **40.14** | **30** | P | **P** | **10 29 17.1** | **+1.0** |
| **TOLK** | **Toolik Lake Re** | **40.14** | **30** | P | **P** | **10 29 17.1** | **+1.0** |
| | baz=266,SNR=5.3 | | | | | | |
| **NEA2** | **Nenana** | **40.20** | **37** | P | **P** | **10 29 17.9** | **+1.2** |
| NEA2 | | | | IAmb | IAmb | 10 29 20.6 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **40.20** | **37** | P | **P** | **10 29 18.1** | **+1.4** |
| | baz=271 | | | | | | |
| **MCK** | **McKinley** | **40.28** | **38** | P | **P** | **10 29 19.2** | **+

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **COLA** | **College** | **40.72** | **36** | P | **P** | **10 29 21.7** | **+0.8** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **40.86** | **33** | P | **P** | **10 29 23.2** | **+1.2** |
| G24K | | | | IAmb | IAmb | 10 29 24.7 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **40.86** | **33** | P | **P** | **10 29 23.9** | **+1.9** |
| | baz=270,SNR=8.5 | | | | | | |
| **WAT6** | **Susitna Watana** | **40.89** | **40** | P | **P** | **10 29 23.5** | **+1.0** |
| | baz=274 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.98** | **307** | P | **P** | **10 29 21.9** | **-1.2** |
| | comp=Z,0.4nm,0.3s,baz=100,slow=7.5,SNR=2.8 | | | | | | |
| ZALV | | | | PcP | **PcP** | **10 31 20.2** | **-1.1** |
| | comp=Z,0.4nm,0.3s,baz=72,slow=4.7,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **DHY** | **Denali Highway** | **41.02** | **39** | P | **P** | **10 29 24.6** | **+1.1** |
| DHY | | | | IAmb | IAmb | 10 29 25.4 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **DHY** | **Denali Highway** | **41.02** | **39** | P | **P** | **10 29 24.7** | **+1.1** |
| | baz=274 | | | | | | |
| **HDA** | **Harding Lake** | **41.13** | **37** | P | **P** | **10 29 24.6** | **+0.3** |
| | baz=273 | | | | | | |
| **IL31** | | **41.14** | **36** | P | **P** | **10 29 25.4** | **+1.1** |
| **ILAR** | **Eielson Array** | **41.14** | **36** | P | **P** | **10 29 25.3** | **+1.0** |
| **ILAR** | **Eielson Array** | **41.14** | **36** | P | **P** | **10 29 25.1** | **+0.8** |
| | comp=Z,1.9nm,0.6s,baz=263,slow=6.3,SNR=29 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **41.14** | **36** | P | **P** | **10 29 25.3** | **+1.0** |
| **D25K** | **Kavik River** | **41.33** | **29** | P | **P** | **10 29 26.6** | **+0.7** |
| **D25K** | **Kavik River** | **41.33** | **29** | P | **P** | **10 29 26.7** | **+0.8** |
| | baz=268,SNR=19 | | | | | | |
| **G25K** | **Bearman Lake** | **41.40** | **33** | P | **P** | **10 29 27.8** | **+1.4** |
| | baz=271 | | | | | | |
| **H25L** | **Birch Creek** | **41.53** | **34** | P | **P** | **10 29 29.4** | **+2.0** |
| | baz=272 | | | | | | |
| **F25K** | **Christian River** | **41.57** | **32** | P | **P** | **10 29 29.9** | **+2.0** |
| | baz=270,SNR=6.5 | | | | | | |
| **PRP** | **Porcupine Dome** | **41.68** | **35** | P | **P** | **10 29 30.6** | **+1.7** |
| PRP | | | | IAmb | IAmb | 10 29 31.4 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **41.68** | **35** | P | **P** | **10 29 30.3** | **+1.4** |
| | baz=273,SNR=7.3 | | | | | | |
| **K24K** | **Donnelly Dome** | **41.68** | **38** | P | **P** | **10 29 31.0** | **+2.1** |
| | baz=275 | | | | | | |
| **FYU** | **Fort Yukon** | **41.75** | **34** | P | **P** | **10 29 31.4** | **+2.1** |
| **J25K** | **Salcha River,** | **41.80** | **37** | P | **P** | **10 29 30.5** | **+0.7** |
| **J25K** | **Salcha River,** | **41.80** | **37** | P | **P** | **10 29 31.4** | **+1.6** |
| | baz=274 | | | | | | |
| **KLU** | **Klutina** | **41.85** | **41** | P | **P** | **10 29 31.8** | **+1.5** |
| | baz=277 | | | | | | |
| **C26K** | **Camden Bay** | **41.86** | **29** | P | **P** | **10 29 31.7** | **+1.5** |
| | baz=269 | | | | | | |
| **BMAR** | **Burnt Mountain** | **41.98** | **32** | P | **P** | **10 29 33.1** | **+1.8** |
| **F26K** | **Sheenjek River** | **42.14** | **32** | P | **P** | **10 29 34.0** | **+1.5** |
| | baz=272,SNR=10 | | | | | | |
| **C27K** | **Jago River** | **42.27** | **29** | P | **P** | **10 29 34.8** | **+1.2** |
| | baz=270,SNR=18 | | | | | | |
| **G26K** | **Porcupine Rive** | **42.31** | **33** | P | **P** | **10 29 36.0** | **+2.2** |
| | baz=273,SNR=10 | | | | | | |
| **SCRK** | **Sand Creek** | **42.45** | **37** | P | **P** | **10 29 36.3** | **+1.1** |
| SCRK | | | | IAmb | IAmb | 10 29 38.9 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **SCRK** | **Sand Creek** | **42.45** | **37** | P | **P** | **10 29 36.0** | **+0.8** |
| | baz=276 | | | | | | |
| **BMRM** | **Bremner River** | **42.55** | **42** | P | **P** | **10 29 37.6** | **+1.7** |
| | baz=279 | | | | | | |
| **J26L** | **Joseph Creek** | **42.58** | **37** | P | **P** | **10 29 36.9** | **+0.7** |
| **J26L** | **Joseph Creek** | **42.58** | **37** | P | **P** | **10 29 37.1** | **+0.8** |
| | baz=276 | | | | | | |
| **L26K** | **Log Cabin Wild** | **42.85** | **39** | P | **P** | **10 29 39.7** | **+1.4** |
| L26K | | | | IAmb | IAmb | 10 29 41.7 | |
| | comp=Z,5.4nm,1.0s | | | | | | |
| **L26K** | **Log Cabin Wild** | **42.85** | **39** | P | **P** | **10 29 39.7** | **+1.4** |
| | baz=278 | | | | | | |
| **E27K** | **Coleen River** | **43.08** | **31** | P | **P** | **10 29 41.7** | **+1.6** |
| E27K | | | | IAmb | IAmb | 10 29 43.8 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **E27K** | **Coleen River** | **43.08** | **31** | P | **P** | **10 29 41.7** | **+1.6** |
| | baz=274 | | | | | | |
| **M26K** | **Nabesna, AK** | **43.10** | **40** | P | **P** | **10 29 42.3** | **+2.0** |
| M26K | | | | IAmb | IAmb | 10 29 43.6 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **M26K** | **Nabesna, AK** | **43.10** | **40** | P | **P** | **10 29 41.8** | **+1.4** |
| | baz=278 | | | | | | |
| **G27K** | **Doyon Strip** | **43.16** | **33** | P | **P** | **10 29 42.4** | **+1.6** |
| **G27K** | **Doyon Strip** | **43.16** | **33** | P | **P** | **10 29 42.2** | **+1.4** |
| | baz=275 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **43.24** | **41** | P | **P** | **10 29 43.2** | **+1.7** |
| | baz=280 | | | | | | |
| **D27M** | **Malcolm River** | **43.25** | **30** | P | **P** | **10 29 42.2** | **+0.7** |
| **D27M** | **Malcolm River** | **43.25** | **30** | P | **P** | **10 29 42.6** | **+1.1** |
| | baz=273 | | | | | | |
| **H27K** | **Steamboat Moun** | **43.26** | **34** | P | **P** | **10 29 43.3** | **+1.7** |
| | baz=276 | | | | | | |
| **K27K** | **Chicken** | **43.28** | **37** | P | **P** | **10 29 43.5** | **+1.7** |
| | baz=278 | | | | | | |
| **I27K** | **Kandik River** | **43.29** | **35** | P | **P** | **10 29 43.8** | **+1.9** |
| | baz=276 | | | | | | |
| **L27K** | **Beaver Creek,** | **43.53** | **39** | P | **P** | **10 29 45.4** | **+1.6** |
| L27K | | | | IAmb | IAmb | 10 29 47.0 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **L27K** | **Beaver Creek,** | **43.53** | **39** | P | **P** | **10 29 45.8** | **+2.0** |
| | baz=279,SNR=9.4 | | | | | | |
| **BCAR** | **Beaver Creek A** | **43.55** | **39** | P | **P** | **10 29 45.8** | **+1.8** |
| **EGAK** | **Eagle** | **43.58** | **36** | P | **P** | **10 29 45.1** | **+1.0** |
| **EGAK** | **Eagle** | **43.58** | **36** | P | **P** | **10 29 44.9** | **+0.8** |
| | baz=278 | | | | | | |
| **M27K** | **Edge Creek, AK** | **43.62** | **40** | P | **P** | **10 29 46.3** | **+1.6** |
| | baz=280 | | | | | | |
| **F28M** | **Old Crow** | **43.78** | **32** | P | **P** | **10 29 47.1** | **+1.4** |
| F28M | | | | IAmb | IAmb | 10 29 48.3 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **43.78** | **32** | P | **P** | **10 29 47.8** | **+2.1** |
| | baz=276,SNR=7.1 | | | | | | |
| **E28M** | **Babbage River** | **43.81** | **30** | P | **P** | **10 29 47.0** | **+1.0** |
| E28M | | | | IAmb | IAmb | 10 29 47.9 | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **43.81** | **30** | P | **P** | **10 29 47.5** | **+1.6** |
| | baz=275,SNR=5.9 | | | | | | |
| **I28M** | **Miner Creek** | **44.01** | **35** | P | **P** | **10 29 49.8** | **+2.2** |
| I28M | | | | IAmb | IAmb | 10 29 50.3 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **44.01** | **35** | P | **P** | **10 29 49.1** | **+1.4** |
| | baz=278,SNR=7.5 | | | | | | |
| **YUK3** | **Moose Creek** | **44.38** | **40** | P | **P** | **10 29 52.2** | **+1.4** |
| | baz=281 | | | | | | |
| **E29M** | **Blow River** | **44.44** | **31** | P | **P** | **10 29 52.6** | **+1.7** |
| E29M | | | | IAmb | IAmb | 10 29 53.7 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **44.44** | **31** | P | **P** | **10 29 52.5** | **+1.6** |
| | baz=277,SNR=8.9 | | | | | | |
| **DAWY** | **Dawson** | **44.45** | **37** | P | **P** | **10 29 52.0** | **+0.9** |
| **DAWY** | **Dawson** | **44.45** | **37** | P | **P** | **10 29 52.3** | **+1.2** |
| | baz=280 | | | | | | |
| **H29M** | **Whitestone** | **44.53** | **34** | P | **P** | **10 29 53.4** | **+1.6** |
| H29M | | | | IAmb | IAmb | 10 29 54.7 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **44.53** | **34** | P | **P** | **10 29 54.0** | **+2.2** |
| | baz=278 | | | | | | |
| **G29M** | **Pine Creek** | **44.57** | **33** | P | **P** | **10 29 54.3** | **+2.3** |
| **G29M** | **Pine Creek** | **44.57** | **33** | P | **P** | **10 29 54.2** | **+2.1** |
| | baz=278,SNR=6.5 | | | | | | |
| **MK31** | **Makanchi Array** | **44.62** | **297** | P | **P** | **10 29 53.0** | **+0.3** |
| **MK31** | **Makanchi Array** | **44.62** | **297** | *ce*P | **P** | **10 29 53.6** | **+0.9** |
| **MKAR** | **Makanchi Array** | **44.62** | **297** | P | **P** | **10 29 52.5** | **-0.2** |
| **MKAR** | **Makanchi Array** | **44.62** | **297** | P | **P** | **10 29 52.7** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=79,slow=9.0,SNR=9.1 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **44.69** | **35** | P | **P** | **10 29 54.0** | **+1.0** |
| I29M | | | | IAmb | IAmb | 10 29 55.6 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **44.69** | **35** | P | **P** | **10 29 54.9** | **+1.9** |
| | baz=279,SNR=8.4 | | | | | | |
| **M29M** | **Somme Creek** | **45.16** | **39** | P | **P** | **10 29 58.9** | **+2.0** |
| | baz=282 | | | | | | |
| **EPYK** | **Eagle Plains** | **45.17** | **33** | P | **P** | **10 29 58.4** | **+1.6** |
| **EPYK** | **Eagle Plains** | **45.17** | **33** | P | **P** | **10 29 58.8** | **+2.0** |
| | baz=280,SNR=5.8 | | | | | | |
| **L29M** | **L29M** | **45.18** | **38** | P | **P** | **10 29 58.7** | **+1.8** |
| L29M | | | | IAmb | IAmb | 10 30 00.1 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **L29M** | **L29M** | **45.18** | **38** | P | **P** | **10 29 59.3** | **+2.4** |
| | baz=282 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **45.27** | **33** | P | **P** | **10 29 59.1** | **+1.5** |
| G30M | | | | IAmb | IAmb | 10 29 59.9 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **45.27** | **33** | P | **P** | **10 29 59.3** | **+1.7** |
| | baz=280,SNR=8.9 | | | | | | |
| **K29M** | **Barlow Dome** | **45.30** | **37** | P | **P** | **10 29 59.7** | **+1.8** |
| | baz=282 | | | | | | |
| **F30M** | **Barrier River** | **45.33** | **32** | P | **P** | **10 30 00.5** | **+2.5** |
| | baz=279,SNR=8.6 | | | | | | |
| **I30M** | **Mount Dempster** | **45.52** | **35** | P | **P** | **10 30 01.1** | **+1.5** |
| I30M | | | | IAmb | IAmb | 10 30 02.3 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **45.52** | **35** | P | **P** | **10 30 01.6** | **+1.9** |
| | baz=281,SNR=7.5 | | | | | | |
| **KURK** | **Kurchatov** | **45.53** | **304** | *e*P | **P** | **10 29 59.4** | **-0.4** |
| **KURK** | **Kurchatov** | **45.53** | **304** | P | **P** | **10 29 59.4** | **-0.4** |
| **YUK6** | **Outpost Mounta** | **45.54** | **41** | P | **P** | **10 30 01.7** | **+1.6** |
| | baz=284 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.61** | **304** | P | **P** | **10 29 59.4** | **-1.0** |
| | comp=Z,1.1nm,0.3s,baz=72,slow=8.3,SNR=7.6 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **J30M** | **Hart River** | **45.66** | **36** | P | **P** | **10 30 02.3** | **+1.5** |
| **J30M** | **Hart River** | **45.66** | **36** | P | **P** | **10 30 02.5** | **+1.7** |
| | baz=282 | | | | | | |
| **G31M** | **Satah River** | **46.03** | **32** | P | **P** | **10 30 04.9** | **+1.4** |
| **G31M** | **Satah River** | **46.03** | **32** | P | **P** | **10 30 05.0** | **+1.6** |
| | baz=281,SNR=7.1 | | | | | | |
| **INK** | **Inuvik** | **46.05** | **30** | P | **P** | **10 30 05.0** | **+1.4** |
| **INK** | **Inuvik** | **46.05** | **30** | P | **P** | **10 30 05.1** | **+1.4** |
| | baz=281,SNR=5.9 | | | | | | |
| **INK** | **Inuvik** | **46.05** | **30** | P | **P** | **10 30 05.0** | **+1.4** |
| INK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **F31M** | **Tsiigehtchic** | **46.13** | **32** | P | **P** | **10 30 05.8** | **+1.6** |
| **F31M** | **Tsiigehtchic** | **46.13** | **32** | P | **P** | **10 30 05.9** | **+1.6** |
| | baz=281,SNR=5.5 | | | | | | |
| **P29M** | **Windy Craggy** | **46.17** | **43** | P | **P** | **10 30 07.6** | **+2.8** |
| | baz=285 | | | | | | |
| **P30M** | **Million Dollar** | **46.42** | **42** | P | **P** | **10 30 09.6** | **+2.9** |
| | baz=286 | | | | | | |
| **O30N** | **Mendenhall** | **46.66** | **41** | P | **P** | **10 30 10.7** | **+2.1** |
| | baz=286 | | | | | | |
| **PLBC** | **Pleasant Camp** | **46.89** | **43** | P | **P** | **10 30 12.2** | **+1.9** |
| | baz=286 | | | | | | |
| **M31M** | **Drury Creek, Y** | **47.07** | **39** | P | **P** | **10 30 13.7** | **+2.0** |
| | baz=286 | | | | | | |
| **FARO** | **Faro, Yukon** | **47.53** | **39** | P | **P** | **10 30 16.7** | **+1.4** |
| | baz=286 | | | | | | |
| **P32M** | **Atlin** | **48.14** | **42** | P | **P** | **10 30 22.3** | **+2.2** |
| | baz=288 | | | | | | |
| **DLBC** | **Dease Lake** | **50.33** | **43** | P | **P** | **10 30 38.5** | **+1.8** |
| | baz=292 | | | | | | |
| **KK31** | **Karatay Array** | **53.75** | **298** | P | **P** | **10 31 02.2** | **-0.1** |
| **KK31** | **Karatay Array** | **53.75** | **298** | P | **P** | **10 31 02.2** | **-0.1** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **53.75** | **298** | P | **P** | **10 31 02.3** | **0.0** |
| **KKAR** | **Karatay Array** | **53.75** | **298** | P | **P** | **10 31 02.4** | **+0.2** |
| **KKAR** | **Karatay Array** | **53.75** | **298** | P | **P** | **10 31 02.3** | **0.0** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ARU** | **Arti** | **54.26** | **317** | *e*P | **P** | **10 31 05.2** | **-0.6** |
| **ARU** | **Arti** | **54.26** | **317** | *c i*P | **P** | **10 31 05.2** | **-0.6** |
| ARU | | | | S | **S** | **10 38 36.7** | **+1.1** |
| ARU | | | | SS | **SS** | **10 42 19.0** | **+0.9** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **57.03** | **309** | P | **P** | **10 31 25.7** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 10 31 26.8 | |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.04** | **340** | P | **P** | **10 31 37.9** | **-1.5** |
| | comp=Z,3.1nm,1.0s,baz=45,slow=7.3,SNR=10 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **64.70** | **333** | P | **P** | **10 32 15.9** | **-1.5** |
| | comp=Z,4.1nm,0.5s,baz=43,slow=7.4,SNR=42 | | | | | | |
| | comp=Z,4.1nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **64.70** | **333** | *i*P | **P** | **10 32 15.8** | **-1.6** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **OBN** | **Obninsk** | **65.19** | **324** | *e*P | **P** | **10 32 19.4** | **-1.3** |
| **OBN** | **Obninsk** | **65.19** | **324** | ‖ *e*P | **P** | **10 32 19.4** | **-1.3** |
| OBN | | | | *e**PP | **PcP** | **10 32 49.0** | **-3.4** |
| OBN | | | | *e* | | 10 34 44.5 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| **BOZ** | **Bozeman (W)** | **66.60** | **49** | P | **P** | **10 32 31.3** | **+1.2** |
| | baz=310 | | | | | | |
| **VSU** | **Vasula** | **66.67** | **331** | *i*P | **P** | **10 32 31.5** | **+1.4** |
| **NVAR** | **Mina Array Bea** | **67.26** | **58** | P | **P** | **10 32 35.1** | **+0.6** |
| | comp=Z,0.3nm,0.5s,baz=297,slow=6.2,SNR=4.1 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **DGMT** | **Dagmar** | **68.55** | **43** | P | **P** | **10 32 42.9** | **+0.7** |
| | baz=313 | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.40** | **339** | P | **P** | **10 32 46.2** | **-1.0** |
| | comp=Z,1.8nm,0.4s,baz=31,slow=6.5 | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.40** | **339** | P | **P** | **10 32 47.1** | **-0.1** |
| **NOA** | **NORSAR Array B** | **69.40** | **339** | P | **P** | **10 32 46.5** | **-0.7** |
| | comp=Z,1.2nm,0.4s,baz=32,slow=6.6,SNR=23 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **69.49** | **337** | P | **P** | **10 32 46.7** | **-1.0** |
| | comp=Z,2.4nm,0.4s,baz=52,slow=5.8,SNR=23 | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **69.57** | **50** | P | **P** | **10 32 50.5** | **+1.6** |
| | comp=Z,0.3nm,0.7s,baz=243,slow=1.7,SNR=3.7 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **KIV** | **Kislovodsk** | **69.71** | **312** | *e*P | **P** | **10 32 50.9** | **+1.4** |
| **KIV** | **Kislovodsk** | **69.71** | **312** | *e*P | **P** | **10 32 50.9** | **+1.4** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **69.75** | **312** | P | **P** | **10 32 49.9** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=176,slow=20,SNR=2.4 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **69.75** | **312** | *e*P | **P** | **10 32 50.1** | **+0.5** |
| **KBZ** | **Khabaz** | **69.75** | **312** | *i*P | **P** | **10 32 50.1** | **+0.5** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **SHA1** | **Shidzhatmaz** | **69.87** | **312** | *ce*P | **P** | **10 32 50.9** | **+0.2** |
| **AKASG** | **Malin Array Be** | **71.46** | **324** | P | **P** | **10 32 59.4** | **-0.4** |
| | comp=Z,4.1nm,0.7s,baz=41,slow=5.6,SNR=15 | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **71.46** | **324** | *i*P | **P** | **10 32 59.9** | **+0.1** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **AKBB** | **Malin Array Si** | **71.46** | **324** | P | **P** | **10 32 59.1** | **-0.7** |
| AKBB | | | | IAmb | IAmb | 10 33 00.9 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **AKBB** | **Malin Array Si** | **71.46** | **324** | *ce*P | **P** | **10 32 59.4** | **-0.4** |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **KIEV** | **Kiev** | **71.47** | **324** | P | **P** | **10 32 58.9** | **-1.0** |
| KIEV | | | | IAmb | IAmb | 10 33 00.9 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **KIEV** | **Kiev** | **71.47** | **324** | P | **P** | **10 32 58.9** | **-1.0** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ISCO** | **Idaho Springs** | **73.77** | **50** | P | **P** | **10 33 14.5** | **+0.3** |
| | baz=314 | | | | | | |
| **SDCO** | **Great Sand Dun** | **75.26** | **52** | P | **P** | **10 33 23.2** | **+0.4** |
| | baz=315 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **75.50** | **324** | P | **P** | **10 33 24.5** | **+0.7** |
| BUR08 | | | | IAmb | IAmb | 10 33 25.2 | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **BURAR** | **Bucovina Array** | **75.51** | **324** | P | **P** | **10 33 24.3** | **+0.5** |
| **ECSD** | **EROS Data Cent** | **75.62** | **42** | P | **P** | **10 33 25.0** | **+0.6** |
| | baz=318 | | | | | | |
| **MORC** | **Moravsky Berou** | **76.83** | **329** | P | **P** | **10 33 31.3** | **+0.1** |
| MORC | | | | IAmb | IAmb | 10 33 33.0 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **MORC** | **Moravsky Berou** | **76.83** | **329** | *e*P | **P** | **10 33 32.2** | **+1.0** |
| **MORC** | **Moravsky Berou** | **76.83** | **329** | P | **P** | **10 33 31.3** | **+0.1** |
| MORC | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **CLL** | **Collm** | **77.14** | **333** | *i*P | **P** | **10 33 33.1** | **+0.3** |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **CLL** | **Collm** | **77.14** | **333** | *i*P | **P** | **10 33 33.1** | **+0.3** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **SCHQ** | **Schefferville** | **77.28** | **20** | P | **P** | **10 33 33.9** | **+0.3** |
| | comp=Z,1.8nm,0.7s,baz=207,slow=17,SNR=3.6 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **VRAC** | **Vranov** | **77.57** | **330** | *e*P | **P** | **10 33 36.5** | **+1.2** |
| **EKA** | **Eskdalemuir Ar** | **77.90** | **343** | P | **P** | **10 33 36.0** | **-0.9** |
| | comp=Z,3.5nm,0.7s,baz=16,slow=5.4,SNR=11 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **KHC** | **Kasperske Hory** | **78.80** | **331** | P | **P** | **10 33 42.2** | **+0.1** |
| **KHC** | **Kasperske Hory** | **78.80** | **331** | *ce*P | **P** | **10 33 42.7** | **+0.6** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **CONA** | **Conrad Observa** | **78.99** | **329** | *i*P | **P** | **10 33 44.2** | **+1.0** |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **79.00** | **331** | P | **P** | **10 33 43.2** | **0.0** |
| | comp=Z,0.5nm,0.4s,baz=123,slow=4.9,SNR=5.2 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **RONA** | **Rosalia, Austr** | **79.02** | **329** | *e*P | **P** | **10 33 44.7** | **+1.4** |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **MOA** | **Molln** | **79.64** | **330** | *i*P | **P** | **10 33 47.1** | **+0.4** |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **SOKA** | **Soboth** | **80.35** | **329** | *e*P | **P** | **10 33 50.3** | **-0.3** |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **80.57** | **331** | *e*P | **P** | **10 33 52.1** | **+0.4** |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **KBA** | **Koelnbreinsper** | **80.62** | **330** | *i*P | **P** | **10 33 52.2** | **0.0** |
| | comp=Z,2.1nm,0.4s | | | | | | |
| **WATA** | **Walderalm** | **81.03** | **331** | *e*P | **P** | **10 33 54.5** | **+0.2** |
| | comp=Z,1.6nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **81.07** | **331** | *e*P | **P** | **10 33 54.4** | **-0.1** |
| | comp=Z,2.4nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **81.18** | **332** | *i*P | **P** | **10 33 55.5** | **+0.4** |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **SQTA** | **Sankt Quirin** | **81.25** | **331** | *e*P | **P** | **10 33 55.4** | **0.0** |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **82.33** | **56** | P | **P** | **10 34 03.0** | **+1.6** |
| | comp=Z,0.2nm,0.6s,baz=320,slow=2.7,SNR=4.3 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **82.33** | **56** | P | **P** | **10 34 03.0** | **+1.6** |
| **OXF** | **Oxford** | **86.28** | **44** | P | **P** | **10 34 20.6** | **-0.5** |
| | baz=323 | | | | | | |
| **LRAL** | **Lakeview Retre** | **88.66** | **43** | P | **P** | **10 34 32.3** | **-0.2** |
| | baz=324 | | | | | | |
| **H03N2** | **Juan Fernandez** | **142.77** | **90** | T | T | 13 20 15.2 | |
| | baz=304,slow=77,SNR=3.1 | | | | | | |
| **H03N3** | **Juan Fernandez** | **142.78** | **90** | T | T | 13 20 10.2 | |
| | baz=304,slow=77,SNR=5.4 | | | | | | |
| **H03N1** | **Juan Fernandez** | **142.78** | **90** | T | T | 13 20 16.4 | |
| | baz=304,slow=77,SNR=3.0 | | | | | | |

**JMA 12 10:42:53.4±0.2,29°N±1°×12°8E±°,h252km,MV3.5/23,NW OFF AMAMI-OSHIMA IS,Northwest of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTAJ** | **Takarajima** | **0.67** | **104** | P | Pn | 10 43 27.2 | +0.2 |
| **JAMN** | **Amaminishikomi** | **1.25** | **149** | P | Pn | 10 43 30.3 | +0.2 |
| JAMN | | | | *e*S | S | 10 43 59.1 | 0.0 |
| **JAM** | **Amami Oshima** | **1.36** | **132** | P | Pn | 10 43 31.2 | +0.4 |
| JAM | | | | S | S | 10 43 58.9 | -1.4 |
| **JTK** | **Tokunoshima** | **1.59** | **164** | P | Pn | 10 43 32.8 | +0.2 |
| JTK | | | | S | S | 10 44 02.4 | -1.2 |
| **JOKE** | **Okinoerabujima** | **1.96** | **177** | *e*P | Pn | 10 43 35.6 | -0.1 |
| JOKE | | | | *e*S | S | 10 44 08.0 | -1.1 |
| **JYAK** | **Yakushimahirau** | **2.00** | **62** | S | S | 10 44 06.7 | -2.9 |
| **JYRO** | **Yoronjima** | **2.29** | **180** | *e*P | Pn | 10 43 39.0 | +0.3 |
| JYRO | | | | S | S | 10 44 12.3 | -2.3 |
| **JIH** | **Iheya** | **2.32** | **191** | P | Pn | 10 43 38.8 | -0.2 |
| **JOW** | **Kunigami** | **2.49** | **184** | P | Pn | 10 43 40.5 | -0.2 |
| **JTN** | **Tanegashima 3** | **2.56** | **58** | P | Pn | 10 43 40.9 | -0.4 |
| **JNTH** | **Nagotoyohara** | **2.82** | **188** | P | Pn | 10 43 44.2 | +0.1 |
| JNTH | | | | S | S | 10 44 21.9 | -2.3 |
| **JKE** | **Kume jima 2** | **3.33** | **207** | *e*S | S | 10 44 32.7 | -1.6 |
| **JTZ** | **Takazaki** | **3.43** | **41** | P | Pn | 10 43 50.5 | -0.1 |
| JTZ | | | | S | S | 10 44 33.1 | -2.9 |
| **JIU3** | **Izumi3** | **3.80** | **32** | P | Pn | 10 43 55.3 | +0.4 |

*DJA* ***12*** *10:45:55.1±3.2,0°N±41°×13°8E±2°0,h10km,M4.7/5, mB4.5/1,mb4.4/5,MLv4.8/2,Mw(mB)3.7/1*
*IDC* ***12*** *10:46:12.2±0.7,1.26S×138.54E,h0km,mb4.1/12, mbtmp4.1/12,MS3.5/30,Error ellipse: s-maj=33.2km s-min=11.3km az=83.0*
*NEIC* ***12*** *10:46:17.3±1.6,1.30S±0.07×138.6E±0.1,h34km±4km, mb4.7/42,Error ellipse: s-maj=17.3km s-min=8.9km az=67.0*

**ISC 12 10:46:17.0±0.4,1.34S±0.06×138.63E±0.07,h35km,n100, σ1§16/81,mb4.7/41,MS3.5/28,1C-2D,Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **1.98** | **129** | P | **Pn** | **10 46 48.1** | **0.0** |
| **JAY** | **Jayapura** | **2.38** | **119** | P | **Pn** | **10 46 52.0** | **-1.7** |
| **FAKI** | **Fak Fak** | **6.56** | **256** | Pn | **Pn** | **10 47 50.6** | **-0.6** |
| **PMG** | **Port Moresby** | **11.68** | **134** | LR | LR | 10 55 21.4 | |
| | comp=Z,282nm,18.4s,baz=342,slow=47 | | | | | | |
| **COEN** | **Coen** | **13.32** | **160** | Pn | **Pn** | **10 49 22.4** | **-1.5** |
| **MTN** | **Manton Dam** | **13.63** | **213** | Pn | **Pn** | **10 49 26.2** | **-1.8** |
| **GUMO** | **Guam** | **16.07** | **22** | LR | LR | 10 54 41.3 | |
| | comp=Z,60nm,19.5s,baz=204,slow=32 | | | | | | |
| **SOEI** | **Soe** | **16.55** | **239** | | **Pn** | **10 50 05.0** | **-1.7** |
| SOEI | | | | IAmb | IAmb | 10 50 26.8 | |
| | comp=Z,142nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **17.25** | **214** | Pn | **Pn** | **10 50 14.0** | **-1.4** |
| **WRAB** | **Tennant Creek** | **18.95** | **192** | P | **P** | **10 50 35.7** | **+0.4** |
| WRAB | | | | IAmb | IAmb | 10 50 41.3 | |
| | comp=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **USRK** | **Ussuriysk Ar.** | **45.72** | **353** | P | **P** | **10 54 33.9** | **-0.9** |
| **USRK** | **Ussuriysk Ar.** | **45.72** | **353** | P | **P** | **10 54 34.3** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=184,slow=5.8,SNR=7.8 | | | | | | |
| USRK | | | | LR | LR | 11 10 11.3 | |
| | comp=Z,92nm,21.6s,baz=191,slow=32 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **BNX** | **BinXian** | **47.92** | **349** | ⇑P | **P** | **10 54 51.8** | **-0.1** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **48.68** | **333** | *e*P | **P** | **10 54 59.3** | **+1.3** |
| HHC | | | | pP | pP | 10 55 07.8 | -0.1 |
| HHC | | | | sP | pwP | 10 55 13.8 | +3.4 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,40nm,5.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,100nm,17.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,130nm,14.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,110nm,15.8s | | | | | | |
| **LZH** | **Lanzhou** | **49.34** | **322** | *e*P | P | 10 55 09.7 | +6.4 |
| LZH | | | | pP | pwP | 10 55 21.2 | +5.3 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **50.72** | **354** | LR | LR | 11 13 27.2 | |
| | comp=Z,57nm,21.5s,baz=186,slow=32 | | | | | | |
| **URZ** | **Urewera** | **50.92** | **141** | LR | LR | 11 17 01.0 | |
| | comp=Z,46nm,18.9s,baz=30,slow=36 | | | | | | |
| **HEH** | **HeiHe** | **52.28** | **351** | *e*P | **P** | **10 55 25.0** | **+0.1** |
| **GTA** | **Gaotai** | **53.92** | **323** | *e*P | **P** | **10 55 38.4** | **+1.0** |
| GTA | | | | pP | pP | 10 55 44.1 | -3.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.19** | **335** | P | **P** | **10 55 53.2** | **-0.5** |
| ULN | | | | IAmb | IAmb | 10 56 00.7 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **56.45** | **334** | P | **P** | **10 55 54.8** | **-0.7** |
| **SONM** | **Songino Array** | **56.45** | **334** | P | **P** | **10 55 55.4** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=177,slow=8.2,SNR=4.8 | | | | | | |
| SONM | | | | LR | LR | 11 20 46.8 | |
| | comp=Z,80nm,18.9s,baz=121,slow=37 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **61.53** | **24** | LR | LR | 11 20 00.9 | |
| | comp=Z,27nm,20.5s,baz=247,slow=33 | | | | | | |
| **YAK** | **Yakutsk** | **63.57** | **355** | LR | LR | 11 21 29.7 | |
| | comp=Z,38nm,20.0s,baz=187,slow=33 | | | | | | |
| **CASY** | **Casey** | **67.79** | **192** | P | **P** | **10 57 11.1** | **+0.1** |
| CASY | | | | IAmb | IAmb | 10 57 53.7 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **68.66** | **322** | P | **P** | **10 57 16.4** | **-0.5** |
| MK31 | | | | IAmb | IAmb | 10 57 24.7 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.66** | **322** | P | **P** | **10 57 16.0** | **-1.0** |
| **MKAR** | **Makanchi Array** | **68.66** | **322** | P | **P** | **10 57 16.8** | **-0.1** |
| | comp=Z,1.3nm,0.9s,baz=113,slow=6.6,SNR=7.9 | | | | | | |
| MKAR | | | | LR | LR | 11 29 07.7 | |
| | comp=Z,22nm,18.9s,baz=131,slow=38 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **KSH** | **Kashi** | **70.09** | **313** | P | **P** | **10 57 27.6** | **+1.5** |
| KSH | | | | pP | pwP | 10 57 37.7 | +1.1 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.71** | **330** | P | **P** | **10 57 28.7** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=120,slow=6.5,SNR=3.7 | | | | | | |
| ZALV | | | | LR | LR | 11 28 05.8 | |
| | comp=Z,30nm,21.4s,baz=73,slow=36 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **72.17** | **316** | LR | LR | 11 29 01.5 | |
| | comp=Z,20nm,21.3s,baz=115,slow=36 | | | | | | |
| **KURK** | **Kurchatov** | **72.55** | **325** | P | **P** | **10 57 39.0** | **-1.5** |
| KURK | | | | IAmb | IAmb | 10 57 47.2 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.56** | **325** | P | **P** | **10 57 40.8** | **+0.2** |
| | comp=Z,2.2nm,1.0s,baz=112,slow=7.3,SNR=8.8 | | | | | | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **GAR** | **Garm** | **74.13** | **311** | P | **P** | **10 57 49.3** | **-1.0** |
| **SIMJ** | **Simiganj** | **75.04** | **311** | P | **P** | **10 57 55.8** | **+0.2** |
| SIMJ | | | | IAmb | IAmb | 10 58 02.9 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **KK31** | **Karatay Array** | **75.10** | **315** | P | **P** | **10 57 55.5** | **-0.2** |
| **KKAR** | **Karatay Array** | **75.10** | **315** | P | **P** | **10 57 55.1** | **-0.6** |
| **VNDA** | **Vanda** | **77.15** | **175** | P | **P** | **10 58 07.2** | **+0.6** |
| **VNDA** | **Vanda** | **77.15** | **175** | P | **P** | **10 58 07.5** | **+0.9** |
| | comp=Z,2.1nm,0.8s,baz=318,slow=6.2,SNR=17 | | | | | | |
| VNDA | | | | LR | LR | 11 32 21.1 | |
| | comp=Z,79nm,18.6s,baz=342,slow=36 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **78.14** | **325** | P | **P** | **10 58 12.8** | **+0.2** |
| | comp=Z,2.2nm,0.6s,baz=89,slow=7.6,SNR=14 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **78.22** | **325** | P | **P** | **10 58 12.6** | **-0.5** |
| BRVK | | | | IAmb | IAmb | 10 58 20.1 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **G19K** | **Purcell Mounta** | **81.07** | **22** | P | **P** | **10 58 27.1** | **-1.1** |
| G19K | | | | IAmb | IAmb | 10 58 39.6 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **E19K** | **Redstone River** | **81.56** | **21** | P | **P** | **10 58 31.6** | **+0.7** |
| E19K | | | | IAmb | IAmb | 10 58 41.0 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **81.70** | **19** | P | **P** | **10 58 31.8** | **+0.2** |
| D19K | | | | IAmb | IAmb | 10 58 39.7 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **81.93** | **21** | P | **P** | **10 58 32.9** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **82.73** | **25** | P | **P** | **10 58 36.0** | **-1.1** |
| **ABKAR** | **Akbulak array** | **83.62** | **320** | P | **P** | **10 58 41.6** | **-0.3** |
| ABKAR | | | | IAmb | IAmb | 10 58 48.7 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **83.62** | **320** | P | **P** | **10 58 41.6** | **-0.3** |
| **G23K** | **Bananza Creek** | **83.92** | **22** | P | **P** | **10 58 43.9** | **+0.7** |
| G23K | | | | IAmb | IAmb | 10 58 51.8 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **83.96** | **18** | P | **P** | **10 58 43.3** | **+0.1** |
| **CCB** | **Clear Creek Bu** | **84.21** | **25** | P | **P** | **10 58 43.7** | **-1.0** |
| **ILAR** | **Eielson Array** | **84.63** | **25** | P | **P** | **10 58 46.5** | **-0.3** |
| | comp=Z,0.6nm,0.9s,baz=258,slow=4.5,SNR=5.0 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **84.67** | **20** | P | **P** | **10 58 48.0** | **+1.0** |
| TOLK | | | | IAmb | IAmb | 10 58 55.9 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| **C23K** | **Itkillik River** | **84.69** | **19** | P | **P** | **10 58 47.1** | **+0.2** |
| **F24K** | **Squaw Lake** | **84.96** | **22** | P | **P** | **10 58 48.0** | **-0.4** |
| F24K | | | | IAmb | IAmb | 10 58 51.6 | |
| | comp=Z,7.9nm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **85.08** | **20** | P | **P** | **10 58 49.3** | **+0.3** |
| **D25K** | **Kavik River** | **85.97** | **20** | P | **P** | **10 58 53.7** | **+0.3** |
| D25K | | | | IAmb | IAmb | 10 59 01.6 | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **86.17** | **22** | P | **P** | **10 58 56.1** | **+1.6** |
| **EGAK** | **Eagle** | **87.03** | **25** | P | **P** | **10 58 56.7** | **-1.9** |
| EGAK | | | | IAmb | IAmb | 10 59 07.0 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **87.64** | **24** | P | **P** | **10 59 02.2** | **+0.4** |
| **DAWY** | **Dawson** | **87.68** | **26** | P | **P** | **10 59 02.0** | **+0.1** |
| DAWY | | | | IAmb | IAmb | 10 59 10.5 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **88.31** | **25** | P | **P** | **10 59 05.9** | **+1.1** |
| **N30M** | **Aishikik Lake** | **88.42** | **29** | P | **P** | **10 59 06.0** | **+0.5** |
| **QSPA** | **South Pole Qui** | **88.60** | **180** | P | **P** | **10 59 06.5** | **+0.2** |
| **QSPA** | **South Pole Qui** | **88.60** | **180** | P | **P** | **10 59 07.6** | **+1.3** |
| | comp=Z,3.4nm,1.0s,baz=310,slow=2.4,SNR=8.0 | | | | | | |
| QSPA | | | | LR | LR | 11 38 06.9 | |
| | comp=Z,77nm,21.2s,baz=304,slow=35 | | | | | | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **J30M** | **Hart River** | **89.06** | **25** | P | **P** | **10 59 07.6** | **-0.9** |
| J30M | | | | IAmb | IAmb | 10 59 18.8 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **KIRV** | **Kirov** | **90.72** | **328** | LR | LR | 11 41 27.8 | |
| | comp=Z,39nm,19.8s,baz=89,slow=37 | | | | | | |
| **BELG** | **Belogornoye** | **91.66** | **322** | LR | LR | 11 42 32.1 | |
| | comp=Z,16nm,20.4s,baz=84,slow=37 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **97.62** | **350** | LR | LR | 11 42 23.9 | |
| | comp=Z,23nm,21.9s,baz=16,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **99.19** | **341** | LR | LR | 11 50 16.3 | |
| | comp=Z,8.9nm,19.8s,baz=350,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **135.78** | **287** | PKP | **PKiKP** | **11 05 36.2** | **-0.5** |
| | comp=Z,0.6nm,1.0s,baz=84,slow=1.8,SNR=2.6 | | | | | | |
| **LPAZ** | **La Paz** | **148.31** | **125** | PKPbc | **PKPbc** | **11 06 02.3** | **+0.8** |
| | comp=Z,6.3nm,0.9s,baz=330,slow=1.6,SNR=7.1 | | | | | | |
| **CPUP** | **Villa Florida** | **148.47** | **152** | PKPbc | **PKPbc** | **11 06 02.1** | **+1.3** |
| | comp=Z,3.0nm,1.0s,baz=26,slow=3.8,SNR=3.3 | | | | | | |

*UPA* ***12*** *11:22:57.9±3.6, 10°.66N×83°.69W, h1km±999km*
*CATAC* ***12*** *11:22:58.8±0.4, 9°.46N×84°.61W, h11km±2km, ML3.7*

*UCR* ***12*** *11:22:59.4±1.1, 9°.46N×84°.61W, h22km±4km, MW3.8*
**ISC 12 11:22:58.2±1.1, 9°43N±0°.03×84°60W±0°.02, h14km±9km, n79, σ0°62/95, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BITO** | **Garabito Jaco** | **0.19** | **354** | *e*P | **Pb** | **11 23 03.6** | **+0.1** |
| **RITA** | **Parrita** | **0.28** | **70** | *e*P | **Pb** | **11 23 05.5** | **+0.4** |
| **LLNJ** | **Naranjito** | **0.50** | **84** | *e*P | **Pb** | **11 23 09.0** | **+0.3** |
| **TRB2** | **Turrubares** | **0.51** | **17** | *e*P | **Pb** | **11 23 08.7** | **-0.2** |
| **CBL1** | **Cabuya** | **0.51** | **288** | *e*P | **Pb** | **11 23 08.8** | **-0.1** |
| CBL1 | | | | *e*S | **Sb** | **11 23 16.9** | **+0.7** |
| **ACOS** | **Acosta** | **0.57** | **49** | *e*P | **Pb** | **11 23 09.9** | **0.0** |
| **ABE2** | **San Pablo** | **0.61** | **63** | *e*P | **Pb** | **11 23 10.9** | **+0.2** |
| **SANTA** | **Santa Ana** | **0.65** | **39** | *e*P | **Pb** | **11 23 11.3** | **-0.1** |
| **LCR2** | **La Lucha 2** | **0.67** | **62** | *i* P | **Pb** | **11 23 11.7** | **0.0** |
| LCR2 | | | | *i* S | **Sn** | **11 23 22.1** | **-1.6** |
| LCR2 | | | | IAML | | 11 23 24.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **0.67** | **62** | *e*P | **Pb** | **11 23 11.5** | **-0.2** |
| **SRA1** | **San Ramn** | **0.67** | **10** | *e*P | **Pb** | **11 23 11.3** | **-0.3** |
| **TCS1** | **Tacares** | **0.68** | **26** | *i* P | **Pb** | **11 23 12.2** | **+0.3** |
| TCS1 | | | | IAML | | 11 23 28.3 | |
| | comp=Z,13μm,1.0s | | | | | | |
| **TCS1** | **Tacares** | **0.68** | **26** | *e*P | **Pb** | **11 23 12.1** | **+0.3** |
| **BELE** | **Belen** | **0.68** | **37** | *e*P | **Pb** | **11 23 11.7** | **-0.2** |
| **NARAN** | **Naranjo de Ala** | **0.70** | **18** | *e*P | **Pn** | **11 23 13.4** | **-0.4** |
| **GREC** | **Grecia** | **0.70** | **24** | *e*P | **Pn** | **11 23 13.5** | **-0.4** |
| **SARCI** | **Sarchi** | **0.71** | **21** | *e*P | **Pb** | **11 23 12.7** | **+0.4** |
| **AMPA** | **Desamparados** | **0.71** | **49** | *e*P | **Pn** | **11 23 13.2** | **-0.7** |
| **CENT** | **San Jose** | **0.72** | **46** | *e*P | **Pn** | **11 23 13.5** | **-0.6** |
| **LUJA** | **Lujan** | **0.72** | **46** | *e*P | **Pn** | **11 23 13.5** | **-0.5** |
| **MEXI** | **Barrio Mexico** | **0.72** | **45** | *e*P | **Pb** | **11 23 12.7** | **+0.1** |
| **SJS** | **Escuela Geolog** | **0.74** | **47** | *e*P | **Pb** | **11 23 12.9** | **0.0** |
| **SJS3** | **Mercedes San J** | **0.74** | **47** | *e*P | **Pb** | **11 23 13.0** | **+0.1** |
| **HDC** | **Heredia** | **0.75** | **40** | *e*P | **Pb** | **11 23 13.2** | **+0.2** |
| **DOMI** | **Santo Domingo** | **0.75** | **42** | *e*P | **Pb** | **11 23 13.0** | **0.0** |
| **LUPE** | **Guadalupe** | **0.75** | **46** | *e*P | **Pb** | **11 23 13.0** | **-0.1** |
| **HDC3** | **Heredia 3** | **0.75** | **40** | *i* P | **Pb** | **11 23 13.2** | **+0.1** |
| HDC3 | | | | *i* S | **Sb** | **11 23 22.9** | **-0.3** |
| HDC3 | | | | IAML | | 11 23 29.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **TRIO** | **Tres Rios** | **0.76** | **51** | *e*P | **Pb** | **11 23 13.2** | **-0.1** |
| **CORON** | **Coronado** | **0.80** | **47** | *e*P | **Pb** | **11 23 14.3** | **+0.3** |
| **REPA** | **Paraso** | **0.82** | **61** | *e*P | **Pn** | **11 23 15.5** | **0.0** |
| **BUS1** | **Rivas** | **0.85** | **81** | *e*P | **Pg** | **11 23 14.8** | **-0.1** |
| **CVIMO** | **Finca Echandi** | **0.88** | **47** | *e*P | **Pb** | **11 23 15.6** | **+0.2** |
| **ZELE** | **Perez Zeledon** | **0.88** | **93** | *e*P | **Pg** | **11 23 15.1** | **-0.2** |
| **MTEVE** | **Monteverde** | **0.92** | **346** | *e*P | **Pn** | **11 23 16.4** | **-0.3** |
| **PCAYA** | **Pacayas** | **0.92** | **58** | *e*P | **Pn** | **11 23 16.4** | **-0.5** |
| **JUNT** | **Juntas** | **0.92** | **337** | *e*P | **Pb** | **11 23 15.2** | **-0.8** |
| **JTS** | **Las Juntas de** | **0.93** | **338** | *e*P | **Pb** | **11 23 15.1** | **-0.9** |
| **VICA** | **Volcano Irazu** | **0.93** | **53** | *e*P | **Pb** | **11 23 16.6** | **+0.2** |
| **RAFA** | **San Farael, Vo** | **0.94** | **56** | *i* P | **Pb** | **11 23 16.3** | **-0.2** |
| RAFA | | | | IAML | | 11 23 17.7 | |
| | comp=Z,12μm,1.0s | | | | | | |
| RAFA | | | | *i* S | **Sn** | **11 23 30.5** | **-0.1** |
| **RAFA** | **San Farael, Vo** | **0.94** | **56** | *e*P | **Pb** | **11 23 16.7** | **+0.2** |
| **SOCE** | **Pocosol** | **0.95** | **359** | *i* P | **Pg** | **11 23 16.7** | **+0.1** |
| SOCE | | | | *i* S | **Sn** | **11 23 30.1** | **-0.4** |
| SOCE | | | | IAML | | 11 23 33.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **0.95** | **359** | *e*P | **Pg** | **11 23 16.4** | **-0.3** |
| **INDI** | **Punta indio, G** | **0.99** | **296** | *i* P | **Pn** | **11 23 18.0** | **+0.4** |
| INDI | | | | *i* S | **Sg** | **11 23 30.5** | **+0.1** |
| INDI | | | | IAML | | 11 23 35.4 | |
| | comp=Z,960nm,1.0s | | | | | | |
| **OCHAL** | **Ojochal** | **1.00** | **109** | *i* P | **Pn** | **11 23 18.3** | **+0.6** |
| OCHAL | | | | *i* S | **Sn** | **11 23 31.9** | **+0.3** |
| OCHAL | | | | IAML | | 11 23 31.9 | |
| | comp=Z,540nm,1.0s | | | | | | |
| **CVTQ** | **Turrialba Volc** | **1.00** | **55** | *e*P | **Pn** | **11 23 18.1** | **-0.1** |
| **TURIB** | **Turrialba** | **1.02** | **62** | *e*P | **Pn** | **11 23 18.0** | **-0.1** |
| **VTCV** | **VTCV, Calle Va** | **1.02** | **57** | *e*P | **Pg** | **11 23 18.0** | **-0.1** |
| **VERB** | **Verbena** | **1.03** | **60** | *e*P | **Pn** | **11 23 18.1** | **-0.2** |
| **ARE1** | **Arenal 1** | **1.03** | **354** | *e*P | **Pg** | **11 23 17.9** | **-0.3** |
| **TUNA** | **La Fortuna** | **1.04** | **358** | *e*P | **Pg** | **11 23 18.1** | **-0.2** |
| **VACR** | **Volcan Arenal** | **1.04** | **356** | *e*P | **Pg** | **11 23 18.1** | **-0.3** |
| **ITAL** | **Pital** | **1.07** | **18** | *e*P | **Pg** | **11 23 18.7** | **-0.2** |
| **RVSTA** | **Santa Teresita** | **1.09** | **60** | *e*P | **Pg** | **11 23 19.1** | **-0.1** |
| **NICO** | **Nicoya** | **1.09** | **310** | *e*P | **Pb** | **11 23 17.8** | **-1.0** |
| **LCOCO** | **El Coco** | **1.22** | **57** | *e*P | **Pg** | **11 23 21.6** | **-0.1** |
| **EDPN** | **Palmar Norte** | **1.22** | **112** | *e*P | **Pn** | **11 23 20.2** | **-0.6** |
| **IRES** | **Siquirres** | **1.27** | **58** | *e*P | **Pg** | **11 23 22.4** | **-0.2** |
| **SACU** | **Santa Cruz** | **1.28** | **311** | *e*P | **Pb** | **11 23 22.0** | **0.0** |
| **COVE** | **Coope Vega, Sa** | **1.30** | **9** | *i* P | **Pb** | **11 23 22.1** | **-0.3** |
| COVE | | | | *i* S | **Sn** | **11 23 39.1** | **0.0** |
| COVE | | | | IAML | | 11 23 46.7 | |
| | comp=Z,830nm,1.0s | | | | | | |
| **TENO** | **El Achiote** | **1.32** | **344** | *e*P | **Pn** | **11 23 21.6** | **-0.6** |
| **EDBA** | **Buenos Aires** | **1.33** | **101** | *e*P | **Pn** | **11 23 22.0** | **-0.4** |
| **CUI** | **Cuipilapa** | **1.34** | **336** | *e*P | **Pn** | **11 23 22.4** | **-0.2** |
| **DRK0** | **Durika** | **1.35** | **97** | *i* P | **Pn** | **11 23 22.7** | **0.0** |
| DRK0 | | | | *i* S | **Sg** | **11 23 41.3** | **-0.5** |
| DRK0 | | | | IAML | | 11 23 43.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **1.35** | **97** | *e*P | **Pn** | **11 23 22.8** | **+0.1** |
| **DELF** | **Filadelfia** | **1.38** | **317** | *e*P | **Pg** | **11 23 24.6** | **-0.3** |
| **VERA** | **Finca Concepci** | **1.44** | **349** | *e*P | **Pn** | **11 23 24.2** | **+0.3** |
| **EDP2** | **Potrero Grande** | **1.46** | **106** | *e*P | **Pn** | **11 23 24.4** | **+0.2** |
| **ALIBA** | **Liberia Airpor** | **1.49** | **321** | *e*P | **Pg** | **11 23 26.5** | **-0.4** |
| **ELI1** | **Hacienda Flor** | **1.53** | **322** | *e*P | **Pn** | **11 23 25.3** | **+0.2** |
| **VRLE** | **La Escondida,** | **1.55** | **331** | *e*P | **Pn** | **11 23 25.6** | **+0.1** |
| **BRIBI** | **Bribri** | **1.74** | **83** | *e*P | **Pg** | **11 23 31.5** | **-0.1** |
| **CDITO** | **Canoas** | **1.91** | **116** | *i* P | **Pn** | **11 23 31.6** | **+1.4** |
| CDITO | | | | *i* S | **Sb** | **11 23 56.2** | **-0.2** |
| CDITO | | | | IAML | | 11 24 25.9 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.99** | **108** | *i* P | **Pb** | **11 23 33.5** | **-0.7** |
| BRU2 | | | | *i* S | **Sb** | **11 23 59.0** | **+0.1** |
| BRU2 | | | | IAML | | 11 24 11.7 | |
| | comp=Z,280nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.99** | **108** | *e*P | **Pn** | **11 23 32.3** | **+0.8** |
| BRU2 | | | | *e*S | **Sg** | **11 24 03.6** | **+1.3** |
| **BCO2** | **Palmira** | **2.16** | **109** | *e*P | **Pb** | **11 23 36.2** | **-1.0** |
| BCO2 | | | | *e*S | **Sb** | **11 24 05.2** | **+1.2** |
| **CHGR2** | **Aguacate** | **2.47** | **101** | *e*P | **Pn** | **11 23 38.9** | **+0.8** |
| CHGR2 | | | | *e*S | **Sn** | **11 24 05.0** | **-3.1** |
| **ACON** | **Acoyapa** | **2.59** | **347** | *i* P | **Pn** | **11 23 40.5** | **+0.9** |
| ACON | | | | *i* S | **Sn** | **11 24 12.4** | **+1.5** |
| ACON | | | | IAML | | 11 24 28.5 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **2.59** | **347** | *e*P | **Pn** | **11 23 40.4** | **+0.8** |
| **BLUN** | **Bluefields** | **2.69** | **17** | *i* P | **Pn** | **11 23 41.4** | **+0.4** |
| BLUN | | | | *i* S | **Sn** | **11 24 14.7** | **+1.3** |
| BLUN | | | | IAML | | 11 24 18.3 | |
| | comp=Z,140nm,1.0s | | | | | | |

**NOU 12 12:07:42.5, 18°84S×169°76E, h194km, ML3.7/12,**
**Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTV** | **Rentapao** | **1.64** | **309** | P | Pn | 12 08 19.0 | +2.0 |
| **DVP** | **Devils Point** | **1.86** | **306** | P | Pn | 12 08 20.5 | +1.4 |
| **LIFNC** | **LIFOU** | **3.06** | **230** | P | Pn | 12 08 31.1 | -1.4 |
| **MARNC** | **Mare, Loyalty** | **3.09** | **211** | P | Pn | 12 08 32.9 | 0.0 |
| **YATNC** | **Mamie plateau,** | **4.18** | **220** | P | Pn | 12 08 45.4 | -1.0 |
| **PINNC** | **Pines Island,** | **4.33** | **210** | P | Pn | 12 08 49.5 | +1.3 |
| **DZM** | **Mont Dzumac** | **4.47** | **223** | P | Pn | 12 08 49.2 | -0.9 |
| **NOUC** | **Port Laguerre** | **4.59** | **224** | P | Pn | 12 08 52.3 | +0.8 |
| **KOUNC** | **Koumac, New Ca** | **5.43** | **251** | P | Pn | 12 09 03.6 | +1.3 |

*SDD* ***12*** *12:27:00.9±3.9, 20°.19N×70°.83W, h18km±63km, MD3.4, ML3.0, MW3.6*
*OSPL* ***12*** *12:27:02.8±2.6, 20°.08N×70°.93W, h0km±11km, ML2.7*
**ISC 12 12:27:01.2±1.2, 20°11N±0°.04×70°89W±0°.05, h12km±9km, n15, σ1°19/27, 9C-7D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SODR** | **Sosua Marina B** | **0.47** | **140** | *e*Pg | **Pg** | **12 27 10.8** | **+0.4** |
| SODR | | | | ⇓*e*Sg | **Sg** | **12 27 17.6** | **+1.0** |
| SODR | | | | IAML | | 12 27 19.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| **SC01** | **Santiago de lo** | **0.70** | **167** | ⇑*e*Pg | **Pg** | **12 27 13.9** | **-0.9** |
| SC01 | | | | ⇓*e*Sg | **Sg** | **12 27 24.8** | **+0.7** |
| SC01 | | | | IAML | | 12 27 34.2 | |
| | comp=N,424nm,0.3s | | | | | | |
| **SC01** | **Santiago de lo** | **0.70** | **167** | *i* P | **Pg** | **12 27 14.2** | **-0.6** |
| SC01 | | | | *e*S | **Sg** | **12 27 24.7** | **+0.7** |
| SC01 | | | | IAML | | 12 27 28.1 | |
| | comp=Z,337nm,0.6s | | | | | | |
| **REDR** | **Restauracion** | **1.05** | **207** | ⇑*e*Pg | **Pg** | **12 27 21.6** | **+0.1** |
| REDR | | | | ⇑*e*Sg | **Sn** | **12 27 38.2** | **+1.7** |
| REDR | | | | IAML | | 12 27 39.3 | |
| | comp=N,173nm,0.7s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.19** | **198** | ⇑*e*Pg | **Pb** | **12 27 21.7** | **-1.9** |
| SDDR | | | | ⇓*e*Sg | **Sb** | **12 27 38.2** | **-0.9** |
| SDDR | | | | IAML | | 12 27 41.8 | |
| | comp=N,161nm,0.6s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.19** | **198** | *i* P | **Pb** | **12 27 21.8** | **-1.9** |
| SDDR | | | | *e*S | **Sb** | **12 27 38.2** | **-0.9** |
| SDDR | | | | IAML | | 12 27 41.2 | |
| | comp=Z,147nm,0.3s | | | | | | |
| **NADR** | **Nagua** | **1.23** | **128** | ⇑*e*Pg | **Pn** | **12 27 22.4** | **-1.9** |
| NADR | | | | ⇑*e*Sg | **Sb** | **12 27 40.9** | **+0.5** |
| NADR | | | | IAML | | 12 27 42.2 | |
| | comp=N,651nm,0.3s | | | | | | |
| **GRTK** | **Grand Turk** | **1.41** | **351** | *e*Pg | **Pn** | **12 27 25.9** | **-0.9** |
| GRTK | | | | IAML | | 12 27 52.6 | |
| | comp=N,87nm,0.4s | | | | | | |
| **GRTK** | **Grand Turk** | **1.41** | **351** | *i* P | **Pn** | **12 27 26.7** | **0.0** |
| GRTK | | | | *e*S | **Sg** | **12 27 48.4** | **+1.8** |
| GRTK | | | | IAML | | 12 27 51.9 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **BANI** | **BANI** | **1.79** | **163** | ⇑*e*Pg | **Pn** | **12 27 31.6** | **-0.4** |
| BANI | | | | ⇑*e*Sg | **Sn** | **12 27 55.4** | **+0.8** |
| **JIDR** | **Jimani** | **1.85** | **209** | ⇑*e*Sg | **Sb** | **12 27 59.1** | **+1.0** |
| JIDR | | | | IAML | | 12 28 01.0 | |
| | comp=N,97nm,0.3s | | | | | | |
| **SDD** | **Santo Domingo** | **1.89** | **151** | *e*S | **Sn** | **12 27 57.4** | **+0.3** |
| **PODR** | **Polo** | **1.97** | **191** | *e*Pg | **Pn** | **12 27 36.1** | **+1.4** |
| PODR | | | | ⇓*e*Sg | **Sg** | **12 28 05.8** | **+1.2** |
| PODR | | | | IAML | | 12 28 06.8 | |
| | comp=N,91nm,1.0s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **2.03** | **185** | ⇓*e*Pg | **Pn** | **12 27 35.1** | **-0.2** |
| LOBA2 | | | | ⇓*e*Sg | **Sb** | **12 28 04.6** | **+1.3** |
| **HIDR** | **Higuey Centro** | **2.55** | **126** | *e*Pg | **Pn** | **12 27 44.1** | **+1.6** |
| HIDR | | | | ⇓*e*Sg | **Sn** | **12 28 14.0** | **+0.5** |
| HIDR | | | | IAML | | 12 28 14.9 | |
| | comp=N,192nm,0.3s | | | | | | |

*IDC* ***12*** *12:29:14.9±1.8, 35°.51N×141°.56E, h0km, mb3.7/5, mbtmp3.7/8, ML3.0/3, MS2.8/4, Error ellipse: s-maj=40.1km s-min=22.7km az=76.0*
*JMA* ***12*** *12:29:19.1±0.2, 35°.5N±0°.6×14°.1E±°, h32km±1km, MV3.0/37, NEAR CHOSHI CITY*
**ISC 12 12:29:20.3±1.2, 35°41N±0°.06×141°3E±0°.1, h35km, n24, σ1°64/21, mb3.7/5, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSMT** | **Sammumatsuo** | **0.74** | **289** | P | **Pn** | **12 29 32.8** | **-1.4** |
| **BSO1** | **Boso 1** | **0.80** | **200** | P | **Pn** | **12 29 34.3** | **-0.3** |
| **JIHU** | **Itakohorinouch** | **0.84** | **311** | P | **Pn** | **12 29 34.5** | **-1.2** |
| **KTR** | **Katsuura** | **0.85** | **252** | *e*P | **Pn** | **12 29 34.7** | **-1.1** |
| KTR | | | | *e*S | **Sn** | **12 29 45.4** | **-1.6** |
| **BSO3** | **Boso 3** | **0.89** | **227** | *i* P | **Pn** | **12 29 35.6** | **-0.4** |
| BSO3 | | | | *e*X | | 12 29 47.0 | |
| **BSO4** | **Boso 4** | **0.90** | **242** | *e*P | **Pn** | **12 29 35.7** | **-0.7** |
| **JCN** | **Nagara** | **0.90** | **271** | P | **Pn** | **12 29 36.1** | **-0.4** |
| **JYT** | **Yasato** | **1.22** | **312** | *e*P | **Pn** | **12 29 39.2** | **-1.7** |
| **JAG** | **Ashikaga** | **1.81** | **305** | *e*P | **Pn** | **12 29 48.1** | **-0.9** |
| **JOD2** | **Odawara 2** | **1.82** | **266** | P | **Pn** | **12 29 47.8** | **-1.4** |
| **JHJ** | **Hachijo jima 2** | **2.61** | **209** | Pn | **Pn** | **12 30 01.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NWF | | | *i* S | | **Sg** | 12 59 53.9 | -0.1 | |
| | baz=295 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.79 292** | *i* P | | **Pb** | 12 59 44.1 | -0.1 | |
| WFSB | baz=295 | | *e*S | | **Sg** | 12 59 54.3 | +0.4 | |
| **NDS** | **Dongshan** | **0.81 260** | *e*P | | **Pb** | 12 59 44.6 | +0.1 | |
| NDS | baz=257 | | *e*S | | **Sg** | 12 59 55.0 | +0.6 | |
| **EWUT** | **Wuta** | **0.81 246** | *i* P | | **Pb** | 12 59 44.5 | +0.1 | |
| EWUT | baz=240 | | S | | **Sg** | 12 59 54.5 | +0.1 | |
| **TWE** | **Neicheng** | **0.84 266** | *i* P | | **Pg** | 12 59 44.7 | +0.1 | |
| TWE | baz=264 | | *i* S | | **Sg** | 12 59 54.8 | -0.7 | |
| **ENA** | **Nanau** | **0.84 246** | *i* P | | **Pb** | 12 59 45.1 | 0.0 | |
| ENA | baz=240 | | *e*S | | **Sg** | 12 59 55.5 | -0.2 | |
| **EAHA** | **Aohua** | **0.89 240** | P | | **Pb** | 12 59 46.2 | +0.2 | |
| EAHA | baz=234 | | *e*S | | **Sg** | 12 59 57.0 | -0.2 | |
| **FUSB** | **Fushanzhiwuyua** | **0.91 269** | *e*P | | **Pb** | 12 59 46.7 | +0.4 | |
| FUSB | baz=268 | | S | | **Sg** | 12 59 57.4 | -0.3 | |
| **TWA** | **Mucha** | **0.93 283** | P | | **Pg** | 12 59 46.6 | +0.2 | |
| TWA | baz=283 | | S | | **Sg** | 12 59 57.7 | -0.9 | |
| **ENTT** | **Nioudou** | **0.94 262** | P | | **Pn** | 12 59 47.5 | -0.1 | |
| ENTT | baz=259 | | *e*S | | **Sb** | 12 59 59.6 | +0.3 | |
| **NHY** | **Taipei** | **0.96 286** | *i* P | | **Pg** | 12 59 47.0 | +0.1 | |
| NHY | baz=287 | | *e*S | | **Sg** | 12 59 59.3 | -0.1 | |
| **NHDH** | **Xindian Distri** | **0.98 281** | P | | **Pg** | 12 59 46.9 | -0.5 | |
| NHDH | baz=282 | | S | | **Sg** | 12 59 59.3 | -0.8 | |
| **NDT** | **Datong Townshi** | **0.99 260** | *e*P | | **Pn** | 12 59 48.2 | -0.2 | |
| NDT | baz=257 | | S | | **Sg** | 13 00 00.0 | -0.4 | |
| **YM08** | **YM08** | **0.99 295** | *e*P | | **Pn** | 12 59 48.6 | +0.2 | |
| YM08 | baz=297 | | *e*S | | **Sb** | 13 00 01.9 | +1.1 | |
| **LATG** | **Datong** | **0.99 256** | P | | **Pb** | 12 59 48.0 | +0.2 | |
| LATG | baz=253 | | *i* S | | **Sg** | 13 00 00.2 | -0.3 | |
| **YM01** | **YM01** | **0.99 292** | P | | **Pg** | 12 59 47.5 | 0.0 | |
| YM01 | baz=294 | | S | | **Sg** | 12 59 59.6 | -0.9 | |
| **ANP** | **Anpu** | **1.05 293** | *e*P | | **Pn** | 12 59 49.6 | +0.3 | |
| **ETL** | **Fush Village** | **1.07 235** | P | | **Pn** | 12 59 49.5 | 0.0 | |
| ETL | baz=229 | | *e*S | | **Sb** | 13 00 03.7 | +0.6 | |
| **NACB** | **Ninganchiao** | **1.09 237** | P | | **Pg** | 12 59 49.2 | -0.1 | |
| NACB | baz=231 | | S | | **Sg** | 13 00 03.5 | +0.1 | |
| **NTST** | **Danshui** | **1.10 291** | *e*S | | **Sg** | 13 00 03.4 | -0.5 | |
| **YHNB** | **Yeheng** | **1.11 265** | P | | **Pb** | 12 59 49.8 | +0.1 | |
| YHNB | baz=263 | | S | | **Sg** | 13 00 03.2 | -0.9 | |
| **TWS1** | **Kuangyinshan** | **1.11 287** | P | | **Pg** | 12 59 49.9 | +0.2 | |
| TWS1 | baz=288 | | *e*S | | **Sb** | 13 00 05.1 | +1.0 | |
| **NSK** | **Sanguang** | **1.12 265** | *e*P | | **Pn** | 12 59 50.5 | +0.3 | |
| NSK | baz=263 | | S | | **Sg** | 13 00 03.2 | -1.4 | |
| **IRIF** | **Iriomote-Funau** | **1.13 113** | *e*P | | **Pn** | 12 59 50.4 | +0.2 | |
| **TWD** | **Chiawan** | **1.14 233** | *e*P | | **Pn** | 12 59 50.3 | 0.0 | |
| TWD | baz=227 | | *e*S | | **Sn** | 13 00 07.4 | +1.4 | |
| **NNSB** | **Datong** | **1.15 253** | P | | **Pg** | 12 59 50.6 | +0.1 | |
| NNSB | baz=249 | | *e*S | | **Sg** | 13 00 05.2 | -0.3 | |
| **NNS** | **Nan Shan** | **1.16 253** | *e*P | | **Pn** | 12 59 50.7 | 0.0 | |
| NNS | baz=250 | | *i* S | | **Sb** | 13 00 05.1 | -0.5 | |
| **ETLH** | **Xiulin Townshi** | **1.16 241** | *i* P | | **Pn** | 12 59 50.8 | +0.1 | |
| ETLH | baz=236 | | *e*S | | **Sb** | 13 00 05.0 | -0.6 | |
| **TEYL** | **Yanliau Villag** | **1.28 225** | *e*P | | **Pn** | 12 59 52.3 | 0.0 | |
| TEYL | baz=221 | | *e*S | | **Sb** | 13 00 07.1 | -1.9 | |
| **ETM** | **Tongmen** | **1.28 231** | *i* P | | **Pg** | 12 59 53.1 | +0.1 | |
| ETM | baz=226 | | *e*S | | **Sb** | 13 00 09.2 | 0.0 | |
| **LXIB** | **Xiulin Townshi** | **1.31 235** | P | | **Pg** | 12 59 53.7 | +0.2 | |
| **HATJ** | **Hateruma jima** | **1.32 123** | *e*S | | **Sb** | 13 00 08.8 | -1.4 | |
| **NFF** | **Wufeng Townshi** | **1.34 264** | *i* P | | **Pn** | 12 59 53.6 | +0.3 | |
| NFF | baz=262 | | *e*S | | **Sb** | 13 00 10.8 | -0.2 | |
| **SHUL** | **Shoufeng** | **1.36 224** | *e*P | | **Pb** | 12 59 54.0 | +0.1 | |
| **WHF** | **Hehuan Shan** | **1.36 243** | *e*P | | **Pg** | 12 59 54.5 | 0.0 | |
| WHF | baz=238 | | *e*S | | **Sb** | 13 00 11.7 | -0.1 | |
| **TWT** | **Tachien** | **1.39 248** | *e*P | | **Pg** | 12 59 55.6 | +0.6 | |
| TWT | baz=245 | | *e*S | | **Sg** | 13 00 13.5 | +0.4 | |
| **TDCB** | **Techi** | **1.40 248** | *e*P | | **Pg** | 12 59 57.0 | +1.6 | |
| TDCB | baz=245 | | *e*S | | **Sg** | 13 00 14.2 | +0.7 | |
| **ESL** | **Shilin** | **1.42 228** | *e*P | | **Pg** | 12 59 55.8 | 0.0 | |
| **LIOB** | **Emei** | **1.44 265** | *e*P | | **Pg** | 12 59 57.1 | +1.2 | |
| LIOB | baz=263 | | *e*S | | **Sb** | 13 00 14.2 | +0.6 | |
| **NSTT** | **Nanjuang** | **1.45 265** | *e*P | | **Pg** | 12 59 57.3 | +1.1 | |
| NSTT | baz=263 | | *e*S | | **Sn** | 13 00 13.7 | 0.0 | |
| **SBCB** | **Hsinchu** | **1.46 271** | *e*P | | **Pn** | 12 59 52.8 | -1.9 | |
| **CHGB** | **Renai** | **1.47 241** | *e*P | | **Pg** | 12 59 56.8 | +0.1 | |
| CHGB | baz=237 | | *e*S | | **Sg** | 13 00 16.3 | +0.5 | |
| **WARBT** | **Fenglin Townsh** | **1.52 226** | *e*P | | **Pb** | 12 59 56.6 | -0.1 | |
| WARBT | baz=222 | | *e*S | | **Sn** | 13 00 14.6 | -0.9 | |
| **OWD** | **Renai** | **1.53 238** | *e*P | | **Pg** | 12 59 57.9 | +0.2 | |
| OWD | baz=234 | | *e*S | | **Sb** | 13 00 16.5 | +0.2 | |
| **WUSB** | **Renai** | **1.55 240** | *e*P | | **Pg** | 12 59 58.0 | -0.2 | |
| **WHP** | **Taichung City** | **1.58 252** | *e*S | | **Sb** | 13 00 18.1 | +0.4 | |
| **HGSD** | **Ruisui** | **1.66 220** | *e*P | | **Pb** | 12 59 58.5 | -0.6 | |
| HGSD | baz=215 | | *e*S | | **Sn** | 13 00 18.5 | -0.5 | |
| **VWDT** | **VWDT** | **1.67 233** | *e*P | | **Pb** | 12 59 59.1 | -0.1 | |
| VWDT | baz=229 | | *e*S | | **Sn** | 13 00 19.5 | +0.5 | |
| | baz=229 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.69 245** | *e*P | | **Pg** | 13 00 00.5 | -0.3 | |
| **TWQ1** | **Liyutan** | **1.71 256** | *e*P | | **Pg** | 13 00 01.6 | +0.4 | |
| **EHY** | **Hungye** | **1.71 223** | *e*P | | **Pn** | 12 59 58.9 | +0.6 | |
| EHY | baz=218 | | *e*S | | **Sn** | 13 00 20.0 | -0.2 | |
| **SSLB** | **Suanglung** | **1.79 237** | *e*P | | **Pg** | 13 00 02.4 | -0.2 | |
| SSLB | baz=233 | | *e*S | | **Sb** | 13 00 24.6 | +0.8 | |
| **TYC** | **Yuchr** | **1.80 242** | *e*P | | **Pg** | 13 00 02.3 | -0.6 | |
| **YULB** | **Yu-li** | **1.81 221** | *e*P | | **Pn** | 12 59 59.7 | 0.0 | |
| YULB | baz=216 | | *e*S | | **Sn** | 13 00 22.4 | -0.3 | |
| **WHYT** | **Xinyi Township** | **1.91 236** | *e*P | | **Pb** | 13 00 02.9 | -0.5 | |
| **WCHH** | **Zhanghua** | **1.98 250** | *e*P | | **Pn** | 13 00 02.0 | +0.1 | |
| WCHH | baz=247 | | *e*S | | **Sn** | 13 00 25.4 | -1.3 | |
| **EDH** | **Donghe** | **2.15 213** | *e*P | | **Pn** | 13 00 04.8 | +0.6 | |
| EDH | baz=209 | | *e*S | | **Sn** | 13 00 30.3 | -0.6 | |
| **LONT** | **Longtian** | **2.29 216** | *e*P | | **Pn** | 13 00 06.5 | +0.3 | |
| LONT | baz=212 | | *e*S | | **Sn** | 13 00 33.9 | -0.6 | |
| **TPUB** | **Ta-pu** | **2.32 231** | *e*P | | **Pn** | 13 00 07.7 | +1.1 | |
| TPUB | baz=228 | | *e*S | | **Sn** | 13 00 34.8 | -0.4 | |
| | baz=228 | | | | | | | |

*IDC **12** 13:19:49.9±1.7, 30.85N×70.00E, h0km, mb3.7/6, mbtmp3.7/8, ML3.7/2, MS2.9/2, Error ellipse: s-maj=43.2km s-min=27.2km az=72.0*

**ISC 12 13:19:53.5±1.8, 30.9N±0.2×69.9E±0.3, h23km, n10, σ1§22/8, mb3.8/5, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **12.28** | **16** | Pn | | **Pn** | **13 22 46.8** | **-0.2** |
| | 1.2nm,0.3s,baz=193,slow=6.3,SNR=3.9 | | | | | | | |
| | 4.8nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **18.53** | **28** | P | | **P** | **13 24 07.4** | **-0.9** |
| | 0.1nm,0.3s,baz=206,slow=11,SNR=2.0 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.73** | **16** | P | | **P** | **13 24 31.5** | **-0.8** |
| | 1.1nm,0.7s,baz=209,slow=8.9,SNR=4.4 | | | | | | | |
| | 1.1nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.42** | **21** | P | | **P** | **13 25 18.9** | **-0.3** |
| | 1.3nm,0.4s,baz=217,slow=8.9,SNR=7.3 | | | | | | | |
| | 1.3nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **32.50** | **48** | P | | **P** | **13 26 23.3** | **+0.8** |
| | 0.3nm,0.5s,baz=228,slow=11,SNR=2.0 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **MLR** | **Muntele Rosu** | **37.05** | **306** | LR | | LR | 13 46 46.4 | |
| | comp=Z,8.9nm,18.5s,baz=290,slow=44 | | | | | | | |
| **FINES** | **FINESS Array B** | **41.77** | **330** | P | | **P** | **13 27 39.8** | **-1.0** |
| | 2.0nm,0.9s,baz=115,slow=8.1,SNR=1.5 | | | | | | | |
| | 2.0nm,0.9s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.04** | **340** | P | | **P** | **13 28 17.0** | **+2.0** |
| | 1.6nm,0.8s,baz=110,slow=7.8,SNR=3.8 | | | | | | | |
| | 1.6nm,0.8s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **58.23** | **68** | LR | | LR | 13 59 29.7 | |
| | comp=Z,19nm,18.7s,baz=318,slow=41 | | | | | | | |
| **ASAR** | **Alice Springs** | **81.83** | **124** | P | | **P** | **13 32 10.7** | **-0.4** |
| | 0.3nm,0.5s,baz=305,slow=5.5,SNR=14 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |

*NOU **12** 13:23:09.6, 37.65S×179.93E, h5km, MLv3.7/6, Off E. Coast of N. Island, N.Z.*

*WEL **12** 13:23:18.3±0.8, 38.5S±7.1×17.9E±.1°, h33km, M2.9/17, ML3.2/24, MLv2.9/17, Error ellipse: s-maj=0.0km s-min=0.0km az=2.6, confirmed*

**ISC 12 13:23:15.1±2.1, 37.68S±0.07×179.6E±0.1, h48km±40km, n61, σ1§13/73, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **0.94** | **261** | P | | **Pn** | **13 23 32.5** | **+0.5** |
| WMGZ | | | | S | | **Sn** | **13 23 43.4** | **-1.0** |
| **MXZ** | **Matakaoa Point** | **1.03** | **276** | P | | **Pn** | **13 23 33.4** | **+0.3** |
| **MXZ** | **Matakaoa Point** | **1.03** | **276** | P | | **Pn** | **13 23 33.3** | **+0.2** |
| MXZ | | | | S | | **Sn** | **13 23 44.7** | **-1.6** |
| **PUZ** | **Puketiti** | **1.13** | **249** | P | | **Pn** | **13 23 35.3** | **+0.8** |
| PUZ | | | | S | | **Sn** | **13 23 48.2** | **-0.6** |
| **PKGZ** | **Pakihiroa** | **1.21** | **261** | P | | **Pn** | **13 23 36.1** | **+0.4** |
| PKGZ | | | | S | | **Sn** | **13 23 49.7** | **-1.2** |
| **CNGZ** | **Carnagh Statio** | **1.36** | **233** | P | | **Pn** | **13 23 39.8** | **+2.2** |
| **TWGZ** | **Tauwhareparae** | **1.37** | **248** | P | | **Pn** | **13 23 38.9** | **+1.1** |
| TWGZ | | | | S | | **Sn** | **13 23 54.7** | **0.0** |
| **HAZ** | **Te Kaha** | **1.44** | **266** | P | | **Pn** | **13 23 39.4** | **+0.7** |
| HAZ | | | | S | | **Sn** | **13 23 55.3** | **-1.0** |
| **RUGZ** | **Raukumara Rang** | **1.54** | **259** | P | | **Pn** | **13 23 40.7** | **+0.4** |
| **TKGZ** | **Te Karaka** | **1.57** | **241** | P | | **Pn** | **13 23 41.9** | **+1.5** |
| TKGZ | | | | S | | **Sn** | **13 24 00.1** | **+0.5** |
| **MWZ** | **Matawai** | **1.76** | **247** | P | | **Pn** | **13 23 43.6** | **+0.6** |
| MWZ | | | | S | | **Sn** | **13 24 03.0** | **-1.3** |
| **RIGZ** | **Rimuhau** | **1.77** | **234** | P | | **Pn** | **13 23 44.7** | **+1.5** |
| RIGZ | | | | S | | **Sn** | **13 24 04.9** | **+0.3** |
| **PRGZ** | **Paritu Road** | **1.83** | **227** | P | | **Pn** | **13 23 46.0** | **+1.9** |
| **RAGZ** | **Rawiri** | **1.90** | **244** | P | | **Pn** | **13 23 46.0** | **+1.0** |
| **MHGZ** | **Mahia Peninsul** | **1.98** | **221** | P | | **Pn** | **13 23 48.0** | **+1.9** |
| **KNZ** | **Kokohu** | **2.02** | **228** | P | | **Pn** | **13 23 47.8** | **+1.2** |
| **URZ** | **Urewera** | **2.04** | **253** | P | | **Pn** | **13 23 48.5** | **+1.5** |
| **URZ** | **Urewera** | **2.04** | **253** | P | | **Pn** | **13 23 48.5** | **+1.5** |
| URZ | | | | S | | **Sn** | **13 24 10.4** | **-0.9** |
| **SNGZ** | **Shannon Statio** | **2.09** | **237** | P | | **Pn** | **13 23 48.8** | **+1.2** |
| SNGZ | | | | S | | **Sn** | **13 24 12.3** | **-0.1** |
| **RTZ** | **Ruatahuna** | **2.26** | **245** | P | | **Pn** | **13 23 51.4** | **+1.4** |
| RTZ | | | | S | | **Sn** | **13 24 17.1** | **+0.4** |
| **WHHZ** | **Waihua** | **2.32** | **232** | P | | **Pn** | **13 23 52.4** | **+1.7** |
| **MUGZ** | **Murupara** | **2.36** | **249** | P | | **Pn** | **13 23 52.5** | **+1.1** |
| **OPRZ** | **Ohinepanea** | **2.41** | **265** | P | | **Pn** | **13 23 52.4** | **+0.4** |
| **MTHZ** | **Maungataniwha** | **2.46** | **241** | P | | **Pn** | **13 23 54.2** | **+1.5** |
| **TARZ** | **Mount Tarawera** | **2.50** | **256** | P | | **Pn** | **13 23 54.8** | **+1.4** |
| **ARHZ** | **Aropaoanui** | **2.58** | **231** | P | | **Pn** | **13 23 55.9** | **+1.5** |
| **NMHZ** | **Naumai** | **2.61** | **236** | P | | **Pn** | **13 23 56.3** | **+1.6** |
| **MRHZ** | **Matea Rd** | **2.75** | **244** | P | | **Pn** | **13 23 57.6** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **2.85** | **238** | P | | **Pn** | **13 23 59.3** | **+1.2** |
| **BKZ** | **Black Stump Fm** | **2.85** | **238** | P | | **Pn** | **13 23 59.1** | **+1.0** |
| **MCHZ** | **McNeill Hill** | **2.87** | **231** | P | | **Pn** | **13 23 59.7** | **+1.3** |
| **KAHZ** | **Kahuranaki** | **3.00** | **224** | P | | **Pn** | **13 24 01.1** | **+1.0** |
| **KWHZ** | **Kaweka Forest** | **3.04** | **234** | P | | **Pn** | **13 24 01.5** | **+0.9** |
| **KRHZ** | **Kereru** | **3.19** | **231** | P | | **Pn** | **13 24 03.5** | **+0.7** |
| **KUZ** | **Kuaotunu** | **3.23** | **286** | P | | **Pn** | **13 24 03.3** | **+0.2** |
| **KUZ** | **Kuaotunu** | **3.23** | **286** | P | | **Pn** | **13 24 03.4** | **+0.2** |
| **ETVZ** | **East Tongariro** | **3.38** | **243** | P | | **Pn** | **13 24 06.5** | **+1.1** |
| **NTVZ** | **North Tongarir** | **3.39** | **244** | P | | **Pn** | **13 24 06.7** | **+1.2** |
| **OTVZ** | **Oturere** | **3.42** | **243** | P | | **Pn** | **13 24 06.8** | **+0.8** |
| **WPHZ** | **Waipukurau** | **3.42** | **225** | P | | **Pn** | **13 24 06.3** | **+0.4** |
| **SNVZ** | **South Ngauruho** | **3.45** | **243** | P | | **Pn** | **13 24 07.4** | **+1.0** |
| **PNHZ** | **Pukenui** | **3.46** | **229** | P | | **Pn** | **13 24 06.8** | **+0.3** |
| **MOVZ** | **Moawhango** | **3.47** | **239** | P | | **Pn** | **13 24 07.9** | **+1.3** |
| **WNVZ** | **Wahianoa** | **3.54** | **241** | P | | **Pn** | **13 24 07.8** | **+0.2** |
| **MKAZ** | **Moumakai** | **3.57** | **278** | P | | **Pn** | **13 24 08.5** | **+0.6** |
| **TSZ** | **Takapari Road** | **3.70** | **229** | P | | **Pn** | **13 24 09.6** | **-0.1** |
| **DVHZ** | **Dannevirke** | **3.74** | **224** | P | | **Pn** | **13 24 10.4** | **+0.1** |
| **ETAZ** | **East Tamaki Re** | **3.79** | **280** | P | | **Pn** | **13 24 12.2** | **+1.3** |
| **MBAZ** | **Motutapu North** | **3.85** | **282** | P | | **Pn** | **13 24 13.0** | **+1.2** |
| **BFZ** | **Birch Farm** | **3.97** | **220** | P | | **Pn** | **13 24 13.5** | **+0.1** |
| **BFZ** | **Birch Farm** | **3.97** | **220** | P | | **Pn** | **13 24 13.2** | **-0.2** |
| **PRWZ** | **Pori Road** | **4.02** | **223** | P | | **Pn** | **13 24 14.2** | **+0.1** |
| **POWZ** | **Post Office Ro** | **4.03** | **226** | P | | **Pn** | **13 24 14.2** | **+0.1** |
| **RVAZ** | **Riverhead Bore** | **4.10** | **281** | P | | **Pn** | **13 24 16.6** | **+1.5** |
| **WAZ** | **Wanganui** | **4.16** | **239** | P | | **Pn** | **13 24 17.6** | **+1.6** |
| **TIWZ** | **Tintock** | **4.22** | **222** | P | | **Pn** | **13 24 16.5** | **-0.4** |
| **MRZ** | **Mangatainoka R** | **4.31** | **225** | P | | **Pn** | **13 24 17.4** | **-0.7** |
| **HOWZ** | **Holdsworth Sta** | **4.51** | **223** | P | | **Pn** | **13 24 20.1** | **-0.7** |
| **OUZ** | **Omahuta** | **5.42** | **295** | P | | **Pn** | **13 24 34.9** | **+1.6** |
| **CTZ** | **Chatham Island** | **6.70** | **156** | P | | Pn | 13 24 56.2 | +5.4 |
| CTZ | | | | S | | **Sn** | **13 26 05.6** | **-0.2** |
| **MQZ** | **McQueen's Vall** | **8.00** | **219** | P | | **Pn** | **13 25 05.8** | **-2.8** |
| MQZ | | | | S | | Sn | 13 26 28.0 | -10 |

*NNC **12** 13:25:58.9±2.0, 49.93N×78.36E, h0km, mb2.8, mpv2.5, Error ellipse: s-maj=33.8km s-min=10.0km az=93.0, Suspected Mining explosion.*

*IDC **12** 13:26:01.2±1.3, 50.04N×78.78E, h0km, mbtmp2.5/2, ML2.1/2, Error ellipse: s-maj=12.4km s-min=7.9km az=62.0*

**ISC 12 13:25:53.9±1.3, 50.07N±0.06×77.53E±0.07, h0km, n10, σ0§68/11, 9C-2D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **0.85** | **49** | Pg | | **Pb** | **13 26 12.1** | **+0.6** |
| | 0.9nm,0.3s,baz=166,slow=18,SNR=56 | | | | | | | |
| KURBB | | | | Lg | | Lg | 13 26 23.0 | |
| | 2.6nm,0.3s,baz=165,slow=32,SNR=19 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.85** | **49** | ⇑P | | **Pn** | **13 26 12.7** | **-0.4** |
| | 7.0nm,0.4s | | | | | | | |
| KURBB | | | | ⇑S | | **Sb** | **13 26 23.6** | **+0.2** |
| | 58nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **0.95** | **47** | ⇑P | | **Pn** | **13 26 14.3** | **-0.2** |
| | 4.5nm,0.5s | | | | | | | |
| KURK | | | | ⇓S | | **Sg** | **13 26 24.3** | **-0.2** |
| | 27nm,0.6s | | | | | | | |
| **OTUK** | **Ortayu** | **3.87** | **244** | ⇑Pn | | **Pb** | **13 27 02.8** | **-0.2** |
| | 1.0nm,0.6s | | | | | | | |
| OTUK | | | | ⇑Lg | | Lg | 13 28 17.4 | |
| | 6.6nm,1.1s | | | | | | | |
| **MAKZ** | **Makanchi** | **4.41** | **136** | ⇑Pg | | **Pb** | **13 27 11.3** | **-0.9** |
| | 0.4nm,0.4s | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 13 28 00.9 | |
| | 16nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **4.56** | **134** | ⇑Pn | | **Pn** | **13 27 05.2** | **+1.0** |
| | 0.1nm,0.2s,baz=323,slow=9.8,SNR=12 | | | | | | | |
| MK31 | | | | ⇑Pg | | **Pb** | **13 27 14.2** | **-0.6** |
| | 0.3nm,0.3s,baz=321,slow=14,SNR=11 | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 13 28 08.2 | |
| | 9.4nm,0.6s,baz=330,slow=26,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.56** | **134** | Pn | | **Pn** | **13 27 05.1** | **+0.9** |
| | 0.2nm,0.3s,baz=324,slow=10.0,SNR=7.3 | | | | | | | |
| MKAR | | | | Lg | | Lg | 13 28 06.9 | |
| | 0.5nm,0.3s,baz=321,slow=25,SNR=4.5 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.94** | **46** | Pn | | **Pn** | **13 27 23.0** | **-0.1** |
| | 0.2nm,0.3s,baz=232,slow=14,SNR=3.7 | | | | | | | |
| ZALV | | | | Lg | | Lg | 13 28 49.9 | |
| | 0.2nm,0.3s,baz=233,slow=30,SNR=2.8 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **7.73** | **197** | Lg | | Lg | 13 30 12.2 | |
| | 0.5nm,0.3s,baz=90,slow=20,SNR=1.2 | | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **12.48** | **279** | I | | I | 14 48 10.0 | |
| | baz=85,slow=318,SNR=2.4 | | | | | | | |

**TAP 12 13:27:24.2, 24.30N×120.86E, h8km, ML2.0, 1C, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WHP** | **Taichung City** | **0.09** | **107** | P | | **Pg** | **13 27 27.2** | **+0.8** |
| WHP | baz=107 | | | *e*S | | Sg | 13 27 29.4 | +1.4 |
| **TWQ1** | **Liyutan** | **0.09** | **300** | *e*P | | Pg | 13 27 26.3 | -0.2 |
| TWQ1 | baz=299 | | | *e*S | | Sg | 13 27 28.2 | +0.2 |
| **NSY** | **Sanyi** | **0.14** | **322** | *i* P | | Pg | 13 27 27.9 | +0.6 |
| NSY | baz=324 | | | *e*S | | Sg | 13 27 31.0 | +1.6 |
| **WDJ** | **Dajia District** | **0.20** | **283** | P | | Pg | 13 27 29.0 | +0.7 |
| WDJ | baz=282 | | | *i* S | | Sg | 13 27 32.9 | +1.8 |
| **TCU** | **Taichung** | **0.23** | **227** | *e*P | | Pg | 13 27 29.5 | +0.8 |
| TCU | baz=225 | | | *e*S | | Sg | 13 27 33.4 | +1.6 |
| **NMLH** | **Miaoli** | **0.24** | **346** | P | | Pg | 13 27 30.2 | +1.1 |
| NMLH | baz=345 | | | *i* S | | Sg | 13 27 34.3 | +2.0 |
| **WCS** | **Beigang Elemen** | **0.25** | **168** | *i* P | | Pg | 13 27 30.0 | +0.8 |
| WCS | baz=168 | | | *i* S | | Sg | 13 27 34.7 | +2.2 |
| **TDCB** | **Techi** | **0.28** | **100** | *i* P | | Pb | 13 27 30.8 | -0.8 |
| TDCB | baz=100 | | | *e*S | | Sg | 13 27 34.9 | +1.3 |
| **NSTT** | **Nanjuang** | **0.35** | **22** | P | | Pg | 13 27 31.9 | +0.8 |
| NSTT | baz=23 | | | S | | Sb | 13 27 38.4 | -0.1 |
| **WCHH** | **Zhanghua** | **0.35** | **231** | *e*P | | Pb | 13 27 32.5 | -0.2 |
| WCHH | baz=230 | | | S | | Sb | 13 27 38.9 | +0.5 |
| **LIOB** | **Emei** | **0.37** | **23** | *i* P | | Pb | 13 27 32.6 | -0.5 |
| LIOB | baz=22 | | | *i* S | | Sb | 13 27 38.7 | -0.3 |
| **CHGB** | **Renai** | **0.38** | **130** | *i* P | | Pb | 13 27 32.8 | -0.5 |
| CHGB | baz=129 | | | S | | Sb | 13 27 38.6 | -0.8 |
| **WUSB** | **Renai** | **0.39** | **142** | *i* P | | Pb | 13 27 32.9 | -0.6 |
| WUSB | baz=142 | | | *e*S | | Sb | 13 27 38.6 | -1.1 |
| **TYC** | **Yuchr** | **0.40** | **180** | *i* P | | Pb | 13 27 33.0 | -0.5 |
| TYC | baz=178 | | | *e*S | | Sb | 13 27 40.0 | +0.3 |
| **WHF** | **Hehuan Shan** | **0.40** | **113** | *e*P | | Pb | 13 27 33.8 | -0.1 |
| WHF | baz=112 | | | S | | Sb | 13 27 40.3 | -0.1 |
| **NFF** | **Wufeng Townshi** | **0.41** | **36** | ⇑*i*P | | Pb | 13 27 33.2 | -0.5 |
| NFF | baz=35 | | | S | | Sb | 13 27 39.9 | -0.1 |
| **WNT** | **Mingjian** | **0.45** | **201** | *e*P | | Pb | 13 27 34.5 | 0.0 |
| WNT | baz=199 | | | *e*S | | Sb | 13 27 42.0 | +0.7 |
| **OWD** | **Renai** | **0.45** | **140** | *e*P | | Pg | 13 27 33.7 | +0.7 |
| OWD | baz=139 | | | *e*S | | Sb | 13 27 40.4 | -1.1 |
| **NNS** | **Nan Shan** | **0.49** | **74** | *e*P | | Pb | 13 27 35.5 | +0.3 |
| NNS | baz=74 | | | *e*S | | Sg | 13 27 41.3 | +1.1 |
| **NNSB** | **Datong** | **0.49** | **75** | *i* P | | Pb | 13 27 34.9 | -0.4 |
| NNSB | baz=75 | | | *e*S | | Sg | 13 27 41.1 | +0.7 |
| **SSLB** | **Suanglung** | **0.52** | **170** | *e*P | | Pb | 13 27 35.0 | -0.6 |
| SSLB | baz=170 | | | S | | Sb | 13 27 43.3 | 0.0 |
| **ETLH** | **Xiulin Townshi** | **0.58** | **99** | *i* P | | Pb | 13 27 36.4 | -0.2 |
| ETLH | baz=99 | | | *e*S | | Sb | 13 27 44.2 | -0.8 |
| **LXIB** | **Xiulin Townshi** | **0.58** | **119** | P | | Pb | 13 27 36.8 | 0.0 |
| LXIB | baz=118 | | | S | | Sb | 13 27 45.4 | +0.2 |
| **NSK** | **Sanguang** | **0.59** | **51** | *i* P | | Pb | 13 27 36.6 | -0.2 |
| NSK | baz=51 | | | *i* S | | Sb | 13 27 45.7 | +0.4 |
| **WRL** | **Guolierlin Hig** | **0.59** | **228** | *e*P | | Pn | 13 27 38.6 | -0.4 |
| WRL | baz=227 | | | *e*S | | Sn | 13 27 48.1 | -0.7 |
| **YHNB** | **Yeheng** | **0.60** | **52** | *e*P | | Pg | 13 27 36.0 | +0.2 |
| YHNB | baz=52 | | | *i* S | | Sb | 13 27 45.9 | +0.3 |
| **WHYT** | **Xinyi Township** | **0.60** | **180** | *i* P | | Pb | 13 27 37.2 | +0.2 |
| WHYT | baz=180 | | | S | | Sb | 13 27 46.4 | +0.7 |
| **VWDT** | **VWDT** | **0.60** | **155** | P | | Pg | 13 27 36.4 | +0.5 |
| | baz=154 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VWDT | | | | | *e*S | Sb | 13 27 45.6 | -0.1 |
| | baz=154 | | | | | | | |
| **LATG** | **Datong** | **0.65** | **69** | *e*P | Pb | 13 27 38.0 | 0.0 |
| | baz=69 | | | | | | | |
| LATG | | | | | *e*S | Sb | 13 27 46.8 | -0.5 |
| | baz=69 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.67** | **63** | *i* P | Pb | 13 27 38.5 | +0.4 |
| | baz=63 | | | | | | | |
| NDT | | | | | *e*S | Sb | 13 27 46.9 | -0.7 |
| | baz=63 | | | | | | | |
| **ETM** | **Tongmen** | **0.67** | **120** | *i* P | Pb | 13 27 38.1 | -0.1 |
| | baz=120 | | | | | | | |
| ETM | | | | | *e*S | Sb | 13 27 47.9 | +0.2 |
| | baz=120 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.69** | **101** | *i* P | Pb | 13 27 38.4 | -0.1 |
| | baz=100 | | | | | | | |
| NACB | | | | | *e*S | Sb | 13 27 49.0 | +0.9 |
| | baz=100 | | | | | | | |
| **TWD** | **Chiawan** | **0.71** | **108** | *e*P | Pb | 13 27 38.4 | -0.4 |
| | baz=107 | | | | | | | |
| TWD | | | | | *e*S | Sb | 13 27 50.1 | +1.3 |
| | baz=107 | | | | | | | |
| **ESL** | **Shilin** | **0.72** | **133** | *e*P | Pb | 13 27 39.5 | +0.6 |
| | baz=132 | | | | | | | |
| ESL | | | | | *e*S | Sb | 13 27 48.8 | -0.2 |
| | baz=132 | | | | | | | |
| **CHN5** | **Tsauling** | **0.72** | **193** | *e*P | Pb | 13 27 38.8 | -0.3 |
| | baz=193 | | | | | | | |
| **ENTT** | **Nioudou** | **0.73** | **62** | *i* P | Pb | 13 27 39.2 | 0.0 |
| | baz=62 | | | | | | | |
| ENTT | | | | | *e*S | Sg | 13 27 48.5 | +0.7 |
| | baz=62 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.76** | **140** | P | Pb | 13 27 39.5 | -0.2 |
| | baz=140 | | | | | | | |
| WARBT | | | | *i* S | Sb | 13 27 50.9 | +0.7 |
| | baz=140 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.81** | **56** | *e*P | Pb | 13 27 41.1 | +0.6 |
| | baz=55 | | | | | | | |
| FUSB | | | | | *e*S | Sg | 13 27 50.9 | +0.6 |
| | baz=55 | | | | | | | |
| **EGFH** | **Guangfu** | **0.82** | **140** | *e*P | Pn | 13 27 41.5 | -0.6 |
| | baz=140 | | | | | | | |
| EGFH | | | | | *e*S | Sb | 13 27 52.5 | +0.6 |
| | baz=140 | | | | | | | |
| **SHUL** | **Shoufeng** | **0.82** | **128** | *e*P | Pn | 13 27 42.3 | +0.2 |
| | baz=128 | | | | | | | |
| SHUL | | | | | *e*S | Sn | 13 27 53.5 | -1.0 |
| | baz=128 | | | | | | | |
| **TWE** | **Neicheng** | **0.85** | **60** | *e*P | Pb | 13 27 41.3 | +0.1 |
| | baz=61 | | | | | | | |
| TWE | | | | *i* S | Sn | 13 27 54.1 | -1.0 |
| | baz=61 | | | | | | | |
| **EWUT** | **Wuta** | **0.85** | **80** | P | Pb | 13 27 41.7 | +0.4 |
| | baz=80 | | | | | | | |
| EWUT | | | | *i* S | Sb | 13 27 53.9 | +1.1 |
| | baz=80 | | | | | | | |
| **WCKO** | **Fanlu** | **0.89** | **195** | *e*P | Pb | 13 27 41.9 | 0.0 |
| | baz=195 | | | | | | | |
| WCKO | | | | | *e*S | Sb | 13 27 54.2 | +0.2 |
| | baz=195 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.90** | **43** | *e*P | Pn | 13 27 43.0 | -0.1 |
| | baz=42 | | | | | | | |
| NHDH | | | | | S | Sn | 13 27 55.3 | -1.0 |
| | baz=42 | | | | | | | |
| **EHY** | **Hungye** | **0.90** | **152** | *e*P | Pn | 13 27 42.7 | -0.5 |
| | baz=151 | | | | | | | |
| EHY | | | | | S | Sn | 13 27 55.4 | -1.0 |
| | baz=151 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.94** | **33** | *e*P | Pb | 13 27 42.8 | -0.1 |
| | baz=32 | | | | | | | |
| TWS1 | | | | | *e*S | Sn | 13 27 57.7 | +0.2 |
| | baz=32 | | | | | | | |
| **YULB** | **Yu-li** | **0.99** | **156** | *e*P | Pn | 13 27 44.2 | -0.2 |
| | baz=156 | | | | | | | |
| YULB | | | | | *e*S | Sn | 13 27 58.9 | +0.2 |
| | baz=156 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.02** | **192** | *e*P | Pg | 13 27 42.8 | -1.0 |
| | baz=191 | | | | | | | |
| TPUB | | | | *i* S | Sn | 13 27 58.9 | -0.5 |
| | baz=191 | | | | | | | |
| **TWF1** | **Yuli** | **1.03** | **157** | *e*P | Pn | 13 27 44.9 | -0.1 |
| | baz=156 | | | | | | | |
| TWF1 | | | | | *e*S | Sn | 13 27 58.8 | -0.8 |
| | baz=156 | | | | | | | |
| **YM01** | **YM01** | **1.06** | **38** | *e*P | Pn | 13 27 45.2 | -0.3 |
| | baz=37 | | | | | | | |
| YM01 | | | | | S | Sn | 13 28 00.3 | -0.2 |
| | baz=37 | | | | | | | |
| **WTP** | **Ta-pu** | **1.07** | **192** | *e*P | Pn | 13 27 45.5 | -0.2 |
| | baz=191 | | | | | | | |
| WTP | | | | | *e*S | Sn | 13 28 00.9 | +0.1 |
| | baz=191 | | | | | | | |
| **ICHU** | **Yijhu** | **1.08** | **210** | *e*P | Pn | 13 27 45.7 | +0.1 |
| | baz=209 | | | | | | | |
| ICHU | | | | | *e*S | Sb | 13 27 59.6 | +0.3 |
| | baz=209 | | | | | | | |
| **TWK** | **Hsinying** | **1.09** | **198** | *e*P | Pb | 13 27 45.4 | +0.1 |
| | baz=197 | | | | | | | |
| TWK | | | | *i* S | Sn | 13 28 00.8 | -0.2 |
| | baz=197 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.10** | **53** | *e*P | Pn | 13 27 46.7 | +0.6 |
| | baz=52 | | | | | | | |
| **ELDTW** | **Lidau** | **1.12** | **172** | *i* P | Pn | 13 27 46.4 | +0.1 |
| | baz=172 | | | | | | | |
| ELDTW | | | | *i* S | Sn | 13 28 02.0 | +0.1 |
| | baz=172 | | | | | | | |
| **SNST** | **Tainan City** | **1.13** | **197** | *e*P | Pb | 13 27 46.0 | 0.0 |
| | baz=196 | | | | | | | |
| SNST | | | | | *e*S | Sn | 13 28 01.6 | -0.4 |
| | baz=196 | | | | | | | |
| **FULB** | **Fuli** | **1.17** | **160** | *e*P | Pn | 13 27 48.1 | +1.2 |
| | baz=159 | | | | | | | |
| FULB | | | | | *e*S | Sn | 13 28 05.4 | +2.3 |
| | baz=159 | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.22** | **49** | *e*P | Pn | 13 27 48.4 | +0.8 |
| | baz=49 | | | | | | | |
| SXI1 | | | | | *e*S | Sb | 13 28 03.9 | +0.4 |
| | baz=49 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.25** | **55** | P | Pg | 13 27 48.9 | +0.7 |
| | baz=55 | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.42** | **236** | *e*P | Pn | 13 27 50.1 | -0.2 |
| | baz=236 | | | | | | | |
| PHUB | | | | | *e*S | Sg | 13 28 10.2 | +0.4 |
| | baz=236 | | | | | | | |
| **VWUC** | **VWUC** | **1.45** | **298** | *e*P | Pn | 13 27 49.6 | -1.2 |
| | baz=298 | | | | | | | |
| VWUC | | | | | *e*S | Sn | 13 28 08.6 | -1.4 |
| | baz=298 | | | | | | | |

**KRSC 12 13:28:30.2**±1.2, **48.46N**×**156.08E, h40**km±20km, **MI3.7, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **2.23** | **1** | *e*P | Pn | 13 29 06.7 | +2.2 |
| SKR | | | | *e*S | Sn | 13 29 33.4 | +2.5 |
| **KDTR** | **Khodutka, Kamc** | **3.59** | **20** | *e*P | Pn | 13 29 27.5 | +4.2 |
| KDTR | | | | *e*S | Sn | 13 30 09.6 | +5.1 |
| **ASAK** | **Asacha** | **4.10** | **16** | *e*P | Pn | 13 29 34.6 | +4.2 |
| **MTVR** | **Mutnovka** | **4.25** | **18** | *e*P | Pn | 13 29 36.2 | +3.7 |
| **GRL** | **Gorelyy** | **4.29** | **16** | *e*P | Pn | 13 29 37.7 | +4.6 |
| **DALK** | **Dalny** | **4.89** | **19** | *e*P | Pn | 13 29 45.0 | +4.0 |
| **UGLR** | **Uglovaya** | **5.07** | **19** | *e*P | Pn | 13 29 48.4 | +4.7 |
| **AVH** | **Avacha** | **5.10** | **18** | *e*P | Pn | 13 29 47.9 | +3.8 |
| **KOK** | **Koryaka** | **5.11** | **18** | *e*P | Pn | 13 29 48.9 | +4.7 |
| **SMAR** | **Somma** | **5.11** | **19** | *e*P | Pn | 13 29 49.8 | +5.4 |
| **KRX** | **Arik** | **5.17** | **17** | *e*P | Pn | 13 29 49.9 | +4.8 |
| **GNL** | **Ganaly** | **5.38** | **12** | *e*P | Pn | 13 29 52.4 | +4.5 |

*IDC* ***12*** *13:42:21.5±1.0, 36.09N×31.23E, h49km±14km, mb3.6/9, mbtmp3.8/18, ML3.6/9, MS2.8/8, Error ellipse: s-maj=10.3km s-min=9.7km az=5.0*

*ISK* ***12*** *13:42:21.7, 36.08N×31.32E, h16km, ML4.0/40*

*NEIC* ***12*** *13:42:22.5±2.5, 36.03N±0.07×31.35E±0.06, h35km±2km, mb4.3/27, Error ellipse: s-maj=11.4km s-min=8.0km az=199.0*

*THE* ***12*** *13:42:23.9, 36.01N×31.22E, h10km±18km, ML4.0/3, Error ellipse: s-maj=25.4km s-min=3.0km az=111.0*

*MED_RC* ***12*** *13:42:23.0±0.6, 36.05N×31.25E, h31km±2km, MW4.2/7, Moment Tensor Solution. Mantle waves: s7,c7; Duration: 1s0 Moment tensor: Scale 10¹⁵Nm; Mrr-1.92±.52; Mθθ1.38±.40; Mθφ0.54±.42; Mrθ0.62±.32; Mφφ-0.46±.38; Mφr-1.55±.18; Best double couple: Mw2.37000×10¹⁵*

*NP1:*φ=321.00000°, δ=67.00000°, λ=-74.00000°. *NP2:* φ=104.00000°, δ=28.00000°, λ=-123.00000°. *Principal axes: T 2.0300, Plg20.0000°, Azm38.0000°; N 0.6600, Plg15.0000°, Azm134.0000°; P -2.7000, Plg65.0000°, Azm258.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*

*AFAD* ***12*** *13:42:23.9±0.0, 36.17N×31.40E, h29km±2km, MW3.9*

*NIC* ***12*** *13:42:24.2, 36.12N×31.56E, h28km±2km, Ml3.9/10*

*HLW* ***12*** *13:42:25.7, 35.93N×31.05E, h26km±29km, Md4.1, Ml4.5*

*GII* ***12*** *13:42:26.2±0.6, 35.918N±0.004×31.589E±0.001, h10km, mB4.0/6, Md3.7/5, Mws3.6, confirmed*

**ISC 12 13:42:23.0**±0.8, **36.04N**±0.03×**31.31E**±0.02, **h51**km±8km, **n226,**σ1**83**/251, **mb4.2**/23, **MS2.9**/4, **3D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNVG** | **Manavgat-Antal** | **0.76** | **7** | Pg | **Pn** | **13 42 36.3** | **-1.2** |
| MNVG | | | | Sg | **Sn** | **13 42 46.8** | **-1.4** |
| **ALAN** | **Alanya-ANTALYA** | **0.78** | **48** | Pg | **Pn** | **13 42 37.2** | **-0.6** |
| **KEMT** | **Kemer-ANTALYA** | **0.83** | **313** | Pg | **Pn** | **13 42 38.1** | **-0.3** |
| **AKUM** | **Antalya-Kumluc** | **0.83** | **290** | P | **Pn** | **13 42 40.4** | **+2.0** |
| AKUM | | | | S | **Sn** | **13 42 54.6** | **+4.9** |
| AKUM | | | | *i* AML | AML | 13 42 56.0 | |
| | comp=E,5μm,0.6s | | | | | | |
| AKUM | | | | *i* AML | AML | 13 42 58.0 | |
| | comp=N,5μm,0.4s | | | | | | |
| **GAZI** | **Gazipasa** | **0.84** | **76** | Pg | **Pn** | **13 42 37.8** | **-0.8** |
| GAZI | | | | Sg | **Sn** | **13 42 49.6** | **-0.4** |
| **GAZI** | **Gazipasa** | **0.84** | **76** | P | **Pn** | **13 42 38.7** | **+0.1** |
| GAZI | | | | S | **Sn** | **13 42 49.6** | **-0.4** |
| GAZI | | | | *i* AML | AML | 13 42 50.0 | |
| | comp=N,1μm,0.6s | | | | | | |
| GAZI | | | | *i* AML | AML | 13 42 50.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **ANTB** | **Antalya** | **1.01** | **329** | Pg | **Pn** | **13 42 41.1** | **+0.3** |
| ANTB | | | | Sg | **Sn** | **13 42 54.6** | **+0.6** |
| **DEMR** | **Demre-Antalya** | **1.15** | **280** | Pn | **Pn** | **13 42 44.2** | **+1.5** |
| **KORT** | **Korkueli** | **1.23** | **322** | Pn | **Pn** | **13 42 44.2** | **+0.2** |
| **AKMS** | **Akamas** | **1.32** | **140** | P | **Pn** | **13 42 45.9** | **+0.9** |
| AKMS | | | | S | **Sn** | **13 43 02.8** | **+1.4** |
| AKMS | | | | AML | AML | 13 43 14.2 | |
| | 8.5nm,0.3s | | | | | | |
| AKMS | | | | AML | AML | 13 43 15.0 | |
| | 7.4nm,0.4s | | | | | | |
| **HDMB** | **Hadim** | **1.33** | **45** | Pn | **Pn** | **13 42 45.5** | **+0.2** |
| **ELL** | **Elmali** | **1.33** | **303** | Pn | **Pn** | **13 42 46.1** | **+0.8** |
| **ELL** | **Elmali** | **1.33** | **303** | | **Pn** | **13 42 46.5** | **+1.2** |
| **ELL** | **Elmali** | **1.33** | **303** | P | **Pn** | **13 42 47.4** | **+2.0** |
| ELL | | | | S | **Sn** | **13 43 07.7** | **+5.7** |
| ELL | | | | AML | AML | 13 43 15.4 | |
| | 13nm,1.2s | | | | | | |
| ELL | | | | AML | AML | 13 43 18.6 | |
| | 12nm,0.9s | | | | | | |
| **BOZY** | **Bozyazi-Mersin** | **1.35** | **86** | Pn | **Pn** | **13 42 46.0** | **+0.5** |
| **ALFC** | **Alefka** | **1.37** | **129** | *i* P | **Pn** | **13 42 46.1** | **+0.3** |
| ALFC | | | | S | **Sn** | **13 43 02.1** | **-0.7** |
| ALFC | | | | AML | AML | 13 43 10.8 | |
| | 8.7nm,0.2s | | | | | | |
| ALFC | | | | AML | AML | 13 43 11.9 | |
| | 6.9nm,0.2s | | | | | | |
| **AKAS** | **Kas** | **1.39** | **279** | Pn | **Pn** | **13 42 47.1** | **+1.0** |
| **AKAS** | **Kas** | **1.39** | **279** | Pn | **Pn** | **13 42 47.0** | **+0.8** |
| **ERMK** | **Ermenek** | **1.43** | **65** | P | **Pn** | **13 42 48.0** | **+1.3** |
| ERMK | | | | S | **Sn** | **13 43 07.2** | **+2.6** |
| ERMK | | | | *i* AML | AML | 13 43 10.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| ERMK | | | | *i* AML | AML | 13 43 11.0 | |
| | comp=E,2μm,0.6s | | | | | | |
| **SEYD** | **Seydisehir-KON** | **1.43** | **17** | Pn | **Pn** | **13 42 47.2** | **+0.5** |
| SEYD | | | | Sn | **Sn** | **13 43 05.3** | **+0.8** |
| **SEDI** | **Konya, Seydise** | **1.46** | **14** | P | **Pn** | **13 42 47.9** | **+0.9** |
| SEDI | | | | S | **Sn** | **13 43 05.6** | **+0.5** |
| SEDI | | | | *i* AML | AML | 13 43 07.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| SEDI | | | | *i* AML | AML | 13 43 08.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| **TEKE** | **Tekeli-Mersin** | **1.47** | **85** | Pn | **Pn** | **13 42 47.9** | **+0.9** |
| **BCK** | **Bucak** | **1.54** | **338** | Pn | **Pn** | **13 42 48.7** | **+0.7** |
| **AKDN** | **Akdeniz- Kıbrı** | **1.54** | **118** | Pn | **Pn** | **13 42 49.3** | **+1.3** |
| **LEF** | **Lefka** | **1.58** | **125** | Pn | **Pn** | **13 42 48.5** | **-0.1** |
| **LEF** | **Lefka** | **1.58** | **125** | P | **Pn** | **13 42 49.1** | **+0.6** |
| LEF | | | | S | **Sn** | **13 43 07.1** | **-0.8** |
| **NATA** | **Nata** | **1.62** | **140** | P | **Pn** | **13 42 52.8** | **+3.6** |
| NATA | | | | AML | AML | 13 43 27.3 | |
| | 11nm,0.4s | | | | | | |
| NATA | | | | AML | AML | 13 43 28.0 | |
| | 12nm,0.7s | | | | | | |
| **TROD** | **Troodos** | **1.67** | **130** | P | **Pn** | **13 42 50.3** | **+0.3** |
| TROD | | | | S | **Sn** | **13 43 10.9** | **+0.5** |
| TROD | | | | AML | AML | 13 43 28.7 | |
| | 2.7nm,0.5s | | | | | | |
| TROD | | | | AML | AML | 13 43 30.2 | |
| | 2.7nm,1.0s | | | | | | |
| **YORU** | **Yoruktepe-Mers** | **1.70** | **85** | Pn | **Pn** | **13 42 51.4** | **+1.1** |
| **OREN** | **Orenkoy-Mersin** | **1.75** | **84** | Pn | **Pn** | **13 42 52.2** | **+1.3** |
| OREN | | | | Sn | **Sn** | **13 43 14.4** | **+2.4** |
| **KKBE** | **Karaman, Kazim** | **1.77** | **48** | P | **Pn** | **13 42 53.6** | **+2.3** |
| KKBE | | | | S | **Sn** | **13 43 16.8** | **+4.2** |
| KKBE | | | | *i* AML | AML | 13 43 18.0 | |
| | comp=N,3μm,0.6s | | | | | | |
| KKBE | | | | *i* AML | AML | 13 43 18.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| **TEVE** | **Tevekalti-Mers** | **1.77** | **76** | Pn | **Pn** | **13 42 52.3** | **+1.0** |
| **AKK1** | **Akkuyu-Mersin** | **1.81** | **86** | Pn | **Pn** | **13 42 53.1** | **+1.4** |
| **GULN** | **MERSIN_Gulnar** | **1.82** | **85** | P | **Pn** | **13 42 53.7** | **+1.9** |
| GULN | | | | *i* AML | AML | 13 43 16.0 | |
| | comp=N,955nm,0.4s | | | | | | |
| GULN | | | | S | **Sn** | **13 43 16.2** | **+2.6** |
| GULN | | | | *i* AML | AML | 13 43 18.0 | |
| | comp=E,860nm,0.3s | | | | | | |
| **AKKU** | **Akkuyu-Mersin** | **1.82** | **85** | Pn | **Pn** | **13 42 53.0** | **+1.2** |
| **TEPK** | **Tepekoy-MERSIN** | **1.82** | **83** | Pn | **Pn** | **13 42 53.4** | **+1.5** |
| **CAME** | **Cameli-Denizli** | **1.85** | **300** | Pn | **Pn** | **13 42 53.9** | **+1.5** |
| **FETY** | **Fethiye** | **1.89** | **289** | Pn | **Pn** | **13 42 54.7** | **+1.8** |
| **YESI** | **Yesilovacik-Me** | **1.90** | **84** | Pn | **Pn** | **13 42 54.1** | **+1.2** |
| YESI | | | | Sn | **Sn** | **13 43 18.0** | **+2.4** |
| **ATHAL** | **Athalassa** | **1.92** | **117** | P | **Pn** | **13 42 53.5** | **+0.2** |
| ATHAL | | | | S | **Sn** | **13 43 15.9** | **-0.3** |
| ATHAL | | | | AML | AML | 13 43 30.2 | |
| | 6.5nm,0.5s | | | | | | |
| ATHAL | | | | AML | AML | 13 43 36.3 | |
| | 4.3nm,0.4s | | | | | | |
| **TISA** | **Tisan-Mersin** | **1.93** | **86** | Pn | **Pn** | **13 42 54.7** | **+1.4** |
| **KMER** | **Konya-Meram** | **1.93** | **26** | P | **Pn** | **13 42 55.1** | **+1.7** |
| KMER | | | | S | **Sn** | **13 43 19.4** | **+2.8** |
| KMER | | | | *i* AML | AML | 13 43 23.0 | |
| | comp=N,568nm,0.4s | | | | | | |
| KMER | | | | *i* AML | AML | 13 43 23.0 | |
| | comp=E,744nm,0.5s | | | | | | |
| **IKL** | **Isikli** | **1.94** | **83** | Pn | **Pn** | **13 42 54.9** | **+1.5** |
| **KRMN** | **Karaman** | **1.94** | **54** | Pn | **Pn** | **13 42 54.6** | **+1.0** |
| **KARG** | **Kargicak-Mersi** | **1.95** | **84** | Pn | **Pn** | **13 42 55.4** | **+1.8** |
| **CSS** | **Mathiatis** | **1.97** | **122** | Pn | **Pn** | **13 42 53.4** | **-0.5** |
| **CSS** | **Mathiatis** | **1.97** | **122** | Pn | **Pn** | **13 42 53.5** | **-0.4** |
| **CSS** | **Mathiatis** | **1.97** | **122** | P | **Pn** | **13 42 53.8** | **-0.1** |
| **CSS** | **Mathiatis** | **1.97** | **122** | *i* P | **Pn** | **13 42 53.7** | **-0.1** |
| CSS | | | | S | **Sn** | **13 43 18.5** | **+1.1** |
| CSS | | | | AML | AML | 13 43 33.1 | |
| | 2.5nm,0.5s | | | | | | |
| CSS | | | | AML | AML | 13 43 35.7 | |
| | 2.2nm,0.4s | | | | | | |
| **KEBE** | **Keben-Mersin** | **1.99** | **77** | Pn | **Pn** | **13 42 55.6** | **+1.4** |
| **ASGA** | **Asgata** | **2.02** | **128** | P | **Pn** | **13 42 55.5** | **+1.0** |
| ASGA | | | | S | **Sn** | **13 43 19.0** | **+0.4** |
| ASGA | | | | AML | AML | 13 43 31.7 | |
| | 3.4nm,0.5s | | | | | | |
| ASGA | | | | AML | AML | 13 43 31.8 | |
| | 3.0nm,0.7s | | | | | | |
| **AKIN** | **Akıncılar- Kıb** | **2.03** | **119** | Pn | **Pn** | **13 42 54.6** | **-0.2** |
| **KONT** | **Konya--Tatoy** | **2.08** | **24** | Pn | **Pn** | **13 42 56.4** | **+0.9** |
| **KONT** | **Konya--Tatoy** | **2.08** | **24** | P | **Pn** | **13 42 57.2** | **+1.7** |
| KONT | | | | S | **Sn** | **13 43 23.0** | **+2.7** |
| KONT | | | | *i* AML | AML | 13 43 28.0 | |
| | comp=N,301nm,0.6s | | | | | | |
| KONT | | | | *i* AML | AML | 13 43 36.0 | |
| | comp=E,426nm,0.4s | | | | | | |
| **BASM** | **Basmaki-Afyon** | **2.13** | **332** | Pn | **Pn** | **13 42 57.7** | **+1.5** |
| **SILI** | **Silifke-Mersin** | **2.14** | **80** | Pn | **Pn** | **13 42 57.8** | **+1.6** |
| **MVOU** | **Mavrovouni** | **2.15** | **118** | *i* P | **Pn** | **13 42 56.1** | **-0.3** |
| MVOU | | | | S | **Sn** | **13 43 20.3** | **-1.6** |
| MVOU | | | | AML | AML | 13 43 34.0 | |
| | 3.9nm,0.4s | | | | | | |
| MVOU | | | | AML | AML | 13 43 37.4 | |
| | 3.5nm,0.5s | | | | | | |
| **APMY** | **Acipayam-Deniz** | **2.16** | **312** | Pn | **Pn** | **13 42 57.9** | **+1.4** |
| **SLFK** | **Silifke-Mersin** | **2.16** | **80** | Pn | **Pn** | **13 42 58.1** | **+1.6** |
| **LAR1C** | **Larnaka City C** | **2.19** | **120** | S | **Sn** | **13 43 21.9** | **-0.8** |
| **LADK** | **Ladik-KONYA** | **2.32** | **21** | Pn | **Pn** | **13 42 59.7** | **+0.9** |
| **KIZK** | **Mersin** | **2.33** | **78** | Pn | **Pn** | **13 43 00.5** | **+1.6** |
| **KIZK** | **Mersin** | **2.33** | **78** | P | **Pn** | **13 43 02.0** | **+3.1** |
| KIZK | | | | S | **Sn** | **13 43 30.8** | **+4.4** |
| KIZK | | | | *i* AML | AML | 13 43 37.0 | |
| | comp=N,542nm,0.4s | | | | | | |
| KIZK | | | | *i* AML | AML | 13 43 39.0 | |
| | comp=E,530nm,0.4s | | | | | | |
| **EREN** | **Erenkoy** | **2.38** | **101** | Pn | **Pn** | **13 43 00.5** | **+1.0** |
| **PARAL** | **Paralimni** | **2.46** | **114** | P | **Pn** | **13 43 02.5** | **+2.0** |
| PARAL | | | | S | **Sn** | **13 43 29.2** | **-0.3** |
| PARAL | | | | AML | AML | 13 43 48.2 | |
| | 2.4nm,0.8s | | | | | | |
| PARAL | | | | AML | AML | 13 43 48.2 | |
| | 2.6nm,0.9s | | | | | | |
| **ARG** | **Arkhangelos** | **2.58** | **275** | | **Pn** | **13 43 02.1** | **-0.1** |
| **ARG** | **Arkhangelos** | **2.58** | **275** | P | **Pn** | **13 43 02.0** | **-0.3** |
| ARG | | | | S | **Sn** | **13 43 32.7** | **+0.3** |
| | 608nm,0.3s | | | | | | |
| **SHUT** | **Suhut-Afyon** | **2.58** | **347** | Pn | **Pn** | **13 43 03.5** | **+1.1** |
| **YESY** | **Yesilyurt** | **2.62** | **48** | Pn | **Pn** | **13 43 04.2** | **+1.3** |
| **YER** | **Yerkesik** | **2.67** | **295** | P | **Pn** | **13 43 05.2** | **+1.7** |
| **KHL** | **Karahalli** | **2.69** | **329** | Pn | **Pn** | **13 43 05.3** | **+1.4** |
| **SULT** | **Sultanhani-AKS** | **2.79** | **39** | Pn | **Pn** | **13 43 06.8** | **+1.6** |
| **CHBY** | **Cihanbeyli** | **2.84** | **26** | Pn | **Pn** | **13 43 06.9** | **+1.0** |
| **KIZT** | **Kizilcal** | **2.88** | **9** | Pn | **Pn** | **13 43 07.2** | **+0.8** |
| **DAT** | **Datca** | **3.09** | **284** | P | **Pn** | **13 43 10.2** | **+0.9** |
| DAT | | | | S | **Sn** | **13 43 46.3** | **+1.3** |
| **KULA** | **Kula-Manisa** | **3.25** | **320** | P | **Pn** | **13 43 12.0** | **+0.5** |
| KULA | | | | S | **Sn** | **13 43 51.2** | **+2.2** |
| **KULU** | **Kulu** | **3.29** | **24** | Pn | **Pn** | **13 43 13.2** | **+1.1** |
| **CMRD** | **Camardi-Nigde** | **3.37** | **60** | Pn | **Pn** | **13 43 15.4** | **+2.2** |
| **BODT** | **Bodrum** | **3.38** | **289** | P | **Pn** | **13 43 14.5** | **+1.3** |
| **KARP** | **Karpathos** | **3.41** | **263** | Pn | **Pn** | **13 43 14.4** | **+0.8** |
| **KARP** | **Karpathos** | **3.41** | **263** | P | **Pn** | **13 43 15.1** | **+1.5** |
| KARP | | | | S | **Sn** | **13 43 53.3** | **+0.6** |
| | 2μm,0.3s | | | | | | |
| **KARP** | **Karpathos** | **3.41** | **263** | P | **Pn** | **13 43 15.0** | **+1.5** |
| **ANTO** | **Ankara** | **4.00** | **17** | Pn | **Pn** | **13 43 23.0** | **+1.2** |
| **BR131** | **Keskin Array S** | **4.12** | **26** | Pn | **Pn** | **13 43 24.0** | **+0.5** |
| **BRTR** | **Keskin Array B** | **4.12** | **26** | Pn | **Pn** | **13 43 24.0** | **+0.5** |
| **BRTR** | **Keskin Array B** | **4.12** | **26** | P | **Pn** | **13 43 23.4** | **0.0** |
| | 2.9nm,0.3s,baz=230,slow=14,SNR=63 | | | | | | |
| BRTR | | | | S | **Sn** | **13 44 09.1** | **-1.3** |
| | 9.9nm,0.3s,baz=204,slow=26,SNR=8.3 | | | | | | |
| BRTR | | | | LR | LR | 13 45 28.5 | |
| | comp=Z,114nm,20.3s,baz=244,slow=46 7.5nm,0.5s | | | | | | |
| **HWQ** | **Hawqa** | **4.19** | **113** | *e*P | **Pn** | **13 43 25.6** | **+1.2** |
| **ZKR** | **Zakros** | **4.25** | **259** | P | **Pn** | **13 43 25.3** | **+0.2** |
| ZKR | | | | S | **Sn** | **13 44 15.2** | **+1.7** |
| | 430nm,0.4s | | | | | | |
| **BEIL** | **Beino** | **4.26** | **109** | *e*P | **Pn** | **13 43 26.2** | **+0.9** |
| **HNTI** | **Hanita** | **4.34** | **132** | P | Pn | 13 43 31.9 | +5.5 |
| **HNTI** | **Hanita** | **4.34** | **132** | P | **Pn** | **13 43 29.2** | **+2.8** |
| **HNTI** | **Hanita** | **4.34** | **132** | S | **Sn** | **13 44 17.2** | **+1.4** |
| **MDUB** | **Mudurnu** | **4.43** | **359** | | **Pn** | **13 43 29.2** | **+1.5** |
| **RCY** | **Rachaya** | **4.51** | **123** | *e*P | **Pn** | **13 43 29.9** | **+1.1** |
| **MMC7** | **Mount Meron ar** | **4.52** | **131** | P | **Pn** | **13 43 31.1** | **+2.2** |
| **MMA0** | **Mount Meron ar** | **4.53** | **131** | P | **Pn** | **13 43 31.6** | **+2.6** |
| **MMA0B** | **Mount Meron ar** | **4.53** | **131** | P | **Pn** | **13 43 30.7** | **+1.6** |
| **MMA0B** | **Mount Meron ar** | **4.53** | **131** | S | **Sn** | **13 44 21.3** | **+0.8** |
| **MMAI** | **Mount Meron Ar** | **4.53** | **131** | P | **Pn** | **13 43 28.3** | **-0.7** |
| | 13nm,0.3s,baz=304,slow=11,SNR=24 | | | | | | |
| MMAI | | | | S | **Sn** | **13 44 22.3** | **+1.9** |
| | 10nm,0.3s,baz=313,slow=25,SNR=8.5 8.3nm,0.3s | | | | | | |
| **GEM** | **Giv'at Ha'Em** | **4.56** | **127** | P | **Pn** | **13 43 32.8** | **+3.3** |
| **GEM** | **Giv'at Ha'Em** | **4.56** | **127** | S | **Sn** | **13 44 21.5** | **+0.2** |
| **GEM** | **Giv'at Ha'Em** | **4.56** | **127** | P | **Pn** | **13 43 32.2** | **+2.8** |
| **OFRI** | **`Ofer** | **4.57** | **137** | P | **Pn** | **13 43 33.4** | **+3.9** |
| **OFRI** | **`Ofer** | **4.57** | **137** | S | **Sn** | **13 44 21.9** | **+0.5** |
| **OFRI** | **`Ofer** | **4.57** | **137** | P | **Pn** | **13 43 31.7** | **+2.1** |
| **BNN** | **Bunyan** | **4.58** | **51** | Pn | **Pn** | **13 43 32.0** | **+2.3** |
| **NATI** | **Neve Ativ** | **4.58** | **126** | P | **Pn** | **13 43 32.4** | **+2.7** |
| **NATI** | **Neve Ativ** | **4.58** | **126** | S | **Sn** | **13 44 21.8** | **+0.2** |
| **NATI** | **Neve Ativ** | **4.58** | **126** | P | **Pn** | **13 43 32.1** | **+2.5** |
| **SANT** | **Santorini** | **4.74** | **276** | Pn | **Pn** | **13 43 33.9** | **+1.9** |
| **KSHT** | **Keshet** | **4.81** | **128** | S | **Sn** | **13 44 28.5** | **+1.2** |
| **KSHT** | **Keshet** | **4.81** | **128** | P | **Pn** | **13 43 35.4** | **+2.6** |
| **GAZ** | **Gaziantep** | **4.88** | **75** | Pn | **Pn** | **13 43 35.2** | **+1.3** |
| **SLTI** | **Sal'it** | **4.89** | **140** | P | Pn | 13 43 39.1 | +5.2 |
| **SLTI** | **Sal'it** | **4.89** | **140** | S | **Sn** | **13 44 29.6** | **+0.4** |
| **SLTI** | **Sal'it** | **4.89** | **140** | P | **Pn** | **13 43 36.5** | **+2.6** |
| **MMLI** | **Mount Malkishu** | **4.95** | **135** | P | **Pn** | **13 43 37.2** | **+2.4** |
| **SALP** | **Salfit** | **5.10** | **140** | P | **Pn** | **13 43 40.0** | **+3.1** |
| **QRNJ** | **Al-Qirein** | **5.11** | **135** | P | **Pn** | **13 43 40.8** | **+3.9** |
| **HMDT** | **Nahal Hemdat** | **5.14** | **136** | P | Pn | 13 43 41.3 | +3.9 |
| **HMDT** | **Nahal Hemdat** | **5.14** | **136** | S | **Sn** | **13 44 37.6** | **+2.1** |
| **HMDT** | **Nahal Hemdat** | **5.14** | **136** | P | **Pn** | **13 43 40.1** | **+2.7** |
| **IDI** | **Anoyia** | **5.28** | **264** | Pn | **Pn** | **13 43 40.3** | **+1.0** |
| **IDI** | **Anoyia** | **5.28** | **264** | P | **Pn** | **13 43 36.7** | **-2.6** |
| | 13nm,0.3s,baz=44,slow=5.9,SNR=88 | | | | | | |
| IDI | | | | S | **Sn** | **13 44 36.0** | **-2.8** |
| | 46nm,0.4s,baz=354,slow=9.2,SNR=8.3 26nm,0.3s | | | | | | |
| **BALJ** | **Balqa** | **5.33** | **136** | | **Pn** | **13 43

RAFF Raffo Rosso 13.66 280 Pn Pn 13 45 31.1 -2.8
KIEV Kiev 14.73 355 P P 13 45 55.5 +2.5
AKASG Malin Array Be 14.74 355 P Pn 13 45 45.9 -2.3
0.5nm,0.3s,baz=227,slow=15,SNR=1.8
0.2nm,0.2s
AKBB Malin Array Si 14.74 355 P P 13 45 55.5 +2.4
NRCA Norcia 15.60 301 Pn 13 46 01.9 +2.4
FDMO Fiordimonte 15.68 302 P 13 46 03.1 -0.6
SABO M.te Sabotino 16.62 312 Pn 13 46 13.5 +1.2
SABO IAmb IAmb 13 46 26.3
comp=Z,23nm,1.5s
TATN Tataouine 17.51 265 P P 13 46 25.9 +1.9
TATN IAmb IAmb 13 46 28.2
comp=Z,18nm,0.6s
KEST Kesra 17.80 275 P P 13 46 30.0 +2.8
KEST IAmb IAmb 13 46 31.5
comp=Z,14nm,0.8s
KEST Kesra 17.80 275 P Pn 13 46 23.4 -3.7
comp=Z,0.1nm,0.3s,baz=82,slow=12,SNR=1.7
comp=Z,1.6nm,0.7s
GEC2 GERESS Array S 18.18 320 P Pn 13 46 32.4 +0.8
GERES GERESS Array B 18.18 320 P P 13 46 29.8 -1.6
comp=Z,0.1nm,0.3s,baz=124,slow=14,SNR=6.9
comp=Z,1.4nm,0.8s
KHC Kasperske Hory 18.43 321 P P 13 46 34.0 0.0
KHC Kasperske Hory 18.43 321 eP P 13 46 33.7 -0.3
WTTA Wattenberg 18.44 314 eP P 13 46 33.9 -0.4
comp=Z,1.6nm,0.7s
WATA Walderalm 18.51 314 eP P 13 46 34.9 -0.1
comp=Z,3.5nm,1.0s
SQTA Sankt Quirin 18.67 313 eP P 13 46 37.1 +0.3
comp=Z,3.8nm,1.0s
MOTA Moosalm 18.79 313 eP P 13 46 37.0 -1.1
comp=Z,5.0nm,1.4s
FETA Feichten 18.86 312 eP P 13 46 39.6 +0.7
comp=Z,8.5nm,1.4s
RETA Reutte 19.06 313 eP P 13 46 40.6 -0.4
comp=Z,1.7nm,0.5s
DAVOX Davos/Dischmat 19.27 310 P P 13 46 42.1 -1.3
comp=Z,0.2nm,0.3s,baz=128,slow=11,SNR=8.0
DAVOX LR LR 13 54 53.5
comp=Z,35nm,21.2s,baz=257,slow=39
comp=Z,3.6nm,0.7s
DAVA Damuels 19.49 312 eP P 13 46 45.8 -0.1
comp=Z,5.1nm,0.6s
BELG Belogornoye 20.03 30 LR LR 13 55 16.5
comp=Z,16nm,18.9s,baz=301,slow=39
SENIN Lac Senin/Sane 20.73 307 P P 13 46 59.4 +0.1
SENIN IAmb IAmb 13 47 03.5
comp=Z,38nm,1.1s
BFO Black Forest 20.90 313 P P 13 47 01.8 +0.8
BFO IAmb IAmb 13 47 04.1
comp=Z,6.8nm,1.0s
ECH Echery 21.55 312 P P 13 47 07.5 -0.5
ECH IAmb IAmb 13 47 46.5
comp=Z,8.6nm,1.3s
WLF Walferdange 22.79 315 P P 13 47 21.8 +0.7
WLF IAmb IAmb 13 47 44.9
comp=Z,8.0nm,1.0s
UOSS Minazif 24.07 110 P P 13 47 33.9 +0.3
UOSS IAmb IAmb 13 48 03.7
comp=Z,11nm,1.4s
CEST Esterri de Car 24.08 295 P P 13 47 35.2 +1.5
CEST IAmb IAmb 13 47 41.1
comp=Z,9.8nm,1.3s
ABKAR Akbulak array 24.69 49 P P 13 47 38.1 -0.9
ABKAR Akbulak array 24.69 49 P P 13 47 38.2 -0.8
FINES FINESS Array B 25.64 354 P P 13 47 47.3 -0.2
FINES FINESS Array B 25.64 354 P P 13 47 44.4 -3.1
comp=Z,3.6nm,0.9s,baz=182,slow=9.5,SNR=10
comp=Z,3.6nm,0.9s
ESDC Sonseca Array 27.97 288 P P 13 48 09.4 +0.7
ESDC Sonseca Array 27.97 288 P P 13 48 07.5 -1.3
comp=Z,1.6nm,0.8s,baz=81,slow=9.3,SNR=13
ESDC LR LR 13 59 23.0
comp=Z,22nm,21.1s,baz=134,slow=37
comp=Z,1.6nm,0.8s
NOA NORSAR Array B 28.10 339 P P 13 48 08.1 -1.5
comp=Z,0.2nm,0.4s,baz=141,slow=9.2,SNR=1.8
comp=Z,0.2nm,0.4s
PAB San Pablo 28.28 288 P P 13 48 11.9 +0.4
PAB IAmb IAmb 13 48 41.2
comp=Z,10nm,1.5s
EKA Eskdalemuir Ar 30.40 320 P P 13 48 28.0 -2.1
comp=Z,0.3nm,0.5s,baz=122,slow=9.2,SNR=4.8
comp=Z,0.3nm,0.5s
PESTR Estremoz 30.85 287 P P 13 48 34.1 -0.1
PESTR IAmb IAmb 13 48 34.9
comp=Z,16nm,1.3s
PVAQ Vaqueiros 31.16 284 P P 13 48 37.2 +0.2
ARCES ARCESS Array B 33.71 356 P P 13 48 55.6 -3.3
comp=Z,1.4nm,0.8s,baz=136,slow=17,SNR=1.0
comp=Z,1.4nm,0.8s
AAK Ala-Archa 33.76 65 LR LR 14 04 57.4
comp=Z,33nm,18.8s,baz=260,slow=40
TORD Torodi Ar. Bea 35.03 237 P P 13 49 10.4 -0.5
comp=Z,1.7nm,0.8s,baz=34,slow=9.5,SNR=9.1
comp=Z,1.7nm,0.8s
KSH Kashi 35.20 71 P P 13 49 14.6 +2.3
KSH sP pwP 13 49 27.3 -0.9
KSH pmax pmax
comp=Z,4.0nm,0.7s
KURBB Kurchatov Area 36.66 52 P P 13 49 22.9 -1.6
comp=Z,0.8nm,0.5s,baz=272,slow=8.8,SNR=7.4
comp=Z,0.8nm,0.5s
MKAR Makanchi Array 39.09 58 P P 13 49 44.6 -0.5
comp=Z,0.4nm,0.5s,baz=265,slow=9.9,SNR=4.8
comp=Z,0.4nm,0.5s
PMOZ Porto Moniz, M 39.81 280 P P 13 49 51.8 +0.4
ZALV Zalesovo Beam 40.77 47 P P 13 49 57.2 -1.6
comp=Z,1.3nm,0.4s,baz=264,slow=10,SNR=6.7
comp=Z,1.3nm,0.4s
WMQ Urumqi 43.21 62 eP P 13 50 19.7 +0.7
WMQ pmax pmax
comp=Z,18nm,0.7s
DBIC Dimbokro 44.15 237 P P 13 50 27.3 +0.6
DBIC Dimbokro 44.15 237 P P 13 50 27.3 +0.6
comp=Z,4.4nm,0.8s,baz=35,slow=10,SNR=3.5
ANGG Ammassalik, Gr 49.18 329 P P 13 51 06.3 +0.9
SFJD Kangerlussuaq 54.32 331 LR LR 14 17 37.7
comp=Z,19nm,18.4s,baz=314,slow=39
PZH PanZhiHua 59.79 78 P P 13 52 25.1 +1.9
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.6s
HHC Hu-ho-hao-te 60.94 59 eP P 13 52 30.1 -0.7
HHC sP pP 13 52 43.9 -0.3
HHC pmax pmax
comp=Z,24nm,0.5s
HHC pmax pmax
comp=Z,53nm,5.0s
PQI Presque Isle 70.47 314 P P 13 53 30.6 -1.3
GGN Saint George 70.59 312 P P 13 53 31.5 -1.2
GGN IAmb IAmb 13 53 52.1
comp=Z,8.5nm,1.3s
D62A Allapoint, All 70.85 315 P P 13 53 33.7 -0.6
D62A IAmb IAmb 13 54 12.5
comp=Z,12nm,1.4s
EMMW East Machias 71.18 312 P P 13 53 35.6 -0.7
RDOG Red Dog Mine 75.68 5 P P 13 54 03.6 +1.3
IMAR Indian Mountai 78.23 2 P P 13 54 16.5 -0.2
M29M Somme Creek 81.52 355 P P 13 54 35.5 +0.8
M29M IAmb IAmb 13 55 00.8
comp=Z,3.5nm,1.1s

**DJA 12 13:45:44.3±0.3,8°S±6°×11°6E±°, h10km, M4.0/8, mb4.4/2, MLv3.8/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.70 | 141 | P | | Pg | 13 45 57.8 | -0.2 |
| SRBI | Singaraja | 1.21 | 275 | P | | Pn | 13 46 06.4 | -0.9 |
| PLAI | Plampang | 1.48 | 116 | P | | Pn | 13 46 11.2 | +0.2 |
| JAGI | Jajag, Banyuwa | 2.27 | 263 | P | | Pn | 13 46 21.2 | -0.7 |
| GRJI | Gresik | 4.12 | 288 | P | | Pn | 13 46 47.7 | +0.4 |
| BSSI | Bau Bau, Buton | 4.51 | 63 | P | | Pn | 13 46 52.0 | -0.8 |
| EDFI | Ende, Flores | 5.23 | 96 | P | | Pn | 13 47 02.5 | -0.3 |
| | 19nm,1.1s,0.1nm | | | | | | | |
| UGM | Wanagama | 5.86 | 272 | P | | Pn | 13 47 11.8 | +0.5 |

*IDC 12 14:42:03.3±0.6,17°.16N×100°.79W,h0km,mb4.1/15, mbtmp4.1/20,ML3.5/6,MS4.0/5,Error ellipse: s-maj=19.8km s-min=11.4km az=50.0*

*MEX 12 14:42:09.2±0.8, 17°.11N×100°.84W, h44km±12km, MD5.2*
*NEIC 12 14:42:09.1±2.9, 17°.13N±0°.05×100°.82W±0°.03, h35km±2km, mb4.6/287, Md5.2/174(MEX), Error ellipse: s-maj=9.2km s-min=3.0km az=203.0*

**ISC 12 14:42:07.3±1.1, 17°.15N±0°.03×100°.77W±0°.02, h23km±8km, n627, σ1s77/615, mb4.6/102, 14C-2D, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| ATYC | Atoyac | 0.33 | 80 | *i* P | | Pn | 14 42 16.5 | -0.3 |
| ATYC | | | | eS | | Sn | 14 42 21.9 | -1.0 |
| PET2 | Petatlan | 0.60 | 309 | eP | | Pb | 14 42 18.9 | -0.4 |
| PET2 | | | | eS | | Sb | 14 42 26.9 | -0.5 |
| ZIIG | Zihuatanejo | 0.80 | 304 | | | Pb | 14 42 21.9 | -0.7 |
| ZIIG | | | | | | Sb | 14 42 32.3 | -0.7 |
| ZIIG | Zihuatanejo | 0.80 | 304 | eP | | Pb | 14 42 21.9 | -0.7 |
| ZIIG | | | | eS | | Sb | 14 42 32.3 | -0.7 |
| ACP2 | Acapulco | 0.89 | 108 | | | Pb | 14 42 24.3 | +0.2 |
| ACP2 | | | | | | Sn | 14 42 36.8 | 0.0 |
| ACP2 | Acapulco | 0.89 | 108 | eP | | Pb | 14 42 24.3 | +0.2 |
| ACP2 | | | | eS | | Sn | 14 42 36.8 | 0.0 |
| DAIG | Los Arroyos | 1.08 | 97 | | | Pn | 14 42 26.9 | -0.2 |
| DAIG | | | | | | Sb | 14 42 41.3 | +0.2 |
| DAIG | Los Arroyos | 1.08 | 97 | eP | | Pn | 14 42 26.9 | -0.2 |
| DAIG | | | | eS | | Sb | 14 42 41.3 | +0.2 |
| ARIG | Puente Sto Nin | 1.19 | 20 | | | Pn | 14 42 28.0 | -0.4 |
| ARIG | | | | | | Sn | 14 42 43.4 | -0.8 |
| ARIG | Puente Sto Nin | 1.19 | 20 | eP | | Pn | 14 42 28.3 | -0.4 |
| ARIG | | | | eS | | Sn | 14 42 43.4 | -0.8 |
| UON | La Union | 1.28 | 309 | eP | | Pn | 14 42 29.3 | -0.6 |
| UON | | | | eS | | Sn | 14 42 46.0 | -0.4 |
| MEIG | Mezcala | 1.34 | 55 | | | Pn | 14 42 31.1 | +0.4 |
| MEIG | | | | | | Sn | 14 42 48.1 | +0.1 |
| MEIG | Mezcala | 1.34 | 55 | *i* P | | Pn | 14 42 31.1 | +0.4 |
| MEIG | | | | eS | | Sn | 14 42 48.1 | +0.1 |
| CRIG | Cruz Grande | 1.62 | 105 | | | Pn | 14 42 34.5 | -0.1 |
| CRIG | | | | | | Sn | 14 42 54.0 | -0.8 |
| CRIG | Cruz Grande | 1.62 | 105 | eP | | Pn | 14 42 34.5 | -0.1 |
| CRIG | | | | eS | | Sn | 14 42 54.0 | -0.8 |
| PLIG | Platanillo | 1.73 | 44 | | | Pn | 14 42 36.5 | +0.4 |
| PLIG | | | | | | Sn | 14 42 57.8 | +0.3 |
| PLIG | Platanillo | 1.73 | 44 | eP | | Pn | 14 42 36.5 | +0.4 |
| PLIG | | | | eS | | Sn | 14 42 57.8 | +0.3 |
| TEJU | Tejupilco | 1.83 | 18 | eP | | Sn | 14 42 38.5 | +0.8 |
| TEJU | | | | eS | | Sn | 14 43 01.4 | +1.2 |
| MGIG | Malinaltepec | 2.04 | 87 | | | Pn | 14 42 41.5 | +0.9 |
| MGIG | | | | | | Sn | 14 43 07.2 | +1.7 |
| MGIG | Malinaltepec | 2.04 | 87 | eP | | Pn | 14 42 41.5 | +0.9 |
| MGIG | | | | eS | | Sn | 14 43 07.2 | +1.7 |
| TLIG | Tlapa | 2.15 | 79 | Pn | | Pn | 14 42 42.8 | +0.9 |
| TLIG | Tlapa | 2.15 | 79 | eP | | Pn | 14 42 42.9 | +0.9 |
| TLIG | | | | eS | | Sn | 14 43 08.6 | +0.7 |
| MAVM | Malinalco, Edo | 2.17 | 34 | eP | | Pn | 14 42 27.3 | -15 |
| MAVM | | | | eS | | Sn | 14 42 54.0 | -15 |
| HMTT | Tlapaneco | 2.21 | 73 | | | Pn | 14 42 43.1 | +0.4 |
| HMTT | | | | | | Sn | 14 43 10.9 | +1.5 |
| HMTT | Tlapaneco | 2.21 | 73 | eP | | Pn | 14 42 43.1 | +0.4 |
| HMTT | | | | eS | | Sn | 14 43 10.9 | +1.5 |
| YAIG | Yautepec | 2.35 | 43 | | | Pn | 14 42 44.6 | -0.2 |
| YAIG | | | | | | Sb | 14 43 16.3 | -1.4 |
| YAIG | Yautepec | 2.35 | 43 | eP | | Pn | 14 42 44.6 | -0.2 |
| YAIG | | | | eS | | Sb | 14 43 16.3 | -1.4 |
| TOVM | TOLUCA | 2.36 | 26 | | | Pn | 14 42 47.4 | +2.4 |
| TOVM | | | | | | Sb | 14 43 16.6 | -1.6 |
| TOVM | TOLUCA | 2.36 | 26 | eP | | Pn | 14 42 47.4 | +2.4 |
| TOVM | | | | eS | | Sb | 14 43 16.6 | -1.6 |
| INVM | La Marquesa | 2.50 | 32 | eP | | Pn | 14 42 47.0 | 0.0 |
| INVM | | | | eS | | Sn | 14 43 19.1 | +2.1 |
| MOIG | Morelia | 2.54 | 351 | Pn | | Pn | 14 42 49.0 | +1.6 |
| MOIG | Morelia | 2.54 | 351 | eP | | Pn | 14 42 48.9 | +1.4 |
| MOIG | | | | eS | | Sn | 14 43 16.7 | -1.1 |
| TLVM | San Miguel Top | 2.56 | 37 | eP | | Pn | 14 42 49.7 | +1.9 |
| TLVM | | | | eS | | Sn | 14 43 20.3 | +1.9 |
| URUA | Uruapan | 2.57 | 331 | | | Pn | 14 42 49.8 | +1.9 |
| URUA | | | | | | Sn | 14 43 16.9 | -1.6 |
| URUA | Uruapan | 2.57 | 331 | eP | | Pn | 14 42 49.8 | +1.9 |
| URUA | | | | eS | | Sn | 14 43 16.9 | -1.6 |
| CJVM | Cuajimalpa | 2.61 | 33 | eP | | Pn | 14 42 49.7 | +1.3 |
| CJVM | | | | eS | | Sn | 14 43 17.7 | -1.9 |
| XCVM | Xochimilco | 2.61 | 37 | eP | | Pn | 14 42 51.2 | +2.7 |
| XCVM | | | | eS | | Sb | 14 43 24.0 | -1.5 |
| FTIG | Fresnillo de T | 2.63 | 73 | | | Pn | 14 42 49.6 | +1.1 |
| FTIG | | | | | | Sn | 14 43 21.5 | +1.7 |
| FTIG | Fresnillo de T | 2.63 | 73 | eP | | Pn | 14 42 49.6 | +1.1 |
| FTIG | | | | eS | | Sn | 14 43 21.5 | +1.7 |
| CNCY | Coyoacan | 2.63 | 35 | eP | | Pn | 14 42 50.8 | +2.1 |
| CNCY | | | | eS | | Sb | 14 43 25.3 | -0.7 |
| MPVM | San Francisco | 2.63 | 39 | eP | | Pn | 14 42 50.5 | +1.8 |
| MPVM | | | | eS | | Sn | 14 43 22.1 | +1.9 |
| CUP5 | Mexico City | 2.64 | 35 | eP | | Pn | 14 42 50.9 | +2.0 |
| CUP5 | | | | eS | | Sn | 14 43 20.9 | +0.6 |
| UNM | Universidad Na | 2.64 | 35 | | | Pn | 14 42 49.4 | +0.6 |
| UNM | Universidad Na | 2.64 | 35 | *i* P | | Pn | 14 42 51.0 | +2.2 |
| UNM | | | | eS | | Sn | 14 43 17.8 | -2.5 |
| PNIG | Pinotepa | 2.64 | 106 | | | Pn | 14 42 49.1 | +0.4 |
| PNIG | | | | | | Sn | 14 43 17.9 | -2.2 |
| PNIG | Pinotepa | 2.64 | 106 | eP | | Pn | 14 42 49.1 | +0.4 |
| PNIG | | | | eS | | Sn | 14 43 17.9 | -2.2 |
| COVM | Coyoacan | 2.67 | 35 | eP | | Pb | 14 42 53.0 | -1.6 |
| COVM | | | | eS | | Sn | 14 43 19.1 | -2.0 |
| BJVM | Benito Juarez | 2.68 | 34 | eP | | Pn | 14 42 51.6 | +2.1 |
| BJVM | | | | eS | | Sn | 14 43 19.3 | -2.0 |
| MHVM | Bosque de Chap | 2.69 | 33 | eP | | Pn | 14 42 51.8 | +2.3 |
| MHVM | | | | eS | | Sn | 14 43 22.8 | +1.3 |
| MMIG | Aquila | 2.70 | 295 | | | Pn | 14 42 48.5 | -0.9 |
| MMIG | | | | | | Sn | 14 43 19.7 | -1.7 |
| MMIG | Aquila | 2.70 | 295 | eP | | Pn | 14 42 48.5 | -0.9 |
| MMIG | | | | eS | | Sn | 14 43 19.7 | -1.7 |
| SCT2 | Benito Juarez | 2.71 | 34 | eP | | Pb | 14 42 57.0 | +1.7 |
| SCT2 | | | | eS | | Sn | 14 43 25.8 | +3.8 |
| PBXN | Popocatepetl | 2.73 | 47 | eP | | Pn | 14 42 50.5 | +0.2 |
| PBXN | | | | eP | | Pn | 14 42 50.8 | +0.5 |
| PBXN | | | | eS | | Sn | 14 43 24.5 | +1.6 |
| PBXN | | | | eS | | Sn | 14 43 26.9 | +4.1 |
| THVM | De Xico | 2.74 | 38 | eP | | Pn | 14 42 52.6 | +2.3 |
| THVM | | | | eS | | Sn | 14 43 24.6 | +1.8 |
| VRVM | Mexico City | 2.75 | 35 | eS | | Sn | 14 43 26.7 | +3.7 |
| APVM | Azcapotzalco | 2.75 | 32 | | | Pn | 14 42 52.5 | +2.1 |
| APVM | | | | | | Sn | 14 43 27.0 | +3.8 |
| APVM | Azcapotzalco | 2.75 | 32 | eP | | Pn | 14 42 52.5 | +2.1 |
| APVM | | | | eS | | Sn | 14 43 27.0 | +3.8 |
| PBPN | Popocatepetl | 2.77 | 47 | eP | | Pn | 14 42 50.9 | 0.0 |
| PBPN | | | | eS | | Sn | 14 43 26.6 | +2.6 |
| PBVM | Pinon | 2.78 | 35 | | | Pn | 14 42 52.2 | +1.6 |
| PBVM | | | | | | Sn | 14 43 23.6 | +0.2 |
| PBVM | Pinon | 2.78 | 35 | eP | | Pn | 14 42 52.2 | +1.6 |
| PBVM | | | | eS | | Sn | 14 43 23.6 | +0.2 |
| PBCV | Popocatepetl | 2.79 | 49 | eP | | Pn | 14 42 50.6 | -0.3 |
| PBCV | | | | eS | | Sn | 14 43 26.2 | +2.2 |
| PPIG | Popocatepetl | 2.79 | 47 | | | Pn | 14 42 51.2 | +0.1 |
| PPIG | | | | | | Sn | 14 43 21.4 | -2.9 |
| PPIM | Popocatepetl | 2.79 | 47 | eP | | Pn | 14 42 51.2 | +0.1 |
| PPIM | | | | eS | | Sn | 14 43 21.4 | -2.9 |
| TXVM | Universitario | 2.87 | 38 | eP | | Pn | 14 42 50.9 | -1.1 |
| TXVM | | | | eS | | Sn | 14 43 28.7 | +2.7 |
| TXIG | Tlaxiaco | 2.87 | 88 | | | Pn | 14 42 53.3 | +1.3 |
| TXIG | | | | | | Sn | 14 43 25.0 | -1.1 |
| TXIG | Tlaxiaco | 2.87 | 88 | eP | | Pn | 14 42 53.3 | +1.3 |
| TXIG | | | | eS | | Sn | 14 43 25.0 | -1.1 |
| HLIG | Huajuapan de L | 2.91 | 76 | | | Pn | 14 42 53.6 | +1.1 |
| HLIG | | | | | | Sn | 14 43 26.0 | -0.9 |
| HLIG | Huajuapan de L | 2.91 | 76 | eP | | Pn | 14 42 53.6 | +1.1 |
| HLIG | | | | eS | | Sn | 14 43 26.0 | -0.9 |
| ACIG | Acambay | 2.94 | 17 | | | Pn | 14 42 52.8 | 0.0 |
| ACIG | | | | | | Sb | 14 43 32.4 | -2.3 |
| ACIG | Acambay | 2.94 | 17 | eP | | Pn | 14 42 52.8 | 0.0 |
| ACIG | | | | eS | | Sb | 14 43 32.4 | -2.3 |
| YOIG | Yosondua | 3.10 | 95 | | | Pn | 14 42 56.6 | +1.4 |
| YOIG | | | | | | Sn | 14 43 30.9 | -0.8 |
| YOIG | Yosondua | 3.10 | 95 | eP | | Pn | 14 42 56.6 | +1.4 |
| YOIG | | | | eS | | Sn | 14 43 30.9 | -0.8 |
| PHPU | Puebla | 3.11 | 52 | | | Pn | 14 42 56.9 | +1.6 |
| PHPU | | | | | | Sb | 14 43 37.7 | -2.0 |
| PHPU | Puebla | 3.11 | 52 | eP | | Pn | 14 42 56.9 | +1.6 |
| PHPU | | | | eS | | Sb | 14 43 37.7 | -2.0 |
| VTVM | Tizayuca | 3.22 | 36 | | | Pn | 14 42 58.3 | +1.5 |
| VTVM | | | | | | Sn | 14 43 38.6 | +3.9 |
| VTVM | Tizayuca | 3.22 | 36 | eP | | Pn | 14 42 58.3 | +1.5 |
| VTVM | | | | eS | | Sn | 14 43 38.6 | +3.9 |
| TPIG | Tehuac#an | 3.48 | 68 | | | Pn | 14 43 01.1 | +0.8 |
| TPIG | | | | | | Sn | 14 43 42.1 | +1.1 |
| TPIG | Tehuac#an | 3.48 | 68 | eP | | Pn | 14 43 01.1 | +0.8 |
| TPIG | | | | eS | | Sn | 14 43 42.1 | +1.1 |
| DHIG | Demacu | 3.54 | 27 | | | Pn | 14 43 01.5 | +0.4 |
| DHIG | | | | | | Sn | 14 43 42.0 | -0.4 |
| DEIG | Demacu | 3.54 | 27 | eP | | Pn | 14 43 01.5 | +0.4 |
| DEIG | | | | *i* S | | Sn | 14 43 42.0 | -0.4 |
| JRQG | Juriquilla Cam | 3.54 | 5 | Pn | | Pn | 14 43 01.6 | +0.4 |
| JRQG | Juriquilla Cam | 3.54 | 5 | eP | | Pb | 14 43 06.3 | -3.3 |
| JRQG | | | | eS | | Sn | 14 43 47.0 | +4.4 |
| JUBC | Volcan de Coli | 3.55 | 312 | eP | | Pn | 14 43 04.5 | +3.2 |
| JUBC | | | | eS | | Sn | 14 43 42.0 | -0.7 |
| MNGA | Volcan de Coli | 3.55 | 311 | eP | | Pn | 14 43 03.8 | +2.5 |
| MNGA | | | | eS | | Sn | 14 43 43.1 | +0.3 |
| CDAR | Ciudad de Arme | 3.56 | 300 | eP | | Pn | 14 43 03.2 | +2.0 |
| CDAR | | | | eS | | Sn | 14 43 40.8 | -1.8 |
| COMA | Comala | 3.57 | 308 | eP | | Pn | 14 43 02.9 | +1.5 |
| COMA | | | | *i* S | | Sn | 14 43 41.8 | -1.2 |
| INCO | Volcan de Coli | 3.58 | 312 | eP | | Pn | 14 43 04.4 | +2.5 |
| INCO | | | | eS | | Sn | 14 43 39.2 | -4.5 |
| SOMAC | Volcano de Col | 3.59 | 311 | eP | | Pn | 14 43 03.9 | +1.8 |
| SOMAC | | | | eS | | Sn | 14 43 47.7 | +3.7 |
| IGIG | Irapuato, Guan | 3.62 | 352 | | | Pn | 14 43 02.6 | +0.4 |
| IGIG | | | | | | Sn | 14 43 39.2 | -5.2 |
| IGIG | Irapuato, Guan | 3.62 | 352 | eP | | Pn | 14 43 02.6 | +0.4 |
| IGIG | | | | *i* S | | Sn | 14 43 39.2 | -5.2 |
| R15V | | 3.65 | 304 | | | Pn | 14 43 02.4 | -0.2 |
| R15V | | 3.65 | 304 | eP | | Pn | 14 43 02.4 | -0.2 |
| R15V | | | | eS | | Sn | 14 43 45.9 | +0.9 |
| TOIG | Toxpalan | 3.66 | 75 | | | Pn | 14 43 03.7 | +1.0 |
| TOIG | | | | | | Sn | 14 43 44.9 | -0.4 |
| TOIG | Toxpalan | 3.66 | 75 | eP | | Pn | 14 43 03.7 | +1.0 |
| TOIG | | | | eS | | Sn | 14 43 44.9 | -0.4 |
| PEIG | Puerto Escondi | 3.66 | 108 | | | Pn | 14 43 03.3 | +0.7 |
| PEIG | | | | | | Sn | 14 43 42.3 | -2.8 |
| PEIG | Puerto Escondi | 3.66 | 108 | eP | | Pn | 14 43 03.3 | +0.7 |
| PEIG | | | | eS | | Sn | 14 43 42.3 | -2.8 |
| CEGR | Campo Tres | 3.68 | 308 | eP | | Pn | 14 43 04.2 | +1.1 |
| CEGR | | | | eS | | Sn | 14 43 44.0 | -1.9 |
| OXBJ | Oaxaca | 3.87 | 91 | | | Pn | 14 43 09.7 | +4.0 |
| OXBJ | | | | | | Sn | 14 43 50.3 | -0.3 |
| OXBJ | Oaxaca | 3.87 | 91 | eP | | Pn | 14 43 09.7 | +4.0 |
| OXBJ | | | | eS | | Sn | 14 43 50.3 | -0.3 |
| OZST | Orizaba | 3.89 | 64 | eP | | Pn | 14 43 05.6 | -0.3 |
| OZST | | | | eS | | Sn | 14 43 52.4 | +1.4 |
| CIHU | Emiliano Zapat | 4.31 | 300 | eP | | Pn | 14 43 12.7 | +1.0 |
| CIHU | | | | eS | | Sn | 14 44 06.7 | +5.5 |
| JAUV | Jalcomulco | 4.37 | 59 | eP | | Pn | 14 43 13.7 | +1.3 |
| JAUV | | | | eS | | Sn | 14 44 00.1 | -2.5 |
| HUIG | Huatulco | 4.68 | 106 | | | Pn | 14 43 18.4 | +1.7 |
| HUIG | | | | | | Sn | 14 44 05.1 | -5.2 |
| HUIG | Huatulco | 4.68 | 106 | eP | | Pn | 14 43 18.4 | +1.7 |
| HUIG | | | | eS | | Sn | 14 44 05.1 | -5.2 |
| RPIG | Rio Verde | 4.76 | 9 | | | Pn | 14 43 20.4 | +2.5 |
| RPIG | | | | | | Sb | 14 44 23.8 | -3.5 |
| RPIG | Rio Verde | 4.76 | 9 | eP | | Pn | 14 43 20.4 | +2.5 |
| RPIG | | | | *e* | | | 14 44 23.8 | |
| NEUV | Arroyo Zacate | 4.78 | 83 | eP | | Pn | 14 43 19.0 | +1.1 |
| NEUV | | | | eS | | Sn | 14 44 06.8 | -5.9 |
| LVIG | Laguna Verde | 4.86 | 58 | eP | | Pb | 14 43 26.5 | -5.3 |
| LVIG | | | | eS | | Sn | 14 44 22.3 | +7.6 |
| CTUV | Llano Grande | 4.86 | 28 | eP | | Pn | 14 43 20.4 | +1.2 |
| CTUV | | | | eS | | Sn | 14 44 21.9 | +7.1 |
| ANIG | Ahuacatlan | 5.25 | 318 | | | Pn | 14 43 27.2 | +2.5 |
| ANIG | | | | | | Sn | 14 44 22.5 | -2.1 |
| ANIG | Ahuacatlan | 5.25 | 318 | eP | | Pn | 14 43 27.2 | +2.5 |
| ANIG | | | | eS | | Sn | 14 44 22.5 | -2.1 |
| CMIG | Matias Romero | 5.63 | 90 | | | Pn | 14 43 31.2 | +1.5 |
| CMIG | | | | | | Sn | 14 44 32.4 | -1.4 |
| CMIG | Matias Romero | 5.63 | 90 | Pn | | Pn | 14 43 30.1 | +0.4 |
| | 2.9nm,0.3s,baz=262,slow=9.3,SNR=26 | | | | | | | |
| CMIG | | | | | | Sn | 14 44 31.2 | -2.6 |
| | 20nm,0.3s,baz=297,slow=12,SNR=4.7 | | | | | | | |
| CMIG | | | | | | Lg | 14 45 04.3 | |
| | 57nm,0.3s,baz=184,slow=23,SNR=8.8 | | | | | | | |
| CMIG | | | | | | LR | 14 45 58.0 | |
| | comp=Z,815nm,20.9s,baz=299,slow=42 | | | | | | | |
| | 8.8nm,0.3s | | | | | | | |
| CMIG | Matias Romero | 5.63 | 90 | eP | | Pn | 14 43 31.2 | +1.5 |
| CMIG | | | | eS | | Sn | 14 44 32.4 | -1.4 |
| ZAIG | Zacatecas | 5.83 | 343 | Pn | | Pn | 14 43 34.8 | +2.0 |
| ZAIG | Zacatecas | 5.83 | 343 | eP | | Pn | 14 43 35.2 | +2.4 |
| ZAIG | | | | eS | | Sn | 14 44 43.9 | +4.7 |
| GTIG | Gomez Farias | 6.07 | 14 | | | Pn | 14 43 36.7 | +0.9 |
| GTIG | | | | | | Sn | 14 44 46.3 | +1.7 |
| GTIG | Gomez Farias | 6.07 | 14 | eP | | Pn | 14 43 36.7 | +0.9 |
| GTIG | | | | *i* S | | Sn | 14 44 46.3 | +1.7 |
| TUIG | Tuzandepetl | 6.12 | 81 | eP | | Pn | 14 43 36.3 | -0.2 |
| TUIG | | | | eS | | Sn | 14 44 39.6 | -6.2 |
| UXUV | UXUV | 6.33 | 88 | eP | | Pn | 14 43 39.9 | +0.4 |
| UXUV | | | | eS | | Sn | 14 44 46.7 | -4.4 |
| TGIG | | 7.33 | 92 | | | Pn | 14 43 56.2 | +3.1 |
| TGIG | | | | | | Sn | 14 45 11.2 | -4.5 |
| TGIG | | 7.33 | 92 | eP | | Pn | 14 43 56.2 | +3.1 |
| TGIG | | | | eS | | Sn | 14 45 11.2 | -4.5 |
| PCIG | | 7.39 | 100 | | | Pn | 14 43 56.1 | +2.2 |
| PCIG | | | | | | Sn | 14 45 10.4 | -6.7 |
| PCIG | | 7.39 | 100 | eP | | Pn | 14 43 56.1 | +2.2 |
| PCIG | | | | eS | | Sn | 14 45 10.4 | -6.7 |
| LNIG | Linares | 7.80 | 9 | eP | | Pn | 14 43 59.6 | +0.1 |
| CCIG | Comitan | 8.32 | 95 | Pn | | Pn | 14 44 08.3 | +1.5 |
| CCIG | Comitan | 8.32 | 95 | eP | | Pn | 14 44 10.2 | +3.4 |
| CCIG | | | | eS | | Sn | 14 45 38.5 | -1.7 |
| MNIG | Monterrey | 8.43 | 3 | | | Pn | 14 44 03.5 | -4.7 |
| MNIG | | | | | | Sn | 14 45 35.4 | -7.3 |
| MNIG | Monterrey | 8.43 | 3 | eP | | Pn | 14 44 03.5 | -4.7 |
| MNIG | | | | eS | | Sn | 14 45 35.4 | -7.3 |
| PATR | El Naranjo | 8.45 | 103 | eP | | Pn | 14 44 11.4 | +2.7 |
| PAVE | Pavencul | 8.48 | 102 | eP | | Pn | 14 44 12.6 | +3.4 |
| PAVE | | | | eS | | Sn | 14 45 47.2 | +2.8 |
| CHUJ | Union Juarez | 8.57 | 103 | eP | | Pn | 14 44 13.9 | +3.5 |
| CHUJ | | | | eS | | Sn | 14 45 54.9 | +8.2 |
| PDIG | Papasquiaro | 8.95 | 332 | | | Pn | 14 44 22.5 | +7.0 |
| PDIG | Papasquiaro | 8.95 | 332 | eP | | Pn | 14 44 22.5 | +7.0 |
| RTAL | Retalhuleu | 9.12 | 105 | Pn | | Pn | 14 44 19.3 | +1.7 |
| APG | El Apazote | 10.14 | 101 | Pn | | Pn | 14 44 32.0 | +0.2 |
| | 0.1nm,0.3s,baz=345,slow=17,SNR=13 | | | | | | | |
| APG | | | | | | Sn | 14 46 22.5 | -2.5 |
| | baz=318,slow=12,SNR=1.9 | | | | | | | |
| APG | | | | | | Lg | 14 47 27.1 | |
| | 0.2nm,0.3s,baz=329,slow=16,SNR=3.5 | | | | | | | |
| MCIG | Muzquiz | 10.69 | 357 | | | Pn | 14 44 41.1 | +1.9 |
| MCIG | Muzquiz | 10.69 | 357 | eP | | Pn | 14 44 41.1 | +1.9 |
| HPIG | | 10.74 | 336 | Pn | | Pn | 14 44 42.6 | +2.7 |
| SLBS | Sierra La Lagu | 10.78 | 309 | Pn | | Pn | 14 44 44.5 | +4.1 |
| 833A | Chaparral WMA, | 11.19 | 6 | P | | Pn | 14 44 47.5 | +1.5 |
| | baz=186 | | | | | | | |
| BCIG | La Boquilla | 11.20 | 338 | | | Pn | 

WHTX **Lake Whitney,** 15.07 11 P Pn 14 45 39.7 +0.7
baz=192
BOAB **BOACO BROADBAN** 15.33 106 P P 14 45 48.7 +1.7
FW13 **Cleburne** 15.43 11 IAmb IAmb 14 45 55.9
comp=Z,53nm,1.2s
ABTX **Abilene, Hawle** 15.44 4 IAmb IAmb 14 46 01.1
comp=Z,27nm,0.8s
ABTX **Abilene, Hawle** 15.44 4 P Pn 14 45 46.5 +2.7
baz=184,SNR=8.8
FW14 **Alvarado** 15.52 11 IAmb IAmb 14 45 57.4
comp=Z,76nm,1.2s
NATX **Nacogdoches** 15.56 20 P Pn 14 45 47.3 +2.0
baz=202,SNR=12
SN05 **Snyder 5** 15.66 360 IAmb IAmb 14 45 58.5
comp=Z,44nm,0.8s
FW07 **Weatherford** 15.71 9 IAmb IAmb 14 46 02.8
comp=Z,39nm,1.0s
PLPT **Palo Pinto** 15.75 8 P P 14 45 51.5 -0.1
PLPT IAmb IAmb 14 46 03.6
comp=Z,54nm,0.8s
POST **Post** 15.86 358 IAmb IAmb 14 46 01.0
comp=Z,31nm,0.9s
SN07 **Snyder 07** 15.87 360 IAmb IAmb 14 46 04.1
comp=Z,33nm,0.7s
FW03 **Perrin-Whitt E** 16.00 8 IAmb IAmb 14 46 02.7
comp=Z,36nm,0.8s
FW06 **Azle** 16.02 10 IAmb IAmb 14 46 02.2
comp=Z,35nm,1.0s
APMT **Aspermont** 16.11 2 IAmb IAmb 14 46 11.5
comp=Z,45nm,0.7s
Z35A **Perchaven, San** 16.42 10 IAmb IAmb 14 46 10.3
comp=Z,33nm,1.0s
DKNS **Dickens** 16.44 360 IAmb IAmb 14 46 10.7
comp=Z,36nm,0.8s
121A **Cookes Peak, D** 16.57 339 P Pn 14 45 60.0 +1.5
baz=156,SNR=11
JTS **Las Juntas de** 16.81 112 Pn Pn 14 46 00.4 -1.1
comp=Z,0.2nm,0.3s,baz=321,slow=14,SNR=1.4
comp=Z,1.8nm,0.5s
MSTX **Muleshoe** 16.84 354 IAmb IAmb 14 46 04.2
comp=Z,60nm,1.0s
MSTX **Muleshoe** 16.84 354 P Pn 14 46 03.4 +1.5
baz=173,SNR=26
LOOK **Love County** 17.07 10 IAmb IAmb 14 46 39.5
comp=Z,41nm,1.0s
DUN6 **Lazy B Ranch** 17.08 335 IAmb IAmb 14 46 35.9
comp=Z,43nm,1.0s
TUC **Tucson** 17.60 331 P P 14 46 14.4 +2.2
TUC **Tucson** 17.60 331 P P 14 46 13.1 +0.9
baz=146
WMOK **Wichita Mounta** 17.60 5 P Pn 14 46 11.6 +0.4
baz=186,SNR=23
AMTX **Amarillo** 17.68 358 IAmb IAmb 14 46 15.0
comp=Z,54nm,1.0s
AMTX **Amarillo** 17.68 358 P Pn 14 46 12.4 +0.2
baz=177
WLAR **White Oak Lake** 17.85 21 IAmb IAmb 14 46 38.0
comp=Z,44nm,0.8s
SMWD **Samnorwood** 17.88 1 IAmb IAmb 14 46 25.2
comp=Z,24nm,0.7s
X37A **Clayton** 18.02 15 IAmb IAmb 14 46 53.6
comp=Z,56nm,1.3s
W35A **Tecumseh** 18.26 10 IAmb IAmb 14 46 30.1
comp=Z,49nm,0.9s
ANMO **Albuquerque** 18.43 345 P Pn 14 46 22.7 +1.1
ANMO **Albuquerque** 18.43 345 P P 14 46 21.3 -0.1
comp=Z,0.2nm,0.3s,baz=246,slow=12,SNR=28
ANMO Lg Lg 14 51 48.6
comp=Z,0.1nm,0.3s,baz=155,slow=18,SNR=1.7
ANMO LR LR 14 54 15.5
comp=Z,962nm,18.6s,baz=258,slow=40
comp=Z,7.8nm,0.9s
ANMO **Albuquerque** 18.43 345 P P 14 46 22.0 +0.5
baz=162
MIAR **Mount Ida** 18.48 19 P P 14 46 21.6 -0.1
baz=202,SNR=13
CCAR **Cane Creek** 18.55 24 IAmb IAmb 14 46 31.0
comp=Z,68nm,1.0s
OK029 **Liberty Lake** 18.80 8 IAmb IAmb 14 46 32.2
comp=Z,22nm,0.7s
DEOK **Depew** 19.00 11 IAmb IAmb 14 46 34.3
comp=Z,33nm,0.9s
OK031 **S. Brethren Rd** 19.05 10 IAmb IAmb 14 46 31.0
comp=Z,42nm,1.0s
OK052 **Battle Ridge R** 19.09 10 IAmb IAmb 14 46 31.6
comp=Z,51nm,1.1s
TUL3 **Leonard** 19.20 12 P P 14 46 29.9 +0.3
baz=194,SNR=17
OK038 **West end E0370** 19.33 5 IAmb IAmb 14 46 43.5
comp=Z,29nm,0.8s
CROK **Carrier** 19.43 7 IAmb IAmb 14 46 35.4
comp=Z,26nm,0.6s
OK048 **Pawnee Station** 19.48 9 IAmb IAmb 14 46 35.4
comp=Z,58nm,1.2s
WHAR **Wooly Hollow** 19.58 21 IAmb IAmb 14 46 42.6
comp=Z,22nm,0.7s
W18A **Petrified Fore** 19.60 338 IAmb IAmb 14 46 50.0
comp=Z,34nm,1.2s
W18A **Petrified Fore** 19.60 338 P P 14 46 35.5 +1.3
baz=153
RLO **Rose Lookout** 19.61 14 IAmb IAmb 14 46 48.1
comp=Z,13nm,0.6s
Z47A **Carrollton** 19.65 33 IAmb IAmb 14 46 43.5
comp=Z,24nm,0.7s
OK032 **Salt Plains WL** 19.70 6 IAmb IAmb 14 46 37.9
comp=Z,23nm,0.7s
250A **Grady** 19.76 39 IAmb IAmb 14 46 45.1
comp=Z,17nm,0.7s
BLOK **Blackwell** 19.78 8 IAmb IAmb 14 46 38.8
comp=Z,39nm,1.1s
KAN14 **Manchester OK** 19.88 7 IAmb IAmb 14 46 39.9
comp=Z,29nm,1.0s
KAN17 **Caldwell West** 19.99 7 IAmb IAmb 14 46 56.4
comp=Z,20nm,0.8s
HHAR **Hobbs** 19.99 16 IAmb IAmb 14 46 45.2
comp=Z,40nm,1.2s
KAN13 **South Haven SW** 20.00 8 IAmb IAmb 14 46 52.0
comp=Z,46nm,1.1s
U38A **Gravette** 20.03 15 IAmb IAmb 14 46 45.6
comp=Z,19nm,0.7s
T35A **Sooner Cattle** 20.04 10 IAmb IAmb 14 46 50.7
comp=Z,41nm,0.8s
OXF **Oxford** 20.06 28 IAmb IAmb 14 47 22.8
comp=Z,33nm,1.1s
OXF **Oxford** 20.06 28 P P 14 46 38.9 -0.1
baz=213
KAN01 **Argonia South** 20.10 7 IAmb IAmb 14 46 53.2
comp=Z,47nm,1.1s
KAN09 **Caldwell North** 20.10 7 IAmb IAmb 14 46 52.6
comp=Z,33nm,0.9s
LRAL **Lakeview Retre** 20.11 36 P P 14 46 39.3 -0.2
baz=221,SNR=9.6
T25A **Trinidad** 20.16 352 P P 14 46 40.6 +0.2
baz=170,SNR=7.5
KAN12 **Harper NE Stat** 20.21 6 IAmb IAmb 14 46 51.6
comp=Z,39nm,0.9s
352A **Blakely** 20.26 42 P P 14 46 41.1 -0.1
WUAZ **Wupatki** 20.58 335 IAmb IAmb 14 47 01.9
comp=Z,24nm,0.8s
WUAZ **Wupatki** 20.58 335 P P 14 46 45.9 +1.0
baz=150,SNR=13
BLYC **Blythe** 20.63 326 IAmb IAmb 14 46 58.7
comp=Z,21nm,0.9s
LCAR **Lake Charles** 20.68 23 IAmb IAmb 14 46 53.8
comp=Z,19nm,0.9s
IKP **In-Ko-Pah, Jac** 20.73 321 P Pn 14 46 48.5 -0.4
baz=134
SWSC **Sam W. Stewart** 20.76 322 P Pn 14 46 48.7 -0.4
baz=135
PDMCI **Parker Dam,Lak** 20.86 327 P P 14 46 49.5 +1.8
baz=141
SDCO **Great Sand Dun** 20.93 349 P P 14 46 49.8 +0.9
baz=167,SNR=18
BC3 **Big Chuckawall** 21.07 324 P P 14 46 51.2 +1.0
baz=137,SNR=5.3
MONP2 **Monument Peak** 21.09 321 P P 14 46 51.4 +0.9
baz=134
MVCO **Mesa Verde** 21.11 343 IAmb IAmb 14 47 17.8
comp=Z,17nm,0.9s
MVCO **Mesa Verde** 21.11 343 P P 14 46 51.8 +1.1
baz=159
TIGA **Tifton** 21.11 45 P P 14 46 50.4 -0.1
baz=232
X48A **Hartselle** 21.16 33 IAmb IAmb 14 47 00.6
comp=Z,23nm,0.9s
152A **Waverly Hall** 21.18 40 IAmb IAmb 14 46 58.5
comp=Z,18nm,0.7s
S22A **4UR Ranch, Cre** 21.20 347 IAmb IAmb 14 47 15.7
comp=Z,26nm,1.0s
S22A **4UR Ranch, Cre** 21.20 347 P P 14 46 53.2 +1.5
baz=164,SNR=14
R32A **Long Quarter,** 21.27 4 IAmb IAmb 14 47 08.0
comp=Z,22nm,0.9s
IRM **Iron Mountain** 21.28 325 P P 14 46 53.8 +1.5
baz=139
MGMO **Mountain Grove** 21.29 19 IAmb IAmb 14 47 07.6
comp=Z,27nm,0.8s
NEE2 **Needles Airpor** 21.47 327 P P 14 46 55.6 +1.3
baz=141
S39A **Bolivar** 21.48 16 IAmb IAmb 14 47 10.0
comp=Z,27nm,0.7s
T42A **Van Buren** 21.57 21 IAmb IAmb 14 47 07.3
comp=Z,35nm,0.8s
CBKS **Cedar Bluff** 21.60 2 IAmb IAmb 14 47 16.6
comp=Z,29nm,0.7s
CBKS **Cedar Bluff** 21.60 2 P P 14 46 56.1 +0.4
baz=182
TPFO **Pinon Flats** 21.61 322 P P 14 46 57.7 +1.6
baz=135
PFO **Pinyon Flats O** 21.62 322 P P 14 46 57.4 +1.3
PFO **Pinyon Flats O** 21.62 322 P P 14 46 54.3 -1.8
comp=Z,0.4nm,0.3s,baz=122,slow=11,SNR=2.6
PFO LR LR 14 55 16.9
comp=Z,219nm,18.1s,baz=138,slow=37
comp=Z,0.4nm,0.3s
PFO **Pinyon Flats O** 21.62 322 P P 14 46 57.4 +1.3
baz=135
BELC **Belle Mtn. Jos** 21.63 324 P P 14 46 57.8 +1.5
baz=137
U15A **North Rim** 21.74 334 IAmb IAmb 14 47 11.9
comp=Z,29nm,1.4s
KSCO **Kaye Shedlock'** 21.84 356 P P 14 46 59.2 +0.8
baz=175,SNR=10
FPAL **Fort Paine** 22.00 35 IAmb IAmb 14 47 11.8
comp=Z,13nm,0.8s
GMRC **Granite Mounta** 22.03 326 P P 14 47 01.9 +1.4
baz=139
MURC **Murrieta** 22.05 321 P P 14 47 02.2 +1.6
baz=134
Q24A **Divide** 22.06 351 P P 14 47 01.2 +0.2
baz=169
WVT **Waverly** 22.12 29 P P 14 47 01.0 -0.2
WVT IAmb IAmb 14 47 09.2
comp=Z,19nm,0.6s
WVT **Waverly** 22.12 29 P P 14 47 01.0 -0.2
baz=214
255A **Hazlehurst** 22.16 45 IAmb IAmb 14 47 08.5
comp=Z,31nm,0.8s
KSU1 **Kansas State U** 22.17 9 P P 14 47 02.5 +0.8
baz=190,SNR=11
V48A **Smith Brothers** 22.28 31 IAmb IAmb 14 47 14.2
comp=Z,12nm,0.8s
SWET **Senee** 22.33 34 IAmb IAmb 14 47 14.6
comp=Z,13nm,0.7s
CGM3 **Cape Girardeau** 22.33 24 IAmb IAmb 14 47 09.7
comp=Z,21nm,0.8s
R40A **Maddies Statio** 22.34 18 IAmb IAmb 14 47 11.1
comp=Z,18nm,0.6s
Y52A **Lilburn** 22.40 39 IAmb IAmb 14 47 10.2
comp=Z,16nm,0.6s
HEC **Hector,Ludlow** 22.43 325 P P 14 47 06.0 +1.3
baz=136
X51A **Calhoun** 22.43 36 IAmb IAmb 14 47 47.1
comp=Z,34nm,1.2s
CCM **Cathedral Cave** 22.44 20 P P 14 47 04.8 0.0
CCM IAmb IAmb 14 47 17.5
comp=Z,34nm,1.0s
CCM **Cathedral Cave** 22.44 20 P P 14 47 05.6 +0.9
baz=204
GOGA **Godfrey** 22.46 41 IAmb IAmb 14 47 18.7
comp=Z,15nm,0.8s
GOGA **Godfrey** 22.46 41 P P 14 47 04.7 -0.2
baz=228
KNB **Kanab** 22.47 334 IAmb IAmb 14 47 26.3
comp=Z,21nm,1.3s
HMU **Henry Mountain** 22.48 339 IAmb IAmb 14 47 22.0
comp=Z,26nm,0.9s
FVM **French Village** 22.65 22 IAmb IAmb 14 47 12.9
comp=Z,18nm,0.8s
TUQ **Turquoise Moun** 22.66 326 P P 14 47 08.7 +1.4
baz=139
CLTN **Cedars of Leba** 22.80 31 IAmb IAmb 14 47 20.8
comp=Z,34nm,1.4s
ISCO **Idaho Springs** 22.95 350 P P 14 47 11.1 +0.7
baz=168,SNR=8.7
GSC **Goldstone, Bar** 23.04 325 P P 14 47 12.0 +0.9
baz=137
MTPU **Mount Pierson** 23.10 337 IAmb IAmb 14 47 31.2
comp=Z,11nm,0.8s
T47A **Shon Grove** 23.15 29 IAmb IAmb 14 47 24.9
comp=Z,25nm,0.7s
DECC **Green Verdugo** 23.18 321 P P 14 47 14.1 +1.6
baz=133
SHOC **Shoshone, Teco** 23.20 327 P P 14 47 13.7 +1.0
baz=139
P38A **Dawn** 23.26 14 IAmb IAmb 14 47 24.2
comp=Z,13nm,0.7s
W52A **Murphy** 23.34 37 IAmb IAmb 14 47 21.8
comp=Z,18nm,0.8s
EDW2 **Edwards Air Fo** 23.41 322 P P 14 47 16.3 +1.4
baz=134
P40A **Paris** 23.55 17 IAmb IAmb 14 47 28.0
comp=Z,19nm,0.8s
LRMC **Laurel Mtn Rad** 23.66 324 P P 14 47 18.4 +1.1
baz=136,SNR=6.1
OGNE **Ogallala** 23.73 358 IAmb IAmb 14 47 30.2
comp=Z,18nm,0.8s
OGNE **Ogallala** 23.73 358 P P 14 47 19.5 +1.5
baz=177
O20A **White River Ci** 23.80 346 P P 14 47 19.5 +0.8
baz=162
TKL **Tuckaleechee C** 23.84 36 IAmb IAmb 14 47 26.1
comp=Z,16nm,0.7s
BG3 **Lake Jocassee** 23.86 38 IAmb IAmb 14 47 27.8
comp=Z,24nm,0.7s
P18A **Preston Nutter** 23.86 342 IAmb IAmb 14 47 40.9
comp=Z,10nm,0.7s
FURC **Furnace Creek,** 23.94 327 P P 14 47 21.0 +1.2
baz=139
MPMC **Manual Prospec** 23.97 325 P P 14 47 21.3 +0.9
baz=137
TPNV **Topopah Spring** 23.99 328 P P 14 47 21.4 +0.8
baz=141,SNR=13
V52A **Sevierville** 24.07 36 IAmb IAmb 14 47 28.3
comp=Z,19nm,0.7s
N23A **Red Feather La** 24.08 350 IAmb IAmb 14 47 42.6
comp=Z,13nm,0.8s
N23A **Red Feather La** 24.08 350 P P 14 47 21.3 -0.1
baz=168
ARVC **Arvin** 24.08 321 P P 14 47 21.7 +0.5
baz=133
ISA **Isabella, Lake** 24.24 323 P P 14 47 23.5 +0.8
baz=135
JSC **Jenkinsville** 24.42 42 IAmb IAmb 14 47 31.6
comp=Z,23nm,0.9s
PAULI **Pauline** 24.42 40 IAmb IAmb 14 47 41.3
comp=Z,26nm,0.9s
NHSC **New Hope** 24.42 46 P P 14 47 24.2 -0.1
baz=234
PKM **Mcpherson Peak** 24.51 320 P P 14 47 26.4 +1.0
baz=131
WCI **Wyandotte Cave** 24.54 28 P P 14 47 25.5 +0.2
WCI IAmb IAmb 14 47 33.6
comp=Z,21nm,0.8s
WCI **Wyandotte Cave** 24.54 28 P P 14 47 25.5 +0.2
baz=215
CWC **Cottonwood Cre** 24.58 325 P P 14 47 27.3 +1.4
baz=137
GRAC **Grapevine Rang** 24.60 327 P P 14 47 27.2 +1.1
baz=139
TZTN **Tazewell** 24.61 35 IAmb IAmb 14 47 34.0
comp=Z,15nm,0.8s
TZTN **Tazewell** 24.61 35 P P 14 47 26.0 0.0
baz=223
VES **Vestal, Richgr** 24.72 322 P P 14 47 28.2 +1.2
baz=134
R11B **Troy Canyon, C** 24.79 331 P P 14 47 28.0 +0.2
baz=144
SMMC **Simmler** 24.91 320 P P 14 47 30.2 +1.4
baz=131
KMSC **Kings Mountain** 24.93 40 P P 14 47 28.6 -0.3
baz=229,SNR=10.0
RWWY **Rawlins** 25.07 349 IAmb IAmb 14 47 47.6
comp=Z,16nm,1.1s
DUG **Dugway, Tooele** 25.22 338 P P 14 47 32.2 +0.5
baz=152
HDIL **Hopedale** 25.34 21 P P 14 47 32.7 +0.1
baz=206
V55A **Taylorsville** 25.47 39 IAmb IAmb 14 47 47.0
comp=Z,22nm,0.8s
W57A **Gilead** 25.78 42 P P 14 47 37.2 +0.6
MLAC **Mammoth, Mammo** 25.86 326 P P 14 47 38.1 +0.5
baz=137
K22A **Casper** 25.88 350 IAmb IAmb 14 47 58.2
comp=Z,24nm,1.0s
K22A **Casper** 25.88 350 P P 14 47 38.1 +0.4
baz=167
SFIN **Lafayette** 26.00 24 P P 14 47 38.9 +0.4
baz=211,SNR=7.0
HWUT **Hardware Ranch** 26.07 341 IAmb IAmb 14 48 01.9
comp=Z,12nm,0.8s
NVAR **Mina Array Bea** 26.17 328 P P 14 47 42.7 +2.3
NVAR **Mina Array Bea** 26.17 328 P P 14 47 40.5 +0.1
comp=Z,2.0nm,0.6s,baz=154,slow=9.8,SNR=25
NVAR PcP PcP 14 51 07.4 +0.1
comp=Z,0.3nm,0.6s,baz=132,slow=2.7,SNR=2.3
comp=Z,2.0nm,0.6s
P49A **Miami Univ. Ec** 26.31 29 P P 14 47 41.5 +0.1
baz=216
L42A **Oliver, Polo** 26.53 19 IAmb IAmb 14 47 57.6
comp=Z,17nm,0.7s
KVN **Kaiserville** 26.54 329 IAmb IAmb 14 47 56.7
comp=Z,13nm,1.1s
BW06 **Boulder Array** 26.61 345 P P 14 47 44.7 +0.3
baz=161
PDAR **Pinedale Array** 26.61 345 P P 14 47 44.8 +0.5
PDAR **Pinedale Array** 26.61 345 P P 14 47 44.6 +0.3
comp=Z,0.8nm,0.7s,baz=148,slow=10,SNR=8.3
PDAR PcP PcP 14 51 07.7 -0.5
comp=Z,1.1nm,0.8s,baz=144,slow=5.3,SNR=3.5
comp=Z,0.8nm,0.7s
ECSD **EROS Data Cent** 26.73 7 IAmb IAmb 14 48 02.8
comp=Z,11nm,0.7s
ECSD **EROS Data Cent** 26.73 7 P P 14 47 45.5 +0.4
baz=189
V58A **Windy Hill, Pi** 26.73 42 P P 14 47 46.5 +1.2
V58A IAmb IAmb 14 47 53.3
comp=Z,17nm,0.6s
BLA **Blacksburg** 26.85 38 P P 14 47 46.0 -0.4
baz=227
JFWS **Jewell Farm** 27.20 17 IAmb IAmb 14 47 58.9
comp=Z,13nm,0.7s
JFWS **Jewell Farm** 27.20 17 P P 14 47 49.5 +0.2
baz=202
L44A **Lake County Fo** 27.26 21 P P 14 47 49.9 0.0
baz=208
EMB **Emerald Bay** 27.52 326 IAmb IAmb 14 48 14.5
comp=Z,18nm,1.4s
TPAW **Teton Pass** 27.64 344 IAmb IAmb 14 48 07.9
comp=Z,11nm,0.9s
P52A **Corning** 27.65 32 IAmb IAmb 14 48 02.2
comp=Z,14nm,1.0s
P52A **Corning** 27.65 32 P P 14 47 53.9 +0.4
baz=221
ACSO **Alum Creek Sta** 27.68 30 P P 14 47 54.2 +0.5
baz=219
R55A **Marlinton** 27.76 37 IAmb IAmb 14 48 09.4
comp=Z,16nm,0.8s
S57A **Dark Hollow, R** 28.09 39 IAmb IAmb 14 48 10.6
comp=Z,12nm,0.9s
O53A **New Philadelph** 28.57 32 P P 14 48 01.7 0.0
baz=222
HLID **Hailey** 28.75 339 P P 14 48 04.1 +0.7
baz=152
RLMT **Red Lodge** 28.78 347 P P 14 48 04.1 +0.4
baz=163
AAM **Ann Arbor** 29.02 27 P P 14 48 06.0 +0.4
baz=215
BOZ **Bozeman (W)** 29.78 345 P P 14 48 13.2 +0.7
baz=159
LAO **LASA Array** 29.80 352 P P 14 48 12.7 +0.2
baz=169
DLMT **Dillon** 29.82 343 IAmb IAmb 14 48 29.9
comp=Z,7.1nm,0.9s
MDND **Maddock** 30.62 2 P P 14 48 20.3 +0.5
baz=182
SSPA **Standing Stone** 30.63 36 P P 14 48 20.0 +0.1
baz=227
AGMN **Agassiz Nation** 31.32 6 P P 14 48 26.8 +0.9
baz=189
MSO **Missoula** 31.54 343 P P 14 48 28.4 +0.5
baz=155
EYMN **Ely** 31.64 12 P P 14 48 28.6 -0.1
baz=197
F10A **Beach Ranch, E** 31.84 338 IAmb IAmb 14 48 45.5
comp=Z,9.0nm,1.0s
BINY **Binghamton** 32.74 35 P P 14 48 37.5 -0.9
baz=228
HOOD **Mount Hood Mea** 33.07 333 IAmb IAmb 14 48 56.3
comp=Z,8.6nm,0.8s
PAL **Palisades** 33.17 39 P P 14 48 41.1 -1.1
baz=232
ULM **Lac du Bonnet** 33.25 6 IAmb IAmb 14 48 54.2
comp=Z,7.8nm,0.9s
ULM **Lac du Bonnet** 33.25 6 P P 14 48 42.5 -0.3
comp=Z,2.4nm,0.6s,baz=287,slow=7.4,SNR=2.3
ULM PcP PcP 14 51 24.1 -0.7
comp=Z,3.8nm,0.9s,baz=164,slow=7.4,SNR=2.7
comp=Z,2.4nm,0.6s
NEW **Newport** 33.79 340 P P 14 48 47.6 +0.1
baz=151
L61B **Northampton** 34.78 38 P P 14 48 55.8 -0.3
baz=232
LONY **Lake Ozonia** 35.13 33 P P 14 48 59.0 -0.1
baz=227
HRV **Adam Dziewonsk** 35.47 38 P P 14 49 01.9 -0.3
baz=233
TRQ **Mont Tremblant** 36.25 31 IAmb IAmb 14 49 25.8
comp=Z,8.1nm,1.0s
LBNH **Lisbon** 36.32 36 P P 14 49 09.2 -0.2
baz=231
G62A **West of Eustis** 37.71 36 IAmb IAmb 14 49 29.1
comp=Z,10nm,0.7s
PKME **Peaks-Kenny Pk** 38.43 36 P P 14 49 27.2 -0.1
baz=233
LDAQ **Lac Daran** 39.09 32 IAmb IAmb 14 49 50.6
comp=Z,8.3nm,1.0s
LMQ **La Malbaie** 39.28 33 IAmb IAmb 14 49 42.6
comp=Z,8.3nm,0.7s
F64A **Sherman** 39.32 36 IAmb IAmb 14 49 42.2
comp=Z,6.3nm,0.7s
D62A **Allapoint, All** 39.67 34 IAmb IAmb 14 49 46.2
comp=Z,15nm,0.9s
BATG **Bathurst New B** 41.42 36 P P 14 49 51.6 -0.6
BATG IAmb IAmb 14 50 00.3
comp=Z,11nm,0.8s
ETMB **Extrema** 43.42 126 P P 14 50 08.6 -0.2
V35K **Ketchikan** 44.79 335 P P 14 50 19.4 +0.2
baz=136
SAML **Samuel** 45.32 122 P P 14 50 22.8 -1.1
TOAD **Toad River Com** 45.35 342 P P 14 50 24.7 +1.0
baz=146
T35M **Bob Quinn** 45.49 338 IAmb IAmb 14 50 27.7
comp=Z,6.9nm,0.8s
T35M **Bob Quinn** 45.49 338 P P 14 50 26.0 +1.2
baz=139
CRAG **Craig** 45.50 335 P P 14 50 26.1 +1.2
baz=134
SCHQ **Schefferville** 45.73 27 P P 14 50 25.4 -1.4
comp=Z,4.5nm,0.6s,baz=226,slow=9.8,SNR=4.6
comp=Z,4.5nm,0.6s
U33K **Whale Pass** 45.95 335 P P 14 50 29.7 +1.3
baz=134
KOTAN **Kotaneelee Air** 46.10 344 P P 14 50 30.8 +1.3
baz=148
LPAZ **La Paz** 46.25 134 P P 14 50 31.2 -0.8
comp=Z,2.6nm,0.9s,baz=332,slow=9.5,SNR=9.3
comp=Z,2.6nm,0.9s
YKA **Yellowknife Ar** 46.32 351 P P 14 50 30.2 -1.0
comp=Z,1.7nm,0.8s,baz=163,slow=6.9,SNR=4.1
YKA PcP PcP 14 52 05.8 -0.3
comp=Z,0.6nm,0.7s,baz=181,slow=6.2,SNR=3.9
comp=Z,1.7nm,0.8s
S34M **Telegraph Cree** 46.51 338 P P 14 50 34.4 +1.6
baz=138
DLBC **Dease Lake** 46.52 339 P P 14 50 35.1 +2.1
baz=140,SNR=11
WTLY **Watson Lake, Y** 47.44 341 P P 14 50 42.2 +2.1
baz=142
S32K **Killisnoo** 47.47 336 P P 14 50 42.2 +1.9
baz=134
SIT **Sitka** 47.49 335 P P 14 50 42.1 +1.7
baz=132
R33M **Jennings River** 47.57 340 P P 14 50 42.8 +1.6

| | | | | | | |
|---|---|---|---|---|---|---|
| R33M | Jennings River<br>baz=139 | 47.57 340 | P | P | 14 50 43.2 | +2.0 |
| Q32M | Nakina River<br>baz=137 | 47.69 339 | P | P | 14 50 44.1 | +1.9 |
| R32K | Eaglecrest<br>baz=134 | 48.01 337 | P | P | 14 50 46.2 | +1.7 |
| TGTN | Hyland Airport<br>baz=144 | 48.42 343 | P | P | 14 50 49.0 | +1.4 |
| S31K | Pelican<br>baz=132 | 48.46 336 | P | P | 14 50 49.9 | +2.0 |
| WRGLY | Wrigley<br>baz=150 | 48.64 347 | P | P | 14 50 50.5 | +1.3 |
| P32M | Atlin<br>baz=136 | 48.66 338 | P | P | 14 50 50.7 | +1.2 |
| P33M | Teslin, Yukon<br>baz=138 | 48.80 339 | P | P | 14 50 51.9 | +1.2 |
| SKAG | Skagway<br>baz=134 | 49.15 337 | P | P | 14 50 54.6 | +1.5 |
| PLBC | Pleasant Camp<br>baz=133 | 49.53 337 | P | P | 14 50 57.3 | +1.2 |
| N32M | Quiet Lake<br>baz=138 | 49.59 340 | P | P | 14 50 58.3 | +1.7 |
| WHY | Whitehorse<br>baz=135 | 49.84 339 | P | P | 14 50 59.9 | +1.4 |
| P29M | Windy Craggy<br>baz=131 | 50.16 337 | P | P | 14 51 02.0 | +1.0 |
| P30M | Million Dollar<br>baz=133 | 50.20 337 | P | P | 14 51 02.0 | +0.7 |
| O30N | Mendenhall<br>comp=Z,9.1nm,1.1s | 50.34 338 | IAmb | IAmb | 14 51 12.8 | |
| O30N | Mendenhall<br>baz=134 | 50.34 338 | P | P | 14 51 03.1 | +0.8 |
| FARO | Faro, Yukon<br>comp=Z,10nm,1.1s | 50.48 341 | IAmb | IAmb | 14 51 13.6 | |
| FARO | Faro, Yukon<br>baz=138 | 50.48 341 | P | P | 14 51 04.5 | +1.1 |
| N31M | Braeburn, Yuko<br>baz=135 | 50.73 339 | P | P | 14 51 06.4 | +1.1 |
| M31M | Drury Creek, Y<br>comp=Z,10nm,1.1s | 50.79 340 | IAmb | IAmb | 14 51 16.7 | |
| M31M | Drury Creek, Y<br>baz=137 | 50.79 340 | P | P | 14 51 06.9 | +1.2 |
| PNL | Peninsula<br>baz=130 | 50.83 336 | P | P | 14 51 07.1 | +1.1 |
| O29M | Mount Kennedy<br>baz=131 | 50.92 337 | P | P | 14 51 07.9 | +1.1 |
| N30M | Aishikik Lake<br>comp=Z,6.2nm,0.9s | 51.16 339 | IAmb | IAmb | 14 51 19.9 | |
| N30M | Aishikik Lake<br>baz=133 | 51.16 339 | P | P | 14 51 09.6 | +1.1 |
| YUK6 | Outpost Mounta<br>baz=132 | 51.27 338 | P | P | 14 51 10.7 | +1.2 |
| YUK4 | Talbot Arm<br>baz=132 | 51.64 338 | P | P | 14 51 13.6 | +1.3 |
| O28M | Mount Upton<br>baz=129 | 51.84 337 | P | P | 14 51 14.7 | +0.8 |
| PTLB | Pontes e Lacer | 52.30 126 | P | P | 14 51 17.3 | -0.3 |
| M29M | Somme Creek<br>baz=132 | 52.31 339 | P | P | 14 51 18.0 | +0.8 |
| YUK3 | Moose Creek<br>baz=130 | 52.58 338 | P | P | 14 51 19.7 | +0.4 |
| L29M | L29M<br>baz=133 | 52.65 340 | P | P | 14 51 20.6 | +1.0 |
| CRQE | Cirque<br>baz=126 | 52.95 336 | P | P | 14 51 22.7 | +0.7 |
| K29M | Barlow Dome<br>baz=134,SNR=7.3 | 52.96 341 | P | P | 14 51 22.7 | +0.8 |
| J30M | Hart River<br>comp=Z,7.6nm,1.2s | 53.12 342 | IAmb | IAmb | 14 51 34.3 | |
| J30M | Hart River<br>baz=136 | 53.12 342 | P | P | 14 51 23.7 | +0.6 |
| MCARA | McCarthy VSAT<br>baz=127 | 53.30 336 | P | P | 14 51 25.4 | +1.0 |
| M27K | Edge Creek, AK<br>baz=128 | 53.47 338 | P | P | 14 51 26.7 | +0.9 |
| Q23K | Middleton Isla<br>baz=122 | 53.56 333 | P | P | 14 51 27.3 | +1.1 |
| I30M | Mount Dempster<br>comp=Z,9.4nm,1.1s | 53.60 342 | IAmb | IAmb | 14 51 36.3 | |
| I30M | Mount Dempster<br>baz=136 | 53.60 342 | P | P | 14 51 27.5 | +0.9 |
| DAWY | Dawson<br>baz=132 | 53.72 340 | P | P | 14 51 28.4 | +1.0 |
| BCAR | Beaver Creek A | 53.88 338 | P | P | 14 51 30.0 | +1.3 |
| L27K | Beaver Creek,<br>comp=Z,9.0nm,1.2s | 53.89 338 | IAmb | IAmb | 14 51 39.0 | |
| L27K | Beaver Creek,<br>baz=129 | 53.89 338 | P | P | 14 51 29.4 | +0.7 |
| M26K | Nabesna, AK<br>baz=127 | 53.90 337 | P | P | 14 51 29.5 | +0.7 |
| EYAK | Cordova Ski Ar<br>baz=123 | 53.91 334 | P | P | 14 51 29.6 | +0.8 |
| I29M | Ogilvie Camp,<br>baz=134 | 54.27 342 | P | P | 14 51 32.3 | +0.9 |
| G31M | Satah River<br>baz=139,SNR=6.0 | 54.29 344 | P | P | 14 51 31.7 | +0.3 |
| P23K | Montague Islan<br>baz=121 | 54.31 333 | P | P | 14 51 32.6 | +0.9 |
| H03N2 | Juan Fernandez<br>baz=335,slow=77,SNR=186 | 54.46 158 | T | T | 15 50 14.6 | |
| H03N1 | Juan Fernandez<br>baz=335,slow=77,SNR=190 | 54.47 158 | T | T | 15 50 15.0 | |
| H03N3 | Juan Fernandez<br>baz=335,slow=77,SNR=211 | 54.48 158 | T | T | 15 50 14.9 | |
| KLU | Klutina<br>baz=124 | 54.50 335 | P | P | 14 51 34.5 | +1.3 |
| F31M | Tsiigehtchic<br>baz=140 | 54.55 345 | P | P | 14 51 35.1 | +1.8 |
| K27K | Chicken<br>baz=129 | 54.59 339 | P | P | 14 51 35.2 | +1.5 |
| EGAK | Eagle<br>baz=131 | 54.77 340 | P | P | 14 51 36.1 | +1.1 |
| I28M | Miner Creek<br>comp=Z,6.1nm,1.2s | 54.83 341 | IAmb | IAmb | 14 51 44.6 | |
| I28M | Miner Creek<br>baz=132 | 54.83 341 | P | P | 14 51 36.5 | +1.0 |
| G30M | tAoh Zraii Nji<br>baz=137 | 54.84 344 | P | P | 14 51 36.1 | +0.5 |
| H29M | Whitestone<br>baz=134 | 54.89 342 | P | P | 14 51 37.0 | +1.1 |
| M24K | Tolsona, Glenn<br>baz=124 | 54.94 336 | P | P | 14 51 36.9 | +0.5 |
| PWL | Port Wells<br>baz=121 | 55.15 334 | P | P | 14 51 38.4 | +0.6 |
| PAX | Paxson<br>baz=125 | 55.16 337 | P | P | 14 51 38.6 | +0.6 |
| INK | Inuvik<br>baz=141 | 55.17 346 | P | P | 14 51 39.1 | +1.3 |
| F30M | Barrier River<br>baz=138,SNR=5.2 | 55.20 344 | P | P | 14 51 38.6 | +0.5 |
| SCRK | Sand Creek<br>comp=Z,6.1nm,1.2s | 55.22 338 | IAmb | IAmb | 14 51 49.7 | |
| SCRK | Sand Creek<br>baz=127 | 55.22 338 | P | P | 14 51 39.3 | +0.8 |
| SCM | Sheep Creek Mo<br>baz=122 | 55.25 335 | P | P | 14 51 39.7 | +1.1 |
| SEW | Seward<br>baz=119 | 55.26 333 | P | P | 14 51 39.6 | +1.0 |
| G29M | Pine Creek<br>baz=135 | 55.28 343 | P | P | 14 51 40.0 | +1.3 |
| M23K | Glacier View<br>baz=122 | 55.39 335 | P | P | 14 51 41.0 | +1.4 |
| J26L | Joseph Creek<br>baz=128 | 55.39 339 | P | P | 14 51 40.8 | +1.2 |
| I27K | Kandik River<br>baz=130 | 55.45 341 | P | P | 14 51 41.3 | +1.2 |
| KNK | Knik Glacier<br>baz=121 | 55.49 334 | P | P | 14 51 41.6 | +1.3 |
| SML | Sawmill<br>baz=121 | 55.64 335 | P | P | 14 51 42.8 | +1.3 |
| BRSE | Bradley Lake S<br>baz=117 | 55.65 332 | P | P | 14 51 42.5 | +1.0 |
| I26K | Coal Creek Min<br>baz=129 | 55.76 340 | P | P | 14 51 43.1 | +1.0 |
| OHAK | Old Harbor<br>baz=113 | 55.77 329 | P | P | 14 51 43.4 | +1.1 |
| WAT6 | Susitna Watana<br>baz=122 | 55.81 336 | P | P | 14 51 43.2 | +0.4 |
| H27K | Steamboat Moun<br>baz=131 | 55.84 341 | P | P | 14 51 43.2 | +0.5 |
| PMR | Palmer<br>baz=120 | 55.86 334 | P | P | 14 51 43.5 | +0.7 |
| SII | Sitkinak Islan<br>baz=112 | 55.97 328 | P | P | 14 51 43.6 | -0.2 |
| J25K | Salcha River,<br>baz=126 | 56.08 339 | P | P | 14 51 45.3 | +0.8 |
| G27K | Doyon Strip<br>comp=Z,7.2nm,1.1s | 56.26 342 | IAmb | IAmb | 14 51 55.2 | |
| G27K | Doyon Strip<br>baz=131,SNR=5.4 | 56.26 342 | P | P | 14 51 46.6 | +0.9 |
| F28M | Old Crow<br>baz=133 | 56.29 343 | P | P | 14 51 46.5 | +0.6 |
| E29M | Blow River<br>baz=136,SNR=7.0 | 56.31 344 | P | P | 14 51 46.8 | +0.8 |
| SUA | Susitna One<br>baz=118 | 56.47 334 | P | P | 14 51 48.4 | +1.0 |
| R18K | Karluk<br>baz=112 | 56.49 329 | P | P | 14 51 48.7 | +1.3 |
| HDA | Harding Lake<br>baz=124 | 56.52 338 | P | P | 14 51 48.7 | +1.0 |
| O20K | Slope Mountain<br>baz=116 | 56.65 332 | P | P | 14 51 49.6 | +0.9 |
| PRP | Porcupine Dome | 56.67 339 | P | P | 14 51 49.8 | +0.9 |
| PRP | Porcupine Dome<br>baz=126 | 56.67 339 | P | P | 14 51 50.0 | +1.1 |
| A36M | Sachs Harbour<br>baz=152 | 56.68 351 | P | P | 14 51 49.7 | +1.1 |
| IL31 | comp=Z,6.5nm,1.1s | 56.71 338 | IAmb | IAmb | 14 51 58.6 | |
| ILAR | Eielson Array | 56.71 338 | P | P | 14 51 49.9 | +1.0 |
| ILAR | Eielson Array<br>comp=Z,1.5nm,0.9s,baz=153,slow=5.8,SNR=18 | 56.71 338 | P | P | 14 51 48.5 | -0.5 |
| ILAR | comp=Z,0.9nm,0.7s,baz=144,slow=2.5,SNR=5.5<br>comp=Z,1.5nm,0.9s | 56.71 338 | PcP | PcP | 14 52 44.8 | 0.0 |
| CUT | Chulitna<br>baz=120 | 56.73 335 | P | P | 14 51 50.0 | +1.0 |
| MCK | McKinley<br>baz=122 | 56.89 337 | P | P | 14 51 51.4 | +1.1 |
| E28M | Babbage River<br>comp=Z,7.8nm,0.9s | 56.89 344 | IAmb | IAmb | 14 51 59.2 | |
| E28M | Babbage River<br>baz=134 | 56.89 344 | P | P | 14 51 51.5 | +1.3 |
| G26K | Porcupine Rive<br>baz=129 | 56.99 341 | P | P | 14 51 51.9 | +1.0 |
| SKT | Skwentna<br>baz=118 | 57.04 334 | P | P | 14 51 52.0 | +0.7 |
| POKR | Poker Plat Res<br>baz=124 | 57.10 338 | P | P | 14 51 52.6 | +0.9 |
| E27K | Coleen River<br>comp=Z,11nm,1.1s | 57.16 343 | IAmb | IAmb | 14 52 02.5 | |
| E27K | Coleen River<br>baz=132,SNR=5.4 | 57.16 343 | P | P | 14 51 53.3 | +1.1 |
| D28M | Stokes Point<br>baz=136 | 57.20 345 | P | P | 14 51 53.6 | +1.3 |
| H25L | Birch Creek<br>baz=126 | 57.22 340 | P | P | 14 51 54.0 | +1.6 |
| TRF | Thorofare Moun<br>baz=120 | 57.26 336 | P | P | 14 51 54.3 | +1.2 |
| NEA2 | Nenana<br>baz=122 | 57.40 338 | P | P | 14 51 55.0 | +1.3 |
| P18K | Big Mountain,<br>baz=113 | 57.57 330 | P | P | 14 51 56.4 | +1.3 |
| F26K | Sheenjek River<br>baz=129 | 57.57 342 | P | P | 14 51 56.3 | +1.2 |
| G25K | Bearman Lake<br>baz=126 | 57.60 340 | P | P | 14 51 56.3 | +1.1 |
| H24K | Noodor Dome<br>baz=124 | 57.66 339 | P | P | 14 51 56.7 | +1.0 |
| M20K | Styx River<br>baz=116 | 57.67 334 | P | P | 14 51 57.2 | +1.3 |
| D27M | Malcolm River<br>comp=Z,12nm,1.2s | 57.71 344 | IAmb | IAmb | 14 52 05.4 | |
| I23K | Minto, Yukon-K<br>comp=Z,7.1nm,0.9s | 57.80 338 | IAmb | IAmb | 14 52 09.8 | |
| I23K | Minto, Yukon-K<br>baz=122 | 57.80 338 | P | P | 14 51 57.8 | +1.2 |
| N19K | Bonanza Creek<br>baz=114 | 57.80 332 | P | P | 14 51 57.8 | +1.0 |
| BPAW | Bear Paw Mtn.<br>baz=120 | 57.86 337 | P | P | 14 51 57.9 | +0.8 |
| F25K | Christian Rive<br>baz=127 | 57.96 341 | P | P | 14 51 59.0 | +1.2 |
| G24K | Hadweenzic Riv<br>comp=Z,8.6nm,0.9s | 58.01 340 | IAmb | IAmb | 14 52 13.2 | |
| G24K | Hadweenzic Riv<br>baz=125,SNR=5.9 | 58.01 340 | P | P | 14 51 59.2 | +1.1 |
| R16K | Pilot Point<br>baz=109 | 58.06 328 | P | P | 14 51 59.5 | +1.0 |
| M19K | Big River Lodg<br>baz=112 | 58.22 333 | P | P | 14 51 60.0 | +0.3 |
| H23K | Yukon River<br>baz=122 | 58.22 339 | P | P | 14 52 00.3 | +0.7 |
| MLY | Manley<br>comp=Z,4.8nm,0.9s | 58.23 338 | IAmb | IAmb | 14 52 17.5 | |
| MLY | Manley<br>baz=120 | 58.23 338 | P | P | 14 52 00.4 | +0.6 |
| M18K | Stony River<br>baz=113 | 58.67 333 | P | P | 14 52 03.6 | +0.8 |
| K20K | Telida<br>baz=116 | 58.72 335 | P | P | 14 52 04.3 | +1.2 |
| P16K | Nushagak River<br>baz=110 | 58.76 329 | P | P | 14 52 04.7 | +1.3 |
| G23K | Bananza Creek<br>comp=Z,5.3nm,1.1s | 58.86 339 | IAmb | IAmb | 14 52 19.6 | |
| G23K | Bananza Creek<br>baz=122 | 58.86 339 | P | P | 14 52 05.3 | +1.2 |
| H22K | Ishtalitna Cre<br>baz=120 | 58.90 338 | P | P | 14 52 05.3 | +1.0 |
| J20K | Nowinta River<br>baz=116 | 59.11 336 | P | P | 14 52 06.4 | +0.6 |
| E24K | Your Creek<br>baz=124 | 59.12 341 | P | P | 14 52 06.7 | +0.8 |
| C26K | Camden Bay<br>baz=129 | 59.20 344 | P | P | 14 52 07.1 | +0.9 |
| COLD | Coldfoot<br>baz=122 | 59.20 340 | P | P | 14 52 07.8 | +1.5 |
| D25K | Kavik River<br>comp=Z,7.7nm,1.0s | 59.23 343 | IAmb | IAmb | 14 52 16.1 | |
| D25K | Kavik River<br>baz=127 | 59.23 343 | P | P | 14 52 07.5 | +0.9 |
| H21K | Melozitna Rive<br>comp=Z,4.6nm,0.9s | 59.30 338 | IAmb | IAmb | 14 52 41.4 | |
| H21K | Melozitna Rive<br>baz=119 | 59.30 338 | P | P | 14 52 08.2 | +1.1 |
| L18K | Granite Mounta<br>baz=113 | 59.34 333 | P | P | 14 52 08.4 | +1.0 |
| M17K | Holitna River<br>baz=112 | 59.35 332 | P | P | 14 52 08.3 | +0.8 |
| E23K | Chandalar<br>baz=123 | 59.46 341 | P | P | 14 52 09.2 | +1.0 |
| G22K | Bettles<br>baz=121 | 59.47 339 | P | P | 14 52 09.5 | +1.3 |
| I20K | Naaghedeneel<br>baz=116 | 59.52 336 | P | P | 14 52 09.6 | +1.1 |
| J19K | Pooran<br>baz=115 | 59.62 335 | P | P | 14 52 09.7 | +0.4 |
| O15K | Ungalikthiuk R<br>baz=108 | 59.70 329 | P | P | 14 52 10.2 | +0.3 |
| TOLK | Toolik Lake Re<br>baz=124 | 59.77 341 | P | P | 14 52 11.3 | +1.0 |
| D24K | Happy Valley<br>baz=125 | 59.84 342 | P | P | 14 52 11.6 | +0.9 |
| J18K | Innoko River<br>baz=114 | 59.84 335 | P | P | 14 52 12.4 | +1.5 |
| S12K | Black Hills<br>baz=104 | 59.89 325 | P | P | 14 52 12.3 | +0.9 |
| G21K | Allakaket<br>baz=118 | 59.96 338 | P | P | 14 52 12.2 | +0.5 |
| H20K | Anotleneega Mo<br>baz=116 | 59.99 337 | P | P | 14 52 12.5 | +0.7 |
| F22K | John River<br>baz=120 | 60.00 340 | P | P | 14 52 12.6 | +0.7 |
| L17K | Donlin<br>baz=111 | 60.00 333 | P | P | 14 52 12.3 | +0.3 |
| N15K | Kwethluk River<br>baz=108 | 60.15 330 | P | P | 14 52 14.5 | +1.5 |
| K17K | Iditarod<br>baz=112 | 60.22 333 | P | P | 14 52 14.9 | +1.4 |
| D23K | Nanushuk River<br>baz=122 | 60.29 341 | P | P | 14 52 15.2 | +1.3 |
| F21K | Alatna River | 60.30 339 | P | P | 14 52 14.8 | +0.8 |
| F21K | Alatna River<br>baz=115 | 60.30 339 | P | P | 14 52 14.7 | +0.8 |
| L16K | Owhat River<br>baz=110 | 60.37 332 | P | P | 14 52 15.2 | +0.7 |
| CPUP | Villa Florida<br>comp=Z,1.9nm,0.7s,baz=324,slow=7.1,SNR=5.1<br>comp=Z,1.9nm,0.7s | 60.42 135 | P | P | 14 52 14.9 | -0.4 |
| FALS | False Pass<br>baz=102 | 60.45 324 | P | P | 14 52 15.9 | +0.8 |
| H19K | Roundabout Mou<br>baz=115 | 60.59 337 | P | P | 14 52 17.1 | +1.2 |
| C23K | Itkillik River | 60.74 342 | P | P | 14 52 17.2 | +0.4 |
| C23K | Itkillik River<br>baz=123 | 60.74 342 | P | P | 14 52 17.8 | +0.9 |
| J17K | VABM Dome<br>baz=111 | 60.80 334 | P | P | 14 52 18.1 | +0.7 |
| N14K | Kuskokwak Cree<br>baz=107 | 60.83 330 | P | P | 14 52 17.8 | +0.2 |
| D22K | Ayikyak River | 60.86 341 | P | P | 14 52 18.7 | +1.0 |
| D22K | comp=Z,7.7nm,0.9s | | IAmb | IAmb | 14 52 33.4 | |
| D22K | Ayikyak River<br>baz=120 | 60.86 341 | P | P | 14 52 18.6 | +0.9 |
| F20K | Avaraart Lake<br>baz=116 | 60.99 338 | P | P | 14 52 19.6 | +1.0 |
| E21K | Killik River<br>baz=119 | 61.05 340 | P | P | 14 52 20.0 | +0.9 |
| G19K | Purcell Mounta<br>baz=114 | 61.09 337 | P | P | 14 52 20.4 | +1.1 |
| H18K | Honhosa River<br>baz=113 | 61.17 336 | P | P | 14 52 20.9 | +1.0 |
| M14K | Bethel<br>baz=107 | 61.21 331 | P | P | 14 52 20.9 | +0.8 |
| L15K | Ungalak Mounta<br>baz=108 | 61.27 332 | P | P | 14 52 21.3 | +0.8 |
| BDFB | Brasilia<br>comp=Z,3.2nm,0.8s,baz=260,slow=9.8,SNR=4.2<br>comp=Z,3.2nm,0.8s | 61.39 119 | P | P | 14 52 22.0 | -0.2 |
| J16K | Anvik River<br>baz=110 | 61.40 334 | P | P | 14 52 22.7 | +1.2 |
| K15K | Wolf Creek Mou<br>baz=108 | 61.48 332 | P | P | 14 52 23.3 | +1.3 |
| G18K | Tagagawik<br>baz=113 | 61.57 337 | P | P | 14 52 23.3 | +0.7 |
| F19K | Shaleruckik Mo<br>baz=114 | 61.62 338 | P | P | 14 52 23.7 | +0.8 |
| E20K | Nigu River<br>baz=116 | 61.69 340 | P | P | 14 52 23.9 | +0.4 |
| E19K | Redstone River<br>baz=115 | 61.70 339 | P | P | 14 52 23.9 | +0.5 |
| H17K | Granite Mounta<br>baz=111 | 61.70 335 | P | P | 14 52 24.2 | +0.7 |
| L14K | Kuka Creek<br>baz=107 | 61.72 331 | P | P | 14 52 24.5 | +0.9 |
| M13K | Dall Lake<br>baz=106 | 61.77 330 | P | P | 14 52 24.8 | +0.9 |
| B21K | Ikpikpuk River<br>baz=119 | 61.83 341 | P | P | 14 52 25.0 | +0.8 |
| B22K | Teshekpuk Lake<br>baz=120 | 61.83 342 | P | P | 14 52 24.9 | +0.7 |
| UNV | Unalaska Valle<br>baz=99 | 62.03 322 | P | P | 14 52 26.7 | +0.8 |
| D20K | Etivluk River<br>baz=116 | 62.03 340 | P | P | 14 52 26.5 | +0.8 |
| G17K | Kiwalik Mounta<br>baz=111 | 62.19 336 | P | P | 14 52 28.0 | +1.2 |
| F18K | Selawik<br>baz=112 | 62.22 337 | P | P | 14 52 28.1 | +1.2 |
| D19K | Kuna River<br>baz=115 | 62.44 340 | P | P | 14 52 29.6 | +1.1 |
| J14K | Nanvaranak Lak<br>baz=106 | 62.51 333 | P | P | 14 52 29.8 | +0.9 |
| H16K | Elim<br>baz=109 | 62.53 335 | P | P | 14 52 30.1 | +1.0 |
| A22K | Sinclair Lake<br>baz=119 | 62.61 343 | P | P | 14 52 29.9 | +0.5 |
| K13K | Kusilvak Mount<br>baz=115 | 62.78 331 | P | P | 14 52 31.8 | +1.1 |
| B20K | Meade River<br>baz=116 | 62.79 341 | P | P | 14 52 32.2 | +1.6 |
| G16K | Koyuk River<br>baz=109 | 62.83 336 | P | P | 14 52 31.8 | +0.9 |
| E18K | Tukpahlearik C<br>baz=112 | 62.87 338 | P | P | 14 52 32.0 | +0.7 |
| M11K | Mekoryuk<br>baz=105 | 63.13 330 | P | P | 14 52 34.6 | +1.5 |
| C19K | Lookout Ridge<br>baz=114 | 63.18 340 | P | P | 14 52 34.6 | +1.2 |
| E17K | Hotham Inlet<br>baz=110 | 63.20 337 | P | P | 14 52 34.6 | +1.2 |
| G15K | Niukluk<br>baz=107 | 63.38 335 | P | P | 14 52 34.9 | +0.3 |
| C18K | Utukok River<br>baz=112 | 63.54 339 | P | P | 14 52 36.3 | +0.5 |
| PLCA | Paso Flores | 64.07 155 | P | P | 14 52 41.1 | +1.5 |
| PLCA | comp=Z,7.2nm,0.9s | | IAmb | IAmb | 14 52 42.1 | |
| PLCA | Paso Flores<br>comp=Z,6.5nm,1.0s,baz=327,slow=8.9,SNR=11<br>comp=Z,6.5nm,1.0s | 64.07 155 | P | P | 14 52 39.6 | 0.0 |
| F14K | Arctic Creek<br>baz=105 | 64.44 335 | P | P | 14 52 42.9 | +1.3 |
| SPIA | Saint Paul Isl<br>baz=98 | 64.63 326 | P | P | 14 52 44.3 | +1.3 |
| SUMG | Summit | 65.58 17 | P | P | 14 52 49.5 | 0.0 |
| EKA | Eskdalemuir Ar<br>comp=Z,1.3nm,0.6s,baz=286,slow=4.8,SNR=6.6<br>comp=Z,1.3nm,0.6s | 80.32 35 | P | P | 14 54 16.2 | -0.4 |
| ESDC | Sonseca Array<br>comp=Z,1.4nm,1.0s,baz=302,slow=4.9,SNR=8.6<br>comp=Z,1.4nm,1.0s | 84.32 50 | P | P | 14 54 35.9 | -2.0 |
| TIXI | Tiksi | 85.30 346 | P | P | 14 54 41.6 | -0.4 |
| TIXI | comp=Z,5.2nm,0.8s | | IAmb | IAmb | 14 54 43.1 | |
| NB2 | NORSAR Subarra<br>comp=Z,0.5nm,0.6s,baz=295,slow=4.8 | 85.30 27 | P | P | 14 54 42.6 | +0.2 |
| NOA | NORSAR Array B<br>comp=Z,0.7nm,0.7s,baz=296,slow=4.7,SNR=5.0<br>comp=Z,0.7nm,0.7s | 85.30 27 | P | P | 14 54 41.8 | -0.6 |
| FINES | FINESS Array B<br>comp=Z,4.5nm,1.0s,baz=277,slow=11,SNR=2.9<br>comp=Z,4.5nm,1.0s | 91.06 23 | P | P | 14 55 08.9 | -0.9 |
| MKAR | Makanchi Array | 116.29 358 | PKP | PKiKP | 15 00 47.8 | -1.4 |
| STKA | Stephens Creek<br>comp=Z,1.3nm,0.7s,baz=146,slow=3.6,SNR=3.1 | 122.09 243 | PKP | PKPdf | 15 00 59.6 | -1.1 |
| MAW | Mawson<br>comp=Z,4.6nm,0.9s,baz=229,slow=3.1,SNR=6.0 | 128.48 172 | PKP | PKPdf | 15 01 11.5 | -0.3 |
| ASAR | Alice Springs<br>comp=Z,2.5nm,0.9s,baz=102,slow=2.0,SNR=16 | 128.60 253 | PKP | PKPdf | 15 01 13.4 | 0.0 |
| CMAR | Chiang Mai Arr<br>comp=Z,1.1nm,0.7s,baz=347,slow=2.6,SNR=5.2 | 139.65 330 | PKP | PKPdf | 15 01 32.6 | -1.6 |

*TAP* **12** *14:58:08.0,25˚.35N×122˚.15E,h258km,ML3.8,D*
*IDC* **12** *14:58:09.8±10.0,25˚.44N×122˚.28E,h262km±126km,*
*mb2.6/3,mbtmp3.5/5,Error ellipse: s-maj=141.5km*
*s-min=21.0km az=63.0*
*JMA* **12** *14:58:10.3±0.2,25˚N±1˚×122˚.1E±0˚.6,h234km±1km,*
*MV3.8/19,TAIWAN REGION*

**ISC 12 14:58:08.3±0.8,25.31N±0˚.04×122˚.13E±0˚.03,h245km±5km,**
**n137,σ1ᵍ03/257,mb2.8/3,4D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| SXI1 | Grass Mountain<br>baz=232 | 0.32 | 226 | *i* P | | Pn | 14 58 40.7 | +0.5 |
| SXI1 | | | | S | | S | 14 59 05.8 | +0.5 |
| TWB1 | Santiao Chiao<br>baz=188 | 0.33 | 202 | *i* P | | Pn | 14 58 40.9 | +0.8 |
| TWB1 | | | | *i* S | | S | 14 59 05.6 | +0.4 |
| TNOU | National Taiwa<br>baz=244 | 0.36 | 243 | *i* P | | Pn | 14 58 40.8 | +0.6 |
| TNOU | | | | *e* S | | S | 14 59 05.0 | -0.2 |
| NWF | Wu-fen Shan<br>baz=234 | 0.40 | 232 | P | | Pn | 14 58 41.2 | +0.8 |
| NWF | | | | S | | S | 14 59 05.7 | +0.2 |
| WFSB | Wu-fen Shan<br>baz=234 | 0.40 | 232 | *e* P | | Pn | 14 58 40.2 | -0.1 |
| WFSB | | | | S | | S | 14 59 05.4 | +0.1 |
| TIPB | Shuangxi<br>baz=214 | 0.44 | 219 | *i* P | | Pn | 14 58 40.9 | +0.4 |
| TIPB | | | | *i* S | | S | 14 59 04.4 | -1.2 |
| TWY | Chenhua<br>baz=251 | 0.48 | 266 | *i* P | | Pn | 14 58 41.2 | +0.8 |
| TWY | | | | *e* S | | S | 14 59 04.9 | -0.7 |
| EGS | baz=190 | 0.50 | 201 | P | | Pn | 14 58 41.1 | +0.5 |
| EGS | | | | S | | S | 14 59 07.1 | +1.2 |
| YM08 | YM08<br>baz=255 | 0.50 | 256 | P | | Pn | 14 58 39.0 | -1.6 |
| YM08 | | | | *e* S | | S | 14 59 04.9 | -0.9 |
| YM01 | YM01 | 0.53 | 252 | *i* P | | Pn | 14 58 41.2 | +0.6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YM01 | baz=248 | | | *e*S | **S** | **14 59 04.8** | **-1.3** |
| **TWA** | **Mucha** | **0.59** | **236** | *i* P | **Pn** | **14 58 41.5** | **+0.6** |
| TWA | baz=229 | | | *i* S | **S** | **14 59 06.4** | **-0.1** |
| **NTST** | **Danshui** | **0.63** | **257** | *i* P | **Pn** | **14 58 41.7** | **+0.7** |
| NTST | baz=250 | | | *e*S | **S** | **14 59 07.1** | **+0.5** |
| **ILA** | **Ilan** | **0.64** | **212** | *i* P | **Pn** | **14 58 42.5** | **+1.5** |
| ILA | baz=207 | | | *i* S | **S** | **14 59 08.1** | **+1.3** |
| **NHDH** | **Xindian Distri** | **0.65** | **238** | P | **Pn** | **14 58 41.8** | **+0.7** |
| NHDH | baz=232 | | | S | **S** | **14 59 06.2** | **-0.5** |
| **TATO** | **Taipei** | **0.67** | **240** | P | **Pn** | **14 58 41.7** | **+0.6** |
| **TATO** | **Taipei** | **0.67** | **240** | *e*P | **Pn** | **14 58 42.1** | **+0.9** |
| TATO | baz=234 | | | *e*S | **S** | **14 59 06.3** | **-0.6** |
| **TWS1** | **Kuangyinshan** | **0.68** | **252** | *i* P | **Pn** | **14 58 41.1** | **0.0** |
| TWS1 | baz=246 | | | *i* S | **S** | **14 59 06.9** | **0.0** |
| **TWE** | **Neicheng** | **0.72** | **215** | *i* P | **Pn** | **14 58 41.9** | **+0.5** |
| TWE | baz=210 | | | *i* S | **S** | **14 59 07.1** | **-0.2** |
| **FUSB** | **Fushanzhiwuyua** | **0.74** | **222** | *i* P | **Pn** | **14 58 42.0** | **+0.5** |
| FUSB | baz=218 | | | S | **S** | **14 59 06.7** | **-0.9** |
| **TWC** | **Suao** | **0.74** | **200**⇓ | *i*P | **Pn** | **14 58 42.0** | **+0.5** |
| TWC | baz=196 | | | *i* S | **S** | **14 59 06.8** | **-0.7** |
| **NDS** | **Dongshan** | **0.77** | **209** | *i* P | **Pn** | **14 58 42.5** | **+0.9** |
| NDS | baz=200 | | | *i* S | **S** | **14 59 08.3** | **+0.5** |
| **ESAO** | **Su ao** | **0.78** | **199** | P | **Pn** | **14 58 42.4** | **+0.7** |
| ESAO | baz=196 | | | S | **S** | **14 59 07.4** | **-0.4** |
| **ENTT** | **Nioudou** | **0.84** | **217**⇓ | *i*P | **Pn** | **14 58 42.6** | **+0.6** |
| ENTT | baz=220 | | | *i* S | **S** | **14 59 07.8** | **-0.6** |
| **EOS2** | **EOS2** | **0.90** | **174** | *i* P | **Pn** | **14 58 43.3** | **+1.2** |
| EOS2 | baz=175 | | | *i* S | **S** | **14 59 08.5** | **-0.1** |
| **NDT** | **Datong Townshi** | **0.90** | **218** | *i* P | **Pn** | **14 58 42.7** | **+0.5** |
| NDT | baz=219 | | | *i* S | **S** | **14 59 08.1** | **-0.8** |
| **NCU** | **National Centr** | **0.92** | **248** | P | **Pn** | **14 58 40.9** | **-1.4** |
| NCU | baz=244 | | | *e*S | **S** | **14 59 07.2** | **-1.7** |
| **EWUT** | **Wuta** | **0.92** | **200** | *i* P | **Pn** | **14 58 43.2** | **+0.9** |
| EWUT | baz=204 | | | *i* S | **S** | **14 59 08.7** | **-0.4** |
| **NCUH** | **Zhongli** | **0.92** | **248** | *i* P | **Pn** | **14 58 42.9** | **+0.6** |
| NCUH | baz=241 | | | S | **S** | **14 59 08.8** | **-0.2** |
| **YHNB** | **Yeheng** | **0.94** | **227** | P | **Pn** | **14 58 42.8** | **+0.3** |
| **YHNB** | **Yeheng** | **0.94** | **227** | *i* P | **Pn** | **14 58 42.6** | **+0.1** |
| YHNB | baz=217 | | | *i* S | **S** | **14 59 07.5** | **-1.8** |
| **NSK** | **Sanguang** | **0.94** | **228** | *i* P | **Pn** | **14 58 42.7** | **+0.2** |
| NSK | baz=218 | | | *i* S | **S** | **14 59 08.1** | **-1.3** |
| **LATG** | **Datong** | **0.95** | **215** | *i* P | **Pn** | **14 58 43.4** | **+0.7** |
| LATG | baz=212 | | | *i* S | **S** | **14 59 08.6** | **-1.0** |
| **ENA** | **Nanau** | **0.95** | **202** | *i* P | **Pn** | **14 58 43.4** | **+0.9** |
| ENA | baz=204 | | | *i* S | **S** | **14 59 09.4** | **0.0** |
| **EOS3** | **EOS3** | **1.04** | **170** | *i* P | **Pn** | **14 58 44.1** | **+1.3** |
| EOS3 | baz=174 | | | S | **S** | **14 59 10.2** | **+0.3** |
| **EAHA** | **Aohua** | **1.04** | **200** | *i* P | **Pn** | **14 58 43.6** | **+0.6** |
| EAHA | baz=188 | | | S | **S** | **14 59 10.3** | **0.0** |
| **NNS** | **Nan Shan** | **1.11** | **218** | *i* P | **Pn** | **14 58 44.1** | **+0.6** |
| NNS | baz=213 | | | *i* S | **S** | **14 59 11.4** | **+0.2** |
| **NNSB** | **Datong** | **1.11** | **218** | *i* P | **Pn** | **14 58 44.2** | **+0.6** |
| NNSB | baz=213 | | | S | **S** | **14 59 11.0** | **-0.3** |
| **NNSH** | **Datong** | **1.11** | **218** | *i* P | **Pn** | **14 58 44.1** | **+0.5** |
| NNSH | baz=212 | | | *i* S | **S** | **14 59 10.0** | **-1.3** |
| **JYNG** | **Yonagunijimaku** | **1.14** | **139** | P | **Pn** | **14 58 44.2** | **+0.6** |
| JYNG | | | | *e*S | **S** | **14 59 09.4** | **-1.8** |
| **HSN1** | **Hsinchu** | **1.14** | **242** | P | **Pn** | **14 58 44.1** | **+0.6** |
| HSN1 | baz=246 | | | S | **S** | **14 59 12.5** | **+1.2** |
| **NFF** | **Wufeng Townshi** | **1.14** | **234** | *i* P | **Pn** | **14 58 44.1** | **+0.4** |
| NFF | baz=230 | | | *i* S | **S** | **14 59 10.2** | **-1.2** |
| **SBCB** | **Hsinchu** | **1.16** | **244** | *i* P | **Pn** | **14 58 44.6** | **+0.9** |
| SBCB | baz=245 | | | *e*S | **S** | **14 59 10.4** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **1.17** | **136** | P | **Pn** | **14 58 44.5** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **1.17** | **136** | *i* P | **Pn** | **14 58 44.4** | **+0.6** |
| YOJ | baz=147 | | | S | **S** | **14 59 10.0** | **-1.6** |
| **YOJ** | **Yonaguni jima** | **1.17** | **136** | *e*S | **S** | **14 59 10.5** | **-1.1** |
| **EOS4** | **EOS4** | **1.20** | **172** | P | **Pn** | **14 58 44.8** | **+1.3** |
| EOS4 | baz=174 | | | S | **S** | **14 59 11.3** | **0.0** |
| **LIOB** | **Emei** | **1.21** | **237** | *i* P | **Pn** | **14 58 44.8** | **+0.7** |
| LIOB | baz=231 | | | *i* S | **S** | **14 59 11.9** | **-0.2** |
| **NSTT** | **Nanjuang** | **1.23** | **237** | *i* P | **Pn** | **14 58 44.7** | **+0.5** |
| NSTT | baz=232 | | | *i* S | **S** | **14 59 11.6** | **-0.7** |
| **NACB** | **Ninganchiao** | **1.23** | **203** | P | **Pn** | **14 58 44.1** | **-0.1** |
| **NACB** | **Ninganchiao** | **1.23** | **203** | *i* P | **Pn** | **14 58 44.1** | **-0.1** |
| NACB | baz=201 | | | S | **S** | **14 59 10.8** | **-1.7** |
| **ETL** | **Fush Village** | **1.24** | **202** | *i* P | **Pn** | **14 58 44.2** | **0.0** |
| ETL | baz=206 | | | S | **S** | **14 59 12.2** | **-0.4** |
| **ETLH** | **Xiulin Townshi** | **1.25** | **208** | *i* P | **Pn** | **14 58 44.9** | **+0.5** |
| ETLH | baz=206 | | | S | **S** | **14 59 12.3** | **-0.5** |
| **TWD** | **Chiawan** | **1.32** | **202** | *i* P | **Pn** | **14 58 44.6** | **-0.2** |
| TWD | baz=205 | | | *i* S | **S** | **14 59 11.3** | **-2.1** |
| **TWT** | **Tachien** | **1.36** | **220** | *i* P | **Pn** | **14 58 46.4** | **+1.1** |
| TWT | baz=217 | | | *i* S | **S** | **14 59 15.5** | **+1.1** |
| **TDCB** | **Techi** | **1.37** | **220** | *i* P | **Pn** | **14 58 46.2** | **+0.8** |
| TDCB | baz=217 | | | S | **S** | **14 59 15.5** | **+1.0** |
| **WHF** | **Hehuan Shan** | **1.40** | **214** | *i* P | **Pn** | **14 58 47.0** | **+1.1** |
| WHF | baz=208 | | | *i* S | **S** | **14 59 15.7** | **+0.3** |
| **HWA** | **Hwalien** | **1.41** | **200** | *i* P | **Pn** | **14 58 46.1** | **+0.7** |
| HWA | baz=189 | | | *e*S | **S** | **14 59 14.2** | **-0.4** |
| **NMLH** | **Miaoli** | **1.44** | **238** | *i* P | **Pn** | **14 58 46.6** | **+1.0** |
| NMLH | baz=230 | | | *e*S | **S** | **14 59 12.8** | **-2.1** |
| **LXIB** | **Xiulin Townshi** | **1.44** | **207** | *i* P | **Pn** | **14 58 45.8** | **-0.1** |
| LXIB | baz=201 | | | S | **S** | **14 59 15.7** | **+0.3** |
| **ETM** | **Tongmen** | **1.46** | **203** | P | **Pn** | **14 58 45.4** | **-0.5** |
| ETM | baz=204 | | | S | **S** | **14 59 13.6** | **-1.7** |
| **WHP** | **Taichung City** | **1.49** | **226** | *i* P | **Pn** | **14 58 46.9** | **+0.8** |
| WHP | baz=224 | | | S | **S** | **14 59 17.3** | **+1.5** |
| **CHGB** | **Renai** | **1.52** | **215** | *i* P | **Pn** | **14 58 47.6** | **+1.1** |
| CHGB | baz=210 | | | S | **S** | **14 59 18.1** | **+1.5** |
| **TWQ1** | **Liyutan** | **1.56** | **232** | *i* P | **Pn** | **14 58 47.4** | **+0.8** |
| TWQ1 | baz=229 | | | *e*S | **S** | **14 59 16.4** | **-0.3** |
| **SHUL** | **Shoufeng** | **1.60** | **199** | *i* P | **Pn** | **14 58 47.7** | **+0.8** |
| SHUL | baz=203 | | | *i* S | **S** | **14 59 17.2** | **-0.2** |
| **WUSB** | **Renai** | **1.60** | **215** | *i* P | **Pn** | **14 58 47.9** | **+0.8** |
| WUSB | baz=214 | | | *i* S | **S** | **14 59 19.0** | **+1.4** |
| **OWD** | **Renai** | **1.61** | **213** | *i* P | **Pn** | **14 58 48.0** | **+0.9** |
| OWD | baz=207 | | | S | **S** | **14 59 19.1** | **+1.4** |
| **ESL** | **Shilin** | **1.62** | **203** | *i* P | **Pn** | **14 58 46.9** | **-0.2** |
| ESL | baz=201 | | | S | **S** | **14 59 15.9** | **-1.7** |
| **WDJ** | **Dajia District** | **1.66** | **235** | P | **Pn** | **14 58 48.3** | **+0.9** |
| WDJ | baz=227 | | | *e*S | **S** | **14 59 16.7** | **-1.4** |
| **WCS** | **Beigang Elemen** | **1.67** | **222** | *i* P | **Pn** | **14 58 48.1** | **+0.7** |
| WCS | baz=223 | | | *i* S | **S** | **14 59 17.7** | **-0.5** |
| **WARBT** | **Fenglin Townsh** | **1.73** | **203** | *i* P | **Pn** | **14 58 47.6** | **-0.4** |
| WARBT | baz=201 | | | *i* S | **S** | **14 59 16.9** | **-2.3** |
| **IRIF** | **Iriomote-Funau** | **1.75** | **123** | P | **Pn** | **14 58 48.8** | **+0.7** |
| IRIF | | | | *e*S | **S** | **14 59 19.1** | **-0.3** |
| **EGFH** | **Guangfu** | **1.76** | **201** | *i* P | **Pn** | **14 58 48.0** | **-0.3** |
| EGFH | baz=204 | | | *e*S | **S** | **14 59 17.7** | **-1.9** |
| **TCU** | **Taichung** | **1.76** | **229** | *i* P | **Pn** | **14 58 49.0** | **+0.8** |
| TCU | baz=226 | | | *e*S | **S** | **14 59 18.5** | **-1.1** |
| **VWDT** | **VWDT** | **1.79** | **210** | *i* P | **Pn** | **14 58 50.0** | **+1.5** |
| VWDT | baz=204 | | | S | **S** | **14 59 20.2** | **+0.1** |
| **SMLT** | **Sun Moon Lake** | **1.81** | **218** | *i* P | **Pn** | **14 58 47.5** | **-1.3** |
| SMLT | baz=215 | | | S | **S** | **14 59 20.8** | **+0.2** |
| **TYC** | **Yuchr** | **1.82** | **220** | *i* P | **Pn** | **14 58 49.3** | **+0.6** |
| TYC | baz=217 | | | *i* S | **S** | **14 59 21.3** | **+0.8** |
| **SSLB** | **Suanglung** | **1.86** | **215** | P | **Pn** | **14 58 49.8** | **+0.7** |
| **SSLB** | **Suanglung** | **1.86** | **215** | *i* P | **Pn** | **14 58 49.6** | **+0.5** |
| SSLB | baz=218 | | | *i* S | **S** | **14 59 19.6** | **-1.6** |
| **WCHH** | **Zhanghua** | **1.88** | **230** | P | **Pn** | **14 58 49.2** | **0.0** |
| WCHH | baz=224 | | | *e*S | **S** | **14 59 20.9** | **-0.6** |
| **HGSD** | **Ruisui** | **1.92** | **200** | *i* P | **Pn** | **14 58 50.3** | **+0.7** |
| HGSD | baz=201 | | | *e*S | **S** | **14 59 22.0** | **-0.2** |
| **WNT** | **Mingjian** | **1.94** | **223** | *i* P | **Pn** | **14 58 50.8** | **+1.0** |
| WNT | baz=215 | | | *e*S | **S** | **14 59 21.4** | **-1.0** |
| **EHY** | **Hungye** | **1.94** | **202** | *i* P | **Pn** | **14 58 50.2** | **+0.4** |
| EHY | baz=200 | | | S | **S** | **14 59 21.3** | **-1.3** |
| **HATJ** | **Hateruma jima** | **1.97** | **129** | *e*S | **S** | **14 59 22.3** | **-0.6** |
| **WHYT** | **Xinyi Township** | **1.98** | **216** | *i* P | **Pn** | **14 58 50.9** | **+0.6** |
| WHYT | baz=217 | | | *i* S | **S** | **14 59 22.8** | **-0.5** |
| **JKRS** | **Kuro-shima** | **2.02** | **122** | P | **Pn** | **14 58 51.8** | **+1.3** |
| JKRS | | | | *e*S | **S** | **14 59 23.0** | **-0.6** |
| **YULB** | **Yu-li** | **2.06** | **202** | P | **Pn** | **14 58 50.5** | **-0.4** |
| **YULB** | **Yu-li** | **2.06** | **202** | *i* P | **Pn** | **14 58 50.6** | **-0.3** |
| YULB | baz=201 | | | *e*S | **S** | **14 59 21.9** | **-2.5** |
| **JIJ** | **Ishigaki jima** | **2.06** | **117** | P | **Pn** | **14 58 51.8** | **+0.9** |
| JIJ | | | | *e*S | **S** | **14 59 22.6** | **-1.8** |
| **EYUL** | **Yuli** | **2.09** | **201** | *i* P | **Pn** | **14 58 50.9** | **-0.3** |
| EYUL | baz=202 | | | *e*S | **S** | **14 59 22.4** | **-2.6** |
| **TWF1** | **Yuli** | **2.09** | **201** | *i* P | **Pn** | **14 58 51.1** | **-0.2** |
| TWF1 | baz=203 | | | *e*S | **S** | **14 59 22.3** | **-2.8** |
| **JISG** | **Ishigakijimahi** | **2.11** | **110** | P | **Pn** | **14 58 52.2** | **+0.9** |
| JISG | | | | *e*S | **S** | **14 59 24.2** | **-1.0** |
| **MATB** | **Ma-tsu** | **2.14** | **293** | P | **Pn** | **14 58 51.5** | **0.0** |
| MATB | baz=291 | | | *e*S | **S** | **14 59 25.4** | **-0.2** |
| **CHN5** | **Tsauling** | **2.16** | **218**⇓ | *i*P | **Pn** | **14 58 52.7** | **+0.8** |
| CHN5 | baz=215 | | | *i* S | **S** | **14 59 25.8** | **-0.5** |
| **WDLH** | **Douliu** | **2.17** | **222** | *i* P | **Pn** | **14 58 52.8** | **+0.9** |
| WDLH | baz=225 | | | *i* S | **S** | **14 59 25.9** | **-0.4** |
| **CHKH** | **Chenggong** | **2.21** | **198** | *i* P | **Pn** | **14 58 52.7** | **+0.3** |
| CHKH | baz=198 | | | *e*S | **S** | **14 59 26.6** | **-0.4** |
| **FULB** | **Fuli** | **2.24** | **200** | *i* P | **Pn** | **14 58 53.1** | **+0.5** |
| FULB | baz=201 | | | *e*S | **S** | **14 59 27.8** | **+0.2** |
| **WTK** | **Tuku** | **2.26** | **225** | *i* P | **Pn** | **14 58 53.5** | **+0.7** |
| WTK | baz=218 | | | *e*S | **S** | **14 59 26.9** | **-1.0** |
| **CHKT** | **Chengkung** | **2.31** | **198** | *i* P | **Pn** | **14 58 53.7** | **+0.4** |
| CHKT | baz=195 | | | *e*S | **S** | **14 59 27.4** | **-1.4** |
| **EHD** | **Haiduan** | **2.31** | **201** | P | **Pn** | **14 58 52.9** | **-0.4** |
| EHD | baz=200 | | | *e*S | **S** | **14 59 26.8** | **-2.1** |
| **WCKO** | **Fanlu** | **2.33** | **217** | *i* P | **Pn** | **14 58 53.8** | **+0.4** |
| WCKO | baz=214 | | | *e*S | **S** | **14 59 28.7** | **-0.4** |
| **ELDTW** | **Lidau** | **2.34** | **206** | *i* P | **Pn** | **14 58 54.6** | **+0.8** |
| ELDTW | baz=207 | | | *e*S | **S** | **14 59 29.2** | **-0.4** |
| **XPSS** | **Dashiqiu** | **2.37** | **313** | *i* P | **Pn** | **14 58 54.5** | **+0.7** |
| XPSS | baz=312 | | | *e*S | **S** | **14 59 29.3** | **-0.4** |
| **TPUB** | **Ta-pu** | **2.42** | **215** | P | **Pn** | **14 58 54.9** | **+0.4** |
| **TPUB** | **Ta-pu** | **2.42** | **215** | *i* P | **Pn** | **14 58 55.0** | **+0.6** |
| TPUB | baz=216 | | | *i* S | **S** | **14 59 29.8** | **-1.1** |
| **JTJ** | **Tarama** | **2.43** | **105** | P | **Pn** | **14 58 55.9** | **+1.5** |
| JTJ | | | | *e*S | **S** | **14 59 30.9** | **+0.1** |
| **EDH** | **Donghe** | **2.45** | **198** | *i* P | **Pn** | **14 58 54.9** | **+0.2** |
| EDH | baz=200 | | | *e*S | **S** | **14 59 30.1** | **-1.2** |
| **LYJJ** | **Jianjiangzhen** | **2.46** | **301** | *i* P | **Pn** | **14 58 54.7** | **0.0** |
| LYJJ | baz=299 | | | *e*S | **S** | **14 59 31.1** | **-0.2** |
| **WTP** | **Ta-pu** | **2.48** | **214** | *i* P | **Pn** | **14 58 55.5** | **+0.5** |
| WTP | baz=217 | | | *e*S | **S** | **14 59 32.6** | **+0.8** |
| **TWK** | **Hsinying** | **2.53** | **217** | *i* P | **Pn** | **14 58 56.0** | **+0.5** |
| TWK | baz=214 | | | *i* S | **S** | **14 59 32.6** | **-0.2** |
| **SNST** | **Tainan City** | **2.56** | **216** | *i* P | **Pn** | **14 58 56.6** | **+0.8** |
| SNST | baz=216 | | | *i* S | **S** | **14 59 31.9** | **-1.4** |
| **LONT** | **Longtian** | **2.56** | **201** | *i* P | **Pn** | **14 58 55.8** | **0.0** |
| LONT | baz=194 | | | S | **S** | **14 59 31.9** | **-1.5** |
| **SGST** | **Jiashian** | **2.63** | **213** | *i* P | **Pn** | **14 58 56.2** | **-0.3** |
| SGST | baz=215 | | | *i* S | **S** | **14 59 33.8** | **-0.8** |
| **TWG** | **Pinlang** | **2.66** | **201** | *i* P | **Pn** | **14 58 56.6** | **-0.3** |
| TWG | baz=195 | | | S | **S** | **14 59 35.2** | **0.0** |
| **TWGBT** | **Beinan** | **2.66** | **201** | P | **Pn** | **14 58 56.8** | **-0.1** |
| **TWGBT** | **Beinan** | **2.66** | **201** | *i* P | **Pn** | **14 58 56.5** | **-0.4** |
| TWGBT | baz=195 | | | *e*S | **S** | **14 59 34.3** | **-0.9** |
| **SLGT** | **Liugui** | **2.68** | **211** | *i* P | **Pn** | **14 58 58.1** | **+1.1** |
| SLGT | baz=211 | | | *i* S | **S** | **14 59 34.8** | **-0.7** |
| **LDUT** | **Ludao** | **2.70** | **193** | *i* P | **Pn** | **14 58 57.1** | **-0.1** |
| LDUT | baz=189 | | | *e*S | **S** | **14 59 35.6** | **-0.3** |
| **JIRB** | **Irabujima** | **2.81** | **99** | P | **Pn** | **14 58 59.8** | **+1.5** |
| JIRB | | | | *e*S | **S** | **14 59 36.6** | **-1.2** |
| **SCST** | **Cishan** | **2.84** | **212** | *i* P | **Pn** | **14 58 59.8** | **+1.1** |
| SCST | baz=209 | | | S | **S** | **14 59 38.7** | **+0.2** |
| **TSCK** | **Chigu Township** | **2.85** | **221** | P | **Pn** | **14 58 59.9** | **+1.0** |
| TSCK | baz=213 | | | *e*S | **S** | **14 59 38.5** | **-0.3** |
| **JIKM** | **Ikemajima** | **2.86** | **97** | *e*P | **Pn** | **14 59 00.1** | **+1.2** |
| JIKM | | | | *e*S | **S** | **14 59 39.0** | **+0.3** |
| **ECL** | **Taimali** | **2.91** | **202** | *i* P | **Pn** | **14 59 00.8** | **+1.3** |
| ECL | baz=205 | | | *i* S | **S** | **14 59 39.9** | **0.0** |
| **JMJ** | **Miyako jima 2** | **2.92** | **99** | P | **Pn** | **14 59 01.9** | **+2.4** |
| **TWM1** | **Shoushan** | **2.93** | **212** | *e*P | **Pn** | **14 59 01.9** | **+2.1** |
| TWM1 | baz=209 | | | *e*S | **S** | **14 59 40.8** | **+0.5** |
| **TSMG** | **Majia** | **2.93** | **208** | *i* P | **Pn** | **14 59 00.5** | **+0.8** |
| TSMG | baz=211 | | | *i* S | **S** | **14 59 38.4** | **-1.9** |
| **JMJ2** | **Miyako jima3** | **2.96** | **100** | P | **Pn** | **14 59 01.6** | **+1.6** |
| **MASBT** | **Mashibuluo** | **3.02** | **207** | *i* P | **Pn** | **14 59 01.5** | **+0.8** |
| MASBT | baz=204 | | | S | **S** | **14 59 40.8** | **-1.3** |
| **JOGS** | **Gusukube** | **3.03** | **100** | P | **Pn** | **14 59 02.6** | **+1.9** |
| JOGS | | | | *e*S | **S** | **14 59 41.9** | **-0.2** |
| **EAST** | **Anshuo** | **3.14** | **202**⇓ | *i*P | **Pn** | **14 59 03.3** | **+1.2** |
| EAST | baz=203 | | | *i* S | **S** | **14 59 42.6** | **-2.0** |
| **SCZT** | **Fangliau** | **3.24** | **206** | *i* P | **Pn** | **14 59 03.8** | **+0.7** |
| SCZT | baz=198 | | | *e*S | **S** | **14 59 46.3** | **-0.1** |
| **KNMB** | **Chin-men Tao** | **3.50** | **257** | P | **Pn** | **14 59 06.3** | **+0.3** |
| KNMB | baz=255 | | | *e*S | **S** | **14 59 50.1** | **-1.5** |
| **JOW** | **Kunigami** | **5.73** | **73** | P | **Pn** | **14 59 33.3** | **+0.4** |
| **JOW** | **Kunigami** | **5.73** | **73** | P | **Pn** | **14 59 32.6** | **-0.3** |
| JOW | 23nm,0.2s,baz=213,slow=16,SNR=18 | | | S | **S** | **15 00 34.4** | **-6.1** |
| **KSRS** | 13nm,0.2s,baz=180,slow=20,SNR=2.1 **Korea Array** | **13.07** | **21** | P | **Pn** | **15 01 04.6** | **-0.5** |
| **SONM** | 0.5nm,0.5s,baz=202,slow=12,SNR=6.4 **Songino Array** | **25.69** | **335** | P | **P** | **15 03 15.3** | **-0.8** |
| **MKAR** | 0.7nm,0.6s,baz=158,slow=9.3,SNR=4.5 0.7nm,0.6s **Makanchi Array** | **38.14** | **315** | P | **P** | **15 05 04.4** | **+0.3** |
| | 0.2nm,0.6s,baz=100,slow=10,SNR=1.3 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **50.01** | **166** | P | **P** | **15 06 38.7** | **+0.6** |
| | 0.2nm,0.9s,baz=350,slow=7.3,SNR=4.4 0.2nm,0.9s | | | | | | |

*BGR* ***12*** *14:58:52.6,69˚.30N×146˚.66W,h14km,mb6.0,mB_BB6.5, Ms6.2*

*IDC* ***12*** *14:58:53.3±0.3,69˚.68N×145˚.14W,h0km,mb5.4/41, mbtmp5.3/45,ML4.9/5,MS6.2/59,Error ellipse: s-maj=9.9km s-min=7.9km az=28.0*

*NEIC* ***12*** *14:58:53.3,69˚.79N×145˚.11W,h12km*

*NEIC* ***12*** *14:58:53.3,69˚.69N×144˚.82W,h12km,Moment Tensor Solution. Duration: 8s6 Moment tensor: Scale 10¹⁸Nm; Mrr~1.02; Mθθ-1.64; Mϕϕ2.66; Mrθ-0.85; Mθϕ-4.79; Mϕr~1.47; Fault plane solution: M₀5.57000×10¹⁸ NP1: ϕs10.37000°,δ80.98000°,λ-18.90000°. NP2:ϕs103.45000°, δ71.35000°,λ-170.47000°. Principal axes: T 5.8505, Plg7.0000°, Azm58.0000°; N -0.5637, Plg69.0000°, Azm166.0000°; P -5.2867, Plg20.0000°, Azm326.0000°;*

*NEIC* ***12*** *14:58:54.7,69˚.62N×145˚.25W,h10km*

*MOS* ***12*** *14:58:54.2±1.0,69˚.58N×145˚.34W,h12km,mb6.1/76, MS6.1/57,Error ellipse: s-maj=12.5km s-min=3.1km az=90.7*

*NEIC* ***12*** *14:58:54.2±1.2,69˚.64N±0˚.04×145˚.24W±0˚.08,h6km±1km, Error ellipse: s-maj=7.3km s-min=4.6km az=181.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr-0.25; Mθθ-1.04; Mϕϕ1.29; Mrθ0.40; Mθϕ-2.83; Mϕr-1.02; Fault plane solution: M₀3.26000×10¹⁸ NP1:ϕs99.97000°, δ74.84000°,λ172.43000°. NP2:ϕs191.96000°,δ82.70000°, λ15.29000°. Principal axes: T 3.4955, Plg16.0000°, Azm57.0000°; N -0.5355, Plg73.0000°, Azm217.0000°; P -2.9600, Plg5.0000°, Azm325.0000°;*

*AEIC* ***12*** *14:58:54.3±2.1,69˚.56N±0˚.04×145˚.30W±0˚.07,h2km±3km, ML6.3,mb6.5/607(NEIC),ML6.4/122(NEIC), Ms_20 6.6/730(NEIC),Mwb6.3/64(NEIC), Mwr6.4/135(NEIC),Mww6.4/26(NEIC) Error ellipse: s-maj=6.5km s-min=3.5km az=173.0*

*IPGP* ***12*** *14:58:55.0,69˚.67N×145˚.55W,h7km,Mw6.5,Fault plane solution: NP1:ϕs101.00000°,δ75.00000°,λ-173.00000°. NP2:ϕs9.00000°,δ83.00000°,λ-15.00000°.*

*BJI* ***12*** *14:58:56.8±0.0,69˚.63N×145˚.55W,h20km,mb5.5/89, mB6.5/78,Ms6.6/83,Ms7 6.5/92*

*GCMT* ***12*** *14:59:01.3±0.0,69˚.74N×144˚.78W,h12km,MW6.4/168, Moment Tensor Solution. s165,c399; s168,c687; Duration: 4s0 Moment tensor: Scale 10¹⁸Nm; Mrr-0.77±.02; Mθθ-1.99±.02; Mϕϕ2.76±.02; Mrθ0.49±.05; Mθϕ-4.73±.02; Mϕr-1.51±.05; Best double couple: M₀5.48600×10¹⁸ NP1:ϕs194.00000°,δ85.00000°, λ13.00000°. NP2:ϕs103.00000°,δ77.00000°,λ175.00000°. Principal axes: T 6.0280, Plg13.0000°, Azm59.0000°; N*

*-1.0840, Plg76.0000°, Azm215.0000°; P -4.9440, Plg5.0000°, Azm328.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 12 14:58:55.8 0.4, 69°64N 0'02 x 145°22W 0'02, h8 km 2 km, h9 km: pP-P, n2518, σ1 84/2390, mb6.3/570, MS6.6/509, 240C-130D, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.30** | **21** | | **Pg** | **14 59 00.8** | **-0.9** |
| **C26K** | **Camden Bay** | **0.30** | **21** | P | **Pg** | **14 59 00.9** | **-0.8** |
| | baz=201,SNR=1000 | | | | | | |
| C26K | | | | S | **Sg** | **14 59 05.8** | **+0.1** |
| | baz=201 | | | | | | |
| **D25K** | **Kavik River** | **0.52** | **233** | | **Pg** | **14 59 03.1** | **-2.7** |
| **D25K** | **Kavik River** | **0.52** | **233** | P | **Pg** | **14 59 02.9** | **-2.8** |
| | baz=57,SNR=1000 | | | | | | |
| D25K | | | | S | **Sg** | **14 59 10.0** | **-2.5** |
| | baz=57 | | | | | | |
| **C27K** | **Jago River** | **0.53** | **91** | | **Pg** | **14 59 03.9** | **-2.1** |
| C27K | | | | IAML | | 14 59 17.2 | |
| | comp=N,1672μm,0.8s | | | | | | |
| **C27K** | **Jago River** | **0.53** | **91** | P | **Pg** | **14 59 05.2** | **-0.8** |
| | baz=264,SNR=1000 | | | | | | |
| **C24K** | **Franklin Bluff** | **1.22** | **276** | | **Sg** | **14 59 34.5** | **-0.4** |
| **C24K** | **Franklin Bluff** | **1.22** | **276** | Pn | **Pg** | **14 59 17.6** | **-1.5** |
| C24K | | | | IAML | | 14 59 49.8 | |
| | comp=E,488μm,1.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.22** | **276** | P | **Pg** | **14 59 16.6** | **-2.5** |
| | baz=96 | | | | | | |
| **D24K** | **Happy Valley** | **1.36** | **251** | | **Pn** | **14 59 18.8** | **-2.3** |
| D24K | | | | | **Sn** | **14 59 40.9** | **+1.5** |
| **D24K** | **Happy Valley** | **1.36** | **251** | P | **Pn** | **14 59 19.5** | **-1.6** |
| | baz=70,SNR=1000 | | | | | | |
| **D27M** | **Malcolm River** | **1.55** | **103** | | **Pn** | **14 59 22.0** | **-1.8** |
| D27M | | | | | **Sg** | **14 59 45.3** | **-0.4** |
| D27M | | | | IAML | | 14 59 49.8 | |
| | comp=E,467μm,1.0s | | | | | | |
| **D27M** | **Malcolm River** | **1.55** | **103** | P | **Pn** | **14 59 23.8** | **0.0** |
| | baz=284,SNR=1000 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.85** | **239** | | **Sn** | **14 59 50.9** | **-0.5** |
| **TOLK** | **Toolik Lake Re** | **1.85** | **239** | Pn | **Pn** | **14 59 26.1** | **-1.7** |
| **TOLK** | **Toolik Lake Re** | **1.85** | **239** | P | **Pn** | **14 59 26.2** | **-1.7** |
| | baz=57,SNR=1000 | | | | | | |
| **C23K** | **Itkillik River** | **1.89** | **279** | Pn | **Pn** | **14 59 26.7** | **-1.6** |
| C23K | | | | IAML | | 15 00 03.4 | |
| | comp=E,240μm,0.7s | | | | | | |
| C23K | | | | IAML | | 15 00 04.1 | |
| | comp=N,334μm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **1.89** | **279** | P | **Pn** | **14 59 26.2** | **-2.1** |
| | baz=96,SNR=1000 | | | | | | |
| **E27K** | **Coleen River** | **1.96** | **136** | | **Pn** | **14 59 27.9** | **-1.4** |
| E27K | | | | IAML | | 15 00 01.7 | |
| | comp=N,294μm,0.9s | | | | | | |
| E27K | | | | IAML | | 15 00 03.2 | |
| | comp=E,314μm,1.4s | | | | | | |
| **E27K** | **Coleen River** | **1.96** | **136** | P | **Pn** | **14 59 28.6** | **-0.7** |
| | baz=318,SNR=1000 | | | | | | |
| **E24K** | **Your Creek** | **1.97** | **219** | | **Pn** | **14 59 28.2** | **-1.2** |
| **E24K** | **Your Creek** | **1.97** | **219** | P | **Pn** | **14 59 28.4** | **-1.0** |
| | baz=36,SNR=1000 | | | | | | |
| **F26K** | **Sheenjek River** | **1.99** | **168** | | **Pn** | **14 59 28.4** | **-1.3** |
| **F26K** | **Sheenjek River** | **1.99** | **168** | IAML | | 15 00 02.8 | |
| | comp=N,266μm,1.6s | | | | | | |
| F26K | | | | IAML | | 15 00 03.1 | |
| | comp=E,338μm,1.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.99** | **168** | P | **Pn** | **14 59 29.0** | **-0.8** |
| | baz=348,SNR=1000 | | | | | | |
| **D23K** | **Nanushuk River** | **2.06** | **253** | | **Pn** | **14 59 29.4** | **-1.2** |
| D23K | | | | IAML | | 15 00 17.2 | |
| | comp=E,187μm,1.2s | | | | | | |
| **D23K** | **Nanushuk River** | **2.06** | **253** | P | **Pn** | **14 59 29.0** | **-1.5** |
| | baz=70 | | | | | | |
| **F25K** | **Christian Rive** | **2.06** | **185** | | **Pn** | **14 59 29.4** | **-1.3** |
| **F25K** | **Christian Rive** | **2.06** | **185** | IAML | | 15 00 05.8 | |
| | comp=E,276μm,2.4s | | | | | | |
| F25K | | | | IAML | | 15 00 06.5 | |
| | comp=N,199μm,1.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.06** | **185** | P | **Pn** | **14 59 29.5** | **-1.2** |
| | baz=3.5,SNR=1000 | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.23** | **174** | | **Pn** | **14 59 31.3** | **-1.8** |
| **E23K** | **Chandalar** | **2.25** | **227** | | **Pn** | **14 59 31.9** | **-1.5** |
| **E23K** | **Chandalar** | **2.25** | **227** | P | **Pn** | **14 59 31.8** | **-1.5** |
| | baz=44,SNR=1000 | | | | | | |
| **E28M** | **Babbage River** | **2.29** | **114** | | **Pn** | **14 59 32.2** | **-1.5** |
| E28M | | | | IAML | | 15 00 10.6 | |
| | comp=E,268μm,1.5s | | | | | | |
| **E28M** | **Babbage River** | **2.29** | **114** | P | **Pn** | **14 59 34.8** | **+1.0** |
| | baz=298,SNR=1000 | | | | | | |
| **D28M** | **Stokes Point** | **2.31** | **95** | | **Pn** | **14 59 34.0** | **0.0** |
| **D28M** | **Stokes Point** | **2.31** | **95** | P | **Pn** | **14 59 34.1** | **+0.2** |
| | baz=279,SNR=1000 | | | | | | |
| **F24K** | **Squaw Lake** | **2.34** | **206** | | **Pn** | **14 59 33.0** | **-1.6** |
| **F24K** | **Squaw Lake** | **2.34** | **206** | P | **Pn** | **14 59 33.1** | **-1.4** |
| | baz=24,SNR=1000 | | | | | | |
| **G26K** | **Porcupine Rive** | **2.75** | **168** | | **Sn** | **15 00 11.5** | **-2.0** |
| **G26K** | **Porcupine Rive** | **2.75** | **168** | P | **Pn** | **14 59 38.7** | **-1.4** |
| | baz=349,SNR=1000 | | | | | | |
| **D22K** | **Ayikyak River** | **2.76** | **258** | Pn | **Pn** | **14 59 38.7** | **-1.6** |
| D22K | | | | IAML | | 15 00 42.1 | |
| | comp=E,103μm,1.0s | | | | | | |
| D22K | | | | IAML | | 15 00 42.6 | |
| | comp=N,158μm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **2.76** | **258** | P | **Pn** | **14 59 38.5** | **-1.8** |
| | baz=72,SNR=1000 | | | | | | |
| **F28M** | **Old Crow** | **2.82** | **134** | | **Pn** | **14 59 39.3** | **-1.8** |
| F28M | | | | IAML | | 15 00 25.6 | |
| | comp=N,151μm,1.6s | | | | | | |
| **F28M** | **Old Crow** | **2.82** | **134** | P | **Pn** | **14 59 40.4** | **-0.8** |
| | baz=317,SNR=1000 | | | | | | |
| **G25K** | **Bearman Lake** | **2.91** | **187** | P | **Pn** | **14 59 41.0** | **-1.2** |
| | baz=5.7,SNR=1000 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.91** | **288** | Pn | **Pn** | **14 59 40.5** | **-1.7** |
| B22K | | | | IAML | | 15 00 36.2 | |
| | comp=N,177μm,0.8s | | | | | | |
| B22K | | | | IAML | | 15 00 49.4 | |
| | comp=E,154μm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.91** | **288** | P | **Pn** | **14 59 40.3** | **-1.9** |
| | baz=102,SNR=1000 | | | | | | |
| **E29M** | **Blow River** | **2.92** | **112** | Pn | **Pn** | **14 59 41.1** | **-1.3** |
| **E29M** | **Blow River** | **2.92** | **112** | P | **Pn** | **14 59 42.2** | **-0.2** |
| | baz=297,SNR=1000 | | | | | | |
| **COLD** | **Coldfoot** | **3.04** | **220** | | **Pn** | **14 59 42.7** | **-1.4** |
| **COLD** | **Coldfoot** | **3.04** | **220** | P | **Pn** | **14 59 42.7** | **-1.4** |
| | baz=36,SNR=868 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.07** | **197** | | **Pn** | **14 59 43.1** | **-1.4** |
| G24K | | | | IAML | | 15 00 42.1 | |
| | comp=E,158μm,2.1s | | | | | | |
| G24K | | | | IAML | | 15 00 43.5 | |
| | comp=N,143μm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.07** | **197** | P | **Pn** | **14 59 43.7** | **-0.8** |
| | baz=15,SNR=1000 | | | | | | |
| **FYU** | **Fort Yukon** | **3.09** | **180** | | **Pn** | **14 59 43.7** | **-1.0** |
| **G27K** | **Doyon Strip** | **3.14** | **153** | | **Pn** | **14 59 43.8** | **-1.6** |
| G27K | | | | IAML | | 15 00 47.1 | |
| | comp=E,116μm,1.7s | | | | | | |
| **G27K** | **Doyon Strip** | **3.14** | **153** | P | **Pn** | **14 59 44.5** | **-0.9** |
| | baz=336,SNR=1000 | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.29** | **274** | Pn | **Pn** | **14 59 46.5** | **-0.9** |
| B21K | | | | IAML | | 15 01 06.8 | |
| | comp=N,84μm,1.3s | | | | | | |
| B21K | | | | IAML | | 15 01 09.0 | |
| | comp=E,84μm,1.7s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.29** | **274** | P | **Pn** | **14 59 46.1** | **-1.4** |
| | baz=87,SNR=1000 | | | | | | |
| **F22K** | **John River** | **3.33** | **233** | P | **Pn** | **14 59 46.5** | **-1.6** |
| | baz=48,SNR=935 | | | | | | |
| **E21K** | **Killik River** | **3.37** | **253** | Pn | **Pn** | **14 59 46.0** | **-2.7** |
| E21K | | | | IAML | | 15 01 02.0 | |
| | comp=N,79μm,1.5s | | | | | | |
| **E21K** | **Killik River** | **3.37** | **253** | P | **Pn** | **14 59 45.9** | **-2.7** |
| | baz=66,SNR=1000 | | | | | | |
| **H25L** | **Birch Creek** | **3.39** | **184** | | **Pn** | **14 59 47.2** | **-1.7** |
| **H25L** | **Birch Creek** | **3.39** | **184** | P | **Pn** | **14 59 48.3** | **-0.6** |
| | baz=3.1 | | | | | | |
| **G23K** | **Bananza Creek** | **3.44** | **214** | Pn | **Pn** | **14 59 48.2** | **-1.5** |
| G23K | | | | IAML | | 15 00 52.6 | |
| | comp=E,71μm,2.8s | | | | | | |
| G23K | | | | IAML | | 15 01 02.6 | |
| | comp=N,64μm,1.5s | | | | | | |
| **G23K** | **Bananza Creek** | **3.44** | **214** | P | **Pn** | **14 59 47.8** | **-1.9** |
| | baz=30,SNR=483 | | | | | | |
| **A22K** | **Sinclair Lake** | **3.57** | **297** | | **Pn** | **14 59 49.7** | **-1.7** |
| **A22K** | **Sinclair Lake** | **3.57** | **297** | P | **Pn** | **14 59 49.5** | **-1.8** |
| | baz=109,SNR=722 | | | | | | |
| **G22K** | **Bettles** | **3.59** | **224** | | **Pn** | **14 59 50.1** | **-1.6** |
| **G22K** | **Bettles** | **3.59** | **224** | P | **Pn** | **14 59 49.7** | **-2.0** |
| | baz=38,SNR=683 | | | | | | |
| **H27K** | **Steamboat Moun** | **3.69** | **156** | | **Pn** | **14 59 51.6** | **-1.6** |
| **H27K** | **Steamboat Moun** | **3.69** | **156** | P | **Pn** | **14 59 52.8** | **-0.3** |
| | baz=339,SNR=1000 | | | | | | |
| **G29M** | **Pine Creek** | **3.83** | **132** | Pn | **Pn** | **14 59 53.4** | **-1.6** |
| **G29M** | **Pine Creek** | **3.83** | **132** | P | **Pn** | **14 59 54.8** | **-0.1** |
| | baz=318,SNR=1000 | | | | | | |
| **F21K** | **Alatna River** | **3.90** | **235** | Pn | **Pn** | **14 59 53.8** | **-2.1** |
| **F21K** | **Alatna River** | **3.90** | **235** | P | **Pn** | **14 59 54.4** | **-1.5** |
| | baz=48,SNR=1000 | | | | | | |
| **H24K** | **Noodor Dome** | **3.95** | **196** | Pn | **Pn** | **14 59 55.5** | **-1.1** |
| H24K | | | | IAML | | 15 01 15.0 | |
| | comp=E,60μm,2.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.95** | **196** | P | **Pn** | **14 59 55.2** | **-1.4** |
| | baz=14,SNR=1000 | | | | | | |
| **F30M** | **Barrier River** | **4.01** | **116** | | **Pn** | **14 59 56.3** | **-1.1** |
| **F30M** | **Barrier River** | **4.01** | **116** | P | **Pn** | **14 59 57.9** | **+0.5** |
| | baz=304,SNR=1000 | | | | | | |
| **PRP** | **Porcupine Dome** | **4.14** | **182** | Pn | **Pn** | **14 59 57.9** | **-1.5** |
| PRP | | | | IAML | | 15 01 13.7 | |
| | comp=E,35μm,2.3s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.14** | **182** | P | **Pn** | **14 59 58.7** | **-0.6** |
| | baz=1.1,SNR=1000 | | | | | | |
| **B20K** | **Meade River** | **4.15** | **281** | Pn | **Pn** | **14 59 57.7** | **-1.7** |
| B20K | | | | IAML | | 15 01 26.5 | |
| | comp=E,66μm,2.0s | | | | | | |
| B20K | | | | IAML | | 15 01 43.8 | |
| | comp=N,65μm,1.7s | | | | | | |
| **B20K** | **Meade River** | **4.15** | **281** | P | **Pn** | **14 59 57.9** | **-1.4** |
| | baz=91,SNR=1000 | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **205** | | **Pn** | **14 59 58.0** | **-1.5** |
| H23K | | | | IAML | | 15 01 16.4 | |
| | comp=N,47μm,1.1s | | | | | | |
| H23K | | | | IAML | | 15 01 19.9 | |
| | comp=E,47μm,2.4s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **205** | P | **Pn** | **14 59 58.1** | **-1.5** |
| | baz=21,SNR=910 | | | | | | |
| **D20K** | **Ettviuk River** | **4.17** | **263** | P | **Pn** | **14 59 58.9** | **-0.8** |
| | baz=73 | | | | | | |
| **A21K** | **Barrow** | **4.18** | **299** | P | **Pn** | **14 59 58.2** | **-1.5** |
| | baz=110,SNR=609 | | | | | | |
| **E20K** | **Nigu River** | **4.19** | **256** | P | **Pn** | **14 59 58.7** | **-1.2** |
| | baz=67 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.27** | **124** | Pn | **Pn** | **14 59 58.5** | **-2.6** |
| **G30M** | **tAoh Zraii Nji** | **4.27** | **124** | P | **Pn** | **15 00 00.3** | **-0.8** |
| | baz=312,SNR=1000 | | | | | | |
| **I27K** | **Kandik River** | **4.28** | **160** | P | **Pn** | **15 00 00.8** | **-0.3** |
| | baz=342,SNR=1000 | | | | | | |
| **H29M** | **Whitestone** | **4.30** | **140** | Pn | **Pn** | **15 00 00.1** | **-1.3** |
| **H29M** | **Whitestone** | **4.30** | **140** | P | **Pn** | **15 00 00.2** | **-1.1** |
| | baz=325,SNR=1000 | | | | | | |
| **G21K** | **Allakaket** | **4.41** | **229** | Pn | **Pn** | **15 00 01.0** | **-2.0** |
| G21K | | | | IAML | | 15 01 35.6 | |
| | comp=E,35μm,1.8s | | | | | | |
| G21K | | | | IAML | | 15 01 36.7 | |
| | comp=N,32μm,1.6s | | | | | | |
| **G21K** | **Allakaket** | **4.41** | **229** | P | **Pn** | **15 00 01.2** | **-1.8** |
| | baz=42 | | | | | | |
| **INK** | **Inuvik** | **4.42** | **102** | Pn | **Pn** | **15 00 00.6** | **-2.4** |
| INK | | | | IAML | | 15 01 25.3 | |
| | comp=N,55μm,2.0s | | | | | | |
| INK | | | | IAML | | 15 01 32.3 | |
| | comp=E,29μm,2.5s | | | | | | |
| **INK** | **Inuvik** | **4.42** | **102** | ⇑P | **Pn** | **15 00 01.4** | **-1.6** |
| **INK** | **Inuvik** | **4.42** | **102** | Pn | **Pn** | **15 00 01.2** | **-1.8** |
| | comp=E,114nm,0.3s,baz=294,slow=18,SNR=104 | | | | | | |
| INK | | | | Sn | **Sn** | **15 00 52.3** | **-2.2** |
| | comp=E,579nm,0.3s,baz=269,slow=10.0,SNR=7.7 | | | | | | |
| INK | | | | Lg | Lg | 15 01 10.9 | |
| | comp=E,844nm,0.3s,baz=230,slow=27,SNR=6.8 | | | | | | |
| INK | | | | LR | LR | 15 02 19.5 | |
| | comp=E,621μm,19.3s,baz=289,slow=47 | | | | | | |
| | comp=E,460nm,0.4s | | | | | | |
| **INK** | **Inuvik** | **4.42** | **102** | P | **Pn** | **15 00 02.3** | **-0.7** |
| | baz=292,SNR=328 | | | | | | |
| **I26K** | **Coal Creek Min** | **4.42** | **169** | | **Pn** | **15 00 01.4** | **-1.7** |
| **I26K** | **Coal Creek Min** | **4.42** | **169** | P | **Pn** | **15 00 01.5** | **-1.5** |
| | baz=350 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.43** | **215** | P | **Pn** | **15 00 01.0** | **-2.2** |
| | baz=29,SNR=404 | | | | | | |
| **EPYK** | **Eagle Plains** | **4.58** | **132** | | **Pn** | **15 00 03.5** | **-1.8** |
| **EPYK** | **Eagle Plains** | **4.58** | **132** | P | **Pn** | **15 00 04.4** | **-0.8** |
| | baz=319,SNR=1000 | | | | | | |
| **POKR** | **Poker Plat Res** | **4.62** | **192** | | **Pn** | **15 00 04.7** | **-1.1** |
| POKR | | | | IAML | | 15 01 33.0 | |
| | comp=E,37μm,2.2s | | | | | | |
| POKR | | | | IAML | | 15 01 43.3 | |
| | comp=N,23μm,1.4s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.62** | **192** | P | **Pn** | **15 00 05.0** | **-0.9** |
| | baz=9.5,SNR=1000 | | | | | | |
| **I28M** | **Miner Creek** | **4.67** | **152** | Pn | **Pn** | **15 00 05.1** | **-1.5** |
| I28M | | | | IAML | | 15 01 37.4 | |
| | comp=N,47μm,1.3s | | | | | | |
| **I28M** | **Miner Creek** | **4.67** | **152** | P | **Pn** | **15 00 05.7** | **-0.9** |
| | baz=336,SNR=1000 | | | | | | |
| **F20K** | **Avaraart Lake** | **4.68** | **241** | | **Pn** | **15 00 06.2** | **-0.3** |
| F20K | | | | IAML | | 15 01 50.4 | |
| | comp=N,24μm,1.6s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.68** | **241** | P | **Pn** | **15 00 04.7** | **-1.8** |
| | baz=52,SNR=1000 | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.76** | **112** | Pn | **Pn** | **15 00 06.1** | **-1.5** |
| **F31M** | **Tsiigehtchic** | **4.76** | **112** | P | **Pn** | **15 00 07.0** | **-0.6** |
| | baz=302,SNR=1000 | | | | | | |
| **D19K** | **Kuna River** | **4.76** | **262** | | **Pn** | **15 00 06.2** | **-1.6** |
| **D19K** | **Kuna River** | **4.76** | **262** | P | **Pn** | **15 00 06.5** | **-1.3** |
| | baz=71 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **201** | | **Pn** | **15 00 06.8** | **-1.2** |
| I23K | | | | IAML | | 15 01 38.6 | |
| | comp=N,40μm,2.5s | | | | | | |
| I23K | | | | IAML | | 15 01 39.1 | |
| | comp=E,35μm,1.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **201** | P | **Pn** | **15 00 07.6** | **-0.4** |
| | baz=18,SNR=1000 | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **195** | | **Pn** | **15 00 07.4** | **-1.5** |
| MDM | | | | IAML | | 15 01 31.4 | |
| | comp=E,25μm,1.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.89** | **225** | Pn | **Pn** | **15 00 07.2** | **-2.3** |
| **COLA** | **College** | **4.89** | **193** | P | **Pn** | **15 00 09.4** | **-0.1** |
| **COLA** | **College** | **4.89** | **193** | | **Pn** | **15 00 08.6** | **-0.9** |
| COLA | | | | IAML | | 15 01 40.1 | |
| | comp=E,33μm,0.9s | | | | | | |
| **COLA** | **College** | **4.89** | **193** | ⇑P | **Pn** | **15 00 08.4** | **-1.1** |
| **COLA** | **College** | **4.89** | **193** | P | **Pn** | **15 00 09.3** | **-0.1** |
| | baz=11 | | | | | | |
| **COLA** | **College** | **4.89** | **193** | *i* P | **Pn** | **15 00 08.7** | **-0.8** |
| COLA | | | | MLR | MLR | | |
| | comp=Z,330μm,12.0s | | | | | | |
| **G31M** | **Satah River** | **4.89** | **119** | | **Pn** | **15 00 08.5** | **-1.0** |
| **G31M** | **Satah River** | **4.89** | **119** | P | **Pn** | **15 00 09.9** | **+0.4** |
| | baz=308,SNR=1000 | | | | | | |
| **I53US** | **FAIRBANKS INFR** | **4.89** | **193** | Pn | **Pn** | **15 00 11.1** | **+1.6** |
| | baz=22,slow=20 | | | | | | |
| I53US | | | | I | I | 15 23 10.0 | |
| | comp=Z,0.2nm,1.1s,baz=21,slow=317,SNR=4.9 | | | | | | |
| **E19K** | **Redstone River** | **4.92** | **249** | | **Pn** | **15 00 08.2** | **-1.7** |
| E19K | | | | IAML | | 15 01 55.9 | |
| | comp=N,20μm,1.1s | | | | | | |
| E19K | | | | IAML | | 15 02 02.3 | |
| | comp=E,21μm,0.9s | | | | | | |
| **E19K** | **Redstone River** | **4.92** | **249** | P | **Pn** | **15 00 07.9** | **-2.0** |
| | baz=59 | | | | | | |
| **ILAR** | **Eielson Array** | **4.93** | **188** | Pn | **Pn** | **15 00 09.1** | **-1.0** |
| **ILAR** | **Eielson Array** | **4.93** | **188** | Pn | **Pn** | **15 00 07.8** | **-2.2** |
| | comp=E,68nm,0.3s,baz=3.4,slow=13,SNR=959 | | | | | | |
| ILAR | | | | Sn | **Sn** | **15 01 07.9** | **+0.7** |
| | comp=E,308nm,0.3s,baz=7.4,slow=16,SNR=6.8 | | | | | | |
| ILAR | | | | Lg | Lg | 15 01 31.2 | |
| | comp=E,726nm,0.3s,baz=3.6,slow=30,SNR=8.7 | | | | | | |
| ILAR | | | | LR | LR | 15 01 51.6 | |
| | comp=E,105μm,18.6s,baz=68,slow=36 | | | | | | |
| | comp=E,616nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **4.93** | **188** | P | **Pn** | **15 00 09.1** | **-1.0** |
| **H21K** | **Melozitna Rive** | **4.93** | **220** | Pn | **Pn** | **15 00 08.9** | **-1.2** |
| H21K | | | | IAML | | 15 01 50.8 | |
| | comp=E,23μm,4.3s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.93** | **220** | P | **Pn** | **15 00 08.9** | **-1.2** |
| | baz=33,SNR=602 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.05** | **145** | | **Pn** | **15 00 10.5** | **-1.2** |
| I29M | | | | IAML | | 15 01 46.5 | |
| | comp=N,36μm,1.2s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.05** | **145** | P | **Pn** | **15 00 11.2** | **-0.5** |
| | baz=331,SNR=1000 | | | | | | |
| **J25K** | **Salcha River,** | **5.05** | **181** | | **Pn** | **15 00 10.3** | **-1.4** |
| J25K | | | | IAML | | 15 01 54.4 | |
| | comp=N,30μm,1.8s | | | | | | |
| **J25K** | **Salcha River,** | **5.05** | **181** | P | **Pn** | **15 00 11.1** | **-0.6** |
| | baz=0.3,SNR=1000 | | | | | | |
| **MLY** | **Manley** | **5.09** | **207** | Pn | **Pn** | **15 00 10.9** | **-1.4** |
| MLY | | | | IAML | | 15 01 54.8 | |
| | comp=E,19μm,4.0s | | | | | | |
| **MLY** | **Manley** | **5.09** | **207** | P | **Pn** | **15 00 11.5** | **-0.8** |
| | baz=22,SNR=643 | | | | | | |
| **C19K** | **Lookout Ridge** | **5.11** | **271** | Pn | **Pn** | **15 00 11.1** | **-1.4** |
| C19K | | | | IAML | | 15 02 01.6 | |
| | comp=E,16μm,2.4s | | | | | | |
| C19K | | | | IAML | | 15 02 16.4 | |
| | comp=N,33μm,1.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.11** | **271** | P | **Pn** | **15 00 12.1** | **-0.4** |
| | baz=78,SNR=839 | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.11** | **193** | | **Pn** | **15 00 11.2** | **-1.3** |
| CCB | | | | IAML | | 15 01 48.1 | |
| | comp=E,17μm,1.3s | | | | | | |
| **EGAK** | **Eagle** | **5.13** | **160** | | **Pn** | **15 00 11.4** | **-1.3** |
| **EGAK** | **Eagle** | **5.13** | **160** | ⇓P | **Pn** | **15 00 11.2** | **-1.6** |
| **EGAK** | **Eagle** | **5.13** | **160** | P | **Pn** | **15 00 11.8** | **-1.0** |
| | baz=343,SNR=1000 | | | | | | |
| **J26L** | **Joseph Creek** | **5.20** | **172** | Pn | **Pn** | **15 00 12.4** | **-1.4** |
| J26L | | | | IAML | | 15 01 43.3 | |
| | comp=E,25μm,3.0s | | | | | | |
| J26L | | | | IAML | | 15 02 00.4 | |
| | comp=N,15μm,1.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.20** | **172** | P | **Pn** | **15 00 13.2** | **-0.7** |
| | baz=353,SNR=1000 | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **198** | | **Pn** | **15 00 13.1** | **-1.8** |
| NEA2 | | | | IAML | | 15 01 58.0 | |
| | comp=E,31μm,3.7s | | | | | | |
| NEA2 | | | | IAML | | 15 02 01.8 | |
| | comp=N,18μm,4.2s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **198** | P | **Pn** | **15 00 14.0** | **-0.9** |
| | baz=15,SNR=915 | | | | | | |
| **HDA** | **Harding Lake** | **5.30** | **188** | | **Pn** | **15 00 13.4** | **-1.7** |
| **HDA** | **Harding Lake** | **5.30** | **188** | IAML | | 15 02 07.8 | |
| | comp=N,23μm,2.0s | | | | | | |
| **HDA** | **Harding Lake** | **5.30** | **188** | P | **Pn** | **15 00 14.3** | **-0.7** |
| | baz=6.4,SNR=1000 | | | | | | |
| **WRH** | **Wood River Hil** | **5.31** | **194** | | **Pn** | **15 00 14.1** | **-1.2** |
| WRH | | | | IAML | | 15 01 50.9 | |
| | comp=N,23μm,2.5s | | | | | | |
| WRH | | | | IAML | | 15 01 54.5 | |
| | comp=E,20μm,2.1s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.45** | **245** | Pn | **Pn** | **15 00 14.4** | **-2.8** |
| F19K | | | | IAML | | 15 02 14.2 | |
| | comp=E,14μm,1.4s | | | | | | |
| F19K | | | | IAML | | 15 02 20.3 | |
| | comp=N,13μm,1.4s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.45** | **245** | P | **Pn** | **15 00 15.6** | **-1.5** |
| | baz=54,SNR=1000 | | | | | | |
| **A19K** | **Wainwright** | **5.49** | **283** | | **Pn** | **15 00 16.6** | **-1.0** |
| **A19K** | **Wainwright** | **5.49** | **283** | P | **Pn** | **15 00 15.8** | **-1.8** |
| | baz=89,SNR=602 | | | | | | |
| **H20K** | **Anotleneega Mo** | **5.56** | **226** | | **Pn** | **15 00 17.0** | **-1.7** |
| **H20K** | **Anotleneega Mo** | **5.56** | **226** | P | **Pn** | **15 00 17.4** | **-1.4** |
| | baz=38,SNR=236 | | | | | | |
| **I30M** | **Mount Dempster** | **5.59** | **138** | | **Pn** | **15 00 18.1** | **-1.0** |
| **I30M** | **Mount Dempster** | **5.59** | **138** | P | **Pn** | **15 00 18.3** | **-0.9** |
| | baz=326,SNR=1000 | | | | | | |
| **G19K** | **Purcell Mounta** | **5.69** | **238** | P | **Pn** | **15 00 18.5** | **-1.9** |
| | baz=47,SNR=1000 | | | | | | |
| **SCRK** | **Sand Creek** | **5.71** | **175** | | **Pn** | **15 00 18.9** | **-1.9** |
| **SCRK** | **Sand Creek** | **5.71** | **175** | P | **Pn** | **15 00 20.7** | **-0.1** |
| | baz=355,SNR=1000 | | | | | | |
| **BWN** | **Browne** | **5.74** | **199** | | **Pn** | **15 00 19.0** | **-2.1** |
| **K27K** | **Chicken** | **5.77** | **166** | | **Pn** | **15 00 19.8** | **-1.8** |
| **K27K** | **Chicken** | **5.77** | **166** | P | **Pn** | **15 00 21.8** | **+0.2** |
| | baz=348 | | | | | | |
| **C18K** | **Utukok River** | **5.79** | **268** | Pn | **Pn** | **15 00 20.3** | **-1.5** |
| **C18K** | **Utukok River** | **5.79** | **268** | P | **Pn** | **15 00 20.4** | **-1.5** |
| | baz=74,SNR=1000 | | | | | | |
| **B18K** | **Kokolik River** | **5.83** | **275** | | **Pn** | **15 00 21.1** | **-1.2** |
| **B18K** | **Kokolik River** | **5.83** | **275** | P | **Pn** | **15 00 20.2** | **-2.2** |
| | baz=80 | | | | | | |
| **K24K** | **Donnelly Dome** | **5.87** | **182** | | **Pn** | **15 00 21.0** | **-1.9** |
| **K24K** | **Donnelly Dome** | **5.87** | **182** | P | **Pn** | **15 00 22.5** | **-0.4** |
| | baz=1.7,SNR=946 | | | | | | |
| **J29N** | **Klondike Camp** | **5.88** | **149** | | **Pn** | **15 00 21.5** | **-1.6** |
| **J29N** | **Klondike Camp** | **5.88** | **149** | P | **Pn** | **15 00 22.8** | **-0.3** |
| | baz=335,SNR=870 | | | | | | |
| **H19K** | **Roundabout Mou** | **5.95** | **231** | | **Pn** | **15 00 22.3** | **-1.7** |
| **H19K** | **Roundabout Mou** | **5.95** | **231** | P | **Pn** | **15 00 22.6** | **-1.4** |
| | baz=42,SNR=538 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **205** | | **Pn** | **15 00 22.9** | **-1.9** |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **205** | P | **Pn** | **15 00 24.2** | **-0.6** |
| | baz=20,SNR=522 | | | | | | |
| **DOT** | **Dot Lake** | **6.03** | **175** | | **Pn** | **15 00 23.4** | **-1.8** |
| **I20K** | **Naaghedeneel** | **6.04** | **221** | | **Pn** | **15 00 23.6** | **-1.6** |
| **I20K** | **Naaghedeneel** | **6.04** | **221** | P | **Pn** | **15 00 24.6** | **-0.6** |
| | baz=33,SNR=87 | | | | | | |
| **DAWY** | **Dawson** | **6.05** | **155** | | **Pn** | **15 00 24.2** | **-1.2** |
| **DAWY** | **Dawson** | **6.05** | **155** | P | **Pn** | **15 00 25.4** | **0.0** |
| | baz=340,SNR=1000 | | | | | | |
| **E18K** | **Tukpahlearik C** | **6.07** | **256** | P | **Pn** | **15 00 24.2** | **-1.4** |
| | baz=62,SNR=1000 | | | | | | |
| **MCK** | **McKinley** | **6.11** | **196** | | **Pn** | **15 00 24.7** | **-1.6** |
| **MCK** | **McKinley** | **6.11** | **196** | P | **Pn** | **15 00 25.7** | **-0.6** |
| | baz=12,SNR=1000 | | | | | | |
| **MCK** | **McKinley** | **6.11** | **196** | P | **Pn** | **15 00 24.7** | **-1.6** |
| **J30M** | **Hart River** | **6.15** | **141** | P | **Pn** | **15 00 26.4** | **-0.4** |
| | baz=329,SNR=1000 | | | | | | |
| **F18K** | **Selawik** | **6.19** | **247** | P | **Pn** | **15 00 25.9** | **-1.3** |
| | baz=54,SNR=1000 | | | | | | |
| **G18K** | **Tagagawik** | **6.33** | **240** | | **Pn** | **15 00 27.0** | **-2.1** |

baz=7.0,SNR=591
**G17K Kiwalik Mounta 7.20 242 Pn 15 00 39.3 -1.9**
**G17K Kiwalik Mounta 7.20 242** P **Pn 15 00 38.4 -2.8**
baz=48,SNR=1000
**K20K Telida 7.22 213 Pn 15 00 39.7 -1.8**
**K20K Telida 7.22 213** P **Pn 15 00 41.0 -0.5**
baz=26,SNR=79
**HARP HAARP 7.27 180 Pn 15 00 40.3 -1.9**
**HARP HAARP 7.27 180** P **Pn 15 00 42.5 +0.4**
baz=360,SNR=858
**M26K Nabesna, AK 7.32 172 Pn 15 00 40.9 -2.0**
**M26K Nabesna, AK 7.32 172** P **Pn 15 00 43.5 +0.6**
baz=354,SNR=721
**PPLA Purkeypile 7.33 206 Pn 15 00 41.0 -2.0**
**PPLA Purkeypile 7.33 206** P **Pn 15 00 42.9 -0.1**
baz=20
**C16K Lisburne Hills 7.36 269 Pn 15 00 41.8 -1.5**
**C16K Lisburne Hills 7.36 269** P **Pn 15 00 41.5 -1.9**
baz=71,SNR=232
**H17K Granite Mounta 7.37 237 Pn 15 00 41.7 -1.8**
**H17K Granite Mounta 7.37 237** P **Pn 15 00 41.7 -1.8**
baz=44,SNR=432
**C36M Paulatuk 7.42 82 Pn 15 00 42.3 -1.9**
**C36M Paulatuk 7.42 82** P **Pn 15 00 42.1 -2.0**
baz=282
**M27K Edge Creek, AK 7.44 168 Pn 15 00 42.3 -2.2**
**M27K Edge Creek, AK 7.44 168** P **Pn 15 00 44.3 -0.3**
baz=351,SNR=1000
**CUT Chulitna 7.55 198** P **Pn 15 00 45.0 -0.8**
baz=14,SNR=150
**M24K Tolsona, Glenn 7.57 183 Pn 15 00 44.7 -1.7**
**M24K Tolsona, Glenn 7.57 183** P **Pn 15 00 47.4 +1.0**
baz=2.4,SNR=151
**WACK Wrangell Chich 7.69 177 Pn 15 00 46.8 -1.4**
**J18K Innoko River 7.70 222** P **Pn 15 00 46.0 -2.0**
baz=32,SNR=24
**M29M Somme Creek 7.72 156** P **Pn 15 00 48.6 +0.1**
baz=342,SNR=1000
**G16K Koyuk River 7.81 245 Pn 15 00 47.8 -1.7**
**G16K Koyuk River 7.81 245** P **Pn 15 00 47.3 -2.2**
baz=50,SNR=219
**SCM Sheep Creek Mo 7.89 187** P **Pn 15 00 51.3 +0.6**
baz=5.2,SNR=333
**M23K Glacier View 7.95 189** P **Pn 15 00 51.8 +0.3**
baz=6.2,SNR=582
**SML Sawmill 7.97 191 Pn 15 00 51.0 -0.7**
**SML Sawmill 7.97 191** P **Pn 15 00 52.0 +0.2**
baz=7.8,SNR=166
**L20K Farewell, AK 8.00 210 Pn 15 00 50.6 -1.5**
**L20K Farewell, AK 8.00 210** P **Pn 15 00 51.0 -1.1**
baz=22
**GHO Glory Hole Cre 8.04 193 Pn 15 00 51.0 -1.8**
**N25K Chitina, Valde 8.07 178 Pn 15 00 51.7 -1.5**
**N25K Chitina, Valde 8.07 178** P **Pn 15 00 53.8 +0.6**
baz=358,SNR=90
**SKT Skwentna 8.11 202 Pn 15 00 52.9 -0.8**
**SKT Skwentna 8.11 202** P **Pn 15 00 53.2 -0.5**
baz=16,SNR=123
**YUK3 Moose Creek 8.13 164** P **Pn 15 00 54.0 -0.1**
baz=348,SNR=1000
**M22K Willow 8.17 197** P **Pn 15 00 55.8 +1.4**
baz=12,SNR=241
**KLU Klutina 8.19 182** P **Pn 15 00 56.0 +1.3**
baz=1.6,SNR=108
**PMR Palmer 8.24 193** P **Pn 15 00 58.1 +2.7**
**PMR Palmer 8.24 193** P **Pn 15 00 55.6 +0.3**
baz=9.5,SNR=318
**H16K Elim 8.29 241** P **Pn 15 00 54.2 -1.8**
baz=46,SNR=86
**J17K VABM Dome 8.34 228** P **Pn 15 00 55.2 -1.5**
baz=36,SNR=150
**MCARA McCarthy YSAT 8.34 173** P **Pn 15 00 57.8 +1.1**
baz=354,SNR=358
**F15K North Star Dit 8.36 251 Pn 15 00 55.5 -1.5**
**F15K North Star Dit 8.36 251** P **Pn 15 00 55.0 -2.0**
baz=54,SNR=170
**KNK Knik Glacier 8.37 191 Pn 15 00 55.5 -1.7**
**KNK Knik Glacier 8.37 191** P **Pn 15 00 58.4 +1.2**
baz=7.7,SNR=319
**I17K Unalakleet 8.39 234** P **Pn 15 00 56.3 -1.1**
baz=40,SNR=168
**M20K Styx River 8.43 206** P **Pn 15 00 57.3 -0.8**
baz=19,SNR=384
**L19K White Mountain 8.45 212** P **Pn 15 00 58.6 +0.3**
baz=24,SNR=60
**SUA Susitna One 8.52 198** P **Pn 15 00 59.7 +0.4**
baz=13,SNR=170
**DIV Divide 8.55 182 Pn 15 00 58.0 -1.7**
**G15K Niukluk 8.61 246** P **Pn 15 00 58.9 -1.6**
baz=49,SNR=133
**STLK Strandline Lak 8.61 202 Pn 15 00 58.9 -1.7**
**M19K Big River Lodg 8.62 210 Pn 15 00 59.7 -0.9**
**M19K Big River Lodg 8.62 210** P **Pn 15 01 00.6 -0.1**
baz=22,SNR=158
**M31M Drury Creek, Y 8.66 144** P **Pn 15 01 00.6 -0.7**
baz=334,SNR=1000
**YUK8 Steele Glacier 8.69 162** P **Pn 15 01 01.7 0.0**
baz=347,SNR=584
**BMRM Bremner River 8.71 178** P **Pn 15 01 02.6 +0.7**
baz=358,SNR=323
**K17K Iditarod 8.71 224** P **Pn 15 01 00.6 -1.3**
baz=32,SNR=42
**YUK4 Talbot Arm 8.76 159** P **Pn 15 01 01.3 -1.4**
baz=344,SNR=1000
**L18K Granite Mounta 8.78 218** P **Pn 15 01 02.4 -0.4**
baz=27,SNR=69
**RC01 Rabbit Creek A 8.79 195** P **Pn 15 01 04.8 +1.9**
baz=10,SNR=142
**GLI Glacier Island 8.83 186 Pn 15 01 01.6 -1.9**
**GLI Glacier Island 8.83 186** P **Pn 15 01 04.2 +0.7**
baz=4.1,SNR=42
**J16K Anvik River 8.84 231** P **Pn 15 01 02.5 -1.1**
baz=37,SNR=137
**SPCG Spurr Capps Gl 8.84 202 Pn 15 01 01.8 -1.9**
**CTG Chitna Glacier 8.86 168** P **Pn 15 01 04.7 +0.7**
baz=351,SNR=740
**FARO Faro, Yukon 8.86 141** P **Pn 15 01 02.8 -1.1**
baz=332,SNR=1000
**N30M Aishikik Lake 8.87 154** P **Pn 15 01 03.7 -0.4**
baz=341,SNR=1000
**SPCP Crater Peak Br 8.88 202 Pn 15 01 03.3 -1.0**
**PWL Port Wells 8.91 190** P **Pn 15 01 04.9 +0.3**
baz=6.9,SNR=121
**N20K Mount Spurr 8.95 202** P **Pn 15 01 04.8 -0.4**
baz=16,SNR=75
**SPCR Spurr Chakacha 8.95 202** P Pn 15 00 48.7 -17
baz=16
**CRQE Cirque 8.97 173** P **Pn 15 01 06.5 +1.0**
baz=355,SNR=482
**N31M Braeburn, Yuko 9.06 150** P **Pn 15 01 06.5 -0.2**
baz=338,SNR=319
**F14K Arctic Creek 9.06 253 Pn 15 01 04.3 -2.3**
**F14K Arctic Creek 9.06 253** P **Pn 15 01 03.8 -2.8**
baz=54,SNR=210
**EYAK Cordova Ski Ar 9.13 182** P **Pn 15 01 10.2 +2.6**
**EYAK Cordova Ski Ar 9.13 182** P **Pn 15 01 07.7 +0.2**
baz=1.0,SNR=53
**O28M Mount Upton 9.15 164** P **Pn 15 01 08.8 +0.7**
baz=349,SNR=580
**YUK6 Outpost Mounta 9.18 159** P **Pn 15 01 09.6 +1.0**
baz=344,SNR=1000
**L17K Donlin 9.21 222** P **Pn 15 01 07.7 -1.1**
baz=30,SNR=56
**CAPN Captain Cook N 9.24 198** P **Pn 15 01 09.4 +0.3**
baz=13,SNR=12
**M18K Stony River 9.27 213** P **Pn 15 01 09.0 -0.4**
baz=24,SNR=34
**ANM Nome 9.32 247** Pn **Pn 15 01 08.2 -2.0**
**ANM Nome 9.32 247** P **Pn 15 01 08.5 -1.8**
baz=48,SNR=19
**ANM Nome 9.32 247** P **Pn 15 01 08.2 -2.0**
**O22K Cooper Landing 9.39 194** P **Pn 15 01 12.1 +1.0**
baz=9.6,SNR=29
**TNA Tin City 9.54 256** ⇑P **Pn 15 01 10.4 -2.8**
**TNA Tin City 9.54 256** P **Pn 15 01 11.0 -2.2**
baz=55,SNR=19
**BGLC Bering Glacier 9.59 174** P **Pn 15 01 14.4 +0.5**
baz=356
BGLC S **Sn 15 03 07.3 +5.6**
baz=356
**MESA MESA 9.60 170** P **Pn 15 01 16.4 +2.3**
baz=353,SNR=215
MESA S **Sn 15 03 08.2 +6.0**
baz=353
**N19K Bonanza Creek 9.66 208** P **Pn 15 01 14.8 -0.1**
baz=20,SNR=74
**M17K Holitna River 9.67 217** P **Pn 15 01 14.8 -0.3**
baz=26,SNR=48
**O30N Mendenhall 9.68 152** P **Pn 15 01 13.9 -1.2**
baz=340,SNR=1000
O30N S **Sn 15 03 11.1 +7.2**
baz=340
**P23K Montague Islan 9.72 187** P **Pn 15 01 16.4 +0.7**
baz=4.4,SNR=12
P23K S **Sn 15 03 10.9 +6.0**
baz=4.4
P23K S **Sn 15 03 10.9 +6.0**
baz=4.4
**SEW Seward 9.74 193** P **Pn 15 01 17.6 +1.7**
baz=8.7,SNR=20
SEW S **Sn 15 03 10.2 +5.0**
baz=8.7
**KAIM Kayak Island 9.76 178** P **Pn 15 01 16.4 +0.2**
baz=358,SNR=26
KAIM S **Sn 15 03 11.6 +5.9**
baz=358
**O29M Mount Kennedy 9.78 160** P **Pn 15 01 17.2 +0.6**
baz=346,SNR=645
**L16K Owhat River 9.86 223** P **Pn 15 01 16.5 -1.1**
baz=30,SNR=27
L16K S **Sn 15 03 13.1 +4.9**
baz=30
**N32M Quiet Lake 9.88 144** P **Pn 15 01 17.0 -0.9**
baz=334
N32M S **Sn 15 03 09.6 +0.7**
baz=334
**K15K Wolf Creek Mou 9.89 230** P **Pn 15 01 17.5 -0.5**
baz=35,SNR=19
**WHY Whitehorse 9.99 149** P **Pn 15 01 18.7 -0.8**
baz=338,SNR=497
WHY S **Sn 15 03 16.1 +4.5**
baz=338
**N18K Kilae Creek 10.03 212** Pn **Pn 15 01 20.0 +0.1**
**N18K Kilae Creek 10.03 212** P **Pn 15 01 19.6 -0.3**
baz=22,SNR=26
N18K S **Sn 15 03 16.5 +4.1**
baz=22
N18K S **Sn 15 03 16.5 +4.1**
baz=22
**O20K Slope Mountain 10.09 202 Pn 15 01 18.5 -2.3**
**O20K Slope Mountain 10.09 202** P **Pn 15 01 19.4 -1.4**
baz=15,SNR=20
O20K S **Sn 15 03 15.4 +1.5**
baz=15
O20K S **Sn 15 03 15.4 +1.5**
baz=15
**J14K Nanvaranak Lak 10.09 236** Pn **Pn 15 01 20.1 -0.6**
**J14K Nanvaranak Lak 10.09 236** P **Pn 15 01 19.7 -1.0**
baz=39,SNR=274
J14K S **Sn 15 03 13.7 -0.1**
baz=39
**P30M Million Dollar 10.16 156** P **Pn 15 01 22.0 +0.2**
baz=343
P30M S **Sn 15 03 23.5 +7.7**
baz=343
**BRSE Bradley Lake S 10.21 196** P **Pn 15 01 21.9 -0.5**
baz=11,SNR=14
BRSE S **Sn 15 03 23.1 +6.3**
baz=11
**Q23K Middleton Isla 10.26 183** P **Pn 15 01 24.2 +1.1**
baz=2.1
Q23K S **Sn 15 03 23.5 +5.4**
baz=2.1
Q23K S **Sn 15 03 23.5 +5.4**
baz=2.1
**MID Middleton Isla 10.26 183** P **Pn 15 01 24.5 +1.4**
**PNL Peninsula 10.31 163** P **Pn 15 01 26.3 +2.5**
**PNL Peninsula 10.31 163** P **Pn 15 01 25.0 +1.3**
baz=348,SNR=71
PNL S **Sn 15 03 24.7 +5.3**
baz=348
**M16K Timber Creek 10.35 220** P **Pn 15 01 22.6 -1.7**
baz=28
M16K S **Sn 15 03 26.5 +6.3**
baz=28
**HOM Homer 10.38 198** P **Pn 15 01 27.2 +2.5**
baz=12,SNR=20
HOM S **Sn 15 03 22.5 +1.5**
baz=12
**L15K Ungalak Mounta 10.39 228** P **Pn 15 01 23.5 -1.4**
baz=33,SNR=35
L15K S **Sn 15 03 23.2 +1.9**
baz=33
**N17K Nushagak Hills 10.42 215** P **Pn 15 01 24.8 -0.4**
baz=24,SNR=20
N17K S **Sn 15 03 22.5 +0.5**
baz=24
**YKU2 Yakutat 10.44 164** P **Pn 15 01 28.0 +2.6**
**CNPM China Poot 10.47 197** Pn **Pn 15 01 26.5 +0.6**
**P29M Windy Craggy 10.54 159** P **Pn 15 01 27.9 +1.1**
baz=345,SNR=588
P29M S **Sn 15 03 30.8 +5.9**
baz=345
**P19K Oil Pt 10.58 203** P **Pn 15 01 28.5 +1.0**
baz=15
P19K S **Sn 15 03 25.1 -1.0**
baz=15
**O18K Koktuh Hills 10.69 208** P **Pn 15 01 29.5 +0.5**
baz=19,SNR=56
O18K S **Sn 15 03 29.3 +0.7**
baz=19
O18K S **Sn 15 03 29.3 +0.7**
baz=19
**TGTN Hyland Airport 10.70 131** P **Pn 15 01 27.8 -1.3**
baz=326,SNR=340
TGTN S **Sn 15 03 29.6 +0.8**
baz=326
**WRGLY Wrigley 10.77 116** Pn **Pn 15 01 27.4 -2.5**
**WRGLY Wrigley 10.77 116** P **Pn 15 01 26.6 -3.3**
baz=316,SNR=1000
WRGLY S **Sn 15 03 23.3 -7.1**
baz=316
**N16K Nishlik Lake 10.79 218** P **Pn 15 01 28.7 -1.7**
baz=26,SNR=21
N16K S **Sn 15 03 31.9 +0.7**
baz=26
**P33M Teslin, Yukon 10.79 145** P **Pn 15 01 28.5 -2.0**
baz=336,SNR=177
**PLBC Pleasant Camp 10.89 155** P **Pn 15 01 32.6 +1.0**
baz=343,SNR=1000
**L14K Kuka Creek 10.99 229** P **Pn 15 01 29.2 -3.8**
baz=34
**M15K Kasigluk River 11.04 223** P **Pn 15 01 31.9 -1.8**
baz=29,SNR=18
**SKAG Skagway 11.04 153** P **Pn 15 01 35.5 +1.7**
**SKAG Skagway 11.04 153** ⇑P **Pn 15 01 33.7 0.0**
**SKAG Skagway 11.04 153** P **Pn 15 01 33.4 -0.4**
baz=341,SNR=197
**K13K Kusilvak Mount 11.05 235** P **Pn 15 01 31.2 -2.7**
baz=38
**P18K Big Mountain, 11.13 207** P **Pn 15 01 35.3 +0.3**
baz=18,SNR=15
P18K S **Sn 15 03 40.5 +1.0**
baz=18
**P32M Atlin 11.20 149** P **Pn 15 01 34.0 -2.0**
baz=339,SNR=147
**M14K Bethel 11.30 226** P **Pn 15 01 36.5 -0.8**
baz=31,SNR=29
**Q19K Cape Douglas, 11.34 203** P **Pn 15 01 38.3 +0.4**
baz=15
**N15K Kwethluk River 11.36 221 Pn 15 01 38.4 +0.2**
**N15K Kwethluk River 11.36 221** P **Pn 15 01 36.7 -1.5**
baz=27
N15K S **Sn 15 03 44.7 -0.4**
baz=27
**O16K Kokwok River B 11.46 215** P **Pn 15 01 40.0 +0.6**
baz=23,SNR=10
O16K S **Sn 15 03 45.5 -1.9**
baz=23
**Q20K Shuyak Island 11.49 199** P **Pn 15 01 40.0 0.0**
baz=13,SNR=14
Q20K S **Sn 15 03 44.2 -4.0**
baz=13
**SYI Shuyak Island 11.49 199** Pn **Pn 15 01 39.8 -0.1**
**WTLY Watson Lake, Y 11.78 136** P **Pn 15 01 42.2 -1.6**
baz=331,SNR=431
WTLY S **Sn 15 03 56.8 +1.5**
baz=331
**Q18K Katmai Hardscr 11.81 206** P **Pn 15 01 44.3 0.0**
baz=17,SNR=19
Q18K S **Sn 15 03 51.2 -4.9**
baz=17
**R33M Jennings River 11.93 142** P **Pn 15 01 44.7 -1.2**
baz=335,SNR=178
R33M S **Sn 15 03 58.8 -0.3**
baz=335
**GAMB Gambell 11.93 253** P **Pn 15 01 43.5 -2.3**
baz=49,SNR=17
GAMB S **Sn 15 03 53.7 -5.1**
baz=49
**M13K Dall Lake 11.95 228** P **Pn 15 01 45.5 -0.6**
baz=32
**N14K Kuskokwak Cree 11.96 224** P **Pn 15 01 45.2 -1.0**
baz=29
**P16K Nushagak River 11.96 213** P **Pn 15 01 45.6 -0.7**
baz=22,SNR=11
**R31K City Hall, Gus 11.98 155** P **Pn 15 01 47.0 +0.4**
baz=344,SNR=54
**Q16K King Salmon 12.05 210** P **Pn 15 01 45.8 -1.6**
baz=19
**Q32M Nakina River 12.06 146** P **Pn 15 01 47.7 -0.2**
baz=338,SNR=1000
**O15K Ungalikthiuk R 12.20 218** P **Pn 15 01 49.0 -0.6**
baz=25
O15K S **Sn 15 04 05.7 +0.2**
baz=25
**R32K Eaglecrest 12.31 153** P **Pn 15 01 52.1 +1.1**
baz=342,SNR=281
**Q17K Contact Creek 12.31 207** P **Pn 15 01 51.9 +0.7**
baz=18,SNR=25
Q17K S **Sn 15 04 06.1 -2.3**
baz=18
**KDAK Kodiak Island 12.32 199** Pn **Pn 15 01 51.8 +0.5**
**KDAK Kodiak Island 12.32 199** ⇑P **Pn 15 01 52.4 +1.2**
**KDAK Kodiak Island 12.32 199** Pn **Pn 15 01 50.4 -0.8**
comp=N,2.4nm,0.3s,baz=54,slow=8.3,SNR=16
KDAK Lg Lg 15 05 18.3
comp=N,0.8nm,0.3s,baz=323,slow=20,SNR=1.4
KDAK LR LR 15 07 02.6
comp=N,312µm,19.0s,baz=41,slow=40
**KDAK Kodiak Island 12.32 199** P **Pn 15 01 50.8 -0.5**
baz=12
KDAK S **Sn 15 04 02.2 -6.4**
baz=12
**KDAK Kodiak Island 12.32 199** *i* P **Pn 15 01 52.9 +1.6**
KDAK MLR MLR
comp=Z,296µm,16.0s
**JIS Juneau Island 12.33 152** P **Pn 15 01 52.4 +1.1**
**S31K Pelican 12.35 157** Pn **Pn 15 01 51.6 0.0**
**S31K Pelican 12.35 157** P **Pn 15 01 51.7 0.0**
baz=345,SNR=269
**O14K Tigyukauivet M 12.45 221** P **Pn 15 01 52.8 -0.1**
baz=27
**M11K Mekoryuk 12.75 234** P **Pn 15 01 57.0 0.0**
baz=35
**R18K Karluk 12.77 203** P **Pn 15 01 53.7 -3.6**
baz=15
**OHAK Old Harbor 12.96 200** P **Pn 15 01 58.8 -1.1**
baz=13
**R17L Mt. Peulik Vol 12.99 208** P **Pn 15 01 59.8 -0.6**
baz=18
R17L S **Sn 15 04 27.7 +2.8**
baz=18
**DLBC Dease Lake 13.00 142** Pn **Pn 15 01 56.5 -4.1**
comp=Z,0.4nm,0.3s,baz=326,slow=8.8,SNR=6.6
DLBC Sn **Sn 15 04 22.6 -2.6**
comp=Z,21nm,0.3s,baz=270,slow=20,SNR=1.4
DLBC Lg Lg 15 05 33.6
baz=252,slow=19
DLBC LR LR 15 07 38.8
comp=Z,246µm,18.6s,baz=334,slow=40
comp=Z,4.1nm,0.5s
**DLBC Dease Lake 13.00 142** P **Pn 15 01 59.7 -0.9**
baz=336,SNR=464
**KOTAN Kotaneelee Air 13.01 127** P **Pn 15 02 01.2 +0.6**
baz=326,SNR=590
**LIRD Liard River Hi 13.07 132** P **Pn 15 02 03.0 +1.6**
baz=329,SNR=125
**S32K Killisnoo 13.07 154** P **Pn 15 02 01.2 -0.2**
baz=343,SNR=260
**R16K Pilot Point 13.26 210** P **Pn 15 02 03.9 -0.1**
baz=19
**S34M Telegraph Cree 13.26 145** P **Pn 15 02 03.1 -0.9**
baz=338,SNR=550
**SIT Sitka 13.36 156** P **Pn 15 02 07.8 +2.5**
**SIT Sitka 13.36 156** Pn **Pn 15 02 05.1 -0.2**
**SIT Sitka 13.36 156** P **Pn 15 02 05.4 +0.1**
baz=345,SNR=44
SIT S **Sn 15 04 38.4 +4.7**
baz=345
**SIT Sitka 13.36 156** P **Pn 15 02 05.1 -0.2**
**SII Sitkinak Islan 13.71 201** P **Pn 15 02 10.4 +0.2**
baz=13
**TOAD Toad River Com 13.78 132** P **Pn 15 02 10.7 -0.4**
baz=330,SNR=371
**T33K Petersburg 13.96 151** P **Pn 15 02 13.6 +0.1**
baz=342,SNR=14
**YKA Yellowknife Ar 14.18 105** Pn Pn 15 02 10.3 -6.3
comp=Z,26nm,0.3s,baz=314,slow=13,SNR=204
YKA Sn Sn 15 04 40.4 -14
comp=Z,148nm,0.3s,baz=311,slow=24,SNR=9.1
YKA LR LR 15 08 18.9
comp=Z,192µm,18.5s,baz=306,slow=40
**T35M Bob Quinn 14.30 145** P **Pn 15 02 18.9 +0.6**
baz=338,SNR=214
**U33K Whale Pass 14.60 152** P **Pn 15 02 21.8 -0.5**
baz=343,SNR=53
**CHGN Chignik 14.61 210** P **Pn 15 02 23.4 +0.9**
baz=18
**S14K Fog Glacier 14.83 213** P **Pn 15 02 23.6 -1.9**
baz=20
**CRAG Craig 15.22 153** P **Pn 15 02 32.7 +2.0**
**CRAG Craig 15.22 153** ⇓P **Pn 15 02 30.5 -0.2**
**CRAG Craig 15.22 153** P **Pn 15 02 30.5 -0.2**
baz=344,SNR=21
CRAG S **Sn 15 05 20.4 +1.3**
baz=344
**U35K Hyder 15.35 146** P **Pn 15 02 33.0 +0.7**
baz=340,SNR=6.1
**V35K Ketchikan 15.61 150** P **Pn 15 02 35.3 -0.4**
baz=342,SNR=40
V35K S **Sn 15 05 33.8 +5.3**
baz=342
V35K S **Sn 15 05 33.8 +5.3**
baz=342
**S12K Black Hills 15.88 217** P **Pn 15 02 39.8 +0.5**
baz=22,SNR=10
S12K S **Sn 15 05 37.4 +2.2**
baz=22
**SDPT Sand Point 15.89 213** P **Pn 15 02 40.6 +1.2**
**SDPT Sand Point 15.89 213** P **Pn 15 02 37.9 -1.5**
baz=20
SDPT S **Sn 15 05 36.8 +1.4**
baz=20
**CHNA Chernabura Isl 16.22 211** P **Pn 15 02 42.2 -1.4**
baz=18
CHNA S **Sn 15 05 41.1 -2.3**
baz=18
**SPIA Saint Paul Isl 16.59 234** P **Pn 15 02 47.4 -1.0**
baz=31
**P08K Saint George I 16.90 232** P **Pn 15 02 52.3 +0.1**
baz=30
**FALS False Pass 16.95 218** P **Pn 15 02 53.8 +0.8**
baz=22,SNR=15
**BILL Bilibino 17.22 288 Pn 15 02 54.2 -2.1**
**BILL Bilibino 17.22 288** *d* P **Pn 15 02 53.9 -2.3**
BILL *i* S **Sn 15 05 57.3 -10**
BILL pmax pmax
comp=Z,447nm,1.7s
BILL MLR MLR
comp=Z,116µm,16.0s
**GRNB Grenville Isla 17.32 148 Pn 15 02 56.9 -0.7**
**EUNU Eureka 17.45 30** P **Pn 15 02 57.5 -1.5**
**H02S1 DAWSON INLET T 17.51 154** P **P 15 03 03.4 +2.4**
**UNV Unalaska Valle 18.59 222** P **Pn 15 03 13.1 0.0**
**UNV Unalaska Valle 18.59 222** P **P 15 03 12.2 -0.7**
baz=24,SNR=8.1
UNV S **S 15 06 43.5 -1.2**
baz=24
**BBB Bella Bella 19.25 147** ⇓P **Pn 15 03 21.6 +0.6**
**BBB Bella Bella 19.25 147** P **P 15 03 20.4 +0.3**
comp=Z,2.2nm,0.3s,baz=352,slow=13,SNR=16
BBB Lg Lg 15 08 57.8
comp=Z,0.6nm,0.3s,baz=256,slow=18,SNR=2.9
comp=Z,32nm,0.7s
**NIKH Nikolski High 19.96 225** P **Pn 15 03 29.8 +0.2**
baz=24,SNR=9.7
NIKH S **Sn 15 07 15.1 +1.3**
baz=24
**TULEG Thule 21.57 38** ⇑P **P 15 03 44.2 -0.9**
**TULEG Thule 21.57 38** *i* P **P 15 03 44.3 -0.9**
**ADK Adak 23.05 236** P **P 15 04 01.6 +0.5**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ADK | **Adak** | **23.05 236** | | P | **P** | **15 04 00.4** | **-0.7** | | |
| ADK | **Adak** | **23.05 236** | ⇑ | P | **P** | **15 03 59.9** | **-1.2** | | |
| ADK | **Adak** | **23.05 236** | | P | **P** | **15 04 00.4** | **-0.7** | | |
| ADK | comp=Z,1μm,1.2s | | | pmax | pmax | | | | |
| ADK | comp=Z,63μm,20.0s | | | MLR | MLR | | | | |
| KIWB | **Kanaga Island** | **23.21 236** | | P | **P** | **15 04 02.3** | **-0.5** | | |
| CLRS | **Cowichan Lake** | **23.25 143** | | IAmb | IAmb | 15 04 17.0 | | | |
| CLRS | comp=Z,2μm,1.5s | | | IAMs_20 | IAMs_20 | 15 13 50.2 | | | |
| PGC | comp=Z,204μm,18.0s **Sidney** | **23.55 142** | | IAmb | IAmb | 15 04 17.7 | | | |
| FFC | comp=Z,3μm,1.6s **Flin Flon** | **24.36 106** | | P | **P** | **15 04 12.0** | **-1.8** | | |
| FFC | **Flin Flon** | **24.36 106** | ⇓ | P | **P** | **15 04 13.4** | **-0.4** | | |
| FFC | **Flin Flon** | **24.36 106** | | P | **P** | **15 04 12.0** | **-1.8** | | |
| FFC | comp=Z,4μm,1.7s | | | pmax | pmax | | | | |
| NLWA | **Neilton Lookou** | **24.66 144** | | IAmb | IAmb | 15 04 30.2 | | | |
| NLWA | comp=Z,2μm,1.6s | | | IAMs_20 | IAMs_20 | 15 14 20.1 | | | |
| NLWA | comp=Z,238μm,18.0s **Neilton Lookou** | **24.66 144** | ⇓ | P | **P** | **15 04 17.9** | **+1.3** | | |
| AMKA | **Amchitka** | **24.69 241** | | P | **P** | **15 04 15.1** | **-1.7** | | |
| NEEM | **North Greenlan** | **24.70 31** | *i* | P | **P** | **15 04 17.4** | **+0.3** | | |
| GNW | **Green Mountain** | **24.71 142** | | IAmb | IAmb | 15 04 30.7 | | | |
| B08A | comp=Z,2μm,1.9s **Colville Reser** | **24.77 136** | | IAmb | IAmb | 15 04 28.4 | | | |
| SEY | comp=Z,829nm,1.1s **Seymchan** | **24.88 286** | | LR | LR | 15 15 08.6 | | | |
| SEY | comp=Z,26μm,18.8s,baz=48,slow=39 **Seymchan** | **24.88 286** | *de* | P | **P** | **15 04 17.9** | **-0.5** | | |
| SEY | comp=Z,761nm,1.3s | | | pmax | pmax | | | | |
| SEY | comp=Z,55μm,12.0s | | | MLR | MLR | | | | |
| KULLO | **Kullorsuaq** | **25.06 39** | ⇑ | P | **P** | **15 04 20.2** | **+0.3** | | |
| SHEM | **Shemya Is, Ala** | **25.17 249** | | LR | LR | 15 14 37.9 | | | |
| D05A | comp=Z,17μm,20.2s,baz=50,slow=38 **Enumclaw** | **25.25 141** | | IAmb | IAmb | 15 04 33.6 | | | |
| NEW | comp=Z,852nm,1.1s **Newport** | **25.41 133** | | IAmb | IAmb | 15 04 35.0 | | | |
| NEW | comp=Z,953nm,1.3s **Newport** | **25.41 133** | ⇓ | P | **P** | **15 04 24.1** | **+0.7** | | |
| NEW | **Newport** | **25.41 133** | | LR | LR | 15 14 55.8 | | | |
| NEW | comp=Z,310μm,19.4s,baz=338,slow=38 **Newport** | **25.41 133** | | P | **P** | **15 04 23.8** | **+0.4** | | |
| NEW | baz=337,SNR=237 | | | S | **S** | **15 08 53.3** | **+3.3** | | |
| NEW | baz=337 **Newport** | **25.41 133** | | P | **P** | **15 04 23.9** | **+0.5** | | |
| LTY | **Liberty** | **25.49 139** | | IAmb | IAmb | 15 04 35.2 | | | |
| LTY | comp=Z,1μm,1.2s | | | IAMs_20 | IAMs_20 | 15 14 56.5 | | | |
| E03A | comp=Z,214μm,19.0s **Lebam** | **25.53 144** | | IAmb | IAmb | 15 04 36.6 | | | |
| LON | comp=Z,892nm,1.1s **Longmire** | **25.71 141** | | IAmb | IAmb | 15 04 38.1 | | | |
| D08A | comp=Z,2μm,1.1s **Wollman Farm,** | **26.09 136** | | IAmb | IAmb | 15 04 40.3 | | | |
| MXC | comp=Z,780nm,1.1s **Moxie City** | **26.21 139** | | IAmb | IAmb | 15 04 41.9 | | | |
| TIXI | comp=Z,955nm,1.2s **Tiksi** | **26.31 315** | | P | **P** | **15 04 28.9** | **-2.3** | | |
| TIXI | **Tiksi** | **26.31 315** | ⇓ | P | **P** | **15 04 30.5** | **-0.7** | | |
| TIXI | **Tiksi** | **26.31 315** | *de* | P | **P** | **15 04 31.2** | **-0.1** | | |
| TIXI | comp=Z,551nm,2.5s | | | pmax | pmax | | | | |
| E07A | **Sunnyside** | **26.33 138** | | IAmb | IAmb | 15 04 42.7 | | | |
| F04A | comp=Z,666nm,1.1s **Amboy** | **26.35 142** | | IAmb | IAmb | 15 04 43.8 | | | |
| UPNV | comp=Z,715nm,1.0s **Upernavik** | **26.38 42** | *i* | P | **P** | **15 04 32.3** | **+0.4** | | |
| NOR | **Nord** | **26.56 15** | ⇓ | P | **P** | **15 04 33.5** | **+0.1** | | |
| NOR | **Nord** | **26.56 15** | | P | **P** | **15 04 34.4** | **+1.0** | | |
| NOR | **Nord** | **26.56 15** | *i* | P | **P** | **15 04 36.0** | **+2.6** | | |
| HAWA | **Hanford** | **26.57 138** | | IAMs_20 | IAMs_20 | 15 13 45.0 | | | |
| HAWA | comp=Z,109μm,18.0s **Hanford** | **26.57 138** | ⇓ | P | **P** | **15 04 34.1** | **+0.3** | | |
| E08A | **Dider Farm, El** | **26.58 137** | | IAmb | IAmb | 15 04 45.1 | | | |
| E09A | comp=Z,3μm,1.7s **Wood Farm, Sta** | **26.78 136** | | IAmb | IAmb | 15 04 46.8 | | | |
| F07A | comp=Z,966nm,1.2s **Phinny Hill Vi** | **26.94 139** | | IAmb | IAmb | 15 04 48.9 | | | |
| HOOD | comp=Z,1μm,1.3s **Mount Hood Mea** | **27.10 142** | | IAmb | IAmb | 15 04 50.6 | | | |
| G05A | comp=Z,2μm,1.1s **Wamic** | **27.25 141** | | IAmb | IAmb | 15 04 52.1 | | | |
| G06A | comp=Z,3μm,1.9s **Carlson Farm,** | **27.41 140** | | IAmb | IAmb | 15 04 53.1 | | | |
| COR | comp=Z,1μm,1.3s **Corvallis** | **27.46 145** | | IAMs_20 | IAMs_20 | 15 16 53.1 | | | |
| COR | comp=Z,110μm,20.0s **Corvallis** | **27.46 145** | ⇑ | P | **P** | **15 04 44.7** | **+2.9** | | |
| F10A | **Beach Ranch, E** | **27.52 135** | | IAmb | IAmb | 15 04 53.8 | | | |
| F10A | comp=Z,764nm,1.1s **Beach Ranch, E** | **27.52 135** | ⇑ | P | **P** | **15 04 42.6** | **+0.1** | | |
| MSO | **Missoula** | **27.57 130** | | IAmb | IAmb | 15 04 54.2 | | | |
| MSO | comp=Z,1μm,1.1s **Missoula** | **27.57 130** | ⇑ | P | **P** | **15 04 43.0** | **+0.1** | | |
| MSO | **Missoula** | **27.57 130** | | P | **P** | **15 04 43.1** | **+0.1** | | |
| MSO | baz=337,SNR=353 | | | S | **S** | **15 09 25.4** | **+1.2** | | |
| H04D | baz=337 **Lebanon** | **27.63 144** | | IAmb | IAmb | 15 04 55.6 | | | |
| EGMT | comp=Z,854nm,1.3s **Eagleton** | **27.66 123** | | IAmb | IAmb | 15 04 54.4 | | | |
| EGMT | comp=Z,1μm,1.1s **Eagleton** | **27.66 123** | ⇑ | P | **P** | **15 04 44.1** | **+0.3** | | |
| EGMT | **Eagleton** | **27.66 123** | | P | **P** | **15 04 44.6** | **+0.8** | | |
| EGMT | baz=334,SNR=76 | | | S | **S** | **15 09 27.6** | **+1.9** | | |
| NUUG | baz=334 **Nuugaatsiaq** | **27.87 43** | ⇑ | P | **P** | **15 04 45.1** | **-0.1** | | |
| BMO | **Blue Mountains** | **28.55 136** | | IAmb | IAmb | 15 05 05.0 | | | |
| BMO | comp=Z,2μm,2.0s **Blue Mountains** | **28.55 136** | ⇑ | P | **P** | **15 04 52.7** | **+1.0** | | |
| UMMG | **Uummannaq** | **28.71 44** | *i* | P | **P** | **15 04 52.7** | **-0.1** | | |
| DBO | **Dodson Butte** | **28.88 145** | | IAmb | IAmb | 15 05 07.6 | | | |
| DGMT | comp=Z,1μm,1.4s **Dagmar** | **28.96 116** | | IAMs_20 | IAMs_20 | 15 16 06.5 | | | |
| DGMT | comp=Z,140μm,21.0s **Dagmar** | **28.96 116** | | IAmb | IAmb | 15 05 48.5 | | | |
| DGMT | comp=Z,959nm,0.9s **Dagmar** | **28.96 116** | ⇑ | P | **P** | **15 04 55.7** | **+0.5** | | |
| DGMT | **Dagmar** | **28.96 116** | | P | **P** | **15 04 55.8** | **+0.5** | | |
| DGMT | baz=332,SNR=31 | | | S | **S** | **15 09 48.2** | **+2.3** | | |
| FRB | baz=332 **Frobisher Bay** | **28.97 63** | ⇑ | P | **P** | **15 04 54.0** | **-1.1** | | |
| FRB | **Frobisher Bay** | **28.97 63** | | LR | LR | 15 17 22.4 | | | |
| J05D | comp=Z,253μm,19.9s,baz=309,slow=38 **Fort Rock, OR** | **29.13 142** | | IAmb | IAmb | 15 05 09.3 | | | |
| BOZ | comp=Z,664nm,1.2s **Bozeman (W)** | **29.34 128** | | IAMs_20 | IAMs_20 | 15 17 51.4 | | | |
| BOZ | comp=Z,176μm,19.0s **Bozeman (W)** | **29.34 128** | ⇓ | P | **P** | **15 04 58.8** | **+0.1** | | |
| BOZ | **Bozeman (W)** | **29.34 128** | | P | **P** | **15 04 58.6** | **-0.2** | | |
| BOZ | baz=337,SNR=107 | | | S | **S** | **15 09 52.1** | **0.0** | | |
| HUMO | baz=337 **Hull Mountain** | **29.43 145** | | IAmb | IAmb | 15 05 12.4 | | | |
| HUMO | comp=Z,2μm,1.4s | | | IAMs_20 | IAMs_20 | 15 16 54.2 | | | |
| HUMO | comp=Z,133μm,19.0s **Hull Mountain** | **29.43 145** | ⇑ | P | **P** | **15 05 00.8** | **+1.4** | | |
| LAO | **LASA Array** | **29.92 120** | | IAmb | IAmb | 15 05 10.6 | | | |
| LAO | comp=Z,694nm,1.2s | | | IAMs_20 | IAMs_20 | 15 18 05.8 | | | |
| LAO | comp=Z,128μm,20.0s **LASA Array** | **29.92 120** | ⇓ | P | **P** | **15 05 04.5** | **+0.7** | | |
| LAO | **LASA Array** | **29.92 120** | | P | **P** | **15 05 04.6** | **+0.7** | | |
| LAO | baz=334,SNR=166 | | | S | **S** | **15 10 03.8** | **+2.7** | | |
| ULM | baz=334 **Lac du Bonnet** | **30.16 104** | ⇑ | P | **P** | **15 05 05.8** | **0.0** | | |
| ULM | **Lac du Bonnet** | **30.16 104** | | P | **P** | **15 05 05.4** | **-0.4** | | |
| ULM | comp=Z,29nm,0.9s,baz=325,slow=8.7,SNR=20 | | | LR | LR | 15 17 47.8 | | | |
| ULM | comp=Z,127μm,19.3s,baz=328,slow=38 **Lac du Bonnet** | **30.16 104** | *c* | *i* P | **P** | **15 05 06.0** | **+0.2** | | |
| PET | comp=Z,29nm,0.9s **Petropavlovsk** | **30.19 266** | | P | **P** | **15 05 06.6** | **+0.6** | | |
| PET | **Petropavlovsk** | **30.19 266** | | P | **P** | **15 05 05.3** | **-0.7** | | |
| PET | **Petropavlovsk** | **30.19 266** | *e* | P | **P** | **15 05 05.5** | **-0.5** | | |
| PET | | | | *e* | | 15 06 15.4 | | | |
| PET | | | | *e* | | 15 08 08.9 | | | |
| PET | | | | *e* | **S** | **15 10 05.7** | **+0.7** | | |
| PET | comp=Z,4μm,6.4s | | | pmax | pmax | | | | |
| PET | comp=Z,6μm,6.1s | | | pmax | pmax | | | | |
| PET | comp=Z,92nm,1.2s | | | pmax | pmax | | | | |
| PET | comp=Z,30μm,16.0s | | | MLR | MLR | | | | |
| MFID | **Camas Ranch** | **30.26 135** | | IAmb | IAmb | 15 05 20.5 | | | |
| MFID | comp=Z,608nm,1.4s | | | IAMs_20 | IAMs_20 | 15 16 59.8 | | | |
| DAG | comp=Z,133μm,20.0s **Danmarks Havn** | **30.28 22** | | P | **P** | **15 05 05.2** | **-1.5** | | |
| DAG | **Danmarks Havn** | **30.28 22** | ⇓ | P | **P** | **15 05 06.2** | **-0.4** | | |
| YBH | **Yreka Blue Hor** | **30.32 145** | | IAMs_20 | IAMs_20 | 15 17 20.8 | | | |
| YBH | comp=Z,129μm,18.0s **Yreka Blue Hor** | **30.32 145** | | LR | LR | 15 17 32.4 | | | |
| SUMG | comp=Z,116μm,18.6s,baz=332,slow=37 **Summit** | **30.37 35** | | P | **P** | **15 05 05.2** | **-2.7** | | |
| SUMG | **Summit** | **30.37 35** | *i* | P | **P** | **15 05 10.0** | **+2.1** | | |
| SUMG | comp=Z,688nm,1.6s | | | IAmb | IAmb | 15 05 12.0 | | | |
| RLMT | **Red Lodge** | **30.44 125** | | IAmb | IAmb | 15 05 20.1 | | | |
| RLMT | comp=Z,777nm,1.1s | | | IAMs_20 | IAMs_20 | 15 19 07.6 | | | |
| RLMT | comp=Z,93μm,18.0s **Red Lodge** | **30.44 125** | ⇑ | P | **P** | **15 05 09.1** | **+0.5** | | |
| RLMT | **Red Lodge** | **30.44 125** | | P | **P** | **15 05 09.6** | **+1.0** | | |
| RLMT | baz=336,SNR=162 | | | S | **S** | **15 10 11.0** | **+1.5** | | |
| HLID | baz=336 **Hailey** | **30.48 133** | ⇓ | P | **P** | **15 05 09.3** | **+0.4** | | |
| HLID | **Hailey** | **30.48 133** | | P | **P** | **15 05 10.2** | **+1.2** | | |
| HLID | baz=339,SNR=199 | | | S | **S** | **15 10 12.3** | **+2.2** | | |
| WVOR | baz=339 **Wild Horse Val** | **30.52 139** | | IAmb | IAmb | 15 05 21.7 | | | |
| WVOR | comp=Z,619nm,1.1s | | | IAMs_20 | IAMs_20 | 15 16 47.6 | | | |
| WVOR | comp=Z,131μm,18.0s **Wild Horse Val** | **30.52 139** | ⇑ | P | **P** | **15 05 10.3** | **+1.2** | | |
| YMP | **Mirror Lake Pl** | **30.54 126** | | IAmb | IAmb | 15 06 08.2 | | | |
| LKWY | comp=Z,637nm,1.4s **Lake** | **30.63 127** | ⇓ | P | **P** | **15 05 14.0** | **+3.7** | | |
| H17A | **Grant Village** | **30.74 127** | | P | **P** | **15 05 12.6** | **+1.3** | | |
| H17A | baz=337,SNR=17 | | | S | **S** | **15 10 16.7** | **+2.4** | | |
| MDND | baz=337 **Maddock** | **30.99 111** | | P | **P** | **15 05 13.9** | **+0.7** | | |
| MDND | baz=331,SNR=9.2 | | | S | **S** | **15 10 17.9** | **+0.2** | | |
| FLWY | baz=331 **Flagg Ranch** | **30.99 128** | | IAMs_20 | IAMs_20 | 15 18 41.1 | | | |
| KBS | comp=Z,170μm,22.0s **Kingsbay** | **31.05 8** | | P | **P** | **15 05 11.2** | **-2.1** | | |
| KBS | **Kingsbay** | **31.05 8** | *e* | P | **P** | **15 05 13.4** | **0.0** | | |
| KBS | comp=Z,5μm,3.4s | | | IVmB_BB | | 15 05 22.9 | | | |
| KBS | | | | *e* | **S** | **15 10 20.1** | **+2.1** | | |
| KBS | | | | *e* | **ScP** | **15 11 49.7** | **-1.4** | | |
| KBS | comp=Z,15μm,18.8s | | | IVMs_BB | IVMs_BB | 15 19 41.6 | | | |
| KBS | **Kingsbay** | **31.05 8** | ⇑ | P | **P** | **15 05 15.5** | **+2.1** | | |
| KBS | **Kingsbay** | **31.05 8** | *ce* | P | **P** | **15 05 14.6** | **+1.2** | | |
| KBS | comp=Z,224nm,2.5s | | | pmax | pmax | | | | |
| KBS | **Kingsbay** | **31.05 8** | *i* | P | **P** | **15 05 17.9** | **+4.6** | | |
| IMW | **Indian Meadow** | **31.09 128** | | IAmb | IAmb | 15 05 26.9 | | | |
| FXWY | comp=Z,707nm,1.1s **Fox Creek** | **31.31 128** | | IAmb | IAmb | 15 05 28.9 | | | |
| LOHW | comp=Z,1μm,1.4s **Long Hollow** | **31.45 128** | | IAmb | IAmb | 15 05 29.9 | | | |
| LOHW | comp=Z,1μm,1.4s | | | IAMs_20 | IAMs_20 | 15 19 02.3 | | | |
| TPAW | comp=Z,100μm,20.0s **Teton Pass** | **31.47 128** | | IAMs_20 | IAMs_20 | 15 16 56.7 | | | |
| SNOW | comp=Z,121μm,19.0s **Snow King Moun** | **31.55 128** | | IAMs_20 | IAMs_20 | 15 17 00.9 | | | |
| SFJD | comp=Z,11μm,18.0s **Kangerlussuaq** | **31.75 48** | | P | **P** | **15 05 17.3** | **-2.3** | | |
| SFJD | comp=Z,489nm,1.2s | | | IAmb | IAmb | 15 06 15.2 | | | |
| SFJD | **Kangerlussuaq** | **31.75 48** | ⇑ | P | **P** | **15 05 19.3** | **-0.3** | | |
| SFJD | **Kangerlussuaq** | **31.75 48** | | LR | LR | 15 21 07.2 | | | |
| SFJD | comp=Z,72nm,18.7s,baz=326,slow=42 **Kangerlussuaq** | **31.75 48** | | P | **P** | **15 05 17.3** | **-2.3** | | |
| SFJD | comp=Z,489nm,1.3s | | | pmax | pmax | | | | |
| SFJD | comp=Z,56μm,21.0s | | | MLR | MLR | | | | |
| SFJD | **Kangerlussuaq** | **31.75 48** | *i* | P | **P** | **15 05 19.7** | **+0.1** | | |
| E28A | **Huff** | **31.75 113** | | IAMs_20 | IAMs_20 | 15 18 41.4 | | | |
| O02D | comp=Z,127μm,21.0s **Mt. Diablo Mer** | **31.80 146** | | IAMs_20 | IAMs_20 | 15 18 23.1 | | | |
| AGMN | comp=Z,99μm,19.0s **Agassiz Nation** | **31.84 106** | | IAmb | IAmb | 15 05 31.3 | | | |
| AGMN | comp=Z,999nm,1.4s | | | IAMs_20 | IAMs_20 | 15 18 36.6 | | | |
| AGMN | comp=Z,99μm,18.0s **Agassiz Nation** | **31.84 106** | ⇓ | P | **P** | **15 05 20.6** | **+0.1** | | |
| AGMN | **Agassiz Nation** | **31.84 106** | | P | **P** | **15 05 20.7** | **+0.1** | | |
| AGMN | baz=330,SNR=94 | | | S | **S** | **15 10 28.8** | **-2.1** | | |
| SPA0 | baz=330 **Spitsbergen Ar** | **31.99 7** | *e* | P | **P** | **15 05 21.4** | **-0.3** | | |
| SPA0 | | | | IVmB_BB | | 15 05 31.2 | | | |
| SPA0 | comp=Z,4μm,5.4s | | | *e* | **S** | **15 10 32.9** | **+0.1** | | |
| SPITS | **Spitsbergen Ar** | **31.99 7** | | P | **P** | **15 05 20.4** | **-1.3** | | |
| SPITS | comp=Z,50nm,0.8s,baz=35,slow=4.6,SNR=21 **Spitsbergen Ar** | **31.99 7** | | P | **P** | **15 05 18.6** | **-3.1** | | |
| SPITS | comp=Z,50nm,0.8s | | | pmax | pmax | | | | |
| SPB2 | comp=Z,230nm,1.0s **Spitsbergen Ar** | **32.00 7** | | P | **P** | **15 05 18.7** | **-3.1** | | |
| AHID | **Auburn Hatcher** | **32.10 129** | ⇑ | P | **P** | **15 05 24.3** | **+1.1** | | |
| DBG | **Daneborg** | **32.14 25** | ⇑ | P | **P** | **15 05 22.8** | **-0.3** | | |
| DBG | **Daneborg** | **32.14 25** | *i* | P | **P** | **15 05 23.2** | **+0.2** | | |
| DBG | comp=Z,214nm,1.3s | | | IAmb | IAmb | 15 05 26.5 | | | |
| BW06 | **Boulder Array** | **32.52 127** | ⇑ | P | **P** | **15 05 27.5** | **+0.5** | | |
| BW06 | **Boulder Array** | **32.52 127** | | P | **P** | **15 05 27.6** | **+0.6** | | |
| BW06 | baz=338,SNR=471 | | | S | **S** | **15 10 42.4** | **+0.3** | | |
| PD31 | baz=338 **Pinedale Array** | **32.52 127** | | IAmb | IAmb | 15 05 38.7 | | | |
| PDAR | comp=Z,1μm,1.1s **Pinedale Array** | **32.52 127** | | P | **P** | **15 05 26.8** | **-0.1** | | |
| PDAR | comp=Z,142nm,0.8s,baz=357,slow=4.5,SNR=130 | | | LR | LR | 15 21 08.4 | | | |
| HVU | comp=Z,20μm,18.4s,baz=340,slow=41 **Hansel Valley** | **32.57 132** | | IAmb | IAmb | 15 05 39.2 | | | |
| ORV | comp=Z,142nm,0.8s **Oroville** | **32.66 145** | | IAMs_20 | IAMs_20 | 15 18 34.8 | | | |
| BMN | comp=Z,1μm,1.4s **Battle Mountai** | **32.75 139** | | IAMs_20 | IAMs_20 | 15 20 07.6 | | | |
| ICESG | comp=Z,86μm,18.0s **Greenland Ices** | **32.80 40** | ⇓ | P | **P** | **15 05 28.1** | **-1.2** | | |
| ICESG | **Greenland Ices** | **32.80 40** | *i* | P | **P** | **15 05 28.8** | **-0.4** | | |
| YAK | **Yakutsk** | **32.84 300** | | P | **P** | **15 05 26.9** | **-2.3** | | |
| YAK | comp=Z,317nm,0.8s | | | IAmb | IAmb | 15 05 41.2 | | | |
| YAK | **Yakutsk** | **32.84 300** | ⇑ | P | **P** | **15 05 28.4** | **-0.8** | | |
| YAK | **Yakutsk** | **32.84 300** | | LR | LR | 15 20 01.0 | | | |
| YAK | comp=Z,20μm,20.3s,baz=38,slow=39 **Yakutsk** | **32.84 300** | | *e* | P | **15 05 28.7** | **-0.5** | | |
| YAK | | | | *e* | | 15 06 38.5 | | | |
| YAK | | | | *e* | **S** | **15 10 47.3** | **+1.1** | | |
| YAK | | | | *e* | **SnSn** | **15 12 40.2** | **-1.7** | | |
| YAK | comp=Z,354nm,1.0s | | | pmax | pmax | | | | |
| YAK | comp=N,136nm,1.0s | | | pmax | pmax | | | | |
| YAK | comp=E,119nm,1.0s | | | pmax | pmax | | | | |
| YAK | comp=Z,5μm,4.2s | | | pmax | pmax | | | | |
| YAK | comp=N,4μm,4.3s | | | pmax | pmax | | | | |
| YAK | comp=E,4μm,4.9s | | | smax | smax | | | | |
| YAK | comp=N,5μm,12.4s | | | smax | smax | | | | |
| YAK | comp=E,1μm,4.5s | | | MLR | MLR | | | | |
| YAK | comp=Z,45μm,14.0s | | | MLR | MLR | | | | |
| YAK | comp=N,13μm,13.0s | | | MLR | MLR | | | | |
| RSSD | comp=E,22μm,13.0s **Black Hills** | **32.90 119** | ⇑ | P | **P** | **15 05 30.1** | **-0.1** | | |
| RSSD | **Black Hills** | **32.90 119** | | P | **P** | **15 05 31.0** | **+0.8** | | |
| RSSD | baz=335 | | | S | **S** | **15 10 47.4** | **-0.5** | | |
| ELK | baz=335 **Elko** | **32.92 136** | | IAmb | IAmb | 15 05 43.2 | | | |
| ELK | comp=Z,1μm,1.4s | | | IAMs_20 | IAMs_20 | 15 18 23.3 | | | |
| ELK | comp=Z,109μm,19.0s **Elko** | **32.92 136** | ⇑ | P | **P** | **15 05 31.7** | **+1.2** | | |
| ELK | **Elko** | **32.92 136** | | LR | LR | 15 19 01.5 | | | |
| ELK | comp=Z,77μm,19.6s,baz=346,slow=37 **Elko** | **32.92 136** | | P | **P** | **15 05 31.7** | **+1.2** | | |
| SKR | **Severo-Kuril's** | **33.01 266** | *eP* | | **P** | **15 05 29.0** | **-1.8** | | |
| SKR | | | *e* | | | 15 06 55.5 | | | |
| SKR | | | *eS* | | **S** | **15 10 52.5** | **+3.5** | | |
| SKR | | | *eSSS* | | SSS | 15 12 43.1 | | | |
| SKR | comp=Z,241nm,1.6s | | | pmax | pmax | | | | |
| SKR | comp=Z,7μm,6.5s | | | pmax | pmax | | | | |
| HWUT | **Hardware Ranch** | **33.05 130** | | IAmb | IAmb | 15 05 46.1 | | | |
| HWUT | comp=Z,773nm,1.1s **Hardware Ranch** | **33.05 130** | ⇑ | P | **P** | **15 05 32.0** | **+0.5** | | |
| SPUT | **South Promonto** | **33.10 132** | | IAmb | IAmb | 15 05 43.7 | | | |
| HSPB | comp=Z,1μm,1.8s **Hornsund (broa** | **33.11 8** | *eP* | | **P** | **15 05 31.8** | **+0.3** | | |
| HSPB | | | *eS* | | S | 15 10 59.5 | +9.3 | | |
| HSPB | **Hornsund (broa** | **33.11 8** | *eP* | | **P** | **15 05 33.4** | **+1.9** | | |
| DY2G | **Dye2** | **33.27 46** | ⇑ | P | **P** | **15 05 31.9** | **-1.4** | | |
| DY2G | **Dye2** | **33.27 46** | *i* | P | **P** | **15 05 32.8** | **-0.4** | | |
| BGU | **Bg Grassy Mou** | **33.31 133** | | IAmb | IAmb | 15 05 45.9 | | | |
| AFDM | comp=Z,1μm,1.7s **Forest Hills D** | **33.35 144** | | IAmb | IAmb | 15 05 45.6 | | | |
| K22A | comp=Z,621nm,1.3s **Casper** | **33.50 123** | | P | **P** | **15 05 35.5** | **+0.2** | | |
| K22A | baz=337,SNR=148 | | | S | **S** | **15 10 57.5** | **+0.3** | | |
| PNTR | baz=337 **Pine Nut** | **33.50 142** | | P | **P** | **15 05 33.9** | **-1.6** | | |
| NUUK | **Nuuk** | **33.61 52** | ⇑ | P | **P** | **15 05 36.0** | **+0.1** | | |
| EYMN | **Ely** | **33.62 102** | | IAMs_20 | IAMs_20 | 15 20 02.8 | | | |
| EYMN | comp=Z,80μm,19.0s **Ely** | **33.62 102** | ⇑ | P | **P** | **15 05 35.9** | **-0.4** | | |
| EYMN | **Ely** | **33.62 102** | | P | **P** | **15 05 35.8** | **-0.4** | | |
| EYMN | baz=329,SNR=264 | | | S | **S** | **15 10 57.4** | **-1.3** | | |
| YERR | baz=329 **Yerington** | **33.68 142** | | IAmb | IAmb | 15 05 49.5 | | | |
| MCCM | comp=Z,796nm,1.2s **Marconi Confer** | **33.75 147** | ⇓ | P | **P** | **15 05 40.8** | **+3.4** | | |
| F33A | **5 Mile Ranch,** | **33.84 109** | | IAmb | IAmb | 15 05 49.1 | | | |
| F33A | comp=Z,1μm,1.5s | | | IAMs_20 | IAMs_20 | 15 18 51.6 | | | |
| CTU | comp=Z,85μm,18.0s **Camp Tracy** | **33.86 131** | | IAmb | IAmb | 15 05 51.5 | | | |
| HOPEN | comp=Z,753nm,1.5s **Hopen** | **33.94 4** | *eP* | | **P** | **15 05 38.9** | **+0.2** | | |
| HOPEN | comp=Z,3μm,1.4s | | | IVmBBB | | 15 05 47.6 | | | |
| HOPEN | | | | *eS* | **S** | **15 11 02.1** | **-0.9** | | |
| HOPEN | comp=Z,9μm,15.4s | | | IVMs_BB | IVMs_BB | 15 29 27.6 | | | |
| DUG | **Dugway, Tooele** | **34.05 133** | ⇑ | P | **P** | **15 05 41.2** | **+1.0** | | |
| DUG | **Dugway, Tooele** | **34.05 133** | | P | **P** | **15 05 41.2** | **+1.0** | | |
| DUG | baz=340,SNR=380 | | | S | **S** | **15 11 08.0** | **+2.4** | | |
| DUG | baz=340 **Dugway, Tooele** | **34.05 133** | | P | **P** | **15 05 41.2** | **+1.0** | | |
| WAKR | **Walker** | **34.10 143** | | IAmb | IAmb | 15 05 53.3 | | | |
| RYN | comp=Z,980nm,1.2s **Ryan** | **34.18 141** | | IAmb | IAmb | 15 05 54.0 | | | |
| SUSD | comp=Z,760nm,1.2s **Miller** | **34.21 113** | | IAmb | IAmb | 15 05 52.4 | | | |
| SUSD | comp=Z,817nm,1.1s **Miller** | **34.21 113** | | P | **P** | **15 05 42.3** | **+0.9** | | |
| SUSD | baz=333,SNR=53 | | | S | **S** | **15 11 10.1** | **+2.3** | | |
| Q09A | baz=333 **Carvers** | **34.28 139** | | IAMs_20 | IAMs_20 | 15 19 12.2 | | | |
| CMB | comp=Z,73μm,20.0s **Columbia Colle** | **34.35 144** | | P | **P** | **15 05 43.8** | **+1.1** | | |
| NVAR | **Mina Array Bea** | **34.42 141** | | P | **P** | **15 05 44.6** | **+1.1** | | |
| NVAR | comp=Z,103nm,0.8s,baz=338,slow=6.3,SNR=83 | | | PcP | **PcP** | **15 08 17.6** | **-1.2** | | |
| NVAR | comp=Z,36nm,0.9s,baz=336,slow=6.6,SNR=2.9 | | | LR | LR | 15 20 19.2 | | | |
| NVAR | comp=Z,153μm,19.0s,baz=348,slow=37 | | | PKKP | **PKKPdf** | **15 30 31.3** | **-0.9** | | |
| NV11 | comp=Z,1.3nm,0.9s,baz=327,slow=7.6,SNR=5.0 **Mina Array Sit** | **34.45 141** | | IAmb | IAmb | 15 05 56.4 | | | |
| NLU | comp=Z,1μm,1.6s **North Lily Min** | **34.47 132** | | IAmb | IAmb | 15 05 55.1 | | | |
| MPU | comp=Z,482nm,1.1s **Maple Canyon** | **34.52 131** | | IAmb | IAmb | 15 05 56.4 | | | |
| LHV | comp=Z,914nm,1.2s **Little Huntoon** | **34.54 141** | | IAmb | IAmb | 15 05 57.3 | | | |
| RDMU | comp=Z,1μm,1.4s **Red Mountain** | **34.56 128** | | IAmb | IAmb | 15 05 56.4 | | | |
| E38A | comp=Z,992nm,1.1s **The Farm, Brul** | **34.77 103** | | IAmb | IAmb | 15 05 56.4 | | | |
| PHWY | comp=Z,1μm,1.6s **Pilot Hill** | **35.05 123** | | IAmb | IAmb | 15 05 59.7 | | | |
| PHWY | comp=Z,698nm,1.5s | | | IAMs_20 | IAMs_20 | 15 19 04.6 | | | |
| MLAC | comp=Z,109μm,18.0s **Mammoth, Mammo** | **35.07 142** | | P | **P** | **15 05 51.0** | **+1.9** | | |
| MLAC | baz=344,SNR=8.4 | | | S | **S** | **15 11 26.0** | **+4.5** | | |
| R11B | baz=344 **Troy Canyon, C** | **35.11 137** | | IAmb | IAmb | 15 06 01.6 | | | |
| R11B | comp=Z,1μm,1.6s | | | IAMs_20 | IAMs_20 | 15 19 47.2 | | | |
| R11B | comp=Z,121μm,19.0s **Troy Canyon, C** | **35.11 137** | | P | **P** | **15 05 50.9** | **+1.4** | | |
| R11B | baz=342,SNR=225 | | | S | **S** | **15 11 24.2** | **+2.1** | | |
| SCO | baz=342 **Scoresbysund** | **35.14 29** | ⇑ | P | **P** | **15 05 49.8** | **+0.7** | | |
| SCO | **Scoresbysund** | **35.14 29** | | P | **P** | **15 05 50.5** | **+1.4** | | |
| P18A | **Preston Nutter** | **35.26 130** | | IAMs_20 | IAMs_20 | 15 19 22.0 | | | |
| N23A | comp=Z,154μm,21.0s **Red Feather La** | **35.28 124** | | IAMs_20 | IAMs_20 | 15 19 19.7 | | | |
| N23A | comp=Z,126μm,18.0s **Red Feather La** | **35.28 124** | | P | **P** | **15 05 51.2** | **+0.2** | | |
| N23A | baz=337,SNR=71 | | | S | **S** | **15 11 26.5** | **+1.6** | | |
| SOEG | baz=337 **Soedalen** | **35.30 36** | *i* | P | **P** | **15 05 50.8** | **+0.3** | | |
| SOEG | comp=Z,698nm,1.3s | | | IAmb | IAmb | 15 06 01.3 | | | |
| O20A | **White River Ci** | **35.33 127** | | IAmb | IAmb | 15 06 37.4 | | | |
| O20A | comp=Z,1μm,1.4s **White River Ci** | **35.33 127** | | P | **P** | **15 05 52.4** | **+1.1** | | |
| O20A | baz=339,SNR=144 | | | S | **S** | **15 11 27.8** | **+2.3** | | |
| PSUT | baz=339 **Pine Spring** | **35.36 135** | | IAmb | IAmb | 15 06 04.0 | | | |
| SAO | comp=Z,1μm,1.4s **San Andreas Ge** | **35.37 146** | | IAMs_20 | IAMs_20 | 15 19 46.4 | | | |
| SAO | comp=Z,73μm,18.0s **San Andreas Ge** | **35.37 146** | ⇑ | P | **P** | **15 05 54.0** | **+2.6** | | |
| SAO | **San Andreas Ge** | **35.37 146** | | P | **P** | **15 05 54.0** | **+2.6** | | |
| SPMN | **Marine on St.** | **35.55 106** | | P | **P** | **15 05 53.4** | **+0.5** | | |
| SPMN | baz=331,SNR=108 | | | S | **S** | **15 11 29.4** | **+1.0** | | |
| ECSD | baz=331 **EROS Data Cent** | **35.60 111** | | IAmb | IAmb | 15 06 04.3 | | | |
| ECSD | comp=Z,950nm,1.2s **EROS Data Cent** | **35.60 111** | | P | **P** | **15 05 53.5** | **+0.2** | | |
| ECSD | baz=333,SNR=276 | | | S | **S** | **15 11 30.8** | **+1.6** | | |
| GMN | baz=333 

BJO1 IVmB_BB 15 06 02.5
comp=Z,4μm,3.4s
BJO1 eS S 15 11 29.3 -1.4
BJO1 IVMs_BB IVMs_BB 15 26 25.2
comp=Z,15μm,17.3s
**S11A Rachel 35.75 138** IAMs_20 IAMs_20 15 20 16.0
comp=Z,121μm,18.0s
**TIN Tinemaha, Big 35.75 142** P P **15 05 56.1 +1.2**
baz=344
TIN S S **15 11 38.0 +6.2**
baz=344
**ISOG Isortoq, Green 35.81 43** ⇑P P **15 05 53.9 -1.0**
**ISOG Isortoq, Green 35.81 43** *i* P P **15 05 54.0 -0.8**
**GRAC Grapevine Rang 36.00 140** P P **15 05 58.3 +1.4**
baz=344,SNR=176
GRAC S S **15 11 39.7 +4.2**
baz=344
**COWI Conover 36.03 101** IAmb IAmb 15 06 07.3
comp=Z,1μm,1.7s
**COWI Conover 36.03 101** ⇓P P **15 05 56.5 -0.6**
**BRIGG Briggsdale 36.05 122** IAMs_20 IAMs_20 15 19 47.0
comp=Z,102μm,19.0s
**ANGG Ammassalik, Gr 36.07 42** P P **15 05 54.1 -3.0**
**ANGG Ammassalik, Gr 36.07 42** ⇑P P **15 05 56.0 -1.1**
**ANGG Ammassalik, Gr 36.07 42** *i* P P **15 05 56.6 -0.5**
ANGG IAmb IAmb 15 06 06.3
comp=Z,506nm,1.2s
**PRN Pahroc Range 36.14 137** IAmb IAmb 15 06 10.7
comp=Z,2μm,1.5s
PRN IAMs_20 IAMs_20 15 20 31.4
comp=Z,121μm,19.0s
**PRN Pahroc Range 36.14 137** ⇑P P **15 05 59.0 +0.8**
**VOG Valley Oaks Go 36.21 143** P P **15 06 00.0 +1.4**
baz=345,SNR=8.9
VOG S S **15 11 43.3 +4.7**
baz=345
**MTPU Mount Pierson 36.24 133** IAmb IAmb 15 06 12.3
comp=Z,1μm,1.2s
**TPNV Topopah Spring 36.30 139** P P **15 06 00.2 +0.7**
baz=343,SNR=569
TPNV S S **15 11 46.6 +6.4**
baz=343
**NKL Nikolayevsk 36.34 282** eP P **15 05 59.4 -0.1**
NKL eS S **15 11 46.7 +6.5**
NKL pmax pmax
comp=E,184nm,1.5s
NKL pmax pmax
comp=N,425nm,1.0s
NKL pmax pmax
comp=Z,1μm,1.0s
NKL pmax pmax
comp=Z,2μm,1.8s
NKL smax smax
comp=E,711nm,5.3s
NKL smax smax
comp=N,391nm,2.7s
NKL MLR MLR
comp=E,30μm,12.0s
NKL MLR MLR
comp=N,186μm,14.0s
NKL MLR MLR
comp=Z,187μm,14.0s
**WCT Wildcat Mounta 36.36 140** IAmb IAmb 15 06 12.5
comp=Z,2μm,1.7s
**CWC Cottonwood Cre 36.37 142** P P **15 06 01.7 +1.4**
baz=344
CWC S S **15 11 46.0 +4.5**
baz=344
**ISCO Idaho Springs 36.39 124** IAmb IAmb 15 06 12.4
comp=Z,1μm,1.4s
**ISCO Idaho Springs 36.39 124** ⇓P P **15 06 01.6 +1.1**
**ISCO Idaho Springs 36.39 124** P P **15 06 01.2 +0.7**
baz=338,SNR=286
ISCO S S **15 11 43.4 +1.4**
baz=338
**G40A Rib Lake 36.39 103** IAmb IAmb 15 06 10.8
comp=Z,2μm,1.8s
G40A IAMs_20 IAMs_20 15 21 27.1
comp=Z,101μm,20.0s
**OGNE Ogallala 36.40 119** IAMs_20 IAMs_20 15 20 05.4
comp=Z,74μm,19.0s
**OGNE Ogallala 36.40 119** ⇑P P **15 06 00.6 +0.2**
**OGNE Ogallala 36.40 119** P P **15 06 00.3 0.0**
baz=336,SNR=64
OGNE S S **15 11 42.2 +0.4**
baz=336
**SCHQ Schefferville 36.41 73** IAmb IAmb 15 06 10.5
comp=Z,2μm,1.6s
**SCHQ Schefferville 36.41 73** P P **15 05 58.9 -1.3**
comp=Z,246nm,1.0s,baz=317,slow=8.8,SNR=50
SCHQ LR LR 15 23 45.8
comp=Z,70μm,18.5s,baz=324,slow=41
comp=Z,246nm,1.0s
**CCUT Cedar City 36.41 135** IAmb IAmb 15 06 13.1
comp=Z,1μm,1.2s
**I37A Lemond, Waseca 36.42 107** IAmb IAmb 15 06 06.8
comp=Z,676nm,0.9s
I37A IAMs_20 IAMs_20 15 21 47.7
comp=Z,102μm,18.0s
**SZCU Shurtz Canyon 36.44 135** IAmb IAmb 15 06 13.1
comp=Z,1μm,1.5s
SZCU IAMs_20 IAMs_20 15 22 28.3
comp=Z,112μm,19.0s
**SMCO Snowmass 36.58 126** IAmb IAmb 15 06 13.8
comp=Z,1μm,1.4s
**SMCO Snowmass 36.58 126** ⇑P P **15 06 02.5 +0.3**
**FURC Furnace Creek, 36.62 140** P P **15 06 03.8 +1.7**
baz=344,SNR=38
FURC S S **15 11 48.1 +3.3**
baz=344
**F42A Maple Grove Fa 36.67 100** IAmb IAmb 15 06 13.4
comp=Z,2μm,1.6s
F42A IAMs_20 IAMs_20 15 20 52.5
comp=Z,127μm,19.0s
**HMU Henry Mountain 36.71 132** IAmb IAmb 15 06 14.7
comp=Z,1μm,1.6s
**JMIC Jan Mayen 36.73 22** eP P **15 06 02.4 -0.3**
JMIC IVmB_BB 15 06 11.3
comp=Z,6μm,3.2s
JMIC eS S **15 11 47.1 +1.2**
JMIC IVMs_BB IVMs_BB 15 27 35.5
comp=Z,13μm,16.1s
**VES Vestal, Richgr 36.74 143** P P **15 06 04.5 +1.4**
baz=345,SNR=34
VES S S **15 11 50.8 +4.2**
baz=345
**JMI Jan Mayen 36.75 22** eP P **15 06 03.1 +0.2**
JMI IVmB_BB 15 06 13.4
comp=Z,7μm,4.2s
JMI eS S **15 11 49.6 +3.4**
JMI IVMs_BB IVMs_BB 15 27 36.6
comp=Z,12μm,15.1s
**PKCU Pink Cliffs 36.77 134** IAMs_20 IAMs_20 15 20 35.2
comp=Z,112μm,22.0s
**MPMC Manual Prospec 36.87 141** P P **15 06 06.0 +1.5**
baz=344,SNR=230
MPMC S S **15 11 54.2 +5.1**
baz=344
**GWY Greenwater Val 36.93 140** IAmb IAmb 15 06 18.4
comp=Z,898nm,1.5s
GWY IAMs_20 IAMs_20 15 22 11.3
comp=Z,140μm,21.0s
**SHPR Sheep Range 36.97 138** IAMs_20 IAMs_20 15 21 08.5
comp=Z,72μm,18.0s
**IVI Ivigtut 36.98 53** P P **15 06 01.8 -3.1**
IVI IAMs_20 IAMs_20 15 23 26.4
comp=Z,114μm,18.0s
**IVI Ivigtut 36.98 53** ⇑P P **15 06 04.9 0.0**
**IVI Ivigtut 36.98 53** *i* P P **15 06 05.2 +0.2**
IVI IAmb IAmb 15 06 08.2
comp=Z,145nm,0.9s
**ISA Isabella, Lake 37.04 143** P P **15 06 06.6 +0.8**
baz=345,SNR=152
ISA S S **15 11 55.6 +4.2**
baz=345
**KNB Kanab 37.05 135** IAmb IAmb 15 06 18.9
comp=Z,1μm,1.3s
**SMMC Simmler 37.06 145** P P **15 06 07.3 +1.3**
baz=346,SNR=31
SMMC S S **15 11 54.0 +2.4**
baz=346
**BGNE Belgrade 37.20 114** P P **15 06 07.7 +0.7**
baz=335,SNR=50
BGNE S S **15 11 54.1 +0.4**
baz=335
**L34A Svendsen Farm, 37.26 112** IAmb IAmb 15 06 18.1
comp=Z,1μm,1.1s
L34A IAMs_20 IAMs_20 15 21 57.1
comp=Z,122μm,21.0s
**SHOC Shoshone, Teco 37.29 140** P P **15 06 09.2 +1.4**
baz=344,SNR=40
SHOC S S **15 11 58.5 +3.3**
baz=344
**Q24A Divide 37.30 124** IAmb IAmb 15 06 20.1
comp=Z,2μm,1.4s
**Q24A Divide 37.30 124** P P **15 06 09.5 +1.2**
baz=338,SNR=172
Q24A S S **15 11 59.0 +3.2**
baz=338
**LRMC Laurel Mtn Rad 37.38 142** P P **15 06 09.9 +1.1**
baz=344,SNR=291
LRMC S S **15 12 01.0 +4.2**
baz=344
**E46A Sault Ste Mari 37.47 96** IAmb IAmb 15 06 19.4
comp=Z,2μm,1.8s
E46A IAMs_20 IAMs_20 15 21 50.6
comp=Z,102μm,22.0s
**ARVC Arvin 37.48 143** P P **15 06 09.8 +0.3**
baz=345,SNR=13
ARVC S S **15 12 04.1 +6.1**
baz=345
**PKM Mcpherson Peak 37.51 145** P P **15 06 12.4 +2.5**
baz=346,SNR=55
PKM S S **15 12 02.3 +3.6**
baz=346
**TYV Tymovskoe 37.56 278** eP P **15 06 09.7 -0.3**
TYV eS S **15 12 01.2 +2.3**
TYV pmax pmax
comp=Z,74nm,1.0s
TYV pmax pmax
comp=Z,4μm,4.7s
TYV smax smax
comp=N,2μm,8.3s
TYV smax smax
comp=E,2μm,8.3s
**U15A North Rim 37.74 134** IAMs_20 IAMs_20 15 22 58.8
comp=Z,127μm,20.0s
**GSC Goldstone, Bar 37.75 141** IAmb IAmb 15 06 24.6
comp=Z,705nm,1.2s
**GSC Goldstone, Bar 37.75 141** P P **15 06 13.3 +1.4**
baz=344,SNR=250
GSC S S **15 12 05.2 +3.0**
baz=344
**NRS Narsarsuaq 37.78 51** IAMs_20 IAMs_20 15 23 35.5
comp=Z,89μm,19.0s
**NRS Narsarsuaq 37.78 51** P P **15 06 11.5 -0.2**
**TUQ Turquoise Moun 37.82 139** P P **15 06 13.8 +1.4**
baz=344,SNR=182
TUQ S S **15 12 07.8 +4.4**
baz=344
**EDW2 Edwards Air Fo 37.89 142** P P **15 06 13.4 +0.3**
baz=345,SNR=134
EDW2 S S **15 12 08.2 +3.8**
baz=345
**H43A Windswept, Lux 37.93 101** P P **15 06 10.9 -2.2**
H43A IAmb IAmb 15 06 23.5
comp=Z,1μm,1.6s
**S22A 4UR Ranch, Cre 37.95 127** IAmb IAmb 15 06 26.0
comp=Z,2μm,1.6s
S22A IAMs_20 IAMs_20 15 23 52.4
comp=Z,91μm,20.0s
**S22A 4UR Ranch, Cre 37.95 127** P P **15 06 14.4 +0.6**
baz=339,SNR=252
S22A S S **15 12 07.7 +2.0**
baz=339
**SBC Santa Barbara 37.96 145** P P **15 06 13.6 +0.1**
baz=346
SBC S S **15 12 10.4 +5.2**
baz=346
**MVCO Mesa Verde 37.99 129** IAMs_20 IAMs_20 15 20 02.8
comp=Z,100μm,21.0s
**MVCO Mesa Verde 37.99 129** ⇑P P **15 06 15.5 +1.4**
**MVCO Mesa Verde 37.99 129** P P **15 06 15.0 +0.9**
baz=340,SNR=54
MVCO S S **15 12 08.5 +2.2**
baz=340
**OSI Osito Audit: C 37.99 143** P P **15 06 14.9 +1.1**
baz=345,SNR=30
OSI S S **15 12 09.0 +3.1**
baz=345
**KSCO Kaye Shedlock' 38.00 121** IAmb IAmb 15 06 25.5
comp=Z,2μm,1.1s
**KSCO Kaye Shedlock' 38.00 121** P P **15 06 14.8 +0.8**
baz=337,SNR=73
KSCO S S **15 12 07.2 +1.1**
baz=337
**I42A Draeger Farm, 38.04 103** IAmb IAmb 15 06 25.2
comp=Z,2μm,1.7s
I42A IAMs_20 IAMs_20 15 22 26.7
comp=Z,106μm,19.0s
**RRX Edison Barstow 38.12 141** P P **15 06 16.5 +1.6**
baz=344,SNR=36
RRX S S **15 12 11.5 +3.8**
baz=344
**HEC Hector,Ludlow 38.31 140** P P **15 06 18.2 +1.7**
baz=344,SNR=204
HEC S S **15 12 15.9 +5.2**
baz=344
**SDCO Great Sand Dun 38.33 125** IAMs_20 IAMs_20 15 23 33.4
comp=Z,118μm,20.0s
**SDCO Great Sand Dun 38.33 125** ⇑P P **15 06 17.3 +0.3**
**SDCO Great Sand Dun 38.33 125** P P **15 06 17.3 +0.3**
baz=339,SNR=336
SDCO S S **15 12 14.0 +2.6**
baz=339
**SCIA State Center 38.35 109** IAmb IAmb 15 06 27.9
comp=Z,2μm,1.5s
SCIA IAMs_20 IAMs_20 15 22 32.0
comp=Z,92μm,20.0s
**SCIA State Center 38.35 109** ⇑P P **15 06 17.7 +0.9**
**SCIA State Center 38.35 109** P P **15 06 17.1 +0.3**
baz=334,SNR=18
SCIA S S **15 12 12.0 +0.8**
baz=334
**VLDQ Val d'Or 38.37 88** IAmb IAmb 15 06 25.4
comp=Z,1μm,1.7s
**SCZ2 Santa Cruz Isl 38.41 145** P P **15 06 18.7 +1.4**
baz=346,SNR=9.0
SCZ2 S S **15 12 15.9 +3.8**
baz=346
**DECC Green Verdugo 38.42 143** P P **15 06 18.8 +1.4**
baz=345,SNR=42
DECC S S **15 12 16.4 +4.0**
baz=345
**JFWS Jewell Farm 38.45 105** IAMs_20 IAMs_20 15 22 32.6
comp=Z,115μm,18.0s
**JFWS Jewell Farm 38.45 105** IAmb IAmb 15 06 28.2
comp=Z,2μm,1.3s
**JFWS Jewell Farm 38.45 105** ⇑P P **15 06 17.2 -0.4**
**JFWS Jewell Farm 38.45 105** P P **15 06 17.9 +0.3**
baz=332,SNR=199
JFWS S S **15 12 13.0 +0.4**
baz=332
**N35A Tabor 38.50 112** IAmb IAmb 15 06 29.2
comp=Z,1μm,1.0s
N35A IAMs_20 IAMs_20 15 21 40.8
comp=Z,85μm,20.0s
**GMRC Granite Mounta 38.50 139** P P **15 06 19.9 +1.6**
baz=344,SNR=108
GMRC S S **15 12 17.6 +3.8**
baz=344
**PASC Pasadena Art C 38.54 143** IAMs_20 IAMs_20 15 23 00.8
comp=Z,121μm,20.0s
**BFSC Mount Baldy Ra 38.58 142** P P **15 06 20.7 +1.8**
baz=345,SNR=111
BFSC S S **15 12 16.3 +1.3**
baz=345
**GLMI Grayling 38.70 97** IAMs_20 IAMs_20 15 20 28.2
comp=Z,99μm,20.0s
**GLMI Grayling 38.70 97** P P **15 06 19.0 -0.7**
baz=331
GLMI S S **15 12 16.2 -0.2**
baz=331
**BBRC Big Bear Solar 38.72 141** P P **15 06 21.0 +0.8**
baz=345,SNR=25
BBRC S S **15 12 21.7 +4.4**
baz=345
**NEE2 Needles Airpor 38.76 138** P P **15 06 21.6 +1.4**
baz=343,SNR=45
NEE2 S S **15 12 22.0 +4.6**
baz=343
**I45A Fountain 38.84 100** IAmb IAmb 15 06 31.3
comp=Z,1μm,1.3s
I45A IAMs_20 IAMs_20 15 21 00.7
comp=Z,59μm,19.0s
**WUAZ Wupatki 38.84 134** IAmb IAmb 15 06 33.5
comp=Z,2μm,1.2s
WUAZ IAMs_20 IAMs_20 15 22 15.8
comp=Z,119μm,22.0s
**WUAZ Wupatki 38.84 134** ⇑P P **15 06 22.1 +1.0**
**WUAZ Wupatki 38.84 134** P P **15 06 22.2 +1.1**
baz=342,SNR=218
WUAZ S S **15 12 23.2 +4.3**
baz=342
**L40A Anamosa 38.88 106** IAMs_20 IAMs_20 15 23 16.9
comp=Z,99μm,18.0s
**FMP Fort Macarthur 38.96 143** P P **15 06 23.3 +1.4**
baz=345
FMP S S **15 12 22.8 +2.5**
baz=345
**CBKS Cedar Bluff 39.06 118** IAmb IAmb 15 06 33.5
comp=Z,3μm,1.4s
CBKS IAMs_20 IAMs_20 15 21 51.7
comp=Z,82μm,18.0s
**CBKS Cedar Bluff 39.06 118** ⇑P P **15 06 22.8 0.0**
**CBKS Cedar Bluff 39.06 118** P P **15 06 22.7 -0.1**
baz=337,SNR=71
CBKS S S **15 12 22.9 +1.0**
baz=337
**SNCC San Nicolas Is 39.15 145** P P **15 06 24.7 +1.1**
baz=346,SNR=12
SNCC S S **15 12 25.0 +1.7**
baz=346
**BELC Belle Mtn. Jos 39.18 140** P P **15 06 25.1 +1.2**
baz=344,SNR=139
BELC S S **15 12 27.2 +3.3**
baz=344
**T25A Trinidad 39.21 124** P P **15 06 24.6 +0.3**
baz=339,SNR=73
T25A S S **15 12 26.2 +1.7**
baz=339
**IRM Iron Mountain 39.22 139** P P **15 06 25.3 +1.1**
baz=344,SNR=170
IRM S S **15 12 29.0 +4.6**
baz=344
**CIS Catalina Islan 39.23 143** P P **15 06 25.6 +1.4**
baz=346,SNR=18
CIS S S **15 12 27.9 +3.4**
baz=346
**K43A Burlington 39.29 103** IAmb IAmb 15 06 35.0
comp=Z,1μm,1.4s
K43A IAMs_20 IAMs_20 15 23 06.7
comp=Z,81μm,19.0s
**MURC Murrieta 39.30 142** P P **15 06 25.6 +0.8**
baz=345,SNR=44
MURC S S **15 12 29.7 +4.1**
baz=345
**PDMCI Parker Dam,Lak 39.32 138** P P **15 06 26.6 +1.7**
baz=343,SNR=80
PDMCI S S **15 12 28.6 +2.9**
baz=343
**N38A Joes South For 39.35 109** IAmb IAmb 15 06 35.5
comp=Z,1μm,1.5s
N38A IAMs_20 IAMs_20 15 23 14.3
comp=Z,84μm,20.0s
**PFO Pinyon Flats O 39.45 141** LR LR 15 23 08.2
comp=Z,119μm,19.6s,baz=344,slow=37
**PFO Pinyon Flats O 39.45 141** P P **15 06 27.6 +1.4**
baz=345,SNR=103
PFO S S **15 12 31.8 +3.8**
baz=345
**PFO Pinyon Flats O 39.45 141** *i* P P **15 06 27.7 +1.5**
PFO pmax pmax
comp=Z,372nm,1.0s
**TPFO Pinon Flats 39.45 141** P P **15 06 26.9 +0.7**
baz=345,SNR=97
TPFO S S **15 12 31.0 +2.9**
baz=345
**L42A Oliver, Polo 39.46 105** IAmb IAmb 15 06 31.6
comp=Z,827nm,0.9s
L42A IAMs_20 IAMs_20 15 23 13.2
comp=Z,111μm,18.0s
**SCI2 San Clemente I 39.61 144** P P **15 06 28.5 +1.1**
baz=346,SNR=37
SCI2 S S **15 12 34.0 +3.8**
baz=346
**BC3 Big Chuckawall 39.63 140** P P **15 06 29.2 +1.5**
baz=344,SNR=212
BC3 S S **15 12 35.3 +4.5**
baz=344
**W18A Petrified Fore 39.64 132** P P **15 06 29.5 +1.7**
baz=341,SNR=159
W18A S S **15 12 35.8 +4.9**
baz=341
**R32A Long Quarter, 39.74 117** IAmb IAmb 15 06 40.0
comp=Z,2μm,1.6s
R32A IAMs_20 IAMs_20 15 25 27.7
comp=Z,85μm,19.0s
**BLYC Blythe 39.76 138** IAmb IAmb 15 06 41.3
comp=Z,1μm,1.4s
**HAMF Hammerfest 39.77 6** eP P **15 06 27.5 -0.8**
HAMF IVmB_BB 15 06 35.7
comp=Z,4μm,3.2s
HAMF eS S **15 12 29.0 -2.9**
HAMF eSS SS **15 15 22.8 -4.1**
HAMF IVMs_BB IVMs_BB 15 28 59.3
comp=Z,11μm,17.2s
**GRNR Gornyy 39.78 284** ⇓P P **15 06 28.6 0.0**
GRNR *e* 15 08 06.4
GRNR eS S **15 12 36.1 +3.6**
GRNR pmax pmax
comp=E,10.0nm,0.8s
GRNR pmax pmax
comp=N,20nm,0.9s
GRNR pmax pmax
comp=Z,40nm,1.0s
GRNR smax smax
comp=N,6.0nm,0.9s
GRNR MLR MLR
comp=N,26μm,15.0s
GRNR MLR MLR
comp=Z,35μm,15.0s
**KSU1 Kansas State U 39.78 114** IAmb IAmb 15 06 39.3
comp=Z,3μm,2.0s
**KSU1 Kansas State U 39.78 114** P P **15 06 28.6 -0.2**
baz=336,SNR=62
KSU1 S S **15 12 37.4 +4.7**
baz=336
**X16A Lo Mia Camp, P 39.86 134** IAMs_20 IAMs_20 15 23 05.0
comp=Z,98μm,20.0s
**L44A Lake County Fo 39.90 103** IAmb IAmb 15 06 40.3
comp=Z,3μm,1.8s
L44A IAMs_20 IAMs_20 15 23 34.9
comp=Z,94μm,18.0s
**L44A Lake County Fo 39.90 103** P P **15 06 29.7 0.0**
baz=333,SNR=45
L44A S S **15 12 33.1 -1.3**
baz=333
**Y14A Wickenburg 39.94 136** IAMs_20 IAMs_20 15 22 26.9
comp=Z,74μm,20.0s
**109C Camp Elliot, M 40.00 142** IAMs_20 IAMs_20 15 23 46.7
comp=Z,113μm,20.0s
**109C Camp Elliot, M 40.00 142** P P **15 06 32.0 +1.4**
baz=345,SNR=18
109C S S **15 12 35.8 -0.2**
baz=345
**J47A Sunmer 40.02 99** IAmb IAmb 15 06 42.7
comp=Z,1μm,1.9s
**I49A Point Hope 40.10 96** IAmb IAmb 15 06 41.4
comp=Z,739nm,0.8s
I49A IAMs_20 IAMs_20 15 23 25.2
comp=Z,106μm,21.0s
**MONP2 Monument Peak 40.15 141** P P **15 06 33.7 +1.6**
baz=345,SNR=206
MONP2 S S **15 12 41.6 +2.9**
baz=345
**N41A Harden Midland 40.22 107** IAmb IAmb 15 06 42.6
comp=Z,2μm,1.4s
N41A IAMs_20 IAMs_20 15 23 37.3
comp=Z,95μm,18.0s
**SWSC Sam W. Stewart 40.24 140** P P **15 06 34.0 +1.4**
baz=344,SNR=54
SWSC S S **15 12 44.6 +5.0**
baz=344
**HQIL Hanson Quary C 40.26 103** IAMs_20 IAMs_20 15 22 14.3
comp=Z,90μm,18.0s
**P38A Dawn 40.30 110** IAmb IAmb 15 06 43.4
comp=Z,2μm,1.7s
P38A IAMs_20 IAMs_20 15 22 45.6
comp=Z,65μm,18.0s
**ZEA Zeya 40.31 293** eP P **15 06 33.1 +0.1**
ZEA *e* 15 08 06.6
ZEA pmax pmax

comp=E,1µm,5.1s
ZEA pmax pmax
comp=N,2µm,5.3s
ZEA pmax pmax
comp=Z,4µm,5.0s
ZEA pmax pmax
comp=Z,110nm,0.9s
ZEA pmax pmax
comp=E,2µm,10.1s
ZEA pmax pmax
comp=N,3µm,9.4s
ZEA pmax pmax
comp=Z,4µm,10.1s
ZEA MLR MLR
comp=E,17µm,14.0s
ZEA MLR MLR
comp=N,17µm,12.0s
ZEA MLR MLR
comp=Z,32µm,12.0s
**BORG Borgarnes 40.32 33** P **P** **15 06 31.4 -1.5**
**BORG Borgarnes 40.32 33** ⇑P **P** **15 06 34.1 +1.2**
**BORG Borgarnes 40.32 33** LR LR 15 26 13.4
comp=Z,42µm,19.3s,baz=335,slow=41
**BORG Borgarnes 40.32 33** P **P** **15 06 31.4 -1.5**
BORG pmax pmax
comp=Z,947nm,1.7s
**RTBA Rita Blanca 40.35 123** IAmb IAmb 15 06 45.0
comp=Z,2µm,1.6s
**GLA Glamis 40.35 139** P **P** **15 06 35.8 +2.1**
baz=344,SNR=51
GLA S **S** **15 12 45.0 +3.6**
baz=344
**TJX Tijuana 40.38 142** IAMs_20 IAMs_20 15 23 59.6
comp=Z,101µm,19.0s
**VADS Vadso 40.44 3** *e*P **P** **15 06 34.2 +0.3**
VADS IVmB_BB 15 06 43.2
comp=Z,4µm,5.3s
VADS *e*S **S** **15 12 41.4 -0.5**
VADS *e*SS **SS** **15 15 42.5 +2.1**
VADS IVMs_BB IVMs_BB 15 24 50.7
comp=Z,6µm,22.2s
**IKP In-Ko-Pah, Jac 40.45 141** P **P** **15 06 36.1 +1.7**
baz=345,SNR=91
IKP S **S** **15 12 46.6 +3.7**
baz=345
**YUH Yuha Desert 40.49 141** P **P** **15 06 34.2 -0.5**
**RMX La Rumorosa 40.50 141** IAMs_20 IAMs_20 15 23 31.5
comp=Z,113µm,20.0s
**KUR Kuril'sk 40.55 269** *e*P **P** **15 06 35.4 +0.4**
KUR *e*PPP PPP 15 08 31.0
KUR S **S** **15 12 45.2 +1.2**
KUR pmax pmax
comp=Z,661nm,1.2s
KUR pmax pmax
comp=E,336nm,2.0s
KUR pmax pmax
comp=N,176nm,1.1s
KUR MLR MLR
comp=Z,32µm,16.0s
KUR MLR MLR
comp=E,31µm,14.0s
KUR MLR MLR
comp=N,18µm,13.0s
**TRO Tromso 40.57 8** *e*P **P** **15 06 35.3 +0.4**
TRO IVmB_BB 15 06 45.6
comp=Z,4µm,3.6s
TRO *e*S **S** **15 12 49.6 +5.8**
TRO IVMs_BB IVMs_BB 15 24 23.2
comp=Z,8µm,24.9s
**L46A Eue Claire 40.60 101** IAmb IAmb 15 06 46.2
comp=Z,1µm,1.4s
L46A IAMs_20 IAMs_20 15 24 06.4
comp=Z,115µm,20.0s
**CBX Cerro Bola 40.65 142** P **P** **15 06 34.7 -1.5**
CBX IAmb IAmb 15 06 48.8
comp=Z,1µm,1.0s
**SADO Sadowa 40.66 92** ⇑P **P** **15 06 34.9 -1.1**
**SADO Sadowa 40.66 92** LR LR 15 24 22.3
comp=Z,67µm,20.1s,baz=344,slow=38
**ANMO Albuquerque 40.68 128** P **P** **15 06 35.4 -1.1**
ANMO IAmb IAmb 15 06 48.7
comp=Z,893nm,1.1s
**ANMO Albuquerque 40.68 128** IAMs_20 IAMs_20 15 21 33.6
comp=Z,62µm,20.0s
**ANMO Albuquerque 40.68 128** LR LR 15 26 06.5
comp=Z,36µm,20.4s,baz=66,slow=40
**ANMO Albuquerque 40.68 128** P **P** **15 06 37.8 +1.4**
baz=340
ANMO S **S** **15 12 49.9 +3.3**
baz=340
**ANMO Albuquerque 40.68 128** *i* P **P** **15 06 37.6 +1.1**
ANMO pmax pmax
comp=Z,239nm,1.1s
**ICQ Pointe Anglais 40.70 78** P **P** **15 06 34.0 -2.2**
ICQ IAmb IAmb 15 06 45.7
comp=Z,1µm,1.4s
**KEV Kevo 40.76 4** P **P** **15 06 34.2 -2.3**
**KEV Kevo 40.76 4** ⇑P **P** **15 06 35.5 -1.0**
**KEV Kevo 40.76 4** P **P** **15 06 34.2 -2.3**
KEV pmax pmax
comp=Z,157nm,0.9s
**YSS Yuzh-Sakhalins 40.85 275** P **P** **15 06 37.3 -0.2**
**YSS Yuzh-Sakhalins 40.85 275** P **P** **15 06 35.9 -1.5**
**YSS Yuzh-Sakhalins 40.85 275** *oe*P **P** **15 06 36.8 -0.7**
YSS *e* 15 08 16.5
YSS *e*S **S** **15 12 44.0 -4.4**
YSS pmax pmax
comp=Z,250nm,0.8s
YSS pmax pmax
comp=Z,7µm,5.7s
YSS pmax pmax
comp=N,4µm,4.1s
YSS pmax pmax
comp=E,4µm,3.7s
YSS pmax pmax
comp=Z,2µm,5.7s
YSS pmax pmax
comp=N,2µm,5.3s
YSS pmax pmax
comp=E,800nm,5.6s
YSS smax smax
comp=E,5µm,7.8s
YSS MLR MLR
comp=N,26µm,14.0s
YSS MLR MLR
comp=Z,35µm,14.0s
YSS MLR MLR
comp=E,15µm,15.0s
**CPBX Cerro Prieto 40.85 140** IAMs_20 IAMs_20 15 25 34.2
comp=Z,69µm,18.0s
**BOD Bodaibo 40.86 307** *i* P **P** **15 06 36.0 -1.5**
BOD pmax pmax
comp=Z,548nm,1.2s
**113A Mohawk Valley, 40.87 138** IAmb IAmb 15 06 50.4
comp=Z,1µm,1.5s
113A IAMs_20 IAMs_20 15 24 13.7
comp=Z,91µm,18.0s
**HDIL Hopedale 40.88 105** IAMs_20 IAMs_20 15 24 05.8
comp=Z,105µm,21.0s
**HDIL Hopedale 40.88 105** P **P** **15 06 37.5 -0.3**
baz=334
HDIL S **S** **15 12 49.2 +0.2**
baz=334
**P40A Paris 40.88 109** IAmb IAmb 15 06 48.0
comp=Z,1µm,1.5s
P40A IAMs_20 IAMs_20 15 23 57.8
comp=Z,92µm,20.0s
**ARA0 ARCESS Array S 40.94 5** *e*P **P** **15 06 37.4 -0.6**
ARA0 *e*S **S** **15 12 47.6 -1.8**
ARA0 *e*SS **SS** **15 15 45.7 -4.6**
**ARCES ARCESS Array B 40.94 5** P **P** **15 06 36.2 -1.8**
**ARCES ARCESS Array B 40.94 5** P **P** **15 06 36.2 -1.8**
comp=Z,23nm,0.8s,baz=354,slow=6.7,SNR=39
ARCES PcP **PcP** **15 08 37.7 -0.3**
comp=Z,25nm,0.8s,baz=12,slow=4.7,SNR=1.7
ARCES PKiKP **PKiKP** **15 15 45.7 -0.1**
comp=Z,2.2nm,0.8s,baz=28,slow=8.2,SNR=1.5
comp=Z,23nm,0.8s
**KAN08 Anthony NE Sta 41.07 117** IAmb IAmb 15 06 49.6
comp=Z,1µm,1.5s
**CCX Cicese 41.08 142** IAMs_20 IAMs_20 15 24 19.3
comp=Z,76nm,19.0s
**KAN01 Argonia South 41.20 117** IAmb IAmb 15 06 50.6
comp=Z,1µm,1.3s
**AAM Ann Arbor 41.26 98** IAmb IAmb 15 06 51.7
comp=Z,2µm,1.5s
AAM IAMs_20 IAMs_20 15 23 44.7
comp=Z,88µm,20.0s
**AAM Ann Arbor 41.26 98** ⇑P **P** **15 06 41.5 +0.7**
**AAM Ann Arbor 41.26 98** P **P** **15 06 41.3 +0.4**
baz=332,SNR=14
AAM S **S** **15 12 54.7 +0.2**
baz=332
**AAM Ann Arbor 41.26 98** P **P** **15 06 41.5 +0.7**
**KAN09 Caldwell North 41.26 117** IAmb IAmb 15 06 51.1
comp=Z,1µm,1.6s
**KAN17 Caldwell West 41.30 117** IAmb IAmb 15 06 51.5
comp=Z,1µm,1.3s
**L48A N Adams 41.30 99** IAmb IAmb 15 06 51.7
comp=Z,2µm,1.4s
L48A IAMs_20 IAMs_20 15 22 40.0
comp=Z,59µm,20.0s
**KAN14 Manchester OK 41.32 117** IAmb IAmb 15 06 51.7
comp=Z,1µm,1.4s
**LMQ La Malbaie 41.34 82** IAmb IAmb 15 06 52.7
comp=Z,2µm,1.7s
**Y22D IRIS PASSCAL I 41.37 129** P **P** **15 06 43.8 +1.7**
baz=341,SNR=6.3
Y22D S **S** **15 12 59.6 +2.8**
baz=341
**KTK1 Kautokeino 41.38 6** *e*P **P** **15 06 41.9 +0.2**
KTK1 IVmBBB 15 06 50.1
comp=Z,3µm,0.9s
KTK1 *e*S **S** **15 12 53.5 -2.5**
KTK1 *e*SS **SS** **15 15 58.3 -0.8**
KTK1 IVMs_BB IVMs_BB 15 29 48.0
comp=Z,8µm,19.7s
**DELO Deloro Mine 41.41 91** IAMs_20 IAMs_20 15 26 48.9
comp=Z,74µm,19.0s
**KAN13 South Haven SW 41.42 116** IAmb IAmb 15 06 52.3
comp=Z,1µm,1.6s
**OK038 West end E0370 41.52 118** IAMs_20 IAMs_20 15 23 47.7
comp=Z,106µm,20.0s
**P43A Skaggs, Pawnee 41.62 106** IAMs_20 IAMs_20 15 24 22.5
comp=Z,96µm,18.0s
**ELIS Ellis County 41.69 119** IAmb IAmb 15 06 55.4
comp=Z,2µm,1.4s
**CROK Carrier 41.73 117** IAMs_20 IAMs_20 15 24 02.3
comp=Z,89µm,20.0s
**LOF Lofoten 41.73 12** *e*P **P** **15 06 44.5 0.0**
LOF IVmB_BB 15 06 52.2
comp=Z,4µm,3.1s
LOF *e*S **S** **15 13 00.7 -0.3**
LOF *e*SS **SS** **15 16 06.9 +1.0**
LOF IVMs_BB IVMs_BB 15 33 43.2
comp=Z,7µm,15.0s
**BLOK Blackwell 41.73 116** IAmb IAmb 15 06 55.0
comp=Z,990nm,1.3s
**SFIN Lafayette 41.78 103** IAmb IAmb 15 06 55.8
comp=Z,2µm,1.8s
SFIN IAMs_20 IAMs_20 15 24 35.7
comp=Z,89µm,20.0s
**SFIN Lafayette 41.78 103** P **P** **15 06 45.0 -0.2**
baz=334,SNR=74
SFIN S **S** **15 13 02.0 -0.4**
baz=334
**T35A Sooner Cattle 41.81 115** IAmb IAmb 15 06 55.7
comp=Z,2µm,1.6s
**N47A Urbana 41.81 101** IAmb IAmb 15 06 55.3
comp=Z,2µm,1.4s
N47A IAMs_20 IAMs_20 15 22 55.5
comp=Z,87µm,18.0s
**WBO Williamsburg 41.81 88** IAmb IAmb 15 06 55.5
comp=Z,2µm,2.0s
**214A Organ Pipe Nat 41.88 137** P **P** **15 06 48.0 +1.9**
baz=344,SNR=42
214A S **S** **15 13 08.0 +4.0**
baz=344
**R40A Maddies Statio 41.93 110** IAMs_20 IAMs_20 15 23 44.6
comp=Z,63µm,18.0s
**TUC Tucson 42.03 134** IAMs_20 IAMs_20 15 24 11.5
comp=Z,88µm,21.0s
**TUC Tucson 42.03 134** ⇑P **P** **15 06 48.7 +1.2**
**TUC Tucson 42.03 134** P **P** **15 06 48.2 +0.8**
baz=343
TUC S **S** **15 13 11.3 +4.9**
baz=343
**TUC Tucson 42.03 134** P **P** **15 06 48.7 +1.2**
**STEI Steigen 42.05 11** *e*P **P** **15 06 47.9 +0.9**
STEI IVmBBB 15 06 55.7
comp=Z,4µm,2.2s
STEI *e*S **S** **15 13 04.3 -1.4**
STEI *e*SS **SS** **15 16 14.7 +2.6**
STEI IVMs_BB IVMs_BB 15 27 46.9
comp=Z,7µm,19.8s
**OK051 E0350 and S346 42.09 116** IAmb IAmb 15 06 57.8
comp=Z,989nm,1.1s
**PIX Pinacate 42.10 138** IAMs_20 IAMs_20 15 25 41.2
comp=Z,65µm,18.0s
**AMTX Amarillo 42.11 122** IAmb IAmb 15 06 58.7
comp=Z,2µm,1.4s
**AMTX Amarillo 42.11 122** ⇓P **P** **15 06 47.8 -0.2**
**AMTX Amarillo 42.11 122** P **P** **15 06 47.9 -0.2**
baz=339
AMTX S **S** **15 13 07.5 0.0**
baz=339
**S39A Bolivar 42.13 111** IAmb IAmb 15 06 58.1
comp=Z,1µm,1.2s
**OK048 Pawnee Station 42.13 116** IAmb IAmb 15 06 58.3
comp=Z,2µm,1.4s
**PECO Prince Edward 42.14 91** IAmb IAmb 15 06 58.4
comp=Z,2µm,1.8s
PECO IAMs_20 IAMs_20 15 23 53.2
comp=Z,74µm,21.0s
**J54A Appleton 42.15 93** IAMs_20 IAMs_20 15 25 05.3
comp=Z,79µm,20.0s
**D62A Allapoint, All 42.18 81** IAmb IAmb 15 06 59.0
comp=Z,1µm,1.6s
**M50A Fremont 42.26 98** IAmb IAmb 15 06 59.3
comp=Z,1µm,1.4s
**SLM Saint Louis 42.29 108** IAmb IAmb 15 06 59.5
comp=Z,1µm,1.6s
**N49A Columbus Grove 42.30 100** IAmb IAmb 15 06 59.6
comp=Z,2µm,1.7s
N49A IAMs_20 IAMs_20 15 22 09.3
comp=Z,94nm,21.0s
**YUK Yuzh-Kuril'sk 42.30 270** *e*P **P** **15 06 48.6 -0.8**
YUK *e* 15 08 26.5
YUK *e*PPP PPP 15 08 56.4
YUK *e*S **S** **15 13 10.2 +0.3**
YUK *e*SSS SSS 15 16 50.9
YUK *e*SSS SSS 15 16 50.9
YUK pmax pmax
comp=Z,557nm,1.3s
YUK pmax pmax
comp=Z,403nm,1.2s
YUK pmax pmax
comp=N,464nm,1.0s
YUK pmax pmax
comp=E,173nm,1.1s
YUK MLR MLR
comp=N,19µm,16.0s
YUK MLR MLR
comp=E,10µm,14.0s
YUK MLR MLR
comp=Z,25µm,15.0s
**MEDO Medina 42.31 93** IAmb IAmb 15 06 59.8
comp=Z,1µm,1.5s
**LONY Lake Ozonia 42.39 88** IAmb IAmb 15 07 00.0
comp=Z,3µm,2.0s
**LONY Lake Ozonia 42.39 88** ⇓P **P** **15 06 49.1 -1.0**
**LONY Lake Ozonia 42.39 88** P **P** **15 06 49.1 -1.0**
baz=331,SNR=145
LONY S **S** **15 13 09.4 -1.9**
baz=331
**E62A Clayton Lake 42.41 82** IAmb IAmb 15 07 01.0
comp=Z,1µm,1.6s
E62A IAMs_20 IAMs_20 15 25 26.3
comp=Z,110µm,20.0s
**P46A Rosedale 42.42 104** IAMs_20 IAMs_20 15 24 56.7
comp=Z,101µm,19.0s
**QUOK Quay 42.43 116** IAmb IAmb 15 07 00.7
comp=Z,1µm,1.4s
QUOK IAMs_20 IAMs_20 15 24 12.0
comp=Z,88µm,19.0s
**J55A Hilton 42.44 92** IAmb IAmb 15 07 00.7
comp=Z,2µm,1.7s
J55A IAMs_20 IAMs_20 15 25 29.0
comp=Z,55µm,21.0s
**Q44A Meyer Farm, Va 42.45 106** IAmb IAmb 15 07 00.8
comp=Z,1µm,0.9s
Q44A IAMs_20 IAMs_20 15 27 05.5
comp=Z,86µm,18.0s
**CCM Cathedral Cave 42.48 109** P **P** **15 06 49.2 -1.7**
**CCM Cathedral Cave 42.48 109** IAMs_20 IAMs_20 15 26 16.1
comp=Z,64µm,21.0s
**CCM Cathedral Cave 42.48 109** P **P** **15 06 50.7 -0.2**
baz=335
CCM S **S** **15 13 11.7 -1.0**
baz=335
**CCM Cathedral Cave 42.48 109** P **P** **15 06 49.2 -1.7**
CCM pmax pmax
comp=Z,951nm,1.7s
CCM MLR MLR
comp=Z,64µm,21.0s
**OK029 Liberty Lake 42.54 117** IAmb IAmb 15 07 01.8
comp=Z,2µm,1.5s
OK029 IAMs_20 IAMs_20 15 24 01.9
comp=Z,71µm,18.0s
**OK052 Battle Ridge R 42.57 116** IAmb IAmb 15 07 01.8
comp=Z,2µm,1.4s
OK052 IAMs_20 IAMs_20 15 24 15.5
comp=Z,99nm,19.0s
**FAUS Fauske 42.59 11** *e*P **P** **15 06 52.0 +0.5**
FAUS IVmBBB 15 07 00.2
comp=Z,3µm,2.1s
FAUS *e*S **S** **15 13 12.0 -1.8**
FAUS *e*SS **SS** **15 16 23.9 +1.0**
FAUS IVMs_BB IVMs_BB 15 35 17.0
comp=Z,7µm,14.4s
**OK031 S. Brethren Rd 42.59 116** IAmb IAmb 15 07 02.0
comp=Z,2µm,1.4s
**121A Cookes Peak, D 42.60 131** IAmb IAmb 15 07 04.7
comp=Z,1µm,1.1s
**121A Cookes Peak, D 42.60 131** P **P** **15 06 53.4 +1.2**
baz=342,SNR=161
121A S **S** **15 13 17.9 +2.9**
baz=342
**MSTX Muleshoe 42.64 124** P **P** **15 06 53.0 +0.6**
baz=340,SNR=73
MSTX S **S** **15 13 15.3 -0.1**
baz=340
**KLR Kul'dur 42.67 286** P **P** **15 06 51.5 -0.8**
comp=Z,42nm,0.8s,baz=26,slow=9.4,SNR=37
comp=Z,42nm,0.8s
**KLR Kul'dur 42.67 286** *oe*P **P** **15 06 51.6 -0.8**
KLR pmax pmax
comp=Z,51nm,1.0s
KLR MLR MLR
comp=Z,22µm,14.0s
**ERPA Erie 42.69 95** IAMs_20 IAMs_20 15 27 29.7
comp=Z,51µm,19.0s
**ERPA Erie 42.69 95** ⇓P **P** **15 06 52.1 -0.5**
**ERPA Erie 42.69 95** P **P** **15 06 52.2 -0.5**
baz=332,SNR=33
ERPA S **S** **15 13 15.5 -0.3**
baz=332
**LVZ Lovozero 42.73 0** P **P** **15 06 50.3 -2.3**
**LVZ Lovozero 42.73 0** ⇑P **P** **15 06 52.9 +0.3**
**LVZ Lovozero 42.73 0** *oe*P **P** **15 06 52.8 +0.2**
LVZ pmax pmax
comp=Z,161nm,1.0s
LVZ MLR MLR
comp=Z,24µm,21.0s
**M52A Chesterland 42.73 97** IAmb IAmb 15 07 03.3
comp=Z,2µm,1.6s
M52A IAMs_20 IAMs_20 15 25 04.6
comp=Z,96µm,18.0s
**J56A Wolcott 42.77 91** IAmb IAmb 15 07 03.1
comp=Z,1µm,1.4s
J56A IAMs_20 IAMs_20 15 23 56.7
comp=Z,75nm,19.0s
**DEOK Depew 42.80 116** P **P** **15 06 52.4 -1.2**
**FVM French Village 42.81 108** IAmb IAmb 15 07 03.9
comp=Z,2µm,1.9s
FVM IAMs_20 IAMs_20 15 25 20.1
comp=Z,94µm,20.0s
**PQI Presque Isle 42.89 81** IAmb IAmb 15 07 04.5
comp=Z,1µm,1.6s
**O49A Covington 42.90 101** IAmb IAmb 15 07 04.1
comp=Z,1µm,1.4s
O49A IAMs_20 IAMs_20 15 22 29.2
comp=Z,78µm,19.0s
**OKCSW OKLAHOMA CITY 42.91 117** IAmb IAmb 15 07 04.8
comp=Z,2µm,1.6s
**OLIL Olney 42.92 105** IAMs_20 IAMs_20 15 25 41.8
comp=Z,84µm,18.0s
**N51A Ashland 42.92 98** IAmb IAmb 15 07 04.5
comp=Z,2µm,1.6s
N51A IAMs_20 IAMs_20 15 25 14.9
comp=Z,99nm,19.0s
**U38A Gravette 42.92 113** IAmb IAmb 15 07 04.4
comp=Z,2µm,1.5s
U38A IAMs_20 IAMs_20 15 25 28.0
comp=Z,80µm,18.0s
**J57A Williamstown 42.95 90** IAMs_20 IAMs_20 15 25 17.5
comp=Z,84µm,20.0s
**MGMO Mountain Grove 42.96 111** IAmb IAmb 15 07 05.2
comp=Z,1µm,1.2s
**TUL3 Leonard 42.96 115** IAmb IAmb 15 07 05.0
comp=Z,2µm,1.3s
**TUL3 Leonard 42.96 115** P **P** **15 06 54.2 -0.7**
baz=337,SNR=106
TUL3 S **S** **15 13 17.5 -2.4**
baz=337
**RLO Rose Lookout 42.97 114** IAmb IAmb 15 07 04.8
comp=Z,546nm,1.3s
RLO IAMs_20 IAMs_20 15 25 35.2
comp=Z,111µm,19.0s
**BATG Bathurst New B 43.04 78** P **P** **15 06 53.9 -1.5**
BATG IAmb IAmb 15 07 06.3
comp=Z,2µm,1.7s
**ALLY Alegheny Colle 43.05 95** IAMs_20 IAMs_20 15 24 11.2
comp=Z,60µm,21.0s
**APA Apatity 43.05 1** ⇓*i* P **P** **15 06 56.7 +1.5**
APA *i* 15 08 41.0
APA *i* PPP PPP 15 09 19.0
APA *i* S **S** **15 13 20.0 -0.5**
APA *i* SS SS 15 16 20.0 -12
APA pmax pmax
comp=Z,134nm,0.7s
**M53A WI Miller and 43.05 96** IAmb IAmb 15 07 05.8
comp=Z,2µm,1.1s
M53A IAMs_20 IAMs_20 15 23 57.3
comp=Z,68µm,21.0s
**M53A WI Miller and 43.05 96** P **P** **15 06 55.2 -0.4**
baz=332,SNR=70
M53A S **S** **15 13 19.3 -1.9**
baz=332
**BLO Bloomington 43.06 103** IAmb IAmb 15 07 05.5
comp=Z,1µm,1.6s
**SGF Sodankyl 43.07 5** P **P** **15 06 55.4 +0.1**
**NCB Newcomb 43.08 88** IAmb IAmb 15 07 06.3
comp=Z,1µm,1.6s
**WMOK Wichita Mounta 43.11 119** IAMs_20 IAMs_20 15 24 46.0
comp=Z,95µm,21.0s
**WMOK Wichita Mounta 43.11 119** IAmb IAmb 15 07 06.7
comp=Z,898nm,1.4s
**WMOK Wichita Mounta 43.11 119** ⇑P **P** **15 06 55.3 -0.8**
**WMOK Wichita Mounta 43.11 119** P **P** **15 06 56.4 +0.3**
baz=338,SNR=349
WMOK S **S** **15 13 22.5 +0.3**
baz=338
**HHAR Hobbs 43.21 113** IAmb IAmb 15 07 06.5
comp=Z,1µm,1.5s
HHAR IAMs_20 IAMs_20 15 25 46.6
comp=Z,78µm,18.0s
**HEH HeiHe 43.23 291** *e*P **P** **15 06 55.9 -1.0**
HEH PcP **PcP** **15 08 49.7 +3.9**
HEH ScP **ScP** **15 12 39.5 +2.6**
HEH S **S** **15 13 23.5 0.0**
HEH ScS **ScS** **15 16 54.3 -2.4**
HEH pmax pmax
comp=Z,130nm,1.7s
HEH pmax pmax
comp=Z,10µm,6.4s
**J58A Remsen 43.24 90** IAMs_20 IAMs_20 15 26 04.3
comp=Z,83µm,19.0s
**G62A West of Eustis 43.28 84** IAmb IAmb 15 07 08.0
comp=Z,2µm,1.5s
**319A Douglas 43.30 133** IAMs_20 IAMs_20 15 25 42.1
comp=Z,85µm,19.0s
**KONS Konsvik 43.31 12** *e*P **P** **15 06 57.3 0.0**
**W35A Tecumseh 43.32 117** IAmb IAmb 15 07 07.9
comp=Z,940nm,1.4s
W35A IAMs_20 IAMs_20 15 23 07.4
comp=Z,77µm,20.0s
**ACSO Alum Creek Sta 43.33 99** IAmb IAmb 15 07 07.7
comp=Z,980nm,1.2s
ACSO IAMs_20 IAMs_20 15 22 35.5
comp=Z,85µm,19.0s

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|---|---|---|---|---|---|---|---|---|---|
| **ACSO** | **Alum Creek Sta** | **43.33** | **99** | ⇓P | | **P** | | **15 06 57.1** | **-0.6** |
| **ACSO** | **Alum Creek Sta** | **43.33** | **99** | P | | **P** | | **15 06 57.1** | **-0.6** |
| | baz=333,SNR=62 | | | | | | | | |
| ACSO | | | | S | | **S** | | **15 13 22.7** | **-2.4** |
| | baz=333 | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **43.35** | **101** | IAmb | | IAmb | | 15 07 07.5 | |
| | comp=Z,1µm,1.5s | | | | | | | | |
| P49A | | | | IAMs_20 | | IAMs_20 | | 15 25 49.2 | |
| | comp=Z,83µm,18.0s | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **43.35** | **101** | P | | **P** | | **15 06 56.8** | **-1.2** |
| | baz=334,SNR=69 | | | | | | | | |
| P49A | | | | S | | **S** | | **15 13 24.4** | **-1.2** |
| | baz=334 | | | | | | | | |
| **F63A** | **Nahmakanta, Br** | **43.35** | **82** | IAmb | | IAmb | | 15 07 08.2 | |
| | comp=Z,1µm,1.8s | | | | | | | | |
| **K57A** | **Scipio Center** | **43.37** | **91** | IAMs_20 | | IAMs_20 | | 15 25 19.5 | |
| | comp=Z,75µm,19.0s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **43.37** | **273** | P | | **P** | | **15 06 55.5** | **-2.6** |
| | comp=Z,50nm,0.8s,baz=348,slow=6.5,SNR=16 | | | | | | | | |
| ASAJ | | | | LR | | LR | | 15 26 50.3 | |
| | comp=Z,22µm,20.5s,baz=50,slow=39 | | | | | | | | |
| | comp=Z,50nm,0.8s | | | | | | | | |
| **T42A** | **Van Buren** | **43.46** | **109** | IAmb | | IAmb | | 15 07 08.8 | |
| | comp=Z,2µm,1.8s | | | | | | | | |
| T42A | | | | IAMs_20 | | IAMs_20 | | 15 24 32.1 | |
| | comp=Z,67µm,18.0s | | | | | | | | |
| **DKNS** | **Dickens** | **43.46** | **122** | IAmb | | IAmb | | 15 07 09.2 | |
| | comp=Z,1µm,1.7s | | | | | | | | |
| **STOK** | **Stokkvaagen** | **43.47** | **13** | *e*P | | **P** | | **15 06 59.2** | **+0.7** |
| STOK | | | | IVmB_BB | | | | 15 07 06.6 | |
| | comp=Z,5µm,3.3s | | | | | | | | |
| STOK | | | | *e*S | | **S** | | **15 13 27.2** | **+0.6** |
| STOK | | | | *e*SS | | **SS** | | **15 16 42.5** | **+2.6** |
| STOK | | | | IVMs_BB | | IVMs_BB | | 15 26 03.5 | |
| | comp=Z,12µm,25.6s | | | | | | | | |
| **S44A** | **Carbondale** | **43.47** | **107** | IAMs_20 | | IAMs_20 | | 15 25 59.3 | |
| | comp=Z,85µm,20.0s | | | | | | | | |
| **F64A** | **Sherman** | **43.48** | **82** | IAmb | | IAmb | | 15 07 09.2 | |
| | comp=Z,2µm,1.7s | | | | | | | | |
| **L56A** | **Greenwood** | **43.52** | **93** | IAMs_20 | | IAMs_20 | | 15 25 23.7 | |
| | comp=Z,62µm,22.0s | | | | | | | | |
| **X34A** | **Smith Ranch, M** | **43.53** | **118** | IAmb | | IAmb | | 15 07 10.5 | |
| | comp=Z,2µm,1.9s | | | | | | | | |
| **N53A** | **Lisbon** | **43.56** | **97** | IAMs_20 | | IAMs_20 | | 15 23 13.6 | |
| | comp=Z,100µm,19.0s | | | | | | | | |
| **H62A** | **Milan** | **43.62** | **85** | IAmb | | IAmb | | 15 07 11.0 | |
| | comp=Z,2µm,1.9s | | | | | | | | |
| **LBNH** | **Lisbon** | **43.65** | **86** | ⇓P | | **P** | | **15 07 00.4** | **+0.1** |
| **LBNH** | **Lisbon** | **43.65** | **86** | P | | **P** | | **15 07 00.5** | **+0.1** |
| | baz=331,SNR=71 | | | | | | | | |
| LBNH | | | | S | | **S** | | **15 13 25.5** | **-4.2** |
| | baz=331 | | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **43.67** | **83** | IAmb | | IAmb | | 15 07 10.8 | |
| | comp=Z,1µm,1.7s | | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **43.67** | **83** | ⇓P | | **P** | | **15 06 59.8** | **-0.7** |
| **PKME** | **Peaks-Kenny Pk** | **43.67** | **83** | P | | **P** | | **15 06 60.0** | **-0.5** |
| | baz=330,SNR=86 | | | | | | | | |
| PKME | | | | S | | **S** | | **15 13 29.9** | **-0.1** |
| | baz=330 | | | | | | | | |
| **CGM3** | **Cape Girardeau** | **43.69** | **108** | IAMs_20 | | IAMs_20 | | 15 26 06.3 | |
| | comp=Z,93µm,20.0s | | | | | | | | |
| **MOR8** | **Moi Rana** | **43.73** | **12** | *e*P | | **P** | | **15 06 59.8** | **-0.9** |
| MOR8 | | | | IVmBBB | | | | 15 07 02.3 | |
| | comp=Z,891nm,2.2s | | | | | | | | |
| MOR8 | | | | *e*S | | **S** | | **15 13 31.9** | **+1.3** |
| MOR8 | | | | *e*SS | | **SS** | | **15 16 44.8** | **-0.4** |
| MOR8 | | | | IVMs_BB | | IVMs_BB | | 15 33 25.3 | |
| | comp=Z,10µm,16.5s | | | | | | | | |
| **POST** | **Post** | **43.85** | **123** | IAmb | | IAmb | | 15 07 12.5 | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **43.91** | **109** | IAmb | | IAmb | | 15 07 11.6 | |
| | comp=Z,597nm,1.1s | | | | | | | | |
| **O53A** | **New Philadelph** | **43.92** | **97** | P | | **P** | | **15 07 01.8** | **-0.8** |
| | baz=333,SNR=70 | | | | | | | | |
| O53A | | | | S | | **S** | | **15 13 31.7** | **-2.1** |
| | baz=333 | | | | | | | | |
| **P51A** | **Williamsport** | **43.97** | **100** | IAmb | | IAmb | | 15 07 12.2 | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| P51A | | | | IAMs_20 | | IAMs_20 | | 15 22 54.5 | |
| | comp=Z,82µm,22.0s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **43.98** | **104** | P | | **P** | | **15 07 01.7** | **-1.4** |
| WCI | | | | IAmb | | IAmb | | 15 07 12.4 | |
| | comp=Z,2µm,1.8s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **43.98** | **104** | IAMs_20 | | IAMs_20 | | 15 26 04.0 | |
| | comp=Z,102µm,21.0s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **43.98** | **104** | ⇓P | | **P** | | **15 07 01.7** | **-1.4** |
| **WCI** | **Wyandotte Cave** | **43.98** | **104** | P | | **P** | | **15 07 02.3** | **-0.8** |
| | baz=334 | | | | | | | | |
| WCI | | | | S | | **S** | | **15 13 34.1** | **-0.7** |
| | baz=334 | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **43.98** | **104** | P | | **P** | | **15 07 01.7** | **-1.4** |
| **HNH** | **Hanover** | **43.99** | **87** | IAmb | | IAmb | | 15 07 15.2 | |
| | comp=Z,1µm,1.5s | | | | | | | | |
| **SN07** | **Snyder 07** | **44.01** | **122** | IAmb | | IAmb | | 15 07 13.7 | |
| | comp=Z,1µm,1.7s | | | | | | | | |
| **BINY** | **Binghamton** | **44.02** | **91** | IAMs_20 | | IAMs_20 | | 15 23 51.8 | |
| | comp=Z,76µm,19.0s | | | | | | | | |
| **BINY** | **Binghamton** | **44.02** | **91** | ⇑P | | **P** | | **15 07 02.5** | **-0.8** |
| **BINY** | **Binghamton** | **44.02** | **91** | P | | **P** | | **15 07 02.6** | **-0.8** |
| | baz=332,SNR=125 | | | | | | | | |
| BINY | | | | S | | **S** | | **15 13 35.2** | **-0.1** |
| | baz=332 | | | | | | | | |
| **APMT** | **Aspermont** | **44.02** | **121** | IAmb | | IAmb | | 15 07 13.5 | |
| | comp=Z,957nm,1.6s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **44.03** | **128** | ⇓P | | **P** | | **15 07 04.2** | **+0.6** |
| **MNTX** | **Cornudas Mount** | **44.03** | **128** | P | | **P** | | **15 07 04.1** | **+0.5** |
| | baz=341,SNR=136 | | | | | | | | |
| MNTX | | | | S | | **S** | | **15 13 38.0** | **+2.3** |
| | baz=341 | | | | | | | | |
| **WTFS** | **Witchita Falls** | **44.11** | **119** | IAmb | | IAmb | | 15 07 37.7 | |
| | comp=Z,692nm,1.3s | | | | | | | | |
| **P52A** | **Corning** | **44.15** | **99** | IAmb | | IAmb | | 15 07 13.9 | |
| | comp=Z,904nm,1.2s | | | | | | | | |
| **P52A** | **Corning** | **44.15** | **99** | P | | **P** | | **15 07 03.6** | **-0.8** |
| | baz=333,SNR=52 | | | | | | | | |
| P52A | | | | S | | **S** | | **15 13 36.2** | **-1.1** |
| | baz=333 | | | | | | | | |
| **WVL** | **Waterville** | **44.15** | **84** | IAmb | | IAmb | | 15 07 14.9 | |
| | comp=Z,2µm,1.8s | | | | | | | | |
| **I62A** | **Tamworth** | **44.17** | **86** | IAmb | | IAmb | | 15 07 15.5 | |
| | comp=Z,1µm,1.8s | | | | | | | | |
| **DRLN** | **Deer Lake** | **44.21** | **70** | IAmb | | IAmb | | 15 07 16.6 | |
| | comp=Z,466nm,1.0s | | | | | | | | |
| **DRLN** | **Deer Lake** | **44.21** | **70** | ⇑P | | **P** | | **15 07 04.1** | **-0.7** |
| **O54A** | **Avella** | **44.27** | **97** | IAMs_20 | | IAMs_20 | | 15 28 18.6 | |
| | comp=Z,89µm,20.0s | | | | | | | | |
| **I63A** | **Otisfield** | **44.28** | **85** | IAmb | | IAmb | | 15 07 16.3 | |
| | comp=Z,1µm,1.7s | | | | | | | | |
| **T45A** | **Paducah** | **44.28** | **107** | IAmb | | IAmb | | 15 07 15.2 | |
| | comp=Z,743nm,0.9s | | | | | | | | |
| T45A | | | | IAMs_20 | | IAMs_20 | | 15 25 06.0 | |
| | comp=Z,67µm,18.0s | | | | | | | | |
| **X37A** | **Clayton** | **44.31** | **115** | IAmb | | IAmb | | 15 07 16.2 | |
| | comp=Z,879nm,1.6s | | | | | | | | |
| **LCAR** | **Lake Charles** | **44.31** | **110** | IAmb | | IAmb | | 15 07 15.9 | |
| | comp=Z,797nm,1.0s | | | | | | | | |
| LCAR | | | | IAMs_20 | | IAMs_20 | | 15 25 07.7 | |
| | comp=Z,79µm,18.0s | | | | | | | | |
| **G65A** | **Princeton** | **44.33** | **81** | IAmb | | IAmb | | 15 07 16.2 | |
| | comp=Z,718nm,1.5s | | | | | | | | |
| **L59A** | **Walton** | **44.36** | **90** | IAMs_20 | | IAMs_20 | | 15 26 36.8 | |
| | comp=Z,87µm,18.0s | | | | | | | | |
| **M57A** | **Sunshine Farm,** | **44.38** | **93** | IAMs_20 | | IAMs_20 | | 15 23 19.4 | |
| | comp=Z,77µm,20.0s | | | | | | | | |
| **ODSA** | **Odessa** | **44.44** | **125** | IAmb | | IAmb | | 15 07 17.4 | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| **PVMO** | **Portageville** | **44.48** | **108** | IAMs_20 | | IAMs_20 | | 15 27 59.2 | |
| | comp=Z,77µm,21.0s | | | | | | | | |
| **P53A** | **Whipple** | **44.54** | **98** | IAmb | | IAmb | | 15 07 17.1 | |
| | comp=Z,578nm,0.9s | | | | | | | | |
| **R50A** | **Paris** | **44.61** | **102** | IAmb | | IAmb | | 15 07 17.9 | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| **KSPA** | **Keystone Colle** | **44.66** | **91** | IAmb | | IAmb | | 15 07 18.8 | |
| | comp=Z,2µm,1.7s | | | | | | | | |
| KSPA | | | | IAMs_20 | | IAMs_20 | | 15 27 31.8 | |
| | comp=Z,74µm,19.0s | | | | | | | | |
| **PEBM** | **Pemiscott Bayo** | **44.70** | **109** | IAMs_20 | | IAMs_20 | | 15 26 35.0 | |
| | comp=Z,59µm,19.0s | | | | | | | | |
| **Q52A** | **Bidwell** | **44.71** | **99** | IAMs_20 | | IAMs_20 | | 15 23 18.1 | |
| | comp=Z,89µm,20.0s | | | | | | | | |
| **LMN** | **Caledonia Moun** | **44.71** | **78** | IAmb | | IAmb | | 15 07 19.2 | |
| | comp=Z,999nm,1.6s | | | | | | | | |
| **SSPA** | **Standing Stone** | **44.74** | **94** | P | | **P** | | **15 07 07.8** | **-1.2** |
| **SSPA** | **Standing Stone** | **44.74** | **94** | IAMs_20 | | IAMs_20 | | 15 26 37.8 | |
| | comp=Z,67µm,20.0s | | | | | | | | |
| **SSPA** | **Standing Stone** | **44.74** | **94** | ⇑P | | **P** | | **15 07 07.6** | **-1.5** |
| **SSPA** | **Standing Stone** | **44.74** | **94** | P | | **P** | | **15 07 08.6** | **-0.4** |
| | baz=333 | | | | | | | | |
| SSPA | | | | S | | **S** | | **15 13 44.4** | **-1.3** |
| | baz=333 | | | | | | | | |
| **GNAR** | **Gosnell** | **44.78** | **109** | IAMs_20 | | IAMs_20 | | 15 26 41.2 | |
| | comp=Z,61µm,19.0s | | | | | | | | |
| **EMMW** | **East Machias** | **44.79** | **82** | IAmb | | IAmb | | 15 07 20.0 | |
| | comp=Z,1µm,1.6s | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **44.82** | **121** | P | | **P** | | **15 07 09.5** | **-0.3** |
| | baz=339,SNR=30 | | | | | | | | |
| ABTX | | | | S | | **S** | | **15 13 44.7** | **-2.3** |
| | baz=339 | | | | | | | | |
| **T47A** | **Sharon Grove** | **44.83** | **105** | IAMs_20 | | IAMs_20 | | 15 26 52.4 | |
| | comp=Z,81µm,19.0s | | | | | | | | |
| **LNXT** | **Lenox** | **44.83** | **108** | IAMs_20 | | IAMs_20 | | 15 26 40.5 | |
| | comp=Z,71µm,20.0s | | | | | | | | |
| **Z35A** | **Perchaven, San** | **44.89** | **118** | IAmb | | IAmb | | 15 07 20.9 | |
| | comp=Z,1µm,1.5s | | | | | | | | |
| **K62A** | **Royalston** | **44.92** | **87** | IAmb | | IAmb | | 15 07 22.4 | |
| | comp=Z,964nm,1.4s | | | | | | | | |
| K62A | | | | IAMs_20 | | IAMs_20 | | 15 26 36.7 | |
| | comp=Z,97µm,20.0s | | | | | | | | |
| **MIAR** | **Mount Ida** | **44.92** | **114** | IAMs_20 | | IAMs_20 | | 15 26 33.9 | |
| | comp=Z,87µm,19.0s | | | | | | | | |
| **MIAR** | **Mount Ida** | **44.92** | **114** | P | | **P** | | **15 07 10.1** | **-0.5** |
| | baz=337,SNR=368 | | | | | | | | |
| MIAR | | | | S | | **S** | | **15 13 47.5** | **-1.0** |
| | baz=337 | | | | | | | | |
| **MCWV** | **Mont Chateau** | **44.92** | **96** | IAMs_20 | | IAMs_20 | | 15 27 47.8 | |
| | comp=Z,80µm,20.0s | | | | | | | | |
| **MCWV** | **Mont Chateau** | **44.92** | **96** | P | | **P** | | **15 07 10.6** | **0.0** |
| | baz=333,SNR=19 | | | | | | | | |
| MCWV | | | | S | | **S** | | **15 13 45.4** | **-3.0** |
| | baz=333 | | | | | | | | |
| **HBAR** | **Harrisburg** | **44.95** | **110** | IAMs_20 | | IAMs_20 | | 15 23 09.5 | |
| | comp=Z,48µm,21.0s | | | | | | | | |
| **L61B** | **Northampton** | **44.95** | **88** | IAmb | | IAmb | | 15 07 21.5 | |
| | comp=Z,1µm,1.6s | | | | | | | | |
| **L61B** | **Northampton** | **44.95** | **88** | P | | **P** | | **15 07 10.4** | **-0.4** |
| | baz=332,SNR=31 | | | | | | | | |
| L61B | | | | S | | **S** | | **15 13 47.7** | **-1.1** |
| | baz=332 | | | | | | | | |
| **N58A** | **Sunbury** | **44.97** | **93** | IAmb | | IAmb | | 15 07 20.7 | |
| | comp=Z,1µm,1.2s | | | | | | | | |
| N58A | | | | IAMs_20 | | IAMs_20 | | 15 28 41.9 | |
| | comp=Z,70µm,18.0s | | | | | | | | |
| **VHRN** | **Van Horn** | **45.01** | **128** | IAmb | | IAmb | | 15 07 23.7 | |
| | comp=Z,1µm,1.5s | | | | | | | | |
| **JEM** | **Erimo** | **45.02** | **271** | P | | **P** | | **15 07 11.4** | **+0.1** |
| **ERM** | **Erimo** | **45.02** | **271** | P | | **P** | | **15 07 11.8** | **+0.5** |
| **ERM** | **Erimo** | **45.02** | **271** | P | | **P** | | **15 07 10.6** | **-0.6** |
| **ERM** | **Erimo** | **45.02** | **271** | *ce*P | | **P** | | **15 07 08.8** | **-2.5** |
| ERM | | | | pmax | | pmax | | | |
| | comp=Z,193nm,1.7s | | | | | | | | |
| **SGCY** | **Sterling City** | **45.04** | **123** | IAmb | | IAmb | | 15 07 22.0 | |
| | comp=Z,1µm,1.3s | | | | | | | | |
| **HALT** | **Halls** | **45.06** | **108** | IAMs_20 | | IAMs_20 | | 15 26 36.4 | |
| | comp=Z,67µm,20.0s | | | | | | | | |
| **MNHN** | **Monahans** | **45.11** | **125** | IAmb | | IAmb | | 15 07 22.5 | |
| | comp=Z,822nm,1.5s | | | | | | | | |
| **UALR** | **University of** | **45.11** | **112** | IAMs_20 | | IAMs_20 | | 15 25 18.8 | |
| | comp=Z,73µm,22.0s | | | | | | | | |
| **NSS** | **Namsos** | **45.16** | **14** | *e*P | | **P** | | **15 07 12.5** | **+0.4** |
| NSS | | | | IVmB_BB | | | | 15 07 21.2 | |
| | comp=Z,5µm,4.2s | | | | | | | | |
| NSS | | | | *e*S | | **S** | | **15 13 50.1** | **-1.2** |
| NSS | | | | *e*ScS | | **ScS** | | **15 17 09.1** | **+0.7** |
| NSS | | | | IVMs_BB | | IVMs_BB | | 15 26 51.5 | |
| | comp=Z,11µm,19.4s | | | | | | | | |
| **Q54A** | **Coxs Mills** | **45.18** | **98** | IAmb | | IAmb | | 15 07 22.1 | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| **X40A** | **Basin Creek Fa** | **45.22** | **113** | IAmb | | IAmb | | 15 07 22.9 | |
| | comp=Z,357nm,1.0s | | | | | | | | |
| X40A | | | | IAMs_20 | | IAMs_20 | | 15 27 08.6 | |
| | comp=Z,50µm,18.0s | | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **45.30** | **87** | P | | **P** | | **15 07 11.5** | **-2.0** |
| HRV | | | | IAmb | | IAmb | | 15 07 25.6 | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **45.30** | **87** | ⇓P | | **P** | | **15 07 13.8** | **+0.3** |
| **HRV** | **Adam Dziewonsk** | **45.30** | **87** | P | | **P** | | **15 07 13.8** | **+0.3** |
| | baz=332 | | | | | | | | |
| HRV | | | | S | | **S** | | **15 13 53.8** | **+0.1** |
| | baz=332 | | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **45.30** | **87** | P | | **P** | | **15 07 11.5** | **-2.0** |
| HRV | | | | pmax | | pmax | | | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| HRV | | | | MLR | | MLR | | | |
| | comp=Z,117µm,18.0s | | | | | | | | |
| **WVT** | **Waverly** | **45.36** | **107** | P | | **P** | | **15 07 13.3** | **-0.8** |
| **WVT** | **Waverly** | **45.36** | **107** | IAMs_20 | | IAMs_20 | | 15 25 51.5 | |
| | comp=Z,80µm,18.0s | | | | | | | | |
| **WVT** | **Waverly** | **45.36** | **107** | ⇑P | | **P** | | **15 07 13.3** | **-0.8** |
| **WVT** | **Waverly** | **45.36** | **107** | P | | **P** | | **15 07 13.9** | **-0.2** |
| | baz=336 | | | | | | | | |
| WVT | | | | S | | **S** | | **15 13 54.2** | **-0.6** |
| | baz=336 | | | | | | | | |
| **WVT** | **Waverly** | **45.36** | **107** | P | | **P** | | **15 07 13.3** | **-0.8** |
| WVT | | | | MLR | | MLR | | | |
| | comp=Z,80µm,18.0s | | | | | | | | |
| **OUL** | **Oulu** | **45.41** | **5** | P | | **P** | | **15 07 14.4** | **+0.3** |
| **S51A** | **Beattyville** | **45.44** | **101** | IAmb | | IAmb | | 15 07 23.6 | |
| | comp=Z,338nm,0.9s | | | | | | | | |
| S51A | | | | IAMs_20 | | IAMs_20 | | 15 27 16.4 | |
| | comp=Z,87µm,18.0s | | | | | | | | |
| **WES** | **Weston** | **45.49** | **87** | IAmb | | IAmb | | 15 07 27.0 | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| **ODNJ** | **Ogdensburg** | **45.49** | **90** | IAMs_20 | | IAMs_20 | | 15 25 55.7 | |
| | comp=Z,80µm,20.0s | | | | | | | | |
| **TRNY** | **Table Rock, Ra** | **45.57** | **90** | IAmb | | IAmb | | 15 07 24.9 | |
| | comp=Z,564nm,1.1s | | | | | | | | |
| TRNY | | | | IAMs_20 | | IAMs_20 | | 15 28 32.8 | |
| | comp=Z,69µm,19.0s | | | | | | | | |
| **T50A** | **Nancy** | **45.57** | **103** | IAMs_20 | | IAMs_20 | | 15 27 11.9 | |
| | comp=Z,85µm,19.0s | | | | | | | | |
| **Q56A** | **Snyder Ridge,** | **45.70** | **96** | IAMs_20 | | IAMs_20 | | 15 28 13.5 | |
| | comp=Z,55µm,20.0s | | | | | | | | |
| **U49A** | **Red Boiling Sp** | **45.71** | **104** | IAmb | | IAmb | | 15 07 27.0 | |
| | comp=Z,777nm,1.1s | | | | | | | | |
| U49A | | | | IAMs_20 | | IAMs_20 | | 15 26 58.6 | |
| | comp=Z,87µm,19.0s | | | | | | | | |
| **P57A** | **Homestead Farm** | **45.72** | **95** | IAMs_20 | | IAMs_20 | | 15 24 44.8 | |
| | comp=Z,64µm,18.0s | | | | | | | | |
| **ALPN** | **Alpine** | **45.77** | **127** | IAmb | | IAmb | | 15 07 27.7 | |
| | comp=Z,433nm,1.0s | | | | | | | | |
| **FW14** | **Alvarado** | **45.77** | **119** | IAmb | | IAmb | | 15 07 27.2 | |
| | comp=Z,791nm,1.1s | | | | | | | | |
| **PAL** | **Palisades** | **45.80** | **90** | IAMs_20 | | IAMs_20 | | 15 26 54.0 | |
| | comp=Z,80µm,18.0s | | | | | | | | |
| **PAL** | **Palisades** | **45.80** | **90** | P | | **P** | | **15 07 16.9** | **-0.6** |
| | baz=332,SNR=41 | | | | | | | | |
| PAL | | | | S | | **S** | | **15 14 00.2** | **-0.8** |
| | baz=332 | | | | | | | | |
| **MVL** | **Millersville** | **45.84** | **93** | IAmb | | IAmb | | 15 07 27.7 | |
| | comp=Z,1µm,1.2s | | | | | | | | |
| MVL | | | | IAMs_20 | | IAMs_20 | | 15 29 29.0 | |
| | comp=Z,68µm,18.0s | | | | | | | | |
| **WLAR** | **White Oak Lake** | **45.86** | **114** | IAMs_20 | | IAMs_20 | | 15 23 59.7 | |
| | comp=Z,54µm,19.0s | | | | | | | | |
| **CLTN** | **Cedars of Leba** | **45.90** | **105** | IAMs_20 | | IAMs_20 | | 15 27 13.8 | |
| | comp=Z,83µm,20.0s | | | | | | | | |
| **OZNA** | **Ozona** | **45.97** | **124** | IAmb | | IAmb | | 15 07 28.8 | |
| | comp=Z,387nm,1.2s | | | | | | | | |
| **CPNY** | **Central Park** | **45.97** | **90** | IAMs_20 | | IAMs_20 | | 15 26 58.5 | |
| | comp=Z,86µm,18.0s | | | | | | | | |
| **CIT** | **Chita** | **46.02** | **303** | *e*P | | **P** | | **15 07 21.8** | **+2.6** |
| CIT | | | | *e* | | | | 15 09 00.2 | |
| CIT | | | | *e* | | | | 15 17 13.8 | |
| CIT | | | | pmax | | pmax | | | |
| | comp=Z,1µm,3.7s | | | | | | | | |
| **L64A** | **Middleborough** | **46.05** | **86** | IAMs_20 | | IAMs_20 | | 15 27 12.6 | |
| | comp=Z,87µm,21.0s | | | | | | | | |
| **V48A** | **Smith Brothers** | **46.06** | **106** | IAMs_20 | | IAMs_20 | | 15 27 16.9 | |
| | comp=Z,63µm,21.0s | | | | | | | | |
| **R55A** | **Marlinton** | **46.06** | **98** | IAmb | | IAmb | | 15 07 29.6 | |
| | comp=Z,667nm,1.0s | | | | | | | | |
| **WHTX** | **Lake Whitney,** | **46.07** | **119** | P | | **P** | | **15 07 19.7** | **0.0** |
| | baz=339,SNR=28 | | | | | | | | |
| WHTX | | | | S | | **S** | | **15 14 02.9** | **-2.1** |
| | baz=339 | | | | | | | | |
| **WUPA** | **West Chester U** | **46.16** | **92** | IAMs_20 | | IAMs_20 | | 15 26 07.5 | |
| | comp=Z,51µm,21.0s | | | | | | | | |
| **HAL** | **Halifax** | **46.19** | **78** | IAMs_20 | | IAMs_20 | | 15 26 38.1 | |
| | comp=Z,70µm,20.0s | | | | | | | | |
| **SDMD** | **Soldier's Deli** | **46.19** | **94** | IAmb | | IAmb | | 15 07 30.2 | |
| | comp=Z,1µm,1.8s | | | | | | | | |
| **TBLU** | **Trondheim** | **46.27** | **15** | *e*P | | **P** | | **15 07 19.4** | **-1.6** |
| TBLU | | | | IVmB_BB | | | | 15 07 29.5 | |
| | comp=Z,3µm,3.6s | | | | | | | | |
| TBLU | | | | *e*S | | **S** | | **15 14 05.0** | **-2.3** |
| TBLU | | | | *e*ScS | | **ScS** | | **15 17 13.9** | **-1.7** |
| TBLU | | | | IVMs_BB | | IVMs_BB | | 15 26 39.6 | |
| | comp=Z,13µm,25.0s | | | | | | | | |
| **OXF** | **Oxford** | **46.31** | **109** | ⇑P | | **P** | | **15 07 20.2** | **-1.4** |
| **OXF** | **Oxford** | **46.31** | **109** | P | | **P** | | **15 07 21.1** | **-0.4** |
| | baz=336,SNR=220 | | | | | | | | |
| OXF | | | | S | | **S** | | **15 14 07.8** | **-0.7** |
| | baz=336 | | | | | | | | |
| **OXF** | **Oxford** | **46.31** | **109** | P | | **P** | | **15 07 20.2** | **-1.4** |
| **JOT** | **Ohata** | **46.31** | **273** | P | | **P** | | **15 07 20.3** | **-1.2** |
| **PLAL** | **Pickwick Lake** | **46.33** | **108** | IAMs_20 | | IAMs_20 | | 15 27 16.0 | |
| | comp=Z,79µm,19.0s | | | | | | | | |
| **TZTN** | **Tazewell** | **46.44** | **102** | IAmb | | IAmb | | 15 07 32.1 | |
| | comp=Z,606nm,0.9s | | | | | | | | |
| TZTN | | | | IAMs_20 | | IAMs_20 | | 15 27 39.0 | |
| | comp=Z,56µm,19.0s | | | | | | | | |
| **TZTN** | **Tazewell** | **46.44** | **102** | ⇓P | | **P** | | **15 07 21.9** | **-0.7** |
| **TZTN** | **Tazewell** | **46.44** | **102** | P | | **P** | | **15 07 21.9** | **-0.7** |
| | baz=335,SNR=119 | | | | | | | | |
| TZTN | | | | S | | **S** | | **15 14 09.2** | **-1.2** |
| | baz=335 | | | | | | | | |
| **M65A** | **Busby, Falmout** | **46.45** | **86** | P | | **P** | | **15 07 22.9** | **+0.4** |
| | baz=332 | | | | | | | | |
| M65A | | | | S | | **S** | | **15 14 11.2** | **+0.9** |
| | baz=332 | | | | | | | | |
| **SRIG** | **Santa Rosalia** | **46.46** | **138** | ⇓P | | **P** | | **15 07 25.9** | **+3.2** |
| **237A** | **Washetta, Mont** | **46.57** | **117** | IAMs_20 | | IAMs_20 | | 15 24 38.4 | |
| | comp=Z,76µm,19.0s | | | | | | | | |
| **P61A** | **Hammonton** | **46.67** | **92** | IAMs_20 | | IAMs_20 | | 15 26 33.1 | |
| | comp=Z,64µm,22.0s | | | | | | | | |
| **MOL** | **Molde** | **46.68** | **17** | *e*P | | **P** | | **15 07 23.6** | **-0.6** |
| MOL | | | | IVmB_BB | | | | 15 07 31.7 | |
| | comp=Z,3µm,3.8s | | | | | | | | |
| MOL | | | | *e*S | | **S** | | **15 14 11.7** | **-1.4** |
| MOL | | | | *e*ScS | | **ScS** | | **15 17 19.7** | **+1.4** |
| MOL | | | | IVMs_BB | | IVMs_BB | | 15 27 48.1 | |
| | comp=Z,15µm,25.8s | | | | | | | | |
| **ADZR** | **Andozero** | **46.69** | **358** | ⇓*i*P | | **P** | | **15 07 22.9** | **-1.3** |
| ADZR | | | | | | | | 15 08 55.8 | |
| ADZR | | | | *e*S | | **S** | | **15 14 13.3** | **+0.1** |
| ADZR | | | | pmax | | pmax | | | |
| | comp=Z,187nm,0.8s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **46.74** | **127** | IAmb | | IAmb | | 15 07 38.1 | |
| | comp=Z,410nm,1.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.74** | **127** | P | | **P** | | **15 07 24.7** | **-0.4** |
| **TXAR** | **Lajitas Array** | **46.74** | **127** | P | | **P** | | **15 07 24.3** | **-0.9** |
| | comp=Z,22nm,0.9s,baz=352,slow=5.7,SNR=87 | | | | | | | | |
| TXAR | | | | PKiKP | | **PKiKP** | | **15 15 52.4** | **0.0** |
| | comp=Z,1.1nm,0.9s,baz=343,slow=1.9,SNR=1.3 | | | | | | | | |
| TXAR | | | | LR | | LR | | 15 28 34.3 | |
| | comp=Z,60µm,18.6s,baz=330,slow=38 | | | | | | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **JCT** | **Junction City** | **46.77** | **122** | IAmb | | IAmb | | 15 07 35.7 | |
| | comp=Z,431nm,0.9s | | | | | | | | |
| **JCT** | **Junction City** | **46.77** | **122** | ⇓P | | **P** | | **15 07 24.9** | **-0.5** |
| **JCT** | **Junction City** | **46.77** | **122** | P | | **P** | | **15 07 25.5** | **+0.2** |
| | baz=340,SNR=97 | | | | | | | | |
| JCT | | | | S | | **S** | | **15 14 14.8** | **-0.5** |
| | baz=340 | | | | | | | | |
| **SWET** | **Sewanee** | **46.83** | **105** | IAMs_20 | | IAMs_20 | | 15 25 53.4 | |
| | comp=Z,65µm,20.0s | | | | | | | | |
| **JTM** | **Tenmabayashi** | **46.84** | **272** | P | | **P** | | **15 07 27.1** | **+1.5** |
| **JTM** | **Tenmabayashi** | **46.84** | **272** | IAmb | | IAmb | | 15 07 40.0 | |
| | comp=Z,291nm,1.1s | | | | | | | | |
| **JTM** | **Tenmabayashi** | **46.84** | **272** | P | | **P** | | **15 07 25.1** | **-0.5** |
| **Y45A** | **Yeager Farm, C** | **46.86** | **110** | IAMs_20 | | IAMs_20 | | 15 26 35.1 | |
| | comp=Z,71µm,20.0s | | | | | | | | |
| **BLA** | **Blacksburg** | **46.92** | **98** | ⇓P | | **P** | | **15 07 25.3** | **-1.1** |
| **BLA** | **Blacksburg** | **46.92** | **98** | P | | **P** | | **15 07 25.4** | **-0.9** |
| | baz=334,SNR=62 | | | | | | | | |
| BLA | | | | S | | **S** | | **15 14 15.7** | **-1.5** |
| | baz=334 | | | | | | | | |
| **BLA** | **Blacksburg** | **46.92** | **98** | P | | **P** | | **15 07 25.3** | **-1.1** |
| **S57A** | **Dark Hollow, R** | **46.93** | **97** | IAmb | | IAmb | | 15 07 37.6 | |
| | comp=Z,335nm,1.1s | | | | | | | | |
| S57A | | | | IAMs_20 | | IAMs_20 | | 15 29 02.0 | |
| | comp=Z,64µm,19.0s | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **46.97** | **283** | *i*P | | **P** | | **15 07 26.6** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **46.97** | **283** | P | | **P** | | **15 07 25.2** | **-1.5** |
| | comp=Z,39nm,0.7s,baz=28,slow=10,SNR=66 | | | | | | | | |
| USRK | | | | LR | | LR | | 15 28 52.5 | |
| | comp=Z,34µm,18.3s,baz=31,slow=38 | | | | | | | | |
| | comp=Z,39nm,0.7s | | | | | | | | |
| **U54A** | **Nelsons Funny** | **47.05** | **100** | IAMs_20 | | IAMs_20 | | 15 28 09.2 | |
| | comp=Z,58µm,20.0s | | | | | | | | |
| **V52A** | **Sevierville** | **47.06** | **102** | IAmb | | IAmb | | 15 07 37.7 | |
| | comp=Z,464nm,1.3s | | | | | | | | |
| V52A | | | | IAMs_20 | | IAMs_20 | | 15 27 53.4 | |
| | comp=Z,79µm,18.0s | | | | | | | | |
| **CBN** | **Cor

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUE** | **Sulen** | **47.85** | **19** | *e*P | **P** | **15 07 33.2** | **-0.1** | OSL | | *e*S | **S** | **15 14 52.8** | **-1.3** | XLT | | sP | sP | 15 08 16.8 | +4.1 |
| SUE | | | | IVmB_BB | | 15 07 42.9 | | OSL | | IVMs_BB | IVMs_BB | 15 32 58.0 | | XLT | | S | **S** | **15 15 35.1** | **+0.1** |
| | comp=Z,3µm,3.6s | | | | | | | | comp=Z,10µm,21.4s | | | | | XLT | | ScS | **ScS** | **15 17 56.3** | **-2.1** |
| SUE | | | | *e*S | **S** | **15 14 28.6** | **-1.2** | **BLS5** | **Blasjo** | **49.64** | **19** | *e*P | **P** | **15 07 46.5** | **-0.6** | XLT | | pmax | pmax | | |
| SUE | | | | *e*SS | **SS** | **15 18 01.5** | **+4.0** | BLS5 | | IVmB_BB | | 15 07 57.1 | | | comp=Z,51nm,1.3s | | | | |
| SUE | | | | IVMs_BB | IVMs_BB | 15 28 01.6 | | | comp=Z,3µm,2.9s | | | | | XLT | | pmax | pmax | | |
| | comp=Z,7µm,21.6s | | | | | | | BLS5 | | *e*S | **S** | **15 14 54.2** | **-1.0** | | comp=Z,4µm,6.5s | | | | |
| **HYA** | **Hoyanger** | **47.91** | **18** | *e*P | **P** | **15 07 33.1** | **-0.6** | BLS5 | | *e*ScS | **ScS** | **15 17 38.9** | **+0.7** | XLT | | LR | LR | | |
| HYA | | | | IVmB_BB | | 15 07 43.0 | | BLS5 | | IVMs_BB | IVMs_BB | 15 28 59.4 | | | comp=Z,43µm,15.8s | | | | |
| | comp=Z,3µm,5.0s | | | | | | | | comp=Z,9µm,22.2s | | | | | XLT | | LR | LR | | |
| HYA | | | | *e*S | **S** | **15 14 31.2** | **+0.6** | **HFS** | **Hagfors** | **49.65** | **14** | P | **P** | **15 07 45.6** | **-1.5** | | comp=Z,11µm,23.7s | | | | |
| HYA | | | | *e*SS | **SS** | **15 18 00.0** | **+1.6** | | comp=Z,141nm,0.8s,baz=7.6,slow=4.5,SNR=82 | | | | | **GAL1** | **Galloway** | **52.54** | **28** | *e*P | **P** | **15 08 08.9** | **0.0** |
| HYA | | | | IVMs_BB | IVMs_BB | 15 28 22.7 | | | comp=Z,141nm,0.8s | | | | | GAL1 | | IAMs_20 | IAMs_20 | 15 30 40.7 | |
| | comp=Z,12µm,21.0s | | | | | | | **KMY** | **Karmoy** | **49.71** | **19** | *e*P | **P** | **15 07 47.2** | **-0.4** | | comp=Z,60µm,23.5s | | | | |
| **VLA** | **Vladivostok** | **47.96** | **282** | *i* P | **P** | **15 07 34.8** | **+0.5** | KMY | | *e*S | **S** | **15 14 56.3** | **+0.3** | **SLIT** | **Slitere, Latvi** | **52.71** | **8** | ⇑P | **P** | **15 08 10.4** | **+0.4** |
| VLA | | | | pmax | pmax | | | KMY | | *e*ScS | **ScS** | **15 17 37.0** | **-1.6** | **SLIT** | **Slitere, Latvi** | **52.71** | **8** | *e*P | **P** | **15 08 09.9** | **-0.2** |
| | comp=Z,54nm,0.9s | | | | | | | KMY | | IVMs_BB | IVMs_BB | 15 35 45.1 | | **JGF** | **Kuroka** | **52.77** | **273** | P | **P** | **15 08 10.9** | **0.0** |
| **Z47A** | **Carrollton** | **47.96** | **108** | IAMs_20 | IAMs_20 | 15 28 36.2 | | | comp=Z,7µm,18.7s | | | | | **JGF** | **Kuroka** | **52.77** | **273** | IAmb | IAmb | 15 08 22.1 | |
| | comp=Z,56µm,19.0s | | | | | | | **KONO** | **Kongsberg** | **49.75** | **16** | P | **P** | **15 07 47.6** | **-0.3** | | comp=Z,377nm,0.9s | | | | |
| **LRW** | **Lerwick** | **47.99** | **23** | *e*P | **P** | **15 07 34.9** | **+0.5** | **KONO** | **Kongsberg** | **49.75** | **16** | *e*P | **P** | **15 07 48.1** | **+0.2** | **MUD** | **Monsted U'grnd** | **52.85** | **18** | ⇑P | **P** | **15 08 12.1** | **+1.0** |
| LRW | | | | IAMs_20 | IAMs_20 | 15 29 10.5 | | KONO | | IVmB_BB | | 15 07 57.3 | | **MUD** | **Monsted U'grnd** | **52.85** | **18** | *i* P | **P** | **15 08 12.0** | **+0.9** |
| | comp=Z,44µm,20.4s | | | | | | | | comp=Z,4µm,4.5s | | | | | MUD | | IAmb | IAmb | 15 08 16.3 | |
| **LRW** | **Lerwick** | **47.99** | **23** | ⇑P | **P** | **15 07 34.7** | **+0.3** | KONO | | *e*S | **S** | **15 14 56.5** | **-0.1** | | comp=Z,112nm,0.9s | | | | |
| **VBMS** | **Vicksburg** | **48.05** | **112** | IAMs_20 | IAMs_20 | 15 26 50.7 | | KONO | | *e*ScS | **ScS** | **15 17 38.3** | **-0.6** | **ARU** | **Arti** | **53.06** | **344** | P | **P** | **15 08 13.2** | **+0.4** |
| | comp=Z,61µm,21.0s | | | | | | | KONO | | IVMs_BB | IVMs_BB | 15 29 45.0 | | ARU | | IAmb | IAmb | 15 08 28.4 | |
| **VBMS** | **Vicksburg** | **48.05** | **112** | ⇑P | **P** | **15 07 36.5** | **+1.3** | | comp=Z,14µm,24.8s | | | | | | comp=Z,1µm,1.8s | | | | |
| **VBMS** | **Vicksburg** | **48.05** | **112** | P | **P** | **15 07 35.7** | **+0.5** | **KONO** | **Kongsberg** | **49.75** | **16** | ⇑P | **P** | **15 07 47.7** | **-0.2** | **ARU** | **Arti** | **53.06** | **344** | *c* *i* P | **P** | **15 08 12.9** | **+0.2** |
| | baz=337,SNR=29 | | | | | | | **KONO** | **Kongsberg** | **49.75** | **16** | *ce*P | **P** | **15 07 47.4** | **-0.5** | ARU | | | | | | 15 09 19.0 | |
| VBMS | | | | S | **S** | **15 14 34.5** | **+1.2** | KONO | | pmax | pmax | | | ARU | | | | | | 15 10 14.3 | |
| | baz=337 | | | | | | | | comp=Z,201nm,1.7s | | | | | ARU | | S | **S** | **15 15 46.3** | **+3.9** |
| **BG3** | **Lake Jocassee** | **48.05** | **102** | IAmb | IAmb | 15 07 45.7 | | **MOY** | **Mondy** | **49.84** | **312** | *e*P | **P** | **15 07 48.9** | **+0.1** | ARU | | | | | | 15 18 00.6 | |
| | comp=Z,401nm,1.0s | | | | | | | MOY | | pmax | pmax | | | ARU | | SS | **SS** | **15 19 14.9** | **-5.7** |
| **T59A** | **Double "B" Far** | **48.13** | **96** | IAMs_20 | IAMs_20 | 15 29 37.6 | | | comp=Z,795nm,2.5s | | | | | ARU | | SSS | SSS | 15 21 10.5 | |
| | comp=Z,71µm,18.0s | | | | | | | **LPIG** | **La Paz** | **50.01** | **137** | LR | LR | 15 30 23.6 | | ARU | | pmax | pmax | | |
| **146A** | **Union** | **48.15** | **110** | IAMs_20 | IAMs_20 | 15 24 43.2 | | | comp=Z,40µm,18.1s,baz=344,slow=38 | | | | | | comp=Z,302nm,1.8s | | | | |
| | comp=Z,79µm,21.0s | | | | | | | **KPL** | **Plockton** | **50.01** | **27** | *e*P | **P** | **15 07 50.1** | **+0.2** | **KESW** | **Keswick, Cumbr** | **53.06** | **27** | *e*P | **P** | **15 08 12.7** | **0.0** |
| **S61A** | **Accomac** | **48.15** | **94** | IAMs_20 | IAMs_20 | 15 27 27.1 | | KPL | | IAmb | IAmb | 15 07 53.7 | | KESW | | IAmb | IAmb | 15 08 17.0 | |
| | comp=Z,63µm,18.0s | | | | | | | | comp=Z,146nm,0.9s | | | | | | comp=Z,197nm,0.9s | | | | |
| **KEF** | **Keuruu** | **48.29** | **6** | *e*P | **P** | **15 07 36.0** | **-0.7** | KPL | | IAMs_20 | IAMs_20 | 15 29 53.5 | | KESW | | IAMs_20 | IAMs_20 | 15 31 00.3 | |
| **IRK** | **Irkutsk** | **48.45** | **310** | *e*P | **P** | **15 07 37.4** | **-0.6** | | comp=Z,49µm,25.4s | | | | | | comp=Z,36µm,22.8s | | | | |
| IRK | | | | pmax | pmax | | | **KVTX** | **Kingsville** | **50.09** | **122** | IAMs_20 | IAMs_20 | 15 28 31.8 | | **ILTH** | **Belurgan, Co L** | **53.08** | **29** | P | **P** | **15 08 13.5** | **+0.7** |
| | comp=Z,735nm,2.4s | | | | | | | | comp=Z,74µm,18.0s | | | | | **ILTH** | **Belurgan, Co L** | **53.08** | **29** | *e*P | **P** | **15 08 12.3** | **-0.5** |
| **ASK** | **Askoy** | **48.46** | **19** | *e*P | **P** | **15 07 37.5** | **-0.5** | **MCD** | **Coleburn Disti** | **50.15** | **26** | *e*P | **P** | **15 07 51.1** | **+0.2** | **INU** | **Inuyama** | **53.12** | **273** | P | **P** | **15 08 13.4** | **0.0** |
| ASK | | | | IVmB_BB | | 15 07 47.3 | | **BRAL** | **Brewton** | **50.16** | **108** | IAMs_20 | IAMs_20 | 15 27 47.5 | | **IGLA** | **Glengowla, Co** | **53.12** | **31** | *e*P | **P** | **15 08 13.0** | **-0.2** |
| | comp=Z,3µm,4.3s | | | | | | | | comp=Z,49µm,21.0s | | | | | IGLA | | IAMs_20 | IAMs_20 | 15 31 57.4 | |
| ASK | | | | *i* S | **S** | **15 14 38.8** | **+0.3** | **BRAL** | **Brewton** | **50.16** | **108** | ⇑P | **P** | **15 07 52.0** | **+0.7** | | comp=Z,38µm,20.4s | | | | |
| **LRAL** | **Lakeview Retre** | **48.46** | **107** | IAMs_20 | IAMs_20 | 15 29 04.5 | | **BRAL** | **Brewton** | **50.16** | **108** | P | **P** | **15 07 51.6** | **+0.3** | **IOMK** | **Kirk Michael** | **53.15** | **28** | *e*P | **P** | **15 08 13.3** | **-0.1** |
| | comp=Z,77µm,22.0s | | | | | | | | baz=337,SNR=23 | | | | | IOMK | | IAmb | IAmb | 15 08 16.4 | |
| **LRAL** | **Lakeview Retre** | **48.46** | **107** | ⇑P | **P** | **15 07 37.3** | **-1.1** | BRAL | | S | **S** | **15 15 02.9** | **-0.1** | | comp=Z,230nm,1.0s | | | | |
| **LRAL** | **Lakeview Retre** | **48.46** | **107** | P | **P** | **15 07 38.6** | **+0.2** | | baz=337 | | | | | IOMK | | IAMs_20 | IAMs_20 | 15 30 56.8 | |
| | baz=337,SNR=161 | | | | | | | **Y58A** | **Scranton** | **50.16** | **100** | IAMs_20 | IAMs_20 | 15 29 10.6 | | | comp=Z,102µm,23.7s | | | | |
| LRAL | | | | S | **S** | **15 14 38.7** | **-0.4** | | comp=Z,88µm,21.0s | | | | | **ZAIG** | **Zacatecas** | **53.27** | **129** | IAmb | IAmb | 15 08 27.0 | |
| | baz=337 | | | | | | | **MEF** | **Metsahovi** | **50.22** | **7** | *e*P | **P** | **15 07 50.4** | **-1.0** | | comp=Z,1µm,1.7s | | | | |
| **HKT** | **Hockley** | **48.47** | **118** | P | **P** | **15 07 38.5** | **+0.2** | **POHA** | **Pohakuloa** | **50.27** | **193** | ⇑P | **P** | 15 08 00.1 | +7.5 | **ZAIG** | **Zacatecas** | **53.27** | **129** | ⇓P | **P** | **15 08 15.7** | **+0.7** |
| HKT | | | | IAmb | IAmb | 15 07 50.7 | | **SLBS** | **Sierra La Lagu** | **50.49** | **137** | ⇑P | **P** | **15 07 55.8** | **+1.8** | **DSB** | **Dublin** | **53.82** | **29** | P | **P** | **15 08 19.3** | **+1.0** |
| | comp=Z,1µm,1.9s | | | | | | | **Y60A** | **Bolivia** | **50.58** | **98** | IAMs_20 | IAMs_20 | 15 27 22.4 | | **DSB** | **Dublin** | **53.82** | **29** | P | **P** | **15 08 19.1** | **+0.8** |
| **HKT** | **Hockley** | **48.47** | **118** | ⇑P | **P** | **15 07 38.1** | **-0.2** | | comp=Z,91µm,22.0s | | | | | **DSB** | **Dublin** | **53.82** | **29** | ⇑P | **P** | **15 08 18.3** | **0.0** |
| **HKT** | **Hockley** | **48.47** | **118** | *i* P | **P** | **15 07 39.0** | **+0.7** | **NHSC** | **New Hope** | **50.71** | **101** | IAMs_20 | IAMs_20 | 15 30 41.1 | | **SSRD** | **Sdr. Stenderup** | **53.86** | **17** | *i* P | **P** | **15 08 19.4** | **+0.8** |
| HKT | | | | pmax | pmax | | | | comp=Z,66µm,18.0s | | | | | SSRD | | IAmb | IAmb | 15 08 22.3 | |
| | comp=Z,252nm,1.2s | | | | | | | **NHSC** | **New Hope** | **50.71** | **101** | ⇑P | **P** | **15 07 55.3** | **-0.2** | | comp=Z,133nm,0.8s | | | | |
| **KMSC** | **Kings Mountain** | **48.47** | **101** | IAMs_20 | IAMs_20 | 15 29 02.7 | | **NHSC** | **New Hope** | **50.71** | **101** | P | **P** | **15 07 55.3** | **-0.2** | **HPK** | **Haverah Park** | **53.90** | **26** | *e*P | **P** | **15 08 19.3** | **+0.4** |
| | comp=Z,73µm,19.0s | | | | | | | | baz=336,SNR=20 | | | | | HPK | | IAMs_20 | IAMs_20 | 15 34 49.4 | |
| **KMSC** | **Kings Mountain** | **48.47** | **101** | P | **P** | **15 07 37.5** | **-0.9** | NHSC | | S | **S** | **15 15 11.4** | **+0.9** | | comp=Z,47µm,20.8s | | | | |
| | baz=335,SNR=72 | | | | | | | | baz=336 | | | | | **COP** | **Copenhagen** | **53.93** | **15** | *i* P | **P** | **15 08 21.4** | **+2.3** |
| KMSC | | | | S | **S** | **15 14 36.9** | **-2.3** | **SNART** | **Snartemo** | **50.79** | **18** | *e*P | **P** | **15 07 55.5** | **-0.2** | **WPS** | **Cemaes, Angles** | **53.98** | **28** | *e*P | **P** | **15 08 19.6** | **+0.1** |
| | baz=335 | | | | | | | **DRUM** | **Mains of Drumt** | **50.91** | **25** | *e*P | **P** | **15 07 56.8** | **+0.1** | WPS | | IAMs_20 | IAMs_20 | 15 31 47.4 | |
| **HPIG** | | **48.47** | **131** | ⇓P | **P** | **15 07 39.8** | **+1.0** | DRUM | | IAmb | IAmb | 15 08 00.5 | | | comp=Z,54µm,25.4s | | | | |
| **NB201** | **NORSAR Array S** | **48.53** | **15** | IAmb | IAmb | 15 08 46.5 | | | comp=Z,281nm,0.9s | | | | | **WME** | **Myndd Eilian** | **54.02** | **28** | *e*P | **P** | **15 08 19.4** | **-0.4** |
| | comp=Z,526nm,1.8s | | | | | | | DRUM | | IAMs_20 | IAMs_20 | 15 30 58.2 | | **WLF1** | **Llynfaes** | **54.11** | **28** | *e*P | **P** | **15 08 20.2** | **-0.2** |
| **NB2** | **NORSAR Subarra** | **48.53** | **15** | P | **P** | **15 07 38.1** | **-0.5** | | comp=Z,69µm,21.8s | | | | | WLF1 | | IAmb | IAmb | 15 08 24.0 | |
| | comp=Z,1µm,3.3s,baz=349,slow=7.9 | | | | | | | **ARBE** | **Arbavere** | **51.07** | **6** | *e*P | **P** | **15 07 55.3** | **-2.5** | | comp=Z,766nm,1.7s | | | | |
| **NB2** | **NORSAR Subarra** | **48.53** | **15** | P | **P** | **15 07 38.1** | **-0.5** | **TIGA** | **Tifton** | **51.07** | **105** | IAMs_20 | IAMs_20 | 15 29 09.6 | | WLF1 | | IAMs_20 | IAMs_20 | 15 32 03.4 | |
| | baz=349,slow=7.9 | | | | | | | | comp=Z,66µm,19.0s | | | | | | comp=Z,107µm,23.9s | | | | |
| **NB2** | **NORSAR Subarra** | **48.53** | **15** | P | **P** | **15 07 42.3** | **+3.7** | **TIGA** | **Tifton** | **51.07** | **105** | P | **P** | **15 07 57.7** | **-0.5** | **JHJ2** | **Mitsune** | **54.16** | **269** | P | **P** | **15 08 23.2** | **+2.1** |
| **NOA** | **NORSAR Array B** | **48.53** | **15** | P | **P** | **15 07 36.5** | **-2.1** | | baz=337,SNR=83 | | | | | **JHJ2** | **Mitsune** | **54.16** | **269** | ⇓P | **P** | **15 08 25.2** | **+4.2** |
| | comp=Z,18nm,0.7s,baz=348,slow=7.8,SNR=44 | | | | | | | TIGA | | S | **S** | **15 15 15.4** | **-0.2** | **JHJ** | **Hachijo jima 2** | **54.16** | **269** | P | **P** | **15 08 21.8** | **+0.7** |
| | comp=Z,18nm,0.7s | | | | | | | | baz=337 | | | | | | comp=Z,270nm,0.8s,baz=54,slow=12,SNR=12 | | | | |
| **441A** | **DeRidder** | **48.55** | **115** | IAMs_20 | IAMs_20 | 15 29 45.9 | | **LAWE** | **Loch Awe, Argy** | **51.09** | **28** | *e*P | **P** | **15 07 58.1** | **+0.1** | JHJ | | LR | LR | 15 34 14.0 | |
| | comp=Z,77µm,19.0s | | | | | | | LAWE | | IAmb | IAmb | 15 08 01.0 | | | comp=Z,5µm,18.3s,baz=36,slow=39 | | | | |
| **BER** | **Bergen** | **48.58** | **19** | *e*P | **P** | **15 07 37.6** | **-1.3** | | comp=Z,302nm,1.5s | | | | | | comp=Z,270nm,0.8s | | | | |
| BER | | | | IVmB_BB | | 15 07 48.1 | | LAWE | | IAMs_20 | IAMs_20 | 15 30 11.9 | | **VAL** | **Valentia** | **54.37** | **33** | P | **P** | **15 08 24.0** | **+1.7** |
| | comp=Z,3µm,4.6s | | | | | | | | comp=Z,52µm,23.9s | | | | | **VAL** | **Valentia** | **54.37** | **33** | P | **P** | **15 08 20.8** | **-1.5** |
| BER | | | | *e*PP | **PP** | **15 09 30.3** | **-1.0** | **451A** | **Vernon** | **51.10** | **107** | IAMs_20 | IAMs_20 | 15 30 36.4 | | **VAL** | **Valentia** | **54.37** | **33** | ⇑P | **P** | **15 08 25.9** | **+3.6** |
| BER | | | | *e*S | **S** | **15 14 37.5** | **-2.5** | | comp=Z,76µm,19.0s | | | | | **KSRS** | **Korea Array** | **54.37** | **282** | P | **P** | **15 08 22.2** | **-0.4** |
| BER | | | | *e*SS | **SS** | **15 18 10.5** | **+1.3** | **ZALV** | **Zalesovo Beam** | **51.49** | **325** | P | **P** | **15 07 60.0** | **-1.1** | | comp=Z,31nm,0.9s,baz=19,slow=7.2,SNR=28 | | | | |
| BER | | | | IVMs_BB | IVMs_BB | 15 38 56.9 | | **ZALV** | **Zalesovo Beam** | **51.49** | **325** | P | **P** | **15 07 59.2** | **-1.9** | KSRS | | PKPPKP | **P'P'df** | **15 38 32.8** | **-6.2** |
| | comp=Z,6µm,15.8s | | | | | | | | comp=Z,15nm,0.5s,baz=16,slow=6.6,SNR=46 | | | | | | comp=Z,1.0nm,0.8s,baz=207,slow=1.4,SNR=5.4 | | | | |
| **PAULI** | **Pauline** | **48.59** | **101** | IAmb | IAmb | 15 07 48.5 | | ZALV | | LR | LR | 15 33 59.0 | | | comp=Z,31nm,0.9s | | | | |
| | comp=Z,410nm,0.9s | | | | | | | | comp=Z,9µm,18.5s,baz=17,slow=41 | | | | | **KSAR** | **Wonju Array Be** | **54.40** | **282** | P | **P** | **15 08 22.3** | **-0.4** |
| PAULI | | | | IAMs_20 | IAMs_20 | 15 28 52.0 | | ZALV | | PKP2ab | | 15 39 27.8 | | **KSAR** | **Wonju Array Be** | **54.40** | **282** | P | **P** | **15 08 22.3** | **-0.4** |
| | comp=Z,91µm,21.0s | | | | | | | | comp=Z,0.8nm,0.6s,baz=298,slow=3.2,SNR=5.0 | | | | | **LBWR** | **Ladybower, Pea** | **54.42** | **26** | *e*P | **P** | **15 08 22.2** | **-0.5** |
| **MSHR** | **Mys Shultsa** | **48.68** | **282** | *ce*P | **P** | **15 07 40.3** | **+0.4** | | comp=Z,15nm,0.5s | | | | | LBWR | | IAmb | IAmb | 15 08 26.6 | |
| MSHR | | | | pmax | pmax | | | **ZALV** | **Zalesovo Beam** | **51.49** | **325** | P | **P** | **15 08 00.0** | **-1.1** | | comp=Z,185nm,1.0s | | | | |
| | comp=Z,76nm,1.2s | | | | | | | **MAJO** | **Matsushiro** | **51.63** | **272** | P | **P** | **15 08 02.0** | **-0.4** | LBWR | | IAMs_20 | IAMs_20 | 15 32 17.3 | |
| MSHR | | | | MLR | MLR | | | **MAJO** | **Matsushiro** | **51.63** | **272** | P | **P** | **15 08 00.4** | **-2.0** | | comp=Z,51µm,23.5s | | | | |
| | comp=Z,27µm,14.0s | | | | | | | **MAJO** | **Matsushiro** | **51.63** | **272** | *i* P | **P** | **15 08 01.7** | **-0.7** | **VSVD** | **Vaisvydziai** | **54.44** | **7** | *e*P | **P** | **15 08 22.2** | **-0.5** |
| **PSTR** | **Posyet** | **48.74** | **283** | *i* P | **P** | **15 07 42.0** | **+1.6** | MAJO | | pmax | pmax | | | **IWEX** | **Carrickbyrne,** | **54.59** | **30** | P | **P** | **15 08 24.8** | **+0.9** |
| **KIP** | **Kipapa** | **48.84** | **196** | P | **P** | **15 07 43.2** | **+1.9** | | comp=Z,58nm,0.7s | | | | | **LLW** | **Llanuwychllyn** | **54.65** | **28** | *e*P | **P** | **15 08 23.9** | **-0.5** |
| **KIP** | **Kipapa** | **48.84** | **196** | *ce*P | **P** | **15 07 43.0** | **+1.7** | **MAT** | **Matsushiro** | **51.63** | **272** | P | **P** | **15 08 01.8** | **-0.5** | **FOEL** | **Foel Wylfa** | **54.69** | **27** | *e*P | **P** | **15 08 24.7** | **0.0** |
| KIP | | | | pmax | pmax | | | **MJAR** | **Matsushiro Arr** | **51.63** | **272** | P | **P** | **15 08 01.8** | **-0.6** | FOEL | | IAmb | IAmb | 15 08 28.4 | |
| | comp=Z,71nm,1.7s | | | | | | | | comp=Z,109nm,0.8s,baz=9.0,slow=8.0,SNR=129 | | | | | | comp=Z,193nm,1.3s | | | | |
| **NC602** | **NORSAR Array S** | **48.86** | **15** | *e*P | **P** | **15 07 40.8** | **-0.3** | MJAR | | LR | LR | 15 30 50.7 | | FOEL | | IAMs_20 | IAMs_20 | 15 31 56.5 | |
| NC602 | | | | *e*S | **S** | **15 14 40.9** | **-3.3** | MJAR | | PKPPKP | P'P'df | 15 38 32.9 | -9.2 | | comp=Z,40µm,25.7s | | | | |
| NC602 | | | | *e*SS | **SS** | **15 18 16.1** | **+2.2** | | comp=Z,14µm,21.6s,baz=36,slow=37 | | | | | **BSD** | **Bornholm Skovb** | **54.72** | **14** | ⇓P | **P** | **15 08 28.5** | **+3.7** |
| NC602 | | | | IVMs_BB | IVMs_BB | 15 28 24.2 | | | comp=Z,2.9nm,1.1s,baz=191,slow=4.5,SNR=4.8 | | | | | **BSD** | **Bornholm Skovb** | **54.72** | **14** | *e*P | **P** | **15 08 25.1** | **+0.2** |
| | comp=Z,11µm,27.1s | | | | | | | | comp=Z,109nm,0.8s | | | | | **BSD** | **Bornholm Skovb** | **54.72** | **14** | *i* P | **P** | **15 08 27.0** | **+2.2** |
| **833A** | **Chaparral WMA,** | **48.92** | **123** | P | **P** | **15 07 42.9** | **+1.0** | **ULN** | **Ulaanbaatar** | **51.63** | **305** | P | **P** | **15 08 00.9** | **-1.5** | **IZAR** | **Zarasai** | **54.76** | **6** | *e*P | **P** | **15 08 25.2** | **0.0** |
| | baz=340,SNR=31 | | | | | | | **ULN** | **Ulaanbaatar** | **51.63** | **305** | P | **P** | **15 08 04.7** | **+2.3** | **INCN** | **Inchon** | **54.79** | **283** | ⇑P | **P** | **15 08 27.2** | **+1.6** |
| 833A | | | | S | **S** | **15 14 45.9** | **+0.3** | ULN | | | P | | **P** | **15 08 04.7** | **+2.3** | **INCN** | **Inchon** | **54.79** | **283** | P | **P** | **15 08 28.2** | **+2.6** |
| | baz=340 | | | | | | | **ULN** | **Ulaanbaatar** | **51.63** | **305** | *ce*P | **P** | **15 08 02.8** | **+0.4** | INCN | | | P | | **P** | **15 08 28.2** | **+2.6** |
| **W57A** | **Gilead** | **48.92** | **99** | IAmb | IAmb | 15 07 51.5 | | ULN | | pmax | pmax | | | | comp=Z,127nm,1.7s | | | | | **DWPF** | **Disney Wildern** | **54.86** | **104** | ⇑P | **P** | **15 08 26.5** | **+0.4** |
| | comp=Z,942nm,1.5s | | | | | | | | comp=Z,127nm,1.7s | | | | | **DWPF** | **Disney Wildern** | **54.86** | **104** | P | **P** | **15 08 26.6** | **+0.5** |
| **HODGE** | **Hodges** | **48.98** | **102** | IAMs_20 | IAMs_20 | 15 29 08.1 | | **KIRV** | **Kirov** | **51.64** | **350** | *ce*P | **P** | **15 08 03.0** | **+0.9** | | baz=337 | | | | |
| | comp=Z,72µm,19.0s | | | | | | | **MTSE** | **Matsula** | **51.70** | **7** | *e*P | **P** | **15 08 02.3** | **-0.3** | DWPF | | S | **S** | **15 16 07.6** | **+0.4** |
| **FIA1** | **FINESS Array S** | **49.06** | **6** | IAmb | IAmb | 15 07 50.4 | | **SONM** | **Songino Array** | **51.84** | **306** | P | **P** | **15 08 02.4** | **-1.6** | | baz=337 | | | | |
| | comp=Z,702nm,1.2s | | | | | | | **SONM** | **Songino Array** | **51.84** | **306** | P | **P** | **15 08 03.4** | **-0.6** | **BRVK** | **Borovoye** | **54.91** | **335** | P | **P** | **15 08 26.6** | **+0.3** |
| **FINES** | **FINESS Array B** | **49.06** | **6** | P | **P** | **15 07 42.2** | **-0.4** | | comp=Z,53nm,1.1s,baz=25,slow=4.1,SNR=71 | | | | | BRVK | | IAmb | IAmb | 15 08 41.9 | |
| **FINES** | **FINESS Array B** | **49.06** | **6** | P | **P** | **15 07 40.7** | **-1.9** | SONM | | PKPPKP | **P'P'df** | **15 38 40.2** | **-4.6** | | comp=Z,607nm,1.6s | | | | |
| | comp=Z,10nm,0.5s,baz=1.9,slow=7.9,SNR=70 | | | | | | | | comp=Z,0.7nm,0.9s,baz=264,slow=3.0,SNR=3.7 | | | | | **BRVK** | **Borovoye** | **54.91** | **335** | ⇓P | **P** | **15 08 26.5** | **+0.3** |
| | comp=Z,10nm,0.5s | | | | | | | SONM | | PKP2ab | | 15 39 22.5 | | **BRVK** | **Borovoye** | **54.91** | **335** | P | **P** | **15 08 27.7** | **+1.4** |
| **FINES** | **FINESS Array B** | **49.06** | **6** | P | **P** | **15 07 42.2** | **-0.4** | | comp=Z,1.7nm,1.0s,baz=180,slow=1.2,SNR=5.5 | | | | | BRVK | | P | P | | **P** | **15 08 27.7** | **+1.4** |
| **ODD1** | **Odda** | **49.18** | **18** | *e*P | **P** | **15 07 42.9** | **-0.8** | | comp=Z,53nm,1.1s | | | | | **BRVK** | **Borovoye** | **54.91** | **335** | *ce*P | **P** | **15 08 26.3** | **0.0** |
| ODD1 | | | | IVmB_BB | | 15 07 51.0 | | **SONM** | **Songino Array** | **51.84** | **306** | P | **P** | **15 08 02.4** | **-1.6** | BRVK | | pmax | pmax | | |
| | comp=Z,3µm,3.3s | | | | | | | SONM | | pmax | pmax | | | | comp=Z,241nm,1.7s | | | | |
| ODD1 | | | | *e*S | **S** | **15 14 51.3** | **+2.5** | | comp=Z,192nm,1.0s | | | | | BRVK | | MLR | MLR | | |
| ODD1 | | | | *e*SS | **SS** | **15 18 20.7** | **+1.6** | **JRY** | **Ryogami san** | **51.86** | **271** | P | **P** | **15 08 03.4** | **-0.7** | | comp=Z,22µm,23.0s | | | | |
| ODD1 | | | | IVMs_BB | IVMs_BB | 15 28 59.4 | | **IDGL** | **Inch Island, C** | **51.87** | **29** | P | **P** | **15 08 03.8** | **-0.1** | **MOS** | **Moscow** | **54.91** | **358** | *e*P | **P** | **15 08 25.6** | **-0.6** |
| | comp=Z,11µm,23.2s | | | | | | | **IDGL** | **Inch Island, C** | **51.87** | **29** | *e*P | **P** | **15 08 03.8** | **-0.1** | MOS | | *e* | | 15 09 27.2 | |
| **BIRD** | **Birdtown, Kers** | **49.22** | **100** | IAmb | IAmb | 15 07 54.0 | | **SNY** | **Shenyang** | **51.91** | **288** | ⇑P | **P** | **15 08 06.0** | **+1.6** | MOS | | *e* | | 15 10 35.5 | |
| | comp=Z,1µm,1.7s | | | | | | | SNY | | pmax | pmax | | | MOS | | *e*PPP | PPP | 15 11 42.3 | |
| **VALR** | **Valaam** | **49.26** | **2** | *i* P | **P** | **15 07 44.4** | **+0.3** | | comp=Z,35nm,1.3s | | | | | MOS | | *e*S | **S** | **15 16 06.9** | **-0.4** |
| VALR | | | | pmax | pmax | | | SNY | | pmax | pmax | | | MOS | | *e* | | 15 18 12.3 | |
| | comp=Z,462nm,0.9s | | | | | | | | comp=Z,5µm,6.7s | | | | | MOS | | *e*SS | **SS** | **15 19 53.6** | **+3.9** |
| VALR | | | | MLR | MLR | | | SNY | | LR | LR | | | MOS | | pmax | pmax | | |
| | comp=Z,5µm,15.0s | | | | | | | | comp=Z,13µm,16.7s | | | | | | comp=N,286nm,1.1s | | | | |
| **JSC** | **Jenkinsville** | **49.27** | **101** | IAMs_20 | IAMs_20 | 15 26 15.0 | | **VSU** | **Vasula** | **52.07** | **5** | ⇑P | **P** | **15 08 05.4** | **+0.1** | MOS | | pmax | pmax | | |
| | comp=Z,47µm,19.0s | | | | | | | **VSU** | **Vasula** | **52.07** | **5** | *ce*P | **P** | **15 08 05.6** | **+0.3** | | comp=Z,297nm,1.1s | | | | |
| **RAF** | **Rauma** | **49.30** | **8** | *e*P | **P** | **15 07 43.6** | **-0.8** | VSU | | pmax | pmax | | | MOS | | pmax | pmax | | |
| **GOGA** | **Godfrey** | **49.31** | **104** | ⇑P | **P** | **15 07 43.8** | **-1.0** | | comp=Z,244nm,0.8s | | | | | | comp=Z,2µm,3.0s | | | | |
| **GOGA** | **Godfrey** | **49.31** | **104** | P | **P** | **15 07 44.4** | **-0.5** | **OVD** | **Ostervraa, Den** | **52.11** | **17** | *i* P | **P** | **15 08 06.4** | **+0.8** | MOS | | pmax | pmax | | |
| | baz=336,SNR=190 | | | | | | | OVD | | IAmb | IAmb | 15 08 09.8 | | | comp=N,2µm,3.0s | | | | |
| GOGA | | | | S | **S** | **15 14 48.9** | **-2.2** | | comp=Z,141nm,0.8s | | | | | MOS | | smax | smax | | |
| | baz=336 | | | | | | | **JGN** | **Niukaw** | **52.23** | **273** | P | **P** | **15 08 06.4** | **-0.5** | | comp=N,1µm,3.2s | | | | |
| **CN2** | **Changchun** | **49.53** | **288** | ⇑P | **P** | **15 07 45.2** | **-1.2** | **GOET** | **G??ttrup** | **52.28** | **17** | *i* P | **P** | **15 08 10.4** | **+3.5** | MOS | | smax | smax | | |
| CN2 | | | | *e*S | **S** | **15 14 49.9** | **-4.0** | **EKA** | **Eskdalemuir Ar** | **52.34** | **26** | P | **P** | **15 08 05.3** | **-2.0** | | comp=E,3µm,4.0s | | | | |
| CN2 | | | | pmax | pmax | | | | comp=Z,30nm,0.5s,baz=334,slow=6.4,SNR=61 | | | | | MOS | | MLR | MLR | | |
| | comp=Z,20nm,0.8s | | | | | | | | comp=Z,30nm,0.5s | | | | | | comp=Z,16µm,21.0s | | | | |
| CN2 | | | | pmax | pmax | | | **ESK** | **Eskdalemuir** | **52.34** | **26** | P | **P** | **15 08 07.2** | **-0.2** | MOS | | MLR | MLR | | |
| | comp=Z,5µm,5.0s | | | | | | | **ESK** | **Eskdalemuir** | **52.34** | **26** | *e*P | **P** | **15 08 07.6** | **+0.2** | | comp=N,15µm,20.0s | | | | |
| CN2 | | | | LR | LR | | | ESK | | IAMs_20 | IAMs_20 | 15 33 50.8 | | **PABE** | **Paberze** | **54.92** | **7** | IAmb | IAmb | 15 08 36.7 | |
| | comp=Z,29µm,17.0s | | | | | | | | comp=Z,44µm,20.6s | | | | | | comp=Z,411nm,1.2s | | | | |
| CN2 | | | | LR | LR | | | **ESK** | **Eskdalemuir** | **52.34** | **26** | ⇑P | **P** | **15 08 07.4** | **0.0** | **PABE** | **Paberze** | **54.92** | **7** | *e*P | **P** | **15 08 25.2** | **-1.0** |
| | comp=Z,31µm,17.0s | | | | | | | **ESK** | **Eskdalemuir** | **52.34** | **26** | P | **P** | **15 08 07.2** | **-0.2** | **BVA0** | **Borovoye Array** | **54.92** | **335** | *i* P | **P** | **15 08 25.4** | **-1.0** |
| CN2 | | | | LR | LR | | | ESK | | pmax | pmax | | | **BVAR** | **Borovoye Array** | **54.92** | **335** | P | **P

HLM1 IAMs_20 IAMs_20 15 31 57.5
comp=Z,41µm,23.2s
**DL2 Dalian 55.19 288** P **P** **15 08 29.8 +1.4**
DL2 pmax pmax
comp=Z,220nm,1.2s
DL2 pmax pmax
comp=Z,6µm,7.3s
DL2 LR LR
comp=Z,20µm,14.6s
DL2 LR LR
comp=Z,34µm,14.0s
DL2 LR LR
comp=Z,40µm,13.3s
**RSBS Rosebush, Pemb 55.34 29** *e*P **P** **15 08 29.4 0.0**
RSBS IAmb IAmb 15 08 33.2
comp=Z,150nm,1.0s
RSBS IAMs_20 IAMs_20 15 33 05.4
comp=Z,45µm,21.8s
**WACR West Acre 55.43 24** *e*P **P** **15 08 30.8 +0.8**
WACR IAMs_20 IAMs_20 15 32 59.5
comp=Z,44µm,23.2s
**BSEG Bad Segeberg 55.45 17** *e*P **P** **15 08 30.9 +0.7**
comp=Z,202nm,1.1s,baz=351,slow=7.0
**TJN Taejon 55.54 282** P **P** **15 08 31.6 +0.6**
**TJN Taejon 55.54 282** *ce*P **P** **15 08 31.6 +0.6**
**OBN Obninsk 55.55 359** P **P** **15 08 31.6 +0.8**
OBN IAmb IAmb 15 08 45.3
comp=Z,801nm,1.5s
**OBN Obninsk 55.55 359** ⇓P **P** **15 08 30.8 0.0**
**OBN Obninsk 55.55 359** ⇓P **P** **15 08 32.9 +2.1**
**OBN Obninsk 55.55 359** *d i*P **P** **15 08 30.6 -0.2**
OBN *e* 15 09 31.8
OBN *e* 15 10 38.1
OBN *i* S **S** **15 16 12.4 -3.4**
OBN pmax pmax
comp=Z,260nm,1.7s
OBN MLR MLR
comp=Z,11µm,19.0s
**JMN Monobe 55.68 275** IAmb IAmb 15 08 47.7
comp=Z,544nm,1.3s
**SEM Semipalatinsk 55.75 327** *e*P **P** **15 08 32.0 -0.6**
comp=Z,70nm,1.1s,baz=326
SEM *e*S **S** **15 16 19.8 +0.6**
baz=326
SEM LR LR 15 33 02.1
comp=Z,5µm,15.0s,baz=326
**SEM Semipalatinsk 55.75 327** *e*P **P** **15 08 32.0 -0.6**
SEM *e*S **S** **15 16 19.8 +0.6**
SEM pmax pmax
comp=Z,70nm,1.1s
**KURK Kurchatov 55.76 328** P **P** **15 08 31.5 -1.0**
KURK IAmb IAmb 15 08 46.8
comp=Z,517nm,1.2s
**KURK Kurchatov 55.76 328** P **P** **15 08 34.6 +2.2**
**KURK Kurchatov 55.76 328** *ce*P **P** **15 08 31.9 -0.5**
KURK pmax pmax
comp=Z,423nm,1.7s
KURK MLR MLR
comp=Z,14µm,24.0s
**MONM Monmouth 55.77 27** *e*P **P** **15 08 32.5 +0.1**
MONM IAmb IAmb 15 08 36.5
comp=Z,213nm,0.9s
MONM IAMs_20 IAMs_20 15 32 28.9
comp=Z,44µm,24.3s
**JRQG Juriquilla Cam 55.82 127** IAMs_20 IAMs_20 15 34 41.5
comp=Z,37µm,18.0s
**KURBB Kurchatov Arra 55.87 328** P **P** **15 08 32.2 -1.0**
comp=Z,96nm,1.2s,baz=13,slow=7.0,SNR=112
KURBB PKPPKP P'P'df 15 38 27.1 -13
comp=Z,0.3nm,0.4s,baz=234,slow=3.2,SNR=4.3
comp=Z,96nm,1.2s
**BJI Beijing 55.94 294** P **P** **15 08 35.5 +1.7**
BJI S **S** **15 16 20.3 -1.2**
BJI pmax pmax
comp=Z,14nm,1.3s
BJI LR LR
comp=Z,9µm,14.7s
BJI LR LR
comp=Z,12µm,18.6s
BJI LR LR
comp=Z,10µm,23.1s
**BJT Baijiatuau 55.96 294** P **P** **15 08 36.4 +2.4**
**MNK Minsk 56.07 5** *i* P **P** **15 08 35.2 +0.7**
MNK *i* 15 09 33.0
MNK *i* 15 10 40.2
MNK *i* PPP PPP 15 11 54.0
MNK *i* S **S** **15 16 26.2 +3.4**
MNK *i* 15 18 25.8
MNK *i* SS **SS** **15 20 13.9 +6.0**
MNK pmax pmax
comp=Z,136nm,0.9s
MNK pmax pmax
comp=E,171nm,1.1s
MNK pmax pmax
comp=N,52nm,0.8s
MNK MLR MLR
comp=N,6µm,21.0s
MNK MLR MLR
comp=E,16µm,21.0s
MNK MLR MLR
comp=Z,18µm,21.0s
**SWN1 Swindon 56.24 27** *e*P **P** **15 08 35.7 -0.2**
SWN1 IAMs_20 IAMs_20 15 32 45.4
comp=Z,49µm,24.1s
**HTL Hartland 56.31 29** *e*P **P** **15 08 36.5 +0.2**
HTL IAMs_20 IAMs_20 15 32 42.9
comp=Z,53µm,22.7s
**SUW Suwalki 56.37 8** *e*P **P** **15 08 36.6 0.0**
SUW *e*S **S** **15 16 24.6 -2.2**
SUW *e*L L 15 40 52.8
**SUW Suwalki 56.37 8** IAmb IAmb 15 08 44.7
comp=Z,294nm,0.9s
**SUW Suwalki 56.37 8** ⇑P **P** **15 08 36.7 0.0**
**SUW Suwalki 56.37 8** *e*P **P** **15 08 36.4 -0.3**
**SUW Suwalki 56.37 8** P **P** **15 08 36.7 0.0**
**GORT1 Trebel 56.49 17** *e*P **P** **15 08 39.8 +2.3**
comp=Z,1µm,2.2s,baz=351,slow=7.0
**JTU Tsushima 56.51 279** P **P** **15 08 41.0 +3.0**
**RETH Rethem/Aller, 56.53 18** *e*P **P** **15 08 39.9 +2.1**
comp=Z,28µm,8.5s,baz=351,slow=7.0
**HHC Hu-ho-hao-te 56.66 298** ⇓P **P** **15 08 40.5 +1.4**
HHC sP sP 15 08 47.4 +4.3
HHC PP **PP** **15 10 52.4 +7.7**
HHC S **S** **15 16 31.7 +0.4**
HHC sS sS 15 16 39.0 +3.0
HHC ScS **ScS** **15 18 25.8 -2.5**
HHC pmax pmax
comp=Z,37nm,1.2s
HHC pmax pmax
comp=Z,4µm,6.3s
HHC LR LR
comp=Z,35µm,13.7s
HHC LR LR
comp=Z,17µm,13.7s
HHC LR LR
comp=Z,52µm,13.5s
**GKP Gorka Klasztor 56.74 13** *e*P **P** **15 08 40.1 +0.8**
**GKP Gorka Klasztor 56.74 13** *e*P **P** **15 08 39.5 +0.2**
**IBBN Ibbenburen 56.77 19** ⇓P **P** **15 08 40.1 +0.6**
**IBBN Ibbenburen 56.77 19** *e*P **P** **15 08 40.2 +0.6**
comp=Z,362nm,1.3s,baz=351,slow=7.0
**BBSR BB Station 56.78 86** P **P** **15 08 38.6 -1.2**
**BBSR BB Station 56.78 86** IAMs_20 IAMs_20 15 35 39.2
comp=Z,55µm,18.0s
**BBSR BB Station 56.78 86** ⇑P **P** **15 08 39.1 -0.8**
**NRDL Niedersach Rie 56.85 18** *e*P **P** **15 08 42.2 +2.1**
comp=Z,94nm,0.9s,baz=351,slow=7.0
**CCA1 Carnmenellis 56.96 30** *e*P **P** **15 08 41.1 +0.1**
CCA1 IAMs_20 IAMs_20 15 34 54.3
comp=Z,31µm,20.2s
**ELSH Elham, Standar 57.04 25** *e*P **P** **15 08 42.4 +0.9**
ELSH IAMs_20 IAMs_20 15 34 49.9
comp=Z,37µm,20.2s
**FLTG Flechtingen 57.13 17** ⇓P **P** **15 08 41.8 -0.4**
**FLTG Flechtingen 57.13 17** *e*P **P** **15 08 42.0 -0.1**
comp=Z,72nm,1.3s,baz=351,slow=7.0
**HMNX Herstmonceux 57.20 25** *e*P **P** **15 08 42.3 -0.3**
HMNX IAMs_20 IAMs_20 15 36 52.2
comp=Z,46µm,19.9s
**RUE Ruedersdorf 57.23 15** ⇓P **P** **15 08 43.5 +0.6**
**RUE Ruedersdorf 57.23 15** *e*P **P** **15 08 41.4 -1.4**
**RUE Ruedersdorf 57.23 15** *e*P **P** **15 08 43.8 +1.0**
comp=Z,174nm,1.0s,baz=351,slow=7.0
**JNU Nakatsue 57.27 277** P **P** **15 08 43.1 -0.4**
**JNU Nakatsue 57.27 277** P **P** **15 08 42.2 -1.2**
comp=Z,56nm,0.8s,baz=116,slow=1.4,SNR=21
JNU LR LR 15 34 19.2
comp=Z,16µm,20.8s,baz=37,slow=37
comp=Z,56nm,0.8s
**BTO Baotou 57.36 299** *e*P **P** **15 08 43.0 -1.1**
BTO PP **PP** **15 10 51.1 +0.2**
BTO S **S** **15 16 41.7 +1.3**
BTO SS **SS** **15 20 28.8 -0.2**
BTO pmax pmax
comp=Z,110nm,1.6s
BTO pmax pmax
comp=Z,4µm,6.2s
BTO LR LR
comp=Z,79µm,16.1s
**CLZ Clausthal 57.52 18** *e*P **P** **15 08 45.6 +0.5**
comp=Z,111nm,0.8s,baz=351,slow=7.0
**BUG Bochum--Univer 57.57 20** *e*P **P** **15 08 45.8 +0.5**
comp=Z,234nm,1.3s,baz=351,slow=7.0
**ZSN Zaisan 57.62 322** *e*P **P** **15 08 45.7 -0.1**
comp=Z,67nm,1.0s,baz=322
ZSN *e*S **S** **15 16 44.8 +1.2**
baz=322
**ZSN Zaisan 57.62 322** *e*P **P** **15 08 45.6 -0.1**
ZSN *e*S **S** **15 16 44.7 +1.2**
ZSN pmax pmax
comp=Z,67nm,1.0s
**GTTG Gottingen 57.77 18** *e*P **P** **15 08 47.7 +1.0**
comp=Z,137nm,0.9s,baz=351,slow=7.0
**BELG Belogornoye 57.92 351** *i* P **P** **15 08 47.3 -0.4**
BELG pmax pmax
comp=Z,80nm,0.9s
BELG MLR MLR
comp=Z,2µm,24.0s
**KASTN Kahler Asten 57.94 19** *e*P **P** **15 08 48.6 +0.7**
comp=Z,185nm,1.6s,baz=351,slow=7.0
KASTN *ep*P **sP** **15 08 52.3 +0.4**
**BEBN Eben Emael 58.01 21** *d*P **P** **15 08 48.0 -0.3**
**LPSR Galich'ya Gora 58.03 357** *e*P **P** **15 08 48.3 -0.2**
LPSR *e* 15 08 52.1
LPSR *e*S **S** **15 16 44.8 -4.0**
LPSR pmax pmax
comp=Z,470nm,1.0s
LPSR smax smax
comp=E,7µm,15.5s
LPSR MLR MLR
comp=Z,11µm,23.0s
**BSTI Sart Tilman 58.20 21** *d*P **P** **15 08 49.5 -0.2**
comp=Z,54nm,0.8s
**MEM Membach 58.23 21** *d*P **P** **15 08 50.2 +0.3**
comp=Z,162nm,0.9s
**BTNL Ternell 58.27 21** *d*P **P** **15 08 49.2 -1.0**
comp=Z,182nm,0.8s
**NEUB Neuenburg 58.30 17** *e*P **P** **15 08 51.2 +0.8**
comp=Z,152nm,1.0s,baz=351,slow=7.0
**CLL Collm 58.32 16** *i* P **P** **15 08 50.8 +0.3**
comp=Z,112nm,1.0s
CLL *e*Pmax 15 08 54.0
CLL *e*Plp 15 08 57.0
CLL *e*Plp 15 08 57.0
CLL *e*S **S** **15 16 53.0 +0.5**
CLL *e*SS **SS** **15 20 45.0 +1.6**
CLL AMS AMS 15 34 00.0
CLL *e*PKPPKPdf **P'P'df** 15 38 30.0 -6.6
CLL *i* PKPPKPbc P'P'bc 15 38 39.6 -8.2
comp=Z,10.0nm,1.4s
CLL *e*PKPPKPma 15 38 49.0
comp=Z,33nm,1.6s
CLL R2 17 09 00.0
CLL R2 17 24 00.0
CLL R2 17 56 00.0
comp=Z,800nm,18.6s
**CLL Collm 58.32 16** *i* P **P** **15 08 50.8 +0.3**
CLL *e*S **S** **15 16 53.0 +0.5**
CLL pmax pmax
comp=Z,112nm,1.0s
CLL MLR MLR
comp=Z,35µm,25.0s
**CLL Collm 58.32 16** *e*P **P** **15 08 50.8 +0.3**
comp=Z,89nm,0.9s,baz=351,slow=7.0
**BCLA Clavier 58.33 22** *d*P **P** **15 08 50.4 -0.2**
comp=Z,68nm,0.8s
BCLA *d*PcP **PcP** **15 09 39.4 -2.1**
**BGES Gesves 58.33 22** *d*P **P** **15 08 51.0 +0.4**
comp=Z,67nm,0.8s
**BMRD Maredsous 58.37 22** *d*P **P** **15 08 50.8 -0.1**
comp=Z,67nm,0.9s
**BEL Belsk 58.41 10** *e*P **P** **15 08 51.8 +0.7**
BEL *e*S **S** **15 16 55.2 +1.6**
BEL *e*L L 15 37 12.4
**BEL Belsk 58.41 10** P **P** **15 08 51.8 +0.7**
**AHRW Bad Neuenahr-A 58.43 20** *e*P **P** **15 08 52.4 +1.1**
comp=Z,607nm,1.9s,baz=351,slow=7.0
AHRW *ep*P **sP** **15 08 56.1 +0.9**
**BHOU Houvegnez 58.48 21** *d*P **P** **15 08 52.4 +0.7**
**UBBA Unterbreizbach 58.49 18** *e*P **P** **15 08 52.3 +0.7**
comp=Z,399nm,2.1s,baz=351,slow=7.0
**BAIF Baives 58.53 23** *e*P **P** **15 08 52.2 +0.2**
**DOU Dourbes 58.55 22** *d*P **P** **15 08 50.2 -2.0**
comp=Z,51nm,0.9s
DOU *d*PcP **PcP** **15 09 41.0 -1.4**
**GIVF Givet 58.58 22** *e*P **P** **15 08 52.4 +0.1**
**RCHB Rochefort 58.58 22** *d*P **P** **15 08 51.4 -0.9**
comp=Z,76nm,0.9s
**MK31 Makanchi Array 58.79 324** *ce*P **P** **15 08 54.2 +0.3**
**MKAR Makanchi Array 58.79 324** P **P** **15 08 52.4 -1.6**
**MKAR Makanchi Array 58.79 324** P **P** **15 08 52.1 -1.8**
comp=Z,5.9nm,0.5s,baz=26,slow=4.6,SNR=54
MKAR LR LR 15 34 54.1
comp=Z,5µm,21.1s,baz=14,slow=37
MKAR PKPPKP **P'P'df** **15 38 34.2 -1.0**
comp=Z,3.8nm,1.1s,baz=132,slow=1.8,SNR=6.5
comp=Z,5.9nm,0.5s
**MKAR Makanchi Array 58.79 324** *ce*P **P** **15 08 53.0 -0.9**
MKAR pmax pmax
comp=Z,7.0nm,0.5s
**HNS HongShan 58.82 294** ⇑P **P** **15 08 54.0 -0.2**
HNS S **S** **15 16 56.6 -2.7**
HNS pmax pmax
comp=Z,78nm,1.6s
HNS pmax pmax
comp=Z,5µm,5.7s
HNS LR LR
comp=Z,31µm,14.3s
HNS LR LR
comp=Z,22µm,18.2s
HNS LR LR
comp=Z,34µm,15.9s
**JCJ Chichijima 58.82 264** P **P** **15 08 56.8 +2.5**
**JCJ Chichijima 58.82 264** P **P** **15 08 52.6 -1.7**
comp=Z,250nm,0.8s,baz=16,slow=7.7,SNR=7.3
JCJ LR LR 15 38 17.8
comp=Z,1µm,19.1s,baz=13,slow=40
comp=Z,250nm,0.8s
**BRG Berggiesshubel 58.84 15** *e*P **P** **15 08 54.3 +0.2**
BRG Amp 15 08 55.8
comp=Z,28nm,1.2s
**BRG Berggiesshubel 58.84 15** P **P** **15 08 58.1 +4.0**
BRG Amp 15 09 00.2
comp=Z,69nm,1.0s
**BRG Berggiesshubel 58.84 15** S **S** **15 16 59.0 -0.3**
**BRG Berggiesshubel 58.84 15** SS SS 15 20 46.0 -5.6
**BRG Berggiesshubel 58.84 15** *e*P **P** **15 08 54.5 +0.3**
comp=Z,319nm,1.8s,baz=351,slow=7.0
BRG *ep*P **sP** **15 08 58.5 +0.3**
**MOX Moxa 58.84 17** *e*P **P** **15 08 54.8 +0.6**
comp=Z,229nm,1.6s,baz=351,slow=7.0
MOX *e*L L 15 40 08.7
comp=Z,16µm,22.0s
**MAKZ Makanchi 58.84 324** P **P** **15 08 53.1 -1.2**
MAKZ IAmb IAmb 15 09 10.2
comp=Z,312nm,1.1s
**MAKZ Makanchi 58.84 324** P **P** **15 08 53.1 -1.2**
MAKZ pmax pmax
comp=Z,312nm,1.2s
MAKZ MLR MLR
comp=Z,12µm,20.0s
**TNS Taunus Mts 58.91 19** *e*P **P** **15 08 55.5 +0.7**
comp=Z,294nm,1.6s,baz=351,slow=7.0
**VORR Voronezh 58.96 357** *e*P P 15 09 00.4 +5.4
VORR *e* 15 09 03.6
VORR *e*S **S** **15 16 55.2 -5.6**
VORR pmax pmax
comp=Z,70nm,0.4s
VORR smax smax
comp=E,1µm,5.7s
VORR MLR MLR
comp=Z,5µm,16.0s
**PLN Plauen 59.05 17** *e*P **P** **15 08 56.3 +0.6**
comp=Z,243nm,1.5s,baz=351,slow=7.0
**HSKC Hora Svate Kat 59.05 16** *e*P **P** **15 08 55.8 +0.1**
HSKC *e*S **S** **15 16 59.1 -3.1**
HSKC AMS AMS 15 34 30.0
comp=Z,40µm,25.7s
**KSP Ksiaz 59.07 14** *e*P **P** **15 08 56.3 +0.5**
KSP *e*S **S** **15 17 03.9 +1.5**
KSP *e*L L 15 38 31.1
**KSP Ksiaz 59.07 14** ⇓P **P** **15 08 56.1 +0.3**
**ROSF Rostrenen 59.08 29** ⇑P **P** **15 08 56.2 +0.3**
**ROSF Rostrenen 59.08 29** *e*P **P** **15 08 55.6 -0.3**
**RNPP9 Sopachiv 59.09 6** P P 15 08 50.9 -5.0
**FLN La Foliniere 59.12 26** P **P** **15 08 55.1 -1.0**
**TIA Tai'an 59.12 291** P **P** **15 08 57.8 +1.5**
TIA ScP **ScP** **15 13 49.4 +4.1**
TIA S **S** **15 17 02.1 -1.2**
TIA pmax pmax
comp=Z,23nm,1.3s
TIA pmax pmax
comp=Z,6µm,6.5s
TIA LR LR
comp=Z,34µm,14.3s
TIA LR LR
comp=Z,27µm,16.9s
TIA LR LR
comp=Z,47µm,13.9s
**TANN Tannenbergstha 59.15 16** *e*P **P** **15 08 57.2 +0.8**
comp=Z,188nm,1.5s,baz=351,slow=7.0
**WLF Walferdange 59.18 21** IAMs_20 IAMs_20 15 38 42.3
comp=Z,33µm,20.0s
**WLF Walferdange 59.18 21** P **P** **15 08 53.5 -3.0**
**WLF Walferdange 59.18 21** ⇓P **P** **15 08 57.2 +0.7**
**WLF Walferdange 59.18 21** *d*P **P** **15 08 56.4 -0.1**
comp=Z,86nm,0.9s
**WLF Walferdange 59.18 21** *e*P **P** **15 08 57.7 +1.2**
**WLF Walferdange 59.18 21** *e*P **P** **15 08 57.5 +1.0**
comp=Z,121nm,0.9s,baz=351,slow=7.0
WLF *ep*P **sP** **15 09 01.4 +0.9**
**RICC Richard 59.18 15** *e*P **P** **15 08 59.3 +2.8**
RICC AMS AMS 15 34 50.0
comp=Z,29µm,24.7s
**PVCC Panska Ves 59.24 15** *e*P **P** **15 08 57.7 +0.8**
PVCC *e*S **S** **15 17 03.0 -1.5**
PVCC AMS AMS 15 34 40.0
comp=Z,31µm,24.9s
**PVCC Panska Ves 59.24 15** *e*P **P** **15 08 57.7 +0.8**
PVCC *e*S **S** **15 17 03.0 -1.5**
PVCC MLR MLR
comp=Z,31µm,24.9s
**SOR Soroa 59.24 108** IAmb IAmb 15 09 07.9
comp=Z,401nm,1.3s
SOR IAMs_20 IAMs_20 15 39 04.1
comp=Z,41µm,19.0s
**TIY Taiyuan 59.25 296** *e*P **P** **15 08 59.6 +2.3**
TIY pmax pmax
comp=Z,33nm,0.6s
TIY pmax pmax
comp=Z,3µm,5.2s
TIY LR LR
comp=Z,38µm,15.1s
TIY LR LR
comp=Z,29µm,13.7s
TIY LR LR
comp=Z,46µm,15.1s
**CHVC Chvalec 59.30 14** *e*P **P** **15 08 58.1 +0.7**
CHVC AMS AMS 15 35 30.0
comp=Z,20µm,22.8s
**CHVC Chvalec 59.30 14** *e*P **P** **15 08 58.1 +0.7**
CHVC MLR MLR
comp=Z,20µm,22.8s
**TLIG Tlapa 59.33 126** ⇑P **P** **15 08 59.6 +1.6**
**LDF La Druitiere 59.34 26** *e*P **P** **15 08 57.1 -0.6**
**OSTC Ostas 59.35 14** *e*P **P** **15 08 58.1 +0.4**
OSTC *e*S **S** **15 17 06.6 +0.6**
OSTC AMS AMS 15 34 30.0
comp=Z,22µm,24.3s
**OSTC Ostas 59.35 14** *e*P **P** **15 08 58.1 +0.4**
OSTC *e*S **S** **15 17 06.6 +0.6**
OSTC MLR MLR
comp=Z,22µm,24.3s
**VRH Novokhopyorsk 59.37 355** *e*P **P** **15 08 59.0 +1.2**
VRH *e* 15 09 02.6
VRH *e*S **S** **15 17 01.9 -4.2**
VRH pmax pmax
comp=Z,190nm,1.0s
VRH smax smax
comp=E,7µm,12.9s
VRH MLR MLR
comp=Z,15µm,21.0s
**UPC Upice 59.38 14** *e*P **P** **15 08 58.4 +0.5**
UPC *e*S **S** **15 17 04.3 -2.1**
UPC AMS AMS 15 35 30.0
comp=Z,23µm,23.2s
**UPC Upice 59.38 14** *e*P **P** **15 08 58.4 +0.5**
UPC *e*S **S** **15 17 04.3 -2.1**
UPC MLR MLR
comp=Z,23µm,23.2s
**VSR Storozhevoye 59.42 357** *e*P **P** **15 08 58.0 -0.1**
VSR *e* 15 09 01.3
VSR *e*S **S** **15 17 03.8 -3.0**
VSR pmax pmax
comp=Z,450nm,1.2s
VSR smax smax
comp=E,9µm,15.6s
VSR MLR MLR
comp=Z,12µm,23.0s
**QUIF Quistinic 59.51 29** *e*P **P** **15 08 59.2 +0.4**
**MANZ Manzenberg 59.54 17** *e*P **P** **15 08 59.6 +0.5**
comp=Z,141nm,2.7s,baz=351,slow=7.0
**DPC Dobruska-Polom 59.56 14** *e*P **P** **15 08 59.1 -0.1**
DPC *e*S **S** **15 17 04.9 -3.9**
DPC AMS AMS 15 34 20.0
comp=Z,21µm,25.4s
**DPC Dobruska-Polom 59.56 14** *e*P **P** **15 08 59.1 -0.1**
DPC *e*S **S** **15 17 04.9 -3.9**
DPC MLR MLR
comp=Z,21µm,25.4s
**VORD Divnogorie 59.66 357** *e*P **P** **15 09 00.7 +0.9**
VORD *e* 15 09 03.8
VORD *e*S **S** **15 17 03.8 -6.2**
VORD pmax pmax
comp=Z,240nm,1.0s
VORD smax smax
comp=E,1µm,6.5s
VORD MLR MLR
comp=Z,5µm,18.0s
**PRA Prague 59.68 15** *e*P **P** **15 09 03.8 +3.8**
PRA AMS AMS 15 35 00.0
comp=Z,36µm,25.0s
**PRA Prague 59.68 15** *e*P **P** **15 09 03.8 +3.8**
PRA MLR MLR
comp=Z,36µm,25.0s
**GRA1 Grafenberg Arr 59.74 17** IAmb IAmb 15 09 25.8
comp=Z,476nm,1.7s
**GRF Grafenberg Arr 59.74 17** *e*P **P** **15 09 01.3 +0.9**
comp=Z,253nm,1.6s,baz=351,slow=7.0
GRF *e*L L 15 40 00.6
comp=Z,20µm,20.4s
**ROTZ Rotzenmuhle 59.77 17** *e*P **P** **15 09 01.2 +0.6**
comp=Z,73nm,2.1s,baz=351,slow=7.0
**PRU Pruhonice 59.77 15** *e*P **P** **15 09 00.5 -0.1**
PRU *e*S **S** **15 17 11.5 +0.1**
PRU AMS AMS 15 34 50.0
comp=Z,34µm,24.1s
**PRU Pruhonice 59.77 15** *e*P **P** **15 09 00.5 -0.1**
PRU *e*S **S** **15 17 11.5 +0.1**
PRU MLR MLR
comp=Z,34µm,24.1s
**AK21 Malin Array Si 59.83 4** P **P** **15 08 56.3 -4.7**
**MI30 MI30,Zelenitsa 59.83 5** P **P** **15 08 56.6 -4.4**
**AK23 Malin Array Si 59.84 4** P **P** **15 08 56.3 -4.8**
**GOPC GO Pecny, Ondr 59.87 15** *e*P **P** **15 09 01.8 +0.5**
GOPC *e*S **S** **15 17 08.5 -4.2**
GOPC AMS AMS 15 35 10.0
comp=Z,34µm,25.3s
**GOPC GO Pecny, Ondr 59.87 15** *e*P **P** **15 09 01.8 +0.5**
GOPC *e*S **S** **15 17 08.5 -4.2**
GOPC MLR MLR
comp=Z,34µm,25.3s
**KRLC Kraliky 59.87 13** *e*P **P** **15 09 01.7 +0.3**
KRLC *e*S **S** **15 17 12.2 -0.6**
KRLC AMS AMS 15 40 00.0
comp=Z,18µm,19.4s

**KRLC Kraliky 59.87 13** *e*P **P 15 09 01.7 +0.3**
KRLC *e*S **S 15 17 12.2 -0.6**
KRLC MLR MLR
comp=Z,18µm,19.4s
**AKASG Malin Array Be 59.91 4** P **P 15 09 00.5 -1.0**
AKASG IAmb IAmb 15 09 09.9
comp=Z,266nm,0.8s
**AKASG Malin Array Be 59.91 4** P **P 15 08 59.7 -1.8**
comp=Z,17nm,0.7s,baz=356,slow=7.0,SNR=52
AKASG PKPPKP **P'P'df 15 38 27.7 -6.5**
comp=Z,0.2nm,0.3s,baz=132,slow=1.4,SNR=4.1
AKASG PKP2bc 15 38 38.2
comp=Z,0.9nm,0.7s,baz=216,slow=1.3,SNR=4.9
comp=Z,17nm,0.7s
**AKASG Malin Array Be 59.91 4***c**e*P **P 15 09 00.9 -0.6**
AKASG pmax pmax
comp=Z,46nm,0.7s
**AKBB Malin Array Si 59.91 4** IAmb IAmb 15 09 09.9
comp=Z,285nm,0.8s
**AKBB Malin Array Si 59.91 4***c**e*P **P 15 09 01.0 -0.5**
AKBB pmax pmax
comp=Z,70nm,0.7s
**AKBB Malin Array Si 59.91 4** P **P 15 09 01.3 -0.2**
**KIEV Kiev 59.91 4** P **P 15 09 00.6 -0.9**
KIEV IAmb IAmb 15 09 09.9
comp=Z,256nm,0.8s
**KIEV Kiev 59.91 4** *i* P **P 15 09 01.4 -0.2**
SNR=75
**KIEV Kiev 59.91 4** ⇓P **P 15 09 01.0 -0.5**
**KIEV Kiev 59.91 4** ⇑P **P 15 09 02.5 +1.0**
**KIEV Kiev 59.91 4** P **P 15 09 00.6 -0.9**
KIEV pmax pmax
comp=Z,256nm,0.9s
KIEV MLR MLR
comp=Z,24µm,21.0s
**AK01 Malin Array Si 59.92 4** P **P 15 09 01.4 -0.2**
**TEIG Tepich 59.92 115** P **P 15 09 01.0 -0.9**
TEIG IAMs_20 IAMs_20 15 37 54.1
comp=Z,36µm,19.0s
**TEIG Tepich 59.92 115** ⇑P **P 15 09 02.2 +0.2**
**TEIG Tepich 59.92 115** LR LR 15 38 05.2
comp=Z,32µm,18.2s,baz=350,slow=39
**OJC Ojcow 59.95 11** *e*P **P 15 09 02.8 +1.0**
OJC *e*S **S 15 17 14.8 +1.0**
OJC *e*L L 15 43 12.6
**OJC Ojcow 59.95 11** ⇑P **P 15 09 02.4 +0.5**
**AB31 Akbulak array 59.99 341** P **P 15 09 01.3 -0.8**
**ABKAR Akbulak array 59.99 341** P **P 15 09 01.3 -0.8**
**MI29 MI29, Kamyanyy 60.15 5** P **P 15 08 59.2 -4.0**
**OKC Ostrava-Krasne 60.22 12** *e*P **P 15 09 06.1 +2.4**
OKC *e*S **S 15 17 15.4 -1.7**
OKC AMS AMS 15 41 00.0
comp=Z,12µm,18.1s
**OKC Ostrava-Krasne 60.22 12** *e*P **P 15 09 06.1 +2.4**
OKC *e*S **S 15 17 15.4 -1.7**
OKC MLR MLR
comp=Z,12µm,18.1s
**MORC Moravsky Berou 60.23 13** *e*P **P 15 09 03.7 -0.1**
MORC *e*S **S 15 17 19.6 +2.2**
**MORC Moravsky Berou 60.23 13** ⇓P **P 15 09 04.0 +0.1**
**MORC Moravsky Berou 60.23 13** ⇓P **P 15 09 06.5 +2.6**
**MORC Moravsky Berou 60.23 13** P **P 15 09 06.4 +2.6**
**CLF Chambon-Foret 60.25 25** IAmb IAmb 15 09 17.7
comp=Z,444nm,1.1s
CLF IAMs_20 IAMs_20 15 36 57.7
comp=Z,48µm,21.0s
**CLF Chambon-Foret 60.25 25** ⇑P **P 15 09 04.3 +0.4**
**ZVC Zvikov 60.28 15** *e*P **P 15 09 06.4 +2.3**
ZVC *e*S **S 15 17 20.5 +2.5**
ZVC AMS AMS 15 35 00.0
comp=Z,34µm,24.6s
**STU Stuttgart 60.42 19** *e*P **P 15 09 06.2 +1.1**
**STU Stuttgart 60.42 19** *e*P **P 15 09 06.1 +1.0**
comp=Z,220nm,1.1s,baz=351,slow=7.0
**WMQ Urumqi 60.42 318** ⇓P **P 15 09 06.9 +1.6**
WMQ PcP **PcP 15 09 49.2 -0.9**
WMQ PP **PP 15 11 21.3 +3.4**
WMQ S **S 15 17 22.2 +2.1**
WMQ pmax pmax
comp=Z,190nm,0.9s
WMQ pmax pmax
comp=Z,5µm,4.9s
WMQ LR LR
comp=Z,16µm,21.1s
WMQ LR LR
comp=Z,12µm,23.1s
WMQ LR LR
comp=Z,19µm,21.1s
**WET Wettzell 60.45 16** *e*P **P 15 09 06.1 +0.8**
comp=Z,228nm,1.4s,baz=351,slow=7.0
**KHC Kasperske Hory 60.53 16** ⇓P **P 15 09 06.6 +0.7**
**KHC Kasperske Hory 60.53 16** *e*P **P 15 09 06.4 +0.5**
KHC *ex* x 15 10 15.5
KHC *e*S **S 15 17 22.4 +1.1**
KHC AMS AMS 15 35 20.0
comp=Z,40µm,25.4s
KHC *e*PKPPKP P'P'df 15 38 45.0 +12
**KHC Kasperske Hory 60.53 16***c**e*P **P 15 09 07.0 +1.1**
KHC pmax pmax
comp=Z,369nm,2.5s
**TREC Trest 60.54 14** *e*S **S 15 17 20.9 -0.5**
TREC AMS AMS 15 35 40.0
comp=Z,31µm,24.8s
**LVV L'vov 60.60 8** *e*P **P 15 09 06.3 0.0**
LVV *e* 15 11 27.4
LVV *e*S **S 15 17 18.3 -3.7**
LVV *e*PS **PnS 15 17 39.0 +4.6**
LVV pmax pmax
comp=Z,500nm,1.9s
LVV MLR MLR
comp=Z,10µm,20.0s
**VRAC Vranov 60.62 14** *e*P **P 15 09 06.6 +0.1**
VRAC *e*S **S 15 17 25.5 +3.1**
**VRAC Vranov 60.62 14** ⇑P **P 15 09 08.4 +1.9**
**VRAC Vranov 60.62 14** P **P 15 09 08.3 +1.9**
**MAUC Maruska 60.66 13** *e*P **P 15 09 08.8 +2.0**
MAUC *e*S **S 15 17 22.2 -0.7**
**KWP Kalwaria Pacla 60.72 9** *e*P **P 15 09 07.9 +0.8**
KWP *e*S **S 15 17 23.7 +0.2**
KWP *e*L L 15 43 35.9
**ECH Echery 60.73 21** ⇓P **P 15 09 07.5 +0.2**
**BFO Black Forest 60.76 20** P **P 15 09 06.7 -0.7**
**BFO Black Forest 60.76 20** ⇓P **P 15 09 07.7 +0.3**
**BFO Black Forest 60.76 20** P **P 15 09 06.7 -0.7**
**BFO Black Forest 60.76 20** *e*P **P 15 09 08.1 +0.7**
comp=Z,201nm,1.4s,baz=351,slow=7.0
**NIE Niedzica 60.78 11** *e*P **P 15 09 08.6 +1.0**
NIE *e*S S 15 17 35.3 +11
**GEC2 GERESS Array S 60.82 16** *e*P **P 15 09 08.7 +0.8**
comp=Z,399nm,1.6s,baz=351,slow=7.0
GEC2 *ep*P **sP 15 09 12.7 +0.7**
**GERES GERESS Array B 60.82 16** P **P 15 09 07.3 -0.6**
**GERES GERESS Array B 60.82 16** P **P 15 09 06.8 -1.2**
comp=Z,9.1nm,0.7s,baz=350,slow=6.7,SNR=45
GERES PKPPKP P'P'df 15 38 20.6 -12
comp=Z,0.7nm,0.9s,baz=146,slow=9.7,SNR=4.3
comp=Z,9.1nm,0.7s
**GERES GERESS Array B 60.82 16** P **P 15 09 07.3 -0.6**
**HAU Haudompre 60.83 21** *e*P **P 15 09 07.4 -0.5**
**CMIG Matias Romero 60.84 123** LR LR 15 39 30.1
comp=Z,23µm,18.6s,baz=309,slow=40
**KRUC Moravsky 60.85 14** *e*P **P 15 09 07.6 -0.4**
KRUC *e*S **S 15 17 27.3 +2.0**
**CKRC Cesky Krumlov 60.91 15** *e*P **P 15 09 08.5 +0.1**
CKRC *e*S **S 15 17 26.8 +0.8**
CKRC AMS AMS 15 35 30.0
comp=Z,35µm,25.1s
**CKRC Cesky Krumlov 60.91 15** *e*P **P 15 09 08.5 +0.1**
CKRC *e*S **S 15 17 26.8 +0.8**
CKRC MLR MLR
comp=Z,35µm,25.1s
**LANS Liptovska Anna 60.99 11** *e*P **P 15 09 10.3 +1.2**
LANS pmax pmax
comp=Z,37nm,0.8s
**LANS Liptovska Anna 60.99 11** *e*P **P 15 09 10.3 +1.2**
**PLTM Poltava 61.07 0** P **P 15 09 04.9 -4.6**
**HINF Hinteralfeld 61.08 21** *e*P **P 15 09 10.1 +0.5**
**JAVC Velka Javorina 61.15 13** *e*P **P 15 09 10.9 +0.8**
JAVC *e*S **S 15 17 33.4 +4.1**
**LOR Lormes 61.22 24** *e*P **P 15 09 09.3 -1.3**
**FUR Furstenfeldbru 61.25 18** *e*P **P 15 09 11.7 +1.0**
comp=Z,119nm,1.0s,baz=351,slow=7.0
FUR *ep*P **sP 15 09 15.3 +0.6**
**MFF Saint Martin d 61.27 27** ⇓P **P 15 09 11.2 +0.3**
**MFF Saint Martin d 61.27 27** *e*P **P 15 09 11.1 +0.2**
**TDK Taldyqorghan 61.29 326** *e*P **P 15 09 11.5 +0.4**
baz=326
TDK *e*S **S 15 17 32.9 +1.8**
baz=326
TDK LR LR 15 36 19.4
comp=Z,8µm,15.0s,baz=326
**TDK Taldyqorghan 61.29 326** *e*P **P 15 09 11.5 +0.4**
TDK *e*S **S 15 17 32.8 +1.8**
**SLE Schleitheim 61.33 20** *e*P **P 15 09 12.0 +0.7**
**SSF Saint Saulge 61.37 24** *e*P **P 15 09 11.6 0.0**
**KOLS Kolonicke sedl 61.39 9** *e*P **P 15 09 15.5 +3.8**
KOLS pmax pmax
comp=Z,16nm,0.5s
**KOLS Kolonicke sedl 61.39 9** *e*P **P 15 09 15.5 +3.8**
**GTA Gaotai 61.45 307** *e*P **P 15 09 11.7 -0.7**
GTA S **S 15 17 36.8 +3.3**
GTA SS **SS 15 21 29.8 -3.6**
GTA pmax pmax
comp=Z,22nm,1.2s
GTA pmax pmax
comp=Z,1µm,6.0s
GTA LR LR
comp=Z,25µm,15.9s
GTA LR LR
comp=Z,13µm,17.5s
GTA LR LR
comp=Z,16µm,15.9s
**UBR Ueberruh 61.60 19** *e*P **P 15 09 14.0 +0.8**
comp=Z,274nm,1.7s,baz=351,slow=7.0
**VYHS Vyhne 61.60 12** *e*P **P 15 09 12.9 -0.2**
VYHS pmax pmax
comp=Z,144nm,1.8s
**VYHS Vyhne 61.60 12** *e*P **P 15 09 12.9 -0.2**
**AVF Avril sur Loir 61.62 24** *e*P **P 15 09 12.4 -0.8**
**KECS Kecovo 61.73 11** *e*P **P 15 09 17.7 +3.7**
KECS pmax pmax
comp=Z,49nm,0.7s
**KECS Kecovo 61.73 11** *e*P **P 15 09 17.7 +3.7**
**ZST Bratislava 61.77 13** *e*P **P 15 09 15.5 +1.3**
ZST pmax pmax
comp=Z,152nm,0.8s
**ZST Bratislava 61.77 13** *e*P **P 15 09 15.5 +1.3**
**SMF Signal de Mont 61.83 24** *e*P **P 15 09 14.3 -0.4**
**RJOB Jochberg 61.83 17** *e*P **P 15 09 15.6 +0.8**
comp=Z,108nm,0.8s,baz=351,slow=7.0
RJOB *ep*P **sP 15 09 19.5 +0.8**
**MOA Molln 61.86 16** *ep*P **P 15 09 15.0 +0.1**
comp=Z,96nm,1.2s,SNR=18
MOA *e*P'P' 15 38 24.5
comp=Z,6.5nm,1.2s
**RETA Reutte 61.87 18** *ep*P **P 15 09 15.5 +0.5**
comp=Z,46nm,0.9s,SNR=28
RETA *e*P'P' 15 38 24.2
comp=Z,8.6nm,1.5s
**CONA Conrad Observa 61.93 14** *ep*P **P 15 09 15.5 0.0**
comp=Z,114nm,1.1s,SNR=55
CONA *e*P'P' 15 38 20.0
comp=Z,2.8nm,1.0s
**TCF Toulx Ste Croi 61.94 25** *e*P **P 15 09 15.2 -0.3**
**KMPD K-Podol'skiy 61.96 6** P **P 15 09 11.6 -3.9**
**BIOA Bad Ischl, Aus 61.96 16** *ep*P **P 15 09 15.7 +0.1**
comp=Z,33nm,1.0s,SNR=18
**DAVA Damuels 61.97 19** *ep*P **P 15 09 15.6 -0.2**
comp=Z,47nm,1.2s,SNR=16
DAVA *e*P'P' 15 38 25.3
comp=Z,12nm,1.8s
**DAVA Damuels 61.97 19** ⇓P **P 15 09 16.1 +0.3**
**MOTA Moosalm 62.04 18** *ep*P **P 15 09 16.4 +0.1**
comp=Z,37nm,0.9s
MOTA *e*P'P' 15 38 25.2
comp=Z,1.2nm,0.5s
**BTLS Baital 62.06 329** *e*P **P 15 09 16.4 +0.1**
comp=Z,50nm,0.9s,baz=329
BTLS *e*S **S 15 17 42.3 +1.5**
baz=329
**BTLS Baital 62.06 329** *e*P **P 15 09 16.3 +0.1**
BTLS *e*S **S 15 17 42.3 +1.5**
BTLS pmax pmax
comp=Z,50nm,0.9s
**WATA Walderalm 62.10 18** *ep*P **P 15 09 16.9 +0.2**
comp=Z,47nm,1.1s,SNR=28
WATA *e*P'P' 15 38 25.6
comp=Z,3.4nm,0.8s
**LESA Schwarzleotal 62.13 17** *ep*P **P 15 09 16.8 0.0**
comp=Z,64nm,0.8s
LESA *e*P'P' 15 38 24.6
comp=Z,4.0nm,1.3s
**LYN LuoYang 62.15 294** P **P 15 09 17.9 +1.0**
LYN sP sP 15 09 25.1 +4.2
LYN pP pP 15 09 30.3 +10
LYN sS sS 15 17 59.6 +13
LYN pmax pmax
comp=Z,71nm,1.4s
LYN pmax pmax
comp=Z,7µm,6.5s
LYN LR LR
comp=Z,67µm,14.8s
**ARXS Arharly 62.16 326** *e*P **P 15 09 16.9 -0.1**
**SQTA Sankt Quirin 62.18 18** *ep*P **P 15 09 17.5 +0.4**
comp=Z,84nm,1.6s,SNR=40
SQTA *e*P'P' 15 38 22.5
comp=Z,1.4nm,0.6s
**WTTA Wattenberg 62.18 18** *ep*P **P 15 09 17.8 +0.6**
comp=Z,79nm,0.9s,SNR=41
WTTA *e*P'P' 15 38 23.8
comp=Z,4.1nm,1.3s
**RONA Rosalia, Austr 62.19 14** *ep*P **P 15 09 17.3 +0.1**
comp=Z,133nm,1.0s,SNR=42
RONA *e*P'P' 15 38 23.7
comp=Z,2.7nm,0.9s
**SOP Sopron 62.23 14** P **P 15 09 18.8 +1.5**
**SRO Srobarova 62.24 12** *e*P **P 15 09 19.9 +2.5**
SRO pmax pmax
comp=Z,51nm,0.8s
**SRO Srobarova 62.24 12** *e*P **P 15 09 19.9 +2.5**
**PSZ Piszkesteto 62.25 11** ⇓P **P 15 09 18.4 +0.8**
**PSZ Piszkesteto 62.25 11** ⇑P **P 15 09 19.6 +2.0**
**PSZ Piszkesteto 62.25 11** P **P 15 09 19.6 +2.0**
**DRBR Darabani 62.32 6** ⇑P **P 15 09 19.9 +2.0**
**FETA Feichten 62.32 18** *ep*P **P 15 09 18.7 +0.6**
comp=Z,108nm,1.6s,SNR=24
FETA *e*P'P' 15 38 22.2
comp=Z,3.4nm,1.1s
**NJ2 Nanjing 62.35 288** *e*P **P 15 09 19.8 +1.5**
NJ2 sP **sP 15 09 27.8 +5.5**
NJ2 PP PP 15 11 43.5 +8.4
NJ2 S **S 15 17 46.3 +1.6**
NJ2 pmax pmax
comp=Z,98nm,1.1s
NJ2 pmax pmax
comp=Z,4µm,4.2s
NJ2 LR LR
comp=Z,14µm,13.7s
NJ2 LR LR
comp=Z,40µm,14.7s
NJ2 LR LR
comp=Z,12µm,15.1s
**SRBC Serra Branca 62.41 51** *e*P **P 15 09 19.1 +0.4**
comp=Z,744nm,1.8s
**CCIG Comitan 62.42 120** IAMs_20 IAMs_20 15 39 59.5
comp=Z,39µm,18.0s
**CCIG Comitan 62.42 120** ⇓P **P 15 09 20.9 +1.7**
**PGRA Graciosa 62.44 51** *e*P **P 15 09 16.9 -1.9**
comp=Z,526nm,1.9s
**SSE Sheshan 62.45 285** P **P 15 09 16.3 -2.7**
SSE S **S 15 17 42.7 -3.2**
SSE pmax pmax
comp=Z,110nm,1.1s
SSE pmax pmax
comp=Z,3µm,5.3s
SSE LR LR
comp=Z,7µm,14.5s
SSE LR LR
comp=Z,8µm,14.1s
**SORM Soroca 62.45 5** ⇓P **P 15 09 20.5 +1.7**
**SORM Soroca 62.45 5** P **P 15 09 20.5 +1.7**
**KBA Koelnbreinsper 62.54 16** *ep*P **P 15 09 19.5 -0.2**
comp=Z,137nm,0.8s,SNR=104
KBA *e*P'P' 15 38 18.3
comp=Z,1.0nm,0.6s
**KBA Koelnbreinsper 62.54 16** ⇑P **P 15 09 20.0 +0.4**
**KBA Koelnbreinsper 62.54 16** P **P 15 09 20.0 +0.4**
**SENIN Lac Senin/Sane 62.56 21** IAmb IAmb 15 09 33.3
comp=Z,415nm,0.9s
**ARSA Arzberg 62.57 15** *ep*P **P 15 09 20.6 +1.0**
comp=Z,108nm,1.3s,SNR=48
ARSA P'P' 15 38 19.2
comp=Z,3.4nm,1.2s
**ARSA Arzberg 62.57 15** ⇑P **P 15 09 20.8 +1.1**
**PCED Cedros 62.61 52** *e*P **P 15 09 18.9 -1.1**
comp=Z,294nm,2.0s
**ROSA Rosais 62.66 52** *e*P **P 15 09 20.4 +0.1**
comp=Z,400nm,1.4s
**ROSA Rosais 62.66 52** ⇓P **P 15 09 21.3 +1.0**
**CALA Caldeira 62.66 52** *e*P **P 15 09 18.3 -2.1**
comp=Z,568nm,1.6s
**CHKK Chushkaly 62.67 327** *e*P **P 15 09 20.5 +0.2**
baz=327
**CHKK Chushkaly 62.67 327** *e*P **P 15 09 20.5 +0.2**
**PDGK Podgornoye 62.68 325** P **P 15 09 19.7 -0.9**
**BMR Baia Mare 62.71 9** ⇑P **P 15 09 22.5 +1.9**
**BMR Baia Mare 62.71 9** P **P 15 09 22.4 +1.9**
**KUU Kurty 62.75 327** *e*P **P 15 09 21.4 +0.4**
comp=Z,72nm,0.9s,baz=327
KUU LR LR 15 37 32.2
comp=Z,13µm,14.1s,baz=327
**KUU Kurty 62.75 327** *e*P **P 15 09 21.3 +0.4**
KUU pmax pmax
comp=Z,72nm,0.9s
KUU MLR MLR
comp=Z,13µm,14.0s
**PMAN Manadas 62.78 52** *e*P **P 15 09 19.6 -1.5**
comp=Z,358nm,1.6s
**ABTA Abfaltersbach 62.78 17** *ep*P **P 15 09 21.0 -0.2**
comp=Z,43nm,0.9s,SNR=45
ABTA *e*P'P' 15 38 22.6
comp=Z,9.8nm,2.1s
**PICO Pico 62.81 52** *e*P **P 15 09 19.8 -1.6**
comp=Z,489nm,1.9s
**BUR08 Bucovina Ar. S 62.82 7** IAmb IAmb 15 09 45.4
comp=Z,392nm,1.8s
**PCAN Candelaria 62.83 52** *e*P **P 15 09 20.4 -1.1**
comp=Z,324nm,1.7s
**SHLS Shalkode 62.85 325** *e*P **P 15 09 21.7 0.0**
comp=Z,64nm,0.9s,baz=324
SHLS *e*S **S 15 17 51.7 +0.7**
baz=324
**SHLS Shalkode 62.85 325** *e*P **P 15 09 21.7 0.0**
SHLS *e*S **S 15 17 51.7 +0.7**
SHLS pmax pmax
comp=Z,64nm,0.9s
**BURAR Bucovina Array 62.85 7** P **P 15 09 20.2 -1.4**
**BURAR Bucovina Array 62.85 7** ⇑P **P 15 09 23.3 +1.7**
**PSBA Serra de Santa 62.86 51** *e*P **P 15 09 21.7 0.0**
comp=Z,402nm,1.3s
**PPNO Prainha do Nor 62.88 52** *e*P **P 15 09 20.6 -1.3**
comp=Z,290nm,1.4s
**PAGU Agualva, Azore 62.90 51** *e*P **P 15 09 20.7 -1.2**
comp=Z,274nm,1.0s
**LTVH Ltavrtes, Hu 62.91 10** ⇓P P 15 09 26.8 +4.9
**LTVH Ltavrtes, Hu 62.91 10** ⇑P **P 15 09 23.9 +2.1**
**UZB Uzynbulak 62.95 325** *e*P **P 15 09 22.6 +0.2**
comp=Z,69nm,0.9s,baz=325
**UZB Uzynbulak 62.95 325** *e*P **P 15 09 22.6 +0.2**
UZB pmax pmax
comp=Z,69nm,0.9s
**PID Ribeirinha 62.95 52** *e*P **P 15 09 20.7 -1.6**
comp=Z,334nm,1.4s
**PSCM Serra do Cume 62.98 51** *e*P **P 15 09 22.9 +0.4**
comp=Z,253nm,1.8s
**MYKA Terra Mystica 63.01 16** *ep*P **P 15 09 21.7 -1.0**
comp=Z,41nm,0.8s,SNR=37
MYKA *e*P'P' 15 38 25.0
comp=Z,4.6nm,1.2s
**LFF La Frestale 63.03 26** *e*P **P 15 09 22.8 +0.1**
**ZHN Zhinishke 63.05 325** *e*P **P 15 09 23.3 +0.2**
baz=325
**ZHN Zhinishke 63.05 325** *e*P **P 15 09 23.2 +0.2**
**SOKA Soboth 63.09 15** *ep*P **P 15 09 23.0 -0.3**
comp=Z,76nm,1.4s,SNR=44
SOKA *e*P'P' 15 38 20.7
comp=Z,4.0nm,1.3s
**PRAR RASCA 63.15 7** ⇑P **P 15 09 25.6 +2.1**
**SATY Saty 63.16 325** *e*P **P 15 09 24.2 +0.5**
comp=Z,41nm,0.7s,baz=325
**SATY Saty 63.16 325** *e*P **P 15 09 24.2 +0.5**
SATY pmax pmax
comp=Z,41nm,0.7s
**MESR Meseseni 63.20 9** ⇓P **P 15 09 25.8 +2.0**
**OBKA Obir 63.22 16** *ep*P **P 15 09 23.6 -0.5**
comp=Z,181nm,0.7s,SNR=129
OBKA *e*P'P' 15 38 20.3
comp=Z,1.2nm,0.5s
**OBKA Obir 63.22 16** *e*P **P 15 09 24.1 0.0**
**SSB Saint Sauveur 63.26 23** IAMs_20 IAMs_20 15 40 51.5
comp=Z,28µm,20.0s
**SSB Saint Sauveur 63.26 23** ⇓P **P 15 09 24.6 +0.3**
**AAA Alma-Ata 63.30 327** *e*P **P 15 09 25.2 +0.6**
comp=Z,71nm,0.8s,baz=327
**AAA Alma-Ata 63.30 327** *e*P **P 15 09 25.2 +0.6**
AAA pmax pmax
comp=Z,71nm,0.8s
**MDOK Medeo 63.32 327** *e*P **P 15 09 25.1 +0.2**
baz=326
MDOK LR LR 15 37 40.6
comp=Z,6µm,14.6s,baz=326
**MDOK Medeo 63.32 327** *e*P **P 15 09 25.0 +0.2**
**LPL La Plagne 63.33 22** *e*P **P 15 09 25.6 +0.6**
**ARCR ARCALIA 63.34 8** ⇓P **P 15 09 26.8 +2.0**
**LPG La Plagne 63.35 22** *e*P **P 15 09 25.9 +0.7**
**IAS Iasi 63.37 6** ⇓P **P 15 09 26.6 +1.7**
**IAS Iasi 63.37 6** P **P 15 09 26.6 +1.7**
**LZH Lanzhou 63.38 302** ⇑P **P 15 09 25.6 +0.2**
LZH pmax pmax
comp=Z,430nm,1.0s
LZH LR LR
comp=Z,47µm,16.1s
**MOZS Mozjanca 63.42 16** *i* P **P 15 09 25.4 0.0**
**TNSS Tian-Shan 63.46 327** *e*P **P 15 09 25.8 -0.3**
baz=326
**TNSS Tian-Shan 63.46 327** *e*P **P 15 09 25.8 -0.3**
**SGDS Sogindy 63.50 329** *e*P **P 15 09 26.5 +0.5**
comp=Z,68nm,0.8s,baz=328
**SGDS Sogindy 63.50 329** *e*P **P 15 09 26.4 +0.5**
SGDS pmax pmax
comp=Z,68nm,0.8s
**DRGR 63.55 9** *e*P **P 15 09 29.6 +3.4**
**DRGR 63.55 9** ⇑P **P 15 09 28.2 +2.0**
**DRGR 63.55 9** P **P 15 09 28.2 +2.0**
**KIS Kishinev 63.60 5** *e*P **P 15 09 26.0 -0.4**
comp=Z,1µm,4.0s
KIS *i* S **S 15 17 59.0 -0.9**
**KIS Kishinev 63.60 5** *e*P **P 15 09 26.0 -0.4**
KIS *i* S **S 15 17 59.0 -0.9**
KIS *e*PS **SKKSac 15 19 12.0 -7.5**
KIS pmax pmax
comp=Z,1µm,4.0s
**SABO M.te Sabotino 63.65 16** IAmb IAmb 15 09 40.2
comp=Z,779nm,1.8s
**CJR Cluj-Napoca 63.67 9** ⇑P **P 15 09 29.8 +2.7**
**CJR Cluj-Napoca 63.67 9** P **P 15 09 29.7 +2.7**
**LJU Ljubljana 63.68 16** *i* P **P 15 09 26.9 -0.1**
LJU *eS* **S 15 18 01.1 +0.1**
LJU *e* 15 25 02.3
**MILM Milestii Mici 63.68 5** *e*P **P 15 09 26.0 -0.9**
comp=Z,3µm,4.2s
MILM *i* S **S 15 18 00.0 -0.9**
MILM *eL* L 15 38 24.0
MILM LRM MLR 15 41 19.0
comp=Z,11µm,20.0s
**MILM Milestii Mici 63.68 5** ⇑P **P 15 09 28.8 +1.8**
**MILM Milestii Mici 63.68 5** *e*P **P 15 09 26.0 -0.9**
MILM *i* 15 09 33.4
MILM *i* S **S 15 18 00.0 -0.9**
**MARR Marisel-Cluj 63.69 9** ⇓P **P 15 09 29.4 +2.2**
**VIVF Saint-Julien-l 63.70 23** *e*P **P 15 09 27.2 0.0**
**USP Ospenovka 63.70 329** P **P 15 09 27.9 +0.7**
SNR=32
**XAN Xi'an 63.74 297** ⇑P **P 15 09 28.2 +0.6**
XAN PP **PP 15 11 45.6 -1.7**
XAN S **S 15 18 04.5 +2.4**
XAN pmax pmax
comp=Z,60nm,2.0s
XAN pmax pmax
comp=Z,5µm,6.5s
XAN LR LR
comp=Z,32µm,17.2s
XAN LR LR
comp=Z,54µm,16.7s
XAN LR LR

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,90µm,14.9s | | | | | | | | |
| **BNI** | **Bardonecchia** | **63.77** | **22** | | IAmb | IAmb | 15 10 14.6 | | |
| | comp=Z,560nm,2.0s | | | | | | | | |
| BNI | | | | | IAMs_20 | IAMs_20 | 15 39 46.0 | | |
| | comp=Z,28µm,20.0s | | | | | | | | |
| **BNI** | **Bardonecchia** | **63.77** | **22** | ⇓ | P | P | **15 09 29.0** | **+1.2** | |
| **GBAS** | **Gorenja Brezov** | **63.78** | **16** | *i* | P | P | **15 09 27.3** | **-0.4** | |
| GBAS | | | | *e* | S | S | **15 18 01.6** | **-0.7** | |
| GBAS | | | | *e* | SS | SS | 15 21 56.1 | -13 | |
| **JMZ** | **Minamidaito 2** | **63.82** | **274** | | IAMs_20 | IAMs_20 | 15 38 34.6 | | |
| | comp=Z,33µm,19.0s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **63.83** | **328** | | P | P | **15 09 29.2** | **+0.8** | |
| | SNR=40 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **63.83** | **328** | | P | P | **15 09 28.6** | **+0.3** | |
| **MORH** | **Mrgy, Hungar** | **63.86** | **12** | ⇑ | P | P | **15 09 29.5** | **+1.3** | |
| **CHMS** | **Chumysh** | **63.91** | **328** | | P | P | **15 09 29.4** | **+0.8** | |
| | SNR=38 | | | | | | | | |
| **MONC** | **Moncucco Torin** | **63.91** | **21** | ⇑ | P | P | **15 09 30.0** | **+1.5** | |
| **JOW** | **Kunigami** | **63.92** | **277** | | P | P | **15 09 29.2** | **+0.4** | |
| **JOW** | **Kunigami** | **63.92** | **277** | | P | P | **15 09 28.0** | **-0.8** | |
| | comp=Z,105nm,0.7s,baz=47,slow=5.7,SNR=13 | | | | | | | | |
| JOW | | | | | LR | LR | 15 39 46.8 | | |
| | comp=Z,10µm,19.7s,baz=50,slow=38 | | | | | | | | |
| | comp=Z,105nm,0.7s | | | | | | | | |
| **KOVH** | **Kovagotottos** | **63.94** | **13** | ⇓ | P | P | **15 09 28.9** | **+0.2** | |
| **CEY** | **Cerknica** | **63.97** | **16** | *e* | P | P | **15 09 28.0** | **-1.0** | |
| **SIRR** | **Siria** | **64.01** | **10** | ⇑ | P | P | **15 09 30.4** | **+1.2** | |
| **TESR** | **Tescani** | **64.01** | **6** | ⇓ | P | P | **15 09 30.1** | **+0.9** | |
| **TEOL** | **Teolo** | **64.07** | **18** | | IAmb | IAmb | 15 09 35.3 | | |
| | comp=Z,191nm,0.9s | | | | | | | | |
| **CHIV** | **Chivirico** | **64.08** | **103** | | IAmb | IAmb | 15 09 39.5 | | |
| | comp=Z,270nm,1.1s | | | | | | | | |
| CHIV | | | | | IAMs_20 | IAMs_20 | 15 34 14.1 | | |
| | comp=Z,93µm,21.0s | | | | | | | | |
| **PURM** | **Purcari** | **64.09** | **4** | ⇑ | P | P | **15 09 32.0** | **+2.3** | |
| **SKDS** | **Skadanscina** | **64.12** | **16** | *e* | P | P | **15 09 28.7** | **-1.3** | |
| **APG** | **El Apazote** | **64.14** | **119** | | LR | LR | 15 40 37.3 | | |
| | comp=Z,4µm,20.6s,baz=359,slow=39 | | | | | | | | |
| **PSET** | **Sete Cidades** | **64.18** | **50** | *e* | P | P | **15 09 30.8** | **+0.4** | |
| | comp=Z,515nm,1.5s | | | | | | | | |
| **ONER** | **Baraj Valea Uz** | **64.18** | **6** | ⇑ | P | P | **15 09 31.7** | **+1.4** | |
| **KBK** | **Karagaybulak** | **64.21** | **328** | | P | P | **15 09 31.7** | **+0.9** | |
| | SNR=28 | | | | | | | | |
| **RTAL** | **Retalhuleu** | **64.22** | **120** | | IAMs_20 | IAMs_20 | 15 37 02.0 | | |
| | comp=Z,37µm,19.0s | | | | | | | | |
| **BOJS** | **Bojanci** | **64.28** | **15** | *e* | S | S | **15 18 08.1** | **-0.3** | |
| **BOJS** | **Bojanci** | **64.28** | **15** | *e* | P | P | **15 09 30.8** | **-0.1** | |
| **CMLA** | **Cha da Macela** | **64.29** | **50** | ⇑ | P | P | **15 09 31.6** | **+0.4** | |
| **AAK** | **Ala-Archa** | **64.31** | **328** | | P | P | **15 09 32.3** | **+0.9** | |
| | SNR=17 | | | | | | | | |
| **AAK** | **Ala-Archa** | **64.31** | **328** | | P | P | **15 09 30.1** | **-1.3** | |
| AAK | | | | | IAmb | IAmb | 15 09 46.4 | | |
| | comp=Z,297nm,1.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **64.31** | **328** | *i* | P | P | **15 09 32.4** | **+0.9** | |
| | SNR=28 | | | | | | | | |
| **AAK** | **Ala-Archa** | **64.31** | **328** | | P | P | **15 09 33.5** | **+2.1** | |
| **AAK** | **Ala-Archa** | **64.31** | **328** | *ce* | P | P | **15 09 32.0** | **+0.6** | |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,217nm,1.7s | | | | | | | | |
| **PGRON** | **Lagoa das Cont** | **64.32** | **50** | *e* | P | P | **15 09 31.7** | **+0.3** | |
| | comp=Z,366nm,1.5s | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **64.32** | **34** | ⇑ | *e* | P | **15 09 32.0** | **+0.6** | |
| | comp=Z,523nm,1.8s | | | | | | | | |
| PGAV | | | | *i* | S | S | **15 18 09.9** | **+0.6** | |
| PGAV | | | | *e* | LQ | LQ | 15 25 24.1 | | |
| PGAV | | | | *e* | LR | LR | 15 29 24.8 | | |
| | comp=Z,27µm,22.0s | | | | | | | | |
| **BART** | **Pico Bartolome** | **64.37** | **50** | *e* | P | P | **15 09 32.1** | **+0.3** | |
| | comp=Z,471nm,1.3s | | | | | | | | |
| **OZUR** | | **64.39** | **7** | ⇑ | P | P | **15 09 33.5** | **+1.7** | |
| **BOSR** | **Bodos** | **64.41** | **7** | ⇑ | P | P | **15 09 34.2** | **+2.4** | |
| **EKS2** | **Erkin-Say** | **64.42** | **329** | | P | P | **15 09 32.7** | **+0.7** | |
| | SNR=53 | | | | | | | | |
| **TURR** | **Turia** | **64.44** | **7** | ⇓ | P | P | **15 09 34.2** | **+2.2** | |
| **DEV** | **Deva** | **64.47** | **9** | ⇑ | P | P | **15 09 33.6** | **+1.4** | |
| **DEV** | **Deva** | **64.47** | **9** | | P | P | **15 09 33.5** | **+1.4** | |
| **GRTK** | **Grand Turk** | **64.48** | **97** | | IAMs_20 | IAMs_20 | 15 35 51.6 | | |
| | comp=Z,51µm,22.0s | | | | | | | | |
| **DOPR** | **Dopca** | **64.51** | **7** | ⇑ | P | P | **15 09 34.4** | **+1.9** | |
| **SURR** | **Surduc** | **64.55** | **10** | ⇑ | P | P | **15 09 34.5** | **+1.8** | |
| **KK31** | **Karatay Array** | **64.55** | **332** | *i* | P | P | **15 09 32.5** | **-0.3** | |
| **KKAR** | **Karatay Array** | **64.55** | **332** | | P | P | **15 09 31.6** | **-1.2** | |
| **KKAR** | **Karatay Array** | **64.55** | **332** | ⇑ | P | P | **15 09 32.1** | **-0.7** | |
| **KKAR** | **Karatay Array** | **64.55** | **332** | | P | P | **15 09 31.6** | **-1.2** | |
| **GTBY** | **Guantanamo Bay** | **64.57** | **102** | | IAMs_20 | IAMs_20 | 15 34 13.1 | | |
| | comp=Z,46µm,21.0s | | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **64.57** | **102** | ⇑ | P | P | **15 09 34.7** | **+1.6** | |
| **PCAB** | **Cabril** | **64.62** | **34** | *e* | P | P | **15 09 34.6** | **+1.3** | |
| | comp=Z,454nm,1.8s | | | | | | | | |
| **ECAL** | **Calabor** | **64.64** | **33** | | P | P | **15 09 31.9** | **-1.6** | |
| **BZS** | **Buzias** | **64.66** | **10** | *e* | P | P | **15 09 33.5** | **+0.1** | |
| **BZS** | **Buzias** | **64.66** | **10** | ⇑ | P | P | **15 09 33.5** | **+0.1** | |
| **BZS** | **Buzias** | **64.66** | **10** | ⇑ | P | P | **15 09 35.0** | **+1.5** | |
| **BZS** | **Buzias** | **64.66** | **10** | | P | P | **15 09 34.9** | **+1.5** | |
| **COVR** | **Voineasa-Covas** | **64.66** | **7** | ⇑ | P | P | **15 09 36.1** | **+2.6** | |
| **VRI** | **Vrincioaia** | **64.66** | **6** | *e* | P | P | **15 09 33.1** | **-0.4** | |
| **VRI** | **Vrincioaia** | **64.66** | **6** | ⇑ | P | P | **15 09 34.8** | **+1.3** | |
| **VRI** | **Vrincioaia** | **64.66** | **6** | | P | P | **15 09 34.8** | **+1.3** | |
| **VARL** | **Varlezi** | **64.67** | **5** | ⇓ | P | P | **15 09 35.6** | **+2.1** | |
| **PANC** | **Panciu** | **64.67** | **6** | ⇑ | P | P | **15 09 36.2** | **+2.8** | |
| **PLOR** | **Plostina** | **64.67** | **6** | ⇑ | P | P | **15 09 35.2** | **+1.6** | |
| **PLOR** | **Plostina** | **64.67** | **6** | | P | P | **15 09 35.2** | **+1.6** | |
| **COSR** | **Cosmesti PH** | **64.69** | **6** | ⇑ | P | P | **15 09 36.1** | **+2.5** | |
| **RUSF** | **Rustrel** | **64.71** | **23** | ⇑ | P | P | **15 09 38.0** | **+4.2** | |
| **VLDR** | **Vladesti** | **64.73** | **5** | ⇑ | P | P | **15 09 35.1** | **+1.3** | |
| **BRLS** | **Borolday** | **64.73** | **332** | *e* | P | P | **15 09 35.9** | **+1.8** | |
| | baz=332 | | | | | | | | |
| **BRLS** | **Borolday** | **64.73** | **332** | *e* | P | P | **15 09 35.8** | **+1.8** | |
| **TNR** | **Turnu Rosu** | **64.77** | **8** | ⇑ | P | P | **15 09 36.0** | **+1.8** | |
| **TNR** | **Turnu Rosu** | **64.77** | **8** | | P | P | **15 09 36.0** | **+1.8** | |
| **PBRG** | **Braganca** | **64.78** | **33** | ⇑ | *e* | P | **15 09 35.2** | **+0.9** | |
| | comp=Z,363nm,1.7s | | | | | | | | |
| **ODBI** | **Odobesti** | **64.78** | **6** | ⇓ | P | P | **15 09 35.7** | **+1.5** | |
| **MTLF** | **Montolieu** | **64.82** | **26** | ⇑ | P | P | **15 09 35.1** | **+0.5** | |
| **EPF** | **Esparros** | **64.83** | **27** | *e* | P | P | **15 09 33.9** | **-0.8** | |
| **ERBR** | **Yeremizino-Bor** | **64.89** | **356** | *e* | P | P | **15 09 36.6** | **+1.7** | |
| ERBR | | | | *e* | | | 15 11 59.1 | | |
| ERBR | | | | | eSS | SS | 15 22 25.3 | -1.0 | |
| ERBR | | | | | eSSS | SSS | 15 25 25.2 | | |
| ERBR | | | | | pmax | pmax | | | |
| | comp=Z,550nm,1.3s | | | | | | | | |
| ERBR | | | | | MLR | MLR | | | |
| | comp=Z,13µm,23.0s | | | | | | | | |
| **SCTR** | **Scanteiesti** | **64.90** | **5** | ⇑ | P | P | **15 09 36.4** | **+1.4** | |
| **A051A** | **Mrakovica** | **64.91** | **14** | *e* | P | P | **15 09 35.6** | **+0.4** | |
| **AML** | **Almayashu** | **64.94** | **329** | | P | P | **15 09 37.2** | **+1.3** | |
| | SNR=33 | | | | | | | | |
| **LOT** | **Lotru** | **64.95** | **9** | *e* | P | P | **15 09 39.3** | **+3.8** | |
| **LOT** | **Lotru** | **64.95** | **9** | ⇓ | P | P | **15 09 38.3** | **+2.9** | |
| **GZR** | **Gura Zlata** | **64.95** | **9** | ⇑ | P | P | **15 09 36.8** | **+1.4** | |
| **GZR** | **Gura Zlata** | **64.95** | **9** | | P | P | **15 09 36.8** | **+1.4** | |
| **TUDR** | | **64.97** | **6** | ⇓ | P | P | **15 09 38.2** | **+2.8** | |
| **SLCR** | **Slobozia Conac** | **64.97** | **5** | ⇓ | P | P | **15 09 37.3** | **+1.8** | |
| **TATR** | **Tatarca** | **64.98** | **5** | ⇓ | P | P | **15 09 37.1** | **+1.7** | |
| **BISRR** | **Bisoca** | **64.98** | **6** | ⇓ | P | P | **15 09 37.6** | **+2.0** | |
| **POLO** | **Lamas de Olo** | **64.99** | **34** | ⇑ | *e* | P | **15 09 36.3** | **+0.5** | |
| | comp=Z,112nm,1.5s | | | | | | | | |
| **FRGS** | **Fruska Gora** | **64.99** | **12** | *e* | P | P | **15 09 35.3** | **-0.3** | |
| **FRGS** | **Fruska Gora** | **64.99** | **12** | ⇑ | P | P | **15 09 37.7** | **+2.0** | |
| **MLR** | **Muntele Rosu** | **65.00** | **7** | *e* | P | P | **15 09 36.4** | **+0.5** | |
| **MLR** | **Muntele Rosu** | **65.00** | **7** | | IAMs_20 | IAMs_20 | 15 40 53.3 | | |
| | comp=Z,38µm,22.0s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **65.00** | **7** | ⇓ | P | P | **15 09 37.8** | **+1.9** | |
| **MLR** | **Muntele Rosu** | **65.00** | **7** | ⇓ | P | P | **15 09 37.7** | **+1.9** | |
| **VOIR** | | **65.02** | **8** | ⇑ | P | P | **15 09 37.3** | **+1.4** | |
| **VOIR** | | **65.02** | **8** | ⇑ | P | P | **15 09 37.2** | **+1.4** | |
| **IZVR** | **Izvoarele** | **65.02** | **5** | ⇑ | P | P | **15 09 37.3** | **+1.5** | |
| **NEGRR** | **Negrea** | **65.03** | **5** | ⇑ | P | P | **15 09 37.6** | **+1.7** | |
| **SBF** | **Sospel** | **65.04** | **21** | *e* | P | P | **15 09 36.2** | **+0.2** | |
| **MTO3** | **Montecristo** | **65.05** | **118** | | IAmb | IAmb | 15 09 47.0 | | |
| | comp=Z,367nm,1.1s | | | | | | | | |
| MTO3 | | | | | IAMs_20 | IAMs_20 | 15 40 40.1 | | |
| | comp=Z,43µm,18.0s | | | | | | | | |
| **SCHL** | **Schela** | **65.07** | **5** | ⇑ | P | P | **15 09 37.8** | **+1.7** | |
| **ARR** | **Arges** | **65.07** | **8** | ⇓ | P | P | **15 09 37.7** | **+1.5** | |
| **NEHR** | **Nehoiu** | **65.08** | **7** | ⇓ | P | P | **15 09 37.9** | **+1.7** | |
| **SCHLR** | **Schela** | **65.10** | **5** | ⇑ | P | P | **15 09 37.7** | **+1.5** | |
| **PVRL** | **Vila Real** | **65.10** | **34** | *e* | P | P | **15 09 37.3** | **+0.9** | |
| | comp=Z,291nm,1.7s | | | | | | | | |
| **VLC** | **Villacollemand** | **65.11** | **19** | | P | P | **15 09 37.0** | **+0.6** | |
| **VLC** | **Villacollemand** | **65.11** | **19** | ⇑ | P | P | **15 09 36.7** | **+0.3** | |
| **PSMA** | **Santa Maria** | **65.12** | **50** | *e* | P | P | **15 09 36.7** | **+0.2** | |
| | comp=Z,420nm,1.5s | | | | | | | | |
| **PSMN** | **Pico do Norte,** | **65.13** | **50** | *e* | P | P | **15 09 34.9** | **-1.7** | |
| | comp=Z,381nm,1.8s | | | | | | | | |
| **BLY** | **Banja Luka** | **65.20** | **14** | ⇑ | P | P | **15 09 37.5** | **+0.6** | |
| **BLY** | **Banja Luka** | **65.20** | **14** | *e* | P | P | **15 09 37.1** | **+0.2** | |
| **WHN** | **Wuhan** | **65.23** | **291** | | P | P | **15 09 37.0** | **-0.3** | |
| WHN | | | | | sP | sP | **15 09 44.8** | **+3.5** | |
| WHN | | | | | PP | PP | **15 12 05.9** | **+5.6** | |
| WHN | | | | | S | S | **15 18 19.7** | **-0.8** | |
| WHN | | | | | pmax | pmax | | | |
| | comp=Z,380nm,0.9s | | | | | | | | |
| WHN | | | | | LR | LR | | | |
| | comp=Z,67µm,15.8s | | | | | | | | |
| **MTDJ** | **Mount Denham** | **65.32** | **105** | ⇓ | P | P | **15 09 39.1** | **+0.9** | |
| **MVO** | **Moncorvo** | **65.34** | **34** | ⇑ | *e* | P | **15 09 38.8** | **+0.8** | |
| | comp=Z,252nm,2.2s | | | | | | | | |
| MVO | | | | *i* | S | S | **15 18 23.5** | **+1.7** | |
| MVO | | | | *e* | LQ | LQ | 15 25 43.5 | | |
| MVO | | | | *e* | LR | LR | 15 29 53.3 | | |
| | comp=Z,28µm,22.0s | | | | | | | | |
| **CFR** | **Carcaliu** | **65.40** | **5** | ⇑ | P | P | **15 09 39.4** | **+1.1** | |
| **CFR** | **Carcaliu** | **65.40** | **5** | | P | P | **15 09 39.3** | **+1.1** | |
| **ISR** | **Istrita** | **65.40** | **6** | ⇑ | P | P | **15 09 39.9** | **+1.6** | |
| **ISR** | **Istrita** | **65.40** | **6** | | P | P | **15 09 39.9** | **+1.6** | |
| **A050A** | **Klekovaca** | **65.41** | **14** | *e* | P | P | **15 09 38.0** | **-0.4** | |
| **TLCR** | | **65.41** | **5** | ⇑ | P | P | **15 09 40.4** | **+2.1** | |
| **TLCR** | | **65.41** | **5** | | P | P | **15 09 40.3** | **+2.1** | |
| **HERR** | **Herculane** | **65.44** | **10** | ⇑ | P | P | **15 09 39.6** | **+1.1** | |
| **GOF** | **Gofitskoye** | **65.46** | **354** | *ce* | P | P | **15 09 39.4** | **+0.8** | |
| GOF | | | | *e* | S | S | **15 18 26.3** | **+3.3** | |
| **MDVR** | **Moldovita** | **65.49** | **10** | ⇑ | P | P | **15 09 40.3** | **+1.4** | |
| **MGRS** | **Mrkonjic Grad** | **65.52** | **14** | *e* | P | P | **15 09 39.3** | **+0.2** | |
| **TEKS** | **Tekeris** | **65.58** | **12** | *e* | P | P | **15 09 38.9** | **-0.5** | |
| **STFAR** | **Stefanesti-Arg** | **65.59** | **8** | ⇓ | P | P | **15 09 42.3** | **+2.8** | |
| **PVIS** | **Viseu** | **65.60** | **34** | ⇑ | *e* | P | **15 09 40.1** | **+0.4** | |
| | comp=Z,258nm,1.6s | | | | | | | | |
| **SRE** | **Strehaia** | **65.70** | **9** | ⇑ | P | P | **15 09 43.1** | **+2.9** | |
| **SRE** | **Strehaia** | **65.70** | **9** | | P | P | **15 09 43.1** | **+2.9** | |
| **TPGR** | **Topolog** | **65.73** | **5** | ⇓ | P | P | **15 09 42.6** | **+2.2** | |
| **SIM** | **Simferopol'** | **65.73** | **1** | *e* | P | P | 15 09 46.0 | +5.6 | |
| SIM | | | | *e* | | | 15 12 13.0 | | |
| SIM | | | | *e* | PPP | PPP | 15 13 48.0 | | |
| SIM | | | | *e* | S | S | **15 18 28.0** | **+1.7** | |
| SIM | | | | | pmax | pmax | | | |
| | comp=Z,180nm,1.6s | | | | | | | | |
| **SNET** | **Serv Nac Est T** | **65.76** | **118** | | IAMs_20 | IAMs_20 | 15 40 27.9 | | |
| | comp=Z,33µm,18.0s | | | | | | | | |
| **EJON** | **La Jonquera** | **65.80** | **25** | | P | P | **15 09 36.8** | **-4.1** | |
| **SULR** | | **65.83** | **7** | ⇑ | P | P | **15 09 43.2** | **+2.2** | |
| **JURR** | **Jurilovca** | **65.83** | **5** | ⇑ | P | P | **15 09 42.3** | **+1.3** | |
| **GOMU** | **GeErMu** | **65.83** | **310** | | P | P | **15 09 41.6** | **0.0** | |
| GOMU | | | | | pP | sP | 15 09 47.6 | +1.9 | |
| GOMU | | | | | sP | pP | 15 09 50.7 | +6.1 | |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,87nm,1.0s | | | | | | | | |
| GOMU | | | | | pmax | pmax | | | |
| | comp=Z,8µm,6.4s | | | | | | | | |
| GOMU | | | | | LR | LR | | | |
| | comp=Z,21µm,21.1s | | | | | | | | |
| GOMU | | | | | LR | LR | | | |
| | comp=Z,28µm,20.1s | | | | | | | | |
| GOMU | | | | | LR | LR | | | |
| | comp=Z,35µm,19.5s | | | | | | | | |
| **ANN** | **Anapa** | **65.86** | **358** | *e* | P | P | **15 09 45.3** | **+4.1** | |
| ANN | | | | *e* | | | 15 12 04.2 | | |
| ANN | | | | *e* | S | S | **15 18 35.0** | **+7.2** | |
| ANN | | | | *e* | SS | SS | **15 22 42.4** | **+1.0** | |
| ANN | | | | | pmax | pmax | | | |
| | comp=Z,122nm,1.0s | | | | | | | | |
| ANN | | | | | MLR | MLR | | | |
| | comp=Z,14µm,21.0s | | | | | | | | |
| **HARR** | **Harsova** | **65.88** | **5** | ⇑ | P | P | **15 09 42.6** | **+1.2** | |
| **HARR** | **Harsova** | **65.88** | **5** | | P | P | **15 09 42.5** | **+1.2** | |
| **HUMR** | **Humele** | **65.92** | **8** | ⇓ | P | P | **15 09 43.9** | **+2.2** | |
| **LABN** | **Labinsk** | **65.95** | **355** | *e* | P | P | **15 09 44.8** | **+3.0** | |
| LABN | | | | *e* | | | 15 12 06.3 | | |
| LABN | | | | | pmax | pmax | | | |
| | comp=Z,631nm,2.6s | | | | | | | | |
| LABN | | | | | MLR | MLR | | | |
| | comp=Z,13µm,22.0s | | | | | | | | |
| **MTE** | **Manteigas** | **65.98** | **34** | | IAmb | IAmb | 15 10 04.3 | | |
| | comp=Z,192nm,1.0s | | | | | | | | |
| MTE | | | | | IAMs_20 | IAMs_20 | 15 39 33.3 | | |
| | comp=Z,29µm,20.0s | | | | | | | | |
| **MTE** | **Manteigas** | **65.98** | **34** | ⇑ | *e* | P | **15 09 42.6** | **+0.5** | |
| | comp=Z,336nm,1.5s | | | | | | | | |
| MTE | | | | *i* | S | S | **15 18 30.1** | **+0.6** | |
| MTE | | | | *e* | LQ | LQ | 15 25 53.3 | | |
| MTE | | | | *e* | LR | LR | 15 30 03.4 | | |
| | comp=Z,25µm,18.0s | | | | | | | | |
| **MTE** | **Manteigas** | **65.98** | **34** | ⇑ | P | P | **15 09 42.8** | **+0.7** | |
| **COI** | **Coimbra** | **65.99** | **35** | | IAmb | IAmb | 15 10 15.3 | | |
| | comp=Z,193nm,1.0s | | | | | | | | |
| COI | | | | | IAMs_20 | IAMs_20 | 15 39 06.6 | | |
| | comp=Z,26µm,20.0s | | | | | | | | |
| **COI** | **Coimbra** | **65.99** | **35** | ⇑ | *e* | P | **15 09 43.1** | **+1.0** | |
| | comp=Z,380nm,1.8s | | | | | | | | |
| **COI** | **Coimbra** | **65.99** | **35** | ⇑ | P | P | **15 09 43.1** | **+1.0** | |
| **COI** | **Coimbra** | **65.99** | **35** | *e* | P | P | **15 09 43.2** | **+1.1** | |
| **HAPS** | **Han Pijesak,BI** | **66.00** | **12** | *e* | P | P | **15 09 41.7** | **-0.6** | |
| **TGUH** | **Tegucigalpa,Un** | **66.02** | **116** | | IAMs_20 | IAMs_20 | 15 40 45.9 | | |
| | comp=Z,36µm,19.0s | | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **66.02** | **116** | ⇑ | P | P | **15 09 43.1** | **+0.4** | |
| **TLBR** | **Topalu** | **66.03** | **5** | ⇓ | P | P | **15 09 44.9** | **+2.6** | |
| **LEHL** | **Lehliu** | **66.06** | **6** | ⇓ | P | P | **15 09 44.6** | **+2.2** | |
| **PCAS** | **Casmilo, Conde** | **66.12** | **35** | ⇑ | *e* | P | **15 09 43.6** | **+0.6** | |
| | comp=Z,571nm,1.8s | | | | | | | | |
| **TIRR** | **Tirgusor** | **66.13** | **5** | *e* | P | P | **15 09 42.5** | **-0.4** | |
| **BBLS** | **Lazi&#263i** | **66.25** | **12** | *e* | P | P | **15 09 43.6** | **-0.2** | |
| **VLAD** | **Vladila** | **66.42** | **8** | ⇑ | P | P | **15 09 46.1** | **+1.2** | |
| **ICOR** | **Ion Corvin** | **66.45** | **5** | ⇓ | P | P | **15 09 47.7** | **+2.7** | |
| **RUDO** | **Rudo** | **66.49** | **12** | *e* | P | P | **15 09 45.2** | **-0.1** | |
| **FDMO** | **Fiordimonte** | **66.51** | **17** | | IAmb | IAmb | 15 10 02.8 | | |
| | comp=Z,136nm,0.7s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **66.53** | **34** | *e* | P | P | **15 09 45.7** | **+0.1** | |
| | comp=Z,281nm,1.4s | | | | | | | | |
| **PGF** | **Pioggiola** | **66.53** | **21** | ⇑ | P | P | **15 09 45.9** | **+0.2** | |
| **PGF** | **Pioggiola** | **66.53** | **21** | *e* | P | P | **15 09 46.5** | **+0.8** | |
| **KIV** | **Kislovodsk** | **66.58** | **354** | *e* | P | P | **15 09 46.5** | **+0.6** | |
| **KIV** | **Kislovodsk** | **66.58** | **354** | *i* | P | P | **15 09 47.4** | **+1.4** | |
| | SNR=19 | | | | | | | | |
| **KIV** | **Kislovodsk** | **66.58** | **354** | ⇑ | P | P | **15 09 47.4** | **+1.4** | |
| **KIV** | **Kislovodsk** | **66.58** | **354** | | P | P | **15 09 48.4** | **+2.4** | |
| **KIV** | **Kislovodsk** | **66.58** | **354** | ⇓ | P | P | **15 09 47.8** | **+1.8** | |
| **KIV** | **Kislovodsk** | **66.58** | **354** | *e* | P | P | **15 09 46.6** | **+0.6** | |
| KIV | | | | *e* | | | 15 12 13.2 | | |
| KIV | | | | *e* | S | S | **15 18 38.9** | **+2.1** | |
| KIV | | | | *e* | SS | SS | **15 22 58.3** | **+5.6** | |
| KIV | | | | | pmax | pmax | | | |
| | comp=Z,139nm,1.1s | | | | | | | | |
| KIV | | | | | MLR | MLR | | | |
| | comp=Z,8µm,17.0s | | | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **66.58** | **354** | | LR | LR | 15 43 14.7 | | |
| | comp=Z,9µm,20.7s,baz=271,slow=40 | | | | | | | | |
| **PSBE** | **So Bento** | **66.58** | **36** | *e* | P | P | **15 09 47.5** | **+1.5** | |
| | comp=Z,288nm,2.0s | | | | | | | | |
| **BOVS** | **Bovan** | **66.64** | **10** | ⇑ | P | P | **15 09 47.2** | **+1.0** | |
| **VALD** | **Valchedram** | **66.68** | **9** | | P | P | **15 09 46.6** | **+0.1** | |
| **NRCA** | **Norcia** | **66.72** | **17** | | IAmb | IAmb | 15 10 00.7 | | |
| | comp=Z,271nm,1.0s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **66.76** | **98** | | IAmb | IAmb | 15 09 57.4 | | |
| | comp=Z,912nm,1.9s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **66.76** | **98** | ⇑ | P | P | **15 09 46.4** | **-1.0** | |
| **SHA1** | **Shidzhatmaz** | **66.79** | **354** | *ce* | P | P | **15 09 48.2** | **+0.7** | |
| **KBZ** | **Khabaz** | **66.79** | **354** | | P | P | **15 09 46.1** | **-1.1** | |
| | comp=Z,14nm,0.8s,baz=354,slow=8.4,SNR=22 | | | | | | | | |
| KBZ | | | | | LR | LR | 15 43 07.3 | | |
| | comp=Z,11µm,20.7s,baz=356,slow=40 | | | | | | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **66.79** | **354** | *ce* | P | P | **15 09 47.6** | **+0.4** | |
| KBZ | | | | | pmax | pmax | | | |
| | comp=Z,90nm,1.5s | | | | | | | | |
| **UPM** | **Unac-Piva** | **66.87** | **13** | *e* | P | P | **15 09 46.9** | **-1.1** | |
| **UCM** | **Universidad Co** | **66.87** | **31** | | P | P | **15 09 48.3** | **+0.4** | |
| **SJES** | **Sjenica** | **66.89** | **12** | *e* | P | P | **15 09 47.8** | **-0.2** | |
| **PMRV** | **Marv??o** | **66.94** | **34** | ⇑ | *e* | P | **15 09 48.4** | **+0.1** | |
| | comp=Z,146nm,1.9s | | | | | | | | |
| PMRV | | | | *i* | S | S | **15 18 41.1** | **-0.1** | |
| PMRV | | | | *e* | LQ | LQ | 15 26 13.7 | | |
| PMRV | | | | *e* | LR | LR | 15 30 20.4 | | |
| | comp=Z,21µm,22.0s | | | | | | | | |
| **NCK** | **Nalchik** | **67.00** | **353** | *e* | P | P | **15 09 49.5** | **+0.9** | |
| NCK | | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.0s | | | | | | | | |
| **MPEP** | **Malo Peshtene** | **67.03** | **9** | | P | P | **15 09 48.9** | **+0.2** | |
| **SOC** | **Sochi** | **67.04** | **356** | *e* | P | P | **15 09 47.8** | **-1.0** | |
| SOC | | | | *e* | | | 15 12 12.5 | | |
| SOC | | | | *e* | PPP | PPP | 15 13 59.3 | | |
| SOC | | | | *e* | S | S | **15 18 43.5** | **+1.3** | |
| SOC | | | | *e* | SSS | SSS | 15 26 05.6 | | |
| SOC | | | | | MLR | MLR | | | |
| | comp=Z,11µm,18.0s | | | | | | | | |
| **ENH** | **Enshi** | **67.05** | **295** | | IAMs_20 | IAMs_20 | 15 43 56.4 | | |
| | comp=Z,21µm,18.0s | | | | | | | | |
| **KSH** | **Kashi** | **67.05** | **326** | | P | P | **15 09 52.3** | **+3.2** | |
| KSH | | | | | sP | sP | 15 10 01.8 | +8.7 | |
| KSH | | | | | PP | PP | 15 12 25.2 | +9.0 | |
| KSH | | | | | S | S | **15 18 48.6** | **+5.9** | |
| KSH | | | | | SS | SS | **15 23 05.4** | **+5.0** | |
| KSH | | | | | pmax | pmax | | | |
| | comp=Z,110nm,1.7s | | | | | | | | |
| KSH | | | | | pmax | pmax | | | |
| | comp=Z,4µm,6.0s | | | | | | | | |
| KSH | | | | | LR | LR | | | |
| | comp=Z,10µm,17.2s | | | | | | | | |
| KSH | | | | | LR | LR | | | |
| | comp=Z,24µm,17.9s | | | | | | | | |
| KSH | | | | | LR | LR | | | |
| | comp=Z,12µm,48.1s | | | | | | | | |
| **PMTG** | **Montargil** | **67.12** | **35** | ⇑ | *e* | P | **15 09 49.6** | **+0.2** | |
| | comp=Z,231nm,1.9s | | | | | | | | |
| **BRY** | **Bratogost** | **67.14** | **13** | *e* | P | P | **15 09 49.1** | **-0.5** | |
| **BRY** | **Bratogost** | **67.14** | **13** | *e* | P | P | **15 09 49.2** | **-0.4** | |
| **SZH** | **Strazhitsa** | **67.23** | **7** | | P | P | **15 09 49.9** | **-0.1** | |
| **LIS** | **Lisbon** | **67.27** | **36** | *e* | P | P | **15 09 51.4** | **+1.1** | |
| | comp=Z,509nm,1.9s | | | | | | | | |
| **LIS** | **Lisbon** | **67.27** | **36** | *e* | P | P | **15 09 50.8** | **+0.5** | |
| LIS | | | | *e* | S | S | **15 18 47.5** | **+2.4** | |
| LIS | | | | | IAMs_20 | IAMs_20 | 15 40 37.7 | | |
| | comp=N,30µm,21.1s | | | | | | | | |
| **LIS** | **Lisbon** | **67.27** | **36** | *e* | P | P | **15 09 50.8** | **+0.5** | |
| LIS | | | | *e* | S | S | **15 18 47.5** | **+2.4** | |
| **LIS** | **Lisbon** | **67.27** | **36** | *e* | P | P | **15 09 51.3** | **+1.0** | |
| **NKME** | **Niksic** | **67.31** | **13** | *e* | P | P | **15 09 49.9** | **-0.7** | |
| **MAK** | **Makhachkala** | **67.33** | **350** | *c* | *i* | P | **15 09 47.8** | **-2.8** | |
| MAK | | | | *e* | S | S | **15 18 43.1** | **-2.5** | |
| MAK | | | | *e* | SS | SS | **15 23 03.3** | **-0.9** | |
| MAK | | | | | pmax | pmax | | | |
| | comp=Z,391nm,0.9s | | | | | | | | |
| MAK | | | | | MLR | MLR | | | |
| | comp=Z,18µm,18.0s | | | | | | | | |
| **ESBB** | **Sonseca Array** | **67.36** | **32** | | IAmb | IAmb | 15 10 13.5 | | |
| | comp=Z,202nm,1.0s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.36** | **32** | | P | P | **15 09 50.2** | **-0.7** | |
| **ESDC** | **Sonseca Array** | **67.36** | **32** | | P | P | **15 09 49.7** | **-1.2** | |
| | comp=Z,20nm,0.8s,baz=346,slow=5.1,SNR=63 | | | | | | | | |
| ESDC | | | | | PKPPKP | P'P'df | 15 38 10.3 | -11 | |
| | comp=Z,1.1nm,1.0s,baz=158,slow=1.4,SNR=3.0 | | | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **CRIN** | **San Cristobal** | **67.37** | **116** | | IAMs_20 | IAMs_20 | 15 40 22.6 | | |
| | comp=Z,26µm,20.0s | | | | | | | | |
| **PRD** | **Provadia** | **67.39** | **6** | | P | P | **15 09 51.4** | **+0.4** | |
| **PAB** | **San Pablo** | **67.41

MORF eS S 15 19 05.1 +2.3
RZN Rozhen 68.74 8 P P 15 10 00.3 +0.6
TIR Tirane 68.79 12 ⇓P P 15 10 02.0 +2.1
TIR Tirane 68.79 12 P P 15 10 01.9 +2.1
KURC Kurucasile-Bar 68.82 2 eP P 15 10 00.2 +0.2
PVAQ Vaqueiros 68.83 35⇑ eP P 15 10 00.4 +0.2
comp=Z,226nm,2.2s
PVAQ i S S 15 19 06.2 +2.4
PVAQ eLQ LQ 15 26 50.8
PVAQ eLR LR 15 31 19.2
comp=Z,21µm,20.0s
PVAQ Vaqueiros 68.83 35 ⇑P P 15 10 00.3 +0.2
MMB Musomishta 68.83 9 P P 15 09 59.9 -0.3
PFVI Vila Bisbo 68.87 36 P P 15 10 00.1 -0.3
PFVI IAmb IAmb 15 10 29.7
comp=Z,332nm,1.3s
PFVI Vila Bisbo 68.87 36 eP P 15 10 01.0 +0.6
comp=Z,289nm,1.8s
EMPR Esperanza - Ma 68.89 94 IAMs_20 IAMs_20 15 42 51.4
comp=Z,31µm,19.0s
AOPR Arecibo Observ 68.93 94 IAmb IAmb 15 10 10.3
comp=Z,236nm,1.1s
AOPR Arecibo Observ 68.93 94 eP P 15 10 01.3 +0.3
PBDV Barranco-do-Ve 68.94 35 eP P 15 10 01.8 +0.9
comp=Z,289nm,2.2s
BATM Batumi 68.96 354 eP P 15 10 04.1 +3.2
QZH Quanzhou 68.98 285 P P 15 10 00.5 -0.7
QZH S S 15 19 06.0 +0.1
QZH pmax pmax
comp=Z,210nm,2.0s
QZH pmax pmax
comp=Z,4µm,7.0s
QZH LR LR
comp=Z,17µm,15.7s
QZH LR LR
comp=Z,26µm,15.5s
QZH LR LR
comp=Z,25µm,15.7s
VAY Valandovo 68.99 10 i P P 15 10 01.9 +0.8
UUPR Utuado, UPR, P 69.03 94 IAMs_20 IAMs_20 15 41 00.1
comp=Z,22µm,19.0s
DIKM Dikmen 69.03 360 eP P 15 10 03.8 +2.5
DIKM Dikmen 69.03 360 ⇑P P 15 10 03.6 +2.3
NVST Nevrokopi 69.04 9 P P 15 10 01.7 +0.3
AKH Akhalkalaki 69.08 353 eP P 15 10 02.6 +0.7
OHR Ohrid 69.09 11 i P P 15 10 02.4 +0.7
SEKA Sheki 69.09 350 eP P 15 10 00.1 -1.7
CHGR Chuyangaron 69.11 332 IAMs_20 IAMs_20 15 46 07.7
comp=Z,24µm,19.0s
CRPR Cabo Rojo, PR 69.12 95 P P 15 10 02.0 -0.1
CRPR IAMs_20 IAMs_20 15 45 09.5
comp=Z,28µm,18.0s
BCA Borcka 69.12 354 eP P 15 10 05.1 +3.2
SIMJ Simiganj 69.13 332 P P 15 10 02.1 -0.1
SIMJ IAmb IAmb 15 10 16.6
comp=Z,514nm,1.2s
KNT Kendrikon 69.17 10 P P 15 10 02.4 +0.2
MLPR Magueyes Islan 69.17 95 IAMs_20 IAMs_20 15 44 19.1
comp=Z,32µm,18.0s
GCPR Guaynabo City 69.20 94 IAmb IAmb 15 10 12.1
comp=Z,456nm,1.2s
MATE Matera 69.23 15 eP P 15 09 59.9 -2.6
MATE Matera 69.23 15 ⇑P P 15 10 02.1 -0.4
CELP Cerrillos 69.24 94 IAmb IAmb 15 10 12.9
comp=Z,593nm,1.9s
CELP IAMs_20 IAMs_20 15 42 08.8
comp=Z,25µm,19.0s
SSLB Suanglung 69.25 282 P P 15 10 05.6 +2.6
SRS Serrai 69.25 9 P P 15 10 02.5 -0.2
SRS Serrai 69.25 9 eP P 15 10 02.5 -0.2
OBIP Obispado Ponce 69.26 94 IAmb IAmb 15 10 12.0
comp=Z,699nm,1.9s
OBIP IAMs_20 IAMs_20 15 42 40.3
comp=Z,33µm,18.0s
RDO Rodhopi 69.32 7 eP P 15 10 01.5 -1.6
RDO Rodhopi 69.32 7 P P 15 10 03.7 +0.6
RDO Rodhopi 69.32 7 ⇓P P 15 10 03.7 +0.6
SLVT Silivri 69.34 5 eP P 15 10 03.5 +0.2
KLVT Kilyos 69.34 5 eP P 15 10 04.0 +0.8
KAVA Kavala 69.42 8 P P 15 10 04.1 +0.4
HUMP Col San Antoni 69.43 93 IAMs_20 IAMs_20 15 39 48.9
comp=Z,31µm,20.0s
FNA Florina 69.45 11 eP P 15 10 03.5 -0.5
FNA Florina 69.45 11 P P 15 10 03.5 -0.5
FNA Florina 69.45 11 ⇓P P 15 10 03.6 -0.5
SILT Sile 69.46 4 eP P 15 10 01.0 -3.0
YULB Yu-li 69.50 282 P P 15 10 05.7 +1.2
IGPR InterUniversit 69.51 94 IAmb IAmb 15 10 14.1
comp=Z,340nm,1.4s
IGPR IAMs_20 IAMs_20 15 46 17.8
comp=Z,31µm,19.0s
ISK Istanbul-Kandi 69.53 5 eP P 15 10 05.1 +0.7
KAVV Kandilli-Istan 69.53 5 eP P 15 10 05.9 +1.5
SOH Sokhos 69.53 9 P P 15 10 04.9 +0.4
SOH Sokhos 69.53 9 eP P 15 10 04.9 +0.4
KOKK Kokkinochori, 69.57 9 P P 15 10 04.9 +0.2
VSL Villasalto 69.59 21 ⇓P P 15 10 05.1 +0.2
ALN Alexandroupoli 69.59 7 IAmb IAmb 15 10 19.3
comp=Z,430nm,1.7s
ALN Alexandroupoli 69.59 7 P P 15 10 05.3 +0.5
ALN Alexandroupoli 69.59 7 ⇓P P 15 10 05.0 +0.2
KVT Kavak 69.59 359 eP P 15 10 06.5 +1.6
ESPY Espiye-Giresun 69.72 357 eP P 15 10 05.7 0.0
HORT Hortiatis 69.74 9 eP P 15 10 04.9 -1.0
HORT Hortiatis 69.74 9 P P 15 10 05.9 0.0
ENEZ Enez 69.76 7 eP P 15 10 06.8 +1.0
HRT Hereke 69.79 4 eP P 15 10 06.8 +0.7
CUC Castrocucco 69.80 15 ⇑P P 15 10 05.8 -0.4
NEST Nestorio 69.80 11 P P 15 10 06.1 -0.1
CAVK Edirne/Enez-Ca 69.80 7 ⇑P P 15 10 07.8 +1.7
TPUB Ta-pu 69.81 282 P P 15 10 09.2 +2.8
ERIK Erikli-Kesan 69.84 7 eP P 15 10 07.3 +1.0
RKY Sarkoy-Tekirda 69.85 6 eP P 15 10 06.4 -0.1
KARS Kars 69.88 353 eP P 15 10 10.6 +3.8
SAUV Serdivan-Sakar 69.89 4 eP P 15 10 04.6 -2.0
CART Cartagena 69.92 30 IAMs_20 IAMs_20 15 43 44.6
comp=Z,23µm,19.0s
CART Cartagena 69.92 30 ⇑P P 15 10 07.5 +0.6
MRMT Marmara Adasi 69.95 6 eP P 15 10 07.9 +0.8
KZN Kozani 69.95 11 P P 15 10 06.6 -0.5
SENK Senkaya-Erzuru 69.97 354 eP P 15 10 08.6 +1.1
ARMT Armutlu 70.03 5 eP P 15 10 06.8 -0.7
SFS San Fernando 70.04 34 IAMs_20 IAMs_20 15 41 36.9
comp=Z,24µm,19.0s
OUR Ouranopolis 70.06 9 eP P 15 10 05.6 -2.0
OUR Ouranopolis 70.06 9 P P 15 10 07.8 +0.2
CANT Cankiri 70.07 1 eP P 15 10 08.7 +0.9
KRBG Karabiga-Canak 70.15 6 eP P 15 10 08.9 +0.7
LPK Lapseki 70.15 7 eP P 15 10 07.4 -0.8
GEMT Gemlik 70.17 5 eP P 15 10 09.4 +1.1
MDUB Mudurnu 70.17 3 eP P 15 10 09.3 +0.8
ADVT Abdulvahap 70.18 4 eP P 15 10 08.6 +0.2
GULT Gulveren 70.20 3 eP P 15 10 08.9 +0.2
EDC Edincik 70.21 6 eP P 15 10 08.9 +0.3
BAYT Aydıntepe-Bayb 70.21 356 eP P 15 10 14.1 +5.2
MDNY Mudanya-Bursa 70.22 5 eP P 15 10 09.4 +0.7
YUVA Yuva-Kibriscik 70.26 3 eP P 15 10 08.9 -0.2
RSDY Resadiye-TOKAT 70.27 358 eP P 15 10 11.4 +2.4
GNI Garni 70.28 352 eP P 15 10 09.8 +0.5
GNI Garni 70.28 352 P P 15 10 11.1 +1.8
GNI Garni 70.28 352 ⇓P P 15 10 12.0 +2.7
GNI Garni 70.28 352 LR LR 15 45 37.7
comp=Z,7µm,20.6s,baz=9.0,slow=40
GNI Garni 70.28 352 P P 15 10 12.2 +2.9
GNI P P 15 10 12.2 +2.9
GNI Garni 70.28 352 d iP P 15 10 09.7 +0.5
GNI pmax pmax
comp=Z,32nm,1.2s
GADA Gvkgeada 70.29 7 eP P 15 10 06.3 -2.8
JTS Las Juntas de 70.30 115 LR LR 15 43 49.1
comp=Z,22µm,18.9s,baz=358,slow=38
KCTX Karacabey (Bur 70.31 5 eP P 15 10 09.4 +0.1
TOKT Tokat 70.35 359 eP P 15 10 12.1 +2.5
GUMO Guam 70.39 256 P P 15 10 09.2 -0.7
comp=Z,14nm,0.4s,baz=51,slow=14,SNR=1.7
comp=Z,14nm,0.4s
KEK Kerkira 70.41 12 eP P 15 10 09.7 -0.1
KEK Kerkira 70.41 12 P P 15 10 09.8 -0.1
KEK Kerkira 70.41 12 ⇑P P 15 10 10.5 +0.6
TASB TASBURUN-IGDIR 70.47 352 eP P 15 10 13.6 +3.3
SMRT St. Maarten 70.49 91 IAMs_20 IAMs_20 15 41 53.8
comp=Z,34µm,20.0s
CORM Corum 70.50 0 eP P 15 10 12.2 +1.6
KOPR Koprukoy-ERZUR 70.56 354 eP P 15 10 13.1 +2.1
SUSR Susurluk-Balik 70.60 5 eP P 15 10 10.6 -0.4
IGT Igoumenitsa 70.63 12 P P 15 10 11.0 -0.2
EZN Ézine 70.67 7 eP P 15 10 10.4 -1.0
TIP Timpagrande 70.69 15 ⇓P P 15 10 11.5 -0.2
TIP Timpagrande 70.69 15 ⇑P P 15 10 13.1 +1.4
THL Klokotos Trika 70.71 10 P P 15 10 10.9 -0.7
SVSK Karacayir 70.75 358 eP P 15 10 12.1 +0.2
ANTO Ankara 70.80 2 eP P 15 10 13.0 +0.7
ANTO Ankara 70.80 2 P P 15 10 15.0 +2.7
ANTO Ankara 70.80 2 ⇑P P 15 10 15.1 +2.7
ANTO Ankara 70.80 2 P P 15 10 15.0 +2.7
SABA Saba 70.83 91 IAMs_20 IAMs_20 15 38 01.7
comp=Z,33µm,20.0s
HDC Heredia 70.84 114 IAMs_20 IAMs_20 15 42 11.4
comp=Z,37µm,18.0s
HDC Heredia 70.84 114 eP P 15 10 14.3 +1.4
AGRB Hanur-Agry 70.93 353 eP P 15 10 14.6 +1.3
BR131 Keskin Array S 70.95 1 eP P 15 10 13.5 +0.2
BR131 Keskin Array S 70.95 1 P P 15 10 15.2 +1.8
SNR=50
BR131 Keskin Array S 70.95 1 d iP P 15 10 13.6 +0.2
BRTR Keskin Array B 70.95 1 P P 15 10 12.8 -0.5
BRTR Keskin Array B 70.95 1 P P 15 10 12.3 -1.0
comp=Z,6.8nm,0.8s,baz=348,slow=2.8,SNR=26
BRTR PKPPKP P'P'df 15 38 11.4 -4.2
comp=Z,0.4nm,0.6s,baz=259,slow=1.5,SNR=3.2
comp=Z,6.8nm,0.8s
BRTR Keskin Array B 70.95 1 ce P P 15 10 13.8 +0.5
BRTR pmax pmax
comp=Z,13nm,0.8s
ERZN Erzincan 71.03 356 eP P 15 10 17.9 +4.1
SEUS St. Eustatius 71.04 91 IAMs_20 IAMs_20 15 41 49.3
comp=Z,31µm,20.0s
YOZ Yozgat 71.04 360 eP P 15 10 14.6 +0.7
PMPST Porto Santo, M 71.07 44 eP P 15 10 14.0 0.0
comp=Z,278nm,1.5s
PMOZ Porto Moniz, M 71.11 45 eP P 15 10 17.1 +2.8
comp=Z,386nm,1.5s
PMOZ eS S 15 19 38.4 +7.6
PMOZ Porto Moniz, M 71.11 45 eLQ LQ 15 29 48.6
PMOZ eLR LR 15 33 08.2
comp=Z,25µm,18.0s
LCR2 La Lucha 2 71.12 114 IAMs_20 IAMs_20 15 42 17.8
comp=Z,28µm,18.0s
ILIC Ilic-Erzincan 71.19 357 eP P 15 10 18.8 +4.0
SVRH Sivrihisar-ESK 71.20 3 eP P 15 10 15.2 +0.4
NAX Nakhchivan 71.22 351 eP P 15 10 13.2 -1.7
AFSR Afar-Bala (An 71.22 1 eP P 15 10 15.6 +0.7
SIGR SIGRI 71.27 7 eP P 15 10 18.5 +3.5
AGG Agios Georgios 71.27 10 eP P 15 10 14.5 -0.6
AGG Agios Georgios 71.27 10 ⇓P P 15 10 16.9 +1.7
PMAR Madeira 71.27 44 eP P 15 10 16.1 +0.7
comp=Z,472nm,1.4s
CIFT Cifteler, Eski 71.28 3 eP P 15 10 15.5 +0.2
ANWB Willy Bob 71.29 90 IAMs_20 IAMs_20 15 44 56.1
comp=Z,23µm,20.0s
ANWB Willy Bob 71.29 90 eP P 15 10 16.5 +1.0
KAMT Kaman 71.31 1 eP P 15 10 16.6 +1.2
CLDR Caldiran 71.33 353 eP P 15 10 13.2 -2.5
EVR Evrytania 71.34 11 P P 15 10 16.9 +1.3
FUL Funchal 71.35 44 eP P 15 10 16.9 +1.3
MLAZ Malazgirt-MUS 71.39 354 eP P 15 10 19.9 +3.9
GULI GuiLin 71.39 292 P P 15 10 19.9 +3.9
GULI S S 15 19 33.8 -0.2
GULI pmax pmax
comp=Z,170nm,1.6s
GULI pmax pmax
comp=Z,5µm,6.2s
GULI LR LR
comp=Z,15µm,20.5s
GULI LR LR
comp=Z,10µm,22.5s
VRTB Varto-Mus 71.41 355 eP P 15 10 24.7 +8.6
DKL Dikili 71.45 6 eP P 15 10 15.9 -0.2
LKRN Lenkeran, Azer 71.47 348 P P 15 10 14.8 -1.5
GYA Guiyang 71.48 296 ⇑P P 15 10 17.8 +1.1
GYA PP PP 15 12 53.1 -1.7
GYA S S 15 19 33.2 -2.2
GYA SKS SKSac 15 20 16.4 -3.7
GYA pmax pmax
comp=Z,71nm,2.0s
GYA pmax pmax
comp=Z,5µm,6.5s
GYA LR LR
comp=Z,6µm,22.3s
GYA LR LR
comp=Z,10µm,19.6s
GYA LR LR
comp=Z,13µm,31.8s
CEL Celeste 71.52 16 ⇑P P 15 10 14.8 -1.9
ARPR Arapgir-MALATY 71.55 357 eP P 15 10 17.7 +0.7
GEDZ Gediz 71.56 4 eP P 15 10 17.5 +0.6
BNGB Bingl 71.60 355 eP P 15 10 18.7 +1.5
KULU Kulu 71.63 1 eP P 15 10 18.0 +0.6
ANX Ano Chora 71.67 11 P P 15 10 20.0 +2.4
SERE Sereflikochisa 71.73 1 eP P 15 10 19.3 +1.3
PTK Pertek 71.73 356 eP P 15 10 19.6 +1.5
KIZT Kizilcal 71.78 2 eP P 15 10 18.3 0.0
BNN Bunyan 71.82 359 eP P 15 10 19.2 +0.6
BNN Bunyan 71.82 359 ⇑P P 15 10 20.3 +1.7
ANBD Bethesda, Anti 71.87 90 eP P 15 10 19.6 +0.7
VANB Van 71.89 353 eP P 15 10 22.1 +3.1
CLTB Caltabellotta 71.93 18 IAMs_20 IAMs_20 15 43 56.6
comp=Z,48µm,21.0s
CLTB Caltabellotta 71.93 18 ⇑P P 15 10 19.7 +0.5
GURO Guroymak-BITLI 71.99 354 eP P 15 10 23.9 +4.3
MBFL Flemmings, Mon 71.99 91 eP P 15 10 14.5 -5.2
KULA Kula-Manisa 72.07 5 eP P 15 10 19.9 -0.1
KULA Kula-Manisa 72.07 5 P P 15 10 20.0 -0.1
SHUT Suhut-Afyon 72.08 3 eP P 15 10 20.2 +0.1
CHBY Cihanbeyli 72.08 2 eP P 15 10 21.2 +1.1
DARE Darende-Malaty 72.09 358 eP P 15 10 21.7 +1.6
CHOS Chios island 72.10 7 eP P 15 10 15.3 -4.9
RTZL Ratzakli, Kefa 72.11 12 P P 15 10 20.0 -0.1
URLA Izmir 72.15 7 eP P 15 10 20.2 -0.2
RLS Riolos of Patr 72.17 11 P P 15 10 21.2 +0.7
AKDM Akdamar-Van 72.18 353 eP P 15 10 21.9 +1.1
SVRC Sivrice-ELAZID 72.25 356 eP P 15 10 22.9 +1.7
SARI SarD1z-Kayseri 72.26 359 eP P 15 10 22.6 +1.3
SET Setif 72.29 25 P P 15 10 23.0 +1.6
RAFF Raffo Rosso 72.40 17 P P 15 10 21.2 -0.7
SVAN Silvan-Diyarba 72.42 355 eP P 15 10 23.7 +1.6
BRU2 Volcan 72.43 113 IAMs_20 IAMs_20 15 40 41.6
comp=Z,23µm,20.0s
LADK Ladik-KONYA 72.46 2 eP P 15 10 22.7 +0.3
SULT Sultanhani-AKS 72.47 1 eP P 15 10 23.1 +0.7
ABD La Joyeuse, An 72.50 90 IAMs_20 IAMs_20 15 45 31.1
comp=Z,26µm,20.0s
AYDB Zeytinkoy-Aydi 72.61 6 eP P 15 10 23.6 +0.3
KONT Konya--Tatoy 72.72 2 eP P 15 10 23.7 -0.1
GDSD La Dsirade Is 72.80 90 IAMs_20 IAMs_20 15 44 18.0
comp=Z,24µm,21.0s
GCAM G?zelcaml? 72.83 6 eP P 15 10 25.4 +1.0
CBE Ff, Capester 72.83 90 IAMs_20 IAMs_20 15 38 53.9
comp=Z,20µm,18.0s
YESY Yesilyurt 72.89 1 eP P 15 10 25.4 +0.4
HNLY HANLEY 72.94 322 eP P 15 10 26.5 +0.7
HKPS Hong Kong Po S 72.95 288 IAMs_20 IAMs_20 15 47 00.1
comp=Z,22µm,22.0s
LSA Lhasa 72.96 311 P P 15 10 34.7 +8.8
LSA S S 15 19 54.8 +1.9
LSA LR LR
comp=Z,9µm,19.6s
LSA LR LR
comp=N,10µm,21.0s
LSA LR LR
comp=E,7µm,21.2s
LSA Lhasa 72.96 311 i P P 15 10 26.1 +0.2
SNR=30
PZH PanZhiHua 72.96 300 P P 15 10 26.9 +1.4
PZH PP PP 15 13 10.1 +2.7
PZH S S 15 19 49.7 -2.6
PZH ScS SKSac 15 20 28.5 -2.7
PZH pmax pmax
comp=E,100nm,0.9s
PZH pmax pmax
comp=E,4µm,5.6s
PZH LR LR
comp=E,22µm,13.0s
PZH LR LR
comp=E,15µm,14.0s
PZH LR LR
comp=E,28µm,15.3s
BCIP Isla Barro Col 73.01 110 IAMs_20 IAMs_20 15 46 19.9
comp=Z,36µm,19.0s
BCIP Isla Barro Col 73.01 110 ⇑P P 15 10 25.9 +0.2
TBG Guadaloupe-3 73.02 90 eP P 15 10 25.7 -0.1
ITM Ithomi 73.08 11 eP P 15 10 19.9 -6.0
ITM Ithomi 73.08 11 P P 15 10 25.4 -0.5
ITM Ithomi 73.08 11 ⇑P P 15 10 26.1 +0.2
APMY Acipayam-Deniz 73.13 5 eP P 15 10 27.1 +0.8
KBL Kabul 73.15 331 P P 15 10 25.1 -1.6
KBL Kabul 73.15 331 P P 15 10 28.7 +2.0
SNR=56
KBL Kabul 73.15 331 P P 15 10 25.1 -1.6
KBL pmax pmax
comp=E,110nm,1.1s
KMRS Kahramanmaras 73.16 358 eP P 15 10 29.3 +2.8
BCK Bucak 73.17 3 eP P 15 10 25.4 -1.2
KOZT Kozan 73.19 359 eP P 15 10 27.4 +0.8
URFA Urfa 73.19 357 eP P 15 10 28.1 +1.4
SEYD Seydisehir-KON 73.25 2 eP P 15 10 27.6 +0.5
MLSB Milas 73.25 6 eP P 15 10 20.8 -6.2
NIL Nilore 73.26 327 P P 15 10 26.0 -1.1
NIL IAmb IAmb 15 10 53.3
comp=Z,226nm,0.8s
NIL Nilore 73.26 327 P P 15 10 28.3 +1.2
NIL Nilore 73.26 327 P P 15 10 26.0 -1.1
NIL pmax pmax
comp=Z,226nm,0.9s
NIL MLR MLR
comp=Z,7µm,18.0s
KEST Kesra 73.30 21 IAmb IAmb 15 11 06.8
comp=Z,296nm,1.1s
KEST Kesra 73.30 21 P P 15 10 26.0 -1.3
comp=Z,16nm,0.5s,baz=287,slow=0.3,SNR=34
KEST LR LR 15 47 14.5
comp=Z,9µm,18.8s,baz=298,slow=40
comp=Z,16nm,0.5s
KEST Kesra 73.30 21 P P 15 10 28.3 +1.0
SNR=63
APE Apeiranthos 73.39 8 eP P 15 10 33.9 +6.1
APE Apeiranthos 73.39 8 ⇑P P 15 10 29.4 +1.6
APE Apeiranthos 73.39 8 P P 15 10 29.4 +1.6
YER Yerkesik 73.43 5 eP P 15 10 28.3 +0.2
BODT Bodrum 73.47 6 eP P 15 10 28.1 -0.2
GAZ Gaziantep 73.49 358 eP P 15 10 29.8 +1.4
GAZ Gaziantep 73.49 358 ⇑P P 15 10 33.0 +4.6
KORT Korkueli 73.62 4 eP P 15 10 24.8 -4.5
CAME Cameli-Denizli 73.65 5 eP P 15 10 29.5 0.0
CEYT Ceyhan 73.66 359 eP P 15 10 31.3 +1.9
HDMB Hadim 73.70 2 eP P 15 10 29.3 -0.6
DALY Dalyan (Mula) 73.76 5 eP P 15 10 34.7 +4.8
DAT Datca 73.81 6 eP P 15 10 29.9 -0.5
JMU Jammu 73.84 326 eP P 15 10 32.3 +1.8
ELL Elmali 73.86 4 IAmb IAmb 15 10 44.9
comp=Z,854nm,1.8s
HATO Hato, Curacao 73.88 99 IAMs_20 IAMs_20 15 41 20.8
comp=Z,37µm,20.0s
MDT Midelt 73.89 34 LR LR 15 44 56.9
comp=Z,12µm,19.5s,baz=8.0,slow=37
LKP Lekhapani 73.91 306 eP P 15 10 32.8 +1.8
LKP IAmb IAmb 15 10 46.9
comp=Z,1µm,2.0s
KMI Kunming 73.95 299 ⇓P P 15 10 31.6 +0.1
KMI S S 15 20 05.4 +1.7
KMI pmax pmax
comp=Z,47nm,2.1s
KMI pmax pmax
comp=Z,4µm,6.6s
KMI LR LR
comp=Z,19µm,14.9s
KMI LR LR
comp=Z,25µm,15.2s
KMI LR LR
comp=Z,28µm,13.6s
FETY Fethiye 73.95 5 eP P 15 10 29.5 -1.6
THN Thein Dam 73.95 325 eP P 15 10 31.1 -0.1
THN IAmb IAmb 15 10 44.3
comp=Z,121nm,1.1s
DHRM DHARAMSHALA 74.01 324 eP P 15 10 31.6 -0.2
DHRM IAmb IAmb 15 10 57.9
comp=Z,170nm,0.7s
KTHA Kythira Island 74.06 10 eP P 15 10 31.1 -0.7
SVN Savane Anatole 74.13 90 IAMs_20 IAMs_20 15 45 01.2
comp=Z,29µm,22.0s
SVN Savane Anatole 74.13 90 eP P 15 10 31.4 -1.0
KIZK Mersin 74.19 1 eP P 15 10 31.8 -0.7
KEBE Keben-Mersin 74.22 1 eP P 15 10 32.6 -0.2
FDF Fort de France 74.23 90 IAMs_20 IAMs_20 15 45 05.0
comp=Z,27µm,21.0s
FDF Fort de France 74.23 90 ⇓P P 15 10 33.2 +0.2
ZIRO ZIRO 74.28 308 eP P 15 10 33.2 -0.1
ZIRO IAmb IAmb 15 10 48.8
comp=Z,583nm,1.6s
ILAM Ilet Lapin Mar 74.29 90 IAMs_20 IAMs_20 15 44 53.5
comp=Z,24µm,21.0s
ILAM Ilet Lapin Mar 74.29 90 eP P 15 10 32.8 -0.5
TAHT Tahtakopru-Hat 74.29 359 eP P 15 10 35.2 +2.1
KLP Kalpa 74.30 322 eP P 15 10 34.3 +0.7
KLP IAmb IAmb 15 10 47.8
comp=Z,740nm,1.4s
SILI Silifke-Mersin 74.30 1 eP P 15 10 33.5 +0.4
ARG Arkhangelos 74.34 6 eP P 15 10 31.8 -1.6
ARG Arkhangelos 74.34 6 IAmb IAmb 15 10 55.3
comp=Z,543nm,1.4s
ARG Arkhangelos 74.34 6 ⇑P P 15 10 33.4 0.0
AKAS Kas 74.37 4 eP P 15 10 33.3 -0.4
GAZI Gazipasa 74.42 2 eP P 15 10 33.8 -0.1
IKL Isikli 74.43 1 eP P 15 10 33.5 -0.4
BIM Bigot 74.46 90 IAMs_20 IAMs_20 15 45 11.0
comp=Z,35µm,20.0s
BIM Bigot 74.46 90 eP P 15 10 33.6 -0.7
AKKU Akkuyu-Mersin 74.51 1 eP P 15 10 32.4 -1.9
TEKE Tekeli-Mersin 74.52 1 eP P 15 10 34.3 -0.1
BHK Bhakra 74.80 324 eP P 15 10 37.9 +1.8
BHK IAmb IAmb 15 10 49.5
comp=Z,194nm,0.8s
IMMV Iera Moni Meta 74.91 9 eP P 15 10 37.2 +0.5
SMLA Simla 74.92 323 eP P 15 10 36.2 -0.5
SMLA IAmb IAmb 15 10 56.6
comp=Z,81nm,0.9s
SLBI Saint Lucia, B 74.95 90 eP P 15 10 36.7 -0.4
KARP Karpathos 74.97 6 IAMs_20 IAMs_20 15 50 01.2
comp=Z,20µm,21.0s
SLB Belfond 75.11 91 eP P 15 10 46.6 +8.4
KNDR Palaiochora Ch 75.12 9 eP P 15 10 38.2 +0.4
IDI Anoyia 75.13 8 eP P 15 10 34.9 -3.1
EREN Erenkoy 75.14 1 eP P 15 10 40.6 +2.6
MCLT Moule a Chique 75.25 90 eP P 15 10 39.5 +0.7
TNCH TengChong 75.31 303 ⇑P P 15 10 39.4 +0.1
TNCH sP sP 15 10 47.5 +4.1
TNCH S S 15 20 15.8 -3.0
TNCH SS SS 15 25 07.7 0.0
TNCH pmax pmax
comp=Z,83nm,1.7s
TNCH LR LR
comp=Z,5µm,29.6s
TNCH LR LR
comp=Z,8µm,27.4s
TNCH LR LR
comp=Z,10µm,35.4s
ZKR Zakros 75.36 7 eP P 15 10 34.7 -4.6
DDI Dehra Dun 75.51 322 eP P 15 10 40.6 +0.4
SSV Crater Summit 75.52 91 eP P 15 10 43.7 +3.2
SVV Soufriere Volc 75.52 91 eP P 15 10 42.6 +2.2
GVD Gavdhos 75.53 9 eP P 15 10 39.9 -0.4
LEF Lefka 75.54 2 eP P 15 10 38.7 -1.6
SVB Belmont 75.55 91 eP P 15 10 40.1 -0.5
SVT Saint Vincent 75.65 91 eP P 15 10 40.4 -0.7
CSS Mathiatis 75.70 1 eP P 15 10 41.6 +0.3
CSS Mathiatis 75.70 1 ⇑P P 15 10 44.6 +3.4
LGTI Lohaghat 75.87 320 eP P 15 10 42.3 +0.1
LGTI IAmb IAmb 15 10 57.3
comp=Z,655nm,1.9s
GTK Tadong 75.89 312 eP P 15 10 42.9 +0.3
GTK IAmb IAmb 15 10 57.9
comp=Z,559nm,1.4s
KOHI KOHIMA 75.92 307 eP P 15 10 42.5 -0.3
KOHI IAmb IAmb 15 10 58.0
comp=Z,330nm,1.2s
GUWA GUWAHATI 76.14 309 eP P 15 10 43.4 -0.4
GUWA IAmb IAmb 15 10 58.5
comp=Z,485nm,1.5s
BBGH Gun Hill 76.26 89 eP P 15 10 45.5 +0.9
GRSS Sisters 76.33 92 eP P 15 10 43.7 -1.3

**SDV Santo Domingo 76.37 101** IAMs_20 IAMs_20 15 48 27.8
comp=Z,29µm,20.0s
**SDV Santo Domingo 76.37 101** P **P** **15 10 45.0 -0.5**
comp=Z,62nm,0.9s,baz=352,slow=4.6,SNR=4.3
SDV LR LR 15 48 39.0
comp=Z,21µm,18.3s,baz=355,slow=39
comp=Z,62nm,0.9s
**SDV Santo Domingo 76.37 101** *e*P **P** **15 10 44.8 -0.7**
**HWQ Hawqa 76.39 359** *e*P P 15 10 52.4 +7.1
**GRHS Sauteurs 76.39 92** *e*P **P** **15 10 43.5 -1.9**
**GRW Mount Saint Ca 76.44 92** *e*P **P** **15 10 44.8 -1.0**
**GRGR Grenville 76.47 92** IAMs_20 IAMs_20 15 39 53.3
comp=Z,27µm,22.0s
**GRGR Grenville 76.47 92** ⇑P **P** **15 10 46.9 +1.0**
**GRGR Grenville 76.47 92** *e*P P 15 10 35.5 -10
**GRFF Grenada Fort F 76.52 92** *e*P P 15 10 39.6 -6.5
**TATN Tataouine 76.55 21** ⇓P **P** **15 10 44.5 -1.7**
**SHL Shillong 76.68 309** *e*P **P** **15 10 47.9 +0.7**
SHL IAmb IAmb 15 11 16.6
comp=Z,58nm,0.8s
**SHL Shillong 76.68 309** P **P** **15 10 48.9 +1.7**
SNR=37
**BHL Bhannes 76.76 359** *e*P P 15 10 53.3 +5.9
**IMP Imphal 76.81 307** *e*P **P** **15 10 49.4 +1.7**
IMP IAmb IAmb 15 11 01.4
comp=Z,260nm,1.6s
**VLK Valmikinagar 77.08 316** *e*P **P** **15 10 51.2 +2.1**
**BAUV El Baul 77.21 99** IAmb IAmb 15 10 54.8
comp=Z,408nm,1.2s
**PCRV Puerto La Cruz 77.24 95** LR LR 15 45 41.1
comp=Z,23µm,21.5s,slow=36
**PCRV Puerto La Cruz 77.24 95** *e*P **P** **15 10 53.7 +3.5**
**NDI New Delhi 77.27 323** *e*P **P** **15 10 49.5 -0.7**
**QIZ Qiongzhong 77.39 291** P **P** **15 10 50.0 -1.0**
QIZ S **S** **15 20 40.6 -0.8**
QIZ SS **SS** **15 25 40.9 +1.7**
QIZ pmax pmax
comp=Z,60nm,2.6s
QIZ LR LR
comp=Z,12µm,13.7s
QIZ LR LR
comp=Z,15µm,15.3s
QIZ LR LR
comp=Z,22µm,20.2s
**QIZ Qiongzhong 77.39 291** IAMs_20 IAMs_20 15 49 50.8
comp=Z,23µm,18.0s
**GEM Giv'at Ha'Em 77.45 359** ⇓P **P** **15 10 52.0 +0.8**
**MMAI Mount Meron Ar 77.65 359** P **P** **15 10 49.6 -2.7**
comp=Z,8.6nm,0.8s,baz=0.0,slow=7.2,SNR=3.1
comp=Z,8.6nm,0.8s
**TPR Prospect 77.65 91** *e*P **P** **15 10 52.7 +0.2**
**SONA Sohna 77.72 323** *e*P **P** **15 10 52.3 -0.4**
**TRN Trinidad (W) 77.94 92** *e*P **P** **15 10 52.9 -1.1**
**KUDL Kundal 77.95 323** *e*P **P** **15 10 53.6 -0.4**
KUDL IAmb IAmb 15 11 06.7
comp=Z,314nm,1.5s
**MMLI Mount Malkishu 78.22 359** *e*P **P** **15 10 55.8 +0.3**
**TAOE Nuku Hiva Isla 78.39 175** *e*P P 15 11 01.6 +5.1
comp=Z,567nm,1.6s
**TAOE Nuku Hiva Isla 78.39 175** *e*PP **PP** **15 13 53.3 -0.6**
comp=Z,377nm,23.6s
TAOE *e*S **S** **15 20 55.9 +3.7**
comp=Z,6µm,30.8s
TAOE *e*SS **SS** **15 25 55.6 +0.3**
comp=Z,9µm,28.5s
TAOE *e*LQ LQ 15 31 55.0
comp=Z,54µm,32.4s
TAOE *e*LR LR 15 35 10.3
comp=Z,38µm,22.8s
**AGT Agartala 78.45 309** *e*P **P** **15 10 59.8 +3.0**
**BALJ Balqa 78.57 359** IAmb IAmb 15 11 12.2
comp=Z,462nm,1.4s
**SALP Salfit 78.59 360** ⇓P **P** **15 10 57.9 +0.3**
**AJAP Al Uja 78.71 359** *e*P **P** **15 10 58.9 +0.8**
**BKNR BIKANER 78.72 326** *e*P **P** **15 10 59.4 +1.1**
**ROSC El Rosal 78.89 106** IAmb IAmb 15 11 05.9
comp=Z,394nm,1.1s
**ROSC El Rosal 78.89 106** P **P** **15 10 58.9 -0.9**
comp=Z,167nm,1.0s,baz=54,slow=4.7,SNR=23
ROSC LR LR 15 46 56.8
comp=Z,20µm,19.6s,baz=0.0,slow=37
comp=Z,167nm,1.0s
**PAYG Puerto Ayora 79.04 124** P **P** **15 10 58.7 -1.4**
PAYG IAmb IAmb 15 11 12.5
comp=Z,703nm,1.4s
**SAIH SAIHA 79.30 307** *e*P **P** **15 11 01.8 +0.1**
SAIH IAmb IAmb 15 11 17.0
comp=Z,2µm,1.9s
**MSBI Mazada 79.34 359** ⇑P **P** **15 11 02.4 +0.8**
**ALBI Allahabad 79.50 318** *e*P **P** **15 11 03.0 +0.5**
**KZIT Kziot 79.75 0** ⇑P **P** **15 11 04.1 +0.2**
**AJM Ajmer 79.94 324** *e*P **P** **15 11 05.2 +0.2**
**BOK Bokaro 79.95 314** *e*P **P** **15 11 05.7 +0.6**
**JHNI Jhansi 80.09 321** *e*P **P** **15 11 04.6 -1.2**
**JASL Jaisalmer 80.24 328** *e*P **P** **15 11 06.7 +0.2**
JASL IAmb IAmb 15 11 12.1
comp=Z,97nm,0.7s
**NONG Nongkai 80.45 296** P **P** **15 11 09.9 +2.1**
**EIL Elat 80.98 360** *e*P **P** **15 11 10.8 +0.3**
**EIL Elat 80.98 360** ⇓P **P** **15 11 10.8 +0.3**
**KBD Kabd 81.03 349** P **P** **15 11 13.3 +2.6**
**GUNA GUNA 81.15 321** *e*P **P** **15 11 11.4 -0.1**
**CM31 Chiang Mai Arr 81.37 300** P **P** **15 11 15.1 +2.4**
SNR=45
**CMAR Chiang Mai Arr 81.37 300** P **P** **15 11 12.2 -0.5**
**CMAR Chiang Mai Arr 81.37 300** P **P** **15 11 12.0 -0.8**
comp=Z,35nm,0.7s,baz=0.5,slow=5.9,SNR=44
CMAR PKKPbc **PKKPbc** **15 29 47.0 +3.8**
comp=Z,2.2nm,0.9s,baz=232,slow=3.6,SNR=5.3
CMAR PKPPKP **P'P'df** **15 37 50.6 -3.7**
comp=Z,0.4nm,0.3s,baz=170,slow=1.1,SNR=3.4
CMAR LR LR 15 52 37.4
comp=Z,14µm,18.2s,baz=65,slow=40
comp=Z,35nm,0.7s
**CMAR Chiang Mai Arr 81.37 300** P **P** **15 11 12.2 -0.5**
**OTAV Otavalo 81.84 112** IAMs_20 IAMs_20 15 50 16.5
comp=Z,20µm,22.0s
**UBPT Khong Chiam 82.32 293** P **P** **15 11 18.3 +0.6**
**BLSP Bilaspur 82.47 317** *e*P **P** **15 11 18.2 -0.3**
BLSP IAmb IAmb 15 11 31.9
comp=Z,260nm,1.3s
**BHPL Bhopal 82.49 321** *e*P **P** **15 11 17.4 -1.2**
BHPL IAmb IAmb 15 11 32.0
comp=Z,544nm,1.6s
**NRDN NARMADA NAGAR 83.05 321** *e*P **P** **15 11 22.3 +0.8**
**SHME Shamm 83.34 341** *i*P **P** **15 11 22.8 -0.2**
SNR=19
**SHME Shamm 83.34 341** P **P** **15 11 24.8 +1.9**
SNR=16
**SAKB Bahrain 83.98 346** P **P** **15 11 28.6 +2.5**
**MASF Masafi 84.01 341** P **P** **15 11 29.0 +2.5**
SNR=26
**MSFE Esma-Masafi 84.02 341** *i*P **P** **15 11 27.1 +0.6**
SNR=15
**MDH Madha 84.07 340** *i*P **P** **15 11 27.3 +0.7**
SNR=33
**MDH Madha 84.07 340** P **P** **15 11 29.4 +2.7**
SNR=27
**NGP Nagpur 84.14 319** *e*P **P** **15 11 27.7 +0.6**
**UOSS Minazif 84.43 341** *i*P **P** **15 11 29.1 +0.6**
SNR=16
**UOSS Minazif 84.43 341** P **P** **15 11 31.5 +3.0**
**PMOR Pomariorio Ree 84.44 183** *e*P P 15 11 37.0 +8.6
comp=Z,548nm,1.3s
**PMOR Pomariorio Ree 84.44 183** *e*LR LR 15 37 57.0
comp=Z,19µm,23.2s
**NAZ Nazwa, Dubai 84.45 341** *i*P **P** **15 11 28.9 +0.3**
SNR=18
**NAZ Nazwa, Dubai 84.45 341** P **P** **15 11 32.0 +3.4**
SNR=21
**DLV T Lat 84.46 289** IAMs_20 IAMs_20 15 54 25.9
comp=Z,18µm,19.0s
**HATD Hatta, Dubai 84.55 341** *i*P **P** **15 11 28.7 -0.4**
SNR=20
**HATD Hatta, Dubai 84.55 341** P **P** **15 11 31.0 +1.8**
SNR=45
**VAH Vaihoa 84.67 182** *e*P P 15 11 37.8 +8.3
comp=Z,677nm,1.3s
**VAH Vaihoa 84.67 182** *e*LR LR 15 38 04.0
comp=Z,25µm,23.1s
**FAQ Al Faqa, Dubai 84.69 341** *i*P **P** **15 11 29.4 -0.4**
SNR=20
**FAQ Al Faqa, Dubai 84.69 341** P **P** **15 11 33.2 +3.3**
SNR=23
**ASHO Ashiyiah 84.70 341** *i*P **P** **15 11 29.3 -0.7**
SNR=30
**ASHO Ashiyiah 84.70 341** P **P** **15 11 31.3 +1.4**
SNR=33
**ASUD Al Ashush, Dub 84.84 341** *i*P **P** **15 11 30.0 -0.6**
SNR=17
**ASUD Al Ashush, Dub 84.84 341** P **P** **15 11 35.1 +4.5**
SNR=16
**AJN Ajban 84.94 342** *i*P **P** **15 11 31.4 +0.3**
SNR=11
**AJN Ajban 84.94 342** P **P** **15 11 34.4 +3.4**
SNR=12
**AKL Akola 85.03 321** *e*P **P** **15 11 32.3 +0.7**
**TRNA Turayna 85.15 345** P **P** **15 11 34.5 +2.4**
**SMRA Abu-Samra 85.18 345** P **P** **15 11 35.4 +3.2**
**SOHO SOHO 85.19 340** *i*P **P** **15 11 32.0 -0.3**
SNR=9.1
**SOHO SOHO 85.19 340** P **P** **15 11 35.0 +2.7**
**ALNE Al Ain 85.36 341** *i*P **P** **15 11 32.8 -0.4**
SNR=19
**ALNE Al Ain 85.36 341** P **P** **15 11 34.5 +1.3**
SNR=42
**BIDO Bidbid 85.60 339** P **P** **15 11 37.2 +2.8**
SNR=15
**HOQ Hoqain 85.64 339** P **P** **15 11 37.4 +2.8**
SNR=18
**WSAR Wadi Sarin 85.81 338** P **P** **15 11 38.1 +2.6**
SNR=26
**BOAV Boa Vista 85.92 94** IAmb IAmb 15 11 48.0
comp=Z,578nm,1.7s
BOAV IAMs_20 IAMs_20 15 50 26.7
comp=Z,32µm,21.0s
**BOAV Boa Vista 85.92 94** *e*P **P** **15 11 35.2 -0.8**
**ARQ Araqi 85.98 340** P **P** **15 11 37.7 +1.4**
SNR=38
**SMDO Samad 86.06 339** P **P** **15 11 39.5 +2.7**
SNR=19
**MDP Montagnes des 86.16 86** P **P** **15 11 35.0 -2.2**
comp=Z,12nm,0.9s,baz=336,slow=7.5,SNR=19
MDP LR LR 15 48 33.6
comp=Z,46µm,21.5s,baz=340,slow=35
comp=Z,12nm,0.9s
**SACV Santiago Islan 86.38 56** IAMs_20 IAMs_20 15 44 31.0
comp=Z,28µm,22.0s
**WBK Wadi Bani Khal 86.39 338** P **P** **15 11 41.0 +2.7**
SNR=13
**MZR Muzera 86.65 343** *i*P **P** **15 11 39.4 -0.2**
SNR=28
**MZR Muzera 86.65 343** P **P** **15 11 41.4 +1.9**
SNR=21
**JMDO Jabal Madar 86.73 338** P **P** **15 11 44.0 +3.9**
SNR=15
**UMZA Um Al Zommool 86.75 341** P **P** **15 11 41.6 +1.5**
**JLN Jalan Bani Buh 86.78 337** P **P** **15 11 42.1 +1.9**
SNR=19
**RAYN Ar Rayn 86.78 350** P **P** **15 11 40.6 +0.3**
RAYN IAmb IAmb 15 11 54.6
comp=Z,279nm,1.2s
**RAYN Ar Rayn 86.78 350** *i*P **P** **15 11 40.7 +0.4**
SNR=79
**RAYN Ar Rayn 86.78 350** P **P** **15 11 41.5 +1.2**
**RAYN Ar Rayn 86.78 350** P **P** **15 11 40.6 +0.3**
RAYN pmax pmax
comp=Z,279nm,1.2s
**JAY Jayapura 86.84 254** P **P** **15 11 41.7 +1.1**
comp=Z,100nm,1.7s,comp=Z,4µm
**PPT Papeete 87.03 184** P **P** **15 11 39.8 -1.4**
comp=Z,31nm,1.2s,baz=72,slow=20,SNR=1.8
PPT LR LR 15 44 20.0
comp=Z,8µm,20.8s,baz=360,slow=31
comp=Z,31nm,1.2s
**PPT2 Papeete2 87.05 184** *e*P **P** **15 11 41.3 -0.1**
comp=Z,278nm,27.0s
**PPT2 Papeete2 87.05 184** *e*P P 15 11 48.2 +6.8
comp=Z,165nm,1.4s
**PPT2 Papeete2 87.05 184** *e*PP **PP** **15 15 00.4 -4.6**
comp=Z,329nm,24.5s
PPT2 *e*S **S** **15 22 15.1 -5.1**
PPT2 comp=Z,2µm,24.2s *e*S **SKKSac** **15 22 19.9 +2.7**
PPT2 comp=Z,981nm,24.4s
PPT2 *e*SS **SS** **15 28 05.7 +1.9**
PPT2 comp=Z,7µm,27.8s
PPT2 *e*LQ LQ 15 35 20.8
PPT2 comp=Z,31µm,25.2s *e*LR LR 15 39 11.9
PPT2 comp=Z,4µm,22.0s *e*LR LR 15 39 14.0
PPT2 comp=Z,11µm,23.5s *e*LR LR 15 39 14.0
comp=Z,13µm,22.2s
**GENI Genyem 87.09 255** P P 15 11 47.2 +5.4
comp=Z,134nm,1.8s,comp=Z,6µmcomp=Z,7µm
**PAE Paea 87.12 184** *e*P P 15 11 49.0 +7.4
comp=Z,67nm,1.3s
**PAE Paea 87.12 184** *e*S **S** **15 22 24.6 +3.9**
comp=Z,392nm,24.1s
**PAE Paea 87.12 184** *e*LR LR 15 39 15.0
comp=Z,2µm,21.8s
**TVO Taravao 87.23 184** *e*P P 15 11 51.5 +9.2
comp=Z,0.1nm,1.1s
**KKM Kota Kinabalu 87.36 280** P **P** **15 11 44.2 +1.0**
**POO Poona 87.82 323** *e*P **P** **15 11 47.1 +1.8**
POO IAmb IAmb 15 11 58.0
comp=Z,67nm,0.6s
**HYB Hyderabad 87.86 319** *e*P **P** **15 11 45.7 +0.2**
HYB *e*PcP **PcP** **15 11 47.0 -0.4**
HYB *e*PP **PP** **15 15 17.5 +6.7**
HYB *e*SKSac **SKSac** **15 22 14.1 +0.2**
HYB *e*SS **SS** **15 28 19.5 +5.2**
HYB IVMs_BB IVMs_BB 15 56 50.2
comp=Z,3µm,15.6s
**HYB Hyderabad 87.86 319** IVMs_BB IVMs_BB 15 48 29.8
comp=Z,3µm,37.3s
**HYB Hyderabad 87.86 319** *e*P **P** **15 11 45.7 +0.2**
**HYB Hyderabad 87.86 319** *e*PcP **PcP** **15 11 47.0 -0.4**
**HYB Hyderabad 87.86 319** *e*PP PP 15 15 11.9 +1.1
**BBTS Babate 88.63 49** P **P** **15 11 47.1 -2.0**
comp=Z,13nm,0.7s,baz=342,slow=3.2,SNR=1.4
BBTS LR LR 15 50 50.8
comp=Z,7µm,18.7s,baz=218,slow=35
comp=Z,13nm,0.7s
**ATAH Atahualpa 88.79 114** P **P** **15 11 49.0 -1.3**
comp=Z,16nm,0.9s,baz=310,slow=4.6,SNR=21
ATAH LR LR 15 53 58.8
comp=Z,19µm,20.0s,baz=352,slow=37
comp=Z,16nm,0.9s
**TBTG Tabatinga, AM 88.82 105** IAMs_20 IAMs_20 15 55 39.9
comp=Z,26µm,19.0s
**TBTG Tabatinga, AM 88.82 105** *e*P **P** **15 11 49.7 -0.3**
**TABU Tabubil 89.24 253** P **P** **15 11 55.3 +3.3**
**PBA Port Blair 89.65 304** IAMs_20 IAMs_20 15 55 01.2
comp=Z,17µm,21.0s
**TEFE Tefe 89.99 100** *e*P **P** **15 11 56.9 +1.5**
**MRSI Marisa 90.55 273** P P 15 12 04.6 +6.5
**DOK Doka 90.91 342** P **P** **15 12 02.6 +2.8**
**MSVF Nonsavu 90.93 215** LR LR 15 46 48.8
comp=Z,15µm,21.9s,baz=7.4,slow=32
**MACA Manacapuru-AM 91.03 96** IAmb IAmb 15 12 11.9
comp=Z,642nm,1.9s
MACA IAMs_20 IAMs_20 15 58 43.4
comp=Z,23µm,20.0s
**MACA Manacapuru-AM 91.03 96** *e*P **P** **15 11 59.2 -1.1**
**PMG Port Moresby 91.18 246** LR LR 15 49 44.0
comp=Z,2µm,21.7s,baz=27,slow=33
**RAR Rarotonga 91.19 194** LR LR 15 49 59.9
comp=Z,7µm,18.1s,baz=2.5,slow=34
**CZSB Cruzeiro do Su 91.20 109** IAMs_20 IAMs_20 15 56 50.0
comp=Z,22µm,20.0s
**CZSB Cruzeiro do Su 91.20 109** *e*P **P** **15 12 00.5 -0.6**
**MCPB Macapa, AP 91.44 87** *e*P **P** **15 12 02.8 +0.5**
**SANI Sanana 91.48 268** P **P** **15 12 06.1 +3.7**
**WHFO Wadi Hawf 91.64 342** P **P** **15 12 05.9 +2.7**
**LUWI Luwuk 91.67 272** P **P** **15 12 07.8 +4.5**
**TBI Tubuai 92.77 184** *e*P **P** **15 12 11.1 +3.1**
comp=Z,761nm,26.8s
**TBI Tubuai 92.77 184** *e*PP **PP** **15 15 44.8 -5.7**
TBI comp=Z,1µm,24.2s *e*S **S** **15 23 08.7 -4.2**
TBI comp=Z,7µm,25.8s *e*SS **SS** **15 29 29.4 +2.8**
TBI comp=Z,5µm,29.6s *e*SS SS 15 29 30.8 +4.2
TBI comp=Z,32µm,30.8s *e*LQ LQ 15 37 53.0
TBI comp=Z,111µm,27.0s *e*LR LR 15 41 50.2
TBI comp=Z,9µm,23.2s *e*LR LR 15 41 54.5
TBI comp=Z,37µm,23.2s *e*LR LR 15 41 56.2
comp=Z,9µm,21.3s
**RKT Rikitea 92.79 171** *e*P **P** **15 12 04.5 -3.6**
comp=Z,686nm,26.0s
**RKT Rikitea 92.79 171** *e*P **P** **15 12 12.4 +4.3**
comp=Z,332nm,1.3s
**RKT Rikitea 92.79 171** *e*PP **PP** **15 15 45.4 -5.2**
comp=Z,887nm,26.8s
**RKT Rikitea 92.79 171** *e*PP **PP** **15 15 56.5 +5.9**
RKT comp=Z,21µm,29.9s *e*S **S** **15 23 08.9 -4.2**
RKT comp=Z,9µm,29.0s *e*SS **SS** **15 29 24.4 -2.4**
RKT comp=Z,19µm,29.8s *e*SS SS 15 29 26.9 +0.1
RKT comp=Z,5µm,25.6s *e*LQ LQ 15 37 54.9
RKT comp=Z,144µm,33.2s *e*LR LR 15 41 48.5
RKT comp=Z,114µm,25.8s *e*LR LR 15 41 50.1
comp=Z,24µm,24.1s
**NNA Nana 93.85 114** P **P** **15 12 11.9 -1.4**
NNA IAMs_20 IAMs_20 15 56 04.3
comp=Z,17µm,20.0s
**NNA Nana 93.85 114** P **P** **15 12 11.3 -2.0**
comp=Z,21nm,1.0s,baz=317,slow=4.6,SNR=2.5
NNA LR LR 15 56 25.5
comp=Z,14µm,19.8s,baz=354,slow=37
comp=Z,21nm,1.0s
**NNA Nana 93.85 114** *ce*P **P** **15 12 12.6 -0.7**
NNA pmax pmax
comp=Z,170nm,1.7s
**ITTB Itaituba 93.88 92** *e*P **P** **15 12 12.5 -1.0**
**TORD Torodi Ar. Bea 94.24 32** P **P** **15 12 13.4 -1.8**
**TORD Torodi Ar. Bea 94.24 32** P **P** **15 12 13.3 -1.9**
comp=Z,1.4nm,0.6s,baz=349,slow=4.2,SNR=18
TORD PKKPbc **PKKPbc** **15 29 11.6 -0.5**
comp=Z,0.8nm,0.4s,baz=140,slow=2.2,SNR=8.5
TORD LR LR 15 57 57.6
comp=Z,10µm,19.9s,baz=350,slow=38
comp=Z,1.4nm,0.6s
**PTCN Pitcairn Islan 95.07 166** IAMs_20 IAMs_20 15 46 22.8
comp=Z,20µm,21.0s
**ETMB Extrema 95.33 104** IAMs_20 IAMs_20 15 59 09.4
comp=Z,21µm,19.0s
**SAML Samuel 95.56 101** P **P** **15 12 19.4 -1.7**
SAML IAmb IAmb 15 12 31.4
comp=Z,259nm,1.9s
SAML IAMs_20 IAMs_20 16 00 50.4
comp=Z,19µm,19.0s
**SAML Samuel 95.56 101** P **P** **15 12 19.4 -1.7**
SAML pmax pmax
comp=Z,259nm,1.9s
**MALK Mahakanadarawa 96.07 315** P P 15 12 30.1 +6.6
**KAPI Kappang 96.42 273** LR LR 15 58 53.5
comp=Z,1µm,21.2s,baz=19,slow=37
**NPGB Novo Progresso 96.51 93** *e*P **P** **15 12 25.4 -0.1**
**PALK Pallekele 97.11 314** LR LR 16 01 54.4
comp=Z,3µm,20.3s,baz=121,slow=39
**DZM Mont Dzumac 97.71 224** *e*P Pdif 15 12 31.1 +0.3
comp=Z,367nm,38.9s
**DZM Mont Dzumac 97.71 224** *e*PP **PP** **15 16 31.1 +2.1**
comp=Z,739nm,25.1s
DZM *e*S **S** **15 23 57.9 +1.7**
DZM comp=Z,3µm,28.2s *e*SS **SS** **15 30 39.2 +2.3**
DZM comp=Z,8µm,29.6s *e*LQ LQ 15 40 00.1
DZM comp=Z,18µm,30.1s *e*LR LR 15 44 07.6
comp=Z,48µm,23.5s
**DZM Mont Dzumac 97.71 224** LR LR 15 50 18.8
comp=Z,3µm,22.0s,baz=34,slow=32
**BKNI Bangkinang 97.79 292** P Pdif 15 12 34.9 +3.6
**GSI Gunungsitoli 97.98 296** IAMs_20 IAMs_20 16 05 37.2
comp=Z,13µm,21.0s
**ATD Arta Tunnel 98.84 352** LR LR 16 03 37.0
comp=Z,68nm,19.6s,baz=10,slow=39
**DBIC Dimbokro 99.19 40** LR LR 15 58 04.4
comp=Z,32µm,19.0s,baz=336,slow=36
**CLDB Colider 99.91 94** *e*P **Pdif** **15 12 41.1 +0.4**
**RPN Rapa Nui 99.91 148** LR LR 15 50 09.6
comp=Z,10µm,19.6s,baz=4.5,slow=31
**PDRB Porto dos Gac 100.27 95** *e*P **Pdif** **15 12 43.9 +1.5**
**MTSU Mount Surprise 100.28 246** P **Pdif** **15 12 44.9 +2.6**
**VILB Vilhena 100.31 99** *e*P **Pdif** **15 12 43.7 +1.2**
**NBPB Pedra_Branca-C 100.59 77** *e*P **Pdif** **15 12 45.8 +2.0**
**LPAZ La Paz 100.72 108** P **Pdif** **15 12 42.2 -2.8**
comp=Z,0.9nm,0.5s,baz=284,slow=1.2,SNR=6.7
LPAZ PKKPbc **PKKPbc** **15 28 55.0 -0.7**
comp=Z,1.1nm,1.0s,baz=129,slow=4.0,SNR=2.2
**LPAZ La Paz 100.72 108** *e*P **Pdif** **15 12 45.2 +0.2**
**SMTB Santa Maria do 100.91 86** *e*P **Pdif** **15 12 46.6 +1.4**
**PB18 Visviri 101.48 109** IAMs_20 IAMs_20 16 04 30.6
comp=Z,22µm,18.0s
**AP01 Chacalluta 101.93 110** IAMs_20 IAMs_20 16 01 27.4
comp=Z,15µm,21.0s
**RCBR Riachuelo 102.10 74** *e*P **Pdif** **15 12 52.7 +2.2**
**SNDB Serra Nova Dou 102.51 91** *e*P **Pdif** **15 12 53.5 +1.3**
**SIV San Ignacio 102.83 101** PKKPbc PKKPbc 15 28 48.0 -0.7
comp=Z,0.7nm,0.6s,baz=137,slow=10.0,SNR=2.3
**PTLB Pontes e Lacer 103.00 99** IAMs_20 IAMs_20 16 03 43.5
comp=Z,21µm,18.0s
**PTLB Pontes e Lacer 103.00 99** *e*P **Pdif** **15 12 54.8 +0.4**
**GO01 Chusmiza 103.52 110** IAMs_20 IAMs_20 16 02 55.5
comp=Z,19µm,22.0s
**PATCX Punta Patache 104.28 111** IAMs_20 IAMs_20 16 07 26.6
comp=Z,10µm,18.0s
**NBCA Caruaru-PE 104.31 75** *e*P **Pdif** **15 13 01.6 +1.2**
**SDBA SAO DESIDERIO 105.14 85** *e*P **Pdif** **15 13 05.4 +1.4**
**KAAM Kaadhehdhoo 105.49 320** IAMs_20 IAMs_20 16 10 58.6
comp=Z,13µm,20.0s
**NBAN Anadia - AL 105.57 75** *e*P **Pdif** **15 13 07.6 +1.7**
**PB04 IPOC Station P 105.69 112** IAMs_20 IAMs_20 16 06 55.0
comp=Z,11µm,20.0s
**LVC Limon Verde 106.35 111** IAMs_20 IAMs_20 16 03 21.6
comp=Z,13µm,21.0s
**LVC Limon Verde 106.35 111** Pdiff **Pdif** **15 13 11.0 +1.5**
comp=Z,0.9nm,0.3s,baz=355,slow=6.9,SNR=3.5
**AF01 San Pedro de A 106.91 110** IAMs_20 IAMs_20 16 07 41.3
comp=Z,11µm,19.0s
**GO02 Mina Guanaco 108.50 112** IAMs_20 IAMs_20 16 03 11.6
comp=Z,12µm,22.0s
**OUZ Omahuta 108.79 215** IAMs_20 IAMs_20 15 55 06.9
comp=Z,13µm,22.0s
**ASAR Alice Springs 108.85 253** Pdiff **Pdif** **15 13 22.8 +2.5**
comp=Z,0.7nm,0.8s,baz=15,slow=5.2,SNR=4.8
ASAR PKiKP **PKiKP** **15 17 23.6 -1.4**
comp=Z,1.1nm,0.7s,baz=48,slow=1.9,SNR=8.2
ASAR PKKPbc **PKKPbc** **15 28 28.4 -2.1**
comp=Z,1.2nm,1.0s,baz=227,slow=2.0,SNR=3.5
**MXZ Matakaoa Point 110.18 210** IAMs_20 IAMs_20 16 02 26.7
comp=Z,11µm,20.0s
**AC06 Mina Casimiro 110.30 114** IAMs_20 IAMs_20 16 09 52.1
comp=Z,10µm,19.0s
**GO03 Copiap 110.56 114** IAMs_20 IAMs_20 16 04 05.9
comp=Z,12µm,22.0s
**ASCN Ascension 110.81 53** IAMs_20 IAMs_20 16 08 21.4
comp=Z,10µm,20.0s
**RTZ Ruatahuna 111.44 211** IAMs_20 IAMs_20 15 59 00.0
comp=Z,14µm,21.0s
**AC05 El Transito 111.70 114** IAMs_20 IAMs_20 16 04 12.2
comp=Z,13µm,22.0s
**LCO Las Campanas 111.72 115** IAMs_20 IAMs_20 16 04 56.9
comp=Z,12µm,22.0s
**BKZ Black Stump Fm 112.06 211** IAMs_20 IAMs_20 15 58 59.5
comp=Z,11µm,22.0s
**CO05 La Serena 112.40 116** IAMs_20 IAMs_20 15 59 50.7
comp=Z,15µm,21.0s
**CO01 Juntas del Tor 112.81 115** IAMs_20 IAMs_20 16 02 54.7
comp=Z,13µm,22.0s
**CO06 Fray Jorge 112.97 116** IAMs_20 IAMs_20 16 04 29.9
comp=Z,14µm,20.0s
**CO03 El Pedregal 113.42 115** IAMs_20 IAMs_20 16 04 21.9
comp=Z,16µm,20.0s
**VA04 Juan Fernndez 113.55 124** IAMs_20 IAMs_20 16 03 16.3
comp=Z,12µm,19.0s
**CO02 Combarbal 113.66 116** IAMs_20 IAMs_20 16 05 57.2
comp=Z,16µm,22.0s
**CPUP Villa Florida 113.68 102** PKKPbc PKKPbc 15 28 12.5 -2.0
comp=Z,0.5nm,0.4s,baz=54,slow=8.7,SNR=1.2
**STKA Stephens Creek 113.96 243** PKKPbc PKKPbc 15 28 14.1 +0.4
comp=Z,2.5nm,1.1s,baz=213,slow=8.7,SNR=1.7
**ZON Zonda 114.72 114** IAMs_20 IAMs_20 16 13 49.1
comp=Z,13µm,22.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MULG | **Mulgathing** | **114.91 250** | P | **PKiKP** | **15 17 39.8** | **+3.6** | |
| VA03 | **San Esteban** | **115.25 116** | IAMs_20 | IAMs_20 | 16 05 18.2 | | |
| | comp=Z,17µm,21.0s | | | | | | |
| PEL | **Peldehue** | **115.56 116** | IAMs_20 | IAMs_20 | 16 05 26.5 | | |
| | comp=Z,19µm,19.0s | | | | | | |
| VA05 | **Santo Domingo** | **115.74 117** | IAMs_20 | IAMs_20 | 16 05 23.3 | | |
| | comp=Z,18µm,20.0s | | | | | | |
| KHZ | **Kahutara** | **115.76 213** | IAMs_20 | IAMs_20 | 16 00 32.4 | | |
| | comp=Z,12µm,21.0s | | | | | | |
| MT05 | **Renca** | **115.77 116** | IAMs_20 | IAMs_20 | 16 05 24.1 | | |
| | comp=Z,10µm,20.0s | | | | | | |
| MT03 | **Universidad Ad** | **115.94 116** | IAMs_20 | IAMs_20 | 16 05 37.4 | | |
| | comp=Z,19µm,20.0s | | | | | | |
| MT08 | **Bocatoma Ro** | **116.05 116** | IAMs_20 | IAMs_20 | 16 06 04.4 | | |
| | comp=Z,18µm,19.0s | | | | | | |
| MT01 | **Popeta** | **116.05 117** | IAMs_20 | IAMs_20 | 16 05 06.4 | | |
| | comp=Z,20µm,21.0s | | | | | | |
| HTT | **Hallett** | **116.24 245** | P | **PKiKP** | **15 17 39.5** | **+0.7** | |
| LTZ | **Lake Taylor** | **116.36 214** | IAMs_20 | IAMs_20 | 16 01 13.2 | | |
| | comp=Z,11µm,22.0s | | | | | | |
| BBOO | **Buckleboo** | **116.58 247** | P | **PKiKP** | **15 17 41.6** | **+2.2** | |
| BO01 | **Tunca** | **116.59 117** | IAMs_20 | IAMs_20 | 16 05 31.7 | | |
| | comp=Z,17µm,20.0s | | | | | | |
| GO05 | **Huala** | **116.90 118** | IAMs_20 | IAMs_20 | 16 05 31.9 | | |
| | comp=Z,13µm,21.0s | | | | | | |
| OXZ | **Oxford** | **116.93 214** | IAMs_20 | IAMs_20 | 16 07 01.3 | | |
| | comp=Z,9µm,19.0s | | | | | | |
| BO02 | **Sierra Bellavi** | **117.05 117** | IAMs_20 | IAMs_20 | 16 05 47.0 | | |
| | comp=Z,17µm,20.0s | | | | | | |
| RPZ | **Rata Peaks** | **117.50 214** | IAMs_20 | IAMs_20 | 16 03 27.3 | | |
| | comp=Z,12µm,21.0s | | | | | | |
| ML02 | **Panimavida** | **117.75 118** | IAMs_20 | IAMs_20 | 16 07 48.5 | | |
| | comp=Z,14µm,20.0s | | | | | | |
| BI02 | **San Fabin de** | **118.63 118** | IAMs_20 | IAMs_20 | 16 08 15.6 | | |
| | comp=Z,16µm,19.0s | | | | | | |
| ODZ | **Otahua Downs** | **118.85 214** | IAMs_20 | IAMs_20 | 16 10 32.2 | | |
| | comp=Z,11µm,20.0s | | | | | | |
| WKZ | **Wanaka** | **118.97 216** | IAMs_20 | IAMs_20 | 16 00 22.4 | | |
| | comp=Z,15µm,22.0s | | | | | | |
| MLZ | **Mavora Lakes** | **119.67 216** | IAMs_20 | IAMs_20 | 16 02 07.9 | | |
| | comp=Z,21µm,22.0s | | | | | | |
| DCZ | **Deep Cove** | **119.97 217** | IAMs_20 | IAMs_20 | 16 03 16.7 | | |
| | comp=Z,12µm,20.0s | | | | | | |
| LR04 | **Corral** | **120.94 122** | IAMs_20 | IAMs_20 | 16 06 01.8 | | |
| | comp=Z,12µm,20.0s | | | | | | |
| BLDU | **Ballidu** | **121.13 266** | P | **PKiKP** | **15 17 49.3** | **+1.0** | |
| GO06 | **Curarrehue** | **121.25 120** | IAMs_20 | IAMs_20 | 16 06 41.2 | | |
| | comp=Z,15µm,20.0s | | | | | | |
| KLBR | **Kellerberrin** | **121.66 264** | P | **PKPdf** | **15 17 48.6** | **-0.6** | |
| KLBR | **Kellerberrin** | **121.66 264** | P | **PKPdf** | **15 17 49.0** | **-0.2** | |
| LL04 | **Puerto Octay** | **122.19 121** | IAMs_20 | IAMs_20 | 16 11 57.9 | | |
| | comp=Z,10µm,18.0s | | | | | | |
| LL05 | **Los Muermos** | **122.33 122** | IAMs_20 | IAMs_20 | 16 08 07.5 | | |
| | comp=Z,11µm,18.0s | | | | | | |
| LL03 | **Petrohue** | **122.40 121** | IAMs_20 | IAMs_20 | 16 09 11.5 | | |
| | comp=Z,11µm,19.0s | | | | | | |
| MUN | **Mundaring** | **122.55 266** | P | **PKiKP** | **15 17 51.1** | **0.0** | |
| MUN | **Mundaring** | **122.55 266** | P | **PKiKP** | **15 17 53.7** | **+2.6** | |
| PLCA | **Paso Flores** | **122.59 120** | PKP | **PKPdf** | **15 17 49.6** | **-1.1** | |
| | comp=Z,15nm,0.9s,baz=313,slow=3.4,SNR=20 | | | | | | |
| PLCA | | | PKKPbc | **PKKPab** | **15 27 44.2** | **+1.0** | |
| | comp=Z,0.6nm,0.9s,baz=151,slow=3.9,SNR=1.0 | | | | | | |
| TRQA | **Tornquist** | **122.86 111** | | **PKPdf** | **15 17 51.3** | **0.0** | |
| TRQA | | | IAMs_20 | IAMs_20 | 16 13 56.6 | | |
| | comp=Z,20µm,22.0s | | | | | | |
| TRQA | **Tornquist** | **122.86 111** | PKIKP | **PKPdf** | **15 17 51.3** | **0.0** | |
| TRQA | **Tornquist** | **122.86 111** | *e*P | **PKiKP** | **15 17 52.7** | **+1.2** | |
| LL06 | **Loncomilla** | **123.02 123** | IAMs_20 | IAMs_20 | 16 04 33.0 | | |
| | comp=Z,13µm,20.0s | | | | | | |
| NWAO | **Narrogin (SRO)** | **123.06 264** | P | **PKiKP** | **15 17 56.4** | **+4.4** | |
| LL01 | **San Ignacio de** | **123.53 122** | | **PKPdf** | **15 17 51.8** | **-0.6** | |
| LL07 | **Hotel Espejo d** | **123.63 123** | IAMs_20 | IAMs_20 | 16 04 50.2 | | |
| | comp=Z,14µm,20.0s | | | | | | |
| LL02 | **Futaleuf** | **124.44 122** | IAMs_20 | IAMs_20 | 16 12 49.6 | | |
| | comp=Z,10µm,19.0s | | | | | | |
| LSZ | **Lusaka** | **125.51 8** | IAMs_20 | IAMs_20 | 16 21 05.3 | | |
| | comp=Z,15µm,19.0s | | | | | | |
| COYC | **Coyhaique** | **126.54 123** | IAMs_20 | IAMs_20 | 16 11 10.2 | | |
| | comp=Z,12µm,19.0s | | | | | | |
| TSUM | **Tsumeb** | **128.48 21** | IAMs_20 | IAMs_20 | 16 16 00.1 | | |
| | comp=Z,14µm,20.0s | | | | | | |
| GO08 | **Villa O'Higgin** | **129.03 125** | IAMs_20 | IAMs_20 | 16 26 19.9 | | |
| | comp=Z,13µm,19.0s | | | | | | |
| RER | **Riviere de l'E** | **129.88 334** | P | **PKiKP** | **15 18 09.6** | **+3.5** | |
| GO09 | **Cerro Castillo** | **131.61 127** | IAMs_20 | IAMs_20 | 16 11 05.3 | | |
| | comp=Z,13µm,22.0s | | | | | | |
| VOI | **Vohitsoka** | **131.71 345** | P | **PKiKP** | **15 18 12.6** | **+2.8** | |
| MG05 | **Puerto Natales** | **131.93 127** | IAMs_20 | IAMs_20 | 16 13 55.7 | | |
| | comp=Z,10µm,21.0s | | | | | | |
| MG04 | **Isla Riesco** | **133.25 127** | IAMs_20 | IAMs_20 | 16 24 41.4 | | |
| | comp=Z,13µm,20.0s | | | | | | |
| GO10 | **Punta Arenas** | **133.66 127** | IAMs_20 | IAMs_20 | 16 12 18.3 | | |
| | comp=Z,13µm,20.0s | | | | | | |
| MG01 | **Puerto William** | **136.19 125** | IAMs_20 | IAMs_20 | 16 28 34.2 | | |
| | comp=Z,12µm,19.0s | | | | | | |
| BOSA | **Boshof** | **138.57 13** | PKhKP | PKPpre | 15 18 15.0 | | |
| | comp=Z,4.0nm,0.7s,baz=334,slow=1.7,SNR=9.4 | | | | | | |
| TRIS | **Tristan da Cun** | **138.84 63** | IAMs_20 | IAMs_20 | 16 12 06.0 | | |
| | comp=Z,11µm,22.0s | | | | | | |
| PMSA | **Palmer Station** | **145.42 132** | IAMs_20 | IAMs_20 | 16 30 15.3 | | |
| | comp=Z,14µm,21.0s | | | | | | |
| SMAI | **San Martin Ant** | **147.30 137** | | **PKPbc** | **15 18 38.3** | **+0.6** | |
| SBA | **Scott Base** | **149.99 198** | IAMs_20 | IAMs_20 | 16 20 59.1 | | |
| | comp=Z,9µm,19.0s | | | | | | |
| VNDA | **Vanda** | **150.28 200** | | **PKPbc** | **15 18 44.8** | **-0.4** | |
| VNDA | **Vanda** | **150.28 200** | PKPbc | **PKPdf** | **15 18 41.6** | **+1.6** | |
| | comp=Z,2.8nm,0.5s,baz=334,slow=2.5,SNR=31 | | | | | | |
| CASY | **Casey** | **153.06 240** | IAMs_20 | IAMs_20 | 16 20 07.4 | | |
| | comp=Z,8µm,22.0s | | | | | | |
| QSPA | **South Pole Qui** | **159.49 180** | | **PKPdf** | **15 18 52.2** | **-0.7** | |
| QSPA | **South Pole Qui** | **159.49 180** | IAMs_20 | IAMs_20 | 16 33 46.2 | | |
| | comp=Z,11µm,19.0s | | | | | | |
| QSPA | **South Pole Qui** | **159.49 180** | PKP | **PKPdf** | **15 18 49.8** | **-3.1** | |
| | comp=Z,7.8nm,1.1s,baz=73,slow=1.8,SNR=6.7 | | | | | | |
| QSPA | | | PKPab | **PKPab** | **15 19 31.1** | **-0.1** | |
| | comp=Z,18nm,0.8s,baz=51,slow=1.4,SNR=8.4 | | | | | | |
| QSPA | | | PP | **PP** | **15 23 09.5** | **-4.1** | |
| | comp=Z,5.2nm,0.9s,baz=135,slow=5.7,SNR=1.2 | | | | | | |
| VNA3 | **Neumayer Olymp** | **165.29 117** | ⇑PKPab | **PKPab** | **15 19 56.7** | **+0.2** | |
| | comp=Z,50nm,0.8s | | | | | | |
| VNA3 | | | ⇑PKPdf | **PKPdf** | **15 18 55.1** | **-3.4** | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| VNA1 | **Neumayer--Stat** | **165.57 114** | ⇑PKPab | **PKPab** | **15 19 58.0** | **+0.3** | |
| | comp=Z,37nm,1.0s | | | | | | |
| VNA1 | | | ⇑PKPdf | **PKPdf** | **15 18 54.7** | **-4.0** | |
| | comp=Z,13nm,1.2s | | | | | | |
| VNA2 | **Neumayer--Watz** | **165.92 115** | ⇑PKPab | **PKPab** | **15 19 58.3** | **-0.9** | |
| | comp=Z,18nm,0.7s,baz=270,slow=2.4 | | | | | | |
| VNA2 | | | ⇑PKPdf | **PKPdf** | **15 18 54.6** | **-4.4** | |
| | comp=Z,8.5nm,1.0s,baz=302,slow=2.4 | | | | | | |
| SNAA | **Sanae** | **167.51 117** | PKPdf | **PKPdf** | **15 18 58.8** | **-1.6** | |
| SNAA | **Sanae** | **167.51 117** | ⇑PKPab | **PKPab** | **15 20 03.1** | **-3.3** | |
| | comp=Z,448nm,0.8s | | | | | | |
| SNAA | | | ⇑PKPdf | **PKPdf** | **15 18 55.6** | **-4.7** | |
| | comp=Z,193nm,1.2s | | | | | | |
| SNAA | **Sanae** | **167.51 117** | PKP | **PKPdf** | **15 18 56.7** | **-3.6** | |
| | comp=Z,8.2nm,1.1s,baz=293,slow=6.6,SNR=6.3 | | | | | | |
| SNAA | | | PKPab | **PKPab** | **15 20 05.1** | **-1.3** | |
| | comp=Z,29nm,1.0s,baz=289,slow=4.4,SNR=11 | | | | | | |
| SNAA | | | PP | **PP** | **15 23 53.5** | **-2.4** | |
| | comp=Z,9.2nm,1.1s,baz=271,slow=2.8,SNR=4.5 | | | | | | |
| TROLL | **Troll, Antarti** | **169.22 118** | ⇑PKPab | **PKPab** | **15 20 13.9** | **-0.1** | |
| | comp=Z,3µm,0.8s | | | | | | |
| TROLL | | | ⇑PKPdf | **PKPdf** | **15 18 58.3** | **-3.2** | |
| | comp=Z,378nm,1.2s | | | | | | |
| MAW | **Mawson** | **169.60 268** | PKP | **PKPdf** | **15 18 59.1** | **-2.6** | |
| | comp=Z,2.4nm,1.0s,baz=88,slow=3.5,SNR=1.8 | | | | | | |
| MAW | | | PKPab | **PKPab** | **15 20 13.7** | **-1.9** | |
| | comp=Z,10.0nm,1.1s,baz=81,slow=11,SNR=2.5 | | | | | | |
| NVL | **N'lazarevskaya** | **172.15 109** | *e*PKP2 | **PKPab** | **15 20 26.8** | **0.0** | |
| NVL | | | pmax | pmax | | | |
| | comp=Z,91nm,1.6s | | | | | | |
| ELIB | **Princess Elisa** | **175.57 127** | *d*PKPdf | **PKPdf** | **15 19 06.5** | **+2.2** | |
| ELIB | | | *d*PKP | **pPKPab** | **15 20 43.6** | **-1.6** | |
| ELIB | | | *d*PP | **PP** | **15 24 35.8** | **-0.1** | |

*NEIC* ***12*** *15:01:05.4±0.8, 69°.53N±0°.05×144°.47W±0°.06, h9km±5km, Error ellipse: s-maj=7.7km s-min=2.1km az=198.0*

**AEIC 12 15:01:05.4**±0.8, **69°.55N**±0°.04×**144°.50W**±0°.07, **h6**km±5km, **ML4.9, mb5.1**/9(NEIC), **ML5.1**/18(NEIC), **Error ellipse: s-maj=6.0km s-min=2.4km az=205.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.29** | **73** | | Pg | 15 01 11.1 | +0.1 |
| C27K | | | | | Sg | 15 01 14.8 | 0.0 |
| **C26K** | **Camden Bay** | **0.40** | **339** | | Pg | 15 01 12.6 | -0.6 |
| C26K | | | | | Sg | 15 01 19.3 | +0.9 |
| **D25K** | **Kavik River** | **0.70** | **252** | Pg | Pg | 15 01 18.4 | -0.4 |
| **D27M** | **Malcolm River** | **1.29** | **102** | | Pn | 15 01 29.4 | -0.7 |
| **D27M** | **Malcolm River** | **1.29** | **102** | | Sg | 15 01 46.1 | -0.6 |
| **D27M** | **Malcolm River** | **1.29** | **102** | IAML | | 15 01 52.5 | |
| | comp=E,30µm,0.6s | | | | | | |
| D27M | | | | IAML | | 15 01 54.3 | |
| | comp=N,39µm,0.9s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.48** | **279** | | Pn | 15 01 32.2 | -0.4 |
| **C24K** | **Franklin Bluff** | **1.48** | **279** | IAML | | 15 02 12.8 | |
| | comp=E,34µm,1.2s | | | | | | |
| C24K | | | | IAML | | 15 02 13.5 | |
| | comp=N,36µm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **1.58** | **258** | | Pn | 15 01 33.5 | -0.5 |
| **E27K** | **Coleen River** | **1.73** | **141** | Pn | Pn | 15 01 35.3 | -0.7 |
| E27K | | | | IAML | | 15 02 07.0 | |
| | comp=N,20µm,1.5s | | | | | | |
| E27K | | | | IAML | | 15 02 29.6 | |
| | comp=E,16µm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.86** | **176** | | Pn | 15 01 37.3 | -0.6 |
| **F26K** | **Sheenjek River** | **1.86** | **176** | IAML | | 15 02 07.4 | |
| | comp=N,18µm,1.0s | | | | | | |
| F26K | | | | IAML | | 15 02 10.9 | |
| | comp=E,17µm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04** | **246** | Pn | Pn | 15 01 40.0 | -0.3 |
| TOLK | | | | IAML | | 15 01 52.1 | |
| | comp=N,19µm,1.4s | | | | | | |
| TOLK | | | | IAML | | 15 02 32.9 | |
| | comp=E,19µm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.13** | **181** | Pn | Pn | 15 01 40.6 | -1.0 |
| **CCB** | **Clear Creek Bu** | **5.09** | **196** | Pn | Pn | 15 02 22.8 | +0.7 |
| **ECSD** | **EROS Data Cent** | **35.33** | **112** | P | P | 15 08 00.3 | -0.9 |
| **SCHQ** | **Schefferville** | **36.19** | **73** | P | P | 15 08 08.2 | -0.2 |
| **YUH** | **Yuha Desert** | **40.27** | **141** | P | P | 15 08 43.0 | +0.2 |
| **113A** | **Mohawk Valley,** | **40.64** | **139** | P | P | 15 08 45.2 | -0.7 |
| 113A | | | | IAmb | IAmb | 15 09 24.3 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **H62A** | **Milan** | **43.38** | **85** | P | P | 15 09 08.7 | +0.4 |
| **WCI** | **Wyandotte Cave** | **43.72** | **104** | P | P | 15 09 10.3 | -0.7 |
| **WVL** | **Waterville** | **43.91** | **84** | P | P | 15 09 12.3 | -0.2 |
| **MJB9** | **Matsu-Tunnel** | **51.88** | **273** | P | P | 15 10 13.1 | -1.3 |
| MJB9 | | | | IAmb | IAmb | 15 10 40.4 | |
| | comp=Z,46nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **51.88** | **273** | P | P | 15 10 13.0 | -1.3 |

*NEIC* ***12*** *15:04:07.1±1.1, 69°.59N±0°.01×145°.20W±0°.04, h6km±4km, Error ellipse: s-maj=2.0km s-min=1.8km az=83.0*

**AEIC 12 15:04:07.4**±1.5, **69°.56N**±0°.02×**145°.16W**±0°.04, **h5**km±4km, **ML4.2, ML4.2**/28(NEIC), **Error ellipse: s-maj=3.2km s-min=2.0km az=158.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.37** | **14** | | Sg | 15 04 19.4 | +0.1 |
| **C26K** | **Camden Bay** | **0.37** | **14** | | Pg | 15 04 13.9 | -0.6 |
| C26K | | | | IAML | | 15 04 20.3 | |
| | comp=E,17µm,0.7s | | | | | | |
| C26K | | | | IAML | | 15 04 20.5 | |
| | comp=N,14µm,0.9s | | | | | | |
| **D25K** | **Kavik River** | **0.49** | **241** | | Sg | 15 04 23.9 | +0.7 |
| **D25K** | **Kavik River** | **0.49** | **241** | | Pg | 15 04 16.1 | -0.8 |
| **D25K** | **Kavik River** | **0.49** | **241** | IAML | | 15 04 24.4 | |
| | comp=N,7µm,0.7s | | | | | | |
| D25K | | | | IAML | | 15 04 26.8 | |
| | comp=E,8µm,0.6s | | | | | | |
| **C27K** | **Jago River** | **0.51** | **82** | | Pg | 15 04 17.2 | -0.1 |
| C27K | | | | | Sg | 15 04 25.1 | +1.2 |
| **C27K** | **Jago River** | **0.51** | **82** | IAML | | 15 04 26.6 | |
| | comp=N,4µm,0.8s | | | | | | |
| C27K | | | | IAML | | 15 04 27.4 | |
| | comp=E,7µm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.25** | **279** | Pg | Pg | 15 04 30.4 | -0.9 |
| C24K | | | | Sg | Sg | 15 04 46.5 | -1.0 |
| C24K | | | | IAML | | 15 04 49.9 | |
| | comp=E,6µm,0.6s | | | | | | |
| C24K | | | | IAML | | 15 04 56.6 | |
| | comp=N,4µm,1.0s | | | | | | |
| **D24K** | **Happy Valley** | **1.36** | **254** | | Sn | 15 04 53.4 | +1.9 |
| **D24K** | **Happy Valley** | **1.36** | **254** | | Pn | 15 04 32.1 | -0.9 |
| **D24K** | **Happy Valley** | **1.36** | **254** | IAML | | 15 04 55.1 | |
| | comp=E,6µm,1.2s | | | | | | |
| D24K | | | | IAML | | 15 04 56.0 | |
| | comp=N,6µm,0.8s | | | | | | |
| **D27M** | **Malcolm River** | **1.52** | **100** | | Pn | 15 04 34.9 | -0.4 |
| **D27M** | **Malcolm River** | **1.52** | **100** | IAML | | 15 04 58.5 | |
| | comp=N,3µm,0.7s | | | | | | |
| D27M | | | | IAML | | 15 05 01.4 | |
| | comp=E,2µm,1.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.83** | **242** | IAML | | 15 05 09.2 | |
| | comp=E,2µm,1.0s | | | | | | |
| TOLK | | | | IAML | | 15 05 10.0 | |
| | comp=N,3µm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.83** | **242** | | Pn | 15 04 38.5 | -1.1 |
| **C23K** | **Itkillik River** | **1.92** | **281** | | Pn | 15 04 39.6 | -1.1 |
| **F25K** | **Christian Rive** | **1.99** | **185** | | Pn | 15 04 41.5 | -0.2 |
| **F25K** | **Christian Rive** | **1.99** | **185** | IAML | | 15 05 55.6 | |
| | comp=N,3µm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.16** | **174** | Pn | Pn | 15 04 43.8 | -0.3 |
| **E28M** | **Babbage River** | **2.24** | **113** | | Pn | 15 04 44.1 | -1.0 |
| E28M | | | | IAML | | 15 06 02.0 | |
| | comp=N,2µm,1.1s | | | | | | |
| E28M | | | | IAML | | 15 06 10.1 | |
| | comp=E,1µm,1.1s | | | | | | |
| **F24K** | **Squaw Lake** | **2.29** | **207** | | Pn | 15 04 45.2 | -0.6 |
| F24K | | | | IAML | | 15 05 24.2 | |
| | comp=E,1µm,0.8s | | | | | | |
| F24K | | | | IAML | | 15 06 11.6 | |
| | comp=N,1µm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.76** | **133** | | Pn | 15 04 51.5 | -0.7 |
| F28M | | | | IAML | | 15 05 45.9 | |
| | comp=N,1µm,1.4s | | | | | | |
| F28M | | | | IAML | | 15 06 17.5 | |
| | comp=E,1µm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **4.78** | **263** | Pn | Pn | 15 05 20.2 | +0.2 |
| **MDM** | **Murphy Dome** | **4.78** | **196** | Pn | Pn | 15 05 20.8 | +0.8 |
| **F19K** | **Shaleruckik Mo** | **5.44** | **246** | Pn | Pn | 15 05 29.7 | +0.7 |
| **E18K** | **Tukpahlearik C** | **6.07** | **257** | Pn | Pn | 15 05 37.8 | +0.1 |
| **GNW** | **Green Mountain** | **24.64** | **142** | P | P | 15 09 26.8 | -1.7 |
| **AMKA** | **Amchitka** | **24.67** | **241** | P | P | 15 09 27.9 | -0.8 |
| **MA2** | **Magadan** | **27.86** | **282** | P | P | 15 09 56.6 | -0.8 |
| **T50A** | **Nancy** | **45.53** | **103** | P | P | 15 12 27.0 | -0.6 |
| **MJB9** | **Matsu-Tunnel** | **51.65** | **272** | P | P | 15 13 14.0 | -0.7 |
| **MAJO** | **Matsushiro** | **51.65** | **272** | P | P | 15 13 14.1 | -0.6 |
| **JGF** | **Kuroka** | **52.80** | **273** | P | P | 15 13 23.0 | -0.3 |
| **JNU** | **Nakatsue** | **57.30** | **277** | P | P | 15 13 55.3 | -0.6 |
| **KKAR** | **Karatay Array** | **64.63** | **332** | P | P | 15 14 45.4 | 0.0 |
| **CHGR** | **Chuyangaron** | **69.19** | **332** | P | P | 15 15 14.8 | +0.2 |
| **UBPT** | **Khong Chiam** | **82.37** | **293** | P | P | 15 16 29.1 | -1.1 |

*NEIC* ***12*** *15:04:49.2±1.4, 69°.58N±0°.06×145°.1W±0°.1, h7km±5km, Error ellipse: s-maj=8.9km s-min=4.5km az=203.0*

**AEIC 12 15:04:49.1**±1.2, **69°.56N**±0°.05×**145°.1W**±0°.1, **h3**km±5km, **ML4.2, ML4.4**/32(NEIC), **Error ellipse: s-maj=8.4km s-min=4.6km az=202.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.37** | **10** | | Pg | 15 04 55.9 | -0.3 |
| **C26K** | **Camden Bay** | **0.37** | **10** | | Sg | 15 05 01.2 | +0.2 |
| **C27K** | **Jago River** | **0.49** | **81** | | Pg | 15 04 58.3 | -0.3 |
| C27K | | | | | Sg | 15 05 05.2 | +0.2 |
| **D25K** | **Kavik River** | **0.51** | **243** | | Pg | 15 04 58.5 | -0.3 |
| D25K | | | | | Sg | 15 05 06.9 | +1.4 |
| **C24K** | **Franklin Bluff** | **1.27** | **279** | | Pg | 15 05 13.1 | -0.3 |
| C24K | | | | | Sb | 15 05 30.8 | +0.4 |
| **C24K** | **Franklin Bluff** | **1.27** | **279** | IAML | | 15 05 32.9 | |
| | comp=N,6µm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.38** | **255** | | Pn | 15 05 14.7 | -0.6 |
| D24K | | | | IAML | | 15 05 38.7 | |
| | comp=N,6µm,0.7s | | | | | | |
| D24K | | | | IAML | | 15 05 40.3 | |
| | comp=E,6µm,0.8s | | | | | | |
| **D27M** | **Malcolm River** | **1.50** | **100** | | Pn | 15 05 16.6 | -0.3 |
| **D27M** | **Malcolm River** | **1.50** | **100** | IAML | | 15 05 38.7 | |
| | comp=N,4µm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.87** | **136** | | Sb | 15 05 47.6 | -0.2 |
| **F25K** | **Christian Rive** | **1.98** | **186** | | Sb | 15 05 50.4 | -0.5 |
| **F28M** | **Old Crow** | **2.74** | **133** | | Pn | 15 05 33.6 | -0.3 |
| **F28M** | **Old Crow** | **2.74** | **133** | IAML | | 15 06 24.3 | |
| | comp=N,1µm,1.2s | | | | | | |
| **D22K** | **Ayikyak River** | **2.79** | **259** | | Pn | 15 05 34.2 | -0.4 |
| **D22K** | **Ayikyak River** | **2.79** | **259** | IAML | | 15 06 32.7 | |
| | comp=E,2µm,1.5s | | | | | | |
| D22K | | | | IAML | | 15 06 39.3 | |
| | comp=N,1µm,1.2s | | | | | | |
| **E29M** | **Blow River** | **2.85** | **111** | Pn | Pn | 15 05 34.6 | -0.8 |
| E29M | | | | IAML | | 15 06 29.1 | |
| | comp=E,2µm,1.4s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.97** | **289** | | Pn | 15 05 36.7 | -0.3 |
| **FYU** | **Fort Yukon** | **3.00** | **181** | | Pn | 15 05 37.3 | -0.2 |
| **FYU** | **Fort Yukon** | **3.00** | **181** | IAML | | 15 06 13.4 | |
| | comp=N,1µm,1.5s | | | | | | |
| **F22K** | **John River** | **3.32** | **235** | | Pn | 15 05 41.5 | -0.4 |
| **H24K** | **Noodor Dome** | **3.88** | **197** | Pn | Pn | 15 05 48.7 | -0.9 |
| H24K | | | | IAML | | 15 06 20.4 | |
| | comp=E,612nm,1.5s | | | | | | |
| H24K | | | | IAML | | 15 06 45.2 | |
| | comp=N,451nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.68** | **242** | Pn | Pn | 15 06 00.1 | -0.3 |
| F20K | | | | IAML | | 15 06 36.9 | |
| | comp=E,291nm,1.2s | | | | | | |
| F20K | | | | IAML | | 15 06 43.0 | |
| | comp=N,270nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **4.80** | **263** | Pn | Pn | 15 06 02.3 | +0.2 |
| **CCB** | **Clear Creek Bu** | **5.04** | **193** | Pn | Pn | 15 06 05.0 | -0.5 |
| CCB | | | | IAML | | 15 06 46.1 | |
| | comp=N,213nm,1.2s | | | | | | |
| **NEA2** | **Nenana** | **5.22** | **199** | Pn | Pn | 15 06 08.3 | +0.3 |
| **WRH** | **Wood River Hil** | **5.24** | **194** | Pn | Pn | 15 06 09.2 | +1.0 |
| WRH | | | | IAML | | 15 07 57.1 | |
| | comp=N,186nm,1.2s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.45** | **246** | Pn | Pn | 15 06 11.8 | +0.6 |
| **G19K** | **Purcell Mounta** | **5.68** | **239** | Pn | Pn | 15 06 14.3 | +0.1 |
| **C18K** | **Utukok River** | **5.83** | **269** | Pn | Pn | 15 06 15.8 | -0.6 |
| **E18K** | **Tukpahlearik C** | **6.09** | **257** | Pn | Pn | 15 06 19.4 | -0.5 |
| **G18K** | **Tagagawik** | **6.32** | **241** | Pn | Pn | 15 06 22.4 | -0.7 |
| **RDOG** | **Red Dog Mine** | **6.62** | **265** | Pn | Pn | 15 06 26.3 | -0.9 |
| **F17K** | **Baldwin Pennin** | **6.81** | **250** | Pn | Pn | 15 06 29.6 | -0.2 |
| **A36M** | **Sachs Harbour** | **6.98** | **60** | Pn | Pn | 15 06 32.4 | +0.4 |
| **H17K** | **Granite Mounta** | **7.37** | **238** | Pn | Pn | 15 06 37.7 | +0.3 |
| **I17K** | **Unalakleet** | **8.37** | **235** | Pn | Pn | 15 06 51.5 | +0.3 |
| **KDAK** | **Kodiak Island** | **12.26** | **199** | Pn | Pn | 15 07 44.0 | -0.4 |
| **CHGN** | **Chignik** | **14.56** | **211** | P | P | 15 08 20.7 | -1.7 |
| **319A** | **Douglas** | **43.22** | **133** | P | P | 15 12 49.1 | -2.2 |
| **KSAR** | **Wonju Array Be** | **54.45** | **282** | P | P | 15 14 17.9 | +0.6 |

*NEIC* ***12*** *15:11:21.6±0.9, 69°.55N±0°.06×144°.87W±0°.07, h4km±7km, Error ellipse: s-maj=9.2km s-min=3.7km az=186.0*

**AEIC 12 15:11:21.3**±0.9, **69°.53N**±0°.04×**144°.87W**±0°.09, **h1**km±6km, **ML3.3, ML3.7**/56(NEIC), **Error ellipse: s-maj=7.0km s-min=3.7km az=205.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.40** | **358** | | Pg | 15 11 28.2 | -0.7 |
| C26K | | | | | Sg | 15 11 33.4 | -0.6 |
| **C26K** | **Camden Bay** | **0.40** | **358** | IAML | | 15 11 34.9 | |
| | comp=N,4µm,0.4s | | | | | | |
| C26K | | | | IAML | | 15 11 38.4 | |
| | comp=E,4µm,0.6s | | | | | | |
| **C27K** | **Jago River** | **0.42** | **75** | | Pg | 15 11 29.1 | -0.2 |
| C27K | | | | | Sg | 15 11 34.6 | -0.1 |
| **C27K** | **Jago River** | **0.42** | **75** | IAML | | 15 11 34.8 | |
| | comp=N,709nm,0.7s | | | | | | |
| C27K | | | | IAML | | 15 11 35.0 | |
| | comp=E,2µm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.57** | **250** | | Pg | 15 11 32.1 | -0.1 |
| D25K | | | | | Sg | 15 11 40.2 | +0.6 |
| **C24K** | **Franklin Bluff** | **1.36** | **280** | | Pg | 15 11 47.2 | -0.1 |
| C24K | | | | | Sn | 15 12 05.7 | -0.3 |
| **C24K** | **Franklin Bluff** | **1.36** | **280** | IAML | | 15 12 06.7 | |
| | comp=N,1µm,0.8s | | | | | | |
| C24K | | | | IAML | | 15 12 07.5 | |
| | comp=E,1µm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.41** | **100** | | Sn | 15 12 07.8 | +0.4 |
| **D27M** | **Malcolm River** | **1.41** | **100** | Pn | Pn | 15 11 48.1 | -0.1 |
| **D27M** | **Malcolm River** | **1.41** | **100** | IAML | | 15 12 16.9 | |
| | comp=N,452nm,0.8s | | | | | | |
| D27M | | | | IAML | | 15 12 18.8 | |
| | comp=E,324nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.45** | **257** | | Pn | 15 11 48.6 | -0.2 |
| D24K | | | | | Sn | 15 12 09.7 | +1.3 |
| **D24K** | **Happy Valley** | **1.45** | **257** | IAML | | 15 12 13.1 | |
| | comp=E,1µm,0.6s | | | | | | |
| D24K | | | | IAML | | 15 12 13.3 | |
| | comp=N,939nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.79** | **137** | | Sb | 15 12 17.9 | 0.0 |
| **TOLK** | **Toolik Lake Re** | **1.91** | **244** | | Sb | 15 12 20.9 | -0.3 |
| **TOLK** | **Toolik Lake Re** | **1.91** | **244** | Pn | Pn | 15 11 53.4 | -1.7 |
| TOLK | | | | IAML | | 15 12 27.8 | |
| | comp=E,410nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.03** | **282** | | Pn | 15 11 56.3 | -0.3 |
| **C23K** | **Itkillik River** | **2.03** | **282** | IAML | | 15 12 32.6 | |
| | comp=N,586nm,1.1s | | | | | | |
| C23K | | | | IAML | | 15 12 32.

| | | | | | |
|---|---|---|---|---|---|
| BPAW | Bear Paw Mtn. | 5.96 207 | Pn | Pn | 15 12 50.7 +0.1 |
| E18K | Tukpahlearik C | 6.16 257 | Pn | Pn | 15 12 53.3 0.0 |
| RND | Reindeer | 6.35 196 | Pn | Pn | 15 12 56.5 +0.5 |
| G18K | Tagagawik | 6.38 242 | Pn | Pn | 15 12 56.8 +0.5 |
| H18K | Honhosa River | 6.80 236 | Pn | Pn | 15 13 02.1 -0.1 |
| F17K | Baldwin Pennin | 6.88 251 | Pn | Pn | 15 13 02.9 -0.3 |
| H17K | Granite Mounta | 7.42 239 | Pn | Pn | 15 13 10.5 -0.1 |
| G16K | Koyuk River | 7.88 247 | Pn | Pn | 15 13 16.0 -0.8 |
| J17K | VABM Dome | 8.36 230 | Pn | Pn | 15 13 23.0 -0.4 |
| F15K | North Star Dit | 8.44 253 | Pn | Pn | 15 13 23.6 -1.0 |

*BJI **12** 15:14:17.1±0.0,69.°67N×144.°65W,h3km,mb4.8/31, mB5.2/1*
*IDC **12** 15:14:19.3±0.5,69.°74N×144.°83W,h0km,mb4.4/26, mbtmp4.4/31,ML4.6/5,Error ellipse: s-maj=13.6km s-min=9.7km az=58.0*
*MOS **12** 15:14:19.9±0.9,69.°60N×144.°62W,h14km,mb4.8/24, Error ellipse: s-maj=21.7km s-min=5.3km az=91.3*
*NEIC **12** 15:14:20.7,69.°27N×145.°02W,h18km,Moment Tensor Solution. Duration: 1ŝ6 Moment tensor: Scale 10^16^Nm; Mrr=0.13; Mθθ-1.35; Mϕϕ1.48; Mrθ-0.01; Mϕr-2.72; Mθϕ-0.60: Fault plane solution: M0 3.12000×10^16^ NP1: ϕs193.82000°,δ88.30000°,λ10.61000°. NP2: ϕs103.50000°,δ79.39000°,λ178.27000°. Principal axes: T 3.2086, Plg9.0000°, Azm59.0000°; N -0.1689, Plg79.0000°, Azm203.0000°; P -3.0397, Plg6.0000°, Azm328.0000°;*
*AEIC **12** 15:14:20.7±1.3,69.°57N±0.°04×144.°74W±0.°08,h3km±3km, ML5.0,mb5.0/34(NEIC),ML5.1/118(NEIC), Mww4.9/10(NEIC) Error ellipse: s-maj=6.5km s-min=3.9km az=194.0*
*NEIC **12** 15:14:20.7,69.°57N×144.°74W,h18km*
*NEIC **12** 15:14:21.3±1.5,69.°60N±0.°04×144.°68W±0.°09,h10km±1km, Error ellipse: s-maj=7.7km s-min=4.8km az=195.0*

**ISC 12 15:14:20.8±1.0, 69°63N±0°03×144°68W±0°02, h5km±6km, n671,σ1ŝ09/647, mb4.8/92, 15C-24D, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.30** | **345** | | **Pb** | **15 14 28.3** | **-0.3** |
| C26K | | | | | **Sb** | **15 14 33.0** | **-0.8** |
| **C26K** | **Camden Bay** | **0.30** | **345** | IAML | | 15 14 35.9 | |
| | comp=N,54μm,0.5s | | | | | | |
| C26K | | | | IAML | | 15 14 38.8 | |
| | comp=E,83μm,1.2s | | | | | | |
| **C26K** | **Camden Bay** | **0.30** | **345** | P | **Pb** | **15 14 28.4** | **-0.2** |
| | baz=170,SNR=75 | | | | | | |
| **C27K** | **Jago River** | **0.34** | **90** | | **Pg** | **15 14 27.5** | **+0.2** |
| C27K | | | | | **Sg** | **15 14 32.7** | **+0.8** |
| **C27K** | **Jago River** | **0.34** | **90** | IAML | | 15 14 34.5 | |
| | comp=N,35μm,0.4s | | | | | | |
| C27K | | | | IAML | | 15 14 35.3 | |
| | comp=E,175μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.34** | **90** | P | **Pg** | **15 14 27.6** | **+0.2** |
| | baz=262,SNR=72 | | | | | | |
| **D25K** | **Kavik River** | **0.67** | **243** | | **Pg** | **15 14 31.5** | **-2.2** |
| **D25K** | **Kavik River** | **0.67** | **243** | P | **Pg** | **15 14 31.7** | **-1.9** |
| | baz=66,SNR=161 | | | | | | |
| **D27M** | **Malcolm River** | **1.37** | **105** | Pn | **Pn** | **15 14 45.3** | **-1.3** |
| D27M | | | | IAML | | 15 15 10.8 | |
| | comp=N,27μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.37** | **105** | | **Sg** | **15 15 05.3** | **+0.5** |
| **D27M** | **Malcolm River** | **1.37** | **105** | P | **Pn** | **15 14 45.5** | **-1.1** |
| | baz=286,SNR=80 | | | | | | |
| **C24K** | **Franklin Bluff** | **1.41** | **276** | | **Pn** | **15 14 47.0** | **+0.1** |
| C24K | | | | | **Sg** | **15 15 06.9** | **+1.0** |
| **C24K** | **Franklin Bluff** | **1.41** | **276** | P | **Pn** | **15 14 46.2** | **-0.7** |
| | baz=94 | | | | | | |
| **D24K** | **Happy Valley** | **1.54** | **254** | Pn | **Pn** | **15 14 49.0** | **+0.1** |
| D24K | | | | IAML | | 15 15 14.7 | |
| | comp=E,35μm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.54** | **254** | | **Sg** | **15 15 10.1** | **-0.2** |
| **D24K** | **Happy Valley** | **1.54** | **254** | P | **Pb** | **15 14 49.4** | **-0.3** |
| | baz=72,SNR=114 | | | | | | |
| **E27K** | **Coleen River** | **1.83** | **141** | Pn | **Pn** | **15 14 53.0** | **+0.1** |
| E27K | | | | IAML | | 15 15 21.0 | |
| | comp=E,15μm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.83** | **141** | | **Sn** | **15 15 16.4** | **0.0** |
| **E27K** | **Coleen River** | **1.83** | **141** | P | **Pn** | **15 14 52.9** | **+0.1** |
| | baz=322,SNR=133 | | | | | | |
| **F26K** | **Sheenjek River** | **1.96** | **174** | | **Pn** | **15 14 54.3** | **-0.2** |
| F26K | | | | | **Sn** | **15 15 19.4** | **0.0** |
| **F26K** | **Sheenjek River** | **1.96** | **174** | IAML | | 15 15 21.5 | |
| | comp=E,14μm,0.6s | | | | | | |
| F26K | | | | IAML | | 15 15 23.1 | |
| | comp=N,14μm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.96** | **174** | P | **Pn** | **15 14 54.5** | **-0.1** |
| | baz=354,SNR=69 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.01** | **243** | Pn | **Pn** | **15 14 55.7** | **+0.4** |
| TOLK | | | | IAML | | 15 15 28.9 | |
| | comp=N,14μm,1.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.01** | **243** | | **Sb** | **15 15 23.7** | **+0.6** |
| **TOLK** | **Toolik Lake Re** | **2.01** | **243** | P | **Pn** | **15 14 56.3** | **+0.9** |
| | baz=59,SNR=71 | | | | | | |
| **C23K** | **Itkillik River** | **2.08** | **278** | Pn | **Pn** | **15 14 56.7** | **+0.5** |
| **C23K** | **Itkillik River** | **2.08** | **278** | P | **Pn** | **15 14 56.5** | **+0.4** |
| | baz=95,SNR=57 | | | | | | |
| **F25K** | **Christian Rive** | **2.08** | **190** | | **Pn** | **15 14 55.8** | **-0.5** |
| F25K | | | | | **Sn** | **15 15 23.4** | **+1.0** |
| **F25K** | **Christian Rive** | **2.08** | **190** | IAML | | 15 15 26.1 | |
| | comp=E,12μm,0.5s | | | | | | |
| F25K | | | | IAML | | 15 15 27.5 | |
| | comp=N,14μm,1.1s | | | | | | |
| **F25K** | **Christian Rive** | **2.08** | **190** | P | **Pn** | **15 14 56.0** | **-0.3** |
| | baz=9.1,SNR=104 | | | | | | |
| **E24K** | **Your Creek** | **2.08** | **223** | Pn | **Pn** | **15 14 56.3** | **0.0** |
| **E24K** | **Your Creek** | **2.08** | **223** | P | **Pn** | **15 14 55.7** | **-0.6** |
| | baz=40,SNR=128 | | | | | | |
| **E28M** | **Babbage River** | **2.11** | **117** | Pn | **Pn** | **15 14 57.9** | **+1.2** |
| **E28M** | **Babbage River** | **2.11** | **117** | P | **Pn** | **15 14 57.6** | **+0.9** |
| | baz=300,SNR=82 | | | | | | |
| **D28M** | **Stokes Point** | **2.12** | **95** | IAML | | 15 15 39.5 | |
| | comp=N,16μm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **2.12** | **95** | P | **Pn** | **15 14 57.6** | **+0.8** |
| | baz=279,SNR=100 | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.21** | **179** | Pn | **Pn** | **15 14 58.1** | **0.0** |
| **D23K** | **Nanushuk River** | **2.23** | **255** | | **Pn** | **15 14 58.6** | **+0.3** |
| **D23K** | **Nanushuk River** | **2.23** | **255** | IAML | | 15 15 36.8 | |
| | comp=E,15μm,1.6s | | | | | | |
| D23K | | | | IAML | | 15 15 38.1 | |
| | comp=N,15μm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.23** | **255** | P | **Pn** | **15 14 59.1** | **+0.8** |
| | baz=71 | | | | | | |
| **E23K** | **Chandalar** | **2.39** | **231** | | **Pn** | **15 15 00.1** | **-0.4** |
| **E23K** | **Chandalar** | **2.39** | **231** | IAML | | 15 15 43.3 | |
| | comp=E,8μm,1.5s | | | | | | |
| **E23K** | **Chandalar** | **2.39** | **231** | P | **Pn** | **15 15 01.0** | **+0.5** |
| | baz=47,SNR=98 | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **211** | Pn | **Pn** | **15 15 00.7** | **-0.4** |
| **F24K** | **Squaw Lake** | **2.43** | **211** | P | **Pn** | **15 15 00.6** | **-0.5** |
| | baz=28,SNR=32 | | | | | | |
| **F28M** | **Old Crow** | **2.69** | **137** | Pn | **Pn** | **15 15 04.2** | **-0.4** |
| **F28M** | **Old Crow** | **2.69** | **137** | P | **Pn** | **15 15 03.8** | **-0.7** |
| | baz=320,SNR=31 | | | | | | |
| **G26K** | **Porcupine Rive** | **2.71** | **173** | | **Pn** | **15 15 04.5** | **-0.4** |
| **G26K** | **Porcupine Rive** | **2.71** | **173** | P | **Pn** | **15 15 05.2** | **+0.3** |
| | baz=353,SNR=80 | | | | | | |
| **E29M** | **Blow River** | **2.74** | **114** | Pn | **Pn** | **15 15 06.5** | **+1.1** |
| E29M | | | | IAML | | 15 15 58.0 | |
| | comp=E,7μm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.74** | **114** | P | **Pn** | **15 15 05.7** | **+0.4** |
| | baz=299,SNR=42 | | | | | | |
| **G25K** | **Bearman Lake** | **2.93** | **191** | | **Pn** | **15 15 07.1** | **-0.8** |
| **G25K** | **Bearman Lake** | **2.93** | **191** | P | **Pn** | **15 15 07.4** | **-0.5** |
| | baz=9.6,SNR=18 | | | | | | |
| **D22K** | **Ayikyak River** | **2.95** | **259** | Pn | **Pn** | **15 15 07.9** | **-0.3** |
| **D22K** | **Ayikyak River** | **2.95** | **259** | P | **Pn** | **15 15 08.2** | **0.0** |
| | baz=72,SNR=32 | | | | | | |
| **G27K** | **Doyon Strip** | **3.05** | **157** | Pn | **Pn** | **15 15 09.1** | **-0.5** |
| **G27K** | **Doyon Strip** | **3.05** | **157** | P | **Pn** | **15 15 09.3** | **-0.3** |
| | baz=339,SNR=8.8 | | | | | | |
| **FYU** | **Fort Yukon** | **3.09** | **184** | Pn | **Pn** | **15 15 09.7** | **-0.3** |
| FYU | | | | IAML | | 15 16 01.4 | |
| | comp=E,8μm,1.6s | | | | | | |
| FYU | | | | IAML | | 15 16 02.6 | |
| | comp=N,7μm,1.2s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.09** | **287** | Pn | **Pn** | **15 15 10.6** | **+0.6** |
| **B22K** | **Teshekpuk Lake** | **3.09** | **287** | P | **Pn** | **15 15 10.2** | **+0.2** |
| | baz=100,SNR=24 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.12** | **201** | Pn | **Pn** | **15 15 09.6** | **-1.0** |
| **G24K** | **Hadweenzic Riv** | **3.12** | **201** | P | **Pn** | **15 15 09.7** | **-0.9** |
| | baz=18,SNR=21 | | | | | | |
| **COLD** | **Coldfoot** | **3.16** | **223** | P | **Pn** | **15 15 10.6** | **-0.4** |
| | baz=38,SNR=32 | | | | | | |
| **H25L** | **Birch Creek** | **3.41** | **188** | | **Pn** | **15 15 13.8** | **-0.6** |
| **H25L** | **Birch Creek** | **3.41** | **188** | P | **Pn** | **15 15 14.4** | **0.0** |
| | baz=6.5 | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.47** | **274** | Pn | **Pn** | **15 15 15.2** | **-0.1** |
| **B21K** | **Ikpikpuk River** | **3.47** | **274** | P | **Pn** | **15 15 15.3** | **-0.1** |
| | baz=86,SNR=19 | | | | | | |
| **F22K** | **John River** | **3.48** | **236** | | **Pn** | **15 15 15.3** | **-0.2** |
| **F22K** | **John River** | **3.48** | **236** | P | **Pn** | **15 15 16.0** | **+0.5** |
| | baz=49,SNR=22 | | | | | | |
| **E21K** | **Killik River** | **3.55** | **255** | Pn | **Pn** | **15 15 16.1** | **-0.3** |
| E21K | | | | IAML | | 15 16 24.5 | |
| | comp=E,6μm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.55** | **255** | P | **Pn** | **15 15 16.1** | **-0.3** |
| | baz=67,SNR=24 | | | | | | |
| **G23K** | **Bananza Creek** | **3.55** | **217** | Pn | **Pn** | **15 15 16.2** | **-0.2** |
| G23K | | | | IAML | | 15 16 16.1 | |
| | comp=E,5μm,1.6s | | | | | | |
| G23K | | | | IAML | | 15 16 16.4 | |
| | comp=N,4μm,1.7s | | | | | | |
| **G23K** | **Bananza Creek** | **3.55** | **217** | P | **Pn** | **15 15 16.8** | **+0.4** |
| | baz=32,SNR=24 | | | | | | |
| **H27K** | **Steamboat Moun** | **3.62** | **159** | P | **Pn** | **15 15 18.1** | **+0.7** |
| | baz=342,SNR=8.0 | | | | | | |
| **G29M** | **Pine Creek** | **3.69** | **135** | Pn | **Pn** | **15 15 17.9** | **-0.4** |
| G29M | | | | IAML | | 15 16 33.6 | |
| | comp=N,4μm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.69** | **135** | P | **Pn** | **15 15 18.4** | **+0.1** |
| | baz=320,SNR=30 | | | | | | |
| **G22K** | **Bettles** | **3.72** | **226** | | **Pn** | **15 15 18.1** | **-0.6** |
| **G22K** | **Bettles** | **3.72** | **226** | P | **Pn** | **15 15 18.4** | **-0.3** |
| | baz=40,SNR=13 | | | | | | |
| **A22K** | **Sinclair Lake** | **3.74** | **296** | | **Pn** | **15 15 18.9** | **-0.1** |
| **A22K** | **Sinclair Lake** | **3.74** | **296** | P | **Pn** | **15 15 19.1** | **0.0** |
| | baz=108,SNR=18 | | | | | | |
| **F30M** | **Barrier River** | **3.84** | **118** | | **Pn** | **15 15 21.7** | **+1.4** |
| **F30M** | **Barrier River** | **3.84** | **118** | P | **Pn** | **15 15 21.0** | **+0.6** |
| | baz=305,SNR=18 | | | | | | |
| **H24K** | **Noodor Dome** | **4.00** | **199** | Pn | **Pn** | **15 15 21.5** | **-1.1** |
| H24K | | | | IAML | | 15 16 27.9 | |
| | comp=E,3μm,1.6s | | | | | | |
| H24K | | | | IAML | | 15 16 32.4 | |
| | comp=N,3μm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **4.00** | **199** | P | **Pn** | **15 15 21.6** | **-1.1** |
| | baz=16,SNR=26 | | | | | | |
| **F21K** | **Alatna River** | **4.05** | **238** | IAML | | 15 16 32.6 | |
| | comp=E,2μm,1.3s | | | | | | |
| F21K | | | | IAML | | 15 16 38.5 | |
| | comp=N,3μm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.05** | **238** | P | **Pn** | **15 15 22.7** | **-0.6** |
| | baz=50,SNR=15 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.12** | **126** | IAML | | 15 16 41.9 | |
| | comp=N,2μm,0.8s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.12** | **126** | P | **Pn** | **15 15 25.1** | **+0.8** |
| | baz=313 | | | | | | |
| **PRP** | **Porcupine Dome** | **4.15** | **185** | Pn | **Pn** | **15 15 24.1** | **-0.6** |
| **PRP** | **Porcupine Dome** | **4.15** | **185** | P | **Pn** | **15 15 24.5** | **-0.2** |
| | baz=3.9,SNR=27 | | | | | | |
| **H29M** | **Whitestone** | **4.17** | **142** | | **Pn** | **15 15 24.8** | **-0.2** |
| **H29M** | **Whitestone** | **4.17** | **142** | IAML | | 15 16 21.5 | |
| | comp=E,2μm,0.9s | | | | | | |
| H29M | | | | IAML | | 15 16 44.2 | |
| | comp=N,3μm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **4.17** | **142** | P | **Pn** | **15 15 25.0** | **+0.1** |
| | baz=327,SNR=26 | | | | | | |
| **I27K** | **Kandik River** | **4.21** | **162** | P | **Pn** | **15 15 26.0** | **+0.4** |
| | baz=345,SNR=16 | | | | | | |
| **INK** | **Inuvik** | **4.24** | **103** | Pn | **Pn** | **15 15 25.7** | **-0.1** |
| INK | | | | IAML | | 15 16 43.1 | |
| | comp=E,519nm,1.6s | | | | | | |
| INK | | | | IAML | | 15 16 48.9 | |
| | comp=N,679nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **4.24** | **103** | Pn | **Pn** | **15 15 25.2** | **-0.6** |
| | comp=N,15nm,0.3s,baz=296,slow=7.6,SNR=22 | | | | | | |
| INK | | | | Sn | **Sn** | **15 16 11.4** | **-4.1** |
| | comp=N,35nm,0.3s,baz=336,slow=13,SNR=3.7 | | | | | | |
| INK | | | | Lg | Lg | 15 16 31.9 | |
| | comp=N,55nm,0.3s,baz=262,slow=28,SNR=3.1 | | | | | | |
| | comp=N,56nm,0.4s | | | | | | |
| **INK** | **Inuvik** | **4.24** | **103** | P | **Pn** | **15 15 26.2** | **+0.4** |
| | baz=293 | | | | | | |
| **INK** | **Inuvik** | **4.24** | **103** | P | **Pn** | **15 15 25.7** | **-0.1** |
| **H23K** | **Yukon River** | **4.25** | **208** | Pn | **Pn** | **15 15 25.3** | **-0.7** |
| H23K | | | | IAML | | 15 16 36.0 | |
| | comp=N,3μm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.25** | **208** | P | **Pn** | **15 15 25.3** | **-0.7** |
| | baz=24,SNR=14 | | | | | | |
| **B20K** | **Meade River** | **4.34** | **281** | | **Pn** | **15 15 27.2** | **0.0** |
| **B20K** | **Meade River** | **4.34** | **281** | P | **Pn** | **15 15 27.7** | **+0.5** |
| | baz=90,SNR=14 | | | | | | |
| **A21K** | **Barrow** | **4.35** | **299** | P | **Pn** | **15 15 27.4** | **+0.1** |
| | baz=108,SNR=48 | | | | | | |
| **D20K** | **Etivluk River** | **4.36** | **263** | | **Pn** | **15 15 27.8** | **+0.3** |
| **D20K** | **Etivluk River** | **4.36** | **263** | P | **Pn** | **15 15 28.0** | **+0.4** |
| | baz=73 | | | | | | |
| **E20K** | **Nigu River** | **4.37** | **257** | | **Pn** | **15 15 27.6** | **-0.2** |
| **E20K** | **Nigu River** | **4.37** | **257** | P | **Pn** | **15 15 27.7** | **-0.1** |
| | baz=67 | | | | | | |
| **I26K** | **Coal Creek Min** | **4.38** | **172** | | **Pn** | **15 15 27.2** | **-0.7** |
| **I26K** | **Coal Creek Min** | **4.38** | **172** | IAML | | 15 16 36.8 | |
| | comp=N,3μm,0.8s | | | | | | |
| I26K | | | | IAML | | 15 16 45.2 | |
| | comp=E,3μm,1.1s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.38** | **172** | P | **Pn** | **15 15 27.7** | **-0.2** |
| | baz=353 | | | | | | |
| **EPYK** | **Eagle Plains** | **4.44** | **134** | | **Pn** | **15 15 28.6** | **0.0** |
| **EPYK** | **Eagle Plains** | **4.44** | **134** | IAML | | 15 16 42.3 | |
| | comp=E,3μm,0.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.44** | **134** | P | **Pn** | **15 15 28.8** | **+0.2** |
| | baz=320,SNR=22 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.53** | **217** | | **Pn** | **15 15 29.2** | **-0.7** |
| **H22K** | **Ishtalitna Cre** | **4.53** | **217** | P | **Pn** | **15 15 29.7** | **-0.2** |
| | baz=31 | | | | | | |
| **G21K** | **Allakaket** | **4.55** | **231** | | **Pn** | **15 15 29.0** | **-1.1** |
| **G21K** | **Allakaket** | **4.55** | **231** | P | **Pn** | **15 15 29.9** | **-0.2** |
| | baz=43 | | | | | | |
| **I28M** | **Miner Creek** | **4.58** | **154** | | **Pn** | **15 15 30.4** | **-0.2** |
| **I28M** | **Miner Creek** | **4.58** | **154** | IAML | | 15 16 26.2 | |
| | comp=N,1μm,0.6s | | | | | | |
| I28M | | | | IAML | | 15 16 51.1 | |
| | comp=E,1μm,2.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.58** | **154** | P | **Pn** | **15 15 31.0** | **+0.4** |
| | baz=338,SNR=42 | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.58** | **113** | Pn | **Pn** | **15 15 30.6** | **+0.1** |
| F31M | | | | IAML | | 15 16 52.6 | |
| | comp=E,2μm,1.3s | | | | | | |
| F31M | | | | IAML | | 15 16 57.5 | |
| | comp=N,2μm,1.2s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.58** | **113** | P | **Pn** | **15 15 30.6** | **+0.1** |
| | baz=303 | | | | | | |
| **POKR** | **Poker Plat Res** | **4.66** | **194** | IAML | | 15 16 53.7 | |
| | comp=E,2μm,1.8s | | | | | | |
| POKR | | | | IAML | | 15 17 00.8 | |
| | comp=N,2μm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.66** | **194** | P | **Pn** | **15 15 30.7** | **-0.9** |
| | baz=105,SNR=15 | | | | | | |
| **G31M** | **Satah River** | **4.73** | **120** | IAML | | 15 17 00.7 | |
| | comp=N,2μm,1.7s | | | | | | |
| **G31M** | **Satah River** | **4.73** | **120** | P | **Pn** | **15 15 32.8** | **+0.3** |
| | baz=309 | | | | | | |
| **F20K** | **Avaraart Lake** | **4.84** | **243** | | **Pn** | **15 15 34.3** | **+0.2** |
| **F20K** | **Avaraart Lake** | **4.84** | **243** | IAML | | 15 17 06.2 | |
| | comp=E,1μm,0.9s | | | | | | |
| F20K | | | | IAML | | 15 17 14.4 | |
| | comp=N,2μm,1.2s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.84** | **243** | P | **Pn** | **15 15 34.3** | **+0.2** |
| | baz=53,SNR=30 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.85** | **204** | IAML | | 15 17 13.3 | |
| | comp=E,2μm,1.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.85** | **204** | P | **Pn** | **15 15 33.6** | **-0.6** |
| | baz=20,SNR=19 | | | | | | |
| **MDM** | **Murphy Dome** | **4.89** | **198** | IAML | | 15 16 59.8 | |
| | comp=E,1μm,1.8s | | | | | | |
| MDM | | | | IAML | | 15 17 02.4 | |
| | comp=N,1μm,0.9s | | | | | | |
| **COLA** | **College** | **4.93** | **196** | P | **Pn** | **15 15 36.5** | **+1.1** |
| **COLA** | **College** | **4.93** | **196** | | **Pn** | **15 15 34.8** | **-0.5** |
| COLA | | | | IAML | | 15 16 57.1 | |
| | comp=N,2μm,0.7s | | | | | | |
| **COLA** | **College** | **4.93** | **196** | P | **Pn** | **15 15 34.8** | **-0.5** |
| | baz=13 | | | | | | |
| **COLA** | **College** | **4.93** | **196** | *i* P | **Pn** | **15 15 34.6** | **-0.8** |
| **I29M** | **Ogilvie Camp,** | **4.94** | **147** | IAML | | 15 17 04.4 | |
| | comp=N,1μm,1.0s | | | | | | |
| I29M | | | | IAML | | 15 17 07.4 | |
| | comp=E,1μm,1.5s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.94** | **147** | P | **Pn** | **15 15 35.4** | **0.0** |
| | baz=333 | | | | | | |
| **D19K** | **Kuna River** | **4.95** | **263** | P | **Pn** | **15 15 35.3** | **-0.4** |
| | baz=71 | | | | | | |
| **IL31** | | **4.96** | **191** | | **Pn** | **15 15 34.9** | **-0.8** |
| **ILAR** | **Eielson Array** | **4.96** | **191** | Pn | **Pn** | **15 15 34.4** | **-1.3** |
| | comp=E,38nm,0.3s,baz=5.3,slow=14,SNR=40 | | | | | | |
| ILAR | | | | Sn | **Sn** | **15 16 31.6** | **-1.7** |
| | comp=E,34nm,0.3s,baz=12,slow=18,SNR=4.6 | | | | | | |
| ILAR | | | | Lg | Lg | 15 16 52.5 | |
| | comp=E,99nm,0.3s,baz=9.9,slow=31,SNR=8.2 | | | | | | |
| | comp=E,104nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **4.96** | **191** | *e*P | **Pn** | **15 15 37.6** | **+1.9** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,38nm,0.3s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.02** | **227** | | **Pn** | **15 15 34.9** | **-1.6** |
| **J25K** | **Salcha River,** | **5.05** | **183** | IAML | | 15 17 03.3 | |
| | comp=E,1μm,2.3s | | | | | | |
| J25K | | | | IAML | | 15 17 07.7 | |
| | comp=N,1μm,1.5s | | | | | | |
| **J25K** | **Salcha River,** | **5.05** | **183** | P | **Pn** | **15 15 36.9** | **-0.1** |
| | baz=2.5,SNR=16 | | | | | | |
| **H21K** | **Melozitna Rive** | **5.05** | **222** | Pn | **Pn** | **15 15 35.8** | **-1.2** |
| H21K | | | | IAML | | 15 17 09.5 | |
| | comp=E,2μm,1.6s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.05** | **222** | P | **Pn** | **15 15 36.0** | **-1.1** |
| | baz=34,SNR=9.0 | | | | | | |
| **EGAK** | **Eagle** | **5.06** | **163** | | **Pn** | **15 15 36.2** | **-1.0** |
| EGAK | | | | IAML | | 15 16 36.8 | |
| | comp=E,1μm,0.7s | | | | | | |
| EGAK | | | | IAML | | 15 17 07.3 | |
| | comp=E,1μm,1.6s | | | | | | |
| **EGAK** | **Eagle** | **5.06** | **163** | P | **Pn** | **15 15 37.5** | **+0.3** |
| | baz=346,SNR=34 | | | | | | |
| **E19K** | **Redstone River** | **5.09** | **251** | | **Pn** | **15 15 37.1** | **-0.6** |
| **E19K** | **Redstone River** | **5.09** | **251** | IAML | | 15 17 17.0 | |
| | comp=E,1μm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **5.09** | **251** | P | **Pn** | **15 15 37.6** | **0.0** |
| | baz=60 | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.15** | **195** | IAML | | 15 17 07.7 | |
| | comp=E,1μm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.17** | **175** | | **Pn** | **15 15 38.0** | **-0.7** |
| **J26L** | **Joseph Creek** | **5.17** | **175** | IAML | | 15 17 01.5 | |
| | comp=E,949nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.17** | **175** | P | **Pn** | **15 15 38.5** | **-0.2** |
| | baz=355,SNR=29 | | | | | | |
| **MLY** | **Manley** | **5.18** | **210** | Pn | **Pn** | **15 15 37.9** | **-0.9** |
| MLY | | | | IAML | | 15 17 14.3 | |
| | comp=E,1μm,1.6s | | | | | | |
| **MLY** | **Manley** | **5.18** | **210** | P | **Pn** | **15 15 38.1** | **-0.7** |
| | baz=24,SNR=14 | | | | | | |
| **C19K** | **Lookout Ridge** | **5.30** | **271** | Pn | **Pn** | **15 15 40.3** | **-0.1** |
| C19K | | | | IAML | | 15 17 37.0 | |
| | comp=E,2μm,2.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.30** | **271** | P | **Pn** | **15 15 40.5** | **+0.1** |
| | baz=78,SNR=18 | | | | | | |
| **HDA** | **Harding Lake** | **5.32** | **191** | | **Pn** | **15 15 40.2** | **-0.5** |
| HDA | | | | IAML | | 15 17 17.4 | |
| | comp=N,1μm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **5.32** | **191** | P | **Pn** | **15 15 40.6** | **-0.1** |
| | baz=8.5,SNR=19 | | | | | | |
| **NEA2** | **Nenana** | **5.34** | **201** | | **Pn** | **15 15 39.3** | **-1.7** |
| NEA2 | | | | IAML | | 15 17 27.6 | |
| | comp=N,817nm,1.9s | | | | | | |
| **NEA2** | **Nenana** | **5.34** | **201** | P | **Pn** | **15 15 40.2** | **-0.8** |
| | baz=17,SNR=28 | | | | | | |
| **WRH** | **Wood River Hil** | **5.35** | **196** | | **Pn** | **15 15 40.5** | **-0.6** |
| WRH | | | | IAML | | 15 17 17.5 | |
| | comp=N,935nm,1.3s | | | | | | |
| WRH | | | | IAML | | 15 17 18.9 | |
| | comp=E,1μm,2.0s | | | | | | |
| **I30M** | **Mount Dempster** | **5.46** | **140** | | **Pn** | **15 15 42.5** | **-0.3** |
| **I30M** | **Mount Dempster** | **5.46** | **140** | P | **Pn** | **15 15 42.9** | **+0.2** |
| | baz=327,SNR=61 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.62** | **246** | | **Pn** | **15 15 44.3** | **-0.4** |
| **F19K** | **Shaleruckik Mo** | **5.62** | **246** | P | **Pn** | **15 15 45.4** | **+0.6** |
| | baz=54,SNR=28 | | | | | | |
| **A19K** | **Wainwright** | **5.67** | **283** | | **Pn** | **15 15 45.1** | **-0.4** |
| **A19K** | **Wainwright** | **5.67** | **283** | P | **Pn** | **15 15 45.3** | **-0.2** |
| | baz=89,SNR=35 | | | | | | |
| **SCRK** | **Sand Creek** | **5.69** | **177** | | **Pn** | **15 15 45.0** | **-0.9** |
| **SCRK** | **Sand Creek** | **5.69** | **177** | P | **Pn** | **15 15 46.3** | **+0.4** |
| | baz=357,SNR=44 | | | | | | |
| **H20K** | **Anotleneega Mo** | **5.70** | **228** | | **Pn** | **15 15 44.7** | **-1.2** |
| **H20K** | **Anotleneega Mo** | **5.70** | **228** | P | **Pn** | **15 15 45.3** | **-0.6** |
| | baz=39 | | | | | | |
| **K27K** | **Chicken** | **5.72** | **168** | | **Pn** | **15 15 45.5** | **-0.7** |
| **K27K** | **Chicken** | **5.72** | **168** | P | **Pn** | **15 15 46.4** | **+0.2** |
| | baz=350 | | | | | | |
| **J29N** | **Klondike Camp** | **5.78** | **151** | | **Pn** | **15 15 47.7** | **+0.6** |
| **J29N** | **Klondike Camp** | **5.78** | **151** | P | **Pn** | **15 15 48.1** | **+1.0** |
| | baz=336,SNR=26 | | | | | | |
| **BWN** | **Browne** | **5.80** | **201** | | **Pn** | **15 15 45.9** | **-1.4** |
| **G19K** | **Purcell Mounta** | **5.84** | **239** | Pn | **Pn** | **15 15 46.7** | **-1.1** |
| **G19K** | **Purcell Mounta** | **5.84** | **239** | P | **Pn** | **15 15 46.8** | **-1.1** |
| | baz=48,SNR=11 | | | | | | |
| **K24K** | **Donnelly Dome** | **5.87** | **185** | | **Pn** | **15 15 47.5** | **-0.8** |
| **K24K** | **Donnelly Dome** | **5.87** | **185** | P | **Pn** | **15 15 48.3** | **0.0** |
| | baz=3.6,SNR=27 | | | | | | |
| **DAWY** | **Dawson** | **5.96** | **157** | | **Pn** | **15 15 49.2** | **-0.4** |
| **DAWY** | **Dawson** | **5.96** | **157** | P | **Pn** | **15 15 49.9** | **+0.3** |
| | baz=342,SNR=33 | | | | | | |
| **C18K** | **Utukok River** | **5.98** | **268** | Pn | **Pn** | **15 15 48.6** | **-1.1** |
| **C18K** | **Utukok River** | **5.98** | **268** | P | **Pn** | **15 15 48.7** | **-1.1** |
| | baz=73,SNR=40 | | | | | | |
| **DOT** | **Dot Lake** | **6.01** | **177** | | **Pn** | **15 15 49.4** | **-0.9** |
| **B18K** | **Kokolik River** | **6.02** | **275** | | **Pn** | **15 15 49.5** | **-0.7** |
| **B18K** | **Kokolik River** | **6.02** | **

baz=61,SNR=31
H18K **Honhosa River** 6.92 236 P Pn 15 16 01.0 -1.6
baz=44,SNR=18
D17K **Noatak River** 6.98 263 P Pn 15 16 02.5 -0.9
baz=66,SNR=25
F17K **Baldwin Pennin** 6.98 251 Pn Pn 15 16 02.7 -0.7
F17K **Baldwin Pennin** 6.98 251 P Pn 15 16 02.6 -0.8
baz=56,SNR=30
WAT1 **Susitna Watana** 7.01 195 Pn 15 16 03.3 -0.6
WAT1 **Susitna Watana** 7.01 195 P Pn 15 16 03.3 -0.6
baz=11
WAT7 **Susitna Watana** 7.03 196 Pn 15 16 04.2 -0.1
L29M **L29M** 7.05 155 Pn 15 16 04.2 -0.4
L29M **L29M** 7.05 155 P Pn 15 16 05.0 +0.5
baz=341,SNR=9.5
J19K **Poorman** 7.11 223 Pn 15 16 04.3 -0.9
J19K **Poorman** 7.11 223 P Pn 15 16 06.1 +0.9
baz=33
WAT6 **Susitna Watana** 7.19 191 Pn 15 16 06.4 -0.1
WAT6 **Susitna Watana** 7.19 191 P Pn 15 16 07.2 +0.7
baz=8.5,SNR=6.6
C36M **Paulatuk** 7.24 83 Pn 15 16 05.6 -1.3
C36M **Paulatuk** 7.24 83 P Pn 15 16 06.0 -0.9
baz=281
HARP **HAARP** 7.27 182 Pn 15 16 07.0 -0.4
HARP **HAARP** 7.27 182 P Pn 15 16 07.6 +0.2
baz=1.2
M26K **Nabesna, AK** 7.29 174 Pn 15 16 08.0 +0.1
M26K **Nabesna, AK** 7.29 174 P Pn 15 16 07.9 +0.1
baz=355,SNR=17
K20K **Telida** 7.32 215 Pn 15 16 07.2 -1.0
K20K **Telida** 7.32 215 P Pn 15 16 08.3 +0.1
baz=27
G17K **Kiwalik Mounta** 7.37 243 P Pn 15 16 08.4 -0.4
baz=49,SNR=22
M27K **Edge Creek, AK** 7.39 170 Pn 15 16 08.8 -0.5
M27K **Edge Creek, AK** 7.39 170 P Pn 15 16 09.7 +0.4
baz=352,SNR=18
PPLA **Purkeypile** 7.40 208 Pn 15 16 08.4 -1.0
PPLA **Purkeypile** 7.40 208 P Pn 15 16 08.4 -1.0
baz=21
H17K **Granite Mounta** 7.53 239 Pn 15 16 10.3 -0.7
H17K **Granite Mounta** 7.53 239 P Pn 15 16 10.5 -0.5
baz=45,SNR=10
C16K **Lisburne Hills** 7.55 269 Pn 15 16 10.4 -0.8
C16K **Lisburne Hills** 7.55 269 P Pn 15 16 10.7 -0.6
baz=70,SNR=16
M24K **Tolsona, Glenn** 7.58 185 P Pn 15 16 12.2 +0.4
baz=3.9
CUT **Chulitna** 7.60 200 Pn 15 16 11.3 -0.6
CUT **Chulitna** 7.60 200 P Pn 15 16 12.8 +0.9
baz=15,SNR=6.0
M29M **Somme Creek** 7.64 158 Pn 15 16 11.9 -0.7
M29M **Somme Creek** 7.64 158 P Pn 15 16 13.6 +0.9
baz=343,SNR=32
WACK **Wrangell Chich** 7.68 179 Pn 15 16 12.4 -0.9
WASW **Wrangell South** 7.74 178 Pn 15 16 13.9 -0.2
J18K **Innoko River** 7.82 224 P Pn 15 16 15.5 +0.5
baz=33
SCM **Sheep Creek Mo** 7.91 189 Pn 15 16 16.1 -0.2
SCM **Sheep Creek Mo** 7.91 189 P Pn 15 16 17.2 +1.0
baz=6.7
SCM **Sheep Creek Mo** 7.91 189 P Pn 15 16 16.1 -0.2
M23K **Glacier View** 7.97 190 Pn 15 16 16.3 -0.8
M23K **Glacier View** 7.97 190 P Pn 15 16 16.9 -0.1
baz=7.6,SNR=11
G16K **Koyuk River** 7.98 246 P Pn 15 16 16.8 -0.3
baz=50,SNR=12
SML **Sawmill** 8.00 193 P Pn 15 16 18.5 +1.0
baz=9.2
N25K **Chitina, Valde** 8.06 180 Pn 15 16 18.6 +0.2
N25K **Chitina, Valde** 8.06 180 P Pn 15 16 19.0 +0.7
baz=360
YUK3 **Moose Creek** 8.08 166 Pn 15 16 19.2 +0.5
YUK3 **Moose Creek** 8.08 166 P Pn 15 16 19.4 +0.7
baz=349,SNR=27
GHO **Glory Hole Cre** 8.08 194 Pn 15 16 18.4 -0.2
L20K **Farewell, AK** 8.09 212 Pn 15 16 18.0 -0.7
L20K **Farewell, AK** 8.09 212 P Pn 15 16 19.2 +0.5
baz=24
SKT **Skwentna** 8.18 203 Pn 15 16 19.8 -0.1
SKT **Skwentna** 8.18 203 P Pn 15 16 20.7 +0.8
baz=17,SNR=8.4
KLU **Klutina** 8.19 184 P Pn 15 16 21.2 +1.1
baz=2.9
M22K **Willow** 8.22 198 P Pn 15 16 21.7 +1.2
baz=13
GLB **Gilahina Butte** 8.23 177 Pn 15 16 20.6 -0.1
PMR **Palmer** 8.28 195 P Pn 15 16 22.3 +1.1
PMR **Palmer** 8.28 195 Pn Pn 15 16 20.9 -0.3
PMR **Palmer** 8.28 195 P Pn 15 16 22.1 +0.9
baz=11
PMR **Palmer** 8.28 195 P Pn 15 16 20.9 -0.3
MCARA **McCarthy VSAT** 8.31 174 Pn 15 16 21.7 -0.1
MCARA **McCarthy VSAT** 8.31 174 P Pn 15 16 22.4 +0.7
baz=356,SNR=10.0
KNK **Knik Glacier** 8.40 193 Pn 15 16 22.5 -0.4
KNK **Knik Glacier** 8.40 193 P Pn 15 16 24.6 +1.7
baz=9.0,SNR=22
H16K **Elim** 8.45 242 Pn 15 16 22.5 -1.1
H16K **Elim** 8.45 242 P Pn 15 16 22.9 -0.7
baz=46
VRDI **Verde Repeater** 8.46 176 Pn 15 16 23.0 -0.9
J17K **VABM Dome** 8.47 229 Pn 15 16 22.6 -1.3
J17K **VABM Dome** 8.47 229 P Pn 15 16 23.3 -0.6
baz=36
M20K **Styx River** 8.51 208 Pn 15 16 24.2 -0.4
M20K **Styx River** 8.51 208 P Pn 15 16 24.7 +0.1
baz=20,SNR=26
PTPK **Patty Peak** 8.53 173 Pn 15 16 24.7 -0.2
F15K **North Star Dit** 8.53 252 P Pn 15 16 24.6 -0.2
baz=54,SNR=7.9
I17K **Unalakleet** 8.54 235 Pn 15 16 23.9 -0.9
I17K **Unalakleet** 8.54 235 P Pn 15 16 25.2 +0.4
baz=41,SNR=5.6
L19K **White Mountain** 8.54 214 Pn 15 16 23.9 -1.1
L19K **White Mountain** 8.54 214 P Pn 15 16 25.2 +0.3
baz=25
M31M **Drury Creek, Y** 8.55 146 Pn 15 16 24.5 -0.4
M31M **Drury Creek, Y** 8.55 146 P Pn 15 16 24.6 -0.4
baz=335
DIV **Divide** 8.55 184 Pn 15 16 24.2 -0.8
SUA **Susitna One** 8.57 200 Pn 15 16 25.0 -0.4
SUA **Susitna One** 8.57 200 P Pn 15 16 26.6 +1.2
baz=14,SNR=13
YUK8 **Steele Glacier** 8.62 164 P Pn 15 16 27.3 +1.1
baz=348,SNR=10
STLK **Strandline Lak** 8.68 203 Pn 15 16 25.9 -1.0
YUK4 **Talbot Arm** 8.69 160 P Pn 15 16 27.2 +0.2
baz=345,SNR=24
BALM **Baldy** 8.69 172 Pn 15 16 26.6 -0.4
BMRM **Bremner River** 8.70 180 Pn 15 16 26.9 -0.3
BMRM **Bremner River** 8.70 180 P Pn 15 16 28.4 +1.2
baz=360,SNR=20
M19K **Big River Lodg** 8.71 212 Pn 15 16 26.8 -0.5
M19K **Big River Lodg** 8.71 212 P Pn 15 16 28.0 +0.8
baz=23,SNR=8.3
FARO **Faro, Yukon** 8.74 143 P Pn 15 16 27.5 -0.1
baz=333,SNR=7.4
G15K **Niukluk** 8.78 247 Pn 15 16 27.2 -0.9
G15K **Niukluk** 8.78 247 P Pn 15 16 28.0 0.0
baz=50,SNR=7.2
N30M **Aishikik Lake** 8.78 155 Pn 15 16 27.8 -0.4
N30M **Aishikik Lake** 8.78 155 P Pn 15 16 28.7 +0.5
baz=342,SNR=21
KIAG **Kiagna River** 8.80 173 Pn 15 16 29.0 +0.4
CTG **Chitna Glacier** 8.81 169 P Pn 15 16 29.5 +0.8
baz=352,SNR=23
CTGM **Chitina Glacie** 8.81 169 Pn 15 16 29.6 +0.9
RC01 **Rabbit Creek A** 8.83 196 P Pn 15 16 29.8 +1.0
baz=12,SNR=8.2
K17K **Iditarod** 8.84 225 Pn 15 16 28.2 -0.7
K17K **Iditarod** 8.84 225 P Pn 15 16 29.0 +0.1
baz=33
GLI **Glacier Island** 8.85 188 P Pn 15 16 29.6 +0.6
baz=5.4
L18K **Granite Mounta** 8.89 219 Pn 15 16 28.7 -0.9
L18K **Granite Mounta** 8.89 219 P Pn 15 16 30.2 +0.5
baz=28
SPCG **Spurr Capps Gl** 8.90 203 Pn 15 16 29.5 -0.4
CRQM **Cirque** 8.94 175 Pn 15 16 31.2 +0.8
PWL **Port Wells** 8.94 192 Pn 15 16 30.0 -0.3
PWL **Port Wells** 8.94 192 P Pn 15 16 31.7 +1.3
baz=8.2,SNR=8.4
CRQE **Cirque** 8.94 175 P Pn 15 16 31.5 +1.0
baz=356,SNR=36
SPCP **Crater Peak Br** 8.95 204 Pn 15 16 30.0 -0.6
TGL **Tana Glacier** 8.95 174 Pn 15 16 31.4 +0.8
N31M **Braeburn, Yuko** 8.96 152 Pn 15 16 30.5 -0.2
N31M **Braeburn, Yuko** 8.96 152 P Pn 15 16 31.5 +0.9
baz=339,SNR=5.7
LOGN **Logan Glacier** 8.98 168 Pn 15 16 30.7 -0.3
J16K **Anvik River** 8.98 233 Pn 15 16 29.9 -0.9
J16K **Anvik River** 8.98 233 P Pn 15 16 30.9 0.0
baz=38
SPBG **Spurr Blockage** 8.98 204 Pn 15 16 30.2 -0.8
YUK5 **Granite Creek** 8.99 158 Pn 15 16 31.4 +0.2
SPU **Mount Spurr** 9.01 203 Pn 15 16 31.0 -0.4
N20K **Mount Spurr** 9.02 204 P Pn 15 16 31.6 +0.2
baz=17,SNR=8.8
O28M **Mount Upton** 9.09 166 Pn 15 16 33.8 +1.1
O28M **Mount Upton** 9.09 166 P Pn 15 16 34.5 +1.8
baz=350,SNR=25
YUK6 **Outpost Mounta** 9.11 160 Pn 15 16 33.2 +0.3
YUK6 **Outpost Mounta** 9.11 160 P Pn 15 16 34.6 +1.8
baz=346,SNR=10
ISLE **Juniper Island** 9.12 173 Pn 15 16 34.4 +1.5
EYAK **Cordova Ski Ar** 9.13 183 P Pn 15 16 35.7 +2.8
EYAK **Cordova Ski Ar** 9.13 183 P Pn 15 16 35.4 +2.4
baz=2.2
F14K **Arctic Creek** 9.23 254 P Pn 15 16 32.7 -1.6
baz=54,SNR=15
KHIT **Khitrov Hills** 9.25 176 Pn 15 16 34.4 -0.2
L17K **Donlin** 9.34 223 Pn 15 16 34.6 -1.2
L17K **Donlin** 9.34 223 P Pn 15 16 36.2 +0.5
baz=31
M18K **Stony River** 9.37 215 Pn 15 16 34.9 -1.2
M18K **Stony River** 9.37 215 P Pn 15 16 36.4 +0.3
baz=25
GRIN **Grindle Hills** 9.41 176 Pn 15 16 36.2 -0.6
O22K **Cooper Landing** 9.43 195 P Pn 15 16 37.4 +0.4
baz=11
ANM **Nome** 9.49 248 P Pn 15 16 38.0 +0.1
baz=49
MESA **MESA** 9.56 172 P Pn 15 16 42.2 +3.2
baz=354,SNR=12
O30N **Mendenhall** 9.59 154 Pn 15 16 39.5 +0.3
O30N **Mendenhall** 9.59 154 P Pn 15 16 40.4 +1.1
baz=342,SNR=7.6
O29M **Mount Kennedy** 9.71 162 P Pn 15 16 43.7 +2.7
baz=347,SNR=11
TNA **Tin City** 9.72 256 P Pn 15 16 41.9 +0.9
baz=55
P23K **Montague Islan** 9.74 188 P Pn 15 16 44.0 +2.7
baz=5.6
N19K **Bonanza Creek** 9.74 210 Pn 15 16 40.5 -0.9
N19K **Bonanza Creek** 9.74 210 P Pn 15 16 43.1 +1.7
baz=21,SNR=8.7
KAIM **Kayak Island** 9.75 179 P Pn 15 16 45.4 +4.0
baz=359
N32M **Quiet Lake** 9.77 145 Pn 15 16 41.6 -0.1
N32M **Quiet Lake** 9.77 145 P Pn 15 16 43.4 +1.7
baz=335
SEW **Seward** 9.77 194 P Pn 15 16 41.6 -0.1
baz=9.8
M17K **Holitna River** 9.78 219 Pn 15 16 41.7 -0.2
M17K **Holitna River** 9.78 219 P Pn 15 16 42.0 +0.1
baz=27
WHY **Whitehorse** 9.89 151 Pn 15 16 42.2 -1.2
WHY **Whitehorse** 9.89 151 P Pn 15 16 43.8 +0.4
baz=340,SNR=6.6
L16K **Owhat River** 9.99 225 Pn 15 16 44.3 -0.3
L16K **Owhat River** 9.99 225 P Pn 15 16 44.1 -0.5
baz=31
K15K **Wolf Creek Mou** 10.03 231 Pn 15 16 44.6 -0.6
K15K **Wolf Creek Mou** 10.03 231 P Pn 15 16 45.4 +0.1
baz=36
P30M **Million Dollar** 10.08 157 P Pn 15 16 47.2 +1.1
baz=344
N18K **Kilae Creek** 10.12 213 Pn 15 16 44.7 -1.8
N18K **Kilae Creek** 10.12 213 P Pn 15 16 47.7 +1.1
baz=23
O20K **Slope Mountain** 10.15 203 P Pn 15 16 47.1 +0.2
baz=16
J14K **Nanvaranak Lak** 10.24 237 Pn 15 16 47.2 -0.9
J14K **Nanvaranak Lak** 10.24 237 P Pn 15 16 48.9 +0.8
baz=40,SNR=13
PNL **Peninsula** 10.25 165 P Pn 15 16 50.2 +1.9
PNL **Peninsula** 10.25 165 P Pn 15 16 50.4 +2.1
baz=349,SNR=7.6
BRSE **Bradley Lake S** 10.26 197 P Pn 15 16 49.6 +1.2
baz=12
HOM **Homer** 10.44 200 P Pn 15 16 50.4 -0.4
baz=14
M16K **Timber Creek** 10.46 221 P Pn 15 16 50.6 -0.5
baz=28
P29M **Windy Craggy** 10.46 160 P Pn 15 16 51.7 +0.5
baz=346,SNR=5.4
CNPM **China Poot** 10.52 199 Pn 15 16 52.5 +0.5
N17K **Nushagak Hills** 10.52 216 P Pn 15 16 53.1 +1.1
baz=25
L15K **Ungalak Mounta** 10.53 229 P Pn 15 16 51.8 -0.2
baz=34
TGTN **Hyland Airport** 10.55 132 P Pn 15 16 53.4 +1.0
baz=327
WRGLY **Wrigley** 10.60 117 P Pn 15 16 51.8 -1.2
baz=316
P19K **Oil Pt** 10.65 204 P Pn 15 16 54.3 +0.5
baz=16
P33M **Teslin, Yukon** 10.68 146 P Pn 15 16 54.8 +0.5
baz=337
O18K **Koktuh Hills** 10.77 210 P Pn 15 16 57.5 +2.1
baz=20
PLBC **Pleasant Camp** 10.81 157 P Pn 15 16 58.2 +2.4
baz=344,SNR=11
SKAG **Skagway** 10.96 154 P Pn 15 17 00.3 +2.4
SKAG **Skagway** 10.96 154 Pn 15 16 57.5 -0.4
SKAG **Skagway** 10.96 154 P Pn 15 16 59.8 +1.9
baz=342
P32M **Atlin** 11.10 150 P Pn 15 17 01.1 +1.2
baz=340
L14K **Kuka Creek** 11.13 231 P Pn 15 17 00.7 +0.5
baz=34
M15K **Kasigluk River** 11.16 224 P Pn 15 17 02.8 +2.1
baz=30
K13K **Kusilvak Mount** 11.20 236 P Pn 15 17 01.7 +0.4
baz=38
M14K **Bethel** 11.43 227 P Pn 15 17 05.8 +1.4
baz=32
Q20K **Shuyak Island** 11.55 201 P Pn 15 17 08.2 +2.2
baz=14
O16K **Kokwok River B** 11.56 216 P Pn 15 17 08.6 +2.5
baz=24
Q18K **Katmai Hardscr** 11.88 207 P Pn 15 17 11.7 +1.0
baz=18
R31K **City Hall, Gus** 11.90 157 P Pn 15 17 12.3 +1.5
baz=344
Q32M **Nakina River** 11.95 147 P Pn 15 17 10.7 -1.0
baz=338
GAMB **Gambell** 12.11 254 P Pn 15 17 15.0 +1.4
baz=50
Q16K **King Salmon** 12.14 211 P Pn 15 17 13.8 -0.2
baz=20
R32K **Eaglecrest** 12.22 154 P Pn 15 17 16.0 +0.8
baz=343
JIS **Juneau Island** 12.23 154 P Pn 15 17 17.5 +2.1
S31K **Pelican** 12.28 158 Pn 15 17 16.4 +0.5
S31K **Pelican** 12.28 158 P Pn 15 17 18.4 +2.5
baz=346,SNR=6.5
KDAK **Kodiak Island** 12.38 200 Pn Pn 15 17 16.8 -0.5
comp=E,0.5nm,0.3s,baz=331,slow=13,SNR=1.9
KDAK **Kodiak Island** 12.38 200 *i* P Pn 15 17 18.8 +1.4
Q17K **Contact Creek** 12.39 209 P Pn 15 17 20.7 +3.0
baz=18
DLBC **Dease Lake** 12.88 143 Pn Pn 15 17 22.1 -2.2
comp=E,2.9nm,0.3s,baz=351,slow=7.6,SNR=7.9
DLBC Sn Sn 15 19 42.1 -5.7
comp=E,1.4nm,0.3s,baz=325,slow=9.8,SNR=2.4
comp=E,20nm,0.7s
DLBC **Dease Lake** 12.88 143 P Pn 15 17 25.8 +1.5
baz=336
LIRD **Liard River Hi** 12.93 133 P Pn 15 17 27.1 +2.2
baz=330
S32K **Killisnoo** 12.98 155 P Pn 15 17 27.4 +1.8
baz=344
S34M **Telegraph Cree** 13.15 147 P Pn 15 17 29.0 +1.2
baz=339
SIT **Sitka** 13.28 157 P Pn 15 17 32.6 +3.1
SIT **Sitka** 13.28 157 Pn 15 17 30.3 +0.8
SIT **Sitka** 13.28 157 P Pn 15 17 30.7 +1.2
baz=346
SIT **Sitka** 13.28 157 P Pn 15 17 30.3 +0.8
T33K **Petersburg** 13.86 152 P Pn 15 17 39.1 +1.5
baz=343
YKA **Yellowknife Ar** 14.00 106 Pn Pn 15 17 34.0 -5.5
comp=E,6.5nm,0.3s,baz=314,slow=13,SNR=23
YKA Sn Sn 15 20 01.6 -13
comp=E,4.0nm,0.3s,baz=321,slow=21,SNR=4.9
comp=E,30nm,0.7s
YKA **Yellowknife Ar** 14.00 106 P Pn 15 17 34.0 -5.5
T35M **Bob Quinn** 14.19 146 P Pn 15 17 43.9 +1.8
baz=339
U33K **Whale Pass** 14.51 153 P Pn 15 17 49.2 +2.8
baz=344
CRAG **Craig** 15.13 154 P Pn 15 17 56.7 +1.9
EUNU **Eureka** 17.36 30 P P 15 18 24.0 -0.7
EUNU IAmb IAmb 15 18 33.3
comp=Z,156nm,1.5s
BILL **Bilibino** 17.40 288 P Pn 15 18 24.1 +0.3
BILL **Bilibino** 17.40 288 *e*P Pn 15 18 23.0 -0.8
BILL *e*S Sn 15 21 37.5 0.0
BILL pmax pmax
comp=Z,46nm,0.9s
BILL MLR MLR
comp=Z,24µm,19.0s
H02S1 **DAWSON INLET T** 17.42 155 P P 15 18 28.1 +2.6
H02S1 **DAWSON INLET T** 17.42 155 P P 15 18 28.1 +2.6
BBB **Bella Bella** 19.14 148 P Pn 15 18 45.1 0.0
comp=Z,0.2nm,0.3s,baz=350,slow=13,SNR=1.9
comp=Z,16nm,1.1s
AMKA **Amchitka** 24.85 241 P P 15 19 43.1 -0.5
SEY **Seymchan** 25.07 286 *i* P P 15 19 46.2 +0.7
SEY pmax pmax
comp=Z,143nm,1.5s
TIXI **Tiksi** 26.45 315 P P 15 19 58.5 +0.6
TIXI **Tiksi** 26.45 315 *i* P P 15 19 58.2 +0.3
TIXI pmax pmax
comp=Z,21nm,1.0s
PET **Petropavlovsk** 30.38 266 *i* P P 15 20 33.9 +0.8
PET pmax pmax
comp=Z,18nm,1.3s
SPITS **Spitsbergen Ar** 31.97 7 P P 15 20 45.5 -1.5
SPITS PcP 15 23 37.5 +1.0
SPITS **Spitsbergen Ar** 31.97 7 P P 15 20 45.5 -1.5
comp=Z,1.6nm,0.4s,baz=20,slow=5.3,SNR=10
SPITS PcP PcP 15 23 37.4 +1.0
comp=Z,1.7nm,0.5s,baz=298,slow=3.1,SNR=2.0
comp=Z,1.6nm,0.4s
PDAR **Pinedale Array** 32.37 128 P P 15 20 51.0 -0.1
comp=Z,9.7nm,0.6s,baz=3.2,slow=5.7,SNR=45
comp=Z,9.7nm,0.6s
YAK **Yakutsk** 33.00 300 P P 15 20 56.1 0.0
YAK IAmb IAmb 15 21 02.9
comp=Z,24nm,0.8s
YAK **Yakutsk** 33.00 300 *i* P P 15 20 56.1 0.0
WAKR **Walker** 33.98 143 P P 15 21 05.7 +0.7
NVAR **Mina Array Bea** 34.29 142 P P 15 21 08.8 +1.0
comp=Z,2.1nm,0.5s,baz=342,slow=7.2,SNR=29
comp=Z,2.1nm,0.5s
GRAC **Grapevine Rang** 35.87 141 P P 15 21 21.8 +0.5
baz=344
TPNV **Topopah Spring** 36.17 140 P P 15 21 24.3 +0.4
baz=344
WCT **Wildcat Mounta** 36.23 140 P P 15 21 25.1 +0.7
CWC **Cottonwood Cre** 36.25 142 P P 15 21 25.0 +0.4
baz=345
FURC **Furnace Creek,** 36.49 141 P P 15 21 28.1 +1.6
baz=344
VES **Vestal, Richgr** 36.62 144 P P 15 21 27.8 +0.3
baz=345
MPMC **Manual Prospec** 36.75 142 P P 15 21 29.9 +1.0
baz=344
ISA **Isabella, Lake** 36.92 143 P P 15 21 31.0 +0.8
baz=345
SHOC **Shoshone, Teco** 37.17 140 P P 15 21 32.8 +0.6
baz=344
LRMC **Laurel Mtn Rad** 37.26 142 P P 15 21 33.3 +0.1
baz=345
PKM **Mcpherson Peak** 37.39 145 P P 15 21 36.7 +2.4
baz=346
GSC **Goldstone, Bar** 37.62 141 P P 15 21 37.4 +1.2
baz=344
TUQ **Turquoise Moun** 37.69 140 P P 15 21 37.3 +0.4
baz=344
EDW2 **Edwards Air Fo** 37.77 143 P P 15 21 37.3 -0.1
baz=345
SDCO **Great Sand Dun** 38.17 126 P P 15 21 41.2 +0.2
baz=339
HEC **Hector,Ludlow** 38.18 141 P P 15 21 41.7 +0.8
baz=344
BFSC **Mount Baldy Ra** 38.46 143 P P 15 21 43.1 -0.2
baz=345
BELC **Belle Mtn. Jos** 39.05 141 P P 15 21 47.1 -1.2
baz=344
IRM **Iron Mountain** 39.09 140 P P 15 21 48.7 +0.2
baz=344
MURC **Murrieta** 39.18 142 P P 15 21 49.5 +0.2
baz=345
PFO **Pinyon Flats O** 39.33 141 P P 15 21 50.7 +0.1
baz=345
TPFO **Pinon Flats** 39.33 141 P P 15 21 48.8 -1.9
baz=345
SCI2 **San Clemente I** 39.49 144 P P 15 21 50.5 -1.3
baz=346
BC3 **Big Chuckawall** 39.51 140 P P 15 21 51.9 -0.2
baz=344
MONP2 **Monument Peak** 40.03 142 P P 15 21 58.2 +1.7
baz=345
IKP **In-Ko-Pah, Jac** 40.33 141 P P 15 21 58.1 -0.8
baz=345
ZEA **Zeya** 40.49 294 *e*P P 15 22 05.9 +6.0
ANMO **Albuquerque** 40.53 129 P P 15 22 01.3 +0.6
baz=340
CBX **Cerro Bola** 40.53 142 P P 15 22 01.1 +0.4
CBX IAmb IAmb 15 22 06.4
comp=Z,24nm,0.8s
ARCES **ARCESS Array B** 40.93 5 P P 15 22 02.0 -1.3
comp=Z,1.1nm,0.4s,baz=354,slow=7.4,SNR=10.0
comp=Z,1.1nm,0.4s
ARCES **ARCESS Array B** 40.93 5 *e*P P 15 22 03.4 +0.1
ARCES pmax pmax
comp=Z,3.0nm,0.6s
YSS **Yuzh-Sakhalins** 41.04 275 *e*P P 15 22 03.8 -0.6
YSS pmax pmax
comp=Z,20nm,1.3s
214A **Organ Pipe Nat** 41.74 138 P P 15 22 12.1 +1.6
baz=344
TUC **Tucson** 41.90 135 P P 15 22 11.6 -0.1
baz=343
KLR **Kul'dur** 42.85 287 P P 15 22 17.9 -1.4
KLR **Kul'dur** 42.85 287 P P 15 22 17.9 -1.4
comp=Z,3.9nm,0.8s,baz=10,slow=8.1,SNR=7.9
comp=Z,3.9nm,0.8s
KLR **Kul'dur** 42.85 287 *i* P P 15 22 19.3 0.0
KLR pmax pmax
comp=Z,5.0nm,0.9s
HEH **HeiHe** 43.41 291 *e*P P 15 22 23.4 -0.4
TXAR **Lajitas Array** 46.59 128 P P 15 22 50.0 +0.6
comp=Z,2.0nm,0.7s,baz=353,slow=6.7,SNR=14
comp=Z,2.0nm,0.7s
TXAR **Lajitas Array** 46.59 128 P P 15 22 50.0 +0.6
USRK **Ussuriysk Ar.** 47.15 283 P P 15 22 52.5 -1.0
USRK **Ussuriysk Ar.** 47.15 283 P P 15 22 51.2 -2.3
comp=Z,5.0nm,0.7s,baz=9.1,slow=6.0,SNR=8.2
comp=Z,5.0nm,0.7s
USRK **Ussuriysk Ar.** 47.15 283 P P 15 22 52.5 -1.0
BNX **BinXian** 47.34 288 ⇑P P 15 22 54.2 -0.8
BNX pmax pmax
comp=Z,10.0nm,0.8s
NB2 **NORSAR Subarra** 48.49 15 P P 15 23 03.1 -0.6
comp=Z,2.5nm,0.9s,baz=350,slow=8.6
NOA **NORSAR Array B** 48.49 15 P P 15 23 01.1 -2.6
comp=Z,0.6nm,0.8s,baz=338,slow=6.3,SNR=2.5
comp=Z,0.6nm,0.8s
MSHR **Mys Shultsa** 48.87 283 *i* P P 15 23 06.6 -0.2
MSHR pmax pmax
comp=Z,8.0nm,1.1s
FINES **FINESS Array B** 49.05 6 P P 15 23 06.1 -1.9
comp=Z,1.8nm,0.4s,baz=357,slow=7.6,SNR=21
comp=Z,1.8nm,0.4s
FINES **FINESS Array B** 49.05 6 *e*P P 15 23 07.2 -0.7
FINES pmax pmax
comp=Z,2.0nm,0.4s
VALR **Valaam** 49.26 3 *i* P P 15 23 11.0 +1.5
VALR pmax pmax
comp=Z,44nm,0.9s
HFS **Hagfors** 49.61 14 P P 15 23 10.7 -1.5
HFS **Hagfors** 49.61 14 P P 15 23 10.7 -1.5
comp=Z,4.3nm,0.6s,baz=15,slow=6.2,SNR=23

comp=Z,4.3nm,0.6s
**MOY Mondy 49.98 312** *e*P P 15 23 16.3 +1.0
MOY pmax pmax
comp=Z,32nm,1.9s
**ZALV Zalesovo Beam 51.60 325** P P 15 23 27.1 -0.2
**ZALV Zalesovo Beam 51.60 325** P P 15 23 25.5 -1.9
comp=Z,2.9nm,0.5s,baz=32,slow=8.1,SNR=10
comp=Z,2.9nm,0.5s
**ZALV Zalesovo Beam 51.60 325** *e*P P 15 23 27.3 0.0
ZALV pmax pmax
comp=Z,4.0nm,0.6s
**MJA0 Matsu Arr-Jizo 51.80 273** *e*P P 15 23 29.6 +0.5
MJA0 pmax pmax
comp=Z,10.0nm,0.8s
**MJB9 Matsu-Tunnel 51.81 273** P P 15 23 29.1 0.0
MJB9 IAmb IAmb 15 23 32.5
comp=Z,15nm,0.9s
**MAJO Matsushiro 51.81 273** P P 15 23 28.6 -0.6
MAJO IAmb IAmb 15 23 32.6
comp=Z,15nm,0.9s
**MAJO Matsushiro 51.81 273** P P 15 23 28.6 -0.6
MAJO pmax pmax
comp=Z,15nm,0.9s
**MJAR Matsushiro Arr 51.81 273** P P 15 23 28.4 -0.8
comp=Z,9.0nm,0.8s,baz=8.0,slow=8.0,SNR=33
comp=Z,9.0nm,0.8s
**SONM Songino Array 52.00 306** P P 15 23 31.1 +0.5
**SONM Songino Array 52.00 306** P P 15 23 29.8 -0.8
comp=Z,6.4nm,1.0s,baz=42,slow=9.0,SNR=15
comp=Z,6.4nm,1.0s
**SONM Songino Array 52.00 306** *e*P P 15 23 32.1 +1.5
SONM pmax pmax
comp=Z,6.0nm,1.0s
**EKA Eskdalemuir Ar 52.26 27** P P 15 23 30.9 -1.3
**EKA Eskdalemuir Ar 52.26 27** P P 15 23 30.9 -1.3
comp=Z,4.2nm,0.6s,baz=329,slow=6.9,SNR=27
comp=Z,4.2nm,0.6s
**XLT XiLinHaoTe 52.66 296** *e*P P 15 23 35.7 +0.3
XLT pP pP 15 23 38.9 +1.6
XLT sP sP 15 23 42.6 +4.5
XLT PcP **PcP** **15 24 45.5 +0.2**
XLT pmax pmax
comp=Z,4.0nm,0.9s
**JGF Kuroka 52.96 273** P P 15 23 37.5 -0.2
JGF IAmb IAmb 15 23 41.5
comp=Z,21nm,0.7s
**ARU Arti 53.12 344** P P 15 23 39.7 +1.1
ARU IAmb IAmb 15 23 46.7
comp=Z,11nm,0.7s
**ARU Arti 53.12 344***c* *i*P P 15 23 38.3 -0.3
ARU S S 15 31 10.7 +1.8
ARU pmax pmax
comp=Z,10.0nm,1.0s
**KSRS Korea Array 54.56 283** P P 15 23 48.6 -0.7
comp=Z,4.1nm,0.8s,baz=20,slow=7.3,SNR=16
comp=Z,4.1nm,0.8s
**KSRS Korea Array 54.56 283** *e*P P 15 23 49.8 +0.5
KSRS pmax pmax
comp=Z,4.0nm,0.8s
**KSAR Wonju Array Be 54.58 283** P P 15 23 49.2 -0.3
**KSAR Wonju Array Be 54.58 283** P P 15 23 49.2 -0.3
**BRVK Borovoye 54.99 335** P P 15 23 51.9 -0.4
**BRVK Borovoye 54.99 335** *i*P P 15 23 52.4 +0.1
BRVK pmax pmax
comp=Z,6.0nm,1.0s
**BVAR Borovoye Array 55.01 335** P P 15 23 51.8 -0.7
comp=Z,2.8nm,0.7s,baz=15,slow=6.0,SNR=8.4
comp=Z,2.8nm,0.7s
**DGZ Jazzator, Alta 55.05 321** *i*P P 15 23 53.8 +0.8
DGZ pmax pmax
comp=Z,6.0nm,1.3s
**OBN Obninsk 55.56 359**⇑ *e*P P 15 23 58.7 +2.4
OBN *e* 15 25 03.2
OBN *e* 15 26 02.3
OBN *e*S S 15 31 30.4 -11
OBN pmax pmax
comp=Z,8.0nm,0.8s
OBN MLR MLR
comp=Z,5µm,17.0s
**KURK Kurchatov 55.87 328** P P 15 23 58.0 -0.6
KURK IAmb IAmb 15 23 59.8
comp=Z,20nm,1.0s
**KURK Kurchatov 55.87 328** *i*P P 15 23 59.1 +0.5
KURK pmax pmax
comp=Z,18nm,1.0s
**KURBB Kurchatov Arra 55.98 328** P P 15 23 57.9 -1.5
comp=Z,11nm,0.9s,baz=13,slow=7.1,SNR=34
comp=Z,11nm,0.9s
**HHC Hu-ho-hao-te 56.83 298** *e*P P 15 24 07.9 +2.1
HHC pP sP 15 24 12.2 +3.8
HHC sP pP 15 24 16.0 +8.3
HHC S **S** **15 32 01.5 +2.3**
HHC sS sS 15 32 07.4 +5.0
HHC pmax pmax
comp=Z,14nm,0.6s
**BELG Belogornoye 57.95 351** *i*P P 15 24 13.8 +0.5
BELG pmax pmax
comp=Z,3.0nm,0.9s
**BSTI Sart Tilman 58.14 22** *d*P P 15 24 15.2 +0.5
**MEM Membach 58.17 22** *d*P P 15 24 16.5 +1.6
**BTNL Ternell 58.21 21** *d*P P 15 24 15.3 +0.1
**CLL Collm 58.27 16** *i*P P 15 24 15.6 0.0
CLL pmax pmax
comp=Z,8.0nm,1.0s
**CLL Collm 58.27 16** *i*P P 15 24 15.6 0.0
CLL pmax pmax
comp=Z,8.0nm,1.0s
**DOU Dourbes 58.48 23** *d*P P 15 24 18.2 +1.1
**RCHB Rochefort 58.51 22** *d*P P 15 24 18.2 +0.9
**BRG Berggiesshubel 58.79 16** *e*P P 15 24 23.1 +3.8
BRG Amp 15 24 26.4
comp=Z,3.1nm,0.8s
**MKAR Makanchi Array 58.91 324** P P 15 24 18.8 -1.4
comp=Z,2.2nm,0.6s,baz=34,slow=6.1,SNR=14
comp=Z,2.2nm,0.6s
**MKAR Makanchi Array 58.91 324** *e*P P 15 24 19.5 -0.7
MKAR pmax pmax
comp=Z,2.0nm,0.6s
**MAKZ Makanchi 58.95 324** ⇓P P 15 24 20.8 +0.3
**HNS HongShan 58.99 294** ⇓P P 15 24 21.1 +0.3
**HSKC Hora Svate Kat 59.01 16** *e*P P 15 24 21.3 +0.5
**RNPP5 Staryi Chortor 59.26 7** P P 15 24 23.1 +0.6
**OSTC Ostas 59.31 14** *e*P P 15 24 23.0 +0.1
**OSTC Ostas 59.31 14** *e*P P 15 24 23.0 +0.1
**DPC Dobruska-Polom 59.52 14** *e*P P 15 24 24.7 +0.3
**DPC Dobruska-Polom 59.52 14** *e*P P 15 24 24.7 +0.3
**KRLC Kraliky 59.84 14** *e*P P 15 24 27.2 +0.6
**KRLC Kraliky 59.84 14** *e*P P 15 24 27.2 +0.6
**AKASG Malin Array Be 59.90 4** P P 15 24 25.7 -1.2
comp=Z,1.5nm,0.4s,baz=356,slow=6.8,SNR=12
comp=Z,1.5nm,0.4s
**AKASG Malin Array Be 59.90 4** *i*P P 15 24 26.5 -0.4
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 59.90 4** P P 15 24 26.8 -0.1
AKBB IAmb IAmb 15 24 32.3
comp=Z,8.8nm,1.0s
**AKBB Malin Array Si 59.90 4** P P 15 24 26.8 -0.1
AKBB pmax pmax
comp=Z,9.0nm,1.0s
**AKBB Malin Array Si 59.90 4** P P 15 24 26.7 -0.1
**KIEV Kiev 59.91 4** P P 15 24 26.8 -0.1
**KIEV Kiev 59.91 4**⇑ P P 15 24 26.9 -0.1
**KIEV Kiev 59.91 4** P P 15 24 26.8 -0.1
KIEV pmax pmax
comp=Z,7.0nm,1.0s
**AK08 Malin Array Si 59.97 4** P P 15 24 27.1 -0.3
**AK13 Malin Array Si 59.98 5** P P 15 24 27.2 -0.3
**AK07 Malin Array Si 60.05 4** P P 15 24 28.6 +0.7
**ABKAR Akbulak array 60.06 342** P P 15 24 28.0 0.0
**ABKAR Akbulak array 60.06 342** IAmb IAmb 15 24 37.8
comp=Z,9.4nm,0.9s
**WMQ Urumqi 60.55 319** *e*P P 15 24 32.5 +0.9
WMQ pmax pmax
comp=Z,16nm,0.9s
**GERES GERESS Array B 60.78 16** P P 15 24 31.9 -1.1
comp=Z,1.5nm,0.9s,baz=6.5,slow=6.8,SNR=2.9
comp=Z,1.5nm,0.9s
**GERES GERESS Array B 60.78 16** P P 15 24 32.0 -1.1
**KOLS Kolonicke sedl 61.36 10** *e*P P 15 24 41.1 +4.1
KOLS pmax pmax
comp=Z,4.0nm,0.8s
**KOLS Kolonicke sedl 61.36 10** *e*P P 15 24 41.1 +4.1
**VYHS Vyhne 61.57 12** *e*P P 15 24 38.3 -0.1
**VYHS Vyhne 61.57 12** *e*P P 15 24 38.3 -0.1
**GTA Gaotai 61.61 307** P P 15 24 39.5 +0.6
GTA sP sP 15 24 46.3 +4.8
GTA pmax pmax
comp=Z,13nm,1.3s
**RETA Reutte 61.81 19** *e*pP P 15 24 40.6 +0.5
comp=Z,6.6nm,1.4s
**MOA Molln 61.82 16** *e*P P 15 24 38.6 -1.5
comp=Z,7.0nm,1.1s
**CONA Conrad Observa 61.89 15** *e*P P 15 24 40.3 -0.3
comp=Z,4.6nm,1.1s
**BIOA Bad Ischl, Aus 61.91 16** *e*pP P 15 24 41.7 +1.0
comp=Z,1.7nm,0.5s
**LESA Schwarzleotal 62.08 17** *e*P P 15 24 40.8 -1.1
comp=Z,4.7nm,0.8s
**SQTA Sankt Quirin 62.12 18** *e*pP P 15 24 42.7 +0.4
comp=Z,8.9nm,1.8s
**WTTA Wattenberg 62.13 18** *e*P P 15 24 41.2 -1.1
comp=Z,8.0nm,1.6s
**RONA Rosalia, Austr 62.15 14** *e*pP P 15 24 42.8 +0.5
comp=Z,2.9nm,0.6s
**PETF Flores 62.35 118** P P 15 24 44.5 +0.6
**SORM Soroca 62.44 5** ⇓P P 15 24 44.0 -0.2
**SORM Soroca 62.44 5** ⇓P P 15 24 44.0 -0.2
**KBA Koelnbreinsper 62.49 17** *e*P P 15 24 44.7 -0.1
comp=Z,9.9nm,0.7s
**NJ2 Nanjing 62.53 288** *e*P P 15 24 46.2 +1.2
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
**ABTA Abfaltersbach 62.73 17** *e*pP P 15 24 46.9 +0.6
comp=Z,2.3nm,0.6s
**BUR08 Bucovina Ar. S 62.81 8** P P 15 24 47.2 +0.4
**BURAR Bucovina Array 62.84 8**⇑ P P 15 24 47.7 +0.8
**MYKA Terra Mystica 62.97 17** *e*pP P 15 24 49.2 +1.4
comp=Z,1.1nm,0.4s
**SOKA Soboth 63.05 16** *e*pP P 15 24 49.6 +1.2
comp=Z,2.4nm,1.1s
**PRED Cave del Predi 63.14 17** P P 15 24 48.4 -0.6
PRED IAmb IAmb 15 24 54.6
comp=Z,7.1nm,0.8s
**OBKA Obir 63.17 16** *e*pP P 15 24 49.8 +0.6
comp=Z,7.5nm,0.9s
**DRGR 63.52 10** ⇓P P 15 24 57.0 +5.5
**DRGR 63.52 10** ⇓P P 15 24 57.0 +5.5
**LZH Lanzhou 63.55 303** *e*P P **15 24 51.1 -0.8**
LZH pP sP 15 24 56.4 +1.8
LZH pmax pmax
comp=Z,27nm,0.9s
**XAN Xi'an 63.91 297**⇑ P P 15 24 52.7 -1.5
XAN pmax pmax
comp=Z,7.0nm,0.5s
**SIRR Siria 63.98 11**⇑ P P 15 24 54.2 -0.2
**PGAV Gavieira, Arco 64.22 35** *e*P P 15 25 01.2 +5.0
**AAK Ala-Archa 64.41 329** *i*P P 15 24 58.7 +1.2
AAK pmax pmax
comp=Z,9.0nm,1.0s
**SURR Surduc 64.52 10**⇑ P P 15 24 58.7 +0.8
**BZS Buzias 64.63 11** ⇓P P 15 25 02.8 +4.1
**BZS Buzias 64.63 11** ⇓P P 15 25 02.8 +4.1
**COVR Voineasa-Covas 64.65 7** ⇓P P 15 25 09.3 +11
**KK31 Karatay Array 64.65 332** IAmb IAmb 15 25 00.1
comp=Z,7.4nm,1.0s
**KKAR Karatay Array 64.65 332** P P 15 24 59.0 +0.1
**KKAR Karatay Array 64.65 332** IAmb IAmb 15 25 00.1
comp=Z,7.4nm,1.0s
**KKAR Karatay Array 64.65 332** P P 15 24 59.0 +0.1
**GZR Gura Zlata 64.92 10** ⇓P P 15 25 01.1 +0.4
**GZR Gura Zlata 64.92 10** ⇓P P 15 25 01.1 +0.4
**MLR Muntele Rosu 64.99 7** ⇓P P 15 25 03.9 +2.7
**MLR Muntele Rosu 64.99 7** ⇓P P 15 25 03.9 +2.7
**CFR Carcaliu 65.39 6**⇑ P P 15 24 58.5 -5.0
**CFR Carcaliu 65.39 6**⇑ P P 15 24 58.5 -5.0
**WHN Wuhan 65.41 291** P P 15 25 04.2 +0.3
**MDVR Moldovita 65.47 11**⇑ P P 15 25 06.4 +2.2
**HARR Harsova 65.87 6** ⇓P P 15 25 07.3 +0.6
**HARR Harsova 65.87 6** ⇓P P 15 25 07.3 +0.6
**MTE Manteigas 65.88 35** *e*P P 15 25 07.3 +0.4
comp=Z,21nm,1.6s
**PCAS Casmilo, Conde 66.02 36** *e*P P 15 25 08.3 +0.5
comp=Z,32nm,1.5s
**KIV Kislovodsk 66.60 354** *e*P P 15 25 12.8 +1.2
KIV pmax pmax
comp=Z,8.0nm,1.1s
**NRCA Norcia 66.67 18** IAmb IAmb 15 25 23.1
comp=Z,11nm,1.1s
**PMTG Montargil 67.02 36** *e*P P 15 25 14.0 -0.2
comp=Z,19nm,1.5s
**KSH Kashi 67.16 327** P P 15 25 18.9 +3.7
KSH sP sP 15 25 24.6 +6.7
KSH PcP **PcP** **15 25 43.3 0.0**
KSH pmax pmax
comp=Z,10.0nm,1.0s
**ESDC Sonseca Array 67.27 32** P P 15 25 16.2 +0.4
**ESDC Sonseca Array 67.27 32** P P 15 25 14.9 -0.9
comp=Z,2.4nm,0.6s,baz=346,slow=6.2,SNR=13
comp=Z,2.4nm,0.6s
**PAB San Pablo 67.32 32** ⇓P P 15 25 17.3 +1.1
**PESTR Estremoz 67.34 35** *e*P P 15 25 16.1 -0.2
**PDG Podgorica 67.63 13** ⇓P P 15 25 16.6 -1.4
**PNCL Nicolau / Gran 67.88 36** *e*P P 15 25 19.8 +0.2
**PBAR Barrancos 68.12 35** *e*P P 15 25 21.4 +0.3
comp=Z,18nm,2.3s
**CD2 Chengdu 68.39 301** P P 15 25 22.8 -0.2
CD2 pmax pmax
comp=Z,10.0nm,0.7s
**MORF Marmelete 68.63 36** *e*P P 15 25 24.7 +0.3
comp=Z,64nm,1.6s
**PVAQ Vaqueiros 68.73 36** *e*P P 15 25 25.8 +0.8
comp=Z,36nm,1.7s
**PBDV Barranco-do-Ve 68.84 36** *e*P P 15 25 30.8 +5.1
comp=Z,40nm,1.9s
**SIMJ Simiganj 69.23 332** P P 15 25 28.0 -0.3
SIMJ IAmb IAmb 15 25 37.8
comp=Z,10nm,0.8s
**FNA Florina 69.42 11** IAmb IAmb 15 25 37.0
comp=Z,7.6nm,0.9s
**BRTR Keskin Array B 70.95 1** P P 15 25 37.1 -1.7
comp=Z,0.7nm,0.7s,baz=316,slow=6.0,SNR=2.6
comp=Z,0.7nm,0.7s
**KIRS Kirsehir-Merke 71.55 1** ⇓P P 15 25 47.2 +4.9
**PZH PanZhiHua 73.12 301** P P **15 25 52.9 +0.9**
PZH pmax pmax
comp=Z,20nm,0.6s
**KEST Kesra 73.23 22** P P 15 25 51.2 -1.2
comp=Z,4.4nm,0.9s,baz=5.4,slow=5.9,SNR=4.7
comp=Z,4.4nm,0.9s
**NIL Nilore 73.36 328** P P 15 25 53.4 +0.2
**NIL Nilore 73.36 328** P P 15 25 53.4 +0.2
NIL pmax pmax
comp=Z,30nm,0.9s
**TNCH TengChong 75.47 303** P P 15 26 06.2 +0.5
TNCH pP pP 15 26 08.1 +0.4
TNCH pmax pmax
comp=Z,14nm,0.7s
**ROSC El Rosal 78.71 107** P P 15 26 22.8 -1.5
comp=Z,5.2nm,0.3s,baz=325,slow=10,SNR=2.3
comp=Z,5.2nm,0.3s
**CMAR Chiang Mai Arr 81.54 301** P P 15 26 38.8 -0.3
**CMAR Chiang Mai Arr 81.54 301** P P 15 26 36.6 -2.5
comp=Z,5.4nm,0.9s,baz=4.2,slow=6.0,SNR=20
comp=Z,5.4nm,0.9s
**CMAR Chiang Mai Arr 81.54 301** *e*P P 15 26 39.1 0.0
CMAR pmax pmax
comp=Z,6.0nm,0.9s
**RAYN Ar Rayn 86.82 351** P P 15 27 06.7 +0.8
RAYN IAmb IAmb 15 27 15.9
comp=Z,12nm,1.1s
**RAYN Ar Rayn 86.82 351** P P 15 27 06.7 +0.8
RAYN pmax pmax
comp=Z,12nm,1.1s
**TORD Torodi Ar. Bea 94.15 33** P P 15 27 38.7 -1.6
comp=Z,0.4nm,0.7s,baz=346,slow=5.3,SNR=2.3
comp=Z,0.4nm,0.7s
**VNDA Vanda 150.33 201** PKPab **PKPab** **15 34 15.2 -2.0**
comp=Z,2.1nm,1.0s,baz=22,slow=3.2,SNR=5.2
**QSPA South Pole Qui 159.48 180** PKPab **PKPab** **15 34 56.8 +0.1**
comp=Z,1.1nm,0.6s,baz=87,slow=0.5,SNR=7.6
**VNA3 Neumayer Olymp 165.12 117**⇑P **PKPab** **15 35 19.7 -1.5**
comp=Z,1.8nm,0.7s
**VNA2 Neumayer--Watz 165.75 115**⇑P **PKPab** **15 35 21.6 -2.4**
comp=Z,1.2nm,0.7s,baz=318,slow=2.6
**SNAA Sanae 167.34 117**⇑P **PKPab** **15 35 28.4 -2.7**
comp=Z,13nm,0.7s
**TROLL Troll, Antarti 169.05 118**⇑P **PKPab** **15 35 37.7 -1.1**
comp=Z,95nm,0.6s
**MAW Mawson 169.78 268** PKPab **PKPab** **15 35 46.8 +5.0**
comp=Z,2.3nm,0.5s,baz=38,slow=12,SNR=1.5

*IDC* ***12*** *15:18:36.6±0.5,69.64N×144.80W,h0km,mb4.1/24, mbtmp4.2/28,ML4.2/4,Error ellipse: s-maj=15.2km s-min=11.2km az=74.0*
*MOS* ***12*** *15:18:36.7±0.9,69.58N×144.75W,h13km,mb4.6/19, Error ellipse: s-maj=27.6km s-min=6.2km az=90.1*
*AEIC* ***12*** *15:18:38±1.7,69.53N±0.04×144.66W±0.08,h6km±4km, ML4.8,mb4.7/7(NEIC),ML4.9/118(NEIC), Error ellipse: s-maj=6.2km s-min=4.1km az=189.0*
*NEIC* ***12*** *15:18:38.2±1.3,69.60N±0.03×144.70W±0.03,h10km±1km, Error ellipse: s-maj=7.0km s-min=2.9km az=222.0*
**ISC 12 15:18:38.6±0.4,69.57N±0.04×144.70W±0.03,h14km, n284,σ0.91/261,mb4.4/59,2C-3D,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC h m s | ISC |
| **C27K** | **Jago River** | **0.35** | **80** | | | **Pg 15 18 44.5** | **-1.3** |
| C27K | | | | | | **Sg 15 18 49.4** | **-1.1** |
| **C26K** | **Camden Bay** | **0.36** | **348** | | | **Pb 15 18 45.6** | **-1.1** |
| C26K | | | | | | **Sb 15 18 51.6** | **-0.7** |
| **C26K** | **Camden Bay** | **0.36** | **348** | IAML | | 15 18 52.9 | |
| | comp=E,70µm,0.5s | | | | | | |
| C26K | | | | IAML | | 15 18 53.4 | |
| | comp=N,82µm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.64** | **248** | | | **Pg 15 18 49.0** | **-2.1** |
| **D25K** | **Kavik River** | **0.64** | **248** | | | **Sg 15 18 58.0** | **-1.6** |
| **D27M** | **Malcolm River** | **1.36** | **102** | Pn | | **Pn 15 19 02.0** | **-1.2** |
| **D27M** | **Malcolm River** | **1.36** | **102** | | | **Sb 15 19 21.7** | **+0.6** |
| **C24K** | **Franklin Bluff** | **1.41** | **278** | | | **Pb 15 19 04.0** | **-0.6** |
| **C24K** | **Franklin Bluff** | **1.41** | **278** | IAML | | 15 19 24.9 | |
| | comp=E,18µm,0.9s | | | | | | |
| C24K | | | | IAML | | 15 19 25.5 | |
| | comp=N,20µm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.52** | **256** | Pn | | **Pb 15 19 05.8** | **-0.7** |
| **D24K** | **Happy Valley** | **1.52** | **256** | | | **Sg 15 19 27.0** | **-0.5** |
| **E27K** | **Coleen River** | **1.79** | **140** | | | **Sn 15 19 32.4** | **+0.8** |
| **E27K** | **Coleen River** | **1.79** | **140** | Pn | | **Pn 15 19 09.1** | **+0.1** |
| **F26K** | **Sheenjek River** | **1.89** | **174** | | | **Pn 15 19 10.9** | **+0.4** |
| F26K | | | | | | **Sn 15 19 34.9** | **+0.7** |
| **F26K** | **Sheenjek River** | **1.89** | **174** | IAML | | 15 19 39.4 | |
| | comp=N,10µm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.98** | **244** | | | **Pn 15 19 11.8** | **+0.1** |
| TOLK | | | | IAML | | 15 19 45.2 | |
| | comp=E,8µm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **190** | | | **Pn 15 19 12.7** | **+0.5** |
| **F25K** | **Christian Rive** | **2.02** | **190** | IAML | | 15 19 43.2 | |
| | comp=E,8µm,0.8s | | | | | | |
| F25K | | | | IAML | | 15 19 43.9 | |
| | comp=N,12µm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **2.04** | **224** | | | **Pn 15 19 13.2** | **+0.7** |
| **C23K** | **Itkillik River** | **2.08** | **280** | Pn | | **Pn 15 19 13.9** | **+0.8** |
| **E28M** | **Babbage River** | **2.09** | **115** | Pn | | **Pn 15 19 14.6** | **+1.4** |
| **D28M** | **Stokes Point** | **2.12** | **94** | | | **Pn 15 19 14.4** | **+0.9** |
| **D28M** | **Stokes Point** | **2.12** | **94** | IAML | | 15 19 53.2 | |
| | comp=N,10µm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.15** | **179** | Pn | | **Pn 15 19 14.3** | **+0.3** |
| **D23K** | **Nanushuk River** | **2.21** | **257** | | | **Pn 15 19 15.8** | **+0.9** |
| **D23K** | **Nanushuk River** | **2.21** | **257** | IAML | | 15 20 03.0 | |
| | comp=N,6µm,1.1s | | | | | | |
| D23K | | | | IAML | | 15 20 03.6 | |
| | comp=E,7µm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.34** | **232** | | | **Pn 15 19 17.4** | **+0.6** |
| **E23K** | **Chandalar** | **2.34** | **232** | IAML | | 15 19 56.9 | |
| | comp=E,5µm,0.8s | | | | | | |
| E23K | | | | IAML | | 15 20 03.6 | |
| | comp=N,5µm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.37** | **211** | | | **Pn 15 19 17.3** | **+0.2** |
| **F28M** | **Old Crow** | **2.64** | **136** | Pn | | **Pn 15 19 20.7** | **-0.1** |
| **G26K** | **Porcupine Rive** | **2.65** | **172** | | | **Pn 15 19 21.6** | **+0.8** |
| **E29M** | **Blow River** | **2.72** | **113** | | | **Pn 15 19 22.8** | **+1.0** |
| **E29M** | **Blow River** | **2.72** | **113** | IAML | | 15 20 09.3 | |
| | comp=N,4µm,0.7s | | | | | | |
| E29M | | | | IAML | | 15 20 12.9 | |
| | comp=E,4µm,0.9s | | | | | | |
| **G25K** | **Bearman Lake** | **2.87** | **191** | | | **Pn 15 19 24.0** | **+0.2** |
| **D22K** | **Ayikyak River** | **2.93** | **260** | | | **Pn 15 19 25.7** | **+1.0** |
| D22K | | | | IAML | | 15 20 23.6 | |
| | comp=N,4µm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **3.00** | **156** | Pn | | **Pn 15 19 26.3** | **+0.6** |
| **FYU** | **Fort Yukon** | **3.02** | **184** | | | **Pn 15 19 26.1** | **+0.2** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **201** | | | **Pn 15 19 26.3** | **-0.2** |
| **B22K** | **Teshekpuk Lake** | **3.10** | **289** | Pn | | **Pn 15 19 27.4** | **+0.4** |
| **H25L** | **Birch Creek** | **3.34** | **188** | | | **Pn 15 19 30.9** | **+0.6** |
| **F22K** | **John River** | **3.44** | **237** | | | **Pn 15 19 32.1** | **+0.4** |
| **B21K** | **Ikpikpuk River** | **3.47** | **276** | Pn | | **Pn 15 19 33.9** | **+1.7** |
| **G23K** | **Bananza Creek** | **3.49** | **217** | Pn | | **Pn 15 19 33.0** | **+0.5** |
| G23K | | | | IAML | | 15 20 34.3 | |
| | comp=N,2µm,0.9s | | | | | | |
| G23K | | | | IAML | | 15 20 37.5 | |
| | comp=E,3µm,0.9s | | | | | | |
| **E21K** | **Killik River** | **3.52** | **256** | | | **Pn 15 19 32.9** | **0.0** |
| E21K | | | | IAML | | 15 20 42.4 | |
| | comp=E,2µm,1.0s | | | | | | |
| E21K | | | | IAML | | 15 20 45.0 | |
| | comp=N,3µm,0.9s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.56** | **159** | | | **Pn 15 19 33.8** | **+0.4** |
| **G29M** | **Pine Creek** | **3.65** | **134** | IAML | | 15 20 47.4 | |
| | comp=N,2µm,0.8s | | | | | | |
| **G22K** | **Bettles** | **3.67** | **227** | | | **Pn 15 19 35.3** | **+0.4** |
| **A22K** | **Sinclair Lake** | **3.77** | **297** | | | **Pn 15 19 36.3** | **+0.2** |
| **F30M** | **Barrier River** | **3.81** | **117** | | | **Pn 15 19 37.6** | **+0.8** |
| **H24K** | **Noodor Dome** | **3.94** | **199** | Pn | | **Pn 15 19 38.4** | **-0.2** |
| H24K | | | | IAML | | 15 20 43.6 | |
| | comp=N,1µm,0.9s | | | | | | |
| H24K | | | | IAML | | 15 20 44.7 | |
| | comp=E,2µm,1.2s | | | | | | |
| **F21K** | **Alatna River** | **4.01** | **238** | | | **Pn 15 19 39.5** | **-0.1** |
| F21K | | | | IAML | | 15 20 47.8 | |
| | comp=E,1µm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.08** | **125** | | | **Pn 15 19 40.8** | **+0.3** |
| **G30M** | **tAoh Zraii Nji** | **4.08** | **125** | IAML | | 15 20 53.4 | |
| | comp=E,1µm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.08** | **185** | | | **Pn 15 19 40.7** | **+0.1** |
| **PRP** | **Porcupine Dome** | **4.08** | **185** | IAML | | 15 20 46.2 | |
| | comp=E,1µm,0.7s | | | | | | |
| PRP | | | | IAML | | 15 20 51.5 | |
| | comp=N,1µm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **4.13** | **142** | | | **Pn 15 19 41.3** | **+0.2** |
| **H29M** | **Whitestone** | **4.13** | **142** | IAML | | 15 20 31.0 | |
| | comp=E,1µm,0.7s | | | | | | |
| H29M | | | | IAML | | 15 20 59.6 | |
| | comp=N,2µm,1.1s | | | | | | |
| **H23K** | **Yukon River** | **4.19** | **208** | Pn | | **Pn 15 19 41.9** | **-0.1** |
| **INK** | **Inuvik** | **4.23** | **102** | | | **Pn 15 19 43.0** | **+0.5** |
| **INK** | **Inuvik** | **4.23** | **102** | Pn | | **Pn 15 19 42.6** | **+0.2** |
| | comp=N,14nm,0.3s,baz=295,slow=14,SNR=6.2 | | | | | | |
| INK | | | | | Sn | **Sn 15 20 29.5** | **-2.0** |
| | comp=N,25nm,0.3s,baz=7.4,slow=31,SNR=4.1 | | | | | | |
| | comp=N,58nm,0.5s | | | | | | |
| **INK** | **Inuvik** | **4.23** | **102** | P | | **Pn 15 19 43.0** | **+0.5** |
| **I26K** | **Coal Creek Min** | **4.32** | **171** | | | **Pn 15 19 44.0** | **+0.2** |
| **B20K** | **Meade River** | **4.35** | **282** | | | **Pn 15 19 44.5** | **+0.4** |
| **D20K** | **Etivluk River** | **4.35** | **264** | | | **Pn 15 19 44.7** | **+0.6** |
| **E20K** | **Nigu River** | **4.35** | **258** | | | **Pn 15 19 44.9** | **+0.5** |
| **A21K** | **Barrow** | **4.37** | **299** | | | **Pn 15 19 45.0** | **+0.5** |
| **EPYK** | **Eagle Plains** | **4.40** | **133** | | | **Pn 15 19 45.3** | **+0.4** |
| **H22K** | **Ishtalitna Cre** | **4.48** | **218** | | | **Pn 15 19 46.4** | **+0.4** |
| **G21K** | **Allakaket** | **4.51** | **231** | | | **Pn 15 19 46.1** | **-0.3** |
| **G21K** | **Allakaket** | **4.51** | **231** | IAML | | 15 21 06.7 | |
| | comp=N,1µm,1.3s | | | | | | |
| G21K | | | | IAML | | 15 21 11.9 | |
| | comp=E,1µm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **4.52** | **154** | | | **Pn 15 19 46.5** | **-0.2** |
| **I28M** | **Miner Creek** | **4.52** | **154** | IAML | | 15 21 11.2 | |
| | comp=E,1µm,1.2s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.56** | **113** | | | **Pn 15 19 47.1** | **+0.1** |
| F31M | | | | IAML | | 15 21 07.8 | |
| | comp=E,1µm,1.3s | | | | | | |
| F31M | | | | IAML | | 15 21 13.4 | |
| | comp=N,800nm,1.4s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.59** | **195** | | | **Pn 15 19 47.6** | **0.0** |
| **POKR** | **Poker Plat Res** | **4.59** | **195** | IAML | | 15 21 02.3 | |
| | comp=E,1µm,0.8s | | | | | | |
| POKR | | | | IAML | | 15 21 15.5 | |
| | comp=N,923nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.70** | **119** | | | **Pn 15 19 49.2** | **+0.2** |
| **G31M** | **Satah River** | **4.70** | **119** | IAML | | 15 21 12.3 | |
| | comp=N,1µm,1.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **204** | | | **Pn 15 19 50.1** | **-0.1** |
| **I23K** | **Minto, Yukon-K** | **4.79** | **204** | IAML | | 15 21 07.7 | |
| | comp=E,1µm,1.3s | | | | | | |
| I23K | | | | IAML | | 15 21 17.5 | |
| | comp=N,1µm,1.8s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **F20K** | **Avaraart Lake** | **4.81** | **243** | | | **Pn** | **15 19 51.3** | **+0.8** |
| F20K | | | | IAML | | | 15 21 33.2 | | |
| | comp=N,658nm,0.8s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **198** | | | **Pn** | **15 19 50.5** | **-0.3** |
| **MDM** | **Murphy Dome** | **4.83** | **198** | IAML | | | 15 21 12.0 | | |
| | comp=E,1μm,0.9s | | | | | | | | |
| MDM | | | | IAML | | | 15 21 12.8 | | |
| | comp=N,1μm,1.0s | | | | | | | | |
| **COLA** | **College** | **4.87** | **196** | | | **Pn** | **15 19 51.5** | **+0.2** |
| **COLA** | **College** | **4.87** | **196** | P | | **Pn** | **15 19 51.5** | **+0.2** |
| **I29M** | **Ogilvie Camp,** | **4.89** | **147** | | | **Pn** | **15 19 51.5** | **-0.1** |
| **I29M** | **Ogilvie Camp,** | **4.89** | **147** | IAML | | | 15 21 20.0 | | |
| | comp=N,693nm,0.9s | | | | | | | | |
| I29M | | | | IAML | | | 15 21 23.3 | | |
| | comp=E,718nm,1.3s | | | | | | | | |
| **IL31** | | **4.89** | **191** | | | **Pn** | **15 19 51.9** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.89** | **191** | Pn | | **Pn** | **15 19 51.9** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.89** | **191** | Pn | | **Pn** | **15 19 51.5** | **-0.1** |
| | comp=E,12nm,0.3s,baz=5.2,slow=14,SNR=5.2 | | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **15 20 46.1** | **-1.9** |
| | comp=E,62nm,0.3s,baz=20,slow=16,SNR=8.8 | | | | | | | | |
| ILAR | | | | Lg | | Lg | 15 21 10.7 | | |
| | comp=E,63nm,0.3s,baz=6.7,slow=31,SNR=7.8 | | | | | | | | |
| | comp=E,56nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **4.89** | **191** | *eP* | | **Pn** | **15 19 53.4** | **+1.7** |
| ILAR | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.3s | | | | | | | | |
| **D19K** | **Kuna River** | **4.94** | **264** | | | **Pn** | **15 19 52.8** | **+0.5** |
| **D19K** | **Kuna River** | **4.94** | **264** | IAML | | | 15 21 31.1 | | |
| | comp=E,925nm,1.1s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **4.97** | **228** | | | **Pn** | **15 19 51.8** | **-1.0** |
| **J25K** | **Salcha River,** | **4.99** | **183** | | | **Pn** | **15 19 53.2** | **+0.2** |
| **J25K** | **Salcha River,** | **4.99** | **183** | IAML | | | 15 21 20.1 | | |
| | comp=N,556nm,0.6s | | | | | | | | |
| J25K | | | | IAML | | | 15 21 23.2 | | |
| | comp=E,826nm,1.0s | | | | | | | | |
| **EGAK** | **Eagle** | **5.01** | **162** | | | **Pn** | **15 19 53.3** | **+0.1** |
| **EGAK** | **Eagle** | **5.01** | **162** | IAML | | | 15 21 19.5 | | |
| | comp=E,710nm,1.1s | | | | | | | | |
| EGAK | | | | IAML | | | 15 21 41.1 | | |
| | comp=E,728nm,1.7s | | | | | | | | |
| **E19K** | **Redstone River** | **5.07** | **251** | | | **Pn** | **15 19 54.0** | **-0.1** |
| **E19K** | **Redstone River** | **5.07** | **251** | IAML | | | 15 21 37.3 | | |
| | comp=E,949nm,0.9s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **195** | | | **Pn** | **15 19 54.3** | **0.0** |
| **J26L** | **Joseph Creek** | **5.11** | **174** | | | **Pn** | **15 19 55.0** | **+0.3** |
| **J26L** | **Joseph Creek** | **5.11** | **174** | IAML | | | 15 20 57.5 | | |
| | comp=N,539nm,1.0s | | | | | | | | |
| J26L | | | | IAML | | | 15 21 20.9 | | |
| | comp=E,794nm,1.1s | | | | | | | | |
| **MLY** | **Manley** | **5.12** | **210** | IAML | | | 15 21 25.3 | | |
| | comp=E,655nm,1.2s | | | | | | | | |
| **HDA** | **Harding Lake** | **5.26** | **191** | | | **Pn** | **15 19 57.3** | **+0.7** |
| HDA | | | | IAML | | | 15 21 26.3 | | |
| | comp=N,781nm,0.8s | | | | | | | | |
| **NEA2** | **Nenana** | **5.28** | **201** | | | **Pn** | **15 19 56.7** | **-0.3** |
| NEA2 | | | | IAML | | | 15 21 38.7 | | |
| | comp=E,472nm,1.5s | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **196** | | | **Pn** | **15 19 57.5** | **+0.5** |
| WRH | | | | IAML | | | 15 21 24.9 | | |
| | comp=N,506nm,0.7s | | | | | | | | |
| WRH | | | | IAML | | | 15 21 32.1 | | |
| | comp=E,739nm,1.3s | | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.29** | **272** | | | **Pn** | **15 19 57.5** | **+0.4** |
| **C19K** | **Lookout Ridge** | **5.29** | **272** | IAML | | | 15 20 58.9 | | |
| | comp=E,533nm,0.4s | | | | | | | | |
| C19K | | | | IAML | | | 15 21 52.2 | | |
| | comp=N,821nm,1.7s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.41** | **140** | | | **Pn** | **15 19 59.0** | **+0.1** |
| **I30M** | **Mount Dempster** | **5.41** | **140** | IAML | | | 15 21 02.6 | | |
| | comp=N,444nm,0.5s | | | | | | | | |
| I30M | | | | IAML | | | 15 21 03.6 | | |
| | comp=E,583nm,0.4s | | | | | | | | |
| **SCRK** | **Sand Creek** | **5.62** | **177** | | | **Pn** | **15 20 02.0** | **+0.2** |
| **H20K** | **Anotleneega Mo** | **5.65** | **228** | | | **Pn** | **15 20 01.9** | **-0.2** |
| **K27K** | **Chicken** | **5.66** | **168** | | | **Pn** | **15 20 02.4** | **+0.2** |
| **A19K** | **Wainwright** | **5.68** | **284** | | | **Pn** | **15 20 02.7** | **+0.3** |
| **BWN** | **Browne** | **5.74** | **201** | | | **Pn** | **15 20 03.0** | **-0.2** |
| **G19K** | **Purcell Mounta** | **5.80** | **240** | | | **Pn** | **15 20 04.3** | **+0.1** |
| **K24K** | **Donnelly Dome** | **5.81** | **185** | | | **Pn** | **15 20 04.4** | **+0.1** |
| **DAWY** | **Dawson** | **5.91** | **157** | | | **Pn** | **15 20 05.8** | **+0.2** |
| **DOT** | **Dot Lake** | **5.95** | **177** | | | **Pn** | **15 20 06.3** | **+0.1** |
| **J30M** | **Hart River** | **5.98** | **143** | | | **Pn** | **15 20 06.7** | **0.0** |
| **B18K** | **Kokolik River** | **6.02** | **276** | | | **Pn** | **15 20 07.5** | **+0.4** |
| **BPAW** | **Bear Paw Mtn.** | **6.02** | **207** | Pn | | **Pn** | **15 20 06.7** | **-0.5** |
| **H19K** | **Roundabout Mou** | **6.05** | **234** | | | **Pn** | **15 20 07.3** | **-0.2** |
| **MCK** | **McKinley** | **6.10** | **198** | | | **Pn** | **15 20 08.2** | **0.0** |
| **MCK** | **McKinley** | **6.10** | **198** | P | | **Pn** | **15 20 08.2** | **0.0** |
| **F18K** | **Selawik** | **6.33** | **249** | | | **Pn** | **15 20 11.6** | **+0.2** |
| **RND** | **Reindeer** | **6.41** | **197** | Pn | | **Pn** | **15 20 12.8** | **+0.3** |
| **RND** | **Reindeer** | **6.41** | **197** | P | | **Pn** | **15 20 12.8** | **+0.3** |
| **K29M** | **Barlow Dome** | **6.41** | **150** | | | **Pn** | **15 20 12.9** | **+0.3** |
| **G18K** | **Tagagawik** | **6.45** | **242** | | | **Pn** | **15 20 13.0** | **0.0** |
| **CHUM** | **Lake Minchumin** | **6.45** | **211** | | | **Pn** | **15 20 13.1** | **0.0** |
| **KTH** | **Kantishna Hill** | **6.53** | **205** | | | **Pn** | **15 20 14.1** | **0.0** |
| **J20K** | **Nowinta River** | **6.56** | **219** | | | **Pn** | **15 20 14.6** | **0.0** |
| **L26K** | **Log Cabin Wild** | **6.59** | **175** | | | **Pn** | **15 20 15.5** | **+0.5** |
| **DHY** | **Denali Highway** | **6.61** | **191** | Pn | | **Pn** | **15 20 17.1** | **+1.7** |
| **BCAR** | **Beaver Creek A** | **6.64** | **168** | Pn | | **Pn** | **15 20 16.3** | **+0.7** |
| **PAX** | **Paxson** | **6.64** | **183** | | | **Pn** | **15 20 16.1** | **+0.4** |
| **PAX** | **Paxson** | **6.64** | **183** | P | | **Pn** | **15 20 16.1** | **+0.4** |
| **L27K** | **Beaver Creek,** | **6.64** | **169** | | | **Pn** | **15 20 16.1** | **+0.4** |
| **C17K** | **DeLong Mountai** | **6.72** | **269** | | | **Pn** | **15 20 15.7** | **-1.0** |
| **GCSA** | **Galena City Sc** | **6.77** | **230** | | | **Pn** | **15 20 17.1** | **-0.3** |
| **E17K** | **Hotham Inlet** | **6.81** | **257** | | | **Pn** | **15 20 17.3** | **-0.6** |
| **A36M** | **Sachs Harbour** | **6.85** | **60** | | | **Pn** | **15 20 17.0** | **-1.4** |
| **H18K** | **Honhosa River** | **6.88** | **236** | | | **Pn** | **15 20 18.5** | **-0.3** |
| **WAT1** | **Susitna Watana** | **6.94** | **195** | | | **Pn** | **15 20 20.1** | **+0.2** |
| **F17K** | **Baldwin Pennin** | **6.95** | **251** | | | **Pn** | **15 20 19.4** | **-0.5** |
| **D17K** | **Noatak River** | **6.96** | **263** | | | **Pn** | **15 20 19.3** | **-0.7** |
| **WAT7** | **Susitna Watana** | **6.97** | **196** | | | **Pn** | **15 20 20.4** | **+0.2** |
| **L29M** | **L29M** | **7.00** | **155** | | | **Pn** | **15 20 20.6** | **0.0** |
| **J19K** | **Poorman** | **7.06** | **223** | | | **Pn** | **15 20 21.3** | **0.0** |
| **WAT6** | **Susitna Watana** | **7.13** | **191** | | | **Pn** | **15 20 22.4** | **0.0** |
| **M26K** | **Nabesna, AK** | **7.23** | **174** | | | **Pn** | **15 20 24.1** | **+0.3** |
| **C36M** | **Paulatuk** | **7.25** | **82** | | | **Pn** | **15 20 22.8** | **-1.2** |
| **K20K** | **Telida** | **7.27** | **215** | | | **Pn** | **15 20 24.0** | **-0.3** |
| **M27K** | **Edge Creek, AK** | **7.33** | **170** | | | **Pn** | **15 20 26.7** | **+1.4** |
| **PPLA** | **Purkeypile** | **7.35** | **208** | | | **Pn** | **15 20 25.8** | **+0.3** |
| **H17K** | **Granite Mounta** | **7.49** | **239** | | | **Pn** | **15 20 27.5** | **+0.2** |
| **C16K** | **Lisburne Hills** | **7.54** | **270** | | | **Pn** | **15 20 27.2** | **-0.8** |
| **M29M** | **Somme Creek** | **7.59** | **158** | | | **Pn** | **15 20 29.2** | **+0.5** |
| **WACK** | **Wrangell Chich** | **7.62** | **179** | | | **Pn** | **15 20 29.7** | **+0.4** |
| **G16K** | **Koyuk River** | **7.95** | **247** | | | **Pn** | **15 20 32.7** | **-0.8** |
| **YUK3** | **Moose Creek** | **8.02** | **165** | | | **Pn** | **15 20 35.5** | **+0.8** |
| **L20K** | **Farewell, AK** | **8.03** | **212** | | | **Pn** | **15 20 34.0** | **-0.7** |
| **MCARA** | **McCarthy VSAT** | **8.25** | **174** | | | **Pn** | **15 20 37.6** | **-0.1** |
| **KNK** | **Knik Glacier** | **8.34** | **193** | | | **Pn** | **15 20 40.2** | **+1.3** |
| **VRDI** | **Verde Repeater** | **8.39** | **176** | | | **Pn** | **15 20 40.0** | **+0.2** |
| **H16K** | **Elim** | **8.41** | **242** | | | **Pn** | **15 20 39.5** | **-0.4** |
| **J17K** | **VABM Dome** | **8.43** | **230** | | | **Pn** | **15 20 39.8** | **-0.4** |
| **M20K** | **Styx River** | **8.45** | **208** | | | **Pn** | **15 20 40.7** | **+0.2** |
| **PTPK** | **Patty Peak** | **8.47** | **173** | | | **Pn** | **15 20 41.1** | **+0.3** |
| **L19K** | **White Mountain** | **8.49** | **214** | | | **Pn** | **15 20 41.1** | **+0.1** |
| **I17K** | **Unalakleet** | **8.50** | **236** | | | **Pn** | **15 20 41.0** | **0.0** |
| **M31M** | **Drury Creek, Y** | **8.50** | **145** | | | **Pn** | **15 20 41.2** | **+0.1** |
| **F15K** | **North Star Dit** | **8.51** | **253** | | | **Pn** | **15 20 40.6** | **-0.6** |
| **SUA** | **Susitna One** | **8.51** | **200** | | | **Pn** | **15 20 41.2** | **-0.2** |
| **STLK** | **Strandline Lak** | **8.62** | **203** | | | **Pn** | **15 20 43.0** | **+0.2** |
| **BALM** | **Baldy** | **8.62** | **172** | | | **Pn** | **15 20 43.3** | **+0.3** |
| **BMRM** | **Bremner River** | **8.64** | **180** | | | **Pn** | **15 20 43.3** | **+0.2** |
| **M19K** | **Big River Lodg** | **8.65** | **212** | | | **Pn** | **15 20 43.4** | **+0.1** |
| **N30M** | **Aishikik Lake** | **8.72** | **155** | | | **Pn** | **15 20 44.7** | **+0.4** |
| **KIAG** | **Kiagna River** | **8.74** | **172** | | | **Pn** | **15 20 45.2** | **+0.7** |
| **G15K** | **Niukluk** | **8.75** | **248** | | | **Pn** | **15 20 44.4** | **-0.1** |
| **CTGM** | **Chitina Glacie** | **8.75** | **169** | | | **Pn** | **15 20 46.4** | **+1.7** |
| **L18K** | **Granite Mounta** | **8.84** | **219** | | | **Pn** | **15 20 45.6** | **-0.2** |
| **LOGN** | **Logan Glacier** | **8.91** | **168** | | | **Pn** | **15 20 46.8** | **-0.1** |
| **GRNC** | **Granite Creek** | **8.96** | **171** | | | **Pn** | **15 20 49.2** | **+1.6** |
| **ISLE** | **Juniper Island** | **9.06** | **173** | | | **Pn** | **15 20 50.2** | **+1.3** |
| **KDAK** | **Kodiak Island** | **12.32** | **200** | Pn | | **Pn** | **15 21 34.5** | **+1.2** |
| | comp=E,0.3nm,0.3s,baz=345,slow=20,SNR=1.4 | | | | | | | | |
| KDAK | | | | Sn | | **Sn** | **15 23 49.1** | **-1.1** |
| | comp=E,0.1nm,0.3s,baz=298,slow=16,SNR=1.6 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **12.32** | **200** | *i* P | | **Pn** | **15 21 33.6** | **+0.3** |
| **DLBC** | **Dease Lake** | **12.84** | **143** | Pn | | **Pn** | **15 21 40.6** | **+0.1** |
| | comp=E,1.5nm,0.3s,baz=10,slow=11,SNR=1.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.99** | **106** | Pn | | **Pn** | **15 21 52.3** | **-3.8** |
| | comp=E,2.2nm,0.3s,baz=333,slow=15,SNR=2.4 | | | | | | | | |
| YKA | | | | Sn | | Sn | 15 24 16.8 | -14 | |
| | comp=E,2.3nm,0.3s,baz=34,slow=21,SNR=6.0 | | | | | | | | |
| | comp=E,14nm,0.8s | | | | | | | | |
| **BILL** | **Bilibino** | **17.42** | **288**⇑ | *eP* | | **Pn** | **15 22 38.5** | **-2.2** |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.4s | | | | | | | | |
| BILL | | | | MLR | | MLR | | | |
| | comp=Z,13μm,16.0s | | | | | | | | |
| **BBB** | **Bella Bella** | **19.09** | **147** | P | | **P** | **15 23 00.5** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=276,slow=18,SNR=2.4 | | | | | | | | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **SEY** | **Seymchan** | **25.08** | **286** | *i* P | | **P** | **15 24 03.0** | **+0.9** |
| SEY | | | | pmax | | pmax | | | |
| | comp=Z,24nm,0.7s | | | | | | | | |
| **LON** | **Longmire** | **25.54** | **142** | IAmb | | IAmb | 15 24 14.2 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **TIXI** | **Tiksi** | **26.49** | **315** | *i* P | | **P** | **15 24 14.8** | **0.0** |
| TIXI | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.04** | **7** | P | | **P** | **15 25 03.6** | **-0.4** |
| | comp=Z,3.1nm,0.6s,baz=13,slow=8.6,SNR=6.0 | | | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.34** | **128** | P | | **P** | **15 25 08.1** | **+0.8** |
| | comp=Z,3.9nm,0.8s,baz=0.9,slow=5.3,SNR=8.8 | | | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | **33.03** | **300** | *i* P | | **P** | **15 25 12.8** | **0.0** |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **WAKR** | **Walker** | **33.93** | **143** | P | | **P** | **15 25 23.1** | **+2.0** |
| **NVAR** | **Mina Array Bea** | **34.25** | **142** | P | | **P** | **15 25 24.8** | **+0.9** |
| | comp=Z,2.7nm,0.7s,baz=342,slow=6.9,SNR=13 | | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | | |
| **TPH** | **Tonopah** | **34.83** | **140** | P | | **P** | **15 25 30.8** | **+1.9** |
| TPH | | | | IAmb | | IAmb | 15 25 47.8 | | |
| | comp=Z,7.4nm,0.6s | | | | | | | | |
| **TPH** | **Tonopah** | **34.83** | **140** | P | | **P** | **15 25 30.8** | **+1.9** |
| TPH | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **5** | P | | **P** | **15 26 19.9** | **-0.4** |
| | comp=Z,1.3nm,0.5s,baz=0.0,slow=7.3,SNR=8.1 | | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **5** | *eP* | | **P** | **15 26 21.0** | **+0.6** |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **41.04** | **276** | *i* P | | **P** | **15 26 20.8** | **-0.1** |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **KLR** | **Kul'dur** | **42.87** | **287** | *i* P | | **P** | **15 26 35.8** | **-0.1** |
| KLR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.55** | **128** | P | | **P** | **15 27 06.7** | **+1.1** |
| | comp=Z,2.9nm,1.0s,baz=359,slow=7.2,SNR=5.7 | | | | | | | | |
| | comp=Z,2.9nm,1.0s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.16** | **283** | P | | **P** | **15 27 09.0** | **-1.1** |
| | comp=Z,1.5nm,0.6s,baz=54,slow=16,SNR=3.2 | | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **48.55** | **15** | P | | **P** | **15 27 19.7** | **-1.0** |
| | comp=Z,0.6nm,0.8s,baz=322,slow=9.6,SNR=2.7 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **48.88** | **283** | *i* P | | **P** | **15 27 22.1** | **-1.2** |
| MSHR | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **FINES** | **FINESS Array B** | **49.11** | **6** | P | | **P** | **15 27 24.4** | **-0.5** |
| | comp=Z,2.1nm,0.7s,baz=2.2,slow=7.8,SNR=9.1 | | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **49.11** | **6** | *eP* | | **P** | **15 27 24.7** | **-0.2** |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **VALR** | **Valaam** | **49.32** | **3** | *i* P | | **P** | **15 27 25.5** | **-1.0** |
| VALR | | | | pmax | | pmax | | | |
| | comp=Z,43nm,0.9s | | | | | | | | |
| **HFS** | **Hagfors** | **49.67** | **14** | P | | **P** | **15 27 28.5** | **-0.7** |
| | comp=Z,2.7nm,0.5s,baz=352,slow=4.5,SNR=12 | | | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | | | |
| **MOY** | **Mondy** | **50.02** | **312** | *eP* | | P | 15 27 37.4 | +5.3 |
| **ZALV** | **Zalesovo Beam** | **51.65** | **325** | P | | **P** | **15 27 43.5** | **-0.7** |
| | comp=Z,1.6nm,0.5s,baz=26,slow=6.9,SNR=6.9 | | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.65** | **325** | *eP* | | **P** | **15 27 46.1** | **+1.9** |
| ZALV | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **51.80** | **273** | *eP* | | **P** | **15 27 48.2** | **+2.6** |
| MJA0 | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.81** | **273** | P | | **P** | **15 27 46.0** | **+0.4** |
| | comp=Z,3.7nm,0.9s,baz=7.4,slow=8.2,SNR=8.5 | | | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | | | |
| **SONM** | **Songino Array** | **52.03** | **306** | P | | **P** | **15 27 47.0** | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=355,slow=1.1,SNR=2.3 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.32** | **27** | P | | **P** | **15 27 48.6** | **-0.5** |
| | comp=Z,5.3nm,0.8s,baz=326,slow=6.8,SNR=12 | | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **52.68** | **296** | *eP* | | **P** | **15 27 51.7** | **-0.4** |
| XLT | | | | pP | | pP | 15 27 56.9 | +0.2 |
| XLT | | | | PcP | | **PcP** | **15 29 02.8** | **+1.1** |
| **ARU** | **Arti** | **53.18** | **344** | P | | **P** | **15 27 55.9** | **+0.4** |
| ARU | | | | S | | **S** | **15 35 30.8** | **+5.6** |
| ARU | | | | SS | | **SKiKP** | **15 39 11.2** | **-0.5** |
| **KSRS** | **Korea Array** | **54.57** | **283** | P | | **P** | **15 28 06.3** | **+0.5** |
| | comp=Z,1.3nm,0.7s,baz=20,slow=7.8,SNR=5.1 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **55.05** | **335** | *i* P | | **P** | **15 28 09.4** | **+0.2** |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,23nm,3.3s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **55.07** | **335** | P | | **P** | **15 28 08.6** | **-0.7** |
| | comp=Z,0.7nm,0.4s,baz=49,slow=7.7,SNR=3.6 | | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **55.10** | **321** | *i* P | | **P** | **15 28 09.1** | **-0.7** |
| DGZ | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.4s | | | | | | | | |
| **OBN** | **Obninsk** | **55.62** | **359**⇑ | *eP* | | **P** | **15 28 12.8** | **-0.4** |
| OBN | | | | *e* | | | 15 29 12.8 | | |
| OBN | | | | *eS* | | **S** | **15 35 54.6** | **-3.5** |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| OBN | | | | MLR | | MLR | | | |
| | comp=Z,8μm,16.0s | | | | | | | | |
| **KURK** | **Kurchatov** | **55.92** | **328** | *i* P | | **P** | **15 28 15.6** | **+0.2** |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.02** | **328** | P | | **P** | **15 28 15.9** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=29,slow=8.5,SNR=3.6 | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.85** | **298** | *eP* | | **P** | **15 28 22.2** | **-0.2** |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.5s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,1μm,8.3s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=N,10μm,16.9s | | | | | | | | |
| HHC | | | | LR | | LR | | | |
| | comp=Z,17μm,16.3s | | | | | | | | |
| **BELG** | **Belogornoye** | **58.02** | **351** | *i* P | | **P** | **15 28 30.6** | **+0.4** |
| BELG | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **BSTI** | **Sart Tilman** | **58.20** | **22** | *dP* | | **P** | **15 28 32.3** | **+0.7** |
| **MEM** | **Membach** | **58.23** | **22** | *dP* | | **P** | **15 28 32.3** | **+0.6** |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| **BTNL** | **Ternell** | **58.27** | **21** | *dP* | | **P** | **15 28 32.6** | **+0.5** |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| **CLL** | **Collm** | **58.34** | **16** | *i* P | | **P** | **15 28 31.9** | **-0.6** |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| **CLL** | **Collm** | **58.34** | **16** | *i* P | | **P** | **15 28 31.9** | **-0.6** |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.95** | **324** | P | | **P** | **15 28 35.5** | **-1.4** |
| | comp=Z,4.4nm,0.4s,baz=35,slow=7.9,SNR=6.6 | | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.95** | **324** | *eP* | | **P** | **15 28 38.2** | **+1.3** |
| MKAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **59.07** | **16** | *eP* | | **P** | **15 28 38.3** | **+0.6** |
| **DPC** | **Dobruska-Polom** | **59.59** | **14** | *eP* | | **P** | **15 28 42.0** | **+0.7** |
| **DPC** | **Dobruska-Polom** | **59.59** | **14** | *eP* | | **P** | **15 28 42.0** | **+0.7** |
| DPC | | | | *e* | | | 15 28 42.0 | | |
| **DPC** | **Dobruska-Polom** | **59.59** | **14** | P | | **P** | **15 28 41.8** | **+0.5** |
| **KRLC** | **Kraliky** | **59.90** | **14** | *eP* | | **P** | **15 28 44.0** | **+0.6** |
| **KRLC** | **Kraliky** | **59.90** | **14** | *eP* | | **P** | **15 28 44.0** | **+0.6** |
| **AKASG** | **Malin Array Be** | **59.96** | **4** | P | | **P** | **15 28 43.1** | **-0.7** |
| | comp=Z,4.1nm,0.6s,baz=357,slow=6.8,SNR=13 | | | | | | | | |
| | comp=Z,4.1nm,0.6s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.96** | **4** | *eP* | | **P** | **15 28 43.6** | **-0.2** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **59.96** | **4** | P | | **P** | **15 28 43.5** | **-0.3** |
| **AKBB** | **Malin Array Si** | **59.96** | **4** | P | | **P** | **15 28 43.5** | **-0.3** |
| AKBB | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **59.96** | **4** | P | | **P** | **15 28 43.6** | **-0.2** |
| **KIEV** | **Kiev** | **59.97** | **4** | P | | **P** | **15 28 43.6** | **-0.3** |
| KIEV | | | | IAmb | | IAmb | 15 28 44.3 | | |
| | comp=Z,6.3nm,0.7s | | | | | | | | |
| **KIEV** | **Kiev** | **59.97** | **4** | P | | **P** | **15 28 43.5** | **-0.3** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **60.12** | **342** | P | | **P** | **15 28 45.4** | **+0.5** |
| **ZVC** | **Zvikov** | **60.30** | **16** | *eP* | | P | 15 28 51.0 | +4.9 |
| **GERES** | **GERESS Array B** | **60.84** | **16** | P | | **P** | **15 28 50.3** | **+0.3** |
| | comp=Z,0.8nm,0.7s,baz=16,slow=6.9,SNR=4.1 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **GERES** | **GERESS Array B** | **60.84** | **16** | *eP* | | **P** | **15 28 51.2** | **+1.2** |
| GERES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **61.03** | **12** | *eP* | | **P** | **15 28 52.0** | **+0.8** |
| LANS | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **61.03** | **12** | *eP* | | **P** | **15 28 52.0** | **+0.8** |
| **PLTM** | **Poltava** | **61.14** | **1** | P | | **P** | **15 28 53.1** | **+1.3** |
| **VYHS** | **Vyhne** | **61.63** | **12** | *eP* | | **P** | **15 28 55.5** | **+0.3** |
| **VYHS** | **Vyhne** | **61.63** | **12** | *eP* | | **P** | **15 28 55.5** | **+0.3** |
| **GTA** | **Gaotai** | **61.64** | **307** | *eP* | | P | 15 29 00.7 | +5.1 |
| GTA | | | | pP | | sP | 15 29 07.3 | +5.2 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **MOA** | **Molln** | **61.88** | **16** | *eP* | | **P** | **15 28 57.3** | **+0.4** |
| | comp=Z,6.4nm,1.4s | | | | | | | | |
| **CONA** | **Conrad Observa** | **61.95** | **15** | *epP* | | **P** | **15 28 58.1** | **+0.6** |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **MOTA** | **Moosalm** | **62.05** | **18** | *epP* | | **P** | **15 29 00.0** | **+1.8** |
| | comp=Z,4.7nm,1.0s | | | | | | | | |
| **WATA** | **Walderalm** | **62.11** | **18** | *epP* | | **P** | **15 29 00.3** | **+1.6** |
| | comp=Z,2.4nm,0.9s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **62.22** | **14** | *epP* | | **P** | **15 29 00.2** | **+1.0** |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **NJ2** | **Nanjing** | **62.55** | **288** | *eP* | | **P** | **15 29 03.2** | **+1.7** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.5s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **62.55** | **17** | *epP* | | **P** | **15 29 02.3** | **+0.7** |
| | comp=Z,2.8nm,0.7s | | | | | | | | |
| **SOKA** | **Soboth** | **63.11** | **16** | *epP* | | **P** | **15 29 06.2** | **+0.9** |
| | comp=Z,1.5nm,0.8s | | | | | | | | |
| **PRED** | **Cave del Predi** | **63.20** | **17** | P | | **P** | **15 29 05.8** | **-0.1** |
| PRED | | | | IAmb | | IAmb | 15 29 09.2 | | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **OBKA** | **Obir** | **63.23** | **16** | *epP* | | **P** | **15 29 06.6** | **+0.5** |
| | comp=Z,6.5nm,0.8s | | | | | | | | |
| **LZH** | **Lanzhou** | **63.58** | **303** | *eP* | | P | 15 29 13.7 | +5.2 |
| LZH | | | | sP | | sP | 15 29 21.9 | +6.8 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **KIV** | **Kislovodsk** | **66.66** | **354** | *eP* | | **P** | **15 29 29.1** | **+0.7** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **KSH** | **Kashi** | **67.21** | **327** | P | | P | 15 29 40.2 | +8.2 |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MDM | | | IAML | | 15 23 13.2 | | |
| | comp=E,61nm,1.1s | | | | | | |
| MDM | | | IAML | | 15 23 31.1 | | |
| | comp=N,57nm,1.3s | | | | | | |
| **D19K** | **Kuna River** | **4.95 265** | Pn | Pn | 15 22 40.9 | 0.0 | |
| D19K | | | IAML | | 15 23 37.2 | | |
| | comp=E,65nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.03 196** | Pn | Pn | 15 22 42.1 | +0.1 | |
| CCB | | | IAML | | 15 23 26.3 | | |
| | comp=E,42nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **5.07 252** | Pn | Pn | 15 22 42.6 | +0.1 | |
| **MLY** | **Manley** | **5.08 211** | Pn | Pn | 15 22 42.5 | -0.1 | |
| MLY | | | IAML | | 15 23 23.7 | | |
| | comp=E,51nm,1.4s | | | | | | |
| **HDA** | **Harding Lake** | **5.20 191** | Pn | Pn | 15 22 44.3 | 0.0 | |
| **NEA2** | **Nenana** | **5.23 201** | Pn | Pn | 15 22 44.9 | +0.2 | |
| NEA2 | | | IAML | | 15 23 30.6 | | |
| | comp=E,34nm,1.0s | | | | | | |
| NEA2 | | | IAML | | 15 26 05.2 | | |
| | comp=N,40nm,1.4s | | | | | | |
| **WRH** | **Wood River Hil** | **5.23 197** | Pn | Pn | 15 22 44.4 | -0.3 | |
| WRH | | | IAML | | 15 23 24.4 | | |
| | comp=N,52nm,1.4s | | | | | | |
| WRH | | | IAML | | 15 26 13.5 | | |
| | comp=E,39nm,1.1s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.32 273** | Pn | Pn | 15 22 45.4 | -0.5 | |
| C19K | | | IAML | | 15 25 53.7 | | |
| | comp=E,48nm,1.5s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.58 248** | Pn | Pn | 15 22 49.1 | -0.4 | |
| **C18K** | **Utukok River** | **5.99 270** | Pn | Pn | 15 22 54.4 | -0.8 | |
| **E18K** | **Tukpahlearik C** | **6.23 258** | Pn | Pn | 15 22 58.4 | 0.0 | |

*NEIC **12** 15:27:43.5±0.9, 69°55N±0'.05×144°57W±0'.04, h8km±7km, Error ellipse: s-maj=7.3km s-min=2.2km az=176.0*
**AEIC 12 15:27:43.4**±0.9, **69°54N**±0'.05×**144°57W**±0'.04, **h9**km±6km, **ML3.2, ML3.5**/48(NEIC), **Error ellipse: s-maj=7.2km s-min=2.2km az=177.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.31** | **74** | | Pg | 15 27 49.5 | -0.1 |
| C27K | | | | | Sg | 15 27 54.3 | +0.6 |
| **C26K** | **Camden Bay** | **0.39** | **343** | | Pg | 15 27 50.8 | -0.3 |
| C26K | | | | | Sg | 15 27 56.6 | +0.3 |
| **C26K** | **Camden Bay** | **0.39** | **343** | IAML | | 15 27 58.5 | |
| | comp=N,814nm,0.4s | | | | | | |
| C26K | | | | IAML | | 15 28 04.5 | |
| | comp=E,1μm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **0.68** | **252** | | Pg | 15 27 55.9 | -0.6 |
| **D25K** | **Kavik River** | **0.68** | **252** | | Sb | 15 28 06.1 | -0.8 |
| **D27M** | **Malcolm River** | **1.31** | **102** | | Pn | 15 28 07.8 | -0.2 |
| D27M | | | | | Sn | 15 28 26.3 | +0.7 |
| **D27M** | **Malcolm River** | **1.31** | **102** | IAML | | 15 28 29.9 | |
| | comp=N,466nm,0.9s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.46** | **279** | | Pn | 15 28 09.7 | -0.2 |
| C24K | | | | | Sb | 15 28 29.7 | +0.4 |
| **C24K** | **Franklin Bluff** | **1.46** | **279** | IAML | | 15 28 32.3 | |
| | comp=N,898nm,1.0s | | | | | | |
| **D24K** | **Happy Valley** | **1.56** | **257** | | Pn | 15 28 11.2 | -0.1 |
| **D24K** | **Happy Valley** | **1.56** | **257** | IAML | | 15 28 37.5 | |
| | comp=N,786nm,0.8s | | | | | | |
| D24K | | | | IAML | | 15 28 39.3 | |
| | comp=E,709nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.74** | **140** | | Pn | 15 28 14.0 | +0.2 |
| **F26K** | **Sheenjek River** | **1.86** | **175** | | Pn | 15 28 15.7 | +0.2 |
| **F26K** | **Sheenjek River** | **1.86** | **175** | IAML | | 15 28 48.7 | |
| | comp=N,416nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **192** | | Pn | 15 28 17.6 | +0.1 |
| F25K | | | | | Sn | 15 28 43.7 | +1.1 |
| **F25K** | **Christian Rive** | **2.00** | **192** | IAML | | 15 28 51.4 | |
| | comp=N,387nm,0.9s | | | | | | |
| F25K | | | | IAML | | 15 28 52.3 | |
| | comp=E,384nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.01** | **246** | | Pn | 15 28 17.4 | -0.1 |
| **TOLK** | **Toolik Lake Re** | **2.01** | **246** | IAML | | 15 28 52.0 | |
| | comp=E,334nm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **2.04** | **115** | | Pn | 15 28 17.8 | -0.2 |
| **E24K** | **Your Creek** | **2.05** | **226** | | Pn | 15 28 18.1 | -0.1 |
| **E24K** | **Your Creek** | **2.05** | **226** | IAML | | 15 28 58.0 | |
| | comp=E,212nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **2.07** | **93** | | Pn | 15 28 18.0 | -0.3 |
| **C23K** | **Itkillik River** | **2.13** | **281** | | Pn | 15 28 18.8 | -0.3 |
| **C23K** | **Itkillik River** | **2.13** | **281** | IAML | | 15 28 55.7 | |
| | comp=N,393nm,0.9s | | | | | | |
| C23K | | | | IAML | | 15 28 59.7 | |
| | comp=E,363nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.25** | **258** | | Pn | 15 28 20.7 | -0.2 |
| **D23K** | **Nanushuk River** | **2.25** | **258** | IAML | | 15 29 01.8 | |
| | comp=E,156nm,1.0s | | | | | | |
| D23K | | | | IAML | | 15 29 04.5 | |
| | comp=N,161nm,1.5s | | | | | | |
| **E23K** | **Chandalar** | **2.37** | **233** | | Pn | 15 28 22.4 | -0.1 |
| **E23K** | **Chandalar** | **2.37** | **233** | IAML | | 15 29 04.6 | |
| | comp=E,176nm,0.8s | | | | | | |
| E23K | | | | IAML | | 15 29 07.7 | |
| | comp=N,146nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.59** | **136** | Pn | Pn | 15 28 25.2 | -0.3 |
| F28M | | | | IAML | | 15 29 11.5 | |
| | comp=E,162nm,0.9s | | | | | | |
| F28M | | | | IAML | | 15 29 13.0 | |
| | comp=N,120nm,0.6s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.06** | **202** | Pn | Pn | 15 28 31.3 | -0.6 |
| G24K | | | | IAML | | 15 29 27.7 | |
| | comp=E,180nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.15** | **289** | Pn | Pn | 15 28 33.6 | +0.4 |
| **E21K** | **Killik River** | **3.56** | **256** | Pn | Pn | 15 28 38.9 | 0.0 |
| E21K | | | | IAML | | 15 30 50.1 | |
| | comp=E,98nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **4.08** | **142** | | Pn | 15 28 46.1 | +0.2 |
| **H29M** | **Whitestone** | **4.08** | **142** | IAML | | 15 30 58.2 | |
| | comp=E,55nm,1.2s | | | | | | |
| H29M | | | | IAML | | 15 31 29.1 | |
| | comp=N,64nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.35** | **133** | | Pn | 15 28 50.5 | +0.8 |
| **G31M** | **Satah River** | **4.65** | **120** | Pn | Pn | 15 28 53.2 | -0.5 |
| G31M | | | | IAML | | 15 31 04.5 | |
| | comp=N,35nm,1.2s | | | | | | |
| **EGAK** | **Eagle** | **4.97** | **163** | Pn | Pn | 15 28 59.4 | +1.2 |
| EGAK | | | | IAML | | 15 30 31.1 | |
| | comp=N,42nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.99** | **229** | Pn | Pn | 15 28 58.9 | +0.5 |
| **NEA2** | **Nenana** | **5.27** | **202** | Pn | Pn | 15 29 02.6 | +0.2 |
| NEA2 | | | | IAML | | 15 31 17.3 | |
| | comp=E,26nm,0.7s | | | | | | |
| **A36M** | **Sachs Harbour** | **6.82** | **60** | Pn | Pn | 15 29 23.7 | +0.2 |
| **H18K** | **Honhosa River** | **6.90** | **237** | Pn | Pn | 15 29 24.8 | +0.2 |
| **F17K** | **Baldwin Pennin** | **6.99** | **252** | Pn | Pn | 15 29 26.6 | +0.9 |

*NEIC **12** 15:28:55.2±0.9, 69°58N±0'.03×144°93W±0'.06, h3km±5km, Error ellipse: s-maj=4.5km s-min=2.5km az=150.0*
**AEIC 12 15:28:55.4**±0.8, **69°58N**±0'.02×**144°89W**±0'.06, **h4**km±5km, **ML3.3, ML3.5**/78(NEIC), **Error ellipse: s-maj=3.9km s-min=2.5km az=139.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.34** | **358** | | Pg | 15 29 01.6 | -0.3 |
| C26K | | | | | Sg | 15 29 07.2 | +0.8 |
| **C26K** | **Camden Bay** | **0.34** | **358** | IAML | | 15 29 07.9 | |
| | comp=N,4μm,0.8s | | | | | | |
| C26K | | | | IAML | | 15 29 13.3 | |
| | comp=E,4μm,1.0s | | | | | | |
| **C27K** | **Jago River** | **0.41** | **83** | | Pg | 15 29 03.2 | -0.2 |
| C27K | | | | | Sg | 15 29 09.1 | +0.3 |
| **D25K** | **Kavik River** | **0.59** | **245** | | Pg | 15 29 06.2 | -0.5 |
| **C24K** | **Franklin Bluff** | **1.34** | **278** | | Pn | 15 29 20.0 | -0.9 |
| C24K | | | | Sg | Sg | 15 29 37.6 | -0.8 |
| **D27M** | **Malcolm River** | **1.43** | **102** | | Pn | 15 29 21.2 | -0.9 |
| D27M | | | | IAML | | 15 29 47.9 | |
| | comp=N,560nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.46** | **255** | | Pn | 15 29 22.2 | -0.3 |
| **D24K** | **Happy Valley** | **1.46** | **255** | | Sg | 15 29 43.0 | +0.8 |
| **E27K** | **Coleen River** | **1.84** | **138** | | Pn | 15 29 27.8 | 0.0 |
| **F26K** | **Sheenjek River** | **1.91** | **172** | | Pn | 15 29 28.8 | 0.0 |
| F26K | | | | | Sn | 15 29 53.7 | +0.4 |
| **F26K** | **Sheenjek River** | **1.91** | **172** | IAML | | 15 29 59.3 | |
| | comp=E,486nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.93** | **243** | | Pn | 15 29 29.1 | +0.1 |
| **TOLK** | **Toolik Lake Re** | **1.93** | **243** | IAML | | 15 30 00.7 | |
| | comp=N,411nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 15 30 05.6 | |
| | comp=E,382nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.00** | **223** | | Pn | 15 29 29.9 | -0.1 |
| **E24K** | **Your Creek** | **2.00** | **223** | IAML | | 15 30 01.2 | |
| | comp=E,300nm,0.9s | | | | | | |
| E24K | | | | IAML | | 15 30 01.5 | |
| | comp=N,287nm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **2.01** | **280** | | Pn | 15 29 29.6 | -0.5 |
| **C23K** | **Itkillik River** | **2.01** | **280** | | Sb | 15 29 56.9 | -1.0 |
| **F25K** | **Christian Rive** | **2.02** | **188** | | Pn | 15 29 30.1 | -0.1 |
| F25K | | | | | Sn | 15 29 56.7 | +0.8 |
| **F25K** | **Christian Rive** | **2.02** | **188** | IAML | | 15 30 00.9 | |
| | comp=E,490nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **2.15** | **256** | | Pn | 15 29 31.9 | -0.1 |
| **D23K** | **Nanushuk River** | **2.15** | **256** | IAML | | 15 30 20.4 | |
| | comp=E,311nm,1.0s | | | | | | |
| **E28M** | **Babbage River** | **2.15** | **115** | | Pn | 15 29 31.8 | -0.2 |
| **BMAR** | **Burnt Mountain** | **2.16** | **177** | Pn | Pn | 15 29 32.2 | 0.0 |
| **D28M** | **Stokes Point** | **2.18** | **94** | | Pn | 15 29 32.2 | -0.3 |
| **D28M** | **Stokes Point** | **2.18** | **94** | IAML | | 15 30 10.4 | |
| | comp=N,412nm,1.4s | | | | | | |
| **E23K** | **Chandalar** | **2.30** | **231** | | Pn | 15 29 33.9 | -0.2 |
| **E23K** | **Chandalar** | **2.30** | **231** | IAML | | 15 30 12.1 | |
| | comp=E,246nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **209** | | Pn | 15 29 34.7 | -0.1 |
| **F24K** | **Squaw Lake** | **2.35** | **209** | IAML | | 15 30 17.3 | |
| | comp=N,222nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.70** | **135** | | Pn | 15 29 39.4 | -0.1 |
| **F28M** | **Old Crow** | **2.70** | **135** | IAML | | 15 30 27.3 | |
| | comp=N,152nm,0.6s | | | | | | |
| **D22K** | **Ayikyak River** | **2.87** | **259** | Pn | Pn | 15 29 41.9 | 0.0 |
| D22K | | | | IAML | | 15 30 30.9 | |
| | comp=E,209nm,0.7s | | | | | | |
| D22K | | | | IAML | | 15 30 32.5 | |
| | comp=N,199nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.04** | **289** | Pn | Pn | 15 29 43.4 | -0.8 |
| **G24K** | **Hadweenzic Riv** | **3.05** | **200** | Pn | Pn | 15 29 44.0 | -0.4 |
| **B21K** | **Ikpikpuk River** | **3.41** | **275** | Pn | Pn | 15 29 49.3 | 0.0 |
| **E21K** | **Killik River** | **3.46** | **255** | Pn | Pn | 15 29 49.5 | -0.6 |
| E21K | | | | IAML | | 15 30 56.1 | |
| | comp=N,140nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.93** | **198** | Pn | Pn | 15 29 55.9 | -0.6 |
| H24K | | | | IAML | | 15 30 59.2 | |
| | comp=E,86nm,0.9s | | | | | | |
| H24K | | | | IAML | | 15 31 05.7 | |
| | comp=N,75nm,0.6s | | | | | | |
| **F21K** | **Alatna River** | **3.96** | **237** | Pn | Pn | 15 29 56.5 | -0.4 |
| F21K | | | | IAML | | 15 31 09.0 | |
| | comp=N,69nm,0.6s | | | | | | |
| F21K | | | | IAML | | 15 31 09.9 | |
| | comp=E,60nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **4.18** | **141** | Pn | Pn | 15 30 00.3 | +0.5 |
| **B20K** | **Meade River** | **4.28** | **282** | Pn | Pn | 15 30 01.5 | +0.3 |
| **EPYK** | **Eagle Plains** | **4.45** | **132** | Pn | Pn | 15 30 03.6 | -0.1 |
| **I28M** | **Miner Creek** | **4.56** | **153** | Pn | Pn | 15 30 05.4 | +0.1 |
| I28M | | | | IAML | | 15 31 43.6 | |
| | comp=N,34nm,1.1s | | | | | | |
| I28M | | | | IAML | | 15 31 44.4 | |
| | comp=E,40nm,1.4s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.62** | **112** | Pn | Pn | 15 30 05.8 | -0.2 |
| F31M | | | | IAML | | 15 31 28.5 | |
| | comp=E,57nm,1.4s | | | | | | |
| F31M | | | | IAML | | 15 31 44.0 | |
| | comp=N,44nm,1.4s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.75** | **243** | Pn | Pn | 15 30 08.1 | +0.3 |
| F20K | | | | IAML | | 15 31 36.3 | |
| | comp=N,29nm,1.2s | | | | | | |
| **G31M** | **Satah River** | **4.76** | **119** | Pn | Pn | 15 30 08.0 | +0.2 |
| G31M | | | | IAML | | 15 33 16.3 | |
| | comp=N,40nm,1.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **203** | Pn | Pn | 15 30 08.1 | +0.1 |
| I23K | | | | IAML | | 15 31 33.2 | |
| | comp=E,39nm,1.3s | | | | | | |
| I23K | | | | IAML | | 15 31 39.2 | |
| | comp=N,46nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **4.82** | **197** | Pn | Pn | 15 30 08.1 | -0.6 |
| MDM | | | | IAML | | 15 31 25.8 | |
| | comp=N,34nm,0.8s | | | | | | |
| MDM | | | | IAML | | 15 31 26.4 | |
| | comp=E,40nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **4.87** | **263** | | Pn | 15 30 08.9 | -0.5 |
| D19K | | | | IAML | | 15 31 46.8 | |
| | comp=E,35nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **5.01** | **251** | Pn | Pn | 15 30 11.1 | -0.2 |
| E19K | | | | IAML | | 15 31 13.9 | |
| | comp=N,40nm,0.9s | | | | | | |
| E19K | | | | IAML | | 15 31 48.7 | |
| | comp=E,36nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **5.04** | **162** | Pn | Pn | 15 30 11.3 | -0.4 |
| EGAK | | | | IAML | | 15 31 43.1 | |
| | comp=E,26nm,1.2s | | | | | | |
| EGAK | | | | IAML | | 15 31 48.5 | |
| | comp=E,32nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **194** | Pn | Pn | 15 30 11.8 | -0.5 |
| CCB | | | | IAML | | 15 31 12.4 | |
| | comp=E,26nm,0.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.23** | **272** | Pn | Pn | 15 30 14.2 | -0.1 |
| C19K | | | | IAML | | 15 32 04.1 | |
| | comp=N,38nm,1.2s | | | | | | |
| **WRH** | **Wood River Hil** | **5.28** | **195** | Pn | Pn | 15 30 15.0 | 0.0 |
| WRH | | | | IAML | | 15 31 57.6 | |
| | comp=N,20nm,0.8s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.53** | **246** | Pn | Pn | 15 30 17.5 | -0.9 |
| **SCRK** | **Sand Creek** | **5.64** | **176** | Pn | Pn | 15 30 16.7 | -3.3 |
| **BWN** | **Browne** | **5.72** | **201** | Pn | Pn | 15 30 17.0 | -4.1 |
| **C18K** | **Utukok River** | **5.91** | **269** | | Pn | 15 30 22.2 | -1.4 |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **207** | Pn | Pn | 15 30 22.4 | -2.5 |
| **E18K** | **Tukpahlearik C** | **6.17** | **257** | | Pn | 15 30 25.2 | -1.9 |
| **F18K** | **Selawik** | **6.28** | **249** | | Pn | 15 30 28.3 | -0.3 |
| **G18K** | **Tagagawik** | **6.40** | **241** | Pn | Pn | 15 30 30.1 | -0.2 |
| **DHY** | **Denali Highway** | **6.61** | **190** | Pn | Pn | 15 30 33.5 | +0.2 |
| **RDOG** | **Red Dog Mine** | **6.70** | **265** | | Pn | 15 30 32.6 | -1.8 |
| **E17K** | **Hotham Inlet** | **6.75** | **256** | | Pn | 15 30 33.2 | -1.9 |
| **H18K** | **Honhosa River** | **6.83** | **236** | Pn | Pn | 15 30 35.4 | -0.8 |
| **F17K** | **Baldwin Pennin** | **6.89** | **251** | Pn | Pn | 15 30 35.9 | -1.1 |
| **A36M** | **Sachs Harbour** | **6.90** | **60** | Pn | Pn | 15 30 35.8 | -1.4 |
| **D17K** | **Noatak River** | **6.90** | **263** | | Pn | 15 30 35.4 | -1.8 |
| **C16K** | **Lisburne Hills** | **7.48** | **270** | Pn | Pn | 15 30 43.2 | -1.9 |
| **G16K** | **Koyuk River** | **7.89** | **246** | Pn | Pn | 15 30 48.8 | -2.0 |
| **N30M** | **Aishikik Lake** | **8.76** | **155** | Pn | Pn | 15 31 03.2 | +0.4 |

*IDC **12** 15:33:22.6±1.8, 42°.32N×143°.09E, h0km, mb4.0/8, mbtmp3.8/11, ML2.9/3, Error ellipse: s-maj=36.0km s-min=32.1km az=102.0*
*JMA **12** 15:33:31.6±0.2, 42°.0N±0'.8×142°.6E±0'.8, h61km±1km, MV3.6/38, S OFF URAKAWA*
*JMA Felt I J1 at S OFF URAKAWA .*
*NEIC **12** 15:33:31.4±0.7, 42°.00N±0'.08×142°.7E±0'.1, h69km±9km, mb4.5/4, Error ellipse: s-maj=17.4km s-min=8.9km az=119.0*
**ISC 12 15:33:31.3**±0.7, **42°.02N**±0'.05×**142°.62E**±0'.04, **h63**km±6km, **n43**, σ**0°90**/53, **mb4.1**/11, **8D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JNBK** | **Urakawa-nobuka** | **0.28** | **21** | P | **Pn** | **15 33 41.6** | **-0.1** |
| JNBK | | | | eS | **Sn** | **15 33 49.1** | **+0.1** |
| **ERM** | **Erimo** | **0.40** | **91** | P | **Pn** | **15 33 43.2** | **+0.6** |
| ERM | | | | Sn | **Sn** | **15 33 50.5** | **-0.3** |
| **JSHD** | **Hidakashinhida** | **0.40** | **344** | P | **Pn** | **15 33 42.8** | **+0.1** |
| JSHD | | | | eS | **Sn** | **15 33 51.5** | **+0.7** |
| **JEM** | **Erimo** | **0.40** | **91** | P | **Pn** | **15 33 43.2** | **+0.6** |
| JEM | | | | eS | **Sn** | **15 33 50.8** | **0.0** |
| **JTHR** | **Tokachihiroo** | **0.57** | **62** | P | **Pn** | **15 33 44.8** | **+0.5** |
| JTHR | | | | eS | **Sn** | **15 33 54.5** | **+0.7** |
| **JBT2** | **Biratori 2** | **0.78** | **346** | ⇓P | **Pn** | **15 33 46.6** | **-0.1** |
| JBT2 | | | | ⇓eS | **Sn** | **15 33 58.0** | **0.0** |
| **JIAM** | **Iburiatsuma** | **0.79** | **319** | ⇓P | **Pn** | **15 33 47.6** | **+0.7** |
| **JCH** | **Churui** | **0.81** | **43** | P | **Pn** | **15 33 47.4** | **+0.3** |
| **JFR** | **Furan** | **1.14** | **359** | eP | **Pn** | **15 33 51.3** | **0.0** |
| **JEW** | **Eniwo** | **1.19** | **314** | ⇓eP | **Pn** | **15 33 52.2** | **+0.2** |
| **JKB** | **Kayabe** | **1.19** | **264** | ⇓P | **Pn** | **15 33 51.8** | **-0.2** |
| JKB | | | | ⇓eS | **Sn** | **15 34 06.7** | **-0.7** |
| **JNB** | **Noboribetsu** | **1.25** | **291** | P | **Pn** | **15 33 52.0** | **-0.8** |
| JNB | | | | eS | **Sn** | **15 34 08.2** | **-0.6** |
| **JOB** | **Onbets** | **1.26** | **45** | P | **Pn** | **15 33 54.2** | **+1.4** |
| **JOT** | **Ohata** | **1.34** | **242** | ⇓P | **Pn** | **15 33 53.9** | **0.0** |
| **JAB** | **Ashibetsu** | **1.51** | **349** | P | **Pn** | **15 33 56.8** | **+0.5** |
| **JAR** | **Ashorobuto** | **1.53** | **33** | P | **Pn** | **15 33 56.8** | **+0.3** |
| JAR | | | | eS | **Sn** | **15 34 15.9** | **+0.4** |
| **JISS** | **Ishikarishitsu** | **1.53** | **325** | ⇓P | **Pn** | **15 33 56.8** | **+0.3** |
| **JTM** | **Tenmabayashi** | **1.70** | **224** | Pn | **Pn** | **15 33 59.4** | **+0.7** |
| **JKA** | **Kamikawa-asahi** | **2.09** | **360** | | **Pn** | **15 34 04.9** | **+0.9** |
| **JMM** | **Marumori** | **4.38** | **199** | Pn | **Pn** | **15 34 35.7** | **+0.4** |
| **MJB9** | **Matsu-Tunnel** | **6.45** | **213** | Pn | **Pn** | **15 35 03.6** | **-0.1** |
| **MAJO** | **Matsushiro** | **6.45** | **213** | Pn | **Pn** | **15 35 03.7** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **6.45** | **213** | Pn | **Pn** | **15 35 04.5** | **+0.7** |
| | 0.1nm,0.3s,baz=37,slow=12,SNR=2.4 1.1nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.07** | **289** | Pn | **Pn** | **15 35 25.1** | **-0.7** |
| USRK | 0.2nm,0.3s,baz=91,slow=13,SNR=4.8 | | | Sn | **Sn** | **15 36 59.9** | **+4.3** |
| | 0.3nm,0.3s,baz=157,slow=44,SNR=2.6 2.2nm,0.7s | | | | | | |
| **JHJ2** | **Mitsune** | **9.17** | **195** | Pn | **Pn** | **15 35 40.2** | **-0.7** |
| **KSRS** | **Korea Array** | **12.20** | **253** | Pn | **Pn** | **15 36 24.6** | **+2.5** |
| | 0.2nm,0.3s,baz=64,slow=13,SNR=5.8 1.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **26.12** | **295** | P | **P** | **15 38 60.0** | **+0.6** |
| | 0.3nm,0.3s,baz=71,slow=7.1,SNR=2.3 0.3nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.41** | **308** | P | **P** | **15 40 54.3** | **-0.4** |
| | 1.7nm,0.7s,baz=77,slow=9.3,SNR=5.9 1.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.44** | **298** | P | **P** | **15 41 19.2** | **-0.5** |
| **MKAR** | **Makanchi Array** | **42.44** | **298** | P | **P** | **15 41 19.7** | **0.0** |
| | 0.9nm,0.8s,baz=79,slow=6.3,SNR=2.6 0.9nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **42.64** | **298** | P | **P** | **15 41 21.3** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 15 41 54.5 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **KURK** | **Kurchatov** | **43.74** | **304** | P | **P** | **15 41 29.5** | **-0.6** |
| KURK | | | | IAmb | IAmb | 15 41 30.7 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.82** | **304** | P | **P** | **15 41 30.6** | **-0.2** |
| | comp=Z,1.8nm,0.6s,baz=77,slow=8.9,SNR=9.5 comp=Z,1.8nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **48.02** | **309** | P | **P** | **15 42 04.0** | **+0.2** |
| | comp=Z,1.5nm,0.5s,baz=79,slow=9.6,SNR=11 comp=Z,1.5nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **51.55** | **297** | P | **P** | **15 42 30.3** | **-0.5** |
| **P32M** | **Atlin** | **51.98** | **40** | P | **P** | **15 42 32.5** | **-1.2** |
| **ABKAR** | **Akbulak array** | **55.52** | **308** | P | **P** | **15 42 59.8** | **+0.1** |
| **FINES** | **FINESS Array B** | **64.85** | **332** | P | **P** | **15 44 01.8** | **-1.4** |
| | comp=Z,3.5nm,0.8s,baz=56,slow=7.4,SNR=4.2 comp=Z,3.5nm,0.8s | | | | | | |
| **NC405** | **NORSAR Array S** | **69.75** | **337** | P | **P** | **15 44 34.0** | **-0.2** |
| NC405 | | | | IAmb | IAmb | 15 44 59.9 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.95** | **337** | P | **P** | **15 44 35.2** | **-0.3** |
| | comp=Z,2.8nm,0.8s,baz=39,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.95** | **337** | P | **P** | **15 44 35.2** | **-0.3** |
| | comp=Z,0.6nm,0.6s,baz=38,slow=6.4,SNR=3.5 comp=Z,0.6nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **70.94** | **322** | P | **P** | **15 44 41.3** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=41,slow=6.4,SNR=2.2 comp=Z,0.5nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **145.78** | **199** | PKPbc | **PKPab** | **15 53 02.8** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=129,slow=3.1,SNR=2.4 | | | | | | |

*NEIC **12** 15:33:37.4±0.9, 69°56N±0'.04×144°3W±0'.1, h10km±2km, Error ellipse: s-maj=8.0km s-min=5.2km az=34.0*
**AEIC 12 15:33:37.4**±0.8, **69°57N**±0'.05×**144°4W**±0'.1, **h10**km±6km, **ML3.6, ML4.1**/66(NEIC), **Error ellipse: s-maj=7.4km s-min=4.7km az=212.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **76** | | Pg | 15 33 46.0 | +3.7 |
| **C26K** | **Camden Bay** | **0.40** | **333** | | Pg | 15 33 45.2 | 0.0 |
| C26K | | | | | Sg | 15 33 50.7 | +0.3 |
| **C26K** | **Camden Bay** | **0.40** | **333** | IAML | | 15 33 53.2 | |
| | comp=N,2μm,1.1s | | | | | | |
| C26K | | | | IAML | | 15 33 57.4 | |
| | comp=E,2μm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.74** | **252** | | Pg | 15 33 50.6 | -1.1 |
| **D27M** | **Malcolm River** | **1.25** | **103** | | Pn | 15 34 00.5 | -0.5 |
| **C24K** | **Franklin Bluff** | **1.52** | **278** | | Pn | 15 34 04.7 | +0.2 |
| **C24K** | **Franklin Bluff** | **1.52** | **278** | IAML | | 15 34 27.5 | |
| | comp=N,916nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.62** | **257** | | Pn | 15 34 06.1 | +0.1 |
| D24K | | | | | Sg | 15 34 28.8 | -0.7 |
| **D24K** | **Happy Valley** | **1.62** | **257** | IAML | | 15 34 32.9 | |
| | comp=N,848nm,0.6s | | | | | | |
| D24K | | | | IAML | | 15 34 35.2 | |
| | comp=E,874nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.72** | **143** | | Pn | 15 34 06.9 | -0.5 |
| **F26K** | **Sheenjek River** | **1.88** | **177** | Pn | Pn | 15 34 09.1 | -0.6 |
| F26K | | | | IAML | | 15 34 40.7 | |
| | comp=E,878nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.99** | **117** | | Pn | 15 34 10.8 | -0.4 |
| **D28M** | **Stokes Point** | **2.01** | **94** | | Pn | 15 34 10.6 | -0.7 |
| **D28M** | **Stokes Point** | **2.01** | **94** | IAML | | 15 34 47.4 | |
| | comp=E,645nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **194** | | Pn | 15 34 10.6 | -1.2 |
| **F25K** | **Christian Rive** | **2.04** | **194** | | Sb | 15 34 38.6 | -1.2 |
| **F25K** | **Christian Rive** | **2.04** | **194** | IAML | | 15 34 45.9 | |
| | comp=N,629nm,0.8s | | | | | | |
| F25K | | | | IAML | | 15 34 46.3 | |
| | comp=E,431nm,1.4s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.08** | **246** | | Pn | 15 34 12.5 | +0.2 |
| **TOLK** | **Toolik Lake Re** | **2.08** | **246** | IAML | | 15 35 29.0 | |
| | comp=E,806nm,0.9s | | | | | | |
| TOLK | | | | IAML | | 15 35 32.3 | |
| | comp=N,549nm,1.0s | | | | | | |
| **E24K** | **Your Creek** | **2.11** | **227** | | Pn | 15 34 13.1 | +0.3 |
| **E24K** | **Your Creek** | **2.11** | **227** | IAML | | 15 35 28.0 | |
| | comp=N,808nm,0.6s | | | | | | |
| E24K | | | | IAML | | 15 35 28.3 | |
| | comp=E,530nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.19** | **280** | | Pn | 15 34 13.5 | -0.3 |
| **C23K** | **Itkillik River** | **2.19** | **280** | IAML | | 15 35 33.2 | |
| | comp=N,466nm,0.6s | | | | | | |
| C23K | | | | IAML | | 15 35 36.8 | |
| | comp=E,1μm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.32** | **258** | | Pn | 15 34 15.6 | 0.0 |
| **D23K** | **Nanushuk River** | **2.32** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SCRK | Sand Creek | 5.62 | 178 | | Pn | 15 35 01.4 | +0.3 |
| SCRK | Sand Creek | 5.62 | 178 | | Sn | 15 36 13.5 | +7.9 |
| F19K | Shaleruckik Mo | 5.69 | 248 | Pn | Pn | 15 35 02.5 | +0.7 |
| BWN | Browne | 5.78 | 203 | Pn | Pn | 15 35 02.6 | -0.4 |
| J30M | Hart River | 5.92 | 144 | | Pn | 15 35 04.7 | -0.4 |
| J30M | Hart River | 5.92 | 144 | | Sn | 15 36 17.4 | +4.5 |
| C18K | Utukok River | 6.08 | 269 | Pn | Pn | 15 35 07.5 | +0.2 |
| A36M | Sachs Harbour | 6.75 | 60 | Pn | Pn | 15 35 16.2 | -0.2 |
| RDOG | Red Dog Mine | 6.87 | 266 | Pn | Pn | 15 35 18.2 | +0.1 |
| H18K | Honhosa River | 6.97 | 237 | Pn | Pn | 15 35 19.6 | +0.2 |
| F15K | North Star Dit | 8.61 | 253 | Pn | Pn | 15 35 41.5 | -0.4 |
| RC01 | Rabbit Creek A | 8.80 | 197 | Pn | Pn | 15 35 41.9 | -2.5 |

*IDC* ***12*** *15:34:48.0±0.6,69°.64N×145°.05W,h0km,mb3.8/16, mbtmp3.9/20,ML4.4/4,Error ellipse: s-maj=18.5km s-min=11.4km az=72.0*

*AEIC* ***12*** *15:34:49.6±0.9,69°.53N±0°.06×144°.68W±0°.08,h2km±5km, ML4.4,mb4.7/5(NEIC),ML4.5/116(NEIC),Error ellipse: s-maj=8.3km s-min=3.9km az=191.0*

*NEIC* ***12*** *15:34:50.2±0.8,69°.57N±0°.04×144°.66W±0°.08,h10km±1km, Error ellipse: s-maj=6.6km s-min=4.7km az=182.0*

**ISC 12 15:34:49.3±0.7,69°.56N±0°.03×144°.68W±0°.02,h9km±5km, n165,σ1°.04/152,mb4.0/20,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | **Jago River** | **0.35** | **79** | | **Pg** | **15 34 56.2** | **+0.1** |
| C27K | | | | | **Sg** | **15 35 01.3** | **+0.6** |
| C26K | **Camden Bay** | **0.37** | **347** | | **Pg** | **15 34 57.1** | **+0.6** |
| C26K | | | | | **Sb** | **15 35 03.1** | **-0.7** |
| C26K | **Camden Bay** | **0.37** | **347** | IAML | | 15 35 04.3 | |
| | comp=E,32µm,0.6s | | | | | | |
| C26K | | | | IAML | | 15 35 05.3 | |
| | comp=N,38µm,0.6s | | | | | | |
| D25K | **Kavik River** | **0.65** | **249** | | **Pg** | **15 35 00.7** | **-1.1** |
| D25K | **Kavik River** | **0.65** | **249** | | **Sg** | **15 35 10.0** | **-0.2** |
| D27M | **Malcolm River** | **1.35** | **102** | Pn | **Pn** | **15 35 14.3** | **-0.1** |
| D27M | **Malcolm River** | **1.35** | **102** | | **Sg** | **15 35 34.1** | **+1.4** |
| C24K | **Franklin Bluff** | **1.42** | **278** | | **Pb** | **15 35 16.1** | **+0.2** |
| C24K | | | | | **Sg** | **15 35 35.8** | **+1.1** |
| C24K | **Franklin Bluff** | **1.42** | **278** | IAML | | 15 35 42.6 | |
| | comp=E,10µm,1.0s | | | | | | |
| D24K | **Happy Valley** | **1.52** | **256** | | **Pb** | **15 35 17.6** | **-0.2** |
| D24K | | | | IAML | | 15 35 41.6 | |
| | comp=N,9µm,0.8s | | | | | | |
| D24K | | | | IAML | | 15 35 44.6 | |
| | comp=E,6µm,1.2s | | | | | | |
| E27K | **Coleen River** | **1.78** | **140** | | **Pn** | **15 35 20.8** | **+0.5** |
| E27K | **Coleen River** | **1.78** | **140** | | **Sb** | **15 35 44.9** | **+0.5** |
| F26K | **Sheenjek River** | **1.89** | **174** | | **Pn** | **15 35 22.6** | **+0.8** |
| F26K | | | | | **Sb** | **15 35 47.4** | **-0.1** |
| F26K | **Sheenjek River** | **1.89** | **174** | IAML | | 15 35 51.9 | |
| | comp=N,4µm,0.9s | | | | | | |
| F26K | | | | IAML | | 15 35 53.3 | |
| | comp=E,5µm,0.8s | | | | | | |
| TOLK | **Toolik Lake Re** | **1.98** | **245** | | **Pn** | **15 35 24.0** | **+0.9** |
| TOLK | | | | IAML | | 15 35 60.0 | |
| | comp=E,4µm,1.1s | | | | | | |
| TOLK | | | | IAML | | 15 36 06.6 | |
| | comp=N,3µm,1.0s | | | | | | |
| F25K | **Christian Rive** | **2.01** | **191** | | **Pn** | **15 35 24.3** | **+0.9** |
| F25K | | | | | **Sb** | **15 35 50.5** | **-0.6** |
| F25K | **Christian Rive** | **2.01** | **191** | IAML | | 15 35 56.3 | |
| | comp=N,4µm,0.7s | | | | | | |
| F25K | | | | IAML | | 15 35 58.0 | |
| | comp=E,3µm,0.7s | | | | | | |
| E24K | **Your Creek** | **2.04** | **225** | | **Pn** | **15 35 24.5** | **+0.7** |
| E24K | | | | IAML | | 15 35 55.4 | |
| | comp=E,2µm,0.8s | | | | | | |
| E24K | | | | IAML | | 15 36 04.9 | |
| | comp=N,2µm,0.8s | | | | | | |
| E28M | **Babbage River** | **2.08** | **115** | | **Pb** | **15 35 26.1** | **-1.1** |
| C23K | **Itkillik River** | **2.09** | **280** | Pn | **Pb** | **15 35 26.3** | **-1.0** |
| C23K | | | | IAML | | 15 35 58.8 | |
| | comp=E,8µm,1.3s | | | | | | |
| C23K | | | | IAML | | 15 35 60.0 | |
| | comp=N,7µm,1.1s | | | | | | |
| D28M | **Stokes Point** | **2.11** | **94** | | **Pn** | **15 35 26.3** | **+1.6** |
| D28M | **Stokes Point** | **2.11** | **94** | IAML | | 15 36 12.5 | |
| | comp=N,3µm,0.9s | | | | | | |
| BMAR | **Burnt Mountain** | **2.14** | **179** | | **Pn** | **15 35 26.0** | **+0.8** |
| D23K | **Nanushuk River** | **2.22** | **257** | | **Pn** | **15 35 27.4** | **+1.1** |
| D23K | **Nanushuk River** | **2.22** | **257** | IAML | | 15 36 13.0 | |
| | comp=E,4µm,1.1s | | | | | | |
| D23K | | | | IAML | | 15 36 16.0 | |
| | comp=N,3µm,0.9s | | | | | | |
| E23K | **Chandalar** | **2.34** | **232** | | **Pn** | **15 35 29.0** | **+1.0** |
| E23K | **Chandalar** | **2.34** | **232** | IAML | | 15 36 09.2 | |
| | comp=E,2µm,1.2s | | | | | | |
| F24K | **Squaw Lake** | **2.37** | **211** | | **Pn** | **15 35 29.4** | **+1.1** |
| F28M | **Old Crow** | **2.63** | **136** | | **Pn** | **15 35 32.1** | **+0.1** |
| G26K | **Porcupine Rive** | **2.64** | **172** | | **Pn** | **15 35 33.0** | **+0.9** |
| E29M | **Blow River** | **2.71** | **112** | | **Pn** | **15 35 33.8** | **+0.7** |
| E29M | | | | IAML | | 15 36 21.9 | |
| | comp=N,2µm,0.7s | | | | | | |
| G25K | **Bearman Lake** | **2.86** | **191** | | **Pn** | **15 35 35.9** | **+0.9** |
| D22K | **Ayikyak River** | **2.93** | **260** | | **Pn** | **15 35 37.1** | **+1.1** |
| D22K | **Ayikyak River** | **2.93** | **260** | IAML | | 15 36 32.4 | |
| | comp=E,2µm,1.0s | | | | | | |
| G27K | **Doyon Strip** | **2.99** | **156** | | **Pn** | **15 35 37.7** | **+0.8** |
| FYU | **Fort Yukon** | **3.02** | **184** | Pn | **Pn** | **15 35 38.0** | **+0.8** |
| FYU | | | | IAML | | 15 36 30.0 | |
| | comp=N,2µm,0.8s | | | | | | |
| G24K | **Hadweenzic Riv** | **3.06** | **201** | | **Pn** | **15 35 38.0** | **+0.2** |
| COLD | **Coldfoot** | **3.11** | **224** | | **Pn** | **15 35 39.1** | **+0.7** |
| B22K | **Teshekpuk Lake** | **3.11** | **289** | | **Pn** | **15 35 39.6** | **+1.1** |
| F22K | **John River** | **3.44** | **237** | | **Pn** | **15 35 44.2** | **+1.1** |
| B21K | **Ikpikpuk River** | **3.48** | **276** | | **Pn** | **15 35 44.8** | **+1.3** |
| G23K | **Bananza Creek** | **3.49** | **217** | | **Pn** | **15 35 44.6** | **+0.9** |
| G23K | **Bananza Creek** | **3.49** | **217** | IAML | | 15 36 50.0 | |
| | comp=E,1µm,1.2s | | | | | | |
| E21K | **Killik River** | **3.53** | **256** | | **Pn** | **15 35 45.1** | **+0.8** |
| H27K | **Steamboat Moun** | **3.55** | **159** | | **Pn** | **15 35 45.4** | **+0.8** |
| G29M | **Pine Creek** | **3.64** | **134** | | **Pn** | **15 35 46.0** | **+0.3** |
| G29M | | | | IAML | | 15 36 53.8 | |
| | comp=N,814nm,1.0s | | | | | | |
| G29M | | | | IAML | | 15 37 12.7 | |
| | comp=E,1µm,1.2s | | | | | | |
| G22K | **Bettles** | **3.67** | **227** | | **Pn** | **15 35 47.1** | **+0.9** |
| A22K | **Sinclair Lake** | **3.78** | **297** | | **Pn** | **15 35 48.6** | **+1.0** |
| F30M | **Barrier River** | **3.80** | **117** | | **Pn** | **15 35 48.8** | **+0.8** |
| H24K | **Noodor Dome** | **3.93** | **200** | | **Pn** | **15 35 50.0** | **+0.1** |
| F21K | **Alatna River** | **4.01** | **238** | | **Pn** | **15 35 51.5** | **+0.6** |
| F21K | | | | IAML | | 15 36 59.4 | |
| | comp=E,561nm,1.2s | | | | | | |
| F21K | | | | IAML | | 15 37 08.6 | |
| | comp=N,490nm,0.9s | | | | | | |
| G30M | **tAoh Zraii Nji** | **4.07** | **125** | Pn | **Pn** | **15 35 52.8** | **+1.1** |
| G30M | | | | IAML | | 15 37 22.8 | |
| | comp=N,512nm,1.1s | | | | | | |
| PRP | **Porcupine Dome** | **4.08** | **185** | | **Pn** | **15 35 53.2** | **+1.3** |
| PRP | | | | IAML | | 15 37 03.8 | |
| | comp=N,478nm,1.3s | | | | | | |
| PRP | | | | IAML | | 15 37 07.6 | |
| | comp=E,519nm,1.2s | | | | | | |
| H29M | **Whitestone** | **4.12** | **142** | | **Pn** | **15 35 52.7** | **+0.4** |
| H29M | | | | IAML | | 15 37 13.4 | |
| | comp=N,627nm,1.1s | | | | | | |
| H29M | | | | IAML | | 15 37 15.3 | |
| | comp=E,593nm,1.3s | | | | | | |
| I27K | **Kandik River** | **4.14** | **162** | | **Pn** | **15 35 52.8** | **0.0** |
| H23K | **Yukon River** | **4.18** | **209** | | **Pn** | **15 35 53.7** | **+0.4** |
| INK | **Inuvik** | **4.22** | **102** | Pn | **Pn** | **15 35 54.7** | **+1.0** |
| INK | **Inuvik** | **4.22** | **102** | Pn | **Pn** | **15 35 54.8** | **+1.0** |
| | comp=E,9.2nm,0.3s,baz=290,slow=8.6,SNR=9.0 | | | | | | |
| INK | | | | Sn | **Sn** | **15 36 41.8** | **-1.2** |
| | comp=E,15nm,0.3s,baz=300,slow=8.1,SNR=2.9 | | | | | | |
| | comp=E,20nm,0.3s | | | | | | |
| B20K | **Meade River** | **4.35** | **282** | | **Pn** | **15 35 56.2** | **+0.7** |
| E20K | **Nigu River** | **4.36** | **258** | | **Pn** | **15 35 56.7** | **+1.0** |
| A21K | **Barrow** | **4.38** | **299** | | **Pn** | **15 35 56.9** | **+0.9** |
| EPYK | **Eagle Plains** | **4.39** | **133** | | **Pn** | **15 35 56.9** | **+0.8** |
| EPYK | **Eagle Plains** | **4.39** | **133** | IAML | | 15 37 13.8 | |
| | comp=E,653nm,1.1s | | | | | | |
| H22K | **Ishtalitna Cre** | **4.48** | **218** | | **Pn** | **15 35 58.0** | **+0.7** |
| G21K | **Allakaket** | **4.51** | **231** | | **Pn** | **15 35 58.7** | **+1.0** |
| I28M | **Miner Creek** | **4.51** | **154** | | **Pn** | **15 35 58.7** | **+0.8** |
| I28M | | | | IAML | | 15 37 25.5 | |
| | comp=E,469nm,1.2s | | | | | | |
| F31M | **Tsiigehtchic** | **4.55** | **113** | | **Pn** | **15 35 59.4** | **+1.1** |
| F31M | **Tsiigehtchic** | **4.55** | **113** | IAML | | 15 37 21.1 | |
| | comp=E,456nm,1.4s | | | | | | |
| F31M | | | | IAML | | 15 37 26.0 | |
| | comp=N,432nm,1.5s | | | | | | |
| POKR | **Poker Plat Res** | **4.59** | **195** | | **Pn** | **15 35 59.6** | **+0.7** |
| POKR | **Poker Plat Res** | **4.59** | **195** | IAML | | 15 37 14.5 | |
| POKR | | | | IAML | | 15 37 29.0 | |
| | comp=N,434nm,1.2s | | | | | | |
| G31M | **Satah River** | **4.69** | **119** | | **Pn** | **15 36 01.2** | **+1.1** |
| G31M | **Satah River** | **4.69** | **119** | IAML | | 15 37 24.7 | |
| | comp=E,419nm,1.5s | | | | | | |
| G31M | | | | IAML | | 15 37 31.0 | |
| | comp=N,319nm,1.4s | | | | | | |
| I23K | **Minto, Yukon-K** | **4.79** | **204** | IAML | | 15 37 27.7 | |
| | comp=N,525nm,1.3s | | | | | | |
| I23K | | | | IAML | | 15 37 37.2 | |
| | comp=E,512nm,1.5s | | | | | | |
| F20K | **Avaraart Lake** | **4.81** | **244** | | **Pn** | **15 36 02.8** | **+1.0** |
| MDM | **Murphy Dome** | **4.82** | **198** | | **Pn** | **15 36 02.4** | **+0.3** |
| MDM | | | | IAML | | 15 37 26.0 | |
| | comp=E,366nm,1.3s | | | | | | |
| MDM | | | | IAML | | 15 37 30.8 | |
| | comp=N,438nm,1.4s | | | | | | |
| COLA | **College** | **4.87** | **196** | | **Pn** | **15 36 03.0** | **+0.5** |
| I29M | **Ogilvie Camp,** | **4.88** | **147** | | **Pn** | **15 36 03.6** | **+0.9** |
| I29M | **Ogilvie Camp,** | **4.88** | **147** | IAML | | 15 37 30.6 | |
| | comp=E,315nm,1.2s | | | | | | |
| I29M | | | | IAML | | 15 37 32.9 | |
| | comp=N,342nm,1.1s | | | | | | |
| IL31 | | **4.89** | **191** | | **Pn** | **15 36 03.7** | **+0.9** |
| ILAR | **Eielson Array** | **4.89** | **191** | | **Pn** | **15 36 03.9** | **+1.0** |
| ILAR | **Eielson Array** | **4.89** | **191** | Pn | **Pn** | **15 36 03.4** | **+0.5** |
| | comp=N,10.0nm,0.3s,baz=6.7,slow=13,SNR=15 | | | | | | |
| ILAR | | | | Sn | **Sn** | **15 37 00.1** | **+0.6** |
| | comp=N,18nm,0.3s,baz=11,slow=13,SNR=4.9 | | | | | | |
| ILAR | | | | Lg | Lg | 15 37 21.6 | |
| | comp=N,22nm,0.3s,baz=6.1,slow=31,SNR=12 | | | | | | |
| | comp=N,29nm,0.7s | | | | | | |
| D19K | **Kuna River** | **4.94** | **264** | | **Pn** | **15 36 04.5** | **+0.8** |
| IMAR | **Indian Mountai** | **4.97** | **228** | | **Pn** | **15 36 03.9** | **-0.1** |
| J25K | **Salcha River,** | **4.98** | **183** | | **Pn** | **15 36 04.8** | **+0.6** |
| J25K | **Salcha River,** | **4.98** | **183** | IAML | | 15 37 36.0 | |
| | comp=E,370nm,1.5s | | | | | | |
| J25K | | | | IAML | | 15 37 38.7 | |
| | comp=N,272nm,0.9s | | | | | | |
| EGAK | **Eagle** | **5.00** | **162** | Pn | **Pn** | **15 36 04.9** | **+0.5** |
| EGAK | | | | IAML | | 15 37 36.0 | |
| | comp=N,287nm,1.1s | | | | | | |
| EGAK | | | | IAML | | 15 37 53.1 | |
| | comp=N,282nm,1.2s | | | | | | |
| H21K | **Melozitna River** | **5.00** | **222** | | **Pn** | **15 36 05.1** | **+0.7** |
| E19K | **Redstone River** | **5.07** | **251** | | **Pn** | **15 36 06.3** | **+0.8** |
| E19K | **Redstone River** | **5.07** | **251** | IAML | | 15 37 56.7 | |
| | comp=E,389nm,1.2s | | | | | | |
| CCB | **Clear Creek Bu** | **5.08** | **195** | | **Pn** | **15 36 06.1** | **+0.5** |
| J26L | **Joseph Creek** | **5.10** | **175** | | **Pn** | **15 36 06.6** | **+0.7** |
| J26L | **Joseph Creek** | **5.10** | **175** | IAML | | 15 37 30.3 | |
| | comp=E,270nm,1.2s | | | | | | |
| MLY | **Manley** | **5.12** | **210** | | **Pn** | **15 36 06.7** | **+0.6** |
| MLY | **Manley** | **5.12** | **210** | IAML | | 15 37 39.6 | |
| | comp=E,300nm,1.5s | | | | | | |
| HDA | **Harding Lake** | **5.25** | **191** | | **Pn** | **15 36 08.9** | **+1.1** |
| HDA | | | | IAML | | 15 37 34.3 | |
| | comp=N,280nm,1.3s | | | | | | |
| NEA2 | **Nenana** | **5.28** | **201** | | **Pn** | **15 36 08.3** | **+0.1** |
| NEA2 | **Nenana** | **5.28** | **201** | IAML | | 15 37 35.7 | |
| | comp=E,197nm,1.4s | | | | | | |
| WRH | **Wood River Hil** | **5.28** | **196** | | **Pn** | **15 36 09.0** | **+0.7** |
| WRH | | | | IAML | | 15 37 44.2 | |
| | comp=E,362nm,1.4s | | | | | | |
| WRH | | | | IAML | | 15 37 47.0 | |
| | comp=N,278nm,1.3s | | | | | | |
| C19K | **Lookout Ridge** | **5.30** | **272** | | **Pn** | **15 36 09.3** | **+0.7** |
| C19K | **Lookout Ridge** | **5.30** | **272** | IAML | | 15 37 56.8 | |
| | comp=E,288nm,1.5s | | | | | | |
| H20K | **Anotleneega Mo** | **5.65** | **229** | | **Pn** | **15 36 13.6** | **+0.2** |
| A19K | **Wainwright** | **5.69** | **284** | | **Pn** | **15 36 14.4** | **+0.5** |
| K24K | **Donnelly Dome** | **5.80** | **185** | | **Pn** | **15 36 16.0** | **+0.5** |
| G19K | **Purcell Mounta** | **5.81** | **240** | | **Pn** | **15 36 15.3** | **-0.2** |
| DOT | **Dot Lake** | **5.94** | **177** | | **Pn** | **15 36 17.8** | **+0.4** |
| C18K | **Utukok River** | **5.98** | **269** | | **Pn** | **15 36 18.0** | **+0.1** |
| RND | **Reindeer** | **6.40** | **197** | | **Pn** | **15 36 24.4** | **+0.6** |
| BCAR | **Beaver Creek A** | **6.63** | **168** | | **Pn** | **15 36 27.8** | **+1.0** |
| PAX | **Paxson** | **6.63** | **183** | | **Pn** | **15 36 27.8** | **+0.9** |
| A36M | **Sachs Harbour** | **6.85** | **60** | | **Pn** | **15 36 28.9** | **-0.8** |
| WAT1 | **Susitna Watana** | **6.94** | **195** | | **Pn** | **15 36 31.9** | **+0.9** |
| F17K | **Baldwin Pennin** | **6.96** | **251** | | **Pn** | **15 36 30.9** | **-0.3** |
| WAT7 | **Susitna Watana** | **6.96** | **196** | | **Pn** | **15 36 32.5** | **+1.0** |
| D17K | **Noatak River** | **6.97** | **263** | | **Pn** | **15 36 30.5** | **-1.0** |
| WAT6 | **Susitna Watana** | **7.12** | **191** | | **Pn** | **15 36 35.1** | **+1.4** |
| HARP | **HAARP** | **7.20** | **182** | | **Pn** | **15 36 36.4** | **+1.8** |
| M26K | **Nabesna, AK** | **7.22** | **174** | | **Pn** | **15 36 36.9** | **+1.8** |
| M27K | **Edge Creek, AK** | **7.32** | **170** | | **Pn** | **15 36 37.9** | **+1.4** |
| SCM | **Sheep Creek Mo** | **7.84** | **189** | | **Pn** | **15 36 45.1** | **+1.7** |
| YUK2 | **White River** | **7.96** | **167** | | **Pn** | **15 36 46.7** | **+1.5** |
| YUK3 | **Moose Creek** | **8.01** | **165** | | **Pn** | **15 36 47.2** | **+1.3** |
| GHO | **Glory Hole Cre** | **8.01** | **195** | | **Pn** | **15 36 46.6** | **+0.7** |
| SKT | **Skwentna** | **8.11** | **204** | | **Pn** | **15 36 47.9** | **+0.7** |
| GLB | **Gilahina Butte** | **8.16** | **177** | | **Pn** | **15 36 49.7** | **+1.9** |
| VRDI | **Verde Repeater** | **8.38** | **176** | | **Pn** | **15 36 52.8** | **+1.8** |
| N30M | **Aishikik Lake** | **8.71** | **155** | | **Pn** | **15 36 55.8** | **+0.3** |
| CTGM | **Chitina Glacie** | **8.74** | **169** | | **Pn** | **15 36 58.4** | **+2.5** |
| L18K | **Granite Mounta** | **8.84** | **219** | | **Pn** | **15 36 56.7** | **-0.3** |
| TGL | **Tana Glacier** | **8.88** | **174** | | **Pn** | **15 36 58.6** | **+0.9** |
| BARK | **Barkley Ridge** | **9.24** | **173** | | **Pn** | **15 37 05.0** | **+2.3** |
| WHY | **Whitehorse** | **9.83** | **151** | Pn | **Pn** | **15 37 11.4** | **+0.7** |
| J14K | **Nanvaranak Lak** | **10.20** | **237** | | **Pn** | **15 37 15.8** | **+0.1** |
| P29M | **Windy Craggy** | **10.40** | **160** | | **Pn** | **15 37 18.7** | **+0.3** |
| WRGLY | **Wrigley** | **10.56** | **117** | | **Pn** | **15 37 20.1** | **-0.5** |
| SKAG | **Skagway** | **10.89** | **154** | | **Pn** | **15 37 26.0** | **+0.9** |
| Q32M | **Nakina River** | **11.89** | **147** | | **Pn** | **15 37 39.5** | **+0.5** |
| KDAK | **Kodiak Island** | **12.31** | **200** | Pn | **Pn** | **15 37 46.8** | **+2.2** |
| | comp=E,0.1nm,0.3s,baz=38,slow=18,SNR=1.8 | | | | | | |
| DLBC | **Dease Lake** | **12.83** | **143** | Pn | **Pn** | **15 37 51.2** | **-0.4** |
| | comp=E,1.7nm,0.3s,baz=334,slow=14,SNR=5.5 | | | | | | |
| | comp=E,4.1nm,0.5s | | | | | | |
| S34M | **Telegraph Cree** | **13.09** | **146** | | **Pn** | **15 37 55.9** | **+0.8** |
| YKA | **Yellowknife Ar** | **13.98** | **106** | Pn | **Pn** | **15 38 03.4** | **-3.9** |
| | comp=E,2.0nm,0.3s,baz=318,slow=24,SNR=15 | | | | | | |
| YKA | | | | Sn | Sn | 15 40 29.8 | -13 |
| | comp=E,1.7nm,0.3s,baz=321,slow=9.7,SNR=4.5 | | | | | | |
| | comp=E,2.9nm,0.4s | | | | | | |
| EUNU | **Eureka** | **17.42** | **30** | P | **P** | **15 38 53.9** | **+0.4** |
| PDAR | **Pinedale Array** | **32.33** | **128** | P | **P** | **15 41 19.4** | **+0.7** |
| | comp=E,1.1nm,0.6s,baz=5.6,slow=2.4,SNR=7.4 | | | | | | |
| | comp=E,1.1nm,0.6s | | | | | | |
| NVAR | **Mina Array Bea** | **34.24** | **142** | P | **P** | **15 41 36.3** | **+0.9** |
| | comp=E,1.0nm,0.7s,baz=340,slow=6.1,SNR=7.0 | | | | | | |
| | comp=E,1.0nm,0.7s | | | | | | |
| TPH | **Tonopah** | **34.82** | **140** | P | **P** | **15 41 41.0** | **+0.6** |
| TPH | | | | IAmb | IAmb | 15 41 53.0 | |
| | comp=Z,26nm,1.2s | | | | | | |
| ARCES | **ARCESS Array B** | **41.00** | **5** | P | **P** | **15 42 32.0** | **+0.1** |
| | comp=Z,2.9nm,0.9s,baz=8.8,slow=8.7,SNR=5.6 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| WVT | **Waverly** | **45.16** | **107** | P | **P** | **15 43 06.7** | **+0.8** |
| WVT | | | | IAmb | IAmb | 15 43 15.0 | |
| | comp=Z,16nm,1.4s | | | | | | |
| OXF | **Oxford** | **46.11** | **110** | P | **P** | **15 43 14.0** | **+0.6** |
| TXAR | **Lajitas Array** | **46.55** | **128** | P | **P** | **15 43 18.5** | **+1.5** |
| | comp=Z,0.4nm,0.7s,baz=342,slow=4.2,SNR=9.1 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| FINES | **FINESS Array B** | **49.12** | **6** | P | **P** | **15 43 35.5** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=6.0,slow=6.9,SNR=8.2 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| HFS | **Hagfors** | **49.67** | **14** | P | **P** | **15 43 40.3** | **-0.4** |
| | comp=Z,2.1nm,0.7s,baz=7.6,slow=4.5,SNR=15 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| ZALV | **Zalesovo Beam** | **51.66** | **325** | P | **P** | **15 43 56.3** | **+0.5** |
| | comp=Z,0.9nm,0.5s,baz=32,slow=7.7,SNR=4.7 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| MJAR | **Matsushiro Arr** | **51.82** | **273** | P | **P** | **15 43 56.2** | **-1.0** |
| | comp=Z,1.7nm,0.9s,baz=10,slow=7.4,SNR=4.6 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| SONM | **Songino Array** | **52.04** | **306** | P | **P** | **15 43 56.5** | **-2.4** |
| | comp=Z,1.9nm,1.1s,baz=12,slow=8.2,SNR=4.8 | | | | | | |
| | comp=Z,1.9nm,1.1s | | | | | | |
| EKA | **Eskdalemuir Ar** | **52.32** | **27** | P | **P** | **15 43 59.9** | **-0.8** |
| | comp=Z,0.4nm,0.4s,baz=332,slow=6.3,SNR=5.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| KURBB | **Kurchatov Arra** | **56.04** | **328** | P | **P** | **15 44 26.0** | **-1.8** |
| | comp=Z,1.6nm,1.0s,baz=12,slow=7.1,SNR=7.6 | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| HHC | **Hu-ho-hao-te** | **56.86** | **298** | *e*P | **P** | **15 44 37.0** | **+3.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,22nm,0.5s | | | | | | |
| CLL | **Collm** | **58.34** | **16** | *e*P | **P** | **15 44 45.0** | **+0.9** |
| MKAR | **Makanchi Array** | **58.96** | **324** | P | **P** | **15 44 47.9** | **-0.7** |
| | comp=Z,0.9nm,1.0s,baz=36,slow=9.0,SNR=2.8 | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | |
| AKASG | **Malin Array Be** | **59.97** | **4** | P | **P** | **15 44 55.5** | **+0.2** |
| | comp=Z,1.1nm,0.4s,baz=358,slow=7.2,SNR=2.2 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| AKBB | **Malin Array Si** | **59.97** | **4** | P | **P** | **15 44 55.8** | **+0.4** |
| AKBB | | | | pP | **sP** | **15 44 59.5** | **0.0** |
| GERES | **GERESS Array B** | **60.85** | **16** | P | **P** | **15 45 02.9** | **+1.4** |
| | comp=Z,0.3nm,0.5s,baz=346,slow=12,SNR=2.0 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| PURM | **Purcari** | **64.16** | **4** | pP | **P** | **15 45 24.0** | **+0.5** |
| ESDC | **Sonseca Array** | **67.33** | **32** | P | **P** | **15 45 43.9** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=311,slow=0.1,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| BRTR | **Keskin Array B** | **71.02** | **1** | P | **P** | **15 46 05.0** | **-2.2** |
| | comp=Z,0.5nm,0.8s,baz=353,slow=10,SNR=1.9 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| PZH | **PanZhiHua** | **73.16** | **301** | P | **P** | **15 46 21.3** | **+1.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |

*IDC* ***12*** *15:39:31.8±1.1,69°.67N×144°.53W,h0km,mb3.6/6, mbtmp3.6/9,ML3.4/3,Error ellipse: s-maj=26.0km s-min=17.1km az=58.0*

*NEIC* ***12*** *15:39:32.4±0.9,69°.54N±0°.04×144°.81W±0°.08,h10km±1km, Error ellipse: s-maj=6.4km s-min=4.9km az=357.0*

*AEIC* ***12*** *15:39:32.1±0.9,69°.51N±0°.06×144°.84W±0°.09,h5km±6km, ML3.9,ML3.9/74(NEIC),Error ellipse: s-maj=8.3km s-min=4.2km az=190.0*

**ISC 12 15:39:32.3±0.7,69°.52N±0°.04×144°.83W±0°.03,h10km,n93, σ0°.61/84,mb3.7/6,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C26K | **Camden Bay** | **0.40** | **356** | | **Pg** | **15 39 39.8** | **-0.5** |
| C26K | | | | | **Sg** | **15 39 45.4** | **-0.1** |
| C26K | **Camden Bay** | **0.40** | **356** | IAML | | 15 39 45.6 | |
| | comp=N,5µm,0.8s | | | | | | |
| C26K | | | | IAML | | 15 39 49.5 | |
| | comp=E,7µm,0.6s | | | | | | |
| C27K | **Jago River** | **0.41** | **74** | | **Pg** | **15 39 39.9** | **-0.4** |
| C27K | | | | | **Sg** | **15 39 45.7** | **0.0** |
| D25K | **Kavik River** | **0.58** | **251** | | **Pg** | **15 39 42.4** | **-1.2** |
| D25K | **Kavik River** | **0.58** | **251** | | **Sg** | **15 39 51.4** | **+0.2** |
| C24K | **Franklin Bluff** | **1.37** | **280** | | **Pn** | **15 39 57.7** | **+0.2** |
| C24K | | | | IAML | | 15 40 18.4 | |
| | comp=N,2µm,0.9s | | | | | | |
| C24K | | | | IAML | | 15 40 18.5 | |
| | comp=E,2µm,0.6s | | | | | | |
| C24K | **Franklin Bluff** | **1.37** | **280** | | **Sg** | **15 40 17.2** | **+0.9** |
| D27M | **Malcolm River** | **1.40** | **100** | Pn | **Pn** | **15 39 58.0** | **+0.1** |
| D27M | | | | IAML | | 15 40 20.7 | |
| | comp=N,2µm,0.4s | | | | | | |
| D27M | **Malcolm River** | **1.40** | **100** | | **Sg** | **15 40 17.9** | **+0.7** |
| D24K | **Happy Valley** | **1.46** | **257** | | **Pn** | **15 39 58.8** | **0.0** |
| D24K | | | | IAML | | 15 40 23.8 | |
| | comp=E,1µm,1.0s | | | | | | |
| D24K | | | | IAML | | 15 40 25.5 | |
| | comp=N,2µm,0.6s | | | | | | |
| E27K | **Coleen River** | **1.78** | **137** | | **Sb** | **15 40 27.7** | **+0.3** |
| E27K | **Coleen River** | **1.78** | **137** | Pn | **Pn** | **15 40 03.7** | **+0.5** |
| E27K | **Coleen River** | **1.78** | **137** | IAML | | 15 40 34.5 | |
| | comp=E,1µm,0.5s | | | | | | |
| E27K | | | | IAML | | 15 40 35.5 | |
| | comp=N,1µm,0.7s | | | | | | |
| F26K | **Sheenjek River** | **1.85** | **172** | | **Pn** | **15 40 04.5** | **+0.3** |
| F26K | **Sheenjek River** | **1.85** | **172** | IAML | | 15 40 38.4 | |
| | comp=E,1µm,0.6s | | | | | | |
| TOLK | **Toolik Lake Re** | **1.92** | **245** | | **Pn** | **15 40 05.3** | **+0.3** |
| TOLK | | | | IAML | | 15 40 42.4 | |
| | comp=N,768nm,1.0s | | | | | | |
| F25K | **Christian Rive** | **1.96** | **189** | | **Pn** | **15 40 04.7** | **-0.9** |
| F25K | | | | IAML | | 15 40 37.9 | |
| | comp=E,1µm,0.5s | | | | | | |
| F25K | | | | IAML | | 15 40 39.8 | |
| | comp=N,947nm,0.8s | | | | | | |
| E24K | **Your Creek** | **1.97** | **224** | | **Pn** | **15 40 05.3** | **-0.4** |
| C23K | **Itkillik River** | **2.04** | **282** | | **Pn** | **15 40 07.2** | **+0.5** |
| C23K | **Itkillik River** | **2.04** | **282** | IAML | | 15 40 47.4 | |
| | comp=N,1µm,0.7s | | | | | | |
| C23K | | | | IAML | | 15 40 48.7 | |
| | comp=E,1µm,0.8s | | | | | | |
| BMAR | **Burnt Mountain** | **2.10** | **177** | | **Pn** | **15 40 06.8** | **-0.8** |
| E28M | **Babbage River** | **2.11** | **113** | | **Sb** | **15 40 35.8** | **-1.1** |
| E28M | **Babbage River** | **2.11** | **113** | Pn | **Pn** | **15 40 07.4** | **-0.3** |
| E28M | **Babbage River** | **2.11** | **113** | IAML | | 15 40 42.8 | |
| | comp=N,1µm,1.0s | | | | | | |
| E28M | | | | IAML | | 15 40 46.8 | |
| | comp=E,649nm,0.7s | | | | | | |
| D23K | **Nanushuk River** | **2.16** | **258** | | **Pn** | **15 40 08.7** | **+0.3** |
| D28M | **Stokes Point** | **2.16** | **92** | | **Pn** | **15 40 08.7** | **+0.3** |
| F24K | **Squaw Lake** | **2.30** | **211** | | **Pn**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EGAK** | **Eagle** | **4.97** | **162** | IAML | | | 15 42 24.3 | |
| | comp=E,80nm,1.0s | | | | | | | |
| EGAK | | | | IAML | | | 15 43 47.0 | |
| | comp=E,109nm,0.6s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.03** | **195** | Pn | **Pn** | | **15 40 48.6** | **+0.9** |
| CCB | | | | IAML | | | 15 42 26.8 | |
| | comp=E,76nm,1.5s | | | | | | | |
| CCB | | | | IAML | | | 15 44 07.6 | |
| | comp=N,64nm,0.9s | | | | | | | |
| **HDA** | **Harding Lake** | **5.20** | **190** | Pn | **Pn** | | **15 40 50.6** | **+0.6** |
| **WRH** | **Wood River Hil** | **5.23** | **196** | Pn | **Pn** | | **15 40 51.0** | **+0.6** |
| WRH | | | | IAML | | | 15 42 26.3 | |
| | comp=E,89nm,1.0s | | | | | | | |
| WRH | | | | IAML | | | 15 44 19.1 | |
| | comp=N,62nm,1.0s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.25** | **272** | Pn | **Pn** | | **15 40 51.5** | **+0.7** |
| C19K | | | | IAML | | | 15 42 42.7 | |
| | comp=N,64nm,1.5s | | | | | | | |
| C19K | | | | IAML | | | 15 43 50.5 | |
| | comp=E,94nm,1.1s | | | | | | | |
| **F19K** | **Shaleruckih Mo** | **5.53** | **247** | | **Pn** | | **15 40 54.2** | **-0.3** |
| **SCRK** | **Sand Creek** | **5.58** | **176** | | **Pn** | | **15 40 55.4** | **+0.1** |
| **K27K** | **Chicken** | **5.62** | **168** | | **Pn** | | **15 40 55.9** | **0.0** |
| **A19K** | **Wainwright** | **5.65** | **285** | | **Pn** | | **15 40 56.2** | **0.0** |
| **C18K** | **Utukok River** | **5.92** | **269** | | **Pn** | | **15 41 00.3** | **+0.2** |
| **J30M** | **Hart River** | **5.97** | **142** | | **Pn** | | **15 41 00.5** | **-0.3** |
| **E18K** | **Tukpahlearik C** | **6.17** | **258** | | **Pn** | | **15 41 03.5** | **+0.1** |
| **F18K** | **Selawik** | **6.27** | **249** | | **Pn** | | **15 41 04.9** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.39** | **150** | | **Pn** | | **15 41 07.1** | **+0.5** |
| **BCAR** | **Beaver Creek A** | **6.59** | **168** | | **Pn** | | **15 41 10.1** | **+0.8** |
| **E17K** | **Hotham Inlet** | **6.75** | **257** | | **Pn** | | **15 41 11.3** | **0.0** |
| **D17K** | **Noatak River** | **6.91** | **263** | | **Pn** | | **15 41 13.2** | **-0.3** |
| **A36M** | **Sachs Harbour** | **6.91** | **60** | | **Pn** | | **15 41 12.3** | **-1.2** |
| **M26K** | **Nabesna, AK** | **7.19** | **173** | | **Pn** | | **15 41 17.4** | **0.0** |
| **M27K** | **Edge Creek, AK** | **7.29** | **169** | | **Pn** | | **15 41 18.6** | **-0.3** |
| **C36M** | **Paulatuk** | **7.30** | **82** | | **Pn** | | **15 41 18.2** | **-0.6** |
| **C16K** | **Lisburne Hills** | **7.50** | **270** | | **Pn** | | **15 41 21.2** | **-0.3** |
| **M29M** | **Somme Creek** | **7.56** | **157** | | **Pn** | | **15 41 22.4** | **-0.2** |
| **YKA** | **Yellowknife Ar** | **14.02** | **105** | Pn | Pn | | 15 42 45.6 | -5.1 |
| | comp=E,0.3nm,0.3s,baz=298,slow=19,SNR=2.7 | | | | | | | |
| YKA | | | | Sn | Sn | | 15 45 13.4 | -13 |
| | comp=E,0.5nm,0.3s,baz=324,slow=7.9,SNR=3.3 | | | | | | | |
| | comp=E,2.0nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.34** | **127** | P | **P** | | **15 46 03.6** | **+2.0** |
| | comp=E,0.5nm,0.7s,baz=2.6,slow=9.9,SNR=3.9 | | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.56** | **128** | P | **P** | | **15 48 00.5** | **+0.5** |
| | comp=E,0.1nm,0.4s,baz=324,slow=4.5,SNR=1.3 | | | | | | | |
| | comp=E,0.1nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **49.17** | **6** | P | **P** | | **15 48 18.5** | **-1.2** |
| | comp=E,1.6nm,0.7s,baz=13,slow=8.6,SNR=3.7 | | | | | | | |
| | comp=E,1.6nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **49.73** | **14** | P | **P** | | **15 48 24.0** | **0.0** |
| | comp=E,0.7nm,0.4s,baz=2.9,slow=3.0,SNR=6.0 | | | | | | | |
| | comp=E,0.7nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.66** | **325** | P | **P** | | **15 48 39.6** | **+1.0** |
| | comp=E,0.3nm,0.5s,baz=90,slow=5.8,SNR=1.8 | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.04** | **328** | P | **P** | | **15 49 11.0** | **+0.2** |
| | comp=E,0.3nm,0.2s,baz=13,slow=7.4,SNR=4.1 | | | | | | | |
| | comp=E,0.3nm,0.2s | | | | | | | |

*AEIC **12** 15:42:06.2±1.9, 69°.54N±0°.05×144°.78W±0°.08, h2km±5km, ML4.1, mb4.4/3(NEIC), ML4.5/72(NEIC), Error ellipse: s-maj=8.1km s-min=2.2km az=208.0*
*NEIC **12** 15:42:07.6±1.0, 69°.63N±0°.05×144°.8W±0°.1, h10km±1km, Error ellipse: s-maj=8.3km s-min=7.2km az=350.0*
**ISC 12 15:42:06.9**±0.6, **69°.58N**±0°.04×**144°.82W**±0°.03, **h10**km, **n62,** σ1**9**/09/58, **Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.34** | **354** | | **Pg** | **15 42 13.6** | **-0.1** |
| C26K | | | | | **Sg** | **15 42 18.0** | **-0.2** |
| **C27K** | **Jago River** | **0.39** | **83** | | **Pg** | **15 42 13.5** | **-1.0** |
| C27K | | | | | **Sg** | **15 42 18.6** | **-0.9** |
| **D25K** | **Kavik River** | **0.61** | **245** | Pg | **Pg** | **15 42 17.5** | **-1.2** |
| **D25K** | **Kavik River** | **0.61** | **245** | | **Sg** | **15 42 26.1** | **-0.6** |
| **D27M** | **Malcolm River** | **1.40** | **102** | Pn | **Pb** | **15 42 32.9** | **-0.3** |
| **D24K** | **Happy Valley** | **1.48** | **255** | Pn | **Pb** | **15 42 34.6** | **0.0** |
| **E27K** | **Coleen River** | **1.82** | **139** | Pn | **Pn** | **15 42 39.0** | **+0.6** |
| E27K | | | | IAML | | 15 43 20.1 | |
| | comp=N,3μm,1.3s | | | | | | |
| **F26K** | **Sheenjek River** | **1.91** | **172** | | **Pb** | **15 42 41.4** | **-0.4** |
| **TOLK** | **Toolik Lake Re** | **1.95** | **243** | Pn | **Pn** | **15 42 40.9** | **+0.8** |
| **E24K** | **Your Creek** | **2.02** | **223** | Pn | **Pn** | **15 42 41.6** | **+0.5** |
| **F25K** | **Christian Rive** | **2.02** | **189** | | **Pb** | **15 42 42.9** | **-0.8** |
| **C23K** | **Itkillik River** | **2.04** | **280** | Pn | **Pn** | **15 42 41.8** | **+0.6** |
| C23K | | | | IAML | | 15 43 46.0 | |
| | comp=E,4μm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.13** | **115** | Pn | **Pn** | **15 42 43.8** | **+1.2** |
| E28M | | | | IAML | | 15 43 32.3 | |
| | comp=N,2μm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **2.16** | **94** | | **Pb** | **15 42 44.6** | **-1.4** |
| **BMAR** | **Burnt Mountain** | **2.17** | **178** | Pn | **Pn** | **15 42 43.9** | **+0.9** |
| **D23K** | **Nanushuk River** | **2.18** | **256** | | **Pb** | **15 42 45.3** | **-1.1** |
| **E23K** | **Chandalar** | **2.32** | **231** | | **Pb** | **15 42 47.6** | **-1.3** |
| **F24K** | **Squaw Lake** | **2.36** | **210** | Pn | **Pn** | **15 42 46.8** | **+1.1** |
| **G26K** | **Porcupine Rive** | **2.67** | **171** | | **Pn** | **15 42 51.6** | **+1.7** |
| **F28M** | **Old Crow** | **2.68** | **135** | Pn | **Pn** | **15 42 51.2** | **+1.1** |
| **E29M** | **Blow River** | **2.77** | **112** | Pn | **Pn** | **15 42 52.4** | **+1.1** |
| E29M | | | | IAML | | 15 43 53.4 | |
| | comp=E,2μm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **2.89** | **260** | | **Pn** | **15 42 54.5** | **+1.5** |
| **G27K** | **Doyon Strip** | **3.02** | **156** | | **Pn** | **15 42 56.3** | **+1.5** |
| **FYU** | **Fort Yukon** | **3.03** | **183** | Pn | **Pn** | **15 42 55.9** | **+1.0** |
| **B22K** | **Teshekpuk Lake** | **3.06** | **288** | | **Pn** | **15 42 55.8** | **+0.6** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **200** | | **Pn** | **15 42 56.6** | **+1.3** |
| G24K | | | | IAML | | 15 44 05.2 | |
| | comp=N,2μm,1.1s | | | | | | |
| G24K | | | | IAML | | 15 44 09.8 | |
| | comp=E,2μm,1.3s | | | | | | |
| **F22K** | **John River** | **3.42** | **236** | | **Pn** | **15 43 01.9** | **+1.7** |
| **B21K** | **Ikpikpuk River** | **3.43** | **275** | | **Pn** | **15 43 01.9** | **+1.5** |
| **E21K** | **Killik River** | **3.49** | **255** | | **Pn** | **15 43 02.3** | **+1.1** |
| **G29M** | **Pine Creek** | **3.69** | **133** | | **Pn** | **15 43 04.7** | **+0.8** |
| **A22K** | **Sinclair Lake** | **3.73** | **297** | | **Pn** | **15 43 05.5** | **+1.1** |
| **H24K** | **Noodor Dome** | **3.94** | **199** | | **Pn** | **15 43 07.9** | **+0.5** |
| H24K | | | | IAML | | 15 44 31.5 | |
| | comp=N,574nm,0.8s | | | | | | |
| H24K | | | | IAML | | 15 44 39.7 | |
| | comp=E,666nm,1.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **184** | | **Pn** | **15 43 11.1** | **+1.5** |
| **G30M** | **tAoh Zraii Nji** | **4.12** | **125** | | **Pn** | **15 43 11.0** | **+1.1** |
| G30M | | | | IAML | | 15 44 49.1 | |
| | comp=E,692nm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **4.16** | **141** | | **Pn** | **15 43 11.2** | **+0.7** |
| H29M | | | | IAML | | 15 44 38.1 | |
| | comp=N,609nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.18** | **208** | Pn | **Pn** | **15 43 12.3** | **+1.6** |
| H23K | | | | IAML | | 15 44 45.7 | |
| | comp=E,817nm,1.5s | | | | | | |
| **I28M** | **Miner Creek** | **4.55** | **153** | Pn | **Pn** | **15 43 17.5** | **+1.6** |
| **POKR** | **Poker Plat Res** | **4.60** | **194** | Pn | **Pn** | **15 43 17.9** | **+1.4** |
| POKR | | | | IAML | | 15 44 58.2 | |
| | comp=E,499nm,1.1s | | | | | | |
| POKR | | | | IAML | | 15 45 02.0 | |
| | comp=N,398nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **4.74** | **119** | Pn | **Pn** | **15 43 19.3** | **+1.0** |
| **I23K** | **Minto, Yukon-K** | **4.79** | **204** | Pn | **Pn** | **15 43 20.4** | **+1.5** |
| I23K | | | | IAML | | 15 45 09.3 | |
| | comp=N,452nm,1.3s | | | | | | |
| I23K | | | | IAML | | 15 45 13.7 | |
| | comp=E,494nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **4.90** | **263** | IAML | | 15 45 28.5 | |
| | comp=E,295nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **5.00** | **183** | IAML | | 15 45 10.8 | |
| | comp=E,319nm,1.2s | | | | | | |
| **EGAK** | **Eagle** | **5.03** | **162** | Pn | **Pn** | **15 43 23.5** | **+1.2** |
| EGAK | | | | IAML | | 15 45 15.0 | |
| | comp=E,337nm,1.4s | | | | | | |
| EGAK | | | | IAML | | 15 45 27.4 | |
| | comp=E,240nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **5.04** | **251** | IAML | | 15 44 43.5 | |
| | comp=E,314nm,0.8s | | | | | | |
| E19K | | | | IAML | | 15 45 13.4 | |
| | comp=N,312nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **195** | IAML | | 15 45 21.1 | |
| | comp=E,210nm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **5.26** | **190** | IAML | | 15 45 21.8 | |
| | comp=N,256nm,1.5s | | | | | | |
| HDA | | | | IAML | | 15 45 25.6 | |
| | comp=E,306nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **196** | IAML | | 15 45 13.4 | |
| | comp=N,196nm,0.9s | | | | | | |
| WRH | | | | IAML | | 15 45 16.2 | |
| | comp=E,234nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.45** | **139** | Pn | **Pn** | **15 43 29.5** | **+1.3** |
| **C18K** | **Utukok River** | **5.93** | **269** | Pn | **Pn** | **15 43 35.6** | **+0.9** |
| **E18K** | **Tukpahlearik C** | **6.19** | **257** | Pn | **Pn** | **15 43 39.1** | **+0.9** |
| **BCAR** | **Beaver Creek A** | **6.66** | **168** | Pn | **Pn** | **15 43 46.6** | **+1.9** |
| **A36M** | **Sachs Harbour** | **6.88** | **60** | Pn | **Pn** | **15 43 47.6** | **0.0** |
| **S39A** | **Bolivar** | **41.97** | **112** | P | **P** | **15 49 58.0** | **+0.3** |
| S39A | | | | IAmb | IAmb | 15 50 16.4 | |
| | comp=Z,8.6nm,1.3s | | | | | | |
| **WVT** | **Waverly** | **45.21** | **107** | P | **P** | **15 50 24.2** | **+0.5** |
| **HHC** | **Hu-ho-hao-te** | **56.81** | **298** | *eP* | **P** | **15 51 49.5** | **-1.5** |
| **MK31** | **Makanchi Array** | **58.92** | **324** | P | **P** | **15 52 06.7** | **+1.0** |
| MK31 | | | | IAmb | IAmb | 15 52 08.4 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **RNPP9** | **Sopachiv** | **59.13** | **7** | P | **P** | **15 52 06.7** | **-0.3** |
| **RNPP8** | **Varash** | **59.20** | **7** | P | **P** | **15 52 07.3** | **-0.2** |
| **AK21** | **Malin Array Si** | **59.87** | **5** | P | **P** | **15 52 13.2** | **+1.1** |
| **AK19** | **Malin Array Si** | **59.92** | **5** | P | **P** | **15 52 12.4** | **-0.1** |
| **AKBB** | **Malin Array Si** | **59.95** | **4** | P | **P** | **15 52 12.6** | **-0.1** |
| **PZH** | **PanZhiHua** | **73.11** | **301** | P | **P** | **15 53 38.1** | **+0.8** |

*IDC **12** 15:42:23.2±0.5, 69°.62N×144°.89W, h0km, mb4.2/23, mbtmp4.2/27, ML4.2/4, Error ellipse: s-maj=14.5km s-min=10.9km az=71.0*
*NEIC **12** 15:42:25.1±1.1, 69°.59N±0°.05×144°.33W±0°.09, h7km±4km, Error ellipse: s-maj=7.6km s-min=4.5km az=180.0*
*AEIC **12** 15:42:25.1±1.4, 69°.55N±0°.07×144°.32W±0°.08, h5km±4km, ML4.4, mb4.6/21(NEIC), ML4.4/50(NEIC), Error ellipse: s-maj=9.6km s-min=3.9km az=187.0*
**ISC 12 15:42:25.6**±0.4, **69°.58N**±0°.04×**144°.37W**±0°.03, **h14**km, **n138,** σ1**9**/128, **mb4.4**/53, **Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **78** | | **Pg** | **15 42 29.1** | **-1.6** |
| C27K | | | | | **Sg** | **15 42 33.2** | **-0.9** |
| **C26K** | **Camden Bay** | **0.39** | **331** | | **Pg** | **15 42 32.6** | **-0.8** |
| C26K | | | | | **Sg** | **15 42 39.5** | **+0.8** |
| **C26K** | **Camden Bay** | **0.39** | **331** | IAML | | 15 42 40.8 | |
| | comp=N,22μm,1.1s | | | | | | |
| C26K | | | | IAML | | 15 42 46.6 | |
| | comp=E,22μm,1.1s | | | | | | |
| **D25K** | **Kavik River** | **0.76** | **251** | Pg | **Pg** | **15 42 39.2** | **-1.1** |
| **D25K** | **Kavik River** | **0.76** | **251** | | **Sg** | **15 42 50.1** | **-0.1** |
| **D27M** | **Malcolm River** | **1.25** | **104** | | **Sg** | **15 43 06.2** | **+0.3** |
| **D27M** | **Malcolm River** | **1.25** | **104** | Pg | **Pn** | **15 42 48.1** | **-0.6** |
| **D27M** | **Malcolm River** | **1.25** | **104** | IAML | | 15 43 09.3 | |
| | comp=N,6μm,1.2s | | | | | | |
| D27M | | | | IAML | | 15 43 11.5 | |
| | comp=E,4μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **277** | | **Pn** | **15 42 52.8** | **+0.5** |
| **D24K** | **Happy Valley** | **1.64** | **257** | | **Sb** | **15 43 16.7** | **+0.7** |
| **D24K** | **Happy Valley** | **1.64** | **257** | Pn | **Pn** | **15 42 54.3** | **+0.4** |
| **D24K** | **Happy Valley** | **1.64** | **257** | IAML | | 15 43 17.9 | |
| | comp=N,5μm,1.0s | | | | | | |
| D24K | | | | IAML | | 15 43 18.1 | |
| | comp=E,5μm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.72** | **143** | Pn | **Pn** | **15 42 55.8** | **+0.6** |
| **F26K** | **Sheenjek River** | **1.90** | **177** | | **Pn** | **15 42 57.6** | **+0.1** |
| F26K | | | | | **Sn** | **15 43 22.8** | **+1.5** |
| **F26K** | **Sheenjek River** | **1.90** | **177** | IAML | | 15 43 24.5 | |
| | comp=E,4μm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **1.99** | **117** | Pn | **Pn** | **15 42 59.4** | **+0.6** |
| **D28M** | **Stokes Point** | **2.00** | **95** | | **Pn** | **15 42 59.2** | **+0.3** |
| **F25K** | **Christian Rive** | **2.05** | **194** | | **Pn** | **15 42 59.7** | **0.0** |
| **F25K** | **Christian Rive** | **2.05** | **194** | IAML | | 15 43 31.2 | |
| | comp=N,3μm,1.2s | | | | | | |
| F25K | | | | IAML | | 15 43 32.8 | |
| | comp=E,2μm,1.4s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.09** | **246** | | **Pn** | **15 43 01.3** | **+1.1** |
| **TOLK** | **Toolik Lake Re** | **2.09** | **246** | IAML | | 15 43 35.1 | |
| | comp=E,3μm,0.9s | | | | | | |
| TOLK | | | | IAML | | 15 43 36.5 | |
| | comp=N,3μm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **227** | | **Pn** | **15 43 01.7** | **+1.0** |
| **E24K** | **Your Creek** | **2.13** | **227** | IAML | | 15 43 35.0 | |
| | comp=E,2μm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **234** | | **Pn** | **15 43 06.2** | **+1.0** |
| **E23K** | **Chandalar** | **2.44** | **234** | IAML | | 15 43 46.7 | |
| | comp=E,2μm,1.1s | | | | | | |
| E23K | | | | IAML | | 15 43 53.7 | |
| | comp=N,2μm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.57** | **138** | | **Pn** | **15 43 06.3** | **-0.5** |
| **F28M** | **Old Crow** | **2.57** | **138** | IAML | | 15 43 48.7 | |
| | comp=N,2μm,0.9s | | | | | | |
| F28M | | | | IAML | | 15 43 52.9 | |
| | comp=E,2μm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **3.05** | **261** | Pn | **Pn** | **15 43 14.6** | **+1.3** |
| D22K | | | | IAML | | 15 44 10.1 | |
| | comp=N,1μm,1.0s | | | | | | |
| **H25L** | **Birch Creek** | **3.37** | **190** | | **Pn** | **15 43 18.3** | **+0.6** |
| **H27K** | **Steamboat Moun** | **3.53** | **161** | | **Pn** | **15 43 21.7** | **+1.7** |
| **E21K** | **Killik River** | **3.64** | **256** | Pn | **Pn** | **15 43 22.3** | **+0.8** |
| E21K | | | | IAML | | 15 44 36.9 | |
| | comp=E,735nm,1.0s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.87** | **297** | | **Pn** | **15 43 25.5** | **+1.0** |
| **G30M** | **tAoh Zraii Nji** | **4.00** | **127** | Pn | **Pn** | **15 43 26.9** | **+0.5** |
| **INK** | **Inuvik** | **4.12** | **103** | Pn | **Pn** | **15 43 30.3** | **+2.3** |
| | comp=E,7.5nm,0.3s,baz=333,slow=3.7,SNR=4.4 | | | | | | |
| INK | | | | Sn | **Sn** | **15 44 16.7** | **+1.0** |
| | comp=E,10nm,0.3s,baz=212,slow=11,SNR=3.7 | | | | | | |
| | comp=E,25nm,0.4s | | | | | | |
| **F21K** | **Alatna River** | **4.12** | **239** | | **Pn** | **15 43 28.6** | **+0.6** |
| **F21K** | **Alatna River** | **4.12** | **239** | IAML | | 15 44 35.3 | |
| | comp=N,422nm,0.7s | | | | | | |
| F21K | | | | IAML | | 15 44 41.9 | |
| | comp=E,529nm,1.5s | | | | | | |
| **I27K** | **Kandik River** | **4.13** | **164** | | **Pn** | **15 43 29.1** | **+0.8** |
| **B20K** | **Meade River** | **4.46** | **281** | Pn | **Pn** | **15 43 32.8** | **+0.2** |
| **I28M** | **Miner Creek** | **4.49** | **156** | Pn | **Pn** | **15 43 33.4** | **+0.2** |
| I28M | | | | IAML | | 15 45 01.4 | |
| | comp=N,380nm,1.3s | | | | | | |
| I28M | | | | IAML | | 15 45 02.0 | |
| | comp=E,471nm,1.3s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.83** | **148** | | **Pn** | **15 43 38.0** | **+0.1** |
| I29M | | | | IAML | | 15 44 55.2 | |
| | comp=E,332nm,1.1s | | | | | | |
| I29M | | | | IAML | | 15 45 03.5 | |
| | comp=N,284nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.88** | **200** | Pn | **Pn** | **15 43 39.4** | **+0.9** |
| MDM | | | | IAML | | 15 45 01.2 | |
| | comp=N,295nm,0.9s | | | | | | |
| MDM | | | | IAML | | 15 45 04.5 | |
| | comp=E,337nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **4.93** | **193** | Pn | **Pn** | **15 43 38.9** | **-0.3** |
| | comp=E,6.5nm,0.3s,baz=5.7,slow=12,SNR=7.4 | | | | | | |
| ILAR | | | | Sn | **Sn** | **15 44 33.8** | **-2.1** |
| | comp=E,12nm,0.3s,baz=9.9,slow=22,SNR=8.4 | | | | | | |
| ILAR | | | | Lg | Lg | 15 44 58.4 | |
| | comp=E,11nm,0.3s,baz=21,slow=29,SNR=1.8 | | | | | | |
| | comp=E,22nm,0.6s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.09** | **223** | Pn | **Pn** | **15 43 42.2** | **+0.9** |
| **J26L** | **Joseph Creek** | **5.11** | **176** | | **Pn** | **15 43 43.0** | **+1.3** |
| J26L | | | | IAML | | 15 44 46.5 | |
| | comp=N,187nm,0.7s | | | | | | |
| J26L | | | | IAML | | 15 45 05.7 | |
| | comp=E,279nm,1.1s | | | | | | |
| **NEA2** | **Nenana** | **5.33** | **202** | | **Pn** | **15 43 44.6** | **-0.1** |
| NEA2 | | | | IAML | | 15 45 18.3 | |
| | comp=E,188nm,1.3s | | | | | | |
| **SCRK** | **Sand Creek** | **5.63** | **178** | | **Pn** | **15 43 49.0** | **+0.1** |
| **K27K** | **Chicken** | **5.65** | **170** | | **Pn** | **15 43 49.9** | **+0.9** |
| **J29N** | **Klondike Camp** | **5.68** | **152** | | **Pn** | **15 43 50.3** | **+0.7** |
| **DAWY** | **Dawson** | **5.88** | **158** | | **Pn** | **15 43 52.7** | **+0.5** |
| **J30M** | **Hart River** | **5.92** | **144** | | **Pn** | **15 43 53.0** | **+0.1** |
| **K29M** | **Barlow Dome** | **6.37** | **152** | | **Pn** | **15 43 59.0** | **+0.1** |
| **RND** | **Reindeer** | **6.45** | **198** | | **Pn** | **15 44 00.8** | **+0.6** |
| **DHY** | **Denali Highway** | **6.64** | **192** | | **Pn** | **15 44 02.1** | **-0.7** |
| **HARP** | **HAARP** | **7.22** | **183** | | **Pn** | **15 44 11.4** | **+0.8** |
| **M26K** | **Nabesna, AK** | **7.23** | **175** | | **Pn** | **15 44 09.9** | **-0.9** |
| **M27K** | **Edge Creek, AK** | **7.33** | **171** | | **Pn** | **15 44 10.9** | **-1.3** |
| **M29M** | **Somme Creek** | **7.56** | **159** | | **Pn** | **15 44 15.8** | **+0.5** |
| **C16K** | **Lisburne Hills** | **7.66** | **270** | | **Pn** | **15 44 15.4** | **-1.1** |
| **SCM** | **Sheep Creek Mo** | **7.88** | **190** | | **Pn** | **15 44 22.0** | **+2.4** |
| **YUK2** | **White River** | **7.96** | **168** | | **Pn** | **15 44 21.4** | **+0.6** |
| **SML** | **Sawmill** | **7.97** | **194** | | **Pn** | **15 44 21.2** | **+0.2** |
| **N25K** | **Chitina, Valde** | **8.01** | **181** | | **Pn** | **15 44 20.8** | **-0.7** |
| **GLB** | **Gilahina Butte** | **8.18** | **178** | | **Pn** | **15 44 23.8** | **+0.1** |
| **MCARA** | **McCarthy VSAT** | **8.25** | **175** | | **Pn** | **15 44 24.3** | **-0.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VRDI** | **Verde Repeater** | **8.40** | **177** | | | **Pn** | **15 44 29.8** | **+2.9** |
| **M20K** | **Styx River** | **8.52** | **209** | | | **Pn** | **15 44 29.0** | **+0.6** |
| **BMRM** | **Bremner River** | **8.65** | **181** | | | **Pn** | **15 44 31.5** | **+1.2** |
| **M19K** | **Big River Lodg** | **8.73** | **213** | | | **Pn** | **15 44 31.8** | **+0.6** |
| **WHY** | **Whitehorse** | **9.79** | **151** | Pn | | **Pn** | **15 44 46.1** | **+0.2** |
| **P29M** | **Windy Craggy** | **10.38** | **161** | | | **Pn** | **15 44 54.0** | **+0.2** |
| **WRGLY** | **Wrigley** | **10.47** | **117** | | | **Pn** | **15 44 55.3** | **+0.3** |
| **SKAG** | **Skagway** | **10.86** | **155** | | | **Pn** | **15 45 00.8** | **+0.4** |
| **R32K** | **Eaglecrest** | **12.12** | **155** | | | **Pn** | **15 45 18.3** | **+0.7** |
| **S31K** | **Pelican** | **12.19** | **159** | | | **Pn** | **15 45 20.6** | **+2.1** |
| **DLBC** | **Dease Lake** | **12.78** | **144** | Pn | | **Pn** | **15 45 25.9** | **-0.7** |
| | comp=E,1.0nm,0.3s,baz=334,slow=6.2,SNR=7.8 | | | | | | | |
| | comp=E,4.8nm,0.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.88** | **106** | Pn | | **Pn** | **15 45 38.7** | **-2.8** |
| | comp=E,1.3nm,0.3s,baz=314,slow=14,SNR=7.5 | | | | | | | |
| YKA | | | | Sn | Sn | | 15 48 02.9 | -12 |
| | comp=E,1.9nm,0.3s,baz=311,slow=25,SNR=7.7 | | | | | | | |
| | comp=E,4.3nm,0.5s | | | | | | | |
| **LTY** | **Liberty** | **25.25** | **140** | IAmb | IAmb | | 15 47 54.9 | |
| | comp=E,8.3nm,0.8s | | | | | | | |
| **TIXI** | **Tiksi** | **26.56** | **315** | P | **P** | | **15 48 02.4** | **-0.1** |
| TIXI | | | | IAmb | IAmb | | 15 48 06.0 | |
| | comp=E,6.2nm,0.8s | | | | | | | |
| **HOOD** | **Mount Hood Mea** | **26.87** | **143** | P | **P** | | **15 48 07.2** | **+1.5** |
| HOOD | | | | IAmb | IAmb | | 15 48 08.7 | |
| | comp=Z,27nm,1.2s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.01** | **7** | P | **P** | | **15 48 51.0** | **+0.2** |
| | comp=Z,2.8nm,0.5s,baz=48,slow=20,SNR=5.5 | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.25** | **128** | P | **P** | | **15 48 54.1** | **+0.6** |
| | comp=Z,2.2nm,0.7s,baz=12,slow=4.9,SNR=2.8 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **WAKR** | **Walker** | **33.87** | **144** | P | **P** | | **15 49 08.7** | **+1.1** |
| WAKR | | | | IAmb | IAmb | | 15 49 11.6 | |
| | comp=Z,8.6nm,1.1s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.19** | **142** | P | **P** | | **15 49 11.9** | **+1.5** |
| **NVAR** | **Mina Array Bea** | **34.19** | **142** | P | **P** | | **15 49 11.2** | **+0.8** |
| | comp=Z,7.7nm,1.1s,baz=340,slow=6.9,SNR=13 | | | | | | | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| **MDPB** | **Devils Postpil** | **34.79** | **144** | IAmb | IAmb | | 15 49 20.9 | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **SCHQ** | **Schefferville** | **36.14** | **73** | P | **P** | | **15 49 26.8** | **0.0** |
| | comp=Z,2.5nm,0.7s,baz=270,slow=14,SNR=1.7 | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.97** | **5** | P | **P** | | **15 50 06.8** | **-0.3** |
| | comp=Z,3.2nm,0.7s,baz=358,slow=8.5,SNR=6.9 | | | | | | | |
| ARCES | | | | PcP | **PcP** | | **15 52 05.8** | **-1.1** |
| | comp=Z,2.5nm,0.9s,baz=3.8,slow=5.5,SNR=2.1 | | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **41.83** | **112** | P | **P** | | **15 50 15.0** | **+0.4** |
| **121A** | **Cookes Peak, D** | **42.34** | **132** | P | **P** | | **15 50 19.6** | **+0.6** |
| 121A | | | | IAmb | IAmb | | 15 50 23.1 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **WVT** | **Waverly** | **45.06** | **107** | P | **P** | | **15 50 40.8** | **+0.2** |
| WVT | | | | IAmb | IAmb | | 15 50 43.6 | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **CLTN** | **Cedars of Leba** | **45.60** | **106** | IAmb | IAmb | | 15 50 47.2 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **V48A** | **Smith Brothers** | **45.75** | **107** | IAmb | IAmb | | 15 50 47.5 | |
| | comp=Z,6.8nm,1.0s | | | | | | | |
| **BRDY** | **Brady** | **45.97** | **122** | P | **P** | | **15 50 48.0** | **+0.1** |
| **OXF** | **Oxford** | **46.01** | **110** | P | **P** | | **15 50 48.8** | **+0.7** |
| **TX31** | **Lajitas Ar. Si** | **46.47** | **128** | P | **P** | | **15 50 52.1** | **+0.2** |
| **TXAR** | **Lajitas Array** | **46.47** | **128** | P | **P** | | **15 50 53.0** | **+1.0** |
| | comp=Z,1.0nm,0.7s,baz=348,slow=5.6,SNR=10 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **SWET** | **Sewanee** | **46.53** | **106** | IAmb | IAmb | | 15 50 55.7 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.27** | **283** | P | **P** | | **15 50 55.7** | **-2.2** |
| | comp=Z,1.9nm,0.7s,baz=22,slow=10,SNR=4.4 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **NOA** | **NORSAR Array B** | **48.51** | **16** | P | **P** | | **15 51 06.9** | **-0.5** |
| | comp=Z,0.6nm,0.7s,baz=290,slow=13,SNR=2.2 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **49.09** | **6** | P | **P** | | **15 51 11.1** | **-0.6** |
| | comp=Z,2.0nm,0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.66 301** | | P | **P** | **15 54 41.8** | **-1.3** |
| | comp=Z,1.7nm,0.8s,baz=4.9,slow=7.3,SNR=8.8 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **150.33 201** | | PKPbc | **PKPdf** | **16 02 11.3** | **+2.5** |
| | comp=Z,0.3nm,0.7s,baz=20,slow=10,SNR=2.2 | | | | | | |

*IDC* ***12*** *15:43:46.3± 1.3, 36°.28N× 142°.37E, h0km, mb3.8/6, mbtmp3.8/11, ML3.3/5, Error ellipse: s-maj=25.0km s-min=22.8km az=83.0*

*JMA* ***12*** *15:43:50.9± 0.3, 36°.3N± 0°.5× 14°.2E± °, h68km, MV3.6/32, FAR E OFF IBARAKI PREF*

**ISC 12 15:43:48.2± 1.0, 36°.25N± 0°.06× 142°.38E± 0°.10, h18km, n25, σ1s 44/27, mb3.8/6, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHYU** | **Hitachinakayam** | **1.45** | **274** | P | **Pn** | **15 44 12.3** | **-1.1** |
| **JHO** | **Hitachi** | **1.50** | **285** | P | **Pn** | **15 44 12.7** | **-1.5** |
| **JIHU** | **Itakohorinouch** | **1.52** | **260** | P | **Pn** | **15 44 13.8** | **-0.7** |
| **ONAJ** | **Iwakimizuishiy** | **1.53** | **304** | P | **Pn** | **15 44 13.7** | **-1.0** |
| **JFK** | **Kawauchi** | **1.64** | **313** | *e*P | **Pn** | **15 44 15.8** | **-0.4** |
| **BSO1** | **Boso 1** | **1.96** | **216** | P | **Pn** | **15 44 20.4** | **+0.4** |
| **JMM** | **Marumori** | **2.05** | **322** | P | **Pn** | **15 44 21.5** | **-0.3** |
| **BSO3** | **Boso 3** | **2.10** | **227** | P | **Pn** | **15 44 22.5** | **+0.3** |
| **JOTO** | **OTAMA OYAMA** | **2.10** | **309** | P | **Pn** | **15 44 22.8** | **+0.3** |
| **JAG** | **Ashikaga** | **2.37** | **275** | *i* P | **Pn** | **15 44 25.0** | **-1.2** |
| **JRY** | **Ryogami san** | **2.82** | **266** | P | **Pn** | **15 44 31.4** | **-1.0** |
| **JOD2** | **Odawara 2** | **2.85** | **251** | P | **Pn** | **15 44 32.5** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **3.38** | **276** | Pn | **Pn** | **15 44 38.7** | **-1.3** |
| | 1.8nm,0.3s,baz=91,slow=24,SNR=196 | | | | | | |
| MJAR | | | | Sn | **Sn** | **15 45 20.2** | **+0.5** |
| | 0.6nm,0.3s,baz=111,slow=12,SNR=1.7 | | | | | | |
| | 6.7nm,0.3s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **3.78** | **215** | Pn | **Pn** | **15 44 44.7** | **-0.9** |
| | 34nm,0.3s,baz=50,slow=17,SNR=30 | | | | | | |
| JHJ | | | | Sn | **Sn** | **15 45 25.6** | **-4.0** |
| | 58nm,0.3s,baz=90,slow=20,SNR=9.0 | | | | | | |
| | 65nm,0.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **7.86** | **1** | Pn | **Pn** | **15 45 41.0** | **-0.6** |
| | 0.4nm,0.3s,baz=214,slow=14,SNR=10 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **15 47 06.6** | **-3.5** |
| | baz=328,slow=14 | | | | | | |
| | 1.2nm,0.3s | | | | | | |
| **JCJ** | **Chichijima** | **9.12** | **181** | Sn | Sn | 15 47 27.9 | -13 |
| | 6.2nm,0.3s,baz=273,slow=13,SNR=1.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.22** | **318** | Pn | **Pn** | **15 46 26.2** | **-1.5** |
| | 0.2nm,0.3s,baz=116,slow=16,SNR=2.9 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **11.64** | **280** | Pn | **Pn** | **15 46 33.1** | **-0.3** |
| | 0.1nm,0.3s,baz=93,slow=12,SNR=3.2 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **28.87** | **305** | P | **P** | **15 49 46.9** | **+1.1** |
| | 3.0nm,0.9s,baz=104,slow=8.8,SNR=11 | | | | | | |
| | 3.0nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.06** | **257** | P | **P** | **15 51 40.2** | **+1.2** |
| | 0.4nm,0.3s,baz=50,slow=4.8,SNR=1.3 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.19** | **303** | P | **P** | **15 52 05.1** | **+1.2** |
| **MKAR** | **Makanchi Array** | **45.19** | **303** | P | **P** | **15 52 05.2** | **+1.2** |
| | 2.0nm,0.7s,baz=88,slow=9.7,SNR=13 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.10** | **309** | P | **P** | **15 52 19.6** | **+0.8** |
| | 0.9nm,0.3s,baz=84,slow=8.7,SNR=9.1 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **60.12** | **189** | P | **P** | **15 53 56.0** | **+1.4** |
| | 0.4nm,0.9s,baz=16,slow=11,SNR=4.7 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **77.66** | **46** | P | **P** | **15 55 44.2** | **+0.3** |
| | 0.1nm,0.5s,baz=346,slow=3.3,SNR=1.9 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

**JMA 12 15:44:52.0± 0.1, 26°.8N± 0°.3× 131°.5E± 0°.9, h33km, MV4.1/15, NEAR MINAMI-DAITOJIMA IS, Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKDJ** | **Kitadaitoujima** | **0.86** | **191** | *e*P | Pn | 15 45 07.8 | 0.0 |
| JKDJ | | | | S | Sn | 15 45 19.4 | +0.2 |
| **JMZ** | **Minamidaito 2** | **1.00** | **193** | P | Pn | 15 45 10.0 | +0.2 |
| JMZ | | | | *e*S | Sn | 15 45 22.9 | +0.2 |
| **JAM** | **Amami Oshima** | **2.32** | **314** | *e*P | Pn | 15 45 29.8 | +1.9 |
| JAM | | | | *e*S | Sn | 15 45 56.9 | +1.7 |
| **JTK** | **Tokunoshima** | **2.46** | **294** | P | Pn | 15 45 31.8 | +1.9 |
| **JAMN** | **Amaminishikomi** | **2.50** | **306** | P | Pn | 15 45 32.1 | +1.6 |
| JAMN | | | | *e*S | Sn | 15 46 00.8 | +1.0 |
| **JOKE** | **Okinoerabujima** | **2.66** | **283** | P | Pn | 15 45 34.3 | +1.8 |
| **JYRO** | **Yoronjima** | **2.72** | **275** | P | Pn | 15 45 34.9 | +1.5 |
| JYRO | | | | S | Sn | 15 46 05.5 | +0.4 |
| **JOW** | **Kunigami** | **2.87** | **271** | P | Pn | 15 45 37.0 | +1.6 |
| **JTAJ** | **Takarajima** | **3.09** | **320** | *e*P | Pn | 15 45 40.3 | +1.7 |
| **JNTH** | **Nagotoyohara** | **3.11** | **266** | P | Pn | 15 45 39.9 | +1.1 |
| **JIH** | **Iheya** | **3.15** | **275** | P | Pn | 15 45 41.0 | +1.8 |
| **JJT3** | **Tamagusuku3** | **3.38** | **260** | *e*P | Pn | 15 45 44.0 | +1.5 |

*AEIC* ***12*** *15:55:45.5± 1.1, 69°.47N± 0°.04× 144°.44W± 0°.08, h6km± 6km, ML3.5, ML3.5/78(NEIC), Error ellipse: s-maj=6.3km s-min=3.6km az=197.0*

*NEIC* ***12*** *15:55:45.9± 0.9, 69°.49N± 0°.03× 144°.41W± 0°.08, h10km± 2km, Error ellipse: s-maj=5.8km s-min=3.5km az=220.0*

*IDC* ***12*** *15:55:46.3± 1.5, 69°.68N× 144°.45W, h0km, mb3.6/5, mbtmp3.6/7, ML3.5/2, Error ellipse: s-maj=39.3km s-min=19.4km az=86.0*

**ISC 12 15:55:45.2± 1.3, 69°.51N± 0°.04× 144°.44W± 0°.03, h5km± 10km, n97, σ0s 88/87, mb3.6/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.28** | **64** | | **Pn** | **15 55 55.2** | **-0.9** |
| **C26K** | **Camden Bay** | **0.45** | **338** | | **Pg** | **15 55 54.4** | **+0.6** |
| C26K | | | | | **Sg** | **15 56 00.9** | **+1.3** |
| **C26K** | **Camden Bay** | **0.45** | **338** | IAML | | 15 56 02.4 | |
| | comp=N,3μm,0.3s | | | | | | |
| C26K | | | | IAML | | 15 56 02.5 | |
| | comp=E,2μm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.71** | **256** | | **Pg** | **15 55 58.7** | **-0.1** |
| D25K | | | | | **Sg** | **15 56 08.8** | **+0.8** |
| **D27M** | **Malcolm River** | **1.26** | **100** | | **Pg** | **15 56 09.2** | **-0.1** |
| D27M | | | | | **Sn** | **15 56 26.7** | **-0.1** |
| **D27M** | **Malcolm River** | **1.26** | **100** | IAML | | 15 56 33.0 | |
| | comp=E,781nm,0.5s | | | | | | |
| D27M | | | | IAML | | 15 56 33.7 | |
| | comp=N,1μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.51** | **280** | | **Pb** | **15 56 13.2** | **-0.5** |
| C24K | | | | | **Sg** | **15 56 33.9** | **+0.3** |
| **C24K** | **Franklin Bluff** | **1.51** | **280** | IAML | | 15 56 38.7 | |
| | comp=N,818nm,0.7s | | | | | | |
| C24K | | | | IAML | | 15 56 38.8 | |
| | comp=E,781nm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.60** | **259** | | **Pb** | **15 56 14.6** | **-0.6** |
| **E27K** | **Coleen River** | **1.68** | **141** | | **Pn** | **15 56 15.2** | **-0.1** |
| E27K | | | | | **Sb** | **15 56 37.5** | **-0.5** |
| **E27K** | **Coleen River** | **1.68** | **141** | IAML | | 15 56 42.5 | |
| | comp=E,503nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **177** | | **Pn** | **15 56 16.9** | **-0.4** |
| **F25K** | **Christian Rive** | **1.97** | **194** | | **Pn** | **15 56 18.9** | **-0.4** |
| F25K | | | | | **Sn** | **15 56 44.4** | **0.0** |
| **F25K** | **Christian Rive** | **1.97** | **194** | IAML | | 15 56 55.7 | |
| | comp=N,354nm,0.7s | | | | | | |
| F25K | | | | IAML | | 15 56 55.8 | |
| | comp=E,322nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **115** | | **Pn** | **15 56 19.0** | **-0.4** |
| **E28M** | **Babbage River** | **1.98** | **115** | IAML | | 15 56 52.0 | |
| | comp=N,323nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **2.02** | **92** | | **Pn** | **15 56 19.9** | **0.0** |
| **TOLK** | **Toolik Lake Re** | **2.04** | **247** | | **Pn** | **15 56 20.1** | **-0.2** |
| TOLK | | | | | **Sb** | **15 56 46.8** | **-1.6** |
| **TOLK** | **Toolik Lake Re** | **2.04** | **247** | IAML | | 15 57 00.0 | |
| | comp=N,370nm,1.0s | | | | | | |
| TOLK | | | | IAML | | 15 57 01.5 | |
| | comp=E,434nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.06** | **228** | | **Pn** | **15 56 20.2** | **-0.4** |
| E24K | | | | | **Sn** | **15 56 46.3** | **-0.2** |
| **E24K** | **Your Creek** | **2.06** | **228** | IAML | | 15 56 56.6 | |
| | comp=E,309nm,1.0s | | | | | | |
| **C23K** | **Itkillik River** | **2.18** | **282** | | **Pn** | **15 56 21.9** | **-0.3** |
| **D23K** | **Nanushuk River** | **2.29** | **259** | | **Pn** | **15 56 23.4** | **-0.2** |
| **D23K** | **Nanushuk River** | **2.29** | **259** | IAML | | 15 57 12.5 | |
| | comp=E,243nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.37** | **214** | | **Pn** | **15 56 24.6** | **-0.2** |
| **E23K** | **Chandalar** | **2.38** | **235** | | **Pn** | **15 56 24.9** | **-0.1** |
| **E23K** | **Chandalar** | **2.38** | **235** | IAML | | 15 57 08.2 | |
| | comp=E,248nm,0.8s | | | | | | |
| E23K | | | | IAML | | 15 57 09.6 | |
| | comp=N,227nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.53** | **136** | | **Pn** | **15 56 27.1** | **+0.1** |
| **G26K** | **Porcupine Rive** | **2.58** | **174** | | **Pn** | **15 56 27.6** | **0.0** |
| **E29M** | **Blow River** | **2.61** | **112** | | **Pn** | **15 56 28.0** | **-0.1** |
| **E29M** | **Blow River** | **2.61** | **112** | IAML | | 15 57 19.5 | |
| | comp=N,218nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **2.90** | **158** | | **Pn** | **15 56 31.7** | **-0.4** |
| **D22K** | **Ayikyak River** | **3.01** | **262** | | **Pn** | **15 56 33.5** | **-0.1** |
| **D22K** | **Ayikyak River** | **3.01** | **262** | IAML | | 15 57 28.1 | |
| | comp=N,151nm,0.7s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.04** | **203** | | **Pn** | **15 56 33.6** | **-0.3** |
| **G24K** | **Hadweenzic Riv** | **3.04** | **203** | IAML | | 15 57 24.7 | |
| | comp=E,142nm,0.8s | | | | | | |
| G24K | | | | IAML | | 15 57 26.8 | |
| | comp=N,177nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **3.13** | **226** | | **Pn** | **15 56 34.9** | **-0.2** |
| **B22K** | **Teshekpuk Lake** | **3.21** | **289** | | **Pn** | **15 56 36.6** | **+0.3** |
| **B22K** | **Teshekpuk Lake** | **3.21** | **289** | IAML | | 15 57 40.1 | |
| | comp=E,142nm,0.7s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.57** | **277** | Pn | **Pn** | **15 56 42.2** | **+1.0** |
| B21K | | | | IAML | | 15 57 51.3 | |
| | comp=N,97nm,1.0s | | | | | | |
| B21K | | | | IAML | | 15 57 55.8 | |
| | comp=E,107nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.60** | **257** | Pn | **Pn** | **15 56 42.7** | **+1.1** |
| E21K | | | | IAML | | 15 57 44.3 | |
| | comp=N,94nm,0.6s | | | | | | |
| E21K | | | | IAML | | 15 57 58.9 | |
| | comp=E,102nm,0.8s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.88** | **298** | | **Pn** | **15 56 45.5** | **+0.1** |
| **H24K** | **Noodor Dome** | **3.91** | **201** | Pn | **Pn** | **15 56 47.1** | **+1.1** |
| H24K | | | | IAML | | 15 57 52.8 | |
| | comp=N,74nm,0.7s | | | | | | |
| H24K | | | | IAML | | 15 58 05.3 | |
| | comp=E,57nm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **4.02** | **142** | | **Pn** | **15 56 47.2** | **-0.2** |
| **H29M** | **Whitestone** | **4.02** | **142** | IAML | | 15 57 42.7 | |
| | comp=E,84nm,0.8s | | | | | | |
| H29M | | | | IAML | | 15 58 04.2 | |
| | comp=N,86nm,0.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.29** | **134** | | **Pn** | **15 56 52.2** | **+1.1** |
| **I28M** | **Miner Creek** | **4.43** | **155** | Pn | **Pn** | **15 56 54.5** | **+1.4** |
| I28M | | | | IAML | | 15 57 49.9 | |
| | comp=N,44nm,0.6s | | | | | | |
| I28M | | | | IAML | | 15 58 18.0 | |
| | comp=E,44nm,0.9s | | | | | | |
| **E20K** | **Nigu River** | **4.43** | **259** | | **Pn** | **15 56 52.6** | **-0.5** |
| **B20K** | **Meade River** | **4.45** | **282** | | **Pn** | **15 56 53.4** | **+0.2** |
| **A21K** | **Barrow** | **4.49** | **300** | | **Pn** | **15 56 53.8** | **+0.1** |
| **G21K** | **Allakaket** | **4.54** | **233** | | **Pn** | **15 56 54.2** | **-0.4** |
| **G21K** | **Allakaket** | **4.54** | **233** | IAML | | 15 58 13.4 | |
| | comp=E,51nm,0.8s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.56** | **196** | | **Pn** | **15 56 54.4** | **-0.4** |
| **POKR** | **Poker Plat Res** | **4.56** | **196** | IAML | | 15 58 25.7 | |
| | comp=E,39nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **206** | Pn | **Pn** | **15 56 58.4** | **+0.6** |
| I23K | | | | IAML | | 15 58 33.0 | |
| | comp=N,36nm,1.4s | | | | | | |
| I23K | | | | IAML | | 15 58 37.6 | |
| | comp=E,45nm,1.2s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.78** | **148** | | **Pn** | **15 56 59.1** | **+1.2** |
| I29M | | | | IAML | | 15 58 05.8 | |
| | comp=N,44nm,0.7s | | | | | | |
| **MDM** | **Murphy Dome** | **4.80** | **200** | Pn | **Pn** | **15 56 59.8** | **+1.6** |
| MDM | | | | IAML | | 15 58 22.5 | |
| | comp=N,44nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **4.85** | **193** | Pn | **Pn** | **15 57 01.5** | **+2.7** |
| | comp=N,1.7nm,0.3s,baz=5.1,slow=16,SNR=5.9 | | | | | | |
| ILAR | | | | Sn | **Sn** | **15 57 56.6** | **+1.3** |
| | comp=N,1.8nm,0.3s,baz=13,slow=25,SNR=1.5 | | | | | | |
| | comp=N,6.3nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **5.02** | **265** | | **Pn** | **15 57 02.4** | **+1.2** |
| **E19K** | **Redstone River** | **5.14** | **252** | Pn | **Pn** | **15 57 04.4** | **+1.7** |
| E19K | | | | IAML | | 15 58 37.0 | |
| | comp=E,29nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.26** | **202** | Pn | **Pn** | **15 57 05.4** | **+1.1** |
| **WRH** | **Wood River Hil** | **5.26** | **198** | | **Pn** | **15 57 05.6** | **+1.2** |
| WRH | | | | IAML | | 15 58 37.2 | |
| | comp=N,24nm,1.2s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.39** | **273** | | **Pn** | **15 57 06.0** | **-0.2** |
| **C19K** | **Lookout Ridge** | **5.39** | **273** | IAML | | 15 59 05.2 | |
| | comp=E,24nm,1.2s | | | | | | |
| C19K | | | | IAML | | 15 59 08.4 | |
| | comp=N,24nm,1.4s | | | | | | |
| **K27K** | **Chicken** | **5.58** | **169** | | **Pn** | **15 57 08.3** | **-0.5** |
| **F19K** | **Shaleruckik Mo** | **5.65** | **248** | | **Pn** | **15 57 09.8** | **+0.1** |
| **BWN** | **Browne** | **5.71** | **203** | Pn | **Pn** | **15 57 10.7** | **0.0** |
| **A19K** | **Wainwright** | **5.79** | **285** | | **Pn** | **15 57 12.4** | **+0.8** |
| **G19K** | **Purcell Mounta** | **5.86** | **241** | Pn | **Pn** | **15 57 12.5** | **-0.1** |
| **J30M** | **Hart River** | **5.88** | **144** | | **Pn** | **15 57 12.3** | **-0.7** |
| **C18K** | **Utukok River** | **6.06** | **270** | | **Pn** | **15 57 14.7** | **-0.8** |
| **E18K** | **Tukpahlearik C** | **6.30** | **258** | | **Pn** | **15 57 17.8** | **-0.9** |
| **K29M** | **Barlow Dome** | **6.31** | **151** | | **Pn** | **15 57 18.7** | **-0.2** |
| **F18K** | **Selawik** | **6.40** | **250** | | **Pn** | **15 57 19.8** | **-0.2** |
| **G18K** | **Tagagawik** | **6.50** | **243** | | **Pn** | **15 57 21.0** | **-0.5** |
| **BCAR** | **Beaver Creek A** | **6.56** | **169** | Pn | **Pn** | **15 57 22.4** | **+0.1** |
| **DHY** | **Denali Highway** | **6.57** | **192** | | **Pn** | **15 57 21.1** | **-1.4** |
| **A36M** | **Sachs Harbour** | **6.80** | **60** | | **Pn** | **15 57 25.2** | **-0.2** |
| **C17K** | **DeLong Mountai** | **6.81** | **270** | | **Pn** | **15 57 25.1** | **-0.6** |
| **E17K** | **Hotham Inlet** | **6.88** | **258** | | **Pn** | **15 57 26.2** | **-0.4** |
| **L29M** | **L29M** | **6.90** | **155** | | **Pn** | **15 57 26.5** | **-0.5** |
| **H18K** | **Honhosa River** | **6.92** | **238** | Pn | **Pn** | **15 57 27.5** | **+0.3** |
| **D17K** | **Noatak River** | **7.05** | **264** | | **Pn** | **15 57 28.8** | **-0.1** |
| **C36M** | **Paulatuk** | **7.17** | **82** | | **Pn** | **15 57 30.3** | **-0.2** |
| **G17K** | **Kiwalik Mounta** | **7.39** | **245** | | **Pn** | **15 57 33.5** | **-0.2** |
| **M29M** | **Somme Creek** | **7.50** | **158** | | **Pn** | **15 57 35.2** | **0.0** |
| **H17K** | **Granite Mounta** | **7.54** | **240** | Pn | **Pn** | **15 57 35.9** | **+0.2** |
| **C16K** | **Lisburne Hills** | **7.64** | **271** | Pn | **Pn** | **15 57 37.3** | **+0.3** |
| **YUK2** | **White River** | **7.89** | **167** | | **Pn** | **15 57 41.4** | **+0.8** |
| **G16K** | **Koyuk River** | **8.01** | **248** | Pn | **Pn** | **15 57 42.1** | **0.0** |
| **M31M** | **Drury Creek, Y** | **8.39** | **146** | Pn | **Pn** | **15 57 47.4** | **0.0** |
| **YKA** | **Yellowknife Ar** | **13.88** | **106** | Pn | **Pn** | **15 58 59.0** | **-3.4** |
| | comp=N,0.2nm,0.3s,baz=324,slow=14,SNR=4.7 | | | | | | |
| YKA | | | | Sn | Sn | 16 01 22.4 | -14 |
| | comp=N,0.2nm,0.3s,baz=38,slow=9.5,SNR=1.4 | | | | | | |
| | comp=N,0.6nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.22** | **128** | P | **P** | **16 02 16.6** | **+2.2** |
| | comp=N,0.5nm,0.6s,baz=0.2,slow=6.1,SNR=6.5 | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.14** | **142** | P | **P** | **16 02 33.1** | **+2.1** |
| | comp=N,0.3nm,0.6s,baz=346,slow=10,SNR=3.6 | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.44** | **128** | P | P | 16 04 17.3 | +4.5 |
| | comp=N,0.2nm,0.7s,baz=328,slow=10.0,SNR=1.9 | | | | | | |
| | comp=N,0.2nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **49.16** | **6** | P | **P** | **16 04 33.6** | **+0.2** |
| | comp=N,2.3nm,1.0s,baz=0.0,slow=6.9,SNR=7.0 | | | | | | |
| | comp=N,2.3nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **49.71** | **14** | P | **P** | **16 04 37.9** | **+0.3** |
| | comp=N,1.6nm,0.7s,baz=1.1,slow=7.4,SNR=4.7 | | | | | | |
| | comp=N,1.6nm,0.7s | | | | | | |

*BJI* ***12*** *16:02:07.0± 0.0, 69°.60N× 144°.90W, h6km, mb4.8/53, mB5.5/1, Ms5.4/3, Ms7 5.3/8*

*IDC* ***12*** *16:02:07.4± 0.4, 69°.69N× 144°.92W, h0km, mb5.0/33, mbtmp5.0/37, ML4.8/4, MS5.0/2, Error ellipse: s-maj=12.2km s-min=9.3km az=48.0*

*MOS* ***12*** *16:02:08.0± 0.9, 69°.63N× 144°.93W, h12km, mb5.3/70, MS5.0/4, Error ellipse: s-maj=15.0km s-min=3.3km az=91.6*

*GCMT* ***12*** *16:02:09.3± 0.4, 69°.83N± 0°.03× 144°.67W± 0°.07, h34km± 2km, MW5.3/71, Moment Tensor Solution. s14,c16; s71,c100; Duration: 1s1 Moment tensor: Scale 10^17 Nm; Mrr=0.30±.16; Mθθ 0.26±.10; Mφφ 0.04±.10; Mrθ 0.74±.12; Mrφ=-1.06±.05; Mθφ=0.05±.10; Best double couple: M0 1.31100×10^17 NP1:φs 271.00000°, δ 83.00000°, λ=-143.00000°. NP2:φs 176.00000°, δ 53.00000°, λ=-9.00000°. Principal axes: T 1.4230, Plg20.0000°, Azm38.0000°; N -0.2240, Plg52.0000°, Azm281.0000°; P -1.1990, Plg31.0000°, Azm141.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*AEIC* ***12*** *16:02:09.3± 1.8, 69°.55N± 0°.04× 144°.95W± 0°.08, h1km± 3km, ML5.5, mb5.2/557(NEIC), ML5.5/118(NEIC), Mwr5.1/17(NEIC), Mww5.1/35(NEIC) Error ellipse: s-maj=6.2km s-min=3.9km az=187.0*

*NEIC* ***12*** *16:02:09.6± 1.0, 69°.62N± 0°.04× 144°.93W± 0°.08, h10km± 1km, Error ellipse: s-maj=7.5km s-min=4.7km az=187.0, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr 0.32; Mθθ -1.15; Mφφ 0.83; Mrθ 0.72; Mrφ -4.79; Mθφ -0.84; Fault plane solution: M0 5.02000×10^16 NP1:φs 95.04000°, δ 80.81000°, λ 170.29000°. NP2:φs 186.61000°, δ 80.42000°, λ 9.32000°. Principal axes: T 4.9904, Plg13.0000°, Azm51.0000°; N 0.0561, Plg77.0000°, Azm232.0000°; P -5.0465, Plg0.0000°, Azm141.0000°;*

*NEIC* ***12*** *16:02:09.3, 69°.75N× 144°.95W, h12km, Moment Tensor Solution. Duration: 1s8 Moment tensor: Scale 10^16 Nm; Mrr=0.64; Mθθ 1.14; Mφφ 1.77; Mrθ 1.53; Mrφ -4.69; Mθφ -1.18; Fault plane solution: M0 5.22000×10^16 NP1:φs 98.13000°, δ 84.46000°, λ 162.60000°. NP2:φs 189.86000°, δ 72.69000°, λ 5.80000°. Principal axes: T 5.7706, Plg16.0000°, Azm53.0000°; N -1.1001, Plg72.0000°, Azm261.0000°; P -4.6705, Plg8.0000°, Azm145.0000°;*

*NEIC* ***12*** *16:02:09.5, 69°.60N× 144°.96W, h6km*

*NEIC* ***12*** *16:02:09.3, 69°.55N× 144°.95W, h12km*

*BGR* ***12*** *16:02:16.6, 70°.50N× 145°.50W, h12km± 1km, mb5.2*

**ISC 12 16:02:09.8± 0.5, 69°.62N± 0°.03× 144°.91W± 0°.02, h10km± 2km, h11km: pP-P, n1396, σ0s 98/1160, mb5.2/469, MS5.1/6, 74C-43D, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.30** | **360** | | **Sb** | **16 02 20.8** | **-1.2** |
| **C26K** | **Camden Bay** | **0.30** | **360** | P | **Pb** | **16 02 16.2** | **-1.0** |
| | baz=182,SNR=986 | | | | | | |
| **C27K** | **Jago River** | **0.42** | **89** | | **Pg** | **16 02 17.8** | **-0.2** |
| C27K | | | | | **Sg** | **16 02 23.9** | **+0.4** |
| **C27K** | **Jago River** | **0.42** | **89** | IAML | | 16 02 25.8 | |
| | comp=N,106μm,0.9s | | | | | | |
| C27K | | | | IAML | | 16 02 25.8 | |
| | comp=E,345μm,0.4s | | | | | | |
| **C27K** | **Jago River** | **0.42** | **89** | P | **Pg** | **16 02 17.8** | **-0.2** |
| | baz=260,SNR=438 | | | | | | |
| **D25K** | **Kavik River** | **0.60** | **240** | | **Sg** | **16 02 27.8** | **-1.4** |
| **D25K** | **Kavik River** | **0.60** | **240** | | **Pg** | **16 02 19.1** | **-2.2** |
| **D25K** | **Kavik River** | **0.60** | **240** | IAML | | 16 02 30.3 | |
| | comp=E,40μm,1.1s | | | | | | |
| D25K | | | | IAML | | 16 02 30.5 | |
| | comp=N,45μm,1.1s | | | | | | |
| **D25K** | **Kavik River** | **0.60** | **240** | P | **Pg** | **16 02 19.4** | **-2.0** |
| | baz=65,SNR=428 | | | | | | |
| **C24K** | **Franklin Bluff** | **1.33** | **276** | | **Sg** | **16 02 52.8** | **+0.3** |
| **C24K** | **Franklin Bluff** | **1.33** | **276** | P | **Pb** | **16 02 34.0** | **-0.7** |
| | baz=96 | | | | | | |
| **D27M** | **Malcolm River** | **1.44** | **103** | | **Sg** | **16 02 56.9** | **+0.8** |
| **D27M** | **Malcolm River** | **1.44** | **103** | Pn | **Pn** | **16 02 35.7** | **-0.2** |
| **D27M** | **Malcolm River** | **1.44** | **103** | IAML | | 16 02 58.4 | |
| | comp=N,116μm,0.8s | | | | | | |
| D27M | | | | IAML | | 16 03 01.2 | |
| | comp=E,51μm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.44** | **103** | P | **Pn** | **16 02 35.4** | **-0.6** |
| | baz=284,SNR=109 | | | | | | |
| **D24K** | **Happy Valley** | **1.47** | **253** | | **Sg** | **16 02 56.6** | **-0.2** |
| **D24K** | **Happy Valley** | **1.47** | **253** | | **Pn** | **16 02 35.6** | **-0.6** |
| **D24K** | **Happy Valley** | **1.47** | **253** | IAML | | 16 02 59.9 | |
| | comp=E,55μm,1.2s | | | | | | |
| D24K | | | | IAML | | 16 03 10.4 | |
| | comp=N,50μm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **1.47** | **253** | P | **Pn** | **16 02 35.8** | **-0.4** |
| | baz=72,SNR=157 | | | | | | |
| **E27K** | **Coleen River** | **1.88** | **139** | | **Sn** | **16 03 06.0** | **+0.5** |
| **E27K** | **Coleen River** | **1.88** | **139** | | **Pn** | **16 02 42.0** | **+0.1** |
| **E27K** | **Coleen River** | **1.88** | **139** | IAML | | 16 03 12.2 | |
| | comp=E,36μm,0.7s | | | | | | |
| E27K | | | | IAML | | 16 03 15.6 | |
| | comp=N,22μm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.88** | **139** | P | **Pn** | **16 02 42.1** | **+0.3** |
| | baz=320,SNR=362 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.94** | **242** | | **Sb** | **16 03 08.0** | **-1.4** |
| **TOLK** | **Toolik Lake Re** | **1.94** | **242** | | **Pn** | **16 02 42.3** | **-0.5** |
| **TOLK** | **Toolik Lake Re** | **1.94** | **242** | IAML | | 16 03 17.8 | |
| | comp=E,21μm,1.1s | | | | | | |
| TOLK | | | | IAML | | 16 03 23.8 | |
| | comp=N,24μm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.94** | **242** | P | **Pn** | **16 02 42.1** | **-0.6** |
| | baz=59,SNR=94 | | | | | | |
| **F26K** | **Sheenjek River** | **1.96** | **171** | | **Pn** | **16 02 42.6** | **-0.3** |
| **F26K** | **Sheenjek River** | **1.96** | **171** | IAML | | 16 03 13.6 | |
| | comp=E,64μm,0.9s | | | | | | |
| F26K | | | | IAML | | 16 03 14.2 | |
| | comp=N,47μm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.96** | **171** | P | **Pn** | **16 02 43.1** | **+0.2** |
| | baz=351,SNR=68 | | | | | | |
| **C23K** | **Itkillik River** | **2.00** | **279** | Pn | **Pn** | **16 02 43.4** | **-0.1** |
| C23K | | | | IAML | | 16 03 16.1 | |
| | comp=N,38μm,1.1s | | | | | | |
| C23K | | | | IAML | | 16 03 23.8 | |
| | comp=E,32μm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.00** | **279** | P | **Pn** | **16 02 43.2** | **-0.3** |
| | baz=96,SNR=39 | | | | | | |
| **E24K** | **Your Creek** | **2.03** | **222** | | **Sn** | **16 03 09.7** | **+0.4** |
| **E24K** | **Your Creek** | **2.03** | **222** | | **Pn** | **16 02 

B22K IAML 16 04 00.4
comp=N,16µm,1.2s
**B22K Teshekpuk Lake** 3.02 288 P Pn **16 02 57.7 +0.2**
baz=101,SNR=25
**FYU Fort Yukon** 3.07 182 Pn **16 02 57.9 -0.3**
**G27K Doyon Strip** 3.08 155 Pn **16 02 57.9 -0.5**
**G27K Doyon Strip** 3.08 155 P Pn **16 02 57.8 -0.5**
baz=337,SNR=36
**G24K Hadweenzic Riv** 3.09 199 Pn **16 02 57.9 -0.5**
G24K IAML 16 03 50.3
comp=E,22µm,1.4s
**G24K Hadweenzic Riv** 3.09 199 P Pn **16 02 58.0 -0.5**
baz=17,SNR=64
**COLD Coldfoot** 3.10 222 Pn **16 02 57.7 -0.9**
**COLD Coldfoot** 3.10 222 P Pn **16 02 58.5 -0.2**
baz=37,SNR=65
**H25L Birch Creek** 3.39 186 Pn **16 03 02.4 -0.2**
**H25L Birch Creek** 3.39 186 P Pn **16 03 02.2 -0.4**
baz=5.3,SNR=23
**B21K Ikpikpuk River** 3.40 275 Pn Pn **16 03 02.7 0.0**
B21K IAML 16 04 06.6
comp=E,10µm,1.2s
B21K IAML 16 04 16.1
comp=N,15µm,1.2s
**B21K Ikpikpuk River** 3.40 275 P Pn **16 03 02.6 0.0**
baz=87,SNR=23
**F22K John River** 3.41 235 Pn **16 03 03.0 +0.1**
**F22K John River** 3.41 235 P Pn **16 03 02.1 -0.8**
baz=49,SNR=26
**E21K Killik River** 3.47 254 Pn Pn **16 03 03.6 -0.1**
E21K IAML 16 04 07.1
comp=N,8µm,1.1s
**E21K Killik River** 3.47 254 P Pn **16 03 02.4 -1.3**
baz=67,SNR=18
**G23K Bananza Creek** 3.49 216 Pn **16 03 03.9 -0.2**
G23K IAML 16 04 10.3
comp=E,10µm,1.5s
G23K IAML 16 04 10.6
comp=N,12µm,1.1s
**G23K Bananza Creek** 3.49 216 P Pn **16 03 04.4 +0.3**
baz=31
**H27K Steamboat Moun** 3.64 158 P Pn **16 03 06.2 +0.1**
baz=340,SNR=57
**G22K Bettles** 3.66 225 Pn **16 03 06.0 -0.3**
**G22K Bettles** 3.66 225 P Pn **16 03 05.6 -0.6**
baz=40
**A22K Sinclair Lake** 3.68 297 P Pn **16 03 06.1 -0.4**
baz=108,SNR=22
**G29M Pine Creek** 3.74 134 Pn **16 03 07.5 +0.1**
**G29M Pine Creek** 3.74 134 P Pn **16 03 07.7 +0.4**
baz=319,SNR=162
**F30M Barrier River** 3.90 117 Pn **16 03 10.7 +1.0**
**F30M Barrier River** 3.90 117 P Pn **16 03 10.4 +0.7**
baz=304,SNR=112
**H24K Noodor Dome** 3.97 198 Pn **16 03 09.9 -0.7**
H24K IAML 16 04 27.7
comp=N,7µm,1.2s
**H24K Noodor Dome** 3.97 198 P Pn **16 03 10.2 -0.4**
baz=15,SNR=42
**F21K Alatna River** 3.98 237 Pn Pn **16 03 09.8 -0.9**
**F21K Alatna River** 3.98 237 P Pn **16 03 10.2 -0.5**
baz=50,SNR=33
**PRP Porcupine Dome** 4.13 184 Pn Pn **16 03 12.6 -0.3**
PRP IAML 16 04 17.8
comp=N,5µm,0.7s
PRP IAML 16 04 34.3
comp=E,7µm,1.2s
**PRP Porcupine Dome** 4.13 184 P Pn **16 03 12.8 -0.1**
baz=2.8,SNR=79
**G30M tAoh Zraii Nji** 4.17 125 Pn **16 03 13.5 0.0**
G30M IAML 16 04 27.5
comp=N,6µm,0.8s
G30M IAML 16 04 35.7
comp=E,6µm,0.7s
**G30M tAoh Zraii Nji** 4.17 125 P Pn **16 03 13.4 0.0**
baz=312,SNR=70
**H23K Yukon River** 4.20 207 Pn **16 03 13.6 -0.2**
H23K IAML 16 04 32.6
comp=N,6µm,1.1s
**H23K Yukon River** 4.20 207 P Pn **16 03 14.2 +0.4**
baz=23,SNR=29
**H29M Whitestone** 4.21 141 Pn **16 03 14.3 +0.4**
**H29M Whitestone** 4.21 141 P Pn **16 03 14.4 +0.4**
baz=326,SNR=203
**I27K Kandik River** 4.23 161 Pn **16 03 13.8 -0.4**
**I27K Kandik River** 4.23 161 P Pn **16 03 14.3 +0.2**
baz=344,SNR=69
**B20K Meade River** 4.26 281 Pn **16 03 14.4 -0.1**
B20K IAML 16 04 46.1
comp=N,6µm,1.4s
**B20K Meade River** 4.26 281 P Pn **16 03 14.5 -0.1**
baz=90,SNR=34
**D20K Etivluk River** 4.28 263 Pn **16 03 15.0 +0.2**
**D20K Etivluk River** 4.28 263 P Pn **16 03 14.5 -0.3**
baz=73,SNR=98
**A21K Barrow** 4.28 299 Pn **16 03 14.9 +0.1**
**A21K Barrow** 4.28 299 P Pn **16 03 14.5 -0.4**
baz=109,SNR=52
**E20K Nigu River** 4.29 257 P Pn **16 03 15.2 +0.1**
baz=67,SNR=68
**INK Inuvik** 4.31 102 Pn Pn **16 03 14.5 -0.7**
**INK Inuvik** 4.31 102 Pn Pn **16 03 15.2 +0.1**
comp=N,111nm,0.3s,baz=341,slow=14,SNR=31
INK Sn Sn **16 04 01.2 -4.1**
comp=N,275nm,0.3s,baz=265,slow=11,SNR=11
INK Lg Lg 16 04 21.2
comp=N,101nm,0.3s,baz=286,slow=23,SNR=5.4
comp=N,211nm,0.5s
**INK Inuvik** 4.31 102 P Pn **16 03 15.4 +0.2**
baz=292,SNR=57
**I26K Coal Creek Min** 4.39 170 Pn **16 03 16.1 -0.3**
**I26K Coal Creek Min** 4.39 170 P Pn **16 03 16.4 +0.1**
baz=352
**H22K Ishtalitna Cre** 4.48 216 Pn **16 03 17.5 -0.1**
**H22K Ishtalitna Cre** 4.48 216 P Pn **16 03 18.3 +0.7**
baz=31,SNR=8.6
**G21K Allakaket** 4.49 230 Pn **16 03 18.0 +0.4**
G21K IAML 16 04 43.3
comp=N,5µm,1.0s
G21K IAML 16 04 45.5
comp=E,6µm,0.8s
**G21K Allakaket** 4.49 230 P Pn **16 03 17.4 -0.3**
baz=43,SNR=16
**EPYK Eagle Plains** 4.49 133 Pn **16 03 17.4 -0.4**
**EPYK Eagle Plains** 4.49 133 P Pn **16 03 17.8 0.0**
baz=320,SNR=214
**I28M Miner Creek** 4.61 153 Pn **16 03 19.5 +0.1**
I28M IAML 16 04 43.8
comp=E,5µm,1.1s
I28M IAML 16 04 48.3
comp=N,4µm,0.8s
**I28M Miner Creek** 4.61 153 P Pn **16 03 19.8 +0.4**
baz=337,SNR=296
**POKR Poker Plat Res** 4.63 193 Pn **16 03 19.3 -0.3**
POKR IAML 16 04 41.0
comp=E,5µm,1.5s
POKR IAML 16 04 47.0
comp=N,4µm,1.3s
**POKR Poker Plat Res** 4.63 193 P Pn **16 03 19.6 0.0**
baz=11,SNR=30
**F31M Tsiigehtchic** 4.65 113 Pn **16 03 19.9 +0.1**
F31M IAML 16 04 38.3
comp=N,5µm,0.9s
**F31M Tsiigehtchic** 4.65 113 P Pn **16 03 19.9 +0.1**
baz=302,SNR=39
**F20K Avaraart Lake** 4.77 242 Pn **16 03 21.7 +0.2**
**F20K Avaraart Lake** 4.77 242 P Pn **16 03 21.9 +0.4**
baz=53,SNR=78
**G31M Satah River** 4.79 119 Pn **16 03 21.5 -0.3**
**G31M Satah River** 4.79 119 P Pn **16 03 21.6 -0.2**
baz=308,SNR=116
**I23K Minto, Yukon-K** 4.81 203 Pn **16 03 21.8 -0.3**
I23K IAML 16 04 54.0
comp=N,5µm,1.4s
**I23K Minto, Yukon-K** 4.81 203 P Pn **16 03 22.0 -0.1**
baz=19,SNR=43
**MDM Murphy Dome** 4.86 197 Pn **16 03 22.1 -0.7**
MDM IAML 16 04 51.0
comp=N,6µm,1.0s
MDM IAML 16 04 55.9
comp=E,4µm,1.3s
**D19K Kuna River** 4.87 263 Pn **16 03 23.2 +0.2**
**D19K Kuna River** 4.87 263 IAML 16 05 00.4
comp=E,3µm,1.5s
**D19K Kuna River** 4.87 263 P Pn **16 03 23.2 +0.2**
baz=71

**COLA College** 4.91 195 P Pn **16 03 23.4 0.0**
**COLA College** 4.91 195 Pn **16 03 22.9 -0.5**
**COLA College** 4.91 195 P Pn **16 03 23.2 -0.2**
baz=12
**COLA College** 4.91 195 *i* P Pn **16 03 23.1 -0.2**
**I53US FAIRBANKS INFR** 4.91 195 Pn Pn **16 03 24.8 +1.5**
baz=13,slow=26
I53US I I 16 28 20.0
baz=14,slow=324,SNR=1.0
**IL31** 4.93 190 Pn **16 03 23.4 -0.4**
**ILAR Eielson Array** 4.93 190 Pn **16 03 23.4 -0.4**
**ILAR Eielson Array** 4.93 190 Pn Pn **16 03 20.8 -3.0**
comp=E,5.6nm,0.3s,baz=10.0,slow=18,SNR=4.1
ILAR Sn Sn **16 04 17.7 -3.1**
comp=E,82nm,0.3s,baz=9.9,slow=16,SNR=6.5
ILAR Lg Lg 16 04 40.4
comp=E,136nm,0.3s,baz=343,slow=14,SNR=6.1
comp=E,102nm,0.5s
**I29M Ogilvie Camp,** 4.97 146 IAML 16 04 27.7
comp=N,3µm,0.7s
I29M IAML 16 04 48.2
comp=E,4µm,1.1s
**I29M Ogilvie Camp,** 4.97 146 P Pn **16 03 24.4 +0.1**
baz=332,SNR=280
**H21K Melozitna Rive** 4.99 221 Pn **16 03 24.3 -0.3**
H21K IAML 16 04 54.5
comp=E,3µm,1.0s
H21K IAML 16 04 56.7
comp=N,3µm,1.3s
**H21K Melozitna Rive** 4.99 221 P Pn **16 03 23.7 -0.9**
baz=34,SNR=16
**E19K Redstone River** 5.02 250 Pn **16 03 24.7 -0.3**
**E19K Redstone River** 5.02 250 IAML 16 05 01.1
comp=N,2µm,1.2s
E19K IAML 16 05 03.2
comp=E,3µm,1.1s
**E19K Redstone River** 5.02 250 P Pn **16 03 24.7 -0.3**
baz=59
**J25K Salcha River,** 5.04 182 Pn **16 03 24.9 -0.3**
J25K IAML 16 04 52.8
comp=N,2µm,1.3s
**J25K Salcha River,** 5.04 182 P Pn **16 03 25.2 0.0**
baz=1.7,SNR=42
**EGAK Eagle** 5.08 162 Pn **16 03 25.6 -0.2**
EGAK IAML 16 04 57.7
comp=N,4µm,1.2s
**EGAK Eagle** 5.08 162 P Pn **16 03 26.0 +0.2**
baz=345,SNR=190
**CCB Clear Creek Bu** 5.12 194 Pn **16 03 25.8 -0.6**
CCB IAML 16 04 57.2
comp=E,4µm,1.2s
**MLY Manley** 5.13 209 Pn **16 03 26.1 -0.5**
MLY IAML 16 04 57.6
comp=E,2µm,1.4s
**MLY Manley** 5.13 209 P Pn **16 03 26.4 -0.1**
baz=24,SNR=33
**J26L Joseph Creek** 5.17 174 Pn **16 03 26.8 -0.4**
J26L IAML 16 04 29.8
comp=N,3µm,0.7s
**J26L Joseph Creek** 5.17 174 P Pn **16 03 27.1 0.0**
baz=354,SNR=59
**C19K Lookout Ridge** 5.22 271 Pn **16 03 27.7 0.0**
C19K IAML 16 05 18.4
comp=N,3µm,1.5s
**C19K Lookout Ridge** 5.22 271 P Pn **16 03 27.6 -0.1**
baz=78,SNR=58
**HDA Harding Lake** 5.30 190 Pn **16 03 28.3 -0.5**
HDA IAML 16 04 57.2
comp=N,3µm,0.9s
**HDA Harding Lake** 5.30 190 P Pn **16 03 28.7 -0.1**
baz=7.7,SNR=93
**NEA2 Nenana** 5.31 200 Pn **16 03 28.1 -0.8**
NEA2 IAML 16 04 58.8
comp=E,2µm,1.0s
**NEA2 Nenana** 5.31 200 P Pn **16 03 28.4 -0.5**
baz=16,SNR=82
**WRH Wood River Hil** 5.32 195 Pn **16 03 28.5 -0.7**
WRH IAML 16 05 12.4
comp=N,4µm,1.2s
**I30M Mount Dempster** 5.50 139 Pn **16 03 31.2 -0.5**
**I30M Mount Dempster** 5.50 139 P Pn **16 03 31.6 -0.1**
baz=327,SNR=424
**F19K Shaleruckik Mo** 5.54 246 Pn **16 03 31.7 -0.4**
**F19K Shaleruckik Mo** 5.54 246 P Pn **16 03 31.9 -0.2**
baz=54,SNR=126
**A19K Wainwright** 5.60 284 P Pn **16 03 33.0 +0.2**
baz=89,SNR=51
**H20K Anotleneega Mo** 5.63 227 P Pn **16 03 32.6 -0.8**
baz=39,SNR=12
**SCRK Sand Creek** 5.68 176 Pn **16 03 34.5 +0.3**
**SCRK Sand Creek** 5.68 176 P Pn **16 03 34.7 +0.5**
baz=357,SNR=143
**K27K Chicken** 5.73 167 Pn **16 03 34.9 +0.2**
**K27K Chicken** 5.73 167 P Pn **16 03 35.0 +0.2**
baz=350
**BWN Browne** 5.76 200 Pn **16 03 34.2 -1.0**
**G19K Purcell Mounta** 5.77 239 Pn **16 03 34.6 -0.7**
**G19K Purcell Mounta** 5.77 239 P Pn **16 03 35.0 -0.3**
baz=48,SNR=36
**J29N Klondike Camp** 5.81 150 Pn **16 03 35.7 -0.2**
**J29N Klondike Camp** 5.81 150 P Pn **16 03 36.1 +0.2**
baz=336,SNR=77
**K24K Donnelly Dome** 5.86 184 P Pn **16 03 36.6 +0.1**
baz=2.9,SNR=123
**C18K Utukok River** 5.90 268 Pn **16 03 35.8 -1.3**
**C18K Utukok River** 5.90 268 P Pn **16 03 36.1 -0.9**
baz=74,SNR=134
**B18K Kokolik River** 5.94 275 Pn **16 03 37.7 +0.1**
**B18K Kokolik River** 5.94 275 P Pn **16 03 37.0 -0.6**
baz=80
**DAWY Dawson** 5.99 156 Pn **16 03 38.4 0.0**
**DAWY Dawson** 5.99 156 P Pn **16 03 38.3 0.0**
baz=341,SNR=394
**H19K Roundabout Mou** 6.03 233 Pn **16 03 38.0 -0.8**
**H19K Roundabout Mou** 6.03 233 P Pn **16 03 38.2 -0.5**
baz=42,SNR=42
**BPAW Bear Paw Mtn.** 6.04 206 Pn **16 03 38.6 -0.4**
**BPAW Bear Paw Mtn.** 6.04 206 P Pn **16 03 38.9 -0.1**
baz=21,SNR=54
**J30M Hart River** 6.07 142 Pn **16 03 39.2 -0.3**
**J30M Hart River** 6.07 142 P Pn **16 03 39.6 +0.1**
baz=330,SNR=216
**I20K Naaghedeneel** 6.10 222 Pn **16 03 40.1 +0.3**
**I20K Naaghedeneel** 6.10 222 P Pn **16 03 39.4 -0.4**
baz=34,SNR=16
**MCK McKinley** 6.13 197 Pn **16 03 39.7 -0.5**
**MCK McKinley** 6.13 197 P Pn **16 03 40.4 +0.2**
baz=13,SNR=166
**MCK McKinley** 6.13 197 P Pn **16 03 39.7 -0.5**
**E18K Tukpahlearik C** 6.17 256 Pn **16 03 40.2 -0.5**
**E18K Tukpahlearik C** 6.17 256 P Pn **16 03 40.5 -0.2**
baz=62,SNR=217
**F18K Selawik** 6.29 248 P Pn **16 03 41.5 -0.7**
baz=55,SNR=340
**G18K Tagagawik** 6.41 241 Pn **16 03 44.0 -0.1**
**G18K Tagagawik** 6.41 241 P Pn **16 03 44.3 +0.2**
baz=49,SNR=98
**RND Reindeer** 6.44 196 Pn **16 03 44.3 -0.2**
**RND Reindeer** 6.44 196 P Pn **16 03 44.3 -0.2**
**CHUM Lake Minchumin** 6.46 210 Pn **16 03 44.4 -0.3**
**CHUM Lake Minchumin** 6.46 210 P Pn **16 03 44.5 -0.3**
baz=24
**K29M Barlow Dome** 6.49 150 Pn **16 03 45.4 +0.1**
**K29M Barlow Dome** 6.49 150 P Pn **16 03 45.5 +0.1**
baz=336,SNR=348
**KTH Kantishna Hill** 6.55 204 Pn **16 03 45.8 -0.2**
**J20K Nowinta River** 6.56 218 Pn **16 03 45.2 -0.9**
**J20K Nowinta River** 6.56 218 P Pn **16 03 45.5 -0.5**
baz=30,SNR=22
**C17K DeLong Mountai** 6.65 269 Pn **16 03 46.1 -1.1**
**C17K DeLong Mountai** 6.65 269 P Pn **16 03 46.0 -1.3**
baz=72,SNR=37
**DHY Denali Highway** 6.65 190 Pn **16 03 47.9 +0.4**
**DHY Denali Highway** 6.65 190 P Pn **16 03 47.8 +0.4**
baz=7.5,SNR=88
**L26K Log Cabin Wild** 6.66 174 Pn **16 03 47.4 0.0**
**L26K Log Cabin Wild** 6.66 174 P Pn **16 03 47.8 +0.3**
baz=355,SNR=181
**PAX Paxson** 6.69 182 Pn **16 03 48.0 +0.1**
**PAX Paxson** 6.69 182 P Pn **16 03 48.0 +0.1**
baz=1.6,SNR=202
**PAX Paxson** 6.69 182 P Pn **16 03 48.0 +0.1**
**RDOG Red Dog Mine** 6.70 265 Pn **16 03 46.2 -1.7**
**RDOG Red Dog Mine** 6.70 265 P Pn **16 03 46.5 -1.5**
baz=69,SNR=176
**BCAR Beaver Creek A** 6.70 168 Pn **16 03 48.1 0.0**

**L27K Beaver Creek,** 6.70 168 Pn **16 03 48.2 0.0**
**L27K Beaver Creek,** 6.70 168 P Pn **16 03 48.1 0.0**
baz=350,SNR=153
**GCSA Galena City Sc** 6.75 229 P Pn **16 03 47.7 -0.9**
baz=39,SNR=9.4
**E17K Hotham Inlet** 6.75 256 Pn **16 03 47.8 -0.9**
**E17K Hotham Inlet** 6.75 256 P Pn **16 03 47.5 -1.2**
baz=61,SNR=140
**H18K Honhosa River** 6.85 236 Pn **16 03 49.4 -0.6**
**H18K Honhosa River** 6.85 236 P Pn **16 03 49.6 -0.5**
baz=44,SNR=73
**A36M Sachs Harbour** 6.88 61 Pn **16 03 49.5 -1.0**
**A36M Sachs Harbour** 6.88 61 P Pn **16 03 49.8 -0.7**
baz=259,SNR=263
**D17K Noatak River** 6.90 262 P Pn **16 03 48.8 -2.0**
baz=66,SNR=141
**F17K Baldwin Pennin** 6.90 250 Pn **16 03 49.0 -1.7**
**F17K Baldwin Pennin** 6.90 250 P Pn **16 03 49.3 -1.5**
baz=56,SNR=93
**WAT1 Susitna Watana** 6.98 194 Pn **16 03 52.0 0.0**
**WAT1 Susitna Watana** 6.98 194 P Pn **16 03 51.9 0.0**
baz=11
**WAT7 Susitna Watana** 7.00 195 Pn **16 03 52.7 +0.4**
**J19K Poorman** 7.05 222 Pn **16 03 52.3 -0.5**
**J19K Poorman** 7.05 222 P Pn **16 03 52.5 -0.3**
baz=32,SNR=12
**L29M L29M** 7.08 154 Pn **16 03 52.6 -0.7**
**L29M L29M** 7.08 154 P Pn **16 03 53.2 -0.1**
baz=340,SNR=274
**WAT6 Susitna Watana** 7.17 191 Pn **16 03 54.6 +0.1**
**WAT6 Susitna Watana** 7.17 191 P Pn **16 03 54.6 +0.1**
baz=8.0,SNR=77
**HARP HAARP** 7.26 181 Pn **16 03 56.1 +0.4**
**HARP HAARP** 7.26 181 P Pn **16 03 56.2 +0.5**
baz=0.6,SNR=100
**K20K Telida** 7.27 215 Pn **16 03 55.2 -0.7**
**K20K Telida** 7.27 215 P Pn **16 03 55.8 -0.1**
baz=26,SNR=16
**G17K Kiwalik Mounta** 7.29 243 P Pn **16 03 55.3 -0.9**
baz=49,SNR=123
**M26K Nabesna, AK** 7.29 173 Pn **16 03 56.4 +0.2**
**M26K Nabesna, AK** 7.29 173 P Pn **16 03 56.6 +0.4**
baz=354,SNR=181
**C36M Paulatuk** 7.32 82 Pn **16 03 55.0 -1.4**
**C36M Paulatuk** 7.32 82 P Pn **16 03 54.8 -1.6**
baz=281
**PPLA Purkeypile** 7.36 207 P Pn **16 03 57.2 0.0**
baz=20
**M27K Edge Creek, AK** 7.40 169 Pn **16 03 57.6 -0.1**
**M27K Edge Creek, AK** 7.40 169 P Pn **16 03 58.0 +0.2**
baz=352,SNR=221
**H17K Granite Mounta** 7.46 238 Pn **16 03 58.3 -0.1**
**H17K Granite Mounta** 7.46 238 P Pn **16 03 58.3 -0.1**
baz=45,SNR=69
**C16K Lisburne Hills** 7.47 269 Pn **16 03 57.6 -0.9**
**C16K Lisburne Hills** 7.47 269 P Pn **16 03 56.8 -1.8**
baz=71
**CUT Chulitna** 7.57 199 Pn **16 04 00.3 +0.4**
**CUT Chulitna** 7.57 199 P Pn **16 04 00.0 +0.1**
baz=14,SNR=41
**M24K Tolsona, Glenn** 7.57 185 Pn **16 04 00.3 +0.3**
**M24K Tolsona, Glenn** 7.57 185 P Pn **16 04 00.1 +0.2**
baz=3.3,SNR=35
**WAZA Wrangell Mount** 7.59 177 Pn **16 04 00.1 -0.4**
**M29M Somme Creek** 7.67 157 Pn **16 04 01.5 +0.1**
**M29M Somme Creek** 7.67 157 P Pn **16 04 01.4 +0.1**
baz=343,SNR=857
**WACK Wrangell Chich** 7.67 178 Pn **16 04 01.7 +0.1**
**J18K Innoko River** 7.76 223 P Pn **16 04 03.4 +0.8**
baz=32
**SCM Sheep Creek Mo** 7.89 188 Pn **16 04 05.1 +0.8**
**SCM Sheep Creek Mo** 7.89 188 P Pn **16 04 04.9 +0.5**
baz=6.2,SNR=73
**SCM Sheep Creek Mo** 7.89 188 P Pn **16 04 05.1 +0.8**
**G16K Koyuk River** 7.90 246 P Pn **16 04 03.2 -1.2**
baz=50,SNR=31
**M23K Glacier View** 7.95 190 Pn **16 04 06.2 +1.0**
**M23K Glacier View** 7.95 190 P Pn **16 04 05.9 +0.8**
baz=7.1,SNR=87
**SML Sawmill** 7.97 192 Pn **16 04 05.8 +0.2**
**SML Sawmill** 7.97 192 P Pn **16 04 06.2 +0.7**
baz=8.7,SNR=42
**L20K Farewell, AK** 8.04 211 Pn **16 04 06.2 -0.2**
**L20K Farewell, AK** 8.04 211 P Pn **16 04 06.1 -0.3**
baz=23,SNR=38
**N25K Chitina, Valde** 8.05 179 Pn **16 04 07.1 +0.4**
**N25K Chitina, Valde** 8.05 179 P Pn **16 04 07.1 +0.4**
baz=359,SNR=29
**GHO Glory Hole Cre** 8.05 194 Pn **16 04 06.5 -0.1**
**YUK3 Moose Creek** 8.09 165 P Pn **16 04 07.4 +0.1**
baz=349,SNR=255
**SKT Skwentna** 8.14 203 Pn **16 04 07.8 0.0**
**SKT Skwentna** 8.14 203 P Pn **16 04 08.1 +0.3**
baz=17,SNR=52
**KLU Klutina** 8.18 183 Pn **16 04 08.7 +0.3**
**KLU Klutina** 8.18 183 P Pn **16 04 08.5 +0.1**
baz=2.4,SNR=21
**M22K Willow** 8.19 198 Pn **16 04 08.7 +0.3**
**M22K Willow** 8.19 198 P Pn **16 04 08.5 +0.2**
baz=13,SNR=52
**GLB Gilahina Butte** 8.23 176 Pn **16 04 09.9 +0.9**
**PMR Palmer** 8.25 194 P Pn **16 04 09.6 +0.4**
**PMR Palmer** 8.25 194 Pn **16 04 09.4 +0.2**
**PMR Palmer** 8.25 194 P Pn **16 04 09.6 +0.4**
baz=10,SNR=47
**PMR Palmer** 8.25 194 P Pn **16 04 09.4 +0.2**
**MCARA McCarthy VSAT** 8.31 174 Pn **16 04 10.9 +0.8**
**MCARA McCarthy VSAT** 8.31 174 P Pn **16 04 11.4 +1.3**
baz=355,SNR=81
**KNK Knik Glacier** 8.37 192 Pn **16 04 11.2 +0.2**
**KNK Knik Glacier** 8.37 192 P Pn **16 04 11.6 +0.6**
baz=8.6,SNR=89
**H16K Elim** 8.38 242 P Pn **16 04 09.7 -1.3**
baz=46,SNR=10
**J17K VABM Dome** 8.41 229 P Pn **16 04 10.1 -1.4**
baz=36,SNR=28
**F15K North Star Dit** 8.46 252 P Pn **16 04 10.0 -2.1**
baz=54,SNR=33
**M20K Styx River** 8.47 207 Pn **16 04 12.2 -0.2**
**M20K Styx River** 8.47 207 P Pn **16 04 12.4 +0.1**
baz=20,SNR=224
**I17K Unalakleet** 8.47 235 P Pn **16 04 11.1 -1.1**
baz=41,SNR=25
**L19K White Mountain** 8.49 213 P Pn **16 04 12.9 +0.3**
baz=24,SNR=23
**PTPK Patty Peak** 8.53 172 Pn **16 04 14.6 +1.3**
**DIV Divide** 8.54 183 Pn **16 04 14.5 +1.2**
**SUA Susitna One** 8.54 199 Pn **16 04 14.5 +1.2**
**SUA Susitna One** 8.54 199 P Pn **16 04 13.6 +0.3**
baz=14,SNR=35
**M31M Drury Creek, Y** 8.59 145 P Pn **16 04 13.2 -0.7**
baz=334,SNR=153
**YUK8 Steele Glacier** 8.64 163 Pn **16 04 15.8 +0.9**
**YUK8 Steele Glacier** 8.64 163 P Pn **16 04 15.2 +0.3**
baz=348,SNR=109
**STLK Strandline Lak** 8.64 203 Pn **16 04 14.9 +0.2**
**M19K Big River Lodg** 8.66 211 P Pn **16 04 15.0 0.0**
baz=23,SNR=32
**BALM Baldy** 8.69 172 Pn **16 04 16.1 +0.7**
**BMRM Bremner River** 8.69 179 P Pn **16 04 15.5 +0.1**
baz=359,SNR=127
**G15K Niukluk** 8.70 247 P Pn **16 04 14.2 -1.3**
baz=50,SNR=21
**YUK4 Talbot Arm** 8.70 160 P Pn **16 04 15.0 -0.7**
baz=345,SNR=342
**FARO Faro, Yukon** 8.78 142 P Pn **16 04 15.6 -0.9**
baz=332,SNR=264
**K17K Iditarod** 8.78 224 P Pn **16 04 15.6 -0.9**
baz=32,SNR=7.7
**RC01 Rabbit Creek A** 8.80 196 Pn **16 04 17.0 +0.2**
**RC01 Rabbit Creek A** 8.80 196 P Pn **16 04 17.8 +1.0**
baz=11,SNR=33
**N30M Aishikik Lake** 8.80 155 P Pn **16 04 17.1 +0.1**
baz=342,SNR=535
**CTG Chitna Glacier** 8.82 169 P Pn **16 04 18.5 +1.3**
baz=352,SNR=172
**CTGM Chitina Glacie** 8.82 169 Pn **16 04 18.3 +1.1**
**GLI Glacier Island** 8.83 187 P Pn **16 04 17.8 +0.6**
baz=5.0
**L18K Granite Mounta** 8.84 219 P Pn **16 04 17.8 +0.5**
baz=28,SNR=14
**SPCP Crater Peak Br** 8.91 203 Pn **16 04 18.5 +0.1**
**J16K Anvik River** 8.91 232 P Pn **16 04 17.8 -0.5**
baz=38,SNR=32
**PWL Port Wells** 8.91 191 Pn **16 04 18.6 +0.2**
**PWL Port Wells** 8.91 191 P Pn **16 04 19.9 +1.5**

baz=7.7,SNR=17
MMPY **Sheldon Lake,** 8.92 135 P Pn 16 04 18.5 0.0
baz=327,SNR=515
CRQE **Cirque** 8.94 174 P Pn 16 04 20.6 +1.7
baz=356,SNR=132
SPBG **Spurr Blockage** 8.94 204 Pn 16 04 19.6 +0.7
N20K **Mount Spurr** 8.98 203 P Pn 16 04 20.4 +1.1
baz=17,SNR=38
SPCR **Spurr Chakacha** 8.98 203 P Pn 16 04 01.3 -18
baz=17
N31M **Braeburn, Yuko** 8.99 151 P Pn 16 04 20.6 +1.1
baz=339,SNR=288
O28M **Mount Upton** 9.10 165 P Pn 16 04 23.1 +1.9
baz=349,SNR=147
EYAK **Cordova Ski Ar** 9.12 183 P Pn 16 04 23.7 +2.5
EYAK **Cordova Ski Ar** 9.12 183 P Pn 16 04 22.0 +0.9
baz=1.8,SNR=13
YUK6 **Outpost Mounta** 9.13 159 P Pn 16 04 22.7 +1.2
baz=345,SNR=291
F14K **Arctic Creek** 9.16 253 P Pn 16 04 20.1 -1.5
baz=54,SNR=52
CAPN **Captain Cook N** 9.26 199 P Pn 16 04 21.9 -1.2
baz=14
L17K **Donlin** 9.28 222 P Pn 16 04 23.5 +0.1
baz=30,SNR=5.7
M18K **Stony River** 9.31 214 P Pn 16 04 23.8 -0.1
baz=24,SNR=20
O22K **Cooper Landing** 9.40 195 Pn 16 04 25.2 +0.2
O22K **Cooper Landing** 9.40 195 P Pn 16 04 25.3 +0.4
baz=10
ANM **Nome** 9.42 247 P Pn 16 04 23.8 -1.4
baz=49
SLKM **Skilak Lake** 9.42 196 Pn 16 04 24.9 -0.4
SNH **Sunshine Point** 9.52 174 Pn 16 04 26.4 -0.3
YUK7 **Dusty Glacier** 9.56 159 Pn 16 04 27.9 +0.6
MESA **MESA** 9.56 171 P Pn 16 04 27.4 0.0
baz=354,SNR=68
SUCK **Suckling Hills** 9.60 177 Pn 16 04 27.7 -0.1
RDT **Redoubt** 9.61 203 Pn 16 04 27.3 -0.7
O30N **Mendenhall** 9.61 153 P Pn 16 04 27.9 -0.1
baz=341,SNR=239
SVW2 **Sparrevohn** 9.63 213 P Pn 16 04 30.6 +2.4
TNA **Tin City** 9.65 256 P Pn 16 04 27.3 -1.0
baz=55
NCT **North Crescent** 9.69 204 Pn 16 04 28.5 -0.6
N19K **Bonanza Creek** 9.70 209 Pn 16 04 28.6 -0.6
N19K **Bonanza Creek** 9.70 209 P Pn 16 04 29.4 +0.2
baz=20,SNR=32
P23K **Montague Islan** 9.72 187 P Pn 16 04 30.0 +0.5
baz=5.1
O29M **Mount Kennedy** 9.73 161 Pn 16 04 30.0 +0.4
O29M **Mount Kennedy** 9.73 161 P Pn 16 04 31.4 +1.8
baz=347,SNR=205
M17K **Holitna River** 9.73 218 P Pn 16 04 30.2 +0.7
baz=27,SNR=13
KAIM **Kayak Island** 9.74 179 Pn 16 04 29.5 -0.2
KAIM **Kayak Island** 9.74 179 P Pn 16 04 31.2 +1.5
baz=359
SEW **Seward** 9.75 194 Pn 16 04 29.8 0.0
SEW **Seward** 9.75 194 P Pn 16 04 29.3 -0.5
baz=9.4
RDWB **Redoubt West** 9.75 204 Pn 16 04 29.3 -0.7
N32M **Quiet Lake** 9.81 144 P Pn 16 04 30.0 -0.6
baz=335
WHY **Whitehorse** 9.92 150 P Pn 16 04 31.9 -0.3
baz=339,SNR=176
L16K **Owhat River** 9.93 224 P Pn 16 04 32.4 +0.2
baz=31,SNR=5.3
K15K **Wolf Creek Mou** 9.96 231 Pn Pn 16 04 32.0 -0.7
K15K **Wolf Creek Mou** 9.96 231 P Pn 16 04 33.3 +0.6
baz=36,SNR=6.1
N18K **Kilae Creek** 10.07 212 P Pn 16 04 34.5 +0.3
baz=22,SNR=9.3
P30M **Million Dollar** 10.11 157 P Pn 16 04 35.3 +0.5
baz=344
O20K **Slope Mountain** 10.11 203 P Pn 16 04 34.9 +0.1
baz=16
J14K **Nanvaranak Lak** 10.17 236 Pn Pn 16 04 35.5 -0.1
J14K **Nanvaranak Lak** 10.17 236 P Pn 16 04 35.4 -0.1
baz=40,SNR=46
BRSE **Bradley Lake S** 10.22 197 P Pn 16 04 34.7 -1.6
baz=12
PNL **Peninsula** 10.26 164 P Pn 16 04 40.4 +3.5
PNL **Peninsula** 10.26 164 P Pn 16 04 36.3 -0.5
baz=349,SNR=27
HOM **Homer** 10.40 199 P Pn 16 04 38.1 -0.6
baz=13
M16K **Timber Creek** 10.41 221 P Pn 16 04 39.2 +0.4
baz=28
L15K **Ungalak Mounta** 10.46 229 P Pn 16 04 38.8 -0.7
baz=34,SNR=9.3
N17K **Nushagak Hills** 10.47 215 P Pn 16 04 39.0 -0.7
baz=24
P29M **Windy Craggy** 10.48 160 P Pn 16 04 41.3 +1.4
baz=346,SNR=98
CNPM **China Poot** 10.49 198 Pn Pn 16 04 40.0 0.0
TGTN **Hyland Airport** 10.60 132 P Pn 16 04 41.8 +0.3
baz=327,SNR=43
WRGLY **Wrigley** 10.66 116 Pn 16 04 41.0 -1.2
WRGLY **Wrigley** 10.66 116 P Pn 16 04 40.5 -1.7
baz=316,SNR=157
P33M **Teslin, Yukon** 10.72 146 P Pn 16 04 43.0 -0.2
baz=336,SNR=63
O18K **Koktuh Hills** 10.73 209 P Pn 16 04 43.8 +0.6
baz=20
PLBC **Pleasant Camp** 10.83 156 P Pn 16 04 45.7 +1.1
baz=344,SNR=365
N16K **Nishlik Lake** 10.85 219 P Pn 16 04 45.4 +0.5
baz=27
SKAG **Skagway** 10.98 154 P Pn 16 04 48.2 +1.6
SKAG **Skagway** 10.98 154 Pn 16 04 47.1 +0.5
SKAG **Skagway** 10.98 154 P Pn 16 04 47.2 +0.6
baz=342,SNR=71
L14K **Kuka Creek** 11.06 230 P Pn 16 04 48.8 +1.1
baz=34
M15K **Kasigluk River** 11.10 224 P Pn 16 04 48.6 +0.4
baz=30
P32M **Atlin** 11.13 149 Pn Pn 16 04 48.7 0.0
P32M **Atlin** 11.13 149 P Pn 16 04 49.5 +0.7
baz=339,SNR=32
K13K **Kusilvak Mount** 11.13 236 P Pn 16 04 49.0 +0.3
baz=38
P18K **Big Mountain,** 11.17 208 P Pn 16 04 49.5 +0.2
baz=19
Q19K **Cape Douglas,** 11.37 204 P Pn 16 04 53.1 +1.1
baz=16
M14K **Bethel** 11.37 227 P Pn 16 04 52.5 +0.6
baz=32,SNR=8.1
N15K **Kwethluk River** 11.42 221 P Pn 16 04 54.1 +1.4
baz=28
O16K **Kokwok River B** 11.51 216 P Pn 16 04 55.2 +1.3
baz=24
Q20K **Shuyak Island** 11.52 200 P Pn 16 04 55.5 +1.6
baz=13
WTLY **Watson Lake, Y** 11.69 137 P Pn 16 04 55.6 -0.8
baz=331,SNR=67
Q18K **Katmai Hardscr** 11.84 207 P Pn 16 04 59.0 +0.5
baz=18,SNR=6.0
R33M **Jennings River** 11.85 143 P Pn 16 04 58.2 -0.4
baz=336,SNR=76
Q32M **Nakina River** 11.99 147 P Pn 16 05 01.1 +0.6
baz=338,SNR=349
P16K **Nushagak River** 12.01 214 P Pn 16 05 01.7 +1.1
baz=22
GAMB **Gambell** 12.03 254 P Pn 16 05 02.0 +1.1
baz=50
R32K **Eaglecrest** 12.24 153 P Pn 16 05 04.5 +0.6
baz=342,SNR=77
O15K **Ungalikthiuk R** 12.26 219 P Pn 16 05 04.8 +0.7
baz=25
JIS **Juneau Island** 12.26 153 P Pn 16 05 05.8 +1.7
S31K **Pelican** 12.30 158 P Pn 16 05 05.3 +0.8
baz=346,SNR=56
KDAK **Kodiak Island** 12.35 200 Pn Pn 16 05 03.8 -1.5
comp=N,0.3nm,0.3s,baz=352,slow=12,SNR=2.2
KDAK Lg Lg 16 08 29.9
baz=300,slow=20,SNR=1.0
KDAK LR LR 16 10 10.7
comp=N,7μm,18.2s,baz=50,slow=39
KDAK **Kodiak Island** 12.35 200 P Pn 16 05 05.8 +0.5
baz=13
KDAK **Kodiak Island** 12.35 200 *i* P Pn 16 05 07.2 +1.9
Q17K **Contact Creek** 12.35 208 P Pn 16 05 06.1 +0.6
baz=18
KOTAN **Kotaneelee Air** 12.91 127 P Pn 16 05 11.8 -1.3
baz=326,SNR=38
DLBC **Dease Lake** 12.92 143 Pn Pn 16 05 12.1 -1.1
comp=N,9.8nm,0.3s,baz=335,slow=8.8,SNR=92
DLBC Lg Lg 16 08 45.4
comp=N,2.1nm,0.3s,baz=270,slow=20,SNR=5.7
DLBC **Dease Lake** 12.92 143 P Pn 16 05 13.6 +0.3
baz=336,SNR=129
LIRD **Liard River Hi** 12.98 133 P Pn 16 05 13.0 -0.9
baz=330
S32K **Killisnoo** 13.01 155 P Pn 16 05 14.8 +0.5
baz=344,SNR=65
R17L **Mt. Peulik Vol** 13.03 208 P Pn 16 05 14.8 +0.1
baz=18
S34M **Telegraph Cree** 13.18 146 P Pn 16 05 17.1 +0.4
baz=338,SNR=214
SIT **Sitka** 13.30 157 P Pn 16 05 20.1 +1.9
SIT **Sitka** 13.30 157 Pn 16 05 19.5 +1.3
SIT **Sitka** 13.30 157 P Pn 16 05 18.1 -0.2
baz=345,SNR=20
SIT **Sitka** 13.30 157 P Pn 16 05 19.5 +1.3
TOAD **Toad River Com** 13.69 132 P Pn 16 05 24.0 +0.4
baz=330,SNR=48
T33K **Petersburg** 13.89 152 P Pn 16 05 27.5 +1.2
baz=342,SNR=14
YKA **Yellowknife Ar** 14.07 106 Pn Pn 16 05 25.0 -3.8
YKA **Yellowknife Ar** 14.07 106 Pn Pn 16 05 23.2 -5.6
comp=N,10nm,0.3s,baz=301,slow=17,SNR=76
YKA Sn Sn 16 07 51.3 -13
comp=N,31nm,0.3s,baz=311,slow=26,SNR=12
comp=N,38nm,0.6s
T35M **Bob Quinn** 14.23 146 P Pn 16 05 31.8 +0.8
baz=339,SNR=56
U33K **Whale Pass** 14.54 153 P Pn 16 05 35.6 +0.4
baz=343,SNR=12
CRAG **Craig** 15.16 154 P Pn 16 05 45.4 +1.9
CRAG **Craig** 15.16 154 P Pn 16 05 44.2 +0.7
baz=344
U35K **Hyder** 15.27 147 P P 16 05 47.3 -2.7
baz=340
V35K **Ketchikan** 15.54 151 IAmb IAmb 16 05 56.0
comp=Z,172nm,1.4s
V35K **Ketchikan** 15.54 151 P P 16 05 50.6 -2.3
baz=342,SNR=15
S12K **Black Hills** 15.93 217 P Pn 16 05 53.9 +0.3
baz=22
GRNB **Grenville Isla** 17.25 149 IAmb IAmb 16 06 16.4
comp=Z,191nm,1.0s
BILL **Bilibino** 17.33 288 Pn Pn 16 06 11.1 -0.2
BILL **Bilibino** 17.33 288 *ce* P Pn 16 06 10.9 -0.4
BILL pmax pmax
comp=Z,31nm,1.0s
EUNU **Eureka** 17.41 30 Pn 16 06 12.1 -0.2
EUNU IAmb IAmb 16 06 17.5
comp=Z,192nm,0.8s
H02S1 **DAWSON INLET T** 17.45 154 P P 16 06 15.4 +1.3
HG4B **Hotspring** 18.53 153 IAmb IAmb 16 06 36.5
comp=Z,162nm,1.0s
UNV **Unalaska Valle** 18.65 223 P Pn 16 06 29.6 +2.0
baz=24
BBB **Bella Bella** 19.17 147 IAmb IAmb 16 06 38.2
comp=Z,225nm,1.2s
BBB **Bella Bella** 19.17 147 P Pn 16 06 34.0 +0.2
comp=Z,0.8nm,0.3s,baz=353,slow=7.9,SNR=15
BBB Lg Lg 16 12 13.7
comp=Z,0.2nm,0.3s,baz=66,slow=19,SNR=2.2
comp=Z,173nm,1.3s
NIKH **Nikolski High** 20.03 226 P Pn 16 06 44.6 +0.5
baz=25
HOLB **Holberg** 20.65 149 P P 16 06 48.9 -0.3
TULEG **Thule** 21.52 38 *i* P P 16 06 57.0 -1.2
TULEG IAmb IAmb 16 07 02.2
comp=Z,114nm,0.7s
CBB **Campbell River** 21.76 144 IAmb IAmb 16 07 11.9
comp=Z,114nm,1.2s
OZB **Mount Ozzard** 22.76 146 IAmb IAmb 16 07 18.3
comp=Z,98nm,1.3s
ADK **Adak** 23.14 236 P P 16 07 17.8 +2.2
ADK **Adak** 23.14 236 P P 16 07 15.4 -0.1
ADK IAmb IAmb 16 07 27.5
comp=Z,115nm,1.1s
ADK **Adak** 23.14 236 P P 16 07 15.5 -0.1
ADK pmax pmax
comp=Z,115nm,1.1s
CLRS **Cowichan Lake** 23.17 143 IAmb IAmb 16 07 19.9
comp=Z,71nm,1.1s
PGC **Sidney** 23.47 142 IAmb IAmb 16 07 21.7
comp=Z,96nm,0.9s
B04A **Port Angeles** 24.02 143 IAmb IAmb 16 07 47.1
comp=Z,93nm,1.2s
FFC **Flin Flon** 24.25 106 P P 16 07 26.9 +0.4
FFC **Flin Flon** 24.25 106 P P 16 07 26.9 +0.4
FFC pmax pmax
comp=Z,82nm,0.9s
NLWA **Neilton Lookou** 24.58 144 IAmb IAmb 16 07 36.9
comp=Z,50nm,0.8s
NEEM **North Greenlan** 24.66 32 *i* P P 16 07 29.1 -1.2
NEEM IAmb IAmb 16 07 31.6
comp=Z,120nm,0.6s
AMKA **Amchitka** 24.78 241 P P 16 07 30.2 -1.0
WISH **Wiskah** 24.86 144 IAmb IAmb 16 07 42.5
comp=Z,68nm,0.9s
SEY **Seymchan** 24.99 286 *ce* P P 16 07 33.4 +0.3
SEY pmax pmax
comp=Z,106nm,1.3s
KULLO **Kullorsuaq** 25.00 39 *i* P P 16 07 32.3 -0.7
KULLO IAmb IAmb 16 07 35.1
comp=Z,48nm,0.7s
NEW **Newport** 25.32 133 IAmb IAmb 16 07 39.5
comp=Z,70nm,1.1s
NEW **Newport** 25.32 133 LR LR 16 16 46.4
comp=Z,3μm,20.2s,baz=108,slow=35
NEW **Newport** 25.32 133 P P 16 07 37.6 +1.4
baz=338,SNR=54
C09A **Chrisman Ranch** 25.46 135 IAmb IAmb 16 07 41.3
comp=Z,34nm,0.8s
D08A **Wollman Farm,** 26.00 137 IAmb IAmb 16 07 44.2
comp=Z,47nm,0.9s
F04A **Amboy** 26.27 143 IAmb IAmb 16 08 03.7
comp=Z,62nm,0.9s
UPNV **Upernavik** 26.31 42 *i* P P 16 07 44.3 -0.7
UPNV IAmb IAmb 16 07 46.2
comp=Z,48nm,1.0s
TIXI **Tiksi** 26.40 315 P P 16 07 45.3 -0.4
TIXI IAmb IAmb 16 07 51.8
comp=Z,42nm,0.9s
TIXI **Tiksi** 26.40 315 *ce* P P 16 07 46.6 +0.9
TIXI pmax pmax
comp=Z,41nm,0.8s
NOR **Nord** 26.54 15 *i* P P 16 07 47.4 +0.4
NOR IAmb IAmb 16 07 48.3
comp=Z,17nm,0.9s
E09A **Wood Farm, Sta** 26.70 136 IAmb IAmb 16 07 51.2
comp=Z,65nm,0.9s
G03D **McMinnville, O** 26.79 145 IAmb IAmb 16 08 09.6
comp=Z,47nm,0.9s
F07A **Phinny Hill Vi** 26.86 139 IAmb IAmb 16 07 52.7
comp=Z,54nm,1.0s
G05A **Wamic** 27.17 142 IAmb IAmb 16 08 20.6
comp=Z,49nm,1.0s
G06A **Carlson Farm,** 27.32 141 IAmb IAmb 16 07 57.0
comp=Z,50nm,1.1s
COR **Corvallis** 27.38 145 P P 16 07 54.7 -0.1
COR IAmb IAmb 16 08 16.9
comp=Z,49nm,1.0s
COR **Corvallis** 27.38 145 P P 16 07 54.7 -0.1
COR pmax pmax
comp=Z,49nm,1.0s
F10A **Beach Ranch, E** 27.43 135 IAmb IAmb 16 08 06.9
comp=Z,49nm,0.9s
MSO **Missoula** 27.48 130 IAmb IAmb 16 07 58.0
comp=Z,54nm,0.9s
MSO **Missoula** 27.48 130 P P 16 07 57.0 +1.2
baz=337,SNR=24
EGMT **Eagleton** 27.57 123 P P 16 07 57.8 +1.3
baz=334,SNR=10
G08A **Pilot Rock** 27.65 138 IAmb IAmb 16 08 03.4
comp=Z,52nm,1.1s
BUCK **Buck Mountain** 27.82 145 IAmb IAmb 16 08 26.4
comp=Z,53nm,1.2s
I05D **Terrebonne, OR** 28.02 142 IAmb IAmb 16 08 19.8
comp=Z,26nm,0.8s
I03D **Drain, OR** 28.23 146 IAmb IAmb 16 08 06.5
comp=Z,66nm,1.3s
I04A **Tendick Farm,** 28.32 144 IAmb IAmb 16 09 01.1
comp=Z,45nm,1.3s
J01E **Myrtle Point** 28.63 147 IAmb IAmb 16 08 15.7
comp=Z,45nm,1.0s
PINE **Pine Mountain** 28.63 142 IAmb IAmb 16 08 33.4
comp=Z,29nm,0.9s
UMMG **Uummannaq** 28.65 44 *i* P P 16 08 04.2 -1.7
UMMG IAmb IAmb 16 08 07.2
comp=Z,38nm,0.8s
I07A **Izee** 28.67 140 IAmb IAmb 16 08 13.0
comp=Z,29nm,0.9s
DBO **Dodson Butte** 28.80 146 IAmb IAmb 16 08 28.0
comp=Z,39nm,1.0s
DGMT **Dagmar** 28.86 116 P P 16 08 09.1 +1.1
baz=332
J05D **Fort Rock, OR** 29.05 143 IAmb IAmb 16 08 16.8
comp=Z,33nm,0.9s
DLMT **Dillon** 29.19 129 IAmb IAmb 16 08 13.7
comp=Z,33nm,1.0s
BOZ **Bozeman (W)** 29.24 128 P P 16 08 12.3 +0.8
baz=337,SNR=10.0
K04D **Chiloquin, OR** 29.58 144 IAmb IAmb 16 08 45.1
comp=Z,51nm,0.8s
J08A **Circle Bar Ran** 29.59 139 IAmb IAmb 16 08 17.9
comp=Z,43nm,1.3s
LAO **LASA Array** 29.82 120 IAmb IAmb 16 09 16.5
comp=Z,46nm,0.9s
LAO **LASA Array** 29.82 120 P P 16 08 18.3 +1.8
baz=334,SNR=14
KSXB **Camp Six Broad** 29.93 147 IAmb IAmb 16 08 21.1
comp=Z,62nm,1.0s
ULM **Lac du Bonnet** 30.05 105 P P 16 08 16.9 -1.6
comp=Z,5.2nm,0.8s,baz=124,slow=15,SNR=1.8
comp=Z,5.2nm,0.8s
ULM **Lac du Bonnet** 30.05 105 *i* P P 16 08 20.7 +2.2
YHL **Hebgen Lake** 30.05 128 IAmb IAmb 16 09 25.6
comp=Z,34nm,0.9s
MFID **Camas Ranch** 30.17 135 IAmb IAmb 16 08 30.1
comp=Z,28nm,1.1s
DAG **Danmarks Havn** 30.26 22 *i* P P 16 08 19.1 -0.9
DAG IAmb IAmb 16 08 20.7
comp=Z,28nm,0.8s
PET **Petropavlovsk** 30.30 266 *i* P P 16 08 23.0 +2.4
PET pmax pmax
comp=Z,10.0nm,1.3s
RLMT **Red Lodge** 30.34 125 IAmb IAmb 16 08 27.8
comp=Z,31nm,0.8s
RLMT **Red Lodge** 30.34 125 P P 16 08 23.4 +2.0
baz=336,SNR=32
HLID **Hailey** 30.39 133 P P 16 08 23.4 +1.6
baz=339,SNR=12
WVOR **Wild Horse Val** 30.43 140 IAmb IAmb 16 08 30.4
comp=Z,38nm,1.1s
YMP **Mirror Lake Pl** 30.44 127 IAmb IAmb 16 09 10.6
comp=Z,32nm,1.0s
H17A **Grant Village** 30.64 128 P P 16 08 25.8 +1.7
baz=337
KBS **Kingsbay** 31.05 8 P P 16 08 27.2 +0.2
KBS IAmb IAmb 16 08 34.7
comp=Z,19nm,0.8s
KBS **Kingsbay** 31.05 8 *e* P P 16 08 28.5 +1.5
KBS IAmb IAmb 16 08 29.0
comp=Z,18nm,0.8s
KBS **Kingsbay** 31.05 8 *ce* P P 16 08 27.6 +0.6
KBS pmax pmax
comp=Z,18nm,0.7s
LOHW **Long Hollow** 31.35 128 IAmb IAmb 16 08 37.4
comp=Z,26nm,0.8s
TPAW **Teton Pass** 31.37 129 IAmb IAmb 16 08 36.5
comp=Z,39nm,1.0s
SFJD **Kangerlussuaq** 31.68 48 *i* P P 16 08 31.1 -1.6
AGMN **Agassiz Nation** 31.73 106 IAmb IAmb 16 09 42.6
comp=Z,26nm,0.8s
AGMN **Agassiz Nation** 31.73 106 P P 16 08 34.0 +0.7
baz=330,SNR=8.8
SPA0 **Spitsbergen Ar** 31.99 7 *e* P P 16 08 35.4 0.0
SPA0 IAmb IAmb 16 08 36.1
comp=Z,45nm,1.0s
SPITS **Spitsbergen Ar** 31.99 7 P P 16 08 33.1 -2.3
comp=Z,24nm,0.7s,baz=43,slow=3.8,SNR=18
comp=Z,24nm,0.7s
SPITS **Spitsbergen Ar** 31.99 7 P P 16 08 34.6 -0.8
SPITS pmax pmax
comp=Z,41nm,1.0s
SPB2 **Spitsbergen Ar** 32.00 7 IAmb IAmb 16 08 36.4
comp=Z,34nm,0.8s
AHID **Auburn Hatcher** 32.00 129 IAmb IAmb 16 08 43.5
comp=Z,37nm,0.9s
DBG **Daneborg** 32.11 25 *i* P P 16 08 34.1 -2.3
DBG IAmb IAmb 16 08 36.5
comp=Z,32nm,0.7s
BW06 **Boulder Array** 32.43 127 P P 16 08 41.4 +1.6
baz=338,SNR=58
PD31 **Pinedale Array** 32.43 127 IAmb IAmb 16 08 46.2
comp=Z,36nm,0.8s
PDAR **Pinedale Array** 32.43 127 P P 16 08 41.3 +1.6
PDAR **Pinedale Array** 32.43 127 P P 16 08 40.3 +0.5
comp=Z,20nm,0.8s,baz=3.5,slow=4.9,SNR=164
comp=Z,20nm,0.8s
HVU **Hansel Valley** 32.48 132 IAmb IAmb 16 08 49.7
comp=Z,28nm,1.0s
ICESG **Greenland Ices** 32.74 40 *i* P P 16 08 41.2 -1.1
ICESG IAmb IAmb 16 08 43.0
comp=Z,137nm,0.8s
RSSD **Black Hills** 32.80 120 P P 16 08 43.0 0.0
RSSD IAmb IAmb 16 08 54.8
comp=Z,22nm,0.6s
RSSD **Black Hills** 32.80 120 P P 16 08 43.0 0.0
baz=335
RSSD **Black Hills** 32.80 120 P P 16 08 43.0 0.0
RSSD pmax pmax
comp=Z,22nm,0.6s
PAHR **Pah Rah Range** 32.88 142 IAmb IAmb 16 08 46.7
comp=Z,31nm,0.9s
YAK **Yakutsk** 32.94 300 P P 16 08 42.8 -0.9
YAK **Yakutsk** 32.94 300 *eP* P 16 08 44.1 +0.4
YAK *eS* S 16 14 03.1 +1.9
YAK *e*SSS SSS 16 16 19.9
YAK pmax pmax
comp=Z,53nm,0.9s
YAK pmax pmax
comp=N,13nm,0.9s
YAK pmax pmax
comp=E,11nm,0.9s
YAK smax smax
comp=N,237nm,5.5s
YAK smax smax
comp=E,127nm,4.8s
YAK MLR MLR
comp=Z,1μm,16.0s
YAK MLR MLR
comp=N,2μm,19.0s
YAK MLR MLR
comp=E,2μm,16.0s
HWUT **Hardware Ranch** 32.96 131 IAmb IAmb 16 08 54.0
comp=Z,40nm,0.9s
DY2G **Dye2** 33.20 46 *i* P P 16 08 44.8 -1.5
DY2G IAmb IAmb 16 08 47.5
comp=Z,16nm,0.6s
AFDM **Forest Hills D** 33.27 145 IAmb IAmb 16 08 49.2
comp=Z,30nm,1.0s
K22A **Casper** 33.40 124 IAmb IAmb 16 08 53.3
comp=Z,32nm,0.9s
K22A **Casper** 33.40 124 P P 16 08 48.9 +0.7
baz=337,SNR=20
EMB **Emerald Bay** 33.43 144 IAmb IAmb 16 08 51.5
comp=Z,36nm,1.1s
EYMN **Ely** 33.52 102 IAmb IAmb 16 08 58.3
comp=Z,30nm,0.7s
EYMN **Ely** 33.52 102 P P 16 08 50.0 +1.1
baz=329,SNR=18
NUUK **Nuuk** 33.53 52 *i* P P 16 08 48.0 -0.8
NUUK IAmb IAmb 16 08 50.2
comp=Z,25nm,1.0s
YERR **Yerington** 33.60 142 IAmb IAmb 16 08 53.0
comp=Z,28nm,0.8s
F33A **5 Mile Ranch,** 33.73 109 IAmb IAmb 16 10 01.6
comp=Z,16nm,0.8s
CTU **Camp Tracy** 33.77 132 IAmb IAmb 16 09 00.7
comp=Z,27nm,1.0s
KVN **Kaiserville** 33.78 141 IAmb IAmb 16 08 54.8
comp=Z,22nm,0.8s
DUG **Dugway, Tooele** 33.96 133 P P 16 08 54.2 +1.2
baz=340,SNR=49
RYN **Ryan** 34.10 142 IAmb IAmb 16 08 57.6
comp=Z,30nm,0.8s
SUSD **Miller** 34.10 113 P P 16 08 54.6 +0.5
baz=333
NVAR **Mina Array Bea** 34.34 141 P P 16 08 56.6 +0.2
comp=Z,37nm,0.9s,baz=325,slow=6.8,SNR=173
comp=Z,37nm,0.9s
NV11 **Mina Array Sit** 34.37 141 IAmb IAmb 16 09 06.8
comp=Z,28nm,1.1s

NLU North Lily Min 34.38 132 IAmb IAmb 16 09 06.4
comp=Z,26nm,0.9s
MPU Maple Canyon 34.43 132 IAmb IAmb 16 09 07.1
comp=Z,40nm,1.0s
LHV Little Huntoon 34.46 142 IAmb IAmb 16 09 09.7
comp=Z,47nm,1.0s
RDMU Red Mountain 34.46 129 IAmb IAmb 16 09 03.9
comp=Z,34nm,0.8s
Q12A Willow Creek R 34.55 137 IAmb IAmb 16 09 19.7
comp=Z,24nm,0.9s
MDPB Devils Postpil 34.93 143 IAmb IAmb 16 09 05.1
comp=Z,33nm,0.9s
OMMB Old Mammoth Mi 34.97 143 IAmb IAmb 16 09 05.6
comp=Z,30nm,0.9s
MLAC Mammoth, Mammo 34.99 143 P P 16 09 01.8 -0.3
baz=344
R11B Troy Canyon, C 35.03 138 P P 16 09 04.0 +1.6
baz=343,SNR=22
P18A Preston Nutter 35.16 130 IAmb IAmb 16 09 30.3
comp=Z,61nm,1.2s
P17A Butcher Ranch, 35.18 131 IAmb IAmb 16 09 11.3
comp=Z,30nm,0.9s
N23A Red Feather La 35.18 124 P P 16 09 03.9 +0.2
baz=338
O20A White River Ci 35.24 127 IAmb IAmb 16 09 12.0
comp=Z,23nm,0.7s
O20A White River Ci 35.24 127 P P 16 09 05.4 +1.3
baz=339,SNR=26
SOEG Soedalen 35.25 36 *i*P P 16 09 03.0 -0.7
SOEG IAmb IAmb 16 09 05.1
comp=Z,69nm,0.7s
PSUT Pine Spring 35.27 136 IAmb IAmb 16 09 15.1
comp=Z,34nm,0.9s
DSP Deep Springs 35.42 141 IAmb IAmb 16 09 09.1
comp=Z,26nm,0.9s
SPMN Marine on St. 35.44 106 IAmb IAmb 16 09 30.4
comp=Z,32nm,0.8s
SPMN Marine on St. 35.44 106 P P 16 09 06.6 +1.0
baz=332,SNR=9.0
ECSD EROS Data Cent 35.49 111 IAmb IAmb 16 09 10.5
comp=Z,76nm,1.5s
ECSD EROS Data Cent 35.49 111 P P 16 09 07.1 +1.0
baz=333,SNR=23
SRU San Rafael Swe 35.57 131 IAmb IAmb 16 09 19.6
comp=Z,30nm,0.7s
GRAC Grapevine Rang 35.92 141 P P 16 09 12.7 +2.9
baz=344,SNR=7.3
ANGG Ammassalik, Gr 36.01 42 P P 16 09 09.4 -0.8
ANGG Ammassalik, Gr 36.01 42 *i* P P 16 09 08.0 -2.2
ANGG IAmb IAmb 16 09 10.2
comp=Z,110nm,0.7s
PRN Pahroc Range 36.05 138 IAmb IAmb 16 09 24.8
comp=Z,22nm,0.8s
VOG Valley Oaks Go 36.13 144 P P 16 09 13.6 +2.0
baz=345
MTPU Mount Pierson 36.15 134 IAmb IAmb 16 09 22.9
comp=Z,62nm,1.2s
TPNV Topopah Spring 36.21 139 P P 16 09 14.1 +1.6
baz=343,SNR=77
ISCO Idaho Springs 36.29 124 IAmb IAmb 16 09 20.4
comp=Z,23nm,0.8s
ISCO Idaho Springs 36.29 124 P P 16 09 14.3 +0.9
baz=338,SNR=37
CWC Cottonwood Cre 36.30 142 P P 16 09 14.2 +1.0
baz=344
OGNE Ogallala 36.30 119 IAmb IAmb 16 09 16.5
comp=Z,27nm,0.6s
OGNE Ogallala 36.30 119 P P 16 09 13.6 +0.5
baz=336
SCHQ Schefferville 36.31 73 P P 16 09 11.4 -1.6
comp=Z,44nm,0.9s,baz=329,slow=9.2,SNR=28
comp=Z,44nm,0.9s
CCUT Cedar City 36.32 135 IAmb IAmb 16 09 23.1
comp=Z,28nm,0.8s
FURC Furnace Creek, 36.53 140 P P 16 09 16.6 +1.6
baz=344
VES Vestal, Richgr 36.66 144 P P 16 09 16.9 +0.8
baz=345
MPMC Manual Prospec 36.79 141 P P 16 09 19.9 +2.4
baz=344,SNR=27
IVI Ivigtut 36.90 53 *i*P P 16 09 16.9 -0.9
ISA Isabella, Lake 36.96 143 P P 16 09 20.5 +1.8
baz=345,SNR=19
KNB Kanab 36.96 135 IAmb IAmb 16 09 29.3
comp=Z,101nm,1.6s
SMMC Simmler 36.98 145 P P 16 09 20.7 +1.8
baz=346
BGNE Belgrade 37.09 115 P P 16 09 19.7 -0.1
baz=335
L34A Svendsen Farm, 37.16 112 IAmb IAmb 16 09 37.5
comp=Z,52nm,0.7s
Q24A Divide 37.20 124 P P 16 09 23.1 +2.1
baz=338,SNR=9.3
SHOC Shoshone, Teco 37.21 140 P P 16 09 23.3 +2.4
baz=344,SNR=38
LRMC Laurel Mtn Rad 37.30 142 P P 16 09 23.9 +2.1
baz=345,SNR=45
E46A Sault Ste Mari 37.36 96 IAmb IAmb 16 09 29.6
comp=Z,37nm,0.9s
ARVC Arvin 37.40 144 P P 16 09 22.6 +0.2
baz=345
PKM Mcpherson Peak 37.43 145 P P 16 09 25.0 +2.1
baz=346,SNR=8.6
BCW Bitter Crk WRg 37.46 144 IAmb IAmb 16 09 42.8
comp=Z,60nm,1.2s
GSC Goldstone, Bar 37.67 141 IAmb IAmb 16 09 28.2
comp=Z,32nm,0.9s
GSC Goldstone, Bar 37.67 141 P P 16 09 27.1 +2.3
baz=344,SNR=34
TYV Tymovskoe 37.67 279 *e*P P 16 09 24.4 -0.1
TYV pmax pmax
comp=Z,300nm,6.9s
TYV pmax pmax
comp=Z,13nm,1.1s
TUQ Turquoise Moun 37.73 140 P P 16 09 27.7 +2.3
baz=344,SNR=19
EDW2 Edwards Air Fo 37.81 143 P P 16 09 27.7 +1.7
baz=345,SNR=17
H43A Windswept, Lux 37.81 101 IAmb IAmb 16 09 29.9
comp=Z,33nm,0.7s
S22A 4UR Ranch, Cre 37.86 127 IAmb IAmb 16 09 34.2
comp=Z,79nm,1.8s
S22A 4UR Ranch, Cre 37.86 127 P P 16 09 28.5 +1.9
baz=339,SNR=22
KSCO Kaye Shedlock' 37.90 121 IAmb IAmb 16 09 31.9
comp=Z,104nm,1.4s
KSCO Kaye Shedlock' 37.90 121 P P 16 09 28.3 +1.6
baz=337,SNR=9.3
MVCO Mesa Verde 37.90 130 P P 16 09 28.5 +1.5
baz=340,SNR=10.0
RRX Edison Barstow 38.03 141 P P 16 09 29.8 +1.9
baz=344
HEC Hector,Ludlow 38.23 141 P P 16 09 32.1 +2.7
baz=344,SNR=12
SDCO Great Sand Dun 38.23 126 P P 16 09 31.3 +1.5
baz=339,SNR=30
SCIA State Center 38.25 109 IAmb IAmb 16 09 37.7
comp=Z,59nm,0.8s
SCIA State Center 38.25 109 P P 16 09 31.2 +1.7
baz=334
JFWS Jewell Farm 38.34 105 IAmb IAmb 16 09 42.4
comp=Z,58nm,0.8s
JFWS Jewell Farm 38.34 105 P P 16 09 31.3 +1.0
baz=332,SNR=20
DECC Green Verdugo 38.35 143 P P 16 09 32.4 +2.0
baz=345
GMRC Granite Mounta 38.42 140 P P 16 09 33.2 +2.0
baz=344,SNR=13
BFSC Mount Baldy Ra 38.50 142 P P 16 09 34.2 +2.3
baz=345,SNR=12
WUAZ Wupatki 38.75 134 P P 16 09 36.0 +2.0
baz=342,SNR=32
L40A Anamosa 38.77 107 IAmb IAmb 16 09 43.6
comp=Z,52nm,0.8s
CBKS Cedar Bluff 38.96 118 IAmb IAmb 16 09 40.5
comp=Z,51nm,0.8s
CBKS Cedar Bluff 38.96 118 P P 16 09 36.7 +1.1
baz=337,SNR=10
SNCC San Nicolas Is 39.08 145 P P 16 09 38.4 +1.9
baz=346
BELC Belle Mtn. Jos 39.10 140 P P 16 09 38.9 +2.0
baz=344,SNR=19
T25A Trinidad 39.11 125 P P 16 09 37.3 +0.2
baz=339,SNR=9.9
IRM Iron Mountain 39.14 139 P P 16 09 39.3 +2.2
baz=344,SNR=20
CIS Catalina Islan 39.15 144 P P 16 09 38.7 +1.4
baz=346

MURC Murrieta 39.22 142 P P 16 09 39.0 +1.2
baz=345
PDMCI Parker Dam,Lak 39.23 138 P P 16 09 39.8 +2.0
baz=344,SNR=6.1
L42A Oliver, Polo 39.35 105 IAmb IAmb 16 09 50.6
comp=Z,54nm,0.9s
PFO Pinyon Flats O 39.37 141 P P 16 09 39.7 +0.6
PFO Pinyon Flats O 39.37 141 P P 16 09 40.8 +1.7
baz=345,SNR=12
PFO Pinyon Flats O 39.37 141 P P 16 09 39.7 +0.6
PFO pmax pmax
comp=Z,17nm,1.0s
TPFO Pinon Flats 39.37 141 P P 16 09 40.9 +1.7
baz=345,SNR=11
SCI2 San Clemente I 39.53 144 P P 16 09 41.3 +1.0
baz=346
W18A Petrified Fore 39.55 132 P P 16 09 41.8 +1.1
baz=342
BC3 Big Chuckawall 39.55 140 P P 16 09 42.7 +2.1
baz=344,SNR=22
R32A Long Quarter, 39.63 117 IAmb IAmb 16 09 46.5
comp=Z,38nm,0.8s
KSU1 Kansas State U 39.68 115 IAmb IAmb 16 09 52.9
comp=Z,39nm,0.8s
KSU1 Kansas State U 39.68 115 P P 16 09 42.8 +1.2
baz=336
HAMF Hammerfest 39.78 6 *e*P P 16 09 42.5 +0.6
HAMF IAmb IAmb 16 09 47.6
comp=Z,29nm,0.8s
L44A Lake County Fo 39.79 103 P P 16 09 44.4 +2.0
baz=333
GRNR Gornyy 39.89 284⇓*i*P P 16 09 43.6 +0.4
GRNR pmax pmax
comp=Z,3.0nm,1.0s
109C Camp Elliot, M 39.92 142 P P 16 09 45.5 +1.8
baz=345
I49A Point Hope 39.99 97 IAmb IAmb 16 09 48.3
comp=Z,63nm,0.7s
MONP2 Monument Peak 40.07 141 P P 16 09 47.4 +2.3
baz=345,SNR=22
N41A Harden Midland 40.11 107 IAmb IAmb 16 09 54.6
comp=Z,40nm,0.8s
SWSC Sam W. Stewart 40.16 141 P P 16 09 46.5 +0.9
baz=345
P38A Dawn 40.20 111 IAmb IAmb 16 09 51.3
comp=Z,32nm,0.7s
BORG Borgarnes 40.27 34 P P 16 09 45.0 -1.1
comp=Z,31nm,1.1s,baz=349,slow=5.9,SNR=5.3
comp=Z,31nm,1.1s
GLA Glamis 40.27 139 P P 16 09 48.1 +1.6
baz=344
IKP In-Ko-Pah, Jac 40.37 141 P P 16 09 49.1 +1.7
baz=345,SNR=7.3
ZEA Zeya 40.42 294 *e*P P 16 09 48.1 +0.6
ZEA pmax pmax
comp=N,10.0nm,1.2s
ZEA pmax pmax
comp=E,10.0nm,1.2s
ZEA pmax pmax
comp=Z,20nm,1.1s
VADS Vadso 40.45 3 *e*P P 16 09 47.2 -0.4
VADS IAmb IAmb 16 09 53.6
comp=Z,354nm,2.7s
SADO Sadowa 40.55 92 IAmb IAmb 16 09 56.3
comp=Z,49nm,0.9s
TRO Tromso 40.57 9 *e*P P 16 09 48.9 +0.3
TRO IAmb IAmb 16 09 49.1
comp=Z,21nm,0.9s
CBX Cerro Bola 40.57 142 IAmb IAmb 16 09 54.0
comp=Z,40nm,0.8s
ANMO Albuquerque 40.59 128 P P 16 09 50.1 +0.8
ANMO Albuquerque 40.59 128 P P 16 09 50.4 +1.0
baz=340
ANMO Albuquerque 40.59 128 *i* P P 16 09 51.0 +1.7
ANMO pmax pmax
comp=Z,16nm,1.1s
ICQ Pointe Anglais 40.59 78 IAmb IAmb 16 09 49.9
comp=Z,37nm,0.8s
HDIL Hopedale 40.77 106 P P 16 09 52.0 +1.5
baz=334
KEV Kevo 40.77 4 P P 16 09 49.3 -0.9
KEV Kevo 40.77 4 P P 16 09 49.3 -0.9
KEV pmax pmax
comp=Z,25nm,0.8s
ARA0 ARCESS Array S 40.95 5 *e*P P 16 09 51.5 -0.2
ARCES ARCESS Array B 40.95 5 P P 16 09 51.2 -0.5
ARCES IAmb IAmb 16 09 52.1
comp=Z,93nm,1.9s
ARCES ARCESS Array B 40.95 5 P P 16 09 50.0 -1.6
comp=Z,15nm,0.7s,baz=357,slow=7.4,SNR=40
ARCES PcP PcP 16 11 51.8 +0.2
comp=Z,6.9nm,0.8s,baz=29,slow=2.8,SNR=3.6
comp=Z,15nm,0.7s
ARCES ARCESS Array B 40.95 5 P P 16 09 51.2 -0.5
ARCES pmax pmax
comp=Z,93nm,1.9s
BOD Bodaibo 40.96 307 *e*P P 16 09 50.9 -1.0
BOD pmax pmax
comp=Z,88nm,1.0s
YSS Yuzh-Sakhalins 40.96 275 P P 16 09 54.6 +2.6
YSS Yuzh-Sakhalins 40.96 275 P P 16 09 51.9 -0.1
YSS Yuzh-Sakhalins 40.96 275 *e*P P 16 09 51.7 -0.3
YSS pmax pmax
comp=Z,30nm,1.1s
KAN01 Argonia South 41.10 117 IAmb IAmb 16 09 58.4
comp=Z,44nm,0.8s
AAM Ann Arbor 41.14 99 P P 16 09 54.3 +0.7
baz=332
L48A N Adams 41.19 100 IAmb IAmb 16 10 16.9
comp=Z,25nm,0.7s
KAN17 Caldwell West 41.20 117 IAmb IAmb 16 09 59.2
comp=Z,34nm,0.8s
KAN14 Manchester OK 41.21 117 IAmb IAmb 16 09 59.4
comp=Z,27nm,0.8s
Y22D IRIS PASSCAL I 41.28 129 P P 16 09 55.8 +0.8
baz=341
DELO Deloro Mine 41.30 91 IAmb IAmb 16 10 02.3
comp=Z,38nm,0.8s
KTK1 Kautokeino 41.39 6 *e*P P 16 09 55.2 -0.1
KTK1 IAmb IAmb 16 09 55.6
comp=Z,39nm,0.9s
OK038 West end E0370 41.41 118 IAmb IAmb 16 10 01.4
comp=Z,26nm,0.7s
ELIS Ellis County 41.59 119 IAmb IAmb 16 10 11.6
comp=Z,27nm,0.7s
SFIN Lafayette 41.67 103 IAmb IAmb 16 10 19.1
comp=Z,82nm,1.5s
SFIN Lafayette 41.67 103 P P 16 09 58.9 +0.9
baz=334
N47A Urbana 41.70 102 IAmb IAmb 16 10 07.7
comp=Z,27nm,0.7s
WBO Williamsburg 41.70 89 IAmb IAmb 16 10 12.5
comp=Z,43nm,1.2s
LOF Lofoten 41.72 12 *e*P P 16 09 57.9 -0.1
LOF IAmb IAmb 16 10 01.8
comp=Z,60nm,0.9s
214A Organ Pipe Nat 41.79 137 P P 16 10 00.6 +1.6
baz=344
MNTQ Montreal, Queb 41.85 87 IAmb IAmb 16 09 59.7
comp=Z,47nm,1.3s
TUC Tucson 41.95 135 P P 16 10 01.7 +1.3
baz=343
AMTX Amarillo 42.01 123 IAmb IAmb 16 10 06.5
comp=Z,27nm,0.6s
AMTX Amarillo 42.01 123 P P 16 10 01.6 +0.7
baz=339
S39A Bolivar 42.02 112 IAmb IAmb 16 10 06.0
comp=Z,51nm,0.8s
OK048 Pawnee Station 42.03 117 IAmb IAmb 16 10 05.7
comp=Z,26nm,0.8s
J54A Appleton 42.04 93 IAmb IAmb 16 10 05.3
comp=Z,52nm,0.8s
STEI Steigen 42.04 11 *e*P P 16 10 01.0 +0.4
STEI IAmb IAmb 16 10 04.3
comp=Z,42nm,0.8s
LONY Lake Ozonia 42.28 88 P P 16 10 02.8 -0.1
baz=331,SNR=8.1
QUOK Quay 42.33 116 IAmb IAmb 16 10 08.5
comp=Z,34nm,0.7s
J55A Hilton 42.33 92 IAmb IAmb 16 10 10.9
comp=Z,42nm,0.9s
CCM Cathedral Cave 42.37 109 P P 16 10 03.2 -0.5
CCM Cathedral Cave 42.37 109 P P 16 10 03.1 -0.6
baz=335
CCM Cathedral Cave 42.37 109 P P 16 10 03.2 -0.5
CCM pmax pmax
comp=Z,13nm,0.8s

OK029 Liberty Lake 42.44 117 IAmb IAmb 16 10 09.6
comp=Z,51nm,0.8s
OK052 Battle Ridge R 42.46 117 IAmb IAmb 16 10 09.6
comp=Z,28nm,0.8s
OK031 S. Brethren Rd 42.49 117 IAmb IAmb 16 10 09.8
comp=Z,39nm,0.7s
121A Cookes Peak, D 42.50 131 P P 16 10 06.0 +1.0
baz=342,SNR=26
MSTX Muleshoe 42.54 124 P P 16 10 05.9 +0.7
baz=340,SNR=11
ERPA Erie 42.58 95 IAmb IAmb 16 10 09.2
comp=Z,48nm,0.8s
ERPA Erie 42.58 95 P P 16 10 04.9 -0.5
baz=332
FAUS Fauske 42.58 11 *e*P P 16 10 05.2 +0.1
FAUS IAmb IAmb 16 10 05.5
comp=Z,42nm,0.8s
J56A Wolcott 42.66 91 IAmb IAmb 16 10 13.3
comp=Z,38nm,1.0s
LVZ Lovozero 42.74 0 P P 16 10 05.9 -0.5
LVZ IAmb IAmb 16 10 10.5
comp=Z,33nm,0.9s
LVZ Lovozero 42.74 0 *c*e P P 16 10 06.8 +0.4
LVZ pmax pmax
comp=Z,40nm,1.0s
KLR Kul'dur 42.78 287 *c*e P P 16 10 06.5 -0.4
KLR pmax pmax
comp=Z,10.0nm,1.3s
WVNY West Valley, N 42.81 94 IAmb IAmb 16 10 14.3
comp=Z,32nm,0.8s
N51A Ashland 42.81 98 IAmb IAmb 16 10 14.2
comp=Z,45nm,1.2s
U38A Gravette 42.82 114 IAmb IAmb 16 10 11.7
comp=Z,37nm,0.9s
J57A Williamstown 42.84 90 IAmb IAmb 16 10 21.1
comp=Z,26nm,0.8s
MGMO Mountain Grove 42.85 111 IAmb IAmb 16 10 13.6
comp=Z,50nm,0.8s
TUL3 Leonard 42.86 116 IAmb IAmb 16 10 12.9
comp=Z,51nm,0.8s
TUL3 Leonard 42.86 116 P P 16 10 08.0 +0.3
baz=337,SNR=20
RLO Rose Lookout 42.87 115 IAmb IAmb 16 10 14.0
comp=Z,26nm,1.0s
BATG Bathurst New B 42.94 79 IAmb IAmb 16 10 09.7
comp=Z,37nm,0.8s
M53A WI Miller and 42.94 96 IAmb IAmb 16 10 12.8
comp=Z,49nm,0.7s
M53A WI Miller and 42.94 96 P P 16 10 07.9 -0.4
baz=332,SNR=9.9
WMOK Wichita Mounta 43.01 120 P P 16 10 09.2 +0.3
baz=338,SNR=40
APA Apatity 43.07 1⇓*i*P P 16 10 06.7 -2.3
APA pmax pmax
comp=Z,16nm,0.7s
HHAR Hobbs 43.11 113 IAmb IAmb 16 10 14.3
comp=Z,31nm,0.8s
J58A Remsen 43.13 90 IAmb IAmb 16 10 23.8
comp=Z,43nm,1.3s
G62A West of Eustis 43.17 84 IAmb IAmb 16 10 11.5
comp=Z,67nm,1.5s
ACSO Alum Creek Sta 43.21 99 P P 16 10 10.6 0.0
baz=333,SNR=7.5
P49A Miami Univ. Ec 43.24 102 P P 16 10 10.0 -0.7
baz=334
KONS Konsvik 43.30 13 *e*P P 16 10 11.2 +0.4
KONS IAmb IAmb 16 10 12.5
comp=Z,26nm,1.0s
HEH HeiHe 43.34 291 *e*P P 16 10 11.8 +0.4
HEH pmax pmax
comp=Z,9.0nm,1.0s
S44A Carbondale 43.36 107 IAmb IAmb 16 10 26.7
comp=Z,39nm,0.9s
L56A Greenwood 43.41 93 IAmb IAmb 16 10 16.4
comp=Z,52nm,0.8s
N53A Lisbon 43.45 97 IAmb IAmb 16 10 29.4
comp=Z,29nm,0.8s
STOK Stokkvaagen 43.46 13 *e*P P 16 10 12.5 +0.4
LBNH Lisbon 43.54 86 P P 16 10 13.0 -0.1
baz=331,SNR=5.7
PKME Peaks-Kenny Pk 43.56 83 IAmb IAmb 16 10 14.2
comp=Z,32nm,0.7s
PKME Peaks-Kenny Pk 43.56 83 P P 16 10 13.4 +0.2
baz=330,SNR=13
USIN University of 43.65 106 IAmb IAmb 16 10 17.3
comp=Z,39nm,0.7s
ACCN Adirondack Com 43.68 88 IAmb IAmb 16 10 29.5
comp=Z,30nm,1.0s
O52A Adamsville 43.71 98 IAmb IAmb 16 10 17.8
comp=Z,27nm,0.9s
MOR8 Moi Rana 43.72 12 *e*P P 16 10 13.4 -0.9
MOR8 IAmb IAmb 16 10 14.1
comp=Z,34nm,1.3s
PBMO Poplar Bluff 43.80 109 IAmb IAmb 16 10 20.1
comp=Z,35nm,0.6s
O53A New Philadelph 43.81 98 IAmb IAmb 16 10 20.4
comp=Z,95nm,1.8s
O53A New Philadelph 43.81 98 P P 16 10 14.4 -1.0
baz=333
P51A Williamsport 43.86 100 IAmb IAmb 16 10 44.1
comp=Z,23nm,0.7s
WCI Wyandotte Cave 43.87 104 P P 16 10 14.9 -0.9
WCI IAmb IAmb 16 10 24.8
comp=Z,22nm,0.8s
WCI Wyandotte Cave 43.87 104 P P 16 10 15.3 -0.5
baz=334
WCI Wyandotte Cave 43.87 104 P P 16 10 14.9 -0.9
WCI pmax pmax
comp=Z,22nm,0.8s
HNH Hanover 43.88 87 IAmb IAmb 16 10 45.3
comp=Z,33nm,0.9s
BINY Binghamton 43.91 91 IAmb IAmb 16 10 23.9
comp=Z,42nm,0.8s
BINY Binghamton 43.91 91 P P 16 10 16.4 +0.3
baz=332,SNR=15
MNTX Cornudas Mount 43.94 129 P P 16 10 16.7 +0.3
baz=341,SNR=9.7
P52A Corning 44.04 99 P P 16 10 16.2 -0.9
baz=333
FCAR Ozark Folk Cen 44.05 112 IAmb IAmb 16 10 22.6
comp=Z,32nm,0.7s
DRLN Deer Lake 44.11 70 P P 16 10 17.3 -0.3
O54A Avella 44.16 97 IAmb IAmb 16 10 21.5
comp=Z,23nm,0.7s
LOOK Love County 44.19 118 IAmb IAmb 16 10 24.1
comp=Z,22nm,0.7s
LCAR Lake Charles 44.20 110 IAmb IAmb 16 10 23.2
comp=Z,36nm,0.7s
M57A Sunshine Farm, 44.27 93 IAmb IAmb 16 10 44.2
comp=Z,29nm,1.0s
SSFO Shawnee State 44.51 101 IAmb IAmb 16 10 28.5
comp=Z,31nm,0.7s
GGN Saint George 44.54 81 IAmb IAmb 16 10 22.0
comp=Z,32nm,0.8s
WHAR Wooly Hollow 44.55 112 IAmb IAmb 16 10 26.5
comp=Z,38nm,0.8s
KSPA Keystone Colle 44.55 92 IAmb IAmb 16 10 32.3
comp=Z,92nm,2.0s
Q52A Bidwell 44.59 100 IAmb IAmb 16 10 25.0
comp=Z,29nm,1.1s
LMN Caledonia Moun 44.60 79 IAmb IAmb 16 10 22.5
comp=Z,21nm,0.8s
SSPA Standing Stone 44.63 94 P P 16 10 21.4 -0.5
SSPA IAmb IAmb 16 10 28.6
comp=Z,28nm,0.9s
SSPA Standing Stone 44.63 94 P P 16 10 21.4 -0.5
baz=333
EMMW East Machias 44.69 82 IAmb IAmb 16 10 23.3
comp=Z,21nm,0.7s
ABTX Abilene, Hawle 44.72 122 P P 16 10 22.3 -0.4
baz=339
FW03 Perrin-Whitt E 44.80 120 IAmb IAmb 16 10 28.9
comp=Z,22nm,0.8s
MCWV Mont Chateau 44.81 97 P P 16 10 23.3 -0.1
baz=333
MIAR Mount Ida 44.82 114 P P 16 10 23.9 +0.5
baz=337,SNR=61
L61B Northampton 44.84 88 P P 16 10 23.9 +0.3
baz=332
Q54A Coxs Mills 45.07 98 IAmb IAmb 16 10 32.9
comp=Z,26nm,0.7s
X40A Basin Creek Fa 45.11 113 IAmb IAmb 16 10 30.7
comp=Z,29nm,0.8s
NSS Namsos 45.15 14 *e*P P 16 10 25.7 0.0
NSS IAmb IAmb 16 10 25.9
comp=Z,39nm,1.0s
HRV Adam Dziewonsk 45.19 87 P P 16 10 26.0 -0.3
HRV IAmb IAmb 16 10 28.2

comp=Z,32nm,1.1s
**HRV Adam Dziewonsk** 45.19 87 P P 16 10 26.6 +0.3
baz=332
**HRV Adam Dziewonsk** 45.19 87 P P 16 10 26.0 -0.3
HRV pmax pmax
comp=Z,32nm,1.1s
**WVT Waverly** 45.25 107 P P 16 10 26.9 +0.1
**WVT Waverly** 45.25 107 P P 16 10 27.7 +0.8
baz=336
**WVT Waverly** 45.25 107 P P 16 10 26.9 +0.1
WVT pmax pmax
comp=Z,58nm,1.0s
**S51A Beattyville** 45.33 102 IAmb IAmb 16 11 27.5
comp=Z,14nm,0.7s
**ODNJ Ogdensburg** 45.38 91 IAmb IAmb 16 10 35.1
comp=Z,30nm,1.1s
**WES Weston** 45.38 87 IAmb IAmb 16 10 34.1
comp=Z,26nm,0.9s
**OUL Oulu** 45.41 5 P P 16 10 27.5 -0.3
**TRNY Table Rock, Ra** 45.46 90 IAmb IAmb 16 10 35.9
comp=Z,20nm,0.8s
**T50A Nancy** 45.46 103 IAmb IAmb 16 10 49.6
comp=Z,61nm,1.5s
**Q56A Snyder Ridge,** 45.59 96 IAmb IAmb 16 10 45.1
comp=Z,20nm,0.9s
**U49A Red Boiling Sp** 45.60 105 IAmb IAmb 16 10 50.5
comp=Z,64nm,1.6s
**P57A Homestead Farm** 45.61 95 IAmb IAmb 16 11 09.2
comp=Z,25nm,1.1s
**ALPN Alpine** 45.67 127 IAmb IAmb 16 10 36.7
comp=Z,14nm,0.7s
**PAL Palisades** 45.69 90 P P 16 10 30.2 -0.1
baz=332
**TREL Terrell** 45.70 118 IAmb IAmb 16 10 36.0
comp=Z,25nm,0.9s
**MVL Millersville** 45.73 93 IAmb IAmb 16 10 37.6
comp=Z,18nm,0.8s
**CPNY Central Park** 45.86 90 P P 16 10 32.1 +0.5
CPNY IAmb IAmb 16 10 39.4
comp=Z,30nm,0.9s
**V48A Smith Brothers** 45.95 106 IAmb IAmb 16 10 39.2
comp=Z,23nm,0.7s
**R55A Marlinton** 45.95 98 IAmb IAmb 16 10 39.2
comp=Z,22nm,0.9s
**WHTX Lake Whitney,** 45.97 119 P P 16 10 33.1 +0.5
baz=339,SNR=5.4
**S54A Dingess, Becki** 45.97 99 IAmb IAmb 16 10 38.4
comp=Z,18nm,0.8s
**HAL Halifax** 46.08 78 IAmb IAmb 16 10 34.3
comp=Z,24nm,0.7s
**GBN Guysborough** 46.12 76 IAmb IAmb 16 10 38.0
comp=Z,27nm,0.8s
**BRDY Brady** 46.16 122 IAmb IAmb 16 10 39.3
comp=Z,14nm,0.8s
**OXF Oxford** 46.20 109 P P 16 10 35.6 +1.3
baz=336,SNR=29
**TZTN Tazewell** 46.33 102 IAmb IAmb 16 10 39.5
comp=Z,32nm,0.9s
**TZTN Tazewell** 46.33 102 P P 16 10 35.4 0.0
baz=335,SNR=5.9
**TXAR Lajitas Array** 46.65 128 P P 16 10 38.3 +0.2
**TXAR Lajitas Array** 46.65 128 P P 16 10 38.2 +0.1
comp=Z,2.6nm,0.4s,baz=349,slow=5.8,SNR=44
comp=Z,2.6nm,0.4s
**MOL Molde** 46.66 17 *e*P P 16 10 38.2 +0.6
**HIA Hailar** 46.66 296 P P 16 10 39.3 +1.4
**HIA Hailar** 46.66 296 *i* P P 16 10 38.8 +0.9
HIA pmax pmax
comp=Z,15nm,1.2s
**JCT Junction City** 46.67 123 P P 16 10 38.5 +0.4
baz=340,SNR=7.4
**SWET Sewanee** 46.72 105 IAmb IAmb 16 10 51.6
comp=Z,22nm,0.8s
**BLA Blacksburg** 46.80 99 IAmb IAmb 16 10 47.3
comp=Z,27nm,1.2s
**BLA Blacksburg** 46.80 99 P P 16 10 39.2 +0.1
baz=334
**S57A Dark Hollow, R** 46.82 97 IAmb IAmb 16 10 49.1
comp=Z,17nm,1.1s
**U54A Nelsons Funny** 46.94 101 IAmb IAmb 16 11 07.0
comp=Z,23nm,1.0s
**JTM Tenmabayashi** 46.95 273 P P 16 10 41.2 +1.1
**W50A Signal Mountai** 46.95 105 IAmb IAmb 16 10 55.0
comp=Z,23nm,0.8s
**V52A Sevierville** 46.95 103 IAmb IAmb 16 10 46.7
comp=Z,12nm,0.8s
**CBN Corbin Frederi** 46.97 95 P P 16 10 40.7 +0.3
baz=334
**CPCT Cooper Cave** 46.99 104 IAmb IAmb 16 11 02.3
comp=Z,18nm,1.0s
**R58B Mineral** 47.01 96 IAmb IAmb 16 10 50.7
comp=Z,16nm,0.9s
**NATX Nacogdoches** 47.04 117 P P 16 10 40.8 -0.2
baz=338
**435B Jarrell** 47.05 120 P P 16 10 39.9 -1.2
baz=339
**USA0B Ussuriysk Arra** 47.08 283 IAmb IAmb 16 10 46.7
comp=Z,17nm,0.9s
**USA0B Ussuriysk Arra** 47.08 283 *i* P P 16 10 41.5 +0.4
**USRK Ussuriysk Ar.** 47.08 283 P P 16 10 39.3 -1.8
comp=Z,3.2nm,0.6s,baz=39,slow=8.9,SNR=15
comp=Z,3.2nm,0.6s
**BNX BinXian** 47.27 288 ⇓P P 16 10 42.3 -0.3
BNX pmax pmax
comp=Z,8.0nm,1.0s
**VAF Ylistaro** 47.33 8 *e*P P 16 10 43.3 +0.5
**DOMB Dombas** 47.33 16 *e*P P 16 10 41.9 -1.0
DOMB IAmb IAmb 16 10 43.1
comp=Z,38nm,1.3s
**FOO Floro** 47.34 19 *e*P P 16 10 42.7 -0.2
**V53A Saluda** 47.37 102 IAmb IAmb 16 10 47.3
comp=Z,13nm,0.9s
**T57A Hurt** 47.40 98 IAmb IAmb 16 11 06.9
comp=Z,9.8nm,0.7s
**DRIO Del Rio** 47.43 124 IAmb IAmb 16 11 02.0
comp=Z,26nm,1.2s
**W52A Murphy** 47.51 104 IAmb IAmb 16 10 55.1
comp=Z,21nm,0.8s
**MDJ Mudanjiang** 47.53 285 P P 16 10 46.1 +1.5
**MDJ Mudanjiang** 47.53 285 P P 16 10 45.7 +1.1
**U56A King** 47.60 99 IAmb IAmb 16 10 48.7
comp=Z,22nm,1.0s
**JOF Joensuu** 47.72 2 *e*P P 16 10 45.8 -0.1
**HNDO Hondo** 47.72 123 IAmb IAmb 16 10 51.9
comp=Z,21nm,0.7s
**V55A Taylorsville** 47.76 100 IAmb IAmb 16 10 51.0
comp=Z,13nm,1.0s
**Y49A Blount Mountai** 47.80 107 IAmb IAmb 16 11 00.6
comp=Z,26nm,0.9s
**SUE Sulen** 47.83 19 *e*P P 16 10 46.4 -0.4
**HYA Hoyanger** 47.89 18 *e*P P 16 10 47.5 +0.4
**BG3 Lake Jocassee** 47.94 103 IAmb IAmb 16 10 53.6
comp=Z,12nm,0.8s
**VBMS Vicksburg** 47.94 112 P P 16 10 47.2 -0.8
baz=337
**T59A Double "B" Far** 48.02 96 IAmb IAmb 16 11 05.7
comp=Z,24nm,1.1s
**KEF Keuruu** 48.30 6 *e*P P 16 10 50.1 -0.2
**NC303 NORSAR Array S** 48.35 15 IAmb IAmb 16 11 11.1
comp=Z,40nm,1.4s
**LRAL Lakeview Retre** 48.35 108 P P 16 10 52.0 +0.8
baz=337,SNR=21
**KMSC Kings Mountain** 48.36 101 P P 16 10 50.7 -0.5
baz=335
**HPIG** 48.38 131 IAmb IAmb 16 11 07.0
comp=Z,14nm,0.9s
**ASK Askoy** 48.44 19 *e*P P 16 10 51.2 -0.2
**PAULI Pauline** 48.48 102 IAmb IAmb 16 10 56.4
comp=Z,16nm,0.7s
**NB201 NORSAR Array S** 48.52 15 IAmb IAmb 16 10 53.7
comp=Z,31nm,1.1s
**NB2 NORSAR Subarra** 48.52 15 P P 16 10 51.5 -0.7
comp=Z,2.8nm,0.5s,baz=347,slow=7.4
**NB2 NORSAR Subarra** 48.52 15 P P 16 10 51.5 -0.7
baz=347,slow=7.4
**NB2 NORSAR Subarra** 48.52 15 P P 16 10 52.0 -0.2
**NOA NORSAR Array B** 48.52 15 P P 16 10 49.5 -2.6
comp=Z,6.1nm,0.8s,baz=348,slow=7.7,SNR=29
comp=Z,6.1nm,0.8s
**V58A Windy Hill, Pi** 48.53 98 IAmb IAmb 16 11 16.5
comp=Z,22nm,0.9s
**IRK Irkutsk** 48.54 310 *e*P P 16 10 50.4 -2.0
IRK pmax pmax
comp=Z,34nm,1.2s
**BER Bergen** 48.55 19 *e*P P 16 10 52.2 -0.1
BER IAmb IAmb 16 10 52.5
comp=Z,17nm,0.7s

**Y52A Lilburn** 48.59 104 IAmb IAmb 16 11 00.0
comp=Z,23nm,0.8s
**NAO01 NORSAR Array S** 48.68 16 IAmb IAmb 16 12 41.3
comp=Z,47nm,1.5s
**833A Chaparral WMA,** 48.82 123 P P 16 10 55.1 +0.3
baz=341
**NC602 NORSAR Array S** 48.85 15 *e*P P 16 10 55.5 +0.8
NC602 IAmb IAmb 16 10 56.4
comp=Z,23nm,1.2s
**PSTR Posyet** 48.85 283 *i* P P 16 10 56.0 +1.1
**HODGE Hodges** 48.87 102 IAmb IAmb 16 10 59.5
comp=Z,15nm,0.7s
**FINES FINESS Array B** 49.06 6 P P 16 10 55.9 -0.4
**FINES FINESS Array B** 49.06 6 P P 16 10 54.4 -1.8
comp=Z,18nm,0.7s,baz=358,slow=8.2,SNR=94
comp=Z,18nm,0.7s
**FINES FINESS Array B** 49.06 6 P P 16 10 55.9 -0.4
**ODD1 Odda** 49.16 19 *e*P P 16 10 57.1 0.0
**JSC Jenkinsville** 49.16 101 IAmb IAmb 16 11 01.7
comp=Z,17nm,0.6s
**GOGA Godfrey** 49.20 104 IAmb IAmb 16 11 02.5
comp=Z,21nm,0.8s
**GOGA Godfrey** 49.20 104 P P 16 10 58.4 +0.7
baz=336,SNR=14
**VALR Valaam** 49.27 3 *i* P P 16 10 57.8 0.0
VALR pmax pmax
comp=Z,59nm,0.9s
**RAF Rauma** 49.30 9 *e*P P 16 10 57.8 -0.2
**152A Waverly Hall** 49.45 106 IAmb IAmb 16 11 13.2
comp=Z,36nm,1.1s
**BLS5 Blasjo** 49.62 19 *e*P P 16 11 00.5 -0.1
BLS5 IAmb IAmb 16 11 01.2
comp=Z,32nm,1.2s
**HFS Hagfors** 49.63 14 P P 16 10 59.9 -0.8
comp=Z,30nm,0.5s,baz=356,slow=4.9,SNR=307
comp=Z,30nm,0.5s
**CN2 Changchun** 49.64 288 *e*P P 16 11 00.1 -0.8
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**JMM Marumori** 49.64 271 P P 16 11 02.9 +1.9
**KONO Kongsberg** 49.73 17 *e*P P 16 11 01.7 +0.3
**KONO Kongsberg** 49.73 17 *ce*P P 16 11 01.7 +0.3
KONO pmax pmax
comp=Z,22nm,1.0s
**MOY Mondy** 49.93 312 *e*P P 16 11 04.1 +0.9
MOY pmax pmax
comp=Z,66nm,2.1s
**KPL Plockton** 49.98 28⇑ *e*P P 16 11 03.0 -0.3
KPL IAmb IAmb 16 11 03.9
comp=Z,38nm,0.8s
**BRAL Brewton** 50.05 109 P P 16 11 04.8 +0.6
baz=337
**MEF Metsahovi** 50.23 7 *e*P P 16 11 05.0 -0.1
**NHSC New Hope** 50.60 101 P P 16 11 07.4 -0.9
baz=336
**SNART Snartemo** 50.77 19 *e*P P 16 11 09.4 +0.2
**DRUM Mains of Drumt** 50.88 26 *e*P P 16 11 09.7 -0.4
DRUM IAmb IAmb 16 11 10.8
comp=Z,94nm,0.7s
**TIGA Tifton** 50.96 105 P P 16 11 11.2 +0.2
baz=337
**LAWE Loch Awe, Argy** 51.05 28⇑ *e*P P 16 11 11.3 -0.1
LAWE IAmb IAmb 16 11 11.9
comp=Z,31nm,0.8s
**ARBE Arbavere** 51.07 6 *e*P P 16 11 10.1 -1.4
**INVG Invergeldie, C** 51.11 27⇑ *e*P P 16 11 11.4 -0.4
INVG IAmb IAmb 16 11 11.9
comp=Z,9.9nm,0.9s
**ZAA0 Zalesovo Array** 51.56 325 P P 16 11 15.2 0.0
**ZALV Zalesovo Beam** 51.56 325 P P 16 11 14.7 -0.5
**ZALV Zalesovo Beam** 51.56 325 P P 16 11 14.5 -0.8
comp=Z,16nm,0.8s,baz=22,slow=7.1,SNR=27
comp=Z,16nm,0.8s
**ZALV Zalesovo Beam** 51.56 325 *i* P P 16 11 15.0 -0.3
ZALV pmax pmax
comp=Z,16nm,0.8s
**PGBU Glenifferbraes** 51.63 27 *e*P P 16 11 15.3 -0.4
PGBU IAmb IAmb 16 11 16.3
comp=Z,31nm,0.8s
**KIRV Kirov** 51.67 350 P P 16 11 14.3 -1.7
comp=Z,19nm,0.5s,baz=44,slow=3.3,SNR=6.3
comp=Z,19nm,0.5s
**KIRV Kirov** 51.67 350 *ce*P P 16 11 16.9 +0.9
**MTSE Matsula** 51.70 7 *e*P P 16 11 16.9 +0.7
**ULN Ulaanbaatar** 51.73 305 P P 16 11 15.8 -1.0
**ULN Ulaanbaatar** 51.73 305 *ce*P P 16 11 17.6 +0.8
ULN pmax pmax
comp=Z,10.0nm,0.8s
**EDI Edinburgh** 51.73 26⇑ *e*P P 16 11 16.3 -0.2
EDI IAmb IAmb 16 11 16.9
comp=Z,30nm,0.7s
**MAJO Matsushiro** 51.74 273 P P 16 11 17.7 +0.9
**MAJO Matsushiro** 51.74 273 P P 16 11 16.6 -0.2
**MAJO Matsushiro** 51.74 273 P P 16 11 16.6 -0.2
MAJO pmax pmax
comp=Z,49nm,0.9s
**MJAR Matsushiro Arr** 51.74 273 P P 16 11 15.7 -1.1
comp=Z,16nm,0.8s,baz=4.9,slow=8.2,SNR=27
comp=Z,16nm,0.8s
**IDGL Inch Island, C** 51.83 30 *e*P P 16 11 17.1 -0.1
**SONM Songino Array** 51.94 306 P P 16 11 17.9 -0.5
SONM IAmb IAmb 16 11 29.2
comp=Z,25nm,1.2s
**SONM Songino Array** 51.94 306 P P 16 11 17.4 -0.9
comp=Z,10nm,0.9s,baz=37,slow=6.4,SNR=24
comp=Z,10nm,0.9s
**SONM Songino Array** 51.94 306 P P 16 11 17.9 -0.5
SONM pmax pmax
comp=Z,25nm,1.2s
**VSU Vasula** 52.07 6 *ce*P P 16 11 18.2 -0.8
VSU pmax pmax
comp=Z,62nm,0.8s
**EKA Eskdalemuir Ar** 52.30 27 P P 16 11 19.8 -0.9
comp=Z,49nm,0.8s,baz=331,slow=6.8,SNR=140
comp=Z,49nm,0.8s
**ESK Eskdalemuir** 52.31 27 P P 16 11 21.0 +0.2
**ESK Eskdalemuir** 52.31 27⇑ *e*P P 16 11 20.9 +0.2
ESK IAmb IAmb 16 11 21.7
comp=Z,50nm,0.8s
**ESK Eskdalemuir** 52.31 27 P P 16 11 21.0 +0.2
ESK pmax pmax
comp=Z,49nm,0.8s
**NEWG New Galloway** 52.34 27 *e*P P 16 11 20.5 -0.5
**GAL1 Galloway** 52.50 28 *e*P P 16 11 21.9 -0.3
GAL1 IAmb IAmb 16 11 22.7
comp=Z,32nm,0.9s
**SVE Sverdlovsk** 52.51 343⇓ *e*P P 16 11 23.3 +1.1
SVE pmax pmax
comp=Z,37nm,1.1s
**XLT XiLinHaoTe** 52.59 296 *e*P P 16 11 23.6 +0.4
XLT pP sP 16 11 27.8 -0.2
XLT PcP **PcP** **16 12 28.9 -4.3**
XLT pmax pmax
comp=Z,7.0nm,1.0s
**MUD Monsted U'grnd** 52.83 18 *i* P P 16 11 23.5 -1.1
MUD IAmb IAmb 16 11 26.0
comp=Z,30nm,0.8s
**JGF Kuroka** 52.88 273 P P 16 11 26.7 +1.3
**KESW Keswick, Cumbr** 53.03 27⇑ *e*P P 16 11 26.1 -0.1
KESW IAmb IAmb 16 11 26.8
comp=Z,39nm,0.8s
**ILTH Belurgan, Co L** 53.03 29 *e*P P 16 11 25.7 -0.4
**IGLA Glengowla, Co** 53.08 32 *e*P P 16 11 26.0 -0.5
**ARU Arti** 53.11 344 P P 16 11 27.1 +0.4
ARU IAmb IAmb 16 11 31.0
comp=Z,34nm,0.8s
**ARU Arti** 53.11 344 P P 16 11 26.3 -0.4
comp=Z,27nm,0.6s,baz=12,slow=4.0,SNR=58
comp=Z,27nm,0.6s
**ARU Arti** 53.11 344 *d* *i*P P 16 11 27.1 +0.4
ARU 16 12 36.9
ARU 16 13 22.0
ARU S **S** **16 19 01.6 +5.2**
ARU SS **SS** **16 22 30.9 -3.9**
ARU pmax pmax
comp=Z,39nm,0.8s
**IOMK Kirk Michael** 53.11 28⇑ *e*P P 16 11 26.1 -0.6
IOMK IAmb IAmb 16 11 28.3
comp=Z,52nm,0.8s
**WIM Isle of Man** 53.20 28⇑ *e*P P 16 11 27.1 -0.3
**INU Inuyama** 53.23 273 P P 16 11 31.2 +3.4
**HPK Haverah Park** 53.87 26 *e*P P 16 11 32.7 +0.4
**WPS Cemaes, Angles** 53.95 28 *e*P P 16 11 32.2 -0.6
WPS IAmb IAmb 16 11 33.2
comp=Z,16nm,0.8s

**WME Myndd Eilian** 53.98 28⇑ *e*P P 16 11 32.7 -0.4
**WLF1 Llynfaes** 54.07 28 *e*P P 16 11 33.3 -0.4
WLF1 IAmb IAmb 16 11 34.2
comp=Z,52nm,0.8s
**LBWR Ladybower, Pea** 54.39 26⇑ *e*P P 16 11 36.0 -0.1
LBWR IAmb IAmb 16 11 36.8
comp=Z,48nm,0.8s
**KSRS Korea Array** 54.48 282 P P 16 11 37.2 +0.2
comp=Z,4.9nm,0.8s,baz=19,slow=7.4,SNR=20
comp=Z,4.9nm,0.8s
**KSAR Wonju Array Be** 54.51 282 P P 16 11 37.2 0.0
**KSAR Wonju Array Be** 54.51 282 P P 16 11 37.2 0.0
**LMK Market Rasen** 54.55 25⇑ *e*P P 16 11 37.7 +0.5
LMK IAmb IAmb 16 11 38.3
comp=Z,89nm,0.7s
**LLW Llanuwchllyn** 54.62 28 *e*P P 16 11 37.2 -0.5
**DWPF Disney Wildern** 54.75 105 P P 16 11 39.4 +0.4
baz=337
**PABE Paberze** 54.92 8 *e*P P 16 11 40.3 +0.5
**MOS Moscow** 54.93 358 *e*P P 16 11 39.7 -0.3
MOS pmax pmax
comp=Z,50nm,0.7s
**BRVK Borovoye** 54.97 335 P P 16 11 40.2 -0.2
BRVK IAmb IAmb 16 11 44.4
comp=Z,22nm,0.9s
**BRVK Borovoye** 54.97 335 *ce*P P 16 11 40.8 +0.5
BRVK pmax pmax
comp=Z,27nm,1.0s
**BVA0 Borovoye Array** 54.99 335 *i* P P 16 11 39.8 -0.7
**BVAR Borovoye Array** 54.99 335 P P 16 11 40.7 +0.3
comp=Z,21nm,0.9s,baz=5.7,slow=6.0,SNR=34
comp=Z,21nm,0.9s
**DGZ Jazzator, Alta** 55.01 321 *i* P P 16 11 41.5 +0.6
DGZ pmax pmax
comp=Z,39nm,1.7s
**HLM1 Long Mynd** 55.06 27⇑ *e*P P 16 11 41.2 +0.1
HLM1 IAmb IAmb 16 11 41.9
comp=Z,62nm,0.9s
**RSBS Rosebush, Pemb** 55.30 29⇑ *e*P P 16 11 42.6 -0.2
RSBS IAmb IAmb 16 11 43.4
comp=Z,56nm,1.0s
**OBN Obninsk** 55.57 359 *ce*P P 16 11 44.8 +0.3
OBN pmax pmax
comp=Z,95nm,2.5s
**TJN Taejon** 55.65 282 P P 16 11 47.1 +1.7
comp=Z,170nm,0.9s
**TJN Taejon** 55.65 282 *ce*P P 16 11 46.2 +0.8
**MONM Monmouth** 55.73 27⇑ *e*P P 16 11 45.9 +0.1
MONM IAmb IAmb 16 11 46.7
comp=Z,70nm,0.9s
**JMN Monobe** 55.79 275 P P 16 11 48.6 +2.1
**JMN Monobe** 55.79 275 P P 16 11 46.0 -0.5
**SEM Semipalatinsk** 55.82 327 *e*P P 16 11 46.2 -0.6
comp=Z,11nm,1.2s,baz=327
**SEM Semipalatinsk** 55.82 327 *e*P P 16 11 46.2 -0.6
SEM pmax pmax
comp=Z,11nm,1.2s
**KURK Kurchatov** 55.84 328 P P 16 11 46.6 0.0
**KURK Kurchatov** 55.84 328 *ce*P P 16 11 46.9 +0.3
KURK pmax pmax
comp=Z,68nm,1.3s
**KURBB Kurchatov Arra** 55.94 328 P P 16 11 45.2 -2.1
comp=Z,17nm,0.9s,baz=12,slow=7.1,SNR=100
comp=Z,17nm,0.9s
**KURBB Kurchatov Arra** 55.94 328 P P 16 11 46.9 -0.4
**ELMS Elmsett, Ipswi** 56.07 25 *e*P P 16 11 48.1 0.0
**MNK Minsk** 56.07 5 *i* P P 16 11 47.3 -0.9
MNK *i* 16 12 45.3
MNK *i* 16 13 57.4
MNK *i* PPP PPP 16 15 11.0
MNK *i* S **S** **16 19 36.9 +0.6**
MNK *i* 16 21 36.7
MNK *i* SS **SS** **16 23 24.5 +3.0**
MNK pmax pmax
comp=Z,62nm,0.8s
MNK pmax pmax
comp=E,45nm,1.1s
MNK pmax pmax
comp=N,22nm,0.9s
MNK MLR MLR
comp=Z,2μm,18.0s
MNK MLR MLR
comp=N,1μm,18.0s
MNK MLR MLR
comp=E,793nm,15.0s
**SUW Suwalki** 56.37 8 *e*P P 16 11 50.6 +0.3
**WOL Wolverton** 56.49 26⇑ *e*P P 16 11 51.7 +0.4
**RETH Rethem/Aller,** 56.51 18 *e*P P 16 11 52.1 +0.7
comp=E,9.1nm,0.8s,baz=351,slow=7.0
**GKP Gorka Klasztor** 56.73 13 *e*P P 16 11 54.0 +1.1
**IBBN Ibbenburen** 56.75 20 *e*P P 16 11 54.0 +0.9
comp=E,51nm,0.7s,baz=351,slow=7.0
**HHC Hu-ho-hao-te** 56.76 298 *e*P P 16 11 51.8 -1.7
HHC pmax pmax
comp=E,10.0nm,0.6s
HHC LR LR
comp=E,2μm,17.7s
**NRDL Niedersach Rie** 56.83 18 *e*P P 16 11 54.1 +0.6
comp=E,27nm,0.9s,baz=351,slow=7.0
**FLTG Flechtingen** 57.12 17 *e*P P 16 11 55.6 -0.1
comp=E,17nm,0.7s,baz=351,slow=7.0
**RUE Ruedersdorf** 57.22 15 *e*P P 16 11 57.4 +1.0
**RUE Ruedersdorf** 57.22 15 *e*P P 16 11 57.3 +0.9
comp=E,48nm,1.0s,baz=351,slow=7.0
**BTO Baotou** 57.46 299 *e*P P 16 11 58.5 +0.1
BTO pP **sP** **16 12 03.2 -0.1**
BTO sP **pP** **16 12 05.8 +3.9**
BTO pmax pmax
comp=E,15nm,0.7s
**CLZ Clausthal** 57.51 18 *e*P P 16 11 59.4 +0.9
comp=E,37nm,0.7s,baz=351,slow=7.0
**BUG Bochum--Univer** 57.55 20 *e*P P 16 11 59.3 +0.6
comp=E,26nm,0.8s,baz=351,slow=7.0
**ZSN Zaisan** 57.70 322 *e*P P 16 11 59.1 -0.8
baz=322
**ZSN Zaisan** 57.70 322 *e*P P 16 11 59.9 0.0
**GTTG Gottingen** 57.75 18 *e*P P 16 12 01.3 +1.1
comp=E,47nm,0.8s,baz=351,slow=7.0
**KASTN Kahler Asten** 57.92 19 *e*P P 16 12 02.1 +0.7
comp=E,14nm,0.8s,baz=351,slow=7.0
KASTN *e*pP **sP** **16 12 05.5 -0.7**
**BELG Belogornoye** 57.95 351 P P 16 11 59.0 -2.5
comp=E,74nm,0.8s,baz=304,slow=0.4,SNR=24
comp=E,74nm,0.8s
**BELG Belogornoye** 57.95 351 *i* P P 16 12 02.3 +0.8
BELG pmax pmax
comp=Z,14nm,0.8s
**LPSR Galich'ya Gora** 58.06 357 *e*P P 16 12 03.1 +0.8
LPSR pmax pmax
comp=Z,40nm,0.8s
**BSTI Sart Tilman** 58.17 22 *d*P P 16 12 03.8 +0.7
comp=Z,20nm,0.7s
**MEM Membach** 58.20 21 *d*P P 16 12 03.9 +0.6
comp=Z,51nm,0.9s
**BTNL Ternell** 58.24 21 *d*P P 16 12 04.2 +0.5
comp=Z,57nm,0.8s
**NEUB Neuenburg** 58.28 17 *e*P P 16 12 04.5 +0.6
comp=Z,45nm,0.9s,baz=351,slow=7.0
**BCLA Clavier** 58.30 22 *d*P P 16 12 04.4 +0.4
comp=Z,21nm,0.8s
**CLL Collm** 58.30 16⇑ *i*P P 16 12 04.1 +0.1
comp=Z,34nm,0.7s
**CLL Collm** 58.30 16⇑ *i*P P 16 12 04.1 +0.1
CLL pmax pmax
comp=Z,34nm,0.7s
**CLL Collm** 58.30 16 *e*P P 16 12 04.2 +0.1
comp=Z,29nm,0.7s,baz=351,slow=7.0
**BGES Gesves** 58.31 22 *d*P P 16 12 04.5 +0.4
comp=Z,19nm,0.8s
**BMRD Maredsous** 58.34 22 *d*P P 16 12 04.3 0.0
comp=Z,18nm,0.8s
**AHRW Bad Neuenahr-A** 58.41 21 *e*P P 16 12 05.6 +0.8
comp=Z,45nm,1.3s,baz=351,slow=7.0
**BHOU Houvegnez** 58.45 21 *d*P P 16 12 05.5 +0.4
**UBBA Unterbreizbach** 58.47 18 *e*P P 16 12 05.7 +0.6
comp=Z,22nm,0.7s,baz=351,slow=7.0
UBBA *e*pP **sP** **16 12 09.2 -0.7**
**BAIF Baives** 58.51 23 P P 16 12 05.1 -0.4
**DOU Dourbes** 58.52 23 *d*P P 16 12 06.0 +0.4
comp=Z,14nm,1.0s
**GIVF Givet** 58.55 22 P P 16 12 05.2 -0.6
**RCHB Rochefort** 58.55 22 *d*P P 16 12 05.9 +0.2
comp=Z,26nm,0.9s
**MOX Moxa** 58.82 17 *e*P P 16 12 08.1 +0.4
comp=Z,16nm,0.7s,baz=351,slow=7.0
**BRG Berggiesshubel** 58.82 15 *e*P P 16 12 07.8 +0.2

BRG Amp 16 12 09.1
comp=Z,25nm,0.9s
**BRG Berggiesshubel 58.82 15** *eP* **P 16 12 08.0 +0.3**
comp=Z,25nm,0.9s,baz=351,slow=7.0
**MK31 Makanchi Array 58.87 324** *i* P **P 16 12 06.3 -1.8**
MK31 pmax pmax
comp=Z,6.0nm,0.7s
**MKAR Makanchi Array 58.87 324** P **P 16 12 07.0 -1.0**
**MKAR Makanchi Array 58.87 324** P **P 16 12 05.7 -2.4**
comp=Z,3.5nm,0.6s,baz=43,slow=5.4,SNR=18
comp=Z,3.5nm,0.6s
**MKAR Makanchi Array 58.87 324** *i* P **P 16 12 07.1 -1.0**
MKAR pmax pmax
comp=Z,4.0nm,0.6s
**TNS Taunus Mts 58.88 20** *eP* **P 16 12 08.8 +0.6**
comp=Z,16nm,0.8s,baz=351,slow=7.0
**MAKZ Makanchi 58.92 324** P **P 16 12 07.7 -0.7**
MAKZ lAmb lAmb 16 12 40.8
comp=Z,20nm,1.1s
**MAKZ Makanchi 58.92 324** P **P 16 12 07.7 -0.7**
MAKZ pmax pmax
comp=Z,20nm,1.1s
**HNS HongShan 58.92 294** ⇓P **P 16 12 08.6 +0.1**
HNS pmax pmax
comp=Z,20nm,0.9s
**VORR Voronezh 58.98 357** *eP* **P 16 12 07.3 -1.4**
VORR pmax pmax
comp=Z,60nm,0.4s
**PLN Plauen 59.03 17** *eP* **P 16 12 09.6 +0.5**
comp=Z,38nm,1.3s,baz=351,slow=7.0
**HSKC Hora Svate Kat 59.04 16** *eP* **P 16 12 09.4 +0.2**
**RNPP9 Sopachiv 59.09 7** P **P 16 12 07.3 -2.2**
**TANN Tannenbergstha 59.13 17** *eP* **P 16 12 10.5 +0.6**
comp=Z,19nm,1.0s,baz=351,slow=7.0
**WLF Walferdange 59.15 21** *dP* **P 16 12 11.1 +1.2**
comp=Z,24nm,0.8s
**WLF Walferdange 59.15 21** *eP* **P 16 12 11.1 +1.2**
comp=Z,31nm,0.8s,baz=351,slow=7.0
**PVCC Panska Ves 59.22 15** *eP* **P 16 12 11.2 +0.8**
**PVCC Panska Ves 59.22 15** *eP* **P 16 12 11.2 +0.8**
**CHVC Chvalec 59.29 14** *eP* **P 16 12 11.6 +0.6**
**CHVC Chvalec 59.29 14** *eP* **P 16 12 11.6 +0.6**
**OSTC Ostas 59.34 14** *eP* **P 16 12 12.1 +0.8**
**OSTC Ostas 59.34 14** *eP* **P 16 12 12.1 +0.8**
**UPC Upice 59.37 14** *eP* **P 16 12 12.1 +0.6**
**UPC Upice 59.37 14** *eP* **P 16 12 12.1 +0.6**
**VRH Novokhopyorsk 59.39 355** *eP* **P 16 12 10.1 -1.5**
VRH pmax pmax
comp=Z,26nm,2.0s
**VSR Storozhevoye 59.44 357** *eP* **P 16 12 09.9 -2.0**
VSR pmax pmax
comp=Z,20nm,1.1s
**QUIF Quistinic 59.47 29** P **P 16 12 11.3 -0.8**
**MANZ Manzenberg 59.52 17** *eP* **P 16 12 13.1 +0.5**
comp=Z,3.1nm,1.0s,baz=351,slow=7.0
**DPC Dobruska-Polom 59.55 14** *eP* **P 16 12 13.6 +0.8**
**DPC Dobruska-Polom 59.55 14** *eP* **P 16 12 13.6 +0.8**
**VORD Divnogorie 59.69 357** *eP* **P 16 12 11.9 -1.7**
VORD pmax pmax
comp=Z,10.0nm,0.8s
**GRA1 Grafenberg Arr 59.72 18** lAmb lAmb 16 12 15.8
comp=Z,16nm,0.7s
**GRF Grafenberg Arr 59.72 18** *eP* **P 16 12 15.4 +1.5**
comp=Z,7.0nm,0.8s,baz=351,slow=7.0
**GRFO Grafenberg 59.72 18** P **P 16 12 12.9 -0.9**
GRFO lAmb lAmb 16 12 15.8
comp=Z,17nm,0.8s
**GRFO Grafenberg 59.72 18** P **P 16 12 13.0 -0.9**
GRFO pmax pmax
comp=Z,17nm,0.8s
**ROTZ Rotzenmuhle 59.75 17** *eP* **P 16 12 14.6 +0.5**
comp=Z,2.7nm,0.8s,baz=351,slow=7.0
**GOPC GO Pecny, Ondr 59.85 15** *eP* **P 16 12 15.1 +0.3**
**GOPC GO Pecny, Ondr 59.85 15** *eP* **P 16 12 15.1 +0.3**
**KRLC Kraliky 59.86 14** *eP* **P 16 12 15.6 +0.7**
**KRLC Kraliky 59.86 14** *eP* **P 16 12 15.6 +0.7**
**AKASG Malin Array Be 59.91 4** P **P 16 12 15.9 +0.8**
**AKASG Malin Array Be 59.91 4** P **P 16 12 13.4 -1.8**
comp=Z,22nm,0.7s,baz=357,slow=6.8,SNR=59
comp=Z,22nm,0.7s
**AKASG Malin Array Be 59.91 4** *i* P **P 16 12 14.8 -0.4**
AKASG pmax pmax
comp=Z,22nm,0.7s
**AKBB Malin Array Si 59.91 4** *ceP* **P 16 12 15.1 -0.1**
AKBB pmax pmax
comp=Z,9.0nm,0.5s
**KIEV Kiev 59.92 4** P **P 16 12 14.4 -0.8**
**KIEV Kiev 59.92 4** P **P 16 12 14.9 -0.3**
**KIEV Kiev 59.92 4** P **P 16 12 14.4 -0.8**
KIEV pmax pmax
comp=Z,35nm,0.8s
**OJC Ojcow 59.95 11** lAmb lAmb 16 12 16.7
comp=Z,15nm,0.6s
**AB31 Akbulak array 60.04 341** *i* P **P 16 12 15.5 -0.6**
**ABKAR Akbulak array 60.04 341** P **P 16 12 15.7 -0.4**
**ABKAR Akbulak array 60.04 341** lAmb lAmb 16 12 20.0
comp=Z,24nm,1.0s
**MORC Moravsky Berou 60.22 13** lAmb lAmb 16 12 18.9
comp=Z,16nm,0.9s
**MORC Moravsky Berou 60.22 13** *eP* **P 16 12 17.3 -0.1**
**MORC Moravsky Berou 60.22 13** ⇑P **P 16 12 17.6 +0.1**
**MORC Moravsky Berou 60.22 13** P **P 16 12 17.5 +0.1**
**ZVC Zvikov 60.27 16** *eP* **P 16 12 18.5 +0.8**
**STU Stuttgart 60.40 19** lAmb lAmb 16 12 20.9
comp=Z,14nm,0.8s
**WET Wettzell 60.43 17** *eP* **P 16 12 19.7 +0.8**
comp=Z,25nm,1.1s,baz=351,slow=7.0
**WMQ Urumqi 60.51 319** *eP* **P 16 12 20.2 +0.7**
WMQ pmax pmax
comp=Z,22nm,1.5s
**KHC Kasperske Hory 60.51 16** P **P 16 12 19.8 +0.4**
KHC lAmb lAmb 16 12 21.7
comp=Z,34nm,1.3s
**KHC Kasperske Hory 60.51 16** *eP* **P 16 12 19.8 +0.4**
**KHC Kasperske Hory 60.51 16** *ceP* **P 16 12 20.6 +1.2**
KHC pmax pmax
comp=Z,48nm,1.0s
**LVV L'vov 60.60 8** *eP* **P 16 12 19.8 -0.1**
**VRAC Vranov 60.61 14** *eP* **P 16 12 20.4 +0.4**
**VRAC Vranov 60.61 14** P **P 16 12 19.5 -0.5**
comp=Z,14nm,0.9s,baz=348,slow=6.5,SNR=20
comp=Z,14nm,0.9s
**VRAC Vranov 60.61 14** ⇑P **P 16 12 20.7 +0.7**
**VRAC Vranov 60.61 14** P **P 16 12 20.7 +0.7**
**MAUC Maruska 60.65 13** *eP* **P 16 12 21.2 +0.9**
**ECH Echery 60.70 21** lAmb lAmb 16 12 22.3
comp=Z,37nm,1.3s
**BFO Black Forest 60.73 20** P **P 16 12 21.0 +0.1**
BFO lAmb lAmb 16 12 22.6
comp=Z,26nm,1.1s
**BFO Black Forest 60.73 20** P **P 16 12 21.0 +0.1**
BFO pmax pmax
comp=Z,26nm,1.1s
**BFO Black Forest 60.73 20** *eP* **P 16 12 21.3 +0.4**
comp=Z,25nm,1.1s,baz=351,slow=7.0
**GEC2 GERESS Array S 60.81 16** lAmb lAmb 16 12 23.2
comp=Z,26nm,0.9s
**GEC2 GERESS Array S 60.81 16** *eP* **P 16 12 22.3 +0.8**
comp=Z,25nm,0.9s,baz=351,slow=7.0
**GERES GERESS Array B 60.81 16** P **P 16 12 21.6 +0.1**
comp=Z,13nm,0.7s,baz=13,slow=8.6,SNR=83
comp=Z,13nm,0.7s
**KRUC Moravsky 60.84 14** *eP* **P 16 12 21.8 +0.2**
**CKRC Cesky Krumlov 60.89 16** *eP* **P 16 12 22.2 +0.2**
**CKRC Cesky Krumlov 60.89 16** *eP* **P 16 12 22.2 +0.2**
**LANS Liptovska Anna 60.99 12** *eP* **P 16 12 23.4 +0.8**
LANS pmax pmax
comp=Z,17nm,0.8s
**LANS Liptovska Anna 60.99 12** *eP* **P 16 12 23.4 +0.8**
**JAVC Velka Javorina 61.14 13** *eP* **P 16 12 25.1 +1.4**
**TDK Taldyqorghan 61.36 326** *eP* **P 16 12 25.6 +0.3**
comp=Z,18nm,1.0s,baz=326
**TDK Taldyqorghan 61.36 326** *eP* **P 16 12 25.5 +0.3**
TDK pmax pmax
comp=Z,18nm,1.0s
**KOLS Kolonicke sedl 61.39 10** *eP* **P 16 12 25.9 +0.6**
KOLS pmax pmax
comp=Z,20nm,0.7s
**KOLS Kolonicke sedl 61.39 10** *eP* **P 16 12 25.9 +0.6**
**GTA Gaotai 61.55 307** P **P 16 12 27.6 +0.9**
GTA sP sP 16 12 35.2 +3.6
GTA pmax pmax
comp=Z,14nm,1.0s
GTA LR LR
comp=Z,2μm,19.5s

**UBR Ueberruh 61.58 19** *eP* **P 16 12 27.4 +0.7**
comp=Z,14nm,0.8s,baz=351,slow=7.0
UBR *ep*P **sP 16 12 30.8 -0.7**
**AVF Avril sur Loir 61.59 24** P **P 16 12 25.9 -0.7**
**VYHS Vyhne 61.60 12** *eP* **P 16 12 27.1 +0.4**
VYHS pmax pmax
comp=Z,31nm,0.9s
**VYHS Vyhne 61.60 12** *eP* **P 16 12 27.1 +0.4**
**KECS Kecovo 61.72 11** *eP* **P 16 12 27.6 +0.1**
**KECS Kecovo 61.72 11** *eP* **P 16 12 27.6 +0.1**
**ZST Bratislava 61.76 14** *eP* **P 16 12 28.3 +0.5**
ZST pmax pmax
comp=Z,76nm,0.8s
**ZST Bratislava 61.76 14** *eP* **P 16 12 28.2 +0.5**
**RJOB Jochberg 61.81 17** *eP* **P 16 12 29.3 +1.1**
RJOB *ep*P **sP 16 12 32.3 -0.8**
comp=Z,28nm,0.8s,baz=351,slow=7.0
**RETA Reutte 61.85 18** *i* pP **P 16 12 28.9 +0.4**
comp=Z,13nm,0.8s,SNR=10
**MOA Molln 61.85 16** *ep*P **P 16 12 28.7 +0.3**
comp=Z,20nm,1.1s,SNR=10
**CONA Conrad Observa 61.92 15** *ep*P **P 16 12 29.7 +0.7**
comp=Z,26nm,0.7s,SNR=22
**BIOA Bad Ischl, Aus 61.94 16** *ep*P **P 16 12 29.4 +0.3**
comp=Z,7.8nm,0.6s,SNR=8.6
**DAVA Damuels 61.94 19** *ep*P **P 16 12 29.4 +0.2**
comp=Z,14nm,1.1s
**KMPD K-Podol'skiy 61.96 6** P **P 16 12 27.1 -2.0**
**MOTA Moosalm 62.02 18** *i* pP **P 16 12 30.2 +0.4**
comp=Z,17nm,1.0s
**WATA Walderalm 62.08 18** *i* pP **P 16 12 30.5 +0.4**
comp=Z,16nm,0.8s,SNR=10
**LESA Schwarzleotal 62.11 17** *i* pP **P 16 12 30.8 +0.5**
comp=Z,25nm,0.8s
**BTLS Baital 62.13 330** *eP* **P 16 12 30.6 +0.2**
comp=Z,7.7nm,0.8s,baz=330
**BTLS Baital 62.13 330** *eP* **P 16 12 30.5 +0.2**
BTLS pmax pmax
comp=Z,8.0nm,0.8s
**SQTA Sankt Quirin 62.16 18** *i* pP **P 16 12 31.3 +0.6**
comp=Z,16nm,0.7s,SNR=14
**WTTA Wattenberg 62.16 18** *i* pP **P 16 12 31.4 +0.6**
comp=Z,35nm,1.1s,SNR=15
**RONA Rosalia, Austr 62.18 14** *ep*P **P 16 12 31.7 +1.0**
comp=Z,29nm,0.7s,SNR=17
**ARXS Arharly 62.23 327** *eP* **P 16 12 30.7 -0.5**
**SRO Srobarova 62.23 13** *eP* **P 16 12 31.6 +0.6**
SRO pmax pmax
comp=Z,24nm,0.8s
**SRO Srobarova 62.23 13** *eP* **P 16 12 31.6 +0.6**
**PSZ Piszkesteto 62.24 11** ⇑P **P 16 12 31.9 +0.7**
**PSZ Piszkesteto 62.24 11** P **P 16 12 31.8 +0.7**
**FETA Feichten 62.30 19** *i* pP **P 16 12 32.2 +0.6**
comp=Z,15nm,1.2s,SNR=6.1
**SORM Soroca 62.45 5** ⇓P **P 16 12 32.4 0.0**
**SORM Soroca 62.45 5** P **P 16 12 32.4 0.0**
**NJ2 Nanjing 62.46 288** *eP* **P 16 12 33.2 +0.5**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**KBA Koelnbreinsper 62.52 17** *i* pP **P 16 12 34.2 +1.0**
comp=Z,47nm,0.7s,SNR=37
**ARSA Arzberg 62.56 15** *i* pP **P 16 12 34.0 +0.8**
comp=Z,12nm,0.9s,SNR=11
**BMR Baia Mare 62.71 9** ⇓P **P 16 12 34.8 +0.6**
**BMR Baia Mare 62.71 9** P **P 16 12 34.8 +0.6**
**CHKK Chushkaly 62.74 327** *eP* **P 16 12 34.7 +0.2**
baz=327
**CHKK Chushkaly 62.74 327** *eP* **P 16 12 34.6 +0.2**
**PDGK Podgornoye 62.76 325** P **P 16 12 33.9 -0.8**
**ABTA Abfaltersbach 62.77 17** *i* pP **P 16 12 35.1 +0.4**
comp=Z,6.5nm,0.6s,SNR=8.5
**KUU Kurty 62.82 328** *eP* **P 16 12 35.2 +0.2**
comp=Z,10.0nm,0.9s,baz=328
**KUU Kurty 62.82 328** *eP* **P 16 12 35.2 +0.2**
KUU pmax pmax
comp=Z,10.0nm,0.9s
**BUR08 Bucovina Ar. S 62.83 8** lAmb lAmb 16 12 36.5
comp=Z,12nm,0.8s
**BURAR Bucovina Array 62.85 7** P **P 16 12 35.4 +0.1**
**BURAR Bucovina Array 62.85 7** ⇑P **P 16 12 35.8 +0.6**
**BURAR Bucovina Array 62.85 7** P **P 16 12 35.6 +0.3**
**SHLS Shalkode 62.93 325** *eP* **P 16 12 35.7 -0.2**
comp=Z,12nm,0.8s,baz=324
**SHLS Shalkode 62.93 325** *eP* **P 16 12 35.6 -0.3**
SHLS pmax pmax
comp=Z,12nm,0.8s
**MYKA Terra Mystica 63.00 16** *i* pP **P 16 12 36.6 +0.4**
comp=Z,21nm,0.8s,SNR=15
**UZB Uzynbulak 63.02 325** *eP* **P 16 12 36.7 +0.1**
comp=Z,7.1nm,1.2s,baz=325
**UZB Uzynbulak 63.02 325** *eP* **P 16 12 36.6 +0.1**
UZB pmax pmax
comp=Z,7.0nm,1.2s
**SOKA Soboth 63.08 15** *i* pP **P 16 12 37.0 +0.2**
comp=Z,14nm,1.1s,SNR=14
**ZHN Zhinishke 63.12 326** *eP* **P 16 12 37.3 +0.2**
comp=Z,5.7nm,0.9s,baz=326
**ZHN Zhinishke 63.12 326** *eP* **P 16 12 37.3 +0.2**
ZHN pmax pmax
comp=Z,6.0nm,0.9s
**PERS Pernice 63.13 15** *i* P **P 16 12 37.4 +0.4**
**OBKA Obir 63.20 16** *i* pP **P 16 12 38.2 +0.6**
comp=Z,73nm,0.8s,SNR=52
**OBKA Obir 63.20 16** ⇑*i* P **P 16 12 38.2 +0.6**
**SATY Saty 63.23 326** *eP* **P 16 12 38.3 +0.4**
baz=326
**SATY Saty 63.23 326** *eP* **P 16 12 38.2 +0.4**
**SSB Saint Sauveur 63.23 24** lAmb lAmb 16 12 39.4
comp=Z,17nm,0.8s
**LPL La Plagne 63.30 22** P **P 16 12 38.5 +0.1**
**LPG La Plagne 63.32 22** P **P 16 12 40.0 +1.4**
**ARCR ARCALIA 63.34 8** ⇑P **P 16 12 39.1 +0.7**
**CTI Castel Tesino 63.36 18** lAmb lAmb 16 12 43.2
comp=Z,13nm,0.8s
**AAA Alma-Ata 63.38 327** *eP* **P 16 12 39.0 +0.3**
comp=Z,12nm,0.7s,baz=327
**AAA Alma-Ata 63.38 327** *eP* **P 16 12 39.0 +0.3**
AAA pmax pmax
comp=Z,12nm,0.7s
**MDOK Medeo 63.39 327** *eP* **P 16 12 39.1 +0.1**
baz=327
**MDOK Medeo 63.39 327** *eP* **P 16 12 39.1 +0.1**
**MOZS Mozjanca 63.41 16** *i* P **P 16 12 39.4 +0.5**
**LZH Lanzhou 63.48 302** *eP* **P 16 12 40.4 +0.7**
LZH sP sP 16 12 49.5 +4.9
LZH pmax pmax
comp=Z,53nm,0.9s
**TNSS Tian-Shan 63.53 327** *eP* **P 16 12 40.2 -0.1**
baz=327
**TNSS Tian-Shan 63.53 327** *eP* **P 16 12 40.1 -0.1**
**DRGR 63.55 9** ⇑P **P 16 12 40.2 +0.3**
**DRGR 63.55 9** P **P 16 12 40.0 +0.2**
**SGDS Sogindy 63.57 329** *eP* **P 16 12 40.4 +0.4**
comp=Z,12nm,0.9s,baz=329
**SGDS Sogindy 63.57 329** *eP* **P 16 12 40.4 +0.4**
SGDS pmax pmax
comp=Z,12nm,0.9s
**CRNS Crni Vrh 63.60 16** *i* P **P 16 12 40.1 0.0**
**SABO M.te Sabotino 63.63 17** lAmb lAmb 16 12 41.4
comp=Z,32nm,0.9s
**LJU Ljubljana 63.66 16** *i* P **P 16 12 40.7 +0.2**
**VIVF Saint-Julien-I 63.67 24** P **P 16 12 40.1 -0.5**
**CJR Cluj-Napoca 63.67 9** ⇑P **P 16 12 41.5 +0.9**
**CJR Cluj-Napoca 63.67 9** P **P 16 12 41.5 +0.9**
**MARR Marisel-Cluj 63.69 9** ⇑P **P 16 12 41.2 +0.4**
**MILM Milestii Mici 63.69 5** ⇓P **P 16 12 40.6 -0.1**
**MILM Milestii Mici 63.69 5** P **P 16 12 40.5 -0.1**
**USP Ospenovka 63.77 329** P **P 16 12 42.2 +0.9**
SNR=10
**ORIF Oris-en-Rattie 63.77 23** P **P 16 12 40.9 -0.5**
**XAN Xi'an 63.84 297** ⇓P **P 16 12 42.0 +0.1**
XAN pmax pmax
comp=Z,14nm,1.1s
**MORH Mrgy. Hungar 63.85 13** ⇑P **P 16 12 42.1 +0.4**
**TKM2 Tokmak 2 63.90 328** P **P 16 12 43.3 +0.9**
SNR=15
**TKM2 Tokmak 2 63.90 328** *i* P **P 16 12 42.8 +0.4**
TKM2 pmax pmax
comp=Z,36nm,0.9s
**CEY Cerknica 63.95 16** ⇑*i* P **P 16 12 42.4 -0.1**
**CHMS Chumysh 63.98 329** P **P 16 12 43.7 +0.9**
SNR=17
**SIRR Siria 64.00 10** ⇑P **P 16 12 43.4 +0.6**
**TESR Tescani 64.02 6** ⇓P **P 16 12 43.0 +0.2**
**ONER Baraj Valea Uz 64.18 7** ⇓P **P 16 12 45.1 +1.1**

**BOJS Bojanci 64.27 15** ⇑*i* P **P 16 12 44.4 -0.1**
**PGAV Gavieira, Arco 64.27 35** *eP* **P 16 12 45.3 +0.6**
comp=Z,35nm,1.9s
**KBK Karagaybulak 64.28 328** P **P 16 12 45.7 +0.9**
SNR=15
**AAK Ala-Archa 64.38 329** P **P 16 12 46.5 +1.1**
SNR=7.7
**AAK Ala-Archa 64.38 329** P **P 16 12 44.9 -0.6**
**AAK Ala-Archa 64.38 329** P **P 16 12 46.2 +0.7**
**AAK Ala-Archa 64.38 329** *ceP* **P 16 12 46.6 +1.1**
AAK pmax pmax
comp=Z,20nm,0.7s
**OZUR 64.40 7** ⇓P **P 16 12 46.4 +1.0**
**TURR Turia 64.45 7** ⇓P **P 16 12 47.0 +1.2**
**EKS2 Erkin-Say 64.49 329** P **P 16 12 47.6 +1.5**
SNR=5.7
**DOPR Dopca 64.51 7** ⇓P **P 16 12 47.2 +1.1**
**SURR Surduc 64.55 10** ⇓P **P 16 12 47.2 +0.9**
**KK31 Karatay Array 64.62 332** lAmb lAmb 16 12 50.9
comp=Z,18nm,0.8s
**KK31 Karatay Array 64.62 332** *i* P **P 16 12 46.3 -0.6**
**KKAR Karatay Array 64.62 332** P **P 16 12 46.7 -0.2**
**KKAR Karatay Array 64.62 332** lAmb lAmb 16 12 50.9
comp=Z,18nm,0.8s
**KKAR Karatay Array 64.62 332** P **P 16 12 46.7 -0.2**
**BZS Buzias 64.65 10** ⇑P **P 16 12 47.5 +0.4**
**BZS Buzias 64.65 10** P **P 16 12 47.4 +0.4**
**COVR Voineasa-Covas 64.66 7** ⇓P **P 16 12 48.6 +1.4**
**VRI Vrincioaia 64.67 6** ⇓P **P 16 12 47.8 +0.7**
**VRI Vrincioaia 64.67 6** P **P 16 12 47.8 +0.7**
**PLOR Plostina 64.68 7** ⇑P **P 16 12 47.4 +0.2**
**PLOR Plostina 64.68 7** P **P 16 12 47.4 +0.2**
**PBRG Braganca 64.73 33** *eP* **P 16 12 50.3 +2.7**
comp=Z,24nm,1.7s
**VLDR Vladesti 64.74 5** ⇑P **P 16 12 48.1 +0.5**
**ODBI Odobesti 64.78 6** ⇓P **P 16 12 49.3 +1.5**
**BRLS Borolday 64.80 332** *eP* **P 16 12 49.9 +1.9**
baz=332
**BRLS Borolday 64.80 332** *eP* **P 16 12 49.9 +1.9**
**SCTR Scanteiesti 64.90 5** ⇓P **P 16 12 49.3 +0.7**
**GZR Gura Zlata 64.94 10** ⇑P **P 16 12 49.5 +0.4**
**GZR Gura Zlata 64.94 10** P **P 16 12 49.4 +0.4**
**TUDR 64.97 6** ⇓P **P 16 12 50.5 +1.5**
**BISRR Bisoca 64.98 6** ⇑P **P 16 12 50.4 +1.1**
**FRGS Fruska Gora 64.98 12** ⇑*i* P **P 16 12 49.2 0.0**
**FRGS Fruska Gora 64.98 12** ⇓P **P 16 12 49.7 +0.5**
**MLR Muntele Rosu 65.01 7** lAmb lAmb 16 12 51.7
comp=Z,34nm,1.4s
**MLR Muntele Rosu 65.01 7** ⇓P **P 16 12 51.0 +1.5**
**MLR Muntele Rosu 65.01 7** P **P 16 12 50.8 +1.3**
**AML Almayashu 65.02 329** P **P 16 12 51.4 +1.4**
SNR=12
**VOIR 65.02 8** ⇓P **P 16 12 50.3 +0.7**
**VOIR 65.02 8** P **P 16 12 50.2 +0.7**
**PVRL Vila Real 65.05 34** *eP* **P 16 12 51.2 +1.5**
comp=Z,32nm,1.6s
**ARR Arges 65.07 8** ⇓P **P 16 12 50.7 +0.9**
**BLY Banja Luka 65.19 14** *eP* **P 16 12 50.4 -0.1**
**MVO Moncorvo 65.29 34** *eP* **P 16 12 51.8 +0.5**
comp=Z,29nm,1.7s
**WHN Wuhan 65.34 291** P **P 16 12 53.6 +2.0**
WHN pP **sP 16 12 58.0 +1.5**
**A050A Klekovaca 65.39 15** ⇑*i* P **P 16 12 51.9 -0.1**
**CFR Carcaliu 65.40 5** ⇑P **P 16 12 51.9 0.0**
**CFR Carcaliu 65.40 5** P **P 16 12 51.9 0.0**
**TLCR 65.42 5** ⇓P **P 16 12 52.5 +0.5**
**TLCR 65.42 5** P **P 16 12 52.4 +0.5**
**HERR Herculane 65.43 10** ⇓P **P 16 12 52.3 +0.2**
**GOF Gofitskoye 65.49 354** *ceP* **P 16 12 53.0 +0.6**
**MDVR Moldovita 65.49 10** ⇑P **P 16 12 52.7 +0.1**
**MGRS Mrkonjic Grad 65.51 14** ⇑*i* P **P 16 12 53.0 +0.4**
**PVIS Viseu 65.55 35** *eP* **P 16 12 53.2 +0.2**
comp=Z,20nm,1.4s
**TEKS Tekeris 65.57 12** ⇑*i* P **P 16 12 52.6 -0.4**
**SRE Strehaia 65.70 9** ⇓P **P 16 12 54.5 +0.7**
**SRE Strehaia 65.70 9** P **P 16 12 54.5 +0.7**
**TPGR Topolog 65.73 5** ⇓P **P 16 12 54.7 +0.6**
**SULR 65.83 7** ⇓P **P 16 12 54.5 -0.1**
**HARR Harsova 65.88 6** ⇑P **P 16 12 55.3 +0.3**
**HARR Harsova 65.88 6** P **P 16 12 55.3 +0.3**
**ARSB Arslanbob 65.92 330** lAmb lAmb 16 13 01.3
comp=Z,9.6nm,0.9s
**MTE Manteigas 65.93 35** lAmb lAmb 16 12 58.8
comp=Z,12nm,0.7s
**MTE Manteigas 65.93 35** *eP* **P 16 12 56.1 +0.7**
comp=Z,28nm,1.3s
**GOMU GeErMu 65.93 310** P **P 16 12 56.5 +0.6**
GOMU pP sP 16 13 04.3 +3.5
GOMU pmax pmax
comp=Z,25nm,0.8s
**PCAS Casmilo, Conde 66.07 35** *eP* **P 16 12 57.0 +0.7**
comp=Z,58nm,1.1s
**BBLS Lazi&#263i 66.24 12** *eP* **P 16 12 57.7 +0.3**
**PCBR Castelo Branco 66.48 35** *eP* **P 16 12 59.6 +0.7**
comp=Z,24nm,1.4s
**RUDO Rudo 66.48 12** ⇑*i* P **P 16 12 58.9 0.0**
**GUMA Gualdo di Mace 66.50 17** lAmb lAmb 16 13 11.2
comp=Z,157nm,0.5s
**KIV Kislovodsk 66.60 354** P **P 16 12 59.6 -0.1**
**KIV Kislovodsk 66.60 354** P **P 16 13 00.6 +0.8**
**KIV Kislovodsk 66.60 354** *eP* **P 16 13 00.3 +0.6**
KIV pmax pmax
comp=Z,18nm,1.1s
**BOVS Bovan 66.63 11** ⇓P **P 16 12 59.7 -0.1**
**SHA1 Shidzhatmaz 66.82 354** *ceP* **P 16 13 01.5 +0.2**
**KBZ Khabaz 66.82 354** P **P 16 13 00.3 -0.7**
comp=Z,10nm,0.8s,baz=348,slow=7.1,SNR=12
comp=Z,10nm,0.8s
**UPM Unac-Piva 66.86 13** ⇑*i* P **P 16 13 01.2 -0.3**
**SJES Sjenica 66.88 12** ⇑*i* P **P 16 13 02.0 +0.4**
**PMRV Marv??o 66.89 35** *eP* **P 16 13 02.0 +0.4**
comp=Z,14nm,2.2s
**PMTG Montargil 67.07 35** *eP* **P 16 13 02.5 -0.2**
comp=Z,27nm,1.6s
**STON Ston 67.09 14** ⇑*i* P **P 16 13 01.6 -1.1**
**KSH Kashi 67.12 327** P **P 16 13 06.6 +3.4**
KSH PcP **PcP 16 13 33.8 +2.5**
KSH pmax pmax
comp=Z,17nm,1.0s
**BRY Bratogost 67.13 13** ⇑*i* P **P 16 13 02.8 -0.4**
**ENH Enshi 67.15 295** P **P 16 13 05.7 +2.3**
**ESBB Sonseca Array 67.31 32** lAmb lAmb 16 13 06.1
comp=Z,12nm,0.9s
**ESDC Sonseca Array 67.31 32** P **P 16 13 04.5 +0.3**
ESDC lAmb lAmb 16 13 06.1
comp=Z,18nm,1.2s
**ESDC Sonseca Array 67.31 32** P **P 16 13 04.0 -0.3**
comp=Z,9.0nm,0.8s,baz=346,slow=6.6,SNR=52
comp=Z,9.0nm,0.8s
**PAB San Pablo 67.37 32** P **P 16 13 04.8 +0.1**
PAB lAmb lAmb 16 13 08.4
comp=Z,9.3nm,0.8s
**PAB San Pablo 67.37 32** P **P 16 13 04.8 +0.1**
PAB pmax pmax
comp=Z,9.0nm,0.8s
**PESTR Estremoz 67.40 35** *eP* **P 16 13 04.8 0.0**
comp=Z,22nm,2.0s
**ELND Elena 67.56 7** ⇑P **P 16 13 05.4 -0.3**
**INTR Introdacqua 67.59 17** lAmb lAmb 16 13 08.4
comp=Z,15nm,0.9s
**EVO Evora 67.63 35** *eP* **P 16 13 06.8 +0.5**
comp=Z,27nm,1.4s
**PDG Podgorica 67.66 13** *eP* **P 16 13 05.9 -0.4**
**DRME Dracevica, Mon 67.89 13** ⇑*i* P **P 16 13 06.9 -0.9**
**PNCL Nicolau / Gran 67.93 36** *eP* **P 16 13 08.6 +0.5**
comp=Z,31nm,1.6s
**PBEJ Beja 68.15 35** *eP* **P 16 13 10.0 +0.5**
**PBAR Barrancos 68.17 35** *eP* **P 16 13 10.1 +0.4**
comp=Z,16nm,1.6s
**CD2 Chengdu 68.33 301** P **P 16 13 10.0 -0.8**
CD2 pmax pmax
comp=Z,10.0nm,0.6s
**MORF Marmelete 68.69 36** *eP* **P 16 13 13.3 +0.3**
**MORF Marmelete 68.69 36** *eP* **P 16 13 13.2 +0.3**
MORF lAmb lAmb 16 13 13.8
comp=Z,16nm,0.7s
**MORF Marmelete 68.69 36** *eP* **P 16 13 13.2 +0.3**
**PVAQ Vaqueiros 68.78 35** *eP* **P 16 13 14.0 +0.5**
comp=Z,41nm,2.0s
**PBDV Barranco-do-Ve 68.89 36** *eP* **P 16 13 15.1 +0.9**
comp=Z,60nm,1.9s
**VAY Valandovo 68.99 10** *i* P **P 16 13 14.8 +0.1**
**OHR Ohrid 69.08 12** *i* P **P 16 13 15.7 +0.3**
**SEKA Sheki 69.13 350** P **P 16 13 13.4 -2.2**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SIMJ | Simiganj | 69.20 | 332 | P | | P | 16 13 16.4 | +0.1 |
| MNGR | Mingechevir, A | 69.57 | 350 | P | | P | 16 13 16.2 | -2.1 |
| ALN | Alexandroupoli | 69.59 | 7 | IAmb | | IAmb | 16 13 19.9 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| TIP | Timpagrande | 70.68 | 15 | IAmb | | IAmb | 16 13 26.4 | |
| | comp=Z,31nm,1.4s | | | | | | | |
| ANTO | Ankara | 70.81 | 2 | P | | P | 16 13 25.8 | -0.2 |
| ANTO | | | | IAmb | | IAmb | 16 13 28.3 | |
| | comp=Z,25nm,0.9s | | | | | | | |
| ANTO | Ankara | 70.81 | 2 | P | | P | 16 13 25.8 | -0.2 |
| ANTO | | | | pmax | | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| BR131 | Keskin Array S | 70.96 | 1 | IAmb | | IAmb | 16 13 28.7 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| BRTR | Keskin Array B | 70.96 | 1 | P | | P | 16 13 27.5 | +0.5 |
| BRTR | Keskin Array B | 70.96 | 1 | P | | P | 16 13 26.3 | -0.8 |
| | comp=Z,6.5nm,0.9s,baz=1.0,slow=3.1,SNR=24 | | | | | | | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| BRTR | Keskin Array B | 70.96 | 1 | *i* P | | P | 16 13 28.0 | +1.0 |
| BRTR | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| NAX | Nakhchivan | 71.25 | 351 | P | | P | 16 13 26.5 | -2.2 |
| GULI | GuiLin | 71.50 | 293 | P | | P | 16 13 35.3 | +5.0 |
| GULI | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.7s | | | | | | | |
| CEL | Celeste | 71.51 | 16 | IAmb | | IAmb | 16 13 36.9 | |
| | comp=Z,21nm,1.0s | | | | | | | |
| LKRN | Lenkeran, Azer | 71.51 | 349 | P | | P | 16 13 28.2 | -2.0 |
| KIRS | Kirsehir-Merke | 71.56 | 1 | ⇓P | | P | 16 13 31.7 | +1.1 |
| GYA | Guiyang | 71.59 | 296 | ⇓P | | P | 16 13 33.3 | +2.3 |
| GYA | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.6s | | | | | | | |
| PZH | PanZhiHua | 73.06 | 301 | P | | P | 16 13 43.1 | +3.3 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| ITM | Ithomi | 73.07 | 11 | IAmb | | IAmb | 16 13 51.3 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| KBL | Kabul | 73.21 | 331 | P | | P | 16 13 39.7 | -1.0 |
| KBL | | | | IAmb | | IAmb | 16 13 44.4 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| KBL | Kabul | 73.21 | 331 | P | | P | 16 13 39.7 | -1.0 |
| KBL | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | | |
| KEST | Kesra | 73.27 | 22 | P | | P | 16 13 40.5 | -0.3 |
| | comp=Z,43nm,0.9s,baz=272,slow=2.3,SNR=46 | | | | | | | |
| | comp=Z,43nm,0.9s | | | | | | | |
| NIL | Nilore | 73.33 | 327 | P | | P | 16 13 41.1 | -0.1 |
| NIL | Nilore | 73.33 | 327 | P | | P | 16 13 41.1 | -0.1 |
| NIL | | | | pmax | | pmax | | |
| | comp=Z,43nm,0.8s | | | | | | | |
| GAZ | Gaziantep | 73.50 | 358 | IAmb | | IAmb | 16 13 44.4 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| KMI | Kunming | 74.05 | 299 | ⇑P | | P | 16 13 48.4 | +2.7 |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| HRA | Herat | 74.41 | 337 | IAmb | | IAmb | 16 13 49.6 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| TNCH | TengChong | 75.41 | 303 | ⇑P | | P | 16 13 53.9 | +0.4 |
| TNCH | | | | pP | | pP | 16 13 55.3 | -1.9 |
| TNCH | | | | sP | | sP | 16 13 57.4 | -1.1 |
| TNCH | | | | PcP | | PcP | 16 14 08.4 | +1.7 |
| TNCH | | | | S | | S | 16 23 33.3 | 0.0 |
| TNCH | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| TNCH | | | | LR | | LR | | |
| | comp=Z,970nm,16.3s | | | | | | | |
| TNCH | | | | LR | | LR | | |
| | comp=Z,700nm,18.6s | | | | | | | |
| TNCH | | | | LR | | LR | | |
| | comp=Z,750nm,22.1s | | | | | | | |
| TATN | Tataouine | 76.53 | 21 | IAmb | | IAmb | 16 13 59.1 | |
| | comp=Z,30nm,1.1s | | | | | | | |
| BAUV | El Baul | 77.10 | 99 | IAmb | | IAmb | 16 14 56.2 | |
| | comp=Z,39nm,1.3s | | | | | | | |
| MMAI | Mount Meron Ar | 77.66 | 360 | P | | P | 16 14 03.9 | -2.1 |
| | comp=Z,4.0nm,0.6s,baz=1.0,slow=5.0,SNR=4.7 | | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| ROSC | El Rosal | 78.78 | 107 | P | | P | 16 14 15.2 | +2.4 |
| | comp=Z,22nm,0.8s,baz=261,slow=12,SNR=2.7 | | | | | | | |
| CM31 | Chiang Mai Arr | 81.48 | 301 | IAmb | | IAmb | 16 14 32.0 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| CMAR | Chiang Mai Arr | 81.48 | 301 | P | | P | 16 14 26.6 | -0.3 |
| CMAR | Chiang Mai Arr | 81.48 | 301 | P | | P | 16 14 26.0 | -0.9 |
| | comp=Z,7.4nm,0.7s,baz=1.8,slow=6.3,SNR=36 | | | | | | | |
| | comp=Z,7.4nm,0.7s | | | | | | | |
| CMAR | Chiang Mai Arr | 81.48 | 301 | *i* P | | P | 16 14 26.8 | -0.1 |
| CMAR | | | | pmax | | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| SHME | Shamm | 83.39 | 341 | P | | P | 16 14 37.1 | +0.3 |
| MSFE | Esma-Masafi | 84.07 | 341 | P | | P | 16 14 39.3 | -1.1 |
| HATD | Hatta, Dubai | 84.61 | 341 | P | | P | 16 14 42.9 | -0.1 |
| ASHO | Ashiyiah | 84.75 | 341 | P | | P | 16 14 43.4 | -0.4 |
| ASUD | Al Ashush, Dub | 84.89 | 342 | P | | P | 16 14 44.2 | -0.2 |
| BOAV | Boa Vista | 85.81 | 94 | P | | P | 16 14 49.3 | +0.2 |
| BOAV | Boa Vista | 85.81 | 94 | *e*P | | P | 16 14 48.9 | -0.2 |
| MZR | Muzera | 86.69 | 343 | P | | P | 16 14 53.1 | -0.3 |
| RAYN | Ar Rayn | 86.82 | 350 | P | | P | 16 14 54.2 | +0.2 |
| RAYN | Ar Rayn | 86.82 | 350 | P | | P | 16 14 54.8 | +0.8 |
| RAYN | Ar Rayn | 86.82 | 350 | P | | P | 16 14 54.3 | +0.2 |
| RAYN | | | | pmax | | pmax | | |
| | comp=Z,26nm,1.0s | | | | | | | |
| HYB | Hyderabad | 87.94 | 319 | *e*P | | P | 16 15 01.0 | +1.4 |
| HYB | | | | *es*P | | PcP | 16 15 01.4 | +0.1 |
| MACA | Manacapuru-AM | 90.92 | 97 | *e*P | | P | 16 15 14.2 | +0.8 |
| CZSB | Cruzeiro do Su | 91.09 | 109 | *e*P | | P | 16 15 15.1 | +0.9 |
| TORD | Torodi Ar. Bea | 94.19 | 33 | P | | P | 16 15 26.1 | -2.5 |
| | comp=Z,1.8nm,0.6s,baz=353,slow=5.4,SNR=15 | | | | | | | |
| TORD | | | | PP | | PP | 16 19 14.4 | -0.2 |
| | comp=Z,1.3nm,0.9s,baz=351,slow=9.7,SNR=3.8 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| ASAR | Alice Springs | 108.95 | 253 | PKiKP | | PKiKP | 16 20 38.0 | -0.8 |
| | comp=Z,0.1nm,0.4s,baz=51,slow=1.7,SNR=1.2 | | | | | | | |
| PLCA | Paso Flores | 122.48 | 120 | PKP | | PKPdf | 16 21 03.6 | -0.6 |
| | comp=Z,2.2nm,0.8s,baz=2.2,slow=13,SNR=3.6 | | | | | | | |
| BOSA | Boshof | 138.56 | 13 | PKhKP | | PKPpre | 16 21 29.7 | |
| | comp=Z,1.9nm,0.6s,baz=294,slow=0.7,SNR=7.4 | | | | | | | |
| SMAI | San Martin Ant | 147.21 | 137 | PKPdf | | PKPbc | 16 21 51.2 | +0.1 |
| VNDA | Vanda | 150.30 | 201 | PKPbc | | PKPbc | 16 21 56.8 | -2.1 |
| | comp=Z,0.4nm,1.0s,baz=102,slow=7.8,SNR=1.6 | | | | | | | |
| CASY | Casey | 153.15 | 240 | PKPbc | | PKiKP | 16 22 06.3 | +0.6 |
| QSPA | South Pole Qui | 159.47 | 180 | PKP | | PKPdf | 16 22 04.4 | -2.1 |
| | comp=Z,2.6nm,1.0s,baz=3.8,slow=1.6,SNR=4.6 | | | | | | | |
| QSPA | | | | PKPab | | PKPab | 16 22 44.4 | -0.4 |
| | comp=Z,5.1nm,1.0s,baz=69,slow=4.7,SNR=4.0 | | | | | | | |
| VNA3 | Neumayer Olymp | 165.18 | 117 | ⇑PKPdf | | PKPab | 16 23 05.5 | -4.2 |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| VNA2 | Neumayer--Watz | 165.81 | 115 | ⇑PKPab | | PKPab | 16 23 12.8 | +0.4 |
| | comp=Z,1.6nm,0.5s,baz=300,slow=3.6 | | | | | | | |
| SNAA | Sanae | 167.41 | 117 | ⇑PKPab | | PKPab | 16 23 17.6 | -1.9 |
| | comp=Z,53nm,1.0s | | | | | | | |
| SNAA | Sanae | 167.41 | 117 | PKPab | | PKPab | 16 23 17.1 | -2.4 |
| | comp=Z,0.3nm,0.5s,baz=8.1,slow=14,SNR=1.1 | | | | | | | |
| TROLL | Troll, Antarti | 169.12 | 118 | ⇑PKPab | | PKPab | 16 23 27.7 | +0.5 |
| | comp=Z,192nm,0.7s | | | | | | | |

*IDC* ***12*** *16:05:20.1±0.8,2˚.45N×129˚.11E,h0km,mb4.1/9, mbtmp4.1/10,ML4.0/1,Error ellipse: s-maj=45.1km s-min=16.5km az=75.0*

*DJA* ***12*** *16:05:23.6±0.7,2˚N±.7˚×12˚.9E±˚,h10km,M4.2/8,mb4.4/3, MLv4.0/8*

*NEIC* ***12*** *16:05:25.7±1.4,2˚.4N±0˚.1×128˚.91E±0˚.10,h35km±2km, mb4.4/8,Error ellipse: s-maj=21.3km s-min=14.3km az=213.0*

**ISC 12 16:05:25.1**±0.7,**2˚.31N**±0˚.08×**129˚.0E**±0˚.1,**h35**km,**n29,** σ1ŝ**16**/30,**mb4.2**/11,**Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TNTI | Ternate | 2.19 | 226 | | Pn | 16 05 59.2 | +0.1 |
| TNTI | Ternate | 2.19 | 226 | P | Pn | 16 05 59.6 | +0.5 |
| SWI | Sorong | 3.91 | 144 | P | Pn | 16 06 23.7 | +1.1 |
| KMSI | Cibinong | 5.25 | 251 | P | Pn | 16 06 39.7 | -1.5 |
| | 164nm,0.6s | | | | | | |
| FAKI | Fak Fak | 6.15 | 148 | Pn | Pn | 16 06 55.0 | +1.5 |
| MRSI | Marisa | 7.24 | 256 | P | Pn | 16 07 10.1 | +1.7 |
| TOLI2 | Tolitoli | 8.25 | 262 | Pn | Pn | 16 07 22.8 | +0.4 |
| KAPI | Kappang | 11.72 | 232 | Pn | Pn | 16 08 12.4 | +2.6 |
| | 0.9nm,0.3s,baz=45,slow=2.9,SNR=1.4 | | | | | | |
| | 5.0nm,0.5s | | | | | | |
| SOEI | Soe | 12.86 | 201 | Pn | Pn | 16 08 22.7 | -2.9 |
| MTN | Manton Dam | 15.21 | 172 | P | P | 16 09 01.0 | -1.0 |
| MTN | | | | IAmb | IAmb | 16 09 12.9 | |
| | comp=Z,75nm,1.4s | | | | | | |
| AS31 | Alice Springs | 26.26 | 170 | P | P | 16 10 58.5 | +1.2 |
| ASAR | Alice Springs | 26.26 | 170 | P | P | 16 10 58.4 | +1.1 |
| ASAR | Alice Springs | 26.26 | 170 | P | P | 16 10 58.2 | +1.0 |
| | comp=Z,0.4nm,0.5s,baz=353,slow=7.9,SNR=41 | | | | | | |
| ASAR | | | | PcP | PcP | 16 14 24.0 | +0.6 |
| | comp=Z,0.2nm,0.5s,baz=355,slow=2.1,SNR=1.8 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| FORT | Forrest | 32.91 | 181 | P | P | 16 11 56.4 | +0.2 |
| MORW | Morawa | 33.56 | 201 | P | P | 16 12 01.0 | -0.9 |
| MJAR | Matsushiro Arr | 35.13 | 13 | P | P | 16 12 14.1 | -1.3 |
| | comp=Z,0.8nm,0.4s,baz=189,slow=8.8,SNR=4.6 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| STKA | Stephens Creek | 36.05 | 162 | P | P | 16 12 23.6 | +0.2 |
| STKA | | | | IAmb | IAmb | 16 12 50.6 | |
| | comp=Z,3.5nm,1.4s | | | | | | |
| STKA | Stephens Creek | 36.05 | 162 | P | P | 16 12 25.0 | +1.6 |
| | comp=Z,2.7nm,0.7s,baz=342,slow=13,SNR=4.9 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| SONM | Songino Array | 49.36 | 340 | P | P | 16 14 12.0 | +0.7 |
| | comp=Z,1.3nm,0.6s,baz=156,slow=9.1,SNR=1.9 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| MK31 | Makanchi Array | 59.98 | 325 | P | P | 16 15 28.0 | -0.2 |
| MK31 | | | | IAmb | IAmb | 16 16 11.2 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| MKAR | Makanchi Array | 59.98 | 325 | P | P | 16 15 28.0 | -0.2 |
| MKAR | Makanchi Array | 59.98 | 325 | P | P | 16 15 28.6 | +0.5 |
| | comp=Z,2.4nm,0.6s,baz=111,slow=7.9,SNR=14 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 62.86 | 332 | P | P | 16 15 46.8 | -0.6 |
| | comp=Z,0.9nm,0.4s,baz=128,slow=7.9,SNR=2.9 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| KURBB | Kurchatov Arra | 64.13 | 327 | P | P | 16 15 55.9 | +0.1 |
| | comp=Z,3.4nm,0.6s,baz=125,slow=6.2,SNR=15 | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| BVAR | Borovoye Array | 69.72 | 327 | P | P | 16 16 31.4 | 0.0 |
| | comp=Z,2.7nm,0.6s,baz=99,slow=4.0,SNR=5.7 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| BRVK | Borovoye | 69.79 | 327 | P | P | 16 16 31.2 | -0.6 |
| BRVK | | | | IAmb | IAmb | 16 16 32.2 | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 74.65 | 321 | P | P | 16 17 00.3 | -0.6 |
| VNDA | Vanda | 81.75 | 173 | P | P | 16 17 40.3 | +0.6 |
| VNDA | | | | IAmb | IAmb | 16 17 51.6 | |
| | comp=Z,2.8nm,1.4s | | | | | | |
| VNDA | Vanda | 81.75 | 173 | P | P | 16 17 40.0 | +0.3 |
| | comp=Z,0.6nm,0.8s,baz=276,slow=5.2,SNR=2.8 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |

*NEIC* ***12*** *16:05:37.9±1.2,69˚.61N±0˚.08×144˚.7W±0˚.1,h7km±4km, Error ellipse: s-maj=12.6km s-min=5.3km az=202.0*

**AEIC 12 16:05:38.1**±1.3,**69˚.61N**±0˚.04×**144˚.65W**±0˚.09,**h5**km±6km, **ML3.3,ML3.8**/56(NEIC),**Error ellipse: s-maj=6.8km s-min=3.5km az=209.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| C26K | Camden Bay | 0.32 | 344 | | Pg | 16 05 44.1 | -0.3 |
| C26K | | | | | Sg | 16 05 49.5 | +0.9 |
| C27K | Jago River | 0.33 | 87 | | Pg | 16 05 44.4 | -0.1 |
| D25K | Kavik River | 0.67 | 245 | | Pg | 16 05 50.5 | -0.5 |
| D27M | Malcolm River | 1.35 | 104 | | Pn | 16 06 02.4 | -1.3 |
| C24K | Franklin Bluff | 1.42 | 276 | | Pn | 16 06 03.6 | -1.0 |
| C24K | | | | | Sb | 16 06 22.6 | -0.8 |
| C24K | Franklin Bluff | 1.42 | 276 | IAML | | 16 06 24.7 | |
| | comp=N,917nm,1.0s | | | | | | |
| C24K | | | | IAML | | 16 06 43.6 | |
| | comp=E,832nm,1.1s | | | | | | |
| D24K | Happy Valley | 1.55 | 255 | | Pn | 16 06 05.8 | -0.5 |
| D24K | Happy Valley | 1.55 | 255 | IAML | | 16 06 29.7 | |
| | comp=N,937nm,0.9s | | | | | | |
| D24K | | | | IAML | | 16 06 30.5 | |
| | comp=E,885nm,0.7s | | | | | | |
| E27K | Coleen River | 1.81 | 141 | | Pn | 16 06 10.0 | +0.1 |
| F26K | Sheenjek River | 1.93 | 174 | | Pn | 16 06 11.5 | -0.1 |
| F26K | | | | | Sn | 16 06 37.1 | +0.8 |
| F26K | Sheenjek River | 1.93 | 174 | IAML | | 16 06 39.5 | |
| | comp=E,516nm,1.0s | | | | | | |
| F26K | | | | IAML | | 16 06 40.7 | |
| | comp=N,408nm,0.6s | | | | | | |
| TOLK | Toolik Lake Re | 2.02 | 243 | Pn | Pn | 16 06 12.5 | -0.3 |
| TOLK | | | | IAML | | 16 06 30.2 | |
| | comp=N,479nm,1.5s | | | | | | |
| TOLK | | | | IAML | | 16 06 47.0 | |
| | comp=E,663nm,1.2s | | | | | | |
| F25K | Christian Rive | 2.06 | 191 | | Pn | 16 06 13.3 | -0.1 |
| F25K | | | | IAML | | 16 06 44.8 | |
| | comp=N,419nm,0.8s | | | | | | |
| F25K | | | | IAML | | 16 06 45.8 | |
| | comp=E,518nm,1.5s | | | | | | |
| F25K | Christian Rive | 2.06 | 191 | | Sn | 16 06 40.4 | +0.9 |
| E24K | Your Creek | 2.08 | 224 | Pn | Pn | 16 06 13.3 | -0.3 |
| C23K | Itkillik River | 2.09 | 279 | Pn | Pn | 16 06 14.0 | +0.3 |
| C23K | | | | IAML | | 16 06 29.0 | |
| | comp=E,795nm,1.3s | | | | | | |
| C23K | | | | IAML | | 16 06 37.0 | |
| | comp=N,788nm,1.4s | | | | | | |
| E28M | Babbage River | 2.09 | 116 | Pn | Pn | 16 06 13.8 | 0.0 |
| E23K | Chandalar | 2.38 | 232 | Pn | Pn | 16 06 17.6 | -0.3 |
| E23K | | | | IAML | | 16 06 42.9 | |
| | comp=E,388nm,1.5s | | | | | | |
| E23K | | | | IAML | | 16 06 45.2 | |
| | comp=N,289nm,1.5s | | | | | | |
| F24K | Squaw Lake | 2.41 | 211 | Pn | Pn | 16 06 17.5 | -0.8 |
| F24K | | | | IAML | | 16 06 59.0 | |
| | comp=N,288nm,1.5s | | | | | | |
| F28M | Old Crow | 2.66 | 137 | Pn | Pn | 16 06 21.3 | -0.3 |
| F28M | | | | IAML | | 16 06 50.7 | |
| | comp=E,320nm,1.1s | | | | | | |
| F28M | | | | IAML | | 16 07 13.8 | |
| | comp=N,433nm,1.5s | | | | | | |
| D22K | Ayikyak River | 2.95 | 259 | Pn | Pn | 16 06 24.2 | -1.4 |
| D22K | | | | IAML | | 16 07 13.2 | |
| | comp=N,599nm,1.5s | | | | | | |
| E22K | Anaktuvuk Pass | 2.99 | 244 | Pn | Pn | 16 06 25.0 | -1.2 |
| E22K | | | | IAML | | 16 06 56.3 | |
| | comp=E,255nm,1.5s | | | | | | |
| E22K | | | | IAML | | 16 08 15.9 | |
| | comp=N,183nm,0.7s | | | | | | |
| B22K | Teshekpuk Lake | 3.11 | 288 | Pn | Pn | 16 06 26.8 | -0.9 |
| B22K | | | | IAML | | 16 07 05.5 | |
| | comp=E,522nm,1.4s | | | | | | |
| G24K | Hadweenzic Riv | 3.11 | 201 | Pn | Pn | 16 06 26.5 | -1.3 |
| G24K | | | | IAML | | 16 06 57.1 | |
| | comp=E,316nm,1.5s | | | | | | |
| B21K | Ikpikpuk River | 3.49 | 275 | Pn | Pn | 16 06 32.2 | -0.8 |
| E21K | Killik River | 3.55 | 255 | Pn | Pn | 16 06 32.8 | -1.1 |
| E21K | | | | IAML | | 16 07 12.2 | |
| | comp=E,366nm,1.4s | | | | | | |
| H24K | Noodor Dome | 3.98 | 200 | Pn | Pn | 16 06 38.6 | -1.3 |
| H24K | | | | IAML | | 16 07 06.6 | |
| | comp=N,205nm,1.5s | | | | | | |
| H24K | | | | IAML | | 16 07 12.9 | |
| | comp=E,265nm,1.1s | | | | | | |
| PRP | Porcupine Dome | 4.12 | 185 | Pn | Pn | 16 06 41.4 | -0.4 |
| PRP | | | | IAML | | 16 07 12.6 | |
| | comp=N,240nm,1.3s | | | | | | |
| PRP | | | | IAML | | 16 07 30.1 | |
| | comp=E,154nm,1.1s | | | | | | |
| I28M | Miner Creek | 4.55 | 154 | Pn | Pn | 16 06 47.8 | +0.1 |
| F20K | Avaraart Lake | 4.84 | 243 | Pn | Pn | 16 06 51.5 | 0.0 |
| F20K | | | | IAML | | 16 07 34.5 | |
| | comp=E,130nm,1.5s | | | | | | |
| D19K | Kuna River | 4.96 | 263 | Pn | Pn | 16 06 52.2 | -1.0 |
| E19K | Redstone River | 5.10 | 251 | Pn | Pn | 16 06 54.7 | -0.4 |
| C19K | Lookout Ridge | 5.31 | 272 | Pn | Pn | 16 06 57.8 | -0.2 |
| F19K | Shaleruckik Mo | 5.62 | 247 | Pn | Pn | 16 07 01.3 | -0.9 |
| E18K | Utukok River | 5.99 | 269 | Pn | Pn | 16 07 06.0 | -1.4 |
| E18K | Tukpahlearik C | 6.25 | 257 | Pn | Pn | 16 07 09.8 | -1.1 |

*NEIC* ***12*** *16:06:41.6±0.9,69˚.55N±0˚.04×144˚.64W±0˚.08,h9km±5km, Error ellipse: s-maj=5.3km s-min=3.9km az=175.0*

**AEIC 12 16:06:41.4**±0.9,**69˚.54N**±0˚.05×**144˚.66W**±0˚.08,**h6**km±6km, **ML3.5,ML3.7**/56(NEIC),**Error ellipse: s-maj=7.4km s-min=3.8km az=193.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| C27K | Jago River | 0.34 | 75 | | Pg | 16 06 48.4 | +0.3 |
| C27K | | | | | Sg | 16 06 53.2 | +0.6 |
| C26K | Camden Bay | 0.39 | 347 | | Pg | 16 06 48.6 | -0.3 |
| C26K | | | | | Sg | 16 06 54.4 | +0.3 |
| C26K | Camden Bay | 0.39 | 347 | IAML | | 16 06 55.7 | |
| | comp=E,6μm,0.3s | | | | | | |
| C26K | | | | IAML | | 16 06 55.9 | |
| | comp=N,7μm,0.3s | | | | | | |
| D25K | Kavik River | 0.65 | 251 | | Pg | 16 06 53.3 | -0.6 |
| D25K | Kavik River | 0.65 | 251 | IAML | | 16 07 01.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| D25K | | | | IAML | | 16 07 03.6 | |
| | comp=N,2μm,0.6s | | | | | | |
| D27M | Malcolm River | 1.34 | 101 | | Pn | 16 07 06.0 | -0.8 |
| D27M | | | | | Sn | 16 07 25.0 | 0.0 |
| C24K | Franklin Bluff | 1.43 | 279 | | Pn | 16 07 07.3 | -0.6 |
| C24K | | | | | Sg | 16 07 27.3 | +0.1 |
| C24K | Franklin Bluff | 1.43 | 279 | IAML | | 16 07 27.8 | |
| | comp=N,827nm,0.6s | | | | | | |
| C24K | | | | IAML | | 16 07 33.3 | |
| | comp=E,892nm,0.7s | | | | | | |
| D24K | Happy Valley | 1.53 | 257 | | Pn | 16 07 08.8 | -0.5 |
| D24K | | | | | Sg | 16 07 30.1 | -0.3 |
| D24K | Happy Valley | 1.53 | 257 | IAML | | 16 07 33.1 | |
| | comp=N,2μm,0.6s | | | | | | |
| E27K | Coleen River | 1.76 | 139 | | Pn | 16 07 12.2 | -0.3 |
| E27K | | | | | Sn | 16 07 35.6 | +0.5 |
| E27K | Coleen River | 1.76 | 139 | IAML | | 16 07 39.6 | |
| | comp=N,673nm,0.7s | | | | | | |
| F26K | Sheenjek River | 1.86 | 174 | | Pn | 16 07 13.6 | -0.3 |
| F26K | Sheenjek River | 1.86 | 174 | IAML | | 16 07 45.0 | |
| | comp=E,775nm,0.6s | | | | | | |
| TOLK | Toolik Lake Re | 1.98 | 245 | | Pn | 16 07 15.0 | -0.6 |
| TOLK | Toolik Lake Re | 1.98 | 245 | IAML | | 16 07 45.6 | |
| | comp=E,627nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 16 07 49.4 | |
| | comp=N,538nm,1.1s | | | | | | |
| F25K | Christian Rive | 1.99 | 191 | | Pn | 16 07 15.2 | -0.5 |
| F25K | | | | | Sn | 16 07 41.5 | +0.5 |
| E24K | Your Creek | 2.03 | 225 | Pn | Pn | 16 07 16.5 | +0.3 |
| E28M | Babbage River | 2.07 | 115 | Pn | Pn | 16 07 17.0 | +0.3 |
| C23K | Itkillik River | 2.10 | 281 | Pn | Pn | 16 07 17.2 | +0.1 |
| C23K | | | | IAML | | 16 07 49.4 | |
| | comp=E,742nm,0.7s | | | | | | |
| C23K | | | | IAML | | 16 07 50.7 | |
| | comp=N,785nm,0.7s | | | | | | |
| E23K | Chandalar | 2.34 | 233 | Pn | Pn | 16 07 20.4 | -0.2 |
| E23K | | | | IAML | | 16 08 00.4 | |
| | comp=E,342nm,0.7s | | | | | | |
| E23K | | | | IAML | | 16 08 04.3 | |
| | comp=N,323nm,1.1s | | | | | | |
| F28M | Old Crow | 2.61 | 136 | | Pn | 16 07 23.9 | -0.3 |
| F28M | Old Crow | 2.61 | 136 | IAML | | 16 08 05.1 | |
| | comp=E,298nm,1.2s | | | | | | |
| F28M | | | | IAML | | 16 08 11.3 | |
| | comp=N,271nm,0.6s | | | | | | |
| E29M | Blow River | 2.70 | 112 | Pn | Pn | 16 07 25.5 | +0.2 |
| E29M | | | | IAML | | 16 08 12.6 | |
| | comp=E,238nm,0.8s | | | | | | |
| B21K | Ikpikpuk River | 3.49 | 276 | Pn | Pn | 16 07 36.2 | -0.1 |
| B21K | | | | IAML | | 16 08 22.0 | |
| | comp=E,256nm,1.4s | | | | | | |
| G29M | Pine Creek | 3.62 | 134 | Pn | Pn | 16 07 37.6 | -0.4 |
| H24K | Noodor Dome | 3.92 | 200 | Pn | Pn | 16 07 41.9 | -0.2 |
| H24K | | | | IAML | | 16 08 52.9 | |
| | comp=N,123nm,1.5s | | | | | | |
| F21K | Alatna River | 4.01 | 239 | Pn | Pn | 16 07 42.8 | -0.6 |
| F21K | | | | IAML | | 16 08 48.8 | |
| | comp=N,143nm,1.0s | | | | | | |
| F21K | | | | IAML | | 16 08 52.2 | |
| | comp=E,147nm,1.1s | | | | | | |
| PRP | Porcupine Dome | 4.05 | 185 | Pn | Pn | 16 07 43.9 | -0.2 |
| PRP | | | | IAML | | 16 08 18.4 | |
| | comp=E,112nm,1.5s | | | | | | |
| PRP | | | | IAML | | 16 08 33.0 | |
| | comp=N,108nm,1.3s | | | | | | |
| H23K | Yukon River | 4.17 | 209 | Pn | Pn | 16 07 45.7 | +0.1 |
| H23K | | | | IAML | | 16 08 59.1 | |
| | comp=E,125nm,1.0s | | | | | | |
| H23K | | | | IAML | | 16 09 01.3 | |
| | comp=N,93nm,1.0s | | | | | | |
| B20K | Meade River | 4.37 | 282 | Pn | Pn | 16 07 48.3 | +0.1 |
| I28M | Miner Creek | 4.49 | 154 | Pn | Pn | 16 07 50.6 | +0.5 |
| POKR | Poker Plat Res | 4.57 | 195 | Pn | Pn | 16 07 51.2 | +0.1 |
| POKR | | | | IAML | | 16 08 60.0 | |
| | comp=N,87nm,1.4s | | | | | | |
| MDM | Murphy Dome | 4.81 | 198 | Pn | Pn | 16 07 54.3 | -0.1 |
| MDM | | | | IAML | | 16 08 53.6 | |
| | comp=N,90nm,1.5s | | | | | | |
| D19K | Kuna River | 4.95 | 264 | Pn | Pn | 16 07 55.8 | -0.5 |
| D19K | | | | IAML | | 16 08 49.9 | |
| | comp=E,50nm,1.5s | | | | | | |
| CCB | Clear Creek Bu | 5.07 | 196 | Pn | Pn | 16 07 57.7 | -0.2 |
| CCB | | | | IAML | | 16 08 51.7 | |
| | comp=N,57nm,1.4s | | | | | | |
| I30M | Mount Dempster | 5.38 | 140 | Pn | Pn | 16 08 02.4 | +0.1 |
| F19K | Shaleruckik Mo | 5.59 | 247 | Pn | Pn | 16 08 04.7 | -0.3 |
| K27K | Chicken | 5.63 | 168 | Pn | Pn | 16 08 05.4 | -0.2 |
| C18K | Utukok River | 5.98 | 269 | Pn | Pn | 16 08 09.9 | -0.6 |
| E18K | Tukpahlearik C | 6.24 | 258 | Pn | Pn | 16 08 13.4 | -0.5 |
| KTH | Kantishna Hill | 6.51 | 206 | Pn | Pn | 16 08 17.6 | -0.1 |
| DHY | Denali Highway | 6.58 | 191 | Pn | Pn | 16 08 19.0 | +0.1 |
| MENT | Mentasta | 6.64 | 176 | Pn | Pn | 16 08 19.3 | -0.2 |
| H18K | Honhosa River | 6.87 | 237 | Pn | Pn | 16 08 22.6 | -0.1 |
| F17K | Baldwin Pennin | 6.96 | 251 | Pn | Pn | 16 08 23.6 | -0.2 |
| I17K | Unalakleet | 8.49 | 236 | Pn | Pn | 16 08 44.2 | -0.6 |

*IDC* ***12*** *16:11:30.5±1.1,69˚.57N×145˚.00W,h0km,mb3.7/6, mbtmp3.7/8,ML3.9/2,Error ellipse: s-maj=29.5km s-min=17.0km az=85.0*

*NEIC* ***12*** *16:11:31.9±1.0,69˚.59N±0˚.04×144˚.72W±0˚.06,h10km±2km, Error ellipse: s-maj=7.2km s-min=3.1km az=339.0*

*AEIC* ***12*** *16:11:31.6±1.2,69˚.56N±0˚.04×144˚.74W±0˚.08,h8km±6km, ML3.8,ML4.0/112(NEIC),Error ellipse: s-maj=6.4km s-min=4.0km az=171.0*

**ISC 12 16:11:32.0**±0.6,**69˚.55N**±0˚.04×**144˚.74W**±0˚.03,**h14**km,**n94,** σ1ŝ**05**/71,**mb3.7**/6,**Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| C27K | Jago River | 0.37 | 78 | | Pg | 16 11 38.4 | -1.1 |
| C27K | | | | | Sg | 16 11 43.4 | -1.1 |
| C26K | Camden Bay | 0.37 | 351 | | Pg | 16 11 38.9 | -0.6 |
| C26K | | | | | Sg | 16 11 44.7 | +0.1 |
| C26K | Camden Bay | 0.37 | 351 | IAML | | 16 11 46.5 | |
| | comp=N,6μm,0.6s | | | | | | |
| C26K | | | | IAML | | 16 11 46.5 | |
| | comp=E,6μm,0.5s | | | | | | |
| D25K | Kavik River | 0.62 | 249 | Pg | Pg | 16 11 42.0 | -2.1 |
| D27M | Malcolm River | 1.37 | 101 | | Pn | 16 11 55.9 | -0.9 |
| D27M | | | | IAML | | 16 12 18.5 | |
| | comp=E,2μm,0.6s | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,906nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.10** | **115** | | **Sn** | **16 12 34.1** | **+1.6** |
| **D28M** | **Stokes Point** | **2.13** | **93** | | **Pn** | **16 12 07.6** | **+0.5** |
| **D28M** | **Stokes Point** | **2.13** | **93** | IAML | | 16 12 50.2 | |
| | comp=N,1μm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.14** | **178** | | **Pn** | **16 12 08.0** | **+0.8** |
| **D23K** | **Nanushuk River** | **2.20** | **257** | | **Pn** | **16 12 07.3** | **-0.7** |
| **E23K** | **Chandalar** | **2.32** | **232** | | **Pn** | **16 12 09.0** | **-0.8** |
| **E23K** | **Chandalar** | **2.32** | **232** | IAML | | 16 12 49.9 | |
| | comp=E,715nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **211** | | **Pn** | **16 12 10.7** | **+0.5** |
| F24K | | | | IAML | | 16 12 51.3 | |
| | comp=N,633nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.64** | **172** | | **Pn** | **16 12 14.3** | **+0.2** |
| **F28M** | **Old Crow** | **2.64** | **135** | | **Pn** | **16 12 14.5** | **+0.3** |
| F28M | | | | IAML | | 16 12 57.0 | |
| | comp=E,684nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.73** | **112** | | **Pn** | **16 12 15.9** | **+0.5** |
| E29M | | | | IAML | | 16 13 02.7 | |
| | comp=E,629nm,0.5s | | | | | | |
| **D22K** | **Ayikyak River** | **2.91** | **260** | | **Pn** | **16 12 18.2** | **+0.4** |
| D22K | | | | IAML | | 16 13 24.4 | |
| | comp=N,484nm,0.9s | | | | | | |
| **G27K** | **Doyon Strip** | **2.99** | **156** | | **Pn** | **16 12 19.7** | **+0.7** |
| **FYU** | **Fort Yukon** | **3.01** | **184** | | **Pn** | **16 12 19.9** | **+0.8** |
| FYU | | | | IAML | | 16 13 13.3 | |
| | comp=N,539nm,1.0s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.04** | **201** | | **Pn** | **16 12 19.9** | **+0.2** |
| **B22K** | **Teshekpuk Lake** | **3.09** | **289** | | **Pn** | **16 12 20.7** | **+0.4** |
| **H25L** | **Birch Creek** | **3.33** | **188** | | **Pn** | **16 12 24.1** | **+0.5** |
| **F22K** | **John River** | **3.42** | **237** | | **Pn** | **16 12 24.8** | **-0.1** |
| **B21K** | **Ikpikpuk River** | **3.46** | **276** | Pn | **Pn** | **16 12 26.6** | **+1.2** |
| B21K | | | | IAML | | 16 13 39.5 | |
| | comp=E,373nm,1.4s | | | | | | |
| **G23K** | **Bananza Creek** | **3.47** | **217** | IAML | | 16 13 31.1 | |
| | comp=E,319nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.51** | **256** | | **Pn** | **16 12 25.6** | **-0.5** |
| **E21K** | **Killik River** | **3.51** | **256** | IAML | | 16 13 30.2 | |
| | comp=E,259nm,0.8s | | | | | | |
| E21K | | | | IAML | | 16 13 37.0 | |
| | comp=N,236nm,0.8s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.55** | **158** | | **Pn** | **16 12 27.3** | **+0.6** |
| **G29M** | **Pine Creek** | **3.65** | **133** | | **Pn** | **16 12 28.5** | **+0.6** |
| **F30M** | **Barrier River** | **3.82** | **116** | | **Pn** | **16 12 31.3** | **+1.0** |
| **H24K** | **Noodor Dome** | **3.92** | **199** | | **Pn** | **16 12 31.7** | **-0.1** |
| H24K | | | | IAML | | 16 13 39.3 | |
| | comp=N,206nm,0.9s | | | | | | |
| H24K | | | | IAML | | 16 13 41.6 | |
| | comp=E,165nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **3.99** | **238** | IAML | | 16 13 38.7 | |
| | comp=N,164nm,0.7s | | | | | | |
| F21K | | | | IAML | | 16 13 42.6 | |
| | comp=E,185nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.07** | **185** | IAML | | 16 13 48.9 | |
| | comp=E,151nm,0.8s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.09** | **125** | | **Pn** | **16 12 34.5** | **+0.4** |
| **G30M** | **tAoh Zraii Nji** | **4.09** | **125** | IAML | | 16 13 51.9 | |
| | comp=N,209nm,0.8s | | | | | | |
| G30M | | | | IAML | | 16 13 51.9 | |
| | comp=E,165nm,0.9s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **208** | | **Pn** | **16 12 34.8** | **-0.3** |
| **B20K** | **Meade River** | **4.33** | **282** | | **Pn** | **16 12 38.0** | **+0.6** |
| **A21K** | **Barrow** | **4.37** | **299** | | **Pn** | **16 12 38.1** | **+0.3** |
| **G21K** | **Allakaket** | **4.49** | **231** | IAML | | 16 14 00.6 | |
| | comp=N,167nm,1.3s | | | | | | |
| **I28M** | **Miner Creek** | **4.52** | **154** | | **Pn** | **16 12 40.5** | **+0.5** |
| **I28M** | **Miner Creek** | **4.52** | **154** | IAML | | 16 14 05.3 | |
| | comp=N,113nm,0.8s | | | | | | |
| I28M | | | | IAML | | 16 14 06.9 | |
| | comp=E,132nm,1.5s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58** | **194** | IAML | | 16 13 55.7 | |
| | comp=E,157nm,0.8s | | | | | | |
| POKR | | | | IAML | | 16 13 59.7 | |
| | comp=N,115nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.71** | **119** | | **Pn** | **16 12 43.4** | **+0.9** |
| **G31M** | **Satah River** | **4.71** | **119** | IAML | | 16 14 07.5 | |
| | comp=N,142nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **204** | IAML | | 16 14 08.9 | |
| | comp=N,114nm,1.4s | | | | | | |
| I23K | | | | IAML | | 16 14 09.9 | |
| | comp=E,131nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **198** | IAML | | 16 14 09.9 | |
| | comp=E,122nm,1.0s | | | | | | |
| MDM | | | | IAML | | 16 14 12.0 | |
| | comp=N,130nm,0.9s | | | | | | |
| **COLA** | **College** | **4.85** | **196** | | **Pn** | **16 12 46.1** | **+1.6** |
| **IL31** | | **4.88** | **191** | | **Pn** | **16 12 44.8** | **0.0** |
| **ILAR** | **Eielson Array** | **4.88** | **191** | Pn | **Pn** | **16 12 45.1** | **+0.2** |
| | comp=N,3.4nm,0.3s,baz=6.4,slow=13,SNR=14 | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 13 41.4** | **+0.4** |
| | comp=N,4.7nm,0.3s,baz=17,slow=18,SNR=4.8 | | | | | | |
| ILAR | | | | Lg | Lg | 16 14 01.8 | |
| | comp=N,9.8nm,0.3s,baz=6.5,slow=31,SNR=5.5 | | | | | | |
| | comp=N,8.9nm,0.5s | | | | | | |
| **D19K** | **Kuna River** | **4.92** | **264** | IAML | | 16 14 24.3 | |
| | comp=E,97nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.95** | **228** | Pn | **Pn** | **16 12 44.7** | **-1.2** |
| **J25K** | **Salcha River,** | **4.97** | **183** | | **Pn** | **16 12 46.9** | **+0.7** |
| **J25K** | **Salcha River,** | **4.97** | **183** | IAML | | 16 14 20.5 | |
| | comp=E,88nm,1.4s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.98** | **222** | IAML | | 16 14 17.3 | |
| | comp=E,103nm,0.8s | | | | | | |
| H21K | | | | IAML | | 16 14 20.6 | |
| | comp=N,117nm,1.3s | | | | | | |
| **EGAK** | **Eagle** | **5.00** | **162** | IAML | | 16 13 46.8 | |
| | comp=N,113nm,0.6s | | | | | | |
| **E19K** | **Redstone River** | **5.05** | **251** | IAML | | 16 14 19.2 | |
| | comp=E,80nm,1.2s | | | | | | |
| E19K | | | | IAML | | 16 14 36.1 | |
| | comp=N,81nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **195** | IAML | | 16 14 17.7 | |
| | comp=E,88nm,1.5s | | | | | | |
| **J26L** | **Joseph Creek** | **5.10** | **174** | IAML | | 16 14 14.8 | |
| | comp=E,84nm,0.8s | | | | | | |
| **MLY** | **Manley** | **5.10** | **210** | IAML | | 16 14 23.6 | |
| | comp=E,76nm,1.4s | | | | | | |
| **HDA** | **Harding Lake** | **5.24** | **191** | IAML | | 16 14 23.4 | |
| | comp=E,91nm,1.0s | | | | | | |
| HDA | | | | IAML | | 16 14 27.6 | |
| | comp=N,84nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **5.27** | **196** | IAML | | 16 14 25.5 | |
| | comp=N,66nm,1.3s | | | | | | |
| WRH | | | | IAML | | 16 14 26.4 | |
| | comp=E,90nm,1.3s | | | | | | |
| **K24K** | **Donnelly Dome** | **5.79** | **185** | | **Pn** | **16 12 58.7** | **+1.3** |
| **DAWY** | **Dawson** | **5.90** | **156** | | **Pn** | **16 13 00.3** | **+1.4** |
| **BCAR** | **Beaver Creek A** | **6.62** | **168** | | **Pn** | **16 13 10.2** | **+1.4** |
| **A36M** | **Sachs Harbour** | **6.87** | **60** | | **Pn** | **16 13 10.8** | **-1.3** |
| **F17K** | **Baldwin Pennin** | **6.93** | **251** | | **Pn** | **16 13 13.2** | **+0.3** |
| **M26K** | **Nabesna, AK** | **7.22** | **174** | | **Pn** | **16 13 18.7** | **+1.6** |
| **M27K** | **Edge Creek, AK** | **7.32** | **169** | | **Pn** | **16 13 19.0** | **+0.5** |
| **M29M** | **Somme Creek** | **7.58** | **157** | | **Pn** | **16 13 22.9** | **+0.9** |
| **N30M** | **Aishikik Lake** | **8.72** | **155** | | **Pn** | **16 13 37.1** | **-0.5** |
| **MMPY** | **Sheldon Lake,** | **8.83** | **135** | | **Pn** | **16 13 39.7** | **+0.6** |
| **YUK6** | **Outpost Mounta** | **9.04** | **160** | | **Pn** | **16 13 42.2** | **0.0** |
| **YKA** | **Yellowknife Ar** | **14.00** | **106** | Pn | **Pn** | **16 14 45.2** | **-4.4** |
| | comp=E,0.8nm,0.3s,baz=316,slow=14,SNR=1.9 | | | | | | |
| YKA | | | | Sn | Sn | 16 17 11.1 | -13 |
| | comp=E,0.5nm,0.3s,baz=1.1,slow=30,SNR=2.1 | | | | | | |
| | comp=E,2.3nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.34** | **128** | P | **P** | **16 18 00.6** | **0.0** |
| | comp=E,1.0nm,0.6s,baz=347,slow=7.4,SNR=2.1 | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.24** | **142** | P | **P** | **16 18 18.5** | **+1.2** |
| | comp=E,0.7nm,0.8s,baz=354,slow=8.2,SNR=2.7 | | | | | | |
| | comp=E,0.7nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.56** | **128** | P | **P** | **16 20 02.0** | **+3.0** |
| | comp=E,0.4nm,0.8s,baz=355,slow=7.2,SNR=2.4 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **49.69** | **14** | P | **P** | **16 20 22.3** | **-0.4** |
| | comp=E,0.4nm,0.3s,baz=352,slow=4.4,SNR=5.2 | | | | | | |
| | comp=E,0.4nm,0.3s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.34** | **27** | P | **P** | **16 20 43.9** | **+1.2** |
| | comp=E,0.5nm,0.6s,baz=338,slow=7.1,SNR=3.8 | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.03** | **328** | P | **P** | **16 21 09.9** | **+0.3** |
| | comp=E,0.4nm,0.3s,baz=12,slow=7.4,SNR=4.2 | | | | | | |
| | comp=E,0.4nm,0.3s | | | | | | |

*NEIC* ***12*** *16:14:57.4±0.9, 69°.53N±0°.03×144°.56W±0°.06, h2km±7km, Error ellipse: s-maj=5.2km s-min=1.7km az=144.0*
**AEIC 12 16:14:57.4±1.0, 69°.52N±0°.04×144°.58W±0°.06, h1km±2km, ML3.2, ML3.2/42(NEIC), Error ellipse: s-maj=5.5km s-min=2.5km az=153.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.32** | **71** | | Pg | 16 15 03.6 | +0.1 |
| C27K | | | | | Sg | 16 15 08.2 | +0.5 |
| **C26K** | **Camden Bay** | **0.41** | **344** | | Pg | 16 15 04.9 | -0.4 |
| C26K | | | | | Sg | 16 15 10.5 | -0.1 |
| **D25K** | **Kavik River** | **0.67** | **253** | | Pg | 16 15 10.0 | -0.1 |
| D25K | | | | | Sg | 16 15 19.2 | +0.5 |
| **D27M** | **Malcolm River** | **1.31** | **101** | | Sn | 16 15 40.9 | 0.0 |
| **D27M** | **Malcolm River** | **1.31** | **101** | | Pg | 16 15 21.5 | -0.9 |
| D27M | | | | IAML | | 16 15 43.0 | |
| | comp=N,184nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.46** | **280** | | Pn | 16 15 24.4 | -0.3 |
| C24K | | | | | Sn | 16 15 45.2 | +0.8 |
| **C24K** | **Franklin Bluff** | **1.46** | **280** | IAML | | 16 15 46.2 | |
| | comp=N,180nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.55** | **258** | | Pn | 16 15 25.8 | -0.2 |
| **D24K** | **Happy Valley** | **1.55** | **258** | IAML | | 16 15 51.0 | |
| | comp=N,165nm,0.8s | | | | | | |
| D24K | | | | IAML | | 16 16 04.1 | |
| | comp=E,152nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **175** | | Pn | 16 15 29.7 | -0.4 |
| **F26K** | **Sheenjek River** | **1.84** | **175** | IAML | | 16 15 59.4 | |
| | comp=E,126nm,1.0s | | | | | | |
| F26K | | | | IAML | | 16 16 28.1 | |
| | comp=N,146nm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **192** | | Pn | 16 15 31.7 | -0.2 |
| **F25K** | **Christian Rive** | **1.98** | **192** | IAML | | 16 16 34.7 | |
| | comp=N,101nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.00** | **246** | IAML | | 16 16 35.1 | |
| | comp=E,91nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 16 16 41.2 | |
| | comp=N,93nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.00** | **246** | | Pn | 16 15 31.8 | -0.4 |
| **E24K** | **Your Creek** | **2.03** | **226** | Pn | Pn | 16 15 32.5 | -0.2 |
| E24K | | | | IAML | | 16 16 45.4 | |
| | comp=N,126nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.03** | **115** | | Pn | 16 15 32.2 | -0.4 |
| **E28M** | **Babbage River** | **2.03** | **115** | IAML | | 16 16 39.5 | |
| | comp=E,85nm,1.0s | | | | | | |
| **C23K** | **Itkillik River** | **2.13** | **281** | | Pn | 16 15 33.5 | -0.4 |
| **C23K** | **Itkillik River** | **2.13** | **281** | IAML | | 16 16 43.0 | |
| | comp=N,145nm,0.5s | | | | | | |
| C23K | | | | IAML | | 16 16 47.0 | |
| | comp=E,151nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **2.25** | **258** | Pn | Pn | 16 15 34.8 | -0.7 |
| D23K | | | | IAML | | 16 16 56.2 | |
| | comp=N,78nm,0.9s | | | | | | |
| D23K | | | | IAML | | 16 17 00.1 | |
| | comp=E,107nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.16** | **289** | | Pn | 16 15 48.0 | 0.0 |
| **B21K** | **Ikpikpuk River** | **3.52** | **276** | | Pn | 16 15 53.6 | +0.6 |
| **E21K** | **Killik River** | **3.55** | **257** | Pn | Pn | 16 15 53.7 | +0.1 |
| **G29M** | **Pine Creek** | **3.58** | **134** | | Pn | 16 15 54.8 | +0.9 |
| **H24K** | **Noodor Dome** | **3.91** | **200** | | Pn | 16 15 58.7 | +0.2 |
| **H29M** | **Whitestone** | **4.06** | **142** | Pn | Pn | 16 16 01.2 | +0.7 |
| **E20K** | **Nigu River** | **4.39** | **259** | | Pn | 16 16 05.2 | +0.2 |
| **MDM** | **Murphy Dome** | **4.80** | **199** | | Pn | 16 16 11.4 | +0.8 |
| **D19K** | **Kuna River** | **4.97** | **264** | | Pn | 16 16 13.3 | +0.3 |
| **C19K** | **Lookout Ridge** | **5.34** | **273** | Pn | Pn | 16 16 18.1 | +0.1 |
| C19K | | | | IAML | | 16 18 14.2 | |
| | comp=E,30nm,0.5s | | | | | | |
| C19K | | | | IAML | | 16 18 16.2 | |
| | comp=N,33nm,1.0s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.61** | **248** | Pn | Pn | 16 16 20.7 | -1.0 |
| **C18K** | **Utukok River** | **6.01** | **269** | | Pn | 16 16 27.3 | 0.0 |

*NEIC* ***12*** *16:15:51.9±1.0, 69°.46N±0°.04×144°.49W±0°.08, h10km±2km, Error ellipse: s-maj=6.9km s-min=4.6km az=0.0*
**AEIC 12 16:15:51.7±0.9, 69°.46N±0°.03×144°.50W±0°.08, h7km±6km, ML3.5, ML3.6/82(NEIC), Error ellipse: s-maj=5.1km s-min=3.9km az=160.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.33** | **58** | | Pn | 16 16 01.4 | -1.4 |
| **C26K** | **Camden Bay** | **0.49** | **343** | | Pg | 16 16 00.3 | -0.7 |
| **C26K** | **Camden Bay** | **0.49** | **343** | IAML | | 16 16 07.4 | |
| | comp=E,2μm,0.6s | | | | | | |
| C26K | | | | IAML | | 16 16 08.2 | |
| | comp=N,4μm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.68** | **259** | | Pg | 16 16 04.0 | -0.7 |
| **D25K** | **Kavik River** | **0.68** | **259** | | Sg | 16 16 14.3 | +0.8 |
| **D27M** | **Malcolm River** | **1.27** | **98** | | Pn | 16 16 15.8 | 0.0 |
| D27M | | | | | Sn | 16 16 33.3 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.50** | **282** | | Pn | 16 16 18.6 | -0.3 |
| C24K | | | | | Sg | 16 16 39.3 | -0.4 |
| **D24K** | **Happy Valley** | **1.57** | **261** | | Pn | 16 16 20.2 | +0.3 |
| **E27K** | **Coleen River** | **1.66** | **139** | | Pn | 16 16 21.3 | +0.2 |
| E27K | | | | | Sb | 16 16 43.7 | +0.2 |
| **F26K** | **Sheenjek River** | **1.77** | **176** | | Pn | 16 16 21.6 | -1.2 |
| F26K | | | | IAML | | 16 16 52.1 | |
| | comp=N,657nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **1.92** | **193** | | Pn | 16 16 24.5 | -0.3 |
| **F25K** | **Christian Rive** | **1.92** | **193** | | Sn | 16 16 50.1 | +0.9 |
| **F25K** | **Christian Rive** | **1.92** | **193** | IAML | | 16 16 58.2 | |
| | comp=N,604nm,1.0s | | | | | | |
| F25K | | | | IAML | | 16 16 59.1 | |
| | comp=E,408nm,1.1s | | | | | | |
| **E24K** | **Your Creek** | **2.01** | **228** | | Pn | 16 16 25.5 | -0.5 |
| **BMAR** | **Burnt Mountain** | **2.04** | **181** | Pn | Pn | 16 16 25.6 | -0.8 |
| **D28M** | **Stokes Point** | **2.04** | **91** | | Pn | 16 16 26.6 | +0.2 |
| **D28M** | **Stokes Point** | **2.04** | **91** | IAML | | 16 17 06.9 | |
| | comp=E,527nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **2.17** | **283** | | Pn | 16 16 28.0 | -0.1 |
| C23K | | | | | Sn | 16 16 55.8 | +0.5 |
| **C23K** | **Itkillik River** | **2.17** | **283** | Pn | Pn | 16 16 27.8 | -0.3 |
| **D23K** | **Nanushuk River** | **2.26** | **260** | | Pn | 16 16 29.5 | +0.1 |
| **D23K** | **Nanushuk River** | **2.26** | **260** | IAML | | 16 17 11.8 | |
| | comp=N,293nm,0.8s | | | | | | |
| D23K | | | | IAML | | 16 17 19.0 | |
| | comp=E,325nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.31** | **214** | | Pn | 16 16 29.6 | -0.5 |
| F24K | | | | IAML | | 16 17 08.9 | |
| | comp=N,282nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.33** | **235** | | Pn | 16 16 30.4 | 0.0 |
| **E23K** | **Chandalar** | **2.33** | **235** | IAML | | 16 17 18.5 | |
| | comp=N,261nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.51** | **135** | | Pn | 16 16 33.7 | +0.8 |
| **G25K** | **Bearman Lake** | **2.77** | **193** | | Pn | 16 16 37.0 | +0.6 |
| **FYU** | **Fort Yukon** | **2.92** | **186** | Pn | Pn | 16 16 37.8 | -0.6 |
| **E22K** | **Anaktuvuk Pass** | **2.97** | **247** | | Pn | 16 16 39.2 | 0.0 |
| **D22K** | **Ayikyak River** | **2.98** | **263** | | Pn | 16 16 39.1 | -0.2 |
| **D22K** | **Ayikyak River** | **2.98** | **263** | IAML | | 16 17 43.2 | |
| | comp=E,281nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **2.99** | **203** | | Pn | 16 16 39.3 | -0.1 |
| G24K | | | | IAML | | 16 17 30.9 | |
| | comp=E,273nm,0.9s | | | | | | |
| G24K | | | | IAML | | 16 17 30.9 | |
| | comp=N,240nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.08** | **226** | | Pn | 16 16 40.9 | +0.3 |
| **B22K** | **Teshekpuk Lake** | **3.21** | **290** | | Pn | 16 16 42.1 | -0.3 |
| **B22K** | **Teshekpuk Lake** | **3.21** | **290** | IAML | | 16 17 38.4 | |
| | comp=E,357nm,0.9s | | | | | | |
| B22K | | | | IAML | | 16 17 42.2 | |
| | comp=N,333nm,1.4s | | | | | | |
| **H25L** | **Birch Creek** | **3.24** | **189** | | Pn | 16 16 43.4 | +0.6 |
| **G23K** | **Bananza Creek** | **3.45** | **220** | | Pn | 16 16 45.4 | -0.4 |
| G23K | | | | IAML | | 16 17 48.6 | |
| | comp=E,136nm,0.8s | | | | | | |
| G23K | | | | IAML | | 16 17 54.9 | |
| | comp=N,132nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.56** | **277** | | Pn | 16 16 47.0 | -0.1 |
| **B21K** | **Ikpikpuk River** | **3.56** | **277** | IAML | | 16 18 01.0 | |
| | comp=E,145nm,0.9s | | | | | | |
| B21K | | | | IAML | | 16 18 03.7 | |
| | comp=N,185nm,0.8s | | | | | | |
| **E21K** | **Killik River** | **3.57** | **258** | | Pn | 16 16 47.5 | +0.1 |
| E21K | | | | IAML | | 16 17 56.3 | |
| | comp=E,139nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.70** | **116** | | Pn | 16 16 49.5 | +0.3 |
| **H24K** | **Noodor Dome** | **3.86** | **201** | | Pn | 16 16 52.1 | +0.8 |
| **H24K** | **Noodor Dome** | **3.86** | **201** | IAML | | 16 18 03.9 | |
| | comp=N,91nm,1.0s | | | | | | |
| H24K | | | | IAML | | 16 18 05.1 | |
| | comp=E,95nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.98** | **186** | Pn | Pn | 16 16 52.1 | -1.0 |
| PRP | | | | IAML | | 16 18 05.5 | |
| | comp=E,76nm,0.8s | | | | | | |
| PRP | | | | IAML | | 16 18 05.6 | |
| | comp=N,98nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.00** | **142** | | Pn | 16 16 52.7 | -0.5 |
| H29M | | | | IAML | | 16 18 08.5 | |
| H29M | | | | IAML | | 16 18 09.9 | |
| | comp=E,66nm,1.2s | | | | | | |
| **F21K** | **Alatna River** | **4.01** | **240** | | Pn | 16 16 53.1 | -0.4 |
| F21K | | | | IAML | | 16 18 04.4 | |
| | comp=E,81nm,0.6s | | | | | | |
| F21K | | | | IAML | | 16 18 11.6 | |
| | comp=N,61nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.12** | **210** | | Pn | 16 16 55.6 | +0.6 |
| **H23K** | **Yukon River** | **4.12** | **210** | IAML | | 16 18 08.7 | |
| | comp=E,75nm,1.1s | | | | | | |
| H23K | | | | IAML | | 16 18 15.1 | |
| | comp=N,79nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.20** | **172** | | Pn | 16 16 55.8 | -0.3 |
| **E20K** | **Nigu River** | **4.40** | **260** | | Pn | 16 16 59.1 | +0.3 |
| **D20K** | **Etivluk River** | **4.41** | **266** | | Pn | 16 16 59.1 | +0.2 |
| **H22K** | **Ishtalitna Cre** | **4.43** | **220** | | Pn | 16 16 59.6 | +0.4 |
| **B20K** | **Meade River** | **4.44** | **283** | Pn | Pn | 16 16 58.5 | -0.7 |
| **G21K** | **Allakaket** | **4.49** | **233** | | Pn | 16 17 00.3 | +0.2 |
| **G21K** | **Allakaket** | **4.49** | **233** | IAML | | 16 18 23.9 | |
| | comp=N,70nm,1.0s | | | | | | |
| G21K | | | | IAML | | 16 18 26.9 | |
| | comp=E,76nm,1.2s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.50** | **196** | | Pn | 16 17 00.8 | +0.6 |
| **POKR** | **Poker Plat Res** | **4.50** | **196** | IAML | | 16 18 23.8 | |
| | comp=E,58nm,0.8s | | | | | | |
| POKR | | | | IAML | | 16 18 25.5 | |
| | comp=N,46nm,0.5s | | | | | | |
| **G31M** | **Satah River** | **4.58** | **119** | Pn | Pn | 16 17 01.7 | +0.5 |
| G31M | | | | IAML | | 16 18 23.6 | |
| | comp=E,68nm,1.4s | | | | | | |
| G31M | | | | IAML | | 16 18 29.7 | |
| | comp=N,60nm,1.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.72** | **206** | | Pn | 16 17 04.2 | +1.1 |
| **I23K** | **Minto, Yukon-K** | **4.72** | **206** | IAML | | 16 18 32.5 | |
| | comp=E,44nm,1.3s | | | | | | |
| I23K | | | | IAML | | 16 18 35.8 | |
| | comp=N,70nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.75** | **200** | | Pn | 16 17 04.3 | +0.8 |
| **MDM** | **Murphy Dome** | **4.75** | **200** | IAML | | 16 18 26.7 | |
| | comp=N,57nm,0.7s | | | | | | |
| MDM | | | | IAML | | 16 18 28.9 | |
| | comp=E,41nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.82** | **245** | | Pn | 16 17 05.3 | +0.7 |
| **F20K** | **Avaraart Lake** | **4.82** | **245** | IAML | | 16 18 06.8 | |
| | comp=E,34nm,0.8s | | | | | | |
| F20K | | | | IAML | | 16 18 54.1 | |
| | comp=N,35nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **4.88** | **163** | Pn | Pn | 16 17 05.8 | +0.4 |
| EGAK | | | | IAML | | 16 18 35.5 | |
| | comp=N,40nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 16 18 43.9 | |
| | comp=N,49nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.95** | **230** | Pn | Pn | 16 17 06.4 | 0.0 |
| **D19K** | **Kuna River** | **5.00** | **265** | Pn | Pn | 16 17 06.9 | -0.1 |
| D19K | | | | IAML | | 16 18 48.5 | |
| | comp=E,40nm,0.8s | | | | | | |
| **MLY** | **Manley** | **5.06** | **212** | | Pn | 16 17 08.5 | +0.6 |
| **E19K** | **Redstone River** | **5.10** | **253** | | Pn | 16 17 09.2 | +0.8 |
| **E19K** | **Redstone River** | **5.10** | **253** | IAML | | 16 18 08.5 | |
| | comp=E,48nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.20** | **202** | Pn | Pn | 16 17 09.7 | -0.1 |
| **K27K** | **Chicken** | **5.54** | **169** | | Pn | 16 17 15.3 | +0.9 |
| **F19K** | **Shaleruckik Mo** | **5.61** | **248** | | Pn | 16 17 15.1 | -0.2 |
| **H20K** | **Anotleneega Mo** | **5.63** | **230** | | Pn | 16 17 15.8 | +0.1 |
| **DAWY** | **Dawson** | **5.78** | **157** | | Pn | 16 17 18.2 | +0.5 |
| **A19K** | **Wainwright** | **5.78** | **285** | | Pn | 16 17 19.3 | +0.3 |
| **G19K** | **Purcell Mounta** | **5.81** | **241** | Pn | Pn | 16 17 19.1 | +1.0 |
| **BPAW** | **Bear Paw Mtn.** | **5.96** | **209** | Pn | Pn | 16 17 20.2 | +0.1 |
| **C18K** | **Utukok River** | **6.04** | **270** | | Pn | 16 17 21.1 | -0.2 |
| **H19K** | **Roundabout Mou** | **6.04** | **235** | Pn | Pn | 16 17 21.1 | -0.2 |
| **B18K** | **Kokolik River** | **6.10** | **277** | | Pn | 16 17 21.9 | -0.2 |
| **E18K** | **Tukpahlearik C** | **6.27** | **259** | | Pn | 16 17 24.3 | -0.1 |
| **RND** | **Reindeer** | **6.32** | **198** | Pn | Pn | 16 17 25.2 | 0.0 |
| **F18K** | **Selawik** | **6.36** | **250** | | Pn | 16 17 25.8 | +0.2 |
| **G18K** | **Tagagawik** | **6.46** | **243** | | Pn | 16 17 27.0 | -0.1 |
| **C17K** | **DeLong Mountai** | **6.79** | **270** | | Pn | 16 17 31.0 | -0.6 |
| **RDOG** | **Red Dog Mine** | **6.83** | **267** | Pn | Pn | 16 17 31.8 | -0.3 |
| **A36M** | **Sachs Harbour** | **6.84** | **59** | Pn | Pn | 16 17 31.2 | -1.1 |
| **E17K** | **Hotham Inlet** | **6.85** | **258** | | Pn | 16 17 32.1 | -0.3 |
| **L29M** | **L29M** | **6.87** | **155** | | Pn | 16 17 32.4 | -0.3 |
| **H18K** | **Honhosa River** | **6.88** | **238** | Pn | Pn | 16 17 32.7 | -0.1 |
| **F17K** | **Baldwin Pennin** | **6.98** | **252** | Pn | Pn | 16 17 34.1 | 0.0 |
| **K20K** | **Telida** | **7.22** | **217** | Pn | Pn | 16 17 37.6 | +0.2 |
| **G17K** | **Kiwalik Mounta** | **7.35** | **245** | | Pn | 16 17 39.2 | 0.0 |
| **H17K** | **Granite Mounta** | **7.50** | **240** | | Pn | 16 17 41.2 | 0.0 |
| **C16K** | **Lisburne Hills** | **7.61** | **271** | Pn | Pn | 16 17 42.2 | -0.6 |
| **SKT** | **Skwentna** | **8.04** | **204** | Pn | Pn | 16 17 48.2 | -0.5 |
| **L19K** | **White Mountain** | **8.44** | **215** | Pn | Pn | 16 17 54.6 | +0.4 |
| **M19K** | **Big River Lodg** | **8.60** | **213** | Pn | Pn | 16 17 56.3 | -0.1 |

*IDC* ***12*** *16:22:04.6±1.6, 69°.66N×145°.12W, h0km, mb3.6/5, mbtmp3.6/7, ML3.9/2, Error ellipse: s-maj=38.4km s-min=17.2km az=95.0*
*AEIC* ***12*** *16:22:06.0±1.1, 69°.50N±0°.06×144°.65W±0°.09, h4km±1km, ML3.8, ML3.9/124(NEIC), Error ellipse: s-maj=8.6km s-min=4.3km az=190.0*
*NEIC* ***12*** *16:22:06.1±1.1, 69°.56N±0°.05×144°.62W±0°.08, h6km±7km, Error ellipse: s-maj=6.8km s-min=3.5km az=196.0*
**ISC 12 16:22:06.0±1.2, 69°.51N±0°.04×144°.67W±0°.03, h5km±10km, n177, g0s55/157, mb3.5/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.35** | **71** | | **Pg** | **16 22 12.4** | **-0.4** |
| C27K | | | | | **Sg** | **16 22 17.0** | **-

comp=N,406nm,0.6s
E29M IAML 16 23 34.1
comp=E,449nm,0.7s
**G25K Bearman Lake 2.81 192 Pn 16 22 51.7 +0.2**
**D22K Ayikyak River 2.93 261 Pn 16 22 53.5 +0.3**
**D22K Ayikyak River 2.93 261** IAML 16 23 48.1
comp=N,425nm,0.9s
**G27K Doyon Strip 2.94 156 Pn 16 22 53.9 +0.6**
**E22K Anaktuvuk Pass 2.94 245 Pn 16 22 53.6 +0.2**
**FYU Fort Yukon 2.97 184 Pn 16 22 54.5 +0.8**
**G24K Hadweenzic Riv 3.02 202 Pn 16 22 54.6 +0.3**
**COLD Coldfoot 3.08 224 Pn 16 22 55.7 +0.5**
**B22K Teshekpuk Lake 3.13 289** Pn Pn **16 22 56.2 +0.3**
**H25L Birch Creek 3.29 188 Pn 16 22 58.3 +0.2**
**F22K John River 3.42 237 Pn 16 23 00.2 +0.3**
**G23K Bananza Creek 3.46 218 Pn 16 23 00.5 0.0**
G23K IAML 16 24 01.7
comp=N,171nm,0.9s
G23K IAML 16 24 06.1
comp=E,211nm,1.1s
**B21K Ikpikpuk River 3.49 276** Pn **Pn 16 23 01.0 +0.1**
**H27K Steamboat Mouth 3.50 159 Pn 16 23 01.2 +0.1**
**E21K Killik River 3.52 257** Pn Pn **16 23 01.3 0.0**
E21K IAML 16 24 02.4
comp=E,176nm,0.8s
E21K IAML 16 24 03.6
comp=N,183nm,1.3s
**G29M Pine Creek 3.60 133 Pn 16 23 02.4 +0.1**
G29M IAML 16 23 50.4
comp=N,255nm,0.6s
G29M IAML 16 24 13.9
comp=E,369nm,0.9s
**G22K Bettles 3.64 228 Pn 16 23 03.2 +0.2**
**F30M Barrier River 3.78 116 Pn 16 23 04.9 +0.1**
**A22K Sinclair Lake 3.80 298 Pn 16 23 05.4 +0.3**
**H24K Noodor Dome 3.89 200** Pn **Pn 16 23 06.4 0.0**
H24K IAML 16 24 12.5
comp=E,163nm,0.9s
**F21K Alatna River 3.99 239** Pn **Pn 16 23 08.2 +0.4**
F21K IAML 16 24 19.0
comp=N,112nm,0.6s
**PRP Porcupine Dome 4.03 185** Pn **Pn 16 23 09.0 +0.6**
PRP IAML 16 24 00.2
comp=E,145nm,0.4s
PRP IAML 16 24 00.8
comp=N,197nm,0.4s
**G30M tAoh Zraii Nji 4.04 125** Pn **Pn 16 23 09.2 +0.7**
G30M IAML 16 24 24.7
comp=E,111nm,1.1s
**H29M Whitestone 4.08 141 Pn 16 23 09.1 +0.2**
**H29M Whitestone 4.08 141** IAML 16 24 07.5
comp=E,166nm,0.6s
H29M IAML 16 24 18.8
comp=N,142nm,1.1s
**I27K Kandik River 4.10 162 Pn 16 23 09.3 +0.1**
**H23K Yukon River 4.15 209 Pn 16 23 10.1 +0.2**
**H23K Yukon River 4.15 209** IAML 16 24 20.6
comp=N,158nm,0.8s
H23K IAML 16 24 23.8
comp=E,125nm,1.1s
**INK Inuvik 4.20 102** Pn **Pn 16 23 11.5 +0.9**
**I26K Coal Creek Min 4.27 171 Pn 16 23 11.6 +0.1**
**EPYK Eagle Plains 4.35 133 Pn 16 23 12.7 0.0**
**D20K Etivluk River 4.35 265 Pn 16 23 12.8 +0.1**
**E20K Nigu River 4.36 259 Pn 16 23 12.9 +0.1**
**B20K Meade River 4.37 282** Pn **Pn 16 23 13.1 +0.2**
**A21K Barrow 4.41 300 Pn 16 23 13.7 +0.3**
**H22K Ishtalitna Cre 4.44 218 Pn 16 23 14.1 +0.1**
**I28M Miner Creek 4.47 154 Pn 16 23 14.4 0.0**
**I28M Miner Creek 4.47 154** IAML 16 24 12.1
comp=N,112nm,0.5s
I28M IAML 16 24 36.9
comp=E,84nm,0.9s
**G21K Allakaket 4.48 232 Pn 16 23 14.6 +0.1**
**G21K Allakaket 4.48 232** IAML 16 24 34.2
comp=N,83nm,1.4s
G21K IAML 16 24 39.5
comp=E,139nm,1.2s
**F31M Tsiigehtchic 4.53 112 Pn 16 23 15.2 +0.2**
**F31M Tsiigehtchic 4.53 112** IAML 16 24 41.0
comp=N,75nm,1.1s
F31M IAML 16 24 41.6
comp=E,88nm,0.9s
**POKR Poker Plat Res 4.54 195 Pn 16 23 15.4 +0.1**
**POKR Poker Plat Res 4.54 195** IAML 16 24 33.0
comp=N,85nm,0.6s
POKR IAML 16 24 35.4
comp=E,102nm,0.8s
**G31M Satah River 4.66 119** Pn **Pn 16 23 17.2 +0.3**
G31M IAML 16 24 40.5
comp=N,94nm,1.3s
**I23K Minto, Yukon-K 4.75 205 Pn 16 23 18.3 +0.2**
**I23K Minto, Yukon-K 4.75 205** IAML 16 24 44.7
comp=N,98nm,1.3s
I23K IAML 16 24 46.1
comp=E,85nm,0.7s
**MDM Murphy Dome 4.78 199 Pn 16 23 18.7 +0.1**
MDM IAML 16 24 40.7
comp=N,86nm,0.9s
MDM IAML 16 24 43.2
comp=E,95nm,0.7s
**F20K Avaraart Lake 4.79 244** Pn **Pn 16 23 19.2 +0.5**
F20K IAML 16 25 07.1
comp=N,60nm,0.8s
**COLA College 4.82 196 Pn 16 23 19.1 0.0**
**I29M Ogilvie Camp, 4.83 147** IAML 16 24 21.4
comp=E,85nm,0.5s
**IL31 4.84 191 Pn 16 23 19.5 +0.1**
**ILAR Eielson Array 4.84 191** Pn **Pn 16 23 20.0 +0.6**
comp=E,4.0nm,0.3s,baz=1.9,slow=13,SNR=18
ILAR Sn **Sn 16 24 15.9 +0.2**
comp=E,6.4nm,0.3s,baz=23,slow=17,SNR=6.6
ILAR Lg Lg 16 24 38.5
comp=E,7.9nm,0.3s,baz=10,slow=31,SNR=6.4
comp=E,5.7nm,0.4s
**J25K Salcha River, 4.93 184 Pn 16 23 20.8 +0.1**
**J25K Salcha River, 4.93 184** IAML 16 24 52.0
comp=E,82nm,0.9s
J25K IAML 16 24 53.6
comp=N,62nm,0.9s
**D19K Kuna River 4.94 264** IAML 16 25 00.8
comp=E,98nm,0.9s
**EGAK Eagle 4.95 162 Pn 16 23 20.9 0.0**
**EGAK Eagle 4.95 162** IAML 16 24 21.6
comp=E,91nm,0.6s
EGAK IAML 16 24 48.1
comp=E,68nm,0.9s
**H21K Melozitna Rive 4.97 223 Pn 16 23 21.2 +0.1**
**H21K Melozitna Rive 4.97 223** IAML 16 24 50.0
comp=E,78nm,1.1s
H21K IAML 16 24 50.7
comp=N,84nm,0.9s
**CCB Clear Creek Bu 5.04 196 Pn 16 23 22.2 +0.1**
**J26L Joseph Creek 5.05 175 Pn 16 23 22.4 0.0**
**J26L Joseph Creek 5.05 175** IAML 16 24 27.5
comp=N,60nm,0.5s
J26L IAML 16 24 56.9
comp=E,73nm,1.1s
**E19K Redstone River 5.06 252 Pn 16 23 22.6 +0.2**
**E19K Redstone River 5.06 252** IAML 16 24 23.6
comp=E,69nm,0.6s
**MLY Manley 5.08 210 Pn 16 23 22.9 +0.2**
**HDA Harding Lake 5.21 191 Pn 16 23 24.6 +0.2**
**HDA Harding Lake 5.21 191** IAML 16 24 59.3
comp=E,82nm,0.9s
HDA IAML 16 25 01.1
comp=N,70nm,1.1s
**NEA2 Nenana 5.23 201 Pn 16 23 24.9 +0.1**
**WRH Wood River Hil 5.24 196 Pn 16 23 25.0 +0.1**
**WRH Wood River Hil 5.24 196** IAML 16 24 55.8
comp=N,51nm,0.8s
WRH IAML 16 24 57.7
comp=E,57nm,0.6s
**C19K Lookout Ridge 5.31 273 Pn 16 23 25.9 +0.1**
**C19K Lookout Ridge 5.31 273** IAML 16 24 27.0
comp=E,63nm,0.5s
C19K IAML 16 25 19.3
comp=N,56nm,1.2s
**I30M Mount Dempster 5.36 139 Pn 16 23 26.6 -0.1**
**I30M Mount Dempster 5.36 139** IAML 16 24 29.1
comp=N,67nm,0.3s
I30M IAML 16 24 31.6
comp=E,59nm,0.5s
**SCRK Sand Creek 5.57 177 Pn 16 23 29.5 0.0**
**F19K Shaleruckik Mo 5.58 247 Pn 16 23 29.6 +0.1**
**K27K Chicken 5.60 168 Pn 16 23 29.9 +0.1**
**J29N Klondike Camp 5.67 150 Pn 16 23 30.9 0.0**
**A19K Wainwright 5.71 285 Pn 16 23 31.4 +0.2**
**G19K Purcell Mounta 5.79 240 Pn 16 23 32.5 +0.1**
**DAWY Dawson 5.85 157 Pn 16 23 34.5 +1.1**
**DOT Dot Lake 5.90 177 Pn 16 23 33.9 0.0**
**J30M Hart River 5.93 143 Pn 16 23 34.4 -0.1**
**BPAW Bear Paw Mtn. 5.98 208 Pn 16 23 35.1 +0.1**
**H19K Roundabout Mou 6.03 234 Pn 16 23 35.8 +0.1**
**B18K Kokolik River 6.04 277 Pn 16 23 35.9 +0.2**
**MCK McKinley 6.05 198 Pn 16 23 36.2 +0.2**
**RND Reindeer 6.36 197 Pn 16 23 40.5 +0.2**
**G18K Tagagawik 6.43 242 Pn 16 23 41.4 +0.1**
**KTH Kantishna Hill 6.48 206 Pn 16 23 42.2 +0.2**
**J20K Nowinta River 6.53 219 Pn 16 23 42.7 +0.2**
**L26K Log Cabin Wild 6.54 175 Pn 16 23 42.7 0.0**
**DHY Denali Highway 6.56 191 Pn 16 23 43.3 +0.2**
**BCAR Beaver Creek A 6.58 168** Pn **Pn 16 23 44.4 +1.1**
**L27K Beaver Creek, 6.58 169 Pn 16 23 43.5 +0.2**
**PAX Paxson 6.58 183 Pn 16 23 43.5 +0.1**
**E17K Hotham Inlet 6.81 257 Pn 16 23 46.1 -0.2**
**H18K Honhosa River 6.86 237 Pn 16 23 47.1 0.0**
**A36M Sachs Harbour 6.87 60** Pn **Pn 16 23 45.8 -1.3**
**WAT7 Susitna Watana 6.92 196 Pn 16 23 48.1 +0.1**
**L29M L29M 6.95 155 Pn 16 23 48.3 0.0**
**D17K Noatak River 6.97 264 Pn 16 23 47.8 -0.8**
**J19K Poorman 7.03 223 Pn 16 23 49.4 0.0**
**HARP HAARP 7.15 182 Pn 16 23 51.1 0.0**
**K20K Telida 7.23 216 Pn 16 23 52.2 0.0**
**C36M Paulatuk 7.25 82 Pn 16 23 51.7 -0.6**
**M27K Edge Creek, AK 7.28 170 Pn 16 23 53.0 +0.1**
**G17K Kiwaiik Mounta 7.32 244 Pn 16 23 53.2 -0.2**
**H17K Granite Mounta 7.47 239 Pn 16 23 55.6 +0.1**
**M29M Somme Creek 7.53 157 Pn 16 23 56.3 -0.1**
**SCM Sheep Creek Mo 7.79 189 Pn 16 23 59.9 0.0**
**YUK2 White River 7.92 167 Pn 16 24 02.1 +0.4**
**G16K Koyuk River 7.94 247 Pn 16 24 01.8 0.0**
**SKT Skwentna 8.07 204 Pn 16 24 03.7 0.0**
**MCARA McCarthy VSAT 8.19 174 Pn 16 24 05.4 0.0**
**J17K VABM Dome 8.40 230 Pn 16 24 08.2 0.0**
**M20K Styx River 8.41 208 Pn 16 24 08.6 +0.2**
**L19K White Mountain 8.45 214 Pn 16 24 08.9 0.0**
**F15K North Star Dit 8.50 253 Pn 16 24 09.3 -0.3**
**M19K Big River Lodg 8.61 212 Pn 16 24 11.2 0.0**
**N30M Aishikik Lake 8.67 155 Pn 16 24 12.0 +0.1**
**KIAG Kiagna River 8.68 173 Pn 16 24 12.2 0.0**
**CTGM Chitina Glacie 8.70 169 Pn 16 24 12.6 +0.2**
**G15K Niukluk 8.74 248 Pn 16 24 12.8 0.0**
**K17K Iditarod 8.76 226 Pn 16 24 13.3 +0.2**
**MMPY Sheldon Lake, 8.78 135 Pn 16 24 13.7 +0.2**
**L18K Granite Mounta 8.80 220 Pn 16 24 13.8 +0.1**
**SPCP Crater Peak Br 8.84 204 Pn 16 24 14.3 -0.1**
**LOGN Logan Glacier 8.86 168 Pn 16 24 14.6 -0.1**
**GRNC Granite Creek 8.90 171 Pn 16 24 15.3 +0.1**
**O28M Mount Upton 8.97 166 Pn 16 24 16.3 -0.1**
**WAX Waxell Ridge 9.13 174 Pn 16 24 18.4 +0.1**
**BARK Barkley Ridge 9.19 173 Pn 16 24 19.3 +0.2**
**F14K Arctic Creek 9.21 254 Pn 16 24 19.0 -0.2**
**TABL Table Mountain 9.23 169 Pn 16 24 20.0 +0.2**
**YUK7 Dusty Glacier 9.43 160 Pn 16 24 22.3 -0.1**
**O30N Mendenhall 9.48 154 Pn 16 24 23.1 +0.1**
**O29M Mount Kennedy 9.60 162 Pn 16 24 24.5 -0.2**
**N32M Quiet Lake 9.67 145 Pn 16 24 25.4 -0.2**
**WRGLY Wrigley 10.54 116 Pn 16 24 36.6 -0.8**
**YKA Yellowknife Ar 13.96 105** Pn Pn 16 25 19.8 -4.3
comp=E,0.7nm,0.3s,baz=347,slow=7.5,SNR=12
comp=E,0.9nm,0.3s
**PDAR Pinedale Array 32.29 128** P **P 16 28 36.1 +0.5**
comp=E,0.4nm,0.6s,baz=359,slow=5.9,SNR=4.8
comp=E,0.4nm,0.6s
**NVAR Mina Array Bea 34.20 142** P **P 16 28 54.8 +2.5**
comp=E,0.3nm,0.6s,baz=315,slow=8.9,SNR=2.1
comp=E,0.3nm,0.6s
**TXAR Lajitas Array 46.51 128** P **P 16 30 35.3 +1.3**
comp=E,0.3nm,0.8s,baz=344,slow=3.0,SNR=1.7
comp=E,0.3nm,0.8s
**FINES FINESS Array B 49.16 6** P **P 16 30 50.3 -3.8**
comp=E,2.0nm,0.9s,baz=356,slow=8.4,SNR=1.5
comp=E,2.0nm,0.9s
**HFS Hagfors 49.72 14** P **P 16 30 58.2 -0.1**
comp=E,2.5nm,1.0s,baz=318,slow=6.2,SNR=1.1
comp=E,2.5nm,1.0s

*IDC **12** 16:22:31.3±0.9,2˚.31N×128˚.73E,h0km,mb4.0/10, mbtmp4.0/10,Error ellipse: s-maj=49.1km s-min=16.8km az=76.0*
*DJA **12** 16:22:34.8±0.6,2˚N±5˚×12˚9E±˚,h10km,M4.3/6,mb5.0/1, MLv4.0/6*
*NEIC **12** 16:22:38.1±1.8,2˚.23N±0˚.06×128˚.80E±0˚.07,h51km±10km, mb4.4/13,Error ellipse: s-maj=12.6km s-min=3.3km az=127.0*
**ISC 12 16:22:36.0±0.7,2˚36N±0˚.07×128˚91E±0˚.09,h35km,n34, σ0°83/35,mb4.3/16,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.21** | **224** | Pn | **Pn** | **16 23 09.2** | **-1.0** |
| **TNTI** | **Ternate** | **2.21** | **224** | P | **Pn** | **16 23 10.1** | **0.0** |
| TNTI | | | | S | **Sn** | **16 23 38.3** | **+2.1** |
| **SWI** | **Sorong** | **3.98** | **144** | P | **Pn** | **16 23 35.3** | **+0.8** |
| **KMSI** | **Cibinong** | **5.23** | **250** | P | **Pn** | **16 23 51.7** | **-0.1** |
| **FAKI** | **Fak Fak** | **6.22** | **147** | Pn | **Pn** | **16 24 06.3** | **+0.9** |
| **TOLI2** | **Tolitoli** | **8.21** | **261** | Pn | **Pn** | **16 24 30.4** | **+0.6** |
| **WRAB** | **Tennant Creek** | **22.79** | **167** | P | **P** | **16 27 35.2** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 16 27 37.3 | |
| comp=Z,8.9nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **26.32** | **170** | P | **P** | **16 28 08.4** | **-0.3** |
| **ASAR** | **Alice Springs** | **26.33** | **170** | P | **P** | **16 28 08.2** | **-0.5** |
| **ASAR** | **Alice Springs** | **26.33** | **170** | P | **P** | **16 28 09.7** | **+0.9** |
| comp=Z,0.5nm,0.7s,baz=352,slow=7.7,SNR=13 | | | | | | | |
| comp=Z,0.5nm,0.7s | | | | | | | |
| **GSI** | **Gunungsitoli** | **31.33** | **269** | P | **P** | **16 28 51.2** | **-2.3** |
| **KSRS** | **Korea Array** | **34.93** | **359** | P | **P** | **16 29 26.1** | **+1.6** |
| comp=Z,0.9nm,0.7s,baz=173,slow=10,SNR=6.5 | | | | | | | |
| comp=Z,0.9nm,0.7s | | | | | | | |
| **MAJO** | **Matsushiro** | **35.08** | **13** | P | **P** | **16 29 26.3** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **35.08** | **13** | P | **P** | **16 29 25.9** | **0.0** |
| comp=Z,1.5nm,0.7s,baz=186,slow=8.4,SNR=7.6 | | | | | | | |
| comp=Z,1.5nm,0.7s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **35.08** | **13** | P | **P** | **16 29 26.4** | **+0.5** |
| **STKA** | **Stephens Creek** | **36.12** | **162** | P | **P** | **16 29 34.4** | **-0.4** |
| **STKA** | **Stephens Creek** | **36.12** | **162** | P | **P** | **16 29 34.5** | **-0.4** |
| comp=Z,1.8nm,0.6s,baz=332,slow=9.6,SNR=7.8 | | | | | | | |
| comp=Z,1.8nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.75** | **3** | P | **P** | **16 30 23.2** | **+1.4** |
| comp=Z,1.1nm,0.7s,baz=200,slow=6.6,SNR=5.4 | | | | | | | |
| comp=Z,1.1nm,0.7s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **41.75** | **3** | P | **P** | **16 30 22.0** | **+0.2** |
| **ULN** | **Ulaanbaatar** | **49.10** | **341** | P | **P** | **16 31 20.5** | **+0.3** |
| ULN | | | | IAmb | IAmb | 16 31 22.2 | |
| comp=Z,3.6nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **49.30** | **340** | P | **P** | **16 31 22.2** | **+0.6** |
| SONM | | | | IAmb | IAmb | 16 31 23.6 | |
| comp=Z,2.1nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **49.30** | **340** | P | **P** | **16 31 22.2** | **+0.6** |
| comp=Z,1.9nm,0.8s,baz=156,slow=8.0,SNR=7.5 | | | | | | | |
| comp=Z,1.9nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.91** | **325** | P | **P** | **16 32 39.1** | **+0.5** |
| MK31 | | | | IAmb | IAmb | 16 33 20.1 | |
| comp=Z,2.9nm,1.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.91** | **325** | P | **P** | **16 32 39.0** | **+0.4** |
| **MKAR** | **Makanchi Array** | **59.91** | **325** | P | **P** | **16 32 38.7** | **+0.1** |
| comp=Z,2.1nm,0.7s,baz=117,slow=8.0,SNR=16 | | | | | | | |
| comp=Z,2.1nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.79** | **332** | P | **P** | **16 32 57.1** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **62.79** | **332** | P | **P** | **16 32 57.3** | **-0.6** |
| comp=Z,0.5nm,0.3s,baz=131,slow=4.1,SNR=3.9 | | | | | | | |
| comp=Z,0.5nm,0.3s | | | | | | | |
| **KURK** | **Kurchatov** | **64.06** | **327** | P | **P** | **16 33 06.6** | **+0.3** |
| KURK | | | | IAmb | IAmb | 16 33 07.4 | |
| comp=Z,4.2nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.06** | **327** | P | **P** | **16 33 06.6** | **+0.3** |
| comp=Z,2.7nm,0.6s,baz=126,slow=6.3,SNR=30 | | | | | | | |
| comp=Z,2.7nm,0.6s | | | | | | | |
| **KKAR** | **Karatay Array** | **65.71** | **317** | P | **P** | **16 33 17.5** | **+0.2** |
| **BVAR** | **Borovoye Array** | **69.64** | **327** | P | **P** | **16 33 42.2** | **+0.4** |
| comp=Z,2.4nm,0.6s,baz=132,slow=6.7,SNR=8.9 | | | | | | | |
| comp=Z,2.4nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **69.72** | **327** | P | **P** | **16 33 42.5** | **+0.2** |
| BRVK | | | | IAmb | IAmb | 16 33 43.0 | |
| comp=Z,3.3nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **74.58** | **321** | P | **P** | **16 34 10.9** | **-0.5** |
| **ARU** | **Arti** | **77.25** | **328** | P | **P** | **16 34 25.9** | **-0.6** |
| ARU | | | | IAmb | IAmb | 16 34 26.7 | |
| comp=Z,3.4nm,0.8s | | | | | | | |

*IDC **12** 16:24:24.5±3.9,69˚.43N×145˚.64W,h0km,mb3.2/1, mbtmp3.4/3,ML3.8/1,Error ellipse: s-maj=45.7km s-min=25.7km az=133.0*
*AEIC **12** 16:24:24.3±0.9,69˚.54N±0˚.04×144˚.90W±0˚.07,h1km±6km, ML3.2,ML3.3/68(NEIC),Error ellipse: s-maj=6.0km s-min=3.6km az=190.0*
*NEIC **12** 16:24:24.1±1.0,69˚.55N±0˚.04×144˚.88W±0˚.08,h3km±7km, Error ellipse: s-maj=6.1km s-min=3.9km az=179.0*
**ISC 12 16:24:24.6±0.8,69˚54N±0˚.04×144˚89W±0˚.03,h10km,n63, σ1°16/53,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.38** | **359** | | **Pg** | **16 24 31.2** | **-1.0** |
| **C26K** | **Camden Bay** | **0.38** | **359** | | **Sg** | **16 24 37.1** | **-0.2** |
| **C27K** | **Jago River** | **0.42** | **77** | | **Pg** | **16 24 32.1** | **-0.8** |
| **C27K** | **Jago River** | **0.42** | **77** | | **Sg** | **16 24 38.0** | **-0.5** |
| **C27K** | **Jago River** | **0.42** | **77** | IAML | | 16 24 37.9 | |
| comp=E,2μm,0.5s | | | | | | | |
| **D25K** | **Kavik River** | **0.57** | **248** | | **Pg** | **16 24 34.2** | **-1.4** |
| **C24K** | **Franklin Bluff** | **1.35** | **280** | | **Pn** | **16 24 49.5** | **+0.1** |
| C24K | | | | | **Sg** | **16 25 08.2** | **+0.3** |
| **C24K** | **Franklin Bluff** | **1.35** | **280** | IAML | | 16 25 10.1 | |
| comp=E,432nm,0.9s | | | | | | | |
| C24K | | | | IAML | | 16 25 10.8 | |
| comp=N,478nm,0.6s | | | | | | | |
| **D27M** | **Malcolm River** | **1.42** | **100** | | **Sb** | **16 25 10.3** | **+1.0** |
| **D27M** | **Malcolm River** | **1.42** | **100** | | **Pn** | **16 24 49.5** | **-1.0** |
| D27M | | | | IAML | | 16 25 12.5 | |
| comp=N,416nm,0.7s | | | | | | | |
| D27M | | | | IAML | | 16 25 12.8 | |
| comp=E,321nm,0.6s | | | | | | | |
| **D24K** | **Happy Valley** | **1.45** | **256** | | **Pn** | **16 24 51.1** | **+0.3** |
| D24K | | | | | **Sg** | **16 25 12.1** | **+1.0** |
| **E27K** | **Coleen River** | **1.81** | **137** | | **Sn** | **16 25 20.0** | **+1.2** |
| **E27K** | **Coleen River** | **1.81** | **137** | | **Pn** | **16 24 55.7** | **-0.1** |
| **E27K** | **Coleen River** | **1.81** | **137** | IAML | | 16 25 24.4 | |
| comp=E,202nm,0.6s | | | | | | | |
| E27K | | | | IAML | | 16 25 26.2 | |
| comp=N,140nm,0.8s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.87** | **171** | | **Pn** | **16 24 57.0** | **+0.3** |
| F26K | | | | IAML | | 16 25 25.1 | |
| comp=E,302nm,0.5s | | | | | | | |
| F26K | | | | IAML | | 16 25 26.7 | |
| comp=N,203nm,0.5s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.90** | **244** | | **Pn** | **16 24 56.5** | **-0.6** |
| **TOLK** | **Toolik Lake Re** | **1.90** | **244** | | **Sn** | **16 25 22.2** | **+1.0** |
| **E24K** | **Your Creek** | **1.96** | **223** | | **Pn** | **16 24 58.1** | **+0.1** |
| **F25K** | **Christian Rive** | **1.97** | **188** | | **Pn** | **16 24 57.4** | **-0.6** |
| F25K | | | | IAML | | 16 25 31.1 | |
| comp=N,249nm,0.5s | | | | | | | |
| **C23K** | **Itkillik River** | **2.02** | **281** | | **Pn** | **16 24 58.8** | **+0.2** |
| **BMAR** | **Burnt Mountain** | **2.12** | **177** | Pn | **Pn** | **16 25 00.6** | **+0.5** |
| **D23K** | **Nanushuk River** | **2.14** | **257** | | **Pn** | **16 25 00.6** | **+0.3** |
| **D23K** | **Nanushuk River** | **2.14** | **257** | IAML | | 16 25 42.9 | |
| comp=E,152nm,0.6s | | | | | | | |
| D23K | | | | IAML | | 16 25 49.0 | |
| comp=N,175nm,0.9s | | | | | | | |
| **E28M** | **Babbage River** | **2.14** | **113** | | **Pn** | **16 25 00.7** | **+0.4** |
| **E28M** | **Babbage River** | **2.14** | **113** | IAML | | 16 25 43.9 | |
| comp=N,138nm,0.7s | | | | | | | |
| **D28M** | **Stokes Point** | **2.19** | **93** | | **Pn** | **16 25 01.0** | **+0.1** |
| **E23K** | **Chandalar** | **2.27** | **231** | | **Pn** | **16 25 01.8** | **-0.4** |
| E23K | | | | IAML | | 16 25 41.9 | |
| comp=E,156nm,0.6s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.31** | **210** | | **Pn** | **16 25 03.0** | **+0.4** |
| **F24K** | **Squaw Lake** | **2.31** | **210** | IAML | | 16 25 44.4 | |
| comp=N,118nm,0.7s | | | | | | | |
| **F28M** | **Old Crow** | **2.67** | **134** | | **Pn** | **16 25 08.3** | **+0.7** |
| **F28M** | **Old Crow** | **2.67** | **134** | IAML | | 16 25 55.4 | |
| comp=N,97nm,0.6s | | | | | | | |
| F28M | | | | IAML | | 16 25 56.9 | |
| comp=E,89nm,0.5s | | | | | | | |
| **E29M** | **Blow River** | **2.77** | **111** | Pn | **Pn** | **16 25 09.4** | **+0.4** |
| E29M | | | | IAML | | 16 25 54.0 | |
| comp=E,95nm,0.7s | | | | | | | |
| E29M | | | | IAML | | 16 26 00.7 | |
| comp=N,103nm,1.0s | | | | | | | |
| **D22K** | **Ayikyak River** | **2.86** | **260** | Pn | **Pn** | **16 25 10.3** | **+0.1** |
| D22K | | | | IAML | | 16 26 06.3 | |
| comp=N,105nm,1.1s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.88** | **244** | | **Pn** | **16 25 11.1** | **+0.6** |
| **G24K** | **Hadweenzic Riv** | **3.01** | **200** | | **Pn** | **16 25 12.4** | **+0.2** |
| **B22K** | **Teshekpuk Lake** | **3.05** | **289** | | **Pn** | **16 25 12.6** | **-0.2** |
| **E21K** | **Killik River** | **3.45** | **256** | | **Pn** | **16 25 18.7** | **+0.4** |
| **E21K** | **Killik River** | **3.45** | **256** | IAML | | 16 26 18.3 | |
| comp=N,56nm,1.1s | | | | | | | |
| E21K | | | | IAML | | 16 26 23.7 | |
| comp=E,65nm,0.9s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.89** | **198** | | **Pn** | **16 25 25.2** | **+0.8** |
| **H24K** | **Noodor Dome** | **3.89** | **198** | IAML | | 16 26 36.1 | |
| comp=E,48nm,1.1s | | | | | | | |
| H24K | | | | IAML | | 16 26 36.2 | |
| comp=N,47nm,0.8s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.12** | **124** | Pn | **Pn** | **16 25 27.9** | **+0.3** |
| G30M | | | | IAML | | 16 26 45.8 | |
| comp=N,30nm,1.2s | | | | | | | |
| G30M | | | | IAML | | 16 26 57.6 | |
| comp=E,28nm,0.9s | | | | | | | |
| **H29M** | **Whitestone** | **4.14** | **140** | Pn | **Pn** | **16 25 28.9** | **+1.0** |
| H29M | | | | IAML | | 16 26 26.0 | |
| comp=E,42nm,0.7s | | | | | | | |
| H29M | | | | IAML | | 16 26 48.5 | |
| comp=N,29nm,1.0s | | | | | | | |
| **B20K** | **Meade River** | **4.29** | **282** | Pn | **Pn** | **16 25 30.8** | **+1.1** |
| **EPYK** | **Eagle Plains** | **4.42** | **132** | Pn | **Pn** | **16 25 33.0** | **+1.3** |
| **I23K** | **Minto, Yukon-K** | **4.73** | **204** | | **Pn** | **16 25 37.1** | **+1.2** |
| **I23K** | **Minto, Yukon-K** | **4.73** | **204** | IAML | | 16 27 13.0 | |
| comp=N,28nm,1.1s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.78** | **197** | | **Pn** | **16 25 37.4** | **+0.8** |
| **MDM** | **Murphy Dome** | **4.78** | **197** | IAML | | 16 26 58.7 | |
| comp=E,24nm,1.1s | | | | | | | |
| MDM | | | | IAML | | 16 26 59.0 | |
| comp=N,23nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **4.85** | **190** | Pn | **Pn** | **16 25 37.0** | **-0.5** |
| comp=N,3.2nm,0.5s,baz=9.5,slow=28,SNR=0.6 | | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 26 27.6** | **-6.0** |
| comp=N,1.6nm,0.3s,baz=2.6,slow=26,SNR=2.2 | | | | | | | |
| ILAR | | | | Lg | Lg | 16 26 52.6 | |
| comp=N,1.2nm,0.3s,baz=3.5,slow=30,SNR=4.0 | | | | | | | |
| **D19K** | **Kuna River** | **4.87** | **264** | | **Pn** | **16 25 38.6** | **+0.8** |
| **D19K** | **Kuna River** | **4.87** | **264** | IAML | | 16 27 15.8 | |
| comp=E,16nm,1.5s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04** | **194** | | **Pn** | **16 25 41.1** | **+1.0** |
| **CCB** | **Clear Creek Bu** | **5.04** | **194** | IAML | | 16 26 42.2 | |
| comp=E,21nm,1.4s | | | | | | | |
| CCB | | | | IAML | | 16 26 43.4 | |
| comp=N,15nm,0.7s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.24** | **195** | Pn | **Pn** | **16 25 44.3** | **+1.5** |
| WRH | | | | IAML | | 16 27 12.7 | |
| comp=N,15nm,1.0s | | | | | | | |
| WRH | | | | IAML | | 16 27 14.9 | |
| comp=E,19nm,1.5s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.43** | **139** | Pn | **Pn** | **16 25 46.8** | **+1.2** |
| **F19K** | **Shaleruckik Mo** | **5.51** | **247** | Pn | **Pn** | **16 25 47.3** | **+0.7** |
| **C18K** | **Utukok River** | **5.90** | **269** | | **Pn** | **16 25 52.5** | **+0.5** |
| **E18K** | **Tukpahlearik C** | **6.15** | **257** | | **Pn** | **16 25 55.9** | **+0.5** |
| **L26K** | **Log Cabin Wild** | **6.57** | **174** | Pn | **Pn** | **16 26 02.3** | **+1.2** |
| **D17K** | **Noatak River** | **6.89** | **263** | | **Pn** | **16 26 05.5** | **0.0** |
| **A36M** | **Sachs Harbour** | **6.92** | **60** | | **Pn** | **16 26 05.6** | **-0.3** |
| **YKA** | **Yellowknife Ar** | **14.05** | **105** | Pn | **Pn** | **16 27 42.9** | **-0.4** |
| comp=E,0.4nm,0.3s,baz=316,slow=14,SNR=2.5 | | | | | | | |
| comp=E,0.9nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.37** | **127** | P | **P** | **16 30 55.9** | **+1.8** |
| comp=E,0.2nm,0.6s,baz=350,slow=7.5,SNR=2.3 | | | | | | | |
| comp=E,0.2nm,0.6s | | | | | | | |

*IDC **12** 16:26:17.2±0.8,2˚.39N×128˚.69E,h0km,mb4.0/10, mbtmp4.0/10,Error ellipse: s-maj=49.7km s-min=17.4km az=76.0*
*DJA **12** 16:26:20.6±0.7,2˚N±6˚×12˚9E±˚,h10km,M4.3/9,mb4.5/3, MLv4.2/9*
*NEIC **12** 16:26:23.4±1.1,2˚.37N±0˚.09×128˚.81E±0˚.06,h43km±9km, mb4.4/11,Error ellipse: s-maj=14.3km s-min=6.8km az=203.0*
**ISC 12 16:26:22.6±0.6,2˚40N±0˚.08×128˚8E±0˚.1,h35km,n34,**

σ1ᵍ00/36, **mb4.2**/15, **Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.18** | **222** | | **Pn** | **16 26 56.9** | **+0.5** |
| **TNTI** | **Ternate** | **2.18** | **222** | P | **Pn** | **16 26 56.8** | **+0.4** |
| **LBMI** | **Labuha** | **3.30** | **204** | P | **Pn** | **16 27 13.4** | **+1.6** |
| **SWI** | **Sorong** | **4.05** | **143** | P | **Pn** | **16 27 20.9** | **-1.2** |
| **KMSI** | **Cibinong** | **5.18** | **250** | P | **Pn** | **16 27 38.5** | **+0.8** |
| | 294nm,0.8s | | | | | | |
| **NLAI** | **Namlea** | **5.86** | **197** | P | **Pn** | **16 27 48.2** | **+1.1** |
| **FAKI** | **Fak Fak** | **6.29** | **147** | Pn | **Pn** | **16 27 53.0** | **0.0** |
| **LUWI** | **Luwuk** | **6.96** | **241** | Pn | **Pn** | **16 28 02.2** | **+0.1** |
| **TOLI2** | **Tolitoli** | **8.15** | **261** | Pn | **Pn** | **16 28 18.2** | **-0.3** |
| **KNRA** | **Kununurra** | **17.96** | **180** | P | **Pn** | **16 30 28.5** | **-1.2** |
| KNRA | | | | IAmb | IAmb | 16 30 54.6 | |
| | comp=Z,41nm,1.4s | | | | | | |
| **YHNB** | **Yeheng** | **23.28** | **343** | P | **P** | **16 31 28.2** | **+0.9** |
| **AS31** | **Alice Springs** | **26.38** | **169** | P | **P** | **16 31 54.4** | **-1.4** |
| **ASAR** | **Alice Springs** | **26.38** | **169** | P | **P** | **16 31 55.5** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=352,slow=8.2,SNR=6.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 35 22.5** | **+1.3** |
| | comp=Z,0.3nm,0.5s,baz=347,slow=2.5,SNR=1.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **16 39 02.1** | **+3.5** |
| | comp=Z,0.5nm,0.8s,baz=331,slow=3.0,SNR=5.2 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **34.89** | **359** | P | **P** | **16 33 10.2** | **-0.6** |
| | comp=Z,0.8nm,0.7s,baz=177,slow=9.6,SNR=5.1 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.06** | **13** | P | **P** | **16 33 12.1** | **-0.2** |
| | comp=Z,1.1nm,0.7s,baz=185,slow=8.4,SNR=6.0 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **36.18** | **161** | P | **P** | **16 33 21.7** | **-0.2** |
| **STKA** | **Stephens Creek** | **36.18** | **161** | P | **P** | **16 33 21.5** | **-0.4** |
| | comp=Z,1.9nm,0.8s,baz=318,slow=11,SNR=3.2 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.72** | **3** | P | **P** | **16 34 08.6** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **41.72** | **3** | P | **P** | **16 34 08.1** | **0.0** |
| | comp=Z,1.2nm,0.7s,baz=170,slow=8.3,SNR=7.2 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **42.67** | **160** | P | **P** | **16 34 16.4** | **+0.4** |
| **SONM** | **Songino Array** | **49.24** | **340** | P | **P** | **16 35 08.5** | **+0.7** |
| SONM | | | | IAmb | IAmb | 16 35 09.3 | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **49.24** | **340** | P | **P** | **16 35 07.6** | **-0.1** |
| | comp=Z,1.4nm,0.7s,baz=150,slow=8.5,SNR=7.1 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **59.84** | **325** | P | **P** | **16 36 24.4** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 16 36 30.9 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.84** | **325** | P | **P** | **16 36 24.4** | **-0.3** |
| **MKAR** | **Makanchi Array** | **59.84** | **325** | P | **P** | **16 36 24.6** | **0.0** |
| | comp=Z,1.6nm,0.6s,baz=117,slow=7.7,SNR=15 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **60.03** | **325** | P | **P** | **16 36 24.6** | **-1.4** |
| MAKZ | | | | IAmb | IAmb | 16 36 32.1 | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.72** | **332** | P | **P** | **16 36 43.0** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=116,slow=6.9,SNR=5.3 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **63.99** | **327** | P | **P** | **16 36 51.6** | **-0.8** |
| KURK | | | | IAmb | IAmb | 16 36 58.3 | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.99** | **327** | P | **P** | **16 36 51.9** | **-0.5** |
| | comp=Z,2.4nm,0.6s,baz=127,slow=6.4,SNR=25 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **KKAR** | **Karatay Array** | **65.63** | **317** | P | **P** | **16 37 03.2** | **-0.2** |
| **BVAR** | **Borovoye Array** | **69.58** | **327** | P | **P** | **16 37 26.8** | **-1.2** |
| | comp=Z,1.9nm,0.7s,baz=119,slow=9.2,SNR=7.0 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **69.65** | **327** | P | **P** | **16 37 27.7** | **-0.7** |
| BRVK | | | | IAmb | IAmb | 16 37 34.2 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **74.50** | **321** | P | **P** | **16 37 56.9** | **-0.7** |
| **VNDA** | **Vanda** | **81.86** | **173** | P | **P** | **16 38 37.5** | **-0.3** |
| VNDA | | | | IAmb | IAmb | 16 38 54.4 | |
| | comp=Z,1.8nm,1.1s | | | | | | |

**NOU 12 16:27:36.1, 16°.63S×167°.48E, h16km, MLv4.0**/15,
**Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **1.28** | **148** | P | Pn | 16 27 59.6 | +0.2 |
| **RTV** | **Rentapao** | **1.47** | **142** | P | Pn | 16 28 02.0 | +0.1 |
| **MARNC** | **Mare, Loyalty** | **4.85** | **174** | P | Pn | 16 28 48.8 | +0.3 |
| **KOUNC** | **Koumac, New Ca** | **4.94** | **217** | P | Pn | 16 28 50.1 | +0.4 |
| **YATNC** | **Mamie plateau,** | **5.43** | **186** | P | Pn | 16 28 56.2 | -0.2 |
| **DZM** | **Mont Dzumac** | **5.50** | **190** | P | Pn | 16 28 57.4 | -0.1 |
| **NOUC** | **Port Laguerre** | **5.55** | **191** | P | Pn | 16 28 58.6 | +0.5 |
| **ONTNC** | **Ouen Toro** | **5.73** | **190** | P | Pn | 16 29 00.6 | 0.0 |
| **PINNC** | **Pines Island,** | **5.95** | **180** | P | Pn | 16 29 04.1 | +0.5 |

*SDD **12** 16:29:17.9±2.0, 18°.68N×73°.45W, h18km±171km, MD3.6, ML2.9, MW3.4*
*OSPL **12** 16:29:18.5±3.5, 18°.70N×73°.55W, h0km±26km, ML2.7*
*SSNC **12** 16:29:19.6±0.8, 18°.62N×73°.59W, h14km±11km, MD3.1, ML2.4, MW3.0*

**ISC 12 16:29:15.5**±1.3, **18°.74N**±0°.07×**73°.46W**±0°.03, **h15**km±11km, **n19**, σ1ᵍ**02**/36, **6C-9D, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIDR** | **Jimani** | **1.55** | **99** | ⇓*e*Pg | **Pg** | **16 29 45.6** | **+0.3** |
| JIDR | | | | ⇓*e*Sg | **Sb** | **16 30 02.9** | **-0.4** |
| JIDR | | | | IAML | | 16 30 07.8 | |
| | comp=N,158nm,0.3s | | | | | | |
| **MASC** | **Masc** | **1.61** | **333** | *e*P | **Pb** | **16 29 45.4** | **+0.6** |
| MASC | | | | *e*S | **Sb** | **16 30 05.5** | **+0.5** |
| MASC | | | | IAML | | 16 30 08.1 | |
| | comp=N,43nm,0.7s | | | | | | |
| MASC | | | | IAML | | 16 30 15.4 | |
| | comp=E,44nm,0.1s | | | | | | |
| **MASC** | **Masc** | **1.61** | **333** | *i* P | **Pb** | **16 29 45.5** | **+0.6** |
| MASC | | | | ⇓*e*S | **Sb** | **16 30 05.4** | **+0.4** |
| MASC | | | | IAML | | 16 30 07.7 | |
| | comp=Z,34nm,1.8s | | | | | | |
| **QMBU** | **Quimbuelo** | **1.94** | **319** | *e*P | **Pn** | **16 29 48.8** | **+0.8** |
| QMBU | | | | *e*S | **Sn** | **16 30 12.6** | **+0.5** |
| QMBU | | | | IAML | | 16 30 21.1 | |
| | comp=N,25nm,0.3s | | | | | | |
| QMBU | | | | IAML | | 16 30 25.3 | |
| | comp=E,28nm,0.5s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.96** | **308** | ⇑*e*Pg | **Pb** | **16 29 51.6** | **+0.8** |
| GTBY | | | | ⇓*e*Sg | **Sg** | **16 30 18.3** | **-0.2** |
| GTBY | | | | IAML | | 16 30 31.0 | |
| | comp=N,33nm,0.7s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.96** | **308** | *e*P | **Pb** | **16 29 50.5** | **-0.4** |
| GTBY | | | | *e*S | **Sb** | **16 30 15.2** | **+0.1** |
| GTBY | | | | IAML | | 16 30 24.8 | |
| | comp=N,32nm,0.3s | | | | | | |
| GTBY | | | | IAML | | 16 30 26.7 | |
| | comp=N,40nm,0.7s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.96** | **308** | *i* P | **Pg** | **16 29 52.4** | **-0.7** |
| GTBY | | | | ⇓*e*S | **Sb** | **16 30 15.1** | **0.0** |
| GTBY | | | | IAML | | 16 30 20.2 | |
| | comp=Z,14nm,1.9s | | | | | | |
| **REDR** | **Restauracion** | **2.00** | **77** | ⇑*e*Pg | **Pn** | **16 29 48.5** | **-0.4** |
| REDR | | | | ⇓*e*Sg | **Sn** | **16 30 10.6** | **-3.1** |
| REDR | | | | IAML | | 16 30 11.5 | |
| | comp=N,205nm,0.6s | | | | | | |
| **MCDR** | **Montecristi** | **2.06** | **56** | ⇓*e*Pg | **Pb** | **16 29 52.2** | **-0.3** |
| MCDR | | | | ⇓*e*Sg | **Sg** | **16 30 20.9** | **-0.8** |
| MCDR | | | | IAML | | 16 30 23.1 | |
| | comp=N,108nm,0.9s | | | | | | |
| **SDDR** | **Presa de Saban** | **2.07** | **83** | ⇑*e*Pg | **Pb** | **16 29 53.8** | **+0.9** |
| SDDR | | | | ⇑*e*Sg | **Sb** | **16 30 19.8** | **+1.2** |
| SDDR | | | | IAML | | 16 30 21.4 | |
| | comp=N,80nm,1.2s | | | | | | |
| **SDDR** | **Presa de Saban** | **2.07** | **83** | *e*P | **Pb** | **16 29 53.8** | **+0.9** |
| SDDR | | | | *e*S | **Sb** | **16 30 19.0** | **+0.4** |
| SDDR | | | | IAML | | 16 30 22.2 | |
| | comp=N,80nm,0.2s | | | | | | |
| SDDR | | | | IAML | | 16 30 22.6 | |
| | comp=N,70nm,0.4s | | | | | | |
| **SDDR** | **Presa de Saban** | **2.07** | **83** | *i* P | **Pb** | **16 29 53.8** | **+0.9** |
| SDDR | | | | *e*S | **Sb** | **16 30 19.8** | **+1.2** |
| SDDR | | | | IAML | | 16 30 24.8 | |
| | comp=Z,47nm,0.7s | | | | | | |
| **PODR** | **Polo** | **2.15** | **105** | *i* P | **Pb** | **16 29 54.1** | **-0.1** |
| PODR | | | | *e*S | **Sg** | **16 30 24.7** | **+0.1** |
| PODR | | | | IAML | | 16 30 30.4 | |
| | comp=Z,59nm,1.6s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **2.34** | **106** | ⇑*e*Pg | **Pb** | **16 29 57.5** | **0.0** |
| LOBA2 | | | | ⇓*e*Sg | **Sb** | **16 30 27.8** | **+1.6** |
| **RCC** | **Rio Carpintero** | **2.45** | **301** | *e*P | **Pn** | **16 29 56.3** | **+1.3** |
| RCC | | | | *e*S | **Sn** | **16 30 26.5** | **+1.7** |
| RCC | | | | IAML | | 16 30 32.5 | |
| | comp=N,12nm,0.3s | | | | | | |
| RCC | | | | IAML | | 16 30 32.9 | |
| | comp=E,16nm,0.7s | | | | | | |
| **MARVS** | **Santiago de Cu** | **2.62** | **299** | *e*P | **Pb** | **16 30 01.6** | **-0.7** |
| MARVS | | | | *e*S | **Sb** | **16 30 34.6** | **+0.3** |
| MARVS | | | | IAML | | 16 30 38.2 | |
| | comp=E,13nm,0.1s | | | | | | |
| MARVS | | | | IAML | | 16 30 38.4 | |
| | comp=N,0.3nm,0.1s | | | | | | |
| **ABDR** | **Alto Bandera** | **2.69** | **88** | ⇓*e*Pg | **Pb** | **16 30 03.4** | **-0.2** |
| **CHIV** | **Chivirico** | **3.05** | **294** | *e*P | **Pb** | **16 30 09.4** | **-0.1** |
| **LMGC** | **Las Mercedes** | **3.60** | **292** | *e*P | **Pn** | **16 30 10.8** | **0.0** |
| LMGC | | | | *e*S | **Sn** | **16 30 50.6** | **-2.4** |
| LMGC | | | | IAML | | 16 30 52.7 | |
| | comp=E,6.5nm,0.0s | | | | | | |
| LMGC | | | | IAML | | 16 30 54.7 | |
| | comp=N,9.7nm,0.0s | | | | | | |

*IDC **12** 16:32:54.9±0.9, 69°.58N×144°.88W, h0km, mb3.9/8, mbtmp3.8/11, ML3.5/3, Error ellipse: s-maj=25.1km s-min=15.0km az=84.0*
*AEIC **12** 16:32:54.8±0.9, 69°.51N±0°.04×144°.39W±0°.07, h4km±5km, ML3.7, ML3.8/62(NEIC), Error ellipse: s-maj=5.7km s-min=2.6km az=203.0*
*NEIC **12** 16:32:54.6±0.6, 69°.53N±0°.05×144°.36W±0°.06, h4km±5km, Error ellipse: s-maj=7.7km s-min=0.7km az=204.0*

**ISC 12 16:32:56.0**±0.6, **69°.51N**±0°.04×**144°.42W**±0°.03, **h14**km, **n70**, σ1ᵍ**10**/60, **mb3.9/8, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.27** | **65** | | **Pg** | **16 32 59.5** | **-2.3** |
| **C26K** | **Camden Bay** | **0.44** | **337** | | **Pg** | **16 33 03.1** | **-1.7** |
| **C26K** | **Camden Bay** | **0.44** | **337** | | **Sg** | **16 33 09.9** | **-0.8** |
| **D25K** | **Kavik River** | **0.72** | **256** | | **Pg** | **16 33 07.7** | **-2.2** |
| **D25K** | **Kavik River** | **0.72** | **256** | | **Sg** | **16 33 18.7** | **-0.7** |
| **D25K** | **Kavik River** | **0.72** | **256** | IAML | | 16 33 23.0 | |
| | comp=N,1μm,0.8s | | | | | | |
| D25K | | | | IAML | | 16 33 26.5 | |
| | comp=E,1μm,0.8s | | | | | | |
| **D27M** | **Malcolm River** | **1.25** | **101** | | **Pn** | **16 33 18.2** | **-0.9** |
| D27M | | | | | **Sb** | **16 33 35.5** | **+0.1** |
| **D27M** | **Malcolm River** | **1.25** | **101** | IAML | | 16 33 40.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **280** | | **Pn** | **16 33 21.7** | **-0.9** |
| C24K | | | | IAML | | 16 33 46.9 | |
| | comp=N,2μm,0.9s | | | | | | |
| C24K | | | | IAML | | 16 33 47.3 | |
| | comp=E,2μm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **280** | | **Sb** | **16 33 43.4** | **+0.6** |
| **D24K** | **Happy Valley** | **1.60** | **259** | | **Pn** | **16 33 23.8** | **-0.1** |
| D24K | | | | | **Sb** | **16 33 46.0** | **+0.5** |
| **D24K** | **Happy Valley** | **1.60** | **259** | IAML | | 16 33 50.1 | |
| | comp=N,1μm,0.7s | | | | | | |
| D24K | | | | IAML | | 16 34 11.1 | |
| | comp=E,1μm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **141** | | **Pn** | **16 33 24.4** | **-0.6** |
| E27K | | | | IAML | | 16 33 52.6 | |
| | comp=N,791nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **141** | | **Sb** | **16 33 47.7** | **+0.1** |
| **F26K** | **Sheenjek River** | **1.83** | **177** | | **Pn** | **16 33 26.9** | **-0.1** |
| **F26K** | **Sheenjek River** | **1.83** | **177** | IAML | | 16 33 55.5 | |
| | comp=E,1μm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **115** | | **Pn** | **16 33 28.9** | **-0.2** |
| **F25K** | **Christian Rive** | **1.98** | **194** | | **Pn** | **16 33 28.9** | **-0.2** |
| **F25K** | **Christian Rive** | **1.98** | **194** | IAML | | 16 34 01.7 | |
| | comp=N,641nm,0.9s | | | | | | |
| F25K | | | | IAML | | 16 34 02.9 | |
| | comp=E,673nm,1.4s | | | | | | |
| **D28M** | **Stokes Point** | **2.02** | **93** | | **Pn** | **16 33 29.2** | **-0.3** |
| **TOLK** | **Toolik Lake Re** | **2.05** | **247** | | **Pn** | **16 33 30.2** | **+0.2** |
| **TOLK** | **Toolik Lake Re** | **2.05** | **247** | IAML | | 16 34 46.0 | |
| | comp=E,626nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.07** | **228** | | **Pn** | **16 33 30.3** | **0.0** |
| **E24K** | **Your Creek** | **2.07** | **228** | IAML | | 16 34 47.7 | |
| | comp=E,704nm,0.9s | | | | | | |
| E24K | | | | IAML | | 16 34 48.1 | |
| | comp=N,507nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.19** | **281** | | **Pn** | **16 33 31.9** | **0.0** |
| **D23K** | **Nanushuk River** | **2.30** | **259** | | **Pn** | **16 33 33.4** | **-0.1** |
| **D23K** | **Nanushuk River** | **2.30** | **259** | IAML | | 16 34 56.0 | |
| | comp=E,787nm,1.4s | | | | | | |
| D23K | | | | IAML | | 16 35 00.7 | |
| | comp=N,728nm,1.1s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **214** | | **Pn** | **16 33 34.4** | **-0.1** |
| **F24K** | **Squaw Lake** | **2.38** | **214** | IAML | | 16 35 00.8 | |
| | comp=E,422nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.39** | **235** | | **Pn** | **16 33 34.8** | **+0.1** |
| **E23K** | **Chandalar** | **2.39** | **235** | IAML | | 16 34 57.2 | |
| | comp=E,505nm,0.6s | | | | | | |
| E23K | | | | IAML | | 16 35 03.1 | |
| | comp=N,397nm,1.1s | | | | | | |
| **F28M** | **Old Crow** | **2.53** | **137** | | **Pn** | **16 33 36.5** | **-0.1** |
| **F28M** | **Old Crow** | **2.53** | **137** | IAML | | 16 34 23.3 | |
| | comp=E,361nm,0.7s | | | | | | |
| F28M | | | | IAML | | 16 34 29.2 | |
| | comp=N,394nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **174** | | **Pn** | **16 33 37.3** | **0.0** |
| **E29M** | **Blow River** | **2.61** | **113** | | **Pn** | **16 33 37.4** | **-0.3** |
| **E29M** | **Blow River** | **2.61** | **113** | IAML | | 16 34 26.2 | |
| | comp=E,436nm,0.7s | | | | | | |
| E29M | | | | IAML | | 16 34 28.5 | |
| | comp=N,488nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **2.91** | **158** | | **Pn** | **16 33 41.4** | **-0.3** |
| **E22K** | **Anaktuvuk Pass** | **3.02** | **246** | Pn | **Pn** | **16 33 43.9** | **+0.6** |
| E22K | | | | IAML | | 16 35 18.5 | |
| | comp=N,220nm,0.7s | | | | | | |
| E22K | | | | IAML | | 16 35 24.6 | |
| | comp=E,246nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.05** | **204** | | **Pn** | **16 33 43.5** | **-0.2** |
| **B22K** | **Teshekpuk Lake** | **3.21** | **289** | Pn | **Pn** | **16 33 46.5** | **+0.6** |
| **G29M** | **Pine Creek** | **3.54** | **135** | | **Pn** | **16 33 50.1** | **-0.3** |
| **G29M** | **Pine Creek** | **3.54** | **135** | IAML | | 16 34 59.5 | |
| | comp=N,288nm,1.1s | | | | | | |
| G29M | | | | IAML | | 16 34 59.7 | |
| | comp=E,402nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.58** | **277** | Pn | **Pn** | **16 33 51.6** | **+0.6** |
| **H24K** | **Noodor Dome** | **3.92** | **201** | | **Sn** | **16 34 41.8** | **+0.3** |
| **G30M** | **tAoh Zraii Nji** | **3.97** | **126** | | **Sn** | **16 34 44.7** | **+2.1** |
| **H29M** | **Whitestone** | **4.02** | **142** | | **Pn** | **16 33 56.8** | **-0.3** |
| **H29M** | **Whitestone** | **4.02** | **142** | IAML | | 16 34 48.2 | |
| | comp=E,183nm,0.7s | | | | | | |
| H29M | | | | IAML | | 16 35 12.8 | |
| | comp=N,123nm,1.2s | | | | | | |
| **INK** | **Inuvik** | **4.12** | **102** | Pn | **Pn** | **16 34 02.5** | **+4.1** |
| | comp=N,1.9nm,0.3s,baz=353,slow=13,SNR=3.6 | | | | | | |
| INK | | | | Sn | **Sn** | **16 34 46.5** | **+0.3** |
| | comp=N,3.8nm,0.3s,baz=282,slow=14,SNR=4.1 | | | | | | |
| | comp=N,5.9nm,0.4s | | | | | | |
| **D20K** | **Etivluk River** | **4.44** | **265** | | **Pn** | **16 34 02.6** | **-0.2** |
| **ILAR** | **Eielson Array** | **4.86** | **193** | Pn | **Pn** | **16 34 07.4** | **-1.2** |
| | comp=N,2.2nm,0.3s,baz=8.6,slow=14,SNR=5.4 | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 35 04.6** | **+0.1** |
| | comp=N,1.3nm,0.3s,baz=14,slow=16,SNR=5.4 | | | | | | |
| ILAR | | | | Lg | Lg | 16 35 31.4 | |
| | comp=N,2.4nm,0.3s,baz=15,slow=22,SNR=6.4 | | | | | | |
| | comp=N,6.8nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **4.92** | **164** | | **Pn** | **16 34 09.4** | **0.0** |
| **H21K** | **Melozitna Rive** | **5.03** | **224** | Pn | **Pn** | **16 34 11.1** | **+0.2** |
| H21K | | | | IAML | | 16 35 46.8 | |
| | comp=N,85nm,1.1s | | | | | | |
| H21K | | | | IAML | | 16 36 28.9 | |
| | comp=E,80nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **5.14** | **252** | Pn | **Pn** | **16 34 12.8** | **+0.3** |
| **I30M** | **Mount Dempster** | **5.31** | **140** | Pn | **Pn** | **16 34 15.2** | **+0.3** |
| I30M | | | | IAML | | 16 35 19.4 | |
| | comp=N,50nm,0.6s | | | | | | |
| I30M | | | | IAML | | 16 35 19.5 | |
| | comp=E,69nm,0.6s | | | | | | |
| **SCRK** | **Sand Creek** | **5.56** | **178** | | **Pn** | **16 34 18.8** | **+0.5** |
| **F19K** | **Shaleruckik Mo** | **5.66** | **248** | Pn | **Pn** | **16 34 18.6** | **-0.9** |
| **DOT** | **Dot Lake** | **5.89** | **178** | | **Pn** | **16 34 24.7** | **+1.9** |
| **C18K** | **Utukok River** | **6.07** | **270** | Pn | **Pn** | **16 34 25.1** | **-0.1** |
| **L27K** | **Beaver Creek,** | **6.56** | **170** | | **Pn** | **16 34 31.8** | **-0.2** |
| **L29M** | **L29M** | **6.91** | **156** | | **Pn** | **16 34 37.4** | **+0.7** |
| **Q32M** | **Nakina River** | **11.80** | **148** | | **Pn** | **16 35 43.0** | **-0.8** |
| **YKA** | **Yellowknife Ar** | **13.88** | **106** | Pn | **Pn** | **16 36 08.8** | **-3.1** |
| | comp=E,0.3nm,0.3s,baz=301,slow=19,SNR=3.0 | | | | | | |
| YKA | | | | Sn | Sn | 16 38 31.7 | -14 |
| | comp=E,0.3nm,0.3s,baz=327,slow=8.6,SNR=2.4 | | | | | | |
| | comp=E,0.7nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.22** | **128** | P | **P** | **16 39 26.2** | **+2.6** |
| | comp=E,0.7nm,0.9s,baz=333,slow=5.8,SNR=3.9 | | | | | | |
| | comp=E,0.7nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **49.16** | **6** | P | **P** | **16 41 43.3** | **+0.7** |
| | comp=E,5.6nm,1.1s,baz=1.9,slow=11,SNR=5.4 | | | | | | |
| | comp=E,5.6nm,1.1s | | | | | | |
| **HFS** | **Hagfors** | **49.70** | **14** | P | **P** | **16 41 47.7** | **+0.9** |
| | comp=E,6.3nm,1.0s,baz=32,slow=3.6,SNR=5.8 | | | | | | |
| | comp=E,6.3nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.75** | **325** | P | **P** | **16 42 01.8** | **-0.5** |
| | comp=E,0.4nm,0.4s,baz=48,slow=8.6,SNR=2.6 | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.32** | **27** | P | **P** | **16 42 07.9** | **+1.4** |
| | comp=E,1.2nm,0.6s,baz=339,slow=6.4,SNR=4.9 | | | | | | |
| | comp=E,1.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.13** | **328** | P | **P** | **16 42 35.1** | **+0.8** |
| | comp=E,0.9nm,0.8s,baz=20,slow=7.3,SNR=6.7 | | | | | | |
| | comp=E,0.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.06** | **324** | P | **P** | **16 42 54.7** | **-0.3** |
| | comp=E,0.2nm,0.7s,baz=62,slow=10,SNR=1.3 | | | | | | |
| | comp=E,0.2nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **60.01** | **5** | P | **P** | **16 43 01.8** | **+0.3** |
| | comp=E,1.6nm,0.6s,baz=358,slow=6.8,SNR=6.3 | | | | | | |
| | comp=E,1.6nm,0.6s | | | | | | |

*IDC **12** 16:33:39.6±1.1, 69°.61N×145°.54W, h0km, mb3.9/6, mbtmp3.9/8, ML3.3/2, Error ellipse: s-maj=30.8km s-min=16.1km az=80.0*
*AEIC **12** 16:33:41.0±0.8, 69°.54N±0°.05×144°.86W±0°.10, h1km±3km, ML3.8, ML3.9/56(NEIC), Error ellipse: s-maj=6.9km s-min=4.6km az=198.0*
*NEIC **12** 16:33:41.3±0.6, 69°.58N±0°.04×144°.8W±0°.1, h7km±5km, Error ellipse: s-maj=5.9km s-min=4.5km az=224.0*

**ISC 12 16:33:41.2**±0.7, **69°.57N**±0°.04×**144°.87W**±0°.03, **h10**km, **n65**, σ0ᵍ**82**/61, **mb3.9/6, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.35** | **357** | | **Pg** | **16 33 48.0** | **-0.3** |
| **C26K** | **Camden Bay** | **0.35** | **357** | | **Sg** | **16 33 53.0** | **0.0** |
| C26K | | | | IAML | | 16 33 54.1 | |
| | comp=N,5μm,0.7s | | | | | | |
| C26K | | | | IAML | | 16 33 59.0 | |
| | comp=E,11μm,0.7s | | | | | | |
| **C27K** | **Jago River** | **0.41** | **81** | | **Sg** | **16 33 54.5** | **-0.1** |
| **D25K** | **Kavik River** | **0.59** | **246** | | **Pg** | **16 33 51.1** | **-1.4** |
| **D25K** | **Kavik River** | **0.59** | **246** | | **Sg** | **16 34 00.0** | **-0.3** |
| **C24K** | **Franklin Bluff** | **1.35** | **278** | | **Pn** | **16 34 06.8** | **+0.7** |
| C24K | | | | | **Sg** | **16 34 25.0** | **+0.4** |
| **C24K** | **Franklin Bluff** | **1.35** | **278** | IAML | | 16 34 29.1 | |
| | comp=N,3μm,1.3s | | | | | | |
| **D27M** | **Malcolm River** | **1.42** | **101** | | **Pn** | **16 34 07.5** | **+0.4** |
| **D24K** | **Happy Valley** | **1.46** | **255** | | **Pn** | **16 34 08.5** | **+0.9** |
| D24K | | | | | **Sg** | **16 34 28.6** | **+0.4** |
| **E27K** | **Coleen River** | **1.82** | **138** | | **Pn** | **16 34 13.1** | **+0.5** |
| **F26K** | **Sheenjek River** | **1.90** | **172** | | **Sn** | **16 34 38.9** | **+1.3** |
| **TOLK** | **Toolik Lake Re** | **1.93** | **243** | Pn | **Pn** | **16 34 14.5** | **+0.4** |
| TOLK | | | | IAML | | 16 34 47.6 | |
| | comp=N,1μm,1.0s | | | | | | |
| TOLK | | | | IAML | | 16 34 50.5 | |
| | comp=E,871nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **189** | Pn | **Pn** | **16 34 15.6** | **+0.5** |
| F25K | | | | IAML | | 16 34 48.0 | |
| | comp=E,842nm,1.2s | | | | | | |
| F25K | | | | IAML | | 16 34 49.8 | |
| | comp=N,872nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **2.87** | **260** | Pn | **Pn** | **16 34 27.6** | **+0.6** |
| D22K | | | | IAML | | 16 35 23.2 | |
| | comp=N,546nm,1.4s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.90** | **244** | | **Pn** | **16 34 28.0** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **3.05** | **289** | | **Pn** | **16 34 30.2** | **+0.8** |
| **H25L** | **Birch Creek** | **3.33** | **187** | | **Pn** | **16 34 33.7** | **+0.4** |
| **B21K** | **Ikpikpuk River** | **3.42** | **276** | | **Pn** | **16 34 34.6** | **+0.1** |
| **G23K** | **Bananza Creek** | **3.46** | **216** | Pn | **Pn** | **16 34 35.3** | **+0.2** |
| G23K | | | | IAML | | 16 35 36.2 | |
| | comp=E,320nm,0.9s | | | | | | |
| G23K | | | | IAML | | 16 35 37.4 | |
| | comp=N,192nm,1.4s | | | | | | |
| **E21K** | **Killik River** | **3.47** | **255** | | **Pn** | **16 34 35.9** | **+0.7** |
| **E21K** | **Killik River** | **3.47** | **255** | IAML | | 16 35 39.2 | |
| | comp=E,327nm,1.3s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.72** | **298** | | **Pn** | **16 34 39.5** | **+0.9** |
| **F21K** | **Alatna River** | **3.96** | **238** | | **Pn** | **16 34 42.5** | **+0.5** |
| **F21K** | **Alatna River** | **3.96** | **238** | IAML | | 16 35 53.9 | |
| | comp=N,143nm,0.7s | | | | | | |
| **D20K** | **Etivluk River** | **4.29** | **264** | | **Pn** | **16 34 47.1** | **+0.7** |
| **B20K** | **Meade River** | **4.29** | **282** | | **Pn** | **16 34 47.2** | **+0.8** |
| **A21K** | **Barrow** | **4.33** | **300** | | **Pn** | **16 34 47.7** | **+0.9** |
| **G21K** | **Allakaket** | **4.46** | **231** | Pn | **Pn** | **16 34 49.3** | **+0.5** |
| G21K | | | | IAML | | 16 36 11.4 | |
| | comp=E,160nm,1.1s | | | | | | |
| G21K | | | | IAML | | 16 36 16.2 | |
| | comp=N,128nm,1.2s | | | | | | |
| **POKR** | **Poker Flat Res** | **4.58** | **194** | Pn | **Pn** | **16 34 51.2** | **+0.8** |
| POKR | | | | IAML | | 16 35 29.7 | |
| | comp=E,136nm,1.0s | | | | | | |
| **G31M** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PDAR | **Pinedale Array** | **32.38** | **127** | P | | **P** | **16 40 12.1** | **+1.2** |
| | comp=N,0.7nm,0.8s,baz=4.3,slow=5.9,SNR=5.4 | | | | | | | | |
| | comp=N,0.7nm,0.8s | | | | | | | | |
| NVAR | **Mina Array Bea** | **34.28** | **141** | P | | **P** | **16 40 29.5** | **+2.1** |
| | comp=N,0.9nm,0.9s,baz=321,slow=7.8,SNR=5.0 | | | | | | | | |
| | comp=N,0.9nm,0.9s | | | | | | | | |
| FINES | **FINESS Array B** | **49.12** | **6** | P | | **P** | **16 42 27.8** | **-0.3** |
| | comp=N,1.3nm,0.8s,baz=2.5,slow=9.7,SNR=1.4 | | | | | | | | |
| | comp=N,1.3nm,0.8s | | | | | | | | |
| HFS | **Hagfors** | **49.69** | **14** | P | | **P** | **16 42 32.2** | **-0.3** |
| | comp=N,4.4nm,1.0s,baz=337,slow=6.3,SNR=4.9 | | | | | | | | |
| | comp=N,4.4nm,1.0s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **56.00** | **328** | P | | **P** | **16 43 19.0** | **-0.3** | |
| | comp=N,0.8nm,0.8s,baz=28,slow=7.4,SNR=4.1 | | | | | | | | |
| | comp=N,0.8nm,0.8s | | | | | | | | |

*IDC* ***12*** *16:35:31.5±1.0,2°.37N×128°.78E,h0km,mb3.9/7, mbtmp3.9/7,Error ellipse: s-maj=56.3km s-min=18.6km az=75.0*

*NEIC* ***12*** *16:35:32.8±1.2,2°.36N±0°.10×128°.67E±0°.08,h7km±6km, mb4.4/13,Error ellipse: s-maj=14.7km s-min=9.7km az=151.0*

**ISC 12 16:35:36.2**±0.6,**2°.33N**±0°.08×**128°.78E**±0°.1,**h35**km,**n26, s0§69/26,mb4.3/14,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| TNTI | **Ternate** | **2.03** | **220** | | | **Pn** | **16 36 06.7** | **-1.3** |
| FAKI | **Fak Fak** | **6.31** | **146** | Pn | | **Pn** | **16 37 05.6** | **-1.2** |
| AS31 | **Alice Springs** | **26.33** | **169** | P | | **P** | **16 41 09.1** | **+0.1** |
| ASAR | **Alice Springs** | **26.33** | **169** | P | | **P** | **16 41 09.0** | **-0.1** |
| ASAR | **Alice Springs** | **26.33** | **169** | P | | **P** | **16 41 09.6** | **+0.5** |
| | 0.3nm,0.4s,baz=353,slow=8.2,SNR=17 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| MNAI | **Manna** | **26.56** | **256** | P | | **P** | **16 41 11.1** | **-0.1** |
| GIRL | **Giralia** | **28.55** | **209** | P | | **P** | **16 41 29.6** | **+0.7** |
| INU | **Inuyama** | **33.75** | **12** | P | | **P** | **16 42 14.5** | **-0.1** |
| INU | | | | IAmb | | IAmb | 16 42 21.0 | |
| | comp=Z,9.6nm,1.3s | | | | | | | |
| MAJO | **Matsushiro** | **35.16** | **13** | P | | **P** | **16 42 25.9** | **-0.9** |
| MAJO | | | | IAmb | | IAmb | 16 43 08.6 | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| MJAR | **Matsushiro Arr** | **35.16** | **13** | P | | **P** | **16 42 26.2** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=191,slow=8.6,SNR=6.6 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| MJB9 | **Matsu-Tunnel** | **35.17** | **13** | P | | **P** | **16 42 25.9** | **-0.9** |
| MJB9 | | | | IAmb | | IAmb | 16 43 08.6 | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| STKA | **Stephens Creek** | **36.16** | **161** | P | | **P** | **16 42 35.4** | **0.0** |
| STKA | **Stephens Creek** | **36.16** | **161** | P | | **P** | **16 42 35.8** | **+0.4** |
| | comp=Z,2.2nm,0.7s,baz=326,slow=6.4,SNR=3.9 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| USRK | **Ussuriysk Ar.** | **41.80** | **4** | P | | **P** | **16 43 23.2** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=186,slow=8.5,SNR=2.6 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| TAU | **Tasmania Unive** | **48.07** | **162** | P | | **P** | **16 44 13.2** | **+0.9** |
| SONM | **Songino Array** | **49.25** | **340** | P | | **P** | **16 44 21.0** | **-0.6** |
| MK31 | **Makanchi Array** | **59.81** | **325** | P | | **P** | **16 45 38.2** | **+0.1** |
| MK31 | | | | IAmb | | IAmb | 16 46 02.9 | |
| | comp=Z,3.5nm,1.3s | | | | | | | |
| MKAR | **Makanchi Array** | **59.81** | **325** | P | | **P** | **16 45 38.5** | **+0.4** |
| MKAR | **Makanchi Array** | **59.81** | **325** | P | | **P** | **16 45 39.3** | **+1.1** |
| | comp=Z,1.1nm,0.5s,baz=113,slow=8.0,SNR=18 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| MAKZ | **Makanchi** | **60.00** | **325** | P | | **P** | **16 45 39.9** | **+0.4** |
| MAKZ | | | | IAmb | | IAmb | 16 46 15.1 | |
| | comp=Z,6.1nm,1.3s | | | | | | | |
| ZALV | **Zalesovo Beam** | **62.72** | **333** | P | | **P** | **16 45 56.8** | **-0.8** |
| ZALV | **Zalesovo Beam** | **62.72** | **333** | P | | **P** | **16 45 57.3** | **-0.2** |
| | comp=Z,0.9nm,0.5s,baz=121,slow=6.9,SNR=3.8 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| KURBB | **Kurchatov Arra** | **63.97** | **327** | P | | **P** | **16 46 06.7** | **+0.8** |
| | comp=Z,1.6nm,0.5s,baz=126,slow=6.5,SNR=14 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| KURK | **Kurchatov** | **63.97** | **327** | P | | **P** | **16 46 06.3** | **+0.4** |
| KURK | | | | IAmb | | IAmb | 16 46 07.3 | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| BRVK | **Borovoye** | **69.62** | **327** | P | | **P** | **16 46 41.7** | **-0.2** |
| BRVK | | | | IAmb | | IAmb | 16 46 42.8 | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| ABKAR | **Akbulak array** | **74.46** | **321** | P | | **P** | **16 47 10.9** | **-0.1** |

*IDC* ***12*** *16:39:28.0±1.0,69°.74N×145°.04W,h0km,mb3.6/7, mbtmp3.7/11,ML3.8/4,Error ellipse: s-maj=24.3km s-min=16.2km az=71.0*

*AEIC* ***12*** *16:39:29.9±0.6,69°.58N±0°.05×144°.9W±0°.1,h6km±6km, ML3.7,ML3.9/102(NEIC),Error ellipse: s-maj=8.3km s-min=5.9km az=198.0*

*NEIC* ***12*** *16:39:29.7±0.9,69°.62N±0°.05×144°.9W±0°.1,h10km±7km, Error ellipse: s-maj=8.4km s-min=5.5km az=203.0*

**ISC 12 16:39:28.7**±0.6,**69°.61N**±0°.04×**144°.82W**±0°.03,**h10**km,**n82, s1§13/67,mb3.6/7,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| C26K | **Camden Bay** | **0.31** | **354** | | | **Pb** | **16 39 36.4** | **0.0** |
| C26K | | | | | | **Sb** | **16 39 41.4** | **-0.1** |
| C27K | **Jago River** | **0.39** | **87** | | | **Pb** | **16 39 37.8** | **+0.1** |
| C27K | | | | | | **Sb** | **16 39 43.9** | **+0.1** |
| D25K | **Kavik River** | **0.62** | **243** | | | **Sg** | **16 39 48.0** | **-0.9** |
| D25K | **Kavik River** | **0.62** | **243** | | | **Pg** | **16 39 39.6** | **-1.1** |
| D25K | | | | IAML | | | 16 39 53.4 | |
| | comp=N,1μm,0.5s | | | | | | | |
| D25K | | | | IAML | | | 16 39 53.6 | |
| | comp=E,2μm,0.6s | | | | | | | |
| C24K | **Franklin Bluff** | **1.36** | **276** | | | **Pn** | **16 39 54.7** | **+0.9** |
| C24K | | | | | | **Sg** | **16 40 13.1** | **+0.7** |
| D27M | **Malcolm River** | **1.41** | **103** | | | **Pb** | **16 39 55.6** | **+0.5** |
| D27M | **Malcolm River** | **1.41** | **103** | IAML | | | 16 40 19.0 | |
| | comp=N,2μm,0.3s | | | | | | | |
| D27M | | | | IAML | | | 16 40 24.2 | |
| | comp=E,1μm,0.6s | | | | | | | |
| D24K | **Happy Valley** | **1.49** | **254** | | | **Sb** | **16 40 16.9** | **+1.5** |
| D24K | **Happy Valley** | **1.49** | **254** | | | **Pn** | **16 39 56.3** | **+0.8** |
| E27K | **Coleen River** | **1.85** | **139** | | | **Pn** | **16 40 01.9** | **+1.4** |
| E27K | **Coleen River** | **1.85** | **139** | IAML | | | 16 40 32.1 | |
| | comp=E,863nm,0.7s | | | | | | | |
| F26K | **Sheenjek River** | **1.94** | **172** | | | **Pn** | **16 40 03.5** | **+1.7** |
| TOLK | **Toolik Lake Re** | **1.96** | **242** | | | **Pn** | **16 40 02.6** | **+0.5** |
| TOLK | | | | IAML | | | 16 40 37.5 | |
| | comp=E,713nm,0.7s | | | | | | | |
| C23K | **Itkillik River** | **2.03** | **279** | | | **Pn** | **16 40 03.8** | **+0.9** |
| E24K | **Your Creek** | **2.04** | **222** | | | **Pn** | **16 40 04.1** | **+1.0** |
| E28M | **Babbage River** | **2.15** | **116** | | | **Pn** | **16 40 05.2** | **+0.6** |
| E28M | | | | IAML | | | 16 40 40.4 | |
| | comp=N,678nm,0.5s | | | | | | | |
| D28M | **Stokes Point** | **2.16** | **95** | | | **Pb** | **16 40 06.8** | **-1.1** |
| BMAR | **Burnt Mountain** | **2.19** | **178** | Pn | | **Pn** | **16 40 06.2** | **+0.9** |
| E23K | **Chandalar** | **2.34** | **230** | | | **Pn** | **16 40 08.5** | **+1.2** |
| F24K | **Squaw Lake** | **2.38** | **210** | | | **Pn** | **16 40 08.7** | **+0.8** |
| F24K | | | | IAML | | | 16 40 46.9 | |
| | comp=E,524nm,0.8s | | | | | | | |
| G26K | **Porcupine Rive** | **2.70** | **171** | | | **Pn** | **16 40 13.5** | **+1.4** |
| F28M | **Old Crow** | **2.71** | **136** | | | **Pn** | **16 40 13.5** | **+1.3** |
| F28M | | | | IAML | | | 16 41 01.4 | |
| | comp=E,392nm,0.5s | | | | | | | |
| F28M | | | | IAML | | | 16 41 02.2 | |
| | comp=N,374nm,0.6s | | | | | | | |
| E29M | **Blow River** | **2.78** | **113** | Pn | | **Pn** | **16 40 14.7** | **+1.5** |
| E29M | | | | IAML | | | 16 41 03.2 | |
| | comp=E,321nm,0.7s | | | | | | | |
| D22K | **Ayikyak River** | **2.89** | **259** | Pn | | **Pn** | **16 40 15.7** | **+0.8** |
| D22K | | | | IAML | | | 16 41 05.6 | |
| | comp=E,429nm,0.8s | | | | | | | |
| D22K | | | | IAML | | | 16 41 09.7 | |
| | comp=N,478nm,0.9s | | | | | | | |
| B22K | **Teshekpuk Lake** | **3.05** | **288** | Pn | | **Pn** | **16 40 18.0** | **+1.1** |
| G27K | **Doyon Strip** | **3.05** | **156** | | | **Pn** | **16 40 18.0** | **+0.9** |
| FYU | **Fort Yukon** | **3.06** | **183** | | | **Pn** | **16 40 18.3** | **+1.2** |
| FYU | | | | IAML | | | 16 41 12.4 | |
| | comp=E,406nm,1.3s | | | | | | | |
| G24K | **Hadweenzic Riv** | **3.09** | **200** | | | **Pn** | **16 40 18.1** | **+0.6** |
| G24K | | | | IAML | | | 16 41 12.8 | |
| | comp=E,396nm,0.9s | | | | | | | |
| COLD | **Coldfoot** | **3.11** | **222** | | | **Pn** | **16 40 17.9** | **+0.1** |
| H25L | **Birch Creek** | **3.38** | **187** | | | **Pn** | **16 40 22.6** | **+1.1** |
| B21K | **Ikpikpuk River** | **3.43** | **275** | Pn | | **Pn** | **16 40 22.9** | **+0.9** |
| B21K | | | | IAML | | | 16 41 26.7 | |
| | comp=E,312nm,1.1s | | | | | | | |
| F22K | **John River** | **3.43** | **235** | | | **Pn** | **16 40 22.8** | **+0.6** |
| E21K | **Killik River** | **3.49** | **255** | | | **Pn** | **16 40 23.5** | **+0.4** |
| E21K | | | | IAML | | | 16 41 28.7 | |
| | comp=N,212nm,0.8s | | | | | | | |
| H27K | **Steamboat Moun** | **3.62** | **158** | | | **Pn** | **16 40 26.2** | **+1.5** |
| G29M | **Pine Creek** | **3.71** | **134** | | | **Pn** | **16 40 27.3** | **+1.3** |
| A22K | **Sinclair Lake** | **3.71** | **297** | | | **Pn** | **16 40 26.8** | **+0.9** |
| H24K | **Noodor Dome** | **3.96** | **199** | Pn | | **Pn** | **16 40 29.9** | **+0.3** |
| H24K | | | | IAML | | | 16 41 34.1 | |
| | comp=E,178nm,0.9s | | | | | | | |
| H24K | | | | IAML | | | 16 41 36.5 | |
| | comp=N,133nm,0.6s | | | | | | | |
| F21K | **Alatna River** | **4.00** | **237** | Pn | | **Pn** | **16 40 30.6** | **+0.7** |
| F21K | | | | IAML | | | 16 41 45.7 | |
| | comp=E,120nm,0.8s | | | | | | | |
| PRP | **Porcupine Dome** | **4.12** | **184** | Pn | | **Pn** | **16 40 32.4** | **+0.6** |
| PRP | | | | IAML | | | 16 41 25.7 | |
| | comp=N,123nm,0.5s | | | | | | | |
| G30M | **tAoh Zraii Nji** | **4.14** | **126** | | | **Pn** | **16 40 33.3** | **+1.4** |
| G30M | | | | IAML | | | 16 41 56.0 | |
| | comp=E,106nm,0.9s | | | | | | | |
| H29M | **Whitestone** | **4.19** | **141** | Pn | | **Pn** | **16 40 33.6** | **+1.0** |
| H29M | | | | IAML | | | 16 41 59.4 | |
| | comp=N,155nm,1.0s | | | | | | | |
| H29M | | | | IAML | | | 16 41 59.5 | |
| | comp=E,153nm,1.1s | | | | | | | |
| H23K | **Yukon River** | **4.21** | **208** | | | **Pn** | **16 40 33.4** | **+0.5** |
| H23K | | | | IAML | | | 16 41 49.1 | |
| | comp=N,115nm,0.8s | | | | | | | |
| INK | **Inuvik** | **4.28** | **102** | Pn | | **Pn** | **16 40 35.3** | **+1.5** |
| INK | **Inuvik** | **4.28** | **102** | Pn | | **Pn** | **16 40 36.8** | **+3.0** |
| | comp=N,2.1nm,0.3s,baz=297,slow=17,SNR=9.5 | | | | | | | |
| INK | | | | Sn | | **Sn** | **16 41 22.9** | **-0.7** |
| | comp=N,5.4nm,0.3s,baz=233,slow=20,SNR=2.9 | | | | | | | |
| | comp=N,11nm,0.4s | | | | | | | |
| B20K | **Meade River** | **4.29** | **281** | Pn | | **Pn** | **16 40 35.2** | **+1.2** |
| I26K | **Coal Creek Min** | **4.37** | **171** | IAML | | | 16 41 51.0 | |
| | comp=E,134nm,0.9s | | | | | | | |
| G21K | **Allakaket** | **4.50** | **230** | IAML | | | 16 42 03.5 | |
| | comp=N,119nm,1.0s | | | | | | | |
| G21K | | | | IAML | | | 16 42 05.6 | |
| | comp=E,132nm,0.8s | | | | | | | |
| I28M | **Miner Creek** | **4.58** | **154** | IAML | | | 16 42 04.3 | |
| I28M | comp=E,84nm,1.3s | | | IAML | | | 16 42 09.8 | |
| | comp=N,79nm,0.8s | | | | | | | |
| F31M | **Tsiigehtchic** | **4.62** | **113** | IAML | | | 16 42 01.8 | |
| | comp=N,78nm,0.7s | | | | | | | |
| POKR | **Poker Plat Res** | **4.62** | **194** | IAML | | | 16 42 00.7 | |
| | comp=N,83nm,0.8s | | | | | | | |
| POKR | | | | IAML | | | 16 42 01.9 | |
| | comp=E,97nm,1.2s | | | | | | | |
| G31M | **Satah River** | **4.76** | **120** | Pn | | **Pn** | **16 40 41.6** | **+1.3** |
| G31M | | | | IAML | | | 16 42 06.9 | |
| | comp=N,96nm,1.5s | | | | | | | |
| I23K | **Minto, Yukon-K** | **4.81** | **203** | IAML | | | 16 42 14.1 | |
| | comp=N,101nm,1.1s | | | | | | | |
| MDM | **Murphy Dome** | **4.86** | **197** | IAML | | | 16 42 08.1 | |
| | comp=E,82nm,1.0s | | | | | | | |
| MDM | | | | IAML | | | 16 42 11.2 | |
| | comp=N,88nm,0.9s | | | | | | | |
| D19K | **Kuna River** | **4.90** | **263** | IAML | | | 16 42 21.4 | |
| | comp=E,83nm,1.1s | | | | | | | |
| COLA | **College** | **4.90** | **195** | | | **Pn** | **16 40 43.1** | **+0.8** |
| ILAR | **Eielson Array** | **4.93** | **190** | | | **Pn** | **16 40 43.6** | **+0.9** |
| ILAR | **Eielson Array** | **4.93** | **190** | Pn | | **Pn** | **16 40 43.5** | **+0.7** |
| | comp=E,3.6nm,0.3s,baz=1.5,slow=13,SNR=28 | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **16 41 39.7** | **0.0** |
| | comp=E,5.2nm,0.3s,baz=1.7,slow=26,SNR=7.6 | | | | | | | |
| ILAR | | | | Lg | Lg | | 16 42 01.1 | |
| | comp=E,8.1nm,0.3s,baz=6.3,slow=29,SNR=5.6 | | | | | | | |
| | comp=E,6.6nm,0.4s | | | | | | | |
| I29M | **Ogilvie Camp,** | **4.95** | **147** | IAML | | | 16 41 51.0 | |
| | comp=N,75nm,0.6s | | | | | | | |
| I29M | | | | IAML | | | 16 42 08.6 | |
| | comp=E,74nm,1.0s | | | | | | | |
| IMAR | **Indian Mountai** | **4.97** | **227** | | | **Pn** | **16 40 43.5** | **+0.2** |
| H21K | **Melozitna Rive** | **5.00** | **221** | IAML | | | 16 42 17.0 | |
| | comp=E,67nm,0.9s | | | | | | | |
| E19K | **Redstone River** | **5.04** | **251** | IAML | | | 16 42 18.4 | |
| | comp=N,84nm,0.6s | | | | | | | |
| E19K | | | | IAML | | | 16 42 23.4 | |
| | comp=E,93nm,1.2s | | | | | | | |
| EGAK | **Eagle** | **5.06** | **162** | IAML | | | 16 42 25.4 | |
| | comp=E,64nm,0.9s | | | | | | | |
| EGAK | | | | IAML | | | 16 42 29.7 | |
| | comp=E,84nm,1.1s | | | | | | | |
| CCB | **Clear Creek Bu** | **5.12** | **195** | IAML | | | 16 42 14.8 | |
| | comp=E,61nm,0.7s | | | | | | | |
| MLY | **Manley** | **5.14** | **209** | Pn | | **Pn** | **16 40 46.4** | **+0.8** |
| J26L | **Joseph Creek** | **5.16** | **174** | IAML | | | 16 41 50.0 | |
| | comp=N,56nm,0.5s | | | | | | | |
| J26L | | | | IAML | | | 16 42 18.8 | |
| | comp=E,70nm,1.0s | | | | | | | |
| C19K | **Lookout Ridge** | **5.25** | **271** | IAML | | | 16 41 47.4 | |
| | comp=E,56nm,0.5s | | | | | | | |
| C19K | | | | IAML | | | 16 42 38.6 | |
| | comp=N,75nm,1.4s | | | | | | | |
| HDA | **Harding Lake** | **5.29** | **190** | IAML | | | 16 42 29.9 | |
| | comp=N,65nm,0.8s | | | | | | | |
| NEA2 | **Nenana** | **5.30** | **200** | IAML | | | 16 41 52.4 | |
| | comp=E,51nm,0.5s | | | | | | | |
| WRH | **Wood River Hil** | **5.32** | **195** | IAML | | | 16 42 14.7 | |
| | comp=N,51nm,0.7s | | | | | | | |
| WRH | | | | IAML | | | 16 42 15.3 | |
| | comp=E,72nm,1.4s | | | | | | | |
| BCAR | **Beaver Creek A** | **6.69** | **168** | Pn | | **Pn** | **16 41 08.6** | **+1.7** |
| A36M | **Sachs Harbour** | **6.87** | **61** | Pn | | **Pn** | **16 41 09.8** | **+0.6** |
| F17K | **Baldwin Pennin** | **6.92** | **251** | Pn | | **Pn** | **16 41 10.6** | **+0.6** |
| WRGLY | **Wrigley** | **10.63** | **117** | Pn | | **Pn** | **16 42 01.5** | **+0.7** |
| DLBC | **Dease Lake** | **12.89** | **143** | Pn | | **Pn** | **16 42 33.3** | **+1.5** |
| | comp=E,0.3nm,0.3s,baz=341,slow=11,SNR=5.3 | | | | | | | |
| | comp=E,2.6nm,0.7s | | | | | | | |
| YKA | **Yellowknife Ar** | **14.04** | **106** | Pn | | **Pn** | **16 42 43.8** | **-3.6** |
| | comp=E,0.5nm,0.3s,baz=33,slow=2.5,SNR=9.8 | | | | | | | |
| YKA | | | | Sn | | Sn | 16 45 11.9 | -11 |
| | comp=E,0.9nm,0.3s,baz=319,slow=24,SNR=6.1 | | | | | | | |
| | comp=E,0.7nm,0.5s | | | | | | | |
| PDAR | **Pinedale Array** | **32.40** | **127** | P | | **P** | **16 45 59.4** | **+0.9** |
| | comp=E,0.4nm,0.6s,baz=335,slow=6.6,SNR=3.7 | | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | | |
| NVAR | **Mina Array Bea** | **34.31** | **142** | P | | **P** | **16 46 15.9** | **+0.7** |
| | comp=E,0.2nm,0.6s,baz=33,slow=11,SNR=2.4 | | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | | |
| FINES | **FINESS Array B** | **49.07** | **6** | P | | **P** | **16 48 14.8** | **-0.5** |
| | comp=E,3.9nm,1.0s,baz=338,slow=6.2,SNR=1.7 | | | | | | | |
| | comp=E,3.9nm,1.0s | | | | | | | |
| HFS | **Hagfors** | **49.64** | **14** | P | | **P** | **16 48 19.6** | **-0.1** |
| | comp=E,1.4nm,0.7s,baz=3.8,slow=4.5,SNR=5.9 | | | | | | | |
| | comp=E,1.4nm,0.7s | | | | | | | |
| MJAR | **Matsushiro Arr** | **51.77** | **273** | P | | **P** | **16 48 37.1** | **+1.0** |
| | comp=E,0.9nm,1.1s,baz=32,slow=8.5,SNR=1.6 | | | | | | | |
| | comp=E,0.9nm,1.1s | | | | | | | |
| EKA | **Eskdalemuir Ar** | **52.30** | **27** | P | | **P** | **16 48 40.7** | **+1.0** |
| | comp=E,0.5nm,0.7s,baz=356,slow=7.2,SNR=1.3 | | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | | |
| KURBB | **Kurchatov Arra** | **55.97** | **328** | P | | **P** | **16 49 05.5** | **-1.1** |
| | comp=E,0.1nm,0.4s,baz=29,slow=5.6,SNR=1.6 | | | | | | | |
| | comp=E,0.1nm,0.4s | | | | | | | |

*IDC* ***12*** *16:42:13.0±3.6,69°.68N×145°.97W,h0km,mb3.4/2, mbtmp3.4/3,ML3.0/1,MS4.4/1,Error ellipse: s-maj=51.0km s-min=28.2km az=123.0*

*AEIC* ***12*** *16:42:13.8±0.6,69°.58N±0°.04×145°.2W±0°.1,h4km±5km, ML3.3,ML3.4/68(NEIC),Error ellipse: s-maj=6.8km s-min=4.5km az=129.0*

*NEIC* ***12*** *16:42:13.8±0.7,69°.63N±0°.06×145°.2W±0°.1,h7km±7km, Error ellipse: s-maj=8.9km s-min=5.6km az=200.0*

**ISC 12 16:42:14.5**±0.9,**69°.60N**±0°.04×**145°.22W**±0°.03,**h10**km,**n78, s0§61/64,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| C26K | **Camden Bay** | **0.34** | **19** | | | **Pg** | **16 42 20.4** | **-0.8** |
| C26K | | | | | | **Sg** | **16 42 24.9** | **-0.8** |
| D25K | **Kavik River** | **0.49** | **236** | | | **Pg** | **16 42 22.5** | **-1.6** |
| D25K | **Kavik River** | **0.49** | **236** | | | **Sg** | **16 42 29.8** | **-0.7** |
| C27K | **Jago River** | **0.53** | **86** | | | **Pg** | **16 42 23.5** | **-1.3** |
| C27K | | | | | | **Sg** | **16 42 31.5** | **-0.3** |
| C27K | **Jago River** | **0.53** | **86** | IAML | | | 16 42 32.2 | |
| | comp=N,1μm,0.4s | | | | | | | |
| C27K | | | | IAML | | | 16 42 32.5 | |
| | comp=E,1μm,0.3s | | | | | | | |
| C24K | **Franklin Bluff** | **1.22** | **277** | | | **Pn** | **16 42 36.7** | **-0.9** |
| C24K | | | | | | **Sn** | **16 42 54.3** | **+0.2** |
| C24K | **Franklin Bluff** | **1.22** | **277** | IAML | | | 16 42 56.1 | |
| | comp=E,746nm,0.8s | | | | | | | |
| C24K | | | | IAML | | | 16 42 56.1 | |
| | comp=N,640nm,0.4s | | | | | | | |
| D24K | **Happy Valley** | **1.35** | **252** | | | **Pn** | **16 42 39.1** | **-0.3** |
| D24K | **Happy Valley** | **1.35** | **252** | | | **Sg** | **16 42 58.5** | **+0.6** |
| D24K | **Happy Valley** | **1.35** | **252** | IAML | | | 16 43 00.3 | |
| | comp=N,869nm,0.5s | | | | | | | |
| D24K | | | | IAML | | | 16 43 01.4 | |
| | comp=E,675nm,1.0s | | | | | | | |
| TOLK | **Toolik Lake Re** | **1.83** | **240** | | | **Pn** | **16 42 46.0** | **0.0** |
| TOLK | **Toolik Lake Re** | **1.83** | **240** | IAML | | | 16 43 15.9 | |
| | comp=E,255nm,0.6s | | | | | | | |
| C23K | **Itkillik River** | **1.89** | **280** | | | **Pn** | **16 42 47.1** | **+0.3** |
| C23K | **Itkillik River** | **1.89** | **280** | IAML | | | 16 43 18.5 | |
| | comp=E,438nm,0.5s | | | | | | | |
| E27K | **Coleen River** | **1.93** | **136** | | | **Pn** | **16 42 47.1** | **-0.3** |
| E27K | **Coleen River** | **1.93** | **136** | IAML | | | 16 43 15.9 | |
| | comp=E,264nm,0.5s | | | | | | | |
| E24K | **Your Creek** | **1.94** | **219** | | | **Pn** | **16 42 47.4** | **-0.1** |
| E24K | **Your Creek** | **1.94** | **219** | IAML | | | 16 43 17.9 | |
| | comp=E,191nm,0.7s | | | | | | | |
| F25K | **Christian Rive** | **2.02** | **185** | | | **Pn** | **16 42 48.6** | **-0.1** |
| F25K | **Christian Rive** | **2.02** | **185** | IAML | | | 16 43 19.2 | |
| | comp=E,279nm,0.5s | | | | | | | |
| F25K | | | | IAML | | | 16 43 24.8 | |
| | comp=N,219nm,0.8s | | | | | | | |
| D23K | **Nanushuk River** | **2.04** | **254** | | | **Pn** | **16 42 49.1** | **+0.2** |
| BMAR | **Burnt Mountain** | **2.19** | **174** | Pn | | **Pn** | **16 42 50.8** | **-0.2** |
| E23K | **Chandalar** | **2.22** | **228** | Pn | | **Pn** | **16 42 51.9** | **+0.5** |
| E23K | | | | IAML | | | 16 43 28.9 | |
| | comp=E,148nm,0.6s | | | | | | | |
| F24K | **Squaw Lake** | **2.31** | **206** | | | **Pn** | **16 42 52.6** | **0.0** |
| F24K | **Squaw Lake** | **2.31** | **206** | IAML | | | 16 43 29.9 | |
| | comp=N,198nm,0.6s | | | | | | | |
| D22K | **Ayikyak River** | **2.75** | **258** | Pn | | **Pn** | **16 42 58.8** | **+0.2** |
| D22K | | | | IAML | | | 16 43 48.3 | |
| | comp=N,138nm,0.8s | | | | | | | |
| D22K | | | | IAML | | | 16 43 49.9 | |
| | comp=E,142nm,0.9s | | | | | | | |
| E22K | **Anaktuvuk Pass** | **2.81** | **241** | | | **Pn** | **16 42 59.2** | **-0.2** |
| G25K | **Bearman Lake** | **2.87** | **187** | | | **Pn** | **16 43 00.2** | **0.0** |
| B22K | **Teshekpuk Lake** | **2.92** | **289** | | | **Pn** | **16 43 01.3** | **+0.4** |
| B22K | | | | IAML | | | 16 43 58.5 | |
| | comp=E,158nm,0.7s | | | | | | | |
| G24K | **Hadweenzic Riv** | **3.03** | **197** | | | **Pn** | **16 43 02.1** | **-0.3** |
| G24K | **Hadweenzic Riv** | **3.03** | **197** | IAML | | | 16 43 56.5 | |
| | comp=E,99nm,0.9s | | | | | | | |
| G24K | | | | IAML | | | 16 43 58.8 | |
| | comp=N,84nm,1.4s | | | | | | | |
| B21K | **Ikpikpuk River** | **3.29** | **275** | | | **Pn** | **16 43 06.0** | **+0.1** |
| B21K | **Ikpikpuk River** | **3.29** | **275** | IAML | | | 16 43 46.1 | |
| | comp=E,77nm,0.7s | | | | | | | |
| B21K | | | | IAML | | | 16 44 06.8 | |
| | comp=N,74nm,1.3s | | | | | | | |
| E21K | **Killik River** | **3.35** | **254** | | | **Pn** | **16 43 06.8** | **-0.1** |
| E21K | **Killik River** | **3.35** | **254** | IAML | | | 16 44 10.0 | |
| | comp=E,59nm,1.2s | | | | | | | |
| E21K | | | | IAML | | | 16 44 10.7 | |
| | comp=N,100nm,1.0s | | | | | | | |
| H25L | **Birch Creek** | **3.36** | **184** | | | **Pn** | **16 43 06.8** | **-0.1** |
| G29M | **Pine Creek** | **3.80** | **132** | Pn | | **Pn** | **16 43 12.7** | **-0.4** |
| F21K | **Alatna River** | **3.87** | **236** | | | **Pn** | **16 43 14.0** | **0.0** |
| F21K | **Alatna River** | **3.87** | **236** | IAML | | | 16 44 19.1 | |
| | comp=N,35nm,0.6s | | | | | | | |
| F21K | | | | IAML | | | 16 44 24.5 | |
| | comp=E,33nm,0.8s | | | | | | | |
| H24K | **Noodor Dome** | **3.91** | **196** | | | **Pn** | **16 43 14.4** | **-0.2** |
| H24K | **Noodor Dome** | **3.91** | **196** | IAML | | | 16 44 29.0 | |
| | comp=E,38nm,1.5s | | | | | | | |
| H23K | **Yukon River** | **4.13** | **205** | | | **Pn** | **16 43 17.4** | **-0.2** |
| H23K | | | | IAML | | | 16 46 01.4 | |
| | comp=E,43nm,1.2s | | | | | | | |
| B20K | **Meade River** | **4.16** | **281** | | | **Pn** | **16 43 17.9** | **+0.1** |
| B20K | | | | IAML | | | 16 46 02.9 | |
| | comp=E,59nm,0.5s | | | | | | | |
| B20K | | | | IAML | | | 16 46 05.0 | |
| | comp=N,50nm,0.5s | | | | | | | |
| E20K | **Nigu River** | **4.18** | **256** | | | **Pn** | **16 43 18.6** | **+0.4** |
| A21K | **Barrow** | **4.20** | **300** | | | **Pn** | **16 43 18.6** | **+0.2** |
| G21K | **Allakaket** | **4.38** | **229** | | | **Pn** | **16 43 20.5** | **-0.5** |
| I26K | **Coal Creek Min** | **4.39** | **169** | Pn | | **Pn** | **16 43 20.7** | **-0.3** |
| I26K | | | | IAML | | | 16 44 42.4 | |
| | comp=E,54nm,0.8s | | | | | | | |
| POKR | **Poker Plat Res** | **4.58** | **192** | | | **Pn** | **16 43 23.9** | **+0.1** |
| POKR | **Poker Plat Res** | **4.58** | **192** | IAML | | | 16 46 15.9 | |
| | comp=E,35nm,0.7s | | | | | | | |
| F20K | **Avaraart Lake** | **4.66** | **242** | | | **Pn** | **16 43 25.2** | **+0.4** |
| F31M | **Tsiigehtchic** | **4.74** | **112** | Pn | | **Pn** | **16 43 26.0** | **+0.1** |
| F31M | | | | IAML | | | 16 46 28.3 | |
| | comp=N,26nm,1.2s | | | | | | | |
| F31M | | | | IAML | | | 16 46 31.9 | |
| | comp=E,38nm,1.4s | | | | | | | |
| I23K | **Minto, Yukon-K** | **4.75** | **202** | Pn | | **Pn** | **16 43 26.0** | **+0.1** |
| I23K | | | | IAML | | | 16 46 29.2 | |
| | comp=N,43nm,1.1s | | | | | | | |
| D19K | **Kuna River** | **4.76** | **263** | | | **Pn** | **16 43 26.5** | **+0.3** |
| MDM | **Murphy Dome** | **4.80** | **195** | | | **Pn** | **16 43 26.6** | **-0.2** |
| MDM | **Murphy Dome** | **4.80** | **195** | IAML | | | 16 46 38.7 | |
| | comp=E,31nm,0.9s | | | | | | | |
| IL31 | | **4.89** | **188** | | | **Pn** | **16 43 28.0** | **+0.1** |
| ILAR | **Eielson Array** | **4.89** | **188** | Pn | | **Pn** | **16 43 27.7** | **-0.3** |
| | comp=E,0.6nm,0.3s,baz=4.3,slow=14,SNR=1.0 | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **16 44 24.6** | **0.0** |
| | comp=E,1.4nm,0.3s,baz=1.4,slow=29,SNR=1.6 | | | | | | | |
| ILAR | | | | Lg | Lg | | 16 44 47.9 | |
| | comp=E,1.5nm,0.3s,baz

1.6nm,0.3s,baz=212,slow=19,SNR=1.7
22nm,0.5s
**RAR Rarotonga 14.02 94 P Pn 16 47 09.0 -2.0**
**PINNC Pines Island, 16.59 261 P P 16 47 49.1 +2.1**
PINNC IAmb IAmb 16 47 56.5
comp=Z,151nm,1.9s
**LIFNC LIFOU 16.80 267 P P 16 47 53.5 +4.2**
**LIFNC LIFOU 16.80 267 P P 16 47 52.4 +3.0**
**YATNC Mamie plateau, 17.09 263 P P 16 47 56.2 +3.7**
**ONTNC Ouen Toro 17.50 262 P P 16 47 58.9 +1.9**
**DZM Mont Dzumac 17.50 263 P P 16 48 00.0 +2.8**
**DZM Mont Dzumac 17.50 263 P P 16 47 58.7 +1.5**
**OUZ Omahuta 17.52 213 P Pn 16 47 56.7 +0.3**
comp=Z,35nm,1.7s
**NOUC Port Laguerre 17.64 263 P P 16 48 01.4 +2.9**
**URZ Urewera 18.64 200 P P 16 48 08.4 -1.1**
**URZ Urewera 18.64 200 P P 16 48 08.4 -1.1**
comp=Z,3.4nm,0.3s,baz=71,slow=3.1,SNR=23
URZ S Sn 16 51 18.4 -19
comp=Z,2.8nm,0.4s,baz=92,slow=18,SNR=1.9
comp=Z,7.9nm,0.4s
**KOUNC Koumac, New Ca 19.58 267 P Pn 16 48 25.8 +4.4**
**KOUNC Koumac, New Ca 19.58 267 P P 16 48 20.5 +0.6**
KOUNC IAmb IAmb 16 48 30.4
comp=Z,91nm,1.7s
**BKZ Black Stump Fm 19.67 200 P P 16 48 18.8 -2.0**
**HIZ Hauiti 19.68 205 P P 16 48 20.2 -0.6**
**BFZ Birch Farm 21.12 199 P P 16 48 35.3 -1.2**
**KIW Kapiti Island 21.72 202 P P 16 48 48.6 +5.7**
**DUWZ D'Urville Isla 22.02 203 P P 16 48 43.8 -2.3**
**MSWZ Moikau Station 22.10 200 P P 16 48 50.6 +3.5**
**PLWZ Palliser 22.24 200 P P 16 48 46.4 -2.2**
**TCW Tory Channel 22.25 202 P P 16 48 50.4 +1.8**
**TUWZ Tuamarina 22.56 203 P P 16 48 48.3 -3.6**
**QRZ Quartz Range 22.58 206 P P 16 48 51.3 -0.8**
**QRZ Quartz Range 22.58 206 P P 16 48 51.0 -1.1**
**NNZ Nelson 22.58 204 P P 16 48 48.7 -3.4**
**TKNZ Takaka Hill 22.59 205 P P 16 48 52.4 +0.2**
**MRNZ Matariki Terra 22.98 205 P P 16 48 53.6 -2.7**
**THZ Tophouse 23.23 204 P P 16 48 56.1 -2.8**
**KHZ Kahutara 23.57 202 P P 16 49 01.5 -0.6**
**KHZ Kahutara 23.57 202 P P 16 48 60.0 -2.1**
**DSZ Denniston Nort 23.65 206 P P 16 49 03.2 +0.3**
**GVZ Greta Valley S 24.23 202 P P 16 49 07.4 -0.9**
**LTZ Lake Taylor 24.35 204 P P 16 49 07.6 -1.9**
**INZ Inchbonnie 24.62 205 P P 16 49 11.4 -0.4**
**MQZ McQueen's Vall 25.02 202 P P 16 49 22.0 +6.6**
**MHCZ Mount Hutt 25.26 204 P P 16 49 20.1 +2.4**
**FOZ Fox Glacier 25.95 206 P P 16 49 24.1 +0.3**
FOZ IAmb IAmb 16 49 25.9
comp=Z,52nm,0.8s
**CTAO Charters Tower 36.44 264 P P 16 50 54.4 -2.1**
**CTAO Charters Tower 36.44 264 P P 16 50 54.4 -2.1**
CTAO pmax pmax
comp=Z,19nm,1.4s
**PMG Port Moresby 38.37 282 P P 16 51 11.1 -1.8**
PMG IAmb IAmb 16 51 13.9
comp=Z,26nm,0.8s
**PMG Port Moresby 38.37 282 P P 16 51 10.7 -2.2**
comp=Z,25nm,0.7s,baz=90,slow=11,SNR=8.8
comp=Z,25nm,0.7s
**PMG Port Moresby 38.37 282** *i* P **P 16 51 10.5 -2.4**
PMG pmax pmax
comp=Z,28nm,0.8s
**STKA Stephens Creek 40.33 245 P P 16 51 26.5 -2.6**
comp=Z,1.9nm,0.4s,baz=87,slow=11,SNR=7.1
comp=Z,1.9nm,0.4s
**COEN Coen 40.61 273 P P 16 51 29.0 -2.5**
**ASAR Alice Springs 47.35 257 P P 16 52 23.4 -2.3**
comp=Z,4.0nm,0.8s,baz=96,slow=8.7,SNR=12
ASAR PcP **PcP 16 53 54.8 -1.4**
comp=Z,1.3nm,0.6s,baz=100,slow=4.2,SNR=4.7
ASAR PP **PP 16 54 13.1 -4.0**
comp=Z,0.8nm,0.8s,baz=100,slow=4.0,SNR=4.4
ASAR ScP **ScP 16 57 47.7 0.0**
comp=Z,0.7nm,0.8s,baz=102,slow=4.7,SNR=5.6
comp=Z,4.0nm,0.8s
**WRAB Tennant Creek 47.51 262** *i* P **P 16 52 29.5 +2.6**
WRAB pmax pmax
comp=Z,7.0nm,0.9s
**SBA Scott Base 57.67 185 P P 16 53 44.2 +3.0**
SBA IAmb IAmb 16 53 45.4
comp=Z,17nm,1.3s
**SBA Scott Base 57.67 185 P P 16 53 44.2 +3.0**
SBA pmax pmax
comp=Z,17nm,1.3s
**VNDA Vanda 57.78 186 P P 16 53 44.0 +2.1**
**VNDA Vanda 57.78 186 P P 16 53 42.6 +0.7**
comp=Z,2.3nm,0.9s,baz=7.0,slow=6.6,SNR=14
comp=Z,2.3nm,0.9s
**VNDA Vanda 57.78 186 P P 16 53 44.0 +2.1**
VNDA pmax pmax
comp=Z,3.0nm,1.0s
**QSPA South Pole Qui 69.15 180 P P 16 54 58.6 +1.1**
**QSPA South Pole Qui 69.15 180 P P 16 54 58.0 +0.5**
comp=Z,11nm,0.7s,baz=39,slow=4.3,SNR=50
comp=Z,11nm,0.7s
**MJA0 Matsu Arr-Jizo 72.34 322** *eP* **P 16 55 15.2 -2.0**
MJA0 pmax pmax
comp=Z,2.0nm,0.6s
**MJAR Matsushiro Arr 72.36 322 P P 16 55 15.2 -2.1**
comp=Z,2.0nm,0.7s,baz=160,slow=5.3,SNR=12
comp=Z,2.0nm,0.7s
**SNCC San Nicolas Is 75.37 45 P P 16 55 35.9 +1.0**
baz=232
**SCZ2 Santa Cruz Isl 75.75 45 P P 16 55 37.8 +0.7**
baz=232
**SCI2 San Clemente I 75.86 46 P P 16 55 39.2 +1.5**
baz=233
**CHNA Chernabura Isl 76.56 9 P P 16 55 43.8 +2.6**
baz=194
**SDPT Sand Point 76.94 8 P P 16 55 45.2 +1.9**
baz=194
**ARVC Arvin 76.96 44 P P 16 55 44.5 +0.5**
baz=232
**SMAI San Martin Ant 77.13 159 P P 16 55 46.1 +1.8**
SMAI IAmb IAmb 16 56 09.1
comp=Z,12nm,1.1s
**MURC Murrieta 77.14 46 P P 16 55 46.4 +1.4**
baz=234
**PET Petropavlovsk 77.16 344** *i* P **P 16 55 45.0 +0.4**
PET pmax pmax
comp=Z,14nm,1.1s
**BFSC Mount Baldy Ra 77.20 46 P P 16 55 46.0 +0.6**
baz=233
**VES Vestal, Richgr 77.23 43 P P 16 55 46.5 +1.1**
baz=232
**MONP2 Monument Peak 77.25 47 P P 16 55 46.8 +0.9**
baz=234
**IKP In-Ko-Pah, Jac 77.33 48 P P 16 55 47.4 +1.3**
baz=235
**EDW2 Edwards Air Fo 77.36 45 P P 16 55 47.8 +1.6**
baz=233,SNR=7.4
**ISA Isabella, Lake 77.52 44 P P 16 55 48.8 +1.7**
baz=233,SNR=6.6
**PFO Pinyon Flats O 77.64 47 P P 16 55 48.9 +1.0**
baz=234
**TPFO Pinon Flats 77.64 47 P P 16 55 49.0 +1.1**
baz=234
**YSS Yuzh-Sakhalins 77.65 332** *i* P **P 16 55 47.9 +0.4**
YSS pmax pmax
comp=Z,13nm,1.3s
**SWSC Sam W. Stewart 77.71 48 P P 16 55 49.3 +1.2**
baz=235
**LRMC Laurel Mtn Rad 77.92 44 P P 16 55 50.8 +1.4**
baz=233
**BELC Belle Mtn. Jos 78.18 47 P P 16 55 52.6 +1.7**
baz=235,SNR=6.7
**CWC Cottonwood Cre 78.24 44 P P 16 55 52.8 +1.6**
baz=233
**BC3 Big Chuckawall 78.35 47 P P 16 55 53.5 +1.6**
baz=235,SNR=5.2
**OMMB Old Mammoth Mi 78.37 42 P P 16 55 52.0 -0.1**
**MPMC Manual Prospec 78.39 44 P P 16 55 53.8 +1.6**
baz=233,SNR=12
**GSC Goldstone, Bar 78.39 45 P P 16 55 53.7 +1.6**
baz=234
**HEC Hector,Ludlow 78.43 46 P P 16 55 53.9 +1.6**
baz=234
**GLA Glamis 78.44 48 P P 16 55 54.1 +1.8**
baz=236
**BELA Belgrano 2 78.74 172 P P 16 55 53.1 -0.1**
BELA IAmb IAmb 16 55 57.5
comp=Z,8.8nm,0.7s
**IRM Iron Mountain 78.85 47 P P 16 55 56.0 +1.5**
baz=235,SNR=7.7

**GMRC Granite Mounta 78.86 46 P P 16 55 56.2 +1.5**
baz=235
**DSP Deep Springs 78.87 43** IAmb IAmb 16 55 57.6
comp=Z,17nm,1.3s
**GWY Greenwater Val 79.00 44** IAmb IAmb 16 55 58.8
comp=Z,17nm,1.6s
**GRAC Grapevine Rang 79.03 43** IAmb IAmb 16 55 58.6
comp=Z,36nm,1.4s
**GRAC Grapevine Rang 79.03 43 P P 16 55 57.0 +1.5**
baz=233,SNR=8.5
**FURC Furnace Creek, 79.04 44 P P 16 55 56.7 +1.4**
baz=234
**TUQ Turquoise Moun 79.06 45 P P 16 55 57.0 +1.2**
baz=234
**LHV Little Huntoon 79.07 42** IAmb IAmb 16 55 58.6
comp=Z,25nm,1.4s
**SHOC Shoshone, Teco 79.09 45 P P 16 55 57.2 +1.4**
baz=234
**KSRS Korea Array 79.22 317 P P 16 55 54.7 -1.6**
comp=Z,0.9nm,0.8s,baz=108,slow=4.0,SNR=3.1
comp=Z,0.9nm,0.8s
**214A Organ Pipe Nat 79.26 50 P P 16 55 58.0 +1.2**
baz=237
**GMN Gold Mountain 79.28 43** IAmb IAmb 16 55 59.6
comp=Z,28nm,1.7s
**NVAR Mina Array Bea 79.30 42 P P 16 55 57.2 +0.1**
**NVAR Mina Array Bea 79.30 42 P P 16 55 58.1 +1.0**
comp=Z,3.5nm,0.7s,baz=224,slow=7.7,SNR=33
comp=Z,3.5nm,0.7s
**NV11 Mina Array Sit 79.39 42** IAmb IAmb 16 56 00.2
comp=Z,19nm,1.4s
**PDMCI Parker Dam,Lak 79.62 47 P P 16 55 59.7 +1.1**
baz=236
**TPNV Topopah Spring 79.72 44 P P 16 56 00.6 +1.2**
baz=234,SNR=8.6
**J05D Fort Rock, OR 80.62 37** IAmb IAmb 16 56 06.5
comp=Z,31nm,1.4s
**TUC Tucson 80.90 50 P P 16 56 06.1 +0.4**
**TUC Tucson 80.90 50 P P 16 56 07.2 +1.5**
baz=238
**TUC Tucson 80.90 50 P P 16 56 06.1 +0.4**
TUC pmax pmax
comp=Z,17nm,1.7s
**R11B Troy Canyon, C 80.97 43 P P 16 56 07.6 +1.6**
baz=234
**USA0B Ussuriysk Arra 81.03 324** *i* P **P 16 56 05.7 -0.3**
**USRK Ussuriysk Ar. 81.03 324 P P 16 56 05.6 -0.4**
**USRK Ussuriysk Ar. 81.03 324 P P 16 56 05.4 -0.6**
comp=Z,2.2nm,0.9s,baz=151,slow=3.4,SNR=6.6
comp=Z,2.2nm,0.9s
**USRK Ussuriysk Ar. 81.03 324 P P 16 56 05.6 -0.4**
**PINE Pine Mountain 81.11 36** IAmb IAmb 16 56 09.5
comp=Z,36nm,1.4s
**LCMT Little Creek M 81.73 45** IAmb IAmb 16 56 13.1
comp=Z,21nm,1.5s
**CCUT Cedar City 81.96 45** IAmb IAmb 16 56 14.7
comp=Z,17nm,1.4s
**U15A North Rim 82.05 46** IAmb IAmb 16 56 15.3
comp=Z,17nm,1.1s
**I07A Izee 82.09 37** IAmb IAmb 16 56 14.3
comp=Z,21nm,1.6s
**SZCU Shurtz Canyon 82.16 45** IAmb IAmb 16 56 15.7
comp=Z,15nm,1.3s
**MAW Mawson 82.17 199 P P 16 56 10.8 -0.9**
comp=Z,3.2nm,0.9s,baz=114,slow=12,SNR=4.0
comp=Z,3.2nm,0.9s
**WUAZ Wupatki 82.19 47 P P 16 56 14.0 +1.4**
baz=237
**N17K Nushagak Hills 82.41 9 P P 16 56 16.0 +3.2**
baz=196
**NJ2 Nanjing 82.48 308** *eP* **P 16 56 17.0 +3.1**
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**L14K Kuk Creek 82.55 6 P P 16 56 16.0 +2.5**
baz=191
**MDJ Mudanjiang 82.62 324 P P 16 56 14.1 -0.2**
MDJ pmax pmax
comp=Z,11nm,1.2s
MDJ pmax pmax
comp=Z,240nm,6.3s
**MDJ Mudanjiang 82.62 324 P P 16 56 14.6 +0.3**
MDJ IAmb IAmb 16 56 15.8
comp=Z,8.1nm,0.9s
**W18A Petrified Fore 83.11 48 P P 16 56 18.3 +0.9**
baz=238
**G08A Pilot Rock 83.16 36 P P 16 56 17.4 +0.1**
G08A IAmb IAmb 16 56 19.7
comp=Z,25nm,1.3s
**121A Cookes Peak, D 83.19 52 P P 16 56 18.9 +1.0**
baz=240
**L16K Owhat River 83.26 7 P P 16 56 19.4 +2.2**
baz=194
**H03S2 Juan Fernandez 83.26 124 T T** 18 28 29.8
baz=247,slow=74
**H03S1 Juan Fernandez 83.28 124 T T** 18 28 33.1
baz=247,slow=74
**H03S3 Juan Fernandez 83.28 124 T T** 18 28 29.6
baz=247,slow=74
**H03N2 Juan Fernandez 83.40 123 T T** 18 28 42.1
baz=251,slow=71
**H03N3 Juan Fernandez 83.40 123 T T** 18 28 43.4
baz=251,slow=71
**H03N1 Juan Fernandez 83.41 123 T T** 18 28 42.6
baz=251,slow=71
**LTY Liberty 83.49 34** IAmb IAmb 16 56 23.8
comp=Z,8.6nm,1.1s
**HAWA Hanford 83.54 35** IAmb IAmb 16 56 21.0
comp=Z,10.0nm,1.0s
**K15K Wolf Creek Mou 83.60 6 P P 16 56 19.6 +0.5**
**K15K Wolf Creek Mou 83.60 6 P P 16 56 21.1 +2.1**
baz=192
**P23K Montague Islan 83.67 13 P P 16 56 21.1 +1.7**
baz=206
**DUG Dugway, Tooele 83.79 43** IAmb IAmb 16 56 23.0
comp=Z,10nm,1.5s
**DUG Dugway, Tooele 83.79 43 P P 16 56 21.8 +1.1**
baz=236
**MFID Camas Ranch 83.79 39** IAmb IAmb 16 56 22.9
comp=Z,18nm,1.4s
**BMO Blue Mountains 83.81 37** IAmb IAmb 16 56 22.7
comp=Z,23nm,1.7s
**V35K Kahikan 84.36 23 P P 16 56 25.1 +2.1**
baz=220
**SIT Sitka 84.43 20 P P 16 56 24.8 +1.5**
baz=216
**VHRN Van Horn 84.44 54** IAmb IAmb 16 56 27.1
comp=Z,24nm,1.6s
**KLR Kul'dur 84.45 328** *i* P **P 16 56 24.1 +0.5**
KLR pmax pmax
comp=Z,1.0nm,1.1s
**BNX BinXian 84.53 323** ⇓P **P 16 56 23.4 -0.7**
BNX pmax pmax
comp=Z,9.0nm,0.9s
**F10A Beach Ranch, E 84.53 36 P P 16 56 24.5 +0.2**
**MNTX Cornudas Mount 84.57 53 P P 16 56 25.5 +0.8**
baz=241
**HLID Hailey 84.71 39** IAmb IAmb 16 56 27.9
comp=Z,17nm,1.3s
**HLID Hailey 84.71 39 P P 16 56 26.6 +1.2**
baz=234
**P17A Butcher Ranch, 84.73 44** IAmb IAmb 16 56 28.4
comp=Z,19nm,1.2s
**TX31 Lajitas Ar. Si 84.77 56** IAmb IAmb 16 56 28.8
comp=Z,16nm,1.4s
**TXAR Lajitas Array 84.77 56 P P 16 56 27.1 +1.2**
**TXAR Lajitas Array 84.77 56 P P 16 56 26.9 +1.0**
comp=Z,5.4nm,1.2s,baz=216,slow=6.2,SNR=23
comp=Z,5.4nm,1.2s
**TXAR Lajitas Array 84.77 56 P P 16 56 27.1 +1.2**
**ALPN Alpine 85.27 55** IAmb IAmb 16 56 31.0
comp=Z,22nm,1.5s
**ANMO Albuquerque 85.35 50 P P 16 56 29.4 +0.6**
ANMO IAmb IAmb 16 56 31.6
comp=Z,14nm,1.2s
**ANMO Albuquerque 85.35 50 P P 16 56 30.4 +1.6**
baz=240
**ANMO Albuquerque 85.35 50 P P 16 56 29.4 +0.6**
ANMO pmax pmax
comp=Z,14nm,1.3s
**SAND Sanderson 86.25 56** IAmb IAmb 16 56 35.1
comp=Z,20nm,1.6s
**ELIB Princess Elisa 86.54 186** *dP* **P 16 56 33.9 -0.1**
comp=Z,7.6nm,1.1s
**O20A White River Ci 86.72 45 P P 16 56 36.5 +1.1**
baz=239
**PDAR Pinedale Array 87.23 42 P P 16 56 37.2 -0.7**
comp=Z,1.9nm,1.0s,baz=224,slow=3.9,SNR=4.2
comp=Z,1.9nm,1.0s

**HEH HeiHe 87.27 327** *eP* **P 16 56 36.4 -1.2**
HEH pmax pmax
comp=Z,5.0nm,1.2s
**TROLL Troll, Antarti 87.29 179** ⇑P **P 16 56 37.6 -0.1**
comp=Z,149nm,0.6s
**SNAA Sanae 87.48 177** ⇑P **P 16 56 38.1 -0.4**
comp=Z,41nm,0.6s
**SNAA Sanae 87.48 177 P P 16 56 38.3 -0.3**
comp=Z,2.2nm,0.8s,baz=214,slow=9.4,SNR=11
comp=Z,2.2nm,0.8s
**SNAA Sanae 87.48 177** *i* P **P 16 56 38.2 -0.4**
SNAA pmax pmax
comp=Z,4.0nm,1.2s
**VNA3 Neumayer Olymp 87.50 175** ⇑P **P 16 56 38.4 -0.2**
comp=Z,6.1nm,0.6s
**SEY Seymchan 87.50 346** *i* P **P 16 56 37.2 -1.2**
SEY pmax pmax
comp=Z,13nm,1.3s
**BOZ Bozeman (W) 87.50 39** IAmb IAmb 16 56 41.4
comp=Z,11nm,1.5s
**VNA2 Neumayer--Watz 87.97 176** ⇑P **P 16 56 41.0 +0.2**
comp=Z,8.5nm,0.7s,baz=189,slow=4.4
**VNA1 Neumayer--Stat 88.18 176** ⇑P **P 16 56 40.7 -1.0**
comp=Z,13nm,1.1s
**Q24A Divide 88.21 47 P P 16 56 43.9 +1.1**
baz=241
**ISCO Idaho Springs 88.30 46 P P 16 56 44.1 +0.9**
baz=241
**N23A Red Feather La 88.61 45 P P 16 56 45.6 +1.1**
baz=241
**RLMT Red Lodge 88.65 40 P P 16 56 45.7 +1.1**
baz=238
**AMTX Amarillo 88.78 52 P P 16 56 46.3 +1.0**
baz=243
**DKNS Dickens 88.81 53** IAmb IAmb 16 57 30.1
comp=Z,8.4nm,1.1s
**ABTX Abilene, Hawle 89.33 55 P P 16 56 48.6 +0.8**
baz=244
**ZEA Zeya 89.48 330** *eP* P 16 56 35.6 -12
**XLT XiLinHaoTe 90.26 318** *eP* **P 16 56 51.1 -0.9**
XLT pP pP 16 57 04.3 +1.4
XLT sP sP 16 57 08.0 +1.1
XLT pmax pmax
comp=Z,4.0nm,1.1s
**PLPT Palo Pinto 90.42 55** IAmb IAmb 16 56 55.0
comp=Z,16nm,1.2s
**WMOK Wichita Mounta 90.87 53** IAmb IAmb 16 57 23.9
comp=Z,15nm,1.4s
**LAO LASA Array 91.28 40 P P 16 56 57.9 +1.3**
baz=240
**RSSD Black Hills 91.40 43 P P 16 56 57.9 +0.4**
baz=242
**HHC Hu-ho-hao-te 91.81 313** *eP* **P 16 57 00.0 +0.7**
HHC pP pP 16 57 08.3 -2.0
HHC sP sP 16 57 12.4 -1.8
HHC pmax pmax
comp=Z,26nm,0.5s
**CMAR Chiang Mai Arr 93.09 288** *i* P **P 16 57 05.9 +0.3**
CMAR pmax pmax
comp=Z,1.0nm,0.8s
**DGMT Dagmar 93.34 39 P P 16 57 07.4 +1.3**
baz=242
**PZH PanZhiHua 93.57 297 P P 16 57 10.0 +2.2**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,20nm,0.7s
**TUL3 Leonard 93.58 53 P P 16 57 08.3 +0.9**
baz=247
**YAK Yakutsk 93.65 337** *i* P **P 16 57 07.1 0.0**
YAK pmax pmax
comp=Z,4.0nm,1.0s
**ECSD EROS Data Cent 96.07 46 P P 16 57 19.7 +1.0**
baz=247
**WMQ Urumqi 109.48 310** Pdif **Pdif 16 58 21.3 +2.7**
WMQ LR LR
comp=N,1μm,21.5s
WMQ LR LR
comp=E,630nm,20.1s
WMQ LR LR
comp=Z,740nm,20.1s
**MKAR Makanchi Array 113.68 313** PKiKP **PKiKP 17 02 27.6 -2.0**
comp=Z,0.6nm,0.4s,baz=154,slow=1.0,SNR=18
**KURK Kurchatov 116.34 317** *i* PKIKP **PKPdf 17 02 32.9 -1.6**
**KURBB Kurchatov Arra 116.34 317 PKP PKPdf 17 02 32.5 -2.1**
comp=Z,0.6nm,0.5s,baz=103,slow=1.7,SNR=9.3
**BRVK Borovoye 121.39 320** *i* PKIKP **PKPdf 17 02 44.1 0.0**
**SPITS Spitsbergen Ar 122.45 357** PKP **PKPdf 17 02 44.4 -1.1**
comp=Z,1.0nm,0.4s,baz=75,slow=14,SNR=4.6
**ARU Arti 127.25 326 PKPdf 17 02 54.3 -1.0**
**ARU Arti 127.25 326** *i* PKIKP **PKPdf 17 02 53.4 -1.8**
ARU 17 04 53.2
ARU 17 10 01.7
**ARCES ARCESS Array B 129.85 351** PKP **PKPdf 17 02 59.0 -0.9**
comp=Z,3.6nm,0.9s,baz=10,slow=1.0,SNR=9.9
**OBN Obninsk 138.53 333** ⇑*e*PKIKP **PKPdf 17 03 17.1 +0.7**
OBN *e* 17 06 08.7
OBN pmax pmax
comp=Z,4.0nm,0.8s
**KIV Kislovodsk 141.39 315** *e*PKIKP **PKPdf 17 03 21.8 -0.4**
KIV pmax pmax
comp=Z,6.0nm,1.1s
**AKASG Malin Array Be 144.79 333** PKP **PKPab 17 03 24.8 -2.0**
comp=Z,1.0nm,0.3s,baz=40,slow=4.1,SNR=12
**AKASG Malin Array Be 144.79 333** *e*PKHKP PKPpre 17 03 25.0
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**EKA Eskdalemuir Ar 145.07 8** PKPbc **PKPab 17 03 26.3 -1.4**
comp=Z,3.5nm,0.7s,baz=320,slow=3.1,SNR=6.9
**LODK Lodwar 145.90 243 PKPdf 17 03 30.6 -0.3**
**BNN Bunyan 148.20 311 PKPbc 17 03 37.2 -0.3**
**OJC Ojcow 148.57 342** *e*PKP **PKPbc 17 03 36.5 -1.3**
**BURAR Bucovina Array 148.85 333 PKPbc 17 03 38.5 -0.4**
**KSP Ksiaz 148.89 346** *e*PKP **PKPbc 17 03 37.7 -1.0**
**KOLS Kolonicke sedl 148.90 338** *e*PKIKP **PKPbc 17 03 38.5 -0.3**
KOLS *e* 17 03 44.1
**KOLS Kolonicke sedl 148.90 338** *e* **PKPab 17 03 44.1 +1.3**
**KOLS Kolonicke sedl 148.90 338** *e*PKP **PKPbc 17 03 38.5 -0.3**
**CLL Collm 149.07 350** *i* PKPbc **PKPbc 17 03 38.2 -0.9**
comp=Z,29nm,1.5s
CLL *i* PKPab **PKiKP 17 03 41.7 +1.3**
comp=Z,20nm,1.5s
CLL *i* pPKPbc **sPKPab 17 03 56.5 -1.6**
**CLL Collm 149.07 350** *i* PKIKP **PKPbc 17 03 38.2 -0.9**
CLL *i* 17 03 41.7
CLL pmax pmax
comp=Z,29nm,1.5s
CLL pmax pmax
comp=Z,20nm,1.5s
**NIE Niedzica 149.13 341** *e*PKP **PKPbc 17 03 39.2 -0.2**
**OSTC Ostas 149.18 346** ⇑*e*PKP **PKPbc 17 03 38.8 -0.7**
**OSTC Ostas 149.18 346** AMS AMS 17 54 10.0
comp=Z,600nm,18.3s
**OSTC Ostas 149.18 346** *e*PKIKP **PKPbc 17 03 38.8 -0.7**
**CHVC Chvalec 149.19 346** ⇑*e*PKP **PKPbc 17 03 39.4 -0.1**
**CHVC Chvalec 149.19 346** AMS AMS 17 45 30.0
comp=Z,700nm,19.7s
**CHVC Chvalec 149.19 346** *e*PKIKP **PKPbc 17 03 39.4 -0.1**
**UPC Upice 149.27 346** AMS AMS 17 50 20.0
comp=Z,800nm,17.6s
**BR131 Keskin Array S 149.32 314 PKPbc 17 03 38.9 -1.5**
**BR131 Keskin Array S 149.32 314** PKIKP **PKPbc 17 03 38.9 -1.5**
**BRTR Keskin Array B 149.32 314 PKPbc 17 03 38.8 -1.5**
**BRTR Keskin Array B 149.32 314** PKPbc **PKPbc 17 03 39.2 -1.1**
comp=Z,2.6nm,0.7s,baz=136,slow=4.5,SNR=13
**BRTR Keskin Array B 149.32 314** PKIKP **PKPbc 17 03 38.8 -1.5**
**BRG Berggiesshubel 149.33 349** *i* PKP **PKPbc 17 03 39.5 -0.3**
BRG Amp 17 03 40.8
comp=Z,6.1nm,0.7s
**DPC Dobruska-Polom 149.35 346** ⇑*e*PKP **PKPbc 17 03 39.7 -0.2**
**DPC Dobruska-Polom 149.35 346** AMS AMS 17 49 10.0
comp=Z,400nm,20.6s
**DPC Dobruska-Polom 149.35 346** *e*PKIKP **PKPbc 17 03 39.7 -0.2**
**OKC Ostrava-Krasne 149.37 343** AMS AMS 17 49 50.0
comp=Z,600nm,20.1s
**KRLC Kraliky 149.50 345** ⇑*e*PKP **PKPbc 17 03 39.6 -0.7**
**KRLC Kraliky 149.50 345** AMS AMS 17 51 40.0
comp=Z,700nm,18.9s
**KRLC Kraliky 149.50 345** *e*PKIKP **PKPbc 17 03 39.6 -0.7**
**PVCC Panska Ves 149.55 348** AMS AMS 17 48 40.0
comp=Z,900nm,19.5s
**MORC Moravsky Berou 149.59 344** *e*PKP **PKPbc 17 03 40.1 -0.4**
**LANS Liptovska Anna 149.62 341** *e*PKHKP PKPpre 17 03 40.7
LANS *e* 17 03 45.4
**LANS Liptovska Anna 149.62 341** *e*PKP **PKPbc 17 03 40.7 +0.1**

| | | | | | | |
|---|---|---|---|---|---|---|
| LANS | | | *e* | | | 17 03 45.4 |
| **HSKC** | **Hora Svate Kat** | **149.68 350** | | AMS | AMS | 17 48 00.0 |
| | comp=Z,600nm,21.7s | | | | | |
| **MAUC** | **Maruska** | **149.89 343**Ⓣ | *e*PKP | | **PKPbc** | **17 03 41.2 -0.1** |
| **KECS** | **Kecovo** | **149.89 340** | *e*PKHKP | | PKPpre | 17 03 37.6 |
| KECS | | | *e* | | | 17 03 46.6 |
| **KECS** | **Kecovo** | **149.89 340** | *e* | | **PKPab** | **17 03 46.6 -0.2** |
| **KECS** | **Kecovo** | **149.89 340** | *e*PKP | | **PKPdf** | **17 03 37.6 +1.2** |
| **KECS** | **Kecovo** | **149.89 340** | *e* | | **PKPbc** | **17 03 41.5 +0.3** |
| **PRA** | **Prague** | **150.01 348**Ⓣ | *e*PKP | | **PKPbc** | **17 03 41.4 -0.1** |
| **PRA** | **Prague** | **150.01 348** | AMS | AMS | AMS | 17 50 00.0 |
| | comp=Z,700nm,17.8s | | | | | |
| **PRA** | **Prague** | **150.01 348** | *e*PKHKP | | PKPpre | 17 03 41.4 |
| **PRU** | **Pruhonice** | **150.07 348**Ⓣ | *e*PKP | | **PKPbc** | **17 03 41.1 -0.5** |
| **PRU** | **Pruhonice** | **150.07 348** | AMS | AMS | AMS | 17 50 00.0 |
| | comp=Z,700nm,17.3s | | | | | |
| **PRU** | **Pruhonice** | **150.07 348** | *e*PKHKP | | PKPpre | 17 03 41.1 |
| **GOPC** | **GO Pecny, Ondr** | **150.09 348** | AMS | AMS | AMS | 17 49 50.0 |
| | comp=Z,700nm,20.6s | | | | | |
| **VRAC** | **Vranov** | **150.26 345** | *e*PKP | | **PKPbc** | **17 03 41.7 -0.4** |
| **BTNL** | **Ternell** | **150.39 359** | *d*PKP | | **PKPbc** | **17 03 41.9 -0.5** |
| **JAVC** | **Velka Javorina** | **150.40 343** | *e*PKP | | **PKiKP** | **17 03 43.2 -0.1** |
| **VYHS** | **Vyhne** | **150.40 342** | *e*PKIKP | | **PKPbc** | **17 03 42.1 -0.4** |
| VYHS | | | *e* | | | 17 03 48.2 |
| **VYHS** | **Vyhne** | **150.40 342** | *e*PKP | | **PKPbc** | **17 03 42.0 -0.4** |
| VYHS | | | *e* | | | 17 03 48.2 |
| **TREC** | **Trest** | **150.53 346** | AMS | AMS | AMS | 17 47 50.0 |
| | comp=Z,800nm,20.3s | | | | | |
| **KRUC** | **Moravsky** | **150.53 345** | *e*PKP | | **PKPbc** | **17 03 42.2 -0.6** |
| **PSZ** | **Piszkesteto** | **150.58 340** | | | **PKPbc** | **17 03 42.8 -0.2** |
| **PSZ** | **Piszkesteto** | **150.58 340** | PKIKP | | **PKPbc** | **17 03 42.8 -0.2** |
| **MMAI** | **Mount Meron Ar** | **150.63 301** | PKPbc | | **PKPbc** | **17 03 43.1 -0.5** |
| | comp=Z,5.6nm,0.7s,baz=76,slow=7.0,SNR=5.9 | | | | | |
| **ZVC** | **Zvikov** | **150.66 348**Ⓣ | *e*PKP | | **PKPbc** | **17 03 42.8 -0.3** |
| **ZVC** | **Zvikov** | **150.66 348** | AMS | AMS | AMS | 17 47 20.0 |
| | comp=Z,600nm,19.8s | | | | | |
| **BMRD** | **Maredsous** | **150.68 1** | *d*PKP | | **PKPbc** | **17 03 42.2 -0.8** |
| **SMOL** | **Smolenice** | **150.78 343** | *e*PKIKP | | **PKPbc** | **17 03 43.4 0.0** |
| **DOU** | **Dourbes** | **150.88 1** | *d*PKP | | **PKPbc** | **17 03 43.5 -0.1** |
| **KHC** | **Kasperske Hory** | **151.07 349**Ⓣ | *e*PKP | | **PKPbc** | **17 03 43.6 -0.5** |
| KHC | | | *ep*PKP | | **pPKPab** | **17 04 01.0 -1.6** |
| **KHC** | **Kasperske Hory** | **151.07 349** | AMS | AMS | AMS | 17 49 30.0 |
| | comp=Z,800nm,19.7s | | | | | |
| **KHC** | **Kasperske Hory** | **151.07 349** | *e*PKIKP | | **PKPbc** | **17 03 43.6 -0.5** |
| **CKRC** | **Cesky Krumlov** | **151.23 347**Ⓣ | *e*PKP | | **PKPbc** | **17 03 44.2 -0.2** |
| **CKRC** | **Cesky Krumlov** | **151.23 347** | AMS | AMS | AMS | 17 46 30.0 |
| | comp=Z,800nm,19.8s | | | | | |
| **CKRC** | **Cesky Krumlov** | **151.23 347** | *e*PKIKP | | **PKPbc** | **17 03 44.2 -0.2** |
| **WLF** | **Walferdange** | **151.31 359** | *d*PKP | | **PKPbc** | **17 03 44.5 -0.1** |
| **GERES** | **GERESS Array B** | **151.32 348** | | | **PKPbc** | **17 03 43.9 -0.9** |
| **GERES** | **GERESS Array B** | **151.32 348** | PKPbc | | **PKPbc** | **17 03 44.2 -0.6** |
| | comp=Z,6.0nm,1.0s,baz=30,slow=3.8,SNR=18 | | | | | |
| **GERES** | **GERESS Array B** | **151.32 348** | PKIKP | | **PKPbc** | **17 03 43.9 -0.9** |
| **CONA** | **Conrad Observa** | **151.72 345** | *e*PKP | | **PKPbc** | **17 03 45.2 -0.5** |
| | comp=Z,10nm,1.3s | | | | | |
| **RONA** | **Rosalia, Austr** | **151.82 344** | *e*PKP | | **PKPbc** | **17 03 45.4 -0.5** |
| | comp=Z,3.7nm,0.5s | | | | | |
| **MOA** | **Molln** | **152.16 347** | *e*PKP | | **PKPbc** | **17 03 45.7 -0.9** |
| | comp=Z,1.2nm,0.5s | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **152.44 348** | *e*PKP | | **PKPbc** | **17 03 46.8 -0.5** |
| | comp=Z,2.5nm,0.6s | | | | | |
| **LESA** | **Schwarzleotal** | **152.88 349** | *e*PKP | | **PKPdf** | **17 03 40.0 -1.1** |
| | comp=Z,1.3nm,0.8s | | | | | |
| **KBA** | **Koelnbreinsper** | **153.08 348** | *e*PKP | | **PKPdf** | **17 03 39.5 -2.1** |
| | comp=Z,2.9nm,1.0s | | | | | |
| **SOKA** | **Soboth** | **153.09 345** | *e*PKP | | **PKPdf** | **17 03 39.3 -2.1** |
| | comp=Z,2.6nm,1.0s | | | | | |
| **RETA** | **Reutte** | **153.12 352** | *e*PKP | | **PKPdf** | **17 03 41.3 -0.2** |
| | comp=Z,2.7nm,1.4s | | | | | |
| **WATA** | **Walderalm** | **153.15 350** | *e*PKP | | **PKPdf** | **17 03 40.3 -1.3** |
| | comp=Z,3.6nm,1.2s | | | | | |
| **WTTA** | **Wattenberg** | **153.21 350** | *e*PKP | | **PKPdf** | **17 03 41.3 -0.4** |
| | comp=Z,2.8nm,0.8s | | | | | |
| **MOTA** | **Moosalm** | **153.21 351** | *e*PKP | | **PKPdf** | **17 03 40.6 -1.1** |
| | comp=Z,1.6nm,0.6s | | | | | |
| **SQTA** | **Sankt Quirin** | **153.32 351** | *i* PKP | | **PKPdf** | **17 03 39.5 -2.3** |
| | comp=Z,6.5nm,1.6s | | | | | |
| **OBKA** | **Obir** | **153.36 346** | *e*PKP | | **PKPdf** | **17 03 40.2 -1.7** |
| | comp=Z,1.9nm,1.2s | | | | | |
| **DAVA** | **Damuels** | **153.43 353** | *e*PKP | | **PKPdf** | **17 03 42.2 +0.2** |
| | comp=Z,2.5nm,1.0s | | | | | |
| **ABTA** | **Abfaltersbach** | **153.56 349** | *e*PKP | | **PKPdf** | **17 03 41.6 -0.5** |
| | comp=Z,2.7nm,1.0s | | | | | |
| **FETA** | **Feichten** | **153.58 351** | *e*PKP | | **PKPdf** | **17 03 40.8 -1.4** |
| | comp=Z,5.0nm,1.9s | | | | | |
| **ESDC** | **Sonseca Array** | **159.72 21** | PKP | | **PKPdf** | **17 03 48.8 -1.4** |
| | comp=Z,0.7nm,0.9s,baz=356,slow=4.5,SNR=4.9 | | | | | |
| ESDC | | | PKPab | | **PKPab** | **17 04 27.8 -1.1** |
| | comp=Z,1.9nm,1.2s,baz=328,slow=5.9,SNR=6.0 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.57 156** | PKP | | **PKPdf** | **17 03 58.6 -2.0** |
| | comp=Z,0.3nm,0.8s,baz=226,slow=5.8,SNR=3.2 | | | | | |
| TORD | | | PKPab | | **PKPab** | **17 05 20.7 -0.8** |
| | comp=Z,0.9nm,0.9s,baz=218,slow=5.1,SNR=3.6 | | | | | |

*IDC* ***12*** *16:44:38.9±0.7, 69.6°69N×144.5°51W, h0km, mb3.6/14, mbtmp3.7/18, ML3.8/4, Error ellipse: s-maj=20.4km s-min=13.1km az=50.0*

*AEIC* ***12*** *16:44:39.5±2.0, 69.47°N±0.05°×144.5°51W±0.08°, h1km±5km, ML4.2, ML4.2/116(NEIC), Mwr4.2/33(NEIC), Error ellipse: s-maj=7.5km s-min=3.0km az=205.0*

*NEIC* ***12*** *16:44:40.4±1.1, 69.59°N±0.06°×144.43°W±0.08°, h10km±1km, Error ellipse: s-maj=10.5km s-min=4.2km az=196.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr=0.40; Mθθ=0.09; Mφφ=0.50; Mrθ=-0.03; Mθφ=-2.43; Mφr=0.15; Fault plane solution: M=2.48000×10¹⁵ NP1: φs=3.39000°, δ88.61000°, λ-3.94000°. NP2:φ=93.49000°, δ86.06000°, λ-178.61000°. Principal axes: T 2.6527, Plg2.0000°, Azm48.0000°; N -0.4000, Plg86.0000°, Azm164.0000°; P -2.2528, Plg4.0000°, Azm318.0000°;*

*NEIC* ***12*** *16:44:40.3, 69.60N×144.51W, h10km*

**ISC 12 16:44:40.6±0.5, 69.55N±0.04×144.52W±0.03, h14km, n148, σ0.975/125, mb3.8/15, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.29** | **75** | | **Pg** | **16 44 45.3** | **-1.4** |
| **C26K** | **Camden Bay** | **0.39** | **340** | | **Pg** | **16 44 48.4** | **-0.1** |
| C26K | | | | | **Sb** | **16 44 55.1** | **-0.1** |
| **C26K** | **Camden Bay** | **0.39** | **340** | IAML | | 16 44 55.2 | |
| | comp=E,9μm,0.9s | | | | | | |
| C26K | | | | IAML | | 16 44 56.8 | |
| | comp=N,12μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.70** | **251** | | **Sg** | **16 45 02.2** | **-1.1** |
| **D25K** | **Kavik River** | **0.70** | **251** | Pg | **Pg** | **16 44 52.2** | **-1.9** |
| **D25K** | **Kavik River** | **0.70** | **251** | IAML | | 16 45 05.8 | |
| | comp=N,10μm,0.9s | | | | | | |
| D25K | | | | IAML | | 16 45 05.8 | |
| | comp=E,7μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.29** | **102** | Pn | **Pn** | **16 45 03.2** | **-1.1** |
| **D27M** | **Malcolm River** | **1.29** | **102** | | **Sb** | **16 45 21.7** | **+0.5** |
| **C24K** | **Franklin Bluff** | **1.48** | **279** | | **Pb** | **16 45 07.5** | **-0.2** |
| C24K | | | | | **Sg** | **16 45 27.6** | **-0.3** |
| **D24K** | **Happy Valley** | **1.58** | **257** | | **Pn** | **16 45 08.8** | **+0.7** |
| **E27K** | **Coleen River** | **1.73** | **141** | | **Pn** | **16 45 10.7** | **+0.5** |
| **E27K** | **Coleen River** | **1.73** | **141** | | **Sn** | **16 45 33.4** | **+1.2** |
| **E28M** | **Babbage River** | **2.03** | **116** | | **Pn** | **16 45 15.2** | **+0.9** |
| **TOLK** | **Toolik Lake Re** | **2.03** | **246** | | **Pn** | **16 45 14.7** | **+0.4** |
| TOLK | | | | IAML | | 16 45 50.5 | |
| | comp=E,3μm,0.7s | | | | | | |
| TOLK | | | | IAML | | 16 45 56.8 | |
| | comp=N,2μm,1.2s | | | | | | |
| **E24K** | **Your Creek** | **2.07** | **226** | | **Pn** | **16 45 15.8** | **+0.9** |
| E24K | | | | IAML | | 16 45 50.0 | |
| | comp=E,2μm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.13** | **181** | | **Pn** | **16 45 16.9** | **+1.1** |
| **C23K** | **Itkillik River** | **2.15** | **280** | | **Pn** | **16 45 16.5** | **+0.6** |
| **D23K** | **Nanushuk River** | **2.27** | **258** | | **Pn** | **16 45 17.6** | **-0.1** |
| **D23K** | **Nanushuk River** | **2.27** | **258** | IAML | | 16 46 01.1 | |
| | comp=N,2μm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.38** | **233** | | **Pn** | **16 45 19.6** | **+0.3** |
| **E23K** | **Chandalar** | **2.38** | **233** | IAML | | 16 46 03.4 | |
| | comp=E,1μm,1.1s | | | | | | |
| E23K | | | | IAML | | 16 46 07.3 | |
| | comp=N,1μm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.39** | **213** | | **Pn** | **16 45 19.4** | **+0.1** |
| F24K | | | | IAML | | 16 45 56.0 | |
| | comp=E,865nm,0.9s | | | | | | |
| F24K | | | | IAML | | 16 45 57.0 | |
| | comp=N,1μm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.59** | **137** | | **Pn** | **16 45 22.4** | **+0.5** |
| **G26K** | **Porcupine Rive** | **2.63** | **174** | | **Pn** | **16 45 23.2** | **+0.7** |
| **E29M** | **Blow River** | **2.66** | **113** | | **Pn** | **16 45 23.8** | **+0.9** |
| **G25K** | **Bearman Lake** | **2.86** | **193** | | **Pn** | **16 45 25.9** | **+0.2** |
| **G27K** | **Doyon Strip** | **2.96** | **157** | | **Pn** | **16 45 27.8** | **+0.8** |
| **D22K** | **Ayikyak River** | **2.99** | **261** | | **Pn** | **16 45 27.8** | **+0.3** |
| **E22K** | **Anaktuvuk Pass** | **3.01** | **245** | | **Pn** | **16 45 27.9** | **+0.1** |
| **E22K** | **Anaktuvuk Pass** | **3.01** | **245** | IAML | | 16 46 21.3 | |
| | comp=E,806nm,1.1s | | | | | | |
| E22K | | | | IAML | | 16 46 23.1 | |
| | comp=N,838nm,1.0s | | | | | | |
| **FYU** | **Fort Yukon** | **3.01** | **185** | | **Pn** | **16 45 29.1** | **+1.3** |
| FYU | | | | IAML | | 16 46 23.9 | |
| | comp=N,1μm,1.3s | | | | | | |
| FYU | | | | IAML | | 16 46 29.7 | |
| | comp=E,1μm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.07** | **203** | | **Pn** | **16 45 29.1** | **+0.5** |
| G24K | | | | IAML | | 16 46 19.7 | |
| | comp=N,1μm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.14** | **225** | | **Pn** | **16 45 29.6** | **0.0** |
| **B22K** | **Teshekpuk Lake** | **3.17** | **289** | | **Pn** | **16 45 30.1** | **+0.1** |
| **F22K** | **John River** | **3.49** | **238** | | **Pn** | **16 45 34.6** | **+0.3** |
| **G23K** | **Bananza Creek** | **3.52** | **218** | IAML | | 16 46 36.8 | |
| | comp=E,589nm,0.9s | | | | | | |
| G23K | | | | IAML | | 16 46 42.5 | |
| | comp=N,614nm,1.1s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.52** | **160** | | **Pn** | **16 45 35.1** | **+0.2** |
| **B21K** | **Ikpikpuk River** | **3.54** | **276** | | **Pn** | **16 45 35.2** | **+0.2** |
| **E21K** | **Killik River** | **3.58** | **256** | | **Pn** | **16 45 36.0** | **+0.4** |
| **G29M** | **Pine Creek** | **3.59** | **135** | IAML | | 16 46 49.1 | |
| | comp=E,611nm,1.1s | | | | | | |
| G29M | | | | IAML | | 16 46 59.7 | |
| | comp=N,373nm,1.3s | | | | | | |
| **F30M** | **Barrier River** | **3.75** | **117** | | **Pn** | **16 45 38.3** | **+0.4** |
| **A22K** | **Sinclair Lake** | **3.83** | **297** | | **Pn** | **16 45 39.8** | **+0.8** |
| **H24K** | **Noodor Dome** | **3.95** | **201** | | **Pn** | **16 45 40.6** | **-0.1** |
| **H24K** | **Noodor Dome** | **3.95** | **201** | IAML | | 16 46 47.7 | |
| | comp=N,348nm,1.1s | | | | | | |
| H24K | | | | IAML | | 16 46 52.7 | |
| | comp=E,389nm,1.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.02** | **126** | | **Pn** | **16 45 42.2** | **+0.5** |
| **F21K** | **Alatna River** | **4.06** | **239** | IAML | | 16 46 53.4 | |
| | comp=N,377nm,1.1s | | | | | | |
| F21K | | | | IAML | | 16 46 56.1 | |
| | comp=E,432nm,1.3s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.07** | **186** | | **Pn** | **16 45 43.3** | **+0.8** |
| PRP | | | | IAML | | 16 46 53.8 | |
| | comp=N,391nm,1.0s | | | | | | |
| PRP | | | | IAML | | 16 46 57.4 | |
| | comp=E,244nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.07** | **142** | | **Pn** | **16 45 43.3** | **+0.9** |
| H29M | | | | IAML | | 16 46 57.6 | |
| | comp=E,277nm,1.1s | | | | | | |
| H29M | | | | IAML | | 16 47 03.7 | |
| | comp=N,272nm,1.2s | | | | | | |
| **I27K** | **Kandik River** | **4.12** | **163** | | **Pn** | **16 45 43.7** | **+0.6** |
| **INK** | **Inuvik** | **4.16** | **102** | | **Pn** | **16 45 44.7** | **+1.2** |
| **INK** | **Inuvik** | **4.16** | **102** | Pn | **Pn** | **16 45 44.0** | **+0.5** |
| | comp=N,2.5nm,0.3s,baz=302,slow=12,SNR=3.6 | | | | | | |
| INK | | | | Sn | **Sn** | **16 46 29.3** | **-2.5** |
| | comp=N,4.1nm,0.3s,baz=320,slow=3.8,SNR=4.4 | | | | | | |
| | comp=N,7.2nm,0.5s | | | | | | |
| **H23K** | **Yukon River** | **4.21** | **209** | IAML | | 16 46 56.9 | |
| | comp=N,432nm,1.0s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.34** | **134** | IAML | | 16 46 58.6 | |
| | comp=E,223nm,0.5s | | | | | | |
| EPYK | | | | IAML | | 16 47 17.6 | |
| | comp=N,279nm,1.3s | | | | | | |
| **B20K** | **Meade River** | **4.41** | **282** | | **Pn** | **16 45 47.9** | **+1.0** |
| **A21K** | **Barrow** | **4.44** | **299** | | **Pn** | **16 45 47.7** | **+0.4** |
| **I28M** | **Miner Creek** | **4.48** | **155** | | **Pn** | **16 45 49.5** | **+1.5** |
| I28M | | | | IAML | | 16 47 15.3 | |
| | comp=E,159nm,1.4s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.50** | **113** | | **Pn** | **16 45 48.4** | **+0.2** |
| **G21K** | **Allakaket** | **4.55** | **232** | IAML | | 16 47 12.7 | |
| | comp=N,284nm,1.3s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.60** | **196** | | **Pn** | **16 45 50.1** | **+0.5** |
| **POKR** | **Poker Plat Res** | **4.60** | **196** | IAML | | 16 47 10.0 | |
| | comp=E,227nm,1.3s | | | | | | |
| POKR | | | | IAML | | 16 47 14.4 | |
| | comp=N,216nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.64** | **120** | | **Pn** | **16 45 50.3** | **+0.3** |
| **G31M** | **Satah River** | **4.64** | **120** | IAML | | 16 47 12.0 | |
| | comp=E,224nm,1.2s | | | | | | |
| G31M | | | | IAML | | 16 47 21.2 | |
| | comp=N,166nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **199** | IAML | | 16 47 17.2 | |
| | comp=N,188nm,1.1s | | | | | | |
| MDM | | | | IAML | | 16 47 20.7 | |
| | comp=E,197nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.86** | **244** | | **Pn** | **16 45 53.9** | **+0.8** |
| F20K | | | | IAML | | 16 47 17.6 | |
| | comp=N,252nm,1.5s | | | | | | |
| F20K | | | | IAML | | 16 47 38.0 | |
| | comp=E,166nm,1.0s | | | | | | |
| **COLA** | **College** | **4.88** | **197** | | **Pn** | **16 45 54.7** | **+1.4** |
| COLA | | | | IAML | | 16 47 22.8 | |
| | comp=E,295nm,0.9s | | | | | | |
| **IL31** | | **4.89** | **192** | | **Pn** | **16 45 54.4** | **+0.9** |
| **ILAR** | **Eielson Array** | **4.89** | **192** | | **Pn** | **16 45 55.0** | **+1.4** |
| **ILAR** | **Eielson Array** | **4.89** | **192** | Pn | **Pn** | **16 45 54.7** | **+1.1** |
| | comp=E,3.4nm,0.3s,baz=7.7,slow=14,SNR=12 | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 46 51.4** | **+1.5** |
| | comp=E,3.8nm,0.3s,baz=7.6,slow=23,SNR=4.6 | | | | | | |
| | comp=E,12nm,0.7s | | | | | | |
| **EGAK** | **Eagle** | **4.97** | **163** | IAML | | 16 47 31.6 | |
| | comp=E,153nm,1.4s | | | | | | |
| EGAK | | | | IAML | | 16 47 35.3 | |
| | comp=E,164nm,1.3s | | | | | | |
| **J25K** | **Salcha River,** | **4.97** | **184** | | **Pn** | **16 45 55.0** | **+0.2** |
| **J25K** | **Salcha River,** | **4.97** | **184** | IAML | | 16 47 26.9 | |
| | comp=N,123nm,1.4s | | | | | | |
| J25K | | | | IAML | | 16 47 27.1 | |
| | comp=E,259nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.01** | **229** | | **Pn** | **16 45 55.8** | **+0.6** |
| **H21K** | **Melozitna Rive** | **5.03** | **223** | IAML | | 16 47 27.2 | |
| | comp=N,202nm,1.4s | | | | | | |
| **J26L** | **Joseph Creek** | **5.09** | **175** | | **Pn** | **16 45 56.8** | **+0.4** |
| **J26L** | **Joseph Creek** | **5.09** | **175** | IAML | | 16 47 15.5 | |
| | comp=E,114nm,1.4s | | | | | | |
| J26L | | | | IAML | | 16 47 31.8 | |
| | comp=N,100nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **196** | IAML | | 16 47 21.2 | |
| | comp=E,99nm,1.5s | | | | | | |
| **MLY** | **Manley** | **5.14** | **211** | IAML | | 16 47 27.9 | |
| | comp=N,129nm,1.3s | | | | | | |
| MLY | | | | IAML | | 16 47 33.9 | |
| | comp=E,127nm,1.4s | | | | | | |
| **HDA** | **Harding Lake** | **5.25** | **192** | | **Pn** | **16 45 58.7** | **+0.1** |
| **HDA** | **Harding Lake** | **5.25** | **192** | IAML | | 16 47 32.0 | |
| | comp=N,169nm,1.4s | | | | | | |
| HDA | | | | IAML | | 16 47 34.6 | |
| | comp=E,202nm,1.3s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **202** | IAML | | 16 47 31.2 | |
| | comp=N,103nm,1.2s | | | | | | |
| NEA2 | | | | IAML | | 16 47 33.0 | |
| | comp=E,96nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **197** | IAML | | 16 47 39.9 | |
| | comp=N,129nm,1.1s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.36** | **272** | IAML | | 16 47 58.4 | |
| | comp=E,180nm,1.5s | | | | | | |
| **I30M** | **Mount Dempster** | **5.36** | **140** | IAML | | 16 47 51.8 | |
| | comp=E,79nm,1.1s | | | | | | |
| **SCRK** | **Sand Creek** | **5.61** | **178** | | **Pn** | **16 46 03.9** | **+0.4** |
| **K27K** | **Chicken** | **5.63** | **169** | | **Pn** | **16 46 03.9** | **+0.2** |
| **F19K** | **Shaleruckik Mo** | **5.64** | **247** | | **Pn** | **16 46 03.6** | **-0.2** |
| **A19K** | **Wainwright** | **5.75** | **284** | | **Pn** | **16 46 05.8** | **+0.5** |
| **K24K** | **Donnelly Dome** | **5.80** | **186** | | **Pn** | **16 46 05.6** | **-0.5** |
| **G19K** | **Purcell Mounta** | **5.85** | **240** | | **Pn** | **16 46 06.4** | **-0.4** |
| **DOT** | **Dot Lake** | **5.93** | **178** | | **Pn** | **16 46 07.5** | **-0.5** |
| **C18K** | **Utukok River** | **6.03** | **269** | | **Pn** | **16 46 09.6** | **+0.3** |
| **B18K** | **Kokolik River** | **6.08** | **276** | | **Pn** | **16 46 10.1** | **+0.2** |
| **MCK** | **McKinley** | **6.10** | **199** | | **Pn** | **16 46 09.9** | **-0.3** |
| **E18K** | **Tukpahlearik C** | **6.29** | **258** | | **Pn** | **16 46 12.9** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.37** | **151** | | **Pn** | **16 46 13.2** | **-0.8** |
| **F18K** | **Selawik** | **6.39** | **250** | | **Pn** | **16 46 14.8** | **+0.7** |
| **RND** | **Reindeer** | **6.41** | **198** | | **Pn** | **16 46 14.3** | **-0.2** |
| **G18K** | **Tagagawik** | **6.50** | **242** | | **Pn** | **16 46 15.8** | **+0.2** |
| **J20K** | **Nowinta River** | **6.59** | **220** | | **Pn** | **16 46 16.9** | **0.0** |
| **DHY** | **Denali Highway** | **6.61** | **191** | | **Pn** | **16 46 17.4** | **+0.1** |
| **BCAR** | **Beaver Creek A** | **6.61** | **169** | | **Pn** | **16 46 18.0** | **+0.8** |
| **PAX** | **Paxson** | **6.62** | **184** | | **Pn** | **16 46 17.3** | **-0.2** |
| **C17K** | **DeLong Mountai** | **6.78** | **270** | | **Pn** | **16 46 18.9** | **-0.6** |
| **A36M** | **Sachs Harbour** | **6.80** | **60** | | **Pn** | **16 46 19.4** | **-0.3** |
| **RDOG** | **Red Dog Mine** | **6.83** | **266** | | **Pn** | **16 46 19.8** | **-0.3** |
| **E17K** | **Hotham Inlet** | **6.87** | **257** | | **Pn** | **16 46 20.4** | **-0.3** |
| **H18K** | **Honhosa River** | **6.92** | **237** | | **Pn** | **16 46 21.2** | **-0.2** |
| **WAT7** | **Susitna Watana** | **6.97** | **197** | | **Pn** | **16 46 21.6** | **-0.6** |
| **D17K** | **Noatak River** | **7.03** | **263** | | **Pn** | **16 46 22.2** | **-0.7** |
| **C36M** | **Paulatuk** | **7.19** | **82** | | **Pn** | **16 46 24.5** | **-0.5** |
| **K20K** | **Telida** | **7.29** | **216** | | **Pn** | **16 46 25.6** | **-1.0** |
| **M27K** | **Edge Creek, AK** | **7.30** | **170** | | **Pn** | **16 46 26.3** | **-0.5** |
| **G17K** | **Kiwalik Mounta** | **7.38** | **244** | | **Pn** | **16 46 27.1** | **-0.7** |
| **H17K** | **Granite Mounta** | **7.54** | **240** | | **Pn** | **16 46 30.2** | **+0.3** |
| **M29M** | **Somme Creek** | **7.55** | **158** | | **Pn** | **16 46 29.9** | **-0.3** |
| **WACK** | **Wrangell Chich** | **7.60** | **179** | | **Pn** | **16 46 30.9** | **-0.1** |
| **C16K** | **Lisburne Hills** | **7.61** | **270** | | **Pn** | **16 46 30.5** | **-0.3** |
| **YUK2** | **White River** | **7.94** | **167** | | **Pn** | **16 46 35.9** | **+0.4** |
| **GHO** | **Glory Hole Cre** | **8.02** | **195** | | **Pn** | **16 46 35.3** | **-1.2** |
| **KLU** | **Klutina** | **8.12** | **185** | | **Pn** | **16 46 36.5** | **-1.4** |
| **L19K** | **White Mountain** | **8.51** | **215** | | **Pn** | **16 46 42.7** | **-0.6** |
| **F15K** | **North Star Dit** | **8.57** | **253** | | **Pn** | **16 46 43.6** | **-0.4** |
| **BMRM** | **Bremner River** | **8.62** | **180** | | **Pn** | **16 46 45.0** | **+0.2** |
| **N30M** | **Aishikik Lake** | **8.68** | **156** | | **Pn** | **16 46 45.0** | **-0.6** |
| **KIAG** | **Kiagna River** | **8.71** | **173** | | **Pn** | **16 46 46.5** | **+0.3** |
| **G15K** | **Niukluk** | **8.80** | **248** | | **Pn** | **16 46 46.9** | **-0.3** |
| **F14K** | **Arctic Creek** | **9.27** | **254** | | **Pn** | **16 46 53.4** | **-0.2** |
| **J14K** | **Nanvaranak Lak** | **10.25** | **238** | | **Pn** | **16 47 07.4** | **+0.5** |
| **DLBC** | **Dease Lake** | **12.78** | **144** | Pn | **Pn** | **16 47 41.7** | **0.0** |
| | comp=E,0.7nm,0.3s,baz=17,slow=9.6,SNR=6.2 | | | | | | |
| | comp=E,1.6nm,0.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.92** | **106** | Pn | Pn | 16 47 52.0 | -5.1 |
| | comp=E,0.2nm,0.3s,baz=41,slow=12,SNR=2.2 | | | | | | |
| YKA | | | | Sn | Sn | 16 50 17.2 | -14 |
| | comp=E,0.3nm,0.3s,baz=324,slow=7.5,SNR=2.7 | | | | | | |
| | comp=E,1.1nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.27** | **128** | P | **P** | **16 51 08.9** | **+0.3** |
| | comp=E,0.6nm,0.7s,baz=14,slow=3.9,SNR=7.2 | | | | | | |
| | comp=E,0.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.20** | **142** | P | **P** | **16 51 27.5** | **+2.1** |
| | comp=E,0.5nm,0.8s,baz=295,slow=9.5,SNR=3.1 | | | | | | |
| | comp=E,0.5nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **35.80** | **123** | P | **P** | **16 51 39.4** | **+0.3** |
| **JFWS** | **Jewell Farm** | **38.19** | **105** | P | **P** | **16 51 59.2** | **-0.1** |
| **TXAR** | **Lajitas Array** | **46.49** | **128** | P | **P** | **16 53 06.2** | **-0.8** |
| | comp=E,0.3nm,0.8s,baz=338,slow=1.0,SNR=2.0 | | | | | | |
| | comp=E,0.3nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.23** | **283** | P | **P** | **16 53 11.4** | **-1.1** |
| | comp=E,1.5nm,0.9s,baz=27,slow=8.8,SNR=7.0 | | | | | | |
| | comp=E,1.5nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **49.12** | **6** | P | **P** | **16 53 27.1** | **+0.1** |
| | comp=E,0.7nm,0.6s,baz=2.7,slow=8.9,SNR=3.6 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **49.67** | **14** | P | **P** | **16 53 31.7** | **+0.5** |
| | comp=E,2.0nm,0.8s,baz=309,slow=7.1,SNR=5.1 | | | | | | |
| | comp=E,2.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.70** | **325** | P | **P** | **16 53 45.4** | **-1.1** |
| | comp=E,0.3nm,0.4s,baz=29,slow=8.3,SNR=3.2 | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.88** | **273** | P | **P** | **16 53 49.1** | **+1.0** |
| | comp=E,1.3nm,0.9s,baz=14,slow=7.5,SNR=6.1 | | | | | | |
| | comp=E,1.3nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **52.09** | **306** | P | **P** | **16 53 50.1** | **+0.4** |
| | comp=E,0.4nm,0.6s,baz=51,slow=5.7,SNR=3.5 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **54.63** | **283** | P | **P** | **16 54 08.7** | **+0.5** |
| | comp=E,0.8nm,0.9s,baz=4.7,slow=9.5,SNR=2.9 | | | | | | |
| | comp=E,0.8nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.07** | **328** | P | **P** | **16 54 17.5** | **-1.0** |
| | comp=E,0.2nm,0.4s,baz=11,slow=7.5,SNR=2.0 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.92** | **299** | *e*P | **P** | **16 54 26.2** | **+1.4** |
| HHC | | | | pP | sP | 16 54 31.7 | +0.4 |
| HHC | | | | sP | pP | 16 54 34.2 | +4.7 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.00** | **324** | P | **P** | **16 54 39.4** | **+0.1** |
| | comp=Z,0.3nm,0.7s,baz=50,slow=9.6,SNR=2.1 | | | | | | |

*IDC **12** 16:53:11.7±0.7,69°.71N×145°.12W,h0km,mb3.9/11, mbtmp3.9/16,ML3.8/5,Error ellipse: s-maj=20.4km s-min=11.6km az=74.0*
*NEIC **12** 16:53:12.8±1.0,69°.63N±0°.05×145°.0W±0°.1,h10km±2km, Error ellipse: s-maj=9.0km s-min=5.9km az=23.0*
*AEIC **12** 16:53:13.0±1.2,69°.56N±0°.04×145°.1W±0°.1,h4km±5km, ML4.0,mb4.0/5(NEIC),ML4.1/120(NEIC),Error ellipse: s-maj=7.1km s-min=4.9km az=208.0*

**ISC 12 16:53:12.5±0.5,69°.62N±0°.04×145°.03W±0°.03,h10km, n136,σ1°02/115,mb4.0/13,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.30** | **7** | | **Pb** | **16 53 19.9** | **-0.1** |
| C26K | | | | | **Sb** | **16 53 25.2** | **+0.2** |
| **C26K** | **Camden Bay** | **0.30** | **7** | IAML | | 16 53 25.9 | |
| | comp=N,24μm,0.4s | | | | | | |
| C26K | | | | IAML | | 16 53 26.3 | |
| | comp=E,26μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.46** | **89** | | **Pg** | **16 53 22.1** | **+0.6** |
| C27K | | | | | **Sg** | **16 53 28.9** | **+1.3** |
| **C27K** | **Jago River** | **0.46** | **89** | IAML | | 16 53 32.1 | |
| | comp=N,15μm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.56** | **238** | | **Pg** | **16 53 22.3** | **-1.1** |
| **D25K** | **Kavik River** | **0.56** | **238** | | **Sg** | **16 53 30.1** | **-0.7** |
| **C24K** | **Franklin Bluff** | **1.29** | **276** | | **Pb** | **16 53 36.8** | **0.0** |
| C24K | | | | | **Sg** | **16 53 54.8** | **+0.9** |
| **C24K** | **Franklin Bluff** | **1.29** | **276** | IAML | | 16 53 56.5 | |
| | comp=N,3μm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.42** | **253** | | **Pn** | **16 53 38.5** | **+0.1** |
| **D27M** | **Malcolm River** | **1.48** | **103** | Pn | **Pn** | **16 53 39.8** | **+0.5** |
| D27M | | | | IAML | | 16 54 04.9 | |
| | comp=E,2μm,0.5s | | | | | | |
| D27M | | | | IAML | | 16 54 07.3 | |
| | comp=N,2μm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.90** | **138** | | **Pn** | **16 53 45.8** | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **1.90** | **241** | | **Pn** | **16 53 45.2** | **+0.1** |
| TOLK | | | | IAML | | 16 54 23.7 | |
| | comp=E,2μm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **1.96** | **279** | | **Pn** | **16 53 45.9** | **+0.2** |
| **F26K** | **Sheenjek River** | **1.96** | **170** | | **Pn** | **16 53 46.8** | **+1.0** |
| F26K | | | | | **Sn** | **16 54 11.4** | **+1.0** |
| **F26K** | **Sheenjek River** | **1.96** | **170** | IAML | | 16 54 15.5 | |
| | comp=E,2μm,0.4s | | | | | | |
| F26K | | | | IAML | | 16 54 16.7 | |
| | comp=N,1μm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.00** | **221** | | **Pn** | **16 53 47.0** | **+0.7** |
| E24K | | | | IAML | | 16 54 18.5 | |
| | comp=E,1μm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.00** | **221** | | **Sn** | **16 54 11.8** | **+0.5** |
| **F25K** | **Christian Rive** | **2.05** | **187** | | **Pn** | **16 53 47.9** | **+0.9** |
| **D23K** | **Nanushuk River** | **2.12** | **255** | IAML | | 16 54 24.3 | |
| | comp=N,1μm,0.8s | | | | | | |
| D23K | | | | IAML | | 16 54 32.5 | |
| | comp=E,1μm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.21** | **176** | | **Pn** | **16 53 50.1** | **+0.9** |
| **E28M** | **Babbage River** | **2.22** | **115** | | **Pn** | **16 53 50.4** | **+1.1** |
| E28M | | | | IAML | | 16 54 28.2 | |
| | comp=N,1μm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.29** | **229** | IAML | | 16 54 31.6 | |
| | comp=N,895nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.36** | **208** | | **Pn** | **16 53 52.0** | **+0.7** |
| F24K | | | | IAML | | 16 54 30.3 | |
| | comp=N,829nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.76** | **134** | | **Pn** | **16 53 57.5** | **+0.7** |
| **D22K** | **Ayikyak River** | **2.83** | **258** | | **Pn** | **16 53 57.9** | **+0.2** |
| D22K | | | | IAML | | 16 54 55.0 | |
| | comp=N,818nm,1.0s | | | | | | |
| **E29M** | **Blow River** | **2.85** | **112** | | **Pn** | **16 53 58.3** | **+0.4** |
| E29M | | | | IAML | | 16 54 50.4 | |
| | comp=E,636nm,0.7s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.88** | **242** | | **Pn** | **16 53 58.4** | **0.0** |
| **B22K** | **Teshekpuk Lake** | **2.98** | **288** | | **Pn** | **16 53 59.9** | **+0.2** |
| **FYU** | **Fort Yukon** | **3.07** | **182** | | **Pn** | **16 54 01.5** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **198** | | **Pn** | **16 54 01.1** | **+0.1** |
| G24K | | | | IAML | | 16 54 57.9 | |
| | comp=E,681nm,0.9s | | | | | | |
| **G27K** | **Doyon Strip** | **3.09** | **154** | | **Pn** | **16 54 01.5** | **+0.2** |
| **B21K** | **Ikpikpuk River** | **3.35** | **275** | | **Pn** | **16 54 05.1** | **+0.2** |
| B21K | | | | IAML | | 16 55 08.8 | |
| | comp=E,428nm,1.1s | | | | | | |
| B21K | | | | IAML | | 16 55 18.2 | |
| | comp=N,524nm,0.9s | | | | | | |
| **H25L** | **Birch Creek** | **3.38** | **185** | | **Pn** | **16 54 05.3** | **0.0** |
| **E21K** | **Killik River** | **3.43** | **254** | | **Pn** | **16 54 05.7** | **-0.2** |
| E21K | | | | IAML | | 16 55 09.8 | |
| | comp=E,310nm,0.8s | | | | | | |
| E21K | | | | IAML | | 16 55 13.8 | |
| | comp=N,440nm,1.0s | | | | | | |
| **G23K** | **Bananza Creek** | **3.47** | **215** | | **Pn** | **16 54 06.7** | **+0.2** |
| G23K | | | | IAML | | 16 55 07.7 | |
| | comp=E,381nm,0.8s | | | | | | |
| **G22K** | **Bettles** | **3.63** | **225** | | **Pn** | **16 54 08.7** | **+0.1** |
| **A22K** | **Sinclair Lake** | **3.64** | **297** | | **Pn** | **16 54 09.7** | **+0.9** |
| **G29M** | **Pine Creek** | **3.77** | **133** | IAML | | 16 55 15.5 | |
| | comp=N,332nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **3.94** | **236** | IAML | | 16 55 27.1 | |
| | comp=E,208nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.95** | **197** | | **Pn** | **16 54 13.2** | **0.0** |
| H24K | | | | IAML | | 16 55 00.5 | |
| | comp=N,223nm,0.6s | | | | | | |
| H24K | | | | IAML | | 16 55 19.5 | |
| | comp=E,295nm,1.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.13** | **183** | | **Pn** | **16 54 16.0** | **+0.4** |
| PRP | | | | IAML | | 16 55 06.8 | |
| | comp=N,288nm,0.3s | | | | | | |
| PRP | | | | IAML | | 16 55 08.0 | |
| | comp=E,205nm,0.5s | | | | | | |
| **H23K** | **Yukon River** | **4.18** | **206** | | **Pn** | **16 54 16.4** | **+0.1** |
| H23K | | | | IAML | | 16 55 31.3 | |
| | comp=E,272nm,1.1s | | | | | | |
| H23K | | | | IAML | | 16 55 37.5 | |
| | comp=N,286nm,1.1s | | | | | | |
| **B20K** | **Meade River** | **4.22** | **281** | | **Pn** | **16 54 17.2** | **+0.5** |
| **H29M** | **Whitestone** | **4.24** | **141** | | **Pn** | **16 54 17.9** | **+0.9** |
| H29M | | | | IAML | | 16 55 34.1 | |
| | comp=N,250nm,0.8s | | | | | | |
| H29M | | | | IAML | | 16 55 38.0 | |
| | comp=E,236nm,0.8s | | | | | | |
| **A21K** | **Barrow** | **4.25** | **299** | | **Pn** | **16 54 18.0** | **+0.8** |
| **INK** | **Inuvik** | **4.35** | **102** | Pn | **Pn** | **16 54 19.0** | **+0.5** |
| **INK** | **Inuvik** | **4.35** | **102** | Pn | **Pn** | **16 54 19.5** | **+1.0** |
| | comp=E,3.2nm,0.3s,baz=313,slow=10,SNR=12 | | | | | | |
| INK | | | | Sn | **Sn** | **16 55 03.8** | **-5.3** |
| | comp=E,8.5nm,0.3s,baz=217,slow=5.1,SNR=5.4 | | | | | | |
| | comp=E,11nm,0.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.39** | **170** | | **Pn** | **16 54 19.9** | **+0.8** |
| **G21K** | **Allakaket** | **4.45** | **230** | IAML | | 16 55 47.6 | |
| | comp=E,180nm,0.6s | | | | | | |
| G21K | | | | IAML | | 16 55 49.2 | |
| | comp=N,182nm,0.8s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.62** | **193** | IAML | | 16 55 17.6 | |
| | comp=N,158nm,0.5s | | | | | | |
| **I28M** | **Miner Creek** | **4.62** | **153** | IAML | | 16 55 49.7 | |
| | comp=N,127nm,1.0s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.69** | **112** | IAML | | 16 55 49.4 | |
| | comp=E,127nm,1.0s | | | | | | |
| F31M | | | | IAML | | 16 55 52.6 | |
| | comp=N,125nm,0.6s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.73** | **242** | | **Pn** | **16 54 23.8** | **0.0** |
| F20K | | | | IAML | | 16 55 51.7 | |
| | comp=E,118nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **202** | IAML | | 16 55 52.0 | |
| | comp=E,173nm,1.2s | | | | | | |
| I23K | | | | IAML | | 16 56 05.4 | |
| | comp=N,155nm,1.4s | | | | | | |
| **G31M** | **Satah River** | **4.83** | **119** | IAML | | 16 55 57.5 | |
| | comp=E,141nm,1.3s | | | | | | |
| G31M | | | | IAML | | 16 55 57.9 | |
| | comp=N,172nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **4.83** | **263** | IAML | | 16 56 02.7 | |
| | comp=E,120nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **196** | IAML | | 16 55 48.3 | |
| | comp=N,138nm,0.8s | | | | | | |
| MDM | | | | IAML | | 16 55 49.2 | |
| | comp=E,168nm,0.7s | | | | | | |
| **COLA** | **College** | **4.89** | **194** | | **Pn** | **16 54 26.3** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.92** | **189** | | **Pn** | **16 54 26.6** | **+0.1** |
| **ILAR** | **Eielson Array** | **4.92** | **189** | Pn | **Pn** | **16 54 27.0** | **+0.5** |
| | comp=E,5.8nm,0.3s,baz=360,slow=10,SNR=70 | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 55 23.1** | **-0.3** |
| | comp=E,13nm,0.3s,baz=6.4,slow=25,SNR=7.4 | | | | | | |
| ILAR | | | | Lg | Lg | 16 55 47.2 | |
| | comp=E,11nm,0.3s,baz=18,slow=31,SNR=2.1 | | | | | | |
| | comp=E,9.2nm,0.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.92** | **226** | | **Pn** | **16 54 24.9** | **-1.5** |
| **H21K** | **Melozitna Rive** | **4.96** | **220** | IAML | | 16 55 59.9 | |
| | comp=E,123nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **4.98** | **250** | IAML | | 16 56 05.5 | |
| | comp=E,116nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.99** | **146** | IAML | | 16 55 32.8 | |
| | comp=N,121nm,0.4s | | | | | | |
| I29M | | | | IAML | | 16 55 49.9 | |
| | comp=E,102nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **5.03** | **182** | IAML | | 16 55 54.9 | |
| | comp=N,114nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **5.09** | **161** | | **Pn** | **16 54 29.6** | **+0.8** |
| **EGAK** | **Eagle** | **5.09** | **161** | IAML | | 16 55 31.4 | |
| | comp=N,140nm,0.7s | | | | | | |
| EGAK | | | | IAML | | 16 55 31.9 | |
| | comp=N,98nm,0.8s | | | | | | |
| **MLY** | **Manley** | **5.11** | **208** | | **Pn** | **16 54 29.8** | **+0.7** |
| **J26L** | **Joseph Creek** | **5.17** | **173** | IAML | | 16 55 37.2 | |
| | comp=N,90nm,0.5s | | | | | | |
| J26L | | | | IAML | | 16 55 58.0 | |
| | comp=E,138nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.18** | **271** | IAML | | 16 56 19.0 | |
| | comp=N,102nm,1.2s | | | | | | |
| C19K | | | | IAML | | 16 56 26.2 | |
| | comp=E,83nm,1.2s | | | | | | |
| **HDA** | **Harding Lake** | **5.29** | **189** | | **Pn** | **16 54 32.4** | **+0.9** |
| **HDA** | **Harding Lake** | **5.29** | **189** | IAML | | 16 56 08.8 | |
| | comp=N,127nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **5.31** | **195** | IAML | | 16 55 58.3 | |
| | comp=E,91nm,1.3s | | | | | | |
| WRH | | | | IAML | | 16 56 01.0 | |
| | comp=N,81nm,0.7s | | | | | | |
| **I30M** | **Mount Dempster** | **5.53** | **139** | | **Pn** | **16 54 35.6** | **+0.7** |
| **A19K** | **Wainwright** | **5.56** | **284** | | **Pn** | **16 54 35.8** | **+0.7** |
| **H20K** | **Anotleneega Mo** | **5.60** | **227** | | **Pn** | **16 54 35.7** | **-0.1** |
| **G19K** | **Purcell Mounta** | **5.73** | **238** | | **Pn** | **16 54 37.9** | **+0.4** |
| **K24K** | **Donnelly Dome** | **5.85** | **183** | | **Pn** | **16 54 40.3** | **+1.1** |
| **B18K** | **Kokolik River** | **5.90** | **275** | | **Pn** | **16 54 40.2** | **+0.4** |
| **H19K** | **Roundabout Mou** | **5.99** | **232** | | **Pn** | **16 54 41.3** | **+0.2** |
| **DAWY** | **Dawson** | **6.00** | **156** | | **Pn** | **16 54 42.6** | **+1.3** |
| **G18K** | **Tagagawik** | **6.38** | **241** | | **Pn** | **16 54 46.9** | **+0.6** |
| **RND** | **Reindeer** | **6.42** | **196** | | **Pn** | **16 54 48.2** | **+1.1** |
| **CHUM** | **Lake Minchumin** | **6.44** | **210** | | **Pn** | **16 54 47.7** | **+0.5** |
| **KTH** | **Kantishna Hill** | **6.53** | **204** | | **Pn** | **16 54 48.9** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **6.71** | **167** | | **Pn** | **16 54 50.4** | **-0.6** |
| **H18K** | **Honhosa River** | **6.81** | **235** | | **Pn** | **16 54 52.4** | **0.0** |
| **A36M** | **Sachs Harbour** | **6.92** | **61** | | **Pn** | **16 54 53.6** | **-0.2** |
| **WAT1** | **Susitna Watana** | **6.97** | **193** | | **Pn** | **16 54 55.9** | **+1.4** |
| **WAT7** | **Susitna Watana** | **6.99** | **195** | | **Pn** | **16 54 55.8** | **+0.9** |
| **K20K** | **Telida** | **7.25** | **214** | | **Pn** | **16 54 58.7** | **+0.3** |
| **HARP** | **HAARP** | **7.25** | **180** | | **Pn** | **16 54 59.6** | **+1.1** |
| **C36M** | **Paulatuk** | **7.36** | **82** | | **Pn** | **16 54 59.2** | **-0.6** |
| **M27K** | **Edge Creek, AK** | **7.41** | **169** | | **Pn** | **16 55 01.2** | **+0.6** |
| **C16K** | **Lisburne Hills** | **7.43** | **269** | | **Pn** | **16 55 00.3** | **-0.5** |
| **WACK** | **Wrangell Chich** | **7.67** | **178** | | **Pn** | **16 55 04.6** | **+0.2** |
| **G16K** | **Koyuk River** | **7.86** | **246** | | **Pn** | **16 55 06.2** | **-0.2** |
| **YUK3** | **Moose Creek** | **8.10** | **164** | | **Pn** | **16 55 11.3** | **+1.1** |
| **SKT** | **Skwentna** | **8.12** | **202** | | **Pn** | **16 55 11.6** | **+1.3** |
| **J17K** | **VABM Dome** | **8.38** | **229** | | **Pn** | **16 55 12.9** | **-0.9** |
| **F15K** | **North Star Dit** | **8.42** | **252** | | **Pn** | **16 55 13.2** | **-1.2** |
| **L19K** | **White Mountain** | **8.47** | **213** | | **Pn** | **16 55 15.3** | **+0.2** |
| **G15K** | **Niukluk** | **8.66** | **247** | | **Pn** | **16 55 17.4** | **-0.3** |
| **K17K** | **Iditarod** | **8.75** | **224** | | **Pn** | **16 55 19.4** | **+0.6** |
| **L18K** | **Granite Mounta** | **8.81** | **218** | | **Pn** | **16 55 20.0** | **+0.3** |
| **CTGM** | **Chitina Glacie** | **8.83** | **168** | | **Pn** | **16 55 21.1** | **+1.0** |
| **F14K** | **Arctic Creek** | **9.12** | **253** | | **Pn** | **16 55 23.0** | **-0.9** |
| **YUK6** | **Outpost Mounta** | **9.14** | **159** | | **Pn** | **16 55 25.3** | **+0.9** |
| **BAGL** | **Bagley Icefiel** | **9.25** | **171** | | **Pn** | **16 55 26.5** | **+0.8** |
| **O30N** | **Mendenhall** | **9.63** | **153** | | **Pn** | **16 55 31.3** | **+0.3** |
| **O29M** | **Mount Kennedy** | **9.74** | **161** | | **Pn** | **16 55 32.9** | **+0.4** |
| **WHY** | **Whitehorse** | **9.94** | **150** | Pn | **Pn** | **16 55 34.1** | **-1.2** |
| **J14K** | **Nanvaranak Lak** | **10.13** | **236** | | **Pn** | **16 55 38.1** | **+0.3** |
| **WRGLY** | **Wrigley** | **10.70** | **116** | | **Pn** | **16 55 45.0** | **-0.6** |
| **P33M** | **Teslin, Yukon** | **10.74** | **145** | | **Pn** | **16 55 46.3** | **+0.1** |
| **Q32M** | **Nakina River** | **12.01** | **147** | | **Pn** | **16 56 04.5** | **+0.9** |
| **KDAK** | **Kodiak Island** | **12.33** | **199** | Pn | Pn | 16 56 02.5 | -5.4 |
| | comp=N,0.5nm,0.3s,baz=64,slow=12,SNR=4.6 | | | | | | |
| | comp=N,8.8nm,0.7s | | | | | | |
| **DLBC** | **Dease Lake** | **12.95** | **143** | Pn | **Pn** | **16 56 14.0** | **-2.3** |
| | comp=N,0.1nm,0.3s,baz=297,slow=2.3,SNR=2.5 | | | | | | |
| DLBC | | | | Sn | Sn | 16 58 27.9 | -12 |
| | comp=N,0.6nm,0.3s,baz=142,slow=13,SNR=2.6 | | | | | | |
| | comp=N,1.3nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.11** | **105** | | **Pn** | **16 56 27.8** | **-4.3** |
| **YKA** | **Yellowknife Ar** | **14.11** | **105** | Pn | Pn | 16 56 27.5 | -4.6 |
| | comp=N,1.1nm,0.3s,baz=282,slow=10.0,SNR=16 | | | | | | |
| YKA | | | | Sn | Sn | 16 58 55.3 | -13 |
| | comp=N,1.7nm,0.3s,baz=331,slow=19,SNR=8.9 | | | | | | |
| | comp=N,0.8nm,0.3s | | | | | | |
| **PD31** | **Pinedale Array** | **32.46** | **127** | P | **P** | **16 59 44.6** | **+1.8** |
| PD31 | | | | IAmb | IAmb | 16 59 45.9 | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.46** | **127** | P | **P** | **16 59 44.6** | **+1.8** |
| | comp=Z,1.4nm,0.6s,baz=5.2,slow=5.5,SNR=16 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.36** | **141** | P | **P** | **17 00 01.3** | **+1.9** |
| | comp=Z,1.0nm,0.8s,baz=334,slow=7.0,SNR=7.1 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **TPH** | **Tonopah** | **34.94** | **140** | P | **P** | **17 00 04.1** | **-0.3** |
| **CCUT** | **Cedar City** | **36.35** | **135** | P | **P** | **17 00 16.3** | **-0.2** |
| **TXAR** | **Lajitas Array** | **46.68** | **128** | P | **P** | **17 01 42.9** | **+1.8** |
| | comp=Z,3.0nm,0.5s,baz=344,slow=6.3,SNR=5.0 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **49.07** | **6** | P | **P** | **17 01 58.9** | **-0.2** |
| | comp=Z,1.1nm,0.6s,baz=3.7,slow=9.5,SNR=6.1 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **49.65** | **14** | P | **P** | **17 02 02.8** | **-0.8** |
| | comp=Z,3.2nm,1.0s,baz=355,slow=4.8,SNR=5.1 | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.54** | **325** | P | **P** | **17 02 16.7** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=46,slow=8.3,SNR=2.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **51.91** | **306** | P | **P** | **17 02 22.2** | **+1.3** |
| | comp=Z,0.9nm,0.9s,baz=7.6,slow=4.4,SNR=2.6 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.32** | **26** | P | **P** | **17 02 24.0** | **+0.3** |
| | comp=Z,2.3nm,0.9s,baz=337,slow=6.5,SNR=5.4 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **54.97** | **335** | P | **P** | **17 02 42.7** | **-0.5** |
| | comp=Z,1.3nm,0.4s,baz=75,slow=1.6,SNR=16 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.92** | **328** | P | **P** | **17 02 50.6** | **+0.6** |
| | comp=Z,1.0nm,0.8s,baz=22,slow=7.4,SNR=7.6 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.73** | **298** | *e*P | **P** | **17 02 55.8** | **-0.2** |
| HHC | | | | pP | pP | 17 03 00.0 | +0.5 |
| HHC | | | | sP | sP | 17 03 02.1 | +1.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,260nm,5.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **59.92** | **4** | P | **P** | **17 03 18.6** | **+0.5** |
| | comp=Z,0.3nm,0.4s,baz=42,slow=4.1,SNR=1.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **PZH** | **PanZhiHua** | **73.03** | **301** | P | **P** | **17 04 43.0** | **+0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |

*IDC **12** 16:55:09.3±1.6,19°.25S×177°.68W,h582km±17km,mb3.1/6, mbtmp4.0/7,Error ellipse: s-maj=27.9km s-min=19.7km az=124.0*

**ISC 12 16:55:10.6±0.7,19°.1S±0°.2×177°.9W±0°.1,h600km,n25, σ0°85/26,mb3.9/9,5C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.08** | **289** | P | **P** | **16 56 34.4** | **-2.4** |
| | 9.2nm,0.7s,baz=138,slow=14,SNR=7.8 | | | | | | |
| MSVF | | | | S | **S** | **16 57 47.8** | **+0.9** |
| | 3.3nm,0.9s,baz=131,slow=19,SNR=0.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.93** | **255** | P | **P** | **17 02 35.1** | **+1.4** |
| | 1.1nm,1.0s,baz=90,slow=8.8,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 04 03.2** | **+1.2** |
| | 0.5nm,0.6s,baz=105,slow=3.5,SNR=6.0 | | | | | | |
| | 1.1nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.93** | **180** | P | **P** | **17 05 28.2** | **-0.1** |
| | 3.1nm,0.8s,baz=10,slow=0.7,SNR=16 | | | | | | |
| | 3.1nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.97** | **43** | P | **P** | **17 06 19.2** | **+0.3** |
| | 0.5nm,0.7s,baz=214,slow=7.0,SNR=6.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.24** | **57** | P | **P** | **17 06 50.8** | **+0.6** |
| | 0.7nm,0.7s,baz=223,slow=7.0,SNR=9.5 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **DLBC** | **Dease Lake** | **86.76** | **23** | P | **P** | **17 06 51.6** | **-0.2** |
| | 0.9nm,0.6s,baz=184,slow=16,SNR=2.0 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.09** | **180** | ⇑P | **P** | **17 07 02.4** | **-0.3** |
| | comp=Z,85nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **89.37** | **178** | ⇑P | **P** | **17 07 02.8** | **-1.1** |
| | comp=Z,32nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **89.37** | **178** | P | **P** | **17 07 02.2** | **-1.7** |
| | comp=Z,1.1nm,0.7s,baz=198,slow=7.5,SNR=3.8 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **89.50** | **176** | ⇑P | **P** | **17 07 04.0** | **-0.4** |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **89.94** | **177** | ⇑P | **P** | **17 07 06.3** | **-0.2** |
| | comp=Z,3.3nm,0.7s,baz=183,slow=4.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.17** | **177** | ⇑P | **P** | **17 07 07.6** | **+0.1** |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **134.49** | **344** | PKP | **PKPdf** | **17 13 20.6** | **-0.4** |
| | comp=Z,1.3nm,0.8s,baz=36,slow=2.3,SNR=1.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **143.64** | **5** | PKP | PKPbc | 17 13 35.5 | -1.4 |
| | comp=Z,1.5nm,0.7s,baz=349,slow=3.8,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.97** | **314** | PKPbc | **PKPbc** | **17 13 44.8** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=148,slow=7.1,SNR=4.0 | | | | | | |
| **GERES** | **GERESS Array B** | **148.91** | **345** | PKPbc | **PKiKP** | **17 13 52.4** | **-0.3** |
| | comp=Z,0.8nm,0.8s,baz=326,slow=1.4,SNR=5.7 | | | | | | |
| **CONA** | **Conrad Observa** | **149.17** | **342** | *e*PKP | **PKiKP** | **17 13 53.8** | **+0.6** |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **SOKA** | **Soboth** | **150.54** | **342** | *i* PKP | **PKiKP** | **17 13 56.2** | **+0.1** |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **KBA** | **Koelnbreinsper** | **150.64** | **344** | *e*PKP | **PKiKP** | **17 13 56.3** | **-0.1** |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **150.87** | **347** | *e*PKP | **PKiKP** | **17 13 57.1** | **+0.2** |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **150.91** | **347** | *e*PKP | **PKiKP** | **17 13 57.5** | **+0.5** |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **MYKA** | **Terra Mystica** | **150.97** | **343** | *i* PKP | **PKiKP** | **17 13 56.1** | **-0.9** |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **SQTA** | **Sankt Quirin** | **151.00** | **347** | *i* PKP | **PKiKP** | **17 13 57.6** | **+0.5** |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **ABTA** | **Abfaltersbach** | **151.16** | **345** | *i* PKP | **PKiKP** | **17 13 57.4** | **0.0** |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **FETA** | **Feichten** | **151.29** | **348** | *i* PKP | **PKiKP** | **17 13 57.9** | **+0.2** |
| | comp=Z,0.8nm,0.5s | | | | | | |

*JMA **12** 16:57:01.9±0.8,45°.N±4°.×15°.0E±°,h30km,MV3.6/11,SE OFF ETOROFU*
*SKHL **12** 16:57:02.2±0.2,44°.10N×149°.70E,h45km±3km,mb4.3/3*

**ISC 12 16:56:59.9±3.9,43°.94N±0°.10×149°.8E±0°.2,h35km,n14, σ2°34/23,East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.90** | **314** | *e*P | **Pn** | **16 57 29.7** | **-0.1** |
| KUR | | | | AMB | AMB | 16 57 32.5 | |
| | 120nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **16 57 50.5** | **-2.0** |
| KUR | | | | A | A | 16 57 55.6 | |
| | 420nm,0.6s | | | | | | |
| KUR | | | | A | A | 16 57 55.6 | |
| | 330nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.16** | **269** | *e*P | **Pn** | **16 57 34.0** | **+0.6** |
| SHO | | | | AMB | AMB | 16 57 37.2 | |
| | 50nm,0.5s | | | | | | |
| SHO | | | | *e*S | **Sn** | **16 57 57.7** | **-1.2** |
| SHO | | | | A | A | 16 57 58.9 | |
| | 190nm,0.5s | | | | | | |
| SHO | | | | A | A | 16 57 58.9 | |
| | 130nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.86** | **273** | *e*P | **Pn** | **16 57 43.8** | **+0.8** |
| YUK | | | | AMB | AMB | 16 57 45.2 | |
| | 110nm,0.6s | | | | | | |
| YUK | | | | *e*S | **Sn** | **16 58 14.8** | **-1.3** |
| YUK | | | | A | A | 16 58 17.0 | |
| | 150nm,0.6s | | | | | | |
| YUK | | | | A | A | 16 58 17.0 | |
| | 180nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **3.01** | **260** | P | **Pn** | **16 57 46.2** | **+1.1** |
| NEM2 | | | | *e*S | **Sn** | **16 58 19.2** | **-0.7** |
| **NMR** | **Nemuro--Hokkai** | **3.02** | **261** | *e*P | **Pn** | **16 57 46.1** | **+0.9** |
| NMR | | | | *e*S | **Sn** | **16 58 19.1** | **-1.1** |
| **JRA** | **Rausu** | **3.39** | **272** | P | **Pn** | **16 57 52.4** | **+2.1** |
| **AKK** | **Akkeshi** | **3.74** | **257** | *e*P | **Pn** | **16 57 57.6** | **+2.6** |
| AKK | | | | *e*S | **Sn** | **16 58 37.5** | **-0.3** |
| **JAK** | **Akkeshi** | **3.84** | **258** | P | **Pn** | **16 57 57.9** | **+1.4** |
| JAK | | | | S | **Sn** | **16 58 40.2** | **-0.3** |
| **JTKR** | **Abashiri--Toko** | **4.27** | **272** | *e*P | **Pn** | **16 58 04.5** | **+2.2** |
| **JAR** | **Ashorobuto** | **4.44** | **264** | *e*P | **Pn** | **16 58 06.8** | **+2.1** |
| JAR | | | | *e*S | **Sn** | **16 58 55.7** | **+0.6** |
| **JCH** | **Churui** | **4.89** | **257** | P | **Pn** | **16 58 14.0** | **+3.0** |
| JCH | | | | *e*S | **Sn** | **16 59 06.7** | **+0.3** |
| **JNBK** | **Urakawa-nobuka** | **5.43** | **255** | P | **Pn** | **16 58 20.7** | **+2.4** |
| **JANG** | **Nango** | **7.12** | **243** | *e*S | **Sn** | **16 59 55.9** | **-5.3** |
| **JTH

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| EL6 | | | | S | Sb | 17 01 00.7 | -1.0 | |
| EL6 | | | | AML | AML | | | |
| | comp=N,198µm,0.1s | | | | | | | |
| EL6 | | | | AML | AML | | | |
| | comp=E,169µm,0.9s | | | | | | | |
| EL6 | | | | AML | AML | | | |
| | comp=E,169µm,1.1s | | | | | | | |
| **CING** | **Cingoli** | **0.46** | **12** | ⇓P | Pg | 17 00 55.2 | +0.1 | |
| CING | | | | S | Sb | 17 01 02.5 | -0.8 | |
| **MURB** | **Monte Urbino** | **0.52** | **311** | P | Pg | 17 00 56.2 | 0.0 | |
| MURB | | | | S | Sb | 17 01 04.9 | 0.0 | |
| MURB | | | | AML | AML | | | |
| | comp=E,168µm,0.5s | | | | | | | |
| MURB | | | | AML | AML | | | |
| | comp=N,108µm,0.5s | | | | | | | |
| MURB | | | | AML | AML | | | |
| | comp=E,168µm,1.5s | | | | | | | |
| **ATFO** | **Monte Foce - G** | **0.57** | **321** | P | Pg | 17 00 57.0 | -0.2 | |
| ATFO | | | | S | Sb | 17 01 06.1 | -0.3 | |
| ATFO | | | | AML | AML | | | |
| | comp=E,33µm,1.5s | | | | | | | |
| ATFO | | | | AML | AML | | | |
| | comp=N,25µm,0.5s | | | | | | | |
| **ARVD** | **Arcevia** | **0.58** | **351** | ⇑P | Pg | 17 00 57.5 | +0.2 | |
| ARVD | | | | S | Sb | 17 01 06.6 | 0.0 | |
| ARVD | | | | AML | AML | | | |
| | comp=E,48µm,1.4s | | | | | | | |
| ARVD | | | | AML | AML | | | |
| | comp=N,34µm,0.2s | | | | | | | |
| **ATVO** | **AVT- Monte Val** | **0.66** | **314** | P | Pb | 17 00 59.5 | -0.2 | |

*MOS* ***12*** *17:02:19.1±0.9,20°.38S×169°.70E,h129km,mb4.7/11, MS5.3/8, Error ellipse: s-maj=10.3km s-min=9.8km az=38.9*

*NEIC* ***12*** *17:02:20.0±2.0,20°.34S±0°.08×169°.71E±0°.09,h114km±5km, mb5.0/67, Error ellipse: s-maj=12.5km s-min=11.0km az=47.0*

*IDC* ***12*** *17:02:20.2±0.5,20°.38S×169°.62E,h126km±3km,mb4.5/18, mbtmp4.8/21, Error ellipse: s-maj=11.7km s-min=8.1km az=139.0*

*NOU* ***12*** *17:02:21.0,20°.34S×169°.60E,h123km,mb5.1/66, Vanuatu Islands*

**ISC 12 17:02:19.9±0.4,20°.40S±0°.04×169°.70E±0°.04,h125km±3km, h126km:pP-P,n464,σ1°11/452,mb4.9/89,7C-23D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.90** | **235** | P | **Pn** | **17 02 52.0** | **-0.4** |
| **LIFNC** | **LIFOU** | **2.34** | **260** | P | **Pn** | **17 02 56.6** | **-1.2** |
| **LIFNC** | **LIFOU** | **2.34** | **260** | Pn | **Pn** | **17 02 56.3** | **-1.5** |
| **RTV** | **Rentapao** | **2.86** | **335** | P | **Pn** | **17 03 05.6** | **+1.0** |
| **DVP** | **Devils Point** | **3.02** | **331** | P | **Pn** | **17 03 07.0** | **+0.3** |
| **PINNC** | **Pines Island,** | **3.04** | **223** | P | **Pn** | **17 03 06.7** | **-0.2** |
| **PINNC** | **Pines Island,** | **3.04** | **223** | | **Pn** | **17 03 06.7** | **-0.2** |
| **YATNC** | **Mamie plateau,** | **3.10** | **237** | P | **Pn** | **17 03 06.5** | **-1.2** |
| **DZM** | **Mont Dzumac** | **3.46** | **241** | P | **Pn** | **17 03 12.8** | **+0.2** |
| **DZM** | **Mont Dzumac** | **3.46** | **241** | Pn | **Pn** | **17 03 12.5** | **-0.1** |
| **DZM** | **Mont Dzumac** | **3.46** | **241** | P | **Pn** | **17 03 12.7** | **+0.1** |
| | 606nm,0.5s,baz=53,slow=19,SNR=1883 | | | | | | |
| DZM | | | | S | **Sn** | **17 03 52.3** | **-1.0** |
| | 1µm,0.4s,baz=324,slow=24,SNR=36 | | | | | | |
| **ONTNC** | **Ouen Toro** | **3.57** | **237** | P | **Pn** | **17 03 14.3** | **+0.4** |
| **ONTNC** | **Ouen Toro** | **3.57** | **237** | | **Pn** | **17 03 14.2** | **+0.3** |
| **NOUC** | **Port Laguerre** | **3.59** | **241** | P | **Pn** | **17 03 14.4** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **5.08** | **267** | P | **Pn** | **17 03 35.4** | **+1.4** |
| **KOUNC** | **Koumac, New Ca** | **5.08** | **267** | Pn | **Pn** | **17 03 35.2** | **+1.1** |
| **MSVF** | **Nonsavu** | **8.33** | **73** | P | **Pn** | **17 04 21.5** | **+3.6** |
| **MSVF** | **Nonsavu** | **8.33** | **73** | P | **Pn** | **17 04 20.8** | **+2.9** |
| | 24nm,0.8s,baz=220,slow=9.8,SNR=16 | | | | | | |
| MSVF | | | | S | **Sn** | **17 05 48.0** | **-2.3** |
| | 3.9nm,0.6s,baz=169,slow=21,SNR=0.9 | | | | | | |
| **MSVF** | **Nonsavu** | **8.33** | **73** | *i* P | **Pn** | **17 04 18.8** | **+0.9** |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,145nm,1.6s | | | | | | |
| **NFK** | **Norfolk Island** | **8.75** | **190** | P | **Pn** | **17 04 25.6** | **+2.1** |
| **NFK** | **Norfolk Island** | **8.75** | **190** | P | **Pn** | **17 04 26.2** | **+2.7** |
| **OUZ** | **Omahuta** | **15.15** | **168** | P | **P** | **17 05 49.5** | **0.0** |
| **EIDS** | **Eidsvold** | **17.85** | **250** | P | **Pn** | **17 06 21.4** | **+0.9** |
| **EIDS** | **Eidsvold** | **17.85** | **250** | | **Pn** | **17 06 22.1** | **+1.7** |
| **EIDS** | **Eidsvold** | **17.85** | **250** | P | **Pn** | **17 06 21.6** | **+1.1** |
| **TOZ** | **Tahuroa Road** | **17.99** | **165** | Pn | **Pn** | **17 06 23.3** | **+1.4** |
| **RK1H** | **Rockhampton Ha** | **18.07** | **257** | P | **Pn** | **17 06 23.5** | **+0.4** |
| **HIZ** | **Hauiti** | **18.59** | **167** | P | **Pn** | **17 06 30.7** | **+1.6** |
| **HIZ** | **Hauiti** | **18.59** | **167** | Pn | **Pn** | **17 06 30.6** | **+1.6** |
| **MXZ** | **Matakaoa Point** | **18.66** | **158** | P | **Pn** | **17 06 30.4** | **+0.5** |
| **MXZ** | **Matakaoa Point** | **18.66** | **158** | Pn | **Pn** | **17 06 30.3** | **+1.5** |
| **AFI** | **Afiamalu** | **18.83** | **73** | P | **P** | **17 06 30.1** | **0.0** |
| **AFI** | **Afiamalu** | **18.83** | **73** | P | **P** | **17 06 30.2** | **0.0** |
| **URZ** | **Urewera** | **18.92** | **162** | P | **Pn** | **17 06 33.2** | **+0.3** |
| **URZ** | **Urewera** | **18.92** | **162** | P | **Pn** | **17 06 32.8** | **-0.1** |
| | comp=Z,89nm,0.6s,baz=40,slow=2.8,SNR=104 | | | | | | |
| URZ | | | | S | **S** | **17 09 56.5** | **-2.7** |
| | comp=Z,9.9nm,1.1s,baz=160,slow=18,SNR=3.0 | | | | | | |
| **ARMA** | **Armidale** | **19.11** | **235** | P | **Pn** | **17 06 35.4** | **0.0** |
| **ARMA** | **Armidale** | **19.11** | **235** | P | **Pn** | **17 06 35.3** | **-0.1** |
| **ARMA** | **Armidale** | **19.11** | **235** | P | **Pn** | **17 06 35.8** | **+0.4** |
| **RTZ** | **Ruatahuna** | **19.21** | **162** | P | **Pn** | **17 06 36.0** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **19.59** | **164** | P | **Pn** | **17 06 40.3** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **19.59** | **164** | P | **Pn** | **17 06 40.3** | **-0.6** |
| **QRZ** | **Quartz Range** | **20.50** | **174** | P | Pn | 17 06 50.9 | -0.5 |
| **QRZ** | **Quartz Range** | **20.50** | **174** | P | **P** | **17 06 49.0** | **+1.0** |
| **TKNZ** | **Takaka Hill** | **20.75** | **173** | P | Pn | 17 06 53.8 | -0.5 |
| **MRZ** | **Mangatainoka R** | **20.81** | **167** | P | **P** | **17 06 52.3** | **+1.1** |
| **BFZ** | **Birch Farm** | **20.97** | **166** | P | **P** | **17 06 53.4** | **+0.4** |
| **BFZ** | **Birch Farm** | **20.97** | **166** | P | **P** | **17 06 53.3** | **+0.2** |
| **NNZ** | **Nelson** | **20.98** | **172** | P | Pn | 17 06 55.4 | -1.7 |
| **TCW** | **Tory Channel** | **21.11** | **170** | P | **P** | **17 06 55.8** | **+1.4** |
| **TUWZ** | **Tuamarina** | **21.27** | **171** | P | **P** | **17 06 58.2** | **+2.0** |
| **SNZO** | **South Karori** | **21.27** | **170** | P | **P** | **17 06 58.2** | **+2.0** |
| **SNZO** | **South Karori** | **21.27** | **170** | P | **P** | **17 06 58.2** | **+2.0** |
| **BHW** | **Baring Head** | **21.40** | **169** | P | **P** | **17 06 57.5** | **-0.1** |
| **THZ** | **Tophouse** | **21.47** | **173** | P | **P** | **17 06 59.8** | **+1.4** |
| **MSWZ** | **Moikau Station** | **21.47** | **169** | P | **P** | **17 06 58.8** | **+0.3** |
| **BSWZ** | **Blackbirch Sta** | **21.54** | **171** | P | **P** | **17 07 01.6** | **+2.4** |
| **TV1H** | **Townsville Har** | **21.58** | **269** | P | **P** | **17 07 00.6** | **+0.8** |
| **PLWZ** | **Palliser** | **21.62** | **169** | P | **P** | **17 06 59.5** | **-0.5** |
| **CTA** | **Charters Tower** | **22.00** | **267** | P | **P** | **17 07 05.0** | **+0.7** |
| | comp=Z,4.4nm,0.6s,baz=89,slow=11,SNR=117 | | | | | | |
| CTA | | | | S | **S** | **17 10 57.1** | **-1.8** |
| | comp=Z,0.2nm,0.7s,baz=21,slow=24,SNR=1.9 | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **22.00** | **267** | P | **P** | **17 07 05.0** | **+0.7** |
| **CTAO** | **Charters Tower** | **22.00** | **267** | P | **P** | **17 07 04.9** | **+0.7** |
| **CTAO** | **Charters Tower** | **22.00** | **267** | P | **P** | **17 07 04.9** | **+0.7** |
| **KHZ** | **Kahutara** | **22.18** | **172** | P | **P** | **17 07 07.5** | **+1.7** |
| **INZ** | **Inchbonnie** | **22.30** | **177** | P | **P** | **17 07 08.8** | **+1.8** |
| **LTZ** | **Lake Taylor** | **22.42** | **175** | P | **P** | **17 07 09.9** | **+1.6** |
| **GVZ** | **Greta Valley S** | **22.67** | **174** | P | **P** | **17 07 11.4** | **+0.8** |
| **CNB** | **Canberra Magne** | **23.226** | | P | **P** | **17 07 17.0** | **+0.6** |
| **CNB** | **Canberra Magne** | **23.226** | | P | **P** | **17 07 18.0** | **+1.6** |
| | comp=Z,41nm,1.0s,SNR=3.0 | | | | | | |
| **RPZ** | **Rata Peaks** | **23.27** | **178** | P | **P** | **17 07 17.9** | **+1.5** |
| **RPZ** | **Rata Peaks** | **23.27** | **178** | P | **P** | **17 07 17.5** | **+1.2** |
| **YNG** | **Young** | **23.38** | **229** | P | **P** | **17 07 19.4** | **+1.9** |
| **YNG** | **Young** | **23.38** | **229** | P | **P** | **17 07 19.1** | **+1.6** |
| | comp=Z,132nm,0.9s,SNR=1.9 | | | | | | |
| **RABL** | **Rabaul** | **23.48** | **311** | P | **P** | **17 07 17.3** | **-1.2** |
| **JCZ** | **Jackson Bay** | **23.62** | **182** | P | **P** | **17 07 21.4** | **+1.8** |
| **LBZ** | **Lake Benmore** | **23.92** | **179** | P | **P** | **17 07 22.8** | **+0.6** |
| **MTSU** | **Mount Surprise** | **24.07** | **271** | P | **P** | **17 07 24.9** | **+1.1** |
| **QLP** | **Quilpie** | **24.13** | **250** | P | **P** | **17 07 25.0** | **+0.7** |
| **QLP** | **Quilpie** | **24.13** | **250** | P | **P** | **17 07 24.2** | **-0.1** |
| | comp=Z,192nm,0.8s,SNR=20 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **24.21** | **238** | P | **P** | **17 07 25.7** | **+0.7** |
| **CMSA** | **Cobar Meteorol** | **24.21** | **238** | P | **P** | **17 07 25.4** | **+0.4** |
| | comp=Z,39nm,0.8s,SNR=4.1 | | | | | | |
| **PMG** | **Port Moresby** | **24.34** | **293** | P | **P** | **17 07 27.0** | **+0.7** |
| **PMG** | **Port Moresby** | **24.34** | **293** | P | **P** | **17 07 26.9** | **+0.7** |
| **PMG** | **Port Moresby** | **24.34** | **293** | P | **P** | **17 07 26.9** | **+0.7** |
| **PMG** | **Port Moresby** | **24.34** | **293** | *i* P | **P** | **17 07 25.8** | **-0.5** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,77nm,0.9s | | | | | | |
| **WKZ** | **Wanaka** | **24.36** | **181** | P | **P** | **17 07 27.6** | **+1.4** |
| **ODZ** | **Otahua Downs** | **24.59** | **178** | P | **P** | **17 07 28.8** | **+0.6** |
| **ODZ** | **Otahua Downs** | **24.59** | **178** | P | **P** | **17 07 28.8** | **+0.6** |
| ODZ | | | | IAmb | IAmb | 17 07 44.3 | |
| | comp=Z,140nm,1.9s | | | | | | |
| **MLZ** | **Mavora Lakes** | **24.93** | **183** | P | **P** | **17 07 32.5** | **+1.1** |
| MLZ | | | | IAmb | IAmb | 17 07 33.5 | |
| | comp=Z,53nm,1.2s | | | | | | |
| **DCZ** | **Deep Cove** | **25.08** | **184** | P | **P** | **17 07 33.6** | **+0.9** |
| DCZ | | | | IAmb | IAmb | 17 07 51.7 | |
| | comp=Z,70nm,1.2s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **25.46** | **183** | P | **P** | **17 07 37.0** | **+0.9** |
| WHZ | | | | IAmb | IAmb | 17 08 09.4 | |
| | comp=Z,107nm,1.6s | | | | | | |
| **SYZ** | **Scrubby Hill** | **26.07** | **181** | P | **P** | **17 07 43.8** | **+2.2** |
| **COEN** | **Coen** | **26.12** | **280** | P | **P** | **17 07 44.0** | **+1.5** |
| **COEN** | **Coen** | **26.12** | **280** | P | **P** | **17 07 43.8** | **+1.3** |
| COEN | | | | IAmb | IAmb | 17 07 44.9 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **COEN** | **Coen** | **26.12** | **280** | P | **P** | **17 07 43.4** | **+1.0** |
| | comp=Z,50nm,1.1s,SNR=5.7 | | | | | | |
| **INKA** | **Innaminka** | **27.39** | **249** | P | **P** | **17 07 54.2** | **+0.5** |
| **STKA** | **Stephens Creek** | **27.62** | **240** | P | **P** | **17 07 56.8** | **+1.1** |
| **STKA** | **Stephens Creek** | **27.62** | **240** | P | **P** | **17 07 56.8** | **+1.1** |
| **STKA** | **Stephens Creek** | **27.62** | **240** | P | **P** | **17 07 56.1** | **+0.4** |
| | comp=Z,4.4nm,0.8s,SNR=2.1 | | | | | | |
| **STKA** | **Stephens Creek** | **27.62** | **240** | P | **P** | **17 07 56.7** | **+1.1** |
| | comp=Z,16nm,0.7s,baz=76,slow=9.5,SNR=24 | | | | | | |
| STKA | | | | PcP | **PcP** | **17 11 10.2** | **+0.1** |
| | comp=Z,3.5nm,0.7s,baz=63,slow=6.8,SNR=3.1 | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **27.62** | **240** | *i* P | **P** | **17 07 56.4** | **+0.7** |
| **QIS** | **Mount Isa** | **28.18** | **264** | P | **P** | **17 08 01.1** | **+0.3** |
| **QIS** | **Mount Isa** | **28.18** | **264** | P | **P** | **17 08 00.6** | **-0.2** |
| | comp=Z,11nm,0.7s,SNR=2.1 | | | | | | |
| **LCRK** | **Leigh Creek** | **30.06** | **244** | P | **P** | **17 08 17.8** | **+0.5** |
| **HTT** | **Hallett** | **30.24** | **238** | P | **P** | **17 08 19.8** | **+0.8** |
| **HTT** | **Hallett** | **30.24** | **238** | P | **P** | **17 08 19.5** | **+0.5** |
| | comp=Z,23nm,0.9s,SNR=1.5 | | | | | | |
| **TABU** | **Tabubil** | **31.50** | **295** | P | **P** | **17 08 31.3** | **+1.1** |
| **OOD** | **Oodnadatta** | **31.84** | **250** | P | **P** | **17 08 34.1** | **+1.1** |
| **BBOO** | **Buckleboo** | **32.38** | **241** | P | **P** | **17 08 38.1** | **+0.3** |
| **BBOO** | **Buckleboo** | **32.38** | **241** | P | **P** | **17 08 38.2** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 17 08 39.0 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **32.38** | **241** | P | **P** | **17 08 37.5** | **-0.3** |
| | comp=Z,50nm,1.5s,SNR=2.8 | | | | | | |
| **WRAB** | **Tennant Creek** | **33.15** | **265** | *i* P | **P** | **17 08 45.0** | **+0.4** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | |
| **AS01** | **Alice Springs** | **33.25** | **258** | P | **P** | **17 08 45.1** | **-0.4** |
| **AS31** | **Alice Springs** | **33.29** | **258** | P | **P** | **17 08 45.6** | **-0.2** |
| AS31 | | | | IAmb | IAmb | 17 08 46.8 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **33.29** | **258** | P | **P** | **17 08 45.7** | **-0.1** |
| **ASAR** | **Alice Springs** | **33.29** | **258** | P | **P** | **17 08 45.6** | **-0.2** |
| | comp=Z,59nm,0.7s,baz=91,slow=9.4,SNR=734 | | | | | | |
| ASAR | | | | pP | **pP** | **17 09 12.7** | **+1.2** |
| | comp=Z,16nm,0.7s,baz=86,slow=8.7,SNR=4.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 11 24.6** | **-0.7** |
| | comp=Z,2.5nm,0.7s,baz=100,slow=2.9,SNR=4.4 | | | | | | |
| ASAR | | | | S | **S** | **17 13 56.8** | **-0.4** |
| | comp=Z,0.7nm,0.8s,baz=81,slow=16,SNR=2.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **17 14 56.6** | **-1.5** |
| | comp=Z,1.0nm,0.7s,baz=101,slow=3.6,SNR=5.2 | | | | | | |
| ASAR | | | | PKiKP | **PKiKP** | **17 18 49.0** | **-1.8** |
| | comp=Z,0.3nm,0.6s,baz=78,slow=1.1,SNR=9.8 | | | | | | |
| | comp=Z,59nm,0.7s | | | | | | |
| **ASPA** | **Alice Springs** | **33.29** | **258** | P | **P** | **17 08 45.0** | **-0.9** |
| | comp=Z,33nm,0.7s,SNR=37 | | | | | | |
| **JAY** | **Jayapura** | **33.41** | **298** | P | **P** | **17 08 46.9** | **0.0** |
| **MULG** | **Mulgathing** | **33.56** | **246** | P | **P** | **17 08 48.3** | **+0.2** |
| **GENI** | **Genyem** | **33.81** | **298** | P | **P** | **17 08 50.9** | **+0.6** |
| **KDU** | **Kakadu** | **36.44** | **276** | P | **P** | **17 09 12.8** | **-0.1** |
| **MTN** | **Manton Dam** | **37.64** | **275** | P | **P** | **17 09 23.1** | **0.0** |
| **MTN** | **Manton Dam** | **37.64** | **275** | P | **P** | **17 09 23.3** | **+0.2** |
| **MTN** | **Manton Dam** | **37.64** | **275** | P | **P** | **17 09 21.6** | **-1.4** |
| | comp=Z,75nm,0.7s,SNR=4.0 | | | | | | |
| **DRS** | **Darwin Rock St** | **37.98** | **276** | P | **P** | **17 09 24.5** | **-1.4** |
| **WRKA** | **Warakurna** | **38.37** | **255** | P | **P** | **17 09 29.0** | **-0.2** |
| **WRKA** | **Warakurna** | **38.37** | **255** | P | **P** | **17 09 28.9** | **-0.2** |
| | comp=Z,50nm,1.0s,SNR=5.9 | | | | | | |
| **FORT** | **Forrest** | **38.76** | **246** | P | **P** | **17 09 32.1** | **-0.2** |
| **FORT** | **Forrest** | **38.76** | **246** | P | **P** | **17 09 32.1** | **-0.2** |
| **FORT** | **Forrest** | **38.76** | **246** | P | **P** | **17 09 32.0** | **-0.3** |
| | comp=Z,46nm,0.8s,SNR=2.6 | | | | | | |
| **KNRA** | **Kununurra** | **39.14** | **270** | P | **P** | **17 09 34.6** | **-1.0** |
| **KNRA** | **Kununurra** | **39.14** | **270** | P | **P** | **17 09 33.8** | **-1.8** |
| | comp=Z,28nm,1.6s,SNR=2.0 | | | | | | |
| **FAKI** | **Fak Fak** | **40.43** | **291** | P | **P** | **17 09 45.8** | **-0.4** |
| **FAKI** | **Fak Fak** | **40.43** | **291** | P | **P** | **17 09 45.9** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **41.57** | **265** | P | **P** | **17 09 56.2** | **+0.6** |
| **KMBL** | **Kambalda** | **44.09** | **246** | P | P | 17 10 10.2 | -5.6 |
| **PSA00** | **Pilbara Seismi** | **46.40** | **259** | P | **P** | **17 10 33.3** | **-0.9** |
| PSA00 | | | | IAmb | IAmb | 17 11 09.3 | |
| | comp=Z,66nm,1.6s | | | | | | |
| **MBWA** | **Marble Bar** | **46.57** | **260** | P | **P** | **17 10 35.6** | **+0.1** |
| **MBWA** | **Marble Bar** | **46.57** | **260** | P | **P** | **17 10 35.3** | **-0.1** |
| MBWA | | | | IAmb | IAmb | 17 10 36.4 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **MBWA** | **Marble Bar** | **46.57** | **260** | P | **P** | **17 10 35.5** | **0.0** |
| | comp=Z,38nm,3.0s,SNR=2.2 | | | | | | |
| **MBWA** | **Marble Bar** | **46.57** | **260** | P | **P** | **17 10 35.3** | **-0.1** |
| MBWA | | | | pP | **pP** | **17 11 04.3** | **+1.3** |
| **MEEK** | **Meekatharra** | **47.01** | **252** | P | **P** | **17 10 38.6** | **-0.3** |
| **MEEK** | **Meekatharra** | **47.01** | **252** | P | **P** | **17 10 38.8** | **0.0** |
| | comp=Z,31nm,2.6s,SNR=2.3 | | | | | | |
| **MMRI** | **Maumere** | **47.26** | **277** | P | **P** | **17 10 41.1** | **+0.2** |
| **NWAO** | **Narrogin (SRO)** | **48.08** | **244** | P | **P** | **17 10 47.2** | **+0.2** |
| **NWAO** | **Narrogin (SRO)** | **48.08** | **244** | P | **P** | **17 10 45.7** | **-1.4** |
| **NWAO** | **Narrogin (SRO)** | **48.08** | **244** | P | **P** | **17 10 45.7** | **-1.4** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,66nm,1.5s | | | | | | |
| **DRV** | **Dumont d'Urvil** | **50.02** | **195** | P | **P** | **17 11 01.0** | **-0.3** |
| DRV | | | | pP | **pP** | **17 11 29.7** | **0.0** |
| DRV | | | | PcP | **PcP** | **17 12 19.0** | **-0.2** |
| **TOLI2** | **Tolitoli** | **52.44** | **288** | P | **P** | **17 11 20.3** | **+0.2** |
| **VNDA** | **Vanda** | **57.29** | **182** | P | **P** | **17 11 54.6** | **+0.6** |
| VNDA | | | | IAmb | IAmb | 17 11 55.7 | |
| | comp=Z,41nm,1.8s | | | | | | |
| **VNDA** | **Vanda** | **57.29** | **182** | P | **P** | **17 11 54.5** | **+0.6** |
| | comp=Z,4.0nm,0.6s,baz=359,slow=7.6,SNR=35 | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **VNDA** | **Vanda** | **57.29** | **182** | P | **P** | **17 11 54.4** | **+0.3** |
| VNDA | | | | PcP | **PcP** | **17 12 45.4** | **-1.4** |
| **SBA** | **Scott Base** | **57.51** | **181** | P | **P** | **17 11 57.3** | **+1.7** |
| **SBA** | **Scott Base** | **57.51** | **181** | P | **P** | **17 11 57.3** | **+1.7** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,65nm,0.9s | | | | | | |
| **SBA** | **Scott Base** | **57.51** | **181** | P | **P** | **17 11 57.1** | **+1.5** |
| **CASY** | **Casey** | **59.24** | **204** | P | **P** | **17 12 07.3** | **-0.5** |
| CASY | | | | IAmb | IAmb | 17 12 08.6 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **CASY** | **Casey** | **59.24** | **204** | P | **P** | **17 12 07.6** | **-0.2** |
| CASY | | | | PcP | **PcP** | **17 12 54.0** | **-0.7** |
| **CCD** | **Concordia, Ant** | **59.86** | **193** | P | **P** | **17 12 12.2** | **-0.2** |
| CCD | | | | pP | **pP** | **17 12 41.1** | **-0.6** |
| **MJA0** | **Matsu Arr-Jizo** | **63.96** | **332** | *e*P | **P** | **17 12 39.7** | **-0.2** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **63.98** | **332** | P | **P** | **17 12 39.7** | **-0.2** |
| | comp=Z,3.2nm,0.8s,baz=171,slow=7.4,SNR=23 | | | | | | |
| MJAR | | | | pP | **pP** | **17 13 09.6** | **-0.4** |
| | comp=Z,3.9nm,0.8s,baz=164,slow=6.5,SNR=5.0 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **63.98** | **332** | P | **P** | **17 12 39.9** | **-0.1** |
| **MAJO** | **Matsushiro** | **63.98** | **332** | P | **P** | **17 12 39.8** | **-0.1** |
| **MAJO** | **Matsushiro** | **63.98** | **332** | P | **P** | **17 12 39.8** | **-0.1** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **63.98** | **332** | P | **P** | **17 12 39.4** | **-0.5** |
| MAJO | | | | pP | **pP** | **17 13 08.8** | **-1.2** |
| **MJB9** | **Matsu-Tunnel** | **63.98** | **332** | P | **P** | **17 12 39.6** | **-0.3** |
| **JNU** | **Nakatsue** | **64.86** | **324** | P | **P** | **17 12 45.0** | **-0.8** |
| **QSPA** | **South Pole Qui** | **69.66** | **180** | P | **P** | **17 13 15.9** | **+0.2** |
| **QSPA** | **South Pole Qui** | **69.66** | **180** | P | **P** | **17 13 16.1** | **+0.4** |
| | comp=Z,70nm,0.7s,baz=11,slow=1.3,SNR=324 | | | | | | |
| | comp=Z,70nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.66** | **180** | P | **P** | **17 13 16.1** | **+0.4** |
| **KSRS** | **Korea Array** | **69.71** | **326** | P | **P** | **17 13 17.2** | **+1.0** |
| | comp=Z,1.3nm,0.9s,baz=143,slow=6.6,SNR=5.7 | | | | | | |
| KSRS | | | | pP | **pP** | **17 13 47.6** | **+1.1** |
| | comp=Z,1.7nm,0.9s,baz=133,slow=5.4,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **69.71** | **326** | *e*P | **P** | **17 13 18.0** | **+1.8** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **71.32** | **341** | *i* P | **P** | **17 13 26.3** | **+0.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **NJ2** | **Nanjing** | **71.34** | **316** | *e*P | **P** | **17 13 28.2** | **+2.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **AMKA** | **Amchitka** | **71.96** | **6** | P | **P** | **17 13 28.6** | **-0.8** |
| **MSHR** | **Mys Shultsa** | **72.05** | **331** | *i* P | **P** | **17 13 30.7** | **+0.5** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| **PSTR** | **Posyet** | **72.26** | **331** | *i* P | **P** | **17 13 32.0** | **+0.5** |
| **KIWB** | **Kanaga Island** | **72.86** | **8** | P | **P** | **17 13 34.9** | **+0.1** |
| **SHEM** | **Shemya Is, Ala** | **72.92** | **3** | P | **P** | **17 13 35.5** | **+0.4** |
| | comp=Z,15nm,0.5s,baz=53,slow=5.1,SNR=7.0 | | | | | | |
| | comp=Z,15nm,0.5s | | | | | | |
| **ADK** | **Adak** | **72.95** | **9** | P | **P** | **17 13 35.2** | **-0.1** |
| **ADK** | **Adak** | **72.95** | **9** | P | **P** | **17 13 34.9** | **-0.5** |
| **ADK** | **Adak** | **72.95** | **9** | P | **P** | **17 13 34.9** | **-0.5** |
| ADK | | | | pmax | pmax | | |
| | comp=Z,78nm,1.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **72.97** | **333** | *i* P | **P** | **17 13 36.2** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **72.97** | **333** | P | **P** | **17 13 36.4** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **72.97** | **333** | P | **P** | **17 13 36.2** | **+0.6** |
| | comp=Z,2.6nm,0.6s,baz=125,slow=5.3,SNR=8.3 | | | | | | |
| USRK | | | | pP | **pP** | **17 14 05.8** | **-0.5** |
| | comp=Z,6.8nm,0.9s,baz=148,slow=4.3,SNR=7.0 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **PET** | **Petropavlovsk** | **73.74** | **353** | *i* P | **P** | **17 13 40.7** | **+0.8** |
| PET | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **CN2** | **Changchun** | **75.67** | **329** | ⇑P | **P** | **17 13 51.9** | **+0.6** |
| CN2 | | | | *e*pP | pP | 17 14 21.9 | -0.3 |
| CN2 | | | | *e*S | **S** | **17 23 23.4** | **+0.9** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,500nm,4.0s | | | | | | |
| **BNX** | **BinXian** | **76.20** | **331** | ⇑P | **P** | **17 13 54.2** | **-0.1** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **UNV** | **Unalaska Valle** | **76.74** | **14** | P | **P** | **17 13 56.6** | **-0.5** |
| **UNV** | **Unalaska Valle** | **76.74** | **14** | P | **P** | **17 13 59.1** | **+2.0** |
| | baz=203 | | | | | | |
| **KLR** | **Kul'dur** | **77.11** | **336** | *i* P | **P** | **17 14 00.0** | **+0.7** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.9s | | | | | | |
| **MAW** | **Mawson** | **77.53** | **202** | P | **P** | **17 14 01.8** | **+0.4** |
| | comp=Z,10nm,0.7s,baz=113,slow=7.3,SNR=15 | | | | | | |
| | comp=Z,10nm,0.7s | | | | | | |
| **BJI** | **Beijing** | **78.11** | **321** | P | **P** | **17 14 05.8** | **+0.7** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **79.22** | **312** | ⇓P | **P** | **17 14 11.9** | **+0.5** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **79.38** | **294** | P | **P** | **17 14 11.6** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **79.38** | **294** | P | **P** | **17 14 13.6** | **+1.1** |
| | comp=Z,2.7nm,0.6s,baz=138,slow=4.4,SNR=15 | | | | | | |
| CMAR | | | | pP | **pP** | **17 14 44.1** | **+0.4** |
| | comp=Z,3.1nm,0.8s,baz=133,slow=4.1,SNR=3.7 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **79.38** | **294** | *e*P | **P** | **17 14 14.0** | **+1.5** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **HEH** | **HeiHe** | **79.65** | **334** | *e*P | **P** | **17 14 13.0** | **-0.2** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **XLT** | **XiLinHaoTe** | **80.64** | **324** | *e*P | **P** | **17 14 19.3** | **+0.5** |
| XLT | | | | pP | pP | 17 14 48.9 | -1.1 |
| XLT | | | |

SNAA pmax pmax
comp=Z,18nm,0.8s
**ULN Ulaanbaatar 88.05 323** *i* P **P** **17 14 56.6 +0.4**
ULN pmax pmax
comp=Z,11nm,1.4s
**PMR Palmer 88.09 18** P **P** **17 14 57.4 +1.6**
baz=218
**HUMO Hull Mountain 88.11 43** P **P** **17 14 57.0 +0.6**
**YAK Yakutsk 88.11 342** *i* P **P** **17 14 56.6 +0.7**
YAK pmax pmax
comp=Z,4.0nm,0.6s
**G16K Koyuk River 88.15 11** P **P** **17 14 57.8 +1.8**
baz=206
**MONP2 Monument Peak 88.17 54** P **P** **17 14 57.7 +0.5**
baz=244,SNR=10
**BILL Bilibino 88.22 359⇑** *e*P **P** **17 14 55.3 -1.0**
BILL *e**PP **pP** **17 15 26.7 -1.6**
BILL *e* 17 18 25.6
BILL *e*PPP PPP 17 20 27.4
BILL pmax pmax
comp=Z,4.0nm,1.0s
**GTA Gaotai 88.24 313** *e*P **P** **17 14 58.0 +0.7**
GTA pP pP 17 15 28.6 -0.4
GTA pmax pmax
comp=Z,6.0nm,1.0s
GTA LR LR
comp=N,1μm,23.1s
GTA LR LR
comp=E,810nm,23.1s
GTA LR LR
comp=Z,1μm,23.1s
**IKP In-Ko-Pah, Jac 88.31 54** P **P** **17 14 58.6 +0.9**
baz=244
**KAIM Kayak Island 88.31 21** P **P** **17 14 59.0 +2.1**
baz=222
**LRMC Laurel Mtn Rad 88.37 51** P **P** **17 14 58.8 +0.8**
baz=244,SNR=9.0
**OMMB Old Mammoth Mi 88.38 49** IAmb IAmb 17 15 01.0
comp=Z,16nm,1.4s
**SONM Songino Array 88.41 323** **P** **17 14 58.5 +0.7**
**SONM Songino Array 88.41 323** P **P** **17 14 58.3 +0.5**
comp=Z,3.4nm,0.8s,baz=134,slow=5.8,SNR=15
SONM pP **pP** **17 15 29.3 -0.3**
comp=Z,3.1nm,0.8s,baz=153,slow=6.0,SNR=5.2
comp=Z,3.4nm,0.8s
**PFO Pinyon Flats O 88.45 53** P **P** **17 14 59.4 +1.0**
baz=244
**PFO Pinyon Flats O 88.45 53** *i* P **P** **17 14 57.9 -0.5**
**TPFO Pinon Flats 88.46 53** P **P** **17 14 60.0 +1.6**
baz=244
**WAKR Walker 88.48 48** **P** **17 14 59.8 +1.2**
WAKR IAmb IAmb 17 15 00.9
comp=Z,24nm,1.3s
**CWC Cottonwood Cre 88.51 50** P **P** **17 14 59.7 +1.0**
baz=243
**VNA3 Neumayer Olymp 88.60 180** ⇓P **P** **17 14 57.7 -0.7**
comp=Z,58nm,0.8s
**SWSC Sam W. Stewart 88.67 54** P **P** **17 15 00.4 +1.2**
baz=245,SNR=6.5
**MPMC Manual Prospec 88.76 51** P **P** **17 15 01.2 +1.3**
baz=244,SNR=12
**J20K Nowinta River 88.84 15** P **P** **17 15 00.7 +1.4**
baz=214
**VNA2 Neumayer--Watz 88.89 181** ⇓P **P** **17 14 59.3 -0.4**
comp=Z,56nm,0.7s,baz=177,slow=4.3
**GSC Goldstone, Bar 88.93 52** P **P** **17 15 02.2 +1.7**
baz=244
**BELC Belle Mtn. Jos 88.97 53** P **P** **17 15 01.9 +1.1**
baz=244,SNR=18
**DSP Deep Springs 89.00 49** IAmb IAmb 17 15 03.0
comp=Z,15nm,1.0s
**HEC Hector,Ludlow 89.07 52** P **P** **17 15 01.6 +0.4**
baz=244
**VNA1 Neumayer--Stat 89.18 181** ⇓P **P** **17 15 00.7 -0.3**
comp=Z,38nm,1.0s
**BC3 Big Chuckawall 89.23 54** P **P** **17 15 03.2 +1.1**
baz=245,SNR=10.0
**WAT1 Susitna Watana 89.23 18** P **P** **17 15 03.6 +2.4**
baz=219
**NVAR Mina Array Bea 89.24 48** P **P** **17 15 03.2 +1.1**
comp=Z,6.3nm,0.8s,baz=226,slow=8.0,SNR=45
NVAR pP **pwP** **17 15 35.6 -0.8**
comp=Z,3.5nm,1.0s,baz=232,slow=8.2,SNR=2.9
comp=Z,6.3nm,0.8s
**GRAC Grapevine Rang 89.27 50** P **P** **17 15 03.3 +1.2**
baz=244,SNR=20
**M24K Tolsona, Glenn 89.38 19** P **P** **17 15 04.3 +2.4**
baz=221
**FURC Furnace Creek, 89.40 51** P **P** **17 15 03.9 +1.3**
baz=244
**GWY Greenwater Val 89.42 51** IAmb IAmb 17 15 04.6
comp=Z,14nm,1.1s
**GLA Glamis 89.45 54** P **P** **17 15 03.7 +0.7**
baz=245
**H19K Roundabout Mou 89.46 13** P **P** **17 15 04.4 +2.2**
baz=212
**N25K Chitina, Valde 89.50 20** P **P** **17 15 05.1 +2.5**
baz=222
**J05D Fort Rock, OR 89.54 43** IAmb IAmb 17 15 05.5
comp=Z,18nm,1.0s
**GMRC Granite Mounta 89.56 53** P **P** **17 15 04.8 +1.2**
baz=245,SNR=5.4
**BPAW Bear Paw Mtn. 89.58 16** P **P** **17 15 05.2 +2.4**
baz=216
**H04A Detroit Lake 89.62 41** IAmb IAmb 17 15 04.5
comp=Z,8.0nm,0.8s
**TUQ Turquoise Moun 89.64 52** P **P** **17 15 05.0 +1.0**
baz=245
**KVN Kaiserville 89.66 48** IAmb IAmb 17 15 05.9
comp=Z,11nm,1.0s
**IRM Iron Mountain 89.68 53** P **P** **17 15 04.9 +0.9**
baz=245,SNR=16
**CRAG Craig 89.73 29** P **P** **17 15 05.9 +2.2**
baz=232
**MCARA McCarthy VSAT 89.85 21** P **P** **17 15 05.3 +1.2**
baz=224
**PINE Pine Mountain 89.97 43** IAmb IAmb 17 15 07.6
comp=Z,16nm,0.8s
**TPNV Topopah Spring 90.05 50** P **P** **17 15 06.1 +0.2**
baz=244,SNR=16
**CTG Chitna Glacier 90.12 22** P **P** **17 15 05.9 +0.4**
baz=225
**U33K Whale Pass 90.13 28** P **P** **17 15 06.3 +0.8**
baz=232
**V35K Ketchikan 90.33 29** P **P** **17 15 06.6 +0.2**
baz=233
**S32K Killisnoo 90.35 27** P **P** **17 15 07.0 +0.5**
baz=231
**O28M Mount Upton 90.38 22** P **P** **17 15 07.2 +0.2**
baz=226
**PDMCI Parker Dam,Lak 90.49 53** P **P** **17 15 07.8 0.0**
baz=246,SNR=7.6
**P29M Windy Craggy 90.50 24** P **P** **17 15 07.7 +0.5**
baz=228
**214A Organ Pipe Nat 90.56 56** P **P** **17 15 08.0 -0.2**
baz=246
**M26K Nabesna, AK 90.60 20** P **P** **17 15 08.4 +0.7**
baz=224
**O29M Mount Kennedy 90.64 23** P **P** **17 15 09.0 +1.0**
baz=227
**GNW Green Mountain 90.66 39** IAmb IAmb 17 15 10.1
comp=Z,12nm,0.9s
**R32K Eaglecrest 90.89 26** P **P** **17 15 10.0 +1.0**
baz=231
**YUK8 Steele Glacier 90.89 22** P **P** **17 15 09.9 +0.6**
baz=226
**PLBC Pleasant Camp 90.91 24** P **P** **17 15 10.4 +1.3**
baz=229
**M27K Edge Creek, AK 90.93 20** P **P** **17 15 09.7 +0.4**
baz=224
**G21K Aliakaket 90.94 14** P **P** **17 15 09.9 +0.8**
baz=214
**YUK3 Moose Creek 90.99 21** P **P** **17 15 10.0 +0.3**
baz=226
**I07A Izee 91.02 43** IAmb IAmb 17 15 44.7
comp=Z,11nm,1.1s
**P30M Million Dollar 91.12 24** P **P** **17 15 10.3 +0.2**
baz=229
**R11B Troy Canyon, C 91.13 49** P **P** **17 15 11.1 +0.2**
baz=245,SNR=7.4
**YUK6 Outpost Mounta 91.15 23** P **P** **17 15 10.6 +0.1**
baz=228
**ILAR Eielson Array 91.21 17** P **P** **17 15 08.7 -1.6**
comp=Z,1.5nm,0.6s,baz=239,slow=5.3,SNR=9.5
comp=Z,1.5nm,0.6s
**SKAG Skagway 91.32 25** P **P** **17 15 11.2 +0.3**
baz=230
**YUK4 Talbot Arm 91.32 22** P **P** **17 15 12.0 +0.7**
baz=227
**J08A Circle Bar Ran 91.36 44** IAmb IAmb 17 15 13.4
comp=Z,7.2nm,0.9s
**E20K Nigu River 91.85 12** P **P** **17 15 14.5 +1.2**
baz=212
**O30N Mendenhall 91.87 23** P **P** **17 15 13.7 +0.2**
baz=230
**N30M Aishikik Lake 91.96 23** P **P** **17 15 14.6 +0.6**
baz=229
**S34M Telegraph Cree 92.09 27** P **P** **17 15 15.3 +0.7**
baz=234
**M29M Somme Creek 92.13 21** P **P** **17 15 15.5 +0.7**
baz=228
**Q32M Nakina River 92.24 26** P **P** **17 15 16.3 +0.8**
baz=233
**WHY Whitehorse 92.26 24** P **P** **17 15 16.1 +0.6**
baz=231
**TUC Tucson 92.28 56** P **P** **17 15 16.9 +0.7**
baz=247
**N31M Braeburn, Yuko 92.45 23** P **P** **17 15 17.1 +0.9**
baz=230
**KNB Kanab 92.57 51** IAmb IAmb 17 15 19.9
comp=Z,19nm,1.7s
**X16A Lo Mia Camp, P 92.58 54** IAmb IAmb 17 15 20.0
comp=Z,9.4nm,0.9s
**A19K Wainwright 92.69 10** P **P** **17 15 18.4 +1.3**
baz=207
**L29M L29M 92.70 21** P **P** **17 15 18.1 +0.8**
baz=228
**U15A North Rim 92.73 52** IAmb IAmb 17 15 21.5
comp=Z,8.0nm,0.9s
**P33M Teslin, Yukon 92.78 25** P **P** **17 15 18.5 +0.6**
baz=232
**DLBC Dease Lake 92.87 27** IAmb IAmb 17 15 20.9
comp=Z,12nm,1.2s
**DLBC Dease Lake 92.87 27** P **P** **17 15 18.1 -0.2**
comp=Z,9.5nm,1.2s,baz=199,slow=7.2,SNR=5.3
comp=Z,9.5nm,1.2s
**DLBC Dease Lake 92.87 27** P **P** **17 15 19.5 +1.2**
baz=235
**R33M Jennings River 93.03 26** IAmb IAmb 17 15 54.8
comp=Z,11nm,1.4s
**R33M Jennings River 93.03 26** P **P** **17 15 20.2 +1.1**
baz=234
**WUAZ Wupatki 93.06 53** IAmb IAmb 17 15 22.0
comp=Z,9.5nm,0.9s
**WUAZ Wupatki 93.06 53** P **P** **17 15 21.0 +1.2**
baz=247
**319A Douglas 93.11 58** IAmb IAmb 17 15 22.3
comp=Z,11nm,0.9s
**N32M Quiet Lake 93.25 24** P **P** **17 15 20.6 +0.7**
baz=232
**MTPU Mount Pierson 93.44 51** IAmb IAmb 17 15 26.5
comp=Z,7.2nm,1.2s
**FARO Faro, Yukon 93.82 23** P **P** **17 15 24.7 +2.2**
baz=232
**HLID Hailey 94.11 45** P **P** **17 15 25.4 +0.9**
baz=246
**TIXI Tiksi 95.97 348** *i* P **P** **17 15 33.5 +1.5**
TIXI pmax pmax
comp=Z,1.0nm,1.0s
**MNTX Cornudas Mount 96.33 59** P **P** **17 15 35.3 +0.5**
baz=250
**ANMO Albuquerque 96.60 55** P **P** **17 15 36.8 +0.7**
baz=250
**TXAR Lajitas Array 96.94 61** P **P** **17 15 38.4 +0.8**
comp=Z,1.3nm,0.9s,baz=236,slow=5.7,SNR=8.0
TXAR PKKPbc **PKKPbc** **17 32 18.8 0.0**
comp=Z,0.3nm,0.9s,baz=108,slow=3.7,SNR=3.7
comp=Z,1.3nm,0.9s
**H17A Grant Village 96.98 45** P **P** **17 15 39.5 +1.8**
baz=248
**O20A White River Ci 97.07 50** P Pdif 17 15 39.8 +1.6
baz=249
**PDAR Pinedale Array 97.08 47** P Pdif 17 15 38.4 +0.2
comp=Z,0.4nm,0.6s,baz=222,slow=4.0,SNR=4.6
PDAR PKKPbc **PKKPbc** **17 32 16.9 -2.3**
comp=Z,0.6nm,0.8s,baz=76,slow=6.3,SNR=4.2
comp=Z,0.4nm,0.6s
**WMQ Urumqi 98.32 314** *e*P Pdif 17 15 45.7 +2.2
WMQ LR LR
comp=N,1μm,21.5s
WMQ LR LR
comp=E,2μm,19.5s
WMQ LR LR
comp=Z,940nm,20.9s
**DGZ Jazzator, Alta 100.47 319** *i* P **Pdif** **17 15 52.4 -0.6**
DGZ pmax pmax
comp=Z,1.0nm,0.8s
**MK31 Makanchi Array 102.87 315** *i* P **Pdif** **17 16 02.6 -1.0**
**MKAR Makanchi Array 102.87 315** P **Pdif** **17 16 04.5 +0.9**
comp=Z,0.4nm,0.6s,baz=91,slow=4.9,SNR=5.9
**ZALV Zalesovo Beam 103.30 323** Pdiff **Pdif** **17 16 05.0 -0.3**
comp=Z,0.4nm,0.3s,baz=88,slow=4.0,SNR=3.9
**KURBB Kurchatov Arra 106.22 318** PKiKP **PKiKP** **17 20 28.0 -1.3**
comp=Z,0.4nm,0.5s,baz=103,slow=2.0,SNR=5.5
**TZTN Tazewell 115.03 58** P **PKiKP** **17 20 46.7 +0.2**
baz=262
**ARU Arti 118.43 324** *i* PKIKP **PKPdf** **17 20 50.2 -2.1**
ARU 17 22 09.3
ARU 17 27 50.8
**BOSA Boshof 120.39 216** PKP **PKPdf** **17 20 56.6 -0.7**
comp=Z,1.6nm,0.4s,baz=169,slow=1.0,SNR=17
**SPITS Spitsbergen Ar 120.79 354** PKP **PKPdf** **17 20 55.2 -1.2**
comp=Z,2.2nm,0.5s,baz=85,slow=9.5,SNR=6.6
**ARCES ARCESS Array B 126.30 345** PKP **PKPdf** **17 21 05.8 -1.3**
comp=Z,2.9nm,0.8s,baz=70,slow=1.2,SNR=10
**ARCES ARCESS Array B 126.30 345** *e*PKIKP **PKPdf** **17 21 06.3 -0.8**
ARCES pmax pmax
comp=Z,3.0nm,0.8s
**BDFB Brasilia 128.46 131** PKP **PKPdf** **17 21 12.4 -0.6**
comp=Z,6.9nm,0.7s,baz=229,slow=0.6,SNR=10
**KIV Kislovodsk 130.36 311** *e*PKIKP **PKPdf** **17 21 11.1 -4.6**
KIV pmax pmax
comp=Z,4.0nm,1.0s
**OBN Obninsk 130.70 326⇑** *e*PKIKP **PKiKP** **17 21 18.4 +1.7**
OBN *e* 17 23 31.9
OBN *e*PPP PPP 17 26 20.8
OBN pmax pmax
comp=Z,4.0nm,0.9s
**FINES FINESS Array B 131.82 338** PKP **PKPdf** **17 21 17.5 -0.3**
comp=Z,1.5nm,0.7s,baz=48,slow=2.8,SNR=7.1
FINES SKPbc **SKPbc** **17 24 30.5 -1.7**
comp=Z,4.6nm,0.9s,baz=17,slow=7.3,SNR=7.0
**FINES FINESS Array B 131.82 338** *e*PKIKP **PKPdf** **17 21 16.5 -1.3**
FINES pmax pmax
comp=Z,2.0nm,0.7s
**NB2 NORSAR Subarra 136.68 345** PKPdf PKPdf 17 21 18.4 -8.6
comp=Z,2.3nm,1.0s,baz=31,slow=1.9
**NOA NORSAR Array B 136.68 345** PKP **PKPdf** **17 21 26.3 -0.7**
comp=Z,1.1nm,0.7s,baz=40,slow=2.1,SNR=5.9
**NOA NORSAR Array B 136.68 345** *e*PKIKP **PKPdf** **17 21 26.9 -0.1**
NOA pmax pmax
comp=Z,1.0nm,0.7s
**AKASG Malin Array Be 136.69 324** PKP **PKPdf** **17 21 26.7 -0.5**
comp=Z,1.2nm,0.6s,baz=48,slow=2.6,SNR=4.3
AKASG SKPbc **SKPbc** **17 24 47.2 -1.2**
comp=Z,0.2nm,0.2s,baz=46,slow=3.5,SNR=4.1
**AKASG Malin Array Be 136.69 324** *e*PKIKP **PKiKP** **17 21 28.9 -0.1**
AKASG pmax pmax
comp=Z,1.0nm,0.6s
**AK20 Malin Array Si 136.78 324** PKP **PKPdf** **17 21 27.3 -0.1**
**BRTR Keskin Array B 137.87 307** PKP **PKPdf** **17 21 30.2 +0.2**
comp=Z,0.8nm,0.6s,baz=143,slow=4.1,SNR=4.7
BRTR SKPbc **SKPbc** **17 24 51.6 -0.9**
comp=Z,1.3nm,0.9s,baz=106,slow=4.4,SNR=5.1
**BRTR Keskin Array B 137.87 307** *e*PKIKP **PKiKP** **17 21 32.4 +0.4**
BRTR pmax pmax
comp=Z,1.0nm,0.6s
**LUBAR Lubar, Ukraine 137.89 324** PKP **PKPdf** **17 21 29.2 -0.3**
**LANS Liptovska Anna 142.75 327** *e*PKIKP **PKPdf** **17 21 39.1 +0.7**
**LANS Liptovska Anna 142.75 327** *e*PKP **PKPdf** **17 21 39.1 +0.7**
**OKC Ostrava-Krasne 142.95 329** AMS AMS 18 26 30.0
comp=Z,300nm,18.9s
**MORC Moravsky Berou 143.28 330** *e*PKP PKPab 17 21 35.8 +0.4
**OSTC Ostas 143.35 332** AMS AMS 18 28 10.0
comp=Z,600nm,20.1s
**CHVC Chvalec 143.40 332** AMS AMS 18 28 20.0
comp=Z,700nm,19.7s
**KRLC Kraliky 143.43 331** *e*PKP PKPbc 17 21 36.8 -0.3
KRLC AMS AMS 18 26 40.0
comp=Z,500nm,19.3s
**KRLC Kraliky 143.43 331** *e*PKIKP PKPbc 17 21 36.8 -0.3
KRLC MLR MLR
comp=Z,500nm,19.3s
**DPC Dobruska-Polom 143.45 331** *e*PKP PKPbc 17 21 37.0 -0.2
DPC AMS AMS 18 26 40.0
comp=Z,500nm,19.3s
**DPC Dobruska-Polom 143.45 331** *e*PKIKP PKPbc 17 21 37.0 -0.2
DPC MLR MLR
comp=Z,500nm,19.3s
**UPC Upice 143.48 332** *e*PKP PKPbc 17 21 36.9 -0.3
UPC AMS AMS 18 28 10.0
comp=Z,700nm,18.2s
**UPC Upice 143.48 332** *e*PKIKP PKPbc 17 21 36.9 -0.3
UPC MLR MLR
comp=Z,700nm,18.2s
**VYHS Vyhne 143.49 327** *e*PKIKP PKPbc 17 21 38.5 +1.2
**VYHS Vyhne 143.49 327** *e*PKP PKPbc 17 21 38.5 +1.2
**JAVC Velka Javorina 143.84 328** *e*PKP **PKPdf** **17 21 39.9 -0.4**
**KAVA Kavala 144.04 313** P **PKPab** **17 21 38.5 -0.1**
**VRAC Vranov 144.06 330** *e*PKP PKPbc 17 21 38.7 -0.2
**PVCC Panska Ves 144.09 333** *e*PKP PKPbc 17 21 39.0 0.0
PVCC AMS AMS 18 26 30.0
comp=Z,700nm,22.2s
**PVCC Panska Ves 144.09 333** *e*PKIKP PKPbc 17 21 39.0 0.0
PVCC MLR MLR
comp=Z,700nm,22.2s
**BRG Berggiesshubel 144.10 334** *i* PKP PKPbc 17 21 39.0 +0.1
BRG Amp 17 21 39.7
comp=Z,27nm,0.7s
BRG pPKP pPKPdf 17 22 10.8 -3.2
BRG Amp 17 22 13.5
comp=Z,5.3nm,0.9s
**CLL Collm 144.15 335⇓** *i*PKPdf **PKPab** **17 21 38.4 -0.2**
comp=Z,25nm,0.7s
CLL *i* pPKPdf **pPKPdf** **17 22 10.6 -3.5**
**CLL Collm 144.15 335⇓** *i*PKIKP **PKPab** **17 21 38.4 -0.2**
CLL pmax pmax
comp=Z,25nm,0.7s
**KRUC Moravsky 144.32 330** *e*PKP **PKPab** **17 21 39.5 +0.1**
**NVR Nevrokopi 144.34 314** P PKPbc 17 21 40.7 +0.6
**GOPC GO Pecny, Ondr 144.45 332** *e*PKP **PKPab** **17 21 39.8 -0.1**
GOPC AMS AMS 18 29 00.0
comp=Z,700nm,17.2s
**GOPC GO Pecny, Ondr 144.45 332** *e*PKIKP **PKPab** **17 21 39.8 -0.1**
GOPC MLR MLR
comp=Z,700nm,17.2s
**KOKK Kokkinochori, 144.47 313** P **PKPab** **17 21 39.9 -0.3**
**PRA Prague 144.49 332** *e*PKP PKPbc 17 21 40.5 +0.3
PRA AMS AMS 18 29 10.0
comp=Z,600nm,17.4s
**PRA Prague 144.49 332** *e*PKIKP PKPbc 17 21 40.5 +0.3
PRA MLR MLR
comp=Z,600nm,17.4s
**PRU Pruhonice 144.50 332** *e*PKP **PKPab** **17 21 40.1 +0.1**
PRU AMS AMS 18 29 00.0
comp=Z,500nm,16.9s
**PRU Pruhonice 144.50 332** *e*PKIKP **PKPab** **17 21 40.1 +0.1**
PRU MLR MLR
comp=Z,500nm,16.9s
**HSKC Hora Svate Kat 144.51 334** *e*PKP **PKPab** **17 21 40.2 +0.1**
HSKC AMS AMS 18 34 50.0
comp=Z,600nm,17.4s
**TREC Trest 144.58 331** *e*PKP PKPbc 17 21 40.6 0.0
**TREC Trest 144.58 331** *e*PKIKP PKPbc 17 21 40.6 0.0
**SRS Serrai 144.62 313** P **PKPab** **17 21 39.8 -1.0**
**EKA Eskdalemuir Ar 144.71 353** PKP **PKPab** **17 21 39.9 -0.8**
comp=Z,7.9nm,0.4s,baz=354,slow=2.3,SNR=114
**ESK Eskdalemuir 144.73 353** **PKPab** **17 21 39.9 -0.8**
**ESK Eskdalemuir 144.73 353** PKIKP **PKPab** **17 21 39.9 -0.8**
**PEHC Pehcevo 144.80 315** *i* P PKPbc 17 21 41.7 +0.1
**ZVC Zvikov 145.06 332** *e*PKP **PKPab** **17 21 42.1 0.0**
**VAY Valandovo 145.22 314** *i* P **PKPbc** **17 21 36.4 -6.4**
**RONA Rosalia, Austr 145.30 328** *e*PKP **PKPab** **17 21 43.1 0.0**
comp=Z,30nm,0.9s,SNR=18
**CONA Conrad Observa 145.36 329** *e*PKP **PKPab** **17 21 43.4 0.0**
comp=Z,33nm,0.8s,SNR=34
**CKRC Cesky Krumlov 145.46 331** *e*PKP **PKPdf** **17 21 42.9 -0.2**
CKRC AMS AMS 18 30 50.0
comp=Z,400nm,17.7s
**CKRC Cesky Krumlov 145.46 331** *e*PKP2 **PKPdf** **17 21 42.9 -0.2**
CKRC MLR MLR
comp=Z,400nm,17.7s
**KHC Kasperske Hory 145.56 332** **PKPab** **17 21 44.0 -0.1**
**KHC Kasperske Hory 145.56 332** *e*PKP **PKPdf** **17 21 43.4 +0.1**
KHC *e*pPKP pPKPab 17 22 15.0 -1.5
KHC AMS AMS 18 27 10.0
comp=Z,800nm,25.6s
**KHC Kasperske Hory 145.56 332** *i* PKP2 **PKPdf** **17 21 43.2 -0.1**
**GERES GERESS Array B 145.72 332** PKPbc **PKPab** **17 21 44.0 -0.2**
comp=Z,10.0nm,0.7s,baz=24,slow=3.4,SNR=58
GERES pPKPbc **pPKPdf** **17 22 16.4 -0.6**
comp=Z,9.6nm,0.9s,baz=40,slow=3.3,SNR=7.3
GERES SKPbc **SKPbc** **17 25 10.8 -1.2**
comp=Z,0.2nm,0.3s,baz=302,slow=2.2,SNR=4.7
**ARSA Arzberg 145.99 328** *e*PKP **PKPdf** **17 21 44.5 +0.5**
comp=Z,5.5nm,1.0s
**MOA Molln 146.18 330** *e*PKP **PKPbc** **17 21 45.3 -0.3**
comp=Z,12nm,0.7s,SNR=12
**FNA Florina 146.27 314** P **PKPbc** **17 21 45.5 -0.6**
**OHR Ohrid 146.51 315** *i* P **PKPbc** **17 21 46.7 -0.1**
**BIOA Bad Ischl, Aus 146.59 330** *e*PKP **PKPbc** **17 21 46.0 -0.8**
comp=Z,5.9nm,0.6s
**SOKA Soboth 146.63 328** *e*PKP **PKPbc** **17 21 46.2 -0.7**
comp=Z,4.7nm,0.7s,SNR=6.5
**KALE Kalithea 146.77 310** P **PKPbc** **17 21 46.7 -0.9**
**GUR Goura 146.80 309** P **PKPbc** **17 21 46.9 -0.9**
**ANX Ano Chora 146.84 310** P **PKPdf** **17 21 46.4 +0.5**
**KLV Kalavryta, Ach 146.90 309** P **PKPdf** **17 21 46.8 +0.9**
**KBA Koelnbreinsper 147.17 330** *e*PKP **PKPdf** **17 21 47.3 +1.1**
comp=Z,5.8nm,0.8s
**BTNL Ternell 147.20 341** *d*PKP **PKPbc** **17 21 47.8 -0.6**
**MEM Membach 147.22 341** *d*PKP **PKPbc** **17 21 47.8 -0.5**
MEM *dp*PKP **pPKPdf** **17 22 19.7 +0.3**
**LESA Schwarzleotal 147.23 331** *e*PKP **PKPbc** **17 21 47.8 -0.8**
comp=Z,11nm,0.6s
**MYKA Terra Mystica 147.35 329** *e*PKP **PKPbc** **17 21 47.7 -1.2**
comp=Z,7.2nm,0.7s
**BSTI Sart Tilman 147.38 341** *d*PKP **PKPbc** **17 21 48.1 -0.7**
**ITM Ithomi 147.39 308** PKPbc **PKPbc** **17 21 48.7 -0.6**
**IGT Igoumenitsa 147.56 313** P **PKPbc** **17 21 48.9 -0.8**
**BCLA Clavier 147.60 341** *d*PKPdf **PKPdf** **17 21 45.8 -0.8**
BCLA *d*PKP **PKiKP** **17 21 51.5 +0.1**
BCLA *dp*PKPdf **pPKPdf** **17 22 17.4 -2.5**
**WATA Walderalm 147.79 332** *i* PKP **PKPbc** **17 21 49.3 -1.0**
comp=Z,3.8nm,0.5s
**ABTA Abfaltersbach 147.80 330** *e*PKP **PKPbc** **17 21 49.0 -1.3**
comp=Z,9.9nm,0.7s,SNR=7.2
**WTTA Wattenberg 147.82 331** *i* PKP **PKPbc** **17 21 49.3 -1.1**
comp=Z,9.2nm,0.9s
**BMRD Maredsous 147.86 342** *d*PKP **PKPbc** **17 21 49.5 -0.6**
**WLF Walferdange 147.99 340** *d*PKP **PKPbc** **17 21 50.6 0.0**
**WLF Walferdange 147.99 340** *d*PKPdf **PKPdf** **17 21 48.0 +0.8**
**MOTA Moosalm 148.00 332** *e*PKP **PKPbc** **17 21 50.0 -0.8**
comp=Z,13nm,0.7s
**RETA Reutte 148.03 333** *i* PKP **PKPbc** **17 21 50.0 -0.8**
comp=Z,3.8nm,0.6s
**SQTA Sankt Quirin 148.04 332** *e*PKP **PKPbc** **17 21 50.3 -0.6**
comp=Z,13nm,0.6s,SNR=10
**DOU Dourbes 148.10 342** *d*PKP **PKPbc** **17 21 50.5 -0.2**
DOU *dp*PKPdf **pPKPdf** **17 22 19.6 -1.2**
DOU *dp*PKP **pPKPbc** **17 22 22.6 -1.3**
**FETA Feichten 148.41 332** *e*PKP **PKPbc** **17 21 51.4 -0.5**
comp=Z,6.5nm,0.6s,SNR=9.2
**DAVA Damuels 148.57 333** *e*PKP **PKPbc** **17 21 51.4 -0.9**
comp=Z,22nm,0.8s
**SENIN Lac Senin/Sane 150.37 335** **PKPbc** **17 21 56.6 -0.3**
**KEST Kesra 156.97 316** PKPab **PKPab** **17 22 31.1 -0.6**
comp=Z,3.5nm,0.8s,baz=286,slow=4.7,SNR=4.7
**ESDC Sonseca Array 160.04 346** PKPab **PKPab** **17 22 43.7 -1.0**
comp=Z,0.7nm,0.8s,baz=4.5,slow=3.7,SNR=5.0
**LIC Lamto 165.01 201⇑** *e*PKP1 **PKPab** **17 23 07.4 +0.4**
comp=Z,54nm,0.9s
**KIC Kosan Boka 165.04 202⇑** *e*PKP1 **PKPab** **17 23 07.7 +0.5**
comp=Z,14nm,0.7s
**DBIC Dimbokro 165.37 202** PKPab **PKPab** **17 23 09.3 +0.7**
comp=Z,9.0nm,0.7s,baz=157,slow=5.2,SNR=7.7
**TIC Toumodi 165.40 201⇓** *e*PKP1 **PKPab** **17 23 08.6 -0.2**
comp=Z,30nm,1.0s
**TORD Torodi Ar. Bea 166.44 240** PKP **PKPdf** **17 22 10.4 -0.8**
comp=Z,1.5nm,0.9s,baz=47,slow=2.4,SNR=5.4
TORD PKPab **PKPab** **17 23 12.8 -0.8**
comp=Z,0.9nm,0.6s,baz=101,slow=4.0,SNR=4.5

*NEIC* **12** *17:03:55.5±2.3, 69°.56N±0°.06×144°.58W±0°.07, h10km±2km, Error ellipse: s-maj=10.9km s-min=3.8km az=6.0*
**AEIC 12 17:03:54.5**±2.8**, 69°.48N**±0°.05×**144°.60W**±0°.08**, h5**km±6km,
**ML2.9, ML3.1**/88(NEIC)**, Error ellipse: s-maj=7.6km**
**s-min=3.9km az=194.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.34** | **65** | | Pg | 17 04 01.2 | 0.0 |
| **C26K** | **Camden Bay** | **0.45** | **346** | | Pg | 17 04 02.8 | -0.3 |
| C26K | | | | | Sg | 17 04 08.8 | -0.2 |
| **C26K** | **Camden Bay** | **0.45** | **346** | IAML | | 17 04 12.4 | |
| | comp=N,1μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.65** | **256** | | Pg | 17 04 06.7 | -0.2 |
| D25K | | | | | Sb | 17 04 16.9 | -0.7 |
| **D27M** | **Malcolm River** | **1.31** | **99** | | Pn | 17 04 19.0 | -0.5 |
| D27M | | | | | Sn | 17 04 38.3 | +0.9 |
| **D27M** | **Malcolm River** | **1.31** | **99** | IAML | | 17 04 40.2 | |
| | comp=N,399nm,0.6s | | | | | | |
| D27M | | | | IAML | | 17 04 42.0 | |
| | comp=E,244nm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.46** | **281** | | Pn | 17 04 21.5 | +0.2 |
| C24K | | | | | Sg | 17 04 41.9 | +0.7 |
| **C24K** | **Franklin Bluff** | **1.46** | **281** | IAML | | 17 04 43.2 | |
| | comp=N,317nm,0.5s | | | | | | |
| C24K | | | | IAML | | 17 04 50.0 | |
| | comp=E,219nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.54** | **259** | | Pn | 17 04 22.6 | +0.1 |
| D24K | | | | | Sg | 17 04 44.5 | +0.7 |
| **D24K** | **Happy Valley** | **1.54** | **259** | IAML | | 17 04 48.4 | |
| | comp=E,286nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.70** | **139** | | Pg | 17 04 27.1 | 0.0 |
| E27K | | | | IAML | | 17 04 53.8 | |
| | comp=E,151nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81** | **174** | Pn | Pg | 17 04 29.7 | +0.7 |
| F26K | | | | IAML | | 17 04 57.8 | |
| | comp=N,128nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **1.94** | **192** | | Pn | 17 04 28.3 | +0.2 |
| **E28M** | **Babbage River** | **2.03** | **113** | Pn | Pb | 17 04 32.1 | +0.4 |
| E28M | | | | IAML | | 17 05 04.5 | |
| | comp=N,63nm,0.6s | | | | | | |
| E28M | | | | IAML | | 17 05 10.9 | |
| | comp=E,61nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **2.13** | **282** | | Pn | 17 04 30.4 | -0.2 |
| **D23K** | **Nanushuk River** | **2.23** | **259** | | Pn | 17 04 31.8 | -0.3 |
| **F28M** | **Old Crow** | **2.56** | **135** | | Pn | 17 04 36.7 | +0.1 |
| **F28M** | **Old Crow** | **2.56** | **135** | IAML | | 17 05 22.7 | |
| | comp=N,67nm,0.5s | | | | | | |
| F28M | | | | IAML | | 17 05 28.3 | |
| | comp=E,86nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.66** | **111** | | Pn | 17 04 37.9 | 0.0 |
| **E29M** | **Blow River** | **2.66** | **111** | IAML | | 17 05 23.5 | |
| | comp=N,72nm,0.7s | | | | | | |
| E29M | | | | IAML | | 17 05 25.4 | |
| | comp=E,59nm,0.6s | | | | | | |
| **G27K** | **Doyon Strip** | **2.91** | **156** | | Pn | 17 04 41.5 | +0.2 |
| **D22K** | **Ayikyak River** | **2.95** | **262** | | Pn | 17 04 41.8 | -0.1 |
| **D22K** | **Ayikyak River** | **2.95** | **262** | IAML | | 17 05 35.5 | |
| | comp=E,55nm,0.8s | | | | | | |
| D22K | | | | IAML | | 17 05 37.9 | |
| | comp=N,58nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.00** | **202** | | Pn | 17 04 42.9 | +0.3 |
| **G24K** | **Hadweenzic Riv** | **3.00** | **202** | IAML | | 17 05 36.8 | |
| | comp=N,50nm,1.2s | | | | | | |
| G24K | | | | IAML | | 17 05 38.3 | |
| | comp=E,42nm,0.6s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.16** | **290** | | Pn | 17 04 45.3 | +0.5 |
| **H25L** | **Birch Creek** | **3.27** | **189** | | Pn | 17 04 47.0 | +0.8 |
| **B21K** | **Ikpikpuk River** | **3.52** | **277** | | Pn | 17 04 49.5 | -0.2 |
| **B21K** | **Ikpikpuk River** | **3.52** | **277** | IAML | | 17 06 00.9 | |
| | comp=N,34nm,1.4s | | | | | | |
| B21K | | | | IAML | | 17 06 05.9 | |
| | comp=E,29nm,0.9s | | | | | | |
| **E21K** | **Killik River** | **3.54** | **257** | | Pn | 17 04 50.1 | +0.1 |
| **E21K** | **Killik River** | **3.54** | **257** | IAML | | 17 06 01.2 | |
| | comp=E,27nm,0.8s | | | | | | |
| E21K | | | | IAML | | 17 06 02.2 | |
| | comp=N,38nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **3.56** | **133** | | Pn | 17 04 50.8 | +0.4 |
| **G29M** | **Pine Creek** | **3.56** | **133** | IAML | | 17 05 41.5 | |
| | comp=N,38nm,0.7s | | | | | | |
| **F30M** | **Barrier River** | **3.75** | **116** | | Pn | 17 04 52.8 | -0.1 |
| **A22K** | **Sinclair Lake** | **3.84** | **298** | | Pn | 17 04 54.0 | 0.0 |
| **H24K** | **Noodor Dome** | **3.87** | **200** | | Pn | 17 04 54.6 | -0.1 |
| **F21K** | **Alatna River** | **4.00** | **240** | | Pn | 17 04 56.2 | -0.1 |
| **PRP** | **Porcupine Dome** | **4.00** | **186** | | Pn | 17 04 56.7 | +0.2 |
| **PRP** | **Porcupine Dome** | **4.00** | **186** | IAML | | 17 05 49.6 | |
| | comp=N,21nm,0.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.01** | **125** | Pn | Pn | 17 04 58.7 | +2.2 |
| G30M | | | | IAML | | 17 06 20.0 | |
| | comp=N,19nm,1.3s | | | | | | |
| **H29M** | **Whitestone** | **4.04** | **141** | | Pn | 17 04 56.9 | 0.0 |
| **H29M** | **Whitestone** | **4.04** | **141** | IAML | | 17 05 52.3 | |
| | comp=E,27nm,0.7s | | | | | | |
| H29M | | | | IAML | | 17 05 53.0 | |
| | comp=N,24nm,1.1s | | | | | | |
| **H23K** | **Yukon River** | **4.13** | **209** | Pn | Pn | 17 04 58.5 | +0.3 |
| H23K | | | | IAML | | 17 06 08.3 | |
| | comp=N,23nm,3.3s | | | | | | |
| H23K | | | | IAML | | 17 06 18.3 | |
| | comp=E,17nm,1.0s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.24** | **172** | Pn | Pn | 17 05 00.7 | +1.1 |
| **EPYK** | **Eagle Plains** | **4.32** | **133** | Pn | Pn | 17 05 03.2 | +2.5 |
| **E20K** | **Nigu River** | **4.37** | **259** | | Pn | 17 05 02.1 | +0.6 |
| **B20K** | **Meade River** | **4.40** | **283** | | Pn | 17 05 02.0 | +0.3 |
| **I28M** | **Miner Creek** | **4.43** | **154** | Pn | Pn | 17 05 05.1 | +2.7 |
| I28M | | | | IAML | | 17 06 29.1 | |
| | comp=E,17nm,1.4s | | | | | | |
| **A21K** | **Barrow** | **4.45** | **300** | | Pn | 17 05 02.3 | -0.1 |
| **G21K** | **Allakaket** | **4.48** | **233** | Pn | Pn | 17 05 03.9 | +0.9 |
| G21K | | | | IAML | | 17 06 34.3 | |
| | comp=N,13nm,2.0s | | | | | | |
| G21K | | | | IAML | | 17 07 49.2 | |
| | comp=E,19nm,3.6s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.50** | **112** | Pn | Pn | 17 05 04.2 | +1.1 |
| F31M | | | | IAML | | 17 05 52.3 | |
| | comp=N,13nm,2.8s | | | | | | |
| F31M | | | | IAML | | 17 07 55.1 | |
| | comp=E,15nm,3.3s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.52** | **195** | Pn | Pn | 17 05 04.4 | +0.9 |
| POKR | | | | IAML | | 17 06 01.9 | |
| | comp=N,14nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **4.63** | **119** | Pn | Pn | 17 05 06.6 | +1.7 |
| **I23K** | **Minto, Yukon-K** | **4.73** | **205** | Pn | Pn | 17 05 07.6 | +1.3 |
| I23K | | | | IAML | | 17 07 46.1 | |
| | comp=E,18nm,4.0s | | | | | | |
| **MDM** | **Murphy Dome** | **4.76** | **199** | Pn | Pn | 17 05 08.4 | +1.7 |
| MDM | | | | IAML | | 17 06 05.3 | |
| | comp=N,16nm,3.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.80** | **245** | Pn | Pn | 17 05 09.3 | +2.0 |
| F20K | | | | IAML | | 17 06 03.4 | |
| | comp=E,13nm,4.2s | | | | | | |
| **D19K** | **Kuna River** | **4.96** | **265** | | Pn | 17 05 10.8 | +1.3 |
| D19K | | | | IAML | | 17 06 51.6 | |
| | comp=E,9.1nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.02** | **196** | Pn | Pn | 17 05 12.6 | +2.3 |
| CCB | | | | IAML | | 17 06 37.9 | |
| | comp=N,11nm,3.8s | | | | | | |
| **E19K** | **Redstone River** | **5.08** | **252** | Pn | Pn | 17 05 12.5 | +1.4 |
| E19K | | | | IAML | | 17 06 18.8 | |
| | comp=E,13nm,2.7s | | | | | | |
| E19K | | | | IAML | | 17 07 55.3 | |
| | comp=N,14nm,3.3s | | | | | | |
| **WRH** | **Wood River Hil** | **5.22** | **197** | | Pn | 17 05 13.6 | +0.5 |
| **I30M** | **Mount Dempster** | **5.33** | **140** | | Pn | 17 05 16.9 | +2.2 |
| **C19K** | **Lookout Ridge** | **5.33** | **273** | | Pn | 17 05 14.4 | -0.2 |
| **SCRK** | **Sand Creek** | **5.54** | **177** | | Pn | 17 05 18.2 | +0.6 |
| **K27K** | **Chicken** | **5.57** | **168** | Pn | Pn | 17 05 20.6 | +2.7 |
| **F19K** | **Shaleruckik Mo** | **5.59** | **248** | Pn | Pn | 17 05 19.6 | +1.5 |
| **A19K** | **Wainwright** | **5.74** | **285** | | Pn | 17 05 20.5 | +0.4 |
| **J30M** | **Hart River** | **5.89** | **143** | | Pn | 17 05 23.2 | +0.7 |
| **BPAW** | **Bear Paw Mtn.** | **5.96** | **208** | Pn | Pn | 17 05 25.6 | +2.2 |
| **C18K** | **Utukok River** | **6.00** | **270** | | Pn | 17 05 23.9 | 0.0 |
| **E18K** | **Tukpahlearik C** | **6.24** | **258** | | Pn | 17 05 27.2 | +0.2 |
| **F18K** | **Selawik** | **6.34** | **250** | | Pn | 17 05 28.6 | +0.3 |
| **A36M** | **Sachs Harbour** | **6.86** | **60** | Pn | Pn | 17 05 34.7 | -0.8 |
| **C16K** | **Lisburne Hills** | **7.58** | **271** | Pn | Pn | 17 05 46.3 | +0.9 |

*NEIC **12** 17:04:47.8±0.3,36°.476N×0.°008×97°.74W±0.°01, h5km±5km, Error ellipse: s-maj=1.7km s-min=0.7km az=50.0*

**TUL 12 17:04:47.9±0.2,36°.487N±0.°009×97°.73W±0.°01, h5km±5km, ML2.2, mb_Lg2.1/11(NEIC), ML2.3/43(NEIC), Error ellipse: s-maj=1.7km s-min=0.6km az=46.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CROK** | **Carrier** | **0.20** | **275** | Pg | Pg | 17 04 52.4 | +0.4 |
| CROK | | | | IAML | | 17 04 57.7 | |
| | comp=N,774nm,0.2s | | | | | | |
| CROK | | | | IAML | | 17 04 58.8 | |
| | comp=E,487nm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.38** | **344** | Pg | Pg | 17 04 55.7 | +0.5 |
| GC02 | | | | Sg | Sg | 17 05 01.2 | +1.0 |
| **BLOK** | **Blackwell** | **0.50** | **56** | Pg | Pg | 17 04 57.9 | +0.5 |
| BLOK | | | | IAML | | 17 05 07.4 | |
| | comp=E,313nm,0.2s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.50** | **309** | Pg | Pg | 17 04 57.8 | +0.3 |
| OK032 | | | | Sg | Sg | 17 05 04.8 | +0.8 |
| **KAN14** | **Manchester OK** | **0.51** | **338** | | Pg | 17 04 58.0 | +0.4 |
| KAN14 | | | | IAML | | 17 05 08.3 | |
| | comp=N,239nm,0.1s | | | | | | |
| **KAN17** | **Caldwell West** | **0.56** | **357** | | Pg | 17 04 59.0 | +0.4 |
| KAN17 | | | | IAML | | 17 05 11.4 | |
| | comp=E,187nm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 17 05 12.1 | |
| | comp=N,220nm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **0.56** | **21** | | Pg | 17 04 59.1 | +0.4 |
| KAN13 | | | | IAML | | 17 05 11.3 | |
| | comp=N,198nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 17 05 14.6 | |
| | comp=E,202nm,0.3s | | | | | | |
| **OK048** | **Pawnee Station** | **0.64** | **96** | Pg | Pg | 17 05 00.4 | +0.2 |
| **KAN09** | **Caldwell North** | **0.65** | **8** | Pg | Pg | 17 05 00.8 | +0.3 |
| **KAN01** | **Argonia South** | **0.67** | **358** | Pg | Pg | 17 05 01.0 | +0.3 |
| KAN01 | | | | IAML | | 17 05 13.0 | |
| | comp=E,137nm,0.1s | | | | | | |
| KAN01 | | | | IAML | | 17 05 17.6 | |
| | comp=N,111nm,0.1s | | | | | | |
| **OK038** | **West end E0370** | **0.82** | **270** | | Pg | 17 05 03.4 | -0.1 |
| **QUOK** | **Quay** | **0.88** | **111** | Pg | Pg | 17 05 04.8 | 0.0 |
| QUOK | | | | IAML | | 17 05 23.2 | |
| | comp=N,86nm,0.2s | | | | | | |
| QUOK | | | | IAML | | 17 05 28.1 | |
| | comp=E,86nm,0.2s | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.90** | **126** | | Pg | 17 05 05.0 | 0.0 |
| **OK052** | **Battle Ridge R** | **0.90** | **123** | | Pg | 17 05 05.0 | 0.0 |
| OK052 | | | | IAML | | 17 05 22.9 | |
| | comp=E,100nm,0.2s | | | | | | |
| **NOKA** | **Waynoka** | **0.98** | **279** | Pg | Pg | 17 05 06.6 | -0.1 |
| NOKA | | | | IAML | | 17 05 25.2 | |
| | comp=E,107nm,0.2s | | | | | | |
| NOKA | | | | IAML | | 17 05 30.6 | |
| | comp=N,84nm,0.3s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.07** | **66** | Pg | Pg | 17 05 08.4 | 0.0 |
| T35A | | | | IAML | | 17 05 24.9 | |
| | comp=N,87nm,0.3s | | | | | | |
| T35A | | | | IAML | | 17 05 27.4 | |
| | comp=E,67nm,0.2s | | | | | | |
| **AMTX** | **Amarillo** | **3.59** | **245** | IAmb_Lg | | 17 06 45.5 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.72** | **70** | IAmb_Lg | | 17 06 48.2 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **3.84** | **224** | IAmb_Lg | | 17 07 00.1 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.43** | **80** | IAmb_Lg | | 17 07 08.4 | |
| | comp=Z,4.5nm,0.8s | | | | | | |

*IDC **12** 17:23:07.7±0.4,2°.81N×128°.07E, h0km, mb5.0/25, mbtmp5.0/27, ML4.9/2, MS4.7/15, Error ellipse: s-maj=20.3km s-min=11.6km az=77.0*

*BJI **12** 17:23:09.9±0.0,2°.33N×128°.35E, h49km, mb5.2/81, mB5.6/30, Ms5.1/41, Ms7 4.9/42*

*NEIC **12** 17:23:11.1,2°.87N×128°.15E, h26km, Moment Tensor Solution. Duration: 2s4 Moment tensor: Scale 10^17Nm; Mrr-0.66; Mθθ 0.14; Mϕϕ 0.52; Mrθ -0.17; Mrϕ -1.36; Mθr-0.72; Fault plane solution: M0 1.64000×10^17 NP1: ϕs356.95000°, δ72.55000°, λ-35.80000°. NP2:ϕs99.16000°, δ56.08000°, λ-158.81000°. Principal axes: T 1.7829, Plg11.0000°, Azm51.0000°; N -0.2849, Plg37.0000°, Azm154.0000°; P -1.4980, Plg37.0000°, Azm313.0000°;*

*MOS **12** 17:23:11.6±0.9,2°.81N×128°.02E, h37km, mb5.4/61, MS5.0/5 Error ellipse: s-maj=9.2km s-min=4.5km az=110.7*

*NEIC **12** 17:23:11.1,2°.77N×128°.05E, h26km*

*NEIC **12** 17:23:12.3±1.7,2°.77N±0°.07×128°.06E±0°.07, h22km±4km, mb5.4/115, Ms_20 5.2/27, Mww5.4/26, Error ellipse: s-maj=10.2km s-min=9.1km az=216.0*

*GCMT **12** 17:23:14.3±0.2,2°.98N±0°.01×127°.98E±0°.01, h24km±1km, MW5.4/127, Moment Tensor Solution. s52,c62; s127,c189; Duration: 1s3 Moment tensor: Scale 10^17 Nm; Mrr-0.62±.08; Mθθ 0.22±.05; Mϕϕ 0.40±.05; Mrθ-0.66±.08; Mθϕ-1.54±.03; Mϕr-0.24±.07; Best double couple: M0 1.76900×10^17 NP1:ϕs97.00000°, δ72.00000°, λ-151.00000°. NP2:ϕs357.00000°, δ62.00000°, λ-20.00000°. Principal axes: T 1.8870, Plg7.0000°, Azm225.0000°; N -0.2350, Plg56.0000°, Azm125.0000°; P -1.6510, Plg33.0000°, Azm320.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*DJA **12** 17:23:15.5±0.2,3°.N±2°×12°.8E±°, h55km±2km, M5.3/102, mb5.5/102, mB5.8/46, MLv5.6/17, Mw(mB)5.3/46, MwMwp6.0/1, Mwp6.0/1*

**ISC 12 17:23:14.3±0.5, 2°.77N±0°.03×128°.07E±0°.04, h42km±3km, h42km:pP-P, n585, σ1°§42/612, mb5.3/158, MS4.9/46, 25C-17D, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.10** | **199** | P | **Pn** | **17 23 47.8** | **+0.8** |
| **TNTI** | **Ternate** | **2.10** | **199** | | **Pn** | **17 23 47.2** | **+0.2** |
| **TNTI** | **Ternate** | **2.10** | **199** | P | **Pn** | 17 23 47.2 | +0.2 |
| **LBMI** | **Labuha** | **3.43** | **189** | P | **Pn** | **17 24 06.5** | **+1.3** |
| **KMSI** | **Cibinong** | **4.63** | **242** | P | **Pn** | **17 24 22.7** | **+1.0** |
| **SWI** | **Sorong** | **4.82** | **138** | P | **Pn** | **17 24 24.5** | **+0.2** |
| **SANI** | **Sanana** | **5.21** | **203** | P | **Pn** | **17 24 30.2** | **+0.4** |
| **SANI** | **Sanana** | **5.21** | **203** | P | **Pn** | **17 24 29.6** | **-0.2** |
| | 766nm,0.7s,9μm2.4nm | | | | | | |
| **GTOI** | **Gorontalo** | **5.48** | **247** | P | **Pn** | **17 24 34.9** | **+1.5** |
| | 408nm,0.6s | | | | | | |
| **NLAI** | **Namlea** | **6.04** | **189** | P | **Pn** | **17 24 42.5** | **+1.3** |
| | 485nm,0.6s,4μm1.9nm | | | | | | |
| **MSAI** | **Masohi** | **6.13** | **172** | P | **Pn** | **17 24 44.4** | **+2.0** |
| | 613nm,0.8s,5μm1.8nm | | | | | | |
| **LUWI** | **Luwuk** | **6.50** | **235** | P | **Pn** | **17 24 49.3** | **+1.8** |
| **LUWI** | **Luwuk** | **6.50** | **235** | Pn | **Pn** | **17 24 48.7** | **+1.1** |
| **LUWI** | **Luwuk** | **6.50** | **235** | P | **Pn** | **17 24 48.8** | **+1.3** |
| **MRSI** | **Marisa** | **6.53** | **250** | P | **Pn** | **17 24 49.2** | **+1.3** |
| **FAKI** | **Fak Fak** | **7.03** | **143** | P | **Pn** | **17 24 55.3** | **+0.5** |
| **FAKI** | **Fak Fak** | **7.03** | **143** | Pn | **Pn** | **17 24 55.2** | **+0.5** |
| **FAKI** | **Fak Fak** | **7.03** | **143** | P | **Pn** | **17 24 55.2** | **+0.5** |
| | 817nm,1.0s,6μm2.6nm | | | | | | |
| **TOLI2** | **Tolitoli** | **7.46** | **257** | P | **Pn** | **17 25 00.5** | **-0.2** |
| **TOLI2** | **Tolitoli** | **7.46** | **257** | Pn | **Pn** | **17 25 00.5** | **-0.2** |
| **MYLDM** | **Lahad Datu** | **9.84** | **284** | Pn | **Pn** | **17 25 35.7** | **+2.4** |
| **BBSI** | **Bau Bau** | **9.87** | **214** | P | **Pn** | **17 25 34.1** | **+0.5** |
| | 420nm,0.9s,5μm | | | | | | |
| **TTSI** | **Tana Toraja** | **10.06** | **235** | P | **Pn** | **17 25 37.3** | **+1.0** |
| **BNSI** | **Bone** | **10.67** | **228** | P | **Pn** | **17 25 44.2** | **-0.5** |
| | 321nm,0.7s,3μm | | | | | | |
| **BKSI** | **Bulukumba** | **11.29** | **225** | P | **Pn** | **17 25 52.2** | **-1.0** |
| | 144nm,0.9s,3μm | | | | | | |
| **SMKI** | **Samarinda** | **11.31** | **254** | P | **Pn** | **17 25 55.2** | **+1.7** |
| **KAPI** | **Kappang** | **11.35** | **227** | P | **Pn** | **17 25 55.4** | **+1.5** |
| **KAPI** | **Kappang** | **11.35** | **227** | Pn | **Pn** | **17 25 52.7** | **-1.2** |
| **KAPI** | **Kappang** | **11.35** | **227** | Pn | **Pn** | **17 25 53.3** | **-0.6** |
| | 10.0nm,0.3s,baz=18,slow=7.9,SNR=13 | | | | | | |
| KAPI | | | | Sn | **Sn** | **17 27 58.9** | **-0.5** |
| | 6.0nm,0.3s,baz=103,slow=23,SNR=2.2 | | | | | | |
| | 42nm,0.4s | | | | | | |
| **KAPI** | **Kappang** | **11.35** | **227** | P | **Pn** | **17 25 54.0** | **+0.1** |
| KAPI | | | | S | **Sn** | **17 27 58.3** | **-1.1** |
| **KAPI** | **Kappang** | **11.35** | **227** *i* | P | **Pn** | **17 25 53.7** | **-0.2** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,43nm,0.9s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **11.64** | **221** | P | **Pn** | **17 25 58.0** | **0.0** |
| | comp=Z,258nm,0.6s,comp=Z,3μm | | | | | | |
| **BKB** | **Balikpapan** | **11.86** | **250** | P | **Pn** | **17 26 01.6** | **+0.7** |
| | comp=Z,250nm,1.6s | | | | | | |
| **KKM** | **Kota Kinabalu** | **12.25** | **286** | P | **Pn** | **17 26 08.7** | **+2.3** |
| **KKM** | **Kota Kinabalu** | **12.25** | **286** | Pn | **Pn** | **17 26 08.4** | **+2.0** |
| **MMRI** | **Maumere** | **12.73** | **207** | P | **Pn** | **17 26 13.8** | **+1.0** |
| **MMRI** | **Maumere** | **12.73** | **207** | P | **Pn** | **17 26 15.3** | **+2.5** |
| | comp=Z,188nm,0.8s,comp=Z,3μm | | | | | | |
| **SOEI** | **Soe** | **13.00** | **197** | P | **Pn** | **17 26 17.4** | **+0.8** |
| **SOEI** | **Soe** | **13.00** | **197** | P | **Pn** | **17 26 19.1** | **+2.5** |
| | comp=Z,306nm,0.9s,comp=Z,6μm | | | | | | |
| **EDFI** | **Ende, Flores** | **13.09** | **209** | P | **Pn** | **17 26 17.9** | **+0.1** |
| | comp=Z,155nm,0.7s,comp=Z,3μm | | | | | | |
| **GENI** | **Genyem** | **13.22** | **114** | P | **Pn** | **17 26 21.7** | **+2.2** |
| **GENI** | **Genyem** | **13.22** | **114** | P | **Pn** | **17 26 21.3** | **+1.8** |
| | comp=Z,310nm,1.2s,comp=Z,3μm | | | | | | |
| **BATI** | **Baumata** | **13.61** | **199** | P | **Pn** | **17 26 27.5** | **+2.6** |
| | comp=Z,191nm,0.9s,comp=Z,4μm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **13.67** | **255** | P | **Pn** | **17 26 26.4** | **+0.7** |
| | comp=Z,389nm,1.0s,comp=Z,3μm | | | | | | |
| **JAY** | **Jayapura** | **13.68** | **112** | P | **Pn** | **17 26 29.0** | **+3.1** |
| | comp=Z,86nm,0.9s | | | | | | |
| **BASI** | **Baing, Sumba** | **14.90** | **210** | P | **Pn** | **17 26 44.4** | **+2.2** |
| **DRS** | **Darwin Rock St** | **15.36** | **169** | P | **Pn** | **17 26 49.1** | **+0.9** |
| **TABU** | **Tabubil** | **15.38** | **121** | P | **Pn** | **17 26 49.6** | **+1.0** |
| **PLAI** | **Plampang** | **15.42** | **222** | P | **P** | **17 26 51.7** | **-1.4** |
| **MTN** | **Manton Dam** | **15.80** | **169** | P | **Pn** | **17 26 55.1** | **+1.1** |
| **MTN** | **Manton Dam** | **15.80** | **169** | Pn | **Pn** | **17 26 54.8** | **+0.7** |
| **MTN** | **Manton Dam** | **15.80** | **169** | P | **Pn** | **17 26 54.4** | **+0.4** |
| | comp=Z,149nm,1.0s,SNR=5.6 | | | | | | |
| **SBUM** | **Sibu** | **15.83** | **269** | | **Pn** | **17 26 55.3** | **+0.9** |
| **KDU** | **Kakadu** | **15.96** | **164** | P | **Pn** | **17 26 54.9** | **-1.1** |
| **KDU** | **Kakadu** | **15.96** | **164** | P | **Pn** | **17 26 52.8** | **-3.2** |
| **TWSI** | **Taliwang, Sumb** | **15.96** | **224** | P | **Pn** | **17 26 56.1** | **0.0** |
| | comp=Z,510nm,1.1s,comp=Z,4μm | | | | | | |
| **MMPI** | **Merauke** | **16.59** | **132** | P | **Pn** | **17 27 05.1** | **+1.0** |
| | comp=Z,432nm,1.0s | | | | | | |
| **SRBI** | **Singaraja** | **16.75** | **230** | P | **P** | **17 27 07.1** | **-0.7** |
| | comp=Z,453nm,0.8s,comp=Z,6μm | | | | | | |
| **STKI** | **Sintang** | **16.80** | **261** | P | **Pn** | **17 27 07.0** | **+0.4** |
| | comp=Z,133nm,1.1s,comp=Z,4μm | | | | | | |
| **DNP** | **Denpasar** | **17.13** | **228** | P | **P** | **17 27 14.1** | **+2.1** |
| **KSM** | **Kuching** | **17.79** | **266** | P | **P** | **17 27 20.9** | **+1.6** |
| **KSM** | **Kuching** | **17.79** | **266** | P | **P** | **17 27 19.6** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **17.81** | **231** | P | **P** | **17 27 21.0** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **17.81** | **231** | | **Pn** | **17 27 19.4** | **+0.3** |
| JAGI | | | | IAmb | IAmb | 17 27 23.8 | |
| | comp=Z,223nm,0.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.81** | **231** | P | **Pn** | **17 27 19.4** | **+0.3** |
| | comp=Z,400nm,0.9s,comp=Z,6μm | | | | | | |
| **GRJI** | **Gresik** | **18.29** | **238** | P | **Pn** | **17 27 25.3** | **+0.3** |
| | comp=Z,214nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **18.34** | **178** | | **Pn** | **17 27 25.9** | **+0.4** |
| **KNRA** | **Kununurra** | **18.34** | **178** | P | **P** | **17 27 25.0** | **-0.3** |
| | comp=Z,138nm,0.9s,SNR=7.4 | | | | | | |
| **NGJI** | **Ngawi** | **19.39** | **239** | P | **P** | **17 27 36.3** | **-0.5** |
| | comp=Z,182nm,1.0s | | | | | | |
| **PWJI** | **Pagerwojo** | **19.44** | **236** | P | **P** | **17 27 36.5** | **-0.9** |
| | comp=Z,302nm,0.7s | | | | | | |
| **GUMO** | **Guam** | **19.79** | **56** | P | **P** | **17 27 41.2** | **0.0** |
| **GUMO** | **Guam** | **19.79** | **56** | P | **P** | **17 27 41.8** | **+0.6** |
| GUMO | | | | IAmb | IAmb | 17 27 45.8 | |
| | comp=Z,252nm,1.3s | | | | | | |
| **GUMO** | **Guam** | **19.79** | **56** | P | **P** | **17 27 40.3** | **-0.9** |
| | comp=Z,2.8nm,0.3s,baz=197,slow=16,SNR=3.9 | | | | | | |
| | comp=Z,80nm,1.0s | | | | | | |
| **GUMO** | **Guam** | **19.79** | **56** | P | **P** | **17 27 41.8** | **+0.6** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,252nm,1.3s | | | | | | |
| **MANU** | **Manus Island** | **19.88** | **104** | | **Pn** | **17 27 44.8** | **+0.6** |
| **SMRI** | **Semarang** | **20.11** | **241** | P | **P** | **17 27 44.0** | **-0.8** |
| **SMRI** | **Semarang** | **20.11** | **241** | P | **P** | **17 27 43.5** | **-1.3** |
| | comp=Z,198nm,0.8s | | | | | | |
| **UGM** | **Wanagama** | **20.46** | **239** | P | **P** | **17 27 47.9** | **-0.8** |
| UGM | | | | IAmb | IAmb | 17 27 58.3 | |
| | comp=Z,152nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **20.46** | **239** | P | **P** | **17 27 48.0** | **-0.6** |
| | comp=Z,262nm,1.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.87** | **186** | P | **P** | **17 27 52.9** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **20.87** | **186** | P | **P** | **17 27 51.8** | **-1.1** |
| **TWGBT** | **Beinan** | **21.05** | **342** | P | **P** | **17 27 53.0** | **-1.9** |
| **TWG** | **Pinlang** | **21.06** | **342** | P | **P** | **17 27 52.5** | **-2.4** |
| TWG | | | | IAmb | IAmb | 17 27 53.5 | |
| | comp=Z,104nm,0.6s | | | | | | |
| **DLV** | **T Lat** | **21.43** | **296** | P | **P** | **17 27 59.6** | **+0.4** |
| **YULB** | **Yu-li** | **21.53** | **343** | P | **P** | **17 27 58.1** | **-1.9** |
| **YULB** | **Yu-li** | **21.53** | **343** | P | **P** | **17 27 58.0** | **-1.9** |
| YULB | | | | IAmb | IAmb | 17 28 17.7 | |
| | comp=Z,432nm,1.9s | | | | | | |
| **KPJI** | **Karang Pucung** | **21.57** | **242** | P | **P** | **17 27 59.8** | **-0.7** |
| **TPUB** | **Ta-pu** | **21.65** | **341** | P | **P** | **17 28 00.2** | **-1.1** |
| **TPUB** | **Ta-pu** | **21.65** | **341** | P | **P** | **17 27 59.9** | **-1.4** |
| TPUB | | | | IAmb | IAmb | 17 28 01.2 | |
| | comp=Z,212nm,0.8s | | | | | | |
| **SSLB** | **Suanglung** | **22.00** | **342** | P | **P** | **17 28 05.7** | **+0.6** |
| **SSLB** | **Suanglung** | **22.00** | **342** | P | **P** | **17 28 03.7** | **-1.3** |
| SSLB | | | | IAmb | IAmb | 17 28 19.1 | |
| | comp=Z,121nm,0.7s | | | | | | |
| **NACB** | **Ninganchiao** | **22.18** | **344** | P | **P** | **17 28 07.2** | **+0.2** |
| **NACB** | **Ninganchiao** | **22.18** | **344** | P | **P** | **17 28 06.2** | **-0.8** |
| **CMJI** | **Cimerak** | **22.20** | **242** | P | **P** | **17 28 07.5** | **+0.2** |
| | comp=Z,338nm,0.8s,comp=Z,3μm | | | | | | |
| **COEN** | **Coen** | **22.37** | **138** | P | **P** | **17 28 09.7** | **+0.6** |
| **COEN** | **Coen** | **22.37** | **138** | P | **P** | **17 28 07.5** | **-1.6** |
| **COEN** | **Coen** | **22.37** | **138** | P | **P** | **17 28 06.6** | **-2.5** |
| | comp=Z,81nm,0.8s,SNR=6.5 | | | | | | |
| **PPBI** | **Pangkal Pinang** | **22.46** | **258** | P | **P** | **17 28 10.4** | **+0.3** |
| **PMG** | **Port Moresby** | **22.54** | **123** | P | **P** | **17 28 11.0** | **+0.1** |
| **PMG** | **Port Moresby** | **22.54** | **123** | P | **P** | **17 28 11.1** | **+0.1** |
| **PMG** | **Port Moresby** | **22.54** | **123** | P | **P** | **17 28 10.3** | **-0.7** |
| PMG | | | | IAmb | IAmb | 17 28 19.7 | |
| | comp=Z,101nm,0.9s | | | | | | |
| **P

comp=Z,144nm,1.1s,comp=Z,2µm
**RABL Rabaul 25.05 106** P **P** **17 28 35.8 +0.8**
**MBWA Marble Bar 25.14 199** P **P** **17 28 34.9 -0.7**
**MBWA Marble Bar 25.14 199** P **P** **17 28 35.0 -0.7**
MBWA IAmb IAmb 17 28 60.0
comp=Z,157nm,1.3s
**MBWA Marble Bar 25.14 199** P **P** **17 28 34.1 -1.5**
comp=Z,79nm,0.8s,SNR=4.2
**MBWA Marble Bar 25.14 199** P **P** **17 28 34.6 -1.0**
**LWLI Liwa 25.20 252** P **P** **17 28 36.3 -0.1**
**PSA00 Pilbara Seismi 25.49 198** P **P** **17 28 39.9 +1.1**
**PSA00 Pilbara Seismi 25.49 198** P **P** **17 28 36.5 -2.3**
**PSA00 Pilbara Seismi 25.49 198** IAmb IAmb 17 28 51.5
comp=Z,63nm,0.8s
**PSA00 Pilbara Seismi 25.49 198** P **P** **17 28 35.7 -3.1**
**UBPT Khong Chiam 25.50 301** P **P** **17 28 39.7 +0.7**
**UBPT Khong Chiam 25.50 301** P **P** **17 28 38.5 -0.5**
**QIS Mount Isa 25.80 154** P **P** **17 28 41.5 -0.1**
**QIS Mount Isa 25.80 154** P **P** **17 28 40.8 -0.8**
comp=Z,126nm,0.9s,SNR=23
**XMI Christmas Isla 25.86 239** P **P** **17 28 43.3 +1.1**
**XMIS Christmas Isla 25.90 239** P **P** **17 28 42.5 -0.2**
**XMIS Christmas Isla 25.90 239** P **P** **17 28 41.8 -0.9**
**MTSU Mount Surprise 26.23 143** P **P** **17 28 46.2 +0.7**
**ASAR Alice Springs 26.88 168** P **P** **17 28 50.9 -0.5**
**ASAR Alice Springs 26.88 168** P **P** **17 28 50.7 -0.7**
comp=Z,10nm,0.7s,baz=352,slow=8.2,SNR=64
ASAR PcP **PcP** **17 32 12.9 -0.3**
comp=Z,4.0nm,0.7s,baz=356,slow=2.3,SNR=1.3
ASAR S **S** **17 33 24.7 -0.7**
comp=Z,1.3nm,0.8s,baz=353,slow=23,SNR=1.1
ASAR ScP **ScP** **17 35 52.2 +2.0**
comp=Z,3.6nm,0.8s,baz=346,slow=2.7,SNR=6.2
ASAR LR LR 17 41 55.4
comp=Z,2µm,18.7s,baz=322,slow=42
comp=Z,10nm,0.7s
**AS01 Alice Springs 26.89 168** P **P** **17 28 51.7 +0.2**
**BKNI Bangkinang 27.12 265** P **P** **17 28 53.2 -0.5**
**BKNI Bangkinang 27.12 265** P **P** **17 28 53.5 -0.2**
comp=Z,96nm,0.6s
**KULM Kulim 27.46 276** P **P** **17 28 55.7 -1.0**
**WRKA Warakurna 27.64 180** P **P** **17 28 58.0 -0.2**
**PDSI Padang 27.84 263** P **P** **17 29 01.0 +0.9**
comp=Z,27nm,0.6s
**GULI GuiLin 28.14 324** P **P** **17 29 04.5 +1.8**
GULI pmax pmax
comp=Z,60nm,1.5s
**TV1H Townsville Har 28.61 141** P **P** **17 29 07.3 +0.5**
**GIRL Giralia 28.64 207** P **P** **17 29 07.8 +0.7**
GIRL IAmb IAmb 17 29 13.7
comp=Z,73nm,0.8s
**NAYO Nakonayok 28.79 295** P **P** **17 29 08.9 +0.4**
**CTA Charters Tower 28.89 143** P **P** **17 29 10.5 +1.1**
**CTA Charters Tower 28.89 143** LR LR 17 41 58.2
comp=Z,90nm,20.9s,baz=308,slow=39
**CTAO Charters Tower 28.89 143** P **P** **17 29 10.5 +1.1**
**CTAO Charters Tower 28.89 143** P **P** **17 29 09.7 +0.3**
**CTAO Charters Tower 28.89 143** P **P** **17 29 09.7 +0.3**
CTAO pmax pmax
comp=Z,47nm,1.1s
**CNSH ChangSha 29.11 332** P **P** **17 29 12.4 +1.2**
CNSH S **S** **17 34 03.4 +3.0**
**SISI Saibi 29.25 262** P **P** **17 29 11.4 -1.3**
comp=Z,73nm,1.4s
**SLVN Son La 29.89 310** P **P** **17 29 17.1 -1.2**
**JNU Nakatsue 30.31 5** P **P** **17 29 20.3 -1.6**
**JNU Nakatsue 30.31 5** P **P** **17 29 20.3 -1.6**
**NJ2 Nanjing 30.39 344** *eP* **P** **17 29 26.3 +3.8**
NJ2 pmax pmax
comp=Z,10.0nm,0.5s
**GSI Gunungsitoli 30.50 268** P **P** **17 29 24.6 +0.8**
**GSI Gunungsitoli 30.50 268** P **P** **17 29 23.0 -0.8**
GSI IAmb IAmb 17 29 25.3
comp=Z,85nm,1.5s
**GSI Gunungsitoli 30.50 268** P **P** **17 29 23.1 -0.7**
comp=Z,36nm,0.7s
**WHN Wuhan 30.52 336** ⇑P **P** **17 29 25.1 +1.4**
WHN pP **pP** **17 29 33.0 -1.0**
WHN pmax pmax
comp=Z,180nm,0.9s
**MEEK Meekatharra 30.62 197** P **P** **17 29 24.3 -0.4**
**SRDT SRDT 30.80 294** P **P** **17 29 28.0 +1.7**
**GYA Guiyang 31.25 321** ⇓P **P** **17 29 30.5 +0.2**
GYA pmax pmax
comp=Z,36nm,1.3s
**OOD Oodnadatta 31.26 167** P **P** **17 29 31.4 +1.2**
**MLSI Meulaboh, Aceh 31.64 274** P **P** **17 29 34.3 +0.5**
comp=Z,23nm,0.8s
**CM31 Chiang Mai Arr 32.51 301** P **P** **17 29 40.9 -0.4**
CM31 IAmb IAmb 17 29 54.6
comp=Z,34nm,0.9s
**CM31 Chiang Mai Arr 32.51 301** P **P** **17 29 41.3 -0.1**
**CMAR Chiang Mai Arr 32.51 301** P **P** **17 29 41.2 -0.1**
**CMAR Chiang Mai Arr 32.51 301** P **P** **17 29 41.4 0.0**
comp=Z,10nm,0.7s,baz=116,slow=7.2,SNR=56
CMAR ScP **ScP** **17 36 11.9 +3.5**
comp=Z,3.2nm,1.0s,baz=146,slow=2.0,SNR=6.8
comp=Z,10nm,0.7s
**CMAR Chiang Mai Arr 32.51 301** *i* P **P** **17 29 41.4 0.0**
CMAR pmax pmax
comp=Z,11nm,0.7s
**ENH Enshi 32.53 329** P **P** **17 29 42.6 +1.2**
**ENH Enshi 32.53 329** P **P** **17 29 42.0 +0.5**
**INKA Innaminka 32.70 159** P **P** **17 29 44.1 +1.3**
**KMI Kunming 33.00 315** ⇓P **P** **17 29 46.5 +0.7**
KMI pP pP 17 29 58.1 +1.9
KMI pmax pmax
comp=Z,36nm,0.9s
**QLP Quilpie 33.10 153** P **P** **17 29 45.7 -0.7**
**FORT Forrest 33.36 180** P **P** **17 29 49.0 +0.4**
**MULG Mulgathing 33.36 171** P **P** **17 29 48.3 -0.3**
**TJN Taejon 33.45 359** P **P** **17 29 49.3 0.0**
**TJN Taejon 33.45 359** P **P** **17 29 48.8 -0.5**
**TJN Taejon 33.45 359** *ce*P **P** **17 29 49.9 +0.6**
**INU Inuyama 33.47 13** P **P** **17 29 48.8 -0.7**
**INU Inuyama 33.47 13** P **P** **17 29 48.5 -1.0**
INU IAmb IAmb 17 30 02.0
comp=Z,56nm,0.7s
**MORW Morawa 33.69 199** P **P** **17 29 50.2 -1.3**
**JGF Kuroka 33.79 14** P **P** **17 29 53.5 +1.1**
**JGF Kuroka 33.79 14** P **P** **17 29 50.9 -1.5**
**RK1H Rockhampton Ha 33.96 141** P **P** **17 29 54.4 +0.5**
**LCRK Leigh Creek 34.42 164** P **P** **17 29 58.3 +0.5**
**KMBL Kambalda 34.45 189** P **P** **17 29 56.9 -1.2**
**KSAR Wonju Array Be 34.51 360** P **P** **17 29 58.4 -0.1**
**KSAR Wonju Array Be 34.51 360** P **P** **17 29 58.4 -0.1**
**KSRS Korea Array 34.52 360** P **P** **17 29 57.5 -1.1**
comp=Z,16nm,0.7s,baz=175,slow=10,SNR=37
KSRS PcP **PcP** **17 32 33.1 +0.2**
comp=Z,3.6nm,0.9s,baz=177,slow=3.9,SNR=4.9
KSRS ScP **ScP** **17 36 19.4 +4.4**
comp=Z,2.1nm,0.9s,baz=189,slow=4.0,SNR=5.8
comp=Z,16nm,0.7s
**PZH PanZhiHua 34.56 316** P **P** **17 30 00.0 +0.7**
PZH pmax pmax
comp=Z,20nm,0.8s
**KS19 Wonju Array Si 34.57 360** P **P** **17 29 58.0 -1.1**
KS19 IAmb IAmb 17 30 13.6
comp=Z,26nm,0.8s
**TIA Tai'an 34.78 344** P **P** **17 30 01.5 +0.6**
TIA pmax pmax
comp=Z,40nm,0.9s
**LYN LuoYang 34.80 337** ⇑P **P** **17 30 02.7 +1.6**
LYN sP pwP 17 30 24.8 +8.6
LYN S **S** **17 35 36.1 +7.1**
LYN pmax pmax
comp=Z,62nm,0.6s
LYN pmax pmax
comp=Z,600nm,4.2s
LYN LR LR
comp=Z,2µm,21.6s
LYN LR LR
comp=Z,2µm,21.6s
LYN LR LR
comp=Z,3µm,20.3s
**MAJO Matsushiro 34.89 14** P **P** **17 29 59.8 -2.1**
**MAJO Matsushiro 34.89 14** P **P** **17 29 59.8 -2.1**
MAJO IAmb IAmb 17 30 14.5
comp=Z,46nm,0.8s
**MAJO Matsushiro 34.89 14** P **P** **17 29 59.8 -2.1**
MAJO pmax pmax
comp=Z,46nm,0.8s
**MJAR Matsushiro Arr 34.89 14** P **P** **17 29 59.2 -2.6**
comp=Z,11nm,0.8s,baz=188,slow=8.8,SNR=37
MJAR PcP **PcP** **17 32 34.0 -0.1**
comp=Z,2.2nm,0.7s,baz=181,slow=2.5,SNR=1.0
MJAR S **S** **17 35 29.4 -1.0**
comp=Z,1.1nm,0.7s,baz=270,slow=17,SNR=4.9
comp=Z,11nm,0.8s
**MJB9 Matsu-Tunnel 34.89 14** P **P** **17 29 59.8 -2.1**
MJB9 IAmb IAmb 17 30 14.4
comp=Z,45nm,0.8s
**BLDU Ballidu 34.92 197** P **P** **17 30 01.2 -0.9**
**KLBR Kellerberrin 35.55 195** P **P** **17 30 06.2 -1.3**
**EIDS Eidsvold 35.78 143** P **P** **17 30 10.7 +1.1**
**XAN Xi'an 35.88 332** ⇑P **P** **17 30 11.4 +1.0**
XAN pP pwP 17 30 27.0 +1.4
XAN S **S** **17 35 50.4 +4.8**
XAN pmax pmax
comp=Z,200nm,1.2s
XAN pmax pmax
comp=Z,480nm,3.9s
**TNCH TengChong 36.05 311** ⇓P **P** **17 30 11.9 -0.3**
TNCH pP pP 17 30 24.8 +2.2
TNCH sP sP 17 30 32.9 +5.8
TNCH S **S** **17 35 50.1 +1.3**
TNCH sS sS 17 36 12.1 +5.8
TNCH pmax pmax
comp=Z,18nm,0.8s
TNCH pmax pmax
comp=Z,380nm,5.2s
TNCH LR LR
comp=Z,160nm,6.7s
TNCH LR LR
comp=Z,380nm,8.8s
TNCH LR LR
comp=Z,420nm,16.1s
**BBOO Buckleboo 36.18 169** P **P** **17 30 14.2 +1.2**
**BBOO Buckleboo 36.18 169** P **P** **17 30 12.3 -0.7**
BBOO IAmb IAmb 17 30 16.5
comp=Z,52nm,1.2s
**CD2 Chengdu 36.21 323** P **P** **17 30 13.4 +0.1**
CD2 pP pP 17 30 26.0 +2.3
CD2 sP pwP 17 30 31.7 +3.2
CD2 pmax pmax
comp=Z,70nm,0.9s
**MUN Mundaring 36.34 197** P **P** **17 30 14.7 +0.4**
**DL2 Dalian 36.45 352** P **P** **17 30 15.9 +0.8**
DL2 S **S** **17 35 54.2 +0.1**
DL2 pmax pmax
comp=Z,72nm,0.9s
DL2 pmax pmax
comp=Z,500nm,9.2s
DL2 LR LR
comp=Z,880nm,22.6s
DL2 LR LR
comp=Z,2µm,18.4s
DL2 LR LR
comp=Z,2µm,23.4s
**HNS HongShan 36.59 342** ⇓P **P** **17 30 15.8 -0.5**
HNS pmax pmax
comp=Z,34nm,1.4s
**WHYH Whyalla 36.72 167** P **P** **17 30 17.5 0.0**
**STKA Stephens Creek 36.77 161** P **P** **17 30 17.7 -0.3**
**STKA Stephens Creek 36.77 161** P **P** **17 30 17.3 -0.7**
**STKA Stephens Creek 36.77 161** P **P** **17 30 17.3 -0.7**
comp=Z,28nm,0.7s,baz=336,slow=8.9,SNR=37
STKA LR LR 17 46 23.3
comp=Z,2µm,21.4s,baz=322,slow=38
comp=Z,28nm,0.7s
**STKA Stephens Creek 36.77 161** *i* P **P** **17 30 17.6 -0.4**
**JMM Marumori 36.83 17** P **P** **17 30 18.9 +0.5**
**JMM Marumori 36.83 17** P **P** **17 30 17.6 -0.8**
**NWAO Narrogin (SRO) 36.95 195** P **P** **17 30 19.4 -0.1**
**NWAO Narrogin (SRO) 36.95 195** P **P** **17 30 18.6 -0.9**
NWAO IAmb IAmb 17 30 43.9
comp=Z,130nm,1.6s
**NWAO Narrogin (SRO) 36.95 195** P **P** **17 30 18.4 -1.1**
**NWAO Narrogin (SRO) 36.95 195** P **P** **17 30 18.6 -0.9**
NWAO pmax pmax
comp=Z,130nm,1.6s
**AULRC Lightning Ridg 37.27 151** P **P** **17 30 21.3 -0.9**
**HTT Hallett 37.43 165** P **P** **17 30 24.8 +1.1**
**CMSA Cobar Meteorol 38.01 155** P **P** **17 30 29.6 +1.1**
**BJT Baijiatuan 38.62 345** P **P** **17 30 34.6 +1.1**
**BJT Baijiatuan 38.62 345** P **P** **17 30 32.7 -0.8**
BJT IAmb IAmb 17 30 35.8
comp=Z,54nm,0.8s
**BJT Baijiatuan 38.62 345** P **P** **17 30 32.7 -0.8**
BJT pmax pmax
comp=Z,54nm,0.8s
**BJI Beijing 38.64 345** P **P** **17 30 32.8 -0.9**
BJI pmax pmax
comp=Z,36nm,0.8s
BJI LR LR
comp=Z,260nm,20.0s
BJI LR LR
comp=Z,340nm,23.8s
BJI LR LR
comp=Z,570nm,22.7s
**JTM Tenmabayashi 39.63 16** P **P** **17 30 42.7 +0.8**
**JTM Tenmabayashi 39.63 16** P **P** **17 30 42.8 +0.9**
JTM IAmb IAmb 17 30 50.9
comp=Z,137nm,1.0s
**MSHR Mys Shultsa 39.74 4** *ce*P **P** **17 30 44.2 +1.4**
MSHR pmax pmax
comp=Z,40nm,1.3s
**PSTR Posyet 39.79 3** *i* P **P** **17 30 44.3 +1.1**
**AUDCS Dubbo College 39.90 152** P **P** **17 30 43.7 -0.6**
**ARMA Armidale 39.94 147** P **P** **17 30 44.5 -0.3**
**ARMA Armidale 39.94 147** P **P** **17 30 44.5 -0.3**
**LZH Lanzhou 40.01 329** ⇓*i*P **P** **17 30 46.9 +1.5**
LZH pP sP 17 31 00.1 -0.3
LZH pmax pmax
comp=Z,210nm,1.2s
LZH pmax pmax
comp=Z,870nm,4.6s
LZH LR LR
comp=Z,1µm,13.1s
LZH LR LR
comp=Z,1µm,14.1s
LZH LR LR
comp=Z,2µm,18.6s
**AUPHS Peel High Scho 40.09 149** P **P** **17 30 47.1 +1.2**
**VLA Vladivostok 40.32 4** *i* P **P** **17 30 48.8 +1.2**
VLA pmax pmax
comp=Z,50nm,0.9s
**HHC Hu-ho-hao-te 40.73 341** *eP* **P** **17 30 52.9 +1.7**
HHC pP sP 17 31 05.5 -0.8
HHC sP pwP 17 31 10.1 +3.5
HHC S **S** **17 37 07.4 +8.4**
HHC pmax pmax
comp=Z,29nm,0.6s
HHC LR LR
comp=Z,1µm,19.8s
HHC LR LR
comp=Z,940nm,15.1s
HHC LR LR
comp=Z,2µm,18.3s
**CN2 Changchun 40.93 357** *eP* **P** **17 30 56.2 +3.6**
CN2 pmax pmax
comp=Z,10.0nm,0.7s
**ERM Erimo 41.35 17** P **P** **17 30 57.3 +1.1**
**ERM Erimo 41.35 17** P **P** **17 30 56.6 +0.5**
**ERM Erimo 41.35 17** P **P** **17 30 56.6 +0.5**
ERM pmax pmax
comp=Z,30nm,0.9s
**JEM Erimo 41.36 17** P **P** **17 30 57.6 +1.4**
**ARPS Mount Arapiles 41.37 163** P **P** **17 30 56.7 +0.3**
**USA0B Ussuriysk Arra 41.41 4** P **P** **17 30 56.9 +0.3**
USA0B IAmb IAmb 17 31 10.3
comp=Z,76nm,0.9s
**USA0B Ussuriysk Arra 41.41 4** *i* P **P** **17 30 56.7 +0.1**
**USRK Ussuriysk Ar. 41.41 4** P **P** **17 30 55.7 -0.8**
comp=Z,42nm,0.9s,baz=183,slow=8.0,SNR=42
comp=Z,42nm,0.9s
**SHL Shillong 41.52 306** P **P** **17 30 57.1 -0.9**
SHL IAmb IAmb 17 31 04.5
comp=Z,76nm,0.7s
**SHL Shillong 41.52 306** P **P** **17 30 57.7 -0.3**
**SHL Shillong 41.52 306** P **P** **17 30 57.1 -0.9**
SHL pmax pmax
comp=Z,76nm,0.7s
**YNG Young 41.54 154** P **P** **17 30 58.8 +1.0**
**MDJ Mudanjiang 41.70 2** P **P** **17 30 59.7 +0.7**
**MDJ Mudanjiang 41.70 2** P **P** **17 30 59.6 +0.6**
MDJ pP pP 17 31 12.1 +2.6
MDJ S **S** **17 37 12.2 -0.7**
MDJ sS sS 17 37 41.0 +10
MDJ ScS **ScS** **17 40 57.9 -0.8**
MDJ pmax pmax
comp=Z,48nm,0.9s
MDJ LR LR
comp=Z,960nm,19.6s
MDJ LR LR
comp=Z,1µm,18.7s
MDJ LR LR
comp=Z,2µm,16.9s
**MDJ Mudanjiang 41.70 2** P **P** **17 30 58.0 -0.9**
MDJ IAmb IAmb 17 31 13.5
comp=Z,108nm,0.9s
**XLT XiLinHaoTe 42.32 347** *eP* **P** **17 31 02.6 -1.5**
XLT pP pP 17 31 16.4 +1.7
XLT sP pwP 17 31 20.6 +1.1
XLT PP **PP** **17 32 46.8 +4.0**
XLT PcP **PcP** **17 32 57.6 +0.4**
XLT S **S** **17 37 23.3 +1.0**
XLT ScS **ScS** **17 40 58.2 -4.6**
XLT pmax pmax
comp=Z,25nm,0.8s
XLT pmax pmax
comp=Z,250nm,5.1s
XLT LR LR
comp=Z,990nm,21.3s
XLT LR LR
comp=Z,1µm,22.5s
**BRAT Ballarat 42.73 161** P **P** **17 31 07.9 +0.5**
**BNX BinXian 42.80 359** ⇓P **P** **17 31 07.7 -0.2**
BNX pmax pmax
comp=Z,14nm,0.8s
**ASAJ Asahikawa 43.14 15** LR LR 17 49 04.5
comp=Z,1µm,21.0s,baz=208,slow=36
**ASAJ Asahikawa 43.14 15** P **P** **17 31 10.4 -0.3**
ASAJ pmax pmax
comp=Z,27nm,0.8s
**JKA Kamikawa-asahi 43.14 15** P **P** **17 31 10.4 -0.3**
**TOO Toolangi 43.27 160** P **P** **17 31 12.1 +0.2**
TOO IAmb IAmb 17 31 20.7
comp=Z,111nm,1.8s
**TOO Toolangi 43.27 160** P **P** **17 31 12.1 +0.2**
TOO pmax pmax
comp=Z,111nm,1.8s
**LSA Lhasa 44.07 311** P **P** **17 31 20.2 +1.2**
LSA LR LR
comp=Z,430nm,18.1s
LSA LR LR
comp=Z,640nm,17.2s
LSA LR LR
comp=Z,1µm,18.6s
**LSA Lhasa 44.07 311** P **P** **17 31 19.4 +0.4**
LSA IAmb IAmb 17 31 24.8
comp=Z,44nm,0.7s
**LSA Lhasa 44.07 311** P **P** **17 31 20.3 +1.2**
**LSA Lhasa 44.07 311** P **P** **17 31 20.9 +1.9**
**LSA Lhasa 44.07 311** P **P** **17 31 19.4 +0.4**
LSA pmax pmax
comp=Z,44nm,0.7s
**GTA Gaotai 44.61 329** P **P** **17 31 23.3 +0.6**
GTA pP pP 17 31 36.0 +2.6
GTA pmax pmax
comp=Z,32nm,1.4s
GTA LR LR
comp=Z,2µm,12.7s
GTA LR LR
comp=Z,3µm,10.4s
GTA LR LR
comp=Z,2µm,12.0s
**GOMU GeErMu 45.26 321** P **P** **17 31 29.8 +1.5**
GOMU pmax pmax
comp=Z,76nm,1.4s
**YSS Yuzh-Sakhalins 45.83 14** P **P** **17 31 31.3 -0.8**
**YSS Yuzh-Sakhalins 45.83 14** P **P** **17 31 31.7 -0.4**
YSS IAmb IAmb 17 31 46.6
comp=Z,29nm,0.8s
**YSS Yuzh-Sakhalins 45.83 14** *eP* **P** **17 31 30.9 -1.2**
YSS *eS* **S** **17 38 07.2 -5.9**
YSS pmax pmax
comp=Z,200nm,5.0s
YSS pmax pmax
comp=Z,30nm,0.7s
**KLR Kul'dur 46.40 3** *ce*P **P** **17 31 35.4 -1.2**
KLR pmax pmax
comp=Z,16nm,0.8s
**HIA Hailar 46.87 353** *i* P **P** **17 31 41.1 +0.8**
HIA pmax pmax
comp=Z,6.0nm,1.0s
**HEH HeiHe 47.32 359** *eP* **P** **17 31 42.4 -1.3**
HEH pmax pmax
comp=Z,7.0nm,0.6s
**GRNR Gornyy 48.35 7** ⇑*i*P **P** **17 31 51.2 -0.6**
GRNR pmax pmax
comp=Z,10.0nm,0.7s
**ULN Ulaanbaatar 48.45 341** P **P** **17 31 53.0 +0.3**
ULN IAmb IAmb 17 32 08.4
comp=Z,50nm,0.9s
**ULN Ulaanbaatar 48.45 341** P **P** **17 31 53.3 +0.6**
**ULN Ulaanbaatar 48.45 341** *ce*P **P** **17 31 52.2 -0.5**
ULN pmax pmax
comp=Z,42nm,1.7s
**SONM Songino Array 48.64 341** P **P** **17 31 54.6 +0.4**
SONM IAmb IAmb 17 32 09.2
comp=Z,20nm,0.7s
**SONM Songino Array 48.64 341** P **P** **17 31 53.9 -0.3**
comp=Z,8.6nm,0.7s,baz=161,slow=8.7,SNR=26
SONM ScP **ScP** **17 37 15.5 +4.7**
comp=Z,1.9nm,0.8s,baz=167,slow=5.1,SNR=4.0
SONM LR LR 17 53 44.9
comp=Z,533nm,20.0s,baz=171,slow=38
comp=Z,8.6nm,0.7s
**SONM Songino Array 48.64 341** P **P** **17 31 54.6 +0.4**
SONM pmax pmax
comp=Z,19nm,0.7s
**TYV Tymovskoe 49.48 12** *eP* **P** **17 31 59.6 -0.8**
TYV pmax pmax
comp=Z,100nm,6.6s
TYV pmax pmax
comp=Z,6.0nm,1.0s
**CIT Chita 50.56 348** *eP* **P** **17 32 08.1 -0.6**
CIT *e* 17 32 22.8
CIT *e* 17 33 23.4
CIT *e* 17 34 58.0
CIT *e* 17 39 19.2
CIT pmax pmax
comp=Z,93nm,2.0s
**HYB Hyderabad 50.70 290** *eP* **P** **17 32 10.2 0.0**
HYB *ep*P **pP** **17 32 17.0 -4.0**
HYB *ePcP* **PcP** **17 33 27.0 -0.2**
HYB *eS* **S** **17 39 24.6 +1.7**
**ZEA Zeya 50.81 359** *eP* **P** **17 32 11.5 +1.1**
ZEA pmax pmax
comp=N,20nm,0.8s
ZEA pmax pmax
comp=Z,30nm,0.8s
**IRK Irkutsk 53.15 342** *eP* **P** **17 32 23.7 -4.2**
IRK pmax pmax
comp=Z,71nm,2.3s
**MOY Mondy 53.74 339** *eP* **P** **17 32 32.6 +0.2**
MOY pmax pmax
comp=Z,57nm,2.1s
**WMQ Urumqi 54.27 325** *eP* **P** **17 32 38.0 +1.6**
WMQ pP sP 17 32 51.4 -0.3
WMQ pmax pmax
comp=Z,59nm,0.7s
WMQ pmax pmax
comp=Z,740nm,4.9s
WMQ LR LR
comp=Z,1µm,21.5s
WMQ LR LR
comp=Z,2µm,19.1s
WMQ LR LR
comp=Z,670nm,18.1s
**BOD Bodaibo 56.01 351** *eP* **P** **17 32 47.1 -1.4**
BOD pmax pmax
comp=Z,53nm,1.1s
**PET Petropavlovsk 56.11 22** *i* P **P** **17 32 53.6 +4.3**
PET pmax pmax
comp=Z,22nm,1.0s
**ZSN Zaisan 58.04 327** *eP* **P** **17 33 02.5 -0.6**
comp=Z,11nm,1.1s,baz=327
ZSN *eS* **S** **17 40 59.5 -1.5**
baz=327
**ZSN Zaisan 58.04 327** *eP* **P** **17 33 02.4 -0.6**
ZSN *eS* **S** **17 40 59.4 -1.5**
ZSN pmax pmax

comp=Z,11nm,1.1s
**DGZ Jazzator, Alta 58.09 330** *i* P **P** **17 33 03.5 -0.1**
DGZ pmax pmax
comp=Z,17nm,0.9s
**SHLS Shalkode 58.94 320** *e*P **P** **17 33 07.5 -2.1**
comp=Z,11nm,0.8s,baz=320
**SHLS Shalkode 58.94 320** *e*P **P** **17 33 07.5 -2.1**
SHLS pmax pmax
comp=Z,11nm,0.8s
**MK31 Makanchi Array 59.10 325** P **P** **17 33 11.0 +0.4**
MK31 IAmb IAmb 17 33 26.4
comp=Z,39nm,0.9s
**MK31 Makanchi Array 59.10 325***ce*P **P** **17 33 10.7 +0.2**
**MKAR Makanchi Array 59.10 325** P **P** **17 33 11.0 +0.5**
**MKAR Makanchi Array 59.10 325** P **P** **17 33 10.9 +0.3**
comp=Z,28nm,0.6s,baz=116,slow=8.0,SNR=368
MKAR ScP **ScP** **17 37 59.9 +3.5**
comp=Z,1.9nm,1.0s,baz=106,slow=3.1,SNR=3.0
MKAR LR LR 18 01 35.5
comp=Z,1μm,18.8s,baz=150,slow=39
MKAR PKP2bc 18 02 52.5
comp=Z,0.8nm,0.8s,baz=266,slow=4.9,SNR=3.7
comp=Z,28nm,0.6s
**YAK Yakutsk 59.14 1** P **P** **17 33 09.2 -1.2**
**YAK Yakutsk 59.14 1** *e*P **P** **17 33 09.4 -1.0**
YAK *e**PP **pwP** **17 33 28.0 +1.8**
YAK *e* 17 33 57.2
YAK *e* 17 35 20.8
YAK *e*S **S** **17 41 12.0 -2.6**
YAK pmax pmax
comp=Z,72nm,0.7s
YAK pmax pmax
comp=N,24nm,0.9s
YAK pmax pmax
comp=E,7.0nm,0.9s
YAK pmax pmax
comp=Z,93nm,2.6s
YAK pmax pmax
comp=N,53nm,2.4s
YAK pmax pmax
comp=E,44nm,2.7s
YAK smax smax
comp=N,57nm,2.4s
YAK smax smax
comp=E,42nm,2.6s
**UZB Uzynbulak 59.21 320** *e*P **P** **17 33 11.1 -0.5**
comp=E,13nm,0.7s,baz=320
UZB *e*S **S** **17 41 15.3 -1.4**
baz=320
**UZB Uzynbulak 59.21 320** *e*P **P** **17 33 11.0 -0.5**
UZB *e*S **S** **17 41 15.2 -1.4**
UZB pmax pmax
comp=Z,13nm,0.7s
**MAKZ Makanchi 59.29 325** P **P** **17 33 12.1 +0.3**
MAKZ IAmb IAmb 17 33 26.7
comp=Z,42nm,0.8s
MAKZ IAMs_20 IAMs_20 18 01 29.4
comp=Z,946nm,20.0s
**MAKZ Makanchi 59.29 325** P **P** **17 33 12.1 +0.3**
MAKZ pmax pmax
comp=Z,42nm,0.9s
MAKZ MLR MLR
comp=Z,900nm,20.0s
**PRZ Przheval'sk 59.30 319** P **P** **17 33 14.1 +1.9**
**PRZ Przheval'sk 59.30 319** P **P** **17 33 14.1 +1.9**
PRZ pmax pmax
comp=Z,117nm,1.0s
**MA2 Magadan 59.32 13** P **P** **17 33 11.1 -0.6**
MA2 IAmb IAmb 17 33 26.1
comp=Z,23nm,0.8s
**MA2 Magadan 59.32 13** P **P** **17 33 11.1 -0.6**
MA2 pmax pmax
comp=Z,23nm,0.8s
**QRZ Quartz Range 59.35 142** IAMs_20 IAMs_20 18 00 22.2
comp=Z,869nm,19.0s
**NIL Nilore 59.56 308** P **P** **17 33 14.2 +0.2**
**NIL Nilore 59.56 308** P **P** **17 33 14.9 +0.9**
**NIL Nilore 59.56 308** P **P** **17 33 14.2 +0.2**
NIL pmax pmax
comp=Z,82nm,0.9s
**SATY Saty 59.57 320** *e*P **P** **17 33 13.6 -0.3**
baz=320
**SATY Saty 59.57 320** *e*P **P** **17 33 13.6 -0.3**
**ZHN Zhinishke 59.60 320** *e*P **P** **17 33 13.6 -0.6**
comp=Z,12nm,0.7s,baz=320
**ZHN Zhinishke 59.60 320** *e*P **P** **17 33 13.6 -0.6**
ZHN pmax pmax
comp=Z,12nm,0.7s
**KSH Kashi 59.66 315** P **P** **17 33 16.4 +1.7**
KSH pP sP 17 33 30.3 +0.2
KSH pmax pmax
comp=Z,73nm,1.2s
KSH LR LR
comp=Z,3μm,16.8s
KSH LR LR
comp=Z,2μm,15.5s
KSH LR LR
comp=Z,2μm,17.2s
**LBZ Lake Benmore 60.15 146** P **P** **17 33 17.8 +0.1**
**RPZ Rata Peaks 60.21 145** LR LR 17 58 53.0
comp=Z,776nm,20.6s,baz=307,slow=36
**NRN Naryn 60.44 317** IAmb IAmb 17 33 34.8
comp=Z,20nm,0.9s
**ARXS Arharly 60.48 321** *e*P **P** **17 33 19.4 -0.7**
**TDK Taldyqorghan 60.49 322** *e*P **P** **17 33 19.8 -0.4**
comp=Z,12nm,0.9s,baz=322
**TDK Taldyqorghan 60.49 322** *e*P **P** **17 33 19.7 -0.4**
TDK pmax pmax
comp=Z,12nm,0.9s
**MDOK Medeo 60.50 319** *e*P **P** **17 33 20.1 -0.3**
baz=319
**MDOK Medeo 60.50 319** *e*P **P** **17 33 20.0 -0.3**
**CHKK Chushkaly 60.85 320** *e*P **P** **17 33 22.4 -0.2**
baz=320
**CHKK Chushkaly 60.85 320** *e*P **P** **17 33 22.4 -0.2**
**URZ Urewera 60.93 137** LR LR 17 59 36.8
comp=Z,408nm,19.6s,baz=34,slow=36
**BKZ Black Stump Fm 60.98 138** P **P** **17 33 23.0 -0.5**
BKZ IAmb IAmb 17 34 15.3
comp=Z,21nm,1.1s
**RTZ Ruatahuna 61.02 138** P **P** **17 33 22.8 -1.1**
RTZ IAmb IAmb 17 33 37.0
comp=Z,24nm,0.8s
**BHW Baring Head 61.14 141** P **P** **17 33 23.8 -0.7**
**KUU Kurty 61.29 320** *e*P **P** **17 33 25.3 -0.2**
baz=320
**KUU Kurty 61.29 320** *e*P **P** **17 33 25.3 -0.2**
**TKM2 Tokmak 2 61.35 318** P **P** **17 33 26.9 +0.7**
SNR=13
**KBK Karagaybulak 61.67 318** P **P** **17 33 29.2 +0.9**
SNR=7.8
**UCH Uchtor 61.78 317** P **P** **17 33 31.3 +1.8**
SNR=5.2
**CHMS Chumysh 61.94 318** P **P** **17 33 30.4 +0.4**
SNR=9.7
**FRU1 Bishkek 61.94 318** P **P** **17 33 29.9 -0.2**
FRU1 IAmb IAmb 17 33 31.3
comp=Z,21nm,0.9s
**FRU1 Bishkek 61.94 318** P **P** **17 33 29.9 -0.2**
FRU1 pmax pmax
comp=Z,21nm,0.9s
**AAK Ala-Archa 61.96 318** P **P** **17 33 27.2 -3.1**
SNR=5.8
**AAK Ala-Archa 61.96 318** P **P** **17 33 30.0 -0.3**
AAK IAmb IAmb 17 33 32.7
comp=Z,21nm,1.0s
**AAK Ala-Archa 61.96 318** *i* P **P** **17 33 30.8 +0.4**
SNR=5.7
**AAK Ala-Archa 61.96 318** LR LR 18 03 01.7
comp=Z,666nm,19.3s,baz=107,slow=39
**AAK Ala-Archa 61.96 318** P **P** **17 33 30.7 +0.4**
**AAK Ala-Archa 61.96 318***ce*P **P** **17 33 31.0 +0.7**
AAK pmax pmax
comp=Z,64nm,2.5s
**ZAA0 Zalesovo Array 62.05 333** P **P** **17 33 29.7 -0.7**
ZAA0 IAmb IAmb 17 33 48.3
comp=Z,21nm,0.9s
**ZALV Zalesovo Beam 62.05 333** P **P** **17 33 29.6 -0.8**
**ZALV Zalesovo Beam 62.05 333** P **P** **17 33 29.2 -1.2**
comp=Z,12nm,0.8s,baz=112,slow=6.6,SNR=41
ZALV S **S** **17 41 52.5 +0.4**
comp=Z,0.7nm,0.6s,baz=112,slow=15,SNR=3.7
ZALV PKP2bc 18 02 46.0
comp=Z,1.0nm,0.8s,baz=264,slow=7.0,SNR=4.5
comp=Z,12nm,0.8s
**SGDS Sogindy 62.21 319** *e*P **P** **17 33 31.3 -0.6**
baz=319
**SGDS Sogindy 62.21 319** *e*P **P** **17 33 31.3 -0.6**
**USP Ospenovka 62.22 318** P **P** **17 33 32.3 +0.4**
SNR=27
**AML Almayashu 62.30 317** P **P** **17 33 33.4 +0.5**
SNR=28
**EKS2 Erkin-Say 62.45 318** P **P** **17 33 34.7 +1.1**
SNR=31
**ARSB Arslanbob 62.47 316** P **P** **17 33 33.2 -0.6**
ARSB IAmb IAmb 17 33 36.8
comp=Z,27nm,1.5s
**ARSB Arslanbob 62.47 316** P **P** **17 33 33.2 -0.6**
ARSB pmax pmax
comp=Z,27nm,1.5s
**DRK Karamyk 62.63 314** P **P** **17 33 35.6 +0.6**
**DRK Karamyk 62.63 314** P **P** **17 33 35.6 +0.6**
DRK pmax pmax
comp=Z,63nm,1.1s
**SEY Seymchan 62.68 12***ce*P **P** **17 33 34.4 0.0**
SEY pmax pmax
comp=Z,9.0nm,1.7s
**KBL Kabul 63.16 308** P **P** **17 33 39.0 +0.4**
**KBL Kabul 63.16 308** P **P** **17 33 39.5 +1.0**
SNR=17
**KBL Kabul 63.16 308** P **P** **17 33 39.0 +0.4**
KBL pmax pmax
comp=Z,54nm,0.8s
**BTLS Baital 63.27 320** *e*P **P** **17 33 38.2 -0.5**
comp=Z,10nm,0.8s,baz=320
**BTLS Baital 63.27 320** *e*P **P** **17 33 38.2 -0.5**
BTLS pmax pmax
comp=Z,10.0nm,0.8s
**KURBB Kurchatov Arra 63.27 327** P **P** **17 33 38.3 -0.3**
comp=Z,30nm,0.7s,baz=126,slow=6.4,SNR=199
KURBB PP **PP** **17 35 56.8 -1.4**
comp=Z,4.5nm,1.0s,baz=129,slow=7.9,SNR=4.0
comp=Z,30nm,0.7s
**KURK Kurchatov 63.27 327** P **P** **17 33 38.5 -0.2**
**KURK Kurchatov 63.27 327** P **P** **17 33 38.6 0.0**
KURK P **P** **17 33 38.6 0.0**
**KURK Kurchatov 63.27 327***ce*P **P** **17 33 38.4 -0.2**
KURK pmax pmax
comp=Z,76nm,1.3s
**GAR Garm 63.55 313** P **P** **17 33 41.4 +0.5**
**CHGR Chuyangaron 64.30 312** P **P** **17 33 45.8 0.0**
**CHGR Chuyangaron 64.30 312** P **P** **17 33 45.8 0.0**
CHGR pmax pmax
comp=Z,76nm,1.0s
**SIMJ Simiganj 64.41 312** P **P** **17 33 46.6 0.0**
SIMJ IAmb IAmb 17 34 02.2
comp=Z,65nm,1.4s
**KK31 Karatay Array 64.84 317** P **P** **17 33 49.3 +0.1**
KK31 IAmb IAmb 17 34 03.0
comp=Z,33nm,0.8s
**KK31 Karatay Array 64.84 317** P **P** **17 33 49.3 +0.1**
KK31 pmax pmax
comp=Z,33nm,0.9s
**KKAR Karatay Array 64.84 317** P **P** **17 33 49.3 +0.2**
**KKAR Karatay Array 64.84 317** P **P** **17 33 49.4 +0.2**
KKAR IAmb IAmb 17 34 03.0
comp=Z,33nm,0.8s
**KKAR Karatay Array 64.84 317** P **P** **17 33 49.3 +0.2**
KKAR pmax pmax
comp=Z,33nm,0.9s
**BRLS Borolday 65.28 317** *e*P **P** **17 33 51.5 -0.5**
comp=Z,16nm,0.7s,baz=316
**BRLS Borolday 65.28 317** *e*P **P** **17 33 51.5 -0.5**
BRLS pmax pmax
comp=Z,16nm,0.7s
**HRA Herat 68.58 306** P **P** **17 34 12.8 -0.6**
HRA IAmb IAmb 17 34 29.0
comp=Z,41nm,1.3s
**TIXI Tiksi 68.79 0** P **P** **17 34 12.1 -1.6**
TIXI IAmb IAmb 17 34 27.6
comp=Z,29nm,0.8s
**TIXI Tiksi 68.79 0***ce*P **P** **17 34 12.7 -1.0**
TIXI pmax pmax
comp=Z,18nm,0.8s
**BVAR Borovoye Array 68.85 327** P **P** **17 34 14.0 -0.5**
comp=Z,31nm,0.8s,baz=115,slow=7.5,SNR=95
BVAR LR LR 18 07 04.7
comp=Z,690nm,18.4s,baz=145,slow=38
comp=Z,31nm,0.8s
**BRVK Borovoye 68.92 327** P **P** **17 34 14.7 -0.2**
**BRVK Borovoye 68.92 327** P **P** **17 34 14.8 -0.1**
**BRVK Borovoye 68.92 327***ce*P **P** **17 34 14.4 -0.5**
BRVK pmax pmax
comp=Z,78nm,1.3s
**JLN Jalan Bani Buh 69.20 293** P **P** **17 34 16.7 -0.6**
**WBK Wadi Bani Khal 69.66 293** P **P** **17 34 19.9 -0.1**
**WSAR Wadi Sarin 70.03 294** P **P** **17 34 22.2 -0.1**
**CASY Casey 70.03 187** P **P** **17 34 21.4 0.0**
**BILL Bilibino 70.14 14**⇑ *e*P **P** **17 34 23.1 +1.0**
BILL *e* 17 36 55.7
BILL *e*S **S** **17 43 35.5 +5.4**
BILL *e*SS **SS** **17 48 01.3 +0.8**
BILL pmax pmax
comp=Z,8.0nm,1.4s
**JMDO Jabal Madar 70.43 293** P **P** **17 34 24.8 0.0**
**MHTO MHTO 70.44 291** P **P** **17 34 24.7 -0.1**
SNR=15
**BIDO Bidbid 70.52 294** P **P** **17 34 25.4 +0.1**
**SMDO Samad 70.54 293** P **P** **17 34 24.8 -0.8**
**DQM DQM 70.76 290** P **P** **17 34 27.1 +0.2**
**HOQ Hoqain 71.27 294** P **P** **17 34 29.9 0.0**
**ARQ Araqi 71.97 294** P **P** **17 34 34.1 0.0**
**SOHO SOHO 72.03 294** *i* P **P** **17 34 34.4 0.0**
SNR=11
**SOHO SOHO 72.03 294** P **P** **17 34 34.4 0.0**
**MDH Madha 72.35 296** P **P** **17 34 34.9 -1.4**
**UOSS Minazif 72.40 295** P **P** **17 34 35.9 -0.7**
**UOSS Minazif 72.40 295** *i* P **P** **17 34 36.1 -0.6**
SNR=7.2
**UOSS Minazif 72.40 295** P **P** **17 34 36.0 -0.6**
**HATD Hatta, Dubai 72.45 295** *i* P **P** **17 34 36.8 -0.2**
SNR=11
**HATD Hatta, Dubai 72.45 295** P **P** **17 34 37.0 0.0**
**MSFE Esma-Masafi 72.48 296** *i* P **P** **17 34 37.0 -0.1**
SNR=9.4
**MASF Masafi 72.48 296** P **P** **17 34 37.3 +0.2**
**ASHO Ashiyiah 72.51 295** *i* P **P** **17 34 36.9 -0.4**
SNR=16
**ASHO Ashiyiah 72.51 295** P **P** **17 34 37.2 -0.2**
**SHME Shamm 72.56 296** P **P** **17 34 38.1 +0.6**
**ALNE Al Ain 72.73 294** *i* P **P** **17 34 39.0 +0.3**
SNR=55
**ALNE Al Ain 72.73 294** P **P** **17 34 39.0 +0.3**
SNR=55
**NAZ Nazwa, Dubai 72.89 295** *i* P **P** **17 34 39.5 -0.1**
SNR=5.6
**NAZ Nazwa, Dubai 72.89 295** P **P** **17 34 39.5 -0.1**
**FAQ Al Faqa, Dubai 72.93 295** *i* P **P** **17 34 39.4 -0.4**
SNR=6.1
**FAQ Al Faqa, Dubai 72.93 295** P **P** **17 34 39.7 -0.1**
SNR=6.2
**UMQ Umm Al-Quwin 72.94 296** P **P** **17 34 40.8 +1.0**
**DMTO DMTO 73.08 288** P **P** **17 34 37.3 -3.5**
**ASUD Al Ashush, Dub 73.16 295** *i* P **P** **17 34 41.2 +0.1**
SNR=6.7
**ASUD Al Ashush, Dub 73.16 295** P **P** **17 34 41.7 +0.5**
SNR=6.7
**UMZA Um Al Zommool 73.17 293** P **P** **17 34 41.0 -0.3**
**AJN Ajban 73.47 295** *i* P **P** **17 34 42.8 -0.1**
SNR=6.6
**AJN Ajban 73.47 295** P **P** **17 34 43.0 0.0**
**ABKAR Akbulak array 73.73 321** P **P** **17 34 43.4 -0.6**
**ABKAR Akbulak array 73.73 321** P **P** **17 34 43.7 -0.4**
ABKAR IAmb IAmb 17 34 45.1
comp=Z,119nm,1.9s
**RBK Rabkut 73.78 287** P **P** **17 34 45.4 +0.4**
**DOK Doka 73.90 288** P **P** **17 34 45.1 -0.5**
**WHFO Wadi Hawf 74.21 288** P **P** **17 34 46.5 -1.0**
**MZWR Madinat Zayed 74.42 294** P **P** **17 34 49.2 +0.7**
**RAR Rarotonga 74.44 113** LR LR 18 04 27.7
comp=Z,252nm,20.6s,baz=238,slow=33
**ABTO Aybut 74.64 287** P **P** **17 34 49.1 -0.9**
**MZR Muzera 74.74 293** *i* P **P** **17 34 50.4 0.0**
SNR=18
**MZR Muzera 74.74 293** P **P** **17 34 50.7 +0.3**
**AKTO Aktyubinsk 75.24 322** LR LR 18 10 27.6
comp=Z,623nm,18.2s,baz=118,slow=38
**GHWR Ruwais 75.35 294** P **P** **17 34 53.6 -0.3**
**JRN Qarnain Island 75.43 295** P **P** **17 34 53.1 -1.2**
**SVE Sverdlovsk 75.47 328**⇑ *e*P **P** **17 34 53.0 -1.0**
SVE pmax pmax
comp=Z,49nm,1.0s
**MLH Mauna Loa 76.40 71** P **P** **17 35 00.5 +0.2**
**SLWR Sila 76.44 294** P **P** **17 34 59.6 -0.5**
**ARU Arti 76.46 328** P **P** **17 34 58.6 -0.9**
ARU IAmb IAmb 17 35 17.4
comp=Z,19nm,0.8s
**ARU Arti 76.46 328***d* *i*P **P** **17 34 58.4 -1.2**
ARU 17 35 10.2
ARU 17 37 48.5
ARU S **S** **17 44 42.6 +0.6**
ARU pmax pmax
comp=Z,25nm,1.0s
**SHMA Al-Shehemyia 77.19 296** P **P** **17 35 04.2 -0.2**
**SMRA Abu-Samra 77.26 295** P **P** **17 35 04.3 -0.4**
**L14K Kuka Creek 77.73 27** P **P** **17 35 07.1 +0.5**
L14K IAmb IAmb 17 35 22.4
comp=Z,43nm,0.9s
**M14K Bethel 77.89 28** P **P** **17 35 08.0 +0.5**
M14K IAmb IAmb 17 35 26.4
comp=Z,53nm,0.9s
**K15K Wolf Creek Mou 78.53 27** IAmb IAmb 17 35 29.5
comp=Z,40nm,1.1s
**KBD Kabd 80.25 299** P **P** **17 35 21.2 0.0**
**MAK Makhachkala 81.21 313** *e*P **P** **17 35 23.7 -2.2**
MAK *e**PP **pP** **17 35 38.4 +1.1**
MAK *e* 17 38 28.2
MAK *e*PPP PPP 17 40 20.5
MAK *e*S **S** **17 45 29.3 -3.9**
MAK *e*SS **SS** **17 50 46.5 -2.7**
MAK *e*SSS SSS 17 54 17.9
MAK pmax pmax
comp=Z,290nm,1.3s
MAK MLR MLR
comp=Z,1μm,18.0s
**KIRV Kirov 81.73 329***ce*P **P** **17 35 27.0 -1.3**
**BELG Belogornoye 81.98 322** *i* P **P** **17 35 28.5 -1.3**
BELG pmax pmax
comp=Z,10.0nm,1.0s
**KDAK Kodiak Island 81.99 32** P **P** **17 35 29.8 +0.1**
comp=Z,29nm,0.8s,baz=301,slow=5.4,SNR=9.2
comp=Z,29nm,0.8s
**RAYN Ar Rayn 82.08 293** P **P** **17 35 29.9 -1.1**
RAYN IAmb IAmb 17 35 46.8
comp=Z,19nm,0.8s
**RAYN Ar Rayn 82.08 293** *i* P **P** **17 35 30.7 -0.4**
SNR=20
**RAYN Ar Rayn 82.08 293** P **P** **17 35 30.8 -0.2**
**RAYN Ar Rayn 82.08 293** P **P** **17 35 29.9 -1.1**
RAYN pmax pmax
comp=Z,19nm,0.8s
**VNDA Vanda 82.31 173** P **P** **17 35 30.3 -0.8**
comp=Z,8.9nm,0.7s,baz=316,slow=6.0,SNR=48
VNDA LR LR 18 11 20.9
comp=Z,256nm,21.8s,baz=334,slow=35
comp=Z,8.9nm,0.7s
**VOI Vohitsoka 82.94 248** P **P** **17 35 35.4 -0.2**
VOI IAmb IAmb 17 35 50.7
comp=Z,28nm,1.1s
**VOI Vohitsoka 82.94 248** P **P** **17 35 36.1 +0.5**
**FOMA Nahampoana Res 83.09 245** P **P** **17 35 37.2 +1.1**
**GNI Garni 83.12 310** P **P** **17 35 38.9 +2.6**
**GNI Garni 83.12 310** *i* P **P** **17 35 36.6 +0.3**
GNI pmax pmax
comp=Z,10.0nm,1.1s
**SBA Scott Base 83.21 172** P **P** **17 35 36.5 +0.8**
**SBA Scott Base 83.21 172** P **P** **17 35 36.5 +0.8**
SBA pmax pmax
comp=Z,14nm,1.1s
**MAW Mawson 83.32 201** P **P** **17 35 36.5 +0.1**
comp=Z,3.1nm,0.7s,baz=49,slow=13,SNR=5.0
comp=Z,3.1nm,0.7s
**GOF Gofitskoye 84.53 315***ce*P **P** **17 35 42.6 -0.6**
**KBZ Khabaz 84.61 313** P **P** **17 35 43.0 -0.5**
comp=Z,3.9nm,0.9s,baz=83,slow=2.8,SNR=8.2
KBZ LR LR 18 18 27.1
comp=Z,488nm,18.1s,baz=86,slow=39
comp=Z,3.9nm,0.9s
**KBZ Khabaz 84.61 313***ce*P **P** **17 35 42.6 -0.9**
KBZ pmax pmax
comp=Z,14nm,1.5s
**KVAR Kislovodsk Arr 84.76 314** LR LR 18 15 40.2
comp=Z,887nm,21.4s,baz=218,slow=37
**KIV Kislovodsk 84.76 314** *e*P **P** **17 35 42.2 -2.3**
KIV pmax pmax
comp=Z,11nm,1.1s
**SHA1 Shidzhatmaz 84.78 313** *i* P **P** **17 35 45.0 +0.3**
**GURO Guroymak-BITLI 85.19 308** IAmb IAmb 17 35 48.9
comp=Z,48nm,1.2s
**VRH Novokhopyorsk 85.56 321** *e*P **P** **17 35 45.3 -2.8**
VRH pmax pmax
comp=Z,40nm,0.8s
**VORD Divnogorie 87.09 321** *e*P **P** **17 35 54.1 -1.6**
VORD pmax pmax
comp=Z,30nm,1.4s
**VORR Voronezh 87.14 321** *e*P **P** **17 35 53.7 -2.2**
VORR pmax pmax
comp=Z,60nm,0.4s
**VSR Storozhevoye 87.17 321** *e*P **P** **17 35 53.5 -2.6**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**LPSR Galich'ya Gora 87.30 322** *e*P **P** **17 35 54.1 -2.5**
LPSR pmax pmax
comp=Z,20nm,0.7s
**MOS Moscow 87.98 326** *e*P **P** **17 35 57.4 -2.4**
MOS *e* 17 36 17.1
MOS *e* 17 39 24.2
**OBN Obninsk 88.61 325**⇑ *e*P **P** **17 36 01.7 -1.1**
OBN *e* 17 39 32.5
OBN pmax pmax
comp=Z,43nm,1.3s
**H29M Whitestone 88.93 24** IAMs_20 IAMs_20 18 06 53.9
comp=Z,1μm,22.0s
**APA Apatity 89.25 338**⇓ *i*P **P** **17 36 09.3 +3.7**
APA pmax pmax
comp=Z,8.0nm,0.9s
**MMAI Mount Meron Ar 90.74 303** P **P** **17 36 13.2 -0.3**
comp=Z,3.2nm,0.7s,baz=97,slow=7.8,SNR=3.2
comp=Z,3.2nm,0.7s
**SIM Simferopol' 90.86 315** *e*P **P** **17 36 13.0 -0.6**
SIM pmax pmax
comp=Z,18nm,1.2s
**KIRS Kirsehir-Merke 91.49 309** ⇑P **P** **17 36 15.6 -1.2**
**BR131 Keskin Array S 91.66 310** P **P** **17 36 17.6 0.0**
**BRTR Keskin Array B 91.66 310** P **P** **17 36 15.8 -1.8**
**BRTR Keskin Array B 91.66 310** P **P** **17 36 16.8 -0.8**
comp=Z,1.4nm,0.8s,baz=102,slow=4.5,SNR=6.8
BRTR PP **PP** **17 39 54.5 -1.9**
comp=Z,0.8nm,0.7s,baz=97,slow=8.8,SNR=3.5
comp=Z,1.4nm,0.8s
**BRTR Keskin Array B 91.66 310** *i* P **P** **17 36 19.0 +1.4**
BRTR pmax pmax
comp=Z,4.0nm,0.9s
**SPITS Spitsbergen Ar 91.67 349** P **P** **17 36 15.0 -1.7**
comp=Z,4.5nm,0.8s,baz=89,slow=14,SNR=4.2
comp=Z,4.5nm,0.8s
**ARCES ARCESS Array B 91.81 340** P **P** **17 36 15.9 -1.6**
comp=Z,5.5nm,0.8s,baz=82,slow=5.7,SNR=18
comp=Z,5.5nm,0.8s
**QSPA South Pole Qui 92.68 180** P **P** **17 36 20.9 -0.7**
QSPA IAmb IAmb 17 36 27.4
comp=Z,10nm,0.8s
**QSPA South Pole Qui 92.68 180** P **P** **17 36 21.0 -0.7**
comp=Z,6.5nm,0.7s,baz=285,slow=0.8,SNR=34
comp=Z,6.5nm,0.7s
**FINES FINESS Array B 93.31 332** P **P** **17 36 22.2 -2.3**
comp=Z,1.7nm,0.5s,baz=51,slow=3.7,SNR=24
comp=Z,1.7nm,0.5s
**FINES FINESS Array B 93.31 332** *i* P **P** **17 36 24.2 -0.3**
FINES pmax pmax
comp=Z,2.0nm,0.5s
**AK09 Malin Array Si 93.45 321** P **P** **17 36 23.8 -1.6**
**H02S1 DAWSON INLET T 93.47 36** T T 19 20 43.9
SNR=10.0
**AK08 Malin Array Si 93.47 321** P **P** **17 36 23.5 -2.0**
**AKASG Malin Array Be 93.48 321** P **P** **17 36 23.6 -2.0**
comp=Z,0.3nm,0.3s,baz=71,slow=4.2,SNR=6.6
comp=Z,0.3nm,0.3s
**AKASG Malin Array Be 93.48 321** *i* P **P** **17 36 23.6 -2.0**
AKASG pmax pmax
comp=Z,1.0nm,0.6s
**AKBB Malin Array Si 93.48 321***ce*P **P** **17 36 24.3 -1.2**
**AKBB Malin Array Si 93.48 321** P **P** **17 36 23.5 -2.0**
**KIEV Kiev 93.49 321** ⇓P **P** **17 36 24.4 -1.2**
**KIEV Kiev 93.49 321** P **P** **17 36 23.3 -2.3**
**MNK Minsk 93.67 325** *i* P **P** **17 36 23.8 -2.6**
MNK *i* *PP **pP** **17 36 38.5 +0.6**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MNK | | | | *i* | | | 17 40 09.0 | |
| MNK | | | | *i* PPP | PPP | | 17 42 09.6 | |
| MNK | | | | *i* S | **SKSac** | | **17 46 53.6** | **-4.0** |
| MNK | | | | *i* *SS | **SKKSac** | | **17 47 19.7** | **+2.1** |
| MNK | | | | *i* SS | **SS** | | **17 53 48.8** | **-1.6** |
| MNK | | | | *i* SSS | SSS | | 17 57 29.8 | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.7s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,9.0nm,0.6s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,305nm,18.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,558nm,19.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,676nm,20.0s | | | | | | | |
| **DLBC** | **Dease Lake** | **93.88** | **31** | P | **P** | | **17 36 28.2** | **+0.9** |
| | comp=Z,6.1nm,1.0s,baz=104,slow=3.6,SNR=4.3 | | | | | | | |
| | comp=Z,6.1nm,1.0s | | | | | | | |
| **CFR** | **Carcaliu** | **95.04** | **316** | ⇑P | **P** | | **17 36 32.4** | **-0.4** |
| **CFR** | **Carcaliu** | **95.04** | **316** | P | **P** | | **17 36 32.4** | **-0.4** |
| **VRI** | **Vrincioaia** | **95.91** | **316** | ⇓P | **P** | | **17 36 36.8** | **-0.1** |
| **VRI** | **Vrincioaia** | **95.91** | **316** | P | **P** | | **17 36 36.8** | **-0.1** |
| **MLR** | **Muntele Rosu** | **96.51** | **316** | ⇓P | **P** | | **17 36 39.2** | **-0.5** |
| **MLR** | **Muntele Rosu** | **96.51** | **316** | ⇓P | **P** | | **17 36 39.2** | **-0.5** |
| **BURAR** | **Bucovina Array** | **96.60** | **318** | P | **P** | | **17 36 39.4** | **-0.7** |
| **BURAR** | **Bucovina Array** | **96.60** | **318** | ⇓P | **P** | | **17 36 38.7** | **-1.4** |
| **DOPR** | **Dopca** | **96.81** | **317** | ⇓P | **P** | | **17 36 36.4** | **-4.5** |
| **ELIB** | **Princess Elisa** | **97.16** | **198** | *dx* | x | | 17 36 56.0 | |
| **MARR** | **Marisel-Cluj** | **98.20** | **318** | ⇓P | **P** | | **17 36 47.0** | **-0.3** |
| **DRGR** | | **98.45** | **318** | ⇑P | **P** | | **17 36 47.6** | **-0.8** |
| **DRGR** | | **98.45** | **318** | ⇑P | **P** | | **17 36 47.6** | **-0.8** |
| **HFS** | **Hagfors** | **99.48** | **332** | P | **Pdif** | | **17 36 51.2** | **-1.4** |
| | comp=Z,4.7nm,0.9s,baz=87,slow=7.7,SNR=4.1 | | | | | | | |
| | comp=Z,4.7nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **99.81** | **25** | P | **Pdif** | | **17 36 53.3** | **-0.7** |
| | comp=Z,1.4nm,0.4s,baz=221,slow=24,SNR=3.8 | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **100.24** | **334** | P | **Pdif** | | **17 36 54.0** | **-2.0** |
| | comp=Z,5.1nm,1.1s,baz=67,slow=4.8 | | | | | | | |
| **NOA** | **NORSAR Array B** | **100.24** | **334** | P | **Pdif** | | **17 36 54.2** | **-1.8** |
| | comp=Z,2.6nm,0.9s,baz=66,slow=4.6,SNR=6.3 | | | | | | | |
| NOA | | | | PP | **PP** | | **17 41 01.7** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=76,slow=6.8,SNR=3.7 | | | | | | | |
| **RONA** | **Rosalia, Austr** | **102.41** | **320** | *e*PP | **PP** | | **17 41 21.9** | **+3.3** |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **CONA** | **Conrad Observa** | **102.61** | **320** | *e*PKiKP | **PKiKP** | | **17 41 24.3** | **-3.5** |
| | comp=Z,5.7nm,1.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **102.80** | **324** | *e*PKP | **PP** | | **17 41 23.9** | **+2.5** |
| BRG | | | | Amp | | | 17 41 25.2 | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| **CLL** | **Collm** | **103.19** | **324** | *e*PP | **PKiKP** | | **17 41 26.0** | **-2.7** |
| **KIJV** | **Kijevo** | **103.47** | **316** | Sn | **SKiKP** | | **17 44 55.0** | **-6.4** |
| **SOKA** | **Soboth** | **103.55** | **319** | *e*PKiKP | **PKiKP** | | **17 41 29.4** | **-0.2** |
| | comp=Z,4.7nm,1.6s | | | | | | | |
| **MOA** | **Molln** | **103.65** | **321** | *e*PKiKP | **PKiKP** | | **17 41 28.8** | **-0.9** |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **GERES** | **GERESS Array B** | **103.66** | **322** | PP | **PKiKP** | | **17 41 30.1** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=111,slow=7.3,SNR=5.5 | | | | | | | |
| **OBKA** | **Obir** | **103.92** | **319** | *e*PKiKP | **PKiKP** | | **17 41 32.0** | **+1.8** |
| | comp=Z,7.6nm,1.8s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **104.51** | **320** | *e*PP | **PP** | | **17 41 35.3** | **+0.9** |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| **GRA1** | **Grafenberg Arr** | **104.86** | **323** | IAMs_20 | IAMs_20 | | 18 28 18.8 | |
| | comp=Z,572nm,21.0s | | | | | | | |
| **GRFO** | **Grafenberg** | **104.86** | **323** | IAMs_20 | IAMs_20 | | 18 30 33.8 | |
| | comp=Z,598nm,21.0s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **105.16** | **320** | *e*PP | **PP** | | **17 41 39.2** | **+0.1** |
| | comp=Z,3.4nm,1.2s | | | | | | | |
| **WTTA** | **Wattenberg** | **105.53** | **321** | *ep*PKiKP | PKiKP | | 17 41 44.7 | +11 |
| | comp=Z,9.9nm,0.9s | | | | | | | |
| **WATA** | **Walderalm** | **105.54** | **321** | *ep*PKiKP | PKiKP | | 17 41 44.9 | +12 |
| | comp=Z,7.4nm,0.6s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **105.81** | **321** | *e*PP | **PP** | | **17 41 45.6** | **+1.6** |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **MOTA** | **Moosalm** | **105.83** | **321** | *e*PP | **PP** | | **17 41 45.6** | **+1.4** |
| | comp=Z,9.4nm,1.5s | | | | | | | |
| **RETA** | **Reutte** | **105.99** | **321** | *ep*PKiKP | PKiKP | | 17 41 48.1 | +14 |
| | comp=Z,7.3nm,1.1s | | | | | | | |
| **FETA** | **Feichten** | **106.19** | **321** | *ep*PKiKP | PKiKP | | 17 41 49.7 | +15 |
| | comp=Z,7.8nm,1.1s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **109.88** | **41** | IAMs_20 | IAMs_20 | | 18 11 50.3 | |
| | comp=Z,677nm,20.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **111.19** | **42** | PKiKP | **PKiKP** | | **17 41 44.1** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=108,slow=2.9,SNR=2.2 | | | | | | | |
| PDAR | | | | PKKPbc | **PKKPab** | | **17 52 48.8** | **-2.3** |
| | comp=Z,0.9nm,0.9s,baz=104,slow=6.3,SNR=5.5 | | | | | | | |
| **DSB** | **Dublin** | **112.46** | **332** | IAMs_20 | IAMs_20 | | 18 30 50.9 | |
| | comp=Z,672nm,20.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **119.05** | **319** | PKP | **PKPdf** | | **17 41 58.4** | **-0.7** |
| | comp=Z,0.2nm,0.6s,baz=106,slow=2.8,SNR=2.8 | | | | | | | |
| ESDC | | | | PP | **PP** | | **17 43 15.3** | **-3.3** |
| | comp=Z,1.1nm,0.9s,baz=57,slow=7.1,SNR=5.5 | | | | | | | |
| ESDC | | | | PKKPbc | **PKKPbc** | | **17 52 12.9** | **-1.3** |
| | comp=Z,0.9nm,1.0s,baz=251,slow=4.2,SNR=4.8 | | | | | | | |
| **POLO** | **Lamas de Olo** | **120.53** | **323** | *e*PKPdf | **PKiKP** | | **17 42 03.7** | **+1.7** |
| **TXAR** | **Lajitas Array** | **121.12** | **53** | PKP | **PKPdf** | | **17 42 02.9** | **-0.5** |
| | comp=Z,0.8nm,0.8s,baz=241,slow=1.3,SNR=9.3 | | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | | **17 52 06.3** | **0.0** |
| | comp=Z,0.4nm,0.7s,baz=116,slow=5.7,SNR=5.0 | | | | | | | |
| **PCBR** | **Castelo Branco** | **121.22** | **321** | *e*PKPdf | **PKiKP** | | **17 42 04.3** | **+1.0** |
| **PCAS** | **Casmilo, Conde** | **121.73** | **322** | *e*PKPdf | **PKiKP** | | **17 42 05.7** | **+1.4** |
| **OK051** | **E0350 and S346** | **122.80** | **43** | IAMs_20 | IAMs_20 | | 18 21 40.4 | |
| | comp=Z,727nm,21.0s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **122.89** | **320** | *e*PKPdf | **PKiKP** | | **17 42 07.9** | **+1.3** |
| **OK052** | **Battle Ridge R** | **123.10** | **43** | IAMs_20 | IAMs_20 | | 18 19 12.4 | |
| | comp=Z,474nm,21.0s | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **124.48** | **288** | P | **PKiKP** | | **17 42 10.3** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **124.48** | **288** | PKP | **PKiKP** | | **17 42 10.4** | **0.0** |
| | comp=Z,6.9nm,0.8s,baz=61,slow=3.5,SNR=33 | | | | | | | |
| **L46A** | **Eue Claire** | **125.63** | **31** | IAMs_20 | IAMs_20 | | 18 33 39.9 | |
| | comp=Z,657nm,19.0s | | | | | | | |
| **F63A** | **Nahmakanta, Br** | **129.39** | **16** | IAMs_20 | IAMs_20 | | 18 21 45.0 | |
| | comp=Z,444nm,20.0s | | | | | | | |
| **MCWV** | **Mont Chateau** | **130.61** | **28** | IAMs_20 | IAMs_20 | | 18 39 01.5 | |
| | comp=Z,524nm,20.0s | | | | | | | |
| **DBIC** | **Dimbokro** | **132.08** | **281** | PKP | **PKPdf** | | **17 42 25.1** | **+0.5** |
| | comp=Z,5.5nm,0.7s,baz=26,slow=3.8,SNR=5.0 | | | | | | | |
| **V61A** | **Roper** | **135.25** | **29** | IAMs_20 | IAMs_20 | | 18 36 02.4 | |
| | comp=Z,515nm,20.0s | | | | | | | |
| **PLCA** | **Paso Flores** | **138.63** | **158** | PKP | **PKPdf** | | **17 42 37.1** | **+1.0** |
| | comp=Z,4.5nm,0.9s,baz=177,slow=4.3,SNR=7.5 | | | | | | | |
| **MT08** | **Bocatoma Ro** | **145.10** | **153** | | **PKPab** | | **17 42 47.8** | **+0.2** |
| **VA06** | **Catapilco** | **145.23** | **151** | PKPdf | **PKPbc** | | **17 42 47.4** | **-0.3** |
| **LCO** | **Las Campanas** | **148.38** | **147** | | **PKPbc** | | **17 42 56.2** | **-1.1** |
| **LCO** | **Las Campanas** | **148.38** | **147** | PKP2 | **PKPbc** | | **17 42 56.2** | **-1.1** |
| **CPUP** | **Villa Florida** | **156.00** | **168** | PKP | **PKPdf** | | **17 43 04.5** | **-0.3** |
| | comp=Z,5.6nm,1.2s,baz=142,slow=1.2,SNR=4.0 | | | | | | | |
| **ROSC** | **El Rosal** | **156.39** | **71** | PKPab | **PKPab** | | **17 43 34.1** | **-0.5** |
| | comp=Z,7.8nm,0.5s,baz=76,slow=17,SNR=4.8 | | | | | | | |
| **SMRT** | **St. Maarten** | **156.58** | **28** | IAMs_20 | IAMs_20 | | 18 59 34.2 | |
| | comp=Z,400nm,19.0s | | | | | | | |
| **LPAZ** | **La Paz** | **159.16** | **131** | PKP | **PKPdf** | | **17 43 10.4** | **+0.6** |
| | comp=Z,2.3nm,1.0s,baz=40,slow=2.7,SNR=6.7 | | | | | | | |
| LPAZ | | | | PKPab | **PKPab** | | **17 43 48.0** | **+1.3** |
| | comp=Z,6.3nm,0.8s,baz=86,slow=2.6,SNR=12 | | | | | | | |
| **BDFB** | **Brasilia** | **166.63** | **197** | PKP | **PKPdf** | | **17 43 16.7** | **+0.3** |
| | comp=Z,0.6nm,0.3s,baz=73,slow=26,SNR=1.5 | | | | | | | |
| BDFB | | | | PKPab | **PKPab** | | **17 44 19.5** | **+0.9** |
| | comp=Z,1.1nm,0.4s,baz=98,slow=23,SNR=2.2 | | | | | | | |

*NEIC* ***12*** *17:29:01.3±1.6,69.61N±0.05×144.9W±0.1,h10km±2km, Error ellipse: s-maj=9.4km s-min=6.4km az=34.0*

**AEIC 12 17:29:00.3±2.1,69.55N±0.05×144.9W±0.1,h5km±6km, ML2.9,ML3.5**/94(NEIC)**, Error ellipse: s-maj=8.2km s-min=5.9km az=205.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.37** | **357** | | Pg | 17 29 07.2 | -0.2 |
| C26K | | | | | Sg | 17 29 12.5 | +0.2 |
| **C26K** | **Camden Bay** | **0.37** | **357** | IAML | | 17 29 12.8 | |
| | comp=E,586nm,0.7s | | | | | | |
| C26K | | | | IAML | | 17 29 13.2 | |
| | comp=N,572nm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.41** | **79** | | Pg | 17 29 08.1 | -0.1 |
| C27K | | | | | Sg | 17 29 14.0 | +0.4 |
| **C27K** | **Jago River** | **0.41** | **79** | IAML | | 17 29 16.2 | |
| | comp=N,554nm,0.3s | | | | | | |
| C27K | | | | IAML | | 17 29 22.8 | |
| | comp=E,501nm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.58** | **248** | Pg | Pg | 17 29 10.4 | -1.0 |
| **D25K** | **Kavik River** | **0.58** | **248** | | Sg | 17 29 19.9 | +0.9 |
| **C24K** | **Franklin Bluff** | **1.35** | **279** | | Pn | 17 29 25.8 | +0.1 |
| C24K | | | | IAML | | 17 30 02.7 | |
| | comp=E,343nm,1.0s | | | | | | |
| C24K | | | | IAML | | 17 30 02.9 | |
| | comp=N,351nm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.35** | **279** | | Sn | 17 29 44.4 | +0.3 |
| **D24K** | **Happy Valley** | **1.46** | **256** | | Pg | 17 29 28.1 | -0.1 |
| D24K | | | | IAML | | 17 30 07.8 | |
| | comp=N,347nm,0.6s | | | | | | |
| D24K | | | | IAML | | 17 30 10.7 | |
| | comp=E,361nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.81** | **138** | Pn | Pb | 17 29 33.7 | -0.2 |
| E27K | | | | IAML | | 17 30 15.4 | |
| | comp=E,135nm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.88** | **172** | Pn | Pb | 17 29 34.4 | -0.7 |
| F26K | | | | IAML | | 17 30 19.8 | |
| | comp=E,138nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.92** | **244** | Pn | Pb | 17 29 36.2 | +0.4 |
| TOLK | | | | IAML | | 17 30 24.8 | |
| | comp=E,123nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.92** | **244** | | Sn | 17 29 58.4 | +0.3 |
| **E24K** | **Your Creek** | **1.98** | **223** | | Pb | 17 29 37.0 | +0.2 |
| **F25K** | **Christian Rive** | **1.99** | **189** | Pn | Pn | 17 29 35.5 | +0.9 |
| **C23K** | **Itkillik River** | **2.03** | **281** | Pn | Pb | 17 29 37.7 | +0.2 |
| C23K | | | | IAML | | 17 30 34.0 | |
| | comp=N,221nm,1.0s | | | | | | |
| C23K | | | | IAML | | 17 30 35.8 | |
| | comp=E,184nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.13** | **177** | Pn | Pb | 17 29 38.2 | -1.1 |
| **E28M** | **Babbage River** | **2.14** | **114** | Pn | Pn | 17 29 37.8 | +1.2 |
| **D23K** | **Nanushuk River** | **2.15** | **257** | | Pn | 17 29 36.5 | -0.3 |
| **D28M** | **Stokes Point** | **2.17** | **93** | | Pn | 17 29 37.2 | +0.1 |
| **D28M** | **Stokes Point** | **2.17** | **93** | IAML | | 17 30 31.5 | |
| | comp=E,170nm,0.7s | | | | | | |
| D28M | | | | IAML | | 17 30 34.6 | |
| | comp=N,168nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.29** | **231** | Pn | Pn | 17 29 40.2 | +1.5 |
| **F24K** | **Squaw Lake** | **2.32** | **210** | Pn | Pn | 17 29 40.3 | +1.1 |
| **G26K** | **Porcupine Rive** | **2.64** | **171** | | Pn | 17 29 43.4 | -0.1 |
| **F28M** | **Old Crow** | **2.67** | **134** | Pn | Pn | 17 29 44.9 | +1.0 |
| F28M | | | | IAML | | 17 30 46.0 | |
| | comp=N,71nm,0.5s | | | | | | |
| F28M | | | | IAML | | 17 30 47.7 | |
| | comp=E,58nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.77** | **112** | | Pb | 17 29 50.6 | +0.4 |
| E29M | | | | IAML | | 17 30 45.9 | |
| | comp=N,66nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.84** | **190** | | Pn | 17 29 46.5 | +0.4 |
| **D22K** | **Ayikyak River** | **2.87** | **260** | Pn | Pb | 17 29 50.3 | -1.6 |
| D22K | | | | IAML | | 17 30 58.4 | |
| | comp=N,108nm,1.1s | | | | | | |
| D22K | | | | IAML | | 17 31 42.6 | |
| | comp=E,137nm,0.7s | | | | | | |
| **FYU** | **Fort Yukon** | **3.00** | **183** | | Pn | 17 29 50.1 | +1.8 |
| FYU | | | | IAML | | 17 31 05.7 | |
| | comp=E,78nm,1.1s | | | | | | |
| FYU | | | | IAML | | 17 31 46.9 | |
| | comp=N,169nm,0.6s | | | | | | |
| **G27K** | **Doyon Strip** | **3.00** | **155** | | Pn | 17 29 49.4 | +0.9 |
| G27K | | | | IAML | | 17 31 43.0 | |
| | comp=E,49nm,0.5s | | | | | | |
| G27K | | | | IAML | | 17 31 43.9 | |
| | comp=N,60nm,0.5s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.02** | **200** | | Pn | 17 29 49.8 | +1.0 |
| G24K | | | | IAML | | 17 31 47.0 | |
| | comp=E,65nm,0.4s | | | | | | |
| G24K | | | | IAML | | 17 31 49.1 | |
| | comp=N,103nm,0.9s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.05** | **289** | Pg | Pb | 17 29 54.1 | -0.9 |
| B22K | | | | IAML | | 17 31 35.9 | |
| | comp=N,81nm,0.9s | | | | | | |
| B22K | | | | IAML | | 17 31 48.6 | |
| | comp=E,109nm,0.6s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.05** | **289** | | Pn | 17 29 49.1 | 0.0 |
| **COLD** | **Coldfoot** | **3.06** | **223** | | Pn | 17 29 49.1 | -0.1 |
| **H25L** | **Birch Creek** | **3.32** | **187** | | Pn | 17 29 52.7 | -0.1 |
| **F22K** | **John River** | **3.38** | **236** | | Pn | 17 29 53.5 | -0.2 |
| **B21K** | **Ikpikpuk River** | **3.42** | **276** | | Pn | 17 29 55.3 | +1.2 |
| B21K | | | | IAML | | 17 31 55.7 | |
| | comp=E,176nm,0.8s | | | | | | |
| B21K | | | | IAML | | 17 32 04.4 | |
| | comp=N,66nm,0.6s | | | | | | |
| **E21K** | **Killik River** | **3.46** | **256** | | Pn | 17 29 54.5 | -0.3 |
| **E21K** | **Killik River** | **3.46** | **256** | IAML | | 17 31 56.0 | |
| | comp=E,145nm,0.7s | | | | | | |
| E21K | | | | IAML | | 17 32 05.0 | |
| | comp=N,124nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **3.67** | **133** | | Pn | 17 29 58.7 | +1.0 |
| G29M | | | | IAML | | 17 32 17.4 | |
| | comp=E,164nm,0.5s | | | | | | |
| G29M | | | | IAML | | 17 32 19.3 | |
| | comp=N,117nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.90** | **199** | Pn | Pn | 17 30 01.1 | +0.3 |
| H24K | | | | IAML | | 17 32 35.2 | |
| | comp=N,117nm,0.6s | | | | | | |
| H24K | | | | IAML | | 17 32 37.1 | |
| | comp=E,87nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **3.95** | **238** | | Pn | 17 30 01.3 | -0.3 |
| **F21K** | **Alatna River** | **3.95** | **238** | IAML | | 17 32 07.4 | |
| | comp=N,67nm,0.7s | | | | | | |
| F21K | | | | IAML | | 17 32 33.1 | |
| | comp=E,68nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **184** | | Pn | 17 30 03.7 | +0.6 |
| **G30M** | **tAoh Zraii Nji** | **4.12** | **125** | | Pn | 17 30 05.5 | +1.7 |
| G30M | | | | IAML | | 17 32 48.3 | |
| | comp=E,140nm,0.7s | | | | | | |
| G30M | | | | IAML | | 17 32 49.3 | |
| | comp=N,139nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.14** | **208** | Pn | Pn | 17 30 05.7 | +1.5 |
| H23K | | | | IAML | | 17 32 40.4 | |
| | comp=E,93nm,0.7s | | | | | | |
| H23K | | | | IAML | | 17 32 44.3 | |
| | comp=N,134nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **4.15** | **141** | Pn | Pn | 17 30 05.1 | +1.0 |
| **D20K** | **Etivluk River** | **4.29** | **264** | | Pn | 17 30 06.0 | -0.1 |
| **B20K** | **Meade River** | **4.29** | **282** | | Pn | 17 30 06.0 | -0.2 |
| **B20K** | **Meade River** | **4.29** | **282** | IAML | | 17 32 44.7 | |
| | comp=E,108nm,0.6s | | | | | | |
| B20K | | | | IAML | | 17 32 49.1 | |
| | comp=N,96nm,0.7s | | | | | | |
| **E20K** | **Nigu River** | **4.29** | **258** | | Pn | 17 30 06.2 | 0.0 |
| **I26K** | **Coal Creek Min** | **4.31** | **170** | Pn | Pn | 17 30 07.7 | +1.2 |
| I26K | | | | IAML | | 17 32 49.4 | |
| | comp=N,122nm,0.9s | | | | | | |
| I26K | | | | IAML | | 17 32 49.8 | |
| | comp=E,122nm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.43** | **132** | | Pn | 17 30 10.2 | +2.2 |
| **I28M** | **Miner Creek** | **4.53** | **153** | Pn | Pn | 17 30 10.8 | +1.3 |
| **POKR** | **Poker Plat Res** | **4.56** | **194** | | Pn | 17 30 09.9 | +0.1 |
| **G31M** | **Satah River** | **4.74** | **119** | Pn | Pn | 17 30 15.4 | +3.2 |
| **F20K** | **Avaraart Lake** | **4.75** | **243** | | Pn | 17 30 12.4 | +0.1 |
| **F20K** | **Avaraart Lake** | **4.75** | **243** | IAML | | 17 33 17.0 | |
| | comp=E,52nm,0.8s | | | | | | |
| F20K | | | | IAML | | 17 33 18.9 | |
| | comp=N,64nm,0.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.75** | **204** | Pn | Pn | 17 30 13.2 | +0.8 |
| I23K | | | | IAML | | 17 33 17.0 | |
| | comp=N,70nm,1.2s | | | | | | |
| **IL31** | | **4.87** | **190** | | Pn | 17 30 13.9 | 0.0 |
| **D19K** | **Kuna River** | **4.88** | **264** | | Pn | 17 30 14.1 | -0.1 |
| **D19K** | **Kuna River** | **4.88** | **264** | IAML | | 17 33 09.5 | |
| | comp=E,45nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.90** | **146** | | Pn | 17 30 15.3 | +0.7 |
| **J25K** | **Salcha River,** | **4.96** | **183** | Pn | Pn | 17 30 15.4 | -0.1 |
| J25K | | | | IAML | | 17 33 29.9 | |
| | comp=N,82nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **5.01** | **162** | Pn | Pn | 17 30 16.7 | +0.8 |
| **CCB** | **Clear Creek Bu** | **5.06** | **195** | | Pn | 17 30 16.8 | +0.1 |
| **C19K** | **Lookout Ridge** | **5.24** | **272** | | Pn | 17 30 18.8 | -0.3 |
| **WRH** | **Wood River Hil** | **5.25** | **195** | | Pn | 17 30 19.2 | -0.2 |
| **WRH** | **Wood River Hil** | **5.25** | **195** | IAML | | 17 33 38.9 | |
| | comp=N,67nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.44** | **139** | Pn | Pn | 17 30 23.8 | +1.8 |
| **F19K** | **Shaleruckim Mo** | **5.53** | **247** | Pn | Pn | 17 30 23.2 | +0.2 |
| **A19K** | **Wainwright** | **5.63** | **284** | | Pn | 17 30 24.4 | -0.1 |
| **K27K** | **Chicken** | **5.65** | **167** | Pn | Pn | 17 30 26.2 | +1.4 |
| **G19K** | **Purcell Mounta** | **5.75** | **239** | | Pn | 17 30 25.8 | -0.3 |
| **C18K** | **Utukok River** | **5.91** | **269** | Pn | Pn | 17 30 27.7 | -0.7 |
| **DAWY** | **Dawson** | **5.92** | **156** | Pn | Pn | 17 30 28.4 | -0.1 |
| **BPAW** | **Bear Paw Mtn.** | **5.98** | **207** | Pn | Pn | 17 30 29.8 | +0.5 |
| **E18K** | **Tukpahlearik C** | **6.17** | **257** | Pn | Pn | 17 30 31.8 | 0.0 |
| **F18K** | **Selawik** | **6.27** | **249** | | Pn | 17 30 33.2 | -0.1 |
| **C17K** | **DeLong Mountai** | **6.66** | **269** | | Pn | 17 30 37.7 | -0.9 |
| **D17K** | **Noatak River** | **6.91** | **263** | | Pn | 17 30 40.9 | -1.0 |
| **A36M** | **Sachs Harbour** | **6.91** | **60** | | Pn | 17 30 41.6 | -0.3 |
| **L29M** | **L29M** | **7.01** | **154** | Pn | Pn | 17 30 45.6 | +2.1 |

*NEIC* ***12*** *17:30:44.9±1.8,69.60N±0.05×144.83W±0.08,h4km±7km, Error ellipse: s-maj=7.8km s-min=3.8km az=188.0*

*AEIC* ***12*** *17:30:44.2±2.2,69.53N±0.05×144.83W±0.08,h1km±6km, ML4.0,ML4.1/116(NEIC),Mwr3.9/12(SLM),Error ellipse: s-maj=7.3km s-min=3.8km az=192.0*

*NEIC* ***12*** *17:30:46,69.67N×144.84W,h14km,Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.04; $M_{\theta\theta}$-5.56; $M_{\phi\phi}$6.60; $M_{r\theta}$2.58; $M_{r\phi}$-4.42; $M_{\theta\phi}$0.78; Fault plane solution: $M_o$8.04000×$10^{14}$ NP1:$\phi_s$205.00000°, δ75.00000°,λ-15.00000°. NP2:$\phi_s$299.00000°,δ76.00000°, λ-164.00000°. Principal axes: T 8.0372, Plg0.0000°, Azm72.0000°; N -0.0016, Plg69.0000°, Azm341.0000°; P -8.0356, Plg21.0000°, Azm162.0000°;*

*IDC* ***12*** *17:30:47.0±0.8,69.54N×144.71W,h0km,mb3.8/12, mbtmp3.8/16,ML3.9/4,MS4.6/1 Error ellipse: s-maj=18.8km s-min=12.2km az=52.0*

**ISC 12 17:30:46.5±0.5,69.51N±0.04×144.84W±0.03,h10km, n136,σ1s55/128,mb3.9**/14**, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.41** | **356** | | **Pg** | **17 30 51.5** | **-2.9** |
| C26K | | | | | **Sg** | **17 30 56.9** | **-3.0** |
| **C26K** | **Camden Bay** | **0.41** | **356** | IAML | | 17 30 57.3 | |
| | comp=N,10μm,0.4s | | | | | | |
| C26K | | | | IAML | | 17 31 00.9 | |
| | comp=E,11μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.41** | **73** | | **Pg** | **17 30 52.1** | **-2.4** |
| C27K | | | | | **Sg** | **17 30 57.4** | **-2.5** |
| **D25K** | **Kavik River** | **0.58** | **251** | | **Pg** | **17 30 54.7** | **-2.9** |
| **D25K** | **Kavik River** | **0.58** | **251** | | **Sg** | **17 31 03.8** | **-1.4** |
| **C24K** | **Franklin Bluff** | **1.37** | **281** | | **Pn** | **17 31 10.0** | **-1.6** |
| C24K | | | | | **Sn** | **17 31 29.2** | **-0.5** |
| **C24K** | **Franklin Bluff** | **1.37** | **281** | IAML | | 17 31 32.7 | |
| | comp=N,3μm,0.8s | | | | | | |
| **D27M** | **Malcolm River** | **1.40** | **99** | Pn | **Pn** | **17 31 09.6** | **-2.5** |
| D27M | | | | IAML | | 17 31 35.1 | |
| | comp=N,3μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.40** | **99** | | **Sn** | **17 31 30.3** | **-0.3** |
| **D24K** | **Happy Valley** | **1.46** | **258** | | **Pn** | **17 31 11.8** | **-1.0** |
| D24K | | | | IAML | | 17 31 40.9 | |
| | comp=E,3μm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.46** | **258** | | **Sb** | **17 31 31.7** | **-0.6** |
| **E27K** | **Coleen River** | **1.78** | **137** | | **Sn** | **17 31 40.1** | **+0.2** |
| **E27K** | **Coleen River** | **1.78** | **137** | Pn | **Pn** | **17 31 17.7** | **+0.5** |
| E27K | | | | IAML | | 17 31 47.3 | |
| | comp=E,2μm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **172** | | **Pn** | **17 31 17.1** | **-1.1** |
| **F26K** | **Sheenjek River** | **1.84** | **172** | IAML | | 17 31 48.9 | |
| | comp=E,2μm,0.7s | | | | | | |
| F26K | | | | IAML | | 17 31 51.4 | |
| | comp=N,1μm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.91** | **245** | Pn | **Pb** | **17 31 20.1** | **-1.3** |
| TOLK | | | | IAML | | 17 31 50.7 | |
| | comp=E,1μm,0.7s | | | | | | |
| TOLK | | | | IAML | | 17 32 01.6 | |
| | comp=N,1μm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **1.95** | **189** | | **Pn** | **17 31 18.5** | **-1.2** |
| F25K | | | | | **Sn** | **17 31 44.8** | **+0.6** |
| **F25K** | **Christian Rive** | **1.95** | **189** | IAML | | 17 31 52.3 | |
| | comp=E,2μm,0.5s | | | | | | |
| F25K | | | | IAML | | 17 31 54.1 | |
| | comp=N,2μm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **1.96** | **224** | Pn | **Pb** | **17 31 21.0** | **-1.3** |
| **C23K** | **Itkillik River** | **2.04** | **282** | Pn | **Pn** | **17 31 19.7** | **-1.2** |
| **BMAR** | **Burnt Mountain** | **2.10** | **177** | Pn | **Pb** | **17 31 23.7** | **-0.8** |
| **E28M** | **Babbage River** | **2.11** | **113** | Pn | **Pn** | **17 31 22.8** | **+0.9** |
| **D23K** | **Nanushuk River** | **2.15** | **258** | | **Pn** | **17 31 21.2** | **-1.1** |
| **D23K** | **Nanushuk River** | **2.15** | **258** | IAML | | 17 32 09.7 | |
| | comp=E,954nm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **2.17** | **92** | | **Pn** | **17 31 21.1** | **-1.4** |
| **E23K** | **Chandalar** | **2.27** | **232** | | **Pn** | **17 31 23.4** | **-0.7** |
| **E23K** | **Chandalar** | **2.27** | **232** | IAML | | 17 32 08.5 | |
| | comp=N,863nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.30** | **211** | Pn | **Pn** | **17 31 24.6** | **+0.2** |
| **F28M** | **Old Crow** | **2.64** | **134** | Pn | **Pn** | **17 31 29.0** | **0.0** |
| F28M | | | | IAML | | 17 32 12.7 | |
| | comp=E,745nm,0.6s | | | | | | |
| F28M | | | | IAML | | 17 32 18.7 | |
| | comp

comp=E,166nm,1.1s
**POKR Poker Plat Res 4.53 194 Pn 17 31 54.6 -0.4**
POKR IAML 17 32 54.9
comp=N,130nm,0.3s
POKR IAML 17 33 32.2
comp=E,157nm,1.1s
**F31M Tsiigehtchic 4.58 112 Pn Pn 17 31 55.4 -0.3**
F31M IAML 17 33 15.0
comp=N,199nm,0.8s
**G31M Satah River 4.72 118 Pn Pn 17 31 57.2 -0.3**
**I23K Minto, Yukon-K 4.72 204 Pn 17 31 57.0 -0.5**
I23K IAML 17 33 30.8
comp=N,157nm,0.9s
**F20K Avaraart Lake 4.74 244 Pn 17 31 57.8 -0.1**
**MDM Murphy Dome 4.76 198 Pn 17 31 57.6 -0.6**
MDM IAML 17 33 20.2
comp=E,140nm,1.0s
MDM IAML 17 33 21.4
comp=N,153nm,0.6s
**COLA College 4.80 196 Pn 17 31 59.8 +1.1**
**IL31 4.83 190 Pn Pn 17 31 59.7 +0.6**
**ILAR Eielson Array 4.83 190 Pn Pn 17 31 58.8 -0.3**
comp=N,2.0nm,0.3s,baz=0.9,slow=12,SNR=3.5
ILAR Sn Sn 17 32 56.4 +1.4
comp=N,10nm,0.3s,baz=15,slow=18,SNR=6.2
comp=N,9.2nm,0.5s
**I29M Ogilvie Camp, 4.87 146 Pn Pn 17 32 00.5 +0.8**
I29M IAML 17 33 09.1
comp=N,121nm,0.4s
I29M IAML 17 33 41.8
comp=E,117nm,0.8s
**D19K Kuna River 4.88 264 Pn 17 31 58.6 -1.3**
D19K IAML 17 33 48.1
comp=E,132nm,0.9s
**IMAR Indian Mountai 4.90 228 Pn 17 32 01.2 +1.1**
**H21K Melozitna Rive 4.93 222 Pn 17 32 00.7 +0.3**
H21K IAML 17 33 31.8
comp=N,100nm,1.0s
H21K IAML 17 33 34.4
comp=E,142nm,0.9s
**J25K Salcha River, 4.93 183** IAML 17 33 31.0
comp=E,152nm,1.2s
**EGAK Eagle 4.97 161** IAML 17 33 03.3
comp=E,106nm,0.5s
EGAK IAML 17 33 06.0
comp=E,103nm,0.7s
**E19K Redstone River 5.00 252 Pn 17 32 00.9 -0.6**
E19K IAML 17 33 50.0
comp=N,114nm,0.9s
E19K IAML 17 33 50.5
comp=E,129nm,1.1s
**CCB Clear Creek Bu 5.02 195 Pn Pn 17 32 01.0 -0.8**
CCB IAML 17 33 38.7
comp=E,100nm,1.0s
**MLY Manley 5.05 210 Pn 17 32 00.8 -1.3**
**J26L Joseph Creek 5.06 174 Pn 17 32 01.1 -1.3**
**J26L Joseph Creek 5.06 174** IAML 17 33 35.4
comp=E,126nm,1.1s
**HDA Harding Lake 5.19 190** IAML 17 33 38.3
comp=N,101nm,0.9s
**NEA2 Nenana 5.21 201** IAML 17 33 34.6
comp=N,80nm,1.1s
NEA2 IAML 17 33 34.9
comp=E,78nm,0.9s
**WRH Wood River Hil 5.22 196 Pn 17 32 03.7 -0.8**
**WRH Wood River Hil 5.22 196** IAML 17 33 35.5
comp=E,106nm,0.8s
**C19K Lookout Ridge 5.25 272 Pn 17 32 02.7 -2.1**
**C19K Lookout Ridge 5.25 272** IAML 17 33 07.1
comp=N,66nm,0.5s
C19K IAML 17 33 07.2
comp=E,92nm,0.7s
**I30M Mount Dempster 5.40 139 Pn Pn 17 32 07.6 +0.5**
**F19K Shaleruckik Mo 5.52 247 Pn 17 32 07.6 -1.0**
**A19K Wainwright 5.65 285 Pn 17 32 08.6 -1.7**
**G19K Purcell Mounta 5.74 240 Pn 17 32 10.2 -1.3**
**C18K Utukok River 5.92 269 Pn 17 32 12.4 -1.7**
**BPAW Bear Paw Mtn. 5.95 207 Pn 17 32 13.4 -1.1**
**J30M Hart River 5.97 142 Pn 17 32 15.4 +0.6**
**MCK McKinley 6.03 198 Pn 17 32 14.5 -1.1**
**E18K Tukpahlearik C 6.17 258 Pn 17 32 15.7 -1.7**
**F18K Selawik 6.27 249 Pn 17 32 17.5 -1.3**
**G18K Tagagawik 6.38 242 Pn 17 32 19.1 -1.3**
**DHY Denali Highway 6.55 190 Pn Pn 17 32 23.9 +1.1**
**BCAR Beaver Creek A 6.59 168 Pn 17 32 23.2 -0.1**
**C17K DeLong Mountai 6.67 270 Pn 17 32 22.1 -2.3**
**E17K Hotham Inlet 6.75 257 Pn 17 32 23.6 -1.8**
**H18K Honhosa River 6.81 236 Pn 17 32 25.7 -0.5**
**D17K Noatak River 6.91 263 Pn 17 32 25.3 -2.3**
**A36M Sachs Harbour 6.92 60 Pn Pn 17 32 24.4 -3.3**
**L29M L29M 6.97 154 Pn 17 32 27.3 -1.2**
**G17K Kiwalik Mounta 7.26 244 Pn 17 32 30.7 -1.8**
**H17K Granite Mounta 7.42 239 Pn 17 32 35.2 +0.6**
**G16K Koyuk River 7.88 247 Pn Pn 17 32 39.8 -1.1**
**J17K VABM Dome 8.36 230 Pn 17 32 45.9 -1.5**
**F15K North Star Dit 8.45 253 Pn 17 32 46.8 -1.9**
**O29M Mount Kennedy 9.62 161 Pn 17 33 03.3 -1.5**
**P29M Windy Craggy 10.37 160 Pn 17 33 16.1 +1.0**
**P19K Oil Pt 10.52 204 Pn Pn 17 33 17.7 +0.5**
**WRGLY Wrigley 10.59 116 Pn 17 33 17.9 -0.1**
**Q32M Nakina River 11.88 147 Pn 17 33 35.9 0.0**
**S31K Pelican 12.19 158 Pn Pn 17 33 41.4 +1.6**
**DLBC Dease Lake 12.82 143 Pn Pn 17 33 47.5 -1.0**
comp=E,0.3nm,0.3s,baz=40,slow=4.2,SNR=2.1
DLBC Sn Sn 17 36 04.0 -7.2
comp=E,0.1nm,0.3s,baz=249,slow=26,SNR=1.5
comp=E,0.8nm,0.3s
**S32K Killisnoo 12.90 154 Pn Pn 17 33 50.5 +1.0**
**S34M Telegraph Cree 13.08 146 Pn Pn 17 33 52.1 +0.1**
**YKA Yellowknife Ar 14.02 105 Pn Pn 17 34 00.9 -3.9**
comp=E,1.0nm,0.3s,baz=318,slow=12,SNR=12
YKA Sn Sn 17 36 28.5 -12
comp=E,1.2nm,0.3s,baz=28,slow=27,SNR=5.2
comp=E,3.3nm,0.6s
**PDAR Pinedale Array 32.34 127 P P 17 37 17.1 +1.4**
comp=E,0.6nm,0.7s,baz=18,slow=4.8,SNR=5.4
comp=E,0.6nm,0.7s
**NVAR Mina Array Bea 34.23 141 P P 17 37 34.1 +1.8**
comp=E,0.3nm,0.6s,baz=338,slow=7.0,SNR=2.7
comp=E,0.3nm,0.6s
**BORG Borgarnes 40.35 34 LR LR** 17 58 52.9
comp=E,847nm,20.1s,baz=143,slow=42
**TXAR Lajitas Array 46.56 128 P P 17 39 17.4 +3.3**
comp=E,0.1nm,0.5s,baz=318,slow=7.7,SNR=3.8
comp=E,0.1nm,0.5s
**NOA NORSAR Array B 48.62 15 P P 17 39 31.8 +2.1**
comp=E,0.6nm,0.9s,baz=346,slow=8.0,SNR=1.7
comp=E,0.6nm,0.9s
**FINES FINESS Array B 49.17 6 P P 17 39 34.5 +0.7**
comp=E,4.5nm,1.1s,baz=28,slow=6.3,SNR=1.9
comp=E,4.5nm,1.1s
**HFS Hagfors 49.73 14 P P 17 39 38.6 +0.4**
comp=E,1.1nm,0.6s,baz=17,slow=6.2,SNR=6.6
comp=E,1.1nm,0.6s
**ZALV Zalesovo Beam 51.67 325 P P 17 39 56.1 +3.3**
comp=E,0.4nm,0.4s,baz=17,slow=7.8,SNR=2.1
comp=E,0.4nm,0.4s
**MJAR Matsushiro Arr 51.77 273 P P 17 39 55.8 +2.0**
comp=E,1.4nm,0.9s,baz=18,slow=9.1,SNR=1.7
comp=E,1.4nm,0.9s
**EKA Eskdalemuir Ar 52.39 27 P P 17 39 59.8 +1.7**
comp=E,0.8nm,0.7s,baz=331,slow=5.9,SNR=3.7
comp=E,0.8nm,0.7s
**KURBB Kurchatov Arra 56.05 328 P P 17 40 26.0 +1.2**
comp=E,1.1nm,1.0s,baz=11,slow=6.9,SNR=4.1
comp=E,1.1nm,1.0s
**HHC Hu-ho-hao-te 56.84 298** *e*P **P 17 40 30.6 -0.2**
HHC pP sP 17 40 37.6 +2.1
HHC sP pP 17 40 43.8 +10
HHC pmax pmax
comp=Z,14nm,0.5s
HHC pmax pmax
comp=Z,130nm,4.1s
**AKASG Malin Array Be 60.02 4 P P 17 40 55.6 +3.0**
comp=Z,0.4nm,0.4s,baz=360,slow=7.3,SNR=2.1
comp=Z,0.4nm,0.4s
**PZH PanZhiHua 73.14 301 P P 17 42 15.0 -2.0**
PZH pmax pmax
comp=Z,10.0nm,0.5s
**KEST Kesra 73.36 22 P P 17 42 21.2 +3.1**
comp=Z,4.0nm,0.8s,baz=330,slow=7.0,SNR=5.7
comp=Z,4.0nm,0.8s

*IDC **12** 17:44:23.7±0.5,24.2°26N×102.2°81E,h0km,mb4.5/27, mbtmp4.4/28,ML4.5/1,MS4.4/11,Error ellipse: s-maj=15.6km s-min=12.7km az=55.0*

*MOS **12** 17:44:23.4±1.1,24.2°30N×102.2°88E,h7km,mb5.0/41, MS4.6/7,Error ellipse: s-maj=7.3km s-min=4.1km az=122.7*

*BJI **12** 17:44:24.7±0.0,24.2°18N×102.2°72E,h14km,mb4.7/59, mB5.2/22,ML5.3/12,Ms5.1/75,Ms7 4.9/73*

*GCMT **12** 17:44:26.3±0.4,24.2°22N±0.2°03×102.2°82E±0.2°02,h18km±2km, MW5.1/85,Moment Tensor Solution. s5,c5; s85,c116; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr0.07±.39; Mθθ-3.56±.28; Mφφ3.49±.27; Mrθ2.67±.84; Mφφ-4.13±.29; Mθr-1.37±.71; Best double couple: M0.6.20000×10^16^ NP1:φs201.00000°,δ61.00000°,λ3.00000°. Principal axes: T 6.3300, Plg22.0000°, Azm62.0000°; N -0.2550, Plg61.0000°, Azm286.0000°; P -6.0700, Plg18.0000°, Azm159.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **12** 17:44:26.3±1.9,24.2°30N±0.2°06×102.2°91E±0.2°07,h10km±1km, mb5.0/58 Error ellipse: s-maj=11.5km s-min=10.5km az=89.0*

**ISC 12 17:44:26.1±0.3,24.2°31N±0.2°03×102.2°81E±0.2°03,h10km,n363, s181°72/383,mb4.8/116,MS4.6/24,41C-32D,Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMI** | **Kunming** | **0.82** | **356** | ⇓Pg | **Pb** | **17 44 43.3** | **+0.8** |
| KMI | | | | Sg | **Sn** | **17 44 56.6** | **+0.4** |
| KMI | | | | smax | smax | | |
| | comp=N,29μm,0.7s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,38μm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **2.39** | **336** | Pn | **Pn** | **17 45 07.0** | **+1.5** |
| PZH | | | | Pg | **Pg** | **17 45 12.3** | **+0.3** |
| PZH | | | | Sn | **Sn** | **17 45 36.6** | **+1.7** |
| PZH | | | | Sg | **Sg** | **17 45 42.5** | **-0.5** |
| PZH | | | | smax | smax | | |
| | comp=N,4μm,1.0s | | | | | | |
| PZH | | | | smax | smax | | |
| | comp=E,6μm,0.9s | | | | | | |
| **SLVN** | **Son La** | **3.12** | **161** | Pn | **Pn** | **17 45 13.5** | **-1.9** |
| **TNCH** | **TengChong** | **3.97** | **281** | Pn | **Pn** | **17 45 26.6** | **-0.6** |
| TNCH | | | | Sn | **Sn** | **17 46 10.0** | **-3.9** |
| TNCH | | | | Sg | **Sb** | **17 46 28.6** | **+4.2** |
| TNCH | | | | smax | smax | | |
| | comp=N,18μm,1.0s | | | | | | |
| TNCH | | | | smax | smax | | |
| | comp=E,16μm,1.5s | | | | | | |
| **GYA** | **Guiyang** | **4.09** | **58** | ⇑Pn | **Pn** | **17 45 29.3** | **+0.5** |
| GYA | | | | Sn | **Sn** | **17 46 17.5** | **+0.6** |
| GYA | | | | Sg | **Sg** | **17 46 37.5** | **-0.1** |
| GYA | | | | smax | smax | | |
| | comp=N,3μm,1.2s | | | | | | |
| GYA | | | | smax | smax | | |
| | comp=E,2μm,1.2s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=N,12μm,4.1s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=E,10μm,5.2s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,13μm,7.9s | | | | | | |
| **PHRA** | **Phrae** | **6.26** | **203** | Pn | **Pn** | **17 45 58.5** | **0.0** |
| **CD2** | **Chengdu** | **6.63** | **7** | Pn | **Pn** | **17 46 07.3** | **+3.6** |
| CD2 | | | | Sn | **Sn** | **17 47 22.7** | **+3.3** |
| CD2 | | | | LR | LR | | |
| | comp=N,14μm,6.9s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,17μm,5.9s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **6.84** | **212** | | **Pn** | **17 46 05.7** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **6.84** | **212** | Pn | **Pn** | **17 46 08.8** | **+2.3** |
| **CMAR** | **Chiang Mai Arr** | **6.84** | **212** | Pn | **Pn** | **17 46 05.3** | **-1.2** |
| | 2.4nm,0.3s,baz=26,slow=12,SNR=34 | | | | | | |
| CMAR | | | | Lg | Lg | 17 48 00.4 | |
| | 3.2nm,0.3s,baz=46,slow=29,SNR=9.3 | | | | | | |
| CMAR | | | | LR | LR | 17 48 60.0 | |
| | comp=Z,1μm,19.9s,baz=5.0,slow=41 | | | | | | |
| | 10.0nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **6.84** | **212** | *i*P | **Pn** | **17 46 08.3** | **+1.7** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **GULI** | **GuiLin** | **6.94** | **80** | Pn | **Pn** | **17 46 08.2** | **+0.4** |
| GULI | | | | Sg | **Sg** | **17 48 06.4** | **-2.4** |
| GULI | | | | smax | smax | | |
| | comp=Z,3μm,1.3s | | | | | | |
| GULI | | | | smax | smax | | |
| | comp=Z,2μm,1.3s | | | | | | |
| **QIZ** | **Qiongzhong** | **8.38** | **127** | P | **Pn** | **17 46 26.5** | **-1.2** |
| QIZ | | | | S | **Sn** | **17 48 01.6** | **-0.9** |
| QIZ | | | | LR | LR | | |
| | comp=Z,13μm,10.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,5μm,9.0s | | | | | | |
| **ENH** | **Enshi** | **8.40** | **44** | Pn | **Pn** | **17 46 28.8** | **+0.9** |
| **CNSH** | **ChangSha** | **9.87** | **65** | P | **Pn** | **17 46 48.4** | **+0.3** |
| CNSH | | | | S | **Sn** | **17 48 40.1** | **+1.1** |
| CNSH | | | | pmax | pmax | | |
| | comp=Z,39nm,1.3s | | | | | | |
| **SHL** | **Shillong** | **10.00** | **279** | Pn | **Pn** | **17 46 52.5** | **+2.6** |
| **SHL** | **Shillong** | **10.00** | **279** | P | **Pn** | **17 46 52.6** | **+2.6** |
| **NAYO** | **Nakonayok** | **10.04** | **188** | P | **Pn** | **17 46 51.4** | **+1.0** |
| **XAN** | **Xi'an** | **11.07** | **27** | ⇓P | **Pn** | **17 47 05.2** | **+0.7** |
| XAN | | | | pP | | 17 47 08.8 | |
| XAN | | | | PP | **PnPn** | **17 47 14.9** | **+2.5** |
| XAN | | | | S | **Sn** | **17 49 06.6** | **-1.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,32nm,0.8s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,2μm,9.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,19μm,13.1s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,27μm,11.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,10μm,12.9s | | | | | | |
| **LSA** | **Lhasa** | **11.70** | **300** | P | Pn | 17 47 19.7 | +6.2 |
| LSA | | | | LR | LR | | |
| | comp=Z,3μm,22.5s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,5μm,21.1s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,2μm,12.3s | | | | | | |
| **LSA** | **Lhasa** | **11.70** | **300** | Pn | **Pn** | **17 47 15.1** | **+1.5** |
| **LSA** | **Lhasa** | **11.70** | **300** | P | **Pn** | **17 47 15.1** | **+1.5** |
| **LZH** | **Lanzhou** | **11.78** | **4** | *e*P | **Pn** | **17 47 14.4** | **+0.1** |
| LZH | | | | pP | | 17 47 19.4 | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,21μm,11.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,8μm,11.7s | | | | | | |
| **WHN** | **Wuhan** | **11.98** | **56** | P | **Pn** | **17 47 19.0** | **+2.0** |
| WHN | | | | pP | | 17 47 21.9 | |
| WHN | | | | S | **Sn** | **17 49 32.2** | **+1.5** |
| WHN | | | | LR | LR | | |
| | comp=Z,11μm,8.7s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,8μm,4.6s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,16μm,8.0s | | | | | | |
| **LYN** | **LuoYang** | **13.22** | **37** | P | **Pn** | **17 47 35.7** | **+1.8** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,50nm,0.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,7μm,14.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,7μm,14.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,8μm,12.0s | | | | | | |
| **GOMU** | **GeErMu** | **13.71** | **332** | P | **Pn** | **17 47 40.9** | **0.0** |
| GOMU | | | | pP | P | 17 47 52.9 | +3.2 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,4μm,7.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,6μm,9.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,3μm,8.7s | | | | | | |
| **GTA** | **Gaotai** | **15.27** | **351** | *e*P | **Pn** | **17 48 00.1** | **-1.8** |
| GTA | | | | sP | P | 17 48 07.5 | +0.7 |
| GTA | | | | S | **Sn** | **17 50 55.7** | **+4.5** |
| GTA | | | | LR | LR | | |
| | comp=Z,2μm,12.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,3μm,10.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,2μm,12.4s | | | | | | |
| **SURA** | **Surathani** | **15.36** | **192** | P | **Pn** | **17 48 04.2** | **+1.2** |
| **TIY** | **Taiyuan** | **15.69** | **29** | P | **Pn** | **17 48 07.3** | **0.0** |
| TIY | | | | S | **S** | **17 51 10.0** | **-6.5** |
| TIY | | | | pmax | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,8μm,15.2s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,5μm,10.9s | | | | | | |
| **PBA** | **Port Blair** | **15.80** | **219** | Pn | **Pn** | **17 48 09.0** | **+0.2** |
| PBA | | | | IAmb | IAmb | 17 48 10.9 | |
| | comp=Z,142nm,1.0s | | | | | | |
| **SRIT** | **Nakonsritamara** | **15.92** | **192** | P | **Pn** | **17 48 11.1** | **+0.8** |
| **NJ2** | **Nanjing** | **16.10** | **58** | *e*P | **Pn** | **17 48 12.0** | **-0.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,5μm,10.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,3μm,9.7s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2μm,10.9s | | | | | | |
| **HNS** | **HongShan** | **16.55** | **35** | ⇓P | **Pn** | **17 48 19.4** | **+1.1** |
| HNS | | | | *e*S | **Sn** | **17 51 23.5** | **+1.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,4μm,9.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,2μm,10.4s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,4μm,15.1s | | | | | | |
| **SSLB** | **Suanglung** | **16.59** | **88** | P | **P** | **17 48 25.9** | **+4.5** |
| | comp=Z,29nm,1.2s | | | | | | |
| **TIA** | **Tai'an** | **17.11** | **43** | P | **P** | **17 48 27.0** | **-0.1** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=Z,750nm,6.5s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,2μm,13.5s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,3μm,10.9s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,4μm,14.9s | | | | | | |
| **BTO** | **Baotou** | **17.34** | **19** | *e*P | **Pn** | **17 48 29.2** | **+0.8** |
| BTO | | | | pP | **pP** | **17 48 33.3** | **+0.2** |
| BTO | | | | sP | **sP** | **17 48 36.1** | **+1.5** |
| BTO | | | | PP | **PnPn** | **17 48 43.9** | **+5.4** |
| BTO | | | | S | **Sn** | **17 51 43.2** | **+1.8** |
| BTO | | | | sS | **S** | **17 51 47.4** | **-2.8** |
| BTO | | | | SS | **SnSn** | **17 52 03.4** | **+8.4** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,38nm,1.0s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,3μm,10.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,15μm,12.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,29μm,13.5s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,9μm,9.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **18.05** | **22** | *e*P | **P** | **17 48 37.8** | **+0.2** |
| HHC | | | | PP | **PnPn** | **17 48 49.4** | **+1.2** |
| HHC | | | | sS | S | 17 52 04.5 | -0.1 |
| HHC | | | | SS | **SnSn** | **17 52 19.1** | **+6.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,3μm,12.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,3μm,9.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,3μm,11.4s | | | | | | |
| **KULM** | **Kulim** | **19.02** | **187** | | **Pn** | **17 48 49.1** | **+0.1** |
| **BJT** | **Baijiatuau** | **19.29** | **32** | Pn | **P** | **17 48 51.7** | **+0.7** |
| **BJT** | **Baijiatuau** | **19.29** | **32** | P | **P** | **17 48 51.7** | **+0.7** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| **BJI** | **Beijing** | **19.31** | **32** | P | **Pn** | **17 48 52.8** | **+0.6** |
| BJI | | | | pP | **pP** | **17 48 55.3** | **+0.7** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,2μm,15.0s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,2μm,17.9s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,960nm,20.3s | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **20.86** | **198** | P | Pn | 17 49 10.0 | -0.7 |
| | comp=Z,179nm,1.0s | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **21.23** | **194** | P | **P** | **17 49 17.6** | **+5.3** |
| | comp=Z,84nm,1.2s | | | | | | |
| **DL2** | **Dalian** | **21.59** | **43** | P | **P** | **17 49 10.9** | **-5.1** |
| DL2 | | | | S | **S** | **17 53 05.5** | **-10** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,95nm,1.1s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=N,3μm,12.6s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=E,2μm,11.8s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,3μm,16.7s | | | | | | |
| **XLT** | **XiLinHaoTe** | **22.37** | **26** | *e*P | **P** | **17 49 25.1** | **+0.7** |
| XLT | | | | pP | sP | 17 49 29.5 | +0.1 |
| XLT | | | | PP | **PnPn** | **17 49 52.6** | **+5.3** |
| XLT | | | | S | **S** | **17 53 31.5** | **+1.2** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,6μm,13.7s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,3μm,12.1s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **22.41** | **177** | P | **P** | **17 49 25.5** | **+0.6** |
| MYKOM | | | | IAmb | IAmb | 17 49 36.0 | |
| | comp=Z,72nm,1.5s | | | | | | |
| **WMQ** | **Urumqi** | **23.08** | **331** | *e*P | **P** | **17 49 32.4** | **+0.5** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,330nm,5.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,1μm,21.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,2μm,20.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,680nm,19.7s | | | | | | |
| **JOW** | **Kunigami** | **23.10** | **78** | LR | LR | 17 58 44.8 | |
| | comp=Z,1μm,18.2s,baz=177,slow=37 | | | | | | |
| **GSI** | **Gunungsitoli** | **23.42** | **193** | P | **P** | **17 49 38.0** | **+2.5** |
| **GSI** | **Gunungsitoli** | **23.42** | **193** | P | **P** | **17 49 35.4** | **-0.1** |
| GSI | | | | IAmb | IAmb | 17 49 37.3 | |
| | comp=Z,71nm,1.4s | | | | | | |
| **GSI** | **Gunungsitoli** | **23.42** | **193** | P | **P** | **17 49 37.5** | **+2.0** |
| | comp=Z,38nm,1.9s | | | | | | |
| **SBUM** | **Sibu** | **23.55** | **156** | P | **P** | **17 49 37.4** | **+0.6** |
| **SONM** | **Songino Array** | **23.66** | **6** | P | **P** | **17 49 38.0** | **+0.3** |
| SONM | | | | IAmb | IAmb | 17 49 42.8 | |
| | comp=Z,62nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **23.66** | **6** | P | **P** | **17 49 37.8** | **+0.1** |
| | comp=Z,52nm,1.1s,baz=190,slow=10,SNR=62 | | | | | | |
| | comp=Z,52nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **23.66** | **6** | P | **P** | **17 49 38.0** | **+0.3** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,62nm,1.2s | | | | | | |
| **HYB** | **Hyderabad** | **23.66** | **258** | *e*P | **P** | **17 49 39.6** | **+1.7** |
| **ULN** | **Ulaanbaatar** | **23.75** | **7** | *de*P | **P** | **17 49 39.6** | **+0.9** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,64nm,1.7s | | | | | | |
| **KSM** | **Kuching** | **23.83** | **161** | P | **P** | **17 49 42.4** | **+2.9** |
| **KSM** | **Kuching** | **23.83** | **161** | P | **P** | **17 49 39.4** | **-0.1** |
| **BKNI** | **Bangkinang** | **23.90** | **184** | P | **P** | **17 49 42.6** | **+2.5** |
| **MYLDM** | **Lahad Datu** | **24.28** | **139** | P | **P** | **17 49 42.3** | **-1.4** |
| MYLDM | | | | IAmb | IAmb | 17 49 49.2 | |
| | comp=Z,88nm,1.4s | | | | | | |
| **TJN** | **Taejon** | **24.30** | **55** | P | **P** | **17 49 40.5** | **-3.2** |
| **TJN** | **Taejon** | **24.30** | **55** | P | **P** | **17 49 40.5** | **-3.2** |
| TJN | | | | pmax | pmax | | |
| | comp=Z,148nm,1.0s | | | | | | |
| **SNY** | **Shenyang** | **24.56** | **40** | ⇑P | **P** | **17 49 47.8** | **+1.8** |
| SNY | | | | pmax | pmax | | |

comp=Z,17nm,0.8s
SNY pmax pmax
comp=Z,460nm,5.0s
SNY LR LR
comp=Z,1μm,14.3s
SNY LR LR
comp=Z,2μm,15.6s
SNY LR LR
comp=Z,2μm,15.3s
**KSRS Korea Array 25.14 53** P **P** **17 49 50.9 -0.4**
comp=Z,3.9nm,0.9s,baz=242,slow=11,SNR=9.4
KSRS LR LR 17 59 43.2
comp=Z,392nm,19.7s,baz=260,slow=37
comp=Z,3.9nm,0.9s
**PDSI Padang 25.17 186** P **P** **17 49 54.1 +2.3**
comp=Z,16nm,0.9s
**SISI Saibi 25.73 189** P **P** **17 50 01.4 +4.5**
comp=Z,59nm,1.3s
**SHLS Shalkode 26.88 320** *e*P **P** **17 50 05.5 -1.8**
comp=Z,12nm,0.8s,baz=320
**SHLS Shalkode 26.88 320** *e*P **P** **17 50 05.4 -1.8**
SHLS pmax pmax
comp=Z,12nm,0.8s
**UZB Uzynbulak 27.13 320** *e*P **P** **17 50 09.9 +0.4**
baz=320
**UZB Uzynbulak 27.13 320** *e*P **P** **17 50 09.9 +0.4**
**ZSN Zaisan 27.16 333** *e*P **P** **17 50 09.9 +0.4**
baz=333
**ZSN Zaisan 27.16 333** *e*P **P** **17 50 09.9 +0.4**
**KSH Kashi 27.23 310** P **P** **17 50 12.4 +2.0**
KSH sP sP 17 50 19.4 +3.9
KSH pmax pmax
comp=Z,12nm,1.4s
KSH LR LR
comp=Z,3μm,16.8s
KSH LR LR
comp=Z,2μm,15.1s
KSH LR LR
comp=Z,1μm,16.5s
**MOY Mondy 27.35 358** *e*P **P** **17 50 12.0 +0.6**
MOY pmax pmax
comp=Z,20nm,1.9s
**NIL Nilore 27.41 297** P **P** **17 50 11.5 -0.5**
**NIL Nilore 27.41 297** P **P** **17 50 11.5 -0.5**
NIL pmax pmax
comp=Z,90nm,1.4s
**SATY Saty 27.45 319** *e*P **P** **17 50 12.4 +0.1**
baz=319
SATY *e*S **S** **17 54 53.9 +1.0**
baz=319
**SATY Saty 27.45 319** *e*P **P** **17 50 12.4 +0.1**
SATY *e*S **S** **17 54 53.9 +1.0**
**ZHN Zhinishke 27.49 319** *e*P **P** **17 50 13.2 +0.5**
baz=319
**ZHN Zhinishke 27.49 319** *e*P **P** **17 50 13.2 +0.5**
**MK31 Makanchi Array 27.81 329** P **P** **17 50 15.7 +0.3**
MK31 IAmb IAmb 17 50 21.6
comp=Z,26nm,1.1s
**MK31 Makanchi Array 27.81 329** *de*P **P** **17 50 15.7 +0.3**
**MKAR Makanchi Array 27.81 329** P **P** **17 50 16.1 +0.7**
comp=Z,11nm,0.8s,baz=140,slow=11,SNR=68
comp=Z,11nm,0.8s
**IRK Irkutsk 27.92 2** *e*P **P** **17 50 14.2 -2.1**
IRK pmax pmax
comp=Z,43nm,1.7s
**MAKZ Makanchi 27.97 329** P **P** **17 50 17.5 +0.7**
MAKZ IAmb IAmb 17 50 33.4
comp=Z,48nm,1.6s
**MAKZ Makanchi 27.97 329** P **P** **17 50 17.5 +0.7**
MAKZ pmax pmax
comp=Z,48nm,1.7s
**DGZ Jazzator, Alta 28.05 339** *i* P **P** **17 50 17.7 0.0**
DGZ pmax pmax
comp=Z,13nm,1.0s
**HIA Hailar 28.23 24** *i* P **P** **17 50 19.5 +0.3**
HIA pmax pmax
comp=Z,14nm,0.9s
**TNSS Tian-Shan 28.32 318** *e*P **P** **17 50 20.5 0.0**
baz=318
**TNSS Tian-Shan 28.32 318** *e*P **P** **17 50 20.4 0.0**
**MDOK Medeo 28.33 318** *e*P **P** **17 50 20.3 +0.1**
baz=318
**MDOK Medeo 28.33 318** *e*P **P** **17 50 20.3 +0.1**
**AAA Alma-Ata 28.43 318** *e*P **P** **17 50 21.5 +0.4**
comp=Z,22nm,1.0s,baz=318
**AAA Alma-Ata 28.43 318** *e*P **P** **17 50 21.4 +0.4**
AAA pmax pmax
comp=Z,22nm,1.0s
**ARXS Arharly 28.46 320** *e*P **P** **17 50 22.1 +0.8**
**TDK Taldyqorghan 28.61 322** *e*P **P** **17 50 22.9 +0.3**
comp=Z,10nm,0.8s,baz=322
**TDK Taldyqorghan 28.61 322** *e*P **P** **17 50 22.8 +0.3**
TDK pmax pmax
comp=Z,11nm,0.8s
**CHKK Chushkaly 28.75 319** *e*P **P** **17 50 23.9 +0.1**
baz=319
**CHKK Chushkaly 28.75 319** *e*P **P** **17 50 23.9 +0.1**
**KUU Kurty 29.16 319** *e*P **P** **17 50 28.1 +0.6**
comp=Z,6.8nm,0.6s,baz=318
**KUU Kurty 29.16 319** *e*P **P** **17 50 28.0 +0.6**
KUU pmax pmax
comp=Z,7.0nm,0.6s
**BNX BinXian 29.17 37** ⇓P **P** **17 50 27.6 +0.1**
BNX pmax pmax
comp=Z,15nm,0.9s
**FRU1 Bishkek 29.66 315** P **P** **17 50 30.7 -1.3**
**FRU1 Bishkek 29.66 315** P **P** **17 50 30.7 -1.3**
**AAK Ala-Archa 29.66 315** P **P** **17 50 31.6 -0.5**
AAK IAmb IAmb 17 50 44.6
comp=Z,14nm,0.8s
**AAK Ala-Archa 29.66 315** *ce*P **P** **17 50 33.3 +1.2**
AAK pmax pmax
comp=Z,20nm,1.3s
**MDJ Mudanjiang 29.75 40** P **P** **17 50 31.7 -0.9**
MDJ pmax pmax
comp=Z,9.0nm,1.5s
**SGDS Sogindy 29.98 317** *e*P **P** **17 50 35.0 +0.1**
baz=316
**SGDS Sogindy 29.98 317** *e*P **P** **17 50 34.9 +0.1**
**ARSB Arslanbob 30.07 312** P **P** **17 50 36.3 +0.6**
**ARSB Arslanbob 30.07 312** P **P** **17 50 36.3 +0.6**
**DRK Karamyk 30.18 308** P **P** **17 50 36.6 -0.3**
**DRK Karamyk 30.18 308** P **P** **17 50 36.6 -0.3**
**USA0B Ussuriysk Arra 30.98 43** P **P** **17 50 43.4 -0.1**
USA0B IAmb IAmb 17 50 47.1
comp=Z,16nm,1.2s
**USA0B Ussuriysk Arra 30.98 43** *i* P **P** **17 50 42.6 -0.9**
**USRK Ussuriysk Ar. 30.98 43** P **P** **17 50 42.5 -1.0**
**USRK Ussuriysk Ar. 30.98 43** P **P** **17 50 43.4 -0.2**
comp=Z,5.6nm,0.7s,baz=258,slow=7.3,SNR=15
USRK LR LR 18 03 52.7
comp=Z,1μm,20.4s,baz=205,slow=38
comp=Z,5.6nm,0.7s
**KBL Kabul 31.00 297** P **P** **17 50 43.5 -0.6**
KBL IAmb IAmb 17 51 11.9
comp=Z,33nm,1.5s
**KBL Kabul 31.00 297** P **P** **17 50 43.5 -0.6**
KBL pmax pmax
comp=Z,33nm,1.5s
**GAR Garm 31.11 306** P **P** **17 50 44.2 -0.7**
GAR IAmb IAmb 17 50 54.6
comp=Z,23nm,0.8s
**BTLS Baital 31.16 319** *e*P **P** **17 50 45.7 +0.6**
baz=319
**BTLS Baital 31.16 319** *e*P **P** **17 50 45.7 +0.6**
**SIMJ Simiganj 31.98 305** P **P** **17 50 53.1 +0.5**
SIMJ IAmb IAmb 17 51 00.7
comp=Z,28nm,1.0s
**HEH HeiHe 32.18 30** *e*P **P** **17 50 54.3 +0.3**
HEH pmax pmax
comp=Z,7.0nm,1.0s
HEH LR LR
comp=Z,3μm,14.3s
HEH LR LR
comp=Z,3μm,14.5s
HEH LR LR
comp=Z,2μm,11.8s
**KURBB Kurchatov Arra 32.30 331** P **P** **17 50 55.2 +0.2**
comp=Z,11nm,0.7s,baz=142,slow=9.1,SNR=50
comp=Z,11nm,0.7s
**KURK Kurchatov 32.32 331** P **P** **17 50 55.8 +0.6**
KURK IAmb IAmb 17 50 57.2
comp=Z,27nm,0.9s
**KURK Kurchatov 32.32 331** *ce*P **P** **17 50 55.0 -0.2**
KURK pmax pmax
comp=Z,42nm,1.3s

**KKAR Karatay Array 32.48 313** P **P** **17 50 57.1 +0.3**
**KKAR Karatay Array 32.48 313** IAmb IAmb 17 50 59.3
comp=Z,5.6nm,1.1s
**KKAR Karatay Array 32.48 313** P **P** **17 50 57.1 +0.3**
**ZAA0 Zalesovo Array 32.53 340** IAmb IAmb 17 51 01.0
comp=Z,29nm,0.9s
**ZALV Zalesovo Beam 32.53 340** P **P** **17 50 57.1 +0.1**
comp=Z,28nm,0.9s,baz=147,slow=8.5,SNR=61
ZALV LR LR 18 04 32.8
comp=Z,608nm,20.6s,baz=142,slow=37
comp=Z,28nm,0.9s
**ZALV Zalesovo Beam 32.53 340** *i* P **P** **17 50 57.0 0.0**
ZALV pmax pmax
comp=Z,28nm,0.9s
**MJAR Matsushiro Arr 32.69 60** P **P** **17 50 58.2 -0.5**
comp=Z,1.5nm,1.0s,baz=272,slow=8.3,SNR=4.6
MJAR LR LR 18 03 55.9
comp=Z,638nm,19.5s,baz=234,slow=36
comp=Z,1.5nm,1.0s
**CHM Chimkent 32.78 311** *e*P **P** **17 50 59.8 +0.3**
comp=Z,3.9nm,0.4s,baz=311
**CHM Chimkent 32.78 311** *e*P **P** **17 50 59.7 +0.3**
CHM pmax pmax
comp=Z,4.0nm,0.4s
**BRLS Borolday 32.91 313** *e*P **P** **17 51 00.6 +0.1**
baz=312
**BRLS Borolday 32.91 313** *e*P **P** **17 51 00.6 +0.1**
**JHJ Hachijo jima 2 33.46 66** LR LR 18 05 55.1
comp=Z,496nm,18.4s,baz=213,slow=39
**KAPI Kappang 33.49 148** LR LR 18 04 21.9
comp=Z,285nm,20.4s,baz=325,slow=36
**KLR Kul'dur 33.64 35** LR LR 18 06 44.9
comp=Z,2μm,19.2s,baz=222,slow=40
**KLR Kul'dur 33.64 35** *ce*P **P** **17 51 06.8 0.0**
KLR pmax pmax
comp=Z,22nm,1.0s
**JAGI Jajag, Banyuwa 34.41 160** P **P** **17 51 15.0 +1.3**
**ZEA Zeya 34.64 26** *e*P **P** **17 51 16.4 +1.0**
ZEA pmax pmax
comp=Z,10.0nm,1.5s
ZEA MLR MLR
comp=E,900nm,13.0s
ZEA MLR MLR
comp=N,900nm,12.0s
ZEA MLR MLR
comp=Z,2μm,14.0s
**BVAR Borovoye Array 37.68 328** P **P** **17 51 41.6 +0.2**
comp=Z,8.4nm,0.5s,baz=124,slow=9.4,SNR=33
comp=Z,8.4nm,0.5s
**BRVK Borovoye 37.75 328** P **P** **17 51 42.3 +0.3**
BRVK IAmb IAmb 17 51 47.4
comp=Z,17nm,0.8s
**BRVK Borovoye 37.75 328** *ce*P **P** **17 51 41.9 -0.1**
BRVK pmax pmax
comp=Z,16nm,0.7s
**ASAJ Asahikawa 37.92 49** P **P** **17 51 43.7 +0.2**
ASAJ pmax pmax
comp=Z,29nm,1.1s
**JKA Kamikawa-asahi 37.92 49** P **P** **17 51 43.7 +0.2**
JKA IAmb IAmb 17 52 26.1
comp=Z,29nm,1.1s
**YSS Yuzh-Sakhalins 38.98 44** *i* P **P** **17 51 50.9 -1.5**
YSS pmax pmax
comp=Z,17nm,1.1s
**FAKI Fak Fak 39.39 129** P **P** **17 51 56.4 +0.2**
**TYV Tymovskoe 40.49 39** *e*P **P** **17 52 04.6 -0.3**
TYV pmax pmax
comp=Z,10.0nm,0.9s
TYV pmax pmax
comp=Z,100nm,5.0s
**ABKAR Akbulak array 41.64 318** P **P** **17 52 14.8 +0.4**
**YAK Yakutsk 41.87 19** *e*P **P** **17 52 16.4 +0.3**
YAK *e*S **S** **17 58 33.0 -0.9**
YAK *e*SS **SS** **18 01 37.2 -2.8**
YAK *e*SSS SSS 18 02 11.5
YAK pmax pmax
comp=Z,15nm,0.8s
YAK pmax pmax
comp=N,4.0nm,0.9s
YAK pmax pmax
comp=E,5.0nm,1.0s
YAK smax smax
comp=N,41nm,2.2s
YAK smax smax
comp=E,59nm,2.8s
YAK MLR MLR
comp=Z,1μm,16.0s
YAK MLR MLR
comp=N,796nm,18.0s
**SVE Sverdlovsk 44.47 328** ⇓*e*P **P** **17 52 38.2 +1.0**
SVE pmax pmax
comp=Z,24nm,0.8s
**ARU Arti 45.30 327** P **P** **17 52 43.5 -0.4**
ARU IAmb IAmb 17 52 48.5
comp=Z,16nm,1.0s
**ARU Arti 45.30 327** *c* *i*P **P** **17 52 42.3 -1.6**
ARU 17 54 26.3
ARU S **S** **17 59 22.9 -1.3**
ARU SS **SS** **18 02 45.5 -1.4**
ARU pmax pmax
comp=Z,16nm,0.9s
**ARU Arti 45.30 327** P **P** **17 52 43.1 -0.8**
comp=Z,21nm,0.9s,comp=Z,345nm
**KNRA Kununurra 47.13 145** P **P** **17 52 57.6 -1.0**
**MBWA Marble Bar 48.10 159** P **P** **17 53 05.6 -0.6**
**PSA00 Pilbara Seismi 48.52 159** P **P** **17 53 11.9 +2.5**
**MAK Makhachkala 48.76 307** *e*P **P** **17 53 06.8 -4.3**
MAK *e* 17 54 57.9
MAK *e*S **S** **18 00 09.6 -4.4**
MAK pmax pmax
comp=Z,249nm,1.0s
**TIXI Tiksi 49.62 11** P **P** **17 53 16.7 -0.6**
TIXI IAmb IAmb 17 53 25.4
comp=Z,22nm,1.4s
**TIXI Tiksi 49.62 11** *ce*P **P** **17 53 15.5 -1.7**
TIXI pmax pmax
comp=Z,28nm,2.5s
**BELG Belogornoye 50.01 319** *i* P **P** **17 53 19.8 -0.7**
BELG pmax pmax
comp=Z,4.0nm,0.9s
**SEY Seymchan 50.61 27** *i* P **P** **17 53 24.3 -0.6**
SEY pmax pmax
comp=Z,6.0nm,0.7s
**GNI Garni 50.74 303** *ce*P **P** **17 53 27.5 +1.0**
GNI pmax pmax
comp=Z,18nm,1.3s
**RAYN Ar Rayn 52.06 282** P **P** **17 53 35.5 -1.0**
RAYN IAmb IAmb 17 53 38.6
comp=Z,15nm,0.8s
**RAYN Ar Rayn 52.06 282** ⇑P **P** **17 53 35.7 -0.8**
**KBZ Khabaz 52.16 307** P **P** **17 53 35.2 -1.5**
comp=Z,0.7nm,0.4s,baz=75,slow=15,SNR=1.6
comp=Z,0.7nm,0.4s
**KIV Kislovodsk 52.31 308** *e*P **P** **17 53 37.1 -1.0**
KIV pmax pmax
comp=Z,9.0nm,1.0s
KIV MLR MLR
comp=Z,256nm,16.0s
**SHA1 Shidzhatmaz 52.33 307** *ce*P **P** **17 53 38.7 +0.3**
**SOC Sochi 54.46 307** *e*P **P** **17 53 50.2 -3.6**
SOC *e* 17 55 57.2
SOC *e*PPP PPP 17 57 09.6
SOC *e*S **S** **18 01 28.6 -4.0**
SOC *e*SS **SS** **18 05 11.3 -3.5**
SOC *e*SSS SSS 18 07 15.7
SOC pmax pmax
comp=Z,36nm,0.8s
SOC MLR MLR
comp=Z,428nm,19.0s
**MORW Morawa 54.57 166** P **P** **17 53 59.3 +4.7**
comp=Z,31nm,1.2s
**MORW Morawa 54.57 166** P **P** **17 53 53.9 -0.7**
MORW IAmb IAmb 17 53 59.6
comp=Z,26nm,1.1s
**WRKA Warakurna 54.91 152** P **P** **17 54 00.4 +3.2**
**MOS Moscow 56.35 322** *e*P **P** **17 54 04.3 -2.8**
MOS pmax pmax
comp=Z,32nm,0.9s
**AS31 Alice Springs 56.43 145** P **P** **17 54 07.4 -0.7**
**ASAR Alice Springs 56.43 145** P **P** **17 54 06.8 -1.3**
**ASAR Alice Springs 56.43 145** P **P** **17 54 07.0 -1.1**
comp=Z,2.1nm,0.6s,baz=329,slow=7.4,SNR=28
comp=Z,2.1nm,0.6s
**OBN Obninsk 56.89 321** ⇑*e*P **P** **17 54 09.7 -1.3**
OBN *e* 17 55 05.2
OBN *e* 17 56 20.8

OBN pmax pmax
comp=Z,34nm,1.7s
OBN MLR MLR
comp=Z,502nm,19.0s
**QIS Mount Isa 57.20 138** P **P** **17 54 18.9 +5.3**
**BILL Bilibino 57.82 23** ⇑*e*P **P** **17 54 16.8 -0.6**
BILL *e* 17 55 11.1
BILL *e* 17 56 28.0
BILL pmax pmax
comp=Z,6.0nm,0.7s
BILL MLR MLR
comp=Z,1μm,18.0s
**ATD Arta Tunnel 58.07 269** LR LR 18 18 15.2
comp=Z,16nm,18.6s,baz=54,slow=35
**KMBL Kambalda 58.29 161** P **P** **17 54 25.3 +4.2**
comp=Z,40nm,1.1s
**KIRS Kirsehir-Merke 59.15 302** ⇑P **P** **17 54 26.6 -0.7**
**BRTR Keskin Array B 59.28 303** P **P** **17 54 26.5 -1.8**
comp=Z,1.5nm,1.0s,baz=140,slow=6.0,SNR=5.7
comp=Z,1.5nm,1.0s
**BRTR Keskin Array B 59.28 303** *i* P **P** **17 54 27.7 -0.6**
BRTR pmax pmax
comp=Z,2.0nm,1.0s
**BR105 Keskin Array S 59.30 303** P **P** **17 54 27.8 -0.6**
comp=Z,2.8nm,1.1s
**OOD Oodnadatta 60.73 147** P P 17 54 43.0 +5.1
**CTA Charters Tower 61.13 132** P **P** **17 54 45.3 +4.4**
comp=Z,1.0nm,1.6s
**CTA Charters Tower 61.13 132** P **P** **17 54 40.0 -0.9**
comp=Z,0.4nm,0.8s,baz=343,slow=10.0,SNR=2.8
**CTA Charters Tower 61.13 132** P **P** **17 54 40.0 -0.9**
**AK09 Malin Array Si 61.29 316** P **P** **17 54 41.0 -0.6**
AK09 pP **sP** **17 54 46.3 -0.6**
**AK08 Malin Array Si 61.31 316** P **P** **17 54 41.1 -0.6**
**AK10 Malin Array Si 61.31 316** P **P** **17 54 41.0 -0.7**
**AK03 Malin Array Si 61.33 316** P **P** **17 54 41.1 -0.7**
**AKASG Malin Array Be 61.33 316** P **P** **17 54 40.9 -0.9**
comp=Z,5.2nm,0.7s,baz=76,slow=6.3,SNR=13
comp=Z,5.2nm,0.7s
**AKASG Malin Array Be 61.33 316** *i* P **P** **17 54 40.9 -0.9**
AKASG pmax pmax
comp=Z,7.0nm,0.7s
**AKBB Malin Array Si 61.33 316** IAmb IAmb 17 54 44.4
comp=Z,10nm,0.8s
**AKBB Malin Array Si 61.33 316** *ce*P **P** **17 54 40.5 -1.3**
AKBB pmax pmax
comp=Z,12nm,0.9s
**AKBB Malin Array Si 61.33 316** P **P** **17 54 40.6 -1.3**
**AK01 Malin Array Si 61.33 316** P **P** **17 54 40.9 -1.0**
**KIEV Kiev 61.34 316** P **P** **17 54 39.9 -2.0**
KIEV IAmb IAmb 17 54 44.5
comp=Z,9.1nm,0.8s
**KIEV Kiev 61.34 316** ⇑P **P** **17 54 41.2 -0.8**
**KIEV Kiev 61.34 316** P **P** **17 54 39.9 -2.0**
KIEV pmax pmax
comp=Z,9.0nm,0.8s
**KIEV Kiev 61.34 316** P **P** **17 54 41.1 -0.8**
**AK02 Malin Array Si 61.34 316** P **P** **17 54 40.9 -1.0**
**AK05 Malin Array Si 61.34 316** P **P** **17 54 41.1 -0.8**
**AK07 Malin Array Si 61.35 316** P **P** **17 54 40.9 -1.1**
**AK04 Malin Array Si 61.36 316** P **P** **17 54 41.0 -1.1**
**MNK Minsk 61.91 320** *i* P **P** **17 54 42.9 -2.8**
MNK *i* 17 55 23.3
MNK *i* 17 56 59.2
MNK *i* S **S** **18 03 07.9 -1.6**
MNK *i* 18 04 34.8
MNK *i* SS **SS** **18 07 11.5 +0.2**
MNK pmax pmax
comp=Z,9.0nm,0.7s
MNK pmax pmax
comp=N,15nm,0.9s
MNK pmax pmax
comp=E,14nm,0.9s
MNK MLR MLR
comp=N,399nm,21.0s
MNK MLR MLR
comp=Z,283nm,20.0s
MNK MLR MLR
comp=E,558nm,18.0s
**MI30 MI30,Zelenitsa 61.98 316** P **P** **17 54 45.1 -1.1**
**SORM Soroca 62.12 313** ⇑P **P** **17 54 46.4 -0.8**
**SORM Soroca 62.12 313** ⇑P **P** **17 54 46.4 -0.8**
**JURR Jurilovca 62.15 309** ⇑P **P** **17 54 50.0 +2.5**
**MI29 MI29, Kamyanyy 62.22 316** P **P** **17 54 46.8 -1.1**
**MI28 Mi28,Pidlybu 62.29 316** P **P** **17 54 47.2 -1.1**
**LUBAR Lubar, Ukraine 62.33 315** P **P** **17 54 47.5 -1.1**
**TPGR Topolog 62.46 309** ⇑P **P** **17 54 48.9 -0.7**
**SGF Sodankyl 62.54 335** P **P** **17 54 50.9 +1.2**
**CFR Carcaliu 62.62 310** ⇓P **P** **17 54 52.0 +1.4**
**CFR Carcaliu 62.62 310** ⇓P **P** **17 54 52.0 +1.4**
**FINES FINESS Array B 62.64 328** P **P** **17 54 50.1 -0.3**
**FINES FINESS Array B 62.64 328** P **P** **17 54 50.3 -0.1**
comp=E,3.8nm,0.7s,baz=88,slow=6.7,SNR=15
comp=E,3.8nm,0.7s
**FINES FINESS Array B 62.64 328** *i* P **P** **17 54 53.9 +3.4**
FINES pmax pmax
comp=Z,6.0nm,0.8s
**OUL Oulu 62.72 332** P **P** **17 54 54.0 +3.1**
**HARR Harsova 62.83 309** ⇑P **P** **17 54 52.2 +0.2**
**HARR Harsova 62.83 309** ⇑P **P** **17 54 52.2 +0.2**
**ARCES ARCESS Array B 63.02 337** P **P** **17 54 51.8 -1.1**
comp=Z,6.3nm,0.9s,baz=85,slow=7.2,SNR=13
comp=Z,6.3nm,0.9s
**COSR Cosmesti PH 63.10 311** ⇓P **P** **17 54 53.8 0.0**
**ODBI Odobesti 63.29 311** ⇓P **P** **17 54 56.5 +1.4**
**KMPD K-Podol'skiy 63.32 314** P **P** **17 54 54.1 -1.1**
**RNPP9 Sopachiv 63.36 317** P **P** **17 54 54.2 -1.2**
**VRI Vrincioaia 63.50 311** ⇓P **P** **17 54 57.3 +0.8**
**VRI Vrincioaia 63.50 311** ⇓P **P** **17 54 57.3 +0.8**
**PLOR Plostina 63.56 311** ⇑P **P** **17 54 57.6 +0.7**
**PLOR Plostina 63.56 311** ⇑P **P** **17 54 57.6 +0.7**
**ONER Baraj Valea Uz 63.66 311** ⇑P **P** **17 54 58.6 +1.0**
**ISR Istrita 63.74 310** ⇓P **P** **17 54 59.6 +1.4**
**ISR Istrita 63.74 310** ⇓P **P** **17 54 59.6 +1.4**
**COVR Voineasa-Covas 63.87 311** ⇓P **P** **17 54 59.1 +0.2**
**NEHR Nehoiu 63.87 310** ⇓P **P** **17 55 02.1 +3.1**
**TURR Turia 63.97 311** ⇑P **P** **17 55 00.1 +0.5**
**MLR Muntele Rosu 64.10 310** P **P** **17 55 00.2 -0.4**
comp=Z,14nm,0.8s,baz=112,slow=2.7,SNR=14
comp=Z,14nm,0.8s
**MLR Muntele Rosu 64.10 310** ⇓P **P** **17 55 01.5 +0.9**
**MLR Muntele Rosu 64.10 310** ⇓P **P** **17 55 01.5 +0.9**
**OZUR 64.12 311** ⇓P **P** **17 55 02.5 +1.9**
**BURAR Bucovina Array 64.28 313** P **P** **17 55 01.0 -0.7**
**BURAR Bucovina Array 64.28 313** ⇓P **P** **17 55 01.8 +0.1**
**BURAR Bucovina Array 64.28 313** ⇓P **P** **17 55 01.8 +0.1**
**BUR08 Bucovina Ar. S 64.28 313** P **P** **17 55 01.0 -0.7**
BUR08 IAmb IAmb 17 55 07.9
comp=Z,7.1nm,1.1s
**DOPR Dopca 64.41 311** ⇑P **P** **17 55 03.8 +1.2**
**QLP Quilpie 64.50 139** P P 17 55 08.7 +5.5
**VOIR 64.73 310** ⇑P **P** **17 55 03.5 -1.2**
**LVV L'vov 64.73 315** *e*P **P** **17 55 04.1 -0.4**
**MARR Marisel-Cluj 65.84 312** ⇑P **P** **17 55 12.2 +0.3**
**KOLS Kolonicke sedl 66.01 315** *e*P **P** **17 55 15.4 +2.6**
KOLS pmax pmax
comp=Z,3.0nm,0.7s
**KOLS Kolonicke sedl 66.01 315** *e*P **P** **17 55 15.4 +2.6**
**DRGR 66.10 312** ⇑P **P** **17 55 13.9 +0.4**
**DRGR 66.10 312** ⇑P **P** **17 55 13.9 +0.4**
**DEV Deva 66.14 311** ⇓P **P** **17 55 14.6 +0.9**
**DEV Deva 66.14 311** ⇓P **P** **17 55 14.6 +0.9**
**HERR Herculane 66.67 310** ⇓P **P** **17 55 17.6 +0.5**
**SURR Surduc 66.69 311** ⇑P **P** **17 55 17.6 +0.4**
**SIRR Siria 66.91 312** ⇑P **P** **17 55 19.0 +0.3**
**STKA Stephens Creek 67.05 145** P **P** **17 55 18.6 -0.9**
comp=Z,5.0nm,0.9s,baz=320,slow=9.4,SNR=3.6
STKA LR LR 18 28 41.2
comp=Z,207nm,18.8s,baz=300,slow=40
comp=Z,5.0nm,0.9s
**BZS Buzias 67.07 311** ⇑P **P** **17 55 21.9 +2.3**
**BZS Buzias 67.07 311** ⇑P **P** **17 55 21.9 +2.3**
**MDVR Moldovita 67.18 310** ⇓P **P** **17 55 20.9 +0.5**
**NIE Niedzica 67.19 315** *e*P **P** **17 55 21.5 +1.1**
**OJC Ojcow 67.36 316** *e*P **P** **17 55 21.1 -0.3**
**OJC Ojcow 67.36 316** P **P** **17 55 21.6 +0.2**
OJC IAmb IAmb 17 55 27.4
comp=Z,9.8nm,1.0s
**OJC Ojcow 67.36 316** P **P** **17 55 21.6 +0.2**
OJC pmax pmax
comp=Z,10.0nm,1.0s
**PSZ Piszkesteto 67.75 314** IAmb IAmb 17 55 26.5
comp=Z,11nm,1.1s
**PSZ Piszkesteto 67.75 314** ⇓P **P** **17 55 24.7 +0.6**

| | | | | | | |
|---|---|---|---|---|---|---|
| PSZ | Piszkesteto | 67.75 | 314 | ⇓P | P | 17 55 24.7 +0.6 |
| LODK | Lodwar | 68.06 | 264 | P | P | 17 55 25.7 -0.8 |
| FNA | Florina | 68.31 | 306 | IAmb | IAmb | 17 55 29.2 |
| | comp=Z,6.4nm,0.8s | | | | | |
| VYHS | Vyhne | 68.33 | 315 | *e*P | P | 17 55 27.3 -0.2 |
| VYHS | | | | pmax | pmax | |
| | comp=Z,8.0nm,1.3s | | | | | |
| VYHS | Vyhne | 68.33 | 315 | *e*P | P | 17 55 27.3 -0.2 |
| FRGS | Fruska Gora | 68.41 | 311 | ⇓P | P | 17 55 28.3 +0.1 |
| MAUC | Maruska | 68.78 | 326 | *e*P | P | 17 55 33.1 +2.7 |
| HFS | Hagfors | 68.81 | 328 | P | P | 17 55 29.7 -0.6 |
| | comp=Z,5.9nm,0.9s,baz=98,slow=3.1,SNR=9.4 | | | | | |
| | comp=Z,5.9nm,0.9s | | | | | |
| MORC | Moravsky Berou | 68.87 | 316 | *e*P | P | 17 55 31.8 +0.8 |
| MORC | Moravsky Berou | 68.87 | 316 | ⇓P | P | 17 55 32.0 +1.0 |
| MORC | Moravsky Berou | 68.87 | 316 | ⇓P | P | 17 55 32.0 +1.0 |
| MORH | Mrgy, Hungar | 68.97 | 312 | ⇑P | P | 17 55 30.9 -0.6 |
| JAVC | Velka Javorina | 69.00 | 315 | *e*P | P | 17 55 33.0 +1.2 |
| CMSA | Cobar Meteorol | 69.03 | 142 | P | P | 17 55 37.3 +5.3 |
| PUK | Puka | 69.09 | 308 | P | P | 17 55 32.0 -0.6 |
| PUK | | | | IAmb | IAmb | 17 55 34.8 |
| | comp=Z,11nm,0.9s | | | | | |
| KRLC | Kraliky | 69.28 | 317 | *e*P | P | 17 55 35.9 +2.4 |
| KRLC | Kraliky | 69.28 | 317 | *e*P | P | 17 55 35.9 +2.4 |
| KSP | Ksiaz | 69.41 | 317 | *e*P | P | 17 55 34.8 +0.5 |
| PDG | Podgorica | 69.45 | 308 | ⇓P | P | 17 55 34.3 -0.3 |
| DPC | Dobruska-Polom | 69.51 | 317 | *e*P | P | 17 55 37.7 +2.8 |
| DPC | Dobruska-Polom | 69.51 | 317 | *e*P | P | 17 55 37.7 +2.8 |
| NC405 | NORSAR Array S | 69.55 | 329 | P | P | 17 55 34.3 -0.7 |
| VRAC | Vranov | 69.58 | 316 | *e*P | P | 17 55 35.6 +0.3 |
| VRAC | Vranov | 69.58 | 316 | P | P | 17 55 35.4 +0.1 |
| | comp=Z,10nm,0.9s,baz=76,slow=6.6,SNR=11 | | | | | |
| | comp=Z,10nm,0.9s | | | | | |
| KRUC | Moravsky | 69.77 | 316 | *e*P | P | 17 55 36.6 +0.1 |
| NB2 | NORSAR Subarra | 69.81 | 329 | P | P | 17 55 35.1 -1.5 |
| | comp=Z,1.1nm,0.5s,baz=75,slow=6.2 | | | | | |
| NB2 | NORSAR Subarra | 69.81 | 329 | P | P | 17 55 35.0 -1.5 |
| NOA | NORSAR Array B | 69.81 | 329 | P | P | 17 55 35.5 -1.1 |
| | comp=Z,1.4nm,0.5s,baz=76,slow=6.2,SNR=12 | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | |
| RONA | Rosalia, Austr | 70.17 | 314 | *e*P | P | 17 55 39.2 +0.2 |
| | comp=Z,7.1nm,1.1s | | | | | |
| CONA | Conrad Observa | 70.39 | 315 | *e*P | P | 17 55 40.6 +0.1 |
| | comp=Z,17nm,1.6s,SNR=11 | | | | | |
| ARSA | Arzberg | 70.79 | 314 | *e*P | P | 17 55 42.0 -0.8 |
| | comp=Z,6.2nm,1.7s | | | | | |
| BRG | Berggiesshubel | 70.85 | 318 | *e*P | P | 17 55 43.3 +0.3 |
| BRG | | | | Amp | | 17 55 45.9 |
| | comp=Z,2.6nm,0.8s | | | | | |
| VOI | Vohitsoka | 71.23 | 234 | P | P | 17 55 46.0 +0.1 |
| SOKA | Soboth | 71.27 | 313 | *e*P | P | 17 55 44.5 -1.3 |
| | comp=Z,5.8nm,1.3s | | | | | |
| CLL | Collm | 71.30 | 318 | *i* P | P | 17 55 46.0 +0.2 |
| | comp=Z,21nm,1.7s | | | | | |
| CLL | Collm | 71.30 | 318 | *i* P | P | 17 55 46.0 +0.2 |
| CLL | | | | pmax | pmax | |
| | comp=Z,21nm,1.7s | | | | | |
| MOA | Molln | 71.45 | 315 | *e*P | P | 17 55 46.5 -0.3 |
| | comp=Z,6.3nm,1.4s | | | | | |
| GERES | GERESS Array B | 71.54 | 316 | P | P | 17 55 47.0 -0.3 |
| | comp=Z,1.5nm,0.7s,baz=141,slow=8.6,SNR=12 | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | |
| KHC | Kasperske Hory | 71.54 | 316 | *e*P | P | 17 55 47.2 -0.1 |
| KHC | Kasperske Hory | 71.54 | 316 | *ce*P | P | 17 55 48.1 +0.8 |
| KHC | | | | pmax | pmax | |
| | comp=Z,12nm,1.3s | | | | | |
| OBKA | Obir | 71.63 | 313 | *e*P | P | 17 55 47.5 -0.5 |
| | comp=Z,5.0nm,1.2s | | | | | |
| BIOA | Bad Ischl, Aus | 71.90 | 315 | *e*P | P | 17 55 49.4 -0.1 |
| | comp=Z,7.2nm,1.0s | | | | | |
| TIP | Timpagrande | 72.16 | 305 | IAmb | IAmb | 17 56 11.5 |
| | comp=Z,11nm,1.3s | | | | | |
| KBA | Koelnbreinsper | 72.27 | 314 | *e*P | P | 17 55 51.3 -0.6 |
| | comp=Z,4.2nm,1.2s | | | | | |
| PRED | Cave del Predi | 72.30 | 313 | IAmb | IAmb | 17 56 11.6 |
| | comp=Z,13nm,1.5s | | | | | |
| LESA | Schwarzleotal | 72.60 | 315 | *e*P | P | 17 55 53.5 -0.3 |
| | comp=Z,11nm,1.2s | | | | | |
| ABTA | Abfaltersbach | 72.91 | 314 | *e*P | P | 17 55 54.3 -1.4 |
| | comp=Z,3.3nm,1.2s | | | | | |
| WTTA | Wattenberg | 73.32 | 315 | *e*P | P | 17 55 56.5 -1.7 |
| | comp=Z,5.3nm,1.1s | | | | | |
| WATA | Walderalm | 73.34 | 315 | *e*P | P | 17 55 56.7 -1.6 |
| | comp=Z,3.6nm,1.1s | | | | | |
| SQTA | Sankt Quirin | 73.61 | 315 | *e*P | P | 17 55 59.1 -0.8 |
| | comp=Z,13nm,0.9s,SNR=7.9 | | | | | |
| MOTA | Moosalm | 73.64 | 315 | *e*P | P | 17 55 59.3 -0.7 |
| | comp=Z,15nm,1.0s | | | | | |
| RETA | Reutte | 73.82 | 315 | *e*P | P | 17 56 00.2 -0.8 |
| | comp=Z,9.4nm,1.4s | | | | | |
| MBAR | Mbarara | 73.94 | 262 | P | P | 17 56 03.5 +1.2 |
| MBAR | Mbarara | 73.94 | 262 | P | P | 17 56 03.6 +1.2 |
| MBAR | | | | pmax | pmax | |
| | comp=Z,10.0nm,1.2s | | | | | |
| FETA | Feichten | 73.99 | 315 | *e*P | P | 17 56 01.6 -0.5 |
| | comp=Z,18nm,1.5s,SNR=5.4 | | | | | |
| DAVA | Damuels | 74.45 | 315 | *e*P | P | 17 56 03.4 -1.3 |
| | comp=Z,4.2nm,1.1s | | | | | |
| DAVOX | Davos/Dischmat | 74.62 | 315 | P | P | 17 56 05.6 -0.1 |
| | comp=Z,8.6nm,0.7s,baz=81,slow=3.5,SNR=17 | | | | | |
| | comp=Z,8.6nm,0.7s | | | | | |
| LPG | La Plagne | 77.10 | 314 | *e*P | P | 17 56 19.7 -0.4 |
| LPL | La Plagne | 77.11 | 314 | *e*P | P | 17 56 19.6 -0.5 |
| DZM | Mont Dzumac | 77.12 | 122 | *e*LR | LR | 18 20 02.6 |
| | comp=Z,336nm,26.8s | | | | | |
| KDAK | Kodiak Island | 77.15 | 32 | P | P | 17 56 18.2 -1.6 |
| | comp=Z,13nm,1.1s,baz=294,slow=4.5,SNR=11 | | | | | |
| | comp=Z,13nm,1.1s | | | | | |
| LOR | Lormes | 78.28 | 317 | *e*P | P | 17 56 27.8 +1.4 |
| SMF | Signal de Mont | 78.54 | 316 | *e*P | P | 17 56 29.5 +1.7 |
| SSF | Saint Saulge | 78.59 | 317 | *e*P | P | 17 56 29.8 +1.8 |
| VIVF | Saint-Julien-l | 78.70 | 314 | *e*P | P | 17 56 27.9 -0.8 |
| AVF | Avril sur Loir | 78.79 | 316 | *e*P | P | 17 56 28.3 -0.8 |
| KEST | Kesra | 78.86 | 304 | P | P | 17 56 28.1 -1.8 |
| | comp=Z,1.7nm,0.8s,baz=342,slow=11,SNR=3.7 | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | |
| EKA | Eskdalemuir Ar | 78.90 | 326 | P | P | 17 56 28.4 -1.1 |
| | comp=Z,2.4nm,0.7s,baz=58,slow=6.6,SNR=6.7 | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | |
| ESDC | Sonseca Array | 86.73 | 312 | P | P | 17 57 11.9 +1.3 |
| | comp=Z,0.7nm,0.9s,baz=32,slow=4.1,SNR=5.1 | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | |
| YKA | Yellowknife Ar | 88.51 | 16 | P | P | 17 57 17.7 -0.9 |
| | comp=Z,0.5nm,0.6s,baz=25,slow=7.6,SNR=1.9 | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | |
| LBTB | Lobatse | 89.36 | 242 | LR | LR | 18 33 35.8 |
| | comp=Z,184nm,19.2s,baz=64,slow=33 | | | | | |
| TORD | Torodi Ar. Bea | 94.52 | 286 | P | P | 17 57 46.0 -1.4 |
| | comp=Z,0.3nm,0.4s,baz=64,slow=40,SNR=2.1 | | | | | |
| TORD | | | | PP | PP | 18 01 32.9 -2.1 |
| | comp=Z,0.9nm,0.9s,baz=69,slow=8.1,SNR=3.5 | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | |
| PPT2 | Papeete2 | 112.72 | 100 | *e*LR | LR | 18 36 34.1 |
| | comp=Z,250nm,22.8s | | | | | |
| PPT2 | | | | *e*LR | LR | 18 36 36.5 |
| | comp=Z,215nm,24.0s | | | | | |
| QSPA | South Pole Qui | 114.11 | 180 | PKiKP | PKPdf | 18 03 04.2 -0.8 |
| | comp=Z,1.3nm,0.9s,baz=225,slow=0.5,SNR=6.7 | | | | | |
| TBI | Tubuai | 114.62 | 106 | *e*LR | LR | 18 37 29.4 |
| | comp=Z,788nm,28.5s | | | | | |
| TROLL | Troll, Antarti | 116.08 | 200 | ⇑PKiKP | PKPdf | 18 03 06.6 -2.2 |
| | comp=Z,31nm,0.6s | | | | | |
| VNA2 | Neumayer--Watz | 119.35 | 201 | ⇑PKiKP | PKPdf | 18 03 13.7 -1.2 |
| | comp=Z,1.2nm,0.7s,baz=133,slow=1.4 | | | | | |
| VNA1 | Neumayer--Stat | 119.69 | 201 | ⇑PKiKP | PKPdf | 18 03 13.3 -2.2 |
| | comp=Z,1.8nm,0.7s | | | | | |
| VNA3 | Neumayer Olymp | 120.01 | 200 | ⇑PKiKP | PKPdf | 18 03 14.8 -1.4 |
| | comp=Z,0.9nm,0.7s | | | | | |
| TXAR | Lajitas Array | 120.91 | 27 | PKP | PKiKP | 18 03 19.6 +0.1 |
| | comp=Z,0.3nm,0.5s,baz=288,slow=1.5,SNR=3.6 | | | | | |
| TXAR | | | | SKP | SKPdf | 18 06 54.0 -1.1 |
| | comp=Z,0.1nm,0.5s,baz=119,slow=1.6,SNR=3.6 | | | | | |
| RKT | Rikitea | 127.42 | 101 | *e*LR | LR | 18 43 20.5 |
| | comp=Z,903nm,27.2s | | | | | |
| ROSC | El Rosal | 150.90 | 354 | PKPbc | PKPbc | 18 04 20.1 -0.3 |
| | comp=Z,27nm,0.6s,baz=164,slow=11,SNR=11 | | | | | |
| BDFB | Brasilia | 151.30 | 282 | PKPab | PKPab | 18 04 27.0 -1.9 |
| | comp=Z,2.8nm,0.7s,baz=45,slow=11,SNR=3.9 | | | | | |
| BDFB | Brasilia | 151.30 | 282 | PKIKP | PKPab | 18 04 27.0 -1.9 |
| PLCA | Paso Flores | 162.70 | 197 | PKPab | PKPab | 18 05 17.5 +0.5 |
| | comp=Z,1.1nm,0.5s,baz=333,slow=15,SNR=3.4 | | | | | |
| LPAZ | La Paz | 168.35 | 312 | PKP | PKPdf | 18 04 32.9 -1.8 |
| | comp=Z,0.4nm,0.4s,baz=140,slow=2.4,SNR=2.9 | | | | | |

*IDC **12** 17:49:21.1±0.9,24˚.02N×102˚.36E,h0km,mb4.0/15,*

*mbtmp4.0/16,Error ellipse: s-maj=22.8km s-min=19.8km az=60.0*

*NEIC **12** 17:49:23.8±2.4,24˚.04N±0˚.08×102˚.3E±0˚.1,h10km±2km, mb4.4/12,Error ellipse: s-maj=21.3km s-min=13.6km az=271.0*

**ISC 12 17:49:22.4**±0.6,**23˚.98N**±0˚.08×**102˚.30E**±0˚.08,**h8**km,**n35,** σ1§**17**/35,**mb4.2**/20,**Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SLVN | Son La | 3.02 | 150 | Pn | | Pn | | 17 50 12.2 | +1.7 |
| CMAR | Chiang Mai Arr | 6.32 | 210 | Pn | | Pn | | 17 50 56.5 | +0.5 |
| | 3.5nm,1.0s,baz=24,slow=14,SNR=0.8 | | | | | | | | |
| ENH | Enshi | 8.96 | 44 | Pn | | Pn | | 17 51 32.2 | +0.1 |
| YHNB | Yeheng | 17.40 | 84 | P | | P | | 17 53 27.9 | +0.9 |
| NACB | Ninganchiao | 17.62 | 85 | P | | P | | 17 53 30.4 | +1.0 |
| GSI | Gunungsitoli | 23.00 | 192 | P | | P | | 17 54 25.5 | -2.3 |
| GSI | | | | | IAmb | IAmb | | 17 54 30.4 | |
| | comp=Z,21nm,1.3s | | | | | | | | |
| SONM | Songino Array | 24.03 | 7 | P | | P | | 17 54 36.8 | -1.2 |
| SONM | | | | | IAmb | IAmb | | 17 54 38.1 | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| SONM | Songino Array | 24.03 | 7 | P | | P | | 17 54 36.7 | -1.2 |
| | comp=Z,5.1nm,0.8s,baz=188,slow=9.3,SNR=8.0 | | | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| KSAR | Wonju Array Be | 25.67 | 53 | P | | P | | 17 54 50.8 | -1.9 |
| KSRS | Korea Array | 25.70 | 53 | P | | P | | 17 54 52.2 | -0.8 |
| | comp=Z,0.6nm,0.6s,baz=240,slow=10.0,SNR=2.6 | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | |
| MK31 | Makanchi Array | 27.85 | 330 | P | | P | | 17 55 11.5 | -0.9 |
| MKAR | Makanchi Array | 27.85 | 330 | P | | P | | 17 55 13.4 | +1.0 |
| MKAR | Makanchi Array | 27.85 | 330 | P | | P | | 17 55 11.5 | -0.9 |
| | comp=Z,2.5nm,0.9s,baz=139,slow=11,SNR=5.1 | | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| USRK | Ussuriysk Ar. | 31.54 | 43 | P | | P | | 17 55 44.5 | -0.5 |
| | comp=Z,1.1nm,0.7s,baz=248,slow=7.6,SNR=2.9 | | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| KURBB | Kurchatov Arra | 32.35 | 331 | P | | P | | 17 55 52.3 | +0.2 |
| | comp=Z,1.7nm,0.7s,baz=138,slow=9.4,SNR=5.0 | | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | |
| KK31 | Karatay Array | 32.37 | 314 | P | | P | | 17 55 55.5 | +3.1 |
| KKAR | Karatay Array | 32.37 | 314 | P | | P | | 17 55 52.9 | +0.5 |
| KURK | Kurchatov | 32.38 | 332 | P | | P | | 17 55 51.8 | -0.5 |
| KURK | | | | | IAmb | IAmb | | 17 55 55.3 | |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| ZAA0 | Zalesovo Array | 32.68 | 341 | P | | P | | 17 55 55.4 | +0.5 |
| ZALV | Zalesovo Beam | 32.68 | 341 | P | | P | | 17 55 54.6 | -0.3 |
| ZALV | Zalesovo Beam | 32.68 | 341 | P | | P | | 17 55 55.0 | 0.0 |
| | comp=Z,4.4nm,0.8s,baz=140,slow=9.5,SNR=8.4 | | | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| MJAR | Matsushiro Arr | 33.26 | 59 | P | | P | | 17 55 59.2 | -1.1 |
| | comp=Z,0.9nm,0.9s,baz=187,slow=4.9,SNR=2.4 | | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | | |
| BRVK | Borovoye | 37.78 | 329 | P | | P | | 17 56 40.5 | +1.6 |
| BRVK | | | | | IAmb | IAmb | | 17 56 45.8 | |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| YSS | Yuzh-Sakhalins | 39.54 | 44 | P | | P | | 17 56 52.7 | -1.0 |
| YSS | | | | | IAmb | IAmb | | 17 57 04.3 | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| ABKAR | Akbulak array | 41.57 | 318 | P | | P | | 17 57 10.2 | -0.3 |
| ARU | Arti | 45.32 | 327 | P | | P | | 17 57 41.3 | +0.6 |
| ARU | | | | | IAmb | IAmb | | 17 57 47.1 | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| ASAR | Alice Springs | 56.43 | 145 | P | | P | | 17 59 05.1 | +0.4 |
| | comp=Z,0.3nm,0.5s,baz=326,slow=7.7,SNR=8.0 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |
| AKASG | Malin Array Be | 61.24 | 316 | P | | P | | 17 59 37.6 | -0.2 |
| | comp=Z,0.8nm,0.5s,baz=80,slow=6.0,SNR=4.0 | | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | | |
| FINES | FINESS Array B | 62.67 | 328 | P | | P | | 17 59 46.2 | -1.1 |
| | comp=Z,3.4nm,0.9s,baz=143,slow=6.7,SNR=3.7 | | | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | | |
| HFS | Hagfors | 68.84 | 328 | P | | P | | 18 00 27.2 | +0.1 |
| | comp=Z,4.1nm,1.0s,baz=188,slow=9.0,SNR=2.8 | | | | | | | | |
| | comp=Z,4.1nm,1.0s | | | | | | | | |
| NB2 | NORSAR Subarra | 69.84 | 329 | P | | P | | 18 00 33.3 | -0.1 |
| | comp=Z,0.7nm,0.7s,baz=77,slow=6.5 | | | | | | | | |
| NOA | NORSAR Array B | 69.84 | 329 | P | | P | | 18 00 33.6 | +0.2 |
| | comp=Z,1.2nm,0.7s,baz=77,slow=6.2,SNR=4.8 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| GERES | GERESS Array B | 71.45 | 316 | P | | P | | 18 00 45.1 | +1.6 |
| | comp=Z,0.4nm,0.7s,baz=146,slow=9.7,SNR=2.2 | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | |
| DAVOX | Davos/Dischmat | 74.51 | 315 | P | | P | | 18 01 03.0 | +1.2 |
| | comp=Z,1.7nm,0.6s,baz=115,slow=12,SNR=4.0 | | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| BOSA | Boshof | 90.70 | 239 | P | | P | | 18 02 24.7 | -1.5 |
| | comp=Z,2.1nm,0.9s,baz=68,slow=7.6,SNR=3.1 | | | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |

*ATH **12** 17:53:31.7,38˚.81N×26˚.51E,h19km±7km,ML2.4/4, Manual Solution by M.Papanikolaou This location: 2020/06/28 21:05:15 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 0 km; Longitude uncertainty: 2 km*

*AFAD **12** 17:53:31.7±0.0,38˚.82N×26˚.49E,h7km,2km,ML2.5*

*ISK **12** 17:53:31.9,38˚.81N×26˚.48E,h7km,ML2.5/30*

**ISC 12 17:53:32.1**±0.8,**38˚.81N**±0˚.02×**26˚.49E**±0˚.02,**h15**km±6km, **n56,**σ0§**70**/78,**Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| KARB | zmir-Karabur | 0.16 | 203 | P | | Pg | | 17 53 36.1 | -0.1 |
| KARB | | | | S | | Sg | | 17 53 38.7 | -0.2 |
| KARB | | | | *i* | AML | AML | | 17 53 39.0 | |
| | comp=N,951nm,0.4s | | | | | | | | |
| FOCM | Foa | 0.21 | 118 | Pg | | Pg | | 17 53 36.9 | 0.0 |
| FOCM | | | | Sg | | Sg | | 17 53 40.5 | +0.3 |
| CAND | Candarli | 0.28 | 60 | Pg | | Pb | | 17 53 38.2 | -0.7 |
| IZMD | zmir-Dikili- | 0.38 | 63 | P | | Pg | | 17 53 39.8 | -0.1 |
| EAG2 | Marmaro, Chios | 0.40 | 228 | P | | Pb | | 17 53 40.4 | -0.6 |
| EAG2 | | | | S | | Sg | | 17 53 46.1 | +0.3 |
| DKL | Dikili | 0.41 | 51 | Pg | | Pg | | 17 53 40.5 | +0.1 |
| DKL | | | | Sg | | Sb | | 17 53 46.7 | -0.6 |
| URLA | Izmir | 0.46 | 170 | Pg | | Pg | | 17 53 41.1 | -0.3 |
| URLA | | | | Sg | | Sb | | 17 53 48.2 | -0.5 |
| URLA | Izmir | 0.46 | 170 | P | | Pg | | 17 53 41.0 | -0.3 |
| URLA | | | | S | | Sg | | 17 53 47.4 | -0.1 |
| URLA | | | | *i* | AML | AML | | 17 53 50.0 | |
| | comp=E,392nm,0.5s | | | | | | | | |
| PRK | Paraskevi | 0.46 | 338 | P | | Pg | | 17 53 41.2 | -0.2 |
| PRK | | | | S | | Sg | | 17 53 47.9 | +0.2 |
| CESE | eme | 0.51 | 197 | Pg | | Pg | | 17 53 41.8 | -0.4 |
| AYVA | Ayvalik | 0.52 | 17 | P | | Pg | | 17 53 41.9 | -0.5 |
| AYVA | | | | S | | Sg | | 17 53 48.7 | -0.6 |
| CHOS | Chios island | 0.55 | 219 | Pg | | Pb | | 17 53 43.2 | -0.3 |
| CHOS | | | | Sg | | Sb | | 17 53 50.8 | -0.4 |
| CHOS | Chios island | 0.55 | 219 | P | | Pb | | 17 53 43.0 | -0.6 |
| CHOS | | | | S | | Sg | | 17 53 50.2 | 0.0 |
| ZEYE | Izmir, Urla-Ze | 0.57 | 179 | P | | Pg | | 17 53 43.1 | -0.3 |
| ZEYE | | | | S | | Sb | | 17 53 52.1 | +0.2 |
| ZEYE | | | | *i* | AML | AML | | 17 53 55.0 | |
| | comp=E,323nm,0.3s | | | | | | | | |
| ZEYE | | | | *i* | AML | AML | | 17 53 56.0 | |
| | comp=N,349nm,0.2s | | | | | | | | |
| SIGR | SIGRI | 0.64 | 309 | Pg | | Pb | | 17 53 44.6 | -0.4 |
| SIGR | | | | Sg | | Sb | | 17 53 53.5 | -0.2 |
| SIGR | SIGRI | 0.64 | 309 | P | | Pb | | 17 53 44.5 | -0.4 |
| SIGR | | | | S | | Sg | | 17 53 53.0 | -0.1 |
| KOCA | Canakkale, Ayv | 0.74 | 338 | P | | Pb | | 17 53 46.5 | -0.3 |
| KOCA | | | | S | | Sg | | 17 53 54.8 | -1.6 |
| KOCA | | | | *i* | AML | AML | | 17 53 57.0 | |
| | comp=E,215nm,0.2s | | | | | | | | |
| KOCA | | | | *i* | AML | AML | | 17 54 00.0 | |
| | comp=N,237nm,0.4s | | | | | | | | |
| PSRA | Psara | 0.78 | 250 | P | | Pb | | 17 53 47.8 | +0.5 |
| GMLD | Gumuldur | 0.81 | 156 | Pg | | Pg | | 17 53 47.5 | -0.3 |
| DGB | zmir | 0.82 | 158 | P | | Pg | | 17 53 47.1 | -1.0 |
| DGB | | | | S | | Sg | | 17 53 58.0 | -0.8 |
| DGB | | | | *i* | AML | AML | | 17 54 02.0 | |
| | comp=E,119nm,0.2s | | | | | | | | |
| BUHA | Balikesir, Bur | 0.82 | 33 | P | | Pg | | 17 53 47.1 | -1.0 |
| BUHA | | | | S | | Sb | | 17 53 59.4 | +0.3 |
| BUHA | | | | *i* | AML | AML | | 17 54 04.0 | |
| | comp=N,180nm,0.5s | | | | | | | | |
| BUHA | | | | *i* | AML | AML | | 17 54 04.0 | |
| | comp=E,174nm,0.6s | | | | | | | | |
| SOMA | Soma-Manisa | 0.88 | 67 | Pg | | Pb | | 17 53 49.4 | +0.2 |
| BAYC | CANAKKALE_Bayr | 0.93 | 3 | P | | Pg | | 17 53 49.3 | -0.8 |
| BAYC | | | | *i* | AML | AML | | 17 54 06.0 | |
| | comp=N,109nm,0.2s | | | | | | | | |
| BAYC | | | | *i* | AML | AML | | 17 54 06.0 | |
| | comp=E,117nm,0.3s | | | | | | | | |
| EZNE | Ezine-Canakkal | 0.95 | 354 | Pg | | Pb | | 17 53 50.4 | +0.1 |
| EZN | Ezine | 1.02 | 353 | Pg | | Pb | | 17 53 51.6 | +0.1 |
| AKHS | Akhisar | 1.03 | 86 | P | | Pn | | 17 53 52.4 | +0.2 |
| AKS | Akhisar | 1.03 | 86 | Pg | | Pn | | 17 53 52.6 | +0.4 |
| BOZC | Bozcaada | 1.08 | 342 | P | | Pg | | 17 53 52.2 | -0.8 |
| BOZC | | | | *i* | AML | AML | | 17 54 08.0 | |
| | comp=N,118nm,0.2s | | | | | | | | |
| BOZC | | | | *i* | AML | AML | | 17 54 08.0 | |
| | comp=E,109nm,0.3s | | | | | | | | |
| STEP | BALIKESIR_Sava | 1.11 | 59 | P | | Pb | | 17 53 53.3 | +0.3 |
| STEP | | | | S | | Sb | | 17 54 07.7 | +0.4 |
| STEP | | | | *i* | AML | AML | | 17 54 10.0 | |
| | comp=N,194nm,0.4s | | | | | | | | |
| STEP | | | | *i* | AML | AML | | 17 54 11.0 | |
| | comp=E,144nm,0.2s | | | | | | | | |
| CNKL | anakkale-Mer | 1.25 | 356 | P | | Pg | | 17 53 55.8 | -0.5 |
| CNKL | | | | S | | Sb | | 17 54 11.5 | 0.0 |
| CNKL | | | | *i* | AML | AML | | 17 54 15.0 | |
| | comp=N,73nm,0.4s | | | | | | | | |
| ECEA | Canakkale, Ece | 1.25 | 349 | P | | Pg | | 17 53 56.1 | -0.2 |
| ECEA | | | | *i* | AML | AML | | 17 54 15.0 | |
| | comp=N,134nm,0.3s | | | | | | | | |
| ECEA | | | | *i* | AML | AML | | 17 54 15.0 | |
| | comp=E,168nm,0.4s | | | | | | | | |
| GCAM | G?zelcaml? | 1.26 | 152 | Pn | | Pg | | 17 53 56.3 | -0.1 |
| GCAM | G?zelcaml? | 1.26 | 152 | P | | Pg | | 17 53 56.3 | -0.1 |
| GCAM | | | | *i* | AML | AML | | 17 54 15.0 | |
| | comp=N,72nm,0.3s | | | | | | | | |
| YENI | Yenice-Canakka | 1.26 | 27 | Pn | | Pg | | 17 53 56.7 | +0.2 |
| BALY | Balya | 1.27 | 43 | P | | Pn | | 17 53 55.5 | 0.0 |
| BALY | | | | S | | Sg | | 17 54 12.8 | -0.5 |
| BALY | | | | *i* | AML | AML | | 17 54 15.0 | |
| | comp=E,87nm,0.5s | | | | | | | | |
| BALY | | | | *i* | AML | AML | | 17 54 16.0 | |
| | comp=N,119nm,0.4s | | | | | | | | |
| COMU | Canakkale | 1.28 | 359 | Pn | | Pg | | 17 53 56.9 | 0.0 |
| GORD | Gordes-Manisa | 1.32 | 85 | Pn | | Pg | | 17 53 57.2 | -0.4 |
| IZMR | zmir-demi | 1.33 | 120 | P | | Pn | | 17 53 56.1 | -0.1 |
| IZMR | | | | S | | Sb | | 17 54 12.6 | -1.1 |
| ODEM | Odemis-Izmir | 1.35 | 113 | Pn | | Pn | | 17 53 57.2 | +0.6 |
| AYDB | Zeytinkoy-Aydi | 1.40 | 128 | Pn | | Pn | | 17 53 57.6 | +0.3 |
| GOAD | anakkale-G¶ | 1.42 | 342 | P | | Pn | | 17 53 57.8 | +0.3 |
| GOAD | | | | S | | Sb | | 17 54 14.1 | -2.2 |
| GOAD | | | | *i* | AML | AML | | 17 54 17.0 | |
| | comp=E,72nm,0.5s | | | | | | | | |
| GOAD | | | | *i* | AML | AML | | 17 54 23.0 | |
| | comp=N,72nm,0.7s | | | | | | | | |
| BKES | Balkesir-Mer | 1.45 | 50 | P | | Pn | | 17 53 58.5 | +0.7 |
| BKES | | | | S | | Sn | | 17 54 16.7 | +0.2 |
| GADA | Gvkgeada | 1.45 | 342 | Pn | | Pb | | 17 53 59.1 | +0.2 |
| LIA | Limnos Island | 1.48 | 317 | P | | Pb | | 17 53 59.5 | +0.1 |
| GONE | Gonen-Balikesi | 1.54 | 37 | Pn | | Pb | | 17 54 00.5 | +0.1 |
| LPK | Lapseki | 1.57 | 7 | Pn | | Pb | | 17 54 00.7 | -0.2 |
| GELI | Tayfur-Gelibol | 1.58 | 360 | Pn | | Pb | | 17 54 01.1 | 0.0 |
| SUSR | Susurluk-Balik | 1.68 | 47 | Pn | | Pb | | 17 54 02.6 | -0.3 |
| KULA | Kula-Manisa | 1.72 | 99 | Pn | | Pb | | 17 54 03.1 | -0.5 |
| ERIK | Erikli-Kesan | 1.85 | 0 | Pn | | Pn | | 17 54 04.8 | +1.4 |
| ENEZ | Enez | 1.94 | 352 | Pn | | Pn | | 17 54 06.0 | +1.4 |
| SIMA | Simav-Kutahya | 1.96 | 81 | Pn | | Pn | | 17 54 06.6 | +1.6 |
| MRMT | Marmara Adasi | 1.98 | 25 | Pn | | Pn | | 17 54 06.8 | +1.6 |
| KCTX | Karacabey (Bur | 2.04 | 44 | Pn | | Pn | | 17 54 07.6 | +1.5 |
| ALN | Alexandroupoli | 2.11 | 351 | Pn | | Pn | | 17 54 08.5 | +1.6 |
| YER | Yerkesik | 2.19 | 139 | Pn | | Pn | | 17 54 09.9 | +1.7 |

**AFAD 12 17:53:51.4**±0.0,**35˚.93N**×**28˚.23E**,**h8**km±2km,**ML2.5, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| IZZE | Mula-Seydike | 0.95 | 57 | P | | Pb | | 17 54 10.0 | -0.2 |
| IZZE | | | | S | | Sb | | 17 54 22.8 | -0.3 |
| IZZE | | | | *i* | AML | AML | | 17 54 29.0 | |
| | comp=N,172nm,0.5s | | | | | | | | |
| DAT | Datca | 0.96 | 327 | P | | Pg | | 17 54 10.1 | +0.3 |
| DAT | | | | S | | Sg | | 17 54 22.4 | +0.1 |
| DAT | | | | *i* | AML | AML | | 17 54 28.0 | |
| | comp=N,108nm,0.5s | | | | | | | | |
| DAT | | | | *i* | AML | AML | | 17 54 31.0 | |
| | comp=E,153nm,0.5s | | | | | | | | |
| YAZI | Mula-Dat§a- | 0.98 | 320 | P | | Pg | | 17 54 09.9 | -0.3 |
| YAZI | | | | S | | Sb | | 17 54 23.7 | -0.1 |
| YAZI | | | | *i* | AML | AML | | 17 54 31.0 | |
| | comp=N,245nm,0.6s | | | | | | | | |
| YAZI | | | | *i* | AML | AML | | 17 54 31.0 | |
| | comp=E,210nm,0.4s | | | | | | | | |
| SABU | Mula-Dalaman | 1.07 | 33 | P | | Pg | | 17 54 12.0 | 0.0 |
| SABU | | | | S | | Sn | | 17 54 29.0 | +0.9 |
| SABU | | | | *i* | AML | AML | | 17 54 37.0 | |
| | comp=E,87nm,0.5s | | | | | | | | |
| SABU | | | | *i* | AML | AML | | 17 54 39.0 | |
| | comp=N,95nm,0.9s | | | | | | | | |
|

comp=N,3µm,0.9s
D24K **Happy Valley** 1.49 255 Sg 17 55 13.7 +0.6
E27K **Coleen River** 1.82 139 Pn 17 54 57.5 +0.8
E27K IAML 17 55 24.1
comp=E,2µm,0.7s
E27K IAML 17 55 28.9
comp=N,2µm,0.9s
E27K **Coleen River** 1.82 139 Sn 17 55 20.7 +1.0
F26K **Sheenjek River** 1.91 172 Pn 17 54 58.5 +0.6
F26K IAML 17 55 31.0
comp=E,2µm,0.5s
F26K **Sheenjek River** 1.91 172 Sn 17 55 22.6 +0.7
TOLK **Toolik Lake Re** 1.95 243 Pn 17 54 59.0 +0.5
TOLK IAML 17 55 34.2
comp=E,1µm,0.8s
E24K **Your Creek** 2.02 223 Pn 17 55 00.6 +1.2
E24K IAML 17 55 35.4
comp=N,1µm,0.8s
F25K **Christian Rive** 2.02 189 Pn 17 55 00.1 +0.7
F25K IAML 17 55 31.8
comp=E,1µm,1.1s
F25K IAML 17 55 33.4
comp=N,2µm,0.8s
C23K **Itkillik River** 2.04 280 Pn 17 54 59.3 -0.4
C23K IAML 17 55 38.8
comp=N,2µm,0.5s
C23K **Itkillik River** 2.04 280 Sb 17 55 27.2 -0.7
E28M **Babbage River** 2.13 115 Pn 17 55 01.7 +0.9
E28M IAML 17 55 33.6
comp=N,1µm,0.6s
D28M **Stokes Point** 2.15 94 Pn 17 55 01.5 +0.4
BMAR **Burnt Mountain** 2.16 178 Pn 17 55 02.4 +1.0
D23K **Nanushuk River** 2.18 256 Pn Pn 17 55 02.5 +0.9
D23K IAML 17 55 48.5
comp=E,883nm,1.2s
E23K **Chandalar** 2.32 231 Pn 17 55 04.6 +1.0
F24K **Squaw Lake** 2.36 210 Pn 17 55 05.0 +0.9
G26K **Porcupine Rive** 2.67 171 Pn 17 55 08.3 +0.1
F28M **Old Crow** 2.68 135 Pn 17 55 08.9 +0.5
F28M IAML 17 55 57.8
comp=E,955nm,0.9s
E29M **Blow River** 2.76 112 Pn Pn 17 55 10.2 +0.7
E29M **Blow River** 2.76 112 Sn 17 55 44.0 +1.2
G25K **Bearman Lake** 2.87 190 Pn 17 55 11.0 0.0
D22K **Ayikyak River** 2.90 260 Pn 17 55 12.1 +0.7
D22K IAML 17 56 01.6
comp=E,555nm,0.9s
D22K IAML 17 56 06.6
comp=N,646nm,0.9s
G27K **Doyon Strip** 3.02 156 Pn 17 55 13.7 +0.6
G27K IAML 17 56 11.1
comp=N,407nm,0.8s
FYU **Fort Yukon** 3.03 183 Pn 17 55 14.4 +1.2
FYU IAML 17 56 10.6
comp=E,688nm,0.8s
G24K **Hadweenzic Riv** 3.06 200 Pn 17 55 13.9 +0.3
G24K IAML 17 56 02.1
comp=E,710nm,0.8s
B22K **Teshekpuk Lake** 3.07 288 Pn 17 55 13.4 -0.3
COLD **Coldfoot** 3.09 223 Pn 17 55 14.6 +0.5
H25L **Birch Creek** 3.35 187 Pn 17 55 17.6 0.0
F22K **John River** 3.42 236 Pn 17 55 18.9 +0.3
B21K **Ikpikpuk River** 3.44 275 Pn 17 55 18.9 +0.1
B21K IAML 17 56 36.8
comp=E,361nm,1.0s
B21K IAML 17 56 38.9
comp=N,426nm,1.1s
G23K **Bananza Creek** 3.48 217 Pn Pn 17 55 20.3 +0.8
G23K IAML 17 56 23.4
comp=N,292nm,1.1s
G23K IAML 17 56 29.5
comp=E,338nm,1.2s
E21K **Killik River** 3.49 255 Pn 17 55 19.3 -0.3
E21K IAML 17 56 23.4
comp=E,385nm,1.0s
E21K IAML 17 56 25.7
comp=N,333nm,0.8s
H27K **Steamboat Moun** 3.58 158 Pn 17 55 20.6 -0.3
G29M **Pine Creek** 3.68 134 Pn 17 55 23.0 +0.9
A22K **Sinclair Lake** 3.73 297 Pn 17 55 22.9 +0.1
H24K **Noodor Dome** 3.94 199 Pn Pn 17 55 25.9 +0.2
H24K IAML 17 56 34.7
comp=E,249nm,0.9s
H24K IAML 17 56 35.5
comp=N,205nm,0.9s
F21K **Alatna River** 3.99 238 Pn 17 55 27.0 +0.6
F21K IAML 17 56 38.2
comp=N,189nm,0.7s
PRP **Porcupine Dome** 4.09 184 Pn Pn 17 55 28.5 +0.6
PRP IAML 17 56 38.7
comp=N,216nm,0.9s
G30M **tAoh Zraii Nji** 4.12 125 Pn Pn 17 55 29.0 +0.8
G30M IAML 17 56 39.7
comp=N,290nm,0.9s
G30M IAML 17 56 46.4
comp=E,287nm,1.1s
H29M **Whitestone** 4.16 141 Pn Pn 17 55 29.7 +1.0
I27K **Kandik River** 4.17 162 Pn 17 55 29.9 +0.9
H23K **Yukon River** 4.18 208 Pn 17 55 28.9 -0.2
H23K IAML 17 56 39.3
comp=N,258nm,0.7s
H23K IAML 17 56 43.2
comp=E,250nm,0.9s
INK **Inuvik** 4.26 102 Pn Pn 17 55 30.3 +0.2
INK **Inuvik** 4.26 102 Pn Pn 17 55 29.7 -0.4
comp=E,6.2nm,0.3s,baz=282,slow=17,SNR=22
INK Sn Sn 17 56 20.1 +0.3
comp=E,19nm,0.3s,baz=267,slow=17,SNR=4.4
INK Lg Lg 17 56 37.6
comp=E,8.2nm,0.3s,baz=326,slow=29,SNR=3.2
comp=E,20nm,0.4s
B20K **Meade River** 4.31 282 Pn Pn 17 55 30.9 +0.1
B20K IAML 17 56 58.9
comp=E,218nm,0.9s
I26K **Coal Creek Min** 4.34 171 Pn 17 55 31.9 +0.7
A21K **Barrow** 4.34 299 Pn 17 55 31.5 +0.3
EPYK **Eagle Plains** 4.43 133 Pn 17 55 32.9 +0.4
G21K **Allakaket** 4.49 231 Pn Pn 17 55 33.1 -0.1
G21K IAML 17 57 01.0
comp=E,196nm,0.7s
G21K IAML 17 57 03.9
comp=N,167nm,0.9s
I28M **Miner Creek** 4.55 153 Pn Pn 17 55 35.2 +1.0
I28M IAML 17 56 59.4
comp=N,214nm,0.6s
F31M **Tsiigehtchic** 4.60 113 Pn Pn 17 55 35.1 +0.4
F31M IAML 17 57 03.2
comp=N,215nm,1.1s
POKR **Poker Plat Res** 4.60 194 Pn 17 55 35.3 +0.5
POKR IAML 17 57 00.6
comp=E,176nm,1.0s
G31M **Satah River** 4.74 119 Pn Pn 17 55 37.0 +0.4
F20K **Avaraart Lake** 4.78 243 Pn Pn 17 55 37.9 +0.7
F20K IAML 17 57 01.6
comp=N,110nm,0.9s
I23K **Minto, Yukon-K** 4.79 204 Pn 17 55 37.7 +0.4
I23K IAML 17 57 05.9
comp=E,111nm,0.9s
I23K IAML 17 57 12.6
comp=N,126nm,1.0s
MDM **Murphy Dome** 4.83 198 Pn 17 55 38.4 +0.4
MDM IAML 17 57 01.5
comp=E,148nm,0.6s
MDM IAML 17 57 05.9
comp=N,126nm,1.0s
COLA **College** 4.87 196 Pn 17 55 39.6 +1.1
COLA **College** 4.87 196 Pn Pn 17 55 39.2 +0.7
IL31 4.90 191 Pn 17 55 39.4 +0.6
ILAR **Eielson Array** 4.90 191 Pn 17 55 39.7 +0.9
ILAR **Eielson Array** 4.90 191 Pn Pn 17 55 39.6 +0.7
comp=N,2.2nm,0.3s,baz=5.2,slow=14,SNR=80
ILAR Sn Sn 17 56 35.9 +0.3
comp=N,3.9nm,0.3s,baz=0.5,slow=18,SNR=4.6
ILAR Lg Lg 17 57 06.1
comp=N,12nm,0.3s,baz=8.0,slow=31,SNR=7.1
comp=N,15nm,0.8s
D19K **Kuna River** 4.90 263 Pn Pn 17 55 39.4 +0.4
I29M **Ogilvie Camp,** 4.92 146 Pn Pn 17 55 39.9 +0.7
IMAR **Indian Mountai** 4.95 228 Pn 17 55 40.1 +0.4
H21K **Melozitna Rive** 4.98 222 Pn Pn 17 55 40.8 +0.8
H21K IAML 17 57 10.0
comp=E,120nm,1.1s
H21K IAML 17 57 19.3
comp=N,93nm,1.0s
J25K **Salcha River,** 4.99 183 Pn Pn 17 55 41.1 +0.9
J25K IAML 17 57 12.4
comp=E,128nm,0.7s
EGAK **Eagle** 5.03 162 Pn 17 55 41.4 +0.7
E19K **Redstone River** 5.04 251 Pn Pn 17 55 41.3 +0.5
E19K IAML 17 57 16.9
comp=N,118nm,0.8s
E19K IAML 17 57 22.6
comp=E,94nm,0.9s
CCB **Clear Creek Bu** 5.09 195 Pn 17 55 41.8 +0.3
MLY **Manley** 5.11 210 Pn Pn 17 55 42.4 +0.6
J26L **Joseph Creek** 5.12 174 Pn Pn 17 55 43.0 +0.9
J26L IAML 17 56 52.1
comp=N,107nm,0.7s
J26L IAML 17 57 14.4
comp=E,104nm,0.9s
I21K **Tanana** 5.21 216 Pn 17 55 43.8 +0.7
C19K **Lookout Ridge** 5.26 272 Pn Pn 17 55 44.1 +0.3
C19K IAML 17 57 34.4
comp=E,88nm,1.1s
C19K IAML 17 57 40.5
comp=N,94nm,1.2s
HDA **Harding Lake** 5.26 190 Pn 17 55 44.9 +1.0
HDA IAML 17 57 16.9
comp=E,122nm,0.9s
HDA IAML 17 57 17.6
comp=N,112nm,0.9s
NEA2 **Nenana** 5.28 200 Pn 17 55 44.6 +0.6
NEA2 IAML 17 57 27.4
comp=E,70nm,1.0s
WRH **Wood River Hil** 5.29 196 Pn 17 55 45.0 +0.8
WRH IAML 17 57 13.8
comp=E,91nm,0.9s
I30M **Mount Dempster** 5.44 139 Pn Pn 17 55 47.1 +0.7
F19K **Shaleruckik Mo** 5.56 246 Pn Pn 17 55 48.5 +0.6
H20K **Anotleneega Mo** 5.63 228 Pn 17 55 49.0 +0.1
SCRK **Sand Creek** 5.64 176 Pn Pn 17 55 50.3 +1.2
A19K **Wainwright** 5.65 284 Pn 17 55 49.0 -0.1
K27K **Chicken** 5.68 168 Pn 17 55 50.7 +1.1
BWN **Browne** 5.73 201 Pn Pn 17 55 51.5 +1.2
G19K **Purcell Mounta** 5.78 239 Pn Pn 17 55 51.8 +0.9
C18K **Utukok River** 5.94 269 Pn Pn 17 55 53.0 -0.1
B18K **Kokolik River** 5.98 276 Pn 17 55 54.1 +0.4
J30M **Hart River** 6.01 143 Pn 17 55 54.6 +0.4
BPAW **Bear Paw Mtn.** 6.02 207 Pn 17 55 55.0 +0.7
H19K **Roundabout Mou** 6.03 233 Pn Pn 17 55 55.3 +0.9
MCK **McKinley** 6.10 198 Pn 17 55 55.5 +0.2
E19K **Tukpahlearik C** 6.20 257 Pn Pn 17 56 56.9 +0.2
RND **Reindeer** 6.41 197 Pn Pn 17 56 01.2 +1.6
G18K **Tagagawik** 6.42 242 Pn Pn 17 56 00.8 +1.0
J20K **Nowinta River** 6.55 219 Pn 17 56 01.4 -0.1
BCAR **Beaver Creek A** 6.65 168 Pn Pn 17 56 04.1 +1.1
C17K **DeLong Mountai** 6.68 269 Pn 17 56 02.4 -0.9
MENT **Mentasta** 6.68 176 Pn Pn 17 56 05.4 +2.0
E17K **Hotham Inlet** 6.78 256 Pn 17 56 04.6 0.0
H18K **Honhosa River** 6.85 236 Pn Pn 17 56 05.8 +0.1
A36M **Sachs Harbour** 6.87 60 Pn Pn 17 56 04.9 -1.0
F17K **Baldwin Pennin** 6.92 251 Pn 17 56 06.6 0.0
D17K **Noatak River** 6.93 263 Pn 17 56 05.7 -1.0
J19K **Poorman** 7.04 222 Pn Pn 17 56 09.3 +1.0
C36M **Paulatuk** 7.28 82 Pn 17 56 10.4 -1.1
G17K **Kiwalik Mounta** 7.31 244 Pn 17 56 11.6 -0.3
H17K **Granite Mounta** 7.47 239 Pn 17 56 13.8 -0.3
C16K **Lisburne Hills** 7.51 270 Pn 17 56 14.8 +0.2
M29M **Somme Creek** 7.61 157 Pn 17 56 16.8 +0.6
SML **Sawmill** 7.94 192 Pn 17 56 21.6 +0.9
N25K **Chitina, Valde** 8.01 179 Pn 17 56 21.3 -0.3
KLU **Klutina** 8.13 184 Pn 17 56 23.4 +0.1
KNK **Knik Glacier** 8.34 192 Pn 17 56 26.0 0.0
M20K **Styx River** 8.45 208 Pn 17 56 27.3 -0.3
L19K **White Mountain** 8.48 214 Pn 17 56 27.6 -0.3
BMRM **Bremner River** 8.65 179 Pn 17 56 30.4 +0.1
N30M **Aishikik Lake** 8.75 155 Pn 17 56 31.9 +0.2
CTGM **Chitina Glacie** 8.77 169 Pn 17 56 33.8 +1.7
L18K **Granite Mounta** 8.82 219 Pn 17 56 32.5 -0.2
LOGN **Logan Glacier** 8.93 168 Pn 17 56 34.1 -0.2
F14K **Arctic Creek** 9.18 254 Pn 17 56 37.6 +0.1
WAX **Waxell Ridge** 9.20 174 Pn 17 56 38.2 +0.3
BARK **Barkley Ridge** 9.27 173 Pn 17 56 38.7 -0.1
TABL **Table Mountain** 9.30 169 Pn 17 56 38.8 -0.7
RKAV **Rock Avalanche** 9.43 169 Pn 17 56 40.8 -0.4
O30N **Mendenhall** 9.56 153 Pn Pn 17 56 45.1 +2.4
O29M **Mount Kennedy** 9.67 161 Pn 17 56 44.2 -0.3
WHY **Whitehorse** 9.86 150 Pn Pn 17 56 48.0 +0.9
WRGLY **Wrigley** 10.61 116 Pn Pn 17 56 55.9 -1.1
P33M **Teslin, Yukon** 10.66 146 Pn Pn 17 56 59.2 +1.2
DLBC **Dease Lake** 12.87 143 Pn Pn 17 57 27.7 -0.3
comp=E,0.6nm,0.3s,baz=332,slow=12,SNR=10
DLBC Sn Sn 17 59 47.4 -3.6
comp=E,0.3nm,0.3s,baz=248,slow=22,SNR=1.4
DLBC Lg Lg 18 01 16.3
comp=E,0.2nm,0.3s,baz=148,slow=21,SNR=1.8
comp=E,4.3nm,0.6s
YKA **Yellowknife Ar** 14.03 106 Pn Pn 17 57 39.1 -4.6
YKA **Yellowknife Ar** 14.03 106 Pn Pn 17 57 39.5 -4.2
comp=E,1.9nm,0.3s,baz=314,slow=13,SNR=28
YKA Sn Sn 18 00 08.0 -11
comp=E,1.1nm,0.3s,baz=42,slow=24,SNR=5.4
comp=E,7.8nm,0.7s
SPITS **Spitsbergen Ar** 32.03 7 P P 18 00 51.3 0.0
comp=E,1.7nm,0.6s,baz=302,slow=2.7,SNR=1.3
comp=E,1.7nm,0.6s
PDAR **Pindale Arra** 32.37 127 P P 18 00 56.9 +2.1
comp=E,2.6nm,0.6s,baz=6.9,slow=5.4,SNR=34
comp=E,2.6nm,0.6s
NVAR **Mina Array Bea** 34.28 142 P P 18 01 14.2 +2.8
comp=E,1.3nm,0.7s,baz=334,slow=7.1,SNR=15
comp=E,1.3nm,0.7s
ARCES **ARCESS Array B** 40.99 5 P P 18 02 07.9 +0.3
comp=E,1.2nm,0.6s,baz=16,slow=6.7,SNR=4.1
comp=E,1.2nm,0.6s
TXAR **Lajitas Array** 46.59 128 P P 18 02 54.2 +1.0
comp=E,0.7nm,0.7s,baz=343,slow=5.5,SNR=11
comp=E,0.7nm,0.7s
NOA **NORSAR Array B** 48.55 15 P P 18 03 07.5 -0.5
comp=E,0.8nm,1.0s,baz=340,slow=6.1,SNR=1.5
comp=E,0.8nm,1.0s
FINES **FINESS Array B** 49.10 6 P P 18 03 10.7 -1.4
comp=E,1.0nm,0.5s,baz=358,slow=7.2,SNR=9.2
comp=E,1.0nm,0.5s
HFS **Hagfors** 49.67 14 P P 18 03 15.6 -0.9
comp=E,1.7nm,0.4s,baz=19,slow=6.3,SNR=18
comp=E,1.7nm,0.4s
ZALV **Zalesovo Beam** 51.62 325 P P 18 03 32.4 +1.1
comp=E,0.7nm,0.4s,baz=22,slow=7.3,SNR=4.1
comp=E,0.7nm,0.4s
MJAR **Matsushiro Arr** 51.78 273 P P 18 03 34.4 +1.7
comp=E,2.5nm,0.8s,baz=9.8,slow=8.3,SNR=14
comp=E,2.5nm,0.8s
SONM **Songino Array** 52.00 306 P P 18 03 36.5 +2.1
comp=E,1.5nm,1.0s,baz=32,slow=5.7,SNR=5.6
comp=E,1.5nm,1.0s
EKA **Eskdalemuir Ar** 52.32 27 P P 18 03 36.5 0.0
comp=E,2.4nm,0.8s,baz=333,slow=6.7,SNR=8.8
comp=E,2.4nm,0.8s
KSRS **Korea Array** 54.53 283 P P 18 03 53.6 +0.7
comp=E,1.0nm,0.9s,baz=46,slow=8.7,SNR=3.0
comp=E,1.0nm,0.9s
KURBB **Kurchatov Arra** 56.00 328 P P 18 04 04.0 +0.6
comp=E,1.9nm,0.2s,baz=11,slow=7.3,SNR=5.4
comp=E,1.9nm,0.2s
HHC **Hu-ho-hao-te** 56.82 298 eP P 18 04 08.7 -0.7
HHC pP sP 18 04 14.5 +0.3
HHC pmax pmax
comp=Z,10.0nm,0.5s
HHC pmax pmax
comp=Z,260nm,8.8s
MKAR **Makanchi Array** 58.92 324 P P 18 04 22.7 -1.4
comp=Z,0.3nm,0.6s,baz=36,slow=5.8,SNR=4.9
comp=Z,0.3nm,0.6s
AKASG **Malin Array Be** 59.95 4 P P 18 04 30.9 -0.2
comp=Z,1.2nm,0.5s,baz=358,slow=6.8,SNR=5.5
comp=Z,1.2nm,0.5s
GERES **GERESS Array B** 60.84 16 P P 18 04 37.6 +0.4
comp=Z,0.4nm,0.5s,baz=332,slow=10,SNR=4.2
comp=Z,0.4nm,0.5s
ESDC **Sonseca Array** 67.33 32 P P 18 05 18.4 -1.6
comp=Z,0.3nm,0.5s,baz=334,slow=8.6,SNR=3.3
comp=Z,0.3nm,0.5s
CMAR **Chiang Mai Arr** 81.53 301 P P 18 06 43.7 +0.9
comp=Z,0.5nm,0.3s,baz=357,slow=6.6,SNR=6.6
comp=Z,0.5nm,0.3s

*IDC **12** 18:04:15.3±6.9, 69°.78N×145°.14W, h0km, mb3.6/1, mbtmp3.4/3, ML3.4/2, Error ellipse: s-maj=100.6km s-min=33.5km az=136.0*

*AEIC **12** 18:04:15.9±1.2, 69°.55N±0°.05×144°.8W±0°.1, h2km±4km, ML3.5, ML3.5/108(NEIC), Error ellipse: s-maj=6.9km s-min=5.8km az=169.0*

*NEIC **12** 18:04:17.0±1.4, 69°.63N±0°.05×144°.80W±0°.06, h10km±2km, Error ellipse: s-maj=9.0km s-min=3.6km az=2.0*

**ISC 12 18:04:16.5±0.8, 69°.61N±0°.05×144°.79W±0°.04, h10km, n100, σ1°.04/103, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.31** | **352** | | | **Pg** | **18 04 23.0** | **+0.3** |
| C26K | | | | | | **Sb** | **18 04 28.4** | **-0.9** |
| **C27K** | **Jago River** | **0.38** | **87** | | | **Pg** | **18 04 22.9** | **-1.1** |
| C27K | | | | | | **Sg** | **18 04 27.9** | **-1.0** |
| C27K | | | | IAML | | | 18 04 34.0 | |
| | comp=E,6µm,0.6s | | | | | | | |
| C27K | | | | IAML | | | 18 04 34.3 | |
| | comp=N,5µm,0.6s | | | | | | | |
| **D25K** | **Kavik River** | **0.63** | **243** | | | **Pg** | **18 04 27.0** | **-1.7** |
| **C24K** | **Franklin Bluff** | **1.37** | **276** | Pn | | **Pn** | **18 04 42.0** | **+0.4** |
| C24K | | | | IAML | | | 18 05 10.9 | |
| | comp=E,1µm,0.6s | | | | | | | |
| **D27M** | **Malcolm River** | **1.40** | **103** | Pn | | **Pn** | **18 04 41.0** | **-1.1** |
| D27M | | | | IAML | | | 18 05 07.0 | |
| | comp=E,846nm,0.5s | | | | | | | |
| D27M | | | | IAML | | | 18 05 08.5 | |
| | comp=N,1µm,0.4s | | | | | | | |
| **D24K** | **Happy Valley** | **1.50** | **254** | | | **Pb** | **18 04 44.3** | **0.0** |
| **E27K** | **Coleen River** | **1.84** | **140** | Pn | | **Pn** | **18 04 48.4** | **+0.3** |
| **F26K** | **Sheenjek River** | **1.94** | **173** | Pn | | **Pn** | **18 04 50.3** | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **1.97** | **243** | | | **Pn** | **18 04 50.7** | **+0.8** |
| TOLK | | | | IAML | | | 18 05 30.9 | |
| | comp=E,398nm,0.5s | | | | | | | |
| **C23K** | **Itkillik River** | **2.04** | **279** | Pn | | **Pn** | **18 04 51.4** | **+0.6** |
| **E24K** | **Your Creek** | **2.04** | **223** | | | **Pn** | **18 04 52.0** | **+1.1** |
| **F25K** | **Christian Rive** | **2.05** | **189** | Pn | | **Pn** | **18 04 51.7** | **+0.7** |
| F25K | | | | IAML | | | 18 05 25.9 | |
| | comp=E,349nm,0.7s | | | | | | | |
| F25K | | | | IAML | | | 18 05 28.3 | |
| | comp=N,346nm,1.0s | | | | | | | |
| **E28M** | **Babbage River** | **2.14** | **116** | Pn | | **Pn** | **18 04 52.8** | **+0.7** |
| E28M | | | | IAML | | | 18 05 28.4 | |
| | comp=N,370nm,0.5s | | | | | | | |
| **D28M** | **Stokes Point** | **2.15** | **95** | | | **Pn** | **18 04 52.8** | **+0.5** |
| **BMAR** | **Burnt Mountain** | **2.19** | **178** | Pn | | **Pn** | **18 04 53.3** | **+0.3** |
| **D23K** | **Nanushuk River** | **2.19** | **256** | | | **Pn** | **18 04 53.0** | **+0.1** |
| D23K | | | | IAML | | | 18 05 40.4 | |
| | comp=E,266nm,0.6s | | | | | | | |
| D23K | | | | IAML | | | 18 05 49.0 | |
| | comp=N,287nm,0.9s | | | | | | | |
| **E23K** | **Chandalar** | **2.34** | **231** | | | **Pn** | **18 04 55.1** | **0.0** |
| E23K | | | | IAML | | | 18 05 40.4 | |
| | comp=N,228nm,0.7s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.39** | **210** | Pn | | **Pn** | **18 04 56.2** | **+0.5** |
| **F28M** | **Old Crow** | **2.70** | **136** | | | **Pn** | **18 05 00.1** | **+0.3** |
| F28M | | | | IAML | | | 18 05 47.4 | |
| | comp=E,170nm,0.5s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.70** | **172** | | | **Pn** | **18 04 59.6** | **-0.2** |
| **E29M** | **Blow River** | **2.77** | **113** | Pn | | **Pn** | **18 05 01.5** | **+0.7** |
| E29M | | | | IAML | | | 18 05 51.6 | |
| | comp=E,198nm,0.6s | | | | | | | |
| E29M | | | | IAML | | | 18 05 53.4 | |
| | comp=N,222nm,0.7s | | | | | | | |
| **G25K** | **Bearman Lake** | **2.90** | **190** | | | **Pn** | **18 05 02.4** | **-0.2** |
| **D22K** | **Ayikyak River** | **2.91** | **259** | Pn | | **Pn** | **18 05 03.6** | **+0.9** |
| D22K | | | | IAML | | | 18 06 02.1 | |
| | comp=E,202nm,1.1s | | | | | | | |
| **G27K** | **Doyon Strip** | **3.05** | **156** | | | **Pn** | **18 05 05.2** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **3.06** | **288** | Pn | | **Pn** | **18 05 06.3** | **+1.5** |
| **FYU** | **Fort Yukon** | **3.06** | **183** | Pn | | **Pn** | **18 05 05.5** | **+0.6** |
| FYU | | | | IAML | | | 18 06 04.6 | |
| | comp=E,208nm,1.1s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.09** | **200** | | | **Pn** | **18 05 05.6** | **+0.3** |
| G24K | | | | IAML | | | 18 05 59.2 | |
| | comp=N,178nm,1.2s | | | | | | | |
| **COLD** | **Coldfoot** | **3.12** | **222** | | | **Pn** | **18 05 06.3** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **3.44** | **275** | Pn | | **Pn** | **18 05 11.4** | **+1.4** |
| B21K | | | | IAML | | | 18 06 29.9 | |
| | comp=E,142nm,0.8s | | | | | | | |
| **F22K** | **John River** | **3.44** | **236** | | | **Pn** | **18 05 10.1** | **+0.1** |
| **E21K** | **Killik River** | **3.50** | **255** | Pn | | **Pn** | **18 05 11.3** | **+0.4** |
| E21K | | | | IAML | | | 18 06 20.4 | |
| | comp=E,110nm,0.8s | | | | | | | |
| **G23K** | **Bananza Creek** | **3.51** | **216** | Pn | | **Pn** | **18 05 11.7** | **+0.7** |
| G23K | | | | IAML | | | 18 06 17.0 | |
| | comp=E,101nm,0.5s | | | | | | | |
| G23K | | | | IAML | | | 18 06 18.4 | |
| | comp=N,91nm,1.0s | | | | | | | |
| **G29M** | **Pine Creek** | **3.70** | **134** | | | **Pn** | **18 05 13.8** | **+0.3** |
| **A22K** | **Sinclair Lake** | **3.72** | **297** | | | **Pn** | **18 05 14.9** | **+1.1** |
| **F30M** | **Barrier River** | **3.86** | **117** | | | **Pn** | **18 05 16.4** | **+0.6** |
| **H24K** | **Noodor Dome** | **3.97** | **199** | Pn | | **Pn** | **18 05 17.7** | **+0.3** |
| H24K | | | | IAML | | | 18 06 30.6 | |
| | comp=E,91nm,0.9s | | | | | | | |
| **F21K** | **Alatna River** | **4.01** | **237** | Pn | | **Pn** | **18 05 18.5** | **+0.6** |
| F21K | | | | IAML | | | 18 06 28.8 | |
| | comp=N,68nm,0.7s | | | | | | | |
| F21K | | | | IAML | | | 18 06 38.2 | |
| | comp=E,66nm,0.9s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.12** | **184** | Pn | | **Pn** | **18 05 20.6** | **+1.1** |
| PRP | | | | IAML | | | 18 06 33.1 | |
| | comp=N,75nm,0.8s | | | | | | | |
| PRP | | | | IAML | | | 18 06 41.8 | |
| | comp=E,56nm,0.8s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.13** | **126** | Pn | | **Pn** | **18 05 20.3** | **+0.8** |
| **H29M** | **Whitestone** | **4.18** | **142** | Pn | | **Pn** | **18 05 20.8** | **+0.6** |
| H29M | | | | IAML | | | 18 06 19.2 | |
| | comp=N,76nm,1.0s | | | | | | | |
| H29M | | | | IAML | | | 18 06 40.2 | |
| | comp=E,85nm,0.8s | | | | | | | |
| **I27K** | **Kandik River** | **4.20** | **162** | | | **Pn** | **18 05 20.8** | **+0.2** |
| **H23K** | **Yukon River** | **4.21** | **208** | | | **Pn** | **18 05 20.6** | **-0.1** |
| H23K | | | | IAML | | | 18 06 35.4 | |
| | comp=E,66nm,0.8s | | | | | | | |
| H23K | | | | IAML | | | 18 06 42.0 | |
| | comp=N,68nm,0.8s | | | | | | | |
| **B20K** | **Meade River** | **4.31** | **281** | Pn | | **Pn** | **18 05 23.6** | **+1.7** |
| **D20K** | **Etivluk River** | **4.32** | **264** | | | **Pn** | **18 05 23.3** | **+1.2** |
| **A21K** | **Barrow** | **4.33** | **299** | | | **Pn** | **18 05 23.1** | **+1.0** |
| **E20K** | **Nigu River** | **4.33** | **257** | | | **Pn** | **18 05 23.1** | **+0.7** |
| **I26K** | **Coal Creek Min** | **4.37** | **171** | | | **Pn** | **18 05 22.2** | **-0.5** |
| **EPYK** | **Eagle Plains** | **4.45** | **133** | | | **Pn** | **18 05 23.8** | **-0.1** |
| **H22K** | **Ishtalitna Cre** | **4.49** | **217** | | | **Pn** | **18 05 24.6** | **+0.1** |
| **G21K** | **Allakaket** | **4.51** | **231** | Pn | | **Pn** | **18 05 24.8** | **+0.1** |
| G21K | | | | IAML | | | 18 06 56.7 | |
| | comp=E,56nm,0.7s | | | | | | | |
| **I28M** | **Miner Creek** | **4.58** | **154** | Pn | | **Pn** | **18 05 26.4** | **+0.7** |
| I28M | | | | IAML | | | 18 06 51.1 | |
| | comp=N,43nm,0.9s | | | | | | | |
| I28M | | | | IAML | | | 18 06 51.9 | |
| | comp=E,45nm,0.9s | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.63** | **194** | | | **Pn** | **18 05 27.2** | **+0.8** |
| POKR | | | | IAML | | | 18 06 28.5 | |
| | comp=N,37nm,0.6s | | | | | | | |
| POKR | | | | IAML | | | 18 06 55.5 | |
| | comp=E,45nm,1.0s | | | | | | | |
| **G31M** | **Satah River** | **4.75** | **120** | Pn | | **Pn** | **18 05 27.8** | **-0.1** |
| G31M | | | | IAML | | | 18 06 50.9 | |
| | comp=E,44nm,1.0s | | | | | | | |
| G31M | | | | IAML | | | 18 06 59.3 | |
| | comp=N,46nm,0.8s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.80** | **243** | Pn | | **Pn** | **18 05 29.8** | **+1.2** |
| **I23K** | **Minto, Yukon-K** | **4.82** | **204** | | | **Pn** | **18 05 29.6** | **+0.7** |
| I23K | | | | IAML | | | 18 07 00.9 | |
| | comp=E,44nm,0.8s | | | | | | | |
| I23K | | | | IAML | | | 18 07 01.6 | |
| | comp=N,43nm,0.8s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.86** | **198** | | | **Pn** | **18 05 29.9** | **+0.4** |
| MDM | | | | IAML | | | 18 06 56.2 | |
| | comp=N,35nm,0.9s | | | | | | | |
| **D19K** | **Kuna River** | **4.91** | **263** | Pn | | **Pn** | **18 05 31.2** | **+1.0** |
| D19K | | | | IAML | | | 18 07 17.1 | |
| | comp=E,42nm,1.0s | | | | | | | |
| **IL31** | | **4.93** | **191** | | | **Pn** | **18 05 31.5** | **+1.1** |
| **ILAR** | **Eielson Array** | **4.93** | **191** | | | **Pn** | **18 05 31.6** | **+1.1** |
| **ILAR** | **Eielson Array** | **4.93** | **191** | Pn | | **Pn** | **18 05 31.1** | **+0.6** |
| | comp=E,0.9nm,0.3s,baz=3.5,slow=13,SNR=14 | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **18 06 29.0** | **+1.5** |
| | comp=E,1.6nm,0.3s,baz=11,slow=15,SNR=5.6 | | | | | | | |
| | comp=E,2.9nm,0.6s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.94** | **147** | | | **Pn** | **18 05 30.9** | **+0.2** |
| I29M | | | | IAML | | | 18 07 01.7 | |
| | comp=E,49nm,0.7s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I29M | | | | IAML | | 18 07 02.0 | |
| | comp=N,45nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.98** | **227** | | **Pn** | **18 05 31.7** | **+0.6** |
| **H21K** | **Melozitna Rive** | **5.01** | **221** | Pn | **Pn** | **18 05 32.7** | **+1.1** |
| H21K | | | | IAML | | 18 07 02.8 | |
| | comp=E,27nm,1.1s | | | | | | |
| H21K | | | | IAML | | 18 07 05.6 | |
| | comp=N,27nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **5.03** | **183** | Pn | **Pn** | **18 05 33.6** | **+1.8** |
| J25K | | | | IAML | | 18 07 05.0 | |
| | comp=N,29nm,0.9s | | | | | | |
| J25K | | | | IAML | | 18 07 07.6 | |
| | comp=E,36nm,0.9s | | | | | | |
| **E19K** | **Redstone River** | **5.05** | **251** | | **Pn** | **18 05 32.5** | **+0.4** |
| E19K | | | | IAML | | 18 06 45.1 | |
| | comp=E,36nm,0.5s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.12** | **195** | | **Pn** | **18 05 33.4** | **+0.3** |
| **J26L** | **Joseph Creek** | **5.16** | **174** | | **Pn** | **18 05 33.6** | **0.0** |
| J26L | | | | IAML | | 18 06 42.0 | |
| | comp=N,35nm,0.7s | | | | | | |
| J26L | | | | IAML | | 18 06 57.1 | |
| | comp=E,34nm,1.1s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.26** | **271** | Pn | **Pn** | **18 05 36.2** | **+1.2** |
| C19K | | | | IAML | | 18 07 27.7 | |
| | comp=E,25nm,1.2s | | | | | | |
| C19K | | | | IAML | | 18 07 43.3 | |
| | comp=N,24nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.31** | **200** | Pn | **Pn** | **18 05 36.7** | **+1.0** |
| **WRH** | **Wood River Hil** | **5.32** | **196** | | **Pn** | **18 05 36.4** | **+0.6** |
| WRH | | | | IAML | | 18 07 18.3 | |
| | comp=E,28nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.47** | **140** | | **Pn** | **18 05 38.1** | **+0.2** |
| **F19K** | **Shaleruckik Mo** | **5.58** | **246** | Pn | **Pn** | **18 05 40.3** | **+1.0** |
| **SCRK** | **Sand Creek** | **5.67** | **176** | Pn | **Pn** | **18 05 42.2** | **+1.5** |
| **K27K** | **Chicken** | **5.71** | **168** | Pn | **Pn** | **18 05 42.8** | **+1.6** |
| **C18K** | **Utukok River** | **5.94** | **268** | Pn | **Pn** | **18 05 45.0** | **+0.6** |
| **J30M** | **Hart River** | **6.03** | **143** | Pn | **Pn** | **18 05 46.4** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **6.05** | **207** | Pn | **Pn** | **18 05 46.6** | **+0.8** |
| **E18K** | **Tukpahlearik C** | **6.21** | **257** | Pn | **Pn** | **18 05 48.9** | **+1.0** |
| **K29M** | **Barlow Dome** | **6.46** | **150** | Pn | **Pn** | **18 05 53.6** | **+2.0** |
| **J20K** | **Nowinta River** | **6.58** | **218** | Pn | **Pn** | **18 05 53.8** | **+0.7** |
| **L26K** | **Log Cabin Wild** | **6.64** | **174** | Pn | **Pn** | **18 05 56.4** | **+2.4** |
| **DHY** | **Denali Highway** | **6.65** | **190** | Pn | **Pn** | **18 05 56.2** | **+2.1** |
| **BCAR** | **Beaver Creek A** | **6.68** | **168** | Pn | **Pn** | **18 05 56.9** | **+2.3** |
| **L27K** | **Beaver Creek,** | **6.68** | **168** | Pn | **Pn** | **18 05 56.7** | **+2.1** |
| **A36M** | **Sachs Harbour** | **6.86** | **61** | Pn | **Pn** | **18 05 56.3** | **-0.5** |
| **H18K** | **Honhosa River** | **6.87** | **236** | Pn | **Pn** | **18 05 57.8** | **+0.6** |
| **F17K** | **Baldwin Pennin** | **6.94** | **251** | Pn | **Pn** | **18 05 58.7** | **+0.7** |
| **WAT7** | **Susitna Watana** | **7.00** | **195** | | **Pn** | **18 05 59.3** | **+0.3** |
| **C36M** | **Paulatuk** | **7.28** | **82** | Pn | **Pn** | **18 06 03.8** | **+1.2** |
| **M27K** | **Edge Creek, AK** | **7.38** | **169** | Pn | **Pn** | **18 06 06.6** | **+2.4** |
| **C16K** | **Lisburne Hills** | **7.51** | **269** | Pn | **Pn** | **18 06 06.2** | **+0.4** |
| **YUK2** | **White River** | **8.02** | **166** | | **Pn** | **18 06 13.8** | **+0.9** |
| **J17K** | **VABM Dome** | **8.43** | **229** | Pn | **Pn** | **18 06 18.3** | **-0.1** |
| **F15K** | **North Star Dit** | **8.49** | **252** | Pn | **Pn** | **18 06 18.7** | **-0.6** |
| **N30M** | **Aishikik Lake** | **8.78** | **155** | Pn | **Pn** | **18 06 24.7** | **+1.5** |
| **MMPY** | **Sheldon Lake,** | **8.88** | **136** | Pn | **Pn** | **18 06 26.2** | **+1.4** |
| **BCPM** | **Bancas Point** | **9.94** | **165** | Pn | **Pn** | **18 06 39.6** | **+0.5** |
| **J14K** | **Nanvaranak Lak** | **10.20** | **237** | Pn | **Pn** | **18 06 43.9** | **+1.2** |
| **YKA** | **Yellowknife Ar** | **14.03** | **106** | Pn | **Pn** | **18 07 32.0** | **-2.9** |
| | comp=E,0.3nm,0.3s,baz=317,slow=14,SNR=5.6 | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.39** | **128** | P | **P** | **18 10 48.5** | **+2.3** |
| | comp=E,0.4nm,0.6s,baz=5.7,slow=10.0,SNR=5.4 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |

*NEIC* ***12*** *18:09:03.0±3.6, 69°.56N×0°.02×144°.59W±0°.04, h10km±2km, Error ellipse: s-maj=4.0km s-min=3.0km az=5.0*

**AEIC 12 18:09:02.7**±0.5**, 69°.55N**±0°.03×**144°.62W**±0°.04**, h16**km±6km, ML2.6, ML3.4**/26(NEIC), **Error ellipse: s-maj=3.7km s-min=2.3km az=190.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.33** | **75** | | Sg | 18 09 13.9 | -0.2 |
| **C27K** | **Jago River** | **0.33** | **75** | Pg | Pg | 18 09 09.3 | -0.2 |
| C27K | | | | IAML | | 18 09 15.7 | |
| | comp=E,1μm,0.4s | | | | | | |
| C27K | | | | IAML | | 18 09 16.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.39** | **345** | | Pg | 18 09 10.5 | -0.1 |
| C26K | | | | | Sg | 18 09 15.8 | -0.2 |
| **C26K** | **Camden Bay** | **0.39** | **345** | IAML | | 18 09 17.5 | |
| | comp=E,566nm,0.5s | | | | | | |
| C26K | | | | IAML | | 18 09 18.0 | |
| | comp=N,585nm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **0.66** | **251** | | Pg | 18 09 15.4 | -0.3 |
| D25K | | | | | Sb | 18 09 25.3 | +0.5 |
| **D27M** | **Malcolm River** | **1.33** | **102** | | Pn | 18 09 26.7 | +0.1 |
| **D27M** | **Malcolm River** | **1.33** | **102** | IAML | | 18 10 04.3 | |
| | comp=E,221nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.54** | **257** | | Pn | 18 09 29.4 | -0.1 |
| **E27K** | **Coleen River** | **1.75** | **140** | | Pn | 18 09 32.4 | 0.0 |
| **F26K** | **Sheenjek River** | **1.87** | **174** | | Pn | 18 09 34.0 | 0.0 |
| **F26K** | **Sheenjek River** | **1.87** | **174** | IAML | | 18 10 36.6 | |
| | comp=N,309nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **191** | | Pn | 18 09 35.7 | -0.2 |
| **TOLK** | **Toolik Lake Re** | **2.00** | **245** | | Pn | 18 09 35.7 | -0.1 |
| **E24K** | **Your Creek** | **2.04** | **225** | | Pn | 18 09 36.3 | -0.1 |
| **E24K** | **Your Creek** | **2.04** | **225** | IAML | | 18 10 38.7 | |
| E24K | comp=E,363nm,0.7s | | | IAML | | 18 10 40.6 | |
| | comp=N,322nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **4.96** | **264** | Pn | Pn | 18 10 19.5 | +3.0 |
| **H21K** | **Melozitna Rive** | **5.00** | **223** | Pn | Pn | 18 10 20.1 | +3.0 |
| H21K | | | | IAML | | 18 12 11.5 | |
| | comp=N,39nm,1.1s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.32** | **272** | Pn | Pn | 18 10 23.9 | +2.4 |
| **C18K** | **Utukok River** | **6.00** | **269** | Pn | Pn | 18 10 33.0 | +2.3 |
| **E18K** | **Tukpahlearik C** | **6.25** | **258** | Pn | Pn | 18 10 36.9 | +2.8 |

*IDC* ***12*** *18:09:32.3±0.8, 69°.78N×144°.76W, h0km, mb3.5/9, mbtmp3.6/13, ML3.7/4, Error ellipse: s-maj=21.9km s-min=14.4km az=57.0*

*AEIC* ***12*** *18:09:32.6±1.9, 69°.57N±0°.03×145°.10W±0°.08, h4km±5km, ML3.5, ML3.6/110(NEIC), Error ellipse: s-maj=4.9km s-min=4.1km az=184.0*

*NEIC* ***12*** *18:09:33.6±1.4, 69°.62N±0°.05×144°.99W±0°.04, h10km±1km, Error ellipse: s-maj=8.5km s-min=2.9km az=14.0*

**ISC 12 18:09:33.1**±0.6**, 69°.60N**±0°.04×**145°.02W**±0°.02**, h10**km**, n125**, σ0**95**/106**, mb3.6**/9**, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.32** | **6** | | **Pg** | **18 09 39.3** | **-0.1** |
| C26K | | | | | **Sb** | **18 09 44.8** | **-1.3** |
| **C26K** | **Camden Bay** | **0.32** | **6** | IAML | | 18 09 50.7 | |
| | comp=E,6μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.46** | **87** | | **Pg** | **18 09 41.9** | **-0.2** |
| C27K | | | | | **Sg** | **18 09 48.2** | **+0.2** |
| **C27K** | **Jago River** | **0.46** | **87** | IAML | | 18 09 51.5 | |
| | comp=E,5μm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.56** | **240** | Pg | **Pg** | **18 09 42.2** | **-1.7** |
| **D25K** | **Kavik River** | **0.56** | **240** | | **Sg** | **18 09 49.8** | **-1.4** |
| **C24K** | **Franklin Bluff** | **1.29** | **277** | Pn | **Pn** | **18 09 57.5** | **+0.3** |
| C24K | | | | IAML | | 18 10 19.1 | |
| | comp=N,2μm,0.9s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.29** | **277** | | **Sb** | **18 10 14.4** | **+0.4** |
| **D24K** | **Happy Valley** | **1.42** | **253** | Pn | **Pn** | **18 09 59.5** | **+0.6** |
| **D24K** | **Happy Valley** | **1.42** | **253** | | **Sn** | **18 10 18.2** | **+0.5** |
| **D27M** | **Malcolm River** | **1.48** | **102** | | **Pb** | **18 10 00.3** | **-0.3** |
| D27M | | | | | **Sg** | **18 10 20.8** | **+0.3** |
| **D27M** | **Malcolm River** | **1.48** | **102** | IAML | | 18 10 22.9 | |
| | comp=E,786nm,0.5s | | | | | | |
| D27M | | | | IAML | | 18 10 24.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.89** | **137** | | **Pn** | **18 10 05.5** | **+0.2** |
| **E27K** | **Coleen River** | **1.89** | **137** | IAML | | 18 10 35.5 | |
| | comp=E,355nm,0.6s | | | | | | |
| E27K | | | | IAML | | 18 10 37.6 | |
| | comp=N,301nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.90** | **242** | | **Pn** | **18 10 07.0** | **+1.4** |
| TOLK | | | | IAML | | 18 10 36.6 | |
| | comp=E,440nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 18 10 44.0 | |
| | comp=N,490nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.90** | **242** | | **Sn** | **18 10 29.3** | **-0.2** |
| **F26K** | **Sheenjek River** | **1.94** | **170** | Pn | **Pn** | **18 10 03.2** | **-2.9** |
| F26K | | | | IAML | | 18 10 38.0 | |
| | comp=E,636nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **1.96** | **279** | | **Pb** | **18 10 08.7** | **-0.2** |
| C23K | | | | IAML | | 18 10 40.2 | |
| | comp=N,661nm,0.7s | | | | | | |
| C23K | | | | IAML | | 18 10 46.6 | |
| | comp=E,618nm,1.0s | | | | | | |
| **E24K** | **Your Creek** | **1.99** | **221** | | **Pn** | **18 10 08.1** | **+1.4** |
| **F25K** | **Christian Rive** | **2.03** | **187** | Pn | **Pn** | **18 10 08.3** | **+0.9** |
| F25K | | | | IAML | | 18 10 40.3 | |
| | comp=E,469nm,0.9s | | | | | | |
| F25K | | | | IAML | | 18 10 40.5 | |
| | comp=N,455nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.11** | **255** | | **Pn** | **18 10 08.2** | **-0.2** |
| **D23K** | **Nanushuk River** | **2.11** | **255** | IAML | | 18 10 45.3 | |
| | comp=E,387nm,1.0s | | | | | | |
| D23K | | | | IAML | | 18 10 54.5 | |
| | comp=N,360nm,1.2s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.19** | **176** | | **Pn** | **18 10 09.4** | **-0.1** |
| **D28M** | **Stokes Point** | **2.23** | **94** | | **Pn** | **18 10 10.6** | **+0.5** |
| **E23K** | **Chandalar** | **2.28** | **229** | Pn | **Pn** | **18 10 11.7** | **+0.9** |
| E23K | | | | IAML | | 18 10 47.6 | |
| | comp=E,352nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.34** | **208** | Pn | **Pn** | **18 10 10.9** | **-0.8** |
| **G26K** | **Porcupine Rive** | **2.71** | **170** | | **Pn** | **18 10 16.4** | **-0.2** |
| **F28M** | **Old Crow** | **2.75** | **134** | | **Pn** | **18 10 17.5** | **+0.4** |
| F28M | | | | IAML | | 18 11 07.5 | |
| | comp=N,204nm,0.6s | | | | | | |
| F28M | | | | IAML | | 18 11 08.4 | |
| | comp=E,200nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **2.83** | **259** | | **Pn** | **18 10 19.3** | **+1.1** |
| D22K | | | | IAML | | 18 11 18.6 | |
| | comp=N,289nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.84** | **112** | | **Pn** | **18 10 20.1** | **+1.7** |
| E29M | | | | IAML | | 18 11 05.6 | |
| | comp=E,183nm,0.6s | | | | | | |
| E29M | | | | IAML | | 18 11 15.9 | |
| | comp=N,252nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.88** | **189** | | **Pn** | **18 10 18.6** | **-0.3** |
| **B22K** | **Teshekpuk Lake** | **2.99** | **288** | Pn | **Pn** | **18 10 21.7** | **+1.3** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **199** | | **Pn** | **18 10 22.0** | **+0.5** |
| **G27K** | **Doyon Strip** | **3.08** | **154** | | **Pn** | **18 10 22.4** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **3.36** | **275** | Pn | **Pn** | **18 10 26.6** | **+1.1** |
| B21K | | | | IAML | | 18 11 33.9 | |
| | comp=E,182nm,1.2s | | | | | | |
| **E21K** | **Killik River** | **3.43** | **254** | | **Pn** | **18 10 27.2** | **+0.7** |
| E21K | | | | IAML | | 18 11 29.5 | |
| | comp=E,154nm,0.8s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.63** | **157** | | **Pn** | **18 10 29.1** | **-0.3** |
| **A22K** | **Sinclair Lake** | **3.65** | **297** | | **Pn** | **18 10 29.6** | **0.0** |
| **G29M** | **Pine Creek** | **3.75** | **133** | | **Pn** | **18 10 32.7** | **+1.7** |
| G29M | | | | IAML | | 18 11 38.8 | |
| | comp=N,139nm,0.7s | | | | | | |
| **F30M** | **Barrier River** | **3.93** | **116** | | **Pn** | **18 10 33.9** | **+0.5** |
| **F21K** | **Alatna River** | **3.94** | **237** | Pn | **Pn** | **18 10 34.8** | **+1.3** |
| F21K | | | | IAML | | 18 11 43.7 | |
| | comp=N,81nm,1.2s | | | | | | |
| F21K | | | | IAML | | 18 11 47.8 | |
| | comp=E,116nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.94** | **197** | Pn | **Pn** | **18 10 34.0** | **+0.4** |
| H24K | | | | IAML | | 18 11 54.8 | |
| | comp=N,70nm,1.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.11** | **183** | | **Pn** | **18 10 36.2** | **+0.2** |
| **PRP** | **Porcupine Dome** | **4.11** | **183** | IAML | | 18 11 41.5 | |
| | comp=E,70nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **207** | | **Pn** | **18 10 36.5** | **-0.1** |
| **H23K** | **Yukon River** | **4.17** | **207** | IAML | | 18 11 50.4 | |
| | comp=N,89nm,0.8s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.20** | **125** | | **Pn** | **18 10 39.0** | **+2.0** |
| G30M | | | | IAML | | 18 12 00.4 | |
| | comp=N,66nm,0.9s | | | | | | |
| G30M | | | | IAML | | 18 12 06.6 | |
| | comp=E,56nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.22** | **160** | | **Pn** | **18 10 37.3** | **-0.1** |
| **H29M** | **Whitestone** | **4.22** | **140** | | **Pn** | **18 10 37.6** | **+0.1** |
| **H29M** | **Whitestone** | **4.22** | **140** | IAML | | 18 12 05.4 | |
| | comp=N,91nm,1.0s | | | | | | |
| **B20K** | **Meade River** | **4.23** | **281** | Pn | **Pn** | **18 10 37.9** | **+0.4** |
| B20K | | | | IAML | | 18 12 27.3 | |
| | comp=N,86nm,1.1s | | | | | | |
| **D20K** | **Etivluk River** | **4.24** | **263** | | **Pn** | **18 10 37.4** | **-0.2** |
| **E20K** | **Nigu River** | **4.25** | **257** | | **Pn** | **18 10 37.7** | **-0.2** |
| **A21K** | **Barrow** | **4.26** | **299** | | **Pn** | **18 10 37.8** | **0.0** |
| **INK** | **Inuvik** | **4.34** | **102** | | **Pn** | **18 10 40.4** | **+1.4** |
| **INK** | **Inuvik** | **4.34** | **102** | Pn | **Pn** | **18 10 37.1** | **-1.9** |
| | comp=N,0.8nm,0.3s,baz=309,slow=11,SNR=3.4 | | | | | | |
| INK | | | | Sn | **Sn** | **18 11 26.8** | **-2.8** |
| | comp=N,2.4nm,0.3s,baz=35,slow=28,SNR=4.4 | | | | | | |
| | comp=N,1.7nm,0.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.38** | **170** | | **Pn** | **18 10 39.2** | **-0.3** |
| **I26K** | **Coal Creek Min** | **4.38** | **170** | IAML | | 18 12 01.0 | |
| | comp=E,86nm,0.9s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.44** | **216** | | **Pn** | **18 10 40.0** | **-0.5** |
| **G21K** | **Allakaket** | **4.44** | **230** | | **Pn** | **18 10 39.9** | **-0.5** |
| **G21K** | **Allakaket** | **4.44** | **230** | IAML | | 18 12 09.8 | |
| | comp=E,64nm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.50** | **132** | | **Pn** | **18 10 42.0** | **+0.7** |
| **POKR** | **Poker Plat Res** | **4.60** | **193** | | **Pn** | **18 10 42.4** | **-0.2** |
| **POKR** | **Poker Plat Res** | **4.60** | **193** | IAML | | 18 11 39.1 | |
| | comp=E,69nm,0.6s | | | | | | |
| POKR | | | | IAML | | 18 11 40.3 | |
| | comp=N,43nm,0.7s | | | | | | |
| **I28M** | **Miner Creek** | **4.61** | **153** | | **Pn** | **18 10 42.9** | **+0.1** |
| **I28M** | **Miner Creek** | **4.61** | **153** | IAML | | 18 12 06.4 | |
| | comp=E,44nm,1.1s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.68** | **112** | | **Pn** | **18 10 44.2** | **+0.6** |
| **F31M** | **Tsiigehtchic** | **4.68** | **112** | IAML | | 18 12 04.0 | |
| | comp=N,49nm,0.7s | | | | | | |
| F31M | | | | IAML | | 18 12 04.9 | |
| | comp=E,47nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.72** | **242** | | **Pn** | **18 10 43.8** | **-0.5** |
| **F20K** | **Avaraart Lake** | **4.72** | **242** | IAML | | 18 12 08.8 | |
| | comp=N,50nm,1.2s | | | | | | |
| F20K | | | | IAML | | 18 12 21.3 | |
| | comp=E,41nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **203** | | **Pn** | **18 10 45.0** | **0.0** |
| **I23K** | **Minto, Yukon-K** | **4.78** | **203** | IAML | | 18 12 09.3 | |
| | comp=E,65nm,1.0s | | | | | | |
| I23K | | | | IAML | | 18 12 24.0 | |
| | comp=N,50nm,1.2s | | | | | | |
| **G31M** | **Satah River** | **4.81** | **119** | | **Pn** | **18 10 46.0** | **+0.6** |
| **G31M** | **Satah River** | **4.81** | **119** | IAML | | 18 12 11.7 | |
| | comp=E,61nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **196** | | **Pn** | **18 10 45.7** | **0.0** |
| **MDM** | **Murphy Dome** | **4.83** | **196** | IAML | | 18 12 12.2 | |
| | comp=N,46nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **4.83** | **263** | | **Pn** | **18 10 45.5** | **-0.2** |
| **D19K** | **Kuna River** | **4.83** | **263** | IAML | | 18 12 22.4 | |
| | comp=E,42nm,1.0s | | | | | | |
| **COLA** | **College** | **4.88** | **194** | Pn | **Pn** | **18 10 47.4** | **+1.0** |
| **IL31** | | **4.91** | **189** | | **Pn** | **18 10 47.1** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.91** | **189** | | **Pn** | **18 10 47.3** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.91** | **189** | Pn | **Pn** | **18 10 47.0** | **+0.2** |
| | comp=E,1.7nm,0.3s,baz=0.6,slow=13,SNR=9.7 | | | | | | |
| ILAR | | | | Sn | **Sn** | **18 11 46.5** | **+3.0** |
| | comp=E,2.2nm,0.3s,baz=2.5,slow=22,SNR=6.2 | | | | | | |
| | comp=E,2.8nm,0.5s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.92** | **226** | Pn | **Pn** | **18 10 46.8** | **-0.1** |
| **E19K** | **Redstone River** | **4.98** | **250** | Pn | **Pn** | **18 10 48.6** | **+0.9** |
| E19K | | | | IAML | | 18 12 25.2 | |
| | comp=E,50nm,1.0s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.98** | **146** | IAML | | 18 12 27.2 | |
| | comp=N,38nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **5.01** | **182** | | **Pn** | **18 10 48.2** | **-0.2** |
| **J25K** | **Salcha River,** | **5.01** | **182** | IAML | | 18 12 16.7 | |
| | comp=E,41nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **5.07** | **161** | IAML | | 18 11 52.4 | |
| | comp=E,51nm,0.7s | | | | | | |
| EGAK | | | | IAML | | 18 12 29.2 | |
| | comp=E,34nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10** | **194** | | **Pn** | **18 10 49.6** | **+0.2** |
| **MLY** | **Manley** | **5.10** | **208** | Pn | **Pn** | **18 10 51.0** | **+1.5** |
| **C19K** | **Lookout Ridge** | **5.18** | **271** | Pn | **Pn** | **18 10 51.5** | **+0.9** |
| C19K | | | | IAML | | 18 12 39.3 | |
| | comp=E,45nm,1.1s | | | | | | |
| C19K | | | | IAML | | 18 12 44.8 | |
| | comp=N,48nm,1.0s | | | | | | |
| **HDA** | **Harding Lake** | **5.27** | **189** | IAML | | 18 12 36.0 | |
| | comp=N,43nm,1.0s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **195** | IAML | | 18 11 55.0 | |
| | comp=N,31nm,0.8s | | | | | | |
| WRH | | | | IAML | | 18 12 19.8 | |
| | comp=E,28nm,1.1s | | | | | | |
| **A19K** | **Wainwright** | **5.56** | **284** | | **Pn** | **18 10 55.7** | **-0.1** |
| **H20K** | **Anotleneega Mo** | **5.59** | **227** | | **Pn** | **18 10 56.1** | **-0.1** |
| **G19K** | **Purcell Mounta** | **5.73** | **238** | | **Pn** | **18 10 57.9** | **-0.2** |
| **C18K** | **Utukok River** | **5.86** | **268** | | **Pn** | **18 10 59.7** | **-0.2** |
| **B18K** | **Kokolik River** | **5.90** | **276** | | **Pn** | **18 11 00.5** | **+0.1** |
| **H19K** | **Roundabout Mou** | **5.99** | **232** | Pn | **Pn** | **18 11 02.5** | **+1.0** |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **206** | | **Pn** | **18 11 01.8** | **-0.1** |
| **J30M** | **Hart River** | **6.08** | **142** | | **Pn** | **18 11 03.4** | **+0.4** |
| **MCK** | **McKinley** | **6.10** | **197** | | **Pn** | **18 11 02.8** | **-0.4** |
| **F18K** | **Selawik** | **6.24** | **248** | | **Pn** | **18 11 05.0** | **-0.1** |
| **G18K** | **Tagagawik** | **6.37** | **241** | | **Pn** | **18 11 06.6** | **-0.3** |
| **K29M** | **Barlow Dome** | **6.50** | **149** | | **Pn** | **18 11 08.8** | **+0.1** |
| **J20K** | **Nowinta River** | **6.52** | **218** | | **Pn** | **18 11 08.6** | **-0.3** |
| **C17K** | **DeLong Mountai** | **6.61** | **269** | | **Pn** | **18 11 09.5** | **-0.6** |
| **BCAR** | **Beaver Creek A** | **6.69** | **167** | Pn | **Pn** | **18 11 13.6** | **+2.3** |
| **E17K** | **Hotham Inlet** | **6.71** | **256** | | **Pn** | **18 11 11.1** | **-0.4** |
| **H18K** | **Honhosa River** | **6.80** | **235** | Pn | **Pn** | **18 11 14.1** | **+1.2** |
| **D17K** | **Noatak River** | **6.86** | **262** | | **Pn** | **18 11 12.6** | **-1.0** |
| **A36M** | **Sachs Harbour** | **6.93** | **61** | Pn | **Pn** | **18 11 14.7** | **+0.2** |
| **M29M** | **Somme Creek** | **7.66** | **157** | | **Pn** | **18 11 25.0** | **+0.3** |
| **YUK2** | **White River** | **8.03** | **166** | | **Pn** | **18 11 29.8** | **0.0** |
| **DLBC** | **Dease Lake** | **12.93** | **143** | Pn | **Pn** | **18 12 35.8** | **-0.9** |
| | comp=E,0.9nm,0.3s,baz=285,slow=14,SNR=3.6 | | | | | | |
| | comp=E,2.1nm,0.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.11** | **105** | Pn | Pn | 18 12 47.7 | -4.9 |
| | comp=E,0.3nm,0.3s,baz=314,slow=14,SNR=5.0 | | | | | | |
| YKA | | | | Sn | Sn | 18 15 15.2 | -14 |
| | comp=E,0.5nm,0.3s,baz=326,slow=22,SNR=5.7 | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.45** | **127** | P | **P** | **18 16 05.3** | **+2.1** |
| | comp=E,0.6nm,0.6s,baz=20,slow=5.8,SNR=7.0 | | | | | | |
| | comp=E,0.6nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.34** | **141** | P | **P** | **18 16 21.5** | **+1.6** |
| | comp=E,1.0nm,0.9s,baz=343,slow=7.2,SNR=5.5 | | | | | | |
| | comp=E,1.0nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.66** | **128** | P | **P** | **18 18 02.5** | **+1.0** |
| | comp=E,0.2nm,0.6s,baz=355,slow=9.0,SNR=1.8 | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **48.55** | **15** | P | **P** | **18 18 14.0** | **-1.7** |
| | comp=E,0.4nm,0.8s,baz=351,slow=7.6,SNR=2.0 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **49.09** | **6** | P | **P** | **18 18 19.5** | **-0.3** |
| | comp=E,0.9nm,0.6s,baz=5.3,slow=7.4,SNR=4.6 | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.70** | **273** | P | **P** | **18 18 40.7** | **+0.8** |
| | comp=E,0.6nm,0.8s,baz=39,slow=7.7,SNR=2.6 | | | | | | |
| | comp=E,0.6nm,0.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.34** | **26** | P | **P** | **18 18 43.8** | **-0.6** |
| | comp=E,0.2nm,0.4s,baz=350,slow=8.8,SNR=2.0 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.94** | **328** | P | **P** | **18 19 11.0** | **+0.4** |
| | comp=E,0.4nm,0.2s,baz=19,slow=7.7,SNR=4.5 | | | | | | |
| | comp=E,0.4nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.86** | **324** | P | **P** | **18 19 31.5** | **+0.1** |
| | comp=E,0.2nm,0.7s,baz=19,slow=7.7,SNR=1.9 | | | | | | |
| | comp=E,0.2nm,0.7s | | | | | | |

*IDC* ***12*** *18:26:16.1±3.8, 18°.63N×146°.59E, h87km±33km, mb3.6/12, mbtmp4.0/14, Error ellipse: s-maj=42.4km s-min=15.1km az=80.0*

**ISC 12 18:26:13.6**±1.0**, 18°.71N**±0°.08×**146°.7E**±0°.2**, h64**km**, n14, σ0**75**/15, mb4.0/12, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.39** | **199** | P | **Pn** | **18 27 32.3** | **+0.9** |
| | 24nm,0.2s,baz=134,slow=4.6,SNR=13 | | | | | | |
| GUMO | | | | S | **Sn** | **18 28 32.6** | **+0.4** |
| | 21nm,0.3s,baz=340,slow=18,SNR=1.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.28** | **339** | P | **Pn** | **18 30 34.1** | **-0.6** |
| | 2.4nm,0.7s,baz=162,slow=9.9,SNR=14 | | | | | | |
| **KSRS** | **Korea Array** | **24.88** | **322** | P | **P** | **18 31 30.4** | **+0.1** |
| | 0.6nm,0.5s,baz=146,slow=9.1,SNR=6.2 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **28.25** | **337** | P | **P** | **18 32 01.8** | **+1.2** |
| | 1.2nm,0.8s,baz=127,slow=8.2,SNR=2.1 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **43.74** | **321** | P | **P** | **18 34 12.8** | **+0.1** |
| | 0.8nm,0.7s,baz=144,slow=9.0,SNR=4.2 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **43.93** | **197** | P | **P** | **18 34 14.0** | **-0.3** |
| | 0.3nm,0.3s,baz=24,slow=7.2,SNR=20 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **50.54** | **186** | P | **P** | **18 35 04.2** | **-1.4** |
| | 2.6nm,1.0s,baz=349,slow=16,SNR=2.2 | | | | | | |
| | 2.6nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.59** | **322** | P | **P** | **18 36 03.1** | **-0.6** |
| | 1.5nm,0.6s,baz=108,slow=7.8,SNR=8.1 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.15** | **314** | P | **P** | **18 36 07.2** | **-0.5** |
| | 0.4nm,0.6s,baz=94,slow=8.9,SNR=4.6 | | | | | | |
| | 0.4nm,0

E24K IAML 18 27 26.2
comp=N,246nm,0.7s
**C23K Itkillik River 2.13 280 Pn 18 26 50.5 +0.9**
**BMAR Burnt Mountain 2.16 180 Pb 18 26 53.0 -0.6**
**D23K Nanushuk River 2.26 257 Pn 18 26 51.9 +0.3**
**D23K Nanushuk River 2.26 257** IAML 18 27 32.3
comp=E,320nm,1.1s
**E23K Chandalar 2.39 233** Pn **Pn 18 26 55.4 +2.0**
E23K IAML 18 27 35.0
comp=E,244nm,0.7s
E23K IAML 18 27 41.1
comp=N,310nm,0.8s
**F24K Squaw Lake 2.41 212** Pn **Pn 18 26 55.1 +1.6**
F24K IAML 18 27 34.9
comp=E,251nm,0.5s
**F28M Old Crow 2.62 137** Pn **Pn 18 26 57.9 +1.4**
F28M IAML 18 27 42.6
comp=E,213nm,0.8s
**G26K Porcupine Rive 2.66 173 Pn 18 26 57.2 +0.2**
**E29M Blow River 2.68 113** Pn **Pn 18 26 58.9 +1.5**
E29M IAML 18 27 42.2
comp=N,216nm,0.8s
**G25K Bearman Lake 2.89 192 Pn 18 27 00.2 +0.1**
**D22K Ayikyak River 2.98 260** Pn **Pn 18 27 03.3 +1.8**
D22K IAML 18 27 56.8
comp=N,224nm,0.9s
D22K IAML 18 28 02.0
comp=E,221nm,0.9s
**G27K Doyon Strip 2.99 157 Pn 18 27 03.5 +2.0**
**G24K Hadweenzic Riv 3.09 202 Pn 18 27 04.1 +1.1**
G24K IAML 18 27 52.9
comp=E,228nm,0.7s
**B22K Teshekpuk Lake 3.14 288** Pn **Pn 18 27 05.3 +1.7**
**COLD Coldfoot 3.15 224 Pn 18 27 04.3 +0.5**
**H25L Birch Creek 3.36 189 Pn 18 27 06.9 +0.2**
**F22K John River 3.49 237 Pn 18 27 08.7 +0.2**
**B21K Ikpikpuk River 3.52 275** Pn **Pn 18 27 10.5 +1.7**
**G23K Bananza Creek 3.53 218 Pn 18 27 09.3 +0.2**
**G23K Bananza Creek 3.53 218** IAML 18 28 14.9
comp=N,108nm,0.8s
**H27K Steamboat Moun 3.56 160 Pn 18 27 09.8 +0.4**
**E21K Killik River 3.58 256** Pn **Pn 18 27 10.2 +0.6**
E21K IAML 18 28 15.3
comp=E,146nm,0.9s
E21K IAML 18 28 27.9
comp=N,137nm,0.8s
**G29M Pine Creek 3.62 135 Pn 18 27 11.9 +1.7**
G29M IAML 18 28 23.3
comp=N,124nm,0.7s
**A22K Sinclair Lake 3.81 297 Pn 18 27 13.4 +0.7**
**H24K Noodor Dome 3.97 200** Pn **Pn 18 27 16.1 +1.0**
H24K IAML 18 28 22.5
comp=E,90nm,1.0s
**G30M tAoh Zraii Nji 4.05 126** Pn **Pn 18 27 18.5 +2.4**
**F21K Alatna River 4.06 239 Pn 18 27 17.1 +0.8**
**F21K Alatna River 4.06 239** IAML 18 28 32.3
comp=E,76nm,0.8s
F21K IAML 18 28 36.6
comp=N,64nm,0.8s
**PRP Porcupine Dome 4.10 186 Pn 18 27 17.2 +0.2**
**H29M Whitestone 4.11 142** Pn **Pn 18 27 19.0 +2.1**
H29M IAML 18 28 37.4
comp=E,78nm,0.9s
H29M IAML 18 28 39.1
comp=N,61nm,0.7s
**I27K Kandik River 4.15 163 Pn 18 27 19.0 +1.4**
**H23K Yukon River 4.22 209 Pn 18 27 19.0 +0.5**
H23K IAML 18 28 31.0
comp=N,90nm,0.6s
**EPYK Eagle Plains 4.37 134 Pn 18 27 22.2 +1.6**
**B20K Meade River 4.39 281** Pn **Pn 18 27 22.1 +1.3**
**D20K Etivluk River 4.39 264 Pn 18 27 22.3 +1.4**
**E20K Nigu River 4.40 258 Pn 18 27 22.1 +1.1**
**A21K Barrow 4.41 299 Pn 18 27 22.4 +1.4**
**I28M Miner Creek 4.51 155 Pn 18 27 24.2 +1.6**
**I28M Miner Creek 4.51 155** IAML 18 28 46.1
comp=N,45nm,0.6s
I28M IAML 18 28 54.7
comp=E,47nm,0.8s
**H22K Ishtalitna Cre 4.52 218 Pn 18 27 23.6 +1.0**
**F31M Tsiigehtchic 4.52 113** Pn **Pn 18 27 24.3 +1.7**
F31M IAML 18 28 44.6
comp=E,43nm,0.9s
F31M IAML 18 28 46.1
comp=N,44nm,0.8s
**G21K Allakaket 4.55 232 Pn 18 27 23.2 +0.2**
**G21K Allakaket 4.55 232** IAML 18 28 47.8
comp=E,59nm,1.2s
G21K IAML 18 28 48.7
comp=N,60nm,0.8s
**POKR Poker Plat Res 4.62 195 Pn 18 27 25.6 +1.7**
POKR IAML 18 28 43.6
comp=N,41nm,0.6s
POKR IAML 18 28 45.9
comp=E,62nm,0.8s
**G31M Satah River 4.66 120 Pn 18 27 25.3 +0.8**
**G31M Satah River 4.66 120** IAML 18 28 49.6
comp=E,57nm,0.8s
G31M IAML 18 28 55.3
comp=N,52nm,0.8s
**I23K Minto, Yukon-K 4.82 205 Pn 18 27 27.4 +0.6**
**I23K Minto, Yukon-K 4.82 205** IAML 18 28 52.0
comp=E,55nm,0.7s
I23K IAML 18 28 55.9
comp=N,44nm,1.1s
**MDM Murphy Dome 4.86 199 Pn 18 27 28.8 +1.5**
MDM IAML 18 28 49.4
comp=E,52nm,0.9s
MDM IAML 18 28 50.8
comp=N,41nm,0.8s
**F20K Avaraart Lake 4.86 244 Pn 18 27 28.1 +0.9**
**F20K Avaraart Lake 4.86 244** IAML 18 28 54.3
comp=N,39nm,1.1s
**I29M Ogilvie Camp, 4.87 147** IAML 18 28 31.8
comp=N,41nm,0.5s
I29M IAML 18 28 59.0
comp=E,35nm,1.2s
**ILAR Eielson Array 4.92 192 Pn 18 27 31.2 +3.2**
**ILAR Eielson Array 4.92 192** Pn **Pn 18 27 29.6 +1.6**
comp=E,2.1nm,0.3s,baz=4.9,slow=14,SNR=38
ILAR Sn **Sn 18 28 27.5 +2.9**
comp=E,1.7nm,0.3s,baz=6.7,slow=24,SNR=5.1
comp=E,5.1nm,0.4s
**D19K Kuna River 4.99 264 Pn 18 27 29.7 +0.7**
**D19K Kuna River 4.99 264** IAML 18 29 15.7
comp=E,41nm,1.1s
**J25K Salcha River, 5.00 184** Pn **Pn 18 27 30.9 +1.7**
J25K IAML 18 28 54.3
comp=N,36nm,0.8s
J25K IAML 18 29 02.3
comp=E,45nm,1.1s
**EGAK Eagle 5.00 163** IAML 18 29 02.5
comp=E,41nm,1.0s
**IMAR Indian Mountai 5.02 228 Pn 18 27 29.3 -0.1**
**H21K Melozitna Rive 5.04 223 Pn 18 27 30.3 +0.5**
**H21K Melozitna Rive 5.04 223** IAML 18 29 01.4
comp=E,43nm,1.1s
H21K IAML 18 29 08.4
comp=N,36nm,0.8s
**CCB Clear Creek Bu 5.12 196 Pn 18 27 30.9 +0.2**
**J26L Joseph Creek 5.12 175 Pn 18 27 31.6 +0.8**
**J26L Joseph Creek 5.12 175** IAML 18 28 36.2
comp=N,36nm,0.6s
J26L IAML 18 28 58.2
comp=E,37nm,0.8s
**E19K Redstone River 5.12 251 Pn 18 27 31.3 +0.5**
**E19K Redstone River 5.12 251** IAML 18 29 10.1
comp=N,45nm,0.8s
E19K IAML 18 29 15.5
comp=E,37nm,0.8s
**MLY Manley 5.16 211 Pn 18 27 31.9 +0.5**
**MLY Manley 5.16 211** IAML 18 29 06.1
comp=E,31nm,1.2s
MLY IAML 18 29 10.4
comp=N,28nm,1.2s
**HDA Harding Lake 5.28 191 Pn 18 27 35.9 +2.9**
**WRH Wood River Hil 5.32 197** IAML 18 29 04.1
comp=E,34nm,0.8s
**C19K Lookout Ridge 5.34 272 Pn 18 27 34.9 +1.0**
**C19K Lookout Ridge 5.34 272** IAML 18 28 36.9
comp=E,33nm,0.8s
C19K IAML 18 29 16.3
comp=N,25nm,0.9s
**I30M Mount Dempster 5.39 140** IAML 18 28 40.0
comp=N,34nm,0.6s
I30M IAML 18 28 44.6
comp=E,33nm,0.5s
**SCRK Sand Creek 5.63 177 Pn 18 27 39.3 +1.3**
**F19K Shaleruckik Mo 5.64 247 Pn 18 27 38.6 +0.7**
**H20K Anotleneega Mo 5.70 229 Pn 18 27 38.9 +0.1**
**A19K Wainwright 5.73 284 Pn 18 27 40.0 +0.9**
**G19K Purcell Mounta 5.85 240 Pn 18 27 41.2 +0.4**
**DAWY Dawson 5.90 157 Pn 18 27 43.8 +2.2**
**J30M Hart River 5.96 143 Pn 18 27 43.8 +1.3**
**C18K Utukok River 6.02 269 Pn 18 27 44.1 +0.9**
**BPAW Bear Paw Mtn. 6.06 208 Pn 18 27 44.5 +0.8**
**H19K Roundabout Mou 6.10 234** Pn **Pn 18 27 45.4 +1.2**
**MCK McKinley 6.12 199 Pn 18 27 45.9 +1.3**
**F18K Selawik 6.38 249 Pn 18 27 49.0 +1.0**
**K29M Barlow Dome 6.40 151 Pn 18 27 50.0 +1.6**
**J20K Nowinta River 6.60 219** Pn **Pn 18 27 52.6 +1.4**
**DHY Denali Highway 6.63 191 Pn 18 27 52.4 +0.7**
**BCAR Beaver Creek A 6.64 169** Pn **Pn 18 27 53.8 +2.0**
**L27K Beaver Creek, 6.64 169** Pn **Pn 18 27 53.7 +2.0**
**PAX Paxson 6.65 184 Pn 18 27 52.9 +1.0**
**C17K DeLong Mountai 6.77 269 Pn 18 27 53.5 +0.1**
**A36M Sachs Harbour 6.80 60 Pn 18 27 54.5 +0.6**
**E17K Hotham Inlet 6.86 257 Pn 18 27 54.8 +0.2**
**H18K Honhosa River 6.92 237 Pn 18 27 55.8 +0.2**
**F17K Baldwin Pennin 7.00 251** Pn **Pn 18 27 56.8 +0.3**
**D17K Noatak River 7.01 263 Pn 18 27 56.6 -0.1**
**C36M Paulatuk 7.20 82 Pn 18 27 59.9 +0.6**
**G17K Kiwalik Mounta 7.38 244 Pn 18 28 01.8 0.0**
**H17K Granite Mounta 7.54 239** Pn **Pn 18 28 05.5 +1.5**
**C16K Lisburne Hills 7.59 270** Pn **Pn 18 28 05.1 +0.5**
**G16K Koyuk River 8.00 247 Pn 18 28 10.7 +0.4**
**J17K VABM Dome 8.47 230** Pn **Pn 18 28 17.1 +0.3**
**M20K Styx River 8.49 209** Pn **Pn 18 28 19.4 +2.4**
**L19K White Mountain 8.53 214** Pn **Pn 18 28 18.7 +1.2**
**N30M Aishikik Lake 8.72 156** Pn **Pn 18 28 23.1 +2.9**
**MMPY Sheldon Lake, 8.81 136** Pn **Pn 18 28 23.1 +1.7**
**L18K Granite Mounta 8.88 220** Pn **Pn 18 28 22.9 +0.6**
**Q32M Nakina River 11.89 148** Pn **Pn 18 29 06.2 +2.5**
**YKA Yellowknife Ar 13.95 106** Pn **Pn 18 29 29.7 -1.8**
comp=E,0.2nm,0.3s,baz=312,slow=13,SNR=5.5
YKA Sn **Sn 18 31 58.9 -7.0**
comp=E,0.3nm,0.3s,baz=74,slow=30,SNR=5.3
comp=E,1.0nm,0.6s
**PDAR Pinedale Array 32.30 128** P **P 18 32 46.1 +3.1**
comp=E,0.4nm,0.7s,baz=18,slow=5.2,SNR=4.2
comp=E,0.4nm,0.7s

*BJI **12** 18:36:42.0±0.0, 69.°60N×144.°80W, h9km, mb4.5/38, mB5.1/10, Ms4.8/11, Ms7 4.5/12*
*MOS **12** 18:36:43.4±0.9, 69.°59N×144.°50W, h15km, mb4.8/37, MS4.0/4, Error ellipse: s-maj=18.5km s-min=4.8km az=91.8*
*IDC **12** 18:36:43.6±0.4, 69.°71N×144.°50W, h0km, mb4.5/27, mbtmp4.5/32, ML4.4/5, MS3.9/17, Error ellipse: s-maj=13.1km s-min=9.2km az=52.0*
*NEIC **12** 18:36:44.2, 69.°57N×144.°75W, h9km*
*AEIC **12** 18:36:44.0±1.4, 69.°54N±0.°06×144.°71W±0.°05, h4km±6km, ML5.1, mb4.9/361(NEIC), ML5.1/122(NEIC), Mwr4.7/44(NEIC), Error ellipse: s-maj=8.6km s-min=2.8km az=183.0*
*NEIC **12** 18:36:44.1±1.4, 69.°62N±0.°05×144.°62W±0.°09, h10km±2km, Error ellipse: s-maj=8.5km s-min=4.9km az=12.0, Moment Tensor Solution. Moment tensor: Scale 10^16^Nm; Mrr0.24; Mθθ-0.73; Mφφ0.49; Mrθ0.02; Mθφ-1.04; Mφr-0.68; Fault plane solution: M0 1.39000×10^16^ NP1: φs198.06000°, δ79.48000°, λ29.32000°. NP2: φs102.20000°, δ61.22000°, λ167.97000°. Principal axes: T 1.3985, Plg28.0000°, Azm64.0000°; N -0.0090, Plg59.0000°, Azm216.0000°; P -1.3895, Plg12.0000°, Azm327.0000°;*

**ISC 12 18:36:44.8±0.3, 69.°55N±0.°03×144.°66W±0.°02, h14km, n940, σ1$25/759, mb4.8/259, MS4.0/19, 30C-38D, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.34** | **77** | | | **Pg** | **18 36 51.0** | **-0.7** |
| C27K | | | | | | **Sb** | **18 36 56.8** | **-1.1** |
| **C27K** | **Jago River** | **0.34** | **77** | IAML | | | 18 36 57.8 | |
| comp=E,50μm,0.6s | | | | | | | | |
| C27K | | | | IAML | | | 18 36 58.1 | |
| comp=N,79μm,0.7s | | | | | | | | |
| **C27K** | **Jago River** | **0.34** | **77** | P | | **Pg** | **18 36 51.1** | **-0.6** |
| baz=256,SNR=417 | | | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **346** | | | **Pb** | **18 36 51.5** | **-1.7** |
| C26K | | | | | | **Sb** | **18 36 57.2** | **-1.7** |
| **C26K** | **Camden Bay** | **0.38** | **346** | IAML | | | 18 36 59.5 | |
| comp=N,91μm,0.5s | | | | | | | | |
| C26K | | | | IAML | | | 18 37 00.1 | |
| comp=E,76μm,0.7s | | | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **346** | P | | **Pb** | **18 36 51.6** | **-1.7** |
| baz=170,SNR=1000 | | | | | | | | |
| **D25K** | **Kavik River** | **0.65** | **250** | Pg | | **Pg** | **18 36 55.0** | **-2.4** |
| **D25K** | **Kavik River** | **0.65** | **250** | | | **Sg** | **18 37 03.4** | **-2.6** |
| **D25K** | **Kavik River** | **0.65** | **250** | P | | **Pg** | **18 36 55.2** | **-2.2** |
| baz=69,SNR=1000 | | | | | | | | |
| **D27M** | **Malcolm River** | **1.34** | **102** | Pn | | **Pn** | **18 37 08.6** | **-0.5** |
| **D27M** | **Malcolm River** | **1.34** | **102** | | | **Sg** | **18 37 27.7** | **-0.3** |
| **D27M** | **Malcolm River** | **1.34** | **102** | P | | **Pn** | **18 37 08.6** | **-0.5** |
| baz=284,SNR=479 | | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.43** | **279** | | | **Pb** | **18 37 10.4** | **-0.6** |
| C24K | | | | | | **Sg** | **18 37 29.7** | **-0.9** |
| **C24K** | **Franklin Bluff** | **1.43** | **279** | IAML | | | 18 37 30.6 | |
| comp=N,42μm,0.8s | | | | | | | | |
| C24K | | | | IAML | | | 18 37 37.9 | |
| comp=E,40μm,0.7s | | | | | | | | |
| **D24K** | **Happy Valley** | **1.53** | **257** | | | **Pn** | **18 37 11.4** | **-0.2** |
| D24K | | | | IAML | | | 18 37 39.0 | |
| comp=E,38μm,0.6s | | | | | | | | |
| **D24K** | **Happy Valley** | **1.53** | **257** | | | **Sg** | **18 37 33.2** | **-0.8** |
| **D24K** | **Happy Valley** | **1.53** | **257** | P | | **Pn** | **18 37 11.4** | **-0.2** |
| baz=73,SNR=1000 | | | | | | | | |
| **E27K** | **Coleen River** | **1.77** | **140** | | | **Pn** | **18 37 15.5** | **+0.5** |
| **E27K** | **Coleen River** | **1.77** | **140** | | | **Sb** | **18 37 39.4** | **+0.5** |
| **E27K** | **Coleen River** | **1.77** | **140** | P | | **Pn** | **18 37 15.6** | **+0.7** |
| baz=322,SNR=762 | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.88** | **174** | | | **Pn** | **18 37 17.4** | **+1.0** |
| F26K | | | | | | **Sb** | **18 37 41.9** | **-0.2** |
| **F26K** | **Sheenjek River** | **1.88** | **174** | IAML | | | 18 37 45.2 | |
| comp=E,20μm,0.7s | | | | | | | | |
| F26K | | | | IAML | | | 18 37 46.4 | |
| comp=N,16μm,0.8s | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.88** | **174** | P | | **Pn** | **18 37 17.3** | **+0.8** |
| baz=354,SNR=944 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.99** | **245** | | | **Pn** | **18 37 17.8** | **-0.2** |
| TOLK | | | | IAML | | | 18 37 54.4 | |
| comp=E,13μm,0.9s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.99** | **245** | P | | **Pn** | **18 37 17.8** | **-0.2** |
| baz=60,SNR=1000 | | | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **191** | | | **Pn** | **18 37 18.9** | **+0.7** |
| **F25K** | **Christian Rive** | **2.00** | **191** | IAML | | | 18 37 50.5 | |
| comp=N,15μm,0.8s | | | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **191** | P | | **Pn** | **18 37 18.9** | **+0.7** |
| baz=9.5,SNR=1000 | | | | | | | | |
| **E24K** | **Your Creek** | **2.04** | **225** | | | **Pn** | **18 37 19.5** | **+0.9** |
| E24K | | | | IAML | | | 18 37 49.8 | |
| comp=E,13μm,0.6s | | | | | | | | |
| **E24K** | **Your Creek** | **2.04** | **225** | P | | **Pn** | **18 37 19.1** | **+0.5** |
| baz=41,SNR=1000 | | | | | | | | |
| **E28M** | **Babbage River** | **2.07** | **115** | | | **Pn** | **18 37 19.8** | **+0.7** |
| **E28M** | **Babbage River** | **2.07** | **115** | P | | **Pn** | **18 37 20.0** | **+0.9** |
| baz=299,SNR=578 | | | | | | | | |
| **C23K** | **Itkillik River** | **2.10** | **281** | | | **Pn** | **18 37 19.1** | **-0.3** |
| **C23K** | **Itkillik River** | **2.10** | **281** | P | | **Pn** | **18 37 18.8** | **-0.6** |
| baz=96,SNR=1000 | | | | | | | | |
| **D28M** | **Stokes Point** | **2.10** | **93** | IAML | | | 18 38 04.7 | |
| comp=N,13μm,1.2s | | | | | | | | |
| **D28M** | **Stokes Point** | **2.10** | **93** | P | | **Pb** | **18 37 20.4** | **-2.2** |
| baz=278,SNR=911 | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.13** | **179** | Pn | | **Pn** | **18 37 21.1** | **+1.1** |
| **D23K** | **Nanushuk River** | **2.23** | **257** | IAML | | | 18 38 07.0 | |
| comp=N,14μm,0.8s | | | | | | | | |
| D23K | | | | IAML | | | 18 38 07.4 | |
| comp=E,12μm,1.1s | | | | | | | | |
| **D23K** | **Nanushuk River** | **2.23** | **257** | P | | **Pn** | **18 37 21.2** | **0.0** |
| baz=72,SNR=1000 | | | | | | | | |
| **E23K** | **Chandalar** | **2.35** | **233** | IAML | | | 18 38 03.7 | |
| comp=E,10μm,0.7s | | | | | | | | |
| **E23K** | **Chandalar** | **2.35** | **233** | P | | **Pn** | **18 37 23.2** | **+0.2** |
| baz=48,SNR=1000 | | | | | | | | |
| **F24K** | **Squaw Lake** | **2.37** | **212** | Pn | | **Pn** | **18 37 23.5** | **+0.4** |
| F24K | | | | IAML | | | 18 38 01.8 | |
| comp=E,10μm,0.6s | | | | | | | | |
| F24K | | | | IAML | | | 18 38 04.7 | |
| comp=N,10μm,0.6s | | | | | | | | |
| **F24K** | **Squaw Lake** | **2.37** | **212** | P | | **Pn** | **18 37 23.6** | **+0.4** |
| baz=28,SNR=414 | | | | | | | | |
| **F28M** | **Old Crow** | **2.62** | **136** | | | **Pn** | **18 37 27.0** | **+0.3** |
| F28M | | | | IAML | | | 18 38 14.2 | |
| comp=N,6μm,0.7s | | | | | | | | |
| **F28M** | **Old Crow** | **2.62** | **136** | P | | **Pn** | **18 37 27.1** | **+0.5** |
| baz=320,SNR=188 | | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.64** | **173** | | | **Pn** | **18 37 27.2** | **+0.4** |
| **G26K** | **Porcupine Rive** | **2.64** | **173** | P | | **Pn** | **18 37 27.2** | **+0.4** |
| baz=353,SNR=189 | | | | | | | | |
| **E29M** | **Blow River** | **2.70** | **112** | Pn | | **Pn** | **18 37 28.4** | **+0.6** |
| E29M | | | | IAML | | | 18 38 19.1 | |
| comp=N,6μm,1.4s | | | | | | | | |
| **E29M** | **Blow River** | **2.70** | **112** | P | | **Pn** | **18 37 28.1** | **+0.4** |
| baz=298,SNR=344 | | | | | | | | |
| **G25K** | **Bearman Lake** | **2.85** | **192** | | | **Pn** | **18 37 30.4** | **+0.6** |
| **G25K** | **Bearman Lake** | **2.85** | **192** | P | | **Pn** | **18 37 30.4** | **+0.6** |
| baz=9.9,SNR=99 | | | | | | | | |
| **D22K** | **Ayikyak River** | **2.94** | **260** | | | **Pn** | **18 37 31.1** | **+0.1** |
| D22K | | | | IAML | | | 18 38 24.3 | |
| comp=N,7μm,0.9s | | | | | | | | |
| D22K | | | | IAML | | | 18 38 25.8 | |
| comp=E,6μm,0.9s | | | | | | | | |
| **D22K** | **Ayikyak River** | **2.94** | **260** | P | | **Pn** | **18 37 30.7** | **-0.3** |
| baz=73,SNR=105 | | | | | | | | |
| **G27K** | **Doyon Strip** | **2.98** | **156** | | | **Pn** | **18 37 31.7** | **+0.2** |
| **G27K** | **Doyon Strip** | **2.98** | **156** | P | | **Pn** | **18 37 31.7** | **+0.2** |
| baz=339,SNR=138 | | | | | | | | |
| **FYU** | **Fort Yukon** | **3.01** | **184** | | | **Pn** | **18 37 32.4** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **202** | | | **Pn** | **18 37 32.7** | **+0.1** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **202** | P | | **Pn** | **18 37 32.7** | **+0.1** |
| baz=19,SNR=188 | | | | | | | | |
| **COLD** | **Coldfoot** | **3.11** | **224** | | | **Pn** | **18 37 33.5** | **+0.2** |
| **COLD** | **Coldfoot** | **3.11** | **224** | P | | **Pn** | **18 37 33.6** | **+0.2** |
| baz=39,SNR=234 | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.12** | **289** | | | **Pn** | **18 37 32.7** | **-0.7** |
| B22K | | | | IAML | | | 18 38 28.9 | |
| comp=N,13μm,1.1s | | | | | | | | |
| B22K | | | | IAML | | | 18 38 32.4 | |
| comp=E,16μm,0.9s | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.12** | **289** | P | | **Pn** | **18 37 32.7** | **-0.7** |
| baz=101,SNR=231 | | | | | | | | |
| **H25L** | **Birch Creek** | **3.33** | **188** | | | **Pn** | **18 37 36.7** | **+0.3** |
| **H25L** | **Birch Creek** | **3.33** | **188** | P | | **Pn** | **18 37 36.9** | **+0.5** |
| baz=6.8,SNR=104 | | | | | | | | |
| **F22K** | **John River** | **3.44** | **237** | | | **Pn** | **18 37 37.7** | **-0.3** |
| **F22K** | **John River** | **3.44** | **237** | P | | **Pn** | **18 37 37.4** | **-0.5** |
| baz=50,SNR=147 | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.49** | **276** | | | **Pn** | **18 37 38.3** | **-0.2** |
| **B21K** | **Ikpikpuk River** | **3.49** | **276** | P | | **Pn** | **18 37 38.3** | **-0.2** |
| baz=87,SNR=137 | | | | | | | | |
| **G23K** | **Bananza Creek** | **3.49** | **218** | | | **Pn** | **18 37 38.5** | **-0.1** |
| G23K | | | | IAML | | | 18 38 40.8 | |
| comp=N,4μm,1.4s | | | | | | | | |
| **G23K** | **Bananza Creek** | **3.49** | **218** | P | | **Pn** | **18 37 38.3** | **-0.3** |
| baz=33,SNR=41 | | | | | | | | |
| **E21K** | **Killik River** | **3.54** | **256** | | | **Pn** | **18 37 38.9** | **-0.3** |
| **E21K** | **Killik River** | **3.54** | **256** | IAML | | | 18 38 41.0 | |
| comp=E,4μm,0.9s | | | | | | | | |
| E21K | | | | IAML | | | 18 38 43.5 | |
| comp=N,5μm,1.1s | | | | | | | | |
| **E21K** | **Killik River** | **3.54** | **256** | P | | **Pn** | **18 37 38.3** | **-0.9** |
| baz=68,SNR=60 | | | | | | | | |
| **H27K** | **Steamboat Moun** | **3.54** | **159** | P | | **Pn** | **18 37 39.4** | **+0.1** |
| baz=342,SNR=155 | | | | | | | | |
| **G29M** | **Pine Creek** | **3.63** | **134** | | | **Pn** | **18 37 41.1** | **+0.7** |
| **G29M** | **Pine Creek** | **3.63** | **134** | IAML | | | 18 38 47.3 | |
| comp=E,5μm,1.4s | | | | | | | | |
| G29M | | | | IAML | | | 18 39 01.6 | |
| comp=N,3μm,0.8s | | | | | | | | |
| **G29M** | **Pine Creek** | **3.63** | **134** | P | | **Pn** | **18 37 41.0** | **+0.7** |
| baz=320,SNR=256 | | | | | | | | |
| **G22K** | **Bettles** | **3.67** | **227** | | | **Pn** | **18 37 41.0** | **-0.1** |
| **G22K** | **Bettles** | **3.67** | **227** | P | | **Pn** | **18 37 40.8** | **-0.2** |
| baz=41 | | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.79** | **297** | | | **Pn** | **18 37 42.0** | **-0.5** |
| **A22K** | **Sinclair Lake** | **3.79** | **297** | P | | **Pn** | **18 37 42.1** | **-0.5** |
| baz=108,SNR=63 | | | | | | | | |
| **F30M** | **Barrier River** | **3.79** | **117** | | | **Pn** | **18 37 44.1** | **+1.4** |
| **F30M** | **Barrier River** | **3.79** | **117** | P | | **Pn** | **18 37 44.3** | **+1.6** |
| baz=305,SNR=263 | | | | | | | | |
| **H24K** | **Noodor Dome** | **3.93** | **200** | IAML | | | 18 38 52.1 | |
| comp=E,3μm,1.1s | | | | | | | | |
| H24K | | | | IAML | | | 18 38 55.8 | |
| comp=N,3μm,0.8s | | | | | | | | |
| **H24K** | **Noodor Dome** | **3.93** | **200** | P | | **Pn** | **18 37 44.7** | **+0.1** |
| baz=17,SNR=294 | | | | | | | | |
| **F21K** | **Alatna River** | **4.02** | **239** | IAML | | | 18 38 55.2 | |
| comp=N,2μm,0.6s | | | | | | | | |
| F21K | | | | IAML | | | 18 38 55.9 | |
| comp=E,3μm,0.8s | | | | | | | | |
| **F21K** | **Alatna River** | **4.02** | **239** | P | | **Pn** | **18 37 45.8** | **-0.1** |
| baz=50,SNR=237 | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.06** | **125** | P | | **Pn** | **18 37 47.3** | **+0.8** |
| baz=313,SNR=125 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.07** | **185** | Pn | | **Pn** | **18 37 47.2** | **+0.6** |
| PRP | | | | IAML | | | 18 38 59.8 | |
| comp=N,3μm,0.8s | | | | | | | | |
| PRP | | | | IAML | | | 18 39 02.2 | |
| comp=E,2μm,1.0s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.07** | **185** | P | | **Pn** | **18 37 47.2** | **+0.6** |
| baz=4.0,SNR=344 | | | | | | | | |
| **H29M** | **Whitestone** | **4.11** | **142** | Pn | | **Pn** | **18 37 47.9** | **+0.9** |
| H29M | | | | IAML | | | 18 38 44.6 | |
| comp=E,3μm,0.9s | | | | | | | | |
| H29M | | | | IAML | | | 18 39 07.2 | |
| comp=N,3μm,1.2s | | | | | | | | |
| **H29M** | **Whitestone** | **4.11** | **142** | P | | **Pn** | **18 37 47.9** | **+0.9** |
| baz=327,SNR=218 | | | | | | | | |
| **I27K** | **Kandik River** | **4.14** | **162** | P | | **Pn** | **18 37 48.0** | **+0.5** |
| baz=345 | | | | | | | | |
| **H23K** | **Yukon River** | **4.18** | **209** | P | | **Pn** | **18 37 48.1** | **+0.1** |
| baz=24,SNR=248 | | | | | | | | |
| **INK** | **Inuvik** | **4.21** | **102** | | | **Pn** | **18 37 48.9** | **+0.6** |
| **INK** | **Inuvik** | **4.21** | **102** | Pn | | **Pn** | **18 37 47.8** | **-0.5** |
| comp=N,9.8nm,0.3s,baz=330,slow=8.1,SNR=30 | | | | | | | | |
| INK | | | | Sn | | **Sn** | **18 38 35.9** | **-1.4** |
| comp=N,34nm,0.3s,baz=283,slow=22,SNR=5.5 | | | | | | | | |
| INK | | | | LR | | LR | 18 40 00.6 | |
| comp=N,1μm,20.1s,baz=284,slow=47 | | | | | | | | |
| comp=N,38nm,0.4s | | | | | | | | |
| **INK** | **Inuvik** | **4.21** | **102** | P | | **Pn** | **18 37 48.5** | **+0.2** |
| baz=292,SNR=61 | | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.31** | **172** | | | **Pn** | **18 37 50.2** | **+0.5** |
| **I26K** | **Coal Creek Min** | **4.31** | **172** | P | | **Pn** | **18 37 50.3** | **+0.5** |
| baz=353,SNR=271 | | | | | | | | |
| **D20K** | **Etivluk River** | **4.36** | **264** | | | **Pn** | **18 37 50.6** | **+0.1** |
| **D20K** | **Etivluk River** | **4.36** | **264** | P | | **Pn** | **18 37 50.8** | **+0.3** |
| baz=74 | | | | | | | | |
| **B20K** | **Meade River** | **4.36** | **282** | | | **Pn** | **18 37 50.1** | **-0.4** |
| **B20K** | **Meade River** | **4.36** | **282** | P | | **Pn** | **18 37 50.2** | **-0.4** |
| baz=90,SNR=120 | | | | | | | | |
| **E20K** | **Nigu River** | **4.37** | **258** | | | **Pn** | **18 37 50.4** | **-0.2** |
| **E20K** | **Nigu River** | **4.37** | **258** | P | | **Pn** | **18 37 50.1** | **-0.5** |
| baz=68,SNR=280 | | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.38** | **133** | | | **Pn** | **18 37 51.3** | **+0.5** |
| **EPYK** | **Eagle Plains** | **4.38** | **133** | IAML | | | 18 39 06.8 | |
| comp=N,3μm,1.0s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.38** | **133** | P | | **Pn** | **18 37 51.3** | **+0.5** |
| baz=320,SNR=224 | | | | | | | | |
| **A21K** | **Barrow** | **4.39** | **299** | | | **Pn** | **18 37 50.5** | **-0.4** |
| **A21K** | **Barrow** | **4.39** | **299** | P | | **Pn** | **18 37 50.2** | **-0.7** |
| baz=108,SNR=114 | | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.48** | **218** | P | | **Pn** | **18 37 51.9** | **-0.2** |
| baz=32,SNR=37 | | | | | | | | |
| **I28M** | **Miner Creek** | **4.50** | **154** | | | **Pn** | **18 37 53.4** | **+0.8** |
| **I28M** | **Miner Creek** | **4.50** | **154** | IAML | | | 18 39 18.1 | |
| comp=E,2μm,1.4s | | | | | | | | |
| **I28M** | **Miner Creek** | **4.50** | **154** | P | | **Pn** | **18 37 53.4** | **+0.8** |
| baz=338,SNR=446 | | | | | | | | |
| **G21K** | **Allakaket** | **4.51** | **232** | | | **Pn** | **18 37 52.3** | **-0.3** |
| **G21K** | **Allakaket** | **4.51** | **232** | P | | **Pn** | **18 37 52.1** | **-0.4** |
| baz=43,SNR=46 | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.54** | **113** | Pn | | **Pn** | **18 37 53.2** | **+0.3** |
| F31M | | | | IAML | | | 18 39 10.5 | |
| comp=N,2μm,0.9s | | | | | | | | |
| F31M | | | | IAML | | | 18 39 15.5 | |
| comp=E,2μm,1.3s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.54** | **113** | P | | **Pn** | **18 37 52.9** | **0.0** |
| baz=302,SNR=79 | | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58** | **195** | | | **Pn** | **18 37 53.9** | **+0.3** |
| **POKR** | **Poker Plat Res** | **4.58** | **195** | IAML | | | 18 39 09.0 | |

comp=E,2µm,0.8s
POKR IAML 18 39 23.6
comp=N,2µm,1.1s
**POKR Poker Plat Res** 4.58 195 P Pn 18 37 53.9 +0.3
baz=12,SNR=89
**G31M Satah River** 4.68 119 Pn 18 37 55.6 +0.7
**G31M Satah River** 4.68 119 IAML 18 39 24.7
comp=N,2µm,1.0s
**G31M Satah River** 4.68 119 P Pn 18 37 55.4 +0.5
baz=309,SNR=148
**I23K Minto, Yukon-K** 4.78 205 IAML 18 39 26.5
comp=N,2µm,1.3s
**I23K Minto, Yukon-K** 4.78 205 P Pn 18 37 56.5 +0.3
baz=20,SNR=193
**F20K Avaraart Lake** 4.81 244 IAML 18 39 27.6
comp=N,1µm,1.3s
F20K IAML 18 39 29.6
comp=E,1µm,0.8s
**F20K Avaraart Lake** 4.81 244 P Pn 18 37 57.1 +0.4
baz=54,SNR=192
**MDM Murphy Dome** 4.82 198 IAML 18 39 18.1
comp=E,2µm,1.0s
MDM IAML 18 39 25.4
comp=N,2µm,0.9s
**COLA College** 4.86 196 P Pn 18 37 59.8 +2.5
**COLA College** 4.86 196 Pn 18 37 57.9 +0.5
**COLA College** 4.86 196 P Pn 18 37 57.4 +0.1
baz=13
**COLA College** 4.86 196 *i* P Pn 18 37 57.8 +0.5
**I29M Ogilvie Camp,** 4.87 147 Pn 18 37 58.3 +0.8
**I29M Ogilvie Camp,** 4.87 147 IAML 18 39 27.0
comp=N,1µm,1.1s
**I29M Ogilvie Camp,** 4.87 147 P Pn 18 37 57.8 +0.4
baz=332,SNR=200
**ILAR Eielson Array** 4.88 191 Pn Pn 18 37 58.0 +0.4
comp=N,21nm,0.3s,baz=5.2,slow=16,SNR=85
ILAR Sn Sn 18 38 57.4 +3.5
comp=N,78nm,0.3s,baz=360,slow=28,SNR=3.1
ILAR LR LR 18 39 37.2
comp=N,909nm,21.9s,baz=28,slow=34
comp=N,156nm,0.7s
**D19K Kuna River** 4.95 264 IAML 18 39 37.6
comp=E,2µm,1.0s
**D19K Kuna River** 4.95 264 P Pn 18 37 58.6 -0.1
baz=72,SNR=615
**J25K Salcha River,** 4.97 184 IAML 18 39 33.2
comp=N,1µm,0.9s
J25K IAML 18 39 34.6
comp=E,1µm,1.4s
**J25K Salcha River,** 4.97 184 P Pn 18 37 59.5 +0.5
baz=2.7,SNR=96
**IMAR Indian Mountai** 4.97 228 Pn 18 37 58.2 -0.7
**EGAK Eagle** 4.99 162 Pn 18 37 59.6 +0.5
**EGAK Eagle** 4.99 162 IAML 18 38 58.7
comp=E,1µm,0.8s
EGAK IAML 18 39 32.4
comp=E,1µm,1.1s
**EGAK Eagle** 4.99 162 P Pn 18 37 59.6 +0.5
baz=346,SNR=256
**H21K Melozitna Rive** 5.00 222 Pn 18 37 59.4 +0.1
**H21K Melozitna Rive** 5.00 222 IAML 18 39 32.1
comp=E,1µm,1.5s
**H21K Melozitna Rive** 5.00 222 P Pn 18 37 59.4 +0.1
baz=35,SNR=69
**E19K Redstone River** 5.08 251 Pn 18 37 59.9 -0.5
**E19K Redstone River** 5.08 251 IAML 18 39 53.9
comp=E,1µm,0.8s
**E19K Redstone River** 5.08 251 P Pn 18 37 59.8 -0.6
baz=60,SNR=105
**CCB Clear Creek Bu** 5.08 195 Pn 18 38 00.5 +0.1
**CCB Clear Creek Bu** 5.08 195 IAML 18 39 30.3
comp=E,1µm,1.3s
**J26L Joseph Creek** 5.09 175 Pn 18 38 01.1 +0.4
**J26L Joseph Creek** 5.09 175 IAML 18 39 27.7
comp=E,1µm,1.0s
**J26L Joseph Creek** 5.09 175 P Pn 18 38 01.3 +0.6
baz=355,SNR=138
**MLY Manley** 5.12 210 IAML 18 39 31.6
comp=N,1µm,1.2s
MLY IAML 18 39 36.9
comp=E,1µm,1.3s
**MLY Manley** 5.12 210 P Pn 18 38 01.2 +0.3
baz=25,SNR=88
**HDA Harding Lake** 5.25 191 Pn 18 38 03.6 +0.9
**HDA Harding Lake** 5.25 191 IAML 18 39 40.8
comp=N,1µm,1.0s
**HDA Harding Lake** 5.25 191 P Pn 18 38 03.5 +0.9
baz=8.7,SNR=172
**NEA2 Nenana** 5.27 201 IAML 18 39 36.9
comp=E,931nm,1.2s
**NEA2 Nenana** 5.27 201 P Pn 18 38 03.0 0.0
baz=17,SNR=129
**WRH Wood River Hil** 5.28 196 IAML 18 39 39.8
comp=E,1µm,1.5s
WRH IAML 18 39 41.5
comp=N,1µm,1.2s
**C19K Lookout Ridge** 5.31 272 IAML 18 39 58.7
comp=N,1µm,1.4s
C19K IAML 18 40 02.1
comp=E,878nm,1.1s
**C19K Lookout Ridge** 5.31 272 P Pn 18 38 03.3 -0.3
baz=78,SNR=146
**I30M Mount Dempster** 5.39 140 Pn 18 38 05.2 +0.4
**I30M Mount Dempster** 5.39 140 IAML 18 39 09.3
comp=E,1µm,0.8s
**I30M Mount Dempster** 5.39 140 P Pn 18 38 05.1 +0.4
baz=327,SNR=356
**F19K Shaleruckik Mo** 5.60 247 Pn Pn 18 38 07.5 +0.1
**F19K Shaleruckik Mo** 5.60 247 P Pn 18 38 07.1 -0.3
baz=55,SNR=184
**SCRK Sand Creek** 5.61 177 P Pn 18 38 09.0 +1.2
baz=357,SNR=204
**K27K Chicken** 5.64 168 Pn 18 38 08.7 +0.6
**K27K Chicken** 5.64 168 P Pn 18 38 09.0 +0.9
baz=350
**H20K Anotleneega Mo** 5.65 229 P Pn 18 38 07.4 -0.9
baz=39,SNR=28
**A19K Wainwright** 5.70 284 Pn 18 38 08.6 -0.3
**A19K Wainwright** 5.70 284 P Pn 18 38 08.0 -0.8
baz=89,SNR=51
**J29N Klondike Camp** 5.71 151 Pn 18 38 09.3 +0.2
**J29N Klondike Camp** 5.71 151 P Pn 18 38 10.0 +1.0
baz=336,SNR=47
**BWN Browne** 5.73 202 Pn 18 38 09.7 +0.4
**K24K Donnelly Dome** 5.79 185 Pn 18 38 11.3 +1.1
**K24K Donnelly Dome** 5.79 185 P Pn 18 38 11.3 +1.1
baz=3.7,SNR=53
**G19K Purcell Mounta** 5.81 240 P Pn 18 38 10.0 -0.4
baz=48,SNR=65
**DAWY Dawson** 5.89 157 Pn 18 38 12.4 +0.9
**DAWY Dawson** 5.89 157 P Pn 18 38 12.5 +0.9
baz=342,SNR=369
**J30M Hart River** 5.96 143 P Pn 18 38 13.1 +0.5
baz=330,SNR=142
**C18K Utukok River** 5.98 269 Pn 18 38 12.6 -0.2
**C18K Utukok River** 5.98 269 P Pn 18 38 12.3 -0.5
baz=74,SNR=184
**BPAW Bear Paw Mtn.** 6.02 208 Pn 18 38 13.3 +0.1
**BPAW Bear Paw Mtn.** 6.02 208 P Pn 18 38 13.7 +0.5
baz=22,SNR=110
**B18K Kokolik River** 6.04 276 Pn 18 38 12.8 -0.7
**B18K Kokolik River** 6.04 276 P Pn 18 38 12.5 -1.0
baz=80,SNR=21
**H19K Roundabout Mou** 6.06 234 P Pn 18 38 13.3 -0.4
baz=43,SNR=56
**MCK McKinley** 6.09 198 P Pn 18 38 15.0 +0.7
baz=14,SNR=123
**I20K Naaghedeneel** 6.11 223 Pn 18 38 14.6 +0.1
**I20K Naaghedeneel** 6.11 223 P Pn 18 38 14.3 -0.2
baz=34,SNR=13
**E18K Tukpahlearik C** 6.24 258 Pn 18 38 16.0 -0.2
**E18K Tukpahlearik C** 6.24 258 P Pn 18 38 16.2 0.0
baz=63,SNR=256
**F18K Selawik** 6.34 249 Pn 18 38 17.3 -0.3
**F18K Selawik** 6.34 249 P Pn 18 38 17.2 -0.4
baz=56,SNR=235
**K29M Barlow Dome** 6.39 150 P Pn 18 38 19.1 +0.7
baz=337,SNR=230
**RND Reindeer** 6.40 197 Pn 18 38 18.7 +0.2
**RND Reindeer** 6.40 197 P Pn 18 38 18.7 +0.2
**CHUM Lake Minchumin** 6.45 212 Pn 18 38 19.2 +0.1
**CHUM Lake Minchumin** 6.45 212 P Pn 18 38 19.6 +0.5
baz=25
**G18K Tagagawik** 6.46 242 P Pn 18 38 19.3 0.0
baz=49,SNR=90
**KTH Kantishna Hill** 6.52 205 Pn 18 38 20.2 0.0
**J20K Nowinta River** 6.56 219 Pn 18 38 20.6 0.0
**J20K Nowinta River** 6.56 219 P Pn 18 38 20.8 +0.1
baz=30,SNR=39
**L26K Log Cabin Wild** 6.58 175 Pn 18 38 21.8 +0.8
**L26K Log Cabin Wild** 6.58 175 P Pn 18 38 22.1 +1.1
baz=356,SNR=247
**DHY Denali Highway** 6.60 191 P Pn 18 38 23.1 +1.8
baz=8.2,SNR=216
**BCAR Beaver Creek A** 6.62 169 Pn Pn 18 38 21.9 +0.4
**L27K Beaver Creek,** 6.62 169 P Pn 18 38 22.5 +1.0
baz=351,SNR=276
**PAX Paxson** 6.62 183 P Pn 18 38 22.9 +1.3
baz=2.3,SNR=164
**MENT Mentasta** 6.66 176 Pn Pn 18 38 23.0 +1.0
**C17K DeLong Mountai** 6.73 270 P Pn 18 38 21.3 -1.8
baz=72,SNR=65
**GCSA Galena City Sc** 6.77 230 Pn 18 38 22.8 -0.7
**GCSA Galena City Sc** 6.77 230 P Pn 18 38 23.4 -0.1
baz=39
**RDOG Red Dog Mine** 6.78 266 P Pn 18 38 23.0 -0.7
baz=69,SNR=103
**E17K Hotham Inlet** 6.82 257 Pn 18 38 23.3 -0.9
**E17K Hotham Inlet** 6.82 257 P Pn 18 38 23.3 -0.9
baz=61
**A36M Sachs Harbour** 6.84 60 Pn Pn 18 38 23.4 -1.1
**A36M Sachs Harbour** 6.84 60 P Pn 18 38 23.6 -0.9
baz=258,SNR=99
**H18K Honhosa River** 6.88 237 P Pn 18 38 24.6 -0.5
baz=44,SNR=76
**WAT1 Susitna Watana** 6.93 195 P Pn 18 38 26.9 +1.1
baz=11
**WAT7 Susitna Watana** 6.96 196 Pn 18 38 26.4 +0.1
**F17K Baldwin Pennin** 6.96 251 Pn Pn 18 38 25.1 -1.0
**F17K Baldwin Pennin** 6.96 251 P Pn 18 38 25.2 -1.0
baz=56,SNR=45
**D17K Noatak River** 6.98 263 Pn 18 38 25.1 -1.3
**D17K Noatak River** 6.98 263 P Pn 18 38 24.9 -1.4
baz=66
**L29M L29M** 6.98 155 Pn 18 38 26.8 +0.3
**L29M L29M** 6.98 155 P Pn 18 38 27.1 +0.6
baz=341,SNR=164
**J19K Poman** 7.06 223 P Pn 18 38 27.1 -0.4
baz=33,SNR=25
**WAT6 Susitna Watana** 7.11 192 P Pn 18 38 29.6 +1.1
baz=8.6,SNR=46
**HARP HAARP** 7.19 182 Pn 18 38 30.7 +1.4
**HARP HAARP** 7.19 182 P Pn 18 38 31.0 +1.7
baz=1.2,SNR=49
**M26K Nabesna, AK** 7.22 174 Pn 18 38 31.5 +1.7
**M26K Nabesna, AK** 7.22 174 P Pn 18 38 30.8 +1.1
baz=355,SNR=269
**C36M Paulatuk** 7.24 82 Pn 18 38 28.3 -1.6
**C36M Paulatuk** 7.24 82 P Pn 18 38 28.1 -1.8
baz=281,SNR=16
**K20K Telida** 7.27 216 P Pn 18 38 29.9 -0.5
baz=27,SNR=21
**M27K Edge Creek, AK** 7.32 170 Pn 18 38 31.9 +0.7
**M27K Edge Creek, AK** 7.32 170 P Pn 18 38 32.2 +1.0
baz=352,SNR=438
**G17K Kiwalik Mounta** 7.34 244 P Pn 18 38 31.2 -0.1
baz=49,SNR=102
**H17K Granite Mounta** 7.50 239 Pn 18 38 33.1 -0.4
**H17K Granite Mounta** 7.50 239 P Pn 18 38 34.0 +0.5
baz=45,SNR=44
**M24K Tolsona, Glenn** 7.51 185 Pn 18 38 35.0 +1.3
**M24K Tolsona, Glenn** 7.51 185 P Pn 18 38 35.9 +2.2
baz=4.0,SNR=14
**CUT Chulitna** 7.53 200 Pn 18 38 35.6 +1.6
**CUT Chulitna** 7.53 200 P Pn 18 38 34.9 +0.9
baz=15,SNR=29
**C16K Lisburne Hills** 7.56 270 Pn 18 38 32.9 -1.4
**C16K Lisburne Hills** 7.56 270 P Pn 18 38 33.7 -0.6
baz=71,SNR=38
**M29M Somme Creek** 7.57 158 Pn 18 38 35.3 +0.7
**M29M Somme Creek** 7.57 158 P Pn 18 38 35.4 +0.7
baz=343,SNR=493
**WACK Wrangell Chich** 7.60 179 Pn 18 38 36.3 +1.1
**WASW Wrangell South** 7.66 178 Pn 18 38 36.5 +0.5
**J18K Innoko River** 7.77 224 Pn 18 38 36.8 -0.5
**J18K Innoko River** 7.77 224 P Pn 18 38 36.8 -0.5
baz=33
**SCM Sheep Creek Mo** 7.83 189 P Pn 18 38 40.2 +2.0
baz=6.8,SNR=33
**M23K Glacier View** 7.90 191 P Pn 18 38 39.5 +0.5
baz=7.8,SNR=44
**SML Sawmill** 7.92 193 Pn 18 38 40.0 +0.5
**SML Sawmill** 7.92 193 P Pn 18 38 40.7 +1.3
baz=9.3,SNR=31
**G16K Koyuk River** 7.96 247 P Pn 18 38 38.6 -1.2
baz=51,SNR=27
**N25K Chitina, Valde** 7.98 180 Pn 18 38 41.2 +0.9
**N25K Chitina, Valde** 7.98 180 P Pn 18 38 42.1 +1.8
baz=360,SNR=18
**YUK3 Moose Creek** 8.00 166 P Pn 18 38 42.0 +1.4
baz=349,SNR=42
**GHO Glory Hole Cre** 8.01 195 Pn 18 38 41.9 +1.3
**L20K Farewell, AK** 8.03 212 Pn 18 38 40.6 -0.2
**L20K Farewell, AK** 8.03 212 P Pn 18 38 40.7 -0.2
baz=24
**SKT Skwentna** 8.11 204 Pn 18 38 42.9 +1.0
**SKT Skwentna** 8.11 204 P Pn 18 38 42.8 +1.0
baz=17,SNR=36
**KLU Klutina** 8.11 184 Pn 18 38 43.3 +1.3
**KLU Klutina** 8.11 184 P Pn 18 38 43.2 +1.1
baz=3.0,SNR=18
**M22K Willow** 8.15 199 Pn 18 38 43.0 +0.6
**M22K Willow** 8.15 199 P Pn 18 38 43.7 +1.3
baz=14,SNR=26
**GLB Gilahina Butte** 8.15 177 Pn 18 38 43.2 +0.6
**PMR Palmer** 8.21 195 P Pn 18 38 46.4 +3.2
**PMR Palmer** 8.21 195 P Pn 18 38 44.5 +1.3
baz=11,SNR=17
**MCARA McCarthy VSAT** 8.23 175 Pn 18 38 45.1 +1.4
**MCARA McCarthy VSAT** 8.23 175 P Pn 18 38 45.6 +2.0
baz=356,SNR=48
**KNK Knik Glacier** 8.32 193 Pn 18 38 45.9 +1.0
**KNK Knik Glacier** 8.32 193 P Pn 18 38 47.1 +2.3
baz=9.1,SNR=41
**H16K Elim** 8.42 243 P Pn 18 38 45.5 -0.7
baz=46,SNR=11
**J17K VABM Dome** 8.43 230 P Pn 18 38 45.8 -0.5
baz=37,SNR=20
**M20K Styx River** 8.45 208 Pn 18 38 46.8 +0.1
**M20K Styx River** 8.45 208 P Pn 18 38 47.3 +0.6
baz=21,SNR=81
**DIV Divide** 8.47 184 Pn 18 38 46.9 -0.1
**M31M Drury Creek, Y** 8.48 145 Pn 18 38 47.3 +0.3
**M31M Drury Creek, Y** 8.48 145 P Pn 18 38 47.5 +0.5
baz=335,SNR=65
**L19K White Mountain** 8.48 214 Pn 18 38 46.9 -0.2
**L19K White Mountain** 8.48 214 P Pn 18 38 47.2 +0.1
baz=25,SNR=12
**I17K Unalakleet** 8.50 236 Pn 18 38 46.8 -0.5
**I17K Unalakleet** 8.50 236 P Pn 18 38 47.1 -0.1
baz=41
**SUA Susitna One** 8.50 200 P Pn 18 38 47.0 -0.5
baz=14,SNR=14
**F15K North Star Dit** 8.52 253 P Pn 18 38 46.0 -1.5
baz=54,SNR=16
**YUK8 Steele Glacier** 8.55 164 P Pn 18 38 49.6 +1.5
baz=348,SNR=144
**YUK4 Talbot Arm** 8.61 160 P Pn 18 38 49.5 +0.5
baz=345,SNR=68
**STLK Strandline Lak** 8.61 204 Pn 18 38 49.5 +0.6
**BMRM Bremner River** 8.62 180 P Pn 18 38 52.0 +3.0
baz=360,SNR=34
**M19K Big River Lodg** 8.65 212 Pn 18 38 49.5 +0.1
**M19K Big River Lodg** 8.65 212 P Pn 18 38 49.8 +0.4
baz=23,SNR=30
**FARO Faro, Yukon** 8.67 142 Pn 18 38 50.0 +0.4
**FARO Faro, Yukon** 8.67 142 P Pn 18 38 49.7 0.0
baz=333,SNR=107
**N30M Aishikik Lake** 8.71 155 P Pn 18 38 50.9 +0.8
baz=342,SNR=260
**KIAG Kiagna River** 8.72 173 Pn 18 38 50.7 +0.2
**CTG Chitna Glacier** 8.73 169 P Pn 18 38 52.7 +2.1
baz=352,SNR=172
**RC01 Rabbit Creek A** 8.76 196 P Pn 18 38 52.2 +1.4
baz=12,SNR=16
**G15K Niukluk** 8.76 248 P Pn 18 38 50.2 -0.6
baz=50,SNR=11
**K17K Iditarod** 8.79 225 P Pn 18 38 51.6 +0.3
baz=33
**MMPY Sheldon Lake,** 8.81 136 Pn 18 38 52.4 +0.8
**MMPY Sheldon Lake,** 8.81 136 P Pn 18 38 52.9 +1.3
baz=328,SNR=154
**L18K Granite Mounta** 8.84 219 P Pn 18 38 52.5 +0.6
baz=28,SNR=13
**CRQE Cirque** 8.86 175 P Pn 18 38 55.0 +2.6
baz=356,SNR=93
**PWL Port Wells** 8.87 192 Pn 18 38 53.3 +1.0
**PWL Port Wells** 8.87 192 P Pn 18 38 54.3 +2.0
baz=8.3
**SPCP Crater Peak Br** 8.88 204 Pn 18 38 53.2 +0.6
**N31M Braeburn, Yuko** 8.89 151 P Pn 18 38 53.9 +1.3
baz=339,SNR=80
**SPBG Spurr Blockage** 8.92 205 Pn 18 38 53.7 +0.6
**J16K Anvik River** 8.94 233 Pn 18 38 52.8 -0.5
**J16K Anvik River** 8.94 233 P Pn 18 38 53.0 -0.3
baz=38,SNR=14
**SPU Mount Spurr** 8.95 204 Pn 18 38 53.2 -0.2
**N20K Mount Spurr** 8.95 204 P Pn 18 38 54.9 +1.4
baz=17,SNR=14
**SPCR Spurr Chakacha** 8.95 204 Pn 18 38 53.6 +0.1
**O28M Mount Upton** 9.01 166 Pn 18 38 56.3 +1.7
**O28M Mount Upton** 9.01 166 P Pn 18 38 57.1 +2.5
baz=350,SNR=113
**YUK6 Outpost Mounta** 9.03 160 Pn 18 38 55.8 +1.0
**YUK6 Outpost Mounta** 9.03 160 P Pn 18 38 56.3 +1.5
baz=346,SNR=68
**EYAK Cordova Ski Ar** 9.05 183 P Pn 18 38 59.1 +4.3
**EYAK Cordova Ski Ar** 9.05 183 P Pn 18 38 55.9 +1.0
baz=2.3,SNR=9.1
**F14K Arctic Creek** 9.22 254 Pn 18 38 56.2 -0.9
**F14K Arctic Creek** 9.22 254 P Pn 18 38 56.0 -1.1
baz=54,SNR=20
**L17K Donlin** 9.29 223 Pn 18 38 57.5 -0.5
**L17K Donlin** 9.29 223 P Pn 18 38 57.8 -0.2
baz=31,SNR=7.7
**M18K Stony River** 9.31 215 P Pn 18 38 58.3 0.0
baz=25
**O22K Cooper Landing** 9.35 196 P Pn 18 38 58.2 -0.7
baz=11
**ANM Nome** 9.47 248 Pn 18 38 59.7 -0.9
**ANM Nome** 9.47 248 P Pn 18 38 59.6 -0.9
baz=49
**ANM Nome** 9.47 248 P Pn 18 38 59.7 -0.9
**MESA MESA** 9.48 172 P Pn 18 39 04.4 +3.5
baz=354,SNR=54
**O30N Mendenhall** 9.51 154 Pn 18 39 01.9 +0.7
**O30N Mendenhall** 9.51 154 P Pn 18 39 01.5 +0.3
baz=341,SNR=45
**DFR Drift River** 9.60 204 Pn 18 39 02.3 -0.2
**SVW2 Sparrevohn** 9.62 213 P Pn 18 39 06.5 +3.9
**O29M Mount Kennedy** 9.63 162 P Pn 18 39 04.9 +2.0
baz=347,SNR=42
**KAIM Kayak Island** 9.67 179 P Pn 18 39 06.9 +3.6
baz=359
**N19K Bonanza Creek** 9.68 210 Pn 18 39 03.1 -0.4
**N19K Bonanza Creek** 9.68 210 P Pn 18 39 03.9 +0.4
baz=21,SNR=14
**N32M Quiet Lake** 9.70 145 P Pn 18 39 03.9 +0.2
baz=335
**SEW Seward** 9.70 194 P Pn 18 39 04.6 +0.9
baz=9.9
**TNA Tin City** 9.71 257 Pn 18 39 03.3 -0.5
**TNA Tin City** 9.71 257 P Pn 18 39 03.8 -0.1
baz=55
**M17K Holitna River** 9.73 219 Pn Pn 18 39 05.1 +1.0
**M17K Holitna River** 9.73 219 P Pn 18 39 04.5 +0.4
baz=27
**WHY Whitehorse** 9.82 151 P Pn 18 39 05.9 +0.5
baz=339,SNR=33
**BCPM Bancas Point** 9.87 165 Pn 18 39 08.0 +2.0
**L16K Owhat River** 9.94 225 Pn Pn 18 39 07.7 +0.8
**L16K Owhat River** 9.94 225 P Pn 18 39 07.2 +0.2
baz=31
**K15K Wolf Creek Mou** 9.99 231 Pn 18 39 06.8 -0.9
**K15K Wolf Creek Mou** 9.99 231 P Pn 18 39 07.2 -0.5
baz=36
**P30M Million Dollar** 10.01 157 P Pn 18 39 10.0 +2.0
baz=344,SNR=93
**N18K Kilae Creek** 10.06 213 P Pn 18 39 09.3 +0.6
baz=23
**PNL Peninsula** 10.17 165 P Pn 18 39 14.5 +4.3
**PNL Peninsula** 10.17 165 P Pn 18 39 12.7 +2.5
baz=349,SNR=18
**BRSE Bradley Lake S** 10.18 198 P Pn 18 39 10.1 -0.2
baz=12
**J14K Nanvaranak Lak** 10.21 237 Pn Pn 18 39 11.2 +0.7
**J14K Nanvaranak Lak** 10.21 237 P Pn 18 39 10.5 -0.1
baz=40,SNR=26
**P29M Windy Craggy** 10.39 160 P Pn 18 39 15.0 +1.9
baz=346,SNR=31
**M16K Timber Creek** 10.41 222 P Pn 18 39 13.7 +0.2
baz=29
**CNPM China Poot** 10.45 199 Pn 18 39 14.2 +0.2
**N17K Nushagak Hills** 10.46 216 Pn Pn 18 39 15.2 +1.1
**N17K Nushagak Hills** 10.46 216 P Pn 18 39 14.4 +0.3
baz=25
**L15K Ungalak Mounta** 10.48 229 P Pn 18 39 14.2 -0.2
baz=34
**TGTN Hyland Airport** 10.49 132 P Pn 18 39 15.2 +0.6
baz=327,SNR=14
**WRGLY Wrigley** 10.55 117 Pn Pn 18 39 14.5 -0.8
**WRGLY Wrigley** 10.55 117 P Pn 18 39 14.9 -0.4
baz=316,SNR=76
**P33M Teslin, Yukon** 10.61 146 Pn 18 39 16.2 -0.1
**P33M Teslin, Yukon** 10.61 146 P Pn 18 39 16.9 +0.6
baz=337,SNR=11
**O18K Koktuh Hills** 10.71 210 P Pn 18 39 18.1 +0.6
baz=20,SNR=5.8
**PLBC Pleasant Camp** 10.73 157 P Pn 18 39 19.9 +2.0
baz=344,SNR=49
**N16K Nishlik Lake** 10.85 220 P Pn 18 39 19.3 -0.2
baz=27
**SKAG Skagway** 10.88 154 P Pn 18 39 22.5 +2.7
**SKAG Skagway** 10.88 154 Pn Pn 18 39 21.0 +1.2
**SKAG Skagway** 10.88 154 P Pn 18 39 20.7 +0.8
baz=342,SNR=12
**P32M Atlin** 11.03 150 P Pn 18 39 24.2 +2.3
baz=340
**L14K Kuka Creek** 11.09 231 P Pn 18 39 22.8 +0.2
baz=34
**M15K Kasigluk River** 11.12 225 P Pn 18 39 23.6 +0.5
baz=30
**K13K Kusilvak Mount** 11.17 237 P Pn 18 39 23.1 -0.6
baz=38
**M14K Bethel** 11.39 228 P Pn 18 39 27.0 +0.3
baz=32
**N15K Kwethluk River** 11.43 222 P Pn 18 39 28.0 +0.6
baz=28
**Q20K Shuyak Island** 11.48 201 P Pn 18 39 28.1 +0.1
baz=14
**O16K Kokwok River B** 11.51 216 Pn Pn 18 39 28.1 -0.2
**O16K Kokwok River B** 11.51 216 P Pn 18 39 29.3 +1.0
baz=24
**WTLY Watson Lake, Y** 11.58 137 P Pn 18 39 30.4 +1.0
baz=331
**R33M Jennings River** 11.74 143 P Pn 18 39 31.6 -0.1
baz=336,SNR=11
**Q18K Katmai Hardscr** 11.82 207 P Pn 18 39 32.1 -0.6
baz=18
**Q32M Nakina River** 11.88 147 Pn Pn 18 39 35.3 +1.6
**Q32M Nakina River** 11.88 147 P Pn 18 39 35.1 +1.4
baz=338,SNR=50
**R32K Eaglecrest** 12.14 154 P Pn 18 39 39.1 +2.0
baz=343
**JIS Juneau Island** 12.16 153 P Pn 18 39 40.5 +3.2
**S31K Pelican** 12.20 158 Pn Pn 18 39 40.0 +2.1
**S31K Pelican** 12.20 158 P Pn 18 39 39.5 +1.7
baz=346,SNR=10
**KDAK Kodiak Island** 12.31 200 Pn Pn 18 39 38.8 -0.5
comp=E,0.3nm,0.3s,baz=347,slow=19,SNR=2.1
KDAK Sn Sn 18 41 52.8 -3.4
comp=E,0.1nm,0.3s,baz=323,slow=17,SNR=2.0
KDAK LR LR 18 44 37.6
comp=E,712nm,18.4s,baz=41,slow=38
**KDAK Kodiak Island** 12.31 200 *i* P Pn 18 39 43.1 +3.7
**Q17K Contact Creek** 12.33 209 P Pn 18 39 41.5 +1.8
baz=19
**KOTAN Kotaneelee Air** 12.80 127 P Pn 18 39 47.4 +1.3
baz=326,SNR=12
**DLBC Dease Lake** 12.81 143 Pn Pn 18 39 46.7 +0.3
comp=E,1.7nm,0.3s,baz=338,slow=12,SNR=26
DLBC Sn Sn 18 42 02.4 -6.3
comp=E,0.8nm,0.3s,baz=112,slow=20,SNR=2.2
DLBC LR LR 18 45 49.7
comp=E,242nm,20.2s,baz=331,slow=42
comp=E,16nm,0.6s
**DLBC Dease Lake** 12.81 143 P Pn 18 39 47.2 +0.9
baz=336,SNR=24
**S32K Killisnoo** 12.91 155 P Pn 18 39 49.5 +2.0
baz=344,SNR=11

S34M **Telegraph Cree** 13.08 147 P Pn 18 39 51.9 +2.0
baz=339,SNR=26
SIT **Sitka** 13.20 157 P Pn 18 39 55.2 +3.7
SIT **Sitka** 13.20 157 Pn 18 39 51.6 +0.1
SIT **Sitka** 13.20 157 P Pn 18 39 54.3 +2.9
baz=346
SIT **Sitka** 13.20 157 P Pn 18 39 51.6 +0.1
TOAD **Toad River Com** 13.58 133 P Pn 18 39 58.9 +2.3
baz=330
YKA **Yellowknife Ar** 13.97 106 Pn Pn 18 39 58.1 -3.9
YKA **Yellowknife Ar** 13.97 106 Pn Pn 18 39 55.4 -6.5
comp=E,3.0nm,0.3s,baz=79,slow=11,SNR=40
YKA Sn Sn 18 42 24.1 -12
comp=E,3.9nm,0.3s,baz=321,slow=22,SNR=7.8
comp=E,14nm,0.6s
YKA **Yellowknife Ar** 13.97 106 P Pn 18 39 58.1 -3.9
T35M **Bob Quinn** 14.12 146 P Pn 18 40 06.9 +2.8
baz=339
U33K **Whale Pass** 14.44 153 Pn Pn 18 40 10.8 +2.5
U33K **Whale Pass** 14.44 153 P Pn 18 40 10.1 +1.8
baz=344
CRAG **Craig** 15.06 154 Pn Pn 18 40 18.0 +1.3
CRAG IAmb IAmb 18 40 30.8
comp=Z,37nm,1.2s
RES **Resolute Bay** 15.66 49 Pn Pn 18 40 20.3 -4.2
RES IAmb IAmb 18 40 36.1
comp=Z,56nm,0.8s
RES **Resolute Bay** 15.66 49 P Pn 18 40 20.3 -4.2
RES pmax pmax
comp=Z,56nm,0.8s
EUNU **Eureka** 17.42 30 P P 18 40 47.0 -1.2
EUNU IAmb IAmb 18 40 51.1
comp=Z,54nm,0.7s
BILL **Bilibino** 17.43 288⇓ *e*P Pn 18 40 45.3 -1.8
BILL *e*S Sn 18 43 53.3 -7.3
BILL pmax pmax
comp=Z,48nm,1.3s
BILL MLR MLR
comp=Z,565nm,14.0s
BBB **Bella Bella** 19.07 148 P Pn 18 41 08.3 +1.1
comp=Z,0.2nm,0.3s,baz=335,slow=17,SNR=1.7
comp=Z,9.3nm,1.1s
FFC **Flin Flon** 24.15 106 P P 18 41 59.6 -0.4
FFC IAmb IAmb 18 42 11.9
comp=Z,29nm,1.0s
FFC **Flin Flon** 24.15 106 P P 18 41 59.6 -0.4
FFC pmax pmax
comp=Z,29nm,1.0s
NEEM **North Greenlan** 24.67 32 *i*P P 18 42 04.8 -0.1
NEEM IAmb IAmb 18 42 06.2
comp=Z,24nm,0.6s
AMKA **Amchitka** 24.82 241 P P 18 42 06.0 0.0
SEY **Seymchan** 25.10 286 *ce*P P 18 42 08.9 +0.5
SEY pmax pmax
comp=Z,67nm,1.3s
NEW **Newport** 25.21 134 P P 18 42 10.2 +0.5
NEW **Newport** 25.21 134 LR LR 18 53 24.4
comp=Z,233nm,18.7s,baz=344,slow=40
NEW **Newport** 25.21 134 P P 18 42 11.2 +1.6
baz=338,SNR=6.2
NEW **Newport** 25.21 134 P P 18 42 10.2 +0.5
NEW pmax pmax
comp=Z,13nm,1.2s
LTY **Liberty** 25.29 140 IAmb IAmb 18 42 13.9
comp=Z,34nm,1.4s
SHEM **Shemya Is, Ala** 25.33 250 LR LR 18 53 00.6
comp=Z,114nm,18.9s,baz=67,slow=38
E03A **Lebam** 25.34 145 P P 18 42 09.5 -1.3
E03A IAmb IAmb 18 42 45.6
comp=Z,31nm,1.2s
C09A **Chrisman Ranch** 25.35 136 P P 18 42 12.9 +1.9
LON **Longmire** 25.52 142 IAmb IAmb 18 42 19.3
comp=Z,19nm,0.8s
D08A **Wollman Farm,** 25.89 137 P P 18 42 15.4 -0.4
MXC **Moxie City** 26.02 140 IAmb IAmb 18 42 22.7
comp=Z,14nm,0.9s
TIXI **Tiksi** 26.51 315 P P 18 42 20.5 -0.7
TIXI IAmb IAmb 18 42 39.8
comp=Z,16nm,0.8s
TIXI **Tiksi** 26.51 315 *ce*P P 18 42 21.7 +0.6
TIXI pmax pmax
comp=Z,12nm,1.0s
NOR **Nord** 26.59 15 *i*P P 18 42 22.1 +0.3
NOR IAmb IAmb 18 42 28.9
comp=Z,7.7nm,0.8s
HOOD **Mount Hood Mea** 26.91 142 IAmb IAmb 18 42 31.9
comp=Z,35nm,1.1s
F10A **Beach Ranch, E** 27.32 136 IAmb IAmb 18 42 44.1
comp=Z,16nm,1.1s
MSO **Missoula** 27.37 130 P P 18 42 30.0 +0.8
MSO **Missoula** 27.37 130 P P 18 42 30.7 +1.5
baz=337,SNR=8.8
EGMT **Eagleton** 27.45 124 IAmb IAmb 18 42 54.7
comp=Z,21nm,0.9s
EGMT **Eagleton** 27.45 124 P P 18 42 30.7 +0.7
baz=334
G08A **Pilot Rock** 27.54 139 P P 18 42 30.3 -0.5
DGMT **Dagmar** 28.75 116 P P 18 42 42.9 +1.4
baz=332
FRB **Frobisher Bay** 28.83 64 LR LR 18 55 34.2
comp=Z,359nm,18.8s,baz=310,slow=39
BOZ **Bozeman (W)** 29.13 128 P P 18 42 46.0 +1.0
baz=337
LAO **LASA Array** 29.71 120 IAmb IAmb 18 42 57.1
comp=Z,15nm,0.9s
LAO **LASA Array** 29.71 120 P P 18 42 51.3 +1.2
baz=334
L04D **Klamath Falls** 29.75 145 IAmb IAmb 18 43 06.5
comp=Z,12nm,0.9s
ULM **Lac du Bonnet** 29.95 105 P P 18 42 52.9 +0.9
comp=Z,2.4nm,0.5s,baz=326,slow=7.9,SNR=5.0
comp=Z,2.4nm,0.5s
MFID **Camas Ranch** 30.06 135 P P 18 42 53.9 +0.7
YHH **Holmes Hill** 30.09 128 P P 18 42 54.5 +0.8
YBH **Yreka Blue Hor** 30.14 146 LR LR 18 55 09.8
comp=Z,230nm,18.5s,baz=0.0,slow=37
RLMT **Red Lodge** 30.23 125 P P 18 42 56.5 +1.6
baz=336
HLID **Hailey** 30.28 133 P P 18 42 56.8 +1.6
baz=340
DAG **Danmarks Havn** 30.29 22 *i*P P 18 42 53.0 -1.8
DAG IAmb IAmb 18 42 55.0
comp=Z,6.6nm,0.7s
SUMG **Summit** 30.32 35 *i*P P 18 42 55.4 -0.2
SUMG IAmb IAmb 18 42 56.5
comp=Z,10nm,0.7s
IMW **Indian Meadow** 30.89 129 IAmb IAmb 18 43 17.3
comp=Z,11nm,0.9s
LOHW **Long Hollow** 31.24 128 IAmb IAmb 18 43 07.3
comp=Z,9.0nm,0.7s
TPAW **Teton Pass** 31.26 129 IAmb IAmb 18 43 25.1
comp=Z,9.7nm,0.9s
SNOW **Snow King Moun** 31.34 129 IAmb IAmb 18 43 08.6
comp=Z,13nm,0.7s
AGMN **Agassiz Nation** 31.63 107 IAmb IAmb 18 43 09.3
comp=Z,7.0nm,0.8s
AGMN **Agassiz Nation** 31.63 107 P P 18 43 07.5 +0.7
baz=330
AHID **Auburn Hatcher** 31.89 130 IAmb IAmb 18 43 13.5
comp=Z,23nm,1.2s
SPITS **Spitsbergen Ar** 32.05 7 P P 18 43 10.0 -0.4
comp=Z,6.9nm,0.7s,baz=23,slow=4.5,SNR=8.9
comp=Z,6.9nm,0.7s
SPITS **Spitsbergen Ar** 32.05 7 P P 18 43 09.9 -0.4
SPITS pmax pmax
comp=Z,17nm,1.0s
DBG **Daneborg** 32.13 25 *i*P P 18 43 10.0 -1.0
DBG IAmb IAmb 18 43 11.3
comp=Z,18nm,0.8s
BW06 **Boulder Array** 32.31 128 P P 18 43 15.2 +2.0
baz=338,SNR=18
PD31 **Pinedale Array** 32.31 128 IAmb IAmb 18 43 16.1
comp=Z,10nm,0.8s
PDAR **Pinedale Array** 32.31 128 P P 18 43 14.7 +1.5
PDAR **Pinedale Array** 32.31 128 P P 18 43 15.2 +2.0
comp=Z,7.1nm,0.6s,baz=4.9,slow=5.9,SNR=88
comp=Z,7.1nm,0.6s
RSSD **Black Hills** 32.69 120 P P 18 43 17.3 +0.8
RSSD IAmb IAmb 18 43 19.6
comp=Z,16nm,1.2s
RSSD **Black Hills** 32.69 120 P P 18 43 17.8 +1.4
baz=335
RSSD **Black Hills** 32.69 120 P P 18 43 17.3 +0.8
RSSD pmax pmax
comp=Z,16nm,1.3s
ICESG **Greenland Ices** 32.74 40 *e*P P 18 43 16.2 -0.6
ICESG IAmb IAmb 18 43 18.2
comp=Z,47nm,0.9s
HWUT **Hardware Ranch** 32.85 131 IAmb IAmb 18 43 25.1
comp=Z,10nm,0.8s
YAK **Yakutsk** 33.05 300 P P 18 43 17.8 -1.4
YAK **Yakutsk** 33.05 300 *e*P P 18 43 18.9 -0.3
YAK *e* 18 44 28.2
YAK *e*S S 18 48 36.9 -0.1
YAK *e*SS SnSn 18 50 35.0 +0.1
YAK pmax pmax
comp=Z,21nm,0.9s
YAK pmax pmax
comp=N,3.0nm,0.9s
YAK pmax pmax
comp=E,2.0nm,0.9s
YAK pmax pmax
comp=Z,33nm,1.9s
YAK pmax pmax
comp=N,44nm,2.0s
YAK pmax pmax
comp=E,43nm,2.3s
YAK smax smax
comp=N,44nm,2.5s
YAK smax smax
comp=E,41nm,2.8s
YAK MLR MLR
comp=Z,239nm,15.0s
YAK MLR MLR
comp=E,137nm,13.0s
K22A **Casper** 33.29 124 IAmb IAmb 18 43 48.2
comp=Z,11nm,1.1s
K22A **Casper** 33.29 124 P P 18 43 22.6 +1.0
baz=337
EYMN **Ely** 33.41 102 P P 18 43 23.4 +0.8
EYMN **Ely** 33.41 102 P P 18 43 23.5 +1.0
baz=329,SNR=9.8
DUG **Dugway, Tooele** 33.85 133 IAmb IAmb 18 43 50.7
comp=Z,6.9nm,0.8s
DUG **Dugway, Tooele** 33.85 133 P P 18 43 28.8 +2.3
baz=341,SNR=12
WAKR **Walker** 33.91 143 IAmb IAmb 18 43 33.8
comp=Z,8.0nm,0.6s
SUSD **Miller** 33.99 114 P P 18 43 28.7 +1.1
baz=333
NVAR **Mina Array Bea** 34.23 142 P P 18 43 31.9 +1.9
NVAR **Mina Array Bea** 34.23 142 P P 18 43 32.2 +2.3
comp=Z,2.5nm,0.6s,baz=334,slow=7.0,SNR=24
comp=Z,2.5nm,0.6s
NV11 **Mina Array Sit** 34.26 141 IAmb IAmb 18 43 50.6
comp=Z,11nm,1.2s
MPU **Maple Canyon** 34.32 132 IAmb IAmb 18 43 35.4
comp=Z,14nm,1.3s
RDMU **Red Mountain** 34.35 129 IAmb IAmb 18 43 33.9
comp=Z,11nm,0.8s
LHV **Little Huntoon** 34.35 142 IAmb IAmb 18 44 17.1
comp=Z,21nm,1.4s
E38A **The Farm, Brul** 34.55 104 IAmb IAmb 18 43 33.8
comp=Z,18nm,1.1s
MDPB **Devils Postpil** 34.83 143 P P 18 43 34.4 -0.7
R11B **Troy Canyon, C** 34.92 138 P P 18 43 37.9 +2.1
baz=343
P18A **Preston Nutter** 35.05 131 IAmb IAmb 18 43 41.4
comp=Z,13nm,1.0s
P17A **Butcher Ranch,** 35.07 131 IAmb IAmb 18 43 41.2
comp=Z,21nm,1.3s
N23A **Red Feather La** 35.07 124 P P 18 43 37.5 +0.2
baz=338
O20A **White River Ci** 35.12 128 IAmb IAmb 18 43 45.8
comp=Z,10nm,0.6s
O20A **White River Ci** 35.12 128 P P 18 43 38.4 +0.7
baz=339,SNR=9.4
PSUT **Pine Spring** 35.16 136 IAmb IAmb 18 44 10.5
comp=Z,16nm,1.2s
SPMN **Marine on St.** 35.34 106 IAmb IAmb 18 43 41.5
comp=Z,27nm,1.1s
SPMN **Marine on St.** 35.34 106 P P 18 43 40.4 +1.3
baz=332
K30B **Basset** 35.37 116 P P 18 43 38.9 -0.7
ECSD **EROS Data Cent** 35.39 111 IAmb IAmb 18 43 41.6
comp=Z,16nm,1.1s
ECSD **EROS Data Cent** 35.39 111 P P 18 43 40.6 +1.0
baz=333,SNR=11
BRIGG **Briggsdale** 35.84 123 IAmb IAmb 18 43 46.6
comp=Z,21nm,0.8s
TPNV **Topopah Spring** 36.10 140 P P 18 43 47.9 +1.9
baz=344,SNR=11
ISCO **Idaho Springs** 36.18 125 P P 18 43 48.8 +2.0
baz=338,SNR=9.5
CWC **Cottonwood Cre** 36.19 142 P P 18 43 48.0 +1.3
baz=345
OGNE **Ogallala** 36.19 120 P P 18 43 47.6 +0.9
baz=336
SCHQ **Schefferville** 36.24 73 P P 18 43 47.1 +0.2
comp=Z,38nm,0.9s,baz=320,slow=9.1,SNR=19
comp=Z,38nm,0.9s
SMCO **Snowmass** 36.37 127 IAmb IAmb 18 43 52.9
comp=Z,7.6nm,0.7s
MPMC **Manual Prospec** 36.68 142 P P 18 43 53.9 +2.9
baz=344,SNR=7.4
ISA **Isabella, Lake** 36.85 143 P P 18 43 54.4 +2.1
baz=345
BGNE **Belgrade** 36.98 115 P P 18 43 54.1 +0.8
baz=335
Q24A **Divide** 37.09 125 P P 18 43 56.0 +1.4
baz=338
SHOC **Shoshone, Teco** 37.10 140 P P 18 43 56.1 +1.8
baz=344
LRMC **Laurel Mtn Rad** 37.20 142 P P 18 43 58.1 +2.8
baz=345,SNR=10
GSC **Goldstone, Bar** 37.56 141 P P 18 44 00.7 +2.4
baz=344
TUQ **Turquoise Moun** 37.63 140 P P 18 44 00.9 +2.0
baz=344
EDW2 **Edwards Air Fo** 37.71 143 P P 18 44 01.4 +1.8
baz=345
S22A **4UR Ranch, Cre** 37.75 127 P P 18 44 01.9 +1.8
baz=339,SNR=12
TYV **Tymovskoe** 37.77 279 *e*P P 18 44 02.3 +2.5
TYV pmax pmax
comp=Z,7.0nm,1.1s
TYV pmax pmax
comp=Z,100nm,3.7s
KSCO **Kaye Shedlock'** 37.79 122 IAmb IAmb 18 44 02.9
comp=Z,26nm,1.0s
KSCO **Kaye Shedlock'** 37.79 122 P P 18 44 01.7 +1.4
baz=338
MVCO **Mesa Verde** 37.79 130 P P 18 44 01.9 +1.5
baz=340
HEC **Hector,Ludlow** 38.12 141 P P 18 44 05.5 +2.5
baz=344
SDCO **Great Sand Dun** 38.12 126 P P 18 44 05.0 +1.7
baz=339,SNR=14
JFWS **Jewell Farm** 38.24 105 P P 18 44 04.6 +0.7
baz=333,SNR=16
GMRC **Granite Mounta** 38.31 140 P P 18 44 06.2 +1.5
baz=344
BFSC **Mount Baldy Ra** 38.40 143 P P 18 44 06.8 +1.4
baz=345
WUAZ **Wupatki** 38.64 134 P P 18 44 09.0 +1.5
baz=342
L40A **Anamosa** 38.67 107 P P 18 44 06.6 -0.9
L40A IAmb IAmb 18 44 09.1
comp=Z,27nm,0.8s
CBKS **Cedar Bluff** 38.85 118 P P 18 44 09.7 +0.6
baz=337
BELC **Belle Mtn. Jos** 38.99 141 P P 18 44 11.9 +1.5
baz=344
T25A **Trinidad** 39.00 125 P P 18 44 11.5 +0.9
baz=339
IRM **Iron Mountain** 39.03 140 P P 18 44 12.5 +1.9
baz=344
L42A **Oliver, Polo** 39.25 105 IAmb IAmb 18 44 13.9
comp=Z,34nm,0.9s
PFO **Pinyon Flats O** 39.26 141 P P 18 44 14.0 +1.3
PFO **Pinyon Flats O** 39.26 141 P P 18 44 14.2 +1.5
baz=345
PFO **Pinyon Flats O** 39.26 141 P P 18 44 14.0 +1.3
PFO pmax pmax
comp=Z,4.0nm,1.0s
TPFO **Pinon Flats** 39.27 141 P P 18 44 13.7 +1.0
baz=345
BC3 **Big Chuckawall** 39.44 140 P P 18 44 15.0 +0.8
baz=344
KSU1 **Kansas State U** 39.57 115 IAmb IAmb 18 44 16.6
comp=Z,14nm,0.8s
KSU1 **Kansas State U** 39.57 115 P P 18 44 15.4 +0.4
baz=336
MONP2 **Monument Peak** 39.96 142 P P 18 44 20.8 +2.2
baz=345,SNR=5.2
GRNR **Gornyy** 39.99 284⇓ *i*P P 18 44 20.8 +2.3
GRNR pmax pmax
comp=Z,7.0nm,0.7s
N41A **Harden Midland** 40.00 107 IAmb IAmb 18 44 20.0
comp=Z,39nm,1.1s
SWSC **Sam W. Stewart** 40.05 141 P P 18 44 21.2 +2.2
baz=345
P38A **Dawn** 40.09 111 IAmb IAmb 18 44 20.8
comp=Z,22nm,0.8s
IKP **In-Ko-Pah, Jac** 40.26 141 P P 18 44 23.5 +2.6
baz=345
CBX **Cerro Bola** 40.47 142 P P 18 44 24.2 +1.5
CBX IAmb IAmb 18 44 38.6
comp=Z,16nm,0.8s
ANMO **Albuquerque** 40.47 128 P P 18 44 24.2 +1.4
ANMO **Albuquerque** 40.47 128 P P 18 44 24.8 +2.0
baz=340
ANMO **Albuquerque** 40.47 128 P P 18 44 24.2 +1.4
ANMO pmax pmax
comp=Z,10.0nm,1.1s
ICQ **Pointe Anglais** 40.52 78 P P 18 44 22.9 +0.1
ICQ IAmb IAmb 18 44 23.8
comp=Z,28nm,0.8s
ZEA **Zeya** 40.53 294 *e*P P 18 44 26.1 +3.2
ZEA pmax pmax
comp=Z,10.0nm,1.1s
ZEA MLR MLR
comp=Z,200nm,15.0s
HDIL **Hopedale** 40.66 106 P P 18 44 24.9 +0.8
baz=334
TRQ **Mont Tremblant** 40.81 87 IAmb IAmb 18 44 25.9
comp=Z,15nm,0.6s
ARCES **ARCESS Array B** 41.01 5 P P 18 44 26.4 -0.3
comp=Z,2.3nm,0.5s,baz=359,slow=6.4,SNR=10.0
comp=Z,2.3nm,0.5s
YSS **Yuzh-Sakhalins** 41.05 276 P P 18 44 27.5 +0.3
YSS IAmb IAmb 18 44 30.7
comp=Z,22nm,1.2s
YSS **Yuzh-Sakhalins** 41.05 276 *ce*P P 18 44 27.8 +0.6
YSS pmax pmax
comp=Z,18nm,1.3s
BOD **Bodaibo** 41.07 307 *e*P P 18 44 26.1 -1.2
BOD pmax pmax
comp=Z,28nm,1.0s
L48A **N Adams** 41.09 100 IAmb IAmb 18 44 29.1
comp=Z,34nm,1.2s
LMQ **La Malbaie** 41.15 82 IAmb IAmb 18 44 29.1
comp=Z,16nm,0.9s
OK032 **Salt Plains WL** 41.17 118 IAmb IAmb 18 44 29.6
comp=Z,20nm,0.6s
P43A **Skaggs, Pawnee** 41.41 107 IAmb IAmb 18 44 31.5
comp=Z,29nm,1.0s
SFIN **Lafayette** 41.57 104 IAmb IAmb 18 44 33.0
comp=Z,28nm,1.1s
SFIN **Lafayette** 41.57 104 P P 18 44 32.1 +0.5
baz=334
N47A **Urbana** 41.60 102 IAmb IAmb 18 44 32.3
comp=Z,21nm,0.6s
WBO **Williamsburg** 41.62 89 IAmb IAmb 18 44 32.9
comp=Z,25nm,1.0s
214A **Organ Pipe Nat** 41.68 138 P P 18 44 32.6 +0.1
baz=344
R40A **Maddies Statio** 41.71 110 IAmb IAmb 18 44 33.6
comp=Z,16nm,0.7s
MNTQ **Montreal, Queb** 41.77 87 IAmb IAmb 18 44 33.6
comp=Z,26nm,1.2s
TUC **Tucson** 41.84 135 P P 18 44 35.6 +1.7
baz=343
AMTX **Amarillo** 41.89 123 IAmb IAmb 18 44 36.0
comp=Z,13nm,0.7s
AMTX **Amarillo** 41.89 123 P P 18 44 35.1 +0.7
baz=339
S39A **Bolivar** 41.91 112 IAmb IAmb 18 44 35.5
comp=Z,21nm,0.9s
PECO **Prince Edward** 41.94 91 IAmb IAmb 18 44 35.9
comp=Z,35nm,1.3s
D62A **Allapoint, All** 42.00 82 IAmb IAmb 18 44 36.3
comp=Z,18nm,1.0s
N49A **Columbus Grove** 42.09 100 IAmb IAmb 18 44 37.1
comp=Z,29nm,1.2s
MEDO **Medina** 42.10 93 IAmb IAmb 18 44 37.2
comp=Z,21nm,1.0s
LONY **Lake Ozonia** 42.19 88 IAmb IAmb 18 44 37.5
comp=Z,24nm,1.1s
LONY **Lake Ozonia** 42.19 88 P P 18 44 36.2 -0.4
baz=331,SNR=8.7
E62A **Clayton Lake** 42.23 82 IAmb IAmb 18 44 38.3
comp=Z,17nm,0.9s
CCM **Cathedral Cave** 42.26 110 P P 18 44 35.5 -1.8
CCM **Cathedral Cave** 42.26 110 P P 18 44 36.9 -0.3
baz=335
CCM **Cathedral Cave** 42.26 110 P P 18 44 35.5 -1.8
CCM pmax pmax
comp=Z,7.0nm,0.8s
121A **Cookes Peak, D** 42.39 131 P P 18 44 40.0 +1.4
baz=342,SNR=7.2
MSTX **Muleshoe** 42.43 125 IAmb IAmb 18 44 40.5
comp=Z,10nm,0.7s
MSTX **Muleshoe** 42.43 125 P P 18 44 39.6 +0.8
baz=340,SNR=6.4
ERPA **Erie** 42.49 95 P P 18 44 38.7 -0.3
baz=332
J56A **Wolcott** 42.57 92 IAmb IAmb 18 44 40.6
comp=Z,27nm,1.0s
DEOK **Depew** 42.59 117 IAmb IAmb 18 44 41.0
comp=Z,20nm,0.7s
O49A **Covington** 42.69 101 IAmb IAmb 18 44 41.5
comp=Z,22nm,1.1s
PQI **Presque Isle** 42.71 81 IAmb IAmb 18 44 41.7
comp=Z,21nm,0.8s
U38A **Gravette** 42.71 114 P P 18 44 40.4 -0.6
U38A IAmb IAmb 18 44 41.7
comp=Z,36nm,1.5s
WVNY **West Valley, N** 42.72 94 IAmb IAmb 18 44 42.0
comp=Z,26nm,0.9s
MGMO **Mountain Grove** 42.75 111 IAmb IAmb 18 44 43.1
comp=Z,27nm,0.8s
TUL3 **Leonard** 42.75 116 IAmb IAmb 18 44 42.4
comp=Z,18nm,0.8s
TUL3 **Leonard** 42.75 116 P P 18 44 41.5 +0.3
baz=337,SNR=6.5
J57A **Williamstown** 42.75 91 P P 18 44 41.0 -0.2
M53A **WI Miller and** 42.85 97 P P 18 44 42.5 +0.5
baz=332,SNR=7.4
BATG **Bathurst New B** 42.86 79 P P 18 44 42.0 0.0
KLR **Kul'dur** 42.89 287 *ce*P P 18 44 41.9 -0.3
KLR pmax pmax
comp=Z,3.0nm,0.7s
WMOK **Wichita Mounta** 42.90 120 P P 18 44 43.2 +0.7
baz=338,SNR=14
P48A **Milroy** 42.96 103 IAmb IAmb 18 44 43.7
comp=Z,29nm,1.3s
J58A **Remsen** 43.05 90 IAmb IAmb 18 44 44.7
comp=Z,19nm,0.9s
G62A **West of Eustis** 43.09 84 IAmb IAmb 18 44 46.0
comp=Z,16nm,0.8s
ACSO **Alum Creek Sta** 43.12 100 IAmb IAmb 18 44 45.1
comp=Z,28nm,1.0s
ACSO **Alum Creek Sta** 43.12 100 P P 18 44 43.7 -0.4
baz=333
P49A **Miami Univ. Ec** 43.14 102 IAmb IAmb 18 44 44.8
comp=Z,23nm,1.1s
P49A **Miami Univ. Ec** 43.14 102 P P 18 44 44.0 -0.4
baz=334
F63A **Nahmakanta, Br** 43.17 83 IAmb IAmb 18 44 45.4
comp=Z,17nm,0.7s
T42A **Van Buren** 43.24 110 IAmb IAmb 18 44 46.2
comp=Z,22nm,1.3s
S44A **Carbondale** 43.25 108 IAmb IAmb 18 44 46.3
comp=Z,22nm,0.9s
F64A **Sherman** 43.29 82 IAmb IAmb 18 44 46.3
comp=Z,31nm,1.4s
N53A **Lisbon** 43.35 97 IAmb IAmb 18 44 46.7
comp=Z,10nm,0.7s
HEH **HeiHe** 43.45 291 *e*P P 18 44 49.6 +2.9
HEH pmax pmax
comp=Z,10.0nm,1.2s
LBNH **Lisbon** 43.46 86 IAmb IAmb 18 44 48.6
comp=Z,17nm,0.9s
LBNH **Lisbon** 43.46 86 P P 18 44 47.5 +0.6
baz=331,SNR=5.1
PKME **Peaks-Kenny Pk** 43.49 83 P P 18 44 46.8 -0.2
baz=330,SNR=8.2
ASAJ **Asahikawa** 43.57 274 LR LR 19 04 20.7
comp=Z,370nm,19.6s,baz=52,slow=38
ACCN **Adirondack Com** 43.59 88 IAmb IAmb 18 44 49.3
comp=Z,26nm,1.1s
O52A **Adamsville** 43.62 99 IAmb IAmb 18 44 48.9

comp=Z,19nm,0.8s
**POST Post** 43.64 124 IAmb IAmb 18 44 50.4
comp=Z,15nm,1.1s
**O53A New Philadelph** 43.72 98 IAmb IAmb 18 44 49.1
comp=Z,11nm,0.7s
**O53A New Philadelph** 43.72 98 P **P** **18 44 48.6 -0.4**
baz=333
**WCI Wyandotte Cave** 43.77 104 P **P** **18 44 48.5 -0.9**
WCI IAmb IAmb 18 44 49.8
comp=Z,15nm,0.7s
**WCI Wyandotte Cave** 43.77 104 P **P** **18 44 49.0 -0.5**
baz=334
**WCI Wyandotte Cave** 43.77 104 P **P** **18 44 48.5 -0.9**
WCI pmax pmax
comp=Z,15nm,0.7s
**HNH Hanover** 43.80 87 IAmb IAmb 18 44 51.6
comp=Z,22nm,1.1s
**BINY Binghamton** 43.82 91 P **P** **18 44 50.0 +0.2**
baz=332,SNR=12
**MNTX Cornudas Mount** 43.83 129 P **P** **18 44 51.6 +1.6**
baz=341,SNR=6.1
**P52A Corning** 43.94 99 IAmb IAmb 18 44 51.8
comp=Z,14nm,0.8s
**P52A Corning** 43.94 99 P **P** **18 44 51.0 +0.2**
baz=333
**FCAR Ozark Folk Cen** 43.95 112 IAmb IAmb 18 44 51.5
comp=Z,36nm,1.3s
**O54A Avella** 44.07 97 IAmb IAmb 18 44 52.5
comp=Z,16nm,0.6s
**G65A Princeton** 44.14 82 IAmb IAmb 18 44 53.3
comp=Z,15nm,1.0s
**L59A Walton** 44.16 91 IAmb IAmb 18 44 53.8
comp=Z,21nm,1.1s
**M57A Sunshine Farm,** 44.18 93 IAmb IAmb 18 44 53.6
comp=Z,22nm,1.0s
**R50A Paris** 44.40 102 IAmb IAmb 18 44 55.3
comp=Z,10nm,0.8s
**WHAR Wooly Hollow** 44.44 112 IAmb IAmb 18 44 55.6
comp=Z,15nm,0.9s
**KSPA Keystone Colle** 44.46 92 IAmb IAmb 18 44 56.1
comp=Z,23nm,1.3s
**Q52A Bidwell** 44.50 100 IAmb IAmb 18 44 55.5
comp=Z,19nm,0.8s
**LMN Caledonia Moun** 44.53 79 P **P** **18 44 55.3 -0.2**
LMN IAmb IAmb 18 44 56.4
comp=Z,23nm,0.9s
**SSPA Standing Stone** 44.53 94 P **P** **18 44 55.2 -0.3**
baz=333
**ABTX Abilene, Hawle** 44.60 122 P **P** **18 44 56.3 +0.1**
baz=339
**EMMW East Machias** 44.61 82 IAmb IAmb 18 44 57.2
comp=Z,18nm,0.8s
**MIAR Mount Ida** 44.71 114 P **P** **18 44 57.2 +0.2**
baz=337,SNR=20
**MCWV Mont Chateau** 44.72 97 IAmb IAmb 18 44 57.3
comp=Z,9.2nm,0.8s
**MCWV Mont Chateau** 44.72 97 P **P** **18 44 56.6 -0.4**
baz=333
**L61B Northampton** 44.76 88 P **P** **18 44 57.8 +0.5**
baz=332
**PLPT Palo Pinto** 44.83 120 IAmb IAmb 18 44 59.4
comp=Z,8.7nm,0.9s
**SGCY Sterling City** 44.83 124 IAmb IAmb 18 44 59.8
comp=Z,8.2nm,0.9s
**UALR University of** 44.90 113 IAmb IAmb 18 44 59.6
comp=Z,15nm,0.8s
**MNHN Monahans** 44.90 126 IAmb IAmb 18 45 04.1
comp=Z,14nm,1.4s
**Q54A Coxs Mills** 44.98 98 IAmb IAmb 18 44 59.5
comp=Z,14nm,0.8s
**X40A Basin Creek Fa** 45.00 113 IAmb IAmb 18 45 00.3
comp=Z,9.4nm,0.8s
**HRV Adam Dziewonsk** 45.10 87 P **P** **18 44 59.6 -0.4**
baz=332
**WVT Waverly** 45.15 107 P **P** **18 45 01.0 +0.5**
baz=336
**S51A Beattyville** 45.23 102 IAmb IAmb 18 45 01.7
comp=Z,8.2nm,0.9s
**T50A Nancy** 45.36 103 IAmb IAmb 18 45 03.3
comp=Z,12nm,0.9s
**TRNY Table Rock, Ra** 45.37 91 IAmb IAmb 18 45 02.6
comp=Z,11nm,0.7s
**U49A Red Boiling Sp** 45.49 105 IAmb IAmb 18 45 05.0
comp=Z,14nm,0.7s
**Q56A Snyder Ridge,** 45.50 97 IAmb IAmb 18 45 04.0
comp=Z,12nm,0.8s
**P57A Homestead Farm** 45.51 95 IAmb IAmb 18 45 04.2
comp=Z,16nm,1.1s
**ALPN Alpine** 45.56 127 IAmb IAmb 18 45 05.7
comp=Z,7.1nm,0.7s
**PAL Palisades** 45.60 90 P **P** **18 45 03.8 -0.2**
baz=332
**MVL Millersville** 45.64 93 IAmb IAmb 18 45 05.2
comp=Z,9.9nm,0.7s
**R55A Marlinton** 45.85 98 IAmb IAmb 18 45 07.5
comp=Z,16nm,0.9s
**WHTX Lake Whitney,** 45.85 120 IAmb IAmb 18 45 07.5
comp=Z,15nm,0.8s
**WHTX Lake Whitney,** 45.85 120 P **P** **18 45 06.2 +0.1**
baz=339,SNR=7.6
**S54A Dingess, Beckl** 45.87 99 IAmb IAmb 18 45 06.7
comp=Z,14nm,0.8s
**WUPA West Chester U** 45.96 93 IAmb IAmb 18 45 07.5
comp=Z,7.8nm,0.8s
**BRDY Brady** 46.05 122 IAmb IAmb 18 45 08.8
comp=Z,6.4nm,0.8s
**OXF Oxford** 46.10 110 P **P** **18 45 08.6 +0.6**
baz=336,SNR=12
**PLAL Pickwick Lake** 46.11 108 IAmb IAmb 18 45 09.3
comp=Z,14nm,0.8s
**TZTN Tazewell** 46.23 102 P **P** **18 45 09.0 0.0**
baz=335,SNR=7.9
**CIT Chita** 46.23 303 *e*P **P** **18 45 09.1 +0.2**
CIT *e* 18 46 50.4
CIT pmax pmax
comp=Z,24nm,1.3s
**M65A Busby, Falmout** 46.26 87 P **P** **18 45 09.4 +0.3**
baz=332
**TXAR Lajitas Array** 46.53 128 P **P** **18 45 12.7 +1.1**
**TXAR Lajitas Array** 46.53 128 P **P** **18 45 13.0 +1.4**
comp=Z,2.5nm,0.7s,baz=349,slow=6.0,SNR=27
comp=Z,2.5nm,0.7s
**TXAR Lajitas Array** 46.53 128 P **P** **18 45 12.7 +1.1**
**JCT Junction City** 46.56 123 IAmb IAmb 18 45 14.4
comp=Z,14nm,0.8s
**JCT Junction City** 46.56 123 P **P** **18 45 11.9 +0.2**
baz=340
**BLA Blacksburg** 46.71 99 P **P** **18 45 12.7 -0.1**
baz=334
**S57A Dark Hollow, R** 46.73 97 IAmb IAmb 18 45 13.6
comp=Z,5.2nm,0.8s
**W50A Signal Mountai** 46.84 105 IAmb IAmb 18 45 15.7
comp=Z,10nm,1.0s
**U54A Nelsons Funny** 46.84 101 IAmb IAmb 18 45 14.9
comp=Z,10nm,0.8s
**V52A Sevierville** 46.85 103 IAmb IAmb 18 45 15.0
comp=Z,11nm,1.1s
**CPCT Cooper Cave** 46.89 104 IAmb IAmb 18 45 15.4
comp=Z,8.5nm,1.0s
**R58B Mineral** 46.92 96 IAmb IAmb 18 45 14.7
comp=Z,8.2nm,0.7s
**USA0B Ussuriysk Arra** 47.18 283 *i* P **P** **18 45 17.8 +1.4**
**USRK Ussuriysk Ar.** 47.18 283 P **P** **18 45 17.5 +1.1**
comp=Z,6.9nm,0.9s,baz=20,slow=7.2,SNR=9.6
comp=Z,6.9nm,0.9s
**V53A Saluda** 47.27 102 IAmb IAmb 18 45 18.4
comp=Z,12nm,0.9s
**BNX BinXian** 47.38 288 ⇑P **P** **18 45 18.4 +0.5**
BNX pmax pmax
comp=Z,7.0nm,0.8s
**HNDO Hondo** 47.61 123 IAmb IAmb 18 45 21.4
comp=Z,9.3nm,0.7s
**V55A Taylorsville** 47.66 101 IAmb IAmb 18 45 21.6
comp=Z,12nm,0.9s
**LRAL Lakeview Retre** 48.25 108 P **P** **18 45 24.9 +0.1**
baz=337,SNR=10
**KMSC Kings Mountain** 48.26 101 IAmb IAmb 18 45 25.4
comp=Z,11nm,0.9s
**KMSC Kings Mountain** 48.26 101 P **P** **18 45 24.3 -0.6**
baz=335
**NB2 NORSAR Subarra** 48.56 15 P **P** **18 45 26.3 -0.6**
comp=Z,0.7nm,0.6s,baz=345,slow=7.9
**NB2 NORSAR Subarra** 48.56 15 P **P** **18 45 26.6 -0.3**
**NOA NORSAR Array B** 48.56 15 P **P** **18 45 25.9 -1.0**
comp=Z,1.9nm,0.8s,baz=338,slow=4.8,SNR=5.6
comp=Z,1.9nm,0.8s
**NOA NORSAR Array B** 48.56 15 P **P** **18 45 26.0 -1.0**
**W57A Gilead** 48.71 100 IAmb IAmb 18 45 28.8
comp=Z,12nm,0.9s
**HODGE Hodges** 48.77 102 IAmb IAmb 18 45 29.6
comp=Z,14nm,0.9s
**GOGA Godfrey** 49.10 104 P **P** **18 45 31.6 +0.3**
baz=336,SNR=12
**FINES FINESS Array B** 49.12 6 P **P** **18 45 30.9 -0.3**
comp=Z,4.3nm,0.6s,baz=358,slow=8.4,SNR=25
comp=Z,4.3nm,0.6s
**MOY Mondy** 50.04 312 *e*P **P** **18 45 39.6 +1.2**
MOY pmax pmax
comp=Z,16nm,1.4s
**NHSC New Hope** 50.50 101 P **P** **18 45 41.9 0.0**
baz=336
**TIGA Tifton** 50.86 105 P **P** **18 45 44.9 +0.2**
baz=337
**ZALV Zalesovo Beam** 51.67 325 P **P** **18 45 51.0 +0.5**
comp=Z,3.1nm,0.5s,baz=13,slow=7.5,SNR=14
ZALV LR LR 19 11 11.6
comp=Z,76nm,18.3s,baz=5.0,slow=40
comp=Z,3.1nm,0.5s
**MJB9 Matsu-Tunnel** 51.83 273 IAmb IAmb 18 45 55.9
comp=Z,14nm,0.9s
**MAJO Matsushiro** 51.83 273 IAmb IAmb 18 45 55.9
comp=Z,15nm,0.9s
**MJAR Matsushiro Arr** 51.83 273 P **P** **18 45 53.0 +1.1**
comp=Z,9.2nm,0.9s,baz=6.5,slow=7.8,SNR=26
comp=Z,9.2nm,0.9s
**ULN Ulaanbaatar** 51.84 306 P **P** **18 45 53.0 +1.0**
**ULN Ulaanbaatar** 51.84 306 *ce*P **P** **18 45 53.4 +1.4**
ULN pmax pmax
comp=Z,5.0nm,1.0s
**SONM Songino Array** 52.05 306 P **P** **18 45 53.7 +0.1**
SONM IAmb IAmb 18 45 58.4
comp=Z,12nm,1.2s
**SONM Songino Array** 52.05 306 P **P** **18 45 54.6 +1.0**
comp=Z,6.6nm,1.0s,baz=27,slow=6.1,SNR=19
SONM LR LR 19 11 02.5
comp=Z,207nm,18.5s,baz=42,slow=40
comp=Z,6.6nm,1.0s
**SONM Songino Array** 52.05 306 P **P** **18 45 53.7 +0.1**
SONM pmax pmax
comp=Z,12nm,1.2s
**EKA Eskdalemuir Ar** 52.32 27 P **P** **18 45 55.3 -0.1**
comp=Z,11nm,0.7s,baz=331,slow=6.7,SNR=42
comp=Z,11nm,0.7s
**SVE Sverdlovsk** 52.60 343 *e*P **P** **18 46 00.1 +2.8**
SVE pmax pmax
comp=Z,8.0nm,0.9s
**XLT XiLinHaoTe** 52.70 296 *e*P **P** **18 45 58.7 +0.3**
XLT pP pP 18 46 02.0 -1.0
XLT sP sP 18 46 04.9 +0.1
XLT PcP **PcP** **18 47 06.0 -2.0**
XLT pmax pmax
comp=Z,5.0nm,0.9s
**JGF Kuroka** 52.97 273 P **P** **18 46 00.6 +0.1**
**ARU Arti** 53.20 344 P **P** **18 46 02.1 +0.4**
ARU IAmb IAmb 18 46 21.8
comp=Z,8.7nm,0.8s
**ARU Arti** 53.20 344 *c i*P **P** **18 46 04.1 +2.3**
ARU 18 47 10.8
ARU 18 48 03.1
ARU S **S** **18 53 39.1 +7.5**
ARU SS **SS** **18 57 12.0 +1.7**
ARU pmax pmax
comp=Z,8.0nm,0.7s
**INU Inuyama** 53.32 273 P **P** **18 46 02.5 -0.4**
INU IAmb IAmb 18 46 13.9
comp=Z,26nm,1.5s
**JHJ Hachijo jima 2** 54.36 270 LR LR 19 11 35.4
comp=Z,89nm,19.6s,baz=74,slow=38
**KSRS Korea Array** 54.58 283 P **P** **18 46 12.7 +0.6**
comp=Z,5.1nm,0.9s,baz=20,slow=7.2,SNR=14
KSRS LR LR 19 10 43.1
comp=Z,114nm,20.0s,baz=40,slow=37
comp=Z,5.1nm,0.9s
**KSAR Wonju Array Be** 54.61 283 P **P** **18 46 12.7 +0.4**
**KSAR Wonju Array Be** 54.61 283 P **P** **18 46 12.7 +0.4**
**BRVK Borovoye** 55.07 335 IAmb IAmb 18 46 37.2
comp=Z,5.6nm,0.7s
**BRVK Borovoye** 55.07 335 *ce*P **P** **18 46 17.4 +1.9**
BRVK pmax pmax
comp=Z,6.0nm,1.0s
**DGZ Jazzator, Alta** 55.12 321 *i* P **P** **18 46 18.0 +1.9**
DGZ pmax pmax
comp=Z,3.0nm,1.1s
**OBN Obninsk** 55.64 359 ⇑*e*P **P** **18 46 18.7 -0.8**
OBN *e* 18 47 19.3
OBN *e* 18 48 27.1
OBN *e*S S 18 54 24.0 +20
OBN pmax pmax
comp=Z,5.0nm,1.0s
OBN MLR MLR
comp=Z,148nm,19.0s
**TJN Taejon** 55.75 283 *ce*P **P** **18 46 22.3 +1.8**
**KURK Kurchatov** 55.94 328 P **P** **18 46 22.1 +0.4**
KURK IAmb IAmb 18 46 48.3
comp=Z,13nm,0.9s
**KURK Kurchatov** 55.94 328 *ce*P **P** **18 46 22.3 +0.6**
KURK pmax pmax
comp=Z,12nm,1.0s
**KURBB Kurchatov Arra** 56.05 328 P **P** **18 46 23.4 +0.9**
comp=Z,6.9nm,0.7s,baz=12,slow=7.0,SNR=20
comp=Z,6.9nm,0.7s
**HHC Hu-ho-hao-te** 56.87 298 *e*P **P** **18 46 28.1 -0.6**
HHC pP pP 18 46 32.8 -0.6
HHC pmax pmax
comp=Z,15nm,0.6s
HHC pmax pmax
comp=Z,200nm,5.2s
HHC LR LR
comp=Z,250nm,13.1s
HHC LR LR
comp=Z,190nm,17.1s
HHC LR LR
comp=Z,280nm,13.9s
**JNU Nakatsue** 57.48 278 LR LR 19 11 50.0
comp=Z,159nm,20.9s,baz=22,slow=37
**BELG Belogornoye** 58.03 351 *i* P **P** **18 46 37.6 +1.1**
BELG pmax pmax
comp=Z,2.0nm,0.9s
**BSTI Sart Tilman** 58.20 22 *d*P **P** **18 46 38.6 +0.8**
comp=Z,4.6nm,0.9s
**MEM Membach** 58.24 22 *d*P **P** **18 46 38.5 +0.5**
comp=Z,16nm,0.9s
**BTNL Ternell** 58.27 21 *d*P **P** **18 46 38.8 +0.5**
comp=Z,13nm,0.8s
**BCLA Clavier** 58.33 22 *d*P **P** **18 46 39.0 +0.3**
comp=Z,5.3nm,0.8s
**BGES Gesves** 58.34 22 *d*P **P** **18 46 38.9 +0.2**
comp=Z,6.5nm,0.9s
**CLL Collm** 58.34 16 IAmb IAmb 18 46 39.6
comp=Z,6.8nm,0.7s
**CLL Collm** 58.34 16 *i* P **P** **18 46 38.6 -0.1**
comp=Z,7.0nm,0.7s
**CLL Collm** 58.34 16 *i* P **P** **18 46 38.6 -0.1**
CLL pmax pmax
comp=Z,7.0nm,0.7s
**BMRD Maredsous** 58.37 23 *d*P **P** **18 46 39.9 +0.9**
**BHOU Houvegnez** 58.49 22 *d*P **P** **18 46 40.4 +0.6**
**BAIF Baives** 58.54 23 P **P** **18 46 40.2 +0.1**
**DOU Dourbes** 58.55 23 *d*P **P** **18 46 40.4 +0.2**
comp=Z,4.5nm,1.1s
**GIVF Givet** 58.58 23 P **P** **18 46 40.2 -0.2**
**RCHB Rochefort** 58.58 22 *d*P **P** **18 46 39.5 -0.8**
comp=Z,6.6nm,0.9s
**BRG Berggiesshubel** 58.87 16 *e*P **P** **18 46 42.8 +0.4**
BRG Amp 18 46 43.6
comp=Z,6.5nm,0.9s
**MKAR Makanchi Array** 58.97 324 P **P** **18 46 42.7 -0.5**
comp=Z,1.1nm,0.6s,baz=33,slow=7.4,SNR=12
MKAR LR LR 19 15 34.5
comp=Z,105nm,18.6s,baz=48,slow=40
comp=Z,1.1nm,0.6s
**MKAR Makanchi Array** 58.97 324 *i* P **P** **18 46 43.9 +0.7**
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**MAKZ Makanchi** 59.02 324 P **P** **18 46 44.4 +0.8**
MAKZ IAmb IAmb 18 46 46.9
comp=Z,5.8nm,0.9s
**MAKZ Makanchi** 59.02 324 P **P** **18 46 44.4 +0.8**
MAKZ pmax pmax
comp=Z,6.0nm,0.9s
**HNS HongShan** 59.03 294 ⇓P **P** **18 46 47.4 +3.7**
HNS pmax pmax
comp=Z,12nm,0.9s
**RNPP9 Sopachiv** 59.15 7 P **P** **18 46 43.2 -1.1**
**WLF Walferdange** 59.18 22 *d*P **P** **18 46 45.4 +0.8**
comp=Z,6.8nm,0.9s
**RNPP5 Staryi Chortor** 59.33 7 P **P** **18 46 44.7 -0.9**
**CHVC Chvalec** 59.34 14 *e*P **P** **18 46 46.2 +0.5**
**CHVC Chvalec** 59.34 14 *e*P **P** **18 46 46.2 +0.5**
**OSTC Ostas** 59.38 14 *e*P **P** **18 46 46.9 +0.9**
**OSTC Ostas** 59.38 14 *e*P **P** **18 46 46.9 +0.9**
**UPC Upice** 59.42 14 *e*P **P** **18 46 47.0 +0.8**
**UPC Upice** 59.42 14 *e*P **P** **18 46 47.0 +0.8**
**DPC Dobruska-Polom** 59.60 14 *e*P **P** **18 46 48.2 +0.7**
**DPC Dobruska-Polom** 59.60 14 *e*P **P** **18 46 48.2 +0.7**
**PRU Pruhonice** 59.80 15 *e*P **P** **18 46 49.6 +0.8**
**PRU Pruhonice** 59.80 15 *e*P **P** **18 46 49.6 +0.8**
**AK21 Malin Array Si** 59.90 5 P **P** **18 46 48.5 -1.0**
**KRLC Kraliky** 59.91 14 *e*P **P** **18 46 50.3 +0.6**
**KRLC Kraliky** 59.91 14 *e*P **P** **18 46 50.3 +0.6**
**AK22 Malin Array Si** 59.91 5 P **P** **18 46 48.3 -1.3**
**AK23 Malin Array Si** 59.91 5 P **P** **18 46 48.6 -1.0**
**AK20 Malin Array Si** 59.93 5 P **P** **18 46 48.4 -1.3**
**AK19 Malin Array Si** 59.95 5 P **P** **18 46 48.6 -1.2**
**AKASG Malin Array Be** 59.98 4 P **P** **18 46 49.9 -0.2**
comp=Z,9.7nm,0.7s,baz=357,slow=6.8,SNR=31
comp=Z,9.7nm,0.7s
**AKBB Malin Array Si** 59.98 4 *ce*P **P** **18 46 49.3 -0.7**
AKBB pmax pmax
comp=Z,13nm,0.9s
**AKBB Malin Array Si** 59.98 4 P **P** **18 46 48.8 -1.2**
**KIEV Kiev** 59.98 5 ⇑P **P** **18 46 49.7 -0.4**
**KIEV Kiev** 59.98 5 ⇑P **P** **18 46 49.7 -0.4**
**ABKAR Akbulak array** 60.14 342 IAmb IAmb 18 47 08.6
comp=Z,5.6nm,0.7s
**MORC Moravsky Berou** 60.27 13 *e*P **P** **18 46 52.0 -0.1**
**MORC Moravsky Berou** 60.27 13 ⇑P **P** **18 46 49.9 -2.3**
**MORC Moravsky Berou** 60.27 13 ⇑P **P** **18 46 49.9 -2.3**
**ZVC Zvikov** 60.31 16 *e*P **P** **18 46 52.8 +0.4**
**KHC Kasperske Hory** 60.55 16 IAmb IAmb 18 46 56.2
comp=Z,6.7nm,1.2s
**KHC Kasperske Hory** 60.55 16 *e*P **P** **18 46 54.9 +0.8**
**KHC Kasperske Hory** 60.55 16 *ce*P **P** **18 46 54.6 +0.5**
KHC pmax pmax
comp=Z,21nm,2.5s
**WMQ Urumqi** 60.62 319 *e*P **P** **18 46 57.4 +2.8**
WMQ pmax pmax
comp=Z,14nm,1.1s
**VRAC Vranov** 60.66 14 *e*P **P** **18 46 54.8 +0.1**
**MAUC Maruska** 60.70 13 *e*P **P** **18 46 55.3 +0.2**
**LUBAR Lubar, Ukraine** 60.71 6 P **P** **18 46 53.9 -1.2**
**ECH Echery** 60.73 21 IAmb IAmb 18 46 56.8
comp=Z,8.9nm,1.2s
**BFO Black Forest** 60.77 20 IAmb IAmb 18 47 05.1
comp=Z,8.2nm,1.1s
**GEC2 GERESS Array S** 60.85 16 P **P** **18 46 56.1 -0.1**
GEC2 IAmb IAmb 18 46 57.7
comp=Z,6.2nm,0.9s
**GERES GERESS Array B** 60.85 16 P **P** **18 46 56.5 +0.3**
comp=Z,3.1nm,0.8s,baz=186,slow=3.6,SNR=19
comp=Z,3.1nm,0.8s
**KRUC Moravsky** 60.88 14 *e*P **P** **18 46 56.4 +0.1**
**CKRC Cesky Krumlov** 60.93 16 *e*P **P** **18 46 57.0 +0.3**
**CKRC Cesky Krumlov** 60.93 16 *e*P **P** **18 46 57.0 +0.3**
**LANS Liptovska Anna** 61.04 12 *e*P **P** **18 46 58.2 +0.8**
LANS pmax pmax
comp=Z,5.0nm,0.8s
**LANS Liptovska Anna** 61.04 12 *e*P **P** **18 46 58.2 +0.8**
**JAVC Velka Javorina** 61.19 13 *e*P **P** **18 46 59.5 +1.1**
**LOR Lormes** 61.22 24 *e*P **P** **18 46 58.3 -0.3**
**SSF Saint Saulge** 61.37 24 *e*P **P** **18 46 58.3 -1.3**
**KOLS Kolonicke sedl** 61.44 10 *e*P **P** **18 47 00.8 +0.7**
KOLS pmax pmax
comp=Z,7.0nm,0.9s
**KOLS Kolonicke sedl** 61.44 10 *e*P **P** **18 47 00.8 +0.7**
**VYHS Vyhne** 61.64 12 *e*P **P** **18 47 01.6 +0.1**
VYHS pmax pmax
comp=Z,9.0nm,1.0s
**VYHS Vyhne** 61.64 12 *e*P **P** **18 47 01.6 +0.1**
**GTA Gaotai** 61.66 307 *e*P **P** **18 47 02.5 +0.6**
GTA sP sP 18 47 10.6 +2.3
GTA pmax pmax
comp=Z,5.0nm,1.0s
GTA LR LR
comp=Z,150nm,15.5s
GTA LR LR
comp=Z,210nm,13.5s
GTA LR LR
comp=Z,130nm,15.5s
**RETA Reutte** 61.88 19 *e*pP **P** **18 47 03.5 +0.4**
comp=Z,3.9nm,0.9s
**MOA Molln** 61.89 16 *e*pP **P** **18 47 04.0 +0.8**
comp=Z,3.5nm,1.2s
**CONA Conrad Observa** 61.96 15 *i* pP **P** **18 47 04.3 +0.6**
comp=Z,6.9nm,0.8s
**DAVA Damuels** 61.98 19 *e*P **P** **18 47 03.8 -0.1**
comp=Z,4.2nm,1.1s
**BIOA Bad Ischl, Aus** 61.99 16 *i* P **P** **18 47 03.8 0.0**
comp=Z,3.9nm,1.0s
**MOTA Moosalm** 62.06 18 *e*pP **P** **18 47 04.6 +0.2**
comp=Z,5.6nm,1.1s
**WATA Walderalm** 62.12 18 *e*pP **P** **18 47 05.2 +0.3**
comp=Z,2.3nm,0.7s
**LESA Schwarzleotal** 62.15 17 *e*pP **P** **18 47 05.0 0.0**
comp=Z,5.7nm,0.8s
**SQTA Sankt Quirin** 62.20 18 *e*pP **P** **18 47 05.8 +0.4**
comp=Z,4.6nm,0.8s
**WTTA Wattenberg** 62.20 18 *e*pP **P** **18 47 06.0 +0.6**
comp=Z,11nm,1.1s
**RONA Rosalia, Austr** 62.23 14 *e*pP **P** **18 47 06.3 +0.9**
comp=Z,7.6nm,0.9s
**PSZ Piszkesteto** 62.29 12 ⇓P **P** **18 47 07.1 +1.2**
**PSZ Piszkesteto** 62.29 12 ⇓P **P** **18 47 07.1 +1.2**
**FETA Feichten** 62.34 19 *e*P **P** **18 47 06.0 -0.4**
comp=Z,4.3nm,1.5s
**SORM Soroca** 62.52 5 ⇓P **P** **18 47 07.2 -0.1**
**SORM Soroca** 62.52 5 ⇓P **P** **18 47 07.2 -0.1**
**KBA Koelnbreinsper** 62.56 17 *e*pP **P** **18 47 08.6 +0.8**
comp=Z,11nm,0.8s
**NJ2 Nanjing** 62.57 288 *e*P **P** **18 47 08.6 +0.8**
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**ARSA Arzberg** 62.60 15 *e*pP **P** **18 47 08.6 +0.7**
comp=Z,4.4nm,1.0s
**FUORN Ofenpass-Fuorn** 62.68 19 IAmb IAmb 18 47 10.8
comp=Z,6.7nm,1.1s
**ABTA Abfaltersbach** 62.80 17 *e*pP **P** **18 47 09.4 +0.1**
comp=Z,2.4nm,0.7s
**BUR08 Bucovina Ar. S** 62.88 8 IAmb IAmb 18 47 31.1
comp=Z,5.0nm,0.9s
**BURAR Bucovina Array** 62.91 8 IAmb IAmb 18 47 11.2
comp=Z,5.6nm,0.7s
**BURAR Bucovina Array** 62.91 8 ⇓P **P** **18 47 10.2 +0.1**
**BURAR Bucovina Array** 62.91 8 ⇓P **P** **18 47 10.2 +0.1**
**LFF La Frestale** 63.02 27 *e*P **P** **18 47 11.4 +0.7**
**SOKA Soboth** 63.12 16 *e*P **P** **18 47 10.9 -0.6**
comp=Z,3.1nm,1.1s
**PRED Cave del Predi** 63.21 17 IAmb IAmb 18 47 11.1
comp=Z,7.0nm,0.8s
**OBKA Obir** 63.24 16 *e*pP **P** **18 47 12.7 +0.4**
comp=Z,18nm,0.9s
**LPL La Plagne** 63.33 22 P **P** **18 47 13.6 +0.6**
**LPG La Plagne** 63.35 22 P **P** **18 47 14.1 +0.9**
**LZH Lanzhou** 63.59 303 *e*P **P** **18 47 15.5 +0.7**
LZH sP sP 18 47 23.9 +2.6
LZH pmax pmax
comp=Z,22nm,1.0s
LZH LR LR
comp=Z,290nm,15.8s
LZH LR LR
comp=Z,330nm,13.7s
LZH LR LR
comp=Z,350nm,15.5s
**DRGR** 63.60 10 ⇑P **P** **18 47 14.7 +0.1**
**DRGR** 63.60 10 ⇑P **P** **18 47 14.7 +0.1**
**VIVF Saint-Julien-l** 63.70 24 *e*P **P** **18 47 15.1 -0.1**
**MILM Milestii Mici** 63.75 5 ⇓P **P** **18 47 14.8 -0.6**
**MILM Milestii Mici** 63.75 5 ⇓P **P** **18 47 14.8 -0.6**
MILM 18 47 15.1
**MORH Mrgy, Hungar** 63.90 13 ⇑P **P** **18 47 16.0 -0.5**
**MORH Mrgy, Hungar** 63.90 13 P **P** **18 47 15.4 -1.0**
**XAN Xi'an** 63.95 298 ⇑P **P** **18 47 14.3 -2.8**
XAN pmax pmax
comp=Z,7.0nm,0.7s
**SIRR Siria** 64.06 11 ⇓P **P** **18 47 18.6 +1.0**
**TESR Tescani** 64.08 7 ⇓P **P** **18 47 17.8 +0.1**
**JOW Kunigami** 64.13 277 LR LR 19 16 54.4
comp=Z,191nm,19.9s,baz=118,slow=38

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **64.28** | **35** | *e*P | | **P** | **18 47 20.0** | **+0.8** |
| | comp=Z,36nm,1.8s | | | | | | | | |
| **SURR** | **Surduc** | **64.60** | **10** | ⇓P | | **P** | **18 47 21.8** | **+0.7** |
| **BZS** | **Buzias** | **64.70** | **11** | ⇑P | | **P** | **18 47 22.0** | **+0.3** |
| **BZS** | **Buzias** | **64.70** | **11** | ⇑P | | **P** | **18 47 22.0** | **+0.3** |
| **KK31** | **Karatay Array** | **64.72** | **332** | IAmb | IAmb | | 18 47 25.6 | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **KKAR** | **Karatay Array** | **64.72** | **332** | IAmb | IAmb | | 18 47 25.6 | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **VRI** | **Vrincioaia** | **64.72** | **7** | ⇓P | | **P** | **18 47 22.1** | **+0.2** |
| **VRI** | **Vrincioaia** | **64.72** | **7** | ⇓P | | **P** | **18 47 22.1** | **+0.2** |
| **PLOR** | **Plostina** | **64.73** | **7** | ⇓P | | **P** | **18 47 22.6** | **+0.6** |
| **PLOR** | **Plostina** | **64.73** | **7** | ⇓P | | **P** | **18 47 22.6** | **+0.6** |
| **MTO3** | **Montecristo** | **64.84** | **118** | IAmb | IAmb | | 18 47 34.3 | |
| | comp=Z,6.3nm,0.9s | | | | | | | | |
| **GZR** | **Gura Zlata** | **65.00** | **10** | ⇓P | | **P** | **18 47 23.9** | **+0.1** |
| **GZR** | **Gura Zlata** | **65.00** | **10** | ⇓P | | **P** | **18 47 23.9** | **+0.1** |
| **MLR** | **Muntele Rosu** | **65.06** | **7** | IAmb | IAmb | | 18 47 26.3 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **65.06** | **7** | ⇓P | | **P** | **18 47 24.6** | **+0.3** |
| **MLR** | **Muntele Rosu** | **65.06** | **7** | ⇓P | | **P** | **18 47 24.6** | **+0.3** |
| **VOIR** | | **65.08** | **8** | ⇓P | | **P** | **18 47 25.8** | **+1.5** |
| **VOIR** | | **65.08** | **8** | ⇓P | | **P** | **18 47 25.8** | **+1.5** |
| **WHN** | **Wuhan** | **65.44** | **291** | P | | P | 18 47 33.6 | +6.9 |
| **CFR** | **Carcaliu** | **65.46** | **6** | ⇓P | | **P** | **18 47 26.9** | **+0.2** |
| **CFR** | **Carcaliu** | **65.46** | **6** | ⇓P | | **P** | **18 47 26.9** | **+0.2** |
| **MDVR** | **Moldovita** | **65.54** | **11** | ⇑P | | **P** | **18 47 25.6** | **-1.6** |
| **TPGR** | **Topolog** | **65.79** | **5** | ⇓P | | **P** | **18 47 29.4** | **+0.6** |
| **MTE** | **Manteigas** | **65.93** | **35** | *e*P | | **P** | **18 47 30.3** | **+0.4** |
| **GOMU** | **GeErMu** | **66.04** | **310** | P | | **P** | **18 47 33.1** | **+2.1** |
| GOMU | | | | pP | sP | | 18 47 39.5 | +2.0 |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **66.08** | **36** | *e*P | | **P** | **18 47 31.2** | **+0.5** |
| | comp=Z,30nm,1.7s | | | | | | | | |
| **FDMO** | **Fiordimonte** | **66.53** | **18** | IAmb | IAmb | | 18 47 39.1 | |
| | comp=Z,7.9nm,0.7s | | | | | | | | |
| **KIV** | **Kislovodsk** | **66.68** | **354** | *e*P | | **P** | **18 47 35.5** | **+0.8** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **BOVS** | **Bovan** | **66.68** | **11** | ⇑P | | **P** | **18 47 32.6** | **-2.0** |
| **KBZ** | **Khabaz** | **66.90** | **354** | P | | **P** | **18 47 36.9** | **+1.0** |
| | comp=Z,2.5nm,0.8s,baz=334,slow=6.7,SNR=5.2 | | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **66.90** | **354** | *i* P | | **P** | **18 47 37.4** | **+1.2** |
| **CESX** | **Cesi** | **66.90** | **18** | IAmb | IAmb | | 18 47 36.6 | |
| | comp=Z,6.2nm,0.7s | | | | | | | | |
| **PMTG** | **Montargil** | **67.08** | **36** | *e*P | | **P** | **18 47 37.1** | **0.0** |
| **KSH** | **Kashi** | **67.23** | **327** | P | | **P** | **18 47 41.7** | **+3.4** |
| KSH | | | | pP | sP | | 18 47 44.5 | -0.3 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.33** | **32** | IAmb | IAmb | | 18 47 40.4 | |
| | comp=Z,7.7nm,1.1s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.33** | **32** | P | | **P** | **18 47 39.3** | **+0.5** |
| | comp=Z,4.1nm,0.9s,baz=345,slow=6.3,SNR=25 | | | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | | | |
| **PESTR** | **Estremoz** | **67.40** | **35** | *e*P | | **P** | **18 47 39.3** | **+0.1** |
| **PDG** | **Podgorica** | **67.70** | **13** | IAmb | IAmb | | 18 48 00.2 | |
| | comp=Z,9.4nm,1.1s | | | | | | | | |
| **PDG** | **Podgorica** | **67.70** | **13** | ⇓P | | **P** | **18 47 41.0** | **0.0** |
| **PNCL** | **Nicolau / Gran** | **67.94** | **36** | *e*P | | **P** | **18 47 42.9** | **+0.3** |
| | comp=Z,18nm,1.8s | | | | | | | | |
| **PUK** | **Puka** | **68.14** | **12** | IAmb | IAmb | | 18 47 44.8 | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **PBAR** | **Barrancos** | **68.18** | **35** | *e*P | | **P** | **18 47 44.4** | **+0.3** |
| **CD2** | **Chengdu** | **68.44** | **301** | P | | **P** | **18 47 43.8** | **-2.1** |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.5s | | | | | | | | |
| **MORF** | **Marmelete** | **68.69** | **36** | *e*P | | **P** | **18 47 47.6** | **+0.2** |
| | comp=Z,64nm,1.7s | | | | | | | | |
| **RDO** | **Rodhopi** | **69.38** | **8** | IAmb | IAmb | | 18 47 53.0 | |
| | comp=Z,7.2nm,0.8s | | | | | | | | |
| **FNA** | **Florina** | **69.50** | **11** | IAmb | IAmb | | 18 47 52.9 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.03** | **1** | P | | **P** | **18 48 01.9** | **0.0** |
| | comp=Z,1.8nm,0.8s,baz=1.5,slow=4.8,SNR=8.9 | | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.03** | **1** | *i* P | | **P** | **18 48 02.7** | **+0.9** |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **PZH** | **PanZhiHua** | **73.17** | **301** | P | | **P** | **18 48 15.6** | **+0.8** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.9s | | | | | | | | |
| **KEST** | **Kesra** | **73.30** | **22** | IAmb | IAmb | | 18 48 17.1 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **KEST** | **Kesra** | **73.30** | **22** | P | | **P** | **18 48 16.1** | **+0.6** |
| | comp=Z,12nm,0.9s,baz=316,slow=2.9,SNR=17 | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **77.73** | **360** | P | | **P** | **18 48 40.0** | **-0.8** |
| | comp=Z,0.9nm,0.5s,baz=358,slow=5.1,SNR=1.9 | | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | | |
| **ROSC** | **El Rosal** | **78.68** | **107** | IAmb | IAmb | | 18 48 48.7 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **ROSC** | **El Rosal** | **78.68** | **107** | P | | **P** | **18 48 47.2** | **+0.6** |
| | comp=Z,5.9nm,0.3s,baz=230,slow=19,SNR=4.5 | | | | | | | | |
| | comp=Z,5.9nm,0.3s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.59** | **301** | P | | **P** | **18 49 03.0** | **+1.1** |
| | comp=Z,5.1nm,0.8s,baz=1.3,slow=6.6,SNR=15 | | | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.59** | **301** | *i* P | | **P** | **18 49 05.5** | **+3.6** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **BOAV** | **Boa Vista** | **85.71** | **95** | IAmb | IAmb | | 18 49 23.9 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **86.90** | **351** | IAmb | IAmb | | 18 49 31.1 | |
| | comp=Z,5.5nm,0.9s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **94.21** | **33** | P | | **P** | **18 50 02.0** | **-1.0** |
| | comp=Z,0.5nm,0.6s,baz=7.5,slow=4.2,SNR=4.2 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **PALK** | **Pallekele** | **97.31** | **315** | LR | | LR | 19 40 32.8 | | |
| | comp=Z,52nm,18.2s,baz=105,slow=39 | | | | | | | | |
| **VNDA** | **Vanda** | **150.26** | **201** | PKPbc | | **PKiKP** | **18 56 33.2** | **-0.7** |
| | comp=Z,0.5nm,0.7s,baz=360,slow=2.1,SNR=5.7 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **159.40** | **180** | PKPab | | **PKPab** | **18 57 21.0** | **+2.2** |
| | comp=Z,1.8nm,0.8s,baz=224,slow=0.6,SNR=6.0 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **165.07** | **117** | ⇑PKPab | | **PKPab** | **18 57 43.4** | **-0.2** |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **165.35** | **115** | ⇑PKPab | | **PKPab** | **18 57 44.8** | **0.0** |
| | comp=Z,2.2nm,1.0s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **165.71** | **115** | ⇑PKPab | | **PKPab** | **18 57 45.9** | **-0.4** |
| | comp=Z,0.9nm,0.8s,baz=306,slow=4.1 | | | | | | | | |
| **SNAA** | **Sanae** | **167.30** | **117** | ⇑PKPab | | **PKPab** | **18 57 52.6** | **-0.9** |
| | comp=Z,4.1nm,0.3s | | | | | | | | |
| **SNAA** | **Sanae** | **167.30** | **117** | PKPab | | **PKPab** | **18 57 53.3** | **-0.2** |
| | comp=Z,1.4nm,0.8s,baz=80,slow=7.5,SNR=4.1 | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **169.01** | **118** | ⇑PKPab | | **PKPab** | **18 58 00.8** | **-0.3** |
| | comp=Z,134nm,0.7s | | | | | | | | |

*ATH **12** 18:39:24.6,34.˚27N×26.˚62E,h21km±5km, ML2.1/1, Error ellipse: s-maj=7.7km s-min=2.6km az=314.0*
*AFAD **12** 18:39:32.6±0.0,34.˚95N×27.˚60E,h9km±4km, ML2.6*
**ISC 12 18:39:24.2±2.3,34.˚3N±0.˚1×26.˚72E±0.˚05,h35km,n17,**
**σ1ˢ58/22,Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.92** | **333** | P | **Pn** | **18 39 41.5** | **+0.9** |
| ZKR | | | | S | **Sn** | **18 39 53.5** | **+0.9** |
| ZKR | | | | AML | AML | 18 40 04.9 | |
| | comp=N,177µm,0.3s | | | | | | |
| ZKR | | | | AML | AML | 18 40 06.6 | |
| | comp=E,263µm,0.5s | | | | | | |
| **KARP** | **Karpathos** | **1.30** | **16** | P | **Pn** | **18 39 47.5** | **+1.6** |
| KARP | | | | S | **Sn** | **18 40 04.8** | **+2.6** |
| **IDI** | **Anoyia** | **1.80** | **304** | P | **Pn** | **18 39 53.4** | **+0.6** |
| **GVD** | **Gavdhos** | **2.24** | **285** | P | **Pn** | **18 39 59.2** | **+0.4** |
| **SNT5** | **Nea Kammeni, S** | **2.37** | **333** | P | **Pn** | **18 40 00.2** | **-0.3** |
| **IMMV** | **Iera Moni Meta** | **2.53** | **298** | P | **Pn** | **18 40 03.5** | **+0.7** |
| **IZZE** | **Mula-Seydike** | **2.96** | **43** | P | **Pn** | **18 40 08.9** | **+0.2** |
| IZZE | | | | S | **Sn** | **18 40 41.2** | **-1.8** |
| IZZE | | | | *i* AML | AML | 18 40 45.0 | |
| | comp=E,42nm,0.4s | | | | | | |
| **AKAS** | **Kas** | **3.06** | **50** | P | **Pn** | **18 40 10.9** | **+0.7** |
| AKAS | | | | S | Sn | 18 40 38.8 | -6.7 |
| AKAS | | | | *i* AML | AML | 18 40 51.0 | |
| | comp=E,61nm,1.6s | | | | | | |
| AKAS | | | | *i* AML | AML | 18 41 04.0 | |
| | comp=E,81nm,1.2s | | | | | | |
| **SABU** | **Mula-Dalaman** | **3.12** | **35** | P | **Pn** | **18 40 11.8** | **+0.9** |
| SABU | | | | S | Sn | 18 40 40.1 | -6.9 |
| SABU | | | | *i* AML | AML | 18 41 13.0 | |
| | comp=E,36nm,2.0s | | | | | | |
| SABU | | | | *i* AML | AML | 18 41 20.0 | |
| | comp=E,55nm,2.1s | | | | | | |
| **ANKY** | **Antikythira Is** | **3.21** | **300** | P | **Pn** | **18 40 13.6** | **+1.4** |
| **DNZT** | **Denizli-Tavas-** | **3.52** | **32** | P | **Pn** | **18 40 17.5** | **+1.0** |
| DNZT | | | | S | **Sn** | **18 40 55.1** | **-1.8** |
| **KTHA** | **Kythira Island** | **3.58** | **304** | P | **Pn** | **18 40 16.9** | **-0.3** |
| **AKUM** | **Antalya-Kumluc** | **3.59** | **55** | P | **Pn** | **18 40 18.3** | **+0.9** |
| **TAVA** | **DENIZLI_Tavas** | **3.63** | **29** | P | **Pn** | **18 40 18.9** | **+0.9** |
| **GOLH** | **Golhisar** | **3.74** | **37** | P | **Pn** | **18 40 21.5** | **+2.0** |
| GOLH | | | | *i* AML | AML | 18 41 20.0 | |
| | comp=E,20nm,2.1s | | | | | | |
| GOLH | | | | *i* AML | AML | 18 41 43.0 | |
| | comp=E,21nm,1.7s | | | | | | |
| **DNIZ** | **Denizli-Tavas-** | **3.82** | **29** | P | **Pn** | **18 40 20.8** | **+0.1** |
| DNIZ | | | | S | **Sn** | **18 41 00.3** | **-4.1** |
| DNIZ | | | | *i* AML | AML | 18 41 09.0 | |
| | comp=E,21nm,0.2s | | | | | | |
| DNIZ | | | | *i* AML | AML | 18 41 10.0 | |
| | comp=E,25nm,0.3s | | | | | | |
| **VLI** | **Velíai** | **3.92** | **309** | P | **Pn** | **18 40 20.6** | **-1.3** |

*NEIC **12** 18:39:57.0±1.5,69.˚65N±0.˚07×144.˚88W±0.˚09,h10km±2km, Error ellipse: s-maj=11.6km s-min=4.9km az=4.0*
**AEIC 12 18:39:56.3±1.3,69.˚57N±0.˚06×144.˚86W±0.˚08,h2km±6km, ML3.4,ML3.7/38(NEIC),Error ellipse: s-maj=8.6km s-min=4.0km az=187.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.35** | **357** | | Pg | 18 40 02.8 | -0.2 |
| C26K | | | | | Sg | 18 40 07.5 | 0.0 |
| **C26K** | **Camden Bay** | **0.35** | **357** | IAML | | 18 40 14.7 | |
| | comp=E,6µm,0.6s | | | | | | |
| **C27K** | **Jago River** | **0.41** | **82** | | Pg | 18 40 04.0 | -0.1 |
| C27K | | | | | Sg | 18 40 09.9 | +0.6 |
| **C27K** | **Jago River** | **0.41** | **82** | IAML | | 18 40 10.2 | |
| | comp=E,3µm,0.5s | | | | | | |
| C27K | | | | IAML | | 18 40 13.4 | |
| | comp=N,4µm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.59** | **245** | | Pg | 18 40 07.5 | -0.2 |
| D25K | | | | | Sg | 18 40 15.6 | +0.3 |
| **D25K** | **Kavik River** | **0.59** | **245** | IAML | | 18 40 17.0 | |
| | comp=N,1µm,0.8s | | | | | | |
| D25K | | | | IAML | | 18 40 19.3 | |
| | comp=E,2µm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.35** | **278** | | Pn | 18 40 21.6 | -0.6 |
| C24K | | | | | Sn | 18 40 40.6 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.35** | **278** | IAML | | 18 40 41.4 | |
| | comp=E,2µm,1.8s | | | | | | |
| C24K | | | | IAML | | 18 40 42.0 | |
| | comp=N,863nm,1.2s | | | | | | |
| **D27M** | **Malcolm River** | **1.42** | **102** | | Pn | 18 40 22.5 | -0.7 |
| D27M | | | | | Sn | 18 40 42.6 | +0.2 |
| **D27M** | **Malcolm River** | **1.42** | **102** | IAML | | 18 40 47.3 | |
| | comp=E,799nm,0.5s | | | | | | |
| D27M | | | | IAML | | 18 40 48.0 | |
| | comp=N,922nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.47** | **255** | | Pn | 18 40 23.3 | -0.5 |
| D24K | | | | | Sb | 18 40 43.3 | 0.0 |
| **D24K** | **Happy Valley** | **1.47** | **255** | IAML | | 18 40 47.3 | |
| | comp=N,1µm,1.0s | | | | | | |
| **E27K** | **Coleen River** | **1.83** | **138** | | Pn | 18 40 28.3 | -0.4 |
| **E27K** | **Coleen River** | **1.83** | **138** | IAML | | 18 40 55.9 | |
| | comp=N,394nm,1.0s | | | | | | |
| **F26K** | **Sheenjek River** | **1.91** | **172** | Pn | Pn | 18 40 30.6 | +0.8 |
| F26K | | | | IAML | | 18 40 59.5 | |
| | comp=E,478nm,0.9s | | | | | | |
| F26K | | | | IAML | | 18 41 01.3 | |
| | comp=N,364nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.93** | **243** | Pn | Pn | 18 40 30.5 | +0.3 |
| TOLK | | | | IAML | | 18 41 01.0 | |
| | comp=E,689nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 18 41 04.3 | |
| | comp=N,534nm,1.0s | | | | | | |
| **E28M** | **Babbage River** | **2.14** | **114** | Pn | Pn | 18 40 32.7 | -0.3 |
| **F28M** | **Old Crow** | **2.69** | **135** | Pn | Pn | 18 40 41.1 | +0.6 |
| F28M | | | | IAML | | 18 41 27.3 | |
| | comp=E,293nm,1.2s | | | | | | |
| F28M | | | | IAML | | 18 41 29.9 | |
| | comp=N,278nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.42** | **275** | Pn | Pn | 18 40 51.6 | +1.1 |
| **E21K** | **Killik River** | **3.47** | **255** | Pn | Pn | 18 40 51.9 | +0.6 |
| E21K | | | | IAML | | 18 41 58.5 | |
| | comp=N,178nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | **3.93** | **198** | Pn | Pn | 18 40 57.7 | +0.2 |
| H24K | | | | IAML | | 18 41 30.2 | |
| | comp=E,144nm,1.4s | | | | | | |
| H24K | | | | IAML | | 18 41 55.8 | |
| | comp=N,112nm,1.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.59** | **194** | Pn | Pn | 18 41 06.8 | +0.2 |
| **MDM** | **Murphy Dome** | **4.82** | **197** | Pn | Pn | 18 41 10.2 | +0.4 |
| MDM | | | | IAML | | 18 41 56.1 | |
| | comp=E,67nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **4.88** | **263** | Pn | Pn | 18 41 10.7 | +0.1 |
| D19K | | | | IAML | | 18 41 45.0 | |
| | comp=E,71nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **194** | Pn | Pn | 18 41 13.5 | +0.2 |
| CCB | | | | IAML | | 18 41 52.7 | |
| | comp=E,59nm,2.6s | | | | | | |
| CCB | | | | IAML | | 18 41 59.2 | |
| | comp=N,53nm,3.4s | | | | | | |
| **WRH** | **Wood River Hil** | **5.28** | **195** | Pn | Pn | 18 41 16.9 | +0.8 |
| **I30M** | **Mount Dempster** | **5.45** | **139** | Pn | Pn | 18 41 19.6 | +1.0 |
| **F19K** | **Shaleruckik Mo** | **5.54** | **246** | Pn | Pn | 18 41 20.2 | +0.5 |
| **C18K** | **Utukok River** | **5.91** | **269** | Pn | Pn | 18 41 24.4 | -0.5 |
| **E18K** | **Tukpahlearik C** | **6.17** | **257** | Pn | Pn | 18 41 27.9 | -0.4 |
| **DHY** | **Denali Highway** | **6.61** | **190** | Pn | Pn | 18 41 36.6 | +2.1 |
| **A36M** | **Sachs Harbour** | **6.90** | **60** | Pn | Pn | 18 41 37.9 | -0.4 |
| **F17K** | **Baldwin Pennin** | **6.90** | **251** | Pn | Pn | 18 41 37.8 | -0.5 |

**GUC 12 18:49:13.0±0.7,30.˚78S×71.˚42W,h45km±1km,ML3.5, 2C-4D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.22** | **299** | ⇑*e*P | Pn | 18 49 20.5 | -0.5 |
| CO06 | | | | *e*S | Sn | 18 49 26.2 | -0.4 |
| CO06 | | | | IAML | | 18 49 26.7 | |
| | comp=N,8µm,0.2s | | | | | | |
| **CO02** | **Combarbal** | **0.55** | **140** | ⇓*e*P | Pn | 18 49 24.6 | -0.2 |
| CO02 | | | | *e*S | Sn | 18 49 33.3 | +0.1 |
| CO02 | | | | IAML | | 18 49 34.3 | |
| | comp=E,9µm,0.1s | | | | | | |
| **CO03** | **El Pedregal** | **0.63** | **96** | ⇓*e*P | Pn | 18 49 25.7 | 0.0 |
| CO03 | | | | *e*S | Sn | 18 49 34.7 | -0.2 |
| **GO04** | **Tololo Observa** | **0.81** | **41** | ⇓*e*P | Pn | 18 49 28.2 | 0.0 |
| GO04 | | | | *e*S | Sn | 18 49 40.2 | +1.0 |
| GO04 | | | | IAML | | 18 49 43.1 | |
| | comp=E,2µm,0.5s | | | | | | |
| **CO05** | **La Serena** | **0.87** | **10** | ⇑*e*P | Pn | 18 49 29.1 | +0.2 |
| CO05 | | | | *e*S | Sn | 18 49 41.2 | +0.7 |
| **CO01** | **Juntas del Tor** | **1.39** | **55** | ⇓*e*P | Pn | 18 49 37.4 | +1.1 |
| CO01 | | | | *e*S | Sn | 18 49 55.6 | +2.0 |
| **VA06** | **Catapilco** | **1.78** | **177** | *e*P | Pn | 18 49 41.5 | +0.3 |
| VA06 | | | | *e*S | Sn | 18 50 04.5 | +1.8 |
| VA06 | | | | IAML | | 18 50 08.9 | |
| | comp=N,457nm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.87** | **20** | *e*P | Pn | 18 49 43.2 | +0.4 |
| LCO | | | | *e*S | Sn | 18 50 07.4 | +2.1 |
| **VA03** | **San Esteban** | **2.11** | **160** | *e*P | Pn | 18 49 47.2 | +1.3 |
| VA03 | | | | *e*S | Sn | 18 50 13.6 | +2.6 |
| VA03 | | | | IAML | | 18 50 19.4 | |
| | comp=E,385nm,0.1s | | | | | | |
| **AC05** | **El Transito** | **2.18** | **27** | *e*P | Pn | 18 49 48.5 | +1.6 |
| AC05 | | | | *e*S | Sn | 18 50 15.1 | +2.5 |
| AC05 | | | | IAML | | 18 50 24.1 | |
| | comp=N,214nm,0.3s | | | | | | |
| **ROCH** | **El Roble** | **2.21** | **171** | *e*P | Pn | 18 49 47.9 | +0.5 |
| **PEL** | **Peldehue** | **2.44** | **165** | *e*P | Pn | 18 49 51.3 | +0.9 |
| **MT02** | **Curacav** | **2.48** | **175** | *e*P | Pn | 18 49 51.2 | +0.2 |
| MT02 | | | | *e*S | Sn | 18 50 21.9 | +1.8 |
| **AC04** | **Llanos de Chal** | **2.58** | **7** | *e*P | Pn | 18 49 52.9 | +0.6 |
| AC04 | | | | IAML | | 18 50 38.3 | |
| | comp=N,108nm,0.3s | | | | | | |
| **MT10** | **Hacienda Santa** | **2.59** | **164** | *e*P | Pn | 18 49 54.1 | +1.5 |
| MT10 | | | | *e*S | Sn | 18 50 25.6 | +2.5 |
| **FCH** | **Farellones** | **2.71** | **160** | *e*P | Pn | 18 49 56.4 | +2.0 |
| FCH | | | | *e*S | Sn | 18 50 29.2 | +3.0 |
| FCH | | | | IAML | | 18 50 42.2 | |
| | comp=N,86nm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **2.81** | **164** | *e*P | Pn | 18 49 57.0 | +1.4 |
| MT03 | | | | *e*S | Sn | 18 50 30.0 | +1.7 |
| MT03 | | | | IAML | | 18 50 43.7 | |
| | comp=E,273nm,0.4s | | | | | | |
| **MT04** | **Ro Olivares** | **2.83** | **158** | *e*P | Pn | 18 49 58.6 | +2.6 |
| MT04 | | | | IAML | | 18 50 42.6 | |
| | comp=E,108nm,0.4s | | | | | | |
| **MT09** | **Talagante** | **3.01** | **173** | *e*P | Pn | 18 49 59.1 | +0.8 |
| MT09 | | | | IAML | | 18 50 48.2 | |
| | comp=N,181nm,0.1s | | | | | | |
| **MT12** | **Pirque** | **3.03** | **166** | *e*P | Pn | 18 49 59.9 | +1.3 |
| MT12 | | | | *e*S | Sn | 18 50 35.5 | +1.8 |
| MT12 | | | | IAML | | 18 50 52.3 | |
| | comp=N,206nm,0.4s | | | | | | |
| **MT01** | **Popeta** | **3.08** | **177** | *e*P | Pn | 18 49 59.3 | +0.1 |
| MT01 | | | | IAML | | 18 50 45.3 | |
| | comp=E,78nm,0.4s | | | | | | |
| **MT13** | **San Alfonso** | **3.11** | **162** | *e*P | Pn | 18 50 00.6 | +1.0 |
| MT13 | | | | *e*S | Sn | 18 50 37.3 | +1.8 |
| MT13 | | | | IAML | | 18 50 48.6 | |
| | comp=E,140nm,0.3s | | | | | | |
| **LMEL** | **Las Melosas** | **3.23** | **162** | *e*P | Pn | 18 50 03.2 | +1.9 |
| LMEL | | | | *e*S | Sn | 18 50 41.9 | +3.4 |
| LMEL | | | | IAML | | 18 50 48.3 | |
| | comp=N,120nm,0.3s | | | | | | |
| **BO04** | **La Punta** | **3.27** | **168** | *e*P | Pn | 18 50 02.7 | +0.9 |
| BO04 | | | | *e*S | Sn | 18 50 41.2 | +1.7 |
| BO04 | | | | IAML | | 18 50 59.6 | |
| | comp=N,74nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **3.34** | **18** | *e*P | Pn | 18 50 04.3 | +1.5 |
| GO03 | | | | *e*S | Sn | 18 50 42.9 | +1.7 |
| GO03 | | | | IAML | | 18 51 00.8 | |
| | comp=E,84nm,0.4s | | | | | | |
| **AC06** | **Mina Casimiro** | **3.54** | **15** | *e*P | Pn | 18 50 07.0 | +1.6 |
| AC06 | | | | IAML | | 18 51 02.7 | |
| | comp=E,64nm,0.5s | | | | | | |

*NEIC **12** 18:52:50.1±1.4,69.˚55N±0.˚02×144.˚57W±0.˚08,h10km±2km, Error ellipse: s-maj=6.0km s-min=3.0km az=234.0*
**AEIC 12 18:52:48.3±1.7,69.˚53N±0.˚04×144.˚63W±0.˚08,h2km±6km, ML3.1,ML3.2/94(NEIC),Error ellipse: s-maj=6.8km s-min=3.4km az=198.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.34** | **73** | | Sg | 18 52 59.3 | +0.2 |
| **C27K** | **Jago River** | **0.34** | **73** | Pg | Pg | 18 52 54.5 | -0.2 |
| C27K | | | | IAML | | 18 52 59.7 | |
| | comp=E,1µm,0.7s | | | | | | |
| C27K | | | | IAML | | 18 53 03.1 | |
| | comp=N,1µm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.40** | **346** | | Pg | 18 52 55.8 | -0.2 |
| C26K | | | | | Sg | 18 53 01.7 | +0.5 |
| **C26K** | **Camden Bay** | **0.40** | **346** | IAML | | 18 53 02.9 | |
| | comp=E,530nm,0.6s | | | | | | |
| C26K | | | | IAML | | 18 53 05.6 | |
| | comp=N,541nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.65** | **252** | Pg | Pg | 18 53 00.7 | -0.1 |
| **D25K** | **Kavik River** | **0.65** | **252** | | Sg | 18 53 10.0 | +0.8 |
| **D27M** | **Malcolm River** | **1.33** | **101** | Pg | Pg | 18 53 13.7 | -0.1 |
| **D27M** | **Malcolm River** | **1.33** | **101** | | Sn | 18 53 32.2 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.44** | **280** | Pn | Pg | 18 53 16.3 | +0.5 |
| C24K | | | | IAML | | 18 53 37.3 | |
| | comp=E,310nm,0.8s | | | | | | |
| C24K | | | | IAML | | 18 53 37.4 | |
| | comp=N,270nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.44** | **280** | | Sn | 18 53 35.2 | +0.4 |
| **D24K** | **Happy Valley** | **1.54** | **258** | | Pg | 18 53 18.1 | +0.4 |
| D24K | | | | IAML | | 18 53 41.0 | |
| | comp=N,207nm,0.4s | | | | | | |
| D24K | | | | IAML | | 18 53 44.1 | |
| | comp=E,285nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.74** | **139** | | Pb | 18 53 20.7 | -0.3 |
| **E27K** | **Coleen River** | **1.74** | **139** | | Sn | 18 53 42.7 | +0.3 |
| **F26K** | **Sheenjek River** | **1.85** | **174** | | Pn | 18 53 21.0 | -0.1 |
| **F26K** | **Sheenjek River** | **1.85** | **174** | IAML | | 18 53 49.7 | |
| | comp=E,161nm,0.8s | | | | | | |
| F26K | | | | IAML | | 18 53 50.5 | |
| | comp=N,102nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **191** | Pn | Pn | 18 53 23.8 | +0.8 |
| F25K | | | | IAML | | 18 53 54.7 | |
| | comp=E,93nm,0.6s | | | | | | |
| F25K | | | | IAML | | 18 53 58.8 | |
| | comp=N,111nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **191** | | Sn | 18 53 48.9 | +0.6 |
| **TOLK** | **Toolik Lake Re** | **1.99** | **246** | | Pb | 18 53 24.6 | -0.6 |
| TOLK | | | | IAML | | 18 53 59.6 | |
| | comp=E,80nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.02** | **226** | | Pb | 18 53 25.0 | -0.8 |
| **E28M** | **Babbage River** | **2.05** | **115** | | Pb | 18 53 25.8 | -0.6 |
| **D28M** | **Stokes Point** | **2.09** | **93** | | Pn | 18 53 24.2 | -0.2 |
| **D28M** | **Stokes Point** | **2.09** | **93** | IAML | | 18 53 58.3 | |
| | comp=E,102nm,0.8s | | | | | | |
| D28M | | | | IAML | | 18 54 05.0 | |
| | comp=N,154nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.11** | **179** | | Pb | 18 53 26.9 | -0.5 |
| **C23K** | **Itkillik River** | **2.11** | **281** | Pn | Pb | 18 53 27.2 | 0.0 |
| C23K | | | | IAML | | 18 54 08.8 | |
| | comp=N,217nm,0.6s | | | | | | |
| C23K | | | | IAML | | 18 54 45.8 | |
| | comp=E,174nm,0.4s | | | | | | |
| **D23K** | **Nanushuk River** | **2.23** | **258** | | Pn | 18 53 26.2 | -0.1 |
| **D23K** | **Nanushuk River** | **2.23** | **258** | IAML | | 18 54 45.9 | |
| | comp=N,73nm,0.8s | | | | | | |
| D23

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=N,16nm,0.9s | | | | | | |
| **E19K** | **Redstone River** | **5.08** | **252** | Pn | Pn | 18 54 06.2 | +0.7 |
| **C19K** | **Lookout Ridge** | **5.32** | **272** | Pn | Pn | 18 54 09.3 | +0.6 |
| **I30M** | **Mount Dempster** | **5.37** | **140** | Pn | Pn | 18 54 10.9 | +1.4 |
| **F19K** | **Shaleruckik Mo** | **5.59** | **247** | | Pn | 18 54 12.6 | +0.1 |
| **K27K** | **Chicken** | **5.62** | **168** | Pn | Pn | 18 54 14.1 | +1.3 |
| **J30M** | **Hart River** | **5.94** | **143** | Pn | Pn | 18 54 19.0 | +1.7 |
| **C18K** | **Utukok River** | **5.99** | **269** | | Pn | 18 54 18.1 | 0.0 |
| **E18K** | **Tukpahlearik C** | **6.24** | **258** | Pn | Pn | 18 54 22.1 | +0.7 |
| **K29M** | **Barlow Dome** | **6.37** | **150** | | Pn | 18 54 23.7 | +0.5 |
| K29M | | | | | Sn | 18 55 35.4 | -1.0 |
| **C17K** | **DeLong Mountai** | **6.74** | **270** | | Pn | 18 54 27.7 | -0.5 |
| **E17K** | **Hotham Inlet** | **6.82** | **257** | | Pn | 18 54 28.7 | -0.6 |
| **H18K** | **Honhosa River** | **6.88** | **237** | Pn | Pn | 18 54 31.6 | +1.6 |
| **D17K** | **Noatak River** | **6.98** | **264** | | Pn | 18 54 31.0 | -0.5 |

*NEIC **12** 19:01:43.7±2.2, 69°58N±0°04×144°58W±0°06, h10km±2km, Error ellipse: s-maj=7.9km s-min=3.0km az=26.0*
**AEIC 12 19:01:42.8±2.4, 69°51N±0°04×144°61W±0°04, h5km±6km, ML2.6, ML2.7/72(NEIC), Error ellipse: s-maj=5.7km s-min=1.6km az=169.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.33** | **70** | | Pg | 19 01 49.2 | -0.1 |
| C27K | | | | | Sg | 19 01 54.0 | +0.3 |
| **C27K** | **Jago River** | **0.33** | **70** | IAML | | 19 01 54.3 | |
| | comp=N,892nm,0.6s | | | | | | |
| C27K | | | | IAML | | 19 01 54.5 | |
| | comp=E,773nm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.42** | **345** | | Pg | 19 01 50.3 | -0.5 |
| C26K | | | | | Sg | 19 01 55.9 | -0.4 |
| **C26K** | **Camden Bay** | **0.42** | **345** | IAML | | 19 01 57.1 | |
| | comp=N,323nm,0.7s | | | | | | |
| C26K | | | | IAML | | 19 01 59.5 | |
| | comp=E,242nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.66** | **254** | Pg | Pg | 19 01 54.4 | -0.9 |
| **D25K** | **Kavik River** | **0.66** | **254** | | Sg | 19 02 04.7 | +0.9 |
| **D27M** | **Malcolm River** | **1.32** | **100** | | Pb | 19 02 08.8 | +0.7 |
| **D27M** | **Malcolm River** | **1.32** | **100** | | Sn | 19 02 26.5 | +0.7 |
| **C24K** | **Franklin Bluff** | **1.45** | **280** | Pn | Pn | 19 02 09.8 | +0.2 |
| C24K | | | | IAML | | 19 02 31.4 | |
| | comp=E,146nm,1.0s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.45** | **280** | | Sg | 19 02 29.8 | +0.5 |
| **D24K** | **Happy Valley** | **1.54** | **258** | | Pn | 19 02 09.2 | -1.7 |
| D24K | | | | IAML | | 19 03 07.9 | |
| | comp=E,113nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.72** | **139** | | Pn | 19 02 12.5 | -0.9 |
| **F26K** | **Sheenjek River** | **1.84** | **175** | Pn | Pg | 19 02 17.5 | -0.4 |
| F26K | | | | IAML | | 19 02 43.8 | |
| | comp=E,92nm,0.7s | | | | | | |
| F26K | | | | IAML | | 19 02 46.4 | |
| | comp=N,71nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **175** | | Sb | 19 02 39.5 | -0.6 |
| **F25K** | **Christian Rive** | **1.97** | **192** | | Pn | 19 02 16.8 | 0.0 |
| F25K | | | | | Sn | 19 02 42.7 | +0.8 |
| **F25K** | **Christian Rive** | **1.97** | **192** | IAML | | 19 02 53.0 | |
| | comp=N,72nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.99** | **246** | | Pn | 19 02 17.0 | -0.1 |
| TOLK | | | | IAML | | 19 02 50.7 | |
| | comp=E,63nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 19 02 53.9 | |
| | comp=N,48nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.02** | **226** | | Pn | 19 02 17.3 | -0.3 |
| **D28M** | **Stokes Point** | **2.08** | **92** | | Pn | 19 02 18.2 | -0.1 |
| **BMAR** | **Burnt Mountain** | **2.10** | **180** | | Pn | 19 02 19.5 | +1.0 |
| **C23K** | **Itkillik River** | **2.12** | **282** | | Pn | 19 02 19.1 | +0.2 |
| **D23K** | **Nanushuk River** | **2.23** | **259** | | Pn | 19 02 20.3 | -0.1 |
| **D23K** | **Nanushuk River** | **2.23** | **259** | IAML | | 19 03 04.5 | |
| | comp=N,43nm,0.7s | | | | | | |
| D23K | | | | IAML | | 19 03 05.7 | |
| | comp=E,45nm,0.8s | | | | | | |
| **E23K** | **Chandalar** | **2.34** | **234** | Pn | Pb | 19 02 24.6 | -0.8 |
| **F24K** | **Squaw Lake** | **2.34** | **213** | | Pn | 19 02 21.8 | -0.1 |
| **F24K** | **Squaw Lake** | **2.34** | **213** | IAML | | 19 03 03.2 | |
| | comp=E,36nm,0.6s | | | | | | |
| F24K | | | | IAML | | 19 03 04.2 | |
| | comp=N,45nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.58** | **135** | | Pn | 19 02 24.2 | -1.0 |
| F28M | | | | IAML | | 19 03 10.2 | |
| | comp=E,32nm,1.0s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.59** | **173** | | Pn | 19 02 25.3 | -0.1 |
| **G25K** | **Bearman Lake** | **2.82** | **192** | | Pn | 19 02 28.3 | -0.1 |
| **G27K** | **Doyon Strip** | **2.93** | **157** | Pn | Pn | 19 02 29.9 | -0.2 |
| **G24K** | **Hadweenzic Riv** | **3.02** | **202** | Pn | Pn | 19 02 32.2 | +0.9 |
| G24K | | | | IAML | | 19 03 21.8 | |
| | comp=E,30nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.15** | **289** | Pn | Pn | 19 02 33.6 | +0.6 |
| **H27K** | **Steamboat Moun** | **3.50** | **159** | | Pn | 19 02 37.7 | -0.1 |
| **B21K** | **Ikpikpuk River** | **3.51** | **276** | Pn | Pn | 19 02 38.0 | 0.0 |
| B21K | | | | IAML | | 19 03 42.4 | |
| | comp=N,17nm,1.0s | | | | | | |
| B21K | | | | IAML | | 19 03 46.0 | |
| | comp=E,20nm,0.9s | | | | | | |
| **E21K** | **Killik River** | **3.54** | **257** | Pn | Pn | 19 02 39.1 | +0.7 |
| **F30M** | **Barrier River** | **3.76** | **116** | | Pn | 19 02 41.1 | -0.2 |
| **A22K** | **Sinclair Lake** | **3.82** | **298** | | Pn | 19 02 42.0 | -0.1 |
| **H24K** | **Noodor Dome** | **3.90** | **200** | Pn | Pn | 19 02 44.2 | +0.9 |
| H24K | | | | IAML | | 19 03 50.5 | |
| | comp=E,14nm,0.8s | | | | | | |
| H24K | | | | IAML | | 19 03 53.7 | |
| | comp=N,10nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **4.01** | **239** | Pn | Pn | 19 02 46.4 | +1.6 |
| F21K | | | | IAML | | 19 04 00.5 | |
| | comp=N,9.3nm,1.1s | | | | | | |
| F21K | | | | IAML | | 19 04 03.1 | |
| | comp=E,10nm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.03** | **125** | Pn | Pn | 19 02 47.1 | +2.1 |
| G30M | | | | IAML | | 19 04 01.6 | |
| | comp=N,8.6nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.06** | **142** | Pn | Pn | 19 02 47.7 | +2.2 |
| H29M | | | | IAML | | 19 04 07.0 | |
| | comp=N,12nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.09** | **162** | | Pn | 19 02 45.7 | -0.3 |
| **H23K** | **Yukon River** | **4.16** | **209** | Pn | Pn | 19 02 49.3 | +2.4 |
| H23K | | | | IAML | | 19 03 57.4 | |
| | comp=N,13nm,0.8s | | | | | | |
| **D20K** | **Etivluk River** | **4.37** | **265** | | Pn | 19 02 49.5 | -0.3 |
| **E20K** | **Nigu River** | **4.38** | **259** | | Pn | 19 02 49.6 | -0.2 |
| **B20K** | **Meade River** | **4.39** | **282** | Pn | Pn | 19 02 50.8 | +0.8 |
| **I28M** | **Miner Creek** | **4.46** | **154** | Pn | Pn | 19 02 53.9 | +2.8 |
| I28M | | | | IAML | | 19 04 18.7 | |
| | comp=E,8.7nm,0.9s | | | | | | |
| I28M | | | | IAML | | 19 04 20.5 | |
| | comp=N,6.9nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.64** | **119** | Pn | Pn | 19 02 55.1 | +1.6 |
| G31M | | | | IAML | | 19 04 31.7 | |
| | comp=N,6.8nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.75** | **205** | Pn | Pn | 19 02 57.6 | +2.6 |
| **F20K** | **Avaraart Lake** | **4.81** | **244** | Pn | Pn | 19 02 57.6 | +1.8 |
| F20K | | | | IAML | | 19 06 04.8 | |
| | comp=N,5.4nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **4.96** | **264** | Pn | Pn | 19 02 58.8 | +0.9 |
| D19K | | | | IAML | | 19 04 36.8 | |
| | comp=E,5.0nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **5.08** | **252** | Pn | Pn | 19 03 00.8 | +1.3 |
| E19K | | | | IAML | | 19 04 49.7 | |
| | comp=E,6.1nm,1.2s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.33** | **273** | Pn | Pn | 19 03 03.8 | +0.9 |
| C19K | | | | IAML | | 19 04 08.1 | |
| | comp=E,4.9nm,0.6s | | | | | | |
| C19K | | | | IAML | | 19 04 54.3 | |
| | comp=N,4.8nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.35** | **140** | Pn | Pn | 19 03 04.9 | +1.6 |
| I30M | | | | IAML | | 19 04 47.2 | |
| | comp=N,4.8nm,0.8s | | | | | | |
| I30M | | | | IAML | | 19 04 51.0 | |
| | comp=E,4.2nm,1.1s | | | | | | |
| **SCRK** | **Sand Creek** | **5.57** | **177** | | Pn | 19 03 10.0 | +3.7 |
| **J30M** | **Hart River** | **5.92** | **143** | | Pn | 19 03 11.6 | +0.5 |
| **E18K** | **Tukpahlearik C** | **6.25** | **258** | | Pn | 19 03 15.4 | -0.1 |
| **F18K** | **Selawik** | **6.34** | **250** | | Pn | 19 03 17.2 | +0.4 |
| **A36M** | **Sachs Harbour** | **6.85** | **60** | Pn | Pn | 19 03 24.0 | +0.3 |

*NEIC **12** 19:02:20.0±1.2, 69°60N±0°07×145°09W±0°09, h10km±1km, Error ellipse: s-maj=11.5km s-min=5.2km az=7.0*
**AEIC 12 19:02:19.6±0.8, 69°55N±0°06×145°11W±0°09, h5km±6km, ML2.5, ML2.7/38(NEIC), Error ellipse: s-maj=8.8km s-min=4.4km az=185.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.38** | **10** | | Pg | 19 02 26.6 | -0.3 |
| C26K | | | | | Sg | 19 02 31.9 | 0.0 |
| **C26K** | **Camden Bay** | **0.38** | **10** | IAML | | 19 02 33.1 | |
| | comp=E,580nm,0.4s | | | | | | |
| C26K | | | | IAML | | 19 02 33.1 | |
| | comp=N,411nm,0.2s | | | | | | |
| **C27K** | **Jago River** | **0.50** | **80** | | Pg | 19 02 29.0 | -0.1 |
| C27K | | | | | Sg | 19 02 35.9 | +0.2 |
| **C27K** | **Jago River** | **0.50** | **80** | IAML | | 19 02 38.0 | |
| | comp=E,157nm,0.5s | | | | | | |
| C27K | | | | IAML | | 19 02 38.0 | |
| | comp=N,221nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.50** | **244** | | Pg | 19 02 29.1 | 0.0 |
| D25K | | | | | Sg | 19 02 36.4 | +0.8 |
| **D25K** | **Kavik River** | **0.50** | **244** | IAML | | 19 02 37.8 | |
| | comp=E,96nm,0.5s | | | | | | |
| D25K | | | | IAML | | 19 02 40.0 | |
| | comp=N,90nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.27** | **280** | | Pg | 19 02 43.7 | -0.1 |
| C24K | | | | | Sn | 19 03 01.2 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.27** | **280** | IAML | | 19 03 02.8 | |
| | comp=E,135nm,0.8s | | | | | | |
| C24K | | | | IAML | | 19 03 03.8 | |
| | comp=N,89nm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **1.37** | **255** | | Sn | 19 03 04.5 | +0.6 |
| **D24K** | **Happy Valley** | **1.37** | **255** | Pn | Pg | 19 02 46.4 | +0.5 |
| **D27M** | **Malcolm River** | **1.50** | **100** | | Pn | 19 02 47.0 | -0.2 |
| D27M | | | | | Sg | 19 03 07.8 | +0.1 |
| **E23K** | **Chandalar** | **2.22** | **230** | Pn | Pn | 19 02 57.4 | +0.4 |
| E23K | | | | IAML | | 19 03 11.2 | |
| | comp=N,28nm,0.6s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.33** | **276** | | Pn | 19 03 11.9 | -0.3 |
| **B21K** | **Ikpikpuk River** | **3.33** | **276** | IAML | | 19 03 35.9 | |
| | comp=E,21nm,3.2s | | | | | | |
| B21K | | | | IAML | | 19 03 50.6 | |
| | comp=N,31nm,1.6s | | | | | | |
| **E21K** | **Killik River** | **3.38** | **255** | | Pn | 19 03 12.7 | -0.3 |
| **E21K** | **Killik River** | **3.38** | **255** | IAML | | 19 03 43.5 | |
| | comp=E,13nm,0.8s | | | | | | |
| E21K | | | | IAML | | 19 03 53.2 | |
| | comp=N,18nm,1.9s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.65** | **298** | | Pn | 19 03 16.4 | -0.2 |
| **G29M** | **Pine Creek** | **3.74** | **132** | | Pn | 19 03 17.8 | 0.0 |
| **H24K** | **Noodor Dome** | **3.87** | **197** | | Pn | 19 03 19.7 | 0.0 |
| **H24K** | **Noodor Dome** | **3.87** | **197** | IAML | | 19 03 56.9 | |
| | comp=E,17nm,1.8s | | | | | | |
| **F21K** | **Alatna River** | **3.88** | **237** | | Pn | 19 03 19.7 | -0.1 |
| **F30M** | **Barrier River** | **3.93** | **115** | | Pn | 19 03 20.4 | -0.1 |
| **PRP** | **Porcupine Dome** | **4.05** | **182** | | Pn | 19 03 22.1 | -0.1 |
| **PRP** | **Porcupine Dome** | **4.05** | **182** | IAML | | 19 04 08.1 | |
| | comp=N,14nm,3.5s | | | | | | |
| PRP | | | | IAML | | 19 04 24.7 | |
| | comp=E,11nm,4.4s | | | | | | |
| **E20K** | **Nigu River** | **4.21** | **257** | | Pn | 19 03 24.0 | -0.3 |
| **B20K** | **Meade River** | **4.21** | **282** | | Pn | 19 03 23.9 | -0.3 |
| **B20K** | **Meade River** | **4.21** | **282** | | Pn | 19 03 24.3 | 0.0 |
| B20K | | | | IAML | | 19 04 15.6 | |
| | comp=N,19nm,1.9s | | | | | | |
| B20K | | | | IAML | | 19 06 02.3 | |
| | comp=E,18nm,2.8s | | | | | | |
| **A21K** | **Barrow** | **4.26** | **300** | | Pn | 19 03 24.6 | -0.3 |
| **POKR** | **Poker Plat Res** | **4.54** | **193** | Pn | Pn | 19 03 29.8 | +0.9 |
| POKR | | | | IAML | | 19 04 12.6 | |
| | comp=E,13nm,1.5s | | | | | | |
| **I28M** | **Miner Creek** | **4.57** | **152** | Pn | Pn | 19 03 29.0 | -0.3 |
| I28M | | | | IAML | | 19 04 54.3 | |
| | comp=N,12nm,3.4s | | | | | | |
| I28M | | | | IAML | | 19 05 55.9 | |
| | comp=E,11nm,4.0s | | | | | | |
| **D19K** | **Kuna River** | **4.79** | **263** | Pn | Pn | 19 03 32.6 | +0.3 |
| **G31M** | **Satah River** | **4.82** | **118** | Pn | Pn | 19 03 33.5 | +0.8 |
| **C19K** | **Lookout Ridge** | **5.15** | **272** | Pn | Pn | 19 03 37.5 | +0.3 |
| **F19K** | **Shaleruckik Mo** | **5.45** | **246** | Pn | Pn | 19 03 42.2 | +1.0 |
| **I30M** | **Mount Dempster** | **5.49** | **138** | Pn | Pn | 19 03 44.2 | +2.2 |
| **C18K** | **Utukok River** | **5.82** | **269** | Pn | Pn | 19 03 46.5 | 0.0 |
| **E18K** | **Tukpahlearik C** | **6.08** | **257** | Pn | Pn | 19 03 50.4 | +0.4 |

*NEIC **12** 19:03:21.9±1.1, 69°60N±0°06×145°0W±0°1, h10km±2km, Error ellipse: s-maj=10.3km s-min=6.5km az=16.0*
**AEIC 12 19:03:21.6±0.5, 69°55N±0°02×145°1W±0°1, h3km±6km, ML2.6, ML2.7/64(NEIC), Error ellipse: s-maj=6.1km s-min=3.3km az=77.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.38** | **8** | | Pg | 19 03 28.6 | -0.3 |
| **C26K** | **Camden Bay** | **0.38** | **8** | IAML | | 19 03 34.5 | |
| | comp=E,534nm,0.7s | | | | | | |
| C26K | | | | IAML | | 19 03 35.3 | |
| | comp=N,389nm,0.2s | | | | | | |
| **C27K** | **Jago River** | **0.48** | **80** | | Pg | 19 03 30.9 | 0.0 |
| **C27K** | **Jago River** | **0.48** | **80** | IAML | | 19 03 40.3 | |
| | comp=N,451nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.51** | **245** | | Pg | 19 03 31.2 | -0.2 |
| **D25K** | **Kavik River** | **0.51** | **245** | IAML | | 19 03 39.7 | |
| | comp=E,207nm,0.6s | | | | | | |
| D25K | | | | IAML | | 19 03 42.6 | |
| | comp=N,185nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.28** | **280** | | Pg | 19 03 45.8 | -0.3 |
| C24K | | | | | Sb | 19 04 03.6 | +0.4 |
| **C24K** | **Franklin Bluff** | **1.28** | **280** | IAML | | 19 04 04.7 | |
| | comp=E,175nm,0.3s | | | | | | |
| C24K | | | | IAML | | 19 04 05.1 | |
| | comp=N,165nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.39** | **255** | | Pn | 19 03 47.8 | -0.1 |
| D24K | | | | | Sn | 19 04 07.1 | +0.5 |
| **D24K** | **Happy Valley** | **1.39** | **255** | IAML | | 19 04 09.3 | |
| | comp=E,148nm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.48** | **100** | | Pn | 19 03 49.1 | -0.2 |
| **D27M** | **Malcolm River** | **1.48** | **100** | IAML | | 19 04 16.5 | |
| | comp=N,77nm,0.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.85** | **243** | | Pn | 19 03 54.2 | -0.1 |
| TOLK | | | | | Sn | 19 04 18.0 | -0.1 |
| **TOLK** | **Toolik Lake Re** | **1.85** | **243** | IAML | | 19 04 26.9 | |
| | comp=E,48nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 19 04 30.2 | |
| | comp=N,45nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.86** | **136** | | Pn | 19 03 54.1 | -0.2 |
| **E27K** | **Coleen River** | **1.86** | **136** | IAML | | 19 04 27.4 | |
| | comp=E,59nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **169** | | Pn | 19 03 54.7 | -0.1 |
| **F26K** | **Sheenjek River** | **1.89** | **169** | IAML | | 19 04 26.3 | |
| | comp=E,46nm,0.5s | | | | | | |
| **E24K** | **Your Creek** | **1.93** | **222** | | Pn | 19 03 55.1 | -0.2 |
| **E24K** | **Your Creek** | **1.93** | **222** | IAML | | 19 04 26.6 | |
| | comp=E,50nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **1.96** | **281** | | Pn | 19 03 55.1 | -0.5 |
| **C23K** | **Itkillik River** | **1.96** | **281** | IAML | | 19 04 29.6 | |
| | comp=N,84nm,0.4s | | | | | | |
| C23K | | | | IAML | | 19 04 32.5 | |
| | comp=E,85nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **1.97** | **186** | | Pn | 19 03 55.9 | 0.0 |
| F25K | | | | | Sn | 19 04 21.8 | +0.7 |
| **F25K** | **Christian Rive** | **1.97** | **186** | IAML | | 19 04 27.7 | |
| | comp=E,48nm,1.2s | | | | | | |
| **D23K** | **Nanushuk River** | **2.08** | **256** | | Pn | 19 03 57.1 | -0.3 |
| **E28M** | **Babbage River** | **2.20** | **113** | | Pn | 19 03 58.8 | -0.2 |
| **E23K** | **Chandalar** | **2.23** | **230** | | Pn | 19 03 59.1 | -0.3 |
| **E23K** | **Chandalar** | **2.23** | **230** | IAML | | 19 04 36.4 | |
| | comp=E,42nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.28** | **208** | | Pn | 19 03 60.0 | -0.2 |
| **F24K** | **Squaw Lake** | **2.28** | **208** | IAML | | 19 04 38.6 | |
| | comp=N,31nm,0.7s | | | | | | |
| F24K | | | | IAML | | 19 04 39.1 | |
| | comp=E,35nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **2.80** | **260** | | Pn | 19 04 06.9 | -0.3 |
| **D22K** | **Ayikyak River** | **2.80** | **260** | IAML | | 19 04 58.2 | |
| | comp=E,26nm,1.8s | | | | | | |
| D22K | | | | IAML | | 19 04 58.6 | |
| | comp=N,23nm,1.0s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.99** | **289** | Pn | Pn | 19 04 08.9 | -0.8 |
| **B21K** | **Ikpikpuk River** | **3.35** | **276** | Pn | Pn | 19 04 14.3 | -0.4 |
| B21K | | | | IAML | | 19 05 25.3 | |
| | comp=E,21nm,2.5s | | | | | | |
| B21K | | | | IAML | | 19 05 33.5 | |
| | comp=N,17nm,1.5s | | | | | | |
| **E21K** | **Killik River** | **3.39** | **255** | Pn | Pn | 19 04 15.3 | -0.1 |
| E21K | | | | IAML | | 19 05 11.2 | |
| | comp=N,15nm,0.9s | | | | | | |
| E21K | | | | IAML | | 19 05 18.6 | |
| | comp=E,12nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.88** | **197** | | Pn | 19 04 21.9 | -0.2 |
| **H24K** | **Noodor Dome** | **3.88** | **197** | IAML | | 19 05 44.9 | |
| | comp=N,14nm,3.8s | | | | | | |
| H24K | | | | IAML | | 19 06 43.6 | |
| | comp=E,18nm,4.3s | | | | | | |
| **F21K** | **Alatna River** | **3.89** | **237** | | Pn | 19 04 21.9 | -0.3 |
| **F21K** | **Alatna River** | **3.89** | **237** | IAML | | 19 05 31.5 | |
| | comp=N,8.8nm,1.1s | | | | | | |
| F21K | | | | IAML | | 19 05 44.9 | |
| | comp=E,10.0nm,3.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05** | **183** | | Pn | 19 04 24.2 | -0.3 |
| **PRP** | **Porcupine Dome** | **4.05** | **183** | IAML | | 19 05 39.5 | |
| | comp=E,9.2nm,2.1s | | | | | | |
| PRP | | | | IAML | | 19 07 02.7 | |
| | comp=N,9.5nm,4.3s | | | | | | |
| **H23K** | **Yukon River** | **4.11** | **207** | Pn | Pn | 19 04 26.1 | +0.9 |
| H23K | | | | IAML | | 19 04 54.8 | |
| | comp=N,15nm,4.3s | | | | | | |
| H23K | | | | IAML | | 19 06 42.3 | |
| | comp=E,13nm,4.2s | | | | | | |
| **B20K** | **Meade River** | **4.22** | **282** | | Pn | 19 04 26.5 | -0.2 |
| **G21K** | **Allakaket** | **4.39** | **230** | Pn | Pn | 19 04 28.8 | -0.3 |
| **POKR** | **Poker Plat Res** | **4.54** | **193** | | Pn | 19 04 31.9 | +0.7 |
| **POKR** | **Poker Plat Res** | **4.54** | **193** | IAML | | 19 05 34.4 | |
| | comp=E,11nm,4.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.68** | **243** | Pn | Pn | 19 04 34.3 | +1.3 |
| **MDM** | **Murphy Dome** | **4.77** | **196** | | Pn | 19 04 34.4 | +0.1 |
| **D19K** | **Kuna River** | **4.80** | **263** | | Pn | 19 04 35.0 | +0.2 |
| **D19K** | **Kuna River** | **4.80** | **263** | IAML | | 19 06 02.7 | |
| | comp=E,5.8nm,3.4s | | | | | | |
| **E19K** | **Redstone River** | **4.94** | **251** | Pn | Pn | 19 04 37.5 | +0.9 |
| **CCB** | **Clear Creek Bu** | **5.03** | **194** | Pn | Pn | 19 04 39.4 | +1.5 |
| **F19K** | **Shaleruckik Mo** | **5.46** | **246** | Pn | Pn | 19 04 44.4 | +0.7 |
| **I30M** | **Mount Dempster** | **5.48** | **138** | Pn | Pn | 19 04 46.5 | +2.4 |
| **C18K** | **Utukok River** | **5.84** | **269** | | Pn | 19 04 48.2 | -0.8 |
| **H19K** | **Roundabout Mou** | **5.93** | **233** | | Pn | 19 04 49.8 | -0.4 |
| **BPAW** | **Bear Paw Mtn.** | **5.94** | **206** | Pn | Pn | 19 04 51.4 | +1.0 |
| **E18K** | **Tukpahlearik C** | **6.09** | **257** | | Pn | 19 04 52.3 | -0.1 |
| **DHY** | **Denali Highway** | **6.56** | **189** | Pn | Pn | 19 05 01.2 | +2.2 |
| **C17K** | **DeLong Mountai** | **6.59** | **269** | | Pn | 19 04 58.3 | -0.9 |
| **E17K** | **Hotham Inlet** | **6.67** | **256** | | Pn | 19 04 59.9 | -0.5 |
| **D17K** | **Noatak River** | **6.83** | **263** | | Pn | 19 05 01.8 | -0.7 |
| **A36M** | **Sachs Harbour** | **6.97** | **60** | | Pn | 19 05 03.8 | -0.6 |
| **G17K** | **Kiwalik Mounta** | **7.21** | **243** | | Pn | 19 05 07.6 | -0.1 |

*NEIC **12** 19:09:16.8±1.2, 69°57N±0°04×144°56W±0°06, h10km±2km, Error ellipse: s-maj=6.6km s-min=3.0km az=335.0*
**AEIC 12 19:09:16.7±0.8, 69°55N±0°04×144°59W±0°07, h9km±6km, ML2.5, ML2.8/46(NEIC), Error ellipse: s-maj=5.7km s-min=2.6km az=154.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.32** | **75** | | Pg | 19 09 22.9 | -0.1 |
| C27K | | | | | Sg | 19 09 27.6 | +0.3 |
| **C27K** | **Jago River** | **0.32** | **75** | IAML | | 19 09 27.8 | |
| | comp=N,707nm,0.5s | | | | | | |
| C27K | | | | IAML | | 19 09 28.0 | |
| | comp=E,585nm,0.7s | | | | | | |
| **C26K** | **Camden Bay** | **0.39** | **343** | | Pg | 19 09 24.0 | -0.3 |
| C26K | | | | | Sg | 19 09 29.6 | +0.1 |
| **C26K** | **Camden Bay** | **0.39** | **343** | IAML | | 19 09 31.2 | |
| | comp=N,363nm,0.4s | | | | | | |
| C26K | | | | IAML | | 19 09 31.5 | |
| | comp=E,309nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.67** | **251** | | Pg | 19 09 29.6 | 0.0 |
| D25K | | | | | Sb | 19 09 39.4 | -0.7 |
| **D27M** | **Malcolm River** | **1.32** | **102** | | Pn | 19 09 41.0 | -0.4 |
| D27M | | | | | Sn | 19 09 59.7 | +0.6 |
| **D27M** | **Malcolm River** | **1.32** | **102** | IAML | | 19 10 04.4 | |
| | comp=N,99nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.45** | **279** | | Pn | 19 09 43.0 | -0.2 |
| C24K | | | | | Sg | 19 10 02.9 | -0.4 |
| **C24K** | **Franklin Bluff** | **1.45** | **279** | IAML | | 19 10 36.1 | |
| | comp=E,199nm,0.6s | | | | | | |
| C24K | | | | IAML | | 19 10 36.4 | |
| | comp=N,127nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.55** | **257** | | Pb | 19 09 45.4 | -0.3 |
| D24K | | | | IAML | | 19 10 41.2 | |
| | comp=N,134nm,0.8s | | | | | | |
| D24K | | | | IAML | | 19 10 41.8 | |
| | comp=E,118nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.75** | **140** | | Pn | 19 09 47.1 | -0.1 |
| **F26K** | **Sheenjek River** | **1.87** | **175** | | Pn | 19 09 48.9 | 0.0 |
| **F26K** | **Sheenjek River** | **1.87** | **175** | IAML | | 19 10 50.8 | |
| | comp=E,85nm,0.6s | | | | | | |
| F26K | | | | IAML | | 19 10 52.5 | |
| | comp=N,54nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **192** | | Pn | 19 09 50.7 | 0.0 |
| **TOLK** | **Toolik Lake Re** | **2.01** | **245** | | Pn | 19 09 50.7 | -0.1 |
| **TOLK** | **Toolik Lake Re** | **2.01** | **245** | IAML | | 19 11 02.0 | |
| | comp=E,86nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 19 11 03.4 | |
| | comp=N,82nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.05** | **115** | | Pn | 19 09 51.2 | -0.1 |
| **E28M** | **Babbage River** | **2.05** | **115** | IAML | | 19 11 10.0 | |
| | comp=N,53nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.05** | **226** | | Pn | 19 09 51.3 | -0.1 |
| **E24K** | **Your Creek** | **2.05** | **226** | IAML | | 19 11 03.4 | |
| | comp=E,79nm,0.8s | | | | | | |
| E24K | | | | IAML | | 19 11 05.5 | |
| | comp=N,46nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **2.08** | **93** | | Pn | 19 09 51.6 | -0.1 |
| **D28M** | **Stokes Point** | **2.08** | **93** | IAML | | 19 10 33.2 | |
| | comp=N,89nm,0.8s | | | | | | |
| D28M | | | | IAML | | 19 11 03.2 | |
| | comp=E,79nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.12** | **281** | | Pn | 19 09 52.3 | -0.1 |
| **F28M** | **Old Crow** | **2.60** | **136** | | Pn | 19 09 58.9 | -0.1 |
| **G24K** | **Hadweenzic Riv** | **3.06** | **202** | Pn | Pn | 19 10 04.5 | -0.7 |
| **B22K** | **Teshekpuk Lake** | **3.15** | **289** | Pn | Pn | 19 10 05.9 | -0.5 |
| **E21K** | **Killik River** | **3.56** | **256** | Pn | Pn | 19 10 12.9 | +0.8 |
| **G29M** | **Pine Creek** | **3.60** | **134** | Pn | Pn | 19 10 14.3 | +1.6 |
| **H29M** | **Whitestone** | **4.08** | **142** | Pn | Pn | 19 10 21.3 | +2.0 |
| H29M | | | | IAML | | 19 11 54.2 | |
| | comp=E,18nm,3.6s | | | | | | |
| **D19K** | **Kuna River** | **4.97** | **264** | | Pn | 19 10 32.9 | +1.3 |
| **E19K** | **Redstone River** | **5.10** | **252** | Pn | Pn | 19 10 35.1 | +1.8 |
| **I30M** | **Mount Dempster** | **5.37** | **140** | Pn | Pn | 19 10 39.4 | +2.3 |
| I30M | | | | IAML | | 19 12 35.3 | |
| | comp=E,7.5nm,2.9s | | | | | | |
| **E18K** | **Tukpahlearik C** | **6.26** | **258** | Pn | Pn | 19 10 48.9 | -0.3 |

**DJA 12 19:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C27K | **Jago River** | **0.48** | **79** | | | Pg | 19 33 56.0 | -0.3 | |
| C27K | | | | | | Sg | 19 34 02.5 | +0.2 | |
| **C27K** | **Jago River** | **0.48** | **79** | IAML | | | 19 34 04.5 | | |
| | comp=E,868nm,0.3s | | | | | | | | |
| C27K | | | | IAML | | | 19 34 05.8 | | |
| | comp=N,1µm,0.6s | | | | | | | | |
| **D25K** | **Kavik River** | **0.52** | **245** | | | Pg | 19 33 56.7 | -0.3 | |
| **D25K** | **Kavik River** | **0.52** | **245** | | | Sg | 19 34 04.4 | +0.7 | |
| **C24K** | **Franklin Bluff** | **1.29** | **280** | | | Pg | 19 34 10.7 | -1.0 | |
| C24K | | | | IAML | | | 19 34 30.9 | | |
| | comp=N,227nm,0.8s | | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.29** | **280** | | | Sb | 19 34 28.8 | -0.2 | |
| **D24K** | **Happy Valley** | **1.40** | **255** | | | Pn | 19 34 13.3 | -0.2 | |
| D24K | | | | IAML | | | 19 34 37.4 | | |
| | comp=E,240nm,0.5s | | | | | | | | |
| **D24K** | **Happy Valley** | **1.40** | **255** | | | Sn | 19 34 32.9 | +0.4 | |
| **D27M** | **Malcolm River** | **1.48** | **100** | | | Pn | 19 34 13.9 | -0.8 | |
| D27M | | | | IAML | | | 19 34 37.0 | | |
| | comp=N,194nm,0.3s | | | | | | | | |
| **D27M** | **Malcolm River** | **1.48** | **100** | | | Sn | 19 34 35.4 | +0.8 | |
| **E27K** | **Coleen River** | **1.85** | **136** | | | Pb | 19 34 21.1 | -0.5 | |
| **TOLK** | **Toolik Lake Re** | **1.86** | **243** | | | Pb | 19 34 21.6 | -0.1 | |
| TOLK | | | | IAML | | | 19 34 54.7 | | |
| | comp=N,95nm,0.5s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.86** | **243** | | | Sn | 19 34 44.6 | +0.6 | |
| **F26K** | **Sheenjek River** | **1.89** | **169** | Pn | | Pb | 19 34 22.3 | +0.1 | |
| F26K | | | | IAML | | | 19 34 49.2 | | |
| | comp=E,92nm,0.4s | | | | | | | | |
| **E24K** | **Your Creek** | **1.93** | **222** | | | Pn | 19 34 21.6 | +0.6 | |
| E24K | | | | IAML | | | 19 34 52.2 | | |
| | comp=E,102nm,0.7s | | | | | | | | |
| **C23K** | **Itkillik River** | **1.96** | **281** | | | Pn | 19 34 22.1 | +0.8 | |
| **F25K** | **Christian River** | **1.97** | **187** | Pn | | Pb | 19 34 23.5 | -0.2 | |
| F25K | | | | IAML | | | 19 34 53.0 | | |
| | comp=N,134nm,0.7s | | | | | | | | |
| F25K | | | | IAML | | | 19 34 53.9 | | |
| | comp=E,135nm,0.7s | | | | | | | | |
| **D23K** | **Nanushuk River** | **2.09** | **257** | | | Pn | 19 34 22.9 | -0.2 | |
| **D23K** | **Nanushuk River** | **2.09** | **257** | IAML | | | 19 35 01.9 | | |
| | comp=E,75nm,0.6s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.13** | **175** | | | Pn | 19 34 25.0 | +1.3 | |
| **E28M** | **Babbage River** | **2.19** | **113** | | | Pn | 19 34 25.5 | +1.0 | |
| E28M | | | | IAML | | | 19 34 59.2 | | |
| | comp=N,75nm,1.0s | | | | | | | | |
| **E23K** | **Chandalar** | **2.23** | **230** | Pn | | Pn | 19 34 25.8 | +0.7 | |
| **D28M** | **Stokes Point** | **2.24** | **93** | | | Pn | 19 34 25.0 | -0.1 | |
| **F24K** | **Squaw Lake** | **2.29** | **209** | Pn | | Pn | 19 34 26.6 | +0.8 | |
| F24K | | | | IAML | | | 19 35 03.7 | | |
| | comp=E,64nm,0.6s | | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.65** | **169** | | | Pn | 19 34 30.8 | +0.1 | |
| **F28M** | **Old Crow** | **2.71** | **133** | | | Pn | 19 34 31.6 | -0.1 | |
| **D22K** | **Ayikyak River** | **2.80** | **260** | Pn | | Pn | 19 34 32.4 | -0.5 | |
| D22K | | | | IAML | | | 19 35 23.2 | | |
| | comp=N,67nm,0.8s | | | | | | | | |
| D22K | | | | IAML | | | 19 35 23.9 | | |
| | comp=E,46nm,1.2s | | | | | | | | |
| **G25K** | **Bearman Lake** | **2.82** | **189** | | | Pn | 19 34 33.1 | 0.0 | |
| **E29M** | **Blow River** | **2.83** | **111** | | | Pn | 19 34 33.1 | -0.1 | |
| E29M | | | | IAML | | | 19 36 22.8 | | |
| | comp=N,66nm,0.9s | | | | | | | | |
| E29M | | | | IAML | | | 19 36 23.6 | | |
| | comp=E,52nm,0.7s | | | | | | | | |
| **FYU** | **Fort Yukon** | **2.99** | **181** | | | Pn | 19 34 36.1 | +0.7 | |
| FYU | | | | IAML | | | 19 35 25.5 | | |
| | comp=N,58nm,1.1s | | | | | | | | |
| FYU | | | | IAML | | | 19 35 29.9 | | |
| | comp=E,33nm,0.9s | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.99** | **289** | | | Pn | 19 34 35.2 | -0.3 | |
| **G24K** | **Hadweenzic Riv** | **3.00** | **199** | | | Pn | 19 34 35.5 | 0.0 | |
| G24K | | | | IAML | | | 19 35 31.9 | | |
| | comp=E,52nm,0.9s | | | | | | | | |
| **G27K** | **Doyon Strip** | **3.02** | **154** | | | Pn | 19 34 36.0 | 0.0 | |
| **H25L** | **Birch Creek** | **3.30** | **185** | | | Pn | 19 34 39.8 | 0.0 | |
| **F22K** | **John River** | **3.32** | **235** | | | Pn | 19 34 40.0 | -0.1 | |
| **B21K** | **Ikpikpuk River** | **3.35** | **276** | | | Pn | 19 34 40.4 | 0.0 | |
| B21K | | | | IAML | | | 19 35 52.3 | | |
| | comp=N,32nm,0.7s | | | | | | | | |
| B21K | | | | IAML | | | 19 36 29.9 | | |
| | comp=E,32nm,0.7s | | | | | | | | |
| **E21K** | **Killik River** | **3.40** | **255** | Pn | | Pn | 19 34 40.3 | -0.8 | |
| E21K | | | | IAML | | | 19 36 53.3 | | |
| | comp=E,28nm,0.7s | | | | | | | | |
| E21K | | | | IAML | | | 19 36 54.5 | | |
| | comp=N,36nm,0.8s | | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.67** | **298** | | | Pn | 19 34 44.3 | -0.4 | |
| **G29M** | **Pine Creek** | **3.72** | **132** | Pn | | Pn | 19 34 45.6 | +0.1 | |
| **H24K** | **Noodor Dome** | **3.88** | **197** | Pn | | Pn | 19 34 47.7 | 0.0 | |
| H24K | | | | IAML | | | 19 36 58.0 | | |
| | comp=N,24nm,0.8s | | | | | | | | |
| H24K | | | | IAML | | | 19 37 08.4 | | |
| | comp=E,25nm,0.9s | | | | | | | | |
| **F21K** | **Alatna River** | **3.89** | **237** | Pn | | Pn | 19 34 47.7 | -0.2 | |
| F21K | | | | IAML | | | 19 37 02.1 | | |
| | comp=N,24nm,0.7s | | | | | | | | |
| **F30M** | **Barrier River** | **3.91** | **115** | | | Pn | 19 34 48.0 | -0.1 | |
| **PRP** | **Porcupine Dome** | **4.05** | **183** | Pn | | Pn | 19 34 50.2 | +0.1 | |
| PRP | | | | IAML | | | 19 36 48.5 | | |
| | comp=N,21nm,0.4s | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.17** | **124** | Pn | | Pn | 19 34 53.8 | +2.1 | |
| G30M | | | | IAML | | | 19 37 11.0 | | |
| | comp=N,23nm,0.8s | | | | | | | | |
| G30M | | | | IAML | | | 19 37 19.6 | | |
| | comp=E,17nm,1.1s | | | | | | | | |
| **H29M** | **Whitestone** | **4.18** | **140** | Pn | | Pn | 19 34 52.5 | +0.6 | |
| **D20K** | **Etivluk River** | **4.22** | **264** | | | Pn | 19 34 52.0 | -0.3 | |
| **E20K** | **Nigu River** | **4.23** | **257** | | | Pn | 19 34 52.4 | -0.1 | |
| **B20K** | **Meade River** | **4.23** | **282** | Pn | | Pn | 19 34 52.5 | +0.1 | |
| **I26K** | **Coal Creek Min** | **4.32** | **169** | Pn | | Pn | 19 34 55.1 | +1.4 | |
| **G21K** | **Allakaket** | **4.39** | **230** | Pn | | Pn | 19 34 53.9 | -0.9 | |
| G21K | | | | IAML | | | 19 36 12.5 | | |
| | comp=E,15nm,1.1s | | | | | | | | |
| G21K | | | | IAML | | | 19 37 28.3 | | |
| | comp=N,15nm,1.0s | | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.54** | **193** | Pn | | Pn | 19 34 57.5 | +0.7 | |
| POKR | | | | IAML | | | 19 37 27.1 | | |
| | comp=N,13nm,0.8s | | | | | | | | |
| POKR | | | | IAML | | | 19 37 39.0 | | |
| | comp=E,14nm,0.9s | | | | | | | | |
| **I28M** | **Miner Creek** | **4.56** | **152** | Pn | | Pn | 19 34 57.8 | +0.7 | |
| I28M | | | | IAML | | | 19 36 07.2 | | |
| | comp=N,15nm,0.5s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.69** | **243** | Pn | | Pn | 19 34 59.4 | +0.7 | |
| **I23K** | **Minto, Yukon-K** | **4.72** | **203** | Pn | | Pn | 19 34 59.5 | +0.4 | |
| I23K | | | | IAML | | | 19 37 40.7 | | |
| | comp=N,14nm,1.1s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.77** | **197** | Pn | | Pn | 19 34 59.6 | -0.2 | |
| MDM | | | | IAML | | | 19 37 27.4 | | |
| | comp=E,12nm,1.1s | | | | | | | | |
| MDM | | | | IAML | | | 19 37 28.3 | | |
| | comp=N,10nm,0.6s | | | | | | | | |
| **G31M** | **Satah River** | **4.80** | **118** | | | Pn | 19 35 00.3 | +0.1 | |
| **D19K** | **Kuna River** | **4.81** | **264** | Pn | | Pn | 19 35 00.3 | -0.2 | |
| D19K | | | | IAML | | | 19 37 54.9 | | |
| | comp=E,11nm,1.1s | | | | | | | | |
| **IL31** | | **4.85** | **189** | | | Pn | 19 35 01.0 | +0.2 | |
| **ILAR** | **Eielson Array** | **4.85** | **189** | Pn | | Pn | 19 35 01.4 | +0.4 | |
| **I29M** | **Ogilvie Camp,** | **4.94** | **145** | Pn | | Pn | 19 35 03.0 | +0.8 | |
| **E19K** | **Redstone River** | **4.94** | **251** | | | Pn | 19 35 02.0 | -0.2 | |
| **E19K** | **Redstone River** | **4.94** | **251** | IAML | | | 19 37 43.8 | | |
| | comp=E,12nm,0.8s | | | | | | | | |
| E19K | | | | IAML | | | 19 37 48.1 | | |
| | comp=N,12nm,0.7s | | | | | | | | |
| **EGAK** | **Eagle** | **5.02** | **161** | Pn | | Pn | 19 35 05.5 | +2.2 | |
| EGAK | | | | IAML | | | 19 37 12.1 | | |
| | comp=N,12nm,0.5s | | | | | | | | |
| EGAK | | | | IAML | | | 19 37 17.0 | | |
| | comp=N,9.5nm,1.1s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.03** | **194** | | | Pn | 19 35 03.4 | -0.1 | |
| **CCB** | **Clear Creek Bu** | **5.03** | **194** | IAML | | | 19 37 42.2 | | |
| | comp=E,7.3nm,1.1s | | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.17** | **272** | | | Pn | 19 35 05.0 | -0.4 | |
| **C19K** | **Lookout Ridge** | **5.17** | **272** | IAML | | | 19 37 37.0 | | |
| | comp=N,8.4nm,1.1s | | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.46** | **246** | | | Pn | 19 35 09.4 | 0.0 | |
| **I30M** | **Mount Dempster** | **5.47** | **138** | | | Pn | 19 35 09.9 | +0.2 | |
| **A19K** | **Wainwright** | **5.57** | **284** | | | Pn | 19 35 10.4 | -0.4 | |
| **SCRK** | **Sand Creek** | **5.61** | **175** | Pn | | Pn | 19 35 12.4 | +0.9 | |
| **K27K** | **Chicken** | **5.66** | **167** | Pn | | Pn | 19 35 13.7 | +1.6 | |
| **C18K** | **Utukok River** | **5.85** | **269** | | | Pn | 19 35 14.0 | -0.6 | |
| **H19K** | **Roundabout Mou** | **5.94** | **233** | | | Pn | 19 35 16.1 | +0.2 | |
| **BPAW** | **Bear Paw Mtn.** | **5.95** | **206** | | | Pn | 19 35 16.0 | -0.1 | |
| **J30M** | **Hart River** | **6.04** | **142** | Pn | | Pn | 19 35 18.6 | +1.2 | |
| **F18K** | **Selawik** | **6.21** | **249** | | | Pn | 19 35 19.1 | -0.4 | |
| **G18K** | **Tagagawik** | **6.33** | **241** | | | Pn | 19 35 20.9 | -0.3 | |
| **K29M** | **Barlow Dome** | **6.45** | **149** | | | Pn | 19 35 23.0 | 0.0 | |
| **C17K** | **DeLong Mountai** | **6.59** | **269** | | | Pn | 19 35 23.6 | -1.3 | |
| **BCAR** | **Beaver Creek A** | **6.64** | **167** | Pn | | Pn | 19 35 28.0 | +2.5 | |
| **E17K** | **Hotham Inlet** | **6.68** | **256** | | | Pn | 19 35 25.5 | -0.5 | |
| **H18K** | **Honhosa River** | **6.76** | **236** | | | Pn | 19 35 26.9 | -0.3 | |
| **D17K** | **Noatak River** | **6.84** | **263** | | | Pn | 19 35 26.7 | -1.5 | |
| **A36M** | **Sachs Harbour** | **6.97** | **60** | | | Pn | 19 35 28.7 | -1.3 | |
| **G17K** | **Kiwalik Mounta** | **7.21** | **243** | | | Pn | 19 35 33.0 | -0.4 | |
| **C16K** | **Lisburne Hills** | **7.42** | **270** | Pn | | Pn | 19 35 35.1 | -1.1 | |
| **M29M** | **Somme Creek** | **7.61** | **156** | Pn | | Pn | 19 35 41.1 | +2.1 | |

*IDC* ***12*** *19:34:35.9±0.9,21°.69S×67°.19W,h168km±9km,mb3.7/8, mbtmp4.1/12,Error ellipse: s-maj=16.6km s-min=10.6km az=109.0*

*SJA* ***12*** *19:34:35.1±0.7,21°.75S×67°.42W,h203km±6km,ML4.0, MW3.9*

*NEIC* ***12*** *19:34:36.2±2.4,21°.76S±0°.04×67°.4W±0°.1,h189km±8km, mb4.4/13,ML4.3(GUC),Error ellipse: s-maj=15.1km s-min=6.0km az=93.0*

*VAO* ***12*** *19:34:36.5±0.3,21°.58S×67°.48W,h188km,mb4.1*

*SCB* ***12*** *19:34:36.8±1.2,21°.78S×67°.36W,h175km±13km,ML4.3/2, MW3.8,Error ellipse: s-maj=10.1km s-min=5.6km az=0.0*

*GUC* ***12*** *19:34:37.7±0.7,21°.72S×67°.68W,h207km±5km,ML4.3*

**ISC 12 19:34:36.2±0.6,21°.69S±0°.04×67°.39W±0°.04,h182km±6km, n144,σ1°48/173,mb3.9/12,5C-5D,Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AF01** | **San Pedro de A** | **1.45** | **210** | | | | **Pn** | **19 35 09.8** | **+1.4** |
| **AF01** | **San Pedro de A** | **1.45** | **210** | *eP* | | | **Pn** | **19 35 09.7** | **+1.4** |
| AF01 | | | | | IAML | | | 19 35 56.6 | |
| | comp=Z,511nm,1.0s | | | | | | | | |
| **AF01** | **San Pedro de A** | **1.45** | **210** | *eP* | | | **Pn** | **19 35 10.3** | **+2.0** |
| AF01 | | | | *eS* | | | **Sn** | **19 35 35.0** | **+1.8** |
| **LVC** | **Limon Verde** | **1.68** | **237** | *eP* | | | **Pn** | **19 35 10.9** | **+0.3** |
| LVC | | | | *eS* | | | **Sn** | **19 35 37.6** | **+0.5** |
| **LVC** | **Limon Verde** | **1.68** | **237** | P | | | **Pn** | **19 35 11.5** | **+1.0** |
| | comp=Z,150nm,0.3s,baz=62,slow=9.3,SNR=314 | | | | | | | | |
| LVC | | | | | S | | **Sn** | **19 35 37.2** | **+0.1** |
| | comp=Z,249nm,0.4s,baz=226,slow=19,SNR=3.5 | | | | | | | | |
| **LVC** | **Limon Verde** | **1.68** | **237** | ⇓*iP* | | | **Pn** | **19 35 11.4** | **+0.8** |
| LVC | | | | *eS* | | | **Sn** | **19 35 37.0** | **-0.1** |
| LVC | | | | | IAML | | | 19 35 38.6 | |
| | comp=Z,3µm,0.5s | | | | | | | | |
| **LVC** | **Limon Verde** | **1.68** | **237** | *eP* | | | **Pn** | **19 35 11.5** | **+1.0** |
| LVC | | | | *eS* | | | **Sn** | **19 35 37.3** | **+0.2** |
| **MOCB** | **Mochara** | **1.69** | **75** | Pg | | | **Pn** | **19 35 12.0** | **+1.2** |
| MOCB | | | | Sg | | | **Sn** | **19 35 37.0** | **-0.4** |
| MOCB | | | | | IAML | | | 19 35 38.8 | |
| | comp=Z,3µm,0.7s | | | | | | | | |
| **PB09** | **IPOC Station P** | **1.73** | **266** | | | | **Pn** | **19 35 11.9** | **+1.1** |
| **PB09** | **IPOC Station P** | **1.73** | **266** | *eP* | | | **Pn** | **19 35 11.6** | **+0.9** |
| PB09 | | | | *eS* | | | **Sn** | **19 35 38.9** | **+1.4** |
| PB09 | | | | | IAML | | | 19 35 45.7 | |
| | comp=Z,340nm,0.5s | | | | | | | | |
| **PB09** | **IPOC Station P** | **1.73** | **266** | ⇓*iP* | | | **Pn** | **19 35 12.0** | **+1.1** |
| PB09 | | | | *eS* | | | **Sn** | **19 35 37.8** | **+0.3** |
| **PB09** | **IPOC Station P** | **1.73** | **266** | Pg | | | **Pn** | **19 35 11.7** | **+0.9** |
| **YJA** | **Yavi** | **1.81** | **106** | *eP* | | | **Pn** | **19 35 13.4** | **+1.5** |
| YJA | | | | *eS* | | | Sn | 19 35 31.2 | -8.3 |
| **PB01** | **IPOC Station P** | **2.06** | **288** | | | | **Pn** | **19 35 15.0** | **+0.8** |
| **PB01** | **IPOC Station P** | **2.06** | **288** | *eP* | | | **Pn** | **19 35 14.6** | **+0.3** |
| PB01 | | | | *eS* | | | **Sn** | **19 35 44.4** | **+0.8** |
| PB01 | | | | | IAML | | | 19 35 45.1 | |
| | comp=Z,319nm,0.2s | | | | | | | | |
| **PB01** | **IPOC Station P** | **2.06** | **288** | ⇓*iP* | | | **Pn** | **19 35 14.7** | **+0.5** |
| PB01 | | | | *eS* | | | **Sn** | **19 35 42.7** | **-0.9** |
| PB01 | | | | | IAML | | | 19 35 45.0 | |
| | comp=N,1µm,0.2s | | | | | | | | |
| **PB01** | **IPOC Station P** | **2.06** | **288** | Pg | | | **Pn** | **19 35 15.2** | **+1.0** |
| PB01 | | | | Sg | | | **Sn** | **19 35 44.4** | **+0.8** |
| PB01 | | | | | IAML | | | 19 35 45.0 | |
| | comp=N,938nm,0.5s | | | | | | | | |
| **PX03** | **IPOC Station P** | **2.45** | **301** | *eP* | | | **Pn** | **19 35 18.9** | **+0.2** |
| PX03 | | | | *eS* | | | **Sn** | **19 35 50.8** | **-0.8** |
| PX03 | | | | | IAML | | | 19 35 53.0 | |
| | comp=N,720nm,0.3s | | | | | | | | |
| **AOVT** | **TarijaAcel** | **2.50** | **87** | Pg | | | **Pn** | **19 35 20.1** | **+0.8** |
| **GO01** | **Chusmiza** | **2.63** | **320** | | | | **Pn** | **19 35 22.4** | **+1.3** |
| **GO01** | **Chusmiza** | **2.63** | **320** | *eP* | | | **Pn** | **19 35 22.2** | **+1.2** |
| GO01 | | | | *eS* | | | **Sn** | **19 35 57.4** | **+1.6** |
| **GO01** | **Chusmiza** | **2.63** | **320** | ⇓*eP* | | | **Pn** | **19 35 22.2** | **+1.2** |
| GO01 | | | | *eS* | | | **Sn** | **19 35 56.8** | **+0.9** |
| GO01 | | | | | IAML | | | 19 36 04.2 | |
| | comp=E,730nm,0.1s | | | | | | | | |
| **GO01** | **Chusmiza** | **2.63** | **320** | Pg | | | **Pn** | **19 35 22.9** | **+1.8** |
| **PB04** | **IPOC Station P** | **2.64** | **255** | | | | **Pn** | **19 35 21.3** | **+0.4** |
| **PB04** | **IPOC Station P** | **2.64** | **255** | *eP* | | | **Pn** | **19 35 21.4** | **+0.6** |
| PB04 | | | | *eS* | | | **Sn** | **19 35 54.8** | **-0.7** |
| PB04 | | | | | IAML | | | 19 35 59.4 | |
| | comp=E,612nm,0.7s | | | | | | | | |
| **PB04** | **IPOC Station P** | **2.64** | **255** | *eP* | | | **Pn** | **19 35 21.2** | **+0.4** |
| PB04 | | | | *eS* | | | **Sn** | **19 35 53.4** | **-2.2** |
| PB04 | | | | | IAML | | | 19 35 56.4 | |
| | comp=E,802nm,0.6s | | | | | | | | |
| **PATCX** | **Punta Patache** | **2.72** | **288** | | | | **Pn** | **19 35 22.3** | **+0.5** |
| **HMBC** | **Humberstone** | **2.72** | **301** | | | | **Pn** | **19 35 21.9** | **0.0** |
| **HMBC** | **Humberstone** | **2.72** | **301** | *eP* | | | **Pn** | **19 35 21.5** | **-0.4** |
| HMBC | | | | *eS* | | | **Sn** | **19 35 56.1** | **-1.2** |
| HMBC | | | | | IAML | | | 19 35 59.3 | |
| | comp=Z,914nm,0.5s | | | | | | | | |
| **HMBC** | **Humberstone** | **2.72** | **301** | ⇓*iP* | | | **Pn** | **19 35 21.9** | **0.0** |
| HMBC | | | | *eS* | | | **Sn** | **19 35 55.6** | **-1.7** |
| **TA01** | **Diego Aracena** | **2.83** | **293** | | | | **Pn** | **19 35 23.0** | **-0.1** |
| **TA01** | **Diego Aracena** | **2.83** | **293** | *eP* | | | **Pn** | **19 35 23.1** | **+0.1** |
| TA01 | | | | *eS* | | | **Sn** | **19 35 58.1** | **-1.4** |
| TA01 | | | | | IAML | | | 19 36 00.0 | |
| | comp=Z,286nm,0.7s | | | | | | | | |
| **TA01** | **Diego Aracena** | **2.83** | **293** | *eP* | | | **Pn** | **19 35 22.9** | **-0.1** |
| TA01 | | | | *eS* | | | **Sn** | **19 35 56.9** | **-2.6** |
| TA01 | | | | | IAML | | | 19 35 59.7 | |
| | comp=N,754nm,0.3s | | | | | | | | |
| **PB05** | **IPOC Station P** | **2.85** | **246** | | | | **Pn** | **19 35 23.8** | **+0.5** |
| **PB05** | **IPOC Station P** | **2.85** | **246** | *eP* | | | **Pn** | **19 35 23.6** | **+0.3** |
| PB05 | | | | *eS* | | | **Sn** | **19 35 58.5** | **-1.5** |
| PB05 | | | | | IAML | | | 19 36 05.2 | |
| | comp=Z,395nm,0.6s | | | | | | | | |
| **PB05** | **IPOC Station P** | **2.85** | **246** | *eP* | | | **Pn** | **19 35 23.6** | **+0.3** |
| PB05 | | | | *eS* | | | **Sn** | **19 35 57.7** | **-2.3** |
| PB05 | | | | | IAML | | | 19 36 00.3 | |
| | comp=N,696nm,0.4s | | | | | | | | |
| **TA02** | **Huaiquique** | **2.92** | **298** | *eP* | | | **Pn** | **19 35 24.5** | **+0.4** |
| TA02 | | | | *eS* | | | **Sn** | **19 36 00.3** | **-1.1** |
| TA02 | | | | | IAML | | | 19 36 00.8 | |
| | comp=Z,403nm,0.6s | | | | | | | | |
| **TA02** | **Huaiquique** | **2.92** | **298** | *eP* | | | **Pn** | **19 35 23.8** | **-0.4** |
| **SOEO** | **Opoqueri** | **3.15** | **351** | Pg | | | **Pn** | **19 35 29.8** | **+2.5** |
| **AZAP** | **Zapla** | **3.31** | **140** | *eP* | | | **Pn** | **19 35 29.7** | **+0.7** |
| AZAP | | | | *eS* | | | **Sn** | **19 36 08.2** | **-2.1** |
| **SLA** | **San Lorenzo** | **3.48** | **150** | *eP* | | | **Pn** | **19 35 32.6** | **+1.6** |
| SLA | | | | *eS* | | | **Sn** | **19 36 16.6** | **+2.6** |
| **ALOL** | **LOMAS DE OLMED** | **3.79** | **125** | *eP* | | | **Pn** | **19 35 34.7** | **-0.1** |
| **SOET** | **ToroToro** | **3.85** | **23** | Pg | | | **Pn** | **19 35 37.2** | **+1.2** |
| **SOTI** | **Planta Incahua** | **3.96** | **63** | Pg | | | **Pn** | **19 35 37.4** | **+0.4** |
| **GO02** | **Mina Guanaco** | **4.00** | **210** | | | | **Pn** | **19 35 38.0** | **+0.2** |
| **GO02** | **Mina Guanaco** | **4.00** | **210** | *eP* | | | **Pn** | **19 35 38.1** | **+0.4** |
| GO02 | | | | *eS* | | | **Sn** | **19 36 24.3** | **-1.7** |
| **PB14** | **IPOC Station P** | **4.03** | **223** | | | | **Pn** | **19 35 37.9** | **-0.2** |
| **PB14** | **IPOC Station P** | **4.03** | **223** | *eP* | | | **Pn** | **19 35 38.0** | **-0.2** |
| **PB14** | **IPOC Station P** | **4.03** | **223** | *eP* | | | **Pn** | **19 35 38.2** | **+0.1** |
| **AOEA** | **Aiquile** | **4.04** | **31** | Pg | | | **Pn** | **19 35 39.1** | **+0.8** |
| **PB18** | **Visviri** | **4.53** | **334** | | | | **Pn** | **19 35 46.6** | **+1.8** |
| **FSA** | **Cafayete** | **4.59** | **164** | *eP* | | | **Pn** | **19 35 47.5** | **+2.4** |
| **SOEJ** | **Jacaque** | **4.75** | **351** | Pg | | | **Pn** | **19 35 50.0** | **+2.4** |
| **BBOE** | **La Paz, Chanca** | **4.88** | **353** | Pg | | | **Pn** | **19 35 51.9** | **+2.5** |
| **BBOD** | **La Paz, Gloria** | **5.15** | **347** | Pg | | | **Pn** | **19 35 54.9** | **+2.1** |
| **AC01** | **Pan de Azucar** | **5.32** | **213** | | | | **Pn** | **19 35 53.2** | **-1.2** |
| **AC01** | **Pan de Azucar** | **5.32** | **213** | *eP* | | | **Pn** | **19 35 53.2** | **-1.2** |
| AC01 | | | | *eS* | | | **Sn** | **19 36 51.3** | **-4.6** |
| AC01 | | | | | IAML | | | 19 36 57.7 | |
| | comp=Z,89nm,0.3s | | | | | | | | |
| **LPAZ** | **La Paz** | **5.42** | **352** | | | | **Pn** | **19 35 58.2** | **+1.8** |
| **LPAZ** | **La Paz** | **5.42** | **352** | P | | | **Pn** | **19 35 57.7** | **+1.3** |
| | comp=Z,32nm,0.3s,baz=162,slow=9.0,SNR=205 | | | | | | | | |
| LPAZ | | | | | S | | **Sn** | **19 36 59.5** | **+0.3** |
| | comp=Z,8.1nm,0.9s,baz=324,slow=18,SNR=1.2 | | | | | | | | |
| **LPAZ** | **La Paz** | **5.42** | **352** | Pg | | | **Pn** | **19 35 58.1** | **+1.8** |
| **GO03** | **Copiap** | **6.42** | **203** | Pn | | | **Pn** | **19 36 06.7** | **-2.2** |
| **AC05** | **El Transito** | **7.58** | **200** | | | | **Pn** | **19 36 22.0** | **-2.1** |
| **LCO** | **Las Campanas** | **7.88** | **202** | Pn | | | **Pn** | **19 36 25.2** | **-3.0** |
| **SIV** | **San Ignacio** | **8.24** | **48** | P | | | **Pn** | **19 36 30.1** | **-2.7** |
| | comp=Z,82nm,0.3s,baz=236,slow=10.0,SNR=325 | | | | | | | | |
| SIV | | | | | S | | **Sn** | **19 37 57.5** | **-7.8** |
| | comp=Z,8.7nm,0.3s,baz=156,slow=22,SNR=3.1 | | | | | | | | |
| **CO01** | **Juntas del Tor** | **8.60** | **196** | | | | **Pn** | **19 36 36.5** | **-1.2** |
| **CO03** | **El Pedregal** | **9.58** | **197** | | | | **Pn** | **19 36 47.8** | **-2.5** |
| **CO06** | **Fray Jorge** | **9.72** | **202** | Pn | | | **Pn** | **19 36 47.6** | **-4.5** |
| **PTLB** | **Pontes e Lacer** | **9.99** | **53** | Pn | | | **Pn** | **19 36 53.9** | **-1.8** |
| **CO02** | **Combarbal** | **10.01** | **198** | | | | **Pn** | **19 36 52.6** | **-3.4** |
| **CPUP** | **Villa Florida** | **10.29** | **119** | P | | | **Pn** | **19 36 58.9** | **-0.7** |
| | comp=Z,0.7nm,0.4s,baz=266,slow=12,SNR=3.0 | | | | | | | | |
| **CPUP** | **Villa Florida** | **10.29** | **119** | *eP* | | | **Pn** | **19 37 00.8** | **+1.2** |
| **VILB** | **Vilhena** | **11.07** | **39** | Pn | | | **Pn** | **19 37 09.5** | **-0.3** |
| **VILB** | **Vilhena** | **11.07** | **39** | *eP* | | | **Pn** | **19 37 09.3** | **-0.4** |
| **VA03** | **San Esteban** | **11.38** | **194** | Pn | | | **Pn** | **19 37 12.1** | **-1.6** |
| **ETMB** | **Extrema** | **11.86** | **6** | *eP* | | | **Pn** | **19 37 18.4** | **-1.6** |
| **MT02** | **Curacav** | **11.99** | **195** | Pn | | | **Pn** | **19 37 18.6** | **-2.9** |
| **LMEL** | **Las Melosas** | **12.36** | **191** | P | | | **Pn** | **19 37 27.1** | **+0.7** |
| **MT09** | **Talagante** | **12.45** | **194** | Pn | | | **Pn** | **19 37 26.2** | **-1.2** |
| **SALV** | **Santo Antonio** | **12.48** | **65** | *eP* | | | **Pn** | **19 37 28.0** | **+0.1** |
| **BO04** | **La Punta** | **12.58** | **192** | | | | **Pn** | **19 37 28.7** | **-0.2** |
| **MT01** | **Popeta** | **12.60** | **195** | Pn | | | **Pn** | **19 37 26.8** | **-2.4** |
| **BO01** | **Tunca** | **13.07** | **194** | Pn | | | **Pn** | **19 37 32.9** | **-2.2** |
| **SAML** | **Samuel** | **13.30** | **18** | Pn | | | **Pn** | **19 37 36.7** | **-1.5** |
| **SAML** | **Samuel** | **13.30** | **18** | *eP* | | | **Pn** | **19 37 37.1** | **-1.1** |
| **BO02** | **Sierra Bellavi** | **13.39** | **192** | Pn | | | **Pn** | **19 37 38.1** | **-1.2** |
| **RODS** | **Rosario do Sul** | **13.94** | **131** | *eP* | | | **P** | **19 37 49.1** | **+0.6** |
| **PDRB** | **Porto dos Gac** | **14.30** | **47** | *eP* | | | **Pn** | **19 37 50.1** | **-0.7** |
| **ALGR** | **Alto Alegre (B** | **14.79** | **121** | *eP* | | | **P** | **19 37 59.2** | **+1.2** |
| **ITAB** | **Concordia** | **14.95** | **115** | | | | **Pn** | **19 37 57.9** | **-0.7** |
| **ITAB** | **Concordia** | **14.95** | **115** | *eP* | | | **P** | **19 37 59.4** | **-0.3** |
| **PCMB** | **Pacaembu** | **15.00** | **93** | *eP* | | | **P** | **19 38 00.8** | **+0.5** |
| **LDASE** | **Londrina, Braz** | **15.13** | **100** | *eP* | | | **P** | **19 38 03.0** | **+1.1** |
| **CPSB** | **Cacapava Do Su** | **15.24** | **128** | *eP* | | | **P** | **19 38 02.7** | **-0.2** |
| **BI02** | **San Fabin de** | **15.30** | **192** | | | | **Pn** | **19 38 01.4** | **-1.5** |
| BI02 | | | | | IAmb | | IAmb | 19 38 06.7 | |
| | comp=Z,10nm,0.7s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **15.87** | **132** | P | | | **P** | **19 38 08.8** | **-1.1** |
| PLTB | | | | | IAmb | | IAmb | 19 38 12.2 | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **15.87** | **132** | *eP* | | | **Pn** | **19 38 10.7** | **+0.8** |
| **ARAG** | **Araguaiana, MT** | **15.91** | **71** | *eP* | | | **Pn** | **19 38 11.1** | **+0.7** |
| **ITRB** | **Iturama** | **16.06** | **86** | *eP* | | | **Pn** | **19 38 13.4** | **+1.2** |
| **FRTB** | **Fartura** | **16.55** | **99** | *eP* | | | **Pn** | **19 38 18.6** | **+0.4** |
| **CNLB** | **Canela** | **16.74** | **120** | *eP* | | | **Pn** | **19 38 20.5** | **+0.2** |
| **TRQA** | **Tornquist** | **16.97** | **165** | Pn | | | **Pn** | **19 38 22.3** | **-0.7** |
| **SNDB** | **Serra Nova Dou** | **18.17** | **60** | *eP* | | | **P** | **19 38 35.3** | **+0.1** |
| **GO06** | **Curarrehue** | **18.17** | **190** | P | | | **P** | **19 38 33.2** | **-2.0** |
| GO06 | | | | | IAmb | | IAmb | 19 38 39.5 | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| **IPMB** | **Ipameri, GO** | **18.41** | **82** | *eP* | | | **P** | **19 38 38.4** | **+0.5** |
| **RCLB** | **Rio Claro- Sao** | **18.43** | **96** | *eP* | | | **P** | **19 38 38.4** | **+0.4** |
| **NPGB** | **Novo

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **A22K** | **Sinclair Lake** | **3.73** | **298** | | **Pg** | **19 39 25.6** | **+0.6** |
| **F30M** | **Barrier River** | **3.85** | **116** | | **Pg** | **19 39 26.9** | **-0.4** |
| **H24K** | **Noodor Dome** | **3.90** | **199** | | **Pn** | **19 39 13.7** | **+0.1** |
| **PRP** | **Porcupine Dome** | **4.05** | **184** | Pn | **Pn** | **19 39 17.3** | **+1.6** |
| PRP | | | | IAML | | 19 40 27.2 | |
| | comp=E,135nm,0.5s | | | | | | |
| **H23K** | **Yukon River** | **4.14** | **208** | Pn | **Pn** | **19 39 17.9** | **+1.1** |
| **H29M** | **Whitestone** | **4.14** | **141** | | **Pn** | **19 39 16.9** | **0.0** |
| **I27K** | **Kandik River** | **4.15** | **161** | | **Pn** | **19 39 17.0** | **+0.1** |
| I27K | | | | | **Pg** | **19 39 31.9** | **-1.1** |
| **D20K** | **Etivluk River** | **4.29** | **264** | | **Pg** | **19 39 19.1** | **+0.3** |
| D20K | | | | | **Pg** | **19 39 34.0** | **-1.6** |
| **E20K** | **Nigu River** | **4.30** | **258** | | **Pn** | **19 39 19.2** | **+0.2** |
| E20K | | | | | **Pg** | **19 39 33.7** | **-2.1** |
| **B20K** | **Meade River** | **4.30** | **282** | Pn | **Pn** | **19 39 20.3** | **+1.4** |
| **A21K** | **Barrow** | **4.34** | **300** | | **Pg** | **19 39 34.3** | **-2.3** |
| **I28M** | **Miner Creek** | **4.53** | **153** | Pn | **Pn** | **19 39 23.1** | **+0.9** |
| **I23K** | **Minto, Yukon-K** | **4.75** | **204** | Pn | **Pn** | **19 39 26.4** | **+1.3** |
| I23K | | | | IAML | | 19 41 10.5 | |
| | comp=E,130nm,1.1s | | | | | | |
| I23K | | | | IAML | | 19 41 16.2 | |
| | comp=N,130nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.75** | **243** | Pn | **Pn** | **19 39 27.4** | **+2.3** |
| **D19K** | **Kuna River** | **4.88** | **264** | Pn | **Pn** | **19 39 28.5** | **+1.5** |
| D19K | | | | IAML | | 19 41 29.6 | |
| | comp=E,71nm,0.9s | | | | | | |
| **E19K** | **Redstone River** | **5.01** | **251** | Pn | **Pn** | **19 39 30.5** | **+1.8** |
| E19K | | | | IAML | | 19 41 18.9 | |
| | comp=E,89nm,0.7s | | | | | | |
| E19K | | | | IAML | | 19 41 22.2 | |
| | comp=N,99nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05** | **195** | Pn | **Pn** | **19 39 30.7** | **+1.4** |
| CCB | | | | IAML | | 19 41 15.7 | |
| | comp=E,81nm,1.2s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.24** | **272** | Pn | **Pn** | **19 39 32.3** | **+0.4** |
| C19K | | | | IAML | | 19 40 48.7 | |
| | comp=E,58nm,0.5s | | | | | | |
| C19K | | | | IAML | | 19 41 37.2 | |
| | comp=N,63nm,1.2s | | | | | | |
| **K27K** | **Chicken** | **5.65** | **167** | Pn | **Pn** | **19 39 39.8** | **+2.3** |
| **C18K** | **Utukok River** | **5.92** | **269** | Pn | **Pn** | **19 39 41.7** | **+0.5** |
| **E18K** | **Tukpahlearik C** | **6.17** | **257** | Pn | **Pn** | **19 39 45.6** | **+1.0** |
| **H18K** | **Honhosa River** | **6.82** | **236** | Pn | **Pn** | **19 39 55.8** | **+2.2** |

*AEIC **12** 19:38:27.5±2.2,69°.53N±0°.05×144°.84W±0°.08,h4km±5km, ML3.9,mb4.2/2(NEIC),ML4.0/112(NEIC),Mwr3.9/16(NEIC), Error ellipse: s-maj=7.2km s-min=4.2km az=183.0*

*IDC **12** 19:38:28.3±0.7,69°.70N×144°.65W,h0km,mb3.6/13, mbtmp3.6/17,ML3.9/4,Error ellipse: s-maj=17.9km s-min=11.9km az=48.0*

*NEIC **12** 19:38:28.5±1.8,69°.61N±0°.05×144°.79W±0°.02,h10km±1km, Error ellipse: s-maj=9.2km s-min=2.9km az=2.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr0.40; Mθθ -3.82; Mφφ 3.43; Mrθ 0.76; Mθφ -7.05; Mφr -2.85; Fault plane solution: Mo8.46000×10¹⁴ NP1: φs194.96000°,δ80.97000°,λ17.79000°. NP2: φs102.08000°,δ72.43000°,λ170.52000°. Principal axes: T 8.6971, Plg19.0000°, Azm60.0000°; N -0.4907, Plg70.0000°, Azm221.0000°; P -8.2065, Plg6.0000°, Azm328.0000°;*

*NEIC **12** 19:38:28.7,69°.61N×144°.73W,h10km*

**ISC 12 19:38:28.3±0.5,69°.58N±0°.04×144°.78W±0°.03,h10km, n170,σ1§12/154,mb3.7/14,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.35** | **352** | | **Pg** | **19 38 34.8** | **-0.4** |
| C26K | | | | | **Sb** | **19 38 40.6** | **-1.5** |
| **C26K** | **Camden Bay** | **0.35** | **352** | IAML | | 19 38 41.8 | |
| | comp=E,11µm,0.7s | | | | | | |
| C26K | | | | IAML | | 19 38 42.1 | |
| | comp=N,12µm,0.4s | | | | | | |
| **C27K** | **Jago River** | **0.38** | **82** | | **Pg** | **19 38 35.2** | **-0.6** |
| C27K | | | | | **Sg** | **19 38 41.0** | **+0.2** |
| **C27K** | **Jago River** | **0.38** | **82** | IAML | | 19 38 44.4 | |
| | comp=E,13µm,0.4s | | | | | | |
| C27K | | | | IAML | | 19 38 44.5 | |
| | comp=N,16µm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.62** | **246** | | **Pg** | **19 38 38.6** | **-1.6** |
| D25K | | | | | **Sg** | **19 38 47.2** | **-1.2** |
| **C24K** | **Franklin Bluff** | **1.38** | **278** | | **Sg** | **19 39 12.3** | **-0.3** |
| **D27M** | **Malcolm River** | **1.39** | **102** | Pn | **Pn** | **19 38 53.0** | **-0.8** |
| **D27M** | **Malcolm River** | **1.39** | **102** | | **Sg** | **19 39 13.3** | **+0.4** |
| **D27M** | **Malcolm River** | **1.39** | **102** | IAML | | 19 39 15.5 | |
| | comp=N,2µm,0.5s | | | | | | |
| D27M | | | | IAML | | 19 39 16.4 | |
| | comp=E,1µm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.49** | **255** | Pn | **Pn** | **19 38 55.8** | **+0.6** |
| **D24K** | **Happy Valley** | **1.49** | **255** | | **Sb** | **19 39 15.5** | **+0.4** |
| **D24K** | **Happy Valley** | **1.49** | **255** | IAML | | 19 39 17.9 | |
| | comp=N,3µm,0.5s | | | | | | |
| D24K | | | | IAML | | 19 39 21.0 | |
| | comp=E,2µm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.81** | **139** | Pn | **Pn** | **19 39 00.8** | **+1.3** |
| **F26K** | **Sheenjek River** | **1.90** | **173** | | **Pn** | **19 39 00.2** | **-0.6** |
| **F26K** | **Sheenjek River** | **1.90** | **173** | IAML | | 19 39 33.0 | |
| | comp=E,1µm,0.5s | | | | | | |
| F26K | | | | IAML | | 19 39 33.0 | |
| | comp=N,1µm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **244** | Pn | **Pb** | **19 39 03.1** | **-0.9** |
| TOLK | | | | IAML | | 19 39 32.2 | |
| | comp=E,1µm,0.8s | | | | | | |
| TOLK | | | | IAML | | 19 39 36.6 | |
| | comp=N,879nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **189** | | **Pn** | **19 39 01.8** | **-0.6** |
| **F25K** | **Christian Rive** | **2.02** | **189** | IAML | | 19 39 36.0 | |
| | comp=E,1µm,0.7s | | | | | | |
| F25K | | | | IAML | | 19 39 36.0 | |
| | comp=N,1µm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.02** | **224** | Pn | **Pn** | **19 39 04.0** | **+1.5** |
| **C23K** | **Itkillik River** | **2.05** | **280** | Pn | **Pn** | **19 39 03.7** | **+0.9** |
| **E28M** | **Babbage River** | **2.12** | **115** | | **Pb** | **19 39 06.0** | **-0.8** |
| E28M | | | | IAML | | 19 39 39.6 | |
| | comp=N,955nm,0.8s | | | | | | |
| E28M | | | | IAML | | 19 39 41.7 | |
| | comp=E,751nm,0.7s | | | | | | |
| **D28M** | **Stokes Point** | **2.15** | **94** | | **Pn** | **19 39 03.9** | **-0.2** |
| **D28M** | **Stokes Point** | **2.15** | **94** | IAML | | 19 39 44.8 | |
| | comp=E,2µm,0.8s | | | | | | |
| D28M | | | | IAML | | 19 39 50.4 | |
| | comp=N,2µm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.16** | **178** | | **Pn** | **19 39 05.9** | **+1.6** |
| **D23K** | **Nanushuk River** | **2.19** | **257** | | **Pn** | **19 39 04.2** | **-0.4** |
| **D23K** | **Nanushuk River** | **2.19** | **257** | IAML | | 19 39 42.7 | |
| | comp=N,674nm,0.8s | | | | | | |
| D23K | | | | IAML | | 19 39 43.5 | |
| | comp=E,706nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.33** | **231** | | **Pn** | **19 39 06.0** | **-0.7** |
| **E23K** | **Chandalar** | **2.33** | **231** | IAML | | 19 39 44.3 | |
| | comp=E,602nm,0.6s | | | | | | |
| E23K | | | | IAML | | 19 39 50.4 | |
| | comp=N,578nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.36** | **210** | Pn | **Pn** | **19 39 07.5** | **+0.4** |
| **G26K** | **Porcupine Rive** | **2.66** | **172** | | **Pn** | **19 39 10.8** | **-0.4** |
| **F28M** | **Old Crow** | **2.67** | **135** | | **Pn** | **19 39 12.1** | **+0.8** |
| **E29M** | **Blow River** | **2.75** | **112** | | **Pn** | **19 39 12.3** | **-0.1** |
| **E29M** | **Blow River** | **2.75** | **112** | IAML | | 19 40 00.9 | |
| | comp=E,539nm,0.7s | | | | | | |
| **G25K** | **Bearman Lake** | **2.87** | **191** | | **Pn** | **19 39 13.5** | **-0.5** |
| **D22K** | **Ayikyak River** | **2.90** | **260** | | **Pn** | **19 39 14.2** | **-0.3** |
| **D22K** | **Ayikyak River** | **2.90** | **260** | IAML | | 19 40 07.4 | |
| | comp=N,570nm,0.6s | | | | | | |
| D22K | | | | IAML | | 19 40 11.3 | |
| | comp=E,516nm,0.9s | | | | | | |
| **G27K** | **Doyon Strip** | **3.01** | **156** | | **Pn** | **19 39 16.5** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **201** | Pn | **Pn** | **19 39 16.6** | **-0.1** |
| **B22K** | **Teshekpuk Lake** | **3.07** | **289** | | **Pn** | **19 39 17.3** | **+0.5** |
| **COLD** | **Coldfoot** | **3.10** | **223** | | **Pn** | **19 39 16.5** | **-0.6** |
| **H25L** | **Birch Creek** | **3.35** | **187** | | **Pn** | **19 39 20.1** | **-0.5** |
| **B21K** | **Ikpikpuk River** | **3.44** | **275** | | **Pn** | **19 39 22.2** | **+0.3** |
| B21K | | | | IAML | | 19 40 28.9 | |
| | comp=E,361nm,0.7s | | | | | | |
| **E21K** | **Killik River** | **3.50** | **255** | | **Pn** | **19 39 22.1** | **-0.6** |
| **E21K** | **Killik River** | **3.50** | **255** | IAML | | 19 40 24.5 | |
| | comp=N,291nm,0.8s | | | | | | |
| E21K | | | | IAML | | 19 40 25.2 | |
| | comp=E,264nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.67** | **134** | | **Pn** | **19 39 25.9** | **+0.8** |
| **H24K** | **Noodor Dome** | **3.94** | **199** | | **Pn** | **19 39 28.4** | **-0.3** |
| H24K | | | | IAML | | 19 40 43.1 | |
| | comp=E,221nm,0.9s | | | | | | |
| H24K | | | | IAML | | 19 40 44.4 | |
| | comp=N,170nm,0.7s | | | | | | |
| **F21K** | **Alatna River** | **3.99** | **238** | | **Pn** | **19 39 30.5** | **+1.1** |
| F21K | | | | IAML | | 19 40 36.5 | |
| | comp=E,153nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **184** | | **Pn** | **19 39 31.3** | **+0.4** |
| PRP | | | | IAML | | 19 40 23.2 | |
| | comp=N,162nm,0.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.11** | **125** | | **Pn** | **19 39 32.7** | **+1.6** |
| G30M | | | | IAML | | 19 40 45.8 | |
| | comp=N,176nm,0.7s | | | | | | |
| G30M | | | | IAML | | 19 40 49.8 | |
| | comp=E,139nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.15** | **141** | | **Pn** | **19 39 33.2** | **+1.6** |
| H29M | | | | IAML | | 19 40 59.5 | |
| | comp=N,202nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.18** | **208** | | **Pn** | **19 39 32.5** | **+0.4** |
| H23K | | | | IAML | | 19 40 43.2 | |
| | comp=N,192nm,0.5s | | | | | | |
| H23K | | | | IAML | | 19 40 45.1 | |
| | comp=E,198nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.26** | **102** | | **Pn** | **19 39 33.2** | **+0.2** |
| **INK** | **Inuvik** | **4.26** | **102** | Pn | **Pn** | **19 39 33.8** | **+0.7** |
| | comp=E,3.1nm,0.3s,baz=309,slow=19,SNR=7.1 | | | | | | |
| INK | | | | Sn | **Sn** | **19 40 21.6** | **-1.1** |
| | comp=E,12nm,0.3s,baz=80,slow=23,SNR=6.0 | | | | | | |
| INK | | | | Lg | Lg | 19 40 45.0 | |
| | comp=E,7.7nm,0.3s,baz=8.1,slow=28,SNR=5.8 | | | | | | |
| | comp=E,6.6nm,0.3s | | | | | | |
| **B20K** | **Meade River** | **4.32** | **282** | | **Pn** | **19 39 33.8** | **-0.1** |
| **I26K** | **Coal Creek Min** | **4.33** | **171** | | **Pn** | **19 39 33.7** | **-0.4** |
| **EPYK** | **Eagle Plains** | **4.42** | **133** | | **Pn** | **19 39 36.7** | **+1.3** |
| **G21K** | **Allakaket** | **4.49** | **231** | | **Pn** | **19 39 36.0** | **-0.3** |
| G21K | | | | IAML | | 19 41 00.6 | |
| | comp=E,110nm,1.1s | | | | | | |
| G21K | | | | IAML | | 19 41 02.2 | |
| | comp=N,141nm,0.6s | | | | | | |
| **I28M** | **Miner Creek** | **4.54** | **154** | | **Pn** | **19 39 38.1** | **+1.0** |
| I28M | | | | IAML | | 19 40 37.3 | |
| | comp=N,117nm,0.5s | | | | | | |
| I28M | | | | IAML | | 19 41 04.5 | |
| | comp=E,126nm,0.9s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.59** | **113** | | **Pn** | **19 39 38.5** | **+0.9** |
| F31M | | | | IAML | | 19 40 57.1 | |
| | comp=N,119nm,1.1s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.59** | **194** | | **Pn** | **19 39 38.0** | **+0.3** |
| POKR | | | | IAML | | 19 40 59.1 | |
| | comp=N,100nm,1.1s | | | | | | |
| POKR | | | | IAML | | 19 41 00.1 | |
| | comp=E,141nm,1.2s | | | | | | |
| **G31M** | **Satah River** | **4.73** | **119** | | **Pn** | **19 39 40.2** | **+0.7** |
| **F20K** | **Avaraart Lake** | **4.79** | **243** | | **Pn** | **19 39 41.1** | **+0.8** |
| **I23K** | **Minto, Yukon-K** | **4.79** | **204** | | **Pn** | **19 39 39.7** | **-0.6** |
| **MDM** | **Murphy Dome** | **4.83** | **198** | | **Pn** | **19 39 40.5** | **-0.4** |
| **MDM** | **Murphy Dome** | **4.83** | **198** | IAML | | 19 41 01.2 | |
| | comp=E,110nm,1.2s | | | | | | |
| MDM | | | | IAML | | 19 41 03.0 | |
| | comp=N,105nm,0.6s | | | | | | |
| **IL31** | | **4.89** | **191** | | **Pn** | **19 39 41.4** | **-0.4** |
| **ILAR** | **Eielson Array** | **4.89** | **191** | Pn | **Pn** | **19 39 41.9** | **0.0** |
| | comp=N,3.4nm,0.3s,baz=4.0,slow=15,SNR=21 | | | | | | |
| ILAR | | | | Sn | **Sn** | **19 40 40.1** | **+1.6** |
| | comp=N,7.2nm,0.3s,baz=11,slow=20,SNR=8.7 | | | | | | |
| | comp=N,8.9nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.91** | **146** | IAML | | 19 40 45.2 | |
| | comp=E,110nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **4.91** | **264** | | **Pn** | **19 39 42.0** | **-0.1** |
| **IMAR** | **Indian Mountai** | **4.96** | **228** | | **Pn** | **19 39 44.1** | **+1.4** |
| **H21K** | **Melozitna River** | **4.99** | **222** | | **Pn** | **19 39 43.1** | **-0.1** |
| **H21K** | **Melozitna River** | **4.99** | **222** | IAML | | 19 41 15.8 | |
| | comp=E,105nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **4.99** | **183** | | **Pn** | **19 39 42.8** | **-0.5** |
| **J25K** | **Salcha River,** | **4.99** | **183** | IAML | | 19 41 12.5 | |
| | comp=E,114nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **5.02** | **162** | IAML | | 19 40 49.9 | |
| | comp=E,92nm,1.1s | | | | | | |
| EGAK | | | | IAML | | 19 41 27.0 | |
| | comp=E,77nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **5.04** | **251** | | **Pn** | **19 39 43.7** | **-0.2** |
| **CCB** | **Clear Creek Bu** | **5.09** | **195** | | **Pn** | **19 39 44.2** | **-0.3** |
| **MLY** | **Manley** | **5.11** | **210** | | **Pn** | **19 39 44.7** | **-0.2** |
| **J26L** | **Joseph Creek** | **5.12** | **174** | | **Pn** | **19 39 45.0** | **-0.1** |
| **J26L** | **Joseph Creek** | **5.12** | **174** | IAML | | 19 40 51.8 | |
| | comp=N,70nm,0.8s | | | | | | |
| J26L | | | | IAML | | 19 41 12.2 | |
| | comp=E,78nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.26** | **272** | | **Pn** | **19 39 46.7** | **-0.2** |
| **C19K** | **Lookout Ridge** | **5.26** | **272** | IAML | | 19 41 40.2 | |
| | comp=N,83nm,1.9s | | | | | | |
| C19K | | | | IAML | | 19 41 40.3 | |
| | comp=E,61nm,2.5s | | | | | | |
| **NEA2** | **Nenana** | **5.28** | **201** | | **Pn** | **19 39 46.6** | **-0.5** |
| **NEA2** | **Nenana** | **5.28** | **201** | IAML | | 19 41 27.3 | |
| | comp=E,99nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **196** | | **Pn** | **19 39 46.7** | **-0.5** |
| **WRH** | **Wood River Hil** | **5.29** | **196** | IAML | | 19 41 16.7 | |
| | comp=E,88nm,0.7s | | | | | | |
| WRH | | | | IAML | | 19 41 35.2 | |
| | comp=N,64nm,1.3s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.56** | **247** | | **Pn** | **19 39 50.7** | **-0.3** |
| **SCRK** | **Sand Creek** | **5.63** | **176** | | **Pn** | **19 39 51.8** | **-0.3** |
| **H20K** | **Anotleneega Mo** | **5.63** | **228** | | **Pn** | **19 39 51.4** | **-0.6** |
| **A19K** | **Wainwright** | **5.65** | **284** | | **Pn** | **19 39 51.8** | **-0.4** |
| **BWN** | **Browne** | **5.73** | **201** | Pn | **Pn** | **19 39 50.1** | **-3.3** |
| **G19K** | **Purcell Mounta** | **5.78** | **239** | | **Pn** | **19 39 53.4** | **-0.7** |
| **DOT** | **Dot Lake** | **5.96** | **177** | | **Pn** | **19 39 56.6** | **+0.1** |
| **B18K** | **Kokolik River** | **5.99** | **276** | | **Pn** | **19 39 56.2** | **-0.6** |
| **J30M** | **Hart River** | **6.00** | **143** | | **Pn** | **19 39 57.3** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.02** | **207** | | **Pn** | **19 39 56.7** | **-0.6** |
| **H19K** | **Roundabout Mou** | **6.03** | **233** | | **Pn** | **19 39 57.2** | **-0.2** |
| **MCK** | **McKinley** | **6.09** | **198** | | **Pn** | **19 39 58.6** | **+0.2** |
| **E18K** | **Tukpahlearik C** | **6.20** | **257** | | **Pn** | **19 39 59.5** | **-0.3** |
| **F18K** | **Selawik** | **6.31** | **249** | | **Pn** | **19 40 00.9** | **-0.3** |
| **G18K** | **Tagagawik** | **6.43** | **242** | | **Pn** | **19 40 03.1** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.43** | **150** | Pn | **Pn** | **19 40 03.4** | **+0.4** |
| **CHUM** | **Lake Minchumin** | **6.44** | **211** | | **Pn** | **19 40 02.8** | **-0.3** |
| **KTH** | **Kantishna Hill** | **6.52** | **205** | Pn | **Pn** | **19 40 04.1** | **-0.1** |
| **J20K** | **Nowinta River** | **6.55** | **219** | | **Pn** | **19 40 04.2** | **-0.3** |
| **PAX** | **Paxson** | **6.64** | **183** | | **Pn** | **19 40 05.8** | **0.0** |
| **BCAR** | **Beaver Creek A** | **6.65** | **168** | | **Pn** | **19 40 06.9** | **+0.9** |
| **L27K** | **Beaver Creek,** | **6.65** | **168** | | **Pn** | **19 40 05.7** | **-0.3** |
| **RDOG** | **Red Dog Mine** | **6.74** | **266** | | **Pn** | **19 40 06.4** | **-0.8** |
| **E17K** | **Hotham Inlet** | **6.78** | **256** | | **Pn** | **19 40 07.3** | **-0.4** |
| **H18K** | **Honhosa River** | **6.86** | **236** | | **Pn** | **19 40 09.6** | **+0.8** |
| **A36M** | **Sachs Harbour** | **6.87** | **60** | | **Pn** | **19 40 07.9** | **-1.0** |
| **F17K** | **Baldwin Pennin** | **6.93** | **251** | | **Pn** | **19 40 09.1** | **-0.6** |
| **D17K** | **Noatak River** | **6.94** | **263** | | **Pn** | **19 40 08.5** | **-1.3** |
| **L29M** | **L29M** | **7.02** | **154** | | **Pn** | **19 40 10.4** | **-0.7** |
| **HARP** | **HAARP** | **7.21** | **181** | | **Pn** | **19 40 13.2** | **-0.4** |
| **C36M** | **Paulatuk** | **7.28** | **82** | | **Pn** | **19 40 13.7** | **-0.8** |
| **G17K** | **Kiwalik Mounta** | **7.31** | **244** | | **Pn** | **19 40 14.3** | **-0.6** |
| **M27K** | **Edge Creek, AK** | **7.34** | **169** | | **Pn** | **19 40 14.7** | **-0.9** |
| **H17K** | **Granite Mounta** | **7.47** | **239** | | **Pn** | **19 40 16.4** | **-0.8** |
| **C16K** | **Lisburne Hills** | **7.51** | **270** | | **Pn** | **19 40 16.9** | **-0.8** |
| **M29M** | **Somme Creek** | **7.61** | **157** | | **Pn** | **19 40 18.3** | **-0.8** |
| **SCM** | **Sheep Creek Mo** | **7.84** | **189** | | **Pn** | **19 40 21.6** | **-0.8** |
| **G16K** | **Koyuk River** | **7.92** | **247** | Pn | **Pn** | **19 40 23.0** | **-0.4** |
| **YUK2** | **White River** | **7.99** | **166** | | **Pn** | **19 40 24.0** | **-0.4** |
| **SKT** | **Skwentna** | **8.11** | **203** | Pn | **Pn** | **19 40 27.0** | **+1.0** |
| **J17K** | **VABM Dome** | **8.41** | **229** | Pn | **Pn** | **19 40 29.8** | **-0.3** |
| **M20K** | **Styx River** | **8.45** | **208** | | **Pn** | **19 40 31.5** | **+0.9** |
| **L19K** | **White Mountain** | **8.48** | **214** | Pn | **Pn** | **19 40 31.5** | **+0.5** |
| **F15K** | **North Star Dit** | **8.48** | **252** | | **Pn** | **19 40 30.1** | **-1.0** |
| **M19K** | **Big River Lodg** | **8.64** | **212** | Pn | **Pn** | **19 40 34.6** | **+1.3** |
| **N30M** | **Aishikik Lake** | **8.74** | **155** | | **Pn** | **19 40 34.4** | **-0.3** |
| **CTGM** | **Chitina Glacie** | **8.76** | **169** | | **Pn** | **19 40 35.0** | **-0.1** |
| **L18K** | **Granite Mounta** | **8.83** | **219** | Pn | **Pn** | **19 40 36.4** | **+0.6** |
| **MMPY** | **Sheldon Lake,** | **8.86** | **135** | | **Pn** | **19 40 37.2** | **+1.0** |
| **CRQM** | **Cirque** | **8.88** | **175** | Pn | **Pn** | **19 40 38.0** | **+1.3** |
| **O28M** | **Mount Upton** | **9.04** | **166** | | **Pn** | **19 40 38.1** | **-1.0** |
| **F14K** | **Arctic Creek** | **9.19** | **254** | | **Pn** | **19 40 39.8** | **-0.8** |
| **WAX** | **Waxell Ridge** | **9.20** | **174** | | **Pn** | **19 40 40.5** | **-0.5** |
| **BARK** | **Barkley Ridge** | **9.26** | **173** | | **Pn** | **19 40 41.0** | **-0.7** |
| **TABL** | **Table Mountain** | **9.30** | **169** | | **Pn** | **19 40 46.1** | **+3.7** |
| **O29M** | **Mount Kennedy** | **9.67** | **161** | | **Pn** | **19 40 50.1** | **+2.7** |
| **M17K** | **Holitna River** | **9.72** | **219** | Pn | **Pn** | **19 40 46.2** | **-1.8** |
| **WHY** | **Whitehorse** | **9.86** | **150** | | **Pn** | **19 40 49.6** | **-0.4** |
| **WRGLY** | **Wrigley** | **10.60** | **116** | | **Pn** | **19 40 59.8** | **-0.2** |
| **P33M** | **Teslin, Yukon** | **10.65** | **146** | Pn | **Pn** | **19 41 01.6** | **+0.7** |
| **R33M** | **Jennings River** | **11.78** | **143** | Pn | **Pn** | **19 41 19.0** | **+2.7** |
| **R32K** | **Eaglecrest** | **12.18** | **154** | Pn | **Pn** | **19 41 23.7** | **+2.1** |
| **DLBC** | **Dease Lake** | **12.86** | **143** | Pn | **Pn** | **19 41 32.0** | **+1.1** |
| | comp=N,0.4nm,0.3s,baz=315,slow=6.8,SNR=4.5 | | | | | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| **PLK4** | **Peulik 4** | **13.01** | **209** | Pn | **Pn** | **19 41 32.9** | **-0.1** |
| **SII** | **Sitkinak Islan** | **13.71** | **202** | Pn | **Pn** | **19 41 41.0** | **-1.5** |
| **YKA** | **Yellowknife Ar** | **14.02** | **106** | Pn | **Pn** | **19 41 43.3** | **-3.4** |
| **YKA** | **Yellowknife Ar** | **14.02** | **106** | Pn | **Pn** | **19 41 43.6** | **-3.0** |
| | comp=N,0.9nm,0.3s,baz=315,slow=13,SNR=12 | | | | | | |
| YKA | | | | Sn | Sn | 19 44 10.2 | -12 |
| | comp=N,1.0nm,0.3s,baz=323,slow=21,SNR=5.6 | | | | | | |
| | comp=N,2.6nm,0.6s | | | | | | |
| **EUNU** | **Eureka** | **17.43** | **30** | Pn | **Pn** | **19 42 31.1** | **0.0** |
| EUNU | | | | IAmb | IAmb | 19 42 47.8 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **H04A** | **Detroit Lake** | **27.45** | **144** | P | **P** | **19 44 11.1** | **-3.0** |
| H04A | | | | IAmb | IAmb | 19 44 12.8 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **OVMT** | **Ovando** | **27.45** | **129** | P | **P** | **19 44 11.5** | **-2.7** |
| **SPITS** | **Spitsbergen Ar** | **32.03** | **7** | S | **S** | **19 50 01.6** | **-3.9** |
| | comp=Z,2.5nm,0.6s,baz=48,slow=20,SNR=2.6 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.36** | **127** | P | **P** | **19 44 58.4** | **+0.6** |
| | comp=Z,0.5nm,0.6s,baz=9.7,slow=6.4,SNR=5.7 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.27** | **142** | P | **P** | **19 45 15.8** | **+1.4** |
| | comp=Z,0.4nm,0.8s,baz=302,slow=5.8,SNR=2.4 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **5** | P | **P** | **19 46 11.0** | **+0.4** |
| | comp=Z,2.5nm,1.0s,baz=360,slow=9.9,SNR=1.3 | | | | | | |
| | comp=Z,2.5nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.58** | **128** | P | **P** | **19 46 58.3** | **+2.2** |
| | comp=Z,0.2nm,0.7s,baz=324,slow=5.6,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **48.55** | **15** | P | **P** | **19 47 11.7** | **+0.6** |
| | comp=Z,0.4nm,0.7s,baz=337,slow=5.8,SNR=1.6 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **49.11** | **6** | P | **P** | **19 47 15.4** | **+0.2** |
| | comp=Z,1.7nm,0.9s,baz=356,slow=8.9,SNR=8.6 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **49.67** | **14** | P | **P** | **19 47 19.1** | **-0.4** |
| | comp=Z,1.3nm,0.4s,baz=354,slow=5.8,SNR=15 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.63** | **325** | P | **P** | **19 47 34.9** | **+0.5** |
| | comp=Z,0.4nm,0.4s,baz=69,slow=7.9,SNR=1.9 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.78** | **273** | P | **P** | **19 47 39.0** | **+3.2** |
| | comp=Z,1.0nm,0.8s,baz=20,slow=8.5,SNR=5.3 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **52.00** | **306** | P | **P** | **19 47 38.1** | **+0.7** |
| | comp=Z,0.2nm,0.6s,baz=112,slow=3.9,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.32** | **27** | P | **P** | **19 47 39.9** | **+0.4** |
| | comp=Z,1.2nm,0.7s,baz=325,slow=8.6,SNR=4.4 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.01** | **328** | P | **P** | **19 48 07.6** | **+1.2** |
| | comp=Z,0.1nm,0.4s,baz=34,slow=6.8,SNR=5.3 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.93** | **324** | P | **P** | **19 48 28.5** | **+1.4** |
| | comp=Z,0.2nm,0.6s,baz=45,slow=7.1,SNR=1.8 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |

*IDC **12** 19:41:33.2±0.4,36°.03S×102°.28W,h0km,mb4.6/18, mbtmp4.7/19,ML4.9/1,MS4.8/41,Error ellipse: s-maj=15.7km s-min=13.4km az=111.0*

*MOS **12** 19:41:33.5±1.4,35°.85S×102°.20W,h10km,mb5.2/25, MS4.8/10,Error ellipse: s-maj=12.6km s-min=10.9km az=78.0*

*NEIC **12** 19:41:34.9,35°.69S×102°.33W,h20km*

*NEIC **12** 19:41:34.7±1.6,35°.68S±0°.10×102°.4W±0°.1,h10km±1km, mb5.1/208,Ms_20 4.9/405,Mww5.5/22,Error ellipse: s-maj=19.9km s-min=16.2km az=261.0*

*NEIC **12** 19:41:34.9,35°.59S×102°.21W,h20km,Moment Tensor Solution. Duration: 2§9 Moment tensor: Scale 10¹⁷Nm; Mrr-0.00; Mθθ-0.66; Mφφ0.67; Mrθ-0.40; Mθφ-2.39; Mφr-0.18; Fault plane solution: Mo2.52000×10¹⁷ NP1: φs98.15000°,δ84.83000°,λ-171.71000°. NP2:φs7.40000°, δ81.74000°,λ-5.22000°. Principal axes: T 2.4830, Plg2.0000°, Azm233.0000°; N 0.0669, Plg80.0000°, Azm130.0000°; P -2.5499, Plg10.0000°, Azm323.0000°;*

*GCMT **12** 19:41:37.7±0.1,35°.95S±0°.01×102°.27W±0°.01,h22km, MW5.6/155,Moment Tensor Solution. s134,c233; s155,c314; Duration: 1§5 Moment tensor: Scale 10¹⁷ Nm; Mrr-0.16±.04; Mθθ-0.59±.03;

**MT09 Talagante 25.81 95** P **P** 19 47 05.3 -0.6
MT09 IAmb IAmb 19 47 09.9
comp=Z,39nm,0.9s
**VA06 Catapilco 25.86 92** **P** 19 47 05.3 -0.8
**BO04 La Punta 26.07 95** P **P** 19 47 04.6 -3.4
BO04 IAmb IAmb 19 47 17.4
comp=Z,61nm,0.9s
**PEL Peldehue 26.21 94** P **P** 19 47 07.7 -1.6
PEL IAmb IAmb 19 47 19.9
comp=Z,35nm,1.0s
**PEL Peldehue 26.21 94** P **P** 19 47 07.7 -1.6
PEL pmax pmax
comp=Z,35nm,1.0s
**MT13 San Alfonso 26.39 95** IAmb IAmb 19 47 14.6
comp=Z,52nm,0.8s
**VA03 San Esteban 26.41 93** IAmb IAmb 19 47 18.1
comp=Z,44nm,1.0s
**CO02 Combarbal 26.50 89** IAmb IAmb 19 47 28.6
comp=Z,48nm,1.2s
**GO09 Cerro Castillo 26.50 135** P **P** 19 47 13.9 +2.1
GO09 IAmb IAmb 19 47 15.1
comp=Z,40nm,0.9s
GO09 IAMs_20 IAMs_20 19 54 42.9
comp=Z,3µm,18.0s
**MT08 Bocatoma Ro 26.68 95** **P** 19 47 13.6 -0.2
**CO05 La Serena 26.73 86** P **P** 19 47 12.8 -1.3
CO05 IAmb IAmb 19 47 17.8
comp=Z,56nm,0.8s
**LCO Las Campanas 27.50 85** P **P** 19 47 21.1 -0.2
LCO IAmb IAmb 19 47 32.4
comp=Z,76nm,1.3s
**LCO Las Campanas 27.50 85** P **P** 19 47 21.1 -0.2
LCO pmax pmax
comp=Z,76nm,1.3s
**AC04 Llanos de Chal 27.52 83** P **P** 19 47 19.8 -1.3
**CO01 Juntas del Tor 27.64 87** IAmb IAmb 19 47 31.1
comp=Z,32nm,1.1s
**AC05 El Transito 27.92 85** IAmb IAmb 19 47 41.0
comp=Z,61nm,1.4s
**PB14 IPOC Station P 29.66 77** P **P** 19 47 40.1 -0.5
PB14 IAMs_20 IAMs_20 19 55 53.4
comp=Z,3µm,21.0s
**GO02 Mina Guanaco 30.04 79** IAmb IAmb 19 48 44.3
comp=Z,58nm,1.4s
**USHA Ushuaia 30.14 140** LR LR 19 56 43.7
comp=Z,6µm,21.9s,baz=292,slow=30
**PB05 IPOC Station P 30.72 74** P **P** 19 47 47.5 -2.2
PB05 IAmb IAmb 19 47 50.6
comp=Z,24nm,0.9s
PB05 IAMs_20 IAMs_20 19 56 24.0
comp=Z,3µm,22.0s
**RKT Rikitea 30.91 285** *e*S **S** 19 52 49.2 -6.2
comp=Z,2µm,33.0s
RKT *e*LQ LQ 19 54 32.4
comp=Z,35µm,30.5s
RKT *e*LR LR 19 55 54.0
comp=Z,5µm,26.0s
**PB04 IPOC Station P 31.03 73** IAMs_20 IAMs_20 19 57 01.4
comp=Z,2µm,19.0s
**LVC Limon Verde 31.86 75** P **P** 19 47 58.9 -1.1
LVC IAmb IAmb 19 48 06.8
comp=Z,56nm,1.6s
**LVC Limon Verde 31.86 75** IAMs_20 IAMs_20 19 57 30.2
comp=Z,3µm,22.0s
**LVC Limon Verde 31.86 75** LR LR 19 57 31.8
comp=Z,2µm,18.8s,baz=244,slow=30
**LVC Limon Verde 31.86 75** P **P** 19 47 58.9 -1.1
LVC pmax pmax
comp=Z,56nm,1.6s
LVC MLR MLR
comp=Z,3µm,22.0s
**LVC Limon Verde 31.86 75** *e*P **P** 19 47 59.4 -0.7
**PATCX Punta Patache 31.87 71** IAMs_20 IAMs_20 19 56 57.5
comp=Z,3µm,20.0s
**PB09 IPOC Station P 32.03 73** IAMs_20 IAMs_20 19 57 14.8
comp=Z,3µm,20.0s
**TRQA Tornquist 32.21 106** P **P** 19 48 02.9 +0.3
TRQA IAMs_20 IAMs_20 19 58 49.2
comp=Z,2µm,19.0s
**TRQA Tornquist 32.21 106** P **P** 19 48 02.9 +0.3
TRQA pmax pmax
comp=Z,18nm,1.1s
TRQA MLR MLR
comp=Z,2µm,19.0s
**AF01 San Pedro de A 32.26 76** IAMs_20 IAMs_20 19 57 36.8
comp=Z,2µm,18.0s
**PB01 IPOC Station P 32.26 72** IAMs_20 IAMs_20 19 57 21.8
comp=Z,3µm,18.0s
**HMBC Humberstone 32.38 70** P **P** 19 48 03.7 -0.6
**NNA Nana 33.05 51** LR LR 19 58 02.2
comp=Z,5µm,21.4s,baz=238,slow=30
**NNA Nana 33.05 51** *i* P **P** 19 48 10.1 -0.1
NNA pmax pmax
comp=Z,58nm,1.3s
**AP01 Chacalluta 33.17 67** IAMs_20 IAMs_20 19 57 51.9
comp=Z,3µm,22.0s
**PB18 Visviri 34.29 67** P **P** 19 48 23.1 +1.5
PB18 IAMs_20 IAMs_20 19 58 12.7
comp=Z,3µm,22.0s
**ATAH Atahualpa 35.97 43** P **P** 19 48 37.2 +1.3
comp=Z,29nm,0.9s,baz=240,slow=6.8,SNR=33
ATAH LR LR 19 59 41.3
comp=Z,3µm,21.3s,baz=231,slow=30
comp=Z,29nm,0.9s
**LPAZ La Paz 36.11 66** P **P** 19 48 38.4 +1.1
**LPAZ La Paz 36.11 66** P **P** 19 48 38.5 +1.1
comp=Z,62nm,1.2s,baz=224,slow=5.8,SNR=79
LPAZ LR LR 20 00 51.0
comp=Z,635nm,19.0s,baz=234,slow=32
comp=Z,62nm,1.2s
**LPAZ La Paz 36.11 66** P **P** 19 48 38.4 +1.1
LPAZ pmax pmax
comp=Z,71nm,1.2s
**PMSA Palmer Station 36.97 154** LR LR 19 59 42.3
comp=Z,3µm,20.0s,baz=310,slow=30
**SMAI San Martin Ant 37.99 159** P **P** 19 48 51.5 -0.5
SMAI IAmb IAmb 19 48 56.2
comp=Z,93nm,1.9s
**ARNL Arenillas 38.11 38** IAMs_20 IAMs_20 20 00 35.6
comp=Z,3µm,20.0s
**ITQB Itaqui 38.70 94** P **P** 19 48 57.9 -0.6
ITQB IAmb IAmb 19 49 02.7
comp=Z,58nm,1.1s
**ITQB Itaqui 38.70 94** *e*P **P** 19 48 58.1 -0.3
**CZSB Cruzeiro do Su 38.91 51** P **P** 19 48 59.4 -0.9
**CZSB Cruzeiro do Su 38.91 51** *e*P **P** 19 49 01.2 +0.8
**CPUP Villa Florida 39.44 89** P **P** 19 49 03.7 -0.9
**CPUP Villa Florida 39.44 89** P **P** 19 49 03.0 -1.6
comp=Z,5.4nm,1.0s,baz=259,slow=9.0,SNR=8.8
CPUP LR LR 20 02 33.6
comp=Z,481nm,21.1s,baz=250,slow=32
comp=Z,5.4nm,1.0s
**CPUP Villa Florida 39.44 89** P **P** 19 49 03.7 -0.9
CPUP pmax pmax
comp=Z,49nm,1.8s
**RODS Rosario do Sul 39.61 96** *e*P **P** 19 49 06.1 0.0
**PLTB Pedras Altas 40.42 99** P **P** 19 49 12.5 -0.3
PLTB IAmb IAmb 19 49 16.2
comp=Z,37nm,0.9s
**CPSB Cacapava Do Su 41.02 97** *e*P **P** 19 49 17.4 -0.3
**BBSD Serra de San D 41.34 75** *e*P **P** 19 49 20.3 -0.3
**MURT Porto Murtinho 41.35 83** *e*P **P** 19 49 20.1 -0.4
**CRSM Crissiumal (Br 41.63 93** *e*P **P** 19 49 22.9 +0.1
**SIV San Ignacio 41.67 73** LR LR 20 04 14.3
comp=Z,2µm,21.6s,baz=268,slow=33
**ANTS Antisana-Sarah 41.68 38** IAMs_20 IAMs_20 20 02 26.2
comp=Z,2µm,19.0s
**ETMB Extrema 41.78 61** P **P** 19 49 24.0 -0.1
ETMB IAmb IAmb 19 49 25.9
comp=Z,50nm,1.3s
**ETMB Extrema 41.78 61** *e*P **P** 19 49 24.5 +0.4
**ALGR Alto Alegre (B 41.94 95** *e*P **P** 19 49 25.5 +0.1
**IMBA Imbabura, San 42.33 37** IAMs_20 IAMs_20 20 02 29.5
comp=Z,2µm,21.0s
**TBI Tubuai 42.41 274** *e*S **S** 19 55 51.8 +0.9
comp=Z,4µm,27.2s
TBI *e*SS **SS** 19 59 01.5 +1.7
comp=Z,23µm,34.8s
TBI *e*LR LR 20 01 08.6
comp=Z,9µm,24.0s
TBI *e*LR LR 20 01 10.4
comp=Z,2µm,22.8s
**ITAB Concordia 43.29 93** *e*P **P** 19 49 36.1 -0.2
**TBTG Tabatinga, AM 43.39 51** P **P** 19 49 36.0 -1.3
TBTG IAMs_20 IAMs_20 20 04 23.7
comp=Z,2µm,20.0s

**TBTG Tabatinga, AM 43.39 51** *e*P **P** 19 49 38.0 +0.8
**AQDB Aquidauana 43.49 82** P **P** 19 49 36.9 -1.1
**PTLB Pontes e Lacer 43.50 74** P **P** 19 49 37.4 -0.6
**PTLB Pontes e Lacer 43.50 74** *e*P **P** 19 49 38.1 +0.1
**CNLB Canela 43.50 97** *e*P **P** 19 49 38.8 +0.7
**TAOE Nuku Hiva Isla 43.58 299** *e*S **S** 19 56 05.9 -2.5
comp=Z,708nm,25.7s
TAOE *e*SS **SS** 19 59 23.7 +0.5
comp=Z,3µm,26.0s
TAOE *e*LR LR 20 01 48.5
comp=Z,2µm,26.3s
**VILB Vilhena 44.17 70** P **P** 19 49 42.7 -0.9
VILB IAMs_20 IAMs_20 20 05 02.6
comp=Z,2µm,20.0s
**VILB Vilhena 44.17 70** *e*P **P** 19 49 43.8 +0.2
**SAML Samuel 44.54 63** P **P** 19 49 45.8 -0.7
**SAML Samuel 44.54 63** P **P** 19 49 45.8 -0.7
SAML pmax pmax
comp=Z,76nm,1.2s
SAML MLR MLR
comp=Z,2µm,22.0s
**SAML Samuel 44.54 63** *e*P **P** 19 49 47.2 +0.7
**TRCB Terra Rica 44.83 87** P **P** 19 49 47.8 -1.0
**PPT2 Papeete2 45.42 281** *e*P **P** 19 49 54.8 +1.3
comp=Z,93nm,22.2s
PPT2 *e*S **S** 19 56 32.8 -2.2
comp=Z,1µm,27.0s
PPT2 *e*SS **SS** 19 59 57.3 -1.0
comp=Z,3µm,24.8s
PPT2 *e*LR LR 20 02 30.8
comp=Z,1µm,24.5s
PPT2 *e*LR LR 20 02 36.0
comp=Z,1µm,27.0s
**LDASE Londrina, Braz 45.79 89** *e*P **P** 19 49 56.0 -0.4
**SALV Santo Antonio 45.95 77** *e*P **P** 19 49 57.4 -0.3
**PCMB Pacaembu 46.52 87** *e*P **P** 19 50 02.2 +0.1
**FRTB Fartura 47.08 90** *e*P **P** 19 50 06.7 +0.2
**TEFE Tefe 47.36 56** *e*P **P** 19 50 09.2 +0.5
**PDRB Porto dos Gac 47.66 71** *e*P **P** 19 50 11.5 +0.4
**ITRB Iturama 48.20 85** *e*P **P** 19 50 15.5 +0.3
**ROSC El Rosal 48.20 39** P **P** 19 50 17.8 +2.2
comp=Z,20nm,0.7s,baz=171,slow=4.1,SNR=23
ROSC LR LR 20 07 03.6
comp=Z,2µm,21.0s,baz=225,slow=32
comp=Z,20nm,0.7s
**JTS Las Juntas de 48.66 23** LR LR 20 05 44.2
comp=Z,2µm,19.1s,baz=190,slow=30
**SPB Sao Paulo 48.69 91** *e*P **P** 19 50 19.6 +0.7
**CLDB Colider 48.84 71** *e*P **P** 19 50 20.3 +0.1
**ARAG Araguaiana, MT 49.15 80** *e*P **P** 19 50 22.8 +0.3
**RCLB Rio Claro- Sao 49.16 90** *e*P **P** 19 50 23.6 +1.0
**VAO Valinhos 49.35 91** *e*P **P** 19 50 24.6 +0.5
**CNGN Cerro Negro 50.23 20** IAMs_20 IAMs_20 20 05 42.8
comp=Z,1µm,20.0s
**MACA Manacapuru-AM 50.33 60** P **P** 19 50 30.9 -0.7
MACA IAMs_20 IAMs_20 20 08 15.7
comp=Z,1µm,22.0s
**MACA Manacapuru-AM 50.33 60** *e*P **P** 19 50 31.9 +0.3
**BOAB BOACO BROADBAN 50.48 21** P **P** 19 50 29.6 -2.9
**ESPN Las Esperanzas 50.66 23** IAMs_20 IAMs_20 20 07 55.2
comp=Z,1µm,18.0s
**BELA Belgrano 2 50.68 165** P **P** 19 50 32.3 -1.1
BELA IAmb IAmb 19 50 42.3
comp=Z,38nm,1.1s
**SNET Serv Nac Est T 50.72 17** IAMs_20 IAMs_20 20 06 24.9
comp=Z,1µm,22.0s
**IPMB Ipameri, GO 50.82 84** *e*P **P** 19 50 34.7 -0.6
**MTO3 Montecristo 51.38 16** IAMs_20 IAMs_20 20 06 45.4
comp=Z,1µm,22.0s
**ESQI Esquipulas 51.53 16** IAMs_20 IAMs_20 20 06 50.6
comp=Z,1µm,21.0s
**TGUH Tegucigalpa,Un 51.56 19** IAMs_20 IAMs_20 20 07 23.1
comp=Z,948nm,20.0s
**NPGB Novo Progresso 51.59 68** *e*P **P** 19 50 41.0 -0.1
**SNDB Serra Nova Dou 51.69 76** *e*P **P** 19 50 42.0 +0.2
**APG El Apazote 51.72 15** LR LR 20 07 28.0
comp=Z,57nm,18.2s,baz=188,slow=30
**RAR Rarotonga 51.81 270** LR LR 20 06 48.4
comp=Z,281nm,21.0s,baz=124,slow=29
**HUEH Huehuetenango 51.82 13** IAMs_20 IAMs_20 20 06 59.3
comp=Z,2µm,22.0s
**BDFB Brasilia 52.23 82** IAmb IAmb 19 51 05.8
comp=Z,23nm,1.2s
**BDFB Brasilia 52.23 82** P **P** 19 50 45.7 -0.3
comp=Z,9.3nm,0.8s,baz=248,slow=8.7,SNR=11
BDFB LR LR 20 12 11.5
comp=Z,677nm,18.1s,baz=240,slow=35
comp=Z,9.3nm,0.8s
**CMIG Matias Romero 53.03 9** LR LR 20 07 53.7
comp=Z,882nm,18.1s,baz=184,slow=30
**ITTB Itaituba 53.07 65** *e*P **P** 19 50 51.6 -0.4
**SDV Santo Domingo 53.54 40** LR LR 20 09 56.7
comp=Z,809nm,20.9s,baz=219,slow=32
**PETF Flores 53.70 15** IAMs_20 IAMs_20 20 09 20.1
comp=Z,978nm,19.0s
**QSPA South Pole Qui 54.46 180** P **P** 19 51 02.2 +0.4
QSPA IAmb IAmb 19 51 11.7
comp=Z,56nm,2.0s
**QSPA South Pole Qui 54.46 180** IAMs_20 IAMs_20 20 08 36.2
comp=Z,1µm,21.0s
**QSPA South Pole Qui 54.46 180** P **P** 19 51 00.6 -1.2
comp=Z,2.6nm,0.5s,baz=146,slow=2.1,SNR=27
QSPA LR LR 20 08 47.2
comp=Z,749nm,21.9s,baz=114,slow=30
comp=Z,2.6nm,0.5s
**BOAV Boa Vista 54.47 55** P **P** 19 51 01.3 -0.9
BOAV IAmb IAmb 19 51 03.2
comp=Z,27nm,1.2s
**BOAV Boa Vista 54.47 55** *e*P **P** 19 51 01.6 -0.6
**BAUV El Baul 54.98 43** P **P** 19 51 05.7 -0.2
**SBA Scott Base 55.54 195** P **P** 19 51 10.6 +1.5
SBA IAmb IAmb 19 51 14.5
comp=Z,14nm,1.0s
**SBA Scott Base 55.54 195** P **P** 19 51 10.6 +1.5
SBA pmax pmax
comp=Z,14nm,1.0s
**JANB Januaria 55.54 84** *e*P **P** 19 51 10.3 +0.2
**MAL2 Monte Alegre, 55.79 64** P **P** 19 51 09.7 -2.2
**PRPB Parauapebas 56.37 71** *e*P **P** 19 51 16.0 -0.1
**SMTB Santa Maria do 56.46 76** *e*P **P** 19 51 17.4 +0.7
**SDBA SAO DESIDERIO 56.53 81** *e*P **P** 19 51 18.0 +0.8
**VNDA Vanda 56.64 195** P **P** 19 51 16.4 -0.6
comp=Z,1.9nm,0.9s,baz=95,slow=5.4,SNR=20
VNDA LR LR 20 09 45.0
comp=Z,756nm,21.3s,baz=98,slow=30
comp=Z,1.9nm,0.9s
**TEIG Tepich 57.25 16** IAMs_20 IAMs_20 20 11 53.1
comp=Z,750nm,19.0s
**TEIG Tepich 57.25 16** LR LR 20 10 32.9
comp=Z,643nm,20.1s,baz=201,slow=30
**VNA3 Neumayer Olymp 57.46 157** ⇓P **P** 19 51 22.0 -1.0
comp=Z,26nm,0.8s
**PCRV Puerto La Cruz 57.92 45** LR LR 20 13 56.0
comp=Z,2µm,20.5s,slow=34
**VNA1 Neumayer--Stat 58.07 157** ⇓P **P** 19 51 26.7 -0.4
comp=Z,19nm,1.0s
**VNA2 Neumayer--Watz 58.26 157** ⇓P **P** 19 51 27.8 -0.8
comp=Z,22nm,1.0s,baz=258,slow=4.8
**MCPB Macapa, AP 58.47 65** *e*P **P** 19 51 31.1 +0.3
**SNAA Sanae 59.39 159** P **P** 19 51 34.5 -2.1
SNAA IAMs_20 IAMs_20 20 12 29.4
comp=Z,1µm,20.0s
**SNAA Sanae 59.39 159** ⇓P **P** 19 51 35.2 -1.3
comp=Z,204nm,0.8s
**SNAA Sanae 59.39 159** P **P** 19 51 34.2 -2.3
comp=Z,3.3nm,0.8s,baz=250,slow=5.7,SNR=16
SNAA LR LR 20 12 40.9
comp=Z,1µm,20.7s,baz=258,slow=32
comp=Z,3.3nm,0.8s
**SNAA Sanae 59.39 159** *i* P **P** 19 51 35.2 -1.3
SNAA pmax pmax
comp=Z,32nm,1.9s
**CHIV Chivirico 60.64 28** IAMs_20 IAMs_20 20 11 36.7
comp=Z,1µm,21.0s
**TROLL Troll, Antarti 60.80 160** ⇓P **P** 19 51 45.4 -0.9
comp=Z,337nm,0.5s
**SOR Soroa 61.04 20** P **P** 19 51 46.2 -2.0
SOR IAMs_20 IAMs_20 20 12 39.6
comp=Z,1µm,20.0s
**SOR Soroa 61.04 20** P **P** 19 51 46.2 -2.0
SOR pmax pmax
comp=Z,82nm,1.8s
SOR MLR MLR
comp=Z,1µm,20.0s
**CAMR Camarioca 61.78 22** IAMs_20 IAMs_20 20 12 32.0
comp=Z,1µm,22.0s

**MDP Montagnes des 61.82 60** LR LR 20 15 39.1
comp=Z,1µm,19.3s,baz=245,slow=33
**RTZ Ruatahuna 62.28 241** P **P** 19 51 56.5 -0.2
**URZ Urewera 62.34 241** P **P** 19 51 57.2 +0.3
comp=Z,5.7nm,0.9s,baz=195,slow=3.6,SNR=2.7
URZ LR LR 20 12 10.6
comp=Z,1µm,22.0s,baz=203,slow=30
comp=Z,5.7nm,0.9s
**RAO Raoul Island 62.59 252** LR LR 20 12 10.7
comp=Z,915nm,21.8s,baz=132,slow=29
**NBLA Lagarto - SE 63.07 84** *e*P **P** 19 52 02.3 +0.1
**OBIP Obispado Ponce 63.33 38** IAMs_20 IAMs_20 20 19 02.0
comp=Z,799nm,22.0s
**SRIG Santa Rosalia 63.42 350** IAMs_20 IAMs_20 20 13 13.8
comp=Z,893nm,20.0s
**UUPR Utuado, UPR, P 63.45 38** IAMs_20 IAMs_20 20 19 06.2
comp=Z,621nm,19.0s
**TOZ Tahuroa Road 63.71 241** IAMs_20 IAMs_20 20 13 51.6
comp=Z,993nm,21.0s
**NVL N'lazarevskaya 64.01 160** *e*P P 19 51 59.6 -7.9
NVL *e*S **S** **20 00 40.6 -2.7**
NVL pmax pmax
comp=Z,13nm,1.0s
NVL MLR MLR
comp=Z,574nm,16.0s
**RPZ Rata Peaks 64.16 234** LR LR 20 13 09.5
comp=Z,2µm,19.5s,baz=98,slow=30
**CBE Ff. Capester 64.39 44** IAMs_20 IAMs_20 20 18 28.1
comp=Z,639nm,20.0s
**061Z Ochoppi 64.56 21** IAMs_20 IAMs_20 20 13 54.5
comp=Z,806nm,22.0s
**TXAR Lajitas Array 64.75 359** P **P** 19 52 11.8 -1.1
**TXAR Lajitas Array 64.75 359** P **P** 19 52 14.2 +1.4
comp=Z,1.9nm,1.1s,baz=185,slow=9.8,SNR=11
TXAR LR LR 20 14 39.8
comp=Z,381nm,20.8s,baz=170,slow=30
comp=Z,1.9nm,1.1s
**SEUS St. Eustatius 64.78 42** IAMs_20 IAMs_20 20 17 11.5
comp=Z,828nm,20.0s
**ABD La Joyeuse, An 64.78 44** IAMs_20 IAMs_20 20 18 46.6
comp=Z,803nm,19.0s
**NBPB Pedra_Branca-C 64.79 78** *e*P **P** 19 52 14.2 +0.7
**HNDO Hondo 65.00 3** P **P** 19 52 14.1 -0.3
**SMRT St. Maarten 65.18 42** IAMs_20 IAMs_20 20 16 53.2
comp=Z,832nm,21.0s
**SAND Sanderson 65.36 0** P **P** 19 52 16.9 +0.2
**ANWB Willy Bob 65.58 43** IAMs_20 IAMs_20 20 20 51.7
comp=Z,614nm,19.0s
**HKT Hockley 65.64 6** *i* P **P** 19 52 18.6 +0.1
HKT pmax pmax
comp=Z,18nm,1.6s
**060A Indiantown 65.82 22** IAMs_20 IAMs_20 20 15 49.0
comp=Z,1µm,20.0s
**JCT Junction City 65.92 2** P **P** 19 52 18.7 -1.7
JCT IAmb IAmb 19 52 43.5
comp=Z,13nm,0.9s
**JCT Junction City 65.92 2** P **P** 19 52 18.7 -1.7
JCT pmax pmax
comp=Z,13nm,1.0s
**ELIB Princess Elisa 66.14 164** *d*P **P** 19 52 20.8 -0.7
comp=Z,10nm,1.1s
**OZNA Ozona 66.33 1** P **P** 19 52 22.6 -0.5
OZNA IAmb IAmb 19 52 34.8
comp=Z,18nm,1.6s
**545A Edgard 66.39 11** IAMs_20 IAMs_20 20 16 25.3
comp=Z,808nm,21.0s
**DWPF Disney Wildern 66.52 20** IAMs_20 IAMs_20 20 15 54.6
comp=Z,762nm,20.0s
**BRDY Brady 66.76 3** P **P** 19 52 25.6 -0.2
**319A Douglas 67.09 354** P **P** 19 52 27.9 0.0
319A IAmb IAmb 19 52 52.1
comp=Z,11nm,0.9s
**SGCY Sterling City 67.32 1** P **P** 19 52 29.2 -0.1
SGCY IAmb IAmb 19 52 42.0
comp=Z,18nm,1.2s
**RCBR Riachuelo 67.56 81** LR LR 20 19 22.5
comp=Z,159nm,19.9s,baz=158,slow=34
**RCBR Riachuelo 67.56 81** *e*P **P** 19 52 33.1 +1.8
**214A Organ Pipe Nat 68.06 350** IAMs_20 IAMs_20 20 16 11.7
comp=Z,830nm,18.0s
**BRAL Brewton 68.11 14** IAMs_20 IAMs_20 20 17 00.6
comp=Z,781nm,21.0s
**121A Cookes Peak, D 68.11 355** P **P** 19 52 34.4 -0.1
121A IAmb IAmb 19 52 46.3
comp=Z,20nm,1.4s
**TUC Tucson 68.16 352** P **P** 19 52 35.1 +0.4
TUC IAmb IAmb 19 52 46.3
comp=Z,18nm,1.4s
**TUC Tucson 68.16 352** P **P** 19 52 35.1 +0.4
TUC pmax pmax
comp=Z,18nm,1.4s
TUC MLR MLR
comp=Z,400nm,18.0s
**FW07 Weatherford 68.23 4** P **P** 19 52 32.4 -2.6
**APMT Aspermont 68.75 2** P **P** 19 52 38.3 +0.1
**113A Mohawk Valley, 68.99 350** IAMs_20 IAMs_20 20 16 28.4
comp=Z,656nm,18.0s
**YUH Yuha Desert 69.22 348** IAMs_20 IAMs_20 20 16 19.4
comp=Z,540nm,18.0s
**TJX Tijuana 69.28 347** IAMs_20 IAMs_20 20 16 04.3
comp=Z,596nm,18.0s
**MSTX Muleshoe 69.36 360** IAmb IAmb 19 52 55.4
comp=Z,12nm,1.0s
**BNM Barren Site 69.65 356** P **P** 19 52 42.6 -1.5
**Z47A Carrollton 69.89 13** P **P** 19 52 45.7 +0.4
**LRAL Lakeview Retre 69.93 14** IAmb IAmb 19 52 57.2
comp=Z,15nm,1.1s
LRAL IAMs_20 IAMs_20 20 18 29.0
comp=Z,688nm,21.0s
**Y14A Wickenburg 70.04 351** IAMs_20 IAMs_20 20 17 05.1
comp=Z,683nm,18.0s
**PFO Pinyon Flats O 70.25 348** LR LR 20 16 16.1
comp=Z,386nm,21.0s,baz=178,slow=30
**PFO Pinyon Flats O 70.25 348** *i* P **P** 19 52 49.6 +2.0
PFO pmax pmax
comp=Z,6.0nm,1.1s
**AMTX Amarillo 70.27 1** P **P** 19 52 47.5 -0.3
AMTX IAmb IAmb 19 53 01.5
comp=Z,22nm,1.2s
**X18A Snowflake 70.27 353** P **P** 19 52 48.4 +0.5
X18A IAmb IAmb 19 52 55.6
comp=Z,29nm,1.4s
**MIAR Mount Ida 70.42 8** IAmb IAmb 19 53 02.0
comp=Z,22nm,1.6s
**ANMO Albuquerque 70.44 356** P **P** 19 52 50.0 +1.2
**ANMO Albuquerque 70.44 356** LR LR 20 18 29.9
comp=Z,501nm,19.8s,baz=262,slow=31
**ANMO Albuquerque 70.44 356** *i* P **P** 19 52 49.1 +0.2
ANMO pmax pmax
comp=Z,3.0nm,1.3s
**SMWD Sannorwood 70.52 2** IAmb IAmb 19 52 59.8
comp=Z,24nm,1.3s
**Y49A Blount Mountai 70.84 14** IAMs_20 IAMs_20 20 18 45.0
comp=Z,611nm,21.0s
**GOGA Godfrey 71.04 17** P **P** 19 52 52.1 -0.1
**GOGA Godfrey 71.04 17** P **P** 19 52 52.2 -0.1
GOGA pmax pmax
comp=Z,13nm,1.2s
**X48A Hartselle 71.29 13** IAmb IAmb 19 53 05.1
comp=Z,13nm,1.0s
**W13A Hualapai Mount 71.30 350** IAMs_20 IAMs_20 20 17 41.5
comp=Z,546nm,19.0s
**WHAR Wooly Hollow 71.30 9** IAmb IAmb 19 53 28.3
comp=Z,31nm,1.5s
**WUAZ Wupatki 71.40 352** IAmb IAmb 19 53 02.2
comp=Z,15nm,1.2s
**DEOK Depew 71.44 5** IAmb IAmb 19 53 31.2
comp=Z,25nm,1.1s
**MSVF Nonsavu 71.55 261** P **P** 19 52 56.9 +0.9
comp=Z,9.9nm,1.0s,baz=157,slow=9.9,SNR=3.2
MSVF LR LR 20 17 03.7
comp=Z,554nm,21.4s,baz=109,slow=30
comp=Z,9.9nm,1.0s
**MSVF Nonsavu 71.55 261** *i* P **P** 19 52 56.3 +0.3
MSVF pmax pmax
comp=Z,19nm,1.0s
**PLAL Pickwick Lake 71.62 12** IAMs_20 IAMs_20 20 19 38.8
comp=Z,592nm,22.0s
**FPAL Fort Paine 71.66 15** IAmb IAmb 19 53 06.1
comp=Z,32nm,1.7s
**X51A Calhoun 71.84 15** IAmb IAmb 19 53 00.2
comp=Z,38nm,1.5s
**GSC Goldstone, Bar 71.96 348** IAmb IAmb 19 53 05.5
comp=Z,18nm,1.2s
**HHAR Hobbs 72.09 7** IAmb IAmb 19 53 11.9
comp=Z,15nm,1.1s
**U15A North Rim 72.40 352** IAmb IAmb 19 53 08.3

comp=Z,27nm,1.5s
**Y58A Scranton 72.48 20** IAMs_20 IAMs_20 20 21 53.3
comp=Z,624nm,18.0s
**ISA Isabella, Lake 72.61 346** IAmb IAmb 19 53 09.5
comp=Z,17nm,1.3s
**WVT Waverly 72.78 12** P **P** **19 53 01.0 -1.7**
**WVT Waverly 72.78 12** IAMs_20 IAMs_20 20 19 50.5
comp=Z,708nm,22.0s
**WVT Waverly 72.78 12** P **P** **19 53 01.0 -1.7**
WVT pmax pmax
comp=Z,49nm,1.7s
WVT MLR MLR
comp=Z,700nm,22.0s
**MVCO Mesa Verde 72.81 355** IAmb IAmb 19 53 14.6
comp=Z,22nm,0.9s
**BIRD Birdtown, Kers 72.96 19** IAMs_20 IAMs_20 20 20 53.2
comp=Z,568nm,20.0s
**CLTN Cedars of Leba 73.02 14** IAmb IAmb 19 53 14.2
comp=Z,28nm,1.7s
CLTN IAMs_20 IAMs_20 20 20 04.7
comp=Z,602nm,21.0s
**KNB Kanab 73.05 351** IAmb IAmb 19 53 11.9
comp=Z,22nm,1.3s
KNB IAMs_20 IAMs_20 20 18 54.8
comp=Z,589nm,18.0s
**LCMT Little Creek M 73.09 351** IAMs_20 IAMs_20 20 19 36.1
comp=Z,593nm,19.0s
**TKL Tuckaleechee C 73.13 16** LR LR 20 21 50.3
comp=Z,280nm,20.3s,baz=192,slow=33
**X58A Rowland 73.18 20** IAMs_20 IAMs_20 20 22 30.9
comp=Z,645nm,18.0s
**SDCO Great Sand Dun 73.18 357** IAMs_20 IAMs_20 20 19 47.3
comp=Z,512nm,19.0s
**PKCU Pink Cliffs 73.41 352** IAmb IAmb 19 53 14.7
comp=Z,31nm,1.2s
PKCU IAMs_20 IAMs_20 20 19 08.3
comp=Z,567nm,20.0s
**W57A Gilead 73.56 19** IAMs_20 IAMs_20 20 21 29.1
comp=Z,732nm,20.0s
**CCUT Cedar City 73.64 351** IAmb IAmb 19 53 15.8
comp=Z,22nm,1.1s
CCUT IAMs_20 IAMs_20 20 19 37.5
comp=Z,622nm,18.0s
**PRN Pahroc Range 73.73 350** IAMs_20 IAMs_20 20 19 22.0
comp=Z,540nm,18.0s
**T47A Sharon Grove 73.75 13** IAMs_20 IAMs_20 20 20 41.0
comp=Z,620nm,22.0s
**MTPU Mount Pierson 73.98 352** IAMs_20 IAMs_20 20 19 37.5
comp=Z,603nm,19.0s
**S11A Rachel 74.07 349** IAMs_20 IAMs_20 20 19 53.0
comp=Z,598nm,18.0s
**CCM Cathedral Cave 74.16 9** P **P** **19 53 11.2 +0.5**
**CCM Cathedral Cave 74.16 9** P **P** **19 53 11.2 +0.5**
CCM pmax pmax
comp=Z,49nm,1.5s
**DSP Deep Springs 74.18 347** IAmb IAmb 19 53 18.7
comp=Z,25nm,1.3s
**T50A Nancy 74.21 15** IAMs_20 IAMs_20 20 32 04.3
comp=Z,749nm,18.0s
**TCRU Three Creeks R 74.57 352** IAMs_20 IAMs_20 20 20 13.2
comp=Z,728nm,19.0s
**U56A King 74.59 18** IAMs_20 IAMs_20 20 21 54.3
comp=Z,729nm,21.0s
**USIN University of 74.60 12** IAMs_20 IAMs_20 20 20 47.6
comp=Z,770nm,22.0s
**OMMB Old Mammoth Mi 74.61 346** IAMs_20 IAMs_20 20 18 44.2
comp=Z,487nm,19.0s
**PSUT Pine Spring 74.67 351** IAMs_20 IAMs_20 20 20 01.8
comp=Z,540nm,19.0s
**SMCO Snowmass 74.68 356** IAmb IAmb 19 53 31.8
comp=Z,17nm,1.1s
**SRU San Rafael Swe 74.87 353** IAmb IAmb 19 53 21.9
comp=Z,32nm,1.5s
SRU IAMs_20 IAMs_20 20 22 52.0
comp=Z,523nm,18.0s
**CASY Casey 75.19 193** P **P** **19 53 17.2 +0.7**
**P17A Butcher Ranch, 75.25 353** P **P** **19 53 18.1 +0.9**
P17A IAmb IAmb 19 53 24.1
comp=Z,19nm,1.2s
**NVAR Mina Array Bea 75.27 347** **P** **19 53 19.3 +1.9**
**NVAR Mina Array Bea 75.27 347** P **P** **19 53 19.6 +2.1**
comp=Z,9.8nm,0.9s,baz=176,slow=7.4,SNR=45
comp=Z,9.8nm,0.9s
**CMB Columbia Colle 75.29 345** IAMs_20 IAMs_20 20 18 46.3
comp=Z,705nm,21.0s
**Q44A Meyer Farm, Va 75.30 11** P **P** **19 53 18.4 +1.0**
**WAKR Walker 75.55 346** IAmb IAmb 19 53 57.7
comp=Z,46nm,1.9s
WAKR IAMs_20 IAMs_20 20 19 02.2
comp=Z,714nm,22.0s
**KVN Kaiserville 75.83 347** IAmb IAmb 19 53 28.0
comp=Z,22nm,1.1s
**NLU North Lily Min 75.86 352** IAmb IAmb 19 53 28.4
comp=Z,16nm,1.1s
**BLO Bloomington 75.98 13** IAMs_20 IAMs_20 20 21 48.0
comp=Z,521nm,20.0s
**YERR Yerington 75.98 347** IAMs_20 IAMs_20 20 19 30.6
comp=Z,494nm,20.0s
**PNTR Pine Nut 76.15 346** IAmb IAmb 19 53 55.1
comp=Z,16nm,1.1s
PNTR IAMs_20 IAMs_20 20 19 04.0
comp=Z,676nm,22.0s
**SSFO Shawnee State 76.17 15** IAmb IAmb 19 53 32.6
comp=Z,23nm,1.0s
**DUG Dugway, Tooele 76.18 352** IAmb IAmb 19 53 30.0
comp=Z,22nm,1.4s
DUG IAMs_20 IAMs_20 20 21 05.7
comp=Z,702nm,19.0s
**AFDM Forest Hills D 76.29 345** IAmb IAmb 19 53 30.3
comp=Z,19nm,1.2s
AFDM IAMs_20 IAMs_20 20 19 05.7
comp=Z,612nm,20.0s
**P46A Rosedale 76.29 12** IAMs_20 IAMs_20 20 22 11.3
comp=Z,555nm,20.0s
**N23A Red Feather La 76.34 357** IAmb IAmb 19 53 40.8
comp=Z,18nm,1.3s
**MAW Mawson 76.36 174** P **P** **19 53 22.4 -0.8**
comp=Z,7.5nm,0.9s,baz=197,slow=6.2,SNR=6.5
comp=Z,7.5nm,0.9s
**R55A Marlinton 76.49 18** IAMs_20 IAMs_20 20 23 15.6
comp=Z,506nm,21.0s
**PAHR Pah Rah Range 76.71 347** IAMs_20 IAMs_20 20 19 43.9
comp=Z,643nm,21.0s
**R58B Mineral 76.78 20** IAMs_20 IAMs_20 20 22 08.2
comp=Z,880nm,21.0s
**BGU Big Grassy Mou 76.93 352** IAMs_20 IAMs_20 20 21 11.4
comp=Z,502nm,20.0s
**BMN Battle Mountai 77.03 348** IAmb IAmb 19 53 34.5
comp=Z,33nm,1.4s
**SFIN Lafayette 77.05 12** IAMs_20 IAMs_20 20 22 46.5
comp=Z,596nm,22.0s
**RWWY Rawlins 77.19 356** IAMs_20 IAMs_20 20 22 12.4
comp=Z,671nm,20.0s
**SPUT South Promonto 77.24 352** IAMs_20 IAMs_20 20 22 08.8
comp=Z,683nm,18.0s
**HWUT Hardware Ranch 77.44 353** IAMs_20 IAMs_20 20 21 55.1
comp=Z,524nm,19.0s
**HVU Hansel Valley 77.74 352** IAMs_20 IAMs_20 20 23 05.0
comp=Z,500nm,18.0s
**N47A Urbana 77.78 13** IAMs_20 IAMs_20 20 28 06.8
comp=Z,511nm,18.0s
**R61A Willards 77.84 21** IAMs_20 IAMs_20 20 22 44.4
comp=Z,802nm,21.0s
**P57A Homestead Farm 78.17 19** IAMs_20 IAMs_20 20 23 03.9
comp=Z,824nm,21.0s
**HATC Hat Creek Radi 78.19 345** IAMs_20 IAMs_20 20 20 16.0
comp=Z,881nm,21.0s
**HQIL Hanson Quary C 78.32 11** IAMs_20 IAMs_20 20 22 05.9
comp=Z,550nm,22.0s
**DZM Mont Dzumac 78.36 251** *e*S **S** **20 03 32.2 +1.0**
comp=Z,429nm,24.6s
**DZM Mont Dzumac 78.36 251** P **P** **19 53 34.9 -0.5**
comp=Z,2.5nm,0.7s,baz=120,slow=13,SNR=2.0
DZM LR LR 20 20 05.8
comp=Z,1μm,22.0s,baz=148,slow=30
comp=Z,2.5nm,0.7s
**SDMD Soldier's Deli 78.42 20** IAMs_20 IAMs_20 20 24 15.5
comp=Z,486nm,20.0s
**PDAR Pinedale Array 78.42 355** P **P** **19 53 36.2 +1.0**
comp=Z,9.1nm,0.8s,baz=162,slow=6.2,SNR=27
PDAR LR LR 20 23 01.1
comp=Z,123nm,18.8s,baz=152,slow=32
comp=Z,9.1nm,0.8s
**L44A Lake County Fo 78.68 11** IAMs_20 IAMs_20 20 26 10.5
comp=Z,531nm,22.0s
**L46A Eue Claire 78.78 12** IAMs_20 IAMs_20 20 23 26.2
comp=Z,583nm,21.0s
**P61A Hammonton 79.25 21** IAMs_20 IAMs_20 20 24 00.6
comp=Z,869nm,21.0s
**WUPA West Chester U 79.25 21** IAMs_20 IAMs_20 20 22 56.6
comp=Z,566nm,22.0s
**TPAW Teton Pass 79.25 354** IAmb IAmb 19 54 13.0
comp=Z,32nm,1.4s
**SSPA Standing Stone 79.28 19** P **P** **19 53 39.1 -0.5**
SSPA IAmb IAmb 19 53 49.9
comp=Z,27nm,1.3s
**ECSD EROS Data Cent 79.28 4** IAmb IAmb 19 53 46.2
comp=Z,47nm,1.8s
**RSSD Black Hills 79.51 359** P **P** **19 53 41.4 +0.3**
**RSSD Black Hills 79.51 359** P **P** **19 53 41.4 +0.3**
RSSD pmax pmax
comp=Z,11nm,1.0s
**IMW Indian Meadow 79.65 354** IAmb IAmb 19 53 48.9
comp=Z,22nm,1.4s
IMW IAMs_20 IAMs_20 20 24 22.5
comp=Z,449nm,19.0s
**HLID Hailey 79.70 351** IAmb IAmb 19 53 59.1
comp=Z,23nm,0.9s
**I37A Lemond, Waseca 79.81 7** IAmb IAmb 19 53 53.7
comp=Z,29nm,1.0s
**L02F Cave Junction 79.89 344** IAmb IAmb 19 53 50.1
comp=Z,18nm,1.0s
**YPP Pitchstone Pla 80.01 354** IAMs_20 IAMs_20 20 24 47.1
comp=Z,546nm,18.0s
**J08A Circle Bar Ran 80.09 348** IAmb IAmb 19 53 51.6
comp=Z,33nm,1.2s
**I42A Draeger Farm, 80.21 10** IAmb IAmb 19 54 03.0
comp=Z,33nm,1.2s
**HUMO Hull Mountain 80.22 345** IAMs_20 IAMs_20 20 21 08.8
comp=Z,554nm,18.0s
**LKWY Lake 80.27 354** IAMs_20 IAMs_20 20 24 07.9
comp=Z,544nm,18.0s
**YMR Madison River 80.42 354** IAMs_20 IAMs_20 20 24 28.9
comp=Z,474nm,20.0s
**YNR Nois Junctio 80.44 354** IAMs_20 IAMs_20 20 24 12.5
comp=Z,531nm,19.0s
**J05D Fort Rock, OR 80.52 346** IAmb IAmb 19 53 53.9
comp=Z,26nm,1.1s
**ODNJ Ogdensburg 80.60 21** IAMs_20 IAMs_20 20 24 21.4
comp=Z,572nm,22.0s
**YHL Hebgen Lake 80.62 354** IAMs_20 IAMs_20 20 24 36.2
comp=Z,535nm,18.0s
**KSPA Keystone Colle 80.71 20** IAmb IAmb 19 53 57.4
comp=Z,27nm,1.6s
**RLMT Red Lodge 80.74 355** IAmb IAmb 19 53 54.7
comp=Z,24nm,1.5s
RLMT IAMs_20 IAMs_20 20 24 35.3
comp=Z,562nm,18.0s
**WVNY West Valley, N 80.76 18** IAmb IAmb 19 53 57.5
comp=Z,24nm,1.0s
WVNY IAMs_20 IAMs_20 20 26 46.7
comp=Z,537nm,18.0s
**DBO Dodson Butte 80.77 345** IAmb IAmb 19 53 55.6
comp=Z,15nm,0.9s
**TRNY Table Rock, Ra 80.77 21** IAMs_20 IAMs_20 20 24 47.9
comp=Z,752nm,21.0s
**PINE Pine Mountain 80.95 346** IAmb IAmb 19 53 56.3
comp=Z,27nm,0.9s
**I07A Izee 80.97 348** IAmb IAmb 19 53 56.3
comp=Z,24nm,1.0s
I07A IAMs_20 IAMs_20 20 23 14.5
comp=Z,430nm,18.0s
**SPMN Marine on St. 81.06 7** IAmb IAmb 19 54 00.4
comp=Z,23nm,0.8s
**BINY Binghamton 81.25 20** IAMs_20 IAMs_20 20 24 15.5
comp=Z,854nm,22.0s
**DLMT Dillon 81.27 353** IAMs_20 IAMs_20 20 24 21.3
comp=Z,513nm,19.0s
**BOZ Bozeman (W) 81.40 353** IAMs_20 IAMs_20 20 26 02.9
comp=Z,534nm,19.0s
**L59A Walton 81.50 20** IAMs_20 IAMs_20 20 24 29.2
comp=Z,651nm,22.0s
**J54A Appleton 81.57 17** IAMs_20 IAMs_20 20 27 31.1
comp=Z,487nm,18.0s
**K57A Scipio Center 81.60 19** IAMs_20 IAMs_20 20 25 25.9
comp=Z,754nm,20.0s
**J55A Hilton 81.77 18** IAMs_20 IAMs_20 20 25 10.3
comp=Z,698nm,22.0s
**GLMI Grayling 81.80 13** IAMs_20 IAMs_20 20 27 37.1
comp=Z,435nm,19.0s
**G08A Pilot Rock 82.05 348** IAmb IAmb 19 54 11.1
comp=Z,13nm,1.1s
G08A IAMs_20 IAMs_20 20 24 45.1
comp=Z,568nm,18.0s
**H04A Detroit Lake 82.05 346** IAMs_20 IAMs_20 20 22 35.2
comp=Z,600nm,21.0s
**LAO LASA Array 82.14 357** IAmb IAmb 19 54 20.2
comp=Z,24nm,1.1s
**F42A Maple Grove Fa 82.15 10** IAMs_20 IAMs_20 20 26 00.3
comp=Z,585nm,22.0s
**M65A Busby, Falmout 82.26 23** IAMs_20 IAMs_20 20 27 30.2
comp=Z,516nm,19.0s
**COWI Conover 82.35 9** IAMs_20 IAMs_20 20 31 34.6
comp=Z,483nm,19.0s
**J57A Williamstown 82.37 19** IAMs_20 IAMs_20 20 24 41.2
comp=Z,746nm,22.0s
**TRY Troy 82.39 21** IAMs_20 IAMs_20 20 25 14.8
comp=Z,771nm,21.0s
**L61B Northampton 82.43 22** IAMs_20 IAMs_20 20 25 01.7
comp=Z,786nm,22.0s
**F10A Beach Ranch, E 82.44 350** IAmb IAmb 19 54 06.5
comp=Z,12nm,1.0s
**J58A Remsen 82.52 20** IAMs_20 IAMs_20 20 28 08.1
comp=Z,610nm,18.0s
**L64A Middleborough 82.53 23** IAMs_20 IAMs_20 20 28 22.5
comp=Z,609nm,18.0s
**HOOD Mount Hood Mea 82.56 346** IAMs_20 IAMs_20 20 23 07.7
comp=Z,674nm,21.0s
**F07A Phny Hill Vi 82.80 348** IAMs_20 IAMs_20 20 23 11.0
comp=Z,593nm,22.0s
**J59A Piesco 82.83 20** IAMs_20 IAMs_20 20 26 18.3
comp=Z,604nm,21.0s
**SADO Sadowa 82.87 16** IAmb IAmb 19 54 08.1
comp=Z,15nm,0.9s
**SADO Sadowa 82.87 16** LR LR 20 27 35.2
comp=Z,554nm,19.3s,baz=171,slow=33
**HAWA Hanford 83.22 348** IAmb IAmb 19 54 07.8
comp=Z,23nm,1.1s
HAWA IAMs_20 IAMs_20 20 23 38.0
comp=Z,538nm,19.0s
**MDND Maddock 83.26 2** IAMs_20 IAMs_20 20 33 50.9
comp=Z,475nm,19.0s
**NCB Newcomb 83.37 20** IAMs_20 IAMs_20 20 26 32.8
comp=Z,764nm,21.0s
**E07A Sunnyside 83.43 348** IAMs_20 IAMs_20 20 24 01.7
comp=Z,734nm,20.0s
**EGMT Eagleton 83.66 355** IAMs_20 IAMs_20 20 26 24.6
comp=Z,625nm,19.0s
**HNH Hanover 83.69 21** IAMs_20 IAMs_20 20 25 15.1
comp=Z,836nm,22.0s
**D08A Wollman Farm, 83.76 349** IAmb IAmb 19 54 09.7
comp=Z,11nm,1.0s
**LONY Lake Ozonia 83.87 20** IAMs_20 IAMs_20 20 27 02.0
comp=Z,526nm,20.0s
**EYMN Ely 83.89 7** IAmb IAmb 19 54 14.4
comp=Z,18nm,1.2s
**LON Longmire 83.97 347** IAMs_20 IAMs_20 20 23 20.9
comp=Z,552nm,22.0s
**WBO Williamsburg 84.04 19** IAmb IAmb 19 54 14.2
comp=Z,21nm,1.2s
**LBNH Lisbon 84.28 21** IAMs_20 IAMs_20 20 25 44.8
comp=Z,726nm,22.0s
**NEW Newport 84.67 350** IAmb IAmb 19 54 14.9
comp=Z,22nm,1.1s
**H62A Milan 84.82 22** IAMs_20 IAMs_20 20 27 58.0
comp=Z,668nm,20.0s
**GNW Green Mountain 84.94 346** IAmb IAmb 19 54 26.6
comp=Z,27nm,1.6s
**MNTQ Montreal, Queb 84.95 20** IAMs_20 IAMs_20 20 27 30.5
comp=Z,763nm,21.0s
**B08A Colville Reser 85.09 349** IAMs_20 IAMs_20 20 24 36.6
comp=Z,604nm,20.0s
**TRQ Mont Tremblant 85.36 19** IAMs_20 IAMs_20 20 30 20.3
comp=Z,514nm,22.0s
**ULM Lac du Bonnet 85.82 4** P **P** **19 54 13.8 +0.3**
comp=Z,2.9nm,0.7s,baz=225,slow=2.9,SNR=2.5
comp=Z,2.9nm,0.7s
**PKME Peaks-Kenny Pk 86.02 23** IAMs_20 IAMs_20 20 27 40.7
comp=Z,721nm,22.0s
**EMMW East Machias 86.11 24** IAMs_20 IAMs_20 20 27 16.3
comp=Z,518nm,19.0s
**CLRS Cowichan Lake 86.40 346** IAMs_20 IAMs_20 20 25 22.2
comp=Z,489nm,19.0s
**VLDQ Val d'Or 86.41 16** IAMs_20 IAMs_20 20 28 20.2
comp=Z,598nm,20.0s
**F63A Nahmakanta, Br 86.47 23** IAmb IAmb 19 54 26.2
comp=Z,15nm,0.9s
F63A IAMs_20 IAMs_20 20 27 53.6
comp=Z,612nm,21.0s
**F64A Sherman 86.85 23** IAMs_20 IAMs_20 20 27 10.7
comp=Z,627nm,21.0s
**PQI Presque Isle 87.67 23** IAMs_20 IAMs_20 20 31 08.5
comp=Z,609nm,19.0s
**LMQ La Malbaie 87.75 21** IAMs_20 IAMs_20 20 29 40.7
comp=Z,601nm,20.0s
**LDAQ Lac Daran 87.87 20** IAMs_20 IAMs_20 20 28 23.6
comp=Z,627nm,20.0s
**LMN Caledonia Moun 88.02 25** IAMs_20 IAMs_20 20 27 24.7
comp=Z,584nm,22.0s
**BATG Bathurst New B 88.84 24** IAmb IAmb 19 54 37.4
comp=Z,12nm,0.9s
**STKA Stephens Creek 89.88 230** P **P** **19 54 31.7 -2.1**
comp=Z,2.7nm,0.9s,baz=124,slow=7.3,SNR=3.0
STKA LR LR 20 26 35.9
comp=Z,1μm,21.6s,baz=135,slow=30
comp=Z,2.7nm,0.9s
**HNR Honiara 90.72 258** LR LR 20 29 33.6
comp=Z,2μm,19.1s,baz=142,slow=32
**SUR Sutherland 93.83 135** LR LR 20 29 50.7
comp=Z,373nm,20.9s,baz=218,slow=31
**CTA Charters Tower 94.59 241** LR LR 20 30 31.7
comp=Z,42nm,21.5s,baz=126,slow=31
**BBTS Babate 95.12 76** LR LR 20 34 23.0
comp=Z,317nm,19.9s,baz=126,slow=33
**SCHQ Schefferville 95.25 20** LR LR 20 34 24.6
comp=Z,476nm,19.1s,baz=224,slow=33
**BOSA Boshof 99.18 135** LR LR 20 35 14.4
comp=Z,450nm,19.3s,baz=218,slow=33
**DBIC Dimbokro 99.96 89** LR LR 20 36 50.7
comp=Z,347nm,20.0s,baz=224,slow=33
**ASAR Alice Springs 100.48 231** P **Pdif** **19 55 19.4 -2.8**
comp=Z,1.0nm,0.8s,baz=128,slow=4.3,SNR=6.5
**PMG Port Moresby 100.73 250** *i* P **Pdif** **19 55 23.4 0.0**
PMG pmax pmax
comp=Z,15nm,1.1s
**H01W1 Cape Leeuwin H 101.89 210** T T 21 49 49.9
baz=150,slow=76,SNR=61
**H01W2 Cape Leeuwin H 101.89 210** T T 21 49 50.3
baz=150,slow=76,SNR=44
**H01W3 Cape Leeuwin H 101.91 210** T T 21 49 51.1
baz=150,slow=76,SNR=48
**GHO Glory Hole Cre 104.22 339** IAMs_20 IAMs_20 20 31 38.9
comp=Z,474nm,19.0s
**TORD Torodi Ar. Bea 108.91 87** PP **PP** **20 00 27.9 -3.9**
comp=Z,1.3nm,1.0s,baz=256,slow=5.8,SNR=3.2
**AVE Averroes 112.14 64** IAMs_20 IAMs_20 20 43 15.2
comp=Z,407nm,20.0s
**SFS San Fernando 114.50 62** IAMs_20 IAMs_20 20 37 50.7
comp=Z,365nm,19.0s
**PESTR Estremoz 114.61 59** IAMs_20 IAMs_20 20 41 47.6
comp=Z,448nm,21.0s
**PAB San Pablo 117.18 59** IAMs_20 IAMs_20 20 43 26.4
comp=Z,358nm,20.0s
**ESDC Sonseca Array 117.50 59** PKP **PKiKP** **20 00 22.4 +2.1**
comp=Z,0.3nm,0.7s,baz=244,slow=1.9,SNR=1.9
ESDC PP **PP** **20 01 32.7 -0.1**
comp=Z,2.0nm,1.2s,baz=240,slow=5.6,SNR=5.4
**BILL Bilibino 123.10 333** IAMs_20 IAMs_20 20 45 42.7
comp=Z,361nm,20.0s
**BILL Bilibino 123.10 333**↑ *e*PKiKP **PKiKP** **20 00 31.7 +1.4**
BILL *e* 20 02 14.2
BILL *e*PPP PPP 20 04 50.2
BILL pmax pmax
comp=Z,2.0nm,1.1s
**SSB Saint Sauveur 125.39 56** IAMs_20 IAMs_20 20 46 42.5
comp=Z,428nm,22.0s
**TOLI2 Tolitoli 127.19 239** IAMs_20 IAMs_20 20 52 05.1
comp=Z,287nm,19.0s
**WLF Walferdange 127.60 51** IAMs_20 IAMs_20 20 51 45.7
comp=Z,261nm,20.0s
**SEY Seymchan 127.95 326** *c* *i* PKiKP **PKiKP** **20 00 41.6 +1.6**
SEY pmax pmax
comp=Z,9.0nm,1.7s
**LODK Lodwar 129.45 120** IAMs_20 IAMs_20 20 48 47.5
comp=Z,380nm,21.0s
**KBS Kingsbay 129.45 13** IAMs_20 IAMs_20 20 53 49.8
comp=Z,406nm,22.0s
**DAVA Damuels 129.48 55** *e*PKP **PKPdf** **20 00 43.2 +0.1**
comp=Z,3.8nm,1.3s
**FETA Feichten 129.99 55** *e*PKP **PKPdf** **20 00 44.2 +0.1**
comp=Z,5.5nm,1.8s
**RETA Reutte 130.11 55** *e* *p*PKiKP **PKiKP** **20 00 48.9 +3.9**
comp=Z,3.0nm,1.0s
**MOTA Moosalm 130.31 55** *e*PKiKP **PKiKP** **20 00 46.8 +1.3**
comp=Z,6.5nm,1.2s
**SQTA Sankt Quirin 130.35 55** *e*PKiKP **PKiKP** **20 00 46.1 +0.6**
comp=Z,4.5nm,1.1s
**WATA Walderalm 130.62 55** *e*PKiKP **PKiKP** **20 00 47.6 +1.5**
comp=Z,4.4nm,1.5s
**WTTA Wattenberg 130.64 55** *e*PKiKP **PKPdf** **20 00 46.6 +1.2**
comp=Z,8.4nm,1.4s
**GRFO Grafenberg 130.83 52** IAMs_20 IAMs_20 20 54 57.2
comp=Z,210nm,20.0s
**GRA1 Grafenberg Arr 130.83 52** IAMs_20 IAMs_20 20 54 48.2
comp=Z,212nm,20.0s
**ABTA Abfaltersbach 131.13 56** *e*PKP **PKPdf** **20 00 46.2 0.0**
comp=Z,3.8nm,1.3s
**YSS Yuzh-Sakhalins 131.15 304** IAMs_20 IAMs_20 20 49 20.6
comp=Z,222nm,20.0s
**CEL Celeste 131.45 68** IAMs_20 IAMs_20 20 55 17.7
comp=Z,250nm,19.0s
**SABO M.te Sabotino 131.71 57** IAMs_20 IAMs_20 20 53 26.6
comp=Z,549nm,20.0s
**KBA Koelnbreinsper 131.75 56** PKiKP **PKiKP** **20 00 49.8 +1.3**
comp=Z,3.5nm,1.1s
**CUC Castrocucco 131.88 65** IAMs_20 IAMs_20 20 55 53.0
comp=Z,248nm,20.0s
**BIOA Bad Ischl, Aus 132.06 55** *e*PKiKP **PKiKP** **20 00 49.5 +0.6**
comp=Z,0.7nm,0.4s
**CLL Collm 132.19 50** IAMs_20 IAMs_20 20 57 35.2
comp=Z,229nm,20.0s
**CLL Collm 132.19 50** *e*SS SS 20 20 36.0 -13
CLL *e*SSS SSS 20 25 30.0
**KHC Kasperske Hory 132.26 53** AMS AMS 20 52 30.0
comp=Z,300nm,20.7s
**GERES CERESS Array B 132.29 53** PKP **PKiKP** **20 00 49.9 +0.6**
comp=Z,0.5nm,0.6s,baz=215,slow=6.3,SNR=5.0
**TIP Timpagrande 132.36 67** IAMs_20 IAMs_20 20 56 00.8
comp=Z,340nm,21.0s
**OBKA Obir 132.46 57** PKP **PKPdf** **20 00 47.6 -1.1**
comp=Z,2.4nm,1.2s
**MOA Molln 132.50 55** *e*PKP **PKPdf** **20 00 47.1 -1.6**
comp=Z,4.6nm,1.8s
**CKRC Cesky Krumlov 132.69 53** AMS AMS 20 55 10.0
comp=Z,300nm,21.9s
**PRA Prague 132.94 52** AMS AMS 20 58 50.0
comp=Z,200nm,19.9s
**PRU Pruhonice 133.00 52** AMS AMS 20 57 40.0
comp=Z,200nm,16.5s
**PVCC Panska Ves 133.08 51** AMS AMS 20 56 00.0
comp=Z,200nm,15.0s
**GOPC GO Pecny, Ondr 133.15 52** AMS AMS 20 55 20.0
comp=Z,200nm,21.7s
**TREC Trest 133.52 53** AMS AMS 20 57 20.0
comp=Z,300nm,19.9s
**SCTE Santa Cesarea 133.87 66** IAMs_20 IAMs_20 20 53 33.6
comp=Z,300nm,21.0s
**KKM Kota Kinabalu 133.88 239** IAMs_20 IAMs_20 20 56 46.4
comp=Z,322nm,21.0s
**UPC Upice 134.00 51** AMS AMS 20 55 10.0
comp=Z,300nm,26.5s
**OSTC Ostas 134.13 51** AMS AMS 20 59 30.0
comp=Z,200nm,19.5s
**DPC Dobruska-Polom 134.18 52** AMS AMS 20 58 50.0
comp=Z,300nm,22.0s
**KSM Kuching 134.37 229** IAMs_20 IAMs_20 20 52 01.5
comp=Z,361nm,21.0s
**KRLC Kraliky 134.44 52** AMS AMS 20 56 40.0
comp=Z,300nm,20.4s
**VLO Vlora 134.73 66** IAMs_20 IAMs_20 20 55 21.3
comp=Z,285nm,20.0s
**MORC Moravsky Berou 134.90 52** IAMs_20 IAMs_20 20 59 24.0
comp=Z,282nm,19.0s
**OKC Ostrava-Krasne 135.30 52** AMS AMS 20 57 20.0
comp=Z,200nm,17.3s
**TIXI Tiksi 135.48 339** IAMs_20 IAMs_20 21 01 38.1
comp=Z,239nm,21.0s
**TIXI Tiksi 135.48 339** *i* PKiKP **PKPdf** **20 00 54.2 +0.8**
**VYHS Vyhne 135.62 54** *e*PKiKP **PKiKP** **20 00 56.6 +0.6**
**VYHS Vyhne 135.62 54** *e*PKP **PKiKP** **20 00 56.6 +0.6**
**PSZ Piszkesteto 136.27 55** IAMs_20 IAMs_20 21 00 04.3
comp=Z,312nm,20.0s
**YAK Yakutsk 138.48 326** IAMs_20 IAMs_20 20 51 39.4
comp=Z,262nm,22.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **YAK** | **Yakutsk** | **138.48** | **326** | *c* iPKIKP | **PKPdf** | **20 01 00.7** | **+1.4** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| **KLR** | **Kul'dur** | **138.74** | **306** | *i* PKIKP | **PKPdf** | **20 01 00.5** | **+0.3** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **PABE** | **Paberze** | **138.82** | **44** | IAMs_20 | IAMs_20 | 20 57 25.9 | |
| | comp=Z,280nm,20.0s | | | | | | |
| **FINES** | **FINESS Array B** | **138.87** | **35** | PKP | **PKPdf** | **20 00 59.3** | **-0.7** |
| | comp=Z,2.2nm,0.9s,baz=254,slow=8.4,SNR=4.9 | | | | | | |
| **ALN** | **Alexandroupoli** | **139.69** | **67** | IAMs_20 | IAMs_20 | 20 59 04.7 | |
| | comp=Z,225nm,20.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **139.91** | **299** | PKP | **PKPdf** | **20 01 03.2** | **+0.8** |
| **KSRS** | **Korea Array** | **139.97** | **288** | PKP | **PKPdf** | **20 01 04.3** | **+1.6** |
| | comp=Z,2.1nm,0.9s,baz=106,slow=2.7,SNR=5.8 | | | | | | |
| **ATD** | **Arta Tunnel** | **140.39** | **119** | IAMs_20 | IAMs_20 | 21 00 15.3 | |
| | comp=Z,306nm,19.0s | | | | | | |
| **VALR** | **Valaam** | **141.10** | **34** | *i* PKIKP | **PKPdf** | **20 01 02.7** | **-1.3** |
| **BNX** | **BinXian** | **141.54** | **301** | PKP | **PKPdf** | **20 01 05.1** | **-0.2** |
| **HEH** | **HeiHe** | **141.54** | **308** | *e*PKP | **PKPdf** | **20 01 05.8** | **+0.6** |
| **KIEV** | **Kiev** | **142.40** | **51** | IAMs_20 | IAMs_20 | 20 59 39.4 | |
| | comp=Z,246nm,19.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **142.41** | **51** | PKP | **PKPdf** | **20 01 04.6** | **-2.1** |
| | comp=Z,0.8nm,0.5s,baz=273,slow=3.6,SNR=1.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.41** | **51** *c* | *i* PKIKP | **PKiKP** | **20 01 11.8** | **+2.0** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **AKBB** | **Malin Array Si** | **142.41** | **51** *c* | *i* PKIKP | **PKPdf** | **20 01 07.1** | **+0.4** |
| **CN2** | **Changchun** | **142.81** | **297** | *e*PKP | **PKPdf** | **20 01 04.8** | **-2.9** |
| CN2 | | | | *e*PP | **PP** | **20 04 18.5** | **+1.3** |
| CN2 | | | | *e*SS | SS | 20 22 51.5 | -3.6 |
| **ANTO** | **Ankara** | **144.63** | **70** | IAMs_20 | IAMs_20 | 21 02 48.5 | |
| | comp=Z,207nm,20.0s | | | | | | |
| **DL2** | **Dalian** | **145.12** | **289** | PKPbc | **PKPbc** | **20 01 12.3** | **+0.9** |
| **MMAI** | **Mount Meron Ar** | **145.24** | **82** | PKPbc | **PKPbc** | **20 01 12.7** | **+0.6** |
| | comp=Z,42nm,1.1s,baz=240,slow=4.8,SNR=12 | | | | | | |
| **BR131** | **Keskin Array S** | **145.25** | **70** | | **PKPbc** | **20 01 11.9** | **-0.2** |
| **BR131** | **Keskin Array S** | **145.25** | **70** | *i* PKIKP | **PKPbc** | **20 01 12.4** | **+0.4** |
| **BRTR** | **Keskin Array B** | **145.25** | **70** | | **PKPbc** | **20 01 11.6** | **-0.4** |
| **BRTR** | **Keskin Array B** | **145.25** | **70** | PKPbc | **PKPbc** | **20 01 11.9** | **-0.2** |
| | comp=Z,6.2nm,1.0s,baz=213,slow=2.2,SNR=24 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.25** | **70** | PKIKP | **PKPbc** | **20 01 11.6** | **-0.4** |
| **NJ2** | **Nanjing** | **145.76** | **276** | *e*PKPbc | **PKPdf** | **20 01 13.2** | **0.0** |
| **OBN** | **Obninsk** | **145.94** | **42** | PKPdf | **PKPbc** | **20 01 14.0** | **+0.5** |
| **OBN** | **Obninsk** | **145.94** | **42** ↑ | *i*PKP2 | **PKPdf** | **20 01 12.9** | **+0.2** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,137nm,1.7s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,417nm,22.0s | | | | | | |
| **MOS** | **Moscow** | **146.32** | **41** | *i* PKP2 | **PKPdf** | **20 01 14.7** | **+1.3** |
| MOS | | | | pmax | pmax | | |
| | comp=Z,70nm,1.5s | | | | | | |
| **HIA** | **Hailar** | **146.59** | **307** | IAMs_20 | IAMs_20 | 21 18 51.7 | |
| | comp=Z,188nm,21.0s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **148.01** | **46** | *e*PKP2 | **PKPbc** | **20 01 19.6** | **+0.2** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,60nm,1.4s | | | | | | |
| **VORR** | **Voronezh** | **148.43** | **48** | *e*PKP2 | **PKPab** | **20 01 24.5** | **+0.6** |
| VORR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **VSR** | **Storozhevoye** | **148.52** | **49** | *e*PKP2 | **PKPbc** | **20 01 20.1** | **-0.7** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **VORD** | **Divnogorie** | **148.66** | **49** | *e*PKP2 | **PKPbc** | **20 01 20.9** | **-0.3** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **148.79** | **72** | IAMs_20 | IAMs_20 | 21 09 28.0 | |
| | comp=Z,236nm,21.0s | | | | | | |
| **WHN** | **Wuhan** | **148.94** | **271** | PKPbc | **PKPab** | **20 01 29.3** | **+2.7** |
| **XLT** | **XiLinHaoTe** | **149.58** | **297** | *e*PKPbc | **PKPbc** | **20 01 24.0** | **+0.1** |
| XLT | | | | AMB | AMB | | |
| | comp=Z,100nm,6.4s | | | | | | |
| **RAYN** | **Ar Rayn** | **149.68** | **105** | IAMs_20 | IAMs_20 | 21 10 53.1 | |
| | comp=Z,280nm,20.0s | | | | | | |
| **SOC** | **Sochi** | **150.00** | **63** | *e*PKIKP | **PKPdf** | **20 01 19.2** | **-0.6** |
| SOC | | | | *e* | | 20 04 59.8 | |
| SOC | | | | *e*PPP | PPP | 20 08 17.1 | |
| SOC | | | | *e*SS | SS | 20 24 12.5 | -4.2 |
| SOC | | | | *e*SSS | SSS | 20 29 59.0 | |
| SOC | | | | MLR | MLR | | |
| | comp=Z,79nm,19.0s | | | | | | |
| **VRH** | **Novokhopyorsk** | **150.07** | **48** | *e*PKIKP | **PKPbc** | **20 01 23.9** | **-0.8** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,30nm,1.5s | | | | | | |
| **HNS** | **HongShan** | **150.29** | **284** | ⇓PKPbc | **PKPbc** | **20 01 26.4** | **+0.8** |
| **SHA1** | **Shidzhatmaz** | **152.12** | **63** *c* | *i* PKIKP | **PKiKP** | **20 01 31.2** | **+0.9** |
| **KIV** | **Kislovodsk** | **152.12** | **62** | *e*PKIKP | **PKPdf** | **20 01 24.2** | **+1.0** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,115nm,25.0s | | | | | | |
| **KBZ** | **Khabaz** | **152.29** | **63** | PKPbc | **PKiKP** | **20 01 32.4** | **+2.1** |
| | comp=Z,7.0nm,0.9s,baz=199,slow=2.9,SNR=9.0 | | | | | | |
| **KBZ** | **Khabaz** | **152.29** | **63** *c* | *i* PKIKP | **PKiKP** | **20 01 33.4** | **+3.1** |
| **HHC** | **Hu-ho-hao-te** | **152.99** | **291** | *e*PKPbc | **PKPdf** | **20 01 22.6** | **-2.0** |
| **GYA** | **Guiyang** | **153.54** | **258** | ⇓PKPbc | **PKPdf** | **20 01 25.1** | **-0.8** |
| GYA | | | | PP | **PP** | **20 05 21.0** | **+0.7** |
| GYA | | | | LR | LR | | |
| | comp=Z,200nm,3.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,340nm,4.2s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,120nm,4.7s | | | | | | |
| **GNI** | **Garni** | **153.79** | **70** *c* | *i* PKIKP | **PKiKP** | **20 01 37.7** | **+3.9** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **154.32** | **275** | PKPbc | **PKPab** | **20 01 51.9** | **+2.8** |
| **CMAR** | **Chiang Mai Arr** | **154.46** | **233** | PKPab | **PKPab** | **20 01 49.2** | **-0.7** |
| | comp=Z,1.3nm,0.5s,baz=184,slow=2.8,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **155.53** | **308** | PKP | PKPdf | 20 01 36.3 | +8.3 |
| | comp=Z,2.4nm,0.8s,baz=120,slow=1.0,SNR=8.9 | | | | | | |
| SONM | | | | PKPab | **PKPab** | **20 01 53.1** | **-0.8** |
| | comp=Z,3.0nm,0.9s,baz=117,slow=1.4,SNR=5.2 | | | | | | |
| **PZH** | **PanZhiHua** | **157.44** | **253** | PKP | **PKPdf** | **20 01 30.4** | **-0.7** |
| **LZH** | **Lanzhou** | **158.78** | **279** | PKP | **PKPdf** | **20 01 29.6** | **-2.9** |
| LZH | | | | pPKP | sPKPdf | 20 01 38.1 | +2.4 |
| **ZALV** | **Zalesovo Beam** | **161.12** | **347** | PKP | **PKPdf** | **20 01 33.9** | **-0.4** |
| | comp=Z,2.0nm,0.8s,baz=17,slow=1.5,SNR=6.5 | | | | | | |
| ZALV | | | | PKPab | **pPKPab** | **20 02 20.8** | **+0.9** |
| | comp=Z,1.6nm,0.8s,baz=352,slow=4.4,SNR=3.6 | | | | | | |
| **HYB** | **Hyderabad** | **161.72** | **183** | *e*PKPab | **PKPab** | **20 02 21.1** | **0.0** |
| HYB | | | | *e*PKPab | **pPKPab** | **20 02 21.4** | **-2.0** |
| HYB | | | | *e*PP | **PP** | **20 06 05.6** | **+2.1** |
| HYB | | | | *e*SKKSac | SKKSac | 20 12 53.2 | -0.1 |
| **GTA** | **Gaotai** | **162.04** | **288** | PKP | **PKPdf** | **20 01 38.8** | **+2.8** |
| GTA | | | | PP | **PP** | **20 06 10.3** | **+3.4** |
| GTA | | | | SS | SS | 20 26 30.9 | +3.7 |
| GTA | | | | LR | LR | | |
| | comp=Z,150nm,14.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,170nm,15.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,150nm,15.2s | | | | | | |
| **KURK** | **Kurchatov** | **165.02** | **358** | PKIKP | **PKPdf** | **20 01 37.4** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **165.12** | **358** | PKP | **PKPdf** | **20 01 37.4** | **-0.9** |
| | comp=Z,0.6nm,0.9s,baz=86,slow=1.1,SNR=4.0 | | | | | | |
| KURBB | | | | PKPab | **pPKPab** | **20 02 38.4** | **+0.9** |
| | comp=Z,1.6nm,0.8s,baz=1.4,slow=4.6,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **168.42** | **344** | PKPab | **PKPab** | **20 02 53.1** | **+3.2** |
| | comp=Z,1.2nm,0.8s,baz=350,slow=5.0,SNR=5.4 | | | | | | |
| **WMQ** | **Urumqi** | **168.83** | **319** | *e*PKP | **PKPdf** | **20 01 41.9** | **+0.5** |
| WMQ | | | | LR | LR | | |
| | comp=Z,980nm,24.7s | | | | | | |

*AEIC **12** 19:42:07.6±1.2,56°.12N±0°.07×149°.2W±0°.1, h8km±7km, Error ellipse: s-maj=11.5km s-min=7.1km az=143.0*

**NEIC 12 19:42:03.6±1.6, 56°.04N±0°.09×149°.2W±0°.1, h23km±10km, ML3.5/30, ML3.2(AEIC), Error ellipse: s-maj=13.8km s-min=9.1km az=176.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.54** | **300** | | Pn | 19 42 43.7 | +0.4 |
| OHAK | | | | | Sn | 19 43 11.5 | -1.9 |
| **KDAK** | **Kodiak Island** | **2.54** | **315** | | Pn | 19 42 43.6 | +0.3 |
| KDAK | | | | | Sn | 19 43 10.9 | -2.6 |
| **SYI** | **Shuyak Island** | **3.10** | **328** | | Pn | 19 42 51.1 | +0.1 |
| SYI | | | | | Sn | 19 43 25.4 | -1.9 |
| **SYI** | **Shuyak Island** | **3.10** | **328** | IAML | | 19 43 26.3 | |
| | comp=E,70nm,0.7s | | | | | | |
| **R18K** | **Karluk** | **3.26** | **300** | | Pn | 19 42 54.0 | +0.8 |
| R18K | | | | | Sn | 19 43 29.3 | -1.9 |
| **R18K** | **Karluk** | **3.26** | **300** | IAML | | 19 43 33.0 | |
| | comp=N,71nm,0.3s | | | | | | |
| R18K | | | | IAML | | 19 43 36.1 | |
| | comp=E,73nm,0.4s | | | | | | |
| **CHIR** | **Chirikof Islan** | **3.61** | **269** | | Pn | 19 42 58.3 | +0.3 |
| **CHIR** | **Chirikof Islan** | **3.61** | **269** | IAML | | 19 45 15.7 | |
| | comp=E,103nm,1.2s | | | | | | |
| CHIR | | | | IAML | | 19 45 21.6 | |
| | comp=N,123nm,1.2s | | | | | | |
| **CNPM** | **China Poot** | **3.66** | **344** | | Pn | 19 42 58.3 | -0.5 |
| CNPM | | | | | Sn | 19 43 37.8 | -3.3 |
| **Q19K** | **Cape Douglas,** | **3.75** | **322** | Pn | Pn | 19 42 59.9 | -0.1 |
| **BRSE** | **Bradley Lake S** | **3.80** | **348** | | Pn | 19 43 00.0 | -0.7 |
| **BRLK** | **Bradley Lake** | **3.84** | **347** | | Pn | 19 43 00.6 | -0.7 |
| **BRLK** | **Bradley Lake** | **3.84** | **347** | IAML | | 19 43 46.4 | |
| | comp=N,37nm,0.7s | | | | | | |
| BRLK | | | | IAML | | 19 45 35.5 | |
| | comp=E,73nm,0.1s | | | | | | |
| **HOM** | **Homer** | **3.85** | **341** | | Pn | 19 43 01.4 | 0.0 |
| **SEW** | **Seward** | **4.08** | **358** | | Pn | 19 43 03.4 | -1.1 |
| **P23K** | **Montague Islan** | **4.09** | **13** | | Pn | 19 43 03.7 | -0.9 |
| P23K | | | | | Sn | 19 43 47.9 | -3.7 |
| **P19K** | **Oil Pt** | **4.21** | **331** | Pn | Pn | 19 43 07.2 | +0.9 |
| P19K | | | | IAML | | 19 44 51.4 | |
| | comp=N,66nm,0.8s | | | | | | |
| **SLKM** | **Skilak Lake** | **4.51** | **354** | | Pn | 19 43 09.6 | -0.9 |
| SLKM | | | | | Sn | 19 43 57.7 | -4.5 |
| **HIN** | **Hinchinbrook I** | **4.60** | **17** | | Pn | 19 43 11.2 | -0.5 |
| **HIN** | **Hinchinbrook I** | **4.60** | **17** | IAML | | 19 44 28.8 | |
| | comp=N,42nm,1.0s | | | | | | |
| **KAIM** | **Kayak Island** | **4.66** | **31** | | Pn | 19 43 12.3 | -0.2 |
| **KAIM** | **Kayak Island** | **4.66** | **31** | IAML | | 19 44 17.1 | |
| | comp=E,49nm,1.1s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **4.88** | **21** | | Pn | 19 43 15.1 | -0.3 |
| **SUCK** | **Suckling Hills** | **4.97** | **33** | | Pn | 19 43 16.5 | -0.3 |
| **SUCK** | **Suckling Hills** | **4.97** | **33** | IAML | | 19 44 10.6 | |
| | comp=N,26nm,0.6s | | | | | | |
| SUCK | | | | IAML | | 19 44 31.7 | |
| | comp=E,28nm,1.2s | | | | | | |
| **GLI** | **Glacier Island** | **4.98** | **12** | | Pn | 19 43 16.4 | -0.5 |
| **GLI** | **Glacier Island** | **4.98** | **12** | IAML | | 19 44 29.7 | |
| | comp=E,25nm,1.1s | | | | | | |
| GLI | | | | IAML | | 19 45 00.8 | |
| | comp=N,34nm,1.0s | | | | | | |
| **NICHA** | **Nichawak Mount** | **5.05** | **31** | | Pn | 19 43 17.9 | +0.1 |
| **GRIN** | **Grindle Hills** | **5.28** | **34** | | Pn | 19 43 21.1 | +0.1 |
| **SNH** | **Sunshine Point** | **5.36** | **37** | | Pn | 19 43 22.0 | 0.0 |
| **SNH** | **Sunshine Point** | **5.36** | **37** | IAML | | 19 44 58.1 | |
| | comp=N,27nm,1.2s | | | | | | |
| SNH | | | | IAML | | 19 45 28.2 | |
| | comp=E,28nm,1.0s | | | | | | |
| **KNK** | **Knik Glacier** | **5.41** | **4** | Pn | Pn | 19 43 22.4 | -0.3 |
| **DIV** | **Divide** | **5.42** | **18** | | Pn | 19 43 22.7 | -0.3 |
| **BMRM** | **Bremner River** | **5.50** | **24** | | Pn | 19 43 24.0 | -0.1 |
| **WAX** | **Waxell Ridge** | **5.56** | **35** | | Pn | 19 43 24.8 | -0.1 |
| **PMR** | **Palmer** | **5.57** | **0** | Pn | Pn | 19 43 24.1 | -0.8 |
| **MESA** | **MESA** | **5.66** | **40** | Pn | Pn | 19 43 26.9 | +0.5 |
| **CRQM** | **Cirque** | **5.71** | **32** | Pn | Pn | 19 43 27.0 | -0.1 |
| **KLU** | **Klutina** | **5.73** | **16** | | Pn | 19 43 27.4 | +0.1 |
| **GHO** | **Glory Hole Cre** | **5.75** | **1** | Pn | Pn | 19 43 27.7 | +0.1 |
| **TGL** | **Tana Glacier** | **5.80** | **33** | Pn | Pn | 19 43 28.4 | +0.1 |
| **SML** | **Sawmill** | **5.80** | **4** | | Pn | 19 43 28.4 | +0.1 |
| **BAGL** | **Bagley Icefiel** | **5.84** | **37** | | Pn | 19 43 28.7 | +0.1 |
| **ISLE** | **Juniper Island** | **5.84** | **36** | Pn | Pn | 19 43 28.9 | +0.1 |
| **SCM** | **Sheep Creek Mo** | **5.89** | **9** | Pn | Pn | 19 43 29.9 | +0.4 |
| **KIAG** | **Kiagna River** | **6.08** | **33** | | Pn | 19 43 31.9 | -0.2 |
| **N25K** | **Chitina, Valde** | **6.08** | **21** | | Pn | 19 43 32.0 | 0.0 |
| **GLB** | **Gilahina Butte** | **6.11** | **25** | Pn | Pn | 19 43 32.3 | -0.1 |
| **GRNC** | **Granite Creek** | **6.13** | **37** | | Pn | 19 43 32.8 | -0.1 |
| **TABL** | **Table Mountain** | **6.14** | **41** | Pn | Pn | 19 43 33.4 | +0.4 |
| **MCARA** | **McCarthy VSAT** | **6.26** | **28** | Pn | Pn | 19 43 35.0 | +0.6 |
| **PCA** | **Pinnacle** | **6.26** | **46** | | Pn | 19 43 34.4 | -0.1 |
| **M24K** | **Tolsona, Glenn** | **6.29** | **13** | Pn | Pn | 19 43 36.4 | +1.5 |
| **PNL** | **Peninsula** | **6.38** | **51** | | Pn | 19 43 36.5 | +0.4 |
| **BCPM** | **Bancas Point** | **6.43** | **48** | | Pn | 19 43 37.4 | +0.6 |
| **CTGM** | **Chitina Glacie** | **6.44** | **37** | Pn | Pn | 19 43 37.1 | +0.1 |
| **LOGN** | **Logan Glacier** | **6.45** | **39** | Pn | Pn | 19 43 37.7 | +0.5 |
| **O28M** | **Mount Upton** | **6.71** | **41** | | Pn | 19 43 41.0 | +0.1 |
| **L19K** | **White Mountain** | **6.81** | **337** | Pn | Pn | 19 43 41.5 | -0.5 |
| **O29M** | **Mount Kennedy** | **7.07** | **48** | Pn | Pn | 19 43 46.4 | +0.8 |
| **P29M** | **Windy Craggy** | **7.11** | **55** | | Pn | 19 43 46.1 | 0.0 |
| **S31K** | **Pelican** | **7.35** | **69** | | Pn | 19 43 48.4 | -1.0 |
| **M27K** | **Edge Creek, AK** | **7.37** | **28** | Pn | Pn | 19 43 51.3 | +1.5 |
| **BPAW** | **Bear Paw Mtn.** | **8.13** | **355** | Pn | Pn | 19 43 59.8 | -0.4 |
| **S32K** | **Killisnoo** | **8.18** | **74** | Pn | Pn | 19 43 59.9 | -0.8 |
| **N30M** | **Aishikik Lake** | **8.32** | **44** | Pn | Pn | 19 44 03.0 | +0.3 |
| **M29M** | **Somme Creek** | **8.46** | **36** | Pn | Pn | 19 44 05.4 | +0.8 |
| **IL31** | | **8.84** | **7** | Pn | Pn | 19 44 11.1 | +1.4 |
| **WHY** | **Whitehorse** | **8.84** | **53** | Pn | Pn | 19 44 11.5 | +1.5 |
| **P32M** | **Atlin** | **9.01** | **60** | Pn | Pn | 19 44 12.6 | +0.5 |
| **U33K** | **Whale Pass** | **9.01** | **83** | Pn | Pn | 19 44 10.3 | -1.8 |
| **CRAG** | **Craig** | **9.10** | **87** | Pn | Pn | 19 44 12.9 | -0.4 |

**GCMT 12 19:42:15.0±0.3, 17°.37S±0°.02×176°.61W±0°.02, h13km±2km, MW5.0/91, Moment Tensor Solution. s16,c17; s91,c123; Duration: 0 Moment tensor: Scale $10^{16}$ Nm; $M_{rr}$0.04±.17; $M_{\theta\theta}$-3.37±.18; $M_{\phi\phi}$3.32±.17; $M_{r\theta}$-0.29±.41; $M_{\theta\phi}$1.79±.14; $M_{\phi r}$1.32±.47; Best double couple: $M_w$4.02300×$10^{16}$ NP1:$\phi_s$328.00000°, $\delta$85.00000°, $\lambda$162.00000°. NP2:$\phi_s$60.00000°, $\delta$72.00000°, $\lambda$5.00000°. Principal axes: T 4.1310, Plg17.0000°, Azm283.0000°; N -0.2190, Plg71.0000°, Azm133.0000°; P -3.9160, Plg9.0000°, Azm16.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **16.62** | **251** | *e*P | P | 19 46 11.2 | +0.8 |
| DZM | 69nm,21.5s | | | | | | |
| | | | | *e*S | S | 19 49 19.3 | -4.8 |
| DZM | 4μm,28.9s | | | | | | |
| | | | | *e*LR | LR | 19 50 22.2 | |
| **PPT2** | 1μm,24.2s **Papeete2** | **25.78** | **95** | *e*LR | LR | 19 53 49.1 | |
| PPT2 | 2μm,27.2s | | | | | | |
| | | | | *e*LR | LR | 19 53 50.9 | |
| **TBI** | 1μm,30.5s **Tubuai** | **26.11** | **108** | *e*LR | LR | 19 53 51.7 | |
| TBI | 2μm,31.5s | | | | | | |
| | | | | *e*LR | LR | 19 53 56.1 | |
| **RKT** | 9μm,28.5s **Rikitea** | **39.38** | **105** | *e*LR | LR | 20 00 05.6 | |
| | 6μm,27.2s | | | | | | |

*NEIC **12** 19:58:55.1±1.5, 69°.58N±0°.03×144°.55W±0°.07, h10km±2km Error ellipse: s-maj=6.1km s-min=3.8km az=336.0*

**AEIC 12 19:58:54.1±1.6, 69°.58N±0°.05×144°.58W±0°.08, h6km±6km, ML2.6, ML2.7/76(NEIC), Error ellipse: s-maj=6.8km s-min=4.0km az=187.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.31** | **81** | | Sg | 19 59 04.8 | +0.7 |
| **C27K** | **Jago River** | **0.31** | **81** | Pg | Pg | 19 58 59.9 | -0.1 |
| C27K | | | | IAML | | 19 59 06.7 | |
| | comp=E,632nm,0.4s | | | | | | |
| C27K | | | | IAML | | 19 59 07.1 | |
| | comp=N,749nm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.36** | **341** | | Pg | 19 59 00.9 | -0.1 |
| C26K | | | | | Sb | 19 59 07.5 | -1.2 |
| **C26K** | **Camden Bay** | **0.36** | **341** | IAML | | 19 59 08.6 | |
| | comp=N,277nm,0.8s | | | | | | |
| C26K | | | | IAML | | 19 59 10.4 | |
| | comp=E,290nm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.69** | **248** | Pg | Pg | 19 59 05.8 | -1.4 |
| **D27M** | **Malcolm River** | **1.32** | **103** | | Pn | 19 59 18.1 | -1.0 |
| D27M | | | | IAML | | 19 59 42.4 | |
| | comp=E,87nm,0.6s | | | | | | |
| D27M | | | | IAML | | 19 59 44.8 | |
| | comp=N,85nm,0.4s | | | | | | |
| **D27M** | **Malcolm River** | **1.32** | **103** | | Sn | 19 59 37.9 | +0.8 |
| **C24K** | **Franklin Bluff** | **1.45** | **277** | Pn | Pb | 19 59 21.5 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.45** | **277** | | Sg | 19 59 41.1 | +0.5 |
| **D24K** | **Happy Valley** | **1.56** | **256** | | Pn | 19 59 22.3 | -0.1 |
| **E27K** | **Coleen River** | **1.77** | **141** | | Pn | 19 59 25.8 | +0.5 |
| **E27K** | **Coleen River** | **1.77** | **141** | | Sb | 19 59 48.9 | -0.5 |
| **F26K** | **Sheenjek River** | **1.90** | **175** | Pn | Pb | 19 59 28.7 | -0.5 |
| F26K | | | | IAML | | 19 59 54.9 | |
| | comp=E,80nm,0.7s | | | | | | |
| F26K | | | | IAML | | 19 59 59.5 | |
| | comp=N,43nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.90** | **175** | | Sb | 19 59 53.0 | -0.2 |
| **TOLK** | **Toolik Lake Re** | **2.02** | **245** | | Pn | 19 59 29.8 | +1.0 |
| TOLK | | | | IAML | | 20 00 03.7 | |
| | comp=E,53nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 20 00 04.6 | |
| | comp=N,43nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **192** | Pn | Pn | 19 59 27.9 | -1.1 |
| F25K | | | | IAML | | 20 00 02.3 | |
| | comp=N,42nm,0.7s | | | | | | |
| F25K | | | | IAML | | 20 00 03.0 | |
| | comp=E,51nm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **2.06** | **116** | | Pn | 19 59 29.5 | +0.3 |
| **D28M** | **Stokes Point** | **2.08** | **94** | | Pn | 19 59 29.3 | -0.1 |
| **E24K** | **Your Creek** | **2.08** | **225** | | Pn | 19 59 30.5 | +1.0 |
| E24K | | | | IAML | | 20 00 04.3 | |
| | comp=E,36nm,0.6s | | | | | | |
| **C23K** | **Itkillik River** | **2.12** | **280** | | Pn | 19 59 30.6 | +0.5 |
| **BMAR** | **Burnt Mountain** | **2.16** | **180** | | Pn | 19 59 31.6 | +0.9 |
| **D23K** | **Nanushuk River** | **2.26** | **257** | | Pn | 19 59 32.1 | +0.2 |
| **D23K** | **Nanushuk River** | **2.26** | **257** | IAML | | 20 00 18.9 | |
| | comp=N,41nm,0.8s | | | | | | |
| D23K | | | | IAML | | 20 00 21.3 | |
| | comp=E,41nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.40** | **212** | | Pn | 19 59 34.1 | +0.1 |
| **F24K** | **Squaw Lake** | **2.40** | **212** | IAML | | 20 00 11.5 | |
| | comp=N,26nm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.62** | **137** | Pn | Pn | 19 59 37.5 | +0.5 |
| F28M | | | | IAML | | 20 00 24.3 | |
| | comp=N,25nm,1.0s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.66** | **173** | | Pn | 19 59 37.5 | 0.0 |
| **E29M** | **Blow River** | **2.69** | **113** | | Pn | 19 59 37.8 | -0.1 |
| **E29M** | **Blow River** | **2.69** | **113** | IAML | | 20 00 27.7 | |
| | comp=E,20nm,0.8s | | | | | | |
| E29M | | | | IAML | | 20 00 30.6 | |
| | comp=N,24nm,0.7s | | | | | | |
| **G25K** | **Bearman Lake** | **2.89** | **192** | | Pn | 19 59 40.6 | 0.0 |
| **D22K** | **Ayikyak River** | **2.97** | **260** | Pn | Pn | 19 59 42.9 | +1.1 |
| D22K | | | | IAML | | 20 00 41.0 | |
| | comp=E,27nm,1.1s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.09** | **202** | | Pn | 19 59 43.5 | 0.0 |
| **G24K** | **Hadweenzic Riv** | **3.09** | **202** | IAML | | 20 00 37.0 | |
| | comp=E,27nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.14** | **288** | Pn | Pn | 19 59 44.6 | +0.6 |
| B22K | | | | IAML | | 20 00 49.6 | |
| | comp=N,27nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.52** | **275** | | Pn | 19 59 50.1 | +0.9 |
| **E21K** | **Killik River** | **3.57** | **256** | | Pn | 19 59 50.4 | +0.4 |
| **G29M** | **Pine Creek** | **3.62** | **135** | Pn | Pn | 19 59 50.9 | +0.1 |
| G29M | | | | IAML | | 20 01 02.4 | |
| | comp=N,18nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.97** | **200** | | Pn | 19 59 55.7 | +0.2 |
| **F21K** | **Alatna River** | **4.05** | **238** | Pn | Pn | 19 59 55.7 | -0.9 |
| F21K | | | | IAML | | 20 01 09.1 | |
| | comp=E,6.9nm,0.8s | | | | | | |
| F21K | | | | IAML | | 20 01 19.4 | |
| | comp=N,7.3nm,1.1s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.06** | **126** | | Pn | 19 59 56.8 | +0.1 |
| **G30M** | **tAoh Zraii Nji** | **4.06** | **126** | IAML | | 20 01 13.7 | |
| | comp=N,7.5nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **4.11** | **142** | | Pn | 19 59 58.4 | +0.9 |
| H29M | | | | IAML | | 20 00 53.4 | |
| | comp=E,11nm,0.7s | | | | | | |
| H29M | | | | IAML | | 20 01 10.2 | |
| | comp=N,12nm,1.1s | | | | | | |
| **H23K** | **Yukon River** | **4.22** | **209** | | Pn | 19 59 59.1 | +0.2 |
| **H23K** | **Yukon River** | **4.22** | **209** | IAML | | 20 01 13.6 | |
| | comp=E,11nm,0.9s | | | | | | |
| H23K | | | | IAML | | 20 01 21.1 | |
| | comp=N,9.7nm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.38** | **134** | Pn | Pn | 20 00 00.8 | -0.3 |
| EPYK | | | | IAML | | 20 01 28.8 | |
| | comp=N,9.5nm,1.1s | | | | | | |
| **B20K** | **Meade River** | **4.38** | **281** | Pn | Pn | 20 00 02.3 | +1.2 |
| **D20K** | **Etivluk River** | **4.39** | **264** | | Pn | 20 00 01.8 | +0.5 |
| **E20K** | **Nigu River** | **4.40** | **258** | | Pn | 20 00 02.1 | +0.7 |
| **I28M** | **Miner Creek** | **4.52** | **155** | Pn | Pn | 20 00 06.0 | +2.9 |
| I28M | | | | IAML | | 20 01 26.1 | |
| | comp=E,5.9nm,1.2s | | | | | | |
| I28M | | | | IAML | | 20 02 13.8 | |
| | comp=N,6.0nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.67** | **120** | Pn | Pn | 20 00 05.6 | +0.6 |
| G31M | | | | IAML | | 20 01 32.1 | |
| | comp=N,5.0nm,1.0s | | | | | | |
| G31M | | | | IAML | | 20 02 28.4 | |
| | comp=E,5.0nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.82** | **205** | Pn | Pn | 20 00 07.5 | +0.4 |
| **F20K** | **Avaraart Lake** | **4.85** | **244** | Pn | Pn | 20 00 08.7 | +1.2 |
| F20K | | | | IAML | | 20 01 34.0 | |
| | comp=N,4.5nm,0.9s | | | | | | |
| **MDM** | **Murphy Dome** | **4.86** | **199** | Pn | Pn | 20 00 08.2 | +0.6 |
| MDM | | | | IAML | | 20 02 37.0 | |
| | comp=E,4.6nm,0.9s | | | | | | |
| MDM | | | | I

| | | | | | | |
|---|---|---|---|---|---|---|
| **DAVA** | **Damuels** | **148.80** | **355** | *e*PKP | **PKiKP** | **20 19 48.7 -0.2** |
| | 3.1nm,1.0s | | | | | |
| **FETA** | **Feichten** | **148.99** | **354** | *e*PKiKP | **PKiKP** | **20 19 49.7 +0.4** |
| | 2.6nm,1.1s | | | | | |
| **MYKA** | **Terra Mystica** | **149.00** | **350** | *i* PKP | **PKPbc** | **20 19 48.3 +0.4** |
| | 0.9nm,0.4s | | | | | |
| **ABTA** | **Abfaltersbach** | **149.05** | **352** | *e*PKP | **PKPbc** | **20 19 48.5 +0.5** |
| | 1.7nm,0.6s | | | | | |

**IDC 12 20:01:06.9±2.7, 5°.65N×123°.87E, h0km, mb3.5/4, mbtmp3.5/4, MS4.1/2, Error ellipse: s-maj=378.1km s-min=26.4km az=66.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **30.74** | **162** | P | P | 20 07 24.1 | 0.0 |
| | 0.4nm,0.7s,baz=342,slow=6.7,SNR=7.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.37** | **326** | P | P | 20 10 35.8 | +0.2 |
| | 0.4nm,0.5s,baz=114,slow=6.9,SNR=7.8 | | | | | | |
| MKAR | | | | LR | LR | 20 35 05.4 | |
| | comp=Z,128nm,22.0s,baz=104,slow=38 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.60** | **334** | P | P | 20 10 59.2 | +0.7 |
| | 0.3nm,0.5s,baz=123,slow=7.1,SNR=1.6 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.60** | **328** | P | P | 20 11 04.3 | -1.2 |
| | 0.2nm,0.4s,baz=122,slow=7.2,SNR=2.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **OPO** | **Ambohidratompo** | **79.25** | **250** | LR | LR | 20 46 25.3 | |
| | comp=Z,153nm,18.5s,baz=2.0,slow=34 | | | | | | |

*NEIC **12** 20:07:14.8±1.0, 69°.53N×0°.04×144°.38W±0°.04, h10km±1km, Error ellipse: s-maj=6.2km s-min=2.9km az=163.0*
**AEIC 12 20:07:13.9±0.8, 69°.51N±0°.02×144°.43W±0°.03, h1km±5km, ML2.5, ML2.7/46(NEIC), Error ellipse: s-maj=2.9km s-min=0.8km az=202.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.28** | **65** | | Pg | 20 07 19.0 | -0.1 |
| C27K | | | | | Sg | 20 07 23.1 | +0.3 |
| **C27K** | **Jago River** | **0.28** | **65** | IAML | | 20 07 24.5 | |
| | comp=N,823nm,0.5s | | | | | | |
| C27K | | | | IAML | | 20 07 24.9 | |
| | comp=E,790nm,0.2s | | | | | | |
| **C26K** | **Camden Bay** | **0.44** | **338** | | Pg | 20 07 22.2 | -0.1 |
| C26K | | | | | Sg | 20 07 28.8 | +0.7 |
| **C26K** | **Camden Bay** | **0.44** | **338** | IAML | | 20 07 31.5 | |
| | comp=N,318nm,0.4s | | | | | | |
| C26K | | | | IAML | | 20 07 36.6 | |
| | comp=E,230nm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.71** | **256** | | Pg | 20 07 27.2 | -0.3 |
| D25K | | | | | Sg | 20 07 37.3 | +0.5 |
| **D27M** | **Malcolm River** | **1.25** | **101** | | Pg | 20 07 37.4 | -0.5 |
| D27M | | | | | Sn | 20 07 55.9 | -0.2 |
| **D27M** | **Malcolm River** | **1.25** | **101** | IAML | | 20 07 59.1 | |
| | comp=N,93nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.51** | **280** | | Sg | 20 08 03.0 | +0.6 |
| **C24K** | **Franklin Bluff** | **1.51** | **280** | | Pg | 20 07 42.9 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.51** | **280** | IAML | | 20 08 04.0 | |
| | comp=N,87nm,0.9s | | | | | | |
| C24K | | | | IAML | | 20 08 08.4 | |
| | comp=E,87nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.60** | **259** | | Pn | 20 07 43.2 | -0.1 |
| **D24K** | **Happy Valley** | **1.60** | **259** | IAML | | 20 08 09.2 | |
| | comp=N,165nm,0.5s | | | | | | |
| D24K | | | | IAML | | 20 08 09.4 | |
| | comp=E,122nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **141** | | Pn | 20 07 44.1 | -0.3 |
| E27K | | | | | Sb | 20 08 07.4 | +0.3 |
| **F26K** | **Sheenjek River** | **1.83** | **177** | | Pn | 20 07 46.3 | -0.1 |
| **F26K** | **Sheenjek River** | **1.83** | **177** | IAML | | 20 08 15.8 | |
| | comp=E,100nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **194** | | Pn | 20 07 48.5 | +0.1 |
| **F25K** | **Christian Rive** | **1.98** | **194** | IAML | | 20 08 21.2 | |
| | comp=E,42nm,0.7s | | | | | | |
| F25K | | | | IAML | | 20 08 26.1 | |
| | comp=N,39nm,0.4s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **115** | | Pn | 20 07 48.5 | 0.0 |
| **D28M** | **Stokes Point** | **2.02** | **93** | | Pn | 20 07 49.0 | 0.0 |
| **D28M** | **Stokes Point** | **2.02** | **93** | IAML | | 20 08 26.7 | |
| | comp=E,61nm,0.9s | | | | | | |
| D28M | | | | IAML | | 20 08 29.2 | |
| | comp=N,43nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04** | **247** | | Sn | 20 08 16.1 | +0.6 |
| **C23K** | **Itkillik River** | **2.19** | **282** | | Pn | 20 07 51.3 | 0.0 |
| **E23K** | **Chandalar** | **2.39** | **235** | Pn | Pn | 20 07 54.6 | +0.5 |
| E23K | | | | IAML | | 20 09 22.2 | |
| | comp=N,29nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.54** | **137** | | Pn | 20 07 56.2 | +0.1 |
| **F28M** | **Old Crow** | **2.54** | **137** | IAML | | 20 09 27.4 | |
| | comp=N,26nm,0.6s | | | | | | |
| F28M | | | | IAML | | 20 09 33.2 | |
| | comp=E,27nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **174** | | Pn | 20 07 56.6 | -0.1 |
| **E29M** | **Blow River** | **2.61** | **112** | | Pn | 20 07 56.9 | -0.2 |
| **E29M** | **Blow River** | **2.61** | **112** | IAML | | 20 09 34.1 | |
| | comp=N,36nm,0.8s | | | | | | |
| E29M | | | | IAML | | 20 09 34.7 | |
| | comp=E,35nm,0.6s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.21** | **289** | | Pn | 20 08 05.3 | 0.0 |
| **G29M** | **Pine Creek** | **3.54** | **135** | | Pn | 20 08 09.9 | +0.1 |
| **G29M** | **Pine Creek** | **3.54** | **135** | IAML | | 20 09 11.6 | |
| | comp=E,23nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.58** | **277** | Pn | Pn | 20 08 10.1 | -0.2 |
| **E21K** | **Killik River** | **3.60** | **257** | | Pn | 20 08 11.2 | +0.4 |
| **E21K** | **Killik River** | **3.60** | **257** | IAML | | 20 10 05.3 | |
| | comp=N,18nm,0.9s | | | | | | |
| E21K | | | | IAML | | 20 10 07.3 | |
| | comp=E,19nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **201** | Pn | Pn | 20 08 16.7 | +1.5 |
| H24K | | | | IAML | | 20 08 51.9 | |
| | comp=N,11nm,4.2s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **206** | Pn | Pn | 20 08 27.9 | +1.1 |
| **I30M** | **Mount Dempster** | **5.31** | **140** | Pn | Pn | 20 08 35.7 | +1.5 |
| **C19K** | **Lookout Ridge** | **5.39** | **273** | Pn | Pn | 20 08 36.0 | +0.7 |

*SOME **12** 20:12:25.4, 43°.52N×84°.90E, h10km*
*NNC **12** 20:12:32.2±4.3, 43°.48N×84°.11E, h0km, mb2.9, mpv2.6, Error ellipse: s-maj=35.6km s-min=13.8km az=122.0*
**ISC 12 20:12:20.8±3.1, 43°.4N±0°.1×85°.1E±0°.1, h10km, n10, σ1ª3ª/16, 4C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **3.42** | **273** | *e*P | **Pg** | **20 13 26.8** | **+0.4** |
| | 0.6nm,0.2s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **20 14 11.5** | **+0.8** |
| | 14nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **3.93** | **286** | *e*P | **Pb** | **20 13 34.5** | **+4.3** |
| | 1.6nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **20 14 24.4** | **-2.4** |
| | 11nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **3.96** | **331** | ⇑Pg | **Pg** | **20 13 37.5** | **+0.9** |
| | 0.4nm,0.3s,baz=148,slow=16,SNR=28 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 20 14 25.2 | |
| | 4.0nm,0.6s,baz=150,slow=28,SNR=6.7 | | | | | | |
| **PDGK** | **Podgornoye** | **4.05** | **272** | ⇓Pg | **Pb** | **20 13 33.3** | **+0.9** |
| | 0.7nm,0.3s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 20 14 20.3 | |
| | 4.7nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **4.08** | **329** | ⇑Pg | **Pg** | **20 13 39.5** | **+0.5** |
| | 0.8nm,0.5s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 20 14 27.1 | |
| | 4.1nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **4.08** | **269** | *e*P | **Pb** | **20 13 32.2** | **-0.6** |
| | 5.4nm,0.3s | | | | | | |
| SHLS | | | | *e*S | **Sb** | **20 14 20.7** | **-1.6** |
| | 32nm,0.4s | | | | | | |
| **ZSN** | **Zaisan** | **4.10** | **358** | *e*P | **Pg** | **20 13 38.4** | **-1.0** |
| | 0.7nm,0.2s | | | | | | |
| ZSN | | | | *e*S | **Sg** | **20 14 30.7** | **-1.7** |
| | 3.3nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **4.41** | **269** | *e*P | Pb | 20 13 44.5 | +6.2 |
| | 1.6nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sg** | **20 14 42.1** | **-0.2** |
| | 4.1nm,0.6s | | | | | | |
| **SATY** | **Saty** | **4.86** | **269** | *e*P | **Pg** | **20 13 53.4** | **-0.5** |
| | 0.9nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **20 14 57.3** | **+0.4** |
| | 3.8nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **5.30** | **282** | *e*P | **Pg** | **20 14 00.5** | **-1.7** |
| | 3.5nm,0.5s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **20 15 09.5** | **-1.3** |
| | 3.7nm,0.5s | | | | | | |

*NEIC **12** 20:12:36.4±1.4, 69°.53N±0°.04×144°.49W±0°.07, h10km±2km, Error ellipse: s-maj=7.3km s-min=4.1km az=0.0*
**AEIC 12 20:12:35.8±0.8, 69°.50N±0°.03×144°.54W±0°.08, h4km±6km, ML2.5, ML2.7/60(NEIC), Error ellipse: s-maj=5.0km s-min=2.9km az=50.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.32** | **66** | | Sg | 20 12 46.0 | -0.1 |
| **C27K** | **Jago River** | **0.32** | **66** | Pg | Pg | 20 12 41.8 | -0.2 |
| C27K | | | | IAML | | 20 12 47.7 | |
| | comp=N,515nm,0.5s | | | | | | |
| C27K | | | | IAML | | 20 12 48.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.44** | **343** | | Pg | 20 12 44.0 | -0.2 |
| **C26K** | **Camden Bay** | **0.44** | **343** | IAML | | 20 12 52.8 | |
| | comp=E,166nm,0.3s | | | | | | |
| C26K | | | | IAML | | 20 12 52.9 | |
| | comp=N,425nm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.67** | **255** | | Pg | 20 12 48.1 | -0.5 |
| D25K | | | | | Sg | 20 12 57.7 | +0.4 |
| **D27M** | **Malcolm River** | **1.29** | **100** | | Pg | 20 12 59.7 | -0.8 |
| D27M | | | | | Sn | 20 13 18.1 | -0.2 |
| **D27M** | **Malcolm River** | **1.29** | **100** | IAML | | 20 13 21.1 | |
| | comp=N,158nm,0.4s | | | | | | |
| D27M | | | | IAML | | 20 13 22.3 | |
| | comp=E,87nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.47** | **281** | | Sg | 20 13 23.5 | +0.5 |
| **C24K** | **Franklin Bluff** | **1.47** | **281** | Pn | Pb | 20 13 03.5 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.47** | **281** | IAML | | 20 13 25.0 | |
| | comp=N,100nm,0.3s | | | | | | |
| C24K | | | | IAML | | 20 13 25.3 | |
| | comp=E,86nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.56** | **259** | | Pn | 20 13 04.3 | +0.2 |
| **D24K** | **Happy Valley** | **1.56** | **259** | IAML | | 20 13 28.5 | |
| | comp=E,68nm,0.5s | | | | | | |
| D24K | | | | IAML | | 20 13 29.7 | |
| | comp=N,81nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.70** | **140** | | Pn | 20 13 06.1 | -0.1 |
| E27K | | | | | Sn | 20 13 28.6 | +0.4 |
| **E27K** | **Coleen River** | **1.70** | **140** | IAML | | 20 13 32.1 | |
| | comp=E,64nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **175** | | Sn | 20 13 31.8 | +0.6 |
| **TOLK** | **Toolik Lake Re** | **2.00** | **247** | | Pn | 20 13 10.2 | -0.1 |
| **E28M** | **Babbage River** | **2.01** | **114** | | Pn | 20 13 10.4 | 0.0 |
| E28M | | | | | Sn | 20 13 36.9 | +0.9 |
| **E28M** | **Babbage River** | **2.01** | **114** | IAML | | 20 13 45.6 | |
| | comp=N,46nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.03** | **227** | | Pn | 20 13 10.7 | 0.0 |
| **D28M** | **Stokes Point** | **2.06** | **92** | | Pn | 20 13 11.1 | +0.1 |
| **D28M** | **Stokes Point** | **2.06** | **92** | IAML | | 20 13 50.2 | |
| | comp=N,76nm,0.7s | | | | | | |
| D28M | | | | IAML | | 20 13 51.8 | |
| | comp=E,79nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **180** | Pn | Pn | 20 13 11.2 | -0.2 |
| **C23K** | **Itkillik River** | **2.15** | **282** | | Pn | 20 13 12.5 | +0.2 |
| **C23K** | **Itkillik River** | **2.15** | **282** | IAML | | 20 13 46.9 | |
| | comp=E,46nm,0.8s | | | | | | |
| C23K | | | | IAML | | 20 13 47.9 | |
| | comp=N,67nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.25** | **259** | | Pn | 20 13 13.9 | +0.2 |
| **F24K** | **Squaw Lake** | **2.34** | **213** | | Pn | 20 13 14.8 | -0.1 |
| **F28M** | **Old Crow** | **2.56** | **136** | | Pn | 20 13 18.0 | +0.1 |
| **F28M** | **Old Crow** | **2.56** | **136** | IAML | | 20 14 00.1 | |
| | comp=E,31nm,0.5s | | | | | | |
| F28M | | | | IAML | | 20 14 01.7 | |
| | comp=N,27nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.65** | **112** | Pn | Pn | 20 13 19.5 | +0.4 |
| E29M | | | | IAML | | 20 14 03.4 | |
| | comp=N,28nm,0.8s | | | | | | |
| E29M | | | | IAML | | 20 14 03.8 | |
| | comp=E,31nm,0.6s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.02** | **203** | | Pn | 20 13 24.5 | +0.3 |
| **G24K** | **Hadweenzic Riv** | **3.02** | **203** | IAML | | 20 14 14.7 | |
| | comp=E,21nm,0.9s | | | | | | |
| G24K | | | | IAML | | 20 14 18.9 | |
| | comp=N,22nm,3.2s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.18** | **290** | | Pn | 20 13 26.8 | +0.5 |
| **B22K** | **Teshekpuk Lake** | **3.18** | **290** | IAML | | 20 13 47.3 | |
| | comp=N,31nm,3.9s | | | | | | |
| B22K | | | | IAML | | 20 15 23.1 | |
| | comp=E,28nm,3.6s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.54** | **277** | Pn | Pn | 20 13 31.6 | +0.3 |
| B21K | | | | IAML | | 20 14 31.2 | |
| | comp=E,20nm,4.4s | | | | | | |
| B21K | | | | IAML | | 20 15 38.8 | |
| | comp=N,14nm,3.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.56** | **134** | | Pn | 20 13 31.7 | +0.1 |
| **G29M** | **Pine Creek** | **3.56** | **134** | IAML | | 20 15 51.9 | |
| | comp=N,18nm,2.7s | | | | | | |
| **E21K** | **Killik River** | **3.56** | **257** | | Pn | 20 13 31.7 | 0.0 |
| **E21K** | **Killik River** | **3.56** | **257** | IAML | | 20 14 11.6 | |
| | comp=E,11nm,4.2s | | | | | | |
| E21K | | | | IAML | | 20 15 25.6 | |
| | comp=N,11nm,4.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.89** | **201** | | Pn | 20 13 36.2 | 0.0 |
| **H24K** | **Noodor Dome** | **3.89** | **201** | IAML | | 20 14 43.9 | |
| | comp=N,16nm,3.8s | | | | | | |
| **H29M** | **Whitestone** | **4.04** | **142** | Pn | Pn | 20 13 39.5 | +1.3 |
| H29M | | | | IAML | | 20 14 52.0 | |
| | comp=E,14nm,2.6s | | | | | | |
| **B20K** | **Meade River** | **4.41** | **283** | | Pn | 20 13 43.4 | +0.1 |
| **G31M** | **Satah River** | **4.62** | **119** | Pn | Pn | 20 13 46.9 | +0.7 |
| **I23K** | **Minto, Yukon-K** | **4.75** | **205** | | Pn | 20 13 48.0 | 0.0 |
| **MDM** | **Murphy Dome** | **4.78** | **199** | Pn | Pn | 20 13 49.5 | +1.0 |
| **D19K** | **Kuna River** | **4.99** | **265** | | Pn | 20 13 51.3 | 0.0 |
| **I30M** | **Mount Dempster** | **5.33** | **140** | Pn | Pn | 20 13 57.5 | +1.5 |
| **C19K** | **Lookout Ridge** | **5.35** | **273** | Pn | Pn | 20 13 56.4 | +0.2 |
| **J30M** | **Hart River** | **5.89** | **143** | Pn | Pn | 20 14 05.3 | +1.5 |
| **C18K** | **Utukok River** | **6.02** | **270** | | Pn | 20 14 05.5 | 0.0 |
| **H19K** | **Roundabout Mou** | **6.06** | **235** | | Pn | 20 14 05.8 | 0.0 |
| **E18K** | **Tukpahlearik C** | **6.26** | **258** | | Pn | 20 14 09.3 | +0.6 |
| **A36M** | **Sachs Harbour** | **6.84** | **60** | | Pn | 20 14 16.4 | -0.2 |
| **GHO** | **Glory Hole Cre** | **7.97** | **195** | Pn | Pn | 20 14 32.7 | +0.5 |
| **KLU** | **Klutina** | **8.06** | **185** | Pn | Pn | 20 14 31.7 | -1.7 |

*NEIC **12** 20:16:31.3±1.2, 69°.56N±0°.06×144°.69W±0°.09, h10km±2km, Error ellipse: s-maj=10.3km s-min=5.1km az=8.0*
**AEIC 12 20:16:30.5±0.9, 69°.54N±0°.06×144°.73W±0°.09, h5km±6km, ML2.6, ML2.9/66(NEIC), Error ellipse: s-maj=8.9km s-min=4.4km az=187.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.37** | **76** | | Pg | 20 16 37.5 | -0.2 |
| C27K | | | | | Sg | 20 16 42.6 | +0.1 |
| **C27K** | **Jago River** | **0.37** | **76** | IAML | | 20 16 44.1 | |
| | comp=N,1μm,0.5s | | | | | | |
| C27K | | | | IAML | | 20 16 44.3 | |
| | comp=E,2μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **351** | | Pg | 20 16 37.9 | 0.0 |
| C26K | | | | | Sb | 20 16 44.5 | -1.5 |
| **D25K** | **Kavik River** | **0.62** | **250** | | Pg | 20 16 42.3 | -0.1 |
| D25K | | | | | Sb | 20 16 52.1 | -0.8 |
| **D27M** | **Malcolm River** | **1.37** | **101** | | Pn | 20 16 56.0 | -0.3 |
| D27M | | | | | Sn | 20 17 15.3 | +0.6 |
| **D27M** | **Malcolm River** | **1.37** | **101** | IAML | | 20 17 18.1 | |
| | comp=N,160nm,0.8s | | | | | | |
| D27M | | | | IAML | | 20 17 19.8 | |
| | comp=E,143nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.40** | **279** | | Pn | 20 16 55.8 | -0.8 |
| C24K | | | | | Sg | 20 17 17.1 | +1.6 |
| **C24K** | **Franklin Bluff** | **1.40** | **279** | IAML | | 20 17 18.5 | |
| | comp=N,185nm,0.6s | | | | | | |
| C24K | | | | IAML | | 20 17 18.9 | |
| | comp=E,207nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.50** | **257** | | Pn | 20 16 58.2 | +0.2 |
| D24K | | | | IAML | | 20 17 23.2 | |
| | comp=N,152nm,0.5s | | | | | | |
| D24K | | | | IAML | | 20 17 26.0 | |
| | comp=E,159nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.87** | **173** | | Pn | 20 17 03.2 | +0.1 |
| **F26K** | **Sheenjek River** | **1.87** | **173** | IAML | | 20 17 34.1 | |
| | comp=N,80nm,0.8s | | | | | | |
| F26K | | | | IAML | | 20 17 34.3 | |
| | comp=E,98nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **245** | | Pn | 20 17 04.3 | -0.1 |
| **TOLK** | **Toolik Lake Re** | **1.96** | **245** | IAML | | 20 17 37.0 | |
| | comp=E,57nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 20 17 41.1 | |
| | comp=N,54nm,0.5s | | | | | | |
| **E24K** | **Your Creek** | **2.01** | **225** | | Pn | 20 17 05.1 | +0.1 |
| **E28M** | **Babbage River** | **2.09** | **114** | | Pn | 20 17 06.1 | -0.1 |
| **BMAR** | **Burnt Mountain** | **2.12** | **178** | | Pb | 20 17 09.5 | +0.1 |
| **D28M** | **Stokes Point** | **2.13** | **93** | | Pn | 20 17 06.7 | +0.1 |
| **D28M** | **Stokes Point** | **2.13** | **93** | IAML | | 20 17 45.3 | |
| | comp=E,106nm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.20** | **257** | | Pn | 20 17 07.5 | -0.1 |
| **E23K** | **Chandalar** | **2.32** | **232** | | Pn | 20 17 09.4 | 0.0 |
| **F28M** | **Old Crow** | **2.63** | **135** | | Pn | 20 17 13.6 | -0.1 |
| **F28M** | **Old Crow** | **2.63** | **135** | IAML | | 20 18 04.1 | |
| | comp=N,38nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.72** | **112** | | Pn | 20 17 14.9 | 0.0 |
| **E29M** | **Blow River** | **2.72** | **112** | IAML | | 20 18 05.9 | |
| | comp=E,40nm,0.6s | | | | | | |
| E29M | | | | IAML | | 20 18 06.6 | |
| | comp=N,34nm,0.6s | | | | | | |
| **D22K** | **Ayikyak River** | **2.91** | **261** | | Pn | 20 17 17.6 | +0.1 |
| **D22K** | **Ayikyak River** | **2.91** | **261** | IAML | | 20 18 12.1 | |
| | comp=N,32nm,0.7s | | | | | | |
| D22K | | | | IAML | | 20 18 13.7 | |
| | comp=E,50nm,1.6s | | | | | | |
| **G27K** | **Doyon Strip** | **2.98** | **156** | | Pn | 20 17 18.3 | -0.1 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **201** | | Pn | 20 17 19.1 | 0.0 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **201** | IAML | | 20 18 16.0 | |
| | comp=E,44nm,0.7s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.10** | **289** | | Pn | 20 17 20.2 | +0.3 |
| **B22K** | **Teshekpuk Lake** | **3.10** | **289** | IAML | | 20 18 16.4 | |
| | comp=E,38nm,1.6s | | | | | | |
| B22K | | | | IAML | | 20 18 18.8 | |
| | comp=N,41nm,1.1s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.46** | **276** | Pn | Pn | 20 17 24.4 | -0.6 |
| B21K | | | | IAML | | 20 18 33.4 | |
| | comp=E,21nm,0.9s | | | | | | |
| B21K | | | | IAML | | 20 18 46.3 | |
| | comp=N,22nm,1.6s | | | | | | |
| **E21K** | **Killik River** | **3.51** | **256** | | Pn | 20 17 25.7 | +0.1 |
| **E21K** | **Killik River** | **3.51** | **256** | IAML | | 20 18 30.5 | |
| | comp=E,16nm,2.9s | | | | | | |
| E21K | | | | IAML | | 20 18 35.8 | |
| | comp=N,19nm,1.7s | | | | | | |
| **G29M** | **Pine Creek** | **3.64** | **133** | | Pn | 20 17 27.6 | +0.2 |
| **G29M** | **Pine Creek** | **3.64** | **133** | IAML | | 20 18 41.6 | |
| | comp=E,25nm,0.6s | | | | | | |
| G29M | | | | IAML | | 20 19 39.8 | |
| | comp=N,23nm,1.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.91** | **199** | | Pn | 20 17 31.6 | +0.4 |
| **H24K** | **Noodor Dome** | **3.91** | **199** | IAML | | 20 18 41.7 | |
| | comp=N,20nm,2.5s | | | | | | |
| H24K | | | | IAML | | 20 19 52.7 | |
| | comp=E,19nm,1.8s | | | | | | |
| **F21K** | **Alatna River** | **3.99** | **238** | Pn | Pn | 20 17 31.9 | -0.4 |
| F21K | | | | IAML | | 20 18 44.8 | |
| | comp=N,12nm,0.7s | | | | | | |
| F21K | | | | IAML | | 20 19 08.3 | |
| | comp=E,13nm,4.0s | | | | | | |
| **H29M** | **Whitestone** | **4.11** | **141** | | Pn | 20 17 34.4 | +0.5 |
| **H29M** | **Whitestone** | **4.11** | **141** | IAML | | 20 19 32.2 | |
| | comp=E,19nm,3.4s | | | | | | |
| H29M | | | | IAML | | 20 20 02.6 | |
| | comp=N,17nm,3.4s | | | | | | |
| **D20K** | **Etivluk River** | **4.33** | **265** | | Pn | 20 17 37.6 | +0.7 |
| **B20K** | **Meade River** | **4.34** | **282** | | Pn | 20 17 37.8 | +0.8 |
| **I28M** | **Miner Creek** | **4.51** | **154** | | Pn | 20 17 39.9 | +0.5 |
| **I28M** | **Miner Creek** | **4.51** | **154** | IAML | | 20 19 00.5 | |
| | comp=E,11nm,3.7s | | | | | | |
| **G31M** | **Satah River** | **4.70** | **119** | Pn | Pn | 20 17 43.1 | +1.2 |
| **I23K** | **Minto, Yukon-K** | **4.76** | **204** | | Pn | 20 17 44.0 | +1.3 |
| **MDM** | **Murphy Dome** | **4.80** | **198** | | Pn | 20 17 44.7 | +1.3 |
| **D19K** | **Kuna River** | **4.92** | **264** | | Pn | 20 17 46.1 | +1.1 |
| **E19K** | **Redstone River** | **5.05** | **251** | Pn | Pn | 20 17 48.3 | +1.5 |
| **C19K** | **Lookout Ridge** | **5.28** | **272** | Pn | Pn | 20 17 51.2 | +1.2 |
| **I30M** | **Mount Dempster** | **5.40** | **139** | | Pn | 20 17 52.1 | +0.4 |
| **J30M** | **Hart River** | **5.97** | **143** | | Pn | 20 17 59.7 | +0.2 |
| **E18K** | **Tukpahlearik C** | **6.21** | **258** | | Pn | 20 18 03.0 | +0.3 |
| **H18K** | **Honhosa River** | **6.85** | **237** | Pn | Pn | 20 18 13.1 | +1.6 |
| **A36M** | **Sachs Harbour** | **6.87** | **60** | | Pn | 20 18 11.7 | 0.0 |
| **C16K** | **Lisburne Hills** | **7.53** | **270** | Pn | Pn | 20 18 21.0 | +0.2 |

*NEIC **12** 20:20:33.1±0.9, 69°.60N±0°.06×144°.29W±0°.09, h10km±2km, Error ellipse: s-maj=9.9km s-min=4.9km az=7.0*
**AEIC 12 20:20:32.6±0.6, 69°.55N±0°.06×144°.38W±0°.09, h3km±6km, ML2.7, ML2.7/64(NEIC), Error ellipse: s-maj=8.9km s-min=4.2km az=190.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.24** | **72** | | Sg | 20 20 41.0 | +0.5 |
| **C27K** | **Jago River** | **0.24** | **72** | Pg | Pg | 20 20 37.0 | -0.3 |
| C27K | | | | IAML | | 20 20 41.1 | |
| | comp=N,561nm,0.4s | | | | | | |
| C27K | | | | IAML | | 20 20 42.9 | |
| | comp=E,473nm,0.7s | | | | | | |
| **C26K** | **Camden Bay** | **0.41** | **333** | | Pg | 20 20 40.5 | 0.0 |
| C26K | | | | | Sg | 20 20 46.8 | +0.9 |
| **C26K** | **Camden Bay** | **0.41** | **333** | IAML | | 20 20 48.4 | |
| | comp=N,204nm,0.7s | | | | | | |
| C26K | | | | IAML | | 20 20 51.9 | |
| | comp=E,275nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.74** | **253** | | Pg | 20 20 47.4 | +0.6 |
| D25K | | | | | Sg | 20 20 56.8 | +0.4 |
| **D27M** | **Malcolm River** | **1.25** | **103** | | Pg | 20 20 56.2 | -0.3 |
| D27M | | | | | Sb | 20 21 13.3 | 0.0 |
| **D27M** | **Malcolm River** | **1.25** | **103** | IAML | | 20 21 17.5 | |
| | comp=N,77nm,0.6s | | | | | | |
| D27M | | | | IAML | | 20 21 19.6 | |
| | comp=E,109nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **278** | | Sg | 20 21 22.2 | +0.7 |
| **D24K** | **Happy Valley** | **1.63** | **258** | | Pn | 20 21 02.1 | -0.1 |
| **D24K** | **Happy Valley** | **1.63** | **258** | IAML | | 20 21 27.1 | |
| | comp=N,91nm,0.6s | | | | | | |
| D24K | | | | IAML | | 20 22 02.3 | |
| | comp=E,110nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.70** | **142** | | Pn | 20 21 03.8 | +0.6 |
| **F26K** | **Sheenjek River** | **1.87** | **177** | | Pn | 20 21 05.3 | -0.2 |
| **F26K** | **Sheenjek River** | **1.87** | **177** | IAML | | 20 21 33.5 | |
| | comp=E,84nm,0.8s | | | | | | |
| F26K | | | | IAML | | 20 21 34.8 | |
| | comp=N,50nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **116** | | Pn | 20 21 06.8 | -0.2 |
| **D28M** | **Stokes Point** | **2.00** | **94** | | Pn | 20 21 07.1 | -0.2 |
| **D28M** | **Stokes Point** | **2.00** | **94** | IAML | | 20 21 50.3 | |
| | comp=N,42nm,1.2s | | | | | | |
| D28M | | | | IAML | | 20 21 52.0 | |
| | comp=E,46nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **194** | | Pn | 20 21 07.4 | -0.3 |
| **F25K** | **Christian Rive** | **2.02** | **194** | IAML | | 20 21 42.1 | |
| | comp=N,39nm,1.0s | | | | | | |
| F25K | | | | IAML | | 20 21 42.6 | |
| | comp=E,38nm,1.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G27K | Doyon Strip | 2.94 | 158 | | Pn | 20 21 20.1 | -0.1 |
| G27K | Doyon Strip | 2.94 | 158 | IAML | | 20 23 05.4 | |
| | comp=N,15nm,3.1s | | | | | | |
| G27K | | | | IAML | | 20 23 13.1 | |
| | comp=E,21nm,0.6s | | | | | | |
| B22K | Teshekpuk Lake | 3.21 | 288 | | Pn | 20 21 23.8 | -0.1 |
| G29M | Pine Creek | 3.55 | 135 | | Pn | 20 21 28.7 | +0.1 |
| G29M | Pine Creek | 3.55 | 135 | IAML | | 20 23 40.2 | |
| | comp=N,23nm,0.8s | | | | | | |
| B21K | Ikpikpuk River | 3.59 | 276 | | Pn | 20 21 29.1 | +0.1 |
| E21K | Killik River | 3.63 | 257 | | Pn | 20 21 29.8 | +0.1 |
| H24K | Noodor Dome | 3.96 | 201 | | Pn | 20 21 34.3 | 0.0 |
| H24K | Noodor Dome | 3.96 | 201 | IAML | | 20 23 29.9 | |
| | comp=E,16nm,3.9s | | | | | | |
| H29M | Whitestone | 4.04 | 143 | Pn | Pn | 20 21 36.8 | +1.5 |
| H29M | | | | IAML | | 20 24 07.5 | |
| | comp=E,18nm,1.1s | | | | | | |
| F21K | Alatna River | 4.10 | 240 | | Pn | 20 21 36.0 | -0.2 |
| I27K | Kandik River | 4.11 | 164 | | Pn | 20 21 36.2 | -0.1 |
| H23K | Yukon River | 4.23 | 210 | | Pn | 20 21 38.0 | 0.0 |
| H23K | Yukon River | 4.23 | 210 | IAML | | 20 22 52.4 | |
| | comp=E,16nm,4.1s | | | | | | |
| B20K | Meade River | 4.46 | 282 | | Pn | 20 21 41.0 | 0.0 |
| I28M | Miner Creek | 4.46 | 155 | Pn | Pn | 20 21 42.9 | +1.7 |
| I28M | | | | IAML | | 20 24 04.0 | |
| | comp=E,12nm,3.3s | | | | | | |
| E20K | Nigu River | 4.46 | 259 | | Pn | 20 21 41.0 | -0.2 |
| D19K | Kuna River | 5.05 | 264 | | Pn | 20 21 49.6 | +0.5 |
| D19K | Kuna River | 5.05 | 264 | IAML | | 20 24 25.6 | |
| | comp=E,8.4nm,1.3s | | | | | | |
| E19K | Redstone River | 5.17 | 252 | Pn | Pn | 20 21 51.5 | +0.6 |
| I30M | Mount Dempster | 5.33 | 141 | | Pn | 20 21 53.0 | -0.1 |
| C19K | Lookout Ridge | 5.41 | 272 | | Pn | 20 21 53.8 | -0.3 |
| A19K | Wainwright | 5.80 | 284 | | Pn | 20 21 59.0 | -0.3 |
| J30M | Hart River | 5.90 | 144 | | Pn | 20 22 00.8 | -0.2 |
| E18K | Tukpahlearik C | 6.33 | 258 | | Pn | 20 22 06.8 | +0.1 |
| A36M | Sachs Harbour | 6.76 | 60 | Pn | Pn | 20 22 11.7 | -0.9 |
| M24K | Tolsona, Glenn | 7.51 | 186 | | Pn | 20 22 22.9 | -0.1 |

*NOU* **12** *20:21:21.4, 43˚.025×173˚.96E, h12km, MLv3.9/5, Off E. Coast of S. Island, N.Z.*
*WEL* **12** *20:21:29.3±0.4, 42˚.5S×17˚.4E±˚, h17km±3km, M3.0/14, ML3.2/19, MLv3.0/14, Error ellipse: s-maj=0.0km s-min=0.0km az=126.8, confirmed*
**ISC 12 20:21:29.2**±0.9**, 42˚.42S**±0˚.03×**173˚.84E**±0˚.03**, h29**km±6km**, n52**, σ1$81/72**, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KIKS** | **Kaikoura** | **0.12** | **266** | P | **Pb** | **20 21 34.3** | **-0.2** |
| KIKS | | | | S | **Sb** | **20 21 37.6** | **-0.6** |
| **KHZ** | **Kahutara** | **0.22** | **271** | P | **Pb** | **20 21 34.0** | **-0.8** |
| **KHZ** | **Kahutara** | **0.22** | **271** | P | **Pb** | **20 21 34.9** | **-0.8** |
| KHZ | | | | S | **Sb** | **20 21 38.3** | **-1.7** |
| **KEKS** | **Kekerengu Vall** | **0.47** | **13** | P | **Pb** | **20 21 39.0** | **-0.2** |
| KEKS | | | | S | **Sb** | **20 21 46.1** | **+0.1** |
| **WTMC** | **Te Mara Farm W** | **0.62** | **251** | P | **Pn** | **20 21 42.7** | **+0.7** |
| WTMC | | | | S | **Sn** | **20 21 52.3** | **+1.4** |
| **BSWZ** | **Blackbirch Sta** | **0.70** | **2** | P | **Pb** | **20 21 42.4** | **-0.6** |
| BSWZ | | | | S | **Sb** | **20 21 51.3** | **-1.1** |
| **CMWZ** | **Cape Campbell** | **0.72** | **23** | P | **Pn** | **20 21 44.8** | **+1.4** |
| CMWZ | | | | S | **Sn** | **20 21 56.1** | **+2.5** |
| **SEDS** | **Seddon Fire St** | **0.77** | **13** | S | **Sn** | **20 21 56.0** | **+1.5** |
| **GVZ** | **Greta Valley S** | **0.81** | **227** | P | **Pn** | **20 21 46.6** | **+2.0** |
| GVZ | | | | S | **Sn** | **20 21 59.1** | **+3.4** |
| **THZ** | **Tophouse** | **0.96** | **313** | P | **Pn** | **20 21 46.2** | **-0.6** |
| THZ | | | | S | **Sb** | **20 21 57.3** | **-2.3** |
| **TUWZ** | **Tuamarina** | **0.99** | **4** | P | **Pb** | **20 21 47.6** | **-0.2** |
| TUWZ | | | | S | **Sb** | **20 22 00.8** | **+0.3** |
| **AMCZ** | **Amberley** | **1.16** | **229** | P | **Pb** | **20 21 51.3** | **+0.7** |
| **LTZ** | **Lake Taylor** | **1.22** | **252** | P | **Pb** | **20 21 51.8** | **+0.1** |
| LTZ | | | | S | **Sb** | **20 22 07.7** | **+0.7** |
| **NNZ** | **Nelson** | **1.25** | **344** | P | **Pn** | **20 21 51.1** | **+0.4** |
| NNZ | | | | S | **Sn** | **20 22 07.8** | **+1.3** |
| **TCW** | **Tory Channel** | **1.25** | **15** | P | **Pn** | **20 21 51.2** | **+0.5** |
| TCW | | | | S | **Sn** | **20 22 07.7** | **+1.1** |
| **BHW** | **Baring Head** | **1.27** | **38** | P | **Pb** | **20 21 51.9** | **-0.6** |
| BHW | | | | S | **Sb** | **20 22 08.3** | **-0.1** |
| **SNZO** | **South Karori** | **1.28** | **31** | P | **Pb** | **20 21 52.1** | **-0.6** |
| **MRNZ** | **Matariki Terra** | **1.30** | **321** | P | **Pn** | **20 21 52.1** | **+0.7** |
| MRNZ | | | | S | **Sn** | **20 22 09.5** | **+1.7** |
| **PLWZ** | **Palliser** | **1.35** | **52** | P | **Pb** | **20 21 52.9** | **-1.0** |
| **OKCZ** | **Okains Bay** | **1.42** | **203** | P | **Pb** | **20 21 55.2** | **+0.1** |
| **MSWZ** | **Moikau Station** | **1.45** | **47** | P | **Pb** | **20 21 54.2** | **-1.4** |
| MSWZ | | | | S | **Sb** | **20 22 12.9** | **-0.8** |
| **TKNZ** | **Takaka Hill** | **1.53** | **334** | P | **Pn** | **20 21 55.6** | **+1.0** |
| TKNZ | | | | S | **Sn** | **20 22 13.8** | **+1.3** |
| **MQZ** | **McQueen's Vall** | **1.55** | **214** | P | **Pb** | **20 21 55.9** | **-1.4** |
| MQZ | | | | S | **Sb** | **20 22 15.1** | **-1.4** |
| **PAWZ** | **Paruwai Farm** | **1.57** | **49** | P | **Pb** | **20 21 55.8** | **-1.9** |
| PAWZ | | | | S | **Sb** | **20 22 15.6** | **-1.6** |
| **CAW** | **Cannon Point** | **1.60** | **35** | P | **Pb** | **20 21 56.5** | **-1.6** |
| CAW | | | | S | **Sn** | **20 22 15.6** | **+0.4** |
| **AKCZ** | **Akaroa Harbour** | **1.60** | **205** | P | **Pb** | **20 21 57.3** | **-0.9** |
| **OXZ** | **Oxford** | **1.61** | **235** | P | **Pb** | **20 21 56.5** | **-1.8** |
| **DUWZ** | **D'Urville Isla** | **1.62** | **2** | P | **Pn** | **20 21 56.5** | **+0.7** |
| DUWZ | | | | S | **Sn** | **20 22 17.0** | **+1.4** |
| **DSZ** | **Denniston Nort** | **1.66** | **293** | P | **Pb** | **20 21 57.6** | **-1.6** |
| DSZ | | | | S | **Sb** | **20 22 19.3** | **-0.4** |
| **KIW** | **Kapiti Island** | **1.75** | **28** | P | **Pb** | **20 21 58.7** | **-1.9** |
| **MTW** | **Mount Morrison** | **1.77** | **45** | P | **Pn** | **20 21 56.4** | **-1.5** |
| **INZ** | **Inchbonnie** | **1.80** | **259** | P | **Pb** | **20 22 00.3** | **-1.1** |
| **RACZ** | **Rakaia** | **1.81** | **223** | P | **Pb** | **20 21 59.7** | **-1.9** |
| **QRZ** | **Quartz Range** | **1.87** | **328** | P | **Pn** | **20 22 01.0** | **+1.8** |
| **QRZ** | **Quartz Range** | **1.87** | **328** | P | **Pn** | **20 22 00.8** | **+1.6** |
| **MHCZ** | **Mount Hutt** | **2.00** | **236** | P | **Pb** | **20 22 01.8** | **-3.2** |
| **MRZ** | **Mangatainoka R** | **2.19** | **37** | P | **Pn** | **20 22 04.7** | **+1.1** |
| **WVZ** | **Waitaha Valley** | **2.38** | **253** | P | **Pb** | **20 22 07.7** | **-3.6** |
| **RPZ** | **Rata Peaks** | **2.42** | **237** | P | **Pb** | **20 22 07.7** | **-4.4** |
| **ARCZ** | **Arundel** | **2.48** | **231** | P | **Pb** | **20 22 08.6** | **-4.4** |
| **TMZ** | **Timaru** | **2.85** | **225** | P | Pb | 20 22 14.2 | -5.2 |
| **KHEZ** | **Kahui Hut** | **3.12** | **2** | P | **Pn** | **20 22 18.7** | **+2.1** |
| **WNVZ** | **Wahianoa** | **3.36** | **24** | P | **Pb** | **20 22 25.9** | **-2.3** |
| **VRZ** | **Vera Road** | **3.36** | **12** | P | **Pn** | **20 22 22.1** | **+2.4** |
| **TUVZ** | **Tukino** | **3.44** | **24** | P | **Pb** | **20 22 26.3** | **-3.2** |
| **ODZ** | **Otahua Downs** | **3.50** | **220** | P | **Pn** | **20 22 22.8** | **+1.1** |
| **SNVZ** | **South Ngauruho** | **3.51** | **24** | P | **Pb** | **20 22 27.2** | **-3.5** |
| **OTVZ** | **Oturere** | **3.54** | **24** | P | **Pn** | **20 22 25.0** | **+2.8** |
| **NNVZ** | **North Ngauruho** | **3.55** | **23** | P | **Pb** | **20 22 29.8** | **-1.6** |
| **WTVZ** | **West Tongariro** | **3.56** | **22** | P | **Pb** | **20 22 28.4** | **-3.1** |
| **HIZ** | **Hauiti** | **3.98** | **12** | P | **Pn** | **20 22 29.8** | **+1.6** |
| **HIZ** | **Hauiti** | **3.98** | **12** | P | **Pn** | **20 22 30.2** | **+2.0** |

*NOU* **12** *20:41:05.8, 14˚.51S×167˚.54E, h170km, MLv4.7/13, Vanuatu Islands*
*IDC* **12** *20:41:06.6±4.4, 14˚.66S×167˚.48E, h163km±33km, mb4.0/9, mbtmp4.4/10, Error ellipse: s-maj=34.0km s-min=18.0km az=53.0*
*NEIC* **12** *20:41:07.2±1.3, 14˚.6S±0˚.1×167˚.4E±0˚.1, h163km±8km, mb4.5/22, Error ellipse: s-maj=18.3km s-min=16.6km az=75.0*
**ISC 12 20:41:07.3**±0.7**, 14˚.67S**±0˚.08×**167˚.40E**±0˚.10**, h170**km**, n58**, σ0$87/60**, mb4.5/20**, 4C-1D**, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **3.13** | **166** | P | **Pn** | **20 41 57.3** | **+0.1** |
| **RTV** | **Rentapao** | **3.26** | **163** | P | **Pn** | **20 41 59.0** | **+0.2** |
| **LIFNC** | **LIFOU** | **6.08** | **181** | P | **Pn** | **20 42 34.7** | **-0.6** |
| **LIFNC** | **LIFOU** | **6.08** | **181** | | **Pn** | **20 42 34.4** | **-0.9** |
| **KOUNC** | **Koumac, New Ca** | **6.56** | **206** | P | **Pn** | **20 42 43.5** | **+1.8** |
| **KOUNC** | **Koumac, New Ca** | **6.56** | **206** | | **Pn** | **20 42 41.7** | **+0.1** |
| **MARNC** | **Mare, Loyalty** | **6.80** | **175** | P | **Pn** | **20 42 45.4** | **+0.6** |
| **YATNC** | **Mamie plateau,** | **7.37** | **184** | P | **Pn** | **20 42 52.3** | **0.0** |
| **DZM** | **Mont Dzumac** | **7.42** | **187** | P | **Pn** | **20 42 53.8** | **+0.7** |
| **DZM** | **Mont Dzumac** | **7.42** | **187** | | **Pn** | **20 42 53.1** | **-0.1** |
| **DZM** | **Mont Dzumac** | **7.42** | **187** | P | **Pn** | **20 42 52.9** | **-0.2** |
| | 17nm,0.4s,baz=42,slow=6.8,SNR=45 | | | | | | |
| DZM | | | | S | **Sn** | **20 44 15.0** | **-1.6** |
| | 7.6nm,0.6s,baz=318,slow=21,SNR=1.1 | | | | | | |
| **NOUC** | **Port Laguerre** | **7.47** | **188** | P | **Pn** | **20 42 55.2** | **+1.6** |
| **ONTNC** | **Ouen Toro** | **7.65** | **187** | P | **Pn** | **20 42 57.6** | **+1.5** |
| **ONTNC** | **Ouen Toro** | **7.65** | **187** | | **Pn** | **20 42 56.8** | **+0.7** |
| **PINNC** | **Pines Island,** | **7.91** | **180** | | **Pn** | **20 42 58.8** | **-0.6** |
| **EIDS** | **Eidsvold** | **18.65** | **233** | P | **P** | **20 45 12.7** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 20 45 15.2 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **20.47** | **283** | P | **P** | **20 45 32.8** | **+0.8** |
| | comp=Z,12nm,0.8s,baz=242,slow=21,SNR=2.8 | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **20.88** | **252** | P | **P** | **20 45 38.0** | **+1.6** |
| | comp=Z,0.1nm,0.5s,baz=80,slow=10,SNR=3.7 | | | | | | |
| **ARMA** | **Armidale** | **21.36** | **220** | P | **P** | **20 45 40.6** | **-0.9** |
| ARMA | | | | IAmb | IAmb | 20 45 43.7 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **RTZ** | **Ruatahuna** | **25.31** | **162** | P | **P** | **20 46 18.0** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **25.68** | **164** | P | **P** | **20 46 22.0** | **+0.4** |
| BKZ | | | | IAmb | IAmb | 20 46 32.3 | |
| | comp=Z,8.6nm,0.5s | | | | | | |
| **LTZ** | **Lake Taylor** | **28.33** | **172** | P | **P** | **20 46 45.8** | **+0.6** |
| LTZ | | | | IAmb | IAmb | 20 46 51.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **29.12** | **175** | P | **P** | **20 46 53.1** | **+0.9** |
| RPZ | | | | IAmb | IAmb | 20 46 59.2 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **29.13** | **230** | P | **P** | **20 46 52.4** | **0.0** |
| **STKA** | **Stephens Creek** | **29.13** | **230** | P | **P** | **20 46 53.5** | **+1.0** |
| | comp=Z,14nm,0.6s,baz=46,slow=8.3,SNR=43 | | | | | | |
| STKA | | | | PcP | **PcP** | **20 49 56.1** | **+0.2** |
| | comp=Z,2.1nm,0.7s,baz=176,slow=1.3,SNR=4.8 | | | | | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **32.81** | **249** | P | **P** | **20 47 23.4** | **-1.5** |
| **ASAR** | **Alice Springs** | **32.81** | **249** | P | **P** | **20 47 24.1** | **-0.8** |
| **ASAR** | **Alice Springs** | **32.81** | **249** | P | **P** | **20 47 24.2** | **-0.7** |
| | comp=Z,2.8nm,0.6s,baz=79,slow=9.5,SNR=29 | | | | | | |
| ASAR | | | | PP | **PnPn** | **20 48 39.1** | **-1.4** |
| | comp=Z,2.3nm,0.8s,baz=78,slow=9.1,SNR=5.7 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 50 06.4** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=93,slow=3.0,SNR=2.3 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **33.72** | **232** | P | **P** | **20 47 33.1** | **+0.5** |
| **KNRA** | **Kununurra** | **37.27** | **263** | P | **P** | **20 48 02.2** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 20 48 20.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **39.44** | **239** | P | **P** | **20 48 21.2** | **+0.2** |
| **FITZ** | **Fitzroy Crossi** | **40.15** | **259** | P | **P** | **20 48 26.9** | **-0.2** |
| **MBWA** | **Marble Bar** | **45.68** | **255** | P | **P** | **20 49 11.3** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 20 49 14.8 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **48.72** | **285** | P | **P** | **20 49 34.3** | **-0.8** |
| TOLI2 | | | | IAmb | IAmb | 20 49 48.7 | |
| | comp=Z,9.4nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **48.89** | **239** | P | **P** | **20 49 36.2** | **0.0** |
| NWAO | | | | IAmb | IAmb | 20 49 43.9 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **49.41** | **244** | P | **P** | **20 49 40.2** | **0.0** |
| **JMM** | **Marumori** | **57.92** | **335** | P | **P** | **20 50 40.1** | **-1.6** |
| JMM | | | | IAmb | IAmb | 20 50 42.4 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **62.93** | **181** | P | **P** | **20 51 15.8** | **+0.7** |
| **VNDA** | **Vanda** | **62.93** | **181** | P | **P** | **20 51 15.6** | **+0.5** |
| | comp=Z,2.2nm,0.6s,baz=354,slow=6.7,SNR=36 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **SBA** | **Scott Base** | **63.20** | **180** | P | **P** | **20 51 16.9** | **0.0** |
| **CASY** | **Casey** | **63.63** | **202** | P | **P** | **20 51 20.3** | **+0.4** |
| CASY | | | | IAmb | IAmb | 20 51 20.9 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.36** | **180** | P | **P** | **20 52 32.5** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 20 52 32.9 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.36** | **180** | P | **P** | **20 52 32.0** | **+0.1** |
| | comp=Z,6.5nm,0.9s,baz=359,slow=2.7,SNR=20 | | | | | | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **81.99** | **202** | P | **P** | **20 53 08.5** | **+0.6** |
| | comp=Z,3.4nm,0.7s,baz=103,slow=6.6,SNR=5.6 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **82.52** | **324** | P | **P** | **20 53 12.3** | **+1.2** |
| | comp=Z,0.3nm,0.3s,baz=104,slow=6.1,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **EMB** | **Emerald Bay** | **86.03** | **48** | P | **P** | **20 53 30.6** | **+1.4** |
| **TROLL** | **Troll, Antarti** | **92.94** | **185** | ⇑P | **P** | **20 54 00.8** | **-0.1** |
| | comp=Z,186nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **93.62** | **183** | ⇓P | **P** | **20 54 03.5** | **-0.5** |
| | comp=Z,38nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **93.62** | **183** | P | **P** | **20 54 03.4** | **-0.6** |
| | comp=Z,1.4nm,0.6s,baz=191,slow=7.6,SNR=10.0 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **94.28** | **181** | ⇑P | **P** | **20 54 06.2** | **-0.8** |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **94.55** | **182** | ⇑P | **P** | **20 54 07.7** | **-0.4** |
| | comp=Z,3.9nm,0.6s,baz=187,slow=5.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **94.85** | **181** | ⇑P | **P** | **20 54 08.1** | **-1.4** |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **97.25** | **316** | P | Pdif | 20 54 22.0 | +1.1 |
| | comp=Z,0.2nm,0.6s,baz=93,slow=4.7,SNR=2.7 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.22** | **345** | PKP | **PKiKP** | **20 59 37.8** | **+0.1** |
| | comp=Z,2.3nm,0.7s,baz=44,slow=2.7,SNR=7.0 | | | | | | |
| **NB2** | **NORSAR Subarra** | **130.60** | **345** | SKPa | | 21 03 08.9 | |
| | comp=Z,2.8nm,1.1s,baz=38,slow=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **132.56** | **311** | PKP | **PKiKP** | **21 00 03.0** | **-0.3** |
| | comp=Z,0.5nm,0.8s,baz=355,slow=4.6,SNR=1.8 | | | | | | |
| **KEST** | **Kesra** | **151.24** | **321** | PKPbc | **PKPbc** | **21 00 38.9** | **-2.3** |
| | comp=Z,3.0nm,0.9s,baz=97,slow=2.8,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.04** | **266** | PKPab | **PKPab** | **21 01 54.1** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=92,slow=6.3,SNR=5.3 | | | | | | |

*NEIC* **12** *20:55:40.2±1.9, 69˚.64N±0˚.05×144˚.24W±0˚.08, h10km±2km, Error ellipse: s-maj=8.4km s-min=4.5km az=13.0*
**AEIC 12 20:55:39.3**±1.7**, 69˚.51N**±0˚.04×**144˚.47W**±0˚.08**, h4**km±3km**, ML4.0, ML4.0**/102(NEIC)**, Error ellipse: s-maj=6.1km s-min=4.3km az=186.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.29** | **66** | | **Sg** | 20 55 48.4 | -0.1 |
| **C27K** | **Jago River** | **0.29** | **66** | Pg | Pg | 20 55 44.5 | -0.3 |
| C27K | | | | IAML | | 20 55 48.7 | |
| | comp=N,4μm,0.3s | | | | | | |
| C27K | | | | IAML | | 20 55 50.4 | |
| | comp=E,4μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.44** | **339** | | Pg | 20 55 47.5 | -0.2 |
| C26K | | | | | Sg | 20 55 53.9 | +0.6 |
| **D25K** | **Kavik River** | **0.70** | **255** | Pg | Pg | 20 55 52.3 | -0.4 |
| **D25K** | **Kavik River** | **0.70** | **255** | | Sg | 20 56 02.7 | +0.9 |
| **D27M** | **Malcolm River** | **1.27** | **101** | Pg | Pg | 20 56 01.8 | -1.7 |
| **D27M** | **Malcolm River** | **1.27** | **101** | | Sb | 20 56 20.6 | +0.2 |
| **C24K** | **Franklin Bluff** | **1.50** | **280** | Pn | Pg | 20 56 07.8 | -0.1 |
| C24K | | | | Sn | Sg | 20 56 28.3 | +1.0 |
| C24K | | | | IAML | | 20 56 29.6 | |
| | comp=N,804nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.59** | **259** | | Pg | 20 56 09.9 | +0.3 |
| **E27K** | **Coleen River** | **1.69** | **141** | | Pb | 20 56 11.1 | +0.2 |
| **E27K** | **Coleen River** | **1.69** | **141** | | Sb | 20 56 32.4 | -0.1 |
| **F26K** | **Sheenjek River** | **1.83** | **176** | Pn | Pb | 20 56 13.3 | 0.0 |
| F26K | | | | Sn | Sg | 20 56 37.4 | -0.6 |
| F26K | | | | IAML | | 20 56 40.6 | |
| | comp=E,625nm,0.8s | | | | | | |
| F26K | | | | IAML | | 20 57 20.0 | |
| | comp=N,567nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **193** | Pn | Pb | 20 56 15.6 | -0.2 |
| F25K | | | | Sn | Sg | 20 56 43.3 | +0.7 |
| **E28M** | **Babbage River** | **1.99** | **115** | Pn | Pb | 20 56 15.5 | -0.6 |
| E28M | | | | IAML | | 20 57 26.5 | |
| | comp=E,427nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.03** | **247** | | Pb | 20 56 17.3 | +0.5 |
| TOLK | | | | IAML | | 20 57 27.8 | |
| | comp=E,403nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.03** | **247** | | Sb | 20 56 41.5 | -0.9 |
| **D28M** | **Stokes Point** | **2.03** | **93** | | Pn | 20 56 14.1 | -0.1 |
| **D28M** | **Stokes Point** | **2.03** | **93** | IAML | | 20 57 24.0 | |
| | comp=E,608nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.06** | **227** | | Pb | 20 56 16.5 | -0.6 |
| **BMAR** | **Burnt Mountain** | **2.09** | **181** | | Pb | 20 56 17.7 | -0.1 |
| **C23K** | **Itkillik River** | **2.17** | **281** | | Pb | 20 56 17.9 | -1.2 |
| C23K | | | | IAML | | 20 57 36.7 | |
| | comp=E,432nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.28** | **259** | | Pn | 20 56 17.8 | +0.1 |
| **F24K** | **Squaw Lake** | **2.37** | **214** | Pn | Pn | 20 56 20.4 | +1.5 |
| F24K | | | | IAML | | 20 57 31.9 | |
| | comp=N,310nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.38** | **234** | Pn | Pn | 20 56 20.5 | +1.4 |
| E23K | | | | IAML | | 20 57 29.0 | |
| | comp=E,357nm,0.5s | | | | | | |
| E23K | | | | IAML | | 20 57 31.9 | |
| | comp=N,360nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.55** | **136** | Pn | Pn | 20 56 22.4 | +1.0 |
| F28M | | | | IAML | | 20 57 58.8 | |
| | comp=E,423nm,0.6s | | | | | | |
| F28M | | | | IAML | | 20 57 59.1 | |
| | comp=N,763nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.59** | **174** | | Pn | 20 56 21.9 | +0.1 |
| **G25K** | **Bearman Lake** | **2.83** | **193** | | Pn | 20 56 25.4 | +0.3 |
| **G27K** | **Doyon Strip** | **2.91** | **158** | | Pn | 20 56 26.4 | +0.1 |
| **G27K** | **Doyon Strip** | **2.91** | **158** | IAML | | 20 58 25.2 | |
| | comp=E,302nm,1.1s | | | | | | |
| G27K | | | | IAML | | 20 58 25.4 | |
| | comp=N,330nm,0.6s | | | | | | |
| **FYU** | **Fort Yukon** | **2.98** | **186** | | Pn | 20 56 29.7 | +2.5 |
| FYU | | | | IAML | | 20 58 20.4 | |
| | comp=N,934nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **3.00** | **262** | | Pn | 20 56 27.6 | 0.0 |
| **D22K** | **Ayikyak River** | **3.00** | **262** | IAML | | 20 58 22.9 | |
| | comp=E,775nm,0.7s | | | | | | |
| D22K | | | | IAML | | 20 58 27.8 | |
| | comp=N,531nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.04** | **203** | Pn | Pn | 20 56 29.6 | +1.4 |
| G24K | | | | IAML | | 20 58 26.9 | |
| | comp=N,806nm,0.8s | | | | | | |
| **COLD** | **Coldfoot** | **3.13** | **225** | | Pn | 20 56 29.3 | 0.0 |
| **B22K** | **Teshekpuk Lake** | **3.20** | **289** | Pn | Pn | 20 56 31.1 | +0.9 |
| **H25L** | **Birch Creek** | **3.30** | **190** | | Pn | 20 56 31.7 | 0.0 |
| **F22K** | **John River** | **3.48** | **238** | | Pn | 20 56 34.1 | -0.1 |
| **H27K** | **Steamboat Moun** | **3.48** | **160** | | Pn | 20 56 34.0 | -0.1 |
| **G23K** | **Bananza Creek** | **3.50** | **219** | | Pn | 20 56 34.3 | -0.2 |
| **G23K** | **Bananza Creek** | **3.50** | **219** | IAML | | 20 58 38.9 | |
| | comp=N,396nm,0.8s | | | | | | |
| G23K | | | | IAML | | 20 58 40.1 | |
| | comp=E,471nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **3.55** | **134** | Pn | Pn | 20 56 37.0 | +1.9 |
| **B21K** | **Ikpikpuk River** | **3.56** | **276** | Pn | Pn | 20 56 37.1 | +1.9 |
| **E21K** | **Killik River** | **3.59** | **257** | Pn | Pn | 20 56 37.7 | +2.0 |
| **F30M** | **Barrier River** | **3.71** | **117** | | Pn | 20 56 37.3 | -0.1 |
| **H24K** | **Noodor Dome** | **3.92** | **201** | Pn | Pn | 20 56 41.4 | +1.3 |
| **H29M** | **Whitestone** | **4.03** | **142** | Pn | Pn | 20 56 43.5 | +1.7 |
| **PRP** | **Porcupine Dome** | **4.04** | **186** | Pn | Pn | 20 56 44.2 | +2.3 |
| **F21K** | **Alatna River** | **4.05** | **240** | Pn | Pn | 20 56 43.0 | +0.9 |
| F21K | | | | IAML | | 20 59 00.5 | |
| | comp=E,235nm,0.6s | | | | | | |
| **I27K** | **Kandik River** | **4.08** | **163** | | Pn | 20 56 42.4 | 0.0 |
| **H23K** | **Yukon River** | **4.18** | **210** | Pn | Pn | 20 56 44.9 | +1.1 |
| **I26K** | **Coal Creek Min** | **4.26** | **173** | Pn | Pn | 20 56 46.9 | +2.1 |
| **EPYK** | **Eagle Plains** | **4.30** | **134** | | Pn | 20 56 47.1 | +1.7 |
| **D20K** | **Etivluk River** | **4.42** | **265** | | Pn | 20 56 47.7 | +0.6 |
| **B20K** | **Meade River** | **4.44** | **282** | Pn | Pn | 20 56 48.4 | +1.2 |
| **I28M** | **Miner Creek** | **4.44** | **155** | Pn | Pn | 20 56 49.9 | +2.5 |
| **A21K** | **Barrow** | **4.47** | **300** | | Pn | 20 56 48.1 | +0.4 |
| **H22K** | **Ishtalitna Cre** | **4.49** | **219** | | Pn | 20 56 48.2 | +0.3 |
| **G21K** | **Allakaket** | **4.54** | **233** | Pn | Pn | 20 56 49.6 | +1.0 |
| **POKR** | **Poker Plat Res** | **4.56** | **196** | Pn | Pn | 20 56 51.1 | +2.1 |
| **G31M** | **Satah River** | **4.60** | **120** | Pn | Pn | 20 56 51.2 | +1.7 |
| **I23K** | **Minto, Yukon-K** | **4.78** | **206** | Pn | Pn | 20 56 53.4 | +1.5 |
| **MDM** | **Murphy Dome** | **4.80** | **200** | Pn | Pn | 20 56 53.7 | +1.3 |
| MDM | | | | IAML | | 20 59 25.5 | |
| | comp=N,136nm,1.0s | | | | | | |
| **IL31** | | **4.86** | **192** | Pn | Pn | 20 56 56.0 | +3.0 |
| **F20K** | **Avaraart Lake** | **4.86** | **245** | Pn | Pn | 20 56 54.8 | +1.8 |
| F20K | | | | IAML | | 20 59 30.2 | |
| | comp=E,118nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **4.94** | **185** | Pn | Pn | 20 56 57.1 | +2.9 |
| **D19K** | **Kuna River** | **5.01** | **265** | | Pn | 20 56 56.5 | +1.3 |
| **H21K** | **Melozitna Rive** | **5.01** | **223** | | Pn | 20 56 55.6 | +0.3 |
| **J26L** | **Joseph Creek** | **5.05** | **176** | | Pn | 20 56 56.2 | +0.4 |
| **CCB** | **Clear Creek Bu** | **5.06** | **197** | Pn | Pn | 20 56 57.7 | +1.9 |
| **E19K** | **Redstone River** | **5.13** | **252** | | Pn | 20 56 57.1 | +0.3 |
| **WRH** | **Wood River Hil** | **5.26** | **197** | Pn | Pn | 20 57 00.5 | +2.0 |
| **I30M** | **Mount Dempster** | **5.32** | **140** | Pn | Pn | 20 57 01.2 | +1.8 |
| **C19K** | **Lookout Ridge** | **5.38** | **273**

D28M IAML 20 57 55.9
comp=E,3µm,0.9s
**D28M Stokes Point 2.00 93 Sn 20 57 44.2 0.0**
**TOLK Toolik Lake Re 2.07 247 Pn Pb 20 57 21.9 -0.2**
TOLK IAML 20 57 55.4
comp=N,2µm,0.7s
TOLK IAML 20 57 57.6
comp=E,2µm,0.9s
**E24K Your Creek 2.09 228 Pn Pb 20 57 22.2 -0.2**
**E24K Your Creek 2.09 228 Sn 20 57 45.8 -0.7**
**BMAR Burnt Mountain 2.10 182 Pn Pn 20 57 22.0 +1.9**
**C23K Itkillik River 2.21 281 Pn Pn 20 57 22.8 +1.3**
**D23K Nanushuk River 2.32 259 Pn 20 57 22.5 -0.6**
**F24K Squaw Lake 2.39 215 Pn 20 57 24.6 +0.5**
F24K IAML 20 58 05.3
comp=N,1µm,0.6s
**E23K Chandalar 2.41 235 Pn 20 57 23.3 -1.0**
**F28M Old Crow 2.53 137 Pn Pn 20 57 26.6 +0.7**
F28M IAML 20 58 08.9
comp=E,948nm,0.9s
F28M IAML 20 58 09.8
comp=N,1µm,0.6s
**G26K Porcupine Rive 2.59 175 Pn 20 57 25.3 -1.4**
**E29M Blow River 2.59 113 Pn 20 57 25.8 -1.0**
**E29M Blow River 2.59 113 IAML** 20 58 09.7
comp=N,1µm,0.8s
E29M IAML 20 58 11.7
comp=E,1µm,1.0s
**G25K Bearman Lake 2.84 194 Pn 20 57 28.9 -1.3**
G25K Pb 20 57 31.7 -3.5
**G27K Doyon Strip 2.90 158 Pn 20 57 32.3 +1.2**
**FYU Fort Yukon 2.98 187 Pn Pn 20 57 33.4 +1.2**
FYU IAML 20 58 29.1
comp=N,1µm,1.6s
**D22K Ayikyak River 3.04 262 Pn 20 57 32.1 -0.8**
**D22K Ayikyak River 3.04 262 IAML** 20 58 29.2
comp=N,871nm,0.8s
D22K IAML 20 58 32.0
comp=E,1µm,1.1s
**G24K Hadweenzic Riv 3.06 204 Pn 20 57 33.8 +0.5**
G24K IAML 20 58 28.5
comp=N,915nm,0.8s
**COLD Coldfoot 3.16 226 Pn 20 57 33.4 -1.1**
**B22K Teshekpuk Lake 3.23 289 Pn Pn 20 57 36.1 +0.5**
**H25L Birch Creek 3.31 190 Pn 20 57 35.4 -1.3**
H25L Pb 20 57 38.4 -4.9
**F22K John River 3.51 239 Pn 20 57 38.4 -1.1**
**G29M Pine Creek 3.53 135 Pn Pn 20 57 40.2 +0.5**
**B21K Ikpikpuk River 3.60 276 Pn 20 57 41.2 +0.7**
B21K IAML 20 58 55.7
comp=E,461nm,1.5s
**E21K Killik River 3.63 257 Pn 20 57 40.2 -0.9**
**E21K Killik River 3.63 257 IAML** 20 58 51.7
comp=N,528nm,1.0s
E21K IAML 20 58 55.3
comp=E,417nm,0.8s
**F30M Barrier River 3.69 117 Pn 20 57 40.8 -1.0**
**A22K Sinclair Lake 3.90 297 Pn 20 57 44.5 -0.2**
**H24K Noodor Dome 3.93 202 Pn Pn 20 57 45.4 +0.1**
H24K IAML 20 58 56.7
comp=N,275nm,0.9s
H24K IAML 20 58 57.5
comp=E,374nm,1.4s
**G30M tAoh Zraii Nji 3.96 126 Pn 20 57 47.3 +1.7**
G30M IAML 20 59 01.4
comp=N,336nm,0.8s
G30M IAML 20 59 02.5
comp=E,309nm,0.7s
**H29M Whitestone 4.01 143 Pn Pn 20 57 47.4 +1.1**
H29M IAML 20 59 00.8
comp=N,448nm,1.4s
H29M IAML 20 59 04.0
comp=E,453nm,1.1s
**PRP Porcupine Dome 4.04 187 Pn Pn 20 57 48.0 +1.1**
PRP IAML 20 58 53.9
comp=N,343nm,0.8s
PRP IAML 20 59 01.8
comp=E,267nm,0.8s
**I27K Kandik River 4.07 164 Pn 20 57 45.9 -1.3**
I27K Pb 20 57 48.1 -8.1
**F21K Alatna River 4.09 240 Pn Pn 20 57 48.2 +0.8**
F21K IAML 20 59 02.6
comp=N,308nm,0.8s
**INK Inuvik 4.10 102 Pn Pn 20 57 47.5 0.0**
**INK Inuvik 4.10 102 Pn Pn 20 57 47.3 -0.2**
comp=N,5.4nm,0.3s,baz=288,slow=9.4,SNR=5.7
INK Sn Sn **20 58 35.0 -1.0**
comp=N,12nm,0.3s,baz=61,slow=19,SNR=4.6
INK LR LR 20 59 57.6
comp=N,226nm,18.6s,baz=114,slow=47
comp=N,11nm,0.3s
**H23K Yukon River 4.20 210 Pn Pn 20 57 50.2 +1.3**
H23K IAML 20 59 06.3
comp=E,345nm,1.1s
H23K IAML 20 59 06.8
comp=N,342nm,1.1s
**I26K Coal Creek Min 4.26 173 Pn 20 57 48.3 -1.4**
**EPYK Eagle Plains 4.28 134 Pn Pn 20 57 50.5 +0.6**
**I28M Miner Creek 4.43 155 Pn Pn 20 57 52.9 +0.8**
I28M IAML 20 58 46.8
comp=N,297nm,0.6s
I28M IAML 20 58 47.3
comp=E,311nm,0.4s
**F31M Tsiigehtchic 4.43 113 Pn Pn 20 57 52.5 +0.4**
F31M IAML 20 59 09.0
comp=E,223nm,0.8s
F31M IAML 20 59 09.3
comp=N,200nm,1.4s
**D20K Etivluk River 4.46 265 Pn 20 57 51.7 -0.8**
**E20K Nigu River 4.46 259 Pn 20 57 51.6 -0.9**
**B20K Meade River 4.47 282 Pn 20 57 52.5 0.0**
**A21K Barrow 4.50 299 Pn 20 57 52.3 -0.6**
**G21K Allakaket 4.57 233 Pn Pn 20 57 53.9 -0.1**
G21K IAML 20 59 19.7
comp=N,276nm,1.1s
**G31M Satah River 4.57 120 Pn Pn 20 57 54.8 +0.9**
**POKR Poker Plat Res 4.58 196 Pn 20 57 54.6 +0.6**
POKR IAML 20 59 12.5
comp=N,181nm,0.9s
POKR IAML 20 59 23.1
comp=E,274nm,1.1s
**I29M Ogilvie Camp, 4.78 148 Pn 20 57 57.2 +0.3**
I29M IAML 20 58 56.6
comp=N,207nm,0.5s
**I23K Minto, Yukon-K 4.79 206 Pn 20 57 57.3 +0.3**
I23K IAML 20 59 23.5
comp=N,196nm,1.2s
I23K IAML 20 59 35.3
comp=E,178nm,1.2s
**MDM Murphy Dome 4.82 200 Pn 20 57 58.0 +0.6**
MDM IAML 20 59 18.1
comp=E,176nm,0.8s
**COLA College 4.86 198 Pn 20 57 59.0 +1.2**
**IL31 4.87 193 Pn Pn 20 57 59.5 +1.5**
**ILAR Eielson Array 4.87 193 Pn Pn 20 57 59.4 +1.3**
comp=E,5.5nm,0.3s,baz=6.6,slow=14,SNR=7.6
ILAR Sn Sn **20 58 55.6 +0.6**
comp=E,9.6nm,0.3s,baz=10,slow=24,SNR=7.7
comp=E,12nm,0.5s
**F20K Avaraart Lake 4.89 245 Pn 20 57 59.5 +1.1**
F20K IAML 20 59 20.9
comp=N,134nm,1.1s
**EGAK Eagle 4.92 164 Pn Pn 20 57 59.5 +0.7**
EGAK IAML 20 59 27.6
comp=N,151nm,1.2s
EGAK IAML 20 59 35.5
comp=N,161nm,1.2s
**J25K Salcha River, 4.94 185 Pn 20 58 00.5 +1.3**
J25K IAML 20 59 24.7
comp=E,150nm,1.1s
**H21K Melozitna Rive 5.04 224 Pn 20 58 01.4 +0.9**
H21K IAML 20 59 30.8
comp=E,223nm,1.2s
H21K IAML 20 59 30.9
comp=N,144nm,1.3s
**J26L Joseph Creek 5.05 176 Pn Pn 20 58 01.1 +0.5**
J26L IAML 20 59 04.6
comp=N,124nm,0.6s
J26L IAML 20 59 25.4
comp=E,206nm,0.6s
**D19K Kuna River 5.05 265 Pn 20 58 00.7 +0.2**
D19K IAML 20 59 38.6
comp=E,142nm,1.2s
**CCB Clear Creek Bu 5.07 197 Pn Pn 20 58 01.5 +0.7**
CCB IAML 20 59 33.0
comp=E,129nm,1.3s
**MLY Manley 5.14 212 Pn 20 58 02.5 +0.7**
**E19K Redstone River 5.17 253 Pn 20 58 02.8 +0.7**
E19K IAML 20 59 46.6
comp=E,108nm,1.1s
**HDA Harding Lake 5.23 192 Pn Pn 20 58 04.7 +1.7**
HDA IAML 20 59 34.9
comp=E,159nm,1.1s
HDA IAML 20 59 38.0
comp=N,200nm,1.0s
**WRH Wood River Hil 5.28 198 Pn Pn 20 58 04.7 +1.0**
WRH IAML 20 59 37.4
comp=N,104nm,1.1s
WRH IAML 20 59 39.1
comp=E,127nm,1.3s
**NEA2 Nenana 5.28 203 Pn Pn 20 58 04.8 +1.1**
NEA2 IAML 20 59 42.1
comp=E,106nm,1.2s
**I30M Mount Dempster 5.30 141 Pn 20 58 04.8 +0.7**
I30M IAML 20 59 20.6
comp=N,115nm,0.7s
**C19K Lookout Ridge 5.41 273 Pn Pn 20 58 05.9 +0.3**
**SCRK Sand Creek 5.57 178 Pn 20 58 09.3 +1.6**
**K27K Chicken 5.59 170 Pn Pn 20 58 09.4 +1.5**
**J29N Klondike Camp 5.63 152 Pn 20 58 10.0 +1.5**
**F19K Shaleruckik Mo 5.68 248 Pn 20 58 09.6 +0.4**
**BWN Browne 5.73 203 Pn Pn 20 58 10.4 +0.5**
**A19K Wainwright 5.81 285 Pn 20 58 10.5 -0.4**
**DAWY Dawson 5.82 158 Pn 20 58 12.3 +1.2**
**J30M Hart River 5.87 144 Pn 20 58 12.1 +0.2**
**G19K Purcell Mounta 5.88 241 Pn Pn 20 58 12.3 +0.3**
**BPAW Bear Paw Mtn. 6.03 209 Pn Pn 20 58 14.5 +0.4**
**C18K Utukok River 6.09 270 Pn Pn 20 58 14.7 -0.1**
**MCK McKinley 6.09 200 Pn 20 58 13.7 -1.2**
**H19K Roundabout Mou 6.12 235 Pn Pn 20 58 15.7 +0.5**
**B18K Kokolik River 6.14 277 Pn 20 58 14.8 -0.7**
**K29M Barlow Dome 6.31 151 Pn Pn 20 58 19.3 +1.4**
**E18K Tukpahlearik C 6.33 258 Pn Pn 20 58 18.4 +0.3**
**RND Reindeer 6.39 198 Pn Pn 20 58 21.1 +2.0**
**F18K Selawik 6.43 250 Pn 20 58 18.9 -0.4**
**G18K Tagagawik 6.53 243 Pn Pn 20 58 21.7 +0.8**
**L26K Log Cabin Wild 6.53 176 Pn Pn 20 58 22.3 +1.3**
**BCAR Beaver Creek A 6.56 170 Pn 20 58 22.3 +0.9**
**L27K Beaver Creek, 6.56 170 Pn 20 58 22.5 +1.1**
**DHY Denali Highway 6.58 192 Pn Pn 20 58 24.0 +2.2**
**PAX Paxson 6.59 184 Pn 20 58 21.3 -0.5**
**J20K Nowinta River 6.60 220 Pn Pn 20 58 22.4 +0.6**
**MENT Mentasta 6.61 177 Pn Pn 20 58 23.4 +1.3**
**A36M Sachs Harbour 6.77 60 Pn 20 58 22.5 -1.6**
**C17K DeLong Mountai 6.84 270 Pn 20 58 24.3 -0.7**
**RDOG Red Dog Mine 6.88 266 Pn Pn 20 58 24.8 -0.8**
**L29M L29M 6.90 156 Pn 20 58 27.0 +1.0**
**E17K Hotham Inlet 6.91 258 Pn 20 58 25.7 -0.4**
**H18K Honhosa River 6.95 238 Pn Pn 20 58 26.8 +0.2**
**F17K Baldwin Pennin 7.05 252 Pn Pn 20 58 28.1 +0.2**
**D17K Noatak River 7.08 264 Pn 20 58 27.3 -1.0**
**J19K Poorman 7.10 224 Pn 20 58 28.3 -0.4**
**C36M Paulatuk 7.14 82 Pn 20 58 28.1 -1.0**
**HARP HAARP 7.16 183 Pn 20 58 28.6 -0.9**
**M27K Edge Creek, AK 7.26 171 Pn Pn 20 58 32.4 +1.3**
**K20K Telida 7.30 217 Pn 20 58 29.6 -1.8**
**G17K Kiwalik Mounta 7.42 245 Pn 20 58 32.4 -0.6**
**M29M Somme Creek 7.50 159 Pn Pn 20 58 35.2 +1.0**
**H17K Granite Mounta 7.57 240 Pn Pn 20 58 36.0 +0.9**
**C16K Lisburne Hills 7.66 271 Pn Pn 20 58 35.6 -0.8**
**SML Sawmill 7.91 194 Pn Pn 20 58 42.1 +2.3**
**G16K Koyuk River 8.04 248 Pn Pn 20 58 41.9 +0.5**
**M20K Styx River 8.46 209 Pn 20 58 47.0 -0.5**
**L19K White Mountain 8.51 215 Pn Pn 20 58 49.0 +1.0**
**L18K Granite Mounta 8.88 220 Pn Pn 20 58 53.8 +0.8**
**N32M Quiet Lake 9.61 145 Pn Pn 20 59 03.0 -0.1**
**L16K Owhat River 9.99 226 Pn Pn 20 59 08.5 +0.3**
**K15K Wolf Creek Mou 10.05 232 Pn Pn 20 59 09.0 0.0**
**J14K Nanvaranak Lak 10.28 238 Pn Pn 20 59 14.4 +2.3**
**P29M Windy Craggy 10.32 161 Pn 20 59 15.0 +2.2**
**WRGLY Wrigley 10.44 117 Pn 20 59 13.7 -0.7**
**M16K Timber Creek 10.45 223 Pn Pn 20 59 15.3 +0.7**
**P33M Teslin, Yukon 10.53 147 Pn Pn 20 59 15.3 -0.3**
**Q32M Nakina River 11.80 148 Pn Pn 20 59 33.7 +0.5**
**KDAK Kodiak Island 12.31 201 LR LR** 21 04 45.7
comp=N,155nm,20.2s,baz=219,slow=38
**DLBC Dease Lake 12.72 144 Pn Pn 20 59 46.2 +0.5**
**DLBC Dease Lake 12.72 144 Pn Pn 20 59 45.7 0.0**
comp=N,0.7nm,0.3s,baz=4.2,slow=10,SNR=7.4
comp=N,2.9nm,0.5s
**S34M Telegraph Cree 12.99 147 Pn Pn 20 59 50.4 +1.2**
**YKA Yellowknife Ar 13.86 106 Pn Pn** 20 59 56.0 -5.0
comp=N,0.9nm,0.3s,baz=315,slow=13,SNR=9.7
YKA Sn Sn 21 02 21.1 -14
comp=N,1.0nm,0.3s,baz=308,slow=23,SNR=6.3
comp=N,1.7nm,0.4s
**EUNU Eureka 17.40 30 P P 21 00 49.7 +0.9**
EUNU IAmb IAmb 21 00 56.3
comp=Z,21nm,1.4s
**BILL Bilibino 17.54 289 P P 21 00 50.5 +0.1**
BILL IAmb IAmb 21 01 28.4
comp=Z,13nm,0.4s
**PDAR Pinedale Array 32.21 128 P P 21 03 13.9 +0.6**
comp=Z,0.9nm,0.8s,baz=350,slow=3.6,SNR=6.4
comp=Z,0.9nm,0.8s
**NVAR Mina Array Bea 34.13 142 P P 21 03 33.3 +3.2**
comp=Z,0.6nm,0.7s,baz=347,slow=7.4,SNR=5.1
comp=Z,0.6nm,0.7s
**TXAR Lajitas Array 46.43 128 P P 21 05 12.6 +0.8**
comp=Z,0.4nm,0.6s,baz=353,slow=6.4,SNR=6.4
comp=Z,0.4nm,0.6s
**FINES FINESS Array B 49.15 6 P P 21 05 31.2 -1.2**
comp=Z,0.6nm,0.3s,baz=5.7,slow=7.0,SNR=9.8
comp=Z,0.6nm,0.3s
**HFS Hagfors 49.69 14 P P 21 05 35.3 -1.3**
comp=Z,0.7nm,0.4s,baz=340,slow=3.8,SNR=12
comp=Z,0.7nm,0.4s
**ZALV Zalesovo Beam 51.76 325 P P 21 05 51.1 -1.1**
comp=Z,0.5nm,0.4s,baz=344,slow=4.7,SNR=3.8
comp=Z,0.5nm,0.4s
**MJAR Matsushiro Arr 51.93 273 P P 21 05 56.5 +2.7**
comp=Z,0.4nm,0.3s,baz=8.1,slow=8.2,SNR=4.7
comp=Z,0.4nm,0.3s
**SONM Songino Array 52.16 306 P P 21 05 55.3 -0.2**
comp=Z,0.5nm,0.6s,baz=44,slow=4.4,SNR=2.8
comp=Z,0.5nm,0.6s
**EKA Eskdalemuir Ar 52.31 27 P P 21 05 55.2 -1.1**
comp=Z,2.4nm,0.9s,baz=338,slow=5.6,SNR=5.6
comp=Z,2.4nm,0.9s
**KSRS Korea Array 54.69 283 P P 21 06 14.3 +0.3**
comp=Z,1.0nm,0.7s,baz=22,slow=8.2,SNR=3.2
comp=Z,1.0nm,0.7s
**KURBB Kurchatov Arra 56.13 329 P P 21 06 23.4 -0.9**
comp=Z,1.1nm,0.7s,baz=13,slow=7.3,SNR=8.2
comp=Z,1.1nm,0.7s
**HHC Hu-ho-hao-te 56.98 299** *e*P P **21 06 30.8 +0.2**
HHC sP 21 06 40.3
HHC pmax pmax
comp=Z,13nm,0.6s
HHC pmax pmax
comp=Z,60nm,4.3s
**MKAR Makanchi Array 59.06 324 P P 21 06 43.0 -2.0**
comp=Z,0.3nm,0.5s,baz=39,slow=5.5,SNR=5.4
comp=Z,0.3nm,0.5s
**AKASG Malin Array Be 60.00 5 P P 21 06 50.7 -0.6**
comp=Z,1.1nm,0.5s,baz=358,slow=7.2,SNR=6.2
comp=Z,1.1nm,0.5s
**ESDC Sonseca Array 67.30 32 P P 21 07 39.1 -0.7**
comp=Z,0.3nm,0.5s,baz=342,slow=7.4,SNR=4.6
comp=Z,0.3nm,0.5s
**PZH PanZhiHua 73.28 301 P P 21 08 17.3 +0.7**
PZH pmax pmax
comp=Z,10.0nm,3.5s
PZH pmax pmax
comp=Z,100nm,5.0s

*ISK* **12** *20:57:00.9, 38.85N×25.87E, h13km, ML3.0/39*
*ATH* **12** *20:57:02.0, 38.84N×25.90E, h13km±1km, ML3.2/5, Error ellipse: s-maj=2.0km s-min=0.8km az=96.0*
*AFAD* **12** *20:57:01.6±0.0, 38.86N×25.94E, h7km±2km, ML3.0*
*THE* **12** *20:57:01.9, 38.85N×25.93E, h12km±1km, ML3.2/4, Error ellipse: s-maj=1.9km s-min=0.6km az=93.0*
**ISC 12 20:57:01.7±0.9, 38.85N±0.02×25.91E±0.02, h14km±8km, n102, σ0.62/127, 2C-6D, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EAG2** | **Marmaro, Chios** | **0.34** | **153** | P | **Pb** | **20 57 09.3** | **-0.3** |
| EAG2 | | | | S | **Sg** | **20 57 13.7** | **+0.3** |
| EAG2 | | | | AML | AML | 20 57 14.6 | |
| | comp=N,61505µm,0.3s | | | | | | |
| EAG2 | | | | AML | AML | 20 57 15.4 | |
| | comp=E,49726µm,0.3s | | | | | | |
| **SIGR** | **SIGRI** | **0.36** | **353** | Pg | **Pg** | **20 57 09.3** | **+0.3** |
| SIGR | | | | Sg | **Sg** | **20 57 14.2** | **+0.2** |
| **SIGR** | **SIGRI** | **0.36** | **353** | P | **Pg** | **20 57 09.3** | **+0.3** |
| SIGR | | | | S | **Sg** | **20 57 14.1** | **+0.1** |
| | comp=E,3µm,0.4s | | | | | | |
| **SIGR** | **SIGRI** | **0.36** | **353** | P | **Pg** | **20 57 09.2** | **+0.1** |
| SIGR | | | | S | **Sg** | **20 57 14.4** | **+0.3** |
| SIGR | | | | AML | AML | 20 57 15.2 | |
| | comp=N,9327µm,0.4s | | | | | | |
| SIGR | | | | AML | AML | 20 57 17.1 | |
| | comp=E,3602µm,0.4s | | | | | | |
| **PSRA** | **Psara** | **0.41** | **221** | P | **Pg** | **20 57 10.0** | **+0.1** |
| PSRA | | | | S | **Sg** | **20 57 15.4** | **0.0** |
| PSRA | | | | AML | AML | 20 57 16.5 | |
| | comp=N,6329µm,0.2s | | | | | | |
| PSRA | | | | AML | AML | 20 57 16.6 | |
| | comp=E,9360µm,0.3s | | | | | | |
| **KARB** | **zmir-Karabur** | **0.44** | **115** | P | **Pg** | **20 57 10.0** | **-0.4** |
| KARB | | | | S | **Sg** | **20 57 14.3** | **-1.9** |
| **CHOS** | **Chios island** | **0.48** | **166** | Pg | **Pg** | **20 57 11.5** | **+0.3** |
| CHOS | | | | Sg | **Sg** | **20 57 17.8** | **+0.2** |
| **CHOS** | **Chios island** | **0.48** | **166** | P | **Pg** | **20 57 11.4** | **+0.3** |
| CHOS | | | | S | **Sg** | **20 57 17.8** | **+0.2** |
| | comp=E,6µm,0.3s | | | | | | |
| **CHOS** | **Chios island** | **0.48** | **166** | P | **Pg** | **20 57 11.3** | **+0.1** |
| CHOS | | | | S | **Sg** | **20 57 17.5** | **-0.1** |
| CHOS | | | | AML | AML | 20 57 18.6 | |
| | comp=N,8180µm,0.4s | | | | | | |
| CHOS | | | | AML | AML | 20 57 19.8 | |
| | comp=E,15612µm,0.3s | | | | | | |
| **PRK** | **Paraskevi** | **0.48** | **36** | P | **Pg** | **20 57 11.3** | **0.0** |
| **PRK** | **Paraskevi** | **0.48** | **36** | P | **Pg** | **20 57 11.2** | **0.0** |
| PRK | | | | S | **Sb** | **20 57 18.7** | **-0.3** |
| PRK | | | | AML | AML | 20 57 21.5 | |
| | comp=E,1903µm,0.5s | | | | | | |
| PRK | | | | AML | AML | 20 57 23.7 | |
| | comp=N,1925µm,0.4s | | | | | | |
| **CESE** | **eme** | **0.60** | **149** | Pg | **Pg** | **20 57 13.4** | **-0.1** |
| **GPNR** | **Gulpinar-Canak** | **0.63** | **16** | Pg | **Pg** | **20 57 13.8** | **-0.2** |
| **FOCM** | **Foa** | **0.66** | **102** | Pg | **Pg** | **20 57 14.4** | **-0.1** |
| **KOCA** | **Canakkale, Ayv** | **0.67** | **15** | P | **Pg** | **20 57 14.8** | **-0.1** |
| KOCA | | | | S | **Sb** | **20 57 25.2** | **+0.8** |
| KOCA | | | | *i* AML | AML | 20 57 27.0 | |
| | comp=N,860nm,0.4s | | | | | | |
| KOCA | | | | *i* AML | AML | 20 57 28.0 | |
| | comp=N,1µm,0.7s | | | | | | |
| **URLA** | **Izmir** | **0.73** | **132** | Pg | **Pg** | **20 57 15.7** | **-0.1** |
| URLA | | | | Sg | **Sb** | **20 57 26.7** | **+0.7** |
| **URLA** | **Izmir** | **0.73** | **132** | P | **Pg** | **20 57 15.6** | **-0.3** |
| URLA | | | | S | **Sg** | **20 57 24.9** | **-0.5** |
| **AYVA** | **Ayvalik** | **0.76** | **53** | P | **Pg** | **20 57 16.3** | **-0.1** |
| AYVA | | | | S | **Sg** | **20 57 26.2** | **-0.2** |
| AYVA | | | | *i* AML | AML | 20 57 29.0 | |
| | comp=N,680nm,0.5s | | | | | | |
| AYVA | | | | *i* AML | AML | 20 57 29.0 | |
| | comp=N,552nm,0.9s | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **0.77** | **142** | P | **Pg** | **20 57 16.3** | **-0.3** |
| ZEYE | | | | *i* AML | AML | 20 57 29.0 | |
| | comp=N,528nm,0.5s | | | | | | |
| ZEYE | | | | *i* AML | AML | 20 57 32.0 | |
| | comp=N,449nm,0.5s | | | | | | |
| **IZMD** | **zmir-Dikili-** | **0.81** | **80** | P | **Pg** | **20 57 17.1** | **-0.2** |
| IZMD | | | | S | **Sg** | **20 57 26.5** | **-1.4** |
| **DKL** | **Dikili** | **0.81** | **74** | Pg | **Pb** | **20 57 17.6** | **+0.1** |
| **ZEDA** | **zmir-Bergama** | **0.92** | **82** | P | **Pg** | **20 57 19.3** | **-0.1** |
| ZEDA | | | | S | **Sb** | **20 57 31.5** | **0.0** |
| **EZNE** | **Ezine-Canakkal** | **0.97** | **21** | Pg | **Pb** | **20 57 20.0** | **-0.3** |
| **BOZC** | **Bozcaada** | **1.00** | **6** | P | **Pb** | **20 57 20.3** | **-0.4** |
| BOZC | | | | S | **Sg** | **20 57 34.5** | **+0.6** |
| BOZC | | | | *i* AML | AML | 20 57 36.0 | |
| | comp=N,342nm,1.0s | | | | | | |
| **BAYC** | **CANAKKALE_Bayr** | **1.02** | **29** | P | **Pb** | **20 57 20.8** | **-0.3** |
| BAYC | | | | S | **Sb** | **20 57 34.4** | **0.0** |
| **EZN** | **Ezine** | **1.02** | **18** | Pg | **Pb** | **20 57 21.0** | **-0.3** |
| **EZN** | **Ezine** | **1.02** | **18** | P | **Pb** | **20 57 20.9** | **-0.3** |
| EZN | | | | S | **Sg** | **20 57 35.1** | **+0.2** |
| | comp=N,1µm,0.6s | | | | | | |
| **DGB** | **zmir** | **1.10** | **136** | P | **Pb** | **20 57 22.1** | **-0.4** |
| DGB | | | | S | **Sb** | **20 57 36.6** | **-0.2** |
| **GMLD** | **Gumuldur** | **1.11** | **134** | Pn | **Pb** | **20 57 22.2** | **-0.4** |
| **BUHA** | **Balikesir, Bur** | **1.12** | **54** | P | **Pb** | **20 57 22.3** | **-0.4** |
| BUHA | | | | S | **Sb** | **20 57 36.7** | **-0.4** |
| BUHA | | | | *i* AML | AML | 20 57 40.0 | |
| | comp=N,366nm,0.8s | | | | | | |
| BUHA | | | | *i* AML | AML | 20 57 42.0 | |
| | comp=N,290nm,0.6s | | | | | | |
| **LIA** | **Limnos Island** | **1.19** | **332** | P | **Pn** | **20 57 23.6** | **-0.3** |
| LIA | | | | S | **Sb** | **20 57 39.5** | **+0.3** |
| | comp=N,798nm,0.5s | | | | | | |
| **LIA** | **Limnos Island** | **1.19** | **332** | P | **Pn** | **20 57 23.8** | **-0.1** |
| **ECEA** | **Canakkale, Ece** | **1.21** | **10** | P | **Pn** | **20 57 24.3** | **+0.1** |
| ECEA | | | | S | **Sb** | **20 57 39.6** | **-0.2** |
| ECEA | | | | *i* AML | AML | 20 57 44.0 | |
| | comp=N,533nm,0.5s | | | | | | |
| ECEA | | | | *i* AML | AML | 20 57 50.0 | |
| | comp=N,632nm,0.5s | | | | | | |
| **CNKL** | **anakkale-Mer** | **1.27** | **17** | P | **Pn** | **20 57 24.7** | **-0.3** |
| CNKL | | | | S | **Sb** | **20 57 39.6** | **-2.0** |
| CNKL | | | | *i* AML | AML | 20 57 43.0 | |
| | comp=N,229nm,0.5s | | | | | | |
| CNKL | | | | *i* AML | AML | 20 57 45.0 | |
| | comp=N,337nm,0.4s | | | | | | |
| **SOMA** | **Soma-Manisa** | **1.30** | **76** | Pn | **Pn** | **20 57 25.6** | **+0.1** |
| **GOAD** | **anakkale-G¶** | **1.31** | **0** | P | **Pn** | **20 57 25.9** | **+0.4** |
| GOAD | | | | S | **Sb** | **20 57 42.7** | **0.0** |
| GOAD | | | | *i* AML | AML | 20 57 45.0 | |
| | comp=N,504nm,0.6s | | | | | | |
| GOAD | | | | *i* AML | AML | 20 57 46.0 | |
| | comp=N,372nm,0.6s | | | | | | |
| **COMU** | **Canakkale** | **1.32** | **19** | Pn | **Pn** | **20 57 25.6** | **-0.1** |
| **GADA** | **Gvkgeada** | **1.34** | **360** | Pn | **Pn** | **20 57 25.7** | **-0.2** |
| **KYMI** | **Kymi, Euboea I** | **1.43** | **262** | P | **Pn** | **20 57 27.3** | **+0.1** |
| **KYMI** | **Kymi, Euboea I** | **1.43** | **262** | P | **Pn** | **20 57 27.1** | **-0.1** |
| **TNSA** | **Tinos** | **1.44** | **204** | P | **Pn** | **20 57 26.3** | **-0.9** |
| **AKHS** | **Akhisar** | **1.49** | **88** | P | **Pg** | **20 57 30.6** | **+0.3** |
| **YENI** | **Yenice-Canakka** | **1.50** | **43** | Pn | **Pn** | **20 57 28.3** | **+0.2** |
| **STEP** | **BALIKESIR_Sava** | **1.50** | **69** | P | **Pg** | **20 57 31.0** | **+0.4** |
| STEP | | | | S | **Sn** | **20 57 47.0** | **-0.7** |
| **GCAM** | **G?zelcaml?** | **1.55** | **137** | Pn | **Pn** | **20 57 28.9** | **+0.1** |
| **GCAM** | **G?zelcaml?** | **1.55** | **137** | P | **Pg** | **20 57 31.6** | **+0.1** |
| GCAM | | | | S | **Sb** | **20 57 50.4** | **+0.8** |
| **BALY** | **Balya** | **1.60** | **56** | P | **Pb** | **20 57 31.4** | **+0.4** |
| BALY | | | | S | **Sb** | **20 57 51.4** | **+0.3** |
| BALY | | | | *i* AML | AML | 20 58 05.0 | |
| | comp=N,117nm,1.0s | | | | | | |
| **GELI** | **Tayfur-Gelibol** | **1.60** | **16** | Pn | **Pn** | **20 57 29.5** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **1.64** | **350** | P | **Pn** | **20 57 29.7** | **-0.4** |
| **LPK** | **Lapseki** | **1.66** | **23** | Pn | **Pn** | **20 57 30.5** | **+0.2** |
| **DION** | **Dionisos Attik** | **1.73** | **244** | P | **Pn** | **20 57 31.4** | **0.0** |
| **DDIM** | **Aydin, Didim** | **1.74** | **143** | P | **Pg** | **20 57 35.7** | **+0.5** |
| **IZMR** | **zmir-demi** | **1.75** | **113** | P | **Pb** | **20 57 33.8** | **+0.1** |
| **GORD** | **Gordes-Manisa** | **1.77** | **87** | Pn | **Pn** | **20 57 31.9** | **-0.1** |
| **ODEM** | **Odemis-Izmir** | **1.79** | **108** | Pn | **Pn** | **20 57 32.7** | **+0.4** |
| **PTL** | **Penteli** | **1.79** | **244** | P | **Pn** | **20 57 32.0** | **-0.3** |
| **BKES** | **Balkesir-Mer** | **1.80** | **60** | P | **Pn** | **20 57 32.8** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.80** | **119** | Pn | **Pn** | **20 57 32.3** | **-0.1** |
| **APE** | **Apeiranthos** | **1.80** | **190** | Pn | **Pn** | **20 57 31.8** | **-0.6** |
| **APE** | **Apeiranthos** | **1.80** | **190** | P | **Pn** | **20 57 31.2** | **-1.2** |
| **APE** | **Apeiranthos** | **1.80** | **190** | P | **Pn** | **20 57 31.6** | **-0.8** |
| **GONE** | **Gonen-Balikesi** | **1.82** | **49** | Pn | **Pn** | **20 57 32.9** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **1.88** | **14** | Pn | **Pn** | **20 57 33.7** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **1.88** | **34** | Pn | **Pn** | **20 57 33.3** | **0.0** |
| **ENEZ** | **Enez** | **1.89** | **6** | Pn | **Pn** | **20 57 33.7** | **+0.2** |
| **THAS** | **Thassos island** | **1.98** | **333** | P | **Pn** | **20 57 34.3** | **-0.4** |
| **SUSR** | **Susurluk-Balik** | **2.02** | **56** | Pn | **Pn** | **20 57 35.7** | **+0.4** |
| **ALN** | **Alexandroupoli** | **2.05** | **3** | Pn | **Pn** | **20 57 35.6** | **-0.1** |
| **ALN** | **Alexandroupoli** | **2.05** | **3** | P | **Pn** | **20 57 35.5** | **-0.1** |
| **ALN** | **Alexandroupoli** | **2.05** | **3** | P | **Pn** | **20 57 35.5** | **-0.1** |
| **KIRA** | **zmir-Kiraz** | **2.06** | **108** | P | **Pn** | **20 57 37.0** | **+0.1** |
| **NAZL** | **Nazilli-Aydin** | **2.07** | **115** | Pn | **Pn** | **20 57 37.2** | **+1.1** |
| **RKY** | **Sarkoy-Tekirda** | **2.08** | **28** | Pn | **Pn** | **20 57 35.5** | **-0.7** |
| **OUR** | **Ouranopolis** | **2.10** | **315** | Pn | **Pn** | **20 57 36.2** | **-0.2** |
| **BODT** | **Bodrum** | **2.10** | **148** | Pn | **Pn** | **20 57 36.6** | **+0.1** |
| **EDC** | **Edincik** | **2.12** | **45** | Pn | **Pb** | **20 57 38.7** | **-1.2** |
| **MLSB** | **Milas** | **2.14** | **136** | Pn | **Pn** | **20 57 37.6** | **+0.6** |
| **KULA** | **Kula-Manisa** | **2.18** | **98** | Pn | **Pn** | **20 57 38.1** | **+0.5** |
| **MRMT** | **Marmara Adasi** | **2.18** | **36** | Pn | **Pn** | **20 57 37.9** | **+0.3** |

| | | | | | | |
|---|---|---|---|---|---|---|
| RDO | Rodhopi | 2.31 | 353 | Pn | Pn | 20 57 39.4 +0.1 |
| RDO | Rodhopi | 2.31 | 353 | P | Pn | 20 57 39.4 +0.1 |
| RDO | Rodhopi | 2.31 | 353 | P | Pn | 20 57 39.4 +0.1 |
| UKOP | Uzunkopru-Edir | 2.34 | 14 | Pn | Pn | 20 57 40.2 +0.5 |
| KCTX | Karacabey (Bur | 2.36 | 52 | Pn | Pn | 20 57 40.7 +0.7 |
| SIMA | Simav-Kutahya | 2.41 | 84 | Pn | Pn | 20 57 41.7 +1.0 |
| YER | Yerkesik | 2.54 | 132 | Pn | Pn | 20 57 43.3 +0.8 |
| CRLT | Corlu | 2.67 | 31 | Pn | Pn | 20 57 44.9 +0.6 |
| HORT | Hortiatis | 2.78 | 310 | Pn | Pn | 20 57 46.2 +0.3 |
| ARMT | Armutlu | 2.85 | 52 | Pn | Pn | 20 57 49.0 +2.3 |
| TYRN | Tyrnavos | 2.98 | 288 | P | Pn | 20 57 49.4 +0.9 |
| EDRB | Edirne | 3.06 | 12 | Pn | Pn | 20 57 49.4 -0.2 |
| CTKS | Kestanelik-??a | 3.11 | 39 | Pn | Pn | 20 57 51.8 +1.6 |
| BGKT | Bogazkoy | 3.20 | 42 | Pn | Pn | 20 57 52.6 +1.1 |
| ISK | Istanbul-Kandi | 3.28 | 47 | Pn | Pn | 20 57 54.1 +1.5 |
| ELND | Elena | 4.07 | 360 | ⇑P | Pn | 20 58 04.3 +0.7 |
| HERR | Herculane | 6.56 | 338 | ⇓P | Pn | 20 58 38.2 +0.5 |
| MLR | Muntele Rosu | 6.63 | 0 | ⇓P | Pn | 20 58 45.1 +6.2 |
| MDVR | Moldovita | 6.70 | 333 | ⇓P | Pn | 20 58 40.7 +1.0 |
| GZR | Gura Zlata | 6.94 | 341 | ⇑P | Pn | 20 58 44.2 +1.2 |
| PLOR | Plostina | 7.02 | 4 | ⇓P | Pn | 20 58 50.3 +6.3 |
| VRI | Vrincioaia | 7.04 | 5 | ⇓P | Pn | 20 58 51.3 +7.1 |
| TESR | Tescani | 7.67 | 4 | ⇓P | Pn | 20 58 54.7 +1.7 |

*BJI* ***12*** *21:15:00.0±0.0,69.6°N×144.5°W,h10km,mb5.6/90, mB5.9/68,Ms6.5/97,Ms7 6.3/95*

*IPGP* ***12*** *21:15:00.0,69.75°N×144.20°W,h9km,Mw6.1,Fault plane solution: NP1:φs108.00000°,δ74.00000°,λ-175.00000°. NP2:φs16.00000°,δ85.00000°,λ-16.00000°.*

*AEIC* ***12*** *21:15:01.8±1.7,69.52°N±0.03°×144.36°W±0.05,h2km±3km, ML6.1,mb6.0/704(NEIC),ML6.2/120(NEIC), Ms_20 5.9/599(NEIC),Mwb5.9/80(NEIC),Mwr6.0/41(NEIC), Mww6.0/31(NEIC),Error ellipse: s-maj=4.4km s-min=2.3km az=201.0*

*MOS* ***12*** *21:15:01.1±0.8,69.55°N×144.45°W,h14km,mb6.0/97, MS5.7/76,Error ellipse: s-maj=13.1km s-min=3.2km az=90.6*

*IDC* ***12*** *21:15:01.6±0.3,69.63°N×144.50°W,h0km,mb5.5/38, mbtmp5.5/43,ML5.5/5,MS5.7/67,Error ellipse: s-maj=9.8km s-min=6.9km az=42.0*

*NEIC* ***12*** *21:15:02.6,69.50°N×144.40°W,h12km,Moment Tensor Solution. Duration: 5±1 Moment tensor: Scale 10¹⁸Nm; Mrr=0.20; Mθθ=0.57; Mφφ=0.77; Mrθ=-0.01; Mθφ=-0.92; Mφr=-0.29; Fault plane solution: M₀1.17000×10¹⁸ NP1: φs197.87000°,δ89.81000°,λ13.86000°. NP2: φs107.82000°,δ76.14000°,λ179.81000°. Principal axes: T 1.2863, Plg10.0000°, Azm64.0000°; N -0.2231, Plg76.0000°, Azm199.0000°; P -1.0632, Plg10.0000°, Azm332.0000°;*

*NEIC* ***12*** *21:15:02.8,69.62°N×144.28°W,h10km*

*NEIC* ***12*** *21:15:02,69.59°N×144.32°W,h7km*

*NEIC* ***12*** *21:15:02.6,69.60°N×144.40°W,h12km*

*NEIC* ***12*** *21:15:02.1±1.0,69.58°N±0.04°×144.34°W±0.05,h9km±1km, Error ellipse: s-maj=7.0km s-min=3.3km az=183.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr0.05; Mθθ-0.62; Mφφ0.57; Mrθ0.05; Mθφ-0.89; Mφr-0.02; Fault plane solution: M₀1.07000×10¹⁸ NP1: φs106.94000°,δ89.51000°,λ177.08000°. NP2: φs196.97000°,δ87.08000°,λ0.49000°. Principal axes: T 1.0491, Plg2.0000°, Azm62.0000°; N 0.0474, Plg87.0000°, Azm277.0000°; P -1.0964, Plg2.0000°, Azm152.0000°; Moment Tensor Solution. Moment tensor: Scale 10¹⁷ Nm; Mrr0.07; Mθθ-6.12; Mφφ6.05; Mrθ-0.10; Mθφ-6.99; Mφr-0.39; Fault plane solution: M₀9.28000×10¹⁷ NP1: φs110.50000°,δ87.51000°,λ179.70000°. NP2: φs200.51000°,δ89.70000°,λ2.49000°. Principal axes: T 9.2459, Plg2.0000°, Azm66.0000°; N 0.0624, Plg87.0000°, Azm207.0000°; P -9.3083, Plg2.0000°, Azm335.0000°;*

*GCMT* ***12*** *21:15:03.8±0.1,69.68°N×144.23°W,h15km,MW6.0/157, Moment Tensor Solution. s147,c310; s157,c531; Duration: 25±5 Moment tensor: Scale 10¹⁸Nm; Mrr-0.14±.01; Mθθ-0.72±.01; Mφφ0.86±.01; Mrθ0.21±.03; Mθφ-1.01±.01; Mφr-0.25±.03; Best double couple: M₀1.32000×10¹⁸ NP1:φs109.00000°,δ85.00000°, λ168.00000°. NP2:φs200.00000°,δ79.00000°,λ5.00000°. Principal axes: T 1.4180, Plg12.0000°, Azm64.0000°; N -0.1960, Plg78.0000°, Azm266.0000°; P -1.2220, Plg5.0000°, Azm155.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*BGR* ***12*** *21:15:15.8,70.78°N×145.20°W,h14km±1km,mb5.7, mB_BB6.0,Ms5.6*

**ISC 12 21:15:02.3±0.3,69°53N±0°02×144°38W±0°02,h10km±1km, h10km:pP-P,n2283,σ1°44/2270,mb5.9/641,MS5.9/451, 123C-109D,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **67** | | | **Pg** | **21 15 06.5** | **-1.0** |
| C27K | | | | | | **Sg** | **21 15 10.2** | **-0.8** |
| **C27K** | **Jago River** baz=245,SNR=1000 | **0.26** | **67** | P | | **Pg** | **21 15 06.6** | **-1.0** |
| **C26K** | **Camden Bay** | **0.43** | **335** | | | **Pg** | **21 15 10.2** | **-0.7** |
| **C26K** | **Camden Bay** baz=154,SNR=1000 | **0.43** | **335** | P | | **Pg** | **21 15 10.7** | **-0.1** |
| **D25K** | **Kavik River** | **0.73** | **255** | | | **Pg** | **21 15 14.8** | **-1.6** |
| D25K | | | | Sg | | **Sg** | **21 15 25.2** | **-0.9** |
| **D25K** | **Kavik River** baz=73,SNR=1000 | **0.73** | **255** | P | | **Pg** | **21 15 14.7** | **-1.8** |
| **D27M** | **Malcolm River** | **1.24** | **102** | Pn | | **Pn** | **21 15 24.7** | **-1.2** |
| D27M | | | | | | **Sb** | **21 15 39.5** | **-2.5** |
| **D27M** | **Malcolm River** baz=285,SNR=1000 | **1.24** | **102** | P | | **Pn** | **21 15 23.9** | **-1.9** |
| **C24K** | **Franklin Bluff** | **1.52** | **279** | Pn | | **Pn** | **21 15 29.9** | **+0.2** |
| C24K | | | | Sn | | **Sn** | **21 15 49.6** | **+0.1** |
| C24K | comp=N,333μm,2.0s | | | IAML | | | 21 15 56.7 | |
| C24K | comp=E,255μm,2.4s | | | IAML | | | 21 16 00.9 | |
| **C24K** | **Franklin Bluff** baz=96 | **1.52** | **279** | P | | **Pn** | **21 15 29.8** | **+0.2** |
| **D24K** | **Happy Valley** | **1.62** | **259** | | | **Pn** | **21 15 31.4** | **+0.4** |
| D24K | | | | | | **Sn** | **21 15 52.1** | **+0.2** |
| D24K | comp=N,260μm,0.6s | | | IAML | | | 21 15 56.4 | |
| D24K | comp=E,282μm,1.2s | | | IAML | | | 21 16 00.3 | |
| **D24K** | **Happy Valley** baz=75,SNR=1000 | **1.62** | **259** | P | | **Pn** | **21 15 31.4** | **+0.4** |
| **E27K** | **Coleen River** | **1.68** | **142** | | | **Pn** | **21 15 32.1** | **+0.3** |
| E27K | | | | | | **Sn** | **21 15 53.7** | **+0.2** |
| E27K | comp=N,291μm,1.2s | | | IAML | | | 21 15 56.9 | |
| E27K | comp=E,265μm,1.2s | | | IAML | | | 21 15 59.6 | |
| **E27K** | **Coleen River** baz=324,SNR=1000 | **1.68** | **142** | P | | **Pn** | **21 15 32.5** | **+0.6** |
| **F26K** | **Sheenjek River** | **1.84** | **177** | | | **Pn** | **21 15 34.7** | **+0.7** |
| F26K | | | | | | **Sn** | **21 15 57.9** | **+0.5** |
| F26K | comp=E,286μm,2.0s | | | IAML | | | 21 16 04.0 | |
| **F26K** | **Sheenjek River** baz=358,SNR=1000 | **1.84** | **177** | P | | **Pn** | **21 15 35.0** | **+0.9** |
| **E28M** | **Babbage River** | **1.97** | **116** | | | **Pn** | **21 15 36.1** | **+0.3** |
| E28M | | | | Sn | | **Sn** | **21 16 01.1** | **+0.6** |
| E28M | comp=N,207μm,1.2s | | | IAML | | | 21 16 04.7 | |
| E28M | comp=E,234μm,1.5s | | | IAML | | | 21 16 13.9 | |
| **E28M** | **Babbage River** baz=300,SNR=1000 | **1.97** | **116** | P | | **Pn** | **21 15 36.2** | **+0.4** |
| **F25K** | **Christian Rive** | **2.00** | **194** | | | **Pn** | **21 15 36.6** | **+0.4** |
| F25K | | | | Sn | | **Sn** | **21 16 02.2** | **+0.9** |
| F25K | comp=E,253μm,1.9s | | | IAML | | | 21 16 08.8 | |
| F25K | comp=N,142μm,1.4s | | | IAML | | | 21 16 10.0 | |
| **F25K** | **Christian Rive** baz=13,SNR=1000 | **2.00** | **194** | P | | **Pb** | **21 15 37.5** | **-1.2** |
| **D28M** | **Stokes Point** | **2.00** | **93** | | | **Pn** | **21 15 36.3** | **+0.1** |
| D28M | | | | Sg | | **Sg** | **21 16 05.4** | **-1.2** |
| **D28M** | **Stokes Point** baz=278,SNR=1000 | **2.00** | **93** | P | | **Pn** | **21 15 36.8** | **+0.6** |
| **TOLK** | **Toolik Lake Re** | **2.06** | **247** | | | **Pn** | **21 15 37.1** | **0.0** |
| TOLK | comp=N,132μm,1.5s | | | IAML | | | 21 16 13.9 | |
| **TOLK** | **Toolik Lake Re** baz=62,SNR=1000 | **2.06** | **247** | P | | **Pn** | **21 15 37.7** | **+0.6** |
| **E24K** | **Your Creek** | **2.09** | **228** | | | **Pn** | **21 15 37.9** | **+0.5** |
| **E24K** | **Your Creek** baz=44,SNR=1000 | **2.09** | **228** | P | | **Pn** | **21 15 38.3** | **+0.8** |
| **BMAR** | **Burnt Mountain** | **2.11** | **182** | | | **Pn** | **21 15 38.4** | **+0.7** |
| **C23K** | **Itkillik River** | **2.20** | **281** | | | **Pn** | **21 15 38.9** | **0.0** |
| C23K | comp=N,160μm,0.7s | | | IAML | | | 21 16 15.8 | |
| C23K | comp=E,177μm,1.2s | | | IAML | | | 21 16 23.7 | |
| **C23K** | **Itkillik River** baz=95,SNR=1000 | **2.20** | **281** | P | | **Pn** | **21 15 38.9** | **0.0** |
| **D23K** | **Nanushuk River** | **2.31** | **259** | | | **Pn** | **21 15 40.7** | **+0.2** |
| **D23K** | **Nanushuk River** baz=73 | **2.31** | **259** | P | | **Pn** | **21 15 40.6** | **+0.2** |
| **F24K** | **Squaw Lake** | **2.40** | **214** | | | **Pn** | **21 15 42.0** | **+0.4** |
| **F24K** | **Squaw Lake** baz=31,SNR=1000 | **2.40** | **214** | P | | **Pn** | **21 15 42.1** | **+0.5** |
| **E23K** | **Chandalar** | **2.41** | **235** | | | **Pn** | **21 15 42.2** | **+0.3** |
| **E23K** | **Chandalar** baz=50,SNR=1000 | **2.41** | **235** | P | | **Pn** | **21 15 42.3** | **+0.5** |
| **F28M** | **Old Crow** | **2.54** | **137** | | | **Pn** | **21 15 43.8** | **+0.2** |
| F28M | comp=N,134μm,1.3s | | | IAML | | | 21 16 25.8 | |
| **F28M** | **Old Crow** baz=321,SNR=1000 | **2.54** | **137** | P | | **Pn** | **21 15 43.7** | **+0.2** |
| **G26K** | **Porcupine Rive** | **2.60** | **175** | | | **Pn** | **21 15 44.7** | **+0.4** |
| **G26K** | **Porcupine Rive** baz=356,SNR=1000 | **2.60** | **175** | P | | **Pn** | **21 15 44.8** | **+0.4** |
| **E29M** | **Blow River** | **2.60** | **113** | | | **Pn** | **21 15 44.5** | **0.0** |
| **E29M** | **Blow River** baz=299,SNR=572 | **2.60** | **113** | P | | **Pn** | **21 15 44.5** | **0.0** |
| **G25K** | **Bearman Lake** | **2.85** | **194** | | | **Pn** | **21 15 48.5** | **+0.7** |
| **G25K** | **Bearman Lake** baz=12,SNR=1000 | **2.85** | **194** | P | | **Pn** | **21 15 49.0** | **+1.2** |
| **G27K** | **Doyon Strip** | **2.91** | **158** | | | **Pn** | **21 15 48.5** | **-0.2** |
| **G27K** | **Doyon Strip** baz=341,SNR=1000 | **2.91** | **158** | P | | **Pn** | **21 15 48.9** | **+0.1** |
| **FYU** | **Fort Yukon** | **2.99** | **187** | | | **Pn** | **21 15 50.1** | **+0.4** |
| **D22K** | **Ayikyak River** | **3.03** | **262** | Pn | | **Pn** | **21 15 50.2** | **-0.1** |
| D22K | comp=E,64μm,0.9s | | | IAML | | | 21 16 51.6 | |
| D22K | comp=N,88μm,0.9s | | | IAML | | | 21 16 51.9 | |
| **D22K** | **Ayikyak River** baz=74,SNR=1000 | **3.03** | **262** | P | | **Pn** | **21 15 50.5** | **+0.1** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **204** | | | **Pn** | **21 15 50.8** | **0.0** |
| G24K | comp=N,64μm,3.0s | | | IAML | | | 21 16 45.1 | |
| G24K | comp=E,94μm,3.4s | | | IAML | | | 21 16 45.9 | |
| **G24K** | **Hadweenzic Riv** baz=21,SNR=1000 | **3.07** | **204** | P | | **Pn** | **21 15 51.2** | **+0.3** |
| **COLD** | **Coldfoot** | **3.16** | **226** | | | **Pn** | **21 15 52.5** | **+0.4** |
| **COLD** | **Coldfoot** baz=40 | **3.16** | **226** | P | | **Pn** | **21 15 52.7** | **+0.6** |
| **B22K** | **Teshekpuk Lake** | **3.22** | **289** | | | **Pn** | **21 15 52.4** | **-0.5** |
| B22K | comp=E,93μm,0.9s | | | IAML | | | 21 16 55.4 | |
| B22K | comp=N,86μm,1.1s | | | IAML | | | 21 16 55.6 | |
| **B22K** | **Teshekpuk Lake** baz=100,SNR=1000 | **3.22** | **289** | P | | **Pn** | **21 15 52.7** | **-0.2** |
| **H25L** | **Birch Creek** | **3.32** | **190** | | | **Pn** | **21 15 54.9** | **+0.6** |
| **H25L** | **Birch Creek** baz=8.9,SNR=1000 | **3.32** | **190** | P | | **Pn** | **21 15 55.3** | **+1.1** |
| **H27K** | **Steamboat Moun** baz=343,SNR=1000 | **3.48** | **161** | P | | **Pn** | **21 15 57.1** | **+0.5** |
| **F22K** | **John River** baz=51 | **3.51** | **238** | P | | **Pn** | **21 15 57.1** | **+0.1** |
| **G23K** | **Bananza Creek** | **3.53** | **219** | Pn | | **Pn** | **21 15 56.9** | **-0.3** |
| G23K | comp=E,48μm,3.6s | | | IAML | | | 21 16 59.8 | |
| G23K | comp=N,43μm,2.5s | | | IAML | | | 21 17 01.4 | |
| **G23K** | **Bananza Creek** baz=34,SNR=509 | **3.53** | **219** | P | | **Pn** | **21 15 57.1** | **-0.2** |
| **G29M** | **Pine Creek** | **3.54** | **135** | | | **Pn** | **21 15 57.6** | **+0.3** |
| **G29M** | **Pine Creek** baz=321,SNR=1000 | **3.54** | **135** | P | | **Pn** | **21 15 57.7** | **+0.3** |
| **B21K** | **Ikpikpuk River** | **3.59** | **276** | | | **Pn** | **21 15 58.2** | **+0.3** |
| B21K | comp=N,53μm,1.2s | | | IAML | | | 21 17 11.1 | |
| B21K | comp=E,48μm,1.5s | | | IAML | | | 21 17 22.9 | |
| **B21K** | **Ikpikpuk River** baz=87,SNR=1000 | **3.59** | **276** | P | | **Pn** | **21 15 58.4** | **+0.4** |
| **E21K** | **Killik River** | **3.62** | **257** | | | **Pn** | **21 15 57.8** | **-0.7** |
| E21K | comp=N,53μm,1.0s | | | IAML | | | 21 17 09.9 | |
| E21K | comp=E,43μm,1.1s | | | IAML | | | 21 17 13.3 | |
| **E21K** | **Killik River** baz=68 | **3.62** | **257** | P | | **Pn** | **21 15 57.9** | **-0.7** |
| **F30M** | **Barrier River** | **3.69** | **117** | | | **Pn** | **21 16 00.3** | **+0.9** |
| **F30M** | **Barrier River** baz=305,SNR=1000 | **3.69** | **117** | P | | **Pn** | **21 16 00.8** | **+1.4** |
| **G22K** | **Bettles** baz=42,SNR=1000 | **3.73** | **229** | P | | **Pn** | **21 15 59.8** | **-0.1** |
| **A22K** | **Sinclair Lake** baz=107,SNR=293 | **3.89** | **297** | P | | **Pn** | **21 16 01.6** | **-0.4** |
| **H24K** | **Noodor Dome** | **3.94** | **201** | Pn | | **Pn** | **21 16 02.8** | **-0.1** |
| H24K | comp=E,34μm,1.8s | | | IAML | | | 21 17 14.3 | |
| **H24K** | **Noodor Dome** baz=18,SNR=1000 | **3.94** | **201** | P | | **Pn** | **21 16 02.8** | **-0.1** |
| **G30M** | **tAoh Zrail Nji** | **3.97** | **126** | Pn | | **Pn** | **21 16 03.3** | **+0.1** |
| G30M | comp=E,44μm,0.9s | | | IAML | | | 21 17 18.2 | |
| **G30M** | **tAoh Zrail Nji** baz=314,SNR=1000 | **3.97** | **126** | P | | **Pn** | **21 16 03.6** | **+0.3** |
| **H29M** | **Whitestone** | **4.03** | **143** | Pn | | **Pn** | **21 16 04.5** | **+0.5** |
| **H29M** | **Whitestone** baz=328,SNR=1000 | **4.03** | **143** | P | | **Pn** | **21 16 04.5** | **+0.5** |
| **PRP** | **Porcupine Dome** | **4.05** | **187** | Pn | | **Pn** | **21 16 05.4** | **+0.9** |
| PRP | comp=N,44μm,2.5s | | | IAML | | | 21 17 14.8 | |
| **PRP** | **Porcupine Dome** baz=5,SNR=1000 | **4.05** | **187** | P | | **Pn** | **21 16 05.6** | **+1.1** |
| **I27K** | **Kandik River** baz=346,SNR=1000 | **4.08** | **164** | P | | **Pn** | **21 16 05.1** | **+0.3** |
| **F21K** | **Alatna River** | **4.09** | **240** | Pn | | **Pn** | **21 16 05.0** | **+0.1** |
| F21K | comp=N,29μm,2.1s | | | IAML | | | 21 17 21.1 | |
| **F21K** | **Alatna River** baz=52,SNR=1000 | **4.09** | **240** | P | | **Pn** | **21 16 05.0** | **+0.1** |
| **INK** | **Inuvik** | **4.11** | **102** | | | **Pn** | **21 16 04.2** | **-0.8** |
| INK | comp=N,29μm,1.4s | | | IAML | | | 21 17 16.5 | |
| **INK** | **Inuvik** comp=N,90nm,0.3s,baz=312,slow=11,SNR=134 | **4.11** | **102** | Pn | | **Pn** | **21 16 04.5** | **-0.6** |
| INK | comp=N,553nm,0.3s,baz=285,slow=13,SNR=6.8 | | | Sn | | **Sn** | **21 16 53.7** | **+0.6** |
| INK | comp=N,570nm,0.3s,baz=360,slow=32,SNR=8.9 | | | Lg | | Lg | 21 17 12.8 | |
| INK | comp=N,102μm,19.1s,baz=282,slow=46 | | | LR | | LR | 21 18 15.7 | |
| **INK** | comp=N,971nm,0.6s **Inuvik** baz=292,SNR=110 | **4.11** | **102** | P | | **Pn** | **21 16 04.3** | **-0.8** |
| **H23K** | **Yukon River** | **4.21** | **210** | | | **Pn** | **21 16 06.9** | **+0.4** |
| H23K | comp=E,39μm,1.9s | | | IAML | | | 21 17 21.1 | |
| H23K | comp=N,25μm,1.1s | | | IAML | | | 21 17 26.4 | |
| **H23K** | **Yukon River** baz=26,SNR=1000 | **4.21** | **210** | P | | **Pn** | **21 16 06.4** | **-0.1** |
| **I26K** | **Coal Creek Min** | **4.27** | **173** | | | **Pn** | **21 16 07.8** | **+0.5** |
| **I26K** | **Coal Creek Min** baz=354 | **4.27** | **173** | P | | **Pn** | **21 16 08.0** | **+0.7** |
| **EPYK** | **Eagle Plains** | **4.29** | **134** | | | **Pn** | **21 16 07.5** | **-0.1** |
| **EPYK** | **Eagle Plains** baz=321,SNR=1000 | **4.29** | **134** | P | | **Pn** | **21 16 08.1** | **+0.5** |
| **I28M** | **Miner Creek** | **4.44** | **155** | Pn | | **Pn** | **21 16 10.2** | **+0.5** |
| I28M | comp=N,26μm,1.9s | | | IAML | | | 21 17 38.5 | |
| **I28M** | **Miner Creek** baz=339,SNR=1000 | **4.44** | **155** | P | | **Pn** | **21 16 10.5** | **+0.8** |
| **F31M** | **Tsiigehtchic** | **4.44** | **113** | Pn | | **Pn** | **21 16 09.3** | **-0.3** |
| **F31M** | **Tsiigehtchic** baz=303,SNR=396 | **4.44** | **113** | P | | **Pn** | **21 16 09.2** | **-0.5** |
| **D20K** | **Etivluk River** | **4.45** | **265** | | | **Pn** | **21 16 10.9** | **+1.0** |
| **D20K** | **Etivluk River** baz=74,SNR=1000 | **4.45** | **265** | P | | **Pn** | **21 16 09.7** | **-0.2** |
| **E20K** | **Nigu River** | **4.46** | **259** | | | **Pn** | **21 16 10.6** | **+0.6** |
| **E20K** | **Nigu River** baz=68,SNR=1000 | **4.46** | **259** | P | | **Pn** | **21 16 10.1** | **+0.1** |
| **B20K** | **Meade River** | **4.46** | **282** | Pn | | **Pn** | **21 16 10.0** | **0.0** |
| B20K | comp=N,29μm,2.9s | | | IAML | | | 21 17 45.3 | |
| **B20K** | **Meade River** baz=90 | **4.46** | **282** | P | | **Pn** | **21 16 09.8** | **-0.1** |
| **A21K** | **Barrow** | **4.49** | **299** | | | **Pn** | **21 16 10.6** | **+0.2** |
| **A21K** | **Barrow** baz=108,SNR=323 | **4.49** | **299** | P | | **Pn** | **21 16 10.0** | **-0.3** |
| **H22K** | **Ishtalitna Cre** | **4.52** | **219** | | | **Pn** | **21 16 11.2** | **+0.4** |
| **H22K** | **Ishtalitna Cre** baz=33,SNR=583 | **4.52** | **219** | P | | **Pn** | **21 16 10.5** | **-0.2** |
| **G21K** | **Allakaket** | **4.57** | **233** | Pn | | **Pn** | **21 16 10.9** | **-0.5** |
| G21K | comp=N,24μm,1.1s | | | IAML | | | 21 17 36.5 | |
| G21K | comp=E,24μm,2.3s | | | IAML | | | 21 17 36.6 | |
| **G21K** | **Allakaket** baz=44,SNR=362 | **4.57** | **233** | P | | **Pn** | **21 16 11.1** | **-0.3** |
| **G31M** | **Satah River** | **4.58** | **120** | Pn | | **Pn** | **21 16 11.5** | **-0.1** |
| **G31M** | **Satah River** baz=309,SNR=1000 | **4.58** | **120** | P | | **Pn** | **21 16 11.4** | **-0.2** |
| **POKR** | **Poker Plat Res** | **4.58** | **196** | | | **Pn** | **21 16 12.0** | **+0.3** |
| POKR | comp=N,23μm,2.5s | | | IAML | | | 21 17 41.7 | |
| **POKR** | **Poker Plat Res** baz=14,SNR=311 | **4.58** | **196** | P | | **Pn** | **21 16 12.0** | **+0.3** |
| **I29M** | **Ogilvie Camp,** | **4.79** | **148** | | | **Pn** | **21 16 14.6** | **0.0** |
| I29M | comp=N,16μm,1.6s | | | IAML | | | 21 17 51.5 | |
| **I29M** | **Ogilvie Camp,** baz=334,SNR=1000 | **4.79** | **148** | P | | **Pn** | **21 16 14.8** | **+0.3** |
| **I23K** | **Minto, Yukon-K** | **4.80** | **206** | | | **Pn** | **21 16 14.6** | **0.0** |
| I23K | comp=E,27μm,1.6s | | | IAML | | | 21 17 48.9 | |
| **I23K** | **Minto, Yukon-K** baz=22,SNR=1000 | **4.80** | **206** | P | | **Pn** | **21 16 15.1** | **+0.5** |
| **MDM** | **Murphy Dome** | **4.83** | **200** | | | **Pn** | **21 16 15.0** | **0.0** |
| MDM | comp=E,17μm,2.2s | | | IAML | | | 21 17 50.1 | |
| **COLA** | **College** | **4.86** | **198** | P | | **Pn** | **21 16 16.9** | **+1.4** |
| **COLA** | **College** | **4.86** | **198** | | | **Pn** | **21 16 15.6** | **+0.2** |
| COLA | comp=E,22μm,0.7s | | | IAML | | | 21 17 38.7 | |
| COLA | comp=E,18μm,0.7s | | | IAML | | | 21 17 57.9 | |
| **COLA** | **College** baz=15 | **4.86** | **198** | P | | **Pn** | **21 16 15.9** | **+0.5** |
| **COLA** | **College** | **4.86** | **198** | *i* P | | **Pn** | **21 16 16.2** | **+0.7** |
| COLA | comp=Z,105μm,3.0s | | | MLR | | MLR | | |
| **I53US** | **FAIRBANKS INFR** baz=29,slow=24 | **4.86** | **198** | Pn | | **Pn** | **21 16 18.0** | **+2.5** |
| I53US | baz=18,slow=322,SNR=1.2 | | | I | | I | 21 43 00.0 | |
| **IL31** | | **4.88** | **193** | | | **Pn** | **21 16 16.3** | **+0.7** |
| **ILAR** | **Eielson Array** | **4.88** | **193** | | | **Pn** | **21 16 16.1** | **+0.5** |
| **ILAR** | **Eielson Array** comp=Z,151nm,0.3s,baz=6.8,slow=13,SNR=778 | **4.88** | **193** | Pn | | **Pn** | **21 16 16.0** | **+0.3** |
| ILAR | comp=Z,348nm,0.3s,baz=9.3,slow=23,SNR=8.0 | | | Sn | | **Sn** | **21 17 11.6** | **-0.6** |
| ILAR | comp=Z,344nm,0.3s,baz=8.9,slow=31,SNR=6.4 | | | Lg | | Lg | 21 17 31.7 | |
| ILAR | comp=Z,50μm,20.6s,baz=176,slow=40 | | | LR | | LR | 21 18 18.4 | |
| **F20K** | comp=Z,898nm,0.5s **Avaraart Lake** | **4.89** | **245** | Pn | | **Pn** | **21 16 16.2** | **+0.4** |
| F20K | comp=N,15μm,2.2s | | | IAML | | | 21 17 45.8 | |
| **F20K** | **Avaraart Lake** baz=54,SNR=1000 | **4.89** | **245** | P | | **Pn** | **21 16 15.8** | **0.0** |
| **EGAK** | **Eagle** | **4.93** | **164** | | | **Pn** | **21 16 16.6** | **+0.2** |
| EGAK | comp=N,18μm,1.6s | | | IAML | | | 21 17 54.0 | |
| EGAK | comp=N,23μm,1.4s | | | IAML | | | 21 18 05.7 | |
| **EGAK** | **Eagle** baz=347,SNR=616 | **4.93** | **164** | P | | **Pn** | **21 16 16.8** | **+0.4** |
| **J25K** | **Salcha River,** | **4.95** | **185** | Pn | | **Pn** | **21 16 17.6** | **+0.8** |
| **J25K** | **Salcha River,** baz=4.1,SNR=1000 | **4.95** | **185** | P | | **Pn** | **21 16 17.6** | **+0.8** |
| **IMAR** | **Indian Mountai** | **5.03** | **229** | | | **Pn** | **21 16 16.8** | **-1.0** |
| **D19K** | **Kuna River** | **5.04** | **265** | Pn | | **Pn** | **21 16 18.2** | **+0.2** |
| D19K | comp=E,13μm,1.8s | | | IAML | | | 21 18 00.0 | |
| **D19K** | **Kuna River** baz=72,SNR=1000 | **5.04** | **265** | P | | **Pn** | **21 16 18.8** | **+0.8** |
| **H21K** | **Melozitna Rive** | **5.05** | **224** | Pn | | **Pn** | **21 16 17.8** | **-0.2** |
| H21K | comp=E,18μm,2.1s | | | IAML | | | 21 17 52.1 | |
| H21K | comp=N,16μm,2.7s | | | IAML | | | 21 17 58.0 | |
| **H21K** | **Melozitna Rive** baz=36,SNR=955 | **5.05** | **224** | P | | **Pn** | **21 16 18.1** | **+0.1** |
| **J26L** | **Joseph Creek** | **5.06** | **176** | Pn | | **Pn** | **21 16 19.2** | **+1.0** |
| J26L | comp=E,22μm,2.1s | | | IAML | | | 21 17 51.7 | |
| **J26L** | **Joseph Creek** baz=357,SNR=1000 | **5.06** | **176** | P | | **Pn** | **21 16 19.1** | **+0.9** |
| **CCB** | **Clear Creek Bu** | **5.08** | **197** | | | **Pn** | **21 16 18.9** | **+0.5** |
| CCB | comp=E,21μm,2.5s | | | IAML | | | 21 17 56.7 | |
| **MLY** | **Manley** | **5.14** | **212** | Pn | | **Pn** | **21 16 19.7** | **+0.4** |
| MLY | comp=N,12μm,2.2s | | | IAML | | | 21 17 54.6 | |
| MLY | comp=E,12μm,2.1s | | | IAML | | | 21 17 56.0 | |
| **MLY** | **Manley** baz=26,SNR=439 | **5.14** | **212** | P | | **Pn** | **21 16 19.6** | **+0.2** |
| **E19K** | **Redstone River** | **5.16** | **252** | | | **Pn** | **21 16 19.6** | **0.0** |
| E19K | comp=E,14μm,1.3s | | | IAML | | | 21 17 59.0 | |
| E19K | comp=N,17μm,1.8s | | | IAML | | | 21 18 07.1 | |
| **E19K** | **Redstone River** baz=60,SNR=1000 | **5.16** | **252** | P | | **Pn** | **21 16 19.4** | **-0.2** |
| **HDA** | **Harding Lake** | **5.24** | **192** | | | **Pn** | **21 16 21.3** | **+0.7** |
| HDA | comp=N,13μm,1.7s | | | IAML | | | 21 17 55.0 | |
| **HDA** | **Harding Lake** baz=10.0,SNR=1000 | **5.24** | **192** | P | | **Pn** | **21 16 21.7** | **+1.0** |
| **WRH** | **Wood River Hil** | **5.28** | **198** | | | **Pn** | **21 16 22.0** | **+0.8** |
| **WRH** | **Wood River Hil** comp=E,14μm,2.5s | **5.28** | **198** | IAML | | | 21 17 51.2 | |
| WRH | comp=N,12μm,2.5s | | | IAML | | | 21 17 56.2 | |
| **NEA2** | **Nenana** | **5.28** | **203** | | | **Pn** | **21 16 21.3** | **+0.1** |
| NEA2 | comp=E,17μm,3.2s | | | IAML | | | 21 18 05.5 | |
| **NEA2** | **Nenana** baz=18,SNR=621 | **5.28** | **203** | P | | **Pn** | **21 16 21.7** | **+0.4** |
| **I30M** | **Mount Dempster** | **5.31** | **141** | Pn | | **Pn** | **21 16 22.1** | **+0.3** |
| **I30M** | **Mount Dempster** baz=328,SNR=1000 | **5.31** | **141** | P | | **Pn** | **21 16 22.0** | **+0.3** |
| **C19K** | **Lookout Ridge** | **5.41** | **273** | Pn | | **Pn** | **21 16 23.1** | **+0.1** |
| **C19K** | **Lookout Ridge** baz=78,SNR=1000 | **5.41** | **273** | P | | **Pn** | **21 16 23.4** | **+0.4** |
| **SCRK** | **Sand Creek** | **5.58** | **178** | Pn | | **Pn** | **21 16 26.4** | **+1.0** |
| **SCRK** | **Sand Creek** baz=359,SNR=1000 | **5.58** | **178** | P | | **Pn** | **21 16 26.6** | **+1.2** |
| **K27K** | **Chicken** | **5.60** | **170** | | | **Pn** | **21 16 26.3** | **+0.8** |
| **K27K** | **Chicken** baz=352 | **5.60** | **170** | P | | **Pn** | **21 16 26.7** | **+1.1** |
| **J29N** | **Klondike Camp** | **5.64** | **152** | | | **Pn** | **21 16 26.6** | **+0.4** |
| **J29N** | **Klondike Camp** baz=337,SNR=171 | **5.64** | **152** | P | | **Pn** | **21 16 27.0** | **+0.8** |
| **F19K** | **Shaleruckik Mo** | **5.67** | **248** | Pn | | **Pn** | **21 16 25.3** | **-1.3** |
| **F19K** | **Shaleruckik Mo** baz=56,SNR=1000 | **5.67** | **248** | P | | **Pn** | **21 16 26.2** | **-0.4** |
| **H20K** | **Anotleneega Mo** baz=40,SNR=457 | **5.71** | **230** | P | | **Pn** | **21 16 26.7** | **-0.4** |
| **BWN** | **Browne** | **5.74** | **203** | | | **Pn** | **21 16 27.7** | **+0.2** |
| **K24K** | **Donnelly Dome** | **5.78** | **186** | | | **Pn** | **21 16 29.0** | **+1.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G19K | Purcell Mounta | 5.88 241 | P | | Pn | 21 16 28.9 | -0.6 |
| | baz=49,SNR=506 | | | | | | |
| BPAW | Bear Paw Mtn. | 6.04 209 | | | Pn | 21 16 31.5 | -0.2 |
| BPAW | Bear Paw Mtn. | 6.04 209 | P | | Pn | 21 16 31.8 | +0.2 |
| | baz=23,SNR=416 | | | | | | |
| C18K | Utukok River | 6.08 270 | | Pn | Pn | 21 16 31.8 | -0.5 |
| C18K | Utukok River | 6.08 270 | P | | Pn | 21 16 31.7 | -0.5 |
| | baz=74 | | | | | | |
| MCK | McKinley | 6.09 199 | P | | Pn | 21 16 33.5 | +1.1 |
| | baz=15,SNR=734 | | | | | | |
| H19K | Roundabout Mou | 6.12 235 | | Pn | Pn | 21 16 32.0 | -0.7 |
| H19K | Roundabout Mou | 6.12 235 | P | | Pn | 21 16 31.9 | -0.7 |
| | baz=44,SNR=680 | | | | | | |
| B18K | Kokolik River | 6.13 277 | | | Pn | 21 16 32.4 | -0.5 |
| B18K | Kokolik River | 6.13 277 | P | | Pn | 21 16 32.5 | -0.5 |
| | baz=80,SNR=114 | | | | | | |
| I20K | Naaghedeneel | 6.16 224 | | | Pn | 21 16 33.7 | +0.5 |
| I20K | Naaghedeneel | 6.16 224 | P | | Pn | 21 16 33.3 | +0.1 |
| | baz=35,SNR=147 | | | | | | |
| K29M | Barlow Dome | 6.32 151 | | Pn | Pn | 21 16 36.1 | +0.5 |
| K29M | Barlow Dome | 6.32 151 | P | | Pn | 21 16 36.3 | +0.7 |
| | baz=338,SNR=1000 | | | | | | |
| E18K | Tukpahlearik C | 6.33 258 | | Pn | Pn | 21 16 35.6 | +0.1 |
| E18K | Tukpahlearik C | 6.33 258 | P | | Pn | 21 16 35.6 | +0.1 |
| | baz=63,SNR=1000 | | | | | | |
| RND | Reindeer | 6.40 198 | | | Pn | 21 16 37.4 | +0.8 |
| RND | Reindeer | 6.40 198 | P | | Pn | 21 16 37.4 | +0.8 |
| F18K | Selawik | 6.42 250 | | | Pn | 21 16 37.5 | +0.6 |
| F18K | Selawik | 6.42 250 | P | | Pn | 21 16 36.1 | -0.7 |
| | baz=56,SNR=1000 | | | | | | |
| CHUM | Lake Minchumin | 6.48 213 | | | Pn | 21 16 37.9 | +0.3 |
| CHUM | Lake Minchumin | 6.48 213 | P | | Pn | 21 16 38.1 | +0.5 |
| | baz=26 | | | | | | |
| G18K | Tagagawik | 6.53 243 | | Pn | Pn | 21 16 37.5 | -0.8 |
| G18K | Tagagawik | 6.53 243 | P | | Pn | 21 16 38.1 | -0.3 |
| | baz=50,SNR=1000 | | | | | | |
| L26K | Log Cabin Wild | 6.54 176 | | | Pn | 21 16 39.5 | +0.9 |
| L26K | Log Cabin Wild | 6.54 176 | P | | Pn | 21 16 39.8 | +1.2 |
| | baz=357,SNR=424 | | | | | | |
| BCAR | Beaver Creek A | 6.57 170 | | Pn | Pn | 21 16 39.9 | +0.8 |
| L27K | Beaver Creek, | 6.57 170 | | Pn | Pn | 21 16 39.7 | +0.7 |
| L27K | Beaver Creek, | 6.57 170 | P | | Pn | 21 16 40.0 | +0.9 |
| | baz=352,SNR=1000 | | | | | | |
| DHY | Denali Highway | 6.59 192 | | Pn | Pn | 21 16 40.9 | +1.5 |
| DHY | Denali Highway | 6.59 192 | P | | Pn | 21 16 41.5 | +2.1 |
| | baz=9.3,SNR=960 | | | | | | |
| J20K | Nowinta River | 6.60 220 | | Pn | Pn | 21 16 39.3 | 0.0 |
| J20K | Nowinta River | 6.60 220 | P | | Pn | 21 16 39.4 | 0.0 |
| | baz=31,SNR=417 | | | | | | |
| PAX | Paxson | 6.60 184 | P | | Pn | 21 16 41.0 | +1.5 |
| | baz=3.4,SNR=1000 | | | | | | |
| A36M | Sachs Harbour | 6.77 60 | | Pn | Pn | 21 16 40.2 | -1.5 |
| A36M | Sachs Harbour | 6.77 60 | P | | Pn | 21 16 40.1 | -1.5 |
| | baz=258,SNR=1000 | | | | | | |
| GCSA | Galena City Sc | 6.83 231 | P | | Pn | 21 16 42.3 | -0.1 |
| | baz=40,SNR=37 | | | | | | |
| C17K | DeLong Mountai | 6.83 270 | | | Pn | 21 16 42.2 | -0.2 |
| C17K | DeLong Mountai | 6.83 270 | P | | Pn | 21 16 41.4 | -1.1 |
| | baz=72,SNR=521 | | | | | | |
| RDOG | Red Dog Mine | 6.87 266 | | | Pn | 21 16 42.5 | -0.6 |
| RDOG | Red Dog Mine | 6.87 266 | P | | Pn | 21 16 42.5 | -0.6 |
| | baz=69,SNR=797 | | | | | | |
| E17K | Hotham Inlet | 6.91 258 | | | Pn | 21 16 43.5 | +0.1 |
| E17K | Hotham Inlet | 6.91 258 | P | | Pn | 21 16 43.4 | -0.1 |
| | baz=61 | | | | | | |
| L29M | L29M | 6.92 156 | | Pn | Pn | 21 16 43.6 | -0.1 |
| L29M | L29M | 6.92 156 | P | | Pn | 21 16 44.3 | +0.6 |
| | baz=342,SNR=1000 | | | | | | |
| WAT1 | Susitna Watana | 6.93 196 | | | Pn | 21 16 44.9 | +0.9 |
| WAT1 | Susitna Watana | 6.93 196 | P | | Pn | 21 16 45.6 | +1.7 |
| | baz=12 | | | | | | |
| H18K | Honhosa River | 6.95 238 | | | Pn | 21 16 44.1 | 0.0 |
| H18K | Honhosa River | 6.95 238 | P | | Pn | 21 16 44.2 | +0.1 |
| | baz=45,SNR=256 | | | | | | |
| F17K | Baldwin Pennin | 7.04 252 | | Pn | Pn | 21 16 45.3 | -0.1 |
| F17K | Baldwin Pennin | 7.04 252 | P | | Pn | 21 16 44.5 | -0.8 |
| | baz=56,SNR=223 | | | | | | |
| D17K | Noatak River | 7.07 264 | | | Pn | 21 16 44.9 | -0.8 |
| D17K | Noatak River | 7.07 264 | P | | Pn | 21 16 45.1 | -0.7 |
| | baz=66 | | | | | | |
| J19K | Poorman | 7.10 224 | | Pn | Pn | 21 16 46.4 | +0.1 |
| J19K | Poorman | 7.10 224 | P | | Pn | 21 16 45.9 | -0.3 |
| | baz=34,SNR=143 | | | | | | |
| WAT6 | Susitna Watana | 7.11 193 | | | Pn | 21 16 48.0 | +1.5 |
| WAT6 | Susitna Watana | 7.11 193 | P | | Pn | 21 16 47.9 | +1.5 |
| | baz=9.7,SNR=202 | | | | | | |
| C36M | Paulatuk | 7.14 82 | | | Pn | 21 16 45.2 | -1.5 |
| C36M | Paulatuk | 7.14 82 | P | | Pn | 21 16 44.5 | -2.3 |
| | baz=281 | | | | | | |
| HARP | HAARP | 7.17 183 | P | | Pn | 21 16 48.8 | +1.7 |
| | baz=2.2,SNR=840 | | | | | | |
| M26K | Nabesna, AK | 7.18 175 | | Pn | Pn | 21 16 48.2 | +0.9 |
| M26K | Nabesna, AK | 7.18 175 | P | | Pn | 21 16 48.9 | +1.6 |
| | baz=356,SNR=525 | | | | | | |
| M27K | Edge Creek, AK | 7.27 171 | | | Pn | 21 16 49.2 | +0.6 |
| M27K | Edge Creek, AK | 7.27 171 | P | | Pn | 21 16 49.3 | +0.6 |
| | baz=353,SNR=1000 | | | | | | |
| K20K | Telida | 7.30 217 | | Pn | Pn | 21 16 48.4 | -0.5 |
| K20K | Telida | 7.30 217 | P | | Pn | 21 16 48.8 | -0.1 |
| | baz=28,SNR=169 | | | | | | |
| G17K | Kiwalik Mounta | 7.42 245 | P | | Pn | 21 16 50.2 | -0.3 |
| | baz=50,SNR=785 | | | | | | |
| M24K | Tolsona, Glenn | 7.49 186 | | | Pn | 21 16 52.7 | +1.2 |
| M24K | Tolsona, Glenn | 7.49 186 | P | | Pn | 21 16 53.2 | +1.6 |
| | baz=4.9,SNR=149 | | | | | | |
| M29M | Somme Creek | 7.51 158 | | Pn | Pn | 21 16 52.2 | +0.3 |
| M29M | Somme Creek | 7.51 158 | P | | Pn | 21 16 52.4 | +0.5 |
| | baz=344,SNR=1000 | | | | | | |
| CUT | Chulitna | 7.54 201 | | | Pn | 21 16 54.3 | +2.1 |
| CUT | Chulitna | 7.54 201 | P | | Pn | 21 16 53.2 | +1.0 |
| | baz=16,SNR=87 | | | | | | |
| H17K | Granite Mounta | 7.57 240 | | Pn | Pn | 21 16 53.0 | +0.4 |
| H17K | Granite Mounta | 7.57 240 | P | | Pn | 21 16 52.3 | -0.3 |
| | baz=46,SNR=317 | | | | | | |
| C16K | Lisburne Hills | 7.66 270 | | | Pn | 21 16 53.3 | -0.4 |
| C16K | Lisburne Hills | 7.66 270 | P | | Pn | 21 16 52.3 | -1.4 |
| | baz=71,SNR=534 | | | | | | |
| J18K | Innoko River | 7.82 225 | | Pn | Pn | 21 16 55.9 | -0.1 |
| J18K | Innoko River | 7.82 225 | P | | Pn | 21 16 56.1 | +0.2 |
| | baz=34,SNR=52 | | | | | | |
| SCM | Sheep Creek Mo | 7.82 190 | | | Pn | 21 16 58.4 | +2.2 |
| SCM | Sheep Creek Mo | 7.82 190 | P | | Pn | 21 16 58.3 | +2.2 |
| | baz=7.7,SNR=325 | | | | | | |
| SCM | Sheep Creek Mo | 7.82 190 | P | | Pn | 21 16 58.4 | +2.2 |
| M23K | Glacier View | 7.89 192 | | | Pn | 21 16 59.4 | +2.4 |
| M23K | Glacier View | 7.89 192 | P | | Pn | 21 16 59.1 | +2.1 |
| | baz=8.7,SNR=292 | | | | | | |
| SML | Sawmill | 7.92 194 | | | Pn | 21 16 58.5 | +1.0 |
| SML | Sawmill | 7.92 194 | P | | Pn | 21 16 59.8 | +2.3 |
| | baz=10,SNR=165 | | | | | | |
| YUK3 | Moose Creek | 7.95 166 | P | | Pn | 21 16 58.5 | +0.5 |
| | baz=350,SNR=796 | | | | | | |
| N25K | Chitina, Valde | 7.96 181 | | | Pn | 21 17 00.3 | +2.3 |
| N25K | Chitina, Valde | 7.96 181 | P | | Pn | 21 16 59.6 | +1.6 |
| | baz=0.6,SNR=88 | | | | | | |
| GHO | Glory Hole Cre | 8.01 196 | | | Pn | 21 16 59.5 | +0.8 |
| G16K | Koyuk River | 8.03 248 | | | Pn | 21 16 58.7 | -0.3 |
| G16K | Koyuk River | 8.03 248 | P | | Pn | 21 16 58.8 | -0.1 |
| | baz=51,SNR=187 | | | | | | |
| L20K | Farewell, AK | 8.05 213 | P | | Pn | 21 16 59.4 | +0.1 |
| | baz=24,SNR=173 | | | | | | |
| KLU | Klutina | 8.09 185 | | | Pn | 21 17 02.0 | +2.2 |
| KLU | Klutina | 8.09 185 | P | | Pn | 21 17 01.9 | +2.0 |
| | baz=3.9,SNR=180 | | | | | | |
| SKT | Skwentna | 8.12 205 | | Pn | Pn | 21 17 01.3 | +1.1 |
| SKT | Skwentna | 8.12 205 | P | | Pn | 21 17 01.4 | +1.2 |
| | baz=18,SNR=94 | | | | | | |
| GLB | Gilahina Butte | 8.12 178 | | | Pn | 21 17 02.2 | +1.9 |
| M22K | Willow | 8.15 200 | | | Pn | 21 17 01.6 | +1.0 |
| M22K | Willow | 8.15 200 | P | | Pn | 21 17 02.6 | +2.0 |
| | baz=14,SNR=47 | | | | | | |
| MCARA | McCarthy VSAT | 8.20 175 | | | Pn | 21 17 02.8 | +1.6 |
| MCARA | McCarthy VSAT | 8.20 175 | P | | Pn | 21 17 03.3 | +2.0 |
| | baz=357,SNR=258 | | | | | | |
| PMR | Palmer | 8.21 196 | P | | Pn | 21 17 03.1 | +1.8 |
| PMR | Palmer | 8.21 196 | | | Pn | 21 17 02.8 | +1.5 |
| PMR | Palmer | 8.21 196 | P | | Pn | 21 17 02.5 | +1.3 |
| | baz=12,SNR=85 | | | | | | |
| PMR | Palmer | 8.21 196 | P | | Pn | 21 17 02.8 | +1.5 |
| KNK | Knik Glacier | 8.32 194 | P | | Pn | 21 17 05.8 | +2.9 |
| | baz=10.0,SNR=240 | | | | | | |
| M31M | Drury Creek, Y | 8.40 146 | P | | Pn | 21 17 04.0 | 0.0 |
| | baz=335,SNR=73 | | | | | | |
| M20K | Styx River | 8.47 209 | P | | Pn | 21 17 05.7 | +0.7 |
| | baz=21,SNR=492 | | | | | | |
| J17K | VABM Dome | 8.49 231 | P | | Pn | 21 17 05.1 | -0.1 |
| | baz=37,SNR=191 | | | | | | |
| YUK8 | Steele Glacier | 8.49 165 | P | | Pn | 21 17 06.5 | +1.0 |
| | baz=349,SNR=118 | | | | | | |
| H16K | Elim | 8.50 243 | P | | Pn | 21 17 04.8 | -0.5 |
| | baz=47,SNR=73 | | | | | | |
| SUA | Susitna One | 8.51 201 | P | | Pn | 21 17 08.1 | +2.5 |
| | baz=15,SNR=116 | | | | | | |
| L19K | White Mountain | 8.52 215 | P | | Pn | 21 17 06.5 | +0.9 |
| | baz=26,SNR=85 | | | | | | |
| YUK4 | Talbot Arm | 8.55 161 | P | | Pn | 21 17 05.8 | -0.5 |
| | baz=346,SNR=1000 | | | | | | |
| I17K | Unalakleet | 8.57 237 | | | Pn | 21 17 06.4 | +0.2 |
| I17K | Unalakleet | 8.57 237 | P | | Pn | 21 17 06.5 | +0.3 |
| | baz=42 | | | | | | |
| FARO | Faro, Yukon | 8.59 143 | P | | Pn | 21 17 06.5 | -0.2 |
| | baz=333,SNR=28 | | | | | | |
| BMRM | Bremner River | 8.60 181 | P | | Pn | 21 17 08.1 | +1.4 |
| | baz=0.6,SNR=584 | | | | | | |
| F15K | North Star Dit | 8.60 253 | P | | Pn | 21 17 06.0 | -0.8 |
| | baz=55,SNR=77 | | | | | | |
| STLK | Strandline Lak | 8.63 205 | | | Pn | 21 17 07.4 | +0.2 |
| N30M | Aishikik Lake | 8.64 156 | P | | Pn | 21 17 08.1 | +0.7 |
| | baz=343,SNR=1000 | | | | | | |
| M19K | Big River Lodg | 8.68 213 | P | | Pn | 21 17 08.6 | +0.8 |
| | baz=24,SNR=175 | | | | | | |
| CTG | Chitna Glacier | 8.69 170 | P | | Pn | 21 17 09.6 | +1.5 |
| | baz=353,SNR=717 | | | | | | |
| MMPY | Sheldon Lake, | 8.72 136 | P | | Pn | 21 17 08.8 | +0.4 |
| | baz=328,SNR=566 | | | | | | |
| GLI | Glacier Island | 8.76 189 | P | | Pn | 21 17 10.4 | +1.6 |
| | baz=6.3,SNR=16 | | | | | | |
| RC01 | Rabbit Creek A | 8.76 197 | P | | Pn | 21 17 10.9 | +1.9 |
| | baz=12,SNR=46 | | | | | | |
| N31M | Braeburn, Yuko | 8.82 152 | P | | Pn | 21 17 10.0 | +0.3 |
| | baz=340,SNR=248 | | | | | | |
| CRQE | Cirque | 8.83 176 | P | | Pn | 21 17 12.3 | +2.3 |
| | baz=357,SNR=716 | | | | | | |
| G15K | Niukluk | 8.84 249 | P | | Pn | 21 17 09.4 | -0.6 |
| | baz=50,SNR=93 | | | | | | |
| K17K | Iditarod | 8.84 226 | P | | Pn | 21 17 10.8 | +0.8 |
| | baz=33,SNR=48 | | | | | | |
| YUK5 | Granite Creek | 8.85 159 | | | Pn | 21 17 11.7 | +1.4 |
| PWL | Port Wells | 8.86 193 | P | | Pn | 21 17 12.5 | +2.3 |
| | baz=9.1,SNR=47 | | | | | | |
| L18K | Granite Mounta | 8.88 220 | P | | Pn | 21 17 10.8 | +0.3 |
| | baz=29,SNR=105 | | | | | | |
| SPCP | Crater Peak Br | 8.89 205 | | | Pn | 21 17 11.7 | +0.8 |
| SPBG | Spurr Blockage | 8.93 206 | | | Pn | 21 17 12.2 | +0.8 |
| O28M | Mount Upton | 8.96 167 | P | | Pn | 21 17 13.1 | +1.1 |
| | baz=351,SNR=169 | | | | | | |
| N20K | Mount Spurr | 8.97 205 | P | | Pn | 21 17 12.2 | +0.4 |
| | baz=18,SNR=49 | | | | | | |
| YUK6 | Outpost Mounta | 8.97 161 | P | | Pn | 21 17 13.1 | +1.0 |
| | baz=346,SNR=917 | | | | | | |
| J16K | Anvik River | 9.00 234 | P | | Pn | 21 17 12.3 | +0.1 |
| | baz=39,SNR=131 | | | | | | |
| EYAK | Cordova Ski Ar | 9.04 184 | P | | Pn | 21 17 16.8 | +4.2 |
| EYAK | Cordova Ski Ar | 9.04 184 | P | | Pn | 21 17 13.6 | +1.0 |
| | baz=3.1,SNR=31 | | | | | | |
| CAPN | Captain Cook N | 9.24 201 | P | | Pn | 21 17 16.6 | +1.2 |
| | baz=15 | | | | | | |
| F14K | Arctic Creek | 9.31 255 | P | | Pn | 21 17 15.7 | -0.7 |
| | baz=54,SNR=155 | | | | | | |
| L17K | Donlin | 9.33 224 | | | Pn | 21 17 16.9 | +0.1 |
| L17K | Donlin | 9.33 224 | P | | Pn | 21 17 17.5 | +0.7 |
| | baz=32,SNR=140 | | | | | | |
| M18K | Stony River | 9.34 216 | P | | Pn | 21 17 17.5 | +0.7 |
| | baz=26,SNR=103 | | | | | | |
| O22K | Cooper Landing | 9.36 196 | P | | Pn | 21 17 18.7 | +1.6 |
| | baz=12 | | | | | | |
| MESA | MESA | 9.44 173 | P | | Pn | 21 17 20.7 | +2.2 |
| | baz=355,SNR=126 | | | | | | |
| O30N | Mendenhall | 9.45 154 | P | | Pn | 21 17 18.3 | -0.1 |
| | baz=342,SNR=448 | | | | | | |
| BGLC | Bering Glacier | 9.46 177 | P | | Pn | 21 17 18.5 | +0.1 |
| | baz=358 | | | | | | |
| ANM | Nome | 9.55 249 | | | Pn | 21 17 19.8 | 0.0 |
| ANM | Nome | 9.55 249 | P | | Pn | 21 17 19.6 | -0.1 |
| | baz=49 | | | | | | |
| ANM | Nome | 9.55 249 | P | | Pn | 21 17 19.8 | 0.0 |
| O29M | Mount Kennedy | 9.58 162 | P | | Pn | 21 17 21.7 | +1.5 |
| | baz=348,SNR=166 | | | | | | |
| N32M | Quiet Lake | 9.62 145 | | | Pn | 21 17 20.6 | -0.2 |
| N32M | Quiet Lake | 9.62 145 | P | | Pn | 21 17 20.5 | -0.2 |
| | baz=356 | | | | | | |
| PINM | Pinnacle | 9.63 168 | P | | Pn | 21 17 23.5 | +2.6 |
| | baz=351,SNR=55 | | | | | | |
| KAIM | Kayak Island | 9.64 180 | | | Pn | 21 17 22.2 | +1.2 |
| KAIM | Kayak Island | 9.64 180 | P | | Pn | 21 17 23.5 | +2.6 |
| | baz=0.1,SNR=22 | | | | | | |
| SVW2 | Sparrevohn | 9.65 214 | P | | Pn | 21 17 22.9 | +1.8 |
| P23K | Montague Islan | 9.65 189 | | | Pn | 21 17 21.9 | +0.8 |
| P23K | Montague Islan | 9.65 189 | P | | Pn | 21 17 20.8 | -0.3 |
| | baz=6.4,SNR=23 | | | | | | |
| NCT | North Crescent | 9.69 206 | | | Pn | 21 17 22.1 | +0.4 |
| SEW | Seward | 9.70 195 | | | Pn | 21 17 22.6 | +0.9 |
| SEW | Seward | 9.70 195 | P | | Pn | 21 17 22.6 | +0.9 |
| | baz=11,SNR=12 | | | | | | |
| N19K | Bonanza Creek | 9.71 211 | P | | Pn | 21 17 22.8 | +0.8 |
| | baz=22,SNR=73 | | | | | | |
| RDWB | Redoubt West | 9.74 205 | | | Pn | 21 17 22.8 | +0.3 |
| WHY | Whitehorse | 9.74 151 | | | Pn | 21 17 22.5 | 0.0 |
| WHY | Whitehorse | 9.74 151 | P | | Pn | 21 17 22.1 | -0.4 |
| | baz=340,SNR=480 | | | | | | |
| M17K | Holitna River | 9.77 220 | P | | Pn | 21 17 23.4 | +0.6 |
| | baz=28,SNR=34 | | | | | | |
| TNA | Tin City | 9.80 257 | P | | Pn | 21 17 21.4 | -1.8 |
| | baz=56,SNR=12 | | | | | | |
| BCPM | Bancas Point | 9.82 166 | | | Pn | 21 17 23.6 | +0.2 |
| P30M | Million Dollar | 9.95 158 | P | | Pn | 21 17 26.0 | +0.8 |
| | baz=345 | | | | | | |
| L16K | Owhat River | 9.99 226 | | | Pn | 21 17 25.9 | +0.2 |
| L16K | Owhat River | 9.99 226 | P | | Pn | 21 17 27.1 | +1.4 |
| | baz=32 | | | | | | |
| K15K | Wolf Creek Mou | 10.05 232 | Pn | | Pn | 21 17 26.4 | -0.1 |
| K15K | Wolf Creek Mou | 10.05 232 | P | | Pn | 21 17 26.6 | 0.0 |
| | baz=36,SNR=61 | | | | | | |
| N18K | Kilcek | 10.10 214 | Pn | | Pn | 21 17 27.9 | +0.7 |
| N18K | Kilae Creek | 10.10 214 | P | | Pn | 21 17 27.8 | +0.6 |
| | baz=24,SNR=35 | | | | | | |
| O20K | Slope Mountain | 10.10 204 | P | | Pn | 21 17 27.6 | +0.3 |
| | baz=17 | | | | | | |
| PNL | Peninsula | 10.12 165 | P | | Pn | 21 17 30.3 | +2.7 |
| PNL | Peninsula | 10.12 165 | P | | Pn | 21 17 29.4 | +1.8 |
| | baz=350,SNR=28 | | | | | | |
| Q23K | Middleton Isla | 10.17 186 | P | | Pn | 21 17 29.0 | +0.7 |
| | baz=3.9 | | | | | | |
| MID | Middleton Isla | 10.18 186 | P | | Pn | 21 17 31.4 | +3.2 |
| BRSE | Bradley Lake S | 10.19 198 | P | | Pn | 21 17 29.8 | +1.3 |
| | baz=13,SNR=10 | | | | | | |
| J14K | Nanvaranak Lak | 10.27 238 | Pn | | Pn | 21 17 30.0 | +0.4 |
| J14K | Nanvaranak Lak | 10.27 238 | P | | Pn | 21 17 29.5 | -0.1 |
| | baz=40,SNR=162 | | | | | | |
| P29M | Windy Craggy | 10.33 161 | Pn | | Pn | 21 17 31.1 | +0.7 |
| P29M | Windy Craggy | 10.33 161 | P | | Pn | 21 17 31.5 | +1.1 |
| | baz=347,SNR=24 | | | | | | |
| HOM | Homer | 10.38 201 | P | | Pn | 21 17 32.7 | +1.7 |
| | baz=14 | | | | | | |
| TGTN | Hyland Airport | 10.40 133 | P | | Pn | 21 17 31.7 | +0.2 |
| | baz=327,SNR=12 | | | | | | |
| WRGLY | Wrigley | 10.45 117 | P | | Pn | 21 17 30.5 | -1.6 |
| | baz=316,SNR=127 | | | | | | |
| CNPM | China Poot | 10.46 200 | Pn | | Pn | 21 17 34.0 | +1.9 |
| M16K | Timber Creek | 10.46 222 | P | | Pn | 21 17 32.8 | +0.7 |
| | baz=29 | | | | | | |
| N17K | Nushagak Hills | 10.50 217 | P | | Pn | 21 17 33.3 | +0.5 |
| | baz=25,SNR=19 | | | | | | |
| P33M | Teslin, Yukon | 10.54 147 | P | | Pn | 21 17 32.7 | -0.6 |
| | baz=337,SNR=472 | | | | | | |
| L15K | Ungalak Mounta | 10.54 230 | P | | Pn | 21 17 33.1 | -0.1 |
| | baz=34,SNR=36 | | | | | | |
| P19K | Oil Pt | 10.60 205 | P | | Pn | 21 17 36.0 | +1.9 |
| | baz=17 | | | | | | |
| PLBC | Pleasant Camp | 10.67 157 | P | | Pn | 21 17 36.2 | +1.2 |
| | baz=345,SNR=95 | | | | | | |
| O18K | Koktuh Hills | 10.73 211 | P | | Pn | 21 17 37.0 | +1.1 |
| | baz=21,SNR=22 | | | | | | |
| SKAG | Skagway | 10.81 155 | P | | Pn | 21 17 39.2 | +2.2 |
| SKAG | Skagway | 10.81 155 | | | Pn | 21 17 37.6 | +0.6 |
| SKAG | Skagway | 10.81 155 | P | | Pn | 21 17 37.3 | +0.3 |
| | baz=343,SNR=55 | | | | | | |
| N16K | Nishlik Lake | 10.90 221 | P | | Pn | 21 17 39.2 | +1.0 |
| | baz=28,SNR=9.4 | | | | | | |
| P32M | Atlin | 10.95 150 | P | | Pn | 21 17 38.7 | -0.2 |
| | baz=340,SNR=82 | | | | | | |
| L14K | Kuka Creek | 11.14 232 | P | | Pn | 21 17 41.6 | +0.1 |
| | baz=35,SNR=27 | | | | | | |
| M15K | Kasigluk River | 11.16 226 | P | | Pn | 21 17 42.0 | +0.2 |
| | baz=31 | | | | | | |
| P18K | Big Mountain, | 11.17 210 | P | | Pn | 21 17 44.3 | +2.4 |
| | baz=20 | | | | | | |
| K13K | Kusilvak Mount | 11.23 237 | P | | Pn | 21 17 43.6 | +0.9 |
| | baz=39 | | | | | | |
| Q19K | Cape Douglas, | 11.36 205 | P | | Pn | 21 17 45.5 | +1.0 |
| | baz=17 | | | | | | |
| M14K | Bethel | 11.44 228 | P | | Pn | 21 17 45.8 | +0.2 |
| | baz=32 | | | | | | |
| N15K | Kwethluk River | 11.48 223 | P | | Pn | 21 17 47.1 | +1.0 |
| | baz=29,SNR=13 | | | | | | |
| Q20K | Shuyak Island | 11.49 201 | P | | Pn | 21 17 47.8 | +1.5 |
| | baz=14 | | | | | | |
| WTLY | Watson Lake, Y | 11.49 138 | P | | Pn | 21 17 45.6 | -0.8 |
| | baz=332 | | | | | | |
| O16K | Kokwok River B | 11.54 217 | P | | Pn | 21 17 47.7 | +0.7 |
| | baz=25,SNR=16 | | | | | | |
| R33M | Jennings River | 11.66 144 | P | | Pn | 21 17 48.6 | -0.1 |
| | baz=336,SNR=174 | | | | | | |
| R31K | City Hall, Gus | 11.77 157 | P | | Pn | 21 17 50.8 | +0.8 |
| | baz=345 | | | | | | |
| Q32M | Nakina River | 11.81 148 | P | | Pn | 21 17 51.2 | +0.5 |
| | baz=339,SNR=352 | | | | | | |
| Q18K | Katmai Hardscr | 11.84 208 | P | | Pn | 21 17 52.1 | +0.9 |
| | baz=18,SNR=13 | | | | | | |
| P16K | Nushagak River | 12.04 216 | P | | Pn | 21 17 54.1 | +0.4 |
| | baz=23 | | | | | | |
| R32K | Eaglecrest | 12.07 154 | P | | Pn | 21 17 55.2 | +0.9 |
| | baz=343 | | | | | | |
| N14K | Kuskokwak Cree | 12.08 226 | P | | Pn | 21 17 55.1 | +0.8 |
| | baz=30 | | | | | | |
| JIS | Juneau Island | 12.09 154 | P | | Pn | 21 17 56.7 | +2.2 |
| M13K | Dall Lake | 12.10 230 | P | | Pn | 21 17 55.8 | +1.2 |
| | baz=33,SNR=9.4 | | | | | | |
| Q16K | King Salmon | 12.10 212 | P | | Pn | 21 17 57.4 | +2.8 |
| | baz=21 | | | | | | |
| S31K | Pelican | 12.14 159 | | Pn | Pn | 21 17 56.5 | +1.4 |
| S31K | Pelican | 12.14 159 | P | | Pn | 21 17 55.5 | +0.5 |
| | baz=346,SNR=80 | | | | | | |
| GAMB | Gambell | 12.18 255 | P | | Pn | 21 17 55.9 | +0.3 |
| | baz=50,SNR=12 | | | | | | |
| O15K | Ungalikthiuk R | 12.30 220 | P | | Pn | 21 17 56.8 | -0.5 |
| | baz=26 | | | | | | |
| KDAK | Kodiak Island | 12.32 201 | Pn | | Pn | 21 17 58.4 | +0.9 |
| | comp=E,2.0nm,0.3s,baz=13,slow=11,SNR=11 | | | | | | |
| KDAK | | | | | Sn | Sn | 21 20 12.5 | -2.2 |
| | baz=7.9,slow=22 | | | | | | |
| KDAK | | | | Lg | Lg | 21 21 33.5 | | |
| | comp=E,0.5nm,0.3s,baz=90,slow=20,SNR=1.3 | | | | | | |
| KDAK | | | | LR | LR | 21 22 57.1 | | |
| | comp=E,68µm,21.4s,baz=42,slow=38 | | | | | | |
| KDAK | Kodiak Island | 12.32 201 | P | | Pn | 21 17 59.2 | +1.6 |
| | baz=14 | | | | | | |
| KDAK | Kodiak Island | 12.32 201 | *i* P | | Pn | 21 17 59.9 | +2.3 |
| KDAK | | | | MLR | MLR | | | |
| | comp=Z,144µm,13.0s | | | | | | |
| Q17K | Contact Creek | 12.35 210 | P | | Pn | 21 17 58.9 | +0.7 |
| | baz=19 | | | | | | |
| O14K | Tigyukauivet M | 12.57 223 | P | | Pn | 21 18 02.2 | +1.3 |
| | baz=28 | | | | | | |
| KOTAN | Kotaneelee Air | 12.71 128 | P | | Pn | 21 18 02.3 | -0.6 |
| | baz=326 | | | | | | |
| DLBC | Dease Lake | 12.73 144 | Pn | | Pn | 21 18 03.9 | +0.5 |
| | comp=Z,26nm,0.3s,baz=358,slow=8.0,SNR=111 | | | | | | |
| DLBC | | | | | Sn | Sn | 21 20 23.8 | -1.2 |
| | comp=Z,6.2nm,0.3s,baz=252,slow=27,SNR=3.0 | | | | | | |
| DLBC | | | | Lg | Lg | 21 21 37.5 | | |
| | comp=Z,7.3nm,0.3s,baz=239,slow=18,SNR=2.4 | | | | | | |
| DLBC | | | | LR | LR | 21 23 27.5 | | |
| | comp=Z,56µm,18.6s,baz=334,slow=39 | | | | | | |
| | comp=Z,196nm,0.5s | | | | | | |
| DLBC | Dease Lake | 12.73 144 | P | | Pn | 21 18 03.4 | 0.0 |
| | baz=337,SNR=65 | | | | | | |
| LIRD | Liard River Hi | 12.78 133 | P | | Pn | 21 18 03.7 | -0.1 |
| | baz=330,SNR=7.6 | | | | | | |
| R18K | Karluk | 12.79 205 | P | | Pn | 21 18 03.2 | -0.7 |
| | baz=16 | | | | | | |
| S32K | Killisnoo | 12.84 156 | P | | Pn | 21 18 03.8 | -0.9 |
| | baz=344,SNR=101 | | | | | | |
| M11K | Mekoryuk | 12.92 236 | P | | Pn | 21 18 05.2 | -0.6 |
| | baz=36 | | | | | | |
| OHAK | Old Harbor | 12.96 202 | P | | Pn | 21 18 08.5 | +2.2 |
| OHAK | Old Harbor | 12.96 202 | P | | Pn | 21 18 07.2 | +0.9 |
| | baz=14 | | | | | | |
| S34M | Telegraph Cree | 13.00 147 | P | | Pn | 21 18 07.4 | +0.5 |
| | baz=339,SNR=20 | | | | | | |
| R17L | Mt. Peulik Vol | 13.04 210 | P | | Pn | 21 18 07.9 | +0.5 |
| | baz=19 | | | | | | |
| SIT | Sitka | 13.14 158 | P | | Pn | 21 18 11.0 | +2.3 |
| SIT | Sitka | 13.14 158 | Pn | | Pn | 21 18 10.0 | +1.3 |
| SIT | Sitka | 13.14 158 | P | | Pn | 21 18 08.2 | -0.5 |
| | baz=346,SNR=29 | | | | | | |
| SIT | Sitka | 13.14 158 | P | | Pn | 21 18 10.0 | +1.3 |
| TOAD | Toad River Com | 13.49 133 | P | | Pn | 21 18 13.1 | -0.5 |
| | baz=330 | | | | | | |
| T33K | Petersburg | 13.72 153 | P | | Pn | 21 18 17.7 | +1.0 |
| | baz=343 | | | | | | |
| SII | Sitkinak Islan | 13.72 203 | P | | Pn | 21 18 17.9 | +1.2 |
| YKA | Yellowknife Ar | 13.87 106 | Pn | | Pn | 21 18 13.6 | -5.1 |
| | comp=Z,38nm,0.3s,baz=315,slow=13,SNR=287 | | | | | | |
| YKA | | | | | Sn | Sn | 21 20 40.4 | -12 |
| | comp=Z,25nm,0.3s,baz=313,slow=24,SNR=8.2 | | | | | | |
| YKA | | | | Lg | Lg | 21 22 14.1 | | |
| | baz=316,slow=30 | | | | | | |
| | comp=Z,104nm,0.5s | | | | | | |
| T35M | Bob Quinn | 14.04 147 | P | | Pn | 21 18 22.2 | +1.1 |
| | baz=339,SNR=127 | | | | | | |
| U33K | Whale Pass | 14.37 154 | P | | Pn | 21 18 25.3 | -0.2 |
| | baz=344 | | | | | | |
| CHGN | Chignik | 14.67 212 | P | | Pn | 21 18 30.4 | +0.8 |
| | baz=20 | | | | | | |
| S14K | Fog Glacier | 14.90 215 | P | | Pn | 21 18 32.8 | -0.1 |
| | baz=21 | | | | | | |
| CRAG | Craig | 14.99 155 | P | | Pn | 21 18 35.8 | +1.8 |
| CRAG | Craig | 14.99 155 | P | | Pn | 21 18 33.4 | -0.5 |
| | baz=345,SNR=11 | | | | | | |
| U35K | Hyder | 15.09 148 | P | | Pn | 21 18 34.7 | -0.6 |
| | baz=340 | | | | | | |
| V35K | Ketchikan | 15.37 152 | P | | Pn | 21 18 38.8 | -0.1 |
| | baz=343,SNR=12 | | | | | | |
| RES | Resolute Bay | 15.60 49 | Pn | | Pn | 21 18 38.6 | -3.3 |
| | comp=Z,50nm,0.3s,baz=268,slow=13,SNR=93 | | | | | | |
| SDPT | Sand Point | 15.96 215 | P | | P | 

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **CBB** | **Campbell River** | **21.58** | **145** | | IAmb | IAmb | 21 20 02.3 | | | | |
| | comp=Z,1µm,1.9s | | | | | | | | | | |
| **CLRS** | **Cowichan Lake** | **22.98** | **144** | | IAmb | IAmb | 21 20 14.1 | | | | |
| | comp=Z,875nm,1.6s | | | | | | | | | | |
| **ADK** | **Adak** | **23.24** | **237** | | P | **P** | **21 20 10.1** | **+0.8** | | | |
| **ADK** | **Adak** | **23.24** | **237** | | P | **P** | **21 20 09.1** | **-0.2** | | | |
| ADK | | | | | IAmb | IAmb | 21 20 13.6 | | | | |
| | comp=Z,334nm,0.9s | | | | | | | | | | |
| **ADK** | **Adak** | **23.24** | **237** | | IAMs_20 | IAMs_20 | 21 30 06.2 | | | | |
| | comp=Z,34µm,18.0s | | | | | | | | | | |
| **ADK** | **Adak** | **23.24** | **237** | | P | **P** | **21 20 09.1** | **-0.2** | | | |
| ADK | | | | | pmax | pmax | | | | | |
| | comp=Z,334nm,1.0s | | | | | | | | | | |
| ADK | | | | | MLR | MLR | | | | | |
| | comp=Z,34µm,18.0s | | | | | | | | | | |
| **PGC** | **Sidney** | **23.28** | **143** | | IAmb | IAmb | 21 20 21.6 | | | | |
| | comp=Z,491nm,1.4s | | | | | | | | | | |
| **KIWB** | **Kanaga Island** | **23.40** | **238** | | P | **P** | **21 20 10.8** | **-0.1** | | | |
| **FFC** | **Flin Flon** | **24.05** | **106** | | P | **P** | **21 20 16.4** | **-0.9** | | | |
| FFC | | | | | IAmb | IAmb | 21 20 29.3 | | | | |
| | comp=Z,293nm,0.9s | | | | | | | | | | |
| **FFC** | **Flin Flon** | **24.05** | **106** | | P | **P** | **21 20 16.4** | **-0.9** | | | |
| FFC | | | | | pmax | pmax | | | | | |
| | comp=Z,293nm,0.9s | | | | | | | | | | |
| **NLWA** | **Neilton Lookou** | **24.40** | **145** | | IAMs_20 | IAMs_20 | 21 29 53.9 | | | | |
| | comp=Z,55µm,21.0s | | | | | | | | | | |
| **GNW** | **Green Mountain** | **24.45** | **143** | | IAmb | IAmb | 21 20 28.5 | | | | |
| | comp=Z,862nm,1.9s | | | | | | | | | | |
| **B08A** | **Colville Reser** | **24.49** | **137** | | IAmb | IAmb | 21 20 43.9 | | | | |
| | comp=Z,471nm,1.5s | | | | | | | | | | |
| **NEEM** | **North Greenlan** | **24.64** | **32** | *i* | P | **P** | **21 20 23.4** | **+0.6** | | | |
| NEEM | | | | | IAmb | IAmb | 21 20 42.6 | | | | |
| | comp=Z,246nm,0.7s | | | | | | | | | | |
| **AMKA** | **Amchitka** | **24.89** | **242** | | P | **P** | **21 20 24.6** | **-0.3** | | | |
| **KULLO** | **Kullorsuaq** | **24.96** | **39** | *i* | P | **P** | **21 20 25.1** | **-0.3** | | | |
| KULLO | | | | | IAmb | IAmb | 21 20 33.6 | | | | |
| | comp=Z,76nm,0.7s | | | | | | | | | | |
| **NEW** | **Newport** | **25.12** | **134** | | IAmb | IAmb | 21 20 32.9 | | | | |
| | comp=Z,279nm,1.2s | | | | | | | | | | |
| **NEW** | **Newport** | **25.12** | **134** | | LR | LR | 21 30 51.6 | | | | |
| | comp=Z,68µm,18.4s,baz=337,slow=38 | | | | | | | | | | |
| **NEW** | **Newport** | **25.12** | **134** | | P | **P** | **21 20 28.1** | **+1.0** | | | |
| | baz=338,SNR=102 | | | | | | | | | | |
| NEW | | | | | S | **S** | **21 24 54.3** | **+2.8** | | | |
| | baz=338 | | | | | | | | | | |
| **SEY** | **Seymchan** | **25.20** | **286** | | LR | LR | 21 32 09.3 | | | | |
| | comp=Z,38µm,18.1s,baz=50,slow=41 | | | | | | | | | | |
| **SEY** | **Seymchan** | **25.20** | **286** | *de* | P | **P** | **21 20 27.8** | **+0.2** | | | |
| SEY | | | | | pmax | pmax | | | | | |
| | comp=Z,791nm,1.3s | | | | | | | | | | |
| SEY | | | | | MLR | MLR | | | | | |
| | comp=Z,35µm,17.0s | | | | | | | | | | |
| **LTY** | **Liberty** | **25.21** | **140** | | IAmb | IAmb | 21 20 33.1 | | | | |
| | comp=Z,365nm,1.2s | | | | | | | | | | |
| **E03A** | **Lebam** | **25.27** | **145** | | IAmb | IAmb | 21 20 38.9 | | | | |
| | comp=Z,277nm,1.0s | | | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.41** | **250** | | LR | LR | 21 30 11.3 | | | | |
| | comp=Z,18µm,21.2s,baz=50,slow=36 | | | | | | | | | | |
| **D08A** | **Wollman Farm,** | **25.80** | **138** | | IAmb | IAmb | 21 20 39.3 | | | | |
| | comp=Z,64nm,1.9s | | | | | | | | | | |
| **F03A** | **Seaside** | **25.86** | **145** | | IAmb | IAmb | 21 21 09.9 | | | | |
| | comp=Z,333nm,1.1s | | | | | | | | | | |
| **E07A** | **Sunnyside** | **26.05** | **139** | | IAmb | IAmb | 21 20 43.0 | | | | |
| | comp=Z,642nm,1.7s | | | | | | | | | | |
| **HAWA** | **Hanford** | **26.29** | **139** | | IAMs_20 | IAMs_20 | 21 29 41.8 | | | | |
| | comp=Z,31µm,18.0s | | | | | | | | | | |
| **E08A** | **Dider Farm, El** | **26.30** | **138** | | IAmb | IAmb | 21 21 02.8 | | | | |
| | comp=Z,380nm,1.2s | | | | | | | | | | |
| **NOR** | **Nord** | **26.59** | **15** | *i* | P | **P** | **21 20 39.9** | **-0.1** | | | |
| NOR | | | | | IAmb | IAmb | 21 20 50.4 | | | | |
| | comp=Z,28nm,0.9s | | | | | | | | | | |
| **TIXI** | **Tiksi** | **26.60** | **315** | | P | **P** | **21 20 39.4** | **-0.8** | | | |
| **TIXI** | **Tiksi** | **26.60** | **315** | | P | **P** | **21 20 39.4** | **-0.8** | | | |
| TIXI | | | | | pmax | pmax | | | | | |
| | comp=Z,198nm,1.0s | | | | | | | | | | |
| TIXI | | | | | MLR | MLR | | | | | |
| | comp=Z,14µm,22.0s | | | | | | | | | | |
| **G03D** | **McMinnville, O** | **26.60** | **145** | | IAmb | IAmb | 21 20 48.9 | | | | |
| | comp=Z,304nm,1.3s | | | | | | | | | | |
| **F07A** | **Phinny Hill Vi** | **26.67** | **140** | | IAmb | IAmb | 21 21 03.6 | | | | |
| | comp=Z,380nm,1.4s | | | | | | | | | | |
| **G05A** | **Wamic** | **26.98** | **142** | | IAmb | IAmb | 21 21 21.2 | | | | |
| | comp=Z,256nm,1.1s | | | | | | | | | | |
| **F10A** | **Beach Ranch, E** | **27.23** | **136** | | IAmb | IAmb | 21 20 51.7 | | | | |
| | comp=Z,236nm,1.1s | | | | | | | | | | |
| **MSO** | **Missoula** | **27.27** | **131** | | IAmb | IAmb | 21 20 52.9 | | | | |
| | comp=Z,590nm,1.4s | | | | | | | | | | |
| **MSO** | **Missoula** | **27.27** | **131** | | P | **P** | **21 20 48.0** | **+1.3** | | | |
| | baz=337,SNR=165 | | | | | | | | | | |
| MSO | | | | | S | **S** | **21 25 28.1** | **+2.4** | | | |
| | baz=337 | | | | | | | | | | |
| **EGMT** | **Eagleton** | **27.36** | **124** | | P | **P** | **21 20 47.7** | **+0.3** | | | |
| | baz=334,SNR=81 | | | | | | | | | | |
| **H04D** | **Lebanon** | **27.37** | **145** | | P | **P** | **21 20 48.5** | **+1.1** | | | |
| H04D | | | | | IAmb | IAmb | 21 20 58.6 | | | | |
| | comp=Z,351nm,1.5s | | | | | | | | | | |
| **G08A** | **Pilot Rock** | **27.46** | **139** | | IAmb | IAmb | 21 20 56.1 | | | | |
| | comp=Z,345nm,1.8s | | | | | | | | | | |
| **BUCK** | **Buck Mountain** | **27.63** | **146** | | IAmb | IAmb | 21 21 28.6 | | | | |
| | comp=Z,592nm,1.9s | | | | | | | | | | |
| **NUUG** | **Nuugaatsiaq** | **27.75** | **43** | *i* | P | **P** | **21 20 50.9** | **+0.4** | | | |
| NUUG | | | | | IAmb | IAmb | 21 20 60.0 | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | | | |
| **MA2** | **Magadan** | **28.13** | **282** | | P | **P** | **21 20 53.2** | **-0.9** | | | |
| MA2 | | | | | IAMs_20 | IAMs_20 | 21 31 53.9 | | | | |
| | comp=Z,35µm,22.0s | | | | | | | | | | |
| **MA2** | **Magadan** | **28.13** | **282** | | P | **P** | **21 20 53.2** | **-0.9** | | | |
| MA2 | | | | | pmax | pmax | | | | | |
| | comp=Z,123nm,0.9s | | | | | | | | | | |
| MA2 | | | | | MLR | MLR | | | | | |
| | comp=Z,35µm,22.0s | | | | | | | | | | |
| **I04A** | **Tendick Farm,** | **28.14** | **145** | | IAmb | IAmb | 21 21 02.3 | | | | |
| | comp=Z,490nm,1.9s | | | | | | | | | | |
| **PINE** | **Pine Mountain** | **28.44** | **143** | | IAmb | IAmb | 21 21 54.2 | | | | |
| | comp=Z,217nm,1.1s | | | | | | | | | | |
| **I07A** | **Izee** | **28.48** | **141** | | IAmb | IAmb | 21 21 04.6 | | | | |
| | comp=Z,619nm,2.0s | | | | | | | | | | |
| **UMMG** | **Uummannaq** | **28.59** | **44** | *i* | P | **P** | **21 20 57.7** | **-0.3** | | | |
| UMMG | | | | | IAmb | IAmb | 21 20 59.5 | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | | |
| **DGMT** | **Dagmar** | **28.65** | **116** | | P | **P** | **21 20 58.2** | **-0.6** | | | |
| **DGMT** | **Dagmar** | **28.65** | **116** | | P | **P** | **21 20 59.1** | **+0.3** | | | |
| | baz=332,SNR=21 | | | | | | | | | | |
| **FRB** | **Frobisher Bay** | **28.75** | **64** | | LR | LR | 21 34 18.2 | | | | |
| | comp=Z,36µm,19.9s,baz=310,slow=40 | | | | | | | | | | |
| **DLMT** | **Dillon** | **28.99** | **130** | | IAmb | IAmb | 21 21 29.3 | | | | |
| | comp=Z,288nm,1.2s | | | | | | | | | | |
| DLMT | | | | | IAMs_20 | IAMs_20 | 21 31 13.9 | | | | |
| | comp=Z,39µm,19.0s | | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **29.04** | **129** | | IAmb | IAmb | 21 22 00.4 | | | | |
| | comp=Z,300nm,1.8s | | | | | | | | | | |
| BOZ | | | | | IAMs_20 | IAMs_20 | 21 31 23.1 | | | | |
| | comp=Z,30µm,19.0s | | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **29.04** | **129** | | P | **P** | **21 21 03.2** | **+0.8** | | | |
| | baz=337,SNR=55 | | | | | | | | | | |
| BOZ | | | | | S | **S** | **21 25 54.3** | **+0.7** | | | |
| | baz=337 | | | | | | | | | | |
| **HUMO** | **Hull Mountain** | **29.17** | **146** | | IAmb | IAmb | 21 21 10.3 | | | | |
| | comp=Z,316nm,1.3s | | | | | | | | | | |
| HUMO | | | | | IAMs_20 | IAMs_20 | 21 32 59.0 | | | | |
| | comp=Z,26µm,19.0s | | | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **29.40** | **140** | | IAmb | IAmb | 21 21 11.9 | | | | |
| | comp=Z,318nm,1.5s | | | | | | | | | | |
| **LAO** | **LASA Array** | **29.61** | **121** | | IAMs_20 | IAMs_20 | 21 32 46.2 | | | | |
| | comp=Z,28µm,21.0s | | | | | | | | | | |
| **LAO** | **LASA Array** | **29.61** | **121** | | P | **P** | **21 21 08.3** | **+0.9** | | | |
| | baz=334,SNR=42 | | | | | | | | | | |
| LAO | | | | | S | **S** | **21 26 03.1** | **+0.7** | | | |
| | baz=334 | | | | | | | | | | |
| **YHL** | **Hebgen Lake** | **29.85** | **129** | | IAmb | IAmb | 21 21 56.6 | | | | |
| | comp=Z,199nm,1.2s | | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **29.85** | **105** | | IAmb | IAmb | 21 22 02.2 | | | | |
| | comp=Z,185nm,0.9s | | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **29.85** | **105** | | P | **P** | **21 21 10.0** | **+0.7** | | | |
| | comp=Z,26nm,0.6s,baz=316,slow=8.2,SNR=20 | | | | | | | | | | |
| ULM | | | | | S | **S** | **21 26 11.4** | **+5.5** | | | |
| | comp=Z,41nm,0.8s,baz=270,slow=22,SNR=2.4 | | | | | | | | | | |
| ULM | | | | | LR | LR | 21 34 05.8 | | | | |
| | comp=Z,15µm,18.7s,baz=329,slow=38 | | | | | | | | | | |
| | comp=Z,26nm,0.6s | | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **29.85** | **105** | *c* | *i*P | **P** | **21 21 09.0** | **-0.4** | | | |
| **YBH** | **Yreka Blue Hor** | **30.06** | **147** | | IAMs_20 | IAMs_20 | 21 33 19.6 | | | | |
| | comp=Z,23µm,18.0s | | | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.06** | **147** | | LR | LR | 21 33 29.5 | | | | |
| | comp=Z,20µm,19.3s,baz=332,slow=37 | | | | | | | | | | |
| **YMR** | **Madison River** | **30.07** | **128** | | IAmb | IAmb | 21 22 12.9 | | | | |
| | comp=Z,603nm,1.9s | | | | | | | | | | |
| **YNR** | **Norris Junctio** | **30.11** | **128** | | IAmb | IAmb | 21 22 08.8 | | | | |
| | comp=Z,386nm,1.9s | | | | | | | | | | |
| **RLMT** | **Red Lodge** | **30.14** | **126** | | IAmb | IAmb | 21 21 18.0 | | | | |
| RLMT | comp=Z,219nm,1.2s | | | | IAMs_20 | IAMs_20 | 21 31 50.2 | | | | |
| | comp=Z,28µm,18.0s | | | | | | | | | | |
| **RLMT** | **Red Lodge** | **30.14** | **126** | | P | **P** | **21 21 13.2** | **+1.0** | | | |
| | baz=336,SNR=101 | | | | | | | | | | |
| RLMT | | | | | S | **S** | **21 26 12.2** | **+1.3** | | | |
| | baz=336 | | | | | | | | | | |
| **HLID** | **Hailey** | **30.19** | **134** | | IAMs_20 | IAMs_20 | 21 34 43.7 | | | | |
| | comp=Z,32µm,20.0s | | | | | | | | | | |
| **HLID** | **Hailey** | **30.19** | **134** | | P | **P** | **21 21 14.1** | **+1.5** | | | |
| | baz=340,SNR=57 | | | | | | | | | | |
| HLID | | | | | S | **S** | **21 26 14.5** | **+2.8** | | | |
| | baz=340 | | | | | | | | | | |
| **DAG** | **Danmarks Havn** | **30.28** | **22** | *i* | P | **P** | **21 21 11.3** | **-1.6** | | | |
| DAG | | | | | IAmb | IAmb | 21 21 14.8 | | | | |
| | comp=Z,21nm,0.5s | | | | | | | | | | |
| **SUMG** | **Summit** | **30.29** | **35** | | P | **P** | **21 21 12.9** | **-0.6** | | | |
| **SUMG** | **Summit** | **30.29** | **35** | | P | **P** | **21 21 12.9** | **-0.6** | | | |
| SUMG | | | | | pmax | pmax | | | | | |
| | comp=Z,713nm,1.6s | | | | | | | | | | |
| SUMG | | | | | MLR | MLR | | | | | |
| | comp=Z,12µm,21.0s | | | | | | | | | | |
| **SUMG** | **Summit** | **30.29** | **35** | *i* | P | **P** | **21 21 13.8** | **+0.3** | | | |
| SUMG | | | | | IAmb | IAmb | 21 21 14.9 | | | | |
| | comp=Z,23nm,0.9s | | | | | | | | | | |
| **H17A** | **Grant Village** | **30.43** | **128** | | P | **P** | **21 21 15.4** | **+0.5** | | | |
| | baz=337 | | | | | | | | | | |
| H17A | | | | | S | **S** | **21 26 19.9** | **+4.2** | | | |
| | baz=337 | | | | | | | | | | |
| **PET** | **Petropavlovsk** | **30.48** | **267** | | P | **P** | **21 21 14.9** | **+0.1** | | | |
| **PET** | **Petropavlovsk** | **30.48** | **267** | *e* | P | **P** | **21 21 14.8** | **-0.1** | | | |
| PET | | | | *e* | | | 21 22 09.5 | | | | |
| PET | | | | *i* | S | **S** | **21 26 10.3** | **-5.3** | | | |
| PET | | | | | pmax | pmax | | | | | |
| | comp=Z,900nm,6.7s | | | | | | | | | | |
| PET | | | | | pmax | pmax | | | | | |
| | comp=Z,2µm,5.7s | | | | | | | | | | |
| PET | | | | | pmax | pmax | | | | | |
| | comp=Z,47nm,1.0s | | | | | | | | | | |
| PET | | | | | MLR | MLR | | | | | |
| | comp=Z,19µm,14.0s | | | | | | | | | | |
| PET | | | | | MLR | MLR | | | | | |
| | comp=Z,21µm,14.0s | | | | | | | | | | |
| **MDND** | **Maddock** | **30.67** | **112** | | IAMs_20 | IAMs_20 | 21 33 53.8 | | | | |
| | comp=Z,26µm,18.0s | | | | | | | | | | |
| **MDND** | **Maddock** | **30.67** | **112** | | P | **P** | **21 21 17.2** | **+0.5** | | | |
| | baz=331 | | | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **30.69** | **128** | | IAMs_20 | IAMs_20 | 21 34 32.1 | | | | |
| | comp=Z,28µm,18.0s | | | | | | | | | | |
| **IMW** | **Indian Meadow** | **30.80** | **129** | | IAmb | IAmb | 21 21 24.8 | | | | |
| | comp=Z,315nm,1.4s | | | | | | | | | | |
| **FXWY** | **Fox Creek** | **31.01** | **129** | | IAmb | IAmb | 21 21 26.8 | | | | |
| | comp=Z,323nm,1.5s | | | | | | | | | | |
| **KBS** | **Kingsbay** | **31.12** | **9** | *e* | P | **P** | **21 21 21.4** | **+1.0** | | | |
| KBS | | | | *e* | S | **S** | **21 26 26.2** | **+0.9** | | | |
| KBS | | | | | IAMs_20 | IAMs_20 | 21 35 23.7 | | | | |
| | comp=Z,17µm,16.6s | | | | | | | | | | |
| **KBS** | **Kingsbay** | **31.12** | **9** | *ce* | P | **P** | **21 21 21.5** | **+1.2** | | | |
| KBS | | | | | pmax | pmax | | | | | |
| | comp=Z,112nm,1.0s | | | | | | | | | | |
| **KBS** | **Kingsbay** | **31.12** | **9** | *i* | P | **P** | **21 21 19.3** | **-1.0** | | | |
| **LOHW** | **Long Hollow** | **31.15** | **129** | | IAmb | IAmb | 21 21 27.9 | | | | |
| | comp=Z,338nm,1.4s | | | | | | | | | | |
| LOHW | | | | | IAMs_20 | IAMs_20 | 21 34 39.3 | | | | |
| | comp=Z,26µm,22.0s | | | | | | | | | | |
| **TPAW** | **Teton Pass** | **31.17** | **129** | | IAmb | IAmb | 21 21 28.3 | | | | |
| | comp=Z,330nm,1.3s | | | | | | | | | | |
| **SNOW** | **Snow King Moun** | **31.25** | **129** | | IAMs_20 | IAMs_20 | 21 35 04.9 | | | | |
| | comp=Z,27µm,21.0s | | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **31.52** | **107** | | IAmb | IAmb | 21 22 31.3 | | | | |
| | comp=Z,388nm,1.6s | | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **31.52** | **107** | | P | **P** | **21 21 24.8** | **+0.6** | | | |
| | baz=330,SNR=35 | | | | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **31.55** | **147** | | IAmb | IAmb | 21 21 31.5 | | | | |
| O02D | comp=Z,395nm,1.6s | | | | IAMs_20 | IAMs_20 | 21 34 39.1 | | | | |
| | comp=Z,20µm,18.0s | | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **31.61** | **48** | | P | **P** | **21 21 23.9** | **-0.8** | | | |
| SFJD | | | | | IAmb | IAmb | 21 22 18.7 | | | | |
| | comp=Z,164nm,1.1s | | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **31.61** | **48** | | LR | LR | 21 36 23.2 | | | | |
| | comp=Z,14µm,20.4s,baz=328,slow=41 | | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **31.61** | **48** | | P | **P** | **21 21 23.9** | **-0.8** | | | |
| SFJD | | | | | pmax | pmax | | | | | |
| | comp=Z,164nm,1.2s | | | | | | | | | | |
| SFJD | | | | | MLR | MLR | | | | | |
| | comp=Z,13µm,21.0s | | | | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **32.06** | **7** | *e* | P | **P** | **21 21 28.9** | **+0.3** | | | |
| SPA0 | | | | *e* | S | **S** | **21 26 39.4** | **-0.7** | | | |
| SPA0 | | | | | IVMs_BB | IVMs_BB | 21 35 56.9 | | | | |
| | comp=Z,11µm,17.4s | | | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.06** | **7** | | P | **P** | **21 21 28.8** | **+0.2** | | | |
| | comp=Z,136nm,1.0s,baz=25,slow=7.9,SNR=44 | | | | | | | | | | |
| SPITS | | | | | PcP | **PcP** | **21 24 17.9** | **+0.4** | | | |
| | comp=Z,7.8nm,0.6s,baz=321,slow=6.1,SNR=1.7 | | | | | | | | | | |
| SPITS | | | | | S | **S** | **21 26 39.0** | **-1.1** | | | |
| | comp=Z,7.1nm,1.0s,baz=77,slow=15,SNR=1.2 | | | | | | | | | | |
| | comp=Z,136nm,1.0s | | | | | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **32.07** | **7** | | IAmb | IAmb | 21 21 49.4 | | | | |
| | comp=Z,125nm,0.9s | | | | | | | | | | |
| **DBG** | **Daneborg** | **32.12** | **25** | *i* | P | **P** | **21 21 27.8** | **-1.3** | | | |
| DBG | | | | | IAmb | IAmb | 21 21 34.4 | | | | |
| | comp=Z,58nm,1.1s | | | | | | | | | | |
| **BW06** | **Boulder Array** | **32.22** | **128** | | P | **P** | **21 21 32.4** | **+1.8** | | | |
| | baz=338,SNR=182 | | | | | | | | | | |
| BW06 | | | | | S | **S** | **21 26 45.0** | **+1.4** | | | |
| | baz=338 | | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.22** | **128** | | P | **P** | **21 21 30.5** | **-0.1** | | | |
| **PDAR** | **Pinedale Array** | **32.22** | **128** | | P | **P** | **21 21 31.9** | **+1.3** | | | |
| | comp=Z,63nm,0.9s,baz=0.0,slow=5.2,SNR=320 | | | | | | | | | | |
| PDAR | | | | | PcP | **PcP** | **21 24 19.9** | **+1.0** | | | |
| | comp=Z,10.0nm,0.7s,baz=354,slow=2.7,SNR=1.7 | | | | | | | | | | |
| PDAR | | | | | S | **S** | **21 26 45.4** | **+1.8** | | | |
| | comp=Z,2.5nm,0.8s,baz=64,slow=12,SNR=0.8 | | | | | | | | | | |
| PDAR | | | | | LR | LR | 21 35 45.7 | | | | |
| | comp=Z,22µm,18.9s,baz=340,slow=38 | | | | | | | | | | |
| | comp=Z,63nm,0.9s | | | | | | | | | | |
| **HVU** | **Hansel Valley** | **32.28** | **133** | | IAmb | IAmb | 21 21 39.3 | | | | |
| | comp=Z,447nm,1.6s | | | | | | | | | | |
| **ORV** | **Oroville** | **32.40** | **146** | | P | **P** | **21 21 32.1** | **+0.1** | | | |
| **ORV** | **Oroville** | **32.40** | **146** | | P | **P** | **21 21 32.1** | **+0.1** | | | |
| ORV | | | | | pmax | pmax | | | | | |
| | comp=Z,191nm,1.8s | | | | | | | | | | |
| ORV | | | | | MLR | MLR | | | | | |
| | comp=Z,18µm,19.0s | | | | | | | | | | |
| **RSSD** | **Black Hills** | **32.59** | **120** | | P | **P** | **21 21 33.7** | **-0.1** | | | |
| **RSSD** | **Black Hills** | **32.59** | **120** | | P | **P** | **21 21 34.6** | **+0.8** | | | |
| RSSD | baz=335 | | | | S | **S** | **21 26 50.9** | **+1.6** | | | |
| | baz=335 | | | | | | | | | | |
| **RSSD** | **Black Hills** | **32.59** | **120** | | P | **P** | **21 21 33.7** | **-0.1** | | | |
| RSSD | | | | | pmax | pmax | | | | | |
| | comp=Z,525nm,1.6s | | | | | | | | | | |
| RSSD | | | | | MLR | MLR | | | | | |
| | comp=Z,13µm,18.0s | | | | | | | | | | |
| **ELK** | **Elko** | **32.64** | **137** | | IAmb | IAmb | 21 21 41.1 | | | | |
| ELK | comp=Z,348nm,1.4s | | | | IAMs_20 | IAMs_20 | 21 34 19.7 | | | | |
| | comp=Z,33µm,18.0s | | | | | | | | | | |
| **ELK** | **Elko** | **32.64** | **137** | | LR | LR | 21 34 29.1 | | | | |
| | comp=Z,24µm,20.9s,baz=347,slow=36 | | | | | | | | | | |
| **PAHR** | **Pah Rah Range** | **32.69** | **143** | | IAmb | IAmb | 21 21 41.1 | | | | |
| | comp=Z,293nm,1.3s | | | | | | | | | | |
| **ICESG** | **Greenland Ices** | **32.70** | **40** | *i* | P | **P** | **21 21 33.7** | **-0.9** | | | |
| **HWUT** | **Hardware Ranch** | **32.76** | **131** | | IAmb | IAmb | 21 21 43.5 | | | | |
| | comp=Z,387nm,1.4s | | | | | | | | | | |
| **DY2G** | **Dye2** | **33.13** | **47** | *i* | P | **P** | **21 21 38.8** | **+0.4** | | | |
| DY2G | | | | | IAmb | IAmb | 21 21 45.7 | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | | | |
| **YAK** | **Yakutsk** | **33.15** | **301** | | P | **P** | **21 21 37.6** | **-0.7** | | | |
| **YAK** | **Yakutsk** | **33.15** | **301** | | LR | LR | 21 38 25.1 | | | | |
| | comp=Z,12µm,18.0s,baz=39,slow=42 | | | | | | | | | | |
| **YAK** | **Yakutsk** | **33.15** | **301** | *d* | *i*P | **P** | **21 21 37.5** | **-0.7** | | | |
| YAK | | | | *e* | | | 21 24 21.4 | | | | |
| YAK | | | | *e* | S | **S** | **21 26 54.7** | **-2.4** | | | |
| YAK | | | | *e* | SS | **SnSn** | **21 28 51.1** | **-4.6** | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=Z,244nm,0.9s | | | | | | | | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=E,34nm,0.9s | | | | | | | | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=N,73nm,1.0s | | | | | | | | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=Z,489nm,2.5s | | | | | | | | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=N,478nm,2.6s | | | | | | | | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=E,352nm,2.8s | | | | | | | | | | |
| YAK | | | | | smax | smax | | | | | |
| | comp=E,676nm,2.5s | | | | | | | | | | |
| YAK | | | | | smax | smax | | | | | |
| | comp=N,491nm,2.5s | | | | | | | | | | |
| YAK | | | | | MLR | MLR | | | | | |
| | comp=Z,16µm,15.0s | | | | | | | | | | |
| YAK | | | | | MLR | MLR | | | | | |
| | comp=E,12µm,14.0s | | | | | | | | | | |
| **HSPB** | **Hornsund (broa** | **33.18** | **8** | *e* | S | **S** | **21 26 56.3** | **-1.1** | | | |
| **HSPB** | **Hornsund (broa** | **33.18** | **8** | *e* | P | **P** | **21 21 38.3** | **-0.1** | | | |
| **K22A** | **Casper** | **33.19** | **124** | | IAmb | IAmb | 21 21 44.1 | | | | |
| | comp=Z,214nm,1.1s | | | | | | | | | | |
| **K22A** | **Casper** | **33.19** | **124** | | P | **P** | **21 21 39.9** | **+0.8** | | | |
| | baz=337,SNR=76 | | | | | | | | | | |
| K22A | | | | | S | **S** | **21 26 58.4** | **-0.2** | | | |
| | baz=337 | | | | | | | | | | |
| **PNTR** | **Pine Nut** | **33.24** | **143** | | IAmb | IAmb | 21 21 47.9 | | | | |
| | comp=Z,135nm,0.7s | | | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **33.30** | **267** | *e* | P | **P** | **21 21 38.9** | **-0.8** | | | |
| SKR | | | | *e* | | | 21 22 58.2 | | | | |
| SKR | | | | *e* | S | **S** | **21 26 56.4** | **-3.3** | | | |
| SKR | | | | | pmax | pmax | | | | | |
| | comp=Z,2µm,6.2s | | | | | | | | | | |
| **EYMN** | **Ely** | **33.31** | **103** | | P | **P** | **21 21 40.1** | **+0.3** | | | |
| **EYMN** | **Ely** | **33.31** | **103** | | P | **P** | **21 21 40.5** | **+0.6** | | | |
| | baz=329,SNR=82 | | | | | | | | | | |
| EYMN | | | | | S | **S** | **21 26 58.5** | **-1.5** | | | |
| | baz=329 | | | | | | | | | | |
| **YERR** | **Yerington** | **33.41** | **143** | | IAmb | IAmb | 21 21 49.6 | | | | |
| | comp=Z,410nm,1.5s | | | | | | | | | | |
| **NUUK** | **Nuuk** | **33.45** | **53** | *i* | P | **P** | **21 21 39.7** | **-1.1** | | | |
| NUUK | | | | | IVmB_BB | | 21 21 42.4 | | | | |
| | comp=Z,1µm,1.9s | | | | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **33.53** | **110** | | IAMs_20 | IAMs_20 | 21 34 48.2 | | | | |
| | comp=Z,20µm,18.0s | | | | | | | | | | |
| **CTU** | **Camp Tracy** | **33.56** | **132** | | IAmb | IAmb | 21 21 50.3 | | | | |
| | comp=Z,479nm,1.7s | | | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **33.76** | **134** | | IAMs_20 | IAMs_20 | 21 35 47.4 | | | | |
| | comp=Z,32µm,21.0s | | | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **33.76** | **134** | | P | **P** | **21 21 46.1** | **+2.2** | | | |
| | baz=341,SNR=272 | | | | | | | | | | |
| DUG | | | | | S | **S** | **21 27 07.3** | **0.0** | | | |
| | baz=341 | | | | | | | | | | |
| **SUSD** | **Miller** | **33.90** | **114** | | IAmb | IAmb | 21 23 00.5 | | | | |
| | comp=Z,243nm,0.9s | | | | | | | | | | |
| **SUSD** | **Miller** | **33.90** | **114** | | P | **P** | **21 21 46.1** | **+1.1** | | | |
| | baz=333,SNR=22 | | | | | | | | | | |
| SUSD | | | | | S | **S** | **21 27 10.9** | **+1.8** | | | |
| | baz=333 | | | | | | | | | | |
| **HOPEN** | **Hopen** | **34.03** | **4** | *e* | P | **P** | **21 21 46.0** | **+0.2** | | | |
| HOPEN | | | | | IVmB_BB | | 21 21 49.9 | | | | |
| | comp=Z,3µm,3.3s | | | | | | | | | | |
| HOPEN | | | | *e* | S | **S** | **21 27 09.3** | **-1.3** | | | |
| HOPEN | | | | | IVMs_BB | IVMs_BB | 21 39 01.1 | | | | |
| | comp=Z,4µm,15.4s | | | | | | | | | | |
| **CMB** | **Columbia Colle** | **34.09** | **145** | | IAmb | IAmb | 21 21 52.9 | | | | |
| | comp=Z,324nm,2.0s | | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.15** | **142** | | P | **P** | **21 21 48.2** | **+0.8** | | | |
| **NVAR** | **Mina Array Bea** | **34.15** | **142** | | P | **P** | **21 21 49.9** | **+2.5** | | | |
| | comp=Z,67nm,1.0s,baz=327,slow=6.5,SNR=185 | | | | | | | | | | |
| NVAR | | | | | PcP | **PcP** | **21 24 24.6** | **+0.3** | | | |
| | comp=Z,13nm,0.8s,baz=316,slow=3.8,SNR=2.5 | | | | | | | | | | |
| NVAR | | | | | S | **S** | **21 27 13.8** | **+0.4** | | | |
| | comp=Z,2.1nm,1.0s,baz=70,slow=6.5,SNR=0.7 | | | | | | | | | | |
| NVAR | | | | | LR | LR | 21 36 37.8 | | | | |
| | comp=Z,27µm,20.4s,baz=347,slow=38 | | | | | | | | | | |
| | comp=Z,67nm,1.0s | | | | | | | | | | |
| **MPU** | **Maple Canyon** | **34.23** | **132** | | IAmb | IAmb | 21 21 54.4 | | | | |
| | comp=Z,283nm,1.0s | | | | | | | | | | |
| **RDMU** | **Red Mountain** | **34.26** | **129** | | IAmb | IAmb | 21 21 55.9 | | | | |
| | comp=Z,223nm,0.9s | | | | | | | | | | |
| **E38A** | **The Farm, Brul** | **34.45** | **104** | | IAmb | IAmb | 21 23 02.5 | | | | |
| | comp=Z,248nm,1.3s | | | | | | | | | | |
| **PHWY** | **Pilot Hill** | **34.74** | **124** | | IAmb | IAmb | 21 23 08.4 | | | | |
| | comp=Z,329nm,1.9s | | | | | | | | | | |
| **MLAC** | **Mammoth, Mammo** | **34.80** | **143** | | P | **P** | **21 21 55.1** | **+2.0** | | | |
| | baz=345 | | | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **34.83** | **138** | | IAmb | IAmb | 21 21 59.5 | | | | |
| | comp=Z,257nm,1.6s | | | | | | | | | | |
| R11B | | | | | IAMs_20 | IAMs_20 | 

baz=345
**CCUT Cedar City** **36.12 136** IAmb IAmb 21 22 11.0
comp=Z,370nm,1.2s
**SCHQ Schefferville** **36.16 73** IAmb IAmb 21 22 10.8
comp=Z,288nm,0.9s
**SCHQ Schefferville** **36.16 73** P **P** **21 22 04.5 +0.1**
comp=Z,210nm,0.8s,baz=329,slow=8.5,SNR=68
SCHQ S **S** **21 27 42.7 -1.0**
comp=Z,29nm,0.9s,baz=47,slow=9.0,SNR=1.5
SCHQ LR LR 21 39 24.7
comp=Z,17µm,18.4s,baz=325,slow=40
comp=Z,210nm,0.8s
**SMCO Snowmass** **36.28 127** IAmb IAmb 21 22 15.4
comp=Z,164nm,0.9s
**FURC Furnace Creek,** **36.34 141** P **P** **21 22 07.7 +1.6**
baz=344,SNR=9.8
FURC S **S** **21 27 50.2 +3.4**
baz=344
**VES Vestal, Richgr** **36.47 144** P **P** **21 22 08.5 +1.3**
baz=345,SNR=28
VES S **S** **21 27 53.0 +4.2**
baz=345
**MPMC Manual Prospec** **36.60 142** P **P** **21 22 10.3 +1.8**
baz=345,SNR=151
MPMC S **S** **21 27 57.9 +6.8**
baz=345
**NKL Nikolayevsk** **36.65 283** *e*P **P** **21 22 08.3 -0.2**
NKL *e* 21 23 34.6
NKL *e*S **S** **21 27 49.4 -1.8**
NKL pmax pmax
comp=N,247nm,1.2s
NKL pmax pmax
comp=E,148nm,1.1s
NKL pmax pmax
comp=Z,689nm,1.1s
NKL pmax pmax
comp=Z,876nm,1.4s
NKL smax smax
comp=E,920nm,3.5s
NKL smax smax
comp=N,408nm,2.7s
NKL MLR MLR
comp=N,96µm,14.0s
NKL MLR MLR
comp=E,26µm,14.0s
NKL MLR MLR
comp=Z,91µm,13.0s
**GWY Greenwater Val** **36.66 141** IAmb IAmb 21 22 15.4
comp=Z,421nm,1.7s
**JMIC Jan Mayen** **36.72 22** *e*P **P** **21 22 09.1 +0.1**
JMIC *e*S **S** **21 27 52.7 +0.7**
**JMI Jan Mayen** **36.74 23** *e*P **P** **21 22 10.2 +1.0**
JMI *e*S **S** **21 27 53.7 +1.5**
**KNB Kanab** **36.77 136** IAmb IAmb 21 22 18.2
comp=Z,259nm,1.0s
**ISA Isabella, Lake** **36.77 144** IAmb IAmb 21 22 18.3
comp=Z,462nm,1.8s
**ISA Isabella, Lake** **36.77 144** P **P** **21 22 11.1 +1.3**
baz=345,SNR=49
ISA S **S** **21 27 57.7 +4.2**
baz=345
**SMMC Simmler** **36.80 146** P **P** **21 22 12.0 +1.9**
baz=346,SNR=12
SMMC S **S** **21 27 56.9 +3.0**
baz=346
**IVI Ivigtut** **36.81 53** P **P** **21 22 09.1 -0.7**
IVI IAmb IAmb 21 23 28.1
comp=Z,315nm,1.5s
**IVI Ivigtut** **36.81 53** *i*P **P** **21 22 08.5 -1.3**
IVI IAmb IAmb 21 22 15.3
comp=Z,40nm,0.5s
**BGNE Belgrade** **36.88 115** P **P** **21 22 10.9 +0.2**
baz=335,SNR=20
BGNE S **S** **21 27 56.5 +1.5**
baz=335
**L34A Svendsen Farm,** **36.95 113** IAmb IAmb 21 22 23.7
comp=Z,198nm,0.9s
**Q24A Divide** **36.99 125** IAmb IAmb 21 22 18.0
comp=Z,428nm,1.4s
**Q24A Divide** **36.99 125** P **P** **21 22 13.6 +1.6**
baz=338
Q24A S **S** **21 27 59.9 +2.5**
baz=338
**SHOC Shoshone, Teco** **37.02 141** P **P** **21 22 14.1 +2.2**
baz=344,SNR=103
SHOC S **S** **21 28 02.6 +5.4**
baz=344
**LRMC Laurel Mtn Rad** **37.12 143** P **P** **21 22 14.7 +1.9**
baz=345,SNR=30
LRMC S **S** **21 28 04.0 +5.1**
baz=345
**ARVC Arvin** **37.22 144** P **P** **21 22 14.7 +1.1**
baz=346
**PKM Mcpherson Peak** **37.25 146** P **P** **21 22 15.9 +1.9**
baz=346,SNR=24
PKM S **S** **21 28 04.6 +3.6**
baz=346
**GSC Goldstone, Bar** **37.48 142** P **P** **21 22 18.4 +2.5**
baz=344,SNR=105
GSC S **S** **21 28 09.2 +4.9**
baz=344
**TUQ Turquoise Moun** **37.54 140** P **P** **21 22 19.1 +2.6**
baz=344,SNR=85
TUQ S **S** **21 28 10.3 +4.9**
baz=344
**EDW2 Edwards Air Fo** **37.63 143** P **P** **21 22 19.2 +2.1**
baz=345,SNR=50
EDW2 S **S** **21 28 07.2 +0.7**
baz=345
**S22A 4UR Ranch, Cre** **37.65 128** IAmb IAmb 21 22 23.9
comp=Z,593nm,1.6s
**S22A 4UR Ranch, Cre** **37.65 128** P **P** **21 22 19.6 +2.0**
baz=340,SNR=124
S22A S **S** **21 28 11.6 +4.2**
baz=340
**KSCO Kaye Shedlock'** **37.69 122** IAmb IAmb 21 22 23.4
comp=Z,422nm,1.2s
**KSCO Kaye Shedlock'** **37.69 122** P **P** **21 22 19.2 +1.6**
baz=338,SNR=36
KSCO S **S** **21 28 08.5 +0.9**
baz=338
**MVCO Mesa Verde** **37.70 130** IAmb IAmb 21 22 26.1
comp=Z,457nm,1.5s
**MVCO Mesa Verde** **37.70 130** P **P** **21 22 19.1 +1.2**
baz=340,SNR=59
MVCO S **S** **21 28 10.4 +2.5**
baz=340
**SBC Santa Barbara** **37.70 146** P **P** **21 22 18.9 +1.3**
baz=346
SBC S **S** **21 28 11.2 +3.7**
baz=346
**I42A Draeger Farm,** **37.73 103** IAmb IAmb 21 22 22.9
comp=Z,730nm,2.0s
I42A IAMs_20 IAMs_20 21 37 39.1
comp=Z,24µm,21.0s
**OSI Osito Audit: C** **37.73 144** P **P** **21 22 19.4 +1.5**
baz=346
OSI S **S** **21 28 10.3 +2.2**
baz=346
**RRX Edison Barstow** **37.84 142** P **P** **21 22 20.6 +1.7**
baz=345
**TYV Tymovskoe** **37.87 279** *e*P **P** **21 22 19.1 +0.2**
TYV *e*S **S** **21 28 10.4 +0.7**
TYV pmax pmax
comp=Z,148nm,0.8s
TYV pmax pmax
comp=Z,1µm,3.2s
TYV smax smax
comp=N,1µm,6.9s
TYV smax smax
comp=E,2µm,6.9s
TYV smax smax
comp=N,18nm,2.0s
TYV smax smax
comp=E,13nm,2.0s
**SDCO Great Sand Dun** **38.03 126** IAMs_20 IAMs_20 21 39 29.2
comp=Z,26µm,20.0s
**SDCO Great Sand Dun** **38.03 126** P **P** **21 22 21.9 +1.1**
baz=339,SNR=112
SDCO S **S** **21 28 16.4 +3.4**
baz=339
**HEC Hector,Ludlow** **38.03 141** P **P** **21 22 22.4 +1.9**
baz=344,SNR=67
HEC S **S** **21 28 16.2 +3.4**
baz=344
**SCIA State Center** **38.04 109** IAMs_20 IAMs_20 21 38 40.6
comp=Z,19µm,19.0s
**SCIA State Center** **38.04 109** P **P** **21 22 21.6 +1.2**
baz=334,SNR=13
SCIA S **S** **21 28 12.3 -0.3**
baz=334
**VLDQ Val d'Or** **38.08 89** IAMs_20 IAMs_20 21 39 05.9
comp=Z,17µm,18.0s
**JFWS Jewell Farm** **38.14 105** IAmb IAmb 21 22 26.0
comp=Z,273nm,0.9s
**JFWS Jewell Farm** **38.14 105** P **P** **21 22 21.2 -0.1**
baz=333,SNR=69
JFWS S **S** **21 28 15.3 +1.2**
baz=333
**SCZ2 Santa Cruz Isl** **38.15 146** P **P** **21 22 22.9 +1.4**
baz=346
SCZ2 S **S** **21 28 17.2 +2.8**
baz=346
**DECC Green Verdugo** **38.16 144** P **P** **21 22 23.3 +1.8**
baz=346,SNR=20
DECC S **S** **21 28 17.8 +3.3**
baz=346
**N35A Tabor** **38.18 113** IAmb IAmb 21 22 44.8
comp=Z,313nm,0.9s
N35A IAMs_20 IAMs_20 21 37 23.6
comp=Z,15µm,18.0s
**GMRC Granite Mounta** **38.23 140** P **P** **21 22 24.6 +2.4**
baz=344,SNR=73
GMRC S **S** **21 28 20.5 +4.8**
baz=344
**PASC Pasadena Art C** **38.27 144** IAMs_20 IAMs_20 21 36 49.9
comp=Z,21µm,22.0s
**BFSC Mount Baldy Ra** **38.32 143** P **P** **21 22 25.1 +2.1**
baz=345,SNR=42
BFSC S **S** **21 28 18.6 +1.5**
baz=345
**GLMI Grayling** **38.40 98** IAmb IAmb 21 22 30.5
comp=Z,259nm,0.8s
**GLMI Grayling** **38.40 98** P **P** **21 22 23.2 -0.3**
baz=331
**BBRC Big Bear Solar** **38.45 142** P **P** **21 22 26.1 +1.9**
baz=345
BBRC S **S** **21 28 21.9 +2.5**
baz=345
**NEE2 Needles Airpor** **38.48 139** P **P** **21 22 26.4 +2.2**
baz=344,SNR=14
NEE2 S **S** **21 28 21.5 +2.2**
baz=344
**I45A Fountain** **38.53 100** IAmb IAmb 21 22 36.5
comp=Z,323nm,1.4s
**WUAZ Wupatki** **38.55 135** IAmb IAmb 21 22 31.4
comp=Z,368nm,1.0s
WUAZ IAMs_20 IAMs_20 21 38 13.2
comp=Z,27µm,20.0s
**WUAZ Wupatki** **38.55 135** P **P** **21 22 27.8 +2.8**
baz=342,SNR=210
WUAZ S **S** **21 28 24.8 +4.1**
baz=342
**L40A Anamosa** **38.57 107** IAMs_20 IAMs_20 21 38 43.5
comp=Z,15µm,18.0s
**FMP Fort Macarthur** **38.69 144** P **P** **21 22 27.5 +1.6**
baz=346
**CBKS Cedar Bluff** **38.75 119** IAmb IAmb 21 22 33.7
comp=Z,493nm,1.2s
CBKS IAMs_20 IAMs_20 21 37 48.9
comp=Z,20µm,18.0s
**CBKS Cedar Bluff** **38.75 119** P **P** **21 22 26.7 +0.2**
baz=337,SNR=20
CBKS S **S** **21 28 24.0 +0.5**
baz=337
**SNCC San Nicolas Is** **38.89 146** P **P** **21 22 29.1 +1.4**
baz=346
SNCC S **S** **21 28 28.4 +2.9**
baz=346
**T25A Trinidad** **38.90 125** P **P** **21 22 29.1 +1.1**
baz=339,SNR=35
T25A S **S** **21 28 27.0 +0.9**
baz=339
**BELC Belle Mtn. Jos** **38.91 141** P **P** **21 22 30.0 +2.1**
baz=345,SNR=76
BELC S **S** **21 28 26.8 +0.8**
baz=345
**IRM Iron Mountain** **38.95 140** P **P** **21 22 30.6 +2.5**
baz=344,SNR=70
IRM S **S** **21 28 31.0 +4.6**
baz=344
**CIS Catalina Islan** **38.97 144** P **P** **21 22 29.6 +1.2**
baz=346,SNR=10
CIS S **S** **21 28 27.9 +1.2**
baz=346
**K43A Burlington** **38.98 104** IAMs_20 IAMs_20 21 38 29.1
comp=Z,25µm,19.0s
**MURC Murrieta** **39.03 143** P **P** **21 22 30.3 +1.4**
baz=345,SNR=23
**N38A Joes South For** **39.03 110** IAmb IAmb 21 22 33.4
comp=Z,484nm,1.7s
N38A IAMs_20 IAMs_20 21 39 26.0
comp=Z,14µm,18.0s
**PDMCI Parker Dam,Lak** **39.04 139** P **P** **21 22 30.0 +1.1**
baz=344,SNR=53
PDMCI S **S** **21 28 31.7 +4.0**
baz=344
**L42A Oliver, Polo** **39.15 105** IAmb IAmb 21 22 36.5
comp=Z,273nm,0.9s
**PFO Pinyon Flats O** **39.18 142** P **P** **21 22 31.7 +1.5**
**PFO Pinyon Flats O** **39.18 142** LR LR 21 39 05.3
comp=Z,25µm,18.8s,baz=342,slow=37
**PFO Pinyon Flats O** **39.18 142** P **P** **21 22 32.1 +1.9**
baz=345,SNR=30
**PFO Pinyon Flats O** **39.18 142** *d i*P **P** **21 22 32.2 +2.0**
PFO pmax pmax
comp=Z,94nm,1.2s
**TPFO Pinon Flats** **39.18 142** P **P** **21 22 31.6 +1.3**
baz=345,SNR=30
**W18A Petrified Fore** **39.34 133** P **P** **21 22 33.7 +2.0**
baz=342,SNR=85
W18A S **S** **21 28 34.8 +2.0**
baz=342
**SCI2 San Clemente I** **39.35 145** P **P** **21 22 33.1 +1.6**
baz=346,SNR=10.0
**BC3 Big Chuckawall** **39.36 140** P **P** **21 22 33.3 +1.6**
baz=345,SNR=94
**R32A Long Quarter,** **39.43 118** IAMs_20 IAMs_20 21 38 45.8
comp=Z,24µm,18.0s
**KSU1 Kansas State U** **39.47 115** IAMs_20 IAMs_20 21 39 22.8
comp=Z,26µm,20.0s
**KSU1 Kansas State U** **39.47 115** P **P** **21 22 32.6 +0.1**
baz=336
KSU1 S **S** **21 28 33.7 -0.4**
baz=336
**UGL Uglegorsk** **39.58 278** *e*P **P** **21 22 33.4 +0.2**
UGL *e* 21 24 14.8
UGL *e*S **S** **21 28 33.8 -1.7**
UGL pmax pmax
comp=Z,200nm,1.0s
UGL pmax pmax
comp=Z,2µm,5.2s
UGL smax smax
comp=E,2µm,5.9s
UGL smax smax
comp=N,2µm,7.5s
**L44A Lake County Fo** **39.59 104** IAmb IAmb 21 22 40.3
comp=Z,257nm,0.8s
**L44A Lake County Fo** **39.59 104** P **P** **21 22 34.0 +0.6**
baz=333,SNR=19
L44A S **S** **21 28 36.0 +0.2**
baz=333
**J47A Sunmer** **39.72 100** IAMs_20 IAMs_20 21 36 29.5
comp=Z,22µm,22.0s
**109C Camp Elliot, M** **39.74 143** IAMs_20 IAMs_20 21 39 23.7
comp=Z,23µm,20.0s
**109C Camp Elliot, M** **39.74 143** P **P** **21 22 36.4 +1.7**
baz=346
**I49A Point Hope** **39.80 97** IAmb IAmb 21 22 41.7
comp=Z,262nm,0.8s
I49A IAMs_20 IAMs_20 21 37 17.4
comp=Z,20µm,22.0s
**HAMF Hammerfest** **39.85 6** *e*P **P** **21 22 34.6 -0.7**
HAMF *e*S **S** **21 28 35.8 -3.4**
HAMF *e*SS **SS** **21 31 34.1 -0.7**
HAMF IAMs_20 IAMs_20 21 41 24.7
comp=Z,15µm,16.5s
**MONP2 Monument Peak** **39.88 142** P **P** **21 22 37.9 +1.8**
baz=345,SNR=66
MONP2 S **S** **21 28 43.3 +2.5**
baz=345
**N41A Harden Midland** **39.90 108** IAmb IAmb 21 22 42.6
comp=Z,333nm,1.3s
N41A IAMs_20 IAMs_20 21 41 44.8
comp=Z,15µm,18.0s
**SWSC Sam W. Stewart** **39.96 141** P **P** **21 22 38.4 +1.7**
baz=345,SNR=53
SWSC S **S** **21 28 44.0 +2.4**
baz=345
**P38A Dawn** **39.99 111** IAMs_20 IAMs_20 21 39 35.3
comp=Z,17µm,20.0s
**RTBA Rita Blanca** **40.04 124** IAmb IAmb 21 22 45.1
comp=Z,401nm,1.3s
**GLA Glamis** **40.08 140** P **P** **21 22 39.3 +1.6**
baz=344,SNR=23
GLA S **S** **21 28 46.5 +3.1**
baz=344
**GRNR Gornyy** **40.09 284** *ij i*P **P** **21 22 37.6 +0.1**
GRNR *e* 21 24 14.6
GRNR *e*S **S** **21 28 46.6 +3.3**
GRNR *e*SS **SS** **21 31 38.9 -1.3**
GRNR pmax pmax
comp=N,30nm,1.0s
GRNR pmax pmax
comp=E,20nm,1.0s
GRNR pmax pmax
comp=Z,80nm,1.1s
GRNR smax smax
comp=Z,10.0nm,0.9s
GRNR MLR MLR
comp=N,20µm,14.0s
GRNR MLR MLR
comp=Z,22µm,14.0s
**IKP In-Ko-Pah, Jac** **40.18 142** P **P** **21 22 40.2 +1.6**
baz=345,SNR=35
IKP S **S** **21 28 48.0 +3.0**
baz=345
**BORG Borgarnes** **40.25 34** LR LR 21 42 51.3
comp=Z,8µm,18.2s,baz=331,slow=42
**L46A Eue Claire** **40.29 102** IAMs_20 IAMs_20 21 37 29.7
comp=Z,22µm,19.0s
**SADO Sadowa** **40.36 93** IAmb IAmb 21 22 41.0
comp=Z,623nm,1.5s
SADO IAMs_20 IAMs_20 21 37 17.2
comp=Z,15µm,19.0s
**SADO Sadowa** **40.36 93** LR LR 21 38 50.4
comp=Z,9µm,19.9s,baz=343,slow=35
**ANMO Albuquerque** **40.38 129** P **P** **21 22 40.8 +0.5**
ANMO IAmb IAmb 21 22 46.6
comp=Z,257nm,1.1s
**ANMO Albuquerque** **40.38 129** LR LR 21 43 06.1
comp=Z,4µm,18.5s,baz=66,slow=42
**ANMO Albuquerque** **40.38 129** P **P** **21 22 42.2 +1.9**
baz=341
ANMO S **S** **21 28 52.6 +4.3**
baz=341
**ANMO Albuquerque** **40.38 129** *c i*P **P** **21 22 41.9 +1.6**
ANMO pmax pmax
comp=Z,141nm,1.0s
**ICQ Pointe Anglais** **40.43 78** P **P** **21 22 40.0 -0.3**
ICQ IAmb IAmb 21 22 46.8
comp=Z,221nm,0.9s
**VADS Vadso** **40.54 3** *e*P **P** **21 22 41.1 +0.1**
VADS IVmB_BB 21 22 45.1
comp=Z,1µm,2.7s
VADS *e*S **S** **21 28 45.0 -4.5**
VADS *e*SS **SS** **21 31 44.0 -4.4**
VADS IAMs_20 IAMs_20 21 42 10.1
comp=Z,9µm,16.5s
**HDIL Hopedale** **40.56 106** IAmb IAmb 21 22 48.4
comp=Z,429nm,1.1s
HDIL IAMs_20 IAMs_20 21 39 47.2
comp=Z,19µm,18.0s
**HDIL Hopedale** **40.56 106** P **P** **21 22 42.1 +0.6**
baz=334
HDIL S **S** **21 28 51.1 +0.7**
baz=334
**P40A Paris** **40.56 110** IAMs_20 IAMs_20 21 40 16.5
comp=Z,15µm,18.0s
**113A Mohawk Valley,** **40.59 139** IAmb IAmb 21 22 48.2
comp=Z,467nm,1.8s
**ZEA Zeya** **40.63 294** *e*P **P** **21 22 42.2 +0.3**
ZEA *e* 21 24 15.1
ZEA *e*S **S** **21 28 47.4 -3.8**
ZEA pmax pmax
comp=E,300nm,4.2s
ZEA pmax pmax
comp=N,300nm,3.8s
ZEA pmax pmax
comp=Z,600nm,4.2s
ZEA pmax pmax
comp=E,40nm,0.8s
ZEA pmax pmax
comp=N,30nm,0.6s
ZEA pmax pmax
comp=Z,90nm,1.0s
ZEA pmax pmax
comp=E,200nm,6.5s
ZEA pmax pmax
comp=N,200nm,7.6s
ZEA pmax pmax
comp=Z,500nm,6.4s
ZEA smax smax
comp=N,1µm,5.8s
ZEA smax smax
comp=E,1µm,6.3s
ZEA MLR MLR
comp=N,9µm,15.0s
ZEA MLR MLR
comp=Z,13µm,13.0s
**TRO Tromso** **40.64 9** *e*P **P** **21 22 42.3 +0.5**
TRO IVmBBB 21 22 46.3
comp=Z,1µm,2.8s
TRO *e*S **S** **21 28 51.2 +0.3**
TRO *e*SS **SS** **21 31 52.7 +2.3**
TRO IVMs_BB IVMs_BB 21 39 51.9
comp=Z,3µm,25.0s
**KAN12 Harper NE Stat** **40.68 118** IAmb IAmb 21 22 49.1
comp=Z,575nm,1.6s
**TRQ Mont Tremblant** **40.72 87** IAMs_20 IAMs_20 21 40 45.4
comp=Z,16µm,20.0s
**KUR Kuril'sk** **40.84 270** *e*P **P** **21 22 43.4 -0.4**
KUR *e*S **S** **21 28 54.4 -0.1**
KUR pmax pmax
comp=Z,517nm,1.0s
KUR pmax pmax
comp=E,119nm,0.9s
KUR pmax pmax
comp=N,148nm,0.8s
KUR MLR MLR
comp=Z,19µm,17.0s
KUR MLR MLR
comp=N,13µm,11.0s
**KEV Kevo** **40.85 5** P **P** **21 22 43.0 -0.5**
**KEV Kevo** **40.85 5** P **P** **21 22 43.0 -0.5**
KEV pmax pmax
comp=Z,163nm,1.1s
KEV MLR MLR
comp=Z,11µm,21.0s
**KAN01 Argonia South** **40.89 117** IAmb IAmb 21 22 50.7
comp=Z,244nm,1.0s
**K50A Casco** **40.89 98** IAmb IAmb 21 22 48.7
comp=Z,358nm,1.3s
K50A IAMs_20 IAMs_20 21 37 48.4
comp=Z,21µm,21.0s
**AAM Ann Arbor** **40.95 99** IAmb IAmb 21 22 49.5
comp=Z,348nm,1.3s
AAM IAMs_20 IAMs_20 21 39 40.0
comp=Z,25µm,21.0s
**AAM Ann Arbor** **40.95 99** P **P** **21 22 45.0 +0.3**
baz=332,SNR=12
AAM S **S** **21 28 57.0 +0.8**
baz=332
**KAN09 Caldwell North** **40.95 117** IAmb IAmb 21 23 42.0
comp=Z,188nm,0.9s
**KAN17 Caldwell West** **40.99 118** IAmb IAmb 21 22 51.6
comp=Z,228nm,1.1s
**L48A N Adams** **40.99 100** IAmb IAmb 21 22 49.6
comp=Z,260nm,1.2s
L48A IAMs_20 IAMs_20 21 40 01.3
comp=Z,17µm,20.0s
**NOKA Waynoka** **41.00 119** IAmb IAmb 21 22 52.1
comp=Z,349nm,0.9s
NOKA IAMs_20 IAMs_20 21 39 08.6
comp=Z,22µm,18.0s
**KAN14 Manchester OK** **41.01 118** IAmb IAmb 21 22 51.8
comp=Z,256nm,1.1s
**ARA0 ARCESS Array S** **41.02 5** *e*P **P** **21 22 44.0 -1.0**
ARA0 *e*S **S** **21 28 54.0 -2.7**
ARA0 *e*SS **SS** **21 31 56.2 -1.9**
**ARCES ARCESS Array B** **41.02 5** P **P** **21 22 44.6 -0.4**
**ARCES ARCESS Array B** **41.02 5** P **P** **21 22 43.9 -1.1**
comp=Z,41nm,0.7s,baz=356,slow=6.9,SNR=40

ARCES PcP **PcP** **21 24 45.3 +0.7**
comp=Z,27nm,0.9s,baz=349,slow=4.1,SNR=3.7
comp=Z,41nm,0.7s
**ARCES ARCESS Array B** **41.02 5** P **P** **21 22 44.6 -0.4**
ARCES pmax pmax
comp=Z,153nm,1.4s
**LMQ La Malbaie** **41.06 83** IAmb IAmb 21 22 46.9
comp=Z,470nm,1.6s
LMQ IAMs_20 IAMs_20 21 40 26.0
comp=Z,25µm,22.0s
**OK032 Salt Plains WL** **41.07 118** IAmb IAmb 21 22 52.5
comp=Z,279nm,1.0s
**Y22D IRIS PASSCAL I** **41.08 130** P **P** **21 22 48.1 +2.1**
baz=341,SNR=5.5
**KAN13 South Haven SW** **41.10 117** IAmb IAmb 21 22 50.1
comp=Z,365nm,1.8s
**DELO Deloro Mine** **41.12 92** IAmb IAmb 21 22 47.6
comp=Z,626nm,1.5s
DELO IAMs_20 IAMs_20 21 40 58.1
comp=Z,15µm,20.0s
**YSS Yuzh-Sakhalins** **41.15 276** P **P** **21 22 45.6 -0.7**
YSS IAmb IAmb 21 22 51.8
comp=Z,275nm,0.7s
**YSS Yuzh-Sakhalins** **41.15 276** *k* *e*P **P** **21 22 46.1 -0.2**
YSS *e* 21 24 26.5
YSS *e*S **S** **21 28 55.9 -3.2**
YSS *e* 21 32 03.6
YSS pmax pmax
comp=Z,2µm,5.6s
YSS pmax pmax
comp=N,1µm,5.8s
YSS pmax pmax
comp=E,700nm,6.1s
YSS pmax pmax
comp=Z,350nm,0.7s
YSS pmax pmax
comp=Z,1µm,5.6s
YSS pmax pmax
comp=N,800nm,5.7s
YSS pmax pmax
comp=E,500nm,4.3s
YSS smax smax
comp=N,1µm,4.7s
YSS smax smax
comp=E,1µm,6.1s
YSS MLR MLR
comp=N,22µm,15.0s
**OK038 West end E0370** **41.20 119** IAmb IAmb 21 22 53.8
comp=Z,261nm,1.1s
**P43A Skaggs, Pawnee** **41.31 107** IAmb IAmb 21 22 54.3
comp=Z,288nm,1.1s
P43A IAMs_20 IAMs_20 21 42 27.0
comp=Z,14µm,20.0s
**BLOK Blackwell** **41.42 117** IAmb IAmb 21 22 52.9
comp=Z,350nm,1.5s
**KTK1 Kautokeino** **41.46 7** *e*P **P** **21 22 48.6 0.0**
KTK1 IVmB_BB 21 22 52.3
comp=Z,1µm,1.1s
KTK1 *e*PP **PP** **21 24 25.5 +1.5**
KTK1 *e*S **S** **21 29 03.7 +0.4**
KTK1 *e*SS **SS** **21 32 06.5 -0.3**
KTK1 IVMs_BB IVMs_BB 21 45 23.5
comp=Z,3µm,14.9s
**SFIN Lafayette** **41.47 104** IAMs_20 IAMs_20 21 39 56.1
comp=Z,19µm,19.0s
**SFIN Lafayette** **41.47 104** P **P** **21 22 49.3 +0.3**
baz=334,SNR=45
SFIN S **S** **21 29 03.9 0.0**
baz=334
**N47A Urbana** **41.50 102** IAmb IAmb 21 23 41.5
comp=Z,198nm,0.9s
N47A IAMs_20 IAMs_20 21 40 53.9
comp=Z,16µm,18.0s
**WBO Williamsburg** **41.52 89** IAmb IAmb 21 22 50.5
comp=Z,623nm,1.8s
**214A Organ Pipe Nat** **41.59 138** P **P** **21 22 51.9 +1.7**
baz=344,SNR=37
214A S **S** **21 29 09.4 +3.4**
baz=344
**R40A Maddies Statio** **41.61 111** IAMs_20 IAMs_20 21 40 25.3
comp=Z,14µm,18.0s
**MNTQ Montreal, Queb** **41.67 87** IAmb IAmb 21 22 51.2
comp=Z,437nm,1.6s
MNTQ IAMs_20 IAMs_20 21 40 32.4
comp=Z,23µm,20.0s
**TUC Tucson** **41.75 135** IAMs_20 IAMs_20 21 40 06.8
comp=Z,19µm,19.0s
**TUC Tucson** **41.75 135** P **P** **21 22 53.8 +2.4**
baz=343
TUC S **S** **21 29 12.2 +3.8**
baz=343
**OK051 E0350 and S346** **41.77 117** IAmb IAmb 21 22 58.0
comp=Z,224nm,0.9s
OK051 IAMs_20 IAMs_20 21 38 23.9
comp=Z,15µm,19.0s
**LOF Lofoten** **41.78 12** *e*P **P** **21 22 50.7 -0.4**
LOF IVmB_BB 21 22 53.2
comp=Z,1µm,4.0s
LOF *e*S **S** **21 29 06.9 -1.0**
LOF *e*SS **SS** **21 32 14.1 +1.1**
LOF IVMs_BB IVMs_BB 21 41 15.8
comp=Z,3µm,19.3s
**AMTX Amarillo** **41.80 123** P **P** **21 22 52.3 +0.5**
baz=339
AMTX S **S** **21 29 09.8 +0.7**
baz=339
**S39A Bolivar** **41.81 112** IAmb IAmb 21 22 56.0
comp=Z,256nm,1.2s
S39A IAMs_20 IAMs_20 21 37 45.6
comp=Z,15µm,21.0s
**OK048 Pawnee Station** **41.82 117** IAmb IAmb 21 22 56.2
comp=Z,355nm,1.4s
**J54A Appleton** **41.85 93** IAmb IAmb 21 22 59.2
comp=Z,340nm,1.0s
**PECO Prince Edward** **41.85 91** IAmb IAmb 21 22 53.5
comp=Z,400nm,1.4s
PECO IAMs_20 IAMs_20 21 39 50.3
comp=Z,15µm,22.0s
**SLM Saint Louis** **41.97 108** IAmb IAmb 21 22 57.3
comp=Z,483nm,1.9s
SLM IAMs_20 IAMs_20 21 39 49.7
comp=Z,15µm,18.0s
**N49A Columbus Grove** **41.99 101** IAmb IAmb 21 22 57.5
comp=Z,265nm,1.2s
**MEDO Medina** **42.01 93** IAmb IAmb 21 22 54.8
comp=Z,304nm,1.5s
**LONY Lake Ozonia** **42.10 89** IAmb IAmb 21 22 55.1
comp=Z,402nm,1.4s
LONY IAMs_20 IAMs_20 21 38 15.8
comp=Z,19µm,18.0s
**LONY Lake Ozonia** **42.10 89** P **P** **21 22 53.7 -0.4**
baz=331,SNR=77
LONY S **S** **21 29 10.9 -2.3**
baz=331
**STEI Steigen** **42.10 11** *e*P **P** **21 22 54.0 +0.2**
STEI IVmBBB 21 23 02.2
comp=Z,2µm,2.0s
STEI *e*S **S** **21 29 12.3 -0.4**
STEI *e*SS **SS** **21 32 21.3 +2.0**
**P46A Rosedale** **42.11 105** IAmb IAmb 21 23 00.9
comp=Z,320nm,0.9s
P46A IAMs_20 IAMs_20 21 40 53.1
comp=Z,15µm,20.0s
**QUOK Quay** **42.12 117** IAMs_20 IAMs_20 21 41 02.0
comp=Z,23µm,20.0s
**E62A Clayton Lake** **42.14 83** IAMs_20 IAMs_20 21 41 23.6
comp=Z,13µm,20.0s
**J55A Hilton** **42.14 93** IAMs_20 IAMs_20 21 38 39.2
comp=Z,14µm,19.0s
**Q44A Meyer Farm, Va** **42.14 107** IAMs_20 IAMs_20 21 43 02.0
comp=Z,19µm,18.0s
**CCM Cathedral Cave** **42.16 110** P **P** **21 22 53.7 -1.0**
**CCM Cathedral Cave** **42.16 110** IAMs_20 IAMs_20 21 42 19.8
comp=Z,17µm,18.0s
**CCM Cathedral Cave** **42.16 110** P **P** **21 22 54.1 -0.6**
baz=335
CCM S **S** **21 29 13.5 -0.8**
baz=335
**CCM Cathedral Cave** **42.16 110** P **P** **21 22 53.7 -1.0**
CCM pmax pmax
comp=Z,379nm,1.9s
CCM MLR MLR
comp=Z,17µm,18.0s
**OK029 Liberty Lake** **42.23 118** IAmb IAmb 21 23 01.9
comp=Z,237nm,0.9s
OK029 IAMs_20 IAMs_20 21 38 50.1
comp=Z,15µm,18.0s
**OK052 Battle Ridge R** **42.25 117** IAmb IAmb 21 22 59.6
comp=Z,358nm,1.3s
**OK031 S. Brethren Rd** **42.28 117** IAmb IAmb 21 23 02.1
comp=Z,249nm,1.1s
OK031 IAMs_20 IAMs_20 21 39 44.3
comp=Z,15µm,18.0s
**121A Cookes Peak, D** **42.30 132** P **P** **21 22 58.4 +2.3**
baz=342,SNR=180
121A S **S** **21 29 20.1 +3.4**
baz=342
**MSTX Muleshoe** **42.33 125** IAmb IAmb 21 23 03.4
comp=Z,511nm,1.6s
**MSTX Muleshoe** **42.33 125** P **P** **21 22 56.8 +0.5**
baz=340,SNR=77
MSTX S **S** **21 29 19.0 +1.9**
baz=340
**ERPA Erie** **42.39 96** IAmb IAmb 21 22 57.8
comp=Z,196nm,0.8s
**ERPA Erie** **42.39 96** P **P** **21 22 56.4 -0.1**
baz=332,SNR=23
ERPA S **S** **21 29 15.7 -1.9**
baz=332
**M52A Chesterland** **42.42 97** IAmb IAmb 21 23 01.2
comp=Z,446nm,1.4s
M52A IAMs_20 IAMs_20 21 38 04.9
comp=Z,16µm,20.0s
**DEOK Depew** **42.49 117** IAmb IAmb 21 23 03.9
comp=Z,225nm,0.9s
**FVM French Village** **42.50 109** IAMs_20 IAMs_20 21 42 56.7
comp=Z,20µm,18.0s
**YUK Yuzh-Kuril'sk** **42.59 271** *e*P **P** **21 22 59.0 +0.9**
YUK *e* 21 24 38.0
YUK *e*PPP PPP 21 25 08.9
YUK *e*S **S** **21 29 22.6 +2.2**
YUK *e*SSS SSS 21 33 06.4
YUK pmax pmax
comp=Z,500nm,0.7s
YUK pmax pmax
comp=N,319nm,0.8s
YUK pmax pmax
comp=E,504nm,0.9s
YUK pmax pmax
comp=Z,560nm,1.0s
YUK MLR MLR
comp=Z,13µm,14.0s
YUK MLR MLR
comp=E,12µm,15.0s
YUK MLR MLR
comp=N,11µm,14.0s
**OKCSW OKLAHOMA CITY** **42.60 118** IAmb IAmb 21 23 04.9
comp=Z,489nm,1.4s
**OLIL Olney** **42.60 106** IAMs_20 IAMs_20 21 41 30.2
comp=Z,16µm,18.0s
**U38A Gravette** **42.61 114** IAmb IAmb 21 23 02.2
comp=Z,461nm,1.6s
U38A IAMs_20 IAMs_20 21 38 44.9
comp=Z,13µm,19.0s
**N51A Ashland** **42.62 99** IAMs_20 IAMs_20 21 38 40.2
comp=Z,24µm,21.0s
**PQI Presque Isle** **42.62 81** IAmb IAmb 21 23 03.3
comp=Z,318nm,1.3s
PQI IAMs_20 IAMs_20 21 43 44.2
comp=Z,15µm,18.0s
**WVNY West Valley, N** **42.62 94** IAmb IAmb 21 23 04.7
comp=Z,176nm,0.8s
WVNY IAMs_20 IAMs_20 21 40 12.0
comp=Z,15µm,18.0s
**FAUS Fauske** **42.64 11** *e*P **P** **21 22 58.4 +0.1**
FAUS IVmB_BB 21 23 02.1
comp=Z,1µm,0.7s
FAUS *e*S **S** **21 29 20.4 -0.3**
FAUS *e*SS **SS** **21 32 32.0 +2.0**
FAUS IVMs_BB IVMs_BB 21 44 10.3
comp=Z,3µm,16.9s
**MGMO Mountain Grove** **42.65 111** IAmb IAmb 21 23 03.0
comp=Z,645nm,1.6s
MGMO IAMs_20 IAMs_20 21 43 05.7
comp=Z,19µm,18.0s
**TUL3 Leonard** **42.65 116** IAmb IAmb 21 23 05.2
comp=Z,261nm,1.0s
**TUL3 Leonard** **42.65 116** P **P** **21 22 58.7 +0.1**
baz=337,SNR=75
TUL3 S **S** **21 29 19.2 -2.3**
baz=337
**J57A Williamstown** **42.66 91** IAmb IAmb 21 22 59.7
comp=Z,537nm,1.5s
J57A IAMs_20 IAMs_20 21 39 16.7
comp=Z,16µm,19.0s
**RLO Rose Lookout** **42.66 115** **P** **21 22 58.5 -0.2**
RLO IAmb IAmb 21 23 04.9
comp=Z,119nm,1.1s
RLO IAMs_20 IAMs_20 21 40 02.1
comp=Z,19µm,19.0s
**BLO Bloomington** **42.74 104** IAmb IAmb 21 23 03.2
comp=Z,500nm,1.9s
BLO IAMs_20 IAMs_20 21 40 45.9
comp=Z,17µm,18.0s
**ALLY Alegheny Colle** **42.75 96** IAMs_20 IAMs_20 21 38 30.5
comp=Z,13µm,20.0s
**M53A WI Miller and** **42.75 97** IAmb IAmb 21 23 06.7
comp=Z,344nm,1.0s
M53A IAMs_20 IAMs_20 21 39 53.5
comp=Z,14µm,20.0s
**M53A WI Miller and** **42.75 97** P **P** **21 22 59.5 +0.1**
baz=332,SNR=70
M53A S **S** **21 29 21.1 -1.7**
baz=332
**BATG Bathurst New B** **42.77 79** P **P** **21 22 59.8 +0.2**
**NCB Newcomb** **42.79 89** IAmb IAmb 21 23 04.0
comp=Z,687nm,1.9s
NCB IAMs_20 IAMs_20 21 41 49.1
comp=Z,14µm,19.0s
**WMOK Wichita Mounta** **42.80 120** P **P** **21 23 00.1 +0.2**
baz=338,SNR=162
WMOK S **S** **21 29 24.9 +1.1**
baz=338
**LVZ Lovozero** **42.84 1** P **P** **21 22 59.5 -0.3**
LVZ IAmb IAmb 21 23 06.4
**LVZ Lovozero** **42.84 1** *c* *e*P **P** **21 23 00.4 +0.5**
LVZ pmax pmax
comp=Z,196nm,1.0s
LVZ MLR MLR
comp=Z,9µm,21.0s
**P48A Milroy** **42.86 103** IAmb IAmb 21 23 04.1
comp=Z,381nm,1.5s
P48A IAMs_20 IAMs_20 21 38 55.9
comp=Z,18µm,19.0s
**J58A Remsen** **42.95 90** IAmb IAmb 21 23 02.3
comp=Z,281nm,1.2s
J58A IAMs_20 IAMs_20 21 40 19.5
comp=Z,19µm,18.0s
**KLR Kul'dur** **42.99 287** P **P** **21 23 00.6 -0.7**
comp=Z,55nm,0.9s,baz=23,slow=8.8,SNR=74
KLR PcP **PcP** **21 24 51.1 -0.2**
comp=Z,25nm,0.9s,baz=6.1,slow=5.8,SNR=2.7
KLR LR LR 21 42 59.0
comp=Z,12µm,19.9s,baz=36,slow=39
comp=Z,55nm,0.9s
**KLR Kul'dur** **42.99 287** *e*P **P** **21 22 58.0 -3.3**
KLR pmax pmax
comp=Z,83nm,1.2s
**VT1 Waterbury** **42.99 87** IAMs_20 IAMs_20 21 42 24.7
comp=Z,13µm,19.0s
**G62A West of Eustis** **43.00 85** IAmb IAmb 21 23 03.1
comp=Z,350nm,1.3s
**W35A Tecumseh** **43.01 118** IAMs_20 IAMs_20 21 39 14.6
comp=Z,19µm,18.0s
**ACSO Alum Creek Sta** **43.02 100** P **P** **21 23 01.4 -0.2**
baz=333,SNR=32
ACSO S **S** **21 29 24.6 -2.1**
baz=333
**P49A Miami Univ. Ec** **43.04 102** IAMs_20 IAMs_20 21 39 48.5
comp=Z,19µm,18.0s
**P49A Miami Univ. Ec** **43.04 102** P **P** **21 23 01.2 -0.6**
baz=334,SNR=22
P49A S **S** **21 29 25.2 -1.9**
baz=334
**K57A Scipio Center** **43.07 92** IAMs_20 IAMs_20 21 40 11.7
comp=Z,17µm,20.0s
**F63A Nahmakanta, Br** **43.08 83** IAmb IAmb 21 23 07.1
comp=Z,416nm,1.8s
**T42A Van Buren** **43.14 110** IAMs_20 IAMs_20 21 41 14.8
comp=Z,14µm,20.0s
**S44A Carbondale** **43.15 108** IAmb IAmb 21 23 09.2
comp=Z,280nm,1.1s
S44A IAMs_20 IAMs_20 21 41 59.9
comp=Z,17µm,21.0s
**APA Apatity** **43.16 1** *i* P **P** **21 23 01.2 -1.2**
APA *i* 21 24 59.0
APA *i* S **S** **21 29 26.0 -2.3**
APA pmax pmax
comp=Z,77nm,1.0s
**F64A Sherman** **43.20 82** IAmb IAmb 21 23 04.3
comp=Z,323nm,1.4s
**X34A Smith Ranch, M** **43.22 119** IAmb IAmb 21 23 08.3
comp=Z,446nm,1.8s
**L56A Greenwood** **43.22 93** IAmb IAmb 21 23 10.3
comp=Z,368nm,0.9s
**N53A Lisbon** **43.25 97** IAmb IAmb 21 23 04.9
comp=Z,581nm,1.6s
**H62A Milan** **43.34 86** IAMs_20 IAMs_20 21 39 03.5
comp=Z,20µm,19.0s
**KONS Konsvik** **43.35 13** *e*P **P** **21 23 03.8 -0.1**
**LBNH Lisbon** **43.36 87** IAmb IAmb 21 23 06.3
comp=Z,381nm,1.4s
LBNH IAMs_20 IAMs_20 21 41 35.2
comp=Z,18µm,20.0s
**LBNH Lisbon** **43.36 87** P **P** **21 23 04.2 -0.2**
baz=331,SNR=45
LBNH S **S** **21 29 31.6 -0.2**
baz=331
**EPT El Paso** **43.36 130** IAmb IAmb 21 23 11.6
comp=Z,446nm,2.0s
**CGM3 Cape Girardeau** **43.38 109** IAMs_20 IAMs_20 21 42 03.9
comp=Z,18µm,18.0s
**PKME Peaks-Kenny Pk** **43.39 83** IAmb IAmb 21 23 05.8
comp=Z,373nm,1.4s
**PKME Peaks-Kenny Pk** **43.39 83** P **P** **21 23 03.4 -1.2**
baz=330,SNR=46
PKME S **S** **21 29 30.5 -1.6**
baz=330
**USIN University of** **43.44 106** IAmb IAmb 21 23 11.2
comp=Z,327nm,1.0s
**JMP Maruseppu** **43.50 273** P **P** **21 23 02.7 -2.7**
**ACCN Adirondack Com** **43.50 89** IAmb IAmb 21 23 06.9
comp=Z,567nm,1.6s
ACCN IAMs_20 IAMs_20 21 42 18.9
comp=Z,17µm,19.0s
**STOK Stokkvaagen** **43.51 13** *e*P **P** **21 23 05.4 +0.2**
STOK IVmB_BB 21 23 09.8
comp=Z,2µm,3.2s
STOK *e*S **S** **21 29 34.0 +0.7**
STOK *e*SS **SS** **21 32 48.4 +1.4**
STOK IVMs_BB IVMs_BB 21 45 41.2
comp=Z,3µm,16.9s
**O52A Adamsville** **43.52 99** IAmb IAmb 21 23 06.5
comp=Z,680nm,1.7s
**HEH HeiHe** **43.55 291** *e*P **P** **21 23 05.3 -0.5**
HEH PcP **PcP** **21 24 58.0 +4.8**
HEH S **S** **21 29 29.6 -4.7**
HEH ScS **ScS** **21 33 03.7 -1.1**
HEH pmax pmax
comp=Z,81nm,1.4s
HEH pmax pmax
comp=Z,2µm,4.5s
HEH LR LR
comp=Z,39µm,20.0s
HEH LR LR
comp=Z,42µm,18.8s
HEH LR LR
comp=Z,42µm,17.8s
**PBMO Poplar Bluff** **43.59 110** IAMs_20 IAMs_20 21 41 22.6
comp=Z,16µm,19.0s
**O53A New Philadelph** **43.62 98** IAmb IAmb 21 23 10.2
comp=Z,474nm,1.6s
**O53A New Philadelph** **43.62 98** P **P** **21 23 05.5 -0.9**
baz=333,SNR=38
O53A S **S** **21 29 33.5 -2.0**
baz=333
**P51A Williamsport** **43.66 100** IAMs_20 IAMs_20 21 38 50.8
comp=Z,19µm,21.0s
**ASAJ Asahikawa** **43.67 274** P **P** **21 23 05.6 -1.2**
comp=Z,132nm,0.8s,baz=351,slow=7.7,SNR=40
ASAJ LR LR 21 42 43.8
comp=Z,24µm,19.4s,baz=49,slow=38
comp=Z,132nm,0.8s
**ASAJ Asahikawa** **43.67 274** P **P** **21 23 05.0 -1.9**
**WCI Wyandotte Cave** **43.67 105** P **P** **21 23 06.0 -0.9**
**WCI Wyandotte Cave** **43.67 105** P **P** **21 23 06.0 -0.9**
baz=334
WCI S **S** **21 29 33.8 -2.6**
baz=334
**WCI Wyandotte Cave** **43.67 105** P **P** **21 23 06.0 -0.9**
WCI pmax pmax
comp=Z,101nm,0.8s
WCI MLR MLR
comp=Z,21µm,18.0s
**HNH Hanover** **43.70 87** IAmb IAmb 21 23 09.3
comp=Z,530nm,1.6s
HNH IAMs_20 IAMs_20 21 39 16.2
comp=Z,16µm,20.0s
**APMT Aspermont** **43.71 122** IAmb IAmb 21 23 11.3
comp=Z,408nm,1.9s
**BINY Binghamton** **43.72 92** IAmb IAmb 21 23 13.8
comp=Z,243nm,0.8s
**BINY Binghamton** **43.72 92** P **P** **21 23 07.0 -0.2**
baz=332,SNR=91
BINY S **S** **21 29 36.5 -0.7**
baz=332
**MNTX Cornudas Mount** **43.73 129** P **P** **21 23 08.9 +1.5**
baz=341,SNR=165
MNTX S **S** **21 29 38.7 +1.2**
baz=341
**MOR8 Moi Rana** **43.78 12** *e*P **P** **21 23 06.1 -1.4**
MOR8 IVmB_BB 21 23 10.7
comp=Z,1µm,3.3s
MOR8 *e*S **S** **21 29 32.9 -4.5**
MOR8 *e*SS **SS** **21 32 51.9 -0.4**
MOR8 IVMs_BB IVMs_BB 21 45 16.0
comp=Z,3µm,18.8s
**WTFS Witchita Falls** **43.80 120** **P** **21 23 07.7 -0.3**
**P52A Corning** **43.84 99** P **P** **21 23 07.5 -0.7**
baz=333,SNR=30
P52A S **S** **21 29 34.1 -4.8**
baz=333
**FCAR Ozark Folk Cen** **43.84 112** IAmb IAmb 21 23 12.1
comp=Z,412nm,1.5s
FCAR IAMs_20 IAMs_20 21 41 00.5
comp=Z,16µm,18.0s
**I62A Tamworth** **43.89 86** IAmb IAmb 21 23 10.7
comp=Z,306nm,1.7s
**SN05 Snyder 5** **43.90 123** IAmb IAmb 21 23 15.6
comp=Z,438nm,2.0s
**J61A Chester** **43.92 88** IAMs_20 IAMs_20 21 39 21.1
comp=Z,16µm,20.0s
**PARMO Parma** **43.92 109** IAmb IAmb 21 23 15.4
comp=Z,242nm,1.1s
PARMO IAMs_20 IAMs_20 21 41 56.3
comp=Z,15µm,21.0s
**T45A Paducah** **43.97 108** IAmb IAmb 21 23 16.4
comp=Z,262nm,0.9s
**LOOK Love County** **43.98 119** IAmb IAmb 21 23 14.3
comp=Z,690nm,1.9s
**X37A Clayton** **44.00 116** **P** **21 23 09.6 +0.1**
X37A IAmb IAmb 21 23 16.4
comp=Z,260nm,1.5s
X37A IAMs_20 IAMs_20 21 41 24.7
comp=Z,19µm,19.0s
**I63A Otisfield** **44.00 85** IAmb IAmb 21 23 11.4
comp=Z,281nm,1.5s
I63A IAMs_20 IAMs_20 21 42 07.0
comp=Z,18µm,19.0s
**LCAR Lake Charles** **44.00 111** IAmb IAmb 21 23 16.1
comp=Z,342nm,1.3s
LCAR IAMs_20 IAMs_20 21 41 04.5
comp=Z,16µm,18.0s
**G65A Princeton** **44.05 82** IAmb IAmb 21 23 11.3
comp=Z,254nm,1.5s
**L59A Walton** **44.06 91** IAmb IAmb 21 23 15.3
comp=Z,196nm,1.0s
L59A IAMs_20 IAMs_20 21 40 53.9
comp=Z,21µm,21.0s
**TRY Troy** **44.07 89** IAmb IAmb 21 23 14.4
comp=Z,490nm,2.0s
TRY IAMs_20 IAMs_20 21 39 26.1
comp=Z,16µm,18.0s
**M57A Sunshine Farm,** **44.08 93** IAmb IAmb 21 23 16.9
comp=Z,207nm,1.0s
M57A IAMs_20 IAMs_20 21 39 30.6
comp=Z,18µm,20.0s
**ODSA Odessa** **44.13 126** IAmb IAmb 21 23 15.3
comp=Z,207nm,1.1s
**PVMO Portageville** **44.17 109** IAMs_20 IAMs_20 21 38 37.8
comp=Z,14µm,20.0s

**HICK Hickman** 44.21 109 IAMs_20 IAMs_20 21 42 07.8
comp=Z,18µm,22.0s
**P53A Whipple** 44.23 99 IAmb IAmb 21 23 15.0
comp=Z,268nm,1.1s
P53A IAMs_20 IAMs_20 21 41 18.9
comp=Z,18µm,21.0s
**SSFO Shawnee State** 44.31 101 IAmb IAmb 21 23 15.7
comp=Z,146nm,0.7s
**WHAR Wooly Hollow** 44.34 113 IAmb IAmb 21 23 18.4
comp=Z,469nm,1.6s
WHAR IAMs_20 IAMs_20 21 39 14.6
comp=Z,12µm,19.0s
**KSPA Keystone Colle** 44.36 92 IAmb IAmb 21 23 17.6
comp=Z,435nm,1.6s
KSPA IAMs_20 IAMs_20 21 39 59.0
comp=Z,16µm,19.0s
**GGN Saint George** 44.37 81 IAmb IAmb 21 23 13.8
comp=Z,567nm,1.7s
GGN IAMs_20 IAMs_20 21 38 53.7
comp=Z,19µm,20.0s
**Q52A Bidwell** 44.40 100 IAmb IAmb 21 23 16.0
comp=Z,240nm,1.2s
Q52A IAMs_20 IAMs_20 21 41 49.4
comp=Z,20µm,20.0s
**GLAT Glass** 44.44 109 IAMs_20 IAMs_20 21 42 12.9
comp=Z,14µm,20.0s
**SSPA Standing Stone** 44.44 95 P P 21 23 12.3 -0.7
**SSPA Standing Stone** 44.44 95 IAMs_20 IAMs_20 21 39 21.0
comp=Z,13µm,20.0s
**SSPA Standing Stone** 44.44 95 P P 21 23 12.4 -0.7
baz=333
SSPA S S 21 29 45.4 -2.1
baz=333
**LMN Caledonia Moun** 44.44 79 P P 21 23 12.6 -0.4
LMN IAmb IAmb 21 23 20.3
comp=Z,233nm,1.2s
**ABTX Abilene, Hawle** 44.51 122 IAmb IAmb 21 23 17.9
comp=Z,294nm,1.8s
**ABTX Abilene, Hawle** 44.51 122 P P 21 23 13.7 0.0
baz=339,SNR=30
ABTX S S 21 29 47.6 -1.2
baz=339
**UTMT University of** 44.51 108 IAMs_20 IAMs_20 21 42 31.7
comp=Z,18µm,21.0s
**T47A Sharon Grove** 44.52 106 IAmb IAmb 21 23 19.8
comp=Z,236nm,0.9s
T47A IAMs_20 IAMs_20 21 43 03.8
comp=Z,14µm,18.0s
**LNXT Lenox** 44.52 109 IAMs_20 IAMs_20 21 42 00.2
comp=Z,19µm,21.0s
**Z35A Perchaven, San** 44.57 119 IAmb IAmb 21 23 18.8
comp=Z,442nm,1.7s
**FW03 Perrin-Whitt E** 44.60 120 IAmb IAmb 21 23 21.3
comp=Z,308nm,1.2s
**MIAR Mount Ida** 44.61 114 IAmb IAmb 21 23 21.1
comp=Z,233nm,0.9s
**MIAR Mount Ida** 44.61 114 P P 21 23 14.3 -0.1
baz=337,SNR=136
MIAR S S 21 29 48.5 -1.6
baz=337
**MCWV Mont Chateau** 44.62 97 IAmb IAmb 21 24 03.1
comp=Z,456nm,1.9s
MCWV IAMs_20 IAMs_20 21 43 35.0
comp=Z,12µm,18.0s
**MCWV Mont Chateau** 44.62 97 P P 21 23 14.1 -0.4
baz=333
MCWV S S 21 29 48.8 -1.3
baz=333
**K62A Royalston** 44.63 88 IAmb IAmb 21 23 20.3
comp=Z,461nm,1.6s
K62A IAMs_20 IAMs_20 21 43 04.9
comp=Z,15µm,19.0s
**L61B Northampton** 44.66 88 IAMs_20 IAMs_20 21 39 42.8
comp=Z,20µm,22.0s
**L61B Northampton** 44.66 88 P P 21 23 14.6 -0.2
baz=332,SNR=19
L61B S S 21 29 51.2 +0.4
baz=332
**N58A Sunbury** 44.66 93 IAMs_20 IAMs_20 21 41 27.1
comp=Z,13µm,20.0s
**VHRN Van Horn** 44.70 129 IAmb IAmb 21 23 20.9
comp=Z,182nm,1.1s
**SGCY Sterling City** 44.73 124 IAmb IAmb 21 23 19.9
comp=Z,206nm,1.1s
**HALT Halls** 44.74 109 IAmb IAmb 21 23 22.0
comp=Z,234nm,1.0s
**UALR University of** 44.80 113 IAmb IAmb 21 23 22.4
comp=Z,196nm,1.0s
**MNHN Monahans** 44.80 126 IAmb IAmb 21 23 22.7
comp=Z,222nm,1.4s
**Q54A Coxs Mills** 44.88 99 IAmb IAmb 21 23 22.4
comp=Z,152nm,1.0s
**TEY Ternei** 44.96 280⇑ *e*P P 21 23 15.1 -2.0
TEY pmax pmax
comp=Z,20nm,1.5s
TEY pmax pmax
comp=E,10.0nm,1.2s
TEY pmax pmax
comp=N,10.0nm,1.3s
TEY MLR MLR
comp=E,700nm,14.0s
**HRV Adam Dziewonsk** 45.01 87 P P 21 23 17.4 -0.2
**HRV Adam Dziewonsk** 45.01 87 IAMs_20 IAMs_20 21 43 25.8
comp=Z,15µm,19.0s
**HRV Adam Dziewonsk** 45.01 87 P P 21 23 17.7 +0.2
baz=332
HRV S S 21 29 53.0 -2.8
baz=332
**HRV Adam Dziewonsk** 45.01 87 P P 21 23 17.4 -0.2
HRV pmax pmax
comp=Z,471nm,1.5s
HRV MLR MLR
comp=Z,15µm,19.0s
**WVT Waverly** 45.05 107 P P 21 23 18.0 +0.1
**WVT Waverly** 45.05 107 IAMs_20 IAMs_20 21 42 51.1
comp=Z,16µm,22.0s
**WVT Waverly** 45.05 107 P P 21 23 18.0 +0.1
baz=336
WVT S S 21 29 56.3 -0.2
baz=336
**WVT Waverly** 45.05 107 P P 21 23 18.0 +0.1
WVT pmax pmax
comp=Z,444nm,1.0s
WVT MLR MLR
comp=Z,16µm,22.0s
**S51A Beattyville** 45.13 102 IAMs_20 IAMs_20 21 40 02.8
comp=Z,18µm,19.0s
**ODNJ Ogdensburg** 45.19 91 IAMs_20 IAMs_20 21 41 27.9
comp=Z,18µm,19.0s
**NSS Namsos** 45.20 14 *e*P P 21 23 18.0 -0.7
NSS IVmB_BB 21 23 30.0
comp=Z,1µm,2.8s
NSS *e*S S 21 29 57.8 -0.2
NSS IVMs_BB IVMs_BB 21 43 02.4
comp=Z,3µm,15.4s
**WES Weston** 45.20 87 IAMs_20 IAMs_20 21 41 09.8
comp=Z,16µm,22.0s
**T50A Nancy** 45.26 104 IAmb IAmb 21 23 23.8
comp=Z,289nm,1.4s
**TRNY Table Rock, Ra** 45.27 91 IAmb IAmb 21 23 25.9
comp=Z,153nm,0.8s
TRNY IAMs_20 IAMs_20 21 41 32.0
comp=Z,15µm,18.0s
**BCX Boston College** 45.30 87 IAmb IAmb 21 23 21.9
comp=Z,286nm,1.3s
BCX IAMs_20 IAMs_20 21 39 47.4
comp=Z,13µm,21.0s
**JEM Erimo** 45.31 272 P P 21 23 21.6 +1.7
**ERM Erimo** 45.31 272 P P 21 23 20.7 +0.8
**ERM Erimo** 45.31 272 P P 21 23 19.6 -0.4
ERM IAmb IAmb 21 23 25.3
comp=Z,127nm,0.8s
**ERM Erimo** 45.31 272 P P 21 23 19.6 -0.4
ERM pmax pmax
comp=Z,127nm,0.8s
ERM MLR MLR
comp=Z,20µm,19.0s
**Z38A Mt. Pleasant** 45.35 117 IAMs_20 IAMs_20 21 40 35.5
comp=Z,14µm,22.0s
**U49A Red Boiling Sp** 45.39 105 IAmb IAmb 21 23 27.2
comp=Z,178nm,1.0s
U49A IAMs_20 IAMs_20 21 42 45.1
comp=Z,16µm,19.0s
**Q56A Snyder Ridge,** 45.40 97 IAmb IAmb 21 23 24.6
comp=Z,265nm,1.4s
Q56A IAMs_20 IAMs_20 21 42 09.7
comp=Z,14µm,20.0s
**UCCT U. Connecticut** 45.40 88 IAMs_20 IAMs_20 21 40 14.3
comp=Z,13µm,18.0s
**P57A Homestead Farm** 45.41 95 IAmb IAmb 21 23 21.8
comp=Z,230nm,1.2s
P57A IAMs_20 IAMs_20 21 40 42.0
comp=Z,17µm,20.0s
**FW14 Alvarado** 45.46 119 IAmb IAmb 21 23 28.1
comp=Z,226nm,1.0s
**ALPN Alpine** 45.47 128 IAmb IAmb 21 23 26.3
comp=Z,143nm,0.9s
**FW16 Waxahatchie** 45.47 119 IAmb IAmb 21 24 02.6
comp=Z,225nm,1.4s
**OUL Oulu** 45.49 6 P P 21 23 21.1 0.0
**PAL Palisades** 45.51 91 IAMs_20 IAMs_20 21 41 47.1
comp=Z,19µm,19.0s
**PAL Palisades** 45.51 91 P P 21 23 20.9 -0.6
baz=332
PAL S S 21 30 02.0 -0.9
baz=332
**MVL Millersville** 45.54 94 IAmb IAmb 21 23 28.6
comp=Z,188nm,1.0s
MVL IAMs_20 IAMs_20 21 40 12.2
comp=Z,14µm,22.0s
**WLAR White Oak Lake** 45.55 114 IAMs_20 IAMs_20 21 39 35.6
comp=Z,13µm,20.0s
**CLTN Cedars of Leba** 45.59 106 IAMs_20 IAMs_20 21 44 47.3
comp=Z,12µm,20.0s
**OZNA Ozona** 45.66 125 IAmb IAmb 21 23 28.9
comp=Z,255nm,1.4s
**CPNY Central Park** 45.68 91 IAMs_20 IAMs_20 21 41 52.7
comp=Z,16µm,19.0s
**N62A Caumsett State** 45.73 90 IAMs_20 IAMs_20 21 40 18.0
comp=Z,14µm,19.0s
**V48A Smith Brothers** 45.74 107 IAMs_20 IAMs_20 21 42 57.4
comp=Z,12µm,18.0s
**R55A Marlinton** 45.75 98 IAmb IAmb 21 23 50.3
comp=Z,120nm,0.9s
**WHTX Lake Whitney,** 45.76 120 IAmb IAmb 21 23 30.3
comp=Z,277nm,1.2s
**WHTX Lake Whitney,** 45.76 120 P P 21 23 23.7 +0.1
baz=339,SNR=54
WHTX S S 21 30 04.4 -2.3
baz=339
**L64A Middleborough** 45.76 87 IAMs_20 IAMs_20 21 41 00.8
comp=Z,16µm,22.0s
**M63A Gales Ferry** 45.81 89 IAmb IAmb 21 23 29.4
comp=Z,213nm,1.0s
M63A IAMs_20 IAMs_20 21 40 28.1
comp=Z,17µm,19.0s
**JSH Shimam** 45.85 275 P P 21 23 23.1 -1.1
**WUPA West Chester U** 45.86 93 IAmb IAmb 21 23 30.3
comp=Z,106nm,0.9s
WUPA IAMs_20 IAMs_20 21 41 52.7
comp=Z,12µm,21.0s
**HAL Halifax** 45.92 79 IAMs_20 IAMs_20 21 45 57.4
comp=Z,15µm,19.0s
**BRDY Brady** 45.95 122 IAmb IAmb 21 23 31.8
comp=Z,283nm,1.5s
**OXF Oxford** 46.00 110 P P 21 23 25.9 +0.4
baz=336
OXF S S 21 30 10.8 +0.7
baz=336
**PLAL Pickwick Lake** 46.01 108 IAmb IAmb 21 23 32.1
comp=Z,175nm,0.9s
PLAL IAMs_20 IAMs_20 21 43 12.6
comp=Z,13µm,20.0s
**TZTN Tazewell** 46.13 103 IAmb IAmb 21 23 32.9
comp=Z,234nm,1.1s
**TZTN Tazewell** 46.13 103 P P 21 23 26.2 -0.3
baz=335
TZTN S S 21 30 10.4 -1.7
baz=335
**M65A Busby, Falmout** 46.16 87 IAMs_20 IAMs_20 21 43 21.3
comp=Z,14µm,20.0s
**M65A Busby, Falmout** 46.16 87 P P 21 23 26.9 +0.2
baz=332
M65A S S 21 30 12.5 +0.2
baz=332
**TBLU Trondheim** 46.30 16 *e*P P 21 23 26.5 -1.0
TBLU IVmB_BB 21 23 30.8
comp=Z,1µm,2.2s
TBLU *e*S S 21 30 09.8 -4.1
TBLU *e*SS SS 21 33 39.8 +1.2
TBLU IVMs_BB IVMs_BB 21 42 36.3
comp=Z,3µm,25.3s
**CIT Chita** 46.33 303 *e*P P 21 23 24.6 -3.4
CIT *e* 21 23 33.6
CIT *e* 21 25 06.2
CIT *e* 21 25 21.4
CIT *e* 21 30 12.6
CIT *e* 21 33 15.0
CIT *e* 21 33 28.8
CIT pmax pmax
comp=Z,279nm,1.3s
**P61A Hammonton** 46.38 92 IAMs_20 IAMs_20 21 41 33.3
comp=Z,14µm,21.0s
**TX31 Lajitas Ar. Si** 46.44 128 IAmb IAmb 21 23 36.1
comp=Z,186nm,1.2s
**TXAR Lajitas Array** 46.44 128 P P 21 23 30.1 +1.0
**TXAR Lajitas Array** 46.44 128 P P 21 23 30.4 +1.3
comp=Z,24nm,0.7s,baz=355,slow=8.4,SNR=176
TXAR LR LR 21 44 39.1
comp=Z,16µm,18.8s,baz=330,slow=38
comp=Z,24nm,0.7s
**TXAR Lajitas Array** 46.44 128 P P 21 23 30.1 +1.0
**JCT Junction City** 46.47 123 P P 21 23 29.5 +0.2
baz=340
JCT S S 21 30 16.1 -1.0
baz=340
**Y45A Yeager Farm, C** 46.54 110 IAMs_20 IAMs_20 21 42 31.8
comp=Z,15µm,18.0s
**BLA Blacksburg** 46.61 99 IAmb IAmb 21 23 34.0
comp=Z,230nm,1.2s
**BLA Blacksburg** 46.61 99 P P 21 23 29.4 -0.9
baz=334,SNR=31
BLA S S 21 30 16.9 -2.0
baz=334
**JOT Ohata** 46.62 273 P P 21 23 29.1 -1.1
**S57A Dark Hollow, R** 46.62 97 IAmb IAmb 21 23 38.4
comp=Z,87nm,0.9s
S57A IAMs_20 IAMs_20 21 41 20.2
comp=Z,16µm,22.0s
**MOL Molde** 46.70 17 *e*P P 21 23 29.9 -0.7
MOL IVmB_BB 21 23 34.8
comp=Z,1µm,3.0s
MOL *e*S S 21 30 17.3 -2.2
MOL *e*SS SS 21 33 46.2 +1.2
MOL IVMs_BB IVMs_BB 21 44 01.3
comp=Z,4µm,23.0s
**W50A Signal Mountai** 46.74 105 IAMs_20 IAMs_20 21 43 01.8
comp=Z,16µm,20.0s
**V52A Sevierville** 46.75 103 IAmb IAmb 21 23 35.5
comp=Z,203nm,1.5s
**CBN Corbin Frederi** 46.78 96 IAMs_20 IAMs_20 21 40 56.2
comp=Z,13µm,19.0s
**CBN Corbin Frederi** 46.78 96 P P 21 23 30.9 -0.7
baz=334,SNR=8.1
CBN S S 21 30 19.8 -1.5
baz=334
**CPCT Cooper Cave** 46.79 104 IAmb IAmb 21 23 35.9
comp=Z,219nm,1.3s
**ADZR Andozero** 46.81 358⇓ *i*P P 21 23 32.1 +0.7
ADZR 21 25 22.6
ADZR *i*S S 21 30 19.3 -1.8
ADZR pmax pmax
comp=Z,307nm,1.3s
**R58B Mineral** 46.82 96 IAmb IAmb 21 23 38.0
comp=Z,90nm,0.9s
R58B IAMs_20 IAMs_20 21 41 37.2
comp=Z,14µm,18.0s
**NATX Nacogdoches** 46.84 117 P P 21 23 32.4 +0.3
baz=338
NATX S S 21 30 22.9 +0.7
baz=338
**X48A Hartselle** 46.84 108 IAMs_20 IAMs_20 21 43 53.5
comp=Z,18µm,20.0s
**435B Jarrell** 46.84 121 IAmb IAmb 21 23 36.6
comp=Z,169nm,1.3s
435B IAMs_20 IAMs_20 21 43 23.7
comp=Z,20µm,20.0s
**435B Jarrell** 46.84 121 P P 21 23 32.3 +0.2
baz=340
435B S S 21 30 22.0 -0.3
baz=340
**TKL Tuckaleechee C** 46.85 103 LR LR 21 43 41.5
comp=Z,12µm,18.6s,baz=344,slow=37
**143A Socs Landing,** 47.00 113 IAMs_20 IAMs_20 21 42 06.1
comp=Z,13µm,19.0s
**JTM Tenmabayashi** 47.13 273 P P 21 23 34.9 +0.6
**V53A Saluda** 47.17 102 IAmb IAmb 21 23 39.8
comp=Z,143nm,1.2s
V53A IAMs_20 IAMs_20 21 44 34.0
comp=Z,15µm,19.0s
**T57A Hurt** 47.20 98 IAmb IAmb 21 23 38.4
comp=Z,115nm,1.1s
**FPAL Fort Paine** 47.24 106 IAMs_20 IAMs_20 21 43 05.0
comp=Z,12µm,19.0s
**USA0B Ussuriysk Arra** 47.28 283 P P 21 23 34.7 -0.8
USA0B IAmb IAmb 21 23 40.1
comp=Z,110nm,0.8s
**USA0B Ussuriysk Arra** 47.28 283 *d* *i*P P 21 23 34.6 -0.8
**USRK Ussuriysk Ar.** 47.28 283 P P 21 23 35.2 -0.2
comp=Z,104nm,0.8s,baz=30,slow=9.5,SNR=106
USRK PcP PcP 21 25 07.7 +1.4
comp=Z,10nm,0.8s,baz=26,slow=4.0,SNR=1.3
USRK PP PP 21 25 27.1 +1.0
comp=Z,32nm,0.9s,baz=27,slow=9.7,SNR=3.0
USRK LR LR 21 44 37.7
comp=Z,13µm,18.2s,baz=31,slow=38
comp=Z,104nm,0.8s
**W52A Murphy** 47.31 104 IAmb IAmb 21 23 40.1
comp=Z,101nm,0.9s
**FOO Floro** 47.37 19 *e*P P 21 23 36.2 +0.4
FOO *e*S S 21 30 28.1 -1.0
FOO *e*SS SS 21 33 57.4 +1.6
FOO IVMs_BB IVMs_BB 21 43 36.6
comp=Z,2µm,23.4s
**DOMB Dombas** 47.37 17 *e*P P 21 23 34.9 -1.0
DOMB IVmB_BB 21 23 39.8
comp=Z,1µm,3.1s
DOMB *e*S S 21 30 25.6 -3.7
DOMB *e*SS SS 21 33 54.2 -1.8
DOMB IVMs_BB IVMs_BB 21 47 14.8
comp=Z,3µm,23.2s
**R61A Willards** 47.38 94 IAMs_20 IAMs_20 21 41 06.0
comp=Z,18µm,19.0s
**VAF Ylistaro** 47.40 8 *e*P P 21 23 35.5 -0.6
**U56A King** 47.40 100 IAMs_20 IAMs_20 21 42 39.8
comp=Z,14µm,20.0s
**X51A Calhoun** 47.47 105 IAmb IAmb 21 23 43.4
comp=Z,118nm,1.0s
X51A IAMs_20 IAMs_20 21 41 45.1
comp=Z,15µm,19.0s
**BNX BinXian** 47.48 288 ⇓P P 21 23 36.0 -0.9
BNX pP pP 21 23 39.3 -0.8
BNX PP PP 21 25 27.6 -0.3
BNX S S 21 30 28.2 -2.9
BNX pmax pmax
comp=Z,90nm,0.9s
BNX pmax pmax
comp=Z,1µm,4.3s
BNX LR LR
comp=Z,27µm,17.3s
BNX LR LR
comp=Z,47µm,18.4s
BNX LR LR
comp=Z,23µm,16.7s
**HNDO Hondo** 47.51 123 IAmb IAmb 21 23 42.0
comp=Z,168nm,1.0s
**V55A Taylorsville** 47.56 101 IAmb IAmb 21 23 43.9
comp=Z,148nm,1.1s
**Y49A Blount Mountai** 47.59 107 IAMs_20 IAMs_20 21 43 15.4
comp=Z,17µm,18.0s
**Z47A Carrollton** 47.64 109 IAMs_20 IAMs_20 21 45 33.8
comp=Z,11µm,19.0s
**MDJ Mudanjiang** 47.73 286 P P 21 23 38.2 -0.7
MDJ pP pP 21 23 42.2 +0.1
MDJ S S 21 30 33.5 -1.2
MDJ pmax pmax
comp=Z,46nm,1.7s
MDJ pmax pmax
comp=Z,1µm,5.1s
MDJ LR LR
comp=Z,23µm,15.3s
MDJ LR LR
comp=Z,34µm,16.0s
MDJ LR LR
comp=Z,40µm,13.9s
**MDJ Mudanjiang** 47.73 286 IAMs_20 IAMs_20 21 43 44.9
comp=Z,18µm,20.0s
**VBMS Vicksburg** 47.74 112 IAMs_20 IAMs_20 21 46 02.5
comp=Z,16µm,18.0s
**VBMS Vicksburg** 47.74 112 P P 21 23 40.2 +1.1
baz=338
VBMS S S 21 30 36.4 +1.4
baz=338
**JOF Joensuu** 47.80 3 *e*P P 21 23 38.3 -0.9
**T59A Double "B" Far** 47.82 97 IAMs_20 IAMs_20 21 42 07.8
comp=Z,14µm,21.0s
**146A Union** 47.83 111 IAMs_20 IAMs_20 21 46 24.9
comp=Z,16µm,18.0s
**HYA Hoyanger** 47.92 19 *e*P P 21 23 38.9 -1.2
HYA IVmB_BB 21 23 40.3
comp=Z,1µm,2.4s
HYA *e*PP PP 21 25 29.8 -1.8
HYA *e*S S 21 30 36.6 -0.3
HYA *e*SS SS 21 34 08.4 +3.7
HYA IVMs_BB IVMs_BB 21 44 33.3
comp=Z,3µm,20.8s
**LRW Lerwick** 47.98 24 *e*P P 21 23 40.4 -0.2
LRW IAmb IAmb 21 23 41.0
comp=Z,112nm,1.3s
**LRAL Lakeview Retre** 48.15 108 IAMs_20 IAMs_20 21 44 49.1
comp=Z,14µm,19.0s
**LRAL Lakeview Retre** 48.15 108 P P 21 23 42.1 -0.2
baz=337
LRAL S S 21 30 40.6 -0.2
baz=337
**HKT Hockley** 48.16 119 P P 21 23 42.2 -0.1
**HKT Hockley** 48.16 119 *c* *i*P P 21 23 42.6 +0.4
HKT pmax pmax
comp=Z,130nm,1.3s
**KMSC Kings Mountain** 48.16 101 IAmb IAmb 21 23 48.2
comp=Z,123nm,1.1s
KMSC IAMs_20 IAMs_20 21 44 10.0
comp=Z,17µm,20.0s
**KMSC Kings Mountain** 48.16 101 P P 21 23 41.7 -0.6
baz=335
KMSC S S 21 30 39.5 -1.4
baz=335
**JOM Ohasama** 48.22 272 P P 21 23 43.4 +0.6
**VLA Vladivostok** 48.27 283 *i* P P 21 23 42.2 -0.8
VLA pmax pmax
comp=Z,57nm,1.0s
**PAULI Pauline** 48.28 102 IAmb IAmb 21 23 49.2
comp=Z,184nm,1.0s
PAULI IAMs_20 IAMs_20 21 42 53.3
comp=Z,13µm,18.0s
**V58A Windy Hill, Pi** 48.34 99 IAmb IAmb 21 23 49.6
comp=Z,143nm,0.9s
**KEF Keuruu** 48.37 7 *e*P P 21 23 42.8 -0.8
**ASK Askoy** 48.47 20 *e*P P 21 23 44.1 -0.2
ASK *e*S S 21 30 44.5 -0.2
**NB2 NORSAR Subarra** 48.56 16 P P 21 23 44.4 -0.8
comp=Z,192nm,2.0s,baz=348,slow=7.9
**NB2 NORSAR Subarra** 48.56 16 P P 21 23 44.4 -0.8
baz=348,slow=7.9
**NB2 NORSAR Subarra** 48.56 16 P P 21 23 48.5 +3.3
**NOA NORSAR Array B** 48.56 16 P P 21 23 44.6 -0.5
comp=Z,13nm,0.8s,baz=348,slow=7.7,SNR=26
NOA PcP PcP 21 25 11.7 +1.0
comp=Z,8.8nm,0.8s,baz=353,slow=4.5,SNR=5.9
comp=Z,13nm,0.8s
**735A Kenedy** 48.58 122 IAMs_20 IAMs_20 21 47 01.6
comp=Z,16µm,20.0s
**BER Bergen** 48.58 20 *e*P P 21 23 44.0 -1.3
BER IVmB_BB 21 23 45.4
comp=Z,885nm,2.6s
BER *e*PP PP 21 25 38.7 +1.1
BER *e*S S 21 30 41.8 -4.6
BER *e*SS SS 21 34 21.8 +6.3
BER IVMs_BB IVMs_BB 21 49 30.6
comp=Z,1µm,17.3s
**833A Chaparral WMA,** 48.61 124 IAmb IAmb 21 23 55.1
comp=Z,195nm,1.5s
**833A Chaparral WMA,** 48.61 124 P P 21 23 46.6 +0.7
baz=341
833A S S 21 30 48.7 +1.3
baz=341
**W57A Gilead** 48.61 100 IAmb IAmb 21 23 51.6
comp=Z,101nm,0.9s
**HODGE Hodges** 48.66 103 IAmb IAmb 21 23 52.4
comp=Z,144nm,1.0s
HODGE IAMs_20 IAMs_20 21 42 18.5
comp=Z,13µm,18.0s

**IRK Irkutsk 48.74 310** *e*P P **21 23 44.9 -1.7**
IRK pmax pmax
comp=Z,227nm,1.4s
**KIP Kipapa 48.81 197** *ce*P P **21 23 49.7 +2.2**
KIP pmax pmax
comp=Z,72nm,1.0s
**346A Big Creek Wild 48.85 112** IAMs_20 IAMs_20 21 42 52.8
comp=Z,14μm,20.0s
**NC602 NORSAR Array S 48.90 15** *e*P P **21 23 47.1 -0.6**
NC602 IVmBBB 21 23 51.9
comp=Z,728nm,2.7s
NC602 *e*S **S** **21 30 49.4 -1.4**
NC602 *e*SS **SS** **21 34 23.1 +2.5**
NC602 IVMs_BB IVMs_BB 21 44 11.5
comp=Z,4μm,20.5s
**BIRD Birdtown, Kers 48.91 101** IAmb IAmb 21 23 51.9
comp=Z,122nm,1.1s
BIRD IAMs_20 IAMs_20 21 44 15.8
comp=Z,15μm,20.0s
**JSC Jenkinsville 48.96 102** IAmb IAmb 21 23 54.5
comp=Z,174nm,1.0s
JSC IAMs_20 IAMs_20 21 43 12.3
comp=Z,14μm,19.0s
**MSHR Mys Shultsa 48.99 283** *ce*P P **21 23 47.8 -0.8**
MSHR pmax pmax
comp=Z,96nm,1.7s
MSHR MLR MLR
comp=Z,12μm,18.0s
**GOGA Godfrey 49.00 104** IAmb IAmb 21 23 55.5
comp=Z,212nm,1.0s
**GOGA Godfrey 49.00 104** P P **21 23 48.8 0.0**
baz=336
GOGA S **S** **21 30 51.3 -1.6**
baz=336
**PSTR Posyet 49.05 283** *c i*P P **21 23 49.0 -0.1**
**W59A Clinton 49.14 98** IAmb IAmb 21 23 56.0
comp=Z,167nm,0.9s
**FINES FINESS Array B 49.14 6** P P **21 23 49.0 -0.5**
**FINES FINESS Array B 49.14 6** P P **21 23 49.2 -0.3**
comp=Z,70nm,0.9s,baz=1.6,slow=8.3,SNR=164
FINES PcP **PcP** **21 25 14.6 +2.0**
comp=Z,15nm,0.7s,baz=3.8,slow=4.2,SNR=1.5
comp=Z,70nm,0.9s
**FINES FINESS Array B 49.14 6** *i*P P **21 23 49.2 -0.3**
FINES pmax pmax
comp=Z,71nm,0.9s
**BIGH Upper Bighouse 49.15 26**⇑ *e*P P **21 23 49.3 -0.3**
BIGH IAmb IAmb 21 23 50.3
comp=Z,142nm,1.3s
**V61A Roper 49.23 96** IAMs_20 IAMs_20 21 42 59.9
comp=Z,15μm,18.0s
**152A Waverly Hall 49.25 106** IAMs_20 IAMs_20 21 44 19.2
comp=Z,15μm,19.0s
**CNNC Cliffs of the 49.26 98** IAmb IAmb 21 23 56.9
comp=Z,116nm,0.9s
**CNNC Cliffs of the 49.26 98** P P **21 23 50.3 -0.5**
baz=335
**LINV Loch Inver, As 49.28 27**⇑ *e*P P **21 23 50.3 -0.3**
LINV IAmb IAmb 21 23 51.4
comp=Z,196nm,1.2s
**VALR Valaam 49.36 3** *d i*P P **21 23 50.9 -0.3**
VALR pmax pmax
comp=Z,191nm,0.8s
VALR MLR MLR
comp=Z,5μm,16.0s
**250A Grady 49.36 108** IAMs_20 IAMs_20 21 45 49.3
comp=Z,15μm,19.0s
**RAF Rauma 49.37 9** *e*P P **21 23 49.8 -1.4**
**X58A Rowland 49.38 100** IAmb IAmb 21 23 57.9
comp=Z,201nm,1.0s
**Y57A Sumter 49.50 101** IAmb IAmb 21 23 58.6
comp=Z,201nm,0.9s
Y57A IAMs_20 IAMs_20 21 42 12.6
comp=Z,16μm,21.0s
**OSL Oslo 49.60 16** *e*P P **21 23 52.9 -0.2**
OSL *e*S **S** **21 31 03.9 +3.3**
**BLS5 Blasjo 49.65 19** *e*P P **21 23 53.2 -0.3**
BLS5 IVmB_BB 21 23 59.3
comp=Z,1μm,4.5s
BLS5 *e*S **S** **21 31 00.5 -1.0**
BLS5 IVMs_BB IVMs_BB 21 46 36.6
comp=Z,2μm,23.9s
**HFS Hagfors 49.68 14** P P **21 23 53.2 -0.5**
comp=Z,94nm,0.9s,baz=352,slow=7.0,SNR=131
comp=Z,94nm,0.9s
**KMY Karmoy 49.72 20** *e*P P **21 23 52.8 -1.2**
KMY *e*S **S** **21 31 00.7 -1.6**
**LPIG La Paz 49.73 138** LR LR 21 44 07.2
comp=Z,10μm,18.7s,baz=348,slow=35
**KONO Kongsberg 49.77 17** P P **21 23 54.8 +0.4**
**KONO Kongsberg 49.77 17** *e*P P **21 23 54.0 -0.3**
KONO IVmB_BB 21 23 58.9
comp=Z,1μm,3.1s
KONO *e*S **S** **21 31 02.4 -0.7**
KONO *e*SS **SS** **21 34 36.8 +2.2**
KONO IVMs_BB IVMs_BB 21 45 43.4
comp=Z,3μm,23.8s
**KONO Kongsberg 49.77 17** *ce*P P **21 23 53.7 -0.7**
KONO pmax pmax
comp=Z,150nm,1.7s
**JMM Marumori 49.83 272** P P **21 23 55.6 +0.5**
**JMM Marumori 49.83 272** IAmb IAmb 21 24 02.6
comp=Z,146nm,0.9s
**JMM Marumori 49.83 272** P P **21 23 55.0 0.0**
**BRAL Brewton 49.84 109** IAmb IAmb 21 24 02.5
comp=Z,250nm,1.0s
BRAL IAMs_20 IAMs_20 21 42 06.1
comp=Z,17μm,20.0s
**BRAL Brewton 49.84 109** P P **21 23 56.1 +0.9**
baz=337
BRAL S **S** **21 31 06.1 +1.4**
baz=337
**CN2 Changchun 49.84 289** ⇓P P **21 23 53.8 -1.3**
CN2 *e*sP sP 21 23 59.9 +0.3
CN2 *e*S **S** **21 31 00.4 -4.1**
CN2 pmax pmax
comp=Z,10.0nm,0.8s
CN2 pmax pmax
comp=Z,600nm,4.0s
CN2 LR LR
comp=Z,28μm,17.0s
CN2 LR LR
comp=Z,36μm,17.0s
CN2 LR LR
comp=Z,22μm,16.0s
**Y58A Scranton 49.85 100** IAmb IAmb 21 24 01.4
comp=Z,209nm,0.9s
**KPL Plockton 49.98 28** *e*P P **21 23 55.7 -0.2**
KPL IAmb IAmb 21 24 00.1
comp=Z,132nm,0.9s
**AAL Aland 50.10 10** *e*P P **21 23 55.9 -1.0**
**MCD Coleburn Disti 50.12 26**⇑ *e*P P **21 23 56.9 -0.2**
MCD IAmb IAmb 21 23 57.5
comp=Z,81nm,0.9s
**MOY Mondy 50.13 312** *e*P P **21 23 58.0 +0.6**
MOY pmax pmax
comp=Z,283nm,1.7s
**SLBS Sierra La Lagu 50.21 138** P P **21 23 59.5 +1.3**
SLBS IAmb IAmb 21 24 08.7
comp=Z,389nm,1.9s
**SLBS Sierra La Lagu 50.21 138** IAMs_20 IAMs_20 21 45 41.1
comp=Z,13μm,20.0s
**UPP Uppsala 50.27 12** *e*P P **21 23 56.9 -1.2**
**352A Blakely 50.27 107** IAMs_20 IAMs_20 21 46 09.2
comp=Z,14μm,18.0s
**Y60A Bolivia 50.27 99** IAmb IAmb 21 24 04.4
comp=Z,186nm,0.9s
Y60A IAMs_20 IAMs_20 21 44 20.7
comp=Z,17μm,22.0s
**MEF Metsahovi 50.30 7** *e*P P **21 23 57.4 -0.9**
**NHSC New Hope 50.40 101** P P **21 23 58.8 -0.6**
baz=336
NHSC S **S** **21 31 11.5 -0.9**
baz=336
**BYL Byron's Ledge 50.55 193** IAmb IAmb 21 24 06.7
comp=Z,202nm,0.9s
**JSD Sado 50.57 274** P P **21 24 00.7 0.0**
**JSD Sado 50.57 274** P P **21 24 00.6 -0.1**
**PUH Pauahi 50.59 193** P P **21 24 01.2 +0.1**
**TIGA Tifton 50.76 106** P P **21 24 01.7 -0.5**
baz=337
TIGA S **S** **21 31 17.9 +0.5**
baz=337
**451A Vernon 50.78 108** IAmb IAmb 21 24 09.1
comp=Z,201nm,0.9s
451A IAMs_20 IAMs_20 21 46 52.0
comp=Z,15μm,18.0s
**SNART Snartemo 50.80 19** *e*P P **21 24 02.4 +0.2**
**DRUM Mains of Drumt 50.89 26**⇑ *e*P P **21 24 02.9 +0.1**
DRUM IAmb IAmb 21 24 06.9
comp=Z,210nm,0.8s
**PUL Pulkovo 50.94 3** *ce*P P **21 24 03.9 +0.7**
PUL pmax pmax
comp=Z,283nm,1.0s
PUL MLR MLR
comp=Z,7μm,17.0s
**LAWE Loch Awe, Argy 51.05 28** *e*P P **21 24 03.8 -0.3**
LAWE IAmb IAmb 21 24 08.2
comp=Z,99nm,0.8s
**INVG Invergeldie, C 51.11 27** *e*P P **21 24 04.4 -0.1**
INVG IAmb IAmb 21 24 04.6
comp=Z,27nm,1.1s
**257A Skidaway Islan 51.14 103** IAMs_20 IAMs_20 21 43 42.1
comp=Z,13μm,18.0s
**ARBE Arbavere 51.15 6** *e*P P **21 24 02.6 -2.1**
**VIKU Vikbolandet 51.54 13** *e*P P **21 24 06.8 -0.9**
**PGBU Glenifferbraes 51.63 28** *e*P P **21 24 08.2 -0.2**
PGBU IAmb IAmb 21 24 12.4
comp=Z,80nm,0.9s
**EDI Edinburgh 51.73 27** *e*P P **21 24 08.8 -0.3**
EDI IAmb IAmb 21 24 13.1
comp=Z,81nm,0.8s
**ZALV Zalesovo Beam 51.75 325** P P **21 24 09.2 -0.2**
**ZALV Zalesovo Beam 51.75 325** P P **21 24 08.5 -0.8**
comp=Z,21nm,0.7s,baz=22,slow=7.3,SNR=66
ZALV PP **PP** **21 26 07.7 +1.2**
comp=Z,21nm,1.0s,baz=22,slow=8.0,SNR=1.5
ZALV LR LR 21 49 35.0
comp=Z,9μm,18.5s,baz=22,slow=40
comp=Z,21nm,0.7s
**ZALV Zalesovo Beam 51.75 325** *i*P P **21 24 08.8 -0.5**
ZALV pmax pmax
comp=Z,21nm,0.7s
**MTSE Matsula 51.77 8** *e*P P **21 24 09.4 0.0**
**KIRV Kirov 51.80 351** *ce*P P **21 24 10.1 +0.5**
**IDGL Inch Island, C 51.82 30** *e*P P **21 24 09.8 -0.1**
**MJB9 Matsu-Tunnel 51.92 273** IAmb IAmb 21 24 17.9
comp=Z,231nm,1.0s
**MAJO Matsushiro 51.93 273** P P **21 24 11.3 +0.4**
**MAJO Matsushiro 51.93 273** P P **21 24 10.9 0.0**
MAJO IAmb IAmb 21 24 17.9
comp=Z,237nm,1.0s
**MAJO Matsushiro 51.93 273** IAMs_20 IAMs_20 21 45 28.7
comp=Z,16μm,22.0s
**MAJO Matsushiro 51.93 273** *d i*P P **21 24 11.4 +0.5**
MAJO pmax pmax
comp=Z,47nm,0.9s
**MAT Matsushiro 51.93 273** P P **21 24 11.0 +0.1**
**MJAR Matsushiro Arr 51.93 273** P P **21 24 11.0 +0.1**
comp=Z,91nm,0.8s,baz=8.5,slow=8.3,SNR=116
MJAR PcP **PcP** **21 25 24.3 +0.9**
comp=Z,10nm,1.0s,baz=350,slow=2.8,SNR=0.8
comp=Z,91nm,0.8s
**ULN Ulaanbaatar 51.93 306** P P **21 24 10.9 -0.1**
**ULN Ulaanbaatar 51.93 306** P P **21 24 11.8 +0.8**
ULN S **S** **21 31 35.3 +1.7**
**ULN Ulaanbaatar 51.93 306** *ce*P P **21 24 10.8 -0.2**
ULN pmax pmax
comp=Z,55nm,1.7s
**CLGH Cloghs, Cushen 52.06 29**⇑ *e*P P **21 24 11.0 -0.6**
CLGH IAmb IAmb 21 24 16.8
comp=Z,64nm,0.9s
**SONM Songino Array 52.15 306** P P **21 24 12.5 -0.1**
**SONM Songino Array 52.15 306** P P **21 24 13.4 +0.9**
comp=Z,56nm,1.0s,baz=23,slow=6.9,SNR=119
SONM PcP **PcP** **21 25 24.7 +0.6**
comp=Z,13nm,0.8s,baz=26,slow=7.0,SNR=1.1
SONM LR LR 21 50 12.7
comp=Z,22μm,19.3s,baz=20,slow=41
comp=Z,56nm,1.0s
**VSU Vasula 52.15 6** *ce*P P **21 24 12.1 -0.1**
VSU pmax pmax
comp=Z,306nm,1.0s
VSU MLR MLR
comp=Z,6μm,16.0s
**JRY Ryogami san 52.15 272** P P **21 24 12.9 +0.3**
**SNY Shenyang 52.23 289** ⇓P P **21 24 12.8 -0.2**
SNY S S 21 31 27.3 -10
SNY pmax pmax
comp=Z,29nm,1.1s
SNY pmax pmax
comp=Z,1μm,3.9s
SNY LR LR
comp=Z,11μm,16.2s
SNY LR LR
comp=Z,30μm,16.6s
SNY LR LR
comp=Z,6μm,19.0s
**EKA Eskdalemuir Ar 52.30 27** P P **21 24 13.6 +0.1**
comp=Z,133nm,0.8s,baz=338,slow=6.4,SNR=170
comp=Z,133nm,0.8s
**ESK Eskdalemuir 52.31 27** P P **21 24 13.1 -0.4**
ESK IAmb IAmb 21 24 18.0
comp=Z,164nm,0.9s
**ESK Eskdalemuir 52.31 27** *e*P P **21 24 13.4 -0.1**
ESK IAmb IAmb 21 24 17.9
comp=Z,174nm,0.9s
**ESK Eskdalemuir 52.31 27** P P **21 24 13.1 -0.4**
ESK pmax pmax
comp=Z,164nm,0.9s
**NEWG New Galloway 52.34 28** *e*P P **21 24 13.4 -0.3**
NEWG IAmb IAmb 21 24 17.5
comp=Z,54nm,0.9s
**GAL1 Galloway 52.50 28** *e*P P **21 24 14.7 -0.2**
GAL1 IAmb IAmb 21 24 18.9
comp=Z,115nm,0.9s
**JGN Niukaw 52.53 274** P P **21 24 15.7 +0.3**
**SVE Sverdlovsk 52.65 343** *ce*P P **21 24 17.0 +1.0**
SVE *e*S **S** **21 31 44.8 +1.9**
SVE pmax pmax
comp=Z,171nm,1.4s
**SLIT Slitere, Latvi 52.78 9** *e*P P **21 24 16.0 -0.9**
**XLT XiLinHaoTe 52.80 296** ⇓ *i*P P **21 24 17.4 0.0**
XLT pP sP 21 24 21.8 -0.1
XLT sP pP 21 24 24.8 +4.2
XLT PcP **PcP** **21 25 30.7 +4.1**
XLT S **S** **21 31 40.5 -4.9**
XLT sS sS 21 31 59.6 +8.8
XLT pmax pmax
comp=Z,42nm,1.3s
XLT pmax pmax
comp=Z,650nm,4.2s
XLT LR LR
comp=Z,23μm,14.9s
XLT LR LR
comp=Z,18μm,16.2s
**MUD Monsted U'grnd 52.87 18** *i*P P **21 24 16.5 -1.1**
MUD IAmb IAmb 21 24 23.4
comp=Z,47nm,0.8s
**EDMD Edmundbyers 52.98 26** *e*P P **21 24 18.4 0.0**
EDMD IAmb IAmb 21 24 22.7
comp=Z,97nm,0.9s
**ILTH Belurgan, Co L 53.03 30** *e*P P **21 24 18.4 -0.4**
**KESW Keswick, Cumbr 53.03 27** *e*P P **21 24 18.6 -0.2**
KESW IAmb IAmb 21 24 25.0
comp=Z,193nm,1.0s
**JGF Kuroka 53.07 273** P P **21 24 19.5 +0.1**
**JGF Kuroka 53.07 273** IAmb IAmb 21 24 24.6
comp=Z,225nm,0.9s
**JGF Kuroka 53.07 273** P P **21 24 19.8 +0.4**
**IOMK Kirk Michael 53.11 28** *e*P P **21 24 18.9 -0.5**
IOMK IAmb IAmb 21 24 23.2
comp=Z,141nm,0.9s
**WIM Isle of Man 53.20 28** *e*P P **21 24 19.4 -0.6**
**ARU Arti 53.25 344** P P **21 24 20.1 -0.4**
ARU IAmb IAmb 21 24 44.2
comp=Z,142nm,1.0s
**ARU Arti 53.25 344** S **S** **21 31 51.8 +0.7**
comp=Z,0.9nm,0.5s,baz=340,slow=20,SNR=1.1
ARU LR LR 21 47 13.8
comp=Z,5μm,21.6s,baz=8.5,slow=36
**ARU Arti 53.25 344** *d i*P P **21 24 20.6 +0.2**
ARU 21 25 33.7
ARU S **S** **21 31 51.5 +0.4**
ARU SS **SS** **21 35 31.5 +1.7**
ARU pmax pmax
comp=Z,67nm,0.7s
ARU MLR MLR
comp=Z,8μm,19.0s
**DEL Delary 53.32 15** *e*P P **21 24 19.9 -1.0**
**INU Inuyama 53.42 274** P P **21 24 22.1 +0.2**
**INU Inuyama 53.42 274** P P **21 24 21.4 -0.5**
INU IAMs_20 IAMs_20 21 48 19.1
comp=Z,9μm,19.0s
**SUJ Sinuiju 53.47 287** P P **21 24 22.3 +0.1**
SUJ S **S** **21 31 49.7 -4.6**
SUJ AmB
comp=Z,911nm,2.0s
SUJ AMS AMS
comp=Z,23μm,16.8s
**GDLE Glaisdale, N Y 53.55 26** *e*P P **21 24 22.5 -0.1**
GDLE IAmb IAmb 21 24 26.8
comp=Z,97nm,0.8s
**HPK Haverah Park 53.87 26** *e*P P **21 24 25.1 +0.1**
**WPS Cemaes, Angles 53.94 29**⇑ *e*P P **21 24 24.9 -0.6**
WPS IAmb IAmb 21 24 29.4
comp=Z,92nm,1.0s
**COP Copenhagen 53.96 16** *i*P P **21 24 23.7 -1.9**
COP IAmb IAmb 21 24 30.4
comp=Z,88nm,0.9s
**WME Myndd Eilian 53.98 28**⇑ *e*P P **21 24 24.9 -0.9**
**PYAG Pyongyang 53.98 286** P P **21 24 25.5 -0.5**
PYAG S **S** **21 31 57.2 -4.2**
PYAG AmB
comp=Z,2μm,4.3s
**JWT Wachi 54.04 275** P P **21 24 26.5 0.0**
**WLF1 Llynfaes 54.07 28**⇑ *e*P P **21 24 25.8 -0.7**
WLF1 IAmb IAmb 21 24 30.3
comp=Z,159nm,0.9s
**PBUR Paburge 54.36 9** *e*P P **21 24 28.9 +0.3**
**LBWR Ladybower, Pea 54.39 27** *e*P P **21 24 28.6 -0.3**
LBWR IAmb IAmb 21 24 33.1
comp=Z,105nm,0.9s
**JHJ2 Mitsune 54.45 270** P P **21 24 32.3 +2.8**
**JHJ Hachijo jima 2 54.46 270** P P **21 24 33.9 +4.3**
comp=Z,126nm,0.7s,baz=234,slow=9.8,SNR=5.2
JHJ LR LR 21 50 34.4
comp=Z,4μm,18.1s,baz=34,slow=39
**VSVD Vaisvydziai 54.51 8** *e*P P **21 24 29.3 -0.3**
**IWEX Carrickbyrne, 54.53 30** *e*P P **21 24 29.6 -0.3**
**DWPF Disney Wildern 54.54 105** P P **21 24 29.8 -0.4**
**DWPF Disney Wildern 54.54 105** P P **21 24 30.4 +0.2**
baz=338
DWPF S **S** **21 32 10.4 +1.2**
baz=338
**LMK Market Rasen 54.56 26**⇑ *e*P P **21 24 30.2 +0.2**
LMK IAmb IAmb 21 24 31.1
comp=Z,570nm,1.4s
**FOEL Foel Wylfa 54.65 28** *e*P P **21 24 30.5 -0.3**
FOEL IAmb IAmb 21 24 34.8
comp=Z,71nm,0.9s
**KSRS Korea Array 54.68 283** P P **21 24 31.8 +0.7**
comp=Z,51nm,0.8s,baz=20,slow=6.9,SNR=86
KSRS LR LR 21 49 14.7
comp=Z,13μm,18.3s,baz=35,slow=38
comp=Z,51nm,0.8s
**KSAR Wonju Array Be 54.71 283** P P **21 24 31.8 +0.5**
**KSAR Wonju Array Be 54.71 283** P P **21 24 31.8 +0.5**
**BSD Bornholm Skovb 54.76 14** *e*P P **21 24 30.9 -0.5**
**BSD Bornholm Skovb 54.76 14** *i*P P **21 24 28.8 -2.6**
BSD IAmb IAmb 21 24 36.6
comp=Z,54nm,0.9s
**JAD Aida 54.78 276** P P **21 24 31.8 -0.1**
**IZAR Zarasai 54.84 6** *e*P P **21 24 32.1 +0.1**
**PABE Paberze 54.99 8** IAMs_20 IAMs_20 21 50 48.9
comp=Z,9μm,19.0s
**PABE Paberze 54.99 8** *e*P P **21 24 31.9 -1.1**
**ISAL Salakas 55.02 7** *e*P P **21 24 33.3 0.0**
**MOS Moscow 55.03 359** *e*P P **21 24 32.6 -0.8**
MOS *e*S **S** **21 32 13.7 -1.4**
MOS *e* 21 34 16.9
MOS *e*SS **SS** **21 36 01.4 +3.6**
MOS pmax pmax
comp=Z,500nm,1.5s
MOS pmax pmax
comp=Z,313nm,1.3s
MOS pmax pmax
comp=N,300nm,1.2s
MOS pmax pmax
comp=N,309nm,1.2s
MOS smax smax
comp=E,3μm,4.0s
MOS smax smax
comp=N,1μm,3.6s
MOS MLR MLR
comp=N,5μm,18.0s
MOS MLR MLR
comp=Z,6μm,18.0s
**JOHN Johnston Islan 55.04 210** IAMs_20 IAMs_20 21 44 49.3
comp=Z,10μm,19.0s
**HLM1 Long Mynd 55.06 28**⇑ *e*P P **21 24 33.2 -0.5**
HLM1 IAmb IAmb 21 24 38.5
comp=Z,177nm,0.8s
**INCN Inchon 55.10 284** P P **21 24 33.2 -1.0**
**INCN Inchon 55.10 284** P P **21 24 34.4 +0.2**
**INCN Inchon 55.10 284** P P **21 24 33.2 -1.0**
INCN pmax pmax
comp=Z,62nm,0.8s
INCN MLR MLR
comp=Z,17μm,18.0s
**JHS Saijyo 55.10 277** P P **21 24 34.5 +0.2**
**CWF Charnwood Fore 55.10 26** *e*P P **21 24 33.9 0.0**
**BRVK Borovoye 55.13 335** P P **21 24 33.7 -0.5**
BRVK IAmb IAmb 21 24 54.9
comp=Z,140nm,1.2s
**BRVK Borovoye 55.13 335** P P **21 24 34.8 +0.6**
BRVK P P **21 24 34.8 +0.6**
BRVK P P **21 24 34.8 +0.6**
BRVK S **S** **21 32 17.9 +1.3**
BRVK S **S** **21 32 17.9 +1.3**
BRVK S **S** **21 32 17.9 +1.3**
**BRVK Borovoye 55.13 335** *ce*P P **21 24 34.2 0.0**
BRVK pmax pmax
comp=Z,96nm,1.7s
BRVK MLR MLR
comp=Z,13μm,24.0s
**BVAR Borovoye Array 55.15 335** P P **21 24 34.4 0.0**
comp=Z,50nm,1.0s,baz=30,slow=7.2,SNR=34
BVAR LR LR 21 49 35.5
comp=Z,7μm,21.7s,baz=20,slow=38
comp=Z,50nm,1.0s
**RGN Rugen 55.17 16** *e*P P **21 24 35.1 +0.7**
**DGZ Jazzator, Alta 55.20 322** *d i*P P **21 24 35.2 +0.2**
DGZ pmax pmax
comp=Z,25nm,1.1s
DGZ MLR MLR
comp=Z,11μm,19.0s
**RSBS Rosebush, Pemb 55.29 29**⇑ *e*P P **21 24 34.9 -0.4**
RSBS IAmb IAmb 21 24 36.9
comp=Z,191nm,1.4s
**BSEG Bad Segeberg 55.47 18** *e*P P **21 24 37.5 +0.9**
comp=Z,451nm,2.2s,baz=351,slow=7.0
**DL2 Dalian 55.50 289** P P **21 24 36.8 -0.2**
DL2 S **S** **21 32 17.8 -4.0**
DL2 pmax pmax
comp=Z,100nm,1.0s
DL2 pmax pmax
comp=Z,1μm,6.8s
DL2 LR LR
comp=Z,30μm,18.4s
DL2 LR LR
comp=Z,29μm,18.1s
DL2 LR LR
comp=Z,25μm,15.3s
**OBN Obninsk 55.66 359** P P **21 24 37.8 -0.1**
OBN IAmb IAmb 21 24 44.2
comp=Z,261nm,1.2s
**OBN Obninsk 55.66 359** ⇓P P **21 24 38.9 +1.0**
**OBN Obninsk 55.66 359** *d i*P P **21 24 37.5 -0.4**
OBN *e* 21 25 39.1
OBN *e* 21 26 44.4
OBN *e*PPP PPP 21 27 52.9
OBN *i*S **S** **21 32 17.5 -6.0**
OBN pmax pmax
comp=Z,138nm,1.0s
OBN MLR MLR
comp=Z,5μm,21.0s
**MONM Monmouth 55.73 28** *e*P P **21 24 38.2 -0.3**
MONM IAmb IAmb 21 24 42.9
comp=Z,187nm,0.9s
**TJN Taejon 55.85 283** P P **21 24 40.2 +0.7**
**TJN Taejon 55.85 283** *ce*P P **21 24 40.3 +0.7**
**OLDB Oldbury-Upon-S 55.94 28**⇑ *e*P P **21 24 39.9 -0.1**
OLDB IAmb IAmb 21 24 44.3
comp=Z,118nm,0.9s
**JMN Monobe 55.98 276** P P **21 24 41.7 +1.1**

**JMN Monobe 55.98 276** IAmb IAmb 21 24 48.4
comp=Z,153nm,1.1s

**KURK Kurchatov 56.02 328** P **P** **21 24 40.2 -0.3**
**KURK Kurchatov 56.02 328** P **P** **21 24 40.8 +0.3**
KURK P **P** **21 24 40.8 +0.3**
KURK P **P** **21 24 40.8 +0.3**
KURK S **S** **21 32 28.4 +0.1**
KURK S **S** **21 32 28.4 +0.1**
KURK S **S** **21 32 28.4 +0.1**
**KURK Kurchatov 56.02 328** *ceP* **P** **21 24 40.1 -0.4**
KURK pmax pmax
comp=Z,152nm,1.3s
KURK MLR MLR
comp=Z,8µm,20.0s

**ELMS Elmsett, Ipswi 56.08 25** *e*P **P** **21 24 41.0 0.0**
ELMS IAmb IAmb 21 24 45.0
comp=Z,140nm,0.7s

**KURBB Kurchatov Arra 56.12 329** P **P** **21 24 41.5 +0.2**
comp=Z,98nm,1.0s,baz=12,slow=7.2,SNR=158
KURBB ScP **ScP** **21 29 38.5 +0.6**
comp=Z,5.0nm,0.9s,baz=20,slow=5.4,SNR=2.2
KURBB LR LR 21 51 28.8
comp=Z,6µm,19.9s,baz=29,slow=39
comp=Z,98nm,1.0s

**MNK Minsk 56.15 5** *i* P **P** **21 24 42.1 +0.6**
MNK *i* 21 25 36.6
MNK *i* 21 26 44.4
MNK *i* PPP PPP 21 27 58.4
MNK *i* S **S** **21 32 29.4 -0.7**
MNK *i* 21 34 28.4
MNK *i* SS **SS** **21 36 17.3 +1.9**
MNK pmax pmax
comp=E,123nm,0.9s
MNK pmax pmax
comp=Z,296nm,1.0s
MNK pmax pmax
comp=N,68nm,0.9s
MNK MLR MLR
comp=N,3µm,18.0s
MNK MLR MLR
comp=Z,5µm,17.0s
MNK MLR MLR
comp=E,4µm,17.0s

**SWN1 Swindon 56.21 27**⇑ *e*P **P** **21 24 42.5 +0.6**
SWN1 IAmb IAmb 21 24 47.1
comp=Z,243nm,0.9s

**BJI Beijing 56.26 294** P **P** **21 24 42.3 -0.1**
BJI pP **pP** **21 24 45.5 -0.1**
BJI S **S** **21 32 30.5 -1.3**
BJI pmax pmax
comp=Z,460nm,3.9s
BJI LR LR
comp=Z,8µm,19.3s
BJI LR LR
comp=Z,9µm,16.0s
BJI LR LR
comp=Z,11µm,17.2s

**HTL Hartland 56.26 29** *e*P **P** **21 24 41.9 -0.3**
HTL IAmb IAmb 21 24 46.8
comp=Z,135nm,1.0s

**BJT Baijiatuan 56.28 294** P **P** **21 24 42.7 +0.1**
**SUW Suwalki 56.44 9** *e*P **P** **21 24 42.9 -0.6**
SUW *e*S **S** **21 32 32.1 -1.8**
SUW *e*L L 21 40 52.3
comp=Z,19µm,34.5s

**SUW Suwalki 56.44 9** *e*P **P** **21 24 43.2 -0.3**
**BBSR BB Station 56.49 87** P **P** **21 24 43.4 -0.7**
**BBSR BB Station 56.49 87** IAMs_20 IAMs_20 21 46 40.9
comp=Z,10µm,21.0s

**GORT1 Trebel 56.51 17** *e*P **P** **21 24 45.1 +1.1**
comp=Z,212nm,1.4s,baz=351,slow=7.0
GORT1 *e*pP **sP** **21 24 48.6 +0.2**
baz=351,slow=7.0

**RETH Rethem/Aller, 56.54 19** *e*P **P** **21 24 45.2 +1.0**
comp=Z,99nm,1.2s,baz=351,slow=7.0
RETH *e*pP **sP** **21 24 48.8 +0.1**
baz=351,slow=7.0

**GKP Gorka Klasztor 56.78 13** *e*P **P** **21 24 46.2 +0.3**
GKP *e*S **S** **21 32 40.0 +1.6**
GKP *e*L L 21 42 48.4
comp=Z,22nm,22.3s

**GKP Gorka Klasztor 56.78 13** *e*P **P** **21 24 45.8 -0.2**
**IBBN Ibbenburen 56.78 20** *e*P **P** **21 24 47.0 +1.0**
comp=Z,247nm,1.1s,baz=351,slow=7.0
IBBN *e*pP **sP** **21 24 50.8 +0.3**
baz=351,slow=7.0

**JTU Tsushima 56.82 280** P **P** **21 24 47.1 +0.6**
**NRDL Niedersach Rie 56.87 18** *e*P **P** **21 24 47.4 +0.9**
comp=Z,129nm,1.0s,baz=351,slow=7.0
NRDL *e*pP **sP** **21 24 51.0 0.0**
baz=351,slow=7.0

**DYA Yadsworthy 56.90 29** *e*P **P** **21 24 46.1 -0.7**
**CCA1 Carnmenellis 56.91 30**⇑ *e*P **P** **21 24 46.9 0.0**
CCA1 IAmb IAmb 21 24 51.2
comp=Z,125nm,0.9s

**HHC Hu-ho-hao-te 56.97 299** ⇓P **P** **21 24 47.2 -0.4**
HHC pP sP 21 24 52.1 0.0
HHC sP pP 21 24 55.3 +4.4
HHC S **S** **21 32 38.9 -2.6**
HHC sS sS 21 32 48.8 +1.8
HHC pmax pmax
comp=Z,26nm,1.0s
HHC pmax pmax
comp=Z,350nm,6.1s
HHC LR LR
comp=Z,18µm,15.5s
HHC LR LR
comp=Z,6µm,13.1s
HHC LR LR
comp=Z,22µm,13.5s

**ELSH Elham, Standar 57.02 25** *e*P **P** **21 24 47.5 -0.1**
ELSH IAmb IAmb 21 24 52.6
comp=Z,234nm,1.0s

**FLTG Flechtingen 57.15 18** *e*P **P** **21 24 48.8 +0.2**
comp=Z,65nm,1.0s,baz=351,slow=7.0
FLTG *e*pP **sP** **21 24 52.5 -0.6**
baz=351,slow=7.0

**RUE Ruedersdorf 57.26 16** *e*P **P** **21 24 47.9 -1.5**
**RUE Ruedersdorf 57.26 16** *e*P **P** **21 24 50.3 +1.0**
comp=Z,190nm,1.1s,baz=351,slow=7.0
RUE *e*pP **sP** **21 24 53.9 +0.1**
baz=351,slow=7.0

**CLZ Clausthal 57.54 18** *e*P **P** **21 24 52.5 +1.1**
comp=Z,167nm,1.0s,baz=351,slow=7.0
CLZ *e*pP **sP** **21 24 56.1 +0.2**
baz=351,slow=7.0

**BUG Bochum–Univer 57.57 21** *e*P **P** **21 24 52.2 +0.6**
comp=Z,87nm,0.8s,baz=351,slow=7.0
BUG *e*pP **sP** **21 24 55.9 -0.1**
comp=Z,113nm,0.9s,baz=351,slow=7.0

**JNU Nakatsue 57.58 278** P **P** **21 24 51.5 -0.4**
**JNU Nakatsue 57.58 278** P **P** **21 24 51.7 -0.3**
comp=Z,50nm,0.8s,baz=34,slow=7.4,SNR=18
JNU LR LR 21 50 12.7
comp=Z,10µm,19.7s,baz=37,slow=37
comp=Z,50nm,0.8s

**BTO Baotou 57.67 300** *e*P **P** **21 24 51.9 -0.7**
BTO pP **sP** **21 24 56.6 -0.5**
BTO sP **pP** **21 24 59.1 +3.3**
BTO PP **PP** **21 27 00.8 +0.8**
BTO S **S** **21 32 50.0 -0.7**
BTO sS **sS** **21 32 57.7 +1.6**
BTO SS **SS** **21 36 36.9 -3.2**
BTO pmax pmax
comp=Z,80nm,1.4s
BTO pmax pmax
comp=Z,2µm,6.8s
BTO LR LR
comp=Z,42µm,20.0s
BTO LR LR
comp=Z,42µm,15.1s
BTO LR LR
comp=Z,48µm,19.2s

**GTTG Gottingen 57.79 19** *e*P **P** **21 24 54.5 +1.4**
comp=Z,342nm,1.1s,baz=351,slow=7.0
GTTG *e*pP **sP** **21 24 58.0 +0.4**
comp=Z,143nm,0.9s,baz=351,slow=7.0

**ZSN Zaisan 57.89 323** *e*P **P** **21 24 53.9 0.0**
comp=Z,54nm,1.1s,baz=323
ZSN *e*S **S** **21 32 54.0 +0.7**
baz=323

**ZSN Zaisan 57.89 323** *e*P **P** **21 24 53.9 0.0**
ZSN *e*S **S** **21 32 53.9 +0.7**
ZSN pmax pmax
comp=Z,54nm,1.1s

**KASTN Kahler Asten 57.94 20** *e*P **P** **21 24 55.1 +0.8**
comp=Z,68nm,0.9s,baz=351,slow=7.0
KASTN *e*pP **sP** **21 24 58.7 0.0**
comp=Z,88nm,1.0s,baz=351,slow=7.0

**BEBN Eben Emael 58.00 22** *d*P **P** **21 24 54.6 0.0**
comp=Z,90nm,1.0s

**BELG Belogornoye 58.08 351** LR LR 21 53 33.0
comp=Z,2µm,18.4s,baz=8.4,slow=40

**BELG Belogornoye 58.08 351** *d* P **P** **21 24 55.0 -0.1**
BELG pmax pmax
comp=Z,20nm,0.9s
BELG MLR MLR
comp=Z,752nm,17.0s

**LPSR Galich'ya Gora 58.16 358** *e*P **P** **21 24 55.1 -0.6**
LPSR pmax pmax
comp=Z,250nm,1.0s
LPSR MLR MLR
comp=Z,5µm,18.0s

**BSTI Sart Tilman 58.19 22** *d*P **P** **21 24 56.7 +0.7**
comp=Z,49nm,0.9s

**MEM Membach 58.23 22** *d*P **P** **21 24 56.8 +0.6**
comp=Z,181nm,0.9s

**BTNL Ternell 58.27 22** *d*P **P** **21 24 57.0 +0.5**
comp=Z,180nm,0.9s

**NEUB Neuenburg 58.32 17** *e*P **P** **21 24 57.6 +0.8**
comp=Z,123nm,0.9s,baz=351,slow=7.0
NEUB *e*pP **sP** **21 25 01.1 -0.2**
comp=Z,141nm,0.9s,baz=351,slow=7.0

**BCLA Clavier 58.32 22** *d*P **P** **21 24 57.1 +0.3**
comp=Z,63nm,0.9s

**BGES Gesves 58.33 22** *d*P **P** **21 24 57.1 +0.3**
comp=Z,60nm,0.9s

**CLL Collm 58.34 16** *i* P **P** **21 24 56.8 -0.2**
comp=Z,102nm,1.0s
CLL *e*Pmax 21 25 00.0
CLL *e*S **S** **21 32 59.0 0.0**
CLL *e*SS **SS** **21 36 54.0 +4.0**
CLL AMS AMS 21 50 00.0
CLL *i* PKPPKPdf **P'P'df** **21 54 43.1 +0.3**
CLL *i* PKPPKPbc **P'P'bc** **21 54 48.9 -5.1**
comp=Z,10.0nm,1.3s
CLL R2 23 25 00.0
CLL R2 00 00 00.0
comp=N,300nm,22.6s
CLL R2 00 00 00.0
comp=E,200nm,21.5s
CLL R2 00 00 00.0
comp=Z,400nm,21.2s
CLL R2 00 11 00.0

**CLL Collm 58.34 16** *i* P **P** **21 24 56.8 -0.2**
CLL *e*S **S** **21 32 59.0 0.0**
CLL pmax pmax
comp=Z,102nm,1.0s
CLL MLR MLR
comp=Z,9µm,26.3s

**CLL Collm 58.34 16** *e*P **P** **21 24 57.3 +0.3**
comp=Z,61nm,0.8s,baz=351,slow=7.0
CLL *e*pP **sP** **21 25 01.0 -0.5**
comp=Z,86nm,0.9s,baz=351,slow=7.0

**BMRD Maredsous 58.36 23** *d*P **P** **21 24 57.0 -0.1**
comp=Z,59nm,0.9s

**AHRW Bad Neuenahr-A 58.43 21** *e*P **P** **21 24 58.5 +0.9**
comp=Z,91nm,0.8s,baz=351,slow=7.0
AHRW *e*pP **sP** **21 25 02.3 +0.2**
comp=Z,124nm,1.0s,baz=351,slow=7.0

**BEL Belsk 58.46 11** *e*P **P** **21 24 57.8 0.0**
BEL *e*S **S** **21 33 00.6 0.0**
BEL *e*L L 21 41 42.8
comp=Z,45µm,36.3s

**BHOU Houvegnez 58.48 22** *d*P **P** **21 24 58.6 +0.6**
comp=Z,37nm,1.3s

**UBBA Unterbreizbach 58.51 19** *e*P **P** **21 24 58.7 +0.6**
comp=Z,30nm,0.6s,baz=351,slow=7.0
UBBA *e*pP **sP** **21 25 02.5 0.0**
comp=Z,69nm,1.0s,baz=351,slow=7.0

**BAIF Baives 58.52 23** *e*P **P** **21 24 58.0 -0.3**
**DOU Dourbes 58.54 23** *d*P **P** **21 24 58.7 +0.3**
comp=Z,39nm,1.0s

**GIVF Givet 58.56 23** *e*P **P** **21 24 58.1 -0.5**
**RCHB Rochefort 58.57 22** *d*P **P** **21 24 58.9 +0.3**
comp=Z,90nm,0.9s

**MOX Moxa 58.86 18** *e*P **P** **21 25 01.2 +0.5**
comp=Z,36nm,0.8s,baz=351,slow=7.0
MOX *e*pP **sP** **21 25 05.0 -0.1**
comp=Z,62nm,1.0s,baz=351,slow=7.0
MOX *e*L L 21 59 33.6
comp=Z,5µm,18.5s

**MOX Moxa 58.86 18** *e*L L 21 59 33.7
comp=Z,5µm,18.5s

**BRG Berggiesshubel 58.87 16** *i* P **P** **21 25 00.9 +0.3**
BRG Amp 21 25 02.4
comp=Z,53nm,1.1s

**BRG Berggiesshubel 58.87 16** P **P** **21 25 05.2 +4.5**
BRG Amp 21 25 06.1
comp=Z,75nm,0.9s

**BRG Berggiesshubel 58.87 16** S **S** **21 33 07.0 +1.2**
**BRG Berggiesshubel 58.87 16** *e*P **P** **21 25 01.2 +0.6**
comp=Z,49nm,0.8s,baz=351,slow=7.0
BRG *e*pP **sP** **21 25 04.9 -0.2**
comp=Z,75nm,0.9s,baz=351,slow=7.0

**TNS Taunus Mts 58.91 20** *e*P **P** **21 25 01.8 +0.8**
comp=Z,56nm,0.8s,baz=351,slow=7.0
TNS *e*pP **sP** **21 25 05.7 +0.1**
comp=Z,85nm,0.9s,baz=351,slow=7.0

**TLIG Tlapa 59.02 127** IAmb IAmb 21 25 09.6
comp=Z,295nm,1.9s

**ROSF Rostrenen 59.04 29** *e*P **P** **21 25 01.2 -0.7**
**MK31 Makanchi Array 59.05 324** *de*P **P** **21 25 00.9 -1.2**
**MKAR Makanchi Array 59.05 324** P **P** **21 25 01.0 -1.1**
**MKAR Makanchi Array 59.05 324** P **P** **21 25 01.7 -0.4**
comp=Z,9.2nm,0.5s,baz=21,slow=6.0,SNR=88
MKAR LR LR 21 53 50.3
comp=Z,8µm,19.1s,baz=18,slow=40
MKAR PKP2bc 21 54 48.4
comp=Z,1.6nm,1.0s,baz=198,slow=2.9,SNR=4.0
comp=Z,9.2nm,0.5s

**MKAR Makanchi Array 59.05 324** *i* P **P** **21 25 01.2 -0.9**
MKAR pmax pmax
comp=Z,9.0nm,0.4s

**PLN Plauen 59.07 17** *e*P **P** **21 25 02.7 +0.6**
baz=351,slow=7.0
PLN *e*pP **sP** **21 25 06.5 -0.1**
comp=Z,74nm,1.0s,baz=351,slow=7.0

**HSKC Hora Svate Kat 59.08 16** *e*P **P** **21 25 02.9 +0.7**
HSKC *e*S **S** **21 33 09.1 +0.4**
HSKC AMS AMS 21 50 30.0
comp=Z,9µm,25.6s

**VORR Voronezh 59.09 357** *e*P **P** **21 25 01.2 -0.9**
VORR pmax pmax
comp=Z,40nm,0.4s
VORR MLR MLR
comp=Z,3µm,14.0s

**JCJ Chichijima 59.10 265** P **P** **21 25 01.9 -0.6**
comp=Z,294nm,0.8s,baz=253,slow=3.9,SNR=7.4
JCJ LR LR 21 50 52.3
comp=Z,3µm,21.8s,baz=356,slow=36
comp=Z,294nm,0.8s

**MAKZ Makanchi 59.10 325** P **P** **21 25 01.4 -0.9**
MAKZ IAMs_20 IAMs_20 21 53 13.3
comp=Z,8µm,19.0s

**MAKZ Makanchi 59.10 325** P **P** **21 25 01.5 -0.9**
MAKZ pmax pmax
comp=Z,277nm,1.2s
MAKZ MLR MLR
comp=Z,8µm,19.0s

**KSP Ksiaz 59.11 14** *e*P **P** **21 25 02.4 0.0**
KSP *e*S **S** **21 33 09.4 +0.4**
KSP *e*L L 21 41 12.3
comp=Z,11µm,44.6s

**HNS HongShan 59.13 294** ⇓P **P** **21 25 02.7 +0.1**
HNS S **S** **21 33 09.0 -0.6**
HNS SS **SS** **21 37 03.7 +0.7**
HNS pmax pmax
comp=Z,120nm,1.2s
HNS pmax pmax
comp=Z,1µm,4.7s
HNS LR LR
comp=Z,19µm,14.3s
HNS LR LR
comp=Z,27µm,17.3s
HNS LR LR
comp=Z,21µm,16.7s

**RNPP9 Sopachiv 59.16 7** P **P** **21 25 02.5 -0.2**
**TANN Tannenbergstha 59.17 17** *e*P **P** **21 25 03.5 +0.7**
comp=Z,109nm,1.1s,baz=351,slow=7.0
TANN *e*pP **sP** **21 25 07.3 0.0**
comp=Z,133nm,1.2s,baz=351,slow=7.0

**WLF Walferdange 59.17 22** IAmb IAmb 21 25 08.2
comp=Z,103nm,0.9s
WLF IAMs_20 IAMs_20 21 55 00.6
comp=Z,9µm,20.0s

**WLF Walferdange 59.17 22** *e*P **P** **21 25 03.9 +1.1**
comp=Z,89nm,0.9s,baz=351,slow=7.0
WLF *e*pP **sP** **21 25 07.7 +0.4**
comp=Z,115nm,0.9s,baz=351,slow=7.0

**RICC Richard 59.21 16** *e*S **S** **21 33 10.8 +0.6**
RICC AMS AMS 21 51 00.0
comp=Z,7µm,22.9s

**AKTO Aktyubinsk 59.23 344** LR LR 21 50 52.2
comp=Z,5µm,22.0s,baz=8.0,slow=36

**PVCC Panska Ves 59.27 15** *e*P **P** **21 25 04.3 +0.9**
PVCC *e*S **S** **21 33 12.1 +1.1**
PVCC AMS AMS 21 51 00.0
comp=Z,7µm,23.4s

**PVCC Panska Ves 59.27 15** *e*P **P** **21 25 04.3 +0.9**
PVCC *e*S **S** **21 33 12.1 +1.1**
PVCC MLR MLR
comp=Z,7µm,23.4s

**LDF La Druitiere 59.31 27** *e*P **P** **21 25 02.8 -0.9**
**CHVC Chvalec 59.34 14** *e*P **P** **21 25 04.8 +0.8**
CHVC *e*pP **sP** **21 25 08.3 -0.2**
CHVC *e*S **S** **21 33 12.4 +0.3**
CHVC AMS AMS 21 55 00.0
comp=Z,5µm,19.3s

**CHVC Chvalec 59.34 14** *e*P **P** **21 25 04.8 +0.8**
CHVC *e**PP **sP** **21 25 08.3 -0.2**
CHVC *e*S **S** **21 33 12.4 +0.3**
CHVC MLR MLR
comp=Z,5µm,19.3s

**RNPP5 Staryi Chortor 59.35 7** P **P** **21 25 03.7 -0.3**
**OSTC Ostas 59.39 14** *e*P **P** **21 25 05.2 +0.9**
OSTC *e*S **S** **21 33 13.7 +1.0**
OSTC AMS AMS 22 00 20.0
comp=Z,6µm,16.8s

**OSTC Ostas 59.39 14** *e*P **P** **21 25 05.2 +0.9**
OSTC *e*S **S** **21 33 13.7 +1.0**
OSTC MLR MLR
comp=Z,6µm,16.8s

**UPC Upice 59.42 14** *e*P **P** **21 25 05.3 +0.8**
UPC *e*S **S** **21 33 14.0 +1.0**
UPC AMS AMS 21 55 20.0
comp=Z,5µm,18.4s

**UPC Upice 59.42 14** *e*P **P** **21 25 05.3 +0.8**
UPC *e*S **S** **21 33 14.0 +1.0**
UPC MLR MLR
comp=Z,5µm,18.4s

**TIA Tai'an 59.43 292** P **P** **21 25 04.4 -0.3**
TIA sP PcP 21 25 41.1 -11
TIA S **S** **21 33 14.1 +0.5**
TIA ScS **ScS** **21 35 00.2 +5.5**
**TIA Tai'an 59.43 292** SS SS 21 37 11.6 +3.8
TIA pmax pmax
comp=Z,35nm,2.0s
TIA LR LR
comp=N,18µm,14.1s
TIA LR LR
comp=E,12µm,13.5s
TIA LR LR
comp=Z,22µm,15.1s

**TIA Tai'an 59.43 292** P **P** **21 25 04.5 -0.3**
TIA PcS **PcS** **21 29 55.9 +1.4**
TIA S **S** **21 33 14.2 +0.6**
TIA SS **SS** **21 37 12.3 +4.5**
TIA pmax pmax
comp=Z,46nm,1.2s
TIA LR LR
comp=Z,18µm,21.2s
TIA LR LR
comp=Z,34µm,20.0s
TIA LR LR
comp=Z,25µm,15.4s

**QUIF Quistinic 59.46 29** *e*P **P** **21 25 04.0 -0.8**
**VRH Novokhopyorsk 59.50 356** *e*P **P** **21 25 04.9 -0.1**
VRH *e*S **S** **21 33 07.4 -6.6**
VRH pmax pmax
comp=Z,108nm,1.4s
VRH smax smax
comp=E,2µm,12.6s
VRH MLR MLR
comp=Z,6µm,20.0s

**VSR Storozhevoye 59.54 357** *e*P **P** **21 25 04.3 -1.0**
VSR pmax pmax
comp=Z,220nm,1.1s
VSR MLR MLR
comp=Z,4µm,16.0s

**MANZ Manzenberg 59.56 17** *e*P **P** **21 25 06.1 +0.6**
comp=Z,13nm,1.0s,baz=351,slow=7.0
MANZ *e*pP **sP** **21 25 09.8 -0.2**
comp=Z,13nm,1.1s,baz=351,slow=7.0

**TIY Taiyuan 59.57 296** P **P** **21 25 09.5 +3.7**
TIY S **S** **21 33 15.7 +0.3**
TIY SS **SS** **21 37 16.0 +6.0**
TIY pmax pmax
comp=Z,35nm,0.5s
TIY LR LR
comp=Z,13µm,14.4s
TIY LR LR
comp=Z,21µm,22.7s
TIY LR LR
comp=Z,25µm,17.9s

**DPC Dobruska-Polom 59.60 14** *e*P **P** **21 25 07.0 +1.2**
DPC *e*pP **sP** **21 25 10.4 +0.1**
DPC AMS AMS 21 55 20.0
comp=Z,4µm,19.3s

**DPC Dobruska-Polom 59.60 14** *e*P **P** **21 25 07.0 +1.2**
DPC *e**PP **sP** **21 25 10.4 +0.1**
DPC MLR MLR
comp=Z,4µm,19.3s

**TEIG Tepich 59.60 115** P **P** **21 25 06.1 0.0**
TEIG IAmb IAmb 21 25 10.6
comp=Z,201nm,1.2s
TEIG IAMs_20 IAMs_20 21 50 03.9
comp=Z,8µm,20.0s

**TEIG Tepich 59.60 115** LR LR 21 54 01.6
comp=Z,6µm,18.6s,baz=344,slow=39

**PRA Prague 59.71 16** *e*P **P** **21 25 07.7 +1.2**
PRA *e*pP **sP** **21 25 11.4 +0.4**
PRA *e*S **S** **21 33 18.0 +1.3**
PRA AMS AMS 21 51 10.0
comp=Z,8µm,24.9s

**PRA Prague 59.71 16** *e*P **P** **21 25 07.7 +1.2**
PRA *e**PP **sP** **21 25 11.4 +0.4**
PRA *e*S **S** **21 33 18.0 +1.3**
PRA MLR MLR
comp=Z,8µm,24.9s

**MI28 Mi28,Pidlybu 59.72 6** P **P** **21 25 06.6 +0.1**
**GRA1 Grafenberg Arr 59.75 18** IAmb IAmb 21 25 27.9
comp=Z,127nm,1.2s

**GRF Grafenberg Arr 59.75 18** *e*P **P** **21 25 07.9 +1.1**
baz=351,slow=7.0
GRF *e*pP **sP** **21 25 11.6 +0.3**
comp=Z,100nm,1.1s,baz=351,slow=7.0
GRF *e*L L 21 52 37.3
comp=Z,5µm,21.5s

**GRF Grafenberg Arr 59.75 18** *e*L L 21 52 37.3
comp=Z,5µm,21.5s

**GRFO Grafenberg 59.75 18** P **P** **21 25 06.9 +0.1**
GRFO IAmb IAmb 21 25 27.8
comp=Z,115nm,1.2s

**GRFO Grafenberg 59.75 18** P **P** **21 25 06.9 +0.1**
GRFO pmax pmax
comp=Z,115nm,1.2s
GRFO MLR MLR
comp=Z,5µm,22.0s

**ROTZ Rotzenmuhle 59.78 17** *e*P **P** **21 25 07.6 +0.6**
comp=Z,5.3nm,0.8s,baz=351,slow=7.0
ROTZ *e*pP **sP** **21 25 11.6 +0.1**
comp=Z,9.8nm,1.0s,baz=351,slow=7.0

**VORD Divnogorie 59.79 357** *e*P **P** **21 25 07.2 +0.2**
VORD pmax pmax
comp=Z,210nm,1.2s
VORD MLR MLR
comp=Z,2µm,15.0s

**PRU Pruhonice 59.80 16** *e*P **P** **21 25 07.9 +0.8**
PRU *e*pP **sP** **21 25 11.8 +0.2**
PRU *e*S **S** **21 33 17.8 -0.1**
PRU AMS AMS 21 51 20.0
comp=Z,8µm,25.0s

**PRU Pruhonice 59.80 16** *e*P **P** **21 25 07.9 +0.8**
PRU *e**PP **sP** **21 25 11.8 +0.2**
PRU *e*S **S** **21 33 17.8 -0.1**
PRU MLR MLR
comp=Z,8µm,25.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GOPC** | **GO Pecny, Ondr** | **59.90** | **15** | *e*P | | **P** | **21 25 08.7** | **+0.9** |
| GOPC | | | | AMS | | AMS | 21 51 20.0 | | |
| | comp=Z,7µm,23.5s | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **59.90** | **15** | *e*P | | **P** | **21 25 08.7** | **+0.9** |
| GOPC | | | | MLR | | MLR | | | |
| | comp=Z,7µm,23.5s | | | | | | | | |
| **KRLC** | **Kraliky** | **59.91** | **14** | *e*P | | **P** | **21 25 08.8** | **+0.8** |
| KRLC | | | | *e*S | | **S** | **21 33 20.2** | **+0.7** |
| KRLC | | | | AMS | | AMS | 21 55 00.0 | | |
| | comp=Z,3µm,19.4s | | | | | | | | |
| **KRLC** | **Kraliky** | **59.91** | **14** | *e*P | | **P** | **21 25 08.8** | **+0.8** |
| KRLC | | | | *e*S | | **S** | **21 33 20.2** | **+0.7** |
| KRLC | | | | MLR | | MLR | | | |
| | comp=Z,3µm,19.4s | | | | | | | | |
| **AK21** | **Malin Array Si** | **59.91** | **5** | P | | **P** | **21 25 07.5** | **-0.4** |
| **MI30** | **MI30,Zelenitsa** | **59.92** | **5** | P | | **P** | **21 25 07.9** | **0.0** |
| **AKASG** | **Malin Array Be** | **59.99** | **5** | P | | **P** | **21 25 08.0** | **-0.4** |
| **AKASG** | **Malin Array Be** | **59.99** | **5** | P | | **P** | **21 25 08.2** | **-0.2** |
| | comp=Z,48nm,0.5s,baz=358,slow=6.8,SNR=131 | | | | | | | | |
| | comp=Z,48nm,0.5s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **59.99** | **5** | *c*eP | | **P** | **21 25 06.1** | **-2.3** |
| AKBB | | | | pmax | | pmax | | | |
| | comp=Z,247nm,1.0s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **59.99** | **5** | P | | **P** | **21 25 08.3** | **-0.1** |
| **AK15** | **Malin Array Si** | **60.00** | **5** | P | | **P** | **21 25 08.3** | **-0.2** |
| **KIEV** | **Kiev** | **60.00** | **5** | P | | **P** | **21 25 08.1** | **-0.3** |
| **KIEV** | **Kiev** | **60.00** | **5** | *i* P | | **P** | **21 25 07.9** | **-0.5** |
| | SNR=115 | | | | | | | | |
| **KIEV** | **Kiev** | **60.00** | **5** | ⇓P | | **P** | **21 25 08.8** | **+0.4** |
| **KIEV** | **Kiev** | **60.00** | **5** | P | | **P** | **21 25 08.1** | **-0.3** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,212nm,0.9s | | | | | | | | |
| KIEV | | | | MLR | | MLR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **OJC** | **Ojcow** | **60.01** | **12** | *e*P | | **P** | **21 25 08.6** | **0.0** |
| OJC | | | | *e*S | | **S** | **21 33 19.1** | **-1.4** |
| OJC | | | | *e*L | | L | 21 42 32.6 | | |
| | comp=Z,17µm,32.1s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **60.19** | **342** | P | | **P** | **21 25 10.0** | **+0.1** |
| **ABKAR** | **Akbulak array** | **60.19** | **342** | IAmb | | IAmb | 21 25 16.1 | | |
| | comp=Z,98nm,1.1s | | | | | | | | |
| **CLF** | **Chambon-Foret** | **60.23** | **25** | IAMs_20 | | IAMs_20 | 21 54 34.6 | | |
| | comp=Z,9µm,21.0s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **60.26** | **13** | *e*P | | **P** | **21 25 11.3** | **+1.0** |
| OKC | | | | *ep*P | | **sP** | **21 25 14.5** | **-0.3** |
| OKC | | | | *e*S | | **S** | **21 33 24.7** | **+0.9** |
| OKC | | | | AMS | | AMS | 21 55 30.0 | | |
| | comp=Z,4µm,15.5s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **60.26** | **13** | *e*P | | **P** | **21 25 11.3** | **+1.0** |
| OKC | | | | *e**PP | | **sP** | **21 25 14.5** | **-0.3** |
| OKC | | | | *e*S | | **S** | **21 33 24.7** | **+0.9** |
| OKC | | | | MLR | | MLR | | | |
| | comp=Z,4µm,15.5s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **60.27** | **13** | IAmb | | IAmb | 21 25 16.9 | | |
| | comp=Z,120nm,1.3s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **60.27** | **13** | *e*P | | **P** | **21 25 10.7** | **+0.3** |
| MORC | | | | *e*S | | **S** | **21 33 24.3** | **+0.2** |
| **MORC** | **Moravsky Berou** | **60.27** | **13** | ⇓P | | **P** | **21 25 11.3** | **+0.9** |
| **MORC** | **Moravsky Berou** | **60.27** | **13** | P | | **P** | **21 25 11.3** | **+0.9** |
| **ZVC** | **Zvikov** | **60.31** | **16** | *e*S | | **S** | **21 33 25.8** | **+1.3** |
| ZVC | | | | AMS | | AMS | 21 51 40.0 | | |
| | comp=Z,7µm,22.5s | | | | | | | | |
| **STU** | **Stuttgart** | **60.43** | **20** | IAmb | | IAmb | 21 25 18.1 | | |
| | comp=Z,91nm,1.0s | | | | | | | | |
| **STU** | **Stuttgart** | **60.43** | **20** | *e*P | | **P** | **21 25 12.8** | **+1.4** |
| | comp=Z,87nm,0.6s,baz=351,slow=7.0 | | | | | | | | |
| STU | | | | *ep*P | | **sP** | **21 25 16.7** | **+0.8** |
| | comp=Z,224nm,1.0s,baz=351,slow=7.0 | | | | | | | | |
| **WET** | **Wettzell** | **60.47** | **17** | *e*P | | **P** | **21 25 12.8** | **+1.1** |
| | comp=Z,44nm,0.9s,baz=351,slow=7.0 | | | | | | | | |
| WET | | | | *ep*P | | **sP** | **21 25 16.8** | **+0.5** |
| | comp=Z,80nm,1.1s,baz=351,slow=7.0 | | | | | | | | |
| **CMIG** | **Matias Romero** | **60.53** | **123** | LR | | LR | 21 52 40.6 | | |
| | comp=Z,4µm,18.9s,baz=315,slow=37 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **60.55** | **16** | IAmb | | IAmb | 21 25 20.3 | | |
| | comp=Z,148nm,1.2s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **60.55** | **16** | *e*P | | **P** | **21 25 13.5** | **+1.1** |
| KHC | | | | *ep*P | | **sP** | **21 25 17.2** | **+0.3** |
| KHC | | | | *ex* | | x | 21 25 33.5 | | |
| KHC | | | | *e*S | | **S** | **21 33 28.5** | **+0.8** |
| KHC | | | | AMS | | AMS | 21 51 10.0 | | |
| | comp=Z,9µm,24.2s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **60.55** | **16** | *e*P | | **P** | **21 25 13.5** | **+1.1** |
| KHC | | | | *e**PP | | **sP** | **21 25 17.2** | **+0.3** |
| KHC | | | | *e*S | | **S** | **21 33 28.5** | **+0.8** |
| KHC | | | | MLR | | MLR | | | |
| | comp=Z,9µm,24.2s | | | | | | | | |
| **TREC** | **Trest** | **60.57** | **15** | AMS | | AMS | 21 51 50.0 | | |
| | comp=Z,9µm,22.4s | | | | | | | | |
| **VRAC** | **Vranov** | **60.66** | **14** | *e*P | | **P** | **21 25 13.8** | **+0.8** |
| VRAC | | | | *e*S | | **S** | **21 33 30.1** | **+1.1** |
| **VRAC** | **Vranov** | **60.66** | **14** | ⇓P | | **P** | **21 25 14.2** | **+1.2** |
| **VRAC** | **Vranov** | **60.66** | **14** | P | | **P** | **21 25 14.2** | **+1.2** |
| **LVV** | **L'vov** | **60.67** | **9** | *e*P | | **P** | **21 25 13.1** | **0.0** |
| LVV | | | | *e* | | | 21 27 26.6 | | |
| LVV | | | | *e*S | | **S** | **21 33 23.8** | **-5.2** |
| LVV | | | | *e*SS | | **SS** | **21 37 30.6** | **+4.2** |
| LVV | | | | MLR | | MLR | | | |
| | comp=Z,4µm,16.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **60.70** | **319** | P | | **P** | **21 25 14.2** | **+0.7** |
| WMQ | | | | pP | | sP | 21 25 18.6 | +0.6 | |
| WMQ | | | | S | | **S** | **21 33 32.3** | **+2.5** |
| WMQ | | | | ScS | | SKKSac | 21 35 03.8 | -0.2 | |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,160nm,1.1s | | | | | | | | |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,690nm,7.7s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,15µm,17.5s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,18µm,20.1s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,11µm,22.7s | | | | | | | | |
| **ECH** | **Echery** | **60.72** | **21** | IAmb | | IAmb | 21 25 20.0 | | |
| | comp=Z,120nm,1.2s | | | | | | | | |
| **BFO** | **Black Forest** | **60.76** | **21** | P | | **P** | **21 25 13.6** | **-0.1** |
| BFO | | | | IAmb | | IAmb | 21 25 21.1 | | |
| | comp=Z,108nm,1.2s | | | | | | | | |
| **BFO** | **Black Forest** | **60.76** | **21** | P | | **P** | **21 25 13.6** | **-0.1** |
| BFO | | | | pmax | | pmax | | | |
| | comp=Z,108nm,1.2s | | | | | | | | |
| **BFO** | **Black Forest** | **60.76** | **21** | *e*P | | **P** | **21 25 14.3** | **+0.6** |
| | comp=Z,56nm,1.0s,baz=351,slow=7.0 | | | | | | | | |
| BFO | | | | *ep*P | | **sP** | **21 25 18.4** | **+0.1** |
| | comp=Z,104nm,1.2s,baz=351,slow=7.0 | | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **60.78** | **10** | *e*P | | **P** | **21 25 14.4** | **+0.5** |
| KWP | | | | *e*S | | **S** | **21 33 30.6** | **+0.1** |
| KWP | | | | *e*L | | L | 21 43 04.2 | | |
| | comp=Z,10µm,33.1s | | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **60.78** | **10** | IAmb | | IAmb | 21 25 20.4 | | |
| | comp=Z,140nm,1.0s | | | | | | | | |
| **KHAM** | **Kharkiv** | **60.79** | **360** | P | | **P** | **21 25 14.5** | **+0.6** |
| **NIE** | **Niedzica** | **60.84** | **11** | *e*P | | **P** | **21 25 14.1** | **-0.2** |
| NIE | | | | *e*S | | **S** | **21 33 30.0** | **-1.3** |
| NIE | | | | *e*L | | L | 21 43 02.4 | | |
| | comp=Z,19µm,33.2s | | | | | | | | |
| **GEC2** | **GERESS Array S** | **60.85** | **16** | IAmb | | IAmb | 21 25 21.8 | | |
| | comp=Z,121nm,1.2s | | | | | | | | |
| **GEC2** | **GERESS Array S** | **60.85** | **16** | *e*P | | **P** | **21 25 15.4** | **+0.9** |
| | comp=Z,47nm,0.8s,baz=351,slow=7.0 | | | | | | | | |
| GEC2 | | | | *ep*P | | **sP** | **21 25 19.0** | **+0.1** |
| | comp=Z,82nm,1.0s,baz=351,slow=7.0 | | | | | | | | |
| **GERES** | **GERESS Array B** | **60.85** | **16** | P | | **P** | **21 25 14.9** | **+0.5** |
| **GERES** | **GERESS Array B** | **60.85** | **16** | P | | **P** | **21 25 15.2** | **+0.7** |
| | comp=Z,42nm,0.9s,baz=20,slow=3.1,SNR=96 | | | | | | | | |
| | comp=Z,42nm,0.9s | | | | | | | | |
| **GERES** | **GERESS Array B** | **60.85** | **16** | P | | **P** | **21 25 14.9** | **+0.5** |
| **KRUC** | **Moravsky** | **60.89** | **14** | *e*P | | **P** | **21 25 15.1** | **+0.5** |
| KRUC | | | | *e*S | | **S** | **21 33 33.6** | **+1.7** |
| **CKRC** | **Cesky Krumlov** | **60.93** | **16** | *e*P | | **P** | **21 25 15.6** | **+0.7** |
| CKRC | | | | *ep*P | | **sP** | **21 25 19.4** | **0.0** |
| CKRC | | | | *e*S | | **S** | **21 33 34.4** | **+1.8** |
| CKRC | | | | AMS | | AMS | 21 51 30.0 | | |
| | comp=Z,7µm,25.3s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **60.93** | **16** | *e*P | | **P** | **21 25 15.6** | **+0.7** |
| CKRC | | | | *e**PP | | **sP** | **21 25 19.4** | **0.0** |
| CKRC | | | | *e*S | | **S** | **21 33 34.4** | **+1.8** |
| CKRC | | | | MLR | | MLR | | | |
| | comp=Z,7µm,25.3s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **61.04** | **12** | *e*P | | **P** | **21 25 17.0** | **+1.3** |
| LANS | | | | pmax | | pmax | | | |
| | comp=Z,31nm,1.2s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **61.04** | **12** | *e*P | | **P** | **21 25 17.0** | **+1.3** |
| **HINF** | **Hinteralfeld** | **61.08** | **22** | *e*P | | **P** | **21 25 15.4** | **-0.5** |
| **JAVC** | **Velka Javorina** | **61.20** | **13** | *e*P | | **P** | **21 25 18.4** | **+1.7** |
| JAVC | | | | *e*S | | **S** | **21 33 39.3** | **+3.4** |
| **FUR** | **Furstenfeldbru** | **61.27** | **18** | *e*P | | **P** | **21 25 18.1** | **+0.9** |
| | comp=Z,116nm,0.9s,baz=351,slow=7.0 | | | | | | | | |
| FUR | | | | *ep*P | | **sP** | **21 25 21.8** | **+0.2** |
| | comp=Z,182nm,1.1s,baz=351,slow=7.0 | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **61.45** | **10** | *e*P | | **P** | **21 25 19.3** | **+0.9** |
| KOLS | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **61.45** | **10** | *e*P | | **P** | **21 25 19.3** | **+0.9** |
| **SMOL** | **Smolenice** | **61.52** | **14** | *e*P | | **P** | **21 25 20.0** | **+1.1** |
| SMOL | | | | pmax | | pmax | | | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **61.54** | **327** | *e*P | | **P** | **21 25 19.4** | **+0.3** |
| | comp=Z,85nm,1.1s,baz=327 | | | | | | | | |
| TDK | | | | *e*S | | **S** | **21 33 41.5** | **+1.1** |
| | baz=327 | | | | | | | | |
| TDK | | | | LR | | LR | 21 54 49.2 | | |
| | comp=Z,5µm,15.8s,baz=327 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **61.54** | **327** | *e*P | | **P** | **21 25 19.4** | **+0.3** |
| TDK | | | | *e*S | | **S** | **21 33 41.5** | **+1.1** |
| TDK | | | | pmax | | pmax | | | |
| | comp=Z,85nm,1.1s | | | | | | | | |
| TDK | | | | MLR | | MLR | | | |
| | comp=Z,5µm,16.0s | | | | | | | | |
| **AVF** | **Avril sur Loir** | **61.60** | **25** | *e*P | | **P** | **21 25 18.8** | **-0.6** |
| **UBR** | **Ueberruh** | **61.61** | **19** | *e*P | | **P** | **21 25 20.4** | **+0.8** |
| | comp=Z,41nm,0.9s,baz=351,slow=7.0 | | | | | | | | |
| UBR | | | | *ep*P | | **sP** | **21 25 24.3** | **+0.2** |
| | comp=Z,71nm,1.1s,baz=351,slow=7.0 | | | | | | | | |
| **VYHS** | **Vyhne** | **61.65** | **13** | *e*P | | **P** | **21 25 20.1** | **+0.3** |
| VYHS | | | | pmax | | pmax | | | |
| | comp=Z,62nm,1.2s | | | | | | | | |
| **VYHS** | **Vyhne** | **61.65** | **13** | *e*P | | **P** | **21 25 20.1** | **+0.3** |
| **GTA** | **Gaotai** | **61.76** | **308** | ⇓P | | **P** | **21 25 20.3** | **-0.5** |
| GTA | | | | sP | | sP | 21 25 26.8 | +1.5 | |
| GTA | | | | S | | **S** | **21 33 45.0** | **+1.5** |
| GTA | | | | SS | | **SS** | **21 37 48.8** | **+4.5** |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,73nm,1.4s | | | | | | | | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,690nm,10.0s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,11µm,16.3s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,11µm,16.7s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,19µm,15.9s | | | | | | | | |
| **KECS** | **Kecovo** | **61.78** | **11** | *e*P | | **P** | **21 25 20.9** | **+0.3** |
| **KECS** | **Kecovo** | **61.78** | **11** | *e*P | | **P** | **21 25 20.9** | **+0.3** |
| **ZST** | **Bratislava** | **61.81** | **14** | *e*P | | **P** | **21 25 21.9** | **+1.1** |
| ZST | | | | pmax | | pmax | | | |
| | comp=Z,276nm,1.3s | | | | | | | | |
| **ZST** | **Bratislava** | **61.81** | **14** | *e*P | | **P** | **21 25 21.9** | **+1.1** |
| **RJOB** | **Jochberg** | **61.85** | **17** | *e*P | | **P** | **21 25 22.2** | **+1.0** |
| | comp=Z,68nm,0.8s,baz=351,slow=7.0 | | | | | | | | |
| RJOB | | | | *ep*P | | **sP** | **21 25 26.0** | **+0.3** |
| | baz=351,slow=7.0 | | | | | | | | |
| **RETA** | **Reutte** | **61.88** | **19** | *ep*P | | **P** | **21 25 21.9** | **+0.5** |
| | comp=Z,32nm,1.1s,SNR=22 | | | | | | | | |
| **MOA** | **Molln** | **61.89** | **16** | *ep*P | | **P** | **21 25 21.5** | **+0.1** |
| | comp=Z,40nm,1.3s,SNR=26 | | | | | | | | |
| **CONA** | **Conrad Observa** | **61.96** | **15** | *ep*P | | **P** | **21 25 22.4** | **+0.4** |
| | comp=Z,119nm,1.6s,SNR=68 | | | | | | | | |
| **DAVA** | **Damuels** | **61.97** | **20** | *ep*P | | **P** | **21 25 22.0** | **-0.2** |
| | comp=Z,32nm,1.2s,SNR=26 | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **61.98** | **17** | *ep*P | | **P** | **21 25 22.1** | **+0.1** |
| | comp=Z,42nm,1.3s,SNR=47 | | | | | | | | |
| **KMPD** | **K-Podol'skiy** | **62.03** | **7** | P | | **P** | **21 25 21.9** | **-0.4** |
| **MOTA** | **Moosalm** | **62.06** | **19** | *i* pP | | **P** | **21 25 23.1** | **+0.4** |
| | comp=Z,41nm,1.1s | | | | | | | | |
| **CCIG** | **Comitan** | **62.11** | **121** | P | | **P** | **21 25 23.4** | **-0.1** |
| **WATA** | **Walderalm** | **62.12** | **18** | *ep*P | | **P** | **21 25 23.4** | **+0.3** |
| | comp=Z,50nm,1.2s,SNR=70 | | | | | | | | |
| **LESA** | **Schwarzleotal** | **62.15** | **17** | *ep*P | | **P** | **21 25 23.6** | **+0.4** |
| | comp=Z,48nm,1.1s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **62.19** | **19** | *ep*P | | **P** | **21 25 23.9** | **+0.4** |
| | comp=Z,55nm,1.2s,SNR=36 | | | | | | | | |
| **WTTA** | **Wattenberg** | **62.20** | **18** | *ep*P | | **P** | **21 25 24.0** | **+0.3** |
| | comp=Z,72nm,1.2s,SNR=60 | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **62.23** | **15** | *ep*P | | **P** | **21 25 24.4** | **+0.7** |
| | comp=Z,72nm,1.3s,SNR=61 | | | | | | | | |
| **PGRA** | **Graciosa** | **62.28** | **52** | *e*P | | P | 21 25 34.4 | +10 | |
| | comp=Z,253nm,2.0s | | | | | | | | |
| **PGRA** | **Graciosa** | **62.28** | **52** | *e*LQ | | LQ | 21 40 55.2 | | |
| PGRA | | | | *e*LR | | LR | 21 44 36.1 | | |
| | comp=Z,4µm,18.3s | | | | | | | | |
| **SRO** | **Srobarova** | **62.28** | **13** | *e*P | | **P** | **21 25 25.2** | **+1.2** |
| SRO | | | | pmax | | pmax | | | |
| | comp=Z,51nm,1.2s | | | | | | | | |
| **SRO** | **Srobarova** | **62.28** | **13** | *e*P | | **P** | **21 25 25.2** | **+1.2** |
| **PSZ** | **Piszkesteto** | **62.30** | **12** | ⇓P | | **P** | **21 25 25.8** | **+1.5** |
| **PSZ** | **Piszkesteto** | **62.30** | **12** | P | | **P** | **21 25 25.7** | **+1.5** |
| **BTLS** | **Baital** | **62.31** | **330** | *e*P | | **P** | **21 25 24.3** | **0.0** |
| | comp=Z,48nm,1.3s,baz=330 | | | | | | | | |
| BTLS | | | | *e*S | | **S** | **21 33 51.2** | **+1.1** |
| | baz=330 | | | | | | | | |
| **BTLS** | **Baital** | **62.31** | **330** | *e*P | | **P** | **21 25 24.2** | **0.0** |
| BTLS | | | | *e*S | | **S** | **21 33 51.1** | **+1.1** |
| BTLS | | | | pmax | | pmax | | | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| **FETA** | **Feichten** | **62.33** | **19** | *ep*P | | **P** | **21 25 25.1** | **+0.6** |
| | comp=Z,32nm,1.4s,SNR=35 | | | | | | | | |
| **DRBR** | **Darabani** | **62.40** | **7** | ⇓P | | **P** | **21 25 24.8** | **+0.1** |
| **ARXS** | **Arharly** | **62.41** | **327** | *i* P | | **P** | **21 25 24.4** | **-0.7** |
| **PCED** | **Cedros** | **62.45** | **53** | *e*P | | **P** | **21 25 25.1** | **-0.1** |
| | comp=Z,143nm,2.6s | | | | | | | | |
| **LYN** | **LuoYang** | **62.46** | **295** | ⇑P | | **P** | **21 25 25.2** | **-0.2** |
| LYN | | | | pP | | sP | 21 25 30.3 | +0.4 | |
| LYN | | | | sP | | pP | 21 25 32.7 | +4.1 | |
| LYN | | | | S | | **S** | **21 33 49.6** | **-2.6** |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,53nm,1.1s | | | | | | | | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,840nm,4.0s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,32µm,18.6s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,34µm,19.2s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,40µm,14.8s | | | | | | | | |
| **ROSA** | **Rosais** | **62.49** | **52** | *e*P | | **P** | **21 25 25.7** | **+0.2** |
| | comp=Z,159nm,1.5s | | | | | | | | |
| **ROSA** | **Rosais** | **62.49** | **52** | *e*LQ | | LQ | 21 41 22.0 | | |
| ROSA | | | | *e*LR | | LR | 21 44 19.7 | | |
| | comp=Z,3µm,20.9s | | | | | | | | |
| **CALA** | **Caldeira** | **62.49** | **53** | *e*LQ | | LQ | 21 41 11.6 | | |
| CALA | | | | *e*LR | | LR | 21 44 57.0 | | |
| | comp=Z,3µm,24.9s | | | | | | | | |
| **SORM** | **Soroca** | **62.53** | **5** | ⇓P | | **P** | **21 25 25.9** | **+0.2** |
| **SORM** | **Soroca** | **62.53** | **5** | P | | **P** | **21 25 25.8** | **+0.2** |
| **KBA** | **Koelnbreinsper** | **62.56** | **17** | *i* pP | | **P** | **21 25 27.0** | **+0.9** |
| | comp=Z,205nm,1.0s,SNR=161 | | | | | | | | |
| **HOR** | **Horta** | **62.56** | **53** | *e*P | | **P** | **21 25 25.6** | **-0.4** |
| | comp=Z,127nm,1.3s | | | | | | | | |
| **ARSA** | **Arzberg** | **62.60** | **15** | *ep*P | | **P** | **21 25 26.7** | **+0.5** |
| | comp=Z,39nm,1.2s,SNR=47 | | | | | | | | |
| **PMAN** | **Manadas** | **62.62** | **52** | *e*P | | **P** | **21 25 26.5** | **+0.2** |
| **PICO** | **Pico** | **62.65** | **53** | *e*P | | **P** | **21 25 26.2** | **-0.4** |
| | comp=Z,119nm,1.6s | | | | | | | | |
| **PICO** | **Pico** | **62.65** | **53** | *e*LQ | | LQ | 21 41 20.5 | | |
| PICO | | | | *e*LR | | LR | 21 44 40.6 | | |
| | comp=Z,3µm,20.9s | | | | | | | | |
| **PCAN** | **Candelaria** | **62.66** | **53** | *e*P | | **P** | **21 25 26.4** | **-0.3** |
| | comp=Z,108nm,1.2s | | | | | | | | |
| **NJ2** | **Nanjing** | **62.67** | **288** | ⇓P | | **P** | **21 25 26.6** | **-0.2** |
| NJ2 | | | | pP | | **sP** | **21 25 32.0** | **+0.7** |
| NJ2 | | | | sP | | **pP** | **21 25 34.6** | **+4.6** |
| NJ2 | | | | S | | **S** | **21 33 53.9** | **-0.9** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,100nm,0.9s | | | | | | | | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,1µm,3.7s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,10µm,14.9s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,17µm,14.1s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,20µm,16.5s | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **62.67** | **19** | IAmb | | IAmb | 21 25 34.2 | | |
| | comp=Z,96nm,1.0s | | | | | | | | |
| **PSBA** | **Serra de Santa** | **62.70** | **52** | *e*P | | **P** | **21 25 26.8** | **-0.2** |
| | comp=Z,119nm,1.4s | | | | | | | | |
| **PPNO** | **Prainha do Nor** | **62.72** | **52** | *e*P | | **P** | **21 25 27.3** | **+0.2** |
| | comp=Z,66nm,0.8s | | | | | | | | |
| **PAGU** | **Agualva, Azore** | **62.74** | **51** | *e*P | | **P** | **21 25 27.5** | **+0.3** |
| | comp=Z,123nm,2.0s | | | | | | | | |
| **PAGU** | **Agualva, Azore** | **62.74** | **51** | *e*LR | | LR | 21 44 40.6 | | |
| | comp=Z,3µm,22.3s | | | | | | | | |
| **SSE** | **Sheshan** | **62.76** | **286** | P | | **P** | **21 25 26.6** | **-0.8** |
| SSE | | | | S | | **S** | **21 33 54.6** | **-1.4** |
| SSE | | | | pmax | | pmax | | | |
| | comp=Z,110nm,0.9s | | | | | | | | |
| SSE | | | | pmax | | pmax | | | |
| | comp=Z,780nm,4.6s | | | | | | | | |
| SSE | | | | LR | | LR | | | |
| | comp=Z,6µm,15.8s | | | | | | | | |
| SSE | | | | LR | | LR | | | |
| | comp=Z,10µm,14.8s | | | | | | | | |
| **BMR** | **Baia Mare** | **62.78** | **9** | ⇓P | | **P** | **21 25 28.5** | **+1.2** |
| **BMR** | **Baia Mare** | **62.78** | **9** | P | | **P** | **21 25 28.5** | **+1.2** |
| **PID** | **Ribeirinha** | **62.78** | **52** | *e*P | | P | 21 25 34.9 | +7.4 | |
| | comp=Z,149nm,1.6s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **62.80** | **18** | *ep*P | | **P** | **21 25 27.9** | **+0.3** |
| | comp=Z,31nm,0.9s,SNR=53 | | | | | | | | |
| **CHKK** | **Chushkaly** | **62.92** | **328** | *e*P | | **P** | **21 25 28.5** | **+0.2** |
| | baz=327 | | | | | | | | |
| **CHKK** | **Chushkaly** | **62.92** | **328** | *e*P | | **P** | **21 25 28.5** | **+0.2** |
| **BURAR** | **Bucovina Array** | **62.92** | **8** | P | | **P** | **21 25 28.6** | **+0.2** |
| **BURAR** | **Bucovina Array** | **62.92** | **8** | ⇑P | | **P** | **21 25 29.2** | **+0.8** |
| **LTVH** | **Ltavrtes, Hu** | **62.97** | **10** | ⇑P | | **P** | **21 25 29.0** | **+0.4** |
| **MYKA** | **Terra Mystica** | **63.03** | **17** | *ep*P | | **P** | **21 25 29.4** | **+0.2** |
| | comp=Z,52nm,1.3s,SNR=72 | | | | | | | | |
| **SHLS** | **Shalkode** | **63.11** | **325** | *e*P | | **P** | **21 25 29.6** | **-0.2** |
| | comp=Z,93nm,1.1s,baz=325 | | | | | | | | |
| SHLS | | | | *e*S | | **S** | **21 34 00.2** | **-0.2** |
| | baz=325 | | | | | | | | |
| **SHLS** | **Shalkode** | **63.11** | **325** | *e*P | | **P** | **21 25 29.6** | **-0.2** |
| SHLS | | | | *e*S | | **S** | **21 34 00.2** | **-0.2** |
| SHLS | | | | pmax | | pmax | | | |
| | comp=Z,93nm,1.1s | | | | | | | | |
| **SOKA** | **Soboth** | **63.12** | **16** | *ep*P | | **P** | **21 25 29.9** | **+0.2** |
| | comp=Z,48nm,1.3s,SNR=66 | | | | | | | | |
| **UZB** | **Uzynbulak** | **63.21** | **326** | *e*P | | **P** | **21 25 30.6** | **+0.1** |
| | comp=Z,66nm,1.1s,baz=326 | | | | | | | | |
| UZB | | | | *e*S | | **S** | **21 34 02.8** | **+1.1** |
| | baz=326 | | | | | | | | |
| **UZB** | **Uzynbulak** | **63.21** | **326** | *e*P | | **P** | **21 25 30.5** | **+0.1** |
| UZB | | | | *e*S | | **S** | **21 34 02.8** | **+1.1** |
| UZB | | | | pmax | | pmax | | | |
| | comp=Z,66nm,1.1s | | | | | | | | |
| **PRAR** | **RASCA** | **63.22** | **7** | ⇓P | | **P** | **21 25 30.6** | **+0.3** |
| **OBKA** | **Obir** | **63.24** | **16** | *ep*P | | **P** | **21 25 30.7** | **+0.2** |
| | comp=Z,124nm,1.1s,SNR=178 | | | | | | | | |
| **OBKA** | **Obir** | **63.24** | **16** | ⇑ *i* P | | **P** | **21 25 31.1** | **+0.5** |
| **SSB** | **Saint Sauveur** | **63.25** | **24** | IAmb | | IAmb | 21 25 35.6 | | |
| | comp=Z,77nm,1.0s | | | | | | | | |
| **BORR** | **Bors** | **63.26** | **11** | ⇑P | | **P** | **21 25 32.8** | **+2.4** |
| **MESR** | **Meseseni** | **63.27** | **10** | ⇓P | | **P** | **21 25 32.2** | **+1.6** |
| **ZHN** | **Zhinishke** | **63.30** | **326** | *e*P | | **P** | **21 25 31.2** | **+0.1** |
| | baz=326 | | | | | | | | |
| **ZHN** | **Zhinishke** | **63.30** | **326** | *e*P | | **P** | **21 25 31.1** | **+0.1** |
| **LPL** | **La Plagne** | **63.32** | **22** | *e*P | | **P** | **21 25 31.4** | **+0.2** |
| **LPG** | **La Plagne** | **63.34** | **22** | *e*P | | **P** | **21 25 31.8** | **+0.4** |
| **GORS** | **Gorjuse** | **63.38** | **17** | *e*P | | **P** | **21 25 31.4** | **-0.1** |
| GORS | | | | *i* pP | | **pP** | **21 25 35.3** | **+0.6** |
| **CTI** | **Castel Tesino** | **63.40** | **18** | IAmb | | IAmb | 21 25 42.9 | | |
| | comp=Z,70nm,1.0s | | | | | | | | |
| **ARCR** | **ARCALIA** | **63.41** | **9** | ⇓P | | **P** | **21 25 33.1** | **+1.5** |
| **SATY** | **Saty** | **63.41** | **326** | *e*P | | **P** | **21 25 32.1** | **+0.3** |
| | comp=Z,44nm,1.1s,baz=326 | | | | | | | | |
| SATY | | | | *e*S | | **S** | **21 34 05.3** | **+1.1** |
| | baz=326 | | | | | | | | |
| **SATY** | **Saty** | **63.41** | **326** | *e*P | | **P** | **21 25 32.0** | **+0.3** |
| SATY | | | | *e*S | | **S** | **21 34 05.3** | **+1.1** |
| SATY | | | | pmax | | pmax | | | |
| | comp=Z,44nm,1.1s | | | | | | | | |
| **CADS** | **Cadrg** | **63.44** | **17** | *i* P | | **P** | **21 25 31.5** | **-0.3** |
| CADS | | | | *e*S | | **S** | **21 34 03.0** | **-1.2** |
| **IAS** | **Iasi** | **63.45** | **6** | ⇓P | | **P** | **21 25 31.9** | **+0.2** |
| **IAS** | **Iasi** | **63.45** | **6** | P | | **P** | **21 25 31.9** | **+0.2** |
| **MOZS** | **Mozjanca** | **63.45** | **16** | *i* P | | **P** | **21 25 32.2** | **+0.4** |
| **AAA** | **Alma-Ata** | **63.56** | **327** | *e*P | | **P** | **21 25 33.0** | **+0.4** |
| | comp=Z,91nm,0.8s,baz=327 | | | | | | | | |
| AAA | | | | LR | | LR | 21 56 02.4 | | |
| | baz=327 | | | | | | | | |
| **AAA** | **Alma-Ata** | **63.56** | **327** | *e*P | | **P** | **21 25 33.0** | **+0.4** |
| AAA | | | | pmax | | pmax | | | |
| | comp=Z,91nm,0.8s | | | | | | | | |
| **MDOK** | **Medeo** | **63.58** | **327** | *e*P | | **P** | **21 25 33.0** | **+0.1** |
| | baz=327 | | | | | | | | |
| MDOK | | | | *e*S | | **S** | **21 34 07.3** | **+1.0** |
| | baz=327 | | | | | | | | |
| MDOK | | | | LR | | LR | 21

comp=Z,620nm,4.2s
XAN LR LR
comp=Z,21µm,17.8s
XAN LR LR
comp=Z,41µm,16.9s
XAN LR LR
comp=Z,35µm,15.8s
**SIRR Siria 64.07 11** ⇓P **P 21 25 37.2 +1.3**
**TKM2 Tokmak 2 64.08 328** P **P 21 25 37.0 +0.7**
SNR=25
**TESR Tescani 64.09 7** ⇓P **P 21 25 36.4 +0.4**
**SKDS Skadanscina 64.14 17** ⇑*i*P **P 21 25 35.5 -0.9**
**CHMS Chumysh 64.16 329** P **P 21 25 37.4 +0.8**
SNR=11
**PGRON Lagoa das Cont 64.17 50** *e*P **P 21 25 36.2 -0.5**
comp=Z,123nm,1.2s
**PURM Purcari 64.19 4** ⇓P **P 21 25 36.9 +0.3**
**BART Pico Bartolome 64.22 50** *e*P **P 21 25 36.0 -1.1**
comp=Z,187nm,1.3s
**JOW Kunigami 64.23 278** P **P 21 25 38.5 +1.3**
**JOW Kunigami 64.23 278** P **P 21 25 37.1 -0.1**
JOW IAmb IAmb 21 25 44.0
comp=Z,131nm,1.0s
JOW IAMs_20 IAMs_20 21 55 28.0
comp=Z,8µm,20.0s
**JOW Kunigami 64.23 278** P **P 21 25 38.3 +1.2**
comp=Z,50nm,0.6s,baz=13,slow=9.5,SNR=10
JOW LR LR 21 54 57.8
comp=Z,9µm,20.8s,baz=58,slow=37
GOF *e*S **S 21 34 33.4 +2.5**
comp=Z,50nm,0.6s
**TEKS Tekeris 65.62 13** ⇑*i*P **P 21 25 45.9 -0.2**
**STFAR Stefanesti-Arg 65.66 8** ⇑P **P 21 25 47.8 +1.6**
**TGUH Tegucigalpa,Ún 65.71 117** IAmb IAmb 21 25 52.2
comp=Z,146nm,1.1s
TGUH IAMs_20 IAMs_20 21 56 41.8
comp=Z,9µm,20.0s
**SRE Strehaia 65.76 10** ⇓P **P 21 25 47.7 +0.8**
**SRE Strehaia 65.76 10** P **P 21 25 47.7 +0.8**
**TPGR Topolog 65.81 6** ⇑P **P 21 25 47.6 +0.4**
**SIM Simferopol' 65.84 1** *e*P **P 21 25 47.8 +0.4**
SIM *e* 21 26 17.0
SIM *e*S **S 21 34 33.0 -0.7**
SIM pmax pmax
comp=Z,72nm,1.1s
SIM MLR MLR
comp=Z,4µm,14.3s
**MTE Manteigas 65.90 35** IAmb IAmb 21 26 09.9
comp=Z,80nm,1.0s
MTE IAMs_20 IAMs_20 21 55 28.8
comp=Z,6µm,19.0s
**MTE Manteigas 65.90 35**⇑*e*P **P 21 25 48.0 0.0**
comp=Z,111nm,1.5s
MTE *i*S **S 21 34 35.6 +0.8**
MTE *e*LQ LQ 21 42 04.8
MTE *e*LR LR 21 46 10.3
comp=Z,5µm,18.0s
**SULR 65.90 7** ⇑P **P 21 25 48.2 +0.4**
**COI Coimbra 65.91 36** IAmb IAmb 21 26 10.2
comp=Z,136nm,1.1s
**COI Coimbra 65.91 36** *e*P **P 21 25 49.0 +1.1**
comp=Z,179nm,1.4s
**JURR Jurilovca 65.92 5** ⇓P **P 21 25 48.4 +0.6**
**HARR Harsova 65.96 6** ⇓P **P 21 25 48.6 +0.5**
**HARR Harsova 65.96 6** P **P 21 25 48.6 +0.5**
**ANN Anapa 65.98 359** *e*P **P 21 25 48.5 +0.2**
ANN *e*S **S 21 34 37.3 +1.8**
ANN pmax pmax
comp=Z,156nm,1.1s
ANN MLR MLR
comp=Z,4µm,15.0s
**HUMR Humele 65.99 8** ⇑P **P 21 25 48.7 +0.3**
**HAPS Han Pijesak,Bl 66.04 13** ⇑*i*P **P 21 25 48.9 0.0**
**PCAS Casmilo, Conde 66.04 36**⇑*e*P **P 21 25 49.1 +0.3**
comp=Z,231nm,2.5s
**LABN Labinsk 66.09 356** *e*P **P 21 25 47.9 -1.1**
LABN *e*S **S 21 34 35.5 -1.3**
LABN pmax pmax
comp=Z,15nm,0.2s
LABN MLR MLR
comp=Z,5µm,16.0s
**TLBR Topalu 66.11 6** ⇓P **P 21 25 49.6 +0.5**
**PUNG Punghina 66.13 10** ⇓P **P 21 25 49.3 +0.1**
**GOMU GeErMu 66.13 311** P **P 21 25 49.8 -0.1**
GOMU pP pP 21 25 53.5 +0.3
GOMU sP sP 21 25 56.0 +1.6
GOMU PcP **PcP 21 26 22.6 +2.4**
GOMU S **S 21 34 32.8 -5.5**
GOMU pmax pmax
comp=Z,68nm,1.2s
GOMU LR LR
comp=Z,29µm,15.1s
GOMU LR LR
comp=Z,12µm,17.6s
GOMU LR LR
comp=Z,41µm,15.4s
**LEHL Lehliu 66.13 7** ⇓P **P 21 25 49.8 +0.5**
**BBLS Lazi&#263i 66.29 13** ⇑*i*P **P 21 25 50.9 +0.5**
**COPA Copaceanca 66.40 8** ⇓P **P 21 25 51.6 +0.6**
**BAIL Bailesti 66.41 10** ⇓P **P 21 25 52.3 +1.3**
**PCBR Castelo Branco 66.45 35**⇑*e*P **P 21 25 51.5 +0.1**
comp=Z,84nm,2.5s
**SDDR Presa de Saban 66.45 99** IAmb IAmb 21 26 03.7
comp=Z,97nm,1.1s
**MFTR Murfatlar 66.49 6** ⇓P **P 21 25 52.4 +0.8**
**PSBE So Bento 66.50 36**⇑*e*P **P 21 25 51.7 0.0**
comp=Z,121nm,2.1s
**PSBE So Bento 66.50 36** *e*PP **PP 21 28 15.6 -1.9**
**CASP Castiglione de 66.52 20** IAmb IAmb 21 25 59.9
comp=Z,86nm,0.9s
**ICOR Ion Corvin 66.53 6** ⇑P **P 21 25 52.4 +0.6**
**FDMO Fiordimonte 66.53 18** IAmb IAmb 21 26 01.5
comp=Z,152nm,1.1s
**GUMA Gualdo di Mace 66.53 18** IAmb IAmb 21 26 31.7
comp=Z,206nm,0.5s
**RUDO Rudo 66.54 13** ⇑*i*P **P 21 25 51.9 0.0**
**BOVS Bovan 66.69 11** ⇓P **P 21 25 53.0 +0.1**
**KIV Kislovodsk 66.72 354** *e*P **P 21 25 53.4 +0.2**
**KIV Kislovodsk 66.72 354** P **P 21 25 53.4 +0.2**
**KIV Kislovodsk 66.72 354** *i*P **P 21 25 53.8 +0.6**
SNR=22
**KIV Kislovodsk 66.72 354** P **P 21 25 55.0 +1.8**
KIV P **P 21 25 55.0 +1.8**
KIV P **P 21 25 55.0 +1.8**
KIV S **S 21 34 48.9 +4.2**
KIV S **S 21 34 48.9 +4.2**
KIV S **S 21 34 48.9 +4.2**
**KIV Kislovodsk 66.72 354** ⇓P **P 21 25 54.6 +1.5**
**KIV Kislovodsk 66.72 354** *e*P **P 21 25 54.0 +0.8**
KIV *e* 21 28 20.7
KIV *e*S **S 21 34 46.2 +1.5**
KIV *e*SS **SS 21 39 04.5 +3.4**
KIV pmax pmax
comp=Z,213nm,1.1s
KIV pmax pmax
comp=Z,42nm,3.3s
KIV MLR MLR
comp=Z,3µm,17.0s
**PLE Pljevlja 66.83 13** ⇑*i*P **P 21 25 55.1 +1.2**
**PMRV Marv??o 66.87 35**⇑*e*P **P 21 25 53.9 -0.2**
comp=Z,58nm,1.7s
PMRV *i*S **S 21 34 45.1 -1.3**
PMRV *e*LQ LQ 21 42 14.9
PMRV *e*LR LR 21 46 04.6
comp=Z,4µm,18.0s
**CESX Cesi 66.90 18** IAmb IAmb 21 26 02.2
comp=Z,69nm,0.9s
**UPM Unac-Piva 66.91 13** ⇑*i*P **P 21 25 54.4 -0.1**
**UPM Unac-Piva 66.91 13** ⇑*i*P **P 21 25 54.3 -0.2**
**SHA1 Shidzhatmaz 66.93 354***ce*P **P 21 25 55.0 +0.3**
**KBZ Khabaz 66.94 354** P **P 21 25 56.1 +1.7**
comp=Z,42nm,0.9s,baz=340,slow=5.1,SNR=58
KBZ LR LR 22 00 09.5
comp=Z,2µm,20.6s,baz=358,slow=40
comp=Z,42nm,0.9s
**KBZ Khabaz 66.94 354***ce*P **P 21 25 53.6 -0.8**
KBZ pmax pmax
comp=Z,70nm,0.9s
**SJES Sjenica 66.94 12** ⇑*i*P **P 21 25 55.1 +0.5**
**PMTG Montargil 67.04 36**⇑*e*P **P 21 25 54.8 -0.4**
comp=Z,102nm,1.9s
**CRIN San Cristobal 67.06 117** IAMs_20 IAMs_20 22 00 23.6
comp=Z,6µm,18.0s
**CAMP Campotosto 67.06 18** IAmb IAmb 21 26 02.5
comp=Z,139nm,1.1s
**MPEP Malo Peshtene 67.09 9** P **P 21 25 54.9 -0.6**
**STON Ston 67.14 14** ⇑*i*P **P 21 25 55.0 -0.7**
**NCK Nalchik 67.14 354** *i*P **P 21 25 56.4 +0.6**
NCK pmax pmax
comp=Z,157nm,1.2s
NCK MLR MLR
comp=Z,4µm,15.0s
**SOC Sochi 67.17 357** *e*P **P 21 25 57.4 +1.5**
SOC *e*S **S 21 34 53.6 +3.7**
SOC pmax pmax
comp=Z,62nm,1.1s
**BRY Bratogost 67.18 14** ⇑*i*P **P 21 25 55.9 -0.3**
**BRY Bratogost 67.18 14** ⇑*i*P **P 21 25 56.0 -0.3**
**LIS Lisbon 67.19 37** *e*P **P 21 25 56.1 0.0**
LIS *e*S **S 21 34 50.6 +0.4**
LIS IAMs_20 IAMs_20 21 57 19.8
comp=E,9µm,27.2s
**LIS Lisbon 67.19 37** *e*P **P 21 25 56.1 0.0**
LIS *e*S **S 21 34 50.7 +0.4**
**ESDC Sonseca Array 67.30 32** P **P 21 25 56.5 -0.4**
ESDC IAmb IAmb 21 26 19.3
comp=Z,122nm,1.1s
**ESDC Sonseca Array 67.30 32** P **P 21 25 57.3 +0.4**
comp=Z,26nm,0.8s,baz=345,slow=6.8,SNR=128
ESDC PKP2bc 21 54 28.7
comp=Z,6.0nm,1.3s,baz=182,slow=3.1,SNR=8.8
ESDC LR LR 21 57 23.7
comp=Z,4µm,20.1s,baz=331,slow=38
comp=Z,26nm,0.8s
**SZH Strazhitsa 67.30 8** P **P 21 25 56.5 -0.3**
**KSH Kashi 67.31 327** P **P 21 26 00.2 +3.2**
KSH pP sP 21 26 05.4 +3.8
KSH S **S 21 34 54.7 +2.8**
KSH SS **SS 21 39 17.8 +7.3**
KSH pmax pmax
comp=Z,130nm,1.2s
KSH pmax pmax
comp=Z,510nm,5.4s
KSH LR LR
comp=Z,6µm,15.8s
KSH LR LR
comp=Z,9µm,15.8s
KSH LR LR
comp=Z,10µm,20.6s
**KOME Kolasin 67.31 13** ⇑*i*P **P 21 25 56.9 -0.1**
**IVA Berane 67.32 12** ⇑*i*P **P 21 25 57.3 +0.3**
**PAB San Pablo 67.35 33** P **P 21 25 56.7 -0.5**
PAB IAmb IAmb 21 26 19.6
comp=Z,140nm,1.3s
**PAB San Pablo 67.35 33** P **P 21 25 56.7 -0.5**
PAB pmax pmax
comp=Z,140nm,1.3s
PAB MLR MLR
comp=Z,4µm,20.0s
**NKME Niksic 67.35 13** ⇑*i*P **P 21 25 56.7 -0.5**
**ENH Enshi 67.36 296** P **P 21 25 56.2 -1.1**
ENH IAmb IAmb 21 26 02.7
comp=Z,129nm,1.1s
**PESTR Estremoz 67.37 35** P **P 21 25 56.3 -1.0**
**PESTR Estremoz 67.37 35**⇑*e*P **P 21 25 56.8 -0.5**
comp=Z,71nm,1.5s
**PRD Provadia 67.47 6** P **P 21 25 58.4 +0.6**
**MAK Makhachkala 67.49 351***c i*P P 21 25 52.1 -5.8
MAK *e* 21 28 22.1
MAK *e*PPP PPP 21 30 05.1
MAK *e*S S 21 34 44.3 -9.4
MAK *e*SS **SS 21 39 12.0 -0.8**
MAK pmax pmax
comp=Z,158nm,1.0s
**CEME Cevo 67.57 13** ⇑*i*P **P 21 25 57.9 -0.6**
**EVO Evora 67.60 36**⇑*e*P **P 21 25 58.4 -0.4**
comp=Z,112nm,1.6s
**INTR Introdacqua 67.63 17** P **P 21 25 58.6 -0.4**
**ELND Elena 67.63 8** ⇓P **P 21 25 58.9 0.0**
**BTK Batken 67.70 331** P **P 21 25 59.1 -0.4**
**BTK Batken 67.70 331** P **P 21 25 59.1 -0.4**
BTK pmax pmax
comp=Z,161nm,0.8s
**PDG Podgorica 67.71 13** P **P 21 25 59.0 -0.4**
PDG IAmb IAmb 21 26 05.7
comp=Z,150nm,1.1s
**PDG Podgorica 67.71 13** ⇑*i*P **P 21 25 59.2 -0.1**
**PDG Podgorica 67.71 13** ⇓P **P 21 25 59.8 +0.4**
**PDG Podgorica 67.71 13** ⇑*i*P **P 21 25 59.1 -0.2**
**VTS Vitosha 67.80 10** P **P 21 25 59.7 -0.4**
**BUM Brajici-Budva 67.81 13** ⇑*i*P **P 21 25 59.6 -0.5**
**PCDR Punta Cana, DR 67.90 96** IAMs_20 IAMs_20 21 56 48.5
comp=Z,9µm,22.0s
**PNCL Nicolau / Gran 67.90 36**⇑*e*P **P 21 26 00.6 0.0**
comp=Z,103nm,2.5s
**XMAS Kiritimati 67.93 194** IAMs_20 IAMs_20 21 50 22.0
comp=Z,6µm,20.0s
**DRME Dracevica, Mon 67.95 13** ⇑*i*P **P 21 26 00.4 -0.5**
**DRME Dracevica, Mon 67.95 13** ⇑*i*P **P 21 26 00.7 -0.2**
**SGRT San Giovanni R 68.07 16** P **P 21 26 01.1 -0.6**
**JMB Yambol 68.10 7** P **P 21 26 00.7 -1.1**
**DRK Karamyk 68.10 331** P **P 21 26 02.9 +0.6**
**DRK Karamyk 68.10 331** P **P 21 26 02.9 +0.6**
DRK pmax pmax
comp=Z,462nm,0.5s
**PBEJ Beja 68.12 36**⇑*e*P **P 21 26 01.6 -0.4**
comp=Z,62nm,1.8s
**PUK Puka 68.14 13** P **P 21 26 02.0 -0.2**
PUK IAmb IAmb 21 26 15.9
comp=Z,80nm,0.9s
**PBAR Barrancos 68.15 35**⇑*e*P **P 21 26 02.1 -0.1**
comp=Z,110nm,1.9s
**CNSH ChangSha 68.19 292** P **P 21 26 00.5 -2.0**
CNSH S **S 21 35 00.0 -2.5**
CNSH pmax pmax
comp=Z,24nm,2.3s
CNSH LR LR
comp=Z,14µm,20.3s
CNSH LR LR
comp=Z,18µm,19.8s
CNSH LR LR
comp=Z,11µm,16.6s
**MESJ Messejana 68.23 36** P **P 21 26 02.1 -0.6**
**MESJ Messejana 68.23 36** *e*P **P 21 26 02.6 0.0**
comp=Z,77nm,1.8s
**MESJ Messejana 68.23 36** *e*P **P 21 26 02.7 0.0**
MESJ *e*S **S 21 35 03.1 +0.4**
MESJ IAMs_20 IAMs_20 21 56 27.8
comp=Z,7µm,22.6s
**MESJ Messejana 68.23 36** P **P 21 26 02.1 -0.6**
MESJ pmax pmax
comp=Z,84nm,1.4s
**TATO Taipei 68.28 283** IAMs_20 IAMs_20 21 57 47.1
comp=Z,8µm,19.0s
**ACON Acoyapa 68.34 115** P **P 21 26 02.7 -0.9**
ACON IAmb IAmb 21 26 54.4
comp=Z,111nm,1.2s
**PLD Plovdiv 68.36 9** *e*P **P 21 26 02.0 -1.4**
**AGPR Aguadilla, PR 68.39 95** IAMs_20 IAMs_20 21 56 35.3
comp=Z,6µm,18.0s
**ESPN Las Esperanzas 68.40 114** P **P 21 26 03.6 -0.4**
ESPN IAmb IAmb 21 26 32.5
comp=Z,62nm,0.9s
ESPN IAMs_20 IAMs_20 21 56 03.1
comp=Z,8µm,20.0s
**PTEO Sao Teotonio 68.41 37** *e*P **P 21 26 03.6 -0.2**
comp=Z,123nm,1.6s
**PCVE Castro Verde 68.47 36** *e*P **P 21 26 03.8 -0.4**
comp=Z,68nm,1.8s
**CD2 Chengdu 68.54 301** P **P 21 26 04.5 -0.3**
CD2 pP pP 21 26 06.9 -1.2
CD2 S **S 21 35 04.5 -2.3**
CD2 SKS **ScS 21 36 05.1 +0.7**
CD2 SS **SS 21 39 28.8 -1.1**
CD2 pmax pmax
comp=Z,50nm,0.9s
CD2 pmax pmax
comp=Z,460nm,4.5s
CD2 LR LR
comp=Z,25µm,15.3s
CD2 LR LR
comp=Z,19µm,18.6s
CD2 LR LR
comp=Z,19µm,14.8s
**YHNB Yeheng 68.60 283** P **P 21 26 07.1 +1.8**
**YHNB Yeheng 68.60 283** IAMs_20 IAMs_20 21 57 36.6
comp=Z,10µm,19.0s
**AOPR Arecibo Observ 68.62 95** P **P 21 26 03.9 -1.5**
**AOPR Arecibo Observ 68.62 95** *e*P **P 21 26 04.1 -1.3**
**MORF Marmelete 68.65 37** P **P 21 26 04.4 -1.0**
MORF IAmb IAmb 21 26 27.1

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,174nm,1.4s | | | | | | | | | |
| **MORF** | **Marmelete** | **68.65** | **37** | ⇑ | *e*P | | **P** | **21 26 05.5** | **+0.1** |
| | comp=Z,100nm,3.5s | | | | | | | | | |
| **MORF** | **Marmelete** | **68.65** | **37** | | *e*P | | **P** | **21 26 05.5** | **+0.1** |
| MORF | | | | | *e*S | | **S** | **21 35 08.3** | **+0.4** |
| MORF | | | | | IAMs_20 | IAMs_20 | | 21 57 29.3 | |
| | comp=N,8µm,17.5s | | | | | | | | | |
| **MORF** | **Marmelete** | **68.65** | **37** | | *e*P | | **P** | **21 26 05.5** | **+0.1** |
| MORF | | | | | *e*S | | **S** | **21 35 08.3** | **+0.4** |
| **PAOL** | **Paolisi** | **68.67** | **17** | | P | | **P** | **21 26 04.6** | **-0.9** |
| PAOL | | | | | IAmb | IAmb | | 21 26 12.1 | |
| | comp=Z,101nm,1.1s | | | | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **68.72** | **95** | | P | | **P** | **21 26 04.9** | **-1.1** |
| **EDRB** | **Edirne** | **68.75** | **7** | | P | | **P** | **21 26 04.4** | **-1.5** |
| **PVAQ** | **Vaqueiros** | **68.75** | **36** | | P | | **P** | **21 26 05.4** | **-0.6** |
| **PVAQ** | **Vaqueiros** | **68.75** | **36** | | *e*P | | **P** | **21 26 05.9** | **-0.1** |
| | comp=Z,92nm,1.6s | | | | | | | | | |
| PVAQ | | | | | *i* S | | **S** | **21 35 08.5** | **-0.5** |
| PVAQ | | | | | *e*LQ | | LQ | 21 43 00.6 | |
| PVAQ | | | | | *e*LR | | LR | 21 47 50.7 | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **68.78** | **37** | ⇑ | *e*P | | **P** | **21 26 06.1** | **-0.1** |
| | comp=Z,161nm,1.4s | | | | | | | | | |
| **RZN** | **Rozhen** | **68.81** | **9** | | P | | **P** | **21 26 06.4** | **-0.1** |
| **CRPR** | **Cabo Rojo, PR** | **68.81** | **95** | | IAMs_20 | IAMs_20 | | 21 55 01.7 | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **GAR** | **Garm** | **68.82** | **332** | | P | | **P** | **21 26 06.3** | **-0.2** |
| **PBDV** | **Barranco-do-Ve** | **68.86** | **36** | ⇑ | *e*P | | **P** | **21 26 06.9** | **+0.2** |
| | comp=Z,150nm,2.2s | | | | | | | | | |
| **GCPR** | **Guaynabo City** | **68.89** | **94** | | P | | **P** | **21 26 06.0** | **-1.0** |
| GCPR | | | | | IAmb | IAmb | | 21 26 10.2 | |
| | comp=Z,125nm,1.0s | | | | | | | | | |
| **MMB** | **Musomishta** | **68.90** | **10** | | P | | **P** | **21 26 05.9** | **-1.0** |
| **KDZ** | **Kurdzhali** | **68.90** | **8** | | P | | **P** | **21 26 08.0** | **+1.2** |
| **CELP** | **Cerrillos** | **68.94** | **95** | | P | | **P** | **21 26 06.0** | **-1.3** |
| CELP | | | | | IAmb | IAmb | | 21 26 14.9 | |
| | comp=Z,60nm,0.8s | | | | | | | | | |
| **OBIP** | **Obispado Ponce** | **68.96** | **95** | | P | | **P** | **21 26 05.6** | **-1.8** |
| OBIP | | | | | IAMs_20 | IAMs_20 | | 21 58 30.4 | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **NACB** | **Ninganchiao** | **68.98** | **283** | | P | | **P** | **21 26 07.8** | **+0.2** |
| **NACB** | **Ninganchiao** | **68.98** | **283** | | P | | **P** | **21 26 07.0** | **-0.6** |
| **VAY** | **Valandovo** | **69.05** | **10** | *i* | Pg | | **P** | **21 26 08.6** | **+0.8** |
| **HUMP** | **Col San Antoni** | **69.13** | **94** | | IAMs_20 | IAMs_20 | | 21 57 36.0 | |
| | comp=Z,6µm,18.0s | | | | | | | | | |
| **DIKM** | **Dikmen** | **69.14** | **0** | | *e*P | | **P** | **21 26 09.8** | **+1.5** |
| **DIKM** | **Dikmen** | **69.14** | **0** | ⇑ | P | | **P** | **21 26 09.3** | **+1.0** |
| **CTYL** | **Yalikoy Yolu** | **69.18** | **6** | | *e*P | | P | 21 26 01.8 | -6.8 |
| **IGPR** | **InterUniversit** | **69.20** | **94** | | P | | **P** | **21 26 07.9** | **-1.0** |
| IGPR | | | | | IAmb | IAmb | | 21 26 14.4 | |
| | comp=Z,106nm,1.0s | | | | | | | | | |
| **AKH** | **Akhalkalaki** | **69.23** | **354** | | *e*P | | **P** | **21 26 10.6** | **+1.5** |
| **KNT** | **Kendrikon** | **69.23** | **10** | | P | | **P** | **21 26 08.5** | **-0.4** |
| **SEKA** | **Sheki** | **69.25** | **351** | | P | | **P** | **21 26 07.1** | **-2.0** |
| **MATE** | **Matera** | **69.26** | **15** | | *e*P | | **P** | **21 26 09.0** | **0.0** |
| **MATE** | **Matera** | **69.26** | **15** | ⇓ | P | | **P** | **21 26 09.8** | **+0.7** |
| **QZH** | **Quanzhou** | **69.30** | **286** | | P | | **P** | **21 26 11.0** | **+1.5** |
| QZH | | | | | S | | **S** | **21 35 18.1** | **+2.4** |
| QZH | | | | | pmax | pmax | | | |
| | comp=Z,120nm,1.1s | | | | | | | | | |
| QZH | | | | | LR | LR | | | |
| | comp=Z,18µm,19.2s | | | | | | | | | |
| QZH | | | | | LR | LR | | | |
| | comp=Z,12µm,16.5s | | | | | | | | | |
| QZH | | | | | LR | LR | | | |
| | comp=Z,17µm,15.8s | | | | | | | | | |
| **CHGR** | **Chuyangaron** | **69.35** | **332** | | P | | **P** | **21 26 09.4** | **-0.3** |
| **CHGR** | **Chuyangaron** | **69.35** | **332** | | P | | **P** | **21 26 09.5** | **-0.3** |
| CHGR | | | | | pmax | pmax | | | |
| | comp=Z,1µm,1.2s | | | | | | | | | |
| **SIMJ** | **Simiganj** | **69.37** | **333** | | P | | **P** | **21 26 09.3** | **-0.7** |
| **RDO** | **Rodhopi** | **69.39** | **8** | | *e*P | | **P** | **21 26 10.4** | **+0.5** |
| **RDO** | **Rodhopi** | **69.39** | **8** | | P | | **P** | **21 26 09.6** | **-0.2** |
| RDO | | | | | IAmb | IAmb | | 21 26 17.2 | |
| | comp=Z,128nm,1.1s | | | | | | | | | |
| **RDO** | **Rodhopi** | **69.39** | **8** | | P | | **P** | **21 26 09.8** | **-0.1** |
| **SLVT** | **Silivri** | **69.42** | **6** | | *e*P | | **P** | **21 26 11.4** | **+1.3** |
| **KLYT** | **Kilyos** | **69.43** | **5** | | *e*P | | **P** | **21 26 10.4** | **+0.3** |
| **UKOP** | **Uzunkopru-Edir** | **69.46** | **7** | | *e*P | | **P** | **21 26 11.4** | **+1.1** |
| **BGKT** | **Bogazkoy** | **69.49** | **6** | | *e*P | | **P** | **21 26 08.9** | **-1.6** |
| **CRLT** | **Corlu** | **69.51** | **6** | | *e*P | | **P** | **21 26 10.6** | **0.0** |
| **SSLB** | **Suanglung** | **69.56** | **283** | | P | | **P** | **21 26 13.2** | **+2.0** |
| **VSL** | **Villasalto** | **69.59** | **21** | | P | | **P** | **21 26 10.3** | **-0.8** |
| **SOH** | **Sokhos** | **69.60** | **10** | | P | | **P** | **21 26 11.6** | **+0.4** |
| **ISK** | **Istanbul-Kandi** | **69.62** | **5** | | *e*P | | **P** | **21 26 09.5** | **-1.8** |
| **ISK** | **Istanbul-Kandi** | **69.62** | **5** | | P | | **P** | **21 26 11.7** | **+0.4** |
| **KAVV** | **Kandilli-Istan** | **69.62** | **5** | | *e*P | | **P** | **21 26 12.9** | **+1.6** |
| **ALN** | **Alexandroupoli** | **69.67** | **8** | | *e*P | | **P** | **21 26 10.3** | **-1.3** |
| **ALN** | **Alexandroupoli** | **69.67** | **8** | | P | | **P** | **21 26 11.8** | **+0.2** |
| ALN | | | | | IAmb | IAmb | | 21 26 18.0 | |
| | comp=Z,78nm,1.0s | | | | | | | | | |
| **ALN** | **Alexandroupoli** | **69.67** | **8** | | P | | **P** | **21 26 10.3** | **-1.3** |
| **ALN** | **Alexandroupoli** | **69.67** | **8** | | P | | **P** | **21 26 11.8** | **+0.2** |
| ALN | | | | | pmax | pmax | | | |
| | comp=Z,78nm,1.0s | | | | | | | | | |
| **KVT** | **Kavak** | **69.71** | **360** | | *e*P | | **P** | **21 26 13.8** | **+1.9** |
| **THE** | **Thessaloniki** | **69.76** | **10** | | P | | **P** | **21 26 12.5** | **+0.4** |
| **HORT** | **Hortiatis** | **69.80** | **10** | | *e*P | | **P** | **21 26 12.8** | **+0.3** |
| **HORT** | **Hortiatis** | **69.80** | **10** | | P | | **P** | **21 26 12.5** | **0.0** |
| **YULB** | **Yu-li** | **69.81** | **283** | | P | | **P** | **21 26 14.3** | **+1.6** |
| **YULB** | **Yu-li** | **69.81** | **283** | | P | | **P** | **21 26 11.8** | **-0.9** |
| YULB | | | | | IAMs_20 | IAMs_20 | | 21 57 44.7 | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| **CUC** | **Castrocucco** | **69.82** | **16** | | P | | **P** | **21 26 12.6** | **-0.1** |
| CUC | | | | | IAmb | IAmb | | 21 26 20.3 | |
| | comp=Z,126nm,1.3s | | | | | | | | | |
| **ENEZ** | **Enez** | **69.83** | **8** | | *e*P | | **P** | **21 26 13.1** | **+0.5** |
| **ESPY** | **Espiye-Giresun** | **69.85** | **357** | | *e*P | | **P** | **21 26 13.5** | **+0.8** |
| **GANJ** | **Ganja** | **69.86** | **351** | | P | | **P** | **21 26 10.8** | **-2.0** |
| **CART** | **Cartagena** | **69.87** | **30** | | P | | **P** | **21 26 11.8** | **-1.1** |
| CART | | | | | IAmb | IAmb | | 21 26 35.0 | |
| | comp=Z,123nm,1.2s | | | | | | | | | |
| CART | | | | | IAMs_20 | IAMs_20 | | 21 59 42.7 | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **CAVK** | **Edirne/Enez-Ca** | **69.88** | **8** | ⇑ | P | | **P** | **21 26 14.2** | **+1.4** |
| **HRT** | **Hereke** | **69.88** | **5** | | *e*P | | **P** | **21 26 12.6** | **-0.4** |
| **ERIK** | **Erikli-Kesan** | **69.91** | **7** | | *e*P | | **P** | **21 26 14.2** | **+1.1** |
| **SFS** | **San Fernando** | **69.97** | **35** | | IAMs_20 | IAMs_20 | | 21 59 47.5 | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **JTS** | **Las Juntas de** | **69.99** | **116** | | IAMs_20 | IAMs_20 | | 21 57 10.1 | |
| | comp=Z,9µm,19.0s | | | | | | | | | |
| **JTS** | **Las Juntas de** | **69.99** | **116** | | LR | LR | | 22 01 11.6 | |
| | comp=Z,5µm,19.7s,baz=354,slow=40 | | | | | | | | | |
| **SCTE** | **Santa Cesarea** | **69.99** | **14** | | P | | **P** | **21 26 12.8** | **-0.8** |
| SCTE | | | | | IAmb | IAmb | | 21 26 20.4 | |
| | comp=Z,196nm,1.4s | | | | | | | | | |
| **KARS** | **Kars** | **70.02** | **354** | | *e*P | | P | 21 26 19.2 | +5.2 |
| **SMTH** | **Samothraki Isl** | **70.07** | **8** | | P | | **P** | **21 26 14.4** | **+0.3** |
| **ARMT** | **Armutlu** | **70.11** | **5** | | *e*P | | **P** | **21 26 14.4** | **+0.1** |
| **SENK** | **Senkaya-Erzuru** | **70.12** | **355** | | *e*P | | **P** | **21 26 15.1** | **+0.5** |
| **OUR** | **Ouranopolis** | **70.12** | **9** | | *e*P | | **P** | **21 26 14.6** | **+0.2** |
| **OUR** | **Ouranopolis** | **70.12** | **9** | | P | | **P** | **21 26 14.5** | **+0.2** |
| **TPUB** | **Ta-pu** | **70.12** | **283** | | IAMs_20 | IAMs_20 | | 21 58 02.9 | |
| | comp=Z,10µm,19.0s | | | | | | | | | |
| **YLV** | **Yalova** | **70.13** | **5** | | *e*P | | **P** | **21 26 14.6** | **+0.1** |
| **CANT** | **Cankiri** | **70.17** | **2** | | *e*P | | **P** | **21 26 16.6** | **+1.8** |
| **GELI** | **Tayfur-Gelibol** | **70.18** | **7** | | *e*P | | **P** | **21 26 14.6** | **-0.1** |
| **SMRT** | **St. Maarten** | **70.19** | **92** | | P | | **P** | **21 26 13.7** | **-1.3** |
| SMRT | | | | | IAMs_20 | IAMs_20 | | 22 02 34.8 | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **LPK** | **Lapseki** | **70.22** | **7** | | *e*P | | **P** | **21 26 16.2** | **+1.2** |
| **KRBG** | **Karabiga-Canak** | **70.22** | **7** | | *e*P | | **P** | **21 26 19.4** | **+4.4** |
| **GEMT** | **Gemlik** | **70.25** | **5** | | *e*P | | **P** | **21 26 17.4** | **+2.2** |
| **MDUB** | **Mudurnu** | **70.27** | **4** | | *e*P | | **P** | **21 26 16.4** | **+1.0** |
| **ADVT** | **Abdulvahap** | **70.27** | **5** | | *e*P | | **P** | **21 26 16.4** | **+1.1** |
| **EDC** | **Edincik** | **70.29** | **6** | | *e*P | | P | 21 26 21.5 | +6.1 |
| **GULT** | **Gulveren** | **70.29** | **4** | | *e*P | | **P** | **21 26 16.1** | **+0.6** |
| **BAND** | **Balkesir-Ban** | **70.29** | **6** | ⇓ | P | | **P** | **21 26 17.4** | **+2.0** |
| **MDNY** | **Mudanya-Bursa** | **70.31** | **5** | | *e*P | | P | 21 26 09.5 | -6.0 |
| **YUVA** | **Yuva-Kibriscik** | **70.36** | **3** | | *e*P | | **P** | **21 26 17.3** | **+1.3** |
| **GADA** | **Gvkgeada** | **70.36** | **8** | | *e*P | | **P** | **21 26 16.9** | **+1.1** |
| **RSDY** | **Resadiye-TOKAT** | **70.39** | **359** | | *e*P | | P | 21 26 21.5 | +5.5 |
| **KCTX** | **Karacabey (Bur** | **70.39** | **6** | | *e*P | | **P** | **21 26 16.7** | **+0.6** |
| **TWG** | **Pinlang** | **70.41** | **283** | | IAMs_20 | IAMs_20 | | 22 01 01.6 | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **GNI** | **Garni** | **70.43** | **353** | | *e*P | | **P** | **21 26 18.4** | **+1.9** |
| **GNI** | **Garni** | **70.43** | **353** | | P | | **P** | **21 26 18.0** | **+1.4** |
| **GNI** | **Garni** | **70.43** | **353** | | P | | **P** | **21 26 17.9** | **+1.4** |
| | comp=Z,19nm,0.8s,baz=336,slow=10.0,SNR=10 | | | | | | | | | |
| GNI | | | | | LR | LR | | 22 01 55.0 | | |
| | comp=Z,3µm,19.5s,baz=18,slow=40 | | | | | | | | | |
| | comp=Z,19nm,0.8s | | | | | | | | | |
| **GNI** | **Garni** | **70.43** | **353** | | P | | **P** | **21 26 18.5** | **+1.9** |
| GNI | | | | | P | | **P** | **21 26 18.5** | **+1.9** |
| GNI | | | | | S | | **S** | **21 35 32.5** | **+3.5** |
| GNI | | | | | S | | **S** | **21 35 32.5** | **+3.5** |
| **GNI** | **Garni** | **70.43** | **353** | *ce* | P | | **P** | **21 26 17.5** | **+1.0** |
| GNI | | | | | pmax | pmax | | | |
| | comp=Z,142nm,1.3s | | | | | | | | | |
| **TOKT** | **Tokat** | **70.47** | **359** | | *e*P | | **P** | **21 26 18.2** | **+1.6** |
| **CAVI** | **Cavuskoy** | **70.50** | **5** | | *e*P | | **P** | **21 26 18.1** | **+1.3** |
| **HDC** | **Heredia** | **70.53** | **115** | | IAMs_20 | IAMs_20 | | 21 55 59.3 | |
| | comp=Z,7µm,22.0s | | | | | | | | | |
| **HDC** | **Heredia** | **70.53** | **115** | | *e*P | | **P** | **21 26 15.5** | **-1.8** |
| **SABA** | **Saba** | **70.53** | **92** | | IAMs_20 | IAMs_20 | | 21 52 30.8 | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| **JAN** | **Janina** | **70.59** | **12** | | P | | **P** | **21 26 18.3** | **+1.0** |
| **CORM** | **Corum** | **70.61** | **1** | | *e*P | | **P** | **21 26 19.9** | **+2.4** |
| **GUMO** | **Guam** | **70.65** | **257** | | LR | LR | | 21 52 24.9 | |
| | comp=Z,1µm,21.5s,baz=26,slow=32 | | | | | | | | | |
| **SUSR** | **Susurluk-Balik** | **70.69** | **6** | | *e*P | | **P** | **21 26 18.1** | **+0.2** |
| **KOPR** | **Koprukoy-ERZUR** | **70.70** | **355** | | *e*P | | **P** | **21 26 20.6** | **+2.4** |
| **TIP** | **Timpagrande** | **70.72** | **15** | | P | | **P** | **21 26 18.2** | **0.0** |
| **TIP** | **Timpagrande** | **70.72** | **15** | ⇓ | P | | **P** | **21 26 18.6** | **+0.4** |
| **SEUS** | **St. Eustatius** | **70.74** | **92** | | IAMs_20 | IAMs_20 | | 21 59 32.4 | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **LCR2** | **La Lucha 2** | **70.80** | **115** | | P | | **P** | **21 26 17.7** | **-1.3** |
| LCR2 | | | | | IAMs_20 | IAMs_20 | | 21 58 13.7 | |
| | comp=Z,8µm,18.0s | | | | | | | | | |
| **SVSK** | **Karacayir** | **70.87** | **359** | | *e*P | | **P** | **21 26 20.7** | **+1.8** |
| **ANTO** | **Ankara** | **70.90** | **2** | | *e*P | | **P** | **21 26 20.8** | **+1.5** |
| **ANTO** | **Ankara** | **70.90** | **2** | | P | | **P** | **21 26 21.1** | **+1.8** |
| ANTO | | | | | P | | **P** | **21 26 21.1** | **+1.8** |
| ANTO | | | | | S | | **S** | **21 35 37.8** | **+3.4** |
| ANTO | | | | | S | | **S** | **21 35 37.8** | **+3.4** |
| **ANTO** | **Ankara** | **70.90** | **2** | ⇓ | P | | **P** | **21 26 21.0** | **+1.8** |
| **ANTO** | **Ankara** | **70.90** | **2** | | P | | **P** | **21 26 21.0** | **+1.7** |
| **PMOZ** | **Porto Moniz, M** | **70.98** | **45** | *e* | S | | **S** | **21 35 38.1** | **+2.6** |
| PMOZ | | | | | *e*LQ | | LQ | 21 43 43.8 | |
| PMOZ | | | | | *e*LR | | LR | 21 48 41.0 | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| **ANWB** | **Willy Bob** | **71.00** | **91** | | *e*P | | **P** | **21 26 18.4** | **-1.6** |
| **BR131** | **Keskin Array S** | **71.05** | **2** | | *e*P | | **P** | **21 26 20.9** | **+0.6** |
| **BR131** | **Keskin Array S** | **71.05** | **2** | | P | | **P** | **21 26 21.3** | **+1.0** |
| BR131 | | | | | IAmb | IAmb | | 21 26 27.0 | |
| | comp=Z,119nm,1.1s | | | | | | | | | |
| **BR131** | **Keskin Array S** | **71.05** | **2** | | P | | **P** | **21 26 21.4** | **+1.1** |
| | SNR=44 | | | | | | | | | |
| BR131 | | | | | P | | **P** | **21 26 21.4** | **+1.1** |
| | SNR=44 | | | | | | | | | |
| **BR131** | **Keskin Array S** | **71.05** | **2** | *i* | P | | **P** | **21 26 20.6** | **+0.3** |
| **BRTR** | **Keskin Array B** | **71.05** | **2** | | P | | **P** | **21 26 20.7** | **+0.4** |
| **BRTR** | **Keskin Array B** | **71.05** | **2** | | P | | **P** | **21 26 21.1** | **+0.9** |
| | comp=Z,45nm,0.9s,baz=356,slow=3.2,SNR=82 | | | | | | | | | |
| | comp=Z,45nm,0.9s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.05** | **2** | *i* | P | | **P** | **21 26 21.2** | **+0.9** |
| BRTR | | | | | pmax | pmax | | | |
| | comp=Z,44nm,0.9s | | | | | | | | | |
| **AGRB** | **Hanur-Agry** | **71.08** | **354** | | *e*P | | **P** | **21 26 21.1** | **+0.6** |
| **PMAR** | **Madeira** | **71.14** | **45** | | *e*P | | **P** | **21 26 22.4** | **+1.5** |
| | comp=Z,229nm,2.0s | | | | | | | | | |
| **YOZ** | **Yozgat** | **71.15** | **0** | | *e*P | | **P** | **21 26 22.2** | **+1.4** |
| **SVRH** | **Sivrihisar-ESK** | **71.30** | **3** | | *e*P | | **P** | **21 26 22.3** | **+0.6** |
| **ILIC** | **ilic-Erzincan** | **71.31** | **358** | | *e*P | | **P** | **21 26 26.1** | **+4.3** |
| **AFSR** | **Afar-Bala (An** | **71.33** | **2** | | *e*P | | **P** | **21 26 23.1** | **+1.2** |
| **NAX** | **Nakhchivan** | **71.37** | **352** | | P | | **P** | **21 26 20.1** | **-2.0** |
| **CIFT** | **Cifteler, Eski** | **71.38** | **4** | | *e*P | | **P** | **21 26 22.8** | **+0.7** |
| **KAMT** | **Kaman** | **71.41** | **2** | | *e*P | | **P** | **21 26 23.0** | **+0.6** |
| **SOMA** | **Soma-Manisa** | **71.47** | **7** | | *e*P | | **P** | **21 26 22.8** | **+0.2** |
| **CLDR** | **Caldiran** | **71.47** | **353** | | *e*P | | **P** | **21 26 20.1** | **-2.8** |
| **DKL** | **Dikili** | **71.53** | **7** | | *e*P | | **P** | **21 26 21.2** | **-1.7** |
| **MLAZ** | **Malazgirt-MUS** | **71.53** | **354** | | *e*P | | P | 21 26 28.5 | +5.3 |
| **VRTB** | **Varto-Mus** | **71.54** | **355** | | *e*P | | P | 21 26 28.4 | +5.2 |
| **ANBD** | **Bethesda, Anti** | **71.58** | **91** | | *e*P | | **P** | **21 26 21.5** | **-2.0** |
| **AXAR** | **Agios Charalam** | **71.60** | **11** | | P | | **P** | **21 26 22.9** | **-0.5** |
| **LKRN** | **Lenkeran, Azer** | **71.64** | **349** | | P | | **P** | **21 26 21.8** | **-1.8** |
| **KIRS** | **Kirsehir-Merke** | **71.65** | **1** | ⇓ | P | | **P** | **21 26 25.3** | **+1.5** |
| **ARPR** | **Arapgir-MALATY** | **71.68** | **358** | | *e*P | | P | 21 26 12.5 | -12 |
| **MBFL** | **Flemmings, Mon** | **71.70** | **91** | | *e*P | | **P** | **21 26 24.3** | **+0.1** |
| **GULI** | **GuiLin** | **71.70** | **293** | | P | | **P** | **21 26 25.7** | **+1.5** |
| GULI | | | | | S | | **S** | **21 35 41.7** | **-2.1** |
| GULI | | | | | pmax | pmax | | | |
| | comp=Z,90nm,1.2s | | | | | | | | | |
| GULI | | | | | pmax | pmax | | | |
| | comp=Z,1µm,5.6s | | | | | | | | | |
| GULI | | | | | LR | LR | | | |
| | comp=Z,15µm,19.3s | | | | | | | | | |
| GULI | | | | | LR | LR | | | |
| | comp=Z,27µm,19.3s | | | | | | | | | |
| GULI | | | | | LR | LR | | | |
| | comp=Z,6µm,21.8s | | | | | | | | | |
| **KULU** | **Kulu** | **71.73** | **2** | | *e*P | | **P** | **21 26 25.1** | **+0.8** |
| **BNGB** | **Bingl** | **71.73** | **356** | | *e*P | | **P** | **21 26 26.0** | **+1.7** |
| **GORD** | **Gordes-Manisa** | **71.74** | **6** | | *e*P | | **P** | **21 26 24.4** | **+0.1** |
| **FSK** | **Fiskardo** | **71.76** | **12** | | P | | **P** | **21 26 23.9** | **-0.4** |
| **GYA** | **Guiyang** | **71.80** | **297** | ⇑ | P | | **P** | **21 26 25.0** | **+0.1** |
| GYA | | | | | S | | **S** | **21 35 41.1** | **-4.0** |
| GYA | | | | | SKS | | **SKSac** | **21 36 21.7** | **-6.9** |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.4s | | | | | | | | | |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,810nm,3.3s | | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| | comp=Z,5µm,19.4s | | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| | comp=Z,10µm,18.8s | | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| | comp=Z,5µm,28.7s | | | | | | | | | |
| **PTK** | **Pertek** | **71.86** | **357** | | *e*P | | **P** | **21 26 26.5** | **+1.3** |
| **EFP** | **Efpalio** | **71.89** | **11** | | P | | **P** | **21 26 25.6** | **+0.5** |
| **BNN** | **Bunyan** | **71.94** | **360** | | *e*P | | **P** | **21 26 27.4** | **+1.8** |
| **KALE** | **Kalithea** | **71.94** | **11** | | P | | **P** | **21 26 25.6** | **+0.1** |
| **CLTB** | **Caltabellotta** | **71.94** | **19** | | P | | **P** | **21 26 25.6** | **0.0** |
| **VLS** | **Valsamata** | **72.04** | **12** | | P | | **P** | **21 26 26.0** | **-0.1** |
| **VANB** | **Van** | **72.04** | **354** | | *e*P | | **P** | **21 26 28.9** | **+2.7** |
| **BRU2** | **Volcan** | **72.12** | **114** | | IAMs_20 | IAMs_20 | | 21 56 47.4 | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **72.13** | **355** | | *e*P | | **P** | **21 26 28.6** | **+1.8** |
| **KULA** | **Kula-Manisa** | **72.15** | **6** | | *e*P | | **P** | **21 26 26.9** | **+0.1** |
| **KULA** | **Kula-Manisa** | **72.15** | **6** | | P | | **P** | **21 26 26.3** | **-0.5** |
| **SHUT** | **Suhut-Afyon** | **72.17** | **4** | | *e*P | | **P** | **21 26 27.2** | **+0.2** |
| **CHBY** | **Cihanbeyli** | **72.19** | **2** | | *e*P | | **P** | **21 26 28.1** | **+1.0** |
| **DARE** | **Darende-Malaty** | **72.21** | **358** | | *e*P | | **P** | **21 26 29.7** | **+2.5** |
| **URLA** | **Izmir** | **72.22** | **7** | | *e*P | | **P** | **21 26 27.6** | **+0.4** |
| **RLS** | **Riolos of Patr** | **72.22** | **12** | | P | | **P** | **21 26 27.6** | **+0.5** |
| **VILL** | **Villia** | **72.24** | **10** | | P | | **P** | **21 26 26.1** | **-1.2** |
| **SET** | **Setif** | **72.27** | **25** | | P | | P | 21 26 12.0 | -16 |
| **KLV** | **Kalavryta, Ach** | **72.28** | **11** | | P | | **P** | **21 26 27.0** | **-0.6** |
| **AKDM** | **Akdamar-Van** | **72.32** | **354** | | *e*P | | **P** | **21 26 30.1** | **+2.1** |
| **SVRC** | **Sivrice-ELAZID** | **72.37** | **357** | | *e*P | | **P** | **21 26 31.0** | **+2.7** |
| **SARI** | **SarDi-Kayseri** | **72.38** | **359** | | *e*P | | **P** | **21 26 29.9** | **+1.6** |
| **PTL** | **Penteli** | **72.39** | **10** | | P | | **P** | **21 26 27.9** | **-0.3** |
| **GUR** | **Goura** | **72.40** | **11** | | P | | **P** | **21 26 27.8** | **-0.6** |
| **RAFF** | **Raffo Rosso** | **72.42** | **18** | | P | | **P** | **21 26 28.1** | **-0.3** |
| **GDSD** | **La Dsirade Is** | **72.50** | **90** | | P | | **P** | **21 26 28.3** | **-0.8** |
| GDSD | | | | | IAmb | IAmb | | 21 26 34.5 | |
| | comp=Z,107nm,0.8s | | | | | | | | | |
| **CBE** | **Ff, Capester** | **72.54** | **91** | | P | | **P** | **21 26 28.6** | **-0.7** |
| CBE | | | | | IAMs_20 | IAMs_20 | | 21 57 40.0 | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **SVAN** | **Silvan-Diyarba** | **72.56** | **355** | | *e*P | | **P** | **21 26 31.2** | **+2.0** |
| **LADK** | **Ladik-KONYA** | **72.56** | **3** | | *e*P | | **P** | **21 26 29.7** | **+0.4** |
| **SULT** | **Sultanhani-AKS** | **72.58** | **2** | | *e*P | | **P** | **21 26 28.7** | **-0.7** |
| **PATS** | **Pohnpei** | **72.58** | **241** | | IAMs_20 | IAMs_20 | | 21 54 47.0 | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **VLY** | **Voula,Athens** | **72.58** | **10** | | P | | **P** | **21 26 33.9** | **+4.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **72.69** | **6** | | *e*P | | **P** | **21 26 29.9** | **-0.2** |
| **BCIP** | **Isla Barro Col** | **72.69** | **111** | | IAMs_20 | IAMs_20 | | 21 55 59.5 | |
| | comp=Z,10µm,22.0s | | | | | | | | | |
| **TBG** | **Guadaloupe-3** | **72.73** | **91** | | *e*P | | **P** | **21 26 26.6** | **-3.7** |
| **MAGL** | **Barre de l'ile** | **72.76** | **91** | | IAMs_20 | IAMs_20 | | 22 02 09.0 | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **AVE** | **Averroes** | **72.78** | **37** | | P | | **P** | **21 26 30.9** | **+0.3** |
| AVE | | | | | IAmb | IAmb | | 21 26 52.5 | |
| | comp=Z,100nm,1.1s | | | | | | | | | |
| **KONT** | **Konya--Tatoy** | **72.81** | **3** | | *e*P | | **P** | **21 26 31.6** | **+0.9** |
| **YESY** | **Yesilyurt** | **73.00** | **2** | | *e*P | | **P** | **21 26 32.7** | **+0.8** |
| **CMRD** | **Camardi-Nigde** | **73.12** | **1** | | *e*P | | **P** | **21 26 33.9** | **+1.2** |
| **ITM** | **Ithomi** | **73.13** | **11** | | *e*P | | **P** | **21 26 32.3** | **-0.3** |
| **ITM** | **Ithomi** | **73.13** | **11** | | P | | **P** | **21 26 31.7** | **-0.9** |
| ITM | | | | | IAmb | IAmb | | 21 26 38.9 | |
| | comp=Z,150nm,1.3s | | | | | | | | | |
| **ITM** | **Ithomi** | **73.13** | **11** | | P | | **P** | **21 26 32.1** | **-0.5** |
| **APMY** | **Acipayam-Deniz** | **73.21** | **5** | | *e*P | | **P** | **21 26 31.6** | **-1.5** |
| **HNLY** | **HANLEY** | **73.21** | **323** | | *e*P | | **P** | **21 26 34.1** | **+0.4** |
| **LSA** | **Lhasa** | **73.25** | **311** | | P | | **P** | **21 26 35.2** | **+1.2** |
| LSA | | | | | S | | **S** | **21 35 58.1** | **-4.3** |
| LSA | | | | | LR | LR | | | |
| | comp=Z,14µm,17.2s | | | | | | | | | |
| LSA | | | | | LR | LR | | | |
| | comp=Z,8µm,16.7s | | | | | | | | | |
| LSA | | | | | LR | LR | | | |
| | comp=Z,7µm,17.2s | | | | | | | | | |
| **BCK** | **Bucak** | **73.26** | **4** | | *e*P | | **P** | **21 26 34.3** | **+0.9** |
| **HKPS** | **Hong Kong Po S** | **73.26** | **289** | | IAmb | IAmb | | 21 26 41.0 | |
| | comp=Z,166nm,1.1s | | | | | | | | | |
| **PZH** | **PanZhiHua** | **73.27** | **301** | | P | | **P** | **21 26 33.5** | **-0.2** |
| PZH | | | | | pP | | **pP** | **21 26 36.0** | **-1.0** |
| PZH | | | | | sP | | **sP** | **21 26 39.0** | **+0.8** |
| PZH | | | | | S | | **S** | **21 35 58.5** | **-3.5** |
| PZH | | | | | SS | | **SS** | **21 40 42.2** | **-0.6** |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,60nm,0.9s | | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,680nm,3.5s | | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,9µm,18.2s | | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,14µm,19.4s | | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,14µm,16.5s | | | | | | | | | |
| **KMRS** | **Kahramanmaras** | **73.28** | **359** | | *e*P | | **P** | **21 26 35.3** | **+1.8** |
| **KEST** | **Kesra** | **73.29** | **22** | | P | | **P** | **21 26 33.4** | **-0.3** |
| KEST | | | | | IAmb | IAmb | | 21 26 42.7 | |
| | comp=Z,143nm,1.0s | | | | | | | | | |
| **KEST** | **Kesra** | **73.29** | **22** | | P | | **P** | **21 26 34.4** | **+0.8** |
| | comp=Z,49nm,0.8s,baz=275,slow=1.6,SNR=56 | | | | | | | | | |
| | comp=Z,49nm,0.8s | | | | | | | | | |
| **KEST** | **Kesra** | **73.29** | **22** | | P | | **P** | **21 26 34.7** | **+1.1** |
| | SNR=36 | | | | | | | | | |
| KEST | | | | | P | | **P** | **21 26 34.7** | **+1.1** |
| | SNR=36 | | | | | | | | | |
| KEST | | | | | S | | **SKiKP** | **21 36 04.6** | **+0.1** |
| KEST | | | | | S | | **SKiKP** | **21 36 04.6** | **+0.1** |
| **KOZT** | **Kozan** | **73.31** | **360** | | *e*P | | **P** | **21 26 34.8** | **+1.2** |
| **URF

TNCH pP pP 21 26 50.8 0.0
TNCH sP sP 21 26 52.2 +0.2
TNCH S **S** **21 36 26.6 -1.8**
TNCH sS sS 21 36 34.1 +0.2
TNCH pmax pmax
comp=Z,53nm,1.1s
TNCH pmax pmax
comp=Z,270nm,2.9s
TNCH LR LR
comp=Z,6µm,21.6s
TNCH LR LR
comp=Z,6µm,21.1s
TNCH LR LR
comp=Z,13µm,23.4s
**LEF Lefka 75.64 2** *e*P **P** **21 26 47.9 +0.7**
**DDI Dehra Dun 75.78 323** *e*P **P** **21 26 48.7 +0.6**
DDI IAmb IAmb 21 26 54.6
comp=Z,289nm,1.0s
**CSS Mathiatis 75.81 2** *e*P **P** **21 26 48.5 +0.3**
**CSS Mathiatis 75.81 2** P **P** **21 26 48.2 +0.1**
**GCMP Grenada, Carri 75.92 92** *e*P P 21 26 35.5 -13
**BBGH Gun Hill 75.97 90** IAMs_20 IAMs_20 22 05 16.9
comp=Z,8µm,20.0s
**BBGH Gun Hill 75.97 90** *e*P **P** **21 26 50.9 +1.6**
**SDV Santo Domingo 76.06 102** P **P** **21 26 48.7 -1.3**
SDV IAMs_20 IAMs_20 22 04 27.1
comp=Z,6µm,20.0s
**SDV Santo Domingo 76.06 102** LR LR 22 03 30.7
comp=Z,5µm,18.1s,baz=356,slow=38
**SDV Santo Domingo 76.06 102** *e*P **P** **21 26 48.8 -1.2**
**GRHS Sauteurs 76.09 92** *e*P **P** **21 26 47.2 -2.7**
**GRW Mount Saint Ca 76.14 93** *e*P **P** **21 26 48.4 -1.9**
**LGTI Lohaghat 76.14 321** *e*P **P** **21 26 50.3 +0.2**
LGTI IAmb IAmb 21 26 56.9
comp=Z,117nm,1.1s
**GRGR Grenville 76.17 93** IAMs_20 IAMs_20 21 58 10.4
comp=Z,5µm,21.0s
**GRGR Grenville 76.17 93** *e*P P 21 26 38.3 -12
**GTK Tadong 76.18 313** *e*P **P** **21 26 51.2 +0.6**
GTK IAmb IAmb 21 26 57.9
comp=Z,337nm,1.3s
**KOHI KOHIMA 76.22 308** *e*P **P** **21 26 50.7 -0.1**
KOHI IAmb IAmb 21 26 58.0
comp=Z,242nm,1.4s
**TATN Tataouine 76.55 22** P **P** **21 26 51.0 -1.5**
**BHL Bhannes 76.87 360** *e*P **P** **21 26 54.8 +0.4**
**BAUV El Baul 76.90 100** P **P** **21 26 53.5 -1.0**
BAUV IAmb IAmb 21 27 00.2
comp=Z,154nm,0.9s
**BAUV El Baul 76.90 100** *e*P **P** **21 26 53.0 -1.6**
**PCRV Puerto La Cruz 76.94 96** LR LR 22 03 31.0
comp=Z,3µm,18.3s,slow=38
**PCRV Puerto La Cruz 76.94 96** *e*P **P** **21 26 50.6 -4.2**
**SHL Shillong 76.98 310** P **P** **21 26 54.3 -0.9**
SHL IAMs_20 IAMs_20 22 05 28.8
comp=Z,9µm,22.0s
**SHL Shillong 76.98 310** *e*P **P** **21 26 54.9 -0.2**
SHL IAmb IAmb 21 27 00.9
comp=Z,49nm,1.0s
**SHL Shillong 76.98 310** P **P** **21 26 55.8 +0.7**
SNR=22
**SHL Shillong 76.98 310** P **P** **21 26 54.3 -0.9**
SHL pmax pmax
comp=Z,83nm,1.1s
SHL MLR MLR
comp=Z,10µm,22.0s
**IMP Imphal 77.11 308** *e*P **P** **21 26 55.8 0.0**
IMP IAmb IAmb 21 27 13.3
comp=Z,114nm,1.4s
**QRWL Qaraoun 77.23 360** *e*P **P** **21 26 57.2 +0.9**
**TPR Prospect 77.36 92** *e*P **P** **21 26 58.0 +0.8**
**SLVN Son La 77.46 297** P **P** **21 26 56.2 -1.5**
**NPLP NPLP New Delhi 77.59 323** *e*P **P** **21 26 58.6 +0.3**
**TRN Trinidad (W) 77.64 93** *e*P **P** **21 26 56.4 -2.2**
**QIZ Qiongzhong 77.71 291** P **P** **21 26 59.8 +0.7**
QIZ S **S** **21 36 50.3 -0.7**
QIZ SS **SS** **21 41 50.8 +0.7**
QIZ pmax pmax
comp=Z,85nm,1.4s
QIZ LR LR
comp=Z,14µm,19.1s
QIZ LR LR
comp=Z,18µm,16.7s
QIZ LR LR
comp=Z,13µm,15.1s
**MMAI Mount Meron Ar 77.76 0** P **P** **21 27 00.2 +0.9**
comp=Z,54nm,1.0s,baz=327,slow=5.4,SNR=22
comp=Z,54nm,1.0s
**SONA Sohna 77.99 323** *e*P **P** **21 27 00.1 -0.4**
SONA IAmb IAmb 21 27 06.2
comp=Z,86nm,0.8s
**KUDL Kundal 78.21 324** *e*P **P** **21 27 01.6 -0.2**
KUDL IAmb IAmb 21 27 07.7
comp=Z,95nm,0.9s
**TAOE Nuku Hiva Isla 78.25 176** *e*P **P** **21 27 04.0 +1.9**
comp=Z,220nm,1.3s
TAOE *e*S **S** **21 36 49.6 -7.3**
comp=Z,547nm,27.2s
TAOE *e*SS **SS** **21 42 03.4 +4.0**
comp=Z,3µm,31.4s
TAOE *e*LQ LQ 21 47 55.7
comp=Z,12µm,31.9s
TAOE *e*LR LR 21 51 14.0
comp=Z,7µm,22.3s
**MMLI Mount Malkishu 78.34 0** *e*P **P** **21 27 03.5 +1.1**
**ROSC El Rosal 78.58 107** P **P** **21 27 04.3 -0.1**
ROSC IAmb IAmb 21 27 17.8
comp=Z,117nm,0.9s
**ROSC El Rosal 78.58 107** P **P** **21 27 05.2 +0.9**
comp=Z,50nm,0.8s,baz=9.2,slow=7.2,SNR=28
ROSC LR LR 22 02 53.3
comp=Z,6µm,20.2s,baz=356,slow=36
comp=Z,50nm,0.8s
**ROSC El Rosal 78.58 107** P **P** **21 27 04.3 -0.1**
ROSC pmax pmax
comp=Z,117nm,1.0s
**BALJ Balqa 78.69 360** P **P** **21 27 04.7 +0.3**
BALJ IAmb IAmb 21 27 11.8
comp=Z,205nm,1.2s
**PAYG Puerto Ayora 78.73 124** IAMs_20 IAMs_20 22 02 46.7
comp=Z,7µm,20.0s
**AGT Agartala 78.75 310** *e*P **P** **21 27 06.7 +2.0**
**UJAP Al Uja 78.82 0** *e*P **P** **21 27 05.6 +0.6**
**CRAI Chiangrai 79.58 300** P **P** **21 27 09.1 -0.3**
**SAIH SAIHA 79.60 308** *e*P **P** **21 27 09.8 +0.2**
SAIH IAmb IAmb 21 27 16.5
comp=Z,149nm,0.8s
**ALBI Allahabad 79.78 318** *e*P **P** **21 27 09.4 -1.0**
ALBI IAmb IAmb 21 27 15.7
comp=Z,227nm,1.2s
**AJM Ajmer 80.20 325** *e*P **P** **21 27 16.8 +4.0**
AJM IAmb IAmb 21 27 18.6
comp=Z,147nm,1.4s
**BOK Bokaro 80.24 314** *e*P **P** **21 27 13.2 +0.3**
BOK IAmb IAmb 21 27 19.2
comp=Z,106nm,1.1s
**JHNI Jhansi 80.36 321** *e*P **P** **21 27 13.2 -0.4**
JHNI IAmb IAmb 21 27 18.9
comp=Z,134nm,1.0s
**JASL Jaisalmer 80.49 328** *e*P P 21 27 19.8 +5.5
**EIL Elat 81.09 1** *e*P **P** **21 27 17.9 +0.5**
**KBD Kabd 81.19 349** P **P** **21 27 18.5 +0.6**
**PHRA Phrae 81.25 300** P **P** **21 27 18.2 -0.1**
**TULM Tulcn-Chalpat 81.29 112** IAMs_20 IAMs_20 22 02 31.5
comp=Z,6µm,21.0s
**CM31 Chiang Mai Arr 81.68 301** P **P** **21 27 20.5 -0.2**
CM31 IAmb IAmb 21 27 27.1
comp=Z,205nm,1.2s
**CM31 Chiang Mai Arr 81.68 301** P **P** **21 27 21.4 +0.8**
SNR=26
**CMAR Chiang Mai Arr 81.68 301** P **P** **21 27 20.0 -0.7**
**CMAR Chiang Mai Arr 81.68 301** P **P** **21 27 21.1 +0.5**
comp=Z,58nm,1.1s,baz=1.5,slow=5.4,SNR=73
CMAR LR LR 22 09 00.5
comp=Z,9µm,18.9s,baz=40,slow=40
comp=Z,58nm,1.1s
**CMAR Chiang Mai Arr 81.68 301** *i* P **P** **21 27 20.7 0.0**
CMAR pmax pmax
comp=Z,59nm,1.1s
**PULU Pululahua 81.71 113** P **P** **21 27 21.8 +0.5**
**ANTS Antisana-Sarah 82.31 113** P **P** **21 27 25.2 +0.5**
ANTS IAmb IAmb 21 27 33.9
comp=Z,219nm,1.6s
ANTS IAMs_20 IAMs_20 22 06 37.5
comp=Z,6µm,18.0s

**BLSP Bilaspur 82.76 317** *e*P **P** **21 27 29.9 +3.6**
BLSP IAmb IAmb 21 27 31.9
comp=Z,150nm,1.0s
**BHPL Bhopal 82.76 322** *e*P **P** **21 27 26.3 0.0**
BHPL IAmb IAmb 21 27 31.8
comp=Z,159nm,1.1s
**NRDN NARMADA NAGAR 83.32 322** *e*P **P** **21 27 31.7 +2.5**
NRDN IAmb IAmb 21 27 37.6
comp=Z,138nm,1.1s
**SHME Shamm 83.55 341** *i* P **P** **21 27 30.0 -0.2**
SNR=16
**SHME Shamm 83.55 341** P **P** **21 27 30.8 +0.5**
SHME P **P** **21 27 30.8 +0.5**
**NGCH Negor - Chabah 83.60 337** P **P** **21 27 31.4 +0.9**
**SAKB Bahrain 84.16 347** P **P** **21 27 34.0 +0.6**
**MASF Masafi 84.21 341** P **P** **21 27 34.2 +0.5**
MASF P **P** **21 27 34.2 +0.5**
**MSFE Esma-Masafi 84.22 341** *i* P **P** **21 27 34.2 +0.4**
SNR=8.1
**SHMA Al-Shehemyia 84.24 346** P **P** **21 27 33.7 -0.1**
**MDH Madha 84.27 341** *i* P **P** **21 27 33.8 -0.2**
SNR=6.8
**MDH Madha 84.27 341** P **P** **21 27 34.2 +0.2**
MDH P **P** **21 27 34.2 +0.2**
**PMOR Pomariorio Ree 84.34 183** *e*P **P** **21 27 33.4 -0.8**
comp=Z,128nm,1.2s
**PMOR Pomariorio Ree 84.34 183** *e*LR LR 21 54 03.1
comp=Z,9µm,23.1s
**NGP Nagpur 84.42 320** *e*P **P** **21 27 38.7 +3.9**
**ARNL Arenillas 84.57 115** P **P** **21 27 34.9 -0.6**
ARNL IAmb IAmb 21 27 40.0
comp=Z,82nm,1.1s
**VAH Vaihoa 84.57 183** *e*P **P** **21 27 35.0 -0.3**
comp=Z,217nm,1.2s
**VAH Vaihoa 84.57 183** *e*LR LR 21 54 10.3
comp=Z,10µm,23.2s
**UOSS Minazif 84.63 341** P **P** **21 27 34.9 -0.9**
**UOSS Minazif 84.63 341** *i* P **P** **21 27 35.0 -0.8**
SNR=6.2
**UOSS Minazif 84.63 341** P **P** **21 27 35.4 -0.4**
UOSS P **P** **21 27 35.4 -0.4**
**NAZ Nazwa, Dubai 84.65 342** *i* P **P** **21 27 34.2 -1.7**
SNR=8.4
**NAZ Nazwa, Dubai 84.65 342** P **P** **21 27 36.1 +0.2**
SNR=9.6
NAZ P **P** **21 27 36.1 +0.2**
SNR=9.6
**HATD Hatta, Dubai 84.75 341** *i* P **P** **21 27 35.8 -0.6**
SNR=10
**HATD Hatta, Dubai 84.75 341** P **P** **21 27 37.0 +0.5**
SNR=14
HATD P **P** **21 27 37.0 +0.5**
SNR=14
**FAQ Al Faqa, Dubai 84.89 342** *i* P **P** **21 27 37.1 -0.1**
SNR=13
**FAQ Al Faqa, Dubai 84.89 342** P **P** **21 27 37.7 +0.5**
SNR=9.0
FAQ P **P** **21 27 37.7 +0.5**
SNR=9.0
**ASHO Ashiyiah 84.90 341** *i* P **P** **21 27 36.6 -0.6**
SNR=31
**ASHO Ashiyiah 84.90 341** P **P** **21 27 37.7 +0.5**
SNR=16
ASHO P **P** **21 27 37.7 +0.5**
SNR=16
**ASUD Al Ashush, Dub 85.04 342** *i* P **P** **21 27 36.8 -1.1**
SNR=26
**ASUD Al Ashush, Dub 85.04 342** P **P** **21 27 38.8 +0.9**
SNR=8.3
ASUD P **P** **21 27 38.8 +0.9**
SNR=8.3
**AJN Ajban 85.14 342** P **P** **21 27 38.0 -0.4**
AJN P **P** **21 27 38.0 -0.4**
**AKL Akola 85.30 322** *e*P **P** **21 27 43.2 +4.0**
**TRNA Turayna 85.33 346** P **P** **21 27 40.0 +0.6**
**SMRA Abu-Samra 85.36 346** P **P** **21 27 40.0 +0.5**
SNR=5.0
**SOHO SOHO 85.39 341** *i* P **P** **21 27 38.3 -1.3**
SNR=8.5
**SOHO SOHO 85.39 341** P **P** **21 27 40.4 +0.8**
SOHO P **P** **21 27 40.4 +0.8**
**TAM Tamanrasset 85.43 28** P **P** **21 27 40.1 0.0**
**TAM Tamanrasset 85.43 28** P **P** **21 27 40.1 0.0**
TAM pmax pmax
comp=Z,24nm,0.9s
TAM MLR MLR
comp=Z,4µm,19.0s
**SRDT SRDT 85.50 300** P **P** **21 27 41.1 +0.8**
**ALNE Al Ain 85.56 342** *i* P **P** **21 27 40.0 -0.5**
SNR=21
**ALNE Al Ain 85.56 342** P **P** **21 27 40.9 +0.4**
SNR=17
ALNE P **P** **21 27 40.9 +0.4**
SNR=17
**BOAV Boa Vista 85.61 95** P **P** **21 27 39.6 -1.3**
BOAV IAmb IAmb 21 27 46.0
comp=Z,188nm,1.5s
BOAV IAMs_20 IAMs_20 22 06 24.8
comp=Z,5µm,20.0s
**BOAV Boa Vista 85.61 95** *e*P **P** **21 27 39.2 -1.6**
**BIDO Bidbid 85.81 339** P **P** **21 27 42.6 +0.9**
BIDO P **P** **21 27 42.6 +0.9**
**HOQ Hoqain 85.85 340** P **P** **21 27 42.7 +0.7**
SNR=7.8
HOQ P **P** **21 27 42.7 +0.7**
SNR=7.8
**MDP Montagnes des 85.87 87** LR LR 22 04 21.6
comp=Z,6µm,21.5s,baz=342,slow=34
**GHWR Ruwais 85.95 344** P **P** **21 27 43.2 +0.8**
GHWR P **P** **21 27 43.2 +0.8**
**SLWR Sila 85.95 345** P **P** **21 27 43.1 +0.7**
SLWR P **P** **21 27 43.1 +0.7**
**WSAR Wadi Sarin 86.02 339** P **P** **21 27 43.0 +0.1**
comp=Z,24nm,0.8s,baz=21,slow=1.3,SNR=16
WSAR LR LR 22 08 43.7
comp=Z,2µm,21.9s,baz=34,slow=38
comp=Z,24nm,0.8s
**WSAR Wadi Sarin 86.02 339** P **P** **21 27 43.7 +0.9**
SNR=7.3
**MZWR Madinat Zayed 86.05 343** P **P** **21 27 42.8 -0.1**
MZWR P **P** **21 27 42.8 -0.1**
**ARQ Araqi 86.18 341** P **P** **21 27 44.1 +0.5**
SNR=16
ARQ P **P** **21 27 44.1 +0.5**
SNR=16
**SMDO Samad 86.27 339** P **P** **21 27 44.4 +0.3**
SNR=7.2
SMDO P **P** **21 27 44.4 +0.3**
SNR=7.2
**WBK Wadi Bani Khal 86.60 338** P **P** **21 27 46.8 +1.1**
WBK P **P** **21 27 46.8 +1.1**
**MZR Muzera 86.84 344** *i* P **P** **21 27 46.5 -0.3**
SNR=40
**MZR Muzera 86.84 344** P **P** **21 27 47.3 +0.4**
SNR=13
MZR P **P** **21 27 47.3 +0.4**
SNR=13
**PPT Papeete 86.94 185** LR LR 22 00 51.3
comp=Z,3µm,19.1s,baz=358,slow=32
**RAYN Ar Rayn 86.94 351** P **P** **21 27 48.1 +0.7**
RAYN IAmb IAmb 21 27 54.5
comp=Z,152nm,1.1s
**RAYN Ar Rayn 86.94 351** *i* P **P** **21 27 47.8 +0.4**
SNR=75
**RAYN Ar Rayn 86.94 351** P **P** **21 27 48.8 +1.4**
**RAYN Ar Rayn 86.94 351** P **P** **21 27 48.1 +0.7**
RAYN pmax pmax
comp=Z,152nm,1.1s
**JMDO Jabal Madar 86.94 339** P **P** **21 27 47.3 0.0**
JMDO P **P** **21 27 47.3 0.0**
**UMZA Um Al Zommool 86.95 342** P **P** **21 27 47.8 +0.4**
UMZA P **P** **21 27 47.8 +0.4**
**PPT2 Papeete2 86.96 185** *e*P **P** **21 27 48.1 +0.8**
comp=Z,80nm,1.3s
**PPT2 Papeete2 86.96 185** *e*PKP1 **P** **21 27 51.9 +4.6**
comp=Z,65nm,23.2s
**PPT2 Papeete2 86.96 185** *e*PP **PP** **21 31 07.4 -3.2**
comp=Z,109nm,27.5s
PPT2 *e*S **S** **21 38 22.4 -3.1**
comp=Z,506nm,27.0s
PPT2 *e*SS **SS** **21 44 12.1 +3.4**
comp=Z,835nm,29.8s
PPT2 *e*LQ LQ 21 51 22.4
comp=Z,8µm,25.0s
PPT2 *e*LR LR 21 55 14.9
comp=Z,5µm,24.5s

PPT2 *e*LR LR 21 55 15.5
comp=Z,6µm,24.0s
PPT2 *e*LR LR 21 55 20.2
comp=Z,1µm,21.0s
**JLN Jalan Bani Buh 86.99 338** P **P** **21 27 48.7 +1.1**
SNR=7.0
JLN P **P** **21 27 48.7 +1.1**
SNR=7.0
**PAE Paea 87.03 185** *e*P **P** **21 27 46.9 -0.6**
comp=Z,33nm,1.3s
**PAE Paea 87.03 185** *e*LR LR 21 55 21.5
comp=Z,736nm,21.0s
**HNR Honiara 87.51 235** IAMs_20 IAMs_20 22 03 18.9
comp=Z,7µm,22.0s
**HNR Honiara 87.51 235** LR LR 22 03 40.7
comp=Z,74µm,20.7s,baz=10.0,slow=33
**KKM Kota Kinabalu 87.67 281** P **P** **21 27 52.0 +1.0**
**KKM Kota Kinabalu 87.67 281** P **P** **21 27 50.8 -0.2**
KKM IAmb IAmb 21 27 57.9
comp=Z,96nm,1.0s
KKM IAMs_20 IAMs_20 22 07 18.0
comp=Z,5µm,21.0s
**POO Poona 88.08 324** *e*P **P** **21 27 54.6 +1.7**
POO IAmb IAmb 21 27 58.9
comp=Z,70nm,1.0s
**HYB Hyderabad 88.14 319** *e*P **P** **21 27 54.2 +1.1**
HYB *e*pP **PcP** **21 27 54.8 -0.1**
HYB *e*PcP **pP** **21 27 55.8 -0.7**
HYB *e*PP **PP** **21 31 21.7 +2.4**
HYB *e*SKSac **SKSac** **21 38 23.3 +1.6**
HYB *e*SS **SS** **21 44 29.5 +5.0**
HYB IVMs_BB IVMs_BB 22 15 11.4
comp=Z,2µm,13.0s
**MHTO MHTO 88.33 339** P **P** **21 27 53.5 -0.5**
**ATAH Atahualpa 88.48 115** LR LR 22 09 43.8
comp=Z,3µm,19.9s,baz=352,slow=37
**BBTS Babate 88.48 50** LR LR 22 06 47.6
comp=Z,2µm,19.4s,baz=220,slow=35
**TBTG Tabatinga, AM 88.51 106** *e*P **P** **21 27 54.2 -0.6**
**TEFE Tefe 89.68 101** *e*P **P** **21 27 60.0 -0.4**
**PBA Port Blair 89.95 305** P **P** **21 28 03.9 +2.3**
**SURA Surathani 90.23 297** P **P** **21 28 05.2 +2.2**
**MACA Manacapuru-AM 90.73 97** P **P** **21 28 04.7 -0.6**
MACA IAMs_20 IAMs_20 22 09 16.6
comp=Z,4µm,20.0s
**MACA Manacapuru-AM 90.73 97** *e*P **P** **21 28 04.6 -0.6**
**MRSI Marisa 90.85 274** P **P** **21 28 07.0 +1.2**
**CZSB Cruzeiro do Su 90.89 110** P **P** **21 28 04.9 -1.0**
**CZSB Cruzeiro do Su 90.89 110** *e*P **P** **21 28 04.3 -1.7**
**MSVF Nonsavu 91.01 216** LR LR 22 02 54.0
comp=Z,6µm,21.9s,baz=7.4,slow=32
**DOK Doka 91.11 342** P **P** **21 28 08.1 +1.1**
**MCPB Macapa, AP 91.15 88** *e*P **P** **21 28 06.3 -0.9**
**RAR Rarotonga 91.16 194** LR LR 22 02 50.6
comp=Z,3µm,19.8s,baz=358,slow=31
**PMG Port Moresby 91.41 247** IAMs_20 IAMs_20 22 08 37.6
comp=Z,4µm,20.0s
**PMG Port Moresby 91.41 247** LR LR 22 08 10.7
comp=Z,4µm,19.4s,baz=28,slow=35
**PMG Port Moresby 91.41 247** *i* P **P** **21 28 07.6 -0.7**
PMG pmax pmax
comp=Z,81nm,2.7s
**SHAO Shalim 91.53 341** P **P** **21 28 09.1 +0.1**
**WHFO Wadi Hawf 91.84 343** P **P** **21 28 09.9 -0.5**
**DMTO DMTO 91.91 342** P **P** **21 28 10.8 +0.1**
**RBK Rabkut 92.20 342** P **P** **21 28 16.1 +3.9**
**ABTO Aybut 92.44 343** P **P** **21 28 13.6 +0.3**
**RKT Rikitea 92.63 171** *e*PP **PP** **21 31 53.6 -2.1**
RKT *e*S **S** **21 39 15.6 -2.3**
comp=Z,1µm,33.0s
RKT *e*SS **SS** **21 45 30.4 -0.3**
comp=Z,3µm,33.0s
RKT *e*SS SS 21 45 35.1 +4.4
comp=Z,15µm,29.7s
RKT *e*LQ LQ 21 53 57.7
comp=Z,7µm,28.5s
RKT *e*LR LR 21 57 54.4
comp=Z,31µm,33.5s
RKT *e*LR LR 21 57 55.3
comp=Z,14µm,26.7s
**TBI Tubuai 92.68 185** *e*P **P** **21 28 13.1 -0.8**
comp=Z,26µm,26.0s
**TBI Tubuai 92.68 185** *e*PP **PP** **21 31 58.2 +2.1**
comp=Z,351nm,27.0s
TBI *e*S **S** **21 39 19.3 +1.0**
comp=Z,403nm,26.2s
TBI *e*SS **SS** **21 45 27.0 -4.5**
comp=Z,3µm,30.8s
TBI *e*LQ LQ 21 53 54.3
comp=Z,3µm,30.5s
TBI *e*LR LR 21 57 52.2
comp=Z,28µm,26.5s
TBI *e*LR LR 21 57 57.5
comp=Z,5µm,23.6s
TBI *e*LR LR 21 57 59.4
comp=Z,5µm,25.0s
**NNA Nana 93.53 115** LR LR 22 12 12.8
comp=Z,18µm,24.5s
**NNA Nana 93.53 115** *ce*P **P** **21 28 16.4 -1.8**
comp=Z,2µm,19.7s,baz=3.5,slow=37
NNA pmax pmax
comp=Z,52nm,1.3s
**KULM Kulim 93.56 295** P **P** **21 28 17.9 -0.5**
KULM IAMs_20 IAMs_20 22 12 50.2
comp=Z,6µm,18.0s
**ITTB Itaituba 93.58 93** *e*P **P** **21 28 17.6 -0.9**
**KSM Kuching 93.95 285** P **P** **21 28 19.6 -0.6**
**TOA0 Torodi Ar. Sit 94.18 33** P **P** **21 28 19.6 -1.6**
**TOA0 Torodi Ar. Sit 94.18 33** P **P** **21 28 20.6 -0.6**
TOA0 P **P** **21 28 20.6 -0.6**
**TORD Torodi Ar. Bea 94.18 33** P **P** **21 28 17.9 -3.3**
**TORD Torodi Ar. Bea 94.18 33** P **P** **21 28 19.9 -1.3**
comp=Z,3.6nm,0.7s,baz=353,slow=4.8,SNR=11
TORD PKKPbc **PKKPbc** **21 45 20.2 +1.6**
comp=Z,0.6nm,0.4s,baz=134,slow=2.5,SNR=9.5
TORD LR LR 22 17 44.6
comp=Z,1µm,18.0s,baz=352,slow=40
comp=Z,3.6nm,0.7s
**BKB Balikpapan 94.23 278** IAMs_20 IAMs_20 22 14 10.4
comp=Z,4µm,18.0s
**TMAB Tom-Au,PA,Br 94.41 85** *e*P **P** **21 28 22.0 -0.3**
**ETMB Extrema 95.02 104** *e*P **P** **21 28 23.4 -1.6**
**SAML Samuel 95.25 101** P **P** **21 28 23.9 -2.1**
SAML IAmb IAmb 21 28 29.3
comp=Z,71nm,1.7s
SAML IAMs_20 IAMs_20 22 10 58.7
comp=Z,5µm,22.0s
**SAML Samuel 95.25 101** P **P** **21 28 23.9 -2.1**
SAML pmax pmax
comp=Z,71nm,1.7s
SAML MLR MLR
comp=Z,5µm,22.0s
**SAML Samuel 95.25 101** *e*P **P** **21 28 23.9 -2.1**
**NPGB Novo Progresso 96.21 93** *e*P **P** **21 28 29.4 -1.1**
**LIFNC LIFOU 96.40 225** IAMs_20 IAMs_20 22 07 02.2
comp=Z,5µm,21.0s
**KAPI Kappang 96.72 274** LR LR 22 18 13.8
comp=Z,910nm,18.2s,baz=14,slow=39
**COEN Coen 96.97 249** P **P** **21 28 36.2 +2.4**
**PALK Pallekele 97.40 315** IAMs_20 IAMs_20 22 16 29.3
comp=Z,6µm,22.0s
**PALK Pallekele 97.40 315** LR LR 22 16 29.3
comp=Z,5µm,21.7s,baz=130,slow=38
**DZM Mont Dzumac 97.84 225** *e*P Pdif 21 28 38.9 +1.2
comp=Z,65nm,1.3s
**DZM Mont Dzumac 97.84 225** *e*PP **PP** **21 32 33.5 -2.8**
comp=Z,169nm,24.8s
DZM *e*S **S** **21 40 05.1 +1.7**
comp=Z,944nm,27.4s
DZM *e*SS **SS** **21 46 47.8 +2.9**
comp=Z,2µm,28.9s
DZM *e*LQ LQ 21 56 06.0
comp=Z,5µm,27.9s
DZM *e*LR LR 22 00 26.2
comp=Z,14µm,22.2s
**DZM Mont Dzumac 97.84 225** P Pdif 21 28 39.3 +1.6
comp=Z,12nm,0.9s,baz=23,slow=3.3,SNR=7.8
DZM LR LR 22 06 35.4
comp=Z,8µm,21.9s,baz=30,slow=32
comp=Z,12nm,0.9s
**DBIC Dimbokro 99.08 41** LR LR 22 13 24.2
comp=Z,8µm,20.1s,baz=342,slow=35
**KDU Kakadu 99.40 259** P **Pdif** **21 28 46.2 +1.5**
**CLDB Colider 99.61 95** *e*P **Pdif** **21 28 44.6 -1.1**
**VILB Vilhena 100.00 100** IAMs_20 IAMs_20 22 16 33.6
comp=Z,6µm,22.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **100.40** | **108** | P | | **Pdif** | **21** | **28** | **48.9** | **-1.0** |
| | comp=Z,1.1nm,0.6s,baz=345,slow=4.8,SNR=4.6 | | | | | | | | | |
| LPAZ | | | | PP | | **PP** | **21** | **32** | **54.1** | **-2.3** |
| | comp=Z,10nm,0.8s,baz=330,slow=8.1,SNR=9.4 | | | | | | | | | |
| **PB18** | **Visviri** | **101.17** | **110** | IAMs_20 | IAMs_20 | | 22 | 16 | 53.2 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **CTAO** | **Charters Tower** | **101.72** | **244** | IAMs_20 | IAMs_20 | | 22 | 10 | 34.0 | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **MNAI** | **Manna** | **101.88** | **290** | IAMs_20 | IAMs_20 | | 22 | 19 | 11.1 | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **HMBC** | **Humberstone** | **103.54** | **111** | IAMs_20 | IAMs_20 | | 22 | 11 | 01.2 | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **PB09** | **IPOC Station P** | **105.17** | **111** | IAMs_20 | IAMs_20 | | 22 | 26 | 09.3 | |
| | comp=Z,4μm,22.0s | | | | | | | | | |
| **PB04** | **IPOC Station P** | **105.38** | **112** | IAMs_20 | IAMs_20 | | 22 | 12 | 37.8 | |
| | comp=Z,3μm,18.0s | | | | | | | | | |
| **LVC** | **Limon Verde** | **106.04** | **111** | IAMs_20 | IAMs_20 | | 22 | 14 | 33.3 | |
| | comp=Z,4μm,22.0s | | | | | | | | | |
| **AC01** | **Pan de Azucar** | **108.78** | **114** | IAMs_20 | IAMs_20 | | 22 | 15 | 01.1 | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **OUZ** | **Omahuta** | **108.87** | **215** | IAMs_20 | IAMs_20 | | 22 | 11 | 34.6 | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **109.10** | **254** | Pdiff | | **Pdif** | **21** | **29** | **28.1** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=25,slow=4.8,SNR=3.0 | | | | | | | | | |
| ASAR | | | | PKIKP | | **PKiKP** | **21** | **33** | **32.4** | **+0.7** |
| | comp=Z,1.9nm,0.8s,baz=38,slow=1.7,SNR=6.1 | | | | | | | | | |
| ASAR | | | | PKKPbc | | **PKKPbc** | **21** | **44** | **37.2** | **+1.2** |
| | comp=Z,0.7nm,0.9s,baz=196,slow=2.4,SNR=3.1 | | | | | | | | | |
| **TOZ** | **Tahuroa Road** | **110.92** | **213** | IAMs_20 | IAMs_20 | | 22 | 20 | 28.9 | |
| | comp=Z,4μm,18.0s | | | | | | | | | |
| **AC05** | **El Transito** | **111.38** | **115** | IAMs_20 | IAMs_20 | | 22 | 20 | 21.1 | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **CO05** | **La Serena** | **112.08** | **116** | IAMs_20 | IAMs_20 | | 22 | 15 | 34.7 | |
| | comp=Z,4μm,22.0s | | | | | | | | | |
| **CO03** | **El Pedregal** | **113.11** | **116** | IAMs_20 | IAMs_20 | | 22 | 20 | 17.9 | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **STKA** | **Stephens Creek** | **114.18** | **244** | PKiKP | | **PKiKP** | **21** | **33** | **42.1** | **+1.0** |
| | comp=Z,3.7nm,1.0s,baz=79,slow=5.2,SNR=2.8 | | | | | | | | | |
| **SPB** | **Sao Paulo** | **114.30** | **92** | IAMs_20 | IAMs_20 | | 22 | 25 | 00.0 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **ZON** | **Zonda** | **114.40** | **115** | IAMs_20 | IAMs_20 | | 22 | 29 | 47.0 | |
| | comp=Z,3μm,19.0s | | | | | | | | | |
| **VA03** | **San Esteban** | **114.94** | **117** | IAMs_20 | IAMs_20 | | 22 | 21 | 49.3 | |
| | comp=Z,4μm,18.0s | | | | | | | | | |
| **MT02** | **Curacav** | **115.21** | **118** | IAMs_20 | IAMs_20 | | 22 | 21 | 00.6 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **VA05** | **Santo Domingo** | **115.43** | **118** | IAMs_20 | IAMs_20 | | 22 | 20 | 44.5 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **MT01** | **Popeta** | **115.74** | **118** | IAMs_20 | IAMs_20 | | 22 | 21 | 14.5 | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **MT09** | **Talagante** | **115.74** | **118** | IAMs_20 | IAMs_20 | | 22 | 21 | 15.5 | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **MT13** | **San Alfonso** | **115.93** | **117** | IAMs_20 | IAMs_20 | | 22 | 21 | 45.5 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **BO01** | **Tunca** | **116.28** | **118** | IAMs_20 | IAMs_20 | | 22 | 21 | 28.8 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **GO05** | **Huala** | **116.58** | **119** | IAMs_20 | IAMs_20 | | 22 | 21 | 37.1 | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **BO02** | **Sierra Bellavi** | **116.74** | **118** | IAMs_20 | IAMs_20 | | 22 | 21 | 44.1 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **ML02** | **Panimavida** | **117.44** | **119** | IAMs_20 | IAMs_20 | | 22 | 23 | 45.7 | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **BI02** | **San Fabin de** | **118.31** | **119** | IAMs_20 | IAMs_20 | | 22 | 18 | 43.9 | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **GO06** | **Curarrehue** | **120.94** | **121** | IAMs_20 | IAMs_20 | | 22 | 20 | 15.4 | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **PLCA** | **Paso Flores** | **122.28** | **120** | | | **PKPdf** | **21** | **33** | **56.3** | **-0.2** |
| **PLCA** | **Paso Flores** | **122.28** | **120** | PKP | | **PKiKP** | **21** | **33** | **56.7** | **0.0** |
| | comp=Z,9.0nm,0.7s,baz=308,slow=2.6,SNR=13 | | | | | | | | | |
| PLCA | | | | SKP | | | 21 | 37 | 33.8 | |
| | comp=Z,3.0nm,1.0s,baz=326,slow=5.7,SNR=2.6 | | | | | | | | | |
| **TRQA** | **Tornquist** | **122.54** | **112** | | | **PKPdf** | **21** | **33** | **55.4** | **-1.6** |
| **TRQA** | **Tornquist** | **122.54** | **112** | PKIKP | | **PKPdf** | **21** | **33** | **55.4** | **-1.6** |
| TRQA | | | | MLR | | MLR | | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **LSZ** | **Lusaka** | **125.58** | **9** | IAMs_20 | IAMs_20 | | 22 | 38 | 04.6 | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **COYC** | **Coyhaique** | **126.24** | **124** | IAMs_20 | IAMs_20 | | 22 | 29 | 57.0 | |
| | comp=Z,3μm,19.0s | | | | | | | | | |
| **TSUM** | **Tsumeb** | **128.48** | **22** | | | **PKPdf** | **21** | **34** | **07.7** | **-1.4** |
| **TSUM** | **Tsumeb** | **128.48** | **22** | IAMs_20 | IAMs_20 | | 22 | 31 | 38.5 | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **FOMA** | **Nahampoana Res** | **134.92** | **345** | IAMs_20 | IAMs_20 | | 22 | 30 | 27.3 | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **EFI** | **East Falkland** | **135.92** | **117** | | | **PKPdf** | **21** | **34** | **22.3** | **+0.5** |
| **EFI** | **East Falkland** | **135.92** | **117** | PKIKP | | **PKPdf** | **21** | **34** | **22.3** | **+0.5** |
| **BOSA** | **Boshof** | **138.61** | **14** | PKhKP | | PKPpre | 21 | 34 | 20.2 | |
| | comp=Z,4.4nm,0.8s,baz=309,slow=4.6,SNR=4.2 | | | | | | | | | |
| **SOE** | **Somerset East** | **142.70** | **14** | | | **PKPdf** | **21** | **34** | **29.9** | **-5.1** |
| **PMSA** | **Palmer Station** | **145.13** | **132** | | | **PKPab** | **21** | **34** | **37.8** | **+0.1** |
| **VNDA** | **Vanda** | **150.27** | **201** | PKPbc | | **PKPbc** | **21** | **34** | **51.7** | **+0.3** |
| | comp=Z,5.3nm,0.9s,baz=340,slow=2.0,SNR=24 | | | | | | | | | |
| **CASY** | **Casey** | **153.26** | **240** | IAMs_20 | IAMs_20 | | 22 | 36 | 12.2 | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **159.38** | **180** | PKP | | **PKPdf** | **21** | **34** | **59.4** | **+0.3** |
| | comp=Z,17nm,1.0s,baz=52,slow=6.8,SNR=9.3 | | | | | | | | | |
| QSPA | | | | PKPab | | **PKPab** | **21** | **35** | **38.5** | **+1.5** |
| | comp=Z,33nm,0.8s,baz=54,slow=0.2,SNR=20 | | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **164.97** | **118** | ⇑PKPab | | **PKPab** | **21** | **36** | **01.1** | **-0.4** |
| | comp=Z,14nm,0.8s | | | | | | | | | |
| VNA3 | | | | ⇑PKPdf | | **PKPdf** | **21** | **35** | **01.4** | **-3.2** |
| | comp=Z,3.5nm,0.8s | | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **165.25** | **115** | ⇑PKPab | | **PKPab** | **21** | **36** | **02.7** | **+0.1** |
| | comp=Z,12nm,0.9s | | | | | | | | | |
| VNA1 | | | | ⇑PKPdf | | **PKPdf** | **21** | **34** | **58.8** | **-5.9** |
| | comp=Z,3.4nm,0.8s | | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **165.60** | **116** | ⇑PKPab | | **PKPab** | **21** | **36** | **01.4** | **-2.8** |
| | comp=Z,8.0nm,0.8s,baz=295,slow=4.7 | | | | | | | | | |
| VNA2 | | | | ⇑PKPdf | | **PKPdf** | **21** | **35** | **04.0** | **-1.1** |
| | comp=Z,4.7nm,0.8s,baz=98,slow=1.0 | | | | | | | | | |
| **SNAA** | **Sanae** | **167.20** | **117** | PKPdf | | **PKPdf** | **21** | **35** | **04.3** | **-2.1** |
| SNAA | | | | | | **pPKPdf** | **21** | **35** | **08.8** | **-1.1** |
| SNAA | | | | PKPab | | **PKPab** | **21** | **36** | **10.5** | **-0.9** |
| **SNAA** | **Sanae** | **167.20** | **117** | ⇑PKPab | | **PKPab** | **21** | **36** | **10.4** | **-0.9** |
| | comp=Z,195nm,0.9s | | | | | | | | | |
| SNAA | | | | ⇑PKPdf | | **PKPdf** | **21** | **35** | **01.2** | **-5.2** |
| | comp=Z,67nm,1.0s | | | | | | | | | |
| **SNAA** | **Sanae** | **167.20** | **117** | PKP | | **PKPdf** | **21** | **35** | **04.8** | **-1.6** |
| | comp=Z,4.0nm,1.1s,baz=273,slow=6.3,SNR=5.3 | | | | | | | | | |
| SNAA | | | | PKPab | | **PKPab** | **21** | **36** | **10.7** | **-0.6** |
| | comp=Z,7.5nm,0.9s,baz=283,slow=3.8,SNR=8.5 | | | | | | | | | |
| SNAA | | | | PP | | **PP** | **21** | **40** | **03.6** | **+3.0** |
| | comp=Z,4.5nm,1.0s,baz=282,slow=8.9,SNR=4.2 | | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **168.91** | **118** | ⇑PKPab | | **PKPab** | **21** | **36** | **19.1** | **+0.1** |
| | comp=Z,762nm,0.7s | | | | | | | | | |
| TROLL | | | | ⇑PKPdf | | **PKPdf** | **21** | **35** | **05.2** | **-2.5** |
| | comp=Z,118nm,0.8s | | | | | | | | | |
| **MAW** | **Mawson** | **169.89** | **268** | PKP | | **PKPdf** | **21** | **35** | **06.2** | **-1.9** |
| | comp=Z,1.3nm,0.6s,baz=337,slow=17,SNR=1.3 | | | | | | | | | |
| MAW | | | | PKPab | | **pPKPab** | **21** | **36** | **25.7** | **-0.9** |
| | comp=Z,7.5nm,0.9s,baz=55,slow=2.8,SNR=5.1 | | | | | | | | | |
| **NVL** | **N'lazarevskaya** | **171.83** | **110** | *e*PKP2 | | **PKPab** | **21** | **36** | **31.8** | **0.0** |
| NVL | | | | *e*SS | | SS | 22 | 01 | 28.9 | -2.7 |
| NVL | | | | pmax | | pmax | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| **ELIB** | **Princess Elisa** | **175.27** | **127** | *d*PKP | | **PKPab** | **21** | **36** | **47.1** | **-0.1** |

*NEIC* ***12*** *21:18:38.7±1.2,69.49N±0.03×144.45W±0.05,h10km±7km, Error ellipse: s-maj=5.4km s-min=1.7km az=156.0*

**AEIC 12 21:18:38.9**±1.8,**69.48N**±0.02×**144.42W**±0.06,**h1km**±6km, **ML3.6,ML3.7**/8(NEIC)**, Error ellipse: s-maj=3.6km s-min=2.6km az=152.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **C27K** | **Jago River** | **0.29** | **60** | | Pg | 21 | 18 | 43.9 | -0.4 |
| C27K | | | | | Sg | 21 | 18 | 48.5 | +0.5 |
| **C26K** | **Camden Bay** | **0.47** | **339** | | Pg | 21 | 18 | 47.4 | -0.5 |
| C26K | | | | IAML | | 21 | 18 | 52.7 | |
| | comp=N,8μm,2.0s | | | | | | | | |
| C26K | | | | IAML | | 21 | 18 | 55.1 | |
| | comp=E,7μm,3.1s | | | | | | | | |
| C26K | | | | | Sg | 21 | 18 | 55.2 | +1.3 |
| **D25K** | **Kavik River** | **0.71** | **258** | | Pg | 21 | 18 | 52.0 | -0.5 |
| D25K | | | | | Sg | 21 | 19 | 02.2 | +0.6 |
| D25K | | | | IAML | | 21 | 19 | 04.9 | |
| | comp=E,3μm,3.2s | | | | | | | | |
| D25K | | | | IAML | | 21 | 19 | 06.0 | |
| | comp=N,4μm,3.0s | | | | | | | | |
| **D27M** | **Malcolm River** | **1.25** | **100** | | Pg | 21 | 19 | 02.2 | -0.5 |
| D27M | | | | | Sb | 21 | 19 | 19.4 | -0.4 |
| **C24K** | **Franklin Bluff** | **1.52** | **281** | | Pn | 21 | 19 | 06.7 | -0.4 |
| C24K | | | | Sn | Sn | 21 | 19 | 25.0 | -2.5 |
| **D24K** | **Happy Valley** | **1.60** | **260** | Pn | Pn | 21 | 19 | 07.0 | -1.2 |
| **E27K** | **Coleen River** | **1.66** | **140** | Pn | Pn | 21 | 19 | 08.3 | -0.8 |
| **F26K** | **Sheenjek River** | **1.80** | **177** | Pn | Pn | 21 | 19 | 11.1 | +0.1 |
| **F25K** | **Christian Rive** | **1.95** | **194** | Pn | Pn | 21 | 19 | 12.2 | -1.0 |
| **E28M** | **Babbage River** | **1.97** | **114** | Pn | Pn | 21 | 19 | 11.7 | -1.6 |
| **TOLK** | **Toolik Lake Re** | **2.04** | **248** | Pn | Pn | 21 | 19 | 12.8 | -1.4 |
| **C23K** | **Itkillik River** | **2.19** | **282** | Pn | Pn | 21 | 19 | 15.1 | -1.3 |
| **F24K** | **Squaw Lake** | **2.35** | **215** | Pn | Pn | 21 | 19 | 17.6 | -1.0 |
| **D22K** | **Ayikyak River** | **3.01** | **262** | Pn | Pn | 21 | 19 | 26.4 | -1.3 |
| **G24K** | **Hadweenzic Riv** | **3.02** | **204** | Pn | Pn | 21 | 19 | 26.1 | -1.7 |
| **INK** | **Inuvik** | **4.11** | **102** | Pn | Pn | 21 | 19 | 42.1 | -0.6 |
| **F31M** | **Tsiigehtchic** | **4.44** | **112** | Pn | Pn | 21 | 19 | 44.5 | -2.7 |
| **G31M** | **Satah River** | **4.57** | **119** | Pn | Pn | 21 | 19 | 48.6 | -0.5 |
| **MDM** | **Murphy Dome** | **4.78** | **200** | Pn | Pn | 21 | 19 | 50.8 | -1.2 |
| **F20K** | **Avaraart Lake** | **4.86** | **245** | Pn | Pn | 21 | 19 | 51.5 | -1.4 |
| **MLY** | **Manley** | **5.10** | **212** | Pn | Pn | 21 | 19 | 53.8 | -2.5 |
| **E19K** | **Redstone River** | **5.14** | **253** | Pn | Pn | 21 | 19 | 54.1 | -2.7 |
| **WRH** | **Wood River Hil** | **5.24** | **198** | Pn | Pn | 21 | 19 | 56.1 | -2.0 |
| **I30M** | **Mount Dempster** | **5.29** | **140** | Pn | Pn | 21 | 19 | 56.2 | -2.8 |
| **C19K** | **Lookout Ridge** | **5.39** | **273** | Pn | Pn | 21 | 19 | 58.5 | -1.9 |

*NEIC* ***12*** *21:22:11.0±0.9,69.55N±0.05×144.46W±0.09,h10km±2km, Error ellipse: s-maj=9.8km s-min=3.5km az=22.0*

**AEIC 12 21:22:10.5**±0.7,**69.53N**±0.04×**144.46W**±0.08,**h4km**±6km, **ML3.8,ML4.0**/44(NEIC)**, Error ellipse: s-maj=6.2km s-min=3.9km az=182.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **C27K** | **Jago River** | **0.28** | **69** | | Pg | 21 | 22 | 15.5 | -0.4 |
| **C27K** | **Jago River** | **0.28** | **69** | | Sg | 21 | 22 | 20.1 | +0.6 |
| **C27K** | **Jago River** | **0.28** | **69** | IAML | | 21 | 22 | 20.1 | |
| | comp=E,10μm,0.7s | | | | | | | | |
| **C26K** | **Camden Bay** | **0.42** | **338** | | Pg | 21 | 22 | 18.6 | 0.0 |
| C26K | | | | | Sg | 21 | 22 | 24.6 | +0.6 |
| **C26K** | **Camden Bay** | **0.42** | **338** | IAML | | 21 | 22 | 27.4 | |
| | comp=E,3μm,0.4s | | | | | | | | |
| C26K | | | | IAML | | 21 | 22 | 27.6 | |
| | comp=N,5μm,0.4s | | | | | | | | |
| **D25K** | **Kavik River** | **0.71** | **254** | | Pg | 21 | 22 | 23.8 | -0.2 |
| D25K | | | | | Sg | 21 | 22 | 33.7 | +0.5 |
| **D27M** | **Malcolm River** | **1.27** | **101** | | Pg | 21 | 22 | 34.4 | -0.4 |
| D27M | | | | | Sn | 21 | 22 | 52.7 | +0.2 |
| **D27M** | **Malcolm River** | **1.27** | **101** | IAML | | 21 | 23 | 13.5 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| D27M | | | | IAML | | 21 | 23 | 17.1 | |
| | comp=E,2μm,0.7s | | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.50** | **279** | | Pn | 21 | 22 | 37.7 | -0.3 |
| C24K | | | | | Sb | 21 | 22 | 58.2 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.50** | **279** | IAML | | 21 | 23 | 24.7 | |
| | comp=N,2μm,0.9s | | | | | | | | |
| C24K | | | | IAML | | 21 | 23 | 27.4 | |
| | comp=E,2μm,1.2s | | | | | | | | |
| **D24K** | **Happy Valley** | **1.59** | **258** | | Pn | 21 | 22 | 39.0 | -0.4 |
| D24K | | | | | Sb | 21 | 23 | 00.7 | -0.2 |
| **D24K** | **Happy Valley** | **1.59** | **258** | IAML | | 21 | 23 | 25.5 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| D24K | | | | IAML | | 21 | 23 | 27.9 | |
| | comp=E,3μm,0.9s | | | | | | | | |
| **E27K** | **Coleen River** | **1.70** | **141** | | Pn | 21 | 22 | 41.0 | +0.1 |
| **E27K** | **Coleen River** | **1.70** | **141** | IAML | | 21 | 23 | 26.0 | |
| | comp=N,1μm,0.6s | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.85** | **176** | | Pn | 21 | 22 | 43.0 | 0.0 |
| **F26K** | **Sheenjek River** | **1.85** | **176** | IAML | | 21 | 23 | 30.9 | |
| | comp=N,1μm,0.6s | | | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **193** | | Pn | 21 | 22 | 44.9 | 0.0 |
| **F25K** | **Christian Rive** | **1.99** | **193** | IAML | | 21 | 23 | 36.6 | |
| | comp=E,1μm,1.1s | | | | | | | | |
| **E28M** | **Babbage River** | **2.00** | **115** | | Pn | 21 | 22 | 44.8 | -0.1 |
| **E28M** | **Babbage River** | **2.00** | **115** | IAML | | 21 | 23 | 36.7 | |
| | comp=N,924nm,1.3s | | | | | | | | |
| **D28M** | **Stokes Point** | **2.03** | **93** | | Pn | 21 | 22 | 45.2 | -0.2 |
| **D28M** | **Stokes Point** | **2.03** | **93** | IAML | | 21 | 23 | 46.3 | |
| | comp=N,2μm,1.2s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04** | **246** | | Pn | 21 | 22 | 45.4 | -0.2 |
| **TOLK** | **Toolik Lake Re** | **2.04** | **246** | IAML | | 21 | 23 | 43.4 | |
| | comp=N,854nm,1.5s | | | | | | | | |
| TOLK | | | | IAML | | 21 | 23 | 46.1 | |
| | comp=E,1μm,1.4s | | | | | | | | |
| **D23K** | **Nanushuk River** | **2.29** | **259** | | Pn | 21 | 22 | 48.7 | -0.3 |
| **D22K** | **Ayikyak River** | **3.00** | **261** | | Pn | 21 | 22 | 58.6 | -0.2 |
| **D22K** | **Ayikyak River** | **3.00** | **261** | IAML | | 21 | 24 | 13.7 | |
| | comp=N,500nm,1.0s | | | | | | | | |
| D22K | | | | IAML | | 21 | 24 | 15.8 | |
| | comp=E,489nm,1.0s | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19** | **289** | | Pn | 21 | 23 | 01.2 | -0.1 |
| **B22K** | **Teshekpuk Lake** | **3.19** | **289** | IAML | | 21 | 24 | 31.9 | |
| | comp=E,586nm,1.4s | | | | | | | | |
| **G29M** | **Pine Creek** | **3.56** | **135** | | Pn | 21 | 23 | 06.8 | +0.4 |
| **B21K** | **Ikpikpuk River** | **3.56** | **276** | | Pn | 21 | 23 | 06.8 | +0.4 |
| **B21K** | **Ikpikpuk River** | **3.56** | **276** | IAML | | 21 | 24 | 21.4 | |
| | comp=E,318nm,1.5s | | | | | | | | |
| B21K | | | | IAML | | 21 | 24 | 39.1 | |
| | comp=N,364nm,1.0s | | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.86** | **297** | | Pn | 21 | 23 | 10.5 | 0.0 |
| **INK** | **Inuvik** | **4.14** | **102** | | Pn | 21 | 23 | 14.1 | -0.2 |
| **INK** | **Inuvik** | **4.14** | **102** | IAML | | 21 | 23 | 50.6 | |
| | comp=N,262nm,1.4s | | | | | | | | |
| INK | | | | IAML | | 21 | 24 | 09.0 | |
| | comp=E,192nm,1.4s | | | | | | | | |
| **B20K** | **Meade River** | **4.43** | **282** | | Pn | 21 | 23 | 18.4 | 0.0 |
| **B20K** | **Meade River** | **4.43** | **282** | IAML | | 21 | 26 | 16.0 | |
| | comp=N,238nm,1.4s | | | | | | | | |
| **A21K** | **Barrow** | **4.47** | **299** | | Pn | 21 | 23 | 18.9 | +0.1 |
| **IL31** | | **4.87** | **192** | | Pn | 21 | 23 | 24.4 | 0.0 |
| **D19K** | **Kuna River** | **5.02** | **264** | | Pn | 21 | 23 | 26.9 | +0.5 |
| **D19K** | **Kuna River** | **5.02** | **264** | IAML | | 21 | 26 | 27.0 | |
| | comp=E,99nm,1.1s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.33** | **140** | | Pn | 21 | 23 | 31.4 | +0.6 |
| **C19K** | **Lookout Ridge** | **5.38** | **273** | | Pn | 21 | 23 | 31.8 | +0.4 |
| **F19K** | **Shaleruckik Mo** | **5.65** | **248** | | Pn | 21 | 23 | 35.4 | +0.3 |
| **J29N** | **Klondike Camp** | **5.65** | **151** | | Pn | 21 | 23 | 35.0 | -0.2 |
| **A19K** | **Wainwright** | **5.77** | **284** | | Pn | 21 | 23 | 37.0 | +0.2 |
| **C18K** | **Utukok River** | **6.05** | **269** | | Pn | 21 | 23 | 40.9 | +0.3 |
| **E18K** | **Tukpahlearik C** | **6.30** | **258** | | Pn | 21 | 23 | 44.0 | 0.0 |
| **F18K** | **Selawik** | **6.40** | **250** | | Pn | 21 | 23 | 45.6 | +0.3 |
| **E17K** | **Hotham Inlet** | **6.88** | **257** | | Pn | 21 | 23 | 52.0 | +0.1 |
| **G17K** | **Kiwalik Mounta** | **7.39** | **245** | | Pn | 21 | 23 | 59.3 | +0.4 |

**PRU 12 21:23:30.7,51.44N×16.16E,h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **CHVC** | **Chvalec** | **0.86** | **184** | *e*PG | Pg | 21 | 23 | 45.4 | -1.7 |
| CHVC | | | | *e*SG | Sg | 21 | 23 | 57.5 | -0.6 |
| **OSTC** | **Ostas** | **0.89** | **178** | *e*PG | Pg | 21 | 23 | 46.6 | -1.0 |
| OSTC | | | | *e*SG | Sg | 21 | 23 | 59.1 | 0.0 |
| **UPC** | **Upice** | **0.94** | **186** | *e*PG | Pg | 21 | 23 | 48.0 | -0.7 |
| UPC | | | | *e*SG | Sg | 21 | 24 | 00.8 | 0.0 |
| | comp=Z,4.3nm,0.3s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.10** | **175** | *e*PG | Pg | 21 | 23 | 50.3 | -1.4 |
| DPC | | | | *e*SG | Sg | 21 | 24 | 05.1 | -0.8 |
| **PVCC** | **Panska Ves** | **1.36** | **228** | *e*PG | Pg | 21 | 23 | 55.6 | -1.1 |
| PVCC | | | | *e*SG | Sg | 21 | 24 | 13.5 | -0.8 |
| | comp=Z,5.0nm,0.2s | | | | | | | | |
| **KRLC** | **Kraliky** | **1.42** | **164** | *e*SG | Sg | 21 | 24 | 15.7 | -0.6 |
| **BRG** | **Berggiesshubel** | **1.51** | **249** | Pg | Pn | 21 | 23 | 55.7 | -3.3 |
| BRG | | | | Sg | Sg | 21 | 24 | 16.7 | -2.4 |
| BRG | | | | Amp | | 21 | 24 | 17.9 | |
| | comp=Z,1.4nm,0.3s | | | | | | | | |

*IDC* ***12*** *21:24:10.1±0.6,69.68N×144.52W,h0km,mb4.1/19, mbtmp4.1/21,ML3.8/1, Error ellipse: s-maj=16.2km s-min=13.4km az=43.0*

*AEIC* ***12*** *21:24:10.5±1.5,69.52N±0.05×144.38W±0.08,h1km±4km, ML4.1,mb4.5/5(NEIC),ML4.4/70(NEIC), Error ellipse: s-maj=7.5km s-min=2.9km az=201.0*

*NEIC* ***12*** *21:24:11.1±1.5,69.59N±0.05×144.30W±0.10,h10km±1km, Error ellipse: s-maj=8.4km s-min=5.8km az=182.0*

**ISC 12 21:24:10.7**±1.2,**69.57N**±0.04×**144.38W**±0.03,**h6km**±7km, **n105,σ0.95/106,mb4.3**/24**, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **C27K** | **Jago River** | **0.24** | **77** | | **Pg** | **21** | **24** | **15.3** | **-0.1** |
| C27K | | | | | **Sg** | **21** | **24** | **19.2** | **+0.7** |
| **C27K** | **Jago River** | **0.24** | **77** | IAML | | 21 | 24 | 19.5 | |
| | comp=E,23μm,0.6s | | | | | | | | |
| C27K | | | | IAML | | 21 | 24 | 19.6 | |
| | comp=N,23μm,1.1s | | | | | | | | |
| **C26K** | **Camden Bay** | **0.39** | **332** | | **Pg** | **21** | **24** | **18.3** | **0.0** |
| C26K | | | | | **Sb** | **21** | **24** | **26.1** | **-0.3** |
| **D25K** | **Kavik River** | **0.75** | **251** | | **Pg** | **21** | **24** | **24.2** | **-0.9** |
| D25K | | | | | | | **Sb** | **21** | **24** | **36.3** | **-0.4** |
| **D27M** | **Malcolm River** | **1.25** | **104** | | | | **Pg** | **21** | **24** | **33.7** | **-0.9** |
| D27M | | | | | | | **Sg** | **21** | **24** | **50.4** | **-0.4** |
| **C24K** | **Franklin Bluff** | **1.52** | **278** | | | | **Pn** | **21** | **24** | **38.0** | **-0.4** |
| **C24K** | **Franklin Bluff** | **1.52** | **278** | IAML | | | | 21 | 25 | 02.3 | |
| | comp=E,4μm,2.2s | | | | | | | | | | |
| **D24K** | **Happy Valley** | **1.63** | **257** | | | | **Pn** | **21** | **24** | **39.7** | **-0.3** |
| D24K | | | | | | | **Sg** | **21** | **25** | **03.4** | **+0.3** |
| **D24K** | **Happy Valley** | **1.63** | **257** | IAML | | | | 21 | 25 | 22.5 | |
| | comp=E,5μm,0.7s | | | | | | | | | | |
| D24K | | | | IAML | | | | 21 | 25 | 22.6 | |
| | comp=N,5μm,0.6s | | | | | | | | | | |
| **E27K** | **Coleen River** | **1.72** | **143** | | | | **Pn** | **21** | **24** | **40.9** | **-0.3** |
| E27K | | | | | | | **Sb** | **21** | **25** | **04.4** | **-0.2** |
| **E27K** | **Coleen River** | **1.72** | **143** | IAML | | | | 21 | 25 | 25.9 | |
| | comp=E,4μm,0.6s | | | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **177** | | | | **Pn** | **21** | **24** | **43.1** | **-0.4** |
| F26K | | | | | | | **Sn** | **21** | **25** | **08.1** | **+0.3** |
| **F26K** | **Sheenjek River** | **1.89** | **177** | IAML | | | | 21 | 25 | 29.3 | |
| | comp=N,3μm,0.5s | | | | | | | | | | |
| **E28M** | **Babbage River** | **1.99** | **117** | | | | **Pn** | **21** | **24** | **44.8** | **-0.2** |
| **D28M** | **Stokes Point** | **2.00** | **94** | | | | **Pn** | **21** | **24** | **45.1** | **+0.1** |
| **F25K** | **Christian Rive** | **2.04** | **194** | | | | **Pn** | **21** | **24** | **45.3** | **-0.4** |
| **TOLK** | **Toolik Lake Re** | **2.09** | **246** | | | | **Pn** | **21** | **24** | **46.2** | **-0.1** |
| **E24K** | **Your Creek** | **2.12** | **227** | | | | **Pn** | **21** | **24** | **46.5** | **-0.3** |
| **C23K** | **Itkillik River** | **2.19** | **280** | | | | **Pn** | **21** | **24** | **47.8** | **+0.1** |
| **D23K** | **Nanushuk River** | **2.33** | **258** | | | | **Pn** | **21** | **24** | **49.3** | **-0.2** |
| **F24K** | **Squaw Lake** | **2.44** | **214** | | | | **Pn** | **21** | **24** | **50.8** | **-0.3** |
| **E23K** | **Chandalar** | **2.44** | **234** | | | | **Pn** | **21** | **24** | **50.8** | **-0.4** |
| **F28M** | **Old Crow** | **2.57** | **138** | | | | **Pn** | **21** | **24** | **52.4** | **-0.5** |
| **E29M** | **Blow River** | **2.62** | **114** | | | | **Pn** | **21** | **24** | **53.2** | **-0.3** |
| **E29M** | **Blow River** | **2.62** | **114** | IAML | | | | 21 | 25 | 34.8 | |
| | comp=N,1μm,0.6s | | | | | | | | | | |
| E29M | | | | IAML | | | | 21 | 25 | 40.4 | |
| | comp=E,1μm,0.9s | | | | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.65** | **175** | | | | **Pn** | **21** | **24** | **53.5** | **-0.4** |
| **G24K** | **Hadweenzic Riv** | **3.11** | **203** | | | | **Pn** | **21** | **24** | **59.6** | **-0.7** |
| **COLD** | **Coldfoot** | **3.19** | **225** | | | | **Pn** | **21** | **25** | **01.0** | **-0.4** |
| **G29M** | **Pine Creek** | **3.57** | **136** | | | | **Pn** | **21** | **25** | **06.5** | **-0.1** |
| **B21K** | **Ikpikpuk River** | **3.59** | **276** | | | | **Pn** | **21** | **25** | **07.7** | **+1.0** |
| **B21K** | **Ikpikpuk River** | **3.59** | **276** | IAML | | | | 21 | 26 | 25.5 | |
| | comp=E,767nm,1.3s | | | | | | | | | | |
| B21K | | | | IAML | | | | 21 | 26 | 33.2 | |
| | comp=N,690nm,0.8s | | | | | | | | | | |
| **H24K** | **Noodor Dome** | **3.98** | **201** | | | | **Pn** | **21** | **25** | **12.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HHC | | | | | pP | | sP | 21 34 02.2 | +2.9 |
| HHC | | | | | *e*S | | **S** | **21 41 49.9** | **-0.8** |
| HHC | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| HHC | | | | | pmax | | pmax | | |
| | comp=Z,160nm,4.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **59.01** | **324** | | P | | **P** | **21 34 11.3** | **+0.5** |
| **MKAR** | **Makanchi Array** | **59.01** | **324** | | P | | **P** | **21 34 11.1** | **+0.3** |
| **MKAR** | **Makanchi Array** | **59.01** | **324** | | P | | **P** | **21 34 10.3** | **-0.5** |
| | comp=Z,1.4nm,0.8s,baz=42,slow=5.6,SNR=3.6 | | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.95** | **5** | | P | | **P** | **21 34 16.4** | **-0.6** |
| | comp=Z,3.3nm,0.6s,baz=358,slow=6.7,SNR=7.9 | | | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **59.95** | **5** | | P | | **P** | **21 34 18.4** | **+1.3** |
| **ABKAR** | **Akbulak array** | **60.15** | **342** | | P | | **P** | **21 34 18.7** | **+0.2** |
| **ABKAR** | **Akbulak array** | **60.15** | **342** | | P | | **P** | **21 34 18.8** | **+0.3** |
| ABKAR | | | | | IAmb | | IAmb | 21 34 21.4 | |
| | comp=Z,2.1nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **66.89** | **354** | | P | | **P** | **21 35 04.0** | **+0.9** |
| | comp=Z,3.5nm,1.0s,baz=18,slow=3.2,SNR=2.5 | | | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.26** | **32** | | P | | **P** | **21 35 05.7** | **+0.1** |
| | comp=Z,2.2nm,1.1s,baz=344,slow=5.8,SNR=4.0 | | | | | | | | |
| | comp=Z,2.2nm,1.1s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.01** | **2** | | P | | **P** | **21 35 29.1** | **+0.1** |
| | comp=Z,0.9nm,0.9s,baz=285,slow=6.5,SNR=2.7 | | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | | |
| **PZH** | **PanZhiHua** | **73.25** | **301** | | P | | **P** | **21 35 45.0** | **+2.4** |
| PZH | | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.66** | **301** | | P | | **P** | **21 36 28.8** | **-0.8** |
| | comp=Z,2.3nm,1.0s,baz=356,slow=6.2,SNR=6.2 | | | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | | | |

*AEIC **12** 21:24:28.3±1.2, 69°48N±0°04×144°33W±0°09, h5km±4km, ML4.1, mb4.5/9(NEIC), ML4.4/46(NEIC), Error ellipse: s-maj=6.5km s-min=4.3km az=199.0*
*IDC **12** 21:24:28.3±0.8, 69°77N×144°85W, h0km, mb4.1/13, mbtmp4.1/15, ML4.2/2, Error ellipse: s-maj=26.3km s-min=15.8km az=78.0*
*NEIC **12** 21:24:28.8±1.5, 69°53N±0°04×144°34W±0°09, h10km±1km, Error ellipse: s-maj=6.2km s-min=5.3km az=11.0*
**ISC 12 21:24:28.7±0.5, 69°56N±0°04×144°55W±0°03, h10km, n92, σ1§41/74, mb4.3/18, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **C27K** | **Jago River** | **0.30** | **77** | | | Pg | 21 24 33.2 | -1.6 |
| C27K | | | | | | **Sg** | **21 24 36.6** | **-2.2** |
| **C27K** | **Jago River** | **0.30** | **77** | IAML | | | 21 24 36.8 | |
| | comp=N,36μm,0.3s | | | | | | | |
| C27K | | | | IAML | | | 21 24 37.2 | |
| | comp=E,29μm,0.7s | | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **340** | | | **Pb** | **21 24 37.4** | **-0.1** |
| C26K | | | | IAML | | | 21 24 47.4 | |
| | comp=N,8μm,0.8s | | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **340** | | | **Sb** | **21 24 45.0** | **+1.5** |
| **C26K** | **Camden Bay** | **0.38** | **340** | IAML | | | 21 24 42.4 | |
| | comp=E,6μm,1.8s | | | | | | | |
| **D25K** | **Kavik River** | **0.69** | **250** | | | **Sn** | **21 24 53.1** | **-2.2** |
| **D27M** | **Malcolm River** | **1.31** | **103** | | | **Sn** | **21 25 08.7** | **-1.9** |
| **C24K** | **Franklin Bluff** | **1.46** | **278** | | | **Pg** | **21 24 57.0** | **+0.3** |
| C24K | | | | IAML | | | 21 25 07.8 | |
| | comp=E,3μm,1.0s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.46** | **278** | | | **Sg** | **21 25 17.5** | **+1.9** |
| **C24K** | **Franklin Bluff** | **1.46** | **278** | IAML | | | 21 25 19.4 | |
| | comp=N,5μm,0.5s | | | | | | | |
| **E27K** | **Coleen River** | **1.75** | **141** | | | **Sn** | **21 25 21.0** | **-0.5** |
| **F26K** | **Sheenjek River** | **1.88** | **175** | | | **Sn** | **21 25 24.6** | **-0.1** |
| **F25K** | **Christian Rive** | **2.02** | **192** | | | **Pn** | **21 25 02.1** | **-0.7** |
| **F25K** | **Christian Rive** | **2.02** | **192** | IAML | | | 21 25 34.2 | |
| | comp=N,4μm,0.6s | | | | | | | |
| F25K | | | | IAML | | | 21 25 36.4 | |
| | comp=E,3μm,0.7s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.03** | **245** | | | **Pb** | **21 25 03.7** | **-1.9** |
| **TOLK** | **Toolik Lake Re** | **2.03** | **245** | IAML | | | 21 25 20.3 | |
| | comp=E,3μm,0.8s | | | | | | | |
| TOLK | | | | IAML | | | 21 25 25.4 | |
| | comp=N,2μm,0.8s | | | | | | | |
| **D28M** | **Stokes Point** | **2.06** | **94** | | | **Pn** | **21 25 02.8** | **-0.6** |
| **D28M** | **Stokes Point** | **2.06** | **94** | IAML | | | 21 25 18.4 | |
| | comp=E,5μm,0.6s | | | | | | | |
| D28M | | | | IAML | | | 21 25 19.1 | |
| | comp=N,5μm,0.8s | | | | | | | |
| **E24K** | **Your Creek** | **2.07** | **226** | | | **Pn** | **21 25 03.6** | **0.0** |
| **E24K** | **Your Creek** | **2.07** | **226** | IAML | | | 21 25 18.9 | |
| | comp=N,2μm,0.7s | | | | | | | |
| E24K | | | | IAML | | | 21 25 20.5 | |
| | comp=E,2μm,1.4s | | | | | | | |
| **C23K** | **Itkillik River** | **2.13** | **280** | | | **Pg** | **21 25 06.0** | **-3.5** |
| **C23K** | **Itkillik River** | **2.13** | **280** | IAML | | | 21 25 41.7 | |
| | comp=E,3μm,1.1s | | | | | | | |
| C23K | | | | IAML | | | 21 25 43.2 | |
| | comp=N,3μm,0.8s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.27** | **258** | | | **Pb** | **21 25 07.2** | **-2.4** |
| **D23K** | **Nanushuk River** | **2.27** | **258** | IAML | | | 21 25 47.4 | |
| | comp=E,1μm,0.9s | | | | | | | |
| D23K | | | | IAML | | | 21 25 52.7 | |
| | comp=N,1μm,1.1s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.39** | **212** | | | **Pn** | **21 25 07.7** | **-0.3** |
| **F24K** | **Squaw Lake** | **2.39** | **212** | IAML | | | 21 25 29.2 | |
| | comp=N,926nm,0.6s | | | | | | | |
| F24K | | | | IAML | | | 21 25 48.5 | |
| | comp=E,901nm,1.7s | | | | | | | |
| **F28M** | **Old Crow** | **2.60** | **137** | | | **Pn** | **21 25 10.3** | **-0.5** |
| **F28M** | **Old Crow** | **2.60** | **137** | IAML | | | 21 25 35.0 | |
| | comp=E,1μm,0.7s | | | | | | | |
| F28M | | | | IAML | | | 21 25 50.5 | |
| | comp=N,1μm,0.6s | | | | | | | |
| **G25K** | **Bearman Lake** | **2.87** | **192** | | | **Pn** | **21 25 14.1** | **-0.4** |
| **FYU** | **Fort Yukon** | **3.02** | **185** | | | **Pn** | **21 25 16.2** | **-0.3** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **202** | | | **Pn** | **21 25 16.8** | **-0.6** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **202** | IAML | | | 21 25 50.6 | |
| | comp=N,1μm,1.1s | | | | | | | |
| G24K | | | | IAML | | | 21 25 52.5 | |
| | comp=E,1μm,1.5s | | | | | | | |
| **COLD** | **Coldfoot** | **3.14** | **224** | | | **Pn** | **21 25 18.2** | **0.0** |
| **B22K** | **Teshekpuk Lake** | **3.15** | **288** | | | **Pb** | **21 25 20.1** | **-4.7** |
| **G29M** | **Pine Creek** | **3.60** | **135** | | | Pn | 21 25 22.9 | -1.7 |
| **G29M** | **Pine Creek** | **3.60** | **135** | IAML | | | 21 26 09.7 | |
| | comp=E,1μm,0.5s | | | | | | | |
| G29M | | | | IAML | | | 21 26 19.6 | |
| | comp=N,1μm,2.2s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.95** | **200** | | | **Pn** | **21 25 28.8** | **-0.6** |
| **H24K** | **Noodor Dome** | **3.95** | **200** | IAML | | | 21 26 22.9 | |
| | comp=N,504nm,4.5s | | | | | | | |
| H24K | | | | IAML | | | 21 26 23.9 | |
| | comp=E,572nm,1.9s | | | | | | | |
| **I27K** | **Kandik River** | **4.13** | **163** | | | **Pn** | **21 25 30.7** | **-1.2** |
| **INK** | **Inuvik** | **4.17** | **102** | | | **Pn** | **21 25 31.1** | **-1.2** |
| **INK** | **Inuvik** | **4.17** | **102** | IAML | | | 21 28 00.4 | |
| | comp=N,297nm,4.1s | | | | | | | |
| **INK** | **Inuvik** | **4.17** | **102** | Pn | | **Pn** | **21 25 34.9** | **+2.5** |
| | comp=N,6.9nm,0.3s,baz=270,slow=10,SNR=1.3 | | | | | | | |
| | comp=N,41nm,0.5s | | | | | | | |
| **D20K** | **Etivluk River** | **4.40** | **264** | | | **Pn** | **21 25 37.3** | **+1.8** |
| **A21K** | **Barrow** | **4.42** | **299** | | | **Pn** | **21 25 37.9** | **+2.1** |
| **I28M** | **Miner Creek** | **4.50** | **155** | | | **Pn** | **21 25 35.7** | **-1.2** |
| **I28M** | **Miner Creek** | **4.50** | **155** | IAML | | | 21 26 24.8 | |
| | comp=N,413nm,3.8s | | | | | | | |
| I28M | | | | IAML | | | 21 27 02.4 | |
| | comp=E,350nm,1.5s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **199** | | | **Pn** | **21 25 41.6** | **+0.1** |
| **ILAR** | **Eielson Array** | **4.90** | **192** | Pn | | **Pn** | **21 25 43.4** | **+1.1** |
| | comp=E,11nm,0.3s,baz=7.3,slow=16,SNR=5.7 | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **21 26 40.0** | **+1.0** |
| | comp=E,15nm,0.3s,baz=6.3,slow=25,SNR=4.3 | | | | | | | |
| ILAR | | | | Lg | | Lg | 21 27 03.7 | |
| | comp=E,21nm,0.3s,baz=7.6,slow=30,SNR=4.2 | | | | | | | |
| | comp=E,54nm,0.6s | | | | | | | |
| **J25K** | **Salcha River,** | **4.98** | **184** | | | **Pn** | **21 25 43.6** | **0.0** |
| **D19K** | **Kuna River** | **4.99** | **264** | | | **Pn** | **21 25 45.2** | **+1.6** |
| **E19K** | **Redstone River** | **5.12** | **252** | | | **Pn** | **21 25 46.7** | **+1.3** |
| **MLY** | **Manley** | **5.14** | **211** | | | **Pn** | **21 25 46.2** | **+0.5** |
| **MLY** | **Manley** | **5.14** | **211** | IAML | | | 21 27 50.1 | |
| | comp=N,240nm,4.6s | | | | | | | |
| MLY | | | | IAML | | | 21 29 04.5 | |
| | comp=E,212nm,1.2s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.35** | **272** | | | **Pn** | **21 25 50.5** | **+2.0** |
| **C18K** | **Utukok River** | **6.02** | **269** | | | **Pn** | **21 25 59.0** | **+1.2** |
| **E18K** | **Tukpahlearik C** | **6.28** | **258** | | | **Pn** | **21 26 02.5** | **+1.3** |
| **G16K** | **Koyuk River** | **7.99** | **247** | Pn | | **Pn** | **21 26 25.3** | **+0.6** |
| **M19K** | **Big River Lodg** | **8.68** | **212** | Pn | | **Pn** | **21 26 35.5** | **+1.4** |
| **L18K** | **Granite Mounta** | **8.87** | **220** | Pn | | **Pn** | **21 26 37.0** | **+0.2** |
| **RAGM** | **Ragged Mountai** | **9.22** | **180** | Pn | | **Pn** | **21 26 40.8** | **-0.7** |
| **SNH** | **Sunshine Point** | **9.45** | **175** | Pn | | **Pn** | **21 26 44.2** | **-0.6** |
| **M17K** | **Holitna River** | **9.76** | **219** | Pn | | **Pn** | **21 26 49.9** | **+0.9** |
| **N18K** | **Kilae Creek** | **10.09** | **214** | Pn | | **Pn** | **21 26 52.8** | **-0.8** |
| **M16K** | **Timber Creek** | **10.44** | **222** | Pn | | **Pn** | **21 26 58.4** | **0.0** |
| **K13K** | **Kusilvak Mount** | **11.20** | **237** | Pn | | **Pn** | **21 27 08.5** | **-0.2** |
| **N15K** | **Kwethluk River** | **11.46** | **222** | Pn | | **Pn** | **21 27 13.1** | **+0.9** |
| **O14K** | **Tigyukauivet M** | **12.55** | **223** | Pn | | **Pn** | **21 27 28.7** | **+1.6** |
| **T35M** | **Bob Quinn** | **14.11** | **146** | Pn | | Pn | 21 27 42.7 | -5.7 |
| **ADK** | **Adak** | **23.21** | **237** | P | | **P** | **21 29 35.9** | **+0.5** |
| ADK | | | | IAmb | | IAmb | 21 29 39.7 | |
| | comp=Z,24nm,1.1s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.04** | **7** | P | | **P** | **21 30 54.7** | **0.0** |
| | comp=Z,2.2nm,0.5s,baz=0.0,slow=2.9,SNR=6.8 | | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.21** | **142** | P | | **P** | **21 31 18.2** | **+3.9** |
| | comp=Z,1.1nm,0.7s,baz=354,slow=8.2,SNR=2.4 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **5** | P | | **P** | **21 32 10.9** | **-0.2** |
| | comp=Z,2.2nm,0.7s,baz=0.0,slow=8.1,SNR=7.5 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.51** | **128** | P | | **P** | **21 32 59.4** | **+3.4** |
| | comp=Z,0.7nm,0.5s,baz=351,slow=5.0,SNR=2.1 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **49.11** | **6** | P | | **P** | **21 33 14.5** | **-1.1** |
| | comp=Z,1.5nm,0.5s,baz=1.1,slow=7.0,SNR=7.9 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **49.66** | **14** | P | | **P** | **21 33 18.4** | **-1.4** |
| | comp=Z,3.0nm,0.7s,baz=350,slow=7.5,SNR=5.3 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **52.08** | **306** | P | | **P** | **21 33 37.7** | **-0.7** |
| | comp=Z,0.8nm,0.7s,baz=53,slow=7.4,SNR=2.5 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.30** | **27** | P | | **P** | **21 33 39.3** | **-0.5** |
| | comp=Z,1.2nm,0.4s,baz=332,slow=6.3,SNR=8.2 | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | |
| **ESK** | **Eskdalemuir** | **52.30** | **27** | P | | **P** | **21 33 40.5** | **+0.7** |
| ESK | | | | IAmb | | IAmb | 21 33 46.0 | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| **ARU** | **Arti** | **53.20** | **344** | P | | **P** | **21 33 46.1** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **56.06** | **328** | P | | **P** | **21 34 07.4** | **+0.2** |
| | comp=Z,2.2nm,0.8s,baz=15,slow=6.8,SNR=3.6 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **58.99** | **324** | P | | **P** | **21 34 28.9** | **+0.9** |
| MK31 | | | | IAmb | | IAmb | 21 34 34.6 | |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.99** | **324** | P | | **P** | **21 34 27.5** | **-0.4** |
| **MKAR** | **Makanchi Array** | **58.99** | **324** | P | | **P** | **21 34 27.9** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=31,slow=6.3,SNR=8.8 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **MAKZ** | **Makanchi** | **59.04** | **324** | P | | **P** | **21 34 28.6** | **+0.3** |
| MAKZ | | | | IAmb | | IAmb | 21 34 29.6 | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.96** | **5** | P | | **P** | **21 34 34.2** | **-0.3** |
| **AKASG** | **Malin Array Be** | **59.96** | **5** | P | | **P** | **21 34 34.4** | **-0.1** |
| | comp=Z,3.4nm,0.5s,baz=359,slow=6.8,SNR=8.5 | | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | | |
| **AKBB** | **Malin Array Si** | **59.96** | **5** | P | | **P** | **21 34 34.5** | **-0.1** |
| **KIEV** | **Kiev** | **59.97** | **5** | P | | **P** | **21 34 34.6** | **0.0** |
| **ABKAR** | **Akbulak array** | **60.14** | **342** | P | | **P** | **21 34 34.8** | **-1.0** |
| **ABKAR** | **Akbulak array** | **60.14** | **342** | P | | **P** | **21 34 34.9** | **-1.0** |
| ABKAR | | | | IAmb | | IAmb | 21 34 42.1 | |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.30** | **32** | P | | **P** | **21 35 23.7** | **+0.5** |
| | comp=Z,1.0nm,0.7s,baz=343,slow=7.3,SNR=5.1 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.02** | **1** | P | | **P** | **21 35 46.3** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=345,slow=2.9,SNR=2.4 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |

*NEIC **12** 21:25:48.8±2.0, 69°56N±0°05×144°26W±0°06, h10km±1km, Error ellipse: s-maj=9.4km s-min=3.6km az=9.0*
*AEIC **12** 21:25:48.1±1.9, 69°49N±0°04×144°24W±0°08, h4km±5km, ML4.1, mb4.4/2(NEIC), ML4.3/36(NEIC), Error ellipse: s-maj=6.3km s-min=3.2km az=205.0*
**ISC 12 21:25:48.2±1.2, 69°53N±0°05×144°25W±0°03, h4km±8km, n86, σ1§08/82, mb4.7/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **C27K** | **Jago River** | **0.21** | **62** | Pg | | **Pg** | **21 25 52.4** | **+0.1** |
| C27K | | | | Sg | | **Sg** | **21 25 55.5** | **+0.3** |
| **C26K** | **Camden Bay** | **0.46** | **330** | | | **Pg** | **21 25 57.3** | **+0.4** |
| C26K | | | | | | **Sb** | **21 26 04.6** | **-1.3** |
| **D25K** | **Kavik River** | **0.78** | **256** | | | **Pg** | **21 26 02.5** | **-0.6** |
| D25K | | | | | | **Sg** | **21 26 13.5** | **+0.3** |
| **D27M** | **Malcolm River** | **1.20** | **102** | | | **Pg** | **21 26 10.6** | **-0.6** |
| D27M | | | | | | **Sb** | **21 26 27.5** | **+0.1** |
| **D27M** | **Malcolm River** | **1.20** | **102** | IAML | | | 21 26 32.1 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.57** | **279** | | | **Pn** | **21 26 16.6** | **-0.2** |
| C24K | | | | | | **Sg** | **21 26 38.4** | **-0.2** |
| **C24K** | **Franklin Bluff** | **1.57** | **279** | IAML | | | 21 26 42.4 | |
| | comp=N,6μm,0.8s | | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **143** | | | **Pn** | **21 26 17.4** | **-0.7** |
| E27K | | | | | | **Sn** | **21 26 40.0** | **+0.2** |
| **E27K** | **Coleen River** | **1.66** | **143** | IAML | | | 21 27 15.6 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **259** | | | **Pn** | **21 26 17.8** | **-0.4** |
| **D24K** | **Happy Valley** | **1.66** | **259** | IAML | | | 21 26 45.5 | |
| | comp=N,4μm,0.9s | | | | | | | |
| D24K | | | | IAML | | | 21 27 13.5 | |
| | comp=E,5μm,0.8s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **179** | | | **Pn** | **21 26 19.8** | **-0.9** |
| F26K | | | | | | **Sn** | **21 26 44.1** | **-0.3** |
| **F26K** | **Sheenjek River** | **1.84** | **179** | IAML | | | 21 26 48.7 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **E28M** | **Babbage River** | **1.93** | **116** | | | **Pn** | **21 26 21.2** | **-0.6** |
| **E28M** | **Babbage River** | **1.93** | **116** | IAML | | | 21 27 26.1 | |
| | comp=E,2μm,0.6s | | | | | | | |
| E28M | | | | IAML | | | 21 27 27.9 | |
| | comp=N,2μm,0.7s | | | | | | | |
| **D28M** | **Stokes Point** | **1.96** | **93** | | | **Pn** | **21 26 21.7** | **-0.5** |
| **F25K** | **Christian Rive** | **2.01** | **195** | | | **Pn** | **21 26 21.9** | **-1.0** |
| **F25K** | **Christian Rive** | **2.01** | **195** | IAML | | | 21 27 26.8 | |
| | comp=E,3μm,1.5s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.11** | **247** | | | **Pn** | **21 26 23.7** | **-0.6** |
| **TOLK** | **Toolik Lake Re** | **2.11** | **247** | IAML | | | 21 27 30.4 | |
| | comp=E,3μm,0.7s | | | | | | | |
| TOLK | | | | IAML | | | 21 27 30.9 | |
| | comp=N,2μm,1.2s | | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **229** | | | **Pn** | **21 26 23.8** | **-0.7** |
| **E24K** | **Your Creek** | **2.12** | **229** | IAML | | | 21 27 30.8 | |
| | comp=E,2μm,0.9s | | | | | | | |
| E24K | | | | IAML | | | 21 27 38.2 | |
| | comp=N,1μm,1.0s | | | | | | | |
| **C23K** | **Itkillik River** | **2.24** | **281** | | | **Pn** | **21 26 25.9** | **-0.2** |
| **C23K** | **Itkillik River** | **2.24** | **281** | IAML | | | 21 27 10.9 | |
| | comp=N,3μm,0.8s | | | | | | | |
| C23K | | | | IAML | | | 21 27 40.8 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **F28M** | **Old Crow** | **2.51** | **138** | | | **Pn** | **21 26 28.9** | **-0.8** |
| **F28M** | **Old Crow** | **2.51** | **138** | IAML | | | 21 27 43.5 | |
| | comp=E,1μm,0.6s | | | | | | | |
| F28M | | | | IAML | | | 21 27 48.0 | |
| | comp=N,1μm,1.1s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.60** | **176** | | | **Pn** | **21 26 30.0** | **-0.9** |
| **G25K** | **Bearman Lake** | **2.86** | **195** | | | **Pn** | **21 26 35.8** | **+1.2** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **205** | | | **Pn** | **21 26 37.1** | **-0.6** |
| **COLD** | **Coldfoot** | **3.19** | **226** | | | **Pn** | **21 26 38.2** | **-0.9** |
| **B22K** | **Teshekpuk Lake** | **3.26** | **289** | | | **Pn** | **21 26 40.1** | **+0.1** |
| **D19K** | **Kuna River** | **5.09** | **265** | | | **Pn** | **21 27 04.6** | **-0.6** |
| **D19K** | **Kuna River** | **5.09** | **265** | IAML | | | 21 30 23.6 | |
| | comp=E,243nm,0.9s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.45** | **273** | | | **Pn** | **21 27 10.1** | **-0.1** |
| **MENT** | **Mentasta** | **6.62** | **178** | Pn | | **Pn** | **21 27 25.0** | **-1.2** |
| **H18K** | **Honhosa River** | **6.99** | **238** | Pn | | **Pn** | **21 27 31.0** | **-0.2** |
| **F17K** | **Baldwin Pennin** | **7.09** | **252** | Pn | | **Pn** | **21 27 31.5** | **-1.0** |
| **M29M** | **Somme Creek** | **7.49** | **159** | Pn | | **Pn** | **21 27 38.9** | **+0.6** |
| **H17K** | **Granite Mounta** | **7.61** | **240** | Pn | | **Pn** | **21 27 40.5** | **+0.8** |
| **GLB** | **Gilahina Butte** | **8.12** | **178** | Pn | | **Pn** | **21 27 47.2** | **+0.4** |
| **MCARA** | **McCarthy WSAT** | **8.20** | **176** | Pn | | **Pn** | **21 27 46.8** | **-1.0** |
| **KNK** | **Knik Glacier** | **8.33** | **194** | Pn | | **Pn** | **21 27 47.7** | **-2.0** |
| **VRDI** | **Verde Repeater** | **8.34** | **177** | Pn | | **Pn** | **21 27 50.1** | **+0.2** |
| **M31M** | **Drury Creek, Y** | **8.38** | **147** | Pn | | **Pn** | **21 27 50.7** | **+0.4** |
| **M20K** | **Styx River** | **8.49** | **210** | Pn | | **Pn** | **21 27 53.3** | **+1.4** |
| **J17K** | **VABM Dome** | **8.52** | **231** | Pn | | **Pn** | **21 27 52.1** | **-0.1** |
| **FARO** | **Faro, Yukon** | **8.56** | **143** | Pn | | **Pn** | **21 27 52.4** | **-0.4** |
| **I17K** | **Unalakleet** | **8.60** | **237** | Pn | | **Pn** | **21 27 54.2** | **+0.9** |
| **N30M** | **Aishikik Lake** | **8.62** | **156** | Pn | | **Pn** | **21 27 52.4** | **-1.3** |
| **CTGM** | **Chitina Glacie** | **8.68** | **171** | Pn | | **Pn** | **21 27 56.1** | **+1.5** |
| **MMPY** | **Sheldon Lake,** | **8.69** | **137** | Pn | | **Pn** | **21 27 55.0** | **+0.4** |
| **M19K** | **Big River Lodg** | **8.70** | **213** | Pn | | **Pn** | **21 27 54.9** | **+0.2** |
| **RC01** | **Rabbit Creek A** | **8.77** | **198** | Pn | | **Pn** | **21 27 57.8** | **+2.1** |
| **N31M** | **Braeburn, Yuko** | **8.80** | **152** | Pn | | **Pn** | **21 27 58.0** | **+1.9** |
| **CRQM** | **Cirque** | **8.82** | **176** | Pn | | **Pn** | **21 27 57.0** | **+0.5** |
| **TGL** | **Tana Glacier** | **8.83** | **175** | Pn | | **Pn** | **21 27 57.0** | **+0.4** |
| **LOGN** | **Logan Glacier** | **8.84** | **170** | Pn | | **Pn** | **21 27 58.2** | **+1.4** |
| **PWL** | **Port Wells** | **8.87** | **193** | Pn | | **Pn** | **21 27 56.8** | **-0.2** |
| **K17K** | **Iditarod** | **8.87** | **226** | Pn | | **Pn** | **21 27 56.9** | **-0.1** |
| **L18K** | **Granite Mounta** | **8.91** | **221** | Pn | | **Pn** | **21 27 57.6** | **+0.1** |
| **ISLE** | **Juniper Island** | **9.00** | **174** | Pn | | **Pn** | **21 28 02.1** | **+3.2** |
| **TABL** | **Table Mountain** | **9.22** | **170** | Pn | | **Pn** | **21 28 05.2** | **+3.2** |
| **O30N** | **Mendenhall** | **9.43** | **155** | Pn | | **Pn** | **21 28 05.2** | **+0.5** |
| **MESA** | **MESA** | **9.44** | **173** | Pn | | **Pn** | **21 28 06.3** | **+1.4** |
| **O29M** | **Mount Kennedy** | **9.56** | **163** | Pn | | **Pn** | **21 28 08.1** | **+1.4** |
| **SVW2** | **Sparrevohn** | **9.68** | **215** | Pn | | **Pn** | **21 28 08.1** | **0.0** |
| **M17K** | **Holitna River** | **9.80** | **220** | Pn | | **Pn** | **21 28 09.6** | **-0.2** |
| **N18K** | **Kilae Creek** | **10.12** | **214** | Pn | | **Pn** | **21 28 13.7** | **-0.5** |
| **J14K** | **Nanvaranak Lak** | **10.31** | **238** | Pn | | **Pn** | **21 28 16.3** | **-0.4** |
| **P29M** | **Windy Craggy** | **10.31** | **161** | Pn | | **Pn** | **21 28 19.9** | **+3.0** |
| **M16K** | **Timber Creek** | **10.49** | **223** | Pn | | **Pn** | **21 28 18.5** | **-0.7** |
| **P33M** | **Teslin, Yukon** | **10.51** | **147** | Pn | | **Pn** | **21 28 19.7** | **+0.1** |
| **P32M** | **Atlin** | **10.93** | **151** | Pn | | **Pn** | **21 28 24.7** | **-0.6** |
| **Q32M** | **Nakina River** | **11.78** | **148** | Pn | | **Pn** | **21 28 36.4** | **-0.7** |
| **R32K** | **Eaglecrest** | **12.06** | **155** | Pn | | **Pn** | **21 28 42.1** | **+1.5** |
| **S31K** | **Pelican** | **12.12** | **159** | Pn | | **Pn** | **21 28 42.3** | **+0.8** |
| **OHAK** | **Old Harbor** | **12.97** | **202** | Pn | | **Pn** | **21 28 52.8** | **-0.3** |
| **AMKA** | **Amchitka** | **24.93** | **242** | P | | **P** | **21 31 14.3** | **+2.2** |
| **LTY** | **Liberty** | **25.18** | **140** | P | | **P** | **21 31 14.8** | **+0.3** |
| **LOHW** | **Long Hollow** | **31.12** | **129** | P | | **P** | **21 32 06.1** | **-1.6** |
| **ELK** | **Elko** | **32.61** | **137** | P | | **P** | **21 32 19.5** | **-1.4** |
| **HHC** | **Hu-ho-hao-te** | **57.01** | **299** | *e*P | | **P** | **21 35 35.3** | **+0.5** |
| HHC | | | | sP | | sP | 21 35 43.1 | +6.5 |
| HHC | | | | S | | **S** | **21 43 29.3** | **-0.2** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,210nm,5.2s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.08** | **324** | P | | **P** | **21 35 48.7** | **-0.3** |
| MK31 | | | | IAmb | | IAmb | 21 35 53.3 | |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.08** | **324** | P | | **P** | **21 35 48.5** | **-0.6** |
| **AKBB** | **Malin Array Si** | **59.99** | **5** | P | | **P** | **21 35 56.9** | **+1.6** |
| AKBB | | | | IAmb | | IAmb | 21 35 57.5 | |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| **PZH** | **PanZhiHua** | **73.31** | **301** | P | | **P** | **21 37 20.0** | **-0.8** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |

*IDC **12** 21:26:20.2±0.7, 69°70N×144°56W, h0km, mb4.1/19, mbtmp4.1/22, ML4.1/2, Error ellipse: s-maj=17.7km s-min=12.8km az=40.0*
**ISC 12 21:26:21.9±0.6, 69°63N±0°09×144°35W±0°07, h14km, n23, σ1§18/25, mb4.2/19, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **INK** | **Inuvik** | **4.12** | **104** | Pn | | **Pn** | **21 27 26.8** | **+2.5** |
| | 5.5nm,0.3s,baz=299,slow=10,SNR=1.1 | | | | | | | |
| INK | | | | Sn | | **Sn** | **21 28 11.8** | **-0.3** |
| | 11nm,0.3s,baz=216,slow=19,SNR=2.1 | | | | | | | |
| INK | | | | Lg | | Lg | 21 28 33.8 | |
| | 19nm,0.3s,baz=233,slow=16,SNR=3.4 | | | | | | | |
| | 56nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **4.98** | **193** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2.3nm,0.4s,baz=172,slow=12,SNR=18 | | | | | | | | |
| KK31 | | | | ⇓S | | **S** | | **21 29 27.7** | **-7.2** |
| | 18nm,0.5s,baz=182,slow=26,SNR=23 | | | | | | | | |
| **ULHL** | **Ulahol** | **6.09** | **31** | P | | **Pn** | | **21 28 22.9** | **-0.9** |
| | SNR=13 | | | | | | | | |
| **CHMS** | **Chumysh** | **6.25** | **19** | P | | **Pn** | | **21 28 25.2** | **-0.4** |
| | SNR=8.6 | | | | | | | | |
| **CHMS** | **Chumysh** | **6.25** | **19** | ⇓P | | **Pn** | | **21 28 24.0** | **-1.6** |
| | 4.6nm,0.5s | | | | | | | | |
| CHMS | | | | ⇑S | | **S** | | **21 29 34.5** | **-4.1** |
| | 11nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.43** | **24** | P | | **Pn** | | **21 28 27.5** | **-0.5** |
| | SNR=5.9 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.43** | **24** | ⇓P | | **Pn** | | **21 28 27.2** | **-0.8** |
| | 9.4nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇓S | | **S** | | **21 29 36.2** | **-6.8** |
| | 8.4nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **12.34** | **35** | P | | **Pn** | | **21 29 42.0** | **0.0** |
| | 2.2nm,0.9s,baz=214,slow=12,SNR=1.3 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **14.95** | **328** | P | | **Pn** | | **21 30 13.5** | **-0.3** |
| **ABKAR** | **Akbulak array** | **14.95** | **328** | Pn | | **Pn** | | **21 30 16.1** | **+2.3** |
| **BVAR** | **Borovoye Array** | **15.95** | **357** | P | | **Pn** | | **21 30 26.3** | **+0.7** |
| | 1.1nm,0.5s,baz=177,slow=9.4,SNR=1.4 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.66** | **327** | P | | **Pn** | | **21 30 34.0** | **-0.1** |
| | 5.0nm,0.3s,baz=137,slow=9.6,SNR=19 | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **17.98** | **223** | P | | | | **21 30 47.5** | **-2.3** |
| | 6.4nm,0.9s,baz=67,slow=21,SNR=1.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.03** | **24** | P | | **P** | | **21 30 59.8** | **+2.0** |
| | 0.9nm,0.3s,baz=223,slow=10,SNR=4.7 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **30.00** | **287** | P | | **P** | | **21 32 42.1** | **+2.0** |
| | 0.4nm,0.6s,baz=88,slow=11,SNR=1.1 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **36.45** | **178** | P | | **P** | | **21 33 33.4** | **-2.3** |
| KAAM | | | | IAmb | | IAmb | | 21 33 42.5 | |
| | comp=Z,43nm,0.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.88** | **337** | P | | **P** | | **21 34 13.6** | **+1.8** |
| ARCES | | | | IAmb | | IAmb | | 21 34 19.8 | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.88** | **337** | P | | **P** | | **21 34 13.8** | **+2.0** |
| | comp=Z,7.0nm,1.2s,baz=90,slow=5.4,SNR=3.7 | | | | | | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **KULM** | **Kulim** | **41.11** | **133** | P | | **P** | | **21 34 13.8** | **-0.5** |
| KULM | | | | IAmb | | IAmb | | 21 34 18.2 | |
| | comp=Z,40nm,1.5s | | | | | | | | |
| **HFS** | **Hagfors** | **43.07** | **321** | P | | **P** | | **21 34 31.1** | **+1.6** |
| | comp=Z,1.5nm,0.6s,baz=108,slow=9.3,SNR=4.3 | | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.36** | **323** | P | | **P** | | **21 34 40.9** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=114,slow=6.6,SNR=2.8 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| **NBO00** | **NORSAR Array S** | **44.58** | **323** | P | | **P** | | **21 34 44.8** | **+3.3** |
| **NC204** | **NORSAR Array S** | **44.60** | **323** | P | | **P** | | **21 34 43.8** | **+2.0** |
| **TIXI** | **Tiksi** | **44.91** | **22** | P | | **P** | | **21 34 45.9** | **+1.9** |
| **ESDC** | **Sonseca Array** | **57.86** | **298** | P | | **P** | | **21 36 21.6** | **+1.4** |
| | comp=Z,0.4nm,0.6s,baz=58,slow=6.7,SNR=6.7 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **SUMG** | **Summit** | **60.73** | **341** | P | | **P** | | **21 36 39.4** | **-0.3** |
| SUMG | | | | IAmb | | IAmb | | 21 36 41.9 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.51** | **269** | P | | **P** | | **21 37 16.9** | **-0.9** |
| | comp=Z,0.4nm,0.7s,baz=46,slow=6.3,SNR=1.5 | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **68.26** | **16** | P | | **P** | | **21 37 28.0** | **+0.2** |
| **F19K** | **Shaleruckik Mo** | **69.67** | **19** | P | | **P** | | **21 37 37.3** | **+0.8** |
| F19K | | | | IAmb | | IAmb | | 21 37 39.2 | |
| | comp=Z,59nm,1.2s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **71.35** | **18** | P | | **P** | | **21 37 48.4** | **+1.8** |
| **H21K** | **Melozitna River** | **71.84** | **18** | P | | **P** | | **21 37 50.7** | **+1.1** |
| H21K | | | | IAmb | | IAmb | | 21 37 53.8 | |
| | comp=Z,36nm,1.0s | | | | | | | | |
| **MBWA** | **Marble Bar** | **73.38** | **134** | P | | **P** | | **21 37 59.2** | **0.0** |
| MBWA | | | | IAmb | | IAmb | | 21 37 59.9 | |
| | comp=Z,23nm,1.3s | | | | | | | | |
| **M17K** | **Holitna River** | **73.95** | **22** | P | | **P** | | **21 38 04.2** | **+2.2** |
| **N18K** | **Kilae Creek** | **74.98** | **22** | P | | **P** | | **21 38 10.0** | **+2.1** |
| **CUT** | **Chulitna** | **75.16** | **19** | P | | **P** | | **21 38 11.1** | **+2.2** |
| **SPU** | **Mount Spurr** | **75.69** | **20** | P | | **P** | | **21 38 14.7** | **+2.7** |
| SPU | | | | IAmb | | IAmb | | 21 38 18.8 | |
| | comp=Z,15nm,1.1s | | | | | | | | |

*IDC **12** 21:27:23.0±0.6,69°.71N×143°.84W,h0$^{km}$,mb4.1/24, mbtmp4.1/26,ML4.5/2,Error ellipse: s-maj=16.4km s-min=15.0km az=31.0*

*NEIC **12** 21:27:22.9±1.4,69°.47N±0°.03×144°.25W±0°.08,h10$^{km}$±1$^{km}$, Error ellipse: s-maj=6.0km s-min=3.3km az=50.0*

*AEIC **12** 21:27:22.3±1.7,69°.45N±0°.04×144°.29W±0°.05,h3$^{km}$±5$^{km}$, ML4.3,mb4.3/5(NEIC),ML4.5/36(NEIC),Error ellipse: s-maj=5.5km s-min=2.4km az=181.0*

**ISC 12 21:27:22.3±1.2,69°.47N±0°.04×144°.20W±0°.03,h3$^{km}$±8$^{km}$, n97,σ1$^{s}$24/94,mb4.2/29,1D,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **47** | | **Pg** | **21 27 27.5** | **+0.6** |
| C27K | | | | | **Sg** | **21 27 31.1** | **+1.3** |
| **C27K** | **Jago River** | **0.23** | **47** | IAML | | 21 27 31.2 | |
| | comp=E,76μm,0.7s | | | | | | |
| C27K | | | | IAML | | 21 27 31.3 | |
| | comp=N,88μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.52** | **332** | | **Pg** | **21 27 32.2** | **+0.1** |
| C26K | | | | | **Sg** | **21 27 39.3** | **+0.4** |
| **C26K** | **Camden Bay** | **0.52** | **332** | IAML | | 21 27 41.0 | |
| | comp=N,23μm,0.7s | | | | | | |
| C26K | | | | IAML | | 21 27 41.1 | |
| | comp=E,29μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.78** | **260** | | **Pg** | **21 27 36.4** | **-0.9** |
| D25K | | | | | **Sg** | **21 27 47.0** | **-0.5** |
| **D27M** | **Malcolm River** | **1.17** | **100** | | **Pb** | **21 27 44.8** | **-0.4** |
| D27M | | | | | **Sn** | **21 28 01.5** | **-0.5** |
| **C24K** | **Franklin Bluff** | **1.60** | **281** | | **Pn** | **21 27 50.9** | **-0.5** |
| **C24K** | **Franklin Bluff** | **1.60** | **281** | IAML | | 21 28 17.7 | |
| | comp=E,6μm,1.3s | | | | | | |
| C24K | | | | IAML | | 21 28 21.2 | |
| | comp=N,4μm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.60** | **142** | | **Pn** | **21 27 51.2** | **-0.2** |
| E27K | | | | | **Sb** | **21 28 13.3** | **+0.3** |
| **E27K** | **Coleen River** | **1.60** | **142** | IAML | | 21 28 16.4 | |
| | comp=N,6μm,1.4s | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **261** | | **Pn** | **21 27 51.9** | **-0.5** |
| **D24K** | **Happy Valley** | **1.67** | **261** | IAML | | 21 28 24.8 | |
| | comp=N,6μm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.78** | **179** | | **Pn** | **21 27 53.7** | **-0.3** |
| F26K | | | | | **Sn** | **21 28 16.7** | **-0.4** |
| **F26K** | **Sheenjek River** | **1.78** | **179** | IAML | | 21 28 25.7 | |
| | comp=E,6μm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.89** | **115** | | **Pn** | **21 27 55.5** | **+0.1** |
| **E28M** | **Babbage River** | **1.89** | **115** | IAML | | 21 28 30.1 | |
| | comp=N,3μm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.94** | **92** | | **Pn** | **21 27 56.4** | **+0.4** |
| **F25K** | **Christian Rive** | **1.96** | **196** | | **Pn** | **21 27 55.9** | **-0.5** |
| F25K | | | | | **Sn** | **21 28 21.1** | **-0.4** |
| **F25K** | **Christian Rive** | **1.96** | **196** | IAML | | 21 28 29.0 | |
| | comp=N,5μm,0.7s | | | | | | |
| F25K | | | | IAML | | 21 28 30.6 | |
| | comp=E,4μm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **230** | | **Pn** | **21 27 57.7** | **-0.6** |
| **E24K** | **Your Creek** | **2.10** | **230** | IAML | | 21 28 32.6 | |
| | comp=E,3μm,0.8s | | | | | | |
| E24K | | | | IAML | | 21 28 34.5 | |
| | comp=N,4μm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.10** | **249** | | **Pn** | **21 27 57.8** | **-0.5** |
| **TOLK** | **Toolik Lake Re** | **2.10** | **249** | IAML | | 21 28 40.0 | |
| | comp=E,3μm,0.8s | | | | | | |
| TOLK | | | | IAML | | 21 28 41.4 | |
| | comp=N,3μm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.27** | **282** | | **Pn** | **21 28 00.2** | **-0.4** |
| **F24K** | **Squaw Lake** | **2.38** | **216** | | **Pn** | **21 28 01.7** | **-0.5** |
| **F24K** | **Squaw Lake** | **2.38** | **216** | IAML | | 21 28 41.1 | |
| | comp=E,2μm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.43** | **237** | | **Pn** | **21 28 02.3** | **-0.6** |
| **E23K** | **Chandalar** | **2.43** | **237** | IAML | | 21 28 41.1 | |
| | comp=N,2μm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.45** | **137** | | **Pn** | **21 28 04.0** | **+0.8** |
| **E29M** | **Blow River** | **2.52** | **112** | | **Pn** | **21 28 04.3** | **+0.2** |
| **E29M** | **Blow River** | **2.52** | **112** | IAML | | 21 28 49.4 | |
| | comp=E,2μm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.54** | **176** | | **Pn** | **21 28 04.2** | **-0.1** |
| G26K | | | | | **Pb** | **21 28 08.3** | **0.0** |
| **INK** | **Inuvik** | **4.04** | **102** | Sn | **Sn** | **21 29 10.3** | **-2.2** |
| | comp=E,10nm,0.3s,baz=278,slow=14,SNR=1.0 | | | | | | |
| **ILAR** | **Eielson Array** | **4.83** | **194** | Pn | **Pn** | **21 28 38.7** | **+2.9** |
| | comp=E,20nm,0.3s,baz=4.5,slow=14,SNR=4.3 | | | | | | |
| ILAR | | | | Sn | **Sn** | **21 29 32.0** | **-0.2** |
| | baz=6.9,slow=25 | | | | | | |
| ILAR | | | | Lg | Lg | 21 30 00.6 | |
| | comp=E,26nm,0.3s,baz=12,slow=30,SNR=4.4 | | | | | | |
| | comp=E,88nm,0.6s | | | | | | |
| **SCRK** | **Sand Creek** | **5.52** | **179** | | **Pn** | **21 28 48.9** | **+3.5** |
| **BCAR** | **Beaver Creek A** | **6.50** | **170** | Pn | **Pn** | **21 28 60.0** | **+1.2** |
| **A36M** | **Sachs Harbour** | **6.75** | **59** | | **Pn** | **21 29 01.1** | **-0.9** |
| **H17K** | **Granite Mounta** | **7.59** | **241** | Pn | **Pn** | **21 29 13.5** | **-0.2** |
| **SCM** | **Sheep Creek Mo** | **7.78** | **191** | Pn | **Pn** | **21 29 15.2** | **-1.0** |
| **SML** | **Sawmill** | **7.88** | **194** | Pn | **Pn** | **21 29 18.4** | **+0.7** |
| **MCARA** | **McCarthy VSAT** | **8.13** | **176** | Pn | **Pn** | **21 29 22.6** | **+1.5** |
| **VRDI** | **Verde Repeater** | **8.28** | **177** | Pn | **Pn** | **21 29 22.3** | **-1.0** |
| **M31M** | **Drury Creek, Y** | **8.32** | **146** | Pn | **Pn** | **21 29 23.3** | **-0.4** |
| **M20K** | **Styx River** | **8.45** | **210** | Pn | **Pn** | **21 29 25.6** | **+0.1** |
| **N30M** | **Aishikik Lake** | **8.56** | **156** | Pn | **Pn** | **21 29 29.0** | **+2.0** |
| **CTGM** | **Chitina Glacie** | **8.62** | **171** | Pn | **Pn** | **21 29 25.9** | **-2.0** |
| **MMPY** | **Sheldon Lake,** | **8.64** | **136** | Pn | **Pn** | **21 29 28.6** | **+0.5** |
| **TGL** | **Tana Glacier** | **8.77** | **176** | Pn | **Pn** | **21 29 29.0** | **-0.9** |
| **SNH** | **Sunshine Point** | **9.35** | **176** | Pn | **Pn** | **21 29 38.0** | **+0.2** |
| **MESA** | **MESA** | **9.38** | **173** | Pn | **Pn** | **21 29 38.5** | **+0.2** |
| **O29M** | **Mount Kennedy** | **9.50** | **163** | Pn | **Pn** | **21 29 38.5** | **-1.5** |
| **WRGLY** | **Wrigley** | **10.37** | **117** | Pn | **Pn** | **21 29 51.6** | **0.0** |
| **CNPM** | **China Poot** | **10.42** | **200** | Pn | **Pn** | **21 29 52.7** | **+0.2** |
| **SKAG** | **Skagway** | **10.73** | **155** | Pn | **Pn** | **21 29 56.7** | **+0.1** |
| **SYI** | **Shuyak Island** | **11.46** | **202** | Pn | **Pn** | **21 30 07.3** | **+0.7** |
| **R32K** | **Eaglecrest** | **11.99** | **155** | Pn | **Pn** | **21 30 14.2** | **+0.3** |
| **S31K** | **Pelican** | **12.06** | **159** | Pn | **Pn** | **21 30 13.6** | **-1.2** |
| **S32K** | **Killisnoo** | **12.76** | **156** | Pn | **Pn** | **21 30 24.9** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **13.79** | **106** | Pn | **Pn** | **21 30 34.9** | **-3.5** |
| | comp=E,2.6nm,0.3s,baz=315,slow=13,SNR=4.3 | | | | | | |
| | comp=E,7.6nm,0.5s | | | | | | |
| **U33K** | **Whale Pass** | **14.29** | **154** | Pn | **Pn** | **21 30 47.9** | **+2.7** |
| **EUNU** | **Eureka** | **17.42** | **29** | | **P** | **21 31 26.9** | **-0.3** |
| EUNU | | | | IAmb | IAmb | 21 31 33.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **OZB** | **Mount Ozzard** | **22.49** | **146** | P | **P** | **21 32 22.0** | **-0.5** |
| **FFC** | **Flin Flon** | **23.97** | **106** | P | **P** | **21 32 36.1** | **-1.3** |
| **AMKA** | **Amchitka** | **24.92** | **242** | P | **P** | **21 32 45.4** | **-0.8** |
| **PETK** | **Petropavlovsk-** | **30.80** | **268** | P | **P** | **21 33 40.6** | **+1.9** |
| | comp=Z,4.3nm,0.7s,baz=61,slow=12,SNR=3.6 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.11** | **7** | P | **P** | **21 33 49.2** | **-0.9** |
| | comp=Z,1.6nm,0.5s,baz=42,slow=6.7,SNR=1.5 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.14** | **128** | P | **P** | **21 33 51.9** | **+1.1** |
| | comp=Z,2.6nm,0.7s,baz=37,slow=13,SNR=2.2 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.06** | **142** | P | **P** | **21 34 09.7** | **+2.0** |
| | comp=Z,1.4nm,0.8s,baz=338,slow=6.8,SNR=2.7 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.08** | **5** | P | **P** | **21 35 06.9** | **+0.5** |
| | comp=Z,2.7nm,0.9s,baz=7.0,slow=8.2,SNR=5.7 | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **KLR** | **Kul'dur** | **43.06** | **287** | P | **P** | **21 35 24.1** | **+1.3** |
| | comp=Z,2.2nm,0.8s,baz=12,slow=9.5,SNR=4.1 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.36** | **128** | P | **P** | **21 35 50.6** | **+1.2** |
| | comp=Z,1.5nm,0.8s,baz=360,slow=8.4,SNR=4.3 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.36** | **284** | P | **P** | **21 35 57.8** | **+0.8** |
| | comp=Z,4.9nm,1.0s,baz=19,slow=9.2,SNR=5.0 | | | | | | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **BNX** | **BinXian** | **47.56** | **288** | ⇓P | **P** | **21 35 57.5** | **-1.0** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **49.19** | **6** | P | **P** | **21 36 11.3** | **+0.4** |
| | comp=Z,1.0nm,0.4s,baz=3.8,slow=8.4,SNR=1.7 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **49.72** | **14** | P | **P** | **21 36 13.5** | **-1.5** |
| | comp=Z,1.9nm,0.4s,baz=359,slow=6.4,SNR=6.8 | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.83** | **325** | P | **P** | **21 36 32.9** | **+2.0** |
| | comp=Z,1.0nm,0.4s,baz=20,slow=6.5,SNR=3.3 | | | | | | |
| ZALV | | | | PcP | **PcP** | **21 37 43.1** | **-0.6** |
| | comp=Z,1.2nm,0.8s,baz=35,slow=5.3,SNR=1.5 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.99** | **273** | P | **P** | **21 36 34.7** | **+2.3** |
| | comp=Z,4.2nm,0.8s,baz=7.1,slow=8.4,SNR=12 | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **52.23** | **306** | P | **P** | **21 36 35.1** | **+0.9** |
| | comp=Z,1.5nm,0.8s,baz=15,slow=3.9,SNR=2.8 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.33** | **27** | P | **P** | **21 36 33.6** | **-1.0** |
| | comp=Z,1.6nm,0.6s,baz=325,slow=7.0,SNR=3.4 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **54.76** | **283** | P | **P** | **21 36 55.6** | **+3.0** |
| | comp=Z,3.5nm,0.9s,baz=14,slow=7.4,SNR=7.8 | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.20** | **329** | P | **P** | **21 37 02.0** | **-0.9** |
| | comp=Z,1.4nm,0.6s,baz=17,slow=7.0,SNR=3.6 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.05** | **299** | *e*P | **P** | **21 37 10.4** | **+1.2** |
| HHC | | | | sP | sP | 21 37 18.2 | +7.1 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,230nm,5.3s | | | | | | |
| **CLL** | **Collm** | **58.38** | **17** | *i* P | **P** | **21 37 18.6** | **+0.3** |
| **MK31** | **Makanchi Array** | **59.14** | **325** | P | **P** | **21 37 22.6** | **-1.1** |
| MK31 | | | | IAmb | IAmb | 21 37 31.1 | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.14** | **325** | P | **P** | **21 37 21.9** | **-1.8** |
| **MKAR** | **Makanchi Array** | **59.14** | **325** | P | **P** | **21 37 22.4** | **-1.3** |
| | comp=Z,0.4nm,0.4s,baz=25,slow=8.0,SNR=5.6 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **59.19** | **325** | P | **P** | **21 37 23.2** | **-0.8** |
| MAKZ | | | | IAmb | IAmb | 21 37 29.3 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **AKASG** | **Malin Array Be** | **60.05** | **5** | P | **P** | **21 37 27.3** | **-2.5** |
| | comp=Z,1.8nm,0.4s,baz=358,slow=6.9,SNR=3.9 | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **60.27** | **342** | P | **P** | **21 37 30.6** | **-0.8** |
| **ABKAR** | **Akbulak array** | **60.27** | **342** | P | **P** | **21 37 30.3** | **-1.0** |
| ABKAR | | | | IAmb | IAmb | 21 37 39.6 | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **60.89** | **17** | P | **P** | **21 37 34.2** | **-1.5** |
| | comp=Z,0.4nm,0.6s,baz=340,slow=17,SNR=2.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **67.31** | **32** | P | **P** | **21 38 17.4** | **-0.6** |
| | comp=Z,1.1nm,0.8s,baz=345,slow=7.5,SNR=2.5 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **71.11** | **2** | P | **P** | **21 38 41.4** | **-0.3** |
| | comp=Z,0.7nm,0.5s,baz=312,slow=41,SNR=1.7 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **PZH** | **PanZhiHua** | **73.35** | **301** | P | **P** | **21 38 54.6** | **-0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.77** | **301** | P | **P** | **21 39 43.9** | **+1.7** |
| | comp=Z,1.5nm,0.8s,baz=359,slow=7.0,SNR=5.2 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **WSAR** | **Wadi Sarin** | **86.10** | **339** | P | **P** | **21 40 05.0** | **+0.8** |
| | comp=Z,5.3nm,0.9s,baz=40,slow=17,SNR=1.8 | | | | | | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **94.19** | **33** | P | **P** | **21 40 43.9** | **+1.6** |
| | comp=Z,0.6nm,1.0s,baz=335,slow=6.4,SNR=1.7 | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | |

*NEIC **12** 21:29:57.5±1.2,69°.51N±0°.06×144°.30W±0°.06,h6$^{km}$,8$^{km}$, Error ellipse: s-maj=9.5km s-min=2.8km az=188.0*

**AEIC 12 21:29:57.1±1.3,69°.45N±0°.06×144°.30W±0°.06,h0$^{km}$±7$^{km}$, ML3.4,ML4.3/38(NEIC),Error ellipse: s-maj=8.5km s-min=1.5km az=196.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.27** | **49** | | Pg | 21 30 02.2 | 0.0 |
| **C27K** | **Jago River** | **0.27** | **49** | | Sg | 21 30 05.3 | -0.5 |
| C27K | | | | IAML | | 21 30 05.9 | |
| | comp=E,9μm,0.5s | | | | | | |
| C27K | | | | IAML | | 21 30 06.0 | |
| | comp=N,13μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.52** | **336** | | Pg | 21 30 06.8 | -0.1 |
| **C26K** | **Camden Bay** | **0.52** | **336** | | Sg | 21 30 13.1 | -0.5 |
| C26K | | | | IAML | | 21 30 15.7 | |
| | comp=N,5μm,0.3s | | | | | | |
| C26K | | | | IAML | | 21 30 15.9 | |
| | comp=E,4μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.74** | **261** | | Pg | 21 30 10.8 | -0.5 |
| D25K | | | | | Sg | 21 30 20.4 | -0.5 |
| **D27M** | **Malcolm River** | **1.20** | **98** | | Pg | 21 30 19.5 | -0.5 |
| D27M | | | | | Sg | 21 30 36.0 | +0.4 |
| **C24K** | **Franklin Bluff** | **1.57** | **282** | | Pn | 21 30 25.5 | -0.6 |
| **E27K** | **Coleen River** | **1.61** | **141** | | Pn | 21 30 26.0 | -0.6 |
| **E27K** | **Coleen River** | **1.61** | **141** | IAML | | 21 31 15.6 | |
| | comp=E,3μm,0.8s | | | | | | |
| E27K | | | | IAML | | 21 31 16.9 | |
| | comp=N,2μm,1.0s | | | | | | |
| **D24K** | **Happy Valley** | **1.63** | **262** | | Pn | 21 30 26.6 | -0.4 |
| **F26K** | **Sheenjek River** | **1.77** | **178** | | Pn | 21 30 28.7 | -0.1 |
| **F26K** | **Sheenjek River** | **1.77** | **178** | IAML | | 21 31 23.8 | |
| | comp=N,3μm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **114** | | Pn | 21 30 30.8 | -0.1 |
| **E28M** | **Babbage River** | **1.92** | **114** | IAML | | 21 31 35.2 | |
| | comp=E,2μm,1.1s | | | | | | |
| **F25K** | **Christian Rive** | **1.93** | **195** | | Pn | 21 30 30.9 | -0.2 |
| **D28M** | **Stokes Point** | **1.97** | **91** | | Pn | 21 30 31.4 | -0.3 |
| **D28M** | **Stokes Point** | **1.97** | **91** | IAML | | 21 31 38.7 | |
| | comp=N,3μm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.03** | **183** | Pn | Pn | 21 30 31.7 | -0.8 |
| **E24K** | **Your Creek** | **2.06** | **230** | Pn | Pn | 21 30 33.0 | +0.1 |
| E24K | | | | IAML | | 21 31 46.3 | |
| | comp=N,3μm,1.1s | | | | | | |
| E24K | | | | IAML | | 21 31 46.5 | |
| | comp=E,2μm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **249** | | Pn | 21 30 32.6 | -0.3 |
| **TOLK** | **Toolik Lake Re** | **2.06** | **249** | IAML | | 21 31 37.9 | |
| | comp=N,3μm,0.7s | | | | | | |
| TOLK | | | | IAML | | 21 31 39.2 | |
| | comp=E,3μm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **2.24** | **283** | | Pn | 21 30 35.1 | -0.2 |
| **D23K** | **Nanushuk River** | **2.33** | **261** | Pn | Pn | 21 30 36.6 | +0.1 |
| D23K | | | | IAML | | 21 31 58.4 | |
| | comp=N,2μm,1.1s | | | | | | |
| D23K | | | | IAML | | 21 32 02.3 | |
| | comp=E,3μm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **216** | | Pn | 21 30 36.3 | -0.5 |
| **F24K** | **Squaw Lake** | **2.35** | **216** | IAML | | 21 31 46.9 | |
| | comp=E,2μm,0.9s | | | | | | |
| F24K | | | | IAML | | 21 31 49.1 | |
| | comp=N,2μm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.39** | **237** | Pn | Pn | 21 30 37.6 | +0.1 |
| E23K | | | | IAML | | 21 31 50.1 | |
| | comp=N,3μm,1.1s | | | | | | |
| E23K | | | | IAML | | 21 31 52.9 | |
| | comp=E,2μm,1.1s | | | | | | |
| **F28M** | **Old Crow** | **2.46** | **136** | | Pn | 21 30 38.1 | -0.3 |
| **F28M** | **Old Crow** | **2.46** | **136** | IAML | | 21 32 00.4 | |
| | comp=N,2μm,0.8s | | | | | | |
| F28M | | | | IAML | | 21 32 00.9 | |
| | comp=E,2μm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.55** | **112** | Pn | Pn | 21 30 39.2 | -0.3 |
| E29M | | | | IAML | | 21 31 45.5 | |
| | comp=N,1μm,1.1s | | | | | | |
| E29M | | | | IAML | | 21 31 49.2 | |
| | comp=E,1μm,1.1s | | | | | | |
| **G27K** | **Doyon Strip** | **2.83** | **158** | Pn | Pn | 21 30 44.2 | +0.7 |
| **G24K** | **Hadweenzic Riv** | **3.01** | **205** | Pn | Pn | 21 30 45.8 | -0.1 |
| **D22K** | **Ayikyak River** | **3.05** | **263** | Pn | Pn | 21 30 47.2 | +0.7 |
| **B22K** | **Teshekpuk Lake** | **3.27** | **290** | Pn | Pn | 21 30 49.2 | -0.3 |
| **G29M** | **Pine Creek** | **3.46** | **134** | Pn | Pn | 21 30 53.7 | +1.0 |
| **G23K** | **Bananza Creek** | **3.49** | **221** | Pn | Pn | 21 30 53.7 | +1.2 |
| **B21K** | **Ikpikpuk River** | **3.63** | **278** | Pn | Pn | 21 30 54.6 | +0.3 |
| **E21K** | **Killik River** | **3.63** | **258** | Pn | Pn | 21 30 54.3 | -0.1 |
| **H24K** | **Noodor Dome** | **3.88** | **202** | Pn | Pn | 21 30 58.2 | +0.3 |
| **H29M** | **Whitestone** | **3.95** | **142** | Pn | Pn | 21 30 59.4 | +0.6 |
| **PRP** | **Porcupine Dome** | **3.98** | **187** | Pn | Pn | 21 31 00.6 | +1.2 |
| **F21K** | **Alatna River** | **4.07** | **241** | Pn | Pn | 21 31 01.2 | +0.7 |
| **H23K** | **Yukon River** | **4.16** | **211** | Pn | Pn | 21 31 03.1 | +1.5 |
| **I26K** | **Coal Creek Min** | **4.19** | **173** | | Sg | 21 32 09.7 | -1.6 |
| **DAWY** | **Dawson** | **5.75** | **158** | | Sn | 21 32 31.8 | +1.7 |
| **J30M** | **Hart River** | **5.80** | **144** | | Sn | 21 32 32.1 | +0.6 |
| **DOT** | **Dot Lake** | **5.83** | **179** | | Sn | 21 32 33.2 | +1.1 |
| **G19K** | **Purcell Mounta** | **5.87** | **242** | | Sn | 21 32 33.1 | +0.1 |

*AEIC **12** 21:30:21.4±2.0,69°.42N±0°.04×144°.21W±0°.08,h6$^{km}$±4$^{km}$, ML4.9,mb4.9/17(NEIC),ML5.1/104(NEIC),Error ellipse: s-maj=5.9km s-min=3.9km az=199.0*

*NEIC **12** 21:30:22.2±2.2,69°.46N±0°.04×144°.11W±

**B21K Ikpikpuk River 3.65 277 Pn Pn 21 31 18.4 -0.6**
**E21K Killik River 3.66 258 Sn Pn 21 32 02.2 -0.3**
**H24K Noodor Dome 3.91 203 Pn Pn 21 31 22.2 -0.6**
**H29M Whitestone 3.95 143 Pn Pn 21 31 24.8 +1.5**
**PRP Porcupine Dome 4.01 188 Pn Pn 21 31 23.0 -1.2**
**I27K Kandik River 4.02 164 Pn Pn 21 31 25.7 +1.4**
**INK Inuvik 4.05 102** Pn **Pn 21 31 26.6 +2.1**
comp=E,6.5nm,0.3s,baz=285,slow=12,SNR=1.3
comp=E,23nm,0.4s
**F21K Alatna River 4.11 241 Pn 21 31 24.5 -1.0**
**F21K Alatna River 4.11 241** IAML 21 33 23.3
comp=N,3µm,2.4s
**H23K Yukon River 4.19 211 Pn Pn 21 31 25.3 -1.3**
**EPYK Eagle Plains 4.21 134 Pn Pn 21 31 25.6 -1.4**
**I28M Miner Creek 4.37 156 Pn Pn 21 31 28.1 -1.0**
**F31M Tsiigehtchic 4.37 113 Pn Pn 21 31 28.6 -0.4**
**F31M Tsiigehtchic 4.37 113** IAML 21 33 36.1
comp=N,2µm,1.7s
**E20K Nigu River 4.50 260 Pn Pn 21 31 30.4 -0.5**
**D20K Etivluk River 4.50 266 Pn Pn 21 31 30.4 -0.4**
**H22K Ishtalitna Cre 4.51 220 Pn Pn 21 31 30.9 -0.1**
**G31M Satah River 4.51 120 Pn Pn 21 31 32.2 +1.3**
**B20K Meade River 4.53 283** Pn **Pn 21 31 31.3 +0.2**
**POKR Poker Plat Res 4.55 197 Pn Pn 21 31 31.7 +0.2**
**A21K Barrow 4.56 300 Pn Pn 21 31 32.8 +1.2**
**G21K Allakaket 4.58 234 Pn Pn 21 32 0.0 +0.1**
**G21K Allakaket 4.58 234** IAML 21 33 45.9
comp=E,2µm,1.1s
**I29M Ogilvie Camp, 4.72 148** Pn **Pn 21 31 34.6 +0.7**
I29M IAML 21 33 49.6
comp=N,2µm,1.0s
I29M IAML 21 33 51.1
comp=E,2µm,1.3s
**I23K Minto, Yukon-K 4.78 207 Pn Pn 21 31 34.3 -0.3**
**MDM Murphy Dome 4.80 201 Pn Pn 21 31 34.8 -0.1**
**COLA College 4.83 199 Pn Pn 21 31 37.0 +1.7**
**ILAR Eielson Array 4.84 193** Pn **Pn 21 31 38.8 +3.4**
comp=E,4.6nm,0.3s,baz=4.9,slow=14,SNR=4.8
comp=E,28nm,0.5s
**EGAK Eagle 4.87 164 Pn 21 31 37.4 +1.6**
**J25K Salcha River, 4.91 186** Pn **Pn 21 31 38.4 +1.9**
J25K IAML 21 33 45.9
comp=E,2µm,0.9s
J25K IAML 21 33 49.6
comp=N,1µm,1.1s
**F20K Avaraart Lake 4.92 246 Pn 21 31 36.5 0.0**
**F20K Avaraart Lake 4.92 246** IAML 21 33 56.4
comp=E,1µm,1.3s
F20K IAML 21 33 58.5
comp=N,2µm,1.4s
**IMAR Indian Mountai 5.04 230** Pn **Pn 21 31 37.1 -1.0**
**H21K Melozitna Rive 5.05 225 Pn 21 31 38.4 +0.1**
**CCB Clear Creek Bu 5.05 198 Pn 21 31 37.1 -1.2**
**D19K Kuna River 5.09 265 Pn 21 31 39.2 +0.3**
**MLY Manley 5.13 213 Pn 21 31 38.5 -1.0**
**E19K Redstone River 5.20 253** Pn **Pn 21 31 40.3 -0.1**
E19K IAML 21 34 02.7
comp=N,2µm,1.4s
E19K IAML 21 34 03.8
comp=E,1µm,1.5s
**HDA Harding Lake 5.20 193** Pn **Pn 21 31 40.7 +0.2**
HDA IAML 21 33 52.4
comp=N,1µm,1.0s
**I30M Mount Dempster 5.24 141** Pn **Pn 21 31 41.9 +0.8**
I30M IAML 21 33 27.9
comp=E,1µm,0.8s
I30M IAML 21 34 03.4
comp=N,850nm,1.3s
**WRH Wood River Hil 5.25 199 Pn 21 31 40.8 -0.3**
**NEA2 Nenana 5.26 203 Pn 21 31 40.9 -0.4**
**C19K Lookout Ridge 5.46 273 Pn 21 31 44.4 +0.4**
**SCRK Sand Creek 5.53 179 Pn 21 31 44.1 -0.9**
**F19K Shaleruckik Mo 5.71 249 Pn 21 31 47.5 +0.2**
**BWN Browne 5.71 204** Pn **Pn 21 31 49.2 +1.7**
**DAWY Dawson 5.76 158** Pn **Pn 21 31 50.4 +2.2**
**G19K Purcell Mounta 5.90 242** Pn **Pn 21 31 51.0 +1.0**
**BPAW Bear Paw Mtn. 6.02 209** Pn **Pn 21 31 53.1 +1.4**
**C18K Utukok River 6.13 270** Pn **Pn 21 31 53.8 +0.5**
**H19K Roundabout Mou 6.13 236** Pn **Pn 21 31 52.9 -0.2**
**E18K Tukpahlearik C 6.37 259** Pn **Pn 21 31 57.4 +1.0**
**G18K Tagagawik 6.55 244** Pn **Pn 21 32 00.7 +1.7**
**J20K Nowinta River 6.60 221** Pn **Pn 21 32 00.6 +1.0**
**A36M Sachs Harbour 6.75 59** Pn **Pn 21 32 00.9 -0.7**
A36M LR 21 33 55.4
**RDOG Red Dog Mine 6.92 267 Pn 21 32 04.0 0.0**
RDOG LR 21 34 00.3
**F17K Baldwin Pennin 7.08 253** Pn **Pn 21 32 06.5 +0.4**
**H17K Granite Mounta 7.59 241** Pn **Pn 21 32 14.3 +1.2**
**C16K Lisburne Hills 7.71 271** Pn **Pn 21 32 15.0 +0.2**
**G16K Koyuk River 8.06 248** Pn **Pn 21 32 19.3 -0.3**
**KNK Knik Glacier 8.29 194 Lg 21 34 44.6**
**J17K VABM Dome 8.50 231** Pn **Pn 21 32 25.6 0.0**
**N30M Aishikik Lake 8.57 156** Pn **Pn 21 32 26.5 -0.2**
**I17K Unalakleet 8.58 237** Pn **Pn 21 32 26.6 -0.2**
**F15K North Star Dit 8.64 254** Pn **Pn 21 32 26.9 -0.7**
**GLI Glacier Island 8.72 189 LR 21 35 00.6**
**PWL Port Wells 8.82 193 LR 21 35 02.4**
**GRNC Granite Creek 8.84 172 LR 21 35 01.4**
**K17K Iditarod 8.85 227** Pn **Pn 21 32 29.4 -1.0**
**L18K Granite Mounta 8.88 221** Pn **Pn 21 32 31.2 +0.4**
**SNH Sunshine Point 9.36 176** Pn **Pn 21 32 35.2 -2.2**
**BCPM Bancas Point 9.76 166** Pn **Pn 21 32 40.6 -2.3**
**M17K Holitna River 9.77 220** Pn **Pn 21 32 42.0 -0.9**
**P29M Windy Craggy 10.27 161** Pn **Pn 21 32 50.6 +0.8**
**J14K Nanvaranak Lak 10.29 238** Pn **Pn 21 32 50.4 +0.3**
**M16K Timber Creek 10.46 223** Pn **Pn 21 32 53.0 +0.6**
**K13K Kusilvak Mount 11.25 238** Pn **Pn 21 33 03.5 +0.2**
**M14K Bethel 11.45 229** Pn **Pn 21 33 06.7 +0.7**
**R33M Jennings River 11.59 144** Pn **Pn 21 33 08.0 0.0**
**S34M Telegraph Cree 12.93 147** Pn **Pn 21 33 24.3 -1.9**
**YKA Yellowknife Ar 13.81 106** Pn **Pn 21 33 38.4 +0.3**
**T35M Bob Quinn 13.97 147** Pn **Pn 21 33 37.2 -3.3**
**GRNB Grenville Isla 17.00 150 Pn 21 34 19.5 -0.7**
**EUNU Eureka 17.41 29** Pn **Pn 21 34 24.1 -1.2**
**CLES Cleveland East 20.50 229 P P 21 34 58.4 -2.1**
**CBB Campbell River 21.51 145 P P 21 35 10.1 -1.2**
CBB IAmb IAmb 21 35 11.5
comp=Z,52nm,1.9s
**PDAR Pinedale Array 32.15 128 P P 21 36 53.3 +3.0**
comp=Z,1.8nm,0.8s,baz=352,slow=5.6,SNR=2.5
comp=Z,1.8nm,0.8s
**NVAR Mina Array Bea 34.08 142 P P 21 37 10.4 +3.3**
comp=Z,3.3nm,0.9s,baz=332,slow=7.1,SNR=6.9
comp=Z,3.3nm,0.9s
**TKX Tecate 40.08 143 P P 21 37 57.9 -0.1**
**TXAR Lajitas Array 46.37 128 P P 21 38 51.3 +2.4**
comp=Z,3.6nm,1.1s,baz=14,slow=11,SNR=1.9
comp=Z,3.6nm,1.1s
**USRK Ussuriysk Ar. 47.34 284 P P 21 38 57.9 +1.8**
comp=Z,4.2nm,0.7s,baz=38,slow=8.1,SNR=9.9
comp=Z,4.2nm,0.7s
**MDJ Mudanjiang 47.79 286 P P 21 39 00.2 +0.5**
MDJ pmax pmax
comp=Z,10.0nm,2.3s
**FINES FINESS Array B 49.19 6 P P 21 39 10.3 +0.2**
comp=Z,1.6nm,0.6s,baz=355,slow=8.4,SNR=4.7
comp=Z,1.6nm,0.6s
**HFS Hagfors 49.72 14 P P 21 39 15.4 +1.1**
comp=Z,2.1nm,0.5s,baz=358,slow=5.0,SNR=7.1
comp=Z,2.1nm,0.5s
**JSD Sado 50.62 274 P P 21 39 19.5 -1.8**
JSD IAmb IAmb 21 39 22.6
comp=Z,8.3nm,0.6s
**553A Crawfordville 51.55 107 P P 21 39 26.5 -1.9**
**ZALV Zalesovo Beam 51.82 325 P P 21 39 30.7 +0.5**
comp=Z,1.1nm,0.5s,baz=28,slow=7.2,SNR=4.0
comp=Z,1.1nm,0.5s
**MJAR Matsushiro Arr 51.98 273 P P 21 39 34.4 +2.8**
comp=Z,1.3nm,0.7s,baz=5.2,slow=9.0,SNR=4.8
comp=Z,1.3nm,0.7s
**SONM Songino Array 52.22 306 P P 21 39 33.0 -0.3**
**SONM Songino Array 52.22 306 P P 21 39 35.4 +2.0**
comp=Z,1.2nm,0.8s,baz=50,slow=5.9,SNR=4.4
comp=Z,1.2nm,0.8s
**EKB Eskdalemuir 52.32 27 P P 21 39 34.0 +0.1**
EKB IAmb IAmb 21 39 48.4
comp=Z,38nm,1.5s
**EKA Eskdalemuir Ar 52.32 27 P P 21 39 33.7 -0.2**
comp=Z,2.8nm,0.8s,baz=338,slow=6.9,SNR=5.2
comp=Z,2.8nm,0.8s
**ESK Eskdalemuir 52.33 27 P P 21 39 33.4 -0.6**
ESK IAmb IAmb 21 39 41.9
comp=Z,44nm,1.6s
**KSRS Korea Array 54.75 283 P P 21 39 55.3 +3.5**
comp=Z,2.4nm,0.8s,baz=15,slow=7.0,SNR=7.6
comp=Z,2.4nm,0.8s
**BVAR Borovoye Array 55.22 335 P P 21 39 55.7 +0.6**
comp=Z,1.1nm,0.7s,baz=28,slow=6.5,SNR=3.5
comp=Z,1.1nm,0.7s
**KURBB Kurchatov Arra 56.19 329 P P 21 40 02.8 +0.8**
comp=Z,1.4nm,0.6s,baz=10,slow=7.2,SNR=6.2
comp=Z,1.4nm,0.6s
**HHC Hu-ho-hao-te 57.04 299** *e*P **P 21 40 06.4 -2.0**
HHC pmax pmax
comp=Z,18nm,0.5s
HHC pmax pmax
comp=Z,490nm,5.0s
**CLL Collm 58.38 17** *e*P **P 21 40 19.0 +1.5**
**MK31 Makanchi Array 59.12 324 P P 21 40 23.5 +0.7**
**MKAR Makanchi Array 59.12 324 P P 21 40 22.6 -0.3**
**MKAR Makanchi Array 59.12 324 P P 21 40 22.3 -0.6**
comp=Z,0.8nm,0.5s,baz=53,slow=6.8,SNR=7.9
comp=Z,0.8nm,0.5s
**MAKZ Makanchi 59.17 325 P P 21 40 23.3 +0.1**
MAKZ IAmb IAmb 21 40 28.9
comp=Z,10nm,1.4s
**GRA1 Grafenberg Arr 59.78 18 P P 21 40 28.3 +1.0**
GRA1 IAmb IAmb 21 40 35.8
comp=Z,4.3nm,0.8s
**GRFO Grafenberg 59.78 18 P P 21 40 27.3 -0.1**
GRFO IAmb IAmb 21 40 42.9
comp=Z,13nm,1.5s
**AKASG Malin Array Be 60.04 5 P P 21 40 29.4 +0.4**
comp=Z,1.7nm,0.5s,baz=359,slow=6.9,SNR=6.3
comp=Z,1.7nm,0.5s
**AKBB Malin Array Si 60.04 5 P P 21 40 28.5 -0.5**
AKBB IAmb IAmb 21 40 36.1
comp=Z,11nm,1.4s
**ABKAR Akbulak array 60.26 342 P P 21 40 29.3 -1.2**
**NJ2 Nanjing 62.73 288** *e*P **P 21 40 46.6 -0.9**
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
**LZH Lanzhou 63.76 303** *e*P P 21 40 58.3 +3.8
LZH sP sP 21 41 04.2 +4.8
LZH pmax pmax
comp=Z,10.0nm,1.0s
**ESDC Sonseca Array 67.31 32 P P 21 41 16.7 -0.5**
comp=Z,0.5nm,0.8s,baz=337,slow=6.9,SNR=2.7
comp=Z,0.5nm,0.8s
**KSH Kashi 67.37 327 P P** 21 41 23.6 +5.9
KSH pmax pmax
comp=Z,5.0nm,1.4s
**BRTR Keskin Array B 71.10 2 P P 21 41 42.1 +1.3**
comp=Z,0.6nm,0.6s,baz=344,slow=3.5,SNR=2.0
comp=Z,0.6nm,0.6s
**KEST Kesra 73.31 22 P P 21 41 55.6 +1.6**
comp=Z,1.9nm,0.7s,baz=294,slow=10.0,SNR=2.9
comp=Z,1.9nm,0.7s
**PZH PanZhiHua 73.34 301 P P 21 41 55.0 +0.6**
PZH pmax pmax
comp=Z,30nm,1.0s
**CMAR Chiang Mai Arr 81.75 301 P P 21 42 44.0 +2.7**
comp=Z,2.3nm,0.8s,baz=355,slow=5.6,SNR=7.7
comp=Z,2.3nm,0.8s
**MANU Manus Island 84.46 249 P P 21 42 56.3 +1.0**

*BJI **12** 21:31:03.3±0.0, 69.°46N×144.°03W, h18km, mb4.8/41, mB5.3/2*
*AEIC **12** 21:31:04.4±1.8, 69.°47N±0.°05×144.°2W±0.°1, h6km±4km, ML5.1, mb5.1/71(NEIC), ML5.2/84(NEIC), Mwr4.9/28(NEIC), Mww5.0/43(NEIC), Error ellipse: s-maj=7.1km s-min=4.9km az=204.0*
*MOS **12** 21:31:05.1±0.9, 69.°58N×144.°39W, h12km, mb5.0/66, MS5.2/4, Error ellipse: s-maj=18.4km s-min=3.9km az=91.2*
*IDC **12** 21:31:05.5±0.4, 69.°70N×144.°28W, h0km, mb4.7/28, mbtmp4.7/33, ML4.6/5, Error ellipse: s-maj=13.1km s-min=9.0km az=57.0*
*NEIC **12** 21:31:05.4±1.1, 69.°60N±0.°05×144.°17W±0.°09, h5km±3km, Error ellipse: s-maj=6.9km s-min=4.2km az=199.0, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.24; $M_{\theta\theta}$-0.91; $M_{\phi\phi}$2.14; $M_{r\theta}$-0.47; $M_{\theta\phi}$-2.73; $M_{\phi r}$-0.12; Fault plane solution: $M_0$3.34000×$10^{16}$ NP1: $\phi_S$13.27000°, $\delta$76.06000°, $\lambda$-11.98000°. NP2:$\phi_S$106.19000°, $\delta$78.38000°, $\lambda$-165.77000°. Principal axes: T 3.7485, Plg2.0000°, Azm239.0000°; N -1.0851, Plg72.0000°, Azm145.0000°; P -2.6635, Plg18.0000°, Azm330.0000°;*
*GCMT **12** 21:31:07.4±0.3, 69.°66N±0.°02×144.°26W±0.°05, h12km, MW5.0/94, Moment Tensor Solution. s94,c125; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.64±.23; $M_{\theta\theta}$-2.18±.20; $M_{\phi\phi}$2.81±.20; $M_{r\theta}$2.16±.55; $M_{\theta\phi}$-3.23±.14; $M_{\phi r}$0.25±.58; Best double couple: $M_0$4.65100×$10^{16}$ NP1:$\phi_S$291.00000°, $\delta$78.00000°, $\lambda$-154.00000°. NP2: $\phi_S$196.00000°, $\delta$65.00000°, $\lambda$-13.00000°. Principal axes: T 4.5090, Plg9.0000°, Azm62.0000°; N 0.2750, Plg62.0000°, Azm315.0000°; P -4.7930, Plg27.0000°, Azm156.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **12** 21:31:07.5, 69.°63N×144.°51W, h12km*
*NEIC **12** 21:31:07.5, 69.°53N×144.°22W, h12km, Moment Tensor Solution. Duration: 1s6 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.60; $M_{\theta\theta}$-1.84; $M_{\phi\phi}$2.44; $M_{r\theta}$-0.36; $M_{\theta\phi}$-2.41; $M_{\phi r}$-1.54; Fault plane solution: $M_0$3.59000×$10^{16}$ NP1: $\phi_S$19.19000°, $\delta$86.63000°, $\lambda$-26.89000°. NP2:$\phi_S$110.90000°, $\delta$63.16000°, $\lambda$-176.22000°. Principal axes: T 3.8877, Plg16.0000°, Azm68.0000°; N -0.5925, Plg63.0000°, Azm193.0000°; P -3.2952, Plg21.0000°, Azm332.0000°;*
*NEIC **12** 21:31:07.5, 69.°63N×144.°51W, h10km*
*BGR **12** 21:31:17.0, 70.°87N×147.°01W, h10km, mb4.9, Ms5.6*
**ISC 12 21:31:06.2±0.3, 69.°51N±0.°03×144.°26W±0.°02, h10km, n705, σ1$34/666, mb5.0/164, 16C-49D, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **58** | | **Pg** | **21 31 08.8** | **-2.1** |
| C27K | | | | | **Sg** | **21 31 12.3** | **-1.6** |
| **C26K** | **Camden Bay** | **0.47** | **331** | | **Pg** | **21 31 13.9** | **-1.5** |
| C26K | | | | | **Sg** | **21 31 20.3** | **-1.3** |
| **D25K** | **Kavik River** | **0.77** | **257** | Pg | **Pg** | **21 31 18.4** | **-2.7** |
| D25K | | | | Sg | **Sg** | **21 31 29.8** | **-1.4** |
| **D27M** | **Malcolm River** | **1.20** | **101** | Pn | **Pg** | **21 31 27.7** | **-1.5** |
| **C24K** | **Franklin Bluff** | **1.57** | **280** | | **Sb** | **21 31 54.3** | **-0.9** |
| **C24K** | **Franklin Bluff** | **1.57** | **280** | | **Pb** | **21 31 33.4** | **-2.0** |
| C24K | | | | IAML | | 21 31 57.0 | |
| comp=N,33µm,1.7s | | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **143** | Pn | **Pb** | **21 31 34.4** | **-2.1** |
| E27K | | | | | **Sg** | **21 31 57.6** | **-1.3** |
| E27K | | | | IAML | | 21 31 59.6 | |
| comp=N,10µm,1.3s | | | | | | | |
| E27K | | | | IAML | | 21 32 02.5 | |
| comp=E,19µm,0.7s | | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **260** | Pn | **Pg** | **21 31 36.0** | **-2.0** |
| D24K | | | | IAML | | 21 32 04.1 | |
| comp=N,32µm,1.2s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **179** | | **Pb** | **21 31 38.6** | **-1.1** |
| **F26K** | **Sheenjek River** | **1.82** | **179** | | **Sg** | **21 32 02.4** | **-2.3** |
| **E28M** | **Babbage River** | **1.92** | **116** | Pn | **Pb** | **21 31 38.7** | **-2.7** |
| E28M | | | | | **Sb** | **21 32 03.3** | **-2.1** |
| E28M | | | | IAML | | 21 32 15.0 | |
| comp=N,9µm,1.9s | | | | | | | |
| E28M | | | | IAML | | 21 32 21.1 | |
| comp=E,10µm,1.6s | | | | | | | |
| **D28M** | **Stokes Point** | **1.96** | **93** | | **Pn** | **21 31 38.1** | **-1.3** |
| D28M | | | | IAML | | 21 32 22.2 | |
| comp=E,17µm,1.2s | | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **196** | | **Pb** | **21 31 41.3** | **-1.2** |
| F25K | | | | IAML | | 21 32 11.8 | |
| comp=E,18µm,1.4s | | | | | | | |
| F25K | | | | IAML | | 21 32 11.9 | |
| comp=N,22µm,1.2s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.09** | **183** | Pn | **Pb** | **21 31 42.1** | **-2.2** |
| **TOLK** | **Toolik Lake Re** | **2.10** | **248** | Pn | **Pb** | **21 31 41.6** | **-2.8** |
| TOLK | | | | IAML | | 21 32 19.8 | |
| comp=E,12µm,1.3s | | | | | | | |
| TOLK | | | | IAML | | 21 32 24.2 | |
| comp=N,18µm,1.7s | | | | | | | |
| **E24K** | **Your Creek** | **2.11** | **229** | | **Pb** | **21 31 42.6** | **-1.9** |
| E24K | | | | IAML | | 21 32 16.9 | |
| comp=E,10µm,1.7s | | | | | | | |
| **F28M** | **Old Crow** | **2.49** | **138** | | **Pn** | **21 31 45.7** | **-1.1** |
| F28M | | | | IAML | | 21 32 28.5 | |
| comp=E,7µm,1.2s | | | | | | | |
| **E29M** | **Blow River** | **2.56** | **113** | Pn | **Pn** | **21 31 47.6** | **0.0** |
| **G25K** | **Bearman Lake** | **2.84** | **195** | | **Pn** | **21 31 52.5** | **+1.0** |
| **G27K** | **Doyon Strip** | **2.88** | **159** | | **Pn** | **21 31 51.9** | **-0.2** |
| **FYU** | **Fort Yukon** | **2.98** | **188** | | **Pn** | **21 31 54.0** | **+0.6** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **205** | | **Pn** | **21 31 54.4** | **-0.3** |
| G24K | | | | IAML | | 21 32 44.0 | |
| comp=E,7µm,1.7s | | | | | | | |
| **D22K** | **Ayikyak River** | **3.07** | **262** | | **Pn** | **21 31 54.2** | **-0.6** |
| D22K | | | | IAML | | 21 33 02.4 | |
| comp=N,9µm,1.5s | | | | | | | |
| **COLD** | **Coldfoot** | **3.18** | **227** | | **Pn** | **21 31 56.3** | **+0.1** |
| **COLD** | **Coldfoot** baz=42 | **3.18** | **227** | P | **Pb** | **21 31 58.1** | **-4.6** |
| **B22K** | **Teshekpuk Lake** | **3.27** | **289** | | **Pn** | **21 31 56.9** | **-0.5** |
| **B22K** | **Teshekpuk Lake** comp=N,12µm,1.6s | **3.27** | **289** | IAML | | 21 32 58.6 | |
| B22K | | | | IAML | | 21 32 58.8 | |
| comp=E,14µm,1.0s | | | | | | | |
| **B22K** | **Teshekpuk Lake** baz=101 | **3.27** | **289** | P | **Pn** | **21 31 57.4** | **0.0** |
| **H25L** | **Birch Creek** | **3.31** | **191** | | **Pn** | **21 31 56.9** | **-1.0** |
| H25L | | | | | Pb | 21 31 59.2 | -5.7 |
| **H25L** | **Birch Creek** baz=9.8 | **3.31** | **191** | P | **Pn** | **21 31 58.8** | **+0.8** |
| **H27K** | **Steamboat Moun** baz=344 | **3.45** | **161** | P | **Pn** | **21 32 01.9** | **+1.9** |
| **G29M** | **Pine Creek** | **3.49** | **135** | | **Pn** | **21 31 59.0** | **-1.5** |
| **G29M** | **Pine Creek** comp=N,4µm,1.2s | **3.49** | **135** | IAML | | 21 33 00.4 | |
| G29M | | | | IAML | | 21 33 22.0 | |
| comp=E,7µm,1.5s | | | | | | | |
| **G29M** | **Pine Creek** baz=321 | **3.49** | **135** | P | **Pn** | **21 32 02.5** | **+2.0** |
| **B21K** | **Ikpikpuk River** | **3.63** | **277** | | **Pn** | **21 32 03.4** | **+1.0** |
| **B21K** | **Ikpikpuk River** baz=88 | **3.63** | **277** | P | **Pn** | **21 32 03.3** | **+1.0** |
| **F30M** | **Barrier River** baz=305 | **3.65** | **117** | P | **Pn** | **21 32 03.1** | **+0.4** |
| **E21K** | **Killik River** baz=69 | **3.66** | **258** | P | **Pn** | **21 32 03.7** | **+0.8** |
| **G30M** | **tAoh Zraii Nji** | **3.92** | **127** | | **Pn** | **21 32 05.5** | **-1.0** |
| **G30M** | **tAoh Zraii Nji** comp=N,3µm,1.5s | **3.92** | **127** | IAML | | 21 33 27.1 | |
| G30M | | | | IAML | | 21 33 28.4 | |
| comp=E,2µm,1.5s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** baz=314 | **3.92** | **127** | P | **Pn** | **21 32 09.0** | **+2.6** |
| **A22K** | **Sinclair Lake** | **3.93** | **297** | | **Pn** | **21 32 06.1** | **-0.4** |
| **A22K** | **Sinclair Lake** baz=108 | **3.93** | **297** | P | **Pn** | **21 32 06.2** | **-0.4** |
| **H24K** | **Noodor Dome** | **3.94** | **202** | | **Pn** | **21 32 05.7** | **-1.0** |
| **H24K** | **Noodor Dome** comp=E,3µm,1.6s | **3.94** | **202** | IAML | | 21 33 17.8 | |
| H24K | | | | IAML | | 21 33 23.2 | |
| comp=N,2µm,1.0s | | | | | | | |
| **H24K** | **Noodor Dome** baz=19 | **3.94** | **202** | P | **Pn** | **21 32 08.2** | **+1.6** |
| **H29M** | **Whitestone** | **3.98** | **143** | | **Pn** | **21 32 06.5** | **-0.7** |
| **H29M** | **Whitestone** comp=N,3µm,1.6s | **3.98** | **143** | IAML | | 21 33 22.1 | |
| H29M | | | | IAML | | 21 33 29.1 | |
| comp=E,3µm,1.4s | | | | | | | |
| **H29M** | **Whitestone** baz=328,SNR=7.3 | **3.98** | **143** | P | **Pn** | **21 32 08.5** | **+1.2** |
| **PRP** | **Porcupine Dome** | **4.04** | **188** | | **Pn** | **21 32 07.0** | **-1.2** |
| **PRP** | **Porcupine Dome** comp=N,3µm,0.8s | **4.04** | **188** | IAML | | 21 33 17.6 | |
| PRP | | | | IAML | | 21 33 19.9 | |
| comp=E,3µm,1.0s | | | | | | | |
| **PRP** | **Porcupine Dome** baz=6.5 | **4.04** | **188** | P | **Pn** | **21 32 10.3** | **+2.1** |
| **I27K** | **Kandik River** | **4.05** | **164** | | **Pn** | **21 32 07.7** | **-0.5** |
| **I27K** | **Kandik River** baz=347,SNR=8.3 | **4.05** | **164** | P | **Pn** | **21 32 09.7** | **+1.5** |
| **INK** | **Inuvik** comp=E,37nm,0.3s,baz=315,slow=7.1,SNR=6.7 | **4.06** | **102** | Pn | **Pn** | **21 32 09.3** | **+1.0** |
| INK | | | | Sn | **Sn** | **21 32 52.4** | **-3.4** |
| comp=E,61nm,0.3s,baz=293,slow=7.7,SNR=4.8 | | | | | | | |
| INK | | | | Lg | Lg | 21 33 14.5 | |
| comp=E,45nm,0.3s,baz=192,slow=20,SNR=5.8 | | | | | | | |
| comp=E,98nm,0.4s | | | | | | | |
| **INK** | **Inuvik** baz=292 | **4.06** | **102** | P | **Pn** | **21 32 08.7** | **+0.4** |
| **F21K** | **Alatna River** baz=52 | **4.12** | **240** | P | **Pn** | **21 32 10.5** | **+1.4** |
| **H23K** | **Yukon River** | **4.21** | **211** | | **Pn** | **21 32 09.4** | **-1.0** |
| **H23K** | **Yukon River** comp=E,4µm,1.4s | **4.21** | **211** | IAML | | 21 33 25.6 | |
| H23K | | | | IAML | | 21 33 27.8 | |
| comp=N,3µm,2.1s | | | | | | | |
| **H23K** | **Yukon River** baz=26 | **4.21** | **211** | P | **Pn** | **21 32 12.1** | **+1.6** |
| **EPYK** | **Eagle Plains** | **4.24** | **134** | | **Pn** | **21 32 09.7** | **-1.1** |
| **EPYK** | **Eagle Plains** comp=N,3µm,1.7s | **4.24** | **134** | IAML | | 21 33 34.7 | |
| EPYK | | | | IAML | | 21 33 39.3 | |
| comp=E,4µm,1.6s | | | | | | | |
| **EPYK** | **Eagle Plains** baz=321 | **4.24** | **134** | P | **Pn** | **21 32 11.7** | **+0.8** |
| **I26K** | **Coal Creek Min** baz=355 | **4.24** | **174** | P | **Pn** | **21 32 11.9** | **+1.1** |
| **F31M** | **Tsiigehtchic** baz=303 | **4.39** | **113** | P | **Pn** | **21 32 14.0** | **+1.2** |
| **I28M** | **Miner Creek** comp=N,2µm,1.6s | **4.40** | **156** | IAML | | 21 33 08.7 | |
| I28M | | | | IAML | | 21 33 36.1 | |
| comp=E,3µm,1.4s | | | | | | | |
| **I28M** | **Miner Creek** baz=340,SNR=13 | **4.40** | **156** | P | **Pn** | **21 32 14.2** | **+1.1** |
| **E20K** | **Nigu River** baz=69 | **4.50** | **259** | P | **Pn** | **21 32 15.2** | **+0.9** |
| **D20K** | **Etivluk River** | **4.50** | **266** | | **Pn** | **21 32 14.1** | **-0.2** |
| **D20K** | **Etivluk River** baz=74 | **4.50** | **266** | P | **Pn** | **21 32 16.7** | **+2.4** |
| **B20K** | **Meade River** | **4.51** | **282** | | **Pn** | **21 32 15.1** | **+0.6** |
| **B20K** | **Meade River** baz=91 | **4.51** | **282** | P | **Pn** | **21 32 15.4** | **+1.0** |
| **H22K** | **Ishtalitna Cre** | **4.53** | **220** | | **Pn** | **21 32 14.3** | **-0.5** |
| **G31M** | **Satah River** | **4.54** | **120** | | **Pn** | **21 32 14.7** | **0.0** |
| G31M | | | | IAML | | 21 33 35.5 | |
| comp=N,3µm,2.1s | | | | | | | |
| **G31M** | **Satah River** baz=309 | **4.54** | **120** | P | **Pn** | **21 32 16.4** | **+1.6** |
| **A21K** | **Barrow** | **4.54** | **299** | | **Pn** | **21 32 14.7** | **-0.1** |
| **A21K** | **Barrow** baz=108 | **4.54** | **299** | P | **Pn** | **21 32 15.0** | **+0.2** |
| **POKR** | **Poker Plat Res** | **4.58** | **197** | | **Pn** | **21 32 16.5** | **+1.1** |
| POKR | | | | IAML | | 21 33 38.1 | |
| POKR | comp=N,2µm,1.1s | | | IAML | | 21 33 42.2 | |
| comp=E,3µm,1.7s | | | | | | | |
| **POKR** | **Poker Plat Res** baz=14 | **4.58** | **197** | P | **Pn** | **21 32 17.6** | **+2.1** |
| **I29M** | **Ogilvie Camp,** baz=334,SNR=8.4 | **4.75** | **148** | P | **Pn** | **21 32 19.5** | **+1.7** |
| **I23K** | **Minto, Yukon-K** | **4.80** | **207** | | **Pn** | **21 32 17.8** | **-0.7** |
| **I23K** | **Minto, Yukon-K** baz=22 | **4.80** | **207** | P | **Pn** | **21 32 20.6** | **+2.1** |
| **MDM** | **Murphy Dome** | **4.82** | **201** | | **Pn** | **21 32 18.2** | **-0.6** |
| **MDM** | **Murphy Dome** comp=N,1µm,1.1s | **4.82** | **201** | IAML | | 21 33 43.3 | |
| MDM | | | | IAML | | 21 33 49.3 | |
| comp=E,1µm,1.0s | | | | | | | |
| **COLA** | **College** comp=E,572nm,0.8s | **4.86** | **198** | P | **Pg** | **21 32 37.2** | **-2.0** |
| **COLA** | **College** | **4.86** | **198** | | **Pn** | **21 32 19.1** | **-0.2** |
| **COLA** | **College** baz=15 | **4.86** | **198** | P | **Pn** | **21 32 20.9** | **+1.6** |
| **COLA** | **College** | **4.86** | **198** | *i* P | **Pn** | **21 32 19.7** | **+0.5** |
| **IL31** | | **4.87** | **193** | | **Pn** | **21 32 18.5** | **-0.8** |
| **ILAR** | **Eielson Array** comp=E,27nm,0.3s,baz=5.7,slow=14,SNR=7.8 | **4.87** | **193** | Pn | **Pn** | **21 32 21.4** | **+2.1** |
| ILAR | | | | Sn | **Sn** | **21 33 17.3** | **+1.6** |
| comp=E,32nm,0.3s,baz=8.6,slow=26,SNR=5.4 | | | | | | | |
| ILAR | | | | Lg | Lg | 21 33 36.1 | |
| comp=E,60nm,0.3s,baz=12,slow=33,SNR=5.5 | | | | | | | |
| comp=E,128nm,0.6s | | | | | | | |
| **EGAK** | **Eagle** | **4.90** | **164** | | **Pn** | **21 32 19.4** | **-0.5** |
| **EGAK** | **Eagle** comp=E,2µm,1.1s | **4.90** | **164** | IAML | | 21 33 48.7 | |
| EGAK | | | | IAML | | 21 33 53.8 | |
| comp=E,2µm,1.4s | | | | | | | |
| **EGAK** | **Eagle** baz=347,SNR=9.9 | **4.90** | **164** | P | **Pn** | **21 32 20.7** | **+0.8** |
| **F20K** | **Avaraart Lake** | **4.92** | **245** | P | **Pn** | **21 32 21.5** | **+1.4** |

J25K Salcha River, 4.94 186 P Pn 21 32 22.5 +2.1
baz=4.7
J26L Joseph Creek 5.04 177 P Pn 21 32 23.3 +1.5
baz=357,SNR=6.9
H21K Melozitna Rive 5.06 224 P Pn 21 32 22.9 +0.8
baz=37
CCB Clear Creek Bu 5.08 198 Pn 21 32 21.7 -0.5
CCB Clear Creek Bu 5.08 198 IAML 21 34 04.0
comp=E,908nm,1.5s
D19K Kuna River 5.09 265 Pn 21 32 22.1 -0.3
D19K Kuna River 5.09 265 IAML 21 34 02.2
comp=E,2μm,1.4s
D19K Kuna River 5.09 265 P Pn 21 32 22.9 +0.5
baz=72
MLY Manley 5.15 212 Pn 21 32 23.0 -0.3
MLY Manley 5.15 212 IAML 21 33 58.5
comp=E,1μm,1.7s
MLY IAML 21 34 04.0
comp=N,1μm,1.9s
MLY Manley 5.15 212 P Pn 21 32 24.7 +1.4
baz=27
E19K Redstone River 5.20 253 Pn 21 32 23.5 -0.4
E19K Redstone River 5.20 253 P Pn 21 32 25.1 +1.1
baz=61
HDA Harding Lake 5.23 193 P Pn 21 32 26.2 +1.9
baz=11
I30M Mount Dempster 5.27 141 P Pn 21 32 25.3 +0.3
baz=328,SNR=15
WRH Wood River Hil 5.28 198 Pn 21 32 26.4 +1.4
WRH IAML 21 33 58.8
comp=E,1μm,1.2s
WRH IAML 21 34 19.1
comp=N,972nm,1.5s
NEA2 Nenana 5.28 203 Pn 21 32 24.8 -0.2
NEA2 IAML 21 33 57.6
comp=E,863nm,1.4s
NEA2 IAML 21 34 13.6
comp=N,1μm,1.7s
NEA2 Nenana 5.28 203 P Pn 21 32 25.8 +0.7
baz=19
C19K Lookout Ridge 5.45 273 Pn 21 32 27.0 -0.4
C19K Lookout Ridge 5.45 273 P Pn 21 32 27.1 -0.4
baz=79
SCRK Sand Creek 5.56 179 P Pn 21 32 30.6 +1.7
baz=359,SNR=18
K27K Chicken 5.57 170 P Pn 21 32 31.1 +2.0
baz=352
J29N Klondike Camp 5.60 152 Pn 21 32 28.7 -0.8
J29N Klondike Camp 5.60 152 P Pn 21 32 30.6 +1.1
baz=338
F19K Shaleruckik Mo 5.71 248 Pn 21 32 30.7 -0.2
F19K Shaleruckik Mo 5.71 248 P Pn 21 32 31.0 +0.1
baz=56
H20K Anotleneega Mo 5.73 230 P Pn 21 32 32.9 +1.6
baz=41
BWN Browne 5.74 203 Pn 21 32 30.8 -0.5
K24K Donnelly Dome 5.76 187 Pn 21 32 31.7 0.0
K24K Donnelly Dome 5.76 187 P Pn 21 32 33.2 +1.5
baz=5.4
DAWY Dawson 5.79 158 P Pn 21 32 33.2 +1.1
baz=343,SNR=18
J30M Hart River 5.84 144 P Pn 21 32 33.3 +0.5
baz=331,SNR=6.4
A19K Wainwright 5.85 285 Pn 21 32 31.9 -0.8
A19K Wainwright 5.85 285 P Pn 21 32 32.4 -0.4
baz=89
G19K Purcell Mounta 5.91 241 P Pn 21 32 34.0 +0.3
baz=50
BPAW Bear Paw Mtn. 6.04 209 P Pn 21 32 36.4 +0.9
baz=23
MCK McKinley 6.09 200 Pn 21 32 36.3 +0.1
MCK McKinley 6.09 200 P Pn 21 32 37.7 +1.5
baz=16
MCK McKinley 6.09 200 P Pn 21 32 36.3 +0.1
C18K Utukok River 6.12 270 Pn 21 32 35.9 -0.8
C18K Utukok River 6.12 270 P Pn 21 32 36.6 0.0
baz=74
I20K Naaghedeneel 6.18 225 P Pn 21 32 39.4 +2.1
baz=36
B18K Kokolik River 6.18 277 P Pn 21 32 37.7 +0.4
baz=81
K29M Barlow Dome 6.28 152 P Pn 21 32 40.5 +1.6
baz=338,SNR=11
E18K Tukpahlearik C 6.37 259 Pn 21 32 39.1 -0.8
E18K Tukpahlearik C 6.37 259 P Pn 21 32 40.6 +0.6
baz=64
F18K Selawik 6.46 250 Pn 21 32 41.2 0.0
F18K Selawik 6.46 250 P Pn 21 32 42.3 +1.2
baz=56
CHUM Lake Minchumin 6.49 213 P Pn 21 32 43.2 +1.7
baz=26
L26K Log Cabin Wild 6.52 176 P Pn 21 32 43.2 +1.1
baz=357,SNR=21
L27K Beaver Creek, 6.55 170 P Pn 21 32 44.5 +2.1
baz=352,SNR=5.5
G18K Tagagawik 6.56 243 Pn 21 32 42.3 -0.4
G18K Tagagawik 6.56 243 P Pn 21 32 43.1 +0.5
baz=50
DHY Denali Highway 6.58 192 Pn 21 32 42.8 -0.2
DHY Denali Highway 6.58 192 P Pn 21 32 45.2 +2.1
baz=9.7
PAX Paxson 6.59 185 P Pn 21 32 44.8 +1.7
baz=3.8
J20K Nowinta River 6.62 221 P Pn 21 32 43.3 0.0
baz=32
A36M Sachs Harbour 6.74 60 Pn Pn 21 32 43.3 -1.8
A36M Sachs Harbour 6.74 60 P Pn 21 32 43.9 -1.2
baz=257
GCSA Galena City Sc 6.85 232 P Pn 21 32 46.6 +0.1
baz=40
C17K DeLong Mountai 6.87 270 P Pn 21 32 45.8 -1.1
baz=73
L29M L29M 6.88 156 Pn 21 32 47.8 +0.7
L29M L29M 6.88 156 P Pn 21 32 47.9 +0.9
baz=342,SNR=7.8
RDOG Red Dog Mine 6.92 267 Pn 21 32 46.5 -1.0
RDOG Red Dog Mine 6.92 267 P Pn 21 32 46.7 -0.8
baz=70
WAT1 Susitna Watana 6.93 197 P Pn 21 32 49.5 +1.8
baz=13
E17K Hotham Inlet 6.95 258 Pn 21 32 47.0 -0.9
E17K Hotham Inlet 6.95 258 P Pn 21 32 47.2 -0.7
baz=62
H18K Honhosa River 6.98 238 Pn 21 32 49.2 +0.9
H18K Honhosa River 6.98 238 P Pn 21 32 49.2 +0.9
baz=45
F17K Baldwin Pennin 7.08 252 Pn Pn 21 32 49.3 -0.4
F17K Baldwin Pennin 7.08 252 P Pn 21 32 49.5 -0.2
baz=57
WAT6 Susitna Watana 7.10 193 P Pn 21 32 51.7 +1.5
baz=10
C36M Paulatuk 7.10 82 Pn 21 32 48.7 -1.3
C36M Paulatuk 7.10 82 P Pn 21 32 49.4 -0.6
baz=280
D17K Noatak River 7.11 264 Pn 21 32 48.4 -1.8
D17K PcP 21 39 47.3 +10
D17K Noatak River 7.11 264 P Pn 21 32 50.0 -0.1
baz=67
J19K Poorman 7.12 224 P Pn 21 32 51.2 +0.9
baz=34
HARP HAARP 7.15 183 Pn 21 32 50.9 +0.2
HARP HAARP 7.15 183 P Pn 21 32 53.6 +2.9
baz=2.6
M26K Nabesna, AK 7.16 175 Pn 21 32 50.3 -0.6
M26K Nabesna, AK 7.16 175 P Pn 21 32 52.4 +1.6
baz=356
M27K Edge Creek, AK 7.25 171 Pn 21 32 51.5 -0.7
M27K Edge Creek, AK 7.25 171 P Pn 21 32 53.8 +1.6
baz=353,SNR=12
K20K Telida 7.31 217 Pn 21 32 52.2 -0.8
K20K Telida 7.31 217 P Pn 21 32 53.8 +0.8
baz=28
PPLA Purkeypile 7.37 210 P Pn 21 32 55.6 +1.8
baz=22
G17K Kiwalik Mounta 7.45 245 Pn 21 32 54.4 -0.4
G17K PcP 21 39 52.9 +15
G17K Kiwalik Mounta 7.45 245 P Pn 21 32 54.6 -0.2
baz=50
M29M Somme Creek 7.47 159 Pn 21 32 55.0 -0.2
M29M Somme Creek 7.47 159 P Pn 21 32 56.4 +1.2
baz=344,SNR=12
M24K Tolsona, Glenn 7.47 187 P Pn 21 32 58.9 +3.7
baz=5.3
CUT Chulitna 7.54 202 P Pn 21 32 59.7 +3.7
baz=16

H17K Granite Mounta 7.60 240 Pn Pn 21 32 57.5 +0.7
H17K Granite Mounta 7.60 240 P Pn 21 32 57.9 +1.1
baz=46
C16K Lisburne Hills 7.70 271 Pn Pn 21 32 57.2 -1.0
C16K Lisburne Hills 7.70 271 P Pn 21 32 58.1 -0.1
baz=71
SCM Sheep Creek Mo 7.81 191 Pn Pn 21 33 02.0 +2.2
SCM Sheep Creek Mo 7.81 191 P Pn 21 33 03.8 +3.9
baz=8.1
SCM Sheep Creek Mo 7.81 191 P Pn 21 33 02.0 +2.2
M23K Glacier View 7.88 192 P Pn 21 33 02.9 +2.2
baz=9.0
SML Sawmill 7.91 194 P Pn 21 33 04.8 +3.6
baz=11
YUK3 Moose Creek 7.92 167 P Pn 21 33 03.1 +1.6
baz=350,SNR=11
N25K Chitina, Valde 7.94 181 P Pn 21 33 03.5 +1.9
baz=0.9
L20K Farewell, AK 8.06 214 P Pn 21 33 05.3 +2.1
baz=25
G16K Koyuk River 8.07 248 Pn 21 33 03.0 -0.2
G16K Koyuk River 8.07 248 P Pn 21 33 03.5 +0.3
baz=52
KLU Klutina 8.08 186 P Pn 21 33 07.1 +3.6
baz=4.2
SKT Skwentna 8.12 205 P Pn 21 33 06.1 +2.0
baz=18
M22K Willow 8.15 200 P Pn 21 33 07.8 +3.4
baz=15
MCARA McCarthy VSAT 8.18 176 Pn 21 33 05.9 +1.1
MCARA McCarthy VSAT 8.18 176 P Pn 21 33 07.6 +2.9
baz=357,SNR=15
PMR Palmer 8.20 197 P Pn 21 33 10.1 +5.1
PMR Palmer 8.20 197 P Pn 21 33 08.5 +3.4
baz=12
KNK Knik Glacier 8.31 194 P Pn 21 33 10.6 +3.9
baz=10
M31M Drury Creek, Y 8.36 146 P Pn 21 33 08.5 +1.2
baz=335
YUK8 Steele Glacier 8.46 165 P Pn 21 33 11.4 +2.4
baz=349,SNR=5.4
M20K Styx River 8.47 210 P Pn 21 33 10.1 +1.1
baz=22
J17K VABM Dome 8.51 231 P Pn 21 33 10.3 +1.0
baz=38
SUA Susitna One 8.51 202 P Pn 21 33 13.2 +3.8
baz=16
YUK4 Talbot Arm 8.52 161 P Pn 21 33 09.8 +0.1
baz=346,SNR=26
H16K Elim 8.53 244 P Pn 21 33 08.8 -0.7
baz=47
L19K White Mountain 8.53 216 P Pn 21 33 11.1 +1.5
baz=26
FARO Faro, Yukon 8.55 143 Pn 21 33 09.4 -0.5
FARO Faro, Yukon 8.55 143 P Pn 21 33 10.9 +1.0
baz=333
BMRM Bremner River 8.58 181 P Pn 21 33 14.2 +3.9
baz=0.9
I17K Unalakleet 8.59 237 P Pn 21 33 11.9 +1.5
baz=42
N30M Aishikik Lake 8.61 156 Pn 21 33 11.4 +0.7
N30M Aishikik Lake 8.61 156 P Pn 21 33 11.7 +1.0
baz=343,SNR=11
F15K North Star Dit 8.64 254 P Pn 21 33 09.7 -1.4
baz=55
CTG Chitna Glacier 8.66 171 P Pn 21 33 12.7 +1.1
baz=353,SNR=19
MMPY Sheldon Lake, 8.68 136 P Pn 21 33 12.7 +1.0
baz=328,SNR=14
M19K Big River Lodg 8.69 213 Pn 21 33 12.5 +0.7
M19K Big River Lodg 8.69 213 P Pn 21 33 13.1 +1.3
baz=24
RC01 Rabbit Creek A 8.76 198 P Pn 21 33 16.1 +3.4
baz=13
N31M Braeburn, Yuko 8.78 152 P Pn 21 33 14.9 +1.9
baz=340
CRQE Cirque 8.81 176 P Pn 21 33 17.0 +3.5
baz=357
PWL Port Wells 8.85 193 P Pn 21 33 16.3 +2.3
baz=9.4
K17K Iditarod 8.86 227 P Pn 21 33 15.8 +1.7
baz=34
G15K Niukluk 8.87 249 P Pn 21 33 15.6 +1.3
baz=51
L18K Granite Mounta 8.89 221 P Pn 21 33 16.3 +1.7
baz=30
O28M Mount Upton 8.94 167 P Pn 21 33 17.9 +2.4
baz=351
YUK6 Outpost Mounta 8.94 161 P Pn 21 33 16.9 +1.4
baz=346,SNR=24
N20K Mount Spurr 8.97 205 P Pn 21 33 17.5 +1.9
baz=18
EYAK Cordova Ski Ar 9.02 185 P Pn 21 33 22.8 +6.5
EYAK Cordova Ski Ar 9.02 185 P Pn 21 33 17.8 +1.5
baz=3.4
J16K Anvil River 9.03 234 P Pn 21 33 17.6 +1.2
baz=39
F14K Arctic Creek 9.35 255 P Pn 21 33 19.7 -1.0
baz=55
L17K Donlin 9.35 225 P Pn 21 33 22.2 +1.4
baz=32
M18K Stony River 9.35 216 P Pn 21 33 22.1 +1.2
baz=26
O30N Mendenhall 9.41 155 P Pn 21 33 22.9 +1.2
baz=342
MESA MESA 9.42 173 P Pn 21 33 25.4 +3.4
baz=355,SNR=6.9
O29M Mount Kennedy 9.55 163 P Pn 21 33 26.4 +2.8
baz=348,SNR=18
PINM Pinnacle 9.60 168 P Pn 21 33 27.5 +3.2
baz=352
KAIM Kayak Island 9.62 180 P Pn 21 33 27.2 +2.6
baz=0.4
P23K Montague Islan 9.64 189 P Pn 21 33 27.0 +2.2
baz=6.7
WHY Whitehorse 9.71 152 P Pn 21 33 26.6 +0.8
baz=340,SNR=8.4
N19K Bonanza Creek 9.71 211 P Pn 21 33 27.5 +1.7
baz=22
M17K Holitna River 9.78 220 P Pn 21 33 26.9 +0.1
baz=28
P30M Million Dollar 9.91 158 P Pn 21 33 31.1 +2.5
baz=345
L16K Owhat River 10.01 226 P Pn 21 33 30.8 +1.1
baz=32
PNL Peninsula 10.09 166 P Pn 21 33 37.1 +6.1
N18K Kilae Creek 10.10 214 P Pn 21 33 32.1 +0.9
baz=24
P29M Windy Craggy 10.30 161 Pn Pn 21 33 35.2 +1.4
P29M Windy Craggy 10.30 161 P Pn 21 33 36.1 +2.3
baz=347
J14K Nanvaranak Lak 10.30 238 Pn Pn 21 33 33.8 0.0
J14K Nanvaranak Lak 10.30 238 P Pn 21 33 34.3 +0.5
baz=341
WRGLY Wrigley 10.40 117 P Pn 21 33 35.3 +0.1
baz=316
M16K Timber Creek 10.47 223 P Pn 21 33 37.0 +0.8
baz=30
P33M Teslin, Yukon 10.50 147 P Pn 21 33 37.3 +0.7
baz=337,SNR=5.5
N17K Nushagak Hills 10.51 217 P Pn 21 33 38.4 +1.7
baz=26
L15K Ungalak Mounta 10.56 230 P Pn 21 33 38.3 +0.9
baz=35
PLBC Pleasant Camp 10.64 158 P Pn 21 33 40.3 +1.9
baz=345
O18K Koktuh Hills 10.74 211 P Pn 21 33 40.7 +0.8
baz=21
SKAG Skagway 10.78 155 P Pn 21 33 41.9 +1.6
baz=343
K13K Kusilvak Mount 11.26 238 P Pn 21 33 47.4 +0.4
baz=39
N15K Kwethluk River 11.49 223 P Pn 21 33 51.7 +1.6
baz=29
Q32M Nakina River 11.77 148 P Pn 21 33 53.6 -0.5
baz=339,SNR=6.9
Q18K Katmai Hardscr 11.84 208 P Pn 21 33 54.6 -0.5
baz=19
R32K Eaglecrest 12.04 155 P Pn 21 33 57.3 -0.3
baz=343
JIS Juneau Island 12.06 154 P Pn 21 34 00.1 +2.3
S31K Pelican 12.11 159 Pn Pn 21 33 59.4 +0.9
S31K Pelican 12.11 159 P Pn 21 34 00.2 +1.8
baz=346
KDAK Kodiak Island 12.32 201 Pn Pn 21 34 03.3 +1.9
comp=N,0.6nm,0.3s,baz=156,slow=20,SNR=2.2
KDAK Kodiak Island 12.32 201 *i* P Pn 21 34 03.5 +2.1

KDAK pmax pmax
comp=Z,37nm,1.3s
Q17K Contact Creek 12.36 210 P Pn 21 34 04.5 +2.5
baz=19
KOTAN Kotaneelee Air 12.66 128 P Pn 21 34 07.8 +1.7
baz=326
DLBC Dease Lake 12.69 144 Pn Pn 21 34 07.6 +1.0
DLBC Dease Lake 12.69 144 Pn Pn 21 34 07.3 +0.7
comp=Z,2.0nm,0.3s,baz=331,slow=9.9,SNR=5.5
DLBC Sn Sn 21 36 24.1 -3.8
comp=Z,0.8nm,0.3s,baz=241,slow=19,SNR=1.3
comp=Z,48nm,0.8s
DLBC Dease Lake 12.69 144 P Pn 21 34 07.0 +0.4
baz=337
LIRD Liard River Hi 12.73 134 P Pn 21 34 07.2 +0.2
baz=330
S32K Killisnoo 12.81 156 P Pn 21 34 10.8 +2.7
baz=344
S34M Telegraph Cree 12.96 147 Pn Pn 21 34 11.1 +1.0
S34M Telegraph Cree 12.96 147 P Pn 21 34 11.8 +1.6
baz=339
SIT Sitka 13.10 158 P Pn 21 34 14.6 +2.5
baz=346
YKA Yellowknife Ar 13.82 106 Pn Pn 21 34 17.8 -4.1
comp=Z,5.1nm,0.3s,baz=314,slow=13,SNR=4.3
YKA Sn Sn 21 36 41.5 -14
comp=Z,6.4nm,0.3s,baz=317,slow=23,SNR=7.6
comp=Z,11nm,0.5s
T35M Bob Quinn 14.01 147 P Pn 21 34 26.0 +1.5
baz=339
U33K Whale Pass 14.33 154 P Pn 21 34 30.1 +1.2
baz=344
RES Resolute Bay 15.58 49 Pn Pn 21 34 41.4 -4.1
comp=Z,3.4nm,0.3s,baz=262,slow=16,SNR=2.0
GRNB Grenville Isla 17.03 150 P 21 35 04.6 -1.4
EUNU Eureka 17.39 29 P 21 35 07.9 -1.9
BILL Bilibino 17.58 289 *i* P Pn 21 35 09.7 -1.2
BILL pmax pmax
comp=Z,49nm,1.1s
BILL MLR MLR
comp=Z,7μm,16.0s
BBB Bella Bella 18.95 148 P Pn 21 35 28.9 +1.2
comp=Z,0.2nm,0.3s,baz=120,slow=13,SNR=2.0
comp=Z,23nm,1.1s
SEY Seymchan 25.25 287 *i* P P 21 36 32.1 +0.3
SEY pmax pmax
comp=Z,78nm,0.9s
TIXI Tiksi 26.64 315 P P 21 36 44.2 -0.2
TIXI Tiksi 26.64 315 *i* P P 21 36 42.8 -1.6
TIXI pmax pmax
comp=Z,11nm,0.9s
HUMO Hull Mountain 29.13 147 P P 21 37 07.5 +0.5
HUMO IAmb IAmb 21 37 11.9
comp=Z,33nm,1.2s
HLID Hailey 30.14 134 P P 21 37 18.2 +2.1
baz=340
PET Petropavlovsk 30.52 267 *i* P P 21 37 19.6 +0.5
PET pmax pmax
comp=Z,13nm,1.1s
AGMN Agassiz Nation 31.48 107 P P 21 37 29.7 +2.1
baz=330
SPITS Spitsbergen Ar 32.08 7 P P 21 37 32.1 -0.5
SPITS Spitsbergen Ar 32.08 7 P P 21 37 32.1 -0.5
comp=Z,4.5nm,0.5s,baz=36,slow=7.5,SNR=14
comp=Z,4.5nm,0.5s
BW06 Boulder Array 32.18 128 P P 21 37 37.0 +2.9
baz=338
PDAR Pinedale Array 32.18 128 P P 21 37 36.0 +1.9
comp=Z,7.6nm,0.8s,baz=357,slow=6.3,SNR=11
comp=Z,7.6nm,0.8s
YAK Yakutsk 33.20 301 *e*P P 21 37 41.8 -0.7
YAK pmax pmax
comp=Z,22nm,1.0s
YAK pmax pmax
comp=N,14nm,1.0s
YAK pmax pmax
comp=E,10.0nm,1.0s
DUG Dugway, Tooele 33.72 134 P P 21 37 50.0 +2.5
baz=341
NVAR Mina Array Bea 34.10 142 P P 21 37 53.9 +3.0
comp=E,17nm,1.0s,baz=358,slow=6.7,SNR=31
NVAR PcP PcP 21 40 28.9 +1.0
comp=E,1.0nm,0.9s,baz=297,slow=4.0,SNR=1.9
comp=E,17nm,1.0s
R11B Troy Canyon, C 34.79 139 P P 21 38 00.6 +3.8
baz=343
TPNV Topopah Spring 35.98 140 P P 21 38 09.9 +3.0
baz=344
CWC Cottonwood Cre 36.06 143 P P 21 38 10.9 +3.2
baz=345
FURC Furnace Creek, 36.30 141 P P 21 38 12.0 +2.5
baz=344
VES Vestal, Richgr 36.43 144 P P 21 38 13.5 +2.8
baz=345
MPMC Manual Prospec 36.56 142 P P 21 38 15.9 +3.9
baz=345
ISA Isabella, Lake 36.73 144 P P 21 38 16.0 +2.7
baz=345
SMMC Simmler 36.76 146 P P 21 38 16.6 +3.0
baz=346
BGNE Belgrade 36.84 115 P P 21 38 16.9 +2.7
baz=335
SHOC Shoshone, Teco 36.98 141 P P 21 38 19.1 +3.8
baz=344
LRMC Laurel Mtn Rad 37.07 143 P P 21 38 19.7 +3.4
baz=345
PKM Mcpherson Peak 37.21 146 P P 21 38 21.7 +4.2
baz=346
GSC Goldstone, Bar 37.43 142 P P 21 38 22.1 +2.8
baz=344
TUQ Turquoise Moun 37.50 140 P P 21 38 23.6 +3.6
baz=344
EDW2 Edwards Air Fo 37.59 143 P P 21 38 23.4 +2.9
baz=345
S22A 4UR Ranch, Cre 37.61 128 P P 21 38 23.8 +2.8
baz=340
TYV Tymovskoe 37.91 279 *e*P P 21 38 24.0 +0.9
TYV pmax pmax
comp=Z,12nm,1.0s
HEC Hector,Ludlow 37.99 141 P P 21 38 27.1 +3.1
baz=344
GMRC Granite Mounta 38.19 140 P P 21 38 28.4 +2.7
baz=344
BFSC Mount Baldy Ra 38.27 143 P P 21 38 28.8 +2.3
baz=345
WUAZ Wupatki 38.50 135 P P 21 38 31.6 +3.2
baz=342
BELC Belle Mtn. Jos 38.86 141 P P 21 38 35.3 +3.9
baz=345
IRM Iron Mountain 38.90 140 P P 21 38 35.1 +3.5
baz=344
CIS Catalina Islan 38.93 145 P P 21 38 34.3 +2.5
baz=346
MURC Murrieta 38.99 143 P P 21 38 35.1 +2.7
baz=345
PDMCI Parker Dam,Lak 38.99 139 P P 21 38 35.5 +3.2
baz=344
PFO Pinyon Flats O 39.14 142 P P 21 38 36.8 +3.1
baz=345
TPFO Pinon Flats 39.14 142 P P 21 38 36.9 +3.1
baz=345
W18A Petrified Fore 39.30 133 P P 21 38 38.5 +3.4
baz=342
BC3 Big Chuckawall 39.32 141 P P 21 38 38.8 +3.7
baz=344
MONP2 Monument Peak 39.84 142 P P 21 38 43.2 +3.6
baz=345
SWSC Sam W. Stewart 39.92 141 P P 21 38 43.6 +3.6
baz=345
IKP In-Ko-Pah, Jac 40.14 142 P P 21 38 46.0 +4.0
baz=345
ANMO Albuquerque 40.34 129 P P 21 38 47.5 +3.8
baz=341
ZEA Zeya 40.68 294 *e*P P 21 38 51.7 +5.6
ARCES ARCESS Array B 41.04 5 P P 21 38 47.6 -1.3
comp=Z,9.4nm,0.8s,baz=357,slow=7.7,SNR=11
ARCES PcP PcP 21 40 47.2 -1.3
comp=Z,4.7nm,1.0s,baz=348,slow=3.8,SNR=2.5
comp=Z,9.4nm,0.8s
ARCES ARCESS Array B 41.04 5 *e*P P 21 38 48.4 -0.6
ARCES pmax pmax
comp=Z,9.0nm,0.8s
YSS Yuzh-Sakhalins 41.20 276 P P 21 38 51.0 +0.5
YSS IAmb IAmb 21 38 52.9
comp=Z,29nm,0.6s
YSS Yuzh-Sakhalins 41.20 276 *i* P P 21 38 50.8 +0.3
YSS pmax pmax
comp=Z,19nm,0.8s

**214A Organ Pipe Nat** 41.55 138 P **P** 21 38 55.7 +2.1
baz=344
**TUC Tucson** 41.70 135 P **P** 21 38 57.4 +2.5
baz=343
**121A Cookes Peak, D** 42.26 132 P **P** 21 39 02.1 +2.5
baz=342
**LVZ Lovozero** 42.85 1 *i* P **P** 21 39 04.1 +0.3
LVZ pmax pmax
comp=Z,31nm,1.1s
**P49A Miami Univ. Ec** 42.99 102 P **P** 21 39 05.9 +0.7
baz=334
**KLR Kul'dur** 43.03 287 *i* P **P** 21 39 05.6 +0.1
KLR pmax pmax
comp=Z,7.0nm,0.8s
**APA Apatity** 43.18 1 ⇓*i* P **P** 21 39 04.2 -2.2
APA *i* 21 40 44.0
APA pmax pmax
comp=Z,8.0nm,0.9s
**HEH HeiHe** 43.59 291 *eP* **P** 21 39 10.9 +0.9
**MNTX Cormudas Mount** 43.69 129 P **P** 21 39 12.8 +1.8
baz=341
**OUL Oulu** 45.50 6 P **P** 21 39 25.4 +0.4
**TXAR Lajitas Array** 46.40 128 P **P** 21 39 34.0 +1.4
comp=Z,5.6nm,0.8s,baz=349,slow=7.1,SNR=13
TXAR PcP **PcP** 21 41 09.2 +1.9
comp=Z,4.7nm,1.1s,baz=349,slow=4.1,SNR=1.9
comp=Z,5.6nm,0.8s
**HIA Hailar** 46.92 297 *i* P **P** 21 39 36.5 +0.1
HIA pmax pmax
comp=Z,5.0nm,0.9s
**JTM Tenmabayashi** 47.18 273 P **P** 21 39 38.9 +0.4
JTM IAmb IAmb 21 39 40.7
comp=Z,18nm,0.9s
**USA0B Ussuriysk Arra** 47.33 283 P **P** 21 39 39.7 +0.1
USA0B IAmb IAmb 21 39 41.8
comp=Z,13nm,0.8s
**USA0B Ussuriysk Arra** 47.33 283 *i* P **P** 21 39 40.6 +1.0
**USRK Ussuriysk Ar.** 47.33 283 P **P** 21 39 38.6 -1.0
comp=Z,11nm,0.7s,baz=32,slow=8.7,SNR=18
comp=Z,11nm,0.7s
**BNX BinXian** 47.53 288 ⇓ **P** 21 39 40.9 -0.2
BNX pmax pmax
comp=Z,8.0nm,0.9s
**MDJ Mudanjiang** 47.78 286 P **P** 21 39 42.4 -0.7
MDJ pmax pmax
comp=Z,6.0nm,1.6s
**VLA Vladivostok** 48.31 283 *i* P **P** 21 39 47.5 +0.3
VLA pmax pmax
comp=Z,11nm,0.7s
**NB2 NORSAR Subarra** 48.57 16 P **P** 21 39 48.3 -0.8
comp=Z,3.9nm,0.8s,baz=348,slow=7.9
**NOA NORSAR Array B** 48.57 16 P **P** 21 39 48.1 -0.9
comp=Z,3.1nm,0.9s,baz=348,slow=7.8,SNR=7.5
comp=Z,3.1nm,0.9s
**NOA NORSAR Array B** 48.57 16 *eP* **P** 21 39 50.6 +1.5
NOA pmax pmax
comp=Z,3.0nm,0.8s
**FINES FINESS Array B** 49.16 6 P **P** 21 39 52.6 -0.8
comp=Z,4.0nm,0.4s,baz=5.8,slow=8.5,SNR=22
comp=Z,4.0nm,0.4s
**HFS Hagfors** 49.69 14 P **P** 21 39 56.6 -1.0
comp=Z,19nm,0.8s,baz=15,slow=6.2,SNR=18
comp=Z,19nm,0.8s
**CN2 Changchun** 49.89 289 *eP* **P** 21 39 57.0 -2.3
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**MOY Mondy** 50.17 313 *eP* **P** 21 40 01.9 +0.4
MOY pmax pmax
comp=Z,34nm,1.6s
**ZALV Zalesovo Beam** 51.79 325 P **P** 21 40 12.4 -1.0
comp=Z,3.8nm,0.5s,baz=23,slow=7.3,SNR=7.2
comp=Z,3.8nm,0.5s
**MAJO Matsushiro** 51.97 273 P **P** 21 40 15.3 +0.3
**MAJO Matsushiro** 51.97 273 *i* P **P** 21 40 16.1 +1.0
MAJO pmax pmax
comp=Z,13nm,1.0s
**MJAR Matsushiro Arr** 51.97 273 P **P** 21 40 16.9 +1.9
comp=Z,8.8nm,1.0s,baz=12,slow=8.2,SNR=19
comp=Z,8.8nm,1.0s
**VSU Vasula** 52.16 6 *i* P **P** 21 40 15.3 -0.8
VSU pmax pmax
comp=Z,31nm,1.0s
**SONM Songino Array** 52.19 306 P **P** 21 40 17.2 +0.5
comp=Z,3.5nm,0.9s,baz=21,slow=9.2,SNR=9.5
comp=Z,3.5nm,0.9s
**EKA Eskdalemuir Ar** 52.30 27 P **P** 21 40 16.7 -0.5
comp=Z,17nm,0.8s,baz=342,slow=6.5,SNR=21
comp=Z,17nm,0.8s
**SVE Sverdlovsk** 52.68 343 ⇓ *eP* **P** 21 40 20.8 +0.7
SVE pmax pmax
comp=Z,26nm,1.9s
**XLT XiLinHaoTe** 52.84 297 *eP* **P** 21 40 21.6 +0.1
XLT pP sP 21 40 26.0 -0.2
XLT sP pP 21 40 30.7 +5.8
XLT pmax pmax
comp=Z,5.0nm,1.0s
**ARU Arti** 53.28 344 P **P** 21 40 24.4 0.0
**ARU Arti** 53.28 344 P **P** 21 40 24.5 0.0
comp=Z,3.0nm,0.3s,baz=15,slow=5.7,SNR=7.3
comp=Z,3.0nm,0.3s
**ARU Arti** 53.28 344 *d i* P **P** 21 40 24.8 +0.3
ARU S **S** 21 47 58.5 +3.2
ARU pmax pmax
comp=Z,16nm,1.0s
**KSRS Korea Array** 54.73 283 P **P** 21 40 35.7 +0.4
comp=Z,7.3nm,0.8s,baz=18,slow=7.7,SNR=17
comp=Z,7.3nm,0.8s
**KSAR Wonju Array Be** 54.76 283 P **P** 21 40 35.6 +0.1
**KSAR Wonju Array Be** 54.76 283 P **P** 21 40 35.6 +0.1
**MOS Moscow** 55.05 359 *eP* **P** 21 40 35.4 -2.0
MOS pmax pmax
comp=Z,45nm,1.0s
**BRVK Borovoye** 55.17 335 P **P** 21 40 38.1 -0.1
**BRVK Borovoye** 55.17 335 *i* P **P** 21 40 38.5 +0.2
BRVK pmax pmax
comp=Z,8.0nm,1.2s
**BVAR Borovoye Array** 55.19 335 P **P** 21 40 38.5 +0.1
comp=Z,5.0nm,1.0s,baz=32,slow=8.5,SNR=9.0
comp=Z,5.0nm,1.0s
**DGZ Jazzator, Alta** 55.25 322 *i* P **P** 21 40 39.1 0.0
DGZ pmax pmax
comp=Z,10.0nm,1.2s
**OBN Obninsk** 55.68 359 ⇓ *eP* **P** 21 40 42.1 +0.2
OBN *e* 21 41 41.3
OBN pmax pmax
comp=Z,31nm,1.3s
OBN MLR MLR
comp=Z,2μm,16.0s
**TJN Taejon** 55.89 283 P **P** 21 40 44.0 +0.3
**TJN Taejon** 55.89 283 P **P** 21 40 44.0 +0.3
TJN pmax pmax
comp=Z,120nm,0.9s
**KURK Kurchatov** 56.05 329 P **P** 21 40 44.1 -0.5
KURK IAmb IAmb 21 40 50.3
comp=Z,28nm,1.1s
**KURK Kurchatov** 56.05 329 *i* P **P** 21 40 44.7 +0.1
KURK pmax pmax
comp=Z,26nm,1.2s
**KURBB Kurchatov Arra** 56.16 329 P **P** 21 40 44.8 -0.6
comp=Z,12nm,1.0s,baz=15,slow=40,SNR=22
comp=Z,12nm,1.0s
**MNK Minsk** 56.17 6 *i* P **P** 21 40 45.9 +0.5
MNK *i* 21 41 43.5
MNK *i* 21 42 51.1
MNK *i* PPP PPP 21 44 05.0
MNK *i* S **S** **21 48 35.9 +1.9**
MNK *i* 21 50 35.2
MNK *i* SS **SS** **21 52 23.8 +4.3**
MNK pmax pmax
comp=Z,49nm,0.9s
MNK pmax pmax
comp=E,42nm,1.2s
MNK pmax pmax
comp=N,11nm,0.9s
MNK MLR MLR
comp=N,2μm,16.0s
MNK MLR MLR
comp=E,2μm,17.0s
MNK MLR MLR
comp=E,2μm,17.0s
**IBBN Ibbenburen** 56.78 20 *eP* **P** 21 40 52.6 +2.8
comp=E,39nm,1.0s,baz=352,slow=7.0
**NRDL Niedersach Rie** 56.87 18 *eP* **P** 21 40 52.8 +2.5
comp=E,22nm,1.0s,baz=352,slow=7.0
**HHC Hu-ho-hao-te** 57.02 299 *eP* **P** 21 40 50.0 -1.8
HHC pmax pmax
comp=E,11nm,0.5s

**RUE Ruedersdorf** 57.27 16 *eP* **P** 21 40 55.8 +2.6
comp=E,24nm,1.0s,baz=352,slow=7.0
**CLZ Clausthal** 57.54 18 *eP* **P** 21 40 56.3 +1.0
comp=E,24nm,0.9s,baz=352,slow=7.0
**BUG Bochum--Univer** 57.57 21 *eP* **P** 21 40 57.7 +2.3
comp=E,22nm,0.9s,baz=352,slow=7.0
**ZSN Zaisan** 57.93 323 *eP* **P** 21 40 57.6 -0.5
comp=E,5.6nm,0.9s,baz=322
**ZSN Zaisan** 57.93 323 *eP* **P** 21 40 57.5 -0.5
ZSN pmax pmax
comp=Z,6.0nm,0.9s
**KASTN Kahler Asten** 57.95 20 *eP* **P** 21 40 59.5 +1.4
comp=Z,9.7nm,1.1s,baz=352,slow=7.0
**BELG Belogornoye** 58.10 351 *i* P **P** 21 40 59.5 +0.4
BELG pmax pmax
comp=Z,8.0nm,1.1s
**BSTI Sart Tilman** 58.20 22 *dP* **P** **21 41 00.1 +0.4**
**MEM Membach** 58.23 22 *dP* **P** **21 41 00.6 +0.6**
MEM *dx* x 21 41 02.5
**BTNL Ternell** 58.27 22 *dP* **P** **21 41 00.3 -0.1**
BTNL *dx* x 21 41 02.5
**BCLA Clavier** 58.32 22 *dP* **P** **21 41 01.0 +0.3**
BCLA *dx* x 21 41 02.5
**NEUB Neuenburg** 58.32 17 *eP* **P** **21 41 01.6 +1.0**
comp=Z,24nm,0.9s,baz=352,slow=7.0
**BGES Gesves** 58.33 23 *dP* **P** **21 41 00.3 -0.4**
BGES *dx* x 21 41 02.5
**CLL Collm** 58.35 17 P **P** **21 41 00.6 -0.3**
CLL IAmb IAmb 21 41 03.1
comp=Z,13nm,0.9s
**CLL Collm** 58.35 17 *i* P **P** **21 41 01.1 +0.2**
comp=Z,19nm,1.1s
**CLL Collm** 58.35 17 P **P** **21 41 00.6 -0.3**
CLL pmax pmax
comp=Z,13nm,0.9s
**CLL Collm** 58.35 17 *eP* **P** **21 41 00.9 +0.1**
comp=Z,14nm,1.0s,baz=352,slow=7.0
**BMRD Maredsous** 58.36 23 *dP* **P** **21 41 01.7 +0.8**
BMRD *dx* x 21 41 03.0
**AHRW Bad Neuenahr-A** 58.43 21 *eP* **P** **21 41 04.3 +2.9**
comp=Z,15nm,1.0s,baz=352,slow=7.0
**BHOU Houvegnez** 58.48 22 *dP* **P** **21 41 01.1 -0.7**
BHOU *dx* x 21 41 03.8
BHOU *d*PcP **PcP** **21 41 52.0 -0.2**
**UBBA Unterbreizbach** 58.51 19 *eP* **P** **21 41 02.6 +0.7**
baz=352,slow=7.0
**BAIF Baives** 58.52 23 P **P** **21 41 03.7 +1.6**
**DOU Dourbes** 58.54 23 *dP* **P** **21 41 02.6 +0.4**
DOU *dx* x 21 41 04.1
DOU *d*PcP **PcP** **21 41 50.8 -1.6**
**GIVF Givet** 58.57 23 *eP* **P** **21 41 03.9 +1.5**
**RCHB Rochefort** 58.57 23 *dP* **P** **21 41 02.6 +0.2**
RCHB *dx* x 21 41 04.3
**MOX Moxa** 58.86 18 *eP* **P** **21 41 06.9 +2.5**
comp=Z,8.5nm,0.9s,baz=352,slow=7.0
**BRG Berggiesshubel** 58.87 16 *eP* **P** **21 41 05.2 +0.7**
BRG Amp 21 41 07.6
comp=Z,13nm,1.0s
**BRG Berggiesshubel** 58.87 16 *eP* **P** **21 41 06.7 +2.2**
comp=Z,13nm,1.0s,baz=352,slow=7.0
**TNS Taunus Mts** 58.91 20 *eP* **P** **21 41 07.3 +2.4**
comp=Z,15nm,1.1s,baz=352,slow=7.0
**PLN Plauen** 59.08 17 *eP* **P** **21 41 06.8 +0.8**
comp=Z,9.0nm,1.0s,baz=352,slow=7.0
**MKAR Makanchi Array** 59.09 324 P **P** **21 41 04.7 -1.5**
**MKAR Makanchi Array** 59.09 324 P **P** **21 41 05.0 -1.2**
comp=Z,2.4nm,0.5s,baz=26,slow=6.1,SNR=19
comp=Z,2.4nm,0.5s
**VORR Voronezh** 59.11 357 *eP* **P** **21 41 04.6 -1.5**
VORR pmax pmax
comp=Z,9.0nm,0.9s
**MAKZ Makanchi** 59.14 325 P **P** **21 41 05.6 -0.9**
MAKZ IAmb IAmb 21 41 06.7
comp=Z,14nm,0.9s
**MAKZ Makanchi** 59.14 325 P **P** **21 41 05.6 -0.9**
MAKZ pmax pmax
comp=Z,14nm,0.9s
**WLF Walferdange** 59.17 22 *dP* **P** **21 41 07.2 +0.6**
WLF *dx* x 21 41 09.3
**WLF Walferdange** 59.17 22 *eP* **P** **21 41 08.5 +1.8**
comp=Z,19nm,1.0s,baz=352,slow=7.0
**TANN Tannenbergstha** 59.18 17 *eP* **P** **21 41 09.2 +2.5**
comp=Z,10nm,1.0s,baz=352,slow=7.0
**RNPP9 Sopachiv** 59.18 7 P **P** **21 41 05.3 -1.3**
**HNS HongShan** 59.18 294 ⇓ P **P** **21 41 08.9 +2.1**
**AKTO Aktyubinsk** 59.26 344 P **P** **21 41 06.5 -0.7**
comp=Z,2.6nm,0.6s,baz=342,slow=7.0,SNR=5.8
comp=Z,2.6nm,0.6s
**CHVC Chvalec** 59.35 14 *eP* **P** **21 41 08.7 +0.8**
CHVC *ex* x 21 41 18.4
**CHVC Chvalec** 59.35 14 *eP* **P** **21 41 08.7 +0.8**
CHVC *e* 21 41 18.4
**VRH Novokhopyorsk** 59.52 356 *eP* **P** **21 41 07.4 -1.6**
VRH pmax pmax
comp=Z,6.0nm,1.0s
**MANZ Manzenberg** 59.56 17 *eP* **P** **21 41 11.6 +2.2**
comp=Z,1.8nm,1.1s,baz=352,slow=7.0
**VSR Storozhevoye** 59.56 358 *eP* **P** **21 41 07.2 -2.1**
VSR pmax pmax
comp=Z,10.0nm,1.2s
**DPC Dobruska-Polom** 59.61 14 *eP* **P** **21 41 09.7 0.0**
**DPC Dobruska-Polom** 59.61 14 *eP* **P** **21 41 09.7 0.0**
**ROTZ Rotzenmuhle** 59.79 17 *eP* **P** **21 41 12.6 +1.8**
comp=Z,2.2nm,1.1s,baz=352,slow=7.0
**PRU Pruhonice** 59.80 16 *eP* **P** **21 41 12.9 +1.9**
**PRU Pruhonice** 59.80 16 *eP* **P** **21 41 12.9 +1.9**
**VORD Divnogorie** 59.81 357 *eP* **P** **21 41 09.0 -2.0**
VORD pmax pmax
comp=Z,10.0nm,1.0s
**GOPC GO Pecny, Ondr** 59.90 16 *eP* **P** **21 41 14.2 +2.5**
**GOPC GO Pecny, Ondr** 59.90 16 *eP* **P** **21 41 14.2 +2.5**
**KRLC Kraliky** 59.92 14 *eP* **P** **21 41 12.3 +0.5**
**KRLC Kraliky** 59.92 14 *eP* **P** **21 41 12.3 +0.5**
**AKASG Malin Array Be** 60.01 5 P **P** **21 41 11.7 -0.7**
**AKASG Malin Array Be** 60.01 5 P **P** **21 41 11.5 -0.8**
comp=Z,17nm,0.7s,baz=357,slow=6.7,SNR=20
comp=Z,17nm,0.7s
**AKASG Malin Array Be** 60.01 5 P **P** **21 41 11.7 -0.7**
AKASG pmax pmax
comp=Z,5.0nm,0.9s
**AKBB Malin Array Si** 60.01 5 *i* P **P** **21 41 12.1 -0.2**
AKBB pmax pmax
comp=Z,31nm,0.9s
**AKBB Malin Array Si** 60.01 5 P **P** **21 41 11.6 -0.7**
**OJC Ojcow** 60.01 12 P **P** **21 41 11.7 -0.7**
OJC IAmb IAmb 21 41 17.9
comp=Z,28nm,1.7s
**OJC Ojcow** 60.01 12 P **P** **21 41 11.7 -0.7**
OJC pmax pmax
comp=Z,28nm,1.7s
**KIEV Kiev** 60.02 5 P **P** **21 41 11.6 -0.8**
**KIEV Kiev** 60.02 5 ⇑P **P** **21 41 11.9 -0.5**
**KIEV Kiev** 60.02 5 P **P** **21 41 11.6 -0.8**
KIEV pmax pmax
comp=Z,24nm,0.8s
**ABKAR Akbulak array** 60.22 342 P **P** **21 41 12.7 -1.1**
**CLF Chambon-Foret** 60.23 25 P **P** **21 41 12.8 -1.0**
**MORC Moravsky Berou** 60.28 13 P **P** **21 41 13.0 -1.3**
**MORC Moravsky Berou** 60.28 13 *eP* **P** **21 41 14.1 -0.2**
**MORC Moravsky Berou** 60.28 13 ⇓P **P** **21 41 15.1 +0.8**
**MORC Moravsky Berou** 60.28 13 P **P** **21 41 13.0 -1.3**
MORC pmax pmax
comp=Z,9.0nm,1.1s
**STU Stuttgart** 60.43 20 *eP* P 21 41 18.7 +3.4
comp=Z,29nm,0.9s,baz=352,slow=7.0
**WET Wettzell** 60.48 17 *eP* **P** **21 41 17.9 +2.3**
baz=352,slow=7.0
**KHC Kasperske Hory** 60.56 17 P **P** **21 41 16.5 +0.3**
KHC IAmb IAmb 21 41 20.1
comp=Z,16nm,1.2s
**KHC Kasperske Hory** 60.56 17 *eP* **P** **21 41 17.4 +1.2**
**KHC Kasperske Hory** 60.56 17 *i* P **P** **21 41 16.8 +0.6**
KHC pmax pmax
comp=Z,30nm,1.2s
**VRAC Vranov** 60.67 14 *eP* **P** **21 41 17.3 +0.4**
**VRAC Vranov** 60.67 14 ⇑P **P** **21 41 18.0 +1.1**
**VRAC Vranov** 60.67 14 P **P** **21 41 18.0 +1.1**
**ECH Echery** 60.73 22 P **P** **21 41 17.8 +0.5**
ECH IAmb IAmb 21 41 20.6
comp=Z,16nm,1.0s
**ECH Echery** 60.73 22 P **P** **21 41 17.8 +0.5**
ECH pmax pmax
comp=Z,16nm,1.0s
**WMQ Urumqi** 60.75 319 *eP* **PKiKP** **21 48 17.6 -0.3**
WMQ pmax pmax
comp=Z,9.0nm,0.9s
**WMQ Urumqi** 60.75 319 *eP* **P** **21 41 18.4 +0.8**
WMQ pmax pmax
comp=Z,17nm,1.1s
**BFO Black Forest** 60.76 21 P **P** **21 41 17.0 -0.6**
BFO IAmb IAmb 21 41 21.0
comp=Z,16nm,1.1s
**BFO Black Forest** 60.76 21 P **P** **21 41 17.0 -0.6**
BFO pmax pmax
comp=Z,16nm,1.1s
**BFO Black Forest** 60.76 21 *eP* **P** **21 41 20.2 +2.6**
comp=Z,18nm,1.1s,baz=352,slow=7.0
**GEC2 GERESS Array S** 60.85 16 P **P** **21 41 17.7 -0.6**
GEC2 IAmb IAmb 21 41 21.7
comp=Z,12nm,1.1s
**GEC2 GERESS Array S** 60.85 16 *eP* **P** **21 41 19.4 +1.1**
comp=Z,14nm,1.1s,baz=352,slow=7.0
**GERES GERESS Array B** 60.85 16 P **P** **21 41 17.9 -0.3**
**GERES GERESS Array B** 60.85 16 P **P** **21 41 18.4 +0.1**
comp=Z,4.6nm,0.9s,baz=180,slow=3.6,SNR=20
comp=Z,4.6nm,0.9s
**KRUC Moravsky** 60.89 14 *eP* **P** **21 41 18.6 +0.2**
**CKRC Cesky Krumlov** 60.94 16 *eP* **P** **21 41 20.3 +1.5**
CKRC *ex* x 21 41 28.8
**CKRC Cesky Krumlov** 60.94 16 *eP* **P** **21 41 20.3 +1.5**
CKRC *e* 21 41 28.8
**LANS Liptovska Anna** 61.05 12 *eP* **P** **21 41 21.1 +1.5**
LANS pmax pmax
comp=Z,6.0nm,1.3s
**LANS Liptovska Anna** 61.05 12 *eP* **P** **21 41 21.1 +1.5**
**JAVC Velka Javorina** 61.20 14 *eP* **P** **21 41 22.0 +1.4**
**FUR Furstenfeldbru** 61.27 18 *eP* **P** **21 41 23.5 +2.5**
comp=Z,15nm,0.9s,baz=352,slow=7.0
**KOLS Kolonicke sedl** 61.46 10 *eP* **P** **21 41 24.0 +1.7**
KOLS pmax pmax
comp=Z,9.0nm,0.9s
**KOLS Kolonicke sedl** 61.46 10 *eP* **P** **21 41 24.0 +1.7**
**TDK Taldyqorghan** 61.58 327 *eP* **P** **21 41 23.1 -0.2**
comp=Z,4.4nm,0.6s,baz=327
**TDK Taldyqorghan** 61.58 327 *eP* **P** **21 41 23.0 -0.2**
TDK pmax pmax
comp=Z,4.0nm,0.6s
**UBR Ueberruh** 61.62 19 *eP* **P** **21 41 24.2 +0.7**
comp=Z,27nm,1.6s,baz=352,slow=7.0
**VYHS Vyhne** 61.66 13 *eP* **P** **21 41 23.9 +0.3**
VYHS pmax pmax
comp=Z,21nm,1.6s
**VYHS Vyhne** 61.66 13 *eP* **P** **21 41 23.9 +0.3**
**KECS Kecovo** 61.79 11 *eP* **P** **21 41 23.1 -1.4**
**KECS Kecovo** 61.79 11 *eP* **P** **21 41 23.1 -1.4**
**GTA Gaotai** 61.80 308 *eP* **P** **21 41 25.3 +0.4**
GTA pmax pmax
comp=Z,10.0nm,1.2s
**RJOB Jochberg** 61.86 17 *eP* **P** **21 41 27.8 +2.7**
comp=Z,13nm,1.0s,baz=352,slow=7.0
**RETA Reutte** 61.88 19 *epP* **P** **21 41 25.4 +0.2**
comp=Z,9.4nm,1.1s
**MOA Molln** 61.90 16 *epP* **P** **21 41 25.4 +0.1**
comp=Z,8.3nm,1.2s,SNR=6.5
**CONA Conrad Observa** 61.97 15 *epP* **P** **21 41 26.1 +0.3**
comp=Z,21nm,1.6s,SNR=11
**DAVA Damuels** 61.98 20 *epP* pP 21 41 26.5 -2.9
comp=Z,6.6nm,1.1s
**BIOA Bad Ischl, Aus** 61.99 17 *epP* **P** **21 41 26.0 +0.1**
comp=Z,8.8nm,1.0s,SNR=8.1
**MOTA Moosalm** 62.06 19 *epP* **P** **21 41 26.4 -0.1**
comp=Z,7.7nm,1.3s
**WATA Walderalm** 62.12 18 *epP* **P** **21 41 26.9 -0.1**
comp=Z,12nm,1.1s,SNR=8.9
**LESA Schwarzleotal** 62.15 18 *epP* **P** **21 41 27.2 +0.1**
comp=Z,16nm,1.1s
**SQTA Sankt Quirin** 62.20 19 *epP* **P** **21 41 27.1 -0.3**
comp=Z,13nm,1.1s,SNR=6.4
**WTTA Wattenberg** 62.20 18 *epP* pP 21 41 28.3 -2.6
comp=Z,23nm,1.8s,SNR=11
**RONA Rosalia, Austr** 62.23 15 *epP* pP 21 41 28.0 -3.0
comp=Z,21nm,1.1s,SNR=8.9
**PSZ Piszkesteto** 62.31 12 P **P** **21 41 28.0 -0.1**
PSZ IAmb IAmb 21 41 31.9
comp=Z,19nm,1.1s
**PSZ Piszkesteto** 62.31 12 ⇓P **P** **21 41 29.7 +1.6**
**PSZ Piszkesteto** 62.31 12 P **P** **21 41 28.0 -0.1**
PSZ pmax pmax
comp=Z,19nm,1.1s
**FETA Feichten** 62.34 19 *epP* **P** **21 41 27.1 -1.3**
comp=Z,8.0nm,1.3s
**BTLS Baital** 62.35 330 *eP* **P** **21 41 28.3 0.0**
comp=Z,3.9nm,0.9s,baz=330
**BTLS Baital** 62.35 330 *eP* **P** **21 41 28.3 0.0**
BTLS pmax pmax
comp=Z,4.0nm,0.9s
**LYN LuoYang** 62.51 295 *eP* **P** **21 41 27.6 -1.9**
LYN pmax pmax
comp=Z,26nm,0.5s
**KBA Koelnbreinsper** 62.57 17 *epP* **P** **21 41 30.2 +0.2**
comp=Z,25nm,1.1s,SNR=17
**ARSA Arzberg** 62.61 15 *epP* pP 21 41 30.8 -2.6
comp=Z,10nm,1.1s
**FUORN Ofenpass-Fuorn** 62.68 19 P **P** **21 41 30.4 -0.4**
FUORN IAmb IAmb 21 41 34.8
comp=Z,15nm,1.1s
**NJ2 Nanjing** 62.72 288 *eP* **P** **21 41 30.7 -0.2**
NJ2 pmax pmax
comp=Z,11nm,0.6s
**BMR Baia Mare** 62.79 9 ⇓P **P** **21 41 32.4 +1.2**
**BMR Baia Mare** 62.79 9 P **P** **21 41 32.4 +1.2**
**BUR08 Bucovina Ar. S** 62.91 8 P **P** **21 41 32.1 -0.1**
BUR08 IAmb IAmb 21 41 35.3
comp=Z,8.9nm,0.9s
**BURAR Bucovina Array** 62.94 8 P **P** **21 41 31.8 -0.5**
**BURAR Bucovina Array** 62.94 8 ⇑P **P** **21 41 32.5 +0.2**
**CHKK Chushkaly** 62.96 328 *eP* **P** **21 41 32.0 -0.4**
baz=327
**CHKK Chushkaly** 62.96 328 *eP* **P** **21 41 32.0 -0.4**
**MYKA Terra Mystica** 63.04 17 *epP* pP 21 41 33.3 -3.0
comp=Z,18nm,1.3s,SNR=9.0
**SOKA Soboth** 63.13 16 *epP* **P** **21 41 33.8 +0.2**
comp=Z,12nm,1.2s,SNR=12
**SHLS Shalkode** 63.15 325 *eP* **P** **21 41 33.1 -0.7**
comp=Z,7.3nm,0.7s,baz=325
**SHLS Shalkode** 63.15 325 *eP* **P** **21 41 33.1 -0.7**
SHLS pmax pmax
comp=Z,7.0nm,0.7s
**PRED Cave del Predi** 63.22 17 P **P** **21 41 32.5 -1.7**
PRED IAmb IAmb 21 41 36.0
comp=Z,12nm,0.9s
**SSB Saint Sauveur** 63.25 24 P **P** **21 41 33.6 -0.7**
SSB IAmb IAmb 21 41 37.2
comp=Z,15nm,1.1s
**SSB Saint Sauveur** 63.25 24 P **P** **21 41 33.6 -0.7**
SSB pmax pmax
comp=Z,15nm,1.1s
**UZB Uzynbulak** 63.25 326 *eP* **P** **21 41 34.2 -0.3**
baz=326
**UZB Uzynbulak** 63.25 326 *eP* **P** **21 41 34.2 -0.3**
**OBKA Obir** 63.25 16 *epP* **P** **21 41 34.6 +0.2**
comp=Z,38nm,1.0s,SNR=26
**MESR Meseseni** 63.28 10 ⇓P **P** **21 41 36.0 +1.5**
**LPL La Plagne** 63.32 22 *eP* **P** **21 41 35.7 +0.7**
**LPG La Plagne** 63.34 22 *eP* **P** **21 41 35.9 +0.6**
**ZHN Zhinishke** 63.34 326 *eP* **P** **21 41 34.8 -0.4**
comp=Z,4.3nm,0.9s,baz=326
**ZHN Zhinishke** 63.34 326 *eP* **P** **21 41 34.7 -0.4**
ZHN pmax pmax
comp=Z,4.0nm,0.9s
**CTI Castel Tesino** 63.40 19 P **P** **21 41 35.2 -0.2**
**CTI Castel Tesino** 63.40 19 P **P** **21 41 35.2 -0.2**
CTI pmax pmax
comp=Z,7.0nm,1.0s
**SATY Saty** 63.45 326 *eP* **P** **21 41 35.6 -0.3**
baz=326
**SATY Saty** 63.45 326 *eP* **P** **21 41 35.6 -0.3**
**AAA Alma-Ata** 63.60 327 *eP* **P** **21 41 36.5 -0.2**
comp=Z,5.3nm,0.5s,baz=327
**AAA Alma-Ata** 63.60 327 *eP* **P** **21 41 36.5 -0.2**
AAA pmax pmax
comp=Z,5.0nm,0.5s
**MDOK Medeo** 63.62 327 *eP* **P** **21 41 36.5 -0.4**
baz=327
**MDOK Medeo** 63.62 327 *eP* **P** **21 41 36.5 -0.4**
**SABO M.te Sabotino** 63.68 17 IAmb IAmb 21 41 39.4
comp=Z,20nm,1.2s
**LZH Lanzhou** 63.74 303 *eP* **P** **21 41 38.2 +0.3**
LZH pmax pmax
comp=Z,26nm,1.2s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CJR** | **Cluj-Napoca** | **63.75** | **9** | ⇑P | | **P** | **21 41 38.8** | **+1.2** |
| **CJR** | **Cluj-Napoca** | **63.75** | **9** | P | | **P** | **21 41 38.8** | **+1.2** |
| **TNSS** | **Tian-Shan** | **63.76** | **327** | *e*P | | **P** | **21 41 37.7** | **-0.6** |
| | baz=327 | | | | | | | |
| **TNSS** | **Tian-Shan** | **63.76** | **327** | *e*P | | **P** | **21 41 37.6** | **-0.6** |
| **MARR** | **Marisel-Cluj** | **63.76** | **10** | ⇓P | | **P** | **21 41 38.4** | **+0.6** |
| **MILM** | **Milestii Mici** | **63.78** | **5** | ⇓P | | **P** | **21 41 37.7** | **-0.1** |
| **MILM** | **Milestii Mici** | **63.78** | **5** | P | | **P** | **21 41 37.6** | **-0.1** |
| **SGDS** | **Sogindy** | **63.78** | **329** | *e*P | | **P** | **21 41 37.7** | **-0.3** |
| | comp=Z,8.9nm,1.2s,baz=329 | | | | | | | |
| **SGDS** | **Sogindy** | **63.78** | **329** | *e*P | | **P** | **21 41 37.6** | **-0.3** |
| SGDS | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **63.79** | **23** | *e*P | | **P** | **21 41 39.7** | **+1.7** |
| **MORH** | **Mrgy, Hungar** | **63.91** | **13** | ⇑P | | **P** | **21 41 39.8** | **+1.2** |
| **USP** | **Ospenovka** | **63.98** | **329** | P | | **P** | **21 41 39.1** | **-0.1** |
| | SNR=8.4 | | | | | | | |
| **SIRR** | **Siria** | **64.08** | **11** | ⇑P | | **P** | **21 41 40.2** | **+0.5** |
| **TEOL** | **Teolo** | **64.08** | **19** | P | | **P** | **21 41 39.9** | **+0.1** |
| **TESR** | **Tescani** | **64.10** | **7** | ⇑P | | **P** | **21 41 40.2** | **+0.3** |
| **TKM2** | **Tokmak 2** | **64.12** | **328** | P | | **P** | **21 41 40.7** | **+0.3** |
| | SNR=9.6 | | | | | | | |
| **CHMS** | **Chumysh** | **64.20** | **329** | P | | **P** | **21 41 41.1** | **+0.4** |
| | SNR=6.3 | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **64.24** | **35** | *e*P | | **P** | **21 41 43.2** | **+2.2** |
| | comp=Z,27nm,1.7s | | | | | | | |
| **FRU1** | **Bishkek** | **64.40** | **329** | P | | **P** | **21 41 42.7** | **+0.6** |
| **FRU1** | **Bishkek** | **64.40** | **329** | P | | **P** | **21 41 42.7** | **+0.6** |
| FRU1 | | | | pmax | | pmax | | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **OZUR** | | **64.48** | **8** | ⇓P | | **P** | **21 41 43.7** | **+1.3** |
| **KBK** | **Karagaybulak** | **64.50** | **329** | P | | **P** | **21 41 43.5** | **+0.7** |
| | SNR=8.6 | | | | | | | |
| **BOSR** | **Bodos** | **64.50** | **8** | ⇑P | | **P** | **21 41 43.9** | **+1.4** |
| **TURR** | **Turia** | **64.53** | **7** | ⇑P | | **P** | **21 41 44.3** | **+1.5** |
| **GHRR** | | **64.59** | **6** | ⇓P | | **P** | **21 41 44.3** | **+1.2** |
| **AAK** | **Ala-Archa** | **64.59** | **329** | P | | **P** | **21 41 43.9** | **+0.5** |
| AAK | | | | IAmb | | IAmb | 21 41 44.9 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **64.59** | **329** | *i* P | | **P** | **21 41 43.5** | **+0.1** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **SURR** | **Surduc** | **64.62** | **11** | ⇑P | | **P** | **21 41 43.4** | **+0.1** |
| **EKS2** | **Erkin-Say** | **64.70** | **330** | P | | **P** | **21 41 44.5** | **+0.5** |
| | SNR=12 | | | | | | | |
| **BZS** | **Buzias** | **64.72** | **11** | ⇓P | | **P** | **21 41 44.7** | **+0.8** |
| **BZS** | **Buzias** | **64.72** | **11** | P | | **P** | **21 41 44.7** | **+0.8** |
| **COVR** | **Voineasa-Covas** | **64.75** | **7** | ⇑P | | **P** | **21 41 45.8** | **+1.6** |
| **VRI** | **Vrincioaia** | **64.75** | **7** | ⇑P | | **P** | **21 41 45.2** | **+0.9** |
| **VRI** | **Vrincioaia** | **64.75** | **7** | P | | **P** | **21 41 45.1** | **+0.9** |
| **PLOR** | **Plostina** | **64.76** | **7** | ⇓P | | **P** | **21 41 45.3** | **+0.9** |
| **PLOR** | **Plostina** | **64.76** | **7** | P | | **P** | **21 41 45.2** | **+0.9** |
| **KK31** | **Karatay Array** | **64.83** | **333** | P | | **P** | **21 41 44.8** | **+0.1** |
| KK31 | | | | IAmb | | IAmb | 21 41 45.6 | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **64.83** | **333** | P | | **P** | **21 41 44.8** | **+0.1** |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **64.83** | **333** | P | | **P** | **21 41 44.5** | **-0.1** |
| **KKAR** | **Karatay Array** | **64.83** | **333** | IAmb | | IAmb | 21 41 45.6 | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **64.83** | **333** | P | | **P** | **21 41 44.6** | **-0.1** |
| **BRLS** | **Borolday** | **65.00** | **333** | *e*P | | **P** | **21 41 47.4** | **+1.4** |
| | baz=333 | | | | | | | |
| **BRLS** | **Borolday** | **65.00** | **333** | *e*P | | **P** | **21 41 47.3** | **+1.4** |
| **GZR** | **Gura Zlata** | **65.02** | **10** | ⇓P | | **P** | **21 41 46.7** | **+0.7** |
| **GZR** | **Gura Zlata** | **65.02** | **10** | P | | **P** | **21 41 46.7** | **+0.7** |
| **FRGS** | **Fruska Gora** | **65.05** | **12** | ⇑P | | **P** | **21 41 47.1** | **+0.9** |
| **MLR** | **Muntele Rosu** | **65.09** | **8** | P | | **P** | **21 41 46.5** | **-0.1** |
| MLR | | | | IAmb | | IAmb | 21 41 50.5 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **MLR** | **Muntele Rosu** | **65.09** | **8** | ⇓P | | **P** | **21 41 47.9** | **+1.3** |
| **MLR** | **Muntele Rosu** | **65.09** | **8** | P | | **P** | **21 41 46.5** | **-0.1** |
| MLR | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **VOIR** | | **65.10** | **8** | ⇓P | | **P** | **21 41 47.4** | **+0.8** |
| **VOIR** | | **65.10** | **8** | P | | **P** | **21 41 47.3** | **+0.8** |
| **AML** | **Almayashu** | **65.23** | **330** | P | | **P** | **21 41 48.9** | **+1.1** |
| | SNR=7.3 | | | | | | | |
| **NRN** | **Naryn** | **65.48** | **328** | P | | **P** | **21 41 49.8** | **+0.4** |
| **NRN** | **Naryn** | **65.48** | **328** | P | | **P** | **21 41 49.8** | **+0.4** |
| NRN | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **CFR** | **Carcaliu** | **65.50** | **6** | ⇓P | | **P** | **21 41 49.4** | **+0.4** |
| **CFR** | **Carcaliu** | **65.50** | **6** | P | | **P** | **21 41 49.3** | **+0.4** |
| **HERR** | **Herculane** | **65.51** | **10** | ⇑P | | **P** | **21 41 49.7** | **+0.7** |
| **MDVR** | **Moldovita** | **65.56** | **11** | ⇓P | | **P** | **21 41 49.9** | **+0.4** |
| **GOF** | **Gofitskoye** | **65.63** | **354** | *ce*P | | **P** | **21 41 51.9** | **+2.1** |
| **TPGR** | **Topolog** | **65.83** | **6** | ⇓P | | **P** | **21 41 51.1** | **-0.1** |
| **MTE** | **Manteigas** | **65.89** | **35** | *e*P | | **P** | **21 41 53.4** | **+1.7** |
| | comp=Z,17nm,1.2s | | | | | | | |
| **HARR** | **Harsova** | **65.97** | **6** | ⇑P | | **P** | **21 41 52.8** | **+0.7** |
| **HARR** | **Harsova** | **65.97** | **6** | P | | **P** | **21 41 52.7** | **+0.7** |
| **PCAS** | **Casmilo, Conde** | **66.03** | **36** | *e*P | | **P** | **21 41 53.8** | **+1.3** |
| | comp=Z,38nm,1.5s | | | | | | | |
| **ARSB** | **Arslanbob** | **66.14** | **330** | P | | **P** | **21 41 53.6** | **+0.2** |
| **ARSB** | **Arslanbob** | **66.14** | **330** | P | | **P** | **21 41 53.6** | **+0.2** |
| ARSB | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **PCBR** | **Castelo Branco** | **66.44** | **35** | *e*P | | **P** | **21 41 57.6** | **+2.4** |
| **FDMO** | **Fiordimonte** | **66.53** | **18** | P | | **P** | **21 41 55.4** | **-0.3** |
| **BOVS** | **Bovan** | **66.70** | **11** | ⇓P | | **P** | **21 41 56.8** | **+0.1** |
| **KIV** | **Kislovodsk** | **66.74** | **355** | P | | **P** | **21 41 56.7** | **-0.4** |
| KIV | | | | IAmb | | IAmb | 21 42 01.3 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **KIV** | **Kislovodsk** | **66.74** | **355** | ⇓P | | **P** | **21 41 58.3** | **+1.2** |
| **KIV** | **Kislovodsk** | **66.74** | **355** | *e*P | | **P** | **21 41 57.3** | **+0.2** |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **NRCA** | **Norcia** | **66.74** | **18** | P | | **P** | **21 41 57.2** | **+0.1** |
| **CESX** | **Cesi** | **66.90** | **18** | P | | **P** | **21 41 57.5** | **-0.5** |
| **SHA1** | **Shidzhatmaz** | **66.96** | **355** | *i* P | | **P** | **21 41 58.9** | **+0.2** |
| **KBZ** | **Khabaz** | **66.96** | **354** | P | | **P** | **21 41 59.6** | **+1.2** |
| | comp=Z,5.8nm,0.9s,baz=339,slow=4.3,SNR=5.3 | | | | | | | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| **KBZ** | **Khabaz** | **66.96** | **354** | *i* P | | **P** | **21 41 59.5** | **+1.2** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **CAMP** | **Campotosto** | **67.06** | **18** | P | | **P** | **21 41 58.4** | **-0.8** |
| **NCK** | **Nalchik** | **67.17** | **354** | *e*P | | **P** | **21 42 00.6** | **+0.8** |
| NCK | | | | pmax | | pmax | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.29** | **32** | P | | **P** | **21 42 00.1** | **-0.6** |
| ESDC | | | | IAmb | | IAmb | 21 42 04.2 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.29** | **32** | P | | **P** | **21 42 00.7** | **0.0** |
| | comp=Z,8.0nm,1.0s,baz=339,slow=6.9,SNR=21 | | | | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **PAB** | **San Pablo** | **67.34** | **33** | P | | **P** | **21 42 00.7** | **-0.3** |
| PAB | | | | IAmb | | IAmb | 21 42 05.1 | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **PAB** | **San Pablo** | **67.34** | **33** | P | | **P** | **21 42 00.7** | **-0.3** |
| PAB | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **KSH** | **Kashi** | **67.34** | **327** | P | | **P** | **21 42 04.0** | **+2.9** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **PESTR** | **Estremoz** | **67.36** | **35** | *e*P | | **P** | **21 42 02.6** | **+1.6** |
| | comp=Z,10nm,1.0s | | | | | | | |
| **PDG** | **Podgorica** | **67.72** | **13** | ⇓P | | **P** | **21 42 03.7** | **+0.5** |
| **BTK** | **Batken** | **67.74** | **332** | P | | **P** | **21 42 03.5** | **-0.1** |
| **BTK** | **Batken** | **67.74** | **332** | P | | **P** | **21 42 03.5** | **-0.1** |
| BTK | | | | pmax | | pmax | | |
| | comp=Z,28nm,1.3s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **67.89** | **36** | *e*P | | **P** | **21 42 04.6** | **+0.2** |
| | comp=Z,41nm,1.4s | | | | | | | |
| **PBAR** | **Barrancos** | **68.14** | **35** | *e*P | | **P** | **21 42 06.0** | **+0.1** |
| | comp=Z,23nm,1.7s | | | | | | | |
| **PUK** | **Puka** | **68.15** | **13** | P | | **P** | **21 42 05.6** | **-0.4** |
| PUK | | | | IAmb | | IAmb | 21 42 08.4 | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| **CD2** | **Chengdu** | **68.59** | **301** | P | | **P** | **21 42 08.2** | **-0.7** |
| CD2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **GAR** | **Garm** | **68.86** | **332** | P | | **P** | **21 42 10.2** | **-0.4** |
| **CHGR** | **Chuyangaron** | **69.38** | **333** | P | | **P** | **21 42 13.6** | **-0.2** |
| **CHGR** | **Chuyangaron** | **69.38** | **333** | P | | **P** | **21 42 13.6** | **-0.2** |
| CHGR | | | | pmax | | pmax | | |
| | comp=Z,46nm,0.7s | | | | | | | |
| **RDO** | **Rodhopi** | **69.41** | **8** | P | | **P** | **21 42 13.6** | **-0.1** |
| RDO | | | | IAmb | | IAmb | 21 42 17.2 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **SIMJ** | **Simiganj** | **69.41** | **333** | P | | **P** | **21 42 13.7** | **-0.3** |
| SIMJ | | | | IAmb | | IAmb | 21 42 17.1 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **FNA** | **Florina** | **69.51** | **12** | P | | **P** | **21 42 14.2** | **-0.3** |
| FNA | | | | IAmb | | IAmb | 21 42 16.6 | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **FNA** | **Florina** | **69.51** | **12** | P | | **P** | **21 42 14.2** | **-0.3** |
| FNA | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **CUC** | **Castrocucco** | **69.83** | **16** | P | | **P** | **21 42 15.8** | **-0.6** |
| CUC | | | | IAmb | | IAmb | 21 42 18.8 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **MDUB** | **Mudurnu** | **70.29** | **4** | P | | **P** | **21 42 19.1** | **-0.2** |
| **GNI** | **Garni** | **70.46** | **353** | *i* P | | **P** | **21 42 21.3** | **+0.8** |
| GNI | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **TIP** | **Timpagrande** | **70.73** | **16** | P | | **P** | **21 42 22.0** | **0.0** |
| TIP | | | | IAmb | | IAmb | 21 42 24.4 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **TIP** | **Timpagrande** | **70.73** | **16** | ⇓P | | **P** | **21 42 22.7** | **+0.7** |
| **ANTO** | **Ankara** | **70.92** | **2** | ⇓P | | **P** | **21 42 25.0** | **+1.8** |
| **ANTO** | **Ankara** | **70.92** | **2** | P | | **P** | **21 42 24.9** | **+1.8** |
| **BR131** | **Keskin Array S** | **71.07** | **2** | P | | **P** | **21 42 23.7** | **-0.5** |
| **BR131** | **Keskin Array S** | **71.07** | **2** | *i* P | | **P** | **21 42 24.6** | **+0.4** |
| **BRTR** | **Keskin Array B** | **71.07** | **2** | P | | **P** | **21 42 23.9** | **-0.3** |
| **BRTR** | **Keskin Array B** | **71.07** | **2** | P | | **P** | **21 42 24.6** | **+0.4** |
| | comp=Z,4.6nm,0.8s,baz=359,slow=4.6,SNR=13 | | | | | | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **GYA** | **Guiyang** | **71.85** | **297** | ⇓P | | **P** | **21 42 27.8** | **-1.2** |
| GYA | | | | pmax | | pmax | | |
| | comp=Z,15nm,2.0s | | | | | | | |
| **KEST** | **Kesra** | **73.29** | **22** | P | | **P** | **21 42 37.9** | **+0.4** |
| | comp=Z,9.6nm,0.9s,baz=49,slow=2.9,SNR=8.6 | | | | | | | |
| | comp=Z,9.6nm,0.9s | | | | | | | |
| **KBL** | **Kabul** | **73.42** | **332** | P | | **P** | **21 42 37.8** | **-0.6** |
| **KBL** | **Kabul** | **73.42** | **332** | P | | **P** | **21 42 37.8** | **-0.6** |
| KBL | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **NIL** | **Nilore** | **73.55** | **328** | P | | **P** | **21 42 38.7** | **-0.2** |
| **NIL** | **Nilore** | **73.55** | **328** | P | | **P** | **21 42 38.7** | **-0.2** |
| NIL | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| **HRA** | **Herat** | **74.60** | **337** | P | | **P** | **21 42 44.8** | **-0.5** |
| HRA | | | | IAmb | | IAmb | 21 42 49.0 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **TNCH** | **TengChong** | **75.66** | **304** | P | | **P** | **21 42 50.5** | **-1.0** |
| TNCH | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **77.78** | **0** | P | | **P** | **21 43 03.0** | **-0.2** |
| | comp=Z,5.9nm,0.9s,baz=325,slow=7.4,SNR=5.7 | | | | | | | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **ROSC** | **El Rosal** | **78.53** | **107** | P | | **P** | **21 43 08.9** | **+1.0** |
| | comp=Z,8.2nm,0.7s,baz=85,slow=18,SNR=4.8 | | | | | | | |
| | comp=Z,8.2nm,0.7s | | | | | | | |
| **ROSC** | **El Rosal** | **78.53** | **107** | P | | **P** | **21 43 09.0** | **+1.0** |
| **BALJ** | **Balqa** | **78.70** | **0** | P | | **P** | **21 43 08.0** | **-0.3** |
| BALJ | | | | IAmb | | IAmb | 21 43 12.3 | |
| | comp=Z,32nm,1.2s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.73** | **301** | P | | **P** | **21 43 24.7** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **81.73** | **301** | P | | **P** | **21 43 25.1** | **+0.4** |
| | comp=Z,4.5nm,0.7s,baz=0.2,slow=6.3,SNR=10 | | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.73** | **301** | P | | **P** | **21 43 24.7** | **0.0** |
| **TAM** | **Tamanrasset** | **85.43** | **28** | P | | **P** | **21 43 43.1** | **-0.8** |
| **TAM** | **Tamanrasset** | **85.43** | **28** | P | | **P** | **21 43 43.1** | **-0.8** |
| TAM | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **BOAV** | **Boa Vista** | **85.57** | **95** | *e*P | | P | 21 43 48.2 | +3.8 |
| **RAYN** | **Ar Rayn** | **86.97** | **351** | P | | **P** | **21 43 51.0** | **-0.3** |
| RAYN | | | | IAmb | | IAmb | 21 43 55.5 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **RAYN** | **Ar Rayn** | **86.97** | **351** | P | | **P** | **21 43 51.0** | **-0.3** |
| RAYN | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **MACA** | **Manacapuru-AM** | **90.68** | **97** | *e*P | | P | 21 44 12.3 | +3.5 |
| **TORD** | **Torodi Ar. Bea** | **94.17** | **33** | PKKPbc | | PKKPbc | 22 01 22.8 | +0.4 |
| | comp=Z,0.2nm,0.4s,baz=139,slow=2.0,SNR=5.7 | | | | | | | |
| **SAML** | **Samuel** | **95.20** | **101** | *e*P | | **P** | **21 44 32.4** | **+2.8** |
| **PLCA** | **Paso Flores** | **122.23** | **120** | PKP | | **PKiKP** | **21 50 00.5** | **+0.1** |
| | comp=Z,1.5nm,0.8s,baz=254,slow=3.2,SNR=3.5 | | | | | | | |
| **VNDA** | **Vanda** | **150.27** | **201** | PKPbc | | **PKiKP** | **21 50 55.9** | **-0.1** |
| | comp=Z,1.7nm,0.8s,baz=311,slow=2.4,SNR=7.2 | | | | | | | |
| **QSPA** | **South Pole Qui** | **159.36** | **180** | PKPab | | **PKPab** | **21 51 41.7** | **+0.9** |
| | comp=Z,2.8nm,0.7s,baz=65,slow=3.9,SNR=14 | | | | | | | |

*DRS* **12** *21:35:26.0, 41°.29N×48°.74E, h24km*
*MOS* **12** *21:35:27.0, 41°.50N×48°.68E, h2km, MPVA4.0*
**ISC 12 21:35:26.8±2.5, 41°.41N±0°.06×48°.75E±0°.10, h11km±11km, n26,σ1°94/46, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSMR** | **Kasumkent** | **0.51** | **292** | *i* Pg | **Pn** | **21 35 38.8** | **-1.3** |
| KSMR | | | | *e*Sg | **Sb** | **21 35 48.1** | **+2.9** |
| **DRN** | **Derbent** | **0.69** | **333** | *e*Pg | **Pb** | **21 35 40.9** | **0.0** |
| DRN | | | | *e*Sg | **Sn** | **21 35 51.7** | **-1.6** |
| **AKT** | **Akhty** | **0.77** | **275** | *i* Pg | **Pn** | **21 35 43.4** | **-0.4** |
| AKT | | | | *e*Sg | **Sn** | **21 35 55.0** | **-0.4** |
| **URKR** | **Urkarakh** | **1.13** | **312** | *e*Pg | **Pn** | **21 35 48.6** | **-0.1** |
| URKR | | | | *e*Sg | **Sn** | **21 36 05.3** | **+1.1** |
| **SGKR** | **Sergokala** | **1.33** | **322** | *e*Pg | **Pn** | **21 35 51.9** | **+0.6** |
| SGKR | | | | *e*Sg | **Sn** | **21 36 11.1** | **+2.0** |
| **KMKR** | **Kumukh** | **1.43** | **301** | *e*Pg | **Pb** | **21 35 54.4** | **+0.8** |
| KMKR | | | | *e*Sg | **Sn** | **21 36 15.2** | **+3.4** |
| **GNBR** | **Gunib** | **1.65** | **307** | *e*Pg | **Pg** | **21 35 59.2** | **+0.7** |
| GNBR | | | | *e*Sg | **Sg** | **21 36 22.2** | **+2.2** |
| **ARKR** | **Arakani** | **1.77** | **313** | *e*Pg | **Pg** | **21 36 00.0** | **-0.7** |
| ARKR | | | | *e*Sg | **Sg** | **21 36 25.4** | **+1.7** |
| **VSHL** | **Vashlovani** | **1.78** | **265** | P | **Pg** | **21 36 02.4** | **+1.4** |
| VSHL | | | | S | **Sg** | **21 36 27.2** | **+3.1** |
| **MAK** | **Makhachkala** | **1.80** | **329** | *e*Pg | **Pg** | **21 36 02.2** | **+0.9** |
| MAK | | | | *e*Sg | **Sg** | **21 36 26.1** | **+1.3** |
| **BUJR** | **Buynaksk** | **1.87** | **320** | *e*Pg | **Pg** | **21 36 03.5** | **+0.9** |
| BUJR | | | | *e*Sg | **Sg** | **21 36 28.9** | **+2.1** |
| **LGD** | **Lagodekhi** | **1.93** | **283** | P | **Pg** | **21 36 03.9** | **+1.1** |
| **UNCR** | **Uncukul** | **1.95** | **312** | *e*Pg | **Pg** | **21 36 03.1** | **-1.1** |
| UNCR | | | | *e*Sg | **Sg** | **21 36 32.6** | **+3.1** |
| **KRNR** | **Karanay** | **1.97** | **316** | *e*Pg | **Pg** | **21 36 03.1** | **-1.5** |
| KRNR | | | | *e*Sg | **Sg** | **21 36 31.7** | **+1.6** |
| **DBC** | **Dubki** | **2.15** | **319** | *e*Pg | **Pb** | **21 36 05.2** | **-0.5** |
| DBC | | | | *e*Sg | **Sg** | **21 36 35.6** | **-0.3** |
| **BTLR** | **Botlikh** | **2.26** | **304** | *e*Pg | **Pg** | **21 36 09.6** | **-0.6** |
| BTLR | | | | *e*Sg | **Sg** | **21 36 39.1** | **-0.3** |
| **DLMR** | **Dylym** | **2.29** | **317** | *e*Pg | **Pg** | **21 36 09.1** | **-1.5** |
| DLMR | | | | *e*Sg | **Sg** | **21 36 39.2** | **-1.0** |
| **DVE** | **Vedeno** | **2.49** | **309** | *e*Pn | **Pg** | **21 36 11.9** | **-2.5** |
| DVE | | | | *e*Sn | **Sg** | **21 36 43.9** | **-2.9** |
| **DGRG** | **David-gareji** | **2.54** | **272** | P | **Pb** | **21 36 11.2** | **-1.2** |
| **SHTL** | **Shatili** | **2.96** | **296** | P | **Pb** | **21 36 17.2** | **-2.4** |
| SHTL | | | | S | **Sg** | **21 37 01.1** | **-0.7** |
| **CHRG** | **Chargali** | **3.00** | **289** | P | **Pb** | **21 36 17.5** | **-2.8** |
| **GNI** | **Garni** | **3.30** | **249** | *e*Pn | **Pb** | **21 36 23.6** | **-1.8** |
| GNI | | | | *e*Sn | **Sb** | **21 37 03.2** | **-2.4** |
| **MTEO** | **Meteo** | **3.39** | **293** | P | **Pb** | **21 36 24.7** | **-2.4** |
| **DMNI** | **Dmanisi** | **3.44** | **270** | P | **Pn** | **21 36 22.6** | **+2.2** |
| **LACR** | **Lac** | **3.60** | **295** | *e*Pn | **Pb** | **21 36 26.5** | **-4.0** |
| LACR | | | | *e*Sn | **Sb** | **21 37 12.0** | **-2.4** |
| **ALIG** | **Mtskhetisjvari** | **3.88** | **282** | P | **Pn** | **21 36 29.3** | **+2.9** |

*NEIC* **12** *21:36:33.9±0.8, 69°.61N±0°.05×144°.9W±0°.1, h10km±2km, Error ellipse: s-maj=9.7km s-min=5.3km az=20.0*
**AEIC 12 21:36:33.3±0.8, 69°.56N±0°.05×145°.0W±0°.1, h0km±6km, ML3.6, ML3.8/52(NEIC), Error ellipse: s-maj=7.8km s-min=3.6km az=212.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.37** | **5** | | Pg | 21 36 40.3 | 0.0 |
| C26K | | | | | Sg | 21 36 45.2 | +0.1 |
| C26K | | | | IAML | | 21 36 46.7 | |
| | comp=N,10μm,0.5s | | | | | | |
| C26K | | | | IAML | | 21 36 49.7 | |
| | comp=E,8μm,0.6s | | | | | | |
| **C27K** | **Jago River** | **0.46** | **80** | | Pg | 21 36 41.9 | -0.2 |
| C27K | | | | | Sg | 21 36 47.9 | -0.1 |
| C27K | | | | IAML | | 21 36 51.0 | |
| | comp=N,5μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.54** | **245** | | Pg | 21 36 43.1 | -0.5 |
| D25K | | | | | Sg | 21 36 51.1 | +0.5 |
| **C24K** | **Franklin Bluff** | **1.31** | **279** | | Pg | 21 36 58.4 | +0.1 |
| C24K | | | | | Sb | 21 37 15.8 | -0.1 |
| **D24K** | **Happy Valley** | **1.42** | **255** | | Pn | 21 37 00.1 | -0.2 |
| D24K | | | | | Sn | 21 37 21.0 | +1.5 |
| D24K | | | | IAML | | 21 37 21.8 | |
| | comp=E,2μm,0.7s | | | | | | |
| D24K | | | | IAML | | 21 37 24.5 | |
| | comp=N,2μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.46** | **100** | | Pn | 21 37 00.2 | -0.7 |
| D27M | | | | IAML | | 21 37 23.9 | |
| | comp=N,848nm,0.4s | | | | | | |
| **E27K** | **Coleen River** | **1.85** | **137** | Pn | Pn | 21 37 06.4 | +0.1 |
| E27K | | | | Sn | Sn | 21 37 30.6 | +0.3 |
| E27K | | | | IAML | | 21 37 34.7 | |
| | comp=E,511nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.88** | **243** | Pn | Pb | 21 37 08.4 | -0.1 |
| TOLK | | | | IAML | | 21 37 39.6 | |
| | comp=E,554nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.90** | **170** | Pn | Pn | 21 37 06.7 | -0.2 |
| F26K | | | | Sn | Sn | 21 37 31.7 | +0.2 |
| F26K | | | | IAML | | 21 37 35.8 | |
| | comp=E,1μm,0.5s | | | | | | |
| **E24K** | **Your Creek** | **1.95** | **222** | | Pn | 21 37 08.2 | +0.5 |
| **C23K** | **Itkillik River** | **1.98** | **281** | | Pn | 21 37 08.1 | +0.1 |
| C23K | | | | IAML | | 21 37 39.2 | |
| | comp=N,1μm,0.5s | | | | | | |
| C23K | | | | IAML | | 21 37 40.3 | |
| | comp=E,1μm,0.4s | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **187** | | Pn | 21 37 08.2 | 0.0 |
| F25K | | | | IAML | | 21 37 40.0 | |
| | comp=N,689nm,0.5s | | | | | | |
| F25K | | | | IAML | | 21 37 40.8 | |
| | comp=E,668nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.11** | **256** | | Pn | 21 37 09.9 | +0.1 |
| D23K | | | | IAML | | 21 37 47.2 | |
| | comp=N,539nm,0.8s | | | | | | |
| D23K | | | | IAML | | 21 37 52.1 | |
| | comp=E,547nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.18** | **113** | | Pn | 21 37 10.9 | +0.1 |
| **E23K** | **Chandalar** | **2.25** | **230** | | Pn | 21 37 12.0 | +0.2 |
| E23K | | | | IAML | | 21 37 52.0 | |
| | comp=E,369nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.31** | **209** | | Pn | 21 37 13.0 | +0.4 |
| F24K | | | | IAML | | 21 37 51.6 | |
| | comp=E,325nm,0.4s | | | | | | |
| F24K | | | | IAML | | 21 37 52.4 | |
| | comp=N,344nm,0.6s | | | | | | |
| **F28M** | **Old Crow** | **2.71** | **134** | | Pn | 21 37 18.3 | +0.2 |
| F28M | | | | IAML | | 21 38 53.9 | |
| | comp=N,493nm,0.8s | | | | | | |
| F28M | | | | IAML | | 21 38 54.5 | |
| | comp=E,446nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **2.82** | **260** | | Pn | 21 37 19.3 | -0.4 |
| D22K | | | | IAML | | 21 38 10.1 | |
| | comp=E,418nm,0.7s | | | | | | |
| D22K | | | | IAML | | 21 38 10.1 | |
| | comp=N,428nm,0.9s | | | | | | |
| **G25K** | **Bearman Lake** | **2.83** | **189** | | Pn | 21 37 19.7 | 0.0 |
| **G24K** | **Hadweenzic Riv** | **3.01** | **199** | | Pn | 21 37 22.4 | +0.2 |
| G24K | | | | IAML | | 21 38 14.3 | |
| | comp=E,286nm,1.3s | | | | | | |
| G24K | | | | IAML | | 21 38 20.2 | |
| | comp=N,312nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.42** | **255** | | Pn | 21 37 27.3 | -0.5 |
| E21K | | | | IAML | | 21 39 40.5 | |
| | comp=N,222nm,0.9s | | | | | | |
| E21K | | | | IAML | | 21 39 42.6 | |
| | comp=E,341nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.89** | **198** | | Pn | 21 37 34.4 | +0.1 |
| **F21K** | **Alatna River** | **3.92** | **237** | Pn | Pn | 21 37 34.8 | +0.1 |
| **B20K** | **Meade River** | **4.25** | **282** | | Pn | 21 37 38.9 | -0.2 |
| **MDM** | **Murphy Dome** | **4.78** | **197** | | Pn | 21 37 46.7 | +0.2 |
| **D19K** | **Kuna River** | **4.83** | **263** | | Pn | 21 37 47.1 | -0.1 |
| **CCB** | **Clear Creek Bu** | **5.05** | **194** | | Pn | 21 37 50.3 | +0.2 |
| **F19K** | **Shaleruckik Mo** | **5.49** | **246** | | Pn | 21 37 56.1 | 0.0 |
| **A19K** | **Wainwright** | **5.58** | **284** | | Pn | 21 37 57.1 | -0.4 |
| **G19K** | **Purcell Mounta** | **5.71** | **239** | | Pn | 21 37 58.9 | -0.3 |
| **C18K** | **Utukok River** | **5.86** | **269** | | Pn | 21 38 00.9 | -0.5 |
| **H19K** | **Roundabout Mou** | **5.96** | **233** | | Pn | 21 38 02.3 | -0.3 |
| **F18K** | **Selawik** | **6.23** | **249** | | Pn | 21 38 06.1 | -0.2 |
| **

D22K IAML 21 39 53.5
comp=E,2µm,1.2s
**COLD Coldfoot 3.19 227 Pn Pn 21 38 55.1 +1.1**
**B22K Teshekpuk Lake 3.30 289 Pn 21 38 56.1 +0.7**
**H25L Birch Creek 3.31 192 Pn 21 38 55.4 -0.2**
**H27K Steamboat Moun 3.44 162 Pn 21 38 57.1 -0.3**
**G29M Pine Creek 3.47 136 Pn 21 38 58.8 +0.9**
**G23K Bananza Creek 3.55 221 Pn 21 38 58.3 -0.8**
G23K IAML 21 40 01.0
comp=E,2µm,1.7s
G23K IAML 21 40 02.2
comp=N,2µm,1.9s
**F22K John River 3.56 240 Pn 21 38 59.2 +0.1**
**F30M Barrier River 3.62 118 Pn 21 38 59.6 -0.3**
**B21K Ikpikpuk River 3.66 277 Pn Pn 21 39 00.8 +0.3**
B21K IAML 21 40 15.0
comp=N,1µm,1.1s
B21K IAML 21 40 18.9
comp=E,1µm,1.1s
**E21K Killik River 3.69 258 Pn Pn 21 39 01.6 +0.7**
E21K IAML 21 40 09.9
comp=E,1µm,1.0s
E21K IAML 21 40 15.8
comp=N,1µm,0.9s
**G22K Bettles 3.76 230 Pn 21 39 02.2 +0.3**
**G30M tAoh Zraii Nji 3.90 127 Pn Pn 21 39 04.5 +0.8**
G30M IAML 21 40 15.2
comp=N,995nm,1.5s
**H24K Noodor Dome 3.94 203 Pn 21 39 04.7 +0.4**
H24K IAML 21 40 16.2
comp=E,1µm,1.4s
**A22K Sinclair Lake 3.96 297 Pn 21 39 05.1 +0.6**
**H29M Whitestone 3.96 144 Pn 21 39 05.7 +1.0**
**PRP Porcupine Dome 4.03 188 Pn 21 39 07.1 +1.3**
PRP IAML 21 40 14.9
comp=E,729nm,1.9s
PRP IAML 21 40 17.5
comp=N,882nm,0.8s
**INK Inuvik 4.04 102 Pn Pn 21 39 06.7 +1.1**
**INK Inuvik 4.04 102 Pn Pn 21 39 06.8 +1.2**
comp=N,11nm,0.3s,baz=283,slow=3.1,SNR=6.8
INK Sn Sn **21 39 50.9 -2.2**
comp=N,12nm,0.3s,baz=213,slow=17,SNR=2.1
INK Lg Lg 21 40 11.7
comp=N,21nm,0.3s,baz=189,slow=19,SNR=3.7
comp=N,42nm,0.4s
**I27K Kandik River 4.04 165 Pn 21 39 05.2 -0.5**
**F21K Alatna River 4.13 241 Pn 21 39 07.2 +0.2**
F21K IAML 21 40 17.4
comp=N,801nm,0.8s
F21K IAML 21 40 21.3
comp=E,720nm,1.5s
**EPYK Eagle Plains 4.22 135 Pn 21 39 09.2 +1.0**
**H23K Yukon River 4.22 212 Pn 21 39 08.7 +0.5**
H23K IAML 21 40 21.9
comp=E,926nm,1.7s
H23K IAML 21 40 25.0
comp=N,746nm,0.9s
**I26K Coal Creek Min 4.23 174 Pn 21 39 09.5 +1.2**
I26K IAML 21 40 37.3
comp=N,976nm,0.9s
**F31M Tsiigehtchic 4.37 113 Pn 21 39 10.4 +0.2**
F31M IAML 21 40 31.8
comp=E,571nm,1.1s
**I28M Miner Creek 4.38 156 Pn 21 39 12.1 +1.6**
I28M IAML 21 40 04.1
comp=N,708nm,0.5s
I28M IAML 21 40 28.5
comp=E,724nm,1.6s
**G31M Satah River 4.51 120 Pn Pn 21 39 11.8 -0.3**
**E20K Nigu River 4.52 260 Pn 21 39 12.9 +0.6**
**D20K Etivluk River 4.52 266 Pn 21 39 13.0 +0.7**
**B20K Meade River 4.54 283 Pn Pn 21 39 12.3 -0.2**
**H22K Ishtalitna Cre 4.54 221 Pn 21 39 12.4 -0.2**
**A21K Barrow 4.57 299 Pn 21 39 13.2 +0.4**
**POKR Poker Plat Res 4.58 197 Pn Pn 21 39 14.8 +1.7**
POKR IAML 21 40 32.3
comp=N,613nm,0.9s
**G21K Allakaket 4.61 234 Pn Pn 21 39 13.9 +0.4**
G21K IAML 21 40 33.3
comp=N,655nm,1.4s
**I29M Ogilvie Camp, 4.73 149 Pn 21 39 16.2 +1.0**
I29M IAML 21 40 36.0
comp=E,549nm,0.9s
I29M IAML 21 40 47.8
comp=N,471nm,0.9s
**I23K Minto, Yukon-K 4.81 207 Pn 21 39 17.1 +0.9**
**MDM Murphy Dome 4.82 201 Pn 21 39 17.2 +0.7**
MDM IAML 21 40 46.3
comp=N,434nm,0.9s
**COLA College 4.86 199 Pn Pn 21 39 18.4 +1.4**
**IL31 4.87 194 Pn 21 39 17.4 +0.4**
**ILAR Eielson Array 4.87 194 Pn Pn 21 39 19.1 +2.1**
comp=N,22nm,0.3s,baz=5.6,slow=14,SNR=20
ILAR Sn Sn **21 40 11.2 -2.5**
comp=N,25nm,0.3s,baz=8.8,slow=23,SNR=10.0
ILAR Lg Lg 21 40 36.9
comp=N,30nm,0.3s,baz=9.7,slow=32,SNR=5.6
comp=N,60nm,0.5s
**EGAK Eagle 4.89 165 Pn 21 39 18.1 +0.8**
EGAK IAML 21 40 17.0
comp=N,538nm,1.2s
EGAK IAML 21 40 17.7
comp=N,529nm,0.8s
**J25K Salcha River, 4.93 186 Pn Pn 21 39 18.8 +0.8**
J25K IAML 21 40 44.8
comp=E,592nm,1.4s
J25K IAML 21 40 47.3
comp=N,354nm,0.8s
**F20K Avaraart Lake 4.94 246 Pn Pn 21 39 19.8 +1.8**
F20K IAML 21 40 44.8
comp=N,417nm,1.0s
F20K IAML 21 40 46.7
comp=E,315nm,1.5s
**J26L Joseph Creek 5.03 177 Pn Pn 21 39 20.7 +1.3**
J26L IAML 21 40 48.1
comp=E,456nm,0.9s
**IMAR Indian Mountai 5.07 230 Pn Pn 21 39 20.6 +0.8**
**H21K Melozitna Rive 5.08 225 Pn Pn 21 39 20.4 +0.5**
H21K IAML 21 40 52.5
comp=E,437nm,1.4s
H21K IAML 21 40 56.9
comp=N,410nm,1.3s
**CCB Clear Creek Bu 5.08 198 Pn 21 39 20.1 +0.2**
**D19K Kuna River 5.11 265 Pn Pn 21 39 21.0 +0.6**
D19K IAML 21 41 08.7
comp=E,314nm,1.1s
**MLY Manley 5.16 213 Pn Pn 21 39 20.8 -0.3**
MLY IAML 21 40 56.7
comp=E,294nm,1.4s
**E19K Redstone River 5.22 253 Pn Pn 21 39 22.2 +0.3**
E19K IAML 21 41 05.3
comp=N,395nm,0.8s
E19K IAML 21 41 14.1
comp=E,361nm,1.0s
**HDA Harding Lake 5.23 193 Pn 21 39 23.7 +1.7**
HDA IAML 21 40 55.7
comp=N,401nm,0.8s
**I30M Mount Dempster 5.25 141 Pn Pn 21 39 23.1 +0.7**
I30M IAML 21 40 24.4
comp=N,379nm,0.6s
**WRH Wood River Hil 5.28 199 Pn Pn 21 39 23.9 +1.2**
WRH IAML 21 40 59.8
comp=E,429nm,1.2s
WRH IAML 21 41 01.4
comp=N,265nm,0.9s
**NEA2 Nenana 5.29 204 Pn 21 39 23.2 +0.5**
NEA2 IAML 21 41 00.4
comp=E,322nm,1.4s
**C19K Lookout Ridge 5.48 273 Pn Pn 21 39 26.1 +0.6**
**SCRK Sand Creek 5.55 179 Pn Pn 21 39 27.2 +0.7**
**K27K Chicken 5.56 170 Pn 21 39 27.9 +1.4**
**J29N Klondike Camp 5.58 152 Pn 21 39 28.4 +1.4**
**F19K Shaleruckik Mo 5.73 249 Pn 21 39 29.2 +0.3**
**BWN Browne 5.74 204 Pn 21 39 29.7 +0.7**
**H20K Anotleneega Mo 5.74 231 Pn 21 39 29.6 +0.5**
**DAWY Dawson 5.78 159 Pn 21 39 31.2 +1.6**
**J30M Hart River 5.82 144 Pn Pn 21 39 31.1 +0.9**
**A19K Wainwright 5.88 285 Pn 21 39 31.2 +0.3**
**DOT Dot Lake 5.88 179 Pn 21 39 31.8 +0.9**
**BPAW Bear Paw Mtn. 6.05 210 Pn 21 39 34.0 +0.8**
**MCK McKinley 6.09 200 Pn Pn 21 39 35.0 +1.2**
**C18K Utukok River 6.15 270 Pn 21 39 34.7 0.0**
**H19K Roundabout Mou 6.16 236 Pn 21 39 35.5 +0.7**
**I20K Naaghedeneel 6.19 225 Pn 21 39 35.2 +0.1**

**B18K Kokolik River 6.21 277 Pn 21 39 35.9 +0.5**
**E18K Tukpahlearik C 6.39 259 Pn Pn 21 39 38.3 +0.4**
**F18K Selawik 6.48 251 Pn 21 39 39.8 +0.6**
**CHUM Lake Minchumin 6.49 214 Pn 21 39 39.2 -0.1**
**L26K Log Cabin Wild 6.51 177 Pn 21 39 40.9 +1.2**
**BCAR Beaver Creek A 6.53 170 Pn Pn 21 39 41.5 +1.5**
**DHY Denali Highway 6.58 193 Pn 21 39 41.2 +0.6**
**G18K Tagagawik 6.58 244 Pn Pn 21 39 41.9 +1.4**
**PAX Paxson 6.58 185 Pn 21 39 41.0 +0.4**
**J20K Nowinta River 6.63 221 Pn 21 39 41.2 0.0**
**A36M Sachs Harbour 6.73 60 Pn 21 39 41.8 -0.7**
**C17K DeLong Mountai 6.90 270 Pn 21 39 44.4 -0.5**
**WAT1 Susitna Watana 6.93 197 Pn 21 39 46.2 +0.8**
**RDOG Red Dog Mine 6.94 267 Pn 21 39 45.1 -0.4**
**E17K Hotham Inlet 6.97 258 Pn 21 39 45.6 -0.2**
**C36M Paulatuk 7.08 82 Pn 21 39 46.6 -0.7**
**F17K Baldwin Pennin 7.10 253 Pn Pn 21 39 47.5 -0.2**
**J19K Poorman 7.13 225 Pn Pn 21 39 48.1 0.0**
J19K LR 21 41 50.3
**HARP HAARP 7.14 184 Pn 21 39 49.7 +1.4**
**M26K Nabesna, AK 7.15 176 Pn Pn 21 39 50.2 +1.8**
**M27K Edge Creek, AK 7.23 171 Pn Pn 21 39 51.5 +1.9**
**K20K Telida 7.32 217 Lg 21 41 57.0**
**M29M Somme Creek 7.46 159 Pn Pn 21 39 54.0 +1.4**
**M24K Tolsona, Glenn 7.47 187 Pn 21 39 52.9 0.0**
**H17K Granite Mounta 7.62 241 Pn Pn 21 39 55.3 +0.6**
**L20K Farewell, AK 8.07 214 Pn 21 40 01.0 0.0**
**M31M Drury Creek, Y 8.34 147 Pn 21 40 04.6 -0.1**
**M20K Styx River 8.48 210 Pn Pn 21 40 07.9 +1.2**
**SUA Susitna One 8.51 202 Pn 21 40 07.5 +0.4**
**J17K VABM Dome 8.53 231 Pn 21 40 06.7 -0.5**
**L19K White Mountain 8.54 216 Pn 21 40 07.3 -0.1**
**I17K Unalakleet 8.61 237 Pn 21 40 08.2 -0.2**
**M19K Big River Lodg 8.70 214 Pn Pn 21 40 10.0 +0.5**
**PWL Port Wells 8.85 193 Pn Pn 21 40 14.4 +2.8**
**SPCP Crater Peak Br 8.90 206 Pn 21 40 12.2 -0.3**
**L18K Granite Mounta 8.90 221 Pn Pn 21 40 12.5 +0.1**
**ISLE Juniper Island 8.97 174 Pn Pn 21 40 17.4 +4.0**
**WHY Whitehorse 9.69 152 Pn Pn 21 40 23.5 +0.3**
**M17K Holitna River 9.79 220 Pn Pn 21 40 24.4 -0.2**
**L16K Owhat River 10.02 226 Pn Pn 21 40 28.6 +0.9**
**J14K Nanvaranak Lak 10.32 238 Pn Pn 21 40 31.9 +0.2**
**WRGLY Wrigley 10.38 117 Pn Pn 21 40 32.4 -0.1**
**P33M Teslin, Yukon 10.48 147 Pn Pn 21 40 33.8 -0.2**
**M16K Timber Creek 10.48 223 Pn Pn 21 40 33.7 -0.3**
**P32M Atlin 10.90 151 Pn Pn 21 40 40.7 +1.0**
**K13K Kusilvak Mount 11.28 238 Pn Pn 21 40 44.4 -0.4**
**N15K Kwethluk River 11.50 223 Pn Pn 21 40 47.7 -0.3**
**R33M Jennings River 11.60 144 Pn Pn 21 40 50.0 +0.7**
**BESE Bessie Mountai 11.68 155 Pn Pn 21 40 51.8 +1.4**
**Q32M Nakina River 11.75 148 Pn Pn 21 40 52.3 +0.8**
**R32K Eaglecrest 12.02 155 Pn Pn 21 40 56.3 +1.2**
**S31K Pelican 12.09 159 Pn Pn 21 40 57.8 +1.9**
**KDAK Kodiak Island 12.32 202 Pn Pn 21 41 03.5 +4.4**
comp=E,0.5nm,0.3s,baz=25,slow=17,SNR=1.2
**O14K Tigyukauivet M 12.60 224 Pn Pn 21 41 03.9 +1.0**
**DLBC Dease Lake 12.67 144 Pn Pn 21 41 04.3 +0.3**
comp=E,1.3nm,0.3s,baz=350,slow=6.5,SNR=5.7
DLBC Sn Sn **21 43 20.3 -5.0**
comp=E,0.2nm,0.3s,baz=321,slow=27,SNR=2.8
comp=E,5.2nm,0.6s
**S32K Killisnoo 12.79 156 Pn Pn 21 41 06.1 +0.6**
**YKA Yellowknife Ar 13.80 106 Pn Pn 21 41 15.5 -3.7**
comp=E,2.4nm,0.3s,baz=315,slow=13,SNR=9.0
YKA Sn Sn 21 43 40.0 -12
comp=E,1.7nm,0.3s,baz=314,slow=23,SNR=4.8
comp=E,7.3nm,0.6s
**T35M Bob Quinn 13.98 147 Pn Pn 21 41 24.4 +2.6**
**LTY Liberty 25.14 140 P P 21 43 29.8 +0.8**
**LON Longmire 25.37 142 P P 21 43 32.6 +1.5**
**MXC Moxie City 25.87 140 P P 21 43 36.7 +1.1**
MXC IAmb IAmb 21 43 36.9
comp=E,32nm,1.6s
**I07A Izee 28.41 141 P P 21 43 59.1 +0.6**
I07A IAmb IAmb 21 44 03.4
comp=E,17nm,1.4s
**SPITS Spitsbergen Ar 32.08 7 P P 21 44 29.4 -1.0**
comp=E,1.8nm,0.5s,baz=324,slow=2.0,SNR=5.1
comp=E,1.8nm,0.5s
**PDAR Pinedale Array 32.15 128 P P 21 44 32.6 +0.9**
**PDAR Pinedale Array 32.15 128 P P 21 44 33.4 +1.7**
comp=E,3.4nm,0.9s,baz=5.3,slow=5.6,SNR=7.3
comp=E,3.4nm,0.9s
**RSSD Black Hills 32.52 120 P P 21 44 36.2 +1.4**
RSSD IAmb IAmb 21 44 36.6
comp=E,25nm,1.6s
**ELK Elko 32.57 137 P P 21 44 37.7 +2.3**
**TCUT Toone Canyon 33.19 132 P P 21 44 42.0 +1.2**
TCUT IAmb IAmb 21 44 43.6
comp=E,16nm,0.7s
**WAKR Walker 33.77 144 P P 21 44 47.5 +1.7**
**NVAR Mina Array Bea 34.08 142 P P 21 44 50.8 +2.3**
comp=E,3.0nm,0.9s,baz=347,slow=6.8,SNR=12
comp=E,3.0nm,0.9s
**NLU North Lily Min 34.10 133 P P 21 44 50.1 +1.4**
**P18A Preston Nutter 34.89 131 P P 21 44 57.6 +2.0**
P18A IAmb IAmb 21 44 59.4
comp=E,64nm,1.8s
**SRU San Rafael Swe 35.30 132 P P 21 45 00.9 +1.9**
SRU IAmb IAmb 21 45 07.1
comp=E,34nm,1.7s
**SCHQ Schefferville 36.10 73 P P 21 45 05.7 +0.2**
SCHQ IAmb IAmb 21 45 06.0
comp=E,22nm,0.9s
**SCHQ Schefferville 36.10 73 P P 21 45 05.5 0.0**
comp=E,10nm,0.8s,baz=320,slow=8.2,SNR=5.5
comp=E,10nm,0.8s
**H43A Windswept, Lux 37.54 102 P P 21 45 18.1 +0.3**
H43A IAmb IAmb 21 45 23.8
comp=E,85nm,1.8s
**MVCO Mesa Verde 37.63 130 P P 21 45 20.1 +1.2**
**SADO Sadowa 40.29 93 P P 21 45 41.0 +0.1**
**TRQ Mont Tremblant 40.65 88 P P 21 45 42.6 -1.3**
**ARCES ARCESS Array B 41.04 6 P P 21 45 46.4 -0.4**
comp=E,1.2nm,0.5s,baz=355,slow=9.2,SNR=3.9
comp=E,1.2nm,0.5s
**DELO Deloro Mine 41.05 92 P P 21 45 47.4 +0.3**
DELO IAmb IAmb 21 45 48.1
comp=E,61nm,1.4s
**LONY Lake Ozonia 42.03 89 P P 21 45 54.8 -0.4**
LONY IAmb IAmb 21 45 56.1
comp=E,44nm,1.6s
**WVNY West Valley, N 42.55 94 P P 21 45 59.2 -0.2**
WVNY IAmb IAmb 21 46 04.4
comp=E,84nm,1.8s
**J57A Williamstown 42.59 91 P P 21 45 59.8 +0.1**
**M53A WI Miller and 42.67 97 P P 21 46 00.8 +0.4**
M53A IAmb IAmb 21 46 01.9
comp=Z,150nm,1.8s
**BATG Bathurst New B 42.71 79 P P 21 46 01.0 +0.3**
**K57A Scipio Center 43.00 92 P P 21 46 03.0 -0.1**
K57A IAmb IAmb 21 46 04.0
comp=E,39nm,1.1s
**F63A Nahmakanta, Br 43.01 83 P P 21 46 03.1 0.0**
F63A IAmb IAmb 21 46 09.4
comp=E,92nm,1.8s
**KLR Kul'dur 43.06 287 P P 21 46 03.0 -0.5**
comp=E,3.9nm,0.9s,baz=21,slow=11,SNR=5.9
comp=E,3.9nm,0.9s
**F64A Sherman 43.14 82 P P 21 46 03.9 -0.2**
F64A IAmb IAmb 21 46 09.1
comp=E,86nm,1.8s
**H62A Milan 43.27 86 P P 21 46 05.3 +0.1**
H62A IAmb IAmb 21 46 05.7
comp=E,58nm,1.6s
**ACCN Adirondack Com 43.43 89 P P 21 46 07.0 +0.4**
ACCN IAmb IAmb 21 46 08.9
comp=E,19nm,1.2s
**PBMO Poplar Bluff 43.52 110 P P 21 46 07.3 0.0**
PBMO IAmb IAmb 21 46 10.0
comp=E,57nm,1.6s
**BINY Binghamton 43.65 92 P P 21 46 08.6 +0.2**
BINY IAmb IAmb 21 46 11.8
comp=E,21nm,1.1s
**O54A Avella 43.89 97 P P 21 46 10.4 0.0**
**M57A Sunshine Farm, 44.01 94 P P 21 46 11.4 +0.1**
M57A IAmb IAmb 21 46 17.8
comp=E,56nm,1.6s
**SSFO Shawnee State 44.24 101 P P 21 46 13.0 -0.1**
**GGN Saint George 44.31 81 P P 21 46 13.5 0.0**
GGN IAmb IAmb 21 46 22.0
comp=E,95nm,1.8s
**SSPA Standing Stone 44.36 95 P P 21 46 13.7 -0.4**
SSPA IAmb IAmb 21 46 14.8
comp=Z,47nm,1.5s
**T47A Sharon Grove 44.44 106 P P 21 46 14.6 -0.1**
T47A IAmb IAmb 21 46 18.8
comp=Z,83nm,1.6s
**Q54A Coxs Mills 44.80 99 P P 21 46 17.1 -0.5**
Q54A IAmb IAmb 21 46 20.2
comp=Z,57nm,1.4s
**KSCT Kent School, K 44.95 90 P P 21 46 19.2 +0.5**
**WVT Waverly 44.98 108 P P 21 46 19.4 +0.4**
WVT IAmb IAmb 21 46 20.0
comp=Z,13nm,0.7s
**TRNY Table Rock, Ra 45.20 91 P P 21 46 20.8 0.0**
TRNY IAmb IAmb 21 46 24.6
comp=Z,25nm,1.4s
**Q56A Snyder Ridge, 45.33 97 P P 21 46 21.4 -0.4**
Q56A IAmb IAmb 21 46 28.5
comp=Z,88nm,1.8s
**UCCT U. Connecticut 45.33 89 P P 21 46 21.5 -0.2**
UCCT IAmb IAmb 21 46 25.6
comp=Z,21nm,1.1s
**ALPN Alpine 45.40 128 P P 21 46 23.1 +0.6**
ALPN IAmb IAmb 21 46 27.8
comp=Z,13nm,1.2s
**MVL Millersville 45.47 94 P P 21 46 23.2 +0.4**
MVL IAmb IAmb 21 46 27.1
comp=Z,65nm,1.7s
**CLTN Cedars of Leba 45.52 106 P P 21 46 23.5 +0.2**
**R55A Marlinton 45.68 98 P P 21 46 24.9 +0.3**
**GBN Guysborough 45.90 77 P P 21 46 26.5 +0.3**
**PLAL Pickwick Lake 45.94 108 P P 21 46 26.6 -0.1**
**TZTN Tazewell 46.05 103 P P 21 46 27.6 0.0**
**TX31 Lajitas Ar. Si 46.37 128 P P 21 46 31.5 +1.2**
**TXAR Lajitas Array 46.37 128 P P 21 46 31.5 +1.3**
**TXAR Lajitas Array 46.37 128 P P 21 46 31.1 +0.9**
comp=Z,1.6nm,0.8s,baz=356,slow=7.2,SNR=14
comp=Z,1.6nm,0.8s
**Y45A Yeager Farm, C 46.47 111 P P 21 46 30.8 0.0**
**TKL Tuckaleechee C 46.78 104 P P 21 46 33.3 +0.1**
**V53A Saluda 47.10 103 P P 21 46 35.9 +0.1**
**FPAL Fort Paine 47.17 106 P P 21 46 36.4 0.0**
FPAL IAmb IAmb 21 46 42.8
comp=Z,22nm,1.2s
**USRK Ussuriysk Ar. 47.35 284 P P 21 46 37.2 -0.4**
comp=Z,6.1nm,0.8s,baz=31,slow=9.4,SNR=13
comp=Z,6.1nm,0.8s
**Y49A Blount Mountai 47.52 107 P P 21 46 39.2 +0.2**
**BNX BinXian 47.55 288 ||P P 21 46 39.0 -0.2**
BNX pmax pmax
comp=Z,6.0nm,0.7s
**LRAL Lakeview Retre 48.08 108 P P 21 46 43.5 +0.2**
**Y52A Lilburn 48.31 105 P P 21 46 45.4 +0.3**
**HODGE Hodges 48.59 103 P P 21 46 46.5 -0.8**
**JSC Jenkinsville 48.89 102 P P 21 46 49.4 -0.2**
**GOGA Godfrey 48.92 105 P P 21 46 49.8 0.0**
GOGA IAmb IAmb 21 46 50.6
comp=Z,12nm,0.8s
**FINES FINESS Array B 49.16 6 P P 21 46 52.2 +0.9**
**FINES FINESS Array B 49.16 6 P P 21 46 51.9 +0.6**
comp=Z,2.0nm,0.7s,baz=0.7,slow=8.7,SNR=10
comp=Z,2.0nm,0.7s
**250A Grady 49.29 108 P P 21 46 52.9 +0.2**
**HFS Hagfors 49.69 14 P P 21 46 54.3 -1.2**
comp=Z,1.8nm,0.7s,baz=5.3,slow=6.4,SNR=7.3
comp=Z,1.8nm,0.7s
**HBVL Hebbronville 49.93 124 P P 21 46 58.3 +0.7**
HBVL IAmb IAmb 21 47 06.1
comp=Z,11nm,0.9s
**352A Blakely 50.19 107 P P 21 46 59.9 +0.3**
352A IAmb IAmb 21 47 01.6
comp=Z,24nm,1.1s
**255A Hazlehurst 50.62 104 P P 21 47 02.5 -0.2**
255A IAmb IAmb 21 47 03.7
comp=Z,28nm,0.7s
**ZALV Zalesovo Beam 51.81 325 P P 21 47 11.7 +0.2**
comp=Z,1.3nm,0.5s,baz=22,slow=7.0,SNR=3.4
comp=Z,1.3nm,0.5s
**MJAR Matsushiro Arr 52.00 273 P P 21 47 15.1 +2.0**
comp=Z,2.0nm,0.8s,baz=4.8,slow=7.4,SNR=8.6
comp=Z,2.0nm,0.8s
**SONM Songino Array 52.22 306 P P 21 47 15.1 +0.4**
comp=Z,1.3nm,0.8s,baz=28,slow=7.1,SNR=5.9
comp=Z,1.3nm,0.8s
**EKA Eskdalemuir Ar 52.30 27 P P 21 47 14.8 -0.3**
comp=Z,1.1nm,0.6s,baz=341,slow=6.7,SNR=8.7
comp=Z,1.1nm,0.6s
**ESK Eskdalemuir 52.30 27 P P 21 47 14.1 -1.0**
ESK IAmb IAmb 21 47 20.7
comp=Z,26nm,1.3s
**ARU Arti 53.30 344 P P 21 47 23.1 +0.7**
**KSRS Korea Array 54.76 283 P P 21 47 33.6 +0.3**
comp=Z,2.6nm,0.8s,baz=17,slow=7.9,SNR=10
comp=Z,2.6nm,0.8s
**BVAR Borovoye Array 55.20 335 P P 21 47 36.9 +0.5**
comp=Z,0.5nm,0.6s,baz=28,slow=4.2,SNR=3.0
comp=Z,0.5nm,0.6s
**KURBB Kurchatov Arra 56.18 329 P P 21 47 43.7 +0.3**
comp=Z,2.2nm,0.2s,baz=16,slow=7.0,SNR=9.7
comp=Z,2.2nm,0.2s
**HHC Hu-ho-hao-te 57.04 299 eP P 21 47 50.6 +0.8**
HHC sP sP 21 47 57.4 +5.0
HHC pmax pmax
comp=Z,13nm,0.6s
**MK31 Makanchi Array 59.12 325 P P 21 48 03.6 -0.6**
**MKAR Makanchi Array 59.12 325 P P 21 48 03.7 -0.5**
**MKAR Makanchi Array 59.12 325 P P 21 48 03.4 -0.8**
comp=Z,1.4nm,0.6s,baz=21,slow=7.1,SNR=14
comp=Z,1.4nm,0.6s
**MAKZ Makanchi 59.16 325 P P 21 48 03.7 -0.8**
**AKASG Malin Array Be 60.02 5 P P 21 48 09.5 -0.7**
comp=Z,1.9nm,0.5s,baz=358,slow=6.9,SNR=8.9
comp=Z,1.9nm,0.5s
**AKBB Malin Array Si 60.02 5 P P 21 48 10.1 -0.1**
**KIEV Kiev 60.02 5 P P 21 48 10.1 -0.2**
**ABKAR Akbulak array 60.24 342 P P 21 48 12.0 +0.2**
**ABKAR Akbulak array 60.24 342 P P 21 48 12.1 +0.2**
ABKAR IAmb IAmb 21 48 19.9
comp=Z,4.2nm,1.1s
**GERES GERESS Array B 60.85 17 P P 21 48 16.3 +0.1**
comp=Z,0.4nm,0.7s,baz=324,slow=9.9,SNR=2.3
comp=Z,0.4nm,0.7s
**GTA Gaotai 61.83 308 eP P 21 48 23.6 +0.7**
GTA pP sP 21 48 29.6 +4.2
GTA pmax pmax
comp=Z,2.0nm,1.2s
**WATA Walderalm 62.12 18 eP P 21 48 24.0 -0.8**
comp=Z,4.0nm,1.3s
**LESA Schwarzleotal 62.15 18 epP P 21 48 25.6 +0.7**
comp=Z,2.4nm,1.0s
**SQTA Sankt Quirin 62.20 19 epP P 21 48 25.5 +0.3**
comp=Z,4.5nm,1.1s
**WTTA Wattenberg 62.20 18 epP P 21 48 26.0 +0.6**
comp=Z,1.3nm,0.9s
**KBA Koelnbreinsper 62.57 17 epP pP 21 48 28.9 -0.7**
comp=Z,0.7nm,0.6s
**NJ2 Nanjing 62.74 289 eP P 21 48 29.7 +0.8**
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
**BUR08 Bucovina Ar. S 62.91 8 P P 21 48 30.3 +0.3**
BUR08 IAmb IAmb 21 48 38.6
comp=Z,11nm,1.8s
**BURAR Bucovina Array 62.94 8 P P 21 48 29.7 -0.5**
**SOKA Soboth 63.13 16 epP P 21 48 32.1 +0.7**
comp=Z,2.8nm,1.4s
**PRED Cave del Predi 63.22 17 P P 21 48 30.6 -1.4**
**OBKA Obir 63.25 16 epP P 21 48 32.6 +0.3**
comp=Z,3.8nm,1.1s
**BOOM Boomskoye usch 64.49 328 P P 21 48 40.9 +0.3**
BOOM IAmb IAmb 21 48 47.5
comp=Z,32nm,1.4s
**KK31 Karatay Array 64.84 333 P P 21 48 43.2 +0.5**
**KKAR Karatay Array 64.84 333 P P 21 48 42.4 -0.3**
**FDMO Fiordimonte 66.53 18 P P 21 48 53.8 +0.2**
**ESDC Sonseca Array 67.28 32 P P 21 48 58.5 0.0**
comp=Z,0.6nm,0.6s,baz=342,slow=7.7,SNR=6.3
comp=Z,0.6nm,0.6s
**KSH Kashi 67.36 327 P P 21 49 02.1 +3.0**
KSH pmax pmax
comp=Z,3.0nm,1.1s
**CHGR Chuyangaron 69.40 333 P P 21 49 11.5 -0.3**
CHGR IAmb IAmb 21 49 16.0
comp=Z,13nm,0.6s
**CART Cartagena 69.85 30 P P 21 49 12.9 -1.5**
CART IAmb IAmb 21 49 13.2
comp=Z,18nm,0.9s
**SABA Saba 70.46 92 P P 21 49 17.9 -0.5**
**BRTR Keskin Array B 71.08 2 P P 21 49 21.5 -0.6**

comp=Z,0.8nm,0.7s,baz=352,slow=5.1,SNR=5.3
comp=Z,0.8nm,0.7s
**KEST Kesra 73.29 22** P **P** **21 49 34.5 -0.9**
**PZH PanZhiHua 73.34 301** P **P** **21 49 36.5 +0.7**
PZH pmax pmax
comp=Z,10.0nm,0.5s
**TARA Tarawa 73.74 225** P **P** **21 49 37.2 -0.8**
**FDF Fort de France 73.87 91** P **P** **21 49 38.6 -0.2**
**CMAR Chiang Mai Arr 81.76 301** P **P** **21 50 22.1 -0.7**
comp=Z,1.6nm,0.9s,baz=359,slow=5.7,SNR=6.8
comp=Z,1.6nm,0.9s
**VNDA Vanda 150.27 201** PKPbc **PKiKP** **21 57 54.9 +0.9**
comp=Z,0.8nm,0.7s,baz=358,slow=1.8,SNR=2.8
**QSPA South Pole Qui 159.35 180** PKPab **PKPab** **21 58 40.5 +1.9**
comp=Z,2.5nm,1.0s,baz=147,slow=1.8,SNR=7.1

*DJA **12** 21:42:49.0±0.7, 2˚N±8˚×12˚9E±˚, h10km, M4.4/10, mb4.5/6, mB5.2/1, MLv4.4/10, Mw(mB)4.5/1*
*NEIC **12** 21:42:52.1±1.4, 2.˚04N±0.˚09×129.˚08E±0.˚10, h61km±8km, mb4.5/18, Error ellipse: s-maj=15.7km s-min=11.9km az=49.0*
*IDC **12** 21:42:54.6±4.4, 2.˚38N×128.˚90E, h70km±41km, mb3.9/12, mbtmp4.2/13, ML4.3/1, Error ellipse: s-maj=36.9km s-min=13.7km az=77.0*
**ISC 12 21:42:50.2**±0.5, **2˚27N**±0.˚07×**129˚06E**±0.˚10, **h35**km, **n43, σ1s64/44, mb4.5/20, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.25** | **229** | Pn | **Pn** | **21 43 24.9** | **-0.1** |
| **TNTI** | **Ternate** | **2.25** | **229** | P | **Pn** | **21 43 25.9** | **+0.9** |
| **SWI** | **Sorong** | **3.81** | **145** | P | **Pn** | **21 43 49.4** | **+2.9** |
| **FAKI** | **Fak Fak** | **6.06** | **148** | Pn | **Pn** | **21 44 16.1** | **-1.4** |
| **FAKI** | **Fak Fak** | **6.06** | **148** | P | **Pn** | **21 44 20.4** | **+3.0** |
| **GTOI** | **Gorontalo** | **6.26** | **255** | P | **Pn** | **21 44 21.9** | **+1.8** |
| | 18nm,0.8s,0.1nm | | | | | | |
| **LUWI** | **Luwuk** | **7.09** | **242** | P | **Pn** | **21 44 34.0** | **+2.4** |
| | 49nm,0.7s,1μm0.2nm | | | | | | |
| **MRSI** | **Marisa** | **7.33** | **256** | P | **Pn** | **21 44 36.9** | **+2.0** |
| **TOLI2** | **Tolitoli** | **8.35** | **262** | Pn | **Pn** | **21 44 48.6** | **-0.3** |
| **MYLDM** | **Lahad Datu** | **10.92** | **286** | Pn | **Pn** | **21 45 25.9** | **+1.8** |
| **KAPI** | **Kappang** | **11.78** | **232** | Pn | **Pn** | **21 45 35.8** | **-0.1** |
| **KAPI** | **Kappang** | **11.78** | **232** | P | **Pn** | **21 45 38.2** | **+2.4** |
| | 2.1nm,0.3s,baz=45,slow=8.6,SNR=4.2 | | | | | | |
| | 6.8nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **17.83** | **181** | Pn | **Pn** | **21 46 51.1** | **-4.6** |
| KNRA | | | | IAmb | IAmb | 21 46 56.5 | |
| | comp=Z,50nm,1.5s | | | | | | |
| **YHNB** | **Yeheng** | **23.47** | **342** | P | **P** | **21 47 58.1** | **+1.2** |
| YHNB | | | | IAmb | IAmb | 21 48 10.3 | |
| | comp=Z,60nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **26.21** | **170** | P | **P** | **21 48 24.2** | **+2.3** |
| | comp=Z,0.7nm,0.5s,baz=350,slow=7.7,SNR=17 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 51 46.3** | **-2.1** |
| | comp=Z,0.4nm,0.5s,baz=1.4,slow=2.2,SNR=2.9 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **35.03** | **358** | P | **P** | **21 49 40.1** | **+0.5** |
| | comp=Z,0.9nm,0.6s,baz=176,slow=9.3,SNR=4.6 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.14** | **13** | P | **P** | **21 49 40.3** | **-0.3** |
| | comp=Z,1.7nm,0.6s,baz=189,slow=8.4,SNR=3.8 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **35.14** | **13** | P | **P** | **21 49 41.8** | **+1.2** |
| MAJO | | | | IAmb | IAmb | 21 50 20.1 | |
| | comp=Z,8.2nm,1.3s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **35.14** | **13** | P | **P** | **21 49 42.2** | **+1.5** |
| MJB9 | | | | IAmb | IAmb | 21 50 20.1 | |
| | comp=Z,8.1nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **35.51** | **170** | P | **P** | **21 49 44.9** | **+1.0** |
| **STKA** | **Stephens Creek** | **35.98** | **162** | P | **P** | **21 49 48.3** | **+0.4** |
| **STKA** | **Stephens Creek** | **35.98** | **162** | P | **P** | **21 49 50.8** | **+2.9** |
| | comp=Z,2.3nm,0.6s,baz=338,slow=10,SNR=9.3 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.84** | **3** | P | **P** | **21 50 38.0** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **41.84** | **3** | P | **P** | **21 50 36.4** | **-0.3** |
| | comp=Z,1.8nm,0.8s,baz=165,slow=6.0,SNR=5.9 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **49.24** | **341** | P | **P** | **21 51 35.9** | **+0.5** |
| ULN | | | | IAmb | IAmb | 21 51 36.7 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **49.44** | **340** | P | **P** | **21 51 37.6** | **+0.7** |
| **SONM** | **Songino Array** | **49.44** | **340** | P | **P** | **21 51 36.8** | **-0.2** |
| | comp=Z,1.4nm,0.6s,baz=152,slow=8.1,SNR=8.0 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **KHZ** | **Kahutara** | **59.90** | **143** | P | **P** | **21 52 49.5** | **-3.2** |
| **MK31** | **Makanchi Array** | **60.08** | **325** | P | **P** | **21 52 53.8** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 21 52 54.5 | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.08** | **325** | P | **P** | **21 52 53.7** | **-0.2** |
| | comp=Z,3.3nm,0.6s,baz=114,slow=8.3,SNR=40 | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **60.27** | **325** | P | **P** | **21 52 54.6** | **-0.6** |
| MAKZ | | | | IAmb | IAmb | 21 52 55.8 | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.94** | **332** | P | **P** | **21 53 11.9** | **-1.2** |
| | comp=Z,1.4nm,0.5s,baz=136,slow=7.2,SNR=5.8 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.22** | **327** | P | **P** | **21 53 21.1** | **-0.4** |
| | comp=Z,2.9nm,0.3s,baz=126,slow=6.3,SNR=18 | | | | | | |
| | comp=Z,2.9nm,0.3s | | | | | | |
| **TIXI** | **Tiksi** | **69.28** | **360** | P | **P** | **21 53 54.0** | **+0.5** |
| **BVAR** | **Borovoye Array** | **69.81** | **327** | P | **P** | **21 53 56.7** | **-0.4** |
| | comp=Z,2.7nm,0.6s,baz=124,slow=7.4,SNR=16 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **69.88** | **327** | P | **P** | **21 53 57.0** | **-0.5** |
| **ARU** | **Arti** | **77.41** | **328** | P | **P** | **21 54 40.8** | **-0.9** |
| ARU | | | | IAmb | IAmb | 21 54 41.3 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **M17K** | **Holitna River** | **80.16** | **28** | P | **P** | **21 54 55.5** | **-1.1** |
| **J19K** | **Poorman** | **81.55** | **26** | P | **P** | **21 55 03.3** | **-0.8** |
| **VNDA** | **Vanda** | **81.70** | **173** | P | **P** | **21 55 05.9** | **+1.3** |
| | comp=Z,1.1nm,1.0s,baz=311,slow=6.7,SNR=3.2 | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | |
| **RAYN** | **Ar Rayn** | **83.19** | **293** | P | **P** | **21 55 12.3** | **-1.2** |
| RAYN | | | | IAmb | IAmb | 21 55 18.6 | |
| | comp=Z,6.1nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **92.61** | **340** | P | **P** | **21 55 57.1** | **-0.8** |
| | comp=Z,0.8nm,0.5s,baz=63,slow=6.2,SNR=3.8 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **125.58** | **288** | PKP | **PKPdf** | **22 01 48.7** | **-0.2** |
| | comp=Z,0.2nm,0.4s,baz=85,slow=1.6,SNR=6.0 | | | | | | |

*NEIC **12** 21:43:50.6±1.2, 69.˚50N±0.˚03×144.˚29W±0.˚05, h7km±9km, Error ellipse: s-maj=3.9km s-min=2.2km az=173.0*
**AEIC 12 21:43:50.1**±1.1, **69.˚487N**±0.˚009×**144.˚27W**±0.˚05, **h1**km±7km, **ML2.7, ML4.0**/40(NEIC), **Error ellipse: s-maj=2.6km s-min=0.9km az=115.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.24** | **54** | | Pg | 21 43 54.5 | -0.2 |
| C27K | | | | | Sg | 21 43 58.3 | +0.5 |
| **C27K** | **Jago River** | **0.24** | **54** | IAML | | 21 43 59.3 | |
| | comp=E,3μm,0.2s | | | | | | |
| C27K | | | | IAML | | 21 43 59.4 | |
| | comp=N,2μm,0.2s | | | | | | |
| **C26K** | **Camden Bay** | **0.49** | **333** | | Pg | 21 43 59.3 | -0.1 |
| C26K | | | | | Sg | 21 44 06.1 | +0.4 |
| **D25K** | **Kavik River** | **0.76** | **258** | | Pg | 21 44 04.3 | -0.4 |
| D25K | | | | | Sg | 21 44 15.0 | +0.5 |
| **D27M** | **Malcolm River** | **1.20** | **100** | | Pg | 21 44 12.8 | -0.2 |
| D27M | | | | | Sb | 21 44 29.2 | -0.2 |
| **C24K** | **Franklin Bluff** | **1.57** | **281** | | Pn | 21 44 18.7 | -0.3 |
| **E27K** | **Coleen River** | **1.63** | **142** | | Pn | 21 44 19.5 | -0.3 |
| **D24K** | **Happy Valley** | **1.65** | **260** | | Pn | 21 44 19.8 | -0.3 |
| **F26K** | **Sheenjek River** | **1.80** | **178** | | Pn | 21 44 21.9 | -0.4 |
| **F26K** | **Sheenjek River** | **1.80** | **178** | IAML | | 21 45 21.7 | |
| | comp=N,2μm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **115** | | Pn | 21 44 23.6 | -0.2 |
| **F25K** | **Christian Rive** | **1.97** | **196** | Pn | Pn | 21 44 23.9 | -0.7 |
| **BMAR** | **Burnt Mountain** | **2.07** | **183** | Pn | Pn | 21 44 25.1 | -0.8 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **248** | Pn | Pn | 21 44 26.9 | +0.8 |
| **E24K** | **Your Creek** | **2.09** | **229** | Pn | Pn | 21 44 26.2 | 0.0 |
| E24K | | | | IAML | | 21 45 27.7 | |
| | comp=E,709nm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **2.24** | **282** | Pn | Pn | 21 44 28.7 | +0.5 |
| **D23K** | **Nanushuk River** | **2.34** | **260** | Pn | Pb | 21 44 32.1 | -0.9 |
| D23K | | | | IAML | | 21 45 41.4 | |
| | comp=E,984nm,0.9s | | | | | | |
| D23K | | | | IAML | | 21 45 44.2 | |
| | comp=N,977nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **216** | Pn | Pn | 21 44 31.7 | +1.5 |
| F24K | | | | IAML | | 21 45 35.5 | |
| | comp=E,769nm,0.6s | | | | | | |
| F24K | | | | IAML | | 21 45 35.8 | |
| | comp=N,970nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.42** | **236** | Pn | Pb | 21 44 32.7 | -1.6 |
| E23K | | | | IAML | | 21 45 39.9 | |
| | comp=N,666nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.48** | **137** | Pn | Pn | 21 44 31.6 | 0.0 |
| F28M | | | | IAML | | 21 45 41.4 | |
| | comp=N,483nm,0.5s | | | | | | |
| F28M | | | | IAML | | 21 45 41.8 | |
| | comp=E,462nm,0.6s | | | | | | |
| **FYU** | **Fort Yukon** | **2.96** | **187** | Pn | Pn | 21 44 38.9 | +0.9 |
| **G24K** | **Hadweenzic Riv** | **3.05** | **205** | Pn | Pn | 21 44 39.6 | +0.3 |
| G24K | | | | IAML | | 21 46 03.5 | |
| | comp=E,650nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **3.07** | **262** | Pn | Pn | 21 44 39.6 | 0.0 |

*IDC **12** 21:44:17.3±0.9, 69.˚69N×144.˚66W, h0km, mb3.9/9, mbtmp3.9/13, ML4.1/4, Error ellipse: s-maj=23.2km s-min=13.5km az=73.0*
*AEIC **12** 21:44:17.1±0.9, 69.˚53N±0.˚05×144.˚41W±0.˚07, h4km±4km, ML4.0, mb4.5/9(NEIC), ML4.1/118(NEIC), Error ellipse: s-maj=7.5km s-min=3.4km az=187.0*
*NEIC **12** 21:44:17.7±0.8, 69.˚57N±0.˚04×144.˚42W±0.˚07, h10km±1km, Error ellipse: s-maj=6.4km s-min=4.4km az=171.0*
**ISC 12 21:44:17.1**±1.1, **69.˚57N**±0.˚04×**144.˚44W**±0.˚03, **h6**km±7km, **n214, σ1s02/177, mb4.4/28, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.26** | **76** | Pg | **Pg** | **21 44 22.0** | **-0.3** |
| C27K | | | | Sg | **Sg** | **21 44 25.7** | **0.0** |
| C27K | | | | IAML | | 21 44 27.7 | |
| | comp=N,26μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.39** | **335** | | **Pg** | **21 44 25.0** | **+0.4** |
| **C26K** | **Camden Bay** | **0.39** | **335** | | **Sg** | **21 44 30.7** | **+0.9** |
| C26K | | | | IAML | | 21 44 32.7 | |
| | comp=N,7μm,0.5s | | | | | | |
| C26K | | | | IAML | | 21 44 33.0 | |
| | comp=E,7μm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.72** | **251** | | **Pg** | **21 44 30.3** | **-0.7** |
| D25K | | | | | **Sg** | **21 44 40.0** | **-0.4** |
| D25K | | | | IAML | | 21 44 44.8 | |
| | comp=N,3μm,0.8s | | | | | | |
| D25K | | | | IAML | | 21 44 45.4 | |
| | comp=E,3μm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.27** | **103** | | **Pg** | **21 44 41.1** | **-0.4** |
| D27M | | | | | **Sb** | **21 44 58.5** | **+0.4** |
| **C24K** | **Franklin Bluff** | **1.50** | **278** | | **Pn** | **21 44 43.0** | **-1.4** |
| C24K | | | | | **Sg** | **21 45 05.7** | **+0.5** |
| **C24K** | **Franklin Bluff** | **1.50** | **278** | | **Pn** | **21 44 42.9** | **-1.6** |
| **C24K** | **Franklin Bluff** | **1.50** | **278** | IAML | | 21 45 07.2 | |
| C24K | comp=N,3μm,0.8s | | | IAML | | 21 45 07.8 | |
| | comp=E,2μm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **257** | | **Pn** | **21 44 45.4** | **-0.6** |
| D24K | | | | IAML | | 21 45 12.5 | |
| | comp=N,3μm,0.7s | | | | | | |
| D24K | | | | IAML | | 21 45 12.7 | |
| | comp=E,3μm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.73** | **142** | | **Pn** | **21 44 47.4** | **-0.3** |
| E27K | | | | | **Sb** | **21 45 11.9** | **+0.7** |
| **E27K** | **Coleen River** | **1.73** | **142** | IAML | | 21 45 15.3 | |
| | comp=E,1μm,0.5s | | | | | | |
| E27K | | | | IAML | | 21 45 17.5 | |
| | comp=N,874nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.01** | **116** | | **Pn** | **21 44 50.9** | **-0.6** |
| E28M | | | | | **Sn** | **21 45 17.4** | **+0.5** |
| **E28M** | **Babbage River** | **2.01** | **116** | IAML | | 21 45 27.1 | |
| | comp=E,717nm,0.8s | | | | | | |
| E28M | | | | IAML | | 21 45 28.8 | |
| | comp=N,811nm,1.0s | | | | | | |
| **D28M** | **Stokes Point** | **2.03** | **94** | | **Pn** | **21 44 51.7** | **-0.1** |
| **D28M** | **Stokes Point** | **2.03** | **94** | IAML | | 21 45 30.7 | |
| | comp=N,2μm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.03** | **193** | | **Pn** | **21 44 51.6** | **-0.3** |
| **F25K** | **Christian Rive** | **2.03** | **193** | IAML | | 21 45 27.6 | |
| | comp=N,2μm,0.8s | | | | | | |
| F25K | | | | IAML | | 21 45 30.1 | |
| | comp=E,1μm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **246** | | **Pn** | **21 44 52.4** | **+0.1** |
| **TOLK** | **Toolik Lake Re** | **2.06** | **246** | | **Sn** | **21 45 18.4** | **+0.2** |
| **TOLK** | **Toolik Lake Re** | **2.06** | **246** | IAML | | 21 45 33.9 | |
| TOLK | comp=E,1μm,1.0s | | | IAML | | 21 45 35.5 | |
| | comp=N,1μm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **226** | | **Pn** | **21 44 53.2** | **+0.4** |
| **BMAR** | **Burnt Mountain** | **2.15** | **181** | | **Pn** | **21 44 52.2** | **-1.2** |
| **C23K** | **Itkillik River** | **2.17** | **280** | | **Pn** | **21 44 54.5** | **+0.8** |
| **C23K** | **Itkillik River** | **2.17** | **280** | IAML | | 21 45 28.4 | |
| C23K | comp=N,2μm,0.8s | | | IAML | | 21 45 37.1 | |
| | comp=E,1μm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.30** | **258** | | **Pn** | **21 44 55.8** | **+0.3** |
| **E23K** | **Chandalar** | **2.41** | **234** | | **Pn** | **21 44 57.2** | **0.0** |
| **E23K** | **Chandalar** | **2.41** | **234** | IAML | | 21 45 41.8 | |
| | comp=E,786nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **213** | | **Pn** | **21 44 57.2** | **+0.1** |
| **F28M** | **Old Crow** | **2.58** | **137** | | **Pn** | **21 44 59.4** | **0.0** |
| **E29M** | **Blow River** | **2.64** | **114** | | **Pn** | **21 45 00.2** | **0.0** |
| **E29M** | **Blow River** | **2.64** | **114** | IAML | | 21 45 45.5 | |
| | comp=N,814nm,0.9s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.64** | **174** | | **Pn** | **21 45 00.3** | **+0.1** |
| **G25K** | **Bearman Lake** | **2.88** | **193** | | **Pn** | **21 45 03.5** | **+0.1** |
| **G27K** | **Doyon Strip** | **2.96** | **158** | | **Pn** | **21 45 04.9** | **+0.3** |
| **D22K** | **Ayikyak River** | **3.02** | **261** | | **Pn** | **21 45 05.9** | **+0.5** |
| **D22K** | **Ayikyak River** | **3.02** | **261** | IAML | | 21 46 05.4 | |
| | comp=N,352nm,0.9s | | | | | | |
| **FYU** | **Fort Yukon** | **3.03** | **186** | | **Pn** | **21 45 05.5** | **0.0** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **203** | | **Pn** | **21 45 06.6** | **+0.1** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **203** | IAML | | 21 46 02.0 | |
| | comp=E,666nm,1.2s | | | | | | |
| **COLD** | **Coldfoot** | **3.17** | **225** | | **Pn** | **21 45 07.7** | **+0.3** |
| **B22K** | **Teshekpuk Lake** | **3.19** | **288** | | **Pn** | **21 45 08.2** | **+0.5** |
| **H25L** | **Birch Creek** | **3.35** | **190** | | **Pn** | **21 45 09.9** | **0.0** |
| **H27K** | **Steamboat Moun** | **3.53** | **160** | | **Pn** | **21 45 12.3** | **-0.1** |
| **G23K** | **Bananza Creek** | **3.55** | **219** | | **Pn** | **21 45 12.7** | **0.0** |
| **G23K** | **Bananza Creek** | **3.55** | **219** | IAML | | 21 46 21.5 | |
| | comp=N,352nm,0.9s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.56** | **276** | | **Pn** | **21 45 13.8** | **+1.0** |
| **G29M** | **Pine Creek** | **3.58** | **135** | | **Pn** | **21 45 13.1** | **0.0** |
| **G29M** | **Pine Creek** | **3.58** | **135** | IAML | | 21 46 32.9 | |
| | comp=N,369nm,0.8s | | | | | | |
| **E21K** | **Killik River** | **3.61** | **256** | | **Pn** | **21 45 13.8** | **+0.2** |
| **A22K** | **Sinclair Lake** | **3.85** | **297** | | **Pn** | **21 45 17.3** | **+0.5** |
| **H24K** | **Noodor Dome** | **3.97** | **201** | | **Pn** | **21 45 18.8** | **+0.3** |
| **H24K** | **Noodor Dome** | **3.97** | **201** | IAML | | 21 46 25.1 | |
| | comp=N,264nm,0.7s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.01** | **126** | | **Pn** | **21 45 18.9** | **-0.2** |
| **H29M** | **Whitestone** | **4.07** | **143** | | **Pn** | **21 45 19.8** | **0.0** |
| **H29M** | **Whitestone** | **4.07** | **143** | IAML | | 21 46 43.2 | |
| | comp=E,299nm,0.9s | | | | | | |
| H29M | | | | IAML | | 21 46 45.3 | |
| | comp=N,216nm,1.1s | | | | | | |
| **F21K** | **Alatna River** | **4.09** | **239** | | **Pn** | **21 45 20.4** | **+0.3** |
| **F21K** | **Alatna River** | **4.09** | **239** | IAML | | 21 46 32.4 | |
| | comp=E,262nm,0.8s | | | | | | |
| F21K | | | | IAML | | 21 46 36.9 | |
| | comp=N,229nm,1.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **186** | | **Pn** | **21 45 20.3** | **+0.1** |
| **PRP** | **Porcupine Dome** | **4.09** | **186** | IAML | | 21 46 28.9 | |
| | comp=E,192nm,0.8s | | | | | | |
| PRP | | | | IAML | | 21 46 34.1 | |
| | comp=N,303nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.12** | **163** | | **Pn** | **21 45 20.6** | **-0.1** |
| **INK** | **Inuvik** | **4.14** | **103** | Pn | **Pn** | **21 45 24.3** | **+3.6** |
| | comp=N,6.6nm,0.3s,baz=294,slow=3.9,SNR=10 | | | | | | |
| INK | | | | Sn | **Sn** | **21 46 07.7** | **-1.7** |
| | comp=N,10nm,0.3s,baz=341,slow=31,SNR=5.3 | | | | | | |
| INK | | | | Lg | Lg | 21 46 31.5 | |
| | comp=N,8.3nm,0.3s,baz=216,slow=18,SNR=3.3 | | | | | | |
| | comp=N,22nm,0.5s | | | | | | |
| **H23K** | **Yukon River** | **4.23** | **210** | | **Pn** | **21 45 22.5** | **+0.4** |
| **I26K** | **Coal Creek Min** | **4.31** | **173** | | **Pn** | **21 45 22.8** | **-0.3** |
| **EPYK** | **Eagle Plains** | **4.33** | **134** | | **Pn** | **21 45 23.9** | **+0.5** |
| **EPYK** | **Eagle Plains** | **4.33** | **134** | IAML | | 21 46 58.0 | |
| | comp=E,261nm,0.8s | | | | | | |
| **B20K** | **Meade River** | **4.43** | **282** | | **Pn** | **21 45 25.4** | **+0.6** |
| **D20K** | **Etivluk River** | **4.43** | **265** | | **Pn** | **21 45 25.4** | **+0.6** |
| **E20K** | **Nigu River** | **4.44** | **258** | | **Pn** | **21 45 25.4** | **+0.4** |
| **A21K** | **Barrow** | **4.45** | **299** | | **Pn** | **21 45 25.4** | **+0.4** |
| **F31M** | **Tsiigehtchic** | **4.48** | **113** | | **Pn** | **21 45 25.5** | **+0.1** |
| **F31M** | **Tsiigehtchic** | **4.48** | **113** | IAML | | 21 46 53.2 | |
| | comp=E,160nm,1.2s | | | | | | |
| **I28M** | **Miner Creek** | **4.48** | **155** | | **Pn** | **21 45 25.8** | **+0.2** |
| **I28M** | **Miner Creek** | **4.48** | **155** | IAML | | 21 46 22.6 | |
| | comp=N,194nm,1.0s | | | | | | |
| I28M | | | | IAML | | 21 47 01.3 | |
| | comp=E,163nm,1.4s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.53** | **219** | | **Pn** | **21 45 26.2** | **0.0** |
| **G21K** | **Allakaket** | **4.58** | **232** | | **Pn** | **21 45 27.0** | **+0.2** |
| **G21K** | **Allakaket** | **4.58** | **232** | IAML | | 21 46 52.7 | |
| | comp=E,229nm,1.9s | | | | | | |
| G21K | | | | IAML | | 21 46 55.4 | |
| | comp=N,165nm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.62** | **196** | | **Pn** | **21 45 27.6** | **+0.3** |
| **POKR** | **Poker Plat Res** | **4.62** | **196** | IAML | | 21 46 52.0 | |
| | comp=E,188nm,1.1s | | | | | | |
| POKR | | | | IAML | | 21 46 59.9 | |
| | comp=N,135nm,1.6s | | | | | | |
| **G31M** | **Satah River** | **4.62** | **120** | | **Pn** | **21 45 27.5** | **+0.2** |
| **G31M** | **Satah River** | **4.62** | **120** | IAML | | 21 46 50.7 | |
| | comp=E,182nm,1.4s | | | | | | |
| G31M | | | | IAML | | 21 46 50.8 | |
| | comp=N,197nm,1.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83** | **205** | | **Pn** | **21 45 30.2** | **0.0** |
| **I23K** | **Minto, Yukon-K** | **4.83** | **205** | IAML | | 21 47 09.6 | |
| | comp=E,178nm,1.0s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.84** | **148** | | **Pn** | **21 45 31.5** | **+1.1** |
| **I29M** | **Ogilvie Camp,** | **4.84** | **148** | IAML | | 21 46 33.5 | |
| | comp=N,172nm,0.4s | | | | | | |
| I29M | | | | IAML | | 21 47 05.7 | |
| | comp=E,119nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **4.86** | **199** | | **Pn** | **21 45 30.7** | **+0.1** |
| **MDM** | **Murphy Dome** | **4.86** | **199** | IAML | | 21 46 54.3 | |
| | comp=N,132nm,0.8s | | | | | | |
| MDM | | | | IAML | | 21 47 01.0 | |
| | comp=E,145nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.89** | **244** | | **Pn** | **21 45 31.3** | **+0.3** |
| **F20K** | **Avaraart Lake** | **4.89** | **244** | IAML | | 21 47 06.8 | |
| | comp=N,120nm,1.2s | | | | | | |
| **COLA** | **College** | **4.90** | **197** | | **Pn** | **21 45 31.4** | **+0.3** |
| **IL31** | | **4.91** | **192** | | **Pn** | **21 45 31.8** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.91** | **192** | | **Pn** | **21 45 31.3** | **-0.1** |
| **ILAR** | **Eielson Array** | **4.91** | **192** | Pn | **Pn** | **21 45 33.9** | **+2.5** |
| | comp=N,5.9nm,0.3s,baz=7.6,slow=14,SNR=11 | | | | | | |
| ILAR | | | | Sn | **Sn** | **21 46 29.7** | **+1.3** |
| | comp=N,5.3nm,0.3s,baz=9.5,slow=22,SNR=3.9 | | | | | | |
| ILAR | | | | Lg | Lg | 21 46 47.9 | |
| | comp=N,9.0nm,0.3s,baz=13,slow=30,SNR=5.8 | | | | | | |
| | comp=N,21nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **4.98** | **164** | | **Pn** | **21 45 33.0** | **+0.7** |
| **EGAK** | **Eagle** | **4.98** | **164** | IAML | | 21 47 04.8 | |
| | comp=N,151nm,1.5s | | | | | | |
| EGAK | | | | IAML | | 21 47 16.9 | |
| | comp=N,131nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **4.99** | **185** | | **Pn** | **21 45 32.7** | **+0.2** |
| **J25K** | **Salcha River,** | **4.99** | **185** | IAML | | 21 47 09.9 | |
| | comp=E,149nm,1.3s | | | | | | |
| J25K | | | | IAML | | 21 47 11.4 | |
| | comp=N,127nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **5.03** | **264** | | **Pn** | **21 45 33.1** | **+0.1** |
| **IMAR** | **Indian Mountai** | **5.04** | **229** | Pn | **Pn** | **21 45 33.4** | **+0.3** |
| **H21K** | **Melozitna Rive** | **5.06** | **223** | | **Pn** | **21 45 33.5** | **+0.1** |
| **H21K** | **Melozitna Rive** | **5.06** | **223** | IAML | | 21 47 04.8 | |
| | comp=E,158nm,1.1s | | | | | | |
| H21K | | | | IAML | | 21 47 05.5 | |
| | comp=N,117nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.10** | **176** | | **Pn** | **21 45 34.3** | **+0.3** |
| **J26L** | **Joseph Creek** | **5.10** | **176** | IAML | | 21 48 58.0 | |
| | comp=N,126nm,0.5s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.11** | **196** | | **Pn** | **21 45 35.2** | **+1.1** |
| **E19K** | **Redstone River** | **5.15** | **252** | | **Pn** | **21 45 34.8** | **+0.1** |
| **E19K** | **Redstone River** | **5.15** | **252** | IAML | | 21 47 10.4 | |
| | comp=N,129nm,0.7s | | | | | | |
| E19K | | | | IAML | | 21 47 19.0 | |
| | comp=E,146nm,0.9s | | | | | | |
| **MLY** | **Manley** | **5.16** | **211** | | **Pn** | **21 45 34.9** | **0.0** |
| **HDA** | **Harding Lake** | **5.27** | **192** | | **Pn** | **21 45 37.7** | **+1.4** |
| HDA | | | | IAML | | 21 49 00.8 | |
| | comp=N,133nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.31** | **202** | | **Pn** | **21 45 37.0** | **+0.1** |
| **NEA2** | **Nenana** | **5.31** | **202** | IAML | | 21 47 17.2 | |
| | comp=E,98nm,1.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.31** | **197** | | **Pn** | **21 45 37.2** | **+0.3** |
| **WRH** | **Wood River Hil** | **5.31** | **197** | IAML | | 21 47 11.8 | |
| | comp=E,112nm,0.7s | | | | | | |
| WRH | | | | IAML | | 21 47 22.6 | |
| | comp=N,94nm,1.6s | | | | | | |
| **I30M** | **Mount Dempster** | **5.36** | **141** | | **Pn** | **21 45 38.4** | **+0.8** |
| **I30M** | **Mount Dempster** | **5.36** | **141** | IAML | | 21 49 05.8 | |
| | comp=N,110nm,0.3s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.38** | **272** | | **Pn** | **21 45 38.1** | **+0.3** |
| **C19K** | **Lookout Ridge** | **5.38** | **272** | IAML | | 21 49 16.0 | |
| | comp=E,113nm,0.5s | | | | | | |
| **SCRK** | **Sand Creek** | **5.62** | **178** | | **Pn** | **21 45 41.2** | **0.0** |
| **K27K** | **Chicken** | **5.64** | **169** | | **Pn** | **21 45 41.4** | **0.0** |
| **F19K** | **Shaleruckik Mo** | **5.67** | **247** | | **Pn** | **21 45 41.7** | **0.0** |
| **J29N** | **Klondike Camp** | **5.68** | **152** | | **Pn** | **21 45 42.2** | **+0.1** |
| **H20K** | **Anotleneega Mo** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **E03A** | **Lebam** | **25.31** | **145** | P | **P** | **21 49 44.0** | **0.0** |
| E03A | | | | IAmb | IAmb | 21 49 52.0 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.26** | **128** | P | **P** | **21 50 48.7** | **+2.3** |
| | comp=Z,1.1nm,0.7s,baz=358,slow=5.4,SNR=6.0 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.19** | **142** | P | **P** | **21 51 03.8** | **+0.6** |
| | comp=Z,1.0nm,0.8s,baz=337,slow=6.4,SNR=6.3 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **5** | P | **P** | **21 52 01.3** | **+1.3** |
| | comp=Z,3.1nm,1.0s,baz=339,slow=9.2,SNR=3.6 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.48** | **128** | P | **P** | **21 52 47.3** | **+2.5** |
| | comp=Z,0.3nm,0.5s,baz=277,slow=12,SNR=16 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **49.10** | **6** | P | **P** | **21 53 05.0** | **+0.4** |
| | comp=Z,2.8nm,0.9s,baz=355,slow=7.5,SNR=11 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **49.65** | **14** | P | **P** | **21 53 09.0** | **+0.2** |
| | comp=Z,2.2nm,0.8s,baz=336,slow=3.2,SNR=7.0 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.28** | **27** | P | **P** | **21 53 28.4** | **-0.2** |
| | comp=Z,1.1nm,0.7s,baz=333,slow=7.1,SNR=4.2 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **ARU** | **Arti** | **53.21** | **344** | P | **P** | **21 53 35.3** | **-0.2** |
| **BRVK** | **Borovoye** | **55.09** | **335** | P | **P** | **21 53 49.1** | **-0.1** |
| BRVK | | | | IAmb | IAmb | 21 53 58.5 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.93** | **299** | *e*P | P | 21 53 57.8 | -4.9 |
| HHC | | | | sP | sP | 21 54 09.2 | +3.6 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7μm,9.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.01** | **324** | P | **P** | **21 54 17.7** | **+0.6** |
| **MAKZ** | **Makanchi** | **59.06** | **325** | P | **P** | **21 54 18.4** | **+0.9** |
| MAKZ | | | | IAmb | IAmb | 21 54 57.3 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **AKASG** | **Malin Array Be** | **59.96** | **5** | P | **P** | **21 54 23.0** | **-0.5** |
| | comp=Z,0.7nm,0.5s,baz=343,slow=22,SNR=2.0 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **60.15** | **342** | P | **P** | **21 54 25.5** | **+0.6** |
| ABKAR | | | | IAmb | IAmb | 21 54 27.1 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **60.15** | **342** | P | **P** | **21 54 25.9** | **+1.0** |
| **ABKAR** | **Akbulak array** | **60.15** | **342** | IAmb | IAmb | 21 54 27.1 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **60.15** | **342** | P | **P** | **21 54 25.7** | **-0.9** |
| **ABKAR** | **Akbulak array** | **60.15** | **342** | P | **P** | **21 54 25.5** | **-1.1** |
| **GTA** | **Gaotai** | **61.71** | **308** | *e*P | P | 21 54 42.4 | +6.6 |
| GTA | | | | pP | sP | 21 54 47.2 | +8.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **RETA** | **Reutte** | **61.85** | **19** | *e*pP | **P** | **21 54 36.1** | **-0.5** |
| | comp=Z,6.0nm,1.8s | | | | | | |
| **MOA** | **Molln** | **61.86** | **16** | *e*P | **P** | **21 54 32.4** | **-4.2** |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **CONA** | **Conrad Observa** | **61.93** | **15** | *e*P | **P** | **21 54 36.2** | **-0.9** |
| | comp=Z,2.9nm,1.7s | | | | | | |
| **DAVA** | **Damuels** | **61.94** | **20** | *e*P | P | 21 54 32.3 | -5.0 |
| | comp=Z,7.3nm,1.3s | | | | | | |
| **MOTA** | **Moosalm** | **62.03** | **19** | *e*P | P | 21 54 33.0 | -4.9 |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **WATA** | **Walderalm** | **62.09** | **18** | *e*P | P | 21 54 33.5 | -4.8 |
| | comp=Z,2.5nm,1.1s | | | | | | |
| **WTTA** | **Wattenberg** | **62.16** | **18** | P | P | 21 54 33.8 | -5.0 |
| | comp=Z,2.8nm,1.1s | | | | | | |
| **ARSA** | **Arzberg** | **62.57** | **15** | P | **P** | **21 54 38.9** | **-2.4** |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **ABTA** | **Abfaltersbach** | **62.77** | **18** | *e*P | **P** | **21 54 38.7** | **-4.1** |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **MYKA** | **Terra Mystica** | **63.00** | **17** | *e*P | **P** | **21 54 40.3** | **-3.9** |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **SOKA** | **Soboth** | **63.09** | **16** | *e*P | P | 21 54 39.8 | -5.1 |
| | comp=Z,5.3nm,1.3s | | | | | | |
| **LZH** | **Lanzhou** | **63.65** | **303** | *e*P | P | 21 54 55.8 | +7.0 |
| LZH | | | | pP | sP | 21 54 59.6 | +7.8 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **67.28** | **32** | P | **P** | **21 55 13.5** | **+1.4** |
| | comp=Z,0.6nm,0.7s,baz=346,slow=6.0,SNR=5.3 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **73.23** | **301** | P | **P** | **21 55 48.1** | **-0.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **159.42** | **180** | PKPab | **PKPab** | **22 04 52.3** | **-0.3** |
| | comp=Z,1.5nm,1.1s,baz=299,slow=7.7,SNR=1.6 | | | | | | |

*IDC **12** 21:46:20.1±7.5, 37.˚70N×144.˚25E, h0km, mb3.6/3, mbtmp3.6/6, ML3.7/2, Error ellipse: s-maj=120.0km s-min=44.5km az=121.0*
*JMA **12** 21:46:25.6±0.2, 37.˚9N±0.˚7×143.˚8E±0.˚9, h49km, MV3.5/28, FAR E OFF MIYAGI PREF*
**ISC 12 21:46:23.9±1.7, 37.˚87N±0.˚08×143.˚81E±0.˚10, h10km, n18, σ1°67/30, mb3.6/3, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **1.90** | **284** | P | **Pn** | **21 46 55.9** | **-0.4** |
| JIKH | | | | S | **Sn** | **21 47 18.4** | **-2.0** |
| **JIO** | **Ouri** | **2.02** | **287** | P | **Pn** | **21 46 57.8** | **-0.3** |
| JIO | | | | S | **Sn** | **21 47 21.9** | **-1.5** |
| **JKMT** | **Kesennumamotoy** | **2.06** | **298** | P | **Pn** | **21 46 58.4** | **-0.2** |
| JKMT | | | | S | **Sn** | **21 47 22.7** | **-1.6** |
| **OFUJ** | **Ofunato** | **2.07** | **306** | P | **Pn** | **21 46 58.5** | **-0.2** |
| **JMK** | **Ichinoseki** | **2.30** | **299** | P | **Pn** | **21 47 02.0** | **+0.2** |
| JMK | | | | S | **Sn** | **21 47 29.0** | **-1.3** |
| **JOM** | **Ohasama** | **2.54** | **310** | P | **Pn** | **21 47 05.6** | **+0.5** |
| JOM | | | | S | **Sn** | **21 47 35.2** | **-0.9** |
| **JYK** | **Kaneyama** | **2.90** | **292** | *e*P | **Pn** | **21 47 10.8** | **+0.6** |
| JYK | | | | *e*S | **Sn** | **21 47 43.8** | **-1.3** |
| **JANG** | **Nango** | **3.07** | **325** | *e*P | **Pn** | **21 47 12.8** | **+0.3** |
| JANG | | | | *e*S | **Sn** | **21 47 47.6** | **-1.5** |
| **JAG** | **Ashikaga** | **3.77** | **249** | *e*P | **Pn** | **21 47 21.8** | **-0.2** |
| **JRY** | **Ryogami san** | **4.35** | **246** | *e*P | **Pn** | **21 47 29.4** | **-0.7** |
| JRY | | | | *e*S | **Sn** | **21 48 15.9** | **-4.9** |
| **JNBK** | **Urakawa-nobuka** | **4.47** | **350** | *e*P | **Pn** | **21 47 31.5** | **-0.3** |
| JNBK | | | | *e*S | **Sn** | **21 48 21.4** | **-2.5** |
| **MJAR** | **Matsushiro Arr** | **4.66** | **255** | Pn | **Pn** | **21 47 35.5** | **+1.1** |
| | 3.1nm,0.6s,baz=76,slow=16,SNR=14 | | | | | | |
| MJAR | | | | Sn | **Sn** | **21 48 27.9** | **-0.7** |
| | 0.1nm,0.3s,baz=80,slow=27,SNR=4.3 | | | | | | |
| **JCH** | **Churui** | **4.75** | **356** | *e*P | **Pn** | **21 47 34.8** | **-0.7** |
| JCH | | | | *e*S | **Sn** | **21 48 26.4** | **-4.2** |
| **ASAJ** | **Asahikawa** | **6.30** | **352** | Pn | **Pn** | **21 47 57.6** | **+0.7** |
| | 2.9nm,0.3s,baz=196,slow=8.0,SNR=31 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **21 49 08.2** | **-0.7** |
| | 1.1nm,0.3s,baz=6.0,slow=18,SNR=4.2 | | | | | | |
| | 6.2nm,0.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.93** | **309** | Pn | **Pn** | **21 49 02.2** | **+1.9** |
| | 0.1nm,0.3s,baz=115,slow=14,SNR=2.1 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **28.93** | **302** | P | **P** | **21 52 25.3** | **+2.1** |
| | 0.4nm,0.7s,baz=98,slow=8.9,SNR=1.5 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.29** | **302** | P | **P** | **21 54 41.9** | **+0.2** |
| | 0.5nm,0.7s,baz=75,slow=7.6,SNR=2.3 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.99** | **308** | P | **P** | **21 54 55.6** | **+0.6** |
| | 0.5nm,0.4s,baz=80,slow=8.1,SNR=1.1 | | | | | | |
| | 0.5nm,0.4s | | | | | | |

*NEIC **12** 21:46:40.4±0.8, 69.˚48N±0.˚02×144.˚25W±0.˚02, h5km±4km, Error ellipse: s-maj=3.4km s-min=0.8km az=192.0*
**AEIC 12 21:46:40.5±0.6, 69.˚47N±0.˚02×144.˚25W±0.˚06, h4km±6km, ML2.5, MLˌ4.0/50(NEIC), Error ellipse: s-maj=3.7km s-min=2.7km az=158.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **51** | Pg | Pg | 21 46 45.1 | -0.1 |
| C27K | | | | Sg | Sg | 21 46 48.3 | -0.1 |
| **C26K** | **Camden Bay** | **0.50** | **333** | Pg | Pg | 21 46 49.8 | -0.2 |
| C26K | | | | Sg | Sg | 21 46 56.7 | +0.1 |
| **C26K** | **Camden Bay** | **0.50** | **333** | IAML | | 21 46 58.2 | |
| | comp=N,608nm,0.2s | | | | | | |
| C26K | | | | IAML | | 21 46 58.8 | |
| | comp=E,532nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.77** | **260** | Pg | Pg | 21 46 54.8 | -0.3 |
| D25K | | | | Sg | Sg | 21 47 05.7 | +0.7 |
| **D27M** | **Malcolm River** | **1.19** | **100** | Pg | Pg | 21 47 03.2 | 0.0 |
| D27M | | | | Sn | Sn | 21 47 20.0 | -0.4 |
| **C24K** | **Franklin Bluff** | **1.58** | **281** | Pn | Pn | 21 47 09.0 | -0.1 |
| C24K | | | | Sb | Sb | 21 47 30.5 | +0.2 |
| **E27K** | **Coleen River** | **1.61** | **142** | Pn | Pn | 21 47 09.7 | 0.0 |
| E27K | | | | Sg | Sg | 21 47 32.0 | -0.2 |
| **D24K** | **Happy Valley** | **1.66** | **261** | Pn | Pn | 21 47 10.1 | -0.1 |
| **D24K** | **Happy Valley** | **1.66** | **261** | IAML | | 21 48 11.7 | |
| | comp=E,2μm,0.9s | | | | | | |
| D24K | | | | IAML | | 21 48 11.8 | |
| | comp=N,663nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.79** | **179** | Pn | Pn | 21 47 11.9 | -0.2 |
| **F26K** | **Sheenjek River** | **1.79** | **179** | IAML | | 21 48 14.0 | |
| | comp=N,2μm,0.8s | | | | | | |
| F26K | | | | IAML | | 21 48 18.1 | |
| | comp=E,1μm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.91** | **115** | Pn | Pn | 21 47 13.2 | -0.5 |
| **E28M** | **Babbage River** | **1.91** | **115** | IAML | | 21 48 15.3 | |
| | comp=N,727nm,0.6s | | | | | | |
| E28M | | | | IAML | | 21 48 15.3 | |
| | comp=E,1μm,0.7s | | | | | | |
| **D28M** | **Stokes Point** | **1.96** | **92** | Pn | Pn | 21 47 14.1 | -0.2 |
| **D28M** | **Stokes Point** | **1.96** | **92** | IAML | | 21 48 18.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| D28M | | | | IAML | | 21 48 23.6 | |
| | comp=N,1μm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.96** | **196** | Pn | Pn | 21 47 14.1 | -0.3 |
| **F25K** | **Christian Rive** | **1.96** | **196** | IAML | | 21 48 19.8 | |
| | comp=N,833nm,0.8s | | | | | | |
| F25K | | | | IAML | | 21 48 22.4 | |
| | comp=E,576nm,0.5s | | | | | | |
| **E24K** | **Your Creek** | **2.09** | **230** | Pn | Pn | 21 47 15.8 | -0.3 |
| E24K | | | | IAML | | 21 48 19.8 | |
| | comp=N,386nm,0.4s | | | | | | |
| E24K | | | | IAML | | 21 48 24.5 | |
| | comp=E,335nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.09** | **249** | Pn | Pn | 21 47 15.8 | -0.4 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **249** | IAML | | 21 48 25.5 | |
| | comp=N,504nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 21 48 35.2 | |
| | comp=E,588nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.42** | **236** | Pn | Pn | 21 47 21.4 | +0.7 |
| E23K | | | | IAML | | 21 48 24.3 | |
| | comp=E,484nm,0.9s | | | | | | |
| E23K | | | | IAML | | 21 48 30.3 | |
| | comp=N,474nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.47** | **137** | Pn | Pn | 21 47 21.2 | -0.1 |
| **F28M** | **Old Crow** | **2.47** | **137** | IAML | | 21 48 52.5 | |
| | comp=N,916nm,0.7s | | | | | | |
| F28M | | | | IAML | | 21 48 56.3 | |
| | comp=E,699nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **2.54** | **112** | Pn | Pn | 21 47 22.7 | +0.4 |
| E29M | | | | IAML | | 21 49 01.3 | |
| | comp=E,1μm,0.3s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.54** | **176** | Pn | Pn | 21 47 22.2 | -0.1 |
| **B22K** | **Teshekpuk Lake** | **3.28** | **290** | Pn | Pn | 21 47 32.2 | -0.3 |
| **G29M** | **Pine Creek** | **3.47** | **135** | Pn | Pn | 21 47 36.6 | +1.6 |
| **B21K** | **Ikpikpuk River** | **3.64** | **277** | Pn | Pn | 21 47 37.5 | +0.1 |
| **E21K** | **Killik River** | **3.66** | **258** | Pn | Pn | 21 47 37.5 | -0.2 |
| **H24K** | **Noodor Dome** | **3.91** | **202** | Pn | Pn | 21 47 42.0 | +0.8 |
| H24K | | | | IAML | | 21 49 48.6 | |
| | comp=E,440nm,0.8s | | | | | | |
| H24K | | | | IAML | | 21 49 49.6 | |
| | comp=N,398nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.10** | **241** | Pn | Pn | 21 47 44.4 | +0.6 |
| **I28M** | **Miner Creek** | **4.37** | **156** | Pn | Pn | 21 47 49.5 | +2.0 |
| **B20K** | **Meade River** | **4.52** | **283** | Pn | Pn | 21 47 49.5 | 0.0 |
| **MDM** | **Murphy Dome** | **4.79** | **201** | Pn | Pn | 21 47 53.5 | +0.3 |

*IDC **12** 21:47:39.2±0.6, 69.˚64N×144.˚17W, h0km, mb4.0/19, mbtmp4.0/23, ML4.5/4, Error ellipse: s-maj=14.7km s-min=11.1km az=46.0*
*NEIC **12** 21:47:39.8±1.3, 69.˚56N±0.˚04×144.˚21W±0.˚09, h10km±1km, Error ellipse: s-maj=7.6km s-min=4.4km az=211.0*
*AEIC **12** 21:47:39.0±2.1, 69.˚45N±0.˚04×144.˚19W±0.˚06, h4km±4km, ML4.3, mb4.7/43(NEIC), ML4.5/118(NEIC), Error ellipse: s-maj=6.1km s-min=3.0km az=193.0*
**ISC 12 21:47:38.8±1.2, 69.˚53N±0.˚04×144.˚20W±0.˚03, h2km±8km, n215, σ0°84/221, mb4.5/43, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.20** | **60** | Pg | **Pg** | **21 47 43.9** | **+1.3** |
| C27K | | | | | **Sg** | **21 47 46.8** | **+1.7** |
| C27K | | | | IAML | | 21 47 47.3 | |
| | comp=N,94μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.46** | **328** | | **Pb** | **21 47 49.0** | **-0.6** |
| C26K | | | | | **Sb** | **21 47 55.9** | **-1.1** |
| C26K | | | | IAML | | 21 48 02.7 | |
| | comp=E,21μm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **0.80** | **256** | | **Pg** | **21 47 53.0** | **-1.0** |
| **D25K** | **Kavik River** | **0.80** | **256** | | **Sg** | **21 48 04.9** | **+0.5** |
| **D25K** | **Kavik River** | **0.80** | **256** | IAML | | 21 48 06.0 | |
| | comp=E,5μm,0.6s | | | | | | |
| D25K | | | | IAML | | 21 48 07.3 | |
| | comp=N,5μm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.18** | **103** | Pn | **Pg** | **21 48 00.6** | **-0.8** |
| **C24K** | **Franklin Bluff** | **1.59** | **279** | | **Pn** | **21 48 07.5** | **-0.4** |
| C24K | | | | Sn | **Sn** | **21 48 28.1** | **-0.8** |
| **E27K** | **Coleen River** | **1.65** | **144** | Pn | **Pn** | **21 48 09.2** | **+0.5** |
| E27K | | | | | **Sn** | **21 48 30.9** | **+0.4** |
| E27K | | | | IAML | | 21 48 33.6 | |
| | comp=N,5μm,0.6s | | | | | | |
| E27K | | | | IAML | | 21 48 33.7 | |
| | comp=E,6μm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.69** | **259** | | **Pb** | **21 48 10.4** | **-0.1** |
| D24K | | | | | **Sb** | **21 48 32.8** | **+0.7** |
| D24K | | | | IAML | | 21 48 35.6 | |
| | comp=N,3μm,0.4s | | | | | | |
| D24K | | | | IAML | | 21 48 36.2 | |
| | comp=E,5μm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **179** | | **Pn** | **21 48 12.1** | **+0.6** |
| F26K | | | | IAML | | 21 48 40.1 | |
| | comp=E,5μm,1.1s | | | | | | |
| F26K | | | | IAML | | 21 48 43.1 | |
| | comp=N,3μm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.91** | **117** | Pn | **Pn** | **21 48 13.7** | **+1.3** |
| E28M | | | | IAML | | 21 48 46.3 | |
| | comp=N,4μm,0.8s | | | | | | |
| E28M | | | | IAML | | 21 48 49.6 | |
| | comp=E,3μm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **1.94** | **93** | | **Pb** | **21 48 14.1** | **-0.7** |
| D28M | | | | IAML | | 21 48 45.3 | |
| | comp=E,5μm,0.9s | | | | | | |
| D28M | | | | IAML | | 21 48 53.3 | |
| | comp=N,6μm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **196** | | **Pn** | **21 48 14.9** | **+1.0** |
| F25K | | | | IAML | | 21 48 44.0 | |
| | comp=E,5μm,0.8s | | | | | | |
| F25K | | | | IAML | | 21 48 44.9 | |
| | comp=N,4μm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.11** | **184** | Pn | **Pn** | **21 48 15.7** | **+0.5** |
| **TOLK** | **Toolik Lake Re** | **2.13** | **248** | | **Pn** | **21 48 15.6** | **+0.3** |
| TOLK | | | | IAML | | 21 48 49.2 | |
| | comp=E,4μm,1.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.13** | **248** | | **Sn** | **21 48 42.0** | **-0.3** |
| **E24K** | **Your Creek** | **2.14** | **229** | | **Pn** | **21 48 16.9** | **+1.3** |
| E24K | | | | IAML | | 21 48 51.5 | |
| | comp=N,3μm,1.0s | | | | | | |
| **C23K** | **Itkillik River** | **2.26** | **281** | | **Pn** | **21 48 17.1** | **0.0** |
| C23K | | | | IAML | | 21 49 04.3 | |
| | comp=N,3μm,1.1s | | | | | | |
| C23K | | | | IAML | | 21 49 07.5 | |
| | comp=E,3μm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.38** | **259** | | **Pn** | **21 48 18.5** | **-0.2** |
| **F24K** | **Squaw Lake** | **2.43** | **216** | Pn | **Pn** | **21 48 20.0** | **+0.4** |
| F24K | | | | IAML | | 21 49 01.1 | |
| | comp=E,2μm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.46** | **236** | | **Pn** | **21 48 21.1** | **+1.1** |
| E23K | | | | IAML | | 21 48 58.4 | |
| | comp=N,2μm,0.8s | | | | | | |
| E23K | | | | IAML | | 21 49 02.5 | |
| | comp=E,2μm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.49** | **138** | | **Pn** | **21 48 20.8** | **+0.4** |
| F28M | | | | IAML | | 21 49 02.0 | |
| | comp=E,3μm,1.1s | | | | | | |
| **E29M** | **Blow River** | **2.54** | **114** | | **Pn** | **21 48 20.7** | **-0.3** |
| E29M | | | | IAML | | 21 49 05.3 | |
| | comp=E,3μm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.59** | **176** | | **Pn** | **21 48 21.2** | **-0.5** |
| **G25K** | **Bearman Lake** | **2.87** | **195** | | **Pn** | **21 48 25.1** | **-0.4** |
| **G27K** | **Doyon Strip** | **2.89** | **160** | | **Pn** | **21 48 26.1** | **+0.2** |
| **FYU** | **Fort Yukon** | **3.00** | **188** | | **Pn** | **21 48 28.0** | **+0.7** |
| **G24K** | **Hadweenzic Riv** | **3.10** | **205** | | **Pn** | **21 48 29.2** | **+0.6** |
| G24K | | | | IAML | | 21 49 23.7 | |
| | comp=E,2μm,1.3s | | | | | | |
| **D22K** | **Ayikyak River** | **3.10** | **262** | | **Pn** | **21 48 28.9** | **+0.2** |
| D22K | | | | IAML | | 21 49 26.1 | |
| | comp=N,1μm,0.8s | | | | | | |
| D22K | | | | IAML | | 21 49 26.2 | |
| | comp=E,1μm,0.7s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.28** | **289** | | **Pn** | **21 48 31.9** | **+0.8** |
| **H25L** | **Birch Creek** | **3.33** | **191** | | **Pn** | **21 48 30.9** | **-1.0** |
| **H27K** | **Steamboat Moun** | **3.46** | **162** | | **Pn** | **21 48 32.7** | **-1.0** |
| **G29M** | **Pine Creek** | **3.49** | **136** | | **Pn** | **21 48 34.8** | **+0.7** |
| **G23K** | **Bananza Creek** | **3.57** | **220** | Pn | **Pn** | **21 48 36.2** | **+1.0** |
| G23K | | | | IAML | | 21 49 36.7 | |
| | comp=E,1μm,1.6s | | | | | | |
| G23K | | | | IAML | | 21 49 38.0 | |
| | comp=N,1μm,1.8s | | | | | | |
| **F30M** | **Barrier River** | **3.64** | **118** | | **Pn** | **21 48 35.5** | **-0.6** |
| **B21K** | **Ikpikpuk River** | **3.65** | **276** | | **Pn** | **21 48 35.9** | **-0.4** |
| B21K | | | | IAML | | 21 49 45.6 | |
| | comp=N,648nm,1.0s | | | | | | |
| B21K | | | | IAML | | 21 49 55.7 | |
| | comp=E,715nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.69** | **257** | | **Pn** | **21 48 36.2** | **-0.5** |
| E21K | | | | IAML | | 21 49 46.8 | |
| | comp=E,615nm,0.8s | | | | | | |
| E21K | | | | IAML | | 21 49 50.8 | |
| | comp=N,743nm,1.0s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.92** | **127** | | **Pn** | **21 48 40.0** | **+0.1** |
| G30M | | | | IAML | | 21 49 54.5 | |
| | comp=E,523nm,0.7s | | | | | | |
| G30M | | | | IAML | | 21 49 55.0 | |
| | comp=N,654nm,0.8s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.94** | **297** | | **Pn** | **21 48 40.6** | **+0.4** |
| **H24K** | **Noodor Dome** | **3.96** | **202** | | **Pn** | **21 48 41.0** | **+0.4** |
| H24K | | | | IAML | | 21 49 52.0 | |
| | comp=E,492nm,1.3s | | | | | | |
| **H29M** | **Whitestone** | **3.99** | **144** | | **Pn** | **21 48 42.0** | **+1.2** |
| **INK** | **Inuvik** | **4.04** | **103** | Pn | **Pn** | **21 48 42.8** | **+1.2** |
| **INK** | **Inuvik** | **4.04** | **103** | Pn | **Pn** | **21 48 43.1** | **+1.5** |
| | comp=E,18nm,0.3s,baz=304,slow=9.2,SNR=12 | | | | | | |
| INK | | | | Sn | **Sn** | **21 49 27.1** | **-2.4** |
| | comp=E,14nm,0.3s,baz=324,slow=14,SNR=3.1 | | | | | | |
| INK | | | | Lg | Lg | 21 49 48.2 | |
| | comp=E,18nm,0.3s,baz=198,slow=20,SNR=2.1 | | | | | | |
| | comp=E,53nm,0.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **188** | Pn | **Pn** | **21 48 42.4** | **+0.4** |
| PRP | | | | IAML | | 21 49 47.8 | |
| | comp=N,451nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.07** | **165** | | **Pn** | **21 48 41.2** | **-0.8** |
| **F21K** | **Alatna River** | **4.14** | **240** | | **Pn** | **21 48 43.5** | **+0.5** |
| F21K | | | | IAML | | 21 49 56.6 | |
| | comp=N,564nm,1.2s | | | | | | |
| F21K | | | | IAML | | 21 49 57.4 | |
| | comp=E,533nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.24** | **211** | | **Pn** | **21 48 44.7** | **+0.3** |
| H23K | | | | IAML | | 21 49 55.1 | |
| | comp=E,486nm,0.7s | | | | | | |
| H23K | | | | IAML | | 21 50 02.1 | |
| | comp=N,638nm,1.1s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.24** | **135** | | **Pn** | **21 48 45.3** | **+0.9** |
| **I26K** | **Coal Creek Min** | **4.26** | **174** | | **Pn** | **21 48 45.2** | **+0.6** |
| **I28M** | **Miner Creek** | **4.41** | **156** | | **Pn** | **21 48 48.0** | **+1.2** |
| I28M | | | | IAML | | 21 50 04.0 | |
| | comp=E,488nm,1.4s | | | | | | |
| **D20K** | **Etivluk River** | **4.52** | **265** | | **Pn** | **21 48 48.3** | **+0.1** |
| **E20K** | **Nigu River** | **4.52** | **259** | | **Pn** | **21 48 48.3** | **+0.1** |
| **B20K** | **Meade River** | **4.53** | **282** | | **Pn** | **21 48 48.5** | **+0.3** |
| B20K | | | | IAML | | 21 50 23.4 | |
| | comp=N,502nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.53** | **121** | | **Pn** | **21 48 48.5** | **+0.2** |
| **A21K** | **Barrow** | **4.55** | **299** | | **Pn** | **21 48 48.8** | **+0.3** |
| **H22K** | **Ishtalitna Cre** | **4.56** | **220** | | **Pn** | **21 48 48.1** | **-0.6** |
| **POKR** | **Poker Plat Res** | **4.61** | **197** | Pn | **Pn** | **21 48 50.2** | **+0.9** |
| POKR | | | | IAML | | 21 50 15.4 | |
| | comp=N,394nm,0.9s | | | | | | |
| POKR | | | | IAML | | 21 50 18.2 | |
| | comp=E,425nm,1.4s | | | | | | |
| **G21K** | **Allakaket** | **4.62** | **234** | | **Pn** | **21 48 50.1** | **+0.5** |
| **I29M** | **Ogilvie Camp,** | **4.76** | **149** | | **Pn** | **21 48 51.9** | **+0.4** |
| I29M | | | | IAML | | 21 50 16.0 | |
| | comp=N,405nm,0.9s | | | | | | |
| I29M | | | | IAML | | 21 50 18.9 | |
| | comp=E,445nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83** | **207** | | **Pn** | **21 48 52.9** | **+0.5** |
| I23K | | | | IAML | | 21 50 17.4 | |
| | comp=E,375nm,1.4s | | | | | | |
| I23K | | | | IAML | | 21 50 23.7 | |
| | comp=N,338nm,1.9s | | | | | | |
| **MDM** | **Murphy Dome** | **4.85** | **201** | | **Pn** | **21 48 53.5** | **+0.7** |
| MDM | | | | IAML | | 21 50 19.8 | |
| | comp=E,286nm,1.0s | | | | | | |
| MDM | | | | IAML | | 21 50 28.6 | |
| | comp=N,238nm,1.0s | | | | | | |
| **COLA** | **College** | **4.89** | **199** | | **Pn** | **21 48 53.8** | **+0.6** |
| **IL31** | | **4.89** | **194** | | **Pn** | **21 48 53.7** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.89** | **194** | | **Pn** | **21 48 53.5** | **+0.2** |
| **ILAR** | **Eielson Array** | **4.89** | **194** | Pn | **Pn** | **21 48 53.8** | **+0.5** |
| | comp=N,16nm,0.3s,baz=6.7,slow=14,SNR=22 | | | | | | |
| ILAR | | | | Sn | **Sn** | **21 49 50.6** | **+0.2** |
| | comp=N,19nm,0.3s,baz=11,slow=24,SNR=6.2 | | | | | | |
| ILAR | | | | Lg | Lg | 21 50 09.7 | |
| | comp=N,33nm,0.3s,baz=12,slow=31,SNR=6.3 | | | | | | |
| | comp=N,50nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **4.92** | **165** | | **Pn** | **21 48 54.0** | **+0.4** |
| EGAK | | | | IAML | | 21 49 52.9 | |
| | comp=N,279nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 21 50 29.9 | |
| | comp=N,359nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.95** | **245** | | **Pn** | **21 48 54.9** | **+0.9** |
| F20K | | | | IAML | | 21 50 43.4 | |
| | comp=N,281nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **186** | | **Pn** | **21 48 54.9** | **+0.7** |
| J25K | | | | IAML | | 21 50 26.9 | |
| | comp=E,290nm,1.2s | | | | | | |
| **J26L** | **Joseph Creek** | **5.06** | **177** | | **Pn** | **21 48 56.7** | **+1.0** |
| J26L | | | | IAML | | 21 50 24.1 | |
| | comp=E,226nm,1.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.09** | **224** | Pn | **Pn** | **21 48 56.5** | **

L27K Beaver Creek, 6.56 171 Pn Pn 21 49 17.2 +1.0
G18K Tagagawik 6.59 243 Pn 21 49 16.4 -0.1
DHY Denali Highway 6.61 193 Pn 21 49 18.9 +2.0
J20K Nowinta River 6.64 221 Pn 21 49 16.9 -0.4
A36M Sachs Harbour 6.72 60 Pn 21 49 17.6 -0.7
L29M L29M 6.89 156 Pn 21 49 20.2 -0.5
C17K DeLong Mountai 6.89 270 Pn 21 49 20.1 -0.6
RDOG Red Dog Mine 6.94 267 Pn 21 49 20.8 -0.5
E17K Hotham Inlet 6.97 258 Pn 21 49 21.3 -0.5
H18K Honhosa River 7.00 238 Pn 21 49 22.4 +0.1
C36M Paulatuk 7.08 82 Pn 21 49 21.7 -1.6
WAT6 Susitna Watana 7.12 193 Pn 21 49 22.8 -1.2
D17K Noatak River 7.13 264 Pn 21 49 22.9 -1.1
J19K Poorman 7.15 225 Pn 21 49 23.7 -0.6
M27K Edge Creek, AK 7.26 171 Pn 21 49 26.0 +0.1
K20K Telida 7.34 217 Pn 21 49 26.0 -0.8
G17K Kiwalik Mounta 7.48 245 Pn 21 49 28.5 -0.2
M29M Somme Creek 7.49 159 Pn 21 49 29.4 +0.5
WACK Wrangell Chich 7.58 180 Pn 21 49 29.4 -0.9
H17K Granite Mounta 7.62 240 Pn 21 49 30.1 -0.7
C16K Lisburne Hills 7.72 271 Pn 21 49 31.0 -1.0
SCM Sheep Creek Mo 7.83 191 Pn 21 49 33.7 0.0
SML Sawmill 7.94 194 Pn 21 49 34.9 -0.2
GHO Glory Hole Cre 8.03 196 Pn 21 49 35.4 -1.0
G16K Koyuk River 8.10 248 Pn 21 49 36.8 -0.4
MCARA McCarthy VSAT 8.19 176 Pn 21 49 39.7 +1.1
J17K VABM Dome 8.54 231 Pn 21 49 42.5 -0.7
N30M Aishikik Lake 8.62 157 Pn 21 49 44.0 -0.4
F15K North Star Dit 8.67 254 Pn 21 49 44.5 -0.5
L18K Granite Mounta 8.92 221 Pn 21 49 47.8 -0.7
SNH Sunshine Point 9.40 176 Pn Pn 21 49 57.1 +1.9
N32M Quiet Lake 9.59 146 Pn Pn 21 49 57.0 -0.6
PCA Pinnacle 9.62 168 Pn Pn 21 49 59.5 +1.4
J14K Nanvaranak Lak 10.33 238 Pn Pn 21 50 07.0 -0.8
WRGLY Wrigley 10.40 117 Pn Pn 21 50 08.3 -0.3
M16K Timber Creek 10.50 223 Pn Pn 21 50 09.4 -0.8
P33M Teslin, Yukon 10.50 147 Pn Pn 21 50 10.6 +0.3
P32M Atlin 10.92 151 Pn Pn 21 50 16.2 +0.2
K13K Kusilvak Mount 11.29 238 Pn Pn 21 50 20.4 -0.5
Q32M Nakina River 11.77 148 Pn Pn 21 50 28.1 +0.3
R32K Eaglecrest 12.05 155 Pn Pn 21 50 32.4 +1.1
S31K Pelican 12.12 159 Pn Pn 21 50 34.1 +1.9
DLBC Dease Lake 12.70 144 Pn Pn 21 50 40.0 -0.2
DLBC Dease Lake 12.70 144 Pn Pn 21 50 39.5 -0.7
comp=E,1.3nm,0.3s,baz=312,slow=14,SNR=7.9
comp=E,3.8nm,0.4s
S32K Killisnoo 12.82 156 Pn Pn 21 50 42.3 +0.6
YKA Yellowknife Ar 13.81 106 Pn Pn 21 50 51.3 -3.9
comp=E,2.3nm,0.3s,baz=299,slow=19,SNR=9.6
YKA Sn Sn 21 53 15.5 -13
comp=E,1.7nm,0.3s,baz=318,slow=22,SNR=5.4
comp=E,5.5nm,0.5s
EUNU Eureka 17.36 30 Pn Pn 21 51 41.0 -0.8
FFC Flin Flon 23.99 107 P P 21 52 54.7 +0.4
FFC IAmb IAmb 21 53 01.4
comp=E,13nm,1.1s
BPMT Black Pine Rid 27.72 131 P P 21 53 28.2 -0.2
KBS Kingsbay 31.11 9 P P 21 53 56.4 -1.5
KBS IAmb IAmb 21 54 12.3
comp=E,13nm,1.2s
SPITS Spitsbergen Ar 32.05 7 P P 21 54 06.2 0.0
comp=E,1.1nm,0.5s,baz=359,slow=12,SNR=4.3
comp=E,1.1nm,0.5s
PDAR Pinedale Array 32.17 128 P P 21 54 08.3 +0.4
PDAR Pinedale Array 32.17 128 P P 21 54 08.9 +1.1
comp=E,1.4nm,0.7s,baz=12,slow=5.6,SNR=7.8
comp=E,1.4nm,0.7s
NVAR Mina Array Bea 34.11 142 P P 21 54 26.8 +2.0
comp=E,1.1nm,0.9s,baz=350,slow=5.8,SNR=5.1
comp=E,1.1nm,0.9s
SCHQ Schefferville 36.10 73 P P 21 54 40.6 -0.9
comp=E,7.3nm,0.8s,baz=295,slow=12,SNR=3.7
comp=E,7.3nm,0.8s
ARCES ARCESS Array B 41.02 5 P P 21 55 22.3 -0.3
ARCES ARCESS Array B 41.02 5 P P 21 55 21.8 -0.8
comp=E,1.5nm,0.7s,baz=345,slow=6.5,SNR=3.7
comp=E,1.5nm,0.7s
DELO Deloro Mine 41.05 92 P P 21 55 23.2 0.0
DELO IAmb IAmb 21 55 24.0
comp=E,8.3nm,0.9s
WBO Williamsburg 41.46 89 P P 21 55 26.4 -0.1
LONY Lake Ozonia 42.03 89 P P 21 55 30.3 -0.9
M53A WI Miller and 42.68 97 P P 21 55 36.3 -0.3
M53A IAmb IAmb 21 55 39.1
comp=E,27nm,1.4s
BATG Bathurst New B 42.71 79 P P 21 55 36.9 +0.2
NCB Newcomb 42.72 89 P P 21 55 36.0 -0.8
K57A Scipio Center 43.00 92 P P 21 55 38.7 -0.4
F63A Nahmakanta, Br 43.01 83 P P 21 55 38.9 -0.3
F63A IAmb IAmb 21 55 56.7
comp=E,14nm,1.4s
KLR Kul'dur 43.05 287 P P 21 55 39.1 -0.3
comp=E,1.7nm,0.8s,baz=45,slow=11,SNR=4.7
comp=E,1.7nm,0.8s
S44A Carbondale 43.09 108 P P 21 55 40.8 +0.9
S44A IAmb IAmb 21 55 47.0
comp=E,13nm,1.2s
F64A Sherman 43.14 82 P P 21 55 39.6 -0.5
F64A IAmb IAmb 21 55 51.7
comp=E,16nm,1.5s
BINY Binghamton 43.66 92 P P 21 55 43.8 -0.6
BINY IAmb IAmb 21 55 57.4
comp=E,26nm,1.4s
G65A Princeton 43.99 82 P P 21 55 46.9 -0.1
G65A IAmb IAmb 21 56 04.1
comp=E,12nm,1.2s
GGN Saint George 44.31 81 P P 21 55 49.5 -0.1
GGN IAmb IAmb 21 56 04.2
comp=E,9.3nm,1.2s
SSPA Standing Stone 44.37 95 P P 21 55 49.4 -0.7
EMMW East Machias 44.45 82 P P 21 55 49.9 -0.8
EMMW IAmb IAmb 21 55 51.4
comp=E,15nm,1.1s
N58A Sunbury 44.60 93 P P 21 55 51.3 -0.7
N58A IAmb IAmb 21 55 53.1
comp=E,13nm,1.1s
WVT Waverly 44.99 108 P P 21 55 54.7 -0.4
WVT IAmb IAmb 21 55 55.9
comp=E,6.6nm,0.6s
U49A Red Boiling Sp 45.33 105 P P 21 55 57.7 -0.2
U49A IAmb IAmb 21 56 05.4
comp=E,12nm,1.4s
UCCT U. Connecticut 45.34 89 P P 21 55 58.7 +0.9
CLTN Cedars of Leba 45.53 106 P P 21 55 59.2 -0.2
CLTN IAmb IAmb 21 56 00.1
comp=E,5.2nm,0.7s
R55A Marlinton 45.69 98 P P 21 56 00.6 -0.1
R55A IAmb IAmb 21 56 10.7
comp=E,13nm,1.2s
TZTN Tazewell 46.06 103 P P 21 56 03.2 -0.5
TX31 Lajitas Ar. Si 46.39 128 P P 21 56 05.7 -0.7
TXAR Lajitas Array 46.39 128 P P 21 56 07.0 +0.6
TXAR Lajitas Array 46.39 128 P P 21 56 06.1 -0.3
comp=E,0.4nm,0.6s,baz=338,slow=6.8,SNR=4.2
comp=E,0.4nm,0.6s
Y45A Yeager Farm, C 46.48 111 P P 21 56 06.3 -0.6
V53A Saluda 47.11 103 P P 21 56 11.5 -0.4
FPAL Fort Paine 47.18 106 P P 21 56 11.8 -0.7
USRK Ussuriysk Ar. 47.34 284 P P 21 56 12.2 -1.4
comp=E,3.4nm,1.0s,baz=33,slow=8.6,SNR=6.0
comp=E,3.4nm,1.0s
Y49A Blount Mountai 47.53 107 P P 21 56 14.8 -0.4
LRAL Lakeview Retre 48.09 108 P P 21 56 19.4 -0.1
LRAL IAmb IAmb 21 56 25.3
comp=E,11nm,1.4s
HODGE Hodges 48.60 103 P P 21 56 22.8 -0.7
JSC Jenkinsville 48.90 102 P P 21 56 25.2 -0.5
JSC IAmb IAmb 21 56 38.7
comp=E,8.2nm,1.1s
GOGA Godfrey 48.94 105 P P 21 56 25.6 -0.3
GOGA IAmb IAmb 21 56 26.5
comp=E,6.8nm,0.8s
FIA1 FINESS Array S 49.13 6 P P 21 56 27.1 0.0
FINES FINESS Array B 49.13 6 P P 21 56 27.5 +0.3
comp=E,2.7nm,0.9s,baz=10,slow=8.5,SNR=11
comp=E,2.7nm,0.9s
HFS Hagfors 49.66 14 P P 21 56 31.6 +0.4
comp=E,1.3nm,0.4s,baz=356,slow=4.6,SNR=10
comp=E,1.3nm,0.4s
255A Hazlehurst 50.63 104 P P 21 56 38.9 0.0
ZALV Zalesovo Beam 51.78 325 P P 21 56 48.2 +0.9
comp=E,1.1nm,0.5s,baz=19,slow=7.5,SNR=6.0
comp=E,1.1nm,0.5s
MJAR Matsushiro Arr 51.99 273 P P 21 56 51.0 +1.9
comp=E,2.1nm,0.8s,baz=14,slow=7.6,SNR=8.0
comp=E,2.1nm,0.8s
EKB Eskdalemuir 52.27 27 P P 21 56 50.3 -0.6
EKA Eskdalemuir Ar 52.27 27 P P 21 56 50.2 -0.7
comp=E,2.0nm,0.9s,baz=335,slow=6.2,SNR=5.6
comp=E,2.0nm,0.9s
KSRS Korea Array 54.75 283 P P 21 57 11.1 +1.8
comp=E,1.5nm,0.9s,baz=21,slow=7.8,SNR=4.4
comp=E,1.5nm,0.9s
KURBB Kurchatov Arra 56.15 329 P P 21 57 18.6 -0.7
comp=E,0.4nm,0.3s,baz=15,slow=7.0,SNR=6.0
comp=E,0.4nm,0.3s
HHC Hu-ho-hao-te 57.03 299 eP P 21 57 27.3 +1.6
HHC pP sP 21 57 31.6 +4.8
HHC pmax pmax
comp=E,16nm,0.6s
CLL Collm 58.32 17 i P P 21 57 37.2 +2.6
MKAR Makanchi Array 59.09 324 P P 21 57 39.4 -0.6
comp=E,0.6nm,0.7s,baz=27,slow=7.1,SNR=6.3
comp=E,0.6nm,0.7s
MAKZ Makanchi 59.14 325 P P 21 57 40.3 -0.1
AKASG Malin Array Be 59.99 5 P P 21 57 47.4 +1.3
comp=E,3.1nm,0.6s,baz=358,slow=7.1,SNR=8.3
comp=E,3.1nm,0.6s
AKBB Malin Array Si 59.99 5 P P 21 57 47.2 +1.1
AKBB IAmb IAmb 21 57 49.7
comp=E,3.7nm,0.8s
KIEV Kiev 59.99 5 P P 21 57 47.2 +1.1
KIEV IAmb IAmb 21 57 49.7
comp=E,3.3nm,0.8s
ABKAR Akbulak array 60.21 342 P P 21 57 47.1 -0.6
NJ2 Nanjing 62.73 288 i P P 21 58 04.8 -0.1
NJ2 pmax pmax
comp=E,6.0nm,0.5s
ESDC Sonseca Array 67.26 32 P P 21 58 34.7 +0.3
comp=E,0.6nm,0.8s,baz=342,slow=6.6,SNR=3.8
comp=E,0.6nm,0.8s
BRTR Keskin Array B 71.05 2 P P 21 58 57.2 -0.7
comp=E,0.7nm,0.8s,baz=359,slow=4.3,SNR=2.6
comp=E,0.7nm,0.8s
PZH PanZhiHua 73.33 301 P P 21 59 12.0 +0.3
PZH pmax pmax
comp=E,10.0nm,0.7s
QSPA South Pole Qui 159.38 180 PKPab PKPab 22 08 15.3 +0.5
comp=E,1.1nm,0.9s,baz=62,slow=6.1,SNR=2.1

*IDC **12** 21:49:29.1±0.8, 69°.76N×144°.08W, h0km, mb3.8/11, mbtmp3.9/15, ML4.3/2, Error ellipse: s-maj=23.1km s-min=13.2km az=47.0*
*AEIC **12** 21:49:29.4±1.3, 69°.47N±0°.03×144°.12W±0°.07, h2km±2km, ML4.1, mb4.4/6(NEIC), ML4.3/62(NEIC), Error ellipse: s-maj=4.6km s-min=3.8km az=175.0*
*NEIC **12** 21:49:29.7±1.3, 69°.51N±0°.05×144°.10W±0°.06, h10km±1km, Error ellipse: s-maj=7.8km s-min=3.6km az=1.0*
**ISC 12 21:49:29.6±1.1, 69°.50N±0°.04×144°.07W±0°.03, h7km±7km, n126, σ1§06/112, mb3.9/15, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.18 | 44 | | Pg | Pg | 21 49 33.5 | +0.2 |
| C27K | | | | | Sg | Sg | 21 49 36.5 | +0.7 |
| C27K | Jago River | 0.18 | 44 | IAML | | | 21 49 36.8 | |
| | comp=E,46μm,0.6s | | | | | | | |
| C27K | | | | IAML | | | 21 49 37.2 | |
| | comp=N,36μm,0.6s | | | | | | | |
| C26K | Camden Bay | 0.52 | 326 | | Pg | Pg | 21 49 39.4 | -0.2 |
| C26K | | | | | Sg | Sg | 21 49 47.3 | +1.0 |
| C26K | Camden Bay | 0.52 | 326 | IAML | | | 21 49 48.9 | |
| | comp=N,18μm,0.3s | | | | | | | |
| C26K | | | | IAML | | | 21 49 49.0 | |
| | comp=E,20μm,0.4s | | | | | | | |
| D25K | Kavik River | 0.83 | 259 | | Pg | Pg | 21 49 44.1 | -1.5 |
| D27M | Malcolm River | 1.13 | 102 | | Pg | Pg | 21 49 51.2 | 0.0 |
| D27M | | | | | Sn | Sn | 21 50 07.8 | +0.2 |
| E27K | Coleen River | 1.59 | 144 | | Pn | Pn | 21 49 58.2 | 0.0 |
| E27K | | | | | Sn | Sn | 21 50 19.8 | +0.8 |
| E27K | Coleen River | 1.59 | 144 | IAML | | | 21 50 22.5 | |
| | comp=N,3μm,0.6s | | | | | | | |
| E27K | | | | IAML | | | 21 50 25.1 | |
| | comp=E,3μm,0.7s | | | | | | | |
| C24K | Franklin Bluff | 1.64 | 280 | | Pn | Pn | 21 49 58.6 | -0.1 |
| C24K | | | | | Sb | Sb | 21 50 20.9 | +0.1 |
| C24K | Franklin Bluff | 1.64 | 280 | IAML | | | 21 50 21.4 | |
| | comp=N,3μm,0.9s | | | | | | | |
| C24K | | | | IAML | | | 21 50 29.4 | |
| | comp=E,3μm,1.1s | | | | | | | |
| D24K | Happy Valley | 1.72 | 261 | | Pn | Pn | 21 49 60.0 | +0.1 |
| D24K | | | | | Sn | Sn | 21 50 22.7 | +0.6 |
| D24K | Happy Valley | 1.72 | 261 | IAML | | | 21 50 25.9 | |
| | comp=E,4μm,0.7s | | | | | | | |
| F26K | Sheenjek River | 1.81 | 181 | | Pn | Pn | 21 50 00.8 | -0.4 |
| F26K | | | | | Sn | Sn | 21 50 23.8 | -0.5 |
| F26K | Sheenjek River | 1.81 | 181 | IAML | | | 21 50 28.5 | |
| | comp=E,4μm,0.4s | | | | | | | |
| F26K | | | | IAML | | | 21 50 29.2 | |
| | comp=N,3μm,0.4s | | | | | | | |
| E28M | Babbage River | 1.86 | 117 | | Pn | Pn | 21 50 02.2 | +0.4 |
| E28M | Babbage River | 1.86 | 117 | IAML | | | 21 50 33.7 | |
| | comp=N,2μm,0.6s | | | | | | | |
| D28M | Stokes Point | 1.89 | 93 | | Pn | Pn | 21 50 01.9 | -0.3 |
| D28M | Stokes Point | 1.89 | 93 | IAML | | | 21 50 36.8 | |
| | comp=E,3μm,1.2s | | | | | | | |
| D28M | | | | IAML | | | 21 50 40.4 | |
| | comp=N,3μm,0.6s | | | | | | | |
| F25K | Christian Rive | 2.00 | 198 | | Pn | Pn | 21 50 03.7 | -0.1 |
| F25K | | | | | Sn | Sn | 21 50 29.2 | +0.2 |
| E24K | Your Creek | 2.15 | 230 | | Pn | Pn | 21 50 05.9 | 0.0 |
| E24K | Your Creek | 2.15 | 230 | IAML | | | 21 50 42.7 | |
| | comp=E,2μm,0.7s | | | | | | | |
| TOLK | Toolik Lake Re | 2.15 | 249 | | Pn | Pn | 21 50 06.3 | +0.4 |
| TOLK | Toolik Lake Re | 2.15 | 249 | IAML | | | 21 50 38.9 | |
| | comp=E,2μm,0.7s | | | | | | | |
| C23K | Itkillik River | 2.31 | 282 | | Pn | Pn | 21 50 08.6 | +0.6 |
| C23K | Itkillik River | 2.31 | 282 | IAML | | | 21 50 53.5 | |
| | comp=E,2μm,0.5s | | | | | | | |
| D23K | Nanushuk River | 2.42 | 260 | | Pn | Pn | 21 50 09.6 | +0.2 |
| D23K | Nanushuk River | 2.42 | 260 | IAML | | | 21 50 58.4 | |
| | comp=N,1μm,0.9s | | | | | | | |
| D23K | | | | IAML | | | 21 50 59.6 | |
| | comp=E,1μm,0.9s | | | | | | | |
| F24K | Squaw Lake | 2.43 | 217 | | Pn | Pn | 21 50 09.7 | 0.0 |
| F24K | Squaw Lake | 2.43 | 217 | IAML | | | 21 50 51.1 | |
| | comp=E,1μm,0.6s | | | | | | | |
| F28M | Old Crow | 2.44 | 139 | | Pn | Pn | 21 50 10.9 | +1.1 |
| F28M | Old Crow | 2.44 | 139 | IAML | | | 21 50 49.5 | |
| | comp=N,1μm,0.6s | | | | | | | |
| F28M | | | | IAML | | | 21 50 51.8 | |
| | comp=E,1μm,0.9s | | | | | | | |
| E23K | Chandalar | 2.48 | 237 | | Pn | Pn | 21 50 10.9 | +0.5 |
| E23K | Chandalar | 2.48 | 237 | IAML | | | 21 50 50.0 | |
| | comp=N,1μm,0.4s | | | | | | | |
| G26K | Porcupine Rive | 2.56 | 177 | | Pn | Pn | 21 50 12.0 | +0.6 |
| G25K | Bearman Lake | 2.85 | 196 | | Pn | Pn | 21 50 16.3 | +1.0 |
| G27K | Doyon Strip | 2.85 | 160 | | Pn | Pn | 21 50 15.8 | +0.4 |
| G24K | Hadweenzic Riv | 3.08 | 206 | | Pn | Pn | 21 50 18.3 | -0.3 |
| G24K | Hadweenzic Riv | 3.08 | 206 | IAML | | | 21 51 13.9 | |
| | comp=E,1μm,0.9s | | | | | | | |
| D22K | Ayikyak River | 3.14 | 263 | | Pn | Pn | 21 50 19.2 | -0.2 |
| D22K | Ayikyak River | 3.14 | 263 | IAML | | | 21 51 19.9 | |
| | comp=E,690nm,1.1s | | | | | | | |
| D22K | | | | IAML | | | 21 51 21.1 | |
| | comp=N,852nm,0.7s | | | | | | | |
| B22K | Teshekpuk Lake | 3.33 | 289 | | Pn | Pn | 21 50 22.0 | 0.0 |
| G29M | Pine Creek | 3.44 | 136 | | Pn | Pn | 21 50 23.7 | +0.2 |
| B21K | Ikpikpuk River | 3.70 | 277 | | Pn | Pn | 21 50 26.8 | -0.3 |
| B21K | Ikpikpuk River | 3.70 | 277 | IAML | | | 21 51 10.2 | |
| | comp=E,537nm,1.0s | | | | | | | |
| E21K | Killik River | 3.72 | 258 | | Pn | Pn | 21 50 27.7 | +0.2 |
| E21K | Killik River | 3.72 | 258 | IAML | | | 21 51 33.9 | |
| | comp=N,447nm,0.8s | | | | | | | |
| H24K | Noodor Dome | 3.95 | 203 | | Pn | Pn | 21 50 30.5 | -0.1 |
| H24K | Noodor Dome | 3.95 | 203 | IAML | | | 21 51 39.9 | |
| | comp=E,335nm,1.0s | | | | | | | |
| H24K | | | | IAML | | | 21 51 40.9 | |
| | comp=N,375nm,0.8s | | | | | | | |
| INK | Inuvik | 4.00 | 102 | Pn | Pn | Pn | 21 50 31.0 | -0.1 |
| | comp=N,56nm,0.7s,baz=140,slow=24,SNR=0.7 | | | | | | | |
| INK | | | | Sn | Sn | Sn | 21 51 13.5 | -4.6 |
| | comp=N,3.9nm,0.3s,baz=183,slow=31,SNR=0.7 | | | | | | | |
| INK | | | | Lg | Lg | Lg | 21 51 37.6 | |
| | comp=N,16nm,0.3s,baz=340,slow=26,SNR=2.3 | | | | | | | |
| A22K | Sinclair Lake | 4.00 | 297 | | Pn | Pn | 21 50 31.1 | 0.0 |
| EPYK | Eagle Plains | 4.19 | 135 | | Pn | Pn | 21 50 34.2 | +0.4 |
| D20K | Etivluk River | 4.56 | 266 | | Pn | Pn | 21 50 39.4 | +0.5 |
| H22K | Ishtalitna Cre | 4.56 | 221 | | Pn | Pn | 21 50 38.6 | -0.3 |
| B20K | Meade River | 4.58 | 283 | | Pn | Pn | 21 50 39.2 | +0.1 |
| A21K | Barrow | 4.60 | 299 | | Pn | Pn | 21 50 39.4 | 0.0 |
| I23K | Minto, Yukon-K | 4.82 | 208 | | Pn | Pn | 21 50 42.5 | +0.1 |
| I23K | Minto, Yukon-K | 4.82 | 208 | IAML | | | 21 52 10.6 | |
| | comp=N,276nm,1.0s | | | | | | | |
| ILAR | Eielson Array | 4.87 | 194 | Pn | Pn | Pn | 21 50 44.9 | +1.8 |
| | comp=N,27nm,0.5s,baz=3.0,slow=14,SNR=1.2 | | | | | | | |
| ILAR | | | | Sn | Sn | Sn | 21 51 39.2 | -0.5 |
| | comp=N,13nm,0.3s,baz=187,slow=22,SNR=1.9 | | | | | | | |
| ILAR | | | | Lg | Lg | Lg | 21 51 57.8 | |
| | comp=N,29nm,0.3s,baz=23,slow=29,SNR=5.0 | | | | | | | |
| D19K | Kuna River | 5.15 | 265 | | Pn | Pn | 21 50 46.7 | -0.3 |
| D19K | Kuna River | 5.15 | 265 | IAML | | | 21 51 46.0 | |
| | comp=E,127nm,0.4s | | | | | | | |
| MLY | Manley | 5.17 | 213 | | Pn | Pn | 21 50 47.2 | -0.2 |
| MLY | Manley | 5.17 | 213 | IAML | | | 21 52 18.0 | |
| | comp=N,122nm,1.9s | | | | | | | |
| C19K | Lookout Ridge | 5.52 | 273 | | Pn | Pn | 21 50 51.9 | -0.2 |
| C18K | Utukok River | 6.19 | 270 | | Pn | Pn | 21 51 00.7 | -0.6 |
| E19K | Tukpahlearik C | 6.43 | 259 | | Pn | Pn | 21 51 03.8 | -0.7 |
| F18K | Selawik | 6.52 | 251 | | Pn | Pn | 21 51 05.3 | -0.3 |
| C17K | DeLong Mountai | 6.94 | 271 | | Pn | Pn | 21 51 10.6 | -0.9 |
| F17K | Baldwin Pennin | 7.14 | 253 | | Pn | Pn | 21 51 13.8 | -0.4 |
| H17K | Granite Mounta | 7.65 | 241 | Pn | Pn | Pn | 21 51 20.1 | -1.1 |
| SCM | Sheep Creek Mo | 7.81 | 191 | Pn | Pn | Pn | 21 51 23.2 | -0.4 |
| G16K | Koyuk River | 8.12 | 248 | Pn | Pn | Pn | 21 51 26.6 | -1.1 |
| MCARA | McCarthy VSAT | 8.16 | 176 | Pn | Pn | Pn | 21 51 29.1 | +0.8 |
| VRDI | Verde Repeater | 8.31 | 178 | Pn | Pn | Pn | 21 51 29.8 | -0.7 |
| I17K | Unalakleet | 8.64 | 237 | Pn | Pn | Pn | 21 51 33.9 | -0.9 |
| M19K | Big River Lodg | 8.71 | 214 | Pn | Pn | Pn | 21 51 35.2 | -0.6 |
| GLI | Glacier Island | 8.74 | 190 | Pn | Pn | Pn | 21 51 36.2 | 0.0 |
| CRQM | Cirque | 8.79 | 177 | Pn | Pn | Pn | 21 51 37.2 | +0.2 |
| TGL | Tana Glacier | 8.79 | 176 | Pn | Pn | Pn | 21 51 35.5 | -1.5 |
| L18K | Granite Mounta | 8.93 | 221 | | Pn | Pn | 21 51 38.3 | -0.4 |
| ISLE | Juniper Island | 8.96 | 175 | Pn | Pn | Pn | 21 51 37.4 | -2.0 |
| WAX | Waxell Ridge | 9.10 | 176 | | Pn | Pn | 21 51 41.3 | +0.1 |
| TABL | Table Mountain | 9.18 | 171 | Pn | Pn | Pn | 21 51 41.8 | -0.6 |
| SNH | Sunshine Point | 9.37 | 176 | Pn | Pn | Pn | 21 51 45.4 | +0.6 |
| L17K | Donlin | 9.39 | 225 | | Pn | Pn | 21 51 44.2 | -0.8 |
| MESA | MESA | 9.40 | 173 | Pn | Pn | Pn | 21 51 45.3 | -0.1 |
| N32M | Quiet Lake | 9.53 | 146 | Pn | Pn | Pn | 21 51 42.5 | -4.7 |
| N19K | Bonanza Creek | 9.74 | 212 | Pn | Pn | Pn | 21 51 49.0 | -0.9 |
| M17K | Holitna River | 9.82 | 221 | Pn | Pn | Pn | 21 51 50.1 | -0.8 |
| L16K | Owhat River | 10.04 | 227 | Pn | Pn | Pn | 21 51 53.9 | -0.1 |
| WRGLY | Wrigley | 10.34 | 117 | Pn | Pn | Pn | 21 51 57.8 | -0.3 |
| J14K | Nanvaranak Lak | 10.35 | 239 | Pn | Pn | Pn | 21 51 56.0 | -2.2 |
| M16K | Timber Creek | 10.51 | 223 | Pn | Pn | Pn | 21 52 00.0 | -0.4 |
| N17K | Nushagak Hills | 10.54 | 218 | Pn | Pn | Pn | 21 52 00.8 | 0.0 |
| O18K | Koktuh Hills | 10.76 | 211 | Pn | Pn | Pn | 21 52 03.7 | -0.2 |
| P18K | Big Mountain, | 11.20 | 211 | Pn | Pn | Pn | 21 52 08.5 | -1.4 |
| K13K | Kusilvak Mount | 11.31 | 238 | Pn | Pn | Pn | 21 52 10.4 | -0.9 |
| M14K | Bethel | 11.50 | 229 | Pn | Pn | Pn | 21 52 13.6 | -0.3 |
| N15K | Kwethluk River | 11.53 | 224 | Pn | Pn | Pn | 21 52 14.3 | 0.0 |
| Q32M | Nakina River | 11.72 | 149 | Pn | Pn | Pn | 21 52 18.6 | +1.4 |
| R32K | Eaglecrest | 12.00 | 155 | Pn | Pn | Pn | 21 52 23.0 | +2.2 |
| S31K | Pelican | 12.07 | 160 | Pn | Pn | Pn | 21 52 23.0 | +1.3 |
| DLBC | Dease Lake | 12.65 | 144 | Pn | Pn | Pn | 21 52 30.5 | +0.8 |
| | comp=N,0.8nm,0.3s,baz=22,slow=9.4,SNR=2.0 | | | | | | | |
| | comp=N,4.1nm,0.6s | | | | | | | |
| SIT | Sitka | 13.07 | 158 | | Pn | Pn | 21 52 36.2 | +0.9 |
| YKA | Yellowknife Ar | 13.76 | 106 | Pn | Pn | Pn | 21 52 41.8 | -2.9 |
| | comp=N,1.5nm,0.3s,baz=300,slow=18,SNR=3.0 | | | | | | | |
| YKA | | | | Sn | Sn | Sn | 21 55 05.2 | -12 |
| | comp=N,0.9nm,0.3s,baz=190,slow=16,SNR=1.4 | | | | | | | |
| | comp=N,4.0nm,0.5s | | | | | | | |
| EUNU | Eureka | 17.37 | 29 | Pn | Pn | Pn | 21 53 32.0 | 0.0 |
| OZB | Mount Ozzard | 22.49 | 147 | P | P | P | 21 54 27.2 | -2.1 |
| OZB | | | | IAmb | IAmb | IAmb | 21 54 32.2 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| WISH | Wishkah | 24.59 | 145 | P | P | P | 21 54 48.4 | -1.5 |
| PDAR | Pinedale Array | 32.12 | 128 | P | P | P | 21 55 59.3 | +2.0 |
| | comp=E,1.0nm,0.6s,baz=359,slow=6.3,SNR=4.3 | | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | | |
| HVU | Hansel Valley | 32.18 | 133 | | | S | 22 01 12.3 | +1.7 |
| NVAR | Mina Array Bea | 34.05 | 142 | P | P | P | 21 56 16.8 | +2.5 |
| | comp=E,0.7nm,0.7s,baz=354,slow=7.3,SNR=3.6 | | | | | | | |
| | comp=E,0.7nm,0.7s | | | | | | | |
| TXAR | Lajitas Array | 46.34 | 129 | P | P | P | 21 57 58.1 | +2.1 |
| | comp=E,0.5nm,0.7s,baz=332,slow=5.6,SNR=3.1 | | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | | |
| FINES | FINESS Array B | 49.16 | 6 | P | | P | 21 58 17.5 | +0.1 |
| | comp=E,2.6nm,0.9s,baz=10,slow=12,SNR=2.4 | | | | | | | |
| | comp=E,2.6nm,0.9s | | | | | | | |
| ZALV | Zalesovo Beam | 51.84 | 325 | P | P | P | 21 58 36.9 | -0.7 |
| | comp=E,0.5nm,0.4s,baz=19,slow=9.2,SNR=1.6 | | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | | |
| MJAR | Matsushiro Arr | 52.04 | 274 | P | P | P | 21 58 40.5 | +1.1 |
| | comp=E,1.1nm,0.8s,baz=24,slow=6.6,SNR=3.0 | | | | | | | |
| | comp=E,1.1nm,0.8s | | | | | | | |
| KURBB | Kurchatov Arra | 56.20 | 329 | P | P | P | 21 59 08.6 | -1.0 |
| | comp=E,1.8nm,0.8s,baz=12,slow=6.9,SNR=5.3 | | | | | | | |
| | comp=E,1.8nm,0.8s | | | | | | | |
| CLL | Collm | 58.34 | 17 | eP | P | P | 21 59 27.0 | +2.4 |
| MK31 | Makanchi Array | 59.14 | 325 | P | P | P | 21 59 29.9 | -0.4 |
| MK31 | | | | IAmb | IAmb | IAmb | 21 59 35.4 | |
| | comp=Z,3.5nm,1.4s | | | | | | | |
| MKAR | Makanchi Array | 59.14 | 325 | P | P | P | 21 59 29.0 | -1.3 |
| MKAR | Makanchi Array | 59.14 | 325 | P | P | P | 21 59 28.8 | -1.6 |
| | comp=E,0.4nm,0.4s,baz=29,slow=6.4,SNR=5.8 | | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | | |
| MAKZ | Makanchi | 59.19 | 325 | P | P | P | 21 59 29.4 | -1.3 |
| MAKZ | | | | IAmb | IAmb | IAmb | 21 59 30.7 | |
| | comp=Z,5.7nm,1.3s | | | | | | | |
| AKASG | Malin Array Be | 60.02 | 5 | P | P | P | 21 59 34.4 | -1.8 |
| | comp=E,1.0nm,0.5s,baz=0.6,slow=7.3,SNR=2.7 | | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | | |
| ABKAR | Akbulak array | 60.26 | 342 | P | P | P | 21 59 37.4 | -0.5 |
| ABKAR | Akbulak array | 60.26 | 342 | P | P | P | 21 59 37.0 | -0.9 |
| ABKAR | | | | IAmb | IAmb | IAmb | 21 59 39.2 | |
| | comp=E,1.2nm,0.9s | | | | | | | |
| ESDC | Sonseca Array | 67.27 | 32 | P | P | P | 22 00 23.1 | -1.3 |
| | comp=E,0.3nm,0.7s,baz=344,slow=7.3,SNR=2.7 | | | | | | | |
| | comp=E,0.3nm,0.7s | | | | | | | |
| BRTR | Keskin Array B | 71.08 | 2 | P | P | P | 22 00 47.4 | -0.7 |
| | comp=E,0.8nm,0.9s,baz=305,slow=4.4,SNR=2.9 | | | | | | | |
| | comp=E,0.8nm,0.9s | | | | | | | |
| QSPA | South Pole Qui | 159.34 | 180 | PKPab | PKPab | PKPab | 22 10 04.9 | +0.3 |
| | comp=E,0.4nm,0.6s,baz=222,slow=6.9,SNR=1.3 | | | | | | | |

*NEIC **12** 21:51:45.1±0.7, 69°.44N±0°.03×144°.21W±0°.05, h5km±4km, Error ellipse: s-maj=3.8km s-min=2.6km az=165.0*
**AEIC 12 21:51:45.1±0.6, 69°.43N±0°.03×144°.22W±0°.05, h4km±4km, ML3.0, ML3.2/38(NEIC), Error ellipse: s-maj=3.8km s-min=2.5km az=165.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.26 | 42 | | | Pg | 21 51 50.1 | 0.0 |
| C27K | | | | | | Sg | 21 51 53.4 | -0.2 |
| C27K | Jago River | 0.26 | 42 | IAML | | | 21 51 53.6 | |
| | comp=N,3μm,0.5s | | | | | | | |
| C27K | | | | IAML | | | 21 51 53.8 | |
| | comp=E,3μm,0.6s | | | | | | | |
| C26K | Camden Bay | 0.54 | 334 | | | Pg | 21 51 55.3 | -0.2 |
| C26K | | | | | | Sg | 21 52 03.1 | +0.6 |
| C26K | Camden Bay | 0.54 | 334 | IAML

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D28M | **Stokes Point** | **1.94 91** | | Pn | | 21 52 18.6 | -0.1 |
| D28M | **Stokes Point** | **1.94 91** | IAML | | | 21 52 55.8 | |
| | comp=N,227nm,1.0s | | | | | | |
| D28M | | | IAML | | | 21 53 04.7 | |
| | comp=E,248nm,0.6s | | | | | | |
| BMAR | **Burnt Mountain** | **2.02 184** | Pn | Pn | | 21 52 19.7 | -0.1 |
| TOLK | **Toolik Lake Re** | **2.08 250** | | Pn | | 21 52 20.4 | -0.4 |
| TOLK | **Toolik Lake Re** | **2.08 250** | IAML | | | 21 53 35.2 | |
| | comp=E,168nm,1.0s | | | | | | |
| C23K | **Itkillik River** | **2.27 283** | | Pn | | 21 52 23.2 | -0.2 |
| F28M | **Old Crow** | **2.43 137** | Pn | Pn | | 21 52 27.3 | +1.8 |
| F28M | | | IAML | | | 21 53 10.1 | |
| | comp=N,160nm,0.6s | | | | | | |
| B22K | **Teshekpuk Lake** | **3.31 290** | Pn | Pn | | 21 52 37.4 | -0.1 |
| B21K | **Ikpikpuk River** | **3.66 278** | Pn | Pn | | 21 52 43.3 | +0.9 |
| E21K | **Killik River** | **3.66 259** | Pn | Pn | | 21 52 43.9 | +1.4 |
| E21K | | | IAML | | | 21 53 09.9 | |
| | comp=N,52nm,1.2s | | | | | | |
| E21K | | | IAML | | | 21 53 53.0 | |
| | comp=E,42nm,1.7s | | | | | | |
| H24K | **Noodor Dome** | **3.87 203** | Pn | Pn | | 21 52 45.7 | +0.4 |
| H24K | | | IAML | | | 21 53 11.6 | |
| | comp=N,40nm,1.8s | | | | | | |
| H24K | | | IAML | | | 21 54 17.1 | |
| | comp=E,30nm,1.6s | | | | | | |
| B20K | **Meade River** | **4.54 283** | Pn | Pn | | 21 52 53.5 | -0.9 |
| J29N | **Klondike Camp** | **5.53 152** | Pn | Pn | | 21 53 09.9 | +1.8 |

*AEIC* ***12*** *22:00:17.0±1.8,69°48N±0°04×144°5W±0°1,h1km±4km, ML4.6,mb4.4/60(NEIC),ML4.6/120(NEIC),Error ellipse: s-maj=6.4km s-min=5.5km az=189.0*
*IDC* ***12*** *22:00:17.1±0.5,69°69N×144°49W,h0km,mb4.0/25, mbtmp4.0/29,ML4.5/4,MS4.7/1,Error ellipse: s-maj=13.8km s-min=9.6km az=48.0*
*NEIC* ***12*** *22:00:17.5±1.0,69°58N±0°05×144°5W±0°1,h8km±4km, Error ellipse: s-maj=6.8km s-min=5.5km az=190.0*

**ISC 12 22:00:18.4±0.3,69°54N±0°04×144°44W±0°03,h14km, n498,σ1s07/504,mb4.3/55,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| C27K | **Jago River** | **0.27** | **71** | | **Pg** | **22 00 23.0** | **-1.2** |
| C27K | | | | | **Sg** | **22 00 26.8** | **-1.1** |
| C27K | **Jago River** | **0.27** | **71** | P | **Pg** | **22 00 22.9** | **-1.2** |
| | baz=242,SNR=1000 | | | | | | |
| C26K | **Camden Bay** | **0.41** | **337** | | **Pg** | **22 00 25.8** | **-0.8** |
| C26K | **Camden Bay** | **0.41** | **337** | P | **Pg** | **22 00 25.9** | **-0.8** |
| | baz=162,SNR=368 | | | | | | |
| D25K | **Kavik River** | **0.72** | **253** | | **Pg** | **22 00 29.7** | **-2.7** |
| D25K | | | | | **Sg** | **22 00 39.3** | **-2.6** |
| D25K | **Kavik River** | **0.72** | **253** | P | **Pg** | **22 00 29.8** | **-2.7** |
| | baz=76,SNR=269 | | | | | | |
| D27M | **Malcolm River** | **1.27** | **102** | | **Pn** | **22 00 40.4** | **-1.3** |
| D27M | | | | IAML | | 22 01 02.1 | |
| | comp=N,11μm,0.4s | | | | | | |
| D27M | **Malcolm River** | **1.27** | **102** | P | **Pn** | **22 00 40.4** | **-1.3** |
| | baz=282,SNR=112 | | | | | | |
| C24K | **Franklin Bluff** | **1.50** | **279** | | **Pn** | **22 00 44.5** | **-0.4** |
| C24K | | | | | **Sg** | **22 01 05.5** | **-1.3** |
| C24K | | | | IAML | | 22 01 06.8 | |
| | comp=E,11μm,1.1s | | | | | | |
| C24K | **Franklin Bluff** | **1.50** | **279** | P | **Pn** | **22 00 44.5** | **-0.4** |
| | baz=97 | | | | | | |
| D24K | **Happy Valley** | **1.60** | **258** | | **Pn** | **22 00 46.0** | **-0.2** |
| D24K | **Happy Valley** | **1.60** | **258** | P | **Pn** | **22 00 46.1** | **-0.2** |
| | baz=76,SNR=382 | | | | | | |
| E27K | **Coleen River** | **1.71** | **142** | | **Pn** | **22 00 48.2** | **+0.4** |
| E27K | | | | IAML | | 22 01 16.0 | |
| | comp=N,6μm,0.8s | | | | | | |
| E27K | **Coleen River** | **1.71** | **142** | P | **Pn** | **22 00 48.4** | **+0.6** |
| | baz=322,SNR=395 | | | | | | |
| F26K | **Sheenjek River** | **1.86** | **177** | | **Sn** | **22 01 14.5** | **+1.4** |
| F26K | **Sheenjek River** | **1.86** | **177** | | **Pn** | **22 00 50.5** | **+0.7** |
| F26K | **Sheenjek River** | **1.86** | **177** | IAML | | 22 01 17.2 | |
| | comp=E,14μm,0.7s | | | | | | |
| F26K | | | | IAML | | 22 01 17.8 | |
| | comp=N,7μm,0.8s | | | | | | |
| F26K | **Sheenjek River** | **1.86** | **177** | P | **Pn** | **22 00 50.6** | **+0.7** |
| | baz=356,SNR=226 | | | | | | |
| E28M | **Babbage River** | **2.00** | **116** | | **Pn** | **22 00 52.6** | **+0.9** |
| E28M | | | | | **Sb** | **22 01 19.7** | **+0.5** |
| E28M | **Babbage River** | **2.00** | **116** | P | **Pn** | **22 00 53.3** | **+1.6** |
| | baz=298,SNR=140 | | | | | | |
| F25K | **Christian Rive** | **2.01** | **193** | | **Pn** | **22 00 52.2** | **+0.3** |
| F25K | | | | IAML | | 22 01 23.7 | |
| | comp=N,6μm,1.0s | | | | | | |
| F25K | | | | IAML | | 22 01 24.6 | |
| | comp=E,5μm,0.8s | | | | | | |
| F25K | **Christian Rive** | **2.01** | **193** | | **Sn** | **22 01 18.6** | **+1.8** |
| F25K | **Christian Rive** | **2.01** | **193** | P | **Pn** | **22 00 52.3** | **+0.4** |
| | baz=12,SNR=204 | | | | | | |
| D28M | **Stokes Point** | **2.02** | **93** | | **Pn** | **22 00 52.8** | **+0.7** |
| D28M | **Stokes Point** | **2.02** | **93** | P | **Pn** | **22 00 53.0** | **+0.9** |
| | baz=277,SNR=274 | | | | | | |
| TOLK | **Toolik Lake Re** | **2.05** | **246** | | **Pn** | **22 00 52.3** | **-0.2** |
| TOLK | | | | IAML | | 22 01 28.0 | |
| | comp=E,4μm,0.7s | | | | | | |
| TOLK | | | | IAML | | 22 01 29.3 | |
| | comp=N,4μm,0.6s | | | | | | |
| TOLK | **Toolik Lake Re** | **2.05** | **246** | P | **Pn** | **22 00 52.3** | **-0.2** |
| | baz=63,SNR=324 | | | | | | |
| E24K | **Your Creek** | **2.08** | **227** | | **Pn** | **22 00 53.1** | **+0.1** |
| E24K | **Your Creek** | **2.08** | **227** | P | **Pn** | **22 00 53.3** | **+0.3** |
| | baz=44,SNR=442 | | | | | | |
| BMAR | **Burnt Mountain** | **2.12** | **182** | | **Pn** | **22 00 53.5** | **0.0** |
| C23K | **Itkillik River** | **2.18** | **281** | | **Pn** | **22 00 53.8** | **-0.3** |
| C23K | **Itkillik River** | **2.18** | **281** | P | **Pn** | **22 00 53.5** | **-0.6** |
| | baz=97,SNR=201 | | | | | | |
| D23K | **Nanushuk River** | **2.30** | **258** | | **Pn** | **22 00 55.5** | **-0.4** |
| D23K | | | | IAML | | 22 01 44.5 | |
| | comp=E,4μm,0.9s | | | | | | |
| D23K | **Nanushuk River** | **2.30** | **258** | P | **Pn** | **22 00 55.8** | **-0.1** |
| | baz=74 | | | | | | |
| F24K | **Squaw Lake** | **2.40** | **214** | | **Pn** | **22 00 57.5** | **+0.3** |
| F24K | | | | IAML | | 22 01 34.7 | |
| | comp=N,4μm,0.5s | | | | | | |
| F24K | | | | IAML | | 22 01 37.2 | |
| | comp=E,3μm,0.5s | | | | | | |
| F24K | **Squaw Lake** | **2.40** | **214** | P | **Pn** | **22 00 57.6** | **+0.3** |
| | baz=31,SNR=352 | | | | | | |
| E23K | **Chandalar** | **2.40** | **234** | | **Pn** | **22 00 57.3** | **0.0** |
| E23K | | | | IAML | | 22 01 43.6 | |
| | comp=N,3μm,0.8s | | | | | | |
| E23K | **Chandalar** | **2.40** | **234** | P | **Pn** | **22 00 57.5** | **+0.2** |
| | baz=50,SNR=782 | | | | | | |
| F28M | **Old Crow** | **2.56** | **137** | | **Pn** | **22 00 59.7** | **+0.2** |
| F28M | **Old Crow** | **2.56** | **137** | P | **Pn** | **22 00 59.7** | **+0.2** |
| | baz=320,SNR=186 | | | | | | |
| G26K | **Porcupine Rive** | **2.62** | **174** | | **Pn** | **22 00 59.6** | **-0.5** |
| G26K | **Porcupine Rive** | **2.62** | **174** | P | **Pn** | **22 01 00.3** | **+0.1** |
| | baz=354,SNR=144 | | | | | | |
| E29M | **Blow River** | **2.63** | **113** | | **Pn** | **22 01 01.3** | **+0.9** |
| E29M | | | | IAML | | 22 01 46.0 | |
| | comp=E,3μm,0.5s | | | | | | |
| E29M | | | | IAML | | 22 01 48.3 | |
| | comp=N,2μm,0.8s | | | | | | |
| E29M | **Blow River** | **2.63** | **113** | P | **Pn** | **22 01 01.0** | **+0.7** |
| | baz=298,SNR=111 | | | | | | |
| G25K | **Bearman Lake** | **2.86** | **193** | | **Pn** | **22 01 03.2** | **-0.3** |
| G25K | **Bearman Lake** | **2.86** | **193** | P | **Pn** | **22 01 04.1** | **+0.6** |
| | baz=12,SNR=53 | | | | | | |
| G27K | **Doyon Strip** | **2.94** | **158** | | **Pn** | **22 01 04.5** | **-0.1** |
| G27K | **Doyon Strip** | **2.94** | **158** | P | **Pn** | **22 01 04.6** | **-0.1** |
| | baz=340,SNR=54 | | | | | | |
| FYU | **Fort Yukon** | **3.00** | **186** | | **Pn** | **22 01 06.0** | **+0.5** |
| D22K | **Ayikyak River** | **3.02** | **261** | | **Pn** | **22 01 05.3** | **-0.4** |
| D22K | **Ayikyak River** | **3.02** | **261** | P | **Pn** | **22 01 05.5** | **-0.2** |
| | baz=75,SNR=35 | | | | | | |
| G24K | **Hadweenzic Riv** | **3.07** | **203** | | **Pn** | **22 01 06.2** | **-0.3** |
| G24K | | | | IAML | | 22 01 57.0 | |
| | comp=N,2μm,1.0s | | | | | | |
| G24K | **Hadweenzic Riv** | **3.07** | **203** | P | **Pn** | **22 01 06.4** | **-0.1** |
| | baz=20,SNR=51 | | | | | | |
| COLD | **Coldfoot** | **3.15** | **225** | | **Pn** | **22 01 07.7** | **+0.1** |
| COLD | **Coldfoot** | **3.15** | **225** | P | **Pn** | **22 01 07.8** | **+0.2** |
| | baz=40 | | | | | | |
| B22K | **Teshekpuk Lake** | **3.20** | **289** | Pn | **Pn** | **22 01 08.2** | **0.0** |
| B22K | **Teshekpuk Lake** | **3.20** | **289** | P | **Pn** | **22 01 08.4** | **+0.2** |
| | baz=102,SNR=32 | | | | | | |
| H25L | **Birch Creek** | **3.33** | **190** | | **Pn** | **22 01 09.2** | **-0.8** |
| H25L | **Birch Creek** | **3.33** | **190** | P | **Pn** | **22 01 10.7** | **+0.6** |
| | baz=8.2,SNR=64 | | | | | | |
| H27K | **Steamboat Moun** | **3.50** | **160** | | **Pn** | **22 01 11.9** | **-0.6** |
| | baz=342,SNR=48 | | | | | | |
| F22K | **John River** | **3.50** | **238** | | **Pn** | **22 01 11.9** | **-0.5** |
| F22K | **John River** | **3.50** | **238** | P | **Pn** | **22 01 12.3** | **-0.2** |
| | baz=52 | | | | | | |
| G23K | **Bananza Creek** | **3.53** | **219** | | **Pn** | **22 01 12.3** | **-0.4** |
| G23K | | | | IAML | | 22 02 14.1 | |
| | comp=E,1μm,0.8s | | | | | | |
| G23K | | | | IAML | | 22 02 19.9 | |
| | comp=N,1μm,1.0s | | | | | | |
| G23K | **Bananza Creek** | **3.53** | **219** | P | **Pn** | **22 01 12.4** | **-0.4** |
| | baz=34,SNR=14 | | | | | | |
| G29M | **Pine Creek** | **3.56** | **135** | | **Pn** | **22 01 13.7** | **+0.5** |
| G29M | **Pine Creek** | **3.56** | **135** | P | **Pn** | **22 01 13.8** | **+0.6** |
| | baz=320,SNR=300 | | | | | | |
| B21K | **Ikpikpuk River** | **3.57** | **276** | | **Pn** | **22 01 13.1** | **-0.1** |
| B21K | | | | IAML | | 22 02 28.7 | |
| | comp=E,2μm,1.4s | | | | | | |
| B21K | **Ikpikpuk River** | **3.57** | **276** | P | **Pn** | **22 01 13.2** | **-0.1** |
| | baz=88,SNR=69 | | | | | | |
| E21K | **Killik River** | **3.61** | **257** | | **Pn** | **22 01 13.1** | **-0.7** |
| E21K | | | | IAML | | 22 02 23.5 | |
| | comp=E,1μm,0.9s | | | | | | |
| E21K | **Killik River** | **3.61** | **257** | P | **Pn** | **22 01 12.8** | **-1.0** |
| | baz=69 | | | | | | |
| F30M | **Barrier River** | **3.72** | **117** | | **Pn** | **22 01 15.1** | **-0.3** |
| F30M | **Barrier River** | **3.72** | **117** | P | **Pn** | **22 01 16.7** | **+1.4** |
| | baz=304,SNR=102 | | | | | | |
| G22K | **Bettles** | **3.72** | **228** | | **Pn** | **22 01 14.6** | **-0.8** |
| G22K | **Bettles** | **3.72** | **228** | P | **Pn** | **22 01 15.4** | **+0.1** |
| | baz=42 | | | | | | |
| A22K | **Sinclair Lake** | **3.86** | **297** | | **Pn** | **22 01 17.3** | **+0.1** |
| A22K | **Sinclair Lake** | **3.86** | **297** | P | **Pn** | **22 01 16.9** | **-0.4** |
| | baz=108 | | | | | | |
| H24K | **Noodor Dome** | **3.94** | **201** | Pn | **Pn** | **22 01 18.1** | **-0.5** |
| H24K | | | | IAML | | 22 02 29.8 | |
| | comp=N,1μm,0.8s | | | | | | |
| H24K | | | | IAML | | 22 02 30.7 | |
| | comp=E,1μm,1.2s | | | | | | |
| H24K | **Noodor Dome** | **3.94** | **201** | P | **Pn** | **22 01 18.3** | **-0.2** |
| | baz=18,SNR=69 | | | | | | |
| G30M | **tAoh Zrail Nji** | **3.99** | **126** | Pn | **Pn** | **22 01 19.8** | **+0.6** |
| G30M | **tAoh Zrail Nji** | **3.99** | **126** | P | **Pn** | **22 01 19.7** | **+0.6** |
| | baz=313,SNR=78 | | | | | | |
| H29M | **Whitestone** | **4.05** | **143** | Pn | **Pn** | **22 01 20.3** | **+0.4** |
| H29M | | | | IAML | | 22 02 11.2 | |
| | comp=E,803nm,0.7s | | | | | | |
| H29M | | | | IAML | | 22 02 34.6 | |
| | comp=N,981nm,1.2s | | | | | | |
| H29M | **Whitestone** | **4.05** | **143** | P | **Pn** | **22 01 20.6** | **+0.7** |
| | baz=328,SNR=204 | | | | | | |
| PRP | **Porcupine Dome** | **4.06** | **186** | | **Pn** | **22 01 20.8** | **+0.5** |
| PRP | | | | IAML | | 22 02 31.1 | |
| | comp=N,1μm,0.8s | | | | | | |
| PRP | | | | IAML | | 22 02 35.2 | |
| | comp=E,702nm,0.9s | | | | | | |
| PRP | **Porcupine Dome** | **4.06** | **186** | P | **Pn** | **22 01 21.1** | **+0.9** |
| | baz=5.2,SNR=167 | | | | | | |
| F21K | **Alatna River** | **4.08** | **239** | Pn | **Pn** | **22 01 20.1** | **-0.2** |
| F21K | | | | IAML | | 22 02 33.5 | |
| | comp=E,813nm,1.2s | | | | | | |
| F21K | | | | IAML | | 22 02 33.5 | |
| | comp=N,769nm,1.1s | | | | | | |
| F21K | **Alatna River** | **4.08** | **239** | P | **Pn** | **22 01 20.2** | **-0.1** |
| | baz=52,SNR=122 | | | | | | |
| I27K | **Kandik River** | **4.10** | **163** | | **Pn** | **22 01 19.8** | **-0.9** |
| I27K | **Kandik River** | **4.10** | **163** | P | **Pn** | **22 01 21.7** | **+1.1** |
| | baz=346,SNR=70 | | | | | | |
| INK | **Inuvik** | **4.13** | **102** | Pn | **Pn** | **22 01 21.8** | **+0.8** |
| INK | **Inuvik** | **4.13** | **102** | Pn | **Pn** | **22 01 22.7** | **+1.7** |
| | comp=N,6.9nm,0.3s,baz=318,slow=9.3,SNR=43 | | | | | | |
| INK | | | | Sn | **Sn** | **22 02 07.2** | **-1.7** |
| | comp=N,18nm,0.3s,baz=281,slow=2.9,SNR=5.6 | | | | | | |
| INK | | | | Lg | Lg | 22 02 28.6 | |
| | comp=N,32nm,0.3s,baz=299,slow=23,SNR=5.1 | | | | | | |
| | comp=N,32nm,0.4s | | | | | | |
| INK | **Inuvik** | **4.13** | **102** | P | **Pn** | **22 01 22.5** | **+1.5** |
| | baz=292,SNR=31 | | | | | | |
| H23K | **Yukon River** | **4.21** | **210** | | **Pn** | **22 01 22.1** | **-0.1** |
| H23K | | | | IAML | | 22 02 34.2 | |
| | comp=N,891nm,0.9s | | | | | | |
| H23K | **Yukon River** | **4.21** | **210** | P | **Pn** | **22 01 22.2** | **+0.1** |
| | baz=25,SNR=128 | | | | | | |
| I26K | **Coal Creek Min** | **4.28** | **173** | | **Pn** | **22 01 23.4** | **+0.3** |
| I26K | **Coal Creek Min** | **4.28** | **173** | P | **Pn** | **22 01 23.5** | **+0.4** |
| | baz=354 | | | | | | |
| EPYK | **Eagle Plains** | **4.31** | **134** | | **Pn** | **22 01 23.5** | **0.0** |
| EPYK | | | | IAML | | 22 02 37.7 | |
| | comp=N,902nm,0.6s | | | | | | |
| EPYK | **Eagle Plains** | **4.31** | **134** | P | **Pn** | **22 01 23.7** | **+0.1** |
| | baz=320,SNR=168 | | | | | | |
| D20K | **Etivluk River** | **4.43** | **265** | | **Pn** | **22 01 24.9** | **-0.3** |
| D20K | **Etivluk River** | **4.43** | **265** | P | **Pn** | **22 01 25.7** | **+0.5** |
| | baz=74,SNR=101 | | | | | | |
| E20K | **Nigu River** | **4.44** | **259** | | **Pn** | **22 01 24.8** | **-0.5** |
| E20K | **Nigu River** | **4.44** | **259** | P | **Pn** | **22 01 26.1** | **+0.8** |
| | baz=68,SNR=133 | | | | | | |
| B20K | **Meade River** | **4.44** | **282** | P | **Pn** | **22 01 25.2** | **0.0** |
| | baz=91 | | | | | | |
| I28M | **Miner Creek** | **4.46** | **155** | Pn | **Pn** | **22 01 26.2** | **+0.5** |
| I28M | | | | IAML | | 22 02 47.6 | |
| | comp=E,465nm,1.2s | | | | | | |
| I28M | **Miner Creek** | **4.46** | **155** | P | **Pn** | **22 01 26.4** | **+0.8** |
| | baz=339,SNR=153 | | | | | | |
| F31M | **Tsiigehtchic** | **4.46** | **113** | | **Pn** | **22 01 25.5** | **0.0** |
| F31M | | | | IAML | | 22 02 51.2 | |
| | comp=E,435nm,1.4s | | | | | | |
| F31M | **Tsiigehtchic** | **4.46** | **113** | P | **Pn** | **22 01 26.0** | **+0.5** |
| | baz=302,SNR=38 | | | | | | |
| A21K | **Barrow** | **4.47** | **299** | | **Pn** | **22 01 25.6** | **0.0** |
| A21K | **Barrow** | **4.47** | **299** | P | **Pn** | **22 01 25.1** | **-0.5** |
| | baz=109,SNR=12 | | | | | | |
| H22K | **Ishtalitna Cre** | **4.51** | **219** | | **Pn** | **22 01 25.8** | **-0.6** |
| H22K | **Ishtalitna Cre** | **4.51** | **219** | P | **Pn** | **22 01 26.0** | **-0.3** |
| | baz=33,SNR=20 | | | | | | |
| G21K | **Allakaket** | **4.56** | **233** | | **Pn** | **22 01 26.0** | **-0.9** |
| G21K | | | | IAML | | 22 02 49.4 | |
| | comp=N,722nm,1.0s | | | | | | |
| G21K | | | | IAML | | 22 02 52.4 | |
| | comp=E,682nm,1.3s | | | | | | |
| G21K | **Allakaket** | **4.56** | **233** | P | **Pn** | **22 01 26.2** | **-0.7** |
| | baz=45,SNR=28 | | | | | | |
| POKR | **Poker Plat Res** | **4.59** | **196** | | **Pn** | **22 01 27.6** | **+0.2** |
| POKR | | | | IAML | | 22 02 47.2 | |
| | comp=E,588nm,1.0s | | | | | | |
| POKR | | | | IAML | | 22 02 52.2 | |
| | comp=N,504nm,1.1s | | | | | | |
| POKR | **Poker Plat Res** | **4.59** | **196** | P | **Pn** | **22 01 27.8** | **+0.5** |
| | baz=13,SNR=27 | | | | | | |
| G31M | **Satah River** | **4.61** | **120** | Pn | **Pn** | **22 01 28.4** | **+0.9** |
| G31M | | | | IAML | | 22 02 48.5 | |
| | comp=E,715nm,1.0s | | | | | | |
| G31M | | | | IAML | | 22 02 57.3 | |
| | comp=N,701nm,1.4s | | | | | | |
| G31M | **Satah River** | **4.61** | **120** | P | **Pn** | **22 01 28.7** | **+1.2** |
| | baz=309,SNR=67 | | | | | | |
| I23K | **Minto, Yukon-K** | **4.80** | **206** | | **Pn** | **22 01 30.0** | **-0.2** |
| I23K | | | | IAML | | 22 02 53.8 | |
| | comp=E,599nm,0.8s | | | | | | |
| I23K | **Minto, Yukon-K** | **4.80** | **206** | P | **Pn** | **22 01 30.3** | **+0.1** |
| | baz=21,SNR=60 | | | | | | |
| I29M | **Ogilvie Camp,** | **4.81** | **148** | | **Pn** | **22 01 30.5** | **+0.1** |
| I29M | | | | IAML | | 22 02 28.6 | |
| | comp=E,388nm,0.7s | | | | | | |
| I29M | | | | IAML | | 22 02 55.4 | |
| | comp=N,366nm,0.6s | | | | | | |
| I29M | **Ogilvie Camp,** | **4.81** | **148** | P | **Pn** | **22 01 30.6** | **+0.1** |
| | baz=333,SNR=244 | | | | | | |
| MDM | **Murphy Dome** | **4.83** | **200** | | **Pn** | **22 01 30.4** | **-0.2** |
| MDM | | | | IAML | | 22 02 52.2 | |
| | comp=N,498nm,0.7s | | | | | | |
| MDM | | | | IAML | | 22 02 56.8 | |
| | comp=E,546nm,1.1s | | | | | | |
| COLA | **College** | **4.87** | **197** | Pn | **Pn** | **22 01 31.1** | **0.0** |
| COLA | **College** | **4.87** | **197** | | **Pn** | **22 01 31.8** | **+0.7** |
| COLA | | | | IAML | | 22 02 59.6 | |
| | comp=E,1μm,0.7s | | | | | | |
| COLA | | | | IAML | | 22 03 02.9 | |
| | comp=E,886nm,0.5s | | | | | | |
| COLA | **College** | **4.87** | **197** | P | **Pn** | **22 01 31.8** | **+0.7** |
| | baz=14 | | | | | | |
| F20K | **Avaraart Lake** | **4.88** | **245** | | **Pn** | **22 01 31.4** | **+0.1** |
| F20K | | | | IAML | | 22 03 08.1 | |
| | comp=N,426nm,1.1s | | | | | | |
| F20K | | | | IAML | | 22 03 15.8 | |
| | comp=E,325nm,0.8s | | | | | | |
| F20K | **Avaraart Lake** | **4.88** | **245** | P | **Pn** | **22 01 31.7** | **+0.5** |
| | baz=55,SNR=81 | | | | | | |
| IL31 | | | **4.89** | **192** | **Pn** | **22 01 31.7** | **+0.4** |
| ILAR | **Eielson Array** | | **4.89** | **192** | **Pn** | **22 01 31.7** | **+0.3** |
| ILAR | **Eielson Array** | | **4.89** | **192** | Pn | **Pn** | **22 01 32.3** | **+0.9** |
| | comp=E,14nm,0.3s,baz=5.7,slow=13,SNR=122 | | | | | | | |
| ILAR | | | | | Sn | **Sn** | **22 02 28.8** | **+1.2** |
| | comp=E,22nm,0.3s,baz=9.9,slow=18,SNR=4.7 | | | | | | | |
| ILAR | | | | | Lg | Lg | 22 02 48.9 | |
| | comp=E,63nm,0.3s,baz=6.0,slow=31,SNR=2.9 | | | | | | | |
| | comp=E,49nm,0.5s | | | | | | | |
| EGAK | **Eagle** | | **4.95** | **164** | | **Pn** | **22 01 32.6** | **+0.4** |
| EGAK | | | | | IAML | | 22 03 09.4 | |
| | comp=E,448nm,1.1s | | | | | | | |
| EGAK | | | | | IAML | | 22 03 16.1 | |
| | comp=E,424nm,1.0s | | | | | | | |
| EGAK | **Eagle** | | **4.95** | **164** | P | **Pn** | **22 01 32.7** | **+0.4** |
| | baz=346,SNR=81 | | | | | | | |
| J25K | **Salcha River,** | | **4.96** | **185** | Pn | **Pn** | **22 01 33.3** | **+0.8** |
| J25K | | | | | IAML | | 22 02 58.8 | |
| | comp=N,406nm,1.0s | | | | | | | |
| J25K | **Salcha River,** | | **4.96** | **185** | P | **Pn** | **22 01 33.6** | **+1.1** |
| | baz=3.6,SNR=62 | | | | | | | |
| IMAR | **Indian Mountai** | | **5.02** | **229** | Pn | **Pn** | **22 01 32.1** | **-1.1** |
| D19K | **Kuna River** | | **5.03** | **264** | | **Pn** | **22 01 33.1** | **-0.2** |
| D19K | | | | | IAML | | 22 03 13.5 | |
| | comp=E,547nm,1.0s | | | | | | | |
| D19K | **Kuna River** | | **5.03** | **264** | P | **Pn** | **22 01 33.3** | **0.0** |
| | baz=72,SNR=241 | | | | | | | |
| H21K | **Melozitna Rive** | | **5.04** | **223** | Pn | **Pn** | **22 01 33.4** | **-0.1** |
| H21K | | | | | IAML | | 22 03 03.9 | |
| | comp=N,465nm,1.1s | | | | | | | |
| H21K | **Melozitna Rive** | | **5.04** | **223** | P | **Pn** | **22 01 33.7** | **+0.1** |
| | baz=36,SNR=52 | | | | | | | |
| J26L | **Joseph Creek** | | **5.08** | **176** | Pn | **Pn** | **22 01 34.4** | **+0.4** |
| J26L | | | | | IAML | | 22 02 58.5 | |
| | comp=E,504nm,0.8s | | | | | | | |
| J26L | | | | | IAML | | 22 03 03.5 | |
| | comp=N,316nm,1.1s | | | | | | | |
| J26L | **Joseph Creek** | | **5.08** | **176** | P | **Pn** | **22 01 34.8** | **+0.7** |
| | baz=356,SNR=121 | | | | | | | |
| CCB | **Clear Creek Bu** | | **5.09** | **197** | | **Pn** | **22 01 34.1** | **-0.1** |
| MLY | **Manley** | | **5.14** | **211** | Pn | **Pn** | **22 01 35.1** | **+0.1** |
| MLY | | | | | IAML | | 22 03 06.1 | |
| | comp=N,298nm,1.3s | | | | | | | |
| MLY | | | | | IAML | | 22 03 10.5 | |
| | comp=E,279nm,1.6s | | | | | | | |
| MLY | **Manley** | | **5.14** | **211** | P | **Pn** | **22 01 35.1** | **+0.1** |
| | baz=26,SNR=28 | | | | | | | |
| E19K | **Redstone River** | | **5.15** | **252** | | **Pn** | **22 01 34.1** | **-0.8** |
| E19K | | | | | IAML | | 22 03 15.6 | |
| | comp=E,418nm,1.2s | | | | | | | |
| E19K | **Redstone River** | | **5.15** | **252** | P | **Pn** | **22 01 34.1** | **-0.8** |
| | baz=61,SNR=72 | | | | | | | |
| HDA | **Harding Lake** | | **5.25** | **192** | | **Pn** | **22 01 37.1** | **+0.7** |
| HDA | | | | | IAML | | 22 03 11.9 | |
| | comp=E,465nm,1.2s | | | | | | | |
| HDA | **Harding Lake** | | **5.25** | **192** | P | **Pn** | **22 01 37.0** | **+0.7** |
| | baz=9.6,SNR=41 | | | | | | | |
| NEA2 | **Nenana** | | **5.29** | **202** | | **Pn** | **22 01 36.6** | **-0.3** |
| NEA2 | **Nenana** | | **5.29** | **202** | P | **Pn** | **22 01 36.9** | **0.0** |
| | baz=18,SNR=48 | | | | | | | |
| WRH | **Wood River Hil** | | **5.29** | **197** | | **Pn** | **22 01 37.0** | **0.0** |
| WRH | | | | | IAML | | 22 03 16.6 | |
| | comp=N,342nm,1.4s | | | | | | | |
| WRH | | | | | IAML | | 22 03 16.7 | |
| | comp=E,444nm,1.3s | | | | | | | |
| I30M | **Mount Dempster** | | **5.33** | **141** | Pn | **Pn** | **22 01 37.7** | **+0.1** |
| I30M | | | | | IAML | | 22 03 10.0 | |
| | comp=E,316nm,0.6s | | | | | | | |
| I30M | **Mount Dempster** | | **5.33** | **141** | P | **Pn** | **22 01 38.0** | **+0.4** |
| | baz=327,SNR=476 | | | | | | | |
| C19K | **Lookout Ridge** | | **5.38** | **272** | Pn | **Pn** | **22 01 38.1** | **-0.1** |
| C19K | | | | | IAML | | 22 02 39.5 | |
| | comp=E,276nm,0.6s | | | | | | | |
| C19K | | | | | IAML | | 22 03 33.9 | |
| | comp=N,349nm,1.6s | | | | | | | |
| C19K | **Lookout Ridge** | | **5.38** | **272** | P | **Pn** | **22 01 38.5** | **+0.2** |
| | baz=79,SNR=50 | | | | | | | |
| SCRK | **Sand Creek** | | **5.59** | **178** | Pn | **Pn** | **22 01 42.0** | **+0.8** |
| SCRK | **Sand Creek** | | **5.59** | **178** | P | **Pn** | **22 01 42.1** | **+0.8** |
| | baz=358,SNR=130 | | | | | | | |
| K27K | **Chicken** | | **5.62** | **169** | | **Pn** | **22 01 42.1** | **+0.7** |
| K27K | **Chicken** | | **5.62** | **169** | P | **Pn** | **22 01 42.1** | **+0.7** |
| | baz=351 | | | | | | | |
| F19K | **Shaleruckik Mo** | | **5.66** | **248** | Pn | **Pn** | **22 01 41.2** | **-0.7** |
| F19K | **Shaleruckik Mo** | | **5.66** | **248** | P | **Pn** | **22 01 41.7** | **-0.3** |
| | baz=56,SNR=103 | | | | | | | |
| H20K | **Anotleneega Mo** | | **5.70** | **230** | P | **Pn** | **22 01 41.9** | **-0.7** |
| | baz=40,SNR=15 | | | | | | | |
| A19K | **Wainwright** | | **5.78** | **284** | | **Pn** | **22 01 43.3** | **-0.3** |
| A19K | **Wainwright** | | **5.78** | **284** | P | **Pn** | **22 01 43.5** | **-0.1** |
| | baz=89,SNR=9.9 | | | | | | | |
| K24K | **Donnelly Dome** | | **5.79** | **186** | | **Pn** | **22 01 43.0** | **-0.8** |
| K24K | **Donnelly Dome** | | **5.79** | **186** | P | **Pn** | **22 01 45.2** | **+1.4** |
| | baz=4.5,SNR=10 | | | | | | | |
| DAWY | **Dawson** | | **5.85** | **158** | | **Pn** | **22 01 45.2** | **+0.7** |
| DAWY | **Dawson** | | **5.85** | **158** | P | **Pn** | **22 01 45.3** | **+0.7** |
| | baz=342,SNR=267 | | | | | | | |
| G19K | **Purcell Mounta** | | **5.87** | **241** | Pn | **Pn** | **22 01 43.9** | **-1.0** |
| G19K | **Purcell Mounta** | | **5.87** | **241** | P | **Pn** | **22 01 44.2** | **-0.7** |
| | baz=49,SNR=38 | | | | | | | |
| J30M | **Hart River** | | **5.90** | **144** | Pn | **Pn** | **22 01 45.8** | **+0.3** |
| J30M | **Hart River** | | **5.90** | **144** | P | **Pn** | **22 01 46.1** | **+0.6** |
| | baz=331,SNR=216 | | | | | | | |
| DOT | **Dot Lake** | | **5.92** | **178** | | **Pn** | **22 01 45.8** | **+0.2** |
| BPAW | **Bear Paw Mtn.** | | **6.04** | **208** | | **Pn** | **22 01 47.0** | **-0.2** |
| BPAW | **Bear Paw Mtn.** | | **6.04** | **208** | P | **Pn** | **22 01 47.1** | **-0.2** |
| | baz=22,SNR=43 | | | | | | | |
| C18K | **Utukok River** | | **6.06** | **269** | | **Pn** | **22 01 46.6** | **-1.0** |
| C18K | **Utukok River** | | **6.06** | **269** | P | **Pn** | **22 01 46.6** | **-1.0** |
| | baz=74 | | | | | | | |
| MCK | **McKinley** | | **6.10** | **199** | | **Pn** | **22 01 48.4** | **+0.3** |
| MCK | **McKinley** | | **6.10** | **199** | P | **Pn** | **22 01 48.6** | **+0.5** |
| | baz=15,SNR=32 | | | | | | | |
| H19K | **Roundabout Mou** | | **6.11** | **235** | Pn | **Pn** | **22 01 47.4** | **-0.7** |
| H19K | **Roundabout Mou** | | **6.11** | **235** | P | **Pn** | **22 01 47.6** | **-0.6** |
| | baz=44,SNR=22 | | | | | | | |
| B18K | **Kokolik River** | | **6.11** | **276** | | **Pn** | **22 01 47.4** | **-0.7** |
| B18K | **Kokolik River** | | **6.11** | **276** | P | **Pn** | **22 01 47.4** | **-0.7** |
| | baz=81,SNR=6.4 | | | | | | | |
| I20K |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=62 | | | | | | | |
| L29M | L29M | 6.94 | 156 | Pn | Pn | 22 01 59.8 | +0.2 | |
| L29M | L29M<br>baz=341,SNR=131 | 6.94 | 156 | P | Pn | 22 02 00.1 | +0.6 | |
| H18K | Honhosa River | 6.94 | 237 | | Pn | 22 01 59.1 | -0.4 | |
| H18K | Honhosa River<br>baz=45,SNR=17 | 6.94 | 237 | P | Pn | 22 01 59.2 | -0.4 | |
| WAT1 | Susitna Watana<br>baz=12 | 6.94 | 196 | P | Pn | 22 02 00.6 | +1.0 | |
| WAT7 | Susitna Watana | 6.97 | 197 | | Pn | 22 01 58.9 | -1.2 | |
| F17K | Baldwin Pennin | 7.03 | 252 | Pn | Pn | 22 01 59.9 | -0.9 | |
| F17K | Baldwin Pennin<br>baz=57,SNR=9.0 | 7.03 | 252 | P | Pn | 22 01 59.1 | -1.6 | |
| D17K | Noatak River | 7.05 | 264 | | Pn | 22 01 59.7 | -1.3 | |
| D17K | Noatak River<br>baz=67 | 7.05 | 264 | P | Pn | 22 01 59.5 | -1.6 | |
| J19K | Poorman | 7.10 | 224 | Pn | Pn | 22 02 01.4 | -0.4 | |
| J19K | Poorman<br>baz=34 | 7.10 | 224 | P | Pn | 22 02 01.6 | -0.2 | |
| WAT6 | Susitna Watana<br>baz=9.3,SNR=13 | 7.12 | 192 | P | Pn | 22 02 03.6 | +1.4 | |
| C36M | Paulatuk | 7.16 | 82 | Pn | Pn | 22 02 00.6 | -1.9 | |
| C36M | Paulatuk<br>baz=281 | 7.16 | 82 | P | Pn | 22 02 01.1 | -1.5 | |
| HARP | HAARP | 7.18 | 183 | | Pn | 22 02 02.0 | -0.9 | |
| HARP | HAARP<br>baz=1.9,SNR=16 | 7.18 | 183 | P | Pn | 22 02 04.6 | +1.8 | |
| M26K | Nabesna, AK | 7.20 | 175 | Pn | Pn | 22 02 04.4 | +1.3 | |
| M26K | Nabesna, AK<br>baz=356,SNR=67 | 7.20 | 175 | P | Pn | 22 02 04.5 | +1.3 | |
| M27K | Edge Creek, AK | 7.29 | 171 | | Pn | 22 02 05.3 | +0.8 | |
| M27K | Edge Creek, AK<br>baz=353,SNR=60 | 7.29 | 171 | P | Pn | 22 02 05.5 | +1.0 | |
| K20K | Telida | 7.30 | 216 | Pn | Pn | 22 02 03.8 | -0.7 | |
| K20K | Telida<br>baz=28,SNR=12 | 7.30 | 216 | P | Pn | 22 02 04.2 | -0.4 | |
| G17K | Kiwalik Mounta<br>baz=50,SNR=23 | 7.41 | 245 | P | Pn | 22 02 05.7 | -0.2 | |
| M24K | Tolsona, Glenn<br>baz=4.6,SNR=6.7 | 7.50 | 186 | P | Pn | 22 02 08.9 | +1.5 | |
| M29M | Somme Creek | 7.53 | 158 | Pn | Pn | 22 02 08.2 | +0.5 | |
| M29M | Somme Creek<br>baz=344,SNR=131 | 7.53 | 158 | P | Pn | 22 02 08.5 | +0.7 | |
| CUT | Chulitna<br>baz=16 | 7.55 | 201 | P | Pn | 22 02 08.4 | +0.6 | |
| H17K | Granite Mounta | 7.56 | 240 | Pn | Pn | 22 02 08.0 | 0.0 | |
| H17K | Granite Mounta<br>baz=46,SNR=17 | 7.56 | 240 | P | Pn | 22 02 08.0 | 0.0 | |
| C16K | Lisburne Hills | 7.63 | 270 | Pn | Pn | 22 02 07.3 | -1.7 | |
| C16K | Lisburne Hills<br>baz=71,SNR=11 | 7.63 | 270 | P | Pn | 22 02 07.3 | -1.7 | |
| J18K | Innoko River<br>baz=34 | 7.81 | 225 | P | Pn | 22 02 10.8 | -0.8 | |
| SCM | Sheep Creek Mo<br>baz=7.4,SNR=13 | 7.83 | 190 | P | Pn | 22 02 14.8 | +2.9 | |
| M23K | Glacier View<br>baz=8.4,SNR=14 | 7.90 | 191 | P | Pn | 22 02 15.6 | +2.8 | |
| SML | Sawmill<br>baz=9.9 | 7.93 | 194 | P | Pn | 22 02 15.6 | +2.4 | |
| YUK3 | Moose Creek | 7.97 | 166 | | Pn | 22 02 14.3 | +0.4 | |
| YUK3 | Moose Creek<br>baz=350,SNR=29 | 7.97 | 166 | P | Pn | 22 02 15.6 | +1.7 | |
| N25K | Chitina, Valde<br>baz=0.3 | 7.97 | 181 | P | Pn | 22 02 15.7 | +2.0 | |
| G16K | Koyuk River | 8.02 | 247 | | Pn | 22 02 13.3 | -1.0 | |
| G16K | Koyuk River<br>baz=51 | 8.02 | 247 | P | Pn | 22 02 13.4 | -0.9 | |
| L20K | Farewell, AK | 8.06 | 213 | | Pn | 22 02 14.2 | -0.6 | |
| L20K | Farewell, AK<br>baz=24,SNR=15 | 8.06 | 213 | P | Pn | 22 02 14.8 | -0.1 | |
| KLU | Klutina<br>baz=3.6,SNR=5.2 | 8.11 | 185 | P | Pn | 22 02 16.9 | +1.3 | |
| SKT | Skwentna<br>baz=18,SNR=9.3 | 8.13 | 204 | P | Pn | 22 02 16.7 | +0.8 | |
| M22K | Willow<br>baz=14 | 8.16 | 199 | P | Pn | 22 02 18.2 | +2.0 | |
| PMR | Palmer<br>baz=12,SNR=7.1 | 8.21 | 196 | P | Pn | 22 02 18.8 | +1.8 | |
| MCARA | McCarthy VSAT<br>baz=356,SNR=18 | 8.21 | 175 | P | Pn | 22 02 20.0 | +3.0 | |
| KNK | Knik Glacier<br>baz=9.8,SNR=14 | 8.33 | 193 | P | Pn | 22 02 20.5 | +1.8 | |
| M31M | Drury Creek, Y<br>baz=335,SNR=34 | 8.43 | 146 | P | Pn | 22 02 19.6 | -0.4 | |
| M20K | Styx River<br>baz=21,SNR=32 | 8.47 | 209 | P | Pn | 22 02 21.0 | +0.4 | |
| J17K | VABM Dome | 8.48 | 230 | Pn | Pn | 22 02 19.7 | -1.0 | |
| J17K | VABM Dome<br>baz=37,SNR=9.0 | 8.48 | 230 | P | Pn | 22 02 19.7 | -1.0 | |
| H16K | Elim | 8.48 | 243 | | Pn | 22 02 19.9 | -0.8 | |
| H16K | Elim<br>baz=47 | 8.48 | 243 | P | Pn | 22 02 20.0 | -0.7 | |
| YUK8 | Steele Glacier<br>baz=349,SNR=20 | 8.51 | 165 | P | Pn | 22 02 22.9 | +1.6 | |
| L19K | White Mountain | 8.52 | 215 | Pn | Pn | 22 02 20.6 | -0.6 | |
| L19K | White Mountain<br>baz=26 | 8.52 | 215 | P | Pn | 22 02 20.6 | -0.6 | |
| SUA | Susitna One<br>baz=15 | 8.52 | 201 | P | Pn | 22 02 22.1 | +0.8 | |
| I17K | Unalakleet | 8.56 | 236 | | Pn | 22 02 21.5 | -0.2 | |
| I17K | Unalakleet<br>baz=42 | 8.56 | 236 | P | Pn | 22 02 21.5 | -0.2 | |
| YUK4 | Talbot Arm<br>baz=346,SNR=14 | 8.57 | 161 | P | Pn | 22 02 22.3 | +0.2 | |
| F15K | North Star Dit | 8.59 | 253 | Pn | Pn | 22 02 21.4 | -0.8 | |
| F15K | North Star Dit<br>baz=55 | 8.59 | 253 | P | Pn | 22 02 21.0 | -1.1 | |
| BMRM | Bremner River | 8.61 | 181 | | Pn | 22 02 23.1 | +0.6 | |
| BMRM | Bremner River<br>baz=0.3,SNR=15 | 8.61 | 181 | P | Pn | 22 02 23.9 | +1.4 | |
| FARO | Faro, Yukon | 8.61 | 143 | | Pn | 22 02 21.9 | -0.6 | |
| FARO | Faro, Yukon<br>baz=333,SNR=57 | 8.61 | 143 | P | Pn | 22 02 22.1 | -0.4 | |
| N30M | Aishikik Lake | 8.66 | 156 | | Pn | 22 02 23.6 | +0.4 | |
| N30M | Aishikik Lake<br>baz=342,SNR=167 | 8.66 | 156 | P | Pn | 22 02 24.3 | +1.1 | |
| M19K | Big River Lodg | 8.68 | 213 | | Pn | 22 02 23.5 | +0.1 | |
| M19K | Big River Lodg<br>baz=24,SNR=15 | 8.68 | 213 | P | Pn | 22 02 24.2 | +0.8 | |
| CTG | Chitna Glacier<br>baz=353,SNR=29 | 8.71 | 170 | P | Pn | 22 02 26.5 | +2.6 | |
| MMPY | Sheldon Lake, | 8.75 | 136 | | Pn | 22 02 24.5 | +0.1 | |
| MMPY | Sheldon Lake,<br>baz=328,SNR=85 | 8.75 | 136 | P | Pn | 22 02 24.8 | +0.4 | |
| RC01 | Rabbit Creek A<br>baz=12 | 8.77 | 197 | P | Pn | 22 02 25.9 | +1.4 | |
| GLI | Glacier Island | 8.77 | 189 | | Pn | 22 02 23.6 | -1.1 | |
| G15K | Niukluk<br>baz=50 | 8.82 | 248 | P | Pn | 22 02 25.3 | 0.0 | |
| K17K | Iditarod<br>baz=33 | 8.84 | 226 | P | Pn | 22 02 25.7 | +0.2 | |
| N31M | Braeburn, Yuko | 8.84 | 152 | | Pn | 22 02 25.9 | +0.3 | |
| N31M | Braeburn, Yuko<br>baz=340,SNR=29 | 8.84 | 152 | P | Pn | 22 02 26.6 | +1.0 | |
| CRQE | Cirque<br>baz=357,SNR=38 | 8.85 | 176 | P | Pn | 22 02 28.7 | +3.0 | |
| TGL | Tana Glacier | 8.85 | 175 | | Pn | 22 02 25.8 | 0.0 | |
| PWL | Port Wells | 8.87 | 192 | | Pn | 22 02 26.3 | +0.3 | |
| PWL | Port Wells<br>baz=8.9 | 8.87 | 192 | P | Pn | 22 02 29.4 | +3.4 | |
| LOGN | Logan Glacier | 8.87 | 169 | | Pn | 22 02 26.0 | -0.1 | |
| L18K | Granite Mounta | 8.88 | 220 | | Pn | 22 02 26.2 | +0.1 | |
| L18K | Granite Mounta<br>baz=29,SNR=6.1 | 8.88 | 220 | P | Pn | 22 02 25.9 | -0.1 | |
| O28M | Mount Upton | 8.98 | 167 | | Pn | 22 02 27.3 | -0.6 | |
| O28M | Mount Upton<br>baz=350,SNR=13 | 8.98 | 167 | P | Pn | 22 02 30.2 | +2.4 | |
| J16K | Anvik River<br>baz=39 | 8.99 | 234 | P | Pn | 22 02 27.2 | -0.4 | |
| YUK6 | Outpost Mounta | 8.99 | 161 | | Pn | 22 02 28.1 | +0.1 | |
| YUK6 | Outpost Mounta<br>baz=346,SNR=36 | 8.99 | 161 | P | Pn | 22 02 29.4 | +1.5 | |
| F14K | Arctic Creek | 9.29 | 255 | | Pn | 22 02 30.6 | -1.2 | |
| F14K | Arctic Creek<br>baz=55 | 9.29 | 255 | P | Pn | 22 02 30.7 | -1.0 | |
| L17K | Donlin | 9.33 | 224 | | Pn | 22 02 31.5 | -0.8 | |
| L17K | Donlin<br>baz=31 | 9.33 | 224 | P | Pn | 22 02 31.9 | -0.4 | |
| M18K | Stony River | 9.34 | 216 | | Pn | 22 02 31.6 | -0.9 | |
| M18K | Stony River<br>baz=25 | 9.34 | 216 | P | Pn | 22 02 31.8 | -0.6 | |
| MESA | MESA<br>baz=354,SNR=13 | 9.46 | 172 | P | Pn | 22 02 38.1 | +3.8 | |
| O30N | Mendenhall<br>baz=342,SNR=19 | 9.47 | 154 | P | Pn | 22 02 35.4 | +1.1 | |
| O29M | Mount Kennedy | 9.60 | 162 | P | Pn | 22 02 37.9 | +1.8 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=347,SNR=16 | | | | | | | |
| N32M | Quiet Lake | 9.64 | 145 | | Pn | 22 02 36.7 | +0.1 | |
| N32M | Quiet Lake<br>baz=335 | 9.64 | 145 | P | Pn | 22 02 36.8 | +0.1 | |
| PINM | Pinnacle<br>baz=351,SNR=11 | 9.65 | 167 | P | Pn | 22 02 39.5 | +2.8 | |
| N19K | Bonanza Creek<br>baz=21 | 9.71 | 210 | P | Pn | 22 02 38.1 | +0.5 | |
| WHY | Whitehorse | 9.77 | 151 | Pn | Pn | 22 02 38.9 | +0.5 | |
| WHY | Whitehorse<br>baz=340,SNR=18 | 9.77 | 151 | P | Pn | 22 02 39.0 | +0.7 | |
| M17K | Holitna River | 9.77 | 220 | Pn | Pn | 22 02 38.0 | -0.3 | |
| M17K | Holitna River<br>baz=28 | 9.77 | 220 | P | Pn | 22 02 37.8 | -0.5 | |
| P30M | Million Dollar<br>baz=344 | 9.97 | 158 | P | Pn | 22 02 42.6 | +1.5 | |
| L16K | Owhat River<br>baz=32 | 9.98 | 225 | P | Pn | 22 02 41.5 | +0.3 | |
| K15K | Wolf Creek Mou<br>baz=36 | 10.04 | 232 | P | Pn | 22 02 41.7 | -0.3 | |
| PNL | Peninsula<br>baz=350 | 10.14 | 165 | P | Pn | 22 02 45.5 | +2.1 | |
| J14K | Nanvaranak Lak | 10.27 | 238 | Pn | Pn | 22 02 44.4 | -0.6 | |
| J14K | Nanvaranak Lak<br>baz=40,SNR=5.2 | 10.27 | 238 | P | Pn | 22 02 44.5 | -0.6 | |
| P29M | Windy Craggy<br>baz=347,SNR=11 | 10.35 | 161 | P | Pn | 22 02 47.8 | +1.6 | |
| TGTN | Hyland Airport<br>baz=327,SNR=7.1 | 10.43 | 133 | P | Pn | 22 02 48.8 | +1.4 | |
| M16K | Timber Creek<br>baz=29 | 10.45 | 222 | P | Pn | 22 02 47.7 | +0.1 | |
| WRGLY | Wrigley | 10.48 | 117 | Pn | Pn | 22 02 47.5 | -0.5 | |
| WRGLY | Wrigley<br>baz=316,SNR=14 | 10.48 | 117 | P | Pn | 22 02 47.7 | -0.3 | |
| L15K | Ungalak Mounta<br>baz=34 | 10.53 | 230 | P | Pn | 22 02 48.9 | +0.2 | |
| P33M | Teslin, Yukon | 10.56 | 147 | Pn | Pn | 22 02 48.5 | -0.7 | |
| P33M | Teslin, Yukon<br>baz=237,SNR=7.6 | 10.56 | 147 | P | Pn | 22 02 49.0 | -0.2 | |
| PLBC | Pleasant Camp<br>baz=344,SNR=21 | 10.69 | 157 | P | Pn | 22 02 52.9 | +1.9 | |
| SKAG | Skagway<br>baz=343 | 10.84 | 155 | P | Pn | 22 02 54.8 | +2.0 | |
| N16K | Nishlik Lake<br>baz=28 | 10.89 | 220 | P | Pn | 22 02 54.6 | +0.9 | |
| P32M | Atlin | 10.98 | 150 | Pn | Pn | 22 02 55.7 | +0.9 | |
| P32M | Atlin<br>baz=340 | 10.98 | 150 | P | Pn | 22 02 56.5 | +1.6 | |
| L14K | Kuka Creek<br>baz=35 | 11.14 | 231 | P | Pn | 22 02 57.5 | +0.5 | |
| M14K | Bethel<br>baz=32 | 11.44 | 228 | P | Pn | 22 03 01.9 | +0.8 | |
| R33M | Jennings River | 11.68 | 144 | Pn | Pn | 22 03 04.7 | +0.1 | |
| Q32M | Nakina River | 11.83 | 148 | | Pn | 22 03 07.4 | +0.7 | |
| Q32M | Nakina River<br>baz=339,SNR=24 | 11.83 | 148 | P | Pn | 22 03 08.4 | +1.7 | |
| R32K | Eaglecrest<br>baz=343 | 12.10 | 154 | P | Pn | 22 03 11.7 | +1.6 | |
| S31K | Pelican<br>baz=346 | 12.16 | 159 | P | Pn | 22 03 12.6 | +1.6 | |
| KDAK | Kodiak Island<br>comp=N,0.3nm,0.3s,baz=72,slow=20,SNR=1.2 | 12.33 | 201 | Pn | Pn | 22 03 12.9 | -0.3 | |
| KOTAN | Kotaneelee Air<br>baz=326 | 12.73 | 128 | P | Pn | 22 03 20.0 | +1.2 | |
| DLBC | Dease Lake | 12.76 | 144 | Pn | Pn | 22 03 19.1 | -0.1 | |
| DLBC | Dease Lake<br>comp=N,3.3nm,0.3s,baz=355,slow=9.4,SNR=16 | 12.76 | 144 | Pn | Pn | 22 03 18.8 | -0.4 | |
| DLBC | | | | Sn | Sn | 22 05 36.4 | -4.5 | |
| | comp=N,0.2nm,0.3s,baz=244,slow=19,SNR=1.5<br>comp=N,7.5nm,0.4s | | | | | | | |
| DLBC | Dease Lake<br>baz=336,SNR=9.8 | 12.76 | 144 | P | Pn | 22 03 19.6 | +0.4 | |
| LIRD | Liard River Hi<br>baz=330 | 12.80 | 133 | P | Pn | 22 03 20.2 | +0.5 | |
| S32K | Killisnoo<br>baz=344 | 12.86 | 155 | P | Pn | 22 03 21.2 | +0.6 | |
| S34M | Telegraph Cree | 13.03 | 147 | | Pn | 22 03 23.9 | +1.1 | |
| S34M | Telegraph Cree<br>baz=339,SNR=11 | 13.03 | 147 | P | Pn | 22 03 24.2 | +1.4 | |
| SIT | Sitka<br>baz=346 | 13.16 | 158 | P | Pn | 22 03 25.4 | +0.8 | |
| TOAD | Toad River Com<br>baz=330,SNR=6.3 | 13.51 | 133 | P | Pn | 22 03 29.9 | +0.5 | |
| YKA | Yellowknife Ar | 13.89 | 106 | Pn | Pn | 22 03 31.6 | -3.0 | |
| YKA | Yellowknife Ar<br>comp=N,2.0nm,0.3s,baz=296,slow=17,SNR=20 | 13.89 | 106 | Pn | Pn | 22 03 30.9 | -3.6 | |
| YKA | | | | Sn | Sn | 22 05 57.0 | -11 | |
| | comp=N,2.8nm,0.3s,baz=312,slow=25,SNR=7.9<br>comp=N,2.2nm,0.3s | | | | | | | |
| T35M | Bob Quinn<br>baz=339 | 14.07 | 146 | P | Pn | 22 03 37.9 | +0.8 | |
| WRAK | Wrangell Islan | 14.22 | 152 | Pn | Pn | 22 03 40.7 | +1.6 | |
| WRAK | Wrangell Islan<br>baz=342 | 14.22 | 152 | P | Pn | 22 03 39.7 | +0.6 | |
| U33K | Whale Pass | 14.39 | 154 | Pn | Pn | 22 03 42.7 | +1.3 | |
| U33K | Whale Pass<br>baz=344 | 14.39 | 154 | P | Pn | 22 03 42.9 | +1.5 | |
| CRAG | Craig<br>baz=344 | 15.01 | 154 | P | Pn | 22 03 50.9 | +1.0 | |
| RES | Resolute Bay | 15.61 | 49 | Pn | Pn | 22 03 54.3 | -3.2 | |
| RES | comp=Z,19nm,0.7s | | | IAmb | IAmb | 22 04 09.3 | | |
| RES | Resolute Bay<br>comp=Z,3.2nm,0.3s,baz=264,slow=13,SNR=7.2 | 15.61 | 49 | Pn | Pn | 22 03 52.7 | -4.8 | |
| RES | | | | Sn | Sn | 22 06 36.6 | -13 | |
| | comp=Z,1.5nm,0.3s,baz=336,slow=18,SNR=4.1 | | | | | | | |
| EUNU | Eureka | 17.39 | 30 | Pn | Pn | 22 04 18.9 | -1.4 | |
| LTY | Liberty | 25.23 | 140 | P | P | 22 05 44.2 | +0.7 | |
| LON | Longmire | 25.46 | 142 | P | P | 22 05 45.6 | 0.0 | |
| LON | comp=Z,5.1nm,0.8s | | | IAmb | IAmb | 22 05 48.5 | | |
| MXC | Moxie City | 25.96 | 140 | P | P | 22 05 50.4 | +0.3 | |
| TIXI | Tiksi | 26.57 | 315 | P | P | 22 05 56.8 | +1.4 | |
| MSO | Missoula<br>baz=337 | 27.30 | 131 | P | P | 22 06 02.9 | +0.6 | |
| I07A | Izee | 28.50 | 140 | P | P | 22 06 13.8 | +0.8 | |
| HLID | Hailey<br>baz=340 | 30.21 | 134 | P | P | 22 06 28.7 | +0.4 | |
| PETK | Petropavlovsk-<br>comp=Z,1.7nm,0.7s,baz=73,slow=6.9,SNR=3.4<br>comp=Z,1.7nm,0.7s | 30.72 | 268 | P | P | 22 06 32.4 | -0.2 | |
| PDAR | Pinedale Array<br>comp=Z,0.7nm,0.2s,baz=18,slow=5.2,SNR=8.8<br>comp=Z,0.7nm,0.2s | 32.25 | 128 | P | P | 22 06 47.7 | +1.4 | |
| RSSD | Black Hills | 32.62 | 120 | P | P | 22 06 49.8 | +0.3 | |
| RSSD | comp=Z,2.6nm,0.7s | | | IAmb | IAmb | 22 07 07.2 | | |
| ELK | Elko<br>comp=Z,0.5nm,0.4s,baz=6.1,slow=22,SNR=2.7<br>comp=Z,0.5nm,0.4s | 32.66 | 137 | P | P | 22 06 51.7 | +1.8 | |
| HWUT | Hardware Ranch | 32.78 | 131 | P | P | 22 06 52.7 | +1.7 | |
| HWUT | comp=Z,4.5nm,1.1s | | | IAmb | IAmb | 22 06 55.5 | | |
| TCUT | Toone Canyon | 33.28 | 131 | P | P | 22 06 56.9 | +1.5 | |
| KVN | Kaiserville | 33.62 | 141 | P | P | 22 06 58.9 | +0.7 | |
| DUG | Dugway, Tooele<br>baz=341 | 33.78 | 134 | P | P | 22 07 01.5 | +1.9 | |
| WAKR | Walker | 33.86 | 143 | P | P | 22 07 01.4 | +1.1 | |
| WAKR | comp=Z,4.1nm,1.0s | | | IAmb | IAmb | 22 07 09.2 | | |
| NVAR | Mina Array Bea<br>comp=Z,1.4nm,0.8s,baz=325,slow=6.2,SNR=9.1<br>comp=Z,1.4nm,0.8s | 34.17 | 142 | P | P | 22 07 05.2 | +2.1 | |
| NV11 | Mina Array Sit | 34.20 | 142 | P | P | 22 07 03.7 | +0.5 | |
| R11B | Troy Canyon, C<br>baz=343 | 34.86 | 138 | P | P | 22 07 10.1 | +1.1 | |
| P18A | Preston Nutter | 34.98 | 131 | P | P | 22 07 10.3 | 0.0 | |
| P18A | comp=Z,4.6nm,1.0s | | | IAmb | IAmb | 22 07 21.2 | | |
| ECSD | EROS Data Cent | 35.31 | 112 | P | P | 22 07 14.5 | +1.9 | |
| ECSD | EROS Data Cent<br>baz=333 | 35.31 | 112 | P | P | 22 07 13.2 | +0.5 | |
| TPNV | Topopah Spring | 36.04 | 140 | P | P | 22 07 20.0 | +0.8 | |
| TPNV | comp=Z,3.7nm,0.8s | | | IAmb | IAmb | 22 07 28.5 | | |
| TPNV | Topopah Spring<br>baz=344 | 36.04 | 140 | P | P | 22 07 20.6 | +1.4 | |
| ISCO | Idaho Springs<br>baz=338 | 36.11 | 125 | P | P | 22 07 20.8 | +0.9 | |
| OGNE | Ogallala<br>baz=336 | 36.12 | 120 | P | P | 22 07 21.4 | +1.7 | |
| CWC | Cottonwood Cre<br>baz=345 | 36.13 | 143 | P | P | 22 07 21.6 | +1.7 | |
| SCHQ | Schefferville | 36.17 | 73 | P | P | 22 07 19.8 | -0.1 | |
| SCHQ | Schefferville<br>comp=Z,5.1nm,0.8s,baz=339,slow=8.6,SNR=3.1<br>comp=Z,5.1nm,0.8s | 36.17 | 73 | P | P | 22 07 19.7 | -0.3 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VES | Vestal, Richgr<br>baz=345 | 36.50 | 144 | P | P | 22 07 25.2 | +2.3 | |
| MPMC | Manual Prospec<br>baz=344 | 36.62 | 142 | P | P | 22 07 26.2 | +2.1 | |
| ARVC | Arvin<br>baz=345 | 37.24 | 144 | P | P | 22 07 31.4 | +2.2 | |
| GSC | Goldstone, Bar<br>baz=344 | 37.50 | 141 | P | P | 22 07 33.0 | +1.5 | |
| TUQ | Turquoise Moun<br>baz=344 | 37.57 | 140 | P | P | 22 07 33.6 | +1.5 | |
| JFWS | Jewell Farm | 38.16 | 105 | P | P | 22 07 37.4 | +0.5 | |
| JFWS | comp=Z,7.6nm,0.9s | | | IAmb | IAmb | 22 07 50.6 | | |
| SNCC | San Nicolas Is<br>baz=346 | 38.92 | 146 | P | P | 22 07 44.9 | +1.6 | |
| PFO | Pinyon Flats O<br>baz=345 | 39.20 | 142 | P | P | 22 07 47.8 | +2.0 | |
| BC3 | Big Chuckawall<br>baz=344 | 39.38 | 140 | P | P | 22 07 49.1 | +1.7 | |
| IKP | In-Ko-Pah, Jac<br>baz=345 | 40.20 | 142 | P | P | 22 07 55.8 | +1.7 | |
| BORG | Borgarnes | 40.25 | 34 | P | P | 22 07 54.3 | +0.2 | |
| BORG | comp=Z,20nm,1.2s | | | IAmb | IAmb | 22 08 09.1 | | |
| ANMO | Albuquerque | 40.41 | 129 | P | P | 22 07 55.3 | -0.6 | |
| ANMO | Albuquerque<br>comp=Z,2.8nm,0.9s,baz=22,slow=8.4,SNR=8.1<br>comp=Z,2.8nm,0.9s | 40.41 | 129 | P | P | 22 07 58.2 | +2.2 | |
| TRQ | Mont Tremblant | 40.74 | 87 | P | P | 22 07 56.3 | -2.1 | |
| ARCES | ARCESS Array B<br>comp=Z,0.7nm,0.5s,baz=10.0,slow=8.0,SNR=5.5 | 41.01 | 5 | P | P | 22 08 00.5 | +0.2 | |
| ARCES | comp=Z,1μm,18.9s,baz=92,slow=38<br>comp=Z,0.7nm,0.5s | | | LR | LR | 22 26 28.6 | | |
| OK032 | Salt Plains WL | 41.09 | 118 | P | P | 22 08 01.5 | +0.1 | |
| OK032 | comp=Z,7.0nm,0.6s | | | IAmb | IAmb | 22 08 02.0 | | |
| AMTX | Amarillo | 41.82 | 123 | P | P | 22 08 07.5 | 0.0 | |
| AMTX | comp=Z,5.0nm,0.6s | | | IAmb | IAmb | 22 08 11.9 | | |
| AMTX | Amarillo<br>baz=339 | 41.82 | 123 | P | P | 22 08 09.2 | +1.8 | |
| S39A | Bolivar | 41.84 | 112 | P | P | 22 08 08.2 | +0.8 | |
| S39A | comp=Z,6.1nm,1.1s | | | IAmb | IAmb | 22 08 12.0 | | |
| PECO | Prince Edward | 41.87 | 91 | P | P | 22 08 07.5 | -0.1 | |
| LONY | Lake Ozonia | 42.12 | 89 | P | P | 22 08 09.4 | -0.3 | |
| CCM | Cathedral Cave<br>baz=335 | 42.19 | 110 | P | P | 22 08 11.0 | +0.7 | |
| 121A | Cookes Peak, D<br>baz=342 | 42.33 | 132 | P | P | 22 08 13.2 | +1.5 | |
| M53A | WI Miller and<br>baz=332 | 42.77 | 97 | P | P | 22 08 15.9 | +0.9 | |
| BATG | Bathurst New B | 42.79 | 79 | P | P | 22 08 14.8 | -0.4 | |
| BATG | comp=Z,9.0nm,1.1s | | | IAmb | IAmb | 22 08 25.0 | | |
| WMOK | Wichita Mounta<br>baz=338 | 42.83 | 120 | P | P | 22 08 17.9 | +2.4 | |
| K57A | Scipio Center | 43.09 | 92 | P | P | 22 08 17.4 | -0.2 | |
| F64A | Sherman | 43.22 | 82 | P | P | 22 08 18.5 | -0.1 | |
| F64A | comp=Z,12nm,1.4s | | | IAmb | IAmb | 22 08 31.0 | | |
| LBNH | Lisbon<br>baz=331 | 43.38 | 86 | P | P | 22 08 20.9 | +0.9 | |
| PKME | Peaks-Kenny Pk | 43.41 | 83 | P | P | 22 08 19.3 | -0.8 | |
| PKME | comp=Z,12nm,1.1s | | | IAmb | IAmb | 22 08 20.8 | | |
| PKME | Peaks-Kenny Pk<br>baz=330 | 43.41 | 83 | P | P | 22 08 20.7 | +0.6 | |
| JKA | Kamikawa-asahi | 43.65 | 274 | P | P | 22 08 21.1 | -1.0 | |
| BINY | Binghamton<br>baz=332 | 43.74 | 92 | P | P | 22 08 23.5 | +0.7 | |
| MNTX | Cornudas Mount<br>baz=341 | 43.76 | 129 | P | P | 22 08 24.4 | +1.3 | |
| P52A | Corning<br>baz=333 | 43.87 | 99 | P | P | 22 08 23.8 | -0.1 | |
| DRLN | Deer Lake | 43.98 | 70 | P | P | 22 08 24.1 | -0.5 | |
| O54A | Avella | 43.99 | 97 | P | P | 22 08 24.8 | 0.0 | |
| O54A | comp=Z,6.6nm,0.8s | | | IAmb | IAmb | 22 08 34.7 | | |
| LCAR | Lake Charles | 44.02 | 111 | P | P | 22 08 25.5 | +0.4 | |
| LCAR | comp=Z,2.8nm,0.5s | | | IAmb | IAmb | 22 08 29.7 | | |
| GGN | Saint George | 44.39 | 81 | P | P | 22 08 28.2 | +0.2 | |
| GGN | comp=Z,6.5nm,1.1s | | | IAmb | IAmb | 22 08 33.6 | | |
| SSPA | Standing Stone | 44.46 | 95 | P | P | 22 08 27.7 | -0.9 | |
| SSPA | Standing Stone<br>baz=333 | 44.46 | 95 | P | P | 22 08 28.9 | +0.3 | |
| LMN | Caledonia Moun | 44.46 | 79 | P | P | 22 08 28.7 | +0.2 | |
| LMN | comp=Z,4.6nm,0.8s | | | IAmb | IAmb | 22 08 36.3 | | |
| MIAR | Mount Ida<br>baz=337 | 44.63 | 114 | P | P | 22 08 31.4 | +1.3 | |
| WVT | Waverly | 45.07 | 107 | P | P | 22 08 34.2 | +0.7 | |
| WVT | comp=Z,3.8nm,0.6s | | | IAmb | IAmb | 22 08 50.2 | | |
| WVT | Waverly<br>baz=336 | 45.07 | 107 | P | P | 22 08 34.6 | +1.1 | |
| GBN | Guysborough | 45.98 | 76 | P | P | 22 08 40.8 | +0.2 | |
| OXF | Oxford | 46.02 | 110 | P | P | 22 08 42.0 | +0.9 | |
| OXF | Oxford<br>baz=336 | 46.02 | 110 | P | P | 22 08 42.2 | +1.2 | |
| PLAL | Pickwick Lake | 46.03 | 108 | P | P | 22 08 39.9 | -1.3 | |
| PLAL | comp=Z,3.6nm,0.8s | | | IAmb | IAmb | 22 08 46.7 | | |
| TZTN | Tazewell | 46.15 | 103 | P | P | 22 08 42.1 | 0.0 | |
| TXAR | Lajitas Array | 46.47 | 128 | P | P | 22 08 44.3 | -0.4 | |
| TXAR | Lajitas Array<br>comp=Z,1.4nm,0.8s,baz=359,slow=7.2,SNR=14<br>comp=Z,1.4nm,0.8s | 46.47 | 128 | P | P | 22 08 45.3 | +0.6 | |
| TKL | Tuckaleechee C | 46.88 | 103 | P | P | 22 08 46.7 | -1.1 | |
| TKL | comp=Z,3.0nm,1.1s | | | IAmb | IAmb | 22 09 03.2 | | |
| USRK | Ussuriysk Ar. | 47.26 | 283 | P | P | 22 08 50.5 | -0.2 | |
| USRK | Ussuriysk Ar.<br>comp=Z,1.9nm,0.8s,baz=29,slow=6.7,SNR=5.2<br>comp=Z,1.9nm,0.8s | 47.26 | 283 | P | P | 22 08 50.1 | -0.5 | |
| FPAL | Fort Paine | 47.27 | 106 | P | P | 22 08 51.7 | +0.8 | |
| Y49A | Blount Mountai | 47.62 | 107 | P | P | 22 08 54.0 | +0.4 | |
| Y49A | comp=Z,7.6nm,1.3s | | | IAmb | IAmb | 22 09 06.1 | | |
| T59A | Double "B" Far | 47.84 | 96 | P | P | 22 08 55.5 | +0.2 | |
| LRAL | Lakeview Retre | 48.17 | 108 | P | P | 22 08 58.6 | +0.8 | |
| LRAL | comp=Z,3.0nm,0.6s | | | IAmb | IAmb | 22 09 03.4 | | |
| LRAL | Lakeview Retre<br>baz=337 | 48.17 | 108 | P | P | 22 08 59.3 | +1.5 | |
| NOA | NORSAR Array B<br>comp=Z,0.9nm,0.9s,baz=339,slow=5.2,SNR=1.5<br>comp=Z,0.9nm,0.9s | 48.56 | 16 | P | P | 22 08 59.4 | -1.1 | |
| GOGA | Godfrey | 49.02 | 104 | P | P | 22 09 04.7 | +0.3 | |
| GOGA | comp=Z,4.3nm,0.8s | | | IAmb | IAmb | 22 09 12.9 | | |
| GOGA | Godfrey<br>baz=336 | 49.02 | 104 | P | P | 22 09 05.6 | +1.2 | |
| FIA1 | FINESS Array S | 49.13 | 6 | P | P | 22 09 04.7 | -0.1 | |
| FINES | FINESS Array B | 49.13 | 6 | P | P | 22 09 04.7 | -0.2 | |
| FINES | FINESS Array B<br>comp=Z,3.6nm,0.8s,baz=5.5,slow=8.1,SNR=12<br>comp=Z,3.6nm,0.8s | 49.13 | 6 | P | P | 22 09 04.3 | -0.6 | |
| HFS | Hagfors<br>comp=Z,5.0nm,0.9s,baz=11,slow=3.0,SNR=10<br>comp=Z,5.0nm,0.9s | 49.67 | 14 | P | P | 22 09 08.5 | -0.6 | |
| ZALV | Zalesovo Beam<br>comp=Z,0.5nm,0.4s,baz=20,slow=6.4,SNR=2.8<br>comp=Z,0.5nm,0.4s | 51.72 | 325 | P | P | 22 09 26.0 | +1.4 | |
| MJAR | Matsushiro Arr<br>comp=Z,2.0nm,0.8s,baz=11,slow=7.8,SNR=7.6<br>comp=Z,2.0nm,0.8s | 51.91 | 273 | P | P | 22 09 26.4 | +0.3 | |
| SONM | Songino Array<br>comp=Z,0.5nm,0.7s,baz=28,slow=5.5,SNR=2.5<br>comp=Z,0.5nm,0.7s | 52.12 | 306 | P | P | 22 09 28.0 | +0.2 | |
| EKA | Eskdalemuir

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HHC | | | | sP | sP | 22 10 10.4 | +1.1 | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,14nm,0.5s | | | | | | | | |
| **CLL** | **Collm** | **58.34** | **16** | *e*P | **P** | **22 10 15.0** | **+2.7** | | |
| **MKAR** | **Makanchi Array** | **59.03** | **324** | P | **P** | **22 10 16.8** | **-0.5** | | |
| | comp=Z,0.3nm,0.4s,baz=46,slow=5.6,SNR=5.4 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.98** | **5** | P | **P** | **22 10 23.2** | **-0.5** | | |
| | comp=Z,1.6nm,0.4s,baz=357,slow=7.1,SNR=5.9 | | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **60.17** | **342** | P | **P** | **22 10 24.7** | **-0.4** | | |
| **GERES** | **GERESS Array B** | **60.84** | **16** | P | **P** | **22 10 29.8** | **0.0** | | |
| | comp=Z,0.3nm,0.5s,baz=284,slow=4.0,SNR=2.4 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |
| **NJ2** | **Nanjing** | **62.64** | **288** | *e*P | **P** | **22 10 42.8** | **+0.8** | | |
| NJ2 | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **62.88** | **8** | P | **P** | **22 10 42.7** | **-0.9** | | |
| BUR08 | | | | IAmb | IAmb | 22 10 49.2 | | | |
| | comp=Z,1.9nm,1.0s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **62.91** | **8** | P | **P** | **22 10 43.5** | **-0.3** | | |
| **CMLA** | **Cha da Macela** | **64.14** | **50** | P | **P** | **22 10 51.6** | **-0.2** | | |
| **KKAR** | **Karatay Array** | **64.77** | **332** | P | **P** | **22 10 57.1** | **+1.2** | | |
| **MTDJ** | **Mount Denham** | **65.03** | **105** | P | **P** | **22 10 58.7** | **+0.7** | | |
| **ESBB** | **Sonseca Array** | **67.30** | **32** | P | **P** | **22 11 12.0** | **-0.3** | | |
| ESBB | | | | IAmb | IAmb | 22 11 16.4 | | | |
| | comp=Z,4.1nm,1.2s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.30** | **32** | P | **P** | **22 11 12.6** | **+0.3** | | |
| | comp=Z,2.1nm,1.0s,baz=346,slow=7.7,SNR=7.0 | | | | | | | | |
| | comp=Z,2.1nm,1.0s | | | | | | | | |
| **PAB** | **San Pablo** | **67.35** | **33** | P | **P** | **22 11 13.2** | **+0.6** | | |
| **BRTR** | **Keskin Array B** | **71.04** | **2** | P | **P** | **22 11 35.8** | **+0.2** | | |
| | comp=Z,0.5nm,0.6s,baz=12,slow=7.4,SNR=1.9 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **PZH** | **PanZhiHua** | **73.25** | **301** | P | **P** | **22 11 50.0** | **+1.1** | | |
| **PZH** | **PanZhiHua** | **73.25** | **301** | P | **P** | **22 11 51.5** | **+2.6** | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **KEST** | **Kesra** | **73.28** | **22** | P | **P** | **22 11 49.3** | **+0.4** | | |
| KEST | | | | IAmb | IAmb | 22 12 03.5 | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **KEST** | **Kesra** | **73.28** | **22** | P | **P** | **22 11 49.6** | **+0.7** | | |
| | comp=Z,2.9nm,0.9s,baz=23,slow=7.8,SNR=4.6 | | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.66** | **301** | P | **P** | **22 12 36.7** | **+0.8** | | |
| | comp=Z,1.3nm,0.7s,baz=356,slow=7.6,SNR=7.4 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **159.39** | **180** | PKPab | **PKPab** | **22 20 53.8** | **+1.3** | | |
| | comp=Z,0.5nm,0.9s,baz=5.3,slow=2.7,SNR=1.4 | | | | | | | | |

*NEIC* ***12*** *22:02:21.0±1.4, 69.6°61N±0.05°×144.4°40W±0.07, h3km±7km, Error ellipse: s-maj=7.8km s-min=1.4km az=204.0*

**AEIC 12 22:02:21.5**±1.3**, 69°52N**±0.08°×**144°40W**±0.07**, h2km±6km**, ML3.5, ML3.7**/56(NEIC)**, Error ellipse: s-maj=11.5km s-min=3.1km az=187.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.27** | **65** | | Pg | 22 02 26.2 | -0.4 |
| C27K | | | | | Sg | 22 02 30.2 | +0.1 |
| **C26K** | **Camden Bay** | **0.44** | **336** | | Pg | 22 02 29.6 | -0.4 |
| **D25K** | **Kavik River** | **0.72** | **255** | | Pg | 22 02 33.9 | -1.6 |
| D25K | | | | | Sg | 22 02 43.4 | -1.4 |
| **D27M** | **Malcolm River** | **1.25** | **101** | | Pg | 22 02 44.8 | -0.6 |
| D27M | | | | | Sg | 22 03 01.4 | -0.2 |
| D27M | | | | IAML | | 22 03 09.4 | |
| | comp=N,827nm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **280** | | Pn | 22 02 49.1 | -0.5 |
| C24K | | | | | Sg | 22 03 10.2 | -0.1 |
| C24K | | | | IAML | | 22 03 15.5 | |
| | comp=E,1μm,0.7s | | | | | | |
| C24K | | | | IAML | | 22 03 24.1 | |
| | comp=N,918nm,0.9s | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **259** | | Pn | 22 02 51.0 | +0.1 |
| D24K | | | | IAML | | 22 03 14.6 | |
| | comp=N,1μm,0.5s | | | | | | |
| D24K | | | | IAML | | 22 03 16.2 | |
| | comp=E,1μm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **141** | | Pn | 22 02 52.0 | +0.1 |
| E27K | | | | IAML | | 22 03 22.5 | |
| | comp=N,462nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **177** | | Pn | 22 02 53.9 | -0.2 |
| F26K | | | | IAML | | 22 03 20.7 | |
| | comp=E,741nm,0.8s | | | | | | |
| F26K | | | | IAML | | 22 03 24.6 | |
| | comp=N,436nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.97** | **115** | Pn | Pn | 22 02 55.5 | -0.4 |
| E28M | | | | IAML | | 22 03 32.4 | |
| | comp=N,425nm,0.9s | | | | | | |
| **F25K** | **Christian River** | **1.99** | **194** | Pn | Pb | 22 02 57.2 | -1.1 |
| F25K | | | | IAML | | 22 03 27.4 | |
| | comp=N,447nm,0.9s | | | | | | |
| F25K | | | | IAML | | 22 03 27.6 | |
| | comp=E,397nm,1.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **247** | Pn | Pn | 22 02 56.1 | -0.9 |
| TOLK | | | | IAML | | 22 03 30.6 | |
| | comp=E,502nm,0.9s | | | | | | |
| TOLK | | | | IAML | | 22 03 32.9 | |
| | comp=N,416nm,1.0s | | | | | | |
| **E24K** | **Your Creek** | **2.08** | **228** | Pn | Pn | 22 02 57.7 | +0.3 |
| **BMAR** | **Burnt Mountain** | **2.10** | **182** | Pn | Pn | 22 02 58.5 | +0.8 |
| **C23K** | **Itkillik River** | **2.19** | **281** | Pn | Pn | 22 02 59.2 | +0.3 |
| **D23K** | **Nanushuk River** | **2.31** | **259** | Pn | Pn | 22 03 01.2 | +0.7 |
| D23K | | | | IAML | | 22 03 41.9 | |
| | comp=E,345nm,0.8s | | | | | | |
| D23K | | | | IAML | | 22 03 56.2 | |
| | comp=N,292nm,1.1s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **214** | Pn | Pn | 22 03 02.1 | +0.5 |
| **F28M** | **Old Crow** | **2.53** | **137** | Pn | Pn | 22 03 04.0 | +0.3 |
| F28M | | | | IAML | | 22 03 48.5 | |
| | comp=N,286nm,0.9s | | | | | | |
| F28M | | | | IAML | | 22 03 50.4 | |
| | comp=E,248nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **3.02** | **262** | Pn | Pn | 22 03 09.5 | -0.9 |
| D22K | | | | IAML | | 22 03 59.4 | |
| | comp=N,289nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.22** | **289** | Pn | Pn | 22 03 12.4 | -0.6 |
| **G29M** | **Pine Creek** | **3.54** | **135** | Pn | Pn | 22 03 17.2 | -0.1 |
| **B21K** | **Ikpikpuk River** | **3.58** | **276** | Pn | Pn | 22 03 17.8 | -0.1 |
| **E21K** | **Killik River** | **3.62** | **257** | Pn | Pn | 22 03 18.1 | -0.3 |
| E21K | | | | IAML | | 22 04 28.3 | |
| | comp=E,162nm,0.9s | | | | | | |
| E21K | | | | IAML | | 22 04 29.7 | |
| | comp=N,201nm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **4.43** | **155** | Pn | Pn | 22 03 29.8 | +0.1 |
| I28M | | | | IAML | | 22 04 00.2 | |
| | comp=E,100nm,1.4s | | | | | | |
| I28M | | | | IAML | | 22 04 01.0 | |
| | comp=N,75nm,1.5s | | | | | | |
| **B20K** | **Meade River** | **4.46** | **282** | Pn | Pn | 22 03 28.1 | -1.9 |
| **MDM** | **Murphy Dome** | **4.81** | **200** | Pn | Pn | 22 03 34.3 | -0.7 |
| MDM | | | | IAML | | 22 04 09.6 | |
| | comp=N,62nm,1.8s | | | | | | |
| MDM | | | | IAML | | 22 05 02.4 | |
| | comp=E,56nm,1.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.03** | **224** | Pn | Pn | 22 03 37.0 | -0.9 |
| H21K | | | | IAML | | 22 04 15.1 | |
| | comp=N,59nm,1.4s | | | | | | |
| H21K | | | | IAML | | 22 04 17.0 | |
| | comp=E,59nm,1.6s | | | | | | |
| **D19K** | **Kuna River** | **5.04** | **265** | Pn | Pn | 22 03 36.6 | -1.4 |
| **E19K** | **Redstone River** | **5.15** | **252** | Pn | Pn | 22 03 39.7 | +0.1 |
| **I30M** | **Mount Dempster** | **5.31** | **141** | Pn | Pn | 22 03 42.2 | +0.4 |
| I30M | | | | IAML | | 22 04 21.8 | |
| | comp=N,56nm,1.3s | | | | | | |
| I30M | | | | IAML | | 22 04 44.8 | |
| | comp=E,57nm,0.8s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.67** | **248** | Pn | Pn | 22 03 46.6 | 0.0 |
| **C18K** | **Utukok River** | **6.07** | **270** | Pn | Pn | 22 03 51.5 | -0.8 |
| **E18K** | **Tukpahlearik C** | **6.32** | **258** | Pn | Pn | 22 03 55.2 | -0.3 |
| **RDOG** | **Red Dog Mine** | **6.87** | **266** | Pn | Pn | 22 04 00.9 | -2.2 |
| **M27K** | **Edge Creek, AK** | **7.26** | **171** | Pn | Pn | 22 04 07.3 | -1.3 |

*NEIC* ***12*** *22:03:18.3±1.2, 5.7°S±0.1°×154.4°E±0.1°, h169km±8km, mb4.7/24, Error ellipse: s-maj=19.5km s-min=15.2km az=73.0*

*IDC* ***12*** *22:03:19.4±3.8, 5.7°S×154.35°E, h180km×33km, mb3.4/12, mbtmp3.9/13, Error ellipse: s-maj=27.1km s-min=15.2km az=73.0*

**ISC 12 22:03:16.1**±0.6**, 5.69°S**±0.08°×**154.51°E**±0.09**, h150km, n44, σ1s24/45, mb4.3/22, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.77** | **302** | | **Pn** | **22 04 02.4** | **+1.7** |
| **PMG** | **Port Moresby** | **8.16** | **243** | | **Pn** | **22 05 12.1** | **+0.4** |
| **PMG** | **Port Moresby** | **8.16** | **243** | P | **Pn** | **22 05 14.3** | **+2.6** |
| | 22nm,0.5s,baz=41,slow=11,SNR=3.2 | | | | | | |
| PMG | | | | S | **Sn** | **22 06 41.4** | **-1.3** |
| | 8.6nm,0.4s,baz=20,slow=15,SNR=2.3 | | | | | | |
| **CTA** | **Charters Tower** | **16.40** | **209** | P | **Pn** | **22 06 58.8** | **+0.9** |
| | 0.3nm,0.9s,baz=29,slow=17,SNR=2.4 | | | | | | |
| **CTAO** | **Charters Tower** | **16.40** | **209** | | **Pn** | **22 06 59.2** | **+1.3** |
| **DZM** | **Mont Dzumac** | **19.96** | **146** | P | **P** | **22 07 38.2** | **+1.4** |
| **DZM** | **Mont Dzumac** | **19.96** | **146** | P | **P** | **22 07 37.7** | **+0.8** |
| | 5.3nm,0.5s,baz=311,slow=20,SNR=3.3 | | | | | | |
| | 5.3nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.04** | **232** | P | **P** | **22 08 16.8** | **-0.7** |
| **WB0** | **Warramunga Arr** | **24.05** | **233** | P | **P** | **22 08 17.4** | **-0.2** |
| **WRAB** | **Tennant Creek** | **24.18** | **232** | P | **P** | **22 08 17.6** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 22 08 24.4 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.18** | **232** | P | **P** | **22 08 18.1** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 22 08 19.4 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.19** | **232** | P | **P** | **22 08 17.9** | **-1.0** |
| | comp=Z,0.7nm,0.6s,baz=57,slow=10,SNR=8.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **26.70** | **226** | P | **P** | **22 08 40.3** | **-1.3** |
| | comp=Z,0.3nm,0.4s,baz=56,slow=9.5,SNR=9.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **31.99** | **210** | P | **P** | **22 09 26.9** | **-1.4** |
| BBOO | | | | IAmb | IAmb | 22 09 27.2 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **35.21** | **222** | P | **P** | **22 09 55.1** | **-1.0** |
| FORT | | | | IAmb | IAmb | 22 10 02.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **RTZ** | **Ruatahuna** | **38.59** | **151** | P | **P** | **22 10 24.0** | **-0.7** |
| RTZ | | | | IAmb | IAmb | 22 10 27.6 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **BKZ** | **Black Stump Fm** | **38.80** | **152** | P | **P** | **22 10 26.6** | **+0.3** |
| BKZ | | | | IAmb | IAmb | 22 10 30.0 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **TCW** | **Tory Channel** | **39.53** | **156** | P | **P** | **22 10 32.8** | **+0.4** |
| **TUWZ** | **Tuamarina** | **39.59** | **157** | P | **P** | **22 10 33.8** | **+1.0** |
| **MRZ** | **Mangatainoka R** | **39.61** | **155** | P | **P** | **22 10 33.0** | **0.0** |
| MRZ | | | | IAmb | IAmb | 22 10 41.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **BFZ** | **Birch Farm** | **39.92** | **154** | P | **P** | **22 10 35.6** | **+0.1** |
| BFZ | | | | IAmb | IAmb | 22 10 39.5 | |
| | comp=Z,36nm,1.3s | | | | | | |
| **MSWZ** | **Moikau Station** | **40.10** | **156** | P | **P** | **22 10 35.7** | **-1.3** |
| **USRK** | **Ussuriysk Ar.** | **53.65** | **340** | P | **P** | **22 12 22.6** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=144,slow=42,SNR=2.4 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **58.19** | **343** | P | **P** | **22 12 54.1** | **-0.2** |
| | comp=Z,1.2nm,0.7s,baz=185,slow=11,SNR=4.1 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **59.79** | **295** | P | **P** | **22 13 06.1** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=122,slow=4.8,SNR=5.4 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **67.99** | **327** | P | **P** | **22 13 58.6** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=123,slow=3.9,SNR=2.5 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **71.89** | **178** | P | **P** | **22 14 20.6** | **-1.7** |
| **VNDA** | **Vanda** | **71.89** | **178** | P | **P** | **22 14 22.6** | **+0.2** |
| | comp=Z,0.6nm,0.7s,baz=330,slow=7.8,SNR=7.9 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **CHGN** | **Chignik** | **72.79** | **25** | P | **P** | **22 14 26.9** | **-1.0** |
| **M13K** | **Dall Lake** | **73.70** | **20** | P | **P** | **22 14 31.6** | **-1.6** |
| **KDAK** | **Kodiak Island** | **76.22** | **26** | P | **P** | **22 14 47.7** | **0.0** |
| **L19K** | **White Mountain** | **77.93** | **22** | P | **P** | **22 14 57.1** | **-0.2** |
| L19K | | | | IAmb | IAmb | 22 14 58.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **M19K** | **Big River Lodg** | **77.94** | **22** | P | **P** | **22 14 57.6** | **+0.3** |
| M19K | | | | IAmb | IAmb | 22 14 58.4 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **RC01** | **Rabbit Creek A** | **79.28** | **24** | P | **P** | **22 15 03.8** | **-0.9** |
| **GLI** | **Glacier Island** | **80.26** | **25** | P | **P** | **22 15 09.8** | **-0.1** |
| **MK31** | **Makanchi Array** | **82.11** | **319** | P | **P** | **22 15 19.2** | **-0.9** |
| **MKAR** | **Makanchi Array** | **82.11** | **319** | P | **P** | **22 15 19.0** | **-1.1** |
| **MKAR** | **Makanchi Array** | **82.11** | **319** | P | **P** | **22 15 19.4** | **-0.7** |
| | comp=Z,0.3nm,0.7s,baz=106,slow=4.7,SNR=2.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **IL31** | | **82.35** | **22** | P | **P** | **22 15 20.8** | **0.0** |
| IL31 | | | | IAmb | IAmb | 22 15 21.9 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.27** | **180** | P | **P** | **22 15 31.0** | **+0.1** |
| | comp=Z,3.1nm,0.8s,baz=7.2,slow=2.1,SNR=14 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **85.40** | **203** | P | **P** | **22 15 36.1** | **-0.2** |
| | comp=Z,3.0nm,0.6s,baz=78,slow=5.3,SNR=5.2 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **85.55** | **322** | P | **P** | **22 15 36.6** | **-0.7** |
| | comp=Z,0.3nm,0.6s,baz=97,slow=4.4,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **TKX** | **Tecate** | **92.09** | **58** | P | **P** | **22 16 08.2** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **152.20** | **287** | PKPbc | **PKPdf** | **22 22 53.2** | **+5.0** |
| | comp=Z,1.4nm,1.2s,baz=126,slow=0.3,SNR=8.8 | | | | | | |

*NEIC* ***12*** *22:08:03.1±0.6, 69.6°64N±0.05°×145.43W±0.08, h4km±7km, Error ellipse: s-maj=8.6km s-min=1.3km az=206.0*

**AEIC 12 22:08:03.0**±0.6**, 69°61N**±0.06°×**145°5W**±0.1**, h0km±6km, ML3.6, ML3.7/54(NEIC), Error ellipse: s-maj=8.8km s-min=5.3km az=195.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.36** | **31** | | Pg | 22 08 09.6 | -0.2 |
| C26K | | | | | Sg | 22 08 14.8 | +0.4 |
| **D25K** | **Kavik River** | **0.44** | **229** | | Pg | 22 08 11.1 | -0.2 |
| D25K | | | | | Sg | 22 08 17.7 | +0.6 |
| **C24K** | **Franklin Bluff** | **1.14** | **277** | | Pg | 22 08 24.6 | -0.2 |
| C24K | | | | Sn | Sn | 22 08 42.3 | -0.2 |
| C24K | | | | IAML | | 22 08 43.6 | |
| | comp=N,623nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.28** | **250** | | Pg | 22 08 27.5 | 0.0 |
| D24K | | | | Sn | Sn | 22 08 46.0 | +0.1 |
| D24K | | | | IAML | | 22 08 48.6 | |
| | comp=E,878nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.77** | **238** | Pn | Pn | 22 08 34.3 | -0.5 |
| **C23K** | **Itkillik River** | **1.81** | **279** | | Pn | 22 08 35.3 | 0.0 |
| C23K | | | | IAML | | 22 09 08.1 | |
| | comp=E,338nm,0.9s | | | | | | |
| C23K | | | | IAML | | 22 09 11.3 | |
| | comp=N,337nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **1.90** | **217** | | Pn | 22 08 36.7 | +0.1 |
| **D23K** | **Nanushuk River** | **1.97** | **253** | | Pn | 22 08 37.8 | +0.3 |
| **E27K** | **Coleen River** | **2.00** | **134** | | Pn | 22 08 38.1 | +0.1 |
| E27K | | | | IAML | | 22 09 37.5 | |
| | comp=E,310nm,0.5s | | | | | | |
| E27K | | | | IAML | | 22 09 37.5 | |
| | comp=N,459nm,0.4s | | | | | | |
| **F25K** | **Christian Rive** | **2.03** | **182** | | Pn | 22 08 38.5 | 0.0 |
| F25K | | | | IAML | | 22 09 43.1 | |
| | comp=N,197nm,0.4s | | | | | | |
| F25K | | | | IAML | | 22 09 52.8 | |
| | comp=E,212nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.22** | **171** | | Pn | 22 08 41.2 | +0.2 |
| **D28M** | **Stokes Point** | **2.38** | **94** | | Pn | 22 08 42.3 | -0.8 |
| **D22K** | **Ayikyak River** | **2.68** | **257** | | Pn | 22 08 47.1 | -0.2 |
| D22K | | | | IAML | | 22 10 29.4 | |
| | comp=E,219nm,0.4s | | | | | | |
| D22K | | | | IAML | | 22 10 31.4 | |
| | comp=N,265nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.75** | **166** | | Pn | 22 08 48.3 | +0.1 |
| **B22K** | **Teshekpuk Lake** | **2.84** | **289** | | Pn | 22 08 49.0 | -0.4 |
| B22K | | | | IAML | | 22 10 37.1 | |
| | comp=N,184nm,0.5s | | | | | | |
| B22K | | | | IAML | | 22 10 39.0 | |
| | comp=E,213nm,0.6s | | | | | | |
| **G25K** | **Bearman Lake** | **2.87** | **185** | | Pn | 22 08 50.0 | +0.1 |
| **COLD** | **Coldfoot** | **2.97** | **218** | | Pn | 22 08 51.4 | +0.1 |
| **FYU** | **Fort Yukon** | **3.06** | **178** | | Pn | 22 08 53.2 | +0.7 |
| **B21K** | **Ikpikpuk River** | **3.21** | **274** | Pn | Pn | 22 08 54.5 | 0.0 |
| B21K | | | | IAML | | 22 10 50.2 | |
| | comp=E,262nm,0.6s | | | | | | |
| B21K | | | | IAML | | 22 11 00.3 | |
| | comp=N,249nm,0.8s | | | | | | |
| **F22K** | **John River** | **3.25** | **233** | | Pn | 22 08 54.8 | -0.4 |
| **A22K** | **Sinclair Lake** | **3.51** | **298** | | Pn | 22 08 58.3 | -0.4 |
| **H27K** | **Steamboat Moun** | **3.71** | **155** | | Pn | 22 09 01.3 | -0.1 |
| **F21K** | **Alatna River** | **3.82** | **235** | Pn | Pn | 22 09 02.6 | -0.3 |
| **G29M** | **Pine Creek** | **3.87** | **131** | | Pn | 22 09 03.4 | -0.3 |
| **H24K** | **Noodor Dome** | **3.91** | **195** | | Pn | 22 09 03.8 | -0.4 |
| **F30M** | **Barrier River** | **4.07** | **115** | | Pn | 22 09 06.3 | 0.0 |
| **B20K** | **Meade River** | **4.08** | **281** | | Pn | 22 09 06.2 | -0.2 |
| **D20K** | **Etivluk River** | **4.09** | **262** | | Pn | 22 09 06.5 | -0.2 |
| **E20K** | **Nigu River** | **4.11** | **256** | | Pn | 22 09 07.2 | +0.3 |
| **H23K** | **Yukon River** | **4.11** | **204** | | Pn | 22 09 06.8 | -0.2 |
| H23K | | | | IAML | | 22 11 23.5 | |
| | comp=N,211nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.12** | **180** | | Pn | 22 09 06.7 | -0.5 |
| **F20K** | **Avaraart Lake** | **4.60** | **241** | | Pn | 22 09 13.7 | +0.1 |
| F20K | | | | IAML | | 22 11 53.4 | |
| | comp=E,71nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **4.68** | **262** | | Pn | 22 09 14.6 | -0.2 |
| **I28M** | **Miner Creek** | **4.69** | **151** | | Pn | 22 09 14.9 | 0.0 |
| **MDM** | **Murphy Dome** | **4.80** | **194** | | Pn | 22 09 16.4 | 0.0 |
| MDM | | | | IAML | | 22 11 39.3 | |
| | comp=N,82nm,0.7s | | | | | | |
| **E19K** | **Redstone River** | **4.84** | **249** | | Pn | 22 09 16.9 | 0.0 |
| E19K | | | | IAML | | 22 12 04.0 | |
| | comp=N,111nm,0.8s | | | | | | |
| E19K | | | | IAML | | 22 12 06.3 | |
| | comp=E,99nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.03** | **271** | Pn | Pn | 22 09 19.2 | -0.3 |
| C19K | | | | IAML | | 22 12 10.6 | |
| | comp=N,77nm,1.0s | | | | | | |
| C19K | | | | IAML | | 22 12 24.6 | |
| | comp=E,68nm,1.8s | | | | | | |

*TIR* ***12*** *22:08:10.9, 38.99°N×19.96E, h18km±3km, Ml3.2*

*IDC* ***12*** *22:08:11.3±1.3, 38.89°N×20.23E, h0km, mb3.5/4, mbtmp3.4/8, ML3.1/2, Error ellipse: s-maj=24.2km s-min=17.4km az=120.0*

*ATH* ***12*** *22:08:13.7, 39.00°N×20.10E, h19km±11km, ML3.0/6, Error ellipse: s-maj=11.3km s-min=1.0km az=70.0*

*BEO* ***12*** *22:08:14.2±0.7, 39.21°N×19.98E, h0km, ML2.9/11*

*THE* ***12*** *22:08:15.4, 39.04°N×20.18E, h0km±2km, ML2.9/9, Error ellipse: s-maj=2.5km s-min=0.5km az=249.0*

**ISC 12 22:08:13.0**±1.1**, 38.98N**±0.02°×**20.05E**±0.03**, h14km±8km, n92, σ1s40/124, mb3.6/4, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TSLK** | **Tsoukalades, L** | **0.50** | **108** | P | **Pb** | **22 08 23.2** | **-0.3** |
| TSLK | | | | S | **Sb** | **22 08 30.3** | **-0.3** |
| | 1μm,0.6s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **0.50** | **108** | P | **Pb** | **22 08 22.9** | **-0.6** |
| TSLK | | | | S | **Sb** | **22 08 30.4** | **-0.3** |
| **LKD2** | **Lefkada island** | **0.51** | **112** | P | **Pg** | **22 08 21.9** | **-1.2** |
| | baz=109 | | | | | | |
| LKD2 | | | | S | **Sb** | **22 08 31.9** | **+0.8** |
| | baz=109 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=N,8.0nm,0.3s,baz=109 | | | | | | |
| **LKD2** | **Lefkada island** | **0.51** | **112** | P | **Pb** | **22 08 23.3** | **-0.5** |
| LKD2 | | | | S | **Sb** | **22 08 30.3** | **-0.8** |
| | comp=N,2μm,0.2s | | | | | | |
| **LKD2** | **Lefkada island** | **0.51** | **112** | P | **Pg** | **22 08 22.8** | **-0.3** |
| LKD2 | | | | S | **Sb** | **22 08 30.2** | **-0.8** |
| **NYDR** | **Nydri-Lefkada** | **0.57** | **118** | P | **Pn** | **22 08 25.4** | **-1.3** |
| NYDR | | | | S | **Sb** | **22 08 33.1** | **+0.3** |
| | comp=N,1μm,0.4s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.57** | **118** | P | **Pg** | **22 08 23.7** | **-0.5** |
| **IGT** | **Igoumenitsa** | **0.59** | **22** | P | **Pg** | **22 08 24.1** | **-0.5** |
| | baz=27 | | | | | | |
| IGT | | | | S | **Sg** | **22 08 32.2** | **-0.3** |
| | baz=27 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=N,5.4nm,0.4s,baz=27 | | | | | | |
| **IGT** | **Igoumenitsa** | **0.59** | **22** | P | **Pg** | **22 08 24.3** | **-0.3** |
| IGT | | | | S | **Sg** | **22 08 32.4** | **-0.1** |
| | comp=N,1μm,0.4s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.59** | **22** | P | **Pg** | **22 08 24.1** | **-0.5** |
| IGT | | | | S | **Sg** | **22 08 32.6** | **+0.1** |
| IGT | | | | AML | AML | 22 08 34.2 | |
| | comp=N,2741μm,0.4s | | | | | | |
| IGT | | | | AML | AML | 22 08 35.1 | |
| | comp=E,2418μm,0.5s | | | | | | |
| **EVGl** | **Lefkada island** | **0.59** | **127** | P | **Pn** | **22 08 25.8** | **-1.2** |
| **EVGl** | **Lefkada island** | **0.59** | **127** | P | **Pb** | **22 08 24.6** | **-0.5** |
| **FSK** | **Fiskardo** | **0.66** | **142** | P | **Pn** | **22 08 28.3** | **+0.4** |
| FSK | | | | S | **Sn** | **22 08 37.3** | **-0.7** |
| | comp=E,3μm,0.3s | | | | | | |
| **FSK** | **Fiskardo** | **0.66** | **142** | P | **Pn** | **22 08 26.6** | **-1.3** |
| FSK | | | | S | **Sb** | **22 08 34.5** | **-0.8** |
| FSK | | | | AML | AML | 22 08 37.9 | |
| | comp=N,3360μm,0.4s | | | | | | |
| FSK | | | | AML | AML | 22 08 40.5 | |
| | comp=E,7177μm,0.2s | | | | | | |
| **KEK** | **Kerkira** | **0.76** | **345** | P | **Pn** | **22 08 29.1** | **-0.2** |
| KEK | | | | S | **Sn** | **22 08 40.4** | **-0.2** |
| | comp=E,1μm,0.4s | | | | | | |
| **KEK** | **Kerkira** | **0.76** | **345** | P | **Pb** | **22 08 28.1** | **+0.1** |
| KEK | | | | S | **Sg** | **22 08 37.3** | **-0.4** |
| KEK | | | | AML | AML | 22 08 42.0 | |
| | comp=E,1680μm,0.5s | | | | | | |
| KEK | | | | AML | AML | 22 08 42.0 | |
| | comp=N,1636μm,0.5s | | | | | | |
| **KASA** | **Kassiopi** | **0.77** | **353** | P | **Pg** | **22 08 27.9** | **-0.1** |
| KASA | | | | AML | AML | 22 08 42.8 | |
| | comp=E,3121μm,0.4s | | | | | | |
| KASA | | | | AML | AML | 22 08 44.2 | |
| | comp=N,1982μm,0.3s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.78** | **161** | P | **Pn** | **22 08 31.4** | **+1.7** |
| DMLN | | | | S | **Sn** | **22 08 43.3** | **+2.1** |
| | comp=N,2μm,0.3s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.78** | **161** | P | **Pb** | **22 08 27.4** | **-1.0** |
| **SMHA** | **Samh** | **0.87** | **147** | P | **Pg** | **22 08 29.2** | **-0.5** |
| SMHA | | | | S | **Sn** | **22 08 41.6** | **-1.5** |
| **SRN** | **Sarande** | **0.90** | **358** | P | **Pb** | **22 08 28.3** | **-2.1** |
| | baz=1.0 | | | | | | |
| SRN | | | | S | **Sb** | **22 08 42.3** | **+

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FNA | | | | *e*Sn | | **Sn** | **22 09 12.3** | **-0.7** |
| **OHR** | **Ohrid** | **2.20** | **15** | *i* Pn | | **Pb** | **22 08 51.7** | **-1.0** |
| **TIR** | **Tirane** | **2.37** | **357** | P | | **Pn** | **22 08 53.3** | **+1.8** |
| | baz=359 | | | | | | | |
| **TIR** | **Tirane** | **2.37** | **357** | *e*Pg | | **Pn** | **22 08 51.4** | **0.0** |
| TIR | | | | *e*Sg | | **Sn** | **22 09 21.7** | **+1.4** |
| **VAY** | **Valandovo** | **3.03** | **39** | *i* Pn | | **Pn** | **22 09 01.4** | **+0.9** |
| **PUK** | **Puka** | **3.06** | **358** | P | | **Pn** | **22 09 01.5** | **+0.5** |
| | baz=0.0 | | | | | | | |
| **DRME** | **Dracevica, Mon** | **3.27** | **349** | *e*Pn | | **Pn** | **22 09 03.8** | **0.0** |
| **BCI** | **Bajram Curri** | **3.38** | **0** | P | | **Pn** | **22 09 06.5** | **+1.1** |
| | baz=1.0 | | | | | | | |
| **SRS** | **Serrai** | **3.46** | **51** | *e*Pn | | **Pn** | **22 09 06.5** | **+0.1** |
| SRS | | | | *e*Sn | | **Sn** | **22 09 47.8** | **+0.7** |
| **PDG** | **Podgorica** | **3.50** | **350** | *e*Pn | | **Pn** | **22 09 06.3** | **-0.7** |
| PDG | | | | *e*Sn | | **Sn** | **22 09 47.0** | **-1.1** |
| **PDG** | **Podgorica** | **3.50** | **350** | *e*Pn | | **Pn** | **22 09 05.8** | **-1.2** |
| **PEHC** | **Pehcevo** | **3.54** | **37** | *i* Pn | | **Pn** | **22 09 08.6** | **+1.0** |
| **BOSS** | **Bosilegrad** | **3.97** | **27** | *e*Pn | | **Pn** | **22 09 13.6** | **+0.2** |
| **BARS** | **Barje** | **4.06** | **19** | *e*Pn | | **Pn** | **22 09 13.8** | **-0.9** |
| **BRY** | **Bratogost** | **4.08** | **344** | *e*Pn | | **Pn** | **22 09 13.2** | **-1.9** |
| **STON** | **Ston** | **4.28** | **336** | *e*Pn | | **Pn** | **22 09 16.1** | **-1.5** |
| STON | | | | *e*Sn | | **Sn** | **22 10 02.8** | **-4.5** |
| **STON** | **Ston** | **4.28** | **336** | *e*Pn | | **Pn** | **22 09 16.2** | **-1.4** |
| **SJES** | **Sjenica** | **4.28** | **359** | *e*Pn | | **Pn** | **22 09 18.4** | **+0.6** |
| SJES | | | | *e*Sn | | **Sn** | **22 10 03.8** | **-3.7** |
| **SJES** | **Sjenica** | **4.28** | **359** | *e*Pn | | **Pn** | **22 09 17.9** | **+0.1** |
| **UPM** | **Unac-Piva** | **4.31** | **349** | *e*Pn | | **Pn** | **22 09 16.9** | **-1.4** |
| **SELS** | **Selova** | **4.31** | **10** | *e*Pn | | **Pn** | **22 09 17.7** | **-0.5** |
| SELS | | | | *e*Sn | | **Sn** | **22 10 05.7** | **-2.5** |
| **RUDO** | **Rudo** | **4.66** | **354** | *e*Pn | | **Pn** | **22 09 21.6** | **-1.4** |
| **ZAPS** | **Zavoj** | **4.71** | **24** | *e*Pn | | **Pn** | **22 09 24.2** | **+0.5** |
| ZAPS | | | | *e*Sn | | **Sn** | **22 10 15.2** | **-2.9** |
| **BOVS** | **Bovan** | **4.81** | **14** | *e*Pn | | **Pn** | **22 09 23.6** | **-1.4** |
| **BBLS** | **Lazi&#263i** | **4.91** | **355** | *e*Pn | | **Pn** | **22 09 29.8** | **+3.4** |
| **GRUS** | **Gruza** | **4.93** | **6** | *e*Pn | | **Pn** | **22 09 26.2** | **-0.4** |
| **DIVS** | **Divibare** | **5.11** | **360** | *e*Pn | | **Pn** | **22 09 28.8** | **-0.4** |
| DIVS | | | | *e*Sn | | **Sn** | **22 10 23.7** | **-4.4** |
| **HAPS** | **Han Pijesak,BI** | **5.17** | **351** | *e*Pn | | **Pn** | **22 09 29.0** | **-1.0** |
| **IDI** | **Anoyia** | **5.34** | **132** | Pn | | **Pn** | **22 09 31.7** | **-0.7** |
| | comp=N,6.6nm,0.8s,baz=322,slow=19,SNR=1.0 | | | | | | | |
| IDI | | | | Sn | | **Sn** | **22 10 31.3** | **-2.4** |
| | comp=N,0.1nm,0.3s,baz=221,slow=22,SNR=1.4 | | | | | | | |
| **MGRS** | **Mrkonjic Grad** | **5.87** | **339** | *e*Pn | | **Pn** | **22 09 37.9** | **-1.6** |
| **A050A** | **Klekovaca** | **6.09** | **336** | *e*Pn | | **Pn** | **22 09 42.8** | **+0.1** |
| **BLY** | **Banja Luka** | **6.15** | **341** | *e*Pn | | **Pn** | **22 09 42.4** | **-1.0** |
| **FRGS** | **Fruska Gora** | **6.17** | **358** | *e*Pn | | Pn | 22 09 31.6 | -12 |
| **A051A** | **Mrakovica** | **6.46** | **340** | *e*Pn | | **Pn** | **22 09 46.4** | **-1.4** |
| **BOJS** | **Bojanci** | **7.42** | **333** | *e*Pn | | **Pn** | **22 09 59.5** | **-1.4** |
| **MLR** | **Muntele Rosu** | **7.84** | **32** | Pn | | **Pn** | **22 10 08.2** | **+1.5** |
| | comp=N,0.1nm,0.3s,baz=202,slow=5.4,SNR=3.8 | | | | | | | |
| MLR | | | | Sn | | **Sn** | **22 11 35.5** | **+0.3** |
| | baz=294,slow=20 comp=N,1.7nm,0.7s | | | | | | | |
| **CEY** | **Cerknica** | **7.93** | **330** | *e*Pn | | **Pn** | **22 10 06.7** | **-1.2** |
| **SKDS** | **Skadanscina** | **7.94** | **328** | *e*Pn | | **Pn** | **22 10 03.9** | **-4.1** |
| **SOKA** | **Soboth** | **8.53** | **336** | *e*Pn | | **Pn** | **22 10 15.0** | **-1.1** |
| | comp=N,0.1nm,0.3s | | | | | | | |
| **OBKA** | **Obir** | **8.54** | **334** | *e*Pn | | **Pn** | **22 10 15.8** | **-0.5** |
| | comp=N,0.1nm,0.2s | | | | | | | |
| **OBKA** | **Obir** | **8.54** | **334** | *e*Pn | | **Pn** | **22 10 16.5** | **+0.2** |
| **KBA** | **Koelnbreinsper** | **9.46** | **331** | *e*Pn | | **Pn** | **22 10 30.9** | **+1.9** |
| | comp=N,0.1nm,0.2s | | | | | | | |
| **MOA** | **Molln** | **9.81** | **337** | *e*Pn | | **Pn** | **22 10 34.3** | **+0.7** |
| | comp=N,0.4nm,0.2s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **9.88** | **334** | *e*Pn | | **Pn** | **22 10 37.7** | **+3.2** |
| | comp=N,0.6nm,0.3s | | | | | | | |
| **LESA** | **Schwarzleotal** | **10.00** | **330** | *e*Pn | | **Pn** | **22 10 36.1** | **-0.2** |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **WTTA** | **Wattenberg** | **10.31** | **326** | *e*Pn | | **Pn** | **22 10 40.8** | **+0.2** |
| | comp=N,0.3nm,0.4s | | | | | | | |
| **BRTR** | **Keskin Array B** | **10.55** | **82** | Pn | | **Pn** | **22 10 46.4** | **+2.5** |
| | baz=258,slow=12,SNR=1.0 comp=N,0.1nm,0.4s | | | | | | | |
| **ESDC** | **Sonseca Array** | **18.58** | **280** | P | | **Pn** | **22 12 30.8** | **+0.9** |
| | comp=N,0.3nm,0.6s,baz=74,slow=11,SNR=5.0 | | | | | | | |
| **HFS** | **Hagfors** | **21.55** | **351** | P | | **P** | **22 13 04.2** | **+2.5** |
| | comp=N,1.0nm,0.6s,baz=158,slow=9.3,SNR=1.6 comp=N,1.0nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **22.80** | **7** | P | | **P** | **22 13 17.8** | **+2.8** |
| | comp=N,2.9nm,1.0s,baz=188,slow=8.4,SNR=1.5 comp=N,2.9nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.43** | **217** | P | | **P** | **22 14 25.4** | **+0.3** |
| | comp=N,0.2nm,0.6s,baz=33,slow=10,SNR=2.0 comp=N,0.2nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.43** | **49** | P | | **P** | **22 16 29.4** | **-1.7** |
| | comp=N,0.7nm,0.5s,baz=275,slow=8.8,SNR=3.7 comp=N,0.7nm,0.5s | | | | | | | |

*NEIC* **12** *22:08:47.1±0.7, 59°.41N±0°.04×153°.8W±0°.1, h127km±5km, Error ellipse: s-maj=10.7km s-min=2.7km az=56.0*

**AEIC 12 22:08:47.9±0.9, 59°.42N±0°.05×153°.8W±0°.1, h127km±4km, ML2.0, ML2.6**/30(NEIC), **Error ellipse: s-maj=11.1km s-min=6.6km az=72.0, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **P19K** | **Oil Pt** | **0.35** | **48** | | Pn | 22 09 05.4 | -0.5 |
| P19K | | | | | Sn | 22 09 18.9 | -0.6 |
| **P19K** | **Oil Pt** | **0.35** | **48** | IAML | | 22 09 19.0 | |
| | comp=N,62nm,0.6s | | | | | | |
| P19K | | | | IAML | | 22 09 19.2 | |
| | comp=E,106nm,0.9s | | | | | | |
| **Q19K** | **Cape Douglas,** | **0.49** | **174** | | Pn | 22 09 06.0 | -0.6 |
| **Q19K** | **Cape Douglas,** | **0.49** | **174** | IAML | | 22 09 17.6 | |
| | comp=E,209nm,1.5s | | | | | | |
| Q19K | | | | IAML | | 22 09 51.3 | |
| | comp=N,158nm,1.2s | | | | | | |
| **O20K** | **Slope Mountain** | **0.88** | **40** | | Sn | 22 09 25.3 | -0.5 |
| **SYI** | **Shuyak Island** | **1.07** | **138** | | Pn | 22 09 11.1 | -0.1 |
| SYI | | | | | Sn | 22 09 28.0 | -0.8 |
| **SYI** | **Shuyak Island** | **1.07** | **138** | IAML | | 22 09 28.6 | |
| | comp=N,55nm,0.8s | | | | | | |
| SYI | | | | IAML | | 22 09 29.0 | |
| | comp=E,50nm,1.1s | | | | | | |
| **NCT** | **North Crescent** | **1.22** | **19** | | Pn | 22 09 12.2 | -0.6 |
| **CNPM** | **China Poot** | **1.29** | **84** | | Pn | 22 09 13.0 | -0.4 |
| CNPM | | | | | Sn | 22 09 32.0 | -0.9 |
| **N19K** | **Bonanza Creek** | **1.45** | **346** | | Pn | 22 09 14.3 | -0.9 |
| **N18K** | **Kilae Creek** | **1.66** | **321** | | Pn | 22 09 16.8 | -0.8 |
| **KDAK** | **Kodiak Island** | **1.75** | **159** | | Pn | 22 09 17.6 | -1.0 |
| **KDAK** | **Kodiak Island** | **1.75** | **159** | IAML | | 22 09 56.5 | |
| | comp=E,19nm,1.4s | | | | | | |
| **OHAK** | **Old Harbor** | **2.21** | **173** | Pn | Pn | 22 09 23.4 | -0.9 |
| OHAK | | | | IAML | | 22 10 22.1 | |
| | comp=N,17nm,1.3s | | | | | | |
| OHAK | | | | IAML | | 22 10 46.9 | |
| | comp=E,18nm,1.5s | | | | | | |
| **PWL** | **Port Wells** | **3.07** | **60** | Pn | Pn | 22 09 35.0 | -0.3 |
| PWL | | | | IAML | | 22 11 04.5 | |
| | comp=E,20nm,1.4s | | | | | | |
| **GHO** | **Glory Hole Cre** | **3.35** | **43** | Pn | Pn | 22 09 37.9 | -1.2 |
| GHO | | | | IAML | | 22 11 16.8 | |
| | comp=N,19nm,1.3s | | | | | | |
| GHO | | | | IAML | | 22 11 47.0 | |
| | comp=E,16nm,1.5s | | | | | | |
| **SML** | **Sawmill** | **3.59** | **46** | Pn | Pn | 22 09 40.5 | -1.6 |
| SML | | | | IAML | | 22 11 37.1 | |
| | comp=E,13nm,1.3s | | | | | | |
| SML | | | | IAML | | 22 11 52.0 | |
| | comp=N,18nm,1.3s | | | | | | |
| **GLI** | **Glacier Island** | **3.64** | **63** | Pn | Pn | 22 09 42.4 | -0.2 |
| **K17K** | **Iditarod** | **3.98** | **328** | Pn | Pn | 22 09 47.3 | +0.1 |
| K17K | | | | IAML | | 22 12 03.0 | |
| | comp=E,9.5nm,1.3s | | | | | | |
| K17K | | | | IAML | | 22 12 22.1 | |
| | comp=N,9.9nm,1.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **5.03** | **60** | Pn | Pn | 22 10 01.0 | -0.3 |
| **BWN** | **Browne** | **5.18** | **21** | | Pn | 22 10 02.3 | -1.0 |

*AEIC* **12** *22:09:02.3±2.2, 69°.46N±0°.04×144°.29W±0°.09, h1km±4km, ML4.0, mb4.5/14(NEIC), ML4.1/80(NEIC), Error ellipse: s-maj=5.8km s-min=3.7km az=213.0*

*IDC* **12** *22:09:03.3±0.8, 69°.68N×144°.27W, h0km, mb3.7/11, mbtmp3.8/15, ML4.1/4, Error ellipse: s-maj=24.2km s-min=13.2km az=64.0*

*NEIC* **12** *22:09:03.3±1.7, 69°.57N±0°.04×144°.17W±0°.09, h8km±4km, Error ellipse: s-maj=6.5km s-min=4.1km az=203.0*

**ISC 12 22:09:03.0±0.4, 69°.50N±0°.03×144°.30W±0°.02, h10km, n133, σ1§45/138, mb4.1/18, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **57** | Pg | **Pg** | **22 09 07.0** | **-1.0** |
| C27K | | | | | **Sg** | **22 09 10.6** | **-0.8** |
| **C26K** | **Camden Bay** | **0.47** | **334** | | **Pb** | **22 09 12.0** | **-1.5** |
| **D25K** | **Kavik River** | **0.75** | **258** | Pg | **Pg** | **22 09 16.0** | **-1.6** |
| **D25K** | **Kavik River** | **0.75** | **258** | | **Sb** | **22 09 27.9** | **-0.6** |
| **D27M** | **Malcolm River** | **1.21** | **101** | | **Pb** | **22 09 24.3** | **-1.7** |
| D27M | | | | IAML | | 22 09 47.7 | |
| | comp=N,4μm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.56** | **280** | | **Pb** | **22 09 31.1** | **-0.8** |
| C24K | | | | Sn | **Sg** | **22 09 52.4** | **-0.7** |
| C24K | | | | IAML | | 22 09 54.3 | |
| | comp=N,3μm,0.5s | | | | | | |
| C24K | | | | IAML | | 22 09 57.5 | |
| | comp=E,3μm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **260** | | **Pg** | **22 09 33.5** | **-1.0** |
| D24K | | | | Sn | **Sg** | **22 09 56.5** | **+0.8** |
| D24K | | | | IAML | | 22 09 57.1 | |
| | comp=E,3μm,0.6s | | | | | | |
| D24K | | | | IAML | | 22 09 57.9 | |
| | comp=N,3μm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **142** | | **Pg** | **22 09 33.1** | **-1.3** |
| E27K | | | | Sn | **Sg** | **22 09 55.3** | **-0.5** |
| E27K | | | | IAML | | 22 09 58.7 | |
| | comp=N,2μm,0.5s | | | | | | |
| E27K | | | | IAML | | 22 09 59.4 | |
| | comp=E,2μm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81** | **178** | | **Pb** | **22 09 36.0** | **-0.3** |
| F26K | | | | Sn | **Sg** | **22 09 60.0** | **-1.2** |
| F26K | | | | IAML | | 22 10 03.7 | |
| | comp=E,2μm,0.6s | | | | | | |
| F26K | | | | IAML | | 22 10 03.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **E28M** | **Babbage River** | **1.93** | **115** | | **Pb** | **22 09 38.0** | **-0.4** |
| **E28M** | **Babbage River** | **1.93** | **115** | | **Sn** | **22 10 00.2** | **0.0** |
| **E28M** | **Babbage River** | **1.93** | **115** | IAML | | 22 10 07.8 | |
| | comp=N,1μm,0.7s | | | | | | |
| E28M | | | | IAML | | 22 10 09.1 | |
| | comp=E,949nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.97** | **195** | | **Pb** | **22 09 38.7** | **-0.3** |
| F25K | | | | Sn | **Sg** | **22 10 05.0** | **-1.4** |
| F25K | | | | IAML | | 22 10 09.2 | |
| | comp=E,2μm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **183** | | **Pb** | **22 09 39.9** | **-0.9** |
| **E24K** | **Your Creek** | **2.09** | **229** | | **Pb** | **22 09 40.7** | **-0.3** |
| E24K | | | | Sn | **Sg** | **22 10 08.8** | **-1.2** |
| **C23K** | **Itkillik River** | **2.23** | **282** | | **Pb** | **22 09 41.1** | **-2.3** |
| C23K | | | | IAML | | 22 10 22.4 | |
| | comp=E,1μm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **215** | | **Pb** | **22 09 43.6** | **-2.5** |
| F24K | | | | IAML | | 22 10 24.1 | |
| | comp=N,809nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.41** | **236** | | **Pn** | **22 09 43.2** | **+0.7** |
| **E23K** | **Chandalar** | **2.41** | **236** | IAML | | 22 10 22.9 | |
| | comp=N,784nm,0.6s | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **137** | | **Pn** | **22 09 44.8** | **+1.1** |
| F28M | | | | IAML | | 22 10 28.1 | |
| | comp=N,978nm,0.5s | | | | | | |
| F28M | | | | IAML | | 22 10 30.9 | |
| | comp=E,1μm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.57** | **175** | | **Pn** | **22 09 44.8** | **+0.2** |
| **E29M** | **Blow River** | **2.57** | **113** | | **Pn** | **22 09 44.8** | **+0.2** |
| E29M | | | | IAML | | 22 10 29.2 | |
| | comp=E,925nm,0.6s | | | | | | |
| **G25K** | **Bearman Lake** | **2.83** | **195** | | **Pn** | **22 09 48.2** | **0.0** |
| **D22K** | **Ayikyak River** | **3.06** | **262** | | **Pn** | **22 09 52.5** | **+1.1** |
| D22K | | | | IAML | | 22 10 48.8 | |
| | comp=E,669nm,0.9s | | | | | | |
| D22K | | | | IAML | | 22 10 59.1 | |
| | comp=N,529nm,0.9s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.26** | **289** | | **Pn** | **22 09 55.0** | **+0.9** |
| **H25L** | **Birch Creek** | **3.29** | **191** | | **Pn** | **22 09 54.5** | **-0.1** |
| H25L | | | | | **Pb** | **22 09 56.8** | **-4.7** |
| **H27K** | **Steamboat Moun** | **3.44** | **161** | | **Pn** | **22 09 56.7** | **0.0** |
| **G29M** | **Pine Creek** | **3.50** | **135** | | **Pn** | **22 09 58.9** | **+1.5** |
| **F22K** | **John River** | **3.52** | **239** | | **Pn** | **22 09 58.0** | **+0.3** |
| **B21K** | **Ikpikpuk River** | **3.62** | **277** | | **Pn** | **22 10 00.0** | **+1.0** |
| **E21K** | **Killik River** | **3.64** | **258** | Pn | **Pn** | **22 10 00.3** | **+0.8** |
| E21K | | | | IAML | | 22 11 07.3 | |
| | comp=E,290nm,1.0s | | | | | | |
| E21K | | | | IAML | | 22 11 10.2 | |
| | comp=N,385nm,0.9s | | | | | | |
| **F30M** | **Barrier River** | **3.66** | **117** | | **Pn** | **22 09 59.5** | **0.0** |
| **H24K** | **Noodor Dome** | **3.92** | **202** | Pn | **Pn** | **22 10 04.2** | **+0.9** |
| H24K | | | | IAML | | 22 11 13.8 | |
| | comp=N,240nm,0.7s | | | | | | |
| H24K | | | | IAML | | 22 11 15.2 | |
| | comp=E,236nm,1.4s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.92** | **298** | | **Pn** | **22 10 03.9** | **+0.7** |
| **I27K** | **Kandik River** | **4.04** | **164** | | **Pn** | **22 10 05.0** | **+0.1** |
| **INK** | **Inuvik** | **4.08** | **102** | Pn | **Pn** | **22 10 08.3** | **+3.0** |
| | comp=E,7.4nm,0.3s,baz=21,slow=5.2,SNR=12 | | | | | | |
| INK | | | | Sn | **Sn** | **22 10 54.4** | **+1.4** |
| | comp=E,8.7nm,0.3s,baz=233,slow=15,SNR=4.0 | | | | | | |
| INK | | | | Lg | Lg | 22 11 07.0 | |
| | comp=E,12nm,0.3s,baz=292,slow=28,SNR=3.9 comp=E,18nm,0.4s | | | | | | |
| **F21K** | **Alatna River** | **4.09** | **240** | | **Pn** | **22 10 08.0** | **+2.4** |
| F21K | | | | IAML | | 22 11 15.5 | |
| | comp=N,181nm,0.6s | | | | | | |
| F21K | | | | IAML | | 22 11 16.6 | |
| | comp=E,198nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.23** | **173** | | **Pn** | **22 10 09.3** | **+1.8** |
| I26K | | | | IAML | | 22 11 22.4 | |
| | comp=N,313nm,0.7s | | | | | | |
| I26K | | | | IAML | | 22 11 33.5 | |
| | comp=E,244nm,1.0s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.25** | **134** | | **Pn** | **22 10 08.8** | **+1.1** |
| **I28M** | **Miner Creek** | **4.40** | **155** | Pn | **Pn** | **22 10 12.2** | **+2.3** |
| I28M | | | | IAML | | 22 11 06.2 | |
| | comp=N,199nm,0.5s | | | | | | |
| I28M | | | | IAML | | 22 11 28.7 | |
| | comp=E,178nm,1.6s | | | | | | |
| **E20K** | **Nigu River** | **4.48** | **259** | | **Pn** | **22 10 11.5** | **+0.6** |
| **D20K** | **Etivluk River** | **4.48** | **266** | | **Pn** | **22 10 11.6** | **+0.7** |
| **B20K** | **Meade River** | **4.50** | **283** | | **Pn** | **22 10 11.9** | **+0.8** |
| **B20K** | **Meade River** | **4.50** | **283** | IAML | | 22 11 44.1 | |
| | comp=N,227nm,1.1s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.51** | **220** | | **Pn** | **22 10 11.7** | **+0.4** |
| **A21K** | **Barrow** | **4.53** | **300** | | **Pn** | **22 10 12.5** | **+1.0** |
| **G31M** | **Satah River** | **4.54** | **120** | | **Pn** | **22 10 12.6** | **+0.9** |
| **I29M** | **Ogilvie Camp,** | **4.75** | **148** | | **Pn** | **22 10 15.8** | **+1.2** |
| I29M | | | | IAML | | 22 11 35.6 | |
| | comp=E,169nm,0.7s | | | | | | |
| I29M | | | | IAML | | 22 13 21.9 | |
| | comp=N,182nm,0.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **207** | Pn | **Pn** | **22 10 17.1** | **+2.0** |
| **I23K** | **Minto, Yukon-K** | **4.79** | **207** | | **Pn** | **22 10 16.9** | **+1.9** |
| I23K | | | | IAML | | 22 11 41.7 | |
| | comp=N,145nm,1.0s | | | | | | |
| I23K | | | | IAML | | 22 11 51.0 | |
| | comp=E,160nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **200** | Pn | **Pn** | **22 10 17.5** | **+2.1** |
| **MDM** | **Murphy Dome** | **4.81** | **200** | | **Pn** | **22 10 17.4** | **+2.0** |
| MDM | | | | IAML | | 22 11 33.2 | |
| | comp=E,81nm,0.8s | | | | | | |
| MDM | | | | IAML | | 22 13 26.2 | |
| | comp=N,95nm,1.0s | | | | | | |
| **COLA** | **College** | **4.84** | **198** | Pn | **Pn** | **22 10 17.1** | **+1.3** |
| **COLA** | **College** | **4.84** | **198** | | **Pn** | **22 10 18.1** | **+2.2** |
| COLA | | | | IAML | | 22 11 17.5 | |
| | comp=N,392nm,0.5s | | | | | | |
| COLA | | | | IAML | | 22 13 27.9 | |
| | comp=N,473nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **4.85** | **193** | Pn | **Pn** | **22 10 18.1** | **+2.1** |
| | comp=N,7.1nm,0.3s,baz=5.9,slow=14,SNR=27 | | | | | | |
| ILAR | | | | Sn | **Sn** | **22 11 14.5** | **+2.4** |
| | comp=N,9.0nm,0.3s,baz=7.9,slow=25,SNR=8.8 | | | | | | |
| ILAR | | | | Lg | Lg | 22 11 34.2 | |
| | comp=N,14nm,0.3s,baz=2.7,slow=33,SNR=6.9 comp=N,21nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **4.90** | **164** | | **Pn** | **22 10 17.9** | **+1.3** |
| **F20K** | **Avaraart Lake** | **4.90** | **245** | Pn | **Pn** | **22 10 18.5** | **+1.9** |
| F20K | | | | IAML | | 22 11 55.9 | |
| | comp=N,112nm,1.3s | | | | | | |
| **J25K** | **Salcha River,** | **4.92** | **185** | Pn | **Pn** | **22 10 18.7** | **+1.7** |
| **J26L** | **Joseph Creek** | **5.03** | **176** | Pn | **Pn** | **22 10 20.6** | **+2.1** |
| J26L | | | | IAML | | 22 11 45.5 | |
| | comp=E,110nm,0.7s | | | | | | |
| J26L | | | | IAML | | 22 13 35.0 | |
| | comp=N,130nm,0.5s | | | | | | |
| **D19K** | **Kuna River** | **5.07** | **265** | Pn | **Pn** | **22 10 20.0** | **+1.0** |
| D19K | | | | IAML | | 22 12 01.7 | |
| | comp=E,99nm,1.4s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRH** | **Wood River Hil** | **5.26** | **198** | | **Pn** | **22 10 23.5** | **+2.0** |
| WRH | | | | IAML | | 22 11 53.4 | |
| | comp=E,87nm,0.6s | | | | | | |
| WRH | | | | IAML | | 22 13 36.6 | |
| | comp=N,150nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.26** | **203** | | **Pn** | **22 10 23.5** | **+1.8** |
| **I30M** | **Mount Dempster** | **5.27** | **141** | Pn | **Pn** | **22 10 22.8** | **+0.9** |
| **C19K** | **Lookout Ridge** | **5.43** | **273** | Pn | **Pn** | **22 10 25.1** | **+1.1** |
| **SCRK** | **Sand Creek** | **5.55** | **179** | Pn | **Pn** | **22 10 27.7** | **+2.1** |
| **K27K** | **Chicken** | **5.56** | **170** | | **Pn** | **22 10 27.8** | **+2.0** |
| **F19K** | **Shaleruckik Mo** | **5.69** | **248** | | **Pn** | **22 10 28.0** | **+0.5** |
| **BWN** | **Browne** | **5.72** | **203** | Pn | **Pn** | **22 10 27.7** | **-0.2** |
| **A19K** | **Wainwright** | **5.83** | **285** | | **Pn** | **22 10 29.8** | **+0.3** |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **209** | | **Pn** | **22 10 33.2** | **+1.1** |
| **H19K** | **Roundabout Mou** | **6.12** | **235** | Pn | **Pn** | **22 10 34.3** | **+0.9** |
| **B18K** | **Kokolik River** | **6.17** | **277** | | **Pn** | **22 10 34.0** | **0.0** |
| **E18K** | **Tukpahlearik C** | **6.35** | **259** | Pn | **Pn** | **22 10 37.3** | **+0.8** |
| **F18K** | **Selawik** | **6.44** | **251** | | **Pn** | **22 10 38.0** | **+0.2** |
| **CHUM** | **Lake Minchumin** | **6.47** | **213** | | **Pn** | **22 10 38.1** | **0.0** |
| **L26K** | **Log Cabin Wild** | **6.51** | **176** | | **Pn** | **22 10 40.5** | **+1.7** |
| **A36M** | **Sachs Harbour** | **6.76** | **60** | Pn | **Pn** | **22 10 41.3** | **-0.9** |
| **C17K** | **DeLong Mountai** | **6.86** | **270** | | **Pn** | **22 10 43.1** | **-0.3** |
| **RDOG** | **Red Dog Mine** | **6.90** | **267** | Pn | **Pn** | **22 10 43.7** | **-0.3** |
| **E17K** | **Hotham Inlet** | **6.93** | **258** | | **Pn** | **22 10 44.3** | **-0.1** |
| **F17K** | **Baldwin Pennin** | **7.06** | **252** | Pn | **Pn** | **22 10 46.9** | **+0.7** |
| **D17K** | **Noatak River** | **7.09** | **264** | | **Pn** | **22 10 46.2** | **-0.5** |
| **HARP** | **HAARP** | **7.14** | **183** | | **Pn** | **22 10 46.9** | **-0.5** |
| **G17K** | **Kiwalik Mounta** | **7.43** | **245** | | **Pn** | **22 10 51.6** | **+0.3** |
| **M29M** | **Somme Creek** | **7.47** | **159** | Pn | **Pn** | **22 10 54.0** | **+2.0** |
| **C16K** | **Lisburne Hills** | **7.68** | **271** | Pn | **Pn** | **22 10 53.9** | **-0.8** |
| **N25K** | **Chitina, Valde** | **7.92** | **181** | Pn | **Pn** | **22 10 57.2** | **-1.0** |
| **G16K** | **Koyuk River** | **8.05** | **248** | Pn | **Pn** | **22 10 59.8** | **0.0** |
| **M31M** | **Drury Creek, Y** | **8.36** | **146** | Pn | **Pn** | **22 11 04.9** | **+0.7** |
| **YUK8** | **Steele Glacier** | **8.46** | **165** | | **Pn** | **22 11 05.5** | **-0.1** |
| **J17K** | **VABM Dome** | **8.49** | **231** | Pn | **Pn** | **22 11 06.3** | **+0.5** |
| **N30M** | **Aishikik Lake** | **8.60** | **156** | Pn | **Pn** | **22 11 09.1** | **+1.6** |
| **L18K** | **Granite Mounta** | **8.87** | **221** | Pn | **Pn** | **22 11 11.8** | **+0.7** |
| **O30N** | **Mendenhall** | **9.41** | **155** | Pn | **Pn** | **22 11 19.7** | **+1.2** |
| **WHY** | **Whitehorse** | **9.71** | **151** | Pn | **Pn** | **22 11 23.9** | **+1.3** |
| **M17K** | **Holitna River** | **9.77** | **220** | Pn | **Pn** | **22 11 24.5** | **+1.2** |
| **J14K** | **Nanvaranak Lak** | **10.28** | **238** | Pn | **Pn** | **22 11 31.6** | **+1.2** |
| **M16K** | **Timber Creek** | **10.45** | **223** | Pn | **Pn** | **22 11 34.0** | **+1.3** |
| **K13K** | **Kusilvak Mount** | **11.24** | **238** | Pn | **Pn** | **22 11 45.2** | **+1.8** |
| **BESE** | **Bessie Mountai** | **11.69** | **155** | Pn | **Pn** | **22 11 52.6** | **+2.8** |
| **Q32M** | **Nakina River** | **11.77** | **148** | Pn | **Pn** | **22 11 50.6** | **-0.3** |
| **S31K** | **Pelican** | **12.10** | **159** | Pn | **Pn** | **22 11 58.4** | **+3.2** |
| **DLBC** | **Dease Lake** | **12.69** | **144** | Pn | **Pn** | **22 12 01.7** | **-1.8** |
| | comp=N,0.5nm,0.3s,baz=117,slow=0.5,SNR=3.1 comp=N,1.2nm,0.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.84** | **106** | Pn | **Pn** | **22 12 15.1** | **-3.7** |
| | comp=N,0.9nm,0.3s,baz=38,slow=12,SNR=7.6 comp=N,2.6nm,0.5s | | | | | | |
| **RES** | **Resolute Bay** | **15.60** | **49** | Pn | **Pn** | **22 12 38.4** | **-4.2** |
| | comp=N,0.8nm,0.3s,baz=266,slow=8.7,SNR=2.6 | | | | | | |
| **CLES** | **Cleveland East** | **20.50** | **228** | P | Pn | 22 13 41.5 | -1.4 |
| **KMPM** | **Mount Pierce** | **31.03** | **149** | P | **P** | **22 15 20.3** | **-0.3** |
| **SPA0** | **Spitsbergen Ar** | **32.09** | **7** | P | **P** | **22 15 31.0** | **+1.4** |
| SPA0 | | | | IAmb | IAmb | 22 15 45.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.18** | **128** | P | **P** | **22 15 33.5** | **+2.5** |
| | comp=Z,0.3nm,0.5s,baz=353,slow=8.1,SNR=3.9 comp=Z,0.3nm,0.5s | | | | | | |
| **ELK** | **Elko** | **32.60** | **137** | P | **P** | **22 15 38.2** | **+3.6** |
| | comp=Z,0.5nm,0.5s,baz=349,slow=10,SNR=3.1 comp=Z,0.5nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.10** | **142** | P | P | 22 15 52.2 | +4.5 |
| | comp=Z,1.5nm,0.9s,baz=340,slow=9.1,SNR=5.4 comp=Z,1.5nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **35.25** | **112** | P | **P** | **22 15 56.6** | **-0.8** |
| ECSD | | | | IAmb | IAmb | 22 15 57.8 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **LCMT** | **Little Creek M** | **36.62** | **136** | P | **P** | **22 16 12.2** | **+2.9** |
| **TRQ** | **Mont Tremblant** | **40.69** | **87** | P | **P** | **22 16 43.6** | **+0.3** |
| **CRNM** | **Carthage** | **41.20** | **130** | P | **P** | **22 16 47.6** | **-0.1** |
| **J57A** | **Williamstown** | **42.63** | **91** | P | **P** | **22 16 

comp=E,3µm,0.8s
F26K IAML 22 12 17.5
comp=N,2µm,0.7s
**E28M Babbage River 1.85 116 Pn 22 11 46.1 -0.1**
**E28M Babbage River 1.85 116** IAML 22 12 18.8
comp=N,2µm,0.4s
E28M IAML 22 12 19.1
comp=E,2µm,0.7s
**D28M Stokes Point 1.89 92 Pn 22 11 47.2 +0.5**
**F25K Christian Rive 1.98 198 Pn 22 11 47.4 -0.6**
**F25K Christian Rive 1.98 198** IAML 22 12 21.1
comp=N,3µm,0.8s
**BMAR Burnt Mountain 2.06 185 Pn 22 11 49.8 +0.7**
**E24K Your Creek 2.13 231 Pn 22 11 49.4 -0.7**
**TOLK Toolik Lake Re 2.15 250 Pn 22 11 49.9 -0.5**
**TOLK Toolik Lake Re 2.15 250** IAML 22 12 32.2
comp=E,964nm,0.9s
**C23K Itkillik River 2.31 282 Pn 22 11 52.3 -0.2**
**C23K Itkillik River 2.31 282** IAML 22 12 35.8
comp=E,1µm,0.8s
C23K IAML 22 12 38.8
comp=N,819nm,0.8s
**D23K Nanushuk River 2.41 261 Pn 22 11 53.5 -0.4**
**D23K Nanushuk River 2.41 261** IAML 22 12 49.8
comp=N,785nm,1.1s
**F24K Squaw Lake 2.42 217 Pn 22 11 53.1 -0.9**
**F28M Old Crow 2.43 138 Pn 22 11 53.8 -0.4**
**F28M Old Crow 2.43 138** IAML 22 12 35.6
comp=N,2µm,0.9s
**E23K Chandalar 2.47 237 Pn 22 11 54.2 -0.6**
**E29M Blow River 2.48 113 Pn 22 11 54.7 -0.2**
**G26K Porcupine Rive 2.54 177 Pn 22 11 55.5 -0.2**
**G27K Doyon Strip 2.83 160 Pn 22 11 59.4 -0.2**
**G24K Hadweenzic Riv 3.07 206 Pn 22 12 02.4 -0.5**
**G24K Hadweenzic Riv 3.07 206** IAML 22 12 55.0
comp=E,1µm,1.2s
G24K IAML 22 12 59.1
comp=N,1µm,1.1s
**D22K Ayikyak River 3.13 263 Pn 22 12 04.0 +0.1**
**D22K Ayikyak River 3.13 263** IAML 22 12 59.0
comp=N,453nm,0.9s
D22K IAML 22 13 07.8
comp=E,399nm,1.0s
**B22K Teshekpuk Lake 3.34 289 Pn 22 12 07.2 +0.6**
**B22K Teshekpuk Lake 3.34 289** IAML 22 13 08.2
comp=E,509nm,0.9s
B22K IAML 22 13 08.4
comp=N,602nm,1.8s
**G29M Pine Creek 3.42 136 Pn 22 12 08.1 +0.3**
**G23K Bananza Creek 3.56 222** Pn Pn **22 12 10.2 +0.5**
G23K IAML 22 13 19.3
comp=E,501nm,1.2s
G23K IAML 22 13 22.7
comp=N,312nm,1.3s
**E21K Killik River 3.72 258 Pn 22 12 12.0 +0.1**
**E21K Killik River 3.72 258** IAML 22 13 23.2
comp=N,255nm,1.2s
E21K IAML 22 13 24.3
comp=E,330nm,1.1s
**H29M Whitestone 3.92 144 Pn 22 12 14.2 -0.4**
**H24K Noodor Dome 3.93 203** Pn Pn **22 12 14.0 -0.9**
H24K IAML 22 13 04.4
comp=N,307nm,0.8s
H24K IAML 22 13 26.8
comp=E,477nm,1.4s
**INK Inuvik 3.99 102** Pn **Pn 22 12 18.5 +2.9**
comp=E,16nm,0.3s,baz=57,slow=3.9,SNR=4.8
INK Sn **Sn 22 13 05.5 +2.9**
comp=E,20nm,0.3s,baz=81,slow=18,SNR=6.0
INK Lg Lg 22 13 18.6
comp=E,17nm,0.3s,baz=264,slow=8.2,SNR=3.1
comp=E,40nm,0.4s
**EPYK Eagle Plains 4.17 135 Pn 22 12 18.0 -0.2**
**I28M Miner Creek 4.35 157 Pn 22 12 20.2 -0.3**
**I28M Miner Creek 4.35 157** IAML 22 13 38.4
comp=E,278nm,0.8s
I28M IAML 22 13 41.1
comp=N,342nm,0.9s
**B20K Meade River 4.58 283 Pn 22 12 24.1 +0.5**
**A21K Barrow 4.61 300 Pn 22 12 24.4 +0.3**
**COLA College 4.85 199** Pn **Pn 22 12 25.9 -1.4**
**ILAR Eielson Array 4.85 194** Pn **Pn 22 12 29.9 +2.5**
comp=N,2.8nm,0.3s,baz=6.3,slow=14,SNR=2.2
ILAR Sn **Sn 22 13 26.0 +2.2**
comp=N,8.6nm,0.3s,baz=8.6,slow=22,SNR=6.9
ILAR Lg Lg 22 13 45.4
comp=N,20nm,0.3s,baz=10,slow=31,SNR=8.1
comp=N,17nm,0.5s
**EGAK Eagle 4.85 165 Pn 22 12 28.3 +0.9**
**EGAK Eagle 4.85 165** IAML 22 13 27.0
comp=N,202nm,0.9s
**F20K Avaraart Lake 4.97 246 Pn 22 12 28.4 -0.6**
**F20K Avaraart Lake 4.97 246** IAML 22 14 06.3
comp=N,138nm,1.2s
**CCB Clear Creek Bu 5.07 199 Pn 22 12 29.8 -0.5**
**CCB Clear Creek Bu 5.07 199** IAML 22 13 58.8
comp=N,117nm,0.9s
CCB IAML 22 14 02.1
comp=E,136nm,1.0s
**D19K Kuna River 5.15 266 Pn 22 12 31.3 -0.1**
**A36M Sachs Harbour 6.71 59 Pn 22 12 52.6 -0.2**
**RDOG Red Dog Mine 6.98 267 Pn 22 12 56.4 -0.2**
**N32M Quiet Lake 9.52 146** Pn Pn **22 13 30.3 -1.1**
**WRGLY Wrigley 10.33 117** Pn Pn **22 13 42.6 +0.1**
**KDAK Kodiak Island 12.31 202** Pn Pn **22 14 12.3 +2.8**
comp=E,0.2nm,0.3s,baz=342,slow=21,SNR=2.2
**DLBC Dease Lake 12.63 144** Pn **Pn 22 14 15.8 +1.8**
comp=E,0.5nm,0.3s,baz=0.0,slow=11,SNR=3.3
comp=E,1.8nm,0.4s
**YKA Yellowknife Ar 13.75 106 Pn 22 14 26.1 -3.1**
**YKA Yellowknife Ar 13.75 106** Pn Pn **22 14 26.3 -2.9**
comp=E,1.6nm,0.3s,baz=316,slow=13,SNR=7.9
YKA Sn **Sn 22 16 53.5 -8.5**
comp=E,1.8nm,0.3s,baz=316,slow=23,SNR=6.1
comp=E,5.2nm,0.5s
**RES Resolute Bay 15.56 49** Pn **Pn 22 14 52.2 -1.2**
RES IAmb IAmb 22 14 57.7
comp=Z,12nm,1.2s
**RES Resolute Bay 15.56 49** Pn **Pn 22 14 47.9 -5.5**
comp=Z,1.1nm,0.3s,baz=270,slow=19,SNR=2.7
**EUNU Eureka 17.39 29** Pn **Pn 22 15 16.5 -0.3**
EUNU IAmb IAmb 22 15 22.3
comp=Z,18nm,1.4s
**FFC Flin Flon 23.93 107 P P 22 16 29.5 +1.2**
FFC IAmb IAmb 22 16 30.0
comp=Z,5.3nm,1.0s
**PDAR Pinedale Array 32.10 128 P P 22 17 44.3 +2.4**
comp=Z,0.6nm,0.7s,baz=12,slow=6.0,SNR=4.5
comp=Z,0.6nm,0.7s
**ELK Elko 32.53 137 P P 22 17 48.5 +3.0**
comp=Z,0.7nm,0.6s,baz=343,slow=8.6,SNR=2.5
comp=Z,0.7nm,0.6s
**NVAR Mina Array Bea 34.04 142 P P 22 18 02.1 +3.4**
comp=Z,1.3nm,0.8s,baz=330,slow=8.6,SNR=5.9
comp=Z,1.3nm,0.8s
**SCHQ Schefferville 36.07 73 P P 22 18 16.4 +0.6**
comp=Z,4.3nm,0.8s,baz=322,slow=11,SNR=2.5
comp=Z,4.3nm,0.8s
**ANMO Albuquerque 40.26 129 P P 22 18 53.8 +2.2**
comp=Z,1.0nm,0.6s,baz=0.0,slow=19,SNR=4.9
comp=Z,1.0nm,0.6s
**TXAR Lajitas Array 46.33 129 P P 22 19 42.2 +1.8**
comp=Z,0.3nm,0.5s,baz=347,slow=6.7,SNR=8.5
comp=Z,0.3nm,0.5s
**FINES FINESS Array B 49.18 6 P P 22 20 01.7 -0.3**
**FINES FINESS Array B 49.18 6 P P 22 20 01.3 -0.7**
comp=Z,3.2nm,1.0s,baz=354,slow=9.8,SNR=1.7
comp=Z,3.2nm,1.0s
**HFS Hagfors 49.71 14 P P 22 20 06.2 +0.1**
comp=Z,2.3nm,0.9s,baz=340,slow=7.7,SNR=5.4
comp=Z,2.3nm,0.9s
**ZALV Zalesovo Beam 51.85 326 P P 22 20 22.1 -0.2**
comp=Z,0.3nm,0.3s,baz=8.9,slow=10,SNR=2.0
comp=Z,0.3nm,0.3s
**SONM Songino Array 52.26 307 P P 22 20 25.3 -0.3**
**EKA Eskdalemuir Ar 52.30 27 P P 22 20 24.1 -1.5**
comp=Z,1.9nm,0.9s,baz=330,slow=6.5,SNR=2.8
comp=Z,1.9nm,0.9s
**KURBB Kurchatov Arra 56.22 329 P P 22 20 54.3 +0.1**
comp=Z,1.1nm,0.8s,baz=11,slow=7.2,SNR=6.8
comp=Z,1.1nm,0.8s
**MKAR Makanchi Array 59.16 325 P P 22 21 14.8 -0.2**
**MKAR Makanchi Array 59.16 325 P P 22 21 14.5 -0.5**
comp=Z,0.4nm,0.6s,baz=35,slow=6.0,SNR=5.2
comp=Z,0.4nm,0.6s
**MAKZ Makanchi 59.21 325 P P 22 21 15.0 -0.3**
**AKASG Malin Array Be 60.04 5 P P 22 21 20.5 -0.5**
comp=Z,0.7nm,0.5s,baz=359,slow=7.2,SNR=1.9
comp=Z,0.7nm,0.5s
**ABKAR Akbulak array 60.27 342 P P 22 21 23.4 +0.8**
**ABKAR Akbulak array 60.27 342 P P 22 21 23.6 +1.0**
ABKAR IAmb IAmb 22 21 29.1
comp=Z,2.7nm,1.4s
**ESDC Sonseca Array 67.28 32 P P 22 22 09.8 +0.8**
comp=Z,0.2nm,0.6s,baz=354,slow=3.9,SNR=1.7
comp=Z,0.2nm,0.6s
**CMAR Chiang Mai Arr 81.80 301 P P 22 23 34.7 +1.1**
comp=Z,0.3nm,0.3s,baz=9.7,slow=6.4,SNR=1.2
comp=Z,0.3nm,0.3s

*FUNV* ***12*** *22:12:37.1, 10˚.61N×62˚.29W, h16km, MW4.0*
*TRN* ***12*** *22:12:39.5, 10˚.75N×62˚.42W, h74km, MD4.1, North of the Paria peninsula.*
**ISC 12 22:12:37.6±1.3, 10˚.67N±0˚.04×62˚.42W±0˚.05, h97km±16km, n37, σ1§74/65, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TCE** | **Chacachacare** | **0.66** | **88** | *eP* | **Pn** | **22 12 55.6** | **+1.2** |
| **TRN** | **Trinidad (W)** | **1.00** | **91** | *eP* | **Pn** | **22 12 57.9** | **+0.1** |
| TRN | | | | *eS* | **Sn** | **22 13 10.7** | **-2.3** |
| **TPP** | **Pointe-a-Pierr** | **1.02** | **110** | *eP* | **Pn** | **22 12 58.8** | **+0.8** |
| **TBH** | **Brigand Hill** | **1.35** | **98** | *eP* | **Pn** | **22 13 03.4** | **+1.6** |
| TBH | | | | *eS* | **Sn** | **22 13 20.2** | **0.0** |
| **GRFF** | **Grenada Fort F** | **1.52** | **26** | *eP* | **Pn** | **22 13 03.7** | **-0.3** |
| GRFF | | | | *eS* | **Sn** | **22 13 22.5** | **-1.5** |
| **GRGR** | **Grenville** | **1.63** | **27** | *eP* | **Pn** | **22 13 05.3** | **-0.1** |
| GRGR | | | | *eS* | **Sn** | **22 13 25.1** | **-1.5** |
| **GRW** | **Mount Saint Ca** | **1.66** | **27** | *eP* | **Pn** | **22 13 06.3** | **+0.5** |
| GRW | | | | *eS* | **Sn** | **22 13 26.6** | **-0.5** |
| **TPR** | **Prospect** | **1.69** | **72** | *eP* | **Pn** | **22 13 07.4** | **+1.2** |
| TPR | | | | *eS* | **Sn** | **22 13 27.9** | **0.0** |
| **GRHS** | **Sauteurs** | **1.72** | **26** | *eP* | **Pn** | **22 13 06.1** | **-0.4** |
| GRHS | | | | *eS* | **Sn** | **22 13 26.9** | **-1.6** |
| **GRSS** | **Sisters** | **1.80** | **26** | *eP* | **Pn** | **22 13 08.1** | **+0.6** |
| GRSS | | | | *eS* | **Sn** | **22 13 29.5** | **-0.7** |
| **GCMP** | **Grenada, Carri** | **2.05** | **28** | *eP* | **Pn** | **22 13 11.0** | **+0.3** |
| GCMP | | | | *eS* | **Sn** | **22 13 34.5** | **-1.5** |
| **PCRV** | **Puerto La Cruz** | **2.23** | **257** | *eP* | **Pn** | **22 13 14.9** | **+1.7** |
| PCRV | | | | *eS* | **Sn** | **22 13 40.5** | **+0.1** |
| **PCRV** | **Puerto La Cruz** | **2.23** | **257** | *eP* | **Pn** | **22 13 15.4** | **+2.3** |
| PCRV | | | | *eS* | **Sn** | **22 13 41.1** | **+0.8** |
| **SVOC** | **Richmond Hill,** | **2.73** | **25** | *eP* | **Pn** | **22 13 19.9** | **+0.2** |
| SVOC | | | | *eS* | **Sn** | **22 13 51.6** | **-0.4** |
| **SVT** | **Saint Vincent** | **2.74** | **25** | *eP* | **Pn** | **22 13 20.3** | **+0.5** |
| SVT | | | | *eS* | **Sn** | **22 13 50.0** | **-2.2** |
| **SVB** | **Belmont** | **2.83** | **24** | *eP* | **Pn** | **22 13 21.9** | **+0.9** |
| SVB | | | | *eS* | **Sn** | **22 13 52.3** | **-2.1** |
| **SLB** | **Belfond** | **3.41** | **23** | *eP* | **Pn** | **22 13 30.0** | **+1.1** |
| SLB | | | | *eS* | **Sn** | **22 14 07.5** | **-1.1** |
| **SLBI** | **Saint Lucia, B** | **3.62** | **23** | *eP* | **Pn** | **22 13 33.4** | **+1.8** |
| SLBI | | | | *eS* | **Sn** | **22 14 10.9** | **-2.5** |
| **BIM** | **Bigot** | **4.04** | **19** | *eP* | **Pn** | **22 13 38.8** | **+1.4** |
| BIM | | | | *eS* | **Sn** | **22 14 20.9** | **-2.8** |
| **LPMF** | **Morne Lapointe** | **4.13** | **20** | *eP* | **Pn** | **22 13 41.3** | **+2.8** |
| **FDF** | **Fort de France** | **4.22** | **17** | *eP* | **Pn** | **22 13 41.9** | **+2.1** |
| **PML** | **Morne Lenard** | **4.26** | **16** | *eP* | **Pn** | **22 13 43.0** | **+2.7** |
| **GBMF** | **Grand Be** | **4.28** | **17** | *eP* | **Pn** | **22 13 43.3** | **+2.7** |
| **PCM** | **Pelee Case Pet** | **4.28** | **16** | *eP* | **Pn** | **22 13 43.2** | **+2.6** |
| **SVN** | **Savane Anatole** | **4.32** | **16** | *eP* | **Pn** | **22 13 41.8** | **+0.6** |
| SVN | | | | *eS* | **Sn** | **22 14 27.3** | **-3.2** |
| **ILAM** | **Ilet Lapin Mar** | **4.35** | **20** | *eP* | **Pn** | **22 13 41.8** | **+0.4** |
| ILAM | | | | *eS* | **Sn** | **22 14 28.1** | **-2.9** |
| **TACV** | **Tcata** | **4.56** | **264** | *eP* | **Pn** | **22 13 45.9** | **+1.5** |
| TACV | | | | *eS* | **Sn** | **22 14 37.0** | **+0.7** |
| **LUEV** | **Luepa** | **4.89** | **169** | *eP* | **Pn** | **22 13 48.0** | **-1.1** |
| LUEV | | | | *eS* | **Sn** | **22 14 39.8** | **-4.8** |
| **CACV** | **CAICARA DEL OR** | **5.11** | **233** | *eP* | Pn | 22 13 47.6 | -4.1 |
| CACV | | | | *eS* | Sn | 22 14 39.0 | -10 |
| **BENV** | **Beln** | **5.14** | **263** | *eP* | **Pn** | **22 13 53.6** | **+1.3** |
| BENV | | | | *eS* | **Sn** | **22 14 50.4** | **-0.1** |
| **TURV** | **Turiamo** | **5.33** | **268** | *eP* | **Pn** | **22 13 56.3** | **+1.5** |
| TURV | | | | *eS* | **Sn** | **22 14 56.1** | **+1.1** |
| **BAUV** | **El Baul** | **5.80** | **253** | *eP* | **Pn** | **22 14 01.7** | **+0.5** |
| BAUV | | | | *eS* | **Sn** | **22 15 04.1** | **-2.3** |
| **BAUV** | **El Baul** | **5.80** | **253** | *eP* | **Pn** | **22 14 02.5** | **+1.3** |
| BAUV | | | | *eS* | **Sn** | **22 15 05.1** | **-1.3** |
| **MAPV** | **Macapo** | **6.00** | **263** | *eP* | **Pn** | **22 14 04.7** | **+0.8** |
| MAPV | | | | *eS* | **Sn** | **22 15 10.6** | **-0.7** |
| **ANBD** | **Bethesda, Anti** | **6.37** | **6** | *eP* | **Pn** | **22 14 10.7** | **+1.7** |
| ANBD | | | | *eS* | **Sn** | **22 15 18.0** | **-2.2** |
| **TEPV** | **Terepaima** | **6.70** | **265** | *eP* | **Pn** | **22 14 14.5** | **+1.0** |
| TEPV | | | | *eS* | **Sn** | **22 15 26.7** | **-1.7** |
| **SOCV** | **Socops** | **8.65** | **255** | *eP* | **Pn** | **22 14 39.9** | **-0.1** |
| SOCV | | | | *eS* | **Sn** | **22 16 12.0** | **-4.0** |

*IDC* ***12*** *22:12:37.1±0.8, 2˚.38N×128˚.73E, h0km, mb3.9/13, mbtmp4.0/13, Error ellipse: s-maj=56.6km s-min=15.4km az=73.0*
*DJA* ***12*** *22:12:40.1±0.7, 2˚N±7˚×12˚9E±˚, h10km, M4.1/9, mb4.2/4, MLv4.1/9*
*NEIC* ***12*** *22:12:47.0±1.8, 2˚.4N±0˚.1×128˚.6E±0˚.1, h67km±9km, mb4.6/21, Error ellipse: s-maj=18.6km s-min=14.3km az=65.0*
**ISC 12 22:12:42.7±0.5, 2˚.37N±0˚.08×128˚.86E±0˚.09, h35km, n45, σ1§16/45, mb4.2/23, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.18** | **223** | | **Pn** | **22 13 16.6** | **+0.1** |
| **TNTI** | **Ternate** | **2.18** | **223** | P | **Pn** | **22 13 16.3** | **-0.2** |
| **SWI** | **Sorong** | **4.01** | **143** | P | **Pn** | **22 13 40.4** | **-1.3** |
| **GTOI** | **Gorontalo** | **6.10** | **254** | P | **Pn** | **22 14 12.6** | **+2.2** |
| | 11nm,1.0s,0.1nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.25** | **147** | P | **Pn** | **22 14 10.9** | **-1.6** |
| | 48nm,1.7s,0.2nm | | | | | | |
| **LUWI** | **Luwuk** | **6.97** | **241** | P | **Pn** | **22 14 22.4** | **0.0** |
| **TOLI2** | **Tolitoli** | **8.17** | **261** | Pn | **Pn** | **22 14 40.0** | **+1.1** |
| **MTN** | **Manton Dam** | **15.28** | **172** | Pn | **P** | **22 16 19.1** | **-1.3** |
| MTN | | | | IAmb | IAmb | 22 16 31.7 | |
| | comp=Z,69nm,1.4s | | | | | | |
| **COEN** | **Coen** | **21.55** | **139** | P | **P** | **22 17 30.5** | **+1.2** |
| COEN | | | | IAmb | IAmb | 22 17 41.5 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.66** | **166** | P | **P** | **22 17 43.5** | **+2.4** |
| **WRA** | **Warramunga Arr** | **22.82** | **167** | P | **P** | **22 17 43.0** | **+0.3** |
| | comp=Z,0.7nm,0.5s,baz=344,slow=9.9,SNR=4.1 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.82** | **167** | P | **P** | **22 17 43.3** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 22 18 13.9 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.88** | **166** | P | **P** | **22 17 44.8** | **+1.4** |
| **RABL** | **Rabaul** | **24.18** | **106** | P | **P** | **22 17 59.6** | **+3.5** |
| RABL | | | | IAmb | IAmb | 22 18 05.4 | |
| | comp=Z,40nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **26.34** | **170** | P | **P** | **22 18 15.2** | **-0.5** |
| | comp=Z,0.5nm,0.6s,baz=354,slow=7.9,SNR=4.8 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **CRAI** | **Chiangrai** | **32.99** | **305** | P | **P** | **22 19 13.8** | **-0.8** |
| **KSRS** | **Korea Array** | **34.92** | **359** | P | **P** | **22 19 30.4** | **-0.8** |
| | comp=Z,0.6nm,0.4s,baz=177,slow=10,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.08** | **13** | P | **P** | **22 19 31.9** | **-0.7** |
| | comp=Z,0.9nm,0.5s,baz=187,slow=8.9,SNR=4.1 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **35.65** | **170** | P | **P** | **22 19 37.3** | **-0.2** |
| BBOO | | | | IAmb | IAmb | 22 19 45.2 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **36.14** | **161** | P | **P** | **22 19 41.8** | **+0.1** |
| | comp=Z,0.6nm,0.2s,baz=356,slow=22,SNR=1.2 | | | | | | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **SONM** | **Songino Array** | **49.27** | **340** | P | **P** | **22 21 27.9** | **-0.3** |
| **SONM** | **Songino Array** | **49.27** | **340** | P | **P** | **22 21 28.4** | **+0.2** |
| | comp=Z,1.0nm,0.7s,baz=154,slow=11,SNR=4.6 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **59.88** | **325** | P | **P** | **22 22 44.8** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 22 22 45.7 | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.88** | **325** | P | **P** | **22 22 45.0** | **-0.1** |
| **MKAR** | **Makanchi Array** | **59.88** | **325** | P | **P** | **22 22 44.9** | **-0.2** |
| | comp=Z,1.9nm,0.6s,baz=116,slow=8.5,SNR=19 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **60.07** | **325** | P | **P** | **22 22 46.4** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 22 22 46.9 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.76** | **332** | P | **P** | **22 23 03.4** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **62.76** | **332** | P | **P** | **22 23 03.3** | **-1.1** |
| | comp=Z,0.7nm,0.4s,baz=118,slow=5.3,SNR=3.9 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **64.03** | **327** | P | **P** | **22 23 12.5** | **-0.2** |
| KURK | | | | IAmb | IAmb | 22 23 13.1 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.03** | **327** | P | **P** | **22 23 12.0** | **-0.8** |
| | comp=Z,3.0nm,0.7s,baz=126,slow=6.3,SNR=18 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **65.67** | **317** | P | **P** | **22 23 23.2** | **-0.5** |
| **TIXI** | **Tiksi** | **69.18** | **0** | P | **P** | **22 23 45.6** | **+0.4** |
| TIXI | | | | IAmb | IAmb | 22 23 59.0 | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.61** | **327** | P | **P** | **22 23 47.5** | **-0.8** |
| | comp=Z,1.5nm,0.6s,baz=123,slow=7.1,SNR=5.2 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **69.69** | **327** | P | **P** | **22 23 48.5** | **-0.3** |
| BRVK | | | | IAmb | IAmb | 22 24 30.9 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **74.54** | **321** | P | **P** | **22 24 16.6** | **-1.3** |
| **ABKAR** | **Akbulak array** | **74.54** | **321** | P | **P** | **22 24 17.0** | **-0.9** |
| ABKAR | | | | IAmb | IAmb | 22 24 18.2 | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| **AKTO** | **Aktyubinsk** | **76.04** | **322** | P | **P** | **22 24 25.5** | **-1.0** |
| | comp=Z,1.6nm,0.8s,baz=85,slow=3.4,SNR=4.4 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **ARU** | **Arti** | **77.22** | **328** | P | **P** | **22 24 31.5** | **-1.5** |
| | comp=Z,1.2nm,0.4s,baz=101,slow=18,SNR=3.9 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **M14K** | **Bethel** | **77.86** | **28** | P | **P** | **22 24 37.4** | **+0.9** |
| **F17K** | **Baldwin Pennin** | **79.88** | **23** | P | **P** | **22 24 48.6** | **+1.1** |
| **L18K** | **Granite Mounta** | **80.69** | **27** | P | **P** | **22 24 52.5** | **+0.6** |
| **VNDA** | **Vanda** | **81.83** | **173** | P | **P** | **22 24 57.1** | **-0.6** |
| | comp=Z,0.6nm,0.9s,baz=358,slow=5.4,SNR=2.6 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **B21K** | **Ikpikpuk River** | **83.11** | **20** | P | **P** | **22 25 06.3** | **+1.7** |
| **MLY** | **Manley** | **83.80** | **25** | P | **P** | **22 25 10.4** | **+2.1** |
| **RND** | **Reindeer** | **84.43** | **27** | P | **P** | **22 25 11.9** | **+0.3** |
| RND | | | | IAmb | IAmb | 22 25 20.4 | |
| | comp=Z,11nm,0.9s | | | | | | |

*NEIC* ***12*** *22:19:11.4±1.1, 69˚.50N±0˚.04×144˚.09W±0˚.08, h10km±2km, Error ellipse: s-maj=7.1km s-min=4.4km az=8.0*
**AEIC 12 22:19:10.8±1.1, 69˚.45N±0˚.02×144˚.14W±0˚.08, h5km±6km, ML3.8, ML3.7/82(NEIC), Error ellipse: s-maj=4.7km s-min=2.8km az=57.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.23** | **40** | Pg | Pg | 22 19 15.2 | -0.1 |
| C27K | | | | Sg | Sg | 22 19 18.3 | -0.1 |
| **C26K** | **Camden Bay** | **0.54** | **330** | | Pg | 22 19 21.1 | -0.2 |
| **C26K** | **Camden Bay** | **0.54** | **330** | | Sg | 22 19 28.7 | +0.4 |
| C26K | | | | IAML | | 22 19 31.2 | |
| | comp=N,1µm,0.3s | | | | | | |
| C26K | | | | IAML | | 22 19 34.8 | |
| | comp=E,1µm,0.9s | | | | | | |
| **D25K** | **Kavik River** | **0.80** | **262** | | Pg | 22 19 25.1 | -1.1 |
| **D25K** | **Kavik River** | **0.80** | **262** | | Sg | 22 19 36.8 | +0.2 |
| **D27M** | **Malcolm River** | **1.14** | **99** | | Pg | 22 19 32.3 | -0.4 |
| D27M | | | | | Sb | 22 19 48.6 | +0.3 |
| **E27K** | **Coleen River** | **1.57** | **143** | | Pn | 22 19 38.9 | -0.4 |
| **C24K** | **Franklin Bluff** | **1.62** | **282** | | Pn | 22 19 39.6 | -0.5 |
| C24K | | | | | Sn | 22 20 01.5 | +0.2 |
| **C24K** | **Franklin Bluff** | **1.62** | **282** | IAML | | 22 20 03.6 | |
| | comp=N,488nm,0.5s | | | | | | |
| C24K | | | | IAML | | 22 20 07.0 | |
| | comp=E,566nm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.69** | **262** | | Pn | 22 19 40.6 | -0.4 |
| **D24K** | **Happy Valley** | **1.69** | **262** | IAML | | 22 20 06.6 | |
| | comp=N,625nm,0.5s | | | | | | |
| D24K | | | | IAML | | 22 20 44.4 | |
| | comp=E,587nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.76** | **180** | | Pn | 22 19 41.5 | -0.5 |
| **F26K** | **Sheenjek River** | **1.76** | **180** | IAML | | 22 20 09.9 | |
| | comp=E,373nm,0.6s | | | | | | |
| F26K | | | | IAML | | 22 20 12.0 | |
| | comp=N,350nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.86** | **115** | | Pn | 22 19 42.9 | -0.4 |
| **D28M** | **Stokes Point** | **1.92** | **91** | | Pn | 22 19 43.8 | -0.2 |
| **D28M** | **Stokes Point** | **1.92** | **91** | IAML | | 22 20 17.0 | |
| | comp=E,393nm,0.7s | | | | | | |
| D28M | | | | IAML | | 22 20 54.7 | |
| | comp=N,425nm,1.0s | | | | | | |
| **F25K** | **Christian Rive** | **1.95** | **197** | | Pn | 22 19 44.0 | -0.6 |
| F25K | | | | | Sn | 22 20 10.0 | +0.6 |
| **F25K** | **Christian Rive** | **1.95** | **197** | IAML | | 22 20 16.3 | |
| | comp=E,402nm,0.6s | | | | | | |
| F25K | | | | IAML | | 22 20 20.1 | |
| | comp=N,303nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.04** | **185** | | Pn | 22 19 45.6 | -0.2 |
| **E24K** | **Your Creek** | **2.10** | **231** | | Pn | 22 19 46.6 | -0.1 |
| **E24K** | **Your Creek** | **2.10** | **231** | IAML | | 22 20 56.2 | |
| | comp=E,251nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.12** | **250** | | Pn | 22 19 47.2 | +0.3 |
| **TOLK** | **Toolik Lake Re** | **2.12** | **250** | IAML | | 22 21 07.7 | |
| | comp=E,277nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.30** | **283** | | Pn | 22 19 49.6 | +0.3 |
| **C23K** | **Itkillik River** | **2.30** | **283** | IAML | | 22 21 21.6 | |
| | comp=E,505nm,0.5s | | | | | | |
| C23K | | | | IAML | | 22 21 21.9 | |
| | comp=N,507nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **217** | | Pn | 22 19 51.1 | +0.5 |
| **D23K** | **Nanushuk River** | **2.39** | **261** | | Pn | 22 19 50.8 | +0.3 |
| **D23K** | **Nanushuk River** | **2.39** | **261** | IAML | | 22 21 21.1 | |
| | comp=E,202nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.42** | **138** | | Pn | 22 19 51.3 | +0.3 |
| **F28M** | **Old Crow** | **2.42** | **138** | IAML | | 22 21 23.3 | |
| | comp=E,183nm,0.7s | | | | | | |
| F28M | | | | IAML | | 22 21 24.8 | |
| | comp=N,226nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **238** | | Pn | 22 19 51.8 | +0.5 |
| **E23K** | **Chandalar** | **2.44** | **238** | IAML | | 22 20 56.1 | |
| | comp=E,206nm,0.5s | | | | | | |
| E23K | | | | IAML | | 22 21 17.5 | |
| | comp=N,181nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.50** | **112** | | Pn | 22 19 52.6 | +0.6 |
| **E29M** | **Blow River** | **2.50** | **112** | IAML | | 22 21 17.4 | |
| | comp=N,195nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.52** | **177** | | Pn | 22 19 52.7 | +0.4 |
| **G27K** | **Doyon Strip** | **2.81** | **160** | | Pn | 22 19 56.8 | +0.4 |
| **G27K** | **Doyon Strip** | **2.81** | **160** | IAML | | 22 21 44.9 | |
| | comp=E,140nm,0.8s | | | | | | |
| **FYU** | **Fort Yukon** | **2.93** | **189** | Pn | Pn | 22 19 58.1 | +0.1 |
| **D22K** | **Ayikyak River** | **3.11** | **263** | | Pn | 22 20 00.6 | +0.2 |
| **B22K** | **Teshekpuk Lake** | **3.33** | **290** | | Pn | 22 20 03.9 | +0.4 |
| **B21K** | **Ikpikpuk River** | **3.68** | **278** | | Pn | 22 20 09.1 | +0.8 |
| **E21K** | **Killik River** | **3.69** | **259** | | Pn | 22 20 08.8 | +0.3 |
| **G30M** | **tAoh Zraii Nji** | **3.85** | **126** | Pn | Pn | 22 20 10.8 | 0.0 |
| G30M | | | | IAML | | 22 22 35.0 | |
| | comp=E,132nm,0.6s | | | |

comp=N,52nm,0.6s
NEA2 **Nenana** 5.25 204 Sn 22 21 28.7 -1.9
NEA2 **Nenana** 5.25 204 Pn Pn 22 20 29.9 +0.1
NEA2 IAML 22 23 01.7
comp=E,52nm,1.5s
NEA2 IAML 22 23 17.6
comp=N,58nm,1.1s
**C19K Lookout Ridge 5.50 274** Pn 22 20 33.7 +0.5
**SCRK Sand Creek 5.50 179** Pn Pn 22 20 36.4 +3.0
**K27K Chicken 5.51 171** Pn Pn 22 20 35.4 +2.0
**J29N Klondike Camp 5.53 152** Pn Pn 22 20 34.5 +0.7
**BWN Browne 5.70 204** Pn 22 20 35.9 -0.2
**F19K Shaleruckik Mo 5.73 249** Pn 22 20 36.9 +0.5
**A19K Wainwright 5.90 285** Pn 22 20 38.8 +0.1
**BPAW Bear Paw Mtn. 6.01 210** Pn 22 20 40.9 +0.5
**H19K Roundabout Mou 6.15 236** Pn Pn 22 20 43.0 +0.9
**C18K Utukok River 6.17 271** Pn 22 20 42.7 +0.2
**K29M Barlow Dome 6.21 152** Pn 22 20 44.0 +0.9
**B18K Kokolik River 6.23 277** Pn 22 20 42.9 -0.4
**E18K Tukpahlearik C 6.40 259** Pn 22 20 45.4 -0.2
**L26K Log Cabin Wild 6.46 177** Pn 22 20 47.5 +1.0
**F18K Selawik 6.48 251** Pn 22 20 47.0 +0.3
**A36M Sachs Harbour 6.74 59** Pn 22 20 49.6 -0.6
**C17K DeLong Mountai 6.92 271** Pn 22 20 52.1 -0.6
**RDOG Red Dog Mine 6.96 267** Pn 22 20 52.7 -0.6
**E17K Hotham Inlet 6.98 259** Pn 22 20 53.4 -0.1
**M29M Somme Creek 7.40 159** Pn Pn 22 21 00.5 +1.0

*NEIC* ***12*** *22:20:09.7±1.8, 69°.49N±0°.04×144°.09W±0°.06, h10km±1km, Error ellipse: s-maj=7.5km s-min=3.1km az=20.0*
*AEIC* ***12*** *22:20:09.4±1.6, 69°.45N±0°.04×144°.18W±0°.08, h6km±4km, ML3.9, mb4.3/4(NEIC), ML4.0/96(NEIC), Error ellipse: s-maj=5.8km s-min=3.8km az=194.0*
*IDC* ***12*** *22:20:10.2±0.7, 69°.73N×144°.06W, h0km, mb3.8/10, mbtmp3.8/14, ML3.7/4, Error ellipse: s-maj=20.7km s-min=12.3km az=43.0*

**ISC 12 22:20:09.2±1.4, 69°.50N±0°.04×144°.11W±0°.03, h1km±9km, n143, σ1§24/131, mb3.9/12, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.19** | **47** | | **Pg** | **22 20 13.7** | **+0.9** |
| **C26K** | **Camden Bay** | **0.51** | **327** | | **Pg** | **22 20 19.7** | **+0.8** |
| C26K | | | | | **Sb** | **22 20 27.5** | **-1.2** |
| **D25K** | **Kavik River** | **0.82** | **259** | | **Pg** | **22 20 24.4** | **-0.5** |
| D25K | | | | | **Sg** | **22 20 35.6** | **+0.1** |
| **D27M** | **Malcolm River** | **1.14** | **102** | | **Pg** | **22 20 31.4** | **+0.3** |
| D27M | | | | | **Sn** | **22 20 47.5** | **-1.2** |
| **E27K** | **Coleen River** | **1.60** | **144** | | **Pn** | **22 20 37.6** | **-1.1** |
| E27K | | | | | **Sn** | **22 20 59.1** | **-0.9** |
| **C24K** | **Franklin Bluff** | **1.62** | **280** | | **Pn** | **22 20 38.4** | **-0.5** |
| C24K | | | | | **Sn** | **22 21 00.5** | **0.0** |
| **C24K** | **Franklin Bluff** | **1.62** | **280** | IAML | | 22 21 05.0 | |
| | comp=E,2μm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.71** | **261** | | **Pn** | **22 20 39.4** | **-0.7** |
| D24K | | | | | **Sn** | **22 21 02.2** | **-0.3** |
| **F26K** | **Sheenjek River** | **1.81** | **180** | | **Pn** | **22 20 40.3** | **-1.3** |
| F26K | | | | | **Sn** | **22 21 04.2** | **-1.0** |
| **F26K** | **Sheenjek River** | **1.81** | **180** | IAML | | 22 21 10.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| F26K | | | | IAML | | 22 21 10.8 | |
| | comp=N,1μm,0.4s | | | | | | |
| **E28M** | **Babbage River** | **1.87** | **117** | | **Pn** | **22 20 41.8** | **-0.6** |
| **D28M** | **Stokes Point** | **1.91** | **93** | | **Pn** | **22 20 42.6** | **-0.2** |
| **D28M** | **Stokes Point** | **1.91** | **93** | IAML | | 22 21 16.4 | |
| | comp=N,1μm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **197** | | **Pn** | **22 20 42.7** | **-1.4** |
| **F25K** | **Christian Rive** | **2.00** | **197** | IAML | | 22 21 15.8 | |
| | comp=N,2μm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **2.14** | **230** | | **Pn** | **22 20 45.0** | **-1.1** |
| **TOLK** | **Toolik Lake Re** | **2.14** | **249** | | **Pn** | **22 20 45.1** | **-1.0** |
| **TOLK** | **Toolik Lake Re** | **2.14** | **249** | IAML | | 22 21 23.9 | |
| | comp=E,947nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 22 21 25.1 | |
| | comp=N,810nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **2.30** | **282** | | **Pn** | **22 20 47.6** | **-0.6** |
| **C23K** | **Itkillik River** | **2.30** | **282** | IAML | | 22 21 24.9 | |
| | comp=E,1μm,0.8s | | | | | | |
| C23K | | | | IAML | | 22 21 26.4 | |
| | comp=N,2μm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **217** | | **Pn** | **22 20 48.7** | **-1.3** |
| **F28M** | **Old Crow** | **2.45** | **139** | | **Pn** | **22 20 49.4** | **-1.0** |
| **F28M** | **Old Crow** | **2.45** | **139** | IAML | | 22 21 32.2 | |
| | comp=N,588nm,0.8s | | | | | | |
| F28M | | | | IAML | | 22 21 32.8 | |
| | comp=E,511nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.47** | **237** | | **Pn** | **22 20 49.7** | **-0.9** |
| **E23K** | **Chandalar** | **2.47** | **237** | IAML | | 22 21 30.9 | |
| | comp=N,639nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.50** | **113** | | **Pn** | **22 20 50.4** | **-0.6** |
| **E29M** | **Blow River** | **2.50** | **113** | IAML | | 22 21 33.5 | |
| | comp=N,587nm,0.9s | | | | | | |
| E29M | | | | IAML | | 22 21 35.9 | |
| | comp=E,519nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.56** | **177** | | **Pn** | **22 20 50.5** | **-1.3** |
| **D22K** | **Ayikyak River** | **3.12** | **263** | Pn | **Pn** | **22 20 58.7** | **-0.8** |
| **B22K** | **Teshekpuk Lake** | **3.32** | **289** | Pn | **Pn** | **22 21 00.8** | **-1.3** |
| **G29M** | **Pine Creek** | **3.45** | **136** | Pn | **Pn** | **22 21 02.7** | **-1.3** |
| G29M | | | | IAML | | 22 22 05.5 | |
| | comp=N,362nm,1.3s | | | | | | |
| **G23K** | **Bananza Creek** | **3.57** | **221** | | **Pn** | **22 21 04.5** | **-1.2** |
| **G23K** | **Bananza Creek** | **3.57** | **221** | IAML | | 22 22 07.2 | |
| | comp=E,280nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.69** | **277** | | **Pn** | **22 21 06.2** | **-1.1** |
| **B21K** | **Ikpikpuk River** | **3.69** | **277** | IAML | | 22 22 20.5 | |
| | comp=N,603nm,0.9s | | | | | | |
| B21K | | | | IAML | | 22 22 32.4 | |
| | comp=E,386nm,1.6s | | | | | | |
| **E21K** | **Killik River** | **3.71** | **258** | | **Pn** | **22 21 07.0** | **-0.6** |
| **E21K** | **Killik River** | **3.71** | **258** | IAML | | 22 22 08.7 | |
| | comp=N,274nm,0.7s | | | | | | |
| E21K | | | | IAML | | 22 22 19.7 | |
| | comp=E,258nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **3.94** | **144** | | **Pn** | **22 21 09.8** | **-1.0** |
| H29M | | | | IAML | | 22 22 07.9 | |
| | comp=E,274nm,0.7s | | | | | | |
| H29M | | | | IAML | | 22 22 29.6 | |
| | comp=N,205nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.95** | **203** | Pn | **Pn** | **22 21 10.9** | **0.0** |
| H24K | | | | IAML | | 22 22 23.7 | |
| | comp=E,161nm,1.6s | | | | | | |
| **INK** | **Inuvik** | **4.01** | **102** | Pn | **Pn** | **22 21 12.7** | **+1.1** |
| | comp=E,1.6nm,0.3s,baz=279,slow=26,SNR=2.2 | | | | | | |
| INK | | | | Sn | **Sn** | **22 21 59.6** | **+0.5** |
| | comp=E,4.9nm,0.3s,baz=42,slow=17,SNR=3.8 | | | | | | |
| INK | | | | Lg | Lg | 22 22 18.3 | |
| | comp=E,5.9nm,0.3s,baz=273,slow=21,SNR=4.0 | | | | | | |
| | comp=E,6.3nm,0.3s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04** | **188** | Pn | **Pn** | **22 21 13.3** | **+1.1** |
| PRP | | | | IAML | | 22 22 18.7 | |
| | comp=N,164nm,0.8s | | | | | | |
| PRP | | | | IAML | | 22 22 24.8 | |
| | comp=E,178nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **4.16** | **241** | Pn | **Pn** | **22 21 12.2** | **-1.5** |
| F21K | | | | IAML | | 22 22 23.8 | |
| | comp=E,186nm,0.7s | | | | | | |
| F21K | | | | IAML | | 22 22 31.6 | |
| | comp=N,146nm,0.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.20** | **135** | | **Pn** | **22 21 12.8** | **-1.6** |
| **I26K** | **Coal Creek Min** | **4.23** | **175** | | **Pn** | **22 21 13.8** | **-0.9** |
| **H23K** | **Yukon River** | **4.23** | **212** | | **Pn** | **22 21 14.8** | **+0.1** |
| H23K | | | | IAML | | 22 22 28.1 | |
| | comp=E,196nm,1.1s | | | | | | |
| H23K | | | | IAML | | 22 22 38.9 | |
| | comp=N,158nm,0.7s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.34** | **113** | | **Pn** | **22 21 17.6** | **+1.4** |
| F31M | | | | IAML | | 22 22 34.9 | |
| | comp=E,199nm,1.3s | | | | | | |
| **I28M** | **Miner Creek** | **4.37** | **157** | | **Pn** | **22 21 15.9** | **-0.8** |
| **I28M** | **Miner Creek** | **4.37** | **157** | IAML | | 22 22 16.9 | |
| | comp=N,114nm,0.7s | | | | | | |
| I28M | | | | IAML | | 22 22 38.4 | |
| | comp=E,112nm,1.3s | | | | | | |
| **G31M** | **Satah River** | **4.49** | **121** | Pn | **Pn** | **22 21 16.1** | **-2.1** |
| G31M | | | | IAML | | 22 22 35.8 | |
| | comp=E,152nm,0.7s | | | | | | |
| G31M | | | | IAML | | 22 22 47.5 | |
| | comp=N,175nm,1.4s | | | | | | |
| **D20K** | **Etivluk River** | **4.55** | **266** | | **Pn** | **22 21 18.1** | **-0.9** |
| **H22K** | **Ishtalitna Cre** | **4.56** | **221** | | **Pn** | **22 21 18.1** | **-1.1** |
| **B20K** | **Meade River** | **4.56** | **283** | Pn | **Pn** | **22 21 19.2** | **-0.1** |
| **A21K** | **Barrow** | **4.59** | **299** | | **Pn** | **22 21 19.4** | **-0.2** |
| **G21K** | **Allakaket** | **4.63** | **234** | | **Pn** | **22 21 19.1** | **-1.1** |
| **G21K** | **Allakaket** | **4.63** | **234** | IAML | | 22 22 45.8 | |
| | comp=N,149nm,0.8s | | | | | | |
| G21K | | | | IAML | | 22 22 47.1 | |
| | comp=E,153nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.72** | **149** | | **Pn** | **22 21 20.6** | **-0.8** |
| I29M | | | | IAML | | 22 22 42.7 | |
| | comp=E,109nm,0.8s | | | | | | |
| I29M | | | | IAML | | 22 22 48.3 | |
| | comp=N,92nm,0.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.82** | **207** | | **Pn** | **22 21 22.0** | **-0.7** |
| **I23K** | **Minto, Yukon-K** | **4.82** | **207** | IAML | | 22 22 50.7 | |
| | comp=N,111nm,0.9s | | | | | | |
| I23K | | | | IAML | | 22 22 52.6 | |
| | comp=E,124nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **201** | | **Pn** | **22 21 22.2** | **-0.8** |
| **MDM** | **Murphy Dome** | **4.83** | **201** | IAML | | 22 22 47.0 | |
| | comp=E,122nm,0.9s | | | | | | |
| MDM | | | | IAML | | 22 22 48.4 | |
| | comp=N,130nm,1.1s | | | | | | |
| **COLA** | **College** | **4.87** | **199** | | **Pn** | **22 21 22.1** | **-1.3** |
| **ILAR** | **Eielson Array** | **4.87** | **194** | Pn | **Pn** | **22 21 25.9** | **+2.4** |
| | comp=N,2.9nm,0.3s,baz=4.4,slow=13,SNR=5.5 | | | | | | |
| ILAR | | | | Sn | **Sn** | **22 22 23.1** | **+2.6** |
| | comp=N,6.6nm,0.3s,baz=8.5,slow=22,SNR=8.2 | | | | | | |
| ILAR | | | | Lg | Lg | 22 22 44.1 | |
| | comp=N,11nm,0.3s,baz=244,slow=28,SNR=4.2 | | | | | | |
| | comp=N,7.9nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **4.88** | **165** | | **Pn** | **22 21 22.7** | **-1.0** |
| **EGAK** | **Eagle** | **4.88** | **165** | IAML | | 22 22 24.6 | |
| | comp=N,114nm,1.0s | | | | | | |
| EGAK | | | | IAML | | 22 22 57.5 | |
| | comp=N,93nm,1.3s | | | | | | |
| **J25K** | **Salcha River,** | **4.93** | **186** | Pn | **Pn** | **22 21 23.8** | **-0.6** |
| J25K | | | | IAML | | 22 22 51.2 | |
| | comp=E,130nm,1.4s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.97** | **246** | | **Pn** | **22 21 23.4** | **-1.3** |
| **F20K** | **Avaraart Lake** | **4.97** | **246** | IAML | | 22 22 58.7 | |
| | comp=N,90nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.03** | **177** | | **Pn** | **22 21 24.8** | **-0.9** |
| **J26L** | **Joseph Creek** | **5.03** | **177** | IAML | | 22 22 51.3 | |
| | comp=E,86nm,0.8s | | | | | | |
| J26L | | | | IAML | | 22 22 59.0 | |
| | comp=N,76nm,0.6s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.09** | **225** | | **Pn** | **22 21 25.5** | **-1.1** |
| **H21K** | **Melozitna Rive** | **5.09** | **225** | IAML | | 22 23 02.1 | |
| | comp=E,80nm,1.2s | | | | | | |
| H21K | | | | IAML | | 22 23 02.2 | |
| | comp=N,74nm,1.3s | | | | | | |
| **D19K** | **Kuna River** | **5.14** | **265** | | **Pn** | **22 21 26.5** | **-0.7** |
| **D19K** | **Kuna River** | **5.14** | **265** | IAML | | 22 22 27.4 | |
| | comp=E,81nm,0.5s | | | | | | |
| D19K | | | | IAML | | 22 23 24.9 | |
| | comp=N,0.1nm,0.6s | | | | | | |
| **I30M** | **Mount Dempster** | **5.23** | **142** | Pn | **Pn** | **22 21 29.8** | **+1.2** |
| I30M | | | | IAML | | 22 22 35.0 | |
| | comp=N,86nm,0.6s | | | | | | |
| **E19K** | **Redstone River** | **5.25** | **253** | | **Pn** | **22 21 28.1** | **-0.6** |
| **E19K** | **Redstone River** | **5.25** | **253** | IAML | | 22 22 32.2 | |
| | comp=N,130nm,0.6s | | | | | | |
| E19K | | | | IAML | | 22 22 37.0 | |
| | comp=E,91nm,0.7s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.50** | **273** | | **Pn** | **22 21 31.9** | **-0.3** |
| **F19K** | **Shaleruckik Mo** | **5.75** | **249** | | **Pn** | **22 21 35.1** | **-0.5** |
| **H20K** | **Anotleneega Mo** | **5.76** | **231** | | **Pn** | **22 21 35.4** | **-0.4** |
| **DAWY** | **Dawson** | **5.77** | **159** | | **Pn** | **22 21 37.6** | **+1.8** |
| **J30M** | **Hart River** | **5.80** | **145** | | **Pn** | **22 21 36.7** | **+0.3** |
| **A19K** | **Wainwright** | **5.90** | **285** | | **Pn** | **22 21 37.8** | **+0.3** |
| **G19K** | **Purcell Mounta** | **5.95** | **242** | | **Pn** | **22 21 37.8** | **-0.5** |
| **BPAW** | **Bear Paw Mtn.** | **6.06** | **210** | | **Pn** | **22 21 39.6** | **-0.3** |
| **MCK** | **McKinley** | **6.10** | **201** | | **Pn** | **22 21 40.3** | **-0.1** |
| **C18K** | **Utukok River** | **6.18** | **270** | | **Pn** | **22 21 41.8** | **+0.3** |
| **K29M** | **Barlow Dome** | **6.25** | **152** | Pn | **Pn** | **22 21 42.5** | **-0.1** |
| **E18K** | **Tukpahlearik C** | **6.42** | **259** | | **Pn** | **22 21 44.5** | **-0.2** |
| **F18K** | **Selawik** | **6.50** | **251** | | **Pn** | **22 21 46.2** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **6.53** | **171** | Pn | **Pn** | **22 21 46.4** | **+0.1** |
| **G18K** | **Tagagawik** | **6.60** | **244** | Pn | **Pn** | **22 21 48.2** | **+1.0** |
| **A36M** | **Sachs Harbour** | **6.70** | **59** | | **Pn** | **22 21 48.6** | **0.0** |
| **L29M** | **L29M** | **6.85** | **157** | Pn | **Pn** | **22 21 52.7** | **+2.0** |
| **C17K** | **DeLong Mountai** | **6.92** | **270** | | **Pn** | **22 21 50.2** | **-1.5** |
| **RDOG** | **Red Dog Mine** | **6.97** | **267** | | **Pn** | **22 21 51.8** | **-0.5** |
| **E17K** | **Hotham Inlet** | **7.00** | **258** | | **Pn** | **22 21 51.9** | **-0.7** |
| **H18K** | **Honhosa River** | **7.01** | **238** | | **Pn** | **22 21 52.0** | **-0.9** |
| **C36M** | **Paulatuk** | **7.05** | **82** | | **Pn** | **22 21 53.4** | **0.0** |
| **M29M** | **Somme Creek** | **7.45** | **159** | Pn | **Pn** | **22 22 00.4** | **+1.5** |
| **G17K** | **Kiwalik Mounta** | **7.49** | **246** | | **Pn** | **22 22 00.0** | **+0.6** |
| **M20K** | **Styx River** | **8.49** | **210** | Pn | **Pn** | **22 22 14.1** | **+0.9** |
| **FARO** | **Faro, Yukon** | **8.51** | **144** | Pn | **Pn** | **22 22 14.1** | **+0.7** |
| **J17K** | **VABM Dome** | **8.54** | **232** | Pn | **Pn** | **22 22 14.2** | **+0.3** |
| **L19K** | **White Mountain** | **8.55** | **216** | Pn | **Pn** | **22 22 12.7** | **-1.3** |
| **MMPY** | **Sheldon Lake,** | **8.64** | **137** | Pn | **Pn** | **22 22 16.1** | **+0.8** |
| **F15K** | **North Star Dit** | **8.69** | **254** | Pn | **Pn** | **22 22 15.6** | **-0.3** |
| **GRNC** | **Granite Creek** | **8.86** | **172** | Pn | **Pn** | **22 22 19.1** | **+0.7** |
| **L18K** | **Granite Mounta** | **8.92** | **221** | Pn | **Pn** | **22 22 19.4** | **+0.4** |
| **RAGM** | **Ragged Mountai** | **9.15** | **182** | Pn | **Pn** | **22 22 22.9** | **+0.6** |
| RAGM | | | | | **Sn** | **22 24 01.9** | **-3.9** |
| **O30N** | **Mendenhall** | **9.38** | **155** | Pn | **Pn** | **22 22 26.6** | **+1.2** |
| **O29M** | **Mount Kennedy** | **9.52** | **163** | Pn | **Pn** | **22 22 31.7** | **+4.3** |
| **WHY** | **Whitehorse** | **9.68** | **152** | Pn | **Pn** | **22 22 29.3** | **-0.2** |
| **M17K** | **Holitna River** | **9.81** | **221** | Pn | **Pn** | **22 22 30.9** | **-0.4** |
| **J14K** | **Nanvaranak Lak** | **10.34** | **239** | Pn | **Pn** | **22 22 36.8** | **-1.6** |
| **P33M** | **Teslin, Yukon** | **10.46** | **147** | Pn | **Pn** | **22 22 38.2** | **-2.0** |
| **M16K** | **Timber Creek** | **10.50** | **223** | Pn | **Pn** | **22 22 41.0** | **+0.4** |
| **K13K** | **Kusilvak Mount** | **11.30** | **238** | Pn | **Pn** | **22 22 49.6** | **-1.9** |
| **R33M** | **Jennings River** | **11.58** | **145** | Pn | **Pn** | **22 22 55.1** | **-0.5** |
| **Q32M** | **Nakina River** | **11.73** | **148** | Pn | **Pn** | **22 22 58.1** | **+0.5** |
| **R32K** | **Eaglecrest** | **12.01** | **155** | Pn | **Pn** | **22 23 00.3** | **-0.9** |
| **S31K** | **Pelican** | **12.08** | **160** | Pn | **Pn** | **22 23 03.5** | **+1.4** |
| **O14K** | **Tigyukauivet M** | **12.61** | **224** | Pn | **Pn** | **22 23 08.4** | **-1.1** |
| **DLBC** | **Dease Lake** | **12.66** | **144** | Pn | **Pn** | **22 23 10.0** | **-0.1** |
| **DLBC** | **Dease Lake** | **12.66** | **144** | Pn | **Pn** | **22 23 10.9** | **+0.7** |
| | comp=E,0.2nm,0.3s,baz=324,slow=10,SNR=4.7 | | | | | | |
| | comp=E,2.8nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.77** | **106** | Pn | **Pn** | **22 23 21.9** | **-3.3** |
| **YKA** | **Yellowknife Ar** | **13.77** | **106** | Pn | **Pn** | **22 23 22.5** | **-2.7** |
| | comp=E,0.8nm,0.3s,baz=320,slow=12,SNR=3.3 | | | | | | |
| | comp=E,1.6nm,0.6s | | | | | | |
| **CLRS** | **Cowichan Lake** | **22.90** | **145** | P | **P** | **22 25 12.3** | **-1.7** |
| **RADR** | **Rader Ridge** | **25.26** | **146** | P | **P** | **22 25 35.3** | **-1.2** |
| **PDAR** | **Pinedale Array** | **32.13** | **128** | P | **P** | **22 26 39.5** | **+1.4** |
| | comp=E,1.1nm,0.9s,baz=20,slow=4.7,SNR=6.0 | | | | | | |
| | comp=E,1.1nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.06** | **142** | P | **P** | **22 26 57.7** | **+2.8** |
| | comp=E,0.5nm,0.5s,baz=345,slow=6.8,SNR=4.8 | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.35** | **128** | P | **P** | **22 28 38.7** | **+2.1** |
| | comp=E,0.4nm,0.5s,baz=350,slow=6.7,SNR=5.5 | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.38** | **284** | P | **P** | **22 28 44.1** | **-0.3** |
| | comp=E,1.4nm,0.7s,baz=21,slow=8.0,SNR=9.9 | | | | | | |
| | comp=E,1.4nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **49.16** | **6** | P | **P** | **22 28 57.6** | **-0.2** |
| | comp=E,3.7nm,1.0s,baz=352,slow=8.3,SNR=3.8 | | | | | | |
| | comp=E,3.7nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.83** | **325** | P | **P** | **22 29 18.2** | **+0.1** |
| | comp=E,0.8nm,0.6s,baz=38,slow=5.9,SNR=2.9 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.19** | **329** | P | **P** | **22 29 49.5** | **-0.5** |
| | comp=E,0.7nm,0.6s,baz=18,slow=6.8,SNR=1.8 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **59.13** | **325** | P | **P** | **22 30 09.9** | **-0.9** |
| MK31 | | | | IAmb | IAmb | 22 30 28.3 | |
| | comp=Z,4.2nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.13** | **325** | P | **P** | **22 30 10.0** | **-0.9** |
| | comp=Z,0.4nm,0.6s,baz=48,slow=8.4,SNR=4.6 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **59.18** | **325** | P | **P** | **22 30 10.6** | **-0.6** |
| MAKZ | | | | IAmb | IAmb | 22 30 15.0 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| **AKASG** | **Malin Array Be** | **60.02** | **5** | P | **P** | **22 30 16.0** | **-0.8** |
| | comp=Z,0.6nm,0.5s,baz=360,slow=7.0,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **60.25** | **342** | P | **P** | **22 30 17.7** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **81.78** | **301** | P | **P** | **22 32 31.8** | **+2.3** |
| | comp=Z,0.5nm,0.3s,baz=353,slow=7.2,SNR=4.3 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **VNDA** | **Vanda** | **150.28** | **201** | PKPbc | **PKiKP** | **22 40 03.0** | **+2.4** |
| | comp=Z,0.3nm,0.7s,baz=332,slow=5.5,SNR=3.7 | | | | | | |
| **QSPA** | **South Pole Qui** | **159.35** | **180** | PKPab | **PKPab** | **22 40 45.9** | **+0.7** |
| | comp=Z,1.9nm,1.2s,baz=112,slow=2.4,SNR=3.2 | | | | | | |

*NEIC* ***12*** *22:30:31.1±0.8, 69°.59N±0°.04×144°.91W±0°.07, h10km±2km, Error ellipse: s-maj=6.5km s-min=4.1km az=341.0*

**AEIC 12 22:30:30.7±0.8, 69°.55N±0°.02×144°.90W±0°.07, h4km±6km, ML3.0, ML3.2/76(NEIC), Error ellipse: s-maj=4.1km s-min=2.8km az=128.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.36** | **359** | | Pg | 22 30 37.6 | -0.1 |
| **C26K** | **Camden Bay** | **0.36** | **359** | Sg | Sg | 22 30 42.9 | +0.5 |
| C26K | | | | IAML | | 22 30 43.6 | |
| | comp=E,1μm,0.7s | | | | | | |
| C26K | | | | IAML | | 22 30 44.5 | |
| | comp=N,1μm,0.4s | | | | | | |
| **C27K** | **Jago River** | **0.42** | **80** | | Pg | 22 30 38.6 | -0.2 |
| **C27K** | **Jago River** | **0.42** | **80** | Sg | Sg | 22 30 44.2 | 0.0 |
| C27K | | | | IAML | | 22 30 46.7 | |
| | comp=E,1μm,0.3s | | | | | | |
| C27K | | | | IAML | | 22 30 46.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.57** | **247** | | Pg | 22 30 40.8 | -0.8 |
| D25K | | | | | Sg | 22 30 49.7 | +0.7 |
| **C24K** | **Franklin Bluff** | **1.34** | **279** | | Pn | 22 30 55.3 | -0.8 |
| C24K | | | | | Sb | 22 31 13.8 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.34** | **279** | IAML | | 22 31 15.4 | |
| | comp=E,329nm,0.6s | | | | | | |
| C24K | | | | IAML | | 22 31 15.9 | |
| | comp=N,354nm,0.8s | | | | | | |
| **D27M** | **Malcolm River** | **1.43** | **101** | | Sn | 22 31 17.2 | +0.7 |
| **D27M** | **Malcolm River** | **1.43** | **101** | Pn | Pn | 22 30 57.0 | -0.3 |
| D27M | | | | IAML | | 22 31 19.7 | |
| | comp=N,238nm,0.4s | | | | | | |
| **D24K** | **Happy Valley** | **1.45** | **256** | | Pn | 22 30 57.5 | -0.1 |
| **D24K** | **Happy Valley** | **1.45** | **256** | IAML | | 22 31 20.1 | |
| | comp=N,414nm,0.5s | | | | | | |
| D24K | | | | IAML | | 22 31 23.0 | |
| | comp=E,370nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.82** | **137** | | Pn | 22 31 02.7 | -0.1 |
| **E27K** | **Coleen River** | **1.82** | **137** | IAML | | 22 31 31.2 | |
| | comp=E,132nm,0.3s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **171** | | Sn | 22 31 28.4 | +0.5 |
| **TOLK** | **Toolik Lake Re** | **1.91** | **244** | | Pn | 22 31 03.7 | -0.3 |
| **E24K** | **Your Creek** | **1.98** | **223** | | Pn | 22 31 04.8 | -0.2 |
| **F25K** | **Christian Rive** | **1.99** | **188** | | Pn | 22 31 04.9 | -0.2 |
| **F25K** | **Christian Rive** | **1.99** | **188** | IAML | | 22 31 36.1 | |
| | comp=N,165nm,0.4s | | | | | | |
| F25K | | | | IAML | | 22 31 37.2 | |
| | comp=E,143nm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **2.02** | **281** | | Pn | 22 31 05.0 | -0.4 |
| **C23K** | **Itkillik River** | **2.02** | **281** | IAML | | 22 31 46.6 | |
| | comp=N,251nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.14** | **177** | | Pn | 22 31 06.8 | -0.4 |
| **D23K** | **Nanushuk River** | **2.14** | **257** | | Pn | 22 31 06.8 | -0.3 |
| **D23K** | **Nanushuk River** | **2.14** | **257** | IAML | | 22 31 52.8 | |
| | comp=E,106nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.15** | **114** | | Pn | 22 31 07.0 | -0.2 |
| **E28M** | **Babbage River** | **2.15** | **114** | IAML | | 22 32 22.1 | |
| | comp=E,104nm,0.5s | | | | | | |
| **D28M** | **Stokes Point** | **2.19** | **93** | | Pn | 22 31 07.6 | -0.1 |
| **D28M** | **Stokes Point** | **2.19** | **93** | IAML | | 22 31 48.8 | |
| | comp=E,153nm,0.8s | | | | | | |
| D28M | | | | IAML | | 22 31 52.8 | |
| | comp=N,110nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.28** | **231** | | Pn | 22 31 08.8 | -0.3 |
| **F24K** | **Squaw Lake** | **2.32** | **210** | Pn | Pn | 22 31 09.7 | +0.1 |
| **F28M** | **Old Crow** | **2.68** | **134** | Pn | Pn | 22 31 14.3 | -0.3 |
| F28M | | | | IAML | | 22 32 59.3 | |
| | comp=E,71nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.78** | **112** | Pn | Pn | 22 31 15.5 | -0.4 |
| E29M | | | | | Lg | 22 32 00.6 | |
| **D22K** | **Ayikyak River** | **2.86** | **260** | Pn | Pn | 22 31 16.9 | -0.1 |
| D22K | | | | IAML | | 22 32 11.7 | |
| | comp=N,63nm,0.9s | | | | | | |
| D22K | | | | IAML | | 22 32 15.8 | |
| | comp=E,55nm,1.0s | | | | | | |
| **G27K** | **Doyon Strip** | **3.01** | **155** | Pn | Pn | 22 31 18.9 | -0.2 |
| G27K | | | | | Lg | 22 32 10.8 | |
| G27K | | | | IAML | | 22 33 13.8 | |
| | comp=E,46nm,0.8s | | | | | | |
| G27K | | | | IAML | | 22 33 16.0 | |
| | comp=N,50nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.02** | **200** | | Pn | 22 31 19.3 | 0.0 |
| **G24K** | **Hadweenzic Riv** | **3.02** | **200** | IAML | | 22 32 09.1 | |
| | comp=N,77nm,0.8s | | | | | | |
| G24K | | | | IAML | | 22 32 13.5 | |
| | comp=E,65nm,0.9s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.04** | **289** | Pn | Pn | 22 31 19.8 | +0.4 |
| B22K | | | | IAML | | 22 32 14.8 | |
| | comp=E,99nm,0.7s | | | | | | |
| **COLD** | **Coldfoot** | **3.05** | **223** | | Pn | 22 31 19.5 | -0.1 |
| **B21K** | **Ikpikpuk River** | **3.41** | **276** | | Pn | 22 31 24.8 | +0.3 |
| **B21K** | **Ikpikpuk River** | **3.41** | **276** | IAML | | 22 33 22.9 | |
| | comp=E,61nm,0.9s | | | | | | |
| B21K | | | | IAML | | 22 33 25.9 | |
| | comp=N,55nm,1.2s | | | | | | |
| **E21K** | **Killik River** | **3.45** | **255** | | Pn | 22 31 25.1 | -0.1 |
| **E21K** | **Killik River** | **3.45** | **255** | IAML | | 22 33 39.1 | |
| | comp=N,72nm,0.8s | | | | | | |
| E21K | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 12.72 | 158 | P | | Pn | 22 33 44.5 | -0.6 |
| DZM | Mont Dzumac | 12.72 | 158 | | | Pn | 22 33 43.7 | -1.5 |
| YATNC | Mamie plateau, | 12.88 | 156 | P | | Pn | 22 33 45.9 | -1.4 |
| MARNC | Mare, Loyalty | 12.88 | 150 | P | | Pn | 22 33 45.8 | -1.5 |
| ONTNC | Ouen Toro | 12.94 | 158 | P | | Pn | 22 33 48.7 | +0.7 |
| ONTNC | Ouen Toro | 12.94 | 158 | Pn | | Pn | 22 33 49.2 | +1.2 |
| PINNC | Pines Island, | 13.60 | 155 | Pn | | Pn | 22 33 56.5 | -0.6 |
| PATS | Pohnpei | 17.28 | 350 | P | | P | 22 34 45.1 | +0.3 |
| EIDS | Eidsvold | 17.82 | 211 | P | | P | 22 34 52.1 | +1.3 |
| WB0 | Warramunga Arr | 27.55 | 247 | P | | P | 22 36 28.1 | -0.2 |
| WB0 | | | | IAmb | | IAmb | 22 36 32.1 | |
| | comp=Z,41nm,2.0s | | | | | | | |
| WB2 | Warramunga Arr | 27.64 | 247 | P | | P | 22 36 26.9 | -2.2 |
| WRA | Warramunga Arr | 27.65 | 247 | P | | P | 22 36 28.8 | -0.3 |
| | comp=Z,2.1nm,0.7s,baz=77,slow=9.3,SNR=6.6 | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| ASAR | Alice Springs | 29.26 | 239 | P | | P | 22 36 41.8 | -1.7 |
| | comp=Z,1.0nm,0.9s,baz=61,slow=11,SNR=6.1 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| BKZ | Black Stump Fm | 31.80 | 157 | P | | P | 22 37 06.7 | +1.0 |
| BKZ | | | | IAmb | | IAmb | 22 37 07.4 | |
| | comp=Z,21nm,1.5s | | | | | | | |
| KNRA | Kununurra | 32.08 | 257 | P | | P | 22 37 06.9 | -1.4 |
| KNRA | | | | IAmb | | IAmb | 22 37 09.4 | |
| | comp=Z,20nm,1.0s | | | | | | | |
| BBOO | Buckleboo | 32.25 | 222 | P | | P | 22 37 10.2 | +0.6 |
| BBOO | | | | IAmb | | IAmb | 22 37 12.1 | |
| | comp=Z,54nm,1.9s | | | | | | | |
| FITZ | Fitzroy Crossi | 35.33 | 253 | P | | P | 22 37 36.1 | -0.5 |
| XMAS | Kiritimati | 42.91 | 76 | P | | P | 22 38 39.7 | -0.2 |
| ERM | Erimo | 54.65 | 344 | P | | P | 22 40 07.3 | -2.1 |
| INCN | Inchon | 57.55 | 328 | P | | P | 22 40 28.7 | -1.5 |
| USRK | Ussuriysk Ar. | 60.39 | 336 | P | | P | 22 40 50.7 | +0.9 |
| | comp=Z,1.9nm,0.8s,baz=132,slow=8.4,SNR=7.3 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| CASY | Casey | 65.50 | 200 | P | | P | 22 41 23.8 | +0.3 |
| VNDA | Vanda | 67.20 | 180 | P | | P | 22 41 34.5 | +0.4 |
| CM31 | Chiang Mai Arr | 67.78 | 295 | P | | P | 22 41 37.1 | -1.7 |
| CM31 | | | | IAmb | | IAmb | 22 41 39.0 | |
| | comp=Z,34nm,1.9s | | | | | | | |
| ULN | Ulaanbaatar | 75.15 | 326 | P | | P | 22 42 22.3 | -0.5 |
| SONM | Songino Array | 75.50 | 325 | P | | P | 22 42 23.8 | -1.0 |
| SONM | Songino Array | 75.50 | 325 | P | | P | 22 42 25.4 | +0.7 |
| | comp=Z,0.8nm,0.5s,baz=122,slow=5.6,SNR=3.8 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| O14K | Tigyukauivet M | 75.60 | 19 | P | | P | 22 42 25.5 | +0.6 |
| L18K | Granite Mounta | 79.32 | 19 | P | | P | 22 42 45.6 | 0.0 |
| L18K | | | | IAmb | | IAmb | 22 42 51.6 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| J17K | VABM Dome | 79.49 | 17 | P | | P | 22 42 46.8 | +0.3 |
| J17K | | | | IAmb | | IAmb | 22 42 48.5 | |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| QSPA | South Pole Qui | 79.69 | 180 | P | | P | 22 42 47.9 | 0.0 |
| QSPA | | | | IAmb | | IAmb | 22 42 53.3 | |
| | comp=Z,9.1nm,1.6s | | | | | | | |
| QSPA | South Pole Qui | 79.69 | 180 | P | | P | 22 42 47.6 | -0.3 |
| | comp=Z,0.5nm,0.5s,baz=245,slow=1.7,SNR=9.4 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| M19K | Big River Lodg | 79.83 | 20 | P | | P | 22 42 50.7 | +2.3 |
| SPU | Mount Spurr | 80.12 | 21 | P | | P | 22 42 49.7 | -0.3 |
| SPU | | | | IAmb | | IAmb | 22 42 54.8 | |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| G18K | Tagagawik | 81.54 | 16 | P | | P | 22 42 57.6 | +0.2 |
| G18K | | | | IAmb | | IAmb | 22 43 02.0 | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| SML | Sawmill | 81.87 | 22 | P | | P | 22 42 59.7 | +0.3 |
| SML | | | | IAmb | | IAmb | 22 43 01.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| WAX | Waxell Ridge | 83.16 | 24 | P | | P | 22 43 06.5 | +0.4 |
| WAX | | | | IAmb | | IAmb | 22 43 09.1 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| MLY | Manley | 83.19 | 19 | P | | P | 22 43 06.7 | +0.5 |
| MLY | | | | IAmb | | IAmb | 22 43 15.1 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| LOGN | Logan Glacier | 84.12 | 25 | P | | P | 22 43 11.7 | +0.5 |
| LOGN | | | | IAmb | | IAmb | 22 43 17.5 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| NVAR | Mina Array Bea | 88.96 | 51 | P | | P | 22 43 37.4 | +2.1 |
| | comp=Z,0.3nm,0.3s,baz=246,slow=6.5,SNR=1.9 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |

*AEIC* ***12*** *22:31:39.9±1.8, 69°.46N±0°.05×144°.17W±0°.06, h4km±3km, ML3.4, ML3.4/36(NEIC), Error ellipse: s-maj=7.5km s-min=2.9km az=171.0*
*NEIC* ***12*** *22:31:40.8±1.9, 69°.55N±0°.06×144°.2W±0°.1, h10km±7km, Error ellipse: s-maj=9.2km s-min=5.4km az=193.0*
*IDC* ***12*** *22:31:41.1±1.2, 69°.78N×144°.07W, h0km, mb3.8/5, mbtmp3.8/7, ML3.6/2, Error ellipse: s-maj=30.3km s-min=19.3km az=44.0*

**ISC 12 22:31:41.2±0.6, 69°.56N±0°.05×144°.18W±0°.03, h10km, n39, σ1s 47/46, mb3.8/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| C27K | Jago River | 0.18 | 67 | Pg | Pg | 22 | 31 | 44.3 | -0.7 |
| C27K | | | | IAML | | 22 | 31 | 47.8 | |
| | comp=N,6μm,0.4s | | | | | | | | |
| C27K | | | | | Sg | 22 | 31 | 47.0 | -0.6 |
| C27K | | | | IAML | | 22 | 31 | 48.6 | |
| | comp=E,5μm,0.8s | | | | | | | | |
| C26K | Camden Bay | 0.44 | 325 | | Pg | 22 | 31 | 49.6 | -0.1 |
| C26K | | | | | Sg | 22 | 31 | 56.3 | +0.7 |
| C26K | | | | IAML | | 22 | 31 | 58.3 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| D25K | Kavik River | 0.81 | 254 | | Pg | 22 | 31 | 54.5 | -2.3 |
| D27M | Malcolm River | 1.18 | 104 | | Pb | 22 | 32 | 02.2 | -1.4 |
| D27M | | | | | Sn | 22 | 32 | 19.6 | -0.3 |
| D27M | | | | IAML | | 22 | 32 | 27.7 | |
| | comp=N,580nm,0.6s | | | | | | | | |
| C24K | Franklin Bluff | 1.59 | 278 | | Pb | 22 | 32 | 09.5 | -1.1 |
| C24K | | | | | Sg | 22 | 32 | 31.3 | -0.9 |
| C24K | | | | IAML | | 22 | 32 | 32.3 | |
| | comp=N,467nm,0.9s | | | | | | | | |
| E27K | Coleen River | 1.67 | 145 | | Pn | 22 | 32 | 09.5 | -0.9 |
| E27K | | | | IAML | | 22 | 32 | 34.7 | |
| | comp=E,490nm,0.6s | | | | | | | | |
| E27K | | | | IAML | | 22 | 32 | 35.2 | |
| | comp=N,548nm,0.7s | | | | | | | | |
| D24K | Happy Valley | 1.70 | 258 | | Pn | 22 | 32 | 10.3 | -0.4 |
| D24K | | | | | Sg | 22 | 32 | 34.5 | -1.0 |
| E28M | Babbage River | 1.92 | 118 | | Pn | 22 | 32 | 12.0 | -1.9 |
| E28M | | | | | Sb | 22 | 32 | 39.9 | -0.4 |
| E28M | | | | IAML | | 22 | 32 | 45.4 | |
| | comp=N,351nm,0.8s | | | | | | | | |
| E28M | | | | IAML | | 22 | 32 | 53.1 | |
| | comp=E,235nm,0.9s | | | | | | | | |
| D28M | Stokes Point | 1.94 | 94 | | Pn | 22 | 32 | 14.3 | +0.3 |
| TOLK | Toolik Lake Re | 2.14 | 247 | | Pn | 22 | 32 | 15.7 | -1.2 |
| TOLK | | | | IAML | | 22 | 32 | 54.3 | |
| | comp=E,197nm,0.8s | | | | | | | | |
| TOLK | | | | IAML | | 22 | 33 | 00.1 | |
| | comp=N,192nm,0.8s | | | | | | | | |
| E24K | Your Creek | 2.16 | 228 | | Pn | 22 | 32 | 16.1 | -1.1 |
| E24K | | | | IAML | | 22 | 32 | 51.4 | |
| | comp=N,178nm,0.8s | | | | | | | | |
| D23K | Nanushuk River | 2.39 | 259 | | Pn | 22 | 32 | 20.1 | -0.2 |
| D23K | | | | IAML | | 22 | 33 | 11.0 | |
| | comp=E,269nm,0.9s | | | | | | | | |
| D23K | | | | IAML | | 22 | 33 | 16.2 | |
| | comp=N,156nm,1.0s | | | | | | | | |
| F24K | Squaw Lake | 2.46 | 215 | | Pn | 22 | 32 | 22.1 | +0.7 |
| E23K | Chandalar | 2.48 | 235 | | Pn | 22 | 32 | 20.3 | -1.3 |
| E23K | | | | IAML | | 22 | 33 | 03.4 | |
| | comp=N,145nm,0.8s | | | | | | | | |
| G26K | Porcupine Rive | 2.62 | 177 | | Pn | 22 | 32 | 21.7 | -1.8 |
| B22K | Teshekpuk Lake | 3.28 | 288 | | Pn | 22 | 32 | 32.7 | +0.3 |
| B21K | Ikpikpuk River | 3.66 | 276 | | Pn | 22 | 32 | 37.9 | +0.3 |
| I28M | Miner Creek | 4.44 | 156 | | Pn | 22 | 32 | 49.1 | +0.6 |
| I28M | | | | IAML | | 22 | 33 | 42.8 | |
| | comp=N,52nm,0.7s | | | | | | | | |
| I28M | | | | IAML | | 22 | 33 | 46.8 | |
| | comp=E,50nm,0.7s | | | | | | | | |
| ILAR | Eielson Array | 4.92 | 194 | Pn | Pn | 22 | 32 | 57.6 | +2.5 |
| | comp=E,1.1nm,0.3s,baz=8.7,slow=14,SNR=3.3 | | | | | | | | |
| ILAR | | | | Sn | Sn | 22 | 33 | 55.1 | +3.1 |
| | comp=E,1.4nm,0.3s,baz=7.9,slow=18,SNR=4.4 | | | | | | | | |
| ILAR | | | | Lg | Lg | 22 | 34 | 15.0 | |
| | comp=E,1.9nm,0.3s,baz=8.6,slow=33,SNR=6.3 | | | | | | | | |
| | comp=E,2.7nm,0.5s | | | | | | | | |
| D19K | Kuna River | 5.12 | 265 | | Pn | 22 | 32 | 58.1 | +0.3 |
| D19K | | | | IAML | | 22 | 34 | 35.2 | |
| | comp=E,22nm,0.8s | | | | | | | | |
| F19K | Shaleruckik Mo | 5.75 | 248 | Pn | Pn | 22 | 33 | 06.8 | +0.4 |
| DAWY | Dawson | 5.83 | 159 | | Pn | 22 | 33 | 06.4 | -1.2 |
| J30M | Hart River | 5.87 | 145 | | Pn | 22 | 33 | 07.6 | -0.6 |
| C18K | Utukok River | 6.15 | 269 | Pn | Pn | 22 | 33 | 11.8 | -0.2 |
| K29M | Barlow Dome | 6.31 | 152 | | Pn | 22 | 33 | 14.8 | +0.5 |
| E18K | Tukpahlearik C | 6.40 | 258 | | Pn | 22 | 33 | 15.1 | -0.3 |
| F18K | Selawik | 6.50 | 250 | | Pn | 22 | 33 | 16.2 | -0.5 |
| BCAR | Beaver Creek A | 6.59 | 170 | Pn | Pn | 22 | 33 | 19.6 | +1.6 |
| L27K | Beaver Creek, | 6.59 | 171 | Pn | Pn | 22 | 33 | 16.0 | -2.0 |
| A36M | Sachs Harbour | 6.70 | 60 | | Pn | 22 | 33 | 18.8 | -0.5 |
| C17K | DeLong Mountai | 6.90 | 270 | | Pn | 22 | 33 | 21.0 | -1.2 |
| E17K | Hotham Inlet | 6.98 | 258 | | Pn | 22 | 33 | 22.1 | -1.2 |
| C36M | Paulatuk | 7.07 | 82 | | Pn | 22 | 33 | 23.2 | -1.3 |
| YKA | Yellowknife Ar | 13.81 | 106 | Pn | Pn | 22 | 34 | 52.7 | -4.0 |
| | comp=E,0.4nm,0.3s,baz=314,slow=11,SNR=4.8 | | | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | | | |
| SEY | Seymchan | 25.26 | 286 | P | P | 22 | 37 | 08.1 | +1.2 |
| | comp=E,1.7nm,0.2s,baz=43,slow=6.0,SNR=7.3 | | | | | | | | |
| | comp=E,1.7nm,0.2s | | | | | | | | |
| PDAR | Pinedale Array | 32.19 | 128 | P | P | 22 | 38 | 11.1 | +2.0 |
| | comp=E,0.3nm,0.6s,baz=7.5,slow=7.6,SNR=2.7 | | | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | | | |
| NVAR | Mina Array Bea | 34.13 | 142 | P | P | 22 | 38 | 29.6 | +3.6 |
| | comp=E,0.3nm,0.3s,baz=354,slow=7.7,SNR=3.6 | | | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | | | |
| TXAR | Lajitas Array | 46.41 | 128 | P | P | 22 | 40 | 09.6 | +2.0 |
| | comp=E,0.3nm,0.5s,baz=329,slow=6.3,SNR=4.4 | | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | | |
| KURBB | Kurchatov Arra | 56.13 | 329 | P | P | 22 | 41 | 20.4 | +0.3 |
| | comp=E,1.0nm,0.2s,baz=6.3,slow=7.2,SNR=4.9 | | | | | | | | |
| | comp=E,1.0nm,0.2s | | | | | | | | |

*AEIC* ***12*** *22:40:59.5±0.8, 69°.49N±0°.05×144°.64W±0°.08, h2km±6km, ML3.3, ML3.4/96(NEIC), Error ellipse: s-maj=7.3km s-min=3.9km az=187.0*
*IDC* ***12*** *22:41:00.3±2.0, 69°.66N×144°.25W, h0km, mb3.6/2, mbtmp3.5/4, ML3.4/2, MS4.0/2, Error ellipse: s-maj=34.1km s-min=27.3km az=24.0*
*NEIC* ***12*** *22:41:00.3±0.7, 69°.52N±0°.04×144°.62W±0°.04, h10km±2km, Error ellipse: s-maj=7.7km s-min=3.0km az=15.0*

**ISC 12 22:41:00.3±0.8, 69°.52N±0°.04×144°.67W±0°.03, h10km, n110, σ0s 67/90, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| C27K | Jago River | 0.35 | 71 | | Pn | 22 | 41 | 10.8 | -0.6 |
| C27K | Jago River | 0.35 | 71 | IAML | | 22 | 41 | 12.6 | |
| | comp=E,3μm,0.4s | | | | | | | | |
| C27K | | | | IAML | | 22 | 41 | 12.7 | |
| | comp=N,3μm,0.5s | | | | | | | | |
| C26K | Camden Bay | 0.41 | 348 | | Pg | 22 | 41 | 07.5 | -0.8 |
| C26K | | | | | Sg | 22 | 41 | 14.0 | +0.1 |
| D25K | Kavik River | 0.63 | 253 | | Pg | 22 | 41 | 11.5 | -1.1 |
| D25K | | | | | Sb | 22 | 41 | 20.8 | -1.6 |
| D27M | Malcolm River | 1.34 | 100 | Pn | Pn | 22 | 41 | 24.2 | -0.8 |
| D27M | | | | IAML | | 22 | 41 | 47.6 | |
| | comp=E,748nm,0.4s | | | | | | | | |
| D27M | Malcolm River | 1.34 | 100 | | Sg | 22 | 41 | 42.9 | -0.4 |
| C24K | Franklin Bluff | 1.43 | 280 | | Sg | 22 | 41 | 46.2 | +0.1 |
| D24K | Happy Valley | 1.52 | 258 | | Pb | 22 | 41 | 27.5 | -1.0 |
| D24K | Happy Valley | 1.52 | 258 | IAML | | 22 | 41 | 55.9 | |
| | comp=E,450nm,0.8s | | | | | | | | |
| D24K | | | | IAML | | 22 | 41 | 56.1 | |
| | comp=N,503nm,0.8s | | | | | | | | |
| E27K | Coleen River | 1.74 | 139 | | Pn | 22 | 41 | 30.2 | -0.4 |
| E27K | | | | | Sb | 22 | 41 | 53.4 | -0.8 |
| F26K | Sheenjek River | 1.84 | 174 | | Pn | 22 | 41 | 31.4 | -0.6 |
| F26K | | | | | Sb | 22 | 41 | 56.0 | -1.0 |
| F26K | Sheenjek River | 1.84 | 174 | IAML | | 22 | 42 | 00.2 | |
| | comp=E,408nm,0.5s | | | | | | | | |
| F25K | Christian Rive | 1.96 | 191 | | Pn | 22 | 41 | 33.1 | -0.5 |
| F25K | Christian Rive | 1.96 | 191 | IAML | | 22 | 42 | 03.6 | |
| | comp=E,299nm,0.6s | | | | | | | | |
| F25K | | | | IAML | | 22 | 42 | 05.4 | |
| | comp=N,268nm,0.5s | | | | | | | | |
| TOLK | Toolik Lake Re | 1.97 | 246 | | Pn | 22 | 41 | 33.5 | -0.2 |
| TOLK | | | | | Sb | 22 | 41 | 59.7 | -1.0 |
| E24K | Your Creek | 2.01 | 226 | | Pn | 22 | 41 | 34.0 | -0.2 |
| E24K | Your Creek | 2.01 | 226 | IAML | | 22 | 42 | 06.6 | |
| | comp=E,269nm,0.8s | | | | | | | | |
| E28M | Babbage River | 2.06 | 114 | | Pn | 22 | 41 | 34.8 | -0.1 |
| E28M | Babbage River | 2.06 | 114 | IAML | | 22 | 42 | 08.0 | |
| | comp=N,245nm,1.0s | | | | | | | | |
| E28M | | | | IAML | | 22 | 42 | 10.5 | |
| | comp=E,235nm,0.5s | | | | | | | | |
| BMAR | Burnt Mountain | 2.10 | 179 | Pn | Pn | 22 | 41 | 35.1 | -0.4 |
| C23K | Itkillik River | 2.10 | 282 | | Pn | 22 | 41 | 35.7 | +0.2 |
| D28M | Stokes Point | 2.10 | 92 | | Pn | 22 | 41 | 35.4 | -0.1 |
| D23K | Nanushuk River | 2.21 | 258 | | Pn | 22 | 41 | 37.0 | 0.0 |
| E23K | Chandalar | 2.32 | 233 | | Pn | 22 | 41 | 38.2 | -0.4 |
| F24K | Squaw Lake | 2.33 | 212 | | Pn | 22 | 41 | 38.6 | -0.1 |
| F24K | Squaw Lake | 2.33 | 212 | IAML | | 22 | 42 | 18.0 | |
| | comp=N,223nm,0.6s | | | | | | | | |
| F24K | | | | IAML | | 22 | 42 | 20.6 | |
| | comp=E,202nm,0.6s | | | | | | | | |
| F28M | Old Crow | 2.60 | 135 | | Pn | 22 | 41 | 42.0 | -0.4 |
| F28M | Old Crow | 2.60 | 135 | IAML | | 22 | 42 | 25.3 | |
| | comp=E,162nm,0.5s | | | | | | | | |
| F28M | | | | IAML | | 22 | 42 | 27.0 | |
| | comp=N,182nm,0.6s | | | | | | | | |
| G26K | Porcupine Rive | 2.60 | 172 | | Pn | 22 | 41 | 42.4 | +0.1 |
| E29M | Blow River | 2.69 | 112 | | Pn | 22 | 41 | 43.6 | 0.0 |
| G25K | Bearman Lake | 2.82 | 192 | | Pn | 22 | 41 | 45.4 | +0.1 |
| D22K | Ayikyak River | 2.93 | 261 | | Pn | 22 | 41 | 47.1 | +0.2 |
| D22K | Ayikyak River | 2.93 | 261 | IAML | | 22 | 42 | 43.6 | |
| | comp=E,140nm,1.0s | | | | | | | | |
| D22K | | | | IAML | | 22 | 42 | 54.6 | |
| | comp=N,111nm,0.7s | | | | | | | | |
| G27K | Doyon Strip | 2.94 | 156 | | Pn | 22 | 41 | 47.1 | 0.0 |
| G24K | Hadweenzic Riv | 3.02 | 202 | | Pn | 22 | 41 | 48.2 | +0.1 |
| B22K | Teshekpuk Lake | 3.13 | 289 | | Pn | 22 | 41 | 50.0 | +0.4 |
| G23K | Bananza Creek | 3.46 | 218 | Pn | Pn | 22 | 41 | 53.8 | -0.4 |
| G23K | | | | IAML | | 22 | 42 | 53.0 | |
| | comp=N,73nm,0.8s | | | | | | | | |
| G23K | | | | IAML | | 22 | 42 | 57.4 | |
| | comp=E,94nm,0.9s | | | | | | | | |
| B21K | Ikpikpuk River | 3.49 | 276 | | Pn | 22 | 41 | 54.9 | +0.4 |
| B21K | Ikpikpuk River | 3.49 | 276 | IAML | | 22 | 43 | 05.3 | |
| | comp=N,86nm,0.9s | | | | | | | | |
| E21K | Killik River | 3.52 | 257 | | Pn | 22 | 41 | 55.4 | +0.4 |
| E21K | Killik River | 3.52 | 257 | IAML | | 22 | 43 | 03.4 | |
| | comp=N,73nm,0.7s | | | | | | | | |
| E21K | | | | IAML | | 22 | 43 | 03.7 | |
| | comp=E,66nm,0.9s | | | | | | | | |
| G29M | Pine Creek | 3.60 | 133 | | Pn | 22 | 41 | 56.2 | +0.1 |
| A22K | Sinclair Lake | 3.80 | 298 | | Pn | 22 | 41 | 58.8 | 0.0 |
| H24K | Noodor Dome | 3.89 | 200 | | Pn | 22 | 42 | 00.3 | +0.1 |
| H24K | Noodor Dome | 3.89 | 200 | IAML | | 22 | 43 | 06.2 | |
| | comp=E,71nm,1.0s | | | | | | | | |
| F21K | Alatna River | 3.99 | 239 | Pn | Pn | 22 | 42 | 02.2 | +0.7 |
| F21K | | | | IAML | | 22 | 43 | 08.2 | |
| | comp=N,46nm,0.7s | | | | | | | | |
| F21K | | | | IAML | | 22 | 43 | 16.2 | |
| | comp=E,48nm,0.5s | | | | | | | | |
| PRP | Porcupine Dome | 4.03 | 185 | | Pn | 22 | 42 | 02.2 | 0.0 |
| PRP | Porcupine Dome | 4.03 | 185 | IAML | | 22 | 42 | 54.7 | |
| | comp=E,41nm,0.4s | | | | | | | | |
| PRP | | | | IAML | | 22 | 44 | 22.9 | |
| | comp=N,40nm,0.7s | | | | | | | | |
| H29M | Whitestone | 4.08 | 141 | | Pn | 22 | 42 | 02.7 | 0.0 |
| H29M | Whitestone | 4.08 | 141 | IAML | | 22 | 44 | 23.1 | |
| | comp=N,65nm,0.9s | | | | | | | | |
| H23K | Yukon River | 4.15 | 209 | | Pn | 22 | 42 | 03.7 | +0.1 |
| H23K | Yukon River | 4.15 | 209 | IAML | | 22 | 43 | 12.3 | |
| | comp=E,58nm,0.9s | | | | | | | | |
| I26K | Coal Creek Min | 4.27 | 171 | | Pn | 22 | 42 | 05.3 | +0.1 |
| I26K | Coal Creek Min | 4.27 | 171 | IAML | | 22 | 43 | 21.4 | |
| | comp=E,56nm,0.6s | | | | | | | | |
| D20K | Etivluk River | 4.35 | 265 | | Pn | 22 | 42 | 06.8 | +0.4 |
| EPYK | Eagle Plains | 4.35 | 133 | | Pn | 22 | 42 | 06.5 | 0.0 |
| E20K | Nigu River | 4.35 | 259 | | Pn | 22 | 42 | 06.7 | +0.2 |
| B20K | Meade River | 4.37 | 282 | | Pn | 22 | 42 | 06.6 | +0.1 |
| A21K | Barrow | 4.41 | 300 | | Pn | 22 | 42 | 07.6 | +0.5 |
| G21K | Allakaket | 4.48 | 232 | Pn | Pn | 22 | 42 | 09.2 | +1.0 |
| G21K | | | | IAML | | 22 | 43 | 36.0 | |
| | comp=N,48nm,1.3s | | | | | | | | |
| POKR | Poker Plat Res | 4.55 | 195 | | Pn | 22 | 42 | 09.0 | -0.1 |
| POKR | Poker Plat Res | 4.55 | 195 | IAML | | 22 | 43 | 29.3 | |
| | comp=E,40nm,0.8s | | | | | | | | |
| POKR | | | | IAML | | 22 | 43 | 31.6 | |
| | comp=N,29nm,1.1s | | | | | | | | |
| I23K | Minto, Yukon-K | 4.75 | 205 | | Pn | 22 | 42 | 12.0 | +0.2 |
| I23K | Minto, Yukon-K | 4.75 | 205 | IAML | | 22 | 43 | 34.9 | |
| | comp=E,39nm,0.8s | | | | | | | | |
| MDM | Murphy Dome | 4.78 | 198 | | Pn | 22 | 42 | 12.3 | 0.0 |
| MDM | Murphy Dome | 4.78 | 198 | IAML | | 22 | 43 | 34.2 | |
| | comp=E,37nm,0.6s | | | | | | | | |
| MDM | | | | IAML | | 22 | 43 | 34.6 | |
| | comp=N,31nm,1.0s | | | | | | | | |
| F20K | Avaraart Lake | 4.79 | 244 | | Pn | 22 | 42 | 12.8 | +0.4 |
| F20K | Avaraart Lake | 4.79 | 244 | IAML | | 22 | 43 | 43.8 | |
| | comp=N,22nm,1.4s | | | | | | | | |
| F20K | | | | IAML | | 22 | 43 | 53.3 | |
| | comp=E,23nm,2.9s | | | | | | | | |
| ILAR | Eielson Array | 4.84 | 191 | Pn | Pn | 22 | 42 | 15.6 | +2.4 |
| | comp=E,1.4nm,0.3s,baz=5.4,slow=11,SNR=7.8 | | | | | | | | |
| ILAR | | | | Sn | Sn | 22 | 43 | 10.3 | +1.1 |
| | comp=E,2.0nm,0.3s,baz=13,slow=24,SNR=2.6 | | | | | | | | |
| ILAR | | | | Lg | Lg | 22 | 43 | 29.4 | |
| | comp=E,2.1nm,0.3s,baz=6.9,slow=32,SNR=1.4 | | | | | | | | |
| ILAR | | | | LR | LR | 22 | 44 | 13.3 | |
| | comp=E,930nm,18.6s,baz=174,slow=38 | | | | | | | | |
| | comp=E,1.5nm,0.3s | | | | | | | | |
| D19K | Kuna River | 4.94 | 264 | Pn | Pn | 22 | 42 | 15.0 | +0.5 |
| IMAR | Indian Mountai | 4.95 | 229 | Pn | Pn | 22 | 42 | 15.0 | +0.5 |
| IMAR | | | | | LR | 22 | 43 | 35.7 | |
| EGAK | Eagle | 4.95 | 162 | Pn | Pn | 22 | 42 | 15.3 | +0.6 |
| EGAK | | | | IAML | | 22 | 43 | 46.1 | |
| | comp=E,25nm,1.2s | | | | | | | | |
| EGAK | | | | IAML | | 22 | 44 | 44.2 | |
| | comp=E,23nm,0.9s | | | | | | | | |
| CCB | Clear Creek Bu | 5.04 | 196 | | Pn | 22 | 42 | 16.1 | +0.3 |
| J26L | Joseph Creek | 5.06 | 175 | Pn | Pn | 22 | 42 | 15.6 | -0.5 |
| J26L | | | | IAML | | 22 | 43 | 50.7 | |
| | comp=E,21nm,0.8s | | | | | | | | |
| E19K | Redstone River | 5.06 | 252 | | Pn | 22 | 42 | 16.3 | +0.2 |
| E19K | Redstone River | 5.06 | 252 | IAML | | 22 | 44 | 00.2 | |
| | comp=E,24nm,1.0s | | | | | | | | |
| E19K | | | | IAML | | 22 | 44 | 22.8 | |
| | comp=N,28nm,0.6s | | | | | | | | |
| MLY | Manley | 5.08 | 210 | | Pn | 22 | 42 | 16.7 | +0.3 |
| MLY | Manley | 5.08 | 210 | IAML | | 22 | 43 | 42.3 | |
| | comp=E,22nm,1.4s | | | | | | | | |
| MLY | | | | IAML | | 22 | 43 | 58.9 | |
| | comp=N,18nm,3.8s | | | | | | | | |
| WRH | Wood River Hil | 5.24 | 196 | | Pn | 22 | 42 | 18.8 | +0.2 |
| WRH | Wood River Hil | 5.24 | 196 | IAML | | 22 | 43 | 52.0 | |
| | comp=N,24nm,3.1s | | | | | | | | |
| WRH | | | | IAML | | 22 | 43 | 54.5 | |
| | comp=E,26nm,1.6s | | | | | | | | |
| C19K | Lookout Ridge | 5.30 | 273 | | Pn | 22 | 42 | 19.8 | +0.3 |
| C19K | Lookout Ridge | 5.30 | 273 | IAML | | 22 | 43 | 56.1 | |
| | comp=N,18nm,3.3s | | | | | | | | |
| C19K | | | | IAML | | 22 | 44 | 37.3 | |
| | comp=E,22nm,2.6s | | | | | | | | |
| I30M | Mount Dempster | 5.37 | 139 | Pn | Pn | 22 | 42 | 21.4 | +1.0 |
| I30M | | | | IAML | | 22 | 43 | 24.0 | |
| | comp=N,23nm,0.5s | | | | | | | | |
| I30M | | | | IAML | | 22 | 43 | 53.3 | |
| | comp=E,28nm,0.5s | | | | | | | | |
| SCRK | Sand Creek | 5.57 | 177 | Pn | Pn | 22 | 42 | 23.7 | +0.4 |
| F19K | Shaleruckik Mo | 5.58 | 247 | | Pn | 22 | 42 | 23.6 | +0.4 |
| H20K | Anotleneega Mo | 5.62 | 229 | | Pn | 22 | 42 | 24.0 | +0.1 |
| A19K | Wainwright | 5.71 | 285 | | Pn | 22 | 42 | 24.9 | 0.0 |
| DAWY | Dawson | 5.86 | 157 | | Pn | 22 | 42 | 26.2 | -0.9 |
| J30M | Hart River | 5.93 | 143 | | Pn | 22 | 42 | 28.1 | -0.1 |
| C18K | Utukok River | 5.98 | 269 | Pn | Pn | 22 | 42 | 29.1 | +0.3 |
| BPAW | Bear Paw Mtn. | 5.98 | 208 | | Pn | 22 | 42 | 28.8 | 0.0 |
| E18K | Tukpahlearik C | 6.23 | 258 | | Pn | 22 | 42 | 32.2 | +0.2 |
| F18K | Selawik | 6.33 | 250 | | Pn | 22 | 42 | 33.6 | +0.2 |
| K29M | Barlow Dome | 6.36 | 150 | Pn | Pn | 22 | 42 | 34.9 | +0.9 |
| L26K | Log Cabin Wild | 6.54 | 175 | | Pn | 22 | 42 | 37.5 | +1.1 |
| BCAR | Beaver Creek A | 6.58 | 168 | | Pn | 22 | 42 | 36.8 | -0.3 |
| L27K | Beaver Creek, | 6.58 | 169 | | Pn | 22 | 42 | 37.2 | +0.2 |
| C17K | DeLong Mountai | 6.73 | 270 | | Pn | 22 | 42 | 38.3 | -0.7 |
| E17K | Hotham Inlet | 6.81 | 257 | | Pn | 22 | 42 | 39.6 | -0.4 |
| A36M | Sachs Harbour | 6.87 | 60 | | Pn | 22 | 42 | 39.9 | -0.9 |
| M26K | Nabesna, AK | 7.18 | 174 | Pn | Pn | 22 | 42 | 44.6 | -0.6 |
| C36M | Paulatuk | 7.25 | 82 | | Pn | 22 | 42 | 45.6 | -0.4 |
| M27K | Edge Creek, AK | 7.28 | 170 | | Pn | 22 | 42 | 48.4 | +1.7 |
| G17K | Kiwalik Mounta | 7.32 | 244 | | Pn | 22 | 42 | 46.7 | -0.4 |
| M29M | Somme Creek | 7.54 | 157 | | Pn | 22 | 42 | 49.5 | -0.6 |
| C16K | Lisburne Hills | 7.55 | 270 | | Pn | 22 | 42 | 49.9 | -0.3 |
| YKA | Yellowknife Ar | 13.96 | 105 | Pn | Pn | 22 | 44 | 12.3 | -5.6 |
| | comp=E,0.2nm,0.3s,baz=314,slow=11,SNR=1.7 | | | | | | | | |
| | comp=E,0.8nm,0.7s | | | | | | | | |
| SEY | Seymchan | 25.10 | 286 | P | P | 22 | 46 | 26.9 | +2.2 |
| | comp=E,1.5nm,0.3s,baz=41,slow=19,SNR=2.2 | | | | | | | | |
| | comp=E,1.5nm,0.3s | | | | | | | | |
| PDAR | Pinedale Array | 32.30 | 128 | P | P | 22 | 47 | 30.8 | +1.6 |
| | comp=E,0.1nm,0.3s,baz=327,slow=6.5,SNR=1.8 | | | | | | | | |
| | comp=E,0.1nm,0.3s | | | | | | | | |
| ARCES | ARCESS Array B | 41.04 | 5 | LR | LR | 23 | 06 | 00.8 | |
| | comp=E,250nm,19.6s,baz=90,slow=37 | | | | | | | | |

*MOS* ***12*** *22:41:07.5±0.9, 48°.25N×155°.03E, h7km, mb4.7/28,

**KOK Koryaka** 5.49 23 *e*P Pn 22 42 33.1 +0.3
**KOK Koryaka** 5.49 23 PN Pn 22 42 33.1 +0.3
**AVH Avacha** 5.49 23 *e*P Pn 22 42 33.1 +0.3
**AVH Avacha** 5.49 23 PN Pn 22 42 33.1 +0.3
**SMAR Somma** 5.51 24 *e*P Pn 22 42 33.2 0.0
**SMAR Somma** 5.51 24 PN Pn 22 42 33.2 0.0
**KRX Arik** 5.56 22 *e*P Pn 22 42 34.1 +0.4
**KRX Arik** 5.56 22 PN Pn 22 42 34.1 +0.4
**GNL Ganaly** 5.71 17 *e*P Pn 22 42 36.2 +0.3
**GNL Ganaly** 5.71 17 PN Pn 22 42 36.1 +0.3
**SPN Mys Shipunski** 5.74 31 *e*P Pn 22 42 34.7 -1.5
**SPN Mys Shipunski** 5.74 31 PN Pn 22 42 34.7 -1.5
**KUR Kuril'sk** 5.84 241 *e*P Pn 22 42 38.6 +1.1
KUR AMB AMB 22 42 43.3
comp=Z,160nm,0.6s
KUR *e*S Sn 22 43 43.5 +0.3
KUR A A 22 43 55.8
comp=Z,140nm,0.7s
KUR A A 22 43 55.8
comp=Z,160nm,0.7s
**KUR Kuril'sk** 5.84 241 *e*PN Pn 22 42 40.4 +2.9
KUR *e*S Sn 22 43 49.1 +5.9
KUR pmax pmax
comp=N,62nm,0.4s
KUR pmax pmax
comp=Z,211nm,0.4s
KUR pmax pmax
comp=E,38nm,0.5s
KUR smax smax
comp=E,111nm,0.7s
KUR smax smax
comp=N,76nm,0.5s
**SHO Shikotan** 7.26 236 *e*P Pn 22 42 56.2 -0.8
SHO AMB AMB 22 42 56.8
comp=N,40nm,0.4s
SHO *e*S Sn 22 44 14.6 -3.4
SHO A A 22 44 21.6
comp=N,40nm,0.5s
SHO A A 22 44 21.6
comp=N,70nm,0.5s
**SHO Shikotan** 7.26 236 *e*PN Pn 22 42 55.5 -1.5
**TUMR Tumrok** 7.67 22 *e*P Pn 22 43 03.0 +0.2
**TUMR Tumrok** 7.67 22 PN Pn 22 43 02.9 +0.2
**YUK Yuzh-Kuril'sk** 7.70 240 *e*P Pn 22 43 03.4 +0.3
YUK AMB AMB 22 43 05.9
comp=N,90nm,0.5s
YUK *e*S Sn 22 44 27.8 -1.1
YUK A A 22 44 36.6
comp=N,100nm,0.5s
YUK A A 22 44 36.6
comp=N,150nm,0.5s
**NMR Nemuro--Hokkai** 8.19 237 *e*P Pn 22 43 08.3 -1.5
NMR *e*S Sn 22 44 37.1 -3.8
**YSS Yuzh-Sakhalins** 8.46 266 *e*P Pn 22 43 16.7 +3.2
YSS AMB AMB 22 43 19.3
comp=N,30nm,0.7s
**YSS Yuzh-Sakhalins** 8.46 266 *e*PN Pn 22 43 17.0 +3.5
YSS pmax pmax
comp=Z,20nm,0.7s
**AKK Akkeshi** 8.91 238 *e*P Pn 22 43 19.2 -0.5
**JKA Kamikawa-asahi** 9.63 249 Pn Pn 22 43 30.6 +1.2
**ASAJ Asahikawa** 9.63 249 Pn Pn 22 43 32.1 +2.7
comp=Z,4.7nm,0.3s,baz=73,slow=13,SNR=26
**ASAJ Asahikawa** 9.63 249 PN Pn 22 43 30.6 +1.1
**ERM Erimo** 10.51 238 Pn Pn 22 43 40.8 -0.8
**ERM Erimo** 10.51 238 PN Pn 22 43 40.8 -0.8
**JTM Tenmabayashi** 12.50 238 Pn Pn 22 44 04.9 -3.8
**SHEM Shemya Is, Ala** 12.87 63 Pn Pn 22 44 11.7 -1.9
comp=Z,2.3nm,0.3s,baz=329,slow=3.5,SNR=5.3
comp=Z,14nm,0.6s
**SEY Seymchan** 14.77 355 Pn Pn 22 44 38.0 -1.4
comp=Z,0.4nm,0.3s,baz=146,slow=12,SNR=4.5
comp=Z,2.3nm,0.2s
**SEY Seymchan** 14.77 355 *e*P Pn 22 44 39.2 -0.1
**SEY Seymchan** 14.77 355 *ce*P Pn 22 44 39.2 -0.1
SEY pmax pmax
comp=Z,7.0nm,1.7s
**KLR Kul'dur** 15.44 282 Pn P 22 44 52.4 +0.4
comp=Z,0.6nm,0.3s,baz=85,slow=9.1,SNR=18
**KLR Kul'dur** 15.44 282 *e*P Pn 22 44 48.6 +0.5
**KLR Kul'dur** 15.44 282 *i*P P 22 44 50.3 -1.7
KLR pmax pmax
comp=Z,14nm,1.5s
**USA0B Ussuriysk Arra** 16.50 264 Pn 22 45 02.3 +0.6
**USA0B Ussuriysk Arra** 16.50 264 *i*P Pn 22 45 01.7 0.0
**USRK Ussuriysk Ar.** 16.50 264 Pn Pn 22 45 01.7 0.0
**USRK Ussuriysk Ar.** 16.50 264 PN Pn 22 45 02.0 +0.3
comp=Z,0.8nm,0.3s,baz=66,slow=12,SNR=18
comp=Z,2.8nm,0.4s
**MJB9 Matsu-Tunnel** 17.09 233 P Pn 22 45 07.3 -1.9
**MAJO Matsushiro** 17.09 233 P Pn 22 45 07.4 -1.8
**MAJO Matsushiro** 17.09 233 *i*P Pn 22 45 07.6 -1.6
MAJO pmax pmax
comp=Z,7.0nm,1.0s
**MJAR Matsushiro Arr** 17.09 233 P Pn 22 45 07.3 -1.9
comp=Z,1.8nm,0.7s,baz=30,slow=14,SNR=11
**PSTR Posyet** 17.93 261 *i*P Pn 22 45 19.3 -0.1
**MDJ Mudanjiang** 17.94 268 P P 22 45 20.1 +0.3
MDJ pmax pmax
comp=Z,13nm,0.8s
**HEH HeiHe** 18.15 287 *e*P Pn 22 45 23.4 +1.2
**BNX BinXian** 19.03 273 ⇓P P 22 45 31.1 -0.7
BNX pmax pmax
comp=Z,4.0nm,0.9s
**YAK Yakutsk** 19.84 323 P Pn 22 45 41.4 -0.9
YAK IAmb IAmb 22 45 45.1
comp=Z,27nm,0.8s
**YAK Yakutsk** 19.84 323 P P 22 45 38.7 -1.7
comp=Z,1.8nm,0.3s,baz=111,slow=4.0,SNR=1.5
comp=Z,20nm,0.6s
**YAK Yakutsk** 19.84 323 *e*P Pn 22 45 43.1 +0.9
**YAK Yakutsk** 19.84 323 *e*P Pn 22 45 43.1 +0.9
YAK pmax pmax
comp=Z,19nm,0.8s
**BILL Bilibino** 20.60 12 ⇓*e*P P 22 45 46.6 -2.1
BILL *e* 22 46 11.1
BILL pmax pmax
comp=Z,4.0nm,0.9s
BILL MLR MLR
comp=Z,462nm,17.0s
**JMN Monobe** 21.54 235 P P 22 45 56.1 -3.0
JMN IAmb IAmb 22 46 07.1
comp=Z,56nm,1.5s
**KSRS Korea Array** 22.57 251 P P 22 46 10.5 +0.6
comp=Z,9.6nm,0.6s,baz=48,slow=10,SNR=25
comp=Z,9.6nm,0.6s
**KS19 Wonju Array Si** 22.57 252 P P 22 46 10.3 +0.3
KS19 IAmb IAmb 22 46 31.2
comp=Z,40nm,1.5s
**KSAR Wonju Array Be** 22.60 251 P P 22 46 10.8 +0.5
**KSAR Wonju Array Be** 22.60 251 P P 22 46 10.8 +0.5
**JNU Nakatsue** 23.67 239 P P 22 46 22.2 +1.0
JNU IAmb IAmb 22 46 23.4
comp=Z,29nm,1.4s
**TIXI Tiksi** 26.41 342 *e*P P 22 46 46.6 +1.0
**TIXI Tiksi** 26.41 342 *ce*P P 22 46 46.6 +1.0
TIXI pmax pmax
comp=Z,5.0nm,1.7s
**N15K Kwethluk River** 28.17 48 P P 22 47 03.1 +1.6
**HHC Hu-ho-hao-te** 31.56 273 *e*P P 22 47 32.4 +0.6
HHC pP pP 22 47 43.0 -0.4
HHC sP sP 22 47 48.7 +0.2
HHC pmax pmax
comp=Z,8.0nm,0.6s
HHC pmax pmax
comp=Z,280nm,4.6s
**ULN Ulaanbaatar** 31.71 288 *ce*P P 22 47 32.8 -0.3
ULN pmax pmax
comp=Z,1.0nm,0.6s
**NJ2 Nanjing** 31.75 253 *e*P P 22 47 34.3 +0.9
NJ2 pmax pmax
comp=Z,8.0nm,0.6s
**M26K Nabesna, AK** 36.38 44 P 22 48 13.2 -0.1
**MCARA McCarthy VSAT** 36.49 46 P P 22 48 15.7 +1.4
**LOGN Logan Glacier** 37.55 46 P P 22 48 23.6 +0.3
**ZALV Zalesovo Beam** 42.83 305 P P 22 49 06.3 -0.7
comp=Z,0.7nm,0.6s,baz=68,slow=3.9,SNR=2.5
ZALV PcP PcP 22 50 57.5 +0.2
comp=Z,0.3nm,0.4s,baz=106,slow=4.7,SNR=1.6
comp=Z,0.7nm,0.6s
**DGZ Jazzator, Alta** 43.06 298 *i*P P 22 49 09.6 +0.5
DGZ pmax pmax
comp=Z,2.0nm,1.0s
**EUNU Eureka** 47.35 12 P P 22 49 43.6 +1.0
EUNU IAmb IAmb 22 49 45.3
comp=Z,10nm,1.0s
**MK31 Makanchi Array** 47.45 297 P P 22 49 43.5 -0.2
**MK31 Makanchi Array** 47.45 297 *ce*P P 22 49 44.0 +0.2
**MKAR Makanchi Array** 47.45 297 P P 22 49 42.5 -1.2
**MKAR Makanchi Array** 47.45 297 P P 22 49 42.9 -0.8
comp=Z,1.3nm,0.6s,baz=69,slow=8.7,SNR=10
MKAR PcP PcP 22 51 14.7 +1.2
comp=Z,0.1nm,0.4s,baz=54,slow=7.3,SNR=0.9
comp=Z,1.3nm,0.6s
**MKAR Makanchi Array** 47.45 297 *i*P P 22 49 43.2 -0.6
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**MAKZ Makanchi** 47.63 297 P P 22 49 44.8 -0.4
**MAKZ Makanchi** 47.63 297 P P 22 49 44.8 -0.4
MAKZ pmax pmax
comp=Z,5.0nm,1.4s
**KURK Kurchatov** 47.66 303 P P 22 49 44.4 -0.9
**KURK Kurchatov** 47.66 303 *e*P P 22 49 44.7 -0.5
**KURK Kurchatov** 47.66 303 *ce*P P 22 49 44.7 -0.5
KURK pmax pmax
comp=Z,4.0nm,0.8s
**KURBB Kurchatov Arra** 47.75 303 P P 22 49 45.0 -1.0
comp=Z,3.4nm,0.8s,baz=65,slow=8.0,SNR=18
comp=Z,3.4nm,0.8s
**YKA Yellowknife Ar** 48.88 38 *i*P P 22 49 57.0 +2.5
YKA pmax pmax
comp=Z,2.0nm,0.6s
**BVAR Borovoye Array** 50.94 309 P P 22 50 09.2 -1.1
comp=Z,1.3nm,0.4s,baz=63,slow=8.1,SNR=7.4
comp=Z,1.3nm,0.4s
**SPITS Spitsbergen Ar** 51.35 350 P P 22 50 11.9 -1.1
comp=Z,1.3nm,0.5s,baz=9.9,slow=3.4,SNR=5.3
comp=Z,1.3nm,0.5s
**LSA Lhasa** 51.55 273 P P 22 50 15.1 -0.6
LSA IAmb IAmb 22 50 18.7
comp=Z,7.2nm,0.8s
**LSA Lhasa** 51.55 273 *e*P P 22 50 15.1 -0.6
**LSA Lhasa** 51.55 273 P P 22 50 15.1 -0.6
LSA pmax pmax
comp=Z,7.0nm,0.8s
**CRAI Chiangrai** 51.84 257 P P 22 50 17.8 +0.3
CRAI IAmb IAmb 22 50 20.1
comp=Z,3.3nm,0.7s
**SHL Shillong** 53.77 269 P P 22 50 31.8 0.0
**SHL Shillong** 53.77 269 P P 22 50 31.8 0.0
SHL pmax pmax
comp=Z,21nm,0.6s
**CMAR Chiang Mai Arr** 54.05 257 P P 22 50 34.8 +1.1
comp=Z,3.7nm,0.9s,baz=35,slow=7.1,SNR=13
comp=Z,3.7nm,0.9s
**CMAR Chiang Mai Arr** 54.05 257 *ce*P P 22 50 35.5 +1.8
CMAR pmax pmax
comp=Z,2.0nm,0.5s
**AAK Ala-Archa** 54.37 296 *i*P P 22 50 35.6 -0.4
AAK pmax pmax
comp=Z,2.0nm,0.9s
**ARU Arti** 54.80 318 P P 22 50 37.4 -1.3
**ARU Arti** 54.80 318 P P 22 50 37.3 -1.4
comp=Z,2.5nm,0.4s,baz=85,slow=7.0,SNR=7.1
comp=Z,2.5nm,0.4s
**ARU Arti** 54.80 318 *e*P P 22 50 38.3 -0.4
**ARU Arti** 54.80 318 *di*P P 22 50 38.3 -0.4
ARU S S 22 58 14.0 -2.2
ARU pmax pmax
comp=Z,3.0nm,0.9s
**ARCES ARCESS Array B** 56.85 341 P P 22 50 52.3 -0.9
**ARCES ARCESS Array B** 56.85 341 P P 22 50 52.0 -1.2
comp=Z,3.3nm,0.9s,baz=34,slow=18,SNR=2.4
comp=Z,3.3nm,0.9s
**ARCES ARCESS Array B** 56.85 341 P P 22 50 52.3 -0.9
ARCES pmax pmax
comp=Z,16nm,1.5s
**BTK Batken** 58.13 296 P P 22 51 02.9 +0.1
BTK IAmb IAmb 22 51 07.4
comp=Z,5.5nm,1.4s
**BTK Batken** 58.13 296 P P 22 51 02.9 +0.1
BTK pmax pmax
comp=Z,6.0nm,1.4s
**ABKAR Akbulak array** 58.49 310 P P 22 51 04.0 -0.9
**ABKAR Akbulak array** 58.49 310 P P 22 51 04.0 -0.9
**SUMG Summit** 59.07 5 P P 22 51 09.8 +0.6
**SUMG Summit** 59.07 5 P P 22 51 09.8 +0.6
SUMG pmax pmax
comp=Z,16nm,1.1s
**CHGR Chuyangaron** 60.02 296 P P 22 51 15.6 -0.2
**CHGR Chuyangaron** 60.02 296 P P 22 51 15.6 -0.2
CHGR pmax pmax
comp=Z,9.0nm,0.9s
**SIMJ Simiganj** 60.10 296 P P 22 51 16.9 +0.4
SIMJ IAmb IAmb 22 51 20.3
comp=Z,5.0nm,1.1s
**PDAR Pinedale Array** 62.75 56 P P 22 51 35.0 +0.6
comp=Z,0.3nm,0.5s,baz=306,slow=7.7,SNR=2.3
comp=Z,0.3nm,0.5s
**FINES FINESS Array B** 63.23 335 P P 22 51 36.5 -0.5
**FINES FINESS Array B** 63.23 335 P P 22 51 36.0 -0.9
comp=Z,1.0nm,0.4s,baz=30,slow=8.2,SNR=24
comp=Z,1.0nm,0.4s
**FINES FINESS Array B** 63.23 335 *ce*P P 22 51 36.9 0.0
FINES pmax pmax
comp=Z,1.0nm,0.4s
**MTN Manton Dam** 64.48 206 P P 22 51 45.5 -0.1
**KNB Kanab** 64.73 62 P P 22 51 47.3 -0.2
**KNB Kanab** 64.73 62 P P 22 51 47.3 -0.2
KNB pmax pmax
comp=Z,3.0nm,1.0s
**RSSD Black Hills** 64.80 51 P P 22 51 49.0 +1.1
RSSD IAmb IAmb 22 51 59.7
comp=Z,2.9nm,0.6s
**RSSD Black Hills** 64.80 51 P P 22 51 49.0 +1.1
RSSD pmax pmax
comp=Z,3.0nm,0.6s
**OBN Obninsk** 64.81 326 *e*P P 22 51 48.9 +1.5
**OBN Obninsk** 64.81 326 ⇑*e*P P 22 51 48.9 +1.5
OBN *e* 22 54 07.3
OBN pmax pmax
comp=Z,4.0nm,0.9s
**U15A North Rim** 65.44 62 P P 22 51 51.8 -0.4
U15A IAmb IAmb 22 52 14.9
comp=Z,5.0nm,1.1s
**VSU Vasula** 65.48 333 *i*P P 22 51 53.5 +1.8
VSU pmax pmax
comp=Z,19nm,1.2s
**NC204 NORSAR Array S** 67.09 342 P P 22 52 02.7 +0.7
NC204 IAmb IAmb 22 52 11.3
comp=Z,8.3nm,1.1s
**NB201 NORSAR Array S** 67.18 342 P P 22 52 02.3 -0.4
**NB2 NORSAR Subarra** 67.21 342 P P 22 52 01.7 -1.1
comp=Z,0.6nm,0.6s,baz=24,slow=6.5
**NOA NORSAR Array B** 67.21 342 P P 22 52 01.8 -1.0
comp=Z,1.1nm,0.8s,baz=25,slow=6.4,SNR=5.3
comp=Z,1.1nm,0.8s
**HFS Hagfors** 67.49 340 P P 22 52 04.6 +0.1
comp=Z,1.5nm,0.4s,baz=59,slow=5.6,SNR=14
comp=Z,1.5nm,0.4s
**ECSD EROS Data Cent** 68.84 48 P P 22 52 13.4 +0.1
**WRA Warramunga Arr** 70.41 201 P P 22 52 24.2 +1.1
comp=Z,1.1nm,0.7s,baz=17,slow=6.2,SNR=5.1
comp=Z,1.1nm,0.7s
**KIV Kislovodsk** 70.69 315 *e*P P 22 52 25.5 +0.7
**KIV Kislovodsk** 70.69 315 *e*P P 22 52 25.5 +0.7
KIV pmax pmax
comp=Z,4.0nm,1.0s
**AKASG Malin Array Be** 71.02 327 P P 22 52 26.1 -0.4
comp=Z,1.1nm,0.5s,baz=36,slow=6.4,SNR=3.7
comp=Z,1.1nm,0.5s
**SCHQ Schefferville** 71.36 24 P P 22 52 29.4 +0.9
comp=Z,2.3nm,0.5s,baz=350,slow=5.3,SNR=6.8
comp=Z,2.3nm,0.5s
**SOC Sochi** 72.36 316 *e*P P 22 52 32.8 -1.9
SOC *e*S S 23 01 53.0 -1.8
SOC *e*SS SS 23 06 44.5 +12
SOC *e*SSS SSS 23 09 52.1
SOC pmax pmax
comp=Z,31nm,0.8s
SOC MLR MLR
comp=Z,99nm,16.0s
**ASAR Alice Springs** 74.10 200 P P 22 52 47.2 +2.1
comp=Z,0.6nm,0.7s,baz=13,slow=5.8,SNR=5.0
comp=Z,0.6nm,0.7s
**OJC Ojcow** 74.62 332 P P 22 52 48.5 +0.6
OJC IAmb IAmb 22 52 49.7
comp=Z,4.1nm,0.6s
**OJC Ojcow** 74.62 332 P P 22 52 48.5 +0.6
OJC pmax pmax
comp=Z,4.0nm,0.6s
**KOLS Kolonicke sedl** 74.94 330 *e*P P 22 52 49.6 -0.2
KOLS pmax pmax
comp=Z,5.0nm,1.1s
**KOLS Kolonicke sedl** 74.94 330 *e*P P 22 52 49.6 -0.2
**BUR08 Bucovina Ar. S** 75.03 328 P P 22 52 50.9 +0.5
**BURAR Bucovina Array** 75.05 328 P P 22 52 51.0 +0.5
**BURAR Bucovina Array** 75.05 328 ⇓P P 22 52 50.8 +0.3
**EKA Eskdalemuir Ar** 75.16 347 P P 22 52 51.0 +0.1
comp=Z,2.6nm,0.5s,baz=21,slow=5.0,SNR=23
comp=Z,2.6nm,0.5s
**EKA Eskdalemuir Ar** 75.16 347 P P 22 52 51.0 +0.1
**OSTC Ostas** 75.40 334 *e*P P 22 52 53.3 +0.9
**OSTC Ostas** 75.40 334 *e*P P 22 52 53.3 +0.9
**CHVC Chvalec** 75.42 334 *e*P P 22 52 52.7 +0.2
**CHVC Chvalec** 75.42 334 *e*P P 22 52 52.7 +0.2
**TESR Tescani** 75.45 326 ⇓P P 22 52 53.2 +0.4
**VLDR Vladesti** 75.47 325 ⇑P P 22 52 54.0 +1.1
**DPC Dobruska-Polom** 75.56 334 *e*P P 22 52 54.3 +1.0
**DPC Dobruska-Polom** 75.56 334 *e*P P 22 52 54.3 +1.0
**TXAR Lajitas Array** 75.56 62 P P 22 52 54.7 +0.8
comp=Z,1.2nm,0.6s,baz=316,slow=3.8,SNR=13
comp=Z,1.2nm,0.6s
**CLL Collm** 75.62 337 P P 22 52 53.9 +0.3
CLL IAmb IAmb 22 52 54.5
comp=Z,4.7nm,0.7s
**CLL Collm** 75.62 337 *i*P P 22 52 53.9 +0.3
comp=Z,9.0nm,1.2s
**CLL Collm** 75.62 337 *i*P P 22 52 53.9 +0.3
CLL pmax pmax
comp=Z,9.0nm,1.2s
**LANS Liptovska Anna** 75.66 332 *e*P P 22 52 55.5 +1.5
LANS pmax pmax
comp=Z,4.0nm,1.0s
**LANS Liptovska Anna** 75.66 332 *e*P P 22 52 55.5 +1.5
**KRLC Kraliky** 75.67 334 *e*P P 22 52 54.6 +0.6
**KRLC Kraliky** 75.67 334 *e*P P 22 52 54.6 +0.6
**MORC Moravsky Berou** 75.70 333 P P 22 52 54.4 +0.2
MORC IAmb IAmb 22 52 56.2
comp=Z,5.2nm,0.9s
**MORC Moravsky Berou** 75.70 333 *e*P P 22 52 54.7 +0.5
**MORC Moravsky Berou** 75.70 333 ⇑P P 22 52 54.9 +0.6
**MORC Moravsky Berou** 75.70 333 P P 22 52 54.4 +0.2
MORC pmax pmax
comp=Z,5.0nm,0.9s
**VRI Vrincioaia** 75.97 326 ⇓P P 22 52 56.4 +0.7
**VRI Vrincioaia** 75.97 326 P P 22 52 56.4 +0.7
**TJRR Turia** 76.08 326 ⇑P P 22 52 56.6 +0.2
**HSKC Hora Svate Kat** 76.14 336 *e*P P 22 52 57.4 +0.8
**TPGR Topolog** 76.16 324 ⇑P P 22 52 57.1 +0.3
**COVR Voineasa-Covas** 76.18 326 ⇓P P 22 52 57.3 +0.3
**PRU Pruhonice** 76.39 335 *e*P P 22 52 59.1 +1.1
**PRU Pruhonice** 76.39 335 *e*P P 22 52 59.1 +1.1
**VRAC Vranov** 76.41 334 *e*P P 22 52 59.0 +0.8
**VRAC Vranov** 76.41 334 ⇓P P 22 52 58.3 +0.1
**VRAC Vranov** 76.41 334 P P 22 52 58.2 +0.1
**VYHS Vyhne** 76.44 332 *e*P P 22 52 58.9 +0.5
VYHS pmax pmax
comp=Z,4.0nm,1.1s
**VYHS Vyhne** 76.44 332 *e*P P 22 52 58.9 +0.5
**JAVC Velka Javorina** 76.48 333 *e*P P 22 53 00.0 +1.4
**MLR Muntele Rosu** 76.58 326 P P 22 53 00.2 +0.8
MLR IAmb IAmb 22 53 01.8
comp=Z,4.0nm,0.7s
**MLR Muntele Rosu** 76.58 326 ⇑P P 22 52 59.3 0.0
**MLR Muntele Rosu** 76.58 326 P P 22 53 00.2 +0.8
MLR pmax pmax
comp=Z,4.0nm,0.7s
**DRGR** 76.64 329 ⇑P P 22 52 59.8 +0.2
**DRGR** 76.64 329 P P 22 52 59.7 +0.2
**KRUC Moravsky** 76.68 334 *e*P P 22 53 00.4 +0.7
**VOIR** 76.96 326 ⇑P P 22 53 02.2 +0.8
**VOIR** 76.96 326 P P 22 53 02.2 +0.8
**ZVC Zvikov** 76.98 335 *e*P P 22 53 02.3 +0.9
**SRO Srobarova** 77.20 332 *e*P P 22 53 03.8 +1.2
**SRO Srobarova** 77.20 332 *e*P P 22 53 03.8 +1.2
**KHC Kasperske Hory** 77.44 335 P P 22 53 04.6 +0.6
KHC IAmb IAmb 22 53 05.7
comp=Z,4.7nm,0.8s
**KHC Kasperske Hory** 77.44 335 *e*P P 22 53 04.9 +0.9
**KHC Kasperske Hory** 77.44 335 *ce*P P 22 53 05.4 +1.4
KHC pmax pmax
comp=Z,9.0nm,0.8s
**SIRR Siria** 77.45 329 ⇑P P 22 53 04.7 +0.6
**CKRC Cesky Krumlov** 77.51 335 *e*P P 22 53 05.1 +0.7
**CKRC Cesky Krumlov** 77.51 335 *e*P P 22 53 05.1 +0.7
**GEC2 GERESS Array S** 77.66 335 P P 22 53 05.7 +0.4
GEC2 IAmb IAmb 22 53 06.5
comp=Z,2.7nm,0.6s
**GERES GERESS Array B** 77.66 335 P P 22 53 05.7 +0.4
comp=Z,1.6nm,0.5s,baz=134,slow=5.8,SNR=14
comp=Z,1.6nm,0.5s
**SURR Surduc** 77.74 328 ⇓P P 22 53 06.0 +0.4
**GZR Gura Zlata** 77.82 328 ⇓P P 22 53 06.4 +0.2
**GZR Gura Zlata** 77.82 328 P P 22 53 06.4 +0.2
**CONA Conrad Observa** 77.86 333 *i*P P 22 53 07.7 +1.3
comp=Z,1.8nm,0.6s,SNR=4.6
**BNN Bunyan** 77.89 316 P P 22 53 07.1 +0.3
**RONA Rosalia, Austr** 77.93 333 *e*P P 22 53 08.0 +1.2
comp=Z,0.4nm,0.2s
**BTNL Ternell** 77.97 340 *d*P P 22 53 07.6 +0.7
**BZS Buzias** 78.03 329 ⇓P P 22 53 07.4 +0.1
**BZS Buzias** 78.03 329 P P 22 53 07.4 +0.1
**BR131 Keskin Array S** 78.19 318 P P 22 53 08.6 +0.1
BR131 IAmb IAmb 22 53 11.7
comp=Z,4.5nm,0.9s
**BR131 Keskin Array S** 78.19 318 P P 22 53 08.6 +0.1
BR131 pmax pmax
comp=Z,5.0nm,0.9s
**BRTR Keskin Array B** 78.19 318 P P 22 53 09.0 +0.5
**BRTR Keskin Array B** 78.19 318 P P 22 53 09.1 +0.5
comp=Z,3.8nm,0.9s,baz=66,slow=2.9,SNR=14
comp=Z,3.8nm,0.9s
**BRTR Keskin Array B** 78.19 318 *ce*P P 22 53 09.1 +0.5
BRTR pmax pmax
comp=Z,3.0nm,0.7s
**BCLA Clavier** 78.31 341 *d*P P 22 53 09.5 +0.7
**HERR Herculane** 78.39 328 ⇓P P 22 53 09.1 -0.2
**BGES Gesves** 78.39 341 *d*P P 22 53 09.3 +0.1
**MOA Molln** 78.40 334 *e*P P 22 53 09.1 -0.3
comp=Z,1.6nm,0.5s
**MORH Mrgy, Hungar** 78.51 331 ⇑P P 22 53 09.5 -0.4
**BMRD Maredsous** 78.54 341 *d*P P 22 53 10.4 +0.4
**KIRS Kirsehir-Merke** 78.55 317 ⇑P P 22 53 11.3 +0.9
**RCHB Rochefort** 78.58 341 *d*P P 22 53 10.8 +0.6
**BIOA Bad Ischl, Aus** 78.72 335 *e*P P 22 53 12.0 +0.9
comp=Z,1.1nm,0.3s
**FRGS Fruska Gora** 79.05 330 ⇑P P 22 53 13.4 +0.4
**SOKA Soboth** 79.23 333 *e*P P 22 53 14.3 +0.3
comp=Z,2.9nm,0.7s
**LESA Schwarzleotal** 79.24 335 *e*P P 22 53 15.1 +1.1
comp=Z,4.2nm,0.5s
**KBA Koelnbreinsper** 79.36 335 *e*P P 22 53 16.2 +1.4
comp=Z,8.0nm,0.5s
**OBKA Obir** 79.53 334 *e*P P 22 53 16.2 +0.5
comp=Z,2.3nm,0.6s,SNR=6.1
**WATA Walderalm** 79.62 336 *i*P P 22 53 17.2 +0.9
comp=Z,3.5nm,0.5s,SNR=6.0
**WTTA Wattenberg** 79.67 336 *i*P P 22 53 17.7 +1.1
comp=Z,8.3nm,0.6s,SNR=12
**MYKA Terra Mystica** 79.68 334 *e*P P 22 53 17.0 +0.5
comp=Z,4.2nm,1.0s
**RETA Reutte** 79.71 336 *i*P P 22 53 17.5 +0.9
comp=Z,1.9nm,0.6s,SNR=4.8
**BOVS Bovan** 79.72 328 ⇓P P 22 53 15.9 -0.7
**MOTA Moosalm** 79.75 336 *i*P P 22 53 17.7 +0.9
comp=Z,6.4nm,0.8s
**SQTA Sankt Quirin** 79.83 336 *i*P P 22 53 18.6 +1.3
comp=Z,4.1nm,0.7s
**PRED Cave del Predi** 79.88 334 P P 22 53 17.7 +0.2
PRED IAmb IAmb 22 53 19.0
comp=Z,4.1nm,0.7s
**ABTA Abfaltersbach** 79.90 335 *e*P P 22 53 18.0 +0.4
comp=Z,3.0nm,1.2s,SNR=5.6
**DAVA Damuels** 80.13 337 *e*P P 22 53 19.5 +0.6
comp=Z,2.9nm,0.9s
**FETA Feichten** 80.14 336 *e*P P 22 53 19.8 +0.8
comp=Z,2.4nm,0.8s,SNR=5.5
**STAL STALIGIAL** 80.29 335 P P 22 53 19.8 +0.1
**FUORN Ofenpass-Fuorn** 80.64 336 P P 22 53 22.6 +0.7
FUORN IAmb IAmb 22 53 23.9
comp=Z,7.6nm,1.1s
**CTI Castel Tesino** 80.78 335 P P 22 53 22.2 -0.2
CTI IAmb IAmb 22 53 23.1
comp=Z,5.2nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CTI** | **Castel Tesino** | **80.78** | **335** | P | **P** | **22 53 22.2** | **-0.2** |
| CTI | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **FNA** | **Florina** | **82.33** | **326** | P | **P** | **22 53 31.1** | **+0.5** |
| FNA | | | | IAmb | IAmb | 22 53 33.2 | | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **FNA** | **Florina** | **82.33** | **326** | P | **P** | **22 53 31.1** | **+0.5** |
| FNA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **82.80** | **313** | P | **P** | **22 53 34.2** | **+1.0** |
| | comp=Z,4.8nm,0.6s,baz=46,slow=7.1,SNR=8.2 | | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | | |
| **ESDC** | **Sonseca Array** | **90.48** | **344** | P | **P** | **22 54 10.6** | **-0.1** |
| | comp=Z,0.5nm,1.1s,baz=0.4,slow=4.7,SNR=2.4 | | | | | | | |
| | comp=Z,0.5nm,1.1s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **137.40** | **90** | T | T | 01 33 30.5 | | |
| | baz=310,slow=77,SNR=19 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **137.41** | **90** | T | T | 01 33 31.9 | | |
| | baz=310,slow=77,SNR=23 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **137.41** | **90** | T | T | 01 33 39.7 | | |
| | baz=310,slow=77,SNR=20 | | | | | | | |
| **PLCA** | **Paso Flores** | **146.97** | **94** | PKPbc | **PKPab** | **23 00 51.9** | **-0.7** |
| | comp=Z,0.6nm,0.7s,baz=277,slow=2.2,SNR=3.4 | | | | | | | |
| **ELIB** | **Princess Elisa** | **147.76** | **206** | *d*PKP | **PKPbc** | **23 00 53.2** | **+1.0** |

*IDC* ***12*** *22:46:22.9±1.1, 69°.89N×144°.86W, h0km, mb3.8/5, mbtmp3.8/7, ML4.1/2, Error ellipse: s-maj=28.6km s-min=19.8km az=65.0*

*AEIC* ***12*** *22:46:26.0±1.0, 69°.43N±0°.04×144°.15W±0°.09, h7km±4km, ML3.9, mb4.4/10(NEIC), ML4.0/116(NEIC), Error ellipse: s-maj=6.4km s-min=4.5km az=203.0*

*NEIC* ***12*** *22:46:26.3±0.9, 69°.44N±0°.05×144°.15W±0°.10, h10km±1km, Error ellipse: s-maj=8.6km s-min=5.5km az=199.0*

**ISC 12 22:46:25.9**±1.1**, 69°.46N**±0°.04×**144°.13W**±0°.03**, h10**km±7km**, n173,** σ**1s05**/148**, mb4.2**/10**, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.22** | **41** | | **Pg** | **22 46 30.7** | **+0.2** |
| C27K | | | | | **Sg** | **22 46 33.8** | **+0.3** |
| **C27K** | **Jago River** | **0.22** | **41** | IAML | | 22 46 33.9 | |
| | comp=E,45μm,0.6s | | | | | | |
| C27K | | | | IAML | | 22 46 34.0 | |
| | comp=N,29μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.54** | **330** | | **Pg** | **22 46 36.7** | **+0.4** |
| C26K | | | | | **Sb** | **22 46 44.7** | **-0.5** |
| **C26K** | **Camden Bay** | **0.54** | **330** | IAML | | 22 46 45.5 | |
| | comp=N,9μm,0.5s | | | | | | |
| C26K | | | | IAML | | 22 46 46.4 | |
| | comp=E,9μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.81** | **261** | | **Pg** | **22 46 40.8** | **-0.6** |
| **D25K** | **Kavik River** | **0.81** | **261** | | **Sg** | **22 46 52.4** | **+0.5** |
| **D27M** | **Malcolm River** | **1.14** | **99** | | **Pg** | **22 46 47.5** | **-0.3** |
| D27M | | | | | **Sn** | **22 47 03.9** | **+0.1** |
| **D27M** | **Malcolm River** | **1.14** | **99** | IAML | | 22 47 09.6 | |
| | comp=E,3μm,0.5s | | | | | | |
| D27M | | | | IAML | | 22 47 09.8 | |
| | comp=N,3μm,0.3s | | | | | | |
| **E27K** | **Coleen River** | **1.58** | **143** | | **Pn** | **22 46 53.8** | **-0.2** |
| E27K | | | | | **Sb** | **22 47 15.2** | **+0.1** |
| **E27K** | **Coleen River** | **1.58** | **143** | IAML | | 22 47 20.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.62** | **281** | | **Pn** | **22 46 54.8** | **+0.3** |
| **C24K** | **Franklin Bluff** | **1.62** | **281** | IAML | | 22 47 22.9 | |
| | comp=N,1μm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.70** | **262** | | **Pn** | **22 46 55.7** | **+0.2** |
| D24K | | | | | **Sb** | **22 47 18.9** | **+0.3** |
| **F26K** | **Sheenjek River** | **1.77** | **180** | | **Pn** | **22 46 56.5** | **-0.2** |
| **F26K** | **Sheenjek River** | **1.77** | **180** | IAML | | 22 47 27.7 | |
| | comp=E,2μm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.86** | **115** | | **Pn** | **22 46 58.1** | **+0.2** |
| E28M | | | | | **Sb** | **22 47 22.9** | **-0.5** |
| **E28M** | **Babbage River** | **1.86** | **115** | IAML | | 22 47 31.4 | |
| | comp=N,1μm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.91** | **91** | | **Pn** | **22 46 58.9** | **+0.4** |
| **F25K** | **Christian Rive** | **1.96** | **197** | | **Pn** | **22 46 59.0** | **-0.2** |
| **F25K** | **Christian Rive** | **1.96** | **197** | IAML | | 22 47 31.3 | |
| | comp=E,1μm,0.9s | | | | | | |
| F25K | | | | IAML | | 22 47 32.6 | |
| | comp=N,1μm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.11** | **231** | | **Pn** | **22 47 01.2** | **-0.1** |
| **E24K** | **Your Creek** | **2.11** | **231** | IAML | | 22 47 40.3 | |
| | comp=E,806nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.12** | **250** | | **Pn** | **22 47 01.7** | **+0.2** |
| **TOLK** | **Toolik Lake Re** | **2.12** | **250** | IAML | | 22 47 36.9 | |
| | comp=E,1μm,0.8s | | | | | | |
| TOLK | | | | IAML | | 22 47 44.3 | |
| | comp=N,729nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.30** | **282** | | **Pn** | **22 47 04.3** | **+0.5** |
| **C23K** | **Itkillik River** | **2.30** | **282** | IAML | | 22 47 46.1 | |
| | comp=E,892nm,0.5s | | | | | | |
| C23K | | | | IAML | | 22 47 51.6 | |
| | comp=N,898nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.39** | **261** | | **Pn** | **22 47 05.3** | **+0.2** |
| **F24K** | **Squaw Lake** | **2.39** | **217** | | **Pn** | **22 47 05.2** | **+0.1** |
| **F28M** | **Old Crow** | **2.43** | **138** | | **Pn** | **22 47 05.7** | **+0.1** |
| **F28M** | **Old Crow** | **2.43** | **138** | IAML | | 22 47 45.9 | |
| | comp=N,796nm,0.3s | | | | | | |
| F28M | | | | IAML | | 22 47 49.2 | |
| | comp=E,763nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **237** | | **Pn** | **22 47 06.0** | **0.0** |
| **E23K** | **Chandalar** | **2.44** | **237** | IAML | | 22 47 49.0 | |
| | comp=E,605nm,0.7s | | | | | | |
| E23K | | | | IAML | | 22 47 54.0 | |
| | comp=N,584nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **2.50** | **113** | | **Pn** | **22 47 07.0** | **+0.5** |
| **E29M** | **Blow River** | **2.50** | **113** | IAML | | 22 47 51.7 | |
| | comp=N,830nm,0.5s | | | | | | |
| E29M | | | | IAML | | 22 47 53.4 | |
| | comp=E,783nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.52** | **177** | | **Pn** | **22 47 07.4** | **+0.5** |
| **G25K** | **Bearman Lake** | **2.81** | **196** | | **Pn** | **22 47 11.0** | **+0.2** |
| **G27K** | **Doyon Strip** | **2.82** | **160** | | **Pn** | **22 47 11.1** | **0.0** |
| **FYU** | **Fort Yukon** | **2.94** | **189** | Pn | **Pn** | **22 47 12.7** | **+0.1** |
| **G24K** | **Hadweenzic Riv** | **3.04** | **206** | | **Pn** | **22 47 13.9** | **-0.1** |
| **G24K** | **Hadweenzic Riv** | **3.04** | **206** | IAML | | 22 48 13.5 | |
| | comp=N,451nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **3.11** | **263** | | **Pn** | **22 47 15.3** | **+0.3** |
| **D22K** | **Ayikyak River** | **3.11** | **263** | IAML | | 22 48 17.4 | |
| | comp=E,370nm,0.9s | | | | | | |
| D22K | | | | IAML | | 22 48 18.6 | |
| | comp=N,375nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.33** | **290** | | **Pn** | **22 47 18.8** | **+0.9** |
| **B22K** | **Teshekpuk Lake** | **3.33** | **290** | IAML | | 22 48 19.4 | |
| | comp=E,376nm,0.8s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.39** | **162** | | **Pn** | **22 47 19.0** | **+0.2** |
| **G29M** | **Pine Creek** | **3.43** | **135** | | **Pn** | **22 47 20.1** | **+0.7** |
| **G23K** | **Bananza Creek** | **3.54** | **221** | | **Pn** | **22 47 21.9** | **+1.1** |
| G23K | | | | IAML | | 22 48 24.2 | |
| | comp=E,278nm,1.0s | | | | | | |
| G23K | | | | IAML | | 22 48 25.4 | |
| | comp=N,260nm,1.1s | | | | | | |
| **F22K** | **John River** | **3.56** | **240** | | **Pn** | **22 47 21.2** | **+0.1** |
| **F30M** | **Barrier River** | **3.58** | **117** | | **Pn** | **22 47 22.2** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **3.69** | **277** | | **Pn** | **22 47 23.5** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **3.69** | **277** | IAML | | 22 48 38.2 | |
| | comp=N,222nm,1.0s | | | | | | |
| B21K | | | | IAML | | 22 48 42.2 | |
| | comp=E,208nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.70** | **259** | | **Pn** | **22 47 23.4** | **+0.3** |
| **E21K** | **Killik River** | **3.70** | **259** | IAML | | 22 48 34.6 | |
| | comp=N,276nm,1.2s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.86** | **126** | | **Pn** | **22 47 25.2** | **0.0** |
| **G30M** | **tAoh Zraii Nji** | **3.86** | **126** | IAML | | 22 48 35.5 | |
| | comp=E,198nm,0.8s | | | | | | |
| G30M | | | | IAML | | 22 48 38.0 | |
| | comp=N,218nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.91** | **203** | Pn | **Pn** | **22 47 26.2** | **+0.2** |
| **H29M** | **Whitestone** | **3.92** | **143** | | **Pn** | **22 47 26.2** | **+0.1** |
| **I27K** | **Kandik River** | **3.99** | **165** | | **Pn** | **22 47 27.1** | **-0.1** |
| **A22K** | **Sinclair Lake** | **4.00** | **298** | | **Pn** | **22 47 27.6** | **+0.5** |
| **PRP** | **Porcupine Dome** | **4.00** | **188** | | **Pn** | **22 47 25.4** | **-1.8** |
| PRP | | | | IAML | | 22 48 20.9 | |
| | comp=N,173nm,0.5s | | | | | | |
| **INK** | **Inuvik** | **4.01** | **102** | Pn | **Pn** | **22 47 28.5** | **+1.2** |
| **F21K** | **Alatna River** | **4.13** | **241** | | **Pn** | **22 47 28.9** | **-0.1** |
| **F21K** | **Alatna River** | **4.13** | **241** | IAML | | 22 48 42.4 | |
| | comp=E,161nm,0.8s | | | | | | |
| F21K | | | | IAML | | 22 48 43.3 | |
| | comp=N,150nm,1.2s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.18** | **134** | | **Pn** | **22 47 29.2** | **-0.5** |
| **I26K** | **Coal Creek Min** | **4.19** | **174** | | **Pn** | **22 47 29.0** | **-0.8** |
| I26K | | | | IAML | | 22 48 44.5 | |
| | comp=E,178nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **212** | | **Pn** | **22 47 30.1** | **+0.2** |
| **H23K** | **Yukon River** | **4.20** | **212** | IAML | | 22 48 43.2 | |
| | comp=N,185nm,0.7s | | | | | | |
| H23K | | | | IAML | | 22 48 44.3 | |
| | comp=E,201nm,1.4s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.33** | **113** | | **Pn** | **22 47 31.9** | **+0.1** |
| **F31M** | **Tsiigehtchic** | **4.33** | **113** | IAML | | 22 48 47.3 | |
| | comp=N,142nm,0.7s | | | | | | |
| F31M | | | | IAML | | 22 48 49.5 | |
| | comp=E,123nm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **4.34** | **156** | | **Pn** | **22 47 31.9** | **-0.1** |
| **I28M** | **Miner Creek** | **4.34** | **156** | IAML | | 22 48 29.3 | |
| | comp=N,157nm,0.5s | | | | | | |
| I28M | | | | IAML | | 22 48 56.4 | |
| | comp=E,180nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.47** | **120** | | **Pn** | **22 47 33.9** | **+0.3** |
| **H22K** | **Ishtalitna Cre** | **4.52** | **221** | | **Pn** | **22 47 34.4** | **0.0** |
| **E20K** | **Nigu River** | **4.53** | **260** | | **Pn** | **22 47 34.6** | **+0.1** |
| **D20K** | **Etivluk River** | **4.54** | **266** | | **Pn** | **22 47 34.6** | **+0.1** |
| **POKR** | **Poker Plat Res** | **4.55** | **198** | | **Pn** | **22 47 34.6** | **-0.1** |
| **POKR** | **Poker Plat Res** | **4.55** | **198** | IAML | | 22 48 32.6 | |
| | comp=E,136nm,0.7s | | | | | | |
| POKR | | | | IAML | | 22 49 02.6 | |
| | comp=N,105nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **4.56** | **283** | | **Pn** | **22 47 35.7** | **+0.8** |
| **B20K** | **Meade River** | **4.56** | **283** | IAML | | 22 49 16.8 | |
| | comp=N,155nm,1.0s | | | | | | |
| **G21K** | **Allakaket** | **4.60** | **234** | Pn | **Pn** | **22 47 36.8** | **+1.3** |
| G21K | | | | IAML | | 22 49 01.9 | |
| | comp=N,143nm,1.1s | | | | | | |
| **A21K** | **Barrow** | **4.60** | **300** | | **Pn** | **22 47 36.1** | **+0.7** |
| **I29M** | **Ogilvie Camp,** | **4.69** | **149** | | **Pn** | **22 47 36.6** | **0.0** |
| I29M | | | | IAML | | 22 49 04.8 | |
| | comp=N,138nm,0.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **208** | | **Pn** | **22 47 38.4** | **+0.5** |
| **I23K** | **Minto, Yukon-K** | **4.78** | **208** | IAML | | 22 49 11.1 | |
| | comp=N,119nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79** | **201** | | **Pn** | **22 47 37.9** | **-0.2** |
| **COLA** | **College** | **4.83** | **199** | | **Pn** | **22 47 38.3** | **-0.2** |
| **IL31** | | **4.83** | **194** | | **Pn** | **22 47 39.0** | **+0.4** |
| **ILAR** | **Eielson Array** | **4.83** | **194** | Pn | **Pn** | **22 47 38.3** | **-0.3** |
| **ILAR** | **Eielson Array** | **4.83** | **194** | Pn | **Pn** | **22 47 41.3** | **+2.7** |
| | comp=N,8.4nm,0.3s,baz=5.7,slow=13,SNR=50 | | | | | | |
| ILAR | | | | Sn | **Sn** | **22 48 37.1** | **+2.5** |
| | comp=N,8.2nm,0.3s,baz=9.1,slow=24,SNR=7.8 | | | | | | |
| ILAR | | | | Lg | Lg | 22 48 57.5 | |
| | comp=N,9.1nm,0.3s,baz=8.4,slow=31,SNR=5.6 | | | | | | |
| | comp=N,23nm,0.4s | | | | | | |
| **EGAK** | **Eagle** | **4.84** | **165** | Pn | **Pn** | **22 47 39.4** | **+0.6** |
| EGAK | | | | IAML | | 22 48 39.8 | |
| | comp=N,94nm,0.7s | | | | | | |
| EGAK | | | | IAML | | 22 49 18.1 | |
| | comp=N,100nm,1.2s | | | | | | |
| **J25K** | **Salcha River,** | **4.89** | **186** | | **Pn** | **22 47 39.8** | **+0.3** |
| **F20K** | **Avaraart Lake** | **4.94** | **246** | | **Pn** | **22 47 40.7** | **+0.6** |
| **J26L** | **Joseph Creek** | **4.99** | **177** | | **Pn** | **22 47 41.1** | **+0.3** |
| **CCB** | **Clear Creek Bu** | **5.04** | **198** | | **Pn** | **22 47 41.8** | **+0.3** |
| **H21K** | **Melozitna Rive** | **5.06** | **225** | | **Pn** | **22 47 42.1** | **+0.4** |
| **H21K** | **Melozitna Rive** | **5.06** | **225** | IAML | | 22 49 15.6 | |
| | comp=E,89nm,1.0s | | | | | | |
| H21K | | | | IAML | | 22 49 18.5 | |
| | comp=N,91nm,0.9s | | | | | | |
| **HDA** | **Harding Lake** | **5.19** | **194** | | **Pn** | **22 47 43.2** | **-0.4** |
| HDA | | | | IAML | | 22 49 25.4 | |
| | comp=N,78nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.20** | **141** | Pn | **Pn** | **22 47 42.7** | **-1.1** |
| I30M | | | | IAML | | 22 48 46.2 | |
| | comp=N,76nm,0.5s | | | | | | |
| **E19K** | **Redstone River** | **5.23** | **254** | | **Pn** | **22 47 44.5** | **+0.5** |
| **E19K** | **Redstone River** | **5.23** | **254** | IAML | | 22 49 27.0 | |
| | comp=N,77nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **5.25** | **199** | | **Pn** | **22 47 44.5** | **+0.2** |
| **WRH** | **Wood River Hil** | **5.25** | **199** | IAML | | 22 49 22.2 | |
| | comp=E,62nm,1.3s | | | | | | |
| WRH | | | | IAML | | 22 49 24.5 | |
| | comp=N,59nm,0.7s | | | | | | |
| **NEA2** | **Nenana** | **5.26** | **204** | | **Pn** | **22 47 46.2** | **+1.8** |
| **C19K** | **Lookout Ridge** | **5.50** | **274** | | **Pn** | **22 47 48.3** | **+0.6** |
| **SCRK** | **Sand Creek** | **5.51** | **179** | Pn | **Pn** | **22 47 50.2** | **+2.2** |
| **K27K** | **Chicken** | **5.51** | **171** | | **Pn** | **22 47 49.5** | **+1.5** |
| **DAWY** | **Dawson** | **5.73** | **159** | | **Pn** | **22 47 53.4** | **+2.4** |
| **F19K** | **Shaleruckik Mo** | **5.73** | **249** | | **Pn** | **22 47 51.8** | **+0.8** |
| **J30M** | **Hart River** | **5.77** | **144** | Pn | **Pn** | **22 47 53.0** | **+1.3** |
| **A19K** | **Wainwright** | **5.90** | **285** | | **Pn** | **22 47 53.9** | **+0.7** |
| **G19K** | **Purcell Mounta** | **5.93** | **242** | | **Pn** | **22 47 54.1** | **+0.4** |
| **BPAW** | **Bear Paw Mtn.** | **6.02** | **210** | | **Pn** | **22 47 55.0** | **0.0** |
| **C18K** | **Utukok River** | **6.17** | **270** | Pn | **Pn** | **22 47 57.8** | **+0.8** |
| **K29M** | **Barlow Dome** | **6.22** | **152** | Pn | **Pn** | **22 47 59.5** | **+1.8** |
| **B18K** | **Kokolik River** | **6.23** | **277** | | **Pn** | **22 47 58.3** | **+0.5** |
| **RND** | **Reindeer** | **6.37** | **200** | | **Pn** | **22 47 57.0** | **-2.7** |
| **E18K** | **Tukpahlearik C** | **6.40** | **259** | | **Pn** | **22 48 00.2** | **+0.1** |
| **CHUM** | **Lake Minchumin** | **6.47** | **214** | | **Pn** | **22 48 00.9** | **-0.2** |
| **F18K** | **Selawik** | **6.49** | **251** | | **Pn** | **22 48 01.3** | **0.0** |
| **BCAR** | **Beaver Creek A** | **6.49** | **171** | Pn | **Pn** | **22 48 02.0** | **+0.6** |
| **L27K** | **Beaver Creek,** | **6.49** | **171** | | **Pn** | **22 48 01.8** | **+0.3** |
| **PAX** | **Paxson** | **6.54** | **185** | | **Pn** | **22 48 02.3** | **+0.1** |
| **DHY** | **Denali Highway** | **6.54** | **193** | | **Pn** | **22 48 02.4** | **+0.2** |
| **G18K** | **Tagagawik** | **6.58** | **244** | Pn | **Pn** | **22 48 05.2** | **+2.6** |
| **J20K** | **Nowinta River** | **6.61** | **221** | | **Pn** | **22 48 03.4** | **+0.4** |
| **A36M** | **Sachs Harbour** | **6.73** | **59** | Pn | **Pn** | **22 48 04.6** | **0.0** |
| **L29M** | **L29M** | **6.82** | **156** | | **Pn** | **22 48 06.5** | **+0.6** |
| **WAT1** | **Susitna Watana** | **6.89** | **197** | | **Pn** | **22 48 07.2** | **+0.3** |
| **C17K** | **DeLong Mountai** | **6.92** | **271** | | **Pn** | **22 48 07.4** | **+0.2** |
| **RDOG** | **Red Dog Mine** | **6.96** | **267** | | **Pn** | **22 48 08.3** | **+0.5** |
| **H18K** | **Honhosa River** | **6.99** | **239** | | **Pn** | **22 48 08.1** | **-0.1** |
| **C36M** | **Paulatuk** | **7.07** | **82** | | **Pn** | **22 48 09.6** | **+0.4** |
| **HARP** | **HAARP** | **7.11** | **184** | | **Pn** | **22 48 09.8** | **-0.1** |
| **D17K** | **Noatak River** | **7.15** | **265** | | **Pn** | **22 48 10.4** | **0.0** |
| **M27K** | **Edge Creek, AK** | **7.19** | **172** | | **Pn** | **22 48 11.1** | **0.0** |
| **M29M** | **Somme Creek** | **7.41** | **159** | | **Pn** | **22 48 14.4** | **+0.2** |
| **G17K** | **Kiwalik Mounta** | **7.47** | **246** | | **Pn** | **22 48 14.8** | **0.0** |
| **C16K** | **Lisburne Hills** | **7.74** | **271** | | **Pn** | **22 48 18.7** | **+0.2** |
| **N25K** | **Chitina, Valde** | **7.89** | **182** | | **Pn** | **22 48 20.1** | **-0.5** |
| **MCARA** | **McCarthy VSAT** | **8.12** | **176** | | **Pn** | **22 48 23.2** | **-0.5** |
| **M31M** | **Drury Creek, Y** | **8.30** | **147** | | **Pn** | **22 48 26.2** | **+0.1** |
| **M20K** | **Styx River** | **8.46** | **210** | Pn | **Pn** | **22 48 26.3** | **-2.0** |
| **FARO** | **Faro, Yukon** | **8.48** | **144** | | **Pn** | **22 48 29.7** | **+1.0** |
| **M19K** | **Big River Lodg** | **8.67** | **214** | Pn | **Pn** | **22 48 29.6** | **-1.7** |
| **WHY** | **Whitehorse** | **9.64** | **152** | Pn | **Pn** | **22 48 45.5** | **+0.8** |
| **RSO** | **Redoubt South** | **9.73** | **206** | Pn | **Pn** | **22 48 45.5** | **-0.4** |
| **K15K** | **Wolf Creek Mou** | **10.08** | **233** | Pn | **Pn** | **22 48 49.4** | **-1.1** |
| **WRGLY** | **Wrigley** | **10.34** | **117** | Pn | **Pn** | **22 48 55.3** | **+1.2** |
| **P33M** | **Teslin, Yukon** | **10.43** | **147** | Pn | **Pn** | **22 48 56.4** | **+0.9** |
| **P32M** | **Atlin** | **10.85** | **151** | Pn | **Pn** | **22 49 00.9** | **-0.3** |
| **P32M** | **Atlin** | **10.85** | **151** | Pn | **Pn** | **22 49 00.6** | **-0.6** |
| **R33M** | **Jennings River** | **11.55** | **144** | Pn | **Pn** | **22 49 11.7** | **+0.9** |
| **Q32M** | **Nakina River** | **11.70** | **148** | Pn | **Pn** | **22 49 12.0** | **-0.9** |
| **DLBC** | **Dease Lake** | **12.63** | **144** | Pn | **Pn** | **22 49 25.7** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **13.77** | **106** | Pn | **Pn** | **22 49 40.4** | **-0.4** |
| **YKA** | **Yellowknife Ar** | **13.77** | **106** | Pn | **Pn** | **22 49 38.6** | **-2.2** |
| | comp=N,0.8nm,0.3s,baz=312,slow=18,SNR=7.6 | | | | | | |
| | comp=N,0.9nm,0.4s | | | | | | |
| **GRNB** | **Grenville Isla** | **16.97** | **150** | Pn | **Pn** | **22 50 22.6** | **-0.5** |
| GRNB | | | | IAmb | IAmb | 22 50 38.0 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **TULEG** | **Thule** | **21.48** | **38** | P | **P** | **22 51 14.3** | **+0.3** |
| **WISH** | **Wishkah** | **24.57** | **145** | P | **P** | **22 51 44.7** | **-0.9** |
| WISH | | | | IAmb | IAmb | 22 52 14.7 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **SEY** | **Seymchan** | **25.30** | **287** | P | **P** | **22 51 46.6** | **-5.5** |
| | comp=Z,3.4nm,0.2s,baz=332,slow=22,SNR=3.0 | | | | | | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| **LON** | **Longmire** | **25.33** | **142** | P | **P** | **22 51 53.4** | **+0.8** |
| **PDAR** | **Pinedale Array** | **32.11** | **128** | P | **P** | **22 52 56.0** | **+2.8** |
| | comp=Z,0.3nm,0.6s,baz=345,slow=6.7,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **49.20** | **6** | P | P | 22 55 08.0 | -5.6 |
| | comp=Z,3.2nm,1.0s,baz=19,slow=9.0,SNR=1.9 | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **52.26** | **307** | P | **P** | **22 55 38.1** | **+1.2** |
| **KURK** | **Kurchatov** | **56.12** | **329** | P | **P** | **22 56 05.2** | **+0.4** |
| KURK | | | | IAmb | IAmb | 22 56 22.0 | |
| | comp=Z,2.3nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.22** | **329** | P | P | 22 56 00.7 | -4.9 |
| | comp=Z,0.1nm,0.3s,baz=13,slow=6.9,SNR=1.7 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.16** | **325** | P | **P** | **22 56 26.4** | **0.0** |
| **MKAR** | **Makanchi Array** | **59.16** | **325** | P | **P** | **22 56 22.1** | **-4.3** |
| | comp=Z,0.3nm,0.7s,baz=32,slow=8.5,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **59.21** | **325** | P | **P** | **22 56 26.8** | **+0.1** |
| MAKZ | | | | IAmb | IAmb | 22 56 32.1 | |
| | comp=Z,4.2nm,1.3s | | | | | | |
| **TEIG** | **Tepich** | **59.49** | **116** | P | **P** | **22 56 27.6** | **-1.4** |
| **GRA1** | **Grafenberg Arr** | **59.79** | **18** | P | **P** | **22 56 31.0** | **+0.4** |
| GRA1 | | | | IAmb | IAmb | 22 57 10.7 | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **60.28** | **342** | P | **P** | **22 56 34.7** | **+0.7** |
| **ABKAR** | **Akbulak array** | **60.28** | **342** | P | **P** | **22 56 36.2** | **+2.2** |
| ABKAR | | | | IAmb | IAmb | 22 57 16.3 | |
| | comp=Z,1.6nm,1.2s | | | | | | |

*AEIC* ***12*** *22:46:59.0±1.5, 56°.46N±0°.09×149°.2W±0°.1, h5km±8km, Error ellipse: s-maj=13.2km s-min=8.5km az=168.0*

**NEIC 12 22:46:56.3**±1.9**, 56°.45N**±0°.09×**149°.19W**±0°.09**, h24**km±10**km, ML3.4**/50**, ML3.2**(AEIC)**, Error ellipse: s-maj=13.4km s-min=7.0km az=168.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **2.29** | **307** | | Pn | 22 47 32.4 | -0.1 |
| KDAK | | | | | Sn | 22 47 58.1 | -1.7 |
| **OHAK** | **Old Harbor** | **2.38** | **291** | | Pn | 22 47 32.9 | -0.9 |
| OHAK | | | | | Sn | 22 47 59.7 | -2.5 |
| **SYI** | **Shuyak Island** | **2.77** | **323** | | Pn | 22 47 39.2 | 0.0 |
| **SYI** | **Shuyak Island** | **2.77** | **323** | | Sn | 22 48 11.3 | -0.6 |
| **SYI** | **Shuyak Island** | **2.77** | **323** | IAML | | 22 48 02.5 | |
| | comp=E,30nm,1.1s | | | | | | |
| **R18K** | **Karluk** | **3.09** | **294** | | Sn | 22 48 18.0 | -1.6 |
| **CNPM** | **China Poot** | **3.28** | **341** | | Pn | 22 47 46.1 | 0.0 |
| CNPM | | | | | Sn | 22 48 24.2 | -0.1 |
| **Q23K** | **Middleton Isla** | **3.35** | **26** | | Pn | 22 47 47.7 | +0.6 |
| **BRSE** | **Bradley Lake S** | **3.41** | **347** | | Pn | 22 47 47.5 | -0.5 |
| **BRLK** | **Bradley Lake** | **3.45** | **346** | Pn | Pn | 22 47 47.7 | -0.7 |
| BRLK | | | | IAML | | 22 49 49.2 | |
| | comp=E,82nm,0.1s | | | | | | |
| BRLK | | | | IAML | | 22 49 49.4 | |
| | comp=N,56nm,0.1s | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.45** | **318** | | Pn | 22 47 47.9 | -0.6 |
| **SEW** | **Seward** | **3.67** | **358** | | Pn | 22 47 50.7 | -0.8 |
| **P23K** | **Montague Islan** | **3.69** | **14** | | Pn | 22 47 51.3 | -0.4 |
| P23K | | | | | Sn | 22 48 31.4 | -2.9 |
| **P19K** | **Oil Pt** | **3.87** | **328** | Pn | Pn | 22 47 55.1 | +0.8 |
| P19K | | | | IAML | | 22 48 50.5 | |
| | comp=E,71nm,1.2s | | | | | | |
| P19K | | | | IAML | | 22 49 15.3 | |
| | comp=N,59nm,1.1s | | | | | | |
| **SLKM** | **Skilak Lake** | **4.11** | **353** | | Pn | 22 47 56.9 | -0.7 |
| **ILSW** | **Iliamna Southw** | **4.12** | **331** | Pn | Pn | 22 47 56.1 | -1.6 |
| ILSW | | | | IAML | | 22 50 34.4 | |
| | comp=E,44nm,1.0s | | | | | | |
| ILSW | | | | IAML | | 22 50 34.4 | |
| | comp=N,59nm,1.0s | | | | | | |
| **KAIM** | **Kayak Island** | **4.31** | **34** | | Pn | 22 48 01.0 | +0.7 |
| **KAIM** | **Kayak Island** | **4.31** | **34** | IAML | | 22 49 12.7 | |
| | comp=N,45nm,1.2s | | | | | | |
| KAIM | | | | IAML | | 22 50 41.6 | |
| | comp=E,50nm,1.0s | | | | | | |
| **P18K** | **Big Mountain,** | **4.37** | **315** | Pn | Pn | 22 48 00.5 | -0.7 |
| P18K | | | | IAML | | 22 49 11.2 | |
| | comp=E,25nm,1.1s | | | | | | |
| P18K | | | | IAML | | 22 49 15.6 | |
| | comp=N,30nm,1.1s | | | | | | |
| **RSO** | **Redoubt South** | **4.44** | **337** | Pn | Pn | 22 48 02.4 | +0.1 |
| **PWL** | **Port Wells** | **4.45** | **5** | | Pn | 22 48 02.0 | -0.2 |
| PWL | | | | | Sn | 22 48 50.2 | -3.0 |
| **PWL** | **Port Wells** | **4.45** | **5** | IAML | | 22 48 53.1 | |
| | comp=N,32nm,1.1s | | | | | | |
| PWL | | | | IAML | | 22 48 58.5 | |
| | comp=E,31nm,1.1s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **4.49** | **22** | | Pn | 22 48 03.2 | +0.4 |
| **GLI** | **Glacier Island** | **4.58** | **13** | | Pn | 22 48 04.5 | +0.5 |
| **GLI** | **Glacier Island** | **4.58** | **13** | IAML | | 22 48 56.4 | |
| | comp=N,41nm,1.1s | | | | | | |
| GLI | | | | IAML | | 22 49 21.7 | |
| | comp=E,33nm,1.1s | | | | | | |
| **SUCK** | **Suckling Hills** | **4.63** | **36** | | Pn | 22 48 05.6 | +1.0 |
| **SUCK** | **Suckling Hills** | **4.63** | **36** | IAML | | 22 49 56.9 | |
| | comp=E,22nm,1.1s | | | | | | |
| **RC01** | **Rabbit Creek A** | **4.67** | **357** | Pn | Pn | 22 48 05.7 | +0.5 |
| RC01 | | | | IAML | | 22 50 48.1 | |
| | comp=N,22nm,1.2s | | | | | | |
| **SPU** | **Mount Spurr** | **

PUK AMP
comp=E,0.3nm,0.4s,baz=336
**BCI Bajram Curri 0.78 354** P Pg 22 51 38.8 +0.2
baz=355
BCI S Sn 22 51 50.6 -0.3
baz=355
BCI AMP
comp=N,0.1nm,0.3s,baz=355
**PDG Podgorica 1.08 321** *e*Pg Pg 22 51 44.4 +0.1
PDG *e*Sg Sg 22 52 01.9 +3.4
**FNA Florina 1.22 131** P Pg 22 51 47.5 +0.7
baz=130
FNA S Sg 22 52 04.2 +1.5
baz=130
**SJES Sjenica 1.68 355** *e*Pg Pb 22 51 54.3 +0.5
SJES *e*Sg Sg 22 52 18.1 +0.6
**SELS Selova 1.78 23** *e*Pg Pb 22 51 55.2 -0.2
SELS *e*Sg Sb 22 52 18.3 +0.9

*NEIC* ***12*** *22:56:14.6±0.8, 69°.48N±0°.06×144°.14W±0°.08, h10km±2km, Error ellipse: s-maj=9.8km s-min=4.6km az=9.0*
**AEIC 12 22:56:14.2±0.5, 69°.46N±0°.06×144°.18W±0°.08, h4km±6km, ML3.0, ML3.1**/84(NEIC), **Error ellipse: s-maj=8.9km**
**s-min=4.2km az=185.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **44** | Pg | Pg | 22 56 18.4 | -0.3 |
| C27K | | | | Sg | Sg | 22 56 21.8 | 0.0 |
| **C26K** | **Camden Bay** | **0.53** | **331** | | Pg | 22 56 24.2 | -0.1 |
| C26K | | | | | Sg | 22 56 31.8 | +0.6 |
| **D25K** | **Kavik River** | **0.79** | **261** | | Pg | 22 56 28.8 | -0.5 |
| D25K | | | | | Sg | 22 56 39.9 | +0.4 |
| **D27M** | **Malcolm River** | **1.16** | **99** | | Pg | 22 56 35.9 | -0.4 |
| D27M | | | | | Sb | 22 56 52.7 | +0.6 |
| **E27K** | **Coleen River** | **1.58** | **142** | | Pn | 22 56 42.5 | -0.5 |
| **C24K** | **Franklin Bluff** | **1.61** | **282** | | Pn | 22 56 43.3 | 0.0 |
| C24K | | | | | Sb | 22 57 05.4 | +0.4 |
| **C24K** | **Franklin Bluff** | **1.61** | **282** | IAML | | 22 57 06.6 | |
| comp=N,188nm,0.4s | | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **262** | | Pn | 22 56 44.1 | -0.2 |
| D24K | | | | | Sg | 22 57 07.5 | -0.5 |
| **D24K** | **Happy Valley** | **1.68** | **262** | IAML | | 22 57 13.3 | |
| comp=E,186nm,0.6s | | | | | | | |
| D24K | | | | IAML | | 22 57 16.3 | |
| comp=N,174nm,0.8s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.77** | **180** | | Pn | 22 56 45.5 | -0.1 |
| F26K | | | | | Sb | 22 57 09.8 | +0.1 |
| **F26K** | **Sheenjek River** | **1.77** | **180** | IAML | | 22 57 14.7 | |
| comp=E,135nm,0.5s | | | | | | | |
| **E28M** | **Babbage River** | **1.88** | **115** | | Pn | 22 56 47.2 | +0.1 |
| **D28M** | **Stokes Point** | **1.93** | **91** | | Pn | 22 56 47.7 | 0.0 |
| **D28M** | **Stokes Point** | **1.93** | **91** | IAML | | 22 57 20.5 | |
| comp=E,132nm,0.7s | | | | | | | |
| D28M | | | | IAML | | 22 57 21.1 | |
| comp=N,115nm,0.8s | | | | | | | |
| **F25K** | **Christian Rive** | **1.95** | **197** | | Pn | 22 56 48.2 | +0.2 |
| **F25K** | **Christian Rive** | **1.95** | **197** | IAML | | 22 58 01.7 | |
| comp=N,114nm,0.8s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.04** | **184** | | Pn | 22 56 49.1 | -0.2 |
| **E24K** | **Your Creek** | **2.10** | **231** | | Pn | 22 56 49.8 | -0.3 |
| **TOLK** | **Toolik Lake Re** | **2.11** | **250** | | Pn | 22 56 50.3 | +0.1 |
| **TOLK** | **Toolik Lake Re** | **2.11** | **250** | IAML | | 22 58 07.0 | |
| comp=E,129nm,0.7s | | | | | | | |
| TOLK | | | | IAML | | 22 58 10.2 | |
| comp=N,88nm,0.6s | | | | | | | |
| **C23K** | **Itkillik River** | **2.28** | **283** | | Pn | 22 56 52.6 | 0.0 |
| **D23K** | **Nanushuk River** | **2.37** | **261** | | Pn | 22 56 53.6 | -0.2 |
| **D23K** | **Nanushuk River** | **2.37** | **261** | IAML | | 22 58 19.2 | |
| comp=E,94nm,0.8s | | | | | | | |
| D23K | | | | IAML | | 22 58 24.4 | |
| comp=N,78nm,1.1s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **217** | | Pn | 22 56 53.9 | -0.1 |
| **E23K** | **Chandalar** | **2.43** | **237** | | Pn | 22 56 54.5 | -0.1 |
| **E23K** | **Chandalar** | **2.43** | **237** | IAML | | 22 58 18.5 | |
| comp=N,71nm,0.6s | | | | | | | |
| E23K | | | | IAML | | 22 58 21.5 | |
| comp=E,69nm,0.6s | | | | | | | |
| **F28M** | **Old Crow** | **2.44** | **137** | Pn | Pn | 22 56 54.1 | -0.6 |
| F28M | | | | IAML | | 22 58 18.9 | |
| comp=N,98nm,0.8s | | | | | | | |
| F28M | | | | IAML | | 22 58 20.2 | |
| comp=E,92nm,0.5s | | | | | | | |
| **E29M** | **Blow River** | **2.51** | **112** | | Pn | 22 56 55.8 | +0.1 |
| **E29M** | **Blow River** | **2.51** | **112** | IAML | | 22 58 20.5 | |
| comp=N,86nm,0.8s | | | | | | | |
| E29M | | | | IAML | | 22 58 25.9 | |
| comp=E,70nm,0.7s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.52** | **176** | | Pn | 22 56 55.8 | -0.1 |
| **G27K** | **Doyon Strip** | **2.82** | **159** | | Pn | 22 56 59.9 | -0.1 |
| **FYU** | **Fort Yukon** | **2.93** | **188** | Pn | Pn | 22 57 01.5 | 0.0 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **206** | | Pn | 22 57 02.8 | -0.1 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **206** | IAML | | 22 58 39.2 | |
| comp=N,64nm,1.3s | | | | | | | |
| G24K | | | | IAML | | 22 58 39.6 | |
| comp=E,64nm,0.8s | | | | | | | |
| **D22K** | **Ayikyak River** | **3.10** | **263** | | Pn | 22 57 03.4 | -0.3 |
| **D22K** | **Ayikyak River** | **3.10** | **263** | IAML | | 22 58 45.3 | |
| comp=E,69nm,1.0s | | | | | | | |
| D22K | | | | IAML | | 22 58 51.7 | |
| comp=N,70nm,0.8s | | | | | | | |
| **COLD** | **Coldfoot** | **3.16** | **228** | | Pn | 22 57 04.5 | -0.1 |
| **H25L** | **Birch Creek** | **3.27** | **192** | | Pn | 22 57 05.9 | -0.1 |
| **B22K** | **Teshekpuk Lake** | **3.31** | **290** | | Pn | 22 57 06.5 | -0.2 |
| **G29M** | **Pine Creek** | **3.44** | **135** | | Pn | 22 57 08.3 | -0.2 |
| **G23K** | **Bananza Creek** | **3.52** | **221** | | Pn | 22 57 09.4 | -0.2 |
| **F30M** | **Barrier River** | **3.60** | **117** | | Pn | 22 57 10.4 | -0.3 |
| **B21K** | **Ikpikpuk River** | **3.67** | **277** | | Pn | 22 57 11.8 | +0.2 |
| **G30M** | **tAoh Zraii Nji** | **3.87** | **126** | Pn | Pn | 22 57 14.3 | -0.1 |
| G30M | | | | IAML | | 22 59 14.8 | |
| comp=N,30nm,1.1s | | | | | | | |
| G30M | | | | IAML | | 22 59 23.9 | |
| comp=E,24nm,1.4s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.90** | **203** | | Pn | 22 57 14.6 | -0.2 |
| **H24K** | **Noodor Dome** | **3.90** | **203** | IAML | | 22 59 07.0 | |
| comp=N,23nm,0.9s | | | | | | | |
| H24K | | | | IAML | | 22 59 10.4 | |
| comp=E,34nm,1.6s | | | | | | | |
| **H29M** | **Whitestone** | **3.93** | **143** | | Pn | 22 57 15.3 | +0.2 |
| **H29M** | **Whitestone** | **3.93** | **143** | IAML | | 22 58 51.6 | |
| comp=E,34nm,0.8s | | | | | | | |
| H29M | | | | IAML | | 22 59 13.1 | |
| comp=N,25nm,0.6s | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.98** | **298** | | Pn | 22 57 15.5 | -0.4 |
| **PRP** | **Porcupine Dome** | **3.99** | **188** | | Pn | 22 57 16.7 | +0.5 |
| PRP | | | | IAML | | 22 59 12.1 | |
| comp=E,26nm,0.9s | | | | | | | |
| **I27K** | **Kandik River** | **3.99** | **165** | | Pn | 22 57 16.4 | +0.3 |
| **F21K** | **Alatna River** | **4.11** | **241** | Pn | Pn | 22 57 17.7 | 0.0 |
| F21K | | | | IAML | | 22 59 16.4 | |
| comp=N,22nm,0.7s | | | | | | | |
| F21K | | | | IAML | | 22 59 19.3 | |
| comp=E,22nm,0.8s | | | | | | | |
| **H23K** | **Yukon River** | **4.18** | **212** | | Pn | 22 57 18.8 | +0.1 |
| **H23K** | **Yukon River** | **4.18** | **212** | IAML | | 22 59 13.6 | |
| comp=E,20nm,1.6s | | | | | | | |
| H23K | | | | IAML | | 22 59 26.8 | |
| comp=N,23nm,1.5s | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.19** | **174** | | Pn | 22 57 18.6 | -0.1 |
| **I28M** | **Miner Creek** | **4.34** | **156** | | Pn | 22 57 21.6 | +0.6 |
| **H22K** | **Ishtalitna Cre** | **4.51** | **221** | | Pn | 22 57 23.2 | 0.0 |
| **D20K** | **Etivluk River** | **4.52** | **266** | | Pn | 22 57 23.7 | +0.4 |
| **G21K** | **Allakaket** | **4.59** | **234** | Pn | Pn | 22 57 24.0 | -0.2 |
| **MDM** | **Murphy Dome** | **4.79** | **201** | | Pn | 22 57 27.3 | +0.4 |
| **J26L** | **Joseph Creek** | **4.98** | **177** | | Pn | 22 57 29.5 | -0.3 |
| **IMAR** | **Indian Mountai** | **5.04** | **231** | Pn | Pn | 22 57 31.0 | +0.5 |
| **H21K** | **Melozitna Rive** | **5.05** | **225** | | Pn | 22 57 31.3 | +0.8 |
| **D19K** | **Kuna River** | **5.11** | **266** | Pn | Pn | 22 57 31.0 | -0.4 |
| **I30M** | **Mount Dempster** | **5.21** | **141** | | Pn | 22 57 33.2 | +0.3 |
| **E19K** | **Redstone River** | **5.21** | **254** | | Pn | 22 57 33.0 | +0.2 |
| **E19K** | **Redstone River** | **5.21** | **254** | IAML | | 23 00 53.1 | |
| comp=E,13nm,4.3s | | | | | | | |
| **SCRK** | **Sand Creek** | **5.51** | **179** | | Pn | 22 57 35.8 | -1.1 |
| **C18K** | **Utukok River** | **6.15** | **270** | | Pn | 22 57 45.5 | -0.2 |
| **E18K** | **Tukpahlearik C** | **6.38** | **259** | | Pn | 22 57 49.3 | +0.5 |
| **F18K** | **Selawik** | **6.47** | **251** | | Pn | 22 57 50.5 | +0.5 |

*NEIC* ***12*** *22:56:56.8±1.1, 69°.53N±0°.07×143°.98W±0°.04, h10km±2km, Error ellipse: s-maj=12.6km s-min=3.1km az=2.0*
**AEIC 12 22:56:56.5±0.9, 69°.44N±0°.07×144°.12W±0°.06, h3km±7km, ML3.2, ML3.2**/58(NEIC), **Error ellipse: s-maj=10.3km**
**s-min=2.8km az=188.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **37** | Pg | Pg | 22 57 00.8 | -0.2 |
| C27K | | | | Sg | Sg | 22 57 04.0 | -0.1 |
| **C26K** | **Camden Bay** | **0.55** | **330** | | Pg | 22 57 07.0 | -0.2 |
| C26K | | | | | Sg | 22 57 14.9 | +0.6 |
| **D25K** | **Kavik River** | **0.81** | **263** | | Pg | 22 57 11.5 | -0.5 |
| **D25K** | **Kavik River** | **0.81** | **263** | | Sg | 22 57 22.3 | -0.2 |
| **D27M** | **Malcolm River** | **1.14** | **99** | | Pg | 22 57 18.0 | -0.2 |
| D27M | | | | | Sb | 22 57 33.6 | -0.3 |
| **E27K** | **Coleen River** | **1.56** | **143** | | Pn | 22 57 25.0 | -0.1 |
| E27K | | | | | Sg | 22 57 46.5 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.63** | **282** | | Pn | 22 57 26.2 | +0.1 |
| C24K | | | | | Sg | 22 57 48.6 | -0.3 |
| **C24K** | **Franklin Bluff** | **1.63** | **282** | IAML | | 22 57 50.7 | |
| comp=E,360nm,0.9s | | | | | | | |
| **D24K** | **Happy Valley** | **1.70** | **262** | | Pn | 22 57 27.2 | +0.2 |
| D24K | | | | | Sg | 22 57 50.5 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.12** | **250** | | Sn | 22 58 00.2 | +0.5 |
| **D23K** | **Nanushuk River** | **2.39** | **262** | | Pn | 22 57 36.5 | -0.1 |
| **FYU** | **Fort Yukon** | **2.92** | **189** | | Pn | 22 57 43.4 | -0.3 |
| **B22K** | **Teshekpuk Lake** | **3.34** | **290** | | Pn | 22 57 49.6 | +0.1 |
| **B22K** | **Teshekpuk Lake** | **3.34** | **290** | IAML | | 22 58 47.5 | |
| comp=E,94nm,0.9s | | | | | | | |
| B22K | | | | IAML | | 22 58 51.5 | |
| comp=N,122nm,0.8s | | | | | | | |
| **G29M** | **Pine Creek** | **3.41** | **135** | | Pn | 22 57 50.5 | 0.0 |
| **G29M** | **Pine Creek** | **3.41** | **135** | IAML | | 22 58 56.0 | |
| comp=N,60nm,0.6s | | | | | | | |
| G29M | | | | IAML | | 22 59 05.7 | |
| comp=E,87nm,0.8s | | | | | | | |
| **G23K** | **Bananza Creek** | **3.52** | **222** | Pn | Pn | 22 57 52.2 | +0.1 |
| G23K | | | | IAML | | 22 58 56.3 | |
| comp=E,34nm,1.4s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.69** | **278** | | Pn | 22 57 54.5 | +0.1 |
| **B21K** | **Ikpikpuk River** | **3.69** | **278** | IAML | | 22 59 10.4 | |
| comp=N,59nm,0.9s | | | | | | | |
| B21K | | | | IAML | | 22 59 20.7 | |
| comp=E,53nm,1.4s | | | | | | | |
| **E21K** | **Killik River** | **3.70** | **259** | Pn | Pn | 22 57 54.2 | -0.2 |
| E21K | | | | IAML | | 22 59 04.7 | |
| comp=N,48nm,0.8s | | | | | | | |
| E21K | | | | IAML | | 22 59 05.8 | |
| comp=E,42nm,1.2s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.90** | **203** | Pn | Pn | 22 57 59.0 | +1.8 |
| **H23K** | **Yukon River** | **4.18** | **212** | Pn | Pn | 22 58 01.3 | +0.2 |
| H23K | | | | IAML | | 23 00 11.2 | |
| comp=E,20nm,2.1s | | | | | | | |
| **I28M** | **Miner Creek** | **4.32** | **156** | Pn | Pn | 22 58 03.0 | -0.1 |
| I28M | | | | IAML | | 22 59 02.8 | |
| comp=N,23nm,0.7s | | | | | | | |
| I28M | | | | IAML | | 22 59 23.1 | |
| comp=E,19nm,1.4s | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.51** | **221** | | Pn | 22 58 05.8 | +0.2 |
| **POKR** | **Poker Plat Res** | **4.53** | **198** | Pn | Pn | 22 58 05.6 | -0.3 |
| POKR | | | | IAML | | 22 59 04.2 | |
| comp=N,23nm,0.7s | | | | | | | |
| POKR | | | | IAML | | 22 59 05.0 | |
| comp=E,28nm,0.9s | | | | | | | |
| **B20K** | **Meade River** | **4.57** | **283** | | Pn | 22 58 06.7 | +0.2 |
| **G21K** | **Allakaket** | **4.59** | **235** | Pn | Pn | 22 58 07.3 | +0.5 |
| G21K | | | | IAML | | 22 59 35.8 | |
| comp=N,25nm,1.8s | | | | | | | |
| G21K | | | | IAML | | 22 59 42.4 | |
| comp=E,25nm,1.9s | | | | | | | |
| **A21K** | **Barrow** | **4.62** | **300** | | Pn | 22 58 07.2 | +0.2 |
| **MDM** | **Murphy Dome** | **4.78** | **202** | | Pn | 22 58 10.3 | +1.0 |
| **MDM** | **Murphy Dome** | **4.78** | **202** | IAML | | 22 59 32.4 | |
| comp=N,17nm,2.7s | | | | | | | |
| MDM | | | | IAML | | 23 00 52.4 | |
| comp=E,14nm,4.6s | | | | | | | |
| **EGAK** | **Eagle** | **4.83** | **165** | Pn | Pn | 22 58 10.2 | +0.2 |
| EGAK | | | | IAML | | 22 59 44.1 | |
| comp=E,18nm,1.1s | | | | | | | |
| EGAK | | | | IAML | | 23 00 12.8 | |
| comp=E,20nm,4.3s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.94** | **246** | Pn | Pn | 22 58 11.8 | +0.3 |
| F20K | | | | IAML | | 22 59 46.0 | |
| comp=N,14nm,1.6s | | | | | | | |
| **J26L** | **Joseph Creek** | **4.97** | **177** | Pn | Pn | 22 58 11.5 | -0.5 |
| J26L | | | | IAML | | 22 59 35.7 | |
| comp=E,15nm,2.1s | | | | | | | |
| J26L | | | | IAML | | 23 00 46.4 | |
| comp=N,15nm,4.5s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.03** | **198** | | Pn | 22 58 13.0 | +0.3 |
| **CCB** | **Clear Creek Bu** | **5.03** | **198** | IAML | | 23 00 55.8 | |
| comp=N,13nm,3.9s | | | | | | | |
| CCB | | | | IAML | | 23 00 57.6 | |
| comp=E,14nm,4.2s | | | | | | | |
| **D19K** | **Kuna River** | **5.13** | **266** | | Pn | 22 58 14.8 | +0.7 |
| **D19K** | **Kuna River** | **5.13** | **266** | IAML | | 22 59 14.8 | |
| comp=E,14nm,0.6s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.18** | **141** | | Pn | 22 58 15.2 | +0.2 |
| **I30M** | **Mount Dempster** | **5.18** | **141** | IAML | | 23 01 10.2 | |
| comp=N,18nm,0.4s | | | | | | | |
| **E19K** | **Redstone River** | **5.23** | **254** | | Pn | 22 58 16.0 | +0.5 |
| **E19K** | **Redstone River** | **5.23** | **254** | IAML | | 23 01 39.1 | |
| comp=E,13nm,3.5s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.23** | **199** | | Pn | 22 58 15.9 | +0.5 |
| **WRH** | **Wood River Hil** | **5.23** | **199** | IAML | | 22 59 16.4 | |
| comp=N,17nm,4.1s | | | | | | | |
| **SCRK** | **Sand Creek** | **5.49** | **179** | Pn | Pn | 22 58 20.5 | +1.3 |
| **C19K** | **Lookout Ridge** | **5.50** | **274** | | Pn | 22 58 19.4 | +0.1 |
| **BWN** | **Browne** | **5.70** | **204** | Pn | Pn | 22 58 22.3 | +0.4 |
| **DAWY** | **Dawson** | **5.71** | **159** | | Pn | 22 58 24.1 | +1.9 |
| **F19K** | **Shaleruckik Mo** | **5.73** | **249** | Pn | Pn | 22 58 22.7 | +0.4 |
| **J30M** | **Hart River** | **5.76** | **144** | | Pn | 22 58 24.0 | +1.2 |
| **G19K** | **Purcell Mounta** | **5.92** | **242** | | Pn | 22 58 25.0 | 0.0 |
| **C18K** | **Utukok River** | **6.17** | **271** | | Pn | 22 58 28.7 | +0.2 |
| **K29M** | **Barlow Dome** | **6.20** | **152** | Pn | Pn | 22 58 31.1 | +2.1 |
| **E18K** | **Tukpahlearik C** | **6.40** | **259** | | Pn | 22 58 32.0 | +0.4 |
| **F18K** | **Selawik** | **6.48** | **251** | | Pn | 22 58 33.2 | +0.6 |
| **J20K** | **Nowinta River** | **6.60** | **222** | | Pn | 22 58 34.5 | +0.3 |
| **C17K** | **DeLong Mountai** | **6.92** | **271** | | Pn | 22 58 38.5 | -0.2 |
| **D17K** | **Noatak River** | **7.16** | **265** | | Pn | 22 58 41.4 | -0.5 |
| **K20K** | **Telida** | **7.29** | **218** | | Pn | 22 58 43.8 | +0.1 |

*IDC* ***12*** *23:02:26.1±1.2, 69°.70N×144°.61W, h0km, mb3.7/5, mbtmp3.7/7, ML3.4/2, Error ellipse: s-maj=31.1km s-min=21.6km az=89.0*
*AEIC* ***12*** *23:02:26.4±1.4, 69°.47N±0°.06×144°.39W±0°.07, h4km±6km, ML3.5, ML3.5/78(NEIC), Error ellipse: s-maj=9.1km s-min=2.9km az=196.0*
*NEIC* ***12*** *23:02:27.4±1.0, 69°.57N±0°.06×144°.37W±0°.09, h10km±2km, Error ellipse: s-maj=9.4km s-min=4.9km az=1.0*
**ISC 12 23:02:26.3±1.1, 69°.54N±0°.04×144°.41W±0°.03, h8km±8km, n67, σ1$09/74, mb4.0/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **70** | Pg | **Pg** | **23 02 31.9** | **+0.4** |
| C27K | | | | | **Sg** | **23 02 36.0** | **+1.0** |
| **C26K** | **Camden Bay** | **0.42** | **336** | | **Pb** | **23 02 35.4** | **-0.6** |
| C26K | | | | IAML | | 23 02 43.7 | |
| comp=N,3μm,0.4s | | | | | | | |
| **D25K** | **Kavik River** | **0.73** | **254** | | **Pg** | **23 02 39.6** | **-0.7** |
| D25K | | | | | **Sg** | **23 02 49.8** | **+0.1** |
| **D27M** | **Malcolm River** | **1.25** | **102** | Pg | **Pg** | **23 02 49.5** | **-0.9** |
| D27M | | | | IAML | | 23 03 12.0 | |
| comp=N,790nm,0.6s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.51** | **279** | | **Pn** | **23 02 54.6** | **+0.9** |
| C24K | | | | | **Sg** | **23 03 15.4** | **+0.6** |
| **D24K** | **Happy Valley** | **1.61** | **258** | | **Pn** | **23 02 56.0** | **+0.9** |
| D24K | | | | Sg | **Sg** | **23 03 19.3** | **+1.2** |
| **E27K** | **Coleen River** | **1.70** | **142** | | **Pn** | **23 02 57.2** | **+0.9** |
| E27K | | | | Sg | **Sb** | **23 03 20.5** | **+1.2** |
| **F26K** | **Sheenjek River** | **1.85** | **177** | | **Pn** | **23 02 58.4** | **0.0** |
| F26K | | | | Sg | **Sn** | **23 03 24.0** | **+2.0** |
| F26K | | | | IAML | | 23 03 30.0 | |
| comp=N,364nm,0.5s | | | | | | | |
| **E28M** | **Babbage River** | **1.99** | **116** | | **Pn** | **23 03 01.8** | **+1.5** |
| **F25K** | **Christian Rive** | **2.00** | **194** | | **Pn** | **23 03 02.1** | **+1.6** |
| F25K | | | | IAML | | 23 03 34.0 | |
| comp=E,416nm,1.4s | | | | | | | |
| F25K | | | | IAML | | 23 03 35.0 | |
| comp=N,395nm,0.7s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **247** | | **Pn** | **23 03 01.8** | **+0.6** |
| TOLK | | | | IAML | | 23 03 34.3 | |
| comp=E,431nm,0.6s | | | | | | | |
| TOLK | | | | IAML | | 23 03 38.3 | |
| comp=N,341nm,0.7s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E24K** | **Your Creek** | **2.09** | **227** | | **Pn** | **23 03 03.0** | **+1.4** |
| **C23K** | **Itkillik River** | **2.19** | **281** | | **Pn** | **23 03 04.2** | **+1.3** |
| **D23K** | **Nanushuk River** | **2.31** | **259** | | **Pn** | **23 03 06.1** | **+1.5** |
| D23K | | | | IAML | | 23 03 52.5 | |
| comp=N,200nm,1.0s | | | | | | | |
| D23K | | | | IAML | | 23 03 55.1 | |
| comp=E,223nm,0.9s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.40** | **214** | | **Pn** | **23 03 06.9** | **+1.0** |
| F24K | | | | IAML | | 23 03 46.8 | |
| comp=N,232nm,0.6s | | | | | | | |
| **F28M** | **Old Crow** | **2.55** | **137** | | **Pn** | **23 03 09.2** | **+1.2** |
| F28M | | | | IAML | | 23 03 50.6 | |
| comp=E,212nm,0.9s | | | | | | | |
| F28M | | | | IAML | | 23 03 53.9 | |
| comp=N,202nm,0.6s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.61** | **175** | | **Pn** | **23 03 08.4** | **-0.4** |
| **E29M** | **Blow River** | **2.62** | **113** | | **Pn** | **23 03 10.2** | **+1.3** |
| E29M | | | | IAML | | 23 03 52.8 | |
| comp=N,252nm,0.8s | | | | | | | |
| E29M | | | | IAML | | 23 03 54.8 | |
| comp=E,205nm,0.5s | | | | | | | |
| **G25K** | **Bearman Lake** | **2.85** | **194** | | **Pn** | **23 03 11.7** | **-0.4** |
| **G27K** | **Doyon Strip** | **2.93** | **158** | | **Pn** | **23 03 14.5** | **+1.3** |
| **FYU** | **Fort Yukon** | **3.00** | **186** | | **Pn** | **23 03 15.6** | **+1.5** |
| FYU | | | | IAML | | 23 04 09.4 | |
| comp=N,216nm,1.3s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.07** | **203** | | **Pn** | **23 03 15.7** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **3.21** | **289** | | **Pn** | **23 03 18.1** | **+1.1** |
| **B21K** | **Ikpikpuk River** | **3.58** | **276** | | **Pn** | **23 03 23.5** | **+1.4** |
| **F30M** | **Barrier River** | **3.71** | **117** | | **Pn** | **23 03 24.4** | **+0.6** |
| **A22K** | **Sinclair Lake** | **3.87** | **297** | | **Pn** | **23 03 27.2** | **+1.1** |
| **H24K** | **Noodor Dome** | **3.94** | **201** | | **Pn** | **23 03 27.8** | **+0.6** |
| H24K | | | | IAML | | 23 04 39.3 | |
| comp=N,57nm,1.1s | | | | | | | |
| H24K | | | | IAML | | 23 04 40.1 | |
| comp=E,68nm,1.1s | | | | | | | |
| **H29M** | **Whitestone** | **4.04** | **143** | | **Pn** | **23 03 30.4** | **+1.9** |
| H29M | | | | IAML | | 23 04 43.4 | |
| comp=E,67nm,1.1s | | | | | | | |
| H29M | | | | IAML | | 23 04 44.4 | |
| comp=N,85nm,1.0s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **187** | Pn | **Pn** | **23 03 30.5** | **+1.6** |
| PRP | | | | IAML | | 23 04 41.9 | |
| comp=N,61nm,1.0s | | | | | | | |
| PRP | | | | IAML | | 23 04 51.8 | |
| comp=E,50nm,0.9s | | | | | | | |
| **F21K** | **Alatna River** | **4.08** | **240** | Pn | **Pn** | **23 03 30.1** | **+1.1** |
| F21K | | | | IAML | | 23 04 43.2 | |
| comp=E,75nm,1.1s | | | | | | | |
| F21K | | | | IAML | | 23 04 43.9 | |
| comp=N,53nm,0.7s | | | | | | | |
| **H23K** | **Yukon River** | **4.21** | **210** | | **Pn** | **23 03 31.7** | **+0.9** |
| H23K | | | | IAML | | 23 04 45.1 | |
| comp=E,64nm,1.3s | | | | | | | |
| H23K | | | | IAML | | 23 04 49.2 | |
| comp=N,62nm,1.4s | | | | | | | |
| **E20K** | **Nigu River** | **4.45** | **259** | | **Pn** | **23 03 35.2** | **+1.1** |
| **B20K** | **Meade River** | **4.45** | **282** | | **Pn** | **23 03 35.2** | **+1.2** |
| **A21K** | **Barrow** | **4.48** | **299** | | **Pn** | **23 03 35.4** | **+1.1** |
| **G21K** | **Allakaket** | **4.57** | **233** | | **Pn** | **23 03 36.0** | **+0.4** |
| G21K | | | | IAML | | 23 05 02.1 | |
| comp=E,54nm,1.4s | | | | | | | |
| G21K | | | | IAML | | 23 05 07.8 | |
| comp=N,51nm,1.1s | | | | | | | |
| **G31M** | **Satah River** | **4.60** | **120** | | **Pn** | **23 03 37.1** | **+1.1** |
| **I23K** | **Minto, Yukon-K** | **4.80** | **206** | | **Pn** | **23 03 40.0** | **+1.1** |
| I23K | | | | IAML | | 23 05 08.7 | |
| comp=N,47nm,1.0s | | | | | | | |
| I23K | | | | IAML | | 23 05 11.8 | |
| comp=E,35nm,1.2s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **200** | | **Pn** | **23 03 40.3** | **+1.0** |
| MDM | | | | IAML | | 23 05 01.0 | |
| comp=E,33nm,0.7s | | | | | | | |
| MDM | | | | IAML | | 23 05 02.0 | |
| comp=N,31nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **4.88** | **193** | Pn | **Pn** | **23 03 41.3** | **+1.3** |
| comp=N,0.8nm,0.3s,baz=5.5,slow=11,SNR=4.3 | | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 04 37.7** | **+1.1** |
| comp=N,1.7nm,0.3s,baz=9.3,slow=23,SNR=4.4 | | | | | | | |
| ILAR | | | | Lg | Lg | 23 04 56.2 | |
| comp=N,2.6nm,0.3s,baz=4.2,slow=20,SNR=4.5 | | | | | | | |
| comp=N,3.6nm,0.6s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.88** | **245** | | **Pn** | **23 03 41.4** | **+1.4** |
| F20K | | | | IAML | | 23 05 07.3 | |
| comp=E,27nm,1.2s | | | | | | | |
| F20K | | | | IAML | | 23 05 10.1 | |
| comp=N,32nm,1.2s | | | | | | | |
| **IMAR** | **Indian Mountai** | **5.03** | **229** | | **Pn** | **23 03 42.3** | **+0.4** |
| **D19K** | **Kuna River** | **5.04** | **264** | | **Pn** | **23 03 43.2** | **+1.1** |
| D19K | | | | IAML | | 23 04 25.8 | |
| comp=N,0.1nm,0.5s | | | | | | | |
| D19K | | | | IAML | | 23 04 42.8 | |
| comp=E,36nm,0.4s | | | | | | | |
| **H21K** | **Melozitna Rive** | **5.04** | **223** | | **Pn** | **23 03 43.3** | **+1.1** |
| H21K | | | | IAML | | 23 05 12.4 | |
| comp=N,30nm,1.4s | | | | | | | |
| H21K | | | | IAML | | 23 05 13.3 | |
| comp=E,37nm,1.2s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **197** | | **Pn** | **23 03 44.0** | **+1.2** |
| CCB | | | | IAML | | 23 05 15.2 | |
| comp=E,22nm,1.3s | | | | | | | |
| **MLY** | **Manley** | **5.14** | **211** | | **Pn** | **23 03 43.8** | **+0.2** |
| **E19K** | **Redstone River** | **5.16** | **252** | | **Pn** | **23 03 44.6** | **+0.9** |
| E19K | | | | IAML | | 23 04 43.8 | |
| comp=E,36nm,0.5s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **198** | | **Pn** | **23 03 46.7** | **+1.2** |
| WRH | | | | IAML | | 23 04 54.3 | |
| comp=N,22nm,1.1s | | | | | | | |
| WRH | | | | IAML | | 23 05 20.1 | |
| comp=E,25nm,0.6s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.39** | **273** | | **Pn** | **23 03 48.1** | **+1.1** |
| **H20K** | **Anotleneega Mo** | **5.71** | **230** | | **Pn** | **23 03 51.8** | **+0.5** |
| **A19K** | **Wainwright** | **5.79** | **284** | | **Pn** | **23 03 53.3** | **+1.0** |
| **G19K** | **Purcell Mounta** | **5.88** | **241** | | **Pn** | **23 03 53.8** | **+0.2** |
| **DOT** | **Dot Lake** | **5.92** | **178** | | **Pn** | **23 03 54.8** | **+0.6** |
| **BPAW** | **Bear Paw Mtn.** | **6.04** | **209** | | **Pn** | **23 03 56.6** | **+0.7** |
| **C18K** | **Utukok River** | **6.07** | **269** | | **Pn** | **23 03 57.1** | **+0.8** |
| **B18K** | **Kokolik River** | **6.12** | **277** | | **Pn** | **23 03 57.3** | **+0.4** |
| **E18K** | **Tukpahlearik C** | **6.32** | **258** | | **Pn** | **23 04 00.6** | **+1.0** |
| **F18K** | **Selawik** | **6.42** | **250** | | **Pn** | **23 04 01.7** | **+0.7** |
| **A36M** | **Sachs Harbour** | **6.78** | **60** | | **Pn** | **23 04 06.1** | **+0.2** |
| **C17K** | **DeLong Mountai** | **6.82** | **270** | | **Pn** | **23 04 06.2** | **-0.4** |
| **E17K** | **Hotham Inlet** | **6.90** | **257** | | **Pn** | **23 04 07.7** | **+0.1** |
| **D17K** | **Noatak River** | **7.06** | **264** | | **Pn** | **23 04 09.9** | **+0.1** |
| **YKA** | **Yellowknife Ar** |

*UCR 12 23:05:47.6±0.9, 9°.51N×83°.74W, h21km±2km, MW3.5*
*UPA 12 23:05:47.9±0.9, 9°.40N×83°.68W, h0km±3km*

**ISC 12 23:05:46.5±0.9, 9°.47N±0°.03×83°.78W±0°.03, h25km±5km, n60, σ0ˢ66/80, 1C, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BUS1** | **Rivas** | **0.09** | **20** | *eP* | **Pb** | **23 05 51.4** | **-0.3** |
| BUS1 | | | | *eS* | **Sb** | **23 05 54.4** | **-0.7** |
| **ZELE** | **Perez Zeledon** | **0.12** | **146** | *eP* | **Pb** | **23 05 52.1** | **+0.6** |
| ZELE | | | | *eS* | **Sb** | **23 05 55.5** | **+0.7** |
| **LLNJ** | **Naranjito** | **0.32** | **270** | *eP* | **Pn** | **23 05 55.2** | **-0.5** |
| **LCR2** | **La Lucha 2** | **0.35** | **320** | *i* P | **Pb** | **23 05 54.7** | **+0.3** |
| LCR2 | | | | *i* S | **Sb** | **23 06 00.0** | **+0.1** |
| LCR2 | | | | IAML | | 23 06 01.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **0.35** | **320** | *eP* | **Pb** | **23 05 54.8** | **+0.3** |
| **ABE2** | **San Pablo** | **0.36** | **310** | *eP* | **Pb** | **23 05 55.3** | **+0.7** |
| ABE2 | | | | *eS* | **Sb** | **23 06 00.8** | **+0.7** |
| **REPA** | **Paraso** | **0.36** | **345** | *eP* | **Pn** | **23 05 55.9** | **-0.5** |
| REPA | | | | *eS* | **Sb** | **23 06 01.3** | **+1.1** |
| **SVQ2** | **Quepos** | **0.39** | **264** | *eP* | **Pn** | **23 05 55.9** | **-0.7** |
| **OCHAL** | **Ojochal** | **0.40** | **161** | *i* P | **Pn** | **23 05 56.3** | **-0.4** |
| OCHAL | | | | *i* S | **Sn** | **23 06 02.8** | **-0.6** |
| OCHAL | | | | IAML | | 23 06 05.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **VINA** | **Juan Vinas** | **0.42** | **4** | *eP* | **Pb** | **23 05 55.5** | **-0.1** |
| **TURIB** | **Turrialba** | **0.44** | **12** | *eP* | **Pb** | **23 05 55.6** | **-0.3** |
| TURIB | | | | *eS* | **Sb** | **23 06 01.5** | **-0.7** |
| **PCAYA** | **Pacayas** | **0.44** | **356** | *eP* | **Pb** | **23 05 56.3** | **+0.3** |
| **VERB** | **Verbena** | **0.47** | **10** | *eP* | **Pb** | **23 05 56.4** | **-0.1** |
| **TRIO** | **Tres Rios** | **0.48** | **333** | *eP* | **Pb** | **23 05 56.6** | **+0.1** |
| **RAFA** | **San Farael, Vo** | **0.48** | **356** | *i* P | **Pb** | **23 05 56.9** | **+0.2** |
| RAFA | | | | *i* S | **Sb** | **23 06 03.4** | **-0.2** |
| RAFA | | | | IAML | | 23 06 05.4 | |
| | comp=Z,17μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.48** | **356** | *eP* | **Pb** | **23 05 56.9** | **+0.2** |
| **ACOS** | **Acosta** | **0.50** | **310** | *eP* | **Pb** | **23 05 57.2** | **+0.3** |
| **AMPA** | **Desamparados** | **0.51** | **326** | *eP* | **Pn** | **23 05 58.3** | **0.0** |
| AMPA | | | | *eS* | **Sn** | **23 06 05.4** | **-0.9** |
| **VTCV** | **VTCV, Calle Va** | **0.51** | **5** | *eP* | **Pb** | **23 05 57.2** | **+0.1** |
| **VICA** | **Volcano Irazu** | **0.51** | **352** | *eP* | **Pb** | **23 05 57.3** | **+0.1** |
| **RVSTA** | **Santa Teresita** | **0.52** | **14** | *eP* | **Pb** | **23 05 57.1** | **0.0** |
| **VTLA** | **Turrialba Volc** | **0.53** | **0** | *eP* | **Pb** | **23 05 57.6** | **+0.2** |
| **BURE** | **Buenos Aires** | **0.53** | **125** | *eP* | **Pb** | **23 05 57.8** | **+0.5** |
| **CVTQ** | **Turrialba Volc** | **0.53** | **1** | *eP* | **Pb** | **23 05 57.7** | **+0.2** |
| **CVTV** | **Tajo** | **0.53** | **3** | *eP* | **Pb** | **23 05 57.7** | **+0.2** |
| **VTR0** | **Volcan Turrial** | **0.54** | **2** | *eP* | **Pb** | **23 05 58.0** | **+0.3** |
| **CVTR** | **Volcan Turrial** | **0.54** | **2** | *eP* | **Pb** | **23 05 57.9** | **+0.1** |
| **CORON** | **Coronado** | **0.54** | **336** | *eP* | **Pb** | **23 05 58.0** | **+0.3** |
| **DRK0** | **Durika** | **0.56** | **112** | *i* P | **Pb** | **23 05 57.7** | **-0.3** |
| DRK0 | | | | *i* S | **Sb** | **23 06 05.2** | **-0.5** |
| DRK0 | | | | IAML | | 23 06 05.9 | |
| | comp=Z,15μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.56** | **112** | ⇑*i* P | **Pb** | **23 05 57.7** | **-0.3** |
| DRK0 | | | | *eS* | **Sb** | **23 06 05.4** | **-0.3** |
| **DRK0** | **Durika** | **0.56** | **112** | *eP* | **Pb** | **23 05 57.7** | **-0.3** |
| **EDBA** | **Buenos Aires** | **0.58** | **122** | *eP* | **Pb** | **23 05 57.9** | **-0.3** |
| **EDPN** | **Palmar Norte** | **0.60** | **148** | *eP* | **Pn** | **23 05 59.7** | **+0.2** |
| **HDC3** | **Heredia 3** | **0.62** | **328** | *i* P | **Pb** | **23 05 59.3** | **+0.4** |
| HDC3 | | | | *i* S | **Sb** | **23 06 07.5** | **+0.2** |
| HDC3 | | | | IAML | | 23 06 13.7 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **HDC** | **Heredia** | **0.62** | **328** | *eP* | **Pn** | **23 05 59.5** | **-0.4** |
| **BELE** | **Belen** | **0.64** | **321** | *eP* | **Pb** | **23 05 59.5** | **+0.3** |
| **LCO** | **El Coco** | **0.64** | **20** | *eP* | **Pb** | **23 05 59.2** | **+0.1** |
| **RVLA** | **Villa Bonita** | **0.66** | **16** | *eP* | **Pb** | **23 05 59.7** | **+0.2** |
| **EDP2** | **Potrero Grande** | **0.75** | **128** | *eP* | **Pn** | **23 06 01.9** | **+0.3** |
| **TCS1** | **Tacares** | **0.77** | **318** | *i* P | **Pn** | **23 06 01.7** | **-0.2** |
| TCS1 | | | | IAML | | 23 06 15.0 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **TRB2** | **Turrubares** | **0.79** | **303** | *eP* | **Pn** | **23 06 02.0** | **-0.2** |
| **BRIBI** | **Bribri** | **0.93** | **81** | *eP* | **Pn** | **23 06 05.4** | **+1.4** |
| **SOCE** | **Pocosol** | **1.23** | **318** | *i* P | **Pb** | **23 06 09.6** | **+0.5** |
| SOCE | | | | IAML | | 23 06 10.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| SOCE | | | | *i* S | **Sb** | **23 06 26.5** | **+1.9** |
| **SOCE** | **Pocosol** | **1.23** | **318** | *eP* | **Pb** | **23 06 09.8** | **+0.6** |
| **CDITO** | **Canoas** | **1.26** | **135** | *i* P | **Pb** | **23 06 09.6** | **-0.1** |
| CDITO | | | | IAML | | 23 06 38.8 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.27** | **122** | *i* P | **Pb** | **23 06 09.9** | **+0.1** |
| BRU2 | | | | *i* S | **Sb** | **23 06 26.5** | **+0.7** |
| BRU2 | | | | IAML | | 23 06 29.7 | |
| | comp=Z,880nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.27** | **122** | *eP* | **Pb** | **23 06 10.6** | **+0.7** |
| BRU2 | | | | *eS* | **Sb** | **23 06 28.3** | **+2.5** |
| **BRU2** | **Volcan** | **1.27** | **122** | *eP* | **Pb** | **23 06 10.0** | **+0.1** |
| **CNI2** | **El Empalme, Bo** | **1.29** | **92** | *eP* | **Pb** | **23 06 10.1** | **0.0** |
| CNI2 | | | | *eS* | **Sb** | **23 06 26.7** | **+0.5** |
| **VACR** | **Volcan Arenal** | **1.33** | **318** | *eP* | **Pb** | **23 06 11.5** | **+0.6** |
| **MTEVE** | **Monteverde** | **1.33** | **309** | *eP* | **Pb** | **23 06 12.4** | **+1.4** |
| **ARE1** | **Arenal 1** | **1.35** | **317** | *eP* | **Pb** | **23 06 11.7** | **+0.5** |
| **JTS** | **Las Juntas de** | **1.42** | **305** | *eP* | **Pb** | **23 06 12.3** | **0.0** |
| **BCO2** | **Palmira** | **1.44** | **121** | *eP* | **Pb** | **23 06 13.0** | **+0.1** |
| BCO2 | | | | *eS* | **Sb** | **23 06 32.0** | **+1.2** |
| **LNBQ3** | **Los Naranjos,** | **1.48** | **117** | *eP* | **Pb** | **23 06 13.0** | **-0.5** |
| **DVD** | **David** | **1.67** | **128** | *eP* | **Pb** | **23 06 16.4** | **-0.2** |
| DVD | | | | *eS* | **Sb** | **23 06 37.5** | **+0.4** |
| **CHGR2** | **Aguacate** | **1.70** | **108** | *eP* | **Pb** | **23 06 16.3** | **-0.8** |
| CHGR2 | | | | *eS* | **Sb** | **23 06 38.7** | **+0.6** |
| **LOMA3** | **Las Lomas, Chi** | **1.72** | **127** | *eP* | **Pb** | **23 06 16.4** | **-1.0** |
| **INDI** | **Punta indio, G** | **1.75** | **283** | *i* P | **Pn** | **23 06 13.6** | **-1.7** |
| INDI | | | | *i* S | **Sb** | **23 06 40.0** | **+0.5** |
| INDI | | | | IAML | | 23 06 48.1 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **CUI** | **Cuipilapa** | **1.80** | **311** | *eP* | **Pb** | **23 06 19.1** | **+0.1** |

**TRN 12 23:19:01.8, 17°.32N×62°.62W, h64km, MD3.5, Near East of St. Kitts., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBFL** | **Flemmings, Mon** | **0.69** | **145** | *eP* | Pn | 23 19 17.1 | +0.9 |
| MBFL | | | | *eS* | Sn | 23 19 28.7 | +2.0 |
| **ANBD** | **Bethesda, Anti** | **0.86** | **108** | *eP* | Pn | 23 19 20.1 | +1.9 |
| ANBD | | | | *eS* | Sn | 23 19 33.2 | +2.7 |
| **ANWB** | **Willy Bob** | **0.87** | **66** | *eP* | Pn | 23 19 20.0 | +1.5 |
| ANWB | | | | *eS* | Sn | 23 19 32.7 | +2.0 |
| **TBG** | **Guadaloupe-3** | **1.73** | **147** | *eP* | Pn | 23 19 30.9 | +1.1 |
| TBG | | | | *eS* | Sn | 23 19 53.1 | +2.3 |

*IDC 12 23:26:22.2±4.9, 39°.15N×142°.43E, h64km±25km, mb3.5/3, mbtmp3.6/6, ML3.1/3, MS3.9/1, Error ellipse: s-maj=76.1km s-min=20.6km az=112.0*
*JMA 12 23:26:22.4±0.1, 39°.1N±0°.3×142°.1E±0°.6, h45km, MV3.5/40, E OFF IWATE PREF*
*JMA Felt I J1 at E OFF IWATE PREF .*

**ISC 12 23:26:20.4±1.8, 39°.11N±0°.04×142°.22E±0°.09, h30km±12km, n18, σ1ˢ22/27, mb3.6/3, 16D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OFUJ** | **Ofunato** | **0.43** | **267** | ⇓*i* P | **Pn** | **23 26 31.8** | **+1.2** |
| OFUJ | | | | ⇓S | **Sn** | **23 26 38.2** | **+0.7** |
| **MIYJ** | **Miyakonagasawa** | **0.56** | **326** | ⇓*i* P | **Pn** | **23 26 33.6** | **+1.2** |
| MIYJ | | | | ⇓S | **Sn** | **23 26 41.2** | **+0.4** |
| **JKMT** | **Kesennumamotoy** | **0.66** | **243** | ⇓*i* P | **Pn** | **23 26 34.3** | **+0.7** |
| JKMT | | | | ⇓S | **Sb** | **23 26 42.5** | **+0.4** |
| **JMK** | **Ichinoseki** | **0.80** | **259** | ⇓*i* P | **Pn** | **23 26 36.2** | **+0.6** |
| JMK | | | | ⇓S | **Sb** | **23 26 46.1** | **0.0** |
| **JOM** | **Ohasama** | **0.81** | **297** | ⇓*i* P | **Pn** | **23 26 36.6** | **+0.9** |
| JOM | | | | ⇓S | **Sb** | **23 26 46.7** | **+0.2** |
| **JTH** | **Tanohata** | **0.88** | **342** | *i* P | **Pn** | **23 26 38.0** | **+1.3** |
| **JIO** | **Ouri** | **0.94** | **227** | ⇓*i* P | **Pb** | **23 26 38.2** | **0.0** |
| JIO | | | | ⇓S | **Sb** | **23 26 49.1** | **-1.2** |
| **JKZ** | **Kuzumaki** | **1.12** | **322** | ⇓*i* P | **Pb** | **23 26 41.5** | **+0.4** |
| JKZ | | | | ⇓*eS* | **Sb** | **23 26 55.1** | **-0.2** |
| **JRG** | **Rokugo** | **1.27** | **284** | ⇓*i* P | **Pb** | **23 26 42.9** | **-0.8** |
| **JANG** | **Nango** | **1.38** | **337** | *i* P | **Pb** | **23 26 44.9** | **-0.7** |
| JANG | | | | *eS* | **Sb** | **23 27 01.7** | **-1.0** |
| **JOU** | **Okura** | **1.43** | **239** | P | **Pn** | **23 26 45.0** | **+0.7** |
| **JYK** | **Kaneyama** | **1.47** | **263** | ⇓*i* P | **Pn** | **23 26 45.6** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **4.08** | **232** | P | **Pn** | **23 27 24.0** | **+3.2** |
| | 0.2nm,0.3s,baz=40,slow=13,SNR=14<br>1.4nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **5.01** | **3** | P | **Pn** | **23 27 34.5** | **+0.9** |
| | 1.6nm,0.3s,baz=166,slow=27,SNR=7.4 | | | | | | |
| ASAJ | | | | S | **Sn** | **23 28 30.9** | **+0.5** |
| | 2.3nm,0.5s,baz=196,slow=28,SNR=1.3<br>3.0nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.19** | **307** | P | **Pn** | **23 28 32.8** | **+1.9** |
| | 0.2nm,0.3s,baz=132,slow=14,SNR=2.9<br>0.6nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.02** | **311** | P | **P** | **23 33 58.0** | **-2.6** |
| | 0.7nm,0.6s,baz=80,slow=12,SNR=2.1<br>0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.59** | **300** | P | **P** | **23 34 21.2** | **-0.5** |
| | 0.6nm,0.8s,baz=93,slow=8.7,SNR=3.6 | | | | | | |
| MKAR | | | | LR | LR | 23 55 09.4 | |
| | comp=Z,152nm,19.2s,baz=191,slow=40<br>0.6nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.26** | **306** | P | **P** | **23 34 34.2** | **-0.7** |
| | 0.8nm,0.3s,baz=83,slow=8.7,SNR=4.5<br>0.8nm,0.3s | | | | | | |

*IDC 12 23:29:38.3±1.1, 69°.69N×143°.96W, h0km, mb3.6/4, mbtmp3.7/9, ML3.7/4, Error ellipse: s-maj=24.7km s-min=17.7km az=63.0*
*AEIC 12 23:29:38.5±2.0, 69°.42N±0°.04×144°.1W±0°.1, h7km±6km, ML4.3, ML4.3/104(NEIC), Mwr4.1/14(NEIC), Error ellipse: s-maj=6.3km s-min=5.4km az=188.0*
*NEIC 12 23:29:39.5±0.7, 69°.55N±0°.05×144°.12W±0°.06, h9km±7km, Error ellipse: s-maj=8.2km s-min=2.8km az=193.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr0.49; Mθθ-1.65; Mφφ 1.16; Mrθ-0.75; Mθφ-1.15; Mφr-0.53; Fault plane solution: M₀2.08000×10¹⁵ NP1:φˢ26.33000°, δ88.29000°, λ-23.34000°. NP2:φˢ117.07000°, δ66.67000°, λ-178.14000°. Principal axes: T 1.6308, Plg15.0000°, Azm74.0000°; N 0.7081, Plg67.0000°, Azm202.0000°; P -2.3389, Plg18.0000°, Azm339.0000°;*
*NEIC 12 23:29:39.5, 69°.54N×144°.11W, h7km*

**ISC 12 23:29:38.4±0.6, 69°.45N±0°.03×144°.05W±0°.02, h10km, n106, σ1ˢ72/113, mb3.8/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.21** | **34** | Pg | **Pg** | **23 29 43.2** | **+0.3** |
| C27K | | | | | **Sg** | **23 29 46.0** | **+0.1** |
| **C26K** | **Camden Bay** | **0.56** | **328** | | **Pg** | **23 29 49.4** | **+0.1** |
| C26K | | | | | **Sg** | **23 29 56.8** | **+0.2** |
| **D25K** | **Kavik River** | **0.83** | **262** | | **Pg** | **23 29 53.5** | **-1.0** |
| D25K | | | | | **Sg** | **23 30 04.6** | **-0.7** |
| **D27M** | **Malcolm River** | **1.11** | **99** | | **Pb** | **23 29 59.6** | **-0.2** |
| **D27M** | **Malcolm River** | **1.11** | **99** | | **Sn** | **23 30 16.4** | **+0.9** |
| **D27M** | **Malcolm River** | **1.11** | **99** | IAML | | 23 30 21.0 | |
| | comp=E,1μm,0.5s | | | | | | |
| D27M | | | | IAML | | 23 30 21.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.55** | **144** | | **Pg** | **23 30 08.3** | **+0.1** |
| **E27K** | **Coleen River** | **1.55** | **144** | | **Sg** | **23 30 29.0** | **+0.8** |
| **C24K** | **Franklin Bluff** | **1.65** | **282** | | **Pb** | **23 30 08.5** | **-0.4** |
| **D24K** | **Happy Valley** | **1.72** | **262** | | **Pb** | **23 30 09.3** | **-0.8** |
| **F26K** | **Sheenjek River** | **1.77** | **181** | | **Pb** | **23 30 11.6** | **+0.7** |
| **E28M** | **Babbage River** | **1.83** | **115** | | **Pb** | **23 30 12.6** | **+0.6** |
| **D28M** | **Stokes Point** | **1.89** | **91** | | **Pn** | **23 30 11.3** | **+0.7** |
| **F25K** | **Christian Rive** | **1.96** | **198** | | **Pb** | **23 30 14.5** | **+0.4** |
| **BMAR** | **Burnt Mountain** | **2.04** | **186** | | **Pb** | **23 30 15.3** | **-0.3** |
| **E24K** | **Your Creek** | **2.12** | **232** | | **Pb** | **23 30 16.2** | **-0.8** |
| **TOLK** | **Toolik Lake Re** | **2.15** | **250** | | **Pb** | **23 30 17.1** | **-0.3** |
| TOLK | | | | IAML | | 23 31 15.8 | |
| | comp=E,2μm,0.8s | | | | | | |
| TOLK | | | | IAML | | 23 31 24.8 | |
| | comp=N,2μm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.33** | **283** | | **Pn** | **23 30 17.7** | **+1.0** |
| **F24K** | **Squaw Lake** | **2.40** | **218** | | **Pn** | **23 30 19.7** | **+1.9** |
| **F28M** | **Old Crow** | **2.40** | **138** | | **Pb** | **23 30 20.1** | **-1.6** |
| **D23K** | **Nanushuk River** | **2.42** | **261** | | **Pn** | **23 30 19.6** | **+1.7** |
| D23K | | | | IAML | | 23 31 36.3 | |
| | comp=E,1μm,1.0s | | | | | | |
| **E23K** | **Chandalar** | **2.46** | **238** | | **Pn** | **23 30 20.2** | **+1.5** |
| E23K | | | | IAML | | 23 31 35.2 | |
| | comp=E,1μm,0.8s | | | | | | |
| **E29M** | **Blow River** | **2.47** | **113** | Pn | **Pb** | **23 30 20.8** | **-2.0** |
| E29M | | | | IAML | | 23 31 25.9 | |
| | comp=N,1μm,0.9s | | | | | | |
| E29M | | | | IAML | | 23 31 30.7 | |
| | comp=E,1μm,1.2s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.52** | **178** | | **Pn** | **23 30 19.2** | **0.0** |
| G26K | | | | | **Pb** | **23 30 21.4** | **-2.2** |
| **G27K** | **Doyon Strip** | **2.80** | **160** | Pn | **Pn** | **23 30 25.6** | **+2.3** |
| **G25K** | **Bearman Lake** | **2.81** | **197** | | **Pn** | **23 30 23.3** | **0.0** |
| G25K | | | | | **Pb** | **23 30 25.4** | **-3.2** |
| **G24K** | **Hadweenzic Riv** | **3.05** | **207** | | **Pn** | **23 30 28.9** | **+2.3** |
| G24K | | | | IAML | | 23 31 50.0 | |
| | comp=N,973nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **3.14** | **264** | | **Pn** | **23 30 29.1** | **+1.2** |
| D22K | | | | IAML | | 23 31 50.7 | |
| | comp=E,776nm,1.2s | | | | | | |
| D22K | | | | IAML | | 23 31 55.7 | |
| | comp=N,1μm,1.0s | | | | | | |
| **H25L** | **Birch Creek** | **3.27** | **193** | | **Pn** | **23 30 29.6** | **0.0** |
| H25L | | | | | Pb | 23 30 31.7 | -4.8 |
| **B22K** | **Teshekpuk Lake** | **3.36** | **290** | | **Pn** | **23 30 32.1** | **+1.3** |
| **H27K** | **Steamboat Moun** | **3.37** | **162** | | **Pn** | **23 30 31.1** | **0.0** |
| H27K | | | | | **Pb** | **23 30 33.6** | **-4.7** |
| **G29M** | **Pine Creek** | **3.40** | **136** | | **Pn** | **23 30 34.1** | **+2.6** |
| **G23K** | **Bananza Creek** | **3.55** | **222** | | **Pn** | **23 30 34.4** | **+0.9** |
| G23K | | | | IAML | | 23 32 12.3 | |
| | comp=E,657nm,0.9s | | | | | | |
| G23K | | | | IAML | | 23 32 13.0 | |
| | comp=N,472nm,1.1s | | | | | | |
| **F30M** | **Barrier River** | **3.56** | **117** | | **Pn** | **23 30 34.1** | **+0.5** |
| **B21K** | **Ikpikpuk River** | **3.71** | **278** | Pn | **Pn** | **23 30 36.4** | **+0.7** |
| **G30M** | **tAoh Zraii Nji** | **3.83** | **127** | | **Pn** | **23 30 39.8** | **+2.4** |
| G30M | | | | IAML | | 23 32 16.5 | |
| | comp=N,462nm,1.2s | | | | | | |
| G30M | | | | IAML | | 23 32 19.0 | |
| | comp=E,369nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **3.89** | **144** | | **Pn** | **23 30 40.6** | **+2.4** |
| H29M | | | | IAML | | 23 32 14.1 | |
| | comp=N,375nm,1.1s | | | | | | |
| H29M | | | | IAML | | 23 32 14.6 | |
| | comp=E,433nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.91** | **204** | | **Pn** | **23 30 40.3** | **+1.7** |
| H24K | | | | IAML | | 23 31 54.7 | |
| | comp=N,412nm,1.1s | | | | | | |
| H24K | | | | IAML | | 23 32 21.2 | |
| | comp=E,444nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **3.98** | **165** | | **Pn** | **23 30 40.2** | **+0.8** |
| **INK** | **Inuvik** | **3.98** | **102** | Pn | **Pn** | **23 30 40.2** | **+0.8** |
| | comp=E,2.3nm,0.3s,baz=291,slow=8.6,SNR=7.6 | | | | | | |
| INK | | | | Sn | **Sn** | **23 31 26.3** | **+0.3** |
| | comp=E,4.6nm,0.3s,baz=291,slow=11,SNR=10<br>comp=E,5.9nm,0.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.99** | **189** | Pn | **Pn** | **23 30 42.3** | **+2.6** |
| PRP | | | | IAML | | 23 32 13.9 | |
| | comp=E,386nm,1.1s | | | | | | |
| PRP | | | | IAML | | 23 32 17.7 | |
| | comp=N,530nm,1.0s | | | | | | |
| **A22K** | **Sinclair Lake** | **4.02** | **298** | | **Pn** | **23 30 40.8** | **+0.8** |
| **F21K** | **Alatna River** | **4.15** | **242** | | **Pn** | **23 30 43.5** | **+1.7** |
| F21K | | | | IAML | | 23 31 24.7 | |
| | comp=E,315nm,0.9s | | | | | | |
| F21K | | | | IAML | | 23 32 18.5 | |
| | comp=N,313nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.15** | **135** | | **Pn** | **23 30 44.3** | **+2.5** |
| **I26K** | **Coal Creek Min** | **4.18** | **175** | | **Pn** | **23 30 43.6** | **+1.5** |
| I26K | | | | IAML | | 23 32 28.4 | |
| | comp=E,425nm,1.0s | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **213** | | **Pn** | **23 30 43.6** | **+1.1** |
| H23K | | | | IAML | | 23 32 22.4 | |
| | comp=N,439nm,0.7s | | | | | | |
| **I28M** | **Miner Creek** | **4.32** | **157** | | **Pn** | **23 30 47.0** | **+2.7** |
| I28M | | | | IAML | | 23 32 34.0 | |
| | comp=N,278nm,0.9s | | | | | | |
| I28M | | | | IAML | | 23 32 38.2 | |
| | comp=E,264nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.44** | **120** | | **Pn** | **23 30 48.0** | **+2.3** |
| **H22K** | **Ishtalitna Cre** | **4.53** | **221** | | **Pn** | **23 30 47.6** | **+0.6** |
| **POKR** | **Poker Plat Res** | **4.55** | **198** | | **Pn** | **23 30 49.5** | **+2.3** |
| POKR | | | | IAML | | 23 32 34.2 | |
| | comp=N,274nm,1.1s | | | | | | |
| **E20K** | **Nigu River** | **4.55** | **260** | | **Pn** | **23 30 48.0** | **+0.7** |
| **D20K** | **Etivluk River** | **4.56** | **267** | | **Pn** | **23 30 48.1** | **+0.7** |
| **B20K** | **Meade River** | **4.59** | **283** | | **Pn** | **23 30 48.8** | **+1.0** |
| **G21K** | **Allakaket** | **4.62** | **235** | | **Pn** | **23 30 48.3** | **+0.1** |
| G21K | | | | IAML | | 23 32 41.0 | |
| | comp=N,292nm,0.8s | | | | | | |
| **A21K** | **Barrow** | **4.63** | **300** | | **Pn** | **23 30 49.2** | **+0.9** |
| **I23K** | **Minto, Yukon-K** | **4.79** | **208** | | **Pn** | **23 30 52.5** | **+2.1** |
| I23K | | | | IAML | | 23 32 48.6 | |
| | comp=E,288nm,1.0s | | | | | | |
| I23K | | | | IAML | | 23 32 50.5 | |
| | comp=N,218nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79** | **202** | | **Pn** | **23 30 53.0** | **+2.4** |
| MDM | | | | IAML | | 23 32 37.5 | |
| | comp=N,268nm,0.8s | | | | | | |
| MDM | | | | IAML | | 23 32 45.9 | |
| | comp=E,285nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **4.83** | **165** | | **Pn** | **23 30 53.6** | **+2.6** |
| EGAK | | | | IAML | | 23 32 51.0 | |
| | comp=E,184nm,1.1s | | | | | | |
| EGAK | | | | IAML | | 23 33 05.0 | |
| | comp=E,188nm,1.2s | | | | | | |
| **IL31** | | **4.83** | **195** | | **Pn** | **23 30 53.8** | **+2.7** |
| **ILAR** | **Eielson Array** | **4.83** | **195** | Pn | **Pn** | **23 30 54.1** | **+3.0** |
| | comp=E,2.6nm,0.3s,baz=5.9,slow=13,SNR=29 | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 31 48.4** | **+1.4** |
| | comp=E,6.3nm,0.3s,baz=14,slow=23,SNR=3.8<br>comp=E,6.4nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **4.89** | **187** | Pn | **Pn** | **23 30 54.4** | **+2.4** |
| J25K | | | | IAML | | 23 32 48.6 | |
| | comp=N,179nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.96** | **246** | | **Pn** | **23 30 55.5** | **+2.6** |
| **J26L** | **Joseph Creek** | **4.98** | **178** | | **Pn** | **23 30 55.8** | **+2.6** |
| J26L | | | | IAML | | 23 32 23.1 | |
| | comp=N,172nm,0.6s | | | | | | |
| J26L | | | | IAML | | 23 32 46.9 | |
| | comp=E,225nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04** | **199** | | **Pn** | **23 30 56.0** | **+2.0** |
| CCB | | | | IAML | | 23 32 22.8 | |
| | comp=N,203nm,0.8s | | | | | | |
| CCB | | | | IAML | | 23 32 23.2 | |
| | comp=E,187nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.07** | **231** | | **Pn** | **23 30 55.5** | **+1.1** |
| **H21K** | **Melozitna Rive** | **5.07** | **226** | Pn | **Pn** | **23 30 55.6** | **+1.1** |
| H21K | | | | IAML | | 23 32 58.6 | |
| | comp=E,186nm,0.9s | | | | | | |
| H21K | | | | IAML | | 23 33 08.9 | |
| | comp=N,193nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.14** | **213** | | **Pn** | **23 30 57.3** | **+1.9** |
| MLY | | | | IAML | | 23 32 56.4 | |
| | comp=E,135nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **5.15** | **266** | Pn | **Pn** | **23 30 56.9** | **+1.3** |
| D19K | | | | IAML | | 23 33 11.2 | |
| | comp=E,156nm,1.2s | | | | | | |
| **I30M** | **Mount Dempster** | **5.18** | **141** | Pn | **Pn** | **23 30 58.2** | **+2.2** |
| I30M | | | | IAML | | 23 32 51.0 | |
| | comp=E,184nm,1.2s | | | | | | |
| I30M | | | | IAML | | 23 32 58.2 | |
| | comp=N,127nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.25** | **199** | | **Pn** | **23 30 59.0** | **+2.2** |
| WRH | | | | IAML | | 23 32 27.2 | |
| | comp=N,186nm,0.9s | | | | | | |
| WRH | | | | IAML | | 23 32 53.9 | |
| | comp=E,180nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **5.25** | **254** | | **Pn** | **23 30 57.9** | **+1.1** |
| E19K | | | | IAML | | 23 33 08.0 | |
| | comp=N,178nm,0.9s | | | | | | |
| E19K | | | | IAML | | 23 33 11.0 | |
| | comp=E,166nm,1.0s | | | | | | |
| **SCRK** | **Sand Creek** | **5.50** | **180** | | **Pn** | **23 31 03.1** | **+2.7** |
| **K27K** | **Chicken** | **5.50** | **171** | | **Pn** | **23 31 03.0** | **+2.6** |
| **C19K** | **Lookout Ridge** | **5.53** | **274** | Pn | **Pn** | **23 31 01.6** | **+1.0** |
| **DAWY** | **Dawson** | **5.71** | **159** | | **Pn** | **23 31 05.7** | **+2.4** |
| **H20K** | **Anotleneega Mo** | **5.75** | **231** | | **Pn** | **23 31 04.5** | **+0.8** |
| **J30M** | **Hart River** | **5.75** | **145** | | **Pn** | **23 31 06.5** | **+2.7** |
| **DOT** | **Dot Lake** | **5.83** | **180** | | **Pn** | **23 31 07.0** | **+2.1** |
| **A19K** | **Wainwright** | **5.93** | **285** | | **Pn** | **23 31 07.0** | **+0.9** |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **210** | | **Pn** | **23 31 09.9** | **+2.3** |
| **C18K** | **Utukok River** | **6.20** | **271** | Pn | **Pn** | **23 31 10.4** | **+0.5** |
| **K29M** | **Barlow Dome** | **6.20** | **152** | | **Pn** | **23 31 12.9** | **+2.9** |
| **B18K** | **Kokolik River** | **6.26** | **278** | | **Pn** | **23 31 11.0** | **+0.3** |
| **E18K** | **Tukpahlearik C** | **6.43** | **259** | Pn | **Pn** | **23 31 14.1** | **+1.2** |
| **BCAR** | **Beaver Creek A** | **6.48** | **171** | | **Pn** | **23 31 16.4** | **+2.6** |
| **L27K** | **Beaver Creek,** | **6.48** | **171** | | **Pn** | **23 31 16.2** | **+2.5** |
| **F18K** | **Selawik** | **6.51** | **251** | | **Pn** | **23 31 15.9** | **+1.9** |
| **J20K** | **Nowinta River** | **6.62** | **222** | | **Pn** | **23 31 17.6** | **+1.9** |
| **A36M** | **Sachs Harbour** | **6.71** | **59** | Pn | **Pn** | **23 31 17.2** | **+0.4** |
| **L29M** | **L29M** | **6.80** | **157** | | **Pn** | **23 31 20.8** | **+2.6** |
| **WAT1** | **Susitna Watana** | **6.89** | **197** | | **Pn** | **23 31 21.4** | **+2.0** |
| **WAT7** | **Susitna Watana** | **6.92** | **199** | | **Pn** | **23 31 21.7** | **+1.8** |
| **RDOG** | **Red Dog Mine** | **6.99** | **267** | | **Pn** | **23 31 21.4** | **+0.7** |
| **E17K** | **Hotham Inlet** | **7.00** | **259**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F26K | | | | IAML | | 23 31 05.3 | |
| | comp=N,2µm,0.8s | | | | | | |
| F26K | | | | IAML | | 23 31 05.7 | |
| | comp=E,4µm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.87 115** | | | **Pn** | **23 30 35.9** | **-2.1** |
| **E28M** | **Babbage River** | **1.87 115** | | | **Sb** | **23 31 03.7** | **+0.1** |
| **D28M** | **Stokes Point** | **1.93 91** | | | **Pn** | **23 30 36.4** | **-2.4** |
| **D28M** | **Stokes Point** | **1.93 91** | | IAML | | 23 31 10.5 | |
| | comp=N,3µm,1.1s | | | | | | |
| D28M | | | | IAML | | 23 31 12.6 | |
| | comp=E,4µm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **1.94 197** | | | **Pn** | **23 30 37.1** | **-2.0** |
| **F25K** | **Christian Rive** | **1.94 197** | | | **Sg** | **23 31 06.0** | **-2.4** |
| F25K | | | | IAML | | 23 31 11.4 | |
| | comp=N,3µm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.09 231** | | | **Pn** | **23 30 39.2** | **-2.0** |
| **TOLK** | **Toolik Lake Re** | **2.11 250** | | | **Pn** | **23 30 39.5** | **-1.8** |
| **C23K** | **Itkillik River** | **2.29 283** | | | **Pn** | **23 30 41.9** | **-1.9** |
| **F24K** | **Squaw Lake** | **2.38 217** | | | **Pn** | **23 30 43.0** | **-2.0** |
| **F28M** | **Old Crow** | **2.43 137** | | | **Pn** | **23 30 43.5** | **-2.2** |
| **E29M** | **Blow River** | **2.50 112** | | | **Pn** | **23 30 44.5** | **-2.2** |
| **G26K** | **Porcupine Rive** | **2.52 177** | | | **Pn** | **23 30 45.0** | **-1.9** |
| **G25K** | **Bearman Lake** | **2.79 196** | | | **Pn** | **23 30 48.6** | **-2.0** |
| **G27K** | **Doyon Strip** | **2.81 159** | | | **Pn** | **23 30 49.0** | **-2.1** |
| **G24K** | **Hadweenzic Riv** | **3.03 206** | | | **Pn** | **23 30 52.0** | **-2.0** |
| **D22K** | **Ayikyak River** | **3.10 263** | | | **Pn** | **23 30 53.2** | **-1.7** |
| **COLD** | **Coldfoot** | **3.16 228** | | | **Pn** | **23 30 53.9** | **-1.8** |
| **H25L** | **Birch Creek** | **3.26 192** | | | **Pn** | **23 30 55.1** | **-2.0** |
| **G29M** | **Pine Creek** | **3.43 135** | | | **Pn** | **23 30 57.6** | **-1.8** |
| **B21K** | **Ikpikpuk River** | **3.67 278** | | | **Pn** | **23 31 01.0** | **-1.8** |
| **E21K** | **Killik River** | **3.68 259** | | | **Pn** | **23 31 01.0** | **-1.9** |
| **E21K** | **Killik River** | **3.68 259** | | IAML | | 23 32 05.9 | |
| | comp=E,424nm,0.7s | | | | | | |
| E21K | | | | IAML | | 23 32 16.8 | |
| | comp=N,512nm,0.9s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.98 188** | | | **Pn** | **23 31 05.0** | **-2.3** |
| **A22K** | **Sinclair Lake** | **3.99 298** | | | **Pn** | **23 31 05.1** | **-2.0** |
| **INK** | **Inuvik** | **4.02 102** | Pn | | **Pn** | **23 31 09.9** | **+2.4** |
| | comp=N,5.3nm,0.3s,baz=150,slow=3.1,SNR=7.8 | | | | | | |
| INK | | | Sn | | **Sn** | **23 31 58.8** | **+4.2** |
| | comp=N,11nm,0.3s,baz=275,slow=13,SNR=7.4 | | | | | | |
| | comp=N,20nm,0.4s | | | | | | |
| **F21K** | **Alatna River** | **4.11 241** | | | **Pn** | **23 31 06.8** | **-2.1** |
| **F21K** | **Alatna River** | **4.11 241** | | IAML | | 23 32 24.6 | |
| | comp=N,369nm,1.3s | | | | | | |
| F21K | | | | IAML | | 23 32 31.3 | |
| | comp=E,299nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.18 134** | | | **Pn** | **23 31 07.0** | **-2.7** |
| **EPYK** | **Eagle Plains** | **4.18 134** | | IAML | | 23 32 21.4 | |
| | comp=N,562nm,1.2s | | | | | | |
| **B20K** | **Meade River** | **4.55 283** | | | **Pn** | **23 31 13.7** | **-1.1** |
| **A21K** | **Barrow** | **4.60 300** | | | **Pn** | **23 31 14.2** | **-1.2** |
| **ILAR** | **Eielson Array** | **4.82 194** | Pn | | **Pn** | **23 31 21.0** | **+2.5** |
| | comp=N,5.8nm,0.3s,baz=6.0,slow=13,SNR=11 | | | | | | |
| ILAR | | | Sn | | **Sn** | **23 32 16.7** | **+2.4** |
| | comp=N,12nm,0.3s,baz=8.6,slow=27,SNR=9.4 | | | | | | |
| ILAR | | | Lg | | Lg | 23 32 33.9 | |
| | comp=N,13nm,0.3s,baz=22,slow=16,SNR=4.7 | | | | | | |
| | comp=N,20nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **4.84 165** | | | **Pn** | **23 31 17.4** | **-1.3** |
| **EGAK** | **Eagle** | **4.84 165** | | IAML | | 23 32 56.6 | |
| | comp=N,214nm,1.4s | | | | | | |
| EGAK | | | | IAML | | 23 32 58.5 | |
| | comp=N,238nm,1.3s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.49 274** | | | **Pn** | **23 31 27.7** | **0.0** |
| **F19K** | **Shaleruckik Mo** | **5.72 249** | | | **Pn** | **23 31 30.3** | **-0.5** |
| **A19K** | **Wainwright** | **5.89 285** | | | **Pn** | **23 31 32.6** | **-0.6** |
| **C18K** | **Utukok River** | **6.16 271** | | | **Pn** | **23 31 36.6** | **-0.3** |
| **B18K** | **Kokolik River** | **6.22 277** | | | **Pn** | **23 31 37.1** | **-0.6** |
| **E18K** | **Tukpahlearik C** | **6.39 259** | | | **Pn** | **23 31 40.1** | **+0.1** |
| **F18K** | **Selawik** | **6.47 251** | | | **Pn** | **23 31 41.0** | **-0.1** |
| **G18K** | **Tagagawik** | **6.56 244** | | | **Pn** | **23 31 40.0** | **-2.5** |
| **A36M** | **Sachs Harbour** | **6.75 59** | | | **Pn** | **23 31 43.2** | **-1.7** |
| **C17K** | **DeLong Mountai** | **6.91 271** | | | **Pn** | **23 31 46.5** | **-0.7** |
| **RDOG** | **Red Dog Mine** | **6.95 267** | | | **Pn** | **23 31 46.5** | **-1.2** |
| **H18K** | **Honhosa River** | **6.97 239** | | | **Pn** | **23 31 45.8** | **-2.2** |
| **F17K** | **Baldwin Pennin** | **7.09 253** | | | **Pn** | **23 31 47.5** | **-2.2** |
| **J19K** | **Poorman** | **7.10 225** | | | **Pn** | **23 31 48.5** | **-1.3** |
| **D17K** | **Noatak River** | **7.14 265** | | | **Pn** | **23 31 49.2** | **-1.1** |
| **H17K** | **Granite Mounta** | **7.60 241** | | | **Pn** | **23 31 54.5** | **-2.1** |
| **C16K** | **Lisburne Hills** | **7.73 271** | | | **Pn** | **23 31 57.7** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **7.76 191** | | | **Pn** | **23 31 57.1** | **-1.8** |
| **G16K** | **Koyuk River** | **8.08 248** | | | **Pn** | **23 32 01.1** | **-2.0** |
| **DLBC** | **Dease Lake** | **12.63 144** | Pn | | **Pn** | **23 33 06.8** | **+1.3** |
| | comp=N,0.5nm,0.3s,baz=329,slow=12,SNR=8.2 | | | | | | |
| DLBC | | | Sn | | **Sn** | **23 35 22.9** | **-3.2** |
| | baz=214,slow=7.1,SNR=2.7 | | | | | | |
| | comp=N,3.3nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.78 106** | Pn | | **Pn** | **23 33 17.0** | **-4.1** |
| | comp=N,0.7nm,0.3s,baz=298,slow=19,SNR=5.6 | | | | | | |
| YKA | | | Sn | | Sn | 23 35 41.2 | -13 |
| | comp=N,0.9nm,0.3s,baz=358,slow=18,SNR=5.0 | | | | | | |
| | comp=N,3.2nm,0.7s | | | | | | |
| **RES** | **Resolute Bay** | **15.60 48** | Pn | | **Pn** | **23 33 43.1** | **-2.4** |
| | comp=N,0.7nm,0.3s,baz=280,slow=16,SNR=2.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.11 128** | P | | **P** | **23 36 35.4** | **+2.1** |
| | comp=N,0.3nm,0.5s,baz=350,slow=4.8,SNR=2.9 | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.04 142** | P | | **P** | **23 36 52.9** | **+2.7** |
| | comp=N,0.5nm,0.6s,baz=347,slow=7.4,SNR=2.0 | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.33 128** | P | | **P** | **23 38 33.7** | **+1.8** |
| | comp=N,0.4nm,0.7s,baz=321,slow=4.5,SNR=4.5 | | | | | | |
| | comp=N,0.4nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.37 284** | P | | **P** | **23 38 39.1** | **-0.6** |
| | comp=N,1.4nm,0.8s,baz=43,slow=8.0,SNR=6.8 | | | | | | |
| | comp=N,1.4nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **49.21 6** | P | | **P** | **23 38 55.5** | **+1.9** |
| | comp=N,1.9nm,0.9s,baz=0.0,slow=9.5,SNR=5.4 | | | | | | |
| | comp=N,1.9nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **49.74 14** | P | | **P** | **23 38 59.5** | **+1.8** |
| | comp=N,0.7nm,0.6s,baz=1.9,slow=4.5,SNR=1.4 | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.85 325** | P | | **P** | **23 39 16.0** | **+2.3** |
| | comp=N,0.9nm,0.5s,baz=33,slow=6.5,SNR=3.9 | | | | | | |
| | comp=N,0.9nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **52.25 307** | P | | **P** | **23 39 19.0** | **+2.1** |
| | comp=N,0.4nm,0.5s,baz=29,slow=3.3,SNR=3.6 | | | | | | |
| | comp=N,0.4nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.34 27** | P | | **P** | **23 39 19.6** | **+2.3** |
| **EKA** | **Eskdalemuir Ar** | **52.34 27** | P | | **P** | **23 39 19.7** | **+2.3** |
| | comp=N,1.6nm,0.8s,baz=347,slow=6.9,SNR=3.6 | | | | | | |
| | comp=N,1.6nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.23 329** | P | | **P** | **23 39 46.0** | **+0.4** |
| | comp=N,0.9nm,0.8s,baz=15,slow=7.1,SNR=1.1 | | | | | | |
| | comp=N,0.9nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.07 299** | *e*P | | **P** | **23 39 49.0** | **-3.0** |
| HHC | | | pP | | pP | 23 39 53.5 | -2.0 |
| HHC | | | sP | | sP | 23 39 56.2 | -0.6 |
| HHC | | | pmax | | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| HHC | | | pmax | | pmax | | |
| | comp=Z,91nm,4.5s | | | | | | |
| HHC | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| HHC | | | LR | | LR | | |
| | comp=N,170nm,14.5s | | | | | | |
| HHC | | | LR | | LR | | |
| | comp=Z,300nm,19.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.16 325** | P | | **P** | **23 40 05.5** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=33,slow=7.8,SNR=2.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **60.07 5** | P | | **P** | **23 40 12.0** | **-0.6** |
| | comp=Z,0.9nm,0.5s,baz=360,slow=6.9,SNR=2.1 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **WMQ** | **Urumqi** | **60.81 319** | *e*P | | **P** | **23 40 16.9** | **-1.0** |
| WMQ | | | pP | | sP | 23 40 22.6 | -0.1 |
| WMQ | | | pmax | | pmax | | |
| | comp=Z,27nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **67.32 32** | P | | **P** | **23 41 01.9** | **+1.2** |
| | comp=Z,0.5nm,0.8s,baz=342,slow=5.7,SNR=2.2 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **71.13 2** | P | | **P** | **23 41 25.4** | **+1.0** |
| | comp=Z,0.7nm,0.8s,baz=345,slow=4.5,SNR=2.4 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **73.38 301** | P | | **P** | **23 41 36.8** | **-1.1** |
| PZH | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | pmax | | pmax | | |
| | comp=Z,130nm,3.7s | | | | | | |
| PZH | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | pmax | | pmax | | |
| | comp=Z,50nm,3.5s | | | | | | |

*NEIC* ***12*** *23:34:10.6±1.3, 69.50N±0.05×144.28W±0.08, h8km±8km, Error ellipse: s-maj=7.1km s-min=4.0km az=174.0*

**AEIC 12 23:34:10.6±1.0, 69.48N±0.05×144.3W±0.1, h5km±6km, ML3.4, ML3.5**/94(NEIC)**, Error ellipse: s-maj=7.6km s-min=5.7km az=200.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **54** | | Pg | 23 34 13.3 | -2.4 |
| **C27K** | **Jago River** | **0.26** | **54** | | Sg | 23 34 18.8 | -0.2 |
| **C26K** | **Camden Bay** | **0.49** | **335** | | Pg | 23 34 19.7 | -0.3 |
| C26K | | | | | Sg | 23 34 26.2 | -0.1 |
| **D25K** | **Kavik River** | **0.75** | **259** | | Pg | 23 34 24.6 | -0.3 |
| D25K | | | | | Sg | 23 34 34.6 | 0.0 |
| **D27M** | **Malcolm River** | **1.21** | **100** | | Pg | 23 34 33.6 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.56** | **281** | | Pn | 23 34 39.0 | +0.1 |
| C24K | | | | | Sg | 23 35 00.3 | -0.3 |
| **C24K** | **Franklin Bluff** | **1.56** | **281** | IAML | | 23 35 04.6 | |
| | comp=E,569nm,0.8s | | | | | | |
| C24K | | | | IAML | | 23 35 05.0 | |
| | comp=N,563nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.63** | **141** | | Pn | 23 34 37.5 | -2.4 |
| E27K | | | | IAML | | 23 35 34.3 | |
| | comp=N,343nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **261** | | Pn | 23 34 39.8 | -0.2 |
| D24K | | | | IAML | | 23 35 05.3 | |
| | comp=N,560nm,0.5s | | | | | | |
| D24K | | | | IAML | | 23 35 09.2 | |
| | comp=E,484nm,0.4s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **261** | | Sb | 23 35 02.3 | +0.2 |
| **F26K** | **Sheenjek River** | **1.79** | **178** | | Pn | 23 34 42.4 | +0.2 |
| **F26K** | **Sheenjek River** | **1.79** | **178** | IAML | | 23 35 10.5 | |
| | comp=E,486nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.93** | **115** | | Pn | 23 34 44.0 | 0.0 |
| **F25K** | **Christian Rive** | **1.96** | **195** | | Pn | 23 34 44.4 | 0.0 |
| F25K | | | | | Sn | 23 35 09.8 | +0.5 |
| **F25K** | **Christian Rive** | **1.96** | **195** | IAML | | 23 35 16.9 | |
| | comp=N,254nm,1.2s | | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **92** | | Pn | 23 34 44.7 | 0.0 |
| **D28M** | **Stokes Point** | **1.98** | **92** | IAML | | 23 35 18.2 | |
| | comp=E,435nm,0.6s | | | | | | |
| D28M | | | | IAML | | 23 35 20.8 | |
| | comp=N,337nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.06** | **183** | Pn | Pn | 23 34 44.4 | -1.4 |
| **TOLK** | **Toolik Lake Re** | **2.07** | **248** | | Pn | 23 34 45.5 | -0.5 |
| **E24K** | **Your Creek** | **2.07** | **229** | | Pn | 23 34 46.0 | 0.0 |
| **C23K** | **Itkillik River** | **2.23** | **282** | | Pn | 23 34 48.2 | 0.0 |
| **C23K** | **Itkillik River** | **2.23** | **282** | IAML | | 23 35 23.5 | |
| | comp=N,283nm,0.4s | | | | | | |
| C23K | | | | IAML | | 23 35 29.7 | |
| | comp=E,302nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.33** | **260** | | Pn | 23 34 49.6 | +0.1 |
| **F24K** | **Squaw Lake** | **2.37** | **215** | | Pn | 23 34 50.2 | +0.1 |
| **F24K** | **Squaw Lake** | **2.37** | **215** | IAML | | 23 36 21.3 | |
| | comp=E,158nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.40** | **236** | Pn | Pn | 23 34 49.8 | -0.8 |
| **F28M** | **Old Crow** | **2.48** | **137** | | Pn | 23 34 51.6 | 0.0 |
| **F28M** | **Old Crow** | **2.48** | **137** | IAML | | 23 36 27.0 | |
| | comp=N,202nm,0.6s | | | | | | |
| **FYU** | **Fort Yukon** | **2.95** | **187** | Pn | Pn | 23 34 56.2 | -1.8 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **205** | | Pn | 23 34 59.3 | +0.2 |
| **D22K** | **Ayikyak River** | **3.05** | **263** | Pn | Pn | 23 34 59.0 | -0.4 |
| D22K | | | | IAML | | 23 36 50.9 | |
| | comp=N,187nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.26** | **290** | | Pn | 23 35 00.5 | -1.7 |
| **H25L** | **Birch Creek** | **3.28** | **191** | | Pn | 23 35 02.7 | +0.3 |
| **G29M** | **Pine Creek** | **3.48** | **135** | Pn | Pn | 23 35 04.3 | -1.1 |
| **G23K** | **Bananza Creek** | **3.51** | **220** | Pn | Pn | 23 35 06.1 | +0.4 |
| G23K | | | | IAML | | 23 37 01.0 | |
| | comp=E,131nm,1.1s | | | | | | |
| G23K | | | | IAML | | 23 37 02.1 | |
| | comp=N,113nm,0.7s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.62** | **277** | | Pn | 23 35 07.2 | +0.1 |
| **B21K** | **Ikpikpuk River** | **3.62** | **277** | IAML | | 23 37 10.4 | |
| | comp=N,115nm,0.8s | | | | | | |
| **E21K** | **Killik River** | **3.64** | **258** | | Pn | 23 35 07.5 | 0.0 |
| **E21K** | **Killik River** | **3.64** | **258** | IAML | | 23 37 09.3 | |
| | comp=E,115nm,1.0s | | | | | | |
| E21K | | | | IAML | | 23 37 11.6 | |
| | comp=N,93nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.90** | **202** | Pn | Pn | 23 35 09.2 | -2.0 |
| H24K | | | | IAML | | 23 37 12.4 | |
| | comp=E,74nm,0.6s | | | | | | |
| H24K | | | | IAML | | 23 37 12.6 | |
| | comp=N,62nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **3.97** | **143** | | Pn | 23 35 11.8 | -0.3 |
| **F21K** | **Alatna River** | **4.08** | **241** | Pn | Pn | 23 35 14.1 | +0.6 |
| F21K | | | | IAML | | 23 37 23.7 | |
| | comp=N,50nm,0.6s | | | | | | |
| F21K | | | | IAML | | 23 37 26.1 | |
| | comp=E,55nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.18** | **211** | Pn | Pn | 23 35 16.7 | +1.8 |
| H23K | | | | IAML | | 23 37 26.0 | |
| | comp=N,69nm,1.0s | | | | | | |
| H23K | | | | IAML | | 23 37 31.5 | |
| | comp=E,70nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.21** | **173** | Pn | Pn | 23 35 15.3 | -0.1 |
| **EPYK** | **Eagle Plains** | **4.24** | **134** | Pn | Pn | 23 35 16.9 | +1.2 |
| **I28M** | **Miner Creek** | **4.38** | **155** | Pn | Pn | 23 35 16.6 | -1.2 |
| I28M | | | | IAML | | 23 36 13.5 | |
| | comp=N,63nm,0.3s | | | | | | |
| **E20K** | **Nigu River** | **4.47** | **260** | | Pn | 23 35 18.6 | -0.3 |
| **D20K** | **Etivluk River** | **4.47** | **266** | | Pn | 23 35 18.9 | 0.0 |
| **B20K** | **Meade River** | **4.50** | **283** | | Pn | 23 35 19.3 | +0.1 |
| **A21K** | **Barrow** | **4.54** | **300** | | Pn | 23 35 19.8 | +0.1 |
| **POKR** | **Poker Plat Res** | **4.54** | **197** | | Pn | 23 35 19.8 | -0.1 |
| **POKR** | **Poker Plat Res** | **4.54** | **197** | IAML | | 23 37 39.8 | |
| | comp=N,50nm,1.3s | | | | | | |
| **G21K** | **Allakaket** | **4.56** | **234** | Pn | Pn | 23 35 19.6 | -0.5 |
| G21K | | | | IAML | | 23 37 38.5 | |
| | comp=N,45nm,0.9s | | | | | | |
| G21K | | | | IAML | | 23 37 45.3 | |
| | comp=E,55nm,0.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.74** | **148** | Pn | Pn | 23 35 22.3 | -0.2 |
| I29M | | | | IAML | | 23 37 34.4 | |
| | comp=E,48nm,0.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **207** | Pn | Pn | 23 35 23.3 | +0.3 |
| I23K | | | | IAML | | 23 37 47.0 | |
| | comp=E,50nm,1.0s | | | | | | |
| I23K | | | | IAML | | 23 37 47.8 | |
| | comp=N,50nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79** | **200** | | Pn | 23 35 23.3 | 0.0 |
| **IL31** | | **4.83** | **193** | | Pn | 23 35 24.4 | +0.6 |
| **EGAK** | **Eagle** | **4.88** | **164** | Pn | Pn | 23 35 25.1 | +0.6 |
| EGAK | | | | IAML | | 23 37 53.0 | |
| | comp=N,43nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.89** | **246** | Pn | Pn | 23 35 25.7 | +1.0 |
| F20K | | | | IAML | | 23 37 51.3 | |
| | comp=N,30nm,0.9s | | | | | | |
| F20K | | | | IAML | | 23 38 02.5 | |
| | comp=E,27nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **4.91** | **185** | Pn | Pn | 23 35 25.0 | +0.1 |
| J25K | | | | IAML | | 23 37 47.0 | |
| | comp=N,40nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.02** | **230** | Pn | Pn | 23 35 25.9 | -0.5 |
| **H21K** | **Melozitna Rive** | **5.03** | **224** | Pn | Pn | 23 35 26.1 | -0.4 |
| **CCB** | **Clear Creek Bu** | **5.04** | **197** | Pn | Pn | 23 35 25.7 | -1.0 |
| CCB | | | | IAML | | 23 37 23.0 | |
| | comp=N,27nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **5.07** | **265** | | Pn | 23 35 25.1 | -1.9 |
| **MLY** | **Manley** | **5.11** | **212** | | Pn | 23 35 27.3 | -0.4 |
| MLY | | | | IAML | | 23 37 56.9 | |
| | comp=N,21nm,1.3s | | | | | | |
| MLY | | | | IAML | | 23 38 05.0 | |
| | comp=E,23nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.24** | **198** | | Pn | 23 35 29.9 | +0.4 |
| **C19K** | **Lookout Ridge** | **5.43** | **273** | | Pn | 23 35 32.2 | +0.1 |
| **A19K** | **Wainwright** | **5.84** | **285** | | Pn | 23 35 37.4 | -0.1 |
| **C18K** | **Utukok River** | **6.11** | **270** | | Pn | 23 35 41.2 | -0.1 |
| **E18K** | **Tukpahlearik C** | **6.34** | **259** | | Pn | 23 35 44.5 | 0.0 |
| **C17K** | **DeLong Mountai** | **6.85** | **270** | | Pn | 23 35 51.1 | -0.4 |
| **E17K** | **Hotham Inlet** | **6.92** | **258** | | Pn | 23 35 52.0 | -0.5 |
| **D17K** | **Noatak River** | **7.09** | **264** | | Pn | 23 35 54.4 | -0.4 |

*AEIC* ***12*** *23:35:02.9±0.9, 69.44N±0.02×144.17W±0.03, h4km±6km, ML3.6, ML3.6/44(NEIC), Error ellipse: s-maj=3.1km s-min=1.2km az=198.0*
*NEIC* ***12*** *23:35:03.1±1.0, 69.47N±0.02×144.19W±0.04, h10km±1km, Error ellipse: s-maj=3.2km s-min=2.5km az=329.0*
*IDC* ***12*** *23:35:05.3±1.2, 69.53N×144.03W, h0km, mb3.3/4, mbtmp3.5/8, ML3.6/4, Error ellipse: s-maj=24.3km s-min=16.4km az=32.0*

**ISC 12 23:35:04.2±0.6, 69.47N±0.04×144.18W±0.03, h10km, n62, σ1s15/58, mb3.4/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **46** | Pg | **Pg** | **23 35 07.6** | **-1.2** |
| C27K | | | | | **Sg** | **23 35 10.6** | **-1.4** |
| C27K | | | | IAML | | 23 35 10.9 | |
| | comp=E,11µm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.52** | **331** | | **Pg** | **23 35 13.2** | **-1.0** |
| C26K | | | | | **Sg** | **23 35 20.7** | **-0.3** |
| **D25K** | **Kavik River** | **0.79** | **260** | | **Pg** | **23 35 17.6** | **-1.8** |
| D25K | | | | | **Sg** | **23 35 28.5** | **-1.2** |
| **D27M** | **Malcolm River** | **1.16** | **100** | | **Pb** | **23 35 24.7** | **-1.6** |
| D27M | | | | IAML | | 23 35 45.4 | |
| | comp=N,1µm,0.4s | | | | | | |
| D27M | | | | IAML | | 23 35 46.8 | |
| | comp=E,887nm,0.4s | | | | | | |
| **D27M** | **Malcolm River** | **1.16** | **100** | | **Sg** | **23 35 41.1** | **-0.4** |
| **E27K** | **Coleen River** | **1.59** | **143** | | **Pb** | **23 35 33.0** | **-0.7** |
| **E27K** | **Coleen River** | **1.59** | **143** | | **Sb** | **23 35 52.9** | **-0.9** |
| **E27K** | **Coleen River** | **1.59** | **143** | IAML | | 23 35 57.2 | |
| | comp=E,518nm,0.7s | | | | | | |
| E27K | | | | IAML | | 23 35 57.5 | |
| | comp=N,495nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.61** | **281** | | **Sb** | **23 35 54.0** | **-0.2** |
| **D24K** | **Happy Valley** | **1.68** | **261** | | **Pn** | **23 35 33.2** | **-0.4** |
| **D24K** | **Happy Valley** | **1.68** | **261** | | **Sb** | **23 35 55.4** | **-1.0** |
| **F26K** | **Sheenjek River** | **1.78** | **180** | | **Pn** | **23 35 33.9** | **-1.2** |
| F26K | | | | IAML | | 23 36 02.3 | |
| | comp=N,611nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.88** | **115** | | **Pn** | **23 35 35.5** | **-0.9** |
| E28M | | | | IAML | | 23 36 09.4 | |
| | comp=N,496nm,0.5s | | | | | | |
| **D28M** | **Stokes Point** | **1.93** | **92** | | **Pn** | **23 35 36.1** | **-0.8** |
| **F25K** | **Christian Rive** | **1.96** | **197** | | **Pn** | **23 35 36.0** | **-1.5** |
| **F24K** | **Squaw Lake** | **2.39** | **217** | Pn | **Pn** | **23 35 44.3** | **+1.0** |
| F24K | | | | IAML | | 23 36 25.4 | |
| | comp=E,241nm,0.6s | | | | | | |
| **F28M** | **Old Crow** | **2.45** | **138** | Pn | **Pn** | **23 35 44.9** | **+0.7** |
| F28M | | | | IAML | | 23 36 23.1 | |
| | comp=E,217nm,0.5s | | | | | | |
| **G29M** | **Pine Creek** | **3.45** | **135** | Pn | **Pn** | **23 35 58.7** | **+0.8** |
| **H29M** | **Whitestone** | **3.94** | **143** | | **Pn** | **23 36 04.4** | **-0.2** |
| **H29M** | **Whitestone** | **3.94** | **143** | IAML | | 23 37 13.6 | |
| | comp=N,90nm,0.9s | | | | | | |
| H29M | | | | IAML | | 23 37 21.1 | |
| | comp=E,94nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.03** | **102** | Pn | **Pn** | **23 36 06.7** | **+1.0** |
| | comp=E,1.4nm,0.3s,baz=82,slow=30,SNR=1.6 | | | | | | |
| INK | | | | Sn | **Sn** | **23 36 53.2** | **+0.3** |
| | comp=E,2.2nm,0.3s,baz=274,slow=30,SNR=1.6 | | | | | | |
| INK | | | | Lg | Lg | 23 37 12.1 | |
| | comp=E,3.7nm,0.3s,baz=191,slow=26,SNR=2.7 | | | | | | |
| | comp=E,5.4nm,0.3s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.20** | **134** | | **Pn** | **23 36 08.3** | **+0.1** |
| **I28M** | **Miner Creek** | **4.36** | **156** | | **Pn** | **23 36 10.7** | **+0.2** |
| **I28M** | **Miner Creek** | **4.36** | **156** | IAML | | 23 37 04.1 | |
| | comp=N,60nm,0.5s | | | | | | |
| I28M | | | | IAML | | 23 37 30.9 | |
| | comp=E,53nm,1.1s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.52** | **221** | | **Pn** | **23 36 12.6** | **0.0** |
| **MDM** | **Murphy Dome** | **4.80** | **201** | | **Pn** | **23 36 16.1** | **-0.3** |
| **MDM** | **Murphy Dome** | **4.80** | **201** | IAML | | 23 37 42.4 | |
| | comp=N,40nm,0.7s | | | | | | |
| MDM | | | | IAML | | 23 37 43.7 | |
| | comp=E,65nm,0.9s | | | | | | |
| **IL31** | | **4.84** | **194** | | **Pn** | **23 36 16.9** | **0.0** |
| **ILAR** | **Eielson Array** | **4.84** | **194** | Pn | **Pn** | **23 36 19.6** | **+2.6** |
| | comp=E,1.5nm,0.3s,baz=5.0,slow=14,SNR=4.4 | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 37 12.8** | **-0.1** |
| | comp=E,5.5nm,0.3s,baz=9.5,slow=25,SNR=7.1 | | | | | | |
| ILAR | | | | Lg | Lg | 23 37 31.6 | |
| | comp=E,6.8nm,0.3s,baz=12,slow=30,SNR=7.6 | | | | | | |
| | comp=E,5.5nm,0.6s | | | | | | |
| **J26L** | **Joseph Creek** | **5.00** | **177** | | **Pn** | **23 36 18.9** | **-0.3** |
| **J26L** | **Joseph Creek** | **5.00** | **177** | IAML | | 23 37 21.0 | |
| | comp=N,50nm,0.5s | | | | | | |
| J26L | | | | IAML | | 23 37 47.5 | |
| | comp=E,49nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05** | **198** | | **Pn** | **23 36 19.7** | **-0.1** |
| **CCB** | **Clear Creek Bu** | **5.05** | **198** | IAML | | 23 37 20.8 | |
| | comp=E,32nm,0.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.05** | **225** | | **Pn** | **23 36 19.6** | **-0.3** |
| **H21K** | **Melozitna Rive** | **5.05** | **225** | IAML | | 23 37 52.2 | |
| | comp=E,37nm,0.9s | | | | | | |
| H21K | | | | IAML | | 23 37 56.0 | |
| | comp=N,28nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **5.11** | **266** | | **Pn** | **23 36 20.2** | **-0.5** |
| **D19K** | **Kuna River** | **5.11** | **266** | IAML | | 23 37 20.4 | |
| | comp=E,33nm,0.4s | | | | | | |
| **WRH** | **Wood River Hil** | **5.25** | **199** | | **Pn** | **23 36 22.3** | **-0.3** |
| **WRH** | **Wood River Hil** | **5.25** | **199** | IAML | | 23 37 25.1 | |
| | comp=N,28nm,1.2s | | | | | | |
| WRH | | | | IAML | | 23 38 01.7 | |
| | comp=E,45nm,1.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.48** | **273** | | **Pn** | **23 36 25.8** | **+0.1** |
| **SCRK** | **Sand Creek** | **5.52** | **179** | | **Pn** | **23 36 26.2** | **-0.2** |
| **F19K** | **Shaleruckik Mo** | **5.72** | **249** | | **Pn** | **23 36 28.9** | **-

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D24K | | | IAML | | 23 42 07.7 | | |
| | comp=N,83nm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.75 180** | | Pn | 23 41 08.9 | -0.1 | |
| **F26K** | **Sheenjek River** | **1.75 180** | IAML | | 23 42 03.9 | | |
| | comp=N,84nm,0.4s | | | | | | |
| F26K | | | IAML | | 23 42 05.0 | | |
| | comp=E,42nm,0.3s | | | | | | |
| **E28M** | **Babbage River** | **1.86 115** | | Sg | 23 41 37.4 | +0.5 | |
| E28M | | | IAML | | 23 42 09.7 | | |
| | comp=E,35nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.86 115** | | Pn | 23 41 10.0 | -0.3 | |
| **D28M** | **Stokes Point** | **1.92 91** | | Pn | 23 41 10.8 | -0.3 | |
| **D28M** | **Stokes Point** | **1.92 91** | IAML | | 23 42 09.9 | | |
| | comp=N,44nm,0.5s | | | | | | |
| D28M | | | IAML | | 23 42 10.0 | | |
| | comp=E,65nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **1.94 197** | | Pn | 23 41 11.3 | -0.2 | |
| **F25K** | **Christian Rive** | **1.94 197** | IAML | | 23 41 42.4 | | |
| | comp=E,33nm,0.7s | | | | | | |
| F25K | | | IAML | | 23 41 43.4 | | |
| | comp=N,31nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.10 231** | | Pn | 23 41 13.4 | -0.3 | |
| **E24K** | **Your Creek** | **2.10 231** | IAML | | 23 42 09.4 | | |
| | comp=N,28nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.11 250** | | Pn | 23 41 13.9 | 0.0 | |
| **TOLK** | **Toolik Lake Re** | **2.11 250** | IAML | | 23 42 27.9 | | |
| | comp=E,28nm,0.6s | | | | | | |
| TOLK | | | IAML | | 23 42 29.8 | | |
| | comp=N,30nm,0.6s | | | | | | |
| **C23K** | **Itkillik River** | **2.30 283** | Pn | Pn | 23 41 15.7 | -0.7 | |
| **F24K** | **Squaw Lake** | **2.38 217** | | Pn | 23 41 17.2 | -0.3 | |
| **F24K** | **Squaw Lake** | **2.38 217** | IAML | | 23 42 46.2 | | |
| | comp=E,38nm,0.7s | | | | | | |
| F24K | | | IAML | | 23 42 46.7 | | |
| | comp=N,54nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.42 137** | | Pn | 23 41 17.0 | -1.0 | |
| F28M | | | IAML | | 23 42 48.6 | | |
| | comp=N,80nm,0.7s | | | | | | |
| F28M | | | IAML | | 23 42 49.0 | | |
| | comp=E,65nm,0.5s | | | | | | |
| **H24K** | **Noodor Dome** | **3.89 203** | Pn | Pn | 23 41 38.4 | +0.1 | |
| **H29M** | **Whitestone** | **3.91 143** | Pn | Pn | 23 41 38.2 | -0.3 | |
| **I26K** | **Coal Creek Min** | **4.17 174** | Pn | Pn | 23 41 40.6 | -1.5 | |
| **I28M** | **Miner Creek** | **4.33 156** | Pn | Pn | 23 41 44.6 | +0.3 | |
| **WRH** | **Wood River Hil** | **5.23 199** | Pn | Pn | 23 41 56.7 | +0.1 | |
| WRH | | | | Pg | 23 42 17.8 | +0.4 | |
| **SCRK** | **Sand Creek** | **5.49 179** | Pn | Pn | 23 42 00.4 | +0.1 | |
| **C19K** | **Lookout Ridge** | **5.50 274** | Pn | Pn | 23 42 00.3 | 0.0 | |

*IDC* ***12*** *23:41:20.9±8.5,22.28S×66.16W,h288km±63km,mb2.9/1, mbtmp3.7/3,Error ellipse: s-maj=107.2km s-min=38.0km az=21.0*

**ISC 12 23:41:13.6**±1.0,**22.90S**±0.09×**66.6W**±0.1,**h250km,n7,** σ1§**24**/10,**Jujuy Province**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **GO02** | **Mina Guanaco** | **3.57 230** | *e*P | **Pn** | **23 42 13.8** | **+1.0** |
| GO02 | | | *i* S | **S** | **23 42 59.5** | **-0.2** |
| **PB14** | **IPOC Station P** | **3.92 243** | *e*P | **Pn** | **23 42 17.8** | **+0.9** |
| PB14 | | | *i* S | **S** | **23 43 05.5** | **-1.4** |
| **LPAZ** | **La Paz** | **6.74 347** | P | **Pn** | **23 42 53.5** | **+1.7** |
| | 1.1nm,0.3s,baz=162,slow=13,SNR=15 | | | | | |
| LPAZ | | | S | **S** | **23 44 08.8** | **-1.6** |
| | 4.7nm,0.9s,baz=171,slow=19,SNR=8.3 | | | | | |
| **BDFB** | **Brasilia 18.92 71** | | P | **P** | **23 45 16.1** | **-0.4** |
| | 2.8nm,0.7s,baz=259,slow=5.2,SNR=4.0 | | | | | |
| **TORD** | **Torodi Ar. Bea 75.80 69** | | P | **P** | **23 52 32.3** | **-0.3** |
| | 0.3nm,0.5s,baz=251,slow=4.5,SNR=4.4 | | | | | |
| | 0.3nm,0.5s | | | | | |
| **ZALV** | **Zalesovo Beam 142.24 28** | | PKP | **PKiKP** | **00 00 18.1** | **-0.9** |
| | 0.6nm,0.5s,baz=66,slow=3.5,SNR=2.4 | | | | | |
| **MKAR** | **Makanchi Array 145.42 39** | | PKP | **PKPab** | **00 00 23.5** | **+0.7** |
| | 0.4nm,0.7s,baz=340,slow=5.2,SNR=1.7 | | | | | |

*NEIC* ***12*** *23:41:29.1±2.0,69.53N±0.05×144.05W±0.08,h10km±2km, Error ellipse: s-maj=8.0km s-min=4.4km az=17.0*

**AEIC 12 23:41:28.4**±1.6,**69.44N**±0.05×**144.12W**±0.07,**h1**km±6km**, ML3.1,ML3.1**/110(NEIC),**Error ellipse: s-maj=7.6km s-min=2.7km az=196.0,Northern Alaska**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24 37** | Pg | Pg | 23 41 32.9 | -0.1 |
| C27K | | | | Sg | 23 41 36.0 | -0.1 |
| C27K | | | IAML | | 23 41 36.3 | |
| | comp=N,3μm,0.6s | | | | | |
| C27K | | | IAML | | 23 41 36.5 | |
| | comp=E,4μm,0.6s | | | | | |
| **C26K** | **Camden Bay** | **0.56 330** | | Pg | 23 41 38.8 | -0.3 |
| C26K | | | | Sg | 23 41 46.6 | +0.4 |
| **D25K** | **Kavik River** | **0.81 263** | | Pg | 23 41 43.1 | -0.8 |
| D25K | | | | Sg | 23 41 54.3 | 0.0 |
| **D27M** | **Malcolm River** | **1.14 98** | | Pb | 23 41 50.7 | -0.2 |
| D27M | | | Sg | Sb | 23 42 06.4 | +0.3 |
| **E27K** | **Coleen River** | **1.56 143** | | Pg | 23 41 58.5 | +0.3 |
| E27K | | | Sn | Sg | 23 42 20.6 | +2.2 |
| E27K | | | IAML | | 23 42 22.5 | |
| | comp=E,186nm,0.6s | | | | | |
| **C24K** | **Franklin Bluff** | **1.63 282** | | Pn | 23 41 57.8 | -0.4 |
| C24K | | | | Sb | 23 42 20.4 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.63 282** | IAML | | 23 42 24.9 | |
| | comp=E,267nm,1.1s | | | | | |
| **D24K** | **Happy Valley** | **1.70 262** | | Pg | 23 42 00.8 | -0.1 |
| D24K | | | Sn | Sg | 23 42 24.2 | +1.4 |
| D24K | | | IAML | | 23 42 26.1 | |
| | comp=E,236nm,0.4s | | | | | |
| **F26K** | **Sheenjek River** | **1.75 180** | | Pn | 23 41 59.6 | -0.4 |
| **F26K** | **Sheenjek River** | **1.75 180** | IAML | | 23 42 27.7 | |
| | comp=E,212nm,0.6s | | | | | |
| F26K | | | IAML | | 23 42 29.8 | |
| | comp=N,184nm,0.6s | | | | | |
| **E28M** | **Babbage River** | **1.85 115** | | Pn | 23 42 01.2 | 0.0 |
| **D28M** | **Stokes Point** | **1.91 91** | | Pn | 23 42 01.9 | -0.1 |
| **F25K** | **Christian Rive** | **1.94 198** | | Pn | 23 42 02.3 | -0.1 |
| **BMAR** | **Burnt Mountain** | **2.03 185** | | Pn | 23 42 03.6 | -0.1 |
| **E24K** | **Your Creek** | **2.10 231** | | Pn | 23 42 05.3 | +0.6 |
| E24K | | | IAML | | 23 42 40.1 | |
| | comp=N,69nm,0.9s | | | | | |
| E24K | | | IAML | | 23 42 45.9 | |
| | comp=E,66nm,0.8s | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.12 250** | | Pn | 23 42 04.9 | -0.1 |
| TOLK | | | IAML | | 23 42 43.3 | |
| | comp=E,110nm,0.6s | | | | | |
| **C23K** | **Itkillik River** | **2.31 283** | | Pn | 23 42 07.5 | 0.0 |
| **F24K** | **Squaw Lake** | **2.38 218** | Pn | Pn | 23 42 08.3 | -0.2 |
| **D23K** | **Nanushuk River** | **2.39 262** | Pn | Pn | 23 42 08.3 | -0.3 |
| D23K | | | IAML | | 23 42 54.6 | |
| | comp=E,78nm,0.7s | | | | | |
| **F28M** | **Old Crow** | **2.41 138** | Pn | Pn | 23 42 09.6 | +0.7 |
| F28M | | | IAML | | 23 42 51.1 | |
| | comp=E,84nm,0.9s | | | | | |
| F28M | | | IAML | | 23 42 51.7 | |
| | comp=N,84nm,0.5s | | | | | |
| **E23K** | **Chandalar** | **2.44 238** | | Pn | 23 42 09.5 | +0.2 |
| E23K | | | IAML | | 23 42 49.7 | |
| | comp=N,76nm,0.7s | | | | | |
| **E29M** | **Blow River** | **2.48 112** | | Pn | 23 42 10.9 | +1.0 |
| E29M | | | IAML | | 23 42 50.5 | |
| | comp=N,92nm,0.6s | | | | | |
| **G26K** | **Porcupine Rive** | **2.50 177** | | Pn | 23 42 09.8 | -0.4 |
| **G25K** | **Bearman Lake** | **2.79 196** | | Pn | 23 42 13.8 | -0.3 |
| **G27K** | **Doyon Strip** | **2.80 160** | | Pn | 23 42 13.6 | -0.7 |
| **FYU** | **Fort Yukon** | **2.92 189** | | Pn | 23 42 14.3 | -1.5 |
| **G24K** | **Hadweenzic Riv** | **3.02 206** | | Pn | 23 42 16.8 | -0.6 |
| G24K | | | IAML | | 23 43 10.7 | |
| | comp=E,70nm,0.7s | | | | | |
| G24K | | | IAML | | 23 43 19.2 | |
| | comp=N,58nm,1.2s | | | | | |
| **D22K** | **Ayikyak River** | **3.11 264** | | Pn | 23 42 18.0 | -0.6 |
| D22K | | | IAML | | 23 43 11.1 | |
| | comp=E,44nm,1.1s | | | | | |
| D22K | | | IAML | | 23 43 12.9 | |
| | comp=N,46nm,0.8s | | | | | |
| **COLD** | **Coldfoot** | **3.17 228** | | Pn | 23 42 18.9 | -0.4 |
| **B22K** | **Teshekpuk Lake** | **3.34 290** | Pn | Pn | 23 42 21.9 | +0.3 |
| **G29M** | **Pine Creek** | **3.41 135** | | Pn | 23 42 22.8 | +0.1 |
| **G23K** | **Bananza Creek** | **3.52 222** | | Pn | 23 42 24.9 | +0.7 |
| G23K | | | IAML | | 23 43 26.2 | |
| | comp=N,32nm,0.8s | | | | | |
| G23K | | | IAML | | 23 43 34.2 | |
| | comp=E,34nm,0.8s | | | | | |
| **B21K** | **Ikpikpuk River** | **3.69 278** | | Pn | 23 42 26.8 | +0.3 |
| B21K | | | IAML | | 23 43 57.0 | |
| | comp=E,39nm,1.4s | | | | | |
| **E21K** | **Killik River** | **3.69 259** | Pn | Pn | 23 42 26.4 | -0.1 |
| E21K | | | IAML | | 23 43 29.9 | |
| | comp=N,33nm,0.7s | | | | | |
| E21K | | | IAML | | 23 43 36.0 | |
| | comp=E,33nm,0.8s | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.84 126** | Pn | Pn | 23 42 28.0 | -0.6 |
| G30M | | | IAML | | 23 43 46.0 | |
| | comp=N,28nm,1.0s | | | | | |
| **H24K** | **Noodor Dome** | **3.89 203** | Pn | Pn | 23 42 28.6 | -0.7 |
| H24K | | | IAML | | 23 43 34.4 | |
| | comp=E,30nm,1.2s | | | | | |
| H24K | | | IAML | | 23 43 38.3 | |
| | comp=N,27nm,0.7s | | | | | |
| **H29M** | **Whitestone** | **3.90 143** | | Pn | 23 42 27.9 | -1.5 |
| H29M | | | IAML | | 23 43 38.9 | |
| | comp=N,30nm,1.0s | | | | | |
| **PRP** | **Porcupine Dome** | **3.98 188** | Pn | Pn | 23 42 29.3 | -1.2 |
| PRP | | | IAML | | 23 43 37.1 | |
| | comp=N,23nm,0.8s | | | | | |
| PRP | | | IAML | | 23 43 38.6 | |
| | comp=E,29nm,0.8s | | | | | |
| **A22K** | **Sinclair Lake** | **4.01 298** | | Pn | 23 42 30.6 | -0.2 |
| **F21K** | **Alatna River** | **4.12 242** | | Pn | 23 42 32.7 | +0.3 |
| F21K | | | IAML | | 23 43 48.1 | |
| | comp=N,24nm,0.7s | | | | | |
| F21K | | | IAML | | 23 43 51.0 | |
| | comp=E,21nm,1.0s | | | | | |
| **EPYK** | **Eagle Plains** | **4.16 134** | Pn | Pn | 23 42 33.1 | +0.1 |
| **I26K** | **Coal Creek Min** | **4.17 174** | Pn | Pn | 23 42 33.5 | +0.4 |
| **H23K** | **Yukon River** | **4.18 212** | | Pn | 23 42 32.9 | -0.3 |
| **H23K** | **Yukon River** | **4.18 212** | IAML | | 23 43 46.8 | |
| | comp=E,26nm,1.1s | | | | | |
| H23K | | | IAML | | 23 43 47.4 | |
| | comp=N,29nm,0.8s | | | | | |
| **I28M** | **Miner Creek** | **4.32 156** | | Pn | 23 42 35.4 | +0.2 |
| I28M | | | IAML | | 23 43 56.1 | |
| | comp=N,19nm,1.4s | | | | | |
| I28M | | | IAML | | 23 44 05.9 | |
| | comp=E,18nm,1.2s | | | | | |
| **G31M** | **Satah River** | **4.46 120** | | Pn | 23 42 36.9 | -0.1 |
| **G31M** | **Satah River** | **4.46 120** | IAML | | 23 44 02.6 | |
| | comp=N,23nm,0.9s | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.51 221** | | Pn | 23 42 37.5 | -0.3 |
| **POKR** | **Poker Plat Res** | **4.53 198** | | Pn | 23 42 38.0 | 0.0 |
| POKR | | | IAML | | 23 43 35.3 | |
| | comp=N,16nm,0.8s | | | | | |
| POKR | | | IAML | | 23 44 09.8 | |
| | comp=E,17nm,1.3s | | | | | |
| **E20K** | **Nigu River** | **4.53 261** | | Pn | 23 42 37.7 | -0.4 |
| **D20K** | **Etivluk River** | **4.54 267** | | Pn | 23 42 37.6 | -0.5 |
| **B20K** | **Meade River** | **4.57 283** | | Pn | 23 42 38.5 | -0.1 |
| **G21K** | **Allakaket** | **4.59 235** | Pn | Pn | 23 42 39.5 | +0.6 |
| G21K | | | IAML | | 23 44 05.7 | |
| | comp=E,21nm,1.1s | | | | | |
| **A21K** | **Barrow** | **4.62 300** | | Pn | 23 42 38.6 | -0.6 |
| **I29M** | **Ogilvie Camp,** | **4.67 149** | Pn | Pn | 23 42 40.9 | +1.0 |
| **I23K** | **Minto, Yukon-K** | **4.76 208** | | Pn | 23 42 42.6 | +1.5 |
| I23K | | | IAML | | 23 44 14.1 | |
| | comp=E,18nm,1.1s | | | | | |
| **MDM** | **Murphy Dome** | **4.78 201** | Pn | Pn | 23 42 41.8 | +0.4 |
| MDM | | | IAML | | 23 44 01.4 | |
| | comp=N,17nm,1.0s | | | | | |
| MDM | | | IAML | | 23 44 06.6 | |
| | comp=E,16nm,1.2s | | | | | |
| **IL31** | | **4.81 194** | Pn | Pn | 23 42 43.2 | +1.3 |
| **ILAR** | **Eielson Array** | **4.81 194** | Pn | Pn | 23 42 42.9 | +1.0 |
| **EGAK** | **Eagle** | **4.82 165** | | Pn | 23 42 42.4 | +0.3 |
| EGAK | | | IAML | | 23 42 42.9 | |
| | comp=E,12nm,1.0s | | | | | |
| EGAK | | | IAML | | 23 44 15.9 | |
| | comp=E,15nm,1.2s | | | | | |
| **J25K** | **Salcha River,** | **4.87 186** | Pn | Pn | 23 42 42.2 | -0.6 |
| J25K | | | IAML | | 23 44 04.1 | |
| | comp=E,16nm,1.1s | | | | | |
| J25K | | | IAML | | 23 44 13.8 | |
| | comp=N,11nm,1.2s | | | | | |
| **F20K** | **Avaraart Lake** | **4.94 246** | Pn | Pn | 23 42 43.6 | +0.1 |
| F20K | | | IAML | | 23 44 17.7 | |
| | comp=N,11nm,1.0s | | | | | |
| **J26L** | **Joseph Creek** | **4.96 177** | | Pn | 23 42 44.3 | +0.2 |
| J26L | | | IAML | | 23 44 10.3 | |
| | comp=E,11nm,1.1s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.02 198** | | Pn | 23 42 44.7 | -0.1 |
| CCB | | | IAML | | 23 44 16.0 | |
| | comp=E,10nm,1.0s | | | | | |
| **IMAR** | **Indian Mountai** | **5.04 231** | Pn | Pn | 23 42 45.0 | -0.1 |
| **H21K** | **Melozitna Rive** | **5.05 225** | | Pn | 23 42 45.5 | +0.3 |
| **H21K** | **Melozitna Rive** | **5.05 225** | IAML | | 23 44 21.4 | |
| | comp=N,9.4nm,0.8s | | | | | |
| H21K | | | IAML | | 23 44 31.3 | |
| | comp=E,10nm,1.3s | | | | | |
| **D19K** | **Kuna River** | **5.13 266** | | Pn | 23 42 46.8 | +0.5 |
| D19K | | | IAML | | 23 43 45.2 | |
| | comp=E,9.4nm,0.7s | | | | | |
| **I30M** | **Mount Dempster** | **5.18 141** | | Pn | 23 42 48.9 | +1.8 |
| I30M | | | IAML | | 23 43 50.0 | |
| | comp=E,14nm,0.8s | | | | | |
| I30M | | | IAML | | 23 43 53.5 | |
| | comp=N,9.3nm,1.0s | | | | | |
| **E19K** | **Redstone River** | **5.22 254** | | Pn | 23 42 47.9 | +0.3 |
| **E19K** | **Redstone River** | **5.22 254** | IAML | | 23 43 51.1 | |
| | comp=N,14nm,0.7s | | | | | |
| **WRH** | **Wood River Hil** | **5.23 199** | | Pn | 23 42 49.9 | +2.3 |
| WRH | | | IAML | | 23 44 22.3 | |
| | comp=E,14nm,1.3s | | | | | |
| **NEA2** | **Nenana** | **5.24 204** | | Pn | 23 42 50.3 | +2.5 |
| **SCRK** | **Sand Creek** | **5.49 179** | | Pn | 23 42 53.7 | +2.5 |
| **C19K** | **Lookout Ridge** | **5.50 274** | | Pn | 23 42 52.0 | +0.6 |
| **DAWY** | **Dawson** | **5.71 159** | Pn | Pn | 23 42 57.0 | +2.8 |
| **F19K** | **Shaleruckik Mo** | **5.73 249** | Pn | Pn | 23 42 55.4 | +1.0 |
| **J30M** | **Hart River** | **5.75 144** | | Pn | 23 42 55.5 | +0.5 |
| **C18K** | **Utukok River** | **6.17 271** | | Pn | 23 43 00.9 | +0.3 |
| **K29M** | **Barlow Dome** | **6.20 152** | | Pn | 23 43 02.9 | +1.9 |
| **B18K** | **Kokolik River** | **6.24 278** | | Pn | 23 43 01.2 | -0.2 |
| **E18K** | **Tukpahlearik C** | **6.40 259** | | Pn | 23 43 04.2 | +0.6 |
| **F18K** | **Selawik** | **6.48 251** | | Pn | 23 43 05.2 | +0.5 |
| **DHY** | **Denali Highway** | **6.52 193** | Pn | Pn | 23 43 07.7 | +2.2 |
| **A36M** | **Sachs Harbour** | **6.74 59** | | Pn | 23 43 07.5 | -0.7 |
| **C17K** | **DeLong Mountai** | **6.92 271** | | Pn | 23 43 09.9 | -0.9 |
| **E17K** | **Hotham Inlet** | **6.98 259** | | Pn | 23 43 11.4 | -0.2 |
| **M29M** | **Somme Creek** | **7.39 159** | | Pn | 23 43 19.4 | +2.0 |
| **M24K** | **Tolsona, Glenn** | **7.41 188** | Pn | Pn | 23 43 19.4 | +1.8 |
| **C16K** | **Lisburne Hills** | **7.75 271** | Pn | Pn | 23 43 20.4 | -1.7 |
| **SCM** | **Sheep Creek Mo** | **7.75 191** | Pn | Pn | 23 43 21.3 | -0.9 |
| **GHO** | **Glory Hole Cre** | **7.95 197** | Pn | Pn | 23 43 26.7 | +1.7 |
| **G16K** | **Koyuk River** | **8.09 249** | Pn | Pn | 23 43 26.2 | -0.6 |

*NEIC* ***12*** *23:42:30.8±1.9,69.41N±0.06×144.2W±0.1,h14km±4km, Error ellipse: s-maj=9.6km s-min=5.1km az=205.0*

**AEIC 12 23:42:30.5**±1.9,**69.42N**±0.06×**144.12W**±0.04,**h2**km±7km**, ML2.6,ML2.9**/56(NEIC),**Error ellipse: s-maj=8.3km s-min=2.1km az=181.0,Northern Alaska**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.25 35** | | Pg | 23 42 35.2 | -0.1 |
| C27K | | | | Sg | 23 42 38.3 | -0.3 |
| C27K | | | IAML | | 23 42 39.0 | |
| | comp=E,2μm,0.2s | | | | | |
| C27K | | | IAML | | 23 42 39.0 | |
| | comp=N,2μm,0.3s | | | | | |
| **C26K** | **Camden Bay** | **0.57 331** | | Pg | 23 42 41.2 | -0.2 |
| **C26K** | **Camden Bay** | **0.57 331** | | Sg | 23 42 49.1 | +0.3 |
| C26K | | | IAML | | 23 42 51.0 | |
| | comp=N,452nm,0.5s | | | | | |
| C26K | | | IAML | | 23 42 54.6 | |
| | comp=E,349nm,0.9s | | | | | |
| **D25K** | **Kavik River** | **0.81 264** | | Pg | 23 42 45.5 | -0.3 |
| D25K | | | | Sg | 23 42 57.4 | +1.1 |
| **D27M** | **Malcolm River** | **1.13 98** | | Pg | 23 42 51.9 | -0.3 |
| D27M | | | | Sb | 23 43 08.0 | -0.1 |
| **E27K** | **Coleen River** | **1.54 142** | | Pn | 23 42 58.4 | -0.6 |
| **E27K** | **Coleen River** | **1.54 142** | IAML | | 23 43 26.5 | |
| | comp=N,117nm,0.6s | | | | | |
| E27K | | | IAML | | 23 43 27.9 | |
| | comp=E,126nm,0.7s | | | | | |
| **C24K** | **Franklin Bluff** | **1.64 283** | | Pn | 23 42 59.7 | -0.5 |
| C24K | | | | Sb | 23 42 22.6 | +0.2 |
| **C24K** | **Franklin Bluff** | **1.64 283** | IAML | | 23 43 25.5 | |
| | comp=E,143nm,0.7s | | | | | |
| **D24K** | **Happy Valley** | **1.69 263** | | Sg | 23 43 24.8 | 0.0 |
| **D24K** | **Happy Valley** | **1.69 263** | Pn | Pn | 23 43 00.1 | -0.9 |
| **D24K** | **Happy Valley** | **1.69 263** | IAML | | 23 43 27.6 | |
| | comp=N,197nm,0.5s | | | | | |
| D24K | | | IAML | | 23 43 29.0 | |
| | comp=E,162nm,0.4s | | | | | |
| **F26K** | **Sheenjek River** | **1.73 180** | | Sb | 23 43 24.8 | -0.4 |
| **F26K** | **Sheenjek River** | **1.73 180** | Pn | Pn | 23 43 00.6 | -1.1 |
| **F26K** | **Sheenjek River** | **1.73 180** | IAML | | 23 43 32.2 | |
| | comp=E,133nm,0.7s | | | | | |
| F26K | | | IAML | | 23 43 32.7 | |
| | comp=N,89nm,0.7s | | | | | |
| **E28M** | **Babbage River** | **1.84 114** | | Pn | 23 43 03.0 | -0.2 |
| **TOLK** | **Toolik Lake Re** | **2.11 251** | Pn | Pn | 23 43 06.8 | -0.1 |
| TOLK | | | IAML | | 23 43 57.5 | |
| | comp=E,57nm,0.7s | | | | | |
| **C23K** | **Itkillik River** | **2.31 283** | Pn | Pn | 23 43 08.2 | -1.4 |
| **H24K** | **Noodor Dome** | **3.87 204** | Pn | Pn | 23 43 30.1 | -1.0 |
| H24K | | | IAML | | 23 44 37.3 | |
| | comp=E,14nm,0.8s | | | | | |
| **G31M** | **Satah River** | **4.45 120** | Pn | Pn | 23 43 37.6 | -1.3 |
| **MDM** | **Murphy Dome** | **4.76 202** | | Pn | 23 43 40.0 | -3.2 |
| MDM | | | IAML | | 23 44 24.7 | |
| | comp=N,11nm,0.9s | | | | | |
| MDM | | | IAML | | 23 44 45.0 | |
| | comp=E,7.3nm,1.1s | | | | | |
| **COLA** | **College** | **4.79 199** | Pn | Pn | 23 43 41.8 | -1.8 |
| **IL31** | | **4.79 194** | Pn | Pn | 23 43 41.0 | -2.5 |
| **ILAR** | **Eielson Array** | **4.79 194** | Pn | Pn | 23 43 41.6 | -2.0 |
| **EGAK** | **Eagle** | **4.80 165** | Pn | Pn | 23 43 41.2 | -2.6 |
| EGAK | | | IAML | | 23 44 18.5 | |
| | comp=E,12nm,1.1s | | | | | |
| **J25K** | **Salcha River,** | **4.85 186** | Pn | Pn | 23 43 42.3 | -2.2 |
| J25K | | | IAML | | 23 44 18.5 | |
| | comp=N,7.9nm,1.1s | | | | | |
| J25K | | | IAML | | 23 44 19.7 | |
| | comp=E,7.7nm,1.1s | | | | | |
| **F20K** | **Avaraart Lake** | **4.93 247** | Pn | Pn | 23 43 44.3 | -1.2 |
| F20K | | | IAML | | 23 44 24.0 | |
| | comp=N,6.8nm,1.1s | | | | | |
| **J26L** | **Joseph Creek** | **4.95 177** | Pn | Pn | 23 43 45.4 | -0.5 |
| J26L | | | IAML | | 23 44 28.5 | |
| | comp=E,7.9nm,0.8s | | | | | |
| J26L | | | IAML | | 23 44 28.5 | |
| | comp=N,7.6nm,0.8s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.01 198** | Pn | Pn | 23 43 45.2 | -1.3 |
| CCB | | | IAML | | 23 44 26.7 | |
| | comp=E,6.6nm,0.7s | | | | | |
| CCB | | | IAML | | 23 44 28.4 | |
| | comp=N,6.3nm,0.9s | | | | | |
| **H21K** | **Melozitna Rive** | **5.03 226** | Pn | Pn | 23 43 45.3 | -1.6 |
| H21K | | | IAML | | 23 44 30.6 | |
| | comp=E,7.9nm,0.9s | | | | | |
| **MLY** | **Manley** | **5.10 213** | Pn | Pn | 23 43 46.0 | -1.9 |
| MLY | | | IAML | | 23 44 40.0 | |
| | comp=E,5.0nm,1.1s | | | | | |
| **D19K** | **Kuna River** | **5.13 266** | Pn | Pn | 23 43 46.9 | -1.4 |
| D19K | | | IAML | | 23 44 26.1 | |
| | comp=E,8.8nm,1.1s | | | | | |
| **HDA** | **Harding Lake** | **5.15 194** | Pn | Pn | 23 43 48.2 | -0.4 |
| **I30M** | **Mount Dempster** | **5.17 141** | Pn | Pn | 23 43 48.6 | -0.4 |
| I30M | | | IAML | | 23 44 54.6 | |
| | comp=N,6.8nm,0.9s | | | | | |
| **WRH** | **Wood River Hil** | **5.21 199** | Pn | Pn | 23 43 49.4 | +0.1 |
| WRH | | | IAML | | 23 44 34.4 | |
| | comp=E,7.8nm,1.2s | | | | | |
| WRH | | | IAML | | 23 44 54.3 | |
| | comp=N,8.2nm,1.1s | | | | | |
| **E19K** | **Redstone River** | **5.22 254** | Pn | Pn | 23 43 46.6 | -2.9 |
| E19K | | | IAML | | 23 44 39.7 | |
| | comp=E,10.0nm,1.1s | | | | | |
| E19K | | | IAML | | 23 44 43.3 | |
| | comp=N,13nm,0.8s | | | | | |
| **NEA2** | **Nenana** | **5.22 204** | Pn | Pn | 23 43 48.7 | -0.8 |
| NEA2 | | | IAML | | 23 44 54.4 | |
| | comp=N,5.6nm,1.2s | | | | | |
| NEA2 | | | IAML | | 23 44 55.9 | |
| | comp=E,7.4nm,1.2s | | | | | |
| **K27K** | **Chicken** | **5.47 171** | Pn | Pn | 23 43 51.8 | -1.2 |
| **C19K** | **Lookout Ridge** | **5.50 274** | Pn | Pn | 23 43 51.9 | -1.5 |
| **DAWY** | **Dawson** | **5.69 159** | Pn | Pn | 23 43 55.2 | -0.8 |
| **F19K** | **Shaleruckik Mo** | **5.72 250** | Pn | Pn | 23 43 54.4 | -2.0 |
| **J30M** | **Hart River** | **5.74 144** | Pn | Pn | 23 43 54.9 | -1.9 |
| **C18K** | **Utukok River** | **6.17 271** | Pn | Pn | 23 44 01.1 | -1.5 |
| **K29M** | **Barlow Dome** | **6.18 152** | Pn | Pn | 23 44 01.5 | -1.3 |
| **E18K** | **Tukpahlearik C** | **6.40 260** | Pn | Pn | 23 44 05.4 | -0.2 |
| **A36M** | **Sachs Harbour** | **6.75 59** | Pn | Pn | 23 44 10.0 | -0.4 |

*SKHL* ***12*** *23:51:10.6±0.3,44.30N×142.80E,h214km±13km,mb5.1/7, msha5.1/4*

*MOS* ***12*** *23:51:10.5±0.8,44.32N×142.68E,h231km,mb4.2/7,Error ellipse: s-maj=10.0km s-min=6.8km az=87.2*

*IDC* ***12*** *23:51:11.7±0.4,44.37N×142.62E,h226km±4km,mb3.7/22, mbtmp4.3/29,Error ellipse: s-maj=10.6km s-min=8.7km az=118.0*

*JMA* ***12*** *23:51:12.0±0.2,44.3N±0.8×14.3E±°,h228km±1km, MV4.0/40,KAMIKAWA-SORACHI REGION*

*NEIC* ***12*** *23:51:11.7±1.8,44.23N±0.07×142.6E±0.2,h227km±4km, mb4.3/17,Error ellipse: s-maj=17.2km s-min=10.6km az=98.0*

**ISC 12 23:51:11.5**±0.5,**44.30N**±0.04×**142.68E**±0.04,**h228**km±4km**, n158,**σ1§**19**/198,**mb4.1**/40,**9C-17D,Hokkaido region**

| Code | Station Name | Δ° AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|
| **ASAJ** | **Asahikawa** | **0.19 199** | P | **Pn** | **23 51 42.0** | **+0.8** |
| | 174nm,0.4s,baz=318,slow=2.4,SNR=320 | | | | | |
| ASAJ | | | S | **S** | **23 52 04.7** | **+0.4** |
| | 125nm,0.4s,baz=73,slow=33,SNR=3.8 | | | | | |
| **ASAJ** | **Asahikawa** | **0.19 199** | PN | **Pn** | **23 51 42.0** | **+0.8** |
| ASAJ | | | S | **S** | **23 52 04.7** | **+0.4** |
| **ASAJ** | **Asahikawa** | **0.19 199** | ⇓P | **Pn** | **23 51 41.9** | **+0.8** |
| ASAJ | | | ⇓S | **S** | **23 52 05.0** | **+0.7** |
| **JKA** | **Kamikawa-asahi** | **0.19 198** | | **Pn** | **23 51 41.9** | **+0.7** |
| JKA | | | Sn | **S** | **23 52 04.1** | **-0.2** |
| **JKA** | **Kamikawa-asahi** | **0.19 198** | *e*P | **Pn** | **23 51 42.0** | **+0.8** |
| **JKK2** | **Kamakawa 2** | **0.43 174** | ⇓*i*P | **Pn** | **23 51 42.5** | **+0.8** |
| JKK2 | | | ⇓S | **S** | **23 52 05.5** | **+0.3** |
| **JMP** | **Maruseppu** | **0.57 120** | ⇓*i*P | **Pn** | **23 51 42.9** | **+0.8** |
| JMP | | | ⇓S | **S** | **23 52 06.6** | **+0.7** |
| **JSS** | **Shosan** | **0.60 280** | P | **Pn** | **23 51 42.9** | **+0.8** |
| JSS | | | S | **S** | **23 52 06.7** | **+0.6** |
| **JSE** | **Soyaes** | **0.67 354** | ⇓*i*P | **Pn** | **23 51 42.8** | **+0.4** |
| JSE | | | ⇓S | **S** | **23 52 06.3** | **-0.4** |
| **JAB** | **Ashibetsu** | **0.86 203** | *i* P | **Pn** | **23 51 44.3** | **+0.9** |
| JAB | | | S | **S** | **23 52 09.7** | **+1.4** |
| **JHR** | **Hokuryu** | **0.88 232** | P | **Pn** | **23 51 44.4** | **+0.9** |
| JHR | | | S | **S** | **23 52 10.0** | **+1.6** |
| **JYG** | **Yagishiri** | **0.91 279** | *e*P | **Pn** | **23 51 44.0** | **+0.4** |
| JYG | | | S | **S** | **23 52 08.0** | **-0.6** |
| **JTKR** | **Abashiri--Toko** | **0.94 110** | ⇓*i*P | **Pn** | **23 51 44.8** | **+1.0** |
| JTKR | | | ⇓S | **S** | **23 52 10.1** | **+1.2** |
| **JWK2** | **Keihoku** | **1.16 332** | ⇓*i*P | **Pn** | **23 51 45.6** | **+0.5** |
| JWK2 | | | ⇓S | **S** | **23 52 11.1** | **-0.4** |
| **JAR** | **Ashorobuto** | **1.27 141** | *i* P | **Pn** | **23 51 47.0** | **+1.1** |
| JAR | | | S | **S** | **23 52 14.4** | **+1.5** |
| **JRBN** | **Rebuntou**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **NMR** | **Nemuro--Hokkai** | **2.39** | **112** | *e*P | | **Pn** | | **23 51 55.1** | **-0.9** |
| NMR | | | | *e*S | | **S** | | **23 52 28.6** | **-2.1** |
| **NEM2** | **Nemuro 2** | **2.40** | **112** | P | | **Pn** | | **23 51 55.2** | **-0.9** |
| NEM2 | | | | S | | **S** | | **23 52 28.5** | **-2.5** |
| **YSS** | **Yuzh-Sakhalins** | **2.66** | **1** | | | **Pn** | | **23 51 58.5** | **-0.3** |
| **YSS** | **Yuzh-Sakhalins** | **2.66** | **1** | *e*P | | **Pn** | | **23 51 58.4** | **-0.3** |
| YSS | | | | AMB | | AMB | | 23 51 58.7 | |
| | 310nm,0.5s | | | | | | | | |
| YSS | | | | *e*S | | **S** | | **23 52 34.7** | **-1.2** |
| YSS | | | | A | | A | | 23 52 35.0 | |
| | 130nm,1.1s | | | | | | | | |
| YSS | | | | A | | A | | 23 52 35.0 | |
| | 190nm,1.1s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **2.66** | **1** | *e*PN | | **Pn** | | **23 51 58.4** | **-0.3** |
| YSS | | | | *e*S | | **S** | | **23 52 34.1** | **-1.8** |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,310nm,0.5s | | | | | | | | |
| YSS | | | | smax | smax | | | | |
| | comp=N,130nm,1.1s | | | | | | | | |
| YSS | | | | smax | smax | | | | |
| | comp=E,190nm,1.1s | | | | | | | | |
| **SHO** | **Shikotan** | **3.02** | **97** | *e*P | | **Pn** | | **23 52 02.8** | **0.0** |
| SHO | | | | AMB | | AMB | | 23 52 05.5 | |
| | comp=E,210nm,0.4s | | | | | | | | |
| SHO | | | | *e*S | | **S** | | **23 52 41.4** | **-1.6** |
| SHO | | | | A | | A | | 23 52 42.0 | |
| | comp=E,280nm,0.4s | | | | | | | | |
| SHO | | | | A | | A | | 23 52 42.0 | |
| | comp=E,420nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **3.02** | **97** | PN | | **Pn** | | **23 52 05.8** | **+3.0** |
| SHO | | | | *e*S | | **S** | | **23 52 41.0** | **-2.0** |
| SHO | | | | smax | smax | | | | |
| | comp=N,268nm,0.3s | | | | | | | | |
| SHO | | | | smax | smax | | | | |
| | comp=E,397nm,0.4s | | | | | | | | |
| **JTM** | **Tenmabayashi** | **3.70** | **199** | Pn | | **Pn** | | **23 52 10.0** | **-0.8** |
| JTM | | | | Sn | | **S** | | **23 52 54.6** | **-2.8** |
| **KUR** | **Kuril'sk** | **3.81** | **74** | *e*P | | **Pn** | | **23 52 11.4** | **-0.5** |
| KUR | | | | AMB | | AMB | | 23 52 13.9 | |
| | comp=E,100nm,0.5s | | | | | | | | |
| KUR | | | | A | | A | | 23 52 57.8 | |
| KUR | | | | *e*S | | **S** | | **23 52 59.1** | **-0.4** |
| KUR | | | | A | | A | | 23 53 04.0 | |
| | comp=E,80nm,0.6s | | | | | | | | |
| KUR | | | | A | | A | | 23 53 04.0 | |
| | comp=E,80nm,0.6s | | | | | | | | |
| **KUR** | **Kuril'sk** | **3.81** | **74** | *i* PN | | **Pn** | | **23 52 11.4** | **-0.5** |
| **TYV** | **Tymovskoe** | **6.57** | **360** | *e*P | | **Pn** | | **23 52 46.5** | **+0.2** |
| TYV | | | | AMB | | AMB | | 23 52 48.1 | |
| **TYV** | **Tymovskoe** | **6.57** | **360** | *e*PN | | **Pn** | | **23 52 46.5** | **+0.2** |
| TYV | | | | *e*S | | **S** | | **23 54 01.6** | **-0.3** |
| TYV | | | | pmax | pmax | | | | |
| | comp=Z,100nm,2.2s | | | | | | | | |
| TYV | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| TYV | | | | smax | smax | | | | |
| | comp=N,5.0nm,0.6s | | | | | | | | |
| TYV | | | | smax | smax | | | | |
| | comp=E,5.0nm,0.6s | | | | | | | | |
| **JMM** | **Marumori** | **6.58** | **193** | | | **Pn** | | **23 52 45.1** | **-1.4** |
| JMM | | | | Sn | | **S** | | **23 53 58.5** | **-3.8** |
| **JSD** | **Sado** | **7.09** | **210** | | | **Pn** | | **23 52 51.8** | **-1.3** |
| **USA0B** | **Ussuriysk Arra** | **7.68** | **273** | | | **Pn** | | **23 52 59.7** | **-0.8** |
| **USA0B** | **Ussuriysk Arra** | **7.68** | **273** | *c i* PN | | **Pn** | | **23 53 00.4** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **7.68** | **273** | | | **Pn** | | **23 53 00.3** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **7.68** | **273** | P | | **Pn** | | **23 53 00.7** | **+0.2** |
| | comp=E,50nm,0.7s,baz=86,slow=13,SNR=198 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.68** | **273** | PN | | **Pn** | | **23 53 00.7** | **+0.2** |
| **MJA0** | **Matsu Arr-Jizo** | **8.45** | **205** | *e*PN | | **Pn** | | **23 53 10.1** | **-0.5** |
| MJA0 | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **8.46** | **205** | Pn | | **Pn** | | **23 53 09.2** | **-1.5** |
| **MAJO** | **Matsushiro** | **8.46** | **205** | Pn | | **Pn** | | **23 53 09.7** | **-1.0** |
| **MAJO** | **Matsushiro** | **8.46** | **205** | *i* PN | | **Pn** | | **23 53 10.1** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **8.46** | **205** | P | | **Pn** | | **23 53 10.1** | **-0.6** |
| | comp=Z,5.5nm,0.5s,baz=12,slow=14,SNR=25 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **8.46** | **205** | PN | | **Pn** | | **23 53 10.1** | **-0.6** |
| **MSHR** | **Mys Shultsa** | **8.56** | **262** | *i* PN | | **Pn** | | **23 53 11.6** | **-0.2** |
| MSHR | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **PSTR** | **Posyet** | **8.79** | **263** | *i* PN | | **Pn** | | **23 53 14.9** | **+0.1** |
| **KLR** | **Kul'dur** | **8.98** | **307** | P | | **Pn** | | **23 53 16.8** | **-0.3** |
| | comp=Z,1.3nm,0.5s,baz=140,slow=11,SNR=7.0 | | | | | | | | |
| **KLR** | **Kul'dur** | **8.98** | **307** | *e*P | | **Pn** | | **23 53 17.9** | **+0.8** |
| **KLR** | **Kul'dur** | **8.98** | **307** | *i* PN | | **Pn** | | **23 53 17.9** | **+0.8** |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **JGF** | **Kuroka** | **9.60** | **207** | Pn | | **Pn** | | **23 53 24.0** | **-1.3** |
| **BNX** | **BinXian** | **10.91** | **283** | ⇓P | | **Pn** | | **23 53 41.6** | **-0.2** |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.4s | | | | | | | | |
| **KSRS** | **Korea Array** | **13.08** | **244** | P | | **Pn** | | **23 54 08.9** | **-0.1** |
| | comp=Z,1.1nm,0.6s,baz=58,slow=12,SNR=4.8 | | | | | | | | |
| **KSRS** | **Korea Array** | **13.08** | **244** | *e*PN | | **P** | | **23 54 12.1** | **+0.8** |
| KSRS | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **13.25** | **43** | P | | **Pn** | | **23 54 10.5** | **-0.4** |
| | comp=Z,14nm,0.8s,baz=249,slow=6.2,SNR=14 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **13.25** | **43** | PN | | **Pn** | | **23 54 10.5** | **-0.4** |
| **ZEA** | **Zeya** | **13.82** | **319** | *e*P | | **P** | | **23 54 20.5** | **+1.2** |
| **JNU** | **Nakatsue** | **14.45** | **223** | P | | **P** | | **23 54 27.3** | **+0.7** |
| | comp=Z,7.1nm,0.7s,baz=48,slow=8.0,SNR=9.9 | | | | | | | | |
| **YAK** | **Yakutsk** | **19.33** | **341** | *e*P | | **P** | | **23 55 18.2** | **-1.2** |
| **YAK** | **Yakutsk** | **19.33** | **341** | *e*P | | **P** | | **23 55 18.2** | **-1.2** |
| YAK | | | | *e*S | | **S** | | **23 58 44.0** | **-1.5** |
| YAK | | | | smax | smax | | | | |
| | comp=N,82nm,2.5s | | | | | | | | |
| YAK | | | | smax | smax | | | | |
| | comp=E,29nm,1.3s | | | | | | | | |
| **SEY** | **Seymchan** | **19.50** | **13** | P | | **P** | | **23 55 20.3** | **-0.9** |
| | comp=E,10.0nm,0.4s,baz=201,slow=10.0,SNR=27 | | | | | | | | |
| **SEY** | **Seymchan** | **19.50** | **13** | *e*P | | **P** | | **23 55 20.5** | **-0.7** |
| **SEY** | **Seymchan** | **19.50** | **13** | *i* P | | **P** | | **23 55 20.5** | **-0.7** |
| SEY | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **23.10** | **272** | ⇑P | | **P** | | **23 55 55.6** | **-1.8** |
| HHC | | | | PP | | **pP** | | **23 56 32.6** | **-4.4** |
| HHC | | | | sP | | sP | | 23 57 00.2 | -5.1 |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,110nm,4.4s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **24.83** | **291** | *e*P | | **P** | | **23 56 13.1** | **+0.1** |
| **ULN** | **Ulaanbaatar** | **24.83** | **291** | *i* P | | **P** | | **23 56 13.1** | **+0.1** |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **SONM** | **Songino Array** | **25.27** | **291** | P | | **P** | | **23 56 17.7** | **+0.7** |
| | comp=Z,2.5nm,0.5s,baz=92,slow=8.4,SNR=16 | | | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **25.27** | **291** | *e*P | | **P** | | **23 56 17.9** | **+0.9** |
| SONM | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| **BILL** | **Bilibino** | **26.83** | **19** | *e*P | | **P** | | **23 56 32.0** | **+1.6** |
| **BILL** | **Bilibino** | **26.83** | **19** | ⇓*e*P | | **P** | | **23 56 32.1** | **+1.6** |
| BILL | | | | *e*'PP | | **pP** | | **23 57 16.9** | **+1.4** |
| BILL | | | | *i* S | | **S** | | **00 00 45.4** | **-3.8** |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| **PZH** | **PanZhiHua** | **37.35** | **255** | P | | **P** | | **23 58 01.5** | **-0.8** |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,180nm,3.7s | | | | | | | | |
| **G18K** | **Tagagawik** | **38.01** | **35** | P | | **P** | | **23 58 07.2** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **38.08** | **306** | P | | **P** | | **23 58 07.9** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=90,slow=8.6,SNR=3.4 | | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.08** | **306** | P | | **P** | | **23 58 07.9** | **-0.1** |
| **F19K** | **Shaleruckik Mo** | **38.45** | **33** | P | | **P** | | **23 58 10.3** | **-0.5** |
| F19K | | | | IAmb | | IAmb | | 23 58 12.6 | |
| | comp=Z,7.2nm,0.6s | | | | | | | | |
| **WMQ** | **Urumqi** | **38.88** | **289** | *e*P | | **P** | | **23 58 15.0** | **+0.1** |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **H19K** | **Roundabout Mou** | **38.89** | **35** | P | | **P** | | **23 58 14.4** | **-0.1** |
| **J20K** | **Nowinta River** | **39.86** | **38** | P | | **P** | | **23 58 23.0** | **+0.4** |
| J20K | | | | IAmb | | IAmb | | 23 58 25.3 | |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **40.02** | **35** | P | | **P** | | **23 58 23.7** | **-0.2** |
| **G21K** | **Allakaket** | **40.13** | **34** | P | | **P** | | **23 58 25.4** | **+0.6** |
| G21K | | | | IAmb | | IAmb | | 23 58 26.9 | |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **41.25** | **47** | P | | **P** | | **23 58 33.8** | **-0.2** |
| | comp=Z,7.9nm,0.7s,baz=288,slow=9.6,SNR=1.9 | | | | | | | | |
| | comp=Z,7.9nm,0.7s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **41.25** | **47** | P | | **P** | | **23 58 33.8** | **-0.2** |
| **MK31** | **Makanchi Array** | **41.46** | **296** | P | | **P** | | **23 58 36.3** | **+0.4** |
| **MK31** | **Makanchi Array** | **41.46** | **296** | *i* P | | **P** | | **23 58 35.6** | **-0.3** |
| **MKAR** | **Makanchi Array** | **41.46** | **296** | P | | **P** | | **23 58 36.0** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=80,slow=9.1,SNR=14 | | | | | | | | |
| MKAR | | | | ScP | | **ScP** | | **00 03 58.0** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=32,slow=1.4,SNR=1.4 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.46** | **296** | *e*P | | **P** | | **23 58 36.7** | **+0.8** |
| **MKAR** | **Makanchi Array** | **41.46** | **296** | *e*P | | **P** | | **23 58 36.4** | **+0.5** |
| MKAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **KURK** | **Kurchatov** | **42.53** | **302** | *e*P | | **P** | | **23 58 44.6** | **+0.2** |
| **KURK** | **Kurchatov** | **42.53** | **302** | *i* P | | **P** | | **23 58 44.6** | **+0.2** |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.61** | **302** | P | | **P** | | **23 58 45.1** | **0.0** |
| | comp=Z,1.4nm,0.5s,baz=72,slow=9.1,SNR=13 | | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **42.96** | **36** | P | | **P** | | **23 58 47.8** | **+0.1** |
| | comp=Z,4.5nm,0.7s,baz=276,slow=7.6,SNR=13 | | | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **42.96** | **36** | *e*P | | **P** | | **23 58 49.6** | **+1.9** |
| ILAR | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **45.28** | **41** | P | | **P** | | **23 59 07.5** | **+1.3** |
| MCARA | | | | IAmb | | IAmb | | 23 59 08.4 | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **45.45** | **38** | P | | **P** | | **23 59 08.0** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **45.47** | **38** | P | | **P** | | **23 59 08.6** | **+0.9** |
| **L29M** | **L29M** | **47.07** | **38** | P | | **P** | | **23 59 21.9** | **+1.8** |
| **INK** | **Inuvik** | **47.55** | **30** | P | | **P** | | **23 59 23.3** | **-0.2** |
| | comp=Z,5.1nm,0.3s,baz=267,slow=5.3,SNR=5.4 | | | | | | | | |
| | comp=Z,5.1nm,0.3s | | | | | | | | |
| **INK** | **Inuvik** | **47.55** | **30** | P | | **P** | | **23 59 23.3** | **-0.2** |
| **P29M** | **Windy Craggy** | **48.29** | **42** | P | | **P** | | **23 59 31.3** | **+1.9** |
| P29M | | | | IAmb | | IAmb | | 23 59 32.5 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **48.60** | **39** | P | | **P** | | **23 59 33.7** | **+2.0** |
| N31M | | | | IAmb | | IAmb | | 23 59 34.5 | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **O30N** | **Mendenhall** | **48.69** | **40** | P | | **P** | | **23 59 34.0** | **+1.5** |
| **FARO** | **Faro, Yukon** | **49.44** | **38** | P | | **P** | | **23 59 39.7** | **+1.5** |
| FARO | | | | IAmb | | IAmb | | 23 59 40.2 | |
| | comp=Z,5.3nm,0.8s | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **50.41** | **40** | P | | **P** | | **23 59 47.3** | **+1.9** |
| P33M | | | | IAmb | | IAmb | | 23 59 48.0 | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| **ARU** | **Arti** | **51.72** | **315** | *e*P | | **P** | | **23 59 54.7** | **-0.4** |
| **ARU** | **Arti** | **51.72** | **315** | *d i* P | | **P** | | **23 59 54.7** | **-0.4** |
| ARU | | | | | | | | 00 01 50.8 | |
| ARU | | | | S | | **S** | | **00 06 58.9** | **+0.4** |
| ARU | | | | SS | | **SS** | | **00 10 31.2** | **-6.2** |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,2.4s | | | | | | | | |
| **DLBC** | **Dease Lake** | **52.43** | **42** | P | | **P** | | **00 00 02.5** | **+2.1** |
| | comp=Z,2.6nm,0.9s,baz=277,slow=9.9,SNR=5.4 | | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **54.18** | **307** | P | | **P** | | **00 00 13.5** | **+0.3** |
| ABKAR | | | | IAmb | | IAmb | | 00 00 13.8 | |
| | comp=Z,2.9nm,0.3s | | | | | | | | |
| **RES** | **Resolute Bay** | **55.34** | **16** | P | | **P** | | **00 00 20.9** | **-0.2** |
| **RES** | **Resolute Bay** | **55.34** | **16** | P | | **P** | | **00 00 20.1** | **-1.0** |
| | comp=Z,5.0nm,0.4s,baz=295,slow=7.7,SNR=6.2 | | | | | | | | |
| | comp=Z,5.0nm,0.4s | | | | | | | | |
| **RES** | **Resolute Bay** | **55.34** | **16** | P | | **P** | | **00 00 20.9** | **-0.2** |
| RES | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **57.11** | **33** | P | | **P** | | **00 00 33.9** | **+0.1** |
| | comp=Z,2.8nm,0.7s,baz=310,slow=7.2,SNR=11 | | | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **57.11** | **33** | *e*P | | **P** | | **00 00 34.0** | **+0.3** |
| YKA | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.58** | **338** | P | | **P** | | **00 00 36.2** | **-0.7** |
| | comp=Z,2.8nm,1.0s,baz=46,slow=8.7,SNR=5.8 | | | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.58** | **338** | *e*P | | **P** | | **00 00 36.2** | **-0.7** |
| ARCES | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **FINES** | **FINESS Array B** | **62.88** | **331** | P | | **P** | | **00 01 12.6** | **-0.3** |
| | comp=Z,1.4nm,0.5s,baz=46,slow=7.0,SNR=19 | | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | | |
| **FINES** | **FINESS Array B** | **62.88** | **331** | *e*P | | **P** | | **00 01 12.5** | **-0.3** |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **OBN** | **Obninsk** | **62.93** | **322** | ⇑*e*P | | **P** | | **00 01 17.2** | **+3.9** |
| OBN | | | | S | | **S** | | **00 09 26.0** | **+1.7** |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **SUMG** | **Summit** | **63.43** | **0** | P | | **P** | | **00 01 17.4** | **+0.6** |
| **SUMG** | **Summit** | **63.43** | **0** | P | | **P** | | **00 01 17.4** | **+0.6** |
| SUMG | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **64.38** | **189** | P | | **P** | | **00 01 23.2** | **+0.1** |
| | comp=Z,4.3nm,0.6s,baz=9.1,slow=6.8,SNR=16 | | | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **64.38** | **189** | P | | **P** | | **00 01 23.2** | **+0.1** |
| **KIV** | **Kislovodsk** | **66.96** | **309** | *e*P | | **P** | | **00 01 39.1** | **-0.5** |
| **KIV** | **Kislovodsk** | **66.96** | **309** | *e*P | | **P** | | **00 01 39.1** | **-0.5** |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | | |
| **NB2** | **NORSAR Subarrr** | **67.88** | **337** | P | | **P** | | **00 01 44.4** | **-0.6** |
| | comp=Z,0.6nm,0.6s,baz=36,slow=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.88** | **337** | P | | **P** | | **00 01 44.5** | **-0.4** |
| | comp=Z,0.9nm,0.7s,baz=35,slow=6.3,SNR=7.2 | | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.88** | **337** | *e*P | | **P** | | **00 01 44.6** | **-0.4** |
| NOA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **HFS** | **Hagfors** | **67.89** | **335** | P | | **P** | | **00 01 44.3** | **-0.7** |
| | comp=Z,2.2nm,0.6s,baz=38,slow=5.6,SNR=14 | | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **HFS** | **Hagfors** | **67.89** | **335** | P | | **P** | | **00 01 44.3** | **-0.7** |
| **ASAR** | **Alice Springs** | **68.11** | **189** | P | | **P** | | **00 01 47.9** | **+1.2** |
| | comp=Z,3.3nm,0.8s,baz=2.3,slow=5.9,SNR=21 | | | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **68.11** | **189** | P | | **P** | | **00 01 47.9** | **+1.2** |
| **AKASG** | **Malin Array Be** | **69.19** | **321** | P | | **P** | | **00 01 52.8** | **-0.3** |
| | comp=Z,1.1nm,0.5s,baz=43,slow=6.4,SNR=4.7 | | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.19** | **321** | *e*P | | **P** | | **00 01 54.1** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **69.98** | **56** | P | | **P** | | **00 01 59.3** | **+0.8** |
| | comp=Z,0.8nm,0.7s,baz=298,slow=6.2,SNR=4.5 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **71.97** | **48** | P | | **P** | | **00 02 11.0** | **+0.6** |
| | comp=Z,1.9nm,0.7s,baz=289,slow=2.0,SNR=22 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **CLL** | **Collm** | **75.29** | **330** | *i* P | | **P** | | **00 02 29.9** | **+0.8** |
| **CLL** | **Collm** | **75.29** | **330** | *i* P | | **P** | | **00 02 29.9** | **+0.8** |
| **STKA** | **Stephens Creek** | **75.81** | **181** | P | | **P** | | **00 02 33.5** | **+1.2** |
| | comp=Z,4.7nm,0.8s,baz=350,slow=6.3,SNR=6.3 | | | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **75.81** | **181** | *e*P | | **P** | | **00 02 34.1** | **+1.9** |
| STKA | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **76.61** | **341** | P | | **P** | | **00 02 36.5** | **0.0** |
| | comp=Z,1.2nm,0.8s,baz=30,slow=5.1,SNR=4.2 | | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **76.61** | **341** | P | | **P** | | **00 02 36.5** | **0.0** |
| **TXAR** | **Lajitas Array** | **84.97** | **53** | P | | **P** | | **00 03 22.1** | **+0.7** |
| | comp=Z,0.6nm,0.8s,baz=294,slow=3.2,SNR=8.8 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.97** | **53** | P | | **P** | | **00 03 22.1** | **+0.7** |
| **VNDA** | **Vanda** | **122.12** | **175** | PKIKP | | **PKPdf** | | **00 09 37.7** | **+0.3** |
| | comp=Z,0.1nm,0.4s,baz=339,slow=2.7,SNR=3.6 | | | | | | | | |
| **VNDA** | **Vanda** | **122.12** | **175** | PKIKP | | **PKPdf** | | **00 09 37.7** | **+0.3** |
| **QSPA** | **South Pole Qui** | **134.03** | **180** | PKP | | **PKPdf** | | **00 10 01.4** | **+1.0** |
| | comp=Z,0.7nm,0.5s,baz=264,slow=1.1,SNR=8.3 | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **146.39** | **201** | ⇑P | | **PKPbc** | | **00 10 24.9** | **+0.6** |
| | comp=Z,381nm,0.6s | | | | | | | | |
| **SNAA** | **Sanae** | **147.94** | **200** | ⇑P | | **PKPbc** | | **00 10 28.4** | **0.0** |
| | comp=Z,45nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **147.94** | **200** | PKPbc | | **PKPbc** | | **00 10 28.5** | **0.0** |
| | comp=Z,1.9nm,0.8s,baz=235,slow=2.5,SNR=8.4 | | | | | | | | |
| **SNAA** | **Sanae** | **147.94** | **200** | PKP2 | | **PKPbc** | | **00 10 28.5** | **0.0** |
| **VNA2** | **Neumayer--Watz** | **149.53** | **199** | ⇑P | | **PKPbc** | | **00 10 32.9** | **+0.5** |
| | comp=Z,1.5nm,0.5s,baz=143,slow=2.4 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **149.80** | **197** | ⇑P | | **PKPbc** | | **00 10 33.2** | **+0.1** |
| | comp=Z,7.4nm,0.8s | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **149.93** | **199** | ⇑P | | **PKPbc** | | **00 10 32.9** | **-0.4** |
| | comp=Z,4.8nm,0.6s | | | | | | | | |

*AEIC **12** 23:59:49.0±1.5, 69°53N±0.05×144°15W±0.07, h18km±5km, ML4.1, ML4.2/120(NEIC), Mwr4.1/40(NEIC), Error ellipse:*
*s-maj=7.5km s-min=3.4km az=194.0*
*IDC **12** 23:59:50.0±0.7, 69°69N×144°17W, h0km, mb3.8/14, mbtmp3.8/18, ML4.0/4, MS3.3/3, Error ellipse: s-maj=18.7km s-min=11.6km az=51.0*
*NEIC **12** 23:59:50.4±0.9, 69°57N±0°05×144°17W±0°06, h10km±1km, Error ellipse: s-maj=8.4km s-min=3.3km az=11.0, Moment Tensor Solution. Moment tensor: Scale 10^15 Nm; Mrr0.09; Mθθ-1.60; Mφφ 1.51; Mrθ 0.63; Mθφ -0.38; Mφr-0.83; Fault plane solution: M0 1.91000×10^15 NP1: φs220.51000°, δs58.47000°, λs6.60000°. NP2: φs127.05000°, δs84.38000°, λs148.29000°. Principal axes: T 1.9967, Plg26.0000°, Azm79.0000°; N -0.1797, Plg58.0000°, Azm298.0000°; P -1.8170, Plg17.0000°, Azm178.0000°;*
*NEIC **12** 23:59:50.5, 69°57N×144°17W, h10km*
**ISC 12 23:59:49.2±1.2, 69°52N±0°04×144°18W±0°03, h3km±8km, n141, σ1$12/148, mb3.9/16, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **C27K** | **Jago River** | **0.19** | **57** | Pg | | **Pg** | **23 59 53.6** | **+0.7** |
| C27K | | | | IAML | | | 23 59 57.5 | |
| | comp=E,41μm,0.6s | | | | | | | |
| **C26K** | **Camden Bay** | **0.47** | **327** | | | **Pg** | **23 59 58.8** | **+0.5** |
| C26K | | | | | | **Sb** | **00 00 06.9** | **-0.7** |
| **D25K** | **Kavik River** | **0.80** | **257** | Pg | | **Pg** | **00 00 03.1** | **-1.5** |
| D25K | | | | Sg | | **Sg** | **00 00 15.1** | **+0.1** |
| **D27M** | **Malcolm River** | **1.17** | **102** | | | **Pb** | **00 00 10.4** | **-1.8** |
| **D27M** | **Malcolm River** | **1.17** | **102** | | | **Sg** | **00 00 28.1** | **+1.3** |
| **D27M** | **Malcolm River** | **1.17** | **102** | IAML | | | 00 00 32.2 | |
| | comp=E,3μm,0.3s | | | | | | | |
| D27M | | | | IAML | | | 00 00 33.7 | |
| | comp=N,5μm,0.7s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.60** | **279** | | | **Pn** | **00 00 18.4** | **0.0** |
| **C24K** | **Franklin Bluff** | **1.60** | **279** | | | **Sb** | **00 00 39.4** | **-0.5** |
| **E27K** | **Coleen River** | **1.64** | **144** | | | **Pn** | **00 00 19.0** | **0.0** |
| E27K | | | | Sg | | **Sn** | **00 00 40.6** | **+0.1** |
| **D24K** | **Happy Valley** | **1.69** | **260** | | | **Pn** | **00 00 19.7** | **+0.1** |
| D24K | | | | Sg | | **Sg** | **00 00 44.2** | **+0.7** |
| D24K | | | | IAML | | | 00 00 44.7 | |
| | comp=N,2μm,0.7s | | | | | | | |
| D24K | | | | IAML | | | 00 00 44.9 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **180** | Pg | | **Pn** | **00 00 22.2** | **+0.5** |
| F26K | | | | Sg | | **Sn** | **00 00 46.3** | **+0.8** |
| F26K | | | | IAML | | | 00 00 48.3 | |
| | comp=E,2μm,0.8s | | | | | | | |
| **E28M** | **Babbage River** | **1.91** | **117** | Pg | | **Pn** | **00 00 23.3** | **+0.7** |
| E28M | | | | Sg | | **Sb** | **00 00 48.7** | **-0.1** |
| **D28M** | **Stokes Point** | **1.93** | **93** | | | **Pn** | **00 00 23.7** | **+0.7** |
| **F25K** | **Christian Rive** | **2.01** | **196** | Pg | | **Pn** | **00 00 24.7** | **+0.6** |
| F25K | | | | Sg | | **Sn** | **00 00 50.4** | **+0.6** |
| **BMAR** | **Burnt Mountain** | **2.11** | **184** | Pg | | **Pn** | **00 00 25.9** | **+0.5** |
| **BMLK** | **Toolik Lake Re** | **2.13** | **248** | | | **Pn** | **00 00 26.2** | **+0.5** |
| TOLK | | | | IAML | | | 00 01 02.8 | |
| | comp=E,1μm,1.0s | | | | | | | |
| **E24K** | **Your Creek** | **2.14** | **229** | Pg | | **Pn** | **00 00 26.5** | **+0.7** |
| E24K | | | | IAML | | | 00 01 02.3 | |
| | comp=E,1μm,0.8s | | | | | | | |
| **C23K** | **Itkillik River** | **2.27** | **281** | | | **Pn** | **00 00 27.1** | **-0.5** |
| C23K | | | | IAML | | | 00 01 13.1 | |
| | comp=N,1μm,0.6s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.38** | **259** | | | **Pn** | **00 00 29.4** | **+0.2** |
| D23K | | | | IAML | | | 00 01 13.1 | |
| | comp=E,919nm,0.9s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **216** | | | **Pn** | **00 00 30.7** | **+0.8** |
| F24K | | | | IAML | | | 00 01 14.3 | |
| | comp=E,1μm,0.8s | | | | | | | |
| **E23K** | **Chandalar** | **2.46** | **236** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **POKR** | **Poker Plat Res** | **4.60 197** | | **Pn** | **00 01 00.9 +1.3** |
| POKR | | | IAML | | 00 01 56.3 |
| | comp=N,248nm,0.8s | | | | |
| **G21K** | **Allakaket** | **4.62 234** | Pn | **Pn** | **00 01 00.6 +0.7** |
| G21K | | | IAML | | 00 02 25.2 |
| | comp=E,262nm,0.8s | | | | |
| G21K | | | IAML | | 00 02 25.6 |
| | comp=N,199nm,0.9s | | | | |
| **I29M** | **Ogilvie Camp,** | **4.75 149** | | **Pn** | **00 01 02.3 +0.6** |
| I29M | | | IAML | | 00 02 23.2 |
| | comp=E,222nm,0.8s | | | | |
| I29M | | | IAML | | 00 02 23.9 |
| | comp=N,212nm,0.6s | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83 207** | | **Pn** | **00 01 03.9 +1.1** |
| I23K | | | IAML | | 00 02 29.3 |
| | comp=E,204nm,0.8s | | | | |
| I23K | | | IAML | | 00 02 31.8 |
| | comp=N,204nm,1.1s | | | | |
| **MDM** | **Murphy Dome** | **4.85 201** | | **Pn** | **00 01 03.6 +0.6** |
| MDM | | | IAML | | 00 02 23.8 |
| | comp=E,172nm,0.7s | | | | |
| MDM | | | IAML | | 00 02 24.8 |
| | comp=N,189nm,0.8s | | | | |
| **COLA** | **College** | **4.88 199** | | **Pn** | **00 01 04.8 +1.4** |
| **IL31** | | **4.89 194** | | **Pn** | **00 01 04.3 +0.8** |
| **ILAR** | **Eielson Array** | **4.89 194** | Pn | **Pn** | **00 01 04.7 +1.1** |
| | comp=N,5.8nm,0.3s,baz=7.5,slow=13,SNR=118 | | | | |
| ILAR | | | Sn | **Sn** | **00 02 01.0 +0.5** |
| | comp=N,13nm,0.3s,baz=6.8,slow=27,SNR=12 | | | | |
| ILAR | | | Lg | Lg | 00 02 24.0 |
| | comp=N,11nm,0.3s,baz=12,slow=29,SNR=2.5 | | | | |
| ILAR | | | LR | LR | 00 03 10.0 |
| | comp=N,286nm,19.4s,baz=102,slow=40 comp=N,19nm,0.5s | | | | |
| **EGAK** | **Eagle** | **4.91 165** | | **Pn** | **00 01 04.8 +1.0** |
| EGAK | | | IAML | | 00 02 02.6 |
| | comp=N,188nm,1.0s | | | | |
| **F20K** | **Avaraart Lake** | **4.95 245** | Pn | **Pn** | **00 01 05.1 +0.7** |
| F20K | | | IAML | | 00 02 38.2 |
| | comp=N,138nm,1.2s | | | | |
| **J25K** | **Salcha River,** | **4.95 186** | | **Pn** | **00 01 05.8 +1.3** |
| J25K | | | IAML | | 00 02 05.8 |
| | comp=N,143nm,0.8s | | | | |
| J25K | | | IAML | | 00 02 29.0 |
| | comp=E,198nm,0.8s | | | | |
| **J26L** | **Joseph Creek** | **5.05 177** | | **Pn** | **00 01 07.1 +1.3** |
| J26L | | | IAML | | 00 02 08.3 |
| | comp=E,123nm,0.7s | | | | |
| **IMAR** | **Indian Mountai** | **5.08 230** | | **Pn** | **00 01 07.9 +1.6** |
| **H21K** | **Melozitna Rive** | **5.09 224** | Pn | **Pn** | **00 01 06.9 +0.5** |
| H21K | | | IAML | | 00 02 41.8 |
| | comp=N,193nm,1.1s | | | | |
| H21K | | | IAML | | 00 02 43.4 |
| | comp=E,159nm,1.1s | | | | |
| **CCB** | **Clear Creek Bu** | **5.10 198** | | **Pn** | **00 01 07.0 +0.5** |
| CCB | | | IAML | | 00 02 19.0 |
| | comp=E,119nm,0.9s | | | | |
| **D19K** | **Kuna River** | **5.12 265** | | **Pn** | **00 01 07.3 +0.6** |
| **MLY** | **Manley** | **5.18 213** | | **Pn** | **00 01 08.9 +1.3** |
| **E19K** | **Redstone River** | **5.23 253** | | **Pn** | **00 01 08.1 -0.2** |
| E19K | | | IAML | | 00 02 07.1 |
| | comp=N,138nm,0.7s | | | | |
| E19K | | | IAML | | 00 02 54.6 |
| | comp=E,144nm,1.1s | | | | |
| **HDA** | **Harding Lake** | **5.25 193** | | **Pn** | **00 01 10.2 +1.6** |
| **I30M** | **Mount Dempster** | **5.26 141** | Pn | **Pn** | **00 01 09.1 +0.3** |
| **WRH** | **Wood River Hil** | **5.30 199** | | **Pn** | **00 01 10.3 +1.1** |
| WRH | | | IAML | | 00 02 11.8 |
| | comp=N,160nm,0.8s | | | | |
| WRH | | | IAML | | 00 02 44.8 |
| | comp=E,150nm,1.2s | | | | |
| **NEA2** | **Nenana** | **5.31 203** | | **Pn** | **00 01 10.1 +0.8** |
| NEA2 | | | IAML | | 00 02 46.7 |
| | comp=E,121nm,1.1s | | | | |
| **C19K** | **Lookout Ridge** | **5.48 273** | Pn | **Pn** | **00 01 12.2 +0.5** |
| **SCRK** | **Sand Creek** | **5.57 179** | Pn | **Pn** | **00 01 14.6 +1.5** |
| **K27K** | **Chicken** | **5.58 170** | | **Pn** | **00 01 14.2 +1.1** |
| **J29N** | **Klondike Camp** | **5.60 153** | | **Pn** | **00 01 14.7 +1.3** |
| **F19K** | **Shaleruckik Mo** | **5.74 248** | | **Pn** | **00 01 16.1 +0.9** |
| **DAWY** | **Dawson** | **5.80 159** | | **Pn** | **00 01 17.1 +1.0** |
| **J30M** | **Hart River** | **5.83 145** | Pn | **Pn** | **00 01 17.4 +0.7** |
| **A19K** | **Wainwright** | **5.87 285** | | **Pn** | **00 01 17.1 +0.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.07 210** | | **Pn** | **00 01 20.7 +0.9** |
| **MCK** | **McKinley** | **6.11 200** | | **Pn** | **00 01 21.1 +0.7** |
| **C18K** | **Utukok River** | **6.15 270** | | **Pn** | **00 01 21.2 +0.3** |
| **H19K** | **Roundabout Mou** | **6.17 235** | Pn | **Pn** | **00 01 23.2 +2.0** |
| **K29M** | **Barlow Dome** | **6.28 152** | | **Pn** | **00 01 23.9 +1.1** |
| **E18K** | **Tukpahlearik C** | **6.40 259** | Pn | **Pn** | **00 01 24.6 +0.4** |
| **RND** | **Reindeer** | **6.42 199** | | **Pn** | **00 01 26.1 +1.5** |
| **F18K** | **Selawik** | **6.49 251** | | **Pn** | **00 01 25.8 +0.3** |
| **L26K** | **Log Cabin Wild** | **6.53 177** | | **Pn** | **00 01 27.6 +1.5** |
| **BCAR** | **Beaver Creek A** | **6.56 170** | Pn | **Pn** | **00 01 27.4 +0.9** |
| **L27K** | **Beaver Creek,** | **6.56 171** | Pn | **Pn** | **00 01 27.5 +1.0** |
| **G18K** | **Tagagawik** | **6.59 243** | Pn | **Pn** | **00 01 28.1 +1.1** |
| **DHY** | **Denali Highway** | **6.60 193** | | **Pn** | **00 01 29.0 +1.8** |
| **PAX** | **Paxson** | **6.60 185** | | **Pn** | **00 01 28.3 +1.1** |
| **J20K** | **Nowinta River** | **6.64 221** | Pn | **Pn** | **00 01 28.4 +0.8** |
| **A36M** | **Sachs Harbour** | **6.71 60** | Pn | **Pn** | **00 01 28.1 -0.4** |
| **L29M** | **L29M** | **6.88 156** | Pn | **Pn** | **00 01 31.7 +0.8** |
| **C17K** | **DeLong Mountai** | **6.90 270** | | **Pn** | **00 01 30.3 -0.9** |
| **RDOG** | **Red Dog Mine** | **6.95 267** | | **Pn** | **00 01 30.6 -1.2** |
| **E17K** | **Hotham Inlet** | **6.98 258** | | **Pn** | **00 01 31.6 -0.5** |
| **WAT7** | **Susitna Watana** | **6.98 198** | | **Pn** | **00 01 33.8 +1.5** |
| **H18K** | **Honhosa River** | **7.01 238** | Pn | **Pn** | **00 01 33.2 +0.6** |
| **C36M** | **Paulatuk** | **7.07 82** | Pn | **Pn** | **00 01 32.4 -1.1** |
| **F17K** | **Baldwin Pennin** | **7.11 252** | Pn | **Pn** | **00 01 34.7 +0.7** |
| **D17K** | **Noatak River** | **7.14 264** | | **Pn** | **00 01 33.6 -0.9** |
| **J19K** | **Poorman** | **7.15 225** | | **Pn** | **00 01 35.5 +0.9** |
| **M26K** | **Nabesna, AK** | **7.17 176** | Pn | **Pn** | **00 01 36.6 +1.7** |
| **M27K** | **Edge Creek, AK** | **7.26 171** | Pn | **Pn** | **00 01 36.6 +0.4** |
| **K20K** | **Telida** | **7.34 217** | Pn | **Pn** | **00 01 38.3 +1.1** |
| **M29M** | **Somme Creek** | **7.48 159** | Pn | **Pn** | **00 01 40.4 +1.2** |
| **G17K** | **Kiwalik Mounta** | **7.48 245** | | **Pn** | **00 01 39.1 0.0** |
| **SML** | **Sawmill** | **7.93 194** | | **Pn** | **00 01 46.9 +1.5** |
| **GHO** | **Glory Hole Cre** | **8.02 196** | Pn | **Pn** | **00 01 47.6 +1.0** |
| **G16K** | **Koyuk River** | **8.10 248** | | **Pn** | **00 01 46.7 -0.9** |
| **SKT** | **Skwentna** | **8.15 205** | | **Pn** | **00 01 49.8 +1.5** |
| **MCARA** | **McCarthy VSAT** | **8.19 176** | | **Pn** | **00 01 50.9 +2.1** |
| **N30M** | **Aishikik Lake** | **8.61 157** | Pn | **Pn** | **00 01 56.1 +1.5** |
| **MMPY** | **Sheldon Lake,** | **8.67 137** | | **Pn** | **00 01 56.8 +1.3** |
| **M19K** | **Big River Lodg** | **8.71 214** | Pn | **Pn** | **00 01 57.7 +1.7** |
| **DLBC** | **Dease Lake** | **12.69 144** | Pn | **Pn** | **00 02 51.0 +0.5** |
| | comp=E,0.4nm,0.3s,baz=334,slow=8.3,SNR=7.4 | | | | |
| DLBC | | | Sn | **Sn** | **00 05 06.5 -5.6** |
| | comp=E,0.2nm,0.3s,baz=179,slow=23,SNR=2.0 comp=E,2.6nm,0.6s | | | | |
| **YKA** | **Yellowknife Ar** | **13.80 106** | Pn | **Pn** | **00 03 01.9 -3.5** |
| | comp=E,0.8nm,0.3s,baz=314,slow=13,SNR=16 | | | | |
| YKA | | | Sn | Sn | 00 05 27.2 -12 |
| | comp=E,1.4nm,0.3s,baz=315,slow=24,SNR=8.7 comp=E,1.9nm,0.5s | | | | |
| **SEY** | **Seymchan** | **25.27 287** | P | **P** | **00 05 17.9 +1.7** |
| | comp=E,2.3nm,0.3s,baz=70,slow=7.8,SNR=8.6 comp=E,2.3nm,0.3s | | | | |
| **PDAR** | **Pinedale Array** | **32.16 128** | P | **P** | **00 06 20.5 +2.4** |
| | comp=E,0.4nm,0.6s,baz=356,slow=7.7,SNR=4.1 comp=E,0.4nm,0.6s | | | | |
| **NVAR** | **Mina Array Bea** | **34.10 142** | P | **P** | **00 06 37.3 +2.3** |
| | comp=E,0.2nm,0.6s,baz=318,slow=6.6,SNR=1.7 comp=E,0.2nm,0.6s | | | | |
| **TXAR** | **Lajitas Array** | **46.38 128** | P | **P** | **00 08 18.3 +1.7** |
| | comp=E,0.3nm,0.5s,baz=359,slow=9.1,SNR=3.8 comp=E,0.3nm,0.5s | | | | |
| **FINES** | **FINESS Array B** | **49.14 6** | P | **P** | **00 08 37.3 -0.2** |
| | comp=E,2.8nm,1.0s,baz=341,slow=12,SNR=1.9 comp=E,2.8nm,1.0s | | | | |
| **HFS** | **Hagfors** | **49.67 14** | P | **P** | **00 08 41.8 +0.2** |
| | comp=E,3.4nm,1.0s,baz=346,slow=3.6,SNR=2.3 comp=E,3.4nm,1.0s | | | | |
| **ZALV** | **Zalesovo Beam** | **51.79 325** | P | **P** | **00 08 58.3 +0.6** |
| | comp=E,0.5nm,0.5s,baz=15,slow=6.2,SNR=2.6 comp=E,0.5nm,0.5s | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.27 27** | P | **P** | **00 09 01.3 +0.1** |
| | comp=E,1.4nm,0.8s,baz=333,slow=6.9,SNR=2.4 comp=E,1.4nm,0.8s | | | | |
| **JHJ** | **Hachijo jima 2** | **54.53 270** | LR | LR | 00 34 36.5 |
| | comp=E,53nm,18.8s,baz=70,slow=38 | | | | |
| **KURBB** | **Kurchatov Arra** | **56.16 329** | P | **P** | **00 09 29.5 -0.1** |
| | comp=E,0.9nm,0.8s,baz=23,slow=7.2,SNR=5.1 comp=E,0.9nm,0.8s | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.04 299** | *e*P | **P** | **00 09 36.7 +0.6** |
| HHC | | | pmax | pmax | |
| | comp=Z,9.0nm,0.6s | | | | |
| HHC | | | pmax | pmax | |
| | comp=Z,60nm,4.6s | | | | |
| **CLL** | **Collm** | **58.33 17** | *i* pP | pP | 00 09 48.4 +2.5 |
| **MKAR** | **Makanchi Array** | **59.10 325** | P | **P** | **00 09 51.0 +0.6** |
| | comp=Z,0.4nm,0.5s,baz=48,slow=8.4,SNR=5.0 comp=Z,0.4nm,0.5s | | | | |
| **AKASG** | **Malin Array Be** | **59.99 5** | P | **P** | **00 09 54.7 -1.7** |
| | comp=Z,0.8nm,0.5s,baz=0.1,slow=7.4,SNR=2.3 comp=Z,0.8nm,0.5s | | | | |
| **ESDC** | **Sonseca Array** | **67.26 32** | P | **P** | **00 10 44.8 +0.2** |
| | comp=Z,0.3nm,0.6s,baz=344,slow=6.2,SNR=2.8 comp=Z,0.3nm,0.6s | | | | |
| **BRTR** | **Keskin Array B** | **71.06 2** | P | **P** | **00 11 08.7 +0.3** |
| | comp=Z,0.5nm,0.8s,baz=352,slow=4.7,SNR=2.3 comp=Z,0.5nm,0.8s | | | | |
| **PZH** | **PanZhiHua** | **73.33 301** | P | **P** | **00 11 22.9 +0.8** |
| PZH | | | pmax | pmax | |
| | comp=Z,10.0nm,0.5s | | | | |
| PZH | | | pmax | pmax | |
| | comp=Z,100nm,4.8s | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.75 301** | P | **P** | **00 12 08.9 -0.1** |
| | comp=Z,0.7nm,0.3s,baz=352,slow=3.7,SNR=1.7 comp=Z,0.7nm,0.3s | | | | |

*NEIC* ***13*** *00:09:19.8±1.4, 69°.50N±0°.03×144°.13W±0°.06, h10km±1km, Error ellipse: s-maj=6.1km s-min=3.2km az=148.0*

**AEIC 13 00:09:19.2±1.5, 69°.45N±0°.05×144°.22W±0°.10, h0km±3km, ML2.5, ML3.2**/108(NEIC), **Error ellipse: s-maj=7.2km s-min=4.7km az=193.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.25** | **45** | Pg | Pg | 00 09 23.8 | -0.2 |
| C27K | | | | | Sg | 00 09 26.8 | -0.5 |
| C27K | | | | IAML | | 00 09 27.0 | |
| | comp=E,3μm,0.7s | | | | | | |
| C27K | | | | IAML | | 00 09 27.2 | |
| | comp=N,2μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.53** | **333** | | Pg | 00 09 29.7 | +0.3 |
| C26K | | | | | Sg | 00 09 37.2 | +1.0 |
| **D25K** | **Kavik River** | **0.78** | **261** | | Pb | 00 09 34.9 | -0.7 |
| **D27M** | **Malcolm River** | **1.17** | **99** | Pg | Pg | 00 09 42.0 | +0.3 |
| **D27M** | **Malcolm River** | **1.17** | **99** | | Sb | 00 09 57.8 | -0.2 |
| **E27K** | **Coleen River** | **1.59** | **142** | Pn | Pn | 00 09 46.7 | -1.9 |
| E27K | | | | Sn | Sg | 00 10 10.9 | +0.8 |
| **C24K** | **Franklin Bluff** | **1.60** | **282** | Pn | Pn | 00 09 47.6 | -1.0 |
| **D24K** | **Happy Valley** | **1.66** | **262** | Pn | Pn | 00 09 49.0 | -0.6 |
| D24K | | | | Sn | Sg | 00 10 14.8 | +2.1 |
| D24K | | | | IAML | | 00 10 17.6 | |
| | comp=E,134nm,0.6s | | | | | | |
| D24K | | | | IAML | | 00 10 19.1 | |
| | comp=N,112nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.76** | **179** | Pn | Pn | 00 09 50.0 | -1.0 |
| F26K | | | | IAML | | 00 10 20.7 | |
| | comp=E,124nm,0.4s | | | | | | |
| **E28M** | **Babbage River** | **1.89** | **115** | | Pn | 00 09 53.3 | +0.6 |
| **F25K** | **Christian Rive** | **1.94** | **196** | Pn | Pn | 00 09 52.5 | -0.9 |
| F25K | | | | Sn | Sg | 00 10 20.9 | -0.5 |
| F25K | | | | IAML | | 00 10 24.2 | |
| | comp=E,95nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.04** | **184** | | Pn | 00 09 54.5 | -0.2 |
| BMAR | | | | | Sg | 00 10 23.8 | -0.8 |
| **E24K** | **Your Creek** | **2.08** | **230** | | Pn | 00 09 54.9 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **250** | Pn | Pn | 00 09 54.7 | -0.8 |
| TOLK | | | | IAML | | 00 10 32.0 | |
| | comp=E,75nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **2.27** | **283** | | Pn | 00 09 57.2 | -0.7 |
| C23K | | | | IAML | | 00 10 34.0 | |
| | comp=N,64nm,0.5s | | | | | | |
| C23K | | | | IAML | | 00 10 41.5 | |
| | comp=E,73nm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.36** | **261** | Pn | Pn | 00 09 58.3 | -0.8 |
| **F24K** | **Squaw Lake** | **2.37** | **217** | | Pn | 00 09 59.2 | 0.0 |
| **E23K** | **Chandalar** | **2.41** | **237** | Pn | Pn | 00 09 59.6 | -0.4 |
| E23K | | | | IAML | | 00 11 23.5 | |
| | comp=E,100nm,0.4s | | | | | | |
| E23K | | | | IAML | | 00 11 23.9 | |
| | comp=N,90nm,0.4s | | | | | | |
| **F28M** | **Old Crow** | **2.44** | **137** | Pn | Pn | 00 10 00.1 | -0.2 |
| F28M | | | | IAML | | 00 10 41.0 | |
| | comp=N,57nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **2.52** | **112** | | Pn | 00 10 01.8 | +0.5 |
| **G27K** | **Doyon Strip** | **2.82** | **159** | Pn | Pn | 00 10 04.7 | -0.8 |
| **FYU** | **Fort Yukon** | **2.92** | **188** | Pn | Pn | 00 10 06.7 | -0.2 |
| FYU | | | | IAML | | 00 12 03.2 | |
| | comp=N,75nm,0.9s | | | | | | |
| FYU | | | | IAML | | 00 12 04.7 | |
| | comp=E,59nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.02** | **205** | Pn | Pn | 00 10 06.2 | -2.0 |
| G24K | | | | IAML | | 00 12 07.6 | |
| | comp=E,42nm,0.6s | | | | | | |
| G24K | | | | IAML | | 00 12 08.3 | |
| | comp=N,63nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **3.08** | **263** | Pn | Pn | 00 10 08.6 | -0.4 |
| D22K | | | | IAML | | 00 12 08.2 | |
| | comp=N,54nm,0.7s | | | | | | |
| D22K | | | | IAML | | 00 12 13.4 | |
| | comp=E,54nm,0.9s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.30** | **290** | | Pn | 00 10 11.4 | -0.6 |
| B22K | | | | IAML | | 00 12 21.8 | |
| | comp=E,48nm,0.5s | | | | | | |
| **G29M** | **Pine Creek** | **3.44** | **135** | Pn | Pn | 00 10 14.0 | 0.0 |
| **G23K** | **Bananza Creek** | **3.51** | **221** | Pn | Pn | 00 10 14.4 | -0.6 |
| G23K | | | | IAML | | 00 12 33.2 | |
| | comp=N,44nm,0.7s | | | | | | |
| G23K | | | | IAML | | 00 12 33.3 | |
| | comp=E,53nm,0.7s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.66** | **278** | Pn | Pn | 00 10 16.4 | -0.5 |
| B21K | | | | IAML | | 00 12 22.0 | |
| | comp=E,54nm,1.0s | | | | | | |
| **E21K** | **Killik River** | **3.66** | **259** | Pn | Pn | 00 10 16.4 | -0.7 |
| E21K | | | | IAML | | 00 12 38.8 | |
| | comp=E,44nm,0.6s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.88** | **126** | Pn | Pn | 00 10 19.8 | -0.2 |
| G30M | | | | IAML | | 00 12 28.1 | |
| | comp=E,49nm,0.7s | | | | | | |
| G30M | | | | IAML | | 00 12 51.4 | |
| | comp=N,59nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.89** | **203** | | Pn | 00 10 20.1 | 0.0 |
| H24K | | | | IAML | | 00 12 47.0 | |
| | comp=E,47nm,1.0s | | | | | | |
| H24K | | | | IAML | | 00 12 48.6 | |
| | comp=N,49nm,0.6s | | | | | | |
| **H29M** | **Whitestone** | **3.93** | **143** | Pn | Pn | 00 10 21.4 | +0.7 |
| **PRP** | **Porcupine Dome** | **3.98** | **188** | Pn | Pn | 00 10 22.3 | +0.7 |
| **INK** | **Inuvik** | **4.04** | **101** | Pn | Pn | 00 10 20.9 | -1.2 |
| INK | | | | IAML | | 00 12 59.5 | |
| | comp=N,20nm,0.9s | | | | | | |
| INK | | | | IAML | | 00 12 59.7 | |
| | comp=E,14nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **4.10** | **241** | Pn | Pn | 00 10 23.3 | +0.3 |
| F21K | | | | IAML | | 00 12 52.4 | |
| | comp=E,47nm,0.8s | | | | | | |
| F21K | | | | IAML | | 00 13 05.1 | |
| | comp=N,38nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **212** | Pn | Pn | 00 10 23.0 | -1.0 |
| H23K | | | | IAML | | 00 13 02.6 | |
| | comp=N,44nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.18** | **174** | Pn | Pn | 00 10 23.9 | -0.2 |
| **I28M** | **Miner Creek** | **4.34** | **156** | Pn | Pn | 00 10 26.8 | +0.3 |
| I28M | | | | IAML | | 00 13 08.6 | |
| | comp=E,37nm,1.2s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.36** | **113** | Pn | Pn | 00 10 26.7 | +0.2 |
| **G31M** | **Satah River** | **4.49** | **120** | Pn | Pn | 00 10 28.0 | -0.3 |
| **POKR** | **Poker Plat Res** | **4.53** | **198** | | Pn | 00 10 28.8 | -0.1 |
| POKR | | | | IAML | | 00 12 45.7 | |
| | comp=N,33nm,0.3s | | | | | | |
| POKR | | | | IAML | | 00 13 12.8 | |
| | comp=E,36nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **4.54** | **283** | Pn | Pn | 00 10 29.1 | +0.1 |
| **I23K** | **Minto, Yukon-K** | **4.76** | **207** | Pn | Pn | 00 10 32.5 | +0.5 |
| I23K | | | | IAML | | 00 13 17.6 | |
| | comp=N,27nm,1.0s | | | | | | |
| I23K | | | | IAML | | 00 13 26.8 | |
| | comp=E,30nm,1.0s | | | | | | |
| **MDM** | **Murphy Dome** | **4.77** | **201** | Pn | Pn | 00 10 32.7 | +0.4 |
| MDM | | | | IAML | | 00 13 17.0 | |
| | comp=E,21nm,0.7s | | | | | | |
| MDM | | | | IAML | | 00 13 27.0 | |
| | comp=N,24nm,1.1s | | | | | | |
| **IL03** | **Eielson Array** | **4.81** | **194** | Pn | Pn | 00 10 31.8 | -0.9 |
| **IL31** | | **4.81** | **194** | Pn | Pn | 00 10 32.9 | +0.1 |
| **ILAR** | **Eielson Array** | **4.81** | **194** | Pn | Pn | 00 10 32.7 | -0.1 |
| **EGAK** | **Eagle** | **4.84** | **164** | Pn | Pn | 00 10 33.1 | -0.1 |
| EGAK | | | | IAML | | 00 12 57.2 | |
| | comp=N,23nm,0.7s | | | | | | |
| **J25K** | **Salcha River,** | **4.88** | **186** | | Pn | 00 10 33.2 | -0.6 |
| J25K | | | | IAML | | 00 13 20.9 | |
| | comp=N,20nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.91** | **246** | Pn | Pn | 00 10 34.3 | +0.2 |
| F20K | | | | IAML | | 00 13 19.4 | |
| | comp=N,21nm,0.7s | | | | | | |
| F20K | | | | IAML | | 00 13 29.9 | |
| | comp=E,17nm,1.2s | | | | | | |
| **J26L** | **Joseph Creek** | **4.98** | **177** | Pn | Pn | 00 10 35.5 | +0.4 |
| J26L | | | | IAML | | 00 13 17.3 | |
| | comp=E,22nm,0.7s | | | | | | |
| J26L | | | | IAML | | 00 13 22.5 | |
| | comp=N,21nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.02** | **198** | Pn | Pn | 00 10 35.4 | -0.3 |
| CCB | | | | IAML | | 00 12 57.9 | |
| | comp=E,18nm,0.9s | | | | | | |
| CCB | | | | IAML | | 00 13 24.6 | |
| | comp=N,14nm,0.4s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.03** | **225** | Pn | Pn | 00 10 37.7 | +1.9 |
| H21K | | | | IAML | | 00 13 25.2 | |
| | comp=E,26nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **5.10** | **266** | Pn | Pn | 00 10 37.0 | +0.3 |
| D19K | | | | IAML | | 00 13 38.0 | |
| | comp=E,15nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.11** | **213** | Pn | Pn | 00 10 37.3 | +0.4 |
| MLY | | | | IAML | | 00 13 28.8 | |
| | comp=E,16nm,0.9s | | | | | | |
| MLY | | | | IAML | | 00 13 42.0 | |
| | comp=N,12nm,0.9s | | | | | | |
| **HDA** | **Harding Lake** | **5.18** | **193** | Pn | Pn | 00 10 38.0 | +0.2 |
| **E19K** | **Redstone River** | **5.20** | **254** | Pn | Pn | 00 10 38.2 | +0.2 |
| E19K | | | | IAML | | 00 13 48.3 | |
| | comp=E,21nm,0.9s | | | | | | |
| **I30M** | **Mount Dempster** | **5.21** | **141** | Pn | Pn | 00 10 38.6 | +0.2 |
| **WRH** | **Wood River Hil** | **5.23** | **199** | Pn | Pn | 00 10 40.0 | +1.6 |
| WRH | | | | IAML | | 00 13 30.4 | |
| | comp=E,20nm,0.7s | | | | | | |
| WRH | | | | IAML | | 00 13 36.9 | |
| | comp=N,16nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.47** | **274** | Pn | Pn | 00 10 42.7 | +0.9 |
| **SCRK** | **Sand Creek** | **5.50** | **179** | | Pn | 00 10 43.1 | +0.8 |
| **K27K** | **Chicken** | **5.51** | **170** | Pn | Pn | 00 10 44.0 | +1.6 |
| **BWN** | **Browne** | **5.69** | **204** | Pn | Pn | 00 10 45.1 | +0.3 |
| **J30M** | **Hart River** | **5.78** | **144** | Pn | Pn | 00 10 45.9 | -0.3 |
| **G19K** | **Purcell Mounta** | **5.89** | **242** | Pn | Pn | 00 10 46.8 | -0.9 |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **210** | Pn | Pn | 00 10 49.2 | 0.0 |
| **C18K** | **Utukok River** | **6.14** | **270** | Pn | Pn | 00 10 50.2 | -0.8 |
| **I20K** | **Naaghedeneel** | **6.14** | **225** | Pn | Pn | 00 10 49.5 | -1.6 |
| **K29M** | **Barlow Dome** | **6.22** | **152** | Pn | Pn | 00 10 51.8 | -0.5 |
| **E18K** | **Tukpahlearik C** | **6.37** | **259** | Pn | Pn | 00 10 54.2 | +0.1 |
| **BCAR** | **Beaver Creek A** | **6.49** | **170** | Pn | Pn | 00 10 55.6 | -0.3 |
| **L27K** | **Beaver Creek,** | **6.49** | **170** | Pn | Pn | 00 10 57.9 | +2.1 |

*NEIC* ***13*** *00:10:39.8±1.2, 69°.57N±0°.06×144°.25W±0°.06, h10km±2km, Error ellipse: s-maj=9.4km s-min=3.7km az=8.0*

**AEIC 13 00:10:37.8±1.9, 69°.51N±0°.04×144°.32W±0°.06, h6km±6km, ML3.3, ML3.5**/88(NEIC), **Error ellipse: s-maj=5.9km s-min=2.8km az=187.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **61** | | Pg | 00 10 46.2 | +3.7 |
| **C26K** | **Camden Bay** | **0.46** | **333** | | Sg | 00 10 53.6 | +1.1 |
| **C26K** | **Camden Bay** | **0.46** | **333** | | Pg | 00 10 47.4 | +0.8 |
| C26K | | | | IAML | | 00 10 57.7 | |
| | comp=N,2μm,0.8s | | | | | | |
| C26K | | | | IAML | | 00 11 01.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.75** | **256** | | Pg | 00 10 52.2 | +0.1 |
| D25K | | | | | Sg | 00 11 02.1 | +0.1 |
| **D27M** | **Malcolm River** | **1.22** | **101** | Pg | Pn | 00 11 01.4 | +0.1 |
| D27M | | | | IAML | | 00 11 22.9 | |
| | comp=E,893nm,0.3s | | | | | | |
| **D27M** | **Malcolm River** | **1.22** | **101** | | Sb | 00 11 17.2 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.55** | **280** | | Pg | 00 11 07.2 | -0.2 |
| C24K | | | | | Sg | 00 11 29.6 | +2.1 |
| **C24K** | **Franklin Bluff** | **1.55** | **280** | IAML | | 00 11 32.9 | |
| | comp=E,689nm,0.8s | | | | | | |
| C24K | | | | IAML | | 00 11 32.9 | |
| | comp=N,619nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **259** | | Pg | 00 11 09.9 | +0.7 |
| D24K | | | | IAML | | 00 11 32.8 | |
| | comp=E,515nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **142** | | Pg | 00 11 09.2 | -0.3 |
| E27K | | | | IAML | | 00 11 34.5 | |
| | comp=E,362nm,0.7s | | | | | | |
| E27K | | | | IAML | | 00 11 34.5 | |
| | comp=N,452nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **178** | | Pb | 00 11 11.6 | 0.0 |
| **F26K** | **Sheenjek River** | **1.83** | **178** | IAML | | 00 11 38.8 | |
| | comp=N,344nm,0.4s | | | | | | |
| **E28M** | **Babbage River** | **1.95** | **116** | | Pb | 00 11 13.8 | +0.3 |
| E28M | | | | IAML | | 00 11 44.5 | |
| | comp=N,335nm,0.7s | | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **93** | | Pb | 00 11 14.2 | +0.1 |
| **F25K** | **Christian Rive** | **1.99** | **195** | | Pb | 00 11 14.4 | +0.1 |
| **TOLK** | **Toolik Lake Re** | **2.08** | **248** | | Pg | 00 11 17.1 | -0.5 |
| TOLK | | | | IAML | | 00 11 51.3 | |
| | comp=E,325nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.09** | **228** | | Pb | 00 11 16.0 | -0.1 |
| **BMAR** | **Burnt Mountain** | **2.10** | **183** | | Pb | 00 11 16.1 | 0.0 |
| **C23K** | **Itkillik River** | **2.22** | **281** | | Pb | 00 11 18.1 | -0.1 |
| **D23K** | **Nanushuk River** | **2.33** | **259** | | Pb | 00 11 19.5 | -0.7 |
| **F24K** | **Squaw Lake** | **2.40** | **215** | | Pb | 00 11 19.7 | -1.5 |
| **E23K** | **Chandalar** | **2.42** | **235** | | Pn | 00 11 19.7 | +1.9 |
| **F28M** | **Old Crow** | **2.51** | **137** | | Pn | 00 11 20.3 | +1.3 |
| F28M | | | | IAML | | 00 12 02.6 | |
| | comp=E,218nm,0.4s | | | | | | |
| F28M | | | | IAML | | 00 12 03.0 | |
| | comp=N,186nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.58** | **113** | | Pn | 00 11 21.0 | +1.0 |
| E29M | | | | IAML | | 00 12 07.3 | |
| | comp=E,229nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **175** | | Pn | 00 11 21.6 | +1.6 |
| **G25K** | **Bearman Lake** | **2.84** | **194** | | Pn | 00 11 25.4 | +1.9 |
| **G27K** | **Doyon Strip** | **2.89** | **159** | | Pn | 00 11 26.0 | +1.7 |
| **D22K** | **Ayikyak River** | **3.05** | **262** | | Pg | 00 11 35.8 | -0.3 |
| D22K | | | | IAML | | 00 12 24.3 | |
| | comp=E,128nm,0.9s | | | | | | |
| D22K | | | | IAML | | 00 12 27.0 | |
| | comp=N,125nm,0.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| I28M | | | | IAML | | | 00 12 42.1 | | |
| | comp=N,44nm,0.5s | | | | | | | | |
| **G21K** | **Allakaket** | **4.58** | **233** | | | Pn | 00 11 50.0 | +2.6 | |
| G21K | | | | IAML | | | 00 13 09.8 | | |
| | comp=E,47nm,0.8s | | | | | | | | |
| G21K | | | | IAML | | | 00 13 12.8 | | |
| | comp=N,36nm,1.0s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.80** | **206** | | | Pn | 00 11 52.5 | +2.1 | |
| **MDM** | **Murphy Dome** | **4.82** | **200** | | | Pn | 00 11 53.2 | +2.4 | |
| **COLA** | **College** | **4.86** | **198** | | | Pn | 00 11 55.0 | +3.8 | |
| **EGAK** | **Eagle** | **4.91** | **164** | | | Pn | 00 11 54.0 | +2.0 | |
| EGAK | | | | IAML | | | 00 13 26.4 | | |
| | comp=N,36nm,0.8s | | | | | | | | |
| **J26L** | **Joseph Creek** | **5.04** | **176** | | | Pn | 00 11 56.6 | +2.8 | |
| **CCB** | **Clear Creek Bu** | **5.07** | **197** | | | Pn | 00 11 57.0 | +2.9 | |
| **HDA** | **Harding Lake** | **5.23** | **193** | | | Pn | 00 11 59.5 | +3.1 | |
| HDA | | | | IAML | | | 00 13 28.0 | | |
| | comp=N,29nm,0.8s | | | | | | | | |
| HDA | | | | IAML | | | 00 13 30.9 | | |
| | comp=E,33nm,0.7s | | | | | | | | |
| **SCRK** | **Sand Creek** | **5.56** | **178** | Pn | | Pn | 00 12 03.7 | +2.6 | |
| **J29N** | **Klondike Camp** | **5.61** | **152** | Pn | | Pn | 00 12 04.2 | +2.5 | |
| **F19K** | **Shaleruckik Mo** | **5.69** | **248** | Pn | | Pn | 00 12 05.2 | +2.6 | |
| **DAWY** | **Dawson** | **5.80** | **158** | | | Pn | 00 12 06.9 | +2.6 | |
| **J30M** | **Hart River** | **5.86** | **144** | Pn | | Pn | 00 12 07.1 | +2.0 | |
| **G19K** | **Purcell Mounta** | **5.89** | **241** | | | Pn | 00 12 07.2 | +1.7 | |
| **C18K** | **Utukok River** | **6.10** | **270** | Pn | | Pn | 00 12 09.7 | +1.4 | |
| **BCAR** | **Beaver Creek A** | **6.55** | **170** | | | Pn | 00 12 16.9 | +2.3 | |
| **L27K** | **Beaver Creek,** | **6.56** | **170** | | | Pn | 00 12 16.6 | +2.0 | |
| **DHY** | **Denali Highway** | **6.58** | **192** | Pn | | Pn | 00 12 17.6 | +2.6 | |
| **A36M** | **Sachs Harbour** | **6.76** | **60** | | | Pn | 00 12 17.1 | -0.1 | |
| **L29M** | **L29M** | **6.89** | **156** | | | Pn | 00 12 21.0 | +1.8 | |
| **M26K** | **Nabesna, AK** | **7.16** | **175** | | | Pn | 00 12 25.5 | +2.6 | |
| **M27K** | **Edge Creek, AK** | **7.25** | **171** | | | Pn | 00 12 26.8 | +2.5 | |
| **N30M** | **Aishikik Lake** | **8.62** | **156** | | | Pn | 00 12 44.7 | +1.9 | |
| **MMPY** | **Sheldon Lake,** | **8.70** | **136** | | | Pn | 00 12 45.2 | +1.3 | |

*IDC* ***13*** *00:11:58.3±1.9,7°.22S×127°.72E,h0km,mb3.6/2, mbtmp3.7/4,ML3.7/2,Error ellipse: s-maj=268.2km s-min=30.4km az=66.0,Banda Sea*

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.19** | **154** | Pn | Pn | 00 15 19.5 | -1.2 |
| | 0.3nm,0.3s,baz=329,slow=13,SNR=6.0 1.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **17.40** | **161** | P | P | 00 16 03.5 | -0.6 |
| | 0.3nm,0.3s,baz=340,slow=11,SNR=26 | | | | | | |
| ASAR | | | | S | Sn | 00 19 03.8 | -13 |
| | 1.1nm,0.6s,baz=314,slow=20,SNR=4.8 1.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.19** | **328** | P | P | 00 22 54.7 | +0.4 |
| | 0.2nm,0.4s,baz=112,slow=6.0,SNR=1.8 0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.80** | **335** | P | P | 00 23 16.2 | -0.4 |
| | 0.6nm,0.6s,baz=134,slow=6.2,SNR=1.5 0.6nm,0.6s | | | | | | |

*NEIC* ***13*** *00:18:00.5±1.3,69°.65N±0°.06×144°.5W±0°.1,h10km±2km, Error ellipse: s-maj=10.1km s-min=6.0km az=6.0*

**AEIC 13 00:17:58.7±1.7,69°.56N±0°.06×144°.5W±0°.1,h11km±5km, ML2.8,ML3.0/88(NEIC),Error ellipse: s-maj=9.0km s-min=5.8km az=188.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **75** | | Pg | 00 18 03.0 | -1.4 |
| C27K | | | | IAML | | 00 18 09.9 | |
| | comp=N,2μm,0.7s | | | | | | |
| C27K | | | | IAML | | 00 18 11.6 | |
| | comp=E,1μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.28** | **75** | | Sb | 00 18 09.4 | -1.1 |
| **C26K** | **Camden Bay** | **0.39** | **338** | | Pg | 00 18 06.6 | +0.2 |
| **C26K** | **Camden Bay** | **0.39** | **338** | | Sg | 00 18 12.4 | +0.8 |
| **C26K** | **Camden Bay** | **0.39** | **338** | IAML | | 00 18 14.3 | |
| | comp=N,676nm,0.5s | | | | | | |
| C26K | | | | IAML | | 00 18 19.5 | |
| | comp=E,602nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.71** | **251** | Pg | Pg | 00 18 11.8 | -0.6 |
| **D25K** | **Kavik River** | **0.71** | **251** | | Sg | 00 18 21.5 | -0.1 |
| **D27M** | **Malcolm River** | **1.29** | **103** | | Pn | 00 18 22.5 | -0.1 |
| D27M | | | | IAML | | 00 18 45.8 | |
| | comp=N,144nm,0.8s | | | | | | |
| **D27M** | **Malcolm River** | **1.29** | **103** | | Sg | 00 18 41.1 | +1.1 |
| **C24K** | **Franklin Bluff** | **1.48** | **278** | Pn | Pn | 00 18 25.7 | +0.4 |
| C24K | | | | IAML | | 00 18 48.7 | |
| | comp=E,182nm,0.9s | | | | | | |
| C24K | | | | IAML | | 00 18 48.8 | |
| | comp=N,209nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.59** | **257** | | Pg | 00 18 28.6 | -0.5 |
| D24K | | | | IAML | | 00 18 53.8 | |
| | comp=N,204nm,0.6s | | | | | | |
| D24K | | | | IAML | | 00 18 55.8 | |
| | comp=E,158nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.73** | **141** | | Pb | 00 18 31.1 | +0.7 |
| **F26K** | **Sheenjek River** | **1.88** | **176** | Pn | Pg | 00 18 34.4 | -0.2 |
| F26K | | | | IAML | | 00 19 01.1 | |
| | comp=E,121nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.88** | **176** | | Sg | 00 18 59.1 | +0.2 |
| **F25K** | **Christian Rive** | **2.02** | **193** | Pn | Pb | 00 18 35.2 | -0.1 |
| F25K | | | | IAML | | 00 19 08.1 | |
| | comp=E,84nm,1.1s | | | | | | |
| F25K | | | | IAML | | 00 19 11.8 | |
| | comp=N,77nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.02** | **116** | | Pg | 00 18 36.4 | -0.9 |
| **TOLK** | **Toolik Lake Re** | **2.04** | **246** | | Pb | 00 18 36.6 | +0.8 |
| TOLK | | | | IAML | | 00 19 10.2 | |
| | comp=E,83nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.08** | **226** | Pn | Pb | 00 18 37.1 | +0.7 |
| **BMAR** | **Burnt Mountain** | **2.14** | **181** | | Pb | 00 18 38.0 | +0.6 |
| **C23K** | **Itkillik River** | **2.15** | **280** | | Pb | 00 18 37.6 | 0.0 |
| C23K | | | | IAML | | 00 19 18.7 | |
| | comp=E,108nm,0.6s | | | | | | |
| C23K | | | | IAML | | 00 19 20.2 | |
| | comp=N,132nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.28** | **258** | | Pb | 00 18 39.1 | -0.7 |
| **D23K** | **Nanushuk River** | **2.28** | **258** | IAML | | 00 19 25.5 | |
| | comp=E,64nm,1.0s | | | | | | |
| **E23K** | **Chandalar** | **2.40** | **233** | Pn | Pb | 00 18 42.3 | +0.5 |
| **F24K** | **Squaw Lake** | **2.40** | **213** | | Pb | 00 18 41.6 | -0.3 |
| **F28M** | **Old Crow** | **2.58** | **137** | | Pb | 00 18 43.4 | -1.6 |
| F28M | | | | IAML | | 00 19 32.7 | |
| | comp=E,37nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.65** | **113** | | Pb | 00 18 44.7 | -1.4 |
| E29M | | | | IAML | | 00 19 27.1 | |
| | comp=N,43nm,0.9s | | | | | | |
| **G27K** | **Doyon Strip** | **2.96** | **158** | | Pb | 00 18 48.7 | -2.6 |
| **G24K** | **Hadweenzic Riv** | **3.08** | **203** | | Pn | 00 18 50.2 | +3.0 |
| **B22K** | **Teshekpuk Lake** | **3.18** | **288** | Pn | Pn | 00 18 50.7 | +2.2 |
| B22K | | | | IAML | | 00 19 46.2 | |
| | comp=E,48nm,0.7s | | | | | | |
| B22K | | | | IAML | | 00 20 57.0 | |
| | comp=N,68nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.55** | **276** | Pn | Pn | 00 18 56.8 | +3.2 |
| B21K | | | | IAML | | 00 21 12.1 | |
| | comp=E,35nm,0.8s | | | | | | |
| B21K | | | | IAML | | 00 21 14.8 | |
| | comp=N,34nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **3.59** | **135** | Pn | Pn | 00 18 57.4 | +3.3 |
| **H24K** | **Noodor Dome** | **3.95** | **201** | Pn | Pn | 00 19 01.9 | +2.7 |
| H24K | | | | IAML | | 00 21 23.5 | |
| | comp=N,25nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.07** | **143** | | Pn | 00 19 03.3 | +2.5 |
| **PRP** | **Porcupine Dome** | **4.08** | **186** | | Pn | 00 19 04.4 | +3.4 |
| PRP | | | | IAML | | 00 20 17.0 | |
| | comp=N,34nm,0.5s | | | | | | |
| PRP | | | | IAML | | 00 21 03.0 | |
| | comp=E,19nm,0.5s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.30** | **173** | Pn | Pn | 00 19 07.2 | +3.2 |
| **EPYK** | **Eagle Plains** | **4.34** | **134** | | Pn | 00 19 07.1 | +2.6 |
| **B20K** | **Meade River** | **4.42** | **282** | Pn | Pn | 00 19 08.0 | +2.5 |
| **I28M** | **Miner Creek** | **4.48** | **155** | Pn | Pn | 00 19 09.9 | +3.4 |
| **F31M** | **Tsiigehtchic** | **4.49** | **113** | Pn | Pn | 00 19 10.1 | +3.6 |
| F31M | | | | IAML | | 00 21 39.9 | |
| | comp=N,25nm,1.2s | | | | | | |
| **G21K** | **Allakaket** | **4.56** | **232** | Pn | Pn | 00 19 10.1 | +2.6 |
| **G31M** | **Satah River** | **4.63** | **120** | Pn | Pn | 00 19 10.9 | +2.5 |
| **I23K** | **Minto, Yukon-K** | **4.81** | **205** | Pn | Pn | 00 19 14.7 | +3.7 |
| **MDM** | **Murphy Dome** | **4.84** | **199** | Pn | Pn | 00 19 14.4 | +3.0 |
| MDM | | | | IAML | | 00 21 48.5 | |
| | comp=N,13nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.87** | **244** | Pn | Pn | 00 19 14.5 | +2.7 |
| **IL31** | | **4.90** | **192** | Pn | Pn | 00 19 15.4 | +3.3 |
| **J25K** | **Salcha River,** | **4.98** | **184** | Pn | Pn | 00 19 16.6 | +3.3 |
| J25K | | | | IAML | | 00 20 52.6 | |
| | comp=N,11nm,1.3s | | | | | | |
| **D19K** | **Kuna River** | **5.01** | **264** | Pn | Pn | 00 19 15.7 | +2.0 |
| D19K | | | | IAML | | 00 22 05.9 | |
| | comp=E,10nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.04** | **223** | Pn | Pn | 00 19 16.1 | +2.0 |
| **J26L** | **Joseph Creek** | **5.09** | **175** | Pn | Pn | 00 19 18.6 | +3.7 |
| **CCB** | **Clear Creek Bu** | **5.10** | **196** | Pn | Pn | 00 19 18.0 | +3.1 |
| CCB | | | | IAML | | 00 20 30.8 | |
| | comp=N,10nm,0.3s | | | | | | |
| CCB | | | | IAML | | 00 22 10.1 | |
| | comp=E,10nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **5.14** | **252** | Pn | Pn | 00 19 17.7 | +2.3 |
| **WRH** | **Wood River Hil** | **5.30** | **197** | Pn | Pn | 00 19 20.7 | +3.1 |
| WRH | | | | IAML | | 00 21 57.7 | |
| | comp=N,10nm,1.5s | | | | | | |
| WRH | | | | IAML | | 00 22 01.2 | |
| | comp=E,6.3nm,1.2s | | | | | | |
| **I30M** | **Mount Dempster** | **5.36** | **140** | Pn | Pn | 00 19 21.6 | +3.0 |
| **SCRK** | **Sand Creek** | **5.61** | **178** | Pn | Pn | 00 19 26.1 | +4.1 |
| **K27K** | **Chicken** | **5.63** | **169** | | Pn | 00 19 25.7 | +3.5 |
| **F19K** | **Shaleruckik Mo** | **5.65** | **247** | Pn | Pn | 00 19 24.7 | +2.3 |
| **BWN** | **Browne** | **5.75** | **202** | | Pn | 00 19 26.8 | +2.9 |
| **DAWY** | **Dawson** | **5.87** | **158** | | Pn | 00 19 28.6 | +3.1 |
| **J30M** | **Hart River** | **5.93** | **144** | Pn | Pn | 00 19 29.3 | +2.9 |
| **E18K** | **Tukpahlearik C** | **6.30** | **258** | Pn | Pn | 00 19 33.2 | +1.9 |
| **K29M** | **Barlow Dome** | **6.37** | **151** | Pn | Pn | 00 19 36.5 | +4.1 |
| **DHY** | **Denali Highway** | **6.61** | **191** | Pn | Pn | 00 19 40.1 | +4.3 |

*IDC* ***13*** *00:29:52.4±0.9,47°.47N×156°.30E,h0km,mb4.0/16, mbtmp4.0/19,ML3.6/3,Error ellipse: s-maj=26.2km s-min=17.6km az=174.0*

*NEIC* ***13*** *00:29:52.3±1.6,47°.3N±0°.1×156°.69E±0°.05,h10km±1km, mb4.4/17,Error ellipse: s-maj=20.7km s-min=5.1km az=171.0*

*SKHL* ***13*** *00:29:56.7±0.5,47°.50N×156°.10E,h41km±3km,mb4.6/5*

*MOS* ***13*** *00:29:58.9±1.6,47°.62N×156°.01E,h51km,mb4.3/9,Error ellipse: s-maj=11.2km s-min=8.7km az=108.0*

**ISC 13 00:29:57.6±0.7,47°.58N±0°.07×156°.22E±0°.07,h35km,n104, s2s16/108,mb4.2/42,7C-3D,East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **3.11** | **359** | *e*P | **Pn** | **00 30 43.4** | **-0.8** |
| SKR | | | | AMB | AMB | 00 30 47.7 | |
| | 70nm,0.4s | | | | | | |
| SKR | | | | *e*S | **Sn** | **00 31 18.4** | **-1.7** |
| SKR | | | | A | A | 00 31 26.2 | |
| | 180nm,0.3s | | | | | | |
| SKR | | | | A | A | 00 31 26.2 | |
| | 170nm,0.3s | | | | | | |
| **SKR** | **Severo-Kuril's** | **3.11** | **359** | *e*PN | **Pn** | **00 30 43.3** | **-0.9** |
| SKR | | | | *e*S | **Sn** | **00 31 18.2** | **-1.9** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,408nm,0.7s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,544nm,0.5s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,300nm,18.0s | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **4.41** | **15** | *e*P | **Pn** | **00 30 59.5** | **-2.5** |
| KDTR | | | | AMB | AMB | 00 30 59.9 | |
| | comp=Z,40nm,0.5s | | | | | | |
| KDTR | | | | *e*S | **Sn** | **00 31 49.0** | **-3.0** |
| KDTR | | | | A | A | 00 31 51.2 | |
| | comp=Z,90nm,0.4s | | | | | | |
| KDTR | | | | A | A | 00 31 51.2 | |
| | comp=Z,100nm,0.4s | | | | | | |
| **PET** | **Petropavlovsk** | **5.67** | **15** | Pn | **Pn** | **00 31 18.0** | **-1.3** |
| **PET** | **Petropavlovsk** | **5.67** | **15** | *e*S | **Sn** | **00 32 21.5** | **-1.7** |
| PET | | | | A | A | 00 32 28.3 | |
| | comp=Z,50nm,0.4s | | | | | | |
| PET | | | | A | A | 00 32 28.3 | |
| | comp=Z,40nm,0.4s | | | | | | |
| **PET** | **Petropavlovsk** | **5.67** | **15** | *e*PN | **Pn** | **00 31 19.6** | **+0.3** |
| **KUR** | **Kuril'sk** | **6.23** | **251** | *e*P | **Pn** | **00 31 26.0** | **-1.0** |
| KUR | | | | AMB | AMB | 00 31 26.9 | |
| | comp=Z,60nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **00 32 33.3** | **-3.6** |
| KUR | | | | A | A | 00 32 35.1 | |
| | comp=Z,90nm,0.5s | | | | | | |
| KUR | | | | A | A | 00 32 35.1 | |
| | comp=Z,60nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **6.23** | **251** | *e*PN | **Pn** | **00 31 25.2** | **-1.8** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,64nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **7.54** | **244** | *e*P | **Pn** | **00 31 41.7** | **-3.3** |
| SHO | | | | *e*S | **Sn** | **00 33 02.0** | **-7.2** |
| **YSS** | **Yuzh-Sakhalins** | **9.18** | **271** | *e*P | **Pn** | **00 32 08.4** | **+1.0** |
| YSS | | | | AMB | AMB | 00 32 10.2 | |
| | comp=Z,20nm,0.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **9.18** | **271** | *ce*PN | **Pn** | **00 32 09.7** | **+2.3** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **10.11** | **255** | Pn | **Pn** | **00 32 20.1** | **-0.1** |
| **JKA** | **Kamikawa-asahi** | **10.11** | **255** | *e*P | **Pn** | **00 32 20.1** | **-0.1** |
| **ASAJ** | **Asahikawa** | **10.11** | **255** | Pn | **Pn** | **00 32 18.8** | **-1.5** |
| | comp=Z,0.7nm,0.3s,baz=148,slow=8.4,SNR=5.0 comp=Z,2.8nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **10.11** | **255** | PN | **Pn** | **00 32 20.1** | **-0.1** |
| **ERM** | **Erimo** | **10.81** | **244** | Pn | **Pn** | **00 32 26.9** | **-2.9** |
| **ERM** | **Erimo** | **10.81** | **244** | PN | **Pn** | **00 32 26.9** | **-2.9** |
| **JTM** | **Tenmabayashi** | **12.80** | **244** | Pn | Pn | 00 32 50.9 | -6.2 |
| **SEY** | **Seymchan** | **15.54** | **353** | *e*P | **Pn** | **00 33 33.2** | **-0.6** |
| **SEY** | **Seymchan** | **15.54** | **353** | *ce*P | **Pn** | **00 33 33.2** | **-0.6** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,11nm,2.5s | | | | | | |
| **KLR** | **Kul'dur** | **16.32** | **285** | Pn | **P** | **00 33 44.8** | **-1.7** |
| | comp=Z,0.2nm,0.3s,baz=74,slow=9.7,SNR=6.0 comp=Z,1.4nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **16.32** | **285** | *e*P | **Pn** | **00 33 41.2** | **-2.7** |
| **KLR** | **Kul'dur** | **16.32** | **285** | *i* P | **Pn** | **00 33 43.2** | **-0.7** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.8s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **17.18** | **268** | Pn | **Pn** | **00 33 52.2** | **-2.6** |
| **USA0B** | **Ussuriysk Arra** | **17.18** | **268** | P | **Pn** | **00 33 52.2** | **-2.6** |
| USA0B | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **17.18** | **268** | P | **Pn** | **00 33 52.6** | **-2.2** |
| | comp=Z,0.2nm,0.3s,baz=70,slow=12,SNR=3.1 comp=Z,1.0nm,0.5s | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **17.26** | **237** | *e*P | **P** | **00 34 03.3** | **+6.2** |
| **GSTR** | **Great Sitkin T** | **18.39** | **65** | P | **P** | **00 34 02.3** | **-7.1** |
| **ZEA** | **Zeya** | **19.29** | **299** | *e*P | **Pn** | **00 34 19.9** | **-0.5** |
| **BILL** | **Bilibino** | **21.15** | **10** | *e*P | **P** | **00 34 40.7** | **+1.4** |
| **BILL** | **Bilibino** | **21.15** | **10** | *je*P | **P** | **00 34 40.7** | **+1.4** |
| BILL | | | | | | 00 34 58.0 | |
| BILL | | | | S | **S** | **00 38 35.0** | **+2.7** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,149nm,19.0s | | | | | | |
| **CN2** | **Changchun** | **21.75** | **271** | P | **P** | **00 34 42.9** | **-3.0** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **23.06** | **254** | P | **P** | **00 35 02.1** | **+2.3** |
| | comp=Z,1.7nm,0.6s,baz=57,slow=10.0,SNR=5.8 | | | | | | |
| **M13K** | **Dall Lake** | **26.54** | **46** | P | **P** | **00 35 34.6** | **+2.9** |
| **XLT** | **XiLinHaoTe** | **28.03** | **277** | *e*P | **P** | **00 35 46.0** | **+0.6** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.84** | **306** | P | **P** | **00 38 00.1** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=68,slow=6.1,SNR=5.0 comp=Z,0.9nm,0.5s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **44.05** | **299** | *i* P | **P** | **00 38 03.4** | **+1.5** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **48.43** | **298** | P | **P** | **00 38 37.3** | **+1.0** |
| MK31 | | | | IAmb | IAmb | 00 38 38.6 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **48.43** | **298** | *ce*P | **P** | **00 38 38.2** | **+1.9** |
| **MKAR** | **Makanchi Array** | **48.43** | **298** | P | **P** | **00 38 37.3** | **+1.0** |
| **MKAR** | **Makanchi Array** | **48.43** | **298** | P | **P** | **00 38 37.0** | **+0.7** |
| | comp=Z,1.5nm,0.6s,baz=68,slow=7.1,SNR=17 comp=Z,1.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.43** | **298** | *e*P | **P** | **00 38 37.4** | **+1.1** |
| **MKAR** | **Makanchi Array** | **48.43** | **298** | *e*P | **P** | **00 38 37.4** | **+1.1** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **48.61** | **298** | P | **P** | **00 38 38.4** | **+0.8** |
| MAKZ | | | | IAmb | IAmb | 00 39 15.1 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **MAKZ** | **Makanchi** | **48.61** | **298** | P | **P** | **00 38 38.4** | **+0.8** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **KURK** | **Kurchatov** | **48.66** | **304** | P | **P** | **00 38 38.6** | **+0.7** |
| KURK | | | | IAmb | IAmb | 00 38 40.2 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **48.66** | **304** | *e*P | **P** | **00 38 40.0** | **+2.1** |
| **KURK** | **Kurchatov** | **48.66** | **304** | *ce*P | **P** | **00 38 40.0** | **+2.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.76** | **304** | P | **P** | **00 38 39.4** | **+0.8** |
| | comp=Z,2.0nm,0.8s,baz=66,slow=8.4,SNR=10 comp=Z,2.0nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **52.00** | **310** | P | **P** | **00 39 04.5** | **+1.4** |
| BRVK | | | | IAmb | IAmb | 00 39 05.0 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **52.00** | **310** | *e*P | **P** | **00 39 04.7** | **+1.6** |
| **BRVK** | **Borovoye** | **52.00** | **310** | *ce*P | **P** | **00 39 04.7** | **+1.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **52.17** | **350** | P | **P** | **00 39 05.0** | **+0.9** |
| SPITS | | | | pmax | pmax | | |
| | comp=Z,24nm,1.3s | | | | | | |
| **PHRA** | **Phrae** | **53.74** | **257** | P | **P** | **00 39 16.9** | **+0.6** |
| **BOOM** | **Boomskoye usch** | **54.56** | **297** | P | **P** | **00 39 23.7** | **+1.4** |
| **BOOM** | **Boomskoye usch** | **54.56** | **297** | P | **P** | **00 39 23.7** | **+1.4** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **54.62** | **258** | P | **P** | **00 39 23.8** | **+1.1** |
| | comp=Z,0.8nm,0.3s,baz=34,slow=8.2,SNR=1.9 comp=Z,0.8nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **55.35** | **297** | *ce*P | **P** | **00 39 29.6** | **+1.6** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **ARU** | **Arti** | **55.82** | **318** | P | **P** | **00 39 32.0** | **+1.1** |
| ARU | | | | IAmb | IAmb | 00 39 32.7 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **ARU** | **Arti** | **55.82** | **318** | *e*P | **P** | **00 39 31.9** | **+0.9** |
| **ARU** | **Arti** | **55.82** | **318** | *d* iP | **P** | **00 39 31.9** | **+0.9** |
| ARU | | | | | | 00 40 27.5 | |
| ARU | | | | S | **S** | **00 47 14.7** | **-0.6** |
| ARU | | | | SS | **SS** | **00 50 56.3** | **-4.2** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **KSH** | **Kashi** | **56.28** | **294** | P | P | 00 39 39.8 | +5.1 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ARSB** | **Arslanbob** | **57.03** | **297** | P | **P** | **00 39 42.8** | **+2.8** |
| **ARSB** | **Arslanbob** | **57.03** | **297** | P | **P** | **00 39 42.8** | **+2.8** |
| ARSB | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **57.44** | **300** | P | **P** | **00 39 44.2** | **+1.5** |
| **KKAR** | **Karatay Array** | **57.44** | **300** | P | **P** | **00 39 44.2** | **+1.5** |
| **ARCES** | **ARCESS Array B** | **57.75** | **342** | P | **P** | **00 39 44.9** | **+0.4** |
| ARCES | | | | IAmb | IAmb | 00 40 25.7 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.75** | **342** | P | **P** | **00 39 45.3** | **+0.8** |
| | comp=Z,0.7nm,0.4s,baz=40,slow=7.1,SNR=1.4 comp=Z,0.7nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.75** | **342** | *e*P | P | 00 39 49.8 | +5.3 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **BPMT** | **Black Pine Rid** | **58.08** | **55** | | **P** | **00 39 44.6** | **-2.8** |
| **ABKAR** | **Akbulak array** | **59.51** | **311** | P | **P** | **00 39 58.1** | **+1.1** |
| ABKAR | | | | IAmb | IAmb | 00 39 59.0 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **59.59** | **54** | P | **P** | **00 39 57.5** | **-0.3** |
| **BOZ** | **Bozeman (W)** | **59.59** | **54** | P | **P** | **00 39 57.5** | **-0.3** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **RYN** | **Ryan** | **59.91** | **64** | P | **P** | **00 39 57.0** | **-3.1** |
| RYN | | | | IAmb | IAmb | 00 40 34.0 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.17** | **64** | P | **P** | **00 40 02.1** | **+0.1** |
| | comp=Z,0.8nm,0.8s,baz=300,slow=7.4,SNR=4.7 comp=Z,0.8nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **62.54** | **56** | P | **P** | **00 40 18.1** | **+0.2** |
| | comp=Z,0.4nm,0.5s,baz=318,slow=2.0,SNR=5.0 comp=Z,0.4nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **64.17** | **336** | P | **P** | **00 40 29.1** | **+0.9** |
| | comp=Z,0.9nm,0.4s,baz=38,slow=6.8,SNR=10 comp=Z,0.9nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **64.17** | **336** | *e*P | **P** | **00 40 29.3** | **+1.2** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **OBN** | **Obninsk** | **65.80** | **327** | *je*P | **P** | **00 40 42.8** | **+4.0** |
| OBN | | | | | | 00 41 09.0 | |
| OBN | | | | SS | SS | 00 53 44.0 | +7.5 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **NB2** | **NORSAR Subarra** | **68.11** | **342** | P | **P** | **00 40 56.9** | **+3.5** |
| | comp=Z,0.6nm,0.5s,baz=24,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **68.11** | **342** | P | **P** | **00 40 57.0** | **+3.5** |
| | comp=Z,1.0nm,0.7s,baz=25,slow=6.4,SNR=7.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **68.11** | **342** | *e*P | **P** | **00 40 57.1** | **+3.7** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **68.40** | **341** | P | **P** | **00 40 56.5** | **+1.3** |
| | comp=Z,0.9nm,0.5s,baz=60,slow=3.6,SNR=11 comp=Z,0.9nm,0.5s | | | | | | |
| **KBZ** | **Khabaz** | **71.78** | **316** | P | **P** | **00 41 18.4** | **+2.2** |
| | comp=Z,2.9nm,0.9s,baz=166,slow=5.3,SNR=3.8 comp=Z,2.9nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **71.78** | **316** | *e*P | **P** | **00 41 18.5** | **+2.3** |
| **KBZ** | **Khabaz** | **71.78** | **316** | *ce*P | **P** | **00 41 18.5** | **+2.3** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.01** | **328** | P | **P** | **00 41 18.0** | **+0.5** |
| | comp=Z,0.8nm,0.4s,baz=34,slow=6.0,SNR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.54** | **337** | | Pg | 00 35 01.9 | +0.1 | |
| **C26K** | **Camden Bay** | **0.54** | **337** | | Sg | 00 35 09.0 | +0.2 | |
| **D25K** | **Kavik River** | **0.74** | **263** | Pg | Pg | 00 35 06.2 | +0.4 | |
| **D27M** | **Malcolm River** | **1.20** | **97** | | Pb | 00 35 14.8 | +0.1 | |
| D27M | | | | IAML | | 00 35 57.5 | | |
| | comp=N,150nm,0.8s | | | | | | | |
| **D27M** | **Malcolm River** | **1.20** | **97** | | Sn | 00 35 31.1 | -0.4 | |
| **C24K** | **Franklin Bluff** | **1.57** | **283** | Pn | Pb | 00 35 21.2 | +0.1 | |
| **E27K** | **Coleen River** | **1.59** | **141** | | Pb | 00 35 21.3 | 0.0 | |
| E27K | | | | IAML | | 00 35 49.2 | | |
| | comp=N,74nm,0.3s | | | | | | | |
| **D24K** | **Happy Valley** | **1.63** | **262** | | Pn | 00 35 21.1 | +0.3 | |
| **F26K** | **Sheenjek River** | **1.74** | **178** | | Pg | 00 35 27.0 | +2.2 | |
| **E28M** | **Babbage River** | **1.90** | **114** | Pn | Pn | 00 35 24.0 | -0.6 | |
| E28M | | | | IAML | | 00 36 22.5 | | |
| | comp=E,46nm,0.7s | | | | | | | |
| **F25K** | **Christian Rive** | **1.91** | **196** | Pn | Pn | 00 35 24.9 | +0.2 | |
| **BMAR** | **Burnt Mountain** | **2.01** | **183** | | Pg | 00 35 29.9 | -0.1 | |
| **E24K** | **Your Creek** | **2.04** | **230** | Pn | Pn | 00 35 26.3 | -0.2 | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **250** | | Pg | 00 35 31.8 | +0.9 | |
| **C23K** | **Itkillik River** | **2.25** | **283** | | Pg | 00 35 34.4 | -0.1 | |
| **D23K** | **Nanushuk River** | **2.33** | **262** | | Pg | 00 35 36.3 | +0.3 | |
| D23K | | | | IAML | | 00 36 49.5 | | |
| | comp=E,28nm,0.7s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.33** | **216** | Pn | Pn | 00 35 30.3 | -0.2 | |
| F24K | | | | IAML | | 00 36 39.2 | | |
| | comp=E,29nm,0.4s | | | | | | | |
| **E23K** | **Chandalar** | **2.38** | **237** | | Pg | 00 35 36.9 | -0.1 | |
| E23K | | | | IAML | | 00 36 37.6 | | |
| | comp=N,26nm,0.7s | | | | | | | |
| **F28M** | **Old Crow** | **2.44** | **136** | Pn | Pn | 00 35 32.0 | 0.0 | |
| **E22K** | **Anaktuvuk Pass** | **3.03** | **248** | Pn | Pb | 00 35 44.5 | -1.3 | |
| E22K | | | | IAML | | 00 37 09.2 | | |
| | comp=N,15nm,0.8s | | | | | | | |
| **D22K** | **Ayikyak River** | **3.05** | **264** | Pn | Pb | 00 35 44.2 | -2.0 | |
| **G29M** | **Pine Creek** | **3.44** | **134** | Pn | Pn | 00 35 46.7 | +1.0 | |
| G29M | | | | IAML | | 00 37 39.7 | | |
| | comp=N,23nm,0.9s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.63** | **278** | Pn | Pn | 00 35 48.2 | -0.1 | |
| **H24K** | **Noodor Dome** | **3.86** | **202** | Pn | Pn | 00 35 52.0 | +0.5 | |
| **H29M** | **Whitestone** | **3.93** | **142** | Pn | Pn | 00 35 52.2 | -0.1 | |
| **EPYK** | **Eagle Plains** | **4.20** | **133** | Pn | Pn | 00 35 55.6 | -0.4 | |
| **I28M** | **Miner Creek** | **4.33** | **155** | Pn | Pn | 00 35 58.0 | -0.1 | |
| I28M | | | | IAML | | 00 37 54.3 | | |
| | comp=E,7.1nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **4.51** | **119** | Pn | Pn | 00 36 00.3 | +0.1 | |
| G31M | | | | IAML | | 00 37 49.4 | | |
| | comp=E,9.6nm,1.0s | | | | | | | |
| **B20K** | **Meade River** | **4.51** | **283** | Pn | Pn | 00 36 01.1 | +0.8 | |
| **I29M** | **Ogilvie Camp,** | **4.69** | **148** | Pn | Pn | 00 36 02.3 | -0.5 | |
| **MDM** | **Murphy Dome** | **4.74** | **201** | Pn | Pn | 00 36 02.9 | -0.7 | |
| MDM | | | | IAML | | 00 37 51.7 | | |
| | comp=N,5.6nm,1.2s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **4.99** | **198** | Pn | Pn | 00 36 09.3 | +2.3 | |
| CCB | | | | IAML | | 00 38 02.5 | | |
| | comp=N,4.7nm,0.6s | | | | | | | |
| CCB | | | | IAML | | 00 38 05.5 | | |
| | comp=E,5.3nm,1.0s | | | | | | | |
| **D19K** | **Kuna River** | **5.07** | **266** | Pn | Pn | 00 36 09.6 | +1.5 | |
| **WRH** | **Wood River Hil** | **5.20** | **198** | Pn | Pn | 00 36 10.3 | +0.6 | |
| WRH | | | | IAML | | 00 38 12.4 | | |
| | comp=N,3.3nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.20** | **203** | Pn | Pn | 00 36 09.9 | 0.0 | |
| NEA2 | | | | IAML | | 00 38 09.3 | | |
| | comp=E,4.1nm,0.8s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.44** | **274** | Pn | Pn | 00 36 14.4 | +1.3 | |
| **SCRK** | **Sand Creek** | **5.48** | **179** | Pn | Pn | 00 36 11.2 | -2.5 | |
| **K27K** | **Chicken** | **5.49** | **170** | Pn | Pn | 00 36 16.0 | +2.1 | |

*NEIC* ***13*** *00:35:17.0±3.0, 69°.38N±0°.06×144°.21W±0°.09, h10km±2km, Error ellipse: s-maj=10.2km s-min=4.1km az=23.0*

**AEIC 13 00:35:16.7±2.8, 69°.40N±0°.04×144°.2W±0°.1, h9km±6km, ML2.5, ML2.8/**106(NEIC)**, Error ellipse: s-maj=7.2km s-min=3.7km az=48.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **36** | Pg | Pg | 00 35 21.5 | -0.7 |
| C27K | | | | | Sg | 00 35 24.3 | -1.6 |
| C27K | | | | IAML | | 00 35 24.9 | |
| | comp=N,1μm,0.4s | | | | | | |
| C27K | | | | IAML | | 00 35 25.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.58** | **334** | | Pg | 00 35 27.7 | -0.2 |
| C26K | | | | | Sg | 00 35 35.9 | +0.5 |
| **D25K** | **Kavik River** | **0.79** | **265** | Pg | Pb | 00 35 32.2 | -0.3 |
| **D25K** | **Kavik River** | **0.79** | **265** | | Sb | 00 35 43.0 | -0.2 |
| **D27M** | **Malcolm River** | **1.15** | **97** | Pn | Pb | 00 35 38.1 | -0.7 |
| D27M | | | | IAML | | 00 35 59.6 | |
| | comp=E,157nm,0.2s | | | | | | |
| D27M | | | | IAML | | 00 36 01.0 | |
| | comp=N,174nm,0.4s | | | | | | |
| **D27M** | **Malcolm River** | **1.15** | **97** | | Sb | 00 35 54.1 | +0.3 |
| **E27K** | **Coleen River** | **1.54** | **141** | Pn | Pg | 00 35 46.0 | -0.2 |
| E27K | | | | IAML | | 00 36 13.3 | |
| | comp=E,83nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.62** | **283** | Pn | Pn | 00 35 44.1 | -1.3 |
| C24K | | | | IAML | | 00 36 10.9 | |
| | comp=N,102nm,0.4s | | | | | | |
| C24K | | | | IAML | | 00 36 12.8 | |
| | comp=E,126nm,0.9s | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **264** | | Pn | 00 35 46.0 | -0.2 |
| **F26K** | **Sheenjek River** | **1.72** | **180** | Pg | Pg | 00 35 50.7 | +1.1 |
| F26K | | | | IAML | | 00 36 17.0 | |
| | comp=N,76nm,0.6s | | | | | | |
| F26K | | | | IAML | | 00 36 17.7 | |
| | comp=E,116nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.85** | **114** | Pn | Pb | 00 35 50.8 | +0.1 |
| E28M | | | | IAML | | 00 36 21.1 | |
| | comp=N,59nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **1.90** | **197** | Pn | Pn | 00 35 48.8 | -0.5 |
| F25K | | | | IAML | | 00 36 21.6 | |
| | comp=E,93nm,0.7s | | | | | | |
| F25K | | | | IAML | | 00 36 24.7 | |
| | comp=N,91nm,0.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **1.99** | **185** | | Pn | 00 35 50.9 | +0.3 |
| **E24K** | **Your Creek** | **2.06** | **232** | | Pn | 00 35 51.3 | -0.2 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **251** | Pn | Pn | 00 35 50.5 | -1.3 |
| TOLK | | | | IAML | | 00 36 32.1 | |
| | comp=E,49nm,0.6s | | | | | | |
| **C23K** | **Itkillik River** | **2.30** | **284** | | Pn | 00 35 53.3 | -1.4 |
| **F24K** | **Squaw Lake** | **2.34** | **218** | | Pn | 00 35 55.2 | 0.0 |
| **D23K** | **Nanushuk River** | **2.37** | **262** | Pn | Pn | 00 35 55.4 | -0.3 |
| **F28M** | **Old Crow** | **2.40** | **137** | | Pn | 00 35 55.9 | -0.2 |
| F28M | | | | IAML | | 00 36 38.8 | |
| | comp=N,38nm,0.8s | | | | | | |
| F28M | | | | IAML | | 00 36 42.2 | |
| | comp=E,42nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.40** | **238** | Pn | Pn | 00 35 55.7 | -0.5 |
| **E29M** | **Blow River** | **2.49** | **111** | | Pn | 00 35 56.8 | -0.5 |
| E29M | | | | IAML | | 00 36 38.3 | |
| | comp=E,40nm,0.5s | | | | | | |
| E29M | | | | IAML | | 00 36 41.4 | |
| | comp=N,49nm,0.5s | | | | | | |
| **G27K** | **Doyon Strip** | **2.77** | **159** | | Pn | 00 35 59.8 | -1.4 |
| **FYU** | **Fort Yukon** | **2.88** | **188** | | Pn | 00 36 00.5 | -2.2 |
| **G24K** | **Hadweenzic Riv** | **2.99** | **206** | | Pn | 00 36 02.8 | -1.4 |
| G24K | | | | IAML | | 00 37 02.0 | |
| | comp=N,30nm,1.0s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **249** | | Pn | 00 36 04.7 | -0.5 |
| **D22K** | **Ayikyak River** | **3.09** | **264** | | Pn | 00 36 05.6 | 0.0 |
| D22K | | | | IAML | | 00 37 04.8 | |
| | comp=N,27nm,1.0s | | | | | | |
| D22K | | | | IAML | | 00 37 05.4 | |
| | comp=E,23nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.33** | **291** | Pn | Pn | 00 36 08.0 | -0.9 |
| **G29M** | **Pine Creek** | **3.40** | **135** | Pn | Pn | 00 36 09.7 | -0.1 |
| G29M | | | | IAML | | 00 37 44.4 | |
| | comp=N,25nm,1.4s | | | | | | |
| **G23K** | **Bananza Creek** | **3.48** | **222** | Pn | Pn | 00 36 10.0 | -1.0 |
| G23K | | | | IAML | | 00 37 15.9 | |
| | comp=E,17nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.68** | **278** | Pn | Pn | 00 36 12.6 | -1.1 |
| B21K | | | | IAML | | 00 37 29.0 | |
| | comp=N,20nm,1.1s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.83** | **126** | Pn | Pn | 00 36 15.1 | -0.7 |
| G30M | | | | IAML | | 00 37 11.1 | |
| | comp=E,13nm,1.5s | | | | | | |
| G30M | | | | IAML | | 00 37 34.3 | |
| | comp=N,12nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.85** | **203** | Pn | Pn | 00 36 14.7 | -1.4 |
| H24K | | | | IAML | | 00 37 07.9 | |
| | comp=N,15nm,0.8s | | | | | | |
| H24K | | | | IAML | | 00 37 33.7 | |
| | comp=E,13nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **3.88** | **143** | | Pn | 00 36 14.7 | -1.8 |
| H29M | | | | IAML | | 00 37 08.1 | |
| | comp=E,17nm,0.6s | | | | | | |
| H29M | | | | IAML | | 00 37 11.2 | |
| | comp=N,15nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.94** | **188** | Pn | Pn | 00 36 15.0 | -2.3 |
| PRP | | | | IAML | | 00 37 30.8 | |
| | comp=E,12nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.01** | **101** | Pn | Pn | 00 36 16.1 | -2.0 |
| **F21K** | **Alatna River** | **4.09** | **242** | | Pn | 00 36 18.1 | -1.2 |
| F21K | | | | IAML | | 00 37 40.8 | |
| | comp=E,8.4nm,1.0s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.13** | **174** | Pn | Pn | 00 36 18.3 | -1.6 |
| **H23K** | **Yukon River** | **4.14** | **212** | Pn | Pn | 00 36 19.0 | -1.0 |
| H23K | | | | IAML | | 00 37 37.3 | |
| | comp=E,12nm,1.5s | | | | | | |
| H23K | | | | IAML | | 00 37 42.8 | |
| | comp=N,10nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **4.29** | **156** | | Pn | 00 36 22.3 | +0.1 |
| I28M | | | | IAML | | 00 37 23.4 | |
| | comp=N,8.0nm,1.1s | | | | | | |
| I28M | | | | IAML | | 00 37 45.0 | |
| | comp=E,8.0nm,1.2s | | | | | | |
| **G31M** | **Satah River** | **4.46** | **119** | Pn | Pn | 00 36 24.5 | +0.2 |
| G31M | | | | IAML | | 00 37 38.2 | |
| | comp=N,11nm,1.1s | | | | | | |
| G31M | | | | IAML | | 00 37 47.4 | |
| | comp=E,10nm,1.4s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.49** | **198** | Pn | Pn | 00 36 24.6 | -0.1 |
| POKR | | | | IAML | | 00 37 24.4 | |
| | comp=N,10nm,1.4s | | | | | | |
| **B20K** | **Meade River** | **4.56** | **284** | Pn | Pn | 00 36 28.2 | +2.4 |
| **I29M** | **Ogilvie Camp,** | **4.65** | **148** | Pn | Pn | 00 36 28.5 | +1.5 |
| **I23K** | **Minto, Yukon-K** | **4.72** | **208** | Pn | Pn | 00 36 28.7 | +0.8 |
| I23K | | | | IAML | | 00 38 01.1 | |
| | comp=N,7.1nm,0.9s | | | | | | |
| I23K | | | | IAML | | 00 38 02.4 | |
| | comp=E,5.6nm,1.0s | | | | | | |
| **MDM** | **Murphy Dome** | **4.74** | **201** | Pn | Pn | 00 36 31.1 | +2.9 |
| MDM | | | | IAML | | 00 37 30.2 | |
| | comp=N,8.4nm,1.3s | | | | | | |
| MDM | | | | IAML | | 00 37 54.9 | |
| | comp=E,8.0nm,1.1s | | | | | | |
| **IL31** | | **4.77** | **194** | Pn | Pn | 00 36 29.5 | +0.9 |
| **ILAR** | **Eielson Array** | **4.77** | **194** | Pn | Pn | 00 36 28.8 | +0.2 |
| **EGAK** | **Eagle** | **4.79** | **164** | Pn | Pn | 00 36 30.7 | +1.8 |
| EGAK | | | | IAML | | 00 37 30.1 | |
| | comp=E,7.3nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.91** | **247** | Pn | Pn | 00 36 30.5 | +0.1 |
| F20K | | | | IAML | | 00 37 45.6 | |
| | comp=N,4.2nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **4.93** | **177** | Pn | Pn | 00 36 31.6 | +0.6 |
| J26L | | | | IAML | | 00 38 03.4 | |
| | comp=E,6.0nm,0.8s | | | | | | |
| J26L | | | | IAML | | 00 38 31.0 | |
| | comp=N,4.1nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **4.99** | **198** | Pn | Pn | 00 36 32.8 | +1.2 |
| CCB | | | | IAML | | 00 37 37.2 | |
| | comp=N,5.1nm,1.3s | | | | | | |
| CCB | | | | IAML | | 00 37 38.7 | |
| | comp=E,5.0nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.01** | **231** | Pn | Pn | 00 36 30.3 | -1.6 |
| **H21K** | **Melozitna Rive** | **5.01** | **225** | Pn | Pn | 00 36 29.9 | -2.1 |
| H21K | | | | IAML | | 00 38 20.7 | |
| | comp=E,3.8nm,0.9s | | | | | | |
| H21K | | | | IAML | | 00 38 47.8 | |
| | comp=N,4.4nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **5.11** | **266** | Pn | Pn | 00 36 34.3 | +1.0 |
| D19K | | | | IAML | | 00 38 16.1 | |
| | comp=E,4.2nm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **5.13** | **194** | Pn | Pn | 00 36 33.5 | -0.1 |
| **I30M** | **Mount Dempster** | **5.17** | **141** | | Pn | 00 36 36.9 | +2.7 |
| **WRH** | **Wood River Hil** | **5.19** | **199** | Pn | Pn | 00 36 36.1 | +1.7 |
| WRH | | | | IAML | | 00 38 18.2 | |
| | comp=E,4.0nm,0.7s | | | | | | |
| **E19K** | **Redstone River** | **5.20** | **254** | Pn | Pn | 00 36 34.4 | -0.1 |
| **NEA2** | **Nenana** | **5.20** | **204** | Pn | Pn | 00 36 34.5 | 0.0 |
| NEA2 | | | | IAML | | 00 37 44.8 | |
| | comp=E,4.5nm,1.4s | | | | | | |
| NEA2 | | | | IAML | | 00 38 34.9 | |
| | comp=N,5.6nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **5.45** | **179** | Pn | Pn | 00 36 39.0 | +0.9 |
| **K27K** | **Chicken** | **5.46** | **170** | Pn | Pn | 00 36 38.0 | -0.1 |
| **C19K** | **Lookout Ridge** | **5.49** | **274** | Pn | Pn | 00 36 40.6 | +2.1 |
| **DAWY** | **Dawson** | **5.69** | **158** | | Pn | 00 36 41.4 | +0.1 |
| **F19K** | **Shaleruckik Mo** | **5.70** | **250** | Pn | Pn | 00 36 41.7 | +0.4 |
| **J30M** | **Hart River** | **5.74** | **144** | Pn | Pn | 00 36 43.2 | +1.2 |
| **G19K** | **Purcell Mounta** | **5.89** | **242** | | Pn | 00 36 44.0 | +0.1 |
| **BPAW** | **Bear Paw Mtn.** | **5.97** | **210** | Pn | Pn | 00 36 43.5 | -1.6 |
| **C18K** | **Utukok River** | **6.16** | **271** | | Pn | 00 36 48.1 | +0.4 |
| **K29M** | **Barlow Dome** | **6.18** | **152** | Pn | Pn | 00 36 49.6 | +1.6 |
| **RND** | **Reindeer** | **6.31** | **200** | Pn | Pn | 00 36 50.0 | +0.1 |
| **E18K** | **Tukpahlearik C** | **6.38** | **260** | Pn | Pn | 00 36 52.0 | +1.3 |
| **L26K** | **Log Cabin Wild** | **6.42** | **177** | Pn | Pn | 00 36 51.4 | +0.2 |
| **BCAR** | **Beaver Creek A** | **6.44** | **170** | Pn | Pn | 00 36 53.7 | +2.1 |
| **L27K** | **Beaver Creek,** | **6.44** | **170** | Pn | Pn | 00 36 52.9 | +1.3 |
| **J20K** | **Nowinta River** | **6.56** | **222** | Pn | Pn | 00 36 54.5 | +1.3 |
| **L29M** | **L29M** | **6.77** | **156** | Pn | Pn | 00 36 57.3 | +1.1 |
| **H18K** | **Honhosa River** | **6.95** | **239** | Pn | Pn | 00 36 56.6 | -1.9 |
| **J19K** | **Poorman** | **7.07** | **225** | Pn | Pn | 00 36 59.7 | -0.5 |
| **M29M** | **Somme Creek** | **7.37** | **159** | Pn | Pn | 00 37 06.2 | +1.9 |
| **C16K** | **Lisburne Hills** | **7.73** | **272** | Pn | Pn | 00 37 10.0 | +0.8 |

*NEIC* ***13*** *00:39:01.6±1.6, 69°.59N±0°.05×144°.24W±0°.09, h10km±2km, Error ellipse: s-maj=8.3km s-min=4.5km az=338.0*

**AEIC 13 00:39:00.3±1.4, 69°.56N±0°.07×144°.3W±0°.1, h16km±7km, ML3.4, ML3.5/**62(NEIC)**, Error ellipse: s-maj=10.7km s-min=6.4km az=194.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.22** | **72** | Pg | Pg | 00 39 05.1 | -0.3 |
| C27K | | | | | Sg | 00 39 08.2 | -0.5 |
| C27K | | | | IAML | | 00 39 11.2 | |
| | comp=E,6μm,0.7s | | | | | | |
| **C26K** | **Camden Bay** | **0.42** | **330** | | Pb | 00 39 09.4 | +0.1 |
| **C26K** | **Camden Bay** | **0.42** | **330** | | Sb | 00 39 16.7 | +1.3 |
| **D25K** | **Kavik River** | **0.77** | **253** | | Pg | 00 39 14.2 | -1.1 |
| D25K | | | | | Sg | 00 39 25.0 | -0.4 |
| **D27M** | **Malcolm River** | **1.23** | **103** | Pn | Pn | 00 39 22.6 | -0.3 |
| D27M | | | | | Sn | 00 39 39.2 | 0.0 |
| **D24K** | **Happy Valley** | **1.65** | **258** | | Pg | 00 39 31.6 | -0.4 |
| **D24K** | **Happy Valley** | **1.65** | **258** | | Sg | 00 39 54.5 | +1.1 |
| **E27K** | **Coleen River** | **1.69** | **143** | | Pb | 00 39 31.4 | +0.3 |
| **F26K** | **Sheenjek River** | **1.88** | **178** | | Pb | 00 39 34.7 | +0.5 |
| F26K | | | | IAML | | 00 40 01.8 | |
| | comp=N,475nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.96** | **117** | | Pb | 00 39 35.6 | -0.1 |
| E28M | | | | IAML | | 00 40 08.5 | |
| | comp=E,236nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **195** | | Pb | 00 39 37.1 | +0.1 |
| F25K | | | | IAML | | 00 40 07.6 | |
| | comp=E,406nm,1.5s | | | | | | |
| F25K | | | | IAML | | 00 40 07.7 | |
| | comp=N,475nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **227** | | Pb | 00 39 38.0 | -0.5 |
| E24K | | | | IAML | | 00 40 19.6 | |
| | comp=E,192nm,1.2s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.14** | **183** | Pn | Pb | 00 39 37.9 | -0.9 |
| **F24K** | **Squaw Lake** | **2.44** | **214** | | Pn | 00 39 41.3 | +1.9 |
| **F28M** | **Old Crow** | **2.54** | **138** | | Pn | 00 39 43.3 | +2.3 |
| F28M | | | | IAML | | 00 40 25.9 | |
| | comp=N,238nm,0.9s | | | | | | |
| F28M | | | | IAML | | 00 40 29.5 | |
| | comp=E,153nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.63** | **175** | | Pn | 00 39 44.3 | +2.2 |
| **G25K** | **Bearman Lake** | **2.88** | **194** | | Pn | 00 39 48.0 | +2.4 |
| **G27K** | **Doyon Strip** | **2.94** | **159** | | Pn | 00 39 48.4 | +2.0 |
| G27K | | | | IAML | | 00 40 42.5 | |
| | comp=E,94nm,1.1s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **246** | | Pn | 00 39 50.0 | +1.8 |
| E22K | | | | IAML | | 00 40 43.1 | |
| | comp=N,101nm,0.7s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.11** | **204** | | Pn | 00 39 50.6 | +2.0 |
| G24K | | | | IAML | | 00 40 46.0 | |
| | comp=E,143nm,1.2s | | | | | | |
| G24K | | | | IAML | | 00 40 46.4 | |
| | comp=N,140nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.23** | **288** | Pn | Pn | 00 39 53.0 | +2.6 |
| **H25L** | **Birch Creek** | **3.36** | **190** | | Pn | 00 39 54.2 | +2.1 |
| **H27K** | **Steamboat Moun** | **3.51** | **161** | | Pn | 00 39 56.0 | +1.8 |
| **G29M** | **Pine Creek** | **3.54** | **136** | | Pn | 00 39 57.2 | +2.5 |
| G29M | | | | IAML | | 00 41 02.2 | |
| | comp=N,126nm,1.0s | | | | | | |
| **F22K** | **John River** | **3.55** | **238** | | Pn | 00 39 57.4 | +2.6 |
| **B21K** | **Ikpikpuk River** | **3.61** | **276** | | Pn | 00 39 58.4 | +2.9 |
| B21K | | | | IAML | | 00 41 29.1 | |
| | comp=E,125nm,1.3s | | | | | | |
| **F30M** | **Barrier River** | **3.69** | **118** | | Pn | 00 39 59.2 | +2.6 |
| **A22K** | **Sinclair Lake** | **3.89** | **297** | | Pn | 00 40 01.4 | +2.1 |
| **G30M** | **tAoh Zraii Nji** | **3.97** | **127** | | Pn | 00 40 03.5 | +2.9 |
| G30M | | | | IAML | | 00 41 14.4 | |
| | comp=N,65nm,1.2s | | | | | | |
| G30M | | | | IAML | | 00 41 24.9 | |
| | comp=E,44nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | **3.98** | **202** | Pn | Pn | 00 40 02.3 | +1.6 |
| H24K | | | | IAML | | 00 40 51.6 | |
| | comp=N,60nm,0.7s | | | | | | |
| H24K | | | | IAML | | 00 41 09.0 | |
| | comp=E,72nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.04** | **143** | | Pn | 00 40 04.3 | +2.8 |
| H29M | | | | IAML | | 00 40 58.7 | |
| | comp=N,82nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **187** | | Pn | 00 40 04.7 | +2.5 |
| PRP | | | | IAML | | 00 41 10.8 | |
| | comp=N,65nm,0.8s | | | | | | |
| PRP | | | | IAML | | 00 41 16.3 | |
| | comp=E,69nm,0.9s | | | | | | |
| **I27K** | **Kandik River** | **4.11** | **164** | | Pn | 00 40 04.0 | +1.6 |
| **F21K** | **Alatna River** | **4.12** | **240** | | Pn | 00 40 05.1 | +2.5 |
| F21K | | | | IAML | | 00 41 17.6 | |
| | comp=N,45nm,1.0s | | | | | | |
| F21K | | | | IAML | | 00 41 21.1 | |
| | comp=E,55nm,1.1s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.29** | **135** | | Pn | 00 40 07.4 | +2.5 |
| **I28M** | **Miner Creek** | **4.46** | **156** | | Pn | 00 40 10.4 | +3.1 |
| I28M | | | | IAML | | 00 41 03.5 | |
| | comp=E,52nm,1.3s | | | | | | |
| I28M | | | | IAML | | 00 41 04.4 | |
| | comp=N,56nm,0.9s | | | | | | |
| **D20K** | **Etivluk River** | **4.48** | **265** | | Pn | 00 40 10.3 | +2.7 |
| **E20K** | **Nigu River** | **4.49** | **259** | | Pn | 00 40 10.4 | +2.7 |
| **H22K** | **Ishtalitna Cre** | **4.56** | **219** | | Pn | 00 40 10.0 | +1.4 |
| **G31M** | **Satah River** | **4.58** | **121** | | Pn | 00 40 11.7 | +2.9 |
| G31M | | | | IAML | | 00 41 32.8 | |
| | comp=E,53nm,1.2s | | | | | | |
| **G21K** | **Allakaket** | **4.61** | **233** | | Pn | 00 40 10.7 | +1.4 |
| G21K | | | | IAML | | 00 41 41.2 | |
| | comp=N,40nm,1.3s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.81** | **148** | | Pn | 00 40 14.2 | +2.1 |
| **I23K** | **Minto, Yukon-K** | **4.84** | **206** | | Pn | 00 40 14.2 | +1.8 |
| I23K | | | | IAML | | 00 41 38.8 | |
| | comp=N,34nm,1.1s | | | | | | |
| I23K | | | | IAML | | 00 41 52.5 | |
| | comp=E,43nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.86** | **200** | | Pn | 00 40 14.8 | +2.0 |
| MDM | | | | IAML | | 00 41 38.1 | |
| | comp=N,33nm,1.1s | | | | | | |
| MDM | | | | IAML | | 00 41 45.6 | |
| | comp=E,34nm,1.0s | | | | | | |
| **IL31** | | **4.91** | **193** | | Pn | 00 40 15.2 | +1.8 |
| **I30M** | **Mount Dempster** | **5.32** | **141** | | Pn | 00 40 21.2 | +2.1 |
| I30M | | | | IAML | | 00 41 45.9 | |
| | comp=N,22nm,0.8s | | | | | | |
| **A19K** | **Wainwright** | **5.82** | **284** | | Pn | 00 40 28.1 | +2.3 |
| **DOT** | **Dot Lake** | **5.94** | **179** | | Pn | 00 40 30.1 | +2.5 |
| **F18K** | **Selawik** | **6.46** | **250** | | Pn | 00 40 36.6 | +2.1 |

*NEIC* ***13*** *00:49:25.9±1.1, 69°.55N±0°.04×144°.08W±0°.07, h10km±2km, Error ellipse: s-maj=6.7km s-min=4.2km az=11.0*

**AEIC 13 00:49:23.2±1.8, 69°.47N±0°.03×144°.18W±0°.08, h8km±6km, ML2.7, ML2.9/**102(NEIC)**, Error ellipse: s-maj=5.0km s-min=3.8km az=196.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **47** | | Pg | 00 49 27.9 | +0.1 |
| **C27K** | **Jago River** | **0.23** | **47** | | Sg | 00 49 31.0 | +0.2 |
| C27K | | | | IAML | | 00 49 31.3 | |
| | comp=N,1μm,0.6s | | | | | | |
| C27K | | | | IAML | | 00 49 31.5 | |
| | comp=E,1μm,0.7s | | | | | | |
| **C26K** | **Camden Bay** | **0.52** | **331** | | Pg | 00 49 33.7 | +0.6 |
| C26K | | | | | Sb | 00 49 41.8 | -0.4 |
| **D25K** | **Kavik River** | **0.79** | **260** | Pn | Pb | 00 49 39.4 | +0.1 |
| D25K | | | | | Sb | 00 49 50.8 | +0.6 |
| **D27M** | **Malcolm River** | **1.16** | **100** | Pn | Pb | 00 49 45.7 | +0.1 |
| D27M | | | | Sn | Sn | 00 50 02.0 | 0.0 |
| D27M | | | | IAML | | 00 50 07.0 | |
| | comp=N,231nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.60** | **143** | | Pg | 00 49 54.4 | +0.6 |
| E27K | | | | Sn | Sg | 00 50 14.6 | +0.1 |
| E27K | | | | IAML | | 00 50 16.7 | |
| | comp=E,124nm,0.6s | | | | | | |
| E27K | | | | IAML | | 00 50 18.5 | |
| | comp=N,116nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.60** | **281** | Pn | Pg | 00 49 54.8 | +0.8 |
| C24K | | | | Sn | Sg | 00 50 16.1 | +1.4 |
| **D24K** | **Happy Valley** | **1.68** | **261** | | Pg | 00 49 55.3 | -0.1 |
| **D24K** | **Happy Valley** | **1.68** | **261** | Sn | Sg | 00 50 18.8 | +1.6 |
| D24K | | | | IAML | | 00 50 21.4 | |
| | comp=E,165nm,0.6s | | | | | | |
| D24K | | | | IAML | | 00 50 23.5 | |
| | comp=N,131nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.79** | **180** | Pn | Pg | 00 49 57.8 | +0.3 |
| F26K | | | | Sn | Sg | 00 50 21.6 | +1.1 |
| F26K | | | | IAML | | 00 50 23.0 | |
| | comp=E,84nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.89** | **115** | | Pb | 00 49 58.4 | +0.5 |
| E28M | | | | Sn | Sb | 00 50 22.6 | +1.0 |
| **D28M** | **Stokes Point** | **1.93** | **92** | | Pb | 00 49 58.2 | -0.4 |
| **D28M** | **Stokes Point** | **1.93** | **92** | IAML | | 00 50 29.4 | |
| | comp=E,109nm,0.8s | | | | | | |
| D28M | | | | IAML | | 00 50 34.4 | |
| | comp=N,106nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **1.96** | **197** | Pn | Pg | 00 50 00.9 | +0.1 |
| F25K | | | | IAML | | 00 50 30.3 | |
| | comp=E,79nm,0.9s | | | | | | |
| F25K | | | | IAML | | 00 50 33.0 | |
| | comp=N,83nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.06** | **184** | | Pb | 00 50 01.4 | +0.5 |
| **E24K** | **Your Creek** | **2.10** | **230** | | Pg | 00 50 03.0 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.11** | **249** | | Pg | 00 50 03.0 | -0.6 |
| **C23K** | **Itkillik River** | **2.28** | **282** | | Pg | 00 50

comp=N,20nm,1.0s
G30M IAML 00 52 59.1
comp=E,17nm,1.2s
**H24K Noodor Dome 3.92 203** Pn Pn 00 50 26.9 +3.3
**H29M Whitestone 3.94 143** Pn Pn 00 50 26.9 +3.0
**PRP Porcupine Dome 4.01 188** Pn Pn 00 50 28.8 +3.8
PRP IAML 00 52 29.9
comp=N,16nm,0.7s
PRP IAML 00 52 51.5
comp=E,22nm,1.1s
**INK Inuvik 4.03 102** Pn Pn 00 50 27.6 +2.5
**F21K Alatna River 4.12 241** Pn Pn 00 50 30.1 +3.6
**H23K Yukon River 4.20 212** Pn Pn 00 50 31.3 +3.8
**EPYK Eagle Plains 4.20 134** Pn Pn 00 50 30.1 +2.5
**I26K Coal Creek Min 4.21 174** Pn Pn 00 50 31.6 +4.0
**F31M Tsiigehtchic 4.36 113** Pn Pn 00 50 32.3 +2.7
F31M IAML 00 53 17.8
comp=N,11nm,1.1s
**G31M Satah River 4.49 120** Pn Pn 00 50 33.8 +2.3
**B20K Meade River 4.54 283** Pn Pn 00 50 35.0 +2.8
**POKR Poker Plat Res 4.55 198** Pn Pn 00 50 36.4 +4.1
**I23K Minto, Yukon-K 4.78 207** Pn Pn 00 50 38.5 +3.0
**MDM Murphy Dome 4.80 201** Pn Pn 00 50 39.0 +3.2
**IL31 4.84 194** Pn Pn 00 50 40.4 +4.2
**EGAK Eagle 4.86 165** Pn Pn 00 50 39.6 +3.0
EGAK IAML 00 53 21.8
comp=N,11nm,1.1s
**J25K Salcha River, 4.91 186** Pn Pn 00 50 41.6 +4.4
J25K IAML 00 53 04.5
comp=E,10.0nm,0.8s
J25K IAML 00 53 27.9
comp=N,7.6nm,0.8s
**F20K Avaraart Lake 4.93 246** Pn Pn 00 50 42.4 +4.9
**J26L Joseph Creek 5.00 177** Pn Pn 00 50 42.3 +3.7
**CCB Clear Creek Bu 5.05 198** Pn Pn 00 50 42.6 +3.4
CCB IAML 00 52 56.2
comp=N,5.0nm,0.6s
CCB IAML 00 53 26.7
comp=E,8.3nm,1.1s
**D19K Kuna River 5.11 265** Pn Pn 00 50 42.3 +2.3
D19K IAML 00 53 35.5
comp=E,12nm,1.0s
**MLY Manley 5.13 213** Pn Pn 00 50 43.5 +3.1
MLY IAML 00 53 24.1
comp=E,6.7nm,1.0s
MLY IAML 00 53 36.4
comp=N,6.7nm,1.1s
**E19K Redstone River 5.21 253** Pn Pn 00 50 46.3 +4.8
**I30M Mount Dempster 5.22 141** Pn Pn 00 50 44.3 +2.6
**WRH Wood River Hil 5.25 199** Pn Pn 00 50 45.4 +3.4
WRH IAML 00 53 25.8
comp=E,9.5nm,1.0s
**NEA2 Nenana 5.26 204** Pn Pn 00 50 43.8 +1.7
NEA2 IAML 00 53 38.0
comp=N,4.9nm,1.2s
**C19K Lookout Ridge 5.48 273** Pn Pn 00 50 47.5 +2.4
**SCRK Sand Creek 5.52 179** Pn Pn 00 50 49.6 +3.8
**K27K Chicken 5.53 170** Pn Pn 00 50 49.4 +3.6
**F19K Shaleruckit Mo 5.72 249** Pn Pn 00 50 51.5 +3.2
**DAWY Dawson 5.75 159** Pn Pn 00 50 52.0 +3.2
**J30M Hart River 5.80 144** Pn Pn 00 50 52.4 +2.9
**G19K Purcell Mounta 5.92 242** Pn Pn 00 50 54.4 +3.3
**BPAW Bear Paw Mtn. 6.03 210** Pn Pn 00 50 55.2 +2.6
**C18K Utukok River 6.15 270** Pn Pn 00 50 56.2 +1.9
**K29M Barlow Dome 6.24 152** Pn Pn 00 50 59.1 +3.5
**BCAR Beaver Creek A 6.51 170** Pn Pn 00 51 02.8 +3.6
**L27K Beaver Creek, 6.51 171** Pn Pn 00 51 03.0 +3.7
**J20K Nowinta River 6.61 221** Pn Pn 00 51 03.1 +2.6
**A36M Sachs Harbour 6.74 59** Pn Pn 00 51 04.6 +2.3
**L29M L29M 6.84 156** Pn Pn 00 51 07.0 +3.2
**H18K Honhosa River 6.98 238** Pn Pn 00 51 10.3 +4.7
**M29M Somme Creek 7.43 159** Pn Pn 00 51 15.3 +3.4

*NEIC **13** 01:04:37.4±1.5, 69°.54N±0°.03×144°.43W±0°.03, h7km±8km, Error ellipse: s-maj=4.4km s-min=1.6km az=170.0*
**AEIC 13 01:04:37.2**±0.7, **69°.53N**±0°.03×**144°.44W**±0°.03, **h9**km±6km, **ML2.5, ML2.5**/16(NEIC), **Error ellipse: s-maj=4.1km s-min=1.3km az=179.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.27** | **70** | | Pg | 01 04 42.7 | +0.1 |
| C27K | | | | | Sg | 01 04 46.7 | +0.4 |
| C27K | | | | IAML | | 01 04 47.1 | |
| | comp=N,604nm,0.3s | | | | | | |
| C27K | | | | IAML | | 01 04 47.3 | |
| | comp=E,370nm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.42** | **337** | Pg | Pg | 01 04 44.7 | -0.7 |
| C26K | | | | Sg | Sg | 01 04 51.5 | +0.5 |
| **D25K** | **Kavik River** | **0.72** | **254** | Pg | Pg | 01 04 50.7 | -0.3 |
| D25K | | | | Sg | Sg | 01 05 00.5 | +0.1 |
| D25K | | | | IAML | | 01 05 05.7 | |
| | comp=N,69nm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.27** | **102** | Pn | Pn | 01 05 01.1 | 0.0 |
| D27M | | | | IAML | | 01 05 23.3 | |
| | comp=N,67nm,0.4s | | | | | | |
| D27M | | | | IAML | | 01 05 41.6 | |
| | comp=E,76nm,0.3s | | | | | | |
| **E27K** | **Coleen River** | **1.70** | **141** | Pn | Pn | 01 05 07.6 | +0.5 |
| **E28M** | **Babbage River** | **1.99** | **116** | Pn | Pn | 01 05 11.3 | +0.2 |
| E28M | | | | IAML | | 01 06 21.5 | |
| | comp=E,81nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **5.02** | **264** | Pn | Pn | 01 05 54.1 | +1.4 |
| **I30M** | **Mount Dempster** | **5.33** | **140** | Pn | Pn | 01 05 58.3 | +1.4 |

**RSNC 13 01:04:47.0**±0.0, **11°N**±2°×**7°7W**±°, **h4**km±3km, **M2.6, mb4.2, ML2.6, North of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SJCC** | **San Jacinto, C** | **1.95** | **126** | P | Pn | 01 05 18.1 | -2.9 |
| SJCC | | | | S | Sn | 01 05 43.9 | -2.0 |
| **LCBC** | **Los crdobas,** | **2.21** | **169** | P | Pn | 01 05 21.7 | -2.8 |
| LCBC | | | | S | Sn | 01 05 49.9 | -2.3 |
| **SMRC** | **Santa Marta, M** | **2.52** | **87** | P | Pn | 01 05 25.8 | -3.0 |
| SMRC | | | | S | Sn | 01 05 57.1 | -2.9 |
| **APAC** | **Apartado, Choc** | **3.13** | **176** | P | Pn | 01 05 34.0 | -3.1 |
| APAC | | | | S | Sn | 01 06 12.0 | -2.9 |
| **BCIP** | **Isla Barro Col** | **3.53** | **238** | P | Pn | 01 05 37.4 | -5.3 |
| **CRJC** | **Cerrejon, Guaj** | **3.84** | **90** | P | Pn | 01 05 44.1 | -2.9 |
| CRJC | | | | S | Sn | 01 06 28.6 | -4.0 |
| **ZARC** | **Zaragoza, Cauc** | **4.01** | **151** | P | Pn | 01 05 45.4 | -3.8 |
| ZARC | | | | S | Sn | 01 06 30.7 | -6.0 |
| **OCAC** | **Ocana** | **4.41** | **129** | P | Pn | 01 05 52.0 | -2.9 |
| OCAC | | | | S | Sn | 01 06 43.4 | -3.5 |
| **URIC** | **Uribia, Colomb** | **4.75** | **82** | P | Pn | 01 05 57.3 | -2.1 |
| URIC | | | | S | Sn | 01 06 51.9 | -3.1 |
| **PRVC** | **Isla de Provid** | **5.04** | **298** | P | Pn | 01 05 59.7 | -3.7 |
| | 106nm,0.9s | | | | | | |
| PRVC | | | | S | Sn | 01 06 49.0 | -13 |
| | 106nm,0.9s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **5.20** | **171** | P | Pn | 01 06 03.8 | -2.0 |
| **RUSC** | **La Rusia** | **6.29** | **144** | P | Pn | 01 06 18.6 | -2.5 |
| RUSC | | | | S | Sn | 01 07 29.1 | -4.6 |

*NEIC **13** 01:08:17.0±1.9, 69°.49N±0°.02×144°.29W±0°.05, h8km±7km, Error ellipse: s-maj=3.7km s-min=2.0km az=187.0*
**AEIC 13 01:08:17.4**±1.9, **69°.49N**±0°.02×**144°.29W**±0°.05, **h8**km±7km, **ML2.7, ML3.1**/34(NEIC), **Error ellipse: s-maj=3.5km s-min=2.7km az=180.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **56** | | Pg | 01 08 22.1 | -0.1 |
| C27K | | | | | Sg | 01 08 25.4 | -0.2 |
| C27K | | | | IAML | | 01 08 26.1 | |
| | comp=E,2µm,0.7s | | | | | | |
| C27K | | | | IAML | | 01 08 26.1 | |
| | comp=N,2µm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.48** | **333** | Pg | Pg | 01 08 26.1 | -0.5 |
| C26K | | | | Sg | Sg | 01 08 33.6 | +0.7 |
| **D25K** | **Kavik River** | **0.76** | **258** | Pg | Pg | 01 08 31.3 | -0.7 |
| D25K | | | | Sg | Sg | 01 08 41.4 | -0.4 |
| **D27M** | **Malcolm River** | **1.21** | **100** | | Pb | 01 08 40.2 | -0.2 |
| D27M | | | | Sg | Sg | 01 08 54.9 | -1.2 |
| D27M | | | | IAML | | 01 09 01.7 | |
| | comp=N,336nm,0.4s | | | | | | |
| D27M | | | | IAML | | 01 09 02.4 | |
| | comp=E,262nm,0.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.56** | **280** | | Pn | 01 08 44.6 | -0.8 |
| C24K | | | | IAML | | 01 09 12.0 | |
| | comp=N,210nm,0.8s | | | | | | |
| C24K | | | | IAML | | 01 09 12.0 | |
| | comp=E,248nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **142** | Pn | Pb | 01 08 47.3 | -0.5 |
| **D24K** | **Happy Valley** | **1.65** | **260** | Pn | Pn | 01 08 46.1 | -0.4 |
| D24K | | | | IAML | | 01 09 13.5 | |
| | comp=N,248nm,0.8s | | | | | | |
| D24K | | | | IAML | | 01 09 15.8 | |
| | comp=E,193nm,1.1s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81** | **178** | Pn | Pn | 01 08 48.0 | -0.8 |
| F26K | | | | IAML | | 01 09 18.3 | |
| | comp=N,192nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.93** | **115** | Pn | Pn | 01 08 50.7 | +0.3 |
| **EPYK** | **Eagle Plains** | **4.24** | **134** | Pn | Pn | 01 09 24.0 | +1.8 |
| **I28M** | **Miner Creek** | **4.39** | **156** | Pn | Pn | 01 09 24.1 | -0.3 |
| **F31M** | **Tsiigehtchic** | **4.40** | **113** | Pn | Pn | 01 09 22.4 | -2.0 |
| F31M | | | | IAML | | 01 12 05.7 | |
| | comp=N,22nm,0.6s | | | | | | |
| F31M | | | | IAML | | 01 12 14.1 | |
| | comp=E,27nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.54** | **120** | Pn | Pn | 01 09 28.5 | +2.3 |
| **I29M** | **Ogilvie Camp,** | **4.75** | **148** | Pn | Pn | 01 09 30.0 | +0.9 |
| **I23K** | **Minto, Yukon-K** | **4.78** | **207** | Pn | Pn | 01 09 30.1 | +0.5 |
| I23K | | | | IAML | | 01 12 38.3 | |
| | comp=N,17nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.26** | **198** | Pn | Pn | 01 09 38.0 | +1.9 |
| WRH | | | | IAML | | 01 12 36.1 | |
| | comp=N,12nm,0.9s | | | | | | |
| WRH | | | | IAML | | 01 12 41.3 | |
| | comp=E,11nm,0.9s | | | | | | |
| **I30M** | **Mount Dempster** | **5.26** | **141** | Pn | Pn | 01 09 38.4 | +2.0 |

*IDC **13** 01:13:11.5±1.3, 69°.75N×145°.27W, h0km, mb3.8/5, mbtmp3.7/8, ML3.4/3, Error ellipse: s-maj=33.2km s-min=17.7km az=84.0*
*NEIC **13** 01:13:11.7±1.6, 69°.69N±0°.05×145°.0W±0°.1, h10km±1km, Error ellipse: s-maj=9.0km s-min=6.6km az=7.0*
*AEIC **13** 01:13:11.3±1.9, 69°.56N±0°.03×145°.1W±0°.1, h13km±4km, ML3.4, ML3.5/122(NEIC), Error ellipse: s-maj=5.8km s-min=3.7km az=88.0*
**ISC 13 01:13:11.7**±1.1, **69°.61N**±0°.04×**145°.08W**±0°.03, **h7**km±8km, **n144**, **σ1§01**/151, **mb3.9**/5, **Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.31** | **11** | Pg | **Pg** | **01 13 18.7** | **+1.0** |
| C26K | | | | | **Sg** | **01 13 23.3** | **+1.5** |
| C26K | | | | IAML | | 01 13 24.8 | |
| | comp=N,5µm,0.8s | | | | | | |
| C26K | | | | IAML | | 01 13 29.8 | |
| | comp=E,6µm,0.7s | | | | | | |
| **C27K** | **Jago River** | **0.48** | **88** | | **Pg** | **01 13 20.6** | **-0.3** |
| C27K | | | | | **Sg** | **01 13 26.7** | **-0.5** |
| **D25K** | **Kavik River** | **0.54** | **238** | Pg | **Pg** | **01 13 21.2** | **-1.0** |
| D25K | | | | Sg | **Sg** | **01 13 29.9** | **+0.7** |
| **C24K** | **Franklin Bluff** | **1.27** | **277** | | **Pb** | **01 13 35.5** | **-0.4** |
| C24K | | | | | **Sn** | **01 13 53.3** | **+0.3** |
| **D24K** | **Happy Valley** | **1.41** | **253** | | **Pn** | **01 13 37.6** | **0.0** |
| D24K | | | | Sn | **Sg** | **01 13 57.7** | **+1.0** |
| **D27M** | **Malcolm River** | **1.50** | **102** | Pn | **Pn** | **01 13 37.2** | **-1.8** |
| D27M | | | | IAML | | 01 14 03.3 | |
| | comp=N,696nm,0.8s | | | | | | |
| D27M | | | | IAML | | 01 14 04.4 | |
| | comp=E,518nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.88** | **241** | Pn | **Pn** | **01 13 44.7** | **+0.5** |
| TOLK | | | | IAML | | 01 14 17.2 | |
| | comp=E,439nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 01 14 25.2 | |
| | comp=N,444nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.91** | **137** | Pn | **Pn** | **01 13 45.9** | **+1.3** |
| E27K | | | | IAML | | 01 14 17.0 | |
| | comp=E,342nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **1.94** | **279** | Pn | **Pn** | **01 13 44.7** | **-0.3** |
| **F26K** | **Sheenjek River** | **1.96** | **170** | Pn | **Pn** | **01 13 45.7** | **+0.5** |
| F26K | | | | IAML | | 01 14 17.7 | |
| | comp=E,481nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **1.98** | **220** | Pn | **Pn** | **01 13 45.9** | **+0.3** |
| E24K | | | | IAML | | 01 14 19.3 | |
| | comp=E,378nm,1.2s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **186** | Pn | **Pn** | **01 13 46.3** | **-0.1** |
| F25K | | | | IAML | | 01 14 21.1 | |
| | comp=E,374nm,0.7s | | | | | | |
| F25K | | | | IAML | | 01 14 22.8 | |
| | comp=N,434nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.10** | **255** | Pn | **Pb** | **01 13 48.6** | **-1.3** |
| D23K | | | | IAML | | 01 14 23.5 | |
| | comp=N,382nm,1.1s | | | | | | |
| D23K | | | | IAML | | 01 14 30.1 | |
| | comp=E,391nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.20** | **175** | Pn | **Pn** | **01 13 50.0** | **+1.3** |
| **E28M** | **Babbage River** | **2.23** | **114** | Pn | **Pn** | **01 13 49.5** | **+0.6** |
| **D28M** | **Stokes Point** | **2.25** | **94** | | **Pn** | **01 13 48.2** | **-1.1** |
| **E23K** | **Chandalar** | **2.27** | **229** | Pn | **Pn** | **01 13 49.6** | **0.0** |
| E23K | | | | IAML | | 01 14 29.6 | |
| | comp=E,260nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.34** | **207** | Pn | **Pn** | **01 13 51.4** | **+0.9** |
| **G26K** | **Porcupine Rive** | **2.72** | **169** | | **Pn** | **01 13 56.5** | **+0.9** |
| **F28M** | **Old Crow** | **2.77** | **134** | Pn | **Pn** | **01 13 56.6** | **+0.2** |
| **D22K** | **Ayikyak River** | **2.81** | **258** | Pn | **Pn** | **01 13 56.6** | **-0.3** |
| **E22K** | **Anaktuvuk Pass** | **2.86** | **242** | Pn | **Pn** | **01 13 57.8** | **+0.1** |
| **E29M** | **Blow River** | **2.86** | **112** | Pn | **Pn** | **01 13 58.6** | **+1.0** |
| E29M | | | | IAML | | 01 14 55.4 | |
| | comp=N,163nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.89** | **188** | | **Pn** | **01 13 58.4** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **2.96** | **288** | Pn | **Pn** | **01 14 00.1** | **+1.1** |
| **COLD** | **Coldfoot** | **3.05** | **221** | Pn | **Pn** | **01 14 00.5** | **+0.3** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **198** | Pn | **Pn** | **01 14 00.5** | **+0.1** |
| G24K | | | | IAML | | 01 14 52.7 | |
| | comp=E,192nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.06** | **181** | Pn | **Pn** | **01 14 01.3** | **+0.9** |
| FYU | | | | IAML | | 01 14 56.9 | |
| | comp=E,183nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **3.09** | **154** | Pn | **Pn** | **01 14 01.9** | **+1.0** |
| **B21K** | **Ikpikpuk River** | **3.34** | **275** | Pn | **Pn** | **01 14 04.2** | **+0.1** |
| **F22K** | **John River** | **3.36** | **234** | | **Pn** | **01 14 04.9** | **+0.4** |
| **H25L** | **Birch Creek** | **3.37** | **185** | | **Pn** | **01 14 05.2** | **+0.5** |
| **E21K** | **Killik River** | **3.41** | **254** | Pn | **Pn** | **01 14 04.5** | **-0.6** |
| E21K | | | | IAML | | 01 15 08.9 | |
| | comp=E,109nm,0.8s | | | | | | |
| **G23K** | **Bananza Creek** | **3.45** | **215** | Pn | **Pn** | **01 14 07.6** | **+1.8** |
| G23K | | | | IAML | | 01 15 07.9 | |
| | comp=N,103nm,0.8s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.63** | **297** | | **Pn** | **01 14 08.8** | **+0.7** |
| **G29M** | **Pine Creek** | **3.77** | **133** | Pn | **Pn** | **01 14 10.9** | **+0.7** |
| G29M | | | | IAML | | 01 15 40.9 | |
| | comp=N,76nm,1.2s | | | | | | |
| **F21K** | **Alatna River** | **3.92** | **236** | Pn | **Pn** | **01 14 12.1** | **-0.1** |
| F21K | | | | IAML | | 01 15 23.5 | |
| | comp=E,72nm,0.9s | | | | | | |
| F21K | | | | IAML | | 01 15 24.1 | |
| | comp=N,66nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.94** | **197** | Pn | **Pn** | **01 14 12.4** | **-0.1** |
| H24K | | | | IAML | | 01 15 22.5 | |
| | comp=E,93nm,0.9s | | | | | | |
| H24K | | | | IAML | | 01 15 23.2 | |
| | comp=N,69nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.95** | **116** | | **Pn** | **01 14 12.5** | **-0.1** |
| **PRP** | **Porcupine Dome** | **4.12** | **183** | Pn | **Pn** | **01 14 15.8** | **+0.8** |
| PRP | | | | IAML | | 01 15 06.6 | |
| | comp=E,49nm,0.6s | | | | | | |
| PRP | | | | IAML | | 01 15 06.9 | |
| | comp=N,65nm,0.4s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **206** | Pn | **Pn** | **01 14 16.1** | **+0.5** |
| H23K | | | | IAML | | 01 15 29.4 | |
| | comp=N,72nm,0.7s | | | | | | |
| H23K | | | | IAML | | 01 15 33.3 | |
| | comp=E,76nm,1.2s | | | | | | |
| **B20K** | **Meade River** | **4.21** | **281** | Pn | **Pn** | **01 14 16.8** | **+0.7** |
| **G30M** | **tAoh Zraii Nji** | **4.22** | **125** | Pn | **Pn** | **01 14 17.0** | **+0.7** |
| G30M | | | | IAML | | 01 15 34.3 | |
| | comp=N,45nm,1.1s | | | | | | |
| **D20K** | **Etivluk River** | **4.22** | **263** | | **Pn** | **01 14 16.9** | **+0.6** |
| **E20K** | **Nigu River** | **4.24** | **256** | | **Pn** | **01 14 17.6** | **+1.1** |
| **A21K** | **Barrow** | **4.24** | **299** | | **Pn** | **01 14 16.8** | **+0.3** |
| **I27K** | **Kandik River** | **4.24** | **160** | | **Pn** | **01 14 17.7** | **+1.1** |
| **H29M** | **Whitestone** | **4.25** | **140** | Pn | **Pn** | **01 14 17.2** | **+0.6** |
| H29M | | | | IAML | | 01 15 39.2 | |
| | comp=E,57nm,0.8s | | | | | | |
| H29M | | | | IAML | | 01 15 39.6 | |
| | comp=N,59nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.37** | **102** | Pn | **Pn** | **01 14 18.6** | **+0.3** |
| **INK** | **Inuvik** | **4.37** | **102** | Pn | **Pn** | **01 14 19.4** | **+1.1** |
| | comp=N,0.7nm,0.3s,baz=304,slow=18,SNR=10.0 | | | | | | |
| INK | | | | | Sn | **01 15 07.4** | **-1.9** |
| | comp=N,3.0nm,0.3s,baz=61,slow=27,SNR=9.1 | | | | | | |
| | comp=N,2.2nm,0.4s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.39** | **169** | Pn | **Pn** | **01 14 20.0** | **+1.4** |
| **G21K** | **Allakaket** | **4.43** | **229** | Pn | **Pn** | **01 14 18.9** | **-0.3** |
| G21K | | | | IAML | | 01 15 36.3 | |
| | comp=N,52nm,1.0s | | | | | | |
| G21K | | | | IAML | | 01 15 47.4 | |
| | comp=E,62nm,1.1s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.44** | **216** | | **Pn** | **01 14 19.4** | **+0.1** |
| **EPYK** | **Eagle Plains** | **4.53** | **132** | Pn | **Pn** | **01 14 21.0** | **+0.5** |
| **POKR** | **Poker Plat Res** | **4.61** | **193** | Pn | **Pn** | **01 14 21.7** | **+0.1** |
| POKR | | | | IAML | | 01 15 22.4 | |
| | comp=E,48nm,0.9s | | | | | | |
| POKR | | | | IAML | | 01 15 47.5 | |
| | comp=N,39nm,0.5s | | | | | | |
| **I28M** | **Miner Creek** | **4.62** | **152** | Pn | **Pn** | **01 14 22.5** | **+0.6** |
| I28M | | | | IAML | | 01 15 49.5 | |
| | comp=E,33nm,0.9s | | | | | | |
| I28M | | | | IAML | | 01 15 52.2 | |
| | comp=N,40nm,0.8s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.70** | **112** | Pn | **Pn** | **01 14 23.3** | **+0.5** |
| **F20K** | **Avaraart Lake** | **4.71** | **242** | Pn | **Pn** | **01 14 24.2** | **+1.2** |
| F20K | | | | IAML | | 01 15 52.9 | |
| | comp=N,31nm,0.6s | | | | | | |
| F20K | | | | IAML | | 01 16 02.4 | |
| | comp=E,34nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **202** | Pn | **Pn** | **01 14 24.4** | **+0.4** |
| I23K | | | | IAML | | 01 15 47.7 | |
| | comp=N,50nm,1.4s | | | | | | |
| I23K | | | | IAML | | 01 15 52.4 | |
| | comp=E,46nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **4.81** | **263** | Pn | **Pn** | **01 14 24.9** | **+0.5** |
| D19K | | | | IAML | | 01 16 04.8 | |
| | comp=E,38nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **196** | Pn | **Pn** | **01 14 24.8** | **+0.1** |
| MDM | | | | IAML | | 01 15 47.6 | |
| | comp=N,37nm,0.6s | | | | | | |
| MDM | | | | IAML | | 01 16 01.1 | |
| | comp=E,34nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.84** | **119** | Pn | **Pn** | **01 14 26.0** | **+1.3** |
| G31M | | | | IAML | | 01 15 51.4 | |
| | comp=N,42nm,0.9s | | | | | | |
| G31M | | | | IAML | | 01 16 01.7 | |
| | comp=E,38nm,1.0s | | | | | | |
| **COLA** | **College** | **4.88** | **194** | | **Pn** | **01 14 25.9** | **+0.6** |
| **IMAR** | **Indian Mountai** | **4.91** | **226** | Pn | **Pn** | **01 14 25.7** | **0.0** |
| **IL31** | | **4.92** | **189** | Pn | **Pn** | **01 14 26.1** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.92** | **189** | Pn | **Pn** | **01 14 26.2** | **+0.4** |
| **ILAR** | **Eielson Array** | **4.92** | **189** | Pn | **Pn** | **01 14 26.4** | **+0.6** |
| | comp=E,3.0nm,0.3s,baz=5.7,slow=15,SNR=17 | | | | | | |
| ILAR | | | | | Sn | **01 15 23.6** | **+0.7** |
| | comp=E,2.7nm,0.3s,baz=4.4,slow=22,SNR=5.7 | | | | | | |
| | comp=E,3.8nm,0.3s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.95** | **220** | Pn | **Pn** | **01 14 26.7** | **+0.5** |
| H21K | | | | IAML | | 01 16 02.5 | |
| | comp=N,28nm,1.3s | | | | | | |
| H21K | | | | IAML | | 01 16 03.6 | |
| | comp=E,33nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **4.96** | **250** | Pn | **Pn** | **01 14 26.3** | **-0.1** |
| E19K | | | | IAML | | 01 15 57.8 | |
| | comp=E,39nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.00** | **145** | Pn | **Pn** | **01 14 27.0** | **0.0** |
| I29M | | | | IAML | | 01 15 37.4 | |
| | comp=N,34nm,0.5s | | | | | | |
| I29M | | | | IAML | | 01 15 51.7 | |
| | comp=E,40nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **5.03** | **181** | Pn | **Pn** | **01 14 27.6** | **+0.2** |
| J25K | | | | IAML | | 01 15 52.7 | |
| | comp=E,28nm,0.6s | | | | | | |
| J25K | | | | IAML | | 01 15 53.2 | |
| | comp=N,26nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **5.09** | **161** | Pn | **Pn** | **01 14 28.9** | **+0.6** |
| EGAK | | | | IAML | | 01 15 32.9 | |
| | comp=N,32nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 01 16 16.8 | |
| | comp=N,29nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.10** | **208** | Pn | **Pn** | **01 14 28.6** | **+0.2** |
| **CCB** | **Clear Creek Bu** | **5.10** | **193** | Pn | **Pn** | **01 14 28.7** | **+0.3** |
| **C19K** | **Lookout Ridge** | **5.16** | **271** | Pn | **Pn** | **01 14 29.7** | **+0.5** |
| C19K | | | | IAML | | 01 15 30.6 | |
| | comp=E,28nm,0.8s | | | | | | |
| C19K | | | | IAML | | 01 16 39.1 | |
| | comp=N,30nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.17** | **173** | Pn | **Pn** | **01 14 30.1** | **+0.6** |
| J26L | | | | IAML | | 01 15 40.0 | |
| | comp=N,22nm,0.7s | | | | | | |
| J26L | | | | IAML | | 01 15 54.8 | |
| | comp=E,22nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.28** | **199** | Pn | **Pn** | **01 14 30.4** | **-0.4** |
| NEA2 | | | | IAML | | 01 15 36.1 | |
| | comp=E,21nm,0.6s | | | | | | |
| **HDA** | **Harding Lake** | **5.28** | **189** | Pn | **Pn** | **01 14 31.5** | **+0.7** |
| **WRH** | **Wood River Hil** | **5.30** | **194** | Pn | **Pn** | **01 14 31.5** | **+0.4** |
| WRH | | | | IAML | | 01 16 08.1 | |
| | comp=N,27nm,1.5s | | | | | | |
| WRH | | | | IAML | | 01 16 10.2 | |
| | comp=E,33nm,1.1s | | | | | | |
| **F19K** | **Shaleruckit Mo** | **5.48** | **245** | Pn | **Pn** | **01 14 33.9** | **+0.3** |
| **I30M** | **Mount Dempster** | **5.54** | **139** | Pn | **Pn** | **01 14 35.1** | **+0.6** |
| **A19K** | **Wainwright** | **5.54** | **284** | | **Pn** | **01 14 35.2** | **+0.8** |
| **SCRK** | **Sand Creek** | **5.68** | **175** | Pn | **Pn** | **01 14 38.0** | **+1.6** |
| **G19K** | **Purcell Mounta** | **5.71** | **238** | Pn | **Pn** | **01 14 36.7** | **-0.1** |
| **BWN** | **Browne** | **5.73** | **200** | Pn | **Pn** | **01 14 37.0** | **0.0** |
| **K27K** | **Chicken** | **5.73** | **167** | Pn | **Pn** | **01 14 38.0** | **+1.0** |
| **C18K** | **Utukok River** | **5.84** | **268** | Pn | **Pn** | **01 14 38.8** | **+0.3** |
| **H19K** | **Roundabout Mou** | **5.97** | **232** | Pn | **Pn** | **01 14 40.9** | **+0.5** |
| **DAWY** | **Dawson** | **6.00** | **155** | Pn | **Pn** | **01 14 42.1** | **+1.3** |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **206** | Pn | **Pn** | **01 14 41.4** | **+0.5** |
| **DOT** | **Dot Lake** | **6.01** | **176** | | **Pn** | **01 14 41.7** | **+0.9** |
| **J30M** | **Hart River** | **6.10** | **142** | Pn | **Pn** | **01 14 42.5** | **+0.3** |
| **MCK** | **McKinley** | **6.10** | **196** | | **Pn** | **01 14 43.2** | **+1.1** |
| **E18K** | **Tukpahlearik C** | **6.11** | **256** | Pn | **Pn** | **01 14 42.2** | **0.0** |
| **F18K** | **Selawik** | **6.23** | **248** | | **Pn** | **01 14 43.8** | **0.0** |
| **G18K** | **Tagagawik** | **6.36** | **241** | Pn | **Pn** | **01 14 46.2** | **+0.6** |
| **RND** | **Reindeer** | **6.41** | **195** | Pn | **Pn** | **01 14 46.7** | **+0.2** |
| **J20K** | **Nowinta River** | **6.52** | **217** | Pn | **Pn** | **01 14 46.9** | **-0.8** |
| **K29M** | **Barlow Dome** | **6.52** | **149** | Pn | **Pn** | **01 14 49.7** | **+1.8** |
| **C17K** | **DeLong Mountai** | **6.59** | **269** | | **Pn** | **01 14 48.1** | **-0.6** |
| **DHY** | **Denali Highway** | **6.63** | **189** | Pn | **Pn** | **01 14 51.7** | **+2.2** |
| **PAX** | **Paxson** | **6.67** | **182** | | **Pn** | **01 14 52.0** | **+2.0** |
| **E17K** | **Hotham Inlet** | **6.69** | **256** | | **Pn** | **01 14 49.6** | **-0.5** |
| **BCAR** | **Beaver Creek A** | **6.71** | **167** | Pn | **Pn** | **01 14 52.0** | **+1.5** |
| **L27K** | **Beaver Creek,** | **6.71** | **167** | Pn | **Pn** | **01 14 51.4** | **+0.9** |
| **H18K** | **Honhosa River** | **6.79** | **235** | Pn | **Pn** | **01 14 51.4** | **-0.2** |
| **D17K** | **Noatak River** | **6.84** | **262** | | **Pn** | **01 14 51.8** | **-0.3** |
| **F17K** | **Baldwin Pennin** | **6.84** | **250** | Pn | **Pn** | **01 14 52.5** | **+0.3** |
| **A36M** | **Sachs Harbour** | **6.94** | **61** | Pn | **Pn** | **01 14 52.9** | **-0.7** |
| **WAT1** | **Susitna Watana** | **6.96** | **193** | | **Pn** | **01 14 55.1** | **+1.3** |
| **J19K** | **Poorman** | **7.00** | **221** | Pn | **Pn** | **01 14

comp=E,0.5nm,0.6s
**NVAR Mina Array Bea 34.37 141** P **P** **01 20 02.2 +3.1**
comp=E,0.4nm,0.6s,baz=353,slow=6.4,SNR=2.2
comp=E,0.4nm,0.6s
**FINES FINESS Array B 49.08 6** P **P** **01 21 58.9 +0.1**
comp=E,0.8nm,0.6s,baz=15,slow=7.9,SNR=6.8
comp=E,0.8nm,0.6s
**HFS Hagfors 49.66 14** P **P** **01 22 03.4 +0.2**
comp=E,0.7nm,0.4s,baz=325,slow=7.6,SNR=9.3
comp=E,0.7nm,0.4s
**EKA Eskdalemuir Ar 52.34 26** P **P** **01 22 23.0 -0.4**
comp=E,2.5nm,0.9s,baz=338,slow=5.4,SNR=3.6
comp=E,2.5nm,0.9s

*NEIC **13** 01:28:11.8±2.1,69.51N±0.05×144.1W±0.2,h4km±9km, Error ellipse: s-maj=10.3km s-min=3.2km az=48.0*
**AEIC 13 01:28:11.3±1.7,69.50N±0.06×144.1W±0.1,h10km±7km, ML2.7, Error ellipse: s-maj=9.2km s-min=5.0km az=213.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.19** | **49** | Pg | Pg | 01 28 15.7 | +0.3 |
| **C26K** | **Camden Bay** | **0.50** | **327** | | Pg | 01 28 21.4 | +0.4 |
| C26K | | | | | Sg | 01 28 28.1 | +0.5 |
| **D25K** | **Kavik River** | **0.81** | **258** | Pg | Pg | 01 28 25.4 | -1.6 |
| **D27M** | **Malcolm River** | **1.15** | **102** | | Pb | 01 28 33.2 | -0.1 |
| **E27K** | **Coleen River** | **1.61** | **144** | | Pb | 01 28 41.0 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.62** | **280** | | Pb | 01 28 40.8 | -0.4 |
| **D24K** | **Happy Valley** | **1.70** | **260** | Pn | Pb | 01 28 42.5 | -0.1 |
| **F26K** | **Sheenjek River** | **1.81** | **180** | Pn | Pb | 01 28 44.4 | -0.2 |
| **E28M** | **Babbage River** | **1.88** | **116** | Pn | Pb | 01 28 45.3 | -0.4 |
| **F25K** | **Christian Rive** | **2.00** | **197** | Pn | Pb | 01 28 47.8 | +0.2 |
| **BMAR** | **Burnt Mountain** | **2.09** | **185** | Pn | Pn | 01 28 47.5 | +1.1 |
| **E24K** | **Your Creek** | **2.14** | **230** | Pn | Pb | 01 28 49.5 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.14** | **249** | Pn | Pb | 01 28 50.0 | -0.1 |
| **C23K** | **Itkillik River** | **2.29** | **281** | Pn | Pb | 01 28 51.8 | -0.8 |
| **F24K** | **Squaw Lake** | **2.42** | **217** | Pn | Pn | 01 28 52.5 | +1.5 |
| **F28M** | **Old Crow** | **2.46** | **138** | Pn | Pn | 01 28 53.0 | +1.6 |
| **E23K** | **Chandalar** | **2.47** | **237** | Pn | Pb | 01 28 54.3 | -1.4 |
| **E29M** | **Blow River** | **2.51** | **113** | Pn | Pn | 01 28 53.9 | +1.7 |
| **G27K** | **Doyon Strip** | **2.86** | **160** | Pn | Pn | 01 28 57.6 | +0.6 |
| **FYU** | **Fort Yukon** | **2.98** | **188** | Pn | Pn | 01 28 58.7 | +0.2 |
| **G24K** | **Hadweenzic Riv** | **3.08** | **206** | Pn | Pn | 01 29 00.7 | +0.7 |
| **G29M** | **Pine Creek** | **3.46** | **136** | Pn | Pn | 01 29 06.9 | +1.8 |
| **G23K** | **Bananza Creek** | **3.57** | **221** | Pn | Pn | 01 29 07.5 | +0.8 |
| **B21K** | **Ikpikpuk River** | **3.68** | **277** | Pn | Pn | 01 29 08.7 | +0.6 |
| **H24K** | **Noodor Dome** | **3.95** | **203** | Pn | Pn | 01 29 12.1 | +0.2 |
| **H29M** | **Whitestone** | **3.95** | **144** | Pn | Pn | 01 29 13.7 | +1.8 |
| **PRP** | **Porcupine Dome** | **4.04** | **188** | Pn | Pn | 01 29 15.4 | +2.2 |
| **F21K** | **Alatna River** | **4.15** | **241** | Pn | Pn | 01 29 16.3 | +1.7 |
| **EPYK** | **Eagle Plains** | **4.21** | **135** | Pn | Pn | 01 29 17.0 | +1.6 |
| **H23K** | **Yukon River** | **4.23** | **212** | Pn | Pn | 01 29 16.5 | +0.7 |
| **I28M** | **Miner Creek** | **4.38** | **156** | Pn | Pn | 01 29 18.4 | +0.6 |
| **G31M** | **Satah River** | **4.49** | **120** | Pn | Pn | 01 29 21.3 | +2.0 |
| **I23K** | **Minto, Yukon-K** | **4.82** | **207** | Pn | Pn | 01 29 24.4 | +0.7 |
| **MDM** | **Murphy Dome** | **4.83** | **201** | Pn | Pn | 01 29 25.4 | +1.4 |
| **EGAK** | **Eagle** | **4.88** | **165** | Pn | Pn | 01 29 24.7 | 0.0 |
| **J26L** | **Joseph Creek** | **5.03** | **177** | Pn | Pn | 01 29 26.6 | -0.1 |
| **IMAR** | **Indian Mountai** | **5.08** | **231** | Pn | Pn | 01 29 29.7 | +2.3 |
| **CCB** | **Clear Creek Bu** | **5.08** | **198** | Pn | Pn | 01 29 29.1 | +1.7 |
| **H21K** | **Melozitna Rive** | **5.09** | **225** | Pn | Pn | 01 29 27.9 | +0.4 |
| **D19K** | **Kuna River** | **5.13** | **265** | Pn | Pn | 01 29 28.9 | +0.8 |
| **I30M** | **Mount Dempster** | **5.24** | **141** | Pn | Pn | 01 29 31.4 | +1.7 |
| **SCRK** | **Sand Creek** | **5.55** | **179** | Pn | Pn | 01 29 35.2 | +1.2 |
| **F19K** | **Shaleruckik Mo** | **5.75** | **249** | Pn | Pn | 01 29 37.9 | +1.4 |
| **DAWY** | **Dawson** | **5.77** | **159** | Pn | Pn | 01 29 38.7 | +1.8 |
| **J30M** | **Hart River** | **5.81** | **145** | Pn | Pn | 01 29 39.4 | +1.9 |
| **BPAW** | **Bear Paw Mtn.** | **6.06** | **210** | Pn | Pn | 01 29 41.3 | +0.5 |
| **K29M** | **Barlow Dome** | **6.26** | **152** | Pn | Pn | 01 29 44.8 | +1.1 |
| **E18K** | **Tukpahlearik C** | **6.41** | **259** | Pn | Pn | 01 29 45.8 | +0.3 |
| **BCAR** | **Beaver Creek A** | **6.53** | **171** | Pn | Pn | 01 29 48.8 | +1.4 |
| **L27K** | **Beaver Creek,** | **6.53** | **171** | Pn | Pn | 01 29 48.5 | +1.2 |
| **J20K** | **Nowinta River** | **6.64** | **221** | Pn | Pn | 01 29 49.5 | +0.8 |
| **L29M** | **L29M** | **6.86** | **157** | Pn | Pn | 01 29 53.4 | +1.6 |

*NEIC **13** 01:28:21.2±1.4,69.54N±0.05×144.00W±0.04,h10km±2km, Error ellipse: s-maj=9.0km s-min=3.0km az=4.0*
**AEIC 13 01:28:19.4±2.0,69.46N±0.05×144.2W±0.1,h8km±7km, ML2.7, ML2.9**/104(NEIC), **Error ellipse: s-maj=7.4km s-min=5.2km az=160.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **43** | Pg | Pg | 01 28 23.8 | -0.2 |
| C27K | | | | Sg | Sg | 01 28 26.5 | -0.7 |
| C27K | | | | IAML | | 01 28 27.2 | |
| | comp=E,2μm,0.6s | | | | | | |
| C27K | | | | IAML | | 01 28 27.3 | |
| | comp=N,2μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.80** | **261** | Pg | Pg | 01 28 34.5 | -0.1 |
| D25K | | | | IAML | | 01 28 47.1 | |
| | comp=N,215nm,0.3s | | | | | | |
| D25K | | | | IAML | | 01 28 47.1 | |
| | comp=E,149nm,0.5s | | | | | | |
| **D27M** | **Malcolm River** | **1.15** | **99** | | Pn | 01 28 42.6 | +0.8 |
| D27M | | | | IAML | | 01 29 02.6 | |
| | comp=N,215nm,0.5s | | | | | | |
| D27M | | | | IAML | | 01 29 08.3 | |
| | comp=E,106nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.58** | **143** | | Pg | 01 28 49.6 | -0.1 |
| E27K | | | | IAML | | 01 29 12.5 | |
| | comp=E,151nm,0.7s | | | | | | |
| E27K | | | | IAML | | 01 29 16.3 | |
| | comp=N,105nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.61** | **282** | Pn | Pg | 01 28 50.2 | 0.0 |
| C24K | | | | IAML | | 01 29 15.1 | |
| | comp=E,149nm,0.8s | | | | | | |
| C24K | | | | IAML | | 01 29 16.3 | |
| | comp=N,112nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.69** | **262** | Pn | Pg | 01 28 51.4 | -0.3 |
| D24K | | | | IAML | | 01 29 16.0 | |
| | comp=N,220nm,0.6s | | | | | | |
| D24K | | | | IAML | | 01 29 17.1 | |
| | comp=E,242nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.77** | **180** | Pn | Pg | 01 28 53.0 | -0.3 |
| F26K | | | | IAML | | 01 29 19.5 | |
| | comp=E,180nm,0.9s | | | | | | |
| F26K | | | | IAML | | 01 29 50.8 | |
| | comp=N,101nm,0.3s | | | | | | |
| **E28M** | **Babbage River** | **1.87** | **115** | Pn | Pb | 01 28 54.0 | +0.3 |
| E28M | | | | IAML | | 01 29 22.1 | |
| | comp=N,79nm,0.7s | | | | | | |
| E28M | | | | IAML | | 01 29 24.8 | |
| | comp=E,64nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.95** | **197** | Pn | Pg | 01 28 56.0 | -0.7 |
| F25K | | | | IAML | | 01 29 24.4 | |
| | comp=E,163nm,0.9s | | | | | | |
| F25K | | | | IAML | | 01 29 26.7 | |
| | comp=N,118nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.04** | **185** | Pn | Pb | 01 28 56.9 | +0.2 |
| **E24K** | **Your Creek** | **2.10** | **231** | | Pb | 01 28 58.3 | +0.7 |
| E24K | | | | IAML | | 01 29 34.7 | |
| | comp=E,40nm,0.7s | | | | | | |
| E24K | | | | IAML | | 01 29 35.7 | |
| | comp=N,32nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.11** | **250** | Pn | Pb | 01 28 58.3 | +0.4 |
| TOLK | | | | IAML | | 01 29 31.6 | |
| | comp=E,118nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 01 29 33.7 | |
| | comp=N,59nm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **2.29** | **283** | Pn | Pb | 01 28 59.9 | -0.9 |
| C23K | | | | IAML | | 01 29 33.5 | |
| | comp=N,115nm,0.5s | | | | | | |
| C23K | | | | IAML | | 01 29 47.6 | |
| | comp=E,128nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **217** | Pn | Pb | 01 29 01.3 | -1.1 |
| F24K | | | | IAML | | 01 29 37.3 | |
| | comp=N,35nm,0.9s | | | | | | |
| F24K | | | | IAML | | 01 29 44.7 | |
| | comp=E,29nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.43** | **138** | Pn | Pn | 01 29 01.0 | +1.7 |
| F28M | | | | IAML | | 01 29 42.1 | |
| | comp=E,52nm,0.6s | | | | | | |
| F28M | | | | IAML | | 01 29 42.5 | |
| | comp=N,64nm,0.4s | | | | | | |
| **E23K** | **Chandalar** | **2.43** | **237** | Pn | Pb | 01 29 03.7 | +0.4 |
| E23K | | | | IAML | | 01 29 42.7 | |
| | comp=N,37nm,0.5s | | | | | | |
| E23K | | | | IAML | | 01 29 44.1 | |
| | comp=E,39nm,1.1s | | | | | | |
| **E29M** | **Blow River** | **2.50** | **112** | Pn | Pb | 01 29 03.8 | -0.7 |
| E29M | | | | IAML | | 01 29 43.2 | |
| | comp=N,62nm,0.7s | | | | | | |
| E29M | | | | IAML | | 01 29 44.9 | |
| | comp=E,70nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **2.82** | **159** | Pn | Pn | 01 29 05.9 | +1.2 |
| G27K | | | | IAML | | 01 29 59.3 | |
| | comp=N,17nm,0.6s | | | | | | |
| G27K | | | | IAML | | 01 30 29.1 | |
| | comp=E,19nm,1.0s | | | | | | |
| **FYU** | **Fort Yukon** | **2.93** | **188** | Pn | Pn | 01 29 07.4 | +1.3 |
| FYU | | | | IAML | | 01 29 55.4 | |
| | comp=N,101nm,0.7s | | | | | | |
| FYU | | | | IAML | | 01 30 01.6 | |
| | comp=E,88nm,1.3s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.04** | **206** | Pn | Pn | 01 29 09.7 | +2.1 |
| G24K | | | | IAML | | 01 30 00.6 | |
| | comp=E,49nm,1.1s | | | | | | |
| G24K | | | | IAML | | 01 30 04.1 | |
| | comp=N,46nm,1.5s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.08** | **248** | Pn | Pg | 01 29 16.8 | -1.6 |
| E22K | | | | IAML | | 01 30 01.8 | |
| | comp=N,26nm,0.6s | | | | | | |
| **D22K** | **Ayikyak River** | **3.10** | **263** | Pn | Pg | 01 29 16.7 | -2.0 |
| D22K | | | | IAML | | 01 30 37.6 | |
| | comp=E,34nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.32** | **290** | Pn | Pn | 01 29 13.0 | +1.6 |
| **G29M** | **Pine Creek** | **3.43** | **135** | Pn | Pn | 01 29 14.2 | +1.2 |
| G29M | | | | IAML | | 01 30 12.0 | |
| | comp=E,55nm,0.8s | | | | | | |
| G29M | | | | IAML | | 01 30 17.8 | |
| | comp=N,35nm,1.1s | | | | | | |
| **G23K** | **Bananza Creek** | **3.53** | **221** | Pn | Pb | 01 29 18.6 | -3.4 |
| G23K | | | | IAML | | 01 30 24.9 | |
| | comp=E,26nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.67** | **277** | Pn | Pn | 01 29 19.6 | +3.3 |
| B21K | | | | IAML | | 01 30 03.5 | |
| | comp=E,27nm,0.7s | | | | | | |
| B21K | | | | IAML | | 01 30 32.1 | |
| | comp=N,26nm,1.4s | | | | | | |
| **G30M** | **tAoh Zrail Nji** | **3.86** | **126** | Pn | Pn | 01 29 20.8 | +1.8 |
| G30M | | | | IAML | | 01 30 28.5 | |
| | comp=N,19nm,1.3s | | | | | | |
| G30M | | | | IAML | | 01 30 47.9 | |
| | comp=E,15nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | **3.90** | **203** | Pn | Pn | 01 29 22.1 | +2.6 |
| H24K | | | | IAML | | 01 30 31.1 | |
| | comp=N,16nm,1.1s | | | | | | |
| H24K | | | | IAML | | 01 30 31.4 | |
| | comp=E,17nm,1.5s | | | | | | |
| **H29M** | **Whitestone** | **3.92** | **143** | Pn | Pn | 01 29 22.0 | +2.3 |
| H29M | | | | IAML | | 01 30 16.8 | |
| | comp=E,21nm,0.8s | | | | | | |
| H29M | | | | IAML | | 01 30 39.1 | |
| | comp=N,20nm,1.3s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.99** | **188** | Pn | Pn | 01 29 23.1 | +2.3 |
| PRP | | | | IAML | | 01 30 32.4 | |
| | comp=N,17nm,0.9s | | | | | | |
| PRP | | | | IAML | | 01 30 32.9 | |
| | comp=E,14nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.02** | **102** | Pn | Pn | 01 29 23.4 | +2.4 |
| **F21K** | **Alatna River** | **4.12** | **241** | Pn | Pn | 01 29 25.2 | +2.7 |
| F21K | | | | IAML | | 01 30 40.1 | |
| | comp=N,20nm,0.9s | | | | | | |
| F21K | | | | IAML | | 01 30 40.2 | |
| | comp=E,12nm,1.0s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.18** | **134** | Pn | Pn | 01 29 25.5 | +2.1 |
| EPYK | | | | IAML | | 01 30 37.5 | |
| | comp=E,36nm,0.5s | | | | | | |
| EPYK | | | | IAML | | 01 30 48.8 | |
| | comp=N,27nm,1.0s | | | | | | |
| **H23K** | **Yukon River** | **4.19** | **212** | Pn | Pn | 01 29 24.9 | +1.5 |
| H23K | | | | IAML | | 01 30 37.1 | |
| | comp=N,14nm,1.0s | | | | | | |
| H23K | | | | IAML | | 01 30 37.8 | |
| | comp=E,14nm,1.1s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.19** | **174** | Pn | Pn | 01 29 28.0 | +4.6 |
| **F31M** | **Tsiigehtchic** | **4.34** | **113** | Pn | Pn | 01 29 26.9 | +1.4 |
| F31M | | | | IAML | | 01 30 43.9 | |
| | comp=E,15nm,1.0s | | | | | | |
| F31M | | | | IAML | | 01 30 44.5 | |
| | comp=N,13nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **4.34** | **156** | Pn | Pn | 01 29 28.7 | +3.1 |
| I28M | | | | IAML | | 01 30 52.3 | |
| | comp=E,16nm,0.8s | | | | | | |
| I28M | | | | IAML | | 01 30 52.9 | |
| | comp=N,16nm,1.4s | | | | | | |
| **G31M** | **Satah River** | **4.48** | **120** | Pn | Pn | 01 29 29.3 | +1.9 |
| G31M | | | | IAML | | 01 30 52.8 | |
| | comp=N,22nm,1.5s | | | | | | |
| G31M | | | | IAML | | 01 30 54.1 | |
| | comp=E,15nm,0.8s | | | | | | |
| **B20K** | **Meade River** | **4.55** | **283** | Pn | Pn | 01 29 30.6 | +2.2 |
| **G21K** | **Allakaket** | **4.59** | **234** | Pn | Pn | 01 29 32.5 | +3.6 |
| G21K | | | | IAML | | 01 30 57.5 | |
| | comp=E,11nm,1.1s | | | | | | |
| G21K | | | | IAML | | 01 31 06.2 | |
| | comp=N,10nm,1.2s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **207** | Pn | Pn | 01 29 35.3 | +3.9 |
| I23K | | | | IAML | | 01 31 00.2 | |
| | comp=E,10nm,1.2s | | | | | | |
| I23K | | | | IAML | | 01 31 04.4 | |
| | comp=N,12nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79** | **201** | Pn | Pn | 01 29 34.1 | +2.5 |
| MDM | | | | IAML | | 01 30 52.2 | |
| | comp=E,8.7nm,0.7s | | | | | | |
| MDM | | | | IAML | | 01 30 53.1 | |
| | comp=N,9.5nm,0.9s | | | | | | |
| **IL31** | | **4.83** | **194** | Pn | Pn | 01 29 35.2 | +3.2 |
| **ILAR** | **Eielson Array** | **4.83** | **194** | Pn | Pn | 01 29 35.0 | +2.8 |
| **EGAK** | **Eagle** | **4.84** | **165** | Pn | Pn | 01 29 34.5 | +2.2 |
| EGAK | | | | IAML | | 01 30 32.5 | |
| | comp=N,12nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **4.89** | **186** | Pn | Pn | 01 29 36.1 | +3.0 |
| J25K | | | | IAML | | 01 30 55.0 | |
| | comp=E,11nm,1.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.93** | **246** | Pn | Pn | 01 29 37.5 | +4.0 |
| F20K | | | | IAML | | 01 31 24.3 | |
| | comp=N,7.8nm,1.5s | | | | | | |
| **J26L** | **Joseph Creek** | **4.98** | **177** | Pn | Pn | 01 29 37.4 | +3.0 |
| J26L | | | | IAML | | 01 31 04.5 | |
| | comp=E,9.8nm,0.9s | | | | | | |
| J26L | | | | IAML | | 01 31 10.2 | |
| | comp=N,7.5nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04** | **198** | Pn | Pn | 01 29 37.4 | +2.3 |
| CCB | | | | IAML | | 01 31 07.5 | |
| | comp=E,7.1nm,1.2s | | | | | | |
| CCB | | | | IAML | | 01 31 09.0 | |
| | comp=N,5.1nm,0.5s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.04** | **231** | Pn | Pn | 01 29 37.5 | +2.3 |
| **H21K** | **Melozitna Rive** | **5.05** | **225** | Pn | Pn | 01 29 37.8 | +2.5 |
| H21K | | | | IAML | | 01 31 12.5 | |
| | comp=N,7.7nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.12** | **266** | Pn | Pn | 01 29 37.9 | +1.7 |
| D19K | | | | IAML | | 01 30 37.9 | |
| | comp=E,8.0nm,0.4s | | | | | | |
| D19K | | | | IAML | | 01 31 39.1 | |
| | comp=N,0.2nm,0.5s | | | | | | |
| **MLY** | **Manley** | **5.12** | **213** | Pn | Pn | 01 29 38.6 | +2.3 |
| **I30M** | **Mount Dempster** | **5.21** | **141** | Pn | Pn | 01 29 38.8 | +1.3 |
| I30M | | | | IAML | | 01 30 41.1 | |
| | comp=E,12nm,0.5s | | | | | | |
| I30M | | | | IAML | | 01 30 42.1 | |
| | comp=N,7.5nm,0.7s | | | | | | |
| **E19K** | **Redstone River** | **5.22** | **254** | Pn | Pn | 01 29 39.8 | +2.3 |
| E19K | | | | IAML | | 01 31 12.9 | |
| | comp=E,8.2nm,1.4s | | | | | | |
| **WRH** | **Wood River Hil** | **5.24** | **199** | Pn | Pn | 01 29 40.4 | +2.6 |
| WRH | | | | IAML | | 01 31 07.9 | |
| | comp=N,6.6nm,1.3s | | | | | | |
| WRH | | | | IAML | | 01 31 30.3 | |
| | comp=E,7.5nm,1.3s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.49** | **274** | Pn | Pn | 01 29 43.1 | +1.9 |
| **SCRK** | **Sand Creek** | **5.51** | **179** | Pn | Pn | 01 29 44.6 | +3.0 |
| **K27K** | **Chicken** | **5.51** | **170** | Pn | Pn | 01 29 43.9 | +2.3 |
| **F19K** | **Shaleruckik Mo** | **5.72** | **249** | Pn | Pn | 01 29 46.6 | +2.2 |
| **DAWY** | **Dawson** | **5.73** | **159** | Pn | Pn | 01 29 47.4 | +2.8 |
| **J30M** | **Hart River** | **5.78** | **144** | Pn | Pn | 01 29 47.1 | +1.8 |
| **C19K** | **Purcell Mounta** | **5.92** | **242** | Pn | Pn | 01 29 49.6 | +2.5 |
| **BPAW** | **Bear Paw Mtn.** | **6.02** | **210** | Pn | Pn | 01 29 48.7 | +0.2 |
| **C18K** | **Utukok River** | **6.16** | **270** | Pn | Pn | 01 29 51.2 | +0.7 |
| **K29M** | **Barlow Dome** | **6.22** | **152** | Pn | Pn | 01 29 54.0 | +2.6 |
| **E18K** | **Tukpahlearik C** | **6.39** | **259** | Pn | Pn | 01 29 54.1 | +0.6 |
| **BCAR** | **Beaver Creek A** | **6.49** | **170** | Pn | Pn | 01 29 60.0 | +4.9 |
| **DHY** | **Denali Highway** | **6.54** | **193** | Pn | Pn | 01 29 57.0 | +1.2 |
| **J20K** | **Nowinta River** | **6.60** | **221** | Pn | Pn | 01 30 00.2 | +3.7 |
| **A36M** | **Sachs Harbour** | **6.74** | **59** | Pn | Pn | 01 29 57.3 | -1.0 |
| **L29M** | **L29M** | **6.82** | **156** | Pn | Pn | 01 30 02.0 | +2.5 |
| **H18K** | **Honhosa River** | **6.98** | **239** | Pn | Pn | 01 30 05.6 | +3.9 |
| **C36M** | **Paulatuk** | **7.08** | **81** | Pn | Pn | 01 30 01.2 | -1.8 |
| **M29M** | **Somme Creek** | **7.41** | **159** | Pn | Pn | 01 30 09.9 | +2.2 |
| **C16K** | **Lisburne Hills** | **7.73** | **271** | Pn | Pn | 01 30 12.6 | +0.6 |
| **MMPY** | **Sheldon Lake,** | **8.62** | **136** | Pn | Pn | 01 30 26.6 | +2.4 |

*IDC **13** 01:37:54.7±0.7,13.47N×120.26E,h32km±5km,mb4.1/17, mbtmp4.3/17,MS3.5/19, Error ellipse: s-maj=31.1km s-min=12.7km az=70.0*
*NEIC **13** 01:37:55.4±1.3,13.54N±0.09×120.2E±0.1,h35km±2km, mb5.0/38, Error ellipse: s-maj=22.6km s-min=14.3km az=251.0*
**ISC 13 01:37:56.2±0.4,13.48N±0.07×120.18E±0.1,h50km, h50km:pP-P,n94,σ1.906/78,mb4.7/44,MS3.5/20,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MYLDM** | **Lahad Datu** | **8.41** | **192** | Pn | **Pn** | **01 39 56.2** | **+0.7** |
| **UBPT** | **Khong Chiam** | **14.37** | **279** | Pn | **Pn** | **01 41 15.3** | **-1.5** |
| **TNTI** | **Ternate** | **14.49** | **150** | Pn | **Pn** | **01 41 18.3** | **-0.2** |
| **JOW** | **Kunigami** | **15.29** | **28** | LR | LR | 01 46 52.1 | |
| | comp=Z,92nm,20.6s,baz=148,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.01** | **286** | P | **P** | **01 42 38.0** | **+2.3** |
| | 1.7nm,0.4s,baz=85,slow=9.8,SNR=7.7 | | | | | | |
| CMAR | | | | LR | LR | 01 50 57.8 | |
| | comp=Z,46nm,19.1s,baz=130,slow=37 | | | | | | |
| | 1.7nm,0.4s | | | | | | |
| **JMN** | **Monobe** | **23.70** | **29** | P | **P** | **01 43 03.5** | **0.0** |
| JMN | | | | IAmb | IAmb | 01 43 07.0 | |
| | comp=Z,48nm,1.2s | | | | | | |
| **GUMO** | **Guam** | **24.00** | **87** | LR | LR | 01 52 43.6 | |
| | comp=Z,87nm,19.9s,baz=204,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **24.86** | **15** | P | **P** | **01 43 14.4** | **+0.4** |
| | comp=Z,3.5nm,0.5s,baz=200,slow=10,SNR=16 | | | | | | |
| KSRS | | | | LR | LR | 01 54 11.2 | |
| | comp=Z,137nm,20.6s,baz=200,slow=39 | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **32.24** | **16** | P | **P** | **01 44 19.7** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **32.24** | **16** | P | **P** | **01 44 19.6** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **32.24** | **16** | P | **P** | **01 44 20.3** | **+0.5** |
| | comp=Z,2.6nm,0.7s,baz=204,slow=7.7,SNR=8.8 | | | | | | |
| USRK | | | | LR | LR | 01 57 09.1 | |
| | comp=Z,72nm,21.6s,baz=185,slow=36 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **35.13** | **129** | LR | LR | 02 00 48.8 | |
| | comp=Z,55nm,19.3s,baz=340,slow=39 | | | | | | |
| **COEN** | **Coen** | **35.52** | **139** | P | **P** | **01 44 49.0** | **+0.4** |
| COEN | | | | IAmb | IAmb | 01 45 02.3 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **35.87** | **157** | P | **P** | **01 44 51.3** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 01 44 52.0 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **36.01** | **157** | P | **P** | **01 44 52.6** | **-0.1** |
| | comp=Z,8.7nm,0.5s,baz=333,slow=10.0,SNR=44 | | | | | | |
| | comp=Z,8.7nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **36.02** | **157** | P | **P** | **01 44 52.5** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 01 44 53.3 | |
| | comp=Z,17nm,0.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **36.06** | **28** | LR | LR | 02 01 29.4 | |
| | comp=Z,77nm,18.4s,baz=170,slow=39 | | | | | | |
| **WR0** | **Warramunga Arr** | **36.11** | **157** | P | **P** | **01 44 53.4** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 01 44 54.5 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **36.13** | **344** | P | **P** | **01 44 51.4** | **-2.3** |
| **SONM** | **Songino Array** | **36.13** | **344** | P | **P** | **01 44 54.7** | **+1.1** |
| | comp=Z,3.1nm,0.8s,baz=162,slow=8.9,SNR=14 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **36.90** | **13** | LR | LR | 02 01 39.3 | |
| | comp=Z,119nm,20.7s,baz=204,slow=39 | | | | | | |
| **AS31** | **Alice Springs** | **39.28** | **160** | P | **P** | **01 45 20.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **39.28** | **160** | P | **P** | **01 45 19.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **39.28** | **160** | P | **P** | **01 45 21.1** | **+0.7** |
| | comp=Z,6.4nm,0.4s,baz=336,slow=6.8,SNR=88 | | | | | | |
| | comp=Z,6.4nm,0.4s | | | | | | |
| **PALK** | **Pallekele** | **39.28** | **265** | LR | LR | 02 03 04.6 | |
| | comp=Z,38nm,18.5s,baz=165,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **42.08** | **142** | LR | LR | 02 03 57.0 | |
| | comp=Z,4.7nm,19.6s,baz=278,slow=37 | | | | | | |
| **CTAO** | **Charters Tower** | **42.08** | **142** | P | **P** | **01 45 43.7** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 01 45 46.4 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **42.08** | **142** | P | **P** | **01 45 45.1** | **+1.6** |
| **FORT** | **Forrest** | **44.65** | **170** | P | **P** | **01 46 04.2** | **+0.2** |
| FORT | | | | IAmb | IAmb | 01 46 22.1 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **HNR** | **Honiara** | **45.56** | **118** | LR | LR | 02 03 03.1 | |
| | comp=Z,745nm,21.9s,baz=281,slow=33 | | | | | | |
| **MK31** | **Makanchi Array** | **45.91** | **324** | P | **P** | **01 46 14.9** | **+1.0** |
| **MKAR** | **Makanchi Array** | **45.91** | **324** | P | **P** | **01 46 14.4** | **+0.4** |
| **MKAR** | **Makanchi Array** | **45.91** | **324** | P | **P** | **01 46 15.0** | **+1.0** |
| | comp=Z,2.8nm,0.7s,baz=123,slow=8.8,SNR=18 | | | | | | |
| MKAR | | | | PcP | **PcP** | **01 47 51.5** | **+1.1** |
| | comp=Z,0.8nm,0.6s,baz=110,slow=3.3,SNR=4.6 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **48.46** | **162** | P | **P** | **01 46 33.5** | **-0.4** |
| **AAK** | **Ala-Archa** | **48.87** | **315** | LR | LR | 02 11 09.3 | |
| | comp=Z,60nm,18.0s,baz=104,slow=41 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **49.03** | **333** | P | **P** | **01 46 36.3** | **-1.7** |
| **ZALV** | **Zalesovo Beam** | **49.03** | **333** | P | **P** | **01 46 38.2** | **+0.2** |
| | comp=Z,1.8nm,0.5s,baz=118,slow=6.1,SNR=6.3 | | | | | | |
| ZALV | | | | LR | LR | 02 08 24.6 | |
| | comp=Z,58nm,19.8s,baz=82,slow=37 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **49.55** | **156** | P | **P** | **01 46 42.5** | **+0.3** |
| | comp=Z,1.0nm,0.3s,baz=336,slow=11,SNR=3.4 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.09** | **327** | P | **P** | **01 46 47.5** | **+1.4** |
| | comp=Z,4.1nm,0.8s,baz=125,slow=8.1,SNR=26 | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **50.10** | **327** | P | **P** | **01 46 47.0** | **+0.8** |
| KURK | | | | IAmb | IAmb | 01 47 02.1 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **50.10** | **327** | P | **P** | **01 46 47.3** | **+1.1** |
| KURK | | | | pP | **pP** | **01 47 00.7** | **+1.7** |
| **KKAR** | **Karatay Array** | **51.77** | **315** | P | **P** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,2.2nm,0.5s | | | | | | |
| **EIL** | **Elat** | **79.37** | **298** | LR | LR | 02 31 34.6 | |
| | comp=Z,21nm,18.2s,baz=78,slow=40 | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **79.70** | **348** | P | **P** | **01 49 59.5** | **+1.3** |
| **SPITS** | **Spitsbergen Ar** | **79.70** | **348** | P | **P** | **01 49 59.4** | **+1.1** |
| | comp=Z,3.3nm,0.4s,baz=78,slow=9.0,SNR=22 | | | | | | |
| SPITS | | | | LR | LR | 02 31 32.9 | |
| | comp=Z,52nm,18.7s,baz=34,slow=40 | | | | | | |
| | comp=Z,3.3nm,0.4s | | | | | | |
| **FIA1** | **FINESS Array S** | **80.23** | **331** | P | **P** | **01 50 01.7** | **+0.4** |
| **FINES** | **FINESS Array B** | **80.23** | **331** | P | **P** | **01 50 00.9** | **-0.4** |
| **FINES** | **FINESS Array B** | **80.23** | **331** | P | **P** | **01 50 01.2** | **-0.1** |
| | comp=Z,1.7nm,0.5s,baz=44,slow=6.3,SNR=18 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **M29M** | **Somme Creek** | **83.34** | **27** | P | **P** | **01 50 19.4** | **+1.5** |
| M29M | | | | IAmb | IAmb | 01 50 39.7 | |
| | comp=Z,21nm,1.9s | | | | | | |
| **MLR** | **Muntele Rosu** | **83.45** | **315** | P | **P** | **01 50 18.7** | **0.0** |
| MLR | | | | IAmb | IAmb | 01 52 13.8 | |
| | comp=Z,15nm,1.8s | | | | | | |
| **BURAR** | **Bucovina Array** | **83.48** | **317** | P | **P** | **01 50 19.4** | **+0.6** |
| **INK** | **Inuvik** | **83.48** | **21** | LR | LR | 02 31 26.0 | |
| | comp=Z,18nm,18.4s,baz=329,slow=38 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **83.48** | **317** | P | **P** | **01 50 18.9** | **0.0** |
| BUR08 | | | | IAmb | IAmb | 01 51 32.2 | |
| | comp=Z,19nm,1.9s | | | | | | |
| **HFS** | **Hagfors** | **86.43** | **331** | P | **P** | **01 50 32.8** | **-0.4** |
| | comp=Z,2.5nm,0.7s,baz=54,slow=2.6,SNR=9.1 | | | | | | |
| HFS | | | | pP | **pP** | **01 50 44.5** | **-2.4** |
| | comp=Z,4.6nm,0.9s,baz=72,slow=11,SNR=3.7 | | | | | | |
| HFS | | | | LR | LR | 02 33 26.1 | |
| | comp=Z,26nm,19.3s,baz=66,slow=38 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.23** | **333** | P | **P** | **01 50 36.4** | **-0.7** |
| | comp=Z,2.8nm,0.8s,baz=67,slow=4.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.23** | **333** | P | **P** | **01 50 36.4** | **-0.7** |
| | baz=67,slow=4.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **87.23** | **333** | P | **P** | **01 50 37.0** | **-0.1** |
| | comp=Z,1.1nm,0.7s,baz=68,slow=4.7,SNR=8.8 | | | | | | |
| NOA | | | | pP | **pP** | **01 50 48.3** | **-2.5** |
| | comp=Z,2.4nm,0.8s,baz=68,slow=4.7,SNR=9.6 | | | | | | |
| NOA | | | | LR | LR | 02 33 21.0 | |
| | comp=Z,20nm,19.3s,baz=55,slow=38 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **90.48** | **321** | P | **P** | **01 50 52.0** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=102,slow=9.1,SNR=2.0 | | | | | | |
| GERES | | | | pP | **pP** | **01 51 03.4** | **-3.1** |
| | comp=Z,0.5nm,0.6s,baz=141,slow=6.8,SNR=3.1 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **MOA** | **Molln** | **90.49** | **320** | *e*P | P | 01 51 05.9 | +13 |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **OBKA** | **Obir** | **90.78** | **318** | *e*PcP | PcP | 01 51 09.1 | +14 |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **KBA** | **Koelnbreinsper** | **91.35** | **319** | *i* PcP | PcP | 01 51 10.4 | +12 |
| | comp=Z,0.3nm,0.0s | | | | | | |
| **ABTA** | **Abfaltersbach** | **92.00** | **319** | *e*P | P | 01 51 11.7 | +12 |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **92.36** | **320** | *e*P | P | 01 51 13.7 | +12 |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **92.37** | **320** | *e*PcP | PcP | 01 51 15.3 | +13 |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **SQTA** | **Sankt Quirin** | **92.65** | **320** | *e*P | P | 01 51 14.1 | +11 |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **MOTA** | **Moosalm** | **92.66** | **320** | *e*P | P | 01 51 14.4 | +11 |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **FETA** | **Feichten** | **93.03** | **320** | *e*P | P | 01 51 16.0 | +11 |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **93.66** | **320** | LR | LR | 02 36 02.3 | |
| | comp=Z,26nm,19.5s,baz=64,slow=37 | | | | | | |
| **VNDA** | **Vanda** | **93.90** | **172** | P | **P** | **01 51 07.3** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=329,slow=5.0,SNR=3.9 | | | | | | |
| VNDA | | | | pP | **pP** | **01 51 18.6** | **-3.0** |
| | comp=Z,0.8nm,0.8s,baz=322,slow=6.9,SNR=4.5 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BORG** | **Borgarnes** | **96.74** | **344** | LR | LR | 02 39 48.6 | |
| | comp=Z,37nm,19.1s,baz=8.1,slow=38 | | | | | | |

*NNC **13** 01:39:36.9±4.0, 41.˚77N×70.˚42E, h0km, mb2.5, mpv2.7, Error ellipse: s-maj=32.4km s-min=13.8km az=10.0*
*KRNET **13** 01:39:38.4±0.1, 41.˚85N×70.˚41E, h10km, mb2.2*
*SOME **13** 01:39:38.8, 41.˚80N×70.˚30E, h10km*

**ISC 13 01:39:37.7**±1.4, **41.˚90N**±0.˚04×**70.˚29E**±0.˚04, **h10**km±12km, **n13**, σ1§**06**/24, **12C-6D**, **Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TRKS** | **Terek-Say** | **0.73** | **120** | ⇓*e*P | | **Pg** | **01 39 51.8** | **-0.1** |
| | baz=24 | | | | | | | |
| TRKS | | | | ⇓*e*S | | **Sg** | **01 40 01.6** | **+0.1** |
| | baz=24 | | | | | | | |
| **BRLS** | **Borolday** | **1.18** | **344** | *e*P | | **Pb** | **01 39 59.6** | **-0.7** |
| | 6.1nm,0.1s | | | | | | | |
| BRLS | | | | *e*S | | **Sb** | **01 40 14.0** | **-1.6** |
| | 6.9nm,0.1s | | | | | | | |
| **BRLS** | **Borolday** | **1.18** | **344** | P | | **Pb** | **01 39 59.6** | **-0.7** |
| | 7.5nm,0.2s | | | | | | | |
| BRLS | | | | S | | **Sb** | **01 40 14.0** | **-1.6** |
| | 6.9nm,0.1s | | | | | | | |
| **KK31** | **Karatay Array** | **1.22** | **8** | ⇑Pn | | **Pg** | **01 40 02.6** | **+1.5** |
| | 0.3nm,0.3s,baz=182,slow=16,SNR=6.4 | | | | | | | |
| KK31 | | | | ⇑Lg | | Lg | 01 40 21.0 | |
| | 1.2nm,0.3s,baz=183,slow=31 | | | | | | | |
| **KKAR** | **Karatay Array** | **1.22** | **8** | ⇑*i*P | | **Pg** | **01 40 02.8** | **+1.7** |
| | baz=3.0 | | | | | | | |
| KKAR | | | | ⇑*i*S | | **Sn** | **01 40 19.8** | **+2.4** |
| | baz=3.0 | | | | | | | |
| **ARK** | **Arkit** | **1.25** | **94** | ⇓*i*P | | **Pn** | **01 40 00.8** | **-0.6** |
| | baz=92 | | | | | | | |
| ARK | | | | ⇓*i*S | | **Sb** | **01 40 17.2** | **-0.6** |
| | baz=92 | | | | | | | |
| **MNAS** | **Manas** | **1.75** | **70** | ⇑*i*P | | **Pb** | **01 40 10.1** | **+0.1** |
| | baz=67 | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sg** | **01 40 33.9** | **0.0** |
| | baz=67 | | | | | | | |
| **BTK** | **Batken** | **1.88** | **168** | ⇓*i*P | | **Pb** | **01 40 12.7** | **+0.5** |
| | baz=70 | | | | | | | |
| BTK | | | | ⇓*i*S | | **Sg** | **01 40 37.5** | **-0.6** |
| | baz=70 | | | | | | | |
| **ARSB** | **Arslanbob** | **2.10** | **105** | ⇑*i*P | | **Pb** | **01 40 16.5** | **+0.5** |
| | baz=4.0 | | | | | | | |
| ARSB | | | | ⇑*i*S | | **Sb** | **01 40 43.3** | **+1.2** |
| | baz=4.0 | | | | | | | |
| **MRKS** | **Merke** | **2.34** | **68** | *e*P | | **Pg** | **01 40 22.3** | **-0.2** |
| | 3.9nm,0.2s | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **01 40 53.0** | **+0.2** |
| | 4.0nm,0.4s | | | | | | | |
| **MRKS** | **Merke** | **2.34** | **68** | Pg | | **Pg** | **01 40 22.3** | **-0.2** |
| | 5.2nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 01 40 53.0 | |
| | 4.1nm,0.4s | | | | | | | |
| **AML** | **Almayashu** | **2.55** | **84** | ⇑*i*P | | **Pb** | **01 40 23.2** | **-0.6** |
| | baz=82 | | | | | | | |
| AML | | | | ⇑*i*S | | **Sb** | **01 40 55.0** | **-0.3** |
| | baz=82 | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.70** | **72** | ⇑*i*P | | **Pb** | **01 40 25.1** | **-1.1** |
| | baz=71 | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sb** | **01 40 58.6** | **-0.8** |
| | baz=71 | | | | | | | |

*IDC **13** 01:42:20.4±0.8, 8.˚29S×116.˚12E, h0km, mb4.0/10, mbtmp4.0/11, ML4.4/1, Error ellipse: s-maj=25.7km s-min=16.0km az=95.0*
*NEIC **13** 01:42:21.9±1.7, 8.˚37S±0.˚04×116.˚24E±0.˚07, h10km±1km, mb4.6/11, Error ellipse: s-maj=11.4km s-min=7.0km az=285.0*
*DJA **13** 01:42:23.6±0.3, 8.˚5±4.˚×11.˚6E±.˚, h13km±3km, M4.6/12, mB4.9/1, mb4.8/4, MLv4.5/12, Mw(mB)4.2/1*

**ISC 13 01:42:22.1**±0.5, **8.˚32S**±0.˚05×**116.˚22E**±0.˚03, **h10**km, **n60**, σ1§**47**/62, **mb4.3**/19, **5C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.78** | **122** | P | | **Pn** | **01 42 39.7** | **+0.5** |
| TWSI | | | | S | | **Sn** | **01 42 52.8** | **+1.9** |
| **SRBI** | **Singaraja** | **1.02** | **283** | P | | **Pg** | **01 42 41.4** | **-0.4** |
| SRBI | | | | S | | **Sg** | **01 42 54.5** | **-0.6** |
| **DNP** | **Denpasar** | **1.05** | **251** | P | | **Pn** | **01 42 43.3** | **+0.3** |
| **IGBI** | **Denpasar** | **1.17** | **245** | P | | **Sn** | **01 43 02.5** | **+2.0** |
| **PLAI** | **Plampang** | **1.62** | **108** | P | | **Pg** | **01 42 52.6** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **266** | P | | **Pn** | **01 42 56.2** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **266** | Pn | | **Pn** | **01 42 56.0** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **266** | P | | **Pn** | **01 42 55.9** | **-0.8** |
| JAGI | | | | S | | **Sn** | **01 43 20.8** | **-1.5** |
| **PWJI** | **Pagerwojo** | **4.38** | **274** | P | | **Pn** | **01 43 29.1** | **+0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.76** | **63** | P | | **Pn** | **01 43 34.9** | **+0.9** |
| **KAPI** | **Kappang** | **4.81** | **47** | P | | **Pn** | **01 43 35.3** | **+0.6** |
| **KAPI** | **Kappang** | **4.81** | **47** | Pn | | **Pn** | **01 43 35.0** | **+0.3** |
| **KAPI** | **Kappang** | **4.81** | **47** | Pn | | **Pn** | **01 43 35.4** | **+0.6** |
| | 17nm,0.3s,baz=234,slow=5.7,SNR=34 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **01 44 28.8** | **-1.8** |
| | 10.0nm,0.3s,baz=349,slow=22,SNR=6.1 | | | | | | | |
| KAPI | | | | Lg | | Lg | 01 44 54.2 | |
| | 3.9nm,0.3s,baz=231,slow=23,SNR=5.8 | | | | | | | |
| | 33nm,0.3s | | | | | | | |
| **EDFI** | **Ende, Flores** | **5.43** | **95** | P | | **Pn** | **01 43 45.8** | **+2.5** |
| | 68nm,0.9s,0.3nm | | | | | | | |
| **BNSI** | **Bone** | **5.49** | **45** | P | | **Pn** | **01 43 46.2** | **+2.2** |
| | 71nm,0.6s,1μm0.3nm | | | | | | | |
| **UGM** | **Wanagama** | **5.65** | **274** | P | | **Pn** | **01 43 49.1** | **+2.8** |
| **UGM** | **Wanagama** | **5.65** | **274** | Pn | | **Pn** | **01 43 48.4** | **+2.1** |
| **UGM** | **Wanagama** | **5.65** | **274** | P | | **Pn** | **01 43 49.5** | **+3.2** |
| **MBWA** | **Marble Bar** | **13.20** | **165** | P | | **Pn** | **01 45 29.8** | **0.0** |
| **MBWA** | **Marble Bar** | **13.20** | **165** | Pn | | **Pn** | **01 45 28.2** | **-1.6** |
| **FITZ** | **Fitzroy Crossi** | **13.36** | **138** | Pn | | **Pn** | **01 45 30.6** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.63** | **166** | P | | **Pn** | **01 45 35.8** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **13.63** | **166** | Pn | | **Pn** | **01 45 33.8** | **-1.8** |
| **PSA00** | **Pilbara Seismi** | **13.63** | **166** | Pn | | **Pn** | **01 45 33.4** | **-2.3** |
| **KNRA** | **Kununurra** | **14.28** | **122** | Pn | | **Pn** | **01 45 42.7** | **-1.8** |
| **GIRL** | **Giralia** | **14.36** | **187** | P | | **Pn** | **01 45 45.0** | **-0.7** |
| **GIRL** | **Giralia** | **14.36** | **187** | Pn | | **Pn** | **01 45 44.0** | **-1.7** |
| **MTN** | **Manton Dam** | **15.33** | **108** | Pn | | **Pn** | **01 45 56.2** | **-2.7** |
| MTN | | | | IAmb | | IAmb | 01 45 58.6 | |
| | comp=Z,78nm,1.5s | | | | | | | |
| **MORW** | **Morawa** | **20.64** | **180** | | | Pn | 01 47 03.3 | -0.9 |
| MORW | | | | IAmb | | IAmb | 01 47 13.4 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.96** | **125** | P | | Pn | 01 47 06.2 | -1.9 |
| WB0 | | | | IAmb | | IAmb | 01 47 06.8 | |
| | comp=Z,14nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.00** | **125** | P | | **P** | **01 47 06.8** | **+0.7** |
| | comp=Z,7.4nm,0.5s,baz=301,slow=12,SNR=37 | | | | | | | |
| | comp=Z,7.4nm,0.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.01** | **125** | Pn | | **P** | **01 47 06.9** | **+0.8** |
| WB2 | | | | IAmb | | IAmb | 01 47 07.4 | |
| | comp=Z,10nm,0.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.17** | **125** | Pn | | **P** | **01 47 08.6** | **+0.8** |
| WR0 | | | | IAmb | | IAmb | 01 47 09.4 | |
| | comp=Z,17nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **22.80** | **134** | P | | **P** | **01 47 25.4** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.80** | **134** | P | | **P** | **01 47 25.0** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.80** | **134** | P | | **P** | **01 47 26.1** | **+0.8** |
| | comp=Z,6.5nm,0.8s,baz=309,slow=8.7,SNR=19 | | | | | | | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.52** | **146** | P | | **P** | **01 48 35.6** | **-0.2** |
| **PZH** | **PanZhiHua** | **37.36** | **338** | P | | **P** | **01 49 37.7** | **+2.4** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,330nm,4.5s | | | | | | | |
| **NJ2** | **Nanjing** | **40.23** | **3** | *e*P | | **P** | **01 50 01.3** | **+2.2** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **XAN** | **Xi'an** | **42.70** | **351** | ⇑P | | **P** | **01 50 22.8** | **+3.4** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **46.84** | **13** | P | | **P** | **01 50 52.5** | **+0.2** |
| | comp=Z,1.3nm,0.7s,baz=191,slow=9.7,SNR=4.5 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.12** | **355** | *e*P | | **P** | **01 51 12.8** | **+2.7** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,110nm,5.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.18** | **23** | P | | **P** | **01 51 08.9** | **-1.6** |
| | comp=Z,2.4nm,0.7s,baz=200,slow=7.7,SNR=9.5 | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **14** | P | | **P** | **01 51 46.7** | **-1.1** |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **14** | P | | **P** | **01 51 48.0** | **+0.1** |
| | comp=Z,1.4nm,0.6s,baz=201,slow=10,SNR=8.1 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **56.59** | **352** | P | | **P** | **01 52 05.4** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=170,slow=10,SNR=2.1 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **CASY** | **Casey** | **58.00** | **183** | P | | **P** | **01 52 14.7** | **0.0** |
| CASY | | | | IAmb | | IAmb | 01 52 20.7 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.63** | **334** | P | | **P** | **01 52 46.5** | **-0.3** |
| **MKAR** | **Makanchi Array** | **62.63** | **334** | P | | **P** | **01 52 45.5** | **-1.3** |
| | comp=Z,0.3nm,0.6s,baz=140,slow=9.1,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **VNDA** | **Vanda** | **73.09** | **171** | P | | **P** | **01 53 51.9** | **-0.3** |
| **VNDA** | **Vanda** | **73.09** | **171** | P | | **P** | **01 53 52.4** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=312,slow=6.7,SNR=7.2 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **POGA** | **Pongola** | **81.38** | **244** | P | | **P** | **01 54 38.2** | **-1.5** |
| **QSPA** | **South Pole Qui** | **81.67** | **180** | P | | **P** | **01 54 39.5** | **-1.1** |
| QSPA | | | | IAmb | | IAmb | 01 54 48.0 | |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.67** | **180** | P | | **P** | **01 54 39.9** | **-0.6** |
| | comp=Z,1.1nm,0.8s,baz=61,slow=9.2,SNR=3.3 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.25** | **197** | ⇑P | | **P** | **01 55 19.1** | **+0.8** |
| | comp=Z,110nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.89** | **196** | ⇑P | | **P** | **01 55 26.4** | **+0.5** |
| | comp=Z,36nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.89** | **196** | P | | **P** | **01 55 25.8** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=162,slow=5.2,SNR=1.5 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.54** | **196** | ⇑P | | **P** | **01 55 35.8** | **+2.4** |
| | comp=Z,1.7nm,0.6s,baz=113,slow=4.3 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.95** | **195** | ⇑P | | **P** | **01 55 36.1** | **+0.8** |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **CPUP** | **Villa Florida** | **144.99** | **190** | PKPbc | | **PKPdf** | **02 01 59.9** | **-0.6** |
| | comp=Z,1.2nm,0.7s,baz=96,slow=0.9,SNR=2.7 | | | | | | | |

*NEIC **13** 01:57:44.3±1.4, 69.˚61N±0.˚04×144.˚68W±0.˚10, h10km±2km, Error ellipse: s-maj=7.3km s-min=5.7km az=16.0*

**AEIC 13 01:57:42.8**±1.8, **69.˚55N**±0.˚05×**144.˚7W**±0.˚1, **h3**km±7km, **ML3.0, ML3.1**/102(NEIC), **Error ellipse: s-maj=7.1km s-min=5.6km az=204.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.37** | **77** | Pg | Pg | Pg | 01 57 50.2 | +0.4 |
| C27K | | | | IAML | | | 01 57 56.9 | |
| | comp=E,2μm,0.5s | | | | | | | |
| C27K | | | | IAML | | | 01 57 57.0 | |
| | comp=N,3μm,0.7s | | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **351** | | Pg | Pg | 01 57 50.0 | -0.1 |
| C26K | | | | | Sg | Sg | 01 57 55.1 | +0.2 |
| **D25K** | **Kavik River** | **0.62** | **249** | Pg | Pg | Pg | 01 57 54.5 | -0.2 |
| **D27M** | **Malcolm River** | **1.37** | **101** | | Pn | Pn | 01 58 08.4 | -0.5 |
| D27M | | | | Sg | Sn | Sn | 01 58 27.5 | 0.0 |
| D27M | | | | IAML | | | 01 58 30.3 | |
| | comp=N,294nm,1.0s | | | | | | | |
| D27M | | | | IAML | | | 01 58 32.4 | |
| | comp=E,260nm,0.8s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.40** | **279** | | | Pb | 01 58 09.4 | -0.2 |
| **D24K** | **Happy Valley** | **1.50** | **257** | Pn | Pg | Pg | 01 58 11.9 | +0.4 |
| D24K | | | | IAML | | | 01 58 38.7 | |
| | comp=E,314nm,0.7s | | | | | | | |
| D24K | | | | IAML | | | 01 58 44.2 | |
| | comp=N,306nm,0.6s | | | | | | | |
| **E27K** | **Coleen River** | **1.78** | **139** | Pn | Pb | Pb | 01 58 15.6 | -0.4 |
| **F26K** | **Sheenjek River** | **1.87** | **173** | Pn | Pg | Pg | 01 58 18.3 | -0.4 |
| F26K | | | | IAML | | | 01 58 44.5 | |
| | comp=E,160nm,0.7s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **245** | Pn | Pn | Pn | 01 58 17.5 | +0.5 |
| TOLK | | | | IAML | | | 01 58 55.0 | |
| | comp=E,123nm,1.0s | | | | | | | |
| TOLK | | | | IAML | | | 01 58 58.2 | |
| | comp=N,136nm,1.0s | | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **190** | Pn | Pn | Pn | 01 58 18.1 | +0.7 |
| F25K | | | | IAML | | | 01 58 52.6 | |
| | comp=E,154nm,1.4s | | | | | | | |
| **E24K** | **Your Creek** | **2.01** | **224** | Pn | Pb | Pb | 01 58 19.6 | -0.4 |
| **C23K** | **Itkillik River** | **2.07** | **281** | Pn | Pn | Pn | 01 58 19.1 | +0.6 |
| C23K | | | | IAML | | | 01 59 01.6 | |
| | comp=E,196nm,0.7s | | | | | | | |
| **E28M** | **Babbage River** | **2.09** | **114** | Pn | Pb | Pb | 01 58 20.2 | -1.2 |
| **BMAR** | **Burnt Mountain** | **2.13** | **178** | Pn | Pb | Pb | 01 58 21.1 | -0.9 |
| **D23K** | **Nanushuk River** | **2.20** | **257** | Pn | Pb | Pb | 01 58 22.6 | -0.6 |
| D23K | | | | IAML | | | 01 59 13.8 | |
| | comp=N,120nm,1.0s | | | | | | | |
| **E23K** | **Chandalar** | **2.32** | **232** | Pn | Pn | Pn | 01 58 23.4 | +1.5 |
| **F24K** | **Squaw Lake** | **2.34** | **211** | Pn | Pb | Pb | 01 58 24.1 | -1.6 |
| **G26K** | **Porcupine Rive** | **2.63** | **172** | | Pb | Pb | 01 58 28.4 | -2.2 |
| **F28M** | **Old Crow** | **2.64** | **135** | Pn | Pn | Pn | 01 58 26.6 | +0.3 |
| F28M | | | | IAML | | | 02 00 07.9 | |
| | comp=N,65nm,0.6s | | | | | | | |
| **E29M** | **Blow River** | **2.73** | **112** | Pn | Pn | Pn | 01 58 27.6 | +0.2 |
| E29M | | | | IAML | | | 02 00 08.6 | |
| | comp=E,86nm,0.6s | | | | | | | |
| E29M | | | | IAML | | | 02 00 09.5 | |
| | comp=N,106nm,0.5s | | | | | | | |
| **G25K** | **Bearman Lake** | **2.84** | **191** | | | Pn | 01 58 31.1 | +2.1 |
| **D22K** | **Ayikyak River** | **2.91** | **260** | Pn | Pn | Pn | 01 58 30.2 | +0.2 |
| D22K | | | | IAML | | | 01 59 30.8 | |
| | comp=N,77nm,1.2s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.93** | **244** | Pn | Pn | Pn | 01 58 30.1 | -0.3 |
| **G27K** | **Doyon Strip** | **2.98** | **156** | Pn | Pn | Pn | 01 58 31.1 | +0.2 |
| **FYU** | **Fort Yukon** | **3.00** | **184** | Pn | Pn | Pn | 01 58 32.1 | +0.9 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **201** | Pn | Pn | Pn | 01 58 30.7 | -1.1 |
| G24K | | | | IAML | | | 01 59 29.1 | |
| | comp=E,79nm,0.9s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.10** | **289** | Pn | Pn | Pn | 01 58 32.6 | +0.1 |
| **B21K** | **Ikpikpuk River** | **3.46** | **276** | Pn | Pn | Pn | 01 58 38.0 | +0.5 |
| B21K | | | | IAML | | | 01 59 57.8 | |
| | comp=E,56nm,0.9s | | | | | | | |
| **G29M** | **Pine Creek** | **3.64** | **133** | Pn | Pn | Pn | 01 58 41.0 | +0.9 |
| **H24K** | **Noodor Dome** | **3.92** | **199** | Pn | Pn | Pn | 01 58 45.2 | +1.4 |
| H24K | | | | IAML | | | 01 59 54.4 | |
| | comp=N,26nm,0.9s | | | | | | | |
| H24K | | | | IAML | | | 02 00 02.0 | |
| | comp=E,32nm,1.3s | | | | | | | |
| **F21K** | **Alatna River** | **3.99** | **238** | Pn | Pn | Pn | 01 58 46.5 | +1.6 |
| F21K | | | | IAML | | | 02 00 58.4 | |
| | comp=N,23nm,0.8s | | | | | | | |
| F21K | | | | IAML | | | 02 01 05.4 | |
| | comp=E,21nm,0.7s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **185** | Pn | Pn | Pn | 01 58 48.2 | +2.3 |
| PRP | | | | IAML | | | 02 00 54.1 | |
| | comp=E,27nm,0.6s | | | | | | | |
| PRP | | | | IAML | | | 02 00 54.6 | |
| | comp=N,26nm,0.5s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.08** | **125** | Pn | Pn | Pn | 01 58 47.4 | +1.3 |
| G30M | | | | IAML | | | 02 01 06.7 | |
| | comp=N,22nm,0.7s | | | | | | | |
| **H29M** | **Whitestone** | **4.12** | **141** | Pn | Pn | Pn | 01 58 47.8 | +1.3 |
| H29M | | | | IAML | | | 02 00 04.7 | |
| | comp=N,28nm,1.2s | | | | | | | |
| H29M | | | | IAML | | | 02 00 35.1 | |
| | comp=E,36nm,0.7s | | | | | | | |
| **H23K** | **Yukon River** | **4.16** | **208** | Pn | Pn | Pn | 01 58 49.4 | +2.2 |
| **I26K** | **Coal Creek Min** | **4.30** | **171** | Pn | Pn | Pn | 01 58 51.5 | +2.4 |
| **D20K** | **Etivluk River** | **4.33** | **264** | | Pn | Pn | 01 58 50.9 | +1.3 |
| **B20K** | **Meade River** | **4.34** | **282** | Pn | Pn | Pn | 01 58 51.3 | +1.8 |
| **EPYK** | **Eagle Plains** | **4.39** | **133** | Pn | Pn | Pn | 01 58 50.8 | +0.5 |
| **G21K** | **Allakaket** | **4.48** | **231** | Pn | Pn | Pn | 01 58 53.5 | +1.9 |
| G21K | | | | IAML | | | 02 00 11.3 | |
| | comp=E,21nm,1.3s | | | | | | | |
| G21K | | | | IAML | | | 02 00 24.8 | |
| | comp=N,22nm,1.3s | | | | | | | |
| **I28M** | **Miner Creek** | **4.51** | **154** | Pn | Pn | Pn | 01 58 52.9 | +0.8 |
| I28M | | | | IAML | | | 02 00 18.8 | |
| | comp=E,19nm,1.1s | | | | | | | |
| I28M | | | | IAML | | | 02 00 35.4 | |
| | comp=N,18nm,1.3s | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.56** | **112** | Pn | Pn | Pn | 01 58 52.5 | -0.2 |
| F31M | | | | IAML | | | 02 00 18.2 | |
| | comp=E,19nm,1.5s | | | | | | | |
| F31M | | | | IAML | | | 02 01 07.6 | |
| | comp=N,16nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **4.70** | **119** | Pn | Pn | Pn | 01 58 56.0 | +1.5 |
| **I23K** | **Minto, Yukon-K** | **4.77** | **204** | Pn | Pn | Pn | 01 58 57.4 | +1.9 |
| I23K | | | | IAML | | | 02 00 30.5 | |
| | comp=N,21nm,1.3s | | | | | | | |
| I23K | | | | IAML | | | 02 00 39.0 | |
| | comp=E,20nm,1.1s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.79** | **244** | Pn | Pn | Pn | 01 58 57.1 | +1.4 |
| F20K | | | | IAML | | | 02 00 23.4 | |
| | comp=N,15nm,1.0s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.80** | **198** | Pn | Pn | Pn | 01 58 57.4 | +1.4 |
| MDM | | | | IAML | | | 02 00 31.4 | |
| | comp=E,18nm,1.5s | | | | | | | |
| MDM | | | | IAML | | | 02 01 27.4 | |
| | comp=N,14nm,1.0s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.88** | **146** | Pn | Pn | Pn | 01 58 58.2 | +1.2 |
| I29M | | | | IAML | | | 02 01 15.7 | |
| | comp=N,16nm,0.5s | | | | | | | |
| **D19K** | **Kuna River** | **4.92** | **264** | Pn | Pn | Pn | 01 58 58.2 | +0.6 |
| D19K | | | | IAML | | | 02 00 38.6 | |
| | comp=E,18nm,1.2s | | | | | | | |
| **IMAR** | **Indian Mountai** | **4.95** | **228** | Pn | Pn | Pn | 01 58 59.2 | +1.2 |
| **J25K** | **Salcha River,** | **4.96** | **183** | Pn | Pn | Pn | 01 58 59.9 | +1.7 |
| J25K | | | | IAML | | | 02 01 19.5 | |
| | comp=E,17nm,0.8s | | | | | | | |
| **H21K** | **Melozitna Rive** | **4.98** | **222** | Pn | Pn | Pn

| | | | | | | |
|---|---|---|---|---|---|---|
| D24K | | | IAML | | 01 59 39.8 | |
| | comp=N,255nm,0.6s | | | | | |
| **E28M** | **Babbage River** | **1.87 115** | Pn | Pn | 01 59 17.9 | +0.7 |
| E28M | | | IAML | | 01 59 49.6 | |
| | comp=N,131nm,0.5s | | | | | |
| E28M | | | IAML | | 01 59 53.8 | |
| | comp=E,104nm,0.7s | | | | | |
| **D28M** | **Stokes Point** | **1.93 91** | Pn | Pn | 01 59 18.5 | +0.6 |
| **F25K** | **Christian Rive** | **1.94 197** | Pn | Pn | 01 59 17.3 | -0.7 |
| **E24K** | **Your Creek** | **2.08 231** | Pn | Pn | 01 59 20.4 | +0.3 |
| **F28M** | **Old Crow** | **2.43 137** | Pn | Pn | 01 59 24.9 | +0.2 |
| F28M | | | IAML | | 02 00 04.5 | |
| | comp=E,90nm,0.5s | | | | | |
| F28M | | | IAML | | 02 00 09.4 | |
| | comp=N,69nm,0.7s | | | | | |
| **B20K** | **Meade River** | **4.55 283** | Pn | Pn | 01 59 54.2 | +0.4 |
| **IL31** | | **4.81 194** | Pn | Pn | 01 59 54.6 | -2.8 |
| **ILAR** | **Eielson Array** | **4.81 194** | Pn | Pn | 01 59 57.4 | -0.1 |
| **J25K** | **Salcha River,** | **4.88 186** | Pn | Pn | 01 59 57.8 | -0.7 |
| J25K | | | IAML | | 02 01 21.8 | |
| | comp=N,12nm,0.8s | | | | | |
| **J26L** | **Joseph Creek** | **4.97 177** | Pn | Pn | 02 00 00.7 | +1.0 |
| J26L | | | IAML | | 02 00 36.2 | |
| | comp=N,10nm,0.9s | | | | | |
| J26L | | | IAML | | 02 01 28.7 | |
| | comp=E,14nm,1.0s | | | | | |
| **D19K** | **Kuna River** | **5.11 266** | Pn | Pn | 02 00 02.5 | +0.9 |
| **F19K** | **Shaleruckik Mo** | **5.71 249** | Pn | Pn | 02 00 10.4 | +0.7 |
| **DAWY** | **Dawson** | **5.72 158** | Pn | Pn | 02 00 12.3 | +2.3 |
| **J30M** | **Hart River** | **5.77 144** | Pn | Pn | 02 00 11.2 | +0.4 |
| **G19K** | **Purcell Mounta** | **5.90 242** | Pn | Pn | 02 00 12.3 | -0.2 |
| **C18K** | **Utukok River** | **6.15 271** | Pn | Pn | 02 00 16.4 | +0.5 |
| **K29M** | **Barlow Dome** | **6.21 152** | Pn | Pn | 02 00 17.7 | +0.8 |
| **E18K** | **Tukpahlearik C** | **6.38 259** | Pn | Pn | 02 00 19.2 | +0.3 |
| **J20K** | **Nowinta River** | **6.58 221** | Pn | Pn | 02 00 22.2 | +0.4 |
| **A36M** | **Sachs Harbour** | **6.75 59** | Pn | Pn | 02 00 22.1 | -2.0 |
| **J19K** | **Poorman** | **7.09 225** | Pn | Pn | 02 00 27.7 | -1.1 |
| **C16K** | **Lisburne Hills** | **7.72 271** | Pn | Pn | 02 00 36.2 | -1.2 |

*NEIC* ***13*** *02:12:14.7±1.4,69°.73N±0°.06×145°.36W±0°.07,h10km±2km, Error ellipse: s-maj=10.2km s-min=4.2km az=1.0*

**AEIC 13 02:12:14.1**±2.1**,69°.61N**±0°.05×**145°.34W**±0°.08**,h18km**±6km, ML3.6,ML3.7**/116(NEIC),**Error ellipse: s-maj=7.1km s-min=3.8km az=192.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.34** | **26** | | **Pg** | 02 12 21.2 | -0.2 |
| C26K | | | | | Sg | 02 12 26.3 | -0.1 |
| **D25K** | **Kavik River** | **0.46** | **232** | Pg | Pg | 02 12 22.4 | -1.1 |
| D25K | | | | Sg | Sg | 02 12 29.2 | -0.7 |
| **C27K** | **Jago River** | **0.57** | **87** | Pg | Pb | 02 12 25.1 | -0.4 |
| C27K | | | | Sg | Sg | 02 12 32.9 | -0.3 |
| **C24K** | **Franklin Bluff** | **1.18** | **277** | | Pb | 02 12 36.2 | +0.3 |
| C24K | | | | Sg | Sg | 02 12 52.1 | -0.2 |
| **D24K** | **Happy Valley** | **1.31** | **251** | | Pg | 02 12 39.2 | -0.3 |
| D24K | | | | Sg | Sg | 02 12 57.8 | +1.2 |
| D24K | | | | IAML | | 02 13 00.9 | |
| | comp=E,1μm,1.0s | | | | | | |
| **D27M** | **Malcolm River** | **1.59** | **101** | | Pb | 02 12 43.0 | 0.0 |
| D27M | | | | IAML | | 02 13 39.7 | |
| | comp=N,1μm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.80** | **239** | Pn | Pb | 02 12 46.2 | -0.3 |
| **C23K** | **Itkillik River** | **1.85** | **280** | Pn | Pb | 02 12 46.7 | -0.7 |
| C23K | | | | IAML | | 02 13 45.4 | |
| | comp=N,820nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **1.92** | **218** | Pn | Pb | 02 12 47.9 | -0.6 |
| E24K | | | | IAML | | 02 13 47.6 | |
| | comp=N,573nm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.97** | **135** | Pn | Pb | 02 12 49.1 | -0.3 |
| **F26K** | **Sheenjek River** | **1.97** | **167** | Pn | Pb | 02 12 49.7 | +0.2 |
| **F25K** | **Christian Rive** | **2.03** | **183** | Pn | Pb | 02 12 49.6 | -0.8 |
| **E23K** | **Chandalar** | **2.20** | **227** | Pn | Pb | 02 12 52.4 | -0.9 |
| E23K | | | | IAML | | 02 13 58.0 | |
| | comp=N,564nm,0.9s | | | | | | |
| E23K | | | | IAML | | 02 14 00.1 | |
| | comp=E,587nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.21** | **172** | Pn | Pb | 02 12 53.0 | -0.5 |
| **F24K** | **Squaw Lake** | **2.30** | **205** | Pn | Pb | 02 12 55.4 | +0.4 |
| **E28M** | **Babbage River** | **2.31** | **113** | Pn | Pb | 02 12 55.3 | +0.1 |
| **D28M** | **Stokes Point** | **2.35** | **94** | Pn | Pn | 02 12 53.2 | +1.6 |
| **D22K** | **Ayikyak River** | **2.71** | **258** | Pn | Pn | 02 12 58.5 | +1.7 |
| **G26K** | **Porcupine Rive** | **2.73** | **167** | | Pb | 02 13 00.4 | -2.0 |
| **E22K** | **Anaktuvuk Pass** | **2.77** | **241** | | Pn | 02 12 59.7 | +2.1 |
| **F28M** | **Old Crow** | **2.83** | **132** | Pn | Pb | 02 13 02.2 | -1.9 |
| **G25K** | **Bearman Lake** | **2.87** | **186** | | Pn | 02 13 01.0 | +2.2 |
| **B22K** | **Teshekpuk Lake** | **2.88** | **289** | Pn | Pn | 02 13 00.6 | +1.7 |
| **E29M** | **Blow River** | **2.95** | **111** | Pn | Pb | 02 13 03.6 | -2.4 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **196** | Pn | Pn | 02 13 03.6 | +2.5 |
| **FYU** | **Fort Yukon** | **3.06** | **179** | Pn | Pb | 02 13 04.8 | -3.1 |
| FYU | | | | IAML | | 02 14 36.8 | |
| | comp=E,258nm,1.0s | | | | | | |
| **G27K** | **Doyon Strip** | **3.13** | **152** | Pn | Pn | 02 13 05.0 | +2.5 |
| **B21K** | **Ikpikpuk River** | **3.25** | **275** | Pn | Pn | 02 13 06.0 | +2.0 |
| B21K | | | | IAML | | 02 14 40.5 | |
| | comp=E,255nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.32** | **253** | Pn | Pn | 02 13 06.7 | +1.6 |
| E21K | | | | IAML | | 02 14 40.8 | |
| | comp=E,164nm,1.1s | | | | | | |
| **G23K** | **Bananza Creek** | **3.40** | **213** | Pn | Pn | 02 13 08.4 | +2.3 |
| G23K | | | | IAML | | 02 14 36.3 | |
| | comp=E,190nm,0.9s | | | | | | |
| G23K | | | | IAML | | 02 14 40.0 | |
| | comp=N,161nm,0.8s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.69** | **155** | | Pn | 02 13 12.8 | +2.7 |
| **G29M** | **Pine Creek** | **3.84** | **131** | Pn | Pn | 02 13 14.7 | +2.5 |
| **F21K** | **Alatna River** | **3.84** | **235** | Pn | Pn | 02 13 14.0 | +1.7 |
| F21K | | | | IAML | | 02 14 53.9 | |
| | comp=N,102nm,0.6s | | | | | | |
| **H24K** | **Noodor Dome** | **3.91** | **195** | Pn | Pn | 02 13 16.1 | +2.9 |
| H24K | | | | IAML | | 02 14 51.8 | |
| | comp=E,121nm,1.1s | | | | | | |
| **F30M** | **Barrier River** | **4.03** | **115** | | Pn | 02 13 18.2 | +3.3 |
| **PRP** | **Porcupine Dome** | **4.11** | **181** | Pn | Pn | 02 13 18.6 | +2.5 |
| PRP | | | | IAML | | 02 15 06.4 | |
| | comp=E,82nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **4.12** | **281** | Pn | Pn | 02 13 18.2 | +2.3 |
| **H23K** | **Yukon River** | **4.12** | **205** | Pn | Pn | 02 13 18.4 | +2.3 |
| **E20K** | **Nigu River** | **4.14** | **256** | | Pn | 02 13 19.5 | +3.1 |
| **I27K** | **Kandik River** | **4.27** | **159** | | Pn | 02 13 21.3 | +3.1 |
| **G30M** | **tAoh Zraii Nji** | **4.29** | **124** | Pn | Pn | 02 13 21.2 | +2.8 |
| **H29M** | **Whitestone** | **4.30** | **139** | Pn | Pn | 02 13 21.4 | +2.8 |
| **G21K** | **Allakaket** | **4.36** | **228** | Pn | Pn | 02 13 21.0 | +1.6 |
| G21K | | | | IAML | | 02 15 09.9 | |
| | comp=N,94nm,1.1s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.40** | **168** | Pn | Pn | 02 13 23.3 | +3.4 |
| I26K | | | | IAML | | 02 15 24.4 | |
| | comp=E,102nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **4.46** | **101** | Pn | Pn | 02 13 22.9 | +2.3 |
| **POKR** | **Poker Plat Res** | **4.58** | **191** | Pn | Pn | 02 13 24.9 | +2.5 |
| **EPYK** | **Eagle Plains** | **4.59** | **131** | Pn | Pn | 02 13 25.9 | +3.3 |
| **F20K** | **Avaraart Lake** | **4.63** | **241** | Pn | Pn | 02 13 25.1 | +2.2 |
| F20K | | | | IAML | | 02 15 28.8 | |
| | comp=N,72nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.66** | **151** | Pn | Pn | 02 13 26.5 | +2.9 |
| **D19K** | **Kuna River** | **4.72** | **262** | Pn | Pn | 02 13 26.0 | +1.7 |
| **I23K** | **Minto, Yukon-K** | **4.74** | **201** | Pn | Pn | 02 13 27.6 | +3.0 |
| I23K | | | | IAML | | 02 15 29.0 | |
| | comp=N,82nm,1.1s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.79** | **112** | Pn | Pn | 02 13 26.9 | +1.8 |
| **MDM** | **Murphy Dome** | **4.80** | **195** | Pn | Pn | 02 13 28.4 | +2.9 |
| **IMAR** | **Indian Mountai** | **4.84** | **225** | Pn | Pn | 02 13 28.1 | +2.3 |
| **E19K** | **Redstone River** | **4.87** | **249** | Pn | Pn | 02 13 28.8 | +2.4 |
| E19K | | | | IAML | | 02 15 33.3 | |
| | comp=E,58nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.88** | **219** | Pn | Pn | 02 13 29.7 | +3.2 |
| **IL31** | | **4.90** | **188** | Pn | Pn | 02 13 29.1 | +2.5 |
| **ILAR** | **Eielson Array** | **4.90** | **188** | Pn | Pn | 02 13 30.9 | +4.2 |
| **G31M** | **Satah River** | **4.92** | **118** | Pn | Pn | 02 13 28.9 | +1.9 |
| **J25K** | **Salcha River,** | **5.02** | **180** | Pn | Pn | 02 13 31.5 | +3.0 |
| **I29M** | **Ogilvie Camp,** | **5.05** | **144** | Pn | Pn | 02 13 31.8 | +3.0 |
| **MLY** | **Manley** | **5.05** | **207** | Pn | Pn | 02 13 31.0 | +2.2 |
| **C19K** | **Lookout Ridge** | **5.07** | **271** | Pn | Pn | 02 13 30.3 | +1.2 |
| C19K | | | | IAML | | 02 14 58.5 | |
| | comp=N,42nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **192** | Pn | Pn | 02 13 31.1 | +2.0 |
| CCB | | | | IAML | | 02 15 33.7 | |
| | comp=E,41nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **5.12** | **159** | Pn | Pn | 02 13 32.6 | +2.9 |
| **J26L** | **Joseph Creek** | **5.18** | **171** | Pn | Pn | 02 13 33.2 | +2.6 |
| **NEA2** | **Nenana** | **5.24** | **198** | Pn | Pn | 02 13 33.3 | +1.8 |
| NEA2 | | | | IAML | | 02 15 40.5 | |
| | comp=E,36nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.27** | **193** | Pn | Pn | 02 13 33.6 | +1.8 |
| WRH | | | | IAML | | 02 15 36.7 | |
| | comp=N,36nm,1.0s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.40** | **245** | Pn | Pn | 02 13 36.1 | +2.5 |
| **I30M** | **Mount Dempster** | **5.59** | **138** | Pn | Pn | 02 13 39.3 | +3.0 |
| **G19K** | **Purcell Mounta** | **5.63** | **237** | Pn | Pn | 02 13 39.2 | +2.4 |
| **SCRK** | **Sand Creek** | **5.68** | **174** | Pn | Pn | 02 13 41.1 | +3.5 |
| **BWN** | **Browne** | **5.70** | **198** | Pn | Pn | 02 13 40.8 | +3.1 |
| **C18K** | **Utukok River** | **5.75** | **268** | Pn | Pn | 02 13 40.3 | +1.9 |
| **K27K** | **Chicken** | **5.75** | **165** | Pn | Pn | 02 13 41.7 | +3.3 |
| **H19K** | **Roundabout Mou** | **5.90** | **231** | Pn | Pn | 02 13 43.2 | +2.8 |
| **BPAW** | **Bear Paw Mtn.** | **5.96** | **205** | Pn | Pn | 02 13 44.4 | +3.1 |
| **E18K** | **Tukpahlearik C** | **6.02** | **256** | Pn | Pn | 02 13 44.6 | +2.6 |
| **DAWY** | **Dawson** | **6.04** | **154** | Pn | Pn | 02 13 45.7 | +3.3 |
| **J30M** | **Hart River** | **6.15** | **141** | Pn | Pn | 02 13 47.5 | +3.5 |
| **G18K** | **Tagagawik** | **6.27** | **240** | Pn | Pn | 02 13 48.3 | +2.7 |
| **K29M** | **Barlow Dome** | **6.56** | **148** | Pn | Pn | 02 13 53.2 | +3.6 |
| **DHY** | **Denali Highway** | **6.61** | **188** | Pn | Pn | 02 13 54.2 | +3.8 |
| **H18K** | **Honhosa River** | **6.71** | **235** | Pn | Pn | 02 13 55.2 | +3.5 |
| **BCAR** | **Beaver Creek A** | **6.72** | **166** | Pn | Pn | 02 13 55.4 | +3.6 |
| **L27K** | **Beaver Creek,** | **6.72** | **166** | Pn | Pn | 02 13 55.2 | +3.4 |
| **F17K** | **Baldwin Pennin** | **6.75** | **250** | Pn | Pn | 02 13 53.9 | +1.8 |
| **J19K** | **Poorman** | **6.94** | **221** | Pn | Pn | 02 13 57.4 | +2.7 |
| **A36M** | **Sachs Harbour** | **7.03** | **61** | Pn | Pn | 02 13 57.5 | +1.7 |
| **L29M** | **L29M** | **7.14** | **153** | Pn | Pn | 02 14 00.8 | +3.3 |
| **K20K** | **Telida** | **7.17** | **213** | Pn | Pn | 02 14 00.5 | +2.6 |
| **C16K** | **Lisburne Hills** | **7.32** | **269** | Pn | Pn | 02 14 00.3 | +0.5 |
| **C36M** | **Paulatuk** | **7.47** | **82** | Pn | Pn | 02 14 01.5 | -0.4 |
| **M29M** | **Somme Creek** | **7.71** | **155** | Pn | Pn | 02 14 09.0 | +3.5 |
| **SKT** | **Skwentna** | **8.07** | **201** | Pn | Pn | 02 14 15.0 | +4.8 |
| **J17K** | **VABM Dome** | **8.29** | **228** | Pn | Pn | 02 14 14.3 | +1.2 |
| **M20K** | **Styx River** | **8.38** | **206** | Pn | Pn | 02 14 16.8 | +2.2 |
| **L18K** | **Granite Mounta** | **8.73** | **217** | Pn | Pn | 02 14 22.6 | +3.3 |
| **N30M** | **Aishikik Lake** | **8.86** | **153** | Pn | Pn | 02 14 24.9 | +3.8 |
| **FARO** | **Faro, Yukon** | **8.86** | **141** | Pn | Pn | 02 14 24.1 | +2.9 |
| **MMPY** | **Sheldon Lake,** | **9.02** | **134** | Pn | Pn | 02 14 26.9 | +3.7 |
| **N31M** | **Braeburn, Yuko** | **9.05** | **150** | Pn | Pn | 02 14 27.4 | +3.7 |
| **TABL** | **Table Mountain** | **9.37** | **167** | Pn | Pn | 02 14 34.6 | +6.4 |

*IDC* ***13*** *02:12:39.7±5.7,69°.95N×145°.81W,h0km,mb3.2/1, mbtmp3.5/3,ML3.8/2, Error ellipse: s-maj=73.3km s-min=32.3km az=142.0*

*AEIC* ***13*** *02:12:42.9±2.4,69°.61N±0°.04×145°.33W±0°.09,h21km±8km, ML3.7,ML3.8/100(NEIC),Error ellipse: s-maj=6.2km s-min=3.9km az=153.0*

*NEIC* ***13*** *02:12:43.2±1.9,69°.75N±0°.06×145°.4W±0°.1,h10km±2km, Error ellipse: s-maj=10.3km s-min=6.3km az=14.0*

**ISC 13 02:12:42.3**±0.7**,69°.61N**±0°.04×**145°.25W**±0°.03**,h10km, n118,σ2≥29**/124**,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.33** | **20** | | **Pb** | **02 12 50.5** | **+0.2** |
| C26K | | | | | **Sb** | **02 12 55.5** | **-0.2** |
| C26K | | | | IAML | | 02 12 56.8 | |
| | comp=E,9μm,0.3s | | | | | | |
| C26K | | | | IAML | | 02 12 57.1 | |
| | comp=N,8μm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.49** | **235** | Pg | **Pg** | **02 12 51.4** | **-0.4** |
| D25K | | | | Sg | **Sg** | **02 12 57.4** | **-1.0** |
| **C27K** | **Jago River** | **0.54** | **87** | Pg | **Pb** | **02 12 54.0** | **+0.2** |
| C27K | | | | Sg | **Sb** | **02 13 02.0** | **+0.4** |
| **C24K** | **Franklin Bluff** | **1.21** | **277** | | **Pg** | **02 13 05.0** | **-0.5** |
| C24K | | | | Sg | **Sn** | **02 13 21.2** | **-0.5** |
| C24K | | | | IAML | | 02 13 24.5 | |
| | comp=N,2μm,1.0s | | | | | | |
| C24K | | | | IAML | | 02 13 25.4 | |
| | comp=E,2μm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.35** | **252** | Pn | **Pg** | **02 13 09.0** | **+0.9** |
| D24K | | | | IAML | | 02 13 33.9 | |
| | comp=N,1μm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.83** | **240** | Pn | **Pb** | **02 13 14.9** | **-1.0** |
| TOLK | | | | IAML | | 02 13 50.2 | |
| | comp=E,675nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **1.88** | **280** | Pn | **Pn** | **02 13 13.5** | **-1.0** |
| C23K | | | | IAML | | 02 13 54.6 | |
| | comp=N,956nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.95** | **135** | Pn | **Pb** | **02 13 17.1** | **-0.7** |
| E27K | | | | IAML | | 02 13 48.0 | |
| | comp=E,717nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.96** | **168** | Pn | **Pb** | **02 13 17.3** | **-0.8** |
| F26K | | | | IAML | | 02 13 49.0 | |
| | comp=E,590nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **2.03** | **184** | Pn | **Pn** | **02 13 17.3** | **+0.7** |
| F25K | | | | IAML | | 02 13 51.0 | |
| | comp=N,740nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.20** | **173** | Pn | **Pb** | **02 13 22.7** | **+0.5** |
| **E28M** | **Babbage River** | **2.28** | **114** | Pn | **Pb** | **02 13 23.1** | **-0.5** |
| E28M | | | | IAML | | 02 14 02.7 | |
| | comp=N,454nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.31** | **206** | Pn | **Pb** | **02 13 24.2** | **+0.2** |
| F24K | | | | IAML | | 02 13 59.9 | |
| | comp=E,560nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **2.31** | **94** | Pn | **Pb** | **02 13 23.3** | **-0.8** |
| **D22K** | **Ayikyak River** | **2.75** | **258** | Pn | **Pn** | **02 13 26.7** | **+0.3** |
| D22K | | | | IAML | | 02 14 18.6 | |
| | comp=N,356nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.81** | **133** | Pn | **Pb** | **02 13 30.0** | **-2.6** |
| F28M | | | | IAML | | 02 14 17.3 | |
| | comp=N,334nm,0.7s | | | | | | |
| F28M | | | | IAML | | 02 14 19.5 | |
| | comp=E,362nm,0.9s | | | | | | |
| **G25K** | **Bearman Lake** | **2.87** | **187** | | **Pb** | **02 13 30.5** | **-3.1** |
| **B22K** | **Teshekpuk Lake** | **2.91** | **288** | Pn | **Pn** | **02 13 29.5** | **+0.9** |
| **E29M** | **Blow River** | **2.92** | **111** | Pn | **Pb** | **02 13 31.7** | **-2.7** |
| E29M | | | | IAML | | 02 14 24.4 | |
| | comp=E,325nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.04** | **197** | Pn | **Pb** | **02 13 32.9** | **-3.6** |
| G24K | | | | IAML | | 02 14 27.6 | |
| | comp=N,288nm,1.0s | | | | | | |
| **FYU** | **Fort Yukon** | **3.06** | **180** | Pn | **Pb** | **02 13 33.7** | **-3.0** |
| FYU | | | | IAML | | 02 14 24.2 | |
| | comp=N,324nm,0.9s | | | | | | |
| FYU | | | | IAML | | 02 14 33.2 | |
| | comp=E,274nm,1.4s | | | | | | |
| **G27K** | **Doyon Strip** | **3.12** | **153** | Pn | **Pb** | **02 13 34.2** | **-3.5** |
| **G22K** | **Bettles** | **3.56** | **224** | | **Pn** | **02 13 39.7** | **+2.1** |
| **G29M** | **Pine Creek** | **3.81** | **132** | Pn | **Pn** | **02 13 44.0** | **+3.0** |
| **F21K** | **Alatna River** | **3.87** | **236** | Pn | **Pn** | **02 13 43.1** | **+1.2** |
| F21K | | | | IAML | | 02 14 50.5 | |
| | comp=E,133nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **196** | Pn | **Pn** | **02 13 44.0** | **+1.5** |
| H24K | | | | IAML | | 02 14 54.6 | |
| | comp=N,102nm,0.7s | | | | | | |
| H24K | | | | IAML | | 02 14 57.7 | |
| | comp=E,140nm,1.2s | | | | | | |
| **F30M** | **Barrier River** | **4.00** | **116** | | **Pn** | **02 13 47.0** | **+3.4** |
| **PRP** | **Porcupine Dome** | **4.11** | **182** | Pn | **Pn** | **02 13 47.8** | **+2.5** |
| **H23K** | **Yukon River** | **4.14** | **205** | Pn | **Pn** | **02 13 48.6** | **+3.1** |
| H23K | | | | IAML | | 02 14 59.9 | |
| | comp=N,122nm,1.1s | | | | | | |
| **B20K** | **Meade River** | **4.15** | **281** | Pn | **Pn** | **02 13 46.0** | **+0.4** |
| **D20K** | **Etivluk River** | **4.16** | **263** | | **Pn** | **02 13 48.2** | **+2.5** |
| **E20K** | **Nigu River** | **4.17** | **256** | | **Pn** | **02 13 48.3** | **+2.3** |
| **G30M** | **tAoh Zraii Nji** | **4.26** | **124** | Pn | **Pn** | **02 13 49.7** | **+2.4** |
| G30M | | | | IAML | | 02 15 05.0 | |
| | comp=N,77nm,1.1s | | | | | | |
| G30M | | | | IAML | | 02 15 08.2 | |
| | comp=E,95nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **4.28** | **139** | Pn | **Pn** | **02 13 51.6** | **+4.2** |
| **G21K** | **Allakaket** | **4.38** | **229** | Pn | **Pn** | **02 13 50.7** | **+1.8** |
| G21K | | | | IAML | | 02 15 06.1 | |
| | comp=N,113nm,1.4s | | | | | | |
| **INK** | **Inuvik** | **4.42** | **102** | Pn | **Pn** | **02 13 50.9** | **+1.5** |
| **EPYK** | **Eagle Plains** | **4.57** | **131** | Pn | **Pn** | **02 13 53.2** | **+1.9** |
| **POKR** | **Poker Plat Res** | **4.59** | **192** | Pn | **Pn** | **02 13 54.3** | **+2.6** |
| POKR | | | | IAML | | 02 15 11.1 | |
| | comp=E,78nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **4.65** | **151** | Pn | **Pn** | **02 13 55.4** | **+2.8** |
| I28M | | | | IAML | | 02 15 23.1 | |
| | comp=N,64nm,1.1s | | | | | | |
| I28M | | | | IAML | | 02 15 27.5 | |
| | comp=E,57nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **4.75** | **262** | Pn | **Pn** | **02 13 54.4** | **+0.5** |
| **I23K** | **Minto, Yukon-K** | **4.75** | **201** | Pn | **Pn** | **02 13 55.2** | **+1.4** |
| I23K | | | | IAML | | 02 15 24.4 | |
| | comp=N,84nm,1.5s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.75** | **112** | Pn | **Pn** | **02 13 55.7** | **+1.8** |
| F31M | | | | IAML | | 02 15 19.9 | |
| | comp=N,65nm,1.1s | | | | | | |
| F31M | | | | IAML | | 02 15 29.4 | |
| | comp=E,73nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **195** | Pn | **Pn** | **02 13 57.1** | **+2.4** |
| MDM | | | | IAML | | 02 15 17.4 | |
| | comp=N,63nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.86** | **226** | Pn | **Pn** | **02 13 57.3** | **+1.9** |
| **G31M** | **Satah River** | **4.89** | **118** | Pn | **Pn** | **02 13 58.1** | **+2.3** |
| **IL31** | | **4.90** | **188** | Pn | **Pn** | **02 13 57.2** | **+1.3** |
| **ILAR** | **Eielson Array** | **4.90** | **188** | Pn | **Pn** | **02 13 58.3** | **+2.4** |
| **ILAR** | **Eielson Array** | **4.90** | **188** | Pn | **Pn** | **02 13 57.9** | **+1.9** |
| | comp=N,2.1nm,0.3s,baz=3.9,slow=14,SNR=10 | | | | | | |
| ILAR | | | | Sn | **Sn** | **02 14 55.2** | **+2.6** |
| | comp=N,3.7nm,0.3s,baz=1.8,slow=22,SNR=6.4 comp=N,6.5nm,0.5s | | | | | | |
| **E19K** | **Redstone River** | **4.90** | **250** | Pn | **Pn** | **02 13 56.2** | **+0.3** |
| E19K | | | | IAML | | 02 15 35.8 | |
| | comp=E,64nm,1.3s | | | | | | |
| E19K | | | | IAML | | 02 15 42.8 | |
| | comp=N,78nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.90** | **220** | Pn | **Pn** | **02 13 58.0** | **+2.0** |
| H21K | | | | IAML | | 02 15 25.4 | |
| | comp=E,56nm,1.1s | | | | | | |
| H21K | | | | IAML | | 02 15 30.0 | |
| | comp=N,62nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **5.02** | **181** | Pn | **Pn** | **02 13 59.3** | **+1.7** |
| J25K | | | | IAML | | 02 15 27.6 | |
| | comp=E,65nm,1.1s | | | | | | |
| J25K | | | | IAML | | 02 15 39.0 | |
| | comp=N,50nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.03** | **145** | Pn | **Pn** | **02 14 00.4** | **+2.6** |
| I29M | | | | IAML | | 02 15 01.8 | |
| | comp=N,57nm,0.8s | | | | | | |
| **MLY** | **Manley** | **5.06** | **207** | Pn | **Pn** | **02 14 00.6** | **+2.4** |
| MLY | | | | IAML | | 02 15 29.2 | |
| | comp=E,48nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **193** | Pn | **Pn** | **02 13 59.9** | **+1.5** |
| **C19K** | **Lookout Ridge** | **5.10** | **271** | Pn | **Pn** | **02 13 58.7** | **0.0** |
| C19K | | | | IAML | | 02 15 46.6 | |
| | comp=E,50nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **5.11** | **160** | Pn | **Pn** | **02 14 01.8** | **+3.1** |
| EGAK | | | | IAML | | 02 15 02.8 | |
| | comp=E,60nm,0.9s | | | | | | |
| EGAK | | | | IAML | | 02 15 40.2 | |
| | comp=E,45nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.17** | **172** | Pn | **Pn** | **02 14 03.5** | **+3.7** |
| J26L | | | | IAML | | 02 15 37.1 | |
| | comp=E,39nm,0.8s | | | | | | |
| J26L | | | | IAML | | 02 15 43.1 | |
| | comp=N,39nm,1.0s | | | | | | |
| **NEA2** | **Nenana** | **5.25** | **198** | Pn | **Pn** | **02 14 02.6** | **+1.8** |
| **HDA** | **Harding Lake** | **5.26** | **188** | Pn | **Pn** | **02 14 03.3** | **+2.4** |
| HDA | | | | IAML | | 02 15 44.4 | |
| | comp=E,52nm,1.2s | | | | | | |
| HDA | | | | IAML | | 02 15 45.9 | |
| | comp=N,53nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.28** | **194** | Pn | **Pn** | **02 14 03.6** | **+2.4** |
| WRH | | | | IAML | | 02 15 34.5 | |
| | comp=E,50nm,1.0s | | | | | | |
| WRH | | | | IAML | | 02 15 36.1 | |
| | comp=N,39nm,1.5s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.43** | **245** | Pn | **Pn** | **02 14 05.3** | **+2.2** |
| **A19K** | **Wainwright** | **5.49** | **284** | | **Pn** | **02 14 05.3** | **+1.3** |
| **I30M** | **Mount Dempster** | **5.57** | **138** | Pn | **Pn** | **02 14 08.1** | **+2.8** |
| **G19K** | **Purcell Mounta** | **5.66** | **238** | Pn | **Pn** | **02 14 06.8** | **+0.4** |
| **SCRK** | **Sand Creek** | **5.68** | **174** | Pn | **Pn** | **02 14 10.2** | **+3.4** |
| **C18K** | **Utukok River** | **5.78** | **268** | Pn | **Pn** | **02 14 09.0** | **+0.9** |
| **B18K** | **Kokolik River** | **5.82** | **275** | | **Pn** | **02 14 09.4** | **+0.9** |
| **H19K** | **Roundabout Mou** | **5.92** | **232** | Pn | **Pn** | **02 14 11.0** | **+1.0** |
| **DOT** | **Dot Lake** | **6.00** | **175** | | **Pn** | **02 14 12.9** | **+1.8** |
| **DAWY** | **Dawson** | **6.02** | **155** | Pn | **Pn** | **02 14 15.1** | **+3.6** |
| **E18K** | **Tukpahlearik C** | **6.05** | **256** | Pn | **Pn** | **02 14 13.2** | **+1.5** |
| **MCK** | **McKinley** | **6.08** | **196** | | **Pn** | **02 14 14.0** | **+1.9** |
| **J30M** | **Hart River** | **6.13** | **141** | Pn | **Pn** | **02 14 16.7** | **+3.7** |
| **F18K** | **Selawik** | **6.17** | **248** | | **Pn** | **02 14 14.7** | **+1.4** |
| **G18K** | **Tagagawik** | **6.30** | **240** | Pn | **Pn** | **02 14 17.0** | **+1.8** |
| **RND** | **Reindeer** | **6.39** | **195** | Pn | **Pn** | **02 14 19.3** | **+2.8** |
| **J20K** | **Nowinta River** | **6.47** | **217** | Pn | **Pn** | **02 14 19.8** | **+2.2** |
| **C17K** | **DeLong Mountai** | **6.53** | **268** | | **Pn** | **02 14 18.8** | **+0.6** |
| **RDOG** | **Red Dog Mine** | **6.58** | **265** | Pn | **Pn** | **02 14 19.0** | **0.0** |
| **DHY** | **Denali Highway** | **6.62** | **188** | Pn | **Pn** | **02 14 23.5** | **+3.9** |
| **PAX** | **Paxson** | **6.67** | **181** | | **Pn** | **02 14 22.9** | **+2.7** |
| **BCAR** | **Beaver Creek A** | **6.72** | **166** | Pn | **Pn** | **02 14 23.8** | **+2.9** |
| **L27K** | **Beaver Creek,** | **6.72** | **167** | Pn | **Pn** | **02 14 24.9** | **+4.0** |
| **H18K** | **Honhosa River** | **6.74** | **235** | Pn | **Pn** | **02 14 22.5** | **+1.3** |
| **D17K** | **Noatak River** | **6.78** | **262** | | **Pn** | **02 14 21.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 34nm,0.2s | | | | | | | | |
| **KBK** | **Karagaybulak** | **0.46** | **174** | ⇑*iP* | | **Pg** | **02 18 44.6** | **+0.3** |
| | baz=73 | | | | | | | | |
| KBK | | | | ⇑*iS* | | **Sg** | **02 18 51.1** | **+0.8** |
| | baz=73 | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.56** | **211** | ⇓P | | **Pg** | **02 18 46.6** | **+0.4** |
| | 10nm,0.3s | | | | | | | | |
| AAK | | | | ⇓S | | **Sg** | **02 18 54.2** | **+0.9** |
| | 15nm,0.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.56** | **211** | ⇑P | | **Pg** | **02 18 46.4** | **+0.2** |
| | 2.9nm,0.3s | | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **02 18 54.2** | **+0.9** |
| | 3.7nm,0.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **0.56** | **211** | ⇑*iP* | | **Pg** | **02 18 46.3** | **+0.2** |
| | baz=10.0 | | | | | | | | |
| AAK | | | | ⇑*iS* | | **Sg** | **02 18 54.3** | **+0.9** |
| | baz=10.0 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.56** | **110** | ⇓P | | **Pg** | **02 18 46.5** | **+0.3** |
| | 2.5nm,0.1s,SNR=22 | | | | | | | | |
| TKM2 | | | | ⇑S | | **Sg** | **02 18 54.1** | **+0.7** |
| | 21nm,0.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.56** | **110** | ⇑P | | **Pg** | **02 18 46.3** | **+0.1** |
| | 1.1nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑S | | **Sg** | **02 18 54.1** | **+0.7** |
| | 5.2nm,0.2s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.56** | **110** | ⇑*iP* | | **Pg** | **02 18 46.5** | **+0.3** |
| | baz=9.0 | | | | | | | | |
| TKM2 | | | | ⇑*iS* | | **Sg** | **02 18 54.6** | **+1.2** |
| | baz=9.0 | | | | | | | | |
| **DGS** | **Degeres** | **0.66** | **79** | *eP* | | **Pg** | **02 18 48.7** | **+0.5** |
| | 3.0nm,0.1s | | | | | | | | |
| DGS | | | | *eS* | | **Sg** | **02 18 57.8** | **+1.1** |
| | 21nm,0.3s | | | | | | | | |
| **DGS** | **Degeres** | **0.66** | **79** | P | | **Pg** | **02 18 48.8** | **+0.6** |
| | 3.0nm,0.1s | | | | | | | | |
| DGS | | | | S | | **Sg** | **02 18 57.5** | **+0.8** |
| | 26nm,0.3s | | | | | | | | |
| **DGS** | **Degeres** | **0.66** | **79** | *eP* | | **Pg** | **02 18 48.8** | **+0.6** |
| | baz=78 | | | | | | | | |
| DGS | | | | *eS* | | **Sg** | **02 18 57.6** | **+0.8** |
| | baz=78 | | | | | | | | |
| **KST** | **Kastek** | **0.79** | **95** | *eP* | | **Pg** | **02 18 51.1** | **+0.4** |
| | 2.8nm,0.2s | | | | | | | | |
| KST | | | | *eS* | | **Sg** | **02 19 01.9** | **+0.9** |
| | 26nm,0.2s | | | | | | | | |
| **KST** | **Kastek** | **0.79** | **95** | P | | **Pg** | **02 18 51.2** | **+0.4** |
| | 2.8nm,0.2s | | | | | | | | |
| KST | | | | S | | **Sg** | **02 19 01.6** | **+0.6** |
| | 24nm,0.4s | | | | | | | | |
| **KST** | **Kastek** | **0.79** | **95** | *eP* | | **Pg** | **02 18 51.2** | **+0.4** |
| | baz=94 | | | | | | | | |
| KST | | | | *eS* | | **Sg** | **02 19 01.6** | **+0.6** |
| | baz=94 | | | | | | | | |
| **KRBS** | **Karabastau** | **0.82** | **44** | *eP* | | **Pg** | **02 18 51.5** | **+0.3** |
| | 2.4nm,0.1s | | | | | | | | |
| KRBS | | | | *eS* | | **Sg** | **02 19 02.6** | **+0.7** |
| | 3.6nm,0.1s | | | | | | | | |
| **KRBS** | **Karabastau** | **0.82** | **44** | P | | **Pg** | **02 18 51.5** | **+0.3** |
| | 4.0nm,0.1s | | | | | | | | |
| KRBS | | | | S | | **Sg** | **02 19 02.2** | **+0.4** |
| | 5.0nm,0.1s | | | | | | | | |
| **KRBS** | **Karabastau** | **0.82** | **44** | *eP* | | **Pg** | **02 18 51.5** | **+0.3** |
| | baz=45 | | | | | | | | |
| KRBS | | | | *eS* | | **Sg** | **02 19 02.2** | **+0.4** |
| | baz=45 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **0.93** | **241** | ⇓P | | **Pg** | **02 18 53.4** | **0.0** |
| | 1.6nm,0.1s,SNR=7.0 | | | | | | | | |
| EKS2 | | | | ⇑S | | **Sg** | **02 19 05.8** | **+0.4** |
| | 6.1nm,0.1s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.00** | **128** | ⇑*iP* | | **Pg** | **02 18 54.0** | **-0.6** |
| | baz=28 | | | | | | | | |
| BOOM | | | | ⇑*iS* | | **Sg** | **02 19 07.4** | **-0.1** |
| | baz=28 | | | | | | | | |
| **MRKS** | **Merke** | **1.27** | **254** | *eP* | | **Pg** | **02 18 59.3** | **-0.6** |
| | 1.8nm,0.1s | | | | | | | | |
| MRKS | | | | *eS* | | **Sg** | **02 19 15.9** | **-0.5** |
| | 13nm,0.2s | | | | | | | | |
| **MRKS** | **Merke** | **1.27** | **254** | P | | **Pg** | **02 18 59.3** | **-0.6** |
| | 2.3nm,0.2s | | | | | | | | |
| MRKS | | | | S | | **Sg** | **02 19 15.5** | **-0.9** |
| | 13nm,0.3s | | | | | | | | |
| **AML** | **Almayashu** | **1.32** | **222** | ⇓P | | **Pg** | **02 19 00.2** | **-0.6** |
| | 4.3nm,0.2s,SNR=14 | | | | | | | | |
| AML | | | | ⇑S | | **Sg** | **02 19 17.5** | **-0.3** |
| | 6.4nm,0.2s | | | | | | | | |
| **AML** | **Almayashu** | **1.32** | **222** | ⇑*iP* | | **Pg** | **02 18 59.9** | **-0.9** |
| | baz=22 | | | | | | | | |
| AML | | | | ⇑*iS* | | **Sg** | **02 19 17.6** | **-0.3** |
| | baz=22 | | | | | | | | |
| **ARLS** | **Aral** | **1.32** | **199** | ⇑*iP* | | **Pg** | **02 18 59.9** | **-0.9** |
| | baz=98 | | | | | | | | |
| ARLS | | | | ⇑*iS* | | **Sg** | **02 19 17.6** | **-0.3** |
| | baz=98 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.51** | **92** | *eP* | | **Pn** | **02 19 03.8** | **-0.5** |
| | 1.5nm,0.2s | | | | | | | | |
| TNSS | | | | *eS* | | **Sg** | **02 19 23.7** | **-0.5** |
| | 4.2nm,0.3s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.51** | **92** | P | | **Pn** | **02 19 04.1** | **-0.2** |
| | 1.5nm,0.2s | | | | | | | | |
| TNSS | | | | S | | **Sg** | **02 19 23.7** | **-0.5** |
| | 4.1nm,0.3s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.51** | **92** | *eP* | | **Pn** | **02 19 04.1** | **-0.2** |
| | baz=92 | | | | | | | | |
| TNSS | | | | *eS* | | **Sg** | **02 19 23.7** | **-0.5** |
| | baz=92 | | | | | | | | |
| **CHKK** | **Chushkaly** | **1.70** | **64** | *eP* | | **Pb** | **02 19 07.5** | **-0.1** |
| | 0.9nm,0.1s | | | | | | | | |
| CHKK | | | | *eS* | | **Sg** | **02 19 30.1** | **0.0** |
| | 16nm,0.2s | | | | | | | | |
| **MNAS** | **Manas** | **1.86** | **251** | ⇑*iP* | | **Pn** | **02 19 08.6** | **-0.2** |
| | baz=51 | | | | | | | | |
| MNAS | | | | ⇑*iS* | | **Sn** | **02 19 32.9** | **-0.2** |
| | baz=51 | | | | | | | | |
| **KDJ** | **Kajisay** | **1.96** | **119** | ⇓*eP* | | **Pn** | **02 19 10.2** | **0.0** |
| | baz=19 | | | | | | | | |
| KDJ | | | | ⇓*eS* | | **Sn** | **02 19 36.0** | **+0.4** |
| | baz=19 | | | | | | | | |
| **BTLS** | **Baital** | **2.02** | **343** | *eP* | | **Pb** | **02 19 12.8** | **-0.3** |
| | 1.8nm,0.2s | | | | | | | | |
| BTLS | | | | *eS* | | **Sb** | **02 19 39.2** | **+0.5** |
| | 9.3nm,0.2s | | | | | | | | |
| **BTLS** | **Baital** | **2.02** | **343** | Pg | | **Pb** | **02 19 13.3** | **+0.2** |
| | 1.8nm,0.2s | | | | | | | | |
| BTLS | | | | Lg | Lg | | 02 19 39.2 | | |
| | 9.9nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **2.40** | **62** | *eP* | | **Pb** | **02 19 18.9** | **-0.8** |
| | 1.2nm,0.3s | | | | | | | | |
| ARXS | | | | *eS* | | **Sb** | **02 19 49.7** | **-0.2** |
| | 9.3nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **2.40** | **62** | Pg | | **Pb** | **02 19 19.3** | **-0.4** |
| | 1.2nm,0.4s | | | | | | | | |
| ARXS | | | | Lg | Lg | | 02 19 49.7 | | |
| | 9.3nm,0.5s | | | | | | | | |
| **ARK** | **Arkit** | **2.53** | **240** | ⇑*iP* | | **Pn** | **02 19 17.8** | **-0.2** |
| | baz=40 | | | | | | | | |
| ARK | | | | ⇑*iS* | | **Sn** | **02 19 48.8** | **-0.8** |
| | baz=40 | | | | | | | | |
| **BLB** | **Baldybastay** | **2.79** | **68** | Lg | Lg | | 02 20 01.2 | | |
| | 3.3nm,0.7s | | | | | | | | |

*NEIC* ***13*** *02:27:30.4±1.5, 15°.7S±0°.1×174°.9W±0°.2, h278km±6km, mb4.2/14, Error ellipse: s-maj=23.0km s-min=16.9km az=120.0*

*IDC* ***13*** *02:27:32.2±3.3, 15°.55S×174°.85W, h297km±31km, mb3.5/8, mbtmp4.1/9, Error ellipse: s-maj=27.0km s-min=18.2km az=126.0*

**ISC 13 02:27:28.4±0.5, 15°.6S±0°.1×175°.0W±0°.1, h262km, n44, σ0s81/43, mb4.0/15, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **3.54** | **62** | Pn | **Pn** | **02 28 29.3** | **+1.7** |
| **NIUE** | **Niue** | **5.96** | **126** | Pn | **Pn** | **02 28 56.5** | **+0.1** |
| **MSVF** | **Nonsavu** | **6.99** | **251** | P | Pn | 02 29 16.0 | +6.7 |
| | 8.2nm,0.7s,baz=96,slow=11,SNR=6.2 | | | | | | |
| **BBOO** | **Buckleboo** | **47.39** | **240** | P | **P** | **02 35 36.8** | **0.0** |
| BBOO | | | | IAmb | IAmb | 02 35 47.2 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **AS31** | **Alice Springs** | **48.58** | **252** | P | **P** | **02 35 46.7** | **+0.6** |
| **ASAR** | **Alice Springs** | **48.59** | **252** | P | **P** | **02 35 45.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **48.59** | **252** | P | **P** | **02 35 47.1** | **+1.0** |
| | comp=Z,7.2nm,0.4s,baz=88,slow=8.2,SNR=92 | | | | | | |
| | comp=Z,7.2nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **63.04** | **186** | P | **P** | **02 37 28.0** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=352,slow=7.1,SNR=2.2 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **72.34** | **343** | P | | **P** | **02 38 25.7** | **+0.2** |
| | comp=Z,4.0nm,0.7s,baz=138,slow=9.7,SNR=4.3 | | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.46** | **180** | P | | **P** | **02 38 38.0** | **0.0** |
| QSPA | | | | IAmb | | IAmb | 02 38 40.5 | | |
| | comp=Z,5.4nm,1.3s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.46** | **180** | P | | **P** | **02 38 38.3** | **+0.3** |
| | comp=Z,2.5nm,1.1s,baz=129,slow=0.9,SNR=5.8 | | | | | | | | |
| | comp=Z,2.5nm,1.1s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **74.68** | **38** | P | | **P** | **02 38 39.4** | **-0.1** |
| YBH | | | | IAmb | | IAmb | 02 39 04.1 | | |
| | comp=Z,8.7nm,1.4s | | | | | | | | |
| **WAKR** | **Walker** | **74.81** | **42** | P | | **P** | **02 38 40.3** | **-0.1** |
| WAKR | | | | IAmb | | IAmb | 02 38 59.2 | | |
| | comp=Z,3.8nm,1.4s | | | | | | | | |
| **HUMO** | **Hull Mountain** | **75.08** | **37** | P | | **P** | **02 38 41.3** | **-0.4** |
| HUMO | | | | IAmb | | IAmb | 02 39 09.2 | | |
| | comp=Z,9.7nm,1.4s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.50** | **43** | P | | **P** | **02 38 44.4** | **0.0** |
| **NVAR** | **Mina Array Bea** | **75.50** | **43** | P | | **P** | **02 38 44.2** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=228,slow=9.3,SNR=11 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **76.49** | **37** | P | | **P** | **02 38 50.1** | **+0.4** |
| J05D | | | | IAmb | | IAmb | 02 38 50.9 | | |
| | comp=Z,3.8nm,0.9s | | | | | | | | |
| **J16K** | **Anvik River** | **79.41** | **7** | P | | **P** | **02 39 05.4** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **80.21** | **13** | P | | **P** | **02 39 08.1** | **-1.5** |
| **GLB** | **Gilahina Butte** | **80.67** | **15** | P | | **P** | **02 39 10.8** | **-1.2** |
| **HLID** | **Hailey** | **80.75** | **40** | P | | **P** | **02 39 12.4** | **-0.6** |
| **VHRN** | **Van Horn** | **81.52** | **55** | P | | **P** | **02 39 17.0** | **-0.2** |
| **TXAR** | **Lajitas Array** | **82.00** | **57** | P | | **P** | **02 39 19.5** | **-0.2** |
| | comp=Z,0.3nm,0.8s,baz=205,slow=4.0,SNR=3.9 | | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **82.64** | **11** | P | | **P** | **02 39 20.8** | **-1.2** |
| CCB | | | | IAmb | | IAmb | 02 39 21.9 | | |
| | comp=Z,5.8nm,1.2s | | | | | | | | |
| **BPMT** | **Black Pine Rid** | **82.84** | **38** | P | | **P** | **02 39 22.6** | **-1.3** |
| **ILAR** | **Eielson Array** | **82.93** | **12** | P | | **P** | **02 39 22.4** | **-1.2** |
| | comp=Z,0.7nm,0.4s,baz=213,slow=5.5,SNR=7.6 | | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| **IMW** | **Indian Meadow** | **83.09** | **41** | P | | **P** | **02 39 24.6** | **-0.7** |
| IMW | | | | IAmb | | IAmb | 02 39 25.6 | | |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **83.44** | **42** | P | | **P** | **02 39 25.9** | **-1.1** |
| | comp=Z,1.5nm,0.8s,baz=208,slow=3.4,SNR=11 | | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **124.56** | **351** | PKPdf | | **PKPdf** | **02 45 54.8** | **-1.2** |
| **ARCES** | **ARCESS Array B** | **124.56** | **351** | PKP | | **PKPdf** | **02 45 54.6** | **-1.3** |
| | comp=Z,2.0nm,0.7s,baz=18,slow=1.1,SNR=7.8 | | | | | | | | |
| **FINES** | **FINESS Array B** | **131.77** | **347** | PKP | | **PKPdf** | **02 46 09.5** | **-0.4** |
| | comp=Z,2.1nm,0.9s,baz=297,slow=5.5,SNR=4.7 | | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **143.92** | **337** | PKPdf | | **PKPab** | **02 46 31.1** | **+0.5** |
| **BURAR** | **Bucovina Array** | **143.94** | **337** | PKPdf | | **PKPab** | **02 46 31.5** | **+0.8** |
| **BRTR** | **Keskin Array B** | **145.31** | **319** | PKPbc | | **PKPdf** | **02 46 36.0** | **+0.6** |
| **BRTR** | **Keskin Array B** | **145.31** | **319** | PKPbc | | **PKPdf** | **02 46 35.5** | **+0.1** |
| | comp=Z,2.0nm,0.6s,baz=84,slow=3.2,SNR=15 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **145.37** | **334** | PKPbc | | **PKPdf** | **02 46 35.6** | **+0.3** |
| **KHC** | **Kasperske Hory** | **145.81** | **350** | PKPbc | | **PKPbc** | **02 46 36.8** | **0.0** |
| **GERES** | **GERESS Array B** | **146.07** | **350** | PKPbc | | **PKPdf** | **02 46 36.9** | **+0.5** |
| **GERES** | **GERESS Array B** | **146.07** | **350** | PKPbc | | **PKPdf** | **02 46 37.2** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=161,slow=8.5,SNR=8.1 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.47** | **308** | PKPbc | | **PKPbc** | **02 46 42.7** | **+0.6** |
| | comp=Z,2.0nm,0.6s,baz=57,slow=5.3,SNR=4.0 | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **148.74** | **353** | PKPbc | | **PKPbc** | **02 46 44.6** | **-0.5** |
| **PUK** | **Puka** | **150.67** | **337** | PKPbc | | **PKPbc** | **02 46 48.7** | **-1.0** |
| **FNA** | **Florina** | **151.14** | **334** | PKPbc | | **PKPbc** | **02 46 49.5** | **-1.4** |
| **NRCA** | **Norcia** | **151.96** | **347** | PKPbc | | **PKPbc** | **02 46 51.5** | **-1.2** |

*IDC* ***13*** *02:42:34.0±1.5, 69°.70N×144°.79W, h0km, mb3.6/5, mbtmp3.7/9, ML4.0/4, MS3.0/1, Error ellipse: s-maj=33.5km s-min=18.4km az=83.0*

*AEIC* ***13*** *02:42:33.4±1.4, 69°.51N±0°.05×144°.64W±0°.09, h13km±5km, ML3.9, mb4.0/1(NEIC), ML4.0/124(NEIC), Mwr3.8/24(NEIC), Error ellipse: s-maj=7.6km s-min=4.3km az=191.0*

*NEIC* ***13*** *02:42:34±1.0, 69°.58N±0°.05×144°.63W±0°.09, h7km±5km, Error ellipse: s-maj=7.9km s-min=4.2km az=190.0, Moment Tensor Solution. Moment tensor: Scale 1014Nm; Mrr0.11; Mθθ-0.93; Mφφ0.82; Mrθ-1.37; Mθφ-7.22; Mφr0.34; Fault plane solution: M07.41000×1014 NP1: φs273.25000°, δ87.92000°, λ169.20000°. NP2: φs3.65000°, δ79.21000°, λ2.12000°. Principal axes: T 7.4023, Plg9.0000°, Azm228.0000°; N 0.0070, Plg79.0000°, Azm82.0000°; P -7.4093, Plg6.0000°, Azm319.0000°;*

*NEIC* ***13*** *02:42:34.6, 69°.53N×144°.72W, h7km*

**ISC 13 02:42:33.2±1.1, 69°.50N±0°.03×144°.68W±0°.02, h2km±9km, n146, σ1s31/150, mb3.7/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.36** | **69** | | **Pg** | **02 42 40.5** | **+0.4** |
| C27K | | | | | **Sg** | **02 42 45.0** | **+0.2** |
| C27K | | | | IAML | | 02 42 46.9 | |
| | comp=E,16μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.42** | **349** | | **Pg** | **02 42 42.1** | **+0.8** |
| C26K | | | | | **Sg** | **02 42 48.0** | **+1.1** |
| C26K | | | | IAML | | 02 42 49.8 | |
| | comp=E,14μm,0.3s | | | | | | |
| C26K | | | | IAML | | 02 42 50.1 | |
| | comp=N,15μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.63** | **254** | | **Pg** | **02 42 45.6** | **+0.5** |
| D25K | | | | | **Sg** | **02 42 54.7** | **+1.4** |
| **D27M** | **Malcolm River** | **1.34** | **99** | | **Pb** | **02 42 58.1** | **-0.9** |
| D27M | | | | | **Sg** | **02 43 17.5** | **+1.4** |
| D27M | | | | IAML | | 02 43 21.1 | |
| | comp=N,3μm,0.3s | | | | | | |
| D27M | | | | IAML | | 02 43 21.7 | |
| | comp=E,2μm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.43** | **281** | Pn | **Pg** | **02 43 00.5** | **0.0** |
| C24K | | | | | **Sg** | **02 43 19.4** | **+0.5** |
| C24K | | | | IAML | | 02 43 22.4 | |
| | comp=N,3μm,0.7s | | | | | | |
| C24K | | | | IAML | | 02 43 29.5 | |
| | comp=E,2μm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.51** | **259** | Pn | **Pb** | **02 43 01.7** | **-0.2** |
| **E27K** | **Coleen River** | **1.73** | **138** | Pn | **Pb** | **02 43 05.2** | **-0.4** |
| **F26K** | **Sheenjek River** | **1.83** | **174** | Pn | **Pg** | **02 43 07.6** | **-0.5** |
| F26K | | | | IAML | | 02 43 35.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **1.95** | **191** | Pn | **Pb** | **02 43 09.0** | **-0.4** |
| F25K | | | | IAML | | 02 43 39.1 | |
| | comp=E,1μm,0.8s | | | | | | |
| F25K | | | | IAML | | 02 43 40.1 | |
| | comp=N,1μm,1.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **246** | Pn | **Pb** | **02 43 08.7** | **-0.9** |
| TOLK | | | | IAML | | 02 43 43.5 | |
| | comp=E,877nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.00** | **226** | | **Pb** | **02 43 09.2** | **-0.9** |
| **E28M** | **Babbage River** | **2.06** | **114** | Pn | **Pb** | **02 43 10.7** | **-0.4** |
| **BMAR** | **Burnt Mountain** | **2.08** | **179** | Pn | **Pb** | **02 43 10.9** | **-0.8** |
| **C23K** | **Itkillik River** | **2.10** | **282** | Pn | **Pn** | **02 43 09.5** | **+0.2** |
| **D28M** | **Stokes Point** | **2.11** | **92** | | **Pb** | **02 43 10.9** | **-1.1** |
| **D23K** | **Nanushuk River** | **2.21** | **259** | | **Pn** | **02 43 11.5** | **+0.8** |
| D23K | | | | IAML | | 02 44 00.0 | |
| | comp=E,796nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.31** | **233** | Pn | **Pb** | **02 43 13.3** | **-2.2** |
| **F24K** | **Squaw Lake** | **2.32** | **212** | Pn | **Pb** | **02 43 13.5** | **-2.1** |
| **G26K** | **Porcupine Rive** | **2.59** | **172** | | **Pb** | **02 43 17.7** | **-2.4** |
| **F28M** | **Old Crow** | **2.59** | **135** | Pn | **Pn** | **02 43 16.6** | **+0.6** |
| F28M | | | | IAML | | 02 44 01.4 | |
| | comp=N,557nm,0.5s | | | | | | |
| F28M | | | | IAML | | 02 44 03.8 | |
| | comp=E,479nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.69** | **111** | Pn | **Pn** | **02 43 17.9** | **+0.5** |
| E29M | | | | IAML | | 02 44 02.0 | |
| | comp=E,601nm,0.7s | | | | | | |
| E29M | | | | IAML | | 02 44 13.3 | |
| | comp=N,483nm,0.6s | | | | | | |
| **G25K** | **Bearman Lake** | **2.80** | **192** | | **Pn** | **02 43 20.4** | **+1.5** |
| **D22K** | **Ayikyak River** | **2.93** | **261** | Pn | **Pn** | **02 43 21.1** | **+0.4** |
| D22K | | | | IAML | | 02 44 22.8 | |
| | comp=N,497nm,0.8s | | | | | | |
| **G27K** | **Doyon Strip** | **2.93** | **156** | Pn | **Pn** | **02 43 21.9** | **+1.2** |
| **E22K** | **Anaktuvuk Pass** | **2.93** | **245** | Pn | **Pn** | **02 43 21.4** | **+0.7** |
| **FYU** | **Fort Yukon** | **2.96** | **184** | Pn | **Pb** | **02 43 23.1** | **-3.4** |
| **G24K** | **Hadweenzic Riv** | **3.00** | **202** | Pn | **Pn** | **02 43 22.5** | **+0.8** |
| **COLD** | **Coldfoot** | **3.07** | **224** | | **Pn** | **02 43 23.8** | **+1.2** |
| **B22K** | **Teshekpuk Lake** | **3.13** | **290** | Pn | **Pn** | **02 43 24.6** | **+1.2** |
| **H25L** | **Birch Creek** | **3.28** | **188** | | **Pn** | **02 43 27.1** | **+1.7** |
| **F22K** | **John River** | **3.41** | **238** | | **Pn** | **02 43 28.6** | **+1.3** |
| **G23K** | **Bananza Creek** | **3.45** | **218** | Pn | **Pn** | **02 43 29.5** | **+1.7** |
| G23K | | | | IAML | | 02 44 33.4 | |
| | comp=N,239nm,0.6s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **B21K** | **Ikpikpuk River** | **3.49** | **277** | | | **Pn** | **02 43 28.9** | **+0.6** |
| B21K | | | | IAML | | | 02 44 48.3 | | |
| | comp=E,360nm,0.9s | | | | | | | | |
| **H27K** | **Steamboat Moun** | **3.50** | **159** | | | **Pn** | **02 43 29.6** | **+1.2** |
| **E21K** | **Killik River** | **3.52** | **257** | | | **Pn** | **02 43 29.2** | **+0.4** |
| E21K | | | | IAML | | | 02 44 29.0 | | |
| | comp=E,275nm,0.7s | | | | | | | | |
| E21K | | | | IAML | | | 02 44 40.5 | | |
| | comp=N,264nm,0.7s | | | | | | | | |
| **G29M** | **Pine Creek** | **3.59** | **133** | Pn | | **Pn** | **02 43 30.5** | **+0.7** |
| G29M | | | | IAML | | | 02 44 16.3 | | |
| | comp=N,330nm,0.7s | | | | | | | | |
| **G22K** | **Bettles** | **3.63** | **228** | | | **Pn** | **02 43 31.4** | **+1.1** |
| **F30M** | **Barrier River** | **3.78** | **116** | | | **Pn** | **02 43 34.0** | **+1.8** |
| **A22K** | **Sinclair Lake** | **3.81** | **298** | | | **Pn** | **02 43 32.6** | **-0.1** |
| **H24K** | **Noodor Dome** | **3.88** | **200** | Pn | | **Pn** | **02 43 34.5** | **+0.8** |
| H24K | | | | IAML | | | 02 44 41.1 | | |
| | comp=E,240nm,1.0s | | | | | | | | |
| H24K | | | | IAML | | | 02 44 53.6 | | |
| | comp=N,162nm,0.9s | | | | | | | | |
| **F21K** | **Alatna River** | **3.98** | **239** | Pn | | **Pn** | **02 43 35.7** | **+0.5** |
| F21K | | | | IAML | | | 02 44 42.0 | | |
| | comp=N,151nm,0.8s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.02** | **185** | Pn | | **Pn** | **02 43 36.8** | **+1.1** |
| PRP | | | | IAML | | | 02 44 47.6 | | |
| | comp=N,180nm,0.9s | | | | | | | | |
| PRP | | | | IAML | | | 02 44 49.9 | | |
| | comp=E,148nm,0.6s | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.04** | **125** | Pn | | **Pn** | **02 43 37.4** | **+1.5** |
| G30M | | | | IAML | | | 02 44 59.6 | | |
| | comp=N,172nm,0.7s | | | | | | | | |
| **H29M** | **Whitestone** | **4.07** | **141** | Pn | | **Pn** | **02 43 37.2** | **+0.9** |
| H29M | | | | IAML | | | 02 44 34.2 | | |
| | comp=N,162nm,0.7s | | | | | | | | |
| H29M | | | | IAML | | | 02 44 59.8 | | |
| | comp=E,215nm,0.9s | | | | | | | | |
| **I27K** | **Kandik River** | **4.09** | **162** | | | **Pn** | **02 43 38.5** | **+1.8** |
| **H23K** | **Yukon River** | **4.13** | **209** | Pn | | **Pn** | **02 43 38.0** | **+0.7** |
| H23K | | | | IAML | | | 02 44 53.4 | | |
| | comp=N,197nm,0.7s | | | | | | | | |
| H23K | | | | IAML | | | 02 44 55.7 | | |
| | comp=E,169nm,1.1s | | | | | | | | |
| **INK** | **Inuvik** | **4.21** | **101** | Pn | | **Pn** | **02 43 38.8** | **+0.7** |
| **INK** | **Inuvik** | **4.21** | **101** | Pn | | **Pn** | **02 43 39.0** | **+0.9** |
| | comp=E,2.8nm,0.3s,baz=308,slow=5.2,SNR=28 | | | | | | | | |
| INK | | | | Sn | | **Sn** | **02 44 27.0** | **-0.7** |
| | comp=E,6.3nm,0.3s,baz=46,slow=25,SNR=6.4 | | | | | | | | |
| | comp=E,14nm,0.5s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.26** | **171** | | | **Pn** | **02 43 40.5** | **+1.6** |
| **EPYK** | **Eagle Plains** | **4.35** | **133** | Pn | | **Pn** | **02 43 41.2** | **+1.1** |
| **D20K** | **Etivluk River** | **4.35** | **265** | | | **Pn** | **02 43 41.5** | **+1.3** |
| **E20K** | **Nigu River** | **4.35** | **259** | | | **Pn** | **02 43 41.0** | **+0.9** |
| **B20K** | **Meade River** | **4.37** | **282** | | | **Pn** | **02 43 40.3** | **0.0** |
| **A21K** | **Barrow** | **4.41** | **300** | | | **Pn** | **02 43 41.2** | **+0.2** |
| **H22K** | **Ishtalitna Cre** | **4.43** | **218** | | | **Pn** | **02 43 42.6** | **+1.4** |
| **I28M** | **Miner Creek** | **4.46** | **154** | Pn | | **Pn** | **02 43 43.5** | **+1.8** |
| I28M | | | | IAML | | | 02 45 07.4 | | |
| | comp=E,102nm,1.1s | | | | | | | | |
| I28M | | | | IAML | | | 02 45 09.6 | | |
| | comp=N,108nm,0.9s | | | | | | | | |
| **G21K** | **Allakaket** | **4.47** | **232** | Pn | | **Pn** | **02 43 42.4** | **+0.5** |
| G21K | | | | IAML | | | 02 45 12.9 | | |
| | comp=E,160nm,1.3s | | | | | | | | |
| G21K | | | | IAML | | | 02 45 21.3 | | |
| | comp=N,101nm,1.2s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.53** | **112** | Pn | | **Pn** | **02 43 43.5** | **+1.0** |
| F31M | | | | IAML | | | 02 45 09.2 | | |
| | comp=N,119nm,1.1s | | | | | | | | |
| F31M | | | | IAML | | | 02 45 09.8 | | |
| | comp=E,122nm,0.8s | | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.53** | **195** | Pn | | **Pn** | **02 43 43.5** | **+0.8** |
| POKR | | | | IAML | | | 02 45 03.0 | | |
| | comp=E,125nm,0.9s | | | | | | | | |
| POKR | | | | IAML | | | 02 45 09.1 | | |
| | comp=N,131nm,0.9s | | | | | | | | |
| **G31M** | **Satah River** | **4.66** | **119** | Pn | | **Pn** | **02 43 45.0** | **+0.6** |
| G31M | | | | IAML | | | 02 45 11.6 | | |
| | comp=N,131nm,0.8s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.73** | **205** | Pn | | **Pn** | **02 43 45.8** | **+0.4** |
| I23K | | | | IAML | | | 02 45 21.0 | | |
| | comp=E,131nm,0.7s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.77** | **199** | Pn | | **Pn** | **02 43 46.8** | **+0.9** |
| MDM | | | | IAML | | | 02 45 08.3 | | |
| | comp=N,119nm,0.8s | | | | | | | | |
| MDM | | | | IAML | | | 02 45 08.7 | | |
| | comp=E,120nm,0.7s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.79** | **244** | Pn | | **Pn** | **02 43 47.4** | **+1.3** |
| F20K | | | | IAML | | | 02 45 21.3 | | |
| | comp=N,85nm,1.3s | | | | | | | | |
| **COLA** | **College** | **4.81** | **196** | Pn | | **Pn** | **02 43 47.6** | **+1.2** |
| **I29M** | **Ogilvie Camp,** | **4.83** | **146** | Pn | | **Pn** | **02 43 46.9** | **+0.2** |
| I29M | | | | IAML | | | 02 45 12.6 | | |
| | comp=E,84nm,0.6s | | | | | | | | |
| **IL31** | | **4.83** | **191** | Pn | | **Pn** | **02 43 48.4** | **+1.7** |
| **ILAR** | **Eielson Array** | **4.83** | **191** | Pn | | **Pn** | **02 43 48.4** | **+1.7** |
| **ILAR** | **Eielson Array**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PAX | Paxson | 6.57 | 183 | | | Pn | 02 44 13.3 | +2.6 |
| C17K | DeLong Mountai | 6.72 | 270 | | | Pn | 02 44 11.9 | -0.8 |
| E17K | Hotham Inlet | 6.80 | 257 | | | Pn | 02 44 14.2 | +0.5 |
| A36M | Sachs Harbour | 6.88 | 60 | Pn | | Pn | 02 44 13.2 | -1.5 |
| WAT1 | Susitna Watana | 6.88 | 195 | | | Pn | 02 44 16.9 | +2.0 |
| WAT7 | Susitna Watana | 6.91 | 196 | | | Pn | 02 44 17.4 | +2.1 |
| D17K | Noatak River | 6.96 | 264 | | | Pn | 02 44 15.7 | -0.3 |
| K20K | Telida | 7.22 | 216 | Pn | | Pn | 02 44 20.2 | +0.7 |
| G17K | Kiwalik Mounta | 7.31 | 244 | | | Pn | 02 44 21.7 | +0.9 |
| H17K | Granite Mounta | 7.47 | 239 | Pn | | Pn | 02 44 24.2 | +1.4 |
| M29M | Somme Creek | 7.53 | 157 | Pn | | Pn | 02 44 25.1 | +1.3 |
| YUK2 | White River | 7.91 | 167 | | | Pn | 02 44 31.8 | +2.8 |
| SKT | Skwentna | 8.06 | 204 | Pn | | Pn | 02 44 32.9 | +1.9 |
| PMR | Palmer | 8.15 | 195 | Pn | | Pn | 02 44 33.7 | +1.5 |
| J17K | VABM Dome | 8.39 | 230 | Pn | | Pn | 02 44 36.1 | +0.5 |
| L19K | White Mountain | 8.44 | 214 | Pn | | Pn | 02 44 35.9 | -0.4 |
| M31M | Drury Creek, Y | 8.44 | 145 | Pn | | Pn | 02 44 37.1 | +0.8 |
| M19K | Big River Lodg | 8.60 | 212 | Pn | | Pn | 02 44 40.1 | +1.6 |
| FARO | Faro, Yukon | 8.63 | 142 | Pn | | Pn | 02 44 39.6 | +0.7 |
| N30M | Aishikik Lake | 8.66 | 155 | Pn | | Pn | 02 44 40.4 | +1.1 |
| CTGM | Chitina Glacie | 8.69 | 169 | Pn | | Pn | 02 44 43.5 | +3.7 |
| MMPY | Sheldon Lake, | 8.78 | 135 | Pn | | Pn | 02 44 42.8 | +1.9 |
| L18K | Granite Mounta | 8.79 | 220 | Pn | | Pn | 02 44 41.6 | +0.6 |
| N31M | Braeburn, Yuko | 8.85 | 151 | Pn | | Pn | 02 44 43.3 | +1.5 |
| J16K | Anvik River | 8.90 | 233 | Pn | | Pn | 02 44 42.9 | +0.3 |
| O28M | Mount Upton | 8.97 | 166 | | | Pn | 02 44 47.4 | +3.7 |
| O30N | Mendenhall | 9.47 | 154 | Pn | | Pn | 02 44 51.9 | +1.5 |
| M17K | Holitna River | 9.69 | 219 | Pn | | Pn | 02 44 54.4 | +1.1 |
| WHY | Whitehorse | 9.78 | 150 | Pn | | Pn | 02 44 55.4 | +0.8 |
| K15K | Wolf Creek Mou | 9.95 | 232 | Pn | | Pn | 02 44 56.7 | -0.2 |
| J14K | Nanvaranak Lak | 10.17 | 237 | Pn | | Pn | 02 44 59.2 | -0.7 |
| M16K | Timber Creek | 10.37 | 222 | Pn | | Pn | 02 45 03.5 | +0.9 |
| WRGLY | Wrigley | 10.54 | 116 | Pn | | Pn | 02 45 04.7 | -0.1 |
| P33M | Teslin, Yukon | 10.57 | 146 | Pn | | Pn | 02 45 05.5 | 0.0 |
| R33M | Jennings River | 11.70 | 143 | Pn | | Pn | 02 45 22.2 | +1.2 |
| Q32M | Nakina River | 11.84 | 147 | Pn | | Pn | 02 45 24.2 | +1.3 |
| DLBC | Dease Lake | 12.78 | 143 | Pn | | Pn | 02 45 34.8 | -0.8 |
| | comp=N,0.6nm,0.3s,baz=351,slow=10,SNR=8.7 | | | | | | | |
| | comp=N,1.7nm,0.6s | | | | | | | |
| YKA | Yellowknife Ar | 13.96 | 105 | Pn | | Pn | 02 45 48.3 | -3.3 |
| | comp=N,1.0nm,0.3s,baz=313,slow=13,SNR=15 | | | | | | | |
| | comp=N,1.1nm,0.4s | | | | | | | |
| EUNU | Eureka | 17.47 | 30 | Pn | | Pn | 02 46 34.9 | -2.5 |
| EUNU | | | | IAmb | | IAmb | 02 46 40.6 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| PDAR | Pinedale Array | 32.29 | 128 | P | | P | 02 49 05.8 | +2.6 |
| | comp=Z,0.5nm,0.5s,baz=4.3,slow=5.9,SNR=5.8 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| NVAR | Mina Array Bea | 34.19 | 142 | P | | P | 02 49 23.0 | +3.2 |
| | comp=Z,0.4nm,0.7s,baz=341,slow=7.9,SNR=2.4 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| SCHQ | Schefferville | 36.27 | 73 | LR | | LR | 03 03 59.0 | |
| | comp=Z,22nm,21.8s,baz=112,slow=36 | | | | | | | |
| TXAR | Lajitas Array | 46.51 | 128 | P | | P | 02 51 05.5 | +3.9 |
| | comp=Z,0.4nm,0.8s,baz=335,slow=3.6,SNR=8.0 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| FINES | FINESS Array B | 49.18 | 6 | P | | P | 02 51 21.4 | -0.4 |
| | comp=Z,1.6nm,0.8s,baz=289,slow=5.8,SNR=3.4 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| HFS | Hagfors | 49.73 | 14 | P | | P | 02 51 25.2 | -0.8 |
| | comp=Z,1.0nm,0.7s,baz=320,slow=3.9,SNR=6.3 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |

*NEIC* ***13*** *03:05:12.7±1.2,69°.57N±0°.05×144°.1W±0°.1,h10km±2km, Error ellipse: s-maj=9.4km s-min=5.5km az=30.0*

**AEIC 13 03:05:11.3±1.5,69°.49N±0°.04×144°.21W±0°.07,h4km±7km, ML2.5,ML2.6/66(NEIC),Error ellipse: s-maj=7.3km s-min=1.4km az=206.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.23 | 51 | Pg | Pg | 03 05 16.4 | +0.8 |
| C27K | | | | IAML | | 03 05 19.7 | |
| | comp=E,1μm,0.5s | | | | | | |
| C27K | | | | IAML | | 03 05 19.7 | |
| | comp=N,1μm,0.5s | | | | | | |
| C26K | Camden Bay | 0.50 | 331 | | Pg | 03 05 21.4 | +0.6 |
| C26K | | | | | Sg | 03 05 27.9 | +0.6 |
| D25K | Kavik River | 0.79 | 259 | Pg | Pb | 03 05 26.9 | -0.6 |
| D27M | Malcolm River | 1.17 | 100 | Pg | Pg | 03 05 32.7 | -1.1 |
| D27M | | | | IAML | | 03 05 52.7 | |
| | comp=N,117nm,0.4s | | | | | | |
| C24K | Franklin Bluff | 1.59 | 281 | Pn | Pg | 03 05 41.5 | -0.2 |
| C24K | | | | IAML | | 03 06 12.7 | |
| | comp=E,64nm,1.0s | | | | | | |
| E27K | Coleen River | 1.61 | 143 | | Pb | 03 05 41.5 | 0.0 |
| E27K | | | | IAML | | 03 06 06.3 | |
| | comp=E,96nm,0.4s | | | | | | |
| E27K | | | | IAML | | 03 06 06.5 | |
| | comp=N,68nm,0.5s | | | | | | |
| D24K | Happy Valley | 1.67 | 261 | Pn | Pb | 03 05 42.3 | -0.3 |
| D24K | | | | IAML | | 03 06 08.6 | |
| | comp=N,79nm,0.4s | | | | | | |
| D24K | | | | IAML | | 03 06 11.7 | |
| | comp=E,72nm,0.4s | | | | | | |
| F26K | Sheenjek River | 1.80 | 179 | Pn | Pb | 03 05 44.6 | -0.2 |
| F26K | | | | IAML | | 03 06 12.0 | |
| | comp=E,82nm,0.6s | | | | | | |
| F26K | | | | IAML | | 03 06 13.1 | |
| | comp=N,50nm,0.4s | | | | | | |
| E28M | Babbage River | 1.90 | 116 | Pn | Pn | 03 05 45.4 | +1.0 |
| E28M | | | | IAML | | 03 06 17.4 | |
| | comp=N,45nm,0.6s | | | | | | |
| D28M | Stokes Point | 1.94 | 92 | | Pb | 03 05 46.8 | -0.3 |
| D28M | | | | IAML | | 03 06 21.4 | |
| | comp=N,60nm,1.2s | | | | | | |
| F25K | Christian Rive | 1.97 | 196 | Pn | Pb | 03 05 47.7 | 0.0 |
| F25K | | | | IAML | | 03 06 19.0 | |
| | comp=N,69nm,0.5s | | | | | | |
| BMAR | Burnt Mountain | 2.07 | 184 | Pn | Pb | 03 05 48.5 | -0.9 |
| E24K | Your Creek | 2.10 | 230 | Pn | Pb | 03 05 50.2 | +0.3 |
| TOLK | Toolik Lake Re | 2.11 | 249 | Pn | Pb | 03 05 50.3 | +0.3 |
| TOLK | | | | IAML | | 03 06 21.8 | |
| | comp=E,39nm,1.0s | | | | | | |
| C23K | Itkillik River | 2.27 | 282 | Pn | Pb | 03 05 51.8 | -0.9 |
| C23K | | | | IAML | | 03 06 27.2 | |
| | comp=N,43nm,0.4s | | | | | | |
| C23K | | | | IAML | | 03 06 34.5 | |
| | comp=E,41nm,0.5s | | | | | | |
| F24K | Squaw Lake | 2.40 | 216 | Pn | Pb | 03 05 53.3 | -1.6 |
| F24K | | | | IAML | | 03 06 31.6 | |
| | comp=E,29nm,0.6s | | | | | | |
| E23K | Chandalar | 2.44 | 237 | Pn | Pb | 03 05 54.1 | -1.5 |
| E23K | | | | IAML | | 03 06 35.5 | |
| | comp=E,27nm,0.8s | | | | | | |
| F28M | Old Crow | 2.46 | 138 | Pn | Pn | 03 05 53.7 | +1.5 |
| F28M | | | | IAML | | 03 06 36.2 | |
| | comp=N,34nm,0.5s | | | | | | |
| F28M | | | | IAML | | 03 06 37.0 | |
| | comp=E,26nm,0.6s | | | | | | |
| E29M | Blow River | 2.53 | 113 | Pn | Pn | 03 05 54.2 | +1.1 |
| E29M | | | | IAML | | 03 06 34.9 | |
| | comp=N,34nm,0.7s | | | | | | |
| E29M | | | | IAML | | 03 06 37.8 | |
| | comp=E,29nm,0.7s | | | | | | |
| G26K | Porcupine Rive | 2.55 | 176 | | Pn | 03 05 55.1 | +1.7 |
| G25K | Bearman Lake | 2.82 | 195 | | Pn | 03 05 59.0 | +2.0 |
| G27K | Doyon Strip | 2.85 | 159 | Pn | Pn | 03 05 58.2 | +0.7 |
| FYU | Fort Yukon | 2.96 | 188 | Pn | Pn | 03 06 00.7 | +1.8 |
| G24K | Hadweenzic Riv | 3.05 | 205 | Pn | Pn | 03 06 01.8 | +1.5 |
| G24K | | | | IAML | | 03 06 56.5 | |
| | comp=E,24nm,1.5s | | | | | | |
| B22K | Teshekpuk Lake | 3.29 | 289 | Pn | Pn | 03 06 04.8 | +1.3 |
| G29M | Pine Creek | 3.46 | 135 | Pn | Pn | 03 06 07.6 | +1.7 |
| B21K | Ikpikpuk River | 3.66 | 277 | Pn | Pn | 03 06 09.2 | +0.8 |
| H24K | Noodor Dome | 3.92 | 203 | Pn | Pn | 03 06 13.4 | +1.2 |
| H24K | | | | IAML | | 03 08 01.2 | |
| | comp=N,8.5nm,0.6s | | | | | | |
| H24K | | | | IAML | | 03 08 19.1 | |
| | comp=E,11nm,1.1s | | | | | | |
| PRP | Porcupine Dome | 4.02 | 188 | Pn | Pn | 03 06 14.6 | +1.0 |
| PRP | | | | IAML | | 03 08 07.9 | |
| | comp=N,10nm,0.5s | | | | | | |
| PRP | | | | IAML | | 03 08 23.0 | |
| | comp=E,9.0nm,0.7s | | | | | | |
| EPYK | Eagle Plains | 4.21 | 134 | Pn | Pn | 03 06 17.3 | +1.1 |
| I28M | Miner Creek | 4.37 | 156 | Pn | Pn | 03 06 20.6 | +2.2 |
| I28M | | | | IAML | | 03 07 15.3 | |
| | comp=N,7.6nm,0.8s | | | | | | |
| D20K | Etivluk River | 4.51 | 266 | | Pn | 03 06 22.0 | +1.8 |
| B20K | Meade River | 4.53 | 283 | Pn | Pn | 03 06 21.2 | +0.7 |
| IL31 | | 4.85 | 194 | Pn | Pn | 03 06 27.2 | +2.3 |
| J26L | Joseph Creek | 5.01 | 177 | Pn | Pn | 03 06 29.6 | +2.4 |
| J26L | | | | IAML | | 03 07 31.9 | |
| | comp=N,3.9nm,1.1s | | | | | | |
| J26L | | | | IAML | | 03 07 54.6 | |
| | comp=E,4.5nm,1.3s | | | | | | |
| CCB | Clear Creek Bu | 5.06 | 198 | Pn | Pn | 03 06 29.0 | +1.2 |
| CCB | | | | IAML | | 03 08 53.6 | |
| | comp=N,3.3nm,1.3s | | | | | | |
| D19K | Kuna River | 5.10 | 265 | Pn | Pn | 03 06 29.3 | +0.9 |
| D19K | | | | IAML | | 03 08 27.2 | |
| | comp=E,4.4nm,0.7s | | | | | | |
| I30M | Mount Dempster | 5.24 | 141 | Pn | Pn | 03 06 31.7 | +1.3 |
| I30M | | | | IAML | | 03 08 57.7 | |
| | comp=N,4.2nm,1.5s | | | | | | |
| C19K | Lookout Ridge | 5.47 | 273 | Pn | Pn | 03 06 34.5 | +1.1 |
| SCRK | Sand Creek | 5.53 | 179 | Pn | Pn | 03 06 37.0 | +2.6 |
| F19K | Shaleruckik Mo | 5.72 | 249 | Pn | Pn | 03 06 38.7 | +1.9 |
| DAWY | Dawson | 5.76 | 158 | Pn | Pn | 03 06 39.5 | +2.0 |
| J30M | Hart River | 5.81 | 144 | Pn | Pn | 03 06 38.0 | -0.2 |
| C18K | Utukok River | 6.14 | 270 | Pn | Pn | 03 06 43.1 | +0.5 |
| K29M | Barlow Dome | 6.25 | 152 | Pn | Pn | 03 06 45.6 | +1.4 |
| E18K | Tukpahlearik C | 6.38 | 259 | Pn | Pn | 03 06 47.4 | +1.5 |
| A36M | Sachs Harbour | 6.74 | 59 | Pn | Pn | 03 06 49.0 | -1.8 |
| C36M | Paulatuk | 7.09 | 82 | Pn | Pn | 03 06 55.2 | -0.4 |
| M29M | Somme Creek | 7.45 | 159 | Pn | Pn | 03 07 02.4 | +1.8 |

*UCR* ***13*** *03:11:39.7±1.3,7°.37N×82°.80W,h23km±5km,MW3.5*

**UPA 13 03:11:38.3±0.9,7°.26N×82°.76W,h19km±15km,2C-1D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PTPM | Petroterminale | 0.94 | 353 | eP | Pb | 03 11 54.7 | -1.3 |
| PTPM | | | | eS | Sb | 03 12 07.3 | -0.8 |
| DVD | David | 1.21 | 15 | eP | Pn | 03 11 58.7 | -1.4 |
| DVD | | | | eS | Sb | 03 12 14.3 | -1.4 |
| LOMA3 | Las Lomas, Chi | 1.22 | 17 | eP | Pn | 03 11 59.8 | -0.5 |
| PTJ1 | Puerto Jimnez | 1.38 | 337 | eP | Pn | 03 12 01.4 | -1.1 |
| PTJ1 | Puerto Jimnez | 1.38 | 337 | eP | Pn | 03 12 01.6 | -0.9 |
| NELY | Ciudad Neily | 1.39 | 352 | iP | Pn | 03 12 01.4 | -1.2 |
| NELY | | | | eS | Sn | 03 12 19.5 | -1.1 |
| EDAD | Golfito | 1.44 | 344 | eP | Pn | 03 12 02.9 | -0.5 |
| BCO2 | Palmira | 1.47 | 9 | eP | Pn | 03 12 03.0 | -0.8 |
| BCO2 | | | | eS | Sn | 03 12 21.9 | -0.7 |
| BRU2 | Volcan | 1.52 | 3 | eP | Pn | 03 12 04.0 | -0.7 |
| BRU2 | | | | eS | Sn | 03 12 23.1 | -0.9 |
| BRU2 | Volcan | 1.52 | 3 | eP | Pn | 03 12 03.6 | -1.1 |
| BRU2 | | | | eS | Sn | 03 12 22.9 | -1.1 |
| LNBQ3 | Los Naranjos, | 1.55 | 12 | eP | Pn | 03 12 04.2 | -0.8 |
| GMAL | Guarumal, Vera | 1.59 | 72 | eP | Pn | 03 12 05.0 | -0.5 |
| GMAL | | | | eS | Sn | 03 12 24.1 | -1.4 |
| CHGR2 | Aguacate | 1.77 | 20 | eP | Pn | 03 12 07.2 | -0.8 |
| CHGR2 | | | | eS | Sn | 03 12 29.5 | -0.5 |
| EDP2 | Potrero Grande | 1.79 | 347 | eP | Pn | 03 12 07.8 | -0.4 |
| EDP2 | | | | eS | Sn | 03 12 30.2 | -0.2 |
| EDPN | Palmar Norte | 1.82 | 338 | eP | Pn | 03 12 04.3 | -4.3 |
| EDPN | | | | eS | Sn | 03 12 30.2 | -1.0 |
| CACAO | El Cacao, Vera | 1.89 | 87 | eP | Pn | 03 12 08.7 | -0.7 |
| CACAO | | | | eS | Sn | 03 12 31.5 | -1.3 |
| STIA3 | Santiago, Vera | 1.96 | 65 | eP | Pn | 03 12 10.1 | -0.4 |
| DRK0 | Durika | 2.04 | 346 | eP | Pn | 03 12 11.3 | -0.5 |
| DRK0 | | | | eS | Sn | 03 12 36.5 | -0.4 |
| DRK0 | Durika | 2.04 | 346 | eP | Pn | 03 12 11.2 | -0.7 |
| DRK0 | | | | eS | Sn | 03 12 36.9 | -0.1 |
| CNI2 | El Empalme, Bo | 2.17 | 8 | eP | Pn | 03 12 13.0 | -0.3 |
| CNI2 | | | | eS | Sn | 03 12 39.0 | -0.6 |
| CHIT3 | Chitre | 2.42 | 73 | eP | Pn | 03 12 16.5 | -0.3 |
| CHIT3 | | | | eS | Sn | 03 12 45.6 | -0.4 |
| BUS1 | Rivas | 2.48 | 337 | iP | Pn | 03 12 17.8 | -0.3 |
| BUS1 | | | | eS | Sn | 03 12 48.1 | +0.1 |
| AZU | Azuero | 2.52 | 78 | eP | Pn | 03 12 18.4 | +0.2 |
| AZU | | | | eS | Sn | 03 12 47.1 | -1.4 |
| AZU | Azuero | 2.52 | 78 | eP | Pn | 03 12 19.6 | +1.4 |
| ABE2 | San Pablo | 2.74 | 332 | eP | Pn | 03 12 21.6 | 0.0 |
| ABE2 | | | | eS | Sn | 03 12 54.0 | -0.3 |
| LCR2 | La Lucha 2 | 2.75 | 334 | eP | Pn | 03 12 21.3 | -0.4 |
| VTCV | VTCV, Calle Va | 2.87 | 341 | eP | Pn | 03 12 23.3 | +0.1 |
| ACOS | Acosta | 2.88 | 331 | eP | Pn | 03 12 26.1 | +2.9 |
| ACOS | | | | eS | Sn | 03 12 56.1 | -1.3 |
| BELE | Belen | 3.04 | 332 | eP | Pn | 03 12 25.2 | -0.3 |
| BELE | | | | eS | Sn | 03 13 00.1 | -1.3 |
| ZANG | Zanguenga, Cho | 3.32 | 59 | eP | Pn | 03 12 30.4 | +1.2 |
| ZANG | | | | eS | Sn | 03 13 06.5 | -1.8 |
| ZANG | Zanguenga, Cho | 3.32 | 59 | eP | Pn | 03 12 30.4 | +1.1 |
| JTS | Las Juntas de | 3.71 | 324 | eP | Pn | 03 12 34.6 | +0.1 |
| JTS | | | | eS | Sn | 03 13 16.4 | -1.4 |
| CUI | Cuipilapa | 4.12 | 325 | eP | Pn | 03 12 40.9 | +0.5 |
| CUI | | | | eS | Sn | 03 13 26.5 | -1.6 |

*NEIC* ***13*** *03:12:19.5±1.3,69°.51N±0°.04×144°.1W±0°.1,h10km±2km, Error ellipse: s-maj=8.7km s-min=3.8km az=35.0*

**AEIC 13 03:12:17.8±1.5,69°.44N±0°.04×144°.16W±0°.09,h10km±6km, ML3.0,ML3.1/116(NEIC),Error ellipse: s-maj=6.8km s-min=3.9km az=200.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.24 | 40 | Pg | Pg | 03 12 22.7 | -0.1 |
| C27K | | | | IAML | | 03 12 26.3 | |
| | comp=E,3μm,0.6s | | | | | | |
| C27K | | | | IAML | | 03 12 26.4 | |
| | comp=N,2μm,0.5s | | | | | | |
| C26K | Camden Bay | 0.55 | 332 | | Pg | 03 12 28.4 | -0.1 |
| C26K | | | | | Sg | 03 12 35.5 | -0.1 |
| C26K | | | | IAML | | 03 12 38.3 | |
| | comp=E,785nm,0.4s | | | | | | |
| C26K | | | | IAML | | 03 12 38.3 | |
| | comp=N,775nm,0.3s | | | | | | |
| D25K | Kavik River | 0.79 | 262 | Pg | Pg | 03 12 32.7 | -0.4 |
| D27M | Malcolm River | 1.15 | 98 | | Pb | 03 12 39.8 | 0.0 |
| D27M | | | | | Sn | 03 12 55.7 | -0.1 |
| E27K | Coleen River | 1.57 | 142 | Pn | Pg | 03 12 47.9 | 0.0 |
| E27K | | | | IAML | | 03 13 12.5 | |
| | comp=N,116nm,0.5s | | | | | | |
| C24K | Franklin Bluff | 1.62 | 282 | Pn | Pg | 03 12 48.4 | -0.4 |
| C24K | | | | Sn | Sb | 03 13 07.6 | -0.4 |
| D24K | Happy Valley | 1.68 | 262 | Pn | Pg | 03 12 50.1 | 0.0 |
| D24K | | | | IAML | | 03 13 15.0 | |
| | comp=N,148nm,0.6s | | | | | | |
| D24K | | | | IAML | | 03 13 15.6 | |
| | comp=E,141nm,0.6s | | | | | | |
| F26K | Sheenjek River | 1.75 | 180 | Pn | Pg | 03 12 50.8 | -0.6 |
| F26K | | | | IAML | | 03 13 20.9 | |
| | comp=E,110nm,0.4s | | | | | | |
| E28M | Babbage River | 1.87 | 115 | Pn | Pg | 03 12 52.9 | -0.6 |
| D28M | Stokes Point | 1.92 | 91 | | Pb | 03 12 53.5 | +0.7 |
| D28M | | | | IAML | | 03 13 23.9 | |
| | comp=E,79nm,0.5s | | | | | | |
| D28M | | | | IAML | | 03 13 29.8 | |
| | comp=N,92nm,0.7s | | | | | | |
| F25K | Christian Rive | 1.94 | 197 | Pn | Pb | 03 12 53.4 | +0.2 |
| F25K | | | | IAML | | 03 13 22.8 | |
| | comp=E,114nm,0.9s | | | | | | |
| F25K | | | | IAML | | 03 13 25.2 | |
| | comp=N,98nm,0.8s | | | | | | |
| BMAR | Burnt Mountain | 2.03 | 185 | Pn | Pb | 03 12 54.8 | +0.1 |
| E24K | Your Creek | 2.09 | 231 | Pn | Pb | 03 12 55.8 | 0.0 |
| TOLK | Toolik Lake Re | 2.10 | 250 | Pn | Pb | 03 12 56.3 | +0.3 |
| TOLK | | | | IAML | | 03 13 28.6 | |
| | comp=E,66nm,0.8s | | | | | | |
| C23K | Itkillik River | 2.29 | 283 | Pn | Pb | 03 12 57.8 | -1.3 |
| C23K | | | | IAML | | 03 13 41.8 | |
| | comp=N,62nm,0.4s | | | | | | |
| C23K | | | | IAML | | 03 13 42.9 | |
| | comp=E,60nm,0.8s | | | | | | |
| F24K | Squaw Lake | 2.37 | 217 | Pn | Pb | 03 12 59.3 | -1.3 |
| D23K | Nanushuk River | 2.38 | 261 | Pn | Pb | 03 13 00.3 | -0.3 |
| F28M | Old Crow | 2.42 | 137 | Pn | Pn | 03 12 59.3 | +2.0 |
| F28M | | | | IAML | | 03 13 42.4 | |
| | comp=N,52nm,0.6s | | | | | | |
| E23K | Chandalar | 2.42 | 238 | Pn | Pb | 03 13 01.7 | +0.2 |
| E29M | Blow River | 2.50 | 112 | Pn | Pb | 03 13 01.3 | -1.5 |
| E29M | | | | IAML | | 03 13 43.7 | |
| | comp=N,54nm,0.6s | | | | | | |
| G26K | Porcupine Rive | 2.51 | 177 | | Pb | 03 13 01.2 | -1.6 |
| G25K | Bearman Lake | 2.79 | 196 | | Pn | 03 13 04.7 | +2.3 |
| G27K | Doyon Strip | 2.81 | 159 | Pn | Pn | 03 13 05.0 | +2.3 |
| FYU | Fort Yukon | 2.92 | 188 | Pn | Pn | 03 13 06.4 | +2.3 |
| FYU | | | | IAML | | 03 13 57.5 | |
| | comp=N,44nm,0.9s | | | | | | |
| FYU | | | | IAML | | 03 13 59.6 | |
| | comp=E,38nm,1.1s | | | | | | |
| G24K | Hadweenzic Riv | 3.02 | 206 | Pn | Pn | 03 13 08.4 | +2.8 |
| G24K | | | | IAML | | 03 14 01.1 | |
| | comp=N,30nm,0.6s | | | | | | |
| G24K | | | | IAML | | 03 14 01.4 | |
| | comp=E,33nm,0.7s | | | | | | |
| E22K | Anaktuvuk Pass | 3.08 | 248 | Pn | Pn | 03 13 08.4 | +2.0 |
| D22K | Ayikyak River | 3.10 | 264 | Pn | Pb | 03 13 09.9 | -3.0 |
| D22K | | | | IAML | | 03 15 00.5 | |
| | comp=E,34nm,0.7s | | | | | | |
| B22K | Teshekpuk Lake | 3.32 | 290 | Pn | Pn | 03 13 11.2 | +1.5 |
| B22K | | | | IAML | | 03 15 26.4 | |
| | comp=N,57nm,0.8s | | | | | | |
| B22K | | | | IAML | | 03 15 27.2 | |
| | comp=E,49nm,0.6s | | | | | | |
| G29M | Pine Creek | 3.42 | 135 | Pn | Pn | 03 13 14.1 | +2.9 |
| G29M | | | | IAML | | 03 14 18.0 | |
| | comp=E,40nm,0.8s | | | | | | |
| G29M | | | | IAML | | 03 15 26.7 | |
| | comp=N,31nm,0.7s | | | | | | |
| G23K | Bananza Creek | 3.51 | 221 | Pn | Pn | 03 13 14.6 | +2.2 |
| G23K | | | | IAML | | 03 14 17.2 | |
| | comp=N,20nm,1.5s | | | | | | |
| F22K | John River | 3.54 | 240 | | Pn | 03 13 15.4 | +2.7 |
| B21K | Ikpikpuk River | 3.68 | 278 | Pn | Pn | 03 13 16.5 | +1.9 |
| B21K | | | | IAML | | 03 15 37.4 | |
| | comp=N,50nm,0.8s | | | | | | |
| E21K | Killik River | 3.68 | 259 | Pn | Pn | 03 13 17.0 | +2.3 |
| E21K | | | | IAML | | 03 15 33.0 | |
| | comp=N,26nm,1.1s | | | | | | |
| E21K | | | | IAML | | 03 15 35.5 | |
| | comp=E,33nm,0.7s | | | | | | |
| G30M | tAoh Zraii Nji | 3.85 | 126 | Pn | Pn | 03 13 19.7 | +2.6 |
| G30M | | | | IAML | | 03 15 44.6 | |
| | comp=N,49nm,0.8s | | | | | | |
| H24K | Noodor Dome | 3.89 | 203 | Pn | Pn | 03 13 19.7 | +2.2 |
| H24K | | | | IAML | | 03 15 42.7 | |
| | comp=N,30nm,0.8s | | | | | | |
| H24K | | | | IAML | | 03 15 52.5 | |
| | comp=E,18nm,1.1s | | | | | | |
| H29M | Whitestone | 3.91 | 143 | Pn | Pn | 03 13 20.5 | +2.7 |
| I27K | Kandik River | 3.98 | 165 | | Pn | 03 13 21.3 | +2.5 |
| PRP | Porcupine Dome | 3.98 | 188 | Pn | Pn | 03 13 21.5 | +2.7 |
| A22K | Sinclair Lake | 3.99 | 298 | | Pn | 03 13 20.2 | +1.3 |
| INK | Inuvik | 4.01 | 101 | Pn | Pn | 03 13 22.5 | +3.3 |
| INK | | | | IAML | | 03 15 49.1 | |
| | comp=E,13nm,0.8s | | | | | | |
| F21K | Alatna River | 4.11 | 242 | Pn | Pn | 03 13 22.4 | +1.8 |
| F21K | | | | IAML | | 03 16 01.7 | |
| | comp=N,28nm,0.7s | | | | | | |
| F21K | | | | IAML | | 03 16 05.5 | |
| | comp=E,44nm,0.8s | | | | | | |
| EPYK | Eagle Plains | 4.17 | 134 | Pn | Pn | 03 13 23.8 | +2.4 |
| I26K | Coal Creek Min | 4.17 | 174 | Pn | Pn | 03 13 24.7 | +3.3 |
| I26K | | | | IAML | | 03 16 08.5 | |
| | comp=E,44nm,0.8s | | | | | | |
| H23K | Yukon River | 4.17 | 212 | Pn | Pn | 03 13 23.4 | +2.0 |
| H23K | | | | IAML | | 03 16 08.5 | |
| | comp=E,40nm,1.2s | | | | | | |
| I28M | Miner Creek | 4.33 | 156 | Pn | Pn | 03 13 27.1 | +3.4 |
| G31M | Satah River | 4.47 | 120 | Pn | Pn | 03 13 28.1 | +2.6 |
| H22K | Ishtalitna Cre | 4.50 | 221 | | Pn | 03 13 27.3 | +1.4 |
| D20K | Etivluk River | 4.52 | 267 | | Pn | 03 13 28.0 | +1.8 |
| POKR | Poker Plat Res | 4.52 | 198 | Pn | Pn | 03 13 29.8 | +3.6 |
| B20K | Meade River | 4.56 | 283 | Pn | Pn | 03 13 27.9 | +1.3 |
| G21K | Allakaket | 4.58 | 235 | Pn | Pn | 03 13 29.2 | +2.2 |
| A21K | Barrow | 4.60 | 300 | | Pn | 03 13 28.6 | +1.4 |
| I29M | Ogilvie Camp, | 4.68 | 148 | Pn | Pn | 03 13 29.5 | +1.1 |
| I23K | Minto, Yukon-K | 4.76 | 207 | Pn | Pn | 03 13 32.4 | +3.0 |
| MDM | Murphy Dome | 4.77 | 201 | Pn | Pn | 03 13 31.6 | +1.9 |
| IL31 | | 4.81 | 194 | Pn | Pn | 03 13 33.0 | +2.9 |
| ILAR | Eielson Array | 4.81 | 194 | Pn | Pn | 03 13 33.3 | +3.1 |
| EGAK | Eagle | 4.83 | 165 | Pn | Pn | 03 13 32.3 | +1.9 |
| J25K | Salcha River, | 4.87 | 186 | Pn | Pn | 03 13 33.8 | +2.7 |
| J25K | | | | IAML | | 03 16 46.1 | |
| | comp=N,20nm,1.5s | | | | | | |
| F20K | Avaraart Lake | 4.92 | 246 | Pn | Pn | 03 13 34.2 | +2.5 |
| F20K | | | | IAML | | 03 16 09.1 | |
| | comp=E,17nm,0.8s | | | | | | |
| J26L | Joseph Creek | 4.97 | 177 | Pn | Pn | 03 13 35.4 | +2.9 |
| CCB | Clear Creek Bu | 5.02 | 198 | Pn | Pn | 03 13 36.4 | +3.3 |
| CCB | | | | IAML | | 03 16 44.1 | |
| | comp=E,18nm,0.9s | | | | | | |
| CCB | | | | IAML | | 03 16 46.4 | |
| | comp=N,15nm,0.7s | | | | | | |
| IMAR | Indian Mountai | 5.03 | 231 | Pn | Pn | 03 13 36.2 | +3.0 |
| H21K | Melozitna Rive | 5.04 | 225 | Pn | Pn | 03 13 35.9 | +2.6 |
| MLY | Manley | 5.11 | 213 | Pn | Pn | 03 13 36.6 | +2.2 |
| MLY | | | | IAML | | 03 16 42.2 | |
| | comp=E,16nm,0.7s | | | | | | |
| MLY | | | | IAML | | 03 16 43.8 | |
| | comp=N,13nm,1.4s | | | | | | |
| D19K | Kuna River | 5.11 | 266 | Pn | Pn | 03 13 36.2 | +1.8 |
| D19K | | | | IAML | | 03 16 51.0 | |
| | comp=E,18nm,1.1s | | | | | | |
| HDA | Harding Lake | 5.17 | 194 | Pn | Pn | 03 13 37.6 | +2.4 |
| I30M | Mount Dempster | 5.19 | 141 | Pn | Pn | 03 13 37.6 | +2.0 |
| E19K | Redstone River | 5.21 | 254 | Pn | Pn | 03 13 37.8 | +2.2 |
| WRH | Wood River Hil | 5.22 | 199 | Pn | Pn | 03 13 39.3 | +3.5 |
| C19K | Lookout Ridge | 5.49 | 274 | Pn | Pn | 03 13 41.4 | +1.9 |
| SCRK | Sand Creek | 5.49 | 179 | Pn | Pn | 03 13 42.4 | +2.8 |
| F19K | Shaleruckik Mo | 5.71 | 249 | Pn | Pn | 03 13 44.2 | +1.7 |
| DAWY | Dawson | 5.72 | 158 | Pn | Pn | 03 13 45.5 | +2.8 |
| J30M | Hart River | 5.77 | 144 | Pn | Pn | 03 13 45.7 | +2.3 |
| G19K | Purcell Mounta | 5.91 | 242 | Pn | Pn | 03 13 46.8 | +1.6 |
| BPAW | Bear Paw Mtn. | 6.00 | 210 | Pn | Pn | 03 13 48.7 | +2.2 |
| H19K | Roundabout Mou | 6.13 | 236 | Pn | Pn | 03 13 50.7 | +2.4 |
| C18K | Utukok River | 6.16 | 271 | Pn | Pn | 03 13 50.3 | +1.6 |
| K29M | Barlow Dome | 6.21 | 152 | Pn | Pn | 03 13 52.6 | +3.1 |
| E18K | Tukpahlearik C | 6.39 | 259 | Pn | Pn | 03 13 53.4 | +1.6 |
| BCAR | Beaver Creek A | 6.47 | 170 | Pn | Pn | 03 13 55.9 | +2.8 |
| L27K | Beaver Creek, | 6.48 | 171 | Pn | Pn | 03 13 57.1 | +4.0 |
| J20K | Nowinta River | 6.59 | 221 |

comp=N,344nm,0.8s
E28M IAML 03 15 03.3

comp=E,259nm,1.1s
**F25K Christian Rive 1.94 196** Pn Pg 03 14 28.1 -0.3
F25K IAML 03 14 58.7

comp=E,405nm,1.1s
**D28M Stokes Point 1.96 91** Pb 03 14 27.0 -0.4
**BMAR Burnt Mountain 2.04 184** Pn Pb 03 14 29.2 +0.4
**E24K Your Creek 2.07 230** Pg 03 14 30.5 -0.5
E24K IAML 03 15 05.7

comp=E,230nm,0.8s
**TOLK Toolik Lake Re 2.08 249** Pn Pb 03 14 30.0 +0.4
TOLK IAML 03 15 05.0

comp=E,316nm,0.7s
**C23K Itkillik River 2.26 283** Pn Pn 03 14 30.0 +0.6
**F24K Squaw Lake 2.36 216** Pn Pn 03 14 30.9 +0.1
**E23K Chandalar 2.41 237** Pn Pb 03 14 33.9 -1.3
E23K IAML 03 15 16.1

comp=E,155nm,0.5s
**F28M Old Crow 2.45 137** Pn Pb 03 14 34.2 -1.6
F28M IAML 03 15 18.5

comp=N,241nm,0.7s
F28M IAML 03 15 18.8

comp=E,221nm,0.6s
**G26K Porcupine Rive 2.52 176** Pb 03 14 35.6 -1.4
**E29M Blow River 2.53 112** Pn Pn 03 14 35.1 +2.0
E29M IAML 03 15 18.8

comp=E,197nm,0.6s
**G25K Bearman Lake 2.79 195** Pb 03 14 39.4 -2.2
**G27K Doyon Strip 2.83 159** Pn Pn 03 14 39.1 +1.9
**FYU Fort Yukon 2.92 188** Pn Pb 03 14 41.7 -2.2
FYU IAML 03 15 34.8

comp=E,183nm,1.3s
**E22K Anaktuvuk Pass 3.05 248** Pn Pn 03 14 40.1 -0.1
**D22K Ayikyak River 3.07 263** Pn Pn 03 14 41.1 +0.6
D22K IAML 03 15 37.6

comp=E,140nm,0.8s
D22K IAML 03 15 48.4

comp=N,143nm,0.9s
**B22K Teshekpuk Lake 3.29 290** Pn Pn 03 14 44.1 +0.7
**G29M Pine Creek 3.45 135** Pn Pn 03 14 46.6 +0.9
**G23K Bananza Creek 3.50 221** Pn Pn 03 14 48.8 +2.4
G23K IAML 03 15 49.9

comp=N,80nm,0.8s
G23K IAML 03 15 53.4

comp=E,78nm,1.1s
**F22K John River 3.52 240** Pn 03 14 49.3 +2.7
**B21K Ikpikpuk River 3.65 278** Pn Pn 03 14 48.3 0.0
**E21K Killik River 3.65 258** Pn Pn 03 14 49.4 +0.9
E21K IAML 03 15 55.8

comp=N,97nm,0.7s
**G30M tAoh Zraii Nji 3.89 126** Pn Pn 03 14 53.7 +2.0
G30M IAML 03 15 42.4

comp=E,45nm,0.9s
G30M IAML 03 16 15.0

comp=N,55nm,1.3s
**H24K Noodor Dome 3.89 203** Pn Pn 03 14 54.0 +2.2
H24K IAML 03 16 00.6

comp=N,51nm,0.8s
H24K IAML 03 16 04.8

comp=E,50nm,1.4s
**H29M Whitestone 3.94 143** Pn Pn 03 14 55.0 +2.6
**A22K Sinclair Lake 3.96 298** Pn 03 14 53.4 +0.7
**PRP Porcupine Dome 3.98 188** Pn Pn 03 14 55.0 +1.9
PRP IAML 03 15 47.6

comp=E,45nm,0.7s
PRP IAML 03 15 49.9

comp=N,61nm,0.9s
**I27K Kandik River 4.00 164** Pn 03 14 56.4 +3.1
**INK Inuvik 4.05 101** Pn Pn 03 14 55.0 +1.1
**F21K Alatna River 4.09 241** Pn Pn 03 14 56.6 +2.0
F21K IAML 03 16 06.1

comp=E,52nm,0.8s
F21K IAML 03 16 07.5

comp=N,41nm,0.8s
**H23K Yukon River 4.17 212** Pn Pn 03 14 58.5 +2.9
H23K IAML 03 16 10.7

comp=E,64nm,1.2s
H23K IAML 03 16 15.7

comp=N,60nm,1.1s
**I26K Coal Creek Min 4.19 174** Pn Pn 03 14 57.5 +1.7
I26K IAML 03 16 14.7

comp=E,64nm,1.1s
**EPYK Eagle Plains 4.20 134** Pn Pn 03 14 58.3 +2.2
**I28M Miner Creek 4.35 156** Pn Pn 03 15 01.3 +3.1
I28M IAML 03 15 55.9

comp=N,54nm,0.5s
I28M IAML 03 16 22.6

comp=E,45nm,1.1s
**F31M Tsiigehtchic 4.37 113** Pn Pn 03 15 00.5 +2.2
F31M IAML 03 16 17.8

comp=E,56nm,1.1s
F31M IAML 03 16 18.4

comp=N,40nm,1.4s
**D20K Etivluk River 4.49 266** Pn 03 15 01.5 +1.5
**G31M Satah River 4.50 120** Pn Pn 03 15 02.5 +2.4
**B20K Meade River 4.53 283** Pn Pn 03 15 01.5 +1.1
**POKR Poker Plat Res 4.53 197** Pn Pn 03 15 02.9 +2.4
POKR IAML 03 15 58.9

comp=N,39nm,0.4s
POKR IAML 03 16 00.1

comp=E,38nm,0.7s
**G21K Allakaket 4.56 234** Pn Pn 03 15 03.1 +2.1
G21K IAML 03 16 23.5

comp=E,49nm,1.1s
G21K IAML 03 16 24.0

comp=N,41nm,1.1s
**A21K Barrow 4.57 300** Pn 03 15 02.1 +1.1
**I23K Minto, Yukon-K 4.75 207** Pn Pn 03 15 05.7 +2.1
I23K IAML 03 16 31.9

comp=N,35nm,1.5s
I23K IAML 03 16 40.0

comp=E,34nm,1.3s
**MDM Murphy Dome 4.77 201** Pn Pn 03 15 06.4 +2.5
MDM IAML 03 16 31.2

comp=N,23nm,0.6s
MDM IAML 03 16 36.8

comp=E,26nm,0.8s
**IL31 4.81 194** Pn Pn 03 15 07.3 +3.0
**EGAK Eagle 4.85 164** Pn Pn 03 15 07.2 +2.3
EGAK IAML 03 16 09.7

comp=E,29nm,0.8s
EGAK IAML 03 16 43.4

comp=E,31nm,1.2s
**J25K Salcha River, 4.88 186** Pn Pn 03 15 08.0 +2.6
J25K IAML 03 16 30.5

comp=E,26nm,0.9s
**F20K Avaraart Lake 4.90 246** Pn Pn 03 15 07.1 +1.5
F20K IAML 03 16 33.0

comp=N,31nm,1.3s
**J26L Joseph Creek 4.98 177** Pn Pn 03 15 09.0 +2.2
J26L IAML 03 16 35.1

comp=E,25nm,0.9s
J26L IAML 03 16 37.5

comp=N,21nm,0.8s
**CCB Clear Creek Bu 5.02 198** Pn Pn 03 15 10.1 +2.8
**H21K Melozitna Rive 5.02 225** Pn Pn 03 15 08.2 +0.8
H21K IAML 03 16 39.5

comp=E,31nm,1.3s
H21K IAML 03 16 40.4

comp=N,28nm,1.2s
**D19K Kuna River 5.08 266** Pn Pn 03 15 09.0 +0.8
**MLY Manley 5.10 213** Pn Pn 03 15 11.2 +2.8
**HDA Harding Lake 5.18 193** Pn Pn 03 15 11.1 +1.7
HDA IAML 03 16 39.2

comp=N,25nm,1.0s
HDA IAML 03 16 40.1

comp=E,22nm,0.8s
**E19K Redstone River 5.18 253** Pn Pn 03 15 08.9 -0.6
E19K IAML 03 16 46.7

comp=E,26nm,1.3s
E19K IAML 03 16 55.9

comp=N,26nm,1.2s
**I30M Mount Dempster 5.22 141** Pn Pn 03 15 12.4 +2.3
**WRH Wood River Hil 5.22 199** Pn Pn 03 15 12.9 +2.9
WRH IAML 03 16 42.9

comp=E,22nm,0.7s
WRH IAML 03 16 51.7

comp=N,17nm,1.4s
**NEA2 Nenana 5.23 203** Pn Pn 03 15 13.7 +3.5
NEA2 IAML 03 16 51.3

comp=E,16nm,1.1s
**C19K Lookout Ridge 5.46 274** Pn Pn 03 15 14.2 +0.9
**SCRK Sand Creek 5.50 179** Pn Pn 03 15 17.6 +3.6
**F19K Shaleruckik Mo 5.69 249** Pn Pn 03 15 17.7 +1.3
**DAWY Dawson 5.74 158** Pn Pn 03 15 20.4 +3.3
**J30M Hart River 5.79 144** Pn Pn 03 15 19.4 +1.4
**A19K Wainwright 5.87 285** 03 15 19.4 +0.6
**G19K Purcell Mounta 5.89 242** Pn Pn 03 15 19.7 +0.5
**BPAW Bear Paw Mtn. 6.00 210** Pn Pn 03 15 22.9 +2.2
**H19K Roundabout Mou 6.12 236** Pn Pn 03 15 24.7 +2.5
**C18K Utukok River 6.13 270** Pn Pn 03 15 22.8 +0.3
**K29M Barlow Dome 6.23 151** Pn Pn 03 15 26.8 +2.7
**RND Reindeer 6.34 199** Pn Pn 03 15 28.4 +2.8
**F18K Selawik 6.44 251** 03 15 28.1 +1.3
**L26K Log Cabin Wild 6.47 176** Pn Pn 03 15 30.4 +3.3
**BCAR Beaver Creek A 6.49 170** Pn Pn 03 15 30.6 +3.1
**L27K Beaver Creek, 6.49 170** Pn Pn 03 15 29.9 +2.4
**DHY Denali Highway 6.53 193** Pn Pn 03 15 32.5 +4.5
**G18K Tagagawik 6.54 244** Pn Pn 03 15 29.7 +1.6
**J20K Nowinta River 6.58 221** Pn Pn 03 15 30.0 +1.4
**A36M Sachs Harbour 6.77 59** Pn Pn 03 15 30.3 -0.9
**L29M L29M 6.83 156** Pn Pn 03 15 34.5 +2.4
**RDOG Red Dog Mine 6.92 267** Pn Pn 03 15 32.3 -1.0
**H18K Honhosa River 6.95 238** Pn Pn 03 15 34.4 +0.7
**F17K Baldwin Pennin 7.07 253** Pn Pn 03 15 35.3 0.0
**J19K Poorman 7.08 225** Pn Pn 03 15 37.1 +1.6
**M26K Nabesna, AK 7.10 175** Pn Pn 03 15 39.4 +3.5
**K20K Telida 7.27 217** Pn Pn 03 15 39.9 +1.7
**M29M Somme Creek 7.42 159** Pn Pn 03 15 42.8 +2.5
**C16K Lisburne Hills 7.70 271** Pn Pn 03 15 43.7 -0.3
**SCM Sheep Creek Mo 7.76 191** Pn Pn 03 15 48.6 +3.7
**N25K Chitina, Valde 7.88 181** Pn Pn 03 15 48.2 +1.6
**GLB Gilahina Butte 8.05 178** Pn Pn 03 15 52.6 +3.7
**SKT Skwentna 8.07 205** Pn Pn 03 15 52.4 +3.2
**J17K VABM Dome 8.48 231** Pn Pn 03 15 55.1 +0.4
**FARO Faro, Yukon 8.50 143** Pn Pn 03 15 56.8 +1.8
**N30M Aishikik Lake 8.55 156** Pn Pn 03 15 57.9 +2.1
**CTGM Chitina Glacie 8.61 170** Pn Pn 03 15 59.1 +2.5
**M19K Big River Lodg 8.64 214** Pn Pn 03 15 59.6 +2.7
**J16K Anvik River 8.99 234** Pn Pn 03 16 03.9 +2.1
**O30N Mendenhall 9.36 155** Pn Pn 03 16 09.3 +2.5
**J14K Nanvaranak Lak 10.28 239** Pn Pn 03 16 21.6 +2.4
**WRGLY Wrigley 10.38 117** Pn Pn 03 16 21.3 +0.7
**P33M Teslin, Yukon 10.45 147** Pn Pn 03 16 24.7 +3.0

*NEIC **13** 03:19:00.3±2.3, 69.65N±0.05×144.49W±0.06, h10km±8km, Error ellipse: s-maj=7.3km s-min=2.1km az=200.0*
**AEIC 13 03:19:00.2±2.9, 69.53N±0.06×144.3W±0.1, h18km±7km, ML2.7, ML2.9**/76(NEIC), **Error ellipse: s-maj=8.8km s-min=5.2km az=200.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **65** | Pg | Pb | 03 19 04.7 | -0.9 |
| C27K | | | | IAML | | 03 19 09.4 | |
| | comp=N,2μm,0.5s | | | | | | |
| C27K | | | | IAML | | 03 19 10.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.44** | **332** | | Pg | 03 19 06.1 | -3.2 |
| C26K | | | | | Sb | 03 19 17.0 | +1.2 |
| C26K | | | | IAML | | 03 19 20.5 | |
| | comp=E,1μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.76** | **255** | Pg | Pb | 03 19 14.9 | +0.1 |
| D25K | | | | Sg | Sb | 03 19 24.1 | -0.7 |
| **D27M** | **Malcolm River** | **1.22** | **102** | Pn | Pb | 03 19 23.0 | +0.3 |
| **C24K** | **Franklin Bluff** | **1.55** | **279** | Pn | Pn | 03 19 26.7 | -0.1 |
| C24K | | | | IAML | | 03 19 48.0 | |
| | comp=E,140nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **259** | Pn | Pn | 03 19 28.6 | +0.5 |
| D24K | | | | IAML | | 03 19 53.0 | |
| | comp=N,127nm,0.6s | | | | | | |
| D24K | | | | IAML | | 03 19 56.1 | |
| | comp=E,156nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.67** | **143** | Pn | Pb | 03 19 30.9 | +0.5 |
| E27K | | | | IAML | | 03 19 55.6 | |
| | comp=N,131nm,0.5s | | | | | | |
| E27K | | | | IAML | | 03 19 55.9 | |
| | comp=E,177nm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **178** | Pn | Pb | 03 19 34.4 | +1.1 |
| **E28M** | **Babbage River** | **1.95** | **116** | Pn | Pb | 03 19 35.3 | +0.2 |
| **F25K** | **Christian Rive** | **2.00** | **195** | Pn | Pb | 03 19 36.6 | +0.5 |
| F25K | | | | IAML | | 03 20 05.8 | |
| | comp=E,80nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.09** | **247** | Pn | Pb | 03 19 36.5 | -1.0 |
| TOLK | | | | IAML | | 03 20 11.0 | |
| | comp=E,91nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **2.11** | **228** | | Pn | 03 19 35.9 | +1.4 |
| **BMAR** | **Burnt Mountain** | **2.11** | **183** | Pn | Pb | 03 19 37.4 | -0.5 |
| **C23K** | **Itkillik River** | **2.22** | **281** | Pn | Pn | 03 19 35.9 | -0.1 |
| C23K | | | | IAML | | 03 20 15.9 | |
| | comp=N,72nm,0.7s | | | | | | |
| C23K | | | | IAML | | 03 20 22.9 | |
| | comp=E,81nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.41** | **215** | Pn | Pb | 03 19 41.9 | -1.1 |
| **E23K** | **Chandalar** | **2.43** | **235** | Pn | Pb | 03 19 41.6 | -1.7 |
| E23K | | | | IAML | | 03 20 24.6 | |
| | comp=E,52nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.52** | **138** | Pn | Pn | 03 19 42.5 | +2.3 |
| F28M | | | | IAML | | 03 20 25.2 | |
| | comp=N,51nm,0.6s | | | | | | |
| F28M | | | | IAML | | 03 20 26.4 | |
| | comp=E,66nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.58** | **113** | Pn | Pb | 03 19 44.7 | -1.2 |
| E29M | | | | IAML | | 03 20 27.3 | |
| | comp=E,45nm,0.5s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.60** | **175** | | Pb | 03 19 44.8 | -1.3 |
| **G27K** | **Doyon Strip** | **2.91** | **159** | Pn | Pn | 03 19 48.2 | +2.8 |
| **FYU** | **Fort Yukon** | **3.00** | **187** | Pn | Pn | 03 19 48.3 | +1.6 |
| FYU | | | | IAML | | 03 20 40.4 | |
| | comp=N,46nm,0.9s | | | | | | |
| FYU | | | | IAML | | 03 20 41.6 | |
| | comp=E,40nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.08** | **204** | Pn | Pn | 03 19 49.8 | +2.0 |
| G24K | | | | IAML | | 03 20 41.5 | |
| | comp=N,37nm,0.8s | | | | | | |
| G24K | | | | IAML | | 03 21 50.5 | |
| | comp=E,35nm,1.2s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.24** | **289** | Pn | Pn | 03 19 50.5 | +0.5 |
| B22K | | | | IAML | | 03 21 45.1 | |
| | comp=E,39nm,0.8s | | | | | | |
| B22K | | | | IAML | | 03 21 45.1 | |
| | comp=N,36nm,0.7s | | | | | | |
| **G29M** | **Pine Creek** | **3.52** | **135** | Pn | Pn | 03 19 55.6 | +1.7 |
| **H24K** | **Noodor Dome** | **3.95** | **202** | Pn | Pn | 03 20 01.9 | +2.1 |
| H24K | | | | IAML | | 03 22 23.5 | |
| | comp=N,18nm,0.8s | | | | | | |
| H24K | | | | IAML | | 03 22 29.8 | |
| | comp=E,19nm,1.3s | | | | | | |
| **H29M** | **Whitestone** | **4.01** | **143** | Pn | Pn | 03 20 03.0 | +2.3 |
| **PRP** | **Porcupine Dome** | **4.06** | **187** | Pn | Pn | 03 20 04.0 | +2.6 |
| PRP | | | | IAML | | 03 22 07.1 | |
| | comp=N,22nm,0.6s | | | | | | |
| PRP | | | | IAML | | 03 22 07.5 | |
| | comp=E,21nm,0.4s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.27** | **134** | Pn | Pn | 03 20 07.1 | +2.9 |
| **F31M** | **Tsiigehtchic** | **4.42** | **113** | Pn | Pn | 03 20 10.0 | +3.9 |
| F31M | | | | IAML | | 03 22 31.4 | |
| | comp=N,14nm,1.5s | | | | | | |
| F31M | | | | IAML | | 03 22 41.2 | |
| | comp=E,16nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **4.43** | **156** | Pn | Pn | 03 20 10.3 | +3.8 |
| **B20K** | **Meade River** | **4.49** | **282** | Pn | Pn | 03 20 09.0 | +1.9 |
| **POKR** | **Poker Plat Res** | **4.59** | **197** | Pn | Pn | 03 20 12.9 | +4.2 |
| **I29M** | **Ogilvie Camp,** | **4.78** | **148** | Pn | Pn | 03 20 12.9 | +1.7 |
| **I23K** | **Minto, Yukon-K** | **4.81** | **206** | Pn | Pn | 03 20 15.6 | +4.0 |
| **MDM** | **Murphy Dome** | **4.83** | **200** | Pn | Pn | 03 20 14.0 | +2.1 |
| **J26L** | **Joseph Creek** | **5.06** | **176** | Pn | Pn | 03 20 19.1 | +4.1 |
| **CCB** | **Clear Creek Bu** | **5.09** | **197** | Pn | Pn | 03 20 16.9 | +1.5 |
| CCB | | | | IAML | | 03 21 32.4 | |
| | comp=N,6.4nm,1.3s | | | | | | |
| CCB | | | | IAML | | 03 22 55.8 | |
| | comp=E,8.2nm,1.3s | | | | | | |
| **HDA** | **Harding Lake** | **5.25** | **193** | Pn | Pn | 03 20 19.9 | +2.3 |
| **WRH** | **Wood River Hil** | **5.29** | **198** | Pn | Pn | 03 20 21.4 | +3.3 |
| WRH | | | | IAML | | 03 23 13.6 | |
| | comp=N,6.9nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.30** | **141** | Pn | Pn | 03 20 20.9 | +2.5 |
| **C19K** | **Lookout Ridge** | **5.43** | **273** | Pn | Pn | 03 20 23.7 | +3.6 |
| **SCRK** | **Sand Creek** | **5.58** | **179** | Pn | Pn | 03 20 26.3 | +4.0 |
| **DAWY** | **Dawson** | **5.82** | **158** | Pn | Pn | 03 20 29.5 | +4.0 |
| **J30M** | **Hart River** | **5.87** | **144** | Pn | Pn | 03 20 28.9 | +2.6 |
| **C18K** | **Utukok River** | **6.11** | **270** | Pn | Pn | 03 20 31.6 | +2.2 |
| **DHY** | **Denali Highway** | **6.60** | **192** | Pn | Pn | 03 20 40.2 | +4.0 |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | Pn | Pn | 03 20 39.0 | +0.8 |

*CATAC **13** 03:25:27.3±0.6, 12.55N×88.15W, h33km±7km, ML3.6*
*SNET **13** 03:25:27.4±1.4, 12.58N×88.17W, h29km, ML3.7*
**ISC 13 03:25:27.3±1.5, 12.55N±0.06×88.17W±0.04, h30km±12km, n52, σ0.64/79, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **INTP** | **Intipuca** | **0.66** | **10** | *eP* | **Pn** | **03 25 40.5** | **-0.1** |
| INTP | | | | *eS* | **Sn** | **03 25 50.6** | **+0.7** |
| **JUCU** | **Jucuarın** | **0.71** | **354** | *eP* | **Pn** | **03 25 41.1** | **-0.2** |
| JUCU | | | | *eS* | **Sn** | **03 25 51.5** | **+0.2** |
| **JUCU** | **Jucuarın** | **0.71** | **354** | *iP* | **Pn** | **03 25 41.2** | **-0.2** |
| JUCU | | | | *iS* | **Sn** | **03 25 51.2** | **-0.1** |
| JUCU | | | | IAML | | 03 25 53.0 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **0.80** | **24** | *eP* | **Pb** | **03 25 42.6** | **-0.1** |
| CNCH | | | | *eS* | **Sn** | **03 25 54.0** | **+0.3** |
| **CNCH** | **Conchagua** | **0.80** | **24** | *iP* | **Pb** | **03 25 42.7** | **0.0** |
| CNCH | | | | *iS* | **Sn** | **03 25 53.9** | **+0.3** |
| CNCH | | | | IAML | | 03 25 54.8 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **LCND** | **La Caada** | **0.81** | **20** | *eP* | **Pb** | **03 25 42.5** | **-0.2** |
| LCND | | | | *eP* | **Pb** | **03 25 42.5** | **-0.2** |
| LCND | | | | *eS* | **Sn** | **03 25 53.5** | **-0.1** |
| **LCND** | **La Caada** | **0.81** | **20** | *iP* | **Pb** | **03 25 42.6** | **-0.2** |
| LCND | | | | *iP* | **Pb** | **03 25 42.6** | **-0.2** |
| LCND | | | | *iS* | **Sn** | **03 25 54.3** | **+0.6** |
| LCND | | | | IAML | | 03 25 58.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| LCND | | | | IAML | | 03 28 11.6 | |
| | comp=Z,13μm,1.0s | | | | | | |
| **LCY** | **Lacayo** | **0.88** | **352** | *eP* | **Pb** | **03 25 43.8** | **-0.3** |
| LCY | | | | *eS* | **Sb** | **03 25 55.9** | **+0.3** |
| **VSM** | **San Miguel** | **0.88** | **353** | *eP* | **Pb** | **03 25 44.0** | **-0.2** |
| **RANC** | **El Ranchito** | **0.89** | **353** | *eP* | **Pn** | **03 25 43.7** | **-0.2** |
| **RANC** | **El Ranchito** | **0.89** | **353** | *iP* | **Pn** | **03 25 43.8** | **-0.2** |
| RANC | | | | *iS* | **Sb** | **03 25 56.4** | **+0.5** |
| RANC | | | | IAML | | 03 26 00.5 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **0.89** | **356** | *eP* | **Pb** | **03 25 43.9** | **-0.4** |
| BLLM | | | | *eS* | **Sb** | **03 25 56.1** | **+0.2** |
| **CNRM** | **Centro Naciona** | **0.92** | **0** | *eP* | **Pn** | **03 25 44.0** | **-0.2** |
| **CNRM** | **Centro Naciona** | **0.92** | **0** | *iP* | **Pb** | **03 25 44.5** | **-0.3** |
| CNRM | | | | *iS* | **Sb** | **03 25 57.4** | **+0.7** |
| CNRM | | | | IAML | | 03 25 59.4 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **PACA** | **Pacayal** | **0.93** | **351** | *eP* | **Pn** | **03 25 44.5** | **0.0** |
| **PACA** | **Pacayal** | **0.93** | **351** | *iP* | **Pb** | **03 25 44.6** | **-0.4** |
| PACA | | | | IAML | | 03 26 01.7 | |
| | comp=Z,10μm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **1.00** | **341** | *eP* | **Pn** | **03 25 45.3** | **-0.2** |
| TECA | | | | *eS* | **Sb** | **03 25 59.0** | **0.0** |
| **CRIN** | **San Cristobal** | **1.10** | **82** | *iP* | **Pn** | **03 25 46.8** | **0.0** |
| CRIN | | | | IAML | | 03 26 05.5 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **1.14** | **341** | *eP* | **Pn** | **03 25 47.3** | **+0.1** |
| **TECO** | **Alcaldia de Te** | **1.15** | **329** | *eP* | **Pn** | **03 25 46.9** | **-0.5** |
| TECO | | | | *eS* | **Sn** | **03 26 01.7** | **-0.5** |
| **TECO** | **Alcaldia de Te** | **1.15** | **329** | *iP* | **Pn** | **03 25 46.9** | **-0.5** |
| TECO | | | | *iS* | **Sn** | **03 26 01.6** | **-0.6** |
| TECO | | | | IAML | | 03 26 05.3 | |
| | comp=Z,580nm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **1.24** | **331** | *eP* | **Pn** | **03 25 48.3** | **-0.3** |
| **UESV** | **Universidad de** | **1.24** | **331** | *iP* | **Pn** | **03 25 48.5** | **-0.2** |
| UESV | | | | IAML | | 03 25 49.3 | |
| | comp=Z,680nm,1.0s | | | | | | |
| UESV | | | | *iS* | **Sn** | **03 26 04.3** | **-0.1** |
| **SCLA** | **Alcaldia de Sa** | **1.27** | **335** | *eP* | **Pn** | **03 25 49.3** | **+0.2** |
| **SCLA** | **Alcaldia de Sa** | **1.27** | **335** | *iP* | **Pn** | **03 25 49.4** | **+0.3** |
| SCLA | | | | *iS* | **Sb** | **03 26 06.2** | **-0.5** |
| SCLA | | | | IAML | | 03 26 08.7 | |
| | comp=Z,530nm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **1.27** | **327** | *eP* | **Pn** | **03 25 48.9** | **-0.2** |
| COEG | | | | *eS* | **Sn** | **03 26 05.0** | **-0.2** |
| **COEG** | **Centro de Oper** | **1.27** | **327** | *iP* | **Pn** | **03 25 49.1** | **0.0** |
| COEG | | | | *iS* | **Sn** | **03 26 04.8** | **-0.5** |
| COEG | | | | IAML | | 03 26 07.4 | |
| | comp=Z,480nm,1.0s | | | | | | |
| **QUEN** | **Al S del Volca** | **1.29** | **88** | *iP* | **Pn** | **03 25 49.2** | **-0.1** |
| QUEN | | | | IAML | | 03 26 08.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LFRS** | **El Faro** | **1.38** | **321** | *eP* | **Pn** | **03 25 50.3** | **-0.4** |
| LFRS | | | | *eS* | **Sn** | **03 26 08.0** | **+0.1** |
| **PAVA** | **Las Pavas** | **1.38** | **327** | *eP* | **Pn** | **03 25 51.0** | **+0.3** |
| PAVA | | | | *eS* | **Sn** | **03 26 08.0** | **0.0** |
| **ROCN** | **Rota Cerro Neg** | **1.39** | **91** | *iP* | **Pn** | **03 25 49.2** | **-1.6** |
| ROCN | | | | *iS* | **Sn** | **03 26 07.6** | **-0.6** |
| ROCN | | | | IAML | | 03 26 17.2 | |
| | comp=Z,420nm,1.0s | | | | | | |
| **CNGA** | **Al SSO del Vol** | **1.44** | **92** | *iP* | **Pn** | **03 25 48.6** | **-2.8** |
| CNGA | | | | IAML | | 03 26 15.1 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **ILCN** | **San Idelfonso** | **1.44** | **89** | *iP* | **Pn** | **03 25 50.7** | **-0.6** |
| ILCN | | | | *iS* | **Sn** | **03 26 08.7** | **-0.5** |
| ILCN | | | | IAML | | 03 26 12.6 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **1.44** | **92** | *iP* | **Pn** | **03 25 51.0** | **-0.4** |
| CNGN | | | | IAML | | 03 26 11.7 | |
| | comp=Z,740nm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **1.46** | **318** | *eP* | **Pn** | **03 25 51.4** | **-0.5** |
| LOMA | | | | *eS* | **Sn** | **03 26 10.0** | **-0.1** |
| **LOMA** | **Loma Larga** | **1.46** | **318** | *iP* | **Pn** | **03 25 51.7** | **-0.1** |
| LOMA | | | | IAML | | 03 26 12.0 | |
| | comp=Z,790nm,1.0s | | | | | | |
| **AEIL** | **Aeropuerto Ilo** | **1.47** | **321** | *eP* | **Pn** | **03 25 51.9** | **0.0** |
| **COPN** | **Copaltepe** | **1.58** | **103** | *iP* | **Pn** | **03 25 53.2** | **-0.2** |
| COPN | | | | IAML | | 03 26 15.3 | |
| | comp=Z,370nm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **1.61** | **316** | *eP* | **Pn** | **03 25 53.6** | **-0.2** |
| **PMON** | **Piamonte** | **1.61** | **316** | *iP* | **Pn** | **03 25 53.9** | **+0.1** |
| PMON | | | | IAML | | 03 26 21.7 | |
| | comp=Z,700nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.66** | **312** | *eP* | **Pn** | **03 25 54.1** | **-0.5** |
| **JAYA** | **Jayaque - finc** | **1.66** | **312** | *iP* | **Pn** | **03 25 54.5** | **-0.1** |
| JAYA | | | | IAML | | 03 26 20.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **1.74** | **30** | *iP* | **Pn** | **03 25 56.6** | **+1.0** |
| TGUH | | | | IAML | | 03 26 23.6 | |
| | comp=Z,640nm,1.0s | | | | | | |
| **SAPS** | **Ciudad Sandino** | **1.77** | **102** | *iP* | **Pn** | **03 25 55.7** | **-0.2** |
| SAPS | | | | *iS* | **Sn** | **03 26 16.6** | **-0.8** |
| SAPS | | | | IAML | | 03 26 21.4 | |
| | comp=Z,890nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **1.83** | **74** | *iP* | **Pn** | **03 25 56.4** | **-0.5** |
| LIMN | | | | IAML | | 03 26 24.7 | |
| | comp=Z,250nm,1.0s | | | | | | |
| **YUSH** | **Yuscaran** | **1.91** | **43** | *eP* | **Pn** | **03 25 57.9** | **0.0** |
| **HUEN** | | **1.96** | **96** | *iP* | **Pn** | **03 25 58.2** | **-0.4** |
| HUEN | | | | *iS* | **Sn** | **03 26 21.8** | **-0.4** |
| HUEN | | | | IAML | | 03 26 23.1 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **2.07** | **311** | *iP* | **Pn** | **03 26 00.2** | **0.0** |
| NUBE | | | | IAML | | 03 26 27.4 | |
| | comp=Z,310nm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **2.17** | **328** | *eP* | **Pn** | **03 26 01.8** | **+0.1** |
| **MTO3** | **Montecristo** | **2.17** | **328** | *iP* | **Pn** | **03 26 01.8** | **+0.1** |
| MTO3 | | | | IAML | | 03 26 32.3 | |
| | comp=Z,61nm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.45** | **92** | *iP* | **Pn** | **03 26 04.6** | **-0.6** |
| BOAB | | | | IAML | | 03 26 24.2 | |
| | comp=Z,69nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **4.95** | **124** | *iP* | **Pn** | **03 26 43.1** | **+3.3** |

*NEIC **13** 03:37:54.2±1.6, 69.62N±0.06×144.46W±0.07, h2km±9km, Error ellipse: s-maj=8.7km s-min=3.4km az=182.0*
**AEIC 13 03:37:53.0±2.0, 69.50N±0.06×144.52W±0.06, h1km±7km, ML2.7, ML2.9**/108(NEIC), **Error ellipse: s-maj=8.6km s-min=3.2km az=184.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.31** | **65** | Pg | Pg | 03 37 59.3 | +0.3 |
| C27K | | | | Sg | Sg | 03 38 03.8 | +0.7 |
| C27K | | | | IAML | | 03 38 04.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| C27K | | | | IAML | | 03 38 06.3 | |
| | comp=E,1μm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.68** | **256** | Pg | Pg | 03 38 05.9 | -0.1 |
| D25K | | | | | Sb | 03 38 16.4 | -1.2 |
| **D27M** | **Malcolm River** | **1.29** | **100** | Pg | Pg | 03 38 17.6 | -0.1 |
| D27M | | | | Sg | Sb | 03 38 34.7 | -0.4 |
| D27M | | | | IAML | | 03 38 40.8 | |

| | | | | | |
|---|---|---|---|---|---|
| | comp=N,174nm,0.3s | | | | |
| **C24K** | **Franklin Bluff** | **1.48 281** | Pn | Pg | 03 38 21.6 +0.3 |
| **D24K** | **Happy Valley** | **1.56 259** | Pn | Pg | 03 38 23.4 +0.4 |
| D24K | | | IAML | | 03 38 49.9 |
| | comp=E,204nm,0.7s | | | | |
| **E27K** | **Coleen River** | **1.69 140** | Pn | Pg | 03 38 26.1 +0.7 |
| **F26K** | **Sheenjek River** | **1.81 175** | Pn | Pg | 03 38 27.8 0.0 |
| **F25K** | **Christian Rive** | **1.96 193** | Pn | Pg | 03 38 30.4 0.0 |
| F25K | | | IAML | | 03 39 02.8 |
| | comp=N,96nm,0.8s | | | | |
| **E28M** | **Babbage River** | **2.00 114** | Pn | Pn | 03 38 28.7 +0.7 |
| **TOLK** | **Toolik Lake Re** | **2.01 247** | Pn | Pb | 03 38 30.5 +0.1 |
| TOLK | | | IAML | | 03 39 05.3 |
| | comp=E,71nm,0.7s | | | | |
| TOLK | | | IAML | | 03 39 12.5 |
| | comp=N,71nm,1.1s | | | | |
| **D28M** | **Stokes Point** | **2.05 92** | | Pb | 03 38 31.2 +0.1 |
| D28M | | | IAML | | 03 39 08.5 |
| | comp=N,105nm,0.6s | | | | |
| **BMAR** | **Burnt Mountain** | **2.08 181** | Pn | Pg | 03 38 32.6 -0.2 |
| **C23K** | **Itkillik River** | **2.15 282** | Pn | Pb | 03 38 31.6 -1.2 |
| **D23K** | **Nanushuk River** | **2.26 259** | Pn | Pb | 03 38 33.9 -0.7 |
| D23K | | | IAML | | 03 39 26.6 |
| | comp=E,61nm,0.7s | | | | |
| **F24K** | **Squaw Lake** | **2.34 214** | Pn | Pb | 03 38 34.5 -1.5 |
| **E23K** | **Chandalar** | **2.35 234** | Pn | Pb | 03 38 35.4 -0.8 |
| E23K | | | IAML | | 03 39 15.9 |
| | comp=N,55nm,0.8s | | | | |
| **F28M** | **Old Crow** | **2.55 136** | Pn | Pn | 03 38 37.2 +1.7 |
| **G26K** | **Porcupine Rive** | **2.57 174** | | Pn | 03 38 37.8 +2.0 |
| **E29M** | **Blow River** | **2.64 112** | Pn | Pn | 03 38 36.1 -0.6 |
| E29M | | | IAML | | 03 39 21.5 |
| | comp=N,44nm,0.6s | | | | |
| **G25K** | **Bearman Lake** | **2.81 193** | | Pn | 03 38 40.6 +1.6 |
| **G27K** | **Doyon Strip** | **2.91 157** | Pn | Pn | 03 38 42.1 +1.7 |
| **FYU** | **Fort Yukon** | **2.96 186** | Pn | Pb | 03 38 44.1 -2.3 |
| FYU | | | IAML | | 03 39 38.1 |
| | comp=E,48nm,0.8s | | | | |
| **D22K** | **Ayikyak River** | **2.98 262** | Pn | Pn | 03 38 43.3 +1.9 |
| **E22K** | **Anaktuvuk Pass** | **2.98 246** | Pn | Pn | 03 38 42.5 +1.0 |
| **G24K** | **Hadweenzic Riv** | **3.02 203** | Pn | Pn | 03 38 43.5 +1.5 |
| G24K | | | IAML | | 03 39 38.9 |
| | comp=E,39nm,1.3s | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19 290** | Pn | Pn | 03 38 45.4 +1.2 |
| B22K | | | IAML | | 03 39 50.8 |
| | comp=N,42nm,0.8s | | | | |
| **F22K** | **John River** | **3.45 238** | | Pn | 03 38 50.4 +2.5 |
| **H27K** | **Steamboat Moun** | **3.47 160** | | Pn | 03 38 50.8 +2.6 |
| **G23K** | **Bananza Creek** | **3.47 219** | Pn | Pn | 03 38 51.7 +3.5 |
| G23K | | | IAML | | 03 39 52.6 |
| | comp=E,33nm,1.2s | | | | |
| G23K | | | IAML | | 03 39 58.0 |
| | comp=N,26nm,1.2s | | | | |
| **B21K** | **Ikpikpuk River** | **3.54 277** | Pn | Pn | 03 38 49.6 +0.5 |
| B21K | | | IAML | | 03 39 35.2 |
| | comp=E,32nm,1.2s | | | | |
| B21K | | | IAML | | 03 40 08.9 |
| | comp=N,31nm,1.5s | | | | |
| **G29M** | **Pine Creek** | **3.55 134** | Pn | Pn | 03 38 50.7 +1.4 |
| G29M | | | IAML | | 03 40 12.2 |
| | comp=N,31nm,0.9s | | | | |
| **E21K** | **Killik River** | **3.57 257** | | Pn | 03 38 51.3 +1.8 |
| **E21K** | **Killik River** | **3.57 257** | IAML | | 03 39 56.7 |
| | comp=N,30nm,0.8s | | | | |
| E21K | | | IAML | | 03 40 02.3 |
| | comp=E,21nm,0.9s | | | | |
| **H24K** | **Noodor Dome** | **3.89 201** | Pn | Pn | 03 38 55.5 +1.5 |
| H24K | | | IAML | | 03 40 03.0 |
| | comp=N,15nm,0.9s | | | | |
| H24K | | | IAML | | 03 40 05.7 |
| | comp=E,16nm,0.8s | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.99 125** | Pn | Pn | 03 38 56.2 +0.9 |
| **PRP** | **Porcupine Dome** | **4.02 186** | Pn | Pn | 03 38 59.8 +4.0 |
| PRP | | | IAML | | 03 40 11.8 |
| | comp=N,16nm,0.8s | | | | |
| **F21K** | **Alatna River** | **4.03 240** | Pn | Pn | 03 38 57.6 +1.8 |
| F21K | | | IAML | | 03 40 07.8 |
| | comp=N,17nm,0.8s | | | | |
| F21K | | | IAML | | 03 41 35.6 |
| | comp=E,16nm,0.7s | | | | |
| **H29M** | **Whitestone** | **4.03 142** | Pn | Pn | 03 38 58.0 +2.1 |
| H29M | | | IAML | | 03 40 18.5 |
| | comp=N,18nm,0.8s | | | | |
| H29M | | | IAML | | 03 40 21.8 |
| | comp=E,15nm,0.8s | | | | |
| **I27K** | **Kandik River** | **4.07 163** | | Pn | 03 38 59.1 +2.7 |
| **INK** | **Inuvik** | **4.15 102** | Pn | Pn | 03 38 58.9 +1.4 |
| **H23K** | **Yukon River** | **4.15 210** | Pn | Pn | 03 38 59.9 +2.3 |
| H23K | | | IAML | | 03 40 10.5 |
| | comp=N,19nm,1.1s | | | | |
| H23K | | | IAML | | 03 40 13.1 |
| | comp=E,20nm,0.9s | | | | |
| **EPYK** | **Eagle Plains** | **4.30 133** | Pn | Pn | 03 39 00.1 +0.5 |
| **D20K** | **Etivluk River** | **4.40 265** | | Pn | 03 39 02.7 +1.8 |
| **B20K** | **Meade River** | **4.42 283** | Pn | Pn | 03 39 01.6 +0.4 |
| **I28M** | **Miner Creek** | **4.43 154** | Pn | Pn | 03 39 03.2 +1.8 |
| I28M | | | IAML | | 03 39 58.8 |
| | comp=E,11nm,0.7s | | | | |
| I28M | | | IAML | | 03 40 06.5 |
| | comp=N,11nm,0.5s | | | | |
| **F31M** | **Tsiigehtchic** | **4.47 112** | Pn | Pn | 03 39 03.5 +1.6 |
| F31M | | | IAML | | 03 40 21.8 |
| | comp=E,12nm,0.8s | | | | |
| F31M | | | IAML | | 03 40 25.7 |
| | comp=N,11nm,1.3s | | | | |
| **G21K** | **Allakaket** | **4.51 233** | Pn | Pn | 03 39 05.6 +3.1 |
| **G31M** | **Satah River** | **4.61 119** | Pn | Pn | 03 39 05.4 +1.6 |
| G31M | | | IAML | | 03 40 42.4 |
| | comp=E,11nm,1.1s | | | | |
| G31M | | | IAML | | 03 42 07.2 |
| | comp=N,13nm,1.5s | | | | |
| **I23K** | **Minto, Yukon-K** | **4.75 205** | Pn | Pn | 03 39 07.4 +1.7 |
| I23K | | | IAML | | 03 40 31.2 |
| | comp=E,9.1nm,0.8s | | | | |
| I23K | | | IAML | | 03 40 38.1 |
| | comp=N,12nm,1.4s | | | | |
| **MDM** | **Murphy Dome** | **4.78 199** | Pn | Pn | 03 39 08.2 +2.1 |
| MDM | | | IAML | | 03 40 31.3 |
| | comp=N,10nm,1.5s | | | | |
| MDM | | | IAML | | 03 40 35.5 |
| | comp=E,9.8nm,0.8s | | | | |
| **I29M** | **Ogilvie Camp,** | **4.79 147** | Pn | Pn | 03 39 09.0 +2.7 |
| I29M | | | IAML | | 03 41 22.5 |
| | comp=E,13nm,0.2s | | | | |
| **F20K** | **Avaraart Lake** | **4.83 245** | Pn | Pn | 03 39 07.5 +0.7 |
| F20K | | | IAML | | 03 42 16.5 |
| | comp=N,11nm,0.9s | | | | |
| F20K | | | IAML | | 03 42 16.6 |
| | comp=E,12nm,0.8s | | | | |
| **IL31** | | **4.83 192** | Pn | Pn | 03 39 08.3 +1.5 |
| **ILAR** | **Eielson Array** | **4.83 192** | Pn | Pn | 03 39 11.0 +4.1 |
| **J25K** | **Salcha River,** | **4.92 184** | Pn | Pn | 03 39 11.7 +3.6 |
| J25K | | | IAML | | 03 40 41.9 |
| | comp=E,11nm,1.3s | | | | |
| **IMAR** | **Indian Mountai** | **4.97 229** | Pn | Pn | 03 39 09.9 +1.2 |
| **H21K** | **Melozitna Rive** | **4.99 223** | Pn | Pn | 03 39 11.5 +2.5 |
| H21K | | | IAML | | 03 40 47.2 |
| | comp=E,10.0nm,1.1s | | | | |
| H21K | | | IAML | | 03 40 53.5 |
| | comp=N,6.5nm,1.2s | | | | |
| **J26L** | **Joseph Creek** | **5.03 175** | Pn | Pn | 03 39 13.3 +3.7 |
| J26L | | | IAML | | 03 40 20.2 |
| | comp=N,6.1nm,0.8s | | | | |
| J26L | | | IAML | | 03 42 30.1 |
| | comp=E,10nm,0.8s | | | | |
| **CCB** | **Clear Creek Bu** | **5.04 196** | Pn | Pn | 03 39 12.6 +3.0 |
| CCB | | | IAML | | 03 41 27.1 |
| | comp=N,6.1nm,0.7s | | | | |
| CCB | | | IAML | | 03 42 19.0 |
| | comp=E,6.0nm,0.6s | | | | |
| **MLY** | **Manley** | **5.09 211** | Pn | Pn | 03 39 12.2 +1.8 |
| MLY | | | IAML | | 03 42 22.7 |
| | comp=E,5.7nm,1.0s | | | | |
| **E19K** | **Redstone River** | **5.11 252** | Pn | Pn | 03 39 11.5 +0.9 |
| **HDA** | **Harding Lake** | **5.20 192** | Pn | Pn | 03 39 13.7 +1.9 |
| **WRH** | **Wood River Hil** | **5.24 197** | Pn | Pn | 03 39 15.0 +2.7 |
| WRH | | | IAML | | 03 41 25.2 |
| | comp=N,7.3nm,1.4s | | | | |
| WRH | | | IAML | | 03 42 24.0 |
| | comp=E,5.8nm,0.9s | | | | |
| **I30M** | **Mount Dempster** | **5.32 140** | Pn | Pn | 03 39 16.0 +2.3 |
| **C19K** | **Lookout Ridge** | **5.36 273** | Pn | Pn | 03 39 15.6 +1.5 |
| **SCRK** | **Sand Creek** | **5.55 178** | Pn | Pn | 03 39 19.8 +3.0 |
| **F19K** | **Shaleruckik Mo** | **5.62 248** | Pn | Pn | 03 39 19.4 +1.9 |
| **DAWY** | **Dawson** | **5.82 157** | Pn | Pn | 03 39 23.4 +2.9 |
| **G19K** | **Purcell Mounta** | **5.82 241** | Pn | Pn | 03 39 22.7 +2.2 |
| **J30M** | **Hart River** | **5.89 143** | Pn | Pn | 03 39 23.6 +2.2 |
| **BPAW** | **Bear Paw Mtn.** | **5.99 208** | Pn | Pn | 03 39 25.1 +2.4 |
| **C18K** | **Utukok River** | **6.03 270** | Pn | Pn | 03 39 24.1 +0.8 |
| **K29M** | **Barlow Dome** | **6.32 151** | Pn | Pn | 03 39 29.9 +2.6 |
| **L26K** | **Log Cabin Wild** | **6.52 175** | Pn | Pn | 03 39 33.3 +3.3 |
| **J20K** | **Nowinta River** | **6.54 220** | Pn | Pn | 03 39 34.9 +4.5 |
| **DHY** | **Denali Highway** | **6.55 191** | Pn | Pn | 03 39 35.5 +4.9 |
| **H18K** | **Honhosa River** | **6.89 237** | Pn | Pn | 03 39 36.9 +1.8 |
| **L29M** | **L29M** | **6.91 155** | Pn | Pn | 03 39 37.3 +1.9 |
| **J19K** | **Poorman** | **7.05 224** | Pn | Pn | 03 39 40.2 +3.0 |
| **C36M** | **Paulatuk** | **7.20 82** | Pn | Pn | 03 39 36.9 -2.4 |
| **M29M** | **Somme Creek** | **7.50 158** | Pn | Pn | 03 39 45.8 +2.2 |
| **N30M** | **Aishikik Lake** | **8.63 156** | Pn | Pn | 03 40 02.3 +3.3 |

*AEIC* ***13*** *03:39:57.9±2.5,69°.47N±0°.03×144°.3W±0°.1,h15km±7km, ML2.9,ML3.0/56(NEIC),Error ellipse: s-maj=5.4km s-min=3.3km az=111.0*
*NEIC* ***13*** *03:39:58.0±1.9,69°.51N±0°.03×144°.4W±0°.1,h10km±2km, Error ellipse: s-maj=6.2km s-min=4.0km az=291.0*
*ANF* ***13*** *03:39:59.6±0.1,69°.54N×144°.34W,h2km,Error ellipse: s-maj=1.5km s-min=1.1km az=9.0*

**ISC 13 03:39:59.2±0.7,69°.51N±0°.02×144°.35W±0°.02,h10km, n116,σ1§97/139,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.25** | **62** | Pg | **Pg** | **03 40 03.3** | **-1.1** |
| C27K | | | | IAML | | 03 40 09.1 | |
| | comp=E,2μm,0.3s | | | | | | |
| C27K | | | | IAML | | 03 40 09.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.25** | **62** | P | **Pg** | **03 40 03.8** | **-0.6** |
| | baz=245 | | | | | | |
| C27K | | | | S | **Sg** | **03 40 06.8** | **-1.1** |
| | baz=245 | | | | | | |
| **C26K** | **Camden Bay** | **0.46** | **335** | | **Pb** | **03 40 07.8** | **-1.5** |
| C26K | | | | | **Sg** | **03 40 12.9** | **-1.1** |
| **C26K** | **Camden Bay** | **0.46** | **335** | P | **Pb** | **03 40 08.1** | **-1.2** |
| | baz=157 | | | | | | |
| C26K | | | | S | **Sg** | **03 40 14.0** | **-0.1** |
| | baz=157 | | | | | | |
| **D25K** | **Kavik River** | **0.74** | **256** | Pg | **Pg** | **03 40 12.0** | **-1.5** |
| D25K | | | | Sg | **Sg** | **03 40 22.1** | **-1.1** |
| **D25K** | **Kavik River** | **0.74** | **256** | S | **Sb** | **03 40 23.2** | **-1.2** |
| | baz=74 | | | | | | |
| **D27M** | **Malcolm River** | **1.23** | **101** | | **Pg** | **03 40 21.5** | **-1.3** |
| D27M | | | | IAML | | 03 40 46.1 | |
| | comp=N,253nm,0.8s | | | | | | |
| D27M | | | | IAML | | 03 40 47.7 | |
| | comp=E,232nm,0.5s | | | | | | |
| **D27M** | **Malcolm River** | **1.23** | **101** | S | **Sn** | **03 40 39.8** | **+0.6** |
| | baz=284 | | | | | | |
| **C24K** | **Franklin Bluff** | **1.54** | **280** | Pn | **Pg** | **03 40 27.4** | **-1.3** |
| C24K | | | | IAML | | 03 40 53.1 | |
| | comp=N,251nm,1.0s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.54** | **280** | P | **Pg** | **03 40 27.7** | **-1.0** |
| | baz=96 | | | | | | |
| **D24K** | **Happy Valley** | **1.63** | **259** | P | **Pg** | **03 40 29.3** | **-1.1** |
| | baz=75 | | | | | | |
| D24K | | | | Sb | **Sg** | **03 40 53.0** | **+1.6** |
| | baz=75 | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **142** | Pn | **Pn** | **03 40 27.5** | **-0.9** |
| E27K | | | | IAML | | 03 40 55.1 | |
| | comp=N,132nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **142** | P | **Pg** | **03 40 30.3** | **-0.8** |
| | baz=324,SNR=15 | | | | | | |
| E27K | | | | S | **Sg** | **03 40 53.4** | **+0.8** |
| | baz=324 | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **178** | Pn | **Pn** | **03 40 28.9** | **-1.8** |
| F26K | | | | IAML | | 03 41 00.7 | |
| | comp=N,156nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **178** | P | **Pg** | **03 40 32.3** | **-1.9** |
| | baz=357,SNR=18 | | | | | | |
| F26K | | | | S | **Sg** | **03 40 57.3** | **-0.5** |
| | baz=357 | | | | | | |
| **E28M** | **Babbage River** | **1.96** | **115** | Pn | **Pg** | **03 40 34.5** | **-2.1** |
| **E28M** | **Babbage River** | **1.96** | **115** | P | **Pg** | **03 40 34.3** | **-2.3** |
| | baz=300 | | | | | | |
| E28M | | | | S | **Sg** | **03 41 00.2** | **-1.7** |
| | baz=300 | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **194** | S | **Sg** | **03 41 00.7** | **-2.1** |
| | baz=13 | | | | | | |
| **D28M** | **Stokes Point** | **1.99** | **93** | P | **Pb** | **03 40 34.8** | **-0.7** |
| | baz=278,SNR=24 | | | | | | |
| D28M | | | | Sg | **Sg** | **03 41 05.5** | **+2.4** |
| | baz=278 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.07** | **247** | S | **Sg** | **03 41 03.3** | **-2.3** |
| | baz=62 | | | | | | |
| TOLK | | | | Sb | **Sb** | **03 41 06.4** | **+3.8** |
| | baz=62 | | | | | | |
| **E24K** | **Your Creek** | **2.08** | **228** | Sb | **Sg** | **03 41 05.9** | **-0.2** |
| | baz=44 | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.09** | **182** | Pn | **Pn** | **03 40 32.5** | **-1.8** |
| **C23K** | **Itkillik River** | **2.21** | **281** | Pn | **Pn** | **03 40 32.9** | **-3.1** |
| **F24K** | **Squaw Lake** | **2.39** | **215** | Pn | **Pn** | **03 40 38.0** | **-0.4** |
| **E23K** | **Chandalar** | **2.41** | **235** | Pn | **Pn** | **03 40 35.5** | **-3.2** |
| E23K | | | | IAML | | 03 41 20.2 | |
| | comp=N,66nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.41** | **235** | Sb | **Sg** | **03 41 15.7** | **-0.7** |
| | baz=50 | | | | | | |
| **F28M** | **Old Crow** | **2.52** | **137** | Pn | **Pb** | **03 40 41.5** | **-3.0** |
| F28M | | | | IAML | | 03 41 22.8 | |
| | comp=E,61nm,0.5s | | | | | | |
| F28M | | | | IAML | | 03 41 25.1 | |
| | comp=N,68nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.52** | **137** | P | **Pb** | **03 40 42.0** | **-2.5** |
| | baz=321,SNR=21 | | | | | | |
| F28M | | | | S | **Sb** | **03 41 13.8** | **-1.6** |
| | baz=321 | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **175** | P | **Pb** | **03 40 43.0** | **-2.5** |
| | baz=355,SNR=5.1 | | | | | | |
| G26K | | | | Sb | **Sg** | **03 41 21.6** | **-0.4** |
| | baz=355 | | | | | | |
| **E29M** | **Blow River** | **2.59** | **113** | Pn | **Pn** | **03 40 40.8** | **-0.3** |
| E29M | | | | IAML | | 03 41 32.0 | |
| | comp=N,76nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.59** | **113** | Pb | **Pg** | **03 40 46.5** | **-2.3** |
| | baz=298 | | | | | | |
| E29M | | | | S | **Sb** | **03 41 15.9** | **-1.5** |
| | baz=298 | | | | | | |
| **G25K** | **Bearman Lake** | **2.83** | **194** | S | **Sb** | **03 41 21.6** | **-3.0** |
| | baz=12 | | | | | | |
| **G27K** | **Doyon Strip** | **2.90** | **158** | S | **Sb** | **03 41 23.8** | **-2.5** |
| | baz=340 | | | | | | |
| **FYU** | **Fort Yukon** | **2.98** | **187** | Pn | **Pn** | **03 40 44.3** | **-2.1** |
| **E22K** | **Anaktuvuk Pass** | **3.04** | **247** | S | **Sn** | **03 41 25.5** | **+1.7** |
| | baz=59 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.06** | **204** | S | **Sb** | **03 41 26.7** | **-4.2** |
| | baz=21 | | | | | | |
| **COLD** | **Coldfoot** | **3.15** | **226** | Sb | **Sg** | **03 41 38.1** | **-2.3** |
| | baz=40 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.24** | **289** | Pn | **Pn** | **03 40 47.8** | **-2.1** |
| **B22K** | **Teshekpuk Lake** | **3.24** | **289** | P | **Pn** | **03 40 51.6** | **+1.6** |
| | baz=101 | | | | | | |
| B22K | | | | Sb | **Sg** | **03 41 40.4** | **-2.7** |
| | baz=101 | | | | | | |
| **H25L** | **Birch Creek** | **3.31** | **190** | Sb | **Sg** | **03 41 43.3** | **-1.9** |
| | baz=8.6 | | | | | | |
| **H27K** | **Steamboat Moun** | **3.46** | **161** | S | **Sb** | **03 41 36.8** | **-5.9** |
| | baz=343 | | | | | | |
| **F22K** | **John River** | **3.51** | **239** | Sb | **Sg** | **03 41 48.1** | **-3.8** |
| | baz=51 | | | | | | |
| **G29M** | **Pine Creek** | **3.52** | **135** | Pn | **Pn** | **03 40 54.1** | **+0.2** |
| **G29M** | **Pine Creek** | **3.52** | **135** | P | **Pn** | **03 40 56.1** | **+2.2** |
| | baz=320,SNR=7.9 | | | | | | |
| G29M | | | | S | **Sb** | **03 41 39.2** | **-5.0** |
| | baz=320 | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.60** | **277** | P | **Pn** | **03 40 56.8** | **+1.8** |
| | baz=87 | | | | | | |
| **F30M** | **Barrier River** | **3.68** | **117** | S | **Sb** | **03 41 43.9** | **-4.9** |
| | baz=305 | | | | | | |
| **G22K** | **Bettles** | **3.73** | **229** | Sg | **Sg** | **03 42 01.7** | **+3.0** |
| | baz=42 | | | | | | |
| **A22K** | **Sinclair Lake** | **3.90** | **298** | S | **Sn** | **03 41 45.3** | **+0.4** |
| | baz=108 | | | | | | |
| **H24K** | **Noodor Dome** | **3.93** | **202** | S | **Sn** | **03 41 48.2** | **+2.5** |
| | baz=18 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.95** | **126** | Pn | **Pn** | **03 41 00.4** | **+0.5** |
| G30M | | | | IAML | | 03 42 13.4 | |
| | comp=E,17nm,0.6s | | | | | | |
| G30M | | | | IAML | | 03 42 19.2 | |
| | comp=N,20nm,1.0s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.95** | **126** | S | **Sn** | **03 41 48.8** | **+2.7** |
| | baz=314 | | | | | | |
| **H29M** | **Whitestone** | **4.00** | **143** | Pn | **Pn** | **03 41 02.2** | **+1.6** |
| H29M | | | | IAML | | 03 41 51.1 | |
| | comp=E,26nm,0.5s | | | | | | |
| H29M | | | | IAML | | 03 42 17.0 | |
| | comp=N,23nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **4.00** | **143** | S | **Sn** | **03 41 49.5** | **+2.0** |
| | baz=328 | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04** | **187** | Pn | Pn | 03 40 55.3 | -5.9 |
| PRP | | | | IAML | | 03 41 53.9 | |
| | comp=E,17nm,1.0s | | | | | | |
| PRP | | | | IAML | | 03 42 09.4 | |
| | comp=N,23nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04** | **187** | S | **Sn** | **03 41 50.0** | **+1.5** |
| | baz=5.5 | | | | | | |
| **I27K** | **Kandik River** | **4.06** | **164** | P | **Pn** | **03 41 03.6** | **+2.2** |
| | baz=346,SNR=8.6 | | | | | | |
| **F21K** | **Alatna River** | **4.09** | **240** | Pn | Pn | 03 40 56.3 | -5.4 |
| F21K | | | | IAML | | 03 42 17.4 | |
| | comp=E,22nm,0.8s | | | | | | |
| F21K | | | | IAML | | 03 42 18.7 | |
| | comp=N,24nm,1.5s | | | | | | |
| **F21K** | **Alatna River** | **4.09** | **240** | S | **Sn** | **03 41 52.5** | **+2.9** |
| | baz=52 | | | | | | |
| **INK** | **Inuvik** | **4.09** | **102** | S | **Sn** | **03 41 52.1** | **+2.6** |
| | baz=292 | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **211** | Pn | **Pn** | **03 41 01.2** | **-2.0** |
| H23K | | | | IAML | | 03 42 25.4 | |
| | comp=E,20nm,0.9s | | | | | | |
| H23K | | | | IAML | | 03 42 26.0 | |
| | comp=N,24nm,1.0s | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **211** | P | **Pn** | **03 41 04.0** | **+0.7** |
| | baz=26 | | | | | | |
| **I26K** | **Coal Creek Min** | **4.25** | **173** | Pn | **Pn** | **03 41 03.4** | **-0.5** |
| **EPYK** | **Eagle Plains** | **4.27** | **134** | Pn | **Pn** | **03 41 04.7** | **+0.5** |
| **EPYK** | **Eagle Plains** | **4.27** | **134** | P | **Pn** | **03 41 06.3** | **+2.1** |
| | baz=321 | | | | | | |
| EPYK | | | | S | **Sn** | **03 41 55.7** | **+1.7** |
| | baz=321 | | | | | | |
| **I28M** | **Miner Creek** | **4.42** | **155** | P | **Pn** | **03 41 08.5** | **+2.2** |
| | baz=339,SNR=12 | | | | | | |
| I28M | | | | S | **Sn** | **03 42 00.5** | **+2.7** |
| | baz=339 | | | | | | |
| **D20K** | **Etivluk River** | **4.46** | **265** | P | **Pn** | **03 41 08.3** | **+1.5** |
| | baz=74 | | | | | | |
| D20K | | | | S | **Sn** | **03 42 00.7** | **+1.9** |
| | baz=74 | | | | | | |
| **E20K** | **Nigu River** | **4.46** | **259** | P | **Pn** | **03 41 08.5** | **+1.6** |
| | baz=68 | | | | | | |
| **B20K** | **Meade River** | **4.48** | **282** | P | **Pn** | **03 41 08.6** | **+1.6** |
| | baz=90 | | | | | | |
| **A21K** | **Barrow** | **4.51** | **299** | S | **Sn** | **03 41 60.0** | **+0.2** |
| | baz=108 | | | | | | |
| **G31M** | **Satah River** | **4.56** | **120** | P | **Pn** | **03 41 10.7** | **+2.5** |
| | baz=309,SNR=6.0 | | | | | | |
| G31M | | | | S | **Sn** | **03 42 02.9** | **+1.7** |
| | baz=309 | | | | | | |
| **POKR** | **Poker Plat Res** | **4.57** | **197** | S | **Sn** | **03 42 04.3** | **+2.9** |
| | baz=13 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **206** | Pn | **Pn** | **03 41 12.3** | **+1.0** |
| I23K | | | | IAML | | 03 42 38.5 | |
| | comp=N,9.9nm,1.3s | | | | | | |
| I23K | | | | IAML | | 03 42 43.7 | |
| | comp=E,12nm,1.4s | | | | | | |
| **J25K** | **Salcha River,** | **4.94** | **185** | S | **Sn** | **03 42 12.7** | **+2.2** |
| | baz=3.9 | | | | | | |
| **J26L** | **Joseph Creek** | **5.04** | **176** | S | **Sn** | **03 42 15.3** | **+2.2** |
| | baz=357 | | | | | | |
| **D19K** | **Kuna River** | **5.05** | **265** | Pn | **Pn** | **03 41 16.6** | **+1.7** |
| D19K | | | | IAML | | 03 42 16.3 | |
| | comp=E,13nm,0.6s | | | | | | |
| **D19K** | **Kuna River** | **5.05** | **265** | P | **Pn** | **03 41 16.5** | **+1.5** |
| | baz=72 | | | | | | |
| D19K | | | | S | **Sn** | **03 42 14.2** | **+0.9** |
| | baz=72 | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **197** | Pn | **Pn** | **03 41 16.2** | **+1.1** |
| CCB | | | | IAML | | 03 42 49.0 | |
| | comp=E,8.3nm,1.4s | | | | | | |
| **MLY** | **Manley** | **5.13** | **212** | Pn | **Pn** | **03 41 17.1** | **+1.0** |
| MLY | | | | IAML | | 03 42 53.0 | |
| | comp=E,8.6nm,1.5s | | | | | | |
| **MLY** | **Manley** | **5.13** | **212** | P | **Pn** | **03 41 17.9** | **+1.8** |
| | baz=26 | | | | | | |
| **E19K** | **Redstone River** | **5.17** | **253** | P | **Pn** | **03 41 17.6** | **+1.1** |
| | baz=61 | | | | | | |
| E19K | | | | S | **Sn** | **03 42 16.5** | **+0.4** |
| | baz=61 | | | | | | |
| **I30M** | **Mount Dempster** | **5.29** | **141** | Pn | **Pn** | **03 41 19.6** | **+1.3** |
| I30M | | | | IAML | | 03 42 22.0 | |
| | comp=E,11nm,0.5s | | | | | | |
| I30M | | | | IAML | | 03 42 22.3 | |
| | comp=N,8.6nm,0.5s | | | | | | |
| **I30M** | **Mount Dempster** | **5.29** | **141** | P | **Pn** | **03 41 20.8** | **+2.5** |
| | baz=328,SNR=11 | | | | | | |
| I30M | | | | S | **Sn** | **03 42 19.7** | **+0.4** |
| | baz=328 | | | | | | |
| **C19K** | **Lookout Ridge** | **5.42** | **273** | Pn | **Pn** | **03 41 21.8** | **+1.8** |
| **C19K** | **Lookout Ridge** | **5.42** | **273** | P | **Pn** | **03 41 21.6** | **+1.6** |
| | baz=79 | | | | | | |
| C19K | | | | S | **Sn** | **03 42 21.5** | **-0.8** |
| | baz=79 | | | | | | |
| **SCRK** | **Sand Creek** | **5.56** | **178** | Pn | **Pn** | **03 41 23.9** | **+1.9** |
| **K27K** | **Chicken** | **5.58** | **170** | S | **Sn** | **03 42 29.0** | **+2.8** |
| | baz=352 | | | | | | |
| **J29N** | **Klondike Camp** | **5.62** | **152** | S | **Sn** | **03 42 29.9** | **+2.6** |
| | baz=337 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.68** | **248** | Pn | **Pn** | **03 41 25.1** | **+1.6** |
| **F19K** | **Shaleruckik Mo** | **5.68** | **248** | P | **Pn** | **03 41 24.8** | **+1.4** |
| | baz=56 | | | | | | |
| **DAWY** | **Dawson** | **5.81** | **158** | Pn | **Pn** | **03 41 25.5** | **+0.1** |
| **DAWY** | **Dawson** | **5.81** | **158** | P | **Pn** | **03 41 28.1** | **+2.8** |
| | baz=342,SNR=7.4 | | | | | | |
| DAWY | | | | S | **Sn** | **03 42 33.5** | **+1.5** |
| | baz=342 | | | | | | |
| **J30M** | **Hart River** | **5.86** | **144** | Pn | **Pn** | **03 41 26.3** | **+0.1** |
| **J30M** | **Hart River** | **5.86** | **144** | P | **Pn** | **03 41 28.0** | **+1.9** |
| | baz=331 | | | | | | |
| J30M | | | | S | **Sn** | **03 42 35.1** | **+1.7** |
| | baz=331 | | | | | | |
| **G19K** | **Purcell Mounta** | **5.88** | **241** | P | **Pn** | **03 41 28.0** | **+1.7** |
| | baz=49 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **209** | Pn | **Pn** | **03 41 30.1** | **+1.7** |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **209** | P | **Pn** | **03 41 30.5** | **+2.2** |
| | baz=23 | | | | | | |
| **C18K** | **Utukok River** | **6.09** | **270** | Pn | **Pn** | **03 41 30.1** | **+0.8** |
| **C18K** | **Utukok River** | **6.09** | **270** | P | **Pn** | **03 41 30.4** | **+1.1** |
| | baz=74 | | | | | | |
| **K29M** | **Barlow Dome** | **6.30** | **151** | P | **Pn** | **03 41 34.2** | **+2.0** |
| | baz=337 | | | | | | |
| **E18K** | **Tukpahlearik C** | **6.33** | **258** | P | **Pn** | **03 41 33.3** | **+0.8** |
| | baz=63 | | | | | | |
| **F18K** | **Selawik** | **6.43** | **250** | P | **Pn** | **03 41 35.2** | **+1.4** |
| | baz=56 | | | | | | |
| **L26K** | **Log Cabin Wild** | **6.53** | **176** | Pn | **Pn** | **03 41 36.5** | **+1.3** |
| **L26K** | **Log Cabin Wild** | **6.53** | **176** | P | **Pn** | **03 41 37.1** | **+1.9** |
| | baz=357 | | | | | | |
| **G18K** | **Tagagawik** | **6.53** | **243** | Pn | **Pn** | **03 41 36.7** | **+1.4** |
| **G18K** | **Tagagawik** | **6.53** | **243** | P | **Pn** | **03 41 36.0** | **+0.8** |
| | baz=50 | | | | | | |
| **BCAR** | **Beaver Creek A** | **6.55** | **170** | Pn | **Pn** | **03 41 35.8** | **+0.2** |
| **DHY** | **Denali Highway** | **6.58** | **192** | P | **Pn** | **03 41 37.4** | **+1.4** |
| | baz=9.1 | | | | | | |
| **PAX** | **Paxson** | **6.58** | **184** | P | **Pn** | **03 41 38.5** | **+2.5** |
| | baz=3.2 | | | | | | |
| **J20K** | **Nowinta River** | **6.59** | **220** | Pn | **Pn** | **03 41 36.5** | **+0.4** |
| **A36M** | **Sachs Harbour** | **6.77** | **

*$M_o$6.93100×10^16^ NP1:$\phi_s$114.00000°,δ89.00000°, λ3.00000°. NP2:$\phi_p$24.00000°,δ87.00000°,λ179.00000°. Principal axes: T 7.2380, Plg3.0000°, Azm339.0000°; N -0.6100, Plg87.0000°, Azm136.0000°; P -6.6230, Plg1.0000°, Azm249.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**ISC 13 03:51:24.8±0.8,57.15S±0.08×141.9W±0.2,h10km,n70, σ1♀71/17,mb4.2/7,MS4.2/44,5C,Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **27.84** | **203** | LR | | LR | LR | 04 05 05.2 | |
| | comp=Z,429nm,21.1s,baz=77,slow=29 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **32.13** | **274** | LR | | LR | LR | 04 07 43.1 | |
| | comp=Z,602nm,20.6s,baz=128,slow=30 | | | | | | | | |
| **URZ** | **Urewera** | **32.75** | **287** | LR | | LR | LR | 04 07 57.5 | |
| | comp=Z,552nm,21.5s,baz=214,slow=30 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **33.01** | **180** | P | | **P** | | **03 58 00.8** | **+1.1** |
| | 3.7nm,1.2s,baz=171,slow=2.6,SNR=4.9 | | | | | | | | |
| QSPA | | | | | | LR | LR | 04 08 58.8 | |
| | comp=Z,778nm,20.8s,baz=70,slow=32 | | | | | | | | |
| | 3.7nm,1.2s | | | | | | | | |
| **TBI** | **Tubuai** | **34.20** | **348** | *e*S | | **S** | | **04 03 35.0** | **-1.7** |
| TBI | 1μm,40.0s | | | | *e*LR | LR | LR | 04 07 09.0 | |
| TBI | 2μm,20.0s | | | | *e*LR | LR | LR | 04 07 12.4 | |
| | 883nm,24.0s | | | | | | | | |
| **RKT** | **Rikitea** | **34.37** | **11** | *e*S | | **S** | | **04 03 40.3** | **+1.1** |
| RKT | 365nm,24.8s | | | | *e*LR | LR | LR | 04 07 14.4 | |
| | 4μm,27.2s | | | | | | | | |
| **PMSA** | **Palmer Station** | **36.24** | **135** | LR | | LR | LR | 04 09 03.3 | |
| | comp=Z,571nm,20.1s,baz=244,slow=29 | | | | | | | | |
| **RAO** | **Raoul Island** | **37.53** | **303** | LR | | LR | LR | 04 10 07.0 | |
| | comp=Z,157nm,20.3s,baz=120,slow=30 | | | | | | | | |
| **RPN** | **Rapa Nui** | **37.86** | **51** | LR | | LR | LR | 04 10 58.9 | |
| | comp=Z,255nm,18.1s,baz=192,slow=31 | | | | | | | | |
| **RAR** | **Rarotonga** | **38.21** | **332** | LR | | LR | LR | 04 10 08.9 | |
| | comp=Z,242nm,20.1s,baz=177,slow=30 | | | | | | | | |
| **PPT2** | **Papeete2** | **39.91** | **349** | *e*S | | **S** | | **04 05 01.9** | **-1.8** |
| PPT2 | 186nm,25.8s | | | | *e*SS | **SnSn** | | **04 08 06.8** | **+3.8** |
| | 142nm,23.8s | | | | | | | | |
| PPT2 | | | | | *e*LR | LR | LR | 04 09 44.8 | |
| | 573nm,22.2s | | | | | | | | |
| PPT2 | | | | | *e*LR | LR | LR | 04 09 45.0 | |
| | 574nm,23.8s | | | | | | | | |
| **PPT** | **Papeete** | **39.93** | **349** | LR | | LR | LR | 04 10 36.3 | |
| | comp=Z,327nm,19.3s,baz=191,slow=29 | | | | | | | | |
| **PLCA** | **Paso Flores** | **47.38** | **102** | LR | | LR | LR | 04 15 21.6 | |
| | comp=Z,137nm,19.0s,baz=222,slow=30 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **47.57** | **161** | ⇑P | | **P** | | **04 00 00.9** | **+1.0** |
| | comp=Z,3.7nm,0.7s | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **47.89** | **89** | T | | T | | 04 51 04.4 | |
| | baz=219,slow=74,SNR=112 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **47.89** | **89** | T | | T | | 04 51 05.5 | |
| | baz=219,slow=74,SNR=109 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **47.91** | **89** | T | | T | | 04 51 04.0 | |
| | baz=219,slow=74,SNR=124 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **48.18** | **89** | T | | T | | 04 51 30.5 | |
| | baz=222,slow=72,SNR=144 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **48.18** | **89** | T | | T | | 04 51 30.6 | |
| | baz=222,slow=72,SNR=178 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **48.19** | **89** | T | | T | | 04 51 30.3 | |
| | baz=222,slow=72,SNR=131 | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **48.20** | **2** | *e*S | | **S** | | **04 07 03.0** | **-1.6** |
| | comp=Z,124nm,24.7s | | | | | | | | |
| TAOE | | | | | *e*SS | **SS** | | **04 10 36.7** | **+2.8** |
| | comp=Z,166nm,27.7s | | | | | | | | |
| TAOE | | | | | *e*LR | LR | LR | 04 13 35.7 | |
| | comp=Z,618nm,25.8s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.23** | **162** | ⇑P | | **P** | | **04 00 05.7** | **+0.7** |
| | comp=Z,6.4nm,0.7s,baz=210,slow=8.0 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **48.32** | **161** | ⇑P | | **P** | | **04 00 06.7** | **+1.1** |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| **SNAA** | **Sanae** | **48.32** | **164** | ⇑P | | **P** | | **04 00 05.8** | **+0.1** |
| | comp=Z,53nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **48.32** | **164** | P | | **P** | | **04 00 06.1** | **+0.4** |
| | comp=Z,1.7nm,0.4s,baz=213,slow=9.3,SNR=17 | | | | | | | | |
| SNAA | | | | | | LR | LR | 04 17 52.1 | |
| | comp=Z,173nm,21.1s,baz=250,slow=33 | | | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **48.77** | **166** | ⇑P | | **P** | | **04 00 10.4** | **+1.1** |
| | comp=Z,191nm,0.9s | | | | | | | | |
| **MSVF** | **Nonsavu** | **49.33** | **306** | LR | | LR | | 04 16 41.7 | |
| | comp=Z,72nm,19.9s,baz=163,slow=31 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **51.16** | **291** | *e*LR | | LR | | 04 15 19.6 | |
| | comp=Z,418nm,25.9s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **51.16** | **291** | LR | | LR | | 04 18 41.3 | |
| | comp=Z,183nm,18.4s,baz=103,slow=32 | | | | | | | | |
| **MAW** | **Mawson** | **54.21** | **191** | LR | | LR | | 04 21 18.0 | |
| | comp=Z,290nm,20.7s,baz=155,slow=33 | | | | | | | | |
| **STKA** | **Stephens Creek** | **56.70** | **262** | LR | | LR | | 04 20 50.3 | |
| | comp=Z,234nm,20.9s,baz=147,slow=31 | | | | | | | | |
| **CTA** | **Charters Tower** | **63.50** | **274** | LR | | LR | | 04 25 57.3 | |
| | comp=Z,8.6nm,18.9s,baz=122,slow=33 | | | | | | | | |
| **HNR** | **Honiara** | **65.13** | **293** | LR | | LR | | 04 27 04.6 | |
| | comp=Z,1μm,18.6s,baz=150,slow=33 | | | | | | | | |
| **CPUP** | **Villa Florida** | **65.43** | **101** | P | | **P** | | **04 02 06.0** | **-1.6** |
| | comp=Z,1.7nm,1.0s,baz=153,slow=2.3,SNR=3.0 | | | | | | | | |
| CPUP | | | | | | LR | LR | 04 26 21.9 | |
| | comp=Z,146nm,18.6s,baz=220,slow=32 | | | | | | | | |
| | comp=Z,1.7nm,1.0s | | | | | | | | |
| **NNA** | **Nana** | **66.57** | **75** | LR | | LR | | 04 24 28.8 | |
| | comp=Z,94nm,18.7s,baz=210,slow=30 | | | | | | | | |
| **ASAR** | **Alice Springs** | **67.33** | **261** | P | | **P** | | **04 02 19.1** | **-0.7** |
| | comp=Z,0.7nm,0.7s,baz=144,slow=6.9,SNR=6.1 | | | | | | | | |
| ASAR | | | | | | LR | LR | 04 27 21.7 | |
| | comp=Z,116nm,21.4s,baz=160,slow=32 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |
| **LPAZ** | **La Paz** | **67.69** | **85** | LR | | LR | | 04 26 02.2 | |
| | comp=Z,64nm,20.6s,baz=206,slow=31 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **68.30** | **239** | T | | T | | 05 18 08.4 | |
| | baz=144,slow=76,SNR=8.1 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **68.31** | **239** | T | | T | | 05 18 10.1 | |
| | baz=144,slow=76,SNR=9.5 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **68.32** | **239** | T | | T | | 05 18 05.8 | |
| | baz=144,slow=76,SNR=7.0 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **68.44** | **243** | LR | | LR | | 04 24 48.3 | |
| | comp=Z,217nm,21.0s,baz=52,slow=29 | | | | | | | | |
| **ATAH** | **Atahualpa** | **69.85** | **71** | LR | | LR | | 04 25 55.6 | |
| | comp=Z,129nm,18.0s,baz=229,slow=30 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **70.11** | **264** | LR | | LR | | 04 29 16.3 | |
| | comp=Z,207nm,20.7s,baz=42,slow=32 | | | | | | | | |
| **SIV** | **San Ignacio** | **71.77** | **91** | LR | | LR | | 04 28 31.1 | |
| | comp=Z,45nm,20.6s,baz=116,slow=31 | | | | | | | | |
| **PMG** | **Port Moresby** | **71.82** | **281** | LR | | LR | | 04 30 10.2 | |
| | comp=Z,140nm,19.7s,baz=172,slow=32 | | | | | | | | |
| **BDFB** | **Brasilia** | **79.12** | **102** | LR | | LR | | 04 34 45.6 | |
| | comp=Z,232nm,19.8s,baz=204,slow=33 | | | | | | | | |
| **JTS** | **Las Juntas de** | **81.75** | **56** | LR | | LR | | 04 31 51.2 | |
| | comp=Z,226nm,20.4s,baz=202,slow=30 | | | | | | | | |
| **ROSC** | **El Rosal** | **82.15** | **68** | LR | | LR | | 04 33 20.6 | |
| | comp=Z,87nm,20.7s,baz=285,slow=31 | | | | | | | | |
| **APG** | **El Apazote** | **83.55** | **50** | LR | | LR | | 04 32 21.3 | |
| | comp=Z,11nm,20.6s,baz=52,slow=29 | | | | | | | | |
| **CMIG** | **Matias Romero** | **83.67** | **45** | LR | | LR | | 04 33 05.5 | |
| | comp=Z,63nm,18.1s,baz=198,slow=30 | | | | | | | | |
| **LPIG** | **La Paz** | **85.20** | **29** | LR | | LR | | 04 31 22.4 | |
| | comp=Z,75nm,21.5s,baz=190,slow=28 | | | | | | | | |
| **SDV** | **Santo Domingo** | **87.48** | **70** | LR | | LR | | 04 37 10.6 | |
| | comp=Z,73nm,20.1s,baz=242,slow=31 | | | | | | | | |
| **TEIG** | **Tepich** | **89.13** | **49** | LR | | LR | | 04 36 57.0 | |
| | comp=Z,109nm,18.1s,baz=170,slow=31 | | | | | | | | |
| **SUR** | **Sutherland** | **89.63** | **165** | LR | | LR | | 04 42 15.5 | |
| | comp=Z,77nm,18.5s,baz=174,slow=34 | | | | | | | | |
| **KAPI** | **Kappang** | **90.33** | **260** | LR | | LR | | 04 41 57.3 | |
| | comp=Z,171nm,20.8s,baz=146,slow=34 | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **91.67** | **74** | LR | | LR | | 04 40 40.6 | |
| | comp=Z,118nm,18.5s,slow=32 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **92.00** | **33** | LR | | LR | | 04 37 15.1 | |
| | comp=Z,28nm,20.1s,baz=188,slow=30 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **92.94** | **21** | LR | | LR | | 04 36 56.6 | |
| | comp=Z,102nm,19.3s,baz=214,slow=29 | | | | | | | | |
| **RCBR** | **Riachuelo** | **93.74** | **107** | LR | | LR | | 04 43 35.3 | |
| | comp=Z,55nm,18.9s,baz=329,slow=33 | | | | | | | | |
| **BOSA** | **Boshof** | **93.89** | **169** | LR | | LR | | 04 43 50.7 | |
| | comp=Z,150nm,19.5s,baz=184,slow=34 | | | | | | | | |
| **ANMO** | **Albuquerque** | **96.51** | **29** | LR | | LR | | 04 38 19.4 | |
| | comp=Z,90nm,21.9s,baz=290,slow=29 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **97.28** | **19** | LR | | LR | | 04 38 32.6 | |
| | comp=Z,142nm,21.5s,baz=190,slow=29 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **99.83** | **14** | LR | | LR | | 04 39 33.1 | |
| | comp=Z,128nm,21.3s,baz=186,slow=29 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **101.33** | **127** | T | | T | | 05 58 52.4 | |
| | baz=208,slow=74,SNR=15 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **101.33** | **127** | T | | T | | 05 58 52.5 | |
| | baz=12,slow=74,SNR=32 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **102.39** | **126** | T | | T | | 06 00 12.0 | |
| | baz=206,slow=75,SNR=13 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **102.40** | **126** | T | | T | | 06 00 09.6 | |
| | baz=206,slow=75,SNR=11 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **102.41** | **126** | T | | T | | 06 00 13.8 | |
| | baz=206,slow=75,SNR=13 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **147.74** | **105** | PKPbc | | **PKiKP** | | **04 11 10.8** | **-0.2** |
| | comp=Z,1.2nm,1.0s,baz=241,slow=4.8,SNR=5.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **151.35** | **268** | PKPbc | | **PKPbc** | | **04 11 17.1** | **-0.6** |
| | comp=Z,1.6nm,0.8s,baz=121,slow=2.5,SNR=8.9 | | | | | | | | |

*IDC **13** 03:58:45.2±4.1,24°.89N×94°.44E,h69$^{km}$±41$^{km}$,mb3.8/10, mbtmp4.1/11,ML4.1/1,MS3.2/4,Error ellipse: s-maj=35.4km s-min=17.5km az=66.0*

**ISC 13 03:58:45.4±0.8,24°.9N±0°.2×94°.5E±0°.2,h72km,n15, σ0♀59/11,mb4.0/10,Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **7.63** | **146** | P | | P | **Pn** | **04 00 33.8** | **-0.2** |
| | 0.8nm,0.3s,baz=326,slow=14,SNR=6.3 | | | | | | | | |
| CMAR | | | | | | LR | LR | 04 04 04.0 | |
| | comp=Z,60nm,18.7s,baz=325,slow=42 | | | | | | | | |
| | 1.4nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **23.93** | **339** | P | | **P** | | **04 03 53.4** | **+0.6** |
| | 1.0nm,0.6s,baz=148,slow=8.3,SNR=11 | | | | | | | | |
| | 1.0nm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **24.17** | **322** | LR | | LR | | 04 14 57.7 | |
| | comp=Z,35nm,18.7s,baz=133,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **24.78** | **19** | P | | **P** | | **04 03 59.8** | **-0.8** |
| | 1.0nm,0.7s,baz=197,slow=18,SNR=5.0 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.50** | **338** | P | | **P** | | **04 04 33.6** | **-0.1** |
| | 1.1nm,0.2s,baz=146,slow=10,SNR=2.7 | | | | | | | | |
| | 1.1nm,0.2s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.91** | **349** | P | | **P** | | **04 04 46.5** | **+0.3** |
| | 0.8nm,0.4s,baz=181,slow=11,SNR=2.4 | | | | | | | | |
| | 0.8nm,0.4s | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **32.70** | **275** | LR | | LR | | 04 19 53.6 | |
| | comp=Z,37nm,19.1s,baz=27,slow=39 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **52.57** | **302** | P | | **P** | | **04 07 52.4** | **+0.5** |
| | 0.6nm,0.7s,baz=97,slow=5.6,SNR=4.5 | | | | | | | | |
| | 0.6nm,0.7s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **55.61** | **316** | P | | **P** | | **04 08 13.4** | **-0.2** |
| | 1.0nm,0.5s,baz=82,slow=6.2,SNR=5.6 | | | | | | | | |
| | 1.0nm,0.5s | | | | | | | | |
| **HFS** | **Hagfors** | **64.20** | **327** | P | | **P** | | **04 09 12.2** | **-0.2** |
| | 7.5nm,1.1s,baz=54,slow=2.6,SNR=5.0 | | | | | | | | |
| | 7.5nm,1.1s | | | | | | | | |
| **GERES** | **GERESS Array B** | **65.77** | **314** | P | | **P** | | **04 09 23.1** | **+0.3** |
| | 1.0nm,0.6s,baz=150,slow=11,SNR=5.9 | | | | | | | | |
| | 1.0nm,0.6s | | | | | | | | |
| **STKA** | **Stephens Creek** | **72.19** | **139** | P | | **P** | | **04 10 03.5** | **+0.8** |
| | 2.5nm,0.3s,baz=328,slow=10.0,SNR=10 | | | | | | | | |
| | 2.5nm,0.3s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **80.58** | **30** | LR | | LR | | 04 46 53.5 | |
| | comp=Z,279nm,19.6s,baz=210,slow=36 | | | | | | | | |
| **BOSA** | **Boshof** | **85.17** | **236** | P | | **P** | | **04 11 13.4** | **-0.8** |
| | 4.0nm,0.8s,baz=47,slow=5.8,SNR=7.8 | | | | | | | | |
| | 4.0nm,0.8s | | | | | | | | |
| **SCHQ** | **Schefferville** | **99.00** | **349** | LR | | LR | LR | 05 01 55.7 | |
| | comp=Z,57nm,18.2s,baz=111,slow=38 | | | | | | | | |

*TAP **13** 04:00:17.3,24°.74N×122°.37E,h16$^{km}$,ML3.1,C*
*JMA **13** 04:00:18.2±0.1,24°.7N±0°.6×122°.4E±0°.3,h32$^{km}$±2$^{km}$, MV2.2/10,NW OFF ISHIGAKIJIMA IS*

**ISC 13 04:00:17.3±1.0,24°.73N±0°.02×122°.40E±0°.02,h14km±9km, n64,σ0♀52/94,1C,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.35** | **206** | ⇑*i*P | | | **Pb** | **04 00 25.2** | **+0.1** |
| | baz=207 | | | | | | | | |
| EOS2 | | | | | | S | **Sb** | **04 00 31.1** | **+0.6** |
| | baz=207 | | | | | | | | |
| **EGS** | | **0.44** | **285** | P | | P | **Pg** | **04 00 26.1** | **0.0** |
| | baz=285 | | | | | | | | |
| **EOS3** | **EOS3** | **0.45** | **190** | *i* P | | P | **Pb** | **04 00 27.1** | **+0.2** |
| | baz=195 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.47** | **306** | *i* P | | P | **Pg** | **04 00 26.6** | **+0.1** |
| | baz=308 | | | | | | | | |
| TWB1 | | | | | *i* | S | **Sg** | **04 00 32.3** | **-0.5** |
| | baz=308 | | | | | | | | |
| **TWC** | **Suao** | **0.52** | **256** | *e*P | | **Pg** | | **04 00 27.0** | **-0.5** |
| | baz=263 | | | | | | | | |
| TWC | | | | | *e*S | | **Sg** | **04 00 34.1** | **-0.3** |
| | baz=263 | | | | | | | | |
| **ESAO** | **Su ao** | **0.53** | **253** | *e*P | | **P** | **Pb** | **04 00 28.4** | **+0.1** |
| | baz=251 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.57** | **119** | P | | P | **Pb** | **04 00 29.0** | **0.0** |
| JYNG | | | | | | S | **Sb** | **04 00 36.8** | **-0.1** |
| **TIPB** | **Shuangxi** | **0.57** | **295** | P | | P | **Pg** | **04 00 28.7** | **+0.1** |
| | baz=294 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.60** | **307** | P | | P | **Pb** | **04 00 29.4** | **-0.1** |
| | baz=308 | | | | | | | | |
| SXI1 | | | | | | S | **Sg** | **04 00 36.9** | **-0.2** |
| | baz=308 | | | | | | | | |
| **EOS4** | **EOS4** | **0.61** | **187** | *e*P | | **Pb** | | **04 00 30.0** | **+0.4** |
| | baz=179 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.62** | **116** | *i* P | | **Pb** | | **04 00 29.8** | **+0.1** |
| | baz=115 | | | | | | | | |
| YOJ | | | | | | S | **Sb** | **04 00 38.2** | **-0.1** |
| | baz=115 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.62** | **116** | P | | P | **Pb** | **04 00 29.9** | **+0.1** |
| YOJ | | | | | | *e*S | **Sb** | **04 00 38.1** | **-0.2** |
| **NDS** | **Dongshan** | **0.63** | **261** | *e*P | | **Pg** | | **04 00 29.4** | **-0.3** |
| | baz=260 | | | | | | | | |
| NDS | | | | | | *e*S | **Sb** | **04 00 38.8** | **+0.1** |
| | baz=260 | | | | | | | | |
| **EWUT** | **Wuta** | **0.64** | **243** | *e*P | | **Pg** | | **04 00 29.4** | **-0.3** |
| | baz=241 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.66** | **301** | P | | P | **Pb** | **04 00 31.1** | **+0.6** |
| | baz=314 | | | | | | | | |
| WFSB | | | | | | *e*S | **Sb** | **04 00 40.0** | **+0.5** |
| | baz=314 | | | | | | | | |
| **TWE** | **Neicheng** | **0.67** | **269** | *e*P | | **Pg** | | **04 00 29.9** | **-0.5** |
| | baz=268 | | | | | | | | |
| **ENA** | **Nanau** | **0.67** | **243** | *e*P | | **Pg** | | **04 00 28.1** | **-2.3** |
| | baz=241 | | | | | | | | |
| **TNOU** | **National Taiwa** | **0.71** | **306** | *e*P | | **Pb** | | **04 00 31.1** | **-0.2** |
| | baz=307 | | | | | | | | |
| TNOU | | | | | | *e*S | **Sb** | **04 00 41.3** | **+0.4** |
| | baz=307 | | | | | | | | |
| **EAHA** | **Aohua** | **0.72** | **236** | *e*P | | **Pg** | | **04 00 31.5** | **+0.1** |
| | baz=241 | | | | | | | | |
| **FUSB** | **Fuanzhiwuyua** | **0.74** | **272** | P | | P | **Pg** | **04 00 31.5** | **-0.2** |
| | baz=280 | | | | | | | | |
| FUSB | | | | | | *e*S | **Sb** | **04 00 42.0** | **0.0** |
| | baz=280 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.77** | **263** | *e*P | | **Pg** | | **04 00 31.8** | **-0.4** |
| | baz=261 | | | | | | | | |
| **TWA** | **Mucha** | **0.78** | **289** | P | | P | **Pb** | **04 00 33.2** | **+0.5** |
| | baz=279 | | | | | | | | |
| TWA | | | | | | *e*S | **Sb** | **04 00 43.6** | **+0.5** |
| | baz=279 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.82** | **261** | *e*P | | **Pb** | | **04 00 32.8** | **-0.5** |
| | baz=265 | | | | | | | | |
| **LATG** | **Datong** | **0.82** | **256** | *e*P | | **Pb** | | **04 00 32.9** | **-0.4** |
| | baz=255 | | | | | | | | |
| LATG | | | | | | *e*S | **Sg** | **04 00 43.9** | **-0.2** |
| | baz=255 | | | | | | | | |
| **YM01** | **YM01** | **0.86** | **299** | P | | P | **Pg** | **04 00 34.1** | **+0.1** |
| | baz=299 | | | | | | | | |
| YM01 | | | | | | *e*S | **Sg** | **04 00 45.7** | **+0.4** |
| | baz=299 | | | | | | | | |
| **TATO** | **Taipei** | **0.86** | **286** | P | | P | **Pn** | **04 00 34.7** | **-0.3** |
| | baz=278 | | | | | | | | |
| TATO | | | | | | S | **Sg** | **04 00 45.9** | **+0.5** |
| | baz=278 | | | | | | | | |
| **YM08** | **YM08** | **0.86** | **302** | *e*P | | **Pb** | | **04 00 33.8** | **-0.3** |
| | baz=302 | | | | | | | | |
| YM08 | | | | | | *e*S | **Sb** | **04 00 45.2** | **-0.3** |
| | baz=302 | | | | | | | | |
| **TWY** | **Chenhua** | **0.91** | **307** | P | | Pn | | **04 00 35.5** | **0.0** |
| | baz=307 | | | | | | | | |
| TWY | | | | | | *e*S | **Sg** | **04 00 46.9** | **+0.2** |
| | baz=307 | | | | | | | | |
| **ETL** | **Fush Village** | **0.91** | **231** | *e*S | | **Sb** | | **04 00 46.7** | **-0.2** |
| | baz=229 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.92** | **233** | P | | Pb | | **04 00 34.3** | **-0.7** |
| | baz=240 | | | | | | | | |
| NACB | | | | | | *e*S | **Sb** | **04 00 46.1** | **-1.0** |
| | baz=240 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.94** | **266** | P | | P | **Pb** | **04 00 35.5** | **+0.2** |
| | baz=266 | | | | | | | | |
| YHNB | | | | | | *e*S | **Sb** | **04 00 47.3** | **-0.3** |
| | baz=266 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.94** | **342** | *e*P | | | **Pn** | **04 00 36.5** | **+0.5** |
| | baz=343 | | | | | | | | |
| **NSK** | **Sanguang** | **0.95** | **267** | *e*P | | | **Pb** | **04 00 35.2** | **-0.3** |
| | baz=266 | | | | | | | | |
| NSK | | | | | | *e*S | **Sb** | **04 00 47.0** | **-1.0** |
| | baz=266 | | | | | | | | |
| **NNSB** | **Datong** | **0.98** | **252** | *e*P | | | **Pb** | **04 00 35.5** | **-0.5** |
| | baz=251 | | | | | | | | |
| NNSB | | | | | | *e*S | **Sb** | **04 00 49.3** | **+0.5** |
| | baz=251 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.98** | **253** | P | | P | **Pg** | **04 00 36.6** | **+0.3** |
| | baz=252 | | | | | | | | |
| NNS | | | | | | *e*S | **Sb** | **04 00 48.9** | **-0.1** |
| | baz=252 | | | | | | | | |
| **TWD** | **Chiawan** | **0.98** | **229** | *e*P | | **Pb** | | **04 00 36.0** | **0.0** |
| | baz=233 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.99** | **238** | *e*P | | **Pb** | | **04 00 35.7** | **-0.5** |
| | baz=245 | | | | | | | | |
| ETLH | | | | | | *e*S | **Sb** | **04 00 48.3** | **-0.8** |
| | baz=245 | | | | | | | | |
| **ETM** | **Tongmen** | **1.13** | **228** | *e*P | | **Pg** | | **04 00 39.1** | **+0.1** |
| | baz=208 | | | | | | | | |
| ETM | | | | | | *e*S | **Sg** | **04 00 55.2** | **+1.5** |
| | baz=208 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.15** | **232** | *e*P | | **Pn** | | **04 00 38.4** | **-0.6** |
| | baz=239 | | | | | | | | |
| LXIB | | | | | | *e*S | **Sn** | **04 00 54.9** | **+0.3** |
| | baz=239 | | | | | | | | |
| **FUSS** | **Fushou** | **1.16** | **246** | P | | Pb | | **04 00 39.5** | **+0.3** |
| | baz=254 | | | | | | | | |
| FUSS | | | | | | *e*S | **Sb** | **04 00 53.9** | **-0.3** |
| | baz=254 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.17** | **265** | *e*P | | **Pg** | | **04 00 39.8** | **-0.1** |
| | baz=255 | | | | | | | | |
| NFF | | | | | | *e*S | **Sg** | **04 00 56.2** | **+1.0** |
| | baz=255 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.19** | **241** | *e*P | | **Pb** | | **04 00 40.1** | **+0.2** |
| | baz=249 | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.21** | **219** | *e*P | | **Pb** | | **04 00 40.5** | **+0.6** |
| | baz=201 | | | | | | | | |
| **TDCB** | **Techi** | **1.23** | **247** | *e*P | | **Pg** | | **04 00 41.5** | **+0.5** |
| | baz=246 | | | | | | | | |
| **LIOB** | **Emei** | **1.26** | **266** | *e*P | | **Pb** | | **04 00 41.1** | **+0.3** |
| | baz=265 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.28** | **266** | *e*P | | **Pb** | | **04 00 41.3** | **+0.2** |
| | baz=264 | | | | | | | | |
| **CHGB** | **Renai** | **1.30** | **239** | *e*P | | **Pb** | | **04 00 41.9** | **+0.2** |
| | baz=247 | | | | | | | | |
| CHGB | | | | | | *e*S | **Sb** | **04 00 58.4** | **0.0** |
| | baz=247 | | | | | | | | |
| **OWD** | **Renai** | **1.36** | **236** | *e*P | | **Pg** | | **04 00 43.9** | **+0.4** |
| | baz=229 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.37** | **223** | *e*P | | **Pn** | | **04 00 42.4** | **+0.4** |
| | baz=205 | | | | | | | | |
| **WUSB** | **Renai** | **1.38** | **238** | *e*P | | **Pb** | | **04 00 43.3** | **+0.3** |
| | baz=222 | | | | | | | | |
| **WHP** | **Taichung City** | **1.40** | **251** | *e*P | | **Pg** | | **04 00 44.3** | **0.0** |
| | baz=250 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.48** | **263** | *e*P | | **Pb** | | **04 00 45.0** | **+0.5** |
| | baz=278 | | | | | | | | |
| **VWDT** | **VWDT** | **1.51** | **230** | *e*P | | **Pb** | | **04 00 45.7** | **+0.7** |
| | baz=214 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.52** | **244** | *e*P | | **Pg** | | **04 00 46.6** | **+0.2** |
| | baz=242 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.52** | **216** | *e*P | | **Pn** | | **04 00 44.5** | **+0.5** |
| | baz=202 | | | | | | | | |
| **NSY** | **Sanyi** | **1.53** | **258** | *e*P | | **Pb** | | **04 00 45.0** | **-0.4** |
| | baz=275 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.53** | **256** | *e*P | | **Pb** | | **04 00 45.4** | **0.0** |
| | baz=274 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.54** | **108** | *e*P | | **Pn** | | **04 00 44.5** | **+0.2** |
| **SSLB** | **Suanglung** | **1.62** | **235** | *e*P | | **Pb** | | **04 00 47.4** | **+0.5** |
| | baz=238 | | | | | | | | |
| SSLB | | | | | | *e*S | **Sg** | **04 01 09.0** | **-0.5** |
| | baz=238 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.63** | **103** | *e*P | | **Pn** | | **04 00 44.9** | **-0.5** |
| **TYC** | **Yuchr** | **1.63** | **240** | *e*P | | **Pb** | | **04 00 47.8** | **+0.6** |
| | baz=226 | | | | | | | | |
| **YULB** | **Yu-li** | **1.67** | **217** | *e*P | | **Pn** | | **04 00 46.6** | **+0.5** |
| | baz=216 | | | | | | | | |
| YULB | | | | | | *e*S | **Sn** | **04 01 06.1** | **-1.3** |
| | baz=216 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.75** | **234** | *e*P | | **Pb** | | **04 00 49.7** | **+0.5** |
| | baz=220 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.94** | **235** | *e*P | | **Pb** | | **04 00 53.3** | **+0.9** |
| | baz=216 | | | | | | | | |

*IDC **13** 04:04:07.0±25.0,20°.82S×179°.09W,h624$^{km}$±289$^{km}$, mb2.9/5,mbtmp3.8/5,Error ellipse: s-maj=167.1km s-min=33.1km az=122.0*

**ISC 13 04:04:06.3±1.7,20°.8S±0°.3×179°.2W±0°.7,h619km,n8, σ0♀51/8,mb3.4/5,2C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **57.54** | **185** | P | | P | **P** | **04 12 58.5** | **+0.6** |
| | 0.3nm,0.5s,baz=4.7,slow=8.5,SNR=2.2 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SANI | Sanana | 6.38 | 32 | P | | P | | 04 06 08.6 | +0.4 |
| | 447nm,0.9s,4µm1.7nm | | | | | | | | |
| LUWI | Luwuk | 6.45 | 1 | P | | P | | 04 06 10.6 | +1.7 |
| LUWI | Luwuk | 6.45 | 1 | P | | P | | 04 06 10.1 | +1.3 |
| LUWI | Luwuk | 6.45 | 1 | P | | P | | 04 06 10.1 | +1.3 |
| | 525nm,1.2s,6µm1.6nm | | | | | | | | |
| MRSI | Marisa | 7.99 | 355 | P | | P | | 04 06 24.8 | +1.0 |
| | 1µm,0.8s,18µm | | | | | | | | |
| GTOI | Gorontalo | 8.12 | 3 | P | | P | | 04 06 27.2 | +2.1 |
| | 232nm,0.7s,2µm | | | | | | | | |
| KMSI | Cibinong | 8.16 | 9 | P | | P | | 04 06 27.4 | +1.9 |
| JAGI | Jajag, Banyuwa | 8.46 | 263 | P | | P | | 04 06 27.4 | -1.1 |
| JAGI | Jajag, Banyuwa | 8.46 | 263 | P | | P | | 04 06 27.0 | -1.5 |
| JAGI | Jajag, Banyuwa | 8.46 | 263 | P | | P | | 04 06 27.5 | -1.1 |
| | 117nm,0.5s,4µm | | | | | | | | |
| TOLI2 | Tolitoli | 8.79 | 348 | P | | P | | 04 06 32.3 | +0.5 |
| TOLI2 | Tolitoli | 8.79 | 348 | P | | P | | 04 06 31.9 | +0.1 |
| DRS | Darwin Rock St | 9.47 | 122 | P | | P | | 04 06 39.8 | +1.1 |
| TNTI | Ternate | 9.50 | 30 | P | | P | | 04 06 38.5 | -0.6 |
| TNTI | Ternate | 9.50 | 30 | P | | P | | 04 06 37.7 | -1.4 |
| TNTI | Ternate | 9.50 | 30 | P | | P | | 04 06 37.5 | -1.6 |
| | 90nm,0.5s | | | | | | | | |
| MTN | Manton Dam | 9.88 | 123 | P | | P | | 04 06 43.5 | +0.6 |
| MTN | Manton Dam | 9.88 | 123 | P | | P | | 04 06 43.2 | +0.3 |
| KNRA | Kununurra | 10.07 | 144 | P | | P | | 04 06 44.9 | +0.1 |
| FAKI | Fak Fak | 10.60 | 65 | P | | P | | 04 06 51.7 | +1.3 |
| FAKI | Fak Fak | 10.60 | 65 | P | | P | | 04 06 49.5 | -0.9 |
| FAKI | Fak Fak | 10.60 | 65 | P | | P | | 04 06 50.6 | +0.2 |
| | 148nm,0.7s | | | | | | | | |
| SWI | Sorong | 10.85 | 53 | P | | P | | 04 06 53.3 | +0.4 |
| | 289nm,0.9s,3µm | | | | | | | | |
| FITZ | Fitzroy Crossi | 10.90 | 165 | P | | P | | 04 06 53.6 | +0.2 |
| FITZ | Fitzroy Crossi | 10.90 | 165 | P | | P | | 04 06 53.4 | 0.0 |
| KDU | Kakadu | 10.94 | 119 | P | | P | | 04 06 54.1 | +0.2 |
| SGSI | Sangihe | 11.51 | 145 | P | | P | | 04 06 59.2 | -0.6 |
| MYLDM | Lahad Datu | 13.29 | 342 | P | | P | | 04 07 19.1 | +0.8 |
| MBWA | Marble Bar | 13.84 | 191 | P | | P | | 04 07 23.8 | +0.1 |
| MBWA | Marble Bar | 13.84 | 191 | P | | P | | 04 07 23.9 | +0.1 |
| PSA00 | Pilbara Seismi | 14.22 | 191 | P | | P | | 04 07 27.6 | -0.2 |
| PSA00 | Pilbara Seismi | 14.22 | 191 | P | | P | | 04 07 27.5 | -0.2 |
| PSA00 | Pilbara Seismi | 14.22 | 191 | P | | P | | 04 07 26.7 | -1.0 |
| SBUM | Sibu | 14.37 | 313 | P | | P | | 04 07 29.9 | +0.5 |
| BBJI | Bungbulang | 14.87 | 269 | P | | P | | 04 07 33.9 | -0.8 |
| KKM | Kota Kinabalu | 14.94 | 334 | P | | P | | 04 07 34.9 | -0.5 |
| KKM | Kota Kinabalu | 14.94 | 334 | P | | P | | 04 07 34.2 | -1.2 |
| KSM | Kuching | 15.22 | 306 | P | | P | | 04 07 38.9 | +0.7 |
| KSM | Kuching | 15.22 | 306 | P | | P | | 04 07 38.2 | 0.0 |
| WRA | Warramunga Arr | 16.75 | 139 | S | | S | | 04 10 40.0 | -1.8 |
| | 12nm,0.9s,baz=326,slow=16,SNR=4.8 | | | | | | | | |
| WRAB | Tennant Creek | 16.75 | 139 | P | | P | | 04 07 52.8 | -0.3 |
| GIRL | Giralia | 17.07 | 207 | P | | P | | 04 07 56.9 | +1.1 |
| GIRL | Giralia | 17.07 | 207 | P | | P | | 04 07 56.0 | +0.1 |
| WRKA | Warakurna | 18.22 | 163 | P | | P | | 04 08 07.2 | +0.7 |
| AS31 | Alice Springs | 19.34 | 147 | P | | P | | 04 08 17.2 | +0.5 |
| AS31 | | | | | IAmb | IAmb | | 04 08 21.2 | |
| | comp=Z,3.9nm,0.6s | | | | | | | | |
| ASAR | Alice Springs | 19.34 | 147 | P | | P | | 04 08 17.4 | +0.7 |
| | comp=Z,4.7nm,0.5s,baz=310,slow=7.7,SNR=33 | | | | | | | | |
| ASAR | | | | S | | S | | 04 11 22.6 | -1.3 |
| | comp=Z,7.0nm,0.8s,baz=341,slow=25,SNR=6.2 | | | | | | | | |
| ASAR | | | | PcP | | PcP | | 04 12 12.0 | -0.2 |
| | comp=Z,3.2nm,0.5s,baz=322,slow=1.3,SNR=7.3 | | | | | | | | |
| ASAR | | | | ScP | | ScP | | 04 14 55.5 | -1.6 |
| | comp=Z,2.2nm,0.7s,baz=319,slow=1.9,SNR=5.7 | | | | | | | | |
| AS01 | Alice Springs | 19.36 | 147 | P | | P | | 04 08 18.0 | +1.1 |
| MEEK | Meekatharra | 19.38 | 191 | P | | P | | 04 08 17.2 | +0.2 |
| QIS | Mount Isa | 20.91 | 130 | P | | P | | 04 08 31.4 | +0.5 |
| COEN | Coen | 21.14 | 109 | P | | P | | 04 08 32.9 | -0.2 |
| COEN | Coen | 21.14 | 109 | P | | P | | 04 08 32.4 | -0.8 |
| MORW | Morawa | 22.31 | 195 | P | | P | | 04 08 43.6 | +0.2 |
| MORW | Morawa | 22.31 | 195 | P | | P | | 04 08 43.4 | 0.0 |
| MORW | | | | | IAmb | IAmb | | 04 08 44.4 | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| BLDU | Ballidu | 23.63 | 193 | P | | P | | 04 08 55.0 | -0.1 |
| OOD | Oodnadatta | 23.63 | 150 | P | | P | | 04 08 55.5 | +0.3 |
| FORT | Forrest | 23.68 | 168 | P | | P | | 04 08 55.8 | +0.3 |
| FORT | Forrest | 23.68 | 168 | P | | P | | 04 08 55.1 | -0.4 |
| KMBL | Kambalda | 23.72 | 182 | P | | P | | 04 08 56.3 | +0.3 |
| KLBR | Kellerberrin | 24.37 | 190 | P | | P | | 04 09 01.8 | +0.1 |
| SZP | Santa | 25.02 | 355 | P | | P | | 04 09 07.3 | -0.2 |
| MULG | Mulgathing | 25.04 | 156 | P | | P | | 04 09 07.9 | +0.3 |
| MUN | Mundaring | 25.05 | 193 | P | | P | | 04 09 08.6 | +0.9 |
| KULM | Kulim | 25.38 | 300 | P | | P | | 04 09 10.7 | -0.1 |
| KULM | | | | | IAmb | IAmb | | 04 09 46.0 | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| NWAO | Narrogin (SRO) | 25.76 | 191 | P | | P | | 04 09 14.4 | +0.4 |
| NWAO | Narrogin (SRO) | 25.76 | 191 | P | | P | | 04 09 14.3 | +0.3 |
| NWAO | Narrogin (SRO) | 25.76 | 191 | P | | P | | 04 09 14.2 | +0.3 |
| LCRK | Leigh Creek | 27.07 | 149 | P | | P | | 04 09 26.5 | +1.0 |
| BBOO | Buckleboo | 28.07 | 155 | P | | P | | 04 09 34.4 | +0.2 |
| BBOO | Buckleboo | 28.07 | 155 | P | | P | | 04 09 34.2 | -0.1 |
| BBOO | | | | | IAmb | IAmb | | 04 09 35.2 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| UBPT | Khong Chiam | 28.35 | 323 | P | | P | | 04 09 37.7 | +0.9 |
| UBPT | Khong Chiam | 28.35 | 323 | P | | P | | 04 09 37.0 | +0.1 |
| UBPT | | | | | IAmb | IAmb | | 04 09 38.5 | |
| | comp=Z,38nm,1.4s | | | | | | | | |
| QIZ | Qiongzhong | 29.26 | 335 | P | | P | | 04 09 44.2 | -0.5 |
| HTT | Hallett | 29.85 | 152 | P | | P | | 04 09 51.1 | +1.3 |
| STKA | Stephens Creek | 29.97 | 146 | P | | P | | 04 09 51.9 | +1.1 |
| STKA | Stephens Creek | 29.97 | 146 | P | | P | | 04 09 51.2 | +0.5 |
| STKA | Stephens Creek | 29.97 | 146 | P | | P | | 04 09 51.6 | +0.9 |
| | comp=Z,2.2nm,0.4s,baz=322,slow=9.4,SNR=17 | | | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | | | |
| TPUB | Ta-pu | 30.71 | 356 | P | | P | | 04 09 56.4 | -0.8 |
| TPUB | Ta-pu | 30.71 | 356 | P | | P | | 04 09 55.4 | -1.9 |
| YULB | Yu-li | 30.77 | 358 | P | | P | | 04 09 57.0 | -0.7 |
| YULB | Yu-li | 30.77 | 358 | P | | P | | 04 09 54.7 | -3.0 |
| YULB | | | | | IAmb | IAmb | | 04 10 11.1 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| SSLB | Suanglung | 31.17 | 357 | P | | P | | 04 09 58.8 | -2.4 |
| SSLB | | | | | IAmb | IAmb | | 04 10 07.2 | |
| | comp=Z,33nm,1.3s | | | | | | | | |
| GD1S | Gladstone Soft | 31.79 | 124 | P | | P | | 04 10 07.0 | +0.6 |
| YHNB | Yeheng | 32.03 | 358 | P | | P | | 04 10 06.3 | -2.3 |
| CMSA | Cobar Meteorol | 32.13 | 141 | P | | P | | 04 10 10.6 | +1.3 |
| EIDS | Eidsvold | 32.41 | 127 | P | | P | | 04 10 12.3 | +0.6 |
| EIDS | | | | | IAmb | IAmb | | 04 10 22.1 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| ARPS | Mount Arapiles | 33.95 | 152 | P | | P | | 04 10 25.3 | +0.7 |
| PHRA | Phrae | 34.03 | 320 | P | | P | | 04 10 25.8 | +0.3 |
| CMAR | Chiang Mai Arr | 34.84 | 318 | P | | P | | 04 10 33.2 | +0.9 |
| | comp=Z,5.2nm,0.4s,baz=146,slow=6.8,SNR=22 | | | | | | | | |
| CMAR | | | | PcP | | PcP | | 04 12 50.1 | +0.1 |
| | comp=Z,1.6nm,0.3s,baz=173,slow=2.8,SNR=6.9 | | | | | | | | |
| CMAR | | | | ScP | | ScP | | 04 15 45.6 | +1.5 |
| | comp=Z,1.1nm,0.3s,baz=172,slow=2.9,SNR=5.3 | | | | | | | | |
| | comp=Z,5.2nm,0.4s | | | | | | | | |
| ARMA | Armidale | 35.43 | 134 | P | | P | | 04 10 39.4 | +2.2 |
| ARMA | | | | | IAmb | IAmb | | 04 10 47.6 | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| GYA | Guiyang | 37.18 | 336 | ⇓P | | P | | 04 10 54.8 | +3.2 |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| PZH | PanZhiHua | 39.45 | 330 | P | | P | | 04 11 12.0 | +1.9 |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,170nm,5.0s | | | | | | | | |
| NJ2 | Nanjing | 39.53 | 355 | eP | | P | | 04 11 12.8 | +2.4 |
| NJ2 | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| JNU | Nakatsue | 41.18 | 11 | P | | P | | 04 11 25.6 | +1.9 |
| JNU | | | | | IAmb | IAmb | | 04 11 27.7 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| CD2 | Chengdu | 42.29 | 336 | P | | P | | 04 11 32.3 | -0.2 |
| CD2 | | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.5s | | | | | | | | |
| JMN | Monobe | 42.40 | 14 | P | | P | | 04 11 33.6 | +0.4 |
| JMN | | | | | IAmb | IAmb | | 04 11 39.0 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| XAN | Xi'an | 43.34 | 343 | ⇑P | | P | | 04 11 40.0 | -0.6 |
| XAN | | | | | pmax | pmax | | | |
| | comp=Z,41nm,0.7s | | | | | | | | |
| DZM | Mont Dzumac | 44.56 | 114 | P | | P | | 04 11 50.6 | +0.3 |
| DZM | | | | | IAmb | IAmb | | 04 11 52.3 | |
| | comp=Z,21nm,1.3s | | | | | | | | |
| KSRS | Korea Array | 45.02 | 6 | P | | P | | 04 11 53.1 | -0.3 |
| | comp=Z,3.4nm,0.9s,baz=188,slow=9.0,SNR=11 | | | | | | | | |
| KSRS | | | | PcP | | PcP | | 04 13 22.5 | -0.3 |
| | comp=Z,1.6nm,0.6s,baz=196,slow=3.5,SNR=6.1 | | | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | | |
| JGF | Kuroka | 45.09 | 17 | P | | P | | 04 11 53.0 | -1.0 |
| JGF | | | | | IAmb | IAmb | | 04 12 06.3 | |
| | comp=Z,21nm,1.5s | | | | | | | | |
| HNS | HongShan | 45.31 | 351 | ⇓P | | P | | 04 11 55.4 | -0.2 |
| HNS | | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| PINNC | Pines Island, | 45.58 | 114 | P | | P | | 04 11 59.1 | +1.1 |
| PINNC | | | | | IAmb | IAmb | | 04 12 14.1 | |
| | comp=Z,27nm,1.3s | | | | | | | | |
| MJAR | Matsushiro Arr | 46.21 | 17 | P | | P | | 04 12 01.8 | -0.8 |
| | comp=Z,2.0nm,0.5s,baz=189,slow=8.8,SNR=6.8 | | | | | | | | |
| MJAR | | | | PcP | | PcP | | 04 13 26.2 | -0.8 |
| | comp=Z,2.1nm,0.8s,baz=185,slow=3.9,SNR=4.9 | | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| BJT | Baijiatuau | 47.69 | 353 | P | | P | | 04 12 12.9 | -0.8 |
| BJT | | | | | IAmb | IAmb | | 04 12 13.7 | |
| | comp=Z,8.2nm,0.6s | | | | | | | | |
| BJI | Beijing | 47.71 | 353 | P | | P | | 04 12 13.1 | -0.7 |
| BJI | | | | | PcP | PcP | | 04 13 32.8 | +0.5 |
| BJI | | | | | ScP | ScP | | 04 16 35.4 | +0.6 |
| BJI | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| HHC | Hu-ho-hao-te | 49.21 | 349 | eP | | P | | 04 12 27.5 | +2.4 |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,93nm,4.8s | | | | | | | | |
| USA0B | Ussuriysk Arra | 52.18 | 8 | P | | P | | 04 12 46.1 | -0.3 |
| USRK | Ussuriysk Ar. | 52.18 | 8 | P | | P | | 04 12 46.2 | -0.3 |
| USRK | Ussuriysk Ar. | 52.18 | 8 | P | | P | | 04 12 46.5 | 0.0 |
| | comp=Z,4.4nm,0.4s,baz=192,slow=6.9,SNR=31 | | | | | | | | |
| | comp=Z,4.4nm,0.4s | | | | | | | | |
| BNX | BinXian | 53.20 | 4 | ⇓P | | P | | 04 12 56.3 | +2.6 |
| BNX | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | | |
| MSVF | Nonsavu | 54.83 | 106 | P | | P | | 04 13 06.3 | +0.4 |
| MSVF | | | | | IAmb | IAmb | | 04 13 08.0 | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| THZ | Tophouse | 55.90 | 136 | P | | P | | 04 13 12.5 | -0.3 |
| THZ | | | | | IAmb | IAmb | | 04 13 54.9 | |
| | comp=Z,62nm,1.5s | | | | | | | | |
| TUWZ | Tuamarina | 56.49 | 135 | P | | P | | 04 13 17.5 | +0.6 |
| TCW | Tory Channel | 56.64 | 135 | P | | P | | 04 13 18.1 | +0.2 |
| SONM | Songino Array | 56.97 | 347 | P | | P | | 04 13 19.4 | -0.8 |
| SONM | Songino Array | 56.97 | 347 | P | | P | | 04 13 20.5 | +0.4 |
| | comp=Z,1.9nm,0.5s,baz=163,slow=8.7,SNR=11 | | | | | | | | |
| SONM | | | | PcP | | PcP | | 04 14 07.5 | -0.2 |
| | comp=Z,1.3nm,0.6s,baz=165,slow=4.2,SNR=4.8 | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| MRZ | Mangatainoka R | 57.37 | 134 | P | | P | | 04 13 22.5 | -0.4 |
| MRZ | | | | | IAmb | IAmb | | 04 13 37.5 | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| PLWZ | Palliser | 57.46 | 135 | P | | P | | 04 13 23.7 | +0.1 |
| HEH | HeiHe | 57.70 | 4 | eP | | P | | 04 13 25.1 | +0.3 |
| RTZ | Ruatahuna | 57.74 | 131 | P | | P | | 04 13 25.7 | +0.1 |
| RTZ | | | | | IAmb | IAmb | | 04 13 26.6 | |
| | comp=Z,53nm,1.5s | | | | | | | | |
| MXZ | Matakaoa Point | 58.43 | 130 | P | | P | | 04 13 31.1 | +0.9 |
| MXZ | | | | | IAmb | IAmb | | 04 14 04.5 | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| MK31 | Makanchi Array | 64.88 | 331 | P | | P | | 04 14 11.9 | -0.2 |
| MKAR | Makanchi Array | 64.88 | 331 | P | | P | | 04 14 11.7 | -0.3 |
| MKAR | Makanchi Array | 64.88 | 331 | P | | P | | 04 14 12.4 | +0.4 |
| | comp=Z,1.2nm,0.6s,baz=129,slow=8.8,SNR=14 | | | | | | | | |
| MKAR | | | | PcP | | PcP | | 04 14 39.5 | -0.3 |
| | comp=Z,1.6nm,0.6s,baz=137,slow=5.8,SNR=5.1 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| PETK | Petropavlovsk- | 67.33 | 22 | P | | P | | 04 14 27.9 | +0.9 |
| | comp=Z,7.7nm,0.6s,baz=222,slow=5.5,SNR=11 | | | | | | | | |
| | comp=Z,7.7nm,0.6s | | | | | | | | |
| ZAA0 | Zalesovo Array | 69.03 | 337 | P | | P | | 04 14 36.2 | -1.2 |
| ZALV | Zalesovo Beam | 69.03 | 337 | P | | P | | 04 14 36.2 | -1.2 |
| ZALV | Zalesovo Beam | 69.03 | 337 | P | | P | | 04 14 36.6 | -0.7 |
| | comp=Z,1.5nm,0.4s,baz=135,slow=5.1,SNR=6.3 | | | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | | | |
| KURBB | Kurchatov Arra | 69.33 | 332 | P | | P | | 04 14 39.4 | +0.2 |
| | comp=Z,0.7nm,0.2s,baz=144,slow=5.0,SNR=4.8 | | | | | | | | |
| | comp=Z,0.7nm,0.2s | | | | | | | | |
| KURK | Kurchatov | 69.35 | 332 | P | | P | | 04 14 37.6 | -1.7 |
| VNDA | Vanda | 72.89 | 172 | P | | P | | 04 14 59.9 | +0.2 |
| VNDA | Vanda | 72.89 | 172 | P | | P | | 04 15 00.5 | +0.8 |
| | comp=Z,2.1nm,0.6s,baz=320,slow=6.1,SNR=24 | | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | | |
| SBA | Scott Base | 73.85 | 171 | P | | P | | 04 15 06.1 | +0.9 |
| VOI | Vohitsoka | 74.14 | 249 | P | | P | | 04 15 08.5 | +0.5 |
| VOI | | | | | IAmb | IAmb | | 04 15 30.6 | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| ABKAR | Akbulak array | 78.49 | 324 | P | | P | | 04 15 30.7 | -0.5 |
| TIXI | Tiksi | 79.13 | 2 | P | | P | | 04 15 33.5 | -0.6 |
| AKTO | Aktyubinsk | 80.12 | 324 | P | | P | | 04 15 39.9 | +0.1 |
| | comp=Z,3.7nm,0.6s,baz=109,slow=5.2,SNR=12 | | | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | | | |
| RAYN | Ar Rayn | 81.33 | 295 | P | | P | | 04 15 46.7 | 0.0 |
| RAYN | | | | | IAmb | IAmb | | 04 15 48.2 | |
| | comp=Z,7.7nm,0.9s | | | | | | | | |
| ARU | Arti | 82.39 | 330 | P | | P | | 04 15 50.4 | -0.9 |
| ARU | | | | | IAmb | IAmb | | 04 15 52.0 | |
| | comp=Z,5.6nm,0.7s | | | | | | | | |
| ARU | Arti | 82.39 | 330 | P | | P | | 04 15 50.9 | -0.3 |
| | comp=Z,2.9nm,0.5s,baz=96,slow=9.2,SNR=7.0 | | | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | | | |
| QSPA | South Pole Qui | 82.45 | 180 | P | | P | | 04 15 51.4 | -0.2 |
| QSPA | South Pole Qui | 82.45 | 180 | P | | P | | 04 15 51.5 | -0.1 |
| | comp=Z,1.5nm,0.5s,baz=276,slow=1.5,SNR=20 | | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| KBZ | Khabaz | 87.81 | 314 | P | | P | | 04 16 18.0 | +0.2 |
| | comp=Z,1.9nm,0.7s,baz=132,slow=6.6,SNR=4.1 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| SNAA | Sanae | 93.36 | 195 | P | | P | | 04 16 43.2 | +0.3 |
| | comp=Z,0.5nm,0.5s,baz=246,slow=20,SNR=5.3 | | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | | |
| BRTR | Keskin Array B | 94.00 | 309 | P | | P | | 04 16 45.4 | -1.2 |
| | comp=Z,0.6nm,0.7s,baz=103,slow=2.7,SNR=4.3 | | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | | |
| I23K | Minto, Yukon-K | 95.93 | 25 | P | | P | | 04 16 54.0 | -0.5 |
| ILAR | Eielson Array | 96.96 | 26 | P | | P | | 04 16 57.0 | -2.2 |
| | comp=Z,0.6nm,0.8s,baz=325,slow=4.6,SNR=3.8 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| EKA | Eskdalemuir Ar | 116.00 | 329 | PKP | | PKiKP | | 04 22 07.2 | -0.1 |
| | comp=Z,1.7nm,1.0s,baz=307,slow=2.6,SNR=4.1 | | | | | | | | |
| NVAR | Mina Array Bea | 117.31 | 51 | PKP | | PKiKP | | 04 22 11.5 | +0.8 |
| | comp=Z,1.4nm,0.8s,baz=252,slow=2.1,SNR=9.6 | | | | | | | | |
| HLID | Hailey | 118.77 | 44 | | | PKiKP | | 04 22 14.1 | +0.7 |
| ELK | Elko | 119.02 | 47 | PKPdf | | PKiKP | | 04 22 14.7 | +0.7 |
| HVU | Hansel Valley | 120.48 | 46 | PKPdf | | PKiKP | | 04 22 17.1 | +0.3 |
| DUG | Dugway, Tooele | 120.95 | 47 | PKPdf | | PKPdf | | 04 22 17.1 | -0.4 |
| FXWY | Fox Creek | 121.06 | 43 | PKPdf | | PKPdf | | 04 22 16.7 | -1.1 |
| SNOW | Snow King Moun | 121.31 | 43 | PKPdf | | PKiKP | | 04 22 19.5 | +1.0 |
| HWUT | Hardware Ranch | 121.40 | 45 | PKPdf | | PKPdf | | 04 22 17.9 | -0.6 |
| TORD | Torodi Ar. Bea | 121.75 | 281 | PKPdf | | PKPdf | | 04 22 19.1 | -0.5 |
| TORD | Torodi Ar. Bea | 121.75 | 281 | PKP | | PKPdf | | 04 22 19.4 | -0.2 |
| | comp=Z,3.1nm,0.7s,baz=66,slow=3.1,SNR=24 | | | | | | | | |
| MPU | Maple Canyon | 121.87 | 47 | PKPdf | | PKPdf | | 04 22 19.0 | -0.3 |
| MSU | Marysvale | 121.93 | 49 | PKPdf | | PKiKP | | 04 22 20.5 | +0.8 |
| PD31 | Pinedale Array | 122.38 | 44 | PKPdf | | PKPdf | | 04 22 19.2 | -1.1 |
| PDAR | Pinedale Array | 122.38 | 44 | PKP | | PKPdf | | 04 22 20.2 | -0.1 |
| | comp=Z,0.6nm,0.4s,baz=77,slow=1.8,SNR=13 | | | | | | | | |
| TMUT | Trail Mountain | 122.41 | 48 | PKPdf | | PKiKP | | 04 22 21.2 | +0.4 |
| U15A | North Rim | 122.44 | 51 | PKPdf | | PKiKP | | 04 22 20.8 | -0.1 |
| ESDC | Sonseca Array | 122.63 | 313 | PKP | | PKiKP | | 04 22 21.2 | +0.4 |
| | comp=Z,0.6nm,0.7s,baz=10.0,slow=3.1,SNR=5.9 | | | | | | | | |
| LAO | LASA Array | 122.92 | 38 | PKPdf | | PKiKP | | 04 22 21.0 | -0.2 |
| SRU | San Rafael Swe | 122.97 | 48 | PKPdf | | PKPdf | | 04 22 20.3 | -1.2 |
| O20A | White River Ci | 124.27 | 46 | PKPdf | | PKiKP | | 04 22 24.3 | 0.0 |
| RWWY | Rawlins | 124.41 | 44 | PKPdf | | PKiKP | | 04 22 24.4 | -0.2 |
| RSSD | Black Hills | 125.47 | 40 | PKPdf | | PKPdf | | 04 22 24.7 | -1.5 |
| ULM | Lac du Bonnet | 126.72 | 30 | PKP | | PKPdf | | 04 22 27.6 | -0.5 |
| | comp=Z,3.3nm,0.6s,baz=35,slow=1.2,SNR=5.6 | | | | | | | | |
| PLCA | Paso Flores | 130.46 | 167 | PKP | | PKiKP | | 04 22 36.4 | -0.2 |
| | comp=Z,1.7nm,1.0s,baz=333,slow=4.5,SNR=3.7 | | | | | | | | |
| TX31 | Lajitas Ar. Si | 131.41 | 57 | PKPdf | | PKiKP | | 04 22 38.8 | -0.1 |
| TXAR | Lajitas Array | 131.41 | 57 | PKP | | PKiKP | | 04 22 39.2 | +0.4 |
| | comp=Z,0.8nm,0.6s,baz=224,slow=1.9,SNR=17 | | | | | | | | |
| TXAR | | | | SKPab | | SKPab | | 04 25 13.0 | -0.5 |
| | comp=Z,0.8nm,0.7s,baz=252,slow=3.2,SNR=8.0 | | | | | | | | |
| SMWD | Samnorwood | 132.08 | 49 | PKPdf | | PKiKP | | 04 22 39.7 | -0.2 |
| SCHQ | Scheferville | 132.22 | 7 | PKP | | PKPdf | | 04 22 38.2 | -0.2 |
| | comp=Z,2.3nm,0.5s,baz=311,slow=3.3,SNR=5.2 | | | | | | | | |
| JCT | Junction City | 134.21 | 54 | PKPdf | | PKiKP | | 04 22 44.2 | -0.2 |
| S39A | Bolivar | 135.72 | 42 | PKPdf | | PKPdf | | 04 22 45.6 | +0.1 |
| R40A | Maddies Statio | 136.07 | 40 | PKPdf | | PKiKP | | 04 22 47.5 | -0.4 |
| WVT | Waverly | 140.19 | 40 | | | PKPpre | | 04 22 46.3 | |
| PLAL | Pickwick Lake | 140.73 | 42 | PKPpre | | PKPpre | | 04 22 46.9 | |
| CLTN | Cedars of Leba | 141.16 | 39 | PKPpre | | PKPpre | | 04 22 49.8 | |
| T50A | Nancy | 141.45 | 36 | PKPpre | | PKPpre | | 04 22 50.6 | |
| SSPA | Standing Stone | 142.29 | 26 | PKPpre | | PKPpre | | 04 22 53.1 | |
| Y49A | Blount Mountai | 142.51 | 42 | PKPpre | | PKPpre | | 04 22 53.9 | |
| FPAL | Fort Paine | 142.60 | 40 | PKPpre | | PKPpre | | 04 22 54.2 | |
| R55A | Marlinton | 143.12 | 30 | PKPdf | | PKPab | | 04 22 56.2 | -0.4 |
| MVL | Millersville | 143.47 | 25 | PKPdf | | PKPab | | 04 22 57.2 | -0.5 |
| U54A | Nelsons Funny | 143.53 | 34 | PKPdf | | PKPab | | 04 22 57.2 | -1.0 |
| V53A | Saluda | 143.56 | 36 | PKPdf | | PKPab | | 04 22 58.1 | -0.3 |
| BRAL | Brewton | 143.64 | 46 | PKPdf | | PKPdf | | 04 22 59.4 | -0.5 |
| SDMD | Soldier's Deli | 143.75 | 26 | PKPdf | | PKPab | | 04 22 58.2 | -0.7 |
| 152A | Waverly Hall | 144.36 | 42 | | | PKPbc | | 04 23 00.6 | -0.4 |
| CBN | Corbin Frederi | 144.50 | 28 | PKPdf | | PKPdf | | 04 23 00.9 | -0.3 |
| HODGE | Hodges | 144.89 | 37 | PKPdf | | PKPbc | | 04 23 02.2 | -0.4 |
| CPUP | Villa Florida | 146.34 | 180 | | | PKPbc | | 04 23 06.8 | -0.1 |
| CPUP | Villa Florida | 146.34 | 180 | PKPbc | | PKPbc | | 04 23 07.7 | +0.7 |
| | comp=Z,7.4nm,0.8s,baz=174,slow=2.4,SNR=21 | | | | | | | | |
| PETF | Flores | 146.93 | 71 | PKPbc | | PKPbc | | 04 23 09.1 | +0.3 |
| AQDB | Aquidauana | 152.12 | 183 | PKPbc | | PKPbc | | 04 23 21.1 | -0.1 |
| LPAZ | La Paz | 154.04 | 156 | PKPab | | PKPab | | 04 23 43.5 | +1.2 |
| | comp=Z,3.6nm,0.6s,baz=144,slow=1.8,SNR=15 | | | | | | | | |

*NEIC* ***13*** *04:10:35.1±1.1,69.55N±0.06×144.19W±0.07,h4km±7km, Error ellipse: s-maj=8.8km s-min=3.0km az=191.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-0.63; $M_{\theta\theta}$-1.51; $M_{\phi\phi}$2.14; $M_{r\theta}$0.50; $M_{r\phi}$-0.16; $M_{\theta\phi}$-0.42; Fault plane solution: $M_0$2.02000×$10^{14}$ NP1: $\phi_s$315.57000°,$\delta$79.47000°,$\lambda$-155.80000°. NP2: $\phi_s$220.88000°,$\delta$66.23000°,$\lambda$-11.51000°. Principal axes: T 2.2116, Plg9.0000°, Azm86.0000°; N -0.4771, Plg64.0000°, Azm338.0000°; P -1.7345, Plg24.0000°, Azm180.0000°;*

*NEIC* ***13*** *04:10:35.4,69.57N×144.11W,h8km*

**AEIC 13 04:10:34.1±1.8,69.44N±0.05×144.20W±0.09,h7km±6km, ML3.4,ML3.5**/118(NEIC),**Mwr3.5**/18(NEIC),**Error ellipse: s-maj=7.7km s-min=4.2km az=192.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.25 | 43 | | Pg | 04 10 39.4 | +0.3 |
| C27K | | | | | Sg | 04 10 42.3 | -0.1 |
| C26K | Camden Bay | 0.54 | 333 | | Pg | 04 10 44.9 | +0.4 |
| C26K | | | | | Sg | 04 10 51.4 | -0.1 |
| C26K | | | | IAML | | 04 10 54.6 | |
| | comp=N,4µm,0.4s | | | | | | |
| C26K | | | | IAML | | 04 10 55.0 | |
| | comp=E,4µm,0.4s | | | | | | |
| D25K | Kavik River | 0.78 | 262 | Pg | Pg | 04 10 48.9 | -0.2 |
| D25K | | | | Sg | Sg | 04 10 59.9 | +0.6 |
| D25K | | | | IAML | | 04 11 02.3 | |
| | comp=N,2µm,0.4s | | | | | | |
| D27M | Malcolm River | 1.16 | 98 | Pg | Pg | 04 10 55.6 | -0.8 |
| D27M | | | | | Sn | 04 11 13.4 | +0.4 |
| D27M | | | | IAML | | 04 11 18.5 | |
| | comp=E,852nm,0.4s | | | | | | |
| D27M | | | | IAML | | 04 11 18.8 | |
| | comp=N,850nm,0.3s | | | | | | |
| E27K | Coleen River | 1.58 | 142 | | Pg | 04 11 04.8 | +0.4 |
| E27K | | | | IAML | | 04 11 28.1 | |
| | comp=E,683nm,0.6s | | | | | | |
| E27K | | | | IAML | | 04 11 30.2 | |
| | comp=N,646nm,0.7s | | | | | | |
| C24K | Franklin Bluff | 1.60 | 282 | Pn | Pg | 04 11 04.6 | -0.3 |
| C24K | | | | | Sb | 04 11 24.5 | +0.1 |
| D24K | Happy Valley | 1.67 | 262 | Pn | Pg | 04 11 06.3 | +0.2 |
| F26K | She

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| H23K | | | | IAML | | 04 12 53.8 | | |
| | comp=N,64nm,0.6s | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.18 174** | Pn | Pn | 04 11 41.1 | +3.0 | | |
| I26K | | | | IAML | 04 12 53.4 | | | |
| | comp=E,73nm,0.7s | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.18 134** | Pn | Pn | 04 11 40.6 | +2.4 | | |
| **I28M** | **Miner Creek** | **4.33 156** | Pn | Pn | 04 11 43.4 | +3.0 | | |
| I28M | | | | IAML | 04 12 37.8 | | | |
| | comp=N,69nm,0.5s | | | | | | | |
| I28M | | | | IAML | 04 12 59.4 | | | |
| | comp=E,51nm,1.4s | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.35 113** | Pn | Pn | 04 11 42.5 | +2.0 | | |
| F31M | | | | IAML | 04 12 56.3 | | | |
| | comp=E,48nm,0.7s | | | | | | | |
| F31M | | | | IAML | 04 12 58.1 | | | |
| | comp=N,47nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **4.48 120** | Pn | Pn | 04 11 44.4 | +2.1 | | |
| **H22K** | **Ishtalitna Cre** | **4.50 221** | | Pn | 04 11 44.4 | +1.9 | | |
| **D20K** | **Etivluk River** | **4.51 266** | | Pn | 04 11 44.8 | +2.0 | | |
| **POKR** | **Poker Plat Res** | **4.52 198** | Pn | Pn | 04 11 45.9 | +2.9 | | |
| POKR | | | | IAML | 04 13 03.8 | | | |
| | comp=E,42nm,0.7s | | | | | | | |
| POKR | | | | IAML | 04 13 10.8 | | | |
| | comp=N,38nm,1.0s | | | | | | | |
| **B20K** | **Meade River** | **4.55 283** | Pn | Pn | 04 11 44.8 | +1.6 | | |
| B20K | | | | IAML | 04 13 14.2 | | | |
| | comp=E,56nm,1.2s | | | | | | | |
| **G21K** | **Allakaket** | **4.57 234** | Pn | Pn | 04 11 45.5 | +1.9 | | |
| **A21K** | **Barrow** | **4.59 300** | | Pn | 04 11 44.9 | +1.1 | | |
| **I29M** | **Ogilvie Camp,** | **4.69 148** | Pn | Pn | 04 11 47.5 | +2.3 | | |
| **I23K** | **Minto, Yukon-K** | **4.75 207** | Pn | Pn | 04 11 48.2 | +2.1 | | |
| I23K | | | | IAML | 04 13 15.2 | | | |
| | comp=E,45nm,1.0s | | | | | | | |
| I23K | | | | IAML | 04 13 20.1 | | | |
| | comp=N,46nm,1.2s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.77 201** | Pn | Pn | 04 11 48.6 | +2.3 | | |
| MDM | | | | IAML | 04 13 15.7 | | | |
| | comp=E,46nm,0.7s | | | | | | | |
| MDM | | | | IAML | 04 13 18.1 | | | |
| | comp=N,33nm,0.9s | | | | | | | |
| **COLA** | **College** | **4.81 199** | Pn | Pn | 04 11 48.8 | +2.0 | | |
| **IL31** | | **4.81 194** | Pn | Pn | 04 11 49.4 | +2.5 | | |
| **EGAK** | **Eagle** | **4.83 164** | Pn | Pn | 04 11 50.0 | +2.8 | | |
| EGAK | | | | IAML | 04 12 47.6 | | | |
| | comp=N,40nm,0.8s | | | | | | | |
| EGAK | | | | IAML | 04 12 48.5 | | | |
| | comp=N,46nm,0.7s | | | | | | | |
| **J25K** | **Salcha River,** | **4.88 186** | Pn | Pn | 04 11 50.7 | +2.9 | | |
| **J26L** | **Joseph Creek** | **4.97 177** | Pn | Pn | 04 11 52.2 | +3.0 | | |
| **CCB** | **Clear Creek Bu** | **5.02 198** | Pn | Pn | 04 11 52.4 | +2.7 | | |
| **IMAR** | **Indian Mountai** | **5.03 231** | Pn | Pn | 04 11 51.5 | +1.7 | | |
| **H21K** | **Melozitna Rive** | **5.03 225** | Pn | Pn | 04 11 52.4 | +2.5 | | |
| H21K | | | | IAML | 04 13 24.9 | | | |
| | comp=E,33nm,1.1s | | | | | | | |
| H21K | | | | IAML | 04 13 27.0 | | | |
| | comp=N,29nm,0.9s | | | | | | | |
| **D19K** | **Kuna River** | **5.10 266** | Pn | Pn | 04 11 52.7 | +1.8 | | |
| **MLY** | **Manley** | **5.11 213** | Pn | Pn | 04 11 53.5 | +2.5 | | |
| **HDA** | **Harding Lake** | **5.17 193** | Pn | Pn | 04 11 54.5 | +2.6 | | |
| HDA | | | | IAML | 04 13 22.9 | | | |
| | comp=N,31nm,0.8s | | | | | | | |
| HDA | | | | IAML | 04 13 29.2 | | | |
| | comp=E,32nm,0.9s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.20 141** | Pn | Pn | 04 11 54.6 | +2.2 | | |
| **WRH** | **Wood River Hil** | **5.22 199** | Pn | Pn | 04 11 55.4 | +2.8 | | |
| WRH | | | | IAML | 04 12 57.0 | | | |
| | comp=N,21nm,1.1s | | | | | | | |
| WRH | | | | IAML | 04 13 28.2 | | | |
| | comp=E,23nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.23 204** | Pn | Pn | 04 11 55.9 | +3.3 | | |
| **C19K** | **Lookout Ridge** | **5.47 274** | Pn | Pn | 04 11 57.6 | +1.6 | | |
| **SCRK** | **Sand Creek** | **5.49 179** | Pn | Pn | 04 11 59.7 | +3.3 | | |
| **K27K** | **Chicken** | **5.50 170** | | Pn | 04 11 59.8 | +3.5 | | |
| **F19K** | **Shaleruckik Mo** | **5.71 249** | Pn | Pn | 04 12 01.5 | +2.4 | | |
| **DAWY** | **Dawson** | **5.72 158** | Pn | Pn | 04 12 02.5 | +3.0 | | |
| **J30M** | **Hart River** | **5.78 144** | Pn | Pn | 04 12 03.2 | +3.0 | | |
| **DOT** | **Dot Lake** | **5.82 179** | | Pn | 04 12 03.7 | +2.9 | | |
| **A19K** | **Wainwright** | **5.88 285** | | Pn | 04 12 02.9 | +1.4 | | |
| **G19K** | **Purcell Mounta** | **5.90 242** | Pn | Pn | 04 12 03.4 | +1.6 | | |
| **BPAW** | **Bear Paw Mtn.** | **6.00 210** | Pn | Pn | 04 12 04.8 | +1.6 | | |
| **H19K** | **Roundabout Mou** | **6.12 236** | Pn | Pn | 04 12 05.8 | +0.9 | | |
| **C18K** | **Utukok River** | **6.15 271** | | Pn | 04 12 06.3 | +1.0 | | |
| **I20K** | **Naaghedeneel** | **6.15 226** | Pn | Pn | 04 12 08.6 | +3.4 | | |
| **B18K** | **Kokolik River** | **6.21 278** | | Pn | 04 12 07.1 | +1.1 | | |
| **K29M** | **Barlow Dome** | **6.22 152** | Pn | Pn | 04 12 08.9 | +2.6 | | |
| **RND** | **Reindeer** | **6.34 199** | Pn | Pn | 04 12 11.4 | +3.4 | | |
| **E18K** | **Tukpahlearik C** | **6.38 259** | | Pn | 04 12 10.3 | +2.0 | | |
| **L26K** | **Log Cabin Wild** | **6.46 177** | Pn | Pn | 04 12 12.2 | +2.7 | | |
| **F18K** | **Selawik** | **6.46 251** | | Pn | 04 12 11.0 | +1.6 | | |
| **BCAR** | **Beaver Creek A** | **6.48 170** | Pn | Pn | 04 12 12.5 | +2.6 | | |
| **DHY** | **Denali Highway** | **6.52 193** | Pn | Pn | 04 12 14.5 | +4.0 | | |
| **PAX** | **Paxson** | **6.52 185** | | Pn | 04 12 13.7 | +3.2 | | |
| **G18K** | **Tagagawik** | **6.55 244** | Pn | Pn | 04 12 13.8 | +3.1 | | |
| **J20K** | **Nowinta River** | **6.58 221** | Pn | Pn | 04 12 13.5 | +2.3 | | |
| **A36M** | **Sachs Harbour** | **6.76 59** | Pn | Pn | 04 12 12.9 | -0.7 | | |
| **L29M** | **L29M** | **6.81 156** | Pn | Pn | 04 12 17.2 | +2.9 | | |
| **WAT1** | **Susitna Watana** | **6.87 197** | | Pn | 04 12 18.6 | +3.4 | | |
| **C17K** | **DeLong Mountai** | **6.89 271** | | Pn | 04 12 15.6 | +0.1 | | |
| **WAT7** | **Susitna Watana** | **6.90 198** | | Pn | 04 12 19.1 | +3.5 | | |
| **RDOG** | **Red Dog Mine** | **6.93 267** | Pn | Pn | 04 12 16.9 | +0.9 | | |
| **E17K** | **Hotham Inlet** | **6.95 258** | | Pn | 04 12 16.9 | +0.6 | | |
| **H18K** | **Honhosa River** | **6.96 239** | Pn | Pn | 04 12 18.1 | +1.7 | | |
| **J19K** | **Poorman** | **7.09 225** | Pn | Pn | 04 12 20.1 | +1.9 | | |
| **M26K** | **Nabesna, AK** | **7.09 175** | Pn | Pn | 04 12 21.1 | +2.9 | | |
| **C36M** | **Paulatuk** | **7.09 81** | | Pn | 04 12 18.6 | +0.4 | | |
| **D17K** | **Noatak River** | **7.13 265** | | Pn | 04 12 18.9 | +0.3 | | |
| **M29M** | **Somme Creek** | **7.41 159** | Pn | Pn | 04 12 25.1 | +2.5 | | |
| **L19K** | **White Mountain** | **8.49 216** | Pn | Pn | 04 12 39.4 | +2.1 | | |
| **N30M** | **Aishikik Lake** | **8.54 156** | Pn | Pn | 04 12 40.5 | +2.4 | | |
| **CTGM** | **Chitina Glacie** | **8.60 171** | Pn | Pn | 04 12 41.8 | +2.8 | | |
| **M19K** | **Big River Lodg** | **8.65 214** | Pn | Pn | 04 12 41.9 | +2.4 | | |
| **L18K** | **Granite Mounta** | **8.86 221** | Pn | Pn | 04 12 43.5 | +1.2 | | |
| **O30N** | **Mendenhall** | **9.34 155** | Pn | Pn | 04 12 51.6 | +2.6 | | |
| **M17K** | **Holitna River** | **9.75 221** | Pn | Pn | 04 12 55.7 | +1.2 | | |
| **WRGLY** | **Wrigley** | **10.36 117** | Pn | Pn | 04 13 04.1 | +1.3 | | |

*NEIC* ***13*** *04:27:44.9±2.2, 69.55N±0.02×144.72W±0.03, h10km±2km, Error ellipse: s-maj=3.7km s-min=3.0km az=338.0*

**AEIC 13 04:27:44.4±2.6, 69.54N±0.02×144.66W±0.05, h5km±7km, ML2.5, ML2.8/34(NEIC), Error ellipse: s-maj=3.2km s-min=2.3km az=176.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.35** | **74** | | Pg | 04 27 51.4 | +0.3 |
| C27K | | | | | Sg | 04 27 56.2 | +0.5 |
| C27K | | | | IAML | | 04 27 58.7 | |
| | comp=N,684nm,0.4s | | | | | | |
| **C26K** | **Camden Bay** | **0.39** | **347** | Pg | Pg | 04 27 51.5 | -0.5 |
| C26K | | | | Sg | Sg | 04 27 56.6 | -0.6 |
| **D25K** | **Kavik River** | **0.64** | **251** | Pg | Pg | 04 27 55.8 | -0.9 |
| D25K | | | | Sg | Sg | 04 28 04.8 | -0.3 |
| **D27M** | **Malcolm River** | **1.34** | **101** | | Pb | 04 28 10.0 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.43** | **279** | Pn | Pb | 04 28 11.5 | +0.1 |
| C24K | | | | IAML | | 04 28 32.9 | |
| | comp=N,76nm,0.8s | | | | | | |
| C24K | | | | IAML | | 04 28 33.2 | |
| | comp=E,95nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.52** | **257** | Pn | Pb | 04 28 12.8 | -0.3 |
| D24K | | | | IAML | | 04 28 37.6 | |
| | comp=E,81nm,0.6s | | | | | | |
| D24K | | | | IAML | | 04 28 38.3 | |
| | comp=N,76nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.75** | **139** | Pn | Pn | 04 28 15.6 | +0.1 |
| E27K | | | | IAML | | 04 29 18.0 | |
| | comp=E,101nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.86** | **174** | Pn | Pb | 04 28 19.4 | +0.5 |
| **F25K** | **Christian Rive** | **1.98** | **191** | Pn | Pb | 04 28 20.5 | -0.4 |
| **E28M** | **Babbage River** | **2.06** | **115** | Pn | Pb | 04 28 22.1 | -0.3 |
| E28M | | | | IAML | | 04 29 29.6 | |
| | comp=N,58nm,0.9s | | | | | | |
| E28M | | | | IAML | | 04 29 30.2 | |
| | comp=E,45nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.10** | **281** | Pn | Pn | 04 28 21.0 | +0.9 |
| **G29M** | **Pine Creek** | **3.61** | **134** | Pn | Pn | 04 28 40.5 | -0.5 |
| **H24K** | **Noodor Dome** | **3.91** | **200** | Pn | Pn | 04 28 44.6 | -0.5 |
| H24K | | | | IAML | | 04 30 32.3 | |
| | comp=N,14nm,1.1s | | | | | | |
| **F21K** | **Alatna River** | **4.00** | **239** | Pn | Pn | 04 28 45.8 | -0.5 |
| **EPYK** | **Eagle Plains** | **4.37** | **133** | Pn | Pn | 04 28 52.7 | +1.4 |
| **I23K** | **Minto, Yukon-K** | **4.77** | **205** | Pn | Pn | 04 28 57.3 | +0.5 |
| **D19K** | **Kuna River** | **4.95** | **264** | Pn | Pn | 04 29 00.7 | +1.4 |

**RSNC 13 04:34:05.3±0.0, 7°N±1°×7°3W±°, h140km±2km, M3.5, mB5.5, mb4.2, ML3.0, Mw(mB)5.0, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.20** | **195** | P | Pn | 04 34 23.6 | -1.1 |
| BARC | | | | S | Sn | 04 34 38.2 | -1.2 |
| **BRJC** | **Barrancabermej** | **0.64** | **287** | P | Pn | 04 34 25.4 | -0.9 |
| BRJC | | | | S | Sn | 04 34 41.9 | -0.3 |
| **PAMC** | **Pamplona, Colo** | **0.69** | **38** | P | Pn | 04 34 26.5 | -0.8 |
| PAMC | | | | S | Sn | 04 34 43.6 | -0.3 |
| **RUSC** | **La Rusia** | **0.89** | **177** | P | Pn | 04 34 27.5 | -1.3 |
| RUSC | | | | S | Sn | 04 34 45.6 | -1.0 |
| **PTBC** | **PUERTO BERRIO,** | **1.34** | **259** | P | Pn | 04 34 30.1 | -2.3 |
| PTBC | | | | S | Sn | 04 34 51.0 | -2.1 |
| **TAMC** | **Tame, Arauca** | **1.38** | **105** | P | Pn | 04 34 32.0 | -0.8 |
| TAMC | | | | S | Sn | 04 34 53.2 | -0.6 |
| **OCAC** | **Ocana** | **1.45** | **353** | P | Pn | 04 34 32.0 | -1.8 |
| OCAC | | | | S | Sn | 04 34 53.5 | -2.0 |
| **SPBC** | **San Pablo de B** | **1.47** | **220** | P | Pn | 04 34 32.5 | -1.4 |
| SPBC | | | | S | Sn | 04 34 54.3 | -1.4 |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **292** | P | Pn | 04 34 36.3 | -1.8 |
| ZARC | | | | S | Sn | 04 35 02.6 | -0.6 |
| **NORC** | **Norcasia** | **2.12** | **235** | P | Pn | 04 34 39.4 | -1.9 |
| NORC | | | | S | Sn | 04 35 07.0 | -1.9 |
| **CHIC** | **Chingaza** | **2.23** | **196** | P | Pn | 04 34 41.7 | -1.3 |
| CHIC | | | | S | Sn | 04 35 10.7 | -1.3 |
| **ROSC** | **El Rosal** | **2.27** | **211** | P | Pn | 04 34 43.3 | -0.2 |
| ROSC | | | | S | Sn | 04 35 14.9 | +2.1 |
| **UREC** | **San Jos de Ur** | **2.57** | **292** | P | Pn | 04 34 44.1 | -2.7 |
| UREC | | | | S | Sn | 04 35 16.1 | -2.7 |
| **VILC** | **Villavicencio,** | **2.72** | **192** | P | Pn | 04 34 46.9 | -2.0 |
| VILC | | | | S | Sn | 04 35 20.8 | -1.6 |
| **PTGC** | **Puerto Gaitan,** | **2.76** | **159** | P | Pn | 04 34 46.8 | -2.4 |
| PTGC | | | | S | Sn | 04 35 19.6 | -3.5 |
| **NIZA** | **Niza - Manizal** | **2.90** | **234** | P | Pn | 04 34 53.7 | +2.5 |
| **DBBC** | **Dabeiba** | **3.07** | **274** | P | Pn | 04 34 52.0 | -1.2 |
| DBBC | | | | S | Sn | 04 35 27.7 | -2.5 |
| **ANIL** | **Santa Ana** | **3.21** | **225** | P | Pn | 04 34 54.7 | -0.7 |
| ANIL | | | | S | Sn | 04 35 36.5 | +2.5 |
| **SDV** | **Santo Domingo** | **3.23** | **50** | P | Pn | 04 34 53.6 | -1.9 |
| SDV | | | | S | Sn | 04 35 30.7 | -3.6 |
| **ARGC** | **Ariguani, Magd** | **3.24** | **340** | P | Pn | 04 34 54.9 | -0.5 |
| ARGC | | | | S | Sn | 04 35 32.4 | -1.8 |
| **PRAC** | **Prado** | **3.52** | **210** | P | Pn | 04 34 57.0 | -2.1 |
| PRAC | | | | S | Sn | 04 35 38.8 | -2.0 |
| **ORTC** | **Ortega, Tolima** | **3.55** | **216** | P | Pn | 04 34 57.9 | -1.6 |
| ORTC | | | | S | Sn | 04 35 40.9 | -0.6 |
| **APAC** | **Apartado, Choc** | **3.59** | **288** | P | Pn | 04 34 58.2 | -1.8 |
| APAC | | | | S | Sn | 04 35 39.7 | -2.7 |
| **PLMC** | **San Jos del P** | **3.65** | **239** | P | Pn | 04 34 59.5 | -1.3 |
| PLMC | | | | S | Sn | 04 35 43.1 | -0.8 |
| **SJCC** | **San Jacinto, C** | **3.69** | **327** | P | Pn | 04 34 58.1 | -3.3 |
| SJCC | | | | S | Sn | 04 35 39.7 | -5.1 |
| **URMC** | **La Uribe, Meta** | **3.73** | **200** | P | Pn | 04 35 00.6 | -1.3 |
| URMC | | | | S | Sn | 04 35 44.2 | -1.6 |
| **CRJC** | **Cerrejon, Guaj** | **4.21** | **3** | P | Pn | 04 35 04.4 | -3.8 |
| CRJC | | | | S | Sn | 04 35 50.7 | -6.4 |
| **YOTC** | **Yotoco, Valle** | **4.25** | **229** | P | Pn | 04 35 06.5 | -2.2 |
| YOTC | | | | S | Sn | 04 36 00.6 | +2.7 |
| **GUVC** | **San Jose del G** | **4.25** | **173** | P | Pn | 04 35 05.9 | -2.7 |
| GUVC | | | | S | Sn | 04 35 53.9 | -3.9 |
| **SMRC** | **Santa Marta, M** | **4.48** | **346** | P | Pn | 04 35 09.4 | -2.3 |
| SMRC | | | | S | Sn | 04 35 58.0 | -5.3 |
| **PIZC** | **Pizarro, Choco** | **4.58** | **247** | P | Pn | 04 35 12.5 | -0.5 |
| **JAMC** | **Jamundi, Valle** | **5.01** | **225** | P | Pn | 04 35 16.8 | -2.1 |
| | 20nm,0.5s | | | | | | |
| **URIC** | **Uribia, Colomb** | **5.01** | **13** | P | Pn | 04 35 14.8 | -3.9 |
| **MALC** | **Bahia Malaga** | **5.01** | **237** | P | Pn | 04 35 18.9 | +0.1 |
| **GARC** | **Garzon, Huila** | **5.14** | **207** | P | Pn | 04 35 18.9 | -1.9 |
| **POPC** | **Popayan, Colom** | **5.50** | **220** | P | Pn | 04 35 24.3 | -1.3 |
| | 9.1nm,0.5s | | | | | | |
| POPC | | | | S | Sn | 04 36 27.4 | -0.7 |
| | 9.1nm,0.5s | | | | | | |
| **FLOC** | **Florencia** | **5.75** | **206** | P | Pn | 04 35 26.7 | -2.0 |
| | 11nm,0.8s | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.27** | **221** | P | Pn | 04 35 35.0 | -0.7 |
| **CRUC** | **La Cruz** | **6.44** | **216** | P | Pn | 04 35 39.4 | +1.3 |
| **MTDJ** | **Mount Denham** | **12.15** | **340** | P | Pn | 04 36 54.0 | 0.0 |
| MTDJ | | | | S | Sn | 04 39 02.9 | -5.3 |

*AEIC* ***13*** *04:43:07±2.1, 69.49N±0.04×144.47W±0.08, h16km±5km, ML3.8, ML3.9/124(NEIC), Mwr3.8/23(NEIC), Error ellipse: s-maj=6.6km s-min=3.9km az=195.0*

*IDC* ***13*** *04:43:08.7±1.0, 69.68N×144.37W, h0km, mb3.6/6, mbtmp3.6/10, ML3.8/4, MS3.5/2, Error ellipse: s-maj=23.0km s-min=15.0km az=36.0*

*NEIC* ***13*** *04:43:08.6±1.3, 69.57N±0.05×144.46W±0.07, h10km±1km, Error ellipse: s-maj=8.5km s-min=3.4km az=20.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.46; $M_{\theta\theta}$-4.79; $M_{\phi\phi}$4.33; $M_{r\theta}$-0.82; $M_{\theta\phi}$-4.74; $M_{\phi r}$1.58; Fault plane solution: $M_0$6.83000×$10^{14}$ NP1: $\phi_s$290.87000°, $\delta$79.86000°, $\lambda$168.06000°. NP2: $\phi_s$23.00000°, $\delta$78.25000°, $\lambda$10.36000°. Principal axes: T 6.8462, Plg16.0000°, Azm247.0000°; N -0.0361, Plg74.0000°, Azm71.0000°; P -6.8101, Plg1.0000°, Azm337.0000°;*

*NEIC* ***13*** *04:43:09, 69.52N×144.74W, h0km*

**ISC 13 04:43:08.0±1.2, 69.55N±0.04×144.44W±0.03, h3km±9km, n150, σ1§01/157, mb3.6/6, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.27** | **73** | | **Pg** | **04 43 13.4** | **+0.3** |
| C27K | | | | | **Sg** | **04 43 17.2** | **+0.7** |
| **C26K** | **Camden Bay** | **0.41** | **336** | | **Pg** | **04 43 16.6** | **+0.8** |
| C26K | | | | | **Sb** | **04 43 23.2** | **-1.1** |
| **D25K** | **Kavik River** | **0.72** | **252** | Pg | **Pg** | **04 43 20.5** | **-1.3** |
| D25K | | | | | **Sg** | **04 43 30.2** | **-0.9** |
| **D27M** | **Malcolm River** | **1.27** | **102** | | **Pn** | **04 43 31.0** | **-1.7** |
| D27M | | | | IAML | | 04 43 52.5 | |
| | comp=N,2µm,0.3s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.50** | **279** | Pn | **Pn** | **04 43 35.1** | **-0.6** |
| C24K | | | | Sn | **Sg** | **04 43 56.8** | **+0.7** |
| C24K | | | | IAML | | 04 43 58.0 | |
| | comp=E,1µm,1.4s | | | | | | |
| C24K | | | | IAML | | 04 43 58.2 | |
| | comp=N,2µm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.60** | **258** | | **Pn** | **04 43 36.0** | **-1.2** |
| D24K | | | | Sn | **Sg** | **04 44 00.2** | **+0.8** |
| D24K | | | | IAML | | 04 44 00.7 | |
| | comp=N,1µm,0.8s | | | | | | |
| D24K | | | | IAML | | 04 44 05.4 | |
| | comp=E,1µm,1.0s | | | | | | |
| **E27K** | **Coleen River** | **1.71** | **142** | Pg | **Pn** | **04 43 39.0** | **+0.3** |
| E27K | | | | Sn | **Sb** | **04 44 02.2** | **+0.2** |
| E27K | | | | IAML | | 04 44 03.7 | |
| | comp=E,851nm,1.0s | | | | | | |
| **F26K** | **Sheenjek River** | **1.87** | **177** | Pn | **Pn** | **04 43 41.5** | **+0.6** |
| F26K | | | | Sn | **Sn** | **04 44 04.7** | **-0.2** |
| F26K | | | | IAML | | 04 44 11.6 | |
| | comp=N,1µm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **2.00** | **116** | Pn | **Pn** | **04 43 43.4** | **+0.7** |
| E28M | | | | IAML | | 04 44 15.8 | |
| | comp=N,1µm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **193** | Pn | **Pn** | **04 43 43.1** | **+0.2** |
| F25K | | | | IAML | | 04 44 14.3 | |
| | comp=N,1µm,1.1s | | | | | | |
| F25K | | | | IAML | | 04 44 17.4 | |
| | comp=E,935nm,1.1s | | | | | | |
| **D28M** | **Stokes Point** | **2.03** | **94** | | **Pn** | **04 43 44.1** | **+1.2** |
| **TOLK** | **Toolik Lake Re** | **2.06** | **246** | Pn | **Pn** | **04 43 43.2** | **-0.3** |
| TOLK | | | | IAML | | 04 44 25.8 | |
| | comp=E,674nm,1.1s | | | | | | |
| **E24K** | **Your Creek** | **2.09** | **227** | Pg | **Pn** | **04 43 44.0** | **+0.1** |
| **BMAR** | **Burnt Mountain** | **2.13** | **181** | Pn | **Pn** | **04 43 44.7** | **+0.2** |
| **C23K** | **Itkillik River** | **2.17** | **280** | Pn | **Pn** | **04 43 44.1** | **-0.8** |
| C23K | | | | IAML | | 04 44 29.1 | |
| | comp=N,663nm,1.0s | | | | | | |
| C23K | | | | IAML | | 04 44 31.8 | |
| | comp=E,610nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.30** | **258** | | **Pn** | **04 43 46.4** | **-0.3** |
| **F24K** | **Squaw Lake** | **2.40** | **213** | Pn | **Pn** | **04 43 47.7** | **-0.5** |
| **E23K** | **Chandalar** | **2.41** | **234** | Pn | **Pn** | **04 43 47.1** | **-1.2** |
| E23K | | | | IAML | | 04 44 31.0 | |
| | comp=E,485nm,1.3s | | | | | | |
| **F28M** | **Old Crow** | **2.57** | **137** | Pn | **Pn** | **04 43 50.6** | **+0.1** |
| F28M | | | | IAML | | 04 44 32.3 | |
| | comp=E,534nm,0.9s | | | | | | |
| F28M | | | | IAML | | 04 44 35.2 | |
| | comp=N,482nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.62** | **174** | | **Pn** | **04 43 51.2** | **+0.1** |
| **E29M** | **Blow River** | **2.63** | **113** | Pn | **Pn** | **04 43 52.0** | **+0.7** |
| E29M | | | | IAML | | 04 44 36.4 | |
| | comp=E,692nm,0.6s | | | | | | |
| **G25K** | **Bearman Lake** | **2.87** | **193** | | **Pn** | **04 43 54.4** | **-0.1** |
| **G27K** | **Doyon Strip** | **2.94** | **158** | Pn | **Pn** | **04 43 55.2** | **-0.4** |
| **FYU** | **Fort Yukon** | **3.01** | **186** | Pn | **Pn** | **04 43 56.3** | **-0.2** |
| **D22K** | **Ayikyak River** | **3.02** | **261** | Pn | **Pn** | **04 43 55.3** | **-1.3** |
| D22K | | | | IAML | | 04 44 51.8 | |
| | comp=E,315nm,0.9s | | | | | | |
| D22K | | | | IAML | | 04 44 55.4 | |
| | comp=N,358nm,1.3s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.03** | **245** | Pn | **Pn** | **04 43 56.2** | **-0.6** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **203** | Pn | **Pn** | **04 43 56.7** | **-0.8** |
| G24K | | | | IAML | | 04 44 45.1 | |
| | comp=N,424nm,1.3s | | | | | | |
| **COLD** | **Coldfoot** | **3.16** | **225** | | **Pn** | **04 43 58.4** | **-0.1** |
| **B22K** | **Teshekpuk Lake** | **3.19** | **289** | Pn | **Pn** | **04 43 59.3** | **+0.3** |
| **H25L** | **Birch Creek** | **3.34** | **190** | | **Pn** | **04 44 01.4** | **+0.4** |
| **F22K** | **John River** | **3.51** | **238** | | **Pn** | **04 44 02.7** | **-0.6** |
| **H27K** | **Steamboat Moun** | **3.51** | **160** | | **Pn** | **04 44 04.0** | **+0.6** |
| **G23K** | **Bananza Creek** | **3.54** | **219** | Pn | **Pn** | **04 44 03.3** | **-0.4** |
| G23K | | | | IAML | | 04 45 03.4 | |
| | comp=E,163nm,1.2s | | | | | | |
| G23K | | | | IAML | | 04 45 03.4 | |
| | comp=N,170nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.57** | **276** | Pn | **Pn** | **04 44 04.2** | **+0.1** |
| B21K | | | | IAML | | 04 45 17.9 | |
| | comp=N,200nm,1.5s | | | | | | |
| B21K | | | | IAML | | 04 45 35.8 | |
| | comp=E,246nm,1.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.57** | **135** | Pn | **Pn** | **04 44 04.9** | **+0.8** |
| **E21K** | **Killik River** | **3.61** | **257** | Pn | **Pn** | **04 44 04.0** | **-0.7** |
| E21K | | | | IAML | | 04 45 12.3 | |
| | comp=E,149nm,1.1s | | | | | | |
| **F30M** | **Barrier River** | **3.72** | **117** | | **Pn** | **04 44 06.4** | **+0.2** |
| F30M | | | | | Pb | 04 44 08.6 | -5.7 |
| **A22K** | **Sinclair Lake** | **3.86** | **297** | | **Pn** | **04 44 08.0** | **-0.1** |
| **H24K** | **Noodor Dome** | **3.95** | **201** | Pn | **Pn** | **04 44 09.1** | **-0.4** |
| H24K | | | | IAML | | 04 45 20.0 | |
| | comp=N,156nm,1.0s | | | | | | |
| H24K | | | | IAML | | 04 45 21.4 | |
| | comp=E,175nm,1.0s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.00** | **126** | Pn | **Pn** | **04 44 10.6** | **+0.5** |
| G30M | | | | IAML | | 04 45 19.0 | |
| | comp=N,141nm,0.8s | | | | | | |
| G30M | | | | IAML | | 04 45 29.4 | |
| | comp=E,159nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.06** | **143** | Pn | **Pn** | **04 44 10.8** | **-0.1** |
| **PRP** | **Porcupine Dome** | **4.07** | **186** | Pn | **Pn** | **04 44 11.5** | **+0.3** |
| PRP | | | | IAML | | 04 45 02.7 | |
| | comp=N,162nm,0.6s | | | | | | |
| PRP | | | | IAML | | 04 45 25.4 | |
| | comp=E,140nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **4.08** | **239** | Pn | **Pn** | **04 44 10.9** | **-0.3** |
| F21K | | | | IAML | | 04 45 25.9 | |
| | comp=N,107nm,1.1s | | | | | | |
| **I27K** | **Kandik River** | **4.11** | **163** | | **Pn** | **04 44 12.0** | **+0.4** |
| **INK** | **Inuvik** | **4.13** | **102** | Pn | **Pn** | **04 44 12.8** | **+0.9** |
| **INK** | **Inuvik** | **4.13** | **102** | Pn | **Pn** | **04 44 11.9** | **0.0** |
| | comp=N,1.8nm,0.3s,baz=321,slow=15,SNR=16 | | | | | | |
| INK | | | | | Sn | **Sn** | **04 44 54.3** | **-6.3** |
| | comp=N,4.3nm,0.3s,baz=175,slow=12,SNR=4.7 | | | | | | |
| INK | | | | | Lg | Lg | 04 45 19.6 | |
| | comp=N,8.5nm,0.3s,baz=44,slow=14,SNR=5.1 | | | | | | |
| | comp=N,4.4nm,0.3s | | | | | | |
| **H23K** | **Yukon River** | **4.22** | **210** | Pn | **Pn** | **04 44 12.8** | **-0.2** |
| H23K | | | | IAML | | 04 45 35.1 | |
| | comp=N,130nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.29** | **173** | Pn | **Pn** | **04 44 14.1** | **0.0** |
| **EPYK** | **Eagle Plains** | **4.32** | **134** | Pn | **Pn** | **04 44 15.0** | **+0.5** |
| **D20K** | **Etivluk River** | **4.43** | **265** | | **Pn** | **04 44 15.9** | **-0.2** |
| **B20K** | **Meade River** | **4.44** | **282** | Pn | **Pn** | **04 44 16.0** | **0.0** |
| **E20K** | **Nigu River** | **4.44** | **259** | | **Pn** | **04 44 16.1** | **-0.1** |
| **A21K** | **Barrow** | **4.46** | **299** | | **Pn** | **04 44 16.6** | **+0.2** |
| **I28M** | **Miner Creek** | **4.47** | **155** | Pn | **Pn** | **04 44 17.3** | **+0.8** |
| I28M | | | | IAML | | 04 45 11.0 | |
| | comp=E,111nm,0.6s | | | | | | |
| I28M | | | | IAML | | 04 45 11.8 | |
| | comp=N,101nm,0.6s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.47** | **113** | Pn | **Pn** | **04 44 17.9** | **+1.4** |
| F31M | | | | IAML | | 04 45 28.4 | |
| | comp=N,106nm,1.1s | | | | | | |
| F31M | | | | IAML | | 04 45 41.1 | |
| | comp=E,91nm,1.0s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.52** | **219** | | **Pn** | **04 44 16.9** | **-0.4** |
| **G21K** | **Allakaket** | **4.57** | **232** | Pn | **Pn** | **04 44 17.2** | **-0.6** |
| **POKR** | **Poker Plat Res** | **4.60** | **196** | Pn | **Pn** | **04 44 18.8** | **+0.4** |
| POKR | | | | IAML | | 04 45 34.9 | |
| | comp=E,117nm,0.8s | | | | | | |
| POKR | | | | IAML | | 04 45 36.6 | |
| | comp=N,93nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.61**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,42nm,1.3s | | | | | | |
| **SCRK** | **Sand Creek** | **5.60 178** | Pn | **Pn** | **04 44 32.9** | **+0.7** |
| **K27K** | **Chicken** | **5.62 169** | Pn | **Pn** | **04 44 32.9** | **+0.5** |
| **F19K** | **Shaleruckik Mo** | **5.67 248** | Pn | **Pn** | **04 44 32.8** | **-0.1** |
| **BWN** | **Browne** | **5.75 203** | Pn | **Pn** | **04 44 34.3** | **+0.2** |
| **A19K** | **Wainwright** | **5.78 284** | | **Pn** | **04 44 34.3** | **-0.1** |
| **DAWY** | **Dawson** | **5.86 158** | Pn | **Pn** | **04 44 36.5** | **+0.9** |
| **G19K** | **Purcell Mounta** | **5.88 240** | Pn | **Pn** | **04 44 34.6** | **-1.2** |
| **J30M** | **Hart River** | **5.91 144** | Pn | **Pn** | **04 44 36.4** | **-0.1** |
| **DOT** | **Dot Lake** | **5.93 178** | | **Pn** | **04 44 37.0** | **+0.5** |
| **BPAW** | **Bear Paw Mtn.** | **6.05 208** | Pn | **Pn** | **04 44 37.6** | **-0.6** |
| **C18K** | **Utukok River** | **6.06 269** | Pn | **Pn** | **04 44 37.9** | **-0.5** |
| **B18K** | **Kokolik River** | **6.11 276** | | **Pn** | **04 44 38.1** | **-0.9** |
| **H19K** | **Roundabout Mou** | **6.12 234** | Pn | **Pn** | **04 44 38.7** | **-0.4** |
| **E18K** | **Tukpahlearik C** | **6.31 258** | Pn | **Pn** | **04 44 41.7** | **-0.1** |
| **K29M** | **Barlow Dome** | **6.35 151** | Pn | **Pn** | **04 44 43.5** | **+1.0** |
| **F18K** | **Selawik** | **6.41 250** | | **Pn** | **04 44 43.0** | **-0.1** |
| **L26K** | **Log Cabin Wild** | **6.57 176** | Pn | **Pn** | **04 44 46.0** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **6.60 169** | Pn | **Pn** | **04 44 46.1** | **+0.3** |
| **L27K** | **Beaver Creek,** | **6.60 170** | Pn | **Pn** | **04 44 46.3** | **+0.5** |
| **J20K** | **Nowinta River** | **6.61 220** | Pn | **Pn** | **04 44 45.8** | **0.0** |
| **DHY** | **Denali Highway** | **6.61 192** | Pn | **Pn** | **04 44 47.5** | **+1.5** |
| **PAX** | **Paxson** | **6.62 184** | | **Pn** | **04 44 46.1** | **-0.1** |
| **A36M** | **Sachs Harbour** | **6.78 60** | Pn | **Pn** | **04 44 47.2** | **-0.9** |
| **C17K** | **DeLong Mountai** | **6.81 270** | | **Pn** | **04 44 47.0** | **-1.6** |
| **RDOG** | **Red Dog Mine** | **6.86 266** | Pn | **Pn** | **04 44 48.2** | **-1.0** |
| **E17K** | **Hotham Inlet** | **6.89 257** | | **Pn** | **04 44 48.0** | **-1.7** |
| **H18K** | **Honhosa River** | **6.94 237** | Pn | **Pn** | **04 44 49.4** | **-1.0** |
| **WAT1** | **Susitna Watana** | **6.95 196** | | **Pn** | **04 44 51.6** | **+1.0** |
| **WAT7** | **Susitna Watana** | **6.98 197** | | **Pn** | **04 44 51.7** | **+0.7** |
| **D17K** | **Noatak River** | **7.05 264** | | **Pn** | **04 44 50.6** | **-1.3** |
| **M26K** | **Nabesna, AK** | **7.20 175** | Pn | **Pn** | **04 44 54.4** | **+0.3** |
| **K20K** | **Telida** | **7.31 216** | | **Pn** | **04 44 54.6** | **-0.9** |
| **G17K** | **Kiwalik Mounta** | **7.41 245** | | **Pn** | **04 44 56.1** | **-0.7** |
| **M29M** | **Somme Creek** | **7.54 158** | Pn | **Pn** | **04 44 59.0** | **+0.3** |
| **H17K** | **Granite Mounta** | **7.56 240** | Pn | **Pn** | **04 44 58.9** | **-0.1** |
| **C16K** | **Lisburne Hills** | **7.63 270** | | **Pn** | **04 44 59.1** | **-0.8** |
| **L20K** | **Farewell, AK** | **8.06 213** | | **Pn** | **04 45 05.3** | **-0.5** |
| **M31M** | **Drury Creek, Y** | **8.43 146** | Pn | **Pn** | **04 45 10.1** | **-0.8** |
| **J17K** | **VABM Dome** | **8.49 230** | Pn | **Pn** | **04 45 10.8** | **-0.8** |
| **L19K** | **White Mountain** | **8.53 215** | Pn | **Pn** | **04 45 10.9** | **-1.2** |
| **FARO** | **Faro, Yukon** | **8.62 143** | Pn | **Pn** | **04 45 13.3** | **-0.2** |
| **N30M** | **Aishikik Lake** | **8.67 156** | Pn | **Pn** | **04 45 15.0** | **+0.8** |
| **CTGM** | **Chitina Glacie** | **8.72 170** | Pn | **Pn** | **04 45 16.8** | **+1.9** |
| **N31M** | **Braeburn, Yuko** | **8.85 152** | Pn | **Pn** | **04 45 17.0** | **+0.4** |
| **L18K** | **Granite Mounta** | **8.88 220** | Pn | **Pn** | **04 45 15.9** | **-1.1** |
| **J16K** | **Anvik River** | **9.00 234** | Pn | **Pn** | **04 45 19.1** | **+0.5** |
| **TABL** | **Table Mountain** | **9.25 170** | Pn | **Pn** | **04 45 24.1** | **+1.8** |
| **O30N** | **Mendenhall** | **9.48 154** | Pn | **Pn** | **04 45 25.6** | **+0.4** |
| **M17K** | **Holitna River** | **9.78 220** | Pn | **Pn** | **04 45 28.6** | **-0.6** |
| **WHY** | **Whitehorse** | **9.78 151** | Pn | **Pn** | **04 45 29.3** | **-0.1** |
| **L16K** | **Owhat River** | **9.99 225** | Pn | **Pn** | **04 45 32.6** | **+0.4** |
| **J14K** | **Nanvaranak Lak** | **10.27 238** | Pn | **Pn** | **04 45 35.6** | **-0.4** |
| **WRGLY** | **Wrigley** | **10.48 117** | Pn | **Pn** | **04 45 38.5** | **-0.4** |
| **P33M** | **Teslin, Yukon** | **10.57 147** | Pn | **Pn** | **04 45 38.3** | **-1.9** |
| **K13K** | **Kusilvak Mount** | **11.23 237** | Pn | **Pn** | **04 45 48.2** | **-0.9** |
| **R33M** | **Jennings River** | **11.69 144** | Pn | **Pn** | **04 45 54.5** | **-1.1** |
| **Q32M** | **Nakina River** | **11.84 148** | Pn | **Pn** | **04 45 58.0** | **+0.3** |
| **DLBC** | **Dease Lake** | **12.77 144** | Pn | **Pn** | **04 46 08.4** | **-1.8** |
| **DLBC** | **Dease Lake** | **12.77 144** | Pn | **Pn** | **04 46 09.9** | **-0.3** |
| | comp=E,0.5nm,0.3s,baz=21,slow=12,SNR=5.7 | | | | | | |
| | comp=E,1.0nm,0.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.90 106** | Pn | **Pn** | **04 46 22.2** | **-3.2** |
| **YKA** | **Yellowknife Ar** | **13.90 106** | Pn | **Pn** | **04 46 21.6** | **-3.9** |
| | comp=E,0.5nm,0.3s,baz=314,slow=14,SNR=9.6 | | | | | | |
| | comp=E,1.2nm,0.5s | | | | | | |
| **EUNU** | **Eureka** | **17.39 30** | Pn | **P** | **04 47 13.2** | **+0.7** |
| **SEY** | **Seymchan** | **25.17 286** | P | **P** | **04 48 35.5** | **+1.5** |
| | comp=E,1.2nm,0.3s,baz=83,slow=6.4,SNR=6.4 | | | | | | |
| | comp=E,1.2nm,0.3s | | | | | | |
| **FRB** | **Frobisher Bay** | **28.76 64** | LR | LR | 05 01 12.7 | | |
| | comp=E,97nm,18.1s,baz=194,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.25 128** | P | **P** | **04 49 38.4** | **+0.8** |
| | comp=E,0.3nm,0.6s,baz=339,slow=6.8,SNR=2.4 | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.18 142** | P | **P** | **04 49 56.7** | **+2.3** |
| | comp=E,0.2nm,0.6s,baz=335,slow=6.1,SNR=2.7 | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.47 128** | P | **P** | **04 51 38.7** | **+2.7** |
| | comp=E,0.2nm,0.7s,baz=1.7,slow=9.0,SNR=4.3 | | | | | | |
| | comp=E,0.2nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.09 328** | LR | LR | 05 22 46.0 | | |
| **MKAR** | **Makanchi Array** | **59.02 324** | P | **P** | **04 53 08.7** | **+0.2** |
| | comp=E,29nm,18.1s,baz=181,slow=42 | | | | | | |
| **AKASG** | **Malin Array Be** | **59.97 5** | P | **P** | **04 53 14.9** | **0.0** |
| | comp=E,1.6nm,0.7s,baz=355,slow=7.1,SNR=2.9 | | | | | | |
| | comp=E,1.6nm,0.7s | | | | | | |

*MOS* ***13*** *04:45:34.4, 43.12N×44.31E, h11km, MPVA3.5*
*DRS* ***13*** *04:45:37.2, 43.19N×44.57E, h54km*

**NORS 13 04:45:34.7, 43.10N×44.31E, h11km, MPVA3.6, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARNR** | **Ardon** | **0.08** | **347** | *e*Pg | Pg | 04 45 38.1 | +1.0 |
| ARNR | | | | *e*Sg | Sg | 04 45 40.2 | +1.2 |
| **KORR** | **Kora** | **0.18** | **265** | *e*Pg | Pb | 04 45 40.3 | +0.3 |
| KORR | | | | *e*Sg | Sg | 04 45 43.4 | +2.2 |
| **LACR** | **Lac** | **0.28** | **182** | *e*Pg | Pb | 04 45 42.1 | +0.3 |
| LACR | | | | *e*Sg | Sb | 04 45 48.0 | +1.4 |
| **VLKR** | **Vladikavkaz** | **0.28** | **102** | *e*Pg | Pb | 04 45 41.6 | -0.1 |
| VLKR | | | | *e*Sg | Sb | 04 45 46.8 | +0.4 |
| **BTKR** | **Batakoyurt** | **0.32** | **32** | *e*Pg | Pb | 04 45 42.1 | -0.4 |
| BTKR | | | | *e*Sg | Sb | 04 45 47.1 | -0.6 |
| **STDR** | **Stavd-Durt** | **0.32** | **326** | *e*Pg | Pb | 04 45 42.9 | +0.4 |
| STDR | | | | *e*Sg | Sb | 04 45 47.5 | -0.3 |
| **LSNR** | **Lesken** | **0.39** | **297** | *e*Pg | Pb | 04 45 44.3 | +0.6 |
| LSNR | | | | *e*Sg | Sb | 04 45 50.3 | +0.4 |
| **KMGR** | **Komgaron** | **0.41** | **96** | *e*Pg | Pb | 04 45 44.4 | +0.3 |
| KMGR | | | | *e*Sg | Sb | 04 45 51.9 | +1.5 |
| **PRTR** | **Priterechnaya** | **0.65** | **358** | *e*Pg | Pn | 04 45 50.0 | +0.1 |
| PRTR | | | | *e*Sg | Sb | 04 45 58.5 | +1.4 |
| **GUDG** | **Gudauri** | **0.65** | **169** | *e*Pg | Pb | 04 45 49.0 | +0.8 |
| GUDG | | | | *e*Sg | Sn | 04 45 59.0 | -1.5 |
| **NCK** | **Nalchik** | **0.65** | **307** | *e*Pg | Pn | 04 45 49.9 | -0.1 |
| NCK | | | | *e*Sg | Sn | 04 45 59.6 | -0.7 |
| **KBTC** | **Kuba-Taba** | **0.97** | **318** | *e*Pg | Pn | 04 45 55.3 | +1.0 |
| KBTC | | | | *e*Sg | Sn | 04 46 09.6 | +1.5 |
| **KBZ** | **Khabaz** | **1.20** | **302** | *e*Pg | Pg | 04 45 58.5 | +0.7 |
| KBZ | | | | *e*Sg | Sn | 04 46 15.2 | +1.4 |
| **PYA1** | **Pyatigorsk** | **1.30** | **318** | *e*Pg | Pg | 04 45 59.7 | 0.0 |
| PYA1 | | | | *e*Sg | Sg | 04 46 17.6 | +1.0 |
| **DVE** | **Vedeno** | **1.34** | **96** | *e*Pg | Pg | 04 46 00.4 | 0.0 |
| DVE | | | | *e*Sg | Sg | 04 46 21.1 | +3.3 |
| **SHA1** | **Shidzhatmaz** | **1.36** | **298** | *e*Pg | Pg | 04 46 01.4 | +0.5 |
| SHA1 | | | | *e*Sg | Sg | 04 46 20.0 | +1.5 |
| **BEYR** | **Belyy Ugol+** | **1.41** | **310** | *e*Pg | Pb | 04 46 01.4 | +0.2 |
| BEYR | | | | *e*Sg | Sg | 04 46 20.4 | +0.1 |
| **KIV** | **Kislovodsk** | **1.46** | **306** | *e*Pg | Pb | 04 46 02.2 | +0.4 |
| KIV | | | | *e*Sg | Sg | 04 46 22.5 | +0.9 |
| **BTLR** | **Botlikh** | **1.47** | **107** | *e*Pg | Pg | 04 46 02.7 | -0.3 |
| BTLR | | | | *e*Sg | Sg | 04 46 23.1 | +1.0 |
| **DLMR** | **Dylym** | **1.70** | **90** | *e*Pg | Pg | 04 46 09.2 | +1.9 |
| DLMR | | | | *i* Sg | Sb | 04 46 28.1 | +0.6 |
| **DBC** | **Dubki** | **1.85** | **92** | *e*Pg | Pb | 04 46 08.3 | -0.3 |
| DBC | | | | *e*Sg | Sb | 04 46 32.9 | +1.2 |
| **XNZR** | **Khunzakh** | **1.85** | **107** | *e*Pg | Pg | 04 46 12.1 | +1.9 |
| XNZR | | | | *e*Sg | Sb | 04 46 32.0 | +0.1 |
| **UNCR** | **Uncukul** | **1.87** | **101** | *e*Pg | Pb | 04 46 09.1 | +0.3 |
| UNCR | | | | *e*Sg | Sg | 04 46 33.8 | -0.9 |
| **KRNR** | **Karanay** | **1.93** | **97** | *e*Pg | Pn | 04 46 08.4 | +0.8 |
| KRNR | | | | *e*Sg | Sn | 04 46 32.9 | +1.1 |
| **ARKR** | **Arakani** | **2.04** | **103** | *e*Pg | Pb | 04 46 11.8 | +0.1 |
| ARKR | | | | *e*Sg | Sb | 04 46 37.8 | +0.7 |
| **GNBR** | **Gunib** | **2.08** | **109** | *e*Pg | Pb | 04 46 13.3 | +0.7 |
| GNBR | | | | *e*Sg | Sb | 04 46 39.0 | +0.5 |
| **KMKR** | **Kumukh** | **2.28** | **114** | *e*Pn | Pb | 04 46 14.9 | -1.1 |
| KMKR | | | | *i* Sn | Sb | 04 46 44.1 | -0.1 |
| **GUZR** | **Guzeripl'** | **3.17** | **288** | *e*Pn | Pn | 04 46 26.8 | +2.1 |
| GUZR | | | | *e*Sn | Sn | 04 47 04.2 | +1.6 |

*NEIC* ***13*** *04:46:07.3±0.8, 69.57N±0.01×145.04W±0.04, h11km±8km,*
*Error ellipse: s-maj=2.2km s-min=1.8km az=62.0*

**AEIC 13 04:46:07.5±1.4, 69.57N±0.02×145.02W±0.06, h18km±4km, ML2.5, ML2.8/12(NEIC), Error ellipse: s-maj=3.0km s-min=2.5km az=129.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.35** | **6** | Pg | Pg | 04 46 14.5 | -0.4 |
| C26K | | | | | Sg | 04 46 18.9 | -1.0 |
| C26K | | | | IAML | | 04 46 26.2 | |
| | comp=E,402nm,0.7s | | | | | | |
| **C27K** | **Jago River** | **0.46** | **83** | Pg | Pg | 04 46 16.3 | -0.6 |
| C27K | | | | Sg | Sg | 04 46 23.2 | +0.1 |
| C27K | | | | IAML | | 04 46 28.1 | |
| | comp=E,491nm,0.4s | | | | | | |
| C27K | | | | IAML | | 04 46 28.2 | |
| | comp=N,498nm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.54** | **243** | Pg | Pg | 04 46 17.6 | -0.7 |
| **C24K** | **Franklin Bluff** | **1.30** | **278** | | Pn | 04 46 30.9 | +0.2 |
| C24K | | | | IAML | | 04 47 09.6 | |
| | comp=E,174nm,0.6s | | | | | | |
| C24K | | | | IAML | | 04 47 19.1 | |
| | comp=N,137nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.41** | **254** | Pn | Pb | 04 46 33.9 | +0.6 |
| **D27M** | **Malcolm River** | **1.47** | **101** | Pn | Pb | 04 46 34.3 | -0.1 |

*NEIC* ***13*** *04:46:31.9±1.9, 69.52N±0.04×144.5W±0.1, h6km±8km,*
*Error ellipse: s-maj=7.5km s-min=4.1km az=48.0*

**AEIC 13 04:46:30.8±2.5, 69.49N±0.06×144.4W±0.1, h10km±7km, ML3.4, ML3.5/86(NEIC), Error ellipse: s-maj=8.5km s-min=5.9km az=191.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.28** | **61** | | Pg | 04 46 37.2 | +0.7 |
| C27K | | | | | Sg | 04 46 41.0 | +0.6 |
| **C26K** | **Camden Bay** | **0.46** | **339** | Pg | Pg | 04 46 40.4 | +0.6 |
| C26K | | | | Sg | Sg | 04 46 46.5 | +0.6 |
| **D25K** | **Kavik River** | **0.71** | **257** | Pg | Pg | 04 46 44.1 | -0.4 |
| D25K | | | | Sg | Sg | 04 46 53.7 | -0.1 |
| **D27M** | **Malcolm River** | **1.25** | **100** | | Pn | 04 46 53.5 | -0.9 |
| D27M | | | | IAML | | 04 47 17.4 | |
| | comp=N,1μm,0.5s | | | | | | |
| D27M | | | | IAML | | 04 47 18.1 | |
| | comp=E,609nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **281** | Pn | Pn | 04 46 57.8 | -0.1 |
| **D24K** | **Happy Valley** | **1.60** | **260** | Pn | Pb | 04 47 00.1 | -0.3 |
| **E27K** | **Coleen River** | **1.67** | **141** | Pn | Pb | 04 47 01.3 | -0.3 |
| **F26K** | **Sheenjek River** | **1.81** | **177** | Pn | Pn | 04 47 02.7 | +0.7 |
| F26K | | | | IAML | | 04 47 35.1 | |
| | comp=N,381nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.97** | **115** | Pn | Pn | 04 47 05.3 | +1.1 |
| **D28M** | **Stokes Point** | **2.02** | **92** | Pn | Pn | 04 47 05.8 | +1.0 |
| **TOLK** | **Toolik Lake Re** | **2.04** | **248** | Pn | Pn | 04 47 06.4 | +1.2 |
| TOLK | | | | IAML | | 04 47 41.3 | |
| | comp=E,468nm,0.9s | | | | | | |
| TOLK | | | | IAML | | 04 47 43.7 | |
| | comp=N,369nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **2.19** | **282** | Pn | Pn | 04 47 08.5 | +1.3 |
| **D23K** | **Nanushuk River** | **2.29** | **260** | Pn | Pn | 04 47 09.5 | +0.9 |
| D23K | | | | IAML | | 04 47 52.1 | |
| | comp=N,246nm,1.2s | | | | | | |
| D23K | | | | IAML | | 04 48 01.2 | |
| | comp=E,254nm,1.2s | | | | | | |
| **F24K** | **Squaw Lake** | **2.36** | **214** | Pn | Pn | 04 47 09.5 | 0.0 |
| F24K | | | | IAML | | 04 47 49.2 | |
| | comp=N,182nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.38** | **235** | Pn | Pn | 04 47 10.6 | +0.8 |
| E23K | | | | IAML | | 04 47 54.5 | |
| | comp=E,183nm,0.9s | | | | | | |
| E23K | | | | IAML | | 04 47 55.2 | |
| | comp=N,197nm,0.6s | | | | | | |
| **F28M** | **Old Crow** | **2.52** | **136** | Pn | Pn | 04 47 13.3 | +1.5 |
| F28M | | | | IAML | | 04 47 59.3 | |
| | comp=N,174nm,0.7s | | | | | | |
| F28M | | | | IAML | | 04 47 59.5 | |
| | comp=E,166nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.56** | **174** | | Pb | 04 47 15.7 | -1.1 |
| **G27K** | **Doyon Strip** | **2.89** | **158** | Pn | Pn | 04 47 16.7 | -0.1 |
| **E22K** | **Anaktuvuk Pass** | **3.01** | **247** | Pn | Pn | 04 47 18.9 | +0.4 |
| **COLD** | **Coldfoot** | **3.12** | **226** | Pn | Pn | 04 47 21.2 | +1.2 |
| **B22K** | **Teshekpuk Lake** | **3.22** | **290** | Pn | Pn | 04 47 21.9 | +0.7 |
| **G29M** | **Pine Creek** | **3.52** | **134** | Pn | Pn | 04 47 26.4 | +0.9 |
| **B21K** | **Ikpikpuk River** | **3.58** | **277** | Pn | Pn | 04 47 27.6 | +1.3 |
| **E21K** | **Killik River** | **3.60** | **257** | Pn | Pn | 04 47 28.7 | +2.1 |
| E21K | | | | IAML | | 04 48 35.7 | |
| | comp=N,124nm,0.8s | | | | | | |
| E21K | | | | IAML | | 04 48 36.6 | |
| | comp=E,93nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.69** | **117** | | Pb | 04 47 32.2 | -3.8 |
| **A22K** | **Sinclair Lake** | **3.89** | **298** | | Pn | 04 47 32.1 | +1.6 |
| **H24K** | **Noodor Dome** | **3.90** | **201** | Pn | Pn | 04 47 32.1 | +1.4 |
| H24K | | | | IAML | | 04 48 39.5 | |
| | comp=N,70nm,0.8s | | | | | | |
| H24K | | | | IAML | | 04 48 45.9 | |
| | comp=E,76nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **4.01** | **142** | Pn | Pn | 04 47 34.1 | +2.0 |
| H29M | | | | IAML | | 04 48 47.2 | |
| | comp=N,70nm,0.8s | | | | | | |
| H29M | | | | IAML | | 04 48 52.3 | |
| | comp=E,68nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.01** | **187** | Pn | Pn | 04 47 35.5 | +3.1 |
| PRP | | | | IAML | | 04 48 25.9 | |
| | comp=N,72nm,0.5s | | | | | | |
| PRP | | | | IAML | | 04 48 49.6 | |
| | comp=E,47nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **4.05** | **240** | Pn | Pn | 04 47 34.7 | +1.8 |
| F21K | | | | IAML | | 04 48 42.1 | |
| | comp=N,52nm,0.8s | | | | | | |
| F21K | | | | IAML | | 04 48 44.4 | |
| | comp=E,58nm,1.2s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **210** | Pn | Pn | 04 47 36.5 | +2.1 |
| H23K | | | | IAML | | 04 48 48.8 | |
| | comp=E,72nm,1.0s | | | | | | |
| H23K | | | | IAML | | 04 48 49.3 | |
| | comp=N,57nm,0.7s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.23** | **173** | Pn | Pn | 04 47 37.0 | +1.7 |
| **EPYK** | **Eagle Plains** | **4.27** | **134** | Pn | Pn | 04 47 36.1 | +0.3 |
| **I28M** | **Miner Creek** | **4.41** | **155** | Pn | Pn | 04 47 40.7 | +2.9 |
| I28M | | | | IAML | | 04 48 34.9 | |
| | comp=N,42nm,0.7s | | | | | | |
| I28M | | | | IAML | | 04 48 35.4 | |
| | comp=E,39nm,0.4s | | | | | | |
| **E20K** | **Nigu River** | **4.43** | **259** | | Pn | 04 47 40.9 | +2.9 |
| **D20K** | **Etivluk River** | **4.43** | **266** | | Pn | 04 47 40.7 | +2.7 |
| **G21K** | **Allakaket** | **4.54** | **233** | Pn | Pn | 04 47 40.9 | +1.5 |
| G21K | | | | IAML | | 04 49 11.8 | |
| | comp=N,43nm,0.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.76** | **206** | Pn | Pn | 04 47 44.2 | +1.8 |
| I23K | | | | IAML | | 04 49 12.8 | |
| | comp=E,48nm,0.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.77** | **147** | Pn | Pn | 04 47 44.8 | +2.1 |
| I29M | | | | IAML | | 04 48 43.0 | |
| | comp=E,31nm,0.6s | | | | | | |
| I29M | | | | IAML | | 04 48 43.4 | |
| | comp=N,36nm,0.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79** | **200** | Pn | Pn | 04 47 44.1 | +1.3 |
| MDM | | | | IAML | | 04 49 15.6 | |
| | comp=E,30nm,1.1s | | | | | | |
| **F20K** | **Avaraat Lake** | **4.86** | **245** | Pn | Pn | 04 47 47.1 | +3.3 |
| F20K | | | | IAML | | 04 49 19.6 | |
| | comp=N,29nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **4.90** | **163** | Pn | Pn | 04 47 46.2 | +1.8 |
| EGAK | | | | IAML | | 04 48 51.7 | |
| | comp=N,30nm,0.7s | | | | | | |
| EGAK | | | | IAML | | 04 49 31.0 | |
| | comp=N,25nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.03** | **176** | Pn | Pn | 04 47 48.8 | +2.6 |
| J26L | | | | IAML | | 04 48 54.5 | |
| | comp=N,24nm,0.5s | | | | | | |
| J26L | | | | IAML | | 04 49 12.8 | |
| | comp=E,29nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.03** | **265** | Pn | Pn | 04 47 47.9 | +1.7 |
| D19K | | | | IAML | | 04 49 25.6 | |
| | comp=E,28nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04** | **197** | Pn | Pn | 04 47 49.9 | +3.6 |
| CCB | | | | IAML | | 04 49 15.4 | |
| | comp=E,22nm,0.7s | | | | | | |
| **MLY** | **Manley** | **5.10** | **212** | Pn | Pn | 04 47 49.4 | +2.1 |
| **WRH** | **Wood River Hil** | **5.24** | **198** | Pn | Pn | 04 47 52.5 | +3.4 |
| WRH | | | | IAML | | 04 49 25.2 | |
| | comp=E,23nm,1.2s | | | | | | |
| WRH | | | | IAML | | 04 49 25.6 | |
| | comp=N,21nm,0.7s | | | | | | |
| **NEA2** | **Nenana** | **5.24** | **202** | Pn | Pn | 04 47 51.7 | +2.6 |
| NEA2 | | | | IAML | | 04 49 23.7 | |
| | comp=N,20nm,1.3s | | | | | | |
| NEA2 | | | | IAML | | 04 49 29.8 | |
| | comp=E,22nm,1.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.39** | **273** | Pn | Pn | 04 47 52.1 | +0.9 |
| C19K | | | | IAML | | 04 49 50.5 | |
| | comp=N,26nm,1.1s | | | | | | |
| C19K | | | | IAML | | 04 49 52.9 | |
| | comp=E,22nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **5.54** | **178** | Pn | Pn | 04 47 56.2 | +2.9 |
| **K27K** | **Chicken** | **5.56** | **169** | Pn | Pn | 04 47 55.8 | +2.3 |
| **A19K** | **Wainwright** | **5.79** | **285** | | Pn | 04 47 58.5 | +1.9 |
| **DAWY** | **Dawson** | **5.80** | **158** | Pn | Pn | 04 48 01.3 | +4.5 |
| **G19K** | **Purcell Mounta** | **5.85** | **241** | Pn | Pn | 04 47 59.5 | +2.0 |
| **J30M** | **Hart River** | **5.86** | **143** | Pn | Pn | 04 48 00.2 | +2.5 |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **209** | Pn | Pn | 04 48 02.2 | +2.7 |
| **H19K** | **Roundabout Mou** | **6.09** | **235** | Pn | Pn | 04 48 03.0 | +2.4 |
| **K29M** | **Barlow Dome** | **6.30** | **151** | Pn | Pn | 04 48 06.7 | +3.0 |
| **F18K** | **Selawik** | **6.40** | **250** | | Pn | 04 48 07.0 | +2.1 |
| **G18K** | **Tagagawik** | **6.50** | **243** | Pn | Pn | 04 48 07.7 | +1.4 |
| **L26K** | **Log Cabin Wild** | **6.51** | **176** | Pn | Pn | 04 48 09.1 | +2.6 |
| **BCAR** | **Beaver Creek A** | **6.54** | **169** | Pn | Pn | 04 48 08.4 | +1.4 |
| **L27K** | **Beaver Creek,** | **6.54** | **170** | Pn | Pn | 04 48 09.8 | +2.8 |
| **A36M** | **Sachs Harbour** | **6.80** | **60** | Pn | Pn | 04 48 10.1 | -0.4 |
| **C17K** | **DeLong Mountai** | **6.81** | **270** | | Pn | 04 48 10.9 | +0.2 |
| **E17K** | **Hotham Inlet** | **6.88** | **258** | | Pn | 04 48 12.9 | +1.3 |
| **H18K** | **Honhosa River** | **6.92** | **238** | Pn | Pn | 04 48 12.6 | +0.5 |
| **F17K** | **Baldwin Pennin** | **7.02** | **252** | Pn | Pn | 04 48 15.5 | +2.1 |
| **G17K** | **Kiwalik Mounta** | **7.39** | **245** | | Pn | 04 48 20.4 | +1.9 |
| **C16K** | **Lisburne Hills** | **7.64** | **271** | Pn | Pn | 04 48 22.0 | +0.1 |
| **FARO** | **Faro, Yukon** | **8.57** | **143** | Pn | Pn | 04 48 37.1 | +2.3 |
| **N30M** | **Aishikik Lake** | **8.61** | **156** | Pn | Pn | 04 48 37.4 | +2.0 |

*AEIC* ***13*** *05:00:18.6±1.6, 69.52N±0.05×144.44W±0.06, h13km±5km,*
*ML4.1, mb4.2/15(NEIC), ML4.1/124(NEIC),*
*Mwr4.0/30(NEIC), Error ellipse: s-maj=7.3km s-min=2.8km az=184.0*
*IDC* ***13*** *05:00:20.3±0.8, 69.72N×144.45W, h0km, mb3.8/10,*
*mbtmp3.9/14, ML3.8/4, MS3.1/9, Error ellipse:*
*s-maj=21.1km s-min=12.7km az=60.0*
*NEIC* ***13*** *05:00:21.0±1.1, 69.58N±0.05×144.5W±0.1, h13km±5km,*
*Error ellipse: s-maj=7.5km s-min=5.6km az=188.0,*
*Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm;*
*Mrr=0.08; Mθθ=0.60; Mϕϕ=0.68; Mrθ=0.04; Mθϕ=0.96; Mϕr=0.07;*
*Fault plane solution: M0 1.16000×10¹⁵ NP1:*
*ϕs=286.82000°, δ87.62000°, λ177.59000°. NP2:*
*ϕs=16.92000°, δ87.59000°, λ2.39000°. Principal axes: T*
*1.1977, Plg3.0000°, Azm242.0000°; N -0.0860,*
*Plg87.0000°, Azm62.0000°; P -1.1117, Plg0.0000°,*
*Azm332.0000°;*
*NEIC* ***13*** *05:00:20.5, 69.61N×144.50W, h10km*

**ISC 13 05:00:20.0±1.1, 69.57N±0.04×144.43W±0.03, h7km±8km, n211, σ1ϑ08/212, mb4.2/21, MS3.2/7, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.26** | **76** | | **Pg** | **05 00 25.5** | **+0.4** |
| C27K | | | | Sg | **Sg** | **05 00 29.6** | **+1.1** |
| **C26K** | **Camden Bay** | **0.39** | **335** | | **Pb** | **05 00 28.5** | **-0.6** |
| **D25K** | **Kavik River** | **0.73** | **251** | | **Pg** | **05 00 32.5** | **-1.4** |
| **D27M** | **Malcolm River** | **1.27** | **103** | | **Pn** | **05 00 42.8** | **-1.3** |
| D27M | | | | Sg | **Sg** | **05 01 02.2** | **+1.5** |
| **C24K** | **Franklin Bluff** | **1.50** | **278** | Pn | **Pb** | **05 00 47.3** | **-0.7** |
| C24K | | | | Sg | **Sg** | **05 01 08.8** | **+0.7** |
| C24K | | | | IAML | | 05 01 10.5 | |
| | comp=E,4μm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **257** | | **Pn** | **05 00 48.8** | **+0.1** |
| D24K | | | | Sg | **Sg** | **05 01 12.4** | **+0.8** |
| **E27K** | **Coleen River** | **1.73** | **142** | | **Pn** | **05 00 50.9** | **+0.5** |
| E27K | | | | Sg | **Sb** | **05 01 14.0** | **+0.3** |
| E27K | | | | IAML | | 05 01 18.4 | |
| | comp=N,2μm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.88** | **177** | Pn | **Pn** | **05 00 53.2** | **+0.8** |
| F26K | | | | IAML | | 05 01 20.7 | |
| | comp=N,2μm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.01** | **116** | | **Pn** | **05 00 55.1** | **+1.0** |
| **D28M** | **Stokes Point** | **2.02** | **94** | | **Pn** | **05 00 55.1** | **+0.8** |
| D28M | | | | IAML | | 05 01 35.2 | |
| | comp=E,2μm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.03** | **193** | Pn | **Pn** | **05 00 55.0** | **+0.5** |
| F25K | | | | Sg | **Sb** | **05 01 23.2** | **+0.7** |
| F25K | | | | IAML | | 05 01 26.3 | |
| | comp=N,2μm,1.0s | | | | | | |
| F25K | | | | IAML | | 05 01 26.7 | |
| | comp=E,1μm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **246** | | **Pn** | **05 00 55

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **INK** | **Inuvik** | **4.13 103** | Pn | **Pn** | **05 01 24.3 +1.0** | | | | |
| | comp=E,1.8nm,0.3s,baz=315,slow=13,SNR=37 | | | | | | | | |
| INK | | | Sn | **Sn** | **05 02 08.7 -3.1** | | | | |
| | comp=E,5.1nm,0.3s,baz=69,slow=24,SNR=8.2 | | | | | | | | |
| INK | | | Lg | Lg | 05 02 31.3 | | | | |
| | comp=E,7.1nm,0.3s,baz=193,slow=28,SNR=6.2 | | | | | | | | |
| | comp=E,17nm,0.5s | | | | | | | | |
| **H23K** | **Yukon River** | **4.23 210** | | **Pn** | **05 01 24.8 +0.1** | | | | |
| H23K | | | IAML | | 05 02 35.1 | | | | |
| | comp=N,243nm,0.7s | | | | | | | | |
| H23K | | | IAML | | 05 02 36.9 | | | | |
| | comp=E,342nm,1.1s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.31 173** | | **Pn** | **05 01 26.0 +0.3** | | | | |
| **EPYK** | **Eagle Plains** | **4.33 134** | | **Pn** | **05 01 26.4 +0.4** | | | | |
| EPYK | | | IAML | | 05 02 52.0 | | | | |
| | comp=N,291nm,1.1s | | | | | | | | |
| **B20K** | **Meade River** | **4.44 282** | Pn | **Pn** | **05 01 28.0 +0.6** | | | | |
| **D20K** | **Etivluk River** | **4.44 265** | | **Pn** | **05 01 28.5 +1.0** | | | | |
| **E20K** | **Nigu River** | **4.45 258** | | **Pn** | **05 01 28.3 +0.6** | | | | |
| **A21K** | **Barrow** | **4.46 299** | | **Pn** | **05 01 28.2 +0.4** | | | | |
| **F31M** | **Tsiigehtchic** | **4.47 113** | Pn | **Pn** | **05 01 28.9 +0.9** | | | | |
| F31M | | | IAML | | 05 02 40.4 | | | | |
| | comp=N,164nm,1.0s | | | | | | | | |
| **I28M** | **Miner Creek** | **4.48 155** | Pn | **Pn** | **05 01 29.1 +0.9** | | | | |
| I28M | | | IAML | | 05 02 52.4 | | | | |
| | comp=E,165nm,0.7s | | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.54 219** | | **Pn** | **05 01 28.8 -0.1** | | | | |
| **G21K** | **Allakaket** | **4.58 232** | Pn | **Pn** | **05 01 29.1 -0.4** | | | | |
| G21K | | | IAML | | 05 02 57.0 | | | | |
| | comp=N,264nm,0.9s | | | | | | | | |
| G21K | | | IAML | | 05 02 59.7 | | | | |
| | comp=E,248nm,1.2s | | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.62 196** | | **Pn** | **05 01 30.1 +0.1** | | | | |
| POKR | | | IAML | | 05 02 46.9 | | | | |
| | comp=E,205nm,0.9s | | | | | | | | |
| POKR | | | IAML | | 05 02 47.9 | | | | |
| | comp=N,158nm,0.9s | | | | | | | | |
| **G31M** | **Satah River** | **4.62 120** | Pn | **Pn** | **05 01 30.2 +0.3** | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83 206** | | **Pn** | **05 01 33.3 +0.4** | | | | |
| I23K | | | IAML | | 05 02 59.8 | | | | |
| | comp=E,196nm,1.4s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.83 148** | | **Pn** | **05 01 33.5 +0.5** | | | | |
| I29M | | | IAML | | 05 02 58.3 | | | | |
| | comp=N,130nm,0.6s | | | | | | | | |
| I29M | | | IAML | | 05 03 04.6 | | | | |
| | comp=E,126nm,0.9s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.86 199** | | **Pn** | **05 01 33.7 +0.4** | | | | |
| MDM | | | IAML | | 05 02 53.9 | | | | |
| | comp=E,155nm,0.8s | | | | | | | | |
| MDM | | | IAML | | 05 02 54.9 | | | | |
| | comp=N,146nm,0.7s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.89 244** | Pn | **Pn** | **05 01 34.6 +0.9** | | | | |
| F20K | | | IAML | | 05 03 18.7 | | | | |
| | comp=E,121nm,0.9s | | | | | | | | |
| **COLA** | **College** | **4.90 197** | Pn | **Pn** | **05 01 34.2 +0.5** | | | | |
| **IL03** | **Eielson Array** | **4.91 192** | Pn | **Pn** | **05 01 34.1 +0.1** | | | | |
| **IL31** | | **4.91 192** | | **Pn** | **05 01 34.7 +0.8** | | | | |
| **ILAR** | **Eielson Array** | **4.91 192** | Pn | **Pn** | **05 01 34.9 +0.8** | | | | |
| **ILAR** | **Eielson Array** | **4.91 192** | Pn | **Pn** | **05 01 34.5 +0.4** | | | | |
| | comp=E,2.7nm,0.3s,baz=7.5,slow=12,SNR=115 | | | | | | | | |
| ILAR | | | Sn | **Sn** | **05 02 32.0 +1.1** | | | | |
| | comp=E,8.3nm,0.3s,baz=6.7,slow=26,SNR=6.5 | | | | | | | | |
| ILAR | | | Lg | Lg | 05 02 51.3 | | | | |
| | comp=E,9.2nm,0.3s,baz=12,slow=30,SNR=6.2 | | | | | | | | |
| ILAR | | | LR | LR | 05 03 53.5 | | | | |
| | comp=E,110nm,20.7s,baz=272,slow=42 | | | | | | | | |
| | comp=E,15nm,0.6s | | | | | | | | |
| **EGAK** | **Eagle** | **4.97 164** | Pn | **Pn** | **05 01 35.5 +0.5** | | | | |
| EGAK | | | IAML | | 05 03 02.8 | | | | |
| | comp=E,112nm,0.7s | | | | | | | | |
| EGAK | | | IAML | | 05 03 18.1 | | | | |
| | comp=E,131nm,1.0s | | | | | | | | |
| **J25K** | **Salcha River,** | **4.99 185** | Pn | **Pn** | **05 01 36.0 +0.8** | | | | |
| J25K | | | IAML | | 05 03 05.0 | | | | |
| | comp=N,130nm,0.7s | | | | | | | | |
| **D19K** | **Kuna River** | **5.03 264** | | **Pn** | **05 01 35.9 +0.2** | | | | |
| D19K | | | IAML | | 05 03 16.9 | | | | |
| | comp=E,115nm,0.8s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **5.04 229** | | **Pn** | **05 01 35.1 -0.7** | | | | |
| **H21K** | **Melozitna Rive** | **5.06 223** | Pn | **Pn** | **05 01 36.7 +0.6** | | | | |
| H21K | | | IAML | | 05 03 07.3 | | | | |
| | comp=N,173nm,1.1s | | | | | | | | |
| **J26L** | **Joseph Creek** | **5.10 176** | Pn | **Pn** | **05 01 37.5 +0.8** | | | | |
| J26L | | | IAML | | 05 02 39.1 | | | | |
| | comp=N,113nm,0.6s | | | | | | | | |
| J26L | | | IAML | | 05 02 56.3 | | | | |
| | comp=E,152nm,0.8s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.11 197** | | **Pn** | **05 01 37.4 +0.6** | | | | |
| CCB | | | IAML | | 05 03 09.0 | | | | |
| | comp=E,98nm,1.4s | | | | | | | | |
| **E19K** | **Redstone River** | **5.16 252** | | **Pn** | **05 01 37.1 -0.3** | | | | |
| E19K | | | IAML | | 05 03 14.4 | | | | |
| | comp=E,123nm,1.0s | | | | | | | | |
| **MLY** | **Manley** | **5.17 211** | Pn | **Pn** | **05 01 38.0 +0.5** | | | | |
| MLY | | | IAML | | 05 03 08.8 | | | | |
| | comp=N,116nm,1.2s | | | | | | | | |
| MLY | | | IAML | | 05 03 13.1 | | | | |
| | comp=E,99nm,1.5s | | | | | | | | |
| **HDA** | **Harding Lake** | **5.27 192** | Pn | **Pn** | **05 01 38.9 -0.1** | | | | |
| HDA | | | IAML | | 05 03 14.5 | | | | |
| | comp=E,144nm,0.9s | | | | | | | | |
| HDA | | | IAML | | 05 03 21.8 | | | | |
| | comp=N,160nm,1.0s | | | | | | | | |
| **NEA2** | **Nenana** | **5.31 202** | | **Pn** | **05 01 39.9 +0.3** | | | | |
| **WRH** | **Wood River Hil** | **5.31 197** | | **Pn** | **05 01 39.9 +0.4** | | | | |
| WRH | | | IAML | | 05 03 17.9 | | | | |
| | comp=N,97nm,1.0s | | | | | | | | |
| WRH | | | IAML | | 05 03 19.4 | | | | |
| | comp=E,131nm,1.4s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.35 141** | Pn | **Pn** | **05 01 40.6 +0.4** | | | | |
| I30M | | | IAML | | 05 02 47.4 | | | | |
| | comp=N,83nm,0.8s | | | | | | | | |
| I30M | | | IAML | | 05 03 12.5 | | | | |
| | comp=E,128nm,0.7s | | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.38 272** | | **Pn** | **05 01 41.3 +0.7** | | | | |
| C19K | | | IAML | | 05 03 37.1 | | | | |
| | comp=N,108nm,2.9s | | | | | | | | |
| C19K | | | IAML | | 05 03 40.6 | | | | |
| | comp=E,102nm,1.6s | | | | | | | | |
| **SCRK** | **Sand Creek** | **5.62 178** | Pn | **Pn** | **05 01 45.0 +1.2** | | | | |
| **K27K** | **Chicken** | **5.64 169** | Pn | **Pn** | **05 01 45.1 +1.1** | | | | |
| **F19K** | **Shaleruckik Mo** | **5.67 247** | Pn | **Pn** | **05 01 44.2 -0.2** | | | | |
| **J29N** | **Klondike Camp** | **5.68 152** | Pn | **Pn** | **05 01 45.4 +0.8** | | | | |
| **H20K** | **Anotleneega Mo** | **5.72 229** | | **Pn** | **05 01 44.7 -0.5** | | | | |
| **BWN** | **Browne** | **5.77 202** | | **Pn** | **05 01 46.0 +0.3** | | | | |
| **A19K** | **Wainwright** | **5.77 284** | | **Pn** | **05 01 46.4 +0.6** | | | | |
| **DAWY** | **Dawson** | **5.87 158** | | **Pn** | **05 01 48.1 +0.8** | | | | |
| **G19K** | **Purcell Mounta** | **5.88 240** | Pn | **Pn** | **05 01 47.1 -0.3** | | | | |
| **J30M** | **Hart River** | **5.92 148** | Pn | **Pn** | **05 01 48.7 +0.6** | | | | |
| **DOT** | **Dot Lake** | **5.95 178** | | **Pn** | **05 01 49.1 +0.9** | | | | |
| **C18K** | **Utukok River** | **6.06 269** | | **Pn** | **05 01 49.8 -0.1** | | | | |
| **BPAW** | **Bear Paw Mtn.** | **6.07 208** | | **Pn** | **05 01 50.4 +0.5** | | | | |
| **B18K** | **Kokolik River** | **6.11 276** | | **Pn** | **05 01 50.0 -0.5** | | | | |
| **MCK** | **McKinley** | **6.12 199** | | **Pn** | **05 01 51.2 +0.5** | | | | |
| **H19K** | **Roundabout Mou** | **6.13 234** | Pn | **Pn** | **05 01 50.8 +0.1** | | | | |
| **I20K** | **Naaghedeneel** | **6.17 224** | Pn | **Pn** | **05 01 51.7 +0.4** | | | | |
| **E18K** | **Tukpahlearik C** | **6.32 258** | | **Pn** | **05 01 53.9 +0.6** | | | | |
| **K29M** | **Barlow Dome** | **6.36 151** | Pn | **Pn** | **05 01 55.4 +1.4** | | | | |
| **F18K** | **Selawik** | **6.42 250** | | **Pn** | **05 01 55.0 +0.3** | | | | |
| **RND** | **Reindeer** | **6.43 198** | | **Pn** | **05 01 55.8 +0.9** | | | | |
| **G18K** | **Tagagawik** | **6.53 242** | Pn | **Pn** | **05 01 56.5 +0.2** | | | | |
| **L26K** | **Log Cabin Wild** | **6.58 176** | | **Pn** | **05 01 58.0 +1.0** | | | | |
| **BCAR** | **Beaver Creek A** | **6.62 169** | Pn | **Pn** | **05 01 58.1 +0.6** | | | | |
| **L27K** | **Beaver Creek,** | **6.62 170** | Pn | **Pn** | **05 01 58.2 +0.7** | | | | |
| **J20K** | **Nowinta River** | **6.62 220** | Pn | **Pn** | **05 01 57.5 0.0** | | | | |
| **PAX** | **Paxson** | **6.64 184** | | **Pn** | **05 01 58.5 +0.7** | | | | |
| **MENT** | **Mentasta** | **6.66 177** | Pn | **Pn** | **05 01 59.1 +1.0** | | | | |
| **A36M** | **Sachs Harbour** | **6.77 60** | Pn | **Pn** | **05 01 59.5 0.0** | | | | |
| **C17K** | **DeLong Mountai** | **6.81 270** | | **Pn** | **05 01 59.1 -1.0** | | | | |
| **GCSA** | **Galena City Sc** | **6.84 231** | | **Pn** | **05 02 00.6 +0.2** | | | | |
| **RDOG** | **Red Dog Mine** | **6.86 266** | | **Pn** | **05 02 00.4 -0.3** | | | | |
| **E17K** | **Hotham Inlet** | **6.90 257** | | **Pn** | **05 02 00.8 -0.4** | | | | |
| **H18K** | **Honhosa River** | **6.95 237** | Pn | **Pn** | **05 02 02.1 +0.1** | | | | |
| **L29M** | **L29M** | **6.96 156** | Pn | **Pn** | **05 02 02.7 +0.6** | | | | |
| **WAT1** | **Susitna Watana** | **6.97 196** | | **Pn** | **05 02 04.3 +2.1** | | | | |
| **WAT7** | **Susitna Watana** | **6.99 197** | | **Pn** | **05 02 04.2 +1.5** | | | | |
| **F17K** | **Baldwin Pennin** | **7.04 252** | Pn | **Pn** | **05 02 03.2 0.0** | | | | |
| **D17K** | **Noatak River** | **7.06 263** | | **Pn** | **05 02 02.5 -0.9** | | | | |
| **J19K** | **Poorman** | **7.12 224** | Pn | **Pn** | **05 02 04.7 +0.4** | | | | |
| **M26K** | **Nabesna, AK** | **7.22 175** | Pn | **Pn** | **05 02 06.5 +0.7** | | | | |
| **M27K** | **Edge Creek, AK** | **7.31 171** | Pn | **Pn** | **05 02 08.9 +1.8** | | | | |
| **K20K** | **Telida** | **7.32 216** | Pn | **Pn** | **05 02 07.2 +0.1** | | | | |
| **G17K** | **Kiwalik Mounta** | **7.42 244** | | **Pn** | **05 02 08.3 0.0** | | | | |
| **M29M** | **Somme Creek** | **7.55 158** | Pn | **Pn** | **05 02 11.4 +1.0** | | | | |
| **H17K** | **Granite Mounta** | **7.57 240** | Pn | **Pn** | **05 02 11.1 +0.6** | | | | |
| **SML** | **Sawmill** | **7.95 193** | | **Pn** | **05 02 16.1 +0.2** | | | | |
| **G16K** | **Koyuk River** | **8.03 247** | Pn | **Pn** | **05 02 15.0 -1.8** | | | | |
| **L20K** | **Farewell, AK** | **8.08 213** | | **Pn** | **05 02 17.4 -0.1** | | | | |
| **KLU** | **Klutina** | **8.13 185** | | **Pn** | **05 02 15.5 -2.8** | | | | |
| **SKT** | **Skwentna** | **8.15 204** | Pn | **Pn** | **05 02 16.6 -1.9** | | | | |
| **GLB** | **Gilahina Butte** | **8.16 178** | | **Pn** | **05 02 16.6 -2.0** | | | | |
| **PMR** | **Palmer** | **8.24 196** | | **Pn** | **05 02 20.2 +0.6** | | | | |
| **MCARA** | **McCarthy VSAT** | **8.24 175** | | **Pn** | **05 02 19.2 -0.5** | | | | |
| **KNK** | **Knik Glacier** | **8.35 193** | Pn | **Pn** | **05 02 20.3 -1.0** | | | | |
| **M31M** | **Drury Creek, Y** | **8.45 146** | | **Pn** | **05 02 22.8 +0.2** | | | | |
| **M20K** | **Styx River** | **8.49 209** | Pn | **Pn** | **05 02 23.7 +0.5** | | | | |
| **J17K** | **VABM Dome** | **8.50 230** | Pn | **Pn** | **05 02 21.4 -1.8** | | | | |
| **L19K** | **White Mountain** | **8.54 215** | Pn | **Pn** | **05 02 24.1 +0.3** | | | | |
| **I17K** | **Unalakleet** | **8.57 236** | Pn | **Pn** | **05 02 24.9 +0.7** | | | | |
| **F15K** | **North Star Dit** | **8.60 253** | Pn | **Pn** | **05 02 24.4 -0.2** | | | | |
| **FARO** | **Faro, Yukon** | **8.63 143** | | **Pn** | **05 02 25.3 +0.2** | | | | |
| **N30M** | **Aishikik Lake** | **8.68 156** | Pn | **Pn** | **05 02 27.3 +1.4** | | | | |
| **M19K** | **Big River Lodg** | **8.70 213** | | **Pn** | **05 02 27.1 +1.1** | | | | |
| **CTGM** | **Chitina Glacie** | **8.73 170** | | **Pn** | **05 02 29.1 +2.6** | | | | |
| **N31M** | **Braeburn, Yuko** | **8.86 152** | | **Pn** | **05 02 29.4 +1.2** | | | | |
| **TGL** | **Tana Glacier** | **8.87 175** | Pn | **Pn** | **05 02 27.4 -1.1** | | | | |
| **L18K** | **Granite Mounta** | **8.90 220** | Pn | **Pn** | **05 02 29.4 +0.8** | | | | |
| **GRNC** | **Granite Creek** | **8.94 172** | Pn | **Pn** | **05 02 33.1 +3.6** | | | | |
| **J16K** | **Anvik River** | **9.01 233** | Pn | **Pn** | **05 02 30.7 +0.5** | | | | |
| **O30N** | **Mendenhall** | **9.49 154** | Pn | **Pn** | **05 02 36.7 -0.1** | | | | |
| **WHY** | **Whitehorse** | **9.79 151** | Pn | **Pn** | **05 02 41.2 +0.2** | | | | |
| **J14K** | **Nanvaranak Lak** | **10.28 238** | Pn | **Pn** | **05 02 47.8 +0.3** | | | | |
| **M16K** | **Timber Creek** | **10.47 222** | Pn | **Pn** | **05 02 49.4 -0.9** | | | | |
| **CNPM** | **China Poot** | **10.49 199** | Pn | **Pn** | **05 02 49.7 -0.7** | | | | |
| **WRGLY** | **Wrigley** | **10.49 117** | Pn | **Pn** | **05 02 50.9 +0.5** | | | | |
| **N17K** | **Nushagak Hills** | **10.52 217** | Pn | **Pn** | **05 02 50.2 -0.6** | | | | |
| **P33M** | **Tesslin, Yukon** | **10.58 147** | Pn | **Pn** | **05 02 51.0 -0.7** | | | | |
| **SKAG** | **Skagway** | **10.86 155** | Pn | **Pn** | **05 02 56.4 +1.0** | | | | |
| **P32M** | **Atlin** | **11.00 150** | Pn | **Pn** | **05 02 57.9 +0.4** | | | | |
| **P18K** | **Big Mountain,** | **11.20 210** | Pn | **Pn** | **05 03 01.1 +1.0** | | | | |
| **M14K** | **Bethel** | **11.46 228** | Pn | **Pn** | **05 03 01.5 -2.1** | | | | |
| **N15K** | **Kwethluk River** | **11.49 223** | Pn | **Pn** | **05 03 04.6 +0.4** | | | | |
| **O16K** | **Kokwok River B** | **11.56 217** | Pn | **Pn** | **05 03 05.3 +0.2** | | | | |
| **R33M** | **Jennings River** | **11.70 144** | Pn | **Pn** | **05 03 08.1 +0.9** | | | | |
| **Q32M** | **Nakina River** | **11.85 148** | Pn | **Pn** | **05 03 10.9 +1.6** | | | | |
| **R32K** | **Eaglecrest** | **12.12 154** | Pn | **Pn** | **05 03 13.8 +1.1** | | | | |
| **S31K** | **Pelican** | **12.18 159** | Pn | **Pn** | **05 03 15.7 +2.1** | | | | |
| **DLBC** | **Dease Lake** | **12.78 144** | Pn | **Pn** | **05 03 22.2 +0.4** | | | | |
| **DLBC** | **Dease Lake** | **12.78 144** | Pn | **Pn** | **05 03 22.1 +0.2** | | | | |
| | comp=E,0.4nm,0.3s,baz=17,slow=11,SNR=6.2 | | | | | | | | |
| DLBC | | | Lg | Lg | 05 07 02.2 | | | | |
| | comp=E,0.2nm,0.3s,baz=202,slow=16,SNR=1.6 | | | | | | | | |
| DLBC | | | LR | LR | 05 08 27.6 | | | | |
| | comp=E,79nm,18.6s,baz=28,slow=38 | | | | | | | | |
| | comp=E,1.6nm,0.5s | | | | | | | | |
| **S34M** | **Telegraph Cree** | **13.04 147** | Pn | **Pn** | **05 03 26.9 +1.5** | | | | |
| **YKA** | **Yellowknife Ar** | **13.90 106** | Pn | **Pn** | **05 03 33.1 -3.8** | | | | |
| **YKA** | **Yellowknife Ar** | **13.90 106** | Pn | **Pn** | **05 03 33.5 -3.4** | | | | |
| | comp=E,0.6nm,0.3s,baz=38,slow=12,SNR=11 | | | | | | | | |
| YKA | | | Sn | Sn | 05 05 56.4 -15 | | | | |
| | comp=E,0.5nm,0.3s,baz=307,slow=23,SNR=5.6 | | | | | | | | |
| | comp=E,1.3nm,0.5s | | | | | | | | |
| **EUNU** | **Eureka** | **17.37 30** | Pn | **Pn** | **05 04 20.8 -1.6** | | | | |
| **NEW** | **Newport** | **25.16 134** | P | **P** | **05 05 43.8 -1.6** | | | | |
| **NEW** | **Newport** | **25.16 134** | LR | LR | 05 17 12.0 | | | | |
| | comp=E,21nm,20.4s,baz=346,slow=40 | | | | | | | | |
| **LTY** | **Liberty** | **25.25 140** | P | **P** | **05 05 47.4 +1.1** | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.41 250** | LR | LR | 05 16 52.1 | | | | |
| | comp=E,20nm,18.6s,baz=134,slow=39 | | | | | | | | |
| **LON** | **Longmire** | **25.48 142** | P | **P** | **05 05 51.0 +2.6** | | | | |
| LON | | | IAmb | IAmb | 05 05 55.7 | | | | |
| | comp=Z,6.7nm,1.2s | | | | | | | | |
| **G03D** | **McMinnville, O** | **26.65 145** | P | **P** | **05 05 59.4 +0.6** | | | | |
| **BPMT** | **Black Pine Rid** | **27.81 130** | P | **P** | **05 06 08.4 -1.2** | | | | |
| **I05D** | **Terrebonne, OR** | **27.88 143** | P | **P** | **05 06 09.2 -0.8** | | | | |
| I05D | | | IAmb | IAmb | 05 06 12.0 | | | | |
| | comp=Z,6.5nm,1.2s | | | | | | | | |
| **FRB** | **Frobisher Bay** | **28.75 64** | LR | LR | 05 17 48.4 | | | | |
| | comp=Z,63nm,19.1s,baz=204,slow=36 | | | | | | | | |
| **DLMT** | **Dillon** | **29.03 130** | P | **P** | **05 06 18.6 -1.7** | | | | |
| DLMT | | | IAmb | IAmb | 05 06 29.6 | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.10 146** | LR | LR | 05 19 14.5 | | | | |
| | comp=Z,43nm,18.3s,baz=333,slow=38 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.03 7** | P | **P** | **05 06 45.8 -0.5** | | | | |
| | comp=Z,4.8nm,0.7s,baz=316,slow=6.0,SNR=14 | | | | | | | | |
| | comp=Z,4.8nm,0.7s | | | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **32.03 7** | P | **P** | **05 06 46.3 -0.1** | | | | |
| SPB2 | | | IAmb | IAmb | 05 06 47.2 | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **PD31** | **Pinedale Array** | **32.26 128** | P | **P** | **05 06 48.0 -0.9** | | | | |
| **PDAR** | **Pinedale Array** | **32.26 128** | P | **P** | **05 06 48.5 -0.4** | | | | |
| **PDAR** | **Pinedale Array** | **32.26 128** | P | **P** | **05 06 52.3 +3.4** | | | | |
| | comp=Z,0.5nm,0.6s,baz=1.8,slow=5.5,SNR=5.8 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **ORV** | **Oroville** | **32.44 146** | P | **P** | **05 06 50.2 0.0** | | | | |
| ORV | | | IAmb | IAmb | 05 07 03.4 | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **RSSD** | **Black Hills** | **32.63 120** | P | **P** | **05 06 49.6 -2.5** | | | | |
| RSSD | | | IAmb | IAmb | 05 06 56.9 | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **33.80 134** | P | **P** | **05 07 01.9 -0.4** | | | | |
| DUG | | | IAmb | IAmb | 05 07 18.6 | | | | |
| | comp=Z,2.5nm,1.1s | | | | | | | | |
| **WAKR** | **Walker** | **33.88 144** | P | **P** | **05 07 01.2 -1.8** | | | | |
| WAKR | | | IAmb | IAmb | 05 07 23.0 | | | | |
| | comp=Z,3.9nm,1.2s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.19 142** | P | **P** | **05 07 08.9 +3.1** | | | | |
| | comp=Z,0.9nm,0.8s,baz=342,slow=5.8,SNR=7.1 | | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | |
| **N23A** | **Red Feather La** | **35.01 125** | P | **P** | **05 07 10.2 -2.7** | | | | |
| N23A | | | IAmb | IAmb | 05 07 11.3 | | | | |
| | comp=Z,4.3nm,1.2s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.22 142** | LR | LR | 05 23 19.4 | | | | |
| | comp=Z,36nm,20.5s,baz=238,slow=35 | | | | | | | | |
| **ANMO** | **Albuquerque** | **40.42 129** | LR | LR | 05 25 12.1 | | | | |
| | comp=Z,35nm,20.9s,baz=48,slow=37 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99 5** | P | **P** | **05 08 03.6 +1.0** | | | | |
| | comp=Z,1.4nm,0.7s,baz=22,slow=9.8,SNR=4.4 | | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **43.65 274** | LR | LR | 05 29 27.4 | | | | |
| | comp=Z,30nm,18.7s,baz=134,slow=40 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.48 128** | P | **P** | **05 08 49.2 +1.8** | | | | |
| | comp=Z,0.5nm,0.8s,baz=345,slow=5.8,SNR=7.2 | | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **49.10 6** | P | **P** | **05 09 06.9 -0.3** | | | | |
| | comp=Z,2.6nm,0.9s,baz=357,slow=7.0,SNR=2.0 | | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | | |
| **SONM** | **Songino Array** | **52.11 306** | P | **P** | **05 09 31.6 +1.3** | | | | |
| | comp=Z,0.4nm,0.6s,baz=38,slow=7.3,SNR=1.8 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.28 27** | P | **P** | **05 09 32.8 +1.6** | | | | |
| | comp=Z,0.5nm,0.5s,baz=321,slow=10.0,SNR=3.8 | | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.08 328** | P | **P** | **05 09 59.4 +0.4** | | | | |
| | comp=Z,0.9nm,0.8s,baz=16,slow=7.2,SNR=6.1 | | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.94 299** | eP | **P** | **05 10 06.3 +0.9** | | | | |
| HHC | | | pmax | pmax | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| HHC | | | pmax | pmax | | | | | |
| | comp=Z,52nm,3.6s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.96 5** | P | **P** | **05 10 25.4 -0.8** | | | | |
| | comp=Z,1.0nm,0.5s,baz=358,slow=7.3,SNR=2.2 | | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **PZH** | **PanZhiHua** | **73.23 301** | P | **P** | **05 11 52.8 +1.3** | | | | |
| PZH | | | pmax | pmax | | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| PZH | | | pmax | pmax | | | | | |
| | comp=Z,230nm,5.8s | | | | | | | | |

*NEIC* ***13*** *05:05:50.4±2.9, 69°.49N±0°.05×144°.64W±0°.06, h10km±2km, Error ellipse: s-maj=9.7km s-min=3.0km az=17.0*

**AEIC 13 05:05:50.0±2.4, 69°.48N±0°.06×144°.5W±0°.1, h5km±7km, ML3.0, ML3.2/96(NEIC), Error ellipse: s-maj=9.0km s-min=6.4km az=190.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.30** | **60** | Pg | Pg | 05 05 55.8 | -0.1 |
| C27K | | | | Sg | Sg | 05 05 59.9 | +0.1 |
| **C26K** | **Camden Bay** | **0.47** | **340** | | Pg | 05 05 58.9 | -0.2 |
| C26K | | | | Sg | Sg | 05 06 05.8 | +0.6 |
| **D25K** | **Kavik River** | **0.70** | **258** | | Pg | 05 06 03.6 | +0.2 |
| D25K | | | | | Sg | 05 06 13.4 | +1.0 |
| **D27M** | **Malcolm River** | **1.26** | **99** | Pg | Pb | 05 06 14.2 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.51** | **281** | | Pn | 05 06 17.8 | +0.2 |
| **D24K** | **Happy Valley** | **1.59** | **260** | | Pg | 05 06 21.3 | +0.9 |
| **E27K** | **Coleen River** | **1.66** | **140** | | Pb | 05 06 20.8 | -0.3 |
| E27K | | | | IAML | | 05 07 20.7 | |
| | comp=E,200nm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.79** | **176** | | Pn | 05 06 21.5 | -0.2 |
| **F25K** | **Christian Rive** | **1.94** | **194** | | Pn | 05 06 22.1 | -1.6 |
| **E28M** | **Babbage River** | **1.98** | **114** | Pn | Pn | 05 06 23.5 | -0.6 |
| **D28M** | **Stokes Point** | **2.03** | **92** | Pn | Pn | 05 06 25.2 | +0.5 |
| **E24K** | **Your Creek** | **2.04** | **228** | | Pn | 05 06 25.3 | +0.4 |
| **F24K** | **Squaw Lake** | **2.34** | **214** | | Pn | 05 06 28.1 | -1.0 |
| F24K | | | | IAML | | 05 07 45.6 | |
| | comp=N,82nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.36** | **235** | | Pn | 05 06 29.1 | -0.3 |
| **F28M** | **Old Crow** | **2.52** | **136** | | Pn | 05 06 33.1 | +1.5 |
| **G26K** | **Porcupine Rive** | **2.55** | **174** | | Pn | 05 06 34.7 | -1.5 |
| **E29M** | **Blow River** | **2.61** | **112** | | Pn | 05 06 34.4 | +1.6 |
| **G27K** | **Doyon Strip** | **2.88** | **157** | | Pn | 05 06 37.9 | +1.4 |
| **FYU** | **Fort Yukon** | **2.94** | **186** | Pn | Pn | 05 06 37.9 | +0.6 |
| **E22K** | **Anaktuvuk Pass** | **2.99** | **247** | | Pn | 05 06 36.7 | -1.4 |
| **D22K** | **Ayikyak River** | **3.00** | **262** | Pn | Pn | 05 06 36.5 | -1.7 |
| **G24K** | **Hadweenzic Riv** | **3.01** | **204** | | Pn | 05 06 39.7 | +1.4 |
| **COLD** | **Coldfoot** | **3.10** | **226** | Pn | Pn | 05 06 38.2 | -1.4 |
| **B22K** | **Teshekpuk Lake** | **3.21** | **290** | | Pn | 05 06 40.3 | -0.8 |
| **H25L** | **Birch Creek** | **3.27** | **190** | | Pn | 05 06 44.7 | +3.0 |
| **G29M** | **Pine Creek** | **3.52** | **134** | | Pn | 05 06 43.8 | -1.5 |
| **B21K** | **Ikpikpuk River** | **3.57** | **277** | Pn | Pn | 05 06 43.9 | -2.0 |
| **H24K** | **Noodor Dome** | **3.88** | **201** | | Pn | 05 06 50.6 | +0.3 |
| H24K | | | | IAML | | 05 08 41.2 | |
| | comp=N,23nm,0.7s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.96** | **125** | Pn | Pn | 05 06 50.5 | -0.8 |
| **H29M** | **Whitestone** | **4.00** | **142** | | Pn | 05 06 50.0 | -1.9 |
| **F21K** | **Alatna River** | **4.04** | **240** | | Pn | 05 06 52.2 | -0.3 |
| **INK** | **Inuvik** | **4.12** | **101** | Pn | Pn | 05 06 51.7 | -1.8 |
| **H23K** | **Yukon River** | **4.15** | **210** | | Pn | 05 06 55.5 | +1.5 |
| **I26K** | **Coal Creek Min** | **4.22** | **173** | Pn | Pn | 05 06 54.9 | 0.0 |
| **EPYK** | **Eagle Plains** | **4.27** | **133** | Pn | Pn | 05 06 55.6 | 0.0 |
| **B20K** | **Meade River** | **4.45** | **283** | | Pn | 05 06 59.7 | +1.7 |
| **POKR** | **Poker Plat Res** | **4.53** | **196** | Pn | Pn | 05 06 56.7 | -2.4 |
| **G31M** | **Satah River** | **4.58** | **119** | Pn | Pn | 05 07 01.1 | +1.3 |
| **I23K** | **Minto, Yukon-K** | **4.74** | **206** | Pn | Pn | 05 07 02.4 | +0.4 |
| **I29M** | **Ogilvie Camp,** | **4.76** | **147** | Pn | Pn | 05 07 00.8 | -1.6 |
| **MDM** | **Murphy Dome** | **4.77** | **200** | Pn | Pn | 05 07 01.6 | -0.8 |
| **IL03** | **Eielson Array** | **4.82** | **192** | Pn | Pn | 05 07 01.3 | -1.8 |
| **IL31** | | **4.82** | **192** | Pn | Pn | 05 07 02.5 | -0.6 |
| **ILAR** | **Eielson Array** | **4.82** | **192** | Pn | Pn | 05 07 02.0 | -0.2 |
| **F20K** | **Avaraart Lake** | **4.85** | **245** | Pn | Pn | 05 07 04.4 | +0.9 |
| F20K | | | | IAML | | 05 09 17.8 | |
| | comp=N,16nm,2.6s | | | | | | |
| **EGAK** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,64nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **3.04 262** | Pn | Pn | 05 07 12.0 | -0.2 | |
| D22K | | | IAML | | 05 08 09.7 | | |
| | comp=E,70nm,0.8s | | | | | | |
| D22K | | | IAML | | 05 08 11.5 | | |
| | comp=N,83nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.25 289** | | Pn | 05 07 15.8 | +0.9 | |
| **H25L** | **Birch Creek** | **3.29 190** | | Pn | 05 07 18.4 | +2.8 | |
| **H27K** | **Steamboat Moun** | **3.45 161** | | Pn | 05 07 20.5 | +2.8 | |
| **G29M** | **Pine Creek** | **3.50 135** | | Pn | 05 07 18.9 | +0.4 | |
| **G23K** | **Bananza Creek** | **3.51 220** | Pn | Pn | 05 07 18.2 | -0.5 | |
| G23K | | | IAML | | 05 08 22.4 | | |
| | comp=N,40nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.61 277** | Pn | Pn | 05 07 20.0 | +0.1 | |
| **E21K** | **Killik River** | **3.63 258** | Pn | Pn | 05 07 19.1 | -1.2 | |
| E21K | | | IAML | | 05 08 28.6 | | |
| | comp=N,58nm,0.8s | | | | | | |
| E21K | | | IAML | | 05 08 28.7 | | |
| | comp=E,47nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.67 117** | | Pn | 05 07 23.6 | +2.9 | |
| **H24K** | **Noodor Dome** | **3.91 202** | Pn | Pn | 05 07 23.3 | -0.9 | |
| **G30M** | **tAoh Zraii Nji** | **3.94 126** | | Pn | 05 07 23.8 | -0.7 | |
| G30M | | | IAML | | 05 08 36.2 | | |
| | comp=E,28nm,0.6s | | | | | | |
| G30M | | | IAML | | 05 08 37.4 | | |
| | comp=N,34nm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **3.99 143** | Pn | Pn | 05 07 24.9 | -0.3 | |
| **PRP** | **Porcupine Dome** | **4.02 187** | Pn | Pn | 05 07 24.5 | -1.2 | |
| PRP | | | IAML | | 05 08 20.0 | | |
| | comp=E,28nm,0.7s | | | | | | |
| PRP | | | IAML | | 05 08 22.3 | | |
| | comp=N,35nm,0.6s | | | | | | |
| **I27K** | **Kandik River** | **4.04 164** | | Pn | 05 07 28.1 | +2.2 | |
| **F21K** | **Alatna River** | **4.08 240** | Pn | Pn | 05 07 26.4 | -0.1 | |
| F21K | | | IAML | | 05 08 20.1 | | |
| | comp=E,24nm,0.9s | | | | | | |
| F21K | | | IAML | | 05 08 40.0 | | |
| | comp=N,27nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **4.09 102** | Pn | Pn | 05 07 26.8 | +0.3 | |
| **H23K** | **Yukon River** | **4.18 211** | Pn | Pn | 05 07 27.7 | -0.2 | |
| H23K | | | IAML | | 05 08 44.8 | | |
| | comp=E,24nm,1.8s | | | | | | |
| H23K | | | IAML | | 05 08 48.2 | | |
| | comp=N,25nm,1.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.23 173** | Pn | Pn | 05 07 26.6 | -1.9 | |
| I26K | | | IAML | | 05 08 55.4 | | |
| | comp=E,35nm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.25 134** | Pn | Pn | 05 07 28.9 | +0.1 | |
| **I28M** | **Miner Creek** | **4.40 155** | | Pn | 05 07 30.9 | -0.1 | |
| I28M | | | IAML | | 05 08 28.5 | | |
| | comp=N,26nm,0.5s | | | | | | |
| I28M | | | IAML | | 05 08 55.5 | | |
| | comp=E,33nm,1.0s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.41 113** | Pn | Pn | 05 07 30.5 | -0.5 | |
| F31M | | | IAML | | 05 08 56.7 | | |
| | comp=N,23nm,1.4s | | | | | | |
| **B20K** | **Meade River** | **4.49 283** | | Pn | 05 07 31.8 | -0.1 | |
| **G31M** | **Satah River** | **4.55 120** | | Pn | 05 07 33.8 | +1.0 | |
| G31M | | | IAML | | 05 08 59.3 | | |
| | comp=N,29nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.56 197** | Pn | Pn | 05 07 32.5 | -0.5 | |
| POKR | | | IAML | | 05 08 31.3 | | |
| | comp=N,21nm,0.4s | | | | | | |
| POKR | | | IAML | | 05 09 01.5 | | |
| | comp=E,20nm,1.8s | | | | | | |
| **G21K** | **Allakaket** | **4.56 233** | Pn | Pn | 05 07 32.2 | -0.8 | |
| G21K | | | IAML | | 05 08 58.9 | | |
| | comp=E,23nm,1.4s | | | | | | |
| G21K | | | IAML | | 05 09 16.6 | | |
| | comp=N,21nm,2.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78 206** | Pn | Pn | 05 07 35.6 | -0.4 | |
| I23K | | | IAML | | 05 09 12.4 | | |
| | comp=E,20nm,1.6s | | | | | | |
| I23K | | | IAML | | 05 09 12.7 | | |
| | comp=N,19nm,2.6s | | | | | | |
| **MDM** | **Murphy Dome** | **4.80 200** | | Pn | 05 07 35.6 | -0.8 | |
| MDM | | | IAML | | 05 08 53.9 | | |
| | comp=N,13nm,4.2s | | | | | | |
| MDM | | | IAML | | 05 09 03.3 | | |
| | comp=E,16nm,3.3s | | | | | | |
| **ILAR** | **Eielson Array** | **4.85 193** | Pn | Pn | 05 07 35.8 | -1.1 | |
| **J25K** | **Salcha River,** | **4.92 185** | Pn | Pn | 05 07 36.0 | -2.0 | |
| J25K | | | IAML | | 05 09 15.2 | | |
| | comp=E,13nm,0.9s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.02 230** | Pn | Pn | 05 07 39.2 | -0.1 | |
| **J26L** | **Joseph Creek** | **5.02 176** | Pn | Pn | 05 07 39.3 | -0.2 | |
| J26L | | | IAML | | 05 08 45.8 | | |
| | comp=N,14nm,0.4s | | | | | | |
| J26L | | | IAML | | 05 09 07.4 | | |
| | comp=E,15nm,0.8s | | | | | | |
| **H21K** | **Melozitna River** | **5.03 224** | Pn | Pn | 05 07 39.1 | -0.4 | |
| H21K | | | IAML | | 05 09 11.2 | | |
| | comp=E,17nm,2.2s | | | | | | |
| H21K | | | IAML | | 05 09 14.6 | | |
| | comp=N,19nm,3.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05 197** | Pn | Pn | 05 07 39.1 | -0.7 | |
| CCB | | | IAML | | 05 08 41.4 | | |
| | comp=E,15nm,3.3s | | | | | | |
| **D19K** | **Kuna River** | **5.06 265** | | Pn | 05 07 40.2 | +0.4 | |
| D19K | | | IAML | | 05 09 23.5 | | |
| | comp=E,11nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **5.17 253** | Pn | Pn | 05 07 41.6 | +0.3 | |
| E19K | | | IAML | | 05 08 44.1 | | |
| | comp=N,16nm,0.5s | | | | | | |
| E19K | | | IAML | | 05 08 46.1 | | |
| | comp=E,14nm,0.5s | | | | | | |
| **I30M** | **Mount Dempster** | **5.27 141** | | Pn | 05 07 43.6 | +0.6 | |
| **C19K** | **Lookout Ridge** | **5.42 273** | | Pn | 05 07 46.8 | +1.9 | |
| **SCRK** | **Sand Creek** | **5.54 178** | | Pn | 05 07 48.3 | +1.7 | |
| **K27K** | **Chicken** | **5.56 170** | Pn | Pn | 05 07 47.7 | +1.0 | |
| **F19K** | **Shaleruckik Mo** | **5.68 248** | Pn | Pn | 05 07 50.0 | +1.7 | |
| **DAWY** | **Dawson** | **5.79 158** | | Pn | 05 07 48.8 | -1.2 | |
| **A19K** | **Wainwright** | **5.82 285** | | Pn | 05 07 51.7 | +1.4 | |
| **J30M** | **Hart River** | **5.84 144** | | Pn | 05 07 50.6 | -0.1 | |
| **DOT** | **Dot Lake** | **5.87 179** | | Pn | 05 07 53.1 | +2.0 | |
| **G19K** | **Purcell Mounta** | **5.88 241** | Pn | Pn | 05 07 50.9 | -0.2 | |
| **BPAW** | **Bear Paw Mtn.** | **6.02 209** | Pn | Pn | 05 07 53.4 | +0.3 | |
| **C18K** | **Utukok River** | **6.10 270** | Pn | Pn | 05 07 53.9 | -0.3 | |
| **K29M** | **Barlow Dome** | **6.28 151** | | Pn | 05 07 58.6 | +1.8 | |
| **E18K** | **Tukpahlearik C** | **6.33 259** | | Pn | 05 07 59.2 | +1.9 | |
| **RND** | **Reindeer** | **6.37 199** | Pn | Pn | 05 08 00.7 | +2.7 | |
| **L26K** | **Log Cabin Wild** | **6.51 176** | Pn | Pn | 05 08 00.8 | +1.0 | |
| **BCAR** | **Beaver Creek A** | **6.54 170** | Pn | Pn | 05 08 01.1 | +1.0 | |
| **DHY** | **Denali Highway** | **6.56 192** | Pn | Pn | 05 08 01.9 | +1.3 | |
| **J20K** | **Nowinta River** | **6.58 221** | Pn | Pn | 05 08 02.6 | +1.8 | |
| **A36M** | **Sachs Harbour** | **6.78 60** | | Pn | 05 08 03.2 | -0.1 | |
| **C17K** | **DeLong Mountai** | **6.84 270** | | Pn | 05 08 05.4 | +1.0 | |
| **L29M** | **L29M** | **6.88 156** | | Pn | 05 08 05.7 | +0.8 | |
| **D17K** | **Noatak River** | **7.08 264** | | Pn | 05 08 08.0 | +0.5 | |
| **C36M** | **Paulatuk** | **7.13 82** | Pn | Pn | 05 08 07.4 | -0.9 | |
| **K20K** | **Telida** | **7.28 217** | Pn | Pn | 05 08 12.3 | +2.0 | |
| **H17K** | **Granite Mounta** | **7.56 240** | Pn | Pn | 05 08 14.5 | +0.3 | |
| **C16K** | **Lisburne Hills** | **7.67 271** | Pn | Pn | 05 08 15.1 | -0.5 | |

*NEIC* ***13*** *05:18:42.7±1.3, 69°.59N±0°.05×144°.7W±0°.1, h10km±2km, Error ellipse: s-maj=8.6km s-min=5.5km az=19.0*

**AEIC 13 05:18:42.6±1.4, 69°.59N±0°.05×144°.6W±0°.1, h10km±6km, ML2.8, ML3.1**/60(NEIC), **Error ellipse: s-maj=7.9km s-min=4.6km az=201.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.33** | **83** | Pg | Pg | 05 18 49.3 | +0.2 |
| C27K | | | | Sg | Sg | 05 18 53.4 | -0.1 |
| **C26K** | **Camden Bay** | **0.34** | **344** | | Pb | 05 18 51.2 | +0.4 |
| C26K | | | | Sg | Sg | 05 18 54.4 | +0.3 |
| **D25K** | **Kavik River** | **0.67** | **247** | | Pg | 05 18 55.2 | -0.4 |
| **D27M** | **Malcolm River** | **1.34** | **103** | | Pn | 05 19 07.5 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.43** | **277** | | Pn | 05 19 08.9 | +0.4 |
| C24K | | | | Sn | Sg | 05 19 28.0 | -0.4 |
| **D24K** | **Happy Valley** | **1.55** | **256** | | Pn | 05 19 10.4 | +0.2 |
| **E27K** | **Coleen River** | **1.79** | **141** | | Pn | 05 19 13.7 | +0.2 |
| E27K | | | | IAML | | 05 20 14.5 | |
| | comp=E,66nm,1.2s | | | | | | |
| E27K | | | | IAML | | 05 20 14.5 | |
| | comp=N,98nm,1.2s | | | | | | |
| **F26K** | **Sheenjek River** | **1.91** | **174** | Pn | Pn | 05 19 14.5 | -0.7 |
| F26K | | | | IAML | | 05 20 16.0 | |
| | comp=N,132nm,1.4s | | | | | | |
| F26K | | | | IAML | | 05 20 21.5 | |
| | comp=E,76nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.01** | **244** | Pn | Pn | 05 19 16.6 | 0.0 |
| TOLK | | | | IAML | | 05 20 20.4 | |
| | comp=E,99nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **191** | Pn | Pn | 05 19 16.4 | -0.6 |
| F25K | | | | IAML | | 05 20 31.8 | |
| | comp=N,75nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.06** | **224** | Pn | Pn | 05 19 16.3 | -1.0 |
| E24K | | | | IAML | | 05 20 34.6 | |
| | comp=N,59nm,1.0s | | | | | | |
| **E28M** | **Babbage River** | **2.08** | **116** | Pn | Pn | 05 19 17.7 | +0.2 |
| E28M | | | | IAML | | 05 20 24.0 | |
| | comp=E,78nm,0.7s | | | | | | |
| E28M | | | | IAML | | 05 20 33.7 | |
| | comp=N,74nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **2.10** | **280** | Pn | Pn | 05 19 17.0 | -0.7 |
| C23K | | | | IAML | | 05 20 30.6 | |
| | comp=E,156nm,0.8s | | | | | | |
| C23K | | | | IAML | | 05 20 37.8 | |
| | comp=N,80nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.24** | **257** | Pn | Pn | 05 19 20.4 | +0.7 |
| D23K | | | | IAML | | 05 20 29.2 | |
| | comp=E,100nm,0.9s | | | | | | |
| D23K | | | | IAML | | 05 20 40.0 | |
| | comp=N,59nm,1.2s | | | | | | |
| **E23K** | **Chandalar** | **2.37** | **232** | Pn | Pn | 05 19 21.7 | +0.1 |
| E23K | | | | IAML | | 05 20 28.4 | |
| | comp=E,58nm,0.9s | | | | | | |
| E23K | | | | IAML | | 05 20 34.8 | |
| | comp=N,66nm,0.5s | | | | | | |
| **F24K** | **Squaw Lake** | **2.40** | **211** | Pn | Pn | 05 19 22.1 | +0.2 |
| F24K | | | | IAML | | 05 20 52.9 | |
| | comp=N,58nm,0.9s | | | | | | |
| F24K | | | | IAML | | 05 20 54.6 | |
| | comp=E,61nm,1.0s | | | | | | |
| **E29M** | **Blow River** | **2.71** | **113** | Pn | Pn | 05 19 25.4 | -0.8 |
| **D22K** | **Ayikyak River** | **2.95** | **260** | Pn | Pn | 05 19 29.5 | 0.0 |
| **E22K** | **Anaktuvuk Pass** | **2.98** | **244** | Pn | Pn | 05 19 29.1 | -0.9 |
| E22K | | | | IAML | | 05 21 21.9 | |
| | comp=N,103nm,1.0s | | | | | | |
| E22K | | | | IAML | | 05 21 26.2 | |
| | comp=E,57nm,0.9s | | | | | | |
| **G27K** | **Doyon Strip** | **3.01** | **157** | Pn | Pn | 05 19 29.5 | -0.7 |
| G27K | | | | IAML | | 05 21 23.1 | |
| | comp=N,60nm,0.7s | | | | | | |
| G27K | | | | IAML | | 05 21 27.2 | |
| | comp=E,71nm,1.0s | | | | | | |
| **FYU** | **Fort Yukon** | **3.04** | **184** | Pn | Pn | 05 19 30.8 | +0.1 |
| **G24K** | **Hadweenzic Riv** | **3.09** | **201** | Pn | Pn | 05 19 31.1 | -0.2 |
| **B22K** | **Teshekpuk Lake** | **3.12** | **288** | Pn | Pn | 05 19 29.7 | -2.0 |
| **B21K** | **Ikpikpuk River** | **3.49** | **275** | Pn | Pn | 05 19 34.7 | -2.1 |
| **G23K** | **Bananza Creek** | **3.52** | **217** | Pn | Pn | 05 19 36.0 | -1.4 |
| **E21K** | **Killik River** | **3.55** | **255** | Pn | Pn | 05 19 37.9 | +0.1 |
| E21K | | | | IAML | | 05 21 38.0 | |
| | comp=E,122nm,1.4s | | | | | | |
| E21K | | | | IAML | | 05 21 50.2 | |
| | comp=N,122nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.64** | **134** | Pn | Pn | 05 19 37.1 | -1.9 |
| **PRP** | **Porcupine Dome** | **4.10** | **185** | Pn | Pn | 05 19 45.1 | -0.3 |
| **H29M** | **Whitestone** | **4.13** | **142** | Pn | Pn | 05 19 46.2 | +0.6 |
| **INK** | **Inuvik** | **4.21** | **103** | Pn | Pn | 05 19 47.7 | +1.0 |
| INK | | | | IAML | | 05 22 08.4 | |
| | comp=N,26nm,1.2s | | | | | | |
| INK | | | | IAML | | 05 22 09.8 | |
| | comp=E,20nm,1.2s | | | | | | |
| **DAWY** | **Dawson** | **5.92** | **157** | Pn | Pn | 05 20 10.7 | +0.5 |

*AEIC* ***13*** *05:19:38.0±2.5, 69°.56N±0°.04×144°.58W±0°.09, h5km±6km, ML3.5, ML3.6/122(NEIC), Error ellipse: s-maj=5.8km s-min=4.2km az=192.0*

*NEIC* ***13*** *05:19:39.9±2.5, 69°.60N±0°.04×144°.63W±0°.08, h10km±2km, Error ellipse: s-maj=7.0km s-min=4.7km az=15.0*

*IDC* ***13*** *05:19:41.4±1.7, 69°.64N×144°.40W, h0km, mb3.4/4, mbtmp3.4/7, ML3.3/3, Error ellipse: s-maj=27.9km s-min=23.3km az=97.0*

**ISC 13 05:19:39.5±0.6, 69°.54N±0°.03×144°.63W±0°.02, h10km, n115, σ1s70/125, mb3.3/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.34** | **74** | Pg | Pg | 05 19 45.2 | -1.0 |
| C27K | | | | Sg | Sg | 05 19 49.6 | -1.1 |
| **C26K** | **Camden Bay** | **0.40** | **346** | | Pg | 05 19 46.5 | -0.7 |
| C26K | | | | | Sg | 05 19 51.9 | -0.6 |
| **D25K** | **Kavik River** | **0.65** | **252** | | Pg | 05 19 51.1 | -1.0 |
| **D27M** | **Malcolm River** | **1.33** | **101** | | Pb | 05 20 04.0 | -0.6 |
| D27M | | | | IAML | | 05 20 28.1 | |
| | comp=N,838nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.44** | **279** | Pn | Pb | 05 20 06.1 | -0.3 |
| C24K | | | | | Sg | 05 20 26.0 | +0.3 |
| C24K | | | | IAML | | 05 20 30.1 | |
| | comp=N,1μm,0.9s | | | | | | |
| **D24K** | **Happy Valley** | **1.54** | **257** | | Pg | 05 20 08.2 | -0.7 |
| D24K | | | | Sn | Sn | 05 20 26.7 | -0.2 |
| D24K | | | | IAML | | 05 20 33.5 | |
| | comp=N,958nm,0.8s | | | | | | |
| D24K | | | | IAML | | 05 20 35.5 | |
| | comp=E,880nm,1.4s | | | | | | |
| **E27K** | **Coleen River** | **1.75** | **140** | | Pb | 05 20 11.7 | 0.0 |
| E27K | | | | | Sb | 05 20 34.4 | +0.7 |
| E27K | | | | IAML | | 05 20 42.1 | |
| | comp=E,506nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.86** | **174** | Pn | Pb | 05 20 13.8 | +0.3 |
| F26K | | | | | Sb | 05 20 36.6 | -0.2 |
| F26K | | | | IAML | | 05 20 42.4 | |
| | comp=E,609nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **191** | Pn | Pb | 05 20 14.9 | -0.8 |
| F25K | | | | | Sg | 05 20 43.2 | -0.1 |
| F25K | | | | IAML | | 05 20 48.2 | |
| | comp=E,397nm,1.3s | | | | | | |
| F25K | | | | IAML | | 05 20 57.9 | |
| | comp=N,391nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.99** | **245** | | Pb | 05 20 14.4 | -1.4 |
| TOLK | | | | IAML | | 05 20 53.7 | |
| | comp=N,363nm,1.4s | | | | | | |
| **E24K** | **Your Creek** | **2.03** | **225** | | Pn | 05 20 14.7 | +0.9 |
| E24K | | | | | Sb | 05 20 41.0 | -0.8 |
| **E28M** | **Babbage River** | **2.06** | **115** | Pn | Pn | 05 20 14.6 | +0.5 |
| E28M | | | | | Sg | 05 20 44.3 | -1.2 |
| **D28M** | **Stokes Point** | **2.09** | **93** | | Pn | 05 20 14.3 | -0.2 |
| **C23K** | **Itkillik River** | **2.11** | **281** | Pn | Pb | 05 20 16.0 | -1.8 |
| C23K | | | | IAML | | 05 20 53.6 | |
| | comp=E,574nm,1.3s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.12** | **179** | Pn | Pb | 05 20 18.2 | +0.3 |
| **D23K** | **Nanushuk River** | **2.23** | **258** | Pn | Pn | 05 20 17.1 | +0.7 |
| D23K | | | | IAML | | 05 21 00.2 | |
| | comp=E,312nm,1.1s | | | | | | |
| D23K | | | | IAML | | 05 21 06.6 | |
| | comp=N,333nm,1.2s | | | | | | |
| **E23K** | **Chandalar** | **2.34** | **233** | Pn | Pb | 05 20 19.8 | -2.1 |
| **F24K** | **Squaw Lake** | **2.35** | **212** | Pn | Pb | 05 20 20.1 | -1.9 |
| **F28M** | **Old Crow** | **2.60** | **136** | Pn | Pb | 05 20 23.7 | -2.5 |
| F28M | | | | IAML | | 05 21 06.0 | |
| | comp=N,255nm,1.5s | | | | | | |
| F28M | | | | IAML | | 05 21 06.4 | |
| | comp=E,366nm,1.2s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.62** | **173** | | Pb | 05 20 24.2 | -2.2 |
| **E29M** | **Blow River** | **2.69** | **112** | | Pn | 05 20 23.9 | +1.2 |
| E29M | | | | IAML | | 05 21 07.7 | |
| | comp=E,220nm,0.8s | | | | | | |
| E29M | | | | IAML | | 05 21 16.4 | |
| | comp=N,266nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **2.95** | **261** | Pn | Pn | 05 20 28.8 | +2.4 |
| **G27K** | **Doyon Strip** | **2.96** | **157** | Pn | Pn | 05 20 26.6 | +0.1 |
| **E22K** | **Anaktuvuk Pass** | **2.96** | **245** | | Pn | 05 20 25.3 | -1.3 |
| **FYU** | **Fort Yukon** | **2.99** | **184** | Pn | Pn | 05 20 27.3 | +0.3 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **202** | Pn | Pn | 05 20 29.1 | +1.4 |
| G24K | | | | IAML | | 05 21 24.8 | |
| | comp=E,220nm,1.2s | | | | | | |
| **COLD** | **Coldfoot** | **3.10** | **224** | Pn | Pn | 05 20 29.7 | +1.2 |
| **B22K** | **Teshekpuk Lake** | **3.13** | **289** | | Pn | 05 20 29.0 | +0.1 |
| **G23K** | **Bananza Creek** | **3.48** | **218** | Pn | Pn | 05 20 35.7 | +1.9 |
| G23K | | | | IAML | | 05 21 42.1 | |
| | comp=E,165nm,1.3s | | | | | | |
| G23K | | | | IAML | | 05 21 48.8 | |
| | comp=N,94nm,1.3s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.50** | **276** | | Pn | 05 20 34.3 | +0.4 |
| B21K | | | | IAML | | 05 21 51.0 | |
| | comp=E,175nm,1.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.61** | **134** | Pn | Pn | 05 20 37.3 | +1.9 |
| **A22K** | **Sinclair Lake** | **3.80** | **298** | | Pn | 05 20 39.4 | +1.4 |
| **H24K** | **Noodor Dome** | **3.92** | **200** | Pn | Pn | 05 20 41.2 | +1.5 |
| H24K | | | | IAML | | 05 21 59.2 | |
| | comp=E,113nm,1.4s | | | | | | |
| **F21K** | **Alatna River** | **4.02** | **239** | Pn | Pn | 05 20 41.5 | +0.5 |
| F21K | | | | IAML | | 05 21 58.7 | |
| | comp=N,84nm,0.9s | | | | | | |
| F21K | | | | IAML | | 05 22 00.8 | |
| | comp=E,86nm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.04** | **125** | Pn | Pn | 05 20 43.0 | +1.6 |
| G30M | | | | IAML | | 05 21 57.9 | |
| | comp=N,118nm,1.1s | | | | | | |
| G30M | | | | IAML | | 05 22 13.4 | |
| | comp=E,76nm,1.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05** | **185** | Pn | Pn | 05 20 43.9 | +2.2 |
| PRP | | | | IAML | | 05 21 57.0 | |
| | comp=N,59nm,0.9s | | | | | | |
| PRP | | | | IAML | | 05 22 04.6 | |
| | comp=E,58nm,1.3s | | | | | | |
| **H29M** | **Whitestone** | **4.09** | **142** | Pn | Pn | 05 20 43.5 | +1.5 |
| H29M | | | | IAML | | 05 21 59.0 | |
| | comp=N,105nm,1.0s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **209** | | Pn | 05 20 44.2 | +1.1 |
| H23K | | | | IAML | | 05 21 58.2 | |
| | comp=E,87nm,1.4s | | | | | | |
| H23K | | | | IAML | | 05 21 59.6 | |
| | comp=N,82nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **4.20** | **102** | | Pn | 05 20 43.1 | -0.3 |
| **INK** | **Inuvik** | **4.20** | **102** | Pn | Pn | 05 20 46.2 | +2.7 |
| | comp=N,0.9nm,0.3s,baz=308,slow=18,SNR=7.7 | | | | | | |
| INK | | | | Sn | Sn | 05 21 32.6 | +0.2 |
| | comp=N,2.0nm,0.3s,baz=98,slow=11,SNR=4.5 | | | | | | |
| | comp=N,3.0nm,0.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.29** | **172** | | Pn | 05 20 45.3 | +0.6 |
| I26K | | | | IAML | | 05 21 60.0 | |
| | comp=E,96nm,1.4s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.36** | **133** | | Pn | 05 20 47.6 | +1.9 |
| **D20K** | **Etivluk River** | **4.37** | **265** | | Pn | 05 20 46.2 | +0.4 |
| **B20K** | **Meade River** | **4.38** | **282** | | Pn | 05 20 45.8 | -0.1 |
| **I28M** | **Miner Creek** | **4.49** | **154** | Pn | Pn | 05 20 49.6 | +2.1 |
| I28M | | | | IAML | | 05 22 10.8 | |
| | comp=E,89nm,1.5s | | | | | | |
| I28M | | | | IAML | | 05 23 45.8 | |
| | comp=N,48nm,1.1s | | | | | | |
| **G21K** | **Allakaket** | **4.51** | **232** | Pn | Pn | 05 20 49.8 | +2.1 |
| G21K | | | | IAML | | 05 22 14.1 | |
| | comp=N,75nm,1.4s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.53** | **113** | | Pn | 05 20 48.6 | +0.7 |
| F31M | | | | IAML | | 05 22 04.9 | |
| | comp=N,72nm,1.1s | | | | | | |
| F31M | | | | IAML | | 05 22 11.7 | |
| | comp=E,73nm,1.3s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.57** | **195** | Pn | Pn | 05 20 49.4 | +0.7 |
| POKR | | | | IAML | | 05 22 10.4 | |
| | comp=E,62nm,1.4s | | | | | | |
| POKR | | | | IAML | | 05 22 19.0 | |
| | comp=N,50nm,1.5s | | | | | | |
| **G31M** | **Satah River** | **4.66** | **119** | Pn | Pn | 05 20 51.4 | +1.5 |
| G31M | | | | IAML | | 05 22 11.4 | |
| | comp=N,79nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **205** | | Pn | 05 20 52.4 | +1.0 |
| **MDM** | **Murphy Dome** | **4.81** | **199** | | Pn | 05 20 53.1 | +1.2 |
| MDM | | | | IAML | | 05 22 21.8 | |
| | comp=E,55nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.81** | **244** | | Pn | 05 20 53.2 | +1.3 |
| F20K | | | | IAML | | 05 22 33.6 | |
| | comp=N,54nm,1.1s | | | | | | |
| F20K | | | | IAML | | 05 22 35.6 | |
| | comp=E,35nm,1.6s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.85** | **147** | | Pn | 05 20 53.1 | +0.7 |
| I29M | | | | IAML | | 05 22 21.4 | |
| | comp=E,51nm,1.3s | | | | | | |
| I29M | | | | IAML | | 05 22 23.1 | |
| | comp=N,43nm,0.8s | | | | | | |
| **COLA** | **College** | **4.85** | **196** | | Pn | 05 20 53.3 | +0.9 |
| **IL03** | **Eielson Array** | **4.87** | **191** | Pn | Pn | 05 20 53.2 | +0.5 |
| **IL31** | | **4.87** | **191** | Pn | Pn | 05 20 54.4 | +1.8 |
| **ILAR** | **Eielson Array** | **4.87** | **191** | | Pn | 05 20 54.1 | +1.5 |
| **ILAR** | **Eielson Array** | **4.87** | **191** | Pn | Pn | 05 20 54.8 | +2.1 |
| | comp=N,0.9nm,0.3s,baz=5.3,slow=14,SNR=15 | | | | | | |
| ILAR | | | | Sn | Sn | 05 21 51.1 | +2.1 |
| | comp=N,1.2nm,0.3s,baz=5.0,slow=19,SNR=5.6 | | | | | | |
| | comp=N,3.0nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **184** | Pn | Pn | 05 20 54.2 | +0.2 |
| J25K | | | | IAML | | 05 22 32.5 | |
| | comp=E,44nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **4.96** | **264** | | Pn | 05 20 56.0 | +2.0 |
| D19K | | | | IAML | | 05 22 40.5 | |
| | comp=E,53nm,1.3s | | | | | | |
| **EGAK** | **Eagle** | **4.97** | **163** | Pn | Pn | 05 20 54.3 | +0.3 |
| EGAK | | | | IAML | | 05 22 25.6 | |
| | comp=E,41nm,1.2s | | | | | | |
| EGAK | | | | IAML | | 05 22 46.3 | |
| | comp=E,44nm,1.6s | | | | | | |
| **H21K** | **Melozitna River** | **4.99** | **223** | Pn | Pn | 05 20 54.7 | +0.3 |
| H21K | | | | IAML | | 05 22 27.7 | |
| | comp=E,46nm,1.8s | | | | | | |
| H21K | | | | IAML | | 05 22 28.3 | |
| | comp=N,53nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **196** | | Pn | 05 20 57.4 | +2.0 |
| CCB | | | | IAML | | 05 23 52.0 | |
| | comp=N,33nm,0.4s | | | | | | |
| **J26L** | **Joseph Creek** | **5.08** | **175** | Pn | Pn | 05 20 57.2 | +1.6 |
| J26L | | | | IAML | | 05 22 23.8 | |
| | comp=E,45nm,0.9s | | | | | | |
| J26L | | | | IAML | | 05 24 02.8 | |
| | comp=N,30nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **5.08** | **252** | | Pn | 05 20 55.2 | -0.4 |
| E19K | | | | IAML | | 05 22 48.6 | |
| | comp=E,44nm,1.2s | | | | | | |
| E19K | | | | IAML | | 05 22 55.1 | |
| | comp=N,54nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.11** | **211** | Pn | Pn | 05 20 57.1 | +1.1 |
| MLY | | | | IAML | | 05 22 29.9 | |
| | comp=E,29nm,1.6s | | | | | | |
| MLY | | | | IAML | | 05 22 34.9 | |
| | comp=N,32nm,1.4s | | | | | | |
| **HDA** | **Harding Lake** | **5.23** | **191** | | Pn | 05 20 59.8 | +2.1 |
| **NEA2** | **Nenana** | **5.26** | **201** | | Pn | 05 20 59.9 | +1.8 |
| NEA2 | | | | IAML | | 05 22 32.4 | |
| | comp=E,32nm,1.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.26** | **197** | Pn | Pn | 05 20 59.2 | +1.0 |
| WRH | | | | IAML | | 05 22 27.5 | |
| | comp=E,29nm,1.3s | | | | | | |
| WRH | | | | IAML | | 05 23 54.9 | |
| | comp=N,38nm,0.7s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.32** | **272** | | Pn | 05 20 59.9 | +1.0 |
| **I30M** | **Mount Dempster** | **5.37** | **140** | Pn | Pn | 05 21 01.7 | +2.0 |
| I30M | | | | IAML | | 05 22 09.1 | |
| | comp=E,47nm,0.8s | | | | | | |
| I30M | | | | IAML | | 05 23 55.4 | |
| | comp=N,37nm,0.9s | | | | | | |
| **SCRK** | **Sand Creek** | **5.59** | **177** | Pn | Pn | 05 21 06.3 | +3.5 |
| **F19K** | **Shaleruckik Mo** | **5.60** | **247** | Pn | Pn | 05 21 04.1 | +1.5 |
| **K27K** | **Chicken** | **5.62** | **168** | Pn | Pn | 05 21 05.6 | +2.5 |
| **J29N** | **Klondike Camp** | **5.69** | **151** | | Pn | 05 21 06.8 | +2.7 |
| **G19K** | **Purcell Mounta** | **5.81** | **240** | Pn | Pn | 05 21 06.5 | +0.9 |
| **DAWY** | **Dawson** | **5.87** | **157** | Pn | Pn | 05 21 07.0 | +0.5 |
| **J30M** | **Hart River** | **5.94** | **143** | Pn | Pn | 05 21 09.8 | +2.3 |
| **C18K** | **Utukok River** | **5.99** | **269** | | Pn | 05 21 08.0 | -0.2 |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **208** | | Pn | 05 21 08.4 | +0.1 |
| **H19K** | **Roundabout Mou** | **6.05** | **234** | Pn |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Q32M | Nakina River | 11.86 147 | | Pn | | 05 22 28.1 | -0.6 |
| R32K | Eaglecrest | 12.12 154 | Pn | Pn | | 05 22 28.6 | -3.5 |
| YKA | Yellowknife Ar | 13.96 106 | Pn | Pn | | 05 22 53.5 | -3.5 |
| | comp=N,0.2nm,0.3s,baz=314,slow=13,SNR=9.3 | | | | | | |
| YKA | | | Sn | Sn | | 05 25 20.3 | -11 |
| | comp=N,0.1nm,0.3s,baz=312,slow=23,SNR=5.7 | | | | | | |
| | comp=N,1.3nm,0.6s | | | | | | |
| PDAR | Pinedale Array | 32.30 128 | P | P | | 05 26 12.8 | +4.4 |
| | comp=N,0.2nm,0.6s,baz=15,slow=6.4,SNR=4.1 | | | | | | |
| | comp=N,0.2nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 34.21 142 | P | P | | 05 26 30.1 | +5.0 |
| | comp=N,0.3nm,0.7s,baz=338,slow=6.8,SNR=2.9 | | | | | | |
| | comp=N,0.3nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 46.52 128 | P | P | | 05 28 09.2 | +2.4 |
| | comp=N,0.2nm,0.8s,baz=348,slow=6.7,SNR=2.4 | | | | | | |
| | comp=N,0.2nm,0.8s | | | | | | |
| FINES | FINESS Array B | 49.14 6 | P | P | | 05 28 28.8 | +2.2 |
| | comp=N,1.0nm,0.6s,baz=357,slow=9.0,SNR=4.9 | | | | | | |
| | comp=N,1.0nm,0.6s | | | | | | |

*NEIC* ***13*** *05:20:32.0±2.0, 69°.43N±0°.06×144°.2W±0°.1, h10km±2km, Error ellipse: s-maj=10.1km s-min=5.7km az=25.0*

**AEIC 13 05:20:32.7±2.3, 69°.47N±0°.03×144°.19W±0°.05, h7km±7km, ML3.1, MLJ3.4**/50(NEIC), **Error ellipse: s-maj=4.6km s-min=2.4km az=161.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.23 | 46 | | Pg | 05 20 37.3 | 0.0 |
| C27K | | | | | Sg | 05 20 40.5 | +0.1 |
| C26K | Camden Bay | 0.52 | 331 | | Pg | 05 20 42.7 | 0.0 |
| C26K | | | | | Sg | 05 20 50.5 | +1.1 |
| D25K | Kavik River | 0.79 | 260 | | Pg | 05 20 47.7 | -0.1 |
| D25K | | | | | Sg | 05 20 56.8 | -1.2 |
| D27M | Malcolm River | 1.17 | 100 | | Pg | 05 20 54.3 | -0.7 |
| D27M | | | | | Sg | 05 21 10.0 | -0.2 |
| E27K | Coleen River | 1.60 | 143 | | Pn | 05 20 59.8 | -1.6 |
| C24K | Franklin Bluff | 1.60 | 281 | | Pn | 05 21 01.0 | -0.4 |
| C24K | | | | IAML | | 05 21 27.1 | |
| | comp=N,372nm,0.4s | | | | | | |
| C24K | | | | IAML | | 05 21 29.3 | |
| | comp=E,376nm,1.1s | | | | | | |
| D24K | Happy Valley | 1.68 | 261 | | Pn | 05 21 01.0 | -1.4 |
| D24K | | | | IAML | | 05 21 28.9 | |
| | comp=N,469nm,0.5s | | | | | | |
| D24K | | | | IAML | | 05 21 31.2 | |
| | comp=E,335nm,0.6s | | | | | | |
| F26K | Sheenjek River | 1.78 | 179 | | Pn | 05 21 03.7 | -0.2 |
| F26K | | | | IAML | | 05 21 33.4 | |
| | comp=E,271nm,0.9s | | | | | | |
| F26K | | | | IAML | | 05 21 34.2 | |
| | comp=N,269nm,0.6s | | | | | | |
| E28M | Babbage River | 1.89 | 115 | Pn | Pn | 05 21 05.0 | -0.3 |
| F25K | Christian Rive | 1.96 | 197 | Pn | Pn | 05 21 06.0 | -0.3 |
| F25K | | | | IAML | | 05 21 38.7 | |
| | comp=N,277nm,0.8s | | | | | | |
| F25K | | | | IAML | | 05 21 39.6 | |
| | comp=E,313nm,0.8s | | | | | | |
| D22K | Ayikyak River | 3.09 | 263 | Pn | Pn | 05 21 19.7 | -2.2 |
| D22K | | | | IAML | | 05 21 45.5 | |
| | comp=N,136nm,1.1s | | | | | | |
| D22K | | | | IAML | | 05 23 03.4 | |
| | comp=E,113nm,0.7s | | | | | | |
| B21K | Ikpikpuk River | 3.66 | 277 | Pn | Pn | 05 21 29.4 | -0.2 |
| E21K | Killik River | 3.68 | 258 | Pn | Pn | 05 21 28.5 | -1.4 |
| E21K | | | | IAML | | 05 21 56.5 | |
| | comp=N,63nm,1.1s | | | | | | |
| E21K | | | | IAML | | 05 22 00.1 | |
| | comp=E,90nm,0.9s | | | | | | |
| H24K | Noodor Dome | 3.91 | 203 | Pn | Pn | 05 21 30.8 | -2.3 |
| H24K | | | | IAML | | 05 21 59.9 | |
| | comp=N,36nm,1.0s | | | | | | |
| H24K | | | | IAML | | 05 22 08.8 | |
| | comp=E,57nm,1.1s | | | | | | |
| H29M | Whitestone | 3.94 | 143 | Pn | Pn | 05 21 31.0 | -2.4 |
| H29M | | | | IAML | | 05 23 43.6 | |
| | comp=N,92nm,0.9s | | | | | | |
| PRP | Porcupine Dome | 4.00 | 188 | Pn | Pn | 05 21 33.3 | -1.2 |
| PRP | | | | IAML | | 05 22 04.0 | |
| | comp=E,48nm,0.9s | | | | | | |
| PRP | | | | IAML | | 05 23 41.2 | |
| | comp=N,55nm,0.5s | | | | | | |
| H23K | Yukon River | 4.19 | 212 | Pn | Pn | 05 21 36.8 | -0.1 |
| H23K | | | | IAML | | 05 22 08.7 | |
| | comp=E,50nm,0.9s | | | | | | |
| H23K | | | | IAML | | 05 22 09.5 | |
| | comp=N,50nm,1.1s | | | | | | |
| EPYK | Eagle Plains | 4.20 | 134 | Pn | Pn | 05 21 37.1 | 0.0 |
| F31M | Tsiigehtchic | 4.36 | 113 | Pn | Pn | 05 21 37.7 | -1.4 |
| F31M | | | | IAML | | 05 22 16.5 | |
| | comp=E,70nm,1.1s | | | | | | |
| G21K | Allakaket | 4.59 | 234 | Pn | Pn | 05 21 40.7 | -1.7 |
| I29M | Ogilvie Camp, | 4.71 | 148 | Pn | Pn | 05 21 44.1 | 0.0 |
| I23K | Minto, Yukon-K | 4.78 | 207 | Pn | Pn | 05 21 43.3 | -1.7 |
| I23K | | | | IAML | | 05 22 31.0 | |
| | comp=N,43nm,1.2s | | | | | | |
| H21K | Melozitna River | 5.05 | 225 | Pn | Pn | 05 21 48.5 | -0.2 |
| H21K | | | | IAML | | 05 22 25.2 | |
| | comp=E,35nm,1.1s | | | | | | |
| H21K | | | | IAML | | 05 22 25.9 | |
| | comp=N,33nm,1.0s | | | | | | |
| MLY | Manley | 5.13 | 213 | Pn | Pn | 05 21 48.1 | -1.8 |
| MLY | | | | IAML | | 05 22 35.6 | |
| | comp=N,29nm,1.2s | | | | | | |
| MLY | | | | IAML | | 05 25 13.8 | |
| | comp=E,26nm,1.1s | | | | | | |
| NEA2 | Nenana | 5.25 | 204 | Pn | Pn | 05 21 48.3 | -3.2 |
| C19K | Lookout Ridge | 5.48 | 273 | Pn | Pn | 05 21 54.4 | -0.3 |
| BWN | Browne | 5.71 | 204 | | Pn | 05 21 56.8 | -1.0 |
| RND | Reindeer | 6.37 | 199 | Pn | Pn | 05 22 06.1 | -0.8 |
| E18K | Tukpahlearik C | 6.38 | 259 | Pn | Pn | 05 22 07.2 | +0.2 |
| L27K | Beaver Creek, | 6.50 | 170 | Pn | Pn | 05 22 06.8 | -1.9 |
| G18K | Tagagawik | 6.56 | 244 | Pn | Pn | 05 22 09.2 | -0.3 |
| A36M | Sachs Harbour | 6.75 | 59 | Pn | Pn | 05 22 12.2 | +0.2 |
| L29M | L29M | 6.83 | 156 | Pn | Pn | 05 22 12.5 | -0.8 |
| RDOG | Red Dog Mine | 6.94 | 267 | Pn | Pn | 05 22 12.7 | -2.0 |
| C36M | Paulatuk | 7.09 | 82 | Pn | Pn | 05 22 15.5 | -1.1 |
| M27K | Edge Creek, AK | 7.20 | 171 | Pn | Pn | 05 22 16.0 | -2.4 |
| K20K | Telida | 7.29 | 218 | Pn | Pn | 05 22 18.5 | -1.0 |
| M29M | Somme Creek | 7.43 | 159 | Pn | Pn | 05 22 19.0 | -2.5 |
| M24K | Tolsona, Glenn | 7.44 | 187 | Pn | Pn | 05 22 19.3 | -2.3 |
| C16K | Lisburne Hills | 7.72 | 271 | Pn | Pn | 05 22 23.7 | -1.6 |
| SML | Sawmill | 7.88 | 194 | Pn | Pn | 05 22 25.7 | -1.9 |

*NEIC* ***13*** *05:22:31.6±2.6, 69°.45N±0°.03×144°.1W±0°.1, h4km±5km, Error ellipse: s-maj=6.0km s-min=3.1km az=122.0, Moment Tensor Solution. Moment tensor: Scale 1014Nm; Mrr=2.19; Mθθ=4.33; Mφφ=6.52; Mrθ=1.63; Mθφ=-4.68; Mφr=0.99; Fault plane solution: M0=7.65000×10^14 NP1: φs=204.20000°, δ72.74000°, λ-5.92000°. NP2: φs=295.96000°, δ84.35000°, λ-162.66000°. Principal axes: T 8.4708, Plg8.0000°, Azm69.0000°; N -2.0591, Plg72.0000°, Azm313.0000°; P -6.4117, Plg16.0000°, Azm161.0000°;*

*AEIC* ***13*** *05:22:32.1±2.5, 69°.46N±0°.03×144°.2W±0°.1, h8km±5km, ML3.8, mb4.1/4(NEIC), ML4.0/100(NEIC), Mwr3.9/34(NEIC) Error ellipse: s-maj=7.3km s-min=2.3km az=54.0*

*IDC 13 05:22:33.3±0.9, 69°.76N×144°.24W, h0km, mb3.8/9, mbtmp3.8/13, ML3.9/4, MS3.0/6, Error ellipse: s-maj=26.6km s-min=13.6km az=68.0*

*NEIC* ***13*** *05:22:33.7, 69°.51N×144°.07W, h1km*

**ISC 13 05:22:32.7±0.5, 69°.47N±0°.04×144°.19W±0°.03, h10km, n150, σ1§53/149, mb3.9/10, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.23 | 47 | Pg | Pg | 05 22 36.8 | -0.7 |
| C27K | | | | Sg | Sg | 05 22 40.0 | -0.7 |
| C27K | | | | IAML | | 05 22 40.3 | |
| | comp=N,23µm,0.5s | | | | | | |
| C27K | | | | IAML | | 05 22 40.4 | |
| | comp=E,21µm,0.7s | | | | | | |
| C26K | Camden Bay | 0.51 | 331 | | Pg | 05 22 42.5 | -0.2 |
| C26K | | | | | Sg | 05 22 49.4 | -0.1 |
| C26K | | | | IAML | | 05 22 51.4 | |
| | comp=N,7µm,0.6s | | | | | | |
| D25K | Kavik River | 0.79 | 260 | Pg | Pg | 05 22 46.6 | -1.3 |
| D25K | | | | | Sg | 05 22 57.4 | -0.7 |
| D27M | Malcolm River | 1.17 | 100 | Pg | Pb | 05 22 53.4 | -1.6 |
| D27M | | | | IAML | | 05 23 16.4 | |
| | comp=N,2µm,0.6s | | | | | | |
| E27K | Coleen River | 1.60 | 143 | Pn | Pn | 05 22 59.8 | -1.2 |
| E27K | | | | IAML | | 05 23 26.3 | |
| | comp=E,1µm,0.7s | | | | | | |
| C24K | Franklin Bluff | 1.60 | 281 | Pn | Pn | 05 23 00.1 | -0.9 |
| C24K | | | | IAML | | 05 23 26.2 | |
| | comp=E,2µm,0.9s | | | | | | |
| D28M | Stokes Point | 1.94 | 92 | Pn | Pn | 05 23 04.6 | -1.0 |
| F25K | Christian Rive | 1.96 | 196 | Pn | Pb | 05 23 07.4 | -1.1 |
| F25K | | | | IAML | | 05 23 37.6 | |
| | comp=E,1µm,1.0s | | | | | | |
| F25K | | | | IAML | | 05 23 39.0 | |
| | comp=N,1µm,0.8s | | | | | | |
| BMAR | Burnt Mountain | 2.06 | 184 | Pn | Pn | 05 23 06.9 | -0.4 |
| C23K | Itkillik River | 2.27 | 282 | Pn | Pn | 05 23 10.8 | +0.5 |
| D23K | Nanushuk River | 2.37 | 261 | Pn | Pn | 05 23 11.5 | 0.0 |
| D23K | | | | IAML | | 05 24 03.5 | |
| | comp=E,562nm,0.9s | | | | | | |
| D23K | | | | IAML | | 05 24 09.1 | |
| | comp=N,619nm,1.0s | | | | | | |
| F24K | Squaw Lake | 2.39 | 216 | Pn | Pn | 05 23 11.2 | -0.7 |
| F28M | Old Crow | 2.45 | 138 | Pn | Pn | 05 23 12.2 | -0.5 |
| F28M | | | | IAML | | 05 23 55.0 | |
| | comp=N,806nm,0.8s | | | | | | |
| F28M | | | | IAML | | 05 23 55.5 | |
| | comp=E,616nm,0.9s | | | | | | |
| E29M | Blow River | 2.52 | 113 | Pn | Pn | 05 23 13.0 | -0.7 |
| E29M | | | | IAML | | 05 23 54.6 | |
| | comp=E,510nm,0.6s | | | | | | |
| E29M | | | | IAML | | 05 23 56.2 | |
| | comp=N,683nm,0.9s | | | | | | |
| G26K | Porcupine Rive | 2.54 | 176 | | Pb | 05 23 16.4 | -1.9 |
| G25K | Bearman Lake | 2.81 | 196 | | Pb | 05 23 20.2 | -2.7 |
| G27K | Doyon Strip | 2.84 | 159 | Pn | Pn | 05 23 17.4 | -0.7 |
| FYU | Fort Yukon | 2.94 | 188 | Pn | Pn | 05 23 20.7 | +1.2 |
| G24K | Hadweenzic Riv | 3.04 | 205 | Pn | Pn | 05 23 20.5 | -0.3 |
| G24K | | | | IAML | | 05 24 14.2 | |
| | comp=N,408nm,0.9s | | | | | | |
| G24K | | | | IAML | | 05 24 15.2 | |
| | comp=E,414nm,0.6s | | | | | | |
| E22K | Anaktuvuk Pass | 3.08 | 248 | Pn | Pn | 05 23 21.5 | +0.2 |
| D22K | Ayikyak River | 3.09 | 263 | Pn | Pn | 05 23 21.9 | +0.4 |
| D22K | | | | IAML | | 05 24 22.9 | |
| | comp=E,456nm,0.9s | | | | | | |
| D22K | | | | IAML | | 05 24 30.1 | |
| | comp=N,516nm,1.2s | | | | | | |
| COLD | Coldfoot | 3.17 | 228 | Pn | Pn | 05 23 22.7 | +0.2 |
| H25L | Birch Creek | 3.28 | 192 | | Pn | 05 23 26.5 | +2.5 |
| B22K | Teshekpuk Lake | 3.30 | 290 | Pn | Pn | 05 23 24.5 | +0.1 |
| G29M | Pine Creek | 3.45 | 135 | Pn | Pn | 05 23 26.9 | +0.4 |
| B21K | Ikpikpuk River | 3.66 | 277 | Pn | Pn | 05 23 27.6 | -1.6 |
| G30M | tAoh Zraii Nji | 3.88 | 126 | Pn | Pn | 05 23 31.1 | -1.3 |
| G30M | | | | IAML | | 05 24 48.5 | |
| | comp=N,182nm,1.0s | | | | | | |
| H29M | Whitestone | 3.94 | 143 | Pn | Pn | 05 23 31.4 | -1.8 |
| H29M | | | | IAML | | 05 24 46.8 | |
| | comp=E,252nm,0.8s | | | | | | |
| H29M | | | | IAML | | 05 24 47.7 | |
| | comp=N,233nm,0.7s | | | | | | |
| PRP | Porcupine Dome | 4.00 | 188 | Pn | Pn | 05 23 31.3 | -2.9 |
| PRP | | | | IAML | | 05 24 44.3 | |
| | comp=N,188nm,0.9s | | | | | | |
| PRP | | | | IAML | | 05 24 48.0 | |
| | comp=E,167nm,1.0s | | | | | | |
| INK | Inuvik | 4.03 | 102 | Pn | Pn | 05 23 31.6 | -2.8 |
| INK | Inuvik | 4.03 | 102 | Pn | Pn | 05 23 36.3 | +2.0 |
| | comp=E,4.1nm,0.3s,baz=290,slow=13,SNR=4.3 | | | | | | |
| INK | | | | Sn | Sn | 05 24 21.9 | +0.3 |
| | comp=E,6.2nm,0.3s,baz=126,slow=28,SNR=4.0 | | | | | | |
| INK | | | | Lg | Lg | 05 24 37.6 | |
| | comp=E,10nm,0.3s,baz=43,slow=21,SNR=4.9 | | | | | | |
| INK | | | | LR | LR | 05 24 56.9 | |
| | comp=E,89nm,18.5s,baz=298,slow=35 | | | | | | |
| | comp=E,12nm,0.3s | | | | | | |
| F21K | Alatna River | 4.12 | 241 | Pn | Pn | 05 23 34.4 | -1.2 |
| F21K | | | | IAML | | 05 24 48.6 | |
| | comp=E,177nm,0.8s | | | | | | |
| F21K | | | | IAML | | 05 24 49.3 | |
| | comp=N,131nm,0.8s | | | | | | |
| EPYK | Eagle Plains | 4.20 | 134 | Pn | Pn | 05 23 36.1 | -0.6 |
| I26K | Coal Creek Min | 4.20 | 174 | Pn | Pn | 05 23 36.4 | -0.4 |
| F31M | Tsiigehtchic | 4.36 | 113 | Pn | Pn | 05 23 38.2 | -0.7 |
| F31M | | | | IAML | | 05 24 56.8 | |
| | comp=E,148nm,1.7s | | | | | | |
| F31M | | | | IAML | | 05 24 57.5 | |
| | comp=N,112nm,0.6s | | | | | | |
| I28M | Miner Creek | 4.36 | 156 | Pn | Pn | 05 23 39.0 | 0.0 |
| I28M | | | | IAML | | 05 24 36.8 | |
| | comp=N,119nm,0.5s | | | | | | |
| I28M | | | | IAML | | 05 24 58.2 | |
| | comp=E,127nm,1.4s | | | | | | |
| G31M | Satah River | 4.50 | 120 | Pn | Pn | 05 23 40.7 | 0.0 |
| G31M | | | | IAML | | 05 25 01.6 | |
| | comp=N,155nm,0.9s | | | | | | |
| G31M | | | | IAML | | 05 25 06.4 | |
| | comp=E,178nm,1.1s | | | | | | |
| E20K | Nigu River | 4.51 | 260 | | Pn | 05 23 43.2 | +2.2 |
| D26K | Etivluk River | 4.51 | 266 | | Pn | 05 23 42.8 | +1.8 |
| H22K | Ishtalitna Cre | 4.51 | 221 | | Pn | 05 23 42.3 | +1.2 |
| B20K | Meade River | 4.54 | 283 | Pn | Pn | 05 23 42.1 | +0.7 |
| POKR | Poker Plat Res | 4.55 | 198 | Pn | Pn | 05 23 40.8 | -0.7 |
| POKR | | | | IAML | | 05 24 40.0 | |
| | comp=N,156nm,0.5s | | | | | | |
| POKR | | | | IAML | | 05 25 10.5 | |
| | comp=E,135nm,1.4s | | | | | | |
| A21K | Barrow | 4.58 | 300 | | Pn | 05 23 42.9 | +1.1 |
| G21K | Allakaket | 4.59 | 234 | Pn | Pn | 05 23 41.8 | -0.2 |
| G21K | | | | IAML | | 05 25 06.5 | |
| | comp=N,133nm,1.2s | | | | | | |
| G21K | | | | IAML | | 05 25 13.0 | |
| | comp=E,143nm,1.1s | | | | | | |
| I29M | Ogilvie Camp, | 4.71 | 148 | Pn | Pn | 05 23 43.0 | -0.7 |
| I29M | | | | IAML | | 05 24 46.9 | |
| | comp=E,102nm,0.5s | | | | | | |
| I29M | | | | IAML | | 05 25 03.8 | |
| | comp=N,87nm,0.5s | | | | | | |
| I23K | Minto, Yukon-K | 4.78 | 207 | | Pn | 05 23 43.1 | -1.5 |
| I23K | | | | IAML | | 05 25 13.5 | |
| | comp=E,138nm,0.9s | | | | | | |
| I23K | | | | IAML | | 05 25 23.7 | |
| | comp=N,110nm,1.2s | | | | | | |
| MDM | Murphy Dome | 4.79 | 201 | Pn | Pn | 05 23 44.7 | -0.2 |
| MDM | | | | IAML | | 05 25 06.0 | |
| | comp=N,95nm,0.7s | | | | | | |
| MDM | | | | IAML | | 05 25 13.6 | |
| | comp=E,82nm,0.9s | | | | | | |
| COLA | College | 4.83 | 199 | Pn | Pn | 05 23 44.9 | -0.5 |
| IL03 | Eielson Array | 4.83 | 194 | Pn | Pn | 05 23 45.0 | -0.4 |
| IL31 | | 4.84 | 194 | Pn | Pn | 05 23 44.3 | -1.1 |
| ILAR | Eielson Array | 4.84 | 194 | Pn | Pn | 05 23 44.6 | -0.9 |
| ILAR | Eielson Array | 4.84 | 194 | Pn | Pn | 05 23 48.7 | +3.2 |
| | comp=E,3.2nm,0.3s,baz=3.5,slow=12,SNR=6.7 | | | | | | |
| ILAR | | | | Sn | Sn | 05 24 45.4 | +4.0 |
| | comp=E,5.7nm,0.3s,baz=13,slow=16,SNR=4.5 | | | | | | |
| | comp=E,7.5nm,0.4s | | | | | | |
| J25K | Salcha River, | 4.90 | 186 | Pn | Pn | 05 23 47.0 | +0.5 |
| J25K | | | | IAML | | 05 25 08.4 | |
| | comp=E,101nm,1.1s | | | | | | |
| F20K | Avaraart Lake | 4.93 | 246 | Pn | Pn | 05 23 45.8 | -0.8 |
| F20K | | | | IAML | | 05 25 21.6 | |
| | comp=N,88nm,1.2s | | | | | | |
| J26L | Joseph Creek | 5.00 | 177 | Pn | Pn | 05 23 45.5 | -2.3 |
| J26L | | | | IAML | | 05 24 54.4 | |
| | comp=N,67nm,0.6s | | | | | | |
| CCB | Clear Creek Bu | 5.05 | 198 | Pn | Pn | 05 23 47.3 | -1.0 |
| H21K | Melozitna River | 5.05 | 225 | | Pn | 05 23 47.9 | -0.5 |
| H21K | | | | IAML | | 05 25 23.1 | |
| | comp=E,78nm,0.8s | | | | | | |
| H21K | | | | IAML | | 05 25 32.6 | |
| | comp=N,76nm,2.2s | | | | | | |
| D19K | Kuna River | 5.11 | 265 | | Pn | 05 23 51.0 | +1.9 |
| D19K | | | | IAML | | 05 24 50.4 | |
| | comp=E,68nm,0.6s | | | | | | |
| MLY | Manley | 5.13 | 213 | | Pn | 05 23 50.7 | +1.2 |
| HDA | Harding Lake | 5.20 | 193 | Pn | Pn | 05 23 51.3 | +0.8 |
| E19K | Redstone River | 5.21 | 253 | | Pn | 05 23 52.4 | +1.9 |
| E19K | | | | IAML | | 05 24 52.2 | |
| | comp=E,87nm,0.7s | | | | | | |
| I30M | Mount Dempster | 5.22 | 141 | | Pn | 05 23 48.5 | -2.4 |
| I30M | | | | IAML | | 05 24 54.3 | |
| | comp=N,89nm,0.5s | | | | | | |
| WRH | Wood River Hil | 5.25 | 199 | | Pn | 05 23 48.4 | -2.7 |
| WRH | | | | IAML | | 05 25 28.8 | |
| | comp=E,84nm,1.2s | | | | | | |
| NEA2 | Nenana | 5.26 | 204 | | Pn | 05 23 49.9 | -1.4 |
| C19K | Lookout Ridge | 5.47 | 273 | Pn | Pn | 05 23 52.4 | -1.9 |
| SCRK | Sand Creek | 5.52 | 179 | Pn | Pn | 05 23 53.6 | -1.4 |
| K27K | Chicken | 5.53 | 170 | Pn | Pn | 05 23 54.1 | -0.8 |
| J29N | Klondike Camp | 5.56 | 152 | Pn | Pn | 05 23 54.9 | -0.5 |
| BWN | Browne | 5.71 | 204 | Pn | Pn | 05 23 55.5 | -1.9 |
| F19K | Shaleruckik Mo | 5.71 | 249 | Pn | Pn | 05 23 59.6 | +2.1 |
| J30M | Hart River | 5.80 | 144 | Pn | Pn | 05 23 57.8 | -1.0 |
| A19K | Wainwright | 5.88 | 285 | | Pn | 05 24 00.6 | +0.9 |
| G19K | Purcell Mounta | 5.91 | 242 | Pn | Pn | 05 23 58.4 | -1.8 |
| BPAW | Bear Paw Mtn. | 6.02 | 210 | Pn | Pn | 05 23 59.9 | -1.9 |
| MCK | McKinley | 6.06 | 200 | Pn | Pn | 05 24 01.1 | -1.2 |
| K29M | Barlow Dome | 6.24 | 152 | Pn | Pn | 05 24 02.9 | -1.9 |
| RND | Reindeer | 6.37 | 199 | Pn | Pn | 05 24 04.6 | -1.9 |
| F18K | Selawik | 6.47 | 251 | | Pn | 05 24 08.7 | +0.9 |
| L26K | Log Cabin Wild | 6.48 | 177 | Pn | Pn | 05 24 05.9 | -2.2 |
| BCAR | Beaver Creek A | 6.51 | 170 | Pn | Pn | 05 24 06.4 | -2.0 |
| L27K | Beaver Creek, | 6.51 | 170 | Pn | Pn | 05 24 06.5 | -2.0 |
| PAX | Paxson | 6.55 | 185 | | Pn | 05 24 06.8 | -2.3 |
| G18K | Tagagawik | 6.56 | 244 | Pn | Pn | 05 24 06.8 | -2.3 |
| MENT | Mentasta | 6.56 | 178 | Pn | Pn | 05 24 08.5 | -0.7 |
| J20K | Nowinta River | 6.60 | 221 | Pn | Pn | 05 24 08.3 | -1.4 |
| RDOG | Red Dog Mine | 6.94 | 267 | | Pn | 05 24 12.0 | -2.2 |
| H18K | Honhosa River | 6.97 | 238 | Pn | Pn | 05 24 12.4 | -2.4 |
| C36M | Paulatuk | 7.09 | 82 | Pn | Pn | 05 24 14.6 | -1.7 |
| F17K | Baldwin Pennin | 7.09 | 253 | Pn | Pn | 05 24 15.2 | -1.2 |
| J19K | Poorman | 7.11 | 225 | Pn | Pn | 05 24 18.2 | +1.6 |
| M26K | Nabesna, AK | 7.12 | 175 | Pn | Pn | 05 24 16.9 | +0.1 |
| D17K | Noatak River | 7.13 | 265 | | Pn | 05 24 16.9 | 0.0 |
| K20K | Telida | 7.30 | 218 | | Pn | 05 24 17.8 | -1.4 |
| M29M | Somme Creek | 7.43 | 159 | Pn | Pn | 05 24 19.4 | -1.7 |
| G17K | Kiwalik Mounta | 7.45 | 246 | | Pn | 05 24 22.9 | +1.5 |
| H17K | Granite Mounta | 7.60 | 241 | | Pn | 05 24 25.1 | +1.8 |
| C16K | Lisburne Hills | 7.72 | 271 | | Pn | 05 24 25.7 | +0.7 |
| SCM | Sheep Creek Mo | 7.78 | 191 | Pn | Pn | 05 24 26.0 | +0.1 |
| SML | Sawmill | 7.88 | 194 | Pn | Pn | 05 24 26.9 | -0.4 |
| GHO | Glory Hole Cre | 7.97 | 196 | Pn | Pn | 05 24 27.3 | -1.2 |
| KLU | Klutina | 8.04 | 186 | Pn | Pn | 05 24 31.0 | +1.4 |
| GLB | Gilahina Butte | 8.06 | 179 | Pn | Pn | 05 24 30.1 | +0.3 |
| G16K | Koyuk River | 8.07 | 248 | Pn | Pn | 05 24 31.4 | +1.6 |
| PMR | Palmer | 8.17 | 197 | Pn | Pn | 05 24 30.0 | -1.1 |
| M20K | Styx River | 8.45 | 210 | | Pn | 05 24 36.4 | +1.3 |
| SUA | Susitna One | 8.48 | 202 | Pn | Pn | 05 24 34.6 | -0.9 |
| J17K | VABM Dome | 8.50 | 231 | Pn | Pn | 05 24 34.1 | -1.6 |
| L19K | White Mountain | 8.51 | 216 | Pn | Pn | 05 24 35.0 | -0.8 |
| N30M | Aishikik Lake | 8.56 | 156 | Pn | Pn | 05 24 34.2 | -2.4 |
| I17K | Unalakleet | 8.59 | 237 | Pn | Pn | 05 24 35.0 | -1.8 |
| CTGM | Chitina Glacie | 8.62 | 171 | Pn | Pn | 05 24 36.3 | -1.2 |
| F15K | North Star Dit | 8.65 | 254 | Pn | Pn | 05 24 38.0 | +0.2 |
| M19K | Big River Lodg | 8.67 | 214 | Pn | Pn | 05 24 40.0 | +1.9 |
| RC01 | Rabbit Creek A | 8.73 | 198 | Pn | Pn | 05 24 39.7 | +0.9 |
| LOGN | Logan Glacier | 8.79 | 170 | Pn | Pn | 05 24 38.0 | -1.8 |
| PWL | Port Wells | 8.82 | 193 | Pn | Pn | 05 24 38.6 | +1.5 |
| L18K | Granite Mounta | 8.88 | 221 | Pn | Pn | 05 24 41.9 | +1.0 |
| MESA | MESA | 9.38 | 173 | Pn | Pn | 05 24 48.0 | +0.1 |
| WHY | Whitehorse | 9.66 | 152 | Pn | Pn | 05 24 52.7 | +0.9 |
| M17K | Holitna River | 9.77 | 221 | Pn | Pn | 05 24 54.1 | +1.0 |
| L16K | Owhat River | 10.00 | 226 | Pn | Pn | 05 24 54.4 | -1.8 |
| K15K | Wolf Creek Mou | 10.07 | 233 | Pn | Pn | 05 24 56.9 | -0.3 |
| J14K | Nanvaranak Lak | 10.30 | 239 | Pn | Pn | 05 25 01.8 | +1.5 |
| WRGLY | Wrigley | 10.37 | 117 | Pn | Pn | 05 25 02.5 | +1.3 |
| P33M | Teslin, Yukon | 10.46 | 147 | Pn | Pn | 05 25 00.1 | -2.4 |
| M16K | Timber Creek | 10.46 | 223 | Pn | Pn | 05 25 03.7 | +1.2 |
| Q32M | Nakina River | 11.72 | 148 | Pn | Pn | 05 25 18.5 | -1.5 |
| KDAK | Kodiak Island | 12.29 | 202 | LR | LR | 05 31 02.2 | |
| | comp=E,52nm,18.1s,baz=43,slow=40 | | | | | | |
| DLBC | Dease Lake | 12.65 | 144 | Pn | Pn | 05 25 29.9 | -2.6 |
| DLBC | Dease Lake | 12.65 | 144 | Pn | Pn | 05 25 35.3 | +2.8 |
| | comp=E,8.4nm,0.3s,baz=34,slow=16,SNR=5.1 | | | | | | |
| | comp=E,1.1nm,0.4s | | | | | | |
| S32K | Killisnoo | 12.76 | 156 | Pn | Pn | 05 25 33.6 | -0.3 |
| YKA | Yellowknife Ar | 13.79 | 106 | Pn | Pn | 05 25 45.2 | -2.7 |
| | comp=E,0.4nm,0.3s,baz=323,slow=16,SNR=3.9 | | | | | | |
| | comp=E,1.5nm,0.5s | | | | | | |
| RES | Resolute Bay | 15.59 | 49 | LR | LR | 05 35 05.5 | |
| | comp=E,46nm,18.4s,slow=49 | | | | | | |
| EUNU | Eureka | 17.41 | 29 | Pn | Pn | 05 26 34.6 | -0.7 |
| EUNU | | | | IAmb | IAmb | 05 26 57.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| LVA | Lava Point | 18.31 | 224 | Pn | Pn | 05 26 43.4 | -3.1 |
| BBB | Bella Bella | 18.91 | 148 | LR | LR | 05 33 56.4 | |
| | comp=Z,40nm,20.4s,baz=344,slow=36 | | | | | | |
| FRB | Frobisher Bay | 28.72 | 64 | LR | LR | 05 40 37.7 | |
| | comp=Z,61nm,21.6s,baz=320,slow=38 | | | | | | |
| PDAR | Pinedale Array | 32.13 | 128 | P | P | 05 29 03.5 | +3.3 |
| | comp=Z,0.7nm,0.8s,baz=5.7,slow=6.0,SNR=6.5 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| NVAR | Mina Array Bea | 34.06 | 142 | P | P | 05 29 22.3 | +5.3 |
| | comp=Z,1.2nm,0.8s,baz=334,slow=7.7,SNR=8.8 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| ARCES | ARCESS Array B | 41.07 | 5 | P | P | 05 30 14.9 | -0.8 |
| | comp=Z,2.0nm,1.0s,baz=0.0,slow=9.4,SNR=4.8 | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 46.35 | 128 | P | P | 05 31 02.1 | +3.4 |
| | comp=Z,0.5nm,0.6s,baz=351,slow=3.9,SNR=9.6 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| FINES | FINESS Array B | 49.19 | 6 | P | P | 05 31 19.7 | -0.5 |
| | comp=Z,2.3nm,0.9s,baz=352,slow=12,SNR=3.9 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| HFS | Hagfors | 49.72 | 14 | P | P | 05 31 24.6 | +0.3 |
| | comp=Z,1.2nm,0.7s,baz=51,slow=9.7,SNR=4.0 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| EKA | Eskdalemuir Ar | 52.32 | 27 | P | P | 05 31 44.3 | +0.4 |
| | comp=Z,0.7nm,0.6s,baz=332,slow=6.9,SNR=4.1 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| KSRS | Korea Array | 54.76 | 283 | LR | LR | 05 58 12.5 | |
| | comp=Z,23nm,18.7s,baz=345,slow=39 | | | | | | |
| KURBB | Kurchatov Arra | 56.20 | 329 | P | P | 05 32 13.0 | +0.8 |
| | comp=Z,1.4nm,0.8s,baz=14,slow=7.0,SNR=9.3 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 59.14 | 325 | P | P | 05 32 33.4 | +0.5 |
| MKAR | Makanchi Array | 59.14 | 325 | P | P | 05 32 33.1 | +0.2 |
| | comp=Z,0.6nm,0.8s,baz=42,slow=6.6,SNR=4.8 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| MAKZ | Makanchi | 59.19 | 325 | P | P | 05 32 31.1 | -2.2 |
| MAKZ | | | | IAmb | IAmb | 05 32 34.3 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| ABK

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D28M | | | IAML | | | 05 37 08.3 | |
| | comp=E,76nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.02 185** | Pn | Pn | | 05 36 28.0 | 0.0 |
| **E24K** | **Your Creek** | **2.08 231** | Pn | Pn | | 05 36 27.7 | -1.2 |
| **TOLK** | **Toolik Lake Re** | **2.10 250** | Pn | Pn | | 05 36 27.8 | -1.3 |
| **C23K** | **Itkillik River** | **2.29 283** | | Pn | | 05 36 31.9 | +0.1 |
| C23K | | | IAML | | | 05 37 07.9 | |
| | comp=N,60nm,0.5s | | | | | | |
| C23K | | | IAML | | | 05 37 19.0 | |
| | comp=E,68nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.36 217** | Pn | Pn | | 05 36 33.0 | +0.3 |
| **D23K** | **Nanushuk River** | **2.37 262** | Pn | Pn | | 05 36 31.6 | -1.2 |
| **F28M** | **Old Crow** | **2.41 137** | Pn | Pn | | 05 36 32.9 | -0.5 |
| F28M | | | IAML | | | 05 37 16.0 | |
| | comp=N,50nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.42 238** | Pn | Pn | | 05 36 33.4 | -0.2 |
| **G26K** | **Porcupine Rive** | **2.50 177** | | Pb | | 05 36 37.5 | -1.1 |
| **E29M** | **Blow River** | **2.50 112** | | Pn | | 05 36 34.2 | -0.3 |
| E29M | | | IAML | | | 05 37 16.0 | |
| | comp=N,48nm,0.6s | | | | | | |
| **G25K** | **Bearman Lake** | **2.77 196** | | Pn | | 05 36 40.6 | +2.3 |
| **G27K** | **Doyon Strip** | **2.79 159** | Pn | Pn | | 05 36 37.9 | -0.8 |
| **FYU** | **Fort Yukon** | **2.91 188** | Pn | Pn | | 05 36 40.0 | -0.1 |
| FYU | | | IAML | | | 05 37 36.1 | |
| | comp=E,45nm,1.5s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.01 206** | | Pn | | 05 36 39.9 | -1.7 |
| G24K | | | IAML | | | 05 37 36.2 | |
| | comp=E,26nm,0.7s | | | | | | |
| G24K | | | IAML | | | 05 37 44.6 | |
| | comp=N,22nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.07 249** | | Pn | | 05 36 40.0 | -2.5 |
| **D22K** | **Ayikyak River** | **3.10 264** | Pn | Pn | | 05 36 40.3 | -2.5 |
| D22K | | | IAML | | | 05 37 24.3 | |
| | comp=E,21nm,2.1s | | | | | | |
| **H25L** | **Birch Creek** | **3.24 192** | | Pn | | 05 36 47.5 | +2.8 |
| **B22K** | **Teshekpuk Lake** | **3.33 290** | Pn | Pn | | 05 36 44.6 | -1.3 |
| B22K | | | IAML | | | 05 37 47.5 | |
| | comp=N,28nm,1.1s | | | | | | |
| B22K | | | IAML | | | 05 37 48.8 | |
| | comp=E,40nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.41 135** | | Pn | | 05 36 46.3 | -0.9 |
| G29M | | | IAML | | | 05 37 48.9 | |
| | comp=E,36nm,1.2s | | | | | | |
| G29M | | | IAML | | | 05 37 49.2 | |
| | comp=N,32nm,1.0s | | | | | | |
| **G23K** | **Bananza Creek** | **3.50 222** | Pn | Pn | | 05 36 47.4 | -1.0 |
| G23K | | | IAML | | | 05 37 51.8 | |
| | comp=N,16nm,1.3s | | | | | | |
| G23K | | | IAML | | | 05 37 59.7 | |
| | comp=E,17nm,1.6s | | | | | | |
| **F30M** | **Barrier River** | **3.58 117** | | Pn | | 05 36 52.3 | +2.9 |
| **B21K** | **Ikpikpuk River** | **3.68 278** | | Pn | | 05 36 49.8 | -0.9 |
| B21K | | | IAML | | | 05 38 23.9 | |
| | comp=N,16nm,3.2s | | | | | | |
| B21K | | | IAML | | | 05 39 08.2 | |
| | comp=E,23nm,2.6s | | | | | | |
| **E21K** | **Killik River** | **3.68 259** | Pn | Pn | | 05 36 48.7 | -2.1 |
| E21K | | | IAML | | | 05 37 56.3 | |
| | comp=N,13nm,0.9s | | | | | | |
| E21K | | | IAML | | | 05 38 59.3 | |
| | comp=E,15nm,1.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.85 126** | Pn | Pn | | 05 36 51.6 | -1.5 |
| G30M | | | IAML | | | 05 38 12.1 | |
| | comp=N,11nm,0.9s | | | | | | |
| G30M | | | IAML | | | 05 39 26.7 | |
| | comp=E,13nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.88 203** | Pn | Pn | | 05 36 53.8 | +0.2 |
| H24K | | | IAML | | | 05 37 59.9 | |
| | comp=E,12nm,2.1s | | | | | | |
| H24K | | | IAML | | | 05 39 26.3 | |
| | comp=N,17nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **3.90 143** | | Pn | | 05 36 52.0 | -1.9 |
| H29M | | | IAML | | | 05 38 49.7 | |
| | comp=N,18nm,1.4s | | | | | | |
| H29M | | | IAML | | | 05 39 30.5 | |
| | comp=E,23nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.96 188** | | Pn | | 05 36 54.0 | -0.8 |
| PRP | | | IAML | | | 05 39 31.9 | |
| | comp=E,24nm,0.3s | | | | | | |
| **I27K** | **Kandik River** | **3.97 165** | | Pn | | 05 36 58.6 | +3.8 |
| **INK** | **Inuvik** | **4.01 101** | | Pn | | 05 36 55.6 | +0.3 |
| **F21K** | **Alatna River** | **4.11 242** | | Pn | | 05 36 56.1 | -0.5 |
| F21K | | | IAML | | | 05 39 35.0 | |
| | comp=E,18nm,0.7s | | | | | | |
| F21K | | | IAML | | | 05 39 35.4 | |
| | comp=N,14nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.16 174** | Pn | Pn | | 05 36 56.7 | -0.7 |
| I26K | | | IAML | | | 05 39 37.8 | |
| | comp=N,16nm,0.5s | | | | | | |
| I26K | | | IAML | | | 05 39 40.6 | |
| | comp=E,15nm,0.5s | | | | | | |
| **H23K** | **Yukon River** | **4.16 212** | Pn | Pn | | 05 36 56.2 | -1.2 |
| H23K | | | IAML | | | 05 38 14.0 | |
| | comp=E,19nm,2.7s | | | | | | |
| H23K | | | IAML | | | 05 39 38.9 | |
| | comp=N,13nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.16 134** | Pn | Pn | | 05 36 56.7 | -0.8 |
| **F31M** | **Tsiigehtchic** | **4.33 112** | Pn | Pn | | 05 36 57.3 | -2.4 |
| F31M | | | IAML | | | 05 38 27.2 | |
| | comp=N,12nm,2.8s | | | | | | |
| F31M | | | IAML | | | 05 39 42.3 | |
| | comp=E,10nm,2.0s | | | | | | |
| **G31M** | **Satah River** | **4.47 120** | Pn | Pn | | 05 37 00.8 | -0.7 |
| G31M | | | IAML | | | 05 39 59.4 | |
| | comp=N,12nm,2.0s | | | | | | |
| G31M | | | IAML | | | 05 40 00.8 | |
| | comp=E,16nm,0.8s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.49 221** | | Pn | | 05 37 04.0 | +2.1 |
| **POKR** | **Poker Plat Res** | **4.51 198** | Pn | Pn | | 05 37 00.1 | -2.1 |
| **D20K** | **Etiviuk River** | **4.52 267** | | Pn | | 05 37 03.8 | +1.4 |
| **B20K** | **Meade River** | **4.56 283** | | Pn | | 05 37 03.3 | +0.5 |
| **G21K** | **Allakaket** | **4.57 235** | Pn | Pn | | 05 37 03.6 | +0.6 |
| G21K | | | IAML | | | 05 39 49.2 | |
| | comp=E,16nm,3.5s | | | | | | |
| G21K | | | IAML | | | 05 40 05.6 | |
| | comp=N,14nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.67 148** | Pn | Pn | | 05 37 03.4 | -1.0 |
| **I23K** | **Minto, Yukon-K** | **4.75 208** | Pn | Pn | | 05 37 05.3 | -0.1 |
| I23K | | | IAML | | | 05 39 51.1 | |
| | comp=E,11nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **4.76 201** | Pn | Pn | | 05 37 04.5 | -1.1 |
| **COLA** | **College** | **4.79 199** | Pn | Pn | | 05 37 04.4 | -1.7 |
| **IL03** | **Eielson Array** | **4.79 194** | Pn | Pn | | 05 37 03.8 | -2.3 |
| **IL31** | | **4.80 194** | Pn | Pn | | 05 37 04.8 | -1.2 |
| **ILAR** | **Eielson Array** | **4.80 194** | Pn | Pn | | 05 37 05.6 | -0.5 |
| **EGAK** | **Eagle** | **4.82 164** | Pn | Pn | | 05 37 05.6 | -0.8 |
| EGAK | | | IAML | | | 05 40 15.0 | |
| | comp=E,12nm,1.4s | | | | | | |
| **J25K** | **Salcha River,** | **4.86 186** | Pn | Pn | | 05 37 06.5 | -0.6 |
| J25K | | | IAML | | | 05 38 42.5 | |
| | comp=N,13nm,4.3s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92 246** | Pn | Pn | | 05 37 05.5 | -2.3 |
| F20K | | | IAML | | | 05 39 30.7 | |
| | comp=E,10nm,2.9s | | | | | | |
| **J26L** | **Joseph Creek** | **4.96 177** | Pn | Pn | | 05 37 07.8 | -0.6 |
| **CCB** | **Clear Creek Bu** | **5.01 198** | Pn | Pn | | 05 37 08.7 | -0.3 |
| **H21K** | **Melozitna Rive** | **5.03 225** | | Pn | | 05 37 09.5 | +0.2 |
| **MLY** | **Manley** | **5.10 213** | Pn | Pn | | 05 37 10.2 | -0.1 |
| **D19K** | **Kuna River** | **5.11 266** | | Pn | | 05 37 12.0 | +1.6 |
| **E19K** | **Redstone River** | **5.21 254** | Pn | Pn | | 05 37 12.8 | +1.1 |
| **NEA2** | **Nenana** | **5.22 204** | Pn | Pn | | 05 37 11.7 | -0.3 |
| **C19K** | **Lookout Ridge** | **5.49 274** | | Pn | | 05 37 17.4 | +1.8 |
| **K27K** | **Chicken** | **5.49 170** | Pn | Pn | | 05 37 16.5 | +0.9 |
| **F19K** | **Shaleruckik Mo** | **5.71 249** | Pn | Pn | | 05 37 17.2 | -1.4 |
| **J30M** | **Hart River** | **5.76 144** | Pn | Pn | | 05 37 17.4 | -2.0 |
| **DOT** | **Dot Lake** | **5.81 180** | | Pn | | 05 37 23.9 | +3.8 |
| **MCK** | **McKinley** | **6.03 201** | | Pn | | 05 37 21.2 | -1.9 |
| **H19K** | **Roundabout Mou** | **6.13 236** | | Pn | | 05 37 24.7 | +0.3 |
| **C18K** | **Utukok River** | **6.16 271** | | Pn | | 05 37 23.7 | -1.1 |
| **K29M** | **Barlow Dome** | **6.20 152** | | Pn | | 05 37 22.5 | -3.0 |
| **E18K** | **Tukpahlearik C** | **6.38 259** | | Pn | | 05 37 27.3 | -0.6 |
| **L26K** | **Log Cabin Wild** | **6.44 177** | | Pn | | 05 37 29.0 | +0.3 |
| **DHY** | **Denali Highway** | **6.51 193** | Pn | Pn | | 05 37 29.2 | -0.6 |

*NEIC **13** 05:36:32.0±2.5, 69.°34N±0.°02×144.°3W±0.°1, h10km±2km, Error ellipse: s-maj=7.0km s-min=3.5km az=94.0*

**AEIC 13 05:36:33.4±1.9, 69.°44N±0.°06×144.°21W±0.°09, h20km±6km, ML2.3, ML2.8/50(NEIC), Error ellipse: s-maj=8.3km s-min=4.5km az=191.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **44** | Pb | | 05 36 39.4 | +0.1 |
| C27K | | | | | Sb | 05 36 42.6 | -0.8 |
| C27K | | | | IAML | | 05 36 43.0 | |
| | comp=N,954nm,0.5s | | | | | | |
| C27K | | | | IAML | | 05 36 43.9 | |
| | comp=E,955nm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.54** | **333** | | Pb | 05 36 44.3 | +0.3 |
| C26K | | | | | Sb | 05 36 51.2 | -0.1 |
| C26K | | | | IAML | | 05 36 53.2 | |
| | comp=N,628nm,0.3s | | | | | | |
| C26K | | | | IAML | | 05 36 53.4 | |
| | comp=E,410nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.78** | **262** | | Pb | 05 36 47.8 | -0.4 |
| D25K | | | | Sn | Sb | 05 36 59.1 | +0.9 |
| **D27M** | **Malcolm River** | **1.17** | **98** | Pn | Pn | 05 36 53.9 | -0.7 |
| **E27K** | **Coleen River** | **1.58** | **142** | Pn | Pn | 05 36 59.9 | -0.3 |
| E27K | | | | IAML | | 05 37 28.3 | |
| | comp=N,69nm,0.6s | | | | | | |
| E27K | | | | IAML | | 05 37 31.2 | |
| | comp=E,95nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **262** | Pn | Pn | 05 37 00.6 | -0.8 |
| D24K | | | | IAML | | 05 37 30.9 | |
| | comp=N,92nm,0.3s | | | | | | |
| D24K | | | | IAML | | 05 37 31.1 | |
| | comp=E,88nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.88** | **114** | Pn | Pn | 05 37 02.3 | -2.1 |
| **BMAR** | **Burnt Mountain** | **2.03** | **184** | Pn | Pn | 05 37 05.8 | -0.6 |
| **C23K** | **Itkillik River** | **2.27** | **283** | Pn | Pn | 05 37 09.7 | 0.0 |
| C23K | | | | IAML | | 05 38 37.9 | |
| | comp=E,52nm,0.6s | | | | | | |
| C23K | | | | IAML | | 05 38 38.9 | |
| | comp=N,42nm,0.3s | | | | | | |
| **F24K** | **Squaw Lake** | **2.36** | **217** | Pn | Pn | 05 37 10.8 | -0.1 |
| F24K | | | | IAML | | 05 37 53.2 | |
| | comp=E,31nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.41** | **237** | Pn | Pn | 05 37 09.5 | -2.2 |
| E23K | | | | IAML | | 05 38 24.2 | |
| | comp=N,57nm,0.5s | | | | | | |
| E23K | | | | IAML | | 05 38 24.2 | |
| | comp=E,50nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.44** | **137** | Pn | Pn | 05 37 09.8 | -2.1 |
| F28M | | | | IAML | | 05 37 56.4 | |
| | comp=E,47nm,0.5s | | | | | | |
| F28M | | | | IAML | | 05 37 59.0 | |
| | comp=N,34nm,0.4s | | | | | | |
| **E29M** | **Blow River** | **2.52** | **112** | Pn | Pn | 05 37 11.3 | -1.7 |
| E29M | | | | IAML | | 05 37 59.2 | |
| | comp=N,32nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **2.81** | **159** | Pn | Pn | 05 37 15.4 | -1.8 |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **248** | Pn | Pn | 05 37 19.7 | -0.9 |
| E22K | | | | IAML | | 05 39 16.8 | |
| | comp=N,44nm,0.9s | | | | | | |
| E22K | | | | IAML | | 05 39 20.1 | |
| | comp=E,36nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **3.08** | **263** | Pn | Pn | 05 37 19.3 | -1.5 |
| **G29M** | **Pine Creek** | **3.44** | **135** | Pn | Pn | 05 37 24.8 | -0.9 |
| **G23K** | **Bananza Creek** | **3.50** | **221** | Pn | Pn | 05 37 25.4 | -1.3 |
| G23K | | | | IAML | | 05 39 34.6 | |
| | comp=N,27nm,1.0s | | | | | | |
| G23K | | | | IAML | | 05 39 39.2 | |
| | comp=E,31nm,0.8s | | | | | | |
| **E21K** | **Killik River** | **3.66** | **259** | Pn | Pn | 05 37 27.3 | -1.5 |
| **G30M** | **tAoh Zraii Nji** | **3.87** | **126** | Pn | Pn | 05 37 31.2 | -0.4 |
| G30M | | | | IAML | | 05 39 54.3 | |
| | comp=N,20nm,1.0s | | | | | | |
| G30M | | | | IAML | | 05 40 03.8 | |
| | comp=E,19nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **4.03** | **101** | Pn | Pn | 05 37 33.6 | -0.2 |
| INK | | | | IAML | | 05 39 47.8 | |
| | comp=N,8.1nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.10** | **241** | Pn | Pn | 05 37 35.2 | +0.5 |
| F21K | | | | IAML | | 05 39 53.3 | |
| | comp=N,20nm,0.7s | | | | | | |
| **I28M** | **Miner Creek** | **4.34** | **156** | Pn | Pn | 05 37 38.1 | 0.0 |
| I28M | | | | IAML | | 05 39 40.8 | |
| | comp=E,14nm,0.6s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.69** | **148** | Pn | Pn | 05 37 41.7 | -1.2 |
| **ILAR** | **Eielson Array** | **4.81** | **194** | Pn | Pn | 05 37 44.2 | -0.3 |
| **F20K** | **Avaraart Lake** | **4.91** | **246** | Pn | Pn | 05 37 43.9 | -2.0 |
| F20K | | | | IAML | | 05 40 28.4 | |
| | comp=E,9.5nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.10** | **266** | Pn | Pn | 05 37 47.3 | -1.1 |
| **C19K** | **Lookout Ridge** | **5.47** | **274** | Pn | Pn | 05 37 53.2 | -0.4 |
| **BWN** | **Browne** | **5.69** | **204** | Pn | Pn | 05 37 54.7 | -1.9 |

*NEIC **13** 05:37:36.1±2.4, 69.°49N±0.°05×144.°2W±0.°1, h10km±2km, Error ellipse: s-maj=8.7km s-min=6.0km az=19.0*

**AEIC 13 05:37:36.0±2.6, 69.°49N±0.°03×144.°2W±0.°1, h6km±6km, ML3.0, ML3.1/96(NEIC), Error ellipse: s-maj=5.9km s-min=3.4km az=126.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **54** | Pg | Pg | 05 37 40.8 | +0.3 |
| C27K | | | | IAML | | 05 37 44.3 | |
| | comp=E,3µm,0.3s | | | | | | |
| C27K | | | | | Sg | 05 37 44.0 | +0.6 |
| **C26K** | **Camden Bay** | **0.49** | **331** | | Pb | 05 37 46.5 | -0.4 |
| C26K | | | | | Sb | 05 37 53.2 | -1.1 |
| C26K | | | | IAML | | 05 37 55.6 | |
| | comp=N,1µm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.78** | **258** | | Pg | 05 37 50.7 | -0.1 |
| D25K | | | | | Sg | 05 38 01.8 | +0.9 |
| **D27M** | **Malcolm River** | **1.19** | **101** | | Pg | 05 37 58.5 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.58** | **280** | Pn | Pn | 05 38 04.9 | +0.4 |
| C24K | | | | Sn | Sn | 05 38 25.3 | 0.0 |
| C24K | | | | IAML | | 05 38 31.8 | |
| | comp=E,328nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.62** | **143** | | Pn | 05 38 05.5 | +0.3 |
| E27K | | | | IAML | | 05 38 33.9 | |
| | comp=E,270nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **260** | Pn | Pn | 05 38 05.3 | -0.4 |
| D24K | | | | Sn | Sn | 05 38 27.4 | 0.0 |
| **F26K** | **Sheenjek River** | **1.81** | **179** | Pn | Pn | 05 38 07.0 | -0.6 |
| **D28M** | **Stokes Point** | **1.95** | **92** | | Pn | 05 38 09.1 | -0.5 |
| D28M | | | | IAML | | 05 38 48.8 | |
| | comp=N,194nm,1.0s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **196** | Pn | Pn | 05 38 09.3 | -0.7 |
| F25K | | | | IAML | | 05 38 41.7 | |
| | comp=E,190nm,0.9s | | | | | | |
| F25K | | | | IAML | | 05 38 43.1 | |
| | comp=N,167nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **184** | Pn | Pn | 05 38 12.2 | +0.8 |
| **TOLK** | **Toolik Lake Re** | **2.10** | **248** | Pn | Pn | 05 38 12.0 | +0.3 |
| TOLK | | | | IAML | | 05 38 46.6 | |
| | comp=E,166nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 05 38 51.9 | |
| | comp=N,113nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **229** | Pn | Pn | 05 38 12.5 | +0.8 |
| **C23K** | **Itkillik River** | **2.25** | **282** | Pn | Pn | 05 38 12.7 | -1.1 |
| **D23K** | **Nanushuk River** | **2.36** | **260** | Pn | Pn | 05 38 13.1 | -2.1 |
| D23K | | | | IAML | | 05 39 07.1 | |
| | comp=E,127nm,0.8s | | | | | | |
| D23K | | | | IAML | | 05 39 13.1 | |
| | comp=N,101nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.40** | **216** | | Pn | 05 38 14.2 | -1.6 |
| **E23K** | **Chandalar** | **2.43** | **236** | Pn | Pn | 05 38 15.3 | -0.9 |
| E23K | | | | IAML | | 05 39 01.6 | |
| | comp=N,92nm,0.8s | | | | | | |
| E23K | | | | IAML | | 05 39 05.0 | |
| | comp=E,82nm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.48** | **138** | | Pn | 05 38 16.5 | -0.3 |
| F28M | | | | IAML | | 05 39 00.8 | |
| | comp=N,93nm,0.7s | | | | | | |
| F28M | | | | IAML | | 05 39 04.2 | |
| | comp=E,84nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.54** | **113** | Pn | Pn | 05 38 17.2 | -0.5 |
| E29M | | | | IAML | | 05 39 01.3 | |
| | comp=N,86nm,0.6s | | | | | | |
| E29M | | | | IAML | | 05 39 04.8 | |
| | comp=E,69nm,0.5s | | | | | | |
| **G27K** | **Doyon Strip** | **2.86** | **159** | Pn | Pn | 05 38 23.4 | +1.2 |
| **FYU** | **Fort Yukon** | **2.96** | **188** | Pn | Pn | 05 38 23.0 | -0.5 |
| **G24K** | **Hadweenzic Riv** | **3.06** | **205** | | Pn | 05 38 23.3 | -1.5 |
| G24K | | | | IAML | | 05 39 18.4 | |
| | comp=N,66nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **247** | Pn | Pn | 05 38 24.7 | -0.3 |
| E22K | | | | IAML | | 05 39 25.9 | |
| | comp=N,44nm,1.2s | | | | | | |
| **D22K** | **Ayikyak River** | **3.08** | **262** | Pn | Pn | 05 38 23.6 | -1.5 |
| D22K | | | | IAML | | 05 39 34.1 | |
| | comp=N,80nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.28** | **289** | | Pn | 05 38 27.9 | +0.1 |
| **G29M** | **Pine Creek** | **3.48** | **135** | Pn | Pn | 05 38 28.6 | -1.9 |
| G29M | | | | IAML | | 05 39 31.5 | |
| | comp=N,51nm,1.0s | | | | | | |
| **G23K** | **Bananza Creek** | **3.54** | **221** | Pn | Pn | 05 38 31.1 | -0.3 |
| **B21K** | **Ikpikpuk River** | **3.64** | **277** | | Pn | 05 38 32.7 | -0.1 |
| **E21K** | **Killik River** | **3.67** | **258** | Pn | Pn | 05 38 31.9 | -1.2 |
| E21K | | | | IAML | | 05 39 41.2 | |
| | comp=N,44nm,0.6s | | | | | | |
| E21K | | | | IAML | | 05 39 45.3 | |
| | comp=E,46nm,1.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.91** | **126** | Pn | Pn | 05 38 37.5 | +1.1 |
| **H24K** | **Noodor Dome** | **3.93** | **202** | | Pn | 05 38 37.0 | +0.2 |
| H24K | | | | IAML | | 05 39 46.8 | |
| | comp=N,24nm,0.8s | | | | | | |
| H24K | | | | IAML | | 05 39 50.5 | |
| | comp=E,28nm,1.6s | | | | | | |
| **H29M** | **Whitestone** | **3.97** | **143** | Pn | Pn | 05 38 37.6 | +0.3 |
| H29M | | | | IAML | | 05 39 36.5 | |
| | comp=E,31nm,1.0s | | | | | | |
| H29M | | | | IAML | | 05 39 51.7 | |
| | comp=N,33nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.02** | **188** | Pn | Pn | 05 38 38.9 | +0.7 |
| PRP | | | | IAML | | 05 39 48.4 | |
| | comp=N,34nm,0.7s | | | | | | |
| PRP | | | | IAML | | 05 39 51.6 | |
| | comp=E,25nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.05** | **102** | Pn | Pn | 05 38 37.5 | -0.9 |
| **F21K** | **Alatna River** | **4.11** | **241** | Pn | Pn | 05 38 38.9 | -0.4 |
| F21K | | | | IAML | | 05 40 03.3 | |
| | comp=E,30nm,0.7s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.23** | **174** | Pn | Pn | 05 38 40.7 | -0.1 |
| **B20K** | **Meade River** | **4.52** | **283** | | Pn | 05 38 43.5 | -1.3 |
| **G21K** | **Allakaket** | **4.59** | **234** | Pn | Pn | 05 38 44.6 | -1.2 |
| G21K | | | | IAML | | 05 40 14.0 | |
| | comp=E,19nm,1.2s | | | | | | |
| G21K | | | | IAML | | 05 40 20.9 | |
| | comp=N,24nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **201** | Pn | Pn | 05 38 47.1 | -1.8 |
| MDM | | | | IAML | | 05 40 10.1 | |
| | comp=N,15nm,0.7s | | | | | | |
| MDM | | | | IAML | | 05 40 27.2 | |
| | comp=E,15nm,3.2s | | | | | | |
| **EGAK** | **Eagle** | **4.88** | **164** | | Pn | 05 38 49.6 | -0.2 |
| EGAK | | | | IAML | | 05 40 24.3 | |
| | comp=E,18nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **4.92** | **186** | Pn | Pn | 05 38 49.3 | -1.1 |
| J25K | | | | IAML | | 05 40 16.6 | |
| | comp=E,18nm,0.7s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92** | **246** | Pn | Pn | 05 38 50.0 | -0.3 |
| F20K | | | | IAML | | 05 40 26.9 | |
| | comp=N,16nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.02** | **177** | Pn | Pn | 05 38 49.6 | -2.2 |
| **CCB** | **Clear Creek Bu** | **5.06** | **198** | | Pn | 05 38 52.0 | -0.3 |
| CCB | | | | IAML | | 05 40 20.2 | |
| | comp=E,13nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **5.09** | **265** | | Pn | 05 38 52.4 | -0.4 |
| D19K | | | | IAML | | 05 39 54.4 | |
| | comp=E,13nm,0.6s | | | | | | |
| **MLY** | **Manley** | **5.14** | **212** | Pn | Pn | 05 38 52.2 | -1.2 |
| MLY | | | | IAML | | 05 40 03.7 | |
| | comp=N,11nm,4.0s | | | | | | |
| MLY | | | | IAML | | 05 40 38.2 | |
| | comp=E,16nm,4.0s | | | | | | |
| **HDA** | **Harding Lake** | **5.22** | **193** | Pn | Pn | 05 38 52.3 | -2.1 |
| **I30M** | **Mount Dempster** | **5.25** | **141** | Pn | Pn | 05 38 52.3 | -2.7 |
| I30M | | | | IAML | | 05 39 58.6 | |
| | comp=N,14nm,0.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.26** | **199** | Pn | Pn | 05 38 53.4 | -1.7 |
| WRH | | | | IAML | | 05 40 32.0 | |
| | comp=N,14nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.46** | **273** | Pn | Pn | 05 38 56.0 | -1.8 |
| **SCRK** | **Sand Creek** | **5.54** | **179** | Pn | Pn | 05 38 57.3 | -1.7 |
| **K27K** | **Chicken** | **5.55** | **170** | Pn | Pn | 05 38 57.2 | -1.9 |
| **F19K** | **Shaleruckik Mo** | **5.71** | **249** | | Pn | 05 39 02.8 | +1.7 |
| **BWN** | **Browne** | **5.73** | **204** | Pn | Pn | 05 38 59.8 | -1.6 |
| **DAWY** | **Dawson** | **5.78** | **158** | | Pn | 05 39 05.4 | +3.2 |
| **J30M** | **Hart River** | **5.82** | **144** | Pn | Pn | 05 39 00.3 | -2.5 |
| **G19K** | **Purcell Mounta** | **5.91** | **241** | Pn | Pn | 05 39 01.8 | -2.1 |
| **C18K** | **Utukok River** | **6.13** | **270** | | Pn | 05 39 07.5 | +0.4 |
| **I20K** | **Naaghedeneel** | **6.17** | **225** | Pn | Pn | 05 39 05.1 | -2.4 |
| **K29M** | **Barlow Dome** | **6.26** | **152** | | Pn | 05 39 07.4 | -1.6 |
| **E18K** | **Tukpahlearik C** | **6.37** | **259** | | Pn | 05 39 12.4 | +2.1 |
| **L26K** | **Log Cabin Wild** | **6.50** | **176** | | Pn | 05 39 15.3 | +3.2 |
| **L27K** | **Beaver Creek,** | **6.53** | **170** | Pn | Pn | 05 39 13.5 | +1.0 |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | | Pn | 05 39 15.6 | +0.3 |

*AEIC **13** 05:41:47.1±2.1, 69.°47N±0.°04×144.°19W±0.°08, h12km±4km, ML3.9, mb4.2/4(NEIC), ML4.0/120(NEIC), Mwr3.9/42(NEIC), Error ellipse: s-maj=6.4km s-min=3.7km az=206.0*

*IDC **13** 05:41:48.6±0.9, 69.°71N×144.°05W, h0km, mb3.7/7, mbtmp3.7/11, ML3.7/4, MS3.1/6, Error ellipse: s-maj=23.8km s-min=12.9km az=33.0*

*NEIC **13** 05:41:48.3±1.4, 69.°63N±0.°05×144.°16W±0.°07, h10km±1km, Error ellipse: s-maj=8.2km s-min=3.7km az=16.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.23; $M_{\theta\theta}$-5.01; $M_{\phi\phi}$4.77; $M_{r\theta}$1.13; $M_{\theta\phi}$-6.68; $M_{\phi r}$-4.17; Fault plane solution: $M_0$9.34000×$10^{14}$ NP1: $\phi_s$200.04000°, $\delta$78.37000°, $\lambda$21.70000°. NP2: $\phi_s$105.45000°, $\delta$68.77000°, $\lambda$167.51000°. Principal axes: T 10.0035, Plg23.0000°, Azm64.0000°; N -1.5076, Plg66.0000°, Azm227.0000°; P -8.4958, Plg7.0000°, Azm331.0000°;*

*NEIC **13** 05:41:49, 69.°58N×144.°16W, h10km*

**ISC 13 05:41:47.6±1.0, 69.°56N±0.°05×144.°16W±0.°03, h9km±7km, n177, σ1°§62/179, mb3.8/9, MS3.0/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.17** | **66** | Pg | **Pg** | 05 41 51.9 | **+0.6** |
| C27K | | | | | **Sg** | 05 41 54.9 | **+1.2** |
| **C26K** | **Camden Bay** | **0.45** | **325** | | **Pb** | 05 41 57.7 | **+0.1** |
| **D25K** | **Kavik River** | **0.82** | **254** | Pg | **Pg** | 05 42 01.9 | **-1.4** |
| D25K | | | | | **Sg** | 05 42 12.9 | **-1.0** |
| **D27M** | **Malcolm River** | **1.17** | **104** | | **Pb** | 05 42 09.0 | **-1.1** |
| **C24K** | **Franklin Bluff** | **1.60** | **278** | Pn | **Pn** | 05 42 16.7 | **+0.7** |
| C24K | | | | | **Sg** | 05 42 38.7 | **-0.1** |
| C24K | | | | IAML | | 05 42 40.7 | |
| | comp=N,2µm,0.8s | | | | | | |
| C24K | | | | IAML | | 05 42 43.2 | |
| | comp=E,2µm,1.2s | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **145** | Pn | **Pn** | 05 42 17.4 | **+0.4** |
| E27K | | | | Sn | **Sn** | 05 42 40.0 | **+1.6** |
| E27K | | | | IAML | | 05 42 41.3 | |
| | comp=E,2µm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.70** | **258** | | **Pn** | 05 42 18.5 | **+1.0** |
| D24K | | | | Sn | **Sg** | 05 42 43.0 | **+0.8** |
| **F26K** | **Sheenjek River** | **1.87** | **180** | Pn | **Pn** | 05 42 21.0 | **+1.2** |
| F26K | | | | Sn | **Sn** | 05 42 44.9 | **+1.4** |
| F26K | | | | IAML | | 05 42 49.1 | |
| | comp=N,1µm,0.7s | | | | | | |
| F26K | | | | IAML | | 05 42 49.9 | |
| | comp=E,2µm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **118** | Pn | **Pn** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **G25K** | **Bearman Lake** | **2.90 195** | | **Pn** | **05 42 35.4** | **+1.6** |
| **G27K** | **Doyon Strip** | **2.92 160** | | **Pn** | **05 42 34.5** | **+0.3** |
| **FYU** | **Fort Yukon** | **3.03 188** | Pn | **Pn** | **05 42 37.6** | **+1.9** |
| **D22K** | **Ayikyak River** | **3.11 261** | Pn | **Pn** | **05 42 37.9** | **+1.0** |
| D22K | | | IAML | | 05 43 42.6 | |
| | comp=N,467nm,0.9s | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.12 246** | Pn | **Pn** | **05 42 37.9** | **+0.9** |
| E22K | | | IAML | | 05 43 27.5 | |
| | comp=N,300nm,0.9s | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.13 205** | | **Pn** | **05 42 37.9** | **+0.8** |
| G24K | | | IAML | | 05 43 31.0 | |
| | comp=E,421nm,1.4s | | | | | |
| **COLD** | **Coldfoot** | **3.23 227** | | **Pn** | **05 42 39.4** | **+0.9** |
| **B22K** | **Teshekpuk Lake** | **3.29 288** | Pn | **Pn** | **05 42 41.2** | **+2.0** |
| **H25L** | **Birch Creek** | **3.36 192** | | **Pn** | **05 42 41.6** | **+1.4** |
| **H27K** | **Steamboat Moun** | **3.49 162** | | **Pn** | **05 42 43.5** | **+1.5** |
| **G29M** | **Pine Creek** | **3.50 136** | Pn | **Pn** | **05 42 43.7** | **+1.4** |
| **F22K** | **John River** | **3.59 239** | | **Pn** | **05 42 44.5** | **+1.0** |
| **G23K** | **Bananza Creek** | **3.60 220** | Pn | **Pn** | **05 42 44.1** | **+0.5** |
| G23K | | | IAML | | 05 43 45.7 | |
| | comp=E,324nm,1.2s | | | | | |
| G23K | | | IAML | | 05 43 45.7 | |
| | comp=N,254nm,1.0s | | | | | |
| **F30M** | **Barrier River** | **3.64 118** | | **Pn** | **05 42 46.5** | **+2.4** |
| **B21K** | **Ikpikpuk River** | **3.66 276** | | **Pn** | **05 42 46.1** | **+1.7** |
| B21K | | | IAML | | 05 44 01.8 | |
| | comp=N,293nm,0.9s | | | | | |
| **E21K** | **Killik River** | **3.71 257** | Pn | **Pn** | **05 42 45.8** | **+0.8** |
| E21K | | | IAML | | 05 43 55.6 | |
| | comp=N,256nm,0.7s | | | | | |
| E21K | | | IAML | | 05 43 57.4 | |
| | comp=E,277nm,1.0s | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.92 127** | Pn | **Pn** | **05 42 49.1** | **+1.1** |
| G30M | | | IAML | | 05 44 05.8 | |
| | comp=N,238nm,1.1s | | | | | |
| **A22K** | **Sinclair Lake** | **3.94 297** | | **Pn** | **05 42 49.3** | **+1.1** |
| **H24K** | **Noodor Dome** | **4.00 203** | Pn | **Pn** | **05 42 50.0** | **+1.0** |
| H24K | | | IAML | | 05 44 01.9 | |
| | comp=N,168nm,0.9s | | | | | |
| **H29M** | **Whitestone** | **4.00 144** | Pn | **Pn** | **05 42 50.7** | **+1.6** |
| H29M | | | IAML | | 05 44 06.1 | |
| | comp=N,219nm,1.2s | | | | | |
| **INK** | **Inuvik** | **4.04 103** | Pn | **Pn** | **05 42 51.1** | **+1.6** |
| **INK** | **Inuvik** | **4.04 103** | Pn | **Pn** | **05 42 50.8** | **+1.3** |
| | comp=N,1.9nm,0.3s,baz=279,slow=5.0,SNR=13 | | | | | |
| INK | | | Sn | **Sn** | **05 43 37.0** | **+0.1** |
| | comp=N,3.5nm,0.3s,baz=283,slow=27,SNR=5.0 | | | | | |
| INK | | | Lg | Lg | 05 43 53.8 | |
| | comp=N,3.3nm,0.3s,baz=189,slow=22,SNR=6.5 | | | | | |
| | comp=N,11nm,0.5s | | | | | |
| **I27K** | **Kandik River** | **4.09 165** | | **Pn** | **05 42 51.7** | **+1.4** |
| **PRP** | **Porcupine Dome** | **4.09 188** | Pn | **Pn** | **05 42 52.1** | **+1.7** |
| PRP | | | IAML | | 05 44 02.6 | |
| | comp=E,206nm,0.9s | | | | | |
| PRP | | | IAML | | 05 44 03.6 | |
| | comp=N,239nm,0.9s | | | | | |
| **F21K** | **Alatna River** | **4.17 240** | Pn | **Pn** | **05 42 52.7** | **+1.4** |
| F21K | | | IAML | | 05 44 01.3 | |
| | comp=E,129nm,0.8s | | | | | |
| **EPYK** | **Eagle Plains** | **4.25 135** | | **Pn** | **05 42 53.9** | **+1.4** |
| **H23K** | **Yukon River** | **4.27 211** | | **Pn** | **05 42 53.9** | **+1.2** |
| H23K | | | IAML | | 05 44 06.7 | |
| | comp=E,188nm,1.3s | | | | | |
| H23K | | | IAML | | 05 44 07.1 | |
| | comp=N,173nm,0.8s | | | | | |
| **I26K** | **Coal Creek Min** | **4.29 174** | | **Pn** | **05 42 54.7** | **+1.8** |
| **F31M** | **Tsiigehtchic** | **4.38 114** | Pn | **Pn** | **05 42 55.3** | **+1.1** |
| F31M | | | IAML | | 05 44 08.7 | |
| | comp=N,114nm,1.6s | | | | | |
| F31M | | | IAML | | 05 44 12.6 | |
| | comp=E,190nm,1.2s | | | | | |
| **I28M** | **Miner Creek** | **4.43 157** | Pn | **Pn** | **05 42 56.8** | **+1.7** |
| I28M | | | IAML | | 05 43 53.7 | |
| | comp=N,139nm,0.6s | | | | | |
| I28M | | | IAML | | 05 44 25.3 | |
| | comp=E,120nm,1.3s | | | | | |
| **G31M** | **Satah River** | **4.53 121** | Pn | **Pn** | **05 42 57.5** | **+1.2** |
| G31M | | | IAML | | 05 44 11.4 | |
| | comp=E,164nm,1.2s | | | | | |
| G31M | | | IAML | | 05 44 16.5 | |
| | comp=N,150nm,0.9s | | | | | |
| **D20K** | **Etivluk River** | **4.53 265** | | **Pn** | **05 42 58.4** | **+2.0** |
| **B20K** | **Meade River** | **4.53 282** | Pn | **Pn** | **05 42 57.9** | **+1.6** |
| **E20K** | **Nigu River** | **4.54 259** | | **Pn** | **05 42 57.8** | **+1.4** |
| **A21K** | **Barrow** | **4.54 299** | | **Pn** | **05 42 58.1** | **+1.7** |
| **H22K** | **Ishtalitna Cre** | **4.59 220** | | **Pn** | **05 42 57.7** | **+0.6** |
| **POKR** | **Poker Plat Res** | **4.63 197** | | **Pn** | **05 42 59.5** | **+1.8** |
| POKR | | | IAML | | 05 43 55.1 | |
| | comp=N,162nm,0.8s | | | | | |
| **G21K** | **Allakaket** | **4.65 233** | Pn | **Pn** | **05 42 58.1** | **+0.2** |
| G21K | | | IAML | | 05 44 27.7 | |
| | comp=E,138nm,0.9s | | | | | |
| G21K | | | IAML | | 05 44 31.3 | |
| | comp=N,140nm,1.0s | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.78 149** | | **Pn** | **05 43 00.7** | **+1.0** |
| I29M | | | IAML | | 05 44 35.4 | |
| | comp=N,91nm,0.8s | | | | | |
| I29M | | | IAML | | 05 46 10.0 | |
| | comp=E,122nm,0.8s | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.86 207** | | **Pn** | **05 43 01.7** | **+0.9** |
| I23K | | | IAML | | 05 44 27.8 | |
| | comp=N,118nm,1.1s | | | | | |
| I23K | | | IAML | | 05 44 28.7 | |
| | comp=E,136nm,0.9s | | | | | |
| **MDM** | **Murphy Dome** | **4.88 201** | | **Pn** | **05 43 02.4** | **+1.3** |
| MDM | | | IAML | | 05 44 19.7 | |
| | comp=E,106nm,0.8s | | | | | |
| MDM | | | IAML | | 05 44 20.8 | |
| | comp=N,106nm,0.8s | | | | | |
| **COLA** | **College** | **4.92 199** | | **Pn** | **05 43 02.8** | **+1.2** |
| **COLA** | **College** | **4.92 199** | Pn | **Pn** | **05 43 02.6** | **+1.0** |
| COLA | | | IAML | | 05 44 03.1 | |
| | comp=N,262nm,0.5s | | | | | |
| COLA | | | IAML | | 05 44 29.5 | |
| | comp=N,324nm,0.7s | | | | | |
| **IL31** | | **4.92 194** | | **Pn** | **05 43 03.1** | **+1.5** |
| **ILAR** | **Eielson Array** | **4.92 194** | Pn | **Pn** | **05 43 03.0** | **+1.3** |
| **ILAR** | **Eielson Array** | **4.92 194** | Pn | **Pn** | **05 43 02.8** | **+1.1** |
| | comp=N,2.6nm,0.3s,baz=6.8,slow=14,SNR=37 | | | | | |
| ILAR | | | Sn | **Sn** | **05 44 00.3** | **+1.6** |
| | comp=N,4.0nm,0.3s,baz=10,slow=23,SNR=5.4 | | | | | |
| | comp=N,8.8nm,0.5s | | | | | |
| **EGAK** | **Eagle** | **4.94 165** | Pn | **Pn** | **05 43 02.9** | **+1.0** |
| EGAK | | | IAML | | 05 44 01.7 | |
| | comp=N,114nm,1.1s | | | | | |
| EGAK | | | IAML | | 05 44 01.9 | |
| | comp=N,122nm,1.1s | | | | | |
| **F20K** | **Avaraart Lake** | **4.97 245** | | **Pn** | **05 43 04.0** | **+1.6** |
| F20K | | | IAML | | 05 44 36.8 | |
| | comp=N,79nm,1.2s | | | | | |
| F20K | | | IAML | | 05 46 14.3 | |
| | comp=E,83nm,0.7s | | | | | |
| **J25K** | **Salcha River,** | **4.99 186** | Pn | **Pn** | **05 43 04.2** | **+1.5** |
| J25K | | | IAML | | 05 44 31.2 | |
| | comp=N,87nm,1.0s | | | | | |
| **J26L** | **Joseph Creek** | **5.08 177** | Pn | **Pn** | **05 43 05.5** | **+1.5** |
| J26L | | | IAML | | 05 44 37.4 | |
| | comp=N,69nm,0.8s | | | | | |
| J26L | | | IAML | | 05 44 40.1 | |
| | comp=E,87nm,0.9s | | | | | |
| **H21K** | **Melozitna Rive** | **5.12 224** | Pn | **Pn** | **05 43 05.6** | **+1.2** |
| H21K | | | IAML | | 05 44 46.6 | |
| | comp=N,99nm,2.0s | | | | | |
| H21K | | | IAML | | 05 44 51.1 | |
| | comp=E,90nm,2.0s | | | | | |
| **D19K** | **Kuna River** | **5.12 265** | | **Pn** | **05 43 06.1** | **+1.6** |
| D19K | | | IAML | | 05 46 14.4 | |
| | comp=E,109nm,1.0s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.13 198** | | **Pn** | **05 43 05.5** | **+1.0** |
| **MLY** | **Manley** | **5.21 212** | Pn | **Pn** | **05 43 06.9** | **+1.2** |
| MLY | | | IAML | | 05 44 45.4 | |
| | comp=N,71nm,1.1s | | | | | |
| **E19K** | **Redstone River** | **5.25 253** | | **Pn** | **05 43 07.8** | **+1.6** |
| **I30M** | **Mount Dempster** | **5.29 142** | Pn | **Pn** | **05 43 07.7** | **+1.0** |
| I30M | | | IAML | | 05 46 23.3 | |
| | comp=N,73nm,0.5s | | | | | |
| **WRH** | **Wood River Hil** | **5.33 199** | | **Pn** | **05 43 08.8** | **+1.5** |
| WRH | | | IAML | | 05 44 39.7 | |
| | comp=E,100nm,0.8s | | | | | |
| WRH | | | IAML | | 05 46 22.2 | |
| | comp=N,77nm,1.1s | | | | | |
| **NEA2** | **Nenana** | **5.34 203** | | **Pn** | **05 43 08.3** | **+0.9** |
| NEA2 | | | IAML | | 05 44 43.1 | |
| | comp=E,64nm,1.3s | | | | | |
| NEA2 | | | IAML | | 05 44 43.5 | |
| | comp=N,55nm,1.0s | | | | | |
| **C19K** | **Lookout Ridge** | **5.48 273** | | **Pn** | **05 43 11.2** | **+1.8** |
| **SCRK** | **Sand Creek** | **5.61 179** | Pn | **Pn** | **05 43 12.8** | **+1.6** |
| **K27K** | **Chicken** | **5.61 171** | | **Pn** | **05 43 13.0** | **+1.8** |
| **J29N** | **Klondike Camp** | **5.63 153** | | **Pn** | **05 43 13.2** | **+1.7** |
| **F19K** | **Shaleruckik Mo** | **5.76 248** | Pn | **Pn** | **05 43 14.4** | **+1.3** |
| **BWN** | **Browne** | **5.80 204** | Pn | **Pn** | **05 43 13.8** | **+0.1** |
| **DAWY** | **Dawson** | **5.83 159** | | **Pn** | **05 43 15.8** | **+1.7** |
| **J30M** | **Hart River** | **5.86 145** | Pn | **Pn** | **05 43 15.9** | **+1.2** |
| **DOT** | **Dot Lake** | **5.94 180** | | **Pn** | **05 43 17.4** | **+1.8** |
| **G19K** | **Purcell Mounta** | **5.96 241** | Pn | **Pn** | **05 43 16.6** | **+0.6** |
| **BPAW** | **Bear Paw Mtn.** | **6.10 209** | | **Pn** | **05 43 18.8** | **+0.9** |
| **MCK** | **McKinley** | **6.15 200** | | **Pn** | **05 43 20.2** | **+1.7** |
| **C18K** | **Utukok River** | **6.16 270** | | **Pn** | **05 43 19.8** | **+1.1** |
| **H19K** | **Roundabout Mou** | **6.20 235** | Pn | **Pn** | **05 43 20.2** | **+1.0** |
| **I20K** | **Naaghedeneel** | **6.23 225** | Pn | **Pn** | **05 43 19.2** | **-0.4** |
| **K29M** | **Barlow Dome** | **6.31 152** | Pn | **Pn** | **05 43 22.3** | **+1.4** |
| **E18K** | **Tukpahlearik C** | **6.41 258** | | **Pn** | **05 43 23.4** | **+1.3** |
| **RND** | **Reindeer** | **6.45 199** | | **Pn** | **05 43 24.4** | **+1.6** |
| **F18K** | **Selawik** | **6.51 250** | | **Pn** | **05 43 24.6** | **+1.2** |
| **L26K** | **Log Cabin Wild** | **6.57 177** | | **Pn** | **05 43 26.0** | **+1.7** |
| **BCAR** | **Beaver Creek A** | **6.59 171** | Pn | **Pn** | **05 43 25.8** | **+1.2** |
| **L27K** | **Beaver Creek,** | **6.59 171** | Pn | **Pn** | **05 43 26.3** | **+1.7** |
| **G18K** | **Tagagawik** | **6.61 243** | Pn | **Pn** | **05 43 26.9** | **+2.0** |
| **DHY** | **Denali Highway** | **6.64 193** | Pn | **Pn** | **05 43 27.8** | **+2.4** |
| **PAX** | **Paxson** | **6.64 185** | | **Pn** | **05 43 27.2** | **+1.9** |
| **J20K** | **Nowinta River** | **6.67 221** | Pn | **Pn** | **05 43 26.8** | **+1.1** |
| **A36M** | **Sachs Harbour** | **6.69 60** | Pn | **Pn** | **05 43 26.5** | **+0.6** |
| **L29M** | **L29M** | **6.91 157** | Pn | **Pn** | **05 43 30.3** | **+1.3** |
| **RDOG** | **Red Dog Mine** | **6.95 266** | | **Pn** | **05 43 30.3** | **+0.8** |
| **WAT1** | **Susitna Watana** | **6.98 197** | | **Pn** | **05 43 32.3** | **+2.3** |
| **WAT7** | **Susitna Watana** | **7.01 198** | | **Pn** | **05 43 32.9** | **+2.5** |
| **H18K** | **Honhosa River** | **7.03 238** | Pn | **Pn** | **05 43 31.7** | **+1.1** |
| **C36M** | **Paulatuk** | **7.07 82** | Pn | **Pn** | **05 43 31.4** | **+0.3** |
| **F17K** | **Baldwin Pennin** | **7.13 252** | Pn | **Pn** | **05 43 32.1** | **+0.3** |
| **J19K** | **Poorman** | **7.18 224** | | **Pn** | **05 43 33.2** | **+0.6** |
| **M27K** | **Edge Creek, AK** | **7.29 172** | Pn | **Pn** | **05 43 33.5** | **-0.8** |
| **K20K** | **Telida** | **7.37 217** | Pn | **Pn** | **05 43 36.2** | **+0.9** |
| **G17K** | **Kiwalik Mounta** | **7.50 245** | | **Pn** | **05 43 37.9** | **+0.9** |
| **M29M** | **Somme Creek** | **7.51 159** | Pn | **Pn** | **05 43 38.8** | **+1.5** |
| **M24K** | **Tolsona, Glenn** | **7.53 187** | Pn | **Pn** | **05 43 36.7** | **-0.8** |
| **H17K** | **Granite Mounta** | **7.65 240** | Pn | **Pn** | **05 43 39.9** | **+0.8** |
| **C16K** | **Lisburne Hills** | **7.73 270** | Pn | **Pn** | **05 43 41.0** | **+0.8** |
| **YUK2** | **White River** | **7.92 168** | | **Pn** | **05 43 45.3** | **+2.4** |
| **SML** | **Sawmill** | **7.97 194** | Pn | **Pn** | **05 43 42.0** | **-1.5** |
| **G16K** | **Koyuk River** | **8.12 248** | Pn | **Pn** | **05 43 46.4** | **+1.0** |
| **L20K** | **Farewell, AK** | **8.12 214** | | **Pn** | **05 43 46.4** | **+0.8** |
| **GLB** | **Gilahina Butte** | **8.15 179** | Pn | **Pn** | **05 43 47.0** | **+1.0** |
| **SKT** | **Skwentna** | **8.18 205** | Pn | **Pn** | **05 43 46.9** | **+0.5** |
| **M31M** | **Drury Creek, Y** | **8.38 147** | | **Pn** | **05 43 50.0** | **+0.8** |
| **M20K** | **Styx River** | **8.53 210** | | **Pn** | **05 43 53.4** | **+2.1** |
| **J17K** | **VABM Dome** | **8.57 231** | Pn | **Pn** | **05 43 52.6** | **+1.0** |
| **FARO** | **Faro, Yukon** | **8.57 144** | | **Pn** | **05 43 52.3** | **+0.6** |
| **SUA** | **Susitna One** | **8.57 202** | Pn | **Pn** | **05 43 50.4** | **-1.4** |
| **L19K** | **White Mountain** | **8.59 216** | Pn | **Pn** | **05 43 53.3** | **+1.4** |
| **N30M** | **Aishikik Lake** | **8.64 157** | Pn | **Pn** | **05 43 53.4** | **+0.7** |
| **I17K** | **Unalakleet** | **8.65 237** | Pn | **Pn** | **05 43 53.9** | **+1.2** |
| **F15K** | **North Star Dit** | **8.69 253** | Pn | **Pn** | **05 43 53.5** | **+0.2** |
| **M19K** | **Big River Lodg** | **8.75 214** | Pn | **Pn** | **05 43 55.6** | **+1.5** |
| **N31M** | **Braeburn, Yuko** | **8.81 153** | Pn | **Pn** | **05 43 57.2** | **+2.2** |
| **CRQM** | **Cirque** | **8.85 177** | Pn | **Pn** | **05 44 00.1** | **+4.4** |
| **TGL** | **Tana Glacier** | **8.86 176** | Pn | **Pn** | **05 44 00.1** | **+4.4** |
| **LOGN** | **Logan Glacier** | **8.87 170** | Pn | **Pn** | **05 43 59.8** | **+3.9** |
| **GRNC** | **Granite Creek** | **8.92 172** | Pn | **Pn** | **05 44 00.9** | **+4.2** |
| **ISLE** | **Juniper Island** | **9.03 174** | Pn | **Pn** | **05 44 01.6** | **+3.5** |
| **J16K** | **Kanuti River** | **9.08 234** | Pn | **Pn** | **05 44 01.3** | **+2.7** |
| **WAX** | **Waxell Ridge** | **9.16 176** | Pn | **Pn** | **05 44 00.1** | **+0.3** |
| **O30N** | **Mendenhall** | **9.44 155** | Pn | **Pn** | **05 44 04.5** | **+0.8** |
| **WHY** | **Whitehorse** | **9.73 152** | Pn | **Pn** | **05 44 05.8** | **-1.9** |
| **M17K** | **Holitna River** | **9.84 220** | Pn | **Pn** | **05 44 10.1** | **+1.0** |
| **L16K** | **Owhat River** | **10.06 226** | Pn | **Pn** | **05 44 13.1** | **+1.0** |
| **P29M** | **Windy Craggy** | **10.33 162** | Pn | **Pn** | **05 44 14.9** | **-1.0** |
| **WRGLY** | **Wrigley** | **10.40 118** | Pn | **Pn** | **05 44 16.8** | **+0.1** |
| **P33M** | **Teslin, Yukon** | **10.52 147** | Pn | **Pn** | **05 44 15.7** | **-2.7** |
| **K13K** | **Kusilvak Mount** | **11.31 238** | Pn | **Pn** | **05 44 29.0** | **-0.2** |
| **R33M** | **Jennings River** | **11.64 145** | Pn | Pn | 05 44 29.7 | -4.1 |
| **Q32M** | **Nakina River** | **11.79 148** | Pn | **Pn** | **05 44 34.1** | **-1.9** |
| **ACHA** | **Angle Creek He** | **12.37 209** | Pn | Pn | 05 44 38.5 | -5.2 |
| **KDAK** | **Kodiak Island** | **12.38 201** | Pn | Pn | 05 44 39.8 | -3.9 |
| **DLBC** | **Dease Lake** | **12.71 144** | Pn | **Pn** | **05 44 48.0** | **-0.4** |
| | comp=N,0.4nm,0.3s,baz=335,slow=2.6,SNR=4.7 | | | | | |
| DLBC | | | LR | LR | 05 50 02.8 | |
| | comp=N,114nm,19.2s,baz=273,slow=39 | | | | | |
| | comp=N,2.2nm,0.8s | | | | | |
| **S34M** | **Telegraph Cree** | **12.99 148** | Pn | Pn | 05 44 47.6 | -4.4 |
| **YKA** | **Yellowknife Ar** | **13.80 106** | Pn | **Pn** | **05 44 59.9** | **-3.3** |
| **YKA** | **Yellowknife Ar** | **13.80 106** | Pn | **Pn** | **05 44 59.2** | **-3.9** |
| | comp=N,0.4nm,0.3s,baz=314,slow=14,SNR=8.9 | | | | | |
| | comp=N,1.1nm,0.6s | | | | | |
| **RES** | **Resolute Bay** | **15.53 49** | Pn | **Pn** | **05 45 25.4** | **-0.9** |
| **BBB** | **Bella Bella** | **18.98 148** | LR | LR | 05 53 16.7 | |
| | comp=N,36nm,20.5s,baz=264,slow=36 | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.05 147** | LR | LR | 06 00 28.2 | |
| | comp=N,41nm,18.4s,baz=15,slow=37 | | | | | |
| **PDAR** | **Pinedale Array** | **32.18 128** | P | **P** | **05 48 18.9** | **+3.3** |
| | comp=N,0.6nm,0.7s,baz=352,slow=4.6,SNR=6.7 | | | | | |
| PDAR | | | LR | LR | 06 02 29.2 | |
| | comp=N,27nm,19.5s,baz=331,slow=38 | | | | | |
| | comp=N,0.6nm,0.7s | | | | | |
| **NVAR** | **Mina Array Bea** | **34.12 142** | P | P | 05 48 37.8 | +5.1 |
| | comp=N,0.9nm,0.8s,baz=333,slow=7.9,SNR=9.5 | | | | | |
| NVAR | | | LR | LR | 06 03 22.2 | |
| | comp=N,37nm,18.6s,baz=292,slow=38 | | | | | |
| | comp=N,0.9nm,0.8s | | | | | |
| **NV11** | **Mina Array Sit** | **34.15 142** | P | **P** | **05 48 32.5** | **-0.3** |
| NV11 | | | IAmb | IAmb | 05 48 55.6 | |
| | comp=Z,3.3nm,1.4s | | | | | |
| **OK051** | **E0350 and S346** | **41.72 117** | P | **P** | **05 49 34.6** | **-1.9** |
| **AMTX** | **Amarillo** | **41.75 124** | P | **P** | **05 49 33.7** | **-3.2** |
| AMTX | | | IAmb | IAmb | 05 49 34.2 | |
| | comp=Z,8.6nm,1.5s | | | | | |
| **KLR** | **Kul'dur** | **43.05 287** | P | **P** | **05 49 47.9** | **+0.7** |
| | comp=Z,0.7nm,0.5s,baz=352,slow=14,SNR=2.4 | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | |
| **TXAR** | **Lajitas Array** | **46.40 128** | P | **P** | **05 50 12.3** | **-1.9** |
| **TXAR** | **Lajitas Array** | **46.40 128** | P | **P** | **05 50 17.7** | **+3.5** |
| | comp=Z,0.4nm,0.7s,baz=316,slow=3.4,SNR=7.4 | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.35 284** | P | **P** | **05 50 23.8** | **+2.5** |
| | comp=Z,1.7nm,0.8s,baz=32,slow=8.5,SNR=6.3 | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.13 329** | P | **P** | **05 51 28.0** | **+1.2** |
| | comp=Z,1.5nm,0.9s,baz=21,slow=7.0,SNR=5.5 | | | | | |
| KURBB | | | LR | LR | 06 18 53.3 | |
| | comp=Z,11nm,19.7s,baz=174,slow=40 | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | |
| **MKAR** | **Makanchi Array** | **59.07 325** | P | **P** | **05 51 48.2** | **+0.5** |
| **MKAR** | **Makanchi Array** | **59.07 325** | P | **P** | **05 51 49.8** | **+2.1** |
| | comp=Z,0.4nm,0.7s,baz=43,slow=7.6,SNR=4.1 | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | |
| **ABKAR** | **Akbulak array** | **60.19 342** | P | **P** | **05 51 52.3** | **-2.9** |

*NEIC* ***13*** *05:42:37.8±2.5, 69°.42N±0°.05×145°.3W±0°.1, h10km±2km, Error ellipse: s-maj=8.5km s-min=6.9km az=7.0*

**AEIC 13 05:42:38.8±2.8, 69°.56N±0°.05×145°.18W±0°.09, h21km±7km, ML3.2, ML3.8/60(NEIC), Error ellipse: s-maj=7.3km s-min=4.5km az=170.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.37** | **15** | | **Pb** | 05 42 46.6 | +0.2 |
| C26K | | | | Sg | Sb | 05 42 51.8 | +0.1 |
| **D25K** | **Kavik River** | **0.49** | **241** | | **Pb** | 05 42 48.4 | -0.1 |
| D25K | | | | Sg | Sb | 05 42 55.6 | +0.4 |
| **C27K** | **Jago River** | **0.52** | **82** | | **Pb** | 05 42 49.7 | +0.5 |
| C27K | | | | | Sb | 05 42 56.8 | +0.5 |
| **C24K** | **Franklin Bluff** | **1.24** | **279** | | **Pb** | 05 43 01.6 | +0.2 |
| C24K | | | | | Sb | 05 43 18.7 | +1.8 |
| C24K | | | | IAML | | 05 43 21.5 | |
| | comp=E,952nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.36** | **254** | | **Pb** | 05 43 03.4 | 0.0 |
| D24K | | | | Sn | Sn | 05 43 17.6 | -2.2 |
| D24K | | | | IAML | | 05 43 27.2 | |
| | comp=E,884nm,0.4s | | | | | | |
| D24K | | | | IAML | | 05 43 27.9 | |
| | comp=N,810nm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.53** | **100** | | Pn | 05 43 05.2 | +0.4 |
| **E27K** | **Coleen River** | **1.90** | **135** | Pn | Pn | 05 43 08.1 | -1.8 |
| **F25K** | **Christian Rive** | **1.99** | **185** | Pn | Pn | 05 43 10.3 | -0.9 |
| **D23K** | **Nanushuk River** | **2.05** | **256** | Pn | Pn | 05 43 11.2 | -0.7 |
| **D22K** | **Ayikyak River** | **2.76** | **259** | Pn | Pn | 05 43 19.5 | -2.2 |
| D22K | | | | | IAML | 05 43 48.3 | |
| | comp=E,286nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.94** | **289** | Pn | Pn | 05 43 22.2 | -2.0 |
| B22K | | | | | IAML | 05 43 44.3 | |
| | comp=N,539nm,0.8s | | | | | | |
| B22K | | | | | IAML | 05 43 45.6 | |
| | comp=E,336nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.00** | **198** | Pn | Pn | 05 43 24.8 | -0.3 |
| G24K | | | | | IAML | 05 43 46.7 | |
| | comp=E,156nm,0.8s | | | | | | |
| G24K | | | | | IAML | 05 43 54.5 | |
| | comp=N,187nm,1.0s | | | | | | |
| **FYU** | **Fort Yukon** | **3.01** | **180** | Pn | Pn | 05 43 21.4 | -3.8 |
| FYU | | | | | IAML | 05 43 50.6 | |
| | comp=N,245nm,0.7s | | | | | | |
| FYU | | | | | IAML | 05 44 07.2 | |
| | comp=E,193nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.31** | **275** | Pn | Pn | 05 43 26.9 | -2.3 |
| B21K | | | | | IAML | 05 44 05.3 | |
| | comp=E,335nm,1.0s | | | | | | |
| **G23K** | **Bananza Creek** | **3.39** | **215** | Pn | Pn | 05 43 27.8 | -2.6 |
| G23K | | | | | IAML | 05 43 55.5 | |
| | comp=E,220nm,1.0s | | | | | | |
| G23K | | | | | IAML | 05 45 37.6 | |
| | comp=N,122nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.07** | **182** | Pn | Pn | 05 43 38.6 | -1.2 |
| **B20K** | **Meade River** | **4.18** | **282** | Pn | Pn | 05 43 38.8 | -2.4 |
| B20K | | | | | IAML | 05 44 42.6 | |
| | comp=N,176nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.35** | **169** | Pn | Pn | 05 43 41.9 | -1.6 |
| **INK** | **Inuvik** | **4.39** | **101** | Pn | Pn | 05 43 41.8 | -2.2 |
| INK | | | | | IAML | 05 46 19.9 | |
| | comp=N,143nm,0.9s | | | | | | |
| INK | | | | | IAML | 05 46 20.0 | |
| | comp=E,78nm,0.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.55** | **192** | Pn | Pn | 05 43 43.5 | -2.8 |
| **F31M** | **Tsiigehtchic** | **4.71** | **111** | Pn | Pn | 05 43 47.2 | -1.3 |
| **I23K** | **Minto, Yukon-K** | **4.72** | **202** | Pn | Pn | 05 43 47.8 | -0.7 |
| **MDM** | **Murphy Dome** | **4.78** | **196** | Pn | Pn | 05 43 46.4 | -3.0 |
| **IL31** | | **4.86** | **189** | Pn | Pn | 05 43 49.3 | -1.1 |
| **ILAR** | **Eielson Array** | **4.86** | **189** | Pn | Pn | 05 43 50.2 | -0.4 |
| **J25K** | **Salcha River,** | **4.97** | **181** | Pn | Pn | 05 43 49.0 | -3.2 |
| J25K | | | | | IAML | 05 44 36.0 | |
| | comp=E,102nm,1.0s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.98** | **145** | Pn | Pn | 05 43 50.8 | -1.3 |
| **MLY** | **Manley** | **5.04** | **208** | Pn | Pn | 05 43 51.4 | -1.6 |
| MLY | | | | | IAML | 05 46 55.2 | |
| | comp=N,74nm,1.1s | | | | | | |
| MLY | | | | | IAML | 05 47 00.6 | |
| | comp=E,54nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.12** | **272** | Pn | Pn | 05 43 54.3 | +0.2 |
| C19K | | | | | IAML | 05 46 23.7 | |
| | comp=E,82nm,0.5s | | | | | | |
| C19K | | | | | IAML | 05 46 23.9 | |
| | comp=N,83nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.12** | **172** | Pn | Pn | 05 43 53.0 | -1.3 |
| **HDA** | **Harding Lake** | **5.22** | **188** | Pn | Pn | 05 43 53.9 | -1.6 |
| **WRH** | **Wood River Hil** | **5.24** | **194** | Pn | Pn | 05 43 54.8 | -0.9 |
| **F19K** | **Shaleruckik Mo** | **5.43** | **246** | Pn | Pn | 05 43 58.8 | +0.5 |
| **SCRK** | **Sand Creek** | **5.63** | **175** | Pn | Pn | 05 43 60.0 | -1.3 |
| **BWN** | **Browne** | **5.67** | **199** | Pn | Pn | 05 44 00.1 | -1.6 |
| **BPAW** | **Bear Paw Mtn.** | **5.95** | **205** | Pn | Pn | 05 44 04.2 | -1.2 |
| **DAWY** | **Dawson** | **5.97** | **155** | Pn | Pn | 05 44 04.1 | -1.8 |
| **I20K** | **Naaghedeneel** | **6.00** | **221** | Pn | Pn | 05 44 04.7 | -1.4 |
| **M29M** | **Somme Creek** | **7.65** | **156** | Pn | Pn | 05 44 27.7 | -1.2 |
| **SML** | **Sawmill** | **7.90** | **191** | Pn | Pn | 05 44 29.8 | -2.4 |
| **MCARA** | **McCarthy VSAT** | **8.26** | **173** | Pn | Pn | 05 44 35.0 | -2.2 |
| **KNK** | **Knik Glacier** | **8.30** | **191** | Pn | Pn | 05 44 36.2 | -1.4 |
| **F15K** | **North Star Dit** | **8.35** | **252** | Pn | Pn | 05 44 36.9 | -1.4 |

*AEIC* ***13*** *05:43:56.2±2.6, 69°.52N±0°.05×144°.35W±0°.08, h8km±4km, ML3.9, mb4.3/65(NEIC), ML4.1/112(NEIC), Mwr4.1/42(NEIC), Error ellipse: s-maj=7.0km s-min=3.6km az=191.0*

*IDC* ***13*** *05:43:57.5±0.6, 69°.72N×144°.41W, h0km, mb4.1/15, mbtmp4.1/19, ML3.9/3, MS3.3/13, Error ellipse: s-maj=18.8km s-min=12.1km az=57.0*

*NEIC* ***13*** *05:43:58.0±2.1, 69°.65N±0°.05×144°.30W±0°.07, h10km±1km, Error ellipse: s-maj=8.6km s-min=4.3km az=8.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=1.38; $M_{\theta\theta}$=0.03; $M_{\phi\phi}$=1.35; $M_{r\theta}$=0.06; $M_{\theta\phi}$=-0.80; $M_{r\phi}$=-0.73; Fault plane solution: $M_0$=1.74000×$10^{15}$ NP1: $\phi_s$=345.44000°, $\delta$=57.90000°, $\lambda$=-77.06000°. NP2: $\phi_s$=142.06000°, $\delta$=34.35000°, $\lambda$=-109.65000°. Principal axes: T 1.8702, Plg12.0000°, Azm66.0000°; N -0.2984, Plg11.0000°, Azm158.0000°; P -1.5719, Plg74.0000°, Azm290.

comp=E,616nm,1.4s
**G24K Hadweenzic Riv 3.12 203** Pn **Pn** **05 44 47.7 +0.4**
G24K IAML 05 45 41.3
comp=E,545nm,1.3s
G24K IAML 05 45 45.2
comp=N,732nm,0.9s
**B22K Teshekpuk Lake 3.20 288** Pn **Pn** **05 44 48.4 +0.1**
B22K IAML 05 45 55.6
comp=E,564nm,1.1s
**G23K Bananza Creek 3.58 219** Pn **Pn** **05 44 53.5 -0.1**
G23K IAML 05 45 57.2
comp=N,363nm,1.8s
**B21K Ikpikpuk River 3.58 275** Pn **Pn** **05 44 53.1 -0.4**
B21K IAML 05 46 04.5
comp=E,409nm,1.2s
**G29M Pine Creek 3.58 136** Pn **Pn** **05 44 53.7 +0.1**
**A22K Sinclair Lake 3.86 297** **Pn** **05 44 57.8 +0.5**
**H24K Noodor Dome 4.00 201** Pn **Pn** **05 44 59.6 +0.3**
H24K IAML 05 46 11.8
comp=E,276nm,1.5s
H24K IAML 05 46 14.2
comp=N,199nm,1.0s
**G30M tAoh Zraii Nji 4.01 127** Pn **Pn** **05 44 58.0 -1.4**
G30M IAML 05 46 10.5
comp=N,365nm,1.1s
G30M IAML 05 46 21.7
comp=E,250nm,1.2s
**H29M Whitestone 4.08 143** Pn **Pn** **05 44 59.0 -1.4**
H29M IAML 05 46 09.2
comp=N,324nm,0.8s
**PRP Porcupine Dome 4.11 187** Pn **Pn** **05 45 01.5 +0.5**
PRP IAML 05 45 55.8
comp=N,195nm,0.7s
PRP IAML 05 46 12.8
comp=E,178nm,0.9s
**F21K Alatna River 4.12 239** Pn **Pn** **05 45 00.3 -0.6**
F21K IAML 05 46 16.2
comp=N,298nm,2.1s
F21K IAML 05 46 17.5
comp=E,317nm,1.8s
**INK Inuvik 4.12 103** Pn **Pn** **05 44 58.8 -2.1**
**INK Inuvik 4.12 103** Pn **Pn** **05 45 04.2 +3.2**
comp=E,4.8nm,0.3s,baz=306,slow=8.7,SNR=1.4
INK Sn **Sn** **05 45 47.6 -1.5**
comp=E,6.4nm,0.3s,baz=252,slow=13,SNR=2.2
comp=E,19nm,0.5s
**H23K Yukon River 4.26 210** Pn **Pn** **05 45 03.3 +0.4**
**EPYK Eagle Plains 4.33 135** Pn **Pn** **05 45 04.5 +0.6**
**A21K Barrow 4.46 299** **Pn** **05 45 06.4 +0.8**
**F31M Tsiigehtchic 4.47 114** Pn **Pn** **05 45 04.5 -1.1**
F31M IAML 05 46 33.0
comp=N,249nm,1.4s
**I28M Miner Creek 4.50 156** Pn **Pn** **05 45 06.0 -0.2**
I28M IAML 05 45 59.6
comp=N,147nm,0.8s
I28M IAML 05 46 28.4
comp=E,177nm,1.0s
**G31M Satah River 4.62 121** Pn **Pn** **05 45 07.8 +0.1**
**POKR Poker Plat Res 4.64 196** Pn **Pn** **05 45 08.3 +0.1**
POKR IAML 05 46 06.7
comp=E,228nm,0.8s
POKR IAML 05 46 07.5
comp=N,136nm,0.7s
**I29M Ogilvie Camp, 4.85 148** Pn **Pn** **05 45 10.8 -0.1**
I29M IAML 05 46 44.3
comp=N,117nm,0.8s
**I23K Minto, Yukon-K 4.86 206** Pn **Pn** **05 45 11.4 +0.4**
I23K IAML 05 46 35.3
comp=N,174nm,1.1s
**MDM Murphy Dome 4.88 200** Pn **Pn** **05 45 11.6 +0.1**
MDM IAML 05 46 34.8
comp=N,123nm,1.1s
MDM IAML 05 46 41.4
comp=E,144nm,0.9s
**F20K Avaraart Lake 4.92 244** Pn **Pn** **05 45 12.1 +0.2**
F20K IAML 05 46 45.3
comp=E,121nm,1.2s
**COLA College 4.92 197** Pn **Pn** **05 45 12.3 +0.3**
**ILAR Eielson Array 4.94 193** Pn **Pn** **05 45 14.5 +2.3**
**ILAR Eielson Array 4.94 193** Pn **Pn** **05 45 13.0 +0.8**
comp=E,11nm,0.6s,baz=5.3,slow=12,SNR=1.9
ILAR Sn **Sn** **05 46 09.2 0.0**
comp=E,4.1nm,0.3s,baz=6.9,slow=23,SNR=7.4
ILAR LR LR 05 47 18.2
comp=E,155nm,21.5s,baz=26,slow=40
**EGAK Eagle 4.99 164** Pn **Pn** **05 45 13.5 +0.5**
EGAK IAML 05 46 47.3
comp=E,106nm,1.2s
EGAK IAML 05 47 05.0
comp=E,104nm,1.1s
**J25K Salcha River, 5.01 185** Pn **Pn** **05 45 13.4 +0.1**
**D19K Kuna River 5.05 264** **Pn** **05 45 14.9 +1.1**
D19K IAML 05 46 56.5
comp=E,110nm,1.6s
**H21K Melozitna Rive 5.09 223** Pn **Pn** **05 45 15.5 +1.2**
**J26L Joseph Creek 5.12 176** Pn **Pn** **05 45 15.9 +1.1**
**CCB Clear Creek Bu 5.14 197** Pn **Pn** **05 45 16.1 +1.2**
**E19K Redstone River 5.18 252** Pn **Pn** **05 45 17.9 +2.4**
E19K IAML 05 47 00.9
comp=E,144nm,1.0s
**MLY Manley 5.20 211** Pn **Pn** **05 45 16.0 +0.3**
MLY IAML 05 46 51.3
comp=E,107nm,1.7s
MLY IAML 05 46 55.9
comp=N,108nm,1.5s
**HDA Harding Lake 5.30 192** Pn **Pn** **05 45 19.1 +1.9**
HDA IAML 05 46 51.7
comp=N,109nm,0.8s
HDA IAML 05 46 57.4
comp=E,106nm,0.9s
**NEA2 Nenana 5.34 202** Pn **Pn** **05 45 18.4 +0.7**
**WRH Wood River Hil 5.34 198** Pn **Pn** **05 45 18.5 +0.8**
WRH IAML 05 46 54.3
comp=E,94nm,1.4s
WRH IAML 05 47 05.6
comp=N,102nm,1.1s
**I30M Mount Dempster 5.36 141** Pn **Pn** **05 45 18.5 +0.4**
I30M IAML 05 46 59.5
comp=N,78nm,0.9s
I30M IAML 05 47 02.8
comp=E,123nm,0.9s
**SCRK Sand Creek 5.64 178** Pn **Pn** **05 45 21.9 0.0**
**F19K Shaleruckik Mo 5.70 247** Pn **Pn** **05 45 23.6 +1.0**
**BWN Browne 5.80 203** Pn **Pn** **05 45 24.9 +0.9**
**DAWY Dawson 5.89 158** Pn **Pn** **05 45 26.2 +1.0**
**C18K Utukok River 6.08 269** Pn **Pn** **05 45 27.7 -0.2**
**BPAW Bear Paw Mtn. 6.09 208** Pn **Pn** **05 45 27.7 -0.4**
**H19K Roundabout Mou 6.15 234** Pn **Pn** **05 45 28.4 -0.5**
**I20K Naaghedeneel 6.20 224** Pn **Pn** **05 45 29.0 -0.5**
**E18K Tukpahleark C 6.34 258** Pn **Pn** **05 45 31.4 +0.1**
**K29M Barlow Dome 6.38 152** Pn **Pn** **05 45 31.8 -0.3**
**F18K Selawik 6.44 250** **Pn** **05 45 34.3 +1.5**
**RND Reindeer 6.46 198** Pn **Pn** **05 45 33.7 +0.5**
**G18K Tagagawik 6.56 242** Pn **Pn** **05 45 33.5 -0.9**
**L26K Log Cabin Wild 6.61 176** Pn **Pn** **05 45 34.9 -0.2**
**MENT Mentasta 6.69 177** Pn **Pn** **05 45 34.5 -1.7**
**A36M Sachs Harbour 6.74 60** Pn **Pn** **05 45 36.0 -0.9**
**RDOG Red Dog Mine 6.88 266** **Pn** **05 45 38.3 -0.5**
**L29M L29M 6.97 156** Pn **Pn** **05 45 39.7 -0.4**
**H18K Honhosa River 6.98 237** **Pn** **05 45 38.3 -1.9**
**F17K Baldwin Pennin 7.06 252** **Pn** **05 45 41.6 +0.3**
**C36M Paulatuk 7.14 82** Pn **Pn** **05 45 40.6 -1.7**
**J19K Poorman 7.15 224** Pn **Pn** **05 45 40.9 -1.6**
**M26K Nabesna, AK 7.24 175** Pn **Pn** **05 45 42.6 -1.2**
**M29M Somme Creek 7.57 159** Pn **Pn** **05 45 49.8 +1.5**
**H17K Granite Mounta 7.60 240** Pn **Pn** **05 45 47.9 -0.8**
**C16K Lisburne Hills 7.65 270** Pn **Pn** **05 45 50.2 +0.9**
**SCM Sheep Creek Mo 7.88 190** Pn **Pn** **05 45 51.8 -0.8**
**N25K Chitina, Valde 8.02 181** Pn **Pn** **05 45 54.6 +0.1**
**G16K Koyuk River 8.06 247** Pn **Pn** **05 45 53.4 -1.5**
**KLU Klutina 8.16 185** Pn **Pn** **05 45 56.0 -0.5**
**GLB Gilahina Butte 8.19 178** Pn **Pn** **05 45 58.1 +1.3**
**M22K Willow 8.21 199** Pn **Pn** **05 45 58.5 +1.5**
**MCARA McCarthy VSAT 8.26 175** Pn **Pn** **05 45 57.6 -0.2**
**PMR Palmer 8.27 196** Pn **Pn** **05 45 58.1 +0.4**
**KNK Knik Glacier 8.38 194** Pn **Pn** **05 45 58.9 -0.5**
**M31M Drury Creek, Y 8.46 146** Pn **Pn** **05 46 00.8 +0.3**
**M20K Styx River 8.52 209** Pn **Pn** **05 46 00.7 -0.7**
**L19K White Mountain 8.57 215** Pn **Pn** **05 46 01.9 -0.1**
**SUA Susitna One 8.57 201** Pn **Pn** **05 46 03.6 +1.5**
**F15K North Star Dit 8.62 253** Pn **Pn** **05 46 02.5 -0.1**
**N30M Aishikik Lake 8.70 156** Pn **Pn** **05 46 04.0 +0.1**
**M19K Big River Lodg 8.73 213** **Pn** **05 46 05.5 +1.3**
**CTGM Chitina Glacie 8.75 170** Pn **Pn** **05 46 04.8 +0.2**

**CRQM Cirque 8.89 176** **Pn** **05 46 06.4 -0.1**
**LOGN Logan Glacier 8.91 169** Pn **Pn** **05 46 07.2 +0.4**
**L18K Granite Mounta 8.93 220** Pn **Pn** **05 46 07.7 +0.9**
**GRNC Granite Creek 8.96 172** Pn **Pn** **05 46 08.0 +0.4**
**O29M Mount Kennedy 9.64 162** Pn **Pn** **05 46 17.9 +1.1**
**M17K Holitna River 9.82 220** Pn **Pn** **05 46 19.9 +0.9**
**L16K Owhat River 10.03 225** Pn **Pn** **05 46 22.3 +0.3**
**K15K Wolf Creek Mou 10.09 232** Pn **Pn** **05 46 22.4 -0.3**
**J14K Nanvaranak Lak 10.31 238** Pn **Pn** **05 46 25.8 +0.1**
**M16K Timber Creek 10.50 222** Pn **Pn** **05 46 30.2 +1.8**
**N17K Nushagak Hills 10.55 217** Pn **Pn** **05 46 30.5 +1.4**
**O16K Kokwok River B 11.59 217** Pn **Pn** **05 46 43.8 +0.5**
**S31K Pelican 12.20 159** Pn **Pn** **05 46 50.6 -0.9**
**KDAK Kodiak Island 12.38 201** Pn **Pn** **05 46 54.8 +0.7**
**KDAK Kodiak Island 12.38 201** LR LR 05 52 01.0
comp=E,215nm,18.7s,baz=42,slow=39
**DLBC Dease Lake 12.79 144** Pn **Pn** **05 47 00.6 +0.9**
**DLBC Dease Lake 12.79 144** Pn **Pn** **05 47 00.5 +0.7**
comp=E,0.3nm,0.3s,baz=353,slow=14,SNR=3.9
DLBC Lg Lg 05 50 33.0
comp=E,0.1nm,0.3s,baz=217,slow=7.3,SNR=3.5
comp=E,5.4nm,0.9s
**S34M Telegraph Cree 13.06 147** Pn **Pn** **05 47 03.3 0.0**
**YKA Yellowknife Ar 13.89 106** Pn Pn 05 47 09.4 -5.2
comp=E,0.8nm,0.3s,baz=314,slow=13,SNR=8.3
YKA Sn Sn 05 49 36.7 -12
comp=E,0.9nm,0.3s,baz=312,slow=23,SNR=5.8
YKA LR LR 05 52 52.9
comp=E,71nm,19.2s,baz=340,slow=38
comp=E,1.6nm,0.5s
**B08A Colville Reser 24.54 137** P **P** **05 49 19.0 +1.5**
**AMKA Amchitka 24.92 242** P **P** **05 49 23.1 +2.3**
**NEW Newport 25.17 134** P **P** **05 49 24.6 +1.4**
**LTY Liberty 25.26 140** P **P** **05 49 25.1 +1.1**
LTY IAmb IAmb 05 49 27.4
comp=Z,8.2nm,1.1s
**SHEM Shemya Is, Ala 25.43 250** LR LR 06 00 18.7
comp=Z,43nm,18.1s,baz=6.5,slow=38
**LON Longmire 25.49 142** P **P** **05 49 28.9 +2.8**
LON IAmb IAmb 05 49 29.8
comp=Z,4.6nm,0.8s
**MXC Moxie City 25.99 140** P **P** **05 49 32.6 +2.0**
MXC IAmb IAmb 05 49 52.1
comp=Z,11nm,1.5s
**F04A Amboy 26.14 144** P **P** **05 49 33.6 +1.7**
F04A IAmb IAmb 05 49 40.3
comp=Z,5.8nm,0.9s
**E09A Wood Farm, Sta 26.55 137** P **P** **05 49 37.8 +2.2**
**HOOD Mount Hood Mea 26.88 143** P **P** **05 49 41.3 +2.5**
**MSO Missoula 27.32 131** P **P** **05 49 44.3 +1.6**
**G08A Pilot Rock 27.51 139** P **P** **05 49 46.5 +2.0**
**BPMT Black Pine Rid 27.81 130** P **P** **05 49 50.0 +2.8**
**I07A Izee 28.53 141** P **P** **05 49 55.4 +1.8**
I07A IAmb IAmb 05 49 57.2
comp=Z,5.0nm,1.0s
**FRB Frobisher Bay 28.73 64** LR LR 06 02 27.0
comp=Z,111nm,20.4s,baz=356,slow=39
**ULM Lac du Bonnet 29.87 105** LR LR 06 02 29.7
comp=Z,43nm,18.9s,baz=94,slow=37
**IMW Indian Meadow 30.84 129** P **P** **05 50 14.6 +0.4**
**SFJD Kangerlussuaq 31.57 49** P **P** **05 50 20.0 0.0**
**SFJD Kangerlussuaq 31.57 49** LR LR 06 05 37.6
comp=Z,31nm,19.3s,baz=333,slow=41
**PD31 Pinedale Array 32.26 128** P **P** **05 50 26.8 +0.2**
PD31 IAmb IAmb 05 50 30.3
comp=Z,3.7nm,0.9s
**PDAR Pinedale Array 32.26 128** P **P** **05 50 27.9 +1.3**
**PDAR Pinedale Array 32.26 128** P **P** **05 50 28.1 +1.5**
comp=Z,1.9nm,0.8s,baz=6.0,slow=4.7,SNR=15
comp=Z,1.9nm,0.8s
**RSSD Black Hills 32.62 120** P **P** **05 50 30.1 +0.3**
RSSD IAmb IAmb 05 50 33.7
comp=Z,5.6nm,1.4s
**ELK Elko 32.69 137** P **P** **05 50 30.6 +0.2**
**HWUT Hardware Ranch 32.80 131** P **P** **05 50 33.0 +1.7**
HWUT IAmb IAmb 05 50 35.0
comp=Z,4.0nm,0.9s
**YAK Yakutsk 33.12 301** LR LR 06 07 49.6
comp=Z,35nm,19.1s,baz=316,slow=43
**DUG Dugway, Tooele 33.80 134** P **P** **05 50 39.3 -0.8**
DUG IAmb IAmb 05 50 44.6
comp=Z,4.5nm,0.8s
**WAKR Walker 33.88 144** P **P** **05 50 42.5 +1.7**
**RYN Ryan 33.96 142** P **P** **05 50 43.0 +1.6**
**NVAR Mina Array Bea 34.20 142** P **P** **05 50 44.9 +1.4**
**NVAR Mina Array Bea 34.20 142** P **P** **05 50 46.0 +2.4**
comp=Z,2.2nm,0.9s,baz=328,slow=7.4,SNR=14
comp=Z,2.2nm,0.9s
**NLU North Lily Min 34.22 133** P **P** **05 50 45.7 +2.0**
NLU IAmb IAmb 05 50 47.3
comp=Z,4.4nm,0.9s
**TPH Tonopah 34.77 141** P **P** **05 50 49.8 +1.3**
**OMMB Old Mammoth Mi 34.83 143** P **P** **05 50 49.2 +0.1**
OMMB IAmb IAmb 05 50 54.8
comp=Z,5.0nm,1.5s
**R11B Troy Canyon, C 34.88 139** P **P** **05 50 50.4 +1.0**
**P18A Preston Nutter 35.00 131** P **P** **05 50 52.1 +1.5**
P18A IAmb IAmb 05 50 55.5
comp=Z,5.0nm,0.8s
**P17A Butcher Ranch, 35.02 132** P **P** **05 50 52.0 +1.4**
P17A IAmb IAmb 05 50 54.8
comp=Z,5.0nm,1.0s
**PSUT Pine Spring 35.12 136** P **P** **05 50 52.6 +1.1**
PSUT IAmb IAmb 05 50 55.5
comp=Z,4.9nm,1.0s
**SRU San Rafael Swe 35.41 132** P **P** **05 50 53.6 -0.4**
SRU IAmb IAmb 05 51 03.5
comp=Z,3.0nm,0.8s
**BBGB Big Mountain B 35.42 147** P **P** **05 50 53.3 -0.7**
**MSU Marysvale 35.55 134** P **P** **05 50 54.4 -0.9**
**TPNV Topopah Spring 36.07 140** P **P** **05 51 01.3 +1.7**
TPNV IAmb IAmb 05 51 03.3
comp=Z,6.0nm,1.0s
**G40A Rib Lake 36.10 104** P **P** **05 50 59.9 +0.2**
G40A IAmb IAmb 05 51 39.1
comp=Z,5.0nm,1.4s
**ISCO Idaho Springs 36.12 125** P **P** **05 51 00.6 +0.3**
ISCO IAmb IAmb 05 51 18.9
comp=Z,5.0nm,0.9s
**SCHQ Schefferville 36.14 73** P **P** **05 50 59.4 -0.5**
comp=Z,4.4nm,0.8s,baz=332,slow=13,SNR=2.9
SCHQ LR LR 06 06 11.2
comp=Z,55nm,18.8s,baz=334,slow=37
comp=Z,4.4nm,0.8s
**LCMT Little Creek M 36.71 136** P **P** **05 51 05.3 +0.2**
**KNB Kanab 36.81 136** P **P** **05 51 05.3 -0.7**
**Q24A Divide 37.03 125** P **P** **05 51 06.8 -1.2**
Q24A IAmb IAmb 05 51 46.5
comp=Z,7.2nm,0.9s
**NRS Narsarsuaq 37.58 52** P **P** **05 51 10.4 -1.6**
**I42A Draeger Farm, 37.75 103** P **P** **05 51 13.6 0.0**
I42A IAmb IAmb 05 51 25.3
comp=Z,5.8nm,1.3s
**W18A Petrified Fore 39.39 133** IAmb IAmb 05 51 32.6
comp=Z,12nm,1.1s
**ANMO Albuquerque 40.42 129** P **P** **05 51 38.3 +2.0**
**MGMO Mountain Grove 42.67 112** IAmb IAmb 05 51 57.3
comp=Z,5.4nm,0.9s
**T42A Van Buren 43.17 110** IAmb IAmb 05 52 00.2
comp=Z,11nm,1.4s
**L56A Greenwood 43.23 93** P **P** **05 51 58.8 -0.2**
L56A IAmb IAmb 05 52 01.1
comp=Z,6.6nm,0.8s
**H62A Milan 43.34 86** P **P** **05 52 00.6 +0.8**
H62A IAmb IAmb 05 52 13.3
comp=Z,10nm,1.3s
**PBMO Poplar Bluff 43.62 110** IAmb IAmb 05 52 03.7
comp=Z,3.6nm,0.8s
**BINY Binghamton 43.73 92** P **P** **05 52 02.9 -0.1**
**T47A Sharon Grove 44.53 106** IAmb IAmb 05 52 11.1
comp=Z,4.1nm,0.7s
**MIAR Mount Ida 44.64 114** IAmb IAmb 05 52 12.4
comp=Z,3.4nm,0.8s
**VHRN Van Horn 44.75 129** P **P** **05 52 12.5 +1.1**
**WVT Waverly 45.07 107** P **P** **05 52 14.2 +0.4**
**ALPN Alpine 45.51 128** P **P** **05 52 18.1 +0.6**
**WLAR White Oak Lake 45.57 114** P **P** **05 52 17.0 -0.8**
**CLTN Cedars of Leba 45.61 106** P **P** **05 52 18.0 0.0**
**TX31 Lajitas Ar. Si 46.48 128** P **P** **05 52 24.6 -0.5**
TX31 IAmb IAmb 05 52 39.0
comp=Z,3.9nm,1.4s
**TXAR Lajitas Array 46.48 128** P **P** **05 52 26.3 +1.2**
**TXAR Lajitas Array 46.48 128** P **P** **05 52 26.2 +1.1**
comp=Z,0.7nm,0.7s,baz=346,slow=5.2,SNR=9.7
comp=Z,0.7nm,0.7s

**JCT Junction City 46.50 123** P **P** **05 52 23.0 -2.1**
JCT IAmb IAmb 05 52 27.3
comp=E,4.0nm,0.8s
**SWET Sewanee 46.54 106** P **P** **05 52 25.9 +0.5**
**TKL Tuckaleechee C 46.87 104** LR LR 06 12 39.5
comp=Z,43nm,19.9s,baz=344,slow=37
**FINES FINESS Array B 49.08 6** P **P** **05 52 44.4 -0.3**
comp=Z,1.5nm,0.6s,baz=2.9,slow=8.2,SNR=9.5
comp=Z,1.5nm,0.6s
**HFS Hagfors 49.62 14** P **P** **05 52 49.0 +0.1**
comp=Z,2.7nm,0.8s,baz=24,slow=4.0,SNR=5.0
comp=Z,2.7nm,0.8s
**KNHH Kane Nui o Ham 50.64 193** P **P** **05 52 57.9 +0.7**
**MJAR Matsushiro Arr 51.92 273** P **P** **05 53 06.7 +0.2**
comp=Z,1.8nm,1.1s,baz=0.1,slow=8.1,SNR=4.5
comp=Z,1.8nm,1.1s
**SONM Songino Array 52.11 306** P **P** **05 53 08.7 +0.7**
comp=Z,0.5nm,0.4s,baz=19,slow=9.3,SNR=2.2
comp=Z,0.5nm,0.4s
**EKA Eskdalemuir Ar 52.25 27** P **P** **05 53 08.6 -0.1**
comp=Z,4.2nm,0.9s,baz=331,slow=5.9,SNR=7.5
comp=Z,4.2nm,0.9s
**KURK Kurchatov 55.96 328** P **P** **05 53 36.3 +0.5**
**KURBB Kurchatov Arra 56.06 328** P **P** **05 53 37.0 +0.4**
comp=Z,2.6nm,0.9s,baz=12,slow=7.3,SNR=12
comp=Z,2.6nm,0.9s
**HHC Hu-ho-hao-te 56.94 299** *e*P **P** **05 53 44.0 +0.9**
HHC pmax pmax
comp=Z,13nm,0.5s
HHC pmax pmax
comp=Z,120nm,4.5s
**MKAR Makanchi Array 59.00 324** P **P** **05 53 57.0 -0.4**
**MKAR Makanchi Array 59.00 324** P **P** **05 53 57.3 0.0**
comp=Z,0.8nm,0.7s,baz=44,slow=7.2,SNR=7.3
comp=Z,0.8nm,0.7s
**MAKZ Makanchi 59.05 325** P **P** **05 53 56.4 -1.3**
MAKZ IAmb IAmb 05 53 58.9
comp=Z,3.6nm,1.0s
**AKASG Malin Array Be 59.93 5** P **P** **05 54 03.9 +0.2**
comp=Z,2.3nm,0.5s,baz=358,slow=7.1,SNR=6.9
comp=Z,2.3nm,0.5s
**ABKAR Akbulak array 60.13 342** P **P** **05 54 05.2 +0.2**
**KBZ Khabaz 66.87 354** P **P** **05 54 50.5 +0.9**
comp=Z,1.2nm,0.5s,baz=45,slow=4.3,SNR=3.0
comp=Z,1.2nm,0.5s
**BRTR Keskin Array B 70.99 2** P **P** **05 55 16.9 +1.3**
comp=Z,1.0nm,0.9s,baz=341,slow=2.6,SNR=3.8
comp=Z,1.0nm,0.9s
**PZH PanZhiHua 73.24 301** P **P** **05 55 30.4 +1.3**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,250nm,6.3s
**MDT Midelt 73.77 34** LR LR 06 30 06.8
comp=Z,50nm,18.7s,baz=158,slow=38
**CMAR Chiang Mai Arr 81.65 301** P **P** **05 56 16.4 +0.3**
comp=Z,0.6nm,0.3s,baz=3.2,slow=8.6,SNR=5.2
comp=Z,0.6nm,0.3s
**MDP Montagnes des 85.87 87** LR LR 06 32 50.6
comp=Z,25nm,20.7s,baz=140,slow=34
**DBIC Dimbokro 99.03 41** LR LR 06 42 15.2
comp=Z,36nm,18.8s,baz=83,slow=35
**VNDA Vanda 150.33 201** PKPbc **PKiKP** **06 03 48.0 0.0**
comp=Z,0.5nm,0.8s,baz=285,slow=2.5,SNR=4.0

*NEIC* ***13*** *05:57:42.4±2.1, 69°.43N±0°.04×144°.23W±0°.05, h10km±2km, Error ellipse: s-maj=6.6km s-min=3.2km az=8.0*
**AEIC 13 05:57:42.0±2.5, 69°.46N±0°.04×144°.2W±0°.1, h3km±7km, ML2.5, ML2.7**/82(NEIC), **Error ellipse: s-maj=6.7km s-min=5.0km az=70.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **45** | Pg | Pg | 05 57 47.0 | +0.4 |
| C27K | | | | Sg | Sg | 05 57 50.2 | +0.5 |
| **C26K** | **Camden Bay** | **0.53** | **332** | | Pg | 05 57 53.0 | +0.8 |
| C26K | | | | | Sg | 05 57 59.1 | +0.1 |
| **D25K** | **Kavik River** | **0.79** | **261** | | Pg | 05 57 57.0 | -0.1 |
| D25K | | | | | Sb | 05 58 08.4 | -1.1 |
| **D27M** | **Malcolm River** | **1.16** | **99** | | Pg | 05 58 04.1 | -0.2 |
| D27M | | | | IAML | | 05 58 26.9 | |
| | comp=N,112nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.59** | **142** | | Pn | 05 58 11.0 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.60** | **282** | | Pn | 05 58 11.4 | +0.1 |
| C24K | | | | IAML | | 05 58 36.2 | |
| | comp=N,60nm,0.8s | | | | | | |
| C24K | | | | IAML | | 05 58 38.3 | |
| | comp=E,56nm,1.3s | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **262** | Pn | Pn | 05 58 11.6 | -0.7 |
| D24K | | | | IAML | | 05 58 39.9 | |
| | comp=N,72nm,0.5s | | | | | | |
| D24K | | | | IAML | | 05 58 40.9 | |
| | comp=E,59nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.88** | **115** | Pn | Pn | 05 58 14.5 | -0.5 |
| **F25K** | **Christian Rive** | **1.95** | **197** | | Pn | 05 58 16.0 | 0.0 |
| F25K | | | | IAML | | 05 58 49.2 | |
| | comp=E,58nm,0.8s | | | | | | |
| F25K | | | | IAML | | 05 58 49.3 | |
| | comp=N,67nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.04** | **184** | Pn | Pn | 05 58 18.0 | +0.7 |
| **E24K** | **Your Creek** | **2.09** | **230** | | Pn | 05 58 17.2 | -0.8 |
| **TOLK** | **Toolik Lake Re** | **2.10** | **250** | | Pn | 05 58 16.7 | -1.4 |
| **C23K** | **Itkillik River** | **2.28** | **283** | Pn | Pn | 05 58 18.9 | -1.6 |
| C23K | | | | IAML | | 05 59 46.8 | |
| | comp=E,44nm,0.4s | | | | | | |
| C23K | | | | IAML | | 05 59 48.2 | |
| | comp=N,50nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.37** | **261** | Pn | Pn | 05 58 20.0 | -1.8 |
| D23K | | | | IAML | | 05 59 52.5 | |
| | comp=E,24nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **217** | | Pn | 05 58 21.1 | -0.9 |
| F24K | | | | IAML | | 05 59 53.7 | |
| | comp=N,38nm,0.5s | | | | | | |
| F24K | | | | IAML | | 05 59 53.7 | |
| | comp=E,32nm,0.4s | | | | | | |
| **E23K** | **Chandalar** | **2.43** | **237** | | Pn | 05 58 21.6 | -1.1 |
| E23K | | | | IAML | | 05 59 55.1 | |
| | comp=E,32nm,0.6s | | | | | | |
| E23K | | | | IAML | | 05 59 56.0 | |
| | comp=N,26nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.52** | **112** | Pn | Pn | 05 58 22.6 | -1.1 |
| E29M | | | | IAML | | 05 59 04.5 | |
| | comp=N,22nm,0.6s | | | | | | |
| E29M | | | | IAML | | 06 00 01.2 | |
| | comp=E,27nm,0.4s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.52** | **176** | | Pb | 05 58 26.4 | -1.6 |
| **G27K** | **Doyon Strip** | **2.83** | **159** | Pn | Pn | 05 58 26.7 | -1.4 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **206** | Pn | Pn | 05 58 29.0 | -1.9 |
| **E22K** | **Anaktuvuk Pass** | **3.08** | **248** | Pn | Pn | 05 58 29.9 | -1.5 |
| E22K | | | | IAML | | 06 00 16.9 | |
| | comp=N,18nm,1.0s | | | | | | |
| **D22K** | **Ayikyak River** | **3.09** | **263** | Pn | Pn | 05 58 30.9 | -0.8 |
| **B22K** | **Teshekpuk Lake** | **3.31** | **290** | | Pn | 05 58 34.0 | -0.6 |
| B22K | | | | IAML | | 06 00 26.6 | |
| | comp=N,27nm,1.4s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.67** | **277** | Pn | Pn | 05 58 39.8 | +0.3 |
| **E21K** | **Killik River** | **3.68** | **258** | Pn | Pn | 05 58 38.4 | -1.4 |
| **H24K** | **Noodor Dome** | **3.90** | **203** | | Pn | 05 58 40.8 | -2.0 |
| H24K | | | | IAML | | 05 59 40.8 | |
| | comp=N,9.3nm,3.5s | | | | | | |
| H24K | | | | IAML | | 06 01 00.5 | |
| | comp=E,11nm,3.3s | | | | | | |
| **H29M** | **Whitestone** | **3.93** | **143** | | Pn | 05 58 42.1 | -1.1 |
| **PRP** | **Porcupine Dome** | **3.99** | **188** | Pn | Pn | 05 58 42.7 | -1.5 |
| **I27K** | **Kandik River** | **4.00** | **164** | | Pn | 05 58 46.8 | +2.6 |
| **F21K** | **Alatna River** | **4.11** | **241** | Pn | Pn | 05 58 45.0 | -0.7 |
| F21K | | | | IAML | | 06 00 50.1 | |
| | comp=E,13nm,0.7s | | | | | | |
| F21K | | | | IAML | | 06 00 55.0 | |
| | comp=N,13nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.18** | **212** | Pn | Pn | 05 58 45.4 | -1.3 |
| **EPYK** | **Eagle Plains** | **4.19** | **134** | Pn | Pn | 05 58 46.0 | -0.8 |
| **I26K** | **Coal Creek Min** | **4.19** | **174** | Pn | Pn | 05 58 48.6 | +1.8 |
| **I28M** | **Miner Creek** | **4.35** | **156** | | Pn | 05 58 51.1 | +2.1 |
| **G31M** | **Satah River** | **4.49** | **120** | | Pn | 05 58 51.2 | +0.3 |
| **I29M** | **Ogilvie Camp,** | **4.70** | **148** | Pn | Pn | 05 58 55.8 | +2.1 |
| **MDM** | **Murphy Dome** | **4.79** | **201** | Pn | Pn | 05 58 54.4 | -0.6 |
| MDM | | | | IAML | | 06 01 12.5 | |
| | comp=E,8.4nm,2.3s | | | | | | |
| **IL31** | | **4.83** | **194** | Pn | Pn | 05 58 52.5 | -2.9 |
| **ILAR** | **Eielson Array** | **4.83** | **194** | Pn | Pn | 05 58 54.0 | -1.5 |
| **EGAK** | **Eagle** | **4.85** | **164** | Pn | Pn | 05 58 52.9 | -2.9 |
| **F20K** | **Avaraart Lake** | **4.92** | **246** | Pn | Pn | 05 58 58.4 | +1.6 |
| F20K | | | | IAML | | 05 59 48.8 | |
| | comp=E,8.1nm,3.0s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J26L** | **Joseph Creek** | **4.99 177** | Pn | Pn | 05 58 58.5 | +0.7 |
| J26L | | | IAML | | 05 59 50.7 | |
| | comp=N,7.3nm,4.9s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04 198** | Pn | Pn | 05 59 00.2 | +1.9 |
| **H21K** | **Melozitna Rive** | **5.04 225** | Pn | Pn | 05 58 56.3 | -2.2 |
| **D19K** | **Kuna River** | **5.11 266** | Pn | Pn | 05 58 57.1 | -2.3 |
| D19K | | | IAML | | 06 00 07.4 | |
| | comp=E,7.0nm,3.3s | | | | | |
| **E19K** | **Redstone River** | **5.21 253** | Pn | Pn | 05 58 58.5 | -2.3 |
| **SCRK** | **Sand Creek** | **5.51 179** | Pn | Pn | 05 59 04.4 | -0.6 |
| **F19K** | **Shaleruckik Mo** | **5.71 249** | Pn | Pn | 05 59 06.8 | -0.9 |
| **DAWY** | **Dawson** | **5.74 158** | Pn | Pn | 05 59 07.2 | -0.9 |
| **J30M** | **Hart River** | **5.79 144** | Pn | Pn | 05 59 10.7 | +1.9 |
| **BPAW** | **Bear Paw Mtn.** | **6.01 210** | Pn | Pn | 05 59 11.4 | -0.4 |
| **H19K** | **Roundabout Mou** | **6.14 236** | Pn | Pn | 05 59 10.5 | -2.9 |
| **C18K** | **Utukok River** | **6.15 270** | Pn | Pn | 05 59 13.0 | -0.7 |
| **E18K** | **Tukpahlearik C** | **6.38 259** | Pn | Pn | 05 59 17.6 | +0.8 |
| **A36M** | **Sachs Harbour** | **6.75 59** | Pn | Pn | 05 59 21.9 | +0.1 |
| **M29M** | **Somme Creek** | **7.42 159** | Pn | Pn | 05 59 30.2 | -0.9 |

*NEIC **13** 05:58:35.8±2.1,69°.42N±0°.04×144°.44W±0°.09,h10km±2km, Error ellipse: s-maj=6.7km s-min=5.6km az=350.0*

**AEIC 13 05:58:36.0±2.2,69°.47N±0°.05×144°.5W±0°.1,h6km±6km, ML2.6,ML2.8/84(NEIC),Error ellipse: s-maj=6.9km s-min=5.1km az=188.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.31** | **58** | | Pg | 05 58 42.3 | +0.3 |
| C27K | | | | | Sg | 05 58 46.0 | -0.2 |
| **C26K** | **Camden Bay** | **0.48** | **342** | | Pg | 05 58 45.4 | +0.2 |
| C26K | | | | | Sg | 05 58 51.5 | +0.1 |
| **D25K** | **Kavik River** | **0.69** | **259** | | Pg | 05 58 49.6 | +0.5 |
| D25K | | | | | Sb | 05 58 59.2 | -0.9 |
| **D27M** | **Malcolm River** | **1.26** | **99** | Pn | Pg | 05 59 00.1 | 0.0 |
| D27M | | | | IAML | | 05 59 22.7 | |
| | comp=N,245nm,0.3s | | | | | | |
| D27M | | | | IAML | | 05 59 23.7 | |
| | comp=E,152nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.50** | **282** | Pn | Pn | 05 59 03.0 | -0.4 |
| C24K | | | | | Sb | 05 59 23.5 | -0.1 |
| C24K | | | | IAML | | 05 59 27.6 | |
| | comp=N,121nm,0.7s | | | | | | |
| C24K | | | | IAML | | 05 59 29.7 | |
| | comp=E,114nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.58** | **261** | | Pn | 05 59 04.1 | -0.4 |
| D24K | | | | IAML | | 05 59 32.1 | |
| | comp=E,164nm,0.4s | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **140** | | Pn | 05 59 04.3 | -1.3 |
| E27K | | | | IAML | | 05 59 32.8 | |
| | comp=N,117nm,0.8s | | | | | | |
| E27K | | | | IAML | | 05 59 34.9 | |
| | comp=E,148nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.78** | **176** | | Pn | 05 59 06.3 | -1.0 |
| F26K | | | | IAML | | 05 59 37.9 | |
| | comp=N,77nm,0.4s | | | | | | |
| **F25K** | **Christian Rive** | **1.93** | **193** | Pn | Pn | 05 59 09.0 | -0.4 |
| **E28M** | **Babbage River** | **1.98** | **114** | | Pn | 05 59 09.2 | -0.7 |
| E28M | | | | IAML | | 05 59 42.9 | |
| | comp=N,71nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.01** | **248** | Pn | Pn | 05 59 09.0 | -1.4 |
| TOLK | | | | IAML | | 05 59 47.1 | |
| | comp=E,98nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 05 59 49.0 | |
| | comp=N,71nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.02** | **228** | Pn | Pn | 05 59 10.4 | -0.2 |
| **C23K** | **Itkillik River** | **2.18** | **283** | Pn | Pn | 05 59 13.0 | +0.3 |
| C23K | | | | IAML | | 05 59 59.5 | |
| | comp=E,81nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.27** | **260** | Pn | Pn | 05 59 13.7 | -0.3 |
| D23K | | | | IAML | | 06 00 00.3 | |
| | comp=E,46nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.33** | **214** | | Pn | 05 59 13.3 | -1.4 |
| F24K | | | | IAML | | 05 59 54.5 | |
| | comp=E,41nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.51** | **136** | | Pn | 05 59 17.6 | +0.2 |
| F28M | | | | IAML | | 06 00 01.3 | |
| | comp=N,54nm,0.5s | | | | | | |
| F28M | | | | IAML | | 06 00 01.9 | |
| | comp=E,50nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.61** | **111** | Pn | Pn | 05 59 17.6 | -1.1 |
| E29M | | | | IAML | | 06 00 03.6 | |
| | comp=N,40nm,0.8s | | | | | | |
| E29M | | | | IAML | | 06 00 07.7 | |
| | comp=E,48nm,0.6s | | | | | | |
| **G27K** | **Doyon Strip** | **2.87** | **157** | Pn | Pn | 05 59 21.0 | -1.3 |
| **E22K** | **Anaktuvuk Pass** | **2.98** | **247** | Pn | Pn | 05 59 21.6 | -2.2 |
| **D22K** | **Ayikyak River** | **2.99** | **263** | Pn | Pn | 05 59 23.1 | -0.8 |
| D22K | | | | IAML | | 06 00 19.5 | |
| | comp=E,32nm,0.8s | | | | | | |
| D22K | | | | IAML | | 06 00 22.8 | |
| | comp=N,35nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.00** | **203** | Pn | Pn | 05 59 21.9 | -2.1 |
| G24K | | | | IAML | | 06 00 15.2 | |
| | comp=N,25nm,0.6s | | | | | | |
| G24K | | | | IAML | | 06 00 26.9 | |
| | comp=E,26nm,0.7s | | | | | | |
| **G23K** | **Bananza Creek** | **3.46** | **220** | Pn | Pn | 05 59 28.4 | -1.9 |
| G23K | | | | IAML | | 06 00 42.5 | |
| | comp=N,16nm,0.7s | | | | | | |
| **G29M** | **Pine Creek** | **3.52** | **134** | Pn | Pn | 05 59 29.9 | -1.2 |
| **B21K** | **Ikpikpuk River** | **3.56** | **277** | Pn | Pn | 05 59 30.7 | -1.0 |
| B21K | | | | IAML | | 06 00 44.5 | |
| | comp=N,22nm,1.6s | | | | | | |
| **E21K** | **Killik River** | **3.58** | **258** | Pn | Pn | 05 59 31.3 | -0.7 |
| E21K | | | | IAML | | 06 00 46.1 | |
| | comp=N,20nm,0.9s | | | | | | |
| E21K | | | | IAML | | 06 01 16.5 | |
| | comp=E,15nm,3.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.87** | **201** | Pn | Pn | 05 59 35.4 | -0.6 |
| **G30M** | **tAoh Zraii Nji** | **3.96** | **125** | Pn | Pn | 05 59 35.1 | -2.1 |
| G30M | | | | IAML | | 06 00 55.4 | |
| | comp=N,14nm,1.6s | | | | | | |
| G30M | | | | IAML | | 06 01 07.0 | |
| | comp=E,11nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.99** | **186** | Pn | Pn | 05 59 34.4 | -3.2 |
| PRP | | | | IAML | | 06 00 31.9 | |
| | comp=N,13nm,0.4s | | | | | | |
| PRP | | | | IAML | | 06 00 32.4 | |
| | comp=E,10nm,0.3s | | | | | | |
| **H29M** | **Whitestone** | **4.00** | **142** | Pn | Pn | 05 59 35.0 | -2.7 |
| H29M | | | | IAML | | 06 01 06.9 | |
| | comp=N,19nm,4.2s | | | | | | |
| **INK** | **Inuvik** | **4.13** | **101** | Pn | Pn | 05 59 37.5 | -2.0 |
| **H23K** | **Yukon River** | **4.14** | **210** | Pn | Pn | 05 59 39.6 | 0.0 |
| H23K | | | | IAML | | 06 00 53.4 | |
| | comp=N,14nm,1.4s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.21** | **172** | Pn | Pn | 05 59 38.6 | -2.0 |
| I26K | | | | IAML | | 06 01 00.9 | |
| | comp=E,11nm,1.2s | | | | | | |
| I26K | | | | IAML | | 06 01 05.5 | |
| | comp=N,14nm,1.1s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.27** | **133** | Pn | Pn | 05 59 39.0 | -2.5 |
| **I28M** | **Miner Creek** | **4.40** | **154** | Pn | Pn | 05 59 43.6 | +0.4 |
| I28M | | | | IAML | | 06 00 40.0 | |
| | comp=N,9.2nm,1.1s | | | | | | |
| I28M | | | | IAML | | 06 01 10.8 | |
| | comp=E,11nm,0.9s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.45** | **112** | Pn | Pn | 05 59 42.9 | -0.9 |
| F31M | | | | IAML | | 06 01 02.0 | |
| | comp=N,9.3nm,1.2s | | | | | | |
| F31M | | | | IAML | | 06 01 12.5 | |
| | comp=E,12nm,3.8s | | | | | | |
| **G31M** | **Satah River** | **4.58** | **119** | Pn | Pn | 05 59 48.0 | +2.4 |
| **I29M** | **Ogilvie Camp,** | **4.76** | **147** | Pn | Pn | 05 59 46.4 | -1.8 |
| **IL31** | | **4.81** | **192** | Pn | Pn | 05 59 48.3 | -0.5 |
| **ILAR** | **Eielson Array** | **4.81** | **192** | Pn | Pn | 05 59 48.2 | -0.7 |
| **F20K** | **Avaraart Lake** | **4.83** | **245** | Pn | Pn | 05 59 51.1 | +2.0 |
| **J25K** | **Salcha River,** | **4.89** | **185** | Pn | Pn | 05 59 47.2 | -2.8 |
| J25K | | | | IAML | | 06 01 06.9 | |
| | comp=E,9.8nm,4.0s | | | | | | |
| J25K | | | | IAML | | 06 01 30.9 | |
| | comp=N,8.3nm,3.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.00** | **175** | Pn | Pn | 05 59 49.3 | -2.3 |
| J26L | | | | IAML | | 06 01 11.9 | |
| | comp=E,6.7nm,2.4s | | | | | | |
| J26L | | | | IAML | | 06 02 52.8 | |
| | comp=N,6.9nm,4.3s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.01** | **197** | Pn | Pn | 05 59 50.4 | -1.1 |
| **I30M** | **Mount Dempster** | **5.28** | **140** | Pn | Pn | 05 59 54.6 | -0.9 |
| **K27K** | **Chicken** | **5.54** | **169** | Pn | Pn | 05 59 57.6 | -1.3 |
| **J30M** | **Hart River** | **5.85** | **143** | Pn | Pn | 06 00 03.6 | +0.3 |
| **BCAR** | **Beaver Creek A** | **6.52** | **169** | Pn | Pn | 06 00 11.7 | -0.7 |
| **RDOG** | **Red Dog Mine** | **6.84** | **267** | Pn | Pn | 06 00 16.9 | +0.2 |
| **L29M** | **L29M** | **6.87** | **155** | Pn | Pn | 06 00 16.7 | -0.5 |
| **M29M** | **Somme Creek** | **7.46** | **158** | Pn | Pn | 06 00 23.7 | -1.7 |

*NEIC **13** 06:15:45.0±1.0,69°.47N±0°.06×144°.3W±0°.1,h10km±2km, Error ellipse: s-maj=10.4km s-min=6.6km az=20.0*

**AEIC 13 06:15:45.7±0.8,69°.50N±0°.06×144°.3W±0°.1,h15km±7km, ML2.5,ML2.9/62(NEIC),Error ellipse: s-maj=9.0km s-min=6.0km az=187.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **59** | Pg | Pg | 06 15 50.4 | -0.7 |
| C27K | | | | Sg | Sg | 06 15 54.2 | -0.5 |
| **C26K** | **Camden Bay** | **0.47** | **333** | Pg | Pg | 06 15 54.5 | -0.6 |
| C26K | | | | Sg | Sg | 06 16 01.6 | +0.3 |
| **D25K** | **Kavik River** | **0.76** | **257** | | Pg | 06 15 59.7 | -0.7 |
| D25K | | | | | Sg | 06 16 09.7 | -0.6 |
| **D27M** | **Malcolm River** | **1.21** | **101** | Pn | Pn | 06 16 07.1 | -1.0 |
| **C24K** | **Franklin Bluff** | **1.56** | **280** | Pn | Pn | 06 16 11.4 | -1.3 |
| C24K | | | | IAML | | 06 16 45.5 | |
| | comp=E,51nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **260** | Pn | Pn | 06 16 13.1 | -0.9 |
| D24K | | | | IAML | | 06 16 41.6 | |
| | comp=N,65nm,0.7s | | | | | | |
| D24K | | | | IAML | | 06 16 43.1 | |
| | comp=E,87nm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.65** | **142** | Pn | Pn | 06 16 13.4 | -0.7 |
| E27K | | | | IAML | | 06 17 12.5 | |
| | comp=N,102nm,0.5s | | | | | | |
| E27K | | | | IAML | | 06 17 12.5 | |
| | comp=E,63nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **178** | Pn | Pn | 06 16 15.6 | -0.8 |
| F26K | | | | IAML | | 06 16 46.4 | |
| | comp=E,50nm,0.4s | | | | | | |
| F26K | | | | IAML | | 06 17 16.1 | |
| | comp=N,83nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.94** | **115** | Pn | Pn | 06 16 16.8 | -1.3 |
| **D28M** | **Stokes Point** | **1.98** | **92** | Pn | Pn | 06 16 18.3 | -0.2 |
| D28M | | | | IAML | | 06 16 57.5 | |
| | comp=N,56nm,0.9s | | | | | | |
| D28M | | | | IAML | | 06 17 27.1 | |
| | comp=E,63nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **195** | Pn | Pn | 06 16 18.1 | -0.6 |
| F25K | | | | IAML | | 06 17 21.6 | |
| | comp=N,35nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.08** | **248** | Pn | Pn | 06 16 19.2 | -0.9 |
| TOLK | | | | IAML | | 06 17 32.4 | |
| | comp=E,30nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 06 17 41.1 | |
| | comp=N,29nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **183** | Pn | Pn | 06 16 19.6 | -0.5 |
| **E24K** | **Your Creek** | **2.09** | **229** | Pn | Pn | 06 16 19.4 | -0.8 |
| **E23K** | **Chandalar** | **2.42** | **236** | Pn | Pn | 06 16 23.8 | -0.9 |
| E23K | | | | IAML | | 06 17 28.4 | |
| | comp=N,31nm,0.6s | | | | | | |
| E23K | | | | IAML | | 06 17 28.5 | |
| | comp=E,37nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **137** | Pn | Pn | 06 16 24.9 | -0.9 |
| **E29M** | **Blow River** | **2.57** | **113** | Pn | Pn | 06 16 26.1 | -0.6 |
| E29M | | | | IAML | | 06 18 05.2 | |
| | comp=N,92nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **202** | Pn | Pn | 06 16 45.2 | -0.1 |
| **H29M** | **Whitestone** | **3.99** | **143** | Pn | Pn | 06 16 45.6 | -0.6 |
| **PRP** | **Porcupine Dome** | **4.03** | **187** | Pn | Pn | 06 16 46.5 | -0.4 |
| **F31M** | **Tsiigehtchic** | **4.41** | **113** | Pn | Pn | 06 16 51.5 | -0.4 |
| **B20K** | **Meade River** | **4.50** | **283** | Pn | Pn | 06 16 53.1 | 0.0 |
| **G31M** | **Satah River** | **4.54** | **120** | Pn | Pn | 06 16 54.5 | +0.7 |
| G31M | | | | IAML | | 06 19 23.3 | |
| | comp=E,22nm,1.2s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.57** | **197** | Pn | Pn | 06 16 55.7 | +1.5 |
| **I23K** | **Minto, Yukon-K** | **4.79** | **207** | Pn | Pn | 06 16 57.4 | +0.2 |
| I23K | | | | IAML | | 06 19 21.2 | |
| | comp=N,17nm,0.9s | | | | | | |
| I23K | | | | IAML | | 06 19 26.7 | |
| | comp=E,15nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **200** | Pn | Pn | 06 16 56.9 | -0.6 |
| MDM | | | | IAML | | 06 19 22.9 | |
| | comp=N,17nm,0.7s | | | | | | |
| **EGAK** | **Eagle** | **4.90** | **164** | Pn | Pn | 06 16 58.6 | -0.1 |
| **F20K** | **Avaraart Lake** | **4.90** | **245** | Pn | Pn | 06 16 57.7 | -1.1 |
| F20K | | | | IAML | | 06 19 22.1 | |
| | comp=E,8.6nm,0.8s | | | | | | |
| F20K | | | | IAML | | 06 19 34.8 | |
| | comp=N,10.0nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.06** | **197** | Pn | Pn | 06 17 00.0 | -0.9 |
| CCB | | | | IAML | | 06 19 25.6 | |
| | comp=N,8.5nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.07** | **265** | Pn | Pn | 06 16 59.8 | -1.3 |
| D19K | | | | IAML | | 06 19 51.6 | |
| | comp=E,8.0nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **5.18** | **253** | Pn | Pn | 06 17 01.9 | -0.7 |
| E19K | | | | IAML | | 06 19 46.4 | |
| | comp=E,11nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.27** | **141** | Pn | Pn | 06 17 03.6 | -0.3 |
| **SCRK** | **Sand Creek** | **5.55** | **179** | Pn | Pn | 06 17 07.2 | -0.5 |
| **F19K** | **Shaleruckik Mo** | **5.69** | **248** | Pn | Pn | 06 17 09.7 | +0.2 |
| **DAWY** | **Dawson** | **5.79** | **158** | Pn | Pn | 06 17 10.5 | -0.5 |
| **J30M** | **Hart River** | **5.84** | **144** | Pn | Pn | 06 17 11.7 | -0.1 |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **209** | Pn | Pn | 06 17 14.4 | +0.2 |
| **E18K** | **Tukpahlearik C** | **6.35** | **259** | Pn | Pn | 06 17 17.9 | -0.7 |

**IDC 13 06:17:22.4±2.4,31°.77S×178°.78W,h0km,mb3.6/3, mbtmp3.6/3,Error ellipse: s-maj=68.9km s-min=42.6km az=42.0,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.39** | **269** | P | P | 06 25 18.6 | -0.2 |
| | 0.4nm,0.6s,baz=102,slow=7.7,SNR=6.7 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.51** | **274** | P | P | 06 25 27.7 | -0.2 |
| | 0.4nm,0.5s,baz=115,slow=7.4,SNR=2.8 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **58.35** | **180** | P | P | 06 27 19.1 | -0.1 |
| | 0.8nm,0.9s,baz=352,slow=8.8,SNR=1.4 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **146.18** | **339** | PKPbc | PKPdf | 06 37 03.2 | +0.3 |
| | 3.1nm,0.9s,baz=33,slow=3.3,SNR=2.7 | | | | | | |

*NEIC **13** 06:19:09.4±1.4,69°.50N±0°.04×144°.3W±0°.1,h10km±2km, Error ellipse: s-maj=8.2km s-min=3.6km az=48.0*

**AEIC 13 06:19:09.5±1.9,69°.51N±0°.05×144°.3W±0°.1,h7km±7km, ML2.7,ML2.9/76(NEIC),Error ellipse: s-maj=8.4km s-min=4.7km az=207.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **60** | | Pg | 06 19 14.5 | +0.2 |
| C27K | | | | | Sg | 06 19 17.8 | +0.3 |
| **C26K** | **Camden Bay** | **0.46** | **333** | | Pb | 06 19 19.3 | -0.7 |
| C26K | | | | | Sg | 06 19 25.2 | +0.7 |
| **D25K** | **Kavik River** | **0.76** | **257** | | Pg | 06 19 23.5 | -0.5 |
| D25K | | | | | Sg | 06 19 33.4 | -0.5 |
| **D27M** | **Malcolm River** | **1.21** | **101** | | Pg | 06 19 32.2 | -0.6 |
| D27M | | | | IAML | | 06 19 53.9 | |
| | comp=N,205nm,0.5s | | | | | | |
| D27M | | | | IAML | | 06 19 57.4 | |
| | comp=E,149nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.56** | **280** | | Pn | 06 19 36.3 | -1.2 |
| C24K | | | | IAML | | 06 20 04.0 | |
| | comp=E,115nm,0.9s | | | | | | |
| C24K | | | | IAML | | 06 20 04.6 | |
| | comp=N,127nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **260** | | Pn | 06 19 38.4 | -0.4 |
| D24K | | | | IAML | | 06 20 05.8 | |
| | comp=N,132nm,0.7s | | | | | | |
| D24K | | | | IAML | | 06 20 08.5 | |
| | comp=E,139nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.65** | **142** | | Pn | 06 19 38.0 | -0.9 |
| E27K | | | | IAML | | 06 20 06.3 | |
| | comp=N,95nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **178** | Pn | Pn | 06 19 40.7 | -0.6 |
| F26K | | | | IAML | | 06 20 11.4 | |
| | comp=N,88nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.94** | **116** | Pn | Pn | 06 19 42.1 | -0.8 |
| E28M | | | | IAML | | 06 20 14.9 | |
| | comp=N,69nm,0.3s | | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **93** | Pn | Pn | 06 19 42.9 | -0.5 |
| **F25K** | **Christian Rive** | **1.98** | **195** | Pn | Pn | 06 19 42.9 | -0.6 |
| F25K | | | | IAML | | 06 20 17.0 | |
| | comp=E,95nm,1.1s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TOLK** | **Toolik Lake Re** | **2.08** | **248** | Pn | Pn | 06 19 44.9 | 0.0 |
| TOLK | | | | IAML | | 06 20 26.4 | |
| | comp=E,65nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.09** | **183** | Pn | Pn | 06 19 44.6 | -0.4 |
| **E24K** | **Your Creek** | **2.09** | **229** | Pn | Pn | 06 19 45.6 | +0.5 |
| **C23K** | **Itkillik River** | **2.23** | **281** | Pn | Pn | 06 19 46.3 | -0.5 |
| C23K | | | | IAML | | 06 20 30.3 | |
| | comp=N,77nm,0.5s | | | | | | |
| C23K | | | | IAML | | 06 20 31.5 | |
| | comp=E,67nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.34** | **260** | Pn | Pn | 06 19 48.1 | -0.3 |
| **F24K** | **Squaw Lake** | **2.39** | **215** | Pn | Pn | 06 19 48.8 | -0.3 |
| F24K | | | | IAML | | 06 20 32.1 | |
| | comp=E,36nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.42** | **236** | Pn | Pn | 06 19 48.2 | -1.3 |
| E23K | | | | IAML | | 06 20 34.2 | |
| | comp=E,36nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **137** | | Pn | 06 19 49.8 | -0.8 |
| F28M | | | | IAML | | 06 20 34.7 | |
| | comp=E,53nm,0.5s | | | | | | |
| F28M | | | | IAML | | 06 20 37.0 | |
| | comp=N,54nm,0.4s | | | | | | |
| **E29M** | **Blow River** | **2.57** | **113** | Pn | Pn | 06 19 49.6 | -1.9 |
| E29M | | | | IAML | | 06 20 32.9 | |
| | comp=N,57nm,0.7s | | | | | | |
| E29M | | | | IAML | | 06 20 37.0 | |
| | comp=E,45nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **175** | | Pn | 06 19 52.3 | +0.7 |
| **G27K** | **Doyon Strip** | **2.89** | **159** | | Pn | 06 19 55.6 | -0.3 |
| **FYU** | **Fort Yukon** | **2.98** | **187** | Pn | Pn | 06 19 57.4 | +0.3 |
| FYU | | | | IAML | | 06 20 51.5 | |
| | comp=E,47nm,2.3s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **247** | | Pn | 06 19 57.0 | -1.3 |
| **D22K** | **Ayikyak River** | **3.06** | **262** | Pn | Pn | 06 19 58.5 | +0.3 |
| D22K | | | | IAML | | 06 21 52.9 | |
| | comp=E,42nm,0.9s | | | | | | |
| D22K | | | | IAML | | 06 21 54.4 | |
| | comp=N,44nm,0.7s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.25** | **289** | | Pn | 06 20 00.1 | -0.8 |
| **H25L** | **Birch Creek** | **3.31** | **191** | | Pn | 06 20 04.1 | +2.5 |
| **G29M** | **Pine Creek** | **3.50** | **135** | | Pn | 06 20 04.1 | -0.3 |
| **G23K** | **Bananza Creek** | **3.53** | **220** | Pn | Pn | 06 20 04.5 | -0.3 |
| **B21K** | **Ikpikpuk River** | **3.62** | **277** | Pn | Pn | 06 20 06.2 | +0.3 |
| B21K | | | | IAML | | 06 22 11.2 | |
| | comp=E,26nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **3.99** | **143** | | Pn | 06 20 11.2 | +0.1 |
| H29M | | | | IAML | | 06 21 02.1 | |
| | comp=E,21nm,0.7s | | | | | | |
| H29M | | | | IAML | | 06 21 26.4 | |
| | comp=N,18nm,1.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04** | **187** | Pn | Pn | 06 20 12.1 | +0.3 |
| PRP | | | | IAML | | 06 21 04.9 | |
| | comp=N,17nm,0.6s | | | | | | |
| PRP | | | | IAML | | 06 22 33.5 | |
| | comp=E,13nm,0.6s | | | | | | |
| **I27K** | **Kandik River** | **4.05** | **164** | | Pn | 06 20 14.7 | +2.7 |
| **H23K** | **Yukon River** | **4.20** | **211** | Pn | Pn | 06 20 13.7 | -0.3 |
| **G21K** | **Allakaket** | **4.58** | **233** | Pn | Pn | 06 20 16.8 | -2.3 |
| **I23K** | **Minto, Yukon-K** | **4.79** | **206** | Pn | Pn | 06 20 19.7 | -2.4 |
| **MDM** | **Murphy Dome** | **4.82** | **200** | | Pn | 06 20 21.0 | -1.4 |
| **COLA** | **College** | **4.85** | **198** | Pn | Pn | 06 20 20.5 | -2.4 |
| **EGAK** | **Eagle** | **4.91** | **164** | Pn | Pn | 06 20 22.6 | -1.0 |
| **F20K** | **Avaraart Lake** | **4.91** | **245** | Pn | Pn | 06 20 22.4 | -1.2 |
| F20K | | | | IAML | | 06 22 10.1 | |
| | comp=E,9.2nm,3.8s | | | | | | |
| F20K | | | | IAML | | 06 22 53.0 | |
| | comp=N,10.0nm,4.5s | | | | | | |
| **J25K** | **Salcha River,** | **4.93** | **185** | Pn | Pn | 06 20 23.2 | -0.8 |
| J25K | | | | IAML | | 06 21 50.0 | |
| | comp=E,11nm,3.1s | | | | | | |
| J25K | | | | IAML | | 06 21 57.9 | |
| | comp=N,9.6nm,4.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.05** | **224** | Pn | Pn | 06 20 22.6 | -3.0 |
| **SCRK** | **Sand Creek** | **5.56** | **179** | Pn | Pn | 06 20 31.4 | -1.3 |
| **A36M** | **Sachs Harbour** | **6.76** | **60** | Pn | Pn | 06 20 49.1 | +0.1 |

*NEIC **13** 06:19:42.5±2.2,30°.93N±0°.05×50°.08E±0°.09,h10km±1km, mb4.4/32, Error ellipse: s-maj=14.2km s-min=4.3km az=60.0*

*IDC **13** 06:19:42.2±1.1,31°.08N×49°.94E,h0km,mb4.0/11, mbtmp4.0/12,ML4.5/1,MS2.9/4, Error ellipse: s-maj=24.2km s-min=22.9km az=147.0*

*TEH **13** 06:19:44.0,31°.11N×50°.23E,h10km±18km,ML4.0*

*OMAN **13** 06:19:49.6±1.4,30°.73N×50°.40E,h19km±20km,mb4.0/27, ms2.5/1, Error ellipse: s-maj=21.9km s-min=7.4km az=171.0*

*DSN **13** 06:19:49.6±1.6,30°.54N×50°.34E,h15km,ML3.7/10, Error ellipse: s-maj=20.6km s-min=9.1km az=6.0*

**ISC 13 06:19:42.8±0.4,31°.08N±0°.03×50°.21E±0°.03,h10km,n150, σ2.5 20/178,mb4.3/26,MS2.9/3,Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABEH** | **Behbahan** | **0.47** | **175** | Pg | Pg | 06 19 53.7 | +1.7 |
| ABEH | | | | | Sg | 06 20 02.5 | +2.2 |
| **ZNGN** | **Zangian** | **1.18** | **28** | Pg | Pn | 06 20 06.3 | +0.7 |
| **KLNJ** | **Kolanjah** | **1.19** | **93** | Pg | Pb | 06 20 06.3 | +0.7 |
| **JHBN** | **Jahan bin** | **1.22** | **19** | Pg | Pn | 06 20 07.1 | +0.9 |
| **IBRJ** | **Brojen** | **1.22** | **47** | Pg | Pn | 06 20 07.1 | +0.9 |
| **AHWZ** | **Ahwaz** | **1.37** | **281** | Pg | Pg | 06 20 10.5 | +1.5 |
| **IPIR** | **Pirpir** | **1.71** | **20** | Pg | Pg | 06 20 16.6 | +1.1 |
| **IRAM** | **Ramesheh** | **2.00** | **68** | Pn | Pg | 06 20 21.1 | +0.1 |
| **IGAR** | **Gharneh** | **2.05** | **49** | Pn | Pb | 06 20 20.7 | +0.5 |
| **AHBU** | **AHRAM** | **2.40** | **157** | Pn | Pn | 06 20 25.0 | +2.9 |
| **SHI** | **Shiraz** | **2.45** | **125** | Pn | Pb | 06 20 26.5 | -0.5 |
| **IKLH** | **Kolahrood** | **2.52** | **27** | Pn | Pb | 06 20 27.6 | -0.7 |
| **DSBU** | **Dashti - Bushe** | **2.85** | **161** | Pn | Pn | 06 20 31.6 | +3.2 |
| **KBD** | **Kabd** | **2.89** | **230** | P | Pn | 06 20 32.3 | +3.4 |
| KBD | | | | S | Sn | 06 21 08.0 | +4.4 |
| **ISAD** | **Sadrabad** | **3.08** | **73** | Pn | Pn | 06 20 35.2 | +3.4 |
| **IKFM** | **Kafar-mosalman** | **3.16** | **321** | Pn | Pn | 06 20 35.8 | +3.3 |
| **HSAM** | **Samen** | **3.41** | **337** | Pn | Pn | 06 20 39.4 | +3.1 |
| **ANAR** | **Anarak** | **3.66** | **54** | Pn | Pn | 06 20 43.2 | +3.7 |
| **ISFB** | **Sefidab** | **3.69** | **27** | Pn | Pn | 06 20 43.5 | +3.5 |
| **ICHK** | **Chekchek** | **3.76** | **71** | Pn | Pn | 06 20 44.4 | +3.3 |
| **IMEH** | **Mehriz** | **3.79** | **84** | Pn | Pn | 06 20 44.9 | +3.5 |
| **IBZA** | **Bozab** | **3.92** | **330** | Pn | Pn | 06 20 45.9 | +2.6 |
| **IVRN** | **Varamin** | **4.11** | **18** | Pn | Pn | 06 20 49.2 | +3.4 |
| **ILBA** | **Ilam Banvizeh** | **4.24** | **308** | Pn | Pn | 06 20 49.8 | +2.4 |
| **IRAZ** | **Razeghan** | **4.32** | **357** | Pn | Pn | 06 20 52.2 | +3.4 |
| **SNQR** | **Sonqor, Kerman** | **4.35** | **331** | Pn | Pn | 06 20 51.9 | +2.7 |
| **IGHG** | **Ghaleghazi** | **4.47** | **318** | Pn | Pn | 06 20 53.

AJN S Sn 06 23 02.5 -0.9
**NAZ Nazwa, Dubai 7.74 140** P Pn 06 21 37.7 +2.1
**ASUD Al Ashush, Dub 7.86 144** *i* P Pn 06 21 36.9 -0.3
SNR=8.6
**ASUD Al Ashush, Dub 7.86 144** P Pn 06 21 39.5 +2.3
SNR=8.8
ASUD S Sn 06 23 06.4 +0.2
**MDH Madha 7.87 135** P Pn 06 21 36.9 -0.4
**MDH Madha 7.87 135** P Pn 06 21 37.8 +0.5
MDH S Sn 06 23 01.9 -4.6
**FAQ Al Faqa, Dubai 7.90 142** P Pn 06 21 40.4 +2.7
FAQ S Sn 06 23 05.7 -1.5
**UOSS Minazif 8.08 138** P Pn 06 21 38.0 -2.3
**UOSS Minazif 8.08 138** *i* P Pn 06 21 39.3 -1.0
SNR=6.0
**UOSS Minazif 8.08 138** P Pn 06 21 41.2 +0.9
UOSS S Sn 06 23 07.2 -4.5
**SBZV Sabzevar 8.13 47** Pn Pn 06 21 44.4 +3.4
**HATD Hatta, Dubai 8.13 138** P Pn 06 21 41.5 +0.6
**HATD Hatta, Dubai 8.13 138** P Pn 06 21 41.9 +0.9
HATD S Sn 06 23 10.2 -2.8
**ASHO Ashiyiah 8.20 139** *i* P Pn 06 21 41.9 -0.1
SNR=19
**ASHO Ashiyiah 8.20 139** P Pn 06 21 42.7 +0.8
SNR=11
ASHO S Sn 06 23 11.1 -3.6
**ALNE Al Ain 8.54 144** *i* P Pn 06 21 47.4 +0.8
SNR=10
**ALNE Al Ain 8.54 144** P Pn 06 21 48.3 +1.7
SNR=11
ALNE S Sn 06 23 20.8 -2.3
**MZR Muzera 8.55 159** *i* P Pn 06 21 46.9 +0.2
SNR=22
**MZR Muzera 8.55 159** P Pn 06 21 47.9 +1.2
SNR=22
MZR S Sn 06 23 22.4 -0.9
**RAYN Ar Rayn 8.61 210** Pn 06 21 45.3 -2.2
**RAYN Ar Rayn 8.61 210** *i* P Pn 06 21 47.0 -0.5
SNR=15
**SOHO SOHO 8.90 139** P Pn 06 21 50.8 -0.7
**SOHO SOHO 8.90 139** P Pn 06 21 51.0 -0.4
SOHO P Pn 06 21 51.0 -0.4
SOHO S Sn 06 23 28.8 -3.0
SOHO S Sn 06 23 28.8 -3.0
**UMZA Um Al Zommool 9.43 151** P Pn 06 21 59.6 +0.9
UMZA S Sn 06 23 39.7 -5.0
**ARQ Araqi 9.54 142** P Pn 06 21 60.0 -0.2
ARQ S Sn 06 23 44.1 -3.4
**HOQ Hoqain 9.77 138** P Pn 06 22 05.8 +2.4
HOQ S Sn 06 23 50.1 -3.2
**MARD Mardin 9.98 311** Pn Pn 06 22 05.4 -1.0
**GNI Garni 10.09 335** Pn Pn 06 22 08.1 +0.2
**GNI Garni 10.09 335** LR LR 06 26 46.5
comp=Z,51nm,18.1s,baz=106,slow=42
**BIDO Bidbid 10.30 135** P Pn 06 22 12.7 +2.0
**SMDO Samad 10.61 137** P Pn 06 22 16.3 +1.4
SMDO S Sn 06 24 09.0 -4.8
**WSAR Wadi Sarin 10.82 134** Pn Pn 06 22 19.1 +1.3
3.6nm,0.3s,baz=318,slow=13,SNR=33
WSAR Sn Sn 06 24 12.3 -6.7
0.8nm,0.3s,baz=42,slow=18,SNR=1.4
9.2nm,0.4s
**WSAR Wadi Sarin 10.82 134** P Pn 06 22 18.7 +0.9
SNR=15
**JMDO Jabal Madar 11.17 139** P Pn 06 22 24.0 +1.3
SNR=10
**NGCH Negor - Chabah 11.19 118** P Pn 06 22 22.2 -0.6
NGCH S Sn 06 24 26.4 -1.6
**ASF Jabal al Asfar 11.40 279** Sn Sn 06 24 27.1 -6.2
1.3nm,0.3s,baz=329,slow=0.0,SNR=3.8
**WBK Wadi Bani Khal 11.49 135** P Pn 06 22 27.8 +0.8
WBK S Sn 06 24 31.3 -4.2
**JLN Jalan Bani Buh 12.11 135** P Pn 06 22 36.8 +1.4
**MHTO MHTO 12.22 143** P Pn 06 22 37.4 +0.4
SNR=8.5
MHTO S Sn 06 24 49.2 -4.2
**DOK Doka 12.90 163** P Pn 06 22 45.8 -0.5
**DQM DQM 12.92 148** P Pn 06 22 46.3 -0.1
**WHFO Wadi Hawf 13.49 165** P Pn 06 22 53.3 -1.0
SNR=7.5
**KBZ Khabaz 13.89 337** LR LR 06 28 55.2
comp=Z,49nm,19.0s,baz=167,slow=40
**ABTO Aybut 13.95 168** P Pn 06 22 59.3 -1.3
**DMTO DMTO 13.98 161** P Pn 06 22 60.0 -1.0
SNR=9.6
**RBK Rabkut 13.99 164** P Pn 06 22 59.8 -1.4
**BR131 Keskin Array S 16.01 307** Pn Pn 06 23 27.2 -1.0
**BRTR Keskin Array B 16.01 307** Pn Pn 06 23 26.6 -1.7
**BRTR Keskin Array B 16.01 307** Pn P 06 23 32.5 +0.7
0.2nm,0.3s,baz=133,slow=13,SNR=4.2
**ANTO Ankara 16.66 307** Pn Pn 06 23 35.4 -1.0
ANTO IAmb IAmb 06 23 36.5
comp=Z,10.0nm,0.5s
**GAR Garm 18.24 59** P Pn 06 23 55.1 -1.1
**ABKAR Akbulak array 19.59 19** P Pn 06 24 12.5 +0.2
**KARP Karpathos 19.76 289** P P 06 24 10.6 -2.4
**KK31 Karatay Array 20.10 48** P P 06 24 16.0 -0.6
**KKAR Karatay Array 20.10 48** P P 06 24 16.7 +0.1
**AKTO Aktyubinsk 20.20 15** P P 06 24 18.9 +1.3
comp=Z,1.3nm,0.3s,baz=226,slow=4.7,SNR=6.9
comp=Z,1.3nm,0.3s
**BELG Belogornoye 21.39 356** P P 06 24 29.0 -1.3
comp=Z,10nm,0.6s,baz=293,slow=5.4,SNR=2.2
comp=Z,10nm,0.6s
**IDI Anoyia 21.58 288** P P 06 24 32.1 -0.6
**IDI Anoyia 21.58 288** P P 06 24 34.2 +1.4
comp=Z,5.7nm,0.4s,baz=26,slow=9.3,SNR=9.0
**KSH Kashi 22.60 61** P P 06 24 46.0 +2.4
KSH pP sP 06 24 51.3 +2.6
KSH pmax pmax
comp=Z,6.0nm,0.9s
**AGG Agios Georgios 24.10 297** P P 06 24 56.9 -1.7
AGG IAmb IAmb 06 25 03.5
comp=Z,9.7nm,1.0s
**ITM Ithomi 24.14 292** P P 06 24 58.3 -0.7
ITM IAmb IAmb 06 25 07.8
comp=Z,9.2nm,0.9s
**AKASG Malin Array Be 25.07 327** P P 06 25 07.7 +0.6
**AKASG Malin Array Be 25.07 327** P P 06 25 06.3 -0.9
comp=Z,0.7nm,0.3s,baz=124,slow=6.6,SNR=6.9
comp=Z,0.7nm,0.3s
**AKBB Malin Array Si 25.07 327** P P 06 25 07.4 +0.3
AKBB IAmb IAmb 06 25 09.2
comp=Z,5.1nm,0.5s
**KIEV Kiev 25.07 327** P P 06 25 07.3 +0.1
KIEV IAmb IAmb 06 25 09.2
comp=Z,4.5nm,0.5s
**FNA Florina 25.18 301** P P 06 25 05.9 -2.5
FNA IAmb IAmb 06 25 16.7
comp=Z,4.9nm,0.9s
**BURAR Bucovina Array 25.26 318** P P 06 25 09.5 +0.4
**BUR08 Bucovina Ar. S 25.29 318** P P 06 25 09.0 -0.3
**KEK Kerkira 26.15 298** P P 06 25 17.3 +0.1
KEK IAmb IAmb 06 25 35.6
comp=Z,8.6nm,0.7s
**PUK Puka 26.57 303** P P 06 25 21.3 +0.2
PUK IAmb IAmb 06 25 29.1
comp=Z,4.5nm,0.5s
**SCTE Santa Cesarea 27.22 298** P P 06 25 26.4 -0.3
SCTE IAmb IAmb 06 25 33.3
comp=Z,6.4nm,0.9s
**KURBB Kurchatov Arra 28.71 39** P P 06 25 43.3 +3.3
comp=Z,0.9nm,0.7s,baz=241,slow=9.4,SNR=4.5
comp=Z,0.9nm,0.7s
**MK31 Makanchi Array 29.23 48** P P 06 25 45.7 +1.0
**MKAR Makanchi Array 29.23 48** P P 06 25 45.3 +0.6
**MKAR Makanchi Array 29.23 48** P P 06 25 47.2 +2.6
comp=Z,0.6nm,0.6s,baz=247,slow=15,SNR=4.7
comp=Z,0.6nm,0.6s
**ZALV Zalesovo Beam 33.73 37** P P 06 26 27.7 +3.6
comp=Z,1.4nm,0.5s,baz=251,slow=12,SNR=4.8
comp=Z,1.4nm,0.5s
**FIA1 FINESS Array S 34.24 340** P P 06 26 28.9 +0.4
**FINES FINESS Array B 34.24 340** P P 06 26 28.9 +0.4
**FINES FINESS Array B 34.24 340** P P 06 26 28.7 +0.2
comp=Z,2.6nm,0.3s,baz=143,slow=8.5,SNR=45
comp=Z,2.6nm,0.3s
**FUORN Ofenpass-Fuorn 34.36 308** P P 06 26 28.0 -2.1
FUORN IAmb IAmb 06 26 53.9
comp=Z,2.8nm,1.1s
**HFS Hagfors 37.83 331** LR LR 06 43 45.8
comp=Z,21nm,21.1s,baz=166,slow=38
**NC602 NORSAR Array S 39.06 331** P P 06 27 07.9 -1.6
NC602 IAmb IAmb 06 27 44.7
comp=Z,23nm,1.4s
**NC405 NORSAR Array S 39.19 331** P P 06 27 10.7 0.0
NC405 IAmb IAmb 06 27 18.1
comp=Z,15nm,1.4s
**NB201 NORSAR Array S 39.33 331** P P 06 27 09.8 -2.0
NB201 IAmb IAmb 06 27 32.6
comp=Z,13nm,1.1s
**NOA NORSAR Array B 39.35 331** P P 06 27 11.3 -0.8
comp=Z,0.4nm,0.5s,baz=124,slow=8.6,SNR=2.6
NOA LR LR 06 44 51.9
comp=Z,20nm,20.4s,baz=125,slow=38
comp=Z,0.4nm,0.5s
**NBO00 NORSAR Array S 39.53 331** P P 06 27 13.9 +0.3
**ARCES ARCESS Array B 40.98 347** P P 06 27 26.4 +1.0
ARCES IAmb IAmb 06 27 35.9
comp=Z,16nm,1.4s
**ARCES ARCESS Array B 40.98 347** P P 06 27 26.0 +0.6
comp=Z,3.4nm,1.1s,baz=158,slow=10,SNR=4.4
comp=Z,3.4nm,1.1s
**CART Cartagena 42.36 293** P P 06 27 35.0 -2.1
CART IAmb IAmb 06 27 37.0
comp=Z,13nm,1.0s
**ESDC Sonseca Array 44.42 297** P P 06 27 56.5 +2.6
comp=Z,0.8nm,0.6s,baz=76,slow=8.8,SNR=3.7
**ESK Eskdalemuir 44.46 319** P P 06 27 54.0 +0.2
**MTE Manteigas 47.06 298** P P 06 28 12.9 -1.8
**PESTR Estremoz 47.32 296** P P 06 28 14.7 -2.0
**TORD Torodi Ar. Bea 47.95 259** P P 06 28 19.3 -2.6
TORD IAmb IAmb 06 28 49.8
comp=Z,2.4nm,1.3s
**TORD Torodi Ar. Bea 47.95 259** P P 06 28 22.4 +0.5
comp=Z,1.1nm,0.5s,baz=63,slow=9.2,SNR=8.8
comp=Z,1.1nm,0.5s
**ENH Enshi 50.44 75** P P 06 28 40.5 -0.3
**RES Resolute Bay 72.05 351** LR LR 07 03 20.2
comp=Z,369nm,21.6s,baz=260,slow=36
**ILAR Eielson Array 83.54 7** P P 06 32 11.5 +0.9
comp=Z,0.4nm,0.6s,baz=316,slow=2.5,SNR=2.5
comp=Z,0.4nm,0.6s
**QSPA South Pole Qui 120.91 180** PKP **PKPdf** 06 38 34.6 0.0
comp=Z,1.2nm,0.8s,baz=190,slow=1.6,SNR=6.6

**RSNC 13 06:34:19.3±0.0, 5°N±2°×7°6W±°, h12km±4km, M2.2, ML1.9, Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLMC** | **San Jos del P** | **0.12** | **167** | P | Pb | 06 34 28.7 | +5.1 |
| PLMC | | | | S | Sg | 06 34 37.3 | +13 |
| **YOTC** | **Yotoco, Valle** | **1.03** | **182** | P | Pb | 06 34 36.4 | -2.8 |
| YOTC | | | | S | Sg | 06 34 51.1 | -1.6 |
| **YOTC** | **Yotoco, Valle** | **1.03** | **182** | P | Pb | 06 34 36.4 | -2.8 |
| YOTC | | | | S | Sg | 06 34 51.3 | -1.4 |
| **ANIL** | **Santa Ana** | **1.05** | **120** | P | Pg | 06 34 39.4 | -0.1 |
| ANIL | | | | S | Sn | 06 34 56.2 | +1.5 |
| **ANIL** | **Santa Ana** | **1.05** | **120** | P | Pg | 06 34 39.4 | -0.1 |
| ANIL | | | | S | Sn | 06 34 56.0 | +1.3 |
| **PIZC** | **Pizarro, Choco** | **1.05** | **267** | P | Pb | 06 34 36.8 | -2.6 |
| PIZC | | | | S | Sb | 06 34 53.0 | -0.1 |
| **PIZC** | **Pizarro, Choco** | **1.05** | **267** | P | Pb | 06 34 36.8 | -2.6 |
| PIZC | | | | S | Sb | 06 34 52.5 | -0.6 |
| **MALC** | **Bahia Malaga** | **1.43** | **226** | P | Pn | 06 34 42.0 | -3.1 |
| MALC | | | | S | Sn | 06 35 02.3 | -1.5 |
| **MALC** | **Bahia Malaga** | **1.43** | **226** | P | Pn | 06 34 42.4 | -2.7 |
| MALC | | | | S | Sn | 06 35 02.5 | -1.3 |
| **ORTC** | **Ortega, Tolima** | **1.53** | **136** | P | Pn | 06 34 44.5 | -2.0 |
| ORTC | | | | S | Sn | 06 35 05.3 | -1.1 |
| **ORTC** | **Ortega, Tolima** | **1.53** | **136** | P | Pn | 06 34 44.6 | -1.9 |
| ORTC | | | | S | Sn | 06 35 06.3 | -0.1 |
| **NORC** | **Norcasia** | **1.53** | **69** | P | Pn | 06 34 44.5 | -2.1 |
| NORC | | | | S | Sn | 06 35 04.8 | -1.7 |
| **JAMC** | **Jamundi, Valle** | **1.83** | **191** | P | Pn | 06 34 46.7 | -4.1 |
| JAMC | | | | S | Sn | 06 35 13.4 | -0.6 |
| **JAMC** | **Jamundi, Valle** | **1.83** | **191** | P | Pn | 06 34 46.5 | -4.3 |
| JAMC | | | | S | Sn | 06 35 13.0 | -1.0 |
| **PRAC** | **Prado** | **1.92** | **132** | P | Pn | 06 34 49.8 | -2.1 |
| PRAC | | | | S | Sn | 06 35 15.4 | -0.7 |
| **PRAC** | **Prado** | **1.92** | **132** | P | Pn | 06 34 49.8 | -2.1 |
| PRAC | | | | S | Sn | 06 35 15.7 | -0.4 |
| **DBBC** | **Dabeiba** | **1.99** | **3** | P | Pn | 06 34 49.7 | -3.1 |
| DBBC | | | | S | Sn | 06 35 15.5 | -2.2 |
| **DBBC** | **Dabeiba** | **1.99** | **3** | P | Pn | 06 34 49.6 | -3.2 |
| **PTBC** | **PUERTO BERRIO,** | **2.38** | **51** | P | Pn | 06 34 55.4 | -2.8 |
| PTBC | | | | S | Sn | 06 35 24.0 | -3.4 |
| **PTBC** | **PUERTO BERRIO,** | **2.38** | **51** | P | Pn | 06 34 55.4 | -2.8 |
| PTBC | | | | S | Sn | 06 35 23.9 | -3.5 |
| **POPC** | **Popayan, Colom** | **2.49** | **188** | P | Pn | 06 34 57.0 | -2.9 |
| POPC | | | | S | Sn | 06 35 26.8 | -3.6 |
| **POPC** | **Popayan, Colom** | **2.49** | **188** | P | Pn | 06 34 56.8 | -3.1 |
| POPC | | | | S | Sn | 06 35 27.3 | -3.1 |
| **ZARC** | **Zaragoza, Cauc** | **2.85** | **30** | P | Pn | 06 35 01.1 | -3.5 |
| ZARC | | | | S | Sn | 06 35 35.3 | -3.6 |
| **ZARC** | **Zaragoza, Cauc** | **2.85** | **30** | P | Pn | 06 35 01.6 | -3.0 |
| ZARC | | | | S | Sn | 06 35 35.5 | -3.4 |
| **BBAC** | **Balboa, Cauca** | **3.12** | **197** | P | Pn | 06 35 04.7 | -3.9 |

*AEIC **13** 06:37:25.3±2.6, 69°.47N±0°.05×144°.22W±0°.06, h10km±4km, ML3.8, mb4.3/10(NEIC), ML3.9/120(NEIC), Mwr4.0/36(NEIC), Error ellipse: s-maj=7.5km s-min=0.2km az=204.0*
*IDC **13** 06:37:27.1±0.8, 69°.75N×143°.97W, h0km, mb3.7/8, mbtmp3.7/12, ML3.7/4, MS3.1/15, Error ellipse: s-maj=22.5km s-min=13.6km az=40.0*
*NEIC **13** 06:37:27.1±2.1, 69°.54N±0°.02×144°.16W±0°.10, h10km±1km, Error ellipse: s-maj=5.8km s-min=4.0km az=265.0, Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr=-0.30; Mθθ=0.62; Mφφ=0.92; Mrθ=0.16; Mθφ=-0.64; Mφr=0.19; Fault plane solution: M0=1.07000×10^15^ NP1: φs=205.39000°, δ=77.51000°, λ=-0.05000°. NP2:φs=295.40000°, δ=89.95000°, λ=-167.51000°. Principal axes: T 1.1914, Plg=9.0000°, Azm=70.0000°; N -0.3242, Plg=78.0000°, Azm=296.0000°; P -0.8672, Plg=9.0000°, Azm=161.0000°;*
*NEIC **13** 06:37:28.7, 69°.63N×144°.20W, h19km*
**ISC 13 06:37:25.7±1.2, 69°.48N±0°.05×144°.14W±0°.03, h4km±9km, n175, σ1=87/161, mb3.9/13, MS3.0/12, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.21** | **45** | | **Pg** | **06 37 30.0** | **+0.2** |
| C27K | | | | | **Sg** | **06 37 33.2** | **+0.5** |
| C27K | | | | IAML | | 06 37 33.7 | |
| | comp=E,18μm,0.8s | | | | | | |
| C27K | | | | IAML | | 06 37 37.0 | |
| | comp=N,17μm,0.8s | | | | | | |
| **C26K** | **Camden Bay** | **0.52** | **329** | | **Pg** | **06 37 35.7** | **+0.1** |
| C26K | | | | | **Sg** | **06 37 42.9** | **+0.5** |
| C26K | | | | IAML | | 06 37 44.6 | |
| | comp=N,6μm,0.6s | | | | | | |
| C26K | | | | IAML | | 06 37 49.5 | |
| | comp=E,6μm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.81** | **260** | | **Pg** | **06 37 39.9** | **-1.3** |
| **D25K** | **Kavik River** | **0.81** | **260** | | **Sg** | **06 37 51.5** | **-0.1** |
| **D27M** | **Malcolm River** | **1.15** | **100** | | **Pb** | **06 37 48.0** | **-0.1** |
| D27M | | | | IAML | | 06 38 12.6 | |
| | comp=N,2μm,1.0s | | | | | | |
| **D27M** | **Malcolm River** | **1.15** | **100** | | **Sn** | **06 38 05.5** | **+0.7** |
| **E27K** | **Coleen River** | **1.59** | **143** | | **Pn** | **06 37 56.8** | **+2.1** |
| E27K | | | | IAML | | 06 38 21.8 | |
| | comp=N,1μm,0.9s | | | | | | |
| E27K | | | | IAML | | 06 38 22.9 | |
| | comp=E,1μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.62** | **281** | | **Pn** | **06 37 55.0** | **0.0** |
| C24K | | | | IAML | | 06 38 18.7 | |
| | comp=N,1μm,1.3s | | | | | | |
| C24K | | | | IAML | | 06 38 26.4 | |
| | comp=E,2μm,1.1s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.62** | **281** | | **Sb** | **06 38 17.5** | **+0.8** |
| **D24K** | **Happy Valley** | **1.70** | **261** | | **Pn** | **06 37 56.5** | **+0.5** |
| D24K | | | | IAML | | 06 38 24.7 | |
| | comp=E,1μm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.79** | **180** | | **Pn** | **06 37 59.5** | **+2.1** |
| F26K | | | | IAML | | 06 38 25.9 | |
| | comp=E,1μm,1.1s | | | | | | |
| **E28M** | **Babbage River** | **1.87** | **116** | | **Pn** | **06 38 00.6** | **+2.1** |
| E28M | | | | IAML | | 06 38 34.8 | |
| | comp=N,729nm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **1.92** | **92** | | **Pn** | **06 38 00.1** | **+1.1** |
| **F25K** | **Christian River** | **1.97** | **197** | Pn | **Pn** | **06 38 02.4** | **+2.5** |
| F25K | | | | IAML | | 06 38 33.1 | |
| | comp=E,973nm,1.1s | | | | | | |
| F25K | | | | IAML | | 06 38 33.5 | |
| | comp=N,816nm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain 2.06 185** | | Pn | **Pn** | | **06 38 03.2** | **+2.1** |
| **E24K** | **Your Creek 2.12 230** | | | **Pn** | | **06 38 03.6** | **+1.7** |
| **TOLK** | **Toolik Lake Re 2.13 249** | | | **Pn** | | **06 38 02.9** | **+0.9** |
| TOLK | | | | IAML | | 06 38 44.8 | |
| | comp=N,593nm,1.2s | | | | | | |
| **C23K** | **Itkillik River 2.29 282** | | | **Pn** | | **06 38 04.5** | **+0.3** |
| **D23K** | **Nanushuk River 2.39 261** | | | **Pn** | | **06 38 06.2** | **+0.6** |
| D23K | | | | IAML | | 06 38 56.9 | |
| | comp=E,655nm,1.0s | | | | | | |
| D23K | | | | IAML | | 06 38 59.4 | |
| | comp=N,486nm,1.5s | | | | | | |
| **F24K** | **Squaw Lake 2.40 217** | | Pn | **Pn** | | **06 38 07.1** | **+1.3** |
| **F28M** | **Old Crow 2.44 138** | | | **Pn** | | **06 38 08.2** | **+1.8** |
| F28M | | | | IAML | | 06 38 50.3 | |
| | comp=N,457nm,1.2s | | | | | | |
| F28M | | | | IAML | | 06 38 52.3 | |
| | comp=E,452nm,1.0s | | | | | | |
| **E23K** | **Chandalar 2.45 237** | | Pn | **Pn** | | **06 38 08.0** | **+1.5** |
| **E29M** | **Blow River 2.51 113** | | Pn | **Pn** | | **06 38 09.3** | **+2.2** |
| E29M | | | | IAML | | 06 38 48.6 | |
| | comp=E,483nm,0.9s | | | | | | |
| **G26K** | **Porcupine Rive 2.54 177** | | | **Pn** | | **06 38 09.8** | **+2.1** |
| **G25K** | **Bearman Lake 2.82 196** | | | **Pn** | | **06 38 13.8** | **+2.3** |
| **G27K** | **Doyon Strip 2.84 160** | | | **Pn** | | **06 38 13.5** | **+1.8** |
| **G24K** | **Hadweenzic Riv 3.06 206** | | | **Pn** | | **06 38 15.9** | **+1.2** |
| G24K | | | | IAML | | 06 39 07.9 | |
| | comp=E,259nm,1.1s | | | | | | |
| **E22K** | **Anaktuvuk Pass 3.10 248** | | Pn | **Pn** | | **06 38 16.0** | **+0.7** |
| **D22K** | **Ayikyak River 3.11 263** | | Pn | **Pn** | | **06 38 16.1** | **+0.6** |
| **COLD** | **Coldfoot 3.19 228** | | | **Pn** | | **06 38 18.2** | **+1.7** |
| **H25L** | **Birch Creek 3.29 192** | | | **Pn** | | **06 38 20.2** | **+2.4** |
| **B22K** | **Teshekpuk Lake 3.32 289** | | | **Pn** | | **06 38 18.9** | **+0.6** |
| **H27K** | **Steamboat Moun 3.41 162** | | | **Pn** | | **06 38 22.0** | **+2.4** |
| **G29M** | **Pine Creek 3.44 136** | | | **Pn** | | **06 38 22.2** | **+2.2** |
| **G23K** | **Bananza Creek 3.55 221** | | Pn | **Pn** | | **06 38 22.4** | **+0.9** |
| G23K | | | | IAML | | 06 39 24.1 | |
| | comp=E,238nm,1.2s | | | | | | |
| G23K | | | | IAML | | 06 39 24.1 | |
| | comp=N,244nm,1.5s | | | | | | |
| **F22K** | **John River 3.56 240** | | | **Pn** | | **06 38 22.9** | **+1.2** |
| **F30M** | **Barrier River 3.59 117** | | | **Pn** | | **06 38 24.6** | **+2.5** |
| **B21K** | **Ikpikpuk River 3.68 277** | | Pn | **Pn** | | **06 38 24.0** | **+0.8** |
| **E21K** | **Killik River 3.70 258** | | Pn | **Pn** | | **06 38 24.1** | **+0.6** |
| E21K | | | | IAML | | 06 39 26.4 | |
| | comp=N,178nm,0.9s | | | | | | |
| E21K | | | | IAML | | 06 39 33.3 | |
| | comp=E,219nm,1.0s | | | | | | |
| **G30M** | **tAoh Zraii Nji 3.87 127** | | Pn | **Pn** | | **06 38 28.1** | **+2.1** |
| G30M | | | | IAML | | 06 39 48.8 | |
| | comp=E,154nm,1.4s | | | | | | |
| G30M | | | | IAML | | 06 39 49.2 | |
| | comp=N,197nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome 3.92 203** | | Pn | **Pn** | | **06 38 28.0** | **+1.3** |
| H24K | | | | IAML | | 06 39 40.1 | |
| | comp=E,151nm,1.6s | | | | | | |
| **H29M** | **Whitestone 3.93 144** | | Pn | **Pn** | | **06 38 29.1** | **+2.3** |
| H29M | | | | IAML | | 06 39 44.6 | |
| | comp=N,191nm,1.1s | | | | | | |
| **A22K** | **Sinclair Lake 3.98 298** | | | **Pn** | | **06 38 28.1** | **+0.6** |
| **I27K** | **Kandik River 4.01 165** | | | **Pn** | | **06 38 30.4** | **+2.5** |
| **PRP** | **Porcupine Dome 4.01 188** | | | **Pn** | | **06 38 30.0** | **+2.0** |
| PRP | | | | IAML | | 06 39 38.0 | |
| | comp=N,166nm,1.0s | | | | | | |
| PRP | | | | IAML | | 06 39 41.8 | |
| | comp=E,114nm,1.1s | | | | | | |
| **INK** | **Inuvik 4.01 102** | | Pn | **Pn** | | **06 38 29.0** | **+1.2** |
| **INK** | **Inuvik 4.01 102** | | Pn | **Pn** | | **06 38 29.2** | **+1.3** |
| | comp=E,1.3nm,0.3s,baz=321,slow=10,SNR=25 | | | | | | |
| INK | | | | Sn | **Sn** | **06 39 14.6** | **-0.6** |
| | comp=E,2.9nm,0.3s,baz=300,slow=20,SNR=4.3 | | | | | | |
| INK | | | | Lg | Lg | 06 39 34.6 | |
| | comp=E,5.9nm,0.3s,baz=10,slow=8.1,SNR=5.0 | | | | | | |
| | comp=E,10nm,0.6s | | | | | | |
| **F21K** | **Alatna River 4.14 241** | | Pn | **Pn** | | **06 38 30.5** | **+0.9** |
| F21K | | | | IAML | | 06 39 44.0 | |
| | comp=E,134nm,0.9s | | | | | | |
| F21K | | | | IAML | | 06 39 45.0 | |
| | comp=N,153nm,2.1s | | | | | | |
| **EPYK** | **Eagle Plains 4.19 135** | | | **Pn** | | **06 38 32.2** | **+1.9** |
| **I26K** | **Coal Creek Min 4.21 174** | | | **Pn** | | **06 38 32.8** | **+2.2** |
| I26K | | | | IAML | | 06 39 55.4 | |
| | comp=E,157nm,1.1s | | | | | | |
| **H23K** | **Yukon River 4.21 212** | | | **Pn** | | **06 38 32.1** | **+1.6** |
| H23K | | | | IAML | | 06 39 43.2 | |
| | comp=N,102nm,1.3s | | | | | | |
| H23K | | | | IAML | | 06 39 45.1 | |
| | comp=E,146nm,1.8s | | | | | | |
| **F31M** | **Tsiigehtchic 4.34 113** | | Pn | **Pn** | | **06 38 33.8** | **+1.4** |
| F31M | | | | IAML | | 06 39 49.6 | |
| | comp=N,132nm,1.1s | | | | | | |
| **I28M** | **Miner Creek 4.36 156** | | Pn | **Pn** | | **06 38 35.1** | **+2.4** |
| I28M | | | | IAML | | 06 39 54.9 | |
| | comp=N,96nm,1.1s | | | | | | |
| I28M | | | | IAML | | 06 39 57.8 | |
| | comp=E,132nm,0.9s | | | | | | |
| **G31M** | **Satah River 4.48 120** | | Pn | **Pn** | | **06 38 36.2** | **+1.9** |
| **E20K** | **Nigu River 4.53 260** | | | **Pn** | | **06 38 35.9** | **+0.9** |
| **H22K** | **Ishtalitna Cre 4.53 221** | | | **Pn** | | **06 38 35.8** | **+0.8** |
| **D20K** | **Etivluk River 4.53 266** | | | **Pn** | | **06 38 36.4** | **+1.3** |
| **B20K** | **Meade River 4.56 283** | | | **Pn** | | **06 38 35.6** | **+0.3** |
| **POKR** | **Poker Plat Res 4.56 198** | | | **Pn** | | **06 38 37.9** | **+2.5** |
| POKR | | | | IAML | | 06 40 06.8 | |
| | comp=E,101nm,1.9s | | | | | | |
| **A21K** | **Barrow 4.59 300** | | | **Pn** | | **06 38 36.4** | **+0.7** |
| **G21K** | **Allakaket 4.61 234** | | Pn | **Pn** | | **06 38 36.9** | **+0.9** |
| G21K | | | | IAML | | 06 40 00.1 | |
| | comp=E,117nm,1.3s | | | | | | |
| G21K | | | | IAML | | 06 40 00.0 | |
| | comp=N,128nm,1.4s | | | | | | |
| **I29M** | **Ogilvie Camp, 4.70 149** | | | **Pn** | | **06 38 39.9** | **+2.5** |
| I29M | | | | IAML | | 06 40 22.8 | |
| | comp=N,72nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K 4.79 207** | | | **Pn** | | **06 38 40.1** | **+1.6** |
| I23K | | | | IAML | | 06 40 19.5 | |
| | comp=N,104nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome 4.81 201** | | | **Pn** | | **06 38 40.6** | **+1.8** |
| **COLA** | **College 4.84 199** | | Pn | **Pn** | | **06 38 41.6** | **+2.3** |
| **IL31** | **4.85 194** | | | **Pn** | | **06 38 42.1** | **+2.9** |
| **ILAR** | **Eielson Array 4.85 194** | | Pn | **Pn** | | **06 38 41.9** | **+2.6** |
| **ILAR** | **Eielson Array 4.85 194** | | Pn | **Pn** | | **06 38 42.1** | **+2.8** |
| | comp=N,2.1nm,0.3s,baz=5.2,slow=13,SNR=32 | | | | | | |
| ILAR | | | | Sn | **Sn** | **06 39 37.2** | **+1.4** |
| | comp=N,1.6nm,0.3s,baz=16,slow=15,SNR=4.3 | | | | | | |
| ILAR | | | | LR | LR | 06 40 54.1 | |
| | comp=N,143nm,19.9s,baz=96,slow=40 | | | | | | |
| | comp=N,6.1nm,0.6s | | | | | | |
| **EGAK** | **Eagle 4.86 165** | | Pn | **Pn** | | **06 38 41.8** | **+2.3** |
| EGAK | | | | IAML | | 06 39 43.3 | |
| | comp=N,99nm,1.2s | | | | | | |
| EGAK | | | | IAML | | 06 39 44.3 | |
| | comp=N,88nm,1.1s | | | | | | |
| **J25K** | **Salcha River, 4.91 186** | | Pn | **Pn** | | **06 38 42.6** | **+2.4** |
| J25K | | | | IAML | | 06 40 02.5 | |
| | comp=E,78nm,1.6s | | | | | | |
| **F20K** | **Avaraart Lake 4.95 246** | | | **Pn** | | **06 38 42.2** | **+1.6** |
| F20K | | | | IAML | | 06 40 11.4 | |
| | comp=N,82nm,1.1s | | | | | | |
| F20K | | | | IAML | | 06 40 25.4 | |
| | comp=E,60nm,1.7s | | | | | | |
| **J26L** | **Joseph Creek 5.00 177** | | Pn | **Pn** | | **06 38 44.3** | **+2.8** |
| J26L | | | | IAML | | 06 40 14.1 | |
| | comp=E,65nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu 5.06 198** | | | **Pn** | | **06 38 43.8** | **+1.6** |
| **H21K** | **Melozitna Rive 5.07 225** | | Pn | **Pn** | | **06 38 44.0** | **+1.6** |
| H21K | | | | IAML | | 06 40 26.1 | |
| | comp=N,79nm,2.0s | | | | | | |
| **D19K** | **Kuna River 5.12 266** | | Pn | **Pn** | | **06 38 44.0** | **+0.8** |
| D19K | | | | IAML | | 06 40 24.6 | |
| | comp=E,80nm,1.2s | | | | | | |
| **MLY** | **Manley 5.14 213** | | Pn | **Pn** | | **06 38 45.0** | **+1.6** |
| MLY | | | | IAML | | 06 40 22.2 | |
| | comp=N,52nm,1.8s | | | | | | |
| **HDA** | **Harding Lake 5.21 194** | | Pn | **Pn** | | **06 38 45.8** | **+1.5** |
| HDA | | | | IAML | | 06 40 18.7 | |
| | comp=N,74nm,1.9s | | | | | | |
| **I30M** | **Mount Dempster 5.22 141** | | Pn | **Pn** | | **06 38 45.7** | **+1.2** |
| I30M | | | | IAML | | 06 40 16.8 | |
| | comp=E,75nm,1.1s | | | | | | |
| I30M | | | | IAML | | 06 40 28.7 | |
| | comp=N,60nm,1.1s | | | | | | |
| **E19K** | **Redstone River 5.23 253** | | | **Pn** | | **06 38 45.2** | **+0.6** |
| E19K | | | | IAML | | 06 40 26.8 | |
| | comp=E,84nm,0.9s | | | | | | |
| E19K | | | | IAML | | 06 40 36.1 | |

comp=N,74nm,1.1s
**WRH Wood River Hil 5.26 199 Pn 06 38 46.8 +1.8**
WRH IAML 06 40 28.7
comp=E,66nm,1.5s
WRH IAML 06 40 35.6
comp=N,52nm,1.3s
**NEA2 Nenana 5.27 204 Pn 06 38 45.4 +0.3**
**C19K Lookout Ridge 5.49 273** Pn **Pn 06 38 49.2 +1.0**
**SCRK Sand Creek 5.53 179** Pn **Pn 06 38 48.9 +0.2**
**K27K Chicken 5.53 171 Pn 06 38 51.4 +2.7**
**J29N Klondike Camp 5.55 152** Pn **Pn 06 38 52.2 +3.1**
**BWN Browne 5.73 204** Pn **Pn 06 38 49.8 -1.6**
**F19K Shaleruckik Mo 5.74 249** Pn **Pn 06 38 48.7 -2.7**
**DAWY Dawson 5.75 159 Pn 06 38 54.3 +2.6**
**J30M Hart River 5.79 144** Pn **Pn 06 38 54.4 +2.0**
**DOT Dot Lake 5.86 180 Pn 06 38 56.5 +3.3**
**A19K Wainwright 5.90 285 Pn 06 38 54.0 +0.4**
**G19K Purcell Mounta 5.93 242** Pn **Pn 06 38 55.2 +1.0**
**BPAW Bear Paw Mtn. 6.04 210 Pn 06 38 57.1 +1.5**
**H19K Roundabout Mou 6.16 236** Pn **Pn 06 38 56.1 -1.2**
**C18K Utukok River 6.17 270** Pn **Pn 06 38 57.8 +0.3**
**I20K Naaghedeneel 6.18 226** Pn **Pn 06 38 55.9 -1.7**
**K29M Barlow Dome 6.24 152** Pn **Pn 06 39 00.2 +1.7**
**RND Reindeer 6.38 199** Pn **Pn 06 39 01.1 +0.7**
**E18K Tukpahlearik C 6.40 259** Pn **Pn 06 39 01.4 +0.8**
**F18K Selawik 6.49 251 Pn 06 39 02.5 +0.8**
**L26K Log Cabin Wild 6.49 177 Pn 06 39 04.3 +2.5**
**BCAR Beaver Creek A 6.51 171** Pn **Pn 06 39 04.1 +1.9**
**L27K Beaver Creek, 6.51 171** Pn **Pn 06 39 01.2 -0.9**
**PAX Paxson 6.56 185 Pn 06 39 05.6 +2.8**
**DHY Denali Highway 6.56 193 Pn 06 39 07.0 +4.0**
**MENT Mentasta 6.57 178** Pn **Pn 06 39 02.5 -0.5**
**G18K Tagagawik 6.58 244** Pn **Pn 06 39 04.9 +1.7**
**J20K Nowinta River 6.62 221** Pn **Pn 06 39 04.5 +0.9**
**A36M Sachs Harbour 6.72 59** Pn **Pn 06 39 04.1 -0.9**
**L29M L29M 6.83 156** Pn **Pn 06 39 08.5 +1.9**
**C17K DeLong Mountai 6.92 271 Pn 06 39 07.1 -0.5**
**WAT7 Susitna Watana 6.94 198 Pn 06 39 11.0 +2.9**
**RDOG Red Dog Mine 6.96 267** Pn **Pn 06 39 08.3 0.0**
**H18K Honhosa River 7.00 238** Pn **Pn 06 39 09.5 +0.7**
**C36M Paulatuk 7.07 82** Pn **Pn 06 39 08.9 -0.8**
**F17K Baldwin Pennin 7.11 253** Pn **Pn 06 39 09.8 -0.5**
**M26K Nabesna, AK 7.12 176** Pn **Pn 06 39 14.0 +3.4**
**J19K Poorman 7.13 225** Pn **Pn 06 39 12.3 +1.7**
**M27K Edge Creek, AK 7.21 172** Pn **Pn 06 39 09.1 -2.8**
**K20K Telida 7.31 218** Pn **Pn 06 39 13.6 +0.5**
**M29M Somme Creek 7.43 159** Pn **Pn 06 39 14.8 -0.1**
**G17K Kiwalik Mounta 7.47 246 Pn 06 39 16.0 +0.7**
**CUT Chulitna 7.53 202** Pn **Pn 06 39 13.9 -2.1**
**H17K Granite Mounta 7.62 241** Pn **Pn 06 39 19.5 +2.2**
**C16K Lisburne Hills 7.74 271** Pn **Pn 06 39 19.3 +0.3**
**SCM Sheep Creek Mo 7.79 191** Pn **Pn 06 39 17.0 -2.7**
**SML Sawmill 7.89 195** Pn **Pn 06 39 20.2 -0.9**
**GLB Gilahina Butte 8.07 179** Pn Pn 06 39 20.3 -3.3
**G16K Koyuk River 8.09 248** Pn **Pn 06 39 23.0 -0.8**
**M31M Drury Creek, Y 8.31 147** Pn **Pn 06 39 28.7 +1.9**
**FARO Faro, Yukon 8.50 144** Pn **Pn 06 39 30.5 +1.1**
**N30M Aishikik Lake 8.56 157** Pn **Pn 06 39 32.3 +2.1**
**N31M Braeburn, Yuko 8.73 153** Pn **Pn 06 39 31.9 -0.8**
**ISLE Juniper Island 8.94 174** Pn **Pn 06 39 33.8 -1.8**
**O30N Mendenhall 9.36 155** Pn **Pn 06 39 39.0 -2.3**
**SVW2 Sparrevohn 9.68 215** Pn Pn 06 39 44.0 -4.3
**P29M Windy Craggy 10.25 161** Pn **Pn 06 39 50.2 -3.3**
**WRGLY Wrigley 10.35 117** Pn **Pn 06 39 51.9 -2.8**
**KDAK Kodiak Island 12.30 202** LR LR 06 44 43.4
comp=N,57nm,20.7s,baz=46,slow=35
**DLBC Dease Lake 12.64 144** Pn **Pn 06 40 29.1 +2.9**
comp=N,0.3nm,0.3s,baz=332,slow=11,SNR=5.6
comp=N,2.1nm,0.7s
**S34M Telegraph Cree 12.91 147** Pn Pn 06 40 25.6 -4.2
**OHAK Old Harbor 12.94 203** Pn **Pn 06 40 27.4 -2.7**
**YKA Yellowknife Ar 13.77 106** Pn Pn 06 40 37.4 -4.0
comp=N,0.5nm,0.3s,baz=314,slow=13,SNR=11
YKA Sn Sn 06 43 01.5 -13
comp=N,0.4nm,0.3s,baz=312,slow=25,SNR=5.7
comp=N,1.4nm,0.5s
**BBB Bella Bella 18.91 148** LR LR 06 48 22.3
comp=N,30nm,18.6s,baz=314,slow=34
**NEW Newport 25.02 134** LR LR 06 53 25.6
comp=N,56nm,21.4s,baz=332,slow=38
**SHEM Shemya Is, Ala 25.47 250** LR LR 06 54 38.4
comp=N,41nm,18.2s,baz=28,slow=40
**HOOD Mount Hood Mea 26.74 143** P **P 06 43 03.2 -2.9**
HOOD IAmb IAmb 06 43 11.5
comp=E,6.1nm,0.8s
**G05A Wamic 26.89 143** P **P 06 43 04.8 -2.5**
G05A IAmb IAmb 06 43 27.9
comp=E,5.0nm,1.0s
**FRB Frobisher Bay 28.70 64** LR LR 06 55 42.7
comp=E,65nm,21.1s,baz=234,slow=38
**PD31 Pinedale Array 32.12 128** P **P 06 43 50.2 -3.8**
PD31 IAmb IAmb 06 44 33.7
comp=E,4.4nm,1.5s
**PDAR Pinedale Array 32.12 128** P P 06 43 49.8 -4.2
**PDAR Pinedale Array 32.12 128** P **P 06 43 57.2 +3.2**
comp=E,0.4nm,0.6s,baz=2.6,slow=6.5,SNR=5.9
PDAR LR LR 06 57 44.8
comp=E,22nm,18.1s,baz=328,slow=38
comp=E,0.4nm,0.6s
**RSSD Black Hills 32.49 120** P **P 06 43 53.6 -3.6**
**ELK Elko 32.54 137** P **P 06 43 54.4 -3.3**
**EYMN Ely 33.22 103** P **P 06 44 00.8 -2.5**
EYMN IAmb IAmb 06 44 03.8
comp=E,8.1nm,1.4s
**YAK Yakutsk 33.25 301** LR LR 07 00 26.5
comp=E,25nm,18.1s,baz=21,slow=42
**NVAR Mina Array Bea 34.05 142** P **P 06 44 14.8 +4.0**
comp=E,1.0nm,0.8s,baz=340,slow=7.5,SNR=8.6
comp=E,1.0nm,0.8s
**PFO Pinyon Flats O 39.09 142** LR LR 07 03 12.0
comp=E,39nm,19.3s,baz=12,slow=39
**BORG Borgarnes 40.24 34** LR LR 07 03 36.4
comp=E,13nm,20.3s,baz=324,slow=39
**ANMO Albuquerque 40.28 129** LR LR 07 05 05.8
comp=E,33nm,21.0s,baz=40,slow=41
**ARCES ARCESS Array B 41.07 6** LR LR 07 04 05.7
comp=E,16nm,18.7s,baz=8.0,slow=39
**TXAR Lajitas Array 46.34 128** P **P 06 45 54.0 +1.5**
**TXAR Lajitas Array 46.34 128** P **P 06 45 54.6 +2.0**
comp=E,0.4nm,0.6s,baz=346,slow=5.5,SNR=7.9
comp=E,0.4nm,0.6s
**FIA1 FINESS Array S 49.18 6** P **P 06 46 14.1 +0.1**
**HFS Hagfors 49.71 14** P **P 06 46 19.6 +1.5**
comp=E,1.9nm,0.7s,baz=5.7,slow=3.0,SNR=5.1
comp=E,1.9nm,0.7s
**ZALV Zalesovo Beam 51.84 325** LR LR 07 11 31.7
comp=E,14nm,18.3s,baz=54,slow=40
**MJAR Matsushiro Arr 52.01 273** P **P 06 46 39.0 +3.1**
comp=E,0.8nm,0.6s,baz=347,slow=10.0,SNR=5.5
comp=E,0.8nm,0.6s
**EKA Eskdalemuir Ar 52.31 27** P **P 06 46 37.7 0.0**
comp=E,0.4nm,0.5s,baz=349,slow=7.3,SNR=2.3
comp=E,0.4nm,0.5s
**BVAR Borovoye Array 55.23 335** LR LR 07 13 35.5
comp=E,15nm,18.7s,baz=39,slow=39
**KURBB Kurchatov Arra 56.21 329** P **P 06 47 05.5 -0.7**
comp=E,1.1nm,0.8s,baz=14,slow=6.9,SNR=6.3
comp=E,1.1nm,0.8s
**MKAR Makanchi Array 59.14 325** P **P 06 47 27.1 +0.2**
**MKAR Makanchi Array 59.14 325** P **P 06 47 26.9 -0.1**
comp=E,0.3nm,0.4s,baz=50,slow=7.3,SNR=2.3
comp=E,0.3nm,0.4s
**MAKZ Makanchi 59.19 325** P **P 06 47 25.3 -2.0**
MAKZ IAmb IAmb 06 47 32.4
comp=E,6.0nm,1.4s
**ABKAR Akbulak array 60.27 342** P **P 06 47 33.5 -1.0**
ABKAR IAmb IAmb 06 48 12.8
comp=E,2.6nm,1.4s
**CMAR Chiang Mai Arr 81.78 301** LR LR 07 30 55.3
comp=E,21nm,18.7s,baz=160,slow=39

**IDC 13 06:49:35.5±2.8, 54°06'N×86°49'E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=22.6km s-min=13.6km az=58.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.99** | **264** | I | I | 06 55 50.0 | |
| | baz=83,slow=322,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.99** | **264** | Pg | Pg | 06 49 53.5 | -0.9 |
| | 1.3nm,0.3s,baz=86,slow=18,SNR=10 | | | | | | |
| ZALV | | | | Lg | Lg | 06 50 08.8 | |
| | 3.5nm,0.3s,baz=87,slow=28,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.97** | **238** | Pn | Pn | 06 51 05.0 | 0.0 |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=5.0 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.75** | **202** | Pn | Pn | 06 51 31.1 | +1.6 |
| | 0.1nm,0.3s,baz=14,slow=13,SNR=5.2 | | | | | | |
| MKAR | | | | Lg | Lg | 06 53 43.8 | |
| | 0.1nm,0.3s,baz=24,slow=29,SNR=5.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**IDC 13 06:51:35.0±9.4, 5°75'S×151°53'E, h84km±66km, mb3.1/2, mbtmp3.6/3, ML1.8/1, MS3.5/2, Error ellipse: s-maj=112.6km s-min=59.3km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.65** | **230** | P | Pn | 06 52 55.7 | -0.7 |
| | 1.9nm,0.3s,baz=32,slow=9.5,SNR=2.9 | | | | | | |
| PMG | | | | S | Sn | 06 54 01.9 | +1.8 |
| | 12nm,0.6s,baz=295,slow=19,SNR=2.0 | | | | | | |
| | 13nm,0.5s | | | | | | |
| **HNR** | **Honiara** | **9.11** | **114** | LR | LR | 06 56 31.4 | |
| | comp=Z,660nm,21.7s,baz=196,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.71** | **140** | LR | LR | 07 02 47.2 | |
| | comp=Z,75nm,19.6s,baz=202,slow=31 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.87** | **228** | P | P | 06 56 20.8 | -0.2 |
| | 0.7nm,0.5s,baz=53,slow=10,SNR=8.9 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.60** | **222** | P | P | 06 56 47.0 | -0.4 |
| | 0.4nm,0.5s,baz=57,slow=8.8,SNR=8.5 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.38** | **286** | PKPbc | PKPbc | 07 11 15.3 | 0.0 |
| | 0.3nm,0.6s,baz=100,slow=3.6,SNR=4.5 | | | | | | |

*NEIC* ***13*** *06:55:50.6±1.9, 69°56N×0°04×144°65W±0°08, h10km±2km, Error ellipse: s-maj=7.8km s-min=4.3km az=15.0*
*AEIC* ***13*** *06:55:50.1±1.7, 69°49N×0°03×144°65W±0°07, h3km±6km, ML3.5, ML3.6/122(NEIC), Error ellipse: s-maj=5.0km s-min=1.9km az=45.0*
*IDC* ***13*** *06:55:52.3±1.9, 69°73N×144°89W, h0km, mb3.6/3, mbtmp3.5/5, ML3.3/2, MS2.8/1, Error ellipse: s-maj=39.5km s-min=24.2km az=99.0*

**ISC 13 06:55:51.4±0.7, 69°55N±0°04×144°68W±0°03, h14km, n119, σ1s24/124, mb3.4/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.35** | **76** | | **Pg** | **06 55 56.9** | **-1.6** |
| C27K | | | | | **Sg** | **06 56 01.9** | **-1.4** |
| **C26K** | **Camden Bay** | **0.38** | **348** | | **Pg** | **06 55 58.6** | **-0.5** |
| C26K | | | | | **Sg** | **06 56 04.3** | **0.0** |
| **D25K** | **Kavik River** | **0.64** | **250** | | **Pg** | **06 56 02.2** | **-1.8** |
| D25K | | | | | **Sg** | **06 56 10.9** | **-1.4** |
| **D27M** | **Malcolm River** | **1.35** | **101** | | **Pn** | **06 56 15.2** | **-0.7** |
| D27M | | | | Sg | **Sb** | **06 56 32.8** | **-0.7** |
| **C24K** | **Franklin Bluff** | **1.42** | **279** | | **Pb** | **06 56 17.1** | **-0.5** |
| C24K | | | | | **Sg** | **06 56 36.5** | **-0.6** |
| C24K | | | | IAML | | 06 56 45.1 | |
| | comp=E,988nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.52** | **257** | | **Pb** | **06 56 19.1** | **-0.3** |
| D24K | | | | IAML | | 06 56 49.1 | |
| | comp=E,836nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.76** | **139** | | **Pb** | **06 56 22.8** | **-0.7** |
| **F26K** | **Sheenjek River** | **1.87** | **174** | Pn | **Pn** | **06 56 22.4** | **-0.6** |
| F26K | | | | Sn | **Sn** | **06 56 45.4** | **-1.0** |
| F26K | | | | IAML | | 06 56 56.7 | |
| | comp=E,628nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.98** | **245** | | **Pn** | **06 56 23.8** | **-0.6** |
| TOLK | | | | IAML | | 06 57 01.3 | |
| | comp=E,493nm,0.9s | | | | | | |
| TOLK | | | | IAML | | 06 57 04.4 | |
| | comp=N,375nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **191** | Pn | **Pn** | **06 56 23.5** | **-1.2** |
| **E24K** | **Your Creek** | **2.02** | **225** | | **Pn** | **06 56 24.6** | **-0.6** |
| **E28M** | **Babbage River** | **2.07** | **115** | Pn | **Pn** | **06 56 26.0** | **+0.3** |
| **C23K** | **Itkillik River** | **2.09** | **281** | Pn | **Pn** | **06 56 25.9** | **0.0** |
| C23K | | | | IAML | | 06 57 08.7 | |
| | comp=N,492nm,1.1s | | | | | | |
| **D28M** | **Stokes Point** | **2.11** | **93** | Pn | **Pn** | **06 56 25.6** | **-0.6** |
| D28M | | | | IAML | | 06 57 11.0 | |
| | comp=E,380nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.13** | **179** | | **Pn** | **06 56 25.5** | **-1.0** |
| **D23K** | **Nanushuk River** | **2.22** | **258** | | **Pn** | **06 56 27.0** | **-0.7** |
| D23K | | | | IAML | | 06 57 14.4 | |
| | comp=N,354nm,0.9s | | | | | | |
| D23K | | | | IAML | | 06 57 23.7 | |
| | comp=E,239nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.34** | **233** | Pn | **Pn** | **06 56 28.6** | **-0.8** |
| E23K | | | | IAML | | 06 57 16.5 | |
| | comp=E,223nm,1.2s | | | | | | |
| E23K | | | | IAML | | 06 57 21.4 | |
| | comp=N,237nm,1.1s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **212** | Pn | **Pn** | **06 56 28.9** | **-0.7** |
| F24K | | | | IAML | | 06 57 17.6 | |
| | comp=E,260nm,0.7s | | | | | | |
| F24K | | | | IAML | | 06 57 17.8 | |
| | comp=N,229nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.62** | **135** | Pn | **Pn** | **06 56 33.6** | **+0.3** |
| F28M | | | | IAML | | 06 57 22.8 | |
| | comp=N,162nm,1.2s | | | | | | |
| F28M | | | | IAML | | 06 57 24.6 | |
| | comp=E,171nm,0.9s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.63** | **172** | | **Pn** | **06 56 35.1** | **+1.7** |
| **E29M** | **Blow River** | **2.71** | **112** | Pn | **Pn** | **06 56 34.6** | **+0.2** |
| E29M | | | | IAML | | 06 57 20.1 | |
| | comp=N,188nm,1.1s | | | | | | |
| E29M | | | | IAML | | 06 57 22.5 | |
| | comp=E,193nm,1.1s | | | | | | |
| **G25K** | **Bearman Lake** | **2.84** | **191** | | **Pn** | **06 56 38.5** | **+2.2** |
| **D22K** | **Ayikyak River** | **2.93** | **261** | Pn | **Pn** | **06 56 37.6** | **0.0** |
| **E22K** | **Anaktuvuk Pass** | **2.95** | **245** | Pn | **Pn** | **06 56 37.0** | **-0.8** |
| **G27K** | **Doyon Strip** | **2.97** | **156** | Pn | **Pn** | **06 56 37.6** | **-0.5** |
| **FYU** | **Fort Yukon** | **3.00** | **184** | Pn | **Pn** | **06 56 38.9** | **+0.5** |
| FYU | | | | IAML | | 06 57 36.0 | |
| | comp=N,231nm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.04** | **201** | | **Pn** | **06 56 39.4** | **+0.3** |
| G24K | | | | IAML | | 06 57 33.8 | |
| | comp=E,232nm,1.0s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.12** | **289** | | **Pn** | **06 56 39.7** | **-0.3** |
| **H25L** | **Birch Creek** | **3.32** | **188** | Pn | **Pn** | **06 56 45.4** | **+2.5** |
| **G23K** | **Bananza Creek** | **3.48** | **218** | Pn | **Pn** | **06 56 43.9** | **-1.2** |
| G23K | | | | IAML | | 06 57 54.9 | |
| | comp=N,95nm,1.6s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.48** | **276** | | **Pn** | **06 56 44.6** | **-0.4** |
| B21K | | | | IAML | | 06 58 01.6 | |
| | comp=E,145nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.53** | **256** | Pn | **Pn** | **06 56 44.3** | **-1.5** |
| E21K | | | | IAML | | 06 58 00.9 | |
| | comp=E,112nm,1.1s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.54** | **159** | | **Pn** | **06 56 48.4** | **+2.5** |
| **G29M** | **Pine Creek** | **3.62** | **134** | Pn | **Pn** | **06 56 47.1** | **+0.1** |
| G29M | | | | IAML | | 06 57 58.4 | |
| | comp=N,127nm,1.3s | | | | | | |
| **F30M** | **Barrier River** | **3.79** | **117** | | **Pn** | **06 56 51.6** | **+2.3** |
| **H24K** | **Noodor Dome** | **3.92** | **200** | | **Pn** | **06 56 50.5** | **-0.6** |
| H24K | | | | IAML | | 06 58 01.1 | |
| | comp=E,78nm,1.0s | | | | | | |
| H24K | | | | IAML | | 06 58 05.1 | |
| | comp=N,55nm,1.2s | | | | | | |
| **F21K** | **Alatna River** | **4.01** | **239** | | **Pn** | **06 56 51.9** | **-0.4** |
| F21K | | | | IAML | | 06 58 10.1 | |
| | comp=E,90nm,0.8s | | | | | | |
| F21K | | | | IAML | | 06 58 14.5 | |
| | comp=N,62nm,1.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **185** | | **Pn** | **06 56 53.7** | **+0.6** |
| PRP | | | | IAML | | 06 57 49.8 | |
| | comp=N,77nm,0.5s | | | | | | |
| PRP | | | | IAML | | 06 58 13.1 | |
| | comp=E,52nm,0.7s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.06** | **125** | | **Pn** | **06 56 52.5** | **-0.6** |
| G30M | | | | IAML | | 06 58 09.6 | |
| | comp=N,49nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.10** | **142** | Pn | **Pn** | **06 56 54.5** | **+0.9** |
| H29M | | | | IAML | | 06 57 50.2 | |
| | comp=E,93nm,0.7s | | | | | | |
| H29M | | | | IAML | | 06 58 08.8 | |
| | comp=N,72nm,0.9s | | | | | | |
| **I27K** | **Kandik River** | **4.13** | **162** | | **Pn** | **06 56 55.9** | **+1.9** |
| **H23K** | **Yukon River** | **4.17** | **209** | | **Pn** | **06 56 54.4** | **-0.1** |
| H23K | | | | IAML | | 06 58 23.4 | |
| | comp=N,90nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.21** | **102** | Pn | **Pn** | **06 56 54.6** | **-0.4** |
| **I26K** | **Coal Creek Min** | **4.30** | **171** | Pn | **Pn** | **06 56 55.2** | **-1.1** |
| **D20K** | **Etivluk River** | **4.35** | **265** | | **Pn** | **06 56 58.5** | **+1.5** |
| **B20K** | **Meade River** | **4.36** | **282** | | **Pn** | **06 56 56.8** | **-0.2** |
| **E20K** | **Nigu River** | **4.36** | **258** | | **Pn** | **06 56 58.5** | **+1.4** |
| **EPYK** | **Eagle Plains** | **4.38** | **133** | | **Pn** | **06 56 57.6** | **+0.2** |
| **H22K** | **Ishtalitna Cre** | **4.47** | **218** | | **Pn** | **06 56 59.8** | **+1.2** |
| **G21K** | **Allakaket** | **4.50** | **232** | | **Pn** | **06 56 59.0** | **-0.1** |
| **I28M** | **Miner Creek** | **4.50** | **154** | | **Pn** | **06 56 59.0** | **-0.2** |
| I28M | | | | IAML | | 06 58 24.5 | |
| | comp=E,49nm,1.2s | | | | | | |
| I28M | | | | IAML | | 06 58 24.7 | |
| | comp=N,46nm,0.9s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.54** | **113** | Pn | **Pn** | **06 57 01.3** | **+1.7** |
| F31M | | | | IAML | | 06 58 18.1 | |
| | comp=N,44nm,0.7s | | | | | | |
| F31M | | | | IAML | | 06 58 32.2 | |
| | comp=E,45nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58** | **195** | Pn | **Pn** | **06 57 00.2** | **+0.1** |
| POKR | | | | IAML | | 06 58 23.9 | |
| | comp=N,41nm,0.7s | | | | | | |
| POKR | | | | IAML | | 06 58 24.8 | |
| | comp=E,58nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.68** | **119** | Pn | **Pn** | **06 57 01.0** | **-0.5** |
| G31M | | | | IAML | | 06 58 26.8 | |
| | comp=E,48nm,1.4s | | | | | | |
| G31M | | | | IAML | | 06 58 30.8 | |
| | comp=N,63nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **205** | | **Pn** | **06 57 02.9** | **+0.1** |
| I23K | | | | IAML | | 06 58 38.2 | |
| | comp=E,59nm,1.2s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.80** | **244** | Pn | **Pn** | **06 57 03.5** | **+0.3** |
| F20K | | | | IAML | | 06 58 30.9 | |
| | comp=N,46nm,1.0s | | | | | | |
| F20K | | | | IAML | | 06 58 40.5 | |
| | comp=E,40nm,0.9s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **198** | | **Pn** | **06 57 02.8** | **-0.5** |
| MDM | | | | IAML | | 06 58 30.3 | |
| | comp=N,42nm,1.0s | | | | | | |
| MDM | | | | IAML | | 06 58 35.4 | |
| | comp=E,43nm,0.8s | | | | | | |
| **COLA** | **College** | **4.85** | **196** | Pn | **Pn** | **06 57 02.4** | **-1.5** |
| **I29M** | **Ogilvie Camp,** | **4.86** | **147** | Pn | **Pn** | **06 57 03.1** | **-0.9** |
| I29M | | | | IAML | | 06 58 31.6 | |
| | comp=E,39nm,0.7s | | | | | | |
| I29M | | | | IAML | | 06 58 37.7 | |
| | comp=N,40nm,1.1s | | | | | | |
| **IL31** | | **4.87** | **191** | | **Pn** | **06 57 03.9** | **-0.2** |
| **ILAR** | **Eielson Array** | **4.87** | **191** | Pn | **Pn** | **06 57 04.6** | **+0.4** |
| **ILAR** | **Eielson Array** | **4.87** | **191** | Pn | **Pn** | **06 57 06.7** | **+2.5** |
| | comp=N,1.1nm,0.3s,baz=7.9,slow=14,SNR=19 | | | | | | |
| ILAR | | | | Sn | **Sn** | **06 58 04.6** | **+4.3** |
| | comp=N,2.1nm,0.3s,baz=7.7,slow=24,SNR=7.3 | | | | | | |
| | comp=N,3.7nm,0.5s | | | | | | |
| **D19K** | **Kuna River** | **4.94** | **264** | Pn | **Pn** | **06 57 05.6** | **+0.4** |
| D19K | | | | IAML | | 06 58 42.4 | |
| | comp=E,31nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **183** | Pn | **Pn** | **06 57 05.3** | **-0.2** |
| J25K | | | | IAML | | 06 58 32.6 | |
| | comp=E,36nm,0.8s | | | | | | |
| J25K | | | | IAML | | 06 58 41.3 | |
| | comp=N,29nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **4.98** | **162** | Pn | **Pn** | **06 57 04.3** | **-1.3** |
| EGAK | | | | IAML | | 06 58 06.1 | |
| | comp=N,41nm,0.9s | | | | | | |
| EGAK | | | | IAML | | 06 58 35.4 | |
| | comp=N,52nm,1.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.99** | **222** | | **Pn** | **06 57 05.6** | **-0.2** |
| **CCB** | **Clear Creek Bu** | **5.07** | **195** | | **Pn** | **06 57 06.0** | **-0.8** |
| **E19K** | **Redstone River** | **5.07** | **252** | | **Pn** | **06 57 06.3** | **-0.5** |
| E19K | | | | IAML | | 06 58 48.2 | |
| | comp=N,45nm,0.8s | | | | | | |
| E19K | | | | IAML | | 06 58 56.0 | |
| | comp=E,42nm,1.0s | | | | | | |
| **J26L** | **Joseph Creek** | **5.09** | **175** | Pn | **Pn** | **06 57 06.2** | **-1.0** |
| J26L | | | | IAML | | 06 58 13.2 | |
| | comp=N,32nm,0.5s | | | | | | |
| **MLY** | **Manley** | **5.11** | **210** | Pn | **Pn** | **06 57 05.9** | **-1.5** |
| **HDA** | **Harding Lake** | **5.24** | **191** | | **Pn** | **06 57 07.4** | **-1.7** |
| HDA | | | | IAML | | 06 58 47.5 | |
| | comp=N,35nm,0.7s | | | | | | |
| HDA | | | | IAML | | 06 58 51.8 | |
| | comp=E,41nm,1.2s | | | | | | |
| **NEA2** | **Nenana** | **5.26** | **201** | | **Pn** | **06 57 08.4** | **-1.1** |
| NEA2 | | | | IAML | | 06 58 59.0 | |
| | comp=E,21nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.27** | **196** | | **Pn** | **06 57 08.6** | **-1.0** |
| WRH | | | | IAML | | 06 58 51.7 | |
| | comp=E,28nm,1.3s | | | | | | |
| WRH | | | | IAML | | 06 58 57.6 | |
| | comp=N,25nm,1.3s | | | | | | |
| **I30M** | **Mount Dempster** | **5.39** | **140** | Pn | **Pn** | **06 57 11.7** | **+0.3** |
| I30M | | | | IAML | | 07 00 46.6 | |
| | comp=N,32nm,0.5s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.59** | **247** | Pn | **Pn** | **06 57 13.7** | **-0.2** |
| **SCRK** | **Sand Creek** | **5.60** | **177** | Pn | **Pn** | **06 57 14.1** | **-0.2** |
| **K27K** | **Chicken** | **5.63** | **168** | Pn | **Pn** | **06 57 14.1** | **-0.5** |
| **G19K** | **Purcell Mounta** | **5.80** | **240** | Pn | **Pn** | **06 57 16.0** | **-0.9** |
| **DAWY** | **Dawson** | **5.88** | **157** | | **Pn** | **06 57 18.5** | **+0.4** |
| **DOT** | **Dot Lake** | **5.93** | **177** | | **Pn** | **06 57 20.9** | **+2.2** |
| **J30M** | **Hart River** | **5.96** | **143** | | **Pn** | **06 57 18.3** | **-0.9** |
| **C18K** | **Utukok River** | **5.98** | **269** | Pn | **Pn** | **06 57 19.5** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **207** | Pn | **Pn** | **06 57 19.1** | **-0.6** |
| **H19K** | **Roundabout Mou** | **6.05** | **234** | Pn | **Pn** | **06 57 19.7** | **-0.5** |
| **MCK** | **McKinley** | **6.08** | **198** | | **Pn** | **06 57 21.1** | **+0.4** |
| **I20K** | **Naaghedeneel** | **6.10** | **223** | Pn | **Pn** | **06 57 17.8** | **-3.2** |
| **E18K** | **Tukpahlearik C** | **6.23** | **258** | | **Pn** | **06 57 23.1** | **+0.3** |
| **K29M** | **Barlow Dome** | **6.39** | **150** | | **Pn** | **06 57 23.4** | **-1.7** |
| **RND** | **Reindeer** | **6.39** | **197** | Pn | **Pn** | **06 57 23.6** | **-1.5** |
| **G18K** | **Tagagawik** | **6.45** | **242** | Pn | **Pn** | **06 57 24.4** | **-1.4** |
| **J20K** | **Nowinta River** | **6.55** | **219** | Pn | **Pn** | **06 57 25.4** | **-1.8** |
| **L26K** | **Log Cabin Wild** | **6.57** | **175** | Pn | **Pn** | **06 57 28.4** | **+1.0** |
| **DHY** | **Denali Highway** | **6.59** | **191** | Pn | **Pn** | **06 57 26.6** | **-1.3** |
| **BCAR** | **Beaver Creek A** | **6.61** | **168** | Pn | **Pn** | **06 57 26.5** | **-1.5** |
| **L27K** | **Beaver Creek,** | **6.61** | **169** | Pn | **Pn** | **06 57 26.7** | **-1.4** |
| **PAX** | **Paxson** | **6.61** | **183** | | **Pn** | **06 57 26.4** | **-1.7** |
| **MENT** | **Mentasta** | **6.65** | **176** | Pn | **Pn** | **06 57 26.8** | **-1.7** |
| **RDOG** | **Red Dog Mine** | **6.77** | **266** | Pn | **Pn** | **06 57 31.0** | **+0.8** |
| **A36M** | **Sachs Harbour** | **6.85** | **60** | Pn | **Pn** | **06 57 31.2** | **0.0** |
| **F17K** | **Baldwin Pennin** | **6.95** | **251** | Pn | **Pn** | **06 57 31.8** | **-0.8** |
| **L29M** | **L29M** | **6.98** | **155** | Pn | **Pn** | **06 57 33.2** | **+0.1** |
| **J19K** | **Poorman** | **7.05** | **223** | Pn | **Pn** | **06 57 35.7** | **+1.7** |
| **C36M** | **Paulatuk** | **7.25** | **82** | Pn | **Pn** | **06 57 36.8** | **+0.1** |
| **K20K** | **Telida** | **7.25** | **216** | Pn | **Pn** | **06 57 38.4** | **+1.5** |
| **M29M** | **Somme Creek** | **7.56** | **158** | Pn | **Pn** | **06 57 41.1** | **0.0** |
| **G16K** | **Koyuk River** | **7.95** | **247** | Pn | **Pn** | **06 57 46.1** | **-0.2** |
| **J17K** | **VABM Dome** | **8.42** | **230** | Pn | **Pn** | **06 57 53.6** | **+0.8** |
| **M20K** | **Styx River** | **8.44** | **208** | Pn | **Pn** | **06 57 51.2** | **-1.9** |
| **M31M** | **Drury Creek, Y** | **8.48** | **145** | Pn | **Pn** | **06 57 53.2** | **-0.4** |
| **F15K** | **North Star Dit** | **8.51** | **253** | Pn | **Pn** | **06 57 53.5** | **-0.5** |
| **FARO**

C27K IAML 06 58 30.5
comp=N,10μm,0.6s
C27K IAML 06 58 30.8
comp=E,13μm,0.7s
**C26K Camden Bay 0.55 330 Pg 06 58 32.8 +0.7**
C26K **Sg 06 58 40.0 +0.8**
C26K IAML 06 58 41.7
comp=N,4μm,0.6s
**D25K Kavik River 0.81 262 Pg 06 58 36.9 -0.2**
D25K **Sb 06 58 47.9 -0.8**
**D27M Malcolm River 1.14 99 Pn 06 58 44.0 +0.5**
D27M **Sn 06 59 00.6 +1.4**
**E27K Coleen River 1.57 143** Pn **Pb 06 58 49.7 -0.9**
E27K IAML 06 59 18.5
comp=N,619nm,0.9s
**C24K Franklin Bluff 1.63 282** Pn **Pn 06 58 49.8 -0.4**
C24K IAML 06 59 15.7
comp=N,684nm,0.5s
C24K IAML 06 59 16.6
comp=E,675nm,1.0s
**D24K Happy Valley 1.70 262** Pn **Pn 06 58 50.6 -0.6**
D24K IAML 06 59 19.4
comp=N,815nm,0.5s
**F26K Sheenjek River 1.77 180** Pn **Pn 06 58 52.0 -0.1**
**E28M Babbage River 1.86 115** Pn **Pn 06 58 53.2 -0.2**
**D28M Stokes Point 1.91 91** Pn **Pn 06 58 54.4 +0.4**
D28M IAML 06 59 32.4
comp=E,616nm,0.8s
**F25K Christian Rive 1.95 197** Pn **Pn 06 58 54.6 0.0**
F25K IAML 06 59 32.2
comp=N,532nm,1.1s
**BMAR Burnt Mountain 2.04 185** Pn **Pn 06 58 56.0 +0.1**
**E24K Your Creek 2.11 231** Pn **Pn 06 58 55.6 -1.2**
**TOLK Toolik Lake Re 2.12 250** Pn **Pn 06 58 56.3 -0.7**
TOLK IAML 06 59 33.9
comp=E,390nm,1.0s
TOLK IAML 06 59 38.6
comp=N,330nm,0.8s
**C23K Itkillik River 2.30 283 Pn 06 58 59.7 +0.3**
C23K IAML 06 59 42.7
comp=E,372nm,0.9s
**F24K Squaw Lake 2.39 217** Pn **Pn 06 59 00.9 +0.3**
**D23K Nanushuk River 2.39 261** Pn **Pn 06 59 00.4 -0.3**
D23K IAML 06 59 57.3
comp=N,236nm,1.1s
**F28M Old Crow 2.42 138** Pn **Pn 06 59 01.0 -0.1**
F28M IAML 06 59 45.3
comp=N,326nm,0.7s
F28M IAML 06 59 50.5
comp=E,265nm,1.2s
**E23K Chandalar 2.44 238** Pn **Pn 06 59 01.0 -0.5**
E23K IAML 06 59 45.3
comp=N,241nm,1.0s
E23K IAML 06 59 49.1
comp=E,246nm,0.8s
**E29M Blow River 2.49 112** Pn **Pn 06 59 03.0 +1.0**
E29M IAML 06 59 47.9
comp=N,227nm,0.7s
E29M IAML 06 59 52.3
comp=E,207nm,0.9s
**G26K Porcupine Rive 2.52 177 Pb 06 59 06.6 -0.1**
**G25K Bearman Lake 2.80 196 Pb 06 59 10.5 -1.0**
**G27K Doyon Strip 2.81 160** Pn **Pn 06 59 07.3 +0.8**
**FYU Fort Yukon 2.93 189** Pn **Pn 06 59 07.3 -0.7**
FYU IAML 07 00 06.6
comp=E,222nm,1.5s
**G24K Hadweenzic Riv 3.04 206** Pn **Pn 06 59 10.5 +1.0**
G24K IAML 07 00 05.9
comp=N,221nm,1.3s
G24K IAML 07 00 07.3
comp=E,164nm,1.2s
**E22K Anaktuvuk Pass 3.09 248** Pn **Pn 06 59 09.1 -1.3**
**D22K Ayikyak River 3.11 263 Pn 06 59 13.1 +2.5**
D22K IAML 07 00 09.5
comp=E,194nm,0.7s
D22K IAML 07 00 18.7
comp=N,149nm,0.8s
**COLD Coldfoot 3.17 228 Pn 06 59 11.3 -0.1**
**B22K Teshekpuk Lake 3.33 290 Pn 06 59 12.9 -0.7**
**G29M Pine Creek 3.42 135** Pn **Pn 06 59 14.8 -0.1**
**G23K Bananza Creek 3.53 222** Pn **Pn 06 59 16.7 +0.3**
G23K IAML 07 00 21.0
comp=E,144nm,0.8s
G23K IAML 07 00 21.0
comp=N,128nm,1.1s
**F22K John River 3.55 240 Pb 06 59 21.0 -3.4**
**F30M Barrier River 3.58 117 Pb 06 59 21.9 -2.9**
**B21K Ikpikpuk River 3.69 278** Pn **Pn 06 59 19.7 +1.2**
B21K IAML 07 00 36.4
comp=N,118nm,1.0s
B21K IAML 07 00 55.9
comp=E,119nm,1.2s
**E21K Killik River 3.70 259 Pn 06 59 17.9 -0.7**
E21K IAML 07 00 31.3
comp=N,97nm,1.0s
**G30M tAoh Zraii Nji 3.85 126 Pn 06 59 21.1 +0.3**
G30M IAML 07 00 38.9
comp=N,74nm,1.1s
**H24K Noodor Dome 3.90 203 Pn 06 59 22.1 +0.6**
H24K IAML 07 00 36.8
comp=E,89nm,0.8s
**H29M Whitestone 3.91 143 Pn 06 59 23.1 +1.6**
**I27K Kandik River 3.98 165 Pn 06 59 26.5 +3.9**
**PRP Porcupine Dome 3.99 188** Pn **Pn 06 59 23.6 +0.9**
PRP IAML 07 00 35.1
comp=N,74nm,0.6s
PRP IAML 07 00 38.5
comp=E,68nm,1.1s
**A22K Sinclair Lake 4.00 298 Pn 06 59 24.7 +1.9**
**INK Inuvik 4.00 102** Pn **Pn 06 59 22.1 -0.7**
**INK Inuvik 4.00 102** LR LR 07 01 19.6
comp=E,85nm,21.3s,baz=5.5,slow=44
**F21K Alatna River 4.13 242 Pn 06 59 22.1 -2.4**
F21K IAML 07 00 39.0
comp=E,70nm,1.1s
F21K IAML 07 00 41.1
comp=N,56nm,1.1s
**EPYK Eagle Plains 4.17 134 Pn 06 59 23.4 -1.7**
**I26K Coal Creek Min 4.18 174** Pn **Pn 06 59 24.8 -0.5**
**H23K Yukon River 4.19 212 Pn 06 59 24.6 -0.8**
H23K IAML 07 00 42.2
comp=N,70nm,0.6s
**F31M Tsiigehtchic 4.33 113** Pn **Pn 06 59 27.0 -0.3**
F31M IAML 07 00 47.1
comp=E,58nm,1.7s
F31M IAML 07 01 00.9
comp=N,56nm,1.1s
**I28M Miner Creek 4.33 156** Pn **Pn 06 59 27.8 +0.4**
I28M IAML 07 00 27.7
comp=N,69nm,0.5s
**G31M Satah River 4.46 120** Pn **Pn 06 59 30.3 +1.2**
**E20K Nigu River 4.53 260 Pn 06 59 33.3 +3.2**
**POKR Poker Plat Res 4.54 198** Pn **Pn 06 59 30.1 -0.1**
POKR IAML 07 00 32.7
comp=N,39nm,0.6s
POKR IAML 07 00 57.4
comp=E,53nm,0.8s
**B20K Meade River 4.57 283** Pn **Pn 06 59 30.1 -0.5**
**G21K Allakaket 4.60 235** Pn **Pn 06 59 28.2 -2.8**
G21K IAML 07 00 55.1
comp=N,63nm,0.9s
G21K IAML 07 01 01.5
comp=E,61nm,1.3s
**I29M Ogilvie Camp, 4.68 149** Pn **Pn 06 59 31.4 -0.7**
I29M IAML 07 00 34.2
comp=N,47nm,0.4s
I29M IAML 07 01 12.3
comp=E,57nm,1.0s
**I23K Minto, Yukon-K 4.77 208** Pn **Pn 06 59 32.6 -0.7**
I23K IAML 07 01 16.4
comp=N,51nm,1.2s
**MDM Murphy Dome 4.79 201** Pn **Pn 06 59 34.6 +1.0**
MDM IAML 07 00 58.1
comp=E,37nm,0.6s
MDM IAML 07 00 59.7
comp=N,36nm,0.8s
**IL03 Eielson Array 4.82 194** Pn **Pn 06 59 32.4 -1.6**
**COLA College 4.82 199** Pn **Pn 06 59 32.8 -1.2**
**IL31 4.82 194** Pn **Pn 06 59 32.3 -1.8**
**ILAR Eielson Array 4.82 194** Pn **Pn 06 59 34.4 +0.3**
**ILAR Eielson Array 4.82 194** Pn Pn 06 59 39.1 +5.0
comp=N,1.1nm,0.3s,baz=6.2,slow=14,SNR=4.3
ILAR Sn **Sn 07 00 35.0 +5.0**
comp=N,2.1nm,0.3s,baz=181,slow=24,SNR=5.4
ILAR LR LR 07 01 19.1
comp=N,44nm,18.1s,baz=88,slow=35
comp=N,3.8nm,0.5s
**EGAK Eagle 4.83 165** Pn **Pn 06 59 34.4 +0.2**
EGAK IAML 07 00 36.8
comp=N,51nm,0.9s
**J25K Salcha River, 4.88 186** Pn **Pn 06 59 34.3 -0.7**
J25K IAML 07 01 03.2
comp=E,47nm,0.7s
**F20K Avaraart Lake 4.94 246** Pn **Pn 06 59 34.1 -1.6**
F20K IAML 07 01 14.8
comp=N,32nm,1.1s
F20K IAML 07 01 22.3
comp=E,28nm,1.6s
**J26L Joseph Creek 4.98 177 Pn 06 59 34.7 -1.6**
J26L IAML 07 00 42.8
comp=E,33nm,0.6s
J26L IAML 07 01 12.7
comp=N,30nm,0.7s
**CCB Clear Creek Bu 5.04 198** Pn **Pn 06 59 34.4 -2.6**
CCB IAML 07 01 06.6
comp=E,33nm,0.7s
**H21K Melozitna Rive 5.05 225** Pn **Pn 06 59 35.6 -1.7**
H21K IAML 07 01 11.2
comp=E,44nm,0.8s
H21K IAML 07 01 23.1
comp=N,33nm,2.0s
**MLY Manley 5.13 213** Pn **Pn 06 59 38.1 -0.2**
MLY IAML 07 01 20.0
comp=N,25nm,1.8s
**D19K Kuna River 5.13 266 Pn 06 59 41.2 +2.9**
**HDA Harding Lake 5.18 194** Pn **Pn 06 59 38.2 -0.9**
HDA IAML 07 01 11.3
comp=N,43nm,0.8s
**I30M Mount Dempster 5.19 141 Pn 06 59 38.7 -0.6**
I30M IAML 07 01 25.5
comp=N,40nm,1.3s
**NEA2 Nenana 5.25 204** Pn **Pn 06 59 38.4 -1.6**
**K27K Chicken 5.51 171** Pn **Pn 06 59 42.8 -0.6**
**J29N Klondike Camp 5.53 152** Pn **Pn 06 59 43.0 -0.8**
**BWN Browne 5.71 204** Pn **Pn 06 59 46.2 0.0**
**I20K Naaghedeneel 6.17 226** Pn **Pn 06 59 51.7 -0.8**
**C18K Utukok River 6.17 271 Pn 06 59 51.2 -1.4**
**RND Reindeer 6.36 200** Pn **Pn 06 59 54.2 -1.0**
**E18K Tukpahlearik C 6.40 259 Pn 06 59 55.1 -0.6**
**L26K Log Cabin Wild 6.46 177** Pn **Pn 06 59 54.6 -1.9**
**BCAR Beaver Creek A 6.48 171** Pn **Pn 06 59 56.6 -0.3**
**L27K Beaver Creek, 6.48 171** Pn **Pn 06 59 55.7 -1.2**
**F18K Selawik 6.49 251 Pn 06 59 59.6 +2.8**
**PAX Paxson 6.53 185** Pn **Pn 06 59 56.7 -0.9**
**DHY Denali Highway 6.54 193** Pn **Pn 06 59 57.0 -0.7**
**A36M Sachs Harbour 6.73 59 Pn 07 00 02.0 +1.8**
**L29M L29M 6.81 156** Pn **Pn 06 59 59.9 -1.5**
**RDOG Red Dog Mine 6.96 267** Pn **Pn 07 00 01.9 -1.5**
**C36M Paulatuk 7.07 81** Pn **Pn 07 00 04.3 -0.5**
**F17K Baldwin Pennin 7.11 253** Pn **Pn 07 00 03.0 -2.3**
**J19K Poorman 7.11 225** Pn **Pn 07 00 03.3 -2.2**
**K20K Telida 7.30 218** Pn **Pn 07 00 06.1 -1.9**
**H17K Granite Mounta 7.61 241** Pn **Pn 07 00 12.4 +0.1**
**C16K Lisburne Hills 7.75 271** Pn **Pn 07 00 16.4 +2.3**
**G16K Koyuk River 8.09 249** Pn **Pn 07 00 21.3 +2.4**
**PMR Palmer 8.16 197** Pn **Pn 07 00 19.4 -0.4**
**KDAK Kodiak Island 12.28 202** LR LR 07 06 32.8
comp=N,58nm,21.8s,baz=133,slow=39
**YKA Yellowknife Ar 13.76 106** Pn **Pn 07 01 35.8 -0.5**
**YKA Yellowknife Ar 13.76 106** Pn **Pn 07 01 35.2 -1.1**
comp=N,0.3nm,0.3s,baz=303,slow=18,SNR=5.8
YKA Sn **Sn 07 04 01.4 -7.6**
comp=N,0.3nm,0.3s,baz=309,slow=25,SNR=5.1
comp=N,0.6nm,0.5s
**YKAB2 New Yellowknif 13.81 106** Pn **Pn 07 01 36.9 -0.1**
**NVAR Mina Array Bea 34.03 142** P P 07 05 12.8 +7.2
comp=N,0.4nm,0.8s,baz=0.8,slow=6.3,SNR=3.4
comp=N,0.4nm,0.8s
**TXAR Lajitas Array 46.32 128** P **P 07 06 51.8 +4.5**
comp=N,0.2nm,0.6s,baz=350,slow=4.6,SNR=2.3
comp=N,0.2nm,0.6s

*NEIC **13** 06:59:11.3±1.8,69°.40N±0°.05×144°.2W±0°.1,h10$^{km}$±2$^{km}$, Error ellipse: s-maj=10.2km s-min=6.0km az=31.0*
**AEIC 13 06:59:12.1±2.4,69°.43N±0°.07×144°.2W±0°.2,h9$^{km}$±7$^{km}$, ML2.9,ML3.4/74(NEIC),Error ellipse: s-maj=11.4km s-min=5.9km az=218.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **42** | | Pg | 06 59 18.0 | +0.6 |
| C27K | | | | | Sg | 06 59 21.3 | +0.3 |
| **C26K** | **Camden Bay** | **0.54** | **334** | | Pg | 06 59 22.6 | -0.1 |
| C26K | | | | | Sg | 06 59 29.8 | 0.0 |
| **D25K** | **Kavik River** | **0.77** | **263** | | Pg | 06 59 27.0 | 0.0 |
| D25K | | | | | Sg | 06 59 37.0 | -0.1 |
| **D27M** | **Malcolm River** | **1.17** | **98** | | Pb | 06 59 33.6 | -0.9 |
| **E27K** | **Coleen River** | **1.57** | **141** | Pn | Pn | 06 59 39.7 | -0.5 |
| **C24K** | **Franklin Bluff** | **1.60** | **282** | Pn | Pn | 06 59 39.0 | -1.5 |
| C24K | | | | IAML | | 07 00 04.2 | |
| comp=N,428nm,0.4s | | | | | | | |
| C24K | | | | IAML | | 07 00 08.3 | |
| comp=E,383nm,1.1s | | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **262** | Pn | Pn | 06 59 40.6 | -0.8 |
| D24K | | | | IAML | | 07 00 09.9 | |
| comp=E,440nm,0.6s | | | | | | | |
| D24K | | | | IAML | | 07 00 10.2 | |
| comp=N,352nm,0.3s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.75** | **179** | Pn | Pn | 06 59 41.8 | -0.8 |
| F26K | | | | IAML | | 07 00 16.4 | |
| comp=E,287nm,0.7s | | | | | | | |
| **F25K** | **Christian Rive** | **1.92** | **197** | Pn | Pn | 06 59 43.7 | -1.3 |
| F25K | | | | IAML | | 07 00 18.5 | |
| comp=N,252nm,0.6s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.02** | **184** | Pn | Pn | 06 59 45.2 | -1.1 |
| **E22K** | **Anaktuvuk Pass** | **3.05** | **248** | Pn | Pn | 06 59 59.3 | -1.3 |
| **D22K** | **Ayikyak River** | **3.08** | **264** | Pn | Pn | 06 59 58.5 | -2.3 |
| D22K | | | | IAML | | 07 00 21.2 | |
| comp=N,133nm,0.9s | | | | | | | |
| D22K | | | | IAML | | 07 00 24.0 | |
| comp=E,150nm,1.1s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.31** | **290** | Pn | Pn | 07 00 01.4 | -2.5 |
| B22K | | | | IAML | | 07 00 26.1 | |
| comp=E,138nm,1.0s | | | | | | | |
| **G29M** | **Pine Creek** | **3.43** | **135** | Pn | Pn | 07 00 03.2 | -2.5 |
| G29M | | | | IAML | | 07 00 39.1 | |
| comp=N,124nm,0.9s | | | | | | | |
| **G23K** | **Bananza Creek** | **3.50** | **221** | Pn | Pn | 07 00 04.2 | -2.4 |
| G23K | | | | IAML | | 07 00 30.8 | |
| comp=E,80nm,1.0s | | | | | | | |
| G23K | | | | IAML | | 07 00 35.5 | |
| comp=N,69nm,1.2s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.66** | **278** | Pn | Pn | 07 00 06.1 | -2.7 |
| **G30M** | **tAoh Zraii Nji** | **3.87** | **126** | Pn | Pn | 07 00 09.5 | -2.2 |
| G30M | | | | IAML | | 07 00 40.3 | |
| comp=E,46nm,0.8s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.87** | **203** | Pn | Pn | 07 00 10.4 | -1.4 |
| H24K | | | | IAML | | 07 00 40.3 | |
| comp=N,56nm,0.7s | | | | | | | |
| H24K | | | | IAML | | 07 00 43.5 | |
| comp=E,48nm,0.8s | | | | | | | |
| **H29M** | **Whitestone** | **3.92** | **143** | Pn | Pn | 07 00 10.4 | -1.9 |
| **PRP** | **Porcupine Dome** | **3.97** | **188** | Pn | Pn | 07 00 11.4 | -1.7 |
| PRP | | | | IAML | | 07 00 42.6 | |
| comp=N,47nm,0.9s | | | | | | | |
| PRP | | | | IAML | | 07 00 45.3 | |
| comp=E,47nm,0.8s | | | | | | | |
| **INK** | **Inuvik** | **4.03** | **101** | Pn | Pn | 07 00 12.3 | -1.6 |
| **F21K** | **Alatna River** | **4.09** | **242** | Pn | Pn | 07 00 14.3 | -0.4 |
| F21K | | | | IAML | | 07 00 43.3 | |
| comp=E,55nm,0.8s | | | | | | | |
| F21K | | | | IAML | | 07 00 44.7 | |
| comp=N,43nm,0.7s | | | | | | | |
| **H23K** | **Yukon River** | **4.16** | **212** | Pn | Pn | 07 00 14.3 | -1.4 |
| H23K | | | | IAML | | 07 00 47.8 | |
| comp=N,66nm,0.8s | | | | | | | |
| H23K | | | | IAML | | 07 00 50.9 | |
| comp=E,75nm,0.9s | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.18** | **134** | Pn | Pn | 07 00 14.1 | -1.9 |
| **I28M** | **Miner Creek** | **4.33** | **156** | Pn | Pn | 07 00 15.3 | -2.8 |
| I28M | | | | IAML | | 07 00 50.8 | |
| comp=N,57nm,1.0s | | | | | | | |
| **G31M** | **Satah River** | **4.49** | **119** | Pn | Pn | 07 00 17.6 | -2.5 |
| G31M | | | | IAML | | 07 00 56.4 | |
| comp=N,53nm,0.8s | | | | | | | |
| G31M | | | | IAML | | 07 00 58.4 | |
| comp=E,57nm,1.1s | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.51** | **198** | Pn | Pn | 07 00 18.9 | -1.6 |
| POKR | | | | IAML | | 07 00 54.6 | |
| comp=N,31nm,1.0s | | | | | | | |
| **G21K** | **Allakaket** | **4.56** | **234** | Pn | Pn | 07 00 20.1 | -1.1 |
| **I29M** | **Ogilvie Camp,** | **4.68** | **148** | Pn | Pn | 07 00 21.7 | -1.2 |
| I29M | | | | IAML | | 07 01 25.5 | |
| comp=N,43nm,0.8s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.74** | **207** | Pn | Pn | 07 00 21.9 | -1.7 |
| **IL31** | | **4.80** | **194** | Pn | Pn | 07 00 23.2 | -1.1 |
| **EGAK** | **Eagle** | **4.83** | **164** | Pn | Pn | 07 00 23.8 | -1.0 |
| EGAK | | | | IAML | | 07 01 10.6 | |
| comp=N,45nm,0.8s | | | | | | | |
| EGAK | | | | IAML | | 07 01 19.9 | |
| comp=N,40nm,1.1s | | | | | | | |
| **J26L** | **Joseph Creek** | **4.96** | **177** | Pn | Pn | 07 00 24.5 | -2.2 |
| **MLY** | **Manley** | **5.09** | **213** | Pn | Pn | 07 00 27.7 | -0.8 |
| MLY | | | | IAML | | 07 01 20.6 | |
| comp=E,18nm,0.9s | | | | | | | |
| **D19K** | **Kuna River** | **5.09** | **266** | Pn | Pn | 07 00 29.6 | +1.1 |
| D19K | | | | IAML | | 07 01 28.1 | |
| comp=E,18nm,1.1s | | | | | | | |
| **HDA** | **Harding Lake** | **5.16** | **193** | Pn | Pn | 07 00 27.3 | -2.2 |
| **E19K** | **Redstone River** | **5.19** | **254** | Pn | Pn | 07 00 27.6 | -2.3 |
| E19K | | | | IAML | | 07 01 17.1 | |
| comp=E,32nm,1.0s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.20** | **141** | Pn | Pn | 07 00 28.8 | -1.3 |
| I30M | | | | IAML | | 07 01 24.9 | |
| comp=N,34nm,1.0s | | | | | | | |
| **NEA2** | **Nenana** | **5.22** | **204** | Pn | Pn | 07 00 27.9 | -2.3 |
| NEA2 | | | | IAML | | 07 01 13.9 | |
| comp=E,20nm,0.9s | | | | | | | |
| NEA2 | | | | IAML | | 07 01 29.6 | |
| comp=N,16nm,0.9s | | | | | | | |
| **SCRK** | **Sand Creek** | **5.48** | **179** | Pn | Pn | 07 00 33.9 | -0.1 |
| **J29N** | **Klondike Camp** | **5.53** | **152** | Pn | Pn | 07 00 34.1 | -0.4 |
| **F19K** | **Shaleruckik Mo** | **5.69** | **249** | Pn | Pn | 07 00 36.8 | +0.1 |
| **C18K** | **Utukok River** | **6.14** | **271** | Pn | Pn | 07 00 41.4 | -1.5 |
| **K29M** | **Barlow Dome** | **6.21** | **151** | Pn | Pn | 07 00 42.5 | -1.4 |

*TIR **13** 06:59:35.2,41°.94N×20°.36E,h23$^{km}$±2$^{km}$,Md2.6,Ml2.2*
*PDG **13** 06:59:36.8±0.1,41°.95N×20°.33E,h6$^{km}$,ML2.3/10,Error ellipse: s-maj=0.2km s-min=0.7km az=0.0*
*BEO **13** 06:59:37.3±0.9,41°.91N×20°.40E,h17$^{km}$±4$^{km}$,ML1.8/8*
**ISC 13 06:59:36.1±1.1,41°.92N±0°.02×20°.38E±0°.03,h10$^{km}$±9$^{km}$, n21,σ0°.93/42,4C-5D,Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PUK** | **Puka** | **0.39** | **288** | P | **Pg** | **06 59 43.1** | **-0.7** |
| baz=287 | | | | | | | |
| PUK | | | | S | **Sg** | **06 59 48.8** | **0.0** |
| baz=287 | | | | | | | |
| PUK | | | | AMP | | | |
| comp=E,1.0nm,0.4s,baz=287 | | | | | | | |
| **BCI** | **Bajram Curri** | **0.50** | **332** | P | **Pg** | **06 59 45.3** | **-0.6** |
| baz=333 | | | | | | | |
| BCI | | | | S | **Sg** | **06 59 53.3** | **+0.7** |
| baz=333 | | | | | | | |
| BCI | | | | AMP | | | |
| comp=E,1.2nm,0.2s,baz=333 | | | | | | | |
| **TIR** | **Tirane** | **0.69** | **214** | P | **Pg** | **06 59 47.8** | **-1.7** |
| baz=213 | | | | | | | |
| TIR | | | | S | **Sb** | **07 00 00.1** | **+0.2** |
| baz=213 | | | | | | | |
| TIR | | | | AMP | | | |
| comp=N,0.2nm,0.3s,baz=213 | | | | | | | |
| **TIR** | **Tirane** | **0.69** | **214** | *e*Pg | **Pg** | **06 59 49.8** | **+0.3** |
| TIR | | | | *e*Sg | **Sb** | **07 00 01.2** | **+1.3** |
| **PVY** | **Plav** | **0.74** | **335** | ⇑*i*Pg | **Pg** | **06 59 50.0** | **-0.5** |
| PVY | | | | *i* Sg | **Sg** | **07 00 00.6** | **+0.4** |
| **DRME** | **Dracevica, Mon** | **0.93** | **287** | ⇓*i*Pg | **Pg** | **06 59 53.0** | **-1.0** |
| DRME | | | | *i* Sg | **Sb** | **07 00 07.3** | **+0.5** |
| **PDG** | **Podgorica** | **0.98** | **302** | *e*Pg | **Pg** | **06 59 55.7** | **+0.7** |
| PDG | | | | *e*Sg | **Sn** | **07 00 09.6** | **-0.3** |
| **PDG** | **Podgorica** | **0.98** | **302** | *e*Pg | **Pb** | **06 59 54.2** | **-1.0** |
| PDG | | | | *i* Sg | **Sb** | **07 00 09.2** | **+1.0** |
| **IVA** | **Berane** | **1.02** | **339** | ⇓*i*Pg | **Pb** | **06 59 55.0** | **-0.9** |
| IVA | | | | *i* Sg | **Sn** | **07 00 10.6** | **-0.4** |
| **KOME** | **Kolasin** | **1.13** | **326** | ⇑*i*Pg | **Pb** | **06 59 56.6** | **-1.2** |
| KOME | | | | *i* Sg | **Sn** | **07 00 14.3** | **+0.5** |
| **BUM** | **Brajici-Budva** | **1.17** | **289** | ⇑*i*Pg | **Pn** | **06 59 57.4** | **-1.3** |
| BUM | | | | *i* Sg | **Sn** | **07 00 15.5** | **+0.7** |
| **CEME** | **Cevo** | **1.25** | **300** | ⇑*i*Pg | **Pb** | **06 59 58.8** | **-1.0** |
| CEME | | | | *i* Sg | **Sg** | **07 00 18.4** | **+1.9** |
| **NKME** | **Niksic** | **1.36** | **309** | ⇓*i*Pg | **Pn** | **07 00 00.7** | **-0.5** |
| NKME | | | | *i* Sg | **Sg** | **07 00 21.6** | **+1.9** |
| **FNA** | **Florina** | **1.36** | **146** | P | **Pn** | **07 00 00.6** | **-0.7** |
| baz=146 | | | | | | | |
| FNA | | | | S | **Sg** | **07 00 21.3** | **+1.4** |
| baz=146 | | | | | | | |
| FNA | | | | AMP | | | |
| comp=N,0.1nm,0.4s,baz=146 | | | | | | | |
| **SJES** | **Sjenica** | **1.37** | **347** | *e*Pg | **Pn** | **07 00 01.3** | **-0.2** |
| SJES | | | | *e*Sg | **Sg** | **07 00 21.1** | **+0.8** |
| **BARS** | **Barje** | **1.39** | **49** | *e*Pg | **Pg** | **07 00 02.9** | **+0.2** |
| BARS | | | | *e*Sg | **Sg** | **07 00 21.4** | **+0.6** |
| **SELS** | **Selova** | **1.41** | **22** | *e*Pg | **Pb** | **07 00 02.4** | **-0.1** |
| SELS | | | | *e*Sg | **Sg** | **07 00 22.5** | **+1.1** |
| **BOSS** | **Bosilegrad** | **1.66** | **69** | *e*Pg | **Pg** | **07 00 07.5** | **-0.4** |
| BOSS | | | | *e*Sg | **Sg** | **07 00 29.2** | **-0.3** |
| **BRY** | **Bratogost** | **1.68** | **306** | ⇓*i*Pn | **Pb** | **07 00 07.4** | **+0.1** |
| BRY | | | | *i* Sn | **Sg** | **07 00 31.4** | **+1.2** |
| **UPM** | **Unac-Piva** | **1.68** | **320** | ⇓*i*Pn | **Pb** | **07 00 06.9** | **-0.4** |
| UPM | | | | *i* Sn | **Sg** | **07 00 31.6** | **+1.4** |
| **SRN** | **Sarande** | **2.06** | **188** | P | **Pb** | **07 00 13.7** | **+0.1** |
| baz=188 | | | | | | | |
| SRN | | | | S | **Sb** | **07 00 40.0** | **+0.8** |
| baz=188 | | | | | | | |

**IDC 13 07:01:16.2±3.0,54°.21N×86°.39E,h0$^{km}$,mbtmp3.0/2, ML2.6/2,Error ellipse: s-maj=23.0km s-min=13.4km az=59.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.96** | **255** | I | I | 07 06 30.0 | |
| baz=73,slow=321,SNR=0.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.96** | **255** | Pg | Pg | 07 01 32.8 | -1.7 |
| 1.7nm,0.3s,baz=73,slow=17,SNR=8.6 | | | | | | | |
| ZALV | | | | Lg | Lg | 07 01 48.3 | |
| 3.8nm,0.3s,baz=74,slow=31,SNR=11 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.00** | **236** | Pn | Pn | 07 02 48.6 | +2.5 |
| 0.2nm,0.3s,baz=49,slow=14,SNR=3.2 | | | | | | | |
| 0.9nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.87** | **201** | Pn | Pn | 07 03 11.8 | +0.1 |
| 0.1nm,0.3s,baz=25,slow=14,SNR=2.1 | | | | | | | |
| 0.2nm,0.3s | | | | | | | |

**IDC 13 07:14:53.2±2.6,53°.94N×86°.60E,h0$^{km}$,mbtmp2.8/2, ML2.7/2,Error ellipse: s-maj=22.8km s-min=13.4km az=60.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.05** | **271** | I | I | 07 21 40.0 | |
| baz=89,slow=322,SNR=1.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.05** | **271** | Pg | Pg | 07 15 11.4 | -1.8 |
| 0.8nm,0.3s,baz=91,slow=17,SNR=5.4 | | | | | | | |
| ZALV | | | | Lg | Lg | 07 15 28.8 | |
| 2.4nm,0.3s,baz=93,slow=29,SNR=9.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.96** | **239** | Pn | Pn | 07 16 23.6 | +1.0 |
| 0.1nm,0.3s,baz=54,slow=13,SNR=3.2 | | | | | | | |
| 0.5nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.66** | **203** | Pn | Pn | 07 16 47.2 | +1.2 |
| 0.1nm,0.3s,baz=25,slow=14,SNR=9.3 | | | | | | | |
| 0.2nm,0.3s | | | | | | | |

*IDC **13** 07:15:47.0±1.2,53°.81S×2°.84E,h0$^{km}$,mb3.8/4, mbtmp3.9/5,ML4.0/1,MS3.6/15,Error ellipse: s-maj=44.8km s-min=28.0km az=77.0*
*NEIC **13** 07:15:47.6±1.1,53°.8S±0°.1×2°.9E±0°.1,h10$^{km}$±1$^{km}$, mb4.6/18,Error ellipse: s-maj=23.0km s-min=10.2km az=150.0*
**ISC 13 07:15:47.7±0.6,53°.72S±0°.09×2°.9E±0°.1,h10$^{km}$,n44, σ0°.94/29,mb4.5/11,MS3.6/14,5C,Bouvet Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **17.71** | **192** | ⇑P | **P** | **07 19 56.3** | **+1.4** |
| comp=Z,5.3nm,0.3s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **17.87** | **191** | ⇑P | **P** | **07 19 58.0** | **+1.3** |

comp=Z,5.6nm,0.4s,baz=5.4,slow=15
**SNAA Sanae 18.19 186 Pn 07 19 59.6 -0.4**
**SNAA Sanae 18.19 186** ⇑P **P 07 20 00.3 +0.1**
comp=Z,121nm,0.9s
**SNAA Sanae 18.19 186** P **Pn 07 19 59.3 -0.7**
comp=Z,0.5nm,0.3s,baz=2.0,slow=18,SNR=24
SNAA LR LR 07 25 15.4
comp=Z,187nm,20.8s,baz=64,slow=31
comp=Z,3.1nm,0.6s
**TROLL Troll, Antarti 18.36 180** ⇑P **P 07 20 02.3 +0.2**
comp=Z,111nm,0.5s
**VNA3 Neumayer Olymp 18.44 193** ⇑P **P 07 20 05.0 +2.0**
comp=Z,3.6nm,0.3s
**TRIS Tristan da Cun 19.73 321** P **Pn 07 20 18.7 0.0**
TRIS IAmb IAmb 07 20 19.3
comp=Z,43nm,1.0s
**SUR Sutherland 24.88 38** LR LR 07 28 19.0
comp=Z,101nm,20.7s,baz=188,slow=30
**BOSA Boshof 29.95 42** LR LR 07 31 39.9
comp=Z,61nm,19.2s,baz=185,slow=32
**H04S2 CROZET ISLANDS 31.49 98** T T 07 55 36.8
baz=239,slow=75,SNR=21
**H04S3 CROZET ISLANDS 31.50 98** T T 07 55 37.4
baz=239,slow=75,SNR=19
**H04S1 CROZET ISLANDS 31.51 98** T T 07 55 37.1
baz=239,slow=75,SNR=20
**LBTB Lobatse 33.31 40** P **P 07 22 24.8 -0.8**
LBTB IAmb IAmb 07 22 25.7
comp=Z,10nm,1.5s
**LBTB Lobatse 33.31 40** LR LR 07 32 58.9
comp=Z,68nm,21.2s,baz=170,slow=31
**PMSA Palmer Station 34.28 224** P **P 07 22 32.8 -0.7**
**PMSA Palmer Station 34.28 224** LR LR 07 33 23.5
comp=Z,56nm,21.7s,baz=94,slow=31
**TSUM Tsumeb 36.27 24** LR LR 07 37 02.1
comp=Z,43nm,18.5s,baz=154,slow=35
**QSPA South Pole Qui 36.52 180** P **P 07 22 52.7 -0.3**
**QSPA South Pole Qui 36.52 180** LR LR 07 37 00.3
comp=Z,159nm,20.3s,baz=230,slow=35
**GO10 Punta Arenas 42.20 240** P **P 07 23 39.7 -0.6**
**VOI Vohitsoka 45.88 64** P **P 07 24 09.7 -0.5**
VOI IAmb IAmb 07 24 31.9
comp=Z,15nm,1.5s
**TRQA Tornquist 46.16 262** P **P 07 24 10.6 -1.6**
TRQA IAmb IAmb 07 24 20.0
comp=Z,6.0nm,1.4s
**VNDA Vanda 48.37 174** P **P 07 24 29.1 +0.2**
**VNDA Vanda 48.37 174** P **P 07 24 29.8 +0.9**
comp=Z,0.6nm,0.7s,baz=213,slow=6.2,SNR=5.4
VNDA LR LR 07 43 12.8
comp=Z,65nm,19.8s,baz=242,slow=34
comp=Z,0.6nm,0.7s
**GO06 Curarrehue 50.66 254** P **P 07 24 46.7 -0.3**
GO06 IAmb IAmb 07 25 05.9
comp=Z,9.9nm,1.2s
**CPUP Villa Florida 51.73 277** P **P 07 24 56.0 +1.1**
comp=Z,1.9nm,1.0s,baz=117,slow=9.0,SNR=3.0
comp=Z,1.9nm,1.0s
**MT09 Talagante 54.39 260** P **P 07 25 14.1 -0.7**
MT09 IAmb IAmb 07 25 22.1
comp=Z,14nm,1.4s
**MBAR Mbarara 57.73 33** LR LR 07 49 44.7
comp=Z,76nm,18.4s,baz=129,slow=35
**AF01 San Pedro de A 60.71 271** P **P 07 25 59.2 -0.4**
**PB14 IPOC Station P 60.76 268** P **P 07 26 00.2 +0.3**
PB14 IAmb IAmb 07 26 03.8
comp=Z,17nm,1.3s
**LVC Limon Verde 61.40 270** LR LR 07 52 40.4
comp=Z,26nm,18.2s,baz=208,slow=36
**LPAZ La Paz 65.83 275** P **P 07 26 34.1 +0.2**
LPAZ IAmb IAmb 07 26 36.3
comp=Z,3.0nm,1.0s
**LPAZ La Paz 65.83 275** P **P 07 26 34.4 +0.5**
comp=Z,1.8nm,0.8s,baz=310,slow=13,SNR=7.2
comp=Z,1.8nm,0.8s
**TORD Torodi Ar. Bea 66.61 359** P **P 07 26 38.4 +0.4**
**TORD Torodi Ar. Bea 66.61 359** P **P 07 26 40.4 +2.4**
comp=Z,0.7nm,0.7s,baz=156,slow=4.9,SNR=3.8
TORD LR LR 07 49 20.3
comp=Z,30nm,19.8s,baz=155,slow=30
comp=Z,0.7nm,0.7s
**SAML Samuel 68.77 284** P **P 07 26 50.8 -1.0**
SAML IAmb IAmb 07 26 59.8
comp=Z,4.8nm,1.4s
**FURI Furi 69.33 38** LR LR 07 56 45.7
comp=Z,34nm,18.1s,baz=179,slow=35
**MDT Midelt 86.43 354** LR LR 08 01 01.6
comp=Z,46nm,20.2s,baz=165,slow=31
**EIL Elat 87.57 28** LR LR 08 05 52.8
comp=Z,31nm,20.3s,baz=250,slow=34
**URZ Urewera 88.25 175** LR LR 08 03 47.4
comp=Z,82nm,21.2s,baz=220,slow=33
**PDAR Pinedale Array 135.36 284** PKP **PKPdf 07 35 07.6 +0.4**
comp=Z,0.1nm,0.5s,baz=129,slow=2.1,SNR=3.5
**MJAR Matsushiro Arr 144.77 101** PKP **PKPab 07 35 23.2 +0.1**
comp=Z,0.8nm,0.6s,baz=199,slow=2.5,SNR=4.9
**YKA Yellowknife Ar 147.13 311** PKPbc **PKPbc 07 35 29.1 -0.4**
comp=Z,1.4nm,0.8s,baz=95,slow=3.9,SNR=6.0

**IDC 13 07:48:12.6±1.2, 51.37N×81.81E, h0km, mbtmp2.2/3, ML1.9/3, Error ellipse: s-maj=15.8km s-min=11.8km az=130.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KURBB | **Kurchatov Arra** | **2.20** | **251** | Pn | Pn | 07 48 50.7 | +0.3 |
| | 0.2nm,0.3s,baz=70,slow=18,SNR=8.5 | | | | | | |
| KURBB | | | | Lg | Lg | 07 49 21.6 | |
| | 0.3nm,0.3s,baz=69,slow=33,SNR=6.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **3.17** | **34** | I | I | 08 10 50.6 | |
| | baz=215,slow=314,SNR=4.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.17** | **34** | Pn | Pn | 07 49 01.7 | -2.0 |
| | 0.3nm,0.3s,baz=212,slow=13,SNR=2.0 | | | | | | |
| ZALV | | | | Pg | Pb | 07 49 10.1 | +0.4 |
| | 0.5nm,0.3s,baz=219,slow=15,SNR=5.7 | | | | | | |
| ZALV | | | | Sn | Sn | 07 49 38.8 | -3.4 |
| | 0.6nm,0.3s,baz=212,slow=22,SNR=3.7 | | | | | | |
| ZALV | | | | Lg | Lg | 07 49 54.1 | |
| | 0.7nm,0.3s,baz=217,slow=24,SNR=6.3 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **4.59** | **176** | Pn | Pn | 07 49 24.2 | +1.0 |
| | 0.1nm,0.3s,baz=350,slow=13,SNR=11 | | | | | | |
| MKAR | | | | Pg | Pb | 07 49 35.2 | +1.2 |
| | 0.2nm,0.3s,baz=356,slow=16,SNR=5.4 | | | | | | |
| MKAR | | | | Lg | Lg | 07 50 37.4 | |
| | 0.4nm,0.3s,baz=9.5,slow=30,SNR=6.3 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*NEIC **13** 07:49:12.4±2.2, 69.54N±0.06×144.7W±0.1, h10km±2km, Error ellipse: s-maj=7.8km s-min=3.4km az=74.0*
**AEIC 13 07:49:12.8±2.2, 69.54N±0.06×144.7W±0.1, h13km±7km, ML2.9, ML3.2/72(NEIC), Error ellipse: s-maj=9.7km s-min=6.0km az=200.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.36** | **76** | Pg | Pg | 07 49 20.4 | +0.3 |
| C27K | | | | Sg | Sg | 07 49 25.3 | +0.3 |
| **C26K** | **Camden Bay** | **0.39** | **350** | | Pb | 07 49 21.3 | -0.2 |
| C26K | | | | | Sb | 07 49 26.7 | -0.7 |
| **D25K** | **Kavik River** | **0.62** | **250** | | Pg | 07 49 25.1 | +0.1 |
| D25K | | | | | Sg | 07 49 32.6 | -0.6 |
| **D27M** | **Malcolm River** | **1.36** | **101** | | Pn | 07 49 37.3 | -0.3 |
| D27M | | | | IAML | | 07 50 01.6 | |
| | comp=N,211nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.41** | **279** | | Pb | 07 49 38.6 | -0.3 |
| C24K | | | | IAML | | 07 50 00.7 | |
| | comp=N,210nm,0.8s | | | | | | |
| C24K | | | | IAML | | 07 50 01.3 | |
| | comp=E,172nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.51** | **257** | Pn | Pn | 07 49 39.8 | +0.2 |
| D24K | | | | IAML | | 07 50 07.2 | |
| | comp=N,173nm,0.5s | | | | | | |
| D24K | | | | IAML | | 07 50 08.3 | |
| | comp=E,157nm,0.4s | | | | | | |
| **E27K** | **Coleen River** | **1.77** | **139** | | Pn | 07 49 42.8 | -0.4 |
| E27K | | | | IAML | | 07 50 43.0 | |
| | comp=E,135nm,0.5s | | | | | | |
| E27K | | | | IAML | | 07 50 43.2 | |
| | comp=N,210nm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.87** | **173** | Pn | Pn | 07 49 43.4 | -1.1 |
| F26K | | | | IAML | | 07 50 46.7 | |
| | comp=N,162nm,0.4s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **245** | | Pn | 07 49 44.5 | -1.3 |
| **E24K** | **Your Creek** | **2.01** | **225** | Pn | Pn | 07 49 45.7 | -0.8 |
| **C23K** | **Itkillik River** | **2.08** | **281** | Pn | Pn | 07 49 46.1 | -1.2 |
| C23K | | | | IAML | | 07 50 24.3 | |
| | comp=E,98nm,0.6s | | | | | | |
| C23K | | | | IAML | | 07 50 31.5 | |
| | comp=N,82nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **2.08** | **114** | | Pn | 07 49 46.7 | -0.8 |
| E28M | | | | IAML | | 07 51 02.1 | |
| | comp=E,68nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.12** | **179** | Pn | Pn | 07 49 47.0 | -1.0 |
| **D23K** | **Nanushuk River** | **2.20** | **258** | Pn | Pn | 07 49 50.0 | +0.9 |
| **E23K** | **Chandalar** | **2.32** | **232** | Pn | Pn | 07 49 51.3 | +0.5 |
| E23K | | | | IAML | | 07 50 55.4 | |
| | comp=E,81nm,0.6s | | | | | | |
| E23K | | | | IAML | | 07 50 57.5 | |
| | comp=N,70nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.34** | **211** | | Pn | 07 49 49.7 | -1.3 |
| **F28M** | **Old Crow** | **2.63** | **135** | | Pn | 07 49 54.3 | -0.7 |
| **E29M** | **Blow River** | **2.72** | **112** | Pn | Pn | 07 49 55.8 | -0.4 |
| **D22K** | **Ayikyak River** | **2.92** | **261** | Pn | Pn | 07 49 57.3 | -1.6 |
| D22K | | | | IAML | | 07 51 51.7 | |
| | comp=E,91nm,0.8s | | | | | | |
| D22K | | | | IAML | | 07 51 53.1 | |
| | comp=N,140nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.94** | **245** | Pn | Pn | 07 49 57.9 | -1.3 |
| E22K | | | | IAML | | 07 51 37.0 | |
| | comp=N,57nm,0.7s | | | | | | |
| E22K | | | | IAML | | 07 51 52.3 | |
| | comp=E,60nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.00** | **184** | Pn | Pn | 07 49 58.5 | -1.5 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **201** | Pn | Pn | 07 50 00.3 | -0.2 |
| **B22K** | **Teshekpuk Lake** | **3.10** | **289** | | Pn | 07 49 59.0 | -2.4 |
| **G23K** | **Bananza Creek** | **3.47** | **217** | Pn | Pn | 07 50 05.1 | -1.4 |
| G23K | | | | IAML | | 07 52 12.9 | |
| | comp=N,49nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.47** | **276** | | Pn | 07 50 03.9 | -2.5 |
| B21K | | | | IAML | | 07 52 11.3 | |
| | comp=E,81nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.63** | **133** | Pn | Pn | 07 50 06.7 | -2.1 |
| **H24K** | **Noodor Dome** | **3.91** | **199** | Pn | Pn | 07 50 10.2 | -2.3 |
| **F21K** | **Alatna River** | **3.99** | **238** | | Pn | 07 50 11.1 | -2.6 |
| **G30M** | **tAoh Zrail Nji** | **4.07** | **125** | Pn | Pn | 07 50 12.1 | -2.7 |
| **H23K** | **Yukon River** | **4.16** | **209** | Pn | Pn | 07 50 13.1 | -2.9 |
| **B20K** | **Meade River** | **4.34** | **282** | | Pn | 07 50 17.6 | -0.9 |
| **EPYK** | **Eagle Plains** | **4.38** | **133** | Pn | Pn | 07 50 16.7 | -2.3 |
| **G21K** | **Allakaket** | **4.48** | **232** | Pn | Pn | 07 50 18.0 | -2.4 |
| **I28M** | **Miner Creek** | **4.50** | **154** | Pn | Pn | 07 50 20.1 | -0.6 |
| I28M | | | | IAML | | 07 52 14.1 | |
| | comp=N,26nm,0.5s | | | | | | |
| **D19K** | **Kuna River** | **4.93** | **264** | Pn | Pn | 07 50 29.3 | +2.7 |
| **WRH** | **Wood River Hil** | **5.26** | **196** | Pn | Pn | 07 50 30.9 | -0.1 |
| **C19K** | **Lookout Ridge** | **5.29** | **272** | Pn | Pn | 07 50 32.1 | +0.7 |
| **F19K** | **Shaleruckik Mo** | **5.57** | **247** | Pn | Pn | 07 50 34.7 | -0.6 |
| **SCRK** | **Sand Creek** | **5.60** | **177** | Pn | Pn | 07 50 35.7 | -0.1 |

**IDC 13 08:00:44.0±6.3, 47.74N×80.45E, h0km, Error ellipse: s-maj=44.8km s-min=33.1km az=127.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **1.57** | **126** | Pg | Pn | 08 01 12.8 | -0.4 |
| | 0.3nm,0.3s,baz=309,slow=13,SNR=12 | | | | | | |
| MKAR | | | | Lg | Lg | 08 01 34.0 | |
| | 0.2nm,0.3s,baz=308,slow=27,SNR=2.3 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.80** | **22** | I | I | 08 46 00.0 | |
| | baz=208,slow=314,SNR=2.0 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **14.92** | **289** | I | I | 09 32 30.0 | |
| | baz=92,slow=314,SNR=1.6 | | | | | | |

*KRNET **13** 08:01:29.9±0.1, 40.79N×78.28E, h10km, mb2.4*
*SOME **13** 08:01:31.7, 40.90N×78.28E, h15km*
*NNC **13** 08:01:34.2±1.6, 40.98N×78.51E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=11.9km s-min=9.8km az=155.0*
**ISC 13 08:01:32.9±2.2, 40.8N±0.1×78.27E±0.05, h10km, n30, σ1°45/52, 9C-9D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDJ** | **Kajisay** | **1.55** | **328** | ⇓*i*P | Pn | 08 01 59.1 | -1.6 |
| | baz=29 | | | | | | |
| KDJ | | | | ⇓*i*S | Sn | 08 02 20.9 | 0.0 |
| | baz=29 | | | | | | |
| **PRZ** | **Przheval'sk** | **1.67** | **3** | ⇓*e*P | Pn | 08 02 02.3 | 0.0 |
| | baz=3.0 | | | | | | |
| PRZ | | | | ⇓*e*S | Sb | 08 02 25.5 | +0.6 |
| | baz=3.0 | | | | | | |
| **NRN** | **Naryn** | **1.82** | **291** | ⇑*i*P | Pb | 08 02 04.5 | -2.0 |
| | baz=91 | | | | | | |
| NRN | | | | ⇑*i*S | Sg | 08 02 30.2 | -1.3 |
| | baz=91 | | | | | | |
| **ULHL** | **Ulahol** | **2.09** | **314** | ⇑*i*P | Pn | 08 02 08.5 | +0.4 |
| | baz=14 | | | | | | |
| ULHL | | | | ⇑*i*S | Sb | 08 02 36.7 | -0.3 |
| | baz=14 | | | | | | |
| **SATY** | **Saty** | **2.24** | **3** | *e*P | Pb | 08 02 12.0 | -1.5 |
| | 5.5nm,0.5s | | | | | | |
| SATY | | | | *e*S | Sb | 08 02 41.3 | -0.1 |
| | 20nm,0.6s | | | | | | |
| **SATY** | **Saty** | **2.24** | **3** | Pg | Pb | 08 02 12.0 | -1.5 |
| | 5.5nm,0.5s | | | | | | |
| SATY | | | | Lg | Lg | 08 02 41.3 | |
| | 20nm,0.6s | | | | | | |
| **UZB** | **Uzunbulak** | **2.40** | **13** | *e*P | Pb | 08 02 14.4 | -1.8 |
| | 3.2nm,0.5s | | | | | | |
| UZB | | | | *e*S | Sb | 08 02 45.0 | -0.8 |
| | 9.1nm,0.2s | | | | | | |
| **UZB** | **Uzunbulak** | **2.40** | **13** | Pg | Pb | 08 02 14.4 | -1.8 |
| | 3.2nm,0.5s | | | | | | |
| UZB | | | | Lg | Lg | 08 02 45.0 | |
| | 9.1nm,0.2s | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.42** | **315** | ⇓*i*P | Pn | 08 02 13.2 | +0.6 |
| | baz=15 | | | | | | |
| BOOM | | | | ⇓*i*S | Sb | 08 02 44.7 | -1.8 |
| | baz=15 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.43** | **336** | *e*P | Pb | 08 02 14.6 | -2.3 |
| | 8.3nm,0.3s | | | | | | |
| TNSS | | | | *e*S | Sb | 08 02 45.5 | -1.6 |
| | 6.1nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.43** | **336** | Pg | Pb | 08 02 14.6 | -2.3 |
| | 8.3nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 08 02 45.5 | |
| | 6.1nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.50** | **20** | *e*P | Pb | 08 02 17.6 | -0.4 |
| | 1.6nm,0.1s | | | | | | |
| SHLS | | | | *e*S | Sb | 08 02 50.6 | +1.7 |
| | 19nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.50** | **20** | Pg | Pb | 08 02 17.3 | -0.6 |
| | 3.0nm,0.1s | | | | | | |
| SHLS | | | | Lg | Lg | 08 02 50.3 | |
| | 19nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **2.52** | **339** | Pn | Pb | 08 02 15.6 | -2.7 |
| | 5.3nm,0.5s | | | | | | |
| MDOK | | | | ⇓Sn | Sb | 08 02 47.3 | -1.9 |
| | 13nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.56** | **341** | *e*P | Pb | 08 02 17.8 | -1.2 |
| | 7.2nm,0.2s | | | | | | |
| KOTS | | | | *e*S | Sb | 08 02 51.1 | +0.4 |
| | 12nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.56** | **341** | Pg | Pb | 08 02 17.9 | -1.2 |
| KOTS | | | | Lg | Lg | 08 02 50.8 | |
| **KPKS** | **Kokpek** | **2.67** | **6** | *e*P | Pb | 08 02 19.7 | -1.0 |
| | 3.7nm,0.1s | | | | | | |
| KPKS | | | | *e*S | Sb | 08 02 54.2 | +0.6 |
| | 16nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **2.67** | **19** | Pn | Pn | 08 02 16.0 | -0.1 |
| | 2.3nm,0.4s | | | | | | |
| PDGK | | | | ⇑Sn | Sn | 08 02 50.3 | +1.8 |
| | 11nm,0.8s | | | | | | |
| **KURS** | **Kuram** | **2.67** | **358** | *e*P | Pb | 08 02 18.9 | -2.0 |
| | 2.1nm,0.2s | | | | | | |
| KURS | | | | *e*S | Sb | 08 02 52.8 | -0.9 |
| | 6.5nm,0.4s | | | | | | |
| **KST** | **Kastek** | **2.81** | **323** | *e*P | Pb | 08 02 22.2 | -1.1 |
| | 2.1nm,0.2s | | | | | | |
| KST | | | | *e*S | Sb | 08 02 58.7 | +0.8 |
| | 4.8nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.90** | **317** | Pn | Pb | 08 02 23.1 | -1.7 |
| | 1.4nm,0.4s | | | | | | |
| TKM2 | | | | Sn | Sb | 08 03 01.4 | +1.0 |
| | 2.4nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.90** | **317** | ⇑*i*P | Pn | 08 02 19.9 | +0.6 |
| | baz=18 | | | | | | |
| TKM2 | | | | ⇑*i*S | Sn | 08 02 56.4 | +2.1 |
| | baz=18 | | | | | | |
| **DGS** | **Degeres** | **3.06** | **323** | *e*P | Pb | 08 02 27.6 | +0.3 |
| | 2.5nm,0.5s | | | | | | |
| DGS | | | | *e*S | Sb | 08 03 07.7 | +2.9 |
| | 3.0nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **3.06** | **323** | Pg | Pb | 08 02 27.7 | +0.3 |
| | 2.5nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 08 03 07.7 | |
| | 3.1nm,0.5s | | | | | | |
| **ARLS** | **Aral** | **3.15** | **291** | ⇑*i*P | Pn | 08 02 23.2 | +0.5 |
| | baz=91 | | | | | | |
| ARLS | | | | ⇑*i*S | Sn | 08 03 02.2 | +1.8 |
| | baz=91 | | | | | | |
| **BLB** | **Baldybastay** | **3.28** | **3** | Pg | Pb | 08 02 30.6 | -0.6 |
| | 7.5nm,0.5s | | | | | | |
| BLB | | | | Lg | Lg | 08 03 12.8 | |
| | 9.3nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **3.41** | **355** | *e*P | Pb | 08 02 33.1 | -0.3 |
| | 2.1nm,0.3s | | | | | | |
| ARXS | | | | *e*S | Sb | 08 03 17.0 | +2.0 |
| | 4.5nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **3.41** | **355** | Pg | Pb | 08 02 33.1 | -0.3 |
| | 2.1nm,0.6s | | | | | | |
| ARXS | | | | Lg | Lg | 08 03 17.0 | |
| | 5.0nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.46** | **327** | *e*P | Pb | 08 02 34.6 | +0.3 |
| | 1.3nm,0.2s | | | | | | |
| KRBS | | | | *e*S | Sb | 08 03 19.6 | +3.2 |
| | 2.8nm,0.4s | | | | | | |
| **AML** | **Almayashu** | **3.68** | **292** | ⇓*i*P | Pn | 08 02 30.7 | +0.5 |
| | baz=93 | | | | | | |
| AML | | | | ⇓*i*S | Sn | 08 03 15.2 | +1.4 |
| | baz=93 | | | | | | |

*SJA **13** 08:02:48.1±0.8, 35.07S×71.17W, h102km±3km, ML3.6, MW3.6*
*GUC **13** 08:02:49.9±0.7, 35.05S×71.18W, h99km±3km, ML3.7*
**ISC 13 08:02:49.1±1.6, 35.09S±0.04×71.12W±0.05, h99km±10km, n46, σ1°10/85, 8C-2D, Central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BO02** | **Sierra Bellavi** | **0.41** | **44** | *e*P | Pn | 08 03 04.0 | -0.4 |
| BO02 | | | | *e*S | Sn | 08 03 16.1 | +0.4 |
| BO02 | | | | IAML | | 08 03 16.8 | |
| | comp=Z,5μm,0.1s | | | | | | |
| **BO02** | **Sierra Bellavi** | **0.41** | **44** | ⇑*i*P | Pn | 08 03 03.8 | -0.5 |
| BO02 | | | | *i* S | Sn | 08 03 14.9 | -0.8 |
| BO02 | | | | IAML | | 08 03 17.3 | |
| | comp=N,5μm,0.2s | | | | | | |
| **GO05** | **Huala** | **0.67** | **277** | *e*P | Pn | 08 03 05.5 | -0.7 |
| GO05 | | | | *e*S | Sn | 08 03 19.0 | -0.1 |
| GO05 | | | | IAML | | 08 03 19.8 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **GO05** | **Huala** | **0.67** | **277** | ⇑*i*P | Pn | 08 03 06.5 | +0.3 |
| GO05 | | | | *i* S | Sn | 08 03 18.9 | -0.1 |
| **BO01** | **Tunca** | **0.70** | **3** | *e*P | Pn | 08 03 05.9 | -0.6 |
| BO01 | | | | *e*S | Sn | 08 03 19.1 | -0.4 |
| BO01 | | | | IAML | | 08 03 19.1 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **BO01** | **Tunca** | **0.70** | **3** | ⇑*i*P | Pn | 08 03 06.1 | -0.4 |
| BO01 | | | | *i* S | Sn | 08 03 18.6 | -0.9 |
| BO01 | | | | IAML | | 08 03 19.2 | |
| | comp=E,4μm,0.1s | | | | | | |
| **ML02** | **Panimavida** | **0.71** | **200** | *e*P | Pn | 08 03 06.6 | 0.0 |
| ML02 | | | | *e*S | Sn | 08 03 20.6 | +0.9 |
| ML02 | | | | IAML | | 08 03 22.1 | |
| | comp=Z,818nm,0.5s | | | | | | |
| **ML02** | **Panimavida** | **0.71** | **200** | ⇑*i*P | Pn | 08 03 07.2 | +0.6 |
| ML02 | | | | *i* S | Sn | 08 03 20.6 | +0.9 |
| ML02 | | | | IAML | | 08 03 21.5 | |
| | comp=N,2μm,0.4s | | | | | | |
| **BO03** | **Pichilemu** | **0.91** | **310** | ⇑*i*P | Pn | 08 03 09.1 | +0.6 |
| BO03 | | | | *i* S | Sn | 08 03 23.9 | +0.8 |
| BO03 | | | | IAML | | 08 03 25.6 | |
| | comp=N,2μm,0.1s | | | | | | |
| **BO04** | **La Punta** | **1.18** | **21** | *i* P | Pn | 08 03 11.5 | -0.1 |
| BO04 | | | | *i* S | Sn | 08 03 28.3 | -0.2 |
| BO04 | | | | IAML | | 08 03 30.3 | |
| | comp=E,1μm,0.2s | | | | | | |
| **MT01** | **Popeta** | **1.23** | **355** | *e*P | Pn | 08 03 11.7 | -0.4 |
| MT01 | | | | *e*S | Sn | 08 03 29.5 | +0.1 |
| MT01 | | | | IAML | | 08 03 30.6 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **MT01** | **Popeta** | **1.23** | **355** | ⇑*i*P | Pn | 08 03 11.8 | -0.3 |
| MT01 | | | | *i* S | Sn | 08 03 28.4 | -1.0 |
| MT01 | | | | IAML | | 08 03 30.8 | |
| | comp=E,2μm,0.2s | | | | | | |
| **MT09** | **Talagante** | **1.31** | **5** | ⇑*i*P | Pn | 08 03 13.2 | -0.1 |
| MT09 | | | | *i* S | Sn | 08 03 30.6 | -0.8 |
| **MT12** | **Pirque** | **1.44** | **20** | *i* P | Pn | 08 03 15.1 | +0.5 |
| MT12 | | | | *i* S | Sn | 08 03 33.9 | 0.0 |
| MT12 | | | | IAML | | 08 03 37.4 | |
| | comp=N,830nm,0.2s | | | | | | |
| **LMEL** | **Las Melosas** | **1.45** | **32** | *e*P | Pn | 08 03 14.9 | 0.0 |
| LMEL | | | | *e*S | Sn | 08 03 36.5 | +2.0 |
| LMEL | | | | IAML | | 08 03 40.4 | |
| | comp=Z,623nm,0.2s | | | | | | |
| **LMEL** | **Las Melosas** | **1.45** | **32** | ⇑*i*P | Pn | 08 03 15.6 | +0.6 |
| LMEL | | | | *i* S | Sn | 08 03 36.1 | +1.6 |
| LMEL | | | | IAML | | 08 03 38.9 | |
| | comp=E,1μm,0.1s | | | | | | |
| **VA05** | **Santo Domingo** | **1.49** | **344** | ⇓*i*P | Pn | 08 03 15.2 | 0.0 |
| VA05 | | | | *i* S | Sn | 08 03 34.2 | -0.7 |
| **MT13** | **San Alfonso** | **1.51** | **28** | *e*P | Pn | 08 03 15.9 | +0.3 |
| MT13 | | | | *e*S | Sn | 08 03 37.0 | +1.3 |
| MT13 | | | | IAML | | 08 03 38.2 | |
| | comp=Z,680nm,0.2s | | | | | | |
| **MT13** | **San Alfonso** | **1.51** | **28** | *i* P | Pn | 08 03 16.4 | +0.8 |
| MT13 | | | | *i* S | Sn | 08 03 36.8 | +1.1 |
| MT13 | | | | IAML | | 08 03 38.4 | |
| | comp=N,1μm,0.2s | | | | | | |
| **EDS3** | **Malargue** | **1.56** | **116** | *e*P | Pn | 08 03 17.1 | +0.8 |
| **MT15** | **Las Vizcachas** | **1.57** | **19** | *i* P | Pn | 08 03 16.9 | +0.5 |
| MT15 | | | | *i* S | Sn | 08 03 37.3 | +0.3 |
| MT15 | | | | IAML | | 08 03 39.3 | |
| | comp=E,2μm,0.2s | | | | | | |
| **MT03** | **Universidad Ad** | **1.67** | **18** | *e*P | Pn | 08 03 17.4 | -0.2 |
| MT03 | | | | *e*S | Sn | 08 03 40.0 | +0.7 |
| MT03 | | | | IAML | | 08 03 41.2 | |
| | comp=Z,600nm,0.1s | | | | | | |
| **MT03** | **Universidad Ad** | **1.67** | **18** | *i* P | Pn | 08 03 17.8 | +0.2 |
| MT03 | | | | *i* S | Sn | 08 03 39.4 | +0.2 |
| MT03 | | | | IAML | | 08 03 44.1 | |
| | comp=N,955nm,0.2s | | | | | | |
| **MT05** | **Renca** | **1.72** | **11** | *e*P | Pn | 08 03 19.6 | +1.4 |
| MT05 | | | | *e*S | Sn | 08 03 40.5 | +0.1 |
| MT05 | | | | IAML | | 08 03 44.5 | |
| | comp=Z,462nm,0.2s | | | | | | |
| **MT05** | **Renca** | **1.72** | **11** | *i* P | Pn | 08 03 19.9 | +1.7 |
| MT05 | | | | *i* S | Sn | 08 03 41.9 | +1.6 |
| MT05 | | | | IAML | | 08 03 43.3 | |
| | comp=E,1μm,0.3s | | | | | | |
| **MT16** | **CCHEN** | **1.73** | **17** | *i* P | Pn | 08 03 18.6 | +0.3 |
| MT16 | | | | *i* S | Sn | 08 03 40.4 | 0.0 |
| **MT14** | **Cerro Cal¡n** | **1.76** | **16** | *i* P | Pn | 08 03 19.1 | +0.4 |
| MT14 | | | | *i* S | Sn | 08 03 41.4 | +0.3 |
| MT14 | | | | IAML | | 08 03 42.7 | |
| | comp=N,1μm,0.7s | | | | | | |
| **MT02** | **Curacav** | **1.83** | **360** | *e*P | Pn | 08 03 19.4 | -0.1 |
| MT02 | | | | *e*S | Sn | 08 03 40.0 | -2.6 |
| MT02 | | | | IAML | | 08 03 45.0 | |
| | comp=Z,274nm,0.4s | | | | | | |
| **MT02** | **Curacav** | **1.83** | **360** | *i* P | Pn | 08 03 19.5 | 0.0 |
| **MT04** | **Ro Olivares** | **1.87** | **26** | *e*P | Pn | 08 03 20.2 | 0.0 |
| MT04 | | | | *e*S | Sn | 08 03 46.2 | +2.3 |
| MT04 | | | | IAML | | 08 03 49.2 | |
| | comp=Z,253nm,0.6s | | | | | | |
| **MT04** | **Ro Olivares** | **1.87** | **26** | *i* P | Pn | 08 03 20.6 | +0.4 |
| MT04 | | | | *i* S | Sn | 08 03 44.5 | +0.6 |
| MT04 | | | | IAML | | 08 03 47.3 | |
| | comp=N,789nm,0.4s | | | | | | |
| **MT10** | **Hacienda Santa** | **1.88** | **15** | *i* P | Pn | 08 03 20.4 | +0.2 |
| MT10 | | | | *i* S | Sn | 08 03 44.1 | +0.2 |
| MT10 | | | | IAML | | 08 03 46.6 | |
| | comp=E,1μm,0.6s | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.88** | **30** | *e*P | Pn | 08 03 21.0 | +0.6 |
| MT08 | | | | *e*S | Sn | 08 03 47.9 | +3.7 |
| **MT08** | **Bocatoma Ro** | **1.88** | **30** | *i* P | Pn | 08 03 21.2 | +0.8 |
| MT08 | | | | *i* S | Sn | 08 03 45.0 | +0.9 |
| **FCH** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=N,724nm,0.2s | | | | | | | | |
| **PEL** | **Peldehue** | **1.98** | **11** | *i* P | | **Pn** | **08 03 21.6** | **+0.2** |
| PEL | | | | *i* S | | **Sn** | **08 03 45.9** | **-0.2** |
| PEL | | | | IAML | | | 08 03 47.9 | |
| | comp=N,435nm,0.2s | | | | | | | |
| **RFA** | **San Rafael** | **2.21** | **82** | *e*P | | **Pn** | **08 03 24.4** | **0.0** |
| RFA | | | | *e*S | | **Sn** | **08 03 45.5** | **-6.0** |
| **VA03** | **San Esteban** | **2.37** | **12** | *e*P | | **Pn** | **08 03 26.9** | **+0.2** |
| VA03 | | | | *e*S | | **Sn** | **08 03 55.9** | **+0.6** |
| VA03 | | | | IAML | | | 08 03 58.2 | |
| | comp=Z,230nm,0.2s | | | | | | | |
| **VA03** | **San Esteban** | **2.37** | **12** | *i* P | | **Pn** | **08 03 26.8** | **+0.2** |
| VA03 | | | | *i* S | | **Sn** | **08 03 55.2** | **0.0** |
| VA03 | | | | IAML | | | 08 03 58.4 | |
| | comp=E,673nm,0.3s | | | | | | | |
| **VA06** | **Catapilco** | **2.53** | **357** | *i* P | | **Pn** | **08 03 28.5** | **-0.1** |
| VA06 | | | | IAML | | | 08 04 00.5 | |
| | comp=N,537nm,0.5s | | | | | | | |
| **RTLS** | **Leoncito** | **3.62** | **25** | *e*P | | **Pn** | **08 03 44.7** | **+1.2** |
| RTLS | | | | *e*S | | Sn | 08 04 09.4 | -16 |
| **CO02** | **Combarbal** | **3.88** | **2** | *e*P | | **Pn** | **08 03 46.3** | **-0.5** |
| CO02 | | | | *e*S | | **Sn** | **08 04 30.9** | **-0.5** |
| CO02 | | | | IAML | | | 08 04 33.3 | |
| | comp=Z,86nm,0.1s | | | | | | | |
| **CO02** | **Combarbal** | **3.88** | **2** | *i* P | | **Pn** | **08 03 46.2** | **-0.6** |
| **CO03** | **El Pedregal** | **4.25** | **5** | *e*P | | **Pn** | **08 03 51.8** | **-0.1** |
| CO03 | | | | *e*S | | **Sn** | **08 04 39.1** | **-1.3** |
| CO03 | | | | IAML | | | 08 04 39.9 | |
| | comp=Z,92nm,0.6s | | | | | | | |
| **DOCA** | **Reserva Natura** | **4.47** | **23** | *e*P | | **Pn** | **08 03 55.0** | **-0.1** |
| **ACCO** | **Cerro Coronel** | **4.81** | **22** | *e*P | | **Pn** | **08 03 59.4** | **-0.3** |

*IDC **13** 08:04:22.7±3.1,54°.34N×86°.93E,h0km,mbtmp3.0/2, ML2.3/2,Error ellipse: s-maj=24.1km s-min=16.2km az=62.0*

**ISC 13 08:04:24.2±4.6,54°.4N±0°.2×86°.9E±0°.2,h10km,n6,σ1s03/8, 2C,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.28** | **250** | I | I | 08 12 31.6 | |
| | baz=72,slow=319,SNR=4.5 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.29** | **250** | ⇑P | **Pn** | **08 04 48.2** | **+0.1** |
| | 0.2nm,0.2s,baz=74,slow=15 | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **08 05 06.4** | **+1.0** |
| | 3.0nm,0.8s,baz=65,slow=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.29** | **250** | Pg | **Pn** | **08 04 47.3** | **-0.9** |
| | 1.7nm,0.3s,baz=75,slow=16,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 08 05 04.6 | |
| | 3.3nm,0.3s,baz=69,slow=27,SNR=8.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.34** | **237** | Pn | **Pn** | **08 05 57.1** | **-0.5** |
| | 0.1nm,0.3s,baz=51,slow=13,SNR=4.8 | | | | | | |
| KURBB | | | | Sn | **Sn** | **08 07 10.4** | **+0.5** |
| | baz=47,slow=20,SNR=1.3 | | | | | | |
| KURBB | | | | Lg | Lg | 08 07 42.0 | |
| | baz=53,slow=31,SNR=1.5 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **8.15** | **203** | P | **Pn** | **08 06 22.7** | **+0.3** |
| | 1.2nm,0.8s,baz=101,slow=20,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.15** | **203** | Pn | **Pn** | **08 06 23.5** | **+1.1** |
| | baz=25,slow=13,SNR=2.7 | | | | | | |
| MKAR | | | | Sn | **Sn** | **08 07 53.2** | **-1.4** |
| | 0.1nm,0.3s,baz=27,slow=32,SNR=1.6 | | | | | | |
| MKAR | | | | Lg | Lg | 08 08 40.8 | |
| | 0.1nm,0.3s,baz=22,slow=32,SNR=2.1 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC **13** 08:18:32.8±4.4,69°.78N×144°.66W,h0km,mb3.3/1, mbtmp3.1/4,ML2.8/3,Error ellipse: s-maj=55.6km s-min=24.2km az=158.0*

*NEIC **13** 08:18:32.7±2.9,69°.55N±0°.04×144°.7W±0°.1,h10km±2km, Error ellipse: s-maj=8.7km s-min=3.0km az=47.0*

*AEIC **13** 08:18:33.3±2.5,69°.56N±0°.06×144°.7W±0°.1,h9km±6km, ML2.5,ML2.8/96(NEIC),Error ellipse: s-maj=9.1km s-min=5.9km az=191.0*

**ISC 13 08:18:33.0±0.8,69°.54N±0°.04×144°.67W±0°.03,h14km,n75, σ1s34/81,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.35** | **76** | Pg | **Pg** | **08 18 39.8** | **-0.3** |
| C27K | | | | Sg | **Sg** | **08 18 44.8** | **-0.1** |
| C27K | | | | IAML | | 08 18 45.2 | |
| | comp=N,1μm,0.3s | | | | | | |
| C27K | | | | IAML | | 08 18 48.0 | |
| | comp=E,883nm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.39** | **348** | | **Pg** | **08 18 40.7** | **-0.1** |
| C26K | | | | | **Sg** | **08 18 46.4** | **+0.3** |
| **D25K** | **Kavik River** | **0.64** | **250** | | **Pg** | **08 18 45.3** | **-0.3** |
| D25K | | | | | **Sg** | **08 18 52.0** | **-2.1** |
| **D27M** | **Malcolm River** | **1.35** | **101** | | **Pb** | **08 18 58.1** | **+0.1** |
| D27M | | | | | **Sg** | **08 19 16.8** | **+0.3** |
| D27M | | | | IAML | | 08 19 21.3 | |
| | comp=N,141nm,0.6s | | | | | | |
| D27M | | | | IAML | | 08 19 24.3 | |
| | comp=E,99nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.42** | **279** | Pn | **Pb** | **08 18 59.5** | **+0.3** |
| C24K | | | | IAML | | 08 19 23.3 | |
| | comp=E,175nm,1.2s | | | | | | |
| C24K | | | | IAML | | 08 19 23.5 | |
| | comp=N,136nm,1.0s | | | | | | |
| **D24K** | **Happy Valley** | **1.52** | **257** | | **Pb** | **08 19 01.7** | **+0.7** |
| D24K | | | | IAML | | 08 19 27.9 | |
| | comp=N,141nm,0.7s | | | | | | |
| D24K | | | | IAML | | 08 19 28.4 | |
| | comp=E,150nm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.76** | **139** | | **Pn** | **08 19 04.1** | **+1.0** |
| **F26K** | **Sheenjek River** | **1.87** | **174** | | **Pn** | **08 19 06.0** | **+1.4** |
| F26K | | | | IAML | | 08 19 40.6 | |
| | comp=N,60nm,0.5s | | | | | | |
| F26K | | | | IAML | | 08 19 40.6 | |
| | comp=E,88nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.98** | **245** | Pn | **Pn** | **08 19 05.8** | **-0.3** |
| TOLK | | | | IAML | | 08 19 43.3 | |
| | comp=E,52nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 08 19 46.7 | |
| | comp=N,51nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **191** | | **Pn** | **08 19 06.1** | **-0.2** |
| **E24K** | **Your Creek** | **2.02** | **225** | Pn | **Pn** | **08 19 07.2** | **+0.5** |
| **E28M** | **Babbage River** | **2.07** | **115** | | **Pn** | **08 19 07.6** | **+0.2** |
| **C23K** | **Itkillik River** | **2.09** | **281** | Pn | **Pn** | **08 19 07.4** | **-0.2** |
| **BMAR** | **Burnt Mountain** | **2.12** | **179** | Pn | **Pn** | **08 19 08.8** | **+0.7** |
| **D23K** | **Nanushuk River** | **2.22** | **258** | Pn | **Pn** | **08 19 09.7** | **+0.4** |
| D23K | | | | IAML | | 08 19 59.0 | |
| | comp=N,40nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.33** | **233** | | **Pn** | **08 19 09.8** | **-1.2** |
| E23K | | | | IAML | | 08 19 55.9 | |
| | comp=N,43nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **212** | Pn | **Pn** | **08 19 11.3** | **0.0** |
| F24K | | | | IAML | | 08 19 53.9 | |
| | comp=N,35nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.62** | **135** | | **Pn** | **08 19 16.0** | **+1.1** |
| **G26K** | **Porcupine Rive** | **2.63** | **172** | | **Pb** | **08 19 18.8** | **-1.0** |
| **E29M** | **Blow River** | **2.71** | **112** | | **Pn** | **08 19 16.2** | **+0.1** |
| E29M | | | | IAML | | 08 20 02.6 | |
| | comp=E,25nm,0.7s | | | | | | |
| E29M | | | | IAML | | 08 20 02.6 | |
| | comp=N,30nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **2.93** | **261** | Pn | **Pn** | **08 19 18.2** | **-1.0** |
| D22K | | | | IAML | | 08 20 18.1 | |
| | comp=E,35nm,1.1s | | | | | | |
| D22K | | | | IAML | | 08 20 18.4 | |
| | comp=N,30nm,1.4s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.95** | **245** | | **Pn** | **08 19 19.4** | **-0.1** |
| **G27K** | **Doyon Strip** | **2.97** | **156** | Pn | **Pn** | **08 19 19.0** | **-0.7** |
| **FYU** | **Fort Yukon** | **3.00** | **184** | Pn | **Pn** | **08 19 20.9** | **+0.8** |
| FYU | | | | IAML | | 08 20 15.2 | |
| | comp=N,27nm,0.9s | | | | | | |
| FYU | | | | IAML | | 08 20 58.9 | |
| | comp=E,32nm,4.9s | | | | | | |
| **G23K** | **Bananza Creek** | **3.48** | **218** | Pn | **Pn** | **08 19 27.0** | **+0.3** |
| G23K | | | | IAML | | 08 20 30.9 | |
| | comp=E,16nm,1.2s | | | | | | |
| G23K | | | | IAML | | 08 20 33.8 | |
| | comp=N,18nm,1.2s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.48** | **276** | Pn | **Pn** | **08 19 25.7** | **-1.0** |
| B21K | | | | IAML | | 08 20 34.1 | |
| | comp=E,21nm,1.2s | | | | | | |
| B21K | | | | IAML | | 08 20 48.0 | |
| | comp=N,19nm,1.3s | | | | | | |
| **E21K** | **Killik River** | **3.53** | **256** | Pn | **Pn** | **08 19 26.0** | **-1.4** |
| E21K | | | | IAML | | 08 20 36.1 | |
| | comp=N,18nm,1.3s | | | | | | |
| E21K | | | | IAML | | 08 20 41.3 | |
| | comp=E,13nm,2.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.62** | **134** | | **Pn** | **08 19 28.5** | **-0.2** |
| G29M | | | | IAML | | 08 20 35.5 | |
| | comp=E,19nm,1.0s | | | | | | |
| G29M | | | | IAML | | 08 20 40.7 | |
| | comp=N,18nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **200** | | **Pn** | **08 19 30.9** | **-1.8** |
| H24K | | | | IAML | | 08 21 46.9 | |
| | comp=E,12nm,3.8s | | | | | | |
| **F21K** | **Alatna River** | **4.01** | **239** | | **Pn** | **08 19 33.3** | **-0.6** |
| F21K | | | | IAML | | 08 20 51.8 | |
| | comp=E,12nm,1.1s | | | | | | |
| F21K | | | | IAML | | 08 21 00.0 | |
| | comp=N,8.7nm,1.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **185** | Pn | **Pn** | **08 19 34.2** | **-0.6** |
| PRP | | | | IAML | | 08 20 47.1 | |
| | comp=N,8.6nm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.06** | **125** | | **Pn** | **08 19 35.8** | **+1.1** |
| G30M | | | | IAML | | 08 20 28.4 | |
| | comp=N,8.3nm,2.0s | | | | | | |
| G30M | | | | IAML | | 08 20 30.2 | |
| | comp=E,7.7nm,4.1s | | | | | | |
| **H29M** | **Whitestone** | **4.10** | **141** | | **Pn** | **08 19 34.2** | **-1.0** |
| H29M | | | | IAML | | 08 21 32.4 | |
| | comp=N,14nm,3.9s | | | | | | |
| H29M | | | | IAML | | 08 21 32.7 | |
| | comp=E,12nm,4.2s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **209** | Pn | **Pn** | **08 19 36.3** | **+0.1** |
| H23K | | | | IAML | | 08 20 58.7 | |
| | comp=E,11nm,1.5s | | | | | | |
| **INK** | **Inuvik** | **4.21** | **102** | Pn | **Pn** | **08 19 39.7** | **+3.0** |
| | comp=E,0.3nm,0.3s,baz=299,slow=11,SNR=8.2 | | | | | | |
| INK | | | | Sn | **Sn** | **08 20 24.7** | **-0.9** |
| | comp=E,0.5nm,0.3s,baz=4.6,slow=15,SNR=6.8 | | | | | | |
| INK | | | | Lg | Lg | 08 20 46.6 | |
| | comp=E,0.3nm,0.3s,baz=41,slow=19,SNR=2.0 | | | | | | |
| | comp=E,1.5nm,0.5s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.30** | **171** | Pn | **Pn** | **08 19 38.6** | **+0.7** |
| **D20K** | **Etivluk River** | **4.35** | **265** | | **Pn** | **08 19 40.8** | **+2.1** |
| **B20K** | **Meade River** | **4.36** | **282** | | **Pn** | **08 19 38.8** | **+0.1** |
| **EPYK** | **Eagle Plains** | **4.37** | **133** | | **Pn** | **08 19 40.9** | **+1.9** |
| **I28M** | **Miner Creek** | **4.50** | **154** | | **Pn** | **08 19 39.2** | **-1.5** |
| I28M | | | | IAML | | 08 20 31.9 | |
| | comp=N,9.0nm,4.5s | | | | | | |
| I28M | | | | IAML | | 08 21 14.9 | |
| | comp=E,10nm,2.2s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.54** | **112** | Pn | **Pn** | **08 19 40.2** | **-1.0** |
| F31M | | | | IAML | | 08 21 11.6 | |
| | comp=E,8.0nm,2.7s | | | | | | |
| F31M | | | | IAML | | 08 21 14.0 | |
| | comp=N,7.6nm,2.8s | | | | | | |
| **G31M** | **Satah River** | **4.68** | **119** | | **Pn** | **08 19 42.1** | **-1.0** |
| **F20K** | **Avaraart Lake** | **4.80** | **244** | Pn | **Pn** | **08 19 47.0** | **+2.2** |
| F20K | | | | IAML | | 08 22 29.8 | |
| | comp=E,8.9nm,4.7s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **198** | Pn | **Pn** | **08 19 45.6** | **+0.7** |
| MDM | | | | IAML | | 08 20 52.8 | |
| | comp=E,8.3nm,4.4s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.86** | **147** | | **Pn** | **08 19 46.9** | **+1.2** |
| **IL31** | | **4.87** | **191** | Pn | **Pn** | **08 19 44.9** | **-0.8** |
| **ILAR** | **Eielson Array** | **4.87** | **191** | Pn | **Pn** | **08 19 45.5** | **-0.3** |
| **ILAR** | **Eielson Array** | **4.87** | **191** | Pn | **Pn** | **08 19 49.5** | **+3.7** |
| | comp=E,0.2nm,0.3s,baz=6.5,slow=14,SNR=11 | | | | | | |
| ILAR | | | | Sn | **Sn** | **08 20 45.9** | **+4.0** |
| | comp=E,0.3nm,0.3s,baz=5.7,slow=23,SNR=8.3 | | | | | | |
| | comp=E,0.6nm,0.5s | | | | | | |
| **D19K** | **Kuna River** | **4.94** | **264** | | **Pn** | **08 19 48.0** | **+1.2** |
| D19K | | | | IAML | | 08 21 28.6 | |
| | comp=E,7.2nm,2.5s | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **183** | Pn | **Pn** | **08 19 46.2** | **-0.9** |
| J25K | | | | IAML | | 08 21 36.2 | |
| | comp=N,7.6nm,4.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.99** | **222** | Pn | **Pn** | **08 19 45.6** | **-1.7** |
| **CCB** | **Clear Creek Bu** | **5.07** | **195** | Pn | **Pn** | **08 19 49.0** | **+0.5** |
| **J26L** | **Joseph Creek** | **5.08** | **175** | Pn | **Pn** | **08 19 47.9** | **-0.9** |
| J26L | | | | IAML | | 08 21 25.9 | |
| | comp=N,6.9nm,3.6s | | | | | | |
| J26L | | | | IAML | | 08 23 00.2 | |
| | comp=E,6.5nm,4.7s | | | | | | |
| **MLY** | **Manley** | **5.10** | **210** | Pn | **Pn** | **08 19 47.2** | **-1.8** |
| **WRH** | **Wood River Hil** | **5.27** | **196** | Pn | **Pn** | **08 19 52.5** | **+1.3** |
| **I30M** | **Mount Dempster** | **5.39** | **140** | Pn | **Pn** | **08 19 52.2** | **-0.8** |
| **K27K** | **Chicken** | **5.63** | **168** | Pn | **Pn** | **08 19 58.3** | **+2.1** |
| **G19K** | **Purcell Mounta** | **5.80** | **240** | Pn | **Pn** | **08 19 59.4** | **+0.9** |
| **DAWY** | **Dawson** | **5.88** | **157** | | **Pn** | **08 20 01.6** | **+1.8** |
| **J30M** | **Hart River** | **5.96** | **143** | Pn | **Pn** | **08 20 02.5** | **+1.7** |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **207** | Pn | **Pn** | **08 20 01.4** | **0.0** |
| **E18K** | **Tukpahlearik C** | **6.23** | **258** | Pn | **Pn** | **08 20 04.4** | **0.0** |
| **L26K** | **Log Cabin Wild** | **6.57** | **175** | | **Pn** | **08 20 10.6** | **+1.5** |
| **DHY** | **Denali Highway** | **6.59** | **191** | Pn | **Pn** | **08 20 08.2** | **-1.2** |
| **BCAR** | **Beaver Creek A** | **6.61** | **168** | Pn | **Pn** | **08 20 07.8** | **-1.8** |
| **A36M** | **Sachs Harbour** | **6.85** | **60** | | **Pn** | **08 20 13.1** | **+0.2** |
| **L29M** | **L29M** | **6.97** | **155** | Pn | **Pn** | **08 20 14.5** | **-0.1** |
| **J19K** | **Poorman** | **7.04** | **223** | Pn | **Pn** | **08 20 13.7** | **-1.9** |
| **C36M** | **Paulatuk** | **7.25** | **82** | Pn | **Pn** | **08 20 17.9** | **-0.4** |
| **K20K** | **Telida** | **7.25** | **216** | Pn | **Pn** | **08 20 16.9** | **-1.5** |
| **M29M** | **Somme Creek** | **7.56** | **158** | Pn | **Pn** | **08 20 23.1** | **+0.3** |
| **GLB** | **Gilahina Butte** | **8.14** | **177** | Pn | **Pn** | **08 20 30.1** | **-0.7** |
| **GLI** | **Glacier Island** | **8.76** | **188** | Pn | **Pn** | **08 20 38.3** | **-0.8** |
| **YKA** | **Yellowknife Ar** | **13.97** | **106** | Pn | **Pn** | **08 21 47.0** | **-3.2** |
| | comp=E,0.1nm,0.3s,baz=323,slow=12,SNR=1.0 | | | | | | |
| | comp=E,0.6nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.31** | **128** | P | **P** | **08 25 04.4** | **+2.9** |
| | comp=E,0.4nm,0.9s,baz=350,slow=3.7,SNR=2.5 | | | | | | |
| | comp=E,0.4nm,0.9s | | | | | | |

*CATAC **13** 08:29:43.8±0.7, 13°.93N×91°.28W,h12km±8km, ML3.3*
*GCG **13** 08:29:46.7±0.3, 13°.95N×91°.20W,h31km±4km, MD3.6*

**ISC 13 08:29:44.1±1.9,13°.92N±0°.09×91°.34W±0°.08,h21km±6km, n11,σ0s52/18,Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTAL** | **Retalhuleu** | **0.69** | **330** | *i* P | **Pb** | **08 29 57.8** | **+0.3** |
| RTAL | | | | IAML | | 08 29 58.3 | |
| | comp=Z,510nm,1.0s | | | | | | |
| RTAL | | | | *i* S | **Sn** | **08 30 08.5** | **-0.3** |
| **FUG** | **Fuego 3** | **0.71** | **42** | *e*P | **Pn** | **08 29 59.2** | **+0.1** |
| **PCG** | **Pacaya** | **0.85** | **56** | *e*P | **Pn** | **08 30 01.3** | **+0.2** |
| PCG | | | | *e*S | **Sn** | **08 30 12.8** | **-0.3** |
| **SOKI** | **Kika Raxquin** | **0.90** | **356** | *i* P | **Pb** | **08 30 00.7** | **-0.5** |
| SOKI | | | | *i* S | **Sb** | **08 30 13.3** | **+0.4** |
| SOKI | | | | IAML | | 08 30 17.1 | |
| | comp=Z,560nm,1.0s | | | | | | |
| **CHTG** | **Tecpan** | **0.91** | **22** | *i* P | **Pb** | **08 30 01.0** | **-0.3** |
| CHTG | | | | *i* S | **Sb** | **08 30 13.2** | **+0.2** |
| CHTG | | | | IAML | | 08 30 15.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.17** | **55** | *e*P | **Pn** | **08 30 06.0** | **+0.5** |
| **QUIS** | **Sacapulas** | **1.39** | **10** | *i* P | **Pn** | **08 30 08.1** | **-0.2** |
| QUIS | | | | *i* S | **Sn** | **08 30 26.7** | **+0.6** |
| QUIS | | | | IAML | | 08 30 27.5 | |
| | comp=Z,390nm,1.0s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.67** | **93** | *i* P | **Pn** | **08 30 11.2** | **-1.1** |
| CEVE | | | | IAML | | 08 30 39.5 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.86** | **98** | *i* P | **Pn** | **08 30 15.4** | **+0.6** |
| JAYA | | | | *i* S | **Sn** | **08 30 37.4** | **-0.3** |
| JAYA | | | | IAML | | 08 30 43.8 | |
| | comp=Z,320nm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **1.89** | **93** | *i* P | **Pn** | **08 30 15.4** | **+0.2** |
| CEDA | | | | IAML | | 08 30 42.4 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **1.98** | **96** | *i* P | **Pn** | **08 30 16.5** | **+0.1** |
| PMON | | | | *i* S | **Sn** | **08 30 41.4** | **+0.7** |
| PMON | | | | IAML | | 08 30 53.4 | |
| | comp=Z,130nm,1.0s | | | | | | |

*NEIC **13** 08:39:37.7±2.5,69°.54N±0°.04×144°.8W±0°.1,h10km±2km, Error ellipse: s-maj=8.3km s-min=5.9km az=37.0*

**AEIC 13 08:39:37.1±2.7,69°.57N±0°.06×144°.9W±0°.1,h16km±6km, ML2.7,ML2.9/100(NEIC),Error ellipse: s-maj=9.0km s-min=6.2km az=190.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.35** | **358** | | Pb | 08 39 45.2 | +0.3 |
| C26K | | | | | Sb | 08 39 50.2 | 0.0 |
| **C27K** | **Jago River** | **0.41** | **82** | | Pg | 08 39 45.6 | +0.1 |
| C27K | | | | | Sg | 08 39 51.0 | -0.2 |
| **D25K** | **Kavik River** | **0.58** | **245** | | Pg | 08 39 48.6 | 0.0 |
| D25K | | | | | Sg | 08 39 56.3 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.34** | **278** | Pn | Pg | 08 40 03.6 | +0.7 |
| C24K | | | | Sg | Sg | 08 40 21.4 | +1.0 |
| C24K | | | | IAML | | 08 40 24.0 | |
| | comp=N,227nm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.43** | **101** | Pn | Pb | 08 40 03.3 | 0.0 |
| D27M | | | | IAML | | 08 40 25.5 | |
| | comp=N,154nm,0.3s | | | | | | |
| **D24K** | **Happy Valley** | **1.46** | **255** | | Pb | 08 40 04.3 | +0.5 |
| D24K | | | | IAML | | 08 40 28.0 | |
| | comp=N,152nm,0.4s | | | | | | |
| D24K | | | | IAML | | 08 40 29.8 | |
| | comp=E,146nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.83** | **138** | | Pb | 08 40 09.1 | -1.1 |
| E27K | | | | IAML | | 08 40 40.6 | |
| | comp=E,69nm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.90** | **171** | Pn | Pn | 08 40 09.8 | +0.9 |
| F26K | | | | IAML | | 08 40 42.4 | |
| | comp=E,99nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.92** | **243** | Pn | Pn | 08 40 08.8 | -0.3 |
| **E24K** | **Your Creek** | **1.99** | **223** | Pn | Pn | 08 40 09.9 | -0.2 |
| **F25K** | **Christian Rive** | **2.00** | **188** | Pn | Pb | 08 40 11.8 | -1.4 |
| F25K | | | | IAML | | 08 40 43.3 | |
| | comp=E,122nm,0.5s | | | | | | |
| F25K | | | | IAML | | 08 40 45.2 | |
| | comp=N,90nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.02** | **280** | Pn | Pb | 08 40 13.2 | -0.1 |
| C23K | | | | IAML | | 08 40 45.0 | |
| | comp=N,94nm,0.6s | | | | | | |
| C23K | | | | IAML | | 08 40 47.8 | |
| | comp=E,110nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.15** | **256** | | Pb | 08 40 14.6 | -1.0 |
| **E28M** | **Babbage River** | **2.15** | **114** | | Pn | 08 40 12.5 | +0.2 |
| E28M | | | | IAML | | 08 40 48.4 | |
| | comp=N,81nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.15** | **177** | Pn | Pn | 08 40 13.5 | +1.2 |
| **E23K** | **Chandalar** | **2.29** | **231** | Pn | Pn | 08 40 15.6 | +1.3 |
| **F24K** | **Squaw Lake** | **2.34** | **210** | Pn | Pn | 08 40 15.8 | +1.0 |
| F24K | | | | IAML | | 08 40 55.2 | |
| | comp=E,40nm,0.5s | | | | | | |
| F24K | | | | IAML | | 08 40 58.3 | |
| | comp=N,36nm,0.5s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.66** | **171** | | Pn | 08 40 21.6 | +2.3 |
| **F28M** | **Old Crow** | **2.69** | **135** | | Pn | 08 40 20.4 | +0.7 |
| F28M | | | | IAML | | 08 41 08.4 | |
| | comp=E,37nm,0.6s | | | | | | |
| F28M | | | | IAML | | 08 41 09.2 | |
| | comp=N,43nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.78** | **112** | | Pn | 08 40 22.0 | +1.1 |
| E29M | | | | IAML | | 08 41 12.6 | |
| | comp=N,48nm,0.9s | | | | | | |
| E29M | | | | IAML | | 08 41 18.3 | |
| | comp=E,36nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.85** | **190** | | Pn | 08 40 24.4 | +2.5 |
| **D22K** | **Ayikyak River** | **2.87** | **260** | Pn | Pn | 08 40 23.1 | +1.1 |
| D22K | | | | IAML | | 08 41 13.3 | |
| | comp=E,34nm,0.8s | | | | | | |
| D22K | | | | IAML | | 08 41 21.7 | |
| | comp=N,34nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.90** | **243** | | Pn | 08 40 22.8 | +0.3 |
| **FYU** | **Fort Yukon** | **3.02** | **183** | Pn | Pn | 08 40 24.9 | +0.7 |
| FYU | | | | IAML | | 08 41 21.3 | |
| | comp=E,40nm,0.8s | | | | | | |
| **G27K** | **Doyon Strip** | **3.02** | **155** | Pn | Pn | 08 40 23.5 | -0.8 |
| **B22K** | **Teshekpuk Lake** | **3.04** | **289** | Pn | Pn | 08 40 24.1 | -0.3 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **200** | Pn | Pn | 08 40 24.3 | -0.2 |
| G24K | | | | IAML | | 08 41 18.8 | |
| | comp=N,42nm,0.7s | | | | | | |
| G24K | | | | IAML | | 08 41 19.8 | |
| | comp=E,39nm,0.7s | | | | | | |
| **COLD** | **Coldfoot** | **3.07** | **222** | Pn | Pn | 08 40 23.3 | -1.5 |
| **F22K** | **John River** | **3.39** | **236** | | Pn | 08 40 31.8 | +2.6 |
| **B21K** | **Ikpikpuk River** | **3.41** | **275** | | Pn | 08 40 30.2 | +0.7 |
| B21K | | | | IAML | | 08 41 38.1 | |
| | comp=N,27nm,0.8s | | | | | | |
| B21K | | | | IAML | | 08 41 52.1 | |
| | comp=E,25nm,1.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.69** | **133** | Pn | Pn | 08 40 36.1 | +2.6 |
| G29M | | | | IAML | | 08 41 48.5 | |
| | comp=E,30nm,0.8s | | | | | | |
| G29M | | | | IAML | | 08 43 05.9 | |
| | comp=N,28nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **198** | | Pn | 08 40 38.5 | +2.0 |
| H24K | | | | IAML | | 08 41 42.2 | |
| | comp=E,15nm,1.1s | | | | | | |
| H24K | | | | IAML | | 08 43 13.3 | |
| | comp=N,16nm,0.6s | | | | | | |
| **F21K** | **Alatna River** | **3.96** | **238** | | Pn | 08 40 37.9 | +0.9 |
| F21K | | | | IAML | | 08 41 51.8 | |
| | comp=E,11nm,0.6s | | | | | | |
| F21K | | | | IAML | | 08 42 03.9 | |
| | comp=N,10.0nm,2.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.08** | **184** | Pn | Pn | 08 40 40.6 | +1.8 |
| **G30M** | **tAoh Zraii Nji** | **4.14** | **125** | Pn | Pn | 08 40 40.6 | +1.1 |
| G30M | | | | IAML | | 08 41 54.5 | |
| | comp=N,10nm,0.8s | | | | | | |
| G30M | | | | IAML | | 08 42 01.2 | |
| | comp=E,11nm,2.1s | | | | | | |
| **H23K** | **Yukon River** | **4.16** | **207** | | Pn | 08 40 41.8 | +1.9 |
| H23K | | | | IAML | | 08 41 53.6 | |
| | comp=E,16nm,0.7s | | | | | | |
| H23K | | | | IAML | | 08 41 57.7 | |
| | comp=N,16nm,3.2s | | | | | | |
| **H29M** | **Whitestone** | **4.17** | **141** | | Pn | 08 40 42.2 | +2.2 |
| H29M | | | | IAML | | 08 43 33.9 | |
| | comp=N,17nm,2.0s | | | | | | |
| **I27K** | **Kandik River** | **4.18** | **161** | | Pn | 08 40 41.2 | +1.1 |
| **B20K** | **Meade River** | **4.28** | **282** | | Pn | 08 40 43.9 | +2.4 |
| **D20K** | **Etivluk River** | **4.28** | **264** | | Pn | 08 40 44.5 | +3.0 |
| **E20K** | **Nigu River** | **4.29** | **257** | | Pn | 08 40 43.2 | +1.5 |
| **INK** | **Inuvik** | **4.29** | **102** | Pn | Pn | 08 40 42.5 | +1.0 |
| **I26K** | **Coal Creek Min** | **4.33** | **170** | Pn | Pn | 08 40 44.8 | +2.6 |
| I26K | | | | IAML | | 08 41 57.9 | |
| | comp=N,20nm,1.2s | | | | | | |
| I26K | | | | IAML | | 08 43 37.0 | |
| | comp=E,19nm,1.0s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.44** | **217** | | Pn | 08 40 45.6 | +1.9 |
| **EPYK** | **Eagle Plains** | **4.45** | **132** | | Pn | 08 40 44.4 | +0.6 |
| **G21K** | **Allakaket** | **4.46** | **231** | | Pn | 08 40 44.2 | +0.3 |
| G21K | | | | IAML | | 08 42 05.7 | |
| | comp=E,13nm,1.6s | | | | | | |
| G21K | | | | IAML | | 08 43 35.1 | |
| | comp=N,10nm,3.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58** | **194** | | Pn | 08 40 45.2 | -0.4 |
| POKR | | | | IAML | | 08 42 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| K29M | Barlow Dome | 6.45 150 | Pn | Pn | 08 41 10.7 | -0.7 | | |
| J20K | Nowinta River | 6.52 218 | Pn | Pn | 08 41 14.8 | +2.6 | | |
| DHY | Denali Highway | 6.60 190 | Pn | Pn | 08 41 11.1 | -2.4 | | |
| L26K | Log Cabin Wild | 6.60 174 | | Pn | 08 41 13.8 | +0.4 | | |
| BCAR | Beaver Creek A | 6.65 168 | Pn | Pn | 08 41 12.3 | -1.8 | | |
| L27K | Beaver Creek, | 6.65 168 | Pn | Pn | 08 41 13.3 | -0.8 | | |
| MENT | Mentasta | 6.68 175 | Pn | Pn | 08 41 14.6 | +0.2 | | |
| RDOG | Red Dog Mine | 6.70 265 | Pn | Pn | 08 41 17.1 | +2.4 | | |
| F17K | Baldwin Pennin | 6.89 251 | Pn | Pn | 08 41 17.4 | +0.1 | | |
| A36M | Sachs Harbour | 6.91 60 | Pn | Pn | 08 41 18.1 | +0.7 | | |
| C36M | Paulatuk | 7.32 82 | Pn | Pn | 08 41 22.1 | -0.9 | | |
| C16K | Lisburne Hills | 7.48 270 | Pn | Pn | 08 41 27.3 | +2.0 | | |
| G16K | Koyuk River | 7.89 246 | Pn | Pn | 08 41 30.7 | -0.2 | | |

*GII* ***13*** *08:48:05.7±0.5, 33°.67N±0'.04×35°.98E±0'.02, h0km, confirmed*
*GRAL* ***13*** *08:48:07.1±0.3, 33°.60N×35°.97E, h13km±2km, MD2.8*

**ISC 13 08:48:06.8±1.2, 33°.64N±0'.03×36°.00E±0'.07, h0km, n19, σ0s62/21, Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RCY | Rachaya | 0.20 | 225 | eP | Pg | 08 48 10.6 | 0.0 |
| RCY | | | | eS | Sg | 08 48 13.3 | 0.0 |
| ZAHL | Zahle | 0.24 | 336 | eP | Pg | 08 48 12.4 | +0.9 |
| DQRL | Deir Qamar | 0.37 | 280 | eP | Pg | 08 48 13.7 | -0.2 |
| DQRL | | | | eS | Sg | 08 48 18.6 | -0.1 |
| BHL | Bhannes | 0.39 | 312 | eP | Pg | 08 48 14.6 | +0.2 |
| NATI | Neve Ativ | 0.44 | 211 | P | Pg | 08 48 15.3 | +0.1 |
| NATI | Neve Ativ | 0.44 | 211 | S | Sb | 08 48 23.4 | -1.2 |
| GEM | Giv'at Ha'Em | 0.51 | 214 | P | Pg | 08 48 16.8 | +0.1 |
| GEM | Giv'at Ha'Em | 0.51 | 214 | S | Sb | 08 48 25.6 | -1.2 |
| HWQ | Hawqa | 0.64 | 356 | eP | Pg | 08 48 19.2 | +0.1 |
| KSHT | Keshet | 0.68 | 194 | P | Pg | 08 48 20.3 | +0.5 |
| KSHT | Keshet | 0.68 | 194 | S | Sb | 08 48 31.4 | -0.1 |
| MMA0B | Mount Meron ar | 0.80 | 219 | P | Pb | 08 48 23.9 | +0.3 |
| MMA0B | Mount Meron ar | 0.80 | 219 | S | Sb | 08 48 35.4 | +0.3 |
| MMC7 | Mount Meron ar | 0.80 | 220 | P | Pg | 08 48 22.0 | -0.2 |
| BEIL | Beino | 0.91 | 9 | eP | Pg | 08 48 23.7 | -0.6 |
| MMLI | Mount Malkishu | 1.29 | 202 | P | Pg | 08 48 31.8 | +0.2 |
| MMLI | Mount Malkishu | 1.29 | 202 | S | Sn | 08 48 51.4 | +1.1 |
| HMDT | Nahal Hemdat | 1.44 | 196 | P | Pn | 08 48 33.6 | -0.6 |
| HMDT | Nahal Hemdat | 1.44 | 196 | S | Sn | 08 48 54.6 | +0.8 |

*AEIC* ***13*** *08:53:11.8±2.7, 69°.47N±0'.05×144°.4W±0°.1, h7km±4km, ML4.3, mb4.4/66(NEIC), ML4.3/122(NEIC), Mwr4.4/47(NEIC), Error ellipse: s-maj=7.2km s-min=4.7km az=204.0*
*NEIC* ***13*** *08:53:12.5±2.5, 69°.52N±0'.05×144°.3W±0°.1, h10km±1km, Error ellipse: s-maj=8.8km s-min=5.5km az=24.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=2.73; $M_{\theta\theta}$=0.01; $M_{\phi\phi}$=2.74; $M_{r\theta}$=1.46; $M_{\theta\phi}$=1.41; $M_{\phi r}$=2.76; Fault plane solution: $M_o$4.39000×$10^{15}$ NP1: $\phi_s$7.86000°, $\delta$68.98000°, $\lambda$-62.66000°. NP2:$\phi_s$132.60000°, $\delta$33.99000°, $\lambda$-140.08000°. Principal axes: T 4.0418, Plg19.0000°, Azm78.0000°; N 0.6224, Plg25.0000°, Azm177.0000°; P -4.6642, Plg57.0000°, Azm315.0000°;*
*NEIC* ***13*** *08:53:12.7, 69°.59N×144°.36W, h1km*
*IDC* ***13*** *08:53:13.1±0.5, 69°.69N×144°.54W, h0km, mb4.2/23, mbtmp4.1/28, ML3.8/5, MS3.4/41, Error ellipse: s-maj=12.8km s-min=9.3km az=62.0*

**ISC 13 08:53:11.9±1.1, 69°.48N±0'.03×144°.32W±0'.02, h5km±7km, n292, σ1s73/275, mb4.4/57, MS3.4/36, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.26 | 55 | | Pg | 08 53 17.2 | +0.3 |
| C27K | | | | | Sg | 08 53 21.5 | +1.2 |
| C26K | Camden Bay | 0.49 | 335 | | Pg | 08 53 21.4 | +0.1 |
| C26K | | | | | Sg | 08 53 28.0 | +0.5 |
| C26K | comp=N,18μm,0.4s | | | IAML | | 08 53 29.7 | |
| C26K | comp=E,16μm,0.6s | | | IAML | | 08 53 33.4 | |
| D25K | Kavik River | 0.75 | 259 | Pg | Pg | 08 53 25.6 | -0.5 |
| D25K | | | | Sg | Sg | 08 53 36.0 | +0.2 |
| D27M | Malcolm River | 1.21 | 100 | Pn | Pg | 08 53 34.8 | -0.2 |
| C24K | Franklin Bluff | 1.56 | 281 | | Pn | 08 53 40.7 | +0.6 |
| C24K | | | | | Sg | 08 54 01.9 | +0.1 |
| E27K | Coleen River | 1.63 | 141 | Pn | Pg | 08 53 43.3 | +0.2 |
| E27K | | | | Sg | Sg | 08 54 05.6 | +1.4 |
| D24K | Happy Valley | 1.64 | 261 | | Pb | 08 53 42.5 | 0.0 |
| D24K | | | | Sg | Sg | 08 54 05.7 | +1.4 |
| F26K | Sheenjek River | 1.79 | 178 | Pn | Pg | 08 53 46.4 | +0.2 |
| F26K | | | | | Sn | 08 54 06.5 | 0.0 |
| F26K | comp=E,2μm,0.9s | | | IAML | | 08 54 14.8 | |
| E28M | Babbage River | 1.93 | 115 | | Pb | 08 53 47.6 | +0.1 |
| F25K | Christian Rive | 1.96 | 195 | Pn | Pb | 08 53 48.6 | +0.6 |
| D28M | Stokes Point | 1.98 | 92 | | Pn | 08 53 46.5 | +0.6 |
| D28M | comp=E,3μm,1.4s | | | IAML | | 08 54 27.4 | |
| D28M | comp=N,3μm,1.6s | | | IAML | | 08 54 27.4 | |
| BMAR | Burnt Mountain | 2.06 | 183 | | Pb | 08 53 49.9 | +0.1 |
| TOLK | Toolik Lake Re | 2.07 | 248 | | Pn | 08 53 47.3 | +0.1 |
| TOLK | comp=N,3μm,0.7s | | | IAML | | 08 54 27.8 | |
| E24K | Your Creek | 2.07 | 229 | | Pn | 08 53 48.5 | +1.2 |
| E24K | | | | | Sg | 08 54 19.0 | +0.7 |
| E24K | comp=E,2μm,1.4s | | | IAML | | 08 54 23.3 | |
| E24K | comp=N,2μm,1.3s | | | IAML | | 08 54 29.1 | |
| C23K | Itkillik River | 2.23 | 282 | | Pn | 08 53 50.1 | +0.7 |
| D23K | Nanushuk River | 2.33 | 260 | | Pn | 08 53 51.7 | +0.9 |
| D23K | comp=E,2μm,1.3s | | | IAML | | 08 54 31.8 | |
| D23K | comp=N,3μm,1.0s | | | IAML | | 08 54 34.5 | |
| F24K | Squaw Lake | 2.37 | 215 | Pn | Pb | 08 53 53.7 | -1.3 |
| F24K | comp=E,1μm,0.8s | | | IAML | | 08 54 35.7 | |
| F24K | comp=N,1μm,0.9s | | | IAML | | 08 54 37.8 | |
| E23K | Chandalar | 2.40 | 236 | Pn | Pn | 08 53 53.6 | +1.8 |
| E23K | comp=E,2μm,0.8s | | | IAML | | 08 54 34.8 | |
| E23K | comp=N,2μm,0.9s | | | IAML | | 08 54 34.9 | |
| F28M | Old Crow | 2.49 | 137 | | Pn | 08 53 55.1 | +2.1 |
| F28M | comp=N,960nm,1.4s | | | IAML | | 08 54 39.3 | |
| G26K | Porcupine Rive | 2.55 | 175 | | Pb | 08 53 56.5 | -1.5 |
| E29M | Blow River | 2.56 | 112 | | Pn | 08 53 53.9 | -0.1 |
| G25K | Bearman Lake | 2.81 | 195 | | Pn | 08 53 59.8 | +2.5 |
| G27K | Doyon Strip | 2.86 | 158 | | Pn | 08 54 00.8 | +2.7 |
| FYU | Fort Yukon | 2.95 | 187 | Pn | Pn | 08 54 01.8 | +2.6 |
| FYU | comp=E,1μm,2.1s | | | IAML | | 08 54 59.6 | |
| FYU | comp=N,2μm,1.4s | | | IAML | | 08 54 59.8 | |
| G24K | Hadweenzic Riv | 3.03 | 204 | | Pn | 08 54 00.6 | +0.2 |
| G24K | comp=E,898nm,1.4s | | | IAML | | 08 54 57.1 | |
| G24K | comp=N,831nm,1.1s | | | IAML | | 08 55 03.2 | |
| E22K | Anaktuvuk Pass | 3.04 | 247 | | Pn | 08 54 01.2 | +0.6 |
| E22K | comp=N,909nm,1.1s | | | IAML | | 08 54 52.2 | |
| E22K | comp=E,627nm,1.0s | | | IAML | | 08 55 08.4 | |
| D22K | Ayikyak River | 3.05 | 263 | Pn | Pn | 08 54 02.1 | +1.4 |
| COLD | Coldfoot | 3.14 | 227 | | Pn | 08 54 03.2 | +1.3 |
| B22K | Teshekpuk Lake | 3.26 | 290 | | Pn | 08 54 03.2 | -0.3 |
| H25L | Birch Creek | 3.28 | 191 | | Pn | 08 54 06.8 | +3.0 |
| H27K | Steamboat Moun | 3.43 | 161 | | Pn | 08 54 08.8 | +2.8 |
| G29M | Pine Creek | 3.49 | 135 | | Pn | 08 54 07.7 | +1.0 |
| G29M | comp=E,868nm,1.0s | | | IAML | | 08 55 08.2 | |
| G29M | comp=N,681nm,1.1s | | | IAML | | 08 55 11.1 | |
| F22K | John River | 3.51 | 239 | | Pn | 08 54 08.7 | +1.8 |
| G23K | Bananza Creek | 3.51 | 220 | Pn | Pn | 08 54 08.2 | +1.2 |
| G23K | comp=N,672nm,0.9s | | | IAML | | 08 55 10.5 | |
| B21K | Ikpikpuk River | 3.62 | 277 | Pn | Pn | 08 54 09.8 | +1.4 |
| E21K | Killik River | 3.64 | 258 | | Pn | 08 54 10.5 | +1.7 |
| F30M | Barrier River | 3.65 | 117 | | Pn | 08 54 11.6 | +2.7 |
| G22K | Bettles | 3.71 | 230 | | Pn | 08 54 12.2 | +2.5 |
| H24K | Noodor Dome | 3.90 | 202 | Pn | Pn | 08 54 14.3 | +1.9 |
| H24K | comp=N,372nm,0.9s | | | IAML | | 08 55 05.8 | |
| H24K | comp=E,509nm,1.5s | | | IAML | | 08 55 27.6 | |
| G30M | tAoh Zrail Nji | 3.92 | 126 | Pn | Pn | 08 54 15.3 | +2.6 |
| G30M | comp=N,334nm,1.4s | | | IAML | | 08 55 27.1 | |
| G30M | comp=E,279nm,1.1s | | | IAML | | 08 55 37.8 | |
| A22K | Sinclair Lake | 3.93 | 298 | | Pn | 08 54 13.1 | +0.5 |
| H29M | Whitestone | 3.97 | 143 | Pn | Pn | 08 54 16.1 | +2.7 |
| H29M | comp=N,373nm,1.2s | | | IAML | | 08 55 26.6 | |
| H29M | comp=E,417nm,1.2s | | | IAML | | 08 55 33.9 | |
| PRP | Porcupine Dome | 4.01 | 187 | Pn | Pn | 08 54 16.9 | +2.9 |
| PRP | comp=N,344nm,0.9s | | | IAML | | 08 55 10.2 | |
| I27K | Kandik River | 4.03 | 164 | | Pn | 08 54 17.0 | +2.8 |
| INK | Inuvik | 4.08 | 102 | Pn | Pn | 08 54 16.3 | +1.6 |
| INK | Inuvik | 4.08 | 102 | Pn | Pn | 08 54 17.0 | +2.3 |
| INK | comp=N,4.5nm,0.3s,baz=319,slow=14,SNR=32 | | | Sn | Sn | 08 55 03.5 | +0.8 |
| INK | comp=N,5.3nm,0.3s,baz=238,slow=19,SNR=2.2 | | | Lg | Lg | 08 55 24.9 | |
| INK | comp=N,6.9nm,0.3s,baz=228,slow=17,SNR=3.1 | | | LR | LR | 08 56 22.2 | |
| F21K | Alatna River | 4.08 | 241 | Pn | Pn | 08 54 16.8 | +1.9 |
| H23K | Yukon River | 4.18 | 211 | | Pn | 08 54 17.8 | +1.6 |
| H23K | comp=N,481nm,1.1s | | | IAML | | 08 55 32.5 | |
| I26K | Coal Creek Min | 4.22 | 173 | | Pn | 08 54 18.6 | +1.9 |
| I26K | comp=N,387nm,0.9s | | | IAML | | 08 55 30.4 | |
| I26K | comp=E,360nm,1.1s | | | IAML | | 08 55 38.4 | |
| EPYK | Eagle Plains | 4.24 | 134 | | Pn | 08 54 19.1 | +2.1 |
| EPYK | comp=N,442nm,1.6s | | | IAML | | 08 55 36.1 | |
| EPYK | comp=E,374nm,1.1s | | | IAML | | 08 55 46.8 | |
| I28M | Miner Creek | 4.38 | 155 | Pn | Pn | 08 54 21.9 | +2.8 |
| I28M | comp=E,221nm,2.1s | | | IAML | | 08 55 41.7 | |
| I28M | comp=N,238nm,1.0s | | | IAML | | 08 55 53.1 | |
| F31M | Tsiigehtchic | 4.40 | 113 | Pn | Pn | 08 54 20.5 | +1.4 |
| F31M | comp=E,218nm,1.8s | | | IAML | | 08 55 41.6 | |
| F31M | comp=N,299nm,1.4s | | | IAML | | 08 55 44.6 | |
| E20K | Nigu River | 4.47 | 260 | | Pn | 08 54 22.2 | +2.0 |
| D20K | Etivluk River | 4.47 | 266 | | Pn | 08 54 21.8 | +1.6 |
| H22K | Ishtalitna Cre | 4.49 | 220 | | Pn | 08 54 22.4 | +1.9 |
| B20K | Meade River | 4.50 | 283 | Pn | Pn | 08 54 21.5 | +1.0 |
| A21K | Barrow | 4.54 | 300 | | Pn | 08 54 21.4 | +0.4 |
| G31M | Satah River | 4.54 | 120 | Pn | Pn | 08 54 23.1 | +2.1 |
| G31M | comp=E,314nm,1.3s | | | IAML | | 08 55 45.4 | |
| G31M | comp=N,341nm,2.2s | | | IAML | | 08 55 47.3 | |
| POKR | Poker Plat Res | 4.54 | 197 | | Pn | 08 54 22.2 | +1.0 |
| POKR | comp=E,335nm,0.9s | | | IAML | | 08 55 22.4 | |
| POKR | comp=N,203nm,1.1s | | | IAML | | 08 55 47.9 | |
| G21K | Allakaket | 4.56 | 234 | Pn | Pn | 08 54 22.6 | +1.2 |
| I29M | Ogilvie Camp, | 4.74 | 148 | | Pn | 08 54 26.4 | +2.5 |
| I29M | comp=E,189nm,1.7s | | | IAML | | 08 55 54.2 | |
| I23K | Minto, Yukon-K | 4.77 | 207 | | Pn | 08 54 26.2 | +2.0 |
| I23K | comp=N,328nm,1.9s | | | IAML | | 08 56 03.2 | |
| I23K | comp=E,334nm,1.2s | | | IAML | | 08 56 05.4 | |
| MDM | Murphy Dome | 4.79 | 200 | | Pn | 08 54 26.1 | +1.5 |
| MDM | comp=N,186nm,0.9s | | | IAML | | 08 55 56.6 | |
| MDM | comp=E,224nm,1.3s | | | IAML | | 08 56 03.2 | |
| COLA | College | 4.83 | 198 | Pn | Pn | 08 54 25.1 | 0.0 |
| COLA | comp=E,257nm,0.7s | | | IAML | | 08 56 08.9 | |
| IL31 | | 4.83 | 193 | | Pn | 08 54 25.8 | +0.7 |
| ILAR | Eielson Array | 4.83 | 193 | Pn | Pn | 08 54 27.2 | +2.0 |
| ILAR | Eielson Array | 4.83 | 193 | Pn | Pn | 08 54 28.4 | +3.2 |
| ILAR | comp=E,2.2nm,0.3s,baz=3.5,slow=13,SNR=59 | | | Sn | Sn | 08 55 24.8 | +3.3 |
| ILAR | comp=E,6.0nm,0.3s,baz=6.0,slow=21,SNR=15 | | | Lg | Lg | 08 55 49.6 | |
| ILAR | comp=E,8.1nm,0.3s,baz=5.9,slow=31,SNR=5.9 | | | LR | LR | 08 56 33.7 | |
| EGAK | Eagle | 4.88 | 164 | Pn | Pn | 08 54 28.1 | +2.4 |
| EGAK | comp=E,140nm,1.0s | | | IAML | | 08 55 54.8 | |
| F20K | Avaraart Lake | 4.89 | 245 | Pn | Pn | 08 54 27.7 | +1.8 |
| F20K | comp=E,297nm,0.9s | | | IAML | | 08 55 55.8 | |
| J25K | Salcha River, | 4.91 | 185 | Pn | Pn | 08 54 26.6 | +0.4 |
| J25K | comp=E,160nm,0.9s | | | IAML | | 08 56 08.4 | |
| J26L | Joseph Creek | 5.01 | 176 | Pn | Pn | 08 54 29.1 | +1.4 |
| J26L | comp=E,132nm,1.1s | | | IAML | | 08 55 57.0 | |
| H21K | Melozitna Rive | 5.03 | 224 | Pn | Pn | 08 54 28.9 | +1.0 |
| CCB | Clear Creek Bu | 5.04 | 197 | | Pn | 08 54 29.9 | +2.0 |
| D19K | Kuna River | 5.06 | 265 | | Pn | 08 54 30.2 | +1.9 |
| MLY | Manley | 5.11 | 212 | Pn | Pn | 08 54 31.5 | +2.4 |
| MLY | comp=E,210nm,1.2s | | | IAML | | 08 56 07.7 | |
| MLY | comp=N,178nm,1.7s | | | IAML | | 08 56 11.7 | |
| E19K | Redstone River | 5.17 | 253 | | Pn | 08 54 31.0 | +1.2 |
| HDA | Harding Lake | 5.20 | 193 | | Pn | 08 54 29.3 | -0.8 |
| HDA | comp=E,221nm,1.0s | | | IAML | | 08 56 13.5 | |
| HDA | comp=N,163nm,1.0s | | | IAML | | 08 56 17.5 | |
| WRH | Wood River Hil | 5.24 | 198 | | Pn | 08 54 33.4 | +2.6 |
| WRH | comp=E,166nm,1.4s | | | IAML | | 08 56 11.3 | |
| WRH | comp=N,140nm,1.3s | | | IAML | | 08 56 21.4 | |
| NEA2 | Nenana | 5.25 | 203 | | Pn | 08 54 33.0 | +2.1 |
| NEA2 | comp=E,127nm,2.1s | | | IAML | | 08 56 15.3 | |
| I30M | Mount Dempster | 5.26 | 141 | Pn | Pn | 08 54 33.3 | +2.2 |
| I30M | comp=E,131nm,1.1s | | | IAML | | 08 56 19.2 | |
| C19K | Lookout Ridge | 5.43 | 273 | Pn | Pn | 08 54 34.7 | +1.3 |
| SCRK | Sand Creek | 5.53 | 178 | Pn | Pn | 08 54 38.0 | +3.2 |
| K27K | Chicken | 5.55 | 170 | | Pn | 08 54 35.8 | +0.8 |
| J29N | Klondike Camp | 5.58 | 152 | | Pn | 08 54 34.9 | -0.6 |
| F19K | Shaleruckik Mo | 5.68 | 249 | Pn | Pn | 08 54 38.0 | +1.3 |
| BWN | Browne | 5.70 | 203 | Pn | Pn | 08 54 35.6 | -1.5 |
| K24K | Donnelly Dome | 5.73 | 187 | | Pn | 08 54 41.3 | +3.8 |
| DAWY | Dawson | 5.77 | 158 | | Pn | 08 54 40.3 | +2.2 |
| J30M | Hart River | 5.83 | 144 | Pn | Pn | 08 54 41.7 | +2.8 |
| A19K | Wainwright | 5.83 | 285 | | Pn | 08 54 39.3 | +0.5 |
| DOT | Dot Lake | 5.86 | 179 | | Pn | 08 54 42.2 | +3.0 |
| G19K | Purcell Mounta | 5.88 | 241 | Pn | Pn | 08 54 39.2 | -0.3 |
| BPAW | Bear Paw Mtn. | 6.01 | 209 | | Pn | 08 54 43.1 | +1.8 |
| MCK | McKinley | 6.06 | 200 | | Pn | 08 54 41.2 | -0.8 |
| C18K | Utukok River | 6.10 | 270 | Pn | Pn | 08 54 42.6 | -0.1 |
| H19K | Roundabout Mou | 6.11 | 235 | Pn | Pn | 08 54 43.5 | +0.8 |
| B18K | Kokolik River | 6.16 | 277 | | Pn | 08 54 43.6 | +0.3 |
| K29M | Barlow Dome | 6.27 | 151 | | Pn | 08 54 48.2 | +3.3 |
| E18K | Tukpahlearik C | 6.34 | 259 | | Pn | 08 54 45.2 | -0.6 |
| RND | Reindeer | 6.36 | 199 | | Pn | 08 54 47.5 | +1.3 |
| F18K | Selawik | 6.43 | 251 | | Pn | 08 54 48.6 | +1.6 |
| L26K | Log Cabin Wild | 6.49 | 176 | | Pn | 08 54 50.1 | +2.1 |
| BCAR | Beaver Creek A | 6.52 | 170 | Pn | Pn | 08 54 50.6 | +2.2 |
| L27K | Beaver Creek, | 6.52 | 170 | Pn | Pn | 08 54 51.2 | +2.8 |
| G18K | Tagagawik | 6.53 | 243 | | Pn | 08 54 49.6 | +1.1 |
| DHY | Denali Highway | 6.55 | 192 | Pn | Pn | 08 54 51.3 | +2.5 |
| PAX | Paxson | 6.55 | 185 | | Pn | 08 54 49.0 | +0.1 |
| J20K | Nowinta River | 6.58 | 221 | Pn | Pn | 08 54 51.0 | +1.9 |
| A36M | Sachs Harbour | 6.78 | 59 | Pn | Pn | 08 54 51.4 | -0.3 |
| C17K | DeLong Mountai | 6.85 | 270 | | Pn | 08 54 52.6 | -0.2 |
| L29M | L29M | 6.86 | 156 | Pn | Pn | 08 54 56.0 | +3.0 |
| RDOG | Red Dog Mine | 6.89 | 267 | Pn | Pn | 08 54 53.3 | -0.1 |
| WAT1 | Susitna Watana | 6.89 | 196 | | Pn | 08 54 56.8 | +3.3 |
| WAT7 | Susitna Watana | 6.92 | 198 | | Pn | 08 54 56.6 | +2.7 |
| H18K | Honhosa River | 6.94 | 238 | | Pn | 08 54 53.9 | -0.2 |
| F17K | Baldwin Pennin | 7.05 | 252 | Pn | Pn | 08 54 56.0 | +0.4 |
| J19K | Poorman | 7.09 | 224 | Pn | Pn | 08 54 56.4 | +0.4 |
| HARP | HAARP | 7.12 | 183 | | Pn | 08 55 01.1 | +4.6 |
| C36M | Paulatuk | 7.13 | 82 | Pn | Pn | 08 54 56.1 | -0.4 |
| K20K | Telida | 7.28 | 217 | Pn | Pn | 08 54 59.9 | +1.2 |
| G17K | Kiwalik Mounta | 7.42 | 245 | | Pn | 08 55 02.0 | +1.4 |
| M29M | Somme Creek | 7.45 | 159 | Pn | Pn | 08 55 04.3 | +3.1 |
| CUT | Chuliitna | 7.50 | 202 | Pn | Pn | 08 55 01.5 | -0.3 |
| H17K | Granite Mounta | 7.56 | 240 | Pn | Pn | 08 55 02.6 | 0.0 |
| C16K | Lisburne Hills | 7.68 | 271 | | Pn | 08 55 03.8 | -0.4 |
| SCM | Sheep Creek Mo | 7.78 | 191 | Pn | Pn | 08 55 04.8 | -0.8 |
| SML | Sawmill | 7.88 | 194 | Pn | Pn | 08 55 07.0 | +0.1 |
| N25K | Chitina, Valde | 7.91 | 181 | Pn | Pn | 08 55 07.5 | +0.1 |
| G16K | Koyuk River | 8.04 | 248 | Pn | Pn | 08 55 09.7 | +0.6 |
| GLB | Gilahina Butte | 8.07 | 178 | Pn | Pn | 08 55 09.2 | -0.5 |
| SKT | Skwentna | 8.09 | 205 | Pn | Pn | 08 55 09.4 | -0.5 |
| KNK | Knik Glacier | 8.28 | 194 | Pn | Pn | 08 55 13.1 | +0.6 |
| J17K | VABM Dome | 8.48 | 231 | Pn | Pn | 08 55 15.3 | +0.2 |
| L19K | White Mountain | 8.49 | 216 | Pn | Pn | 08 55 13.3 | -2.1 |
| FARO | Faro, Yukon | 8.54 | 143 | Pn | Pn | 08 55 18.5 | +2.5 |
| I17K | Unalakleet | 8.56 | 237 | Pn | Pn | 08 55 18.1 | +1.9 |
| F15K | North Star Dit | 8.61 | 254 | Pn | Pn | 08 55 17.5 | +0.6 |
| M19K | Big River Lodg | 8.65 | 213 | Pn | Pn | 08 55 18.6 | +1.0 |
| RC01 | Rabbit Creek A | 8.72 | 198 | Pn | Pn | 08 55 20.6 | +2.2 |
| WRGLY | Wrigley | 10.41 | 117 | Pn | Pn | 08 55 42.4 | +0.9 |
| P33M | Teslin, Yukon | 10.48 | 147 | Pn | Pn | 08 55 39.0 | -3.7 |
| C18K | Koktuh Hills | 10.71 | 211 | Pn | Pn | 08 55 43.2 | -2.4 |
| N15K | Kwethluk River | 11.46 | 223 | Pn | Pn | 08 55 55.3 | -0.6 |
| R33M | Jennings River | 11.61 | 144 | Pn | Pn | 08 55 57.6 | -0.5 |
| Q32M | Nakina River | 11.75 | 148 | Pn | Pn | 08 56 00.8 | +0.7 |
| R32K | Eaglecrest | 12.02 | 154 | Pn | Pn | 08 56 02.2 | -1.4 |
| KDAK | Kodiak Island | 12.28 | 201 | Pn | Pn | 08 56 05.6 | -1.6 |
| KDAK | comp=E,0.1nm,0.3s,baz=38,slow=19,SNR=0.9 | | | LR | LR | 09 01 16.1 | |
| DLBC | Dease Lake | 12.68 | 144 | Pn | Pn | 08 56 15.2 | +2.5 |
| DLBC | comp=E,0.4nm,0.3s,baz=358,slow=11,SNR=7.9 | | | Sn | Sn | 08 58 32.6 | -1.6 |
| DLBC | comp=E,0.1nm,0.3s,baz=305,slow=16,SNR=1.2 | | | Lg | Lg | 08 59 49.0 | |
| YKA | Yellowknife Ar | 13.84 | 106 | Pn | Pn | 08 56 25.8 | -2.4 |
| YKA | Yellowknife Ar | 13.84 | 106 | Pn | Pn | 08 56 26.1 | -2.2 |
| YKA | comp=E,0.8nm,0.3s,baz=247,slow=10,SNR=16 | | | Sn | Sn | 08 58 51.9 | -10 |
| YKA | comp=E,0.7nm,0.3s,baz=313,slow=23,SNR=5.8 | | | Lg | Lg | 09 00 27.2 | |
| YKA | baz=311,slow=36 | | | LR | LR | 09 02 08.9 | |
| EUNU | Eureka | 17.43 | 29 | Pn | Pn | 08 57 15.2 | -0.1 |
| BBB | Bella Bella | 18.94 | 148 | LR | LR | 09 05 15.5 | |
| B08A | Colville Reser | 24.44 | 137 | P | P | 08 58 33.6 | +2.5 |
| D05A | Enumclaw | 24.93 | 142 | P | P | 08 58 33.0 | -2.5 |
| D05A | comp=Z,11nm,1.0s | | | IAmb | IAmb | 08 58 42.2 | |
| NEW | Newport | 25.07 | 134 | P | P | 08 58 36.5 | -0.3 |
| LTY | Liberty | 25.16 | 140 | P | P | 08 58 38.3 | +0.6 |
| LTY | comp=Z,11nm,1.1s | | | IAmb | IAmb | 08 58 43.2 | |
| E03A | Lebam | 25.21 | 145 | P | P | 08 58 36.4 | -1.7 |
| LON | Longmire | 25.39 | 142 | P | P | 08 58 38.1 | -1.6 |
| LON | comp=Z,8.4nm,1.1s | | | IAmb | IAmb | 08 58 50.9 | |
| SHEM | Shemya Is, Ala | 25.41 | 250 | LR | LR | 09 09 14.0 | |
| MXC | Moxie City | 25.89 | 140 | P | P | 08 58 42.8 | -1.5 |
| MXC | comp=Z,6.5nm,1.2s | | | IAmb | IAmb | 08 58 50.0 | |
| LYMT | Lyon Mountain | 27.55 | 128 | P | P | 08 58 57.0 | -2.5 |
| BPMT | Black Pine Rid | 27.72 | 130 | P | P | 08 58 59.2 | -1.8 |
| MA2 | Magadan | 28.16 | 282 | LR | LR | 09 11 51.1 | |
| I07A | Izee | 28.43 | 141 | P | P | 08 59 06.7 | -0.5 |
| FRB | Frobisher Bay | 28.75 | 64 | LR | LR | 09 12 05.8 | |
| ULM | Lac du Bonnet | 29.81 | 105 | LR | LR | 09 11 36.1 | |
| YBH | Yreka Blue Hor | 30.01 | 147 | LR | LR | 09 11 38.3 | |
| E28A | Huff | 31.40 | 114 | P | P | 08 59 31.2 | -2.1 |
| SFJD | Kangerlussuaq | 31.62 | 48 | LR | LR | 09 15 29.7 | |
| PD31 | Pinedale Array | 32.17 | 128 | P | P | 08 59 38.2 | -2.2 |
| PD31 | comp=Z,3.8nm,1.1s | | | IAmb | IAmb | 08 59 49.6 | |
| PDAR | Pinedale Array | 32.17 | 128 | P | P | 08 59 37.0 | -3.5 |
| PDAR | Pinedale Array | 32.17 | 128 | P | P | 08 59 44.4 | +4.0 |
| PDAR | comp=Z,1.2nm,0.6s,baz=10,slow=4.6,SNR=15 | | | PcP | PcP | 09 02 30.1 | +1.1 |
| PDAR | comp=Z,0.4nm,0.8s,baz=326,slow=4.7,SNR=2.6 | | | LR | LR | 09 13 12.5 | |
| RSSD | Black Hills | 32.55 | 120 | P | P | 08 59 40.8 | -2.9 |
| ELK | Elko | 32.59 | 137 | LR | LR | 09 14 24.3 | |
| PAHR | Pah Rah Range | 32.64 | 143 | P | P | 08 59 42.9 | -1.5 |
| PAHR | comp=Z,6.2nm,1.2s | | | IAmb | IAmb | 08 59 51.2 | |
| HWUT | Hardware Ranch | 32.71 | 131 | P | P | 08 59 43.6 | -1.5 |
| YAK | Yakutsk | 33.19 | 301 | LR | LR | 09 15 05.8 | |
| NVAR | Mina Array Bea | 34.09 | 142 | P | P | 08 59 55.5 | -1.7 |
| NVAR | Mina Array Bea | 34.09 | 142 | P | P | 09 00 02.1 | +4.9 |
| NVAR | comp=Z,4.2nm,1.1s,baz=330,slow=6.5,SNR=17 | | | PcP | PcP | 09 02 37.8 | +3.4 |
| NVAR | comp=Z,0.8nm,0.9s,baz=29,slow=2.1,SNR=4.3 | | | LR | LR | 09 15 16.5 | |
| NLU | North Lily Min | 34.12 | 133 | P | P | 08 59 56.2 | -1.3 |
| NLU | comp=Z,3.6nm,1.1s | | | IAmb | IAmb | 09 00 03.1 | |
| MPU | Maple Canyon | 34.18 | 132 | P | P | 08 59 54.6 | -3.3 |
| MPU | comp=Z,4.7nm,0.9s | | | IAmb | IAmb | 09 00 04.6 | |
| LHV | Little Huntoon | 34.22 | 142 | P | P | 08 59 56.5 | -1.5 |
| LHV | comp=Z,13nm,1.4s | | | IAmb | IAmb | 09 00 05.5 | |
| SPR3 | Spring Creek 3 | 34.46 | 137 | P | P | 08 59 57.4 | -3.2 |
| TPH | Tonopah | 34.67 | 141 | P | P | 08 59 59.1 | -3.1 |
| OMMB | Old Mammoth Mi | 34.73 | 143 | P | P | 08 59 59.8 | -3.1 |
| OMMB | comp=Z,5.4nm,1.2s | | | IAmb | IAmb | 09 00 11.2 | |
| P18A | Preston Nutter | 34.91 | 131 | P | P | 09 00 00.8 | -3.6 |
| P18A | comp=Z,4.4nm,0.6s | | | IAmb | IAmb | 09 00 42.5 | |
| P17A | Butcher Ranch, | 34.93 | 132 | P | P | 09 00 00.8 | -3.5 |
| P17A | comp=Z,8.5nm,1.2s | | | IAmb | IAmb | 09 00 10.6 | |
| TMUT | Trail Mountain | 34.97 | 132 | P | P | 09 00 03.1 | -1.8 |
| MZP | Montezuma Peak | 34.99 | 141 | P | P | 09 00 02.9 | -2.2 |
| MVU | Marysvale | 35.46 | 134 | P | P | 09 00 06.3 | -2.7 |
| ISCO | Idaho Springs | 36.04 | 125 | P | P | 09 00 12.6 | -1.5 |
| SCHQ | Schefferville | 36.15 | 73 | LR | LR | 09 15 49.5 | |
| GWY | Greenwater Val | 36.60 | 141 | P | P | 09 00 15.7 | -3.0 |
| GWY | comp=Z,7.8nm,1.3s | | | IAmb | IAmb | 09 00 25.7 | |
| LCMT | Little Creek M | 36.62 | 136 | P | P | 09 00 16.0 | -2.8 |
| ISA | Isabella, Lake | 36.72 | 144 | P | P | 09 00 16.3 | -3.3 |
| WUAZ | Wupatki | 38.50 | 135 | P | P | 09 00 33.3 | -1.5 |
| WUAZ | comp=Z,6.3nm,0.9s | | | IAmb | IAmb | 09 00 41.5 | |
| PFO | Pinyon Flats O | 39.13 | 142 | LR | LR | 09 19 21.8 | |
| ANMO | Albuquerque | 40.33 | 129 | LR | LR | 09 19 06.0 | |
| SADO | Sadowa | 40.34 

S39A IAmb IAmb 09 01 06.1
comp=Z,7,8nm,1.2s
**OK048 Pawnee Station 41.78 117** P **P** **09 01 01.0 -0.8**
**KLR Kul'dur 43.02 287** LR LR 09 21 36.7
comp=Z,48nm,18.1s,baz=64,slow=40
**J59A Piesco 43.11 89** P **P** **09 01 10.9 -1.7**
J59A IAmb IAmb 09 01 52.6
comp=Z,15nm,1.5s
**F64A Sherman 43.19 82** P **P** **09 01 11.9 -1.2**
F64A IAmb IAmb 09 01 53.4
comp=Z,6.7nm,1.2s
**O53A New Philadelph 43.59 98** P **P** **09 01 16.2 -0.3**
O53A IAmb IAmb 09 01 50.3
comp=Z,14nm,1.4s
**JKA Kamikawa-asahi 43.69 274** P **P** **09 01 16.8 -0.5**
**ASAJ Asahikawa 43.70 274** LR LR 09 20 04.2
comp=Z,73nm,20.4s,baz=0.5,slow=37
**FCAR Ozark Folk Cen 43.81 112** P **P** **09 01 17.4 -0.8**
FCAR IAmb IAmb 09 01 22.2
comp=Z,7.0nm,1.4s
**MIAR Mount Ida 44.57 114** P **P** **09 01 23.7 -0.7**
MIAR IAmb IAmb 09 01 28.9
comp=Z,10nm,1.4s
**WVT Waverly 45.01 107** P **P** **09 01 27.6 -0.2**
WVT IAmb IAmb 09 01 31.8
comp=Z,4.6nm,0.7s
**S51A Beattyville 45.09 102** P **P** **09 01 27.1 -1.4**
S51A IAmb IAmb 09 01 40.5
comp=Z,5.2nm,0.9s
**ALPN Alpine 45.42 128** P **P** **09 01 32.0 +0.7**
ALPN IAmb IAmb 09 01 36.1
comp=Z,5.8nm,1.4s
**CLTN Cedars of Leba 45.55 106** P **P** **09 01 31.7 -0.5**
**BRDY Brady 45.90 122** P **P** **09 01 34.8 -0.2**
**TXAR Lajitas Array 46.39 128** P **P** **09 01 42.0 +3.0**
comp=Z,0.7nm,0.6s,baz=343,slow=5.7,SNR=12
TXAR LR LR 09 20 48.8
comp=Z,34nm,19.9s,baz=352,slow=36
comp=Z,0.7nm,0.6s
**TKL Tuckaleechee C 46.82 103** LR LR 09 21 54.7
comp=Z,92nm,20.1s,baz=338,slow=37
**USA0B Ussuriysk Arra 47.31 283** P **P** **09 01 46.0 +0.1**
USA0B IAmb IAmb 09 01 47.2
comp=Z,4.4nm,1.0s
**USRK Ussuriysk Ar. 47.31 283** P **P** **09 01 45.8 -0.1**
**USRK Ussuriysk Ar. 47.31 283** P **P** **09 01 46.7 +0.8**
comp=Z,2.8nm,0.8s,baz=30,slow=9.1,SNR=7.2
USRK LR LR 09 22 48.2
comp=Z,50nm,19.2s,baz=142,slow=38
comp=Z,2.8nm,0.8s
**NOA NORSAR Array B 48.60 16** P **P** **09 01 56.6 +0.9**
comp=Z,0.6nm,0.9s,baz=340,slow=9.0,SNR=1.5
comp=Z,0.6nm,0.9s
**FINES FINESS Array B 49.19 6** P **P** **09 02 00.2 +0.1**
comp=Z,3.7nm,0.8s,baz=6.8,slow=10,SNR=10
comp=Z,3.7nm,0.8s
**HFS Hagfors 49.72 14** P **P** **09 02 04.5 +0.2**
comp=Z,5.4nm,0.8s,baz=347,slow=4.7,SNR=9.1
HFS PcP **PcP** **09 03 28.1 +3.0**
comp=Z,1.6nm,0.6s,baz=352,slow=2.9,SNR=2.0
comp=Z,5.4nm,0.8s
**ZALV Zalesovo Beam 51.80 325** P **P** **09 02 20.0 0.0**
comp=Z,1.3nm,0.5s,baz=28,slow=6.7,SNR=4.5
comp=Z,1.3nm,0.5s
**MJB9 Matsu-Tunnel 51.95 273** P **P** **09 02 19.0 -2.3**
MJB9 IAmb IAmb 09 02 26.0
comp=Z,7.6nm,1.0s
**MAJO Matsushiro 51.95 273** P **P** **09 02 19.2 -2.2**
MAJO IAmb IAmb 09 02 26.0
comp=Z,7.7nm,1.0s
**MJAR Matsushiro Arr 51.95 273** P **P** **09 02 22.7 +1.4**
comp=Z,3.1nm,0.9s,baz=14,slow=7.1,SNR=11
MJAR LR LR 09 26 05.2
comp=Z,48nm,18.1s,baz=56,slow=38
comp=Z,3.1nm,0.9s
**SONM Songino Array 52.19 306** P **P** **09 02 21.4 -1.7**
**SONM Songino Array 52.19 306** P **P** **09 02 24.2 +1.1**
comp=Z,2.0nm,0.7s,baz=37,slow=3.5,SNR=9.3
comp=Z,2.0nm,0.7s
**EKA Eskdalemuir Ar 52.34 27** P **P** **09 02 24.6 +0.6**
comp=Z,4.1nm,0.8s,baz=335,slow=7.6,SNR=8.3
comp=Z,4.1nm,0.8s
**JHJ Hachijo jima 2 54.48 270** LR LR 09 30 10.6
comp=Z,17nm,18.1s,baz=74,slow=41
**KSRS Korea Array 54.72 283** P **P** **09 02 43.0 +1.4**
comp=Z,2.0nm,0.7s,baz=20,slow=6.2,SNR=6.9
KSRS LR LR 09 28 42.1
comp=Z,37nm,18.7s,baz=35,slow=39
comp=Z,2.0nm,0.7s
**BVAR Borovoye Array 55.20 335** P **P** **09 02 46.0 +1.0**
comp=Z,1.5nm,0.8s,baz=34,slow=9.0,SNR=7.2
BVAR LR LR 09 27 49.9
comp=Z,18nm,20.7s,baz=22,slow=38
comp=Z,1.5nm,0.8s
**KURK Kurchatov 56.07 329** P **P** **09 02 51.5 +0.4**
**KURBB Kurchatov Arra 56.17 329** P **P** **09 02 52.5 +0.6**
comp=Z,6.5nm,0.9s,baz=12,slow=7.2,SNR=29
comp=Z,6.5nm,0.9s
**HHC Hu-ho-hao-te 57.01 299** *eP* **P** **09 02 58.3 +0.1**
HHC pmax pmax
comp=Z,14nm,0.6s
HHC pmax pmax
comp=Z,80nm,4.0s
**JNU Nakatsue 57.61 278** LR LR 09 29 21.6
comp=Z,44nm,19.3s,baz=332,slow=38
**BELG Belogornoye 58.13 351** LR LR 09 31 31.2
comp=Z,21nm,18.1s,baz=87,slow=40
**MK31 Makanchi Array 59.10 324** P **P** **09 03 12.2 -0.4**
MK31 IAmb IAmb 09 03 14.1
comp=Z,4.4nm,1.4s
**MKAR Makanchi Array 59.10 324** P **P** **09 03 11.8 -0.8**
**MKAR Makanchi Array 59.10 324** P **P** **09 03 12.8 +0.1**
comp=Z,1.7nm,0.7s,baz=45,slow=6.4,SNR=12
comp=Z,1.7nm,0.7s
**MAKZ Makanchi 59.16 325** P **P** **09 03 13.3 +0.3**
**AK21 Malin Array Si 59.96 5** P **P** **09 03 17.1 -1.3**
**AK22 Malin Array Si 59.98 5** P **P** **09 03 17.7 -0.8**
**AK20 Malin Array Si 59.99 5** P **P** **09 03 17.7 -1.0**
**AK19 Malin Array Si 60.01 5** P **P** **09 03 17.6 -1.2**
**AK03 Malin Array Si 60.02 5** P **P** **09 03 18.2 -0.6**
**AK18 Malin Array Si 60.02 5** P **P** **09 03 17.8 -1.0**
**AKASG Malin Array Be 60.04 5** P **P** **09 03 19.4 +0.4**
comp=Z,3.7nm,0.6s,baz=358,slow=6.8,SNR=15
AKASG LR LR 09 29 29.1
comp=Z,13nm,20.7s,baz=49,slow=36
comp=Z,3.7nm,0.6s
**AKBB Malin Array Si 60.04 5** P **P** **09 03 18.8 -0.2**
**AKBB Malin Array Si 60.04 5** P **P** **09 03 18.3 -0.7**
**KIEV Kiev 60.05 5** P **P** **09 03 18.8 -0.2**
**KIEV Kiev 60.05 5** P **P** **09 03 18.2 -0.8**
comp=Z,48nm,1.0s
**OJC Ojcow 60.05 12** P **P** **09 03 17.7 -1.4**
comp=Z,4.4nm,0.9s
**AK11 Malin Array Si 60.06 5** P **P** **09 03 18.2 -0.9**
**ABKAR Akbulak array 60.24 342** P **P** **09 03 19.3 -1.1**
**MI29 MI29, Kamyanyy 60.28 6** P **P** **09 03 20.0 -0.6**
**LUBAR Lubar, Ukraine 60.77 6** P **P** **09 03 22.6 -1.4**
**GEC2 GERESS Array S 60.89 16** P **P** **09 03 23.7 -1.3**
GEC2 IAmb IAmb 09 03 29.8
comp=Z,4.4nm,1.3s
**GERES GERESS Array B 60.89 16** P **P** **09 03 23.7 -1.3**
**GERES GERESS Array B 60.89 16** P **P** **09 03 26.1 +1.1**
comp=Z,0.3nm,0.3s,baz=324,slow=9.8,SNR=2.1
comp=Z,0.3nm,0.3s
**KMPD K-Podol'skiy 62.08 7** P **P** **09 03 31.1 -1.7**
**SENIN Lac Senin/Sane 62.60 22** P **P** **09 03 36.1 -0.5**
**FUORN Ofenpass-Fuorn 62.71 19** P **P** **09 03 36.8 -0.7**
FUORN IAmb IAmb 09 03 40.4
comp=Z,2.2nm,1.0s
**BUR08 Bucovina Ar. S 62.94 8** P **P** **09 03 38.8 0.0**
BUR08 IAmb IAmb 09 03 41.3
comp=Z,6.1nm,1.2s
**BURAR Bucovina Array 62.97 8** P **P** **09 03 37.2 -1.7**
BURAR IAmb IAmb 09 03 43.9
comp=Z,1.9nm,0.8s
**JOW Kunigami 64.25 278** LR LR 09 35 25.7
comp=Z,77nm,18.1s,baz=157,slow=40
**AAK Ala-Archa 64.61 329** LR LR 09 35 26.8
comp=Z,26nm,20.7s,baz=112,slow=39
**KK31 Karatay Array 64.84 332** P **P** **09 03 52.3 +1.1**
**KKAR Karatay Array 64.84 332** P **P** **09 03 51.6 +0.4**
**MLR Muntele Rosu 65.12 8** P **P** **09 03 54.1 +0.9**
**NRCA Norcia 66.77 18** P **P** **09 04 03.9 +0.2**
**KBZ Khabaz 66.98 354** P **P** **09 04 05.9 +1.0**
comp=Z,3.6nm,0.9s,baz=346,slow=2.9,SNR=5.0
comp=Z,3.6nm,0.9s
**ESDC Sonseca Array 67.33 32** P **P** **09 04 08.0 +0.7**
comp=Z,1.2nm,0.8s,baz=351,slow=7.3,SNR=7.6
comp=Z,1.2nm,0.8s
**KSH Kashi 67.36 327** pP pP 09 04 14.4 +4.8
**KSH Kashi 67.36 327** pmax pmax
comp=Z,5.0nm,0.8s
**KSH Kashi 67.36 327** P **P** **09 04 11.6 +4.0**
**BTK Batken 67.76 331** P **P** **09 04 11.4 +1.4**
**JTS Las Juntas de 69.94 116** LR LR 09 40 14.4
comp=Z,25nm,18.4s,baz=294,slow=40
**GUMO Guam 70.66 257** LR LR 09 34 50.3
comp=Z,9.7nm,20.0s,baz=68,slow=35
**BR131 Keskin Array S 71.10 2** P **P** **09 04 32.3 +1.5**
BR131 IAmb IAmb 09 04 59.2
comp=Z,4.7nm,1.3s
**BRTR Keskin Array B 71.10 2** P **P** **09 04 30.7 -0.1**
**BRTR Keskin Array B 71.10 2** P **P** **09 04 32.1 +1.3**
comp=Z,1.5nm,0.8s,baz=0.0,slow=4.9,SNR=6.1
comp=Z,1.5nm,0.8s
**PZH PanZhiHua 73.31 301** P **P** **09 04 45.1 +0.9**
PZH pmax pmax
comp=Z,40nm,0.9s
PZH pmax pmax
comp=Z,150nm,5.1s
**KEST Kesra 73.33 22** P **P** **09 04 46.0 +1.9**
comp=Z,2.5nm,0.7s,baz=314,slow=3.5,SNR=3.5
comp=Z,2.5nm,0.7s
**MDT Midelt 73.85 35** LR LR 09 40 25.6
comp=Z,48nm,18.1s,baz=129,slow=38
**SDV Santo Domingo 76.02 102** LR LR 09 40 20.0
comp=Z,28nm,19.3s,baz=292,slow=37
**CMAR Chiang Mai Arr 81.73 301** P **P** **09 05 30.5 -0.7**
comp=Z,1.2nm,0.3s,baz=353,slow=5.7,SNR=9.5
CMAR LR LR 09 45 42.1
comp=Z,13nm,19.6s,baz=115,slow=39
comp=Z,1.2nm,0.3s
**MDP Montagnes des 85.85 87** LR LR 09 44 18.0
comp=Z,38nm,19.1s,baz=288,slow=36
**TORD Torodi Ar. Bea 94.20 33** LR LR 09 53 20.3
comp=Z,26nm,18.0s,baz=204,slow=38
**DBIC Dimbokro 99.10 41** LR LR 09 52 55.5
comp=Z,35nm,18.1s,baz=98,slow=36
**QSPA South Pole Qui 159.33 180** PKPab **PKPab** **09 13 48.6 +1.5**
comp=Z,2.0nm,1.0s,baz=182,slow=1.2,SNR=7.7

*SOF **13** 08:57:05.4, 40.44N±0.04×27.46E±0.03, h15km±1km, MD3.8/6*
*THE **13** 08:57:08.9, 40.69N×27.38E, h5km±2km, ML3.6/7, Error ellipse: s-maj=2.3km s-min=1.1km az=236.0*
*AFAD **13** 08:57:09.0±0.0, 40.63N×27.32E, h22km±1km, ML3.8*
*ISK **13** 08:57:09.1, 40.66N×27.36E, h17km, ML3.7/51*
*ATH **13** 08:57:10.2, 40.62N×27.29E, h10km±2km, ML3.6/6, Error ellipse: s-maj=3.8km s-min=1.4km az=54.0*
**ISC 13 08:57:08.8±1.0, 40.67N±0.01×27.36E±0.01, h18km±8km, n138, σ1§10/186, 15C-3D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SART** | **Tekirdag** | **0.14** | **278** | P | | **Pb** | **08 57 14.0** | **+1.9** |
| SART | | | | S | | **Sb** | **08 57 16.7** | **+2.4** |
| SART | | | | *i* AML | | AML | 08 57 17.0 | |
| | comp=E,3μm,0.6s | | | | | | | |
| SART | | | | *i* AML | | AML | 08 57 18.0 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **RKY** | **Sarkoy-Tekirda** | **0.14** | **277** | Pg | | **Pb** | **08 57 13.9** | **+1.7** |
| RKY | | | | Sg | | **Sb** | **08 57 16.6** | **+2.3** |
| **MRMT** | **Marmara Adasi** | **0.19** | **111** | Pg | | **Pb** | **08 57 14.2** | **+0.7** |
| MRMT | | | | Sg | | **Sb** | **08 57 17.6** | **+1.0** |
| **KRBG** | **Karabiga-Canak** | **0.28** | **190** | Pg | | **Pb** | **08 57 15.8** | **+0.5** |
| KRBG | | | | Sg | | **Sb** | **08 57 19.9** | **+0.3** |
| **TKR** | **Tekirdag** | **0.35** | **23** | Pg | | **Pb** | **08 57 17.8** | **+1.3** |
| TKR | | | | Sg | | **Sb** | **08 57 23.0** | **+1.3** |
| **EDC** | **Edincik** | **0.50** | **130** | Pg | | **Pb** | **08 57 19.6** | **+0.5** |
| EDC | | | | Sg | | **Sb** | **08 57 26.9** | **+0.8** |
| **CRLT** | **Corlu** | **0.54** | **32** | Pg | | **Pb** | **08 57 20.7** | **+1.0** |
| **LPK** | **Lapseki** | **0.55** | **237** | Pg | | **Pb** | **08 57 20.2** | **+0.4** |
| **ERIK** | **Erikli-Kesan** | **0.64** | **270** | Pg | | **Pb** | **08 57 22.1** | **+0.7** |
| **BAND** | **Balkesir-Ban** | **0.65** | **119** | P | | **Pb** | **08 57 21.9** | **+0.3** |
| BAND | | | | S | | **Sb** | **08 57 30.9** | **+0.8** |
| BAND | | | | *i* AML | | AML | 08 57 33.0 | |
| | comp=E,4μm,0.5s | | | | | | | |
| BAND | | | | *i* AML | | AML | 08 57 33.0 | |
| | comp=N,5μm,0.3s | | | | | | | |
| **GONE** | **Gonen-Balikesi** | **0.67** | **158** | Pg | | **Pn** | **08 57 22.8** | **-0.6** |
| **UKOP** | **Uzunkopru-Edir** | **0.72** | **310** | Pg | | **Pn** | **08 57 23.8** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.73** | **248** | Pg | | **Pg** | **08 57 23.1** | **0.0** |
| **YENI** | **Yenice-Canakka** | **0.74** | **187** | Pg | | **Pg** | **08 57 23.5** | **+0.2** |
| **SLVT** | **Silivri** | **0.85** | **49** | Pg | | **Pn** | **08 57 26.1** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **0.86** | **118** | Pg | | **Pg** | **08 57 25.8** | **+0.2** |
| **COMU** | **Canakkale** | **0.89** | **230** | Pg | | **Pn** | **08 57 26.3** | **-0.1** |
| **SUSR** | **Susurluk-Balik** | **0.90** | **142** | Pg | | **Pn** | **08 57 26.8** | **+0.3** |
| **CAVK** | **Edirne/Enez-Ca** | **0.91** | **272** | P | | **Pg** | **08 57 26.6** | **+0.2** |
| CAVK | | | | S | | **Sb** | **08 57 38.1** | **+0.5** |
| CAVK | | | | *i* AML | | AML | 08 57 40.0 | |
| | comp=E,3μm,0.5s | | | | | | | |
| CAVK | | | | *i* AML | | AML | 08 57 40.0 | |
| | comp=N,2μm,0.3s | | | | | | | |
| **ENEZ** | **Enez** | **0.92** | **274** | Pg | | **Pn** | **08 57 27.0** | **+0.2** |
| **ENEZ** | **Enez** | **0.92** | **274** | P | | **Pn** | **08 57 27.0** | **+0.2** |
| ENEZ | | | | S | | **Sn** | **08 57 39.8** | **+0.3** |
| | 7μm,0.3s | | | | | | | |
| **BLKS** | **Balkesir-Sus** | **0.92** | **149** | P | | **Pn** | **08 57 27.1** | **+0.2** |
| BLKS | | | | S | | **Sn** | **08 57 39.4** | **-0.2** |
| **ENZZ** | **Sultanice-Enez** | **0.93** | **266** | Pg | | **Pn** | **08 57 27.5** | **+0.6** |
| **ELBA** | **Catalca** | **0.94** | **59** | P | | **Pb** | **08 57 27.0** | **+0.4** |
| ELBA | | | | S | | **Sb** | **08 57 39.0** | **+0.3** |
| **BALY** | **Balya** | **0.95** | **168** | P | | **Pn** | **08 57 27.5** | **+0.2** |
| BALY | | | | S | | **Sn** | **08 57 40.3** | **-0.1** |
| **CNKL** | **anakkale-Mer** | **0.96** | **231** | P | | **Pb** | **08 57 26.5** | **-0.3** |
| CNKL | | | | S | | **Sg** | **08 57 39.6** | **-0.3** |
| CNKL | | | | *i* AML | | AML | 08 57 41.0 | |
| | comp=N,780nm,0.6s | | | | | | | |
| CNKL | | | | *i* AML | | AML | 08 57 42.0 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **VIZE** | **Kirklareli, Vi** | **0.98** | **22** | P | | **Pn** | **08 57 27.9** | **+0.3** |
| VIZE | | | | S | | **Sb** | **08 57 40.2** | **+0.4** |
| **ALN** | **Alexandroupoli** | **1.02** | **283** | Pg | | **Pg** | **08 57 28.8** | **+0.1** |
| **ALN** | **Alexandroupoli** | **1.02** | **283** | P | | **Pg** | **08 57 28.7** | **+0.1** |
| ALN | | | | S | | **Sg** | **08 57 42.2** | **+0.1** |
| | 2μm,0.4s | | | | | | | |
| **ALN** | **Alexandroupoli** | **1.02** | **283** | P | | **Pn** | **08 57 28.6** | **+0.4** |
| ALN | | | | S | | **Sg** | **08 57 41.8** | **-0.3** |
| ALN | | | | AML | | AML | 08 57 43.0 | |
| | comp=N,4189μm,0.4s | | | | | | | |
| ALN | | | | AML | | AML | 08 57 43.8 | |
| | comp=E,3693μm,0.3s | | | | | | | |
| **BKES** | **Balkesir-Mer** | **1.03** | **155** | P | | **Pg** | **08 57 29.5** | **+0.6** |
| BKES | | | | S | | **Sn** | **08 57 43.0** | **+0.6** |
| BKES | | | | *i* AML | | AML | 08 57 44.0 | |
| | comp=E,5μm,0.3s | | | | | | | |
| BKES | | | | *i* AML | | AML | 08 57 44.0 | |
| | comp=E,3μm,0.4s | | | | | | | |
| **CTKS** | **Kestanelik-??a** | **1.04** | **57** | Pg | | **Pg** | **08 57 28.9** | **0.0** |
| **CTYL** | **Yalikoy Yolu** | **1.07** | **41** | Pg | | **Pn** | **08 57 29.4** | **+0.5** |
| **KIYI** | **Yalıkoy-Catalc** | **1.08** | **41** | Pn | | **Pg** | **08 57 29.7** | **0.0** |
| **ECEA** | **Canakkale, Ece** | **1.10** | **236** | P | | **Pn** | **08 57 29.5** | **+0.2** |
| ECEA | | | | S | | **Sg** | **08 57 44.8** | **+0.2** |
| ECEA | | | | *i* AML | | AML | 08 57 46.0 | |
| | comp=E,4μm,0.5s | | | | | | | |
| ECEA | | | | *i* AML | | AML | 08 57 46.0 | |
| | comp=E,5μm,0.4s | | | | | | | |
| **BAYC** | **CANAKKALE_Bayr** | **1.12** | **214** | P | | **Pn** | **08 57 29.8** | **+0.2** |
| BAYC | | | | S | | **Sn** | **08 57 44.6** | **+0.1** |
| BAYC | | | | *i* AML | | AML | 08 57 46.0 | |
| | comp=E,3μm,0.5s | | | | | | | |
| **KIRK** | **Kırklareli** | **1.13** | **350** | P | | **Pn** | **08 57 29.9** | **+0.2** |
| KIRK | | | | S | | **Sb** | **08 57 44.5** | **+0.5** |
| **ARMT** | **Armutlu** | **1.15** | **95** | Pn | | **Pg** | **08 57 30.9** | **-0.1** |
| **EZN** | **Ezine** | **1.16** | **223** | Pn | | **Pg** | **08 57 30.7** | **-0.5** |
| **EZN** | **Ezine** | **1.16** | **223** | P | | **Pb** | **08 57 30.4** | **+0.2** |
| **YYLC** | **Yaylacik** | **1.17** | **108** | P | | **Pb** | **08 57 30.6** | **+0.1** |
| YYLC | | | | S | | **Sg** | **08 57 48.0** | **+1.2** |
| **BGKT** | **Bogazkoy** | **1.19** | **64** | Pn | | **Pb** | **08 57 31.0** | **+0.2** |
| **BUHA** | **Balikesir, Bur** | **1.19** | **191** | P | | **Pg** | **08 57 31.3** | **-0.5** |
| BUHA | | | | S | | **Sg** | **08 57 47.0** | **-0.3** |
| BUHA | | | | *i* AML | | AML | 08 57 49.0 | |
| | comp=E,3μm,0.5s | | | | | | | |
| BUHA | | | | *i* AML | | AML | 08 57 49.0 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **EZNE** | **Ezine-Canakkal** | **1.19** | **220** | Pn | | **Pb** | **08 57 31.2** | **+0.4** |
| **ARMN** | **Kirklareli, Me** | **1.19** | **3** | P | | **Pb** | **08 57 31.2** | **+0.3** |
| ARMN | | | | S | | **Sb** | **08 57 46.2** | **+0.2** |
| **GOKC** | **Gokceada-Canak** | **1.20** | **247** | Pn | | **Pg** | **08 57 31.5** | **-0.4** |
| **MDNY** | **Mudanya-Bursa** | **1.20** | **104** | Pn | | **Pg** | **08 57 31.6** | **-0.4** |
| **GADA** | **Gvkgeada** | **1.21** | **247** | Pn | | **Pb** | **08 57 31.5** | **+0.3** |
| **GOAD** | **anakkale-G¶** | **1.22** | **246** | P | | **Pb** | **08 57 31.3** | **0.0** |
| GOAD | | | | S | | **Sn** | **08 57 47.5** | **+0.5** |
| GOAD | | | | *i* AML | | AML | 08 57 49.0 | |
| | comp=E,2μm,0.4s | | | | | | | |
| GOAD | | | | *i* AML | | AML | 08 57 53.0 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **EDRB** | **Edirne** | **1.26** | **339** | Pn | | **Pb** | **08 57 32.6** | **+0.5** |
| **EDRB** | **Edirne** | **1.26** | **339** | P | | **Pb** | **08 57 32.3** | **+0.2** |
| EDRB | | | | S | | **Sg** | **08 57 50.1** | **+0.4** |
| | comp=E,2μm,0.5s | | | | | | | |
| **BOZC** | **Bozcaada** | **1.30** | **231** | P | | **Pb** | **08 57 32.5** | **-0.1** |
| BOZC | | | | S | | **Sg** | **08 57 49.9** | **-0.9** |
| BOZC | | | | *i* AML | | AML | 08 57 52.0 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **STEP** | **BALIKESİR_Sava** | **1.32** | **168** | P | | **Pb** | **08 57 33.0** | **-0.1** |
| STEP | | | | S | | **Sg** | **08 57 52.8** | **+1.2** |
| **ORLT** | **Orhaneli** | **1.33** | **117** | Pn | | **Pb** | **08 57 33.5** | **+0.3** |
| **ISK** | **Istanbul-Kandi** | **1.35** | **72** | Pn | | **Pn** | **08 57 33.2** | **+0.5** |
| **ISK** | **Istanbul-Kandi** | **1.35** | **72** | P | | **Pn** | **08 57 33.1** | **+0.4** |
| ISK | | | | S | | **Sn** | **08 57 50.5** | **+0.3** |
| | comp=E,780nm,0.5s | | | | | | | |
| **KAVV** | **Kandilli-Istan** | **1.35** | **73** | Pn | | **Pb** | **08 57 33.8** | **+0.3** |
| **DURS** | **Dursunbey** | **1.37** | **141** | P | | **Pg** | **08 57 34.8** | **-0.4** |
| DURS | | | | S | | **Sg** | **08 57 53.2** | **+0.1** |
| DURS | | | | *i* AML | | AML | 08 57 56.0 | |
| | comp=E,1μm,0.2s | | | | | | | |
| DURS | | | | *i* AML | | AML | 08 57 59.0 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **KLYT** | **Kilyos** | **1.40** | **65** | Pn | | **Pn** | **08 57 34.1** | **+0.7** |
| **SMTH** | **Samothraki Isl** | **1.41** | **262** | P | | **Pn** | **08 57 33.8** | **+0.2** |
| SMTH | | | | S | | **Sb** | **08 57 53.1** | **+1.0** |
| **SMTH** | **Samothraki Isl** | **1.41** | **262** | P | | **Pn** | **08 57 33.8** | **+0.2** |
| SMTH | | | | S | | **Sn** | **08 57 51.7** | **0.0** |
| **GEMT** | **Gemlik** | **1.41** | **99** | Pn | | **Pb** | **08 57 34.7** | **+0.1** |
| **AVDN** | **Avdancik/Bursa** | **1.43** | **105** | P | | **Pb** | **08 57 35.5** | **+0.6** |
| AVDN | | | | S | | **Sg** | **08 57 55.8** | **+0.8** |
| AVDN | | | | *i* AML | | AML | 08 57 59.0 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **DST** | **Dursunbey** | **1.44** | **137** | Pn | | **Pb** | **08 57 35.1** | **0.0** |
| **AYVA** | **Ayvalik** | **1.46** | **201** | P | | **Pg** | **08 57 36.3** | **-0.5** |
| AYVA | | | | S | | **Sg** | **08 57 54.7** | **-1.1** |
| AYVA | | | | *i* AML | | AML | 08 57 56.0 | |
| | comp=E,4μm,0.3s | | | | | | | |
| AYVA | | | | *i* AML | | AML | 08 57 58.0 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **ULDT** | **Uludag** | **1.46** | **111** | P | | **Pg** | **08 57 36.6** | **-0.3** |
| ULDT | | | | S | | **Sg** | **08 57 56.0** | **+0.1** |
| **RDO** | **Rodhopi** | **1.46** | **290** | Pn | | **Pb** | **08 57 35.3** | **-0.1** |
| **RDO** | **Rodhopi** | **1.46** | **290** | P | | **Pb** | **08 57 35.3** | **-0.1** |
| RDO | | | | S | | **Sg** | **08 57 55.5** | **-0.5** |
| | comp=E,2μm,0.2s | | | | | | | |
| **RDO** | **Rodhopi** | **1.46** | **290** | P | | **Pb** | **08 57 35.4** | **-0.1** |
| RDO | | | | S | | **Sn** | **08 57 53.5** | **+0.6** |
| RDO | | | | AML | | AML | 08 57 56.6 | |
| | comp=E,2894μm,0.2s | | | | | | | |
| RDO | | | | AML | | AML | 08 57 57.6 | |
| | comp=N,3077μm,0.3s | | | | | | | |
| **KOCA** | **Canakkale, Ayv** | **1.50** | **219** | P | | **Pg** | **08 57 36.9** | **-0.7** |
| KOCA | | | | S | | **Sg** | **08 57 56.7** | **-0.4** |
| KOCA | | | | *i* AML | | AML | 08 57 57.0 | |
| | comp=N,3μm,0.4s | | | | | | | |
| KOCA | | | | *i* AML | | AML | 08 58 01.0 | |
| | comp=N,2μm,0.4s | | | | | | | |
| **SOMA** | **Soma-Manisa** | **1.52** | **175** | Pn | | **Pb** | **08 57 35.9** | **-0.5** |
| **GPNR** | **Gulpinar-Canak** | **1.54** | **218** | Pn | | **Pb** | **08 57 36.2** | **-0.5** |
| **YLV** | **Yalova** | **1.54** | **93** | Pn | | **Pb** | **08 57 36.2** | **-0.6** |
| **PRK** | **Paraskevi** | **1.65** | **211** | P | | **Pn** | **08 57 37.2** | **+0.3** |
| **PRK** | **Paraskevi** | **1.65** | **211** | P | | **Pn** | **08 57 37.3** | **+0.5** |
| PRK | | | | S | | **Sn** | **08 57 57.7** | **+0.1** |
| PRK | | | | AML | | AML | 08 58 05.6 | |
| | comp=N,5558μm,0.9s | | | | | | | |
| PRK | | | | AML | | AML | 08 58 07.8 | |
| | comp=E,3705μm,0.6s | | | | | | | |
| **ZEDA** | **zmir-Bergama** | **1.72** | **187** | P | | **Pn** | **08 57 38.4** | **+0.6** |
| **HRT** | **Hereke** | **1.76** | **84** | Pn | | **Pb** | **08 57 39.5** | **+1.1** |
| **CAND** | **Candarli** | **1.77** | **194** | Pn | | **Pb** | **08 57 39.6** | **-1.1** |
| **OSMT** | **Osmaniye** | **1.78** | **91** | Pn | | **Pn** | **08 57 39.7** | **+0.9** |
| **SILT** | **Sile** | **1.80** | **74** | Pn | | **Pb** | **08 57 40.2** | **-1.0** |
| **KDZ** | **Kurdzhali** | **1.80** | **303** | Pn | | **Pb** | **08 57 40.4** | **-0.8** |
| **KDZ** | **Kurdzhali** | **1.80** | **303** | P | | **Pn** | **08 57 39.9** | **+0.9** |
| **SEMS** | **Kocaeli-K¶rfe** | **1.82** | **83** | P | | **Pn** | **08 57 39.2** | **0.0** |
| SEMS | | | | S | | **Sn** | **08 58 02.3** | **+0.5** |
| **AKS** | **Akhisar** | **1.82** | **169** | Pn | | **Pn** | **08 57 40.3** | **+1.0** |
| **ADVT** | **Abdulvahap** | **1.83** | **97** | Pn | | **Pn** | **08 57 40.6** | **+1.3** |
| **LIA** | **Limnos Island** | **1.83** | **246** | P | | **Pn** | **08 57 40.0** | **+0.6** |
| LIA | | | | S | | **Sb** | **08 58 05.4** | **+1.0** |
| | comp=E,1μm,0.4s | | | | | | | |
| **LIA** | **Limnos Island** | **1.83** | **246** | P | | **Pn** | **08 57 40.2** | **+0.8** |
| LIA | | | | S | | **Sn** | **08 58 02.0** | **-0.1** |
| LIA | | | | AML | | AML | 08 58 09.8 | |
| | comp=E,3325μm,0.5s | | | | | | | |
| LIA | | | | AML | | AML | 08 58 14.8 | |
| | comp=N,3007μm,0.4s | | | | | | | |
| **SIGR** | **SIGRI** | **1.86** | **219** | Pn | | **Pn** | **08 57 40.9** | **+1.1** |
| **SIGR** | **SIGRI** | **1.86** | **219** | P | | **Pb** | **08 57 41.8** | **-0.4** |
| SIGR | | | | S | | **Sb** | **08 58 06.2** | **+1.1** |
| | comp=N,2μm,0.5s | | | | | | | |
| **SIGR** | **SIGRI** | **1.86** | **219** | P | | **Pn** | **08 57 40.8** | **+1.1** |
| SIGR | | | | S | | **Sn** | **08 58 02.4** | **-0.3** |
| SIGR | | | | AML | | AML | 08 58 12.6 | |
| | comp=N,4552μm,0.6s | | | | | | | |
| SIGR | | | | AML | | AML | 08 58 13.1 | |
| | comp=E,1839μm,0.5s | | | | | | | |
| **GORD** | **Gordes-Manisa** | **1.87** | **160** | Pn | | **Pn** | **08 57 40.9** | **+1.0** |
| **DIM** | **Dimitrovgrad** | **1.92** | **316** | P | | **Pb** | **08 57 42.4** | **-0.9** |
| DIM | | | | S | | **Sg** | **08 58 09.8** | **-0.8** |
| **JMB** | **Yambol** | **1.92** | **341** | Pn | | **Pn** | **08 57 41.5** | **+0.9** |
| **JMB** | **Yambol** | **1.92** | **341** | P | | **Pb** | **08 57 43.0** | **-0.3** |
| **CAVI** | **Cavuskoy** | **1.95** | **103** | Pn | | **Pn** | **08 57 42.3** | **+1.2** |
| **HISA** | **Bilecik-Osmane** | **1.96** | **95** | P | | **Pn** | **08 57 42.4** | **+1.1** |
| HISA | | | | S | | **Sg** | **08 58 10.6** | **-1.4** |
| **DOMA** | **Ktahya-Doman** | **2.00** | **116** | P | | **Pn** | **08 57 45.6** | **+1.0** |
| **SMAA** | **Simav-Kutahya** | **2.00** | **141** | Pn | | **Pn** | **08 57 42.8** | **+1.0** |
| **GOMA** | **Golmarmara-Man** | **2.01** | **167** | Pn | | **Pn** | **08 57 43.0** | **+1.2** |
| **THAS** | **Thassos island** | **2.01** | **269** | P | | **Pn** | **08 57 42.0** | **+0.2** |
| **FOCM** | **Foa** | **2.02** | **194** | Pn | | **Pn** | **08 57 42.8** | **+0.9** |
| **SIMA** | **Simav-Kutahya** | **2.02** | **141** | Pn | | **Pn** | **08 57 43.2** | **+1.2** |
| **KARB** | **zmir-Karabur** | **2.13** | **200** | P | | **Pn** | **08 57 44.0** | **+0.5** |
| KARB | | | | S | | **Sb** | **08 58 14.0** | **+1.0** |
| KARB | | | | *i* AML | | AML | 08 58 20.0 | |
| | comp=E,697nm,0.5s | | | | | | | |
| KARB | | | | *i* AML | | AML | 08 58 20.0 | |
| | comp=E,447nm,0.5s | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GZR | Gura Zlata | 5.79 | 326 | ⇑P | | Pn | 08 58 26.8 | -7.0 |
| SEV | Sevastopol' | 6.05 | 48 | *e*P | | Pn | 08 58 37.2 | -0.2 |
| SEV | | | | Pm | | | 08 58 37.7 | |
| | comp=Z,21nm,0.4s | | | | | | | |
| SEV | | | | *e*S | | Sn | 08 59 41.0 | -5.1 |
| SEV | | | | Sm | | | 08 59 49.4 | |
| | comp=N,5.0nm,0.3s | | | | | | | |
| SEV | | | | Sm | | | 08 59 49.4 | |
| | comp=E,4.0nm,0.5s | | | | | | | |
| YAL | Yalta | 6.30 | 51 | *e*P | | Pn | 08 58 41.6 | +0.9 |
| YAL | | | | Pm | | | 08 58 42.4 | |
| | comp=Z,12nm,0.4s | | | | | | | |
| MARR | Marisel-Cluj | 6.74 | 334 | ⇑P | | Pn | 08 58 43.0 | -3.9 |
| SUDU | Sudak | 7.03 | 51 | *e*P | | Pn | 08 58 51.6 | +0.9 |
| SUDU | | | | Pm | | | 08 58 53.2 | |
| | comp=Z,10.0nm,0.3s | | | | | | | |

**IDC 13 08:59:42.9±3.8, 54.30N×87.42E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=34.2km s-min=21.3km az=39.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.57 | 258 | I | I | 09 08 50.0 | |
| | baz=77,slow=317,SNR=2.6 | | | | | | |
| ZALV | Zalesovo Beam | 1.57 | 258 | Pg | Pn | 09 00 10.5 | -1.5 |
| | 2.0nm,0.3s,baz=80,slow=15,SNR=8.1 | | | | | | |
| ZALV | | | | Lg | Lg | 09 00 33.5 | |
| | 2.4nm,0.3s,baz=79,slow=25,SNR=5.8 | | | | | | |
| KURBB | Kurchatov Arra | 6.56 | 239 | Pn | Pn | 09 01 20.4 | -0.1 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=4.3 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 8.19 | 206 | Pn | Pn | 09 01 44.8 | +1.9 |
| | 0.1nm,0.3s,baz=28,slow=15,SNR=2.5 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*NOU **13** 09:13:01.9, 43.68S×175.60E, h0km, MLv4.0/10, Off E. Coast of S. Island, N.Z.*
*WEL **13** 09:13:06.5±0.5, 44.2S±4.4×17.6E±.1, h33km, M3.2/19, ML3.6/36, MLv3.2/19, Error ellipse: s-maj=0.0km s-min=0.0km az=133.4, confirmed*

**ISC 13 09:13:03.7±1.4, 43.74S±0.05×175.66E±0.05, h35km, n84, σ1§62/97, Off east coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKCZ | Okains Bay | 1.89 | 270 | P | Pn | 09 13 33.9 | +0.4 |
| OKCZ | | | | S | Sn | 09 13 53.9 | -2.2 |
| KHZ | Kahutara | 2.04 | 310 | P | Pn | 09 13 36.4 | +0.8 |
| KHZ | Kahutara | 2.04 | 310 | P | Pn | 09 13 36.3 | +0.7 |
| KHZ | | | | S | Sn | 09 13 59.7 | -0.1 |
| GVZ | Greta Valley S | 2.07 | 291 | P | Pn | 09 13 36.4 | +0.5 |
| GVZ | | | | S | Sn | 09 14 03.1 | +2.6 |
| MQZ | McQueen's Vall | 2.18 | 270 | P | Pn | 09 13 37.5 | 0.0 |
| MQZ | | | | S | Sn | 09 13 59.4 | -3.9 |
| PLWZ | Palliser | 2.19 | 352 | P | Pn | 09 13 38.7 | +1.0 |
| PLWZ | | | | S | Sn | 09 14 02.3 | -1.3 |
| TRWZ | Traveller | 2.34 | 0 | P | Pn | 09 13 41.0 | +1.2 |
| MSWZ | Moikau Station | 2.34 | 352 | P | Pn | 09 13 40.5 | +0.7 |
| MSWZ | | | | S | Sn | 09 14 05.4 | -2.0 |
| PAWZ | Paruwai Farm | 2.37 | 356 | P | Pn | 09 13 41.0 | +0.9 |
| PAWZ | | | | S | Sn | 09 14 06.2 | -1.7 |
| BHW | Baring Head | 2.41 | 346 | P | Pn | 09 13 41.4 | +0.8 |
| BHW | | | | S | Sn | 09 14 06.7 | -2.0 |
| BSWZ | Blackbirch Sta | 2.42 | 326 | P | Pn | 09 13 41.5 | +0.7 |
| SNZO | South Karori | 2.53 | 343 | P | Pn | 09 13 43.0 | +0.7 |
| MTW | Mount Morrison | 2.59 | 357 | P | Pn | 09 13 43.9 | +0.8 |
| MTW | | | | S | Sn | 09 14 11.0 | -2.3 |
| TUWZ | Tuamarina | 2.64 | 331 | P | Pn | 09 13 45.0 | +1.3 |
| TMWZ | Te Maipa | 2.64 | 4 | P | Pn | 09 13 45.1 | +1.3 |
| TMWZ | | | | S | Sn | 09 14 13.0 | -1.7 |
| LTZ | Lake Taylor | 2.66 | 290 | P | Pn | 09 13 45.0 | +0.9 |
| CAW | Cannon Point | 2.67 | 350 | P | Pn | 09 13 45.3 | +1.0 |
| CAW | | | | S | Sn | 09 14 12.7 | -2.7 |
| TCW | Tory Channel | 2.73 | 337 | P | Pn | 09 13 45.8 | +0.7 |
| TCW | | | | S | Sn | 09 14 14.1 | -2.8 |
| THZ | Tophouse | 2.83 | 313 | P | Pn | 09 13 47.7 | +1.2 |
| HOWZ | Holdsworth Sta | 2.85 | 358 | P | Pn | 09 13 47.5 | +0.8 |
| KIW | Kapiti Island | 2.93 | 349 | P | Pn | 09 13 49.2 | +1.3 |
| OGWZ | Otaki Gorge | 2.95 | 353 | P | Pn | 09 13 49.2 | +1.1 |
| TIWZ | Tintock | 2.97 | 3 | P | Pn | 09 13 49.5 | +1.1 |
| MRZ | Mangatainoka R | 3.08 | 359 | P | Pn | 09 13 50.8 | +0.9 |
| BFZ | Birch Farm | 3.09 | 8 | P | Pn | 09 13 51.2 | +1.2 |
| BFZ | Birch Farm | 3.09 | 8 | P | Pn | 09 13 51.4 | +1.4 |
| MRNZ | Matariki Terra | 3.18 | 317 | P | Pn | 09 13 52.7 | +1.4 |
| PRWZ | Pori Road | 3.19 | 4 | P | Pn | 09 13 53.2 | +1.8 |
| DUWZ | D'Urville Isla | 3.21 | 336 | P | Pn | 09 13 53.3 | +1.6 |
| INZ | Inchbonnie | 3.25 | 287 | P | Pn | 09 13 53.3 | +1.2 |
| ARCZ | Arundel | 3.25 | 265 | P | Pn | 09 13 53.3 | +1.0 |
| ANWZ | Angora Road | 3.34 | 11 | P | Pn | 09 13 54.6 | +1.2 |
| RPZ | Rata Peaks | 3.34 | 269 | P | Pn | 09 13 54.5 | +1.0 |
| POWZ | Post Office Ro | 3.35 | 1 | P | Pn | 09 13 55.3 | +1.8 |
| TMZ | Timaru | 3.42 | 258 | P | Pn | 09 13 55.0 | +0.5 |
| DVHZ | Dannevirke | 3.46 | 6 | P | Pn | 09 13 56.5 | +1.4 |
| DSZ | Denniston Nort | 3.47 | 304 | P | Pn | 09 13 56.5 | +1.2 |
| PRHZ | Porangahau | 3.55 | 12 | P | Pn | 09 13 57.6 | +1.3 |
| WVZ | Waitaha Valley | 3.65 | 279 | P | Pn | 09 13 59.3 | +1.6 |
| TSZ | Takapari Road | 3.69 | 4 | P | Pn | 09 13 59.5 | +1.3 |
| WPHZ | Waipukurau | 3.72 | 9 | P | Pn | 09 14 00.1 | +1.4 |
| QRZ | Quartz Range | 3.73 | 320 | P | Pn | 09 13 59.5 | +0.7 |
| QRZ | Quartz Range | 3.73 | 320 | P | Pn | 09 13 59.8 | +1.0 |
| ODZ | Otahua Downs | 3.82 | 248 | P | Pn | 09 14 01.2 | +1.1 |
| ODZ | Otahua Downs | 3.82 | 248 | P | Pn | 09 14 01.1 | +1.0 |
| PNHZ | Pukenui | 3.85 | 6 | P | Pn | 09 14 01.8 | +1.3 |
| GCSZ | Gaunt Creek Bo | 3.90 | 274 | P | Pn | 09 14 03.7 | +2.5 |
| LBZ | Lake Benmore | 4.00 | 359 | P | Pn | 09 14 05.6 | +1.1 |
| WAZ | Wanganui | 4.02 | 353 | P | Pn | 09 14 05.7 | +2.9 |
| KAHZ | Kahuranaki | 4.05 | 13 | P | Pn | 09 14 04.3 | +1.1 |
| KRHZ | Kereru | 4.13 | 8 | P | Pn | 09 14 05.7 | +1.4 |
| FOZ | Fox Glacier | 4.25 | 271 | P | Pn | 09 14 08.4 | +2.5 |
| MOVZ | Moawhango | 4.33 | 1 | P | Pn | 09 14 09.1 | +1.9 |
| KWHZ | Kaweka Forest | 4.35 | 8 | P | Pn | 09 14 08.7 | +1.3 |
| MCHZ | McNeill Hill | 4.37 | 11 | P | Pn | 09 14 09.6 | +2.0 |
| WNVZ | Wahianoa | 4.41 | 359 | P | Pn | 09 14 10.3 | +2.0 |
| WHVZ | Whangaehu Hut | 4.46 | 359 | P | Pn | 09 14 11.1 | +2.1 |
| FWVZ | Far West T-bar | 4.49 | 359 | P | Pn | 09 14 11.6 | +2.2 |
| SNVZ | South Ngauruho | 4.55 | 360 | P | Pn | 09 14 12.8 | +2.5 |
| OTVZ | Oturere | 4.58 | 0 | P | Pn | 09 14 12.7 | +2.1 |
| ETVZ | East Tongariro | 4.60 | 0 | P | Pn | 09 14 13.3 | +2.4 |
| BKZ | Black Stump Fm | 4.62 | 8 | P | Pn | 09 14 12.0 | +0.9 |
| BKZ | Black Stump Fm | 4.62 | 8 | P | Pn | 09 14 12.0 | +0.9 |
| TMVZ | Te Maari | 4.62 | 0 | P | Pn | 09 14 13.3 | +2.1 |
| NTVZ | North Tongarir | 4.64 | 0 | P | Pn | 09 14 13.5 | +2.0 |
| KRVZ | Karewarewa | 4.64 | 360 | P | Pn | 09 14 14.4 | +2.9 |
| VRZ | Vera Road | 4.66 | 351 | P | Pn | 09 14 14.2 | +2.5 |
| EAZ | Earnscleugh | 4.78 | 250 | P | Pn | 09 14 14.8 | +1.5 |
| TUZ | Tuapeka | 4.82 | 241 | P | Pn | 09 14 15.7 | +1.9 |
| KNZ | Kokohu | 4.95 | 18 | P | Pn | 09 14 16.4 | +0.7 |
| SNGZ | Shannon Statio | 5.12 | 15 | P | Pn | 09 14 19.3 | +1.5 |
| HIZ | Hauiti | 5.26 | 353 | P | Pn | 09 14 20.6 | +0.8 |
| HIZ | Hauiti | 5.26 | 353 | P | Pn | 09 14 21.8 | +1.9 |
| RIGZ | Rimuhau | 5.28 | 18 | P | Pn | 09 14 20.7 | +0.6 |
| SYZ | Scrubby Hill | 5.39 | 237 | P | Pn | 09 14 23.8 | +2.2 |
| SYZ | Scrubby Hill | 5.39 | 237 | P | Pn | 09 14 23.8 | +2.2 |
| MWZ | Matawai | 5.58 | 15 | P | Pn | 09 14 24.5 | +0.2 |
| URZ | Urewera | 5.59 | 12 | P | Pn | 09 14 24.9 | +0.6 |
| URZ | Urewera | 5.59 | 12 | P | Pn | 09 14 24.9 | +0.6 |
| CTZ | Chatham Island | 5.59 | 93 | P | Pn | 09 14 27.1 | +2.7 |
| CTZ | | | | S | Sn | 09 15 25.8 | -1.6 |
| WHZ | Wether Hill Ro | 5.89 | 246 | P | Pn | 09 14 30.4 | +1.9 |
| RUGZ | Raukumara Rang | 5.97 | 16 | P | Pn | 09 14 30.1 | +0.4 |
| PKGZ | Pakihiroa | 6.15 | 16 | P | Pn | 09 14 32.3 | +0.2 |
| HAZ | Te Kaha | 6.19 | 16 | P | Pn | 09 14 33.7 | +1.0 |

**IDC 13 09:27:48.2±2.2, 5.13S×152.34E, h0km, mb3.2/3, mbtmp3.4/4, ML1.3/1, MS3.7/1, Error ellipse: s-maj=145.3km s-min=26.6km az=130.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.67 | 230 | Pn | Pn | 09 29 26.2 | -1.3 |
| | 0.4nm,0.3s,baz=30,slow=20,SNR=1.6 | | | | | | |
| PMG | | | | Sn | Sn | 09 30 44.5 | +0.2 |
| | 1.8nm,0.3s,baz=60,slow=20,SNR=2.4 | | | | | | |
| | 6.7nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 22.88 | 228 | P | P | 09 32 52.8 | -1.0 |
| | 0.7nm,0.9s,baz=54,slow=10,SNR=1.7 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| ASAR | Alice Springs | 25.60 | 222 | P | P | 09 33 20.0 | +0.6 |
| | 0.3nm,0.8s,baz=54,slow=9.5,SNR=4.6 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| KAPI | Kappang | 32.46 | 269 | LR | LR | 09 49 07.2 | |
| | comp=Z,137nm,21.7s,baz=142,slow=39 | | | | | | |
| ILAR | Eielson Array | 82.64 | 22 | P | P | 09 40 11.9 | -1.3 |
| | 0.2nm,0.5s,baz=239,slow=7.0,SNR=1.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| TORD | Torodi Ar. Bea | 149.97 | 287 | PKPbc | PKiKP | 09 47 43.5 | +0.7 |
| | 0.4nm,0.8s,baz=70,slow=3.2,SNR=2.5 | | | | | | |

*NNC **13** 09:34:48.1±1.7, 45.19N×83.36E, h0km, mb3.4, mpv3.2, Error ellipse: s-maj=14.0km s-min=11.2km az=160.0*

**SOME 13 09:33:47.4, 43.83N×84.45E, h20km, 3C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MK31 | Makanchi Array | 3.33 | 334 | ⇑Pn | Pb | 09 35 20.4 | +35 |
| | 2.8nm,0.3s,baz=155,slow=16,SNR=41 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 35 44.0 | |
| | 12nm,0.3s,baz=154,slow=28 | | | | | | |
| DJR | Jarkent | 3.40 | 280 | *e*P | Pb | 09 34 50.8 | +3.9 |
| | 2.1nm,0.1s | | | | | | |
| DJR | | | | *e*S | Sb | 09 35 37.5 | +10 |
| | 13nm,0.4s | | | | | | |
| DJR | Jarkent | 3.40 | 280 | Pg | Pb | 09 34 50.9 | +4.0 |
| | 1.7nm,0.1s | | | | | | |
| DJR | | | | Lg | Lg | 09 35 37.1 | |
| | 14nm,0.3s | | | | | | |
| MAKZ | Makanchi | 3.45 | 330 | ⇓Pn | Pb | 09 35 21.2 | +33 |
| | 8.1nm,0.9s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 09 35 48.4 | |
| | 11nm,0.5s | | | | | | |
| ZSN | Zaisan | 3.63 | 4 | *e*P | Pb | 09 34 50.9 | 0.0 |
| | 1.8nm,0.1s | | | | | | |
| ZSN | | | | *e*S | Sb | 09 35 37.7 | +3.2 |
| | 14nm,0.3s | | | | | | |
| ZSN | Zaisan | 3.63 | 4 | Pg | Pb | 09 34 51.0 | +0.2 |
| | 2.8nm,0.3s | | | | | | |
| ZSN | | | | Lg | Lg | 09 35 36.9 | |
| | 13nm,0.3s | | | | | | |
| PDGK | Podgornoye | 3.64 | 264 | Pg | Pb | 09 34 53.1 | +2.0 |
| PDGK | | | | Lg | Lg | 09 35 41.8 | |
| SHLS | Shalkode | 3.69 | 261 | *e*P | Pb | 09 34 49.0 | -3.0 |
| | 6.1nm,0.3s | | | | | | |
| SHLS | | | | *e*S | Sb | 09 35 33.9 | -2.5 |
| | 83nm,0.4s | | | | | | |
| UZB | Uzynbulak | 4.01 | 262 | *e*P | Pb | 09 35 00.2 | +2.8 |
| | 1.9nm,0.1s | | | | | | |
| UZB | | | | *e*S | Sb | 09 35 53.3 | +7.8 |
| | 7.8nm,0.4s | | | | | | |
| UZB | Uzynbulak | 4.01 | 262 | Pg | Pb | 09 35 00.2 | +2.8 |
| | 1.9nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 09 35 53.3 | |
| | 7.8nm,0.4s | | | | | | |
| KPKS | Kokpek | 4.20 | 267 | *e*P | Pb | 09 35 04.3 | +3.7 |
| | 2.5nm,0.2s | | | | | | |
| KPKS | | | | *e*S | Sb | 09 36 00.5 | +10 |
| | 17nm,0.4s | | | | | | |
| KPKS | Kokpek | 4.20 | 267 | Pg | Pb | 09 35 03.8 | +3.2 |
| | 2.5nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 09 36 00.5 | |
| | 16nm,0.5s | | | | | | |
| SATY | Saty | 4.47 | 262 | *e*P | Pb | 09 35 10.0 | +4.8 |
| | 2.4nm,0.2s | | | | | | |
| SATY | | | | *e*S | Sb | 09 36 10.1 | +11 |
| | 12nm,0.2s | | | | | | |
| SATY | Saty | 4.47 | 262 | Pg | Pb | 09 35 09.6 | +4.4 |
| | 1.7nm,0.1s | | | | | | |
| SATY | | | | Lg | Lg | 09 36 10.1 | |
| | 14nm,0.6s | | | | | | |
| ARXS | Arharly | 4.79 | 277 | *e*P | Pb | 09 35 14.1 | +3.4 |
| | 2.1nm,0.3s | | | | | | |
| ARXS | | | | *e*S | Sb | 09 36 17.7 | +10 |
| | 18nm,0.5s | | | | | | |

**IDC 13 09:39:25.6±3.4, 54.11N×86.62E, h0km, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=28.1km s-min=17.0km az=51.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.08 | 262 | I | I | 09 46 00.0 | |
| | baz=81,slow=322,SNR=1.6 | | | | | | |
| ZALV | Zalesovo Beam | 1.08 | 262 | Pg | Pg | 09 39 46.0 | -0.2 |
| | 0.5nm,0.3s,baz=77,slow=14,SNR=1.7 | | | | | | |
| ZALV | | | | Lg | Lg | 09 40 00.7 | |
| | 1.0nm,0.3s,baz=76,slow=30,SNR=5.5 | | | | | | |
| KURBB | Kurchatov Arra | 6.06 | 238 | Pn | Pn | 09 40 57.9 | +1.6 |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=1.2 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 7.82 | 202 | Pn | Pn | 09 41 21.0 | +0.3 |
| | 0.1nm,0.3s,baz=20,slow=13,SNR=1.5 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**IDC 13 09:54:32.3±1.2, 19.45N×121.76E, h0km, mb3.5/4, mbtmp3.5/5, ML3.8/1, MS2.5/1, Error ellipse: s-maj=71.7km s-min=21.8km az=73.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSRS | Korea Array | 18.73 | 15 | P | P | 09 58 52.0 | -0.6 |
| | 0.3nm,0.3s,baz=195,slow=12,SNR=5.0 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| CMAR | Chiang Mai Arr | 21.60 | 271 | LR | LR | 10 08 34.1 | |
| | comp=Z,12nm,18.1s,baz=125,slow=39 | | | | | | |
| SONM | Songino Array | 30.95 | 340 | P | P | 10 00 51.6 | +0.4 |
| | 0.4nm,0.5s,baz=154,slow=9.2,SNR=1.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 41.04 | 162 | P | P | 10 02 17.4 | -0.3 |
| | 0.5nm,0.6s,baz=342,slow=8.8,SNR=5.2 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 42.19 | 319 | P | P | 10 02 26.5 | -0.4 |
| | 0.4nm,0.7s,baz=99,slow=9.1,SNR=3.1 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| ASAR | Alice Springs | 44.46 | 164 | P | P | 10 02 45.4 | 0.0 |
| | 0.2nm,0.5s,baz=344,slow=6.6,SNR=5.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **13** 09:55:54.9±0.7, 69.56N×144.16W, h0km, mb3.7/13, mbtmp3.7/17, ML3.8/4, Error ellipse: s-maj=17.3km s-min=12.2km az=66.0*
*AEIC **13** 09:55:55.2±1.5, 69.46N±0.06×144.4W±0.1, h11km±6km, ML4.5, ML4.5/118(NEIC), Error ellipse: s-maj=8.2km s-min=5.4km az=179.0*
*NEIC **13** 09:55:56.2±1.2, 69.58N±0.06×144.1W±0.1, h10km±2km, Error ellipse: s-maj=10.1km s-min=6.1km az=18.0*

**ISC 13 09:55:54.6±1.2, 69.50N±0.03×144.17W±0.02, h1km±8km, n139, σ1§45/139, mb3.8/15, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.21 | 51 | | Pg | 09 55 59.7 | +1.1 |
| C27K | | | | | Sg | 09 56 02.6 | +1.3 |
| C26K | Camden Bay | 0.49 | 329 | | Pb | 09 56 05.7 | -0.4 |
| C26K | | | | | Sb | 09 56 13.1 | -0.7 |
| D25K | Kavik River | 0.80 | 258 | | Pg | 09 56 09.2 | -0.7 |
| D25K | | | | | Sg | 09 56 21.2 | +0.9 |
| D27M | Malcolm River | 1.17 | 101 | | Pg | 09 56 16.3 | -0.6 |
| C24K | Franklin Bluff | 1.60 | 280 | | Sg | 09 56 47.1 | +1.1 |
| C24K | Franklin Bluff | 1.60 | 280 | | Pb | 09 56 24.6 | -0.3 |
| C24K | Franklin Bluff | 1.60 | 280 | IAML | | 09 56 50.5 | |
| | comp=N,1μm,0.7s | | | | | | |
| C24K | | | | IAML | | 09 56 51.6 | |
| | comp=E,2μm,1.4s | | | | | | |
| E27K | Coleen River | 1.62 | 143 | | Pb | 09 56 25.1 | -0.1 |
| E27K | Coleen River | 1.62 | 143 | | Sg | 09 56 47.0 | +0.5 |
| E27K | Coleen River | 1.62 | 143 | IAML | | 09 56 49.3 | |
| | comp=E,2μm,0.8s | | | | | | |
| E27K | | | | IAML | | 09 56 50.5 | |
| | comp=N,2μm,0.6s | | | | | | |
| D24K | Happy Valley | 1.69 | 260 | | Sg | 09 56 50.0 | +1.3 |
| D24K | Happy Valley | 1.69 | 260 | | Pb | 09 56 26.1 | -0.3 |
| D24K | Happy Valley | 1.69 | 260 | IAML | | 09 56 51.3 | |
| | comp=N,2μm,0.6s | | | | | | |
| D24K | | | | IAML | | 09 56 55.0 | |
| | comp=E,3μm,0.8s | | | | | | |
| F26K | Sheenjek River | 1.81 | 180 | | Pb | 09 56 28.3 | -0.2 |
| E28M | Babbage River | 1.89 | 116 | | Pb | 09 56 29.6 | -0.3 |
| E28M | | | | | Pg | 09 56 29.8 | -1.1 |
| D28M | Stokes Point | 1.93 | 93 | | Pb | 09 56 30.9 | +0.4 |
| D28M | Stokes Point | 1.93 | 93 | IAML | | 09 57 07.1 | |
| | comp=E,2μm,0.8s | | | | | | |
| D28M | | | | IAML | | 09 57 07.4 | |
| | comp=N,2μm,0.9s | | | | | | |
| F25K | Christian Rive | 1.99 | 196 | | Pb | 09 56 30.9 | -0.6 |
| F25K | | | | IAML | | 09 56 59.8 | |
| | comp=E,2μm,0.9s | | | | | | |
| F25K | | | | IAML | | 09 57 01.2 | |
| | comp=N,2μm,0.5s | | | | | | |
| BMAR | Burnt Mountain | 2.08 | 184 | | Pb | 09 56 32.2 | -1.0 |
| TOLK | Toolik Lake Re | 2.12 | 249 | | Pn | 09 56 31.8 | +0.6 |
| E24K | Your Creek | 2.12 | 230 | | Pn | 09 56 32.5 | +1.3 |
| C23K | Itkillik River | 2.28 | 282 | | Pn | 09 56 33.8 | +0.6 |
| C23K | | | | IAML | | 09 57 46.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| C23K | | | | IAML | | 09 57 48.5 | |
| | comp=E,2μm,0.5s | | | | | | |
| D23K | Nanushuk River | 2.38 | 260 | | Pn | 09 56 35.6 | +0.9 |
| F24K | Squaw Lake | 2.41 | 216 | | Pn | 09 56 36.8 | +1.6 |
| E23K | Chandalar | 2.45 | 236 | | Pn | 09 56 36.9 | +1.2 |
| F28M | Old Crow | 2.47 | 138 | | Pn | 09 56 37.2 | +1.3 |
| E29M | Blow River | 2.52 | 113 | | Pn | 09 56 38.2 | +1.6 |
| E29M | | | | IAML | | 09 58 21.8 | |
| | comp=N,746nm,0.9s | | | | | | |
| G26K | Porcupine Rive | 2.56 | 177 | | Pn | 09 56 38.5 | +1.4 |
| G25K | Bearman Lake | 2.84 | 196 | | Pn | 09 56 42.4 | +1.5 |
| G27K | Doyon Strip | 2.86 | 160 | | Pn | 09 56 42.0 | +0.7 |
| G27K | | | | IAML | | 09 58 36.6 | |
| | comp=E,953nm,0.9s | | | | | | |
| G27K | | | | IAML | | 09 58 38.1 | |
| | comp=N,650nm,1.1s | | | | | | |
| FYU | Fort Yukon | 2.97 | 188 | Pn | Pn | 09 56 44.2 | +1.4 |
| FYU | | | | IAML | | 09 58 34.8 | |
| | comp=N,1μm,0.8s | | | | | | |
| FYU | | | | IAML | | 09 58 36.8 | |
| | comp=E,1μm,1.6s | | | | | | |
| G24K | Hadweenzic Riv | 3.07 | 205 | | Pn | 09 56 45.4 | +1.2 |
| D22K | Ayikyak River | 3.10 | 262 | | Pn | 09 56 45.4 | +0.8 |
| COLD | Coldfoot | 3.19 | 227 | | Pn | 09 56 47.0 | +1.2 |
| B22K | Teshekpuk Lake | 3.30 | 289 | | Pn | 09 56 48.3 | +1.1 |
| H25L | Birch Creek | 3.31 | 192 | | Pn | 09 56 49.0 | +1.7 |
| G29M | Pine Creek | 3.46 | 136 | | Pn | 09 56 51.1 | +1.5 |
| G23K | Bananza Creek | 3.56 | 221 | Pn | Pn | 09 56 51.7 | +0.8 |
| G23K | | | | IAML | | 09 58 58.3 | |
| | comp=E,1μm,1.2s | | | | | | |
| G23K | | | | IAML | | 09 58 58.9 | |
| | comp=N,988nm,1.4s | | | | | | |
| F22K | John River | 3.56 | 240 | | Pn | 09 56 52.6 | +1.7 |
| F30M | Barrier River | 3.62 | 118 | | Pn | 09 56 53.9 | +2.2 |
| B21K | Ikpikpuk River | 3.67 | 277 | | Pn | 09 56 53.4 | +1.1 |
| E21K | Killik River | 3.69 | 258 | | Pn | 09 56 52.9 | +0.2 |
| G30M | tAoh Zraii Nji | 3.89 | 127 | | Pn | 09 56 57.1 | +1.6 |
| G30M | | | | IAML | | 09 59 28.1 | |
| | comp=N,691nm,0.9s | | | | | | |
| G30M | | | | IAML | | 09 59 30.1 | |
| | comp=E,608nm,0.8s | | | | | | |
| H24K | Noodor Dome | 3.94 | 203 | Pn | Pn | 09 56 57.4 | +1.3 |
| H24K | | | | IAML | | 09 59 14.3 | |
| | comp=E,889nm,1.0s | | | | | | |
| H24K | | | | IAML | | 09 59 23.2 | |
| | comp=N,859nm,0.9s | | | | | | |
| H29M | Whitestone | 3.96 | 144 | Pn | Pn | 09 56 58.0 | +1.6 |
| A22K | Sinclair Lake | 3.96 | 297 | | Pn | 09 56 57.3 | +0.9 |
| INK | Inuvik | 4.03 | 102 | | Pn | 09 56 58.4 | +1.1 |
| INK | Inuvik | 4.03 | 102 | IAML | | 09 59 31.9 | |
| | comp=N,327nm,1.0s | | | | | | |
| INK | Inuvik | 4.03 | 102 | Pn | Pn | 09 56 58.0 | +0.7 |
| | comp=N,4.2nm,0.3s,baz=321,slow=8.8,SNR=23 | | | | | | |
| INK | | | | Sn | Sn | 09 57 45.2 | +0.2 |
| | comp=N,4.6nm,0.3s,baz=266,slow=14,SNR=3.6 | | | | | | |
| | comp=N,12nm,0.4s | | | | | | |
| I27K | Kandik River | 4.03 | 165 | | Pn | 09 56 59.4 | +1.9 |
| PRP | Porcupine Dome | 4.03 | 188 | Pn | Pn | 09 56 59.3 | +1.8 |
| PRP | | | | IAML | | 09 59 16.4 | |
| | comp=N,839nm,0.9s | | | | | | |
| PRP | | | | IAML | | 09 59 21.7 | |
| | comp=E,672nm,0.7s | | | | | | |
| F21K | Alatna River | 4.14 | 241 | | Pn | 09 56 59.9 | +1.1 |
| EPYK | Eagle Plains | 4.21 | 135 | | Pn | 09 57 01.4 | +1.5 |
| H23K | Yukon River | 4.22 | 212 | | Pn | 09 57 01.5 | +1.5 |
| I26K | Coal Creek Min | 4.23 | 174 | | Pn | 09 57 01.6 | +1.5 |
| F31M | Tsiigehtchic | 4.36 | 113 | | Pn | 09 57 03.1 | +1.3 |
| I28M | Miner Creek | 4.38 | 156 | | Pn | 09 57 04.0 | +1.8 |
| G31M | Satah River | 4.50 | 120 | | Pn | 09 57 04.9 | +1.1 |
| E20K | Nigu River | 4.52 | 260 | | Pn | 09 57 05.2 | +1.0 |
| D20K | Etivluk River | 4.52 | 266 | | Pn | 09 57 06.0 | +1.9 |
| H22K | Ishtalitna Cre | 4.54 | 221 | | Pn | 09 57 05.1 | +0.7 |
| B20K | Meade River | 4.54 | 283 | | Pn | 09 57 05.2 | +0.9 |
| A21K | Barrow | 4.57 | 299 | | Pn | 09 57 05.9 | +1.2 |
| G21K | Allakaket | 4.61 | 234 | | Pn | 09 57 05.5 | +0.2 |
| G21K | | | | IAML | | 09 59 31.1 | |
| | comp=N,661nm,1.1s | | | | | | |
| G21K | | | | IAML | | 09 59 36.2 | |
| | comp=E,700nm,1.1s | | | | | | |
| I29M | Ogilvie Camp, | 4.73 | 149 | | Pn | 09 57 08.3 | +1.3 |
| I29M | | | | IAML | | 09 59 43.9 | |
| | comp=N,582nm,1.1s | | | | | | |
| I29M | | | | IAML | | 09 59 50.1 | |
| | comp=E,614nm,1.1s | | | | | | |
| I23K | Minto, Yukon-K | 4.81 | 207 | | Pn | 09 57 09.6 | +1.6 |
| MDM | Murphy Dome | 4.82 | 201 | | Pn | 09 57 10.0 | +1.7 |
| COLA | College | 4.86 | 199 | | Pn | 09 57 10.3 | +1.6 |
| IL31 | | 4.86 | 194 | | Pn | 09 57 10.5 | +1.7 |
| ILAR | Eielson Array | 4.86 | 194 | Pn | Pn | 09 57 10.3 | +1.5 |
| ILAR | Eielson Array | 4.86 | 194 | Pn | Pn | 09 57 09.9 | +1.2 |
| | comp=E,3.8nm,0.3s,baz=7.6,slow=13,SNR=85 | | | | | | |
| ILAR | | | | Sn | Sn | 09 58 04.5 | -1.2 |
| | comp=E,12nm,0.3s,baz=2.8,slow=16,SNR=11 | | | | | | |
| ILAR | | | | Lg | Lg | 09 58 26.9 | |
| | comp=E,20nm,0.3s,baz=359,slow=14,SNR=3.4 | | | | | | |
| | comp=E,13nm,0.5s | | | | | | |
| EGAK | Eagle | 4.88 | 165 | Pn | Pn | 09 57 10.6 | +1.5 |
| J25K | Salcha River, | 4.93 | 186 | Pn | Pn | 09 57 11.7 | +1.9 |
| J25K | | | | IAML | | 09 59 45.3 | |
| | comp=E,414nm,1.0s | | | | | | |
| J25K | | | | IAML | | 09 59 48.5 | |
| | comp=N,443nm,0.8s | | | | | | |
| F20K | Avaraart Lake | 4.95 | 246 | | Pn | 09 57 10.8 | +0.9 |
| F20K | | | | IAML | | 09 59 45.5 | |
| | comp=E,339nm,1.1s | | | | | | |
| J26L | Joseph Creek | 5.03 | 177 | | Pn | 09 57 12.6 | +1.5 |
| CCB | Clear Creek Bu | 5.08 | 198 | | Pn | 09 57 13.2 | +1.5 |
| CCB | | | | IAML | | 09 59 50.5 | |
| | comp=N,304nm,1.1s | | | | | | |
| H21K | Melozitna River | 5.08 | 225 | | Pn | 09 57 12.9 | +1.2 |
| H21K | | | | IAML | | 09 59 43.0 | |
| | comp=E,397nm,0.9s | | | | | | |
| H21K | | | | IAML | | 09 59 49.1 | |
| | comp=N,483nm,1.2s | | | | | | |
| D19K | Kuna River | 5.12 | 265 | | Pn | 09 57 13.5 | +1.2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **K29M** | **Barlow Dome** | **6.26** | **152** | Pn | | **Pn** | **09 57 30.1** | **+2.0** |
| **E18K** | **Tukpahlearik C** | **6.39** | **259** | Pn | | **Pn** | **09 57 31.0** | **+1.3** |
| **F18K** | **Selawik** | **6.48** | **251** | | | **Pn** | **09 57 31.9** | **+0.9** |
| **L26K** | **Log Cabin Wild** | **6.51** | **177** | | | **Pn** | **09 57 33.6** | **+2.2** |
| **BCAR** | **Beaver Creek A** | **6.53** | **170** | Pn | | **Pn** | **09 57 33.6** | **+1.9** |
| **L27K** | **Beaver Creek,** | **6.53** | **171** | Pn | | **Pn** | **09 57 33.8** | **+2.1** |
| **DHY** | **Denali Highway** | **6.58** | **193** | Pn | | **Pn** | **09 57 35.7** | **+3.3** |
| **G18K** | **Tagagawik** | **6.58** | **244** | Pn | | **Pn** | **09 57 34.5** | **+2.1** |
| **MENT** | **Mentasta** | **6.59** | **178** | Pn | | **Pn** | **09 57 34.8** | **+2.3** |
| **J20K** | **Nowinta River** | **6.63** | **221** | | | **Pn** | **09 57 33.7** | **+0.7** |
| **A36M** | **Sachs Harbour** | **6.72** | **60** | | | **Pn** | **09 57 34.1** | **-0.1** |
| **L29M** | **L29M** | **6.86** | **156** | Pn | | **Pn** | **09 57 37.7** | **+1.5** |
| **C17K** | **DeLong Mountai** | **6.90** | **270** | | | **Pn** | **09 57 36.2** | **-0.5** |
| **WAT1** | **Susitna Watana** | **6.93** | **197** | | | **Pn** | **09 57 39.5** | **+2.4** |
| **RDOG** | **Red Dog Mine** | **6.95** | **267** | | | **Pn** | **09 57 37.9** | **+0.5** |
| **WAT7** | **Susitna Watana** | **6.95** | **198** | | | **Pn** | **09 57 40.1** | **+2.6** |
| **C36M** | **Paulatuk** | **7.08** | **82** | Pn | | **Pn** | **09 57 38.0** | **-1.0** |
| **M26K** | **Nabesna, AK** | **7.14** | **176** | Pn | | **Pn** | **09 57 42.7** | **+2.6** |
| **M29M** | **Somme Creek** | **7.45** | **159** | Pn | | **Pn** | **09 57 46.5** | **+2.0** |
| **H17K** | **Granite Mounta** | **7.62** | **241** | Pn | | **Pn** | **09 57 48.0** | **+1.5** |
| **C16K** | **Lisburne Hills** | **7.73** | **271** | Pn | | **Pn** | **09 57 48.9** | **+0.9** |
| **KDAK** | **Kodiak Island** | **12.32** | **202** | Pn | | Pn | 09 58 56.5 | +5.6 |
| | comp=N,0.1nm,0.3s,baz=24,slow=18,SNR=1.4 | | | | | | | |
| **DLBC** | **Dease Lake** | **12.67** | **144** | Pn | | **Pn** | **09 58 55.1** | **-0.6** |
| | comp=N,0.2nm,0.3s,baz=335,slow=7.4,SNR=5.5 | | | | | | | |
| | comp=N,1.2nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.79** | **106** | Pn | | **Pn** | **09 59 07.2** | **-3.7** |
| | comp=N,0.7nm,0.3s,baz=331,slow=20,SNR=14 | | | | | | | |
| | comp=N,1.9nm,0.6s | | | | | | | |
| **RES** | **Resolute Bay** | **15.57** | **49** | Pn | | **Pn** | **09 59 31.6** | **-3.2** |
| | comp=N,0.4nm,0.3s,baz=256,slow=9.4,SNR=2.8 | | | | | | | |
| **SEY** | **Seymchan** | **25.28** | **287** | P | | **P** | **10 01 23.2** | **+1.4** |
| | comp=N,3.4nm,0.5s,baz=84,slow=9.1,SNR=8.9 | | | | | | | |
| | comp=N,3.4nm,0.5s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.08** | **7** | P | | **P** | **10 02 21.2** | **-1.2** |
| | comp=N,3.4nm,0.8s,baz=37,slow=14,SNR=1.6 | | | | | | | |
| | comp=N,3.4nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.15** | **128** | P | | **P** | **10 02 22.4** | **-1.1** |
| | comp=N,0.1nm,0.3s,baz=2.7,slow=3.9,SNR=2.0 | | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.08** | **142** | P | | **P** | **10 02 39.8** | **-0.6** |
| | comp=N,0.1nm,0.2s,baz=337,slow=9.0,SNR=1.6 | | | | | | | |
| | comp=N,0.1nm,0.2s | | | | | | | |
| **ANMO** | **Albuquerque** | **40.30** | **129** | P | | **P** | **10 03 32.5** | **-0.8** |
| | comp=N,0.2nm,0.4s,baz=73,slow=20,SNR=1.4 | | | | | | | |
| | comp=N,0.2nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.37** | **128** | P | | **P** | **10 04 24.6** | **+2.5** |
| | comp=N,0.2nm,0.5s,baz=354,slow=7.6,SNR=7.6 | | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **49.16** | **6** | P | | **P** | **10 04 43.0** | **-0.3** |
| | comp=N,2.3nm,0.9s,baz=1.6,slow=9.7,SNR=1.5 | | | | | | | |
| | comp=N,2.3nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **49.69** | **14** | P | | **P** | **10 04 47.3** | **0.0** |
| | comp=N,2.2nm,0.9s,baz=28,slow=6.5,SNR=2.1 | | | | | | | |
| | comp=N,2.2nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.00** | **273** | P | | **P** | **10 05 05.4** | **+0.3** |
| | comp=N,0.7nm,0.8s,baz=11,slow=31,SNR=3.2 | | | | | | | |
| | comp=N,0.7nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.30** | **27** | P | | **P** | **10 05 07.8** | **+0.8** |
| | comp=N,0.9nm,0.7s,baz=347,slow=5.8,SNR=1.5 | | | | | | | |
| | comp=N,0.9nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.18** | **329** | P | | **P** | **10 05 34.5** | **-0.8** |
| | comp=N,0.5nm,0.3s,baz=12,slow=6.6,SNR=1.5 | | | | | | | |
| | comp=N,0.5nm,0.3s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.05** | **299** | *e*P | | **P** | **10 05 41.3** | **-0.5** |
| **MKAR** | **Makanchi Array** | **59.12** | **325** | P | | **P** | **10 05 55.9** | **-0.2** |
| | comp=N,0.5nm,0.6s,baz=21,slow=8.5,SNR=5.5 | | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | | |
| **WMQ** | **Urumqi** | **60.77** | **319** | *e*P | | **P** | **10 06 09.3** | **+1.7** |
| WMQ | | | | LR | LR | | | |
| | comp=Z,88nm,23.9s | | | | | | | |
| **LYN** | **LuoYang** | **62.54** | **295** | *e*P | | **P** | **10 06 20.3** | **+0.8** |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.4s | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.08** | **2** | P | | **P** | **10 07 14.4** | **+0.3** |
| | comp=Z,0.7nm,0.8s,baz=352,slow=4.4,SNR=2.7 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **PZH** | **PanZhiHua** | **73.35** | **301** | P | | **P** | **10 07 29.4** | **+1.6** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,190nm,4.7s | | | | | | | |

*MOS* ***13*** *09:56:58.9±0.9, 69.°69N×144.°67W, h9km, mb4.9/51, Error ellipse: s-maj=16.6km s-min=5.0km az=95.6*

*AEIC* ***13*** *09:56:58.7±3.1, 69.°54N±0.°04×144.°79W±0.°07, h7km±4km, ML4.5, mb4.8/313(NEIC), ML4.7/70(NEIC), Mwr4.4/32(NEIC), Error ellipse: s-maj=6.1km s-min=3.2km az=200.0*

*IDC* ***13*** *09:56:59.6±0.3, 69.°72N×144.°69W, h0km, mb4.5/43, mbtmp4.5/47, ML4.5/4, MS3.7/11, Error ellipse: s-maj=10.6km s-min=7.4km az=44.0*

*NEIC* ***13*** *09:56:59, 69.°56N×144.°81W, h5km*

*NEIC* ***13*** *09:57:00.7±2.1, 69.°68N±0.°05×144.°73W±0.°08, h10km±1km, Error ellipse: s-maj=8.5km s-min=4.7km az=187.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr1.17; Mθθ-1.08; Mφφ-0.09; Mrθ-0.64; Mθφ-4.55; Mφr-0.64; Fault plane solution: M0 4.78000×10¹⁵ NP1: φs2.85000°, δ85.10000°, λ-6.34000°. NP2:φs93.39000°, δ83.69000°, λ-175.07000°. Principal axes: T 3.9934, Plg1.0000°, Azm48.0000°; N 1.2962, Plg82.0000°, Azm145.0000°; P -5.2895, Plg8.0000°, Azm318.0000°;*

**ISC 13 09:57:00.3±0.3, 69.°55N±0.°03×144.°80W±0.°02, h10km, n459, σ1§56/368, mb4.8/227, MS3.6/13, 20C-11D, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.37** | **354** | | **Pg** | **09 57 06.5** | **-1.1** |
| C26K | | | | | **Sg** | **09 57 11.8** | **-0.7** |
| C26K | | | | IAML | | 09 57 12.3 | |
| | comp=E,70μm,0.8s | | | | | | |
| C26K | | | | IAML | | 09 57 12.6 | |
| | comp=N,59μm,0.7s | | | | | | |
| **C27K** | **Jago River** | **0.39** | **78** | | **Pg** | **09 57 06.7** | **-1.3** |
| C27K | | | | | **Sg** | **09 57 13.5** | **+0.4** |
| C27K | | | | IAML | | 09 57 14.3 | |
| | comp=E,73μm,0.4s | | | | | | |
| C27K | | | | IAML | | 09 57 14.4 | |
| | comp=N,55μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.60** | **248** | | **Pg** | **09 57 10.6** | **-1.4** |
| D25K | | | | | **Sg** | **09 57 19.0** | **-0.9** |
| **C24K** | **Franklin Bluff** | **1.38** | **279** | Pn | **Pb** | **09 57 25.3** | **-0.8** |
| C24K | | | | | **Sg** | **09 57 44.7** | **+0.2** |
| C24K | | | | IAML | | 09 57 46.7 | |
| | comp=N,10μm,0.9s | | | | | | |
| C24K | | | | IAML | | 09 57 48.1 | |
| | comp=E,10μm,1.0s | | | | | | |
| **D27M** | **Malcolm River** | **1.39** | **101** | | **Sn** | **09 57 44.6** | **+0.3** |
| **D27M** | **Malcolm River** | **1.39** | **101** | Pn | **Pn** | **09 57 25.1** | **-0.8** |
| **D27M** | **Malcolm River** | **1.39** | **101** | IAML | | 09 57 47.2 | |
| | comp=N,11μm,0.8s | | | | | | |
| D27M | | | | IAML | | 09 57 49.0 | |
| | comp=E,7μm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.48** | **256** | Pn | **Pg** | **09 57 28.1** | **-0.6** |
| **D24K** | **Happy Valley** | **1.48** | **256** | | **Sg** | **09 57 48.0** | **+0.1** |
| **D24K** | **Happy Valley** | **1.48** | **256** | IAML | | 09 57 51.6 | |
| | comp=E,14μm,0.6s | | | | | | |
| D24K | | | | IAML | | 09 57 53.7 | |
| | comp=N,13μm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.80** | **138** | Pn | **Pn** | **09 57 32.4** | **+1.0** |
| **E27K** | **Coleen River** | **1.80** | **138** | | **Sn** | **09 57 56.0** | **+1.7** |
| **E27K** | **Coleen River** | **1.80** | **138** | IAML | | 09 58 03.6 | |
| | comp=N,3μm,1.1s | | | | | | |
| E27K | | | | IAML | | 09 58 04.4 | |
| | comp=E,7μm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.88** | **172** | Pn | **Pn** | **09 57 34.0** | **+1.4** |
| F26K | | | | IAML | | 09 58 02.0 | |
| | comp=E,6μm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.94** | **244** | Pn | **Pb** | **09 57 34.9** | **-0.9** |
| TOLK | | | | IAML | | 09 58 07.2 | |
| | comp=N,5μm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **189** | Pn | **Pb** | **09 57 36.4** | **-0.2** |
| F25K | | | | IAML | | 09 58 07.5 | |
| | comp=E,6μm,0.5s | | | | | | |
| F25K | | | | IAML | | 09 58 07.7 | |
| | comp=N,5μm,1.0s | | | | | | |
| **E24K** | **Your Creek** | **2.00** | **224** | Pn | **Pb** | **09 57 36.2** | **-0.6** |
| **C23K** | **Itkillik River** | **2.05** | **281** | | **Pb** | **09 57 36.0** | **-1.5** |
| C23K | | | | IAML | | 09 58 18.0 | |
| | comp=E,7μm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **2.12** | **114** | Pn | **Pn** | **09 57 37.2** | **+1.4** |
| E28M | | | | IAML | | 09 58 12.4 | |
| | comp=N,4μm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.13** | **178** | Pn | **Pn** | **09 57 38.3** | **+2.3** |
| **D28M** | **Stokes Point** | **2.15** | **93** | | **Pn** | **09 57 38.2** | **+2.0** |
| **F28M** | **Old Crow** | **2.66** | **135** | Pn | **Pn** | **09 57 43.4** | **+0.2** |
| **D22K** | **Ayikyak River** | **2.89** | **260** | Pn | **Pn** | **09 57 47.3** | **+0.9** |
| **B22K** | **Teshekpuk Lake** | **3.07** | **289** | Pn | **Pn** | **09 57 49.3** | **+0.5** |
| **B21K** | **Ikpikpuk River** | **3.44** | **276** | Pn | **Pn** | **09 57 54.9** | **+1.0** |
| B21K | | | | IAML | | 09 59 09.6 | |
| | comp=N,2μm,1.4s | | | | | | |
| **G29M** | **Pine Creek** | **3.66** | **133** | Pn | **Pn** | **09 57 58.4** | **+1.4** |
| **F21K** | **Alatna River** | **3.97** | **238** | Pn | **Pn** | **09 58 02.9** | **+1.7** |
| F21K | | | | IAML | | 09 59 12.9 | |
| | comp=E,1μm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **4.14** | **141** | Pn | **Pn** | **09 58 05.7** | **+2.2** |
| **H23K** | **Yukon River** | **4.16** | **208** | Pn | **Pn** | **09 58 05.4** | **+1.7** |
| H23K | | | | IAML | | 09 59 16.5 | |
| | comp=N,806nm,0.7s | | | | | | |
| H23K | | | | IAML | | 09 59 23.7 | |
| | comp=E,848nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.26** | **102** | Pn | **Pn** | **09 58 05.5** | **+0.4** |
| | comp=E,18nm,0.3s,baz=325,slow=18,SNR=13 | | | | | | |
| INK | | | | Sn | **Sn** | **09 58 53.2** | **-1.5** |
| | comp=E,28nm,0.3s,baz=52,slow=19,SNR=4.2 | | | | | | |
| INK | | | | Lg | Lg | 09 59 11.7 | |
| | comp=E,27nm,0.3s,baz=21,slow=25,SNR=5.4 | | | | | | |
| INK | | | | LR | LR | 10 00 10.6 | |
| | comp=E,799nm,19.8s,baz=274,slow=45 | | | | | | |
| | comp=E,72nm,0.4s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.41** | **133** | Pn | **Pn** | **09 58 08.8** | **+1.5** |
| **I28M** | **Miner Creek** | **4.53** | **153** | Pn | **Pn** | **09 58 10.8** | **+1.9** |
| I28M | | | | IAML | | 09 59 07.1 | |
| | comp=N,566nm,0.7s | | | | | | |
| I28M | | | | IAML | | 09 59 36.1 | |
| | comp=E,732nm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.57** | **194** | Pn | **Pn** | **09 58 10.7** | **+1.2** |
| POKR | | | | IAML | | 09 59 34.6 | |
| | comp=N,620nm,0.7s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.59** | **112** | Pn | **Pn** | **09 58 10.7** | **+1.1** |
| F31M | | | | IAML | | 09 59 31.9 | |
| | comp=E,599nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **4.72** | **119** | Pn | **Pn** | **09 58 12.4** | **+1.0** |
| G31M | | | | IAML | | 09 59 32.1 | |
| | comp=E,624nm,1.1s | | | | | | |
| G31M | | | | IAML | | 09 59 36.9 | |
| | comp=N,601nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.76** | **204** | Pn | **Pn** | **09 58 13.3** | **+1.3** |
| I23K | | | | IAML | | 09 59 34.7 | |
| | comp=N,729nm,1.3s | | | | | | |
| I23K | | | | IAML | | 09 59 51.3 | |
| | comp=E,633nm,1.4s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.77** | **243** | Pn | **Pn** | **09 58 13.3** | **+1.2** |
| F20K | | | | IAML | | 09 59 48.2 | |
| | comp=N,431nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **4.80** | **198** | Pn | **Pn** | **09 58 13.9** | **+1.2** |
| MDM | | | | IAML | | 09 59 33.9 | |
| | comp=E,556nm,0.9s | | | | | | |
| MDM | | | | IAML | | 09 59 43.2 | |
| | comp=N,611nm,0.9s | | | | | | |
| **COLA** | **College** | **4.85** | **196** | *e*P | **Pn** | **09 58 16.1** | **+2.9** |
| **ILAR** | **Eielson Array** | **4.87** | **191** | Pn | **Pn** | **09 58 16.4** | **+2.8** |
| | comp=N,11nm,0.3s,baz=360,slow=14,SNR=4.1 | | | | | | |
| ILAR | | | | Sn | **Sn** | **09 59 12.0** | **+2.1** |
| | comp=N,30nm,0.3s,baz=7.0,slow=24,SNR=6.8 | | | | | | |
| ILAR | | | | Lg | Lg | 09 59 30.5 | |
| | comp=N,25nm,0.3s,baz=3.8,slow=30,SNR=5.9 | | | | | | |
| | comp=N,32nm,0.5s | | | | | | |
| **E19K** | **Redstone River** | **5.03** | **251** | Pn | **Pn** | **09 58 13.3** | **-2.4** |
| E19K | | | | IAML | | 09 59 50.0 | |
| | comp=N,583nm,0.9s | | | | | | |
| E19K | | | | IAML | | 10 00 02.9 | |
| | comp=E,468nm,1.0s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **195** | Pn | **Pn** | **09 58 13.4** | **-2.8** |
| CCB | | | | IAML | | 09 59 43.8 | |
| | comp=E,374nm,1.0s | | | | | | |
| **MLY** | **Manley** | **5.09** | **210** | Pn | **Pn** | **09 58 12.9** | **-3.7** |
| MLY | | | | IAML | | 09 59 56.7 | |
| | comp=E,390nm,1.6s | | | | | | |
| **J26L** | **Joseph Creek** | **5.10** | **174** | Pn | Pn | 09 58 12.8 | -4.0 |
| J26L | | | | IAML | | 09 59 25.3 | |
| | comp=N,389nm,0.8s | | | | | | |
| J26L | | | | IAML | | 09 59 42.1 | |
| | comp=E,558nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.25** | **201** | Pn | **Pn** | **09 58 15.6** | **-3.2** |
| NEA2 | | | | IAML | | 09 59 58.8 | |
| | comp=E,318nm,1.5s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.55** | **247** | Pn | **Pn** | **09 58 23.5** | **+0.7** |
| **BWN** | **Browne** | **5.71** | **201** | Pn | **Pn** | **09 58 26.5** | **+1.5** |
| **J29N** | **Klondike Camp** | **5.73** | **150** | Pn | **Pn** | **09 58 24.6** | **-0.8** |
| **G19K** | **Purcell Mounta** | **5.77** | **239** | Pn | **Pn** | **09 58 26.0** | **+0.2** |
| **DAWY** | **Dawson** | **5.91** | **156** | Pn | **Pn** | **09 58 29.4** | **+1.6** |
| **C18K** | **Utukok River** | **5.93** | **269** | Pn | **Pn** | **09 58 27.6** | **-0.6** |
| **J30M** | **Hart River** | **5.99** | **142** | Pn | **Pn** | **09 58 29.5** | **+0.5** |
| **BPAW** | **Bear Paw Mtn.** | **5.99** | **207** | Pn | **Pn** | **09 58 29.6** | **+0.7** |
| **H19K** | **Roundabout Mou** | **6.01** | **233** | Pn | **Pn** | **09 58 30.4** | **+1.2** |
| **MCK** | **McKinley** | **6.07** | **198** | Pn | **Pn** | **09 58 31.4** | **+1.3** |
| **MCK** | **McKinley** | **6.07** | **198** | P | **Pn** | **09 58 31.4** | **+1.3** |
| **E18K** | **Tukpahlearik C** | **6.19** | **257** | Pn | **Pn** | **09 58 31.9** | **+0.3** |
| **RND** | **Reindeer** | **6.38** | **197** | Pn | **Pn** | **09 58 35.9** | **+1.6** |
| **RND** | **Reindeer** | **6.38** | **197** | P | **Pn** | **09 58 35.9** | **+1.6** |
| **K29M** | **Barlow Dome** | **6.42** | **150** | Pn | **Pn** | **09 58 37.0** | **+2.2** |
| **J20K** | **Nowinta River** | **6.53** | **219** | Pn | **Pn** | **09 58 37.5** | **+1.2** |
| **L26K** | **Log Cabin Wild** | **6.58** | **174** | Pn | **Pn** | **09 58 38.8** | **+1.7** |
| **DHY** | **Denali Highway** | **6.59** | **190** | Pn | **Pn** | **09 58 40.2** | **+3.0** |
| **BCAR** | **Beaver Creek A** | **6.63** | **168** | Pn | **Pn** | **09 58 40.0** | **+2.3** |
| **L27K** | **Beaver Creek,** | **6.63** | **168** | Pn | **Pn** | **09 58 40.3** | **+2.6** |
| **RDOG** | **Red Dog Mine** | **6.73** | **266** | | **Pn** | **09 58 38.4** | **-0.6** |
| **A36M** | **Sachs Harbour** | **6.89** | **60** | Pn | **Pn** | **09 58 39.7** | **-1.4** |
| **F17K** | **Baldwin Pennin** | **6.91** | **251** | Pn | **Pn** | **09 58 40.9** | **-0.6** |
| **L29M** | **L29M** | **7.00** | **154** | Pn | **Pn** | **09 58 44.5** | **+1.7** |
| **M26K** | **Nabesna, AK** | **7.22** | **173** | Pn | **Pn** | **09 58 47.8** | **+2.0** |
| **C36M** | **Paulatuk** | **7.29** | **82** | Pn | **Pn** | **09 58 44.4** | **-2.2** |
| **H17K** | **Granite Mounta** | **7.45** | **239** | Pn | **Pn** | **09 58 49.3** | **+0.3** |
| **C16K** | **Lisburne Hills** | **7.51** | **270** | Pn | **Pn** | **09 58 49.0** | **-0.7** |
| **M29M** | **Somme Creek** | **7.59** | **157** | Pn | **Pn** | **09 58 52.3** | **+1.4** |
| **G16K** | **Koyuk River** | **7.91** | **247** | | **Pn** | **09 58 55.3** | **+0.1** |
| **PMR** | **Palmer** | **8.19** | **195** | P | **Pn** | **09 59 03.7** | **+4.7** |
| **J17K** | **VABM Dome** | **8.39** | **230** | | **Pn** | **09 59 01.9** | **+0.1** |
| **M20K** | **Styx River** | **8.42** | **208** | Pn | **Pn** | **09 59 03.7** | **+1.4** |
| **I17K** | **Unalakleet** | **8.46** | **235** | | **Pn** | **09 59 03.6** | **+0.9** |
| **F15K** | **North Star Dit** | **8.47** | **252** | Pn | **Pn** | **09 59 02.3** | **-0.6** |
| **M31M** | **Drury Creek, Y** | **8.51** | **145** | | **Pn** | **09 59 03.6** | **+0.2** |
| **M19K** | **Big River Lodg** | **8.62** | **212** | Pn | **Pn** | **09 59 06.0** | **+1.1** |
| **FARO** | **Faro, Yukon** | **8.70** | **142** | Pn | **Pn** | **09 59 06.5** | **+0.5** |
| **N30M** | **Aishikik Lake** | **8.72** | **155** | Pn | **Pn** | **09 59 07.7** | **+1.2** |
| **ISLE** | **Juniper Island** | **9.05** | **172** | Pn | **Pn** | **09 59 10.7** | **-0.3** |
| **SVW2** | **Sparrevohn** | **9.59** | **213** | P | **Pn** | **09 59 21.9** | **+3.7** |
| **WRGLY** | **Wrigley** | **10.60** | **116** | Pn | **Pn** | **09 59 30.9** | **-1.1** |
| **SKAG** | **Skagway** | **10.90** | **154** | P | Pn | 09 59 44.2 | +8.1 |
| | comp=E,37nm,1.0s | | | | | | |
| **JIS** | **Juneau Island** | **12.18** | **153** | P | **Pn** | **09 59 56.3** | **+2.7** |
| **KDAK** | **Kodiak Island** | **12.29** | **200** | Pn | **Pn** | **09 59 56.9** | **+1.7** |
| | comp=E,0.2nm,0.3s,baz=51,slow=14,SNR=1.4 | | | | | | |
| KDAK | | | | Sn | **Sn** | **10 02 06.5** | **-5.5** |
| | comp=E,0.1nm,0.3s,baz=62,slow=15,SNR=1.3 | | | | | | |
| **DLBC** | **Dease Lake** | **12.84** | **143** | | **Pn** | **10 00 03.8** | **+1.0** |
| **DLBC** | **Dease Lake** | **12.84** | **143** | Pn | **Pn** | **10 00 03.1** | **+0.4** |
| | comp=E,1.0nm,0.3s,baz=331,slow=11,SNR=12 | | | | | | |
| DLBC | | | | Sn | **Sn** | **10 02 19.6** | **-6.1** |
| | comp=E,0.3nm,0.3s,baz=270,slow=20,SNR=1.8 | | | | | | |
| DLBC | | | | Lg | Lg | 10 03 47.2 | |
| | comp=E,0.2nm,0.3s,baz=253,slow=20,SNR=4.1 | | | | | | |
| DLBC | | | | LR | LR | 10 05 11.0 | |
| | comp=E,556nm,18.3s,baz=319,slow=38 | | | | | | |
| | comp=E,7.4nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.02** | **105** | Pn | Pn | 10 00 14.6 | -4.1 |
| **YKA** | **Yellowknife Ar** | **14.02** | **105** | Pn | Pn | 10 00 13.1 | -5.6 |
| | comp=E,3.0nm,0.3s,baz=315,slow=13,SNR=17 | | | | | | |
| YKA | | | | Sn | Sn | 10 02 40.5 | -14 |
| | comp=E,2.1nm,0.3s,baz=322,slow=22,SNR=6.5 | | | | | | |
| YKA | | | | Lg | Lg | 10 04 17.1 | |
| | baz=313,slow=31 | | | | | | |
| YKA | | | | LR | LR | 10 06 18.5 | |
| | comp=E,229nm,20.0s,baz=317,slow=40 | | | | | | |
| | comp=E,8.2nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.02** | **105** | P | Pn | 10 00 14.6 | -4.1 |
| **RES** | **Resolute Bay** | **15.70** | **49** | Pn | **Pn** | **10 00 36.6** | **-4.4** |
| | comp=E,3.2nm,0.3s,baz=271,slow=14,SNR=9.1 | | | | | | |
| RES | | | | Sn | Sn | 10 03 23.6 | -11 |
| | comp=E,2.5nm,0.3s,baz=330,slow=20,SNR=2.5 | | | | | | |
| **BILL** | **Bilibino** | **17.39** | **288** | *i*P | **Pn** | **10 01 02.4** | **-0.2** |
| BILL | | | | S | **Sn** | **10 04 07.0** | **-8.8** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,397nm,15.0s | | | | | | |
| **EUNU** | **Eureka** | **17.45** | **30** | P | **Pn** | **10 01 03.1** | **-0.3** |
| EUNU | | | | IAmb | IAmb | 10 01 06.7 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **PGC** | **Sidney** | **23.39** | **143** | P | **P** | **10 02 10.8** | **+2.0** |
| PGC | | | | IAmb | IAmb | 10 02 12.8 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **NLWA** | **Neilton Lookou** | **24.50** | **144** | P | **P** | **10 02 21.6** | **+2.2** |
| **GNW** | **Green Mountain** | **24.56** | **142** | P | **P** | **10 02 21.2** | **+1.3** |
| **B08A** | **Colville Reser** | **24.61** | **136** | P | **P** | **10 02 18.8** | **-1.6** |
| **AMKA** | **Amchitka** | **24.78** | **241** | P | **P** | **10 02 22.4** | **+0.5** |
| **SEY** | **Seymchan** | **25.05** | **286** | P | **P** | **10 02 24.3** | **+0.1** |
| | comp=Z,27nm,0.5s,baz=68,slow=8.0,SNR=28 | | | | | | |
| | comp=Z,27nm,0.5s | | | | | | |
| **SEY** | **Seymchan** | **25.05** | **286** | *e*P | **P** | **10 02 23.7** | **-0.5** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,82nm,1.2s | | | | | | |
| **D05A** | **Enumclaw** | **25.09** | **141** | P | **P** | **10 02 26.3** | **+1.6** |
| **NEW** | **Newport** | **25.25** | **133** | P | **P** | **10 02 27.4** | **+1.3** |
| **NEW** | **Newport** | **25.25** | **133** | P | **P** | **10 02 27.9** | **+1.8** |
| | comp=Z,6.1nm,0.9s,baz=314,slow=7.0,SNR=8.5 | | | | | | |
| NEW | | | | LR | LR | 10 12 55.5 | |
| | comp=Z,327nm,19.1s,baz=340,slow=38 | | | | | | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **NEW** | **Newport** | **25.25** | **133** | P | **P** | **10 02 27.4** | **+1.3** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.28** | **249** | P | **P** | **10 02 28.3** | **+2.0** |
| | comp=Z,29nm,0.8s,baz=308,slow=6.9,SNR=2.8 | | | | | | |
| | comp=Z,29nm,0.8s | | | | | | |
| **LTY** | **Liberty** | **25.32** | **139** | P | **P** | **10 02 24.3** | **-2.6** |
| LTY | | | | IAmb | IAmb | 10 02 29.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **C09A** | **Chrisman Ranch** | **25.39** | **135** | P | **P** | **10 02 28.8** | **+1.4** |
| **LON** | **Longmire** | **25.55** | **141** | P | **P** | **10 02 31.5** | **+2.5** |
| LON | | | | IAmb | IAmb | 10 02 32.1 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **LON** | **Longmire** | **25.55** | **141** | P | **P** | **10 02 31.5** | **+2.5** |
| LON | | | | pmax | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | |
| **D08A** | **Wollman Farm,** | **25.92** | **137** | P | **P** | **10 02 33.8** | **+1.6** |
| **MXC** | **Moxie City** | **26.05** | **139** | P | **P** | **10 02 34.9** | **+1.4** |
| MXC | | | | IAmb | IAmb | 10 02 35.9 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **TIXI** | **Tiksi** | **26.48** | **315** | *i*P | **P** | **10 02 38.7** | **+1.7** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **E09A** | **Wood Farm, Sta** | **26.62** | **136** | P | **P** | **10 02 40.2** | **+1.7** |
| E09A | | | | IAmb | IAmb | 10 02 41.3 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **26.94** | **142** | P | **P** | **10 02 43.0** | **+1.3** |
| HOOD | | | | IAmb | IAmb | 10 02 46.4 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **G06A** | **Carlson Farm,** | **27.25** | **141** | P | **P** | **10 02 45.7** | **+1.4** |
| **F10A** | **Beach Ranch, E** | **27.35** | **135** | P | **P** | **10 02 46.8** | **+1.5** |
| **MSO** | **Missoula** | **27.40** | **130** | P | **P** | **10 02 47.0** | **+1.3** |
| MSO | | | | IAmb | IAmb | 10 02 48.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **OVMT** | **Ovando** | **27.45** | **129** | P | **P** | **10 02 46.7** | **+0.5** |
| **EGMT** | **Eagleton** | **27.50** | **123** | P | **P** | **10 02 48.0** | **+1.5** |
| EGMT | | | | IAmb | IAmb | 10 02 49.1 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **LYMT** | **Lyon Mountain** | **27.73** | **128** | P | **P** | **10 02 50.5** | **+1.7** |
| **BPMT** | **Black Pine Rid** | **27.90** | **130** | P | **P** | **10 02 51.2** | **+0.8** |
| **I05D** | **Terrebonne, OR** | **27.95** | **142** | P | **P** | **10 02 52.5** | **+1.9** |
| **MA2** | **Magadan** | **27.98** | **282** | P | **P** | **10 02 51.1** | **+0.4** |
| | comp=Z,4.5nm,0.6s,baz=22,slow=16,SNR=2.1 | | | | | | |
| | comp=Z,4.5nm,0.6s | | | | | | |
| **I07A** | **Izee** | **28.59** | **140** | P | **P** | **10 02 58.6** | **+2.2** |
| **FRB** | **Frobisher Bay** | **28.88** | **63** | LR | LR | 10 16 30.9 | |
| | comp=Z,124nm,19.7s,baz=335,slow=41 | | | | | | |
| **J05D** | **Fort Rock, OR** | **28.98** | **143** | P | **P** | **10 03 02.4** | **+2.6** |
| **DLMT** | **Dillon** | **29.12** | **129** | P | **P** | **10 03 01.8** | **+0.8** |
| **HUMO** | **Hull Mountain** | **29.27** | **146** | P | **P** | **10 03 04.9** | **+2.6** |
| **J08

comp=Z,95nm,19.9s,baz=37,slow=40
**YAK Yakutsk 33.01 300***c* iP **P** **10 03 36.1 +1.1**
YAK pmax pmax
comp=Z,21nm,1.3s
**AFDM Forest Hills D 33.20 145** IAmb IAmb 10 03 41.3
comp=Z,6.7nm,0.9s
**K22A Casper 33.33 124** IAmb IAmb 10 03 42.1
comp=Z,25nm,1.4s
**PNTR Pine Nut 33.34 143** IAmb IAmb 10 03 47.0
comp=Z,9.3nm,0.7s
**EMB Emerald Bay 33.35 144** IAmb IAmb 10 03 43.7
comp=Z,14nm,1.3s
**EYMN Ely 33.46 102** P **P** **10 03 40.0 +0.9**
**YERR Yerington 33.52 142** IAmb IAmb 10 03 43.1
comp=Z,9.2nm,1.1s
**F33A 5 Mile Ranch, 33.67 109** IAmb IAmb 10 03 44.8
comp=Z,13nm,1.3s
**DUG Dugway, Tooele 33.88 133** P **P** **10 03 45.7 +2.7**
DUG IAmb IAmb 10 03 48.3
comp=Z,9.8nm,1.0s
**DUG Dugway, Tooele 33.88 133** P **P** **10 03 45.7 +2.7**
DUG pmax pmax
comp=Z,10.0nm,1.0s
**WAKR Walker 33.94 143** IAmb IAmb 10 03 47.1
comp=Z,9.7nm,0.7s
**RYN Ryan 34.02 142** IAmb IAmb 10 03 48.4
comp=Z,5.8nm,0.7s
**NVAR Mina Array Bea 34.26 142** P **P** **10 03 49.0 +2.7**
**NVAR Mina Array Bea 34.26 142** P **P** **10 03 48.8 +2.4**
comp=Z,6.5nm,0.8s,baz=326,slow=7.3,SNR=35
comp=Z,6.5nm,0.8s
**MPU Maple Canyon 34.36 132** IAmb IAmb 10 03 51.8
comp=Z,7.8nm,0.9s
**LHV Little Huntoon 34.38 142** IAmb IAmb 10 03 54.5
comp=Z,8.4nm,0.9s
**RDMU Red Mountain 34.39 129** P **P** **10 03 48.7 +1.3**
RDMU IAmb IAmb 10 03 50.3
comp=Z,11nm,0.8s
**Q12A Willow Creek R 34.47 137** IAmb IAmb 10 03 53.4
comp=Z,13nm,1.4s
**E38A The Farm, Brul 34.60 103** IAmb IAmb 10 03 52.1
comp=Z,16nm,1.4s
**P18A Preston Nutter 35.09 130** IAmb IAmb 10 03 59.2
comp=Z,11nm,0.8s
**P17A Butcher Ranch, 35.10 131** IAmb IAmb 10 03 57.2
comp=Z,8.8nm,0.9s
**O20A White River Ci 35.16 128** IAmb IAmb 10 04 02.1
comp=Z,7.2nm,0.6s
**PSUT Pine Spring 35.19 136** IAmb IAmb 10 03 59.2
comp=Z,12nm,1.2s
**ECSD EROS Data Cent 35.43 111** P **P** **10 03 57.2 +1.0**
ECSD IAmb IAmb 10 03 58.0
comp=Z,8.7nm,0.8s
**ISCO Idaho Springs 36.22 125** P **P** **10 04 05.5 +2.2**
ISCO IAmb IAmb 10 04 06.3
comp=Z,7.2nm,0.8s
**ISCO Idaho Springs 36.22 125** P **P** **10 04 05.5 +2.2**
ISCO pmax pmax
comp=Z,7.0nm,0.9s
**G40A Rib Lake 36.23 103** IAmb IAmb 10 04 04.6
comp=Z,14nm,0.8s
**SCHQ Schefferville 36.29 73** P **P** **10 04 01.0 -2.4**
**SCHQ Schefferville 36.29 73** P **P** **10 04 03.1 -0.4**
comp=Z,20nm,0.8s,baz=324,slow=9.1,SNR=12
comp=Z,20nm,0.8s
**SMCO Snowmass 36.41 127** IAmb IAmb 10 04 09.4
comp=Z,8.2nm,0.7s
**Q24A Divide 37.13 124** IAmb IAmb 10 04 14.0
comp=Z,15nm,1.3s
**E46A Sault Ste Mari 37.32 96** IAmb IAmb 10 04 13.2
comp=Z,18nm,0.7s
**TYV Tymovskoe 37.72 279** *e*P **P** **10 04 16.2 +0.6**
TYV pmax pmax
comp=Z,7.0nm,1.0s
**KSCO Kaye Shedlock' 37.83 121** IAmb IAmb 10 04 19.3
comp=Z,17nm,0.9s
**SDCO Great Sand Dun 38.16 126** P **P** **10 04 21.5 +1.7**
**SCIA State Center 38.19 109** P **P** **10 04 21.0 +1.3**
**JFWS Jewell Farm 38.29 105** P **P** **10 04 21.1 +0.6**
**JFWS Jewell Farm 38.29 105** P **P** **10 04 21.1 +0.6**
JFWS pmax pmax
comp=Z,33nm,0.8s
**CBKS Cedar Bluff 38.89 118** P **P** **10 04 26.7 +1.1**
CBKS IAmb IAmb 10 04 27.4
comp=Z,18nm,0.8s
**CBKS Cedar Bluff 38.89 118** P **P** **10 04 26.7 +1.1**
CBKS pmax pmax
comp=Z,18nm,0.9s
**PFO Pinyon Flats O 39.29 141** P **P** **10 04 30.9 +1.8**
comp=Z,3.5nm,0.8s,baz=342,slow=8.2,SNR=7.1
comp=Z,3.5nm,0.8s
**PFO Pinyon Flats O 39.29 141***d* iP **P** **10 04 31.4 +2.3**
PFO pmax pmax
comp=Z,5.0nm,0.9s
**L42A Oliver, Polo 39.29 105** P **P** **10 04 29.6 +0.8**
L42A IAmb IAmb 10 04 30.3
comp=Z,25nm,0.8s
**R32A Long Quarter, 39.57 117** P **P** **10 04 31.9 +0.6**
R32A IAmb IAmb 10 04 32.5
comp=Z,12nm,0.8s
**KSU1 Kansas State U 39.61 115** P **P** **10 04 32.4 +0.8**
KSU1 IAmb IAmb 10 04 33.1
comp=Z,13nm,0.8s
**I49A Point Hope 39.95 97** P **P** **10 04 34.0 -0.3**
**N41A Harden Midland 40.05 107** IAmb IAmb 10 04 36.9
comp=Z,16nm,1.0s
**P38A Dawn 40.14 111** IAmb IAmb 10 04 37.2
comp=Z,17nm,0.7s
**L46A Eue Claire 40.44 102** IAmb IAmb 10 04 39.9
comp=Z,41nm,1.4s
**CBX Cerro Bola 40.50 142** P **P** **10 04 41.2 +2.1**
CBX IAmb IAmb 10 04 42.5
comp=Z,19nm,0.8s
**SADO Sadowa 40.51 92** P **P** **10 04 38.8 -0.2**
SADO IAmb IAmb 10 04 39.9
comp=Z,28nm,0.9s
**SADO Sadowa 40.51 92** LR LR 10 22 21.3
comp=Z,85nm,18.4s,baz=62,slow=38
**ANMO Albuquerque 40.51 128** P **P** **10 04 41.7 +2.4**
**ANMO Albuquerque 40.51 128** P **P** **10 04 41.2 +1.9**
comp=Z,6.0nm,0.9s,baz=59,slow=8.0,SNR=21
comp=Z,6.0nm,0.9s
**ANMO Albuquerque 40.51 128***c* iP **P** **10 04 41.0 +1.7**
ANMO pmax pmax
comp=Z,6.0nm,1.4s
**ICQ Pointe Anglais 40.57 78** P **P** **10 04 39.1 -0.3**
ICQ IAmb IAmb 10 04 40.1
comp=Z,21nm,0.7s
**HDIL Hopedale 40.71 106** P **P** **10 04 41.1 +0.5**
**KEV Kevo 40.84 4** P **P** **10 04 39.6 -1.7**
KEV IAmb IAmb 10 05 17.8
comp=Z,34nm,1.5s
**KEV Kevo 40.84 4** P **P** **10 04 39.7 -1.7**
KEV pmax pmax
comp=Z,34nm,1.5s
**TRQ Mont Tremblant 40.86 87** IAmb IAmb 10 04 42.6
comp=Z,11nm,0.7s
**YSS Yuzh-Sakhalins 41.01 275** *e*P **P** **10 04 42.9 -0.1**
YSS *e*S **S** **10 10 55.4 +0.6**
YSS pmax pmax
comp=Z,10.0nm,0.9s
YSS MLR MLR
comp=N,200nm,14.0s
YSS MLR MLR
comp=E,200nm,15.0s
**ARCES ARCESS Array B 41.01 5** P **P** **10 04 41.6 -1.3**
comp=E,2.7nm,0.5s,baz=1.6,slow=7.6,SNR=20
ARCES PcP **PcP** **10 06 41.9 -0.5**
comp=E,2.7nm,0.9s,baz=350,slow=2.0,SNR=2.0
comp=E,2.7nm,0.5s
**BOD Bodaibo 41.03 307** *e*P **P** **10 04 42.1 -1.0**
BOD pmax pmax
comp=Z,31nm,1.0s
**L48A N Adams 41.14 100** IAmb IAmb 10 05 14.5
comp=Z,26nm,1.0s
**LMQ La Malbaie 41.20 82** IAmb IAmb 10 04 47.0
comp=Z,10nm,0.9s
**DELO Deloro Mine 41.27 91** IAmb IAmb 10 04 46.4
comp=Z,31nm,1.1s
**P43A Skaggs, Pawnee 41.46 107** IAmb IAmb 10 04 48.0
comp=Z,18nm,0.8s
**ELIS Ellis County 41.52 120** IAmb IAmb 10 04 49.2
comp=Z,9.7nm,0.7s
**CROK Carrier 41.56 118** P **P** **10 04 47.1 -0.6**
**SFIN Lafayette 41.62 104** IAmb IAmb 10 04 49.5
comp=Z,32nm,1.4s
**WBO Williamsburg 41.67 89** IAmb IAmb 10 04 49.2
comp=Z,17nm,1.0s
**R40A Maddies Statio 41.76 110** IAmb IAmb 10 04 50.0
comp=Z,13nm,0.7s
**MNTQ Montreal, Queb 41.81 87** IAmb IAmb 10 04 49.9
comp=Z,11nm,0.6s
**TUC Tucson 41.87 135** P **P** **10 04 48.9 -1.5**
**TUC Tucson 41.87 135** P **P** **10 04 48.9 -1.5**
TUC pmax pmax
comp=Z,5.0nm,1.2s
**AMTX Amarillo 41.94 123** IAmb IAmb 10 04 52.5
comp=Z,12nm,0.7s
**S39A Bolivar 41.96 112** IAmb IAmb 10 04 51.9
comp=Z,18nm,0.9s
**PECO Prince Edward 41.99 91** IAmb IAmb 10 04 52.2
comp=Z,23nm,1.3s
**D62A Allapoint, All 42.05 81** IAmb IAmb 10 04 52.6
comp=Z,12nm,0.9s
**N49A Columbus Grove 42.14 100** IAmb IAmb 10 04 53.3
comp=Z,15nm,1.1s
**LONY Lake Ozonia 42.24 88** P **P** **10 04 53.0 -0.2**
LONY IAmb IAmb 10 04 53.8
comp=Z,19nm,1.1s
**E62A Clayton Lake 42.28 82** IAmb IAmb 10 04 54.7
comp=Z,10.0nm,0.9s
**CCM Cathedral Cave 42.31 109** P **P** **10 04 52.8 -1.0**
**CCM Cathedral Cave 42.31 109** P **P** **10 04 52.8 -1.0**
CCM pmax pmax
comp=Z,5.0nm,0.7s
**OK029 Liberty Lake 42.37 117** IAmb IAmb 10 04 55.5
comp=Z,15nm,0.8s
**OK031 S. Brethren Rd 42.42 117** IAmb IAmb 10 04 55.7
comp=Z,14nm,0.8s
**MSTX Muleshoe 42.47 125** IAmb IAmb 10 04 56.9
comp=Z,12nm,0.8s
**ERPA Erie 42.54 95** P **P** **10 04 56.0 +0.4**
**J56A Wolcott 42.62 91** IAmb IAmb 10 04 57.4
comp=Z,14nm,0.9s
**FVM French Village 42.65 109** IAmb IAmb 10 04 57.4
comp=Z,10nm,0.9s
**O49A Covington 42.74 101** IAmb IAmb 10 04 59.8
comp=Z,16nm,1.2s
**U38A Gravette 42.76 114** IAmb IAmb 10 04 59.4
comp=Z,28nm,1.4s
**PQI Presque Isle 42.76 81** IAmb IAmb 10 04 58.0
comp=Z,12nm,0.8s
**WVNY West Valley, N 42.77 94** IAmb IAmb 10 04 58.3
comp=Z,19nm,1.0s
**MGMO Mountain Grove 42.79 111** IAmb IAmb 10 04 59.5
comp=Z,22nm,0.8s
**TUL3 Leonard 42.79 116** IAmb IAmb 10 04 58.8
comp=Z,15nm,0.8s
**KLR Kul'dur 42.84 287** P **P** **10 04 57.4 -0.6**
comp=Z,4.0nm,0.8s,baz=12,slow=9.6,SNR=13
KLR LR LR 10 23 40.6
comp=Z,47nm,20.8s,baz=36,slow=37
comp=Z,4.0nm,0.8s
**KLR Kul'dur 42.84 287**⇑ *i*P **P** **10 04 57.4 -0.6**
KLR pmax pmax
comp=Z,7.0nm,1.0s
**BATG Bathurst New B 42.91 79** IAmb IAmb 10 04 59.9
comp=Z,19nm,0.8s
**P48A Milroy 43.01 102** IAmb IAmb 10 05 02.0
comp=Z,18nm,1.2s
**HHAR Hobbs 43.04 113** IAmb IAmb 10 05 00.2
comp=Z,10nm,0.8s
**J58A Resen 43.10 90** IAmb IAmb 10 05 01.0
comp=Z,18nm,1.0s
**G62A West of Eustis 43.14 84** IAmb IAmb 10 05 02.3
comp=Z,10nm,0.8s
**ACSO Alum Creek Sta 43.17 99** IAmb IAmb 10 05 01.5
comp=Z,14nm,0.8s
**P49A Miami Univ. Ec 43.19 102** IAmb IAmb 10 05 01.2
comp=Z,8.6nm,0.8s
**F63A Nahmakanta, Br 43.22 83** IAmb IAmb 10 05 01.8
comp=Z,12nm,0.7s
**J59A Piesco 43.28 89** IAmb IAmb 10 05 02.4
comp=Z,14nm,0.6s
**T42A Van Buren 43.29 110** IAmb IAmb 10 05 02.7
comp=Z,15nm,1.3s
**S44A Carbondale 43.30 107** IAmb IAmb 10 05 02.8
comp=Z,17nm,0.8s
**F64A Sherman 43.34 82** IAmb IAmb 10 05 02.2
comp=Z,8.1nm,0.6s
**N53A Lisbon 43.40 97** IAmb IAmb 10 05 04.8
comp=Z,17nm,1.0s
**LBNH Lisbon 43.51 86** IAmb IAmb 10 05 04.9
comp=Z,12nm,0.8s
**ASAJ Asahikawa 43.52 274** P **P** **10 05 03.5 0.0**
comp=Z,7.6nm,0.9s,baz=33,slow=13,SNR=4.7
comp=Z,7.6nm,0.9s
**PKME Peaks-Kenny Pk 43.54 83** P **P** **10 05 03.9 +0.2**
PKME IAmb IAmb 10 05 04.4
comp=Z,16nm,0.7s
**ACCN Adirondack Com 43.64 88** IAmb IAmb 10 05 05.6
comp=Z,9.2nm,0.7s
**O52A Adamsville 43.67 98** IAmb IAmb 10 05 05.2
comp=Z,15nm,0.7s
**POST Post 43.68 124** IAmb IAmb 10 05 06.3
comp=Z,7.5nm,0.7s
**O53A New Philadelph 43.77 98** IAmb IAmb 10 05 05.6
comp=Z,11nm,0.6s
**WCI Wyandotte Cave 43.82 104** P **P** **10 05 05.0 -1.0**
WCI IAmb IAmb 10 05 06.3
comp=Z,13nm,0.8s
**WCI Wyandotte Cave 43.82 104** P **P** **10 05 05.0 -1.0**
WCI pmax pmax
comp=Z,13nm,0.8s
**HNH Hanover 43.85 87** IAmb IAmb 10 05 08.1
comp=Z,25nm,1.2s
**FCAR Ozark Folk Cen 43.99 112** IAmb IAmb 10 05 07.9
comp=Z,25nm,1.3s
**P52A Corning 43.99 99** IAmb IAmb 10 05 08.2
comp=Z,12nm,0.9s
**LCAR Lake Charles 44.15 110** IAmb IAmb 10 05 10.2
comp=Z,15nm,0.7s
**R50A Paris 44.45 102** IAmb IAmb 10 05 11.7
comp=Z,7.1nm,0.9s
**WHAR Wooly Hollow 44.49 112** IAmb IAmb 10 05 12.1
comp=Z,12nm,0.9s
**Q52A Bidwell 44.55 100** IAmb IAmb 10 05 11.9
comp=Z,14nm,0.7s
**LMN Caledonia Moun 44.58 79** IAmb IAmb 10 05 12.7
comp=Z,11nm,0.8s
**SSPA Standing Stone 44.58 94** P **P** **10 05 10.7 -1.4**
SSPA IAmb IAmb 10 05 14.7
comp=Z,18nm,1.1s
**EMMW East Machias 44.66 82** IAmb IAmb 10 05 13.5
comp=Z,15nm,0.8s
**MIAR Mount Ida 44.75 114** P **P** **10 05 13.7 +0.2**
**MIAR Mount Ida 44.75 114** P **P** **10 05 13.7 +0.2**
MIAR pmax pmax
comp=Z,18nm,0.8s
**PLPT Palo Pinto 44.87 120** IAmb IAmb 10 05 15.7
comp=Z,5.6nm,0.7s
**Q54A Coxs Mills 45.02 98** IAmb IAmb 10 05 15.8
comp=Z,11nm,0.7s
**X40A Basin Creek Fa 45.05 113** IAmb IAmb 10 05 16.7
comp=Z,8.3nm,0.8s
**ERM Erimo 45.17 272***d* iP **P** **10 05 17.9 +1.2**
ERM pmax pmax
comp=Z,40nm,1.2s
**WVT Waverly 45.20 107** P **P** **10 05 16.8 -0.3**
**WVT Waverly 45.20 107** P **P** **10 05 16.8 -0.3**
WVT pmax pmax
comp=Z,28nm,0.7s
**T50A Nancy 45.41 103** IAmb IAmb 10 05 21.7
comp=Z,21nm,1.4s
**U49A Red Boiling Sp 45.54 105** IAmb IAmb 10 05 21.3
comp=Z,11nm,0.7s
**ALPN Alpine 45.60 127** IAmb IAmb 10 05 22.1
comp=Z,6.4nm,0.7s
**S54A Dingess, Beckl 45.92 99** IAmb IAmb 10 05 22.6
comp=Z,11nm,0.8s
**BRDY Brady 46.09 122** IAmb IAmb 10 05 25.2
comp=Z,5.7nm,0.8s
**OXF Oxford 46.14 110** P **P** **10 05 25.1 +0.6**
**OXF Oxford 46.14 110** P **P** **10 05 25.2 +0.6**
OXF pmax pmax
comp=Z,38nm,0.7s
**PLAL Pickwick Lake 46.16 108** IAmb IAmb 10 05 25.7
comp=Z,12nm,0.8s
**TXAR Lajitas Array 46.57 128** P **P** **10 05 26.3 -1.8**
**TXAR Lajitas Array 46.57 128** P **P** **10 05 29.4 +1.3**
comp=Z,2.6nm,0.8s,baz=350,slow=5.3,SNR=21
TXAR LR LR 10 26 36.8
comp=Z,179nm,20.4s,baz=14,slow=38
comp=Z,2.6nm,0.8s
**JCT Junction City 46.60 123** P **P** **10 05 29.0 +0.7**
JCT IAmb IAmb 10 05 29.5
comp=Z,8.3nm,0.7s
**JCT Junction City 46.60 123** P **P** **10 05 29.0 +0.7**
JCT pmax pmax
comp=Z,8.0nm,0.7s
**W50A Signal Mountai 46.89 105** IAmb IAmb 10 05 36.8
comp=Z,7.6nm,0.7s
**CPCT Cooper Cave 46.94 104** IAmb IAmb 10 05 33.7
comp=Z,15nm,1.3s
**TKL Tuckaleechee C 47.00 103** IAmb IAmb 10 05 31.6
comp=Z,6.5nm,0.8s
**USA0B Ussuriysk Arra 47.13 283**⇑ *i*P **P** **10 05 33.3 +1.1**
**USRK Ussuriysk Ar. 47.13 283** P **P** **10 05 30.2 -2.0**
**USRK Ussuriysk Ar. 47.13 283** P **P** **10 05 33.3 +1.1**
comp=Z,5.2nm,0.9s,baz=33,slow=7.5,SNR=10
comp=Z,5.2nm,0.9s
**V53A Saluda 47.32 102** IAmb IAmb 10 05 34.7
comp=Z,7.4nm,0.8s
**DRIO Del Rio 47.35 124** IAmb IAmb 10 05 37.2
comp=Z,12nm,1.4s
**V55A Taylorsville 47.71 100** IAmb IAmb 10 05 37.5
comp=Z,9.2nm,0.9s
**LRAL Lakeview Retre 48.30 108** P **P** **10 05 41.6 +0.3**
**HPIG 48.30 131** IAmb IAmb 10 05 44.6
comp=Z,5.8nm,0.9s
**NB2 NORSAR Subarra 48.58 15** P **P** **10 05 42.3 -0.9**
comp=Z,1.7nm,0.7s,baz=348,slow=7.4
**NB2 NORSAR Subarra 48.58 15** P **P** **10 05 44.8 +1.6**
**NOA NORSAR Array B 48.58 15** P **P** **10 05 42.6 -0.6**
comp=Z,0.9nm,0.6s,baz=348,slow=7.7,SNR=5.5
comp=Z,0.9nm,0.6s
**HODGE Hodges 48.81 102** IAmb IAmb 10 05 45.9
comp=Z,9.0nm,0.8s
**JSC Jenkinsville 49.11 101** IAmb IAmb 10 05 48.1
comp=Z,12nm,1.0s
**FINES FINESS Array B 49.13 6** P **P** **10 05 46.9 -0.5**
comp=Z,5.0nm,0.6s,baz=2.2,slow=8.0,SNR=21
comp=Z,5.0nm,0.6s
**GOGA Godfrey 49.15 104** P **P** **10 05 48.4 +0.5**
**GOGA Godfrey 49.15 104** P **P** **10 05 48.4 +0.5**
GOGA pmax pmax
comp=Z,13nm,0.9s
**152A Waverly Hall 49.40 106** IAmb IAmb 10 05 52.8
comp=Z,14nm,1.0s
**HFS Hagfors 49.69 14** P **P** **10 05 51.1 -0.6**
comp=Z,9.9nm,0.4s,baz=355,slow=4.8,SNR=63
HFS PcP **PcP** **10 07 13.1 +0.4**
comp=Z,2.5nm,0.5s,baz=90,slow=2.9,SNR=2.5
comp=Z,9.9nm,0.4s
**CN2 Changchun 49.70 288** P **P** **10 05 54.1 +2.2**
CN2 pmax pmax
comp=Z,10.0nm,0.5s
**ZALV Zalesovo Beam 51.64 325** P **P** **10 06 05.6 -0.9**
**ZALV Zalesovo Beam 51.64 325** P **P** **10 06 05.4 -1.0**
comp=Z,3.9nm,0.6s,baz=14,slow=7.4,SNR=9.6
comp=Z,3.9nm,0.6s
**ZALV Zalesovo Beam 51.64 325** *i* P **P** **10 06 07.6 +1.1**
ZALV pmax pmax
comp=Z,4.0nm,0.6s
**MJB9 Matsu-Tunnel 51.77 273** IAmb IAmb 10 06 10.2
comp=Z,14nm,1.0s
**MAJO Matsushiro 51.78 273** P **P** **10 06 06.4 -1.3**
MAJO IAmb IAmb 10 06 10.2
comp=Z,15nm,1.0s
**MAJO Matsushiro 51.78 273**⇑ *i*P **P** **10 06 08.2 +0.5**
MAJO pmax pmax
comp=Z,16nm,1.0s
**MJAR Matsushiro Arr 51.78 273** P **P** **10 06 08.8 +1.1**
comp=Z,7.3nm,0.9s,baz=8.1,slow=8.1,SNR=29
comp=Z,7.3nm,0.9s
**ULN Ulaanbaatar 51.80 305***ce*P **P** **10 06 09.6 +1.7**
ULN pmax pmax
comp=Z,5.0nm,1.2s
**SONM Songino Array 52.01 306** P **P** **10 06 11.1 +1.6**
comp=Z,6.6nm,1.0s,baz=28,slow=6.5,SNR=24
comp=Z,6.6nm,1.0s
**VSU Vasula 52.14 6***ce*P **P** **10 06 09.7 -0.4**
VSU pmax pmax
comp=Z,20nm,1.1s
**EKA Eskdalemuir Ar 52.35 27** P **P** **10 06 11.4 -0.2**
comp=Z,12nm,0.8s,baz=332,slow=6.6,SNR=29
comp=Z,12nm,0.8s
**ARU Arti 53.19 344** P **P** **10 06 16.9 -1.0**
ARU IAmb IAmb 10 06 20.5
comp=Z,8.6nm,0.7s
**ARU Arti 53.19 344** P **P** **10 06 18.0 +0.1**
comp=Z,8.3nm,0.6s,baz=343,slow=5.9,SNR=10
comp=Z,8.3nm,0.6s
**ARU Arti 53.19 344***c* iP **P** **10 06 18.2 +0.3**
ARU **10 08 15.1**
ARU S **S** **10 13 51.5 +3.4**
ARU SS **SS** **10 17 29.1 +2.5**
ARU pmax pmax
comp=Z,9.0nm,0.7s
**KSRS Korea Array 54.53 283** P **P** **10 06 29.1 +1.1**
comp=Z,5.7nm,1.0s,baz=22,slow=6.6,SNR=14
comp=Z,5.7nm,1.0s
**KSAR Wonju Array Be 54.56 283** P **P** **10 06 26.1 -2.1**
**KSAR Wonju Array Be 54.56 283** P **P** **10 06 26.1 -2.1**
**BRVK Borovoye 55.05 335** P **P** **10 06 31.5 0.0**
BRVK IAmb IAmb 10 06 33.9
comp=Z,4.6nm,0.8s
**BRVK Borovoye 55.05 335** P **P** **10 06 31.5 0.0**
BRVK pmax pmax
comp=Z,5.0nm,0.8s
**BVAR Borovoye Array 55.07 335** P **P** **10 06 31.9 +0.2**
comp=Z,3.6nm,0.7s,baz=356,slow=4.9,SNR=14
comp=Z,3.6nm,0.7s
**DGZ Jazzator, Alta 55.09 321**⇓ *i*P **P** **10 06 33.5 +1.4**
DGZ pmax pmax
comp=Z,13nm,1.7s
**OBN Obninsk 55.64 359**⇑ *e*P **P** **10 06 35.5 -0.2**
OBN *PP **pP** **10 06 39.0 -0.1**
OBN *SP **sP** **10 06 40.0 -0.4**
OBN **10 07 35.0**
OBN S **S** **10 14 26.0 +4.9**
OBN SS **SS** **10 18 10.0 +4.8**
OBN pmax pmax
comp=Z,6.0nm,0.9s
OBN MLR MLR
comp=Z,26nm,16.0s
**TJN Taejon 55.70 283**⇑ *i*P **P** **10 06 38.7 +2.3**
**KURK Kurchatov 55.91 328**⇑ *i*P **P** **10 06 38.5 +0.7**
KURK pmax pmax
comp=Z,13nm,1.0s
**KURBB Kurchatov Arra 56.02 328** P **P** **10 06 38.5 0.0**
comp=Z,9.1nm,0.9s,baz=11,slow=7.2,SNR=23
KURBB PcP **PcP** **10 07 36.6 0.0**
comp=Z,0.6nm,0.3s,baz=19,slow=5.9,SNR=1.1
comp=Z,9.1nm,0.9s
**MNK Minsk 56.14 5** *i* P **P** **10 06 38.8 -0.5**
MNK *i* **10 07 32.0**
MNK *i* **10 08 48.3**
MNK *i* S **S** **10 14 28.2 +0.4**
MNK pmax pmax
comp=N,8.0nm,0.8s
MNK pmax pmax
comp=Z,16nm,0.8s
MNK pmax pmax
comp=E,10.0nm,0.7s
MNK MLR MLR
comp=E,73nm,17.0s
MNK MLR MLR
comp=N,39nm,16.0s
MNK MLR MLR
comp=Z,25nm,15.0s
**JNU Nakatsue 57.43 278** P **P** **10 06 49.4 +0.5**
comp=Z,5.4nm,0.9s,baz=62,slow=11,SNR=2.4
comp=Z,5.4nm,0.9s
**BELG Belogornoye 58.03 351** P **P** **10 06 52.0 -0.6**
comp=Z,15nm,0.7s,baz=48,slow=12,SNR=4.7
BELG LR LR 10 35 26.5
comp=Z,20nm,18.0s,baz=62,slow=40
comp=Z,15nm,0.7s
**BELG Belogornoye 58.03 351***c* iP **P** **10 06 52.8 +0.1**
BELG pmax pmax
comp=Z,3.0nm,0.9s
**BSTI Sart Tilman 58.23 22** *d*P **P** **10 06 54.5 +0.4**
**MEM Membach 58.26 21** *d*P **P** **10 06 54.7 +0.3**
**BTNL Ternell 58.30 21** *d*P **P** **10 06 54.7 0.0**
**BCLA Clavier 58.35 22** *d*P **P** **10 06 55.6 +0.6**
**BGES Gesves 58.36 22** *d*P **P** **10 06 55.1 +0.1**
**CLL Collm 58.36 16** *i* P **P** **10 06 54.8 -0.2**
comp=Z,9.0nm,0.6s
**CLL Collm 58.36 16** *i* P **P** **10 06 54.8 -0.2**
CLL pmax pmax
comp=Z,9.0nm,0.6s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BMRD | **Maredsous** | 58.40 | 22 | *d*P | | P | | 10 06 55.5 | +0.2 |
| GIVF | **Givet** | 58.60 | 22 | *e*P | | P | | 10 06 57.1 | +0.4 |
| MK31 | **Makanchi Array** | 58.95 | 324 | *c i*P | | P | | 10 06 59.8 | +0.6 |
| MKAR | **Makanchi Array** | 58.95 | 324 | P | | P | | 10 06 57.1 | -2.1 |
| MKAR | **Makanchi Array** | 58.95 | 324 | P | | P | | 10 06 58.7 | -0.5 |
| | comp=Z,1.1nm,0.6s,baz=43,slow=7.3,SNR=9.0 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| MAKZ | **Makanchi** | 59.00 | 324 | P | | P | | 10 06 58.8 | -0.8 |
| MAKZ | | | | IAmb | | IAmb | | 10 07 01.8 | |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| MAKZ | **Makanchi** | 59.00 | 324 | P | | P | | 10 06 58.8 | -0.8 |
| MAKZ | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| AKTO | **Aktyubinsk** | 59.16 | 343 | P | | P | | 10 07 00.5 | -0.1 |
| | comp=Z,2.2nm,0.6s,baz=37,slow=5.3,SNR=6.7 | | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| AKASG | **Malin Array Be** | 59.98 | 4 | P | | P | | 10 07 06.0 | -0.3 |
| | comp=Z,5.9nm,0.6s,baz=357,slow=6.8,SNR=14 | | | | | | | | |
| | comp=Z,5.9nm,0.6s | | | | | | | | |
| AKASG | **Malin Array Be** | 59.98 | 4 | *ce*P | | P | | 10 07 06.0 | -0.3 |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| AKBB | **Malin Array Si** | 59.98 | 4 | P | | P | | 10 07 06.0 | -0.2 |
| AKBB | **Malin Array Si** | 59.98 | 4 | *d i*P | | P | | 10 07 06.1 | -0.2 |
| AKBB | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| KIEV | **Kiev** | 59.99 | 4 | P | | P | | 10 07 04.5 | -1.8 |
| KIEV | **Kiev** | 59.99 | 4 | P | | P | | 10 07 04.5 | -1.8 |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| ABKAR | **Akbulak array** | 60.12 | 342 | P | | P | | 10 07 07.2 | -0.1 |
| ABKAR | **Akbulak array** | 60.12 | 342 | IAmb | | IAmb | | 10 07 10.1 | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| MORC | **Moravsky Berou** | 60.28 | 13 | *e*P | | P | | 10 07 07.9 | -0.5 |
| KHC | **Kasperske Hory** | 60.57 | 16 | ⇑*i*P | | P | | 10 07 11.9 | +1.5 |
| KHC | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| VRAC | **Vranov** | 60.67 | 14 | P | | P | | 10 07 11.2 | +0.2 |
| | comp=Z,3.1nm,0.5s,baz=0.0,slow=11,SNR=3.2 | | | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | | | |
| GEC2 | **GERESS Array S** | 60.87 | 16 | IAmb | | IAmb | | 10 07 13.8 | |
| | comp=Z,6.7nm,1.0s | | | | | | | | |
| GERES | **GERESS Array B** | 60.87 | 16 | P | | P | | 10 07 10.9 | -1.5 |
| GERES | **GERESS Array B** | 60.87 | 16 | P | | P | | 10 07 12.7 | +0.2 |
| | comp=Z,2.4nm,0.7s,baz=262,slow=6.7,SNR=8.8 | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | |
| KRUC | **Moravsky** | 60.90 | 14 | *e*P | | P | | 10 07 12.7 | +0.1 |
| LANS | **Liptovska Anna** | 61.05 | 12 | *e*P | | P | | 10 07 14.3 | +0.6 |
| LANS | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| LANS | **Liptovska Anna** | 61.05 | 12 | *e*P | | P | | 10 07 14.3 | +0.6 |
| JAVC | **Velka Javorina** | 61.20 | 13 | *e*P | | P | | 10 07 15.7 | +1.0 |
| KOLS | **Kolonicke sedl** | 61.45 | 10 | *e*P | | P | | 10 07 16.8 | +0.5 |
| KOLS | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| KOLS | **Kolonicke sedl** | 61.45 | 10 | *e*P | | P | | 10 07 16.8 | +0.5 |
| GTA | **Gaotai** | 61.62 | 307 | *e*P | | P | | 10 07 19.9 | +2.1 |
| GTA | | | | pP | | sP | | 10 07 24.8 | +2.3 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| AVF | **Avril sur Loir** | 61.63 | 24 | *e*P | | P | | 10 07 17.0 | -0.6 |
| VYHS | **Vyhne** | 61.66 | 12 | *e*P | | P | | 10 07 17.9 | +0.2 |
| VYHS | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| VYHS | **Vyhne** | 61.66 | 12 | *e*P | | P | | 10 07 17.9 | +0.2 |
| KECS | **Kecovo** | 61.78 | 11 | *e*P | | P | | 10 07 16.9 | -1.7 |
| KECS | **Kecovo** | 61.78 | 11 | *e*P | | P | | 10 07 16.9 | -1.7 |
| RETA | **Reutte** | 61.90 | 19 | *ep*P | | P | | 10 07 19.7 | +0.3 |
| | comp=Z,2.5nm,0.8s | | | | | | | | |
| MOA | **Molin** | 61.91 | 16 | *ep*P | | P | | 10 07 19.4 | 0.0 |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| MOTA | **Moosalm** | 62.08 | 18 | *e*P | | P | | 10 07 20.4 | -0.4 |
| | comp=Z,3.4nm,0.6s | | | | | | | | |
| LESA | **Schwarzleotal** | 62.17 | 17 | *ep*P | | P | | 10 07 21.1 | -0.2 |
| | comp=Z,4.1nm,0.6s | | | | | | | | |
| SQTA | **Sankt Quirin** | 62.21 | 18 | *ep*P | | P | | 10 07 21.7 | 0.0 |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| WTTA | **Wattenberg** | 62.22 | 18 | *e*P | | P | | 10 07 20.8 | -0.9 |
| | comp=Z,4.4nm,0.7s | | | | | | | | |
| RONA | **Rosalia, Austr** | 62.24 | 14 | *ep*P | | P | | 10 07 22.5 | +0.8 |
| | comp=Z,6.5nm,0.7s | | | | | | | | |
| PSZ | **Piszkesteto** | 62.31 | 12 | IAmb | | IAmb | | 10 07 25.1 | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| KBA | **Koelnbreinsper** | 62.58 | 17 | *ep*P | | P | | 10 07 25.0 | +0.8 |
| | comp=Z,18nm,1.2s | | | | | | | | |
| ARSA | **Arzberg** | 62.62 | 15 | *ep*P | | P | | 10 07 24.1 | -0.1 |
| | comp=Z,5.1nm,1.2s | | | | | | | | |
| FUORN | **Ofenpass-Fuorn** | 62.70 | 19 | IAmb | | IAmb | | 10 07 26.4 | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| BUR08 | **Bucovina Ar. S** | 62.89 | 8 | IAmb | | IAmb | | 10 07 28.1 | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| BURAR | **Bucovina Array** | 62.92 | 8 | P | | P | | 10 07 25.9 | -0.4 |
| BURAR | | | | IAmb | | IAmb | | 10 07 27.1 | |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| MYKA | **Terra Mystica** | 63.05 | 17 | *e*P | | P | | 10 07 26.4 | -0.8 |
| | comp=Z,2.6nm,0.6s | | | | | | | | |
| SOKA | **Soboth** | 63.14 | 15 | *e*P | | P | | 10 07 27.3 | -0.5 |
| | comp=Z,1.6nm,0.7s | | | | | | | | |
| OBKA | **Obir** | 63.26 | 16 | *ep*P | | P | | 10 07 29.0 | +0.4 |
| | comp=Z,14nm,0.8s | | | | | | | | |
| CADS | **Cadrg** | 63.46 | 16 | *i*P | | P | | 10 07 29.3 | -0.6 |
| VIVF | **Saint-Julien-l** | 63.72 | 24 | *e*P | | P | | 10 07 31.2 | -0.4 |
| JAVS | **Javornik** | 63.82 | 16 | *i*P | | P | | 10 07 31.7 | -0.6 |
| USP | **Osenovka** | 63.85 | 329 | P | | P | | 10 07 33.4 | +1.0 |
| | SNR=6.6 | | | | | | | | |
| TKM2 | **Tokmak 2** | 63.98 | 328 | P | | P | | 10 07 34.6 | +1.1 |
| | SNR=11 | | | | | | | | |
| KBK | **Karagaybulak** | 64.36 | 328 | P | | P | | 10 07 37.2 | +1.3 |
| | SNR=6.5 | | | | | | | | |
| AAK | **Ala-Archa** | 64.46 | 329 | *c i*P | | P | | 10 07 38.2 | +1.6 |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| EKS2 | **Erkin-Say** | 64.56 | 329 | P | | P | | 10 07 38.5 | +1.2 |
| | SNR=15 | | | | | | | | |
| KK31 | **Karatay Array** | 64.70 | 332 | P | | P | | 10 07 37.4 | -0.6 |
| KK31 | | | | IAmb | | IAmb | | 10 07 40.4 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| KK31 | **Karatay Array** | 64.70 | 332 | P | | P | | 10 07 37.4 | -0.6 |
| KK31 | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| KKAR | **Karatay Array** | 64.70 | 332 | P | | P | | 10 07 37.2 | -0.8 |
| KKAR | | | | IAmb | | IAmb | | 10 07 40.4 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| KKAR | **Karatay Array** | 64.70 | 332 | P | | P | | 10 07 37.3 | -0.8 |
| KKAR | **Karatay Array** | 64.70 | 332 | P | | P | | 10 07 37.2 | -0.8 |
| KKAR | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| AML | **Almayashu** | 65.09 | 329 | P | | P | | 10 07 42.6 | +1.5 |
| | SNR=8.0 | | | | | | | | |
| KBZ | **Khabaz** | 66.89 | 354 | P | | P | | 10 07 52.1 | 0.0 |
| | comp=Z,1.3nm,0.6s,baz=333,slow=4.5,SNR=2.0 | | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | | |
| SOC | **Sochi** | 67.13 | 356 | *e*P | | P | | 10 07 52.8 | -0.8 |
| SOC | | | | *e* | | | | 10 10 20.4 | |
| SOC | | | | *e*PPP | | PPP | | 10 11 56.1 | |
| SOC | | | | *e*S | | S | | 10 16 47.0 | -0.4 |
| SOC | | | | *e*SS | | SS | | 10 21 03.8 | -1.5 |
| SOC | | | | MLR | | MLR | | | |
| | comp=Z,65nm,19.0s | | | | | | | | |
| ESDC | **Sonseca Array** | 67.35 | 32 | P | | P | | 10 07 55.7 | +0.5 |
| ESDC | | | | IAmb | | IAmb | | 10 07 56.6 | |
| | comp=Z,6.1nm,1.2s | | | | | | | | |
| ESDC | **Sonseca Array** | 67.35 | 32 | P | | P | | 10 07 55.3 | +0.1 |
| | comp=Z,1.5nm,0.6s,baz=350,slow=6.1,SNR=10 | | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| BR131 | **Keskin Array S** | 71.03 | 1 | ⇑*i*P | | P | | 10 08 17.8 | -0.3 |
| BRTR | **Keskin Array B** | 71.03 | 1 | P | | P | | 10 08 18.7 | +0.6 |
| | comp=Z,2.1nm,0.9s,baz=352,slow=3.6,SNR=8.1 | | | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |
| PZH | **PanZhiHua** | 73.13 | 301 | P | | P | | 10 08 30.5 | -0.3 |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,210nm,4.9s | | | | | | | | |
| KEST | **Kesra** | 73.32 | 22 | P | | P | | 10 08 32.5 | +0.8 |
| | comp=Z,8.5nm,0.7s,baz=349,slow=1.0,SNR=9.6 | | | | | | | | |
| | comp=Z,8.5nm,0.7s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | 81.54 | 301 | P | | P | | 10 09 19.2 | +1.4 |
| | comp=Z,5.6nm,0.9s,baz=1.5,slow=6.6,SNR=17 | | | | | | | | |
| | comp=Z,5.6nm,0.9s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | 81.54 | 301 | *ce*P | | P | | 10 09 19.2 | +1.4 |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| PPT | **Papeete** | 86.95 | 185 | P | | P | | 10 09 46.0 | +0.9 |
| | comp=Z,21nm,0.7s,baz=59,slow=13,SNR=2.2 | | | | | | | | |
| | comp=Z,21nm,0.7s | | | | | | | | |
| PPT | **Papeete** | 86.95 | 185 | P | | P | | 10 09 46.0 | +0.9 |
| NNA | **Nana** | 93.68 | 115 | LR | | LR | | 10 54 30.6 | |
| | comp=Z,22nm,18.3s,baz=0.0,slow=37 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | 94.23 | 33 | P | | P | | 10 10 17.6 | -1.8 |
| | comp=Z,0.5nm,0.6s,baz=344,slow=5.2,SNR=6.1 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| PLCA | **Paso Flores** | 122.42 | 120 | PKP | | PKPdf | | 10 15 54.6 | 0.0 |
| | comp=Z,1.1nm,0.7s,baz=315,slow=1.6,SNR=3.9 | | | | | | | | |
| VNDA | **Vanda** | 150.25 | 201 | PKPbc | | PKPbc | | 10 16 48.5 | -0.9 |
| | comp=Z,0.4nm,0.7s,baz=94,slow=8.9,SNR=2.2 | | | | | | | | |
| QSPA | **South Pole Qui** | 159.40 | 180 | PKP | | PKPdf | | 10 16 57.2 | +0.1 |
| | comp=Z,1.3nm,1.0s,baz=17,slow=4.0,SNR=3.6 | | | | | | | | |
| QSPA | | | | PKPab | | PKPab | | 10 17 35.2 | +0.1 |
| | comp=Z,1.0nm,1.0s,baz=4.5,slow=3.2,SNR=1.4 | | | | | | | | |
| SNAA | **Sanae** | 167.34 | 117 | PKPab | | PKPab | | 10 18 09.0 | -0.9 |
| | comp=Z,0.8nm,0.8s,baz=320,slow=6.2,SNR=2.3 | | | | | | | | |
| SNAA | **Sanae** | 167.34 | 117 | PKP2 | | PKPab | | 10 18 09.0 | -0.9 |

*KRSC* ***13*** *10:03:07.5±2.0, 48°.39N×154°.40E, h90km±38km, Ml4.4*
*MOS* ***13*** *10:03:11.1±0.9, 48°.95N×153°.39E, h131km, mb3.9/8, Error ellipse: s-maj=15.5km s-min=5.2km az=64.0*
*SKHL* ***13*** *10:03:12.6±0.2, 48°.80N×154°.00E, h142km±7km, mb4.7/8, msha5.6/7*
*NEIC* ***13*** *10:03:12.1±1.4, 48°.9N±0°.1×153°.5E±0°.2, h127km±5km, mb4.2/16, Error ellipse: s-maj=20.2km s-min=12.2km az=149.0*
*IDC* ***13*** *10:03:14.8±1.9, 48°.94N×153°.53E, h153km±18km, mb3.5/18, mbtmp4.1/25, Error ellipse: s-maj=14.5km s-min=9.9km az=147.0*

**ISC 13 10:03:12.5±0.5, 48°.77N±0°.07×153°.73E±0°.06, h140km, n122,σ2s07/143, mb3.9/30, 1C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SKR | **Severo-Kuril's** | 2.46 | 38 | *e*P | | Pn | | 10 03 51.2 | -1.4 |
| SKR | | | | AMB | | AMB | | 10 03 55.1 | |
| | 80nm,0.5s | | | | | | | | |
| SKR | | | | *e*S | | Sn | | 10 04 20.0 | -3.6 |
| SKR | | | | A | | A | | 10 04 26.6 | |
| | 350nm,0.3s | | | | | | | | |
| SKR | | | | A | | A | | 10 04 26.6 | |
| | 300nm,0.3s | | | | | | | | |
| SKR | **Severo-Kuril's** | 2.46 | 38 | *e*PN | | Pn | | 10 03 53.7 | +1.1 |
| SKR | | | | *e*S | | Sn | | 10 04 22.2 | -1.4 |
| SKR | | | | pmax | | pmax | | | |
| | comp=Z,226nm,0.9s | | | | | | | | |
| SKR | | | | smax | | smax | | | |
| | comp=N,940nm,0.9s | | | | | | | | |
| SKR | | | | smax | | smax | | | |
| | comp=E,584nm,0.4s | | | | | | | | |
| KDTR | **Khodutka, Kamc** | 4.13 | 41 | *e*P | | Pn | | 10 04 11.1 | -2.9 |
| KDTR | | | | *e*S | | Sn | | 10 04 55.1 | -6.8 |
| KDTR | **Khodutka, Kamc** | 4.13 | 41 | *e*P | | Pn | | 10 04 11.2 | -2.9 |
| KDTR | | | | AMB | | AMB | | 10 04 13.3 | |
| | comp=E,60nm,0.3s | | | | | | | | |
| KDTR | | | | *e*S | | Sn | | 10 04 55.2 | -6.8 |
| KDTR | | | | A | | A | | 10 04 57.0 | |
| | comp=E,360nm,0.4s | | | | | | | | |
| KDTR | | | | A | | A | | 10 04 57.0 | |
| | comp=E,290nm,0.4s | | | | | | | | |
| KDTR | **Khodutka, Kamc** | 4.13 | 41 | PN | | Pn | | 10 04 11.1 | -2.9 |
| KDTR | | | | S | | Sn | | 10 04 55.1 | -6.8 |
| ASAK | **Asacha** | 4.49 | 35 | *e*P | | Pn | | 10 04 18.3 | -0.7 |
| ASAK | | | | *e*S | | Sn | | 10 05 08.5 | -2.2 |
| ASAK | **Asacha** | 4.49 | 35 | PN | | Pn | | 10 04 18.2 | -0.7 |
| ASAK | | | | S | | Sn | | 10 05 08.4 | -2.2 |
| MTVR | **Mutnovka** | 4.68 | 36 | *e*P | | Pn | | 10 04 20.8 | -0.8 |
| MTVR | | | | *e*S | | Sn | | 10 05 12.1 | -3.2 |
| MTVR | **Mutnovka** | 4.68 | 36 | PN | | Pn | | 10 04 20.7 | -0.8 |
| MTVR | | | | S | | Sn | | 10 05 12.0 | -3.2 |
| GRL | **Gorelyy** | 4.69 | 34 | *e*P | | Pn | | 10 04 21.2 | -0.5 |
| GRL | | | | *e*S | | Sn | | 10 05 13.7 | -1.7 |
| GRL | **Gorelyy** | 4.69 | 34 | PN | | Pn | | 10 04 21.1 | -0.5 |
| GRL | | | | S | | Sn | | 10 05 13.7 | -1.7 |
| KRMR | **Karymshinskiy** | 4.93 | 33 | *e*P | | Pn | | 10 04 22.7 | -2.0 |
| KRMR | **Karymshinskiy** | 4.93 | 33 | PN | | Pn | | 10 04 22.7 | -2.0 |
| PETK | **Petropavlovsk-** | 5.02 | 28 | P | | Pn | | 10 04 25.8 | -0.1 |
| | comp=E,22nm,0.6s,baz=199,slow=13,SNR=17 | | | | | | | | |
| PET | **Petropavlovsk** | 5.28 | 34 | Pn | | Pn | | 10 04 28.2 | -1.1 |
| PET | **Petropavlovsk** | 5.28 | 34 | *e*P | | Pn | | 10 04 27.5 | -1.8 |
| PET | | | | AMB | | AMB | | 10 04 29.3 | |
| | comp=E,10.0nm,0.4s | | | | | | | | |
| PET | | | | *e*S | | Sn | | 10 05 24.7 | -4.6 |
| PET | | | | A | | A | | 10 05 35.7 | |
| | comp=E,40nm,0.5s | | | | | | | | |
| PET | | | | A | | A | | 10 05 35.7 | |
| | comp=E,30nm,0.5s | | | | | | | | |
| PET | **Petropavlovsk** | 5.28 | 34 | *e*PN | | Pn | | 10 04 26.7 | -2.6 |
| PET | | | | *e*S | | Sn | | 10 05 24.5 | -4.8 |
| PET | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.4s | | | | | | | | |
| PET | | | | smax | | smax | | | |
| | comp=E,34nm,0.7s | | | | | | | | |
| PET | | | | smax | | smax | | | |
| | comp=N,48nm,0.6s | | | | | | | | |
| DALK | **Dalny** | 5.32 | 35 | *e*P | | Pn | | 10 04 28.8 | -1.1 |
| DALK | **Dalny** | 5.32 | 35 | PN | | Pn | | 10 04 28.8 | -1.1 |
| KUR | **Kuril'sk** | 5.35 | 231 | *e*P | | Pn | | 10 04 33.1 | +2.8 |
| KUR | | | | AMB | | AMB | | 10 04 34.4 | |
| | comp=N,40nm,0.6s | | | | | | | | |
| KUR | | | | *e*S | | Sn | | 10 05 33.8 | +2.8 |
| KUR | | | | A | | A | | 10 05 43.5 | |
| | comp=N,70nm,0.5s | | | | | | | | |
| KUR | | | | A | | A | | 10 05 43.5 | |
| | comp=N,50nm,0.5s | | | | | | | | |
| KUR | **Kuril'sk** | 5.35 | 231 | *e*PN | | Pn | | 10 04 33.6 | +3.3 |
| KUR | | | | pmax | | pmax | | | |
| | comp=Z,38nm,0.7s | | | | | | | | |
| KOK | **Koryaka** | 5.49 | 32 | *e*P | | Pn | | 10 04 32.0 | -0.2 |
| KOK | **Koryaka** | 5.49 | 32 | *e*P | | Pn | | 10 04 33.0 | +0.8 |
| KOK | **Koryaka** | 5.49 | 32 | PN | | Pn | | 10 04 32.0 | -0.2 |
| UGLR | **Uglovaya** | 5.49 | 34 | *e*P | | Pn | | 10 04 31.9 | -0.4 |
| UGLR | **Uglovaya** | 5.49 | 34 | PN | | Pn | | 10 04 31.8 | -0.4 |
| AVH | **Avacha** | 5.50 | 33 | *e*P | | Pn | | 10 04 32.6 | +0.1 |
| AVH | **Avacha** | 5.50 | 33 | *e*P | | Pn | | 10 04 32.5 | +0.1 |
| AVH | **Avacha** | 5.50 | 33 | PN | | Pn | | 10 04 32.5 | +0.1 |
| SMAR | **Somma** | 5.52 | 33 | *e*P | | Pn | | 10 04 32.4 | -0.5 |
| SMAR | **Somma** | 5.52 | 33 | PN | | Pn | | 10 04 32.3 | -0.5 |
| KRX | **Arik** | 5.54 | 32 | *e*P | | Pn | | 10 04 32.7 | -0.3 |
| KRX | **Arik** | 5.54 | 32 | PN | | Pn | | 10 04 32.7 | -0.3 |
| GNL | **Ganaly** | 5.60 | 27 | *e*P | | Pn | | 10 04 33.9 | +0.1 |
| GNL | **Ganaly** | 5.60 | 27 | PN | | Pn | | 10 04 33.8 | +0.1 |
| SHO | **Shikotan** | 6.84 | 227 | *e*P | | Pn | | 10 04 48.6 | -1.7 |
| SHO | | | | *e*S | | Sn | | 10 06 01.3 | -5.6 |
| SHO | **Shikotan** | 6.84 | 227 | *e*P | | Pn | | 10 04 49.6 | -0.7 |
| SHO | | | | AMB | | AMB | | 10 04 53.7 | |
| | comp=Z,30nm,0.4s | | | | | | | | |
| SHO | | | | *e*S | | Sn | | 10 06 03.7 | -3.2 |
| SHO | | | | A | | A | | 10 06 06.2 | |
| | comp=Z,30nm,0.4s | | | | | | | | |
| SHO | | | | A | | A | | 10 06 06.2 | |
| | comp=Z,70nm,0.4s | | | | | | | | |
| SHO | **Shikotan** | 6.84 | 227 | *e*PN | | Pn | | 10 04 48.7 | -1.7 |
| SHO | | | | *e*S | | Sn | | 10 06 01.8 | -5.1 |
| SHO | | | | pmax | | pmax | | | |
| | comp=E,15nm,0.2s | | | | | | | | |
| SHO | | | | pmax | | pmax | | | |
| | comp=Z,24nm,0.2s | | | | | | | | |
| YUK | **Yuzh-Kuril'sk** | 7.21 | 232 | *e*P | | Pn | | 10 04 55.8 | +0.5 |
| YUK | | | | AMB | | AMB | | 10 04 58.4 | |
| | comp=Z,50nm,0.4s | | | | | | | | |
| YUK | | | | *e*S | | Sn | | 10 06 16.7 | +1.0 |
| YUK | | | | A | | A | | 10 06 27.0 | |
| | comp=Z,40nm,0.5s | | | | | | | | |
| YUK | | | | A | | A | | 10 06 27.0 | |
| | comp=Z,110nm,0.5s | | | | | | | | |
| YUK | **Yuzh-Kuril'sk** | 7.21 | 232 | *e*PN | | Pn | | 10 04 55.7 | +0.5 |
| YUK | | | | S | | Sn | | 10 06 17.0 | +1.3 |
| YUK | | | | pmax | | pmax | | | |
| | comp=Z,94nm,0.2s | | | | | | | | |
| YUK | | | | pmax | | pmax | | | |
| | comp=N,20nm,0.1s | | | | | | | | |
| YUK | | | | pmax | | pmax | | | |
| | comp=E,15nm,0.1s | | | | | | | | |
| TYV | **Tymovskoe** | 7.47 | 290 | *e*P | | Pn | | 10 05 00.5 | +1.8 |
| TYV | | | | AMB | | AMB | | 10 05 01.9 | |
| | comp=E,10.0nm,0.8s | | | | | | | | |
| RUSJ | **Misakicho** | 7.49 | 235 | *e*PN | | Pn | | 10 05 01.6 | +2.6 |
| YSS | **Yuzh-Sakhalins** | 7.61 | 260 | *e*P | | Pn | | 10 05 03.7 | +3.2 |
| YSS | | | | AMB | | AMB | | 10 05 04.7 | |
| | comp=E,10.0nm,0.7s | | | | | | | | |
| YSS | **Yuzh-Sakhalins** | 7.61 | 260 | *e*PN | | Pn | | 10 05 03.8 | +3.2 |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| NMR | **Nemuro--Hokkai** | 7.75 | 229 | ⇑*i*PN | | Pn | | 10 05 00.1 | -2.4 |
| NMR | | | | *e*S | | Sn | | 10 06 22.3 | -6.5 |
| JKA | **Kamikawa-asahi** | 8.98 | 243 | | | Pn | | 10 05 17.9 | -1.1 |
| JKA | **Kamikawa-asahi** | 8.98 | 243 | *e*P | | Pn | | 10 05 21.9 | +2.9 |
| ASAJ | **Asahikawa** | 8.98 | 243 | P | | Pn | | 10 05 21.9 | +2.8 |
| | comp=Z,10.0nm,0.6s,baz=98,slow=19,SNR=18 | | | | | | | | |
| ERM | **Erimo** | 10.04 | 232 | | | Pn | | 10 05 31.9 | -1.2 |
| ERM | **Erimo** | 10.04 | 232 | PN | | Pn | | 10 05 31.9 | -1.2 |
| JTM | **Tenmabayashi** | 12.01 | 233 | Pn | | Pn | | 10 05 55.1 | -4.1 |
| SHEM | **Shemya Is, Ala** | 13.48 | 65 | P | | Pn | | 10 06 19.4 | +1.4 |
| | comp=Z,13nm,0.6s,baz=270,slow=7.1,SNR=1.7 | | | | | | | | |
| KLR | **Kul'dur** | 14.44 | 280 | P | | Pn | | 10 06 30.9 | +0.8 |
| | comp=Z,2.4nm,0.9s,baz=67,slow=10.0,SNR=4.1 | | | | | | | | |
| KLR | **Kul'dur** | 14.44 | 280 | *e*P | | Pn | | 10 06 31.4 | +1.3 |
| KLR | **Kul'dur** | 14.44 | 280 | *e*P | | P | | 10 06 31.7 | -1.3 |
| KLR | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.4s | | | | | | | | |
| USA0B | **Ussuriysk Arra** | 15.64 | 261 | | | Pn | | 10 06 44.2 | -1.0 |
| USA0B | **Ussuriysk Arra** | 15.64 | 261 | *i*P | | P | | 10 06 48.5 | +2.1 |
| USRK | **Ussuriysk Ar.** | 15.64 | 261 | P | | P | | 10 06 46.1 | -0.3 |
| | comp=Z,3.1nm,0.6s,baz=63,slow=14,SNR=5.0 | | | | | | | | |
| MAJO | **Matsushiro** | 16.68 | 229 | | | Pn | | 10 06 58.2 | +0.2 |
| MAJO | | | | IAmb | | IAmb | | 10 07 01.7 | |
| | comp=Z,5.1nm,0.6s | | | | | | | | |
| MAJO | **Matsushiro** | 16.68 | 229 | P | | Pn | | 10 06 58.2 | +0.2 |
| MAJO | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| MJAR | **Matsushiro Arr** | 16.68 | 229 | P | | Pn | | 10 06 59.5 | +1.5 |
| | comp=Z,2.0nm,0.7s,baz=26,slow=12,SNR=4.0 | | | | | | | | |
| HEH | **HeiHe** | 17.13 | 285 | *e*P | | Pn | | 10 07 04.0 | +0.7 |
| HEH | | | | pmax | | pmax | | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| INU | **Inuyama** | 18.21 | 229 | | | P | | 10 07 14.9 | +0.1 |
| INU | | | | IAmb | | IAmb | | 10 07 17.8 | |
| | comp=Z,8.8nm,0.8s | | | | | | | | |
| YAK | **Yakutsk** | 18.90 | 324 | P | | P | | 10 07 22.2 | +0.3 |
| YAK | **Yakutsk** | 18.90 | 324 | P | | P | | 10 07 21.4 | -0.5 |
| | comp=Z,73nm,0.6s,baz=121,slow=4.5,SNR=10.0 | | | | | | | | |
| YAK | **Yakutsk** | 18.90 | 324 | *e*P | | Pn | | 10 07 24.3 | +0.3 |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,44nm,0.8s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=N,4.0nm,1.0s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=E,4.0nm,0.6s | | | | | | | | |
| KSRS | **Korea Array** | 21.86 | 248 | P | | P | | 10 07 55.6 | +1.7 |
| | comp=E,2.0nm,0.7s,baz=46,slow=9.7,SNR=6.4 | | | | | | | | |
| | comp=E,2.0nm,0.7s | | | | | | | | |
| XLT | **XiLinHaoTe** | 26.26 | 274 | *e*P | | P | | 10 08 34.4 | -0.2 |
| XLT | | | | sP | | pP | | 10 08 58.6 | -4.6 |
| XLT | | | | PP | | sP | | 10 09 17.8 | -1.4 |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| F19K | **Shaleruckik Mo** | 30.45 | 36 | P | | P | | 10 09 11.4 | 0.0 |
| F19K | | | | IAmb | | IAmb | | 10 09 18.9 | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| H19K | **Roundabout Mou** | 30.74 | 39 | P | | P | | 10 09 14.8 | +0.9 |
| H19K | | | | IAmb | | IAmb | | 10 09 15.7 | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| G21K | **Allakaket** | 32.07 | 37 | P | | P | | 10 09 26.5 | +0.9 |
| KDAK | **Kodiak Island** | 32.53 | 53 | *i*P | | P | | 10 09 33.6 | +3.8 |
| KDAK | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| COLA | **College** | 34.31 | 40 | *i*P | | P | | 10 09 45.2 | +0.2 |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| ILAR | **Eielson Array** | 34.73 | 40 | P | | P | | 10 09 49.6 | +1.0 |
| | comp=Z,0.4nm,0.7s,baz=263,slow=6.1,SNR=4.8 | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | |
| ILAR | **Eielson Array** | 34.73 | 40 | *e*P | | P | | 10 09 49.5 | +0.8 |
| INK | **Inuvik** | 39.73 | 34 | P | | P | | 10 10 31.6 | +0.9 |
| | comp=Z,1.4nm,0.4s,baz=286,slow=7.3,SNR=8.9 | | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| ZALV | **Zalesovo Beam** | 41.80 | 304 | P | | P | | 10 10 46.5 | -1.4 |
| | comp=Z,0.8nm,0.4s,baz=63,slow=10,SNR=2.5 | | | | | | | | |
| ZALV | | | | PcP | | PcP | | 10 12 41.9 | +0.7 |
| | comp=Z,0.6nm,0.3s,baz=65,slow=7.0,SNR=2.5 | | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| A36M | **Sachs Harbour** | 41.86 | 27 | P | | P | | 10 10 48.2 | +0.1 |
| A36M | | | | IAmb | | IAmb | | 10 10 49.7 | |
| | comp=Z,4.3nm,0.7s | | | | | | | | |
| C36M | **Paulatuk** | 42.87 | 31 | P | | P | | 10 10 57.1 | +0.8 |
| MK31 | **Makanchi Array** | 46.41 | 296 | P | | P | | 10 11 24.0 | -0.8 |
| MK31 | **Makanchi Array** | 46.41 | 296 | P | | P | | 10 11 24.0 | -0.8 |
| MK31 | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| MKAR | **Makanchi Array** | 46.41 | 296 | P | | P | | 10 11 24.1 | -0.6 |
| MKAR | **Makanchi Array** | 46.41 | 296 | P | | P | | 10 11 24.0 | -0.8 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **H03N2** | **Juan Fernandez** | **138.31** | **89** | T | T | 12 56 03.9 | | | |
| | baz=307,slow=74 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **138.33** | **88** | T | T | 12 56 06.2 | | | |
| | baz=307 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **138.33** | **89** | T | T | 12 56 03.6 | | | |
| | baz=307,slow=74 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **138.50** | **180** | PKP | **PKPdf** | **10 22 20.1** | **0.0** | | |
| | comp=Z,0.8nm,0.7s,baz=281,slow=1.6,SNR=6.9 | | | | | | | | |
| **CPUP** | **Villa Florida** | **147.08** | **58** | PKPbc | **PKPdf** | **10 22 37.0** | **+0.5** | | |
| | comp=Z,0.5nm,0.4s,baz=53,slow=5.1,SNR=1.6 | | | | | | | | |
| **CPUP** | **Villa Florida** | **147.08** | **58** | PKIKP | **PKPdf** | **10 22 37.0** | **+0.5** | | |
| **PLCA** | **Paso Flores** | **147.92** | **92** | PKPbc | **PKPbc** | **10 22 41.2** | **+0.5** | | |
| | comp=Z,1.2nm,0.6s,baz=278,slow=3.0,SNR=5.4 | | | | | | | | |
| **SNAA** | **Sanae** | **154.61** | **197** | PKP | **PKPdf** | **10 22 47.0** | **+0.3** | | |
| | comp=Z,1.2nm,1.1s,baz=257,slow=5.6,SNR=2.2 | | | | | | | | |
| SNAA | | | | PKPab | **PKPab** | **10 23 11.3** | **+0.6** | | |
| | comp=Z,0.4nm,0.5s,baz=144,slow=24,SNR=1.7 | | | | | | | | |

*ISN **13** 10:07:43.8±0.8, 34.69N×46.36E, h20km±5km, ML3.2*
*TEH **13** 10:07:44.7, 34.63N×46.29E, h8km±17km, ML2.9*
**ISC 13 10:07:44.5±0.9, 34.65N±0.03×46.31E±0.03, h11km±7km, n16, σ0.967/23, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.08** | **53** | Pg | **Pg** | **10 07 47.2** | **0.0** |
| IDHR | | | | Sg | **Sg** | **10 07 49.5** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.39** | **146** | Pg | **Pb** | **10 07 52.6** | **-0.9** |
| IGHG | | | | Sg | **Sb** | **10 07 58.7** | **-0.9** |
| **ILIN** | **Lien** | **0.60** | **63** | Pg | **Pb** | **10 07 56.8** | **-0.5** |
| **KGS1** | **Ghasr-e-Shirin** | **0.61** | **257** | Pg | **Pg** | **10 07 56.4** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.63** | **212** | Pg | **Pg** | **10 07 56.5** | **-0.2** |
| GLG1 | | | | Sg | **Sg** | **10 08 05.2** | **+0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **121** | Pg | **Pb** | **10 07 58.5** | **-0.6** |
| **ILBA** | **Ilam Banvizeh** | **1.03** | **185** | Pg | **Pb** | **10 08 03.8** | **-0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.11** | **79** | Pg | **Pn** | **10 08 06.6** | **+0.4** |
| **IBZA** | **Bozab** | **1.30** | **98** | Pg | **Pg** | **10 08 09.6** | **+0.2** |
| **IBDR** | **Badra** | **1.57** | **192** | *e*Pg | **Pb** | **10 08 13.0** | **-0.5** |
| IBDR | | | | *e*Sg | **Sb** | **10 08 34.0** | **+0.7** |
| **IKFM** | **Kafar-mosalman** | **1.70** | **131** | Pg | **Pg** | **10 08 17.1** | **0.0** |
| **IKRK** | **Kirkuk** | **1.78** | **295** | *e*Pn | **Pb** | **10 08 16.0** | **-1.1** |
| IKRK | | | | *e*Sn | **Sb** | **10 08 39.0** | **-0.5** |
| IKRK | | | | AML | AML | 10 08 45.0 | |
| | comp=N,320nm,0.7s | | | | | | |
| IKRK | | | | AML | AML | 10 08 47.7 | |
| | comp=E,236nm,0.8s | | | | | | |
| **HSAM** | **Samen** | **1.95** | **102** | Pn | **Pg** | **10 08 21.1** | **-0.7** |
| **BHD** | **Baghdad** | **2.11** | **230** | *e*Pn | **Pn** | **10 08 20.0** | **+0.3** |
| BHD | | | | *e*Sn | **Sb** | **10 08 48.0** | **-1.0** |
| **MAHB** | **Mahabad** | **2.17** | **347** | Pn | **Pb** | **10 08 24.0** | **+0.2** |
| **RAFI** | **Al-Rafai** | **2.92** | **183** | *e*Pn | **Pn** | **10 08 32.0** | **+1.1** |
| RAFI | | | | *e*Sn | **Sn** | **10 09 07.0** | **+1.0** |

**HEL 13 10:09:21.1±0.3, 67.62N×20.99E, h0km, ML1.5, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LANU** | **Lannavaara** | **0.57** | **41** | PG | Pg | 10 09 31.1 | -1.0 |
| | baz=224 | | | | | | |
| LANU | | | | SG | Sg | 10 09 39.0 | -0.5 |
| **SALU** | **Saltoluokta** | **0.99** | **257** | *e*P | Pg | 10 09 39.1 | -0.9 |
| **PAJU** | **Pajala** | **1.02** | **125** | PG | Pg | 10 09 39.3 | -1.3 |
| PAJU | | | | SB | Sg | 10 09 53.1 | -0.7 |
| **KLF** | **Kolari** | **1.21** | **107** | PG | Pg | 10 09 43.2 | -1.1 |
| KLF | | | | MSG | | 10 09 57.9 | |
| | comp=Z,2.5nm,0.2s | | | | | | |
| KLF | | | | SB | Sg | 10 09 59.5 | -0.4 |
| **HEF** | **Hetta** | **1.28** | **51** | *e*P | Pg | 10 09 44.2 | -1.3 |
| **HEF** | **Hetta** | **1.28** | **51** | PG | Pg | 10 09 43.5 | -2.0 |
| | baz=233 | | | | | | |
| HEF | | | | MSG | | 10 09 59.7 | |
| | comp=Z,2.5nm,0.2s | | | | | | |
| HEF | | | | SG | Sg | 10 10 00.3 | -1.7 |
| **KTK1** | **Kautokeino** | **1.62** | **30** | PN | Pn | 10 09 51.2 | +0.2 |
| KTK1 | | | | SN | Sg | 10 10 14.3 | +1.0 |
| **KALU** | **Kalix** | **2.00** | **151** | PG | Pn | 10 09 57.1 | +1.0 |
| KALU | | | | SG | Sb | 10 10 23.5 | -0.3 |
| **TOF** | **Tornio** | **2.03** | **138** | PG | Pn | 10 09 57.6 | +1.1 |
| | baz=319 | | | | | | |
| TOF | | | | MSG | | 10 10 21.5 | |
| | comp=Z,2.7nm,0.2s | | | | | | |
| TOF | | | | SG | Sb | 10 10 23.9 | -0.7 |
| **SGF** | **Sodankyl** | **2.13** | **92** | PN | Pn | 10 09 57.1 | -0.8 |
| SGF | | | | SG | Sn | 10 10 26.0 | +0.9 |
| **RNF** | **Rovaniemi** | **2.21** | **115** | PG | Pn | 10 09 60.0 | +1.0 |
| | baz=299 | | | | | | |
| RNF | | | | SG | Sb | 10 10 29.1 | -0.7 |
| **KEV** | **Kevo** | **3.07** | **43** | PB | Pn | 10 10 11.5 | +0.8 |
| KEV | | | | MSG | | 10 10 51.3 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| **VRF** | **Varrio** | **3.29** | **84** | SN | Sn | 10 10 54.4 | +0.8 |
| **OBF8** | **Ulkokalla** | **3.46** | **162** | SG | Sb | 10 11 05.2 | -0.3 |
| **OLKF** | **Oulanka, Finla** | **3.55** | **108** | SN | Sn | 10 11 00.4 | +0.3 |
| **KU6** | **Riekki** | **3.87** | **110** | PN | Pn | 10 10 23.1 | +1.4 |
| | baz=299 | | | | | | |

**UPP 13 10:09:53.2±0.1, 67.61N×20.98E, h0km, ML1.7, Unknown, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MASU** | **Masugnsbyn** | **0.42** | **111** | P | Pg | 10 10 01.2 | 0.0 |
| MASU | | | | S | Sg | 10 10 07.2 | +0.6 |
| **DUNU** | **Dundret** | **0.52** | **198** | P | Pg | 10 10 03.0 | 0.0 |
| **LANU** | **Lannavaara** | **0.58** | **41** | P | Pg | 10 10 04.3 | -0.1 |
| LANU | | | | S | Sg | 10 10 12.2 | +0.2 |
| **KOVU** | **Salmi** | **0.69** | **334** | P | Pg | 10 10 06.2 | -0.2 |
| **PAJU** | **Pajala** | **1.01** | **124** | P | Pg | 10 10 12.3 | -0.3 |

*NEIC **13** 10:13:11.7±2.6, 69.49N±0.02×144.26W±0.03, h2km±5km, Error ellipse: s-maj=3.2km s-min=1.4km az=196.0*
**AEIC 13 10:13:10.7±2.5, 69.48N±0.02×144.23W±0.04, h2km±2km, ML2.8, ML2.9/20(NEIC), Error ellipse: s-maj=3.1km s-min=2.0km az=168.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.23** | **50** | | Pg | 10 13 15.1 | -0.1 |
| C27K | | | | | Sg | 10 13 18.5 | +0.4 |
| **C26K** | **Camden Bay** | **0.50** | **332** | | Pg | 10 13 20.5 | +0.3 |
| C26K | | | | | Sg | 10 13 27.8 | +1.1 |
| **C26K** | **Camden Bay** | **0.50** | **332** | IAML | | 10 13 29.8 | |
| | comp=N,50nm,0.3s | | | | | | |
| C26K | | | | IAML | | 10 13 30.2 | |
| | comp=E,33nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.78** | **259** | IAML | | 10 13 53.4 | |
| | comp=E,570nm,0.6s | | | | | | |
| D25K | | | | IAML | | 10 13 53.7 | |
| | comp=N,524nm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.78** | **259** | | Pg | 10 13 25.4 | -0.1 |
| D25K | | | | | Sg | 10 13 36.2 | +0.7 |
| **D27M** | **Malcolm River** | **1.18** | **100** | | Pg | 10 13 33.4 | +0.1 |
| D27M | | | | | Sn | 10 13 50.5 | -0.5 |
| **D27M** | **Malcolm River** | **1.18** | **100** | IAML | | 10 14 08.0 | |
| | comp=E,103nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.59** | **281** | | Pb | 10 13 40.5 | -0.2 |
| **E27K** | **Coleen River** | **1.61** | **142** | | Pg | 10 13 41.4 | -0.1 |
| **F26K** | **Sheenjek River** | **1.79** | **179** | | Sg | 10 14 08.6 | +0.5 |
| F26K | | | | IAML | | 10 14 39.5 | |
| | comp=E,147nm,0.7s | | | | | | |
| F26K | | | | IAML | | 10 14 40.5 | |
| | comp=N,130nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.79** | **179** | | Pg | 10 13 44.9 | 0.0 |
| **E28M** | **Babbage River** | **1.90** | **115** | IAML | | 10 14 50.3 | |
| | comp=N,145nm,1.1s | | | | | | |
| E28M | | | | IAML | | 10 14 55.5 | |
| | comp=E,100nm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **1.90** | **115** | | Pb | 10 13 45.8 | -0.2 |
| E28M | | | | | Sg | 10 14 12.4 | +0.7 |
| **F25K** | **Christian Rive** | **1.96** | **196** | IAML | | 10 14 40.9 | |
| | comp=N,181nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **1.96** | **196** | | Pb | 10 13 47.7 | +0.5 |
| F25K | | | | | Sn | 10 14 09.2 | -1.0 |
| **F20K** | **Avaraart Lake** | **4.92** | **246** | | Pg | 10 14 45.7 | +0.9 |

*IDC **13** 10:18:39.5±0.9, 34.41N×45.79E, h0km, mb3.9/19, mbtmp3.9/27, ML3.7/8, MS2.8/4, Error ellipse:*
*s-maj=16.9km s-min=14.0km az=176.0*
*TEH **13** 10:18:42.6, 34.60N×45.80E, h8km±22km, ML3.8*
*ISN **13** 10:18:42.5±0.7, 34.60N×45.79E, h9km±26km, ML3.8*
**ISC 13 10:18:43.3±0.9, 34.62N±0.03×45.75E±0.03, h15km±6km, n59, σ1.996/63, mb3.8/18, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KGS1** | **Ghasr-e-Shirin** | **0.17** | **230** | Pg | **Pg** | **10 18 47.5** | **-0.2** |
| KGS1 | | | | Sg | **Sg** | **10 18 51.3** | **+0.8** |
| **GLG1** | **Gilan-e-Gharb** | **0.52** | **165** | Pg | **Pg** | **10 18 53.3** | **-0.4** |
| **IDHR** | **Dehrash** | **0.53** | **81** | Pg | **Pg** | **10 18 53.3** | **-0.6** |
| **IGHG** | **Ghaleghazi** | **0.73** | **113** | Pg | **Pg** | **10 18 57.2** | **-0.5** |
| **ILIN** | **Lien** | **1.04** | **73** | Pg | **Pg** | **10 19 02.6** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **1.06** | **159** | Pg | **Pg** | **10 19 03.0** | **-0.8** |
| **KCHF** | **Cheshme Sefid,** | **1.12** | **107** | Pg | **Pg** | **10 19 04.4** | **-0.5** |
| KCHF | | | | Sg | **Sb** | **10 19 20.7** | **+1.7** |
| **IKRK** | **Kirkuk** | **1.40** | **304** | *e*Pg | **Pg** | **10 19 10.0** | **-0.2** |
| IKRK | | | | *e*Sg | **Sn** | **10 19 30.0** | **+3.5** |
| IKRK | | | | AML | AML | 10 19 38.7 | |
| | comp=N,1μm,1.2s | | | | | | |
| IKRK | | | | AML | AML | 10 19 39.2 | |
| | comp=E,2μm,0.5s | | | | | | |
| **IBDR** | **Badra** | **1.51** | **174** | *e*Pn | **Pn** | **10 19 11.0** | **+1.1** |
| IBDR | | | | *e*Sn | **Sn** | **10 19 32.0** | **+2.7** |
| IBDR | | | | AML | AML | 10 19 39.5 | |
| | comp=N,2μm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 10 19 47.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.54** | **352** | Pg | **Pg** | **10 19 13.5** | **+0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.56** | **81** | Pg | **Pn** | **10 19 12.3** | **+1.4** |
| **IBZA** | **Bozab** | **1.75** | **94** | Pg | **Pb** | **10 19 15.8** | **+0.5** |
| **BHD** | **Baghdad** | **1.76** | **221** | *e*Pn | **Pn** | **10 19 15.0** | **+1.7** |
| BHD | | | | *e*Sn | **Sn** | **10 19 39.0** | **+3.5** |
| **IKFM** | **Kafar-mosalman** | **2.05** | **122** | Pn | **Pn** | **10 19 19.8** | **+2.5** |
| **MAHB** | **Mahabad** | **2.14** | **359** | Pn | **Pb** | **10 19 22.2** | **+0.2** |
| **HSAM** | **Samen** | **2.39** | **99** | Pn | **Pn** | **10 19 24.6** | **+2.4** |
| **HAGD** | **Aghdareh** | **2.80** | **85** | Pn | **Pn** | **10 19 30.5** | **+2.7** |
| **RAFI** | **Al-Rafai** | **2.90** | **174** | *e*Pn | **Pn** | **10 19 31.0** | **+2.0** |
| RAFI | | | | *e*Sn | **Sn** | **10 20 06.0** | **+2.4** |
| **IAZR** | **Azarshahr** | **3.06** | **3** | Pn | **Pb** | **10 19 34.9** | **-2.7** |
| **IRAZ** | **Razeghan** | **3.52** | **76** | Pn | **Pn** | **10 19 40.4** | **+2.8** |
| **ISRB** | **Sarab** | **3.55** | **25** | Pn | **Pn** | **10 19 41.2** | **+3.0** |
| **IQOM** | **Qom** | **4.39** | **86** | Pn | **Pn** | **10 19 51.7** | **+2.0** |
| **GRMI** | **Germi** | **4.52** | **22** | Pn | **Pn** | **10 19 54.3** | **+3.0** |
| **JHBN** | **Jahan bin** | **4.75** | **119** | Pn | **Pn** | **10 19 56.7** | **+2.0** |
| **QAMS** | **Qamsar** | **4.76** | **99** | Pn | **Pn** | **10 19 57.9** | **+3.1** |
| **IVRN** | **Varamin** | **4.93** | **84** | Pn | **Pn** | **10 19 59.4** | **+2.4** |
| **IKLH** | **Kolahrood** | **5.01** | **103** | Pn | **Pn** | **10 20 00.9** | **+2.6** |
| **GNI** | **Garni** | **5.58** | **352** | Pn | **Pn** | **10 20 08.0** | **+2.0** |
| | comp=E,1.0nm,0.3s,baz=119,slow=14,SNR=1.4 | | | | | | |
| GNI | | | | Pg | **Pg** | **10 20 28.4** | **-1.8** |
| | comp=E,0.8nm,0.3s,baz=337,slow=11,SNR=4.7 | | | | | | |
| GNI | | | | Lg | Lg | 10 21 40.5 | |
| | comp=E,0.5nm,0.3s,baz=168,slow=20,SNR=0.9 | | | | | | |
| GNI | | | | LR | LR | 10 22 40.8 | |
| | comp=E,34nm,21.6s,baz=212,slow=42 | | | | | | |
| | comp=E,3.6nm,0.5s | | | | | | |
| **IGAR** | **Gharneh** | **5.70** | **111** | Pn | **Pn** | **10 20 09.7** | **+2.0** |
| **IZEF** | **Zefreh** | **5.74** | **106** | Pn | **Pn** | **10 20 10.1** | **+1.8** |
| **IFIR** | **Firoozkooh** | **5.83** | **78** | Pn | **Pn** | **10 20 12.3** | **+2.8** |
| **IRAM** | **Ramesheh** | **6.22** | **115** | Pn | **Pn** | **10 20 16.7** | **+1.9** |
| **ASF** | **Jabal al Asfar** | **7.80** | **254** | Pg | Pb | 10 21 04.1 | +5.9 |
| | comp=E,0.4nm,0.3s,baz=52,slow=20,SNR=1.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **8.76** | **262** | Pn | **Pn** | **10 20 46.3** | **-3.2** |
| | comp=E,0.8nm,0.3s,baz=92,slow=16,SNR=1.0 | | | | | | |
| MMAI | | | | Lg | Lg | 10 23 03.8 | |
| | comp=E,0.7nm,0.3s,baz=64,slow=40,SNR=1.9 | | | | | | |
| MMAI | | | | LR | LR | 10 25 13.5 | |
| | comp=E,61nm,20.4s,baz=7.5,slow=45 | | | | | | |
| | comp=E,0.5nm,0.3s | | | | | | |
| **KBZ** | **Khabaz** | **9.36** | **347** | Pn | Pn | 10 21 03.0 | +5.3 |
| | comp=E,0.1nm,0.3s,baz=135,slow=14,SNR=1.3 | | | | | | |
| | comp=E,0.9nm,0.7s | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **9.62** | **347** | Pn | **Pn** | **10 21 04.4** | **+3.1** |
| | baz=81,slow=22 | | | | | | |
| | comp=E,2.4nm,0.3s | | | | | | |
| **EIL** | **Elat** | **10.40** | **245** | Pn | Pn | 10 21 07.6 | -4.4 |
| | comp=E,0.3nm,0.3s,baz=41,slow=17,SNR=1.6 | | | | | | |
| EIL | | | | Lg | Lg | 10 24 10.0 | |
| | comp=E,0.4nm,0.3s,baz=81,slow=19,SNR=2.0 | | | | | | |
| EIL | | | | LR | LR | 10 26 05.2 | |
| | comp=E,45nm,18.2s,baz=70,slow=43 | | | | | | |
| | comp=E,3.1nm,0.8s | | | | | | |
| **WSAR** | **Wadi Sarin** | **15.97** | **132** | Pn | **Pn** | **10 22 23.5** | **-4.1** |
| | comp=E,1.1nm,0.3s,baz=305,slow=8.4,SNR=13 | | | | | | |
| WSAR | | | | Sn | Sn | 10 25 14.2 | -10 |
| | comp=E,0.4nm,0.3s,baz=25,slow=17,SNR=2.9 | | | | | | |
| | comp=E,5.8nm,0.5s | | | | | | |
| **BELG** | **Belogornoye** | **17.82** | **4** | P | **Pn** | **10 22 50.7** | **+0.1** |
| | comp=E,1.6nm,0.3s,baz=158,slow=19,SNR=2.0 | | | | | | |
| | comp=E,9.5nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.17** | **26** | P | **Pn** | **10 22 55.1** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=223,slow=7.7,SNR=2.4 | | | | | | |
| | comp=E,1.4nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **20.08** | **328** | P | **P** | **10 23 15.8** | **-0.2** |
| | comp=E,0.3nm,0.3s,baz=136,slow=8.8,SNR=5.5 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **ARU** | **Arti** | **23.51** | **18** | P | **P** | **10 23 53.9** | **+1.4** |
| | comp=E,1.6nm,0.3s,baz=195,slow=14,SNR=1.6 | | | | | | |
| | comp=E,1.6nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **25.38** | **36** | P | **P** | **10 24 09.6** | **-0.2** |
| | comp=E,0.6nm,0.5s,baz=237,slow=7.9,SNR=2.5 | | | | | | |
| | comp=E,0.6nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **25.98** | **313** | P | **P** | **10 24 15.7** | **+0.4** |
| | comp=E,2.4nm,0.5s,baz=105,slow=16,SNR=1.5 | | | | | | |
| | comp=E,2.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.64** | **46** | P | **P** | **10 24 38.0** | **-1.2** |
| | comp=E,0.4nm,0.3s,baz=37,slow=42,SNR=4.5 | | | | | | |
| | comp=E,0.4nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **29.64** | **341** | P | **P** | **10 24 49.4** | **+1.5** |
| | comp=E,4.6nm,1.1s,baz=145,slow=10,SNR=2.0 | | | | | | |
| FINES | | | | LR | LR | 10 38 41.5 | |
| | comp=E,37nm,18.0s,baz=70,slow=40 | | | | | | |
| | comp=E,4.6nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.98** | **55** | P | **P** | **10 24 51.8** | **+0.6** |
| | comp=E,1.1nm,0.8s,baz=254,slow=8.6,SNR=4.0 | | | | | | |
| | comp=E,1.1nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **32.92** | **331** | P | **P** | **10 25 16.4** | **-0.4** |
| | comp=E,5.1nm,0.7s,baz=128,slow=9.6,SNR=12 | | | | | | |
| | comp=E,5.1nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.42** | **43** | P | **P** | **10 25 21.6** | **+0.3** |
| | comp=E,0.5nm,0.4s,baz=260,slow=8.5,SNR=1.3 | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | |
| **NOA** | **NORSAR Array B** | **34.44** | **331** | P | **P** | **10 25 29.3** | **-0.9** |
| | comp=E,0.5nm,0.6s,baz=88,slow=19,SNR=1.9 | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **36.72** | **348** | P | **P** | **10 25 51.4** | **+1.8** |
| | comp=E,1.4nm,0.7s,baz=157,slow=13,SNR=3.7 | | | | | | |
| | comp=E,1.4nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.30** | **317** | P | **P** | **10 26 12.1** | **+0.7** |
| | comp=E,0.9nm,0.4s,baz=103,slow=8.8,SNR=6.9 | | | | | | |
| | comp=E,0.9nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.54** | **292** | P | **P** | **10 26 12.9** | **-0.9** |
| | comp=E,1.1nm,0.8s,baz=64,slow=12,SNR=4.3 | | | | | | |
| | comp=E,1.1nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.16** | **253** | P | **P** | **10 26 57.9** | **-1.8** |
| | comp=E,0.8nm,0.8s,baz=47,slow=8.8,SNR=3.9 | | | | | | |
| | comp=E,0.8nm,0.8s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **45.45** | **352** | P | **P** | **10 27 01.0** | **-0.2** |
| | comp=E,5.4nm,0.8s,baz=169,slow=13,SNR=6.9 | | | | | | |
| | comp=E,5.4nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.68** | **95** | P | **P** | **10 27 32.5** | **-2.4** |
| | comp=E,1.0nm,0.6s,baz=292,slow=9.6,SNR=4.5 | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **64.42** | **61** | P | **P** | **10 29 17.9** | **-1.0** |
| | comp=E,0.7nm,0.6s,baz=287,slow=6.7,SNR=2.5 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **64.42** | **53** | P | **P** | **10 29 17.0** | **-1.9** |
| | comp=E,0.7nm,0.6s,baz=275,slow=7.1,SNR=4.2 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **80.44** | **5** | P | **P** | **10 30 53.9** | **-0.2** |
| | comp=E,0.6nm,0.9s,baz=358,slow=5.1,SNR=4.2 | | | | | | |
| | comp=E,0.6nm,0.9s | | | | | | |

*ATH **13** 10:19:51.6, 36.66N×19.34E, h30km±14km, ML2.8/5, Error ellipse: s-maj=16.0km s-min=2.2km az=229.0*
*THE **13** 10:19:53.8, 36.71N×19.52E, h32km±32km, ML2.9/5, Error ellipse: s-maj=32.5km s-min=1.4km az=0.0*
**ISC 13 10:19:49.4±1.3, 36.70N±0.06×19.39E±0.03, h10km, n51, σ1.830/69, 1C-2D, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LTHK** | **Lithakia** | **1.53** | **49** | P | **Pn** | **10 20 16.8** | **0.0** |
| LTHK | | | | S | **Sn** | **10 20 36.2** | **-0.5** |
| | 378nm,0.2s | | | | | | |
| **LTHK** | **Lithakia** | **1.53** | **49** | P | **Pn** | **10 20 16.8** | **0.0** |
| LTHK | | | | S | **Sn** | **10 20 35.9** | **-0.9** |
| LTHK | | | | AML | AML | 10 20 37.0 | |
| | comp=E,712μm,0.3s | | | | | | |
| LTHK | | | | AML | AML | 10 20 40.9 | |
| | comp=N,771μm,0.2s | | | | | | |
| **DMLN** | **Damoulianata-K** | **1.72** | **27** | P | **Pn** | **10 20 20.0** | **+0.6** |
| DMLN | | | | S | **Sn** | **10 20 41.0** | **-0.5** |
| | comp=N,155nm,0.2s | | | | | | |
| **DMLN** | **Damoulianata-K** | **1.72** | **27** | P | **Pn** | **10 20 20.0** | **+0.6** |
| **VLS** | **Valsamata** | **1.75** | **33** | P | **Pn** | **10 20 20.4** | **+0.5** |
| VLS | | | | S | **Sn** | **10 20 41.3** | **-1.0** |
| | comp=N,390nm,0.4s | | | | | | |
| **VLS** | **Valsamata** | **1.75** | **33** | P | **Pn** | **10 20 20.3** | **+0.4** |
| VLS | | | | S | **Sn** | **10 20 40.6** | **-1.7** |
| VLS | | | | AML | AML | 10 20 42.4 | |
| | comp=E,602μm,0.3s | | | | | | |
| VLS | | | | AML | AML | 10 20 43.1 | |
| | comp=N,811μm,0.4s | | | | | | |
| **RTZL** | **Ratzakli, Kefa** | **1.76** | **38** | P | **Pn** | **10 20 20.8** | **+0.9** |
| RTZL | | | | S | **Sn** | **10 20 41.6** | **-0.7** |
| **PYL** | **PYLOS** | **1.90** | **84** | P | **Pn** | **10 20 21.9** | **0.0** |
| PYL | | | | S | **Sn** | **10 20 43.9** | **-1.9** |
| **PYL** | **PYLOS** | **1.90** | **84** | P | **Pn** | **10 20 21.9** | **0.0** |
| PYL | | | | S | **Sn** | **10 20 44.4** | **-1.4** |
| PYL | | | | AML | AML | 10 20 48.1 | |
| | comp=E,341μm,0.3s | | | | | | |
| PYL | | | | AML | AML | 10 20 48.8 | |
| | comp=N,151μm,0.4s | | | | | | |
| **FSK** | **Fiskardo** | **1.98** | **28** | P | **Pn** | **10 20 24.0** | **+1.0** |
| FSK | | | | S | **Sn** | **10 20 47.6** | **-0.3** |
| | comp=N,150nm,0.4s | | | | | | |
| **FSK** | **Fiskardo** | **1.98** | **28** | P | **Pn** | **10 20 23.9** | **+0.8** |
| **ITM** | **Ithomi** | **2.09** | **76** | P | **Pn** | **10 20 24.7** | **+0.2** |
| **ITM** | **Ithomi** | **2.09** | **76** | P | **Pn** | **10 20 25.5** | **+1.0** |
| ITM | | | | S | **Sn** | **10 20 49.8** | **-0.7** |
| ITM | | | | AML | AML | | |
| | comp=E,22μm,1.5s | | | | | | |
| ITM | | | | AML | AML | | |
| | comp=N,19μm,1.6s | | | | | | |
| ITM | | | | AML | AML | | |
| | comp=N,19μm,0.4s | | | | | | |
| ITM | | | | AML | AML | | |
| | comp=E,22μm,0.5s | | | | | | |
| **ITM** | **Ithomi** | **2.09** | **76** | P | **Pn** | **10 20 24.9** | **+0.4** |
| ITM | | | | S | **Sn** | **10 20 49.2** | **-1.4** |
| ITM | | | | AML | AML | 10 20 52.5 | |
| | comp=N,140μm,0.3s | | | | | | |
| ITM | | | | AML | AML | 10 20 53.4 | |
| | comp=E,123μm,0.2s | | | | | | |
| **RLS** | **Riolos of Patr** | **2.14** | **50** | P | **Pn** | **10 20 26.4** | **+1.3** |
| **RLS** | **Riolos of Patr** | **2.14** | **50** | P | **Pn** | **10 20 25.6** | **+0.5** |
| RLS | | | | S | **Sn** | **10 20 51.6** | **-0.1** |
| RLS | | | | AML | AML | 10 20 55.4 | |
| | comp=E,140μm,0.3s | | | | | | |
| RLS | | | | AML | AML | 10 20 55.9 | |
| | comp=N,212μm,0.2s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **2.26** | **27** | P | **Pn** | **10 20 28.3** | **+1.5** |
| NYDR | | | | S | **Sn** | **10 20 55.1** | **+0.4** |
| | comp=N,138nm,0.6s | | | | | | |
| **LKD2** | **Lefkada island** | **2.31** | **25** | P | **Pn** | **10 20 28.8** | **+1.2** |
| **TSLK** | **Tsoukalades, L** | **2.34** | **25** | P | **Pn** | **10 20 29.7** | **+1.7** |
| **KLV** | **Kalavryta, Ach** | **2.57** | **58** | P | **Pn** | **10 20 32.4** | **+1.2** |
| KLV | | | | S | **Sn** | **10 21 02.7** | **+0.1** |
| KLV | | | | AML | AML | | |
| | comp=E,68μm,0.4s | | | | | | |
| KLV | | | | AML | AML | | |
| | comp=N,53μm,0.8s | | | | | | |
| KLV | | | | AML | AML | | |
| | comp=E,68μm,1.6s | | | | | | |
| **VLI** | **Veliai** | **2.85** | **89** | P | **Pn** | **10 20 36.1** | **+1.2** |
| **PLAC** | **Placanica** | **2.92** | **308** | P | **Pn** | **10 20 37.1** | **+1.2** |
| PLAC | | | | S | **Sn** | **10 21 09.8** | **-1.3** |
| PLAC | | | | AML | AML | | |
| | comp=N,37μm,0.3s | | | | | | |
| PLAC | | | | AML | AML | | |
| | comp=E,46μm,1.1s | | | | | | |
| **SOI** | **Samo** | **2.99** | **298** | P | **Pn** | **10 20 38.8** | **+2.0** |
| **KTHA** | **Kythira Island** | **2.99** | **97** | P | **Pn** | **10 20 37.9** | **+1.0** |
| **KEK** | **Kerkira** | **3.02** | **6** | P | **Pn** | **10 20 38.1** | **+0.8** |
| **KEK** | **Kerkira** | **3.02** | **6** | P | **Pn** | **10 20 38.1** | **+0.8** |
| **SERS** | **Sersale** | **3.16** | **318** | P | **Pn** | **10 20 40.1** | **+0.8** |
| SERS | | | | AML | AML | | |
| | comp=E,24μm,1.0s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=N,31μm,0.4s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=E,24μm,1.0s | | | | | | |
| SERS | | | | AML | AML | | |
| | comp=N,31μm,1.6s | | | | | | |
| **CEL** | **Celeste** | **3.18** | **300** | P | **Pn** | **10 20 41.2** | **+1.7** |
| CEL | | | | S | **Sn** | **10 21 16.5** | **-1.1** |
| CEL | | | | AML | AML | | |
| | comp=N,72μm,0.6s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=E,58μm,1.0s | | | | | | |
| **LADO** | **San Nicola del** | **3.20** | **324** | P | **Pn** | **10 20 41.3** | **+1.5** |
| **SRN** | **Sarande** | **3.21** | **8** | P | **Pn** | **10 20 40.5** | **+0.7** |
| **MTTG** | **Motta San Giov** | **3.22** | **295** | P | **Pn** | **10 20 41.8** | **+1.8** |
| **TIP** | **Timpagrande** | **3.23** | **321** | P |

comp=N,19µm,1.4s
SALB AML AML
comp=E,33µm,0.7s
**RAFF Raffo Rosso 4.06 279** P **Pn** **10 20 53.0 +1.4**
RAFF AML AML
comp=N,67µm,0.2s
RAFF AML AML
comp=E,78µm,0.3s
**CLTA Licata 4.37 278** P **Pn** **10 20 58.0 +2.1**
**LTRZ Laterza 4.38 333** ⇓P **Pn** **10 20 56.5 +0.5**
LTRZ AML AML
comp=E,30µm,1.5s
LTRZ AML AML
comp=N,229µm,1.6s
LTRZ AML AML
comp=N,229µm,0.4s
LTRZ AML AML
comp=E,30µm,0.5s
**MATE Matera 4.46 333** P **Pn** **10 20 57.6 +0.5**
**NOCI Noci 4.46 337** P **Pn** **10 20 57.5 +0.3**
NOCI S **Sn** **10 21 45.6 -3.6**
NOCI AML AML
comp=E,52µm,1.1s
NOCI AML AML
comp=N,57µm,1.4s
NOCI AML AML
comp=N,57µm,0.6s
NOCI AML AML
comp=E,52µm,0.9s
**MIGL Miglionico 4.53 330** ⇓P **Pn** **10 20 59.1 +1.1**
**AMUR Altamura 4.73 333** P **Pn** **10 21 01.1 +0.4**
AMUR AML AML
comp=N,38µm,0.4s
AMUR AML AML
comp=E,32µm,0.5s

*IDC **13** 10:27:00.3±8.0,6°.06N×126°.63E,h124$^{km}$±76$^{km}$,mb3.5/8, mbtmp3.9/8,MS2.9/5,Error ellipse: s-maj=56.8km s-min=15.2km az=77.0*

**ISC 13 10:26:57.6±0.8,6°.1N±0°.2×126°.6E±0°.4,h100$^{km}$,n13, σ1§40/10,mb3.8/8,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **19.45** | **66** | LR | LR | 10 40 44.1 | |
| | comp=Z,23nm,18.0s,baz=111,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.95** | **164** | P | **P** | **10 32 29.4** | **-0.5** |
| | 1.1nm,0.7s,baz=336,slow=12,SNR=19 1.1nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **27.19** | **8** | LR | LR | 10 43 19.2 | |
| | comp=Z,17nm,20.1s,baz=202,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **30.41** | **167** | P | **P** | **10 33 00.9** | **+0.2** |
| | 1.3nm,0.6s,baz=343,slow=7.2,SNR=21 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 35 57.6** | **-0.6** |
| | 0.5nm,0.7s,baz=345,slow=2.9,SNR=3.6 1.3nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **32.12** | **18** | LR | LR | 10 45 52.7 | |
| | comp=Z,12nm,21.2s,baz=181,slow=35 | | | | | | |
| **USRK** | **Ussurisk Ar.** | **38.26** | **6** | P | **P** | **10 34 07.0** | **-1.1** |
| | 0.7nm,0.6s,baz=176,slow=7.8,SNR=4.6 0.7nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **40.36** | **160** | P | **P** | **10 34 26.6** | **+0.9** |
| | 7.2nm,0.8s,baz=328,slow=8.4,SNR=8.6 7.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **45.05** | **341** | P | **P** | **10 35 04.6** | **+1.0** |
| | 0.3nm,0.3s,baz=126,slow=7.3,SNR=1.8 0.3nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.46** | **332** | P | **P** | **10 36 43.6** | **+0.6** |
| | 0.3nm,0.3s,baz=116,slow=9.8,SNR=1.5 | | | | | | |
| ZALV | | | | LR | LR | 11 03 20.2 | |
| | comp=Z,18nm,18.1s,baz=106,slow=37 0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.72** | **327** | P | **P** | **10 36 52.5** | **+0.7** |
| | 0.3nm,0.5s,baz=123,slow=6.8,SNR=2.3 0.3nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **83.04** | **26** | P | **P** | **10 39 12.4** | **+0.7** |
| | 1.0nm,0.7s,baz=242,slow=4.7,SNR=6.6 1.0nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **96.64** | **334** | LR | LR | 11 28 09.4 | |
| | comp=Z,12nm,18.5s,baz=355,slow=38 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.06** | **290** | PKP | **PKPdf** | **10 45 38.6** | **-3.0** |
| | 0.3nm,0.6s,baz=47,slow=2.2,SNR=2.1 | | | | | | |

*IDC **13** 10:37:18.3±0.8,7°.57S×108°.86E,h0$^{km}$,mb4.0/9, mbtmp4.0/9,Error ellipse: s-maj=41.8km s-min=20.4km az=54.0*

*DJA **13** 10:37:31.8±0.3,8°.S±3°×10°9E±°,h48$^{km}$±13$^{km}$,M4.7/13, mb4.9/3,MLv4.5/13*

*NEIC **13** 10:37:31.6±2.1,8°.32S±0°.10×108°.88E±0°.07,h71$^{km}$±7$^{km}$, mb4.5/14,Error ellipse: s-maj=15.2km s-min=9.0km az=156.0*

**ISC 13 10:37:31.0±0.9,8°.39S±0°.07×108°.92E±0°.04,h72$^{km}$±10$^{km}$, n46,σ1§56/44,mb4.2/15,Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMJI** | **Cimerak** | **0.76** | **322** | P | **Pn** | **10 37 47.2** | **+0.6** |
| CMJI | | | | S | **Sn** | **10 37 58.8** | **+0.6** |
| **KPJI** | **Karang Pucung** | **1.05** | **1** | P | **Pn** | **10 37 50.4** | **+0.3** |
| **UGM** | **Wanagama** | **1.66** | **74** | | **Pn** | **10 37 57.9** | **-0.2** |
| **UGM** | **Wanagama** | **1.66** | **74** | P | **Pn** | **10 37 57.7** | **-0.4** |
| UGM | | | | S | **Sn** | **10 38 17.1** | **-1.6** |
| **SMRI** | **Semarang** | **2.01** | **49** | | **Pn** | **10 38 03.0** | **+0.1** |
| **SMRI** | **Semarang** | **2.01** | **49** | P | **Pn** | **10 38 03.0** | **+0.1** |
| SMRI | | | | S | **Sn** | **10 38 27.2** | **+0.1** |
| **CNJI** | **Cibinong** | **2.07** | **301** | P | **Pn** | **10 38 04.5** | **+0.9** |
| CNJI | | | | S | **Sn** | **10 38 28.5** | **0.0** |
| **NGJI** | **Ngawi** | **2.72** | **68** | P | **Pn** | **10 38 15.5** | **+3.2** |
| **DBJI** | **Dramaga** | **2.82** | **310** | P | **Pn** | **10 38 16.4** | **+2.7** |
| **PWJI** | **Pagerwojo** | **2.88** | **83** | P | **Pn** | **10 38 14.4** | **-0.2** |
| PWJI | | | | S | **Sn** | **10 38 47.2** | **-1.0** |
| **GRJI** | **Gresik** | **3.82** | **68** | P | **Pn** | **10 38 27.5** | **+0.1** |
| **XMIS** | **Christmas Isla** | **3.83** | **237** | Pn | **Pn** | **10 38 28.7** | **+1.1** |
| XMIS | | | | | **Sn** | **10 39 08.8** | **-2.7** |
| **JAGI** | **Jajag, Banyuwa** | **5.18** | **91** | | **Pn** | **10 38 47.7** | **+1.7** |
| **JAGI** | **Jajag, Banyuwa** 75nm,0.8s,0.7nm | **5.18** | **91** | P | **Pn** | **10 38 47.7** | **+1.7** |
| **KASI** | **Kota Agung** | **5.23** | **303** | P | Pn | 10 38 57.5 | +11 |
| **MNAI** | **Manna** | **7.15** | **304** | Pn | **Pn** | **10 39 10.8** | **-2.1** |
| **TWSI** | **Taliwang, Sumb** | **7.88** | **93** | P | **Pn** | **10 39 22.6** | **-0.4** |
| **GIRL** | **Giralia** | **15.07** | **161** | Pn | **Pn** | **10 40 58.8** | **-1.0** |
| **MBWA** | **Marble Bar** | **16.44** | **142** | P | **Pn** | **10 41 17.5** | **+0.3** |
| MBWA | | | | IAmb | IAmb | 10 41 46.9 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.82** | **142** | | **Pn** | **10 41 23.6** | **+1.6** |
| **FITZ** | **Fitzroy Crossi** | **18.91** | **122** | P | **Pn** | **10 41 48.0** | **+0.6** |
| **KNRA** | **Kununurra** | **20.71** | **112** | P | **P** | **10 42 06.7** | **+1.2** |
| KNRA | | | | IAmb | IAmb | 10 42 40.3 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **MTN** | **Manton Dam** | **22.27** | **103** | P | **P** | **10 42 22.2** | **-0.2** |
| MTN | | | | IAmb | IAmb | 10 42 46.8 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **27.13** | **117** | P | **P** | **10 43 07.9** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 10 43 32.3 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.15** | **118** | P | **P** | **10 43 09.3** | **+1.5** |
| **WRA** | **Warramunga Arr** | **27.15** | **118** | P | **P** | **10 43 07.6** | **-0.2** |
| | comp=Z,0.9nm,0.7s,baz=290,slow=11,SNR=5.7 | | | | | | |
| WRA | | | | PcP | **PcP** | **10 46 25.7** | **-1.2** |
| | comp=Z,0.3nm,0.5s,baz=302,slow=1.8,SNR=2.4 comp=Z,0.9nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **27.16** | **118** | P | **P** | **10 43 08.5** | **+0.7** |
| WB2 | | | | IAmb | IAmb | 10 43 20.6 | |
| | comp=Z,9.6nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **27.33** | **118** | P | **P** | **10 43 10.5** | **+1.1** |
| WR0 | | | | IAmb | IAmb | 10 43 53.2 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **28.34** | **125** | P | **P** | **10 43 18.7** | **+0.3** |
| | comp=Z,1.2nm,0.5s,baz=305,slow=9.4,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 46 28.6** | **-1.1** |
| | comp=Z,0.5nm,0.3s,baz=308,slow=1.8,SNR=11 comp=Z,1.2nm,0.5s | | | | | | |
| **COEN** | **Coen** | **34.04** | **102** | P | **P** | **10 44 06.5** | **-2.0** |
| COEN | | | | IAmb | IAmb | 10 44 09.6 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **34.95** | **138** | P | **P** | **10 44 17.0** | **+0.8** |
| BBOO | | | | IAmb | IAmb | 10 44 27.0 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **36.07** | **269** | T | T | 11 22 57.3 | |
| | baz=93,slow=75,SNR=28 | | | | | | |
| **H08S3** | **Diego Garcia H** | **36.08** | **269** | T | T | 11 23 07.4 | |
| | baz=93,slow=75,SNR=63 | | | | | | |
| **H08S1** | **Diego Carcia H** | **36.09** | **269** | T | T | 11 22 51.9 | |
| | baz=93,slow=75,SNR=4.9 | | | | | | |
| **STKA** | **Stephens Creek** | **38.31** | **132** | P | **P** | **10 44 46.1** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.31** | **132** | P | **P** | **10 44 45.7** | **+0.9** |
| | comp=Z,1.2nm,0.3s,baz=353,slow=9.6,SNR=3.1 comp=Z,1.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.84** | **339** | P | P | 10 47 19.9 | -9.1 |
| | comp=Z,0.3nm,0.5s,baz=154,slow=8.1,SNR=2.6 comp=Z,0.3nm,0.5s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **61.47** | **222** | T | T | 11 55 00.8 | |
| | baz=71,slow=75,SNR=64 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **61.49** | **222** | T | T | 11 54 50.1 | |
| | baz=71,slow=75,SNR=65 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **61.49** | **222** | T | T | 11 54 53.4 | |
| | baz=71,slow=75,SNR=66 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **65.35** | **345** | P | P | 10 47 57.4 | -8.1 |
| | comp=Z,0.6nm,0.3s,baz=147,slow=8.6,SNR=2.2 comp=Z,0.6nm,0.3s | | | | | | |
| **VNDA** | **Vanda** | **74.27** | **170** | P | **P** | **10 49 01.3** | **+1.4** |
| | comp=Z,0.6nm,0.6s,baz=315,slow=6.3,SNR=6.9 comp=Z,0.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.61** | **180** | P | **P** | **10 49 41.9** | **+0.9** |
| | comp=Z,1.1nm,0.8s,baz=335,slow=8.0,SNR=7.6 comp=Z,1.1nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **84.16** | **311** | P | P | 10 49 48.4 | -6.3 |
| | comp=Z,0.7nm,0.7s,baz=102,slow=3.7,SNR=1.4 comp=Z,0.7nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **88.77** | **197** | P | **P** | **10 50 18.1** | **+1.5** |
| | comp=Z,1.2nm,0.8s,baz=114,slow=2.1,SNR=12 comp=Z,1.2nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **143.00** | **51** | PKP | **PKPdf** | **10 56 51.8** | **-5.6** |
| | comp=Z,0.1nm,0.4s,baz=248,slow=1.7,SNR=5.2 | | | | | | |

*AEIC **13** 11:05:12.7±1.3,69°.53N±0°.04×144°.63W±0°.05,h16$^{km}$±5$^{km}$, ML4.4,mb4.4/26(NEIC),ML4.5/122(NEIC), Mwr4.3/42(NEIC),Error ellipse: s-maj=6.0km s-min=2.2km az=174.0*

*IDC **13** 11:05:13.3±0.6,69°.72N×144°.59W,h0$^{km}$,mb4.0/19, mbtmp4.0/23,ML4.1/4,MS3.4/28,Error ellipse: s-maj=15.7km s-min=10.4km az=42.0*

*NEIC **13** 11:05:13.8±1.2,69°.62N±0°.02×144°.64W±0°.09,h10$^{km}$±1$^{km}$, Error ellipse: s-maj=6.0km s-min=3.0km az=55.0,Moment Tensor Solution. Moment tensor: Scale 10$^{15}$Nm; $M_{rr}$=0.22; $M_{\theta\theta}$=1.38; $M_{\phi\phi}$=1.60; $M_{r\theta}$=0.14; $M_{r\phi}$=-3.13; $M_{\theta\phi}$=1.00; Fault plane solution: $M_0$=3.62000×10$^{15}$ NP1: φ=282.65000°,δ=73.71000°,λ=-179.68000°. NP2: φ=192.56000°,δ=89.70000°,λ=-16.29000°. Principal axes: T 3.7346, Plg11.0000°, Azm239.0000°; N -0.2396, Plg74.0000°, Azm12.0000°; P -3.4950, Plg12.0000°, Azm146.0000°.*

*NEIC **13** 11:05:15,69°.62N×144°.73W,h13$^{km}$*

**ISC 13 11:05:13.6±1.1,69°.57N±0°.03×144°.59W±0°.02,h8$^{km}$±7$^{km}$, n241,σ1§07/231,mb4.3/35,MS3.4/25,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.31** | **79** | | **Pg** | **11 05 19.6** | **-0.1** |
| C27K | | | | | **Sg** | **11 05 23.8** | **-0.1** |
| **C26K** | **Camden Bay** | **0.37** | **342** | | **Pg** | **11 05 21.7** | **+0.9** |
| C26K | | | | | **Sb** | **11 05 27.4** | **-0.8** |
| C26K | | | | IAML | | 11 05 29.4 | |
| | comp=N,32µm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.68** | **249** | | **Pg** | **11 05 25.3** | **-1.3** |
| D25K | | | | | **Sg** | **11 05 34.6** | **-0.9** |
| **D27M** | **Malcolm River** | **1.32** | **103** | | **Pn** | **11 05 37.3** | **-1.1** |
| D27M | | | | | **Sb** | **11 05 56.6** | **+0.8** |
| **C24K** | **Franklin Bluff** | **1.45** | **278** | | **Pn** | **11 05 40.0** | **0.0** |
| **D24K** | **Happy Valley** | **1.56** | **256** | | **Pn** | **11 05 41.8** | **+0.3** |
| D24K | | | | | **Sg** | **11 06 04.5** | **+1.0** |
| **E27K** | **Coleen River** | **1.76** | **141** | | **Pn** | **11 05 45.0** | **+0.6** |
| E27K | | | | | **Sn** | **11 06 08.8** | **+1.9** |
| **F26K** | **Sheenjek River** | **1.89** | **175** | | **Pn** | **11 05 47.0** | **+0.9** |
| F26K | | | | | **Sn** | **11 06 10.6** | **+0.5** |
| F26K | | | | IAML | | 11 06 14.4 | |
| | comp=E,6µm,0.8s | | | | | | |
| F26K | | | | IAML | | 11 06 16.7 | |
| | comp=N,3µm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.02** | **245** | Pn | **Pn** | **11 05 48.1** | **+0.2** |
| TOLK | | | | | **Sb** | **11 06 16.0** | **+0.4** |
| TOLK | | | | IAML | | 11 06 22.6 | |
| | comp=E,4µm,0.6s | | | | | | |
| TOLK | | | | IAML | | 11 06 28.9 | |
| | comp=N,3µm,1.2s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **192** | | **Pn** | **11 05 48.7** | **+0.7** |
| **F25K** | **Christian Rive** | **2.02** | **192** | | **Sn** | **11 06 13.8** | **+0.4** |
| F25K | | | | IAML | | 11 06 19.0 | |
| | comp=E,4µm,0.9s | | | | | | |
| F25K | | | | IAML | | 11 06 20.1 | |
| | comp=N,4µm,1.1s | | | | | | |
| **E28M** | **Babbage River** | **2.06** | **116** | | **Pn** | **11 05 49.0** | **+0.6** |
| **E28M** | **Babbage River** | **2.06** | **116** | | **Sb** | **11 06 16.9** | **+0.1** |
| **E24K** | **Your Creek** | **2.06** | **225** | | **Pn** | **11 05 49.3** | **+0.8** |
| E24K | | | | | **Sb** | **11 06 17.8** | **+0.8** |
| E24K | | | | IAML | | 11 06 21.0 | |
| | comp=E,4µm,0.8s | | | | | | |
| E24K | | | | IAML | | 11 06 25.8 | |
| | comp=N,3µm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **2.08** | **94** | | **Pn** | **11 05 50.3** | **+1.6** |
| D28M | | | | IAML | | 11 06 26.6 | |
| | comp=E,4µm,1.1s | | | | | | |
| D28M | | | | IAML | | 11 06 33.4 | |
| | comp=N,4µm,1.2s | | | | | | |
| **C23K** | **Itkillik River** | **2.12** | **280** | | **Pn** | **11 05 49.3** | **+0.1** |
| **BMAR** | **Burnt Mountain** | **2.15** | **180** | | **Pn** | **11 05 50.4** | **+0.7** |
| **D23K** | **Nanushuk River** | **2.25** | **257** | | **Pn** | **11 05 51.6** | **+0.6** |
| **D23K** | **Nanushuk River** | **2.25** | **257** | IAML | | 11 06 41.4 | |
| | comp=N,2µm,0.9s | | | | | | |
| D23K | | | | IAML | | 11 06 45.3 | |
| | comp=E,3µm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.37** | **233** | | **Pn** | **11 05 53.5** | **+0.7** |
| E23K | | | | IAML | | 11 06 34.2 | |
| | comp=E,3µm,1.2s | | | | | | |
| E23K | | | | IAML | | 11 06 36.4 | |
| | comp=N,2µm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.39** | **212** | Pn | **Pn** | **11 05 53.6** | **+0.7** |
| F24K | | | | IAML | | 11 06 29.6 | |
| | comp=N,2µm,0.8s | | | | | | |
| F24K | | | | IAML | | 11 06 33.1 | |
| | comp=E,2µm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.62** | **136** | | **Pn** | **11 05 56.3** | **+0.2** |
| **G26K** | **Porcupine Rive** | **2.65** | **173** | | **Pn** | **11 05 56.8** | **+0.3** |
| **E29M** | **Blow River** | **2.69** | **113** | | **Pn** | **11 05 58.1** | **+1.1** |
| **G25K** | **Bearman Lake** | **2.87** | **192** | | **Pn** | **11 06 00.3** | **+0.7** |
| **D22K** | **Ayikyak River** | **2.97** | **260** | Pn | **Pn** | **11 06 01.0** | **+0.1** |
| **G27K** | **Doyon Strip** | **2.98** | **157** | | **Pn** | **11 06 01.1** | **0.0** |
| **FYU** | **Fort Yukon** | **3.03** | **185** | Pn | **Pn** | **11 06 02.7** | **+1.1** |
| FYU | | | | IAML | | 11 06 55.1 | |
| | comp=N,2µm,1.3s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.08** | **202** | | **Pn** | **11 06 02.5** | **+0.2** |
| **COLD** | **Coldfoot** | **3.14** | **224** | | **Pn** | **11 06 03.6** | **+0.4** |
| **B22K** | **Teshekpuk Lake** | **3.14** | **288** | | **Pn** | **11 06 03.3** | **+0.1** |
| B22K | | | | Sn | **Sn** | **11 06 40.3** | **-0.4** |
| **H25L** | **Birch Creek** | **3.35** | **189** | | **Pn** | **11 06 06.8** | **+0.7** |
| **F22K** | **John River** | **3.47** | **237** | | **Pn** | **11 06 07.9** | **+0.1** |
| **B21K** | **Ikpikpuk River** | **3.51** | **276** | | **Pn** | **11 06 08.7** | **+0.4** |
| **G23K** | **Bananza Creek** | **3.52** | **218** | | **Pn** | **11 06 08.6** | **+0.1** |
| G23K | | | | IAML | | 11 07 07.2 | |
| | comp=N,790nm,1.0s | | | | | | |
| G23K | | | | IAML | | 11 07 08.8 | |
| | comp=E,1µm,1.1s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.55** | **160** | | **Pn** | **11 06 09.3** | **+0.4** |
| **E21K** | **Killik River** | **3.56** | **256** | | **Pn** | **11 06 08.6** | **-0.4** |
| E21K | | | | IAML | | 11 07 17.9 | |
| | comp=N,1µm,1.0s | | | | | | |
| E21K | | | | IAML | | 11 07 22.1 | |
| | comp=E,1µm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.62** | **134** | | **Pn** | **11 06 10.4** | **+0.5** |
| G29M | | | | IAML | | 11 07 22.4 | |
| | comp=E,1µm,1.1s | | | | | | |
| G29M | | | | IAML | | 11 07 24.9 | |
| | comp=N,912nm,1.5s | | | | | | |
| **G22K** | **Bettles** | **3.70** | **227** | | **Pn** | **11 06 11.1** | **+0.1** |
| **F30M** | **Barrier River** | **3.78** | **117** | | **Pn** | **11 06 13.6** | **+1.6** |
| **A22K** | **Sinclair Lake** | **3.80** | **297** | | **Pn** | **11 06 12.2** | **0.0** |
| **H24K** | **Noodor Dome** | **3.95** | **200** | | **Pn** | **11 06 14.5** | **0.0** |
| H24K | | | | IAML | | 11 07 20.6 | |
| | comp=N,847nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **4.04** | **239** | | **Pn** | **11 06 15.9** | **+0.2** |
| F21K | | | | IAML | | 11 07 29.2 | |
| | comp=N,683nm,1.0s | | | | | | |
| F21K | | | | IAML | | 11 07 32.4 | |
| | comp=E,800nm,1.0s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.05** | **126** | | **Pn** | **11 06 16.2** | **+0.4** |
| **PRP** | **Porcupine Dome** | **4.09** | **185** | | **Pn** | **11 06 16.8** | **+0.4** |
| PRP | | | | IAML | | 11 07 37.9 | |
| | comp=N,428nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.10** | **142** | Pn | **Pn** | **11 06 17.3** | **+0.8** |
| H29M | | | | IAML | | 11 07 27.4 | |
| | comp=E,428nm,1.5s | | | | | | |
| H29M | | | | IAML | | 11 07 31.8 | |
| | comp=N,460nm,1.4s | | | | | | |
| **I27K** | **Kandik River** | **4.14** | **163** | | **Pn** | **11 06 17.9** | **+0.8** |
| **INK** | **Inuvik** | **4.19** | **102** | Pn | **Pn** | **11 06 17.9** | **+0.3** |
| **INK** | **Inuvik** | **4.19** | **102** | Pn | **Pn** | **11 06 18.4** | **+0.7** |
| | comp=N,3.1nm,0.3s,baz=288,slow=14,SNR=28 | | | | | | |
| INK | | | | Sn | **Sn** | **11 07 04.8** | **-1.9** |
| | comp=N,16nm,0.3s,baz=305,slow=5.4,SNR=8.3 | | | | | | |
| INK | | | | Lg | Lg | 11 07 26.0 | |
| | comp=N,12nm,0.3s,baz=193,slow=23,SNR=5.9 | | | | | | |
| INK | | | | LR | LR | 11 08 27.2 | |
| | comp=N,72nm,21.1s,baz=275,slow=46 comp=N,11nm,0.3s | | | | | | |
| **H23K** | **Yukon River** | **4.21** | **209** | | **Pn** | **11 06 17.9** | **0.0** |
| H23K | | | | IAML | | 11 07 31.1 | |
| | comp=E,769nm,1.5s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.32** | **172** | | **Pn** | **11 06 19.8** | **+0.4** |
| I26K | | | | IAML | | 11 07 48.3 | |
| | comp=E,676nm,1.1s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.37** | **134** | | **Pn** | **11 06 20.8** | **+0.6** |
| **EPYK** | **Eagle Plains** | **4.37** | **134** | IAML | | 11 07 34.9 | |
| | comp=N,535nm,1.3s | | | | | | |
| EPYK | | | | IAML | | 11 07 42.8 | |
| | comp=E,673nm,1.2s | | | | | | |
| **B20K** | **Meade River** | **4.38** | **282** | Pn | **Pn** | **11 06 21.1** | **+0.8** |
| **D20K** | **Etivluk River** | **4.38** | **264** | | **Pn** | **11 06 21.2** | **+0.8** |
| **E20K** | **Nigu River** | **4.39** | **258** | | **Pn** | **11 06 21.3** | **+0.8** |
| **A21K** | **Barrow** | **4.41** | **299** | | **Pn** | **11 06 21.0** | **+0.4** |
| **H22K** | **Ishtalitna Cre** | **4.50** | **218** | | **Pn** | **11 06 22.5** | **+0.5** |
| **I28M** | **Miner Creek** | **4.51** | **154** | Pn | **Pn** | **11 06 23.1** | **+1.0** |
| I28M | | | | IAML | | 11 07 48.8 | |
| | comp=E,470nm,1.6s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.53** | **113** | Pn | **Pn** | **11 06 22.5** | **+0.3** |
| **G21K** | **Allakaket** | **4.54** | **232** | | **Pn** | **11 06 22.2** | **-0.3** |
| G21K | | | | IAML | | 11 07 44.2 | |
| | comp=N,639nm,1.3s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.61** | **195** | | **Pn** | **11 06 23.7** | **+0.3** |
| POKR | | | | IAML | | 11 07 40.4 | |
| | comp=E,440nm,0.9s | | | | | | |
| POKR | | | | IAML | | 11 07 48.1 | |
| | comp=N,405nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.67** | **120** | | **Pn** | **11 06 24.4** | **+0.2** |
| **G31M** | **Satah River** | **4.67** | **120** | IAML | | 11 07 47.2 | |
| | comp=E,521nm,1.8s | | | | | | |
| G31M | | | | IAML | | 11 07 48.0 | |
| | comp=N,524nm,1.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **205** | | **Pn** | **11 06 26.4** | **+0.3** |
| **MDM** | **Murphy Dome** | **4.84** | **199** | | **Pn** | **11 06 27.1** | **+0.5** |
| MDM | | | | IAML | | 11 07 50.8 | |
| | comp=N,481nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.84** | **244** | | **Pn** | **11 06 27.0** | **+0.4** |
| F20K | | | | IAML | | 11 08 03.7 | |
| | comp=N,272nm,1.1s | | | | | | |
| F20K | | | | IAML | | 11 08 11.4 | |
| | comp=E,350nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.87** | **147** | | **Pn** | **11 06 27.2** | **+0.2** |
| I29M | | | | IAML | | 11 07 58.5 | |
| | comp=E,235nm,1.0s | | | | | | |
| **COLA** | **College** | **4.88** | **197** | | **Pn** | **11 06 27.8** | **+0.7** |
| **IL31** | | **4.90** | **192** | | **Pn** | **11 06 28.0** | **+0.6** |
| **ILAR** | **Eielson Array** | **4.90** | **192** | Pn | **Pn** | **11 06 27.7** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.90** | **192** | Pn | **Pn** | **11 06 28.1** | **+0.7** |
| | comp=E,10nm,0.3s,baz=13,slow=14,SNR=97 | | | | | | |
| ILAR | | | | Sn | **Sn** | **11 07 24.2** | **0.0** |
| | comp=E,15nm,0.3s,baz=7.6,slow=24,SNR=5.7 | | | | | | |
| ILAR | | | | Lg | Lg | 11 07 45.5 | |
| | comp=E,21nm,0.3s,baz=5.9,slow=28,SNR=4.4 comp=E,17nm,0.4s | | | | | | |
| **D19K** | **Kuna River** | **4.98** | **264** | | **Pn** | **11 06 28.8** | **+0.4** |
| **J25K** | **Salcha River,** | **4.99** | **184** | | **Pn** | **11 06 29.6** | **+0.9** |
| **J25K** | **Salcha River,** | **4.99** | **184** | IAML | | 11 07 58.5 | |
| | comp=N,271nm,1.1s | | | | | | |
| J25K | | | | IAML | | 11 08 02.8 | |
| | comp=E,354nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **4.99** | **163** | | **Pn** | **11 06 29.2** | **+0.5** |
| EGAK | | | | IAML | | 11 08 00.5 | |
| | comp=E,236nm,2.0s | | | | | | |
| EGAK | | | | IAML | | 11 08 09.4 | |
| | comp=E,221nm,1.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.03** | **223** | Pn | **Pn** | **11 06 29.5** | **+0.3** |
| **CCB** | **Clear Creek Bu** | **5.10** | **196** | | **Pn** | **11 06 30.4** | **+0.3** |
| CCB | | | | IAML | | 11 08 01.9 | |
| | comp=E,219nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **5.11** | **251** | | **Pn** | **11 06 30.0** | **-0.3** |
| E19K | | | | IAML | | 11 08 13.6 | |
| | comp=E,401nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.11** | **175** | Pn | **Pn** | **11 06 30.5** | **+0.2** |
| J26L | | | | IAML | | 11 07 59.5 | |
| | comp=E,270nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.14** | **210** | Pn | **Pn** | **11 06 31.1** | **+0.3** |
| MLY | | | | IAML | | 11 07 56.7 | |
| | comp=E,298nm,1.6s | | | | | | |
| MLY | | | | IAML | | 11 08 01.4 | |
| | comp=N,218nm,1.2s | | | | | | |
| **HDA** | **Harding Lake** | **5.26** | **191** | | **Pn** | **11 06 33.3** | **+0.9** |
| HDA | | | | IAML | | 11 08 02.7 | |
| | comp=E,332nm,0.8s | | | | | | |
| HDA | | | | IAML | | 11 08 05.2 | |
| | comp=N,319nm,1.2s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **201** | | **Pn** | **11 06 32.8** | **0.0** |
| **NEA2** | **Nenana** | **5.29** | **201** | IAML | | 11 08 05.7 | |
| | comp=E,249nm,1.7s | | | | | | |
| NEA2 | | | | IAML | | 11 08 05.8 | |
| | comp=N,189nm,1.7s | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **197** | | **Pn** | **11 06 33.5** | **+0.6** |
| WRH | | | | IAML | | 11 08 03.2 | |
| | comp=E,269nm,1.7s | | | | | | |
| WRH | | | | IAML | | 11 08 03.8 | |
| | comp=N,238nm,1.0s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.33** | **272** | | **Pn** | **11 06 33.7** | **+0.4** |
| C19K | | | | IAML | | 11 08 29.3 | |
| | comp=N,367nm,1.7s | | | | | | |
| C19K | | | | IAML | | 11 08 33.5 | |
| | comp=E,264nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.39** | **140** | | **Pn** | **11 06 34.7** | **+0.5** |
| I30M | | | | IAML | | 11 08 26.8 | |
| | comp=E,168nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **5.62** | **177** | | **Pn** | **11 06 38.1** | **+0.6** |
| **F19K** | **Shaleruckik Mo** | **5.62** | **247** | | **Pn** | **11 06 37.4** | **+0.1** |
| **K27K** | **Chicken** | **5.65** | **169** | | **Pn** | **11 06 38.4** | **+0.7** |
| **A19K** | **Wainwright** | **5.72** | **284** | | **Pn** | **11 06 39.0** | **+0.4** |
| **BWN** | **Browne** | **5.75** | **202** | | **Pn** | **11 06 39.1** | **+0.1** |
| **DAWY** | **Dawson** | **5.89** | **157** | | **Pn** | **11 06 41.6** | **+0.5** |
| **DOT** | **Dot Lake** | **5.95** | **178** | | **Pn** | **11 06 42.9** | **+1.0** |
| **J30M** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KLU | Klutina | 8.13 185 | | Pn | | Pn | 11 07 14.0 | +2.2 |
| SKT | Skwentna | 8.13 204 | Pn | | | Pn | 11 07 12.9 | +1.2 |
| GLB | Gilahina Butte | 8.17 177 | | | | Pn | 11 07 14.7 | +2.5 |
| M22K | Willow | 8.17 199 | | | | Pn | 11 07 13.1 | +0.9 |
| PMR | Palmer | 8.22 195 | | | | Pn | 11 07 14.4 | +1.4 |
| MCARA | McCarthy VSAT | 8.25 175 | | | | Pn | 11 07 15.8 | +2.5 |
| KNK | Knik Glacier | 8.34 193 | | | | Pn | 11 07 17.1 | +2.4 |
| J17K | VABM Dome | 8.46 230 | Pn | | | Pn | 11 07 16.1 | -0.1 |
| M20K | Styx River | 8.47 209 | | | | Pn | 11 07 17.1 | +0.7 |
| M31M | Drury Creek, Y | 8.48 146 | | | | Pn | 11 07 16.9 | +0.4 |
| L19K | White Mountain | 8.51 214 | | | | Pn | 11 07 16.5 | -0.4 |
| SUA | Susitna One | 8.53 200 | | | | Pn | 11 07 17.8 | +0.6 |
| I17K | Unalakleet | 8.53 236 | | | | Pn | 11 07 17.9 | +0.7 |
| F15K | North Star Dit | 8.55 253 | | | | Pn | 11 07 16.5 | -0.9 |
| FARO | Faro, Yukon | 8.67 143 | | | | Pn | 11 07 19.9 | +0.8 |
| M19K | Big River Lodg | 8.68 212 | | | | Pn | 11 07 20.2 | +1.0 |
| N30M | Aishikik Lake | 8.71 156 | Pn | | | Pn | 11 07 20.9 | +1.2 |
| CTGM | Chitina Glacie | 8.75 169 | | | | Pn | 11 07 22.8 | +2.5 |
| RC01 | Rabbit Creek A | 8.78 197 | | | | Pn | 11 07 22.4 | +1.8 |
| G15K | Niukluk | 8.79 248 | | | | Pn | 11 07 20.2 | -0.4 |
| L18K | Granite Mounta | 8.86 220 | | | | Pn | 11 07 22.1 | +0.3 |
| TGL | Tana Glacier | 8.88 174 | | | | Pn | 11 07 25.4 | +3.3 |
| N31M | Braeburn, Yuko | 8.89 152 | | | | Pn | 11 07 23.4 | +1.2 |
| LOGN | Logan Glacier | 8.91 169 | | | | Pn | 11 07 24.6 | +2.1 |
| J16K | Anvik River | 8.97 233 | Pn | | | Pn | 11 07 23.2 | +0.1 |
| O28M | Mount Upton | 9.02 166 | | | | Pn | 11 07 26.2 | +2.0 |
| ISLE | Juniper Island | 9.05 173 | | | | Pn | 11 07 28.2 | +3.7 |
| MESA | MESA | 9.49 172 | | | | Pn | 11 07 30.4 | -0.2 |
| O30N | Mendenhall | 9.52 154 | | | | Pn | 11 07 32.0 | +1.3 |
| O29M | Mount Kennedy | 9.64 162 | | | | Pn | 11 07 35.2 | +2.7 |
| N19K | Bonanza Creek | 9.71 210 | | | | Pn | 11 07 35.6 | +2.2 |
| M17K | Holitna River | 9.76 219 | Pn | | | Pn | 11 07 34.4 | +0.4 |
| WHY | Whitehorse | 9.82 151 | | | | Pn | 11 07 35.5 | +0.6 |
| L16K | Owhat River | 9.96 225 | Pn | | | Pn | 11 07 37.8 | +1.0 |
| K15K | Wolf Creek Mou | 10.02 232 | Pn | | | Pn | 11 07 37.5 | 0.0 |
| P29M | Windy Craggy | 10.39 160 | Pn | | | Pn | 11 07 45.0 | +2.3 |
| M16K | Timber Creek | 10.44 222 | Pn | | | Pn | 11 07 43.3 | 0.0 |
| L15K | Ungalak Mounta | 10.51 229 | | | | Pn | 11 07 43.9 | -0.3 |
| WRGLY | Wrigley | 10.54 117 | | | | Pn | 11 07 43.9 | -0.7 |
| P33M | Teslin, Yukon | 10.61 146 | | | | Pn | 11 07 46.4 | +0.6 |
| R33M | Jennings River | 11.74 144 | Pn | | | Pn | 11 08 01.5 | +0.3 |
| Q32M | Nakina River | 11.88 148 | | | | Pn | 11 08 05.0 | +1.8 |
| KDAK | Kodiak Island | 12.33 200 | Pn | | | Pn | 11 08 09.9 | +0.7 |
| | comp=E,0.1nm,0.3s,baz=190,slow=23,SNR=0.9 | | | | | | | |
| KDAK | | | LR | | LR | | 11 13 07.5 | |
| | comp=E,206nm,19.5s,baz=44,slow=38 | | | | | | | |
| DLBC | Dease Lake | 12.81 143 | Pn | | | Pn | 11 08 16.3 | +0.5 |
| DLBC | Dease Lake | 12.81 143 | Pn | | | Pn | 11 08 15.5 | -0.3 |
| | comp=E,0.9nm,0.3s,baz=346,slow=10,SNR=15 | | | | | | | |
| DLBC | | | Sn | | | Sn | 11 10 33.3 | -5.1 |
| | comp=E,0.1nm,0.3s,baz=180,slow=10.0,SNR=1.4 | | | | | | | |
| DLBC | | | Lg | | Lg | | 11 11 54.3 | |
| | comp=E,0.1nm,0.3s,baz=228,slow=16,SNR=4.0 | | | | | | | |
| | comp=E,2.9nm,0.4s | | | | | | | |
| S34M | Telegraph Cree | 13.08 147 | Pn | | | Pn | 11 08 21.0 | +1.6 |
| YKA | Yellowknife Ar | 13.95 106 | | | | Pn | 11 08 28.2 | -3.0 |
| YKA | Yellowknife Ar | 13.95 106 | Pn | | | Pn | 11 08 28.0 | -3.2 |
| | comp=E,0.9nm,0.3s,baz=316,slow=14,SNR=22 | | | | | | | |
| YKA | | | Sn | | Sn | | 11 10 53.2 | -13 |
| | comp=E,1.4nm,0.3s,baz=25,slow=37,SNR=2.2 | | | | | | | |
| YKA | | | LR | | LR | | 11 14 33.0 | |
| | comp=E,100nm,19.0s,baz=286,slow=40 | | | | | | | |
| | comp=E,3.6nm,0.6s | | | | | | | |
| EUNU | Eureka | 17.40 30 | P | | | Pn | 11 09 16.7 | +0.5 |
| BBB | Bella Bella | 19.07 148 | LR | | LR | | 11 16 32.6 | |
| | comp=E,53nm,20.1s,baz=325,slow=35 | | | | | | | |
| B08A | Colville Reser | 24.57 137 | P | | | P | 11 10 32.6 | -0.9 |
| LTY | Liberty | 25.29 140 | P | | | P | 11 10 40.8 | +0.7 |
| LTY | | | IAmb | | IAmb | | 11 10 42.3 | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| LON | Longmire | 25.52 142 | P | | | P | 11 10 44.1 | +1.9 |
| LON | | | IAmb | | IAmb | | 11 10 45.1 | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| MXC | Moxie City | 26.02 140 | P | | | P | 11 10 45.7 | -0.9 |
| MXC | | | IAmb | | IAmb | | 11 10 57.1 | |
| | comp=Z,8.9nm,1.4s | | | | | | | |
| MSO | Missoula | 27.36 130 | P | | | P | 11 10 59.8 | +0.9 |
| EGMT | Eagleton | 27.44 124 | P | | | P | 11 11 00.1 | +0.5 |
| EGMT | | | IAmb | | IAmb | | 11 11 09.3 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| MA2 | Magadan | 28.05 282 | LR | | LR | | 11 22 22.8 | |
| | comp=Z,78nm,20.8s,baz=41,slow=37 | | | | | | | |
| FRB | Frobisher Bay | 28.80 64 | LR | | LR | | 11 23 44.3 | |
| | comp=Z,162nm,19.7s,baz=344,slow=39 | | | | | | | |
| YBH | Yreka Blue Hor | 30.14 146 | LR | | LR | | 11 23 43.4 | |
| | comp=Z,41nm,18.5s,baz=310,slow=37 | | | | | | | |
| IMW | Indian Meadow | 30.86 129 | P | | | P | 11 11 30.0 | -0.3 |
| SFJD | Kangerlussuaq | 31.63 48 | LR | | LR | | 11 27 09.6 | |
| | comp=Z,26nm,19.2s,baz=333,slow=42 | | | | | | | |
| PD31 | Pinedale Array | 32.31 128 | P | | | P | 11 11 43.5 | +0.6 |
| PDAR | Pinedale Array | 32.31 128 | P | | | P | 11 11 44.8 | +2.0 |
| | comp=Z,1.3nm,0.7s,baz=5.3,slow=4.8,SNR=18 | | | | | | | |
| PDAR | | | LR | | LR | | 11 26 04.7 | |
| | comp=Z,52nm,18.0s,baz=338,slow=39 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| HWUT | Hardware Ranch | 32.84 131 | P | | | P | 11 11 47.5 | 0.0 |
| HWUT | | | IAmb | | IAmb | | 11 12 01.2 | |
| | comp=Z,8.7nm,1.5s | | | | | | | |
| TCUT | Toone Canyon | 33.34 131 | P | | | P | 11 11 53.5 | +1.6 |
| RWWY | Rawlins | 33.96 126 | P | | | P | 11 11 57.6 | +0.3 |
| RWWY | | | IAmb | | IAmb | | 11 12 05.0 | |
| | comp=Z,6.7nm,1.1s | | | | | | | |
| NVAR | Mina Array Bea | 34.22 142 | P | | | P | 11 12 02.0 | +2.4 |
| | comp=Z,1.0nm,0.7s,baz=326,slow=7.0,SNR=9.3 | | | | | | | |
| NVAR | | | LR | | LR | | 11 27 05.2 | |
| | comp=Z,56nm,20.6s,baz=342,slow=38 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| TPH | Tonopah | 34.80 141 | P | | | P | 11 12 04.5 | -0.1 |
| P18A | Preston Nutter | 35.04 131 | P | | | P | 11 12 08.8 | +2.0 |
| P18A | | | IAmb | | IAmb | | 11 12 16.1 | |
| | comp=Z,4.6nm,1.0s | | | | | | | |
| PSUT | Pine Spring | 35.15 136 | P | | | P | 11 12 09.6 | +2.0 |
| PSUT | | | IAmb | | IAmb | | 11 12 11.7 | |
| | comp=Z,4.3nm,1.2s | | | | | | | |
| MSU | Marysvale | 35.59 134 | P | | | P | 11 12 12.1 | +0.7 |
| SCHQ | Schefferville | 36.22 73 | P | | | P | 11 12 17.4 | +1.0 |
| | comp=Z,6.0nm,0.9s,baz=337,slow=9.3,SNR=4.2 | | | | | | | |
| SCHQ | | | LR | | LR | | 11 29 26.8 | |
| | comp=Z,44nm,18.3s,baz=246,slow=40 | | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| JFWS | Jewell Farm | 38.22 105 | P | | | P | 11 12 34.1 | +0.7 |
| JFWS | | | IAmb | | IAmb | | 11 12 39.0 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| PFO | Pinyon Flats O | 39.26 142 | LR | | LR | | 11 28 03.8 | |
| | comp=Z,86nm,21.3s,baz=315,slow=35 | | | | | | | |
| SADO | Sadowa | 40.44 93 | LR | | LR | | 11 30 37.2 | |
| | comp=Z,42nm,19.1s,baz=237,slow=38 | | | | | | | |
| ANMO | Albuquerque | 40.46 129 | LR | | LR | | 11 30 15.8 | |
| | comp=Z,37nm,18.2s,baz=64,slow=37 | | | | | | | |
| ARCES | ARCESS Array B | 40.99 5 | P | | | P | 11 12 55.6 | -0.6 |
| | comp=Z,2.1nm,0.8s,baz=351,slow=10.0,SNR=2.0 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| S39A | Bolivar | 41.90 112 | P | | | P | 11 13 03.2 | -0.8 |
| S39A | | | IAmb | | IAmb | | 11 13 12.7 | |
| | comp=Z,5.8nm,1.0s | | | | | | | |
| KLR | Kul'dur | 42.90 287 | LR | | LR | | 11 33 53.4 | |
| | comp=Z,30nm,18.0s,baz=38,slow=40 | | | | | | | |
| K57A | Scipio Center | 43.14 92 | P | | | P | 11 13 14.5 | +0.5 |
| J59A | Piesco | 43.20 89 | P | | | P | 11 13 14.9 | +0.4 |
| J59A | | | IAmb | | IAmb | | 11 13 18.2 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| L56A | Greenwood | 43.30 93 | P | | | P | 11 13 15.9 | +0.5 |
| L56A | | | IAmb | | IAmb | | 11 13 43.1 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| WVT | Waverly | 45.13 107 | P | | | P | 11 13 30.4 | +0.3 |
| TXAR | Lajitas Array | 46.52 128 | P | | | P | 11 13 42.7 | +1.5 |
| | comp=Z,0.4nm,0.5s,baz=353,slow=6.6,SNR=8.0 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| JCT | Junction City | 46.55 123 | P | | | P | 11 13 41.2 | -0.2 |
| JCT | | | IAmb | | IAmb | | 11 13 46.6 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| TKL | Tuckaleechee C | 46.93 103 | LR | | LR | | 11 34 11.8 | |
| | comp=Z,54nm,18.2s,baz=338,slow=37 | | | | | | | |
| USRK | Ussuriysk Ar. | 47.20 283 | P | | | P | 11 13 46.3 | +0.1 |
| | comp=Z,3.5nm,0.9s,baz=27,slow=8.2,SNR=9.7 | | | | | | | |
| USRK | | | LR | | LR | | 11 34 47.8 | |
| | comp=Z,55nm,18.1s,baz=43,slow=38 | | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| FINES | FINESS Array B | 49.11 6 | P | | | P | 11 14 00.1 | -0.6 |
| | comp=Z,3.0nm,0.9s,baz=3.3,slow=9.7,SNR=2.2 | | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| HFS | Hagfors | 49.66 14 | P | | | P | 11 14 04.8 | -0.1 |
| | comp=Z,2.1nm,0.5s,baz=21,slow=6.3,SNR=6.6 | | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| ZALV | Zalesovo Beam | 51.67 325 | P | | | P | 11 14 20.1 | -0.1 |
| | comp=Z,0.8nm,0.4s,baz=28,slow=7.1,SNR=1.5 | | | | | | | |
| ZALV | | | LR | | LR | | 11 39 52.5 | |
| | comp=Z,17nm,18.7s,baz=6.0,slow=40 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| MJB9 | Matsu-Tunnel | 51.85 273 | P | | | P | 11 14 22.4 | +0.6 |
| MAJO | Matsushiro | 51.85 273 | P | | | P | 11 14 22.0 | +0.2 |
| MJAR | Matsushiro Arr | 51.85 273 | P | | | P | 11 14 22.6 | +0.8 |
| | comp=Z,3.7nm,0.9s,baz=16,slow=7.7,SNR=17 | | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| SONM | Songino Array | 52.06 306 | P | | | P | 11 14 24.1 | +0.7 |
| | comp=Z,1.6nm,0.9s,baz=29,slow=7.0,SNR=4.6 | | | | | | | |
| SONM | | | LR | | LR | | 11 40 19.1 | |
| | comp=Z,67nm,19.5s,baz=21,slow=40 | | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| EKA | Eskdalemuir Ar | 52.30 27 | P | | | P | 11 14 23.7 | -1.2 |
| | comp=Z,2.5nm,0.9s,baz=348,slow=7.7,SNR=1.6 | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| JHJ | Hachijo jima 2 | 54.38 270 | LR | | LR | | 11 41 10.1 | |
| | comp=Z,34nm,18.9s,baz=148,slow=40 | | | | | | | |
| KSRS | Korea Array | 54.60 283 | P | | | P | 11 14 43.0 | +1.1 |
| | comp=Z,1.7nm,0.8s,baz=12,slow=7.9,SNR=6.8 | | | | | | | |
| KSRS | | | LR | | LR | | 11 39 38.6 | |
| | comp=Z,40nm,18.0s,baz=50,slow=38 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| BVAR | Borovoye Array | 55.08 335 | P | | | P | 11 14 47.1 | +1.8 |
| | comp=Z,0.3nm,0.3s,baz=10,slow=8.8,SNR=2.3 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| KURBB | Kurchatov Arra | 56.05 328 | P | | | P | 11 14 52.2 | 0.0 |
| | comp=Z,0.6nm,0.6s,baz=15,slow=7.2,SNR=4.7 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| HHC | Hu-ho-hao-te | 56.89 298 | *eP* | | | P | 11 14 57.3 | -1.2 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,140nm,3.6s | | | | | | | |
| JNU | Nakatsue | 57.50 278 | LR | | LR | | 11 41 40.3 | |
| | comp=Z,31nm,18.4s,baz=99,slow=38 | | | | | | | |
| BELG | Belogornoye | 58.02 351 | LR | | LR | | 11 43 31.2 | |
| | comp=Z,20nm,18.1s,baz=92,slow=40 | | | | | | | |
| MKAR | Makanchi Array | 58.98 324 | P | | | P | 11 15 12.8 | -0.2 |
| | comp=Z,0.4nm,0.5s,baz=18,slow=6.6,SNR=3.8 | | | | | | | |
| MKAR | | | LR | | LR | | 11 44 17.4 | |
| | comp=Z,24nm,18.9s,baz=23,slow=40 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| AKASG | Malin Array Be | 59.96 5 | P | | | P | 11 15 19.2 | -0.5 |
| | comp=Z,1.5nm,0.6s,baz=359,slow=6.7,SNR=3.5 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| NJ2 | Nanjing | 62.58 288 | *eP* | | | P | 11 15 37.4 | -0.3 |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| AAK | Ala-Archa | 64.48 329 | LR | | LR | | 11 47 55.4 | |
| | comp=Z,23nm,20.1s,baz=22,slow=40 | | | | | | | |
| ESDC | Sonseca Array | 67.30 32 | P | | | P | 11 16 08.4 | 0.0 |
| | comp=Z,0.4nm,0.6s,baz=351,slow=6.8,SNR=1.9 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| PZH | PanZhiHua | 73.19 301 | P | | | P | 11 16 45.5 | +0.8 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.3s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,190nm,5.1s | | | | | | | |
| CMAR | Chiang Mai Arr | 81.60 301 | P | | | P | 11 17 32.5 | +0.9 |
| | comp=Z,1.4nm,0.7s,baz=360,slow=6.6,SNR=6.1 | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| MDP | Montagnes des | 85.94 86 | LR | | LR | | 11 56 07.4 | |
| | comp=Z,34nm,19.9s,baz=169,slow=36 | | | | | | | |
| HNR | Honiara | 87.48 234 | LR | | LR | | 11 52 16.8 | |
| | comp=Z,410nm,19.7s,baz=295,slow=32 | | | | | | | |
| NNA | Nana | 93.62 115 | LR | | LR | | 12 03 42.5 | |
| | comp=Z,26nm,19.2s,baz=98,slow=38 | | | | | | | |
| PALK | Pallekele | 97.31 315 | LR | | LR | | 12 06 12.8 | |
| | comp=Z,19nm,21.7s,baz=308,slow=38 | | | | | | | |

*SOME **13** 11:15:20.3,39˚.10N×73˚.40E,h10km*
*NNC **13** 11:15:25.7±9.6,39˚.23N×74˚.91E,h0km,mb3.8,mpv3.6,*
*Error ellipse: s-maj=74.3km s-min=41.8km az=158.0*
**ISC 13 11:15:22.9±4.4,38˚.2N±0˚.2×73˚.67E±0˚.1,h100km±,n14,**
**σ1s70/19,2C,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| AML | Almayashu | 3.92 | 0 | P | | Pn | 11 16 22.8 | +1.3 |
| | SNR=29 | | | | | | | |
| UCH | Uchtor | 4.07 | 9 | P | | Sn | 11 17 14.0 | +3.7 |
| | SNR=5.5 | | | | | | | |
| EKS2 | Erkin-Say | 4.46 | 1 | P | | Pn | 11 16 30.2 | +1.8 |
| | SNR=10 | | | | | | | |
| MRKS | Merke | 4.55 | 356 | *eP* | | Pn | 11 16 30.0 | +0.4 |
| | 20nm,0.4s | | | | | | | |
| MRKS | | | | *eS* | | Sn | 11 17 20.4 | -1.0 |
| | 36nm,0.4s | | | | | | | |
| KBK | Karagaybulak | 4.55 | 12 | P | | Pn | 11 16 30.0 | +0.2 |
| | SNR=6.5 | | | | | | | |
| CHMS | Chumysh | 4.86 | 9 | P | | Pn | 11 16 34.3 | +0.5 |
| | SNR=8.9 | | | | | | | |
| TKM2 | Tokmak 2 | 4.94 | 17 | P | | Pn | 11 16 34.4 | -0.6 |
| | SNR=5.6 | | | | | | | |
| KST | Kastek | 5.14 | 19 | *eP* | | Pn | 11 16 39.1 | +1.4 |
| | 2.8nm,0.3s | | | | | | | |
| KST | | | | *eS* | | Sn | 11 17 35.5 | -0.3 |
| | 22nm,0.6s | | | | | | | |
| KST | Kastek | 5.14 | 19 | Pg | | Pn | 11 16 37.0 | -0.6 |
| | 5.5nm,0.5s | | | | | | | |
| KST | | | | Lg | | Lg | 11 17 32.5 | |
| | 22nm,0.8s | | | | | | | |
| DGS | Degeres | 5.28 | 17 | *eP* | | Pn | 11 16 39.2 | -0.3 |
| | 1.7nm,0.4s | | | | | | | |
| DGS | | | | *eS* | | Sn | 11 17 36.1 | -3.1 |
| | 8.0nm,0.5s | | | | | | | |
| DGS | Degeres | 5.28 | 17 | Pg | | Pn | 11 16 38.6 | -0.9 |
| | 1.6nm,0.5s | | | | | | | |
| DGS | | | | Lg | | Lg | 11 17 35.3 | |
| | 9.4nm,0.8s | | | | | | | |
| KK31 | Karatay Array | 5.45 | 335 | ⇑P | | Pn | 11 16 43.6 | +1.8 |
| | 8.4nm,0.7s,baz=128,slow=12,SNR=75 | | | | | | | |
| KK31 | | | | ⇑S | | Sn | 11 17 43.6 | +0.4 |
| | 6.3nm,0.3s,baz=132,slow=20 | | | | | | | |
| BRLS | Borolday | 5.63 | 330 | *eP* | | Pn | 11 16 44.1 | -0.1 |
| | 6.8nm,0.2s | | | | | | | |
| BRLS | | | | *eS* | | Sn | 11 17 44.6 | -3.0 |
| | 12nm,0.4s | | | | | | | |
| BRLS | Borolday | 5.63 | 330 | Pg | | Pn | 11 16 44.1 | -0.1 |
| | 6.8nm,0.2s | | | | | | | |
| BRLS | | | | Lg | | Lg | 11 17 45.3 | |
| | 12nm,0.4s | | | | | | | |

*NEIC **13** 11:23:34.1±1.7,69˚.65N±0˚.06×144˚.6W±0˚.1,h4km±7km,*
*Error ellipse: s-maj=9.6km s-min=4.6km az=205.0*
**AEIC 13 11:23:33.2±1.6,69˚.55N±0˚.07×144˚.7W±0˚.1,h12km±6km,**
**ML2.8,ML3.0/**9**4**(NEIC)**, Error ellipse: s-maj=10.2km**
**s-min=5.2km az=194.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| C27K | Jago River | 0.36 | 77 | Pg | | Pg | 11 23 40.0 | -0.5 |
| C27K | | | | IAML | | | 11 23 46.9 | |
| | comp=N,1μm,0.5s | | | | | | | |
| C27K | | | | IAML | | | 11 23 47.0 | |
| | comp=E,2μm,0.4s | | | | | | | |
| C26K | Camden Bay | 0.38 | 350 | | | Pg | 11 23 40.8 | +0.1 |
| C26K | | | | | | Sg | 11 23 46.4 | +0.7 |
| C26K | Camden Bay | 0.38 | 350 | IAML | | | 11 23 47.5 | |
| | comp=E,743nm,0.4s | | | | | | | |
| C26K | | | | IAML | | | 11 23 50.1 | |
| | comp=N,693nm,0.5s | | | | | | | |
| D25K | Kavik River | 0.63 | 249 | Pg | | Pg | 11 23 45.2 | -0.2 |
| D25K | | | | Sg | | Sb | 11 23 55.4 | +0.6 |
| D27M | Malcolm River | 1.36 | 101 | Pn | | Pg | 11 23 59.8 | +0.5 |
| D27M | | | | IAML | | | 11 24 19.9 | |
| | comp=N,269nm,0.6s | | | | | | | |
| C24K | Franklin Bluff | 1.40 | 279 | | | Pg | 11 24 00.8 | +0.7 |
| C24K | Franklin Bluff | 1.40 | 279 | | | Sg | 11 24 20.0 | +1.7 |
| C24K | Franklin Bluff | 1.40 | 279 | IAML | | | 11 24 21.3 | |
| | comp=N,316nm,0.5s | | | | | | | |
| C24K | | | | IAML | | | 11 24 21.7 | |
| | comp=E,226nm,0.6s | | | | | | | |
| D24K | Happy Valley | 1.51 | 257 | | | Pg | 11 24 02.8 | +0.7 |
| D24K | | | | IAML | | | 11 24 26.7 | |
| | comp=N,218nm,0.8s | | | | | | | |
| D24K | | | | IAML | | | 11 24 28.1 | |
| | comp=E,215nm,0.6s | | | | | | | |
| E27K | Coleen River | 1.78 | 139 | | | Pg | 11 24 06.5 | -0.8 |
| F26K | Sheenjek River | 1.88 | 173 | | | Pb | 11 24 07.2 | -0.1 |
| F26K | | | | | | Sg | 11 24 33.6 | +0.2 |
| F26K | Sheenjek River | 1.88 | 173 | IAML | | | 11 24 36.3 | |
| | comp=E,157nm,0.7s | | | | | | | |
| TOLK | Toolik Lake Re | 1.96 | 245 | | | Pb | 11 24 09.0 | +0.2 |
| TOLK | Toolik Lake Re | 1.96 | 245 | IAML | | | 11 24 41.6 | |
| | comp=E,84nm,0.7s | | | | | | | |
| F25K | Christian Rive | 2.00 | 190 | | | Pb | 11 24 09.0 | -0.4 |
| F25K | | | | | | Sg | 11 24 37.2 | 0.0 |
| F25K | Christian Rive | 2.00 | 190 | IAML | | | 11 24 40.9 | |
| | comp=N,137nm,0.6s | | | | | | | |
| F25K | | | | IAML | | | 11 24 41.2 | |
| | comp=E,97nm,0.7s | | | | | | | |
| E24K | Your Creek | 2.02 | 224 | | | Pb | 11 24 09.8 | +0.1 |
| C23K | Itkillik River | 2.08 | 281 | | | Pb | 11 24 11.2 | +0.5 |
| C23K | Itkillik River | 2.08 | 281 | IAML | | | 11 24 52.1 | |
| | comp=N,142nm,0.7s | | | | | | | |
| E28M | Babbage River | 2.09 | 115 | | | Pb | 11 24 11.2 | +0.2 |
| BMAR | Burnt Mountain | 2.13 | 179 | | | Pb | 11 24 12.2 | +0.5 |
| D23K | Nanushuk River | 2.20 | 257 | Pn | | Pg | 11 24 15.1 | -0.2 |
| D23K | | | | IAML | | | 11 24 58.7 | |
| | comp=E,67nm,0.9s | | | | | | | |
| E23K | Chandalar | 2.33 | 232 | | | Pb | 11 24 14.1 | -0.9 |
| F24K | Squaw Lake | 2.35 | 211 | | | Pb | 11 24 15.8 | +0.4 |
| G26K | Porcupine Rive | 2.63 | 172 | | | Pb | 11 24 18.0 | -2.2 |
| F28M | Old Crow | 2.64 | 135 | | | Pn | 11 24 17.2 | +1.7 |
| E29M | Blow River | 2.72 | 112 | | | Pb | 11 24 19.3 | -2.4 |
| E29M | | | | IAML | | | 11 25 08.2 | |
| | comp=E,50nm,0.7s | | | | | | | |
| E29M | | | | IAML | | | 11 25 52.0 | |
| | comp=N,78nm,0.6s | | | | | | | |
| G25K | Bearman Lake | 2.84 | 191 | | | Pn | 11 24 20.6 | +2.3 |
| D22K | Ayikyak River | 2.92 | 260 | | | Pb | 11 24 24.5 | -0.5 |
| D22K | | | | IAML | | | 11 25 12.9 | |
| | comp=E,54nm,0.6s | | | | | | | |
| D22K | | | | IAML | | | 11 25 20.5 | |
| | comp=N,48nm,0.8s | | | | | | | |
| G27K | Doyon Strip | 2.98 | 156 | | | Pb | 11 24 23.2 | -2.9 |
| FYU | Fort Yukon | 3.00 | 184 | | | Pn | 11 24 23.4 | +3.0 |
| G24K | Hadweenzic Riv | 3.04 | 201 | | | Pn | 11 24 24.0 | +3.0 |
| G24K | | | | IAML | | | 11 25 11.8 | |
| | comp=E,55nm,0.7s | | | | | | | |
| B22K | Teshekpuk Lake | 3.10 | 289 | | | Pn | 11 24 23.8 | +2.1 |
| B22K | Teshekpuk Lake | 3.10 | 289 | IAML | | | 11 25 21.4 | |
| | comp=E,57nm,0.6s | | | | | | | |
| B21K | Ikpikpuk River | 3.47 | 276 | | | Pn | 11 24 28.9 | +2.1 |
| B21K | Ikpikpuk River | 3.47 | 276 | IAML | | | 11 25 42.2 | |
| | comp=N,36nm,1.6s | | | | | | | |
| B21K | | | | IAML | | | 11 26 11.5 | |
| | comp=E,29nm,1.4s | | | | | | | |
| G23K | Bananza Creek | 3.47 | 217 | | | Pb | 11 24 31.1 | -3.4 |
| G23K | | | | IAML | | | 11 25 33.0 | |
| | comp=N,22nm,1.0s | | | | | | | |
| G23K | | | | IAML | | | 11 26 13.3 | |
| | comp=E,28nm,0.9s | | | | | | | |
| G29M | Pine Creek | 3.64 | 134 | Pn | | Pn | 11 24 32.2 | +3.0 |
| G29M | | | | IAML | | | 11 25 35.8 | |
| | comp=N,34nm,1.0s | | | | | | | |
| H24K | Noodor Dome | 3.92 | 199 | Pn | | Pn | 11 24 35.8 | +2.7 |
| H24K | | | | IAML | | | 11 25 43.8 | |
| | comp=N,20nm,0.8s | | | | | | | |
| H24K | | | | IAML | | | 11 25 48.1 | |
| | comp=E,24nm,1.1s | | | | | | | |
| F21K | Alatna River | 4.00 | 238 | | | Pn | 11 24 37.1 | +3.0 |
| F21K | | | | IAML | | | 11 26 28.5 | |
| | comp=N,16nm,0.7s | | | | | | | |
| PRP | Porcupine Dome | 4.06 | 185 | | | Pn | 11 24 38.9 | +3.7 |
| PRP | | | | IAML | | | 11 25 30.0 | |
| | comp=N,15nm,0.4s | | | | | | | |
| PRP | | | | IAML | | | 11 26 13.0 | |
| | comp=E,18nm,0.4s | | | | | | | |
| G30M | tAoh Zraii Nji | 4.08 | 125 | | | Pn | 11 24 37.1 | +1.8 |
| G30M | tAoh Zraii Nji | 4.08 | 125 | IAML | | | 11 26 43.8 | |
| | comp=N,15nm,0.9s | | | | | | | |
| H29M | Whitestone | 4.12 | 141 | | | Pn | 11 24 37.8 | +2.0 |
| H29M | Whitestone | 4.12 | 141 | IAML | | | 11 25 32.1 | |
| | comp=E,19nm,0.5s | | | | | | | |
| H29M | | | | IAML | | | 11 25 55.9 | |
| | comp=N,19nm,0.8s | | | | | | | |
| H23K | Yukon River | 4.17 | 208 | | | Pn | 11 24 39.8 | +3.4 |
| H23K | | | | IAML | | | 11 25 49.3 | |
| | comp=N,18nm,0.8s | | | | | | | |
| H23K | | | | IAML | | | 11 25 52.4 | |
| | comp=E,24nm,0.9s | | | | | | | |
| D20K | Etivluk River | 4.34 | 264 | | | Pn | 11 24 41.5 | +2.8 |
| B20K | Meade River | 4.34 | 282 | | | Pn | 11 24 41.4 | +2.6 |
| EPYK | Eagle Plains | 4.39 | 133 | | | Pn | 11 24 42.1 | +2.6 |
| I28M | Miner Creek | 4.51 | 154 | | | Pn | 11 24 43.9 | +2.7 |
| I28M | Miner Creek | 4.51 | 154 | IAML | | | 11 26 23.1 | |
| | comp=N,11nm,3.8s | | | | | | | |
| I28M | | | | IAML | | | 11 26 27.8 | |
| | comp=E,13nm,3.8s | | | | | | | |
| G31M | Satah River | 4.70 | 119 | | | Pn | 11 24 45.0 | +1.3 |
| G31M | Satah River | 4.70 | 119 | IAML | | | 11 27 07.3 | |
| | comp=N,13nm,2.7s | | | | | | | |
| F20K | Avaraart Lake | 4.79 | 244 | | | Pn | 11 24 47.3 | +2.3 |
| F20K | Avaraart Lake | 4.79 | 244 | IAML | | | 11 26 00.7 | |
| | comp=E,11nm,3.0s | | | | | | | |
| F20K | | | | IAML | | | 11 26 59.8 | |
| | comp=N,14nm,2.8s | | | | | | | |
| MDM | Murphy Dome | 4.81 | 198 | | | Pn | 11 24 47.0 | +1.8 |
| MDM | Murphy Dome | 4.81 | 198 | IAML | | | 11 26 08.0 | |
| | comp=E,13nm,2.8s | | | | | | | |
| MDM | | | | IAML | | | 11 28 04.0 | |
| | comp=N,15nm,0.4s | | | | | | | |
| IL31 | | 4.87 | 191 | | | Pn | 11 24 50.8 | +4.7 |
| ILAR | Eielson Array | 4.87 | 191 | Pn | | Pn | 11 24 49.8 | +3.6 |
| I29M | Ogilvie Camp, | 4.88 | 147 | | | Pn | 11 24 49.0 | +2.8 |
| D19K | Kuna River | 4.93 | 264 | | | Pn | 11 24 49.2 | +2.3 |
| J25K | Salcha River, | 4.97 | 183 | Pn | | Pn | 11 24 51.2 | +3.8 |
| J25K | | | | IAML | | | 11 28 04.9 | |
| | comp=E,12nm,2.0s | | | | | | | |
| EGAK | Eagle | 4.99 | 162 | | | Pn | 11 24 50.9 | +3.1 |
| E19K | Redstone River | 5.06 | 251 | | | Pn | 11 24

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E27K** | **Coleen River** | **1.82 138** | | | Pb | 11 24 51.5 | +0.3 |
| **E27K** | **Coleen River** | **1.82 138** | | IAML | | 11 25 22.0 | |
| | comp=E,90nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89 172** | | Pn | Pn | 11 24 49.1 | -1.2 |
| F26K | | | | IAML | | 11 25 20.6 | |
| | comp=N,70nm,0.4s | | | | | | |
| F26K | | | | IAML | | 11 25 23.8 | |
| | comp=E,104nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.33 210** | | Pn | Pn | 11 24 55.1 | -1.3 |
| F24K | | | | IAML | | 11 25 43.9 | |
| | comp=N,40nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.68 134** | | Pn | Pn | 11 24 59.3 | -1.8 |
| F28M | | | | IAML | | 11 25 47.3 | |
| | comp=E,47nm,0.6s | | | | | | |
| F28M | | | | IAML | | 11 25 50.7 | |
| | comp=N,44nm,0.5s | | | | | | |
| **D22K** | **Ayikyak River** | **2.87 260** | | Pn | Pn | 11 25 03.0 | -0.7 |
| D22K | | | | IAML | | 11 26 00.5 | |
| | comp=N,47nm,1.4s | | | | | | |
| D22K | | | | IAML | | 11 26 00.9 | |
| | comp=E,47nm,1.0s | | | | | | |
| **D19K** | **Kuna River** | **4.88 264** | | | Pn | 11 25 32.7 | +1.4 |
| **J26L** | **Joseph Creek** | **5.11 174** | | | Pn | 11 25 33.8 | -0.8 |
| **A36M** | **Sachs Harbour** | **6.91 60** | | | Pn | 11 25 59.6 | +0.5 |

*AEIC **13** 11:26:46.3±1.3,69.52N±0.06×144.5W±0.1,h17$^{km}_{\pm 7km}$, ML3.7,ML3.8/116(NEIC),Error ellipse: s-maj=8.7km s-min=5.6km az=201.0*
*IDC **13** 11:26:47.6±1.1,69.67N×144.45W,h0$^{km}$,mb3.5/5, mbtmp3.6/9,ML3.8/4,MS3.2/1,Error ellipse: s-maj=23.0km s-min=15.3km az=49.0*
*NEIC **13** 11:26:47.6±1.2,69.61N±0.04×144.47W±0.09,h10$^{km}_{\pm 2km}$, Error ellipse: s-maj=7.4km s-min=5.2km az=350.0*

**ISC 13 11:26:47.9±0.7,69.57N±0.04×144.47W±0.03,h14$^{km}$, n117,σ1§02/119,mb3.5/5,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.27** | **78** | | **Pg** | **11 26 52.4** | **-1.2** |
| C27K | | | | IAML | | 11 26 58.5 | |
| | comp=E,10μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **336** | | **Pg** | **11 26 55.0** | **-0.5** |
| **D25K** | **Kavik River** | **0.72** | **250** | | **Pg** | **11 26 59.0** | **-2.9** |
| **D27M** | **Malcolm River** | **1.28** | **103** | Pn | **Pn** | **11 27 10.3** | **-1.1** |
| D27M | | | | IAML | | 11 27 31.9 | |
| | comp=N,2μm,0.4s | | | | | | |
| D27M | | | | IAML | | 11 27 32.8 | |
| | comp=E,1μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.49** | **278** | | **Pn** | **11 27 14.5** | **+0.4** |
| C24K | | | | IAML | | 11 27 36.5 | |
| | comp=N,2μm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.60** | **257** | | **Pn** | **11 27 16.1** | **+0.4** |
| **D24K** | **Happy Valley** | **1.60** | **257** | | **Sb** | **11 27 38.6** | **+1.5** |
| D24K | | | | IAML | | 11 27 43.4 | |
| | comp=E,2μm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.74** | **142** | | **Pn** | **11 27 18.1** | **+0.5** |
| E27K | | | | | **Sb** | **11 27 41.5** | **+0.3** |
| E27K | | | | IAML | | 11 27 43.0 | |
| | comp=E,1μm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **176** | | **Pn** | **11 27 20.1** | **+0.4** |
| F26K | | | | IAML | | 11 27 50.6 | |
| | comp=N,905nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.02** | **116** | | **Pn** | **11 27 22.4** | **+1.0** |
| **F25K** | **Christian River** | **2.04** | **193** | | **Pn** | **11 27 22.0** | **+0.3** |
| F25K | | | | IAML | | 11 27 53.3 | |
| | comp=N,712nm,0.7s | | | | | | |
| F25K | | | | IAML | | 11 27 56.2 | |
| | comp=E,649nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **2.04** | **94** | | **Pb** | **11 27 23.6** | **-1.0** |
| **TOLK** | **Toolik Lake Re** | **2.06** | **245** | | **Pn** | **11 27 23.1** | **+1.1** |
| TOLK | | | | IAML | | 11 28 04.2 | |
| | comp=E,694nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **226** | | **Pn** | **11 27 22.9** | **+0.3** |
| E24K | | | | IAML | | 11 27 56.1 | |
| | comp=E,624nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.15** | **181** | | **Pn** | **11 27 23.7** | **+0.4** |
| **C23K** | **Itkillik River** | **2.16** | **280** | | **Pn** | **11 27 23.7** | **+0.4** |
| **D23K** | **Nanushuk River** | **2.29** | **258** | | **Pn** | **11 27 25.4** | **+0.2** |
| **E23K** | **Chandalar** | **2.41** | **233** | | **Pn** | **11 27 27.0** | **+0.1** |
| E23K | | | | IAML | | 11 28 07.3 | |
| | comp=N,415nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **213** | | **Pn** | **11 27 26.6** | **-0.3** |
| F24K | | | | IAML | | 11 28 05.0 | |
| | comp=E,473nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.59** | **137** | | **Pn** | **11 27 29.7** | **+0.4** |
| F28M | | | | IAML | | 11 28 12.2 | |
| | comp=E,474nm,1.1s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.65** | **174** | | **Pn** | **11 27 30.0** | **0.0** |
| **E29M** | **Blow River** | **2.65** | **114** | | **Pn** | **11 27 30.5** | **+0.4** |
| E29M | | | | IAML | | 11 28 14.2 | |
| | comp=N,604nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.89** | **193** | | **Pn** | **11 27 33.2** | **-0.1** |
| **G27K** | **Doyon Strip** | **2.97** | **158** | | **Pn** | **11 27 34.4** | **-0.1** |
| **D22K** | **Ayikyak River** | **3.01** | **261** | | **Pn** | **11 27 34.7** | **-0.4** |
| D22K | | | | IAML | | 11 28 32.7 | |
| | comp=E,427nm,0.9s | | | | | | |
| D22K | | | | IAML | | 11 28 34.6 | |
| | comp=N,355nm,0.7s | | | | | | |
| **FYU** | **Fort Yukon** | **3.03** | **186** | | **Pn** | **11 27 36.1** | **+0.7** |
| FYU | | | | IAML | | 11 28 30.9 | |
| | comp=N,390nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.10** | **203** | | **Pn** | **11 27 35.6** | **-0.6** |
| G24K | | | | IAML | | 11 28 27.8 | |
| | comp=E,423nm,1.2s | | | | | | |
| G24K | | | | IAML | | 11 28 28.8 | |
| | comp=N,358nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **3.17** | **225** | | **Pn** | **11 27 37.4** | **+0.1** |
| **B22K** | **Teshekpuk Lake** | **3.18** | **288** | Pn | **Pn** | **11 27 38.0** | **+0.7** |
| **H25L** | **Birch Creek** | **3.36** | **189** | | **Pn** | **11 27 40.4** | **+0.6** |
| **F22K** | **John River** | **3.51** | **237** | | **Pn** | **11 27 42.2** | **+0.2** |
| **H27K** | **Steamboat Moun** | **3.54** | **160** | | **Pn** | **11 27 42.6** | **+0.3** |
| **B21K** | **Ikpikpuk River** | **3.55** | **276** | | **Pn** | **11 27 43.2** | **+0.7** |
| B21K | | | | IAML | | 11 28 51.6 | |
| | comp=N,286nm,0.8s | | | | | | |
| B21K | | | | IAML | | 11 28 58.5 | |
| | comp=E,251nm,1.0s | | | | | | |
| **G29M** | **Pine Creek** | **3.59** | **135** | Pn | **Pn** | **11 27 43.8** | **+0.7** |
| **E21K** | **Killik River** | **3.60** | **256** | | **Pn** | **11 27 43.2** | **0.0** |
| E21K | | | | IAML | | 11 28 52.2 | |
| | comp=N,193nm,0.9s | | | | | | |
| E21K | | | | IAML | | 11 28 53.3 | |
| | comp=E,184nm,0.9s | | | | | | |
| **F30M** | **Barrier River** | **3.74** | **118** | | **Pn** | **11 27 46.5** | **+1.4** |
| **A22K** | **Sinclair Lake** | **3.84** | **297** | | **Pn** | **11 27 46.4** | **0.0** |
| **H24K** | **Noodor Dome** | **3.97** | **201** | Pn | **Pn** | **11 27 48.0** | **-0.3** |
| H24K | | | | IAML | | 11 28 54.5 | |
| | comp=N,158nm,0.9s | | | | | | |
| H24K | | | | IAML | | 11 28 60.0 | |
| | comp=E,142nm,1.1s | | | | | | |
| **G30M** | **tAoh Zrail Nji** | **4.02** | **126** | | **Pn** | **11 27 50.0** | **+1.0** |
| G30M | | | | IAML | | 11 29 05.7 | |
| | comp=N,137nm,0.7s | | | | | | |
| G30M | | | | IAML | | 11 29 08.9 | |
| | comp=E,136nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.08** | **143** | | **Pn** | **11 27 50.6** | **+0.9** |
| **F21K** | **Alatna River** | **4.08** | **239** | | **Pn** | **11 27 50.0** | **+0.2** |
| F21K | | | | IAML | | 11 28 56.2 | |
| | comp=N,102nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **186** | Pn | **Pn** | **11 27 50.4** | **+0.4** |
| PRP | | | | IAML | | 11 28 40.9 | |
| | comp=N,124nm,0.4s | | | | | | |
| **I27K** | **Kandik River** | **4.13** | **163** | | **Pn** | **11 27 51.0** | **+0.4** |
| **INK** | **Inuvik** | **4.15** | **103** | Pn | **Pn** | **11 27 50.9** | **+0.3** |
| **INK** | **Inuvik** | **4.15** | **103** | Pn | **Pn** | **11 27 52.0** | **+1.4** |
| | comp=N,1.2nm,0.3s,baz=293,slow=8.2,SNR=16 | | | | | | |
| INK | | | | Sn | **Sn** | **11 28 36.0** | **-2.8** |
| | comp=N,9.3nm,0.3s,baz=84,slow=21,SNR=7.5 | | | | | | |
| INK | | | | Lg | Lg | 11 28 58.8 | |
| | comp=N,7.2nm,0.3s,baz=33,slow=27,SNR=5.0 | | | | | | |
| | comp=N,3.3nm,0.3s | | | | | | |
| **H23K** | **Yukon River** | **4.23** | **210** | | **Pn** | **11 27 51.9** | **+0.1** |
| H23K | | | | IAML | | 11 29 03.6 | |
| | comp=E,148nm,0.7s | | | | | | |
| H23K | | | | IAML | | 11 29 09.9 | |
| | comp=N,152nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.32** | **173** | | **Pn** | **11 27 53.0** | **0.0** |
| **EPYK** | **Eagle Plains** | **4.34** | **134** | Pn | **Pn** | **11 27 54.1** | **+0.7** |
| **B20K** | **Meade River** | **4.42** | **282** | | **Pn** | **11 27 54.8** | **+0.3** |
| **D20K** | **Etivluk River** | **4.43** | **264** | | **Pn** | **11 27 54.7** | **+0.2** |
| **E20K** | **Nigu River** | **4.43** | **258** | | **Pn** | **11 27 54.8** | **+0.2** |
| **A21K** | **Barrow** | **4.44** | **299** | | **Pn** | **11 27 54.9** | **+0.2** |
| **F31M** | **Tsiigehtchic** | **4.49** | **113** | | **Pn** | **11 27 56.5** | **+1.3** |
| F31M | | | | IAML | | 11 29 15.8 | |
| | comp=N,83nm,1.2s | | | | | | |
| F31M | | | | IAML | | 11 29 25.2 | |
| | comp=E,93nm,1.3s | | | | | | |
| **I28M** | **Miner Creek** | **4.49** | **155** | | **Pn** | **11 27 56.3** | **+0.8** |
| I28M | | | | IAML | | 11 28 50.4 | |
| | comp=N,126nm,0.7s | | | | | | |
| I28M | | | | IAML | | 11 28 51.5 | |
| | comp=E,112nm,0.6s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.53** | **219** | | **Pn** | **11 27 55.4** | **-0.6** |
| **G21K** | **Allakaket** | **4.57** | **232** | | **Pn** | **11 27 55.9** | **-0.6** |
| G21K | | | | IAML | | 11 29 21.1 | |
| | comp=E,94nm,1.0s | | | | | | |
| G21K | | | | IAML | | 11 29 24.1 | |
| | comp=N,90nm,0.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.62** | **196** | | **Pn** | **11 27 58.7** | **+1.5** |
| POKR | | | | IAML | | 11 29 17.7 | |
| | comp=E,90nm,0.8s | | | | | | |
| POKR | | | | IAML | | 11 29 26.1 | |
| | comp=N,70nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.63** | **120** | Pn | **Pn** | **11 27 58.0** | **+0.8** |
| **I23K** | **Minto, Yukon-K** | **4.83** | **205** | Pn | **Pn** | **11 27 59.7** | **-0.3** |
| I23K | | | | IAML | | 11 29 30.8 | |
| | comp=N,84nm,1.1s | | | | | | |
| I23K | | | | IAML | | 11 29 32.0 | |
| | comp=E,79nm,1.5s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.85** | **148** | | **Pn** | **11 28 00.5** | **+0.2** |
| I29M | | | | IAML | | 11 29 21.3 | |
| | comp=E,97nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **4.86** | **199** | | **Pn** | **11 28 00.7** | **+0.3** |
| MDM | | | | IAML | | 11 29 21.3 | |
| | comp=N,78nm,0.7s | | | | | | |
| MDM | | | | IAML | | 11 29 30.9 | |
| | comp=E,64nm,1.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.88** | **244** | | **Pn** | **11 28 01.3** | **+0.6** |
| F20K | | | | IAML | | 11 29 29.0 | |
| | comp=N,70nm,1.1s | | | | | | |
| **COLA** | **College** | **4.90** | **197** | | **Pn** | **11 28 01.5** | **+0.5** |
| **IL31** | | **4.91** | **192** | | **Pn** | **11 28 01.8** | **+0.6** |
| **ILAR** | **Eielson Array** | **4.91** | **192** | Pn | **Pn** | **11 28 02.2** | **+1.1** |
| **ILAR** | **Eielson Array** | **4.91** | **192** | Pn | **Pn** | **11 28 02.5** | **+1.3** |
| | comp=N,2.9nm,0.3s,baz=6.3,slow=12,SNR=18 | | | | | | |
| ILAR | | | | Sn | **Sn** | **11 28 57.6** | **-0.1** |
| | comp=N,4.6nm,0.3s,baz=10,slow=24,SNR=4.1 | | | | | | |
| ILAR | | | | Lg | Lg | 11 29 17.0 | |
| | comp=N,3.6nm,0.3s,baz=9.8,slow=32,SNR=5.6 | | | | | | |
| | comp=N,7.6nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **4.99** | **163** | | **Pn** | **11 28 02.3** | **+0.1** |
| EGAK | | | | IAML | | 11 29 01.0 | |
| | comp=N,70nm,0.7s | | | | | | |
| EGAK | | | | IAML | | 11 29 01.1 | |
| | comp=N,89nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **5.00** | **184** | Pn | **Pn** | **11 28 03.0** | **+0.7** |
| J25K | | | | IAML | | 11 29 32.2 | |
| | comp=E,61nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.02** | **264** | | **Pn** | **11 28 02.9** | **+0.2** |
| D19K | | | | IAML | | 11 29 45.2 | |
| | comp=E,54nm,1.6s | | | | | | |
| **H21K** | **Melozitna River** | **5.06** | **223** | | **Pn** | **11 28 04.7** | **+1.5** |
| H21K | | | | IAML | | 11 29 33.9 | |
| | comp=E,59nm,1.2s | | | | | | |
| H21K | | | | IAML | | 11 29 34.1 | |
| | comp=N,70nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.11** | **176** | | **Pn** | **11 28 05.0** | **+1.0** |
| J26L | | | | IAML | | 11 29 08.0 | |
| | comp=N,72nm,0.6s | | | | | | |
| J26L | | | | IAML | | 11 29 28.5 | |
| | comp=E,63nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.12** | **196** | | **Pn** | **11 28 05.0** | **+1.1** |
| CCB | | | | IAML | | 11 29 31.8 | |
| | comp=N,41nm,0.6s | | | | | | |
| CCB | | | | IAML | | 11 29 34.5 | |
| | comp=E,40nm,0.5s | | | | | | |
| **MLY** | **Manley** | **5.17** | **211** | Pn | **Pn** | **11 28 04.6** | **-0.1** |
| **HDA** | **Harding Lake** | **5.28** | **192** | | **Pn** | **11 28 06.9** | **+0.7** |
| HDA | | | | IAML | | 11 29 38.0 | |
| | comp=N,57nm,1.1s | | | | | | |
| **NEA2** | **Nenana** | **5.31** | **202** | | **Pn** | **11 28 07.6** | **+1.0** |
| **I30M** | **Mount Dempster** | **5.37** | **141** | Pn | **Pn** | **11 28 08.0** | **+0.5** |
| I30M | | | | IAML | | 11 29 10.6 | |
| | comp=N,68nm,0.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.37** | **272** | | **Pn** | **11 28 07.9** | **+0.4** |
| C19K | | | | IAML | | 11 30 07.2 | |
| | comp=E,46nm,1.7s | | | | | | |
| C19K | | | | IAML | | 11 30 07.8 | |
| | comp=N,55nm,1.6s | | | | | | |
| **SCRK** | **Sand Creek** | **5.62** | **178** | | **Pn** | **11 28 12.5** | **+1.5** |
| **K27K** | **Chicken** | **5.65** | **169** | | **Pn** | **11 28 12.4** | **+1.2** |
| **F19K** | **Shaleruckik Mo** | **5.66** | **247** | Pn | **Pn** | **11 28 11.9** | **+0.4** |
| **J29N** | **Klondike Camp** | **5.69** | **152** | | **Pn** | **11 28 12.8** | **+0.8** |
| **BWN** | **Browne** | **5.77** | **202** | | **Pn** | **11 28 12.0** | **-0.9** |
| **G19K** | **Purcell Mounta** | **5.88** | **240** | | **Pn** | **11 28 13.2** | **-1.2** |
| **DAWY** | **Dawson** | **5.88** | **158** | | **Pn** | **11 28 15.8** | **+1.3** |
| **J30M** | **Hart River** | **5.94** | **144** | | **Pn** | **11 28 15.6** | **+0.3** |
| **C18K** | **Utukok River** | **6.05** | **269** | | **Pn** | **11 28 16.1** | **-0.8** |
| **BPAW** | **Bear Paw Mtn.** | **6.07** | **208** | | **Pn** | **11 28 16.7** | **-0.3** |
| **H19K** | **Rounabout Mou** | **6.12** | **234** | | **Pn** | **11 28 18.1** | **+0.4** |
| **E18K** | **Tukpahleerik C** | **6.31** | **258** | | **Pn** | **11 28 20.5** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.38** | **151** | Pn | **Pn** | **11 28 22.7** | **+1.3** |
| **F18K** | **Selawik** | **6.41** | **250** | | **Pn** | **11 28 21.3** | **-0.4** |
| **RND** | **Reindeer** | **6.43** | **198** | | **Pn** | **11 28 23.4** | **+1.3** |
| **G18K** | **Tagagawik** | **6.52** | **242** | | **Pn** | **11 28 23.9** | **+0.6** |
| **L26K** | **Log Cabin Wild** | **6.59** | **176** | | **Pn** | **11 28 25.1** | **+0.8** |
| **J20K** | **Nowinta River** | **6.62** | **220** | | **Pn** | **11 28 25.2** | **+0.7** |
| **BCAR** | **Beaver Creek A** | **6.62** | **169** | Pn | **Pn** | **11 28 25.3** | **+0.6** |
| **L27K** | **Beaver Creek,** | **6.62** | **170** | | **Pn** | **11 28 25.3** | **+0.6** |
| **DHY** | **Denali Highway** | **6.63** | **192** | | **Pn** | **11 28 26.6** | **+1.7** |
| **PAX** | **Paxson** | **6.64** | **184** | | **Pn** | **11 28 26.2** | **+1.2** |
| **A36M** | **Sachs Harbour** | **6.78** | **60** | | **Pn** | **11 28 25.5** | **-1.2** |
| **E17K** | **Hotham Inlet** | **6.89** | **257** | | **Pn** | **11 28 27.9** | **-0.4** |
| **L29M** | **L29M** | **6.97** | **156** | Pn | **Pn** | **11 28 30.5** | **+1.1** |
| **WAT7** | **Susitna Watana** | **6.99** | **197** | | **Pn** | **11 28 31.8** | **+1.9** |
| **D17K** | **Noatak River** | **7.04** | **263** | | **Pn** | **11 28 28.9** | **-1.5** |
| **WAT6** | **Susitna Watana** | **7.15** | **192** | | **Pn** | **11 28 33.8** | **+1.9** |
| **M26K** | **Nabesna, AK** | **7.23** | **175** | | **Pn** | **11 28 35.0** | **+2.0** |
| **G17K** | **Kiwalik Mounta** | **7.41** | **244** | | **Pn** | **11 28 34.9** | **-0.5** |
| **M29M** | **Somme Creek** | **7.56** | **158** | | **Pn** | **11 28 38.3** | **+0.7** |
| **FARO** | **Faro, Yukon** | **8.64** | **143** | | **Pn** | **11 28 52.6** | **+0.2** |
| **DLBC** | **Dease Lake** | **12.79** | **144** | Pn | **Pn** | **11 29 49.1** | **0.0** |
| | comp=N,0.8nm,0.3s,baz=18,slow=11,SNR=12 | | | | | | |
| | comp=N,1.7nm,0.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.91** | **106** | Pn | **Pn** | **11 30 00.7** | **-3.5** |
| | comp=N,0.5nm,0.3s,baz=316,slow=13,SNR=12 | | | | | | |
| YKA | | | | Sn | Sn | 11 32 25.3 | -13 |
| | comp=N,0.6nm,0.3s,baz=318,slow=23,SNR=7.2 | | | | | | |
| | comp=N,1.0nm,0.6s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.02** | **7** | P | **P** | **11 33 14.4** | **+1.3** |
| | comp=N,1.0nm,0.5s,baz=331,slow=8.3,SNR=0.9 | | | | | | |
| | comp=N,1.0nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.27** | **128** | P | **P** | **11 33 17.8** | **+1.8** |
| | comp=N,0.5nm,0.7s,baz=358,slow=8.1,SNR=5.9 | | | | | | |
| | comp=N,0.5nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.20** | **142** | P | **P** | **11 33 36.0** | **+3.2** |
| | comp=N,0.3nm,0.7s,baz=345,slow=8.3,SNR=3.2 | | | | | | |
| | comp=N,0.3nm,0.7s | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.23** | **142** | LR | LR | 11 51 24.8 | |
| | comp=N,35nm,19.4s,baz=257,slow=38 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.06** | **328** | P | **P** | **11 36 27.8** | **+2.1** |
| | comp=N,0.3nm,0.3s,baz=13,slow=7.0,SNR=4.3 | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.00** | **324** | P | **P** | **11 36 46.8** | **+0.3** |
| | comp=N,0.2nm,0.7s,baz=26,slow=8.3,SNR=2.2 | | | | | | |
| | comp=N,0.2nm,0.7s | | | | | | |

**HEL 13 11:29:38.3±0.1,63.96N×28.13E,h0$^{km}$,ML1.6, Explosion,Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIF** | **Nilsia** | **0.58** | **194** | PG | Pg | 11 29 48.7 | -0.7 |
| | baz=12 | | | | | | |
| NIF | | | | SG | Sg | 11 29 56.6 | -0.4 |
| **RMF** | **Romuvaara** | **0.83** | **71** | PG | Pg | 11 29 53.5 | -0.8 |
| RMF | | | | MSG | | 11 30 04.2 | |
| | comp=Z,4.3nm,0.2s | | | | | | |
| **OUL** | **Oulu** | **1.49** | **321** | PG | Pn | 11 30 04.9 | -1.4 |
| | baz=137 | | | | | | |
| OUL | | | | SN | Sn | 11 30 27.3 | +0.9 |
| **SUF** | **Sumiainen** | **1.53** | **217** | PG | Pn | 11 30 05.9 | -0.9 |
| SUF | | | | MSG | | 11 30 24.2 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| SUF | | | | SN | Sn | 11 30 28.6 | +1.2 |
| **OUF** | **Merijarvi** | **1.54** | **287** | PG | Pn | 11 30 05.9 | -1.1 |
| | baz=102 | | | | | | |
| OUF | | | | MSG | | 11 30 24.7 | |
| | comp=Z,5.4nm,0.2s | | | | | | |
| OUF | | | | SN | Sn | 11 30 27.6 | -0.1 |
| **OBF4** | **Vikkela, Lumij** | **1.57** | **305** | PG | Pn | 11 30 06.4 | -1.0 |
| | baz=117 | | | | | | |
| OBF4 | | | | MSG | | 11 30 25.5 | |
| | comp=Z,4.1nm,0.2s | | | | | | |
| OBF4 | | | | SN | Sg | 11 30 29.5 | +0.7 |
| **JOF** | **Joensuu** | **1.77** | **125** | PG | Pn | 11 30 09.7 | -0.4 |
| | baz=305 | | | | | | |
| JOF | | | | SN | Sn | 11 30 33.5 | +0.2 |
| **OBF0** | **Syolatti, Pyha** | **1.79** | **290** | PG | Pn | 11 30 10.0 | -0.3 |
| OBF0 | | | | MSG | | 11 30 31.4 | |
| | comp=Z,4.5nm,0.2s | | | | | | |
| OBF0 | | | | SN | Sg | 11 30 35.5 | -0.1 |
| **MSF** | **Maaselka** | **2.00** | **11** | PG | Pn | 11 30 14.3 | +1.0 |
| MSF | | | | SG | Sb | 11 30 41.8 | +0.7 |
| **KAF** | **Kangasniemi** | **2.03** | **205** | PG | Pn | 11 30 14.4 | +0.7 |
| KAF | | | | MSG | | 11 30 38.4 | |
| | comp=Z,4.6nm,0.2s | | | | | | |
| KAF | | | | SG | Sb | 11 30 41.6 | -0.1 |
| **RANF** | **Ranua** | **2.15** | **345** | PG | Pb | 11 30 17.4 | -0.6 |
| RANF | | | | SG | Sb | 11 30 44.5 | -0.6 |
| **KU6** | **Riekki** | **2.21** | **19** | PG | Pn | 11 30 17.2 | +1.0 |
| | baz=198 | | | | | | |
| KU6 | | | | MSG | | 11 30 43.9 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| KU6 | | | | SG | Sb | 11 30 45.7 | -1.3 |
| **KEF** | **Keuruu** | **2.33** | **221** | PG | Pb | 11 30 20.4 | -0.7 |
| KEF | | | | MSG | | 11 30 47.2 | |
| | comp=Z,3.3nm,0.2s | | | | | | |
| KEF | | | | SG | Sb | 11 30 49.8 | -0.5 |
| **OLKF** | **Oulanka, Finla** | **2.44** | **12** | PG | Pb | 11 30 21.2 | -1.7 |
| OLKF | | | | MSG | | 11 30 50.3 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| OLKF | | | | SG | Sb | 11 30 53.4 | -0.1 |
| **RUF** | **Ruokolahti** | **2.57** | **171** | PB | Pb | 11 30 23.2 | -2.0 |
| | baz=349 | | | | | | |
| RUF | | | | MSG | | 11 30 54.0 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| RUF | | | | SG | Sb | 11 30 58.5 | +1.3 |
| **VAF** | **Ylistaro** | **2.61** | **252** | PG | Pb | 11 30 24.2 | -1.7 |
| | baz=64 | | | | | | |
| VAF | | | | MSG | | 11 30 55.3 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| VAF | | | | SG | Sb | 11 30 57.8 | -0.7 |
| **FIA0** | **FINESS Array S** | **2.69** | **201** | PB | Pn | 11 30 24.9 | +2.1 |
| FIA0 | | | | MSG | | 11 30 57.6 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| FIA0 | | | | SG | Sb | 11 31 02.2 | +1.4 |
| **RNF** | **Rovaniemi** | **2.81** | **343** | PG | Pb | 11 30 29.3 | 0.0 |
| | baz=164 | | | | | | |
| RNF | | | | SG | Sb | 11 31 04.6 | +0.4 |
| **KLF** | **Kolari** | **3.72** | **334** | SB | Sn | 11 31 25.5 | +4.2 |
| **RAF** | **Rauma** | **4.17** | **228** | PN | Pn | 11 30 41.5 | -1.5 |
| **RAJF** | **Raja-Jooseppi** | **4.54** | **1** | PN | Pn | 11 30 48.3 | +0.1 |
| RAJF | | | | SB | Sb | 11 31 49.7 | -4.3 |
| **HEMU** | **Hemsoen** | **4.73** | **259** | PN | Pn | 11 30 51.9 | +1.2 |
| | baz=70 | | | | | | |

**HEL 13 11:30:34.0±0.5,67.83N×20.03E,h0$^{km}$,ML1.4, Explosion,Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SALU** | **Saltoluokta** | **0.74** | **233** | *e*P | Pb | 11 30 48.9 | -0.7 |
| **LANU** | **Lannavaara** | **0.78** | **73** | PG | Pg | 11 30 47.8 | -1.0 |
| LANU | | | | SG | Sg | 11 30 57.4 | -1.4 |
| **PAJU** | **Pajala** | **1.44** | **123** | SN | Sg | 11 31 18.6 | -1.6 |
| **PAJU** | **Pajala** | **1.44** | **123** | PG | Pn | 11 30 59.5 | -1.8 |
| PAJU | | | | SG | Sg | 11 31 18.6 | -1.6 |
| **HEF** | **Hetta** | **1.48** | **65** | *e*P | Pn | 11 30 59.9 | -2.0 |
| **HEF** | **Hetta** | **1.48** | **65** | PG | Pn | 11 31 00.3 | -1.6 |
| HEF | | | | MSG | | 11 31 18.6 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| HEF | | | | SG | Sg | 11 31 19.6 | -1.9 |
| **KLF** | **Kolari** | **1.63** | **110** | PG | Pn | 11 31 03.2 | -0.6 |
| KLF | | | | MSG | | 11 31 22.7 | |
| | comp=Z,2.5nm,0.2s | | | | | | |
| KLF | | | | SG | Sn | 11 31 24.2 | -1.2 |
| **KTK1** | **Kautokeino** | **1.68** | **43** | SN | Sb | 11 31 27.3 | -0.1 |
| **KALU** | **Kalix** | **2.38** | **145** | PG | Pn | 11 31 15.6 | +1.5 |
| KALU | | | | SG | Sb | 11 31 47.5 | +0.2 |
| **TOF** | **Tornio** | **2.44** | **134** | PG | Pb | 11 31 17.0 | -1.7 |
| TOF | | | | MSG | | 11 31 46.0 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| TOF | | | | SG | Sb | 11 31 48.9 | -0.2 |
| **SGF** | **Sodankyl** | **2.52** | **96** | SB | Sn | 11 31 49.2 | +1.8 |
| **RNF** | **Rovaniemi** | **2.63** | **115** | PG | Pb | 11 31 20.5 | -1.4 |
| RNF | | | | SG | Sb | 11 31 53.0 | -1.7 |
| **RAJF** | **Raja-Jooseppi** | **3.17** | **74** | SB | Sb | 11 32 07.0 | -3.1 |
| **KEV** | **Kevo** | **3.19** | **49** | SN | Sn | 11 32 04.5 | +0.5 |
| **RANF** | **Ranua** | **3.23** | **121** | PG | Pb | 11 31 32.1 | +0.1 |
| RANF | | | | SB | Sn | 11 32 07.6 | +2.7 |
| **OUL** | **Oulu** | **3.62** | **137** | SG | Sb | 11 32 28.5 | +3.2 |
| **MSF** | **Maaselka** | **4.04** | **114** | SG | Sb | 11 32 39.5 | +4.2 |
| **KU6** | **Riekki** | **4.28** | **110** | SG | Sg | 11 32 47.6 | -3.8 |

*AEIC **13** 11:34:45.0±2.0,69.53N±0.04×144.84W±0.08,h16$^{km}_{\pm 5km}$, ML3.4,ML3.5/118(NEIC),Error ellipse: s-maj=6.1km s-min=4.1km az=187.0*
*NEIC **13** 11:34:46.7±1.8,69.61N±0.04×144.78W±0.08,h10$^{km}_{\pm 2km}$, Error ellipse: s-maj=7.7km s-min=4.7km az=0.0*
*IDC **13** 11:34:48.9±4.2,69.47N×144.25W,h0$^{km}$,mb3.3/1, mbtmp3.4/5,ML3.3/4,Error ellipse: s-maj=53.3km s-min=21.0km az=159.0*

**ISC 13 11:34:45.8±0.7,69.55N±0.04×144.81W±0.03,h10$^{km}$, n127,σ1§66/118,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.37** | **354** | | **Pg** | **11 34 53.0** | **0.0** |
| C26K | | | | | **Sg** | **11 34 58.3** | **+0.4** |
| **C27K** | **Jago River** | **0.39** | **79** | Pg | **Pg** | **11 34 53.3** | **-0.1** |
| C27K | | | | IAML | | 11 35 01.3 | |
| | comp=N,4μm,0.6s | | | | | | |
| **C27K** | **Jago River** | **0.39** | **79** | | **Sg** | **11 34 58.7** | **+0.1** |
| **D25

comp=E,172nm,0.5s
F28M IAML 11 36 17.0
comp=N,217nm,0.5s
**E29M Blow River 2.75 112 Pn 11 35 32.1 +2.2**
E29M IAML 11 36 15.8
comp=E,161nm,0.5s
**G25K Bearman Lake 2.84 190 Pn 11 35 31.5 +0.4**
**D22K Ayikyak River 2.89 260** Pn **Pn 11 35 33.4 +1.6**
D22K IAML 11 36 27.8
comp=N,173nm,0.8s
D22K IAML 11 36 31.7
comp=E,183nm,0.8s
**G27K Doyon Strip 3.00 155 Pn 11 35 33.0 -0.2**
**FYU Fort Yukon 3.00 183 Pn 11 35 35.9 +2.5**
FYU IAML 11 36 29.1
comp=E,177nm,0.9s
**G24K Hadweenzic Riv 3.04 200 Pn 11 35 35.3 +1.5**
**B22K Teshekpuk Lake 3.07 289 Pn 11 35 35.2 +1.0**
**COLD Coldfoot 3.07 223 Pn 11 35 35.0 +0.7**
**H25L Birch Creek 3.32 187 Pn 11 35 38.5 +0.8**
**B21K Ikpikpuk River 3.44 276 Pn 11 35 40.9 +1.6**
B21K IAML 11 36 46.2
comp=E,119nm,0.8s
**E21K Killik River 3.48 256 Pn 11 35 40.3 +0.4**
**E21K Killik River 3.48 256** IAML 11 36 46.4
comp=N,96nm,0.7s
E21K IAML 11 36 49.7
comp=E,95nm,0.7s
**H27K Steamboat Moun 3.56 158 Pn 11 35 42.6 +1.6**
**G29M Pine Creek 3.66 133 Pn 11 35 44.3 +1.9**
**F30M Barrier River 3.84 116 Pn 11 35 46.9 +2.0**
**H24K Noodor Dome 3.91 199** Pn **Pn 11 35 47.8 +1.9**
H24K IAML 11 36 50.0
comp=E,67nm,0.8s
H24K IAML 11 36 52.1
comp=N,68nm,0.7s
**F21K Alatna River 3.97 238 Pn 11 35 47.9 +1.2**
F21K IAML 11 36 53.9
comp=N,52nm,0.7s
**PRP Porcupine Dome 4.06 184 Pn 11 35 49.0 +1.0**
**PRP Porcupine Dome 4.06 184** IAML 11 36 40.0
comp=E,49nm,0.3s
PRP IAML 11 37 03.8
comp=N,50nm,1.0s
**G30M tAoh Zraii Nji 4.11 125 Pn 11 35 50.1 +1.6**
G30M IAML 11 37 11.9
comp=N,56nm,0.7s
**H29M Whitestone 4.14 141 Pn 11 35 50.2 +1.2**
**H29M Whitestone 4.14 141** IAML 11 37 11.1
comp=N,72nm,0.7s
**I27K Kandik River 4.15 161 Pn 11 35 49.4 +0.2**
**H23K Yukon River 4.16 208 Pn 11 35 50.9 +1.7**
H23K IAML 11 37 06.2
comp=N,73nm,0.7s
**INK Inuvik 4.26 102** Pn **Pn 11 35 52.1 +1.5**
**INK Inuvik 4.26 102** Pn **Pn 11 35 51.9 +1.4**
comp=N,0.6nm,0.3s,baz=308,slow=8.4,SNR=19
INK Sn **Sn 11 36 38.0 -2.3**
comp=N,4.0nm,0.3s,baz=86,slow=31,SNR=9.0
INK Lg Lg 11 36 58.0
comp=N,2.5nm,0.3s,baz=232,slow=29,SNR=2.7
comp=N,2.9nm,0.4s
**D20K Etivluk River 4.31 264 Pn 11 35 51.3 0.0**
**B20K Meade River 4.31 282 Pn 11 35 52.4 +1.1**
**E20K Nigu River 4.31 258 Pn 11 35 52.1 +0.7**
**I26K Coal Creek Min 4.31 171 Pn 11 35 54.2 +2.9**
I26K IAML 11 37 16.4
comp=E,58nm,0.8s
**A21K Barrow 4.35 300 Pn 11 35 52.4 +0.7**
**EPYK Eagle Plains 4.41 133 Pn 11 35 54.4 +1.6**
**H22K Ishtalitna Cre 4.44 217 Pn 11 35 53.7 +0.5**
**G21K Allakaket 4.47 231 Pn 11 35 55.7 +2.2**
G21K IAML 11 37 21.5
comp=N,44nm,0.9s
G21K IAML 11 37 22.3
comp=E,41nm,0.7s
**I28M Miner Creek 4.53 153 Pn 11 35 57.0 +2.6**
I28M IAML 11 37 20.2
comp=E,38nm,1.1s
**POKR Poker Plat Res 4.57 194 Pn 11 35 56.8 +1.9**
POKR IAML 11 37 11.5
comp=N,38nm,0.6s
POKR IAML 11 37 17.0
comp=E,46nm,1.6s
**F31M Tsiigehtchic 4.59 112 Pn 11 35 56.7 +1.7**
F31M IAML 11 37 13.2
comp=N,46nm,0.8s
F31M IAML 11 37 18.3
comp=E,54nm,1.3s
**G31M Satah River 4.73 119 Pn 11 35 58.0 +1.0**
G31M IAML 11 37 33.1
comp=N,48nm,0.8s
**I23K Minto, Yukon-K 4.76 204 Pn 11 35 57.7 +0.3**
**I23K Minto, Yukon-K 4.76 204** IAML 11 37 23.9
comp=E,44nm,1.1s
I23K IAML 11 37 32.6
comp=N,48nm,1.2s
**F20K Avaraart Lake 4.77 243 Pn 11 35 59.4 +1.9**
**MDM Murphy Dome 4.80 198 Pn 11 35 59.1 +1.1**
MDM IAML 11 37 16.5
comp=N,33nm,0.6s
MDM IAML 11 37 20.7
comp=E,33nm,0.8s
**COLA College 4.85 196** Pn **Pn 11 36 01.2 +2.6**
**IL31 4.87 191 Pn 11 36 01.7 +2.8**
**ILAR Eielson Array 4.87 191** Pn **Pn 11 36 00.7 +1.7**
**ILAR Eielson Array 4.87 191** Pn **Pn 11 36 00.9 +1.9**
comp=E,1.8nm,0.3s,baz=14,slow=14,SNR=14
ILAR Sn **Sn 11 36 55.4 0.0**
comp=E,2.8nm,0.3s,baz=11,slow=22,SNR=6.4
ILAR Lg Lg 11 37 16.4
comp=E,2.2nm,0.3s,baz=11,slow=32,SNR=6.7
comp=E,2.4nm,0.4s
**I29M Ogilvie Camp, 4.89 146 Pn 11 36 01.6 +2.3**
I29M IAML 11 37 02.0
comp=E,40nm,0.7s
I29M IAML 11 37 11.2
comp=N,34nm,0.6s
**D19K Kuna River 4.90 264 Pn 11 35 59.9 +0.6**
**D19K Kuna River 4.90 264** IAML 11 37 46.9
comp=E,29nm,0.9s
**H21K Melozitna River 4.96 222** Pn **Pn 11 36 01.7 +1.5**
H21K IAML 11 37 33.4
comp=E,34nm,0.9s
H21K IAML 11 37 42.0
comp=N,28nm,0.8s
**J25K Salcha River, 4.97 183 Pn 11 36 02.5 +2.2**
J25K IAML 11 37 29.4
comp=E,40nm,1.0s
**EGAK Eagle 5.00 162 Pn 11 36 02.5 +1.8**
EGAK IAML 11 37 04.3
comp=E,29nm,0.6s
EGAK IAML 11 37 31.9
comp=E,24nm,1.4s
**E19K Redstone River 5.03 251 Pn 11 36 03.0 +1.9**
E19K IAML 11 37 00.1
comp=N,27nm,0.5s
E19K IAML 11 37 51.5
comp=E,25nm,1.2s
**CCB Clear Creek Bu 5.07 195 Pn 11 36 02.3 +0.7**
**CCB Clear Creek Bu 5.07 195** IAML 11 37 32.6
comp=E,23nm,1.3s
**MLY Manley 5.09 210 Pn 11 36 03.1 +1.1**
**J26L Joseph Creek 5.10 174 Pn 11 36 03.6 +1.4**
J26L IAML 11 37 13.5
comp=N,22nm,0.7s
J26L IAML 11 37 34.4
comp=E,35nm,0.9s
**HDA Harding Lake 5.24 190 Pn 11 36 07.1 +3.1**
HDA IAML 11 37 51.4
comp=N,30nm,0.8s
**NEA2 Nenana 5.25 200 Pn 11 36 05.7 +1.5**
NEA2 IAML 11 37 45.0
comp=E,24nm,2.6s
**C19K Lookout Ridge 5.25 272 Pn 11 36 04.9 +0.6**
**C19K Lookout Ridge 5.25 272** IAML 11 37 54.6
comp=E,29nm,2.5s
**WRH Wood River Hil 5.26 196 Pn 11 36 05.4 +1.0**
**WRH Wood River Hil 5.26 196** IAML 11 37 32.7
comp=N,21nm,1.4s
WRH IAML 11 37 33.6
comp=E,22nm,0.7s
**I30M Mount Dempster 5.43 139** Pn **Pn 11 36 08.5 +1.8**
**F19K Shaleruckik Mo 5.55 247 Pn 11 36 08.3 +0.1**
**SCRK Sand Creek 5.61 176 Pn 11 36 10.7 +1.4**

**A19K Wainwright 5.65 284 Pn 11 36 10.5 +0.9**
**K27K Chicken 5.65 168 Pn 11 36 11.3 +1.7**
**J29N Klondike Camp 5.73 150 Pn 11 36 14.1 +3.2**
**G19K Purcell Mounta 5.76 239 Pn 11 36 13.1 +1.9**
**DAWY Dawson 5.91 156 Pn 11 36 15.6 +2.3**
**C18K Utukok River 5.93 269** Pn **Pn 11 36 14.4 +0.9**
**J30M Hart River 5.99 142 Pn 11 36 15.7 +1.2**
**BPAW Bear Paw Mtn. 5.99 207 Pn 11 36 16.1 +1.8**
**H19K Roundabout Mou 6.01 233 Pn 11 36 16.0 +1.4**
**MCK McKinley 6.07 198 Pn 11 36 16.3 +0.8**
**E18K Tukpahlearik C 6.19 257 Pn 11 36 17.5 +0.5**
**F18K Selawik 6.29 249 Pn 11 36 18.6 +0.2**
**RND Reindeer 6.38 197 Pn 11 36 21.7 +1.9**
**K29M Barlow Dome 6.42 150** Pn **Pn 11 36 23.3 +3.0**
**J20K Nowinta River 6.53 219 Pn 11 36 22.4 +0.8**
**L26K Log Cabin Wild 6.58 174 Pn 11 36 24.3 +1.8**
**DHY Denali Highway 6.59 190 Pn 11 36 24.9 +2.2**
**BCAR Beaver Creek A 6.63 168** Pn **Pn 11 36 24.8 +1.6**
**L27K Beaver Creek, 6.63 168 Pn 11 36 24.7 +1.5**
**C17K DeLong Mountai 6.68 269 Pn 11 36 22.8 -1.0**
**RDOG Red Dog Mine 6.73 266 Pn 11 36 25.1 +0.7**
**E17K Hotham Inlet 6.77 257 Pn 11 36 24.8 -0.2**
**A36M Sachs Harbour 6.89 60 Pn 11 36 25.9 -0.6**
**L29M L29M 7.00 154 Pn 11 36 30.3 +2.1**
**M26K Nabesna, AK 7.22 173** Pn **Pn 11 36 35.5 +4.3**
**C36M Paulatuk 7.29 82 Pn 11 36 31.1 -1.0**
**G17K Kiwalik Mounta 7.29 244 Pn 11 36 32.1 -0.1**
**M27K Edge Creek, AK 7.32 169 Pn 11 36 36.4 +3.6**
**M29M Somme Creek 7.59 157** Pn **Pn 11 36 38.3 +1.9**
**N30M Aishikik Lake 8.73 155 Pn 11 36 54.6 +2.7**
**DLBC Dease Lake 12.85 143** Pn **Pn 11 37 47.3 -0.9**
comp=E,0.1nm,0.3s,baz=84,slow=9.2,SNR=1.6
comp=E,0.6nm,0.4s
**YKA Yellowknife Ar 14.02 105** Pn **Pn 11 38 00.7 -3.5**
comp=E,0.3nm,0.3s,baz=309,slow=13,SNR=11
YKA Sn Sn 11 40 27.6 -12
comp=E,0.2nm,0.3s,baz=314,slow=24,SNR=1.3
comp=E,1.1nm,0.6s
**PDAR Pinedale Array 32.36 127** P **P 11 41 17.9 +2.7**
comp=E,0.3nm,0.6s,baz=345,slow=4.6,SNR=3.6
comp=E,0.3nm,0.6s

*AEIC **13** 11:38:53.1±1.6, 69.50N±0.06×144.33W±0.10, h12km±7km, ML3.4, ML3.5/116(NEIC), Error ellipse: s-maj=8.3km s-min=4.9km az=187.0*
*NEIC **13** 11:38:55.1±1.4, 69.58N±0.06×144.3W±0.1, h10km±2km, Error ellipse: s-maj=9.7km s-min=5.5km az=15.0*
*IDC **13** 11:38:56.4±2.0, 69.58N×143.94W, h0km, mb3.3/4, mbtmp3.4/7, ML3.3/3, Error ellipse: s-maj=32.5km s-min=24.6km az=125.0*

**ISC 13 11:38:55.5±0.7, 69.55N±0.04×144.35W±0.03, h14km, n120, σ1s11/111, mb3.4/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.24** | **72** | Pg | **Pg** | **11 38 58.3** | **-2.4** |
| **C26K** | **Camden Bay** | **0.41** | **332** | | **Pg** | **11 39 02.8** | **-1.0** |
| C26K | | | | | **Sb** | **11 39 10.4** | **-0.4** |
| **D25K** | **Kavik River** | **0.75** | **253** | | **Pg** | **11 39 07.3** | **-2.8** |
| **D25K** | **Kavik River** | **0.75** | **253** | | **Sg** | **11 39 17.7** | **-2.3** |
| **D27M** | **Malcolm River** | **1.24** | **103** | | **Pn** | **11 39 16.6** | **-1.9** |
| D27M | | | | IAML | | 11 39 37.7 | |
| | comp=N,1μm,0.5s | | | | | | |
| D27M | | | | IAML | | 11 39 41.1 | |
| | comp=E,680nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.53** | **278** | | **Pn** | **11 39 22.9** | **+0.5** |
| C24K | | | | | **Sb** | **11 39 43.6** | **+0.7** |
| **C24K** | **Franklin Bluff** | **1.53** | **278** | IAML | | 11 39 45.7 | |
| | comp=N,597nm,1.1s | | | | | | |
| C24K | | | | IAML | | 11 39 48.0 | |
| | comp=E,726nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **258** | | **Pn** | **11 39 24.8** | **+1.0** |
| **E27K** | **Coleen River** | **1.70** | **143** | | **Pn** | **11 39 24.6** | **-0.2** |
| E27K | | | | IAML | | 11 39 51.9 | |
| | comp=E,431nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.70** | **143** | | **Sn** | **11 39 47.1** | **+0.9** |
| **F26K** | **Sheenjek River** | **1.87** | **178** | | **Pn** | **11 39 27.0** | **-0.1** |
| **F26K** | **Sheenjek River** | **1.87** | **178** | IAML | | 11 39 55.2 | |
| | comp=N,460nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **117** | | **Pn** | **11 39 29.4** | **+0.9** |
| E28M | | | | IAML | | 11 39 59.4 | |
| | comp=N,400nm,0.5s | | | | | | |
| **D28M** | **Stokes Point** | **2.00** | **94** | | **Pn** | **11 39 29.9** | **+1.1** |
| **F25K** | **Christian Rive** | **2.03** | **194** | | **Pn** | **11 39 29.6** | **+0.3** |
| **F25K** | **Christian Rive** | **2.03** | **194** | IAML | | 11 40 00.7 | |
| | comp=E,393nm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.08** | **246** | | **Pn** | **11 39 30.0** | **-0.1** |
| **TOLK** | **Toolik Lake Re** | **2.08** | **246** | IAML | | 11 40 02.6 | |
| | comp=E,452nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 11 40 08.7 | |
| | comp=N,316nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.11** | **227** | | **Pn** | **11 39 30.0** | **-0.5** |
| **BMAR** | **Burn Mountain** | **2.14** | **182** | Pn | **Pn** | **11 39 31.1** | **+0.3** |
| **C23K** | **Itkillik River** | **2.20** | **280** | Pn | **Pb** | **11 39 34.9** | **-0.2** |
| **D23K** | **Nanushuk River** | **2.33** | **258** | | **Pn** | **11 39 34.2** | **+0.9** |
| **F24K** | **Squaw Lake** | **2.42** | **214** | | **Pn** | **11 39 34.8** | **+0.1** |
| **E23K** | **Chandalar** | **2.43** | **234** | | **Pn** | **11 39 34.6** | **-0.2** |
| **F28M** | **Old Crow** | **2.55** | **138** | | **Pn** | **11 39 36.7** | **+0.3** |
| F28M | | | | IAML | | 11 40 18.4 | |
| | comp=N,248nm,0.6s | | | | | | |
| F28M | | | | IAML | | 11 40 22.6 | |
| | comp=E,198nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.60** | **114** | | **Pn** | **11 39 38.9** | **+1.8** |
| E29M | | | | IAML | | 11 40 16.9 | |
| | comp=N,222nm,0.7s | | | | | | |
| E29M | | | | IAML | | 11 40 21.0 | |
| | comp=E,188nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.62** | **175** | | **Pn** | **11 39 37.4** | **0.0** |
| **G25K** | **Bearman Lake** | **2.88** | **194** | | **Pn** | **11 39 40.7** | **-0.2** |
| **G27K** | **Doyon Strip** | **2.94** | **159** | | **Pn** | **11 39 41.3** | **-0.5** |
| **FYU** | **Fort Yukon** | **3.02** | **187** | Pn | **Pn** | **11 39 44.2** | **+1.4** |
| **D22K** | **Ayikyak River** | **3.05** | **261** | | **Pn** | **11 39 44.1** | **+0.9** |
| D22K | | | | IAML | | 11 40 34.3 | |
| | comp=N,161nm,0.6s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.10** | **204** | | **Pn** | **11 39 43.8** | **-0.1** |
| G24K | | | | IAML | | 11 40 37.0 | |
| | comp=E,103nm,1.4s | | | | | | |
| G24K | | | | IAML | | 11 40 40.6 | |
| | comp=N,151nm,0.6s | | | | | | |
| **COLD** | **Coldfoot** | **3.19** | **226** | | **Pn** | **11 39 45.1** | **-0.1** |
| **B22K** | **Teshekpuk Lake** | **3.22** | **288** | | **Pn** | **11 39 46.3** | **+0.7** |
| **H27K** | **Steamboat Moun** | **3.50** | **161** | | **Pn** | **11 39 49.6** | **+0.1** |
| **F22K** | **John River** | **3.54** | **238** | | **Pn** | **11 39 50.4** | **+0.4** |
| **G29M** | **Pine Creek** | **3.55** | **135** | | **Pn** | **11 39 50.0** | **-0.2** |
| **G23K** | **Bananza Creek** | **3.56** | **219** | | **Pn** | **11 39 50.0** | **-0.2** |
| G23K | | | | IAML | | 11 40 49.7 | |
| | comp=E,76nm,0.7s | | | | | | |
| G23K | | | | IAML | | 11 40 54.3 | |
| | comp=N,70nm,1.2s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.60** | **276** | | **Pn** | **11 39 51.7** | **+0.9** |
| B21K | | | | IAML | | 11 41 05.5 | |
| | comp=N,122nm,0.9s | | | | | | |
| **E21K** | **Killik River** | **3.64** | **257** | | **Pn** | **11 39 52.1** | **+0.7** |
| E21K | | | | IAML | | 11 40 57.3 | |
| | comp=N,86nm,0.6s | | | | | | |
| E21K | | | | IAML | | 11 41 05.8 | |
| | comp=E,75nm,0.9s | | | | | | |
| **F30M** | **Barrier River** | **3.70** | **118** | | **Pn** | **11 39 53.0** | **+0.9** |
| **A22K** | **Sinclair Lake** | **3.88** | **297** | | **Pn** | **11 39 54.5** | **-0.1** |
| **H24K** | **Noodor Dome** | **3.97** | **201** | | **Pn** | **11 39 56.0** | **0.0** |
| H24K | | | | IAML | | 11 41 06.8 | |
| | comp=E,57nm,1.1s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.98** | **127** | | **Pn** | **11 39 57.3** | **+1.2** |
| G30M | | | | IAML | | 11 41 06.7 | |
| | comp=N,69nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **4.04** | **143** | | **Pn** | **11 39 56.8** | **-0.1** |
| **H29M** | **Whitestone** | **4.04** | **143** | IAML | | 11 41 10.3 | |
| | comp=N,72nm,1.5s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.08** | **187** | | **Pn** | **11 39 58.7** | **+1.2** |
| PRP | | | | IAML | | 11 41 06.5 | |
| | comp=E,56nm,0.7s | | | | | | |
| PRP | | | | IAML | | 11 41 06.6 | |
| | comp=N,70nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.10** | **164** | | **Pn** | **11 39 58.0** | **+0.2** |
| **INK** | **Inuvik** | **4.10** | **103** | | **Pn** | **11 39 56.6** | **-1.1** |
| **INK** | **Inuvik** | **4.10** | **103** | Pn | **Pn** | **11 39 58.4** | **+0.7** |
| | comp=N,0.7nm,0.3s,baz=296,slow=11,SNR=10 | | | | | | |
| INK | | | | Sn | **Sn** | **11 40 44.5** | **-0.9** |
| | comp=N,2.3nm,0.3s,baz=251,slow=14,SNR=5.0 | | | | | | |
| INK | | | | Lg | Lg | 11 41 08.1 | |
| | comp=N,3.1nm,0.3s,baz=186,slow=32,SNR=5.0 | | | | | | |
| | comp=N,3.0nm,0.3s | | | | | | |

**F21K Alatna River 4.11 240 Pn 11 39 58.1 +0.3**
F21K IAML 11 41 14.2
comp=E,60nm,0.8s
F21K IAML 11 41 15.3
comp=N,59nm,0.7s
**H23K Yukon River 4.24 210 Pn 11 40 00.0 +0.5**
H23K IAML 11 41 12.5
comp=E,52nm,1.1s
H23K IAML 11 41 17.6
comp=N,64nm,1.1s
**I26K Coal Creek Min 4.29 173 Pn 11 40 00.8 +0.5**
**EPYK Eagle Plains 4.30 134 Pn 11 40 00.2 -0.3**
**F31M Tsiigehtchic 4.44 113 Pn 11 40 02.9 +0.5**
F31M IAML 11 41 18.4
comp=N,47nm,0.7s
**I28M Miner Creek 4.46 156 Pn 11 40 03.2 +0.5**
**I28M Miner Creek 4.46 156** IAML 11 40 58.0
comp=N,54nm,0.5s
I28M IAML 11 40 60.0
comp=E,56nm,0.6s
**B20K Meade River 4.47 282 Pn 11 40 02.8 +0.1**
**A21K Barrow 4.49 299 Pn 11 40 03.1 +0.2**
**G31M Satah River 4.59 120 Pn 11 40 04.9 +0.6**
**POKR Poker Plat Res 4.61 196 Pn 11 40 06.4 +1.7**
POKR IAML 11 41 29.1
comp=N,38nm,0.6s
POKR IAML 11 41 29.4
comp=E,42nm,0.8s
**I29M Ogilvie Camp, 4.81 148 Pn 11 40 07.9 +0.5**
I29M IAML 11 41 05.8
comp=N,52nm,0.5s
I29M IAML 11 41 27.4
comp=E,52nm,0.7s
**I23K Minto, Yukon-K 4.83 206 Pn 11 40 07.7 0.0**
I23K IAML 11 41 37.2
comp=N,35nm,1.3s
I23K IAML 11 41 37.6
comp=E,30nm,1.1s
**MDM Murphy Dome 4.85 200 Pn 11 40 08.5 +0.4**
MDM IAML 11 41 29.1
comp=E,40nm,0.7s
MDM IAML 11 41 30.9
comp=N,37nm,0.7s
**COLA College 4.89 198 Pn 11 40 08.5 0.0**
**IL31 4.90 193 Pn 11 40 09.1 +0.4**
**ILAR Eielson Array 4.90 193** Pn **Pn 11 40 10.0 +1.3**
comp=N,1.1nm,0.3s,baz=5.6,slow=7.6,SNR=6.4
ILAR Sn **Sn 11 41 05.2 0.0**
comp=N,2.1nm,0.3s,baz=6.8,slow=24,SNR=6.3
ILAR Lg Lg 11 41 24.1
comp=N,2.7nm,0.3s,baz=10,slow=31,SNR=2.5
comp=N,2.5nm,0.5s
**F20K Avaraart Lake 4.91 245 Pn 11 40 10.5 +1.7**
F20K IAML 11 41 34.7
comp=N,28nm,1.1s
F20K IAML 11 41 43.9
comp=E,34nm,1.0s
**EGAK Eagle 4.96 164 Pn 11 40 09.4 0.0**
**EGAK Eagle 4.96 164** IAML 11 41 09.2
comp=E,34nm,0.7s
EGAK IAML 11 41 37.0
comp=E,32nm,1.4s
**J25K Salcha River, 4.98 185 Pn 11 40 08.6 -1.2**
**J25K Salcha River, 4.98 185** IAML 11 41 35.4
comp=E,38nm,0.9s
J25K IAML 11 41 42.4
comp=N,27nm,0.7s
**D19K Kuna River 5.06 264 Pn 11 40 11.1 +0.2**
D19K IAML 11 41 10.4
comp=E,26nm,0.7s
**H21K Melozitna Rive 5.07 224 Pn 11 40 11.1 0.0**
**H21K Melozitna Rive 5.07 224** IAML 11 41 41.2
comp=E,39nm,2.0s
H21K IAML 11 41 41.4
comp=N,29nm,2.3s
**J26L Joseph Creek 5.08 176 Pn 11 40 12.0 +0.7**
**J26L Joseph Creek 5.08 176** IAML 11 41 33.1
comp=E,35nm,0.6s
**CCB Clear Creek Bu 5.11 197 Pn 11 40 11.4 -0.1**
**CCB Clear Creek Bu 5.11 197** IAML 11 41 41.4
comp=E,24nm,0.5s
**MLY Manley 5.17 212 Pn 11 40 12.2 -0.2**
**HDA Harding Lake 5.27 192 Pn 11 40 15.1 +1.4**
HDA IAML 11 41 43.7
comp=N,29nm,1.3s
HDA IAML 11 41 48.0
comp=E,30nm,1.1s
**WRH Wood River Hil 5.31 198 Pn 11 40 14.1 -0.2**
**WRH Wood River Hil 5.31 198** IAML 11 41 50.0
comp=N,21nm,1.8s
WRH IAML 11 41 56.9
comp=E,21nm,1.1s
**NEA2 Nenana 5.31 203** Pn **Pn 11 40 13.8 -0.5**
**I30M Mount Dempster 5.32 141 Pn 11 40 14.5 -0.1**
**I30M Mount Dempster 5.32 141** IAML 11 41 19.1
comp=N,32nm,0.6s
**C19K Lookout Ridge 5.42 272 Pn 11 40 16.7 +0.9**
**SCRK Sand Creek 5.60 178 Pn 11 40 18.9 +0.5**
**F19K Shaleruckik Mo 5.69 248 Pn 11 40 18.5 -1.0**
**A19K Wainwright 5.80 284 Pn 11 40 21.2 +0.2**
**DAWY Dawson 5.85 158 Pn 11 40 22.6 +0.9**
**J30M Hart River 5.90 144 Pn 11 40 22.2 -0.2**
**G19K Purcell Mounta 5.90 241 Pn 11 40 22.8 +0.4**
**BPAW Bear Paw Mtn. 6.07 209 Pn 11 40 25.6 +0.9**
**C18K Utukok River 6.09 269 Pn 11 40 25.1 +0.1**
**H19K Roundabout Mou 6.14 235 Pn 11 40 26.0 +0.3**
**K29M Barlow Dome 6.34 151 Pn 11 40 28.7 +0.2**
**E18K Tukpahlearik C 6.34 258 Pn 11 40 28.3 -0.1**
**F18K Selawik 6.44 250 Pn 11 40 29.4 -0.3**
**L26K Log Cabin Wild 6.57 176 Pn 11 40 32.2 +0.6**
**BCAR Beaver Creek A 6.60 170 Pn 11 40 33.1 +1.0**
**L27K Beaver Creek, 6.60 170 Pn 11 40 33.3 +1.3**
**DHY Denali Highway 6.62 192 Pn 11 40 34.7 +2.3**
**J20K Nowinta River 6.63 220 Pn 11 40 31.4 -0.9**
**A36M Sachs Harbour 6.75 60** Pn **Pn 11 40 32.7 -1.3**
**RDOG Red Dog Mine 6.89 266 Pn 11 40 37.1 +1.2**
**L29M L29M 6.94 156 Pn 11 40 36.5 -0.1**
**F17K Baldwin Pennin 7.06 252 Pn 11 40 40.5 +2.3**
**D17K Noatak River 7.08 264 Pn 11 40 37.6 -1.0**
**C36M Paulatuk 7.13 82 Pn 11 40 37.4 -1.8**
**M26K Nabesna, AK 7.21 175 Pn 11 40 42.0 +1.6**
**G17K Kiwalik Mounta 7.44 245 Pn 11 40 43.4 -0.1**
**M29M Somme Creek 7.53 159 Pn 11 40 45.3 +0.4**
**C16K Lisburne Hills 7.67 270 Pn 11 40 45.6 -0.9**
**N30M Aishikik Lake 8.66 156 Pn 11 41 00.8 +0.5**
**YKA Yellowknife Ar 13.87 106** Pn **Pn 11 42 07.0 -4.3**
comp=N,0.3nm,0.3s,baz=315,slow=11,SNR=4.4
YKA Sn Sn 11 44 31.8 -13
comp=N,0.2nm,0.3s,baz=319,slow=22,SNR=3.0
comp=N,0.7nm,0.5s
**PDAR Pinedale Array 32.23 128** P **P 11 45 26.1 +2.8**
comp=N,0.2nm,0.5s,baz=347,slow=8.0,SNR=3.5
comp=N,0.2nm,0.5s
**NVAR Mina Array Bea 34.16 142** P **P 11 45 42.7 +2.6**
comp=N,0.4nm,0.8s,baz=345,slow=7.6,SNR=3.3
comp=N,0.4nm,0.8s
**TXAR Lajitas Array 46.45 128** P **P 11 47 24.2 +2.5**
comp=N,0.2nm,0.6s,baz=345,slow=7.4,SNR=3.0
comp=N,0.2nm,0.6s
**ESDC Sonseca Array 67.27 32** P **P 11 49 51.4 +2.2**
comp=N,0.5nm,0.7s,baz=328,slow=4.6,SNR=2.7
comp=N,0.5nm,0.7s

**KRSC 13 11:44:12.8±0.7, 48.53N×155.87E, h6km±16km, Ml3.7, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **3.57** | **23** | *e*S | Sn | 11 45 55.0 | +4.0 |
| **ASAK** | **Asacha** | **4.07** | **18** | *e*P | Pn | 11 45 19.2 | +3.7 |
| **MTVR** | **Mutnovka** | **4.22** | **20** | *e*P | Pn | 11 45 21.1 | +3.4 |
| MTVR | | | | *e*S | Sn | 11 46 12.7 | +5.4 |
| **GRL** | **Gorelyy** | **4.26** | **18** | *e*P | Pn | 11 45 22.3 | +4.0 |
| **KOK** | **Koryaka** | **5.08** | **19** | *e*P | Pn | 11 45 33.6 | +4.2 |

*TIR **13** 11:45:45.9, 41.60N×20.18E, h16km±4km, Md2.7, Ml2.1*
*PDG **13** 11:45:47.1±0.1, 41.60N×20.13E, h6km, ML2.5/11, Error ellipse: s-maj=0.1km s-min=0.6km az=0.0*

**ISC 13 11:45:47.0±0.1, 41.60N±0.03×20.16E±0.04, h15km±9km, n17, σ1s11/34, 7C-1D, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.33** | **221** | P | **Pg** | **11** | **45** | **53.5 -0.4** |
| | baz=224 | | | | | | | |
| TIR | | | | S | **Sb** | **11** | **45** | **59.1 -0.6** |
| | baz=224 | | | | | | | |
| TIR | | | | AMP | | | | |
| | comp=N,0.5nm,0.3s,baz=224 | | | | | | | |
| **PUK** | **Puka** | **0.48** | **336** | P | **Pb** | **11** | **45** | **56.6 -0.7** |
| | baz=334 | | | | | | | |
| PUK | | | | S | **Sb** | **11** | **46** | **03.3 -1.0** |
| | baz=334 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=E,1.0nm,0.1s,baz=334 | | | | | | | |
| **OHR** | **Ohrid** | **0.69** | **135** | *i* Pg | **Pb** | **11** | **46** | **00.5 -0.2** |
| OHR | | | | *i* Sg | **Sn** | **11** | **46** | **12.1 -0.6** |
| **BCI** | **Bajram Curri** | **0.77** | **355** | P | **Pg** | **11** | **46** | **00.4 -1.6** |
| | baz=354 | | | | | | | |
| BCI | | | | S | **Sb** | **11** | **46** | **12.8 +0.4** |
| | baz=354 | | | | | | | |
| BCI | | | | AMP | | | | |
| | comp=N,0.3nm,0.5s,baz=354 | | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.93** | **309** ⇓ | *i* Pg | **Pg** | **11** | **46** | **04.0 -1.1** |
| DRME | | | | *i* Sg | **Sn** | **11** | **46** | **18.5 -0.2** |
| **PVY** | **Plav** | **1.01** | **352** ⇑ | *i* Pg | **Pg** | **11** | **46** | **05.5 -1.0** |
| PVY | | | | *i* Sg | **Sn** | **11** | **46** | **21.5 +0.8** |
| **PDG** | **Podgorica** | **1.07** | **321** | *e* Pg | **Pb** | **11** | **46** | **06.4 -0.8** |
| PDG | | | | *i* Sg | **Sn** | **11** | **46** | **22.8 +0.8** |
| **BUM** | **Brajici-Budva** | **1.17** | **307** ⇑ | *i* Pg | **Pb** | **11** | **46** | **08.5 -0.5** |
| BUM | | | | *i* Sg | **Sn** | **11** | **46** | **26.7 +2.0** |
| **FNA** | **Florina** | **1.23** | **131** | P | **Pn** | **11** | **46** | **09.5 -0.2** |
| | baz=131 | | | | | | | |
| FNA | | | | S | **Sn** | **11** | **46** | **26.7 +0.6** |
| | baz=131 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=E,0.1nm,0.4s,baz=131 | | | | | | | |
| **FNA** | **Florina** | **1.23** | **131** | *i* Pg | **Pg** | **11** | **46** | **10.0 -0.7** |
| FNA | | | | *i* Sg | **Sn** | **11** | **46** | **27.8 +1.7** |
| **IVA** | **Berane** | **1.29** | **351** | *e* Pg | **Pb** | **11** | **46** | **10.7 -0.3** |
| IVA | | | | *i* Sg | **Sg** | **11** | **46** | **30.7 +2.1** |
| **CEME** | **Cevo** | **1.32** | **316** ⇑ | *i* Pg | **Pn** | **11** | **46** | **11.0 0.0** |
| CEME | | | | *i* Sg | **Sg** | **11** | **46** | **31.5 +1.8** |
| **KOME** | **Kolasin** | **1.34** | **339** ⇑ | *i* Pg | **Pb** | **11** | **46** | **11.5 -0.4** |
| KOME | | | | *i* Sg | **Sg** | **11** | **46** | **32.5 +2.3** |
| **NKME** | **Niksic** | **1.47** | **323** ⇑ | *i* Pg | **Pb** | **11** | **46** | **13.4 -0.7** |
| NKME | | | | *i* Sg | **Sg** | **11** | **46** | **36.8 +2.4** |
| **BRY** | **Bratogost** | **1.77** | **318** ⇑ | *i* Pn | **Pb** | **11** | **46** | **19.1 -0.2** |
| BRY | | | | *i* Sn | **Sg** | **11** | **46** | **43.9 -0.1** |
| **PLE** | **Pljevlja** | **1.82** | **342** ⇑ | *i* Pn | **Pb** | **11** | **46** | **20.2 +0.1** |
| PLE | | | | *i* Sn | **Sg** | **11** | **46** | **46.2 +0.6** |
| **UPM** | **Unac-Piva** | **1.85** | **330** | *e* Pn | **Pb** | **11** | **46** | **20.2 -0.5** |
| UPM | | | | *i* Sn | **Sg** | **11** | **46** | **46.3 -0.3** |

*AEIC* ***13*** *11:47:25.8±2.1, 69.43N±0.05×144.30W±0.07, h5km±6km, ML3.9, ML4.0/120(NEIC), Mwr3.9/40(NEIC), Error ellipse: s-maj=7.6km s-min=2.5km az=199.0*

*IDC* ***13*** *11:47:26.2±0.8, 69.78N×144.05W, h0km, mb3.8/11, mbtmp3.8/15, ML3.5/4, MS3.0/9, Error ellipse: s-maj=22.3km s-min=11.7km az=49.0*

*NEIC* ***13*** *11:47:26.4±1.0, 69.58N±0.04×144.19W±0.05, h2km±6km, Error ellipse: s-maj=6.5km s-min=2.4km az=182.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-3.96; $M_{\theta\theta}$-3.63; $M_{\phi\phi}$7.58; $M_{r\theta}$-0.72; $M_{r\phi}$-6.83; $M_{\theta\phi}$-1.03; Fault plane solution: $M_0$9.56000×$10^{14}$ NP1: $\phi_s$17.93000°, $\delta$78.68000°, $\lambda$-15.14000°. NP2:$\phi_s$110.97000°, $\delta$75.16000°, $\lambda$-168.29000°. Principal axes: T 10.8402, Plg2.0000°, Azm65.0000°; N -3.6129, Plg71.0000°, Azm162.0000°; P -7.2272, Plg19.0000°, Azm334.0000°;*

*NEIC* ***13*** *11:47:27.3, 69.61N×144.19W, h4km*

**ISC 13 11:47:26.5±1.0, 69.56N±0.04×144.22W±0.02, h10km±7km, n136, σ1§15/140, mb3.9/11, MS3.0/6, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.19** | **70** | Pg | **Pg** | **11 47 30.8** | **+0.2** |
| C27K | | | | Sg | **Sg** | **11 47 34.1** | **+0.8** |
| C27K | | | | IAML | | 11 47 34.3 | |
| | comp=N,24μm,0.5s | | | | | | |
| C27K | | | | IAML | | 11 47 34.5 | |
| | comp=E,24μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.43** | **326** | | **Pb** | **11 47 36.5** | **+0.3** |
| **D25K** | **Kavik River** | **0.80** | **253** | | **Pg** | **11 47 40.3** | **-1.6** |
| **D25K** | **Kavik River** | **0.80** | **253** | | **Sg** | **11 47 51.5** | **-0.8** |
| **D27M** | **Malcolm River** | **1.20** | **104** | Pn | **Pg** | **11 47 47.5** | **-1.9** |
| D27M | | | | IAML | | 11 48 10.6 | |
| | comp=N,3μm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **278** | | **Pn** | **11 47 55.6** | **+1.1** |
| C24K | | | | Sg | **Sg** | **11 48 18.1** | **+1.0** |
| C24K | | | | IAML | | 11 48 22.3 | |
| | comp=E,2μm,1.1s | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **144** | | **Pn** | **11 47 56.3** | **+0.3** |
| E27K | | | | Sg | **Sn** | **11 48 18.5** | **+1.0** |
| E27K | | | | IAML | | 11 48 20.8 | |
| | comp=N,1μm,0.8s | | | | | | |
| E27K | | | | IAML | | 11 48 21.9 | |
| | comp=E,1μm,0.4s | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **258** | | **Pn** | **11 47 57.1** | **+1.1** |
| D24K | | | | Sg | **Sg** | **11 48 21.2** | **+0.6** |
| **F26K** | **Sheenjek River** | **1.88** | **179** | | **Pn** | **11 47 59.6** | **+0.9** |
| F26K | | | | Sg | **Sn** | **11 48 23.6** | **+1.2** |
| F26K | | | | IAML | | 11 48 30.0 | |
| | comp=E,2μm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.94** | **118** | | **Pn** | **11 48 00.7** | **+1.2** |
| E28M | | | | Sg | **Sb** | **11 48 26.1** | **0.0** |
| E28M | | | | IAML | | 11 48 32.3 | |
| | comp=E,892nm,0.9s | | | | | | |
| E28M | | | | IAML | | 11 48 34.4 | |
| | comp=N,904nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **1.95** | **94** | | **Pn** | **11 48 00.9** | **+1.3** |
| D28M | | | | Sg | **Sg** | **11 48 30.1** | **+1.0** |
| **F25K** | **Christian Rive** | **2.05** | **195** | | **Pn** | **11 48 02.0** | **+1.0** |
| **F25K** | **Christian Rive** | **2.05** | **195** | Sg | **Sn** | **11 48 28.6** | **+2.0** |
| F25K | | | | IAML | | 11 48 31.0 | |
| | comp=E,1μm,0.9s | | | | | | |
| F25K | | | | IAML | | 11 48 33.2 | |
| | comp=N,1μm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.13** | **247** | | **Pn** | **11 48 03.0** | **+0.8** |
| TOLK | | | | IAML | | 11 48 36.4 | |
| | comp=E,862nm,1.0s | | | | | | |
| TOLK | | | | IAML | | 11 48 45.0 | |
| | comp=N,682nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.15** | **184** | | **Pn** | **11 48 03.2** | **+0.8** |
| **E24K** | **Your Creek** | **2.15** | **228** | | **Pn** | **11 48 03.5** | **+1.0** |
| E24K | | | | Sg | **Sb** | **11 48 33.0** | **+0.7** |
| **C23K** | **Itkillik River** | **2.25** | **280** | | **Pn** | **11 48 04.9** | **+1.2** |
| C23K | | | | IAML | | 11 48 41.6 | |
| | comp=E,1μm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.38** | **258** | | **Pn** | **11 48 06.8** | **+1.2** |
| D23K | | | | IAML | | 11 48 53.7 | |
| | comp=N,618nm,1.2s | | | | | | |
| **F24K** | **Squaw Lake** | **2.46** | **215** | Pn | **Pn** | **11 48 07.5** | **+0.9** |
| **E23K** | **Chandalar** | **2.48** | **235** | | **Pn** | **11 48 08.4** | **+1.5** |
| E23K | | | | IAML | | 11 48 48.3 | |
| | comp=N,590nm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.53** | **139** | Pn | **Pn** | **11 48 08.2** | **+0.6** |
| F28M | | | | IAML | | 11 48 48.0 | |
| | comp=N,627nm,0.6s | | | | | | |
| F28M | | | | IAML | | 11 48 49.2 | |
| | comp=E,585nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.57** | **114** | | **Pn** | **11 48 08.8** | **+0.6** |
| E29M | | | | IAML | | 11 48 52.4 | |
| | comp=N,823nm,0.7s | | | | | | |
| E29M | | | | IAML | | 11 48 54.2 | |
| | comp=E,693nm,1.1s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.63** | **176** | | **Pn** | **11 48 09.7** | **+0.7** |
| **G25K** | **Bearman Lake** | **2.90** | **195** | | **Pn** | **11 48 13.6** | **+0.9** |
| **G27K** | **Doyon Strip** | **2.93** | **160** | | **Pn** | **11 48 13.5** | **+0.3** |
| **FYU** | **Fort Yukon** | **3.04** | **188** | Pn | **Pn** | **11 48 15.2** | **+0.6** |
| FYU | | | | IAML | | 11 49 06.9 | |
| | comp=E,569nm,1.7s | | | | | | |
| **D22K** | **Ayikyak River** | **3.09** | **261** | | **Pn** | **11 48 16.3** | **+0.9** |
| D22K | | | | IAML | | 11 49 12.2 | |
| | comp=E,474nm,1.2s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.12** | **204** | | **Pn** | **11 48 16.4** | **+0.7** |
| G24K | | | | IAML | | 11 49 09.0 | |
| | comp=N,464nm,1.3s | | | | | | |
| G24K | | | | IAML | | 11 49 09.4 | |
| | comp=E,343nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **3.22** | **226** | | **Pn** | **11 48 17.9** | **+0.8** |
| **B22K** | **Teshekpuk Lake** | **3.26** | **288** | | **Pn** | **11 48 18.9** | **+1.2** |
| **H25L** | **Birch Creek** | **3.37** | **191** | | **Pn** | **11 48 20.0** | **+0.9** |
| **H27K** | **Steamboat Moun** | **3.50** | **162** | | **Pn** | **11 48 21.9** | **+1.0** |
| **G29M** | **Pine Creek** | **3.52** | **136** | Pn | **Pn** | **11 48 22.1** | **+0.9** |
| **F22K** | **John River** | **3.58** | **239** | | **Pn** | **11 48 23.3** | **+1.3** |
| **G23K** | **Bananza Creek** | **3.59** | **220** | Pn | **Pn** | **11 48 22.7** | **+0.5** |
| G23K | | | | IAML | | 11 49 24.0 | |
| | comp=N,251nm,1.1s | | | | | | |
| G23K | | | | IAML | | 11 49 25.5 | |
| | comp=E,334nm,1.3s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.64** | **276** | Pn | **Pn** | **11 48 24.0** | **+1.2** |
| **F30M** | **Barrier River** | **3.66** | **118** | | **Pn** | **11 48 25.2** | **+2.0** |
| **E21K** | **Killik River** | **3.69** | **257** | | **Pn** | **11 48 23.8** | **+0.3** |
| E21K | | | | IAML | | 11 49 32.7 | |
| | comp=N,293nm,1.2s | | | | | | |
| **G22K** | **Bettles** | **3.79** | **229** | | **Pn** | **11 48 25.9** | **+0.9** |
| **A22K** | **Sinclair Lake** | **3.92** | **297** | | **Pn** | **11 48 27.7** | **+1.0** |
| **G30M** | **tAoh Zraii Nji** | **3.94** | **127** | | **Pn** | **11 48 28.3** | **+1.3** |
| G30M | | | | IAML | | 11 49 39.2 | |
| | comp=E,150nm,1.0s | | | | | | |
| G30M | | | | IAML | | 11 49 44.6 | |
| | comp=N,239nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.99** | **202** | | **Pn** | **11 48 28.6** | **+0.8** |
| H24K | | | | IAML | | 11 49 39.8 | |
| | comp=E,185nm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **4.02** | **144** | | **Pn** | **11 48 28.8** | **+0.7** |
| H29M | | | | IAML | | 11 49 45.3 | |
| | comp=N,248nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.06** | **103** | Pn | **Pn** | **11 48 29.0** | **+0.4** |
| **INK** | **Inuvik** | **4.06** | **103** | Pn | **Pn** | **11 48 29.4** | **+0.8** |
| | comp=N,3.4nm,0.3s,baz=320,slow=15,SNR=39 | | | | | | |
| INK | | | | Sn | **Sn** | **11 49 15.9** | **-0.2** |
| | comp=N,5.9nm,0.3s,baz=37,slow=21,SNR=4.7 | | | | | | |
| INK | | | | Lg | Lg | 11 49 34.2 | |
| | comp=N,8.7nm,0.3s,baz=242,slow=24,SNR=3.9 | | | | | | |
| INK | | | | LR | LR | 11 50 00.2 | |
| | comp=N,80nm,18.6s,baz=338,slow=38 | | | | | | |
| | comp=N,17nm,0.5s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **188** | | **Pn** | **11 48 30.4** | **+1.2** |
| PRP | | | | IAML | | 11 49 35.9 | |
| | comp=N,168nm,1.0s | | | | | | |
| **I27K** | **Kandik River** | **4.10** | **165** | | **Pn** | **11 48 30.6** | **+1.3** |
| **F21K** | **Alatna River** | **4.15** | **240** | | **Pn** | **11 48 30.9** | **+1.0** |
| F21K | | | | IAML | | 11 49 41.8 | |
| | comp=N,141nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.27** | **211** | | **Pn** | **11 48 32.3** | **+0.8** |
| H23K | | | | IAML | | 11 49 49.0 | |
| | comp=N,172nm,1.2s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.27** | **135** | | **Pn** | **11 48 32.4** | **+0.8** |
| **I26K** | **Coal Creek Min** | **4.30** | **174** | | **Pn** | **11 48 33.1** | **+1.3** |
| **F31M** | **Tsiigehtchic** | **4.40** | **114** | Pn | **Pn** | **11 48 34.4** | **+1.1** |
| F31M | | | | IAML | | 11 49 52.6 | |
| | comp=N,122nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.45** | **156** | | **Pn** | **11 48 35.6** | **+1.6** |
| I28M | | | | IAML | | 11 49 30.3 | |
| | comp=N,133nm,0.5s | | | | | | |
| I28M | | | | IAML | | 11 49 51.8 | |
| | comp=E,144nm,1.7s | | | | | | |
| **B20K** | **Meade River** | **4.51** | **282** | Pn | **Pn** | **11 48 36.4** | **+1.6** |
| **D20K** | **Etivluk River** | **4.51** | **265** | | **Pn** | **11 48 36.6** | **+1.8** |
| **A21K** | **Barrow** | **4.52** | **299** | | **Pn** | **11 48 36.2** | **+1.3** |
| **G31M** | **Satah River** | **4.55** | **121** | Pn | **Pn** | **11 48 35.9** | **+0.6** |
| G31M | | | | IAML | | 11 50 06.7 | |
| | comp=E,149nm,1.0s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.58** | **220** | | **Pn** | **11 48 36.1** | **+0.3** |
| **POKR** | **Poker Plat Res** | **4.63** | **197** | | **Pn** | **11 48 37.8** | **+1.3** |
| POKR | | | | IAML | | 11 49 33.4 | |
| | comp=N,106nm,0.4s | | | | | | |
| POKR | | | | IAML | | 11 50 00.0 | |
| | comp=E,136nm,0.8s | | | | | | |
| **G21K** | **Allakaket** | **4.64** | **233** | Pn | **Pn** | **11 48 36.6** | **+0.1** |
| G21K | | | | IAML | | 11 50 05.7 | |
| | comp=E,147nm,0.8s | | | | | | |
| G21K | | | | IAML | | 11 50 10.2 | |
| | comp=N,147nm,1.5s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.79** | **149** | | **Pn** | **11 48 39.6** | **+0.9** |
| I29M | | | | IAML | | 11 49 53.0 | |
| | comp=N,123nm,0.5s | | | | | | |
| I29M | | | | IAML | | 11 50 06.5 | |
| | comp=E,115nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.86** | **207** | | **Pn** | **11 48 40.4** | **+0.8** |
| I23K | | | | IAML | | 11 50 06.9 | |
| | comp=E,115nm,1.5s | | | | | | |
| I23K | | | | IAML | | 11 50 18.0 | |
| | comp=N,129nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.88** | **200** | | **Pn** | **11 48 40.9** | **+1.0** |
| MDM | | | | IAML | | 11 50 08.3 | |
| | comp=E,113nm,1.0s | | | | | | |
| **COLA** | **College** | **4.92** | **198** | | **Pn** | **11 48 41.5** | **+1.2** |
| **IL31** | | **4.92** | **193** | | **Pn** | **11 48 41.9** | **+1.5** |
| **ILAR** | **Eielson Array** | **4.92** | **193** | Pn | **Pn** | **11 48 41.9** | **+1.4** |
| **ILAR** | **Eielson Array** | **4.92** | **193** | Pn | **Pn** | **11 48 42.0** | **+1.5** |
| | comp=E,3.4nm,0.3s,baz=5.7,slow=14,SNR=42 | | | | | | |
| ILAR | | | | Sn | **Sn** | **11 49 36.6** | **-0.8** |
| | comp=E,4.3nm,0.3s,baz=30,slow=15,SNR=6.3 | | | | | | |
| ILAR | | | | Lg | Lg | 11 50 00.8 | |
| | comp=E,6.7nm,0.3s,baz=11,slow=30,SNR=6.3 | | | | | | |
| | comp=E,11nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **4.95** | **165** | | **Pn** | **11 48 41.9** | **+1.0** |
| **EGAK** | **Eagle** | **4.95** | **165** | IAML | | 11 50 13.3 | |
| | comp=E,106nm,1.0s | | | | | | |
| EGAK | | | | IAML | | 11 50 17.5 | |
| | comp=E,94nm,1.3s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.96** | **245** | | **Pn** | **11 48 41.8** | **+0.9** |
| F20K | | | | IAML | | 11 50 15.2 | |
| | comp=N,97nm,1.3s | | | | | | |
| **J25K** | **Salcha River,** | **4.99** | **186** | | **Pn** | **11 48 42.8** | **+1.3** |
| J25K | | | | IAML | | 11 50 13.7 | |
| | comp=E,102nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.09** | **177** | | **Pn** | **11 48 44.0** | **+1.2** |
| J26L | | | | IAML | | 11 49 47.8 | |
| | comp=N,76nm,0.5s | | | | | | |
| J26L | | | | IAML | | 11 50 13.7 | |
| | comp=E,75nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **5.10** | **264** | | **Pn** | **11 48 44.2** | **+1.2** |
| D19K | | | | IAML | | 11 50 23.2 | |
| | comp=E,83nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.11** | **224** | Pn | **Pn** | **11 48 44.1** | **+1.1** |
| H21K | | | | IAML | | 11 50 19.0 | |
| | comp=N,92nm,1.1s | | | | | | |
| H21K | | | | IAML | | 11 50 20.5 | |
| | comp=E,72nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.13** | **198** | | **Pn** | **11 48 44.3** | **+1.0** |
| **MLY** | **Manley** | **5.20** | **212** | | **Pn** | **11 48 45.4** | **+1.1** |
| **E19K** | **Redstone River** | **5.23** | **252** | | **Pn** | **11 48 45.5** | **+0.8** |
| E19K | | | | IAML | | 11 50 31.2 | |
| | comp=E,99nm,1.0s | | | | | | |
| E19K | | | | IAML | | 11 50 32.8 | |
| | comp=N,92nm,0.7s | | | | | | |
| **HDA** | **Harding Lake** | **5.29** | **193** | | **Pn** | **11 48 47.1** | **+1.6** |
| HDA | | | | IAML | | 11 50 18.7 | |
| | comp=N,81nm,1.7s | | | | | | |
| **I30M** | **Mount Dempster** | **5.30** | **142** | Pn | **Pn** | **11 48 46.7** | **+0.9** |
| **WRH** | **Wood River Hil** | **5.33** | **198** | | **Pn** | **11 48 47.5** | **+1.4** |
| WRH | | | | IAML | | 11 50 22.7 | |
| | comp=E,102nm,1.3s | | | | | | |
| **NEA2** | **Nenana** | **5.34** | **203** | | **Pn** | **11 48 47.0** | **+0.9** |
| **C19K** | **Lookout Ridge** | **5.46** | **272** | Pn | **Pn** | **11 48 49.6** | **+1.7** |
| **SCRK** | **Sand Creek** | **5.61** | **179** | | **Pn** | **11 48 51.6** | **+1.6** |
| **K27K** | **Chicken** | **5.62** | **170** | | **Pn** | **11 48 51.4** | **+1.3** |
| **F19K** | **Shaleruckik Mo** | **5.74** | **248** | Pn | **Pn** | **11 48 52.6** | **+0.9** |
| **BWN** | **Browne** | **5.79** | **203** | | **Pn** | **11 48 53.4** | **+1.0** |
| **DAWY** | **Dawson** | **5.84** | **159** | | **Pn** | **11 48 54.6** | **+1.5** |
| **J30M** | **Hart River** | **5.88** | **145** | Pn | **Pn** | **11 48 54.4** | **+0.7** |
| **DOT** | **Dot Lake** | **5.94** | **179** | | **Pn** | **11 48 56.0** | **+1.5** |
| **G19K** | **Purcell Mounta** | **5.95** | **241** | | **Pn** | **11 48 54.4** | **-0.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.10** | **209** | | **Pn** | **11 48 57.4** | **+0.7** |
| **C18K** | **Utukok River** | **6.14** | **269** | Pn | **Pn** | **11 48 57.8** | **+0.6** |
| **MCK** | **McKinley** | **6.15** | **200** | | **Pn** | **11 48 58.7** | **+1.4** |
| **I20K** | **Naaghedeneel** | **6.22** | **225** | Pn | **Pn** | **11 48 59.6** | **+1.3** |
| **K29M** | **Barlow Dome** | **6.33** | **152** | Pn | **Pn** | **11 49 01.1** | **+1.3** |
| **E18K** | **Tukpahlearik C** | **6.39** | **258** | | **Pn** | **11 49 01.8** | **+1.2** |
| **RND** | **Reindeer** | **6.45** | **199** | | **Pn** | **11 49 02.6** | **+1.1** |
| **F18K** | **Selawik** | **6.49** | **250** | | **Pn** | **11 49 02.5** | **+0.6** |
| **G18K** | **Tagagawik** | **6.60** | **243** | | **Pn** | **11 49 04.3** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **6.60** | **170** | Pn | **Pn** | **11 49 04.8** | **+1.3** |
| **L27K** | **Beaver Creek,** | **6.60** | **170** | | **Pn** | **11 49 04.8** | **+1.2** |
| **PAX** | **Paxson** | **6.64** | **185** | | **Pn** | **11 49 06.1** | **+2.0** |
| **J20K** | **Nowinta River** | **6.67** | **221** | | **Pn** | **11 49 04.8** | **+0.4** |
| **A36M** | **Sachs Harbour** | **6.71** | **60** | | **Pn** | **11 49 04.6** | **-0.3** |
| **C17K** | **DeLong Mountai** | **6.89** | **270** | | **Pn** | **11 49 07.2** | **-0.2** |
| **L29M** | **L29M** | **6.92** | **156** | | **Pn** | **11 49 08.4** | **+0.4** |
| **RDOG** | **Red Dog Mine** | **6.93** | **266** | | **Pn** | **11 49 08.7** | **+0.6** |
| **E17K** | **Hotham Inlet** | **6.97** | **257** | | **Pn** | **11 49 08.8** | **+0.2** |
| **WAT7** | **Susitna Watana** | **7.01** | **198** | | **Pn** | **11 49 11.1** | **+1.9** |
| **H18K** | **Honhosa River** | **7.02** | **238** | | **Pn** | **11 49 09.9** | **+0.7** |
| **C36M** | **Paulatuk** | **7.08** | **82** | Pn | **Pn** | **11 49 09.3** | **-0.7** |
| **D17K** | **Noatak River** | **7.13** | **264** | | **Pn** | **11 49 10.2** | **-0.5** |
| **G17K** | **Kiwalik Mounta** | **7.48** | **245** | | **Pn** | **11 49 15.9** | **+0.3** |
| **M29M** | **Somme Creek** | **7.52** | **159** | Pn | **Pn** | **11 49 17.6** | **+1.4** |
| **C16K** | **Lisburne Hills** | **7.71** | **270** | | **Pn** | **11 49 18.5** | **-0.1** |
| **L20K** | **Farewell, AK** | **8.12** | **214** | | **Pn** | **11 49 25.1** | **+0.8** |
| **FARO** | **Faro, Yukon** | **8.59** | **144** | | **Pn** | **11 49 30.8** | **+0.1** |
| **KDAK** | **Kodiak Island** | **12.37** | **201** | LR | LR | 11 55 53.0 | |
| | comp=E,26nm,19.7s,baz=40,slow=40 | | | | | | |
| **DLBC** | **Dease Lake** | **12.73** | **144** | Pn | **Pn** | **11 50 27.0** | **-0.5** |
| | baz=199,slow=23,SNR=1.6 | | | | | | |
| DLBC | | | | Sn | **Sn** | **11 52 46.0** | **-3.1** |
| | comp=E,0.1nm,0.3s,baz=318,slow=14,SNR=2.4 | | | | | | |
| DLBC | | | | Lg | Lg | 11 54 04.8 | |
| | comp=E,0.1nm,0.3s,baz=114,slow=20,SNR=2.0 | | | | | | |
| DLBC | | | | LR | LR | 11 55 57.2 | |
| | comp=E,64nm,18.2s,baz=292,slow=40 | | | | | | |
| | comp=E,1.3nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.83** | **106** | Pn | **Pn** | **11 50 38.5** | **-3.7** |
| | comp=E,0.5nm,0.3s,baz=333,slow=21,SNR=19 | | | | | | |
| YKA | | | | Sn | Sn | 11 53 03.9 | -12 |
| | comp=E,0.6nm,0.3s,baz=315,slow=24,SNR=5.4 | | | | | | |
| YKA | | | | Lg | Lg | 11 54 36.2 | |
| | baz=347,slow=27 | | | | | | |
| | comp=E,2.2nm,0.6s | | | | | | |
| **NEW** | **Newport** | **25.11** | **134** | LR | LR | 12 03 14.2 | |
| | comp=E,78nm,18.1s,baz=339,slow=38 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.47** | **250** | LR | LR | 12 04 30.0 | |
| | comp=E,30nm,18.7s,baz=119,slow=40 | | | | | | |
| **MA2** | **Magadan** | **28.18** | **282** | LR | LR | 12 06 06.7 | |
| | comp=E,23nm,18.9s,baz=68,slow=40 | | | | | | |
| **FRB** | **Frobisher Bay** | **28.69** | **64** | LR | LR | 12 05 42.4 | |
| | comp=E,62nm,18.6s,baz=352,slow=38 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.06** | **147** | LR | LR | 12 06 08.7 | |
| | comp=E,39nm,19.7s,baz=334,slow=37 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.20** | **128** | P | **P** | **11 53 56.2** | **+1.5** |
| | comp=E,0.5nm,0.8s,baz=346,slow=4.5,SNR=5.9 | | | | | | |
| | comp=E,0.5nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.14** | **142** | P | **P** | **11 54 14.0** | **+2.5** |
| | comp=E,0.8nm,0.8s,baz=341,slow=8.1,SNR=7.2 | | | | | | |
| | comp=E,0.8nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.42** | **128** | P | **P** | **11 55 55.0** | **+1.9** |
| | comp=E,0.6nm,0.9s,baz=336,slow=5.8,SNR=4.5 | | | | | | |
| | comp=E,0.6nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **49.10** | **6** | P | **P** | **11 56 12.6** | **-0.8** |
| | comp=E,1.8nm,0.9s,baz=338,slow=9.4,SNR=1.6 | | | | | | |
| | comp=E,1.8nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **49.63** | **14** | P | **P** | **11 56 16.2** | **-1.2** |
| | comp=E,0.9nm,0.6s,baz=355,slow=9.2,SNR=1.7 | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.75** | **325** | P | **P** | **11 56 33.2** | **-0.3** |
| | comp=E,0.8nm,0.5s,baz=26,slow=7.9,SNR=2.7 | | | | | | |
| ZALV | | | | LR | LR | 12 23 01.4 | |
| | comp=E,12nm,18.5s,baz=72,slow=41 | | | | | | |
| | comp=E,0.8nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.24** | **27** | P | **P** | **11 56 36.9** | **-0.3** |
| | comp=E,1.0nm,0.6s,baz=342,slow=6.1,SNR=1.8 | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Array** | **56.12** | **329** | P | **P** | **11 57 05.8** | **+0.3** |
| | comp=E,1.6nm,0.8s,baz=16,slow=6.9,SNR=8.5 | | | | | | |
| | comp=E,1.6nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.05** | **324** | P | **P** | **11 57 26.3** | **+0.1** |
| | comp=E,0.4nm,0.6s,baz=19,slow=7.9,SNR=4.7 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **59.95** | **5** | P | **P** | **11 57 32.0** | **-0.3** |
| | comp=E,1.4nm,0.6s,baz=355,slow=7.4,SNR=1.9 | | | | | | |
| | comp=E,1.4nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **67.24** | **32** | P | **P** | **11 58 21.1** | **+0.5** |
| | comp=E,0.4nm,0.7s,baz=341,slow=6.7,SNR=1.8 | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | |

**AUST 13 11:48:23.0±0.6, 33.73S×147.48E, h10km, Mjma3.7/4, ML2.1/2, MLv2.8/4, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0, New South Wales**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YNG** | **Young** | **0.95** | **127** | P | Pg | 11 48 39.7 | -1.6 |
| | 0.3nm,SNR=1.6 | | | | | | |
| YNG | | | | S | Sb | 11 48 54.0 | -0.2 |
| **DLN** | **Dalton (NSW)** | **1.72** | **126** | P | Pn | 11 48 52.7 | -0.4 |
| DLN | | | | S | Sb | 11 49 17.0 | +0.6 |
| **CAN** | **Canberra** | **2.02** | **142** | P | Pn | 11 48 57.2 | 0.0 |
| | 0.1nm,SNR=1.8 | | | | | | |
| CAN | | | | S | Sn | 11 49 23.5 | +0.9 |
| **CMSA** | **Cobar Meteorol** | **2.65** | **325** | P | Pn | 11 49 06.1 | +0.3 |

*NEIC* ***13*** *11:54:32.0±1.4, 69.62N±0.05×144.4W±0.1, h10km±2km, Error ellipse: s-maj=8.0km s-min=5.9km az=6.0*

**AEIC 13 11:54:30.6±1.8, 69.53N±0.05×144.4W±0.1, h17km±3km, ML3.4, ML3.5/116(NEIC), Error ellipse: s-maj=7.4km s-min=5.1km az=211.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **68** | Pg | Pg | 11 54 36.2 | -0.4 |
| C27K | | | | IAML | | 11 54 40.8 | |
| | comp=N,6μm,0.4s | | | | | | |
| **C26K** | **Camden Bay** | **0.42** | **338** | | **Pb** | 11 54 39.6 | 0.0 |
| C26K | | | | | Sb | 11 54 46.8 | +1.1 |
| **D25K

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G23K | | | | IAML | | 11 56 29.1 | |
| | comp=N,93nm,0.9s | | | | | | |
| G23K | | | | IAML | | 11 56 33.5 | |
| | comp=E,83nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.55 135** | | | Pn | 11 55 27.7 | +2.8 |
| **G29M** | **Pine Creek** | **3.55 135** | | IAML | | 11 56 34.7 | |
| | comp=N,119nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.57 276** | | | Pn | 11 55 26.3 | +1.3 |
| **E21K** | **Killik River** | **3.60 257** | | | Pn | 11 55 27.3 | +1.8 |
| **E21K** | **Killik River** | **3.60 257** | | IAML | | 11 56 30.6 | |
| | comp=E,70nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.71 117** | | | Pn | 11 55 31.3 | +4.2 |
| **A22K** | **Sinclair Lake** | **3.87 297** | | | Pn | 11 55 31.7 | +2.6 |
| **H24K** | **Noodor Dome** | **3.93 201** | | | Pn | 11 55 32.6 | +2.5 |
| **H24K** | **Noodor Dome** | **3.93 201** | | IAML | | 11 56 38.6 | |
| | comp=N,60nm,0.8s | | | | | | |
| H24K | | | | IAML | | 11 56 45.1 | |
| | comp=E,90nm,1.8s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.99 126** | | | Pn | 11 55 34.2 | +3.4 |
| G30M | | | | IAML | | 11 56 46.2 | |
| | comp=N,55nm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **4.04 142** | | Pn | Pn | 11 55 35.3 | +3.7 |
| H29M | | | | IAML | | 11 56 51.3 | |
| | comp=N,62nm,0.9s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05 186** | | | Pn | 11 55 34.2 | +2.4 |
| **PRP** | **Porcupine Dome** | **4.05 186** | | IAML | | 11 56 25.9 | |
| | comp=N,51nm,0.4s | | | | | | |
| PRP | | | | IAML | | 11 56 42.2 | |
| | comp=E,47nm,1.2s | | | | | | |
| **F21K** | **Alatna River** | **4.07 240** | | | Pn | 11 55 34.4 | +2.5 |
| **F21K** | **Alatna River** | **4.07 240** | | IAML | | 11 56 46.6 | |
| | comp=E,48nm,0.8s | | | | | | |
| F21K | | | | IAML | | 11 56 49.9 | |
| | comp=N,51nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.09 163** | | | Pn | 11 55 35.6 | +3.4 |
| **INK** | **Inuvik** | **4.13 102** | | | Pn | 11 55 36.1 | +3.4 |
| **H23K** | **Yukon River** | **4.20 210** | | | Pn | 11 55 36.0 | +2.3 |
| **EPYK** | **Eagle Plains** | **4.30 134** | | | Pn | 11 55 37.9 | +2.7 |
| **EPYK** | **Eagle Plains** | **4.30 134** | | IAML | | 11 56 50.6 | |
| | comp=N,68nm,0.6s | | | | | | |
| **D20K** | **Etivluk River** | **4.43 265** | | | Pn | 11 55 39.8 | +2.8 |
| **B20K** | **Meade River** | **4.44 282** | | Pn | Pn | 11 55 39.6 | +2.6 |
| **I28M** | **Miner Creek** | **4.45 155** | | | Pn | 11 55 40.0 | +2.8 |
| **I28M** | **Miner Creek** | **4.45 155** | | IAML | | 11 57 00.2 | |
| | comp=E,36nm,1.4s | | | | | | |
| I28M | | | | IAML | | 11 57 08.2 | |
| | comp=N,34nm,0.8s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.46 113** | | | Pn | 11 55 40.2 | +3.0 |
| F31M | | | | IAML | | 11 56 57.2 | |
| | comp=N,48nm,1.2s | | | | | | |
| F31M | | | | IAML | | 11 56 58.8 | |
| | comp=E,42nm,1.4s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.50 219** | | | Pn | 11 55 40.2 | +2.3 |
| **G21K** | **Allakaket** | **4.55 233** | | | Pn | 11 55 40.9 | +2.3 |
| **G21K** | **Allakaket** | **4.55 233** | | IAML | | 11 57 03.6 | |
| | comp=E,47nm,1.7s | | | | | | |
| G21K | | | | IAML | | 11 57 08.8 | |
| | comp=N,50nm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58 196** | | Pn | Pn | 11 55 43.1 | +4.1 |
| POKR | | | | IAML | | 11 57 06.1 | |
| | comp=N,47nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.60 120** | | Pn | Pn | 11 55 42.5 | +3.3 |
| G31M | | | | IAML | | 11 57 05.5 | |
| | comp=N,47nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79 206** | | | Pn | 11 55 44.5 | +2.7 |
| **I23K** | **Minto, Yukon-K** | **4.79 206** | | IAML | | 11 57 13.8 | |
| | comp=N,44nm,1.4s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.80 148** | | | Pn | 11 55 45.3 | +3.2 |
| I29M | | | | IAML | | 11 57 05.8 | |
| | comp=E,29nm,0.8s | | | | | | |
| I29M | | | | IAML | | 11 57 10.2 | |
| | comp=N,29nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **4.82 200** | | | Pn | 11 55 45.8 | +3.5 |
| MDM | | | | IAML | | 11 57 08.2 | |
| | comp=N,31nm,1.0s | | | | | | |
| MDM | | | | IAML | | 11 57 11.7 | |
| | comp=E,47nm,0.8s | | | | | | |
| **COLA** | **College** | **4.86 197** | | | Pn | 11 55 45.9 | +3.2 |
| **F20K** | **Avaraart Lake** | **4.87 245** | | | Pn | 11 55 46.3 | +3.4 |
| **IL31** | | **4.87 192** | | | Pn | 11 55 46.6 | +3.7 |
| **ILAR** | **Eielson Array** | **4.87 192** | | Pn | Pn | 11 55 47.5 | +4.5 |
| **EGAK** | **Eagle** | **4.94 163** | | Pn | Pn | 11 55 47.5 | +3.6 |
| EGAK | | | | IAML | | 11 56 49.7 | |
| | comp=E,27nm,1.0s | | | | | | |
| EGAK | | | | IAML | | 11 57 18.1 | |
| | comp=E,28nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **4.95 185** | | | Pn | 11 55 47.8 | +3.7 |
| J25K | | | | IAML | | 11 57 18.0 | |
| | comp=E,25nm,1.0s | | | | | | |
| **D19K** | **Kuna River** | **5.02 265** | | | Pn | 11 55 47.8 | +2.7 |
| **D19K** | **Kuna River** | **5.02 265** | | IAML | | 11 57 27.6 | |
| | comp=E,31nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.03 223** | | | Pn | 11 55 47.8 | +2.6 |
| **H21K** | **Melozitna Rive** | **5.03 223** | | IAML | | 11 57 19.2 | |
| | comp=N,32nm,1.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.06 176** | | Pn | Pn | 11 55 50.3 | +4.7 |
| J26L | | | | IAML | | 11 56 56.0 | |
| | comp=N,22nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08 197** | | | Pn | 11 55 48.8 | +3.1 |
| **MLY** | **Manley** | **5.13 211** | | Pn | Pn | 11 55 50.0 | +3.4 |
| MLY | | | | IAML | | 11 57 32.0 | |
| | comp=N,19nm,1.4s | | | | | | |
| MLY | | | | IAML | | 11 57 35.0 | |
| | comp=E,19nm,2.0s | | | | | | |
| **HDA** | **Harding Lake** | **5.23 192** | | | Pn | 11 55 51.8 | +3.9 |
| HDA | | | | IAML | | 11 57 28.9 | |
| | comp=N,28nm,1.2s | | | | | | |
| **NEA2** | **Nenana** | **5.28 202** | | | Pn | 11 55 50.9 | +2.4 |
| **NEA2** | **Nenana** | **5.28 202** | | IAML | | 11 57 30.6 | |
| | comp=E,20nm,1.6s | | | | | | |
| **WRH** | **Wood River Hil** | **5.28 197** | | | Pn | 11 55 52.0 | +3.5 |
| WRH | | | | IAML | | 11 57 20.5 | |
| | comp=N,24nm,0.8s | | | | | | |
| WRH | | | | IAML | | 11 57 24.8 | |
| | comp=E,26nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.32 140** | | Pn | Pn | 11 55 52.5 | +3.2 |
| I30M | | | | IAML | | 11 56 55.4 | |
| | comp=E,29nm,0.5s | | | | | | |
| I30M | | | | IAML | | 11 56 55.5 | |
| | comp=N,24nm,0.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.38 273** | | | Pn | 11 55 53.1 | +3.1 |
| C19K | | | | IAML | | 11 57 49.8 | |
| | comp=E,27nm,1.8s | | | | | | |
| **SCRK** | **Sand Creek** | **5.58 178** | | | Pn | 11 55 56.4 | +3.6 |
| **F19K** | **Shaleruckik Mo** | **5.66 248** | | | Pn | 11 55 56.1 | +2.4 |
| **DAWY** | **Dawson** | **5.84 158** | | | Pn | 11 55 59.8 | +3.5 |
| **J30M** | **Hart River** | **5.89 144** | | | Pn | 11 56 00.2 | +3.1 |
| **DOT** | **Dot Lake** | **5.91 178** | | | Pn | 11 56 01.1 | +3.9 |
| **BPAW** | **Bear Paw Mtn.** | **6.03 208** | | | Pn | 11 56 00.9 | +2.0 |
| **C18K** | **Utukok River** | **6.06 270** | | | Pn | 11 56 01.6 | +2.3 |
| **E18K** | **Tukpahlearik C** | **6.31 258** | | | Pn | 11 56 05.1 | +2.5 |
| **K29M** | **Barlow Dome** | **6.33 151** | | Pn | Pn | 11 56 07.4 | +4.3 |
| **F18K** | **Selawik** | **6.40 250** | | | Pn | 11 56 06.5 | +2.5 |
| **L26K** | **Log Cabin Wild** | **6.55 176** | | | Pn | 11 56 10.2 | +4.2 |
| **L27K** | **Beaver Creek,** | **6.58 170** | | | Pn | 11 56 10.6 | +4.2 |
| **DHY** | **Denali Highway** | **6.59 192** | | Pn | Pn | 11 56 12.5 | +5.9 |
| **A36M** | **Sachs Harbour** | **6.79 60** | | | Pn | 11 56 10.3 | +1.0 |
| **C17K** | **DeLong Mountai** | **6.81 270** | | | Pn | 11 56 10.4 | +0.9 |
| **L29M** | **L29M** | **6.92 155** | | | Pn | 11 56 14.8 | +3.6 |
| **D17K** | **Noatak River** | **7.05 264** | | | Pn | 11 56 13.4 | +0.6 |
| **C36M** | **Paulatuk** | **7.17 82** | | | Pn | 11 56 15.1 | +0.7 |
| **M26K** | **Nabesna, AK** | **7.18 175** | | | Pn | 11 56 18.9 | +4.2 |
| **M29M** | **Somme Creek** | **7.52 158** | | | Pn | 11 56 22.8 | +3.4 |
| **M20K** | **Styx River** | **8.46 209** | | | Pn | 11 56 36.1 | +3.8 |
| **N30M** | **Aishikik Lake** | **8.65 156** | | | Pn | 11 56 38.0 | +3.1 |

*AEIC* ***13*** *12:10:42.8±1.5, 69°50N±0°06×144°30W±0°10, h11km±6km, ML3.4, ML3.5/118(NEIC), Error ellipse: s-maj=8.7km s-min=4.7km az=191.0*

*NEIC* ***13*** *12:10:44.3±1.5, 69°61N±0°06×144°18W±0°09, h10km±2km, Error ellipse: s-maj=10.1km s-min=5.3km az=8.0*

*IDC* ***13*** *12:10:46.1±2.6, 69°36N×143°85W, h0km, mb3.3/3, mbtmp3.3/5, ML3.4/2, MS3.1/1, Error ellipse: s-maj=39.6km s-min=22.0km az=140.0*

**ISC 13 12:10:44.0**±0.7,**69°52N**±0°03×**144°26W**±0°02,**h14**km, **n136,**σ1**s90**/121,**mb3.4**/3,**Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **C27K** | **Jago River** | **0.22** | **61** | Pg | | **Pg** | **12** | **10 47.6** | **-1.3** |
| **C26K** | **Camden Bay** | **0.46** | **331** | | | **Pg** | **12** | **10 52.7** | **-0.4** |
| C26K | | | | | | **Sb** | **12** | **10 59.8** | **-0.7** |
| **D25K** | **Kavik River** | | **0.78** | **256** | | **Pg** | **12** | **10 57.8** | **-1.2** |
| **D25K** | **Kavik River** | | **0.78** | **256** | | **Sb** | **12** | **11 08.2** | **-1.4** |
| **D25K** | **Kavik River** | | **0.78** | **256** | IAML | | 12 | 11 12.5 | |
| | comp=N,807nm,0.4s | | | | | | | | |
| D25K | | | | | IAML | | 12 | 11 12.9 | |
| | comp=E,879nm,0.6s | | | | | | | | |
| **D27M** | **Malcolm River** | | **1.20** | **102** | | **Pn** | **12** | **11 05.6** | **-0.8** |
| **D27M** | **Malcolm River** | | **1.20** | **102** | | **Sg** | **12** | **11 23.1** | **+0.5** |
| **D27M** | **Malcolm River** | | **1.20** | **102** | IAML | | 12 | 11 28.3 | |
| | comp=E,674nm,0.6s | | | | | | | | |
| D27M | | | | | IAML | | 12 | 11 28.5 | |
| | comp=N,746nm,0.5s | | | | | | | | |
| **C24K** | **Franklin Bluff** | | **1.57** | **279** | Pn | **Pg** | **12** | **11 13.2** | **-0.9** |
| **C24K** | **Franklin Bluff** | | **1.57** | **279** | | **Sg** | **12** | **11 34.2** | **-0.2** |
| **E27K** | **Coleen River** | | **1.65** | **143** | Pn | **Pg** | **12** | **11 14.5** | **-1.2** |
| E27K | | | | | IAML | | 12 | 11 39.5 | |
| | comp=E,430nm,0.6s | | | | | | | | |
| **D24K** | **Happy Valley** | | **1.66** | **259** | Pn | **Pg** | **12** | **11 14.9** | **-0.9** |
| **F26K** | **Sheenjek River** | | **1.84** | **179** | Pn | **Pg** | **12** | **11 17.8** | **-1.4** |
| F26K | | | | | IAML | | 12 | 11 45.5 | |
| | comp=N,384nm,0.5s | | | | | | | | |
| **E28M** | **Babbage River** | | **1.93** | **116** | | **Pb** | **12** | **11 17.9** | **-1.0** |
| **D28M** | **Stokes Point** | | **1.96** | **93** | | **Pb** | **12** | **11 18.6** | **-0.8** |
| **F25K** | **Christian Rive** | | **2.00** | **195** | | **Pb** | **12** | **11 19.7** | **-0.5** |
| F25K | | | | | IAML | | 12 | 11 50.7 | |
| | comp=E,432nm,0.9s | | | | | | | | |
| F25K | | | | | IAML | | 12 | 11 50.8 | |
| | comp=N,504nm,0.6s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | | **2.10** | **248** | | **Pb** | **12** | **11 21.5** | **-0.3** |
| TOLK | | | | | IAML | | 12 | 11 52.7 | |
| | comp=E,444nm,0.5s | | | | | | | | |
| TOLK | | | | | IAML | | 12 | 11 57.4 | |
| | comp=N,278nm,0.7s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | | **2.11** | **183** | | **Pb** | **12** | **11 21.0** | **-0.9** |
| **E24K** | **Your Creek** | | **2.12** | **229** | | **Pb** | **12** | **11 20.8** | **-1.3** |
| **C23K** | **Itkillik River** | | **2.24** | **281** | | **Pb** | **12** | **11 21.9** | **-2.2** |
| **D23K** | **Nanushuk River** | | **2.36** | **259** | | **Pb** | **12** | **11 23.5** | **-2.6** |
| **D23K** | **Nanushuk River** | | **2.36** | **259** | IAML | | 12 | 12 09.5 | |
| | comp=E,278nm,0.6s | | | | | | | | |
| D23K | | | | | IAML | | 12 | 12 21.5 | |
| | comp=N,221nm,0.9s | | | | | | | | |
| **F24K** | **Squaw Lake** | | **2.42** | **215** | | **Pb** | **12** | **11 24.6** | **-2.6** |
| **E23K** | **Chandalar** | | **2.44** | **236** | | **Pb** | **12** | **11 25.4** | **-2.3** |
| **F28M** | **Old Crow** | | **2.50** | **138** | | **Pb** | **12** | **11 25.7** | **-2.9** |
| **F28M** | **Old Crow** | | **2.50** | **138** | IAML | | 12 | 12 06.6 | |
| | comp=E,194nm,0.8s | | | | | | | | |
| F28M | | | | | IAML | | 12 | 12 08.0 | |
| | comp=N,247nm,0.7s | | | | | | | | |
| **E29M** | **Blow River** | | **2.56** | **113** | | **Pn** | **12** | **11 25.7** | **+0.7** |
| E29M | | | | | IAML | | 12 | 12 13.3 | |
| | comp=N,167nm,0.8s | | | | | | | | |
| **G26K** | **Porcupine Rive** | | **2.59** | **176** | | **Pb** | **12** | **11 27.4** | **-2.7** |
| **G25K** | **Bearman Lake** | | **2.85** | **195** | | **Pb** | **12** | **11 30.8** | **-3.8** |
| **G27K** | **Doyon Strip** | | **2.89** | **159** | | **Pb** | **12** | **11 31.7** | **-3.6** |
| **FYU** | **Fort Yukon** | | **2.99** | **187** | Pn | **Pb** | **12** | **11 33.3** | **-3.6** |
| **D22K** | **Ayikyak River** | | **3.08** | **262** | Pn | **Pn** | **12** | **11 33.8** | **+1.7** |
| **G24K** | **Hadweenzic Riv** | | **3.08** | **205** | | **Pn** | **12** | **11 33.3** | **+1.2** |
| **G24K** | **Hadweenzic Riv** | | **3.08** | **205** | IAML | | 12 | 12 24.1 | |
| | comp=E,128nm,0.8s | | | | | | | | |
| G24K | | | | | IAML | | 12 | 12 26.0 | |
| | comp=N,166nm,1.1s | | | | | | | | |
| **COLD** | **Coldfoot** | | **3.19** | **226** | | **Pn** | **12** | **11 35.0** | **+1.4** |
| **B22K** | **Teshekpuk Lake** | | **3.26** | **289** | Pn | **Pn** | **12** | **11 36.7** | **+2.1** |
| **H25L** | **Birch Creek** | | **3.32** | **191** | | **Pn** | **12** | **11 36.9** | **+1.5** |
| **H27K** | **Steamboat Moun** | | **3.46** | **161** | | **Pn** | **12** | **11 39.0** | **+1.6** |
| **G29M** | **Pine Creek** | | **3.50** | **135** | Pn | **Pn** | **12** | **11 39.6** | **+1.6** |
| G29M | | | | | IAML | | 12 | 12 39.7 | |
| | comp=N,101nm,0.9s | | | | | | | | |
| **F22K** | **John River** | | **3.55** | **239** | | **Pn** | **12** | **11 40.3** | **+1.8** |
| **G23K** | **Bananza Creek** | | **3.55** | **220** | | **Pn** | **12** | **11 39.8** | **+1.1** |
| G23K | | | | | IAML | | 12 | 12 40.3 | |
| | comp=E,92nm,0.6s | | | | | | | | |
| G23K | | | | | IAML | | 12 | 12 51.7 | |
| | comp=N,84nm,1.5s | | | | | | | | |
| **B21K** | **Ikpikpuk River** | | **3.63** | **276** | Pn | **Pn** | **12** | **11 41.9** | **+2.2** |
| B21K | | | | | IAML | | 12 | 12 25.8 | |
| | comp=E,118nm,0.8s | | | | | | | | |
| **F30M** | **Barrier River** | | **3.65** | **118** | | **Pn** | **12** | **11 39.4** | **-0.6** |
| **E21K** | **Killik River** | | **3.66** | **257** | | **Pn** | **12** | **11 40.5** | **+0.3** |
| **E21K** | **Killik River** | | **3.66** | **257** | IAML | | 12 | 12 48.2 | |
| | comp=E,101nm,0.8s | | | | | | | | |
| E21K | | | | | IAML | | 12 | 12 59.5 | |
| | comp=N,102nm,1.1s | | | | | | | | |
| **A22K** | **Sinclair Lake** | | **3.93** | **297** | | **Pn** | **12** | **11 45.2** | **+1.5** |
| **G30M** | **tAoh Zraii Nji** | | **3.93** | **127** | | **Pn** | **12** | **11 45.9** | **+2.1** |
| **G30M** | **tAoh Zraii Nji** | | **3.93** | **127** | IAML | | 12 | 13 06.8 | |
| | comp=E,51nm,1.1s | | | | | | | | |
| G30M | | | | | IAML | | 12 | 13 07.2 | |
| | comp=N,54nm,0.7s | | | | | | | | |
| **H24K** | **Noodor Dome** | | **3.95** | **202** | Pn | **Pn** | **12** | **11 45.6** | **+1.5** |
| H24K | | | | | IAML | | 12 | 12 52.6 | |
| | comp=N,54nm,0.7s | | | | | | | | |
| H24K | | | | | IAML | | 12 | 12 56.8 | |
| | comp=E,62nm,1.4s | | | | | | | | |
| **H29M** | **Whitestone** | | **4.00** | **143** | | **Pn** | **12** | **11 46.5** | **+1.8** |
| H29M | | | | | IAML | | 12 | 12 57.5 | |
| | comp=N,78nm,0.6s | | | | | | | | |
| H29M | | | | | IAML | | 12 | 12 58.0 | |
| | comp=E,90nm,0.8s | | | | | | | | |
| **PRP** | **Porcupine Dome** | | **4.05** | **187** | | **Pn** | **12** | **11 47.8** | **+2.1** |
| **PRP** | **Porcupine Dome** | | **4.05** | **187** | IAML | | 12 | 12 39.1 | |
| | comp=N,64nm,0.5s | | | | | | | | |
| PRP | | | | | IAML | | 12 | 12 52.8 | |
| | comp=E,58nm,1.1s | | | | | | | | |
| **I27K** | **Kandik River** | | **4.06** | **164** | | **Pn** | **12** | **11 48.0** | **+2.3** |
| **INK** | **Inuvik** | | **4.07** | **102** | | **Pn** | **12** | **11 47.1** | **+1.5** |
| **F21K** | **Alatna River** | | **4.12** | **240** | | **Pn** | **12** | **11 47.7** | **+1.3** |
| **F21K** | **Alatna River** | | **4.12** | **240** | IAML | | 12 | 12 58.1 | |
| | comp=E,55nm,1.0s | | | | | | | | |
| F21K | | | | | IAML | | 12 | 13 05.7 | |
| | comp=N,53nm,0.9s | | | | | | | | |
| **H23K** | **Yukon River** | | **4.22** | **211** | | **Pn** | **12** | **11 48.7** | **+0.9** |
| **H23K** | **Yukon River** | | **4.22** | **211** | IAML | | 12 | 13 07.0 | |
| | comp=E,71nm,0.7s | | | | | | | | |
| H23K | | | | | IAML | | 12 | 13 07.2 | |
| | comp=N,67nm,0.8s | | | | | | | | |
| **EPYK** | **Eagle Plains** | | **4.25** | **135** | | **Pn** | **12** | **11 50.4** | **+2.1** |
| **I26K** | **Coal Creek Min** | | **4.26** | **174** | | **Pn** | **12** | **11 50.1** | **+1.8** |
| I26K | | | | | IAML | | 12 | 13 00.9 | |
| | comp=E,65nm,0.8s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | | **4.40** | **113** | | **Pn** | **12** | **11 51.1** | **+0.9** |
| F31M | | | | | IAML | | 12 | 13 05.2 | |
| | comp=N,38nm,0.8s | | | | | | | | |
| F31M | | | | | IAML | | 12 | 13 11.6 | |
| | comp=E,40nm,1.5s | | | | | | | | |
| **I28M** | **Miner Creek** | | **4.42** | **156** | | **Pn** | **12** | **11 52.9** | **+2.4** |
| **I28M** | **Miner Creek** | | **4.42** | **156** | IAML | | 12 | 13 17.8 | |
| | comp=N,44nm,0.8s | | | | | | | | |
| **D20K** | **Etivluk River** | | **4.50** | **265** | | **Pn** | **12** | **11 53.3** | **+1.8** |
| **B20K** | **Meade River** | | **4.51** | **282** | | **Pn** | **12** | **11 53.0** | **+1.4** |
| **A21K** | **Barrow** | | **4.53** | **299** | | **Pn** | **12** | **11 52.9** | **+0.9** |
| **H22K** | **Ishtalitna Cre** | | **4.54** | **220** | | **Pn** | **12** | **11 53.3** | **+1.1** |
| **G31M** | **Satah River** | | **4.54** | **120** | | **Pn** | **12** | **11 53.3** | **+1.1** |
| **G31M** | **Satah River** | | **4.54** | **120** | IAML | | 12 | 13 15.5 | |
| | comp=N,52nm,0.8s | | | | | | | | |
| G31M | | | | | IAML | | 12 | 13 21.4 | |
| | comp=E,57nm,1.2s | | | | | | | | |
| **G21K** | **Allakaket** | | **4.60** | **233** | | **Pn** | **12** | **11 53.5** | **+0.5** |
| G21K | | | | | IAML | | 12 | 13 15.6 | |
| | comp=E,52nm,1.0s | | | | | | | | |
| G21K | | | | | IAML | | 12 | 13 23.9 | |
| | comp=N,46nm,1.2s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | | **4.76** | **148** | | **Pn** | **12** | **11 57.3** | **+2.0** |
| I29M | | | | | IAML | | 12 | 12 55.5 | |
| | comp=E,35nm,0.4s | | | | | | | | |
| I29M | | | | | IAML | | 12 | 12 55.8 | |
| | comp=N,41nm,0.3s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | | **4.81** | **207** | | **Pn** | **12** | **11 57.8** | **+1.9** |
| I23K | | | | | IAML | | 12 | 13 26.6 | |
| | comp=N,31nm,1.7s | | | | | | | | |
| I23K | | | | | IAML | | 12 | 13 29.1 | |
| | comp=E,31nm,1.1s | | | | | | | | |
| **MDM** | **Murphy Dome** | | **4.83** | **200** | | **Pn** | **12** | **11 57.7** | **+1.4** |
| **MDM** | **Murphy Dome** | | **4.83** | **200** | IAML | | 12 | 13 21.2 | |
| | comp=N,30nm,0.7s | | | | | | | | |
| MDM | | | | | IAML | | 12 | 13 32.7 | |
| | comp=E,28nm,1.1s | | | | | | | | |
| **COLA** | **College** | | **4.87** | **198** | | **Pn** | **12** | **11 59.2** | **+2.5** |
| **IL31** | | | **4.88** | **193** | | **Pn** | **12** | **11 58.4** | **+1.6** |
| **ILAR** | **Eielson Array** | | **4.88** | **193** | Pn | **Pn** | **12** | **11 59.1** | **+2.3** |
| **ILAR** | **Eielson Array** | | **4.88** | **193** | Pn | **Pn** | **12** | **11 58.0** | **+1.1** |
| | comp=E,1.1nm,0.3s,baz=12,slow=14,SNR=23 | | | | | | | | |
| ILAR | | | | | Sn | **Sn** | **12** | **12 53.5** | **+0.4** |
| | comp=E,2.6nm,0.3s,baz=14,slow=25,SNR=5.3 | | | | | | | | |
| ILAR | | | | | Lg | Lg | 12 | 13 14.1 | |
| | comp=E,3.8nm,0.3s,baz=11,slow=31,SNR=9.2 | | | | | | | | |
| | comp=E,2.4nm,0.4s | | | | | | | | |
| **EGAK** | **Eagle** | | **4.92** | **164** | Pn | **Pn** | **12** | **11 59.5** | **+2.1** |
| EGAK | | | | | IAML | | 12 | 13 01.4 | |
| | comp=E,40nm,1.1s | | | | | | | | |
| EGAK | | | | | IAML | | 12 | 13 28.7 | |
| | comp=E,34nm,0.9s | | | | | | | | |
| **F20K** | **Avaraart Lake** | | **4.93** | **245** | | **Pn** | **12** | **11 58.8** | **+1.3** |
| **F20K** | **Avaraart Lake** | | **4.93** | **245** | IAML | | 12 | 13 36.0 | |
| | comp=N,32nm,1.4s | | | | | | | | |
| **J25K** | **Salcha River,** | | **4.95** | **186** | | **Pn** | **12** | **11 59.9** | **+2.0** |
| J25K | | | | | IAML | | 12 | 13 30.2 | |
| | comp=N,25nm,0.6s | | | | | | | | |
| J25K | | | | | IAML | | 12 | 13 32.2 | |
| | comp=E,42nm,0.8s | | | | | | | | |
| **J26L** | **Joseph Creek** | | **5.05** | **177** | | **Pn** | **12** | **12 01.5** | **+2.3** |
| J26L | | | | | IAML | | 12 | 13 04.8 | |
| | comp=N,25nm,0.4s | | | | | | | | |
| J26L | | | | | IAML | | 12 | 13 28.6 | |
| | comp=E,33nm,0.9s | | | | | | | | |
| **H21K** | **Melozitna Rive** | | **5.07** | **224** | | **Pn** | **12** | **12 00.8** | **+1.4** |
| **H21K** | **Melozitna Rive** | | **5.07** | **224** | IAML | | 12 | 13 31.7 | |
| | comp=N,34nm,2.2s | | | | | | | | |
| **D19K** | **Kuna River** | | **5.09** | **265** | | **Pn** | **12** | **12 01.3** | **+1.6** |
| D19K | | | | | IAML | | 12 | 13 02.6 | |
| | comp=E,26nm,1.3s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | | **5.09** | **197** | | **Pn** | **12** | **12 01.3** | **+1.6** |
| **MLY** | **Manley** | | **5.16** | **212** | | **Pn** | **12** | **12 01.9** | **+1.2** |
| **E19K** | **Redstone River** | | **5.20** | **253** | | **Pn** | **12** | **12 02.7** | **+1.5** |
| E19K | | | | | IAML | | 12 | 13 44.7 | |
| | comp=E,32nm,1.0s | | | | | | | | |
| **HDA** | **Harding Lake** | | **5.24** | **193** | | **Pn** | **12** | **12 04.8** | **+3.0** |
| HDA | | | | | IAML | | 12 | 13 32.6 | |
| | comp=N,32nm,0.8s | | | | | | | | |
| **I30M** | **Mount Dempster** | | **5.28** | **141** | Pn | **Pn** | **12** | **12 03.8** | **+1.4** |
| I30M | | | | | IAML | | 12 | 13 05.9 | |
| | comp=N,27nm,0.5s | | | | | | | | |
| **WRH** | **Wood River Hil** | | **5.29** | **198** | | **Pn** | **12** | **12 03.7** | **+1.3** |
| **WRH** | **Wood River Hil** | | **5.29** | **198** | IAML | | 12 | 13 34.9 | |
| | comp=E,24nm,0.6s | | | | | | | | |
| **NEA2** | **Nenana** | | **5.29** | **203** | | **Pn** | **12** | **12 04.0** | **+1.4** |
| NEA2 | | | | | IAML | | 12 | 13 43.5 | |
| | comp=E,19nm,1.3s | | | | | | | | |
| **C19K** | **Lookout Ridge** | | **5.45** | **273** | | **Pn** | **12** | **12 06.1** | **+1.4** |
| **SCRK** | **Sand Creek** | | **5.57** | **179** | | **Pn** | **12** | **12 08.5** | **+2.1** |
| **K27K** | **Chicken** | | **5.58** | **170** | | **Pn** | **12** | **12 08.6** | **+2.1** |
| **F19K** | **Shaleruckik Mo** | | **5.71** | **248** | | **Pn** | **12** | **12 09.5** | **+1.3** |
| **DAWY** | **Dawson** | | **5.81** | **158** | | **Pn** | **12** | **12 12.3** | **+2.7** |
| **A19K** | **Wainwright** | | **5.84** | **285** | | **Pn** | **12** | **12 11.1** | **+1.1** |
| **J30M** | **Hart River** | | **5.85** | **144** | | **Pn** | **12** | **12 11.0** | **+0.7** |
| **DOT** | **Dot Lake** | | **5.90** | **179** | | **Pn** | **12** | **12 12.6** | **+1.8** |
| **G19K** | **Purcell Mounta** | | **5.92** | **241** | | **Pn** | **12** | **12 11.9** | **+0.9** |
| **BPAW** | **Bear Paw Mtn.** | | **6.05** | **209** | | **Pn** | **12** | **12 15.1** | **+2.1** |
| **C18K** | **Utukok River** | | **6.12** | **270** | | **Pn** | **12** | **12 14.9** | **+1.0** |
| **H19K** | **Roundabout Mou** | | **6.15** | **235** | | **Pn** | **12** | **12 15.6** | **+1.3** |
| **K29M** | **Barlow Dome** | | **6.29** | **152** | | **Pn** | **12** | **12 18.8** | **+2.4** |
| **E18K** | **Tukpahlearik C** | | **6.37** | **258** | | **Pn** | **12** | **12 18.4** | **+1.1** |
| **RND** | **Reindeer** | | **6.41** | **199** | | **Pn** | **12** | **12 19.5** | **+1.6** |
| **F18K** | **Selawik** | | **6.46** | **250** | | **Pn** | **12** | **12 19.9** | **+1.4** |
| **L26K** | **Log Cabin Wild** | | **6.54** | **176** | | **Pn** | **12** | **12 22.2** | **+2.6** |
| **BCAR** | **Beaver Creek A** | | **6.56** | **170** | Pn | **Pn** | **12** | **12 23.2** | **+3.3** |
| **L27K** | **Beaver Creek,** | | **6.56** | **170** | | **Pn** | **12** | **12 23.0** | **+3.1** |
| **DHY** | **Denali Highway** | | **6.59** | **192** | | **Pn** | **12** | **12 24.0** | **+3.5** |
| **J20K** | **Nowinta River** | | **6.62** | **221** | | **Pn** | **12** | **12 21.3** | **+0.5** |
| **A36M** | **Sachs Harbour** | | **6.74** | **60** | | **Pn** | **12** | **12 21.6** | **-0.6** |
| **C17K** | **DeLong Mountai** | | **6.87** | **270** | | **Pn** | **12** | **12 23.7** | **-0.4** |
| **L29M** | **L29M** | | **6.89** | **156** | | **Pn** | **12** | **12 26.5** | **+2.0** |
| **RDOG** | **Red Dog Mine** | | **6.92** | **267** | | **Pn** | **12** | **12 26.0** | **+1.2** |
| **F17K** | **Baldwin Pennin** | | **7.08** | **252** | Pn | **Pn** | **12** | **12 27.9** | **+0.9** |
| **C36M** | **Paulatuk** | | **7.10** | **82** | | **Pn** | **12** | **12 26.5** | **-0.8** |
| **D17K** | **Noatak River** | | **7.11** | **264** | | **Pn** | **12** | **12 27.6** | **+0.2** |
| **J19K** | **Poorman** | | **7.13** | **224** | Pn | **Pn** | **12** | **12 29.2** | **+1.5** |
| **M26K** | **Nabesna, AK** | | **7.17** | **175** | | **Pn** | **12** | **12 31.9** | **+3.6** |
| **M27K** | **Edge Creek, AK** | | **7.26** | **171** | | **Pn** | **12** | **12 32.3** | **+2.6** |
| **G17K** | **Kiwalik Mounta** | | **7.45** | **245** | | **Pn** | **12** | **12 33.0** | **+0.8** |
| **M29M** | **Somme Creek** | | **7.49** | **159** | | **Pn** | **12** | **12 35.3** | **+2.6** |
| **C16K** | **Lisburne Hills** | | **7.70** | **271** | Pn | **Pn** | **12** | **12 36.5** | **+1.1** |
| **YUK2** | **White River** | | **7.89** | **168** | | **Pn** | **12** | **12 41.5** | **+3.2** |
| **N30M** | **Aishikik Lake** | | **8.62** | **156** | | **Pn** | **12** | **12 50.6** | **+2.5** |
| **YKA** | **Yellowknife Ar** | | **13.83** | **106** | Pn | **Pn** | **12** | **13 54.9** | **-4.3** |
| | comp=E,0.2nm,0.3s,baz=316,slow=15,

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D22K | | | IAML | | | 12 49 59.5 | |
| | comp=E,155nm,0.7s | | | | | | |
| D22K | | | IAML | | | 12 50 04.0 | |
| | comp=N,185nm,0.8s | | | | | | |
| **G27K** | **Doyon Strip** | **2.97 156** | | Pn | | 12 49 04.4 | +2.1 |
| **FYU** | **Fort Yukon** | **2.99 184** | | Pb | | 12 49 05.9 | -2.7 |
| FYU | | | IAML | | | 12 49 60.0 | |
| | comp=E,196nm,1.2s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.03 201** | | Pn | | 12 49 05.5 | +2.4 |
| **COLD** | **Coldfoot** | **3.08 224** | | Pn | | 12 49 06.8 | +3.1 |
| **B22K** | **Teshekpuk Lake** | **3.10 289** | | Pn | | 12 49 06.3 | +2.4 |
| **F22K** | **John River** | **3.41 237** | | Pn | | 12 49 11.1 | +2.9 |
| **G23K** | **Bananza Creek** | **3.46 217** | | Pn | | 12 49 11.6 | +2.7 |
| G23K | | | IAML | | | 12 50 13.6 | |
| | comp=N,96nm,1.3s | | | | | | |
| G23K | | | IAML | | | 12 50 17.2 | |
| | comp=E,143nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.46 276** | Pn | Pn | | 12 49 11.8 | +2.9 |
| B21K | | | IAML | | | 12 50 33.1 | |
| | comp=N,118nm,1.6s | | | | | | |
| **E21K** | **Killik River** | **3.50 256** | Pn | Pn | | 12 49 11.8 | +2.2 |
| E21K | | | IAML | | | 12 50 19.8 | |
| | comp=N,95nm,0.7s | | | | | | |
| E21K | | | IAML | | | 12 50 25.7 | |
| | comp=E,90nm,0.7s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.54 158** | | Pn | | 12 49 12.9 | +2.9 |
| **G29M** | **Pine Creek** | **3.64 133** | | Pn | | 12 49 13.4 | +2.1 |
| **A22K** | **Sinclair Lake** | **3.77 298** | | Pn | | 12 49 15.6 | +2.5 |
| **F30M** | **Barrier River** | **3.81 116** | | Pn | | 12 49 17.2 | +3.4 |
| **H24K** | **Noodor Dome** | **3.90 199** | Pn | Pn | | 12 49 17.6 | +2.5 |
| H24K | | | IAML | | | 12 50 30.5 | |
| | comp=E,70nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **3.98 238** | | Pn | | 12 49 18.5 | +2.4 |
| **F21K** | **Alatna River** | **3.98 238** | IAML | | | 12 50 27.6 | |
| | comp=E,68nm,0.7s | | | | | | |
| F21K | | | IAML | | | 12 50 31.6 | |
| | comp=N,64nm,0.6s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05 185** | Pn | Pn | | 12 49 20.4 | +3.3 |
| PRP | | | IAML | | | 12 50 11.9 | |
| | comp=N,70nm,0.6s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.08 125** | Pn | Pn | | 12 49 20.7 | +3.2 |
| G30M | | | IAML | | | 12 50 35.2 | |
| | comp=N,82nm,0.7s | | | | | | |
| G30M | | | IAML | | | 12 50 41.6 | |
| | comp=E,63nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **4.11 141** | Pn | Pn | | 12 49 21.0 | +3.2 |
| H29M | | | IAML | | | 12 50 39.7 | |
| | comp=E,91nm,0.7s | | | | | | |
| H29M | | | IAML | | | 12 50 40.2 | |
| | comp=N,72nm,1.1s | | | | | | |
| **I27K** | **Kandik River** | **4.13 162** | | Pn | | 12 49 21.6 | +3.4 |
| **H23K** | **Yukon River** | **4.15 208** | | Pn | | 12 49 21.0 | +2.5 |
| **H23K** | **Yukon River** | **4.15 208** | IAML | | | 12 50 29.5 | |
| | comp=E,88nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **4.24 102** | | Pn | | 12 49 22.6 | +3.1 |
| **I26K** | **Coal Creek Min** | **4.29 171** | | Pn | | 12 49 23.6 | +3.2 |
| **I26K** | **Coal Creek Min** | **4.29 171** | IAML | | | 12 50 40.9 | |
| | comp=E,70nm,0.8s | | | | | | |
| **D20K** | **Etivluk River** | **4.33 265** | | Pn | | 12 49 24.0 | +3.2 |
| **E20K** | **Nigu River** | **4.33 258** | | Pn | | 12 49 24.1 | +3.1 |
| **B20K** | **Meade River** | **4.34 282** | Pn | Pn | | 12 49 23.4 | +2.5 |
| B20K | | | IAML | | | 12 50 56.3 | |
| | comp=N,77nm,0.8s | | | | | | |
| **A21K** | **Barrow** | **4.38 300** | | Pn | | 12 49 24.0 | +2.6 |
| **EPYK** | **Eagle Plains** | **4.39 133** | | Pn | | 12 49 24.4 | +2.7 |
| **H22K** | **Ishtalitna Cre** | **4.44 218** | | Pn | | 12 49 24.2 | +1.7 |
| **G21K** | **Allakaket** | **4.47 231** | | Pn | | 12 49 25.0 | +2.1 |
| **I28M** | **Miner Creek** | **4.50 154** | | Pn | | 12 49 26.2 | +2.9 |
| **I28M** | **Miner Creek** | **4.50 154** | IAML | | | 12 50 21.6 | |
| | comp=N,55nm,0.5s | | | | | | |
| I28M | | | IAML | | | 12 50 49.8 | |
| | comp=E,44nm,1.3s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.56 194** | | Pn | | 12 49 26.4 | +2.3 |
| POKR | | | IAML | | | 12 50 46.7 | |
| | comp=E,64nm,0.7s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.56 112** | | Pn | | 12 49 26.4 | +2.4 |
| **F31M** | **Tsiigehtchic** | **4.56 112** | IAML | | | 12 50 41.1 | |
| | comp=N,42nm,1.1s | | | | | | |
| F31M | | | IAML | | | 12 50 47.6 | |
| | comp=E,58nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.70 119** | | Pn | | 12 49 28.4 | +2.5 |
| **I23K** | **Minto, Yukon-K** | **4.75 204** | | Pn | | 12 49 29.8 | +3.1 |
| I23K | | | IAML | | | 12 50 57.9 | |
| | comp=E,53nm,1.6s | | | | | | |
| I23K | | | IAML | | | 12 50 59.2 | |
| | comp=N,51nm,1.4s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.78 244** | | Pn | | 12 49 30.1 | +3.1 |
| **F20K** | **Avaraart Lake** | **4.78 244** | IAML | | | 12 50 59.3 | |
| | comp=N,49nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79 198** | | Pn | | 12 49 30.5 | +3.2 |
| MDM | | | IAML | | | 12 50 51.7 | |
| | comp=E,39nm,0.6s | | | | | | |
| MDM | | | IAML | | | 12 51 01.9 | |
| | comp=N,45nm,1.0s | | | | | | |
| **COLA** | **College** | **4.84 196** | | Pn | | 12 49 30.6 | +2.8 |
| **IL31** | | **4.86 191** | | Pn | | 12 49 31.3 | +3.2 |
| **ILAR** | **Eielson Array** | **4.86 191** | Pn | Pn | | 12 49 31.6 | +3.4 |
| **I29M** | **Ogilvie Camp,** | **4.87 146** | | Pn | | 12 49 30.9 | +2.6 |
| I29M | | | IAML | | | 12 50 58.6 | |
| | comp=N,42nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **4.92 264** | | Pn | | 12 49 31.5 | +2.5 |
| D19K | | | IAML | | | 12 51 10.7 | |
| | comp=E,33nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **4.95 183** | | Pn | | 12 49 32.1 | +2.6 |
| **J25K** | **Salcha River,** | **4.95 183** | IAML | | | 12 51 03.4 | |
| | comp=E,36nm,0.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.97 222** | Pn | Pn | | 12 49 32.5 | +2.9 |
| H21K | | | IAML | | | 12 51 03.5 | |
| | comp=E,36nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **4.98 162** | | Pn | | 12 49 32.4 | +2.7 |
| **EGAK** | **Eagle** | **4.98 162** | IAML | | | 12 51 10.1 | |
| | comp=E,37nm,1.1s | | | | | | |
| EGAK | | | IAML | | | 12 51 12.8 | |
| | comp=E,32nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **5.04 251** | | Pn | | 12 49 32.8 | +2.1 |
| **E19K** | **Redstone River** | **5.04 251** | IAML | | | 12 51 16.4 | |
| | comp=E,28nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05 195** | | Pn | | 12 49 33.4 | +2.6 |
| **J26L** | **Joseph Creek** | **5.08 174** | Pn | Pn | | 12 49 34.3 | +3.0 |
| J26L | | | IAML | | | 12 50 39.6 | |
| | comp=N,30nm,0.7s | | | | | | |
| **MLY** | **Manley** | **5.08 210** | Pn | Pn | | 12 49 33.7 | +2.4 |
| MLY | | | IAML | | | 12 51 04.2 | |
| | comp=N,27nm,1.1s | | | | | | |
| MLY | | | IAML | | | 12 51 05.1 | |
| | comp=E,31nm,0.8s | | | | | | |
| **HDA** | **Harding Lake** | **5.22 191** | | Pn | | 12 49 36.2 | +3.1 |
| **HDA** | **Harding Lake** | **5.22 191** | IAML | | | 12 51 08.9 | |
| | comp=N,30nm,0.8s | | | | | | |
| HDA | | | IAML | | | 12 51 10.9 | |
| | comp=E,40nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.25 201** | | Pn | | 12 49 35.8 | +2.3 |
| **WRH** | **Wood River Hil** | **5.25 196** | | Pn | | 12 49 36.4 | +2.9 |
| **WRH** | **Wood River Hil** | **5.25 196** | IAML | | | 12 51 03.5 | |
| | comp=E,31nm,0.8s | | | | | | |
| WRH | | | IAML | | | 12 51 05.2 | |
| | comp=N,28nm,0.7s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.28 272** | Pn | Pn | | 12 49 36.0 | +2.1 |
| C19K | | | IAML | | | 12 51 02.1 | |
| | comp=E,33nm,2.5s | | | | | | |
| C19K | | | IAML | | | 12 51 36.6 | |
| | comp=N,30nm,1.4s | | | | | | |
| **I30M** | **Mount Dempster** | **5.40 139** | | Pn | | 12 49 38.0 | +2.4 |
| **F19K** | **Shaleruckik Mo** | **5.56 247** | | Pn | | 12 49 39.8 | +2.1 |
| **SCRK** | **Sand Creek** | **5.59 177** | Pn | Pn | | 12 49 42.0 | +3.7 |
| **K27K** | **Chicken** | **5.63 168** | | Pn | | 12 49 42.3 | +3.6 |
| **A19K** | **Wainwright** | **5.67 284** | | Pn | | 12 49 41.8 | +2.5 |
| **G19K** | **Purcell Mounta** | **5.78 240** | Pn | Pn | | 12 49 43.2 | +2.5 |
| **DAWY** | **Dawson** | **5.89 156** | | Pn | | 12 49 45.4 | +3.1 |
| **DOT** | **Dot Lake** | **5.92 177** | | Pn | | 12 49 46.0 | +3.2 |
| **C18K** | **Utukok River** | **5.95 269** | Pn | Pn | | 12 49 45.3 | +2.1 |
| **J30M** | **Hart River** | **5.96 143** | Pn | Pn | | 12 49 46.0 | +2.6 |
| **BPAW** | **Bear Paw Mtn.** | **5.99 207** | | Pn | | 12 49 45.9 | +2.2 |
| **B18K** | **Kokolik River** | **6.01 276** | | Pn | | 12 49 45.5 | +1.7 |
| **H19K** | **Roundabout Mou** | **6.02 234** | | Pn | | 12 49 46.5 | +2.4 |
| **MCK** | **McKinley** | **6.06 198** | | Pn | | 12 49 47.2 | +2.5 |
| **E18K** | **Tukpahlearik C** | **6.20 258** | | Pn | | 12 49 49.1 | +2.5 |
| **F18K** | **Selawik** | **6.31 249** | | Pn | | 12 49 50.3 | +2.4 |
| **RND** | **Reindeer** | **6.37 197** | Pn | Pn | | 12 49 51.7 | +2.7 |
| **K29M** | **Barlow Dome** | **6.39 150** | | Pn | | 12 49 52.4 | +3.1 |
| **G18K** | **Tagagawik** | **6.42 242** | | Pn | | 12 49 52.5 | +2.9 |
| **J20K** | **Nowinta River** | **6.53 219** | Pn | Pn | | 12 49 54.0 | +3.0 |
| **L26K** | **Log Cabin Wild** | **6.56 174** | | Pn | | 12 49 55.0 | +3.5 |
| **DHY** | **Denali Highway** | **6.58 191** | Pn | Pn | | 12 49 56.0 | +4.2 |
| **PAX** | **Paxson** | **6.60 183** | | Pn | | 12 49 56.0 | +3.9 |
| **BCAR** | **Beaver Creek A** | **6.61 168** | Pn | Pn | | 12 49 55.7 | +3.5 |
| **L27K** | **Beaver Creek,** | **6.61 168** | Pn | Pn | | 12 49 55.7 | +3.5 |
| **C17K** | **DeLong Mountai** | **6.70 270** | | Pn | | 12 49 54.3 | +0.9 |
| **RDOG** | **Red Dog Mine** | **6.75 266** | | Pn | | 12 49 55.2 | +1.2 |
| **E17K** | **Hotham Inlet** | **6.79 257** | | Pn | | 12 49 56.0 | +1.4 |
| **H18K** | **Honhosa River** | **6.85 237** | | Pn | | 12 49 57.6 | +2.1 |
| **A36M** | **Sachs Harbour** | **6.88 60** | | Pn | | 12 49 56.1 | +0.4 |
| **F17K** | **Baldwin Pennin** | **6.93 251** | Pn | Pn | | 12 49 58.5 | +2.0 |
| **WAT7** | **Susitna Watana** | **6.93 196** | | Pn | | 12 49 60.0 | +3.3 |
| **D17K** | **Noatak River** | **6.95 263** | | Pn | | 12 49 58.0 | +1.3 |
| **L29M** | **L29M** | **6.98 154** | | Pn | | 12 50 00.2 | +2.9 |
| **J19K** | **Poorman** | **7.02 223** | Pn | Pn | | 12 50 00.8 | +2.9 |
| **M26K** | **Nabesna, AK** | **7.20 173** | | Pn | | 12 50 02.5 | +2.1 |
| **C36M** | **Paulatuk** | **7.27 82** | | Pn | | 12 50 00.9 | -0.2 |
| **M27K** | **Edge Creek, AK** | **7.30 169** | | Pn | | 12 50 05.5 | +3.7 |
| **G17K** | **Kiwalik Mounta** | **7.31 244** | | Pn | | 12 50 03.3 | +1.6 |
| **H17K** | **Granite Mounta** | **7.46 239** | Pn | Pn | | 12 50 06.6 | +2.8 |
| **C16K** | **Lisburne Hills** | **7.53 270** | Pn | Pn | | 12 50 06.1 | +1.4 |
| **M29M** | **Somme Creek** | **7.56 157** | Pn | Pn | | 12 50 08.0 | +2.6 |
| **SCM** | **Sheep Creek Mo** | **7.81 189** | Pn | Pn | | 12 50 14.0 | +5.4 |
| **G16K** | **Koyuk River** | **7.92 247** | | Pn | | 12 50 12.2 | +2.1 |
| **YUK2** | **White River** | **7.95 166** | | Pn | | 12 50 14.4 | +3.8 |
| **J17K** | **VABM Dome** | **8.40 230** | Pn | Pn | | 12 50 19.1 | +2.5 |
| **I17K** | **Unalakleet** | **8.47 236** | Pn | Pn | | 12 50 20.6 | +3.1 |
| **M19K** | **Big River Lodg** | **8.62 212** | Pn | Pn | | 12 50 22.8 | +3.1 |
| **FARO** | **Faro, Yukon** | **8.68 142** | | Pn | | 12 50 23.0 | +2.5 |
| **N30M** | **Aishikik Lake** | **8.70 155** | Pn | Pn | | 12 50 24.2 | +3.3 |
| **CTGM** | **Chitina Glacie** | **8.72 169** | | Pn | | 12 50 25.8 | +4.5 |
| **J16K** | **Anvik River** | **8.90 233** | Pn | Pn | | 12 50 26.9 | +3.3 |

*NOU* ***13*** *12:59:20.4,41˚.92S×174˚.60E,h5km,MLv4.1/11,Cook Strait, New Zealand*

*WEL* ***13*** *12:59:21.8±0.5,42˚.5±4˚×17˚.4E±˚,h8km±4km,M3.8/17, ML4.1/16,MLv3.8/17,Error ellipse: s-maj=0.0km s-min=0.0km az=163.2,confirmed*

*WEL* ***13*** *12:59:22.3,41˚.70S×174˚.33E,h17km,ML3.8,Mw3.8, Moment Tensor Solution. s4 Moment tensor: Mrr=5.06; Mθθ51.06; Mφφ-56.13; Mrθ-7.15; Mθφ-7.87; Mφr-0.53; Fault plane solution: NP1:φ±221.00000°,δ83.00000°, λ175.00000°. NP2:φ±311.00000°,δ85.00000°,λ7.00000°. Principal axes: T 52.6900, Plg8.0000°, Azm176.0000°; N -56.7200, Plg81.0000°, Azm346.0000°; P 4.0300, Plg1.0000°, Azm86.0000°; SOUTH ISLAND*

**ISC 13 12:59:21.7±1.1,41˚.75S±0˚.03×174˚.39E±0˚.02,h13km±8km, n132,σ1§37/144,Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMWZ** | **Cape Campbell** | **0.13** | **270** | P | **Pg** | **12 59 24.6** | **-0.4** |
| **WDFS** | **Ward Fire Stat** | **0.20** | **247** | P | **Pg** | **12 59 26.4** | **+0.3** |
| **SEDS** | **Seddon Fire St** | **0.24** | **288** | P | **Pg** | **12 59 27.0** | **+0.1** |
| **KEKS** | **Kekerengu Val** | **0.37** | **236** | P | **Pb** | **12 59 30.0** | **-0.1** |
| KEKS | | | | S | **Sb** | **12 59 37.8** | **+2.0** |
| **BSWZ** | **Blackbirch Sta** | **0.38** | **275** | P | **Pg** | **12 59 29.4** | **0.0** |
| BSWZ | | | | S | **Sb** | **12 59 35.9** | **-0.4** |
| **TUWZ** | **Tuamarina** | **0.46** | **314** | P | **Pb** | **12 59 30.8** | **-0.8** |
| TUWZ | | | | S | **Sb** | **12 59 37.7** | **-0.7** |
| **BWRS** | **Waikakaho Road** | **0.48** | **311** | P | **Pg** | **12 59 30.9** | **-0.2** |
| BWRS | | | | S | **Sb** | **12 59 38.1** | **-0.8** |
| **BHW** | **Baring Head** | **0.50** | **47** | P | **Pg** | **12 59 31.4** | **-0.1** |
| BHW | | | | S | **Sb** | **12 59 39.7** | **+0.2** |
| **SNZO** | **South Karori** | **0.50** | **29** | P | **Pg** | **12 59 31.3** | **-0.2** |
| **TCW** | **Tory Channel** | **0.55** | **351** | P | **Pg** | **12 59 31.8** | **+0.6** |
| **WEL** | **Wellington** | **0.55** | **32** | P | **Pg** | **12 59 32.3** | **-0.2** |
| **PLWZ** | **Palliser** | **0.68** | **75** | P | **Pb** | **12 59 35.8** | **+0.4** |
| PLWZ | | | | S | **Sn** | **12 59 48.1** | **+0.6** |
| **MSWZ** | **Moikau Station** | **0.73** | **63** | P | **Pg** | **12 59 36.2** | **+0.3** |
| MSWZ | | | | S | **Sn** | **12 59 49.6** | **+0.9** |
| **CAW** | **Cannon Point** | **0.82** | **39** | P | **Pg** | **12 59 37.0** | **-0.6** |
| **PAWZ** | **Paruwai Farm** | **0.86** | **65** | P | **Pb** | **12 59 38.7** | **+0.2** |
| PAWZ | | | | S | **Sn** | **12 59 53.4** | **+1.3** |
| **KHZ** | **Kahutara** | **0.92** | **223** | P | **Pb** | **12 59 40.2** | **+0.7** |
| **KHZ** | **Kahutara** | **0.92** | **223** | P | **Pb** | **12 59 40.1** | **+0.6** |
| KHZ | | | | S | **Sn** | **12 59 54.6** | **+1.3** |
| **NNZ** | **Nelson** | **0.93** | **305** | P | **Pg** | **12 59 38.8** | **-0.8** |
| NNZ | | | | S | **Sg** | **12 59 50.9** | **-0.7** |
| **KIW** | **Kapiti Island** | **0.97** | **24** | P | **Pg** | **12 59 39.6** | **-0.8** |
| KIW | | | | S | **Sb** | **12 59 53.8** | **+0.6** |
| **DUWZ** | **D'Urville Isla** | **1.01** | **340** | P | **Pg** | **12 59 40.1** | **-1.0** |
| DUWZ | | | | S | **Sn** | **12 59 55.0** | **-0.7** |
| **MTW** | **Mount Morrison** | **1.03** | **55** | P | **Pg** | **12 59 41.2** | **-0.2** |
| MTW | | | | S | **Sn** | **12 59 57.7** | **+1.6** |
| **TRWZ** | **Traveller** | **1.04** | **71** | P | **Pg** | **12 59 41.1** | **-0.7** |
| **OGWZ** | **Otaki Gorge** | **1.10** | **33** | P | **Pg** | **12 59 41.9** | **-1.1** |
| **THZ** | **Tophouse** | **1.11** | **269** | P | **Pg** | **12 59 42.6** | **-0.4** |
| **HOWZ** | **Holdsworth Sta** | **1.20** | **45** | P | **Pb** | **12 59 43.7** | **-0.7** |
| **MRNZ** | **Matariki Tera** | **1.27** | **285** | P | **Pb** | **12 59 45.6** | **+0.1** |
| **TKNZ** | **Takaka Hill** | **1.29** | **303** | P | **Pn** | **12 59 45.4** | **-0.1** |
| **TMWZ** | **Te Maipa** | **1.30** | **61** | P | **Pn** | **12 59 44.7** | **-0.9** |
| **MRZ** | **Mangatainoka R** | **1.41** | **40** | P | **Pn** | **12 59 46.7** | **-0.5** |
| **TIWZ** | **Tintock** | **1.49** | **50** | P | **Pn** | **12 59 47.6** | **-0.7** |
| **GVZ** | **Greta Valley S** | **1.58** | **219** | P | **Pn** | **12 59 48.9** | **-0.5** |
| **CPWZ** | **Castlepoint** | **1.60** | **59** | P | **Pn** | **12 59 49.7** | **-0.1** |
| **QRZ** | **Quartz Range** | **1.68** | **303** | P | **Pb** | **12 59 52.0** | **-0.4** |
| **QRZ** | **Quartz Range** | **1.68** | **303** | P | **Pb** | **12 59 51.9** | **-0.6** |
| **PRWZ** | **Pori Road** | **1.69** | **46** | P | **Pn** | **12 59 50.1** | **-0.8** |
| **OHWZ** | **Ohakea** | **1.69** | **25** | P | **Pb** | **12 59 52.4** | **-0.3** |
| **POWZ** | **Post Office Ro** | **1.71** | **38** | P | **Pn** | **12 59 51.3** | **0.0** |
| **BFZ** | **Birch Farm** | **1.76** | **53** | P | **Pn** | **12 59 50.9** | **-1.1** |
| **BFZ** | **Birch Farm** | **1.76** | **53** | P | **Pn** | **12 59 50.5** | **-1.4** |
| **LTZ** | **Lake Taylor** | **1.88** | **236** | P | **Pn** | **12 59 53.3** | **-0.3** |
| **AMCZ** | **Amberley** | **1.92** | **221** | P | **Pn** | **12 59 53.4** | **-0.7** |
| **DSZ** | **Denniston Nort** | **1.93** | **269** | P | **Pn** | **12 59 55.6** | **+1.3** |
| **DVHZ** | **Dannevirke** | **1.98** | **43** | P | **Pn** | **12 59 53.6** | **-1.3** |
| **ANWZ** | **Angora Road** | **2.04** | **51** | P | **Pn** | **12 59 54.5** | **-1.2** |
| **WAZ** | **Wanganui** | **2.04** | **13** | P | **Pb** | **12 59 58.3** | **-0.4** |
| **TSZ** | **Takapari Road** | **2.07** | **36** | P | **Pn** | **12 59 55.6** | **-0.6** |
| **OKCZ** | **Okains Bay** | **2.20** | **206** | P | **Pn** | **12 59 56.6** | **-1.4** |
| **LREZ** | **Lake Rotokare** | **2.29** | **0** | P | **Pb** | **13 00 02.2** | **-0.7** |
| **PNHZ** | **Pukenui** | **2.29** | **37** | P | **Pn** | **12 59 58.5** | **-0.8** |
| **WPHZ** | **Waipukurau** | **2.29** | **43** | P | **Pn** | **12 59 58.2** | **-1.0** |
| **MQZ** | **McQueen's Vall** | **2.33** | **213** | P | **Pn** | **12 59 57.8** | **-2.0** |
| **OXZ** | **Oxford** | **2.34** | **227** | P | **Pn** | **12 59 58.9** | **-1.1** |
| **NMEZ** | **Namu Road** | **2.37** | **350** | P | **Pb** | **13 00 04.6** | **+0.4** |
| **AKCZ** | **Akaroa Harbour** | **2.38** | **207** | P | **Pn** | **12 59 59.0** | **-1.5** |
| **INZ** | **Inchinnnie** | **2.39** | **245** | P | **Pn** | **13 00 01.3** | **+0.7** |
| **KHEZ** | **Kahui Hut** | **2.47** | **353** | P | **Pb** | **13 00 05.7** | **-0.3** |
| **KHEZ** | **Kahui Hut** | **2.47** | **353** | P | **Pb** | **13 00 06.2** | **+0.2** |
| **NEZ** | **North Egmont** | **2.49** | **355** | P | **Pb** | **13 00 05.2** | **-1.1** |
| **MTVZ** | **Mangateitei** | **2.50** | **20** | P | **Pb** | **13 00 06.7** | **+0.2** |
| **NBEZ** | **Newall Road No** | **2.51** | **351** | P | **Pb** | **13 00 05.3** | **-1.3** |
| **MOVZ** | **Moawhango** | **2.56** | **24** | P | **Pn** | **13 00 04.0** | **+1.0** |
| **DREZ** | **Durham Road** | **2.56** | **357** | P | **Pb** | **13 00 06.3** | **-1.2** |
| **PKE** | **Pukeiti** | **2.57** | **353** | P | **Pg** | **13 00 09.3** | **-1.7** |
| **KRHZ** | **Kereru** | **2.59** | **36** | P | **Pn** | **13 00 02.2** | **-1.1** |
| **WNVZ** | **Wahianoa** | **2.59** | **21** | P | **Pn** | **13 00 05.1** | **+1.6** |
| **TRVZ** | **Turoa** | **2.60** | **20** | P | **Pb** | **13 00 08.3** | **-0.1** |
| **WHVZ** | **Whangaehu Hut** | **2.63** | **21** | P | **Pn** | **13 00 05.1** | **+1.1** |
| **MAVZ** | **Matarangi** | **2.64** | **20** | P | **Pb** | **13 00 08.9** | **-0.1** |
| **VRZ** | **Vera Road** | **2.64** | **6** | P | **Pb** | **13 00 06.4** | **-2.4** |
| **FWVZ** | **Far West T-bar** | **2.65** | **20** | P | **Pn** | **13 00 06.0** | **+1.7** |
| **TUVZ** | **Tukino** | **2.66** | **22** | P | **Pb** | **13 00 09.3** | **0.0** |
| **COVZ** | **Chateau Observ** | **2.69** | **19** | P | **Pb** | **13 00 09.6** | **-0.2** |
| **KAHZ** | **Kahuranaki** | **2.72** | **45** | P | **Pn** | **13 00 03.7** | **-1.5** |
| **NGZ** | **Ngauruhoe** | **2.73** | **20** | P | **Pg** | **13 00 12.4** | **-1.7** |
| **SNVZ** | **South Ngauruho** | **2.73** | **21** | P | **Pb** | **13 00 08.4** | **-2.2** |
| **OTVZ** | **Oturere** | **2.76** | **21** | P | **Pn** | **13 00 07.3** | **+1.5** |
| **NNVZ** | **North Ngauruho** | **2.78** | **20** | P | **Pb** | **13 00 10.9** | **-0.4** |
| **WTVZ** | **West Tongariro** | **2.79** | **20** | P | **Pb** | **13 00 11.7** | **+0.3** |
| **KWHZ** | **Kaweka Forest** | **2.79** | **34** | P | **Pb** | **13 00 05.4** | **-0.8** |
| **KWHZ** | **Kaweka Forest** | **2.79** | **34** | P | **Pb** | **13 00 13.2** | **+1.7** |
| **ETVZ** | **East Tongariro** | **2.80** | **22** | P | **Pb** | **13 00 09.8** | **-1.9** |
| **TMVZ** | **Te Maari** | **2.82** | **21** | P | **Pn** | **13 00 07.3** | **+0.8** |
| **NTVZ** | **North Tongariro** | **2.83** | **21** | P | **Pn** | **13 00 07.7** | **+1.0** |
| **WACZ** | **Wakanui South** | **2.88** | **220** | P | **Pn** | **13 00 06.0** | **-1.3** |
| **MCHZ** | **McNeill Hill** | **2.90** | **38** | P | **Pn** | **13 00 07.0** | **-0.5** |
| **KATZ** | **Kakaramea** | **2.95** | **20** | P | **Pg** | **13 00 16.3** | **-1.9** |
| **WVZ** | **Waitaha Valley** | **3.01** | **243** | P | **Pn** | **13 00 11.0** | **+1.9** |
| **BKZ** | **Black Stump Fm** | **3.04** | **33** | P | **Pn** | **13 00 10.0** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **3.04** | **33** | P | **Pn** | **13 00 08.2** | **-1.4** |
| **RATZ** | **Rangitukua** | **3.07** | **21** | P | **Pn** | **13 00 17.9** | **+1.7** |
| **HATZ** | **Hinemaiaia** | **3.14** | **25** | P | **Pb** | **13 00 17.1** | **-0.3** |
| **RPZ** | **Rata Peaks** | **3.14** | **230** | P | **Pn** | **13 00 10.2** | **-0.8** |
| **RPZ** | **Rata Peaks** | **3.14** | **230** | P | **Pn** | **13 00 10.1** | **-0.9** |
| **WATZ** | **Wairara** | **3.21** | **19** | P | **Pb** | **13 00 19.5** | **+1.0** |
| **ARCZ** | **Arundel** | **3.22** | **226** | P | **Pn** | **13 00 10.8** | **-1.3** |
| **NMHZ** | **Naumai** | **3.23** | **36** | P | **Pg** | **13 00 21.7** | **-1.9** |
| **HIZ** | **Hauiti** | **3.25** | **7** | P | **Pn** | **13 00 14.8** | **+2.4** |
| **HIZ** | **Hauiti** | **3.25** | **7** | P | **Pn** | **13 00 14.9** | **+2.5** |
| **MRHZ** | **Matea Rd** | **3.30** | **29** | P | **Pb** | **13 00 20.2** | **0.0** |
| **KUTZ** | **Kaahu Road** | **3.44** | **19** | P | **Pb** | **13 00 23.8** | **+1.3** |
| **WHHZ** | **Waihua** | **3.44** | **40** | P | Pg | 13 00 32.4 | +4.8 |
| **MTHZ** | **Maungataniwha** | **3.45** | **34** | P | **Pb** | **13 00 24.8** | **+2.1** |
| **WPRZ** | **Whakapapataran** | **3.50** | **23** | P | **Pb** | **13 00 25.3** | **+1.7** |
| **ALRZ** | **Allen Road** | **3.52** | **26** | P | **Pb** | **13 00 24.3** | **+0.4** |
| **TLZ** | **Tolley Road** | **3.53** | **15** | P | **Pn** | **13 00 19.3** | **+3.0** |
| **PRRZ** | **Plateau Road** | **3.59** | **26** | P | **Pb** | **13 00 25.7** | **+0.6** |
| **TMZ** | **Timaru** | **3.61** | **222** | P | **Pn** | **13 00 16.3** | **-1.2** |
| **GRRZ** | **Galatos Road** | **3.64** | **22** | P | **Pg** | **13 00 29.8** | **-1.8** |
| **HRRZ** | **Handcock Road** | **3.66** | **24** | P | **Pb** | **13 00 28.4** | **+2.2** |
| **RTZ** | **Ruatahuna** | **3.71** | **33** | P | **Pg** | **13 00 29.9** | **-2.9** |
| **HSRZ** | **Hossack Road** | **3.72** | **23** | P | **Pn** | **13 00 20.4** | **+1.5** |
| **SNGZ** | **Shannon Statio** | **3.73** | **38** | P | **Pg** | **13 00 35.8** | **+2.7** |
| **RRRZ** | **Republican Roa** | **3.78** | **26** | P | **Pb** | **13 00 30.3** | **+2.0** |
| **KARZ** | **Kaharoa** | **3.99** | **22** | P | **Pg** | **13 00 35.5** | **-2.6** |
| **RAGZ** | **Rawiri** | **3.99** | **37** | P | **Pg** | **13 00 40.1** | **+1.9** |
| **LBZ** | **Lake Benmore** | **4.05** | **228** | P | **Pn** | **13 00 24.2** | **+0.8** |
| **URZ** | **Urewera** | **4.07** | **32** | P | **Pn** | **13 00 24.3** | **+0.7** |
| **URZ** | **Urewera** | **4.07** | **32** | P | **Pn** | **13 00 23.6** | **0.0** |
| **TOZ** | **Tahuroa Road** | **4.11** | **12** | P | **Pn** | **13 00 28.2** | **+4.0** |
| **TGRZ** | **Tauranga** | **4.27** | **20** | P | **Pg** | **13 00 41.1** | **-2.3** |
| **ODZ** | **Otahua Downs** | **4.28** | **218** | P | **Pn** | **13 00 25.0** | **-1.5** |
| **ODZ** | **Otahua Downs** | **4.28** | **218** | P | **Pn** | **13 00 24.5** | **-1.9** |
| **TWGZ** | **Tauwhareparae** | **4.51** | **39** | P | **Pg** | **13 00 46.7** | **-1.4** |
| **RUGZ** | **Raukumara Rang** | **4.55** | **35** | P | **Pn** | **13 00 28.9** | **-1.5** |
| **MKAZ** | **Moumakai** | **4.68** | **8** | P | **Pn** | **13 00 34.8** | **+2.8** |
| **AWAZ** | **Awhitu Peninsu** | **4.68** | **3** | P | **Pn** | **13 00 34.6** | **+2.5** |
| **JCZ** | **Jackson Bay** | **4.72** | **239** | P | **Pn** | **13 00 32.4** | **-0.3** |
| **JCZ** | **Jackson Bay** | **4.72** | **239** | P | **Pn** | **13 00 36.5** | **+3.7** |
| **ETAZ** | **East Tamaki Re** | **4.81** | **5** | P | **Pn** | **13 00 36.9** | **+3.1** |
| **PKGZ** | **Pakihiroa** | **4.81** | **37** | P | **Pn** | **13 00 32.7** | **-1.1** |
| **RVAZ** | **Riverhead Bore** | **4.97** | **2** | P | **Pn** | **13 00 38.6** | **+2.5** |
| **CTZ** | **Chatham Island** | **6.91** | **110** | P | **Pn** | **13 01 00.7** | **-2.0** |

*IDC* ***13*** *13:00:02.2±6.5,36˚.19N×70˚.74E,h171km±60km,mb3.2/6, mbtmp3.7/9,Error ellipse: s-maj=47.1km s-min=21.1km az=25.0*

*NNC* ***13*** *13:00:12.4±1.5,37˚.17N×71˚.84E,h0km,mb4.0,mpv3.7, Error ellipse: s-maj=18.1km s-min=12.8km az=80.0*

**ISC 13 13:00:00.3±1.1,36˚.2N±0˚.1×70˚.6E±0˚.1,h150km,n12, σ2§11/14,mb3.5/5,1C-1D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRKS** | **Merke** | **6.86** | **16** | Pg | **Pn** | **13 01 41.3** | **+2.7** |
|

D22K IAML 13 37 16.6
comp=E,1μm,0.7s
**G25K Bearman Lake 2.89 187 Pn Pn 13 36 31.6 +0.6**
**E29M Blow River 2.92 112** Pn Pn **13 36 28.5 -3.1**
E29M IAML 13 37 25.0
comp=E,1μm,0.8s
**G24K Hadweenzic Riv 3.05 197 Pn 13 36 29.7 -3.5**
**G27K Doyon Strip 3.13 153 Pn 13 36 31.2 -3.1**
**F22K John River 3.31 233 Pn 13 36 37.1 +0.3**
**E21K Killik River 3.35 253 Pn 13 36 33.7 -3.7**
E21K IAML 13 37 39.8
comp=E,854nm,0.8s
E21K IAML 13 37 46.0
comp=N,894nm,1.1s
**H25L Birch Creek 3.38 184 Pn 13 36 37.7 0.0**
**A22K Sinclair Lake 3.57 297 Pn 13 36 39.2 -1.1**
**G22K Bettles 3.57 224 Pn 13 36 40.2 -0.2**
**H27K Steamboat Moun 3.69 156 Pn 13 36 43.1 +1.1**
**G29M Pine Creek 3.83 132** Pn Pn **13 36 41.8 -2.2**
**D20K Etivluk River 4.16 263 Pn 13 36 48.9 +0.5**
**E20K Nigu River 4.17 256 Pn 13 36 48.5 -0.2**
**A21K Barrow 4.18 299 Pn 13 36 48.1 -0.6**
**I27K Kandik River 4.27 159 Pn 13 36 51.0 +0.9**
**H22K Ishtalitna Cre 4.41 215 Pn 13 36 52.4 +0.5**
**I26K Coal Creek Min 4.41 168 Pn 13 36 52.6 +0.7**
**I26K Coal Creek Min 4.41 168** IAML 13 38 15.1
comp=E,343nm,0.6s
**INK Inuvik 4.43 102** Pn Pn **13 36 49.9 -2.2**
**INK Inuvik 4.43 102** Pn Pn **13 36 51.9 -0.2**
comp=E,8.4nm,0.3s,baz=322,slow=8.8,SNR=21
INK Sn **Sn 13 37 41.3 -2.3**
comp=E,17nm,0.3s,baz=198,slow=14,SNR=5.3
INK Lg Lg 13 38 05.8
comp=E,11nm,0.3s,baz=1.6,slow=26,SNR=5.9
INK LR LR 13 38 20.3
comp=E,119nm,20.6s,baz=288,slow=35
comp=E,15nm,0.3s
**EPYK Eagle Plains 4.58 131 Pn 13 36 51.4 -2.9**
**D19K Kuna River 4.75 262 Pn 13 36 55.7 -0.9**
**MDM Murphy Dome 4.82 195 Pn 13 36 58.3 +0.7**
**MDM Murphy Dome 4.82 195** IAML 13 38 18.9
comp=N,288nm,1.0s
**G31M Satah River 4.90 118** Pn Pn **13 36 59.0 +0.4**
G31M IAML 13 38 21.3
comp=E,299nm,1.0s
**E19K Redstone River 4.90 249 Pn 13 36 58.5 -0.2**
**E19K Redstone River 4.90 249** IAML 13 38 41.0
comp=E,300nm,1.1s
**H21K Melozitna River 4.91 219 Pn 13 36 58.8 -0.1**
**H21K Melozitna River 4.91 219** IAML 13 38 27.0
comp=E,276nm,1.2s
H21K IAML 13 38 30.5
comp=N,294nm,1.3s
**IL31 4.91 188 Pn 13 36 59.4 +0.7**
**ILAR Eielson Array 4.91 188 Pn 13 36 59.4 +0.6**
**ILAR Eielson Array 4.91 188** Pn Pn **13 36 58.9 +0.1**
comp=N,2.0nm,0.3s,baz=3.4,slow=16,SNR=13
ILAR Sn **Sn 13 37 56.0 +0.4**
comp=N,8.9nm,0.3s,baz=1.2,slow=19,SNR=4.5
ILAR Lg Lg 13 38 17.6
comp=N,18nm,0.3s,baz=0.8,slow=32,SNR=5.0
ILAR LR LR 13 39 22.2
comp=N,197nm,18.3s,baz=64,slow=43
comp=N,31nm,0.5s
**J25K Salcha River, 5.03 181** Pn Pn **13 37 01.0 +0.5**
J25K IAML 13 38 28.5
comp=E,291nm,1.1s
J25K IAML 13 38 36.3
comp=N,181nm,0.9s
**I29M Ogilvie Camp, 5.04 145 Pn 13 37 01.1 +0.5**
**I29M Ogilvie Camp, 5.04 145** IAML 13 38 33.6
comp=N,219nm,0.8s
**MLY Manley 5.07 207 Pn 13 37 01.2 +0.1**
MLY IAML 13 38 35.1
comp=E,192nm,1.0s
MLY IAML 13 38 40.6
comp=N,169nm,1.2s
**CCB Clear Creek Bu 5.09 192** IAML 13 38 28.2
comp=E,207nm,1.2s
**C19K Lookout Ridge 5.09 271 Pn 13 37 00.9 -0.4**
C19K IAML 13 38 00.1
comp=N,206nm,0.6s
C19K IAML 13 38 49.8
comp=E,250nm,1.5s
**EGAK Eagle 5.12 160 Pn 13 37 02.1 +0.5**
**EGAK Eagle 5.12 160** IAML 13 38 05.9
comp=E,184nm,1.1s
EGAK IAML 13 38 06.6
comp=E,245nm,0.8s
**J26L Joseph Creek 5.18 172** Pn Pn **13 37 04.2 +1.5**
J26L IAML 13 38 38.0
comp=E,157nm,1.0s
**NEA2 Nenana 5.26 198 Pn 13 37 04.1 +0.4**
**NEA2 Nenana 5.26 198** IAML 13 38 41.5
comp=E,181nm,1.4s
**HDA Harding Lake 5.28 188** IAML 13 38 47.4
comp=N,203nm,1.1s
**WRH Wood River Hil 5.29 193 Pn 13 37 04.3 +0.3**
**WRH Wood River Hil 5.29 193** IAML 13 38 37.6
comp=N,180nm,1.4s
WRH IAML 13 38 40.6
comp=E,183nm,1.2s
**A19K Wainwright 5.48 284 Pn 13 37 06.0 -0.5**
**I30M Mount Dempster 5.58 138 Pn 13 37 08.5 +0.4**
**SCRK Sand Creek 5.69 174 Pn 13 37 10.5 +0.9**
**BWN Browne 5.72 199 Pn 13 37 10.4 +0.5**
**K27K Chicken 5.75 166 Pn 13 37 11.0 +0.6**
**C19K Utukok River 5.78 268 Pn 13 37 10.0 -0.7**
**B18K Kokolik River 5.82 275 Pn 13 37 09.7 -1.5**
**K24K Donnelly Dome 5.85 182 Pn 13 37 12.9 +1.2**
**BPAW Bear Paw Mtn. 5.98 205 Pn 13 37 13.7 +0.2**
**DOT Dot Lake 6.02 175 Pn 13 37 15.0 +1.0**
**DAWY Dawson 6.04 155 Pn 13 37 15.0 +0.7**
**E18K Tukpahlearik C 6.05 256 Pn 13 37 14.2 -0.2**
**J30M Hart River 6.14 141** Pn Pn **13 37 16.3 +0.5**
**RND Reindeer 6.40 195 Pn 13 37 20.7 +1.4**
**C17K DeLong Mountai 6.52 268 Pn 13 37 19.2 -1.7**
**RDOG Red Dog Mine 6.57 265 Pn 13 37 20.3 -1.3**
**BCAR Beaver Creek A 6.73 166** Pn Pn **13 37 24.7 +0.9**
**L27K Beaver Creek, 6.73 167 Pn 13 37 24.8 +1.0**
**MENT Mentasta 6.74 174 Pn 13 37 24.7 +0.8**
**F17K Baldwin Pennin 6.78 250 Pn 13 37 23.8 -0.6**
**J19K Poorman 6.97 221 Pn 13 37 27.6 +0.6**
**A36M Sachs Harbour 6.99 61** Pn Pn **13 37 26.2 -1.1**
**L29M L29M 7.13 153 Pn 13 37 30.3 +1.0**
**G17K Kiwalik Mounta 7.18 242 Pn 13 37 29.3 -0.7**
**K20K Telida 7.20 213 Pn 13 37 30.1 -0.1**
**HARP HAARP 7.25 180 Pn 13 37 33.3 +2.4**
**C16K Lisburne Hills 7.35 269 Pn 13 37 30.6 -1.6**
**H17K Granite Mounta 7.35 237 Pn 13 37 31.6 -0.7**
**C36M Paulatuk 7.44 82 Pn 13 37 31.7 -1.7**
**G16K Koyuk River 7.79 245 Pn 13 37 36.1 -2.1**
**SCM Sheep Creek Mo 7.87 187 Pn 13 37 42.2 +2.8**
**SML Sawmill 7.95 191 Pn 13 37 42.1 +1.6**
**L20K Farewell, AK 7.97 210 Pn 13 37 41.0 +0.2**
**YUK2 White River 8.07 165 Pn 13 37 44.6 +2.4**
**YUK3 Moose Creek 8.12 164 Pn 13 37 45.3 +2.3**
**H16K Elim 8.27 241 Pn 13 37 43.7 -1.1**
**F15K North Star Dit 8.34 251 Pn 13 37 43.7 -2.1**
**M20K Styx River 8.41 206 Pn 13 37 46.4 -0.4**
**PTPK Patty Peak 8.55 171 Pn 13 37 52.1 +3.3**
**G15K Niukluk 8.59 246 Pn 13 37 48.2 -1.0**
**M19K Big River Lodg 8.60 210 Pn 13 37 50.6 +1.3**
**K17K Iditarod 8.69 223 Pn 13 37 50.0 -0.6**
**L18K Granite Mounta 8.76 218 Pn 13 37 51.6 0.0**
**RC01 Rabbit Creek A 8.77 194 Pn 13 37 54.9 +3.2**
**KIAG Kiagna River 8.82 171 Pn 13 37 55.9 +3.4**
**CTGM Chitina Glacie 8.84 167 Pn 13 37 54.7 +1.8**
**N30M Aishikik Lake 8.86 154 Pn 13 37 53.7 +0.8**
**LOGN Logan Glacier 9.01 167 Pn 13 37 58.2 +3.1**
**N31M Braeburn, Yuko 9.05 150 Pn 13 37 57.1 +1.6**
**O28M Mount Upton 9.13 164 Pn 13 37 59.2 +2.3**
**L17K Donlin 9.19 222 Pn 13 37 58.3 +0.9**
**M17K Holitna River 9.65 217 Pn 13 38 03.8 0.0**
**WHY Whitehorse 9.98 149** Pn Pn **13 38 06.2 -2.1**
**J14K Nanvaranak Lak 10.07 236** Pn Pn **13 38 09.4 0.0**
**WRGLY Wrigley 10.77 116** Pn Pn **13 38 18.7 -0.3**
**P33M Teslin, Yukon 10.79 145** Pn Pn **13 38 19.2 -0.2**
**Q32M Nakina River 12.05 146 Pn 13 38 38.7 +1.9**
**KDAK Kodiak Island 12.30 199** Pn Pn **13 38 39.0 -1.0**
comp=E,0.2nm,0.3s,baz=290,slow=10,SNR=1.3
KDAK LR LR 13 43 28.2
comp=E,98nm,18.4s,baz=44,slow=37

**DLBC Dease Lake 13.00 142** Pn Pn **13 38 47.7 -1.9**
**DLBC Dease Lake 13.00 142** Pn Pn **13 38 49.4 -0.1**
comp=E,0.8nm,0.3s,baz=345,slow=8.8,SNR=14
DLBC Sn **Sn 13 41 09.6 -4.5**
comp=E,0.2nm,0.3s,baz=122,slow=20,SNR=1.6
DLBC Lg Lg 13 42 36.4
comp=E,0.2nm,0.3s,baz=230,slow=21,SNR=2.4
DLBC LR LR 13 44 10.1
comp=E,205nm,19.0s,baz=325,slow=39
comp=E,3.6nm,0.5s
**S34M Telegraph Cree 13.25 145** Pn Pn **13 38 55.7 +2.7**
**YKA Yellowknife Ar 14.19 105** Pn Pn 13 39 00.4 -5.4
**YKA Yellowknife Ar 14.19 105** Pn Pn **13 39 01.1 -4.6**
comp=E,1.8nm,0.3s,baz=320,slow=15,SNR=35
YKA Sn Sn 13 41 30.5 -13
comp=E,1.6nm,0.3s,baz=315,slow=25,SNR=6.1
YKA Lg Lg 13 43 06.9
baz=21,slow=31
comp=E,4.1nm,0.5s
**BBB Bella Bella 19.24 147** LR LR 13 47 31.4
comp=E,62nm,21.1s,baz=4.5,slow=36
**SHEM Shemya Is, Ala 25.15 249** LR LR 13 50 54.8
comp=E,56nm,20.4s,baz=274,slow=36
**NEW Newport 25.41 133** LR LR 13 51 43.4
comp=E,96nm,20.8s,baz=336,slow=38
**MA2 Magadan 27.81 281** LR LR 13 55 26.5
comp=E,42nm,19.0s,baz=349,slow=43
**FRB Frobisher Bay 28.99 63** LR LR 13 55 38.4
comp=E,74nm,19.9s,baz=328,slow=41
**ULM Lac du Bonnet 30.17 104** LR LR 13 55 27.6
comp=E,20nm,20.7s,baz=278,slow=39
**YBH Yreka Blue Hor 30.31 145** LR LR 13 54 30.1
comp=E,55nm,20.0s,baz=312,slow=37
**SFJD Kangerlussuaq 31.77 48** LR LR 13 57 21.9
comp=E,30nm,18.8s,baz=343,slow=41
**PDAR Pinedale Array 32.52 127** P **P 13 42 17.1 +1.2**
comp=E,2.4nm,0.6s,baz=8.6,slow=5.2,SNR=34
PDAR LR LR 13 56 18.4
comp=E,26nm,19.0s,baz=338,slow=38
comp=E,2.4nm,0.6s
**YAK Yakutsk 32.84 300** LR LR 13 56 50.8
comp=E,40nm,18.6s,baz=23,slow=39
**ELK Elko 32.92 136** LR LR 13 55 56.1
comp=E,51nm,18.4s,baz=351,slow=37
**NVAR Mina Array Bea 34.41 141** P **P 13 42 34.7 +2.3**
comp=E,0.9nm,0.6s,baz=351,slow=8.3,SNR=6.6
NVAR LR LR 13 57 38.6
comp=E,70nm,21.5s,baz=338,slow=38
comp=E,0.9nm,0.6s
**SCHQ Schefferville 36.43 73** P **P 13 42 51.2 +2.0**
comp=E,6.0nm,0.8s,baz=345,slow=5.9,SNR=4.6
SCHQ LR LR 13 57 53.2
comp=E,74nm,18.1s,baz=256,slow=36
comp=E,6.0nm,0.8s
**PFO Pinyon Flats O 39.44 141** LR LR 14 01 32.7
comp=E,63nm,19.1s,baz=333,slow=39
**SADO Sadowa 40.67 92** LR LR 14 00 28.3
comp=E,39nm,21.8s,baz=330,slow=36
**KLR Kul'dur 42.66 286** LR LR 14 03 58.6
comp=E,30nm,19.5s,baz=28,slow=40
**ASAJ Asahikawa 43.35 273** LR LR 14 02 24.8
comp=E,60nm,19.4s,baz=144,slow=37
**TXAR Lajitas Array 46.74 127** P **P 13 44 16.1 +1.9**
comp=E,0.3nm,0.5s,baz=340,slow=6.6,SNR=6.1
TXAR LR LR 14 03 27.8
comp=E,40nm,20.1s,baz=324,slow=36
comp=E,0.3nm,0.5s
**TKL Tuckaleechee C 47.17 103** LR LR 14 02 39.0
comp=E,29nm,21.5s,baz=348,slow=34
**FINES FINESS Array B 49.08 5** P **P 13 44 31.0 -0.7**
comp=E,1.9nm,0.7s,baz=7.2,slow=8.0,SNR=8.7
comp=E,1.9nm,0.7s
**HFS Hagfors 49.66 14** P **P 13 44 36.3 +0.1**
comp=E,2.4nm,0.5s,baz=15,slow=6.2,SNR=17
comp=E,2.4nm,0.5s
**ZALV Zalesovo Beam 51.49 325** P **P 13 44 50.5 +0.4**
comp=E,1.2nm,0.6s,baz=38,slow=7.5,SNR=5.2
ZALV LR LR 14 09 46.8
comp=E,31nm,18.7s,baz=36,slow=40
comp=E,1.2nm,0.6s
**MJAR Matsushiro Arr 51.61 272** P **P 13 44 51.5 +0.3**
comp=E,0.8nm,0.7s,baz=7.1,slow=7.8,SNR=5.8
MJAR LR LR 14 07 19.8
comp=E,25nm,21.9s,baz=40,slow=37
comp=E,0.8nm,0.7s
**SONM Songino Array 51.84 306** P **P 13 44 52.7 -0.2**
comp=E,1.9nm,1.0s,baz=14,slow=6.6,SNR=7.8
SONM LR LR 14 08 55.9
comp=E,69nm,20.8s,baz=30,slow=38
comp=E,1.9nm,1.0s
**EKA Eskdalemuir Ar 52.36 26** P **P 13 44 56.1 -0.4**
comp=E,0.8nm,0.4s,baz=340,slow=6.9,SNR=5.3
comp=E,0.8nm,0.4s
**KSRS Korea Array 54.36 282** P **P 13 45 12.4 +0.9**
comp=E,0.9nm,0.8s,baz=25,slow=7.1,SNR=2.5
comp=E,0.9nm,0.8s
**BVAR Borovoye Array 54.94 335** P **P 13 45 15.6 +0.2**
comp=E,1.2nm,0.6s,baz=5.7,slow=6.0,SNR=7.8
comp=E,1.2nm,0.6s
**KURK Kurchatov 55.77 328** P **P 13 45 18.4 -3.1**
**KURBB Kurchatov Arra 55.88 328** P **P 13 45 22.8 +0.6**
comp=E,1.6nm,0.7s,baz=11,slow=7.3,SNR=11
comp=E,1.6nm,0.7s
**HHC Hu-ho-hao-te 56.65 298** *e*P **P 13 45 26.3 -1.7**
HHC pmax pmax
comp=Z,25nm,0.5s
HHC pmax pmax
comp=Z,93nm,4.3s
**MKAR Makanchi Array 58.80 324** P **P 13 45 43.0 +0.1**
comp=Z,0.5nm,0.5s,baz=18,slow=7.7,SNR=5.0
comp=Z,0.5nm,0.5s
**RNPP5 Staryi Chortor 59.29 6** P **P 13 45 47.6 +1.4**
**AK21 Malin Array Si 59.84 4** P **P 13 45 51.0 +1.0**
**AK19 Malin Array Si 59.90 4** P **P 13 45 51.4 +1.0**
**AK04 Malin Array Si 59.90 4** P **P 13 45 51.5 +1.1**
**AKASG Malin Array Be 59.92 4** P **P 13 45 50.6 0.0**
comp=Z,0.2nm,0.2s,baz=357,slow=6.8,SNR=4.0
comp=Z,0.2nm,0.2s
**AKBB Malin Array Si 59.92 4** P **P 13 45 51.5 +0.9**
**LUBAR Lubar, Ukraine 60.66 5** P **P 13 45 56.7 +1.0**
**GTA Gaotai 61.45 307** *e*P **P 13 46 03.8 +2.5**
GTA pP sP 13 46 09.4 +3.2
GTA pmax pmax
comp=Z,5.0nm,1.1s
**ESDC Sonseca Array 67.38 32** P **P 13 46 41.8 +1.8**
comp=Z,0.6nm,0.6s,baz=354,slow=7.2,SNR=4.2
comp=Z,0.6nm,0.6s
**PZH PanZhiHua 72.96 300** P **P 13 47 16.3 +1.8**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,200nm,5.1s
**CMAR Chiang Mai Arr 81.37 300** P **P 13 48 02.4 +0.7**
comp=Z,0.6nm,0.4s,baz=354,slow=6.2,SNR=4.7
comp=Z,0.6nm,0.4s

*AEIC **13** 13:41:53.0±0.4, 69°56N±0°03×145°09W±0°04, h18km±3km, ML3.3, ML3.4/112(NEIC), Error ellipse: s-maj=4.1km s-min=1.7km az=156.0*
*NEIC **13** 13:41:52.7±0.6, 69°54N±0°02×145°06W±0°04, h10km±2km, Error ellipse: s-maj=3.2km s-min=3.0km az=356.0*
*IDC **13** 13:41:54.8±3.9, 69°49N×144°65W, h0km, mb3.4/1, mbtmp3.4/4, ML3.2/3, Error ellipse: s-maj=46.8km s-min=22.1km az=140.0*
**ISC 13 13:41:53.3±0.8, 69°60N±0°05×145°05W±0°03, h10km, n110, σ1s00/108, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.32** | **8** | | **Pb** | **13 42 00.2** | **-0.9** |
| C26K | | | | | **Sb** | **13 42 05.3** | **-1.0** |
| **C26K** | **Camden Bay** | **0.32** | **8** | IAML | | 13 42 06.2 | |
| | comp=N,3μm,0.5s | | | | | | |
| C26K | | | | IAML | | 13 42 06.8 | |
| | comp=E,4μm,0.4s | | | | | | |
| **C27K** | **Jago River** | **0.47** | **86** | Pg | **Pg** | **13 42 01.9** | **-0.5** |
| C27K | | | | IAML | | 13 42 10.2 | |
| | comp=N,3μm,0.6s | | | | | | |
| C27K | | | | IAML | | 13 42 10.7 | |
| | comp=E,2μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.47** | **86** | | **Sg** | **13 42 08.7** | **+0.1** |
| **D25K** | **Kavik River** | **0.55** | **240** | Pg | **Pg** | **13 42 02.9** | **-1.0** |
| **D25K** | **Kavik River** | **0.55** | **240** | | **Sg** | **13 42 10.3** | **-0.8** |
| **C24K** | **Franklin Bluff** | **1.28** | **277** | | **Pn** | **13 42 17.5** | **+0.2** |
| **C24K** | **Franklin Bluff** | **1.28** | **277** | | **Sg** | **13 42 35.3** | **+0.8** |
| **C24K** | **Franklin Bluff** | **1.28** | **277** | IAML | | 13 42 37.2 | |

C24K IAML 13 42 37.4
comp=N,622nm,0.7s
**D24K Happy Valley 1.41 253 Sg 13 42 39.8 +1.2**
**D24K Happy Valley 1.41 253 Pn 13 42 19.1 +0.1**
**D24K Happy Valley 1.41 253** IAML 13 42 41.8
comp=N,919nm,0.7s
D24K IAML 13 42 47.0
comp=E,575nm,0.6s
**D27M Malcolm River 1.49 102 Pn 13 42 19.6 -0.5**
D27M IAML 13 42 43.8
comp=E,390nm,0.5s
**TOLK Toolik Lake Re 1.89 241 Pn 13 42 23.3 -2.2**
**E27K Coleen River 1.89 137 Pn 13 42 25.9 +0.3**
E27K IAML 13 42 58.0
comp=E,240nm,0.8s
**F26K Sheenjek River 1.94 170 Pn 13 42 23.9 -2.4**
F26K IAML 13 42 59.0
comp=N,312nm,0.7s
**E24K Your Creek 1.98 221 Pn 13 42 24.4 -2.5**
E24K IAML 13 42 58.7
comp=E,242nm,0.7s
**D23K Nanushuk River 2.10 255** Pn Pn **13 42 27.0 -1.5**
D23K IAML 13 43 05.2
comp=N,207nm,0.7s
D23K IAML 13 43 08.4
comp=E,238nm,0.6s
**D28M Stokes Point 2.24 94 Pn 13 42 32.0 +1.6**
**E23K Chandalar 2.27 229 Pn 13 42 32.3 +1.4**
E23K IAML 13 43 10.0
comp=E,179nm,0.9s
E23K IAML 13 43 11.4
comp=N,192nm,0.8s
**F24K Squaw Lake 2.34 208** Pn Pn **13 42 32.8 +1.0**
F24K IAML 13 43 13.3
comp=N,175nm,0.8s
**G26K Porcupine Rive 2.71 169 Pn 13 42 38.0 +1.2**
**F28M Old Crow 2.75 134 Pn 13 42 37.4 0.0**
F28M IAML 13 43 26.8
comp=E,164nm,0.5s
**D22K Ayikyak River 2.81 259 Pn 13 42 39.6 +1.3**
D22K IAML 13 43 29.6
comp=N,144nm,0.8s
**E29M Blow River 2.85 112** Pn Pn **13 42 38.5 -0.2**
E29M IAML 13 43 30.7
comp=E,141nm,1.1s
**G25K Bearman Lake 2.88 188 Pn 13 42 39.7 +0.6**
**B22K Teshekpuk Lake 2.98 288** Pn Pn **13 42 41.5 +1.0**
**FYU Fort Yukon 3.05 181** Pn Pn **13 42 42.3 +0.8**
FYU IAML 13 43 37.5
comp=E,115nm,1.2s
**COLD Coldfoot 3.05 221 Pn 13 42 42.5 +1.0**
**G24K Hadweenzic Riv 3.05 198 Pn 13 42 41.9 +0.4**
G24K IAML 13 43 33.1
comp=E,120nm,1.0s
G24K IAML 13 43 41.1
comp=N,103nm,1.0s
**G27K Doyon Strip 3.08 154 Pn 13 42 42.6 +0.7**
**B21K Ikpikpuk River 3.35 275 Pn 13 42 46.5 +1.0**
B21K IAML 13 43 48.1
comp=N,105nm,1.1s
B21K IAML 13 43 54.5
comp=E,77nm,1.1s
**F22K John River 3.36 235 Pn 13 42 46.3 +0.6**
**H25L Birch Creek 3.36 185 Pn 13 42 45.3 -0.5**
**E21K Killik River 3.42 254** Pn Pn **13 42 47.2 +0.6**
E21K IAML 13 43 50.6
comp=N,76nm,1.0s
E21K IAML 13 43 54.1
comp=E,87nm,1.0s
**G23K Bananza Creek 3.45 215** Pn Pn **13 42 45.3 -1.7**
G23K IAML 13 43 53.2
comp=E,74nm,0.8s
**H27K Steamboat Moun 3.64 157 Pn 13 42 50.6 +1.0**
**A22K Sinclair Lake 3.64 297 Pn 13 42 50.3 +0.7**
**G29M Pine Creek 3.76 133** Pn Pn **13 42 51.8 +0.6**
**F21K Alatna River 3.93 237** Pn Pn **13 42 54.2 +0.7**
F21K IAML 13 44 04.0
comp=N,47nm,0.7s
**H24K Noodor Dome 3.93 197** Pn Pn **13 42 53.7 +0.1**
H24K IAML 13 44 09.1
comp=E,53nm,1.3s
**F30M Barrier River 3.94 116 Pn 13 42 55.1 +1.4**
**PRP Porcupine Dome 4.11 183** Pn Pn **13 42 56.6 +0.4**
PRP IAML 13 43 47.4
comp=N,39nm,0.4s
PRP IAML 13 43 48.5
comp=E,35nm,0.4s
**H23K Yukon River 4.16 206** Pn Pn **13 42 57.4 +0.6**
H23K IAML 13 44 09.3
comp=E,45nm,0.9s
H23K IAML 13 44 11.7
comp=N,45nm,0.9s
**G30M tAoh Zraii Nji 4.20 125** Pn Pn **13 42 58.6 +1.3**
G30M IAML 13 44 20.1
comp=E,37nm,0.6s
**B20K Meade River 4.22 281** Pn Pn **13 42 58.6 +1.1**
**I27K Kandik River 4.22 160 Pn 13 42 58.9 +1.2**
**D20K Etivluk River 4.23 263 Pn 13 42 59.1 +1.4**
**H29M Whitestone 4.23 140** Pn Pn **13 42 58.4 +0.7**
**E20K Nigu River 4.24 257 Pn 13 42 58.7 +0.7**
**A21K Barrow 4.25 299 Pn 13 42 59.8 +1.8**
**INK Inuvik 4.35 102** Pn Pn **13 42 60.0 +0.6**
comp=E,0.6nm,0.3s,baz=321,slow=11,SNR=4.7
comp=E,3.4nm,0.5s
**I26K Coal Creek Min 4.38 170 Pn 13 43 00.2 +0.5**
**G21K Allakaket 4.43 230** Pn Pn **13 43 01.2 +0.7**
G21K IAML 13 44 19.6
comp=E,35nm,1.3s
G21K IAML 13 44 20.4
comp=N,31nm,1.4s
**EPYK Eagle Plains 4.51 132 Pn 13 43 01.3 -0.2**
**POKR Poker Plat Res 4.60 193** Pn Pn **13 43 03.4 +0.6**
POKR IAML 13 44 25.0
comp=E,33nm,0.9s
**I28M Miner Creek 4.61 152** Pn Pn **13 43 03.6 +0.6**
I28M IAML 13 44 28.9
comp=N,26nm,1.1s
I28M IAML 13 44 32.6
comp=E,28nm,0.9s
**F31M Tsiigehtchic 4.69 112** Pn Pn **13 43 04.5 +0.6**
F31M IAML 13 44 29.2
comp=E,37nm,1.0s
F31M IAML 13 44 32.6
comp=N,27nm,1.1s
**F20K Avaraart Lake 4.71 242** Pn Pn **13 43 05.4 +1.1**
**I23K Minto, Yukon-K 4.77 202 Pn 13 43 05.7 +0.6**
I23K IAML 13 44 38.7
comp=E,28nm,0.9s
I23K IAML 13 44 41.2
comp=N,24nm,1.1s
**D19K Kuna River 4.82 263 Pn 13 43 07.1 +1.2**
**G31M Satah River 4.82 119** Pn Pn **13 43 06.1 +0.3**
**MDM Murphy Dome 4.82 196 Pn 13 43 06.6 +0.7**
MDM IAML 13 44 04.6
comp=N,27nm,0.4s
MDM IAML 13 44 29.0
comp=E,27nm,1.0s
**COLA College 4.87 194** Pn Pn **13 43 07.1 +0.6**
**IL31 4.90 189 Pn 13 43 07.4 +0.5**
**ILAR Eielson Array 4.90 189** Pn Pn **13 43 07.4 +0.4**
comp=E,1.2nm,0.3s,baz=12,slow=14,SNR=7.2
ILAR Sn **Sn 13 44 03.0 -0.7**
comp=E,0.9nm,0.3s,baz=10,slow=26,SNR=2.0
ILAR Lg Lg 13 44 25.9
comp=E,2.2nm,0.3s,baz=5.9,slow=30,SNR=5.5
comp=E,2.6nm,0.6s
**H21K Melozitna River 4.94 220** Pn Pn **13 43 09.3 +1.8**
H21K IAML 13 44 36.3
comp=E,20nm,1.0s
**E19K Redstone River 4.96 250** Pn Pn **13 43 09.4 +1.6**
E19K IAML 13 44 44.0
comp=N,24nm,0.9s
E19K IAML 13 44 45.7
comp=E,21nm,1.2s
**I29M Ogilvie Camp, 4.98 145 Pn 13 43 08.6 +0.6**
**J25K Salcha River, 5.01 182** Pn Pn **13 43 09.3 +0.8**
J25K IAML 13 44 40.4
comp=E,24nm,1.4s
**EGAK Eagle 5.08 161** Pn Pn **13 43 09.9 +0.6**
EGAK IAML 13 44 13.4
comp=E,20nm,0.8s
EGAK IAML 13 44 43.3
comp=E,24nm,1.1s
**MLY Manley 5.09 208** Pn Pn **13 43 11.0 +1.4**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CCB** | **Clear Creek Bu** | **5.09** | **194** | | **Pn** | **13 43 09.9** | **+0.4** |
| CCB | | | | IAML | | 13 44 40.8 | |
| | comp=E,23nm,1.5s | | | | | | |
| **J26L** | **Joseph Creek** | **5.16** | **173** | | **Pn** | **13 43 11.2** | **+0.7** |
| J26L | | | | IAML | | 13 44 34.8 | |
| | comp=E,25nm,1.0s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.17** | **271** | Pn | **Pn** | **13 43 11.6** | **+1.0** |
| C19K | | | | IAML | | 13 45 07.1 | |
| | comp=E,21nm,1.2s | | | | | | |
| C19K | | | | IAML | | 13 45 07.4 | |
| | comp=N,24nm,1.3s | | | | | | |
| **HDA** | **Harding Lake** | **5.27** | **189** | | **Pn** | **13 43 12.7** | **+0.8** |
| HDA | | | | IAML | | 13 44 40.4 | |
| | comp=N,21nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.27** | **199** | | **Pn** | **13 43 12.3** | **+0.3** |
| **WRH** | **Wood River Hil** | **5.29** | **194** | | **Pn** | **13 43 12.7** | **+0.4** |
| WRH | | | | IAML | | 13 44 54.1 | |
| | comp=E,20nm,1.0s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.49** | **246** | Pn | **Pn** | **13 43 15.9** | **+1.0** |
| **A19K** | **Wainwright** | **5.56** | **284** | | **Pn** | **13 43 16.5** | **+0.7** |
| **K27K** | **Chicken** | **5.72** | **167** | Pn | **Pn** | **13 43 19.2** | **+1.0** |
| **BWN** | **Browne** | **5.72** | **200** | Pn | **Pn** | **13 43 19.5** | **+1.3** |
| **C18K** | **Utukok River** | **5.85** | **268** | Pn | **Pn** | **13 43 20.7** | **+0.7** |
| **H19K** | **Roundabout Mou** | **5.97** | **232** | Pn | **Pn** | **13 43 22.0** | **+0.4** |
| **DAWY** | **Dawson** | **5.99** | **155** | | **Pn** | **13 43 22.8** | **+0.9** |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **206** | Pn | **Pn** | **13 43 22.8** | **+0.8** |
| **J30M** | **Hart River** | **6.08** | **142** | Pn | **Pn** | **13 43 23.8** | **+0.6** |
| **MCK** | **McKinley** | **6.09** | **197** | | **Pn** | **13 43 23.9** | **+0.6** |
| **E18K** | **Tukpahlearik C** | **6.12** | **256** | Pn | **Pn** | **13 43 24.2** | **+0.7** |
| **F18K** | **Selawik** | **6.23** | **248** | | **Pn** | **13 43 25.5** | **+0.3** |
| **G18K** | **Tagagawik** | **6.36** | **241** | Pn | **Pn** | **13 43 28.0** | **+1.1** |
| **J20K** | **Nowinta River** | **6.51** | **218** | Pn | **Pn** | **13 43 30.4** | **+1.4** |
| **C17K** | **DeLong Mountai** | **6.60** | **269** | | **Pn** | **13 43 29.9** | **-0.3** |
| **DHY** | **Denali Highway** | **6.62** | **189** | Pn | **Pn** | **13 43 32.4** | **+1.7** |
| **L26K** | **Log Cabin Wild** | **6.64** | **173** | | **Pn** | **13 43 31.7** | **+0.9** |
| **L27K** | **Beaver Creek,** | **6.69** | **167** | Pn | **Pn** | **13 43 32.3** | **+0.8** |
| **E17K** | **Hotham Inlet** | **6.70** | **256** | | **Pn** | **13 43 31.4** | **-0.1** |
| **MENT** | **Mentasta** | **6.71** | **175** | Pn | **Pn** | **13 43 32.7** | **+0.9** |
| **H18K** | **Honhosa River** | **6.79** | **235** | Pn | **Pn** | **13 43 34.1** | **+1.2** |
| **D17K** | **Noatak River** | **6.85** | **262** | | **Pn** | **13 43 33.1** | **-0.5** |
| **F17K** | **Baldwin Pennin** | **6.85** | **250** | Pn | **Pn** | **13 43 34.0** | **+0.4** |
| **A36M** | **Sachs Harbour** | **6.94** | **61** | Pn | **Pn** | **13 43 34.0** | **-0.8** |
| **C36M** | **Paulatuk** | **7.37** | **82** | Pn | **Pn** | **13 43 39.1** | **-1.5** |
| **H17K** | **Granite Mounta** | **7.41** | **238** | Pn | **Pn** | **13 43 42.1** | **+0.8** |
| **C16K** | **Lisburne Hills** | **7.42** | **269** | Pn | **Pn** | **13 43 41.9** | **+0.4** |
| **J17K** | **VABM Dome** | **8.36** | **229** | Pn | **Pn** | **13 43 54.8** | **+0.5** |
| **M31M** | **Drury Creek, Y** | **8.60** | **145** | Pn | **Pn** | **13 43 57.5** | **-0.1** |
| **M17K** | **Holitna River** | **9.68** | **218** | Pn | **Pn** | **13 44 14.5** | **+2.0** |
| **YKA** | **Yellowknife Ar** | **14.12** | **105** | Pn | Pn | 13 45 08.2 | -4.8 |
| | comp=E,0.2nm,0.3s,baz=310,slow=12,SNR=1.6 | | | | | | |
| YKA | | | | Sn | Sn | 13 47 34.0 | -15 |
| | comp=E,0.3nm,0.3s,baz=320,slow=20,SNR=1.2 | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.45** | **127** | P | **P** | **13 48 25.1** | **+1.6** |
| | comp=E,0.3nm,0.6s,baz=356,slow=8.1,SNR=2.5 | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | |

**RSNC 13 13:51:28.5±0.0,7°N±1°×7°3W±°,h141km±3km,mb4.0, mB4.7,ML3.6,Mw(mB)3.9,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.20** | **195** | P | Pn | 13 51 46.8 | -1.2 |
| BARC | | | | S | Sn | 13 52 02.0 | -0.8 |
| **PAMC** | **Pamplona, Colo** | **0.69** | **38** | P | Pn | 13 51 49.7 | -0.9 |
| PAMC | | | | S | Sn | 13 52 06.8 | -0.5 |
| **RUSC** | **La Rusia** | **0.89** | **177** | P | Pn | 13 51 50.7 | -1.4 |
| RUSC | | | | S | Sn | 13 52 09.4 | -0.6 |
| **PTBC** | **PUERTO BERRIO,** | **1.34** | **259** | P | Pn | 13 51 53.4 | -2.3 |
| PTBC | | | | S | Sn | 13 52 14.9 | -1.6 |
| **TAMC** | **Tame, Arauca** | **1.38** | **105** | P | Pn | 13 51 55.0 | -1.1 |
| TAMC | | | | S | Sn | 13 52 16.7 | -0.5 |
| **OCAC** | **Ocana** | **1.45** | **353** | P | Pn | 13 51 55.1 | -2.0 |
| OCAC | | | | S | Sn | 13 52 16.7 | -2.2 |
| **SPBC** | **San Pablo de B** | **1.47** | **220** | P | Pn | 13 51 55.6 | -1.6 |
| SPBC | | | | S | Sn | 13 52 17.8 | -1.2 |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **292** | P | Pn | 13 51 59.4 | -2.0 |
| ZARC | | | | S | Sn | 13 52 24.9 | -1.6 |
| **NORC** | **Norcasia** | **2.12** | **235** | P | Pn | 13 52 02.6 | -1.9 |
| NORC | | | | S | Sn | 13 52 30.8 | -1.4 |
| **CHIC** | **Chingaza** | **2.23** | **196** | P | Pn | 13 52 04.7 | -1.6 |
| CHIC | | | | S | Sn | 13 52 34.0 | -1.3 |
| **ROSC** | **El Rosal** | **2.27** | **211** | P | Pn | 13 52 06.7 | -0.1 |
| ROSC | | | | S | Sn | 13 52 36.8 | +0.7 |
| **UREC** | **San Jos de Ur** | **2.57** | **292** | P | Pn | 13 52 06.9 | -3.2 |
| UREC | | | | S | Sn | 13 52 37.9 | -4.2 |
| **VILC** | **Villavicencio,** | **2.72** | **192** | P | Pn | 13 52 10.3 | -1.8 |
| VILC | | | | S | Sn | 13 52 44.2 | -1.5 |
| **PTGC** | **Puerto Gaitan,** | **2.76** | **159** | P | Pn | 13 52 09.7 | -2.8 |
| PTGC | | | | S | Sn | 13 52 42.1 | -4.3 |
| **CBOC** | **Ciudad Bolivar** | **3.01** | **252** | P | Pn | 13 52 14.5 | -1.3 |
| CBOC | | | | S | Sn | 13 52 49.0 | -3.3 |
| **DBBC** | **Dabeiba** | **3.07** | **274** | P | Pn | 13 52 14.5 | -2.0 |
| DBBC | | | | S | Sn | 13 52 49.4 | -4.1 |
| **ARGC** | **Ariguani, Magd** | **3.24** | **340** | P | Pn | 13 52 17.0 | -1.7 |
| ARGC | | | | S | Sn | 13 52 55.8 | -1.7 |
| **PRAC** | **Prado** | **3.52** | **210** | P | Pn | 13 52 20.1 | -2.2 |
| PRAC | | | | S | Sn | 13 53 03.2 | -0.8 |
| **ORTC** | **Ortega, Tolima** | **3.55** | **216** | P | Pn | 13 52 20.8 | -2.0 |
| ORTC | | | | S | Sn | 13 53 03.6 | -1.2 |
| **APAC** | **Apartado, Choc** | **3.59** | **288** | P | Pn | 13 52 20.8 | -2.4 |
| APAC | | | | S | Sn | 13 53 02.7 | -2.9 |
| **PLMC** | **San Jos del P** | **3.65** | **239** | P | Pn | 13 52 22.4 | -1.7 |
| PLMC | | | | S | Sn | 13 53 06.9 | -0.2 |
| **SJCC** | **San Jacinto, C** | **3.69** | **327** | P | Pn | 13 52 21.0 | -3.6 |
| SJCC | | | | S | Sn | 13 53 02.9 | -5.2 |
| **LCBC** | **Los crdobas,** | **3.81** | **303** | P | Pn | 13 52 25.8 | -0.2 |
| LCBC | | | | S | Sn | 13 53 09.4 | -1.3 |
| **CRJC** | **Cerrejon, Guaj** | **4.21** | **3** | P | Pn | 13 52 27.1 | -4.3 |
| CRJC | | | | S | Sn | 13 53 13.5 | -6.8 |
| **YOTC** | **Yotoco, Valle** | **4.25** | **229** | P | Pn | 13 52 29.3 | -2.6 |
| YOTC | | | | S | Sn | 13 53 19.6 | -1.5 |
| **SMRC** | **Santa Marta, M** | **4.48** | **346** | P | Pn | 13 52 31.5 | -3.4 |
| SMRC | | | | S | Sn | 13 53 20.4 | -6.1 |
| **CAPC** | **Capurgana** | **4.57** | **294** | P | Pn | 13 52 32.0 | -4.0 |
| **JAMC** | **Jamundi, Valle** | **5.01** | **225** | P | Pn | 13 52 39.2 | -2.9 |
| **URIC** | **Uribia, Colomb** | **5.01** | **13** | P | Pn | 13 52 37.0 | -4.9 |
| **FLOC** | **Florencia** | **5.75** | **206** | P | Pn | 13 52 49.2 | -2.7 |
| | 16nm,0.8s | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.27** | **221** | P | Pn | 13 52 57.4 | -1.6 |

*BJI **13** 13:54:27.5±0.0, 15°.64N×39°.52E, h22km, mb4.8/42, mB5.0/11, Ms4.5/2, Ms7 4.1/3*
*IDC **13** 13:54:28.3±0.6, 15°.97N×39°.73E, h0km, mb4.5/27, mbtmp4.5/31, ML4.1/4, MS3.6/36, Error ellipse: s-maj=14.7km s-min=13.5km az=17.0*
*GCMT **13** 13:54:29.5±0.4, 16°.20N±0°.04×39°.48E±0°.02, h22km±1km, MW4.8/81, Moment Tensor Solution. s14,c15; s81,c104; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=2.16±.19; $M_{\theta\theta}$0.23±.10; $M_{\phi\phi}$1.94±.12; $M_{r\theta}$0.68±.14; $M_{\theta\phi}$0.17±.06; $M_{\phi r}$1.02±.14; Best double couple: $M_o$2.38800×$10^{16}$ NP1:$\phi_s$198.00000°, δ60.00000°, λ-78.00000°. NP2: $\phi_s$355.00000°, δ32.00000°, λ-110.00000°. Principal axes: T 2.2330, Plg14.0000°, Azm280.0000°; N 0.3150, Plg10.0000°, Azm12.0000°; P -2.5430, Plg72.0000°, Azm137.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **13** 13:54:30.5±1.7, 16°.01N±0°.09×39°.81E±0°.02, h10km±1km, mb4.7/70 Error ellipse: s-maj=15.7km s-min=3.2km az=178.0*

**ISC 13 13:54:29.8±0.4,15°.96N±0°.05×39°.76E±0°.06,h10km,n233, σ1$21/212,mb4.7/100,MS3.7/30,3C-2D,Ethiopia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATD** | **Arta Tunnel** | **5.33** | **145** | Pn | **Pn** | **13 55 48.8** | **-0.6** |
| **ATD** | **Arta Tunnel** | **5.33** | **145** | Pn | **Pn** | **13 55 49.0** | **-0.4** |
| | 0.2nm,0.3s,baz=307,slow=9.6,SNR=15 | | | | | | |
| ATD | | | | Pg | **Pb** | **13 56 00.5** | **-2.5** |
| | 0.8nm,0.3s,baz=304,slow=18,SNR=8.8 | | | | | | |
| ATD | | | | Sn | **Sn** | **13 56 53.1** | **+2.1** |
| | 0.4nm,0.3s,baz=108,slow=23,SNR=1.1 | | | | | | |
| ATD | | | | Lg | Lg | 13 57 09.2 | |
| | 0.9nm,0.3s,baz=232,slow=23,SNR=8.4 | | | | | | |
| ATD | | | | LR | LR | 13 57 44.8 | |
| | comp=Z,86nm,18.9s,baz=4.0,slow=37 | | | | | | |
| **ATD** | **Arta Tunnel** | **5.33** | **145** | P | **Pn** | **13 55 49.3** | **-0.1** |
| | SNR=7.2 | | | | | | |
| ATD | | | | S | **Sn** | **13 56 52.5** | **+1.5** |
| **FURI** | **Furi** | **7.09** | **189** | Pn | **Pn** | **13 56 15.1** | **+1.0** |
| **FURI** | **Furi** | **7.09** | **189** | Pn | **Pn** | **13 56 13.5** | **-0.5** |
| | 8.9nm,0.3s,baz=185,slow=12,SNR=2.0 | | | | | | |
| FURI | | | | Lg | Lg | 13 58 10.3 | |
| | 32nm,0.3s,baz=184,slow=23,SNR=4.4 | | | | | | |
| FURI | | | | LR | LR | 13 58 58.4 | |
| | comp=Z,697nm,18.2s,baz=14,slow=38 | | | | | | |
| | 24nm,0.3s | | | | | | |
| **RAYN** | **Ar Rayn** | **9.27** | **35** | P | **Pn** | **13 56 44.2** | **+0.7** |
| **LODK** | **Lodwar** | **13.19** | **200** | Pn | **Pn** | **13 57 35.3** | **-2.0** |
| **EIL** | **Elat** | **14.35** | **343** | LR | LR | 14 02 05.0 | |
| | comp=Z,245nm,20.1s,baz=249,slow=32 | | | | | | |
| **MZR** | **Muzera** | **14.71** | **59** | Pn | **Pn** | **13 57 58.3** | **+0.3** |
| **MZR** | **Muzera** | **14.71** | **59** | P | **Pn** | **13 57 59.9** | **+1.8** |
| **KBD** | **Kabd** | **15.05** | **28** | P | **P** | **13 58 05.0** | **-3.0** |
| **GHAJ** | **Ghor Haditha** | **15.75** | **347** | P | **P** | **13 58 15.3** | **-0.4** |
| **UMZA** | **Um Al Zommool** | **16.01** | **63** | P | **Pn** | **13 58 16.0** | **+0.8** |
| **ASF** | **Jabal al Asfar** | **16.35** | **351** | Pn | **Pn** | **13 58 17.6** | **-2.1** |
| | 0.4nm,0.3s,baz=122,slow=0.3,SNR=3.4 | | | | | | |
| | 1.4nm,0.3s | | | | | | |
| **BALJ** | **Balqa** | **16.49** | **348** | P | **P** | **13 58 24.3** | **+0.3** |
| **AJN** | **Ajban** | **16.64** | **57** | P | **P** | **13 58 24.6** | **-1.1** |
| **ASUD** | **Al Ashush, Dub** | **16.95** | **57** | Pn | **Pn** | **13 58 25.9** | **-1.3** |
| **ASUD** | **Al Ashush, Dub** | **16.95** | **57** | P | **P** | **13 58 29.0** | **-0.1** |
| | SNR=5.9 | | | | | | |
| **ALNE** | **Al Ain** | **17.04** | **59** | Pn | **Pn** | **13 58 27.3** | **-1.0** |
| **ALNE** | **Al Ain** | **17.04** | **59** | P | **P** | **13 58 30.0** | **-0.2** |
| | SNR=6.3 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **17.22** | **57** | P | **P** | **13 58 31.9** | **-0.1** |
| | SNR=5.0 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **17.39** | **56** | P | **P** | **13 58 33.6** | **-0.3** |
| | SNR=5.0 | | | | | | |
| **ARQ** | **Araqi** | **17.40** | **62** | P | **P** | **13 58 34.4** | **+0.3** |
| **MMAI** | **Mount Meron Ar** | **17.44** | **348** | LR | LR | 14 04 08.0 | |
| | comp=Z,167nm,19.9s,baz=116,slow=33 | | | | | | |
| **ASHO** | **Ashiyiah** | **17.57** | **58** | *i* Pn | **P** | **13 58 35.0** | **-1.0** |
| | SNR=7.9 | | | | | | |
| **ASHO** | **Ashiyiah** | **17.57** | **58** | P | **P** | **13 58 36.0** | **0.0** |
| | SNR=14 | | | | | | |
| ASHO | | | | P | **P** | **13 58 36.0** | **0.0** |
| | SNR=14 | | | | | | |
| **HATD** | **Hatta, Dubai** | **17.69** | **57** | *i* Pn | **P** | **13 58 37.0** | **-0.3** |
| | SNR=15 | | | | | | |
| **HATD** | **Hatta, Dubai** | **17.69** | **57** | P | **P** | **13 58 37.5** | **+0.1** |
| | SNR=12 | | | | | | |
| **SOHO** | **SOHO** | **17.72** | **60** | *i* Pn | **Pn** | **13 58 36.5** | **-0.3** |
| | SNR=6.9 | | | | | | |
| **SOHO** | **SOHO** | **17.72** | **60** | P | **P** | **13 58 38.2** | **+0.6** |
| **UOSS** | **Minazif** | **17.80** | **57** | | **Pn** | **13 58 37.2** | **-0.6** |
| UOSS | | | | IAmb | IAmb | 13 58 40.2 | |
| | comp=Z,72nm,1.2s | | | | | | |
| **UOSS** | **Minazif** | **17.80** | **57** | *i* Pn | **P** | **13 58 38.2** | **-0.3** |
| | SNR=5.8 | | | | | | |
| **UOSS** | **Minazif** | **17.80** | **57** | P | **P** | **13 58 38.9** | **+0.4** |
| UOSS | | | | P | **P** | **13 58 38.9** | **+0.4** |
| **MSFE** | **Esma-Masafi** | **17.96** | **56** | Pn | **P** | **13 58 39.9** | **-0.4** |
| **MHTO** | **MHTO** | **17.98** | **71** | P | **P** | **13 58 40.3** | **-0.2** |
| **MDH** | **Madha** | **18.04** | **56** | *i* Pn | **P** | **13 58 41.0** | **-0.2** |
| | SNR=7.1 | | | | | | |
| **MDH** | **Madha** | **18.04** | **56** | P | **P** | **13 58 42.5** | **+1.3** |
| | SNR=9.3 | | | | | | |
| **HOQ** | **Hoqain** | **18.17** | **63** | P | **P** | **13 58 43.2** | **+0.6** |
| | SNR=8.5 | | | | | | |
| HOQ | | | | P | **P** | **13 58 43.2** | **+0.6** |
| | SNR=8.5 | | | | | | |
| **SHME** | **Shamm** | **18.28** | **54** | Pn | **P** | **13 58 43.7** | **-0.1** |
| **JMDO** | **Jabal Madar** | **18.46** | **67** | P | **Pn** | **13 58 45.8** | **-0.1** |
| **SMDO** | **Samad** | **18.62** | **65** | P | **Pn** | **13 58 48.3** | **+0.3** |
| **MBAR** | **Mbarara** | **18.71** | **209** | P | **P** | **13 58 48.0** | **-0.8** |
| | comp=Z,0.6nm,0.3s,baz=351,slow=20,SNR=1.3 | | | | | | |
| MBAR | | | | Lg | Lg | 14 04 09.8 | |
| | baz=153,slow=23 | | | | | | |
| MBAR | | | | LR | LR | 14 05 53.4 | |
| | comp=Z,114nm,21.4s,baz=58,slow=37 | | | | | | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| **BIDO** | **Bidbid** | **18.84** | **64** | P | **Pn** | **13 58 51.7** | **+1.1** |
| **WSAR** | **Wadi Sarin** | **19.19** | **65** | P | **P** | **13 58 53.5** | **-0.3** |
| | comp=Z,0.4nm,0.3s,baz=279,slow=12,SNR=5.7 | | | | | | |
| WSAR | | | | LR | LR | 14 07 02.0 | |
| | comp=Z,460nm,19.1s,baz=268,slow=39 | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **WSAR** | **Wadi Sarin** | **19.19** | **65** | P | **Pn** | **13 58 55.3** | **+0.5** |
| **WBK** | **Wadi Bani Khal** | **19.29** | **67** | P | **Pn** | **13 58 56.2** | **+0.2** |
| | SNR=6.6 | | | | | | |
| **JLN** | **Jalan Bani Buh** | **19.56** | **69** | P | **Pn** | **13 58 59.5** | **+0.3** |
| **GAZ** | **Gaziantep** | **21.25** | **354** | P | **P** | **13 59 16.1** | **-0.1** |
| GAZ | | | | IAmb | IAmb | 13 59 22.7 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **23.08** | **357** | P | **P** | **13 59 36.0** | **+0.1** |
| ARPR | | | | IAmb | IAmb | 13 59 55.7 | |
| | comp=Z,29nm,1.3s | | | | | | |
| **BR104** | **Keskin Array S** | **24.26** | **348** | P | **P** | **13 59 49.1** | **+1.8** |
| | comp=Z,8.9nm,1.0s,comp=Z,99nm | | | | | | |
| **BR105** | **Keskin Array S** | **24.27** | **348** | P | **P** | **13 59 49.1** | **+1.7** |
| | comp=Z,10nm,1.4s,comp=Z,178nm | | | | | | |
| **BR131** | **Keskin Array S** | **24.28** | **348** | P | **P** | **13 59 47.1** | **-0.3** |
| BR131 | | | | IAmb | IAmb | 13 59 54.6 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **BR131** | **Keskin Array S** | **24.28** | **348** | P | **P** | **13 59 48.6** | **+1.2** |
| | SNR=10 | | | | | | |
| **BRTR** | **Keskin Array B** | **24.28** | **348** | P | **P** | **13 59 48.6** | **+1.2** |
| **BRTR** | **Keskin Array B** | **24.28** | **348** | P | **P** | **13 59 46.2** | **-1.2** |
| | comp=Z,6.6nm,1.0s,baz=162,slow=10.0,SNR=24 | | | | | | |
| BRTR | | | | PcP | **PcP** | **14 03 27.6** | **+0.1** |
| | comp=Z,1.4nm,0.7s,baz=153,slow=2.3,SNR=5.6 | | | | | | |
| BRTR | | | | LR | LR | 14 08 04.7 | |
| | comp=Z,76nm,20.2s,baz=181,slow=34 | | | | | | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **BR106** | **Keskin Array S** | **24.29** | **348** | P | **P** | **13 59 49.5** | **+2.0** |
| | comp=Z,10nm,1.2s,comp=Z,144nm | | | | | | |
| **GNI** | **Garni** | **24.49** | **9** | P | **P** | **13 59 47.9** | **-1.5** |
| GNI | | | | IAmb | IAmb | 14 00 06.3 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **GNI** | **Garni** | **24.49** | **9** | LR | LR | 14 09 40.4 | |
| | comp=Z,104nm,18.2s,baz=206,slow=37 | | | | | | |
| **GNI** | **Garni** | **24.49** | **9** | P | **P** | **13 59 48.1** | **-1.3** |
| **HRA** | **Herat** | **27.30** | **44** | P | **P** | **14 00 14.4** | **-0.5** |
| HRA | | | | IAmb | IAmb | 14 00 18.4 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **ALN** | **Alexandroupoli** | **27.55** | **337** | P | **P** | **14 00 17.5** | **+0.7** |
| **AGG** | **Agios Georgios** | **27.60** | **330** | P | **P** | **14 00 17.1** | **-0.2** |
| AGG | | | | IAmb | IAmb | 14 00 24.9 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **27.81** | **5** | P | **P** | **14 00 15.4** | **-3.7** |
| | comp=Z,1.7nm,1.0s,baz=187,slow=4.6,SNR=1.8 | | | | | | |
| KBZ | | | | PcP | **PcP** | **14 03 32.9** | **-2.4** |
| | comp=Z,0.5nm,0.3s,baz=131,slow=2.4,SNR=4.0 | | | | | | |
| KBZ | | | | LR | LR | 14 11 44.1 | |
| | comp=Z,107nm,18.5s,baz=215,slow=37 | | | | | | |
| **RDO** | **Rodhopi** | **27.96** | **337** | P | **P** | **14 00 20.0** | **-0.4** |
| RDO | | | | IAmb | IAmb | 14 00 27.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **KIV** | **Kislovodsk** | **28.02** | **5** | P | **P** | **14 00 22.6** | **+1.5** |
| | comp=Z,7.8nm,0.5s | | | | | | |
| **LIT** | **Litokhoron** | **28.37** | **331** | P | **P** | **14 00 24.2** | **0.0** |
| LIT | | | | IAmb | IAmb | 14 00 50.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **FNA** | **Florina** | **29.43** | **331** | P | **P** | **14 00 34.7** | **+1.1** |
| **CEL** | **Celeste** | **30.57** | **321** | P | **P** | **14 00 43.5** | **-0.3** |
| CEL | | | | IAmb | IAmb | 14 00 50.5 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **PUK** | **Puka** | **31.11** | **331** | P | **P** | **14 00 50.0** | **+1.5** |
| PUK | | | | IAmb | IAmb | 14 00 57.4 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **ISR** | **Istrita** | **31.13** | **342** | P | **P** | **14 00 50.7** | **+2.0** |
| | comp=Z,14nm,0.9s | | | | | | |
| **BISRR** | **Bisoca** | **31.47** | **342** | P | **P** | **14 00 51.5** | **-0.2** |
| **MLR** | **Muntele Rosu** | **31.65** | **341** | P | **P** | **14 00 53.8** | **+0.4** |
| MLR | | | | IAmb | IAmb | 14 01 11.0 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **MLR** | **Muntele Rosu** | **31.65** | **341** | P | **P** | **14 00 55.7** | **+2.4** |
| | comp=Z,11nm,1.1s | | | | | | |
| **VRI** | **Vrincioaia** | **31.76** | **343** | P | **P** | **14 00 55.9** | **+1.8** |
| | comp=Z,5.3nm,0.7s,comp=Z,219nm | | | | | | |
| **PLOR3** | **Plostina Array** | **31.77** | **342** | P | **P** | **14 00 56.5** | **+2.2** |
| | comp=Z,27nm,1.1s | | | | | | |
| **VOIR** | | **31.89** | **340** | P | **P** | **14 00 56.4** | **+1.1** |
| | comp=Z,14nm,1.1s | | | | | | |
| **KBL** | **Kabul** | **32.13** | **49** | P | **P** | **14 00 58.7** | **+0.9** |
| KBL | | | | IAmb | IAmb | 14 00 59.8 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **TAM** | **Tamanrasset** | **32.95** | **287** | P | **P** | **14 01 06.2** | **+1.2** |
| TAM | | | | IAmb | IAmb | 14 01 11.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KEST** | **Kesra** | **33.51** | **312** | P | **P** | **14 01 11.2** | **+1.6** |
| KEST | | | | IAmb | IAmb | 14 01 16.2 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **KEST** | **Kesra** | **33.51** | **312** | P | **P** | **14 01 10.8** | **+1.2** |
| | comp=Z,3.9nm,0.8s,baz=75,slow=20,SNR=3.6 | | | | | | |
| KEST | | | | LR | LR | 14 17 06.7 | |
| | comp=Z,508nm,18.5s,baz=46,slow=41 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **BURAR** | **Bucovina Array** | **33.78** | **342** | P | **P** | **14 01 12.7** | **+0.8** |
| **BUR08** | **Bucovina Ar. S** | **33.81** | **342** | IAmb | IAmb | 14 01 17.9 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **NDNU** | **Novodnistrovsk** | **34.10** | **345** | P | **P** | **14 01 13.2** | **-1.3** |
| **INTR** | **Introdacqua** | **34.18** | **325** | P | **P** | **14 01 15.7** | **+0.3** |
| INTR | | | | IAmb | IAmb | 14 01 22.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **SIMJ** | **Simiganj** | **34.20** | **43** | P | **P** | **14 01 15.7** | **0.0** |
| **KMPD** | **K-Podol'skiy** | **34.30** | **344** | P | **pP** | **14 01 15.7** | **-3.6** |
| KMPD | | | | P | **P** | **14 01 14.9** | **-1.3** |
| **BERU** | **Beregovo** | **35.13** | **340** | P | **P** | **14 01 24.5** | **+1.1** |
| **LUBAR** | **Lubar, Ukraine** | **35.25** | **347** | P | **P** | **14 01 23.5** | **-0.9** |
| **HOLU** | **Holmets** | **35.47** | **340** | P | **P** | **14 01 27.5** | **+1.1** |
| **MORS** | **Morshin** | **35.53** | **342** | P | **P** | **14 01 27.7** | **+0.8** |
| **AK07** | **Malin Array Si** | **35.54** | **348** | P | **P** | **14 01 26.8** | **-0.2** |
| **AK10** | **Malin Array Si** | **35.58** | **348** | P | **P** | **14 01 27.4** | **+0.1** |
| **AK09** | **Malin Array Si** | **35.59** | **349** | P | **P** | **14 01 27.2** | **-0.2** |
| **AK05** | **Malin Array Si** | **35.61** | **348** | P | **P** | **14 01 27.4** | **-0.1** |
| **AK08** | **Malin Array Si** | **35.61** | **348** | P | **P** | **14 01 27.4** | **-0.1** |
| **AK01** | **Malin Array Si** | **35.68** | **348** | P | **P** | **14 01 27.8** | **-0.3** |
| **KIEV** | **Kiev** | **35.68** | **348** | P | **P** | **14 01 27.6** | **-0.6** |
| KIEV | | | | IAmb | IAmb | 14 01 32.4 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **KIEV** | **Kiev** | **35.68** | **348** | P | **P** | **14 01 28.1** | **0.0** |
| **KIEV** | **Kiev** | **35.68** | **348** | P | **P** | **14 01 28.0** | **-0.1** |
| **AKASG** | **Malin Array Be** | **35.68** | **349** | P | **P** | **14 01 26.7** | **-1.4** |
| | comp=Z,0.5nm,0.3s,baz=170,slow=7.4,SNR=11 | | | | | | |
| AKASG | | | | PcP | **PcP** | **14 03 56.2** | **-0.2** |
| | comp=Z,3.7nm,0.9s,baz=165,slow=2.7,SNR=6.2 | | | | | | |
| AKASG | | | | LR | LR | 14 16 42.5 | |
| | comp=Z,34nm,19.9s,baz=220,slow=37 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **AKBB** | **Malin Array Si** | **35.68** | **349** | IAmb | IAmb | 14 01 32.4 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **35.68** | **349** | P | **P** | **14 01 27.7** | **-0.5** |
| **SHIU** | **Shidnytsya** | **35.77** | **342** | P | **P** | **14 01 30.9** | **+1.9** |
| **PSZ** | **Piszkesteto** | **35.83** | **337** | IAmb | IAmb | 14 01 34.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **BTK** | **Batken** | **36.14** | **42** | IAmb | IAmb | 14 01 35.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **MPLH** | **Magyarpolny** | **36.17** | **334** | P | **P** | **14 01 33.2** | **+0.8** |
| **KWP** | **Kalwaria Pacla** | **36.34** | **341** | P | **P** | **14 01 34.7** | **+0.9** |
| | comp=Z,21nm,1.2s,comp=Z,1μm | | | | | | |
| **VYHS** | **Vyhne** | **36.71** | **337** | *e*P | **P** | **14 01 37.8** | **+0.8** |
| **SOKA** | **Soboth** | **36.90** | **331** | *i* P | **P** | **14 01 39.8** | **+1.1** |
| | comp=Z,11nm,1.3s | | | | | | |
| **RNPP5** | **Staryi Chortor** | **36.91** | **345** | P | **P** | **14 01 38.3** | **-0.3** |
| **TOA0** | **Torodi Ar. Sit** | **36.92** | **271** | P | **P** | **14 01 38.7** | **-0.5** |
| **TORD** | **Torodi Ar. Bea** | **36.92** | **271** | P | **P** | **14 01 38.5** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **36.92** | **271** | P | **P** | **14 01 39.0** | **-0.2** |
| | comp=Z,8.5nm,1.1s,baz=71,slow=10,SNR=17 | | | | | | |
| TORD | | | | LR | LR | 14 17 26.6 | |
| | comp=Z,262nm,19.7s,baz=88,slow=37 | | | | | | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **OBKA** | **Obir** | **37.00** | **331** | *i* P | **P** | **14 01 41.6** | **+2.1** |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **37.06** | **22** | P | **P** | **14 01 40.0** | **+0.1** |
| **ABKAR** | **Akbulak array** | **37.06** | **22** | IAmb | IAmb | 14 01 45.2 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| **SABO** | **M.te Sabotino** | **37.07** | **329** | IAmb | IAmb | 14 01 47.0 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **RNPP9** | **Sopachiv** | **37.07** | **346** | P | **P** | **14 01 39.5** | **-0.5** |
| **ARSA** | **Arzberg** | **37.10** | **332** | *e*P | **P** | **14 01 42.6** | **+2.2** |
| | comp=Z,13nm,1.3s | | | | | | |
| **RONA** | **Rosalia, Austr** | **37.11** |

BVAR LR LR 14 22 46.1
comp=Z,43nm,20.2s,baz=249,slow=38
comp=Z,3.8nm,1.0s
**DBIC Dimbokro 44.63 263** P **P** **14 02 42.9 0.0**
DBIC IAmb IAmb 14 02 49.5
comp=Z,19nm,1.1s
**DBIC Dimbokro 44.63 263** P **P** **14 02 42.9 0.0**
comp=Z,5.0nm,0.6s,baz=84,slow=9.4,SNR=5.3
DBIC LR LR 14 21 23.6
comp=Z,235nm,19.4s,baz=72,slow=36
comp=Z,5.0nm,0.6s
**ESBB Sonseca Array 44.74 311** P **P** **14 02 43.3 -0.2**
ESBB IAmb IAmb 14 02 48.6
comp=Z,17nm,1.3s
**ESDC Sonseca Array 44.74 311** P **P** **14 02 44.2 +0.7**
ESDC IAmb IAmb 14 02 48.5
comp=Z,11nm,1.2s
**ESDC Sonseca Array 44.74 311** P **P** **14 02 44.2 +0.7**
comp=Z,7.1nm,1.1s,baz=108,slow=7.8,SNR=22
comp=Z,7.1nm,1.1s
**PAB San Pablo 44.98 310** P **P** **14 02 46.2 +0.7**
PAB IAmb IAmb 14 02 50.5
comp=Z,11nm,1.1s
**FINES FINESS Array B 46.47 351** P **P** **14 02 56.5 -0.2**
comp=Z,3.8nm,0.9s,baz=156,slow=7.3,SNR=4.9
comp=Z,3.8nm,0.9s
**BOSA Boshof 46.48 198** LR LR 14 23 12.1
comp=Z,132nm,19.8s,baz=34,slow=37
**KURBB Kurchatov Arra 46.50 33** P **P** **14 02 58.1 +0.9**
comp=Z,7.2nm,0.8s,baz=238,slow=8.1,SNR=25
KURBB PcP **PcP** **14 04 31.8 +0.2**
comp=Z,2.0nm,0.8s,baz=234,slow=4.6,SNR=6.4
comp=Z,7.2nm,0.8s
**MAKZ Makanchi 46.54 39** P **P** **14 02 57.9 +0.4**
**PBAR Barrancos 46.59 308** *eP* **P** **14 03 01.4 +3.3**
comp=Z,18nm,1.6s
**KURK Kurchatov 46.60 33** P **P** **14 02 57.9 0.0**
**KURK Kurchatov 46.60 33** P **P** **14 02 59.2 +1.2**
**MKAR Makanchi Array 46.72 40** P **P** **14 02 59.3 +0.3**
**MKAR Makanchi Array 46.72 40** P **P** **14 03 00.0 +0.9**
comp=Z,8.8nm,0.8s,baz=237,slow=7.2,SNR=56
MKAR LR LR 14 26 04.0
comp=Z,65nm,19.5s,baz=249,slow=41
comp=Z,8.8nm,0.8s
**PVAQ Vaqueiros 46.92 307** *eP* **P** **14 03 04.2 +3.5**
comp=Z,23nm,1.9s
**PBEJ Beja 47.19 307** *eP* P 14 03 06.8 +4.0
comp=Z,22nm,1.4s
**PMRV Marv??o 47.20 309** *eP* **P** **14 02 59.5 -3.4**
comp=Z,17nm,1.7s
**EVO Evora 47.43 308** *eP* **P** **14 03 08.3 +3.7**
comp=Z,28nm,1.4s
**PNCL Nicolau / Gran 47.72 307** *eP* **P** **14 03 09.0 +2.1**
comp=Z,23nm,1.9s
**HFS Hagfors 48.01 343** P **P** **14 03 07.8 -1.0**
comp=Z,3.9nm,0.9s,baz=167,slow=7.3,SNR=5.6
HFS LR LR 14 24 34.3
comp=Z,33nm,19.6s,baz=134,slow=38
comp=Z,3.9nm,0.9s
**POLO Lamas de Olo 48.05 312** *eP* **P** **14 03 13.1 +3.5**
comp=Z,11nm,1.4s
**WMQ Urumqi 49.08 45** *eP* **P** **14 03 18.8 +1.4**
WMQ pmax pmax
comp=Z,17nm,1.9s
**SHL Shillong 49.41 70** P **P** **14 03 19.7 -0.7**
**NB2 NORSAR Subarra 49.46 342** P **P** **14 03 19.3 -0.8**
comp=Z,13nm,1.2s,baz=140,slow=8.6
**NOA NORSAR Array B 49.46 342** P **P** **14 03 19.2 -0.8**
comp=Z,4.8nm,1.0s,baz=140,slow=7.8,SNR=7.6
comp=Z,4.8nm,1.0s
**NC204 NORSAR Array S 49.79 342** P **P** **14 03 22.3 -0.2**
NC204 IAmb IAmb 14 03 26.4
comp=Z,14nm,1.2s
**EKA Eskdalemuir Ar 51.19 330** P **P** **14 03 32.5 -0.7**
comp=Z,1.7nm,0.8s,baz=110,slow=7.2,SNR=4.6
comp=Z,1.7nm,0.8s
**ZALV Zalesovo Beam 51.54 32** P **P** **14 03 35.2 -0.6**
**ZALV Zalesovo Beam 51.54 32** P **P** **14 03 35.8 0.0**
comp=Z,16nm,0.8s,baz=248,slow=7.8,SNR=49
comp=Z,16nm,0.8s
**ARCES ARCESS Array B 54.29 354** P **P** **14 03 55.7 -0.1**
comp=Z,3.1nm,1.0s,baz=164,slow=7.6,SNR=4.4
ARCES LR LR 14 29 07.6
comp=Z,29nm,18.1s,baz=175,slow=38
comp=Z,3.1nm,1.0s
**TNCH TengChong 55.42 70** ⇑P **P** **14 04 06.3 +1.3**
TNCH pP sP 14 04 08.9 -0.5
TNCH pmax pmax
comp=Z,17nm,0.8s
TNCH pmax pmax
comp=Z,170nm,5.0s
**CMAR Chiang Mai Arr 56.38 78** P **P** **14 04 11.0 -0.7**
**CMAR Chiang Mai Arr 56.38 78** P **P** **14 04 11.9 +0.2**
comp=Z,3.8nm,1.0s,baz=277,slow=8.3,SNR=16
comp=Z,3.8nm,1.0s
**PZH PanZhiHua 58.25 68** P **P** **14 04 27.3 +2.3**
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,190nm,5.1s
**LZH Lanzhou 59.95 57** *eP* **P** **14 04 37.6 +0.9**
LZH pP sP 14 04 42.9 +1.7
LZH pmax pmax
comp=Z,36nm,1.1s
**GYA Guiyang 62.66 68** ⇑P **P** **14 04 55.6 +0.4**
GYA pmax pmax
comp=Z,34nm,1.0s
**SONM Songino Array 62.68 44** P **P** **14 04 55.6 +0.7**
**SONM Songino Array 62.68 44** P **P** **14 04 55.8 +0.8**
comp=Z,11nm,0.9s,baz=259,slow=6.8,SNR=41
SONM LR LR 14 35 38.0
comp=Z,76nm,19.0s,baz=256,slow=39
comp=Z,11nm,0.9s
**ULN Ulaanbaatar 63.13 44** P **P** **14 04 57.8 -0.2**
ULN IAmb IAmb 14 04 60.0
comp=Z,8.5nm,1.1s
**SPITS Spitsbergen Ar 63.30 355** P **P** **14 04 58.1 -0.3**
comp=Z,18nm,1.0s,baz=117,slow=8.3,SNR=4.2
comp=Z,18nm,1.0s
**XAN Xi'an 64.13 60** ⇓P **P** **14 05 04.5 -0.2**
XAN pmax pmax
comp=Z,13nm,1.0s
**HHC Hu-ho-hao-te 66.06 52** *eP* **P** **14 05 18.8 +1.6**
HHC pmax pmax
comp=Z,13nm,0.6s
HHC pmax pmax
comp=Z,84nm,4.7s
**HNS HongShan 68.64 56** *eP* **P** **14 05 34.6 +1.1**
**XLT XiLinHaoTe 69.32 49** *eP* P 14 05 41.8 +4.1
XLT pP sP 14 05 46.5 +4.4
XLT sP pP 14 05 49.1 +8.2
XLT pmax pmax
comp=Z,8.0nm,0.9s
**STKI Sintang 72.42 95** P **P** **14 05 56.0 -0.9**
**NJ2 Nanjing 72.61 61** *eP* **P** **14 05 57.8 0.0**
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
**SFJD Kangerlussuaq 75.60 336** LR LR 14 42 04.3
comp=Z,35nm,18.6s,baz=90,slow=38
**YAK Yakutsk 76.02 29** LR LR 14 44 37.3
comp=Z,33nm,18.0s,baz=259,slow=40
**HEH HeiHe 76.42 41** *eP* **P** **14 06 19.5 -0.1**
HEH pmax pmax
comp=Z,11nm,0.9s
**BNX BinXian 77.13 46** ⇑P **P** **14 06 23.4 -0.3**
BNX pmax pmax
comp=Z,8.0nm,1.0s
**KSRS Korea Array 79.05 54** P **P** **14 06 33.9 -0.6**
comp=Z,2.8nm,0.9s,baz=269,slow=6.2,SNR=11
KSRS LR LR 14 46 35.1
comp=Z,28nm,18.4s,baz=275,slow=40
comp=Z,2.8nm,0.9s
**KLR Kul'dur 79.37 42** LR LR 14 44 35.8
comp=Z,54nm,19.5s,baz=226,slow=38
**EUNU Eureka 80.19 352** P **P** **14 06 39.8 -0.2**
EUNU IAmb IAmb 14 06 45.3
comp=Z,11nm,1.2s
**KAPI Kappang 81.79 98** LR LR 14 40 32.4
comp=Z,28nm,19.6s,baz=314,slow=34
**JNU Nakatsue 82.37 58** LR LR 14 48 42.8
comp=Z,16nm,18.5s,baz=312,slow=40
**FRB Frobisher Bay 83.67 335** LR LR 14 46 20.1
comp=Z,19nm,18.1s,baz=157,slow=37
**MJAR Matsushiro Arr 87.24 53** P **P** **14 07 17.1 +0.2**
comp=Z,2.0nm,0.8s,baz=318,slow=6.6,SNR=6.9
MJAR LR LR 14 50 17.6
comp=Z,21nm,19.6s,baz=208,slow=38
comp=Z,2.0nm,0.8s

**ASAJ Asahikawa 87.96 45** LR LR 14 51 19.4
comp=Z,39nm,18.0s,baz=190,slow=39
**ELIB Princess Elisa 88.39 185** *dP* **P** **14 07 23.4 +1.8**
comp=Z,1.8nm,1.4s
**NWAO Narrogin (SRO) 88.42 125** LR LR 14 38 17.4
comp=Z,54nm,21.2s,baz=200,slow=30
**MDP Montagnes des 90.92 276** LR LR 14 46 55.6
comp=Z,110nm,19.7s,baz=34,slow=35
**A36M Sachs Harbour 91.69 355** P **P** **14 07 36.4 -0.6**
**SNAA Sanae 92.01 192** LR LR 14 47 37.9
comp=Z,53nm,18.1s,baz=71,slow=35
**ASAR Alice Springs 99.95 112** P **Pdif** **14 08 15.9 +0.2**
comp=Z,0.8nm,1.0s,baz=271,slow=3.1,SNR=4.0
comp=Z,0.8nm,1.0s
**NVAR Mina Array Bea 122.12 340** PKP **PKPdf** **14 13 24.8 -0.7**
comp=Z,1.0nm,0.8s,baz=99,slow=2.0,SNR=5.5
**TXAR Lajitas Array 122.78 322** PKP **PKPdf** **14 13 26.2 -0.6**
comp=Z,1.0nm,0.8s,baz=48,slow=2.1,SNR=10

*NEIC **13** 14:08:29.7±0.8,5°.4S±0°.2×151°.4E±0°.3, h64km±15km, mb4.3/10, Error ellipse: s-maj=47.7km s-min=11.3km az=129.0*
*IDC **13** 14:08:30.6±8.4,5°.41S×151°.32E, h74km±61km, mb3.6/3, mbtmp4.0/4, ML2.4/1, MS3.5/2, Error ellipse: s-maj=66.8km s-min=55.8km az=118.0*
**ISC 13 14:08:28.7**±0.9,**5°.4S**±0°.2×**151°.3E**±0°.3,**h57**km,**n19,**
**σ1s28/20,mb4.1/8,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.44** | **37** | Pn | | **Pn** | | **14 08 53.2** | **+0.6** |
| RABL | | | | Sn | | **Sn** | | **14 09 12.8** | **+2.3** |
| **PMG** | **Port Moresby** | **5.75** | **225** | Pn | | **Pn** | | **14 09 52.5** | **+1.0** |
| **PMG** | **Port Moresby** | **5.75** | **225** | P | | **Pn** | | **14 09 53.2** | **+1.7** |
| | 7.1nm,0.3s,baz=32,slow=19,SNR=19 | | | | | | | | |
| PMG | | | | S | | **Sn** | | **14 10 58.2** | **+2.1** |
| | 23nm,0.4s,baz=148,slow=18,SNR=3.0 | | | | | | | | |
| PMG | | | | LR | | LR | | 14 12 19.7 | |
| | comp=Z,146nm,19.5s,baz=5.5,slow=40 | | | | | | | | |
| | 14nm,0.4s | | | | | | | | |
| **HNR** | **Honiara** | **9.48** | **116** | LR | | LR | | 14 14 34.9 | |
| | comp=Z,796nm,20.6s,baz=282,slow=39 | | | | | | | | |
| **MTN** | **Manton Dam** | **21.24** | **248** | P | | **P** | | **14 13 10.5** | **+0.2** |
| MTN | | | | IAmb | | IAmb | | 14 13 33.4 | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.82** | **227** | P | | **P** | | **14 13 16.2** | **-0.1** |
| WB0 | | | | IAmb | | IAmb | | 14 13 36.2 | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.83** | **227** | P | | **P** | | **14 13 16.3** | **-0.2** |
| WR0 | | | | IAmb | | IAmb | | 14 13 38.8 | |
| | comp=Z,7.7nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.96** | **227** | P | | **P** | | **14 13 18.1** | **+0.2** |
| WB2 | | | | IAmb | | IAmb | | 14 13 30.7 | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.97** | **227** | P | | **P** | | **14 13 18.2** | **+0.3** |
| | comp=Z,3.1nm,0.6s,baz=52,slow=9.9,SNR=35 | | | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | | | |
| **KNRA** | **Kununurra** | **24.39** | **243** | P | | **P** | | **14 13 41.9** | **0.0** |
| KNRA | | | | IAmb | | IAmb | | 14 14 23.9 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **AS31** | **Alice Springs** | **24.74** | **221** | P | | **P** | | **14 13 43.0** | **-2.1** |
| **ASAR** | **Alice Springs** | **24.74** | **221** | P | | **P** | | **14 13 42.7** | **-2.4** |
| **ASAR** | **Alice Springs** | **24.74** | **221** | P | | **P** | | **14 13 45.6** | **+0.5** |
| | comp=Z,1.9nm,0.7s,baz=55,slow=9.2,SNR=43 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.08** | **241** | P | | **P** | | **14 14 15.4** | **+0.2** |
| **FORT** | **Forrest** | **33.42** | **218** | P | | **P** | | **14 15 01.5** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **34.46** | **239** | P | | **P** | | **14 15 09.7** | **-1.6** |
| **QSPA** | **South Pole Qui** | **84.61** | **180** | P | | **P** | | **14 20 55.9** | **0.0** |
| **QSPA** | **South Pole Qui** | **84.61** | **180** | P | | **P** | | **14 20 55.3** | **-0.6** |
| | comp=Z,1.1nm,1.0s,baz=4.0,slow=3.1,SNR=5.0 | | | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.04** | **287** | PKPbc | | **PKPbc** | | **14 28 11.1** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=88,slow=3.3,SNR=4.3 | | | | | | | | |

*KRSC **13** 14:33:32.3±0.6,55°.65N×162°.29E, h70km±16km, Ml4.0*
*IDC **13** 14:33:37.0±4.3,55°.76N×161°.79E, h91km±45km, mb3.4/5, mbtmp3.7/6, Error ellipse: s-maj=38.8km s-min=28.1km az=173.0*
**ISC 13 14:33:34.3**±0.9,**55°.71N**±0°.04×**162°.23E**±0°.04,**h72**km±8km,
**n35,σ1s16/50,mb3.7/5,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.60** | **33** | *eP* | | **Pn** | | **14 33 48.1** | **-0.2** |
| KBTR | | | | *eS* | | **Sn** | | **14 33 58.9** | **+0.3** |
| **KBG** | **Krutoberegovo** | **0.61** | **26** | *eP* | | **Pn** | | **14 33 48.0** | **-0.3** |
| KBG | | | | *eS* | | **Sn** | | **14 33 59.4** | **+0.7** |
| **ZLN** | **Zelenaya** | **0.86** | **292** | *eP* | | **Pn** | | **14 33 51.4** | **+0.1** |
| ZLN | | | | *eS* | | **Sn** | | **14 34 05.1** | **+1.2** |
| **BZGR** | **Bezymyannyi-Gr** | **0.90** | **286** | *eP* | | **Pn** | | **14 33 51.6** | **0.0** |
| BZGR | | | | *eS* | | **Sn** | | **14 34 05.0** | **+0.4** |
| **CIRR** | **Tsirk** | **0.93** | **297** | *eP* | | **Pn** | | **14 33 52.1** | **0.0** |
| CIRR | | | | *eS* | | **Sn** | | **14 34 06.1** | **+0.7** |
| **LGNR** | **Loginova** | **0.94** | **294** | *eP* | | **Pn** | | **14 33 52.6** | **+0.1** |
| LGNR | | | | *eS* | | **Sn** | | **14 34 07.1** | **+1.1** |
| **KRSR** | **Krestovskiy** | **1.06** | **300** | *eP* | | **Pn** | | **14 33 53.5** | **-0.3** |
| KRSR | | | | *eS* | | **Sn** | | **14 34 07.7** | **-0.6** |
| **KLY** | **Klyuchi** | **1.07** | **305** | *eP* | | **Pn** | | **14 33 52.3** | **-1.4** |
| KLY | | | | *eS* | | **Sn** | | **14 34 06.0** | **-2.2** |
| **KIRR** | **Kirishev** | **1.09** | **284** | *eP* | | **Pn** | | **14 33 54.4** | **+0.2** |
| KIRR | | | | *eS* | | **Sn** | | **14 34 09.9** | **+1.0** |
| **TUMD** | **Tumrok D** | **1.16** | **245** | *eP* | | **Pn** | | **14 33 54.3** | **-0.6** |
| TUMD | | | | *eS* | | **Sn** | | **14 34 09.4** | **-0.8** |
| **ESO** | **Esso** | **2.00** | **278** | *eP* | | **Pn** | | **14 34 05.8** | **-0.2** |
| **BKI** | **Bering** | **2.19** | **102** | *eS* | | **Sn** | | **14 34 33.7** | **-0.9** |
| **KII** | **Karymskiy** | **2.32** | **225** | *eP* | | **Pn** | | **14 34 10.6** | **+0.4** |
| **SPN** | **Mys Shipunski** | **2.91** | **207** | *eP* | | **Pn** | | **14 34 17.0** | **-1.3** |
| SPN | | | | *eS* | | **Sn** | | **14 34 48.8** | **-3.3** |
| **NLC** | **Nalytchevo** | **3.04** | **215** | *eP* | | **Pn** | | **14 34 20.3** | **+0.2** |
| NLC | | | | *eS* | | **Sn** | | **14 34 55.1** | **-0.2** |
| **SMAR** | **Somma** | **3.16** | **221** | *eP* | | **Pn** | | **14 34 22.5** | **+0.7** |
| **AVH** | **Avacha** | **3.18** | **221** | *eP* | | **Pn** | | **14 34 23.0** | **+1.0** |
| **UGLR** | **Uglovaya** | **3.19** | **220** | *eP* | | **Pn** | | **14 34 22.9** | **+0.7** |
| **KOK** | **Koryaka** | **3.20** | **222** | *eP* | | **Pn** | | **14 34 23.3** | **+1.0** |
| **GNL** | **Ganaly** | **3.20** | **233** | *eP* | | **Pn** | | **14 34 23.2** | **+0.9** |
| **DALK** | **Dalny** | **3.36** | **219** | *eP* | | **Pn** | | **14 34 24.7** | **+0.3** |
| DALK | | | | *eS* | | **Sn** | | **14 35 02.9** | **-0.2** |
| **PET** | **Petropavlovsk** | **3.40** | **219** | *eP* | | **Pn** | | **14 34 25.3** | **+0.4** |
| PET | | | | *eS* | | **Sn** | | **14 35 04.8** | **+0.7** |
| **OSSR** | **Ossora** | **3.58** | **7** | *eP* | | **Pn** | | **14 34 27.9** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **3.71** | **227** | P | | **Pn** | | **14 34 30.1** | **+1.0** |
| | 8.9nm,0.7s,baz=54,slow=16,SNR=22 | | | | | | | | |
| **KRMR** | **Karymshinskiy** | **3.75** | **221** | *eP* | | **Pn** | | **14 34 30.7** | **+1.1** |
| KRMR | | | | *eS* | | **Sn** | | **14 35 15.2** | **+2.7** |
| **GRL** | **Gorelyy** | **3.99** | **219** | *eP* | | **Pn** | | **14 34 34.9** | **+1.8** |
| **MTVR** | **Mutnovka** | **4.01** | **218** | *eP* | | **Pn** | | **14 34 34.6** | **+1.2** |
| **ASAK** | **Asacha** | **4.19** | **219** | *eP* | | **Pn** | | **14 34 37.2** | **+1.4** |
| **KDTR** | **Khodutka, Kamc** | **4.61** | **214** | *eP* | | **Pn** | | **14 34 41.1** | **-0.3** |
| **TILK** | **Tilichiki** | **5.19** | **22** | *eP* | | **Pn** | | **14 34 51.1** | **+1.9** |
| **MJAR** | **Matsushiro Arr** | **25.16** | **230** | P | | **P** | | **14 38 52.4** | **-0.3** |
| | 0.9nm,0.8s,baz=32,slow=8.9,SNR=5.6 | | | | | | | | |
| | 0.9nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.54** | **301** | P | | **P** | | **14 42 00.5** | **-1.5** |
| | 0.4nm,0.3s,baz=57,slow=7.7,SNR=2.6 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.17** | **295** | P | | **P** | | **14 42 05.5** | **-1.6** |
| | 0.3nm,0.3s,baz=51,slow=6.4,SNR=7.3 | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **53.73** | **73** | P | | **P** | | **14 42 51.3** | **+2.2** |
| | 0.6nm,0.7s,baz=300,slow=6.4,SNR=3.7 | | | | | | | | |
| | 0.6nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **58.21** | **337** | P | | **P** | | **14 43 19.8** | **-0.5** |
| | 1.7nm,0.8s,baz=32,slow=8.5,SNR=6.9 | | | | | | | | |
| | 1.7nm,0.8s | | | | | | | | |

*NEIC **13** 14:36:22.7±2.4, 69°.53N±0°.03×144°.60W±0°.07, h10km±1km, Error ellipse: s-maj=6.2km s-min=3.4km az=326.0*
**AEIC 13 14:36:22.8**±1.9,**69°.58N**±0°.02×**144°.60W**±0°.02,**h16**km±4km,
**ML3.3,MLa3.4**/104(NEIC),**Error ellipse: s-maj=2.6km s-min=0.9km az=189.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.32** | **81** | Pg | | Pg | | 14 36 29.3 | -0.1 |
| C27K | | | | IAML | | | | 14 36 36.0 | |
| | comp=E,4μm,0.4s | | | | | | | | |
| C27K | | | | IAML | | | | 14 36 36.0 | |
| | comp=N,3μm,0.6s | | | | | | | | |
| **C26K** | **Camden Bay** | **0.36** | **343** | | | Pb | | 14 36 30.7 | -0.1 |

C26K Sb 14 36 35.8 -0.4
**D25K Kavik River 0.68 248** Pg 14 36 35.2 -0.9
**D25K Kavik River 0.68 248** Sb 14 36 45.5 +0.1
**D25K Kavik River 0.68 248** IAML 14 36 51.0
comp=N,421nm,0.6s
D25K IAML 14 36 51.9
comp=E,362nm,0.6s
**D27M Malcolm River 1.33 103** Pn Pn 14 36 46.6 -0.3
**D27M Malcolm River 1.33 103** Sg 14 37 06.9 +1.2
**D27M Malcolm River 1.33 103** IAML 14 37 11.5
comp=E,417nm,0.6s
D27M IAML 14 37 13.6
comp=N,452nm,0.7s
**C24K Franklin Bluff 1.44 278** Pn 14 36 48.0 -0.3
**C24K Franklin Bluff 1.44 278** Sg 14 37 09.4 +0.2
**C24K Franklin Bluff 1.44 278** IAML 14 37 12.2
comp=N,831nm,0.6s
C24K IAML 14 37 12.2
comp=E,767nm,0.8s
**D24K Happy Valley 1.56 256** Pn 14 36 49.4 -0.5
**D24K Happy Valley 1.56 256** Sg 14 37 15.2 +2.3
**D24K Happy Valley 1.56 256** IAML 14 37 17.1
comp=N,635nm,0.8s
D24K IAML 14 37 18.9
comp=E,654nm,0.7s
**E27K Coleen River 1.77 141** Pn Pb 14 36 54.8 -0.2
**F26K Sheenjek River 1.90 175** Pb 14 36 57.5 +0.3
F26K IAML 14 37 28.4
comp=N,251nm,0.5s
**TOLK Toolik Lake Re 2.02 244** Pn Pb 14 36 58.2 -0.9
TOLK IAML 14 37 31.5
comp=E,275nm,0.8s
**F25K Christian Rive 2.03 191** Pb 14 36 59.0 -0.4
F25K IAML 14 37 31.9
comp=E,312nm,0.9s
F25K IAML 14 37 33.7
comp=N,292nm,0.8s
**E28M Babbage River 2.07 116** Pb 14 36 59.7 -0.3
**E24K Your Creek 2.07 225** Pb 14 36 59.2 -0.8
**C23K Itkillik River 2.11 280** Pn Pb 14 36 59.4 -1.3
**BMAR Burnt Mountain 2.16 180** Pb 14 37 01.1 -0.5
**D23K Nanushuk River 2.25 257** Pn Pb 14 37 02.0 -1.1
D23K IAML 14 37 47.8
comp=E,156nm,1.0s
**E23K Chandalar 2.38 232** Pb 14 37 03.8 -1.4
**F28M Old Crow 2.63 136** Pb 14 37 07.1 -2.4
**F28M Old Crow 2.63 136** IAML 14 37 50.8
comp=E,139nm,0.9s
**G26K Porcupine Rive 2.66 173** Pb 14 37 08.5 -1.5
**E29M Blow River 2.70 113** Pn 14 37 08.0 +2.5
E29M IAML 14 38 07.0
comp=E,108nm,0.7s
**G25K Bearman Lake 2.88 192** Pn 14 37 10.1 +2.0
**D22K Ayikyak River 2.96 260** Pn Pn 14 37 11.2 +2.0
D22K IAML 14 38 09.1
comp=E,150nm,1.1s
**FYU Fort Yukon 3.04 185** Pn Pn 14 37 13.1 +2.9
**G24K Hadweenzic Riv 3.08 202** Pn 14 37 13.4 +2.6
G24K IAML 14 38 06.8
comp=E,121nm,0.9s
**B22K Teshekpuk Lake 3.13 288** Pn Pn 14 37 13.7 +2.2
**COLD Coldfoot 3.14 224** Pn 14 37 14.0 +2.4
**G23K Bananza Creek 3.52 218** Pn 14 37 19.1 +2.2
G23K IAML 14 38 23.6
comp=N,69nm,0.8s
G23K IAML 14 38 25.7
comp=E,74nm,1.0s
**E21K Killik River 3.56 256** Pn Pn 14 37 19.3 +1.9
E21K IAML 14 38 30.0
comp=N,82nm,0.8s
E21K IAML 14 38 30.1
comp=E,60nm,1.1s
**H27K Steamboat Moun 3.56 159** Pn 14 37 20.0 +2.6
**G29M Pine Creek 3.63 134** Pn 14 37 21.0 +2.6
**G29M Pine Creek 3.63 134** IAML 14 38 24.1
comp=E,84nm,1.1s
G29M IAML 14 38 39.5
comp=N,81nm,1.2s
**F30M Barrier River 3.79 117** Pn 14 37 24.3 +3.8
**H24K Noodor Dome 3.96 200** Pn Pn 14 37 24.7 +1.8
H24K IAML 14 38 31.3
comp=E,52nm,0.9s
**F21K Alatna River 4.05 238** Pn Pn 14 37 26.0 +1.9
F21K IAML 14 38 43.9
comp=E,35nm,0.9s
**G30M tAoh Zraii Nji 4.06 126** Pn 14 37 27.4 +3.1
**PRP Porcupine Dome 4.10 185** Pn 14 37 27.6 +2.7
**PRP Porcupine Dome 4.10 185** IAML 14 38 34.5
comp=E,33nm,1.0s
PRP IAML 14 38 40.2
comp=N,38nm,0.7s
**H29M Whitestone 4.12 142** Pn Pn 14 37 27.9 +2.8
H29M IAML 14 38 47.1
comp=E,37nm,0.9s
H29M IAML 14 38 53.5
comp=N,43nm,0.9s
**I27K Kandik River 4.16 163** Pn 14 37 28.6 +2.9
**H23K Yukon River 4.21 209** Pn 14 37 28.8 +2.4
**H23K Yukon River 4.21 209** IAML 14 38 40.4
comp=E,54nm,0.7s
**I26K Coal Creek Min 4.33 172** Pn 14 37 30.3 +2.3
**B20K Meade River 4.38 282** Pn 14 37 30.4 +1.9
**D20K Etivluk River 4.38 264** Pn 14 37 30.3 +1.7
**EPYK Eagle Plains 4.38 134** Pn 14 37 31.3 +2.6
**H22K Ishtalitna Cre 4.51 218** Pn 14 37 32.4 +2.0
**I28M Miner Creek 4.52 154** Pn 14 37 33.2 +2.6
**I28M Miner Creek 4.52 154** IAML 14 39 06.5
comp=E,28nm,1.2s
**F31M Tsiigehtchic 4.53 113** Pn Pn 14 37 31.6 +0.9
F31M IAML 14 38 55.8
comp=E,25nm,1.0s
F31M IAML 14 39 00.5
comp=N,25nm,1.2s
**G21K Allakaket 4.54 232** Pn 14 37 34.5 +3.6
G21K IAML 14 39 03.1
comp=N,29nm,1.2s
G21K IAML 14 39 04.0
comp=E,40nm,1.1s
**G31M Satah River 4.68 120** Pn 14 37 35.3 +2.7
**G31M Satah River 4.68 120** IAML 14 39 00.3
comp=E,30nm,1.4s
G31M IAML 14 39 00.6
comp=N,28nm,1.1s
**I23K Minto, Yukon-K 4.81 205** Pn 14 37 36.6 +2.1
**I23K Minto, Yukon-K 4.81 205** IAML 14 39 07.7
comp=E,31nm,0.8s
**F20K Avaraart Lake 4.84 244** Pn 14 37 37.2 +2.2
**F20K Avaraart Lake 4.84 244** IAML 14 39 15.9
comp=N,21nm,0.8s
**MDM Murphy Dome 4.85 199** Pn 14 37 37.1 +2.0
**MDM Murphy Dome 4.85 199** IAML 14 38 58.2
comp=E,32nm,0.8s
MDM IAML 14 39 09.3
comp=N,29nm,0.8s
**I29M Ogilvie Camp, 4.88 147** Pn 14 37 37.7 +2.2
**D19K Kuna River 4.97 264** Pn 14 37 39.2 +2.4
**EGAK Eagle 5.01 163** Pn Pn 14 37 39.5 +2.3
EGAK IAML 14 39 09.4
comp=N,29nm,1.0s
**H21K Melozitna Rive 5.03 222** Pn 14 37 40.0 +2.4
**H21K Melozitna Rive 5.03 222** IAML 14 39 09.5
comp=N,25nm,1.0s
**E19K Redstone River 5.10 251** Pn 14 37 40.5 +1.9
**E19K Redstone River 5.10 251** IAML 14 41 05.2
comp=N,29nm,0.5s
E19K IAML 14 41 05.8
comp=E,25nm,0.6s
**CCB Clear Creek Bu 5.11 196** Pn 14 37 41.1 +2.4
**J26L Joseph Creek 5.12 175** Pn 14 37 41.5 +2.6
**J26L Joseph Creek 5.12 175** IAML 14 38 44.6
comp=N,19nm,0.6s
J26L IAML 14 39 09.2
comp=E,26nm,0.8s
**MLY Manley 5.15 210** Pn Pn 14 37 41.3 +2.0
MLY IAML 14 39 18.6
comp=N,16nm,1.0s
MLY IAML 14 39 18.9
comp=E,18nm,1.4s
**HDA Harding Lake 5.27 191** Pn 14 37 40.9 -0.1
HDA IAML 14 39 22.7
comp=N,25nm,1.0s
**NEA2 Nenana 5.30 201** Pn 14 37 44.8 +3.5
**WRH Wood River Hil 5.31 197** Pn 14 37 43.6 +2.2
**WRH Wood River Hil 5.31 197** IAML 14 39 12.3
comp=E,18nm,0.9s

| | | | | | | |
|---|---|---|---|---|---|---|
| WRH | | | IAML | | 14 39 14.0 | |
| | comp=N,15nm,1.3s | | | | | |
| **C19K** | **Lookout Ridge** | **5.33 272** | | Pn | 14 37 43.4 | +1.8 |
| **C19K** | **Lookout Ridge** | **5.33 272** | IAML | | 14 38 46.3 | |
| | comp=E,19nm,1.4s | | | | | |
| C19K | | | IAML | | 14 39 37.9 | |
| | comp=N,20nm,1.5s | | | | | |
| **I30M** | **Mount Dempster** | **5.40 140** | | Pn | 14 37 44.9 | +2.1 |
| **F19K** | **Shaleruckik Mo** | **5.62 247** | | Pn | 14 37 47.4 | +1.7 |
| **SCRK** | **Sand Creek** | **5.63 177** | | Pn | 14 37 49.1 | +3.1 |
| **A19K** | **Wainwright** | **5.71 284** | | Pn | 14 37 49.0 | +2.1 |
| **BWN** | **Browne** | **5.76 202** | | Pn | 14 37 52.1 | +4.5 |
| **DAWY** | **Dawson** | **5.91 157** | | Pn | 14 37 52.7 | +3.1 |
| **DOT** | **Dot Lake** | **5.96 178** | | Pn | 14 37 53.4 | +3.0 |
| **J30M** | **Hart River** | **5.97 143** | Pn | Pn | 14 37 53.2 | +2.6 |
| **C18K** | **Utukok River** | **6.00 269** | | Pn | 14 37 52.6 | +1.7 |
| **BPAW** | **Bear Paw Mtn.** | **6.05 208** | | Pn | 14 37 54.0 | +2.5 |
| **E18K** | **Tukpahlearik C** | **6.26 257** | | Pn | 14 37 56.7 | +2.2 |
| **F18K** | **Selawik** | **6.37 249** | | Pn | 14 37 58.0 | +2.1 |
| **K29M** | **Barlow Dome** | **6.40 151** | Pn | Pn | 14 37 59.9 | +3.4 |
| **J20K** | **Nowinta River** | **6.59 219** | | Pn | 14 38 01.3 | +2.4 |
| **L27K** | **Beaver Creek,** | **6.64 169** | Pn | Pn | 14 38 03.9 | +4.2 |
| **C17K** | **DeLong Mountai** | **6.75 269** | | Pn | 14 38 02.0 | +0.8 |
| **A36M** | **Sachs Harbour** | **6.81 60** | Pn | Pn | 14 38 02.6 | +0.6 |
| **L29M** | **L29M** | **7.00 155** | | Pn | 14 38 07.1 | +2.5 |
| **D17K** | **Noatak River** | **7.00 263** | | Pn | 14 38 05.4 | +0.8 |
| **C36M** | **Paulatuk** | **7.22 82** | | Pn | 14 38 08.4 | +1.0 |
| **M29M** | **Somme Creek** | **7.59 158** | | Pn | 14 38 15.5 | +2.7 |
| **N30M** | **Aishikik Lake** | **8.72 156** | Pn | Pn | 14 38 31.3 | +3.0 |

*DJA* ***13*** *14:39:07.8±0.4,6˚S±3˚×13˚1E±˚,h117km±10km,M4.3/12, mb4.3/6,mB4.9/1,MLv4.3/12,Mw(mB)4.2/1*
**ISC 13 14:39:07.8**±1.1,**5˚58S**±0.07×**131˚02E**±0.08,**h100**km,**n17,** σ**0**§**96**/17,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **1.53** | **313** | P | **Pn** | **14 39 35.2** | **+0.8** |
| **BNDI** | **Bandanaira** | **1.53** | **313** | P | **Pn** | **14 39 35.9** | **+1.5** |
| BNDI | | | | S | **Sn** | **14 39 55.1** | **+0.5** |
| **SAUI** | **Saumlaki** | **2.40** | **173** | P | **Pn** | **14 39 47.2** | **+1.5** |
| **FAKI** | **Fak Fak** | **2.92** | **25** | P | **Pn** | **14 39 52.7** | **+0.2** |
| **FAKI** | **Fak Fak** | **2.92** | **25** | P | **Pn** | **14 39 52.3** | **-0.2** |
| **MSAI** | **Masohi** | **3.04** | **317** | P | Pn | 14 39 49.0 | -5.2 |
| **KMPI** | **Kaimana, Papua** | **3.29** | **55** | P | **Pn** | **14 39 57.9** | **+0.4** |
| **NLAI** | **Namlea** | **4.54** | **301** | P | **Pn** | **14 40 13.9** | **-0.5** |
| **SWI** | **Sorong** | **4.69** | **3** | P | **Pn** | **14 40 15.2** | **-1.2** |
| **SANI** | **Sanana** | **6.12** | **305** | P | **Pn** | **14 40 37.3** | **+1.5** |
| **SANI** | **Sanana** | **6.12** | **305** | P | **Pn** | **14 40 34.8** | **-1.0** |
| | 32nm,0.9s,0.2nm | | | | | | |
| **DRS** | **Darwin Rock St** | **6.81** | **181** | P | **Pn** | **14 40 45.1** | **-0.1** |
| **KDU** | **Kakadu** | **7.21** | **169** | P | **Pn** | **14 40 49.3** | **-1.3** |
| **MTN** | **Manton Dam** | **7.22** | **179** | P | **Pn** | **14 40 50.5** | **-0.2** |
| **SOEI** | **Soe** | **7.87** | **238** | P | **Pn** | **14 40 59.7** | **0.0** |
| **COEN** | **Coen** | **14.58** | **126** | P | **Pn** | **14 42 28.5** | **-0.9** |
| **AS01** | **Alice Springs** | **18.20** | **171** | P | **Pn** | **14 43 14.3** | **+0.2** |

*IGIL* ***13*** *14:39:58.7,38˚07N×0˚39W,h7km,ML3.8*
*IDC* ***13*** *14:40:03.3±1.0,38˚32N×1˚05W,h0km,mb3.7/7, mbtmp3.7/13,ML3.7/6,MS3.1/17,Error ellipse: s-maj=18.8km s-min=14.2km az=25.0*
*NEIC* ***13*** *14:40:03.9±0.6,38˚27N±0˚05×1˚04W±0˚03,h10km±2km, mb_Lg4.0/14,Error ellipse: s-maj=9.3km s-min=3.1km az=160.0*
*SFS* ***13*** *14:40:03.1,38˚35N×0˚88W,h0km,mB5.2/5,mb4.9/6, ML4.9/21,ML4.9/21,MLv4.8/21,Mw(mB)4.6/5*
*LDG* ***13*** *14:40:04.6±0.1,38˚25N×0˚92W,h3km,Ml4.2/27,Error ellipse: s-maj=1.6km s-min=1.0km az=138.0*
*MDD* ***13*** *14:40:05.7±0.1,38˚25N×0˚95W,h11km,mb_Lg4.3/82, Error ellipse: s-maj=1.5km s-min=0.8km az=133.0*
*INMG* ***13*** *14:40:05.4±2.0,38˚24N×0˚87W,h18km±3km,ML4.2,Error ellipse: s-maj=2.9km s-min=1.9km az=113.0*
**ISC 13 14:40:04.1**±0.7,**38˚31N**±0˚02×**1˚00W**±0˚02,**h12**km±4km, **n211,**σ**1**§**86**/381,**mb3.8**/9,**MS3.1**/12,**24C-10D,Spain**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETRV** | **Los Montesinos** | **0.34** | **147** | ⇓Pg | **Pg** | **14 40 10.1** | **-0.9** |
| ETRV | | | | Sg | **Sg** | **14 40 15.0** | **-0.7** |
| ETRV | | | | *i* Vmb_Lg | | 14 40 16.3 | |
| **AFON** | **Font Roja** | **0.50** | **45** | ⇓Pg | **Pg** | **14 40 13.5** | **-0.5** |
| AFON | | | | Sg | **Sg** | **14 40 22.5** | **+1.7** |
| AFON | | | | *i* Vmb_Lg | | 14 40 28.4 | |
| **EMUR** | **La Murta** | **0.51** | **202** | Pg | **Pg** | **14 40 13.7** | **-0.3** |
| EMUR | | | | Sg | **Sb** | **14 40 23.3** | **+1.1** |
| **EMUR** | **La Murta** | **0.51** | **202** | ⇓Pg | **Pg** | **14 40 13.3** | **-0.7** |
| EMUR | | | | Sg | **Sb** | **14 40 21.1** | **-1.1** |
| EMUR | | | | *i* Vmb_Lg | | 14 40 26.1 | |
| **ETOB** | **Tobarra** | **0.55** | **308** | ⇑Pg | **Pb** | **14 40 15.8** | **+0.1** |
| ETOB | | | | Sg | **Sn** | **14 40 25.7** | **-1.1** |
| **EZAR** | **Zarzadilla de** | **0.70** | **232** | ⇑Pg | **Pb** | **14 40 17.3** | **-1.0** |
| EZAR | | | | Sg | **Sb** | **14 40 27.8** | **-0.1** |
| EZAR | | | | *i* Vmb_Lg | | 14 40 29.8 | |
| **CART** | **Cartagena** | **0.72** | **180** | | **Pg** | **14 40 17.1** | **-0.9** |
| CART | | | | IAmb_Lg | | 14 40 25.0 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **CART** | **Cartagena** | **0.72** | **180** | Pg | **Pg** | **14 40 17.5** | **-0.6** |
| CART | | | | Sg | **Sg** | **14 40 27.1** | **-0.5** |
| **EBEN2** | **Beniarda presa** | **0.73** | **60** | ⇑Pg | **Pg** | **14 40 17.8** | **-0.5** |
| EBEN2 | | | | Sg | **Sg** | **14 40 29.6** | **+1.7** |
| EBEN2 | | | | *i* Vmb_Lg | | 14 40 33.8 | |
| **TLOR** | **Lorca, Murcia** | **0.85** | **220** | Pg | **Pb** | **14 40 21.0** | **+0.2** |
| TLOR | | | | Sg | **Sn** | **14 40 33.9** | **-0.3** |
| **TLOR** | **Lorca, Murcia** | **0.85** | **220** | ⇑Pg | **Pb** | **14 40 21.1** | **+0.2** |
| TLOR | | | | Sg | **Sn** | **14 40 34.1** | **-0.2** |
| **ELOR** | **Lorca, Murcia** | **0.89** | **222** | Pg | **Pb** | **14 40 21.6** | **+0.1** |
| ELOR | | | | Sg | **Sn** | **14 40 34.3** | **-1.0** |
| ELOR | | | | *i* Vmb_Lg | | 14 40 41.8 | |
| **EVIV** | **Cofrentes, Val** | **0.96** | **354** | Pg | **Pn** | **14 40 24.2** | **+0.8** |
| EVIV | | | | Sg | **Sn** | **14 40 38.3** | **+1.2** |
| EVIV | | | | *i* Vmb_Lg | | 14 40 42.9 | |
| **ECHE** | **Chera** | **1.28** | **1** | ⇓Pg | **Pn** | **14 40 27.5** | **-0.3** |
| ECHE | | | | Pn | **Pg** | **14 40 27.8** | **-0.9** |
| ECHE | | | | Sn | **Sb** | **14 40 46.2** | **+1.7** |
| ECHE | | | | Sg | **Sn** | **14 40 47.4** | **+2.5** |
| ECHE | | | | *i* Vmb_Lg | | 14 40 49.9 | |
| **ENIJ** | **Nijar** | **1.65** | **216** | Pn | **Pn** | **14 40 32.1** | **-0.7** |
| ENIJ | | | | Sg | **Sg** | **14 40 57.0** | **0.0** |
| **ENIJ** | **Nijar** | **1.65** | **216** | Pn | **Pn** | **14 40 32.5** | **-0.2** |
| ENIJ | | | | Pg | **Pn** | **14 40 32.6** | **-0.2** |
| ENIJ | | | | Sg | **Sg** | **14 40 57.8** | **+0.8** |
| ENIJ | | | | *i* Vmb_Lg | | 14 41 00.0 | |
| **E0802** | **Ubeda,Jaen** | **1.90** | **262** | ⇑Pn | **Pb** | **14 40 37.3** | **-1.3** |
| E0802 | | | | Pg | **Pg** | **14 40 41.2** | **+0.8** |
| E0802 | | | | Sg | **Sg** | **14 41 05.7** | **+0.6** |
| **EIBI** | **Ibiza** | **1.97** | **68** | Pn | **Pn** | **14 40 35.6** | **-1.6** |
| EIBI | | | | Sg | **Sn** | **14 41 00.6** | **-1.1** |
| **EIBI** | **Ibiza** | **1.97** | **68** | Pn | **Pn** | **14 40 35.5** | **-1.7** |
| EIBI | | | | Sn | **Sn** | **14 40 58.4** | **-3.4** |
| **EBER** | **Berja** | **2.06** | **227** | Pn | **Pn** | **14 40 38.8** | **+0.1** |
| **EBER** | **Berja** | **2.06** | **227** | Pn | **Pn** | **14 40 38.8** | **+0.1** |
| EBER | | | | Pg | **Pg** | **14 40 43.1** | **-0.5** |
| EBER | | | | Sg | **Sg** | **14 41 13.0** | **+2.6** |
| EBER | | | | *i* Vmb_Lg | | 14 41 27.4 | |
| **EMOS** | **Mosqueruela** | **2.09** | **11** | ⇓Pn | **Pn** | **14 40 39.0** | **-0.1** |
| EMOS | | | | Pg | **Pg** | **14 40 45.2** | **+1.0** |
| EMOS | | | | Sn | **Sn** | **14 41 06.4** | **+1.3** |
| EMOS | | | | Sg | **Sg** | **14 41 12.2** | **+0.8** |
| EMOS | | | | *i* Vmb_Lg | | 14 41 23.7 | |
| **E0901** | **Celadas (Terue** | **2.17** | **357** | ⇓Pn | **Pn** | **14 40 40.4** | **+0.3** |
| E0901 | | | | Pg | **Pg** | **14 40 45.4** | **-0.4** |
| E0901 | | | | Sn | **Sn** | **14 41 08.1** | **+1.1** |
| E0901 | | | | Sg | **Sg** | **14 41 14.6** | **+0.7** |
| E0901 | | | | *i* Vmb_Lg | | 14 41 24.0 | |
| **EQUE** | **Quentar** | **2.23** | **241** | ⇑Pn | **Pb** | **14 40 42.6** | **-1.7** |
| EQUE | | | | Pg | **Pg** | **14 40 45.4** | **-1.4** |
| EQUE | | | | Sn | **Sb** | **14 41 09.6** | **-2.3** |
| EQUE | | | | Sg | **Sg** | **14 41 15.4** | **-0.3** |
| EQUE | | | | *i* Vmb_Lg | | 14 41 18.6 | |
| **EQTA** | **Presa de Quent** | **2.23** | **241** | Pn | **Pb** | **14 40 43.0** | **-1.3** |
| EQTA | | | | Sg | **Sg** | **14 41 15.8** | **0.0** |
| **ELGU** | **Los Guajares,** | **2.54** | **236** | Pn | **Pn** | **14 40 46.2** | **+1.1** |
| ELGU | | | | Sg | **Sg** | **14 41 27.8** | **+2.2** |
| **ELGU** | **Los Guajares,** | **2.54** | **236** | Pn | **Pn** | **14 40 45.4** | **+0.3** |
| ELGU | | | | Pg | **Pg** | **14 40 52.3** | **-0.4** |
| ELGU | | | | Sg | **Sg** | **14 41 26.1** | **+0.5** |
| ELGU | | | | *i* Vmb_Lg | | 14 41 40.1 | |
| **UCM** | **Universidad Co** | **2.65** | **320** | Pg | **Pg** | **14 40 54.1** | **-0.8** |
| UCM | | | | Sg | **Sg** | **14 41 29.7** | **+0.5** |
| **ESBB** | **Sonseca Array** | **2.68** | **301** | | **Pn** | **14 40 47.0** | **-0.1** |
| **ESDC** | **Sonseca Array** | **2.68** | **301** | Pn | **Pn** | **14 40 47.0** | **-0.1** |
| ESDC | | | | IAmb_Lg | | 14 41 36.0 | |
| | comp=Z,900nm,0.9s | | | | | | |
| **ESDC** | **Sonseca Array** | **2.68** | **301** | ⇑Pn | **Pn** | **14 40 47.2** | **+0.1** |
| ESDC | | | | Pg | **Pg** | **14 40 54.1** | **-1.5** |
| ESDC | | | | Sg | **Sg** | **14 41 29.0** | **-1.3** |
| ESDC | | | | *i* Vmb_Lg | | 14 41 35.5 | |
| **ESDC** | **Sonseca Array** | **2.68** | **301** | Pn | **Pn** | **14 40 47.2** | **+0.1** |
| | comp=Z,7.1nm,0.3s,baz=116,slow=14,SNR=205 | | | | | | |
| ESDC | | | | Pg | **Pb** | **14 40 52.8** | **+0.8** |
| | comp=Z,38nm,0.3s,baz=117,slow=16,SNR=62 | | | | | | |
| ESDC | | | | Lg | Lg | 14 41 27.6 | |
| | comp=Z,103nm,0.3s,baz=121,slow=30,SNR=20 | | | | | | |
| | comp=Z,22nm,0.3s | | | | | | |
| **EGOR** | **Sierra Gorda,** | **2.74** | **245** | Pn | **Pn** | **14 40 49.6** | **+1.6** |
| EGOR | | | | Sn | **Sb** | **14 41 25.3** | **-1.5** |
| **EGOR** | **Sierra Gorda,** | **2.74** | **245** | ⇑Pn | **Pn** | **14 40 49.7** | **+1.7** |
| EGOR | | | | Pg | **Pg** | **14 40 54.9** | **-1.8** |
| EGOR | | | | Sn | **Sn** | **14 41 23.1** | **+1.9** |
| EGOR | | | | Sg | **Sg** | **14 41 34.9** | **+2.7** |
| EGOR | | | | *i* Vmb_Lg | | 14 41 54.9 | |
| **EADA** | **Adamuz** | **2.82** | **268** | Pn | **Pn** | **14 40 48.8** | **-0.2** |
| EADA | | | | Sn | **Sn** | **14 41 23.8** | **+0.9** |
| **EADA** | **Adamuz** | **2.82** | **268** | ⇑Pn | **Pn** | **14 40 48.9** | **-0.1** |
| EADA | | | | Pg | **Pg** | **14 40 56.1** | **-2.0** |
| EADA | | | | Sn | **Sn** | **14 41 23.1** | **+0.2** |
| EADA | | | | Sg | **Sg** | **14 41 35.5** | **+0.7** |
| EADA | | | | *i* Vmb_Lg | | 14 41 43.4 | |
| **ERTA** | **Horta de San J** | **2.84** | **21** | ⇓Pn | **Pn** | **14 40 49.3** | **+0.1** |
| ERTA | | | | Sn | **Sn** | **14 41 22.0** | **-1.3** |
| ERTA | | | | Sg | **Sg** | **14 41 34.3** | **-0.9** |
| ERTA | | | | *i* Vmb_Lg | | 14 41 39.1 | |
| **EALB** | **Alboran** | **2.87** | **215** | Pn | **Pn** | **14 40 50.1** | **+0.5** |
| EALB | | | | Pg | **Pg** | **14 40 57.5** | **-1.7** |
| EALB | | | | Sn | **Sn** | **14 41 21.7** | **-2.3** |
| EALB | | | | Sg | **Sg** | **14 41 33.1** | **-3.3** |
| **PAB** | **San Pablo** | **2.89** | **296** | | **Pn** | **14 40 50.0** | **+0.1** |
| PAB | | | | IAmb_Lg | | 14 41 42.1 | |
| | comp=Z,530nm,0.8s | | | | | | |
| **PAB** | **San Pablo** | **2.89** | **296** | ⇑Pn | **Pn** | **14 40 50.0** | **+0.1** |
| PAB | | | | Pg | **Pg** | **14 40 58.5** | **-1.0** |
| PAB | | | | Sg | **Sg** | **14 41 37.6** | **+0.7** |
| PAB | | | | *i* Vmb_Lg | | 14 41 40.9 | |
| **EMAL** | **Malaga-Limoner** | **3.13** | **242** | Pn | **Pn** | **14 40 54.9** | **+1.6** |
| EMAL | | | | Sn | **Sb** | **14 41 35.1** | **-2.7** |
| **ETOS** | **Mallorca** | **3.31** | **63** | Pn | **Pn** | **14 40 54.3** | **-1.3** |
| ETOS | | | | Sn | **Sn** | **14 41 33.4** | **-1.4** |
| **ETOS** | **Mallorca** | **3.31** | **63** | ⇑Pn | **Pn** | **14 40 54.8** | **-0.9** |
| ETOS | | | | Sn | **Sn** | **14 41 33.9** | **-1.0** |
| **GUD** | **Guadarrama** | **3.38** | **315** | ⇓Pn | **Pn** | **14 40 57.0** | **+0.3** |
| GUD | | | | Pg | **Pg** | **14 41 07.5** | **-1.3** |
| GUD | | | | Sn | **Sn** | **14 41 37.3** | **+0.5** |
| GUD | | | | Sg | **Sg** | **14 41 52.7** | **+0.2** |
| GUD | | | | *i* Vmb_Lg | | 14 42 05.1 | |
| **ESAC** | **San Caprasio** | **3.43** | **7** | ⇑Pn | **Pn** | **14 40 54.9** | **-2.5** |
| ESAC | | | | Pg | **Pb** | **14 41 06.3** | **+1.4** |
| ESAC | | | | Sn | **Sn** | **14 41 38.7** | **+0.6** |
| ESAC | | | | Sg | **Sg** | **14 41 52.0** | **-2.4** |
| ESAC | | | | *i* Vmb_Lg | | 14 42 00.2 | |
| **EPOB** | **Poblet** | **3.43** | **27** | ⇓Pn | **Pn** | **14 40 57.6** | **+0.1** |
| EPOB | | | | Sn | **Sn** | **14 41 34.9** | **-3.2** |
| EPOB | | | | Sg | **Sg** | **14 41 54.0** | **-0.4** |
| EPOB | | | | *i* Vmb_Lg | | 14 42 20.7 | |
| **ECAB** | **El Cabril** | **3.49** | **268** | Pn | **Pn** | **14 40 58.0** | **-0.2** |
| ECAB | | | | Sn | **Sn** | **14 41 39.9** | **+0.5** |
| **ECAB** | **El Cabril** | **3.49** | **268** | ⇑Pn | **Pn** | **14 40 57.9** | **-0.3** |
| ECAB | | | | Pg | **Pg** | **14 41 11.9** | **+0.9** |
| ECAB | | | | Sn | **Sn** | **14 41 39.5** | **+0.1** |
| ECAB | | | | Sg | **Sg** | **14 41 57.5** | **+1.2** |
| ECAB | | | | *i* Vmb_Lg | | 14 42 05.2 | |
| **EJIF** | **Jimena Fronter** | **4.02** | **244** | ⇓Pn | **Pn** | **14 41 06.7** | **+1.3** |
| EJIF | | | | Pg | **Pg** | **14 41 21.0** | **0.0** |
| EJIF | | | | Sg | **Sg** | **14 42 11.1** | **-1.9** |
| **ESPR** | **Espera** | **4.12** | **251** | Pn | **Pn** | **14 41 07.5** | **+0.8** |
| ESPR | | | | Sn | **Sn** | **14 41 56.5** | **+1.7** |
| **ESPR** | **Espera** | **4.12** | **251** | ⇑Pn | **Pn** | **14 41 07.6** | **+0.8** |
| ESPR | | | | Pg | **Pg** | **14 41 24.0** | **+1.0** |
| ESPR | | | | Sn | **Sn** | **14 41 57.2** | **+2.3** |
| ESPR | | | | Sg | **Sg** | **14 42 15.2** | **-1.1** |
| ESPR | | | | *i* Vmb_Lg | | 14 42 36.3 | |
| **ECEU** | **Ceuta** | **4.25** | **237** | Pn | **Pn** | **14 41 11.8** | **+3.2** |
| **EPLA** | **Plasencia** | **4.32** | **296** | ⇑Pn | **Pn** | **14 41 09.6** | **0.0** |
| EPLA | | | | Pg | **Pg** | **14 41 24.3** | **-2.5** |
| EPLA | | | | Sg | **Sg** | **14 42 20.7** | **-2.1** |
| EPLA | | | | *i* Vmb_Lg | | 14 42 27.5 | |
| **ECHI** | **Chisagues Biel** | **4.44** | **11** | Pn | **Pn** | **14 41 12.4** | **+1.0** |
| ECHI | | | | Pg | **Pg** | **14 41 29.4** | **+0.2** |
| ECHI | | | | Sg | **Sg** | **14 42 28.7** | **+2.0** |
| ECHI | | | | *i* Vmb_Lg | | 14 42 43.0 | |
| **EARA** | **Aranguren** | **4.48** | **354** | Pn | **Pn** | **14 41 13.6** | **+1.9** |
| EARA | | | | Pg | **Pg** | **14 41 30.2** | **+0.3** |
| EARA | | | | Sg | **Sg** | **14 42 31.0** | **+3.1** |
| EARA | | | | *i* Vmb_Lg | | 14 42 54.4 | |
| **EMIN** | **Mina Concepcio** | **4.51** | **265** | Pn | **Pn** | **14 41 10.9** | **-1.3** |
| EMIN | | | | Sn | **Sn** | **14 42 03.6** | **-0.9** |
| **EMIN** | **Mina Concepcio** | **4.51** | **265** | ⇑Pn | **Pn** | **14 41 11.7** | **-0.5** |
| EMIN | | | | Sn | **Sn** | **14 42 03.1** | **-1.5** |
| EMIN | | | | Sg | **Sg** | **14 42 27.5** | **-1.5** |
| EMIN | | | | *i* Vmb_Lg | | 14 42 39.0 | |
| **EORO** | **Oroz-Betelu** | **4.58** | **357** | ⇑Pn | **Pn** | **14 41 15.1** | **+1.9** |
| EORO | | | | Pg | **Pg** | **14 41 29.8** | **-2.1** |
| EORO | | | | Sg | **Sg** | **14 42 30.2** | **-1.1** |
| EORO | | | | *i* Vmb_Lg | | 14 42 43.2 | |
| **ETSF** | **Etsaut** | **4.60** | **4** | *e*Pn | **Pn** | **14 41 14.2** | **+0.8** |
| ETSF | | | | *e*Sn | **Sn** | **14 42 03.8** | **-2.9** |
| | comp=Z,173nm,0.8s | | | | | | |
| **CEST** | **Esterri de Car** | **4.62** | **21** | | **Pn** | **14 41 14.5** | **+0.8** |
| CEST | | | | IAmb_Lg | | 14 42 37.8 | |
| | comp=Z,96nm,1.1s | | | | | | |
| **EJUZ** | **Juzbado, Salam** | **4.68** | **308** | Pn | **Pn** | **14 41 14.7** | **+0.1** |
| EJUZ | | | | Pg | **Pg** | **14 41 33.3** | **-0.4** |
| EJUZ | | | | Sn | **Sn** | **14 42 07.4** | **-1.5** |
| EJUZ | | | | Sg | **Sg** | **14 42 32.1** | **-2.3** |
| **EBAD** | **Badajoz** | **4.74** | **277** | Pn | **Pn** | **14 41 14.5** | **-0.7** |
| EBAD | | | | Sn | **Sn** | **14 42 11.6** | **+1.4** |
| **EBAD** | **Badajoz** | **4.74** | **277** | ⇑Pn | **Pn** | **14 41 14.6** | **-0.7** |
| EBAD | | | | Pg | **Pg** | **14 41 33.7** | **-1.2** |
| EBAD | | | | Sn | **Sn** | **14 42 10.5** | **+0.4** |
| EBAD | | | | Sg | **Sg** | **14 42 35.2** | **-1.0** |
| EBAD | | | | *i* Vmb_Lg | | 14 42 42.0 | |
| **PBAR** | **Barrancos** | **4.76** | **270** | *e*Pn | **Pn** | **14 41 15.2** | **-0.4** |
| PBAR | | | | *e*Sn | **Sn** | **14 42 10.7** | **+0.1** |
| PBAR | | | | *e*Sg | **Sg** | **14 42 34.8** | **-2.1** |
| PBAR | | | | A | A | 14 42 42.3 | |
| | comp=Z,356nm,0.5s | | | | | | |
| **PBAR** | **Barrancos** | **4.76** | **270** | Pn | **Pn** | **14 41 14.9** | **-0.7** |
| PBAR | | | | Sn | **Sn** | **14 42 10.0** | **-0.6** |
| **SJPF** | **Ste Jean** | **4.80** | **358** | *e*Pn | **Pn** | **14 41 17.4** | **+1.2** |
| SJPF | | | | *e*Sn | **Sn** | **14 42 09.0** | **-2.7** |
| | comp=Z,214nm,0.7s | | | | | | |
| SJPF | | | | *e*Sg | **Sg** | **14 42 35.8** | **-2.4** |
| | comp=Z,214nm,0.7s | | | | | | |
| **EPF** | **Esparros** | **4.82** | **12** | *e*Pn | **Pn** | **14 41 16.9** | **+0.4** |
| EPF | | | | *e*Sn | **Sn** | **14 42 09.9** | **-2.4** |
| | comp=Z,144nm,0.6s | | | | | | |
| EPF | | | | *e*Sg | **Sg** | **14 42 36.5** | **-2.5** |
| | comp=Z,118nm,0.6s | | | | | | |
| **EJON** | **La Jonquera** | **5.09** | **34** | ⇑Pn | **Pn** | **14 41 20.6** | **+0.4** |
| EJON | | | | Sn | **Sn** | **14 42 18.1** | **-0.7** |
| EJON | | | | *i* Vmb_Lg | | 14 43 20.4 | |
| **PMRV** | **Marv??o** | **5.11** | **285** | *e*Pn | **Pn** | **14 41 20.6** | **+0.1** |
| PMRV | | | | *e*Sg | **Sg** | **14 42 51.2** | **+2.9** |
| PMRV | | | | A | A | 14 42 56.2 | |
| | comp=Z,286nm,0.6s | | | | | | |
| **EGRO** | **El Granado** | **5.19** | **263** | Pn | **Pn** | **14 41 20.9** | **-0.5** |
| EGRO | | | | Sn | **Sn** | **14 42 19.9** | **-1.2** |
| **EGRO** | **El Granado** | **5.19** | **263** | ⇑Pn | **Pn** | **14 41 20.8** | **-0.7** |
| EGRO | | | | Sn | **Sn** | **14 42 18.7** | **-2.4** |
| EGRO | | | | Sg | **Sg** | **14 42 46.8** | **-3.7** |
| EGRO | | | | *i* Vmb_Lg | | 14 43 01.2 | |
| **PESTR** | **Estremoz** | **5.20** | **278** | | **Pn** | **14 41 20.8** | **-0.8** |
| **PESTR** | **Estremoz** | **5.20** | **278** | *e*Pn | **Pn** | **14 41 21.5** | **-0.1** |
| PESTR | | | | *e*Sn | **Sn** | **14 42 21.9** | **+0.5** |
| PESTR | | | | *e*Sg | **Sg** | **14 42 52.0** | **+1.1** |
| PESTR | | | | A | A | 14 42 55.4 | |
| | comp=Z,242nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **5.20** | **278** | Pn | **Pn** | **14 41 20.3** | **-1.4** |
| PESTR | | | | Sn | **Sn** | **14 42 21.6** | **+0.1** |
| **ELAN** | **Lanestosa** | **5.25** | **340** | ⇑Pn | **Pn** | **14 41 23.8** | **+1.4** |
| ELAN | | | | Sn | **Sn** | **14 42 23.1** | **+0.2** |
| ELAN | | | | Sg | **Sg** | **14 42 50.9** | **-1.8** |
| ELAN | | | | *i* Vmb_Lg | | 14 43 16.3 | |
| **PCBR** | **Castelo Branco** | **5.27** | **289** | *e*Pn | **Pn** | **14 41 22.5** | **-0.1** |
| PCBR | | | | *e*Sn | **Sn** | **14 42 24.5** | **+1.3** |
| PCBR | | | | *e*Sg | **Sg** | **14 42 55.9** | **+2.7** |
| PCBR | | | | A | A | 14 42 59.5 | |
| | comp=Z,182nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **5.39** | **262** | | **Pn** | **14 41 23.5** | **-0.8** |
| PVAQ | | | | IAmb_Lg | | 14 43 02.2 | |
| | comp=Z,213nm,1.0s | | | | | | |
| **PVAQ** | **Vaqueiros** | **5.39** | **262** | *e*Pn | **Pn** | **14 41 23.7** | **-0.6** |
| PVAQ | | | | *e*Sn | **Sn** | **14 42 25.5** | **-0.8** |
| PVAQ | | | | *e*Sg | **Sg** | **14 42 57.4** | **+0.2** |
| PVAQ | | | | A | A | 14 43 09.2 | |
| | comp=Z,142nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **5.39** | **262** | Sn | **Sn** | **14 42 23.5** | **-2.8** |
| PVAQ | | | | Pn | **Pn** | **14 41 23.8** | **-0.5** |
| **PBEJ** | **Beja** | **5.42** | **269** | *e*Pn | **Pn** | **14 41 25.8** | **+1.1** |
| PBEJ | | | | *e*Sn | **Sn** | **14 42 27.0** | **0.0** |
| PBEJ | | | | *e*Sg | **Sg** | **14 42 58.5** | **+0.4** |
| PBEJ | | | | A | A | 14 43 09.8 | |
| | comp=Z,117nm,0.5s | | | | | | |
| **MVO** | **Moncorvo** | **5.45** | **303** | *e*Pn | **Pn** | **14 41 25.2** | **0.0** |
| MVO | | | | *e*Sn | **Sn** | **14 42 28.5** | **+0.6** |
| MVO | | | | *e*Sg | **Sg** | **14 43 01.8** | **+2.7** |
| MVO | | | | A | A | 14 43 11.7 | |
| | comp=Z,286nm,0.7s | | | | | | |
| **MTE** | **Manteigas** | **5.49** | **294** | Pn | **Pn** | **14 41 25.4** | **-0.3** |
| MTE | | | | IAmb_Lg | | 14 43 06.7 | |
| | comp=Z,348nm,0.8s | | | | | | |
| **MTE** | **Manteigas** | **5.49** | **294** | *e*Pn | **Pn** | **14 41 26.9** | **+1.3** |
| MTE | | | | *e*Sg | **Sg** | **14 43 00.2** | **0.0** |
| MTE | | | | A | A | 14 43 20.3 | |
| | comp=Z,308nm,0.6s | | | | | | |
| **EVO** | **Evora** | **5.51** | **274** | *e*Sn | **Sn** | **14 42 28.9** | **-0.4** |
| EVO | | | | *e*Sg | **Sg** | **14 43 02.7** | **+1.6** |
| EVO | | | | A | A | 14 43 14.2 | |
| | comp=Z,140nm,0.5s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **5.59** | **261** | *e*Pn | **Pn** | **14 41 26.7** | **-0.4** |
| PBDV | | | | *e*Sn | **Sn** | **14 42 30.9** | **-0.4** |
| PBDV | | | | *e*Sg | **Sg** | **14 43 03.8** | **+0.1** |
| PBDV | | | | A | A | 14 43 09.5 | |
| | comp=Z,160nm,0.6s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **5.59** | **261** | Sn | **Sn** | **14 42 29.9** | **-1.4** |
| PBDV | | | | Pn | **Pn** | **14 41 26.7** | **-0.4** |
| **PCVE** | **Castro Verde** | **5.61** | **265** | *e*Pn | **Pn** | **14 41 27.1** | **-0.1** |
| PCVE | | | | *e*Sn | **Sn** | **14 42 30.9** | **-0.6** |
| PCVE | | | | *e*Sg | **Sg** | **14 43 04.4** | **+0.4** |
| PCVE | | | | A | A | 14 43 21.1 | |
| | comp=Z,132nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **5.61** | **265** | Sn | **Sn** | **14 42 29.3** | **-2.2** |
| PCVE | | | | Pn | **Pn** | **14 41 26.4** | **-0.8** |
| **PBRG** | **Braganca** | **5.62** | **310** | *e*Pn | **Pn** | **14 41 27.7** | **+0.2** |
| PBRG | | | | *e*Sn | **Sn** | **14 42 32.5** | **+0.5** |
| PBRG | | | | *e*Sg | **Sg** | **14 43 06.5** | **+2.0** |
| PBRG | | | | A | A | 14 43 10.4 | |
| | comp=Z,230nm,0.6s | | | | | | |
| **ECAL** | **Calabor** | **5.70** | **311** | Sn | **Sn** | **14 42 31.2** | **-2.8** |
| ECAL | | | | Pn | **Pn** | **14 41 28.6** | **0.0** |
| **ECAL** | **Calabor** | **5.70** | **311** | ⇑Pn | **Pn** | **14 41 28.8** | **+0.2** |
| ECAL | | | | Pg | **Pg** | **14 41 54.0** | **+0.7** |
| ECAL | | | | Sn | **Sn** | **14 42 32.0** | **-1.9** |
| ECAL | | | | Sg | **Sg** | **14 43 04.8** | **-2.3** |
| ECAL | | | | *i* Vmb_Lg | | 14 43 19.8 | |
| **PMTG** | **Montargil** | **5.71** | **280** | *e*Pn | **Pn** | **14 41 29.7** | **+1.1** |
| PMTG | | | | *e*Sn | **Sn** | **14 42 34.3** | **+0.3** |
| PMTG | | | | *e*Sg | **Sg** | **14 43 09.1** | **+1.9** |
| PMTG | | | | A | A | 14 43 18.4 | |
| | comp=Z,298nm,0.6s | | | | | | |
| **MESJ**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ELOB | | | | *i* Vmb_Lg | | | 14 43 42.4 | |
| **PMAFR** | **Mafra** | **6.52** | **278** | *e*Pn | | **Pn** | **14 41 39.8** | **0.0** |
| PMAFR | | | | *e*Sn | | **Sn** | **14 42 55.2** | **+1.2** |
| PMAFR | | | | *e*Sg | | **Sg** | **14 43 33.4** | **+0.1** |
| PMAFR | | | | A | | A | 14 43 57.4 | |
| | comp=Z,208nm,0.8s | | | | | | | |
| **PMAFR** | **Mafra** | **6.52** | **278** | Sn | | **Sn** | **14 42 52.4** | **-1.6** |
| PMAFR | | | | Pn | | **Pn** | **14 41 39.3** | **-0.5** |
| **PGAV** | **Gavieira, Arco** | **6.66** | **306** | *e*Pn | | **Pn** | **14 41 41.8** | **0.0** |
| PGAV | | | | *e*Sg | | **Sg** | **14 43 38.5** | **+0.7** |
| PGAV | | | | A | | A | 14 43 48.6 | |
| | comp=Z,218nm,0.7s | | | | | | | |
| **LFF** | **La Frestale** | **6.75** | **11** | *e*Pn | | **Pn** | **14 41 42.6** | **-0.3** |
| LFF | | | | *e*Sn | | **Sn** | **14 42 55.5** | **-4.2** |
| | comp=Z,315nm,1.2s | | | | | | | |
| LFF | | | | *e*Sg | | **Sg** | **14 43 37.4** | **-3.3** |
| | comp=Z,315nm,1.2s | | | | | | | |
| **LASF** | **Ste Croix** | **6.82** | **31** | *e*Pn | | **Pn** | **14 41 44.5** | **+0.5** |
| LASF | | | | *e*Sn | | **Sn** | **14 42 57.6** | **-3.9** |
| | comp=Z,100nm,1.0s | | | | | | | |
| **EPON** | **Pontenova** | **6.85** | **319** | Pn | | **Pn** | **14 41 45.0** | **+0.8** |
| EPON | | | | Sn | | **Sn** | **14 42 58.9** | **-3.1** |
| EPON | | | | Sg | | **Sg** | **14 43 40.6** | **-3.1** |
| EPON | | | | *i* Vmb_Lg | | | 14 44 00.3 | |
| **CAF** | **Calviac** | **7.00** | **18** | *e*Pn | | **Pn** | **14 41 46.2** | **-0.1** |
| CAF | | | | *e*Sn | | **Sn** | **14 43 00.7** | **-5.1** |
| | comp=Z,127nm,1.1s | | | | | | | |
| CAF | | | | *e*Sg | | **Sg** | **14 43 43.7** | **-4.8** |
| | comp=Z,162nm,1.2s | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **7.02** | **312** | ⇑Pn | | **Pn** | **14 41 46.9** | **+0.3** |
| EAGO | | | | Sg | | **Sg** | **14 43 45.7** | **-3.6** |
| EAGO | | | | *i* Vmb_Lg | | | 14 44 02.5 | |
| **EZAM** | **Zamans** | **7.03** | **305** | Pn | | **Pn** | **14 41 46.7** | **0.0** |
| EZAM | | | | Sn | | **Sn** | **14 43 02.5** | **-4.0** |
| EZAM | | | | Sg | | **Sg** | **14 43 51.3** | **+1.7** |
| EZAM | | | | *i* Vmb_Lg | | | 14 43 58.4 | |
| **RJF** | **Les Rejaudoux** | **7.24** | **14** | *e*Pn | | **Pn** | **14 41 49.2** | **-0.4** |
| RJF | | | | *e*Sn | | **Sn** | **14 43 06.8** | **-4.9** |
| | comp=Z,136nm,1.1s | | | | | | | |
| **SMRF** | **Simiane la Rot** | **7.52** | **39** | *e*Pn | | **Pn** | **14 41 53.7** | **+0.1** |
| **LMR** | **La Mourre** | **7.59** | **46** | *e*Pn | | **Pn** | **14 41 54.4** | **0.0** |
| LMR | | | | *e*Sn | | Sn | 14 43 13.9 | -6.3 |
| | comp=Z,27nm,0.7s | | | | | | | |
| **EMAZ** | **Mazaricos** | **7.63** | **310** | ⇑Pn | | **Pn** | **14 41 55.2** | **+0.1** |
| EMAZ | | | | Sn | | **Sn** | **14 43 16.0** | **-5.5** |
| EMAZ | | | | Sg | | **Sg** | **14 44 07.6** | **-1.4** |
| EMAZ | | | | *i* Vmb_Lg | | | 14 44 23.6 | |
| **VIVF** | **Saint-Julien-l** | **7.80** | **31** | *e*Pn | | **Pn** | **14 41 56.9** | **-0.4** |
| VIVF | | | | *e*Sn | | **Sn** | **14 43 19.7** | **-5.8** |
| | comp=Z,76nm,1.1s | | | | | | | |
| **SSB** | **Saint Sauveur** | **8.10** | **29** | Pn | | **Pn** | **14 42 00.8** | **-0.6** |
| **VSL** | **Villasalto** | **8.18** | **78** | Pn | | **Pn** | **14 42 02.7** | **+0.2** |
| **VSL** | **Villasalto** | **8.18** | **78** | Pn | | **Pn** | **14 42 03.4** | **+0.9** |
| VSL | | | | Sn | | **Sn** | **14 43 29.4** | **-5.4** |
| **MFF** | **Saint Martin d** | **8.31** | **4** | *e*Pn | | **Pn** | **14 42 03.5** | **-0.8** |
| MFF | | | | *e*Sn | | **Sn** | **14 43 32.0** | **-6.0** |
| | comp=Z,19nm,0.8s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **8.32** | **16** | *e*Pn | | **Pn** | **14 42 03.2** | **-1.3** |
| TCF | | | | *e*Sn | | **Sn** | **14 43 32.6** | **-5.7** |
| | comp=Z,92nm,1.2s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **8.37** | **36** | *e*Pn | | **Pn** | **14 42 04.5** | **-0.8** |
| **SBF** | **Sospel** | **8.44** | **46** | *e*Pn | | **Pn** | **14 42 05.5** | **-0.7** |
| SBF | | | | *e*Sn | | Sn | 14 43 35.1 | -6.3 |
| | comp=Z,27nm,0.6s | | | | | | | |
| **DGI** | **Dorgali Grotta** | **8.46** | **73** | Pn | | **Pn** | **14 42 07.2** | **+0.8** |
| DGI | | | | Sn | | **Sn** | **14 43 38.3** | **-3.5** |
| **MBDF** | **Montbardon** | **8.66** | **40** | *e*Pn | | **Pn** | **14 42 08.1** | **-1.2** |
| **KEST** | **Kesra** | **8.66** | **104** | | | **Pn** | **14 42 11.4** | **+2.2** |
| **KEST** | **Kesra** | **8.66** | **104** | Pn | | **Pn** | **14 42 11.9** | **+2.7** |
| | comp=Z,0.7nm,0.3s,baz=263,slow=5.6,SNR=17 | | | | | | | |
| KEST | | | | Sn | | **Sn** | **14 43 44.6** | **-2.3** |
| | comp=Z,1.2nm,0.3s,baz=108,slow=20,SNR=1.8 | | | | | | | |
| KEST | | | | LR | | LR | 14 45 19.8 | |
| | comp=Z,98nm,20.2s,baz=256,slow=36 | | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **BGF** | **Bois d'Agland** | **8.72** | **18** | *e*Pn | | **Pn** | **14 42 09.1** | **-0.8** |
| **PGF** | **Pioggiola** | **8.72** | **58** | *e*Pn | | **Pn** | **14 42 09.2** | **-0.8** |
| PGF | | | | *e*Sn | | Sn | 14 43 40.3 | -8.0 |
| **AVF** | **Avril sur Loir** | **9.06** | **19** | *e*Pn | | **Pn** | **14 42 13.6** | **-1.0** |
| AVF | | | | *e*Sn | | **Sn** | **14 43 50.0** | **-6.5** |
| | comp=Z,62nm,1.1s | | | | | | | |
| AVF | | | | *e*Sg | | | 14 44 48.4 | |
| | comp=Z,62nm,1.1s | | | | | | | |
| **SMF** | **Signal de Mont** | **9.06** | **22** | *e*Pn | | **Pn** | **14 42 14.6** | **0.0** |
| SMF | | | | *e*Sg | | Sn | 14 44 48.5 | +52 |
| | comp=Z,133nm,1.6s | | | | | | | |
| **LPL** | **La Plagne** | **9.22** | **36** | *e*Pn | | **Pn** | **14 42 16.4** | **-0.6** |
| **SSF** | **Saint Saulge** | **9.35** | **19** | *e*Pn | | **Pn** | **14 42 17.8** | **-0.8** |
| **PCP** | **Piancastagn** | **9.49** | **46** | Pn | | **Pn** | **14 42 22.4** | **+1.9** |
| PCP | | | | Sn | | **Sn** | **14 44 05.5** | **-1.5** |
| **QUIF** | **Quistinic** | **9.73** | **351** | *e*Pn | | **Pn** | **14 42 23.8** | **0.0** |
| QUIF | | | | *e*Sn | | **Sn** | **14 44 06.8** | **-6.1** |
| | comp=Z,38nm,1.0s | | | | | | | |
| **CABF** | **La Chapelle** | **9.80** | **30** | *e*Pn | | **Pn** | **14 42 24.2** | **-0.7** |
| CABF | | | | *e*Sg | | Sn | 14 45 10.9 | +56 |
| | comp=Z,124nm,1.3s | | | | | | | |
| **CLF** | **Chambon-Foret** | **10.00** | **13** | Pn | | **Pn** | **14 42 27.9** | **+0.5** |
| **CLF** | **Chambon-Foret** | **10.00** | **13** | Pn | | **Pn** | **14 42 28.6** | **+1.2** |
| **SGMF** | **Saint Gilles** | **10.01** | **354** | *e*Pn | | **Pn** | **14 42 27.8** | **+0.3** |
| **CASP** | **Castiglione de** | **10.07** | **60** | Pn | | **Pn** | **14 42 29.3** | **+0.8** |
| **GRR** | **Gorron** | **10.07** | **1** | *e*Pn | | **Pn** | **14 42 27.3** | **-1.2** |
| GRR | | | | *e*Sn | | **Sn** | **14 44 14.5** | **-6.8** |
| | comp=Z,21nm,0.8s | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **10.12** | **35** | Pn | | **Pn** | **14 42 28.8** | **-0.5** |
| **SENIN** | **Lac Senin/Sane** | **10.12** | **35** | Pn | | **Pn** | **14 42 31.9** | **+2.6** |
| **ROSF** | **Rostrenen** | **10.16** | **351** | *e*Sn | | **Sn** | **14 44 16.9** | **-6.5** |
| | comp=Z,9.2nm,0.6s | | | | | | | |
| **BRANT** | **Les Verrieres** | **10.22** | **30** | Pn | | **Pn** | **14 42 30.7** | **+0.1** |
| **LDF** | **La Druitiere** | **10.30** | **3** | *e*Pn | | **Pn** | **14 42 31.1** | **-0.5** |
| LDF | | | | *e*Sn | | **Sn** | **14 44 20.1** | **-6.8** |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| **VLC** | **Villacollemand** | **10.37** | **52** | Pn | | **Pn** | **14 42 33.8** | **+1.2** |
| **FLN** | **La Foliniere** baz=189 | **10.46** | **2** | *e*Pn | | **Pn** | **14 42 32.9** | **-0.8** |
| FLN | | | | *e*Sn | | **Sn** | **14 44 24.1** | **-6.6** |
| | comp=Z,0.9nm,0.2s | | | | | | | |
| **FIESA** | **Fiescheralp** | **10.54** | **37** | Pn | | **Pn** | **14 42 35.1** | **0.0** |
| **DAVOX** | **Davos/Dischmat** | **11.65** | **40** | Pn | | **Pn** | **14 42 52.1** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=280,slow=12,SNR=2.2 | | | | | | | |
| DAVOX | | | | LR | | LR | 14 47 13.0 | |
| | comp=Z,94nm,19.9s,baz=265,slow=37 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **DAVA** | **Damuels** | **12.00** | **38** | *e*Pn | | **Pn** | **14 42 59.4** | **+4.4** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **12.25** | **41** | *e*Pn | | Pn | 14 43 03.8 | +5.5 |
| | comp=Z,5.8nm,1.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **12.62** | **41** | *e*Pn | | Pn | 14 43 09.2 | +5.7 |
| | comp=Z,10nm,1.4s | | | | | | | |
| **MOTA** | **Moosalm** | **12.65** | **41** | *i* Pn | | **Pn** | **14 43 08.6** | **+4.7** |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **12.88** | **42** | *i* Pn | | Pn | 14 43 13.0 | +6.1 |
| | comp=Z,16nm,1.5s | | | | | | | |
| **WATA** | **Walderalm** | **12.89** | **42** | *e*Pn | | Pn | 14 43 12.3 | +5.2 |
| | comp=Z,1.8nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **13.04** | **45** | *e*Pn | | **Pn** | **14 43 13.3** | **+4.2** |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| **LESA** | **Schwarzleotal** | **13.53** | **43** | *e*Pn | | Pn | 14 43 21.0 | +5.2 |
| | comp=Z,6.2nm,1.5s | | | | | | | |
| **MYKA** | **Terra Mystica** | **13.62** | **48** | *e*Pn | | Pn | 14 43 23.1 | +6.1 |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **13.70** | **46** | *e*Pn | | **P** | **14 43 25.1** | **-1.8** |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| **OBKA** | **Obir** | **14.09** | **49** | *i* Pn | | **P** | **14 43 32.1** | **+0.8** |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **SOKA** | **Soboth** | **14.46** | **50** | *e*Pn | | **P** | **14 43 35.7** | **+0.3** |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| **GERES** | **GERESS Array B** | **14.95** | **41** | Pn | | **Pn** | **14 43 36.7** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=212,slow=13,SNR=2.0 | | | | | | | |
| GERES | | | | LR | | LR | 14 49 33.3 | |
| | comp=Z,33nm,18.0s,baz=230,slow=38 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **KHC** | **Kasperske Hory** | **15.07** | **39** | *e*P | | **P** | **14 43 44.9** | **+2.8** |
| KHC | | | | AMS | | AMS | 14 50 10.0 | |
| | comp=Z,300nm,12.6s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **15.25** | **42** | AMS | | AMS | 14 50 30.0 | |
| | comp=Z,300nm,13.6s | | | | | | | |
| **ZVC** | **Zvikov** | **15.58** | **40** | AMS | | AMS | 14 50 30.0 | |
| | comp=Z,300nm,15.9s | | | | | | | |
| **CONA** | **Conrad Observa** | **15.59** | **47** | *e*Pn | | **Pn** | **14 43 45.4** | **+1.8** |
| | comp=Z,2.7nm,1.4s | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **16.00** | **35** | AMS | | AMS | 14 50 40.0 | |
| | comp=Z,300nm,9.8s | | | | | | | |
| **PRU** | **Pruhonice** | **16.11** | **39** | AMS | | AMS | 14 50 50.0 | |
| | comp=Z,200nm,13.2s | | | | | | | |
| **TREC** | **Trest** | **16.15** | **42** | AMS | | AMS | 14 51 00.0 | |
| | comp=Z,300nm,12.6s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **16.18** | **39** | AMS | | AMS | 14 51 00.0 | |
| | comp=Z,200nm,12.9s | | | | | | | |
| **CLL** | **Collm** | **16.32** | **33** | *e*PP | | **P** | **14 44 00.0** | **+4.2** |
| **BRG** | **Berggiesshubel** | **16.42** | **35** | *e*P | | **P** | **14 44 01.5** | **+4.5** |
| BRG | | | | Amp | | | 14 44 02.3 | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| **PVCC** | **Panska Ves** | **16.48** | **37** | AMS | | AMS | 14 51 30.0 | |
| | comp=Z,200nm,9.4s | | | | | | | |
| **VRAC** | **Vranov** | **16.75** | **43** | LR | | LR | 14 50 23.4 | |
| | comp=Z,51nm,20.1s,baz=229,slow=37 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **17.09** | **356** | P | | **Pn** | **14 44 02.3** | **-0.4** |
| | baz=174,slow=14 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **UPC** | **Upice** | **17.16** | **39** | AMS | | AMS | 14 51 30.0 | |
| | comp=Z,200nm,12.6s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **17.22** | **40** | AMS | | AMS | 14 51 40.0 | |
| | comp=Z,200nm,13.1s | | | | | | | |
| **KRLC** | **Kraliky** | **17.29** | **41** | AMS | | AMS | 14 51 50.0 | |
| | comp=Z,200nm,11.4s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **17.89** | **44** | AMS | | AMS | 14 52 10.0 | |
| | comp=Z,300nm,16.5s | | | | | | | |
| **HFS** | **Hagfors** | **23.75** | **18** | P | | **P** | **14 45 16.1** | **+0.1** |
| | comp=Z,2.7nm,1.0s,baz=201,slow=7.7,SNR=3.2 | | | | | | | |
| HFS | | | | LR | | LR | 14 54 28.8 | |
| | comp=Z,11nm,19.7s,baz=210,slow=36 | | | | | | | |
| | comp=Z,2.7nm,1.0s | | | | | | | |
| **NOA** | **NORSAR Array B** | **24.00** | **15** | P | | **P** | **14 45 19.2** | **+0.8** |
| | comp=Z,0.8nm,0.8s,baz=206,slow=8.8,SNR=5.1 | | | | | | | |
| NOA | | | | LR | | LR | 14 54 42.4 | |
| | comp=Z,28nm,20.9s,baz=205,slow=37 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **NACGM** | **Naroch** | **25.05** | **39** | *e*P | | P | 14 45 18.5 | -9.4 |
| | comp=N,417nm,0.8s,baz=240 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **25.17** | **174** | P | | **P** | **14 45 30.3** | **+1.0** |
| | comp=N,2.5nm,0.9s,baz=360,slow=9.8,SNR=9.4 | | | | | | | |
| TORD | | | | LR | | LR | 14 55 42.1 | |
| | comp=N,68nm,18.4s,baz=56,slow=37 | | | | | | | |
| | comp=N,2.5nm,0.9s | | | | | | | |
| **BRTR** | **Keskin Array B** | **26.85** | **76** | LR | | LR | 14 56 58.8 | |
| | comp=N,31nm,18.9s,baz=289,slow=38 | | | | | | | |
| **BORG** | **Borgarnes** | **29.06** | **342** | LR | | LR | 14 57 17.7 | |
| | comp=N,32nm,18.2s,baz=156,slow=36 | | | | | | | |
| **DBIC** | **Dimbokro** | **31.69** | **187** | LR | | LR | 14 59 59.9 | |
| | comp=N,64nm,18.3s,baz=23,slow=38 | | | | | | | |
| **JMIC** | **Jan Mayen** | **32.98** | **355** | LR | | LR | 15 00 24.0 | |
| | comp=N,37nm,18.2s,baz=286,slow=37 | | | | | | | |
| **KBZ** | **Khabaz** | **33.26** | **66** | LR | | LR | 15 01 48.7 | |
| | comp=N,22nm,18.2s,baz=103,slow=39 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.36** | **16** | LR | | LR | 15 01 46.0 | |
| | comp=N,50nm,18.4s,baz=203,slow=38 | | | | | | | |
| **KIRV** | **Kirov** | **37.96** | **41** | LR | | LR | 15 03 42.1 | |
| | comp=N,32nm,18.1s,baz=290,slow=37 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.46** | **49** | P | | **P** | **14 49 39.6** | **+1.3** |
| | comp=N,0.7nm,0.6s,baz=290,slow=7.9,SNR=7.2 | | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.87** | **44** | P | | **P** | **14 49 57.3** | **+1.9** |
| | comp=N,0.6nm,0.6s,baz=305,slow=8.6,SNR=2.4 | | | | | | | |
| ZALV | | | | LR | | LR | 15 17 49.5 | |
| | comp=N,28nm,18.5s,baz=66,slow=39 | | | | | | | |
| | comp=N,0.6nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.22** | **53** | P | | **P** | **14 50 06.1** | **+1.1** |
| | comp=N,0.8nm,0.9s,baz=306,slow=2.9,SNR=4.4 | | | | | | | |
| | comp=N,0.8nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **76.51** | **314** | P | | **P** | **14 51 55.0** | **+0.8** |
| | comp=N,0.2nm,0.4s,baz=78,slow=5.0,SNR=3.1 | | | | | | | |
| | comp=N,0.2nm,0.4s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **80.02** | **45** | *e*P | | **P** | **14 52 11.8** | **-1.7** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,130nm,4.9s | | | | | | | |
| **PZH** | **PanZhiHua** | **83.19** | **62** | P | | **P** | **14 52 30.3** | **-0.2** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,180nm,4.6s | | | | | | | |
| **KSRS** | **Korea Array** | **91.12** | **38** | LR | | LR | 15 39 34.6 | |
| | comp=Z,15nm,19.4s,baz=110,slow=39 | | | | | | | |

*IDC **13** 15:05:59.7±1.0,51.50N×177.30W,h0km,mb3.6/5, mbtmp3.8/6,ML4.1/1,Error ellipse: s-maj=44.4km s-min=23.6km az=161.0*
*AEIC **13** 15:06:09.8±1.4,51.58N±0.09×177.07W±0.06,h72km±5km, ML3.5,mb4.2/4(NEIC),Error ellipse: s-maj=13.8km s-min=4.8km az=167.0*
*NEIC **13** 15:06:10.7±0.9,51.8N±0.2×177.10W±0.07,h74km±4km, Error ellipse: s-maj=25.4km s-min=3.0km az=167.0*

**ISC 13 15:06:09.7±1.1,51.6N±0.2×177.06W±0.05,h75km±7km, n35,σ0°81/37,mb3.5/5,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIMD** | **Kanaga Island** | **0.18** | **324** | | **Pn** | **15 06 21.1** | **+0.2** |
| KIMD | | | | | **Sn** | **15 06 29.2** | **+0.1** |
| **KIWB** | **Kanaga Island** | **0.25** | **347** | Pn | **Pn** | **15 06 21.3** | **+0.1** |
| **KIRH** | **Kanaga Island** | **0.29** | **356** | | **Pn** | **15 06 21.8** | **+0.4** |
| **KICM** | **Kanaga Island** | **0.32** | **345** | | **Pn** | **15 06 22.1** | **+0.6** |
| KICM | | | | | **Sn** | **15 06 31.0** | **+0.7** |
| **ADK** | **Adak** | **0.36** | **41** | | **Pn** | **15 06 21.8** | **0.0** |
| ADK | | | | Sn | **Sn** | **15 06 30.3** | **-0.4** |
| **TASE** | **Tanaga Southea** | **0.65** | **291** | | **Pn** | **15 06 25.2** | **+0.8** |
| TASE | | | | | **Sn** | **15 06 35.6** | **+0.2** |
| **GSCK** | **Great Sitkin C** | **0.69** | **54** | | **Pn** | **15 06 25.3** | **+0.5** |
| **GSTD** | **Great Sitkin T** | **0.72** | **52** | | **Pn** | **15 06 25.7** | **+0.4** |
| GSTD | | | | | **Sn** | **15 06 36.7** | **-0.1** |
| **TANO** | **Tanaga North** | **0.72** | **295** | | **Pn** | **15 06 26.1** | **+0.9** |
| **GSMY** | **Great Sitkin M** | **0.76** | **55** | | **Pn** | **15 06 26.0** | **+0.4** |
| **GSTR** | **Great Sitkin T** | **0.79** | **52** | | **Pn** | **15 06 25.9** | **-0.1** |
| **GAEA** | **Gareloi East** | **1.06** | **280** | | **Pn** | **15 06 30.0** | **+0.8** |
| **GANE** | **Gareloi Northe** | **1.09** | **282** | | **Pn** | **15 06 30.2** | **+0.7** |
| **GANO** | **Gareloi North** | **1.10** | **282** | | **Pn** | **15 06 30.4** | **+0.6** |
| **KOKL** | **Mount Kliuchef** | **1.91** | **67** | | **Pn** | **15 06 41.5** | **+1.3** |
| **KOFP** | **Korovin Flat P** | **1.95** | **69** | | **Pn** | **15 06 42.2** | **+1.4** |
| **AMKA** | **Amchitka** | **2.29** | **266** | Pn | **Pn** | **15 06 45.3** | **+0.1** |
| **M16K** | **Timber Creek** | **13.72** | **40** | P | **P** | **15 09 26.1** | **-0.7** |
| **L16K** | **Owhat River** | **13.94** | **37** | P | **P** | **15 09 28.1** | **-1.0** |
| **J16K** | **Anvik River** | **14.61** | **31** | P | **P** | **15 09 36.4** | **-0.1** |
| **OHAK** | **Old Harbor** | **14.89** | **59** | Pn | **Pn** | **15 09 35.9** | **+0.1** |
| **KDAK** | **Kodiak Island** | **15.39** | **57** | Pn | **Pn** | **15 09 41.5** | **-0.5** |
| **KDAK** | **Kodiak Island** | **15.39** | **57** | Pn | **Pn** | **15 09 40.2** | **-1.8** |
| | 0.8nm,0.3s,baz=334,slow=1.4,SNR=17 | | | | | | |
| | 11nm,1.1s | | | | | | |
| **H18K** | **Honhosa River** | **16.64** | **28** | Pn | **Pn** | **15 09 56.3** | **-1.4** |
| H18K | | | | IAmb | IAmb | 15 09 57.4 | |
| | comp=Z,30nm,1.5s | | | | | | |
| **G21K** | **Allakaket** | **19.03** | **29** | | **P** | **15 10 26.7** | **+1.4** |
| G21K | | | | IAmb | IAmb | 15 10 55.9 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **MLY** | **Manley** | **19.07** | **35** | | **P** | **15 10 27.2** | **+1.4** |
| **PDAR** | **Pinedale Array** | **45.20** | **73** | P | **P** | **15 14 20.3** | **+1.1** |
| | comp=Z,1.0nm,0.6s,baz=317,slow=4.1,SNR=12 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **57.55** | **83** | P | **P** | **15 15 51.1** | **-0.3** |
| | comp=Z,0.1nm,0.5s,baz=332,slow=7.1,SNR=2.1 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.41** | **321** | P | **P** | **15 16 17.6** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=51,slow=6.5,SNR=5.2 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.94** | **225** | P | **P** | **15 18 25.4** | **-0.8** |
| | comp=Z,0.6nm,1.1s,baz=31,slow=5.8,SNR=1.1 | | | | | | |
| | comp=Z,0.6nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **86.40** | **224** | P | **P** | **15 18 43.5** | **0.0** |
| | comp=Z,0.4nm,0.8s,baz=23,slow=5.8,SNR=5.1 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **H03N2** | **Juan Fernandez** baz=317,slow=77 | **120.17** | **107** | T | T | 17 36 41.8 | |
| **H03N1** | **Juan Fernandez** baz=317,slow=77 | **120.18** | **107** | T | T | 17 36 45.7 | |
| **H03N3** | **Juan Fernandez** baz=317,slow=77 | **120.18** | **107** | T | T | 17 36 39.4 | |
| **BOSA** | **Boshof** | **151.60** | **315** | PKPbc | **PKPbc** | **15 25 54.3** | **-0.7** |
| | comp=Z,2.0nm,0.5s,baz=25,slow=3.4,SNR=6.3 | | | | | | |

*IDC **13** 15:16:21.4±1.8,56.60S×142.66W,h0km,mb3.9/4, mbtmp3.9/4,MS3.9/29,Error ellipse: s-maj=61.0km s-min=33.0km az=41.0*
*GCMT **13** 15:16:26.0±0.3,56.72S±0.02×142.21W±0.03,h15km±1km, MW5.0/80,Moment Tensor Solution. s32,c34; s80,c105; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-0.71±.15; Mθθ2.49±.16; Mϕϕ-1.78±.12; Mrθ0.65±.42; Mϕθ2.49±.12; Mϕr-0.77±.39; Best double couple: M0 3.47100×10^16*

*NP1:ϕs288.00000°,δ78.00000°,λ-17.00000°. NP2: ϕs22.00000°,δ73.00000°,λ-168.00000°. Principal axes: T 3.6520, Plg4.0000°, Azm336.0000°; N -0.3660, Plg69.0000°, Azm75.0000°; P -3.2910, Plg21.0000°, Azm244.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**ISC 13 15:16:22.0±0.9,56.5S±0.1×142.3W±0.3,h10km,n55, σ0°92/13,mb4.2/7,MS4.0/30,5C,Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **28.41** | **202** | LR | LR | 15 30 07.3 | |
| | comp=Z,199nm,21.5s,baz=79,slow=29 | | | | | | |
| **RPZ** | **Rata Peaks** | **31.89** | **273** | LR | LR | 15 32 45.4 | |
| | comp=Z,282nm,20.4s,baz=128,slow=31 | | | | | | |
| **URZ** | **Urewera** | **32.35** | **287** | LR | LR | 15 32 50.3 | |
| | comp=Z,238nm,21.4s,baz=122,slow=31 | | | | | | |
| **TBI** | **Tubuai** 1μm,30.2s | **33.48** | **348** | *e*LR | LR | 15 31 44.3 | |
| TBI | | | | *e*LR | LR | 15 31 47.6 | |
| | 3μm,25.8s | | | | | | |
| **QSPA** | **South Pole Qui** 3.3nm,1.1s,baz=68,slow=1.9,SNR=4.5 | **33.70** | **180** | P | **P** | **15 23 03.9** | **+0.9** |
| QSPA | | | | LR | LR | 15 34 03.9 | |
| | comp=Z,290nm,20.9s,baz=67,slow=32 | | | | | | |
| | 3.3nm,1.1s | | | | | | |
| **RKT** | **Rikitea** 455nm,31.5s | **33.73** | **12** | *e*S | **S** | **15 28 26.7** | **+0.1** |
| RKT | | | | *e*LR | LR | 15 32 11.0 | |
| | 2μm,26.2s | | | | | | |
| **PMSA** | **Palmer Station** | **36.87** | **136** | LR | LR | 15 34 14.6 | |
| | comp=Z,268nm,20.8s,baz=258,slow=29 | | | | | | |
| **RAO** | **Raoul Island** | **36.99** | **302** | LR | LR | 15 36 34.6 | |
| | comp=Z,48nm,19.4s,baz=132,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **37.51** | **333** | LR | LR | 15 35 39.6 | |
| | comp=Z,194nm,18.7s,baz=166,slow=31 | | | | | | |
| **RPN** | **Rapa Nui** | **37.59** | **53** | LR | LR | 15 36 00.7 | |
| | comp=Z,125nm,18.7s,baz=338,slow=31 | | | | | | |
| **PPT2** | **Papeete2** 48nm,26.2s | **39.19** | **349** | *e*P | P | 15 24 24.2 | +34 |
| PPT2 | | | | *e*S | **S** | **15 29 50.6** | **+0.5** |
| | 58nm,23.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 15 34 31.1 | |
| | 344nm,24.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 15 34 37.7 | |
| | 322nm,22.2s | | | | | | |
| **PPT** | **Papeete** | **39.21** | **349** | LR | LR | 15 36 17.4 | |
| | comp=Z,313nm,18.2s,baz=180,slow=30 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** 61nm,23.5s | **47.51** | **3** | *e*S | S | 15 32 15.2 | +23 |
| TAOE | | | | *e*LR | LR | 15 38 37.3 | |
| | 321nm,25.3s | | | | | | |
| **H03S2** | **Juan Fernandez** baz=220,slow=74,SNR=31 | **48.08** | **90** | T | T | 16 16 54.0 | |
| **H03S1** | **Juan Fernandez** baz=220,slow=74,SNR=33 | **48.08** | **90** | T | T | 16 16 54.6 | |
| **H03S3** | **Juan Fernandez** baz=220,slow=74,SNR=35 | **48.09** | **90** | T | T | 16 16 54.2 | |
| **VNA3** | **Neumayer Olymp** comp=Z,2.7nm,0.8s | **48.29** | **161** | ⇑P | **P** | **15 25 02.2** | **-0.5** |
| **H03N3** | **Juan Fernandez** baz=223,slow=72,SNR=31 | **48.36** | **89** | T | T | 16 17 13.1 | |
| **H03N2** | **Juan Fernandez** baz=223,slow=72,SNR=37 | **48.37** | **89** | T | T | 16 17 07.4 | |
| **H03N1** | **Juan Fernandez** baz=223,slow=72,SNR=35 | **48.38** | **89** | T | T | 16 17 08.1 | |
| **MSVF** | **Nonsavu** comp=Z,86nm,21.7s,baz=157,slow=31 | **48.76** | **306** | LR | LR | 15 41 10.4 | |
| **VNA2** | **Neumayer--Watz** comp=Z,3.2nm,0.6s,baz=212,slow=5.9 | **48.95** | **162** | ⇑P | **P** | **15 25 06.2** | **-1.6** |
| **VNA1** | **Neumayer--Stat** comp=Z,5.0nm,0.8s | **49.04** | **161** | ⇑P | **P** | **15 25 08.3** | **-0.1** |
| **SNAA** | **Sanae** comp=Z,39nm,1.0s | **49.04** | **164** | ⇑P | **P** | **15 25 08.9** | **+0.4** |
| **SNAA** | **Sanae** comp=Z,2.4nm,1.0s,baz=195,slow=12,SNR=4.6 | **49.04** | **164** | P | **P** | **15 25 07.4** | **-1.2** |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **TROLL** | **Troll, Antarti** comp=Z,2.4nm,0.2s | **49.49** | **166** | ⇑P | **P** | **15 25 13.3** | **+1.2** |
| **DZM** | **Mont Dzumac** comp=Z,135nm,26.7s | **50.73** | **291** | eLR | LR | 15 40 11.8 | |
| **DZM** | **Mont Dzumac** comp=Z,70nm,18.1s,baz=109,slow

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| QMBU | | | | IAML | | | 15 29 31.9 | |
| | comp=Z,35nm,0.2s | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.60** | **280** | *i* P | | **Pn** | **15 29 09.2** | **+0.8** |
| GTBY | | | | *e*Sg | | **Sb** | **15 29 32.9** | **+1.9** |
| GTBY | | | | IAML | | | 15 29 42.0 | |
| | comp=N,45nm,1.4s | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.60** | **280** | *e*P | | **Pn** | **15 29 09.2** | **+0.8** |
| GTBY | | | | *e*S | | **Sb** | **15 29 30.3** | **-0.7** |
| GTBY | | | | IAML | | | 15 29 33.5 | |
| | comp=N,40nm,0.3s | | | | | | | |
| GTBY | | | | IAML | | | 15 29 33.7 | |
| | comp=N,34nm,0.2s | | | | | | | |
| **MCDR** | **Montecristi** | **1.69** | **81** | *i* P | | **Pb** | **15 29 13.7** | **+1.1** |
| MCDR | | | | *e*Sg | | **Sb** | **15 29 38.2** | **+4.7** |
| MCDR | | | | IAML | | | 15 29 41.1 | |
| | comp=N,327nm,0.3s | | | | | | | |
| **MOAC** | **Moa** | **1.75** | **305** | *e*P | | **Pn** | **15 29 09.8** | **-0.7** |
| MOAC | | | | *e*S | | **Sn** | **15 29 29.6** | **-2.1** |
| MOAC | | | | IAML | | | 15 29 31.4 | |
| | comp=E,30nm,0.1s | | | | | | | |
| **SDDR** | **Presa de Saban** | **2.13** | **108** | *i* P | | **Pn** | **15 29 16.2** | **+0.5** |
| SDDR | | | | *e*Sg | | **Sb** | **15 29 45.1** | **-1.1** |
| SDDR | | | | IAML | | | 15 29 57.9 | |
| | comp=N,34nm,0.3s | | | | | | | |
| **RCC** | **Rio Carpintero** | **2.16** | **280** | *e*P | | **Pn** | **15 29 17.1** | **+1.1** |
| RCC | | | | *e*S | | **Sn** | **15 29 42.8** | **+1.0** |
| RCC | | | | IAML | | | 15 29 46.0 | |
| | comp=E,7.2nm,0.1s | | | | | | | |
| RCC | | | | IAML | | | 15 29 46.1 | |
| | comp=N,11nm,0.2s | | | | | | | |
| **NEDR** | **Neiba UASD** | **2.23** | **121** | *i* P | | Pn | 15 29 13.3 | -3.7 |
| NEDR | | | | *e*Sg | | **Sn** | **15 29 41.0** | **-2.5** |
| NEDR | | | | IAML | | | 15 29 59.1 | |
| | comp=N,43nm,1.2s | | | | | | | |
| **MARVS** | **Santiago de Cu** | **2.35** | **279** | *e*P | | **Pn** | **15 29 20.3** | **+1.6** |
| MARVS | | | | *e*S | | **Sn** | **15 29 47.4** | **+0.9** |
| MARVS | | | | IAML | | | 15 29 54.3 | |
| | comp=E,14nm,0.1s | | | | | | | |
| MARVS | | | | IAML | | | 15 29 55.2 | |
| | comp=N,17nm,0.2s | | | | | | | |
| **CHIV** | **Chivirico** | **2.83** | **277** | *e*P | | **Pn** | **15 29 27.2** | **+2.0** |
| **BANI** | **BANI** | **3.17** | **113** | *i* P | | **Pn** | **15 29 27.5** | **-2.6** |
| BANI | | | | IAML | | | 15 31 04.1 | |
| | comp=N,45nm,1.8s | | | | | | | |

*NEIC* ***13*** *15:37:07.1±0.8, 69°.48N±0°.03×144°.42W±0°.06, h10km±2km, Error ellipse: s-maj=5.6km s-min=2.9km az=326.0*

**AEIC 13 15:37:06.9±1.2, 69°.50N±0°.03×144°.44W±0°.04, h11km±7km, ML2.4, ML2.6/84(NEIC), Error ellipse: s-maj=4.6km s-min=1.5km az=165.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.29** | **63** | Pg | Pg | 15 37 12.7 | 0.0 |
| **C26K** | **Camden Bay** | **0.45** | **339** | | Pb | 15 37 16.4 | -0.4 |
| C26K | | | | | Sb | 15 37 22.9 | -0.7 |
| **C26K** | **Camden Bay** | **0.45** | **339** | IAML | | 15 37 23.9 | |
| | comp=E,130nm,0.5s | | | | | | |
| C26K | | | | IAML | | 15 37 24.6 | |
| | comp=N,203nm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.71** | **256** | | Pg | 15 37 20.4 | -0.1 |
| D25K | | | | | Sg | 15 37 30.1 | +0.3 |
| **D27M** | **Malcolm River** | **1.26** | **100** | Pn | Pn | 15 37 30.4 | +0.1 |
| **D27M** | **Malcolm River** | **1.26** | **100** | | Sg | 15 37 47.6 | +0.3 |
| **D27M** | **Malcolm River** | **1.26** | **100** | IAML | | 15 37 53.1 | |
| | comp=N,89nm,0.5s | | | | | | |
| D27M | | | | IAML | | 15 37 53.6 | |
| | comp=E,56nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.59** | **260** | | Sg | 15 38 00.1 | +2.0 |
| **D24K** | **Happy Valley** | **1.59** | **260** | Pg | Pg | 15 37 37.7 | +0.3 |
| **D24K** | **Happy Valley** | **1.59** | **260** | IAML | | 15 38 02.9 | |
| | comp=N,54nm,0.5s | | | | | | |
| D24K | | | | IAML | | 15 38 05.0 | |
| | comp=E,52nm,0.4s | | | | | | |
| **E27K** | **Coleen River** | **1.67** | **141** | Pn | Pn | 15 37 34.7 | -1.4 |
| E27K | | | | IAML | | 15 38 03.7 | |
| | comp=E,34nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81** | **176** | | Sg | 15 38 05.7 | +0.6 |
| **F26K** | **Sheenjek River** | **1.81** | **176** | Pg | Pg | 15 37 40.9 | -0.7 |
| **F26K** | **Sheenjek River** | **1.81** | **176** | IAML | | 15 38 08.6 | |
| | comp=N,31nm,0.3s | | | | | | |
| F26K | | | | IAML | | 15 38 09.1 | |
| | comp=E,52nm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **1.96** | **194** | Pg | Pb | 15 37 43.2 | +0.6 |
| F25K | | | | IAML | | 15 38 14.8 | |
| | comp=E,33nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **115** | | Pn | 15 37 40.0 | -0.2 |
| E28M | | | | IAML | | 15 38 13.8 | |
| | comp=N,26nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04** | **247** | Pn | Pb | 15 37 44.3 | +0.5 |
| **E24K** | **Your Creek** | **2.05** | **228** | | Pb | 15 37 44.6 | +0.5 |
| **BMAR** | **Burnt Mountain** | **2.08** | **181** | Pn | Pb | 15 37 44.9 | +0.3 |
| **C23K** | **Itkillik River** | **2.18** | **282** | Pn | Pb | 15 37 45.5 | -0.8 |
| C23K | | | | IAML | | 15 38 24.1 | |
| | comp=N,30nm,0.5s | | | | | | |
| C23K | | | | IAML | | 15 38 29.0 | |
| | comp=E,33nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.29** | **259** | Pn | Pb | 15 37 47.4 | -0.7 |
| **F24K** | **Squaw Lake** | **2.36** | **214** | Pn | Pb | 15 37 48.4 | -0.9 |
| **E23K** | **Chandalar** | **2.37** | **235** | | Pb | 15 37 48.7 | -0.9 |
| E23K | | | | IAML | | 15 38 30.6 | |
| | comp=E,16nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.53** | **136** | Pn | Pb | 15 37 50.4 | -1.8 |
| F28M | | | | IAML | | 15 38 31.8 | |
| | comp=E,20nm,0.5s | | | | | | |
| F28M | | | | IAML | | 15 38 33.2 | |
| | comp=N,22nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.57** | **174** | | Pb | 15 37 50.7 | -2.2 |
| **E29M** | **Blow River** | **2.61** | **112** | Pn | Pn | 15 37 51.2 | +2.3 |
| E29M | | | | IAML | | 15 38 32.6 | |
| | comp=E,17nm,0.6s | | | | | | |
| E29M | | | | IAML | | 15 38 33.6 | |
| | comp=N,18nm,1.2s | | | | | | |
| **G25K** | **Bearman Lake** | **2.81** | **194** | | Pb | 15 37 54.4 | -2.6 |
| **G27K** | **Doyon Strip** | **2.90** | **158** | | Pn | 15 37 54.9 | +2.1 |
| **D22K** | **Ayikyak River** | **3.01** | **262** | Pn | Pn | 15 37 56.6 | +2.3 |
| D22K | | | | IAML | | 15 38 52.1 | |
| | comp=N,11nm,0.8s | | | | | | |
| D22K | | | | IAML | | 15 39 56.1 | |
| | comp=E,9.3nm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.03** | **203** | Pn | Pn | 15 37 57.3 | +2.6 |
| G24K | | | | IAML | | 15 38 47.5 | |
| | comp=N,14nm,1.4s | | | | | | |
| G24K | | | | IAML | | 15 38 49.1 | |
| | comp=E,11nm,1.0s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.21** | **289** | Pn | Pn | 15 37 59.5 | +2.4 |
| B22K | | | | IAML | | 15 38 58.9 | |
| | comp=E,19nm,1.3s | | | | | | |
| B22K | | | | IAML | | 15 39 06.4 | |
| | comp=N,16nm,1.5s | | | | | | |
| **G29M** | **Pine Creek** | **3.53** | **134** | Pn | Pn | 15 38 04.6 | +3.0 |
| G29M | | | | IAML | | 15 40 24.2 | |
| | comp=N,26nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.57** | **277** | Pn | Pn | 15 38 04.6 | +2.5 |
| B21K | | | | IAML | | 15 40 27.6 | |
| | comp=N,12nm,0.8s | | | | | | |
| B21K | | | | IAML | | 15 40 28.1 | |
| | comp=E,23nm,0.9s | | | | | | |
| **E21K** | **Killik River** | **3.60** | **257** | Pn | Pn | 15 38 04.9 | +2.4 |
| E21K | | | | IAML | | 15 40 22.3 | |
| | comp=E,9.9nm,1.1s | | | | | | |
| E21K | | | | IAML | | 15 40 27.0 | |
| | comp=N,13nm,1.4s | | | | | | |
| **H24K** | **Noodor Dome** | **3.90** | **201** | Pn | Pn | 15 38 09.0 | +2.3 |
| H24K | | | | IAML | | 15 40 35.5 | |
| | comp=N,14nm,0.9s | | | | | | |
| H24K | | | | IAML | | 15 40 40.6 | |
| | comp=E,9.4nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.01** | **142** | Pn | Pn | 15 38 10.6 | +2.5 |
| **F21K** | **Alatna River** | **4.05** | **240** | Pn | Pn | 15 38 11.1 | +2.4 |
| F21K | | | | IAML | | 15 40 56.5 | |
| | comp=E,8.6nm,0.8s | | | | | | |
| F21K | | | | IAML | | 15 40 56.6 | |
| | comp=N,8.8nm,0.6s | | | | | | |
| **I27K** | **Kandik River** | **4.06** | **163** | | Pn | 15 38 11.6 | +2.7 |
| **H23K** | **Yukon River** | **4.17** | **210** | Pn | Pn | 15 38 12.9 | +2.5 |
| H23K | | | | IAML | | 15 41 03.0 | |
| | comp=N,14nm,1.3s | | | | | | |
| H23K | | | | IAML | | 15 41 03.3 | |
| | comp=E,13nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.24** | **173** | Pn | Pn | 15 38 13.6 | +2.4 |
| **I28M** | **Miner Creek** | **4.42** | **155** | | Pn | 15 38 16.8 | +2.9 |
| **D20K** | **Etivluk River** | **4.43** | **265** | | Pn | 15 38 16.6 | +2.7 |
| **B20K** | **Meade River** | **4.45** | **283** | Pn | Pn | 15 38 16.1 | +2.0 |
| **G31M** | **Satah River** | **4.59** | **119** | Pn | Pn | 15 38 18.1 | +2.2 |
| **I23K** | **Minto, Yukon-K** | **4.76** | **206** | Pn | Pn | 15 38 21.4 | +2.9 |
| **I29M** | **Ogilvie Camp,** | **4.78** | **147** | | Pn | 15 38 21.0 | +2.3 |
| **IL31** | | **4.84** | **193** | Pn | Pn | 15 38 23.7 | +4.2 |
| **F20K** | **Avaraart Lake** | **4.86** | **245** | Pn | Pn | 15 38 22.7 | +2.9 |
| F20K | | | | IAML | | 15 41 38.7 | |
| | comp=E,5.5nm,1.5s | | | | | | |
| F20K | | | | IAML | | 15 41 39.5 | |
| | comp=N,8.6nm,1.2s | | | | | | |
| **EGAK** | **Eagle** | **4.91** | **163** | Pn | Pn | 15 38 23.4 | +2.9 |
| **D19K** | **Kuna River** | **5.02** | **265** | Pn | Pn | 15 38 24.3 | +2.2 |
| D19K | | | | IAML | | 15 41 02.9 | |
| | comp=E,6.2nm,0.4s | | | | | | |
| **J26L** | **Joseph Creek** | **5.03** | **176** | Pn | Pn | 15 38 25.0 | +2.8 |
| **MLY** | **Manley** | **5.11** | **212** | Pn | Pn | 15 38 26.2 | +3.0 |
| MLY | | | | IAML | | 15 41 09.8 | |
| | comp=N,3.8nm,0.7s | | | | | | |
| MLY | | | | IAML | | 15 41 46.0 | |
| | comp=E,5.8nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **5.13** | **253** | Pn | Pn | 15 38 26.0 | +2.5 |
| **WRH** | **Wood River Hil** | **5.25** | **198** | Pn | Pn | 15 38 28.3 | +3.2 |
| WRH | | | | IAML | | 15 41 07.8 | |
| | comp=N,5.3nm,0.9s | | | | | | |
| **I30M** | **Mount Dempster** | **5.30** | **140** | Pn | Pn | 15 38 28.3 | +2.4 |
| **SCRK** | **Sand Creek** | **5.55** | **178** | Pn | Pn | 15 38 32.3 | +3.0 |
| **K29M** | **Barlow Dome** | **6.30** | **151** | Pn | Pn | 15 38 43.1 | +3.4 |
| **L29M** | **L29M** | **6.90** | **155** | Pn | Pn | 15 38 50.7 | +2.9 |

*NEIC* ***13*** *15:40:20.9±1.2, 50°.91N±0°.05×178°.40W±0°.03, h10km±2km, mb4.0/28, ML3.7(AEIC), Error ellipse: s-maj=9.5km s-min=2.9km az=163.0*

*AEIC* ***13*** *15:40:24.3±0.9, 51°.1N±0°.1×178°.53W±0°.06, h26km±7km, Error ellipse: s-maj=15.3km s-min=5.2km az=174.0*

*IDC* ***13*** *15:40:29.7±3.8, 51°.34N×178°.61W, h74km±33km, mb3.5/17, mbtmp3.9/18, MS3.1/7, Error ellipse: s-maj=23.4km s-min=15.7km az=163.0*

**ISC 13 15:40:23.1±0.6, 51°.05N±0°.08×178°.44W±0°.04, h23km, n78, σ1§24/73, mb4.0/27, MS3.3/5, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GALAA** | **Gareloi Lava P** | **0.74** | **344** | | **Pb** | **15 40 38.1** | **+0.9** |
| **GAEA** | **Gareloi East** | **0.76** | **345** | | **Pb** | **15 40 38.3** | **+0.8** |
| **GANO** | **Gareloi North** | **0.80** | **344** | | **Pb** | **15 40 38.7** | **+0.4** |
| **TASE** | **Tanaga Southea** | **0.82** | **18** | | **Pn** | **15 40 39.6** | **+0.3** |
| **TANO** | **Tanaga North** | **0.89** | **13** | | **Pn** | **15 40 40.5** | **+0.4** |
| **KIWB** | **Kanaga Island** | **1.14** | **45** | Pn | **Pb** | **15 40 44.3** | **+0.3** |
| **KICM** | **Kanaga Island** | **1.16** | **41** | | **Pb** | **15 40 45.1** | **+0.6** |
| KICM | | | | | **Sb** | **15 40 59.9** | **+0.8** |
| **KIRH** | **Kanaga Island** | **1.19** | **44** | | **Pb** | **15 40 45.4** | **+0.4** |
| KIRH | | | | | **Sb** | **15 41 00.2** | **+0.2** |
| **ADK** | **Adak** | **1.38** | **52** | | **Pb** | **15 40 47.7** | **-0.4** |
| **ADK** | **Adak** | **1.38** | **52** | | **Sn** | **15 41 04.5** | **+0.2** |
| **AMKA** | **Amchitka** | **1.46** | **284** | | **Pn** | **15 40 47.2** | **-0.7** |
| **AMKA** | **Amchitka** | **1.46** | **284** | | **Sn** | **15 41 06.2** | **-0.1** |
| **ADAG** | **Mount Adagdak** | **1.48** | **50** | | **Pb** | **15 40 49.8** | **0.0** |
| **GSCK** | **Great Sitkin C** | **1.72** | **55** | | **Pb** | **15 40 53.3** | **-0.5** |
| **GSMY** | **Great Sitkin M** | **1.79** | **55** | | **Pb** | **15 40 54.5** | **-0.6** |
| **GSTR** | **Great Sitkin T** | **1.81** | **54** | Pn | **Pn** | **15 40 54.1** | **+1.2** |
| **KOKL** | **Mount Kliuchef** | **2.93** | **63** | | **Pn** | **15 41 11.5** | **+3.3** |
| **KOFP** | **Korovin Flat P** | **2.97** | **64** | | **Pn** | **15 41 12.2** | **+3.4** |
| **SHEM** | **Shemya Is, Ala** | **4.92** | **293** | P | **Pn** | **15 41 37.7** | **+2.3** |
| | 18nm,0.3s,baz=94,slow=6.6,SNR=5.2 | | | | | | |
| SHEM | | | | S | **Sn** | **15 42 36.2** | **+4.6** |
| | 18nm,0.6s,baz=292,slow=19,SNR=1.0 | | | | | | |
| SHEM | | | | LR | LR | 15 43 29.7 | |
| | comp=Z,134nm,18.8s,baz=284,slow=38 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **14.54** | **33** | P | **P** | **15 43 54.5** | **+0.9** |
| **M16K** | **Timber Creek** | **14.71** | **40** | P | **P** | **15 43 55.8** | **+0.5** |
| **L16K** | **Owhat River** | **14.91** | **37** | P | **P** | **15 43 58.3** | **+0.8** |
| **M17K** | **Holitna River** | **15.53** | **40** | P | **P** | **15 44 05.4** | **+0.9** |
| **OHAK** | **Old Harbor** | **15.92** | **57** | Pn | **Pn** | **15 44 05.8** | **+0.5** |
| **L18K** | **Granite Mounta** | **16.28** | **38** | P | **P** | **15 44 13.5** | **+0.8** |
| L18K | | | | IAmb | IAmb | 15 44 46.1 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **16.42** | **56** | Pn | **Pn** | **15 44 11.0** | **-0.6** |
| **KDAK** | **Kodiak Island** | **16.42** | **56** | P | **Pn** | **15 44 09.2** | **-2.4** |
| | comp=Z,3.1nm,0.4s,baz=235,slow=3.5,SNR=21 | | | | | | |
| KDAK | | | | S | **Sn** | **15 47 10.3** | **-2.6** |
| | comp=Z,5.7nm,1.0s,baz=139,slow=20,SNR=1.4 | | | | | | |
| **J19K** | **Poorman** | **17.70** | **34** | P | **P** | **15 44 28.9** | **+0.5** |
| **F19K** | **Shaleruckik Mo** | **18.91** | **26** | | **Pn** | **15 44 43.6** | **+1.2** |
| **MA2** | **Magadan** | **19.33** | **308** | LR | LR | 15 51 30.9 | |
| | comp=Z,32nm,19.4s,baz=108,slow=35 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **19.47** | **37** | P | **P** | **15 44 48.2** | **+0.3** |
| BPAW | | | | IAmb | IAmb | 15 45 28.1 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| **E19K** | **Redstone River** | **19.51** | **25** | P | **P** | **15 44 49.0** | **+0.7** |
| E19K | | | | IAmb | IAmb | 15 45 07.0 | |
| | comp=Z,9.7nm,1.2s | | | | | | |
| **F20K** | **Avaraart Lake** | **19.64** | **27** | P | **P** | **15 44 50.2** | **+0.5** |
| **G21K** | **Allakaket** | **19.95** | **30** | P | **P** | **15 44 53.9** | **+0.8** |
| G21K | | | | IAmb | IAmb | 15 44 57.5 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **RND** | **Reindeer** | **20.00** | **41** | P | **P** | **15 44 53.4** | **-0.3** |
| RND | | | | IAmb | IAmb | 15 45 32.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **MLY** | **Manley** | **20.03** | **35** | P | **P** | **15 44 54.2** | **+0.1** |
| **D19K** | **Kuna River** | **20.07** | **22** | P | **P** | **15 44 55.6** | **+1.1** |
| **F21K** | **Alatna River** | **20.40** | **28** | P | **P** | **15 44 59.0** | **+0.9** |
| **DHY** | **Denali Highway** | **20.49** | **42** | P | **P** | **15 44 58.6** | **-0.6** |
| DHY | | | | IAmb | IAmb | 15 45 04.3 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **21.36** | **38** | P | **P** | **15 45 08.2** | **-0.2** |
| | comp=Z,0.2nm,0.4s,baz=234,slow=8.7,SNR=2.2 | | | | | | |
| **D22K** | **Ayikyak River** | **21.73** | **25** | P | **P** | **15 45 13.3** | **+1.0** |
| **J25K** | **Salcha River,** | **21.89** | **39** | P | **P** | **15 45 14.5** | **+0.4** |
| J25K | | | | IAmb | IAmb | 15 45 31.1 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **22.04** | **33** | P | **P** | **15 45 16.6** | **+1.0** |
| G24K | | | | IAmb | IAmb | 15 45 21.3 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **D23K** | **Nanushuk River** | **22.33** | **26** | P | **P** | **15 45 18.8** | **+0.1** |
| **J26L** | **Joseph Creek** | **22.58** | **40** | P | **P** | **15 45 21.8** | **+0.2** |
| J26L | | | | IAmb | IAmb | 15 45 43.5 | |
| | comp=Z,7.4nm,1.5s | | | | | | |
| **FYU** | **Fort Yukon** | **22.76** | **34** | P | **P** | **15 45 23.4** | **+0.1** |
| FYU | | | | IAmb | IAmb | 15 45 38.6 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **L27K** | **Beaver Creek,** | **22.89** | **44** | P | **P** | **15 45 25.2** | **+0.5** |
| L27K | | | | IAmb | IAmb | 15 45 32.1 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **K27K** | **Chicken** | **23.04** | **42** | P | **P** | **15 45 26.5** | **+0.2** |
| **EGAK** | **Eagle** | **23.65** | **40** | P | **P** | **15 45 31.9** | **-0.4** |
| EGAK | | | | IAmb | IAmb | 15 46 10.6 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **M29M** | **Somme Creek** | **24.27** | **47** | P | **P** | **15 45 38.7** | **+0.4** |
| M29M | | | | IAmb | IAmb | 15 45 57.0 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **24.34** | **39** | P | **P** | **15 45 38.3** | **-0.6** |
| I28M | | | | IAmb | IAmb | 15 45 39.4 | |
| | comp=Z,5.6nm,1.3s | | | | | | |
| **I30M** | **Mount Dempster** | **25.72** | **41** | P | **P** | **15 45 50.9** | **-0.5** |
| **YAK** | **Yakutsk** | **29.80** | **312** | LR | LR | 15 58 57.0 | |
| | comp=Z,28nm,18.2s,baz=125,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **31.49** | **287** | LR | LR | 15 59 35.6 | |
| | comp=Z,17nm,18.9s,baz=106,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.56** | **278** | P | **P** | **15 47 00.9** | **-0.1** |
| | comp=Z,1.1nm,0.5s,baz=73,slow=10,SNR=4.2 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **33.96** | **262** | P | **P** | **15 47 05.3** | **+0.8** |
| | comp=Z,0.8nm,0.7s,baz=49,slow=7.4,SNR=5.2 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **ELK** | **Elko** | **43.90** | **78** | LR | LR | 16 05 23.2 | |
| | comp=Z,58nm,19.6s,baz=194,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **46.19** | **72** | P | **P** | **15 48 47.5** | **+1.4** |
| | comp=Z,0.9nm,0.5s,baz=298,slow=3.5,SNR=14 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **46.99** | **297** | P | **P** | **15 48 53.0** | **+0.8** |
| | comp=Z,0.7nm,0.5s,baz=48,slow=8.8,SNR=4.9 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.71** | **356** | P | **P** | **15 49 18.7** | **-1.5** |
| | comp=Z,4.0nm,0.7s,baz=38,slow=4.2,SNR=5.2 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **GTA** | **Gaotai** | **55.90** | **292** | *e*P | **P** | **15 49 59.8** | **+0.8** |
| GTA | | | | pP | sP | 15 50 07.8 | +0.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.45** | **350** | P | **P** | **15 50 14.8** | **-1.6** |
| | comp=Z,1.1nm,0.6s,baz=27,slow=8.3,SNR=4.9 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **58.48** | **81** | P | **P** | **15 50 18.6** | **+1.3** |
| | comp=Z,0.3nm,0.6s,baz=292,slow=4.8,SNR=3.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.52** | **314** | P | **P** | **15 50 22.4** | **-1.6** |
| | comp=Z,0.2nm,0.4s,baz=40,slow=7.1,SNR=3.0 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.41** | **309** | P | **P** | **15 50 28.7** | **-1.6** |
| | comp=Z,0.2nm,0.3s,baz=41,slow=6.9,SNR=6.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.28** | **320** | P | **P** | **15 50 35.2** | **-0.9** |
| | comp=Z,0.8nm,0.5s,baz=51,slow=6.1,SNR=6.5 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **SADO** | **Sadowa** | **61.85** | **53** | LR | LR | 16 18 55.8 | |
| | comp=Z,21nm,18.5s,baz=136,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **66.15** | **347** | P | **P** | **15 51 06.5** | **-1.5** |
| | comp=Z,1.1nm,0.7s,baz=29,slow=4.4,SNR=4.7 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **68.73** | **354** | P | **P** | **15 51 23.1** | **-1.3** |
| | comp=Z,1.1nm,0.8s,baz=13,slow=7.7,SNR=5.3 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **71.27** | **276** | P | **P** | **15 51 40.2** | **-0.4** |
| | comp=Z,0.6nm,0.6s,baz=30,slow=5.5,SNR=2.2 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **RAR** | **Rarotonga** | **73.81** | **162** | LR | LR | 16 19 09.0 | |
| | comp=Z,17nm,20.5s,baz=232,slow=31 | | | | | | |
| **AKASG** | **Malin Array Be** | **75.93** | **342** | P | **P** | **15 52 05.9** | **-1.5** |
| | comp=Z,0.6nm,0.3s,baz=20,slow=6.4,SNR=3.3 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.94** | **224** | P | **P** | **15 52 40.7** | **0.0** |
| | comp=Z,0.3nm,0.7s,baz=30,slow=5.7,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **85.33** | **336** | P | **P** | **15 52 56.5** | **-1.7** |
| | comp=Z,1.8nm,0.6s,baz=7.1,slow=3.0,SNR=4.6 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **85.40** | **223** | P | **P** | **15 52 59.4** | **+1.0** |
| | comp=Z,0.5nm,0.7s,baz=27,slow=5.6,SNR=9.1 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **H03N2** | **Juan Fernandez** | **120.84** | **106** | T | T | 18 11 54.6 | |
| | baz=317,slow=78,SNR=11 | | | | | | |
| **H03N1** | **Juan Fernandez** | **120.85** | **106** | T | T | 18 12 02.7 | |
| | baz=317,slow=78,SNR=14 | | | | | | |
| **H03N3** | **Juan Fernandez** | **120.85** | **106** | T | T | 18 12 01.3 | |
| | baz=317,slow=78,SNR=13 | | | | | | |

*NEIC* ***13*** *16:00:10.2±1.6, 69°.42N±0°.01×144°.16W±0°.04, h10km±2km, Error ellipse: s-maj=3.3km s-min=2.4km az=348.0*

**AEIC 13 16:00:11.3±2.0, 69°.50N±0°.04×144°.34W±0°.07, h9km±6km, ML2.9, ML3.3/72(NEIC), Error ellipse: s-maj=5.2km s-min=3.4km az=177.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.25** | **60** | Pg | Pg | 16 00 15.6 | -0.9 |
| C27K | | | | IAML | | 16 00 20.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.47** | **335** | | Pg | 16 00 20.9 | +0.6 |
| C26K | | | | | Sb | 16 00 28.4 | -0.2 |
| **D25K** | **Kavik River** | **0.74** | **257** | | Pg | 16 00 25.3 | -0.3 |
| D25K | | | | | Sg | 16 00 35.8 | +0.5 |
| **D27M** | **Malcolm River** | **1.22** | **101** | | Sn | 16 00 51.0 | -0.3 |
| **D27M** | **Malcolm River** | **1.22** | **101** | | Pb | 16 00 33.2 | -1.4 |
| **D27M** | **Malcolm River** | **1.22** | **101** | IAML | | 16 00 55.0 | |
| | comp=E,216nm,0.4s | | | | | | |
| D27M | | | | IAML | | 16 00 56.7 | |
| | comp=N,304nm,0.3s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.54** | **280** | | Sg | 16 01 02.2 | +1.3 |
| **C24K** | **Franklin Bluff** | **1.54** | **280** | | Pn | 16 00 38.0 | -1.0 |
| **C24K** | **Franklin Bluff** | **1.54** | **280** | IAML | | 16 01 03.3 | |
| | comp=N,156nm,0.5s | | | | | | |
| C24K | | | | IAML | | 16 01 06.4 | |
| | comp=E,176nm,1.0s | | | | | | |
| **D24K** | **Happy Valley** | **1.63** | **260** | | Sg | 16 01 05.3 | +1.7 |
| **F26K** | **Sheenjek River** | **1.81** | **178** | | Pb | 16 00 44.6 | 0.0 |
| F26K | | | | IAML | | 16 01 12.4 | |
| | comp=E,179nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.95** | **115** | | Pb | 16 00 46.4 | -0.5 |
| **F25K** | **Christian Rive** | **1.98** | **195** | | Pb | 16 00 46.9 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.07** | **248** | | Pg | 16 00 50.1 | -0.8 |
| **E24K** | **Your Creek** | **2.08** | **228** | | Pg | 16 00 50.2 | -0.9 |
| E24K | | | | IAML | | 16 02 05.1 | |
| | comp=N,147nm,0.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **183** | Pn | Pb | 16 00 48.0 | -1.2 |
| **C23K** | **Itkillik River** | **2.22** | **282** | Pn | Pb | 16 00 51.3 | -0.2 |
| C23K | | | | IAML | | 16 01 34.5 | |
| | comp=N,112nm,0.5s | | | | | | |
| C23K | | | | IAML | | 16 02 11.8 | |
| | comp=E,136nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **215** | | Pb | 16 00 53.0 | -1.3 |
| **F24K** | **Squaw Lake** | **2.38** | **215** | IAML | | 16 02 08.8 | |
| | comp=N,93nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.41** | **235** | | Pb | 16 00 55.3 | +0.5 |
| E23K | | | | IAML | | 16 02 10.8 | |
| | comp=N,174nm,0.5s | | | | | | |
| E23K | | | | IAML | | 16 02 10.9 | |
| | comp=E,198nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.51** | **137** | Pn | Pn | 16 00 54.1 | +1.9 |
| F28M | | | | IAML | | 16 02 19.8 | |
| | comp=E,75nm,0.5s | | | | | | |
| F28M | | | | IAML | | 16 02 20.2 | |
| | comp=N,88nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.57** | **175** | | Pb | 16 00 55.4 | -2.1 |
| **G27K** | **Doyon Strip** | **2.88** | **158** | Pn | Pb | 16 01 00.2 | -2.7 |
| G27K | | | | IAML | | 16 02 48.9 | |
| | comp=N,48nm,0.6s | | | |

*AEIC **13** 16:01:23.9±1.5, 69˚.49N±0˚.03×144˚.31W±0˚.08, h5km±7km, ML3.6, ML3.6/90(NEIC), Error ellipse: s-maj=5.2km s-min=3.0km az=219.0*

*NEIC **13** 16:01:24.3±1.8, 69˚.47N±0˚.03×144˚.21W±0˚.06, h10km±2km, Error ellipse: s-maj=4.9km s-min=3.5km az=19.0*

**ISC 13 16:01:24.5**±1.3, **69˚.61N**±0˚.04×**144˚.29W**±0˚.03, **h13**km±9km, **n90**, σ1=**51**/72, **mb3.7**/3, **Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **85** | Pg | **Pg** | **16 01 29.1** | **+0.1** |
| **C26K** | **Camden Bay** | **0.38** | **325** | | **Pb** | **16 01 34.1** | **+1.1** |
| C26K | | | | | **Sn** | **16 01 41.5** | **-1.2** |
| **C26K** | **Camden Bay** | **0.38** | **325** | IAML | | 16 01 43.3 | |
| | comp=N,2μm,0.8s | | | | | | |
| C26K | | | | IAML | | 16 01 49.4 | |
| | comp=E,1μm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **0.79** | **250** | | **Pb** | **16 01 38.4** | **-1.7** |
| D25K | | | | | **Sb** | **16 01 49.5** | **-1.1** |
| **D27M** | **Malcolm River** | **1.23** | **106** | | **Sb** | **16 02 02.6** | **-0.8** |
| **D27M** | **Malcolm River** | **1.23** | **106** | | **Pn** | **16 01 46.5** | **-0.9** |
| **D27M** | **Malcolm River** | **1.23** | **106** | IAML | | 16 02 08.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| D27M | | | | IAML | | 16 02 08.4 | |
| | comp=E,1μm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.55** | **276** | | **Pn** | **16 01 51.7** | **0.0** |
| C24K | | | | IAML | | 16 02 16.4 | |
| | comp=N,1μm,0.8s | | | | | | |
| C24K | | | | IAML | | 16 02 34.3 | |
| | comp=E,822nm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **256** | | **Pb** | **16 01 55.9** | **+0.9** |
| **E27K** | **Coleen River** | **1.73** | **144** | | **Pn** | **16 01 55.2** | **+1.0** |
| E27K | | | | IAML | | 16 02 22.1 | |
| | comp=E,623nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.92** | **178** | Pg | **Pn** | **16 01 58.2** | **+1.3** |
| F26K | | | | IAML | | 16 02 28.8 | |
| | comp=N,662nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **96** | | **Pb** | **16 02 00.9** | **+0.6** |
| **E28M** | **Babbage River** | **1.98** | **118** | Pg | **Pb** | **16 01 60.0** | **-0.4** |
| E28M | | | | IAML | | 16 02 29.3 | |
| | comp=N,461nm,0.5s | | | | | | |
| E28M | | | | IAML | | 16 02 31.3 | |
| | comp=E,381nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.08** | **194** | | **Pn** | **16 02 00.6** | **+1.5** |
| **F25K** | **Christian Rive** | **2.08** | **194** | IAML | | 16 02 31.5 | |
| | comp=E,541nm,0.9s | | | | | | |
| F25K | | | | IAML | | 16 02 31.6 | |
| | comp=N,692nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.13** | **245** | | **Pb** | **16 02 02.2** | **-0.6** |
| TOLK | | | | IAML | | 16 02 38.4 | |
| | comp=N,492nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.17** | **227** | | **Pb** | **16 02 02.7** | **-0.8** |
| **F24K** | **Squaw Lake** | **2.48** | **214** | | **Pn** | **16 02 05.9** | **+1.3** |
| F24K | | | | IAML | | 16 02 46.6 | |
| | comp=N,184nm,0.6s | | | | | | |
| F24K | | | | IAML | | 16 02 49.6 | |
| | comp=E,181nm,1.4s | | | | | | |
| **F28M** | **Old Crow** | **2.58** | **139** | | **Pn** | **16 02 06.9** | **+1.1** |
| F28M | | | | IAML | | 16 02 51.0 | |
| | comp=E,305nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.61** | **115** | | **Pn** | **16 02 08.8** | **+2.5** |
| **E29M** | **Blow River** | **2.61** | **115** | IAML | | 16 02 51.3 | |
| | comp=E,338nm,0.7s | | | | | | |
| E29M | | | | IAML | | 16 02 58.2 | |
| | comp=N,388nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.68** | **176** | | **Pn** | **16 02 08.8** | **+1.6** |
| **G24K** | **Hadweenzic Riv** | **3.15** | **204** | | **Pn** | **16 02 14.7** | **+0.9** |
| **G24K** | **Hadweenzic Riv** | **3.15** | **204** | IAML | | 16 03 06.7 | |
| | comp=N,221nm,0.8s | | | | | | |
| G24K | | | | IAML | | 16 03 14.1 | |
| | comp=E,202nm,1.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.23** | **287** | Pn | **Pn** | **16 02 17.0** | **+2.3** |
| **COLD** | **Coldfoot** | **3.24** | **225** | | **Pn** | **16 02 16.4** | **+1.5** |
| **B21K** | **Ikpikpuk River** | **3.61** | **275** | Pn | **Pn** | **16 02 22.1** | **+2.1** |
| **E21K** | **Killik River** | **3.67** | **256** | Pn | **Pn** | **16 02 22.4** | **+1.5** |
| **H29M** | **Whitestone** | **4.07** | **144** | | **Pn** | **16 02 28.1** | **+1.7** |
| **H29M** | **Whitestone** | **4.07** | **144** | IAML | | 16 03 39.5 | |
| | comp=N,113nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **4.09** | **104** | | **Pn** | **16 02 28.0** | **+1.4** |
| **INK** | **Inuvik** | **4.09** | **104** | Pn | **Pn** | **16 02 26.6** | **0.0** |
| | comp=N,1.1nm,0.3s,baz=45,slow=16,SNR=3.8 | | | | | | |
| INK | | | | Sn | **Sn** | **16 03 14.1** | **-0.2** |
| | comp=N,4.6nm,0.3s,baz=76,slow=27,SNR=4.4 | | | | | | |
| | comp=N,3.4nm,0.3s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.14** | **187** | | **Pn** | **16 02 29.0** | **+1.6** |
| PRP | | | | IAML | | 16 03 39.8 | |
| | comp=N,71nm,0.7s | | | | | | |
| **F21K** | **Alatna River** | **4.16** | **239** | IAML | | 16 03 40.8 | |
| | comp=N,98nm,0.7s | | | | | | |
| F21K | | | | IAML | | 16 03 41.8 | |
| | comp=E,90nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.29** | **210** | | **Pn** | **16 02 31.4** | **+2.0** |
| H23K | | | | IAML | | 16 03 48.7 | |
| | comp=N,62nm,1.4s | | | | | | |
| H23K | | | | IAML | | 16 03 55.1 | |
| | comp=E,68nm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.32** | **135** | | **Pn** | **16 02 31.4** | **+1.6** |
| **EPYK** | **Eagle Plains** | **4.32** | **135** | IAML | | 16 03 45.2 | |
| | comp=N,142nm,0.5s | | | | | | |
| EPYK | | | | IAML | | 16 03 47.5 | |
| | comp=E,180nm,0.6s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.45** | **114** | Pn | **Pn** | **16 02 33.7** | **+2.3** |
| F31M | | | | IAML | | 16 03 49.1 | |
| | comp=N,60nm,1.1s | | | | | | |
| **B20K** | **Meade River** | **4.48** | **281** | Pn | **Pn** | **16 02 33.8** | **+1.9** |
| **A21K** | **Barrow** | **4.48** | **298** | | **Pn** | **16 02 34.5** | **+2.6** |
| **D20K** | **Etivluk River** | **4.49** | **264** | | **Pn** | **16 02 34.5** | **+2.4** |
| **E20K** | **Nigu River** | **4.50** | **258** | | **Pn** | **16 02 34.4** | **+2.1** |
| **G31M** | **Satah River** | **4.60** | **121** | | **Pn** | **16 02 34.9** | **+1.4** |
| **G21K** | **Allakaket** | **4.64** | **232** | IAML | | 16 03 58.0 | |
| | comp=E,61nm,1.2s | | | | | | |
| G21K | | | | IAML | | 16 04 02.9 | |
| | comp=N,70nm,0.8s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.67** | **197** | IAML | | 16 03 32.1 | |
| | comp=N,50nm,0.4s | | | | | | |
| POKR | | | | IAML | | 16 04 02.7 | |
| | comp=E,49nm,1.2s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.84** | **149** | | **Pn** | **16 02 38.1** | **+1.1** |
| I29M | | | | IAML | | 16 03 54.1 | |
| | comp=N,51nm,0.5s | | | | | | |
| I29M | | | | IAML | | 16 03 59.6 | |
| | comp=E,66nm,0.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.89** | **206** | | **Pn** | **16 02 37.9** | **+0.4** |
| **I23K** | **Minto, Yukon-K** | **4.89** | **206** | IAML | | 16 04 04.0 | |
| | comp=N,45nm,0.8s | | | | | | |
| I23K | | | | IAML | | 16 04 13.3 | |
| | comp=E,53nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **4.91** | **200** | | **Pn** | **16 02 38.7** | **+0.8** |
| **MDM** | **Murphy Dome** | **4.91** | **200** | IAML | | 16 04 02.5 | |
| | comp=E,41nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.95** | **244** | IAML | | 16 04 04.8 | |
| | comp=E,34nm,0.7s | | | | | | |
| F20K | | | | IAML | | 16 04 06.0 | |
| | comp=N,44nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **4.96** | **193** | Pn | **Pn** | **16 02 40.3** | **+1.8** |
| **ILAR** | **Eielson Array** | **4.96** | **193** | Pn | **Pn** | **16 02 39.4** | **+0.8** |
| | comp=N,1.1nm,0.3s,baz=9.8,slow=25,SNR=5.2 | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 03 36.7** | **+1.0** |
| | comp=N,3.0nm,0.3s,baz=7.1,slow=26,SNR=6.7 | | | | | | |
| | comp=N,4.1nm,0.4s | | | | | | |
| **EGAK** | **Eagle** | **5.00** | **164** | IAML | | 16 04 09.1 | |
| | comp=N,53nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **5.04** | **185** | IAML | | 16 04 05.4 | |
| | comp=E,52nm,1.0s | | | | | | |
| J25K | | | | IAML | | 16 04 15.5 | |
| | comp=N,28nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **5.08** | **264** | | **Pn** | **16 02 42.3** | **+2.0** |
| **D19K** | **Kuna River** | **5.08** | **264** | IAML | | 16 04 24.0 | |
| | comp=E,38nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.13** | **223** | IAML | | 16 04 13.8 | |
| | comp=N,42nm,1.1s | | | | | | |
| H21K | | | | IAML | | 16 04 14.0 | |
| | comp=E,38nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.17** | **197** | | **Pn** | **16 02 42.9** | **+1.5** |
| CCB | | | | IAML | | 16 04 13.1 | |
| | comp=E,32nm,0.9s | | | | | | |
| **E19K** | **Redstone River** | **5.22** | **252** | | **Pn** | **16 02 43.9** | **+1.8** |
| **E19K** | **Redstone River** | **5.22** | **252** | IAML | | 16 04 16.1 | |
| | comp=N,50nm,0.6s | | | | | | |
| E19K | | | | IAML | | 16 04 17.7 | |
| | comp=E,34nm,1.0s | | | | | | |
| **MLY** | **Manley** | **5.23** | **212** | Pn | **Pn** | **16 02 43.2** | **+0.9** |
| **HDA** | **Harding Lake** | **5.33** | **193** | | **Pn** | **16 02 45.4** | **+1.9** |
| **HDA** | **Harding Lake** | **5.33** | **193** | IAML | | 16 04 18.7 | |
| | comp=E,50nm,1.0s | | | | | | |
| HDA | | | | IAML | | 16 04 19.9 | |
| | comp=N,38nm,1.0s | | | | | | |
| **WRH** | **Wood River Hil** | **5.37** | **198** | IAML | | 16 04 18.7 | |
| | comp=E,25nm,0.8s | | | | | | |
| WRH | | | | IAML | | 16 04 27.0 | |
| | comp=N,26nm,1.4s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.74** | **247** | | **Pn** | **16 02 50.5** | **+1.4** |
| **F18K** | **Selawik** | **6.48** | **250** | | **Pn** | **16 03 00.7** | **+1.4** |
| **BCAR** | **Beaver Creek A** | **6.65** | **170** | Pn | **Pn** | **16 03 03.8** | **+2.1** |
| **L27K** | **Beaver Creek,** | **6.65** | **170** | Pn | **Pn** | **16 03 03.7** | **+1.9** |
| **DHY** | **Denali Highway** | **6.68** | **192** | | **Pn** | **16 03 05.0** | **+2.7** |
| **J20K** | **Nowinta River** | **6.68** | **220** | | **Pn** | **16 03 02.8** | **+0.6** |
| **A36M** | **Sachs Harbour** | **6.70** | **60** | Pn | **Pn** | **16 03 03.3** | **+0.9** |
| **C17K** | **DeLong Mountai** | **6.86** | **269** | | **Pn** | **16 03 05.0** | **+0.4** |
| **L29M** | **L29M** | **6.98** | **156** | | **Pn** | **16 03 07.7** | **+1.4** |
| **WAT1** | **Susitna Watana** | **7.02** | **196** | | **Pn** | **16 03 08.2** | **+1.3** |
| **WAT7** | **Susitna Watana** | **7.05** | **197** | | **Pn** | **16 03 09.8** | **+2.5** |
| **C36M** | **Paulatuk** | **7.10** | **83** | Pn | **Pn** | **16 03 07.8** | **-0.1** |
| **D17K** | **Noatak River** | **7.11** | **263** | | **Pn** | **16 03 08.5** | **+0.5** |
| **G17K** | **Kiwalik Mounta** | **7.48** | **244** | | **Pn** | **16 03 14.4** | **+1.3** |
| **M29M** | **Somme Creek** | **7.57** | **159** | Pn | **Pn** | **16 03 16.1** | **+1.7** |
| **C16K** | **Lisburne Hills** | **7.69** | **270** | | **Pn** | **16 03 16.4** | **+0.5** |
| **YUK2** | **White River** | **7.98** | **168** | | **Pn** | **16 03 22.2** | **+2.1** |
| **L20K** | **Farewell, AK** | **8.14** | **213** | | **Pn** | **16 03 22.8** | **+0.6** |
| **WRGLY** | **Wrigley** | **10.46** | **118** | Pn | **Pn** | **16 03 54.0** | **+0.1** |
| **YKA** | **Yellowknife Ar** | **13.86** | **106** | Pn | **Pn** | **16 04 37.4** | **-2.9** |
| | comp=N,0.3nm,0.3s,baz=314,slow=14,SNR=2.5 | | | | | | |
| YKA | | | | Sn | Sn | 16 07 03.9 | -10 |
| | comp=N,0.4nm,0.3s,baz=357,slow=17,SNR=2.8 | | | | | | |
| | comp=N,0.5nm,0.3s | | | | | | |
| **MA2** | **Magadan** | **28.15** | **282** | LR | LR | 16 20 19.8 | |
| | comp=N,74nm,18.9s,baz=129,slow=40 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.11** | **147** | LR | LR | 16 19 46.5 | |
| | comp=N,38nm,18.6s,baz=250,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **46.47** | **128** | P | **P** | **16 09 51.5** | **+0.6** |
| | comp=N,0.1nm,0.4s,baz=350,slow=4.6,SNR=1.9 | | | | | | |
| | comp=N,0.1nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.07** | **329** | P | **P** | **16 11 03.3** | **+0.8** |
| | comp=N,0.3nm,0.3s,baz=23,slow=7.3,SNR=5.2 | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.00** | **324** | P | **P** | **16 11 22.8** | **-0.5** |
| | comp=N,0.4nm,0.7s,baz=15,slow=7.4,SNR=2.8 | | | | | | |
| | comp=N,0.4nm,0.7s | | | | | | |

*NDI **13** 16:07:04.0, 13˚.62N×93˚.30E, h10km, mb4.4, ML4.4, mb4.9(NEIC)*

*IDC **13** 16:07:06.0±0.6, 13˚.97N×93˚.09E, h0km, mb4.3/23, mbtmp4.3/25, ML4.5/2, MS3.9/35, Error ellipse: s-maj=17.2km s-min=13.5km az=48.0*

*BJI **13** 16:07:07.9±0.0, 13˚.84N×93˚.24E, h28km, mb4.6/54, mB4.9/19, Ms4.3/41, Ms7 4.0/41*

*DJA **13** 16:07:08.4±0.3, 14˚N±4˚×9˚3E±˚, h10km, M5.3/9, mb5.2/9, mB5.8/5, MLv5.4/3, Mw(mB)5.4/5*

*MOS **13** 16:07:09.0±0.8, 13˚.91N×93˚.16E, h33km, mb4.9/30, Error ellipse: s-maj=9.7km s-min=5.4km az=105.2*

*GCMT **13** 16:07:09.4±0.4, 13˚.98N±0˚.03×93˚.24E±0˚.02, h27km±1km, MW4.9/73, Moment Tensor Solution. s9,c10; s73,c94; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr0.14±.18; Mθθ1.92±.12; Mϕϕ-2.07±.13; Mrθ0.94±.23; Mϕθ0.90±.12; Mϕr0.95±.25; Best double couple: M0 2.56500×10^16^ NP1:ϕs32.00000°, δ85.00000°, λ149.00000°. NP2: ϕs125.00000°, δ59.00000°, λ6.00000°. Principal axes: T 2.6410, Plg25.0000°, Azm344.0000°; N -0.1560, Plg59.0000°, Azm203.0000°; P -2.4900, Plg17.0000°, Azm82.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **13** 16:07:11.4±1.5, 14˚.07N±0˚.07×93˚.22E±0˚.09, h30km±6km, mb4.9/37 Error ellipse: s-maj=12.6km s-min=9.5km az=112.0*

**ISC 13 16:07:09.5**±0.5, **13˚.93N**±0˚.04×**92˚.99E**±0˚.04, **h27**km±2km, **h27**km:**pP-P, n245,** σ2=**16**/257, **mb4.6**/99, **MS4.0**/52, **14C-7D, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBA** | **Port Blair** | **2.27** | **186** | Pn | **Pb** | **16 07 48.8** | **-1.1** |
| **PBA** | **Port Blair** | **2.27** | **186** | *e*P | Pn | 16 07 38.0 | -7.4 |
| PBA | | | | *e*S | **Sn** | **16 08 06.3** | **-6.2** |
| PBA | | | | *ex* | x | 16 08 39.2 | |
| PBA | | | | IAML | | 16 08 41.4 | |
| | comp=N,3μm,0.5s | | | | | | |
| PBA | | | | IAML | | 16 08 42.4 | |
| | comp=E,4μm,0.7s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **7.28** | **51** | | **Pn** | **16 08 52.0** | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **7.28** | **51** | Pn | **Pn** | **16 08 52.0** | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **7.28** | **51** | Pn | **Pn** | **16 08 53.0** | **-1.2** |
| | comp=E,3.6nm,0.3s,baz=240,slow=15,SNR=78 | | | | | | |
| CMAR | | | | Sn | **Sn** | **16 10 10.8** | **-5.2** |
| | comp=E,4.5nm,0.3s,baz=204,slow=31,SNR=4.9 | | | | | | |
| CMAR | | | | LR | LR | 16 12 19.5 | |
| | comp=E,864nm,18.4s,baz=235,slow=44 | | | | | | |
| | comp=E,16nm,0.5s | | | | | | |
| **PHRA** | **Phrae** | **8.31** | **56** | Pn | **Pn** | **16 09 06.7** | **-1.7** |
| **SAIH** | **SAIHA** | **8.51** | **360** | *e*P | **Pn** | **16 09 10.1** | **-1.2** |
| SAIH | | | | *e*S | **Sn** | **16 10 44.5** | **-2.1** |
| **CRAI** | **Chiangrai** | **9.44** | **47** | | **Pn** | **16 09 21.4** | **-2.5** |
| **MLSI** | **Meulaboh, Aceh** | **10.18** | **160** | P | Pn | 16 09 42.4 | +8.5 |
| **IMP** | **Imphal** | **10.88** | **5** | *e*P | **Pn** | **16 09 42.0** | **-1.7** |
| IMP | | | | *e*S | **Sn** | **16 11 41.7** | **-2.9** |
| **SHL** | **Shillong** | **11.62** | **355** | Pn | **Pn** | **16 09 50.8** | **-3.1** |
| **SHL** | **Shillong** | **11.62** | **355** | *e*P | **Pn** | **16 09 50.4** | **-3.6** |
| SHL | | | | *e*S | **Sn** | **16 11 56.2** | **-6.8** |
| **SHL** | **Shillong** | **11.62** | **355** | P | **Pn** | **16 09 50.8** | **-3.1** |
| **KOHI** | **KOHIMA** | **11.78** | **5** | *e*P | **Pn** | **16 09 53.3** | **-2.7** |
| KOHI | | | | *e*S | **Sn** | **16 12 03.3** | **-3.4** |
| KOHI | | | | IAML | | 16 12 12.6 | |
| | comp=E,45nm,0.5s | | | | | | |
| **BOK** | **Bokaro** | **11.89** | **327** | *e*P | **Pn** | **16 09 55.9** | **-1.5** |
| BOK | | | | IAML | | 16 12 05.2 | |
| | comp=E,38nm,0.3s | | | | | | |
| BOK | | | | *e*S | **Sn** | **16 12 06.2** | **-3.1** |
| BOK | | | | IAML | | 16 12 08.2 | |
| | comp=E,36nm,0.4s | | | | | | |
| **TNCH** | **TengChong** | **12.21** | **24** | P | **Pn** | **16 10 02.3** | **+0.4** |
| TNCH | | | | S | **Sn** | **16 12 16.9** | **-0.4** |
| TNCH | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,450nm,15.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,580nm,16.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,930nm,19.4s | | | | | | |
| **MDRS** | **Chennai** | **12.42** | **268** | *e*P | **Pn** | **16 10 05.4** | **+0.7** |
| MDRS | | | | *e*S | **Sn** | **16 12 15.1** | **-7.2** |
| MDRS | | | | IAML | | 16 12 21.1 | |
| | comp=N,174nm,0.7s | | | | | | |
| MDRS | | | | IAML | | 16 12 22.2 | |
| | comp=E,199nm,0.6s | | | | | | |
| **ZIRO** | **ZIRO** | **13.55** | **3** | *e*P | **Pn** | **16 10 18.8** | **-1.5** |
| ZIRO | | | | *e*S | **Sn** | **16 12 43.9** | **-6.2** |
| ZIRO | | | | IAML | | 16 12 46.5 | |
| | comp=E,202nm,0.6s | | | | | | |
| ZIRO | | | | IAML | | 16 12 51.7 | |
| | comp=E,197nm,0.4s | | | | | | |
| **PALK** | **Pallekele** | **13.77** | **243** | Pn | **Pn** | **16 10 25.3** | **+2.2** |
| | comp=E,1.3nm,0.3s,baz=164,slow=14,SNR=7.1 | | | | | | |
| PALK | | | | Sn | **Sn** | **16 12 49.0** | **-6.2** |
| | comp=E,1.0nm,0.3s,baz=236,slow=8.0,SNR=2.6 | | | | | | |
| PALK | | | | LR | LR | 16 15 39.6 | |
| | comp=E,480nm,20.5s,baz=169,slow=37 | | | | | | |
| | comp=E,4.4nm,0.4s | | | | | | |
| **PALK** | **Pallekele** | **13.77** | **243** | *i* P | **Pn** | **16 10 24.9** | **+1.8** |
| **HYB** | **Hyderabad** | **14.33** | **286** | *e*P | **Pn** | **16 10 32.8** | **+2.0** |
| **PZH** | **PanZhiHua** | **14.96** | **32** | P | **Pn** | **16 10 38.1** | **-1.2** |
| PZH | | | | S | **Sn** | **16 13 22.6** | **-1.7** |
| PZH | | | | pmax | pmax | | |
| | comp=E,30nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=E,170nm,3.9s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,500nm,15.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,570nm,17.6s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=E,420nm,13.7s | | | | | | |
| **NGP** | **Nagpur** | **15.10** | **300** | *e*P | **Pn** | **16 10 42.9** | **+1.7** |
| **LSA** | **Lhasa** | **15.79** | **354** | P | **P** | **16 10 55.6** | **+1.4** |
| LSA | | | | S | **Sn** | **16 13 37.8** | **-7.1** |
| LSA | | | | LR | LR | | |
| | comp=E,370nm,17.4s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,520nm,20.0s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,380nm,19.9s | | | | | | |
| **LSA** | **Lhasa** | **15.79** | **354** | P | **P** | **16 10 53.7** | **-0.5** |
| LSA | | | | IAmb | IAmb | 16 10 56.1 | |
| | comp=E,39nm,0.6s | | | | | | |
| **LSA** | **Lhasa** | **15.79** | **354** | P | **P** | **16 10 53.7** | **-0.5** |
| LSA | | | | pmax | pmax | | |
| | comp=E,39nm,0.6s | | | | | | |
| **PDSI** | **Padang** | **16.50** | **153** | P | **Pn** | **16 11 00.2** | **+0.9** |
| | comp=E,37nm,1.0s | | | | | | |
| **AKL** | **Akola** | **16.66** | **296** | *e*P | **P** | **16 11 04.0** | **+0.4** |
| **QIZ** | **Qiongzhong** | **16.94** | **70** | P | **Pn** | **16 11 02.0** | **-2.8** |
| QIZ | | | | S | **Sn** | **16 14 06.3** | **-6.0** |
| QIZ | | | | LR | LR | | |
| | comp=E,1μm,14.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,1μm,17.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,940nm,16.0s | | | | | | |
| **BHPL** | **Bhopal** | **17.41** | **304** | *e*P | **P** | **16 11 13.2** | **+1.4** |
| BHPL | | | | IAmb | IAmb | 16 11 16.5 | |
| | comp=E,35nm,1.2s | | | | | | |
| BHPL | | | | *e*S | **Sn** | **16 14 16.9** | **-6.8** |
| **KAD** | **Karad** | **18.42** | **283** | *e*S | Sn | 16 14 38.2 | -10 |
| **CD2** | **Chengdu** | **19.59** | **29** | P | **P** | **16 11 35.0** | **-0.7** |
| CD2 | | | | pmax | pmax | | |
| | comp=E,30nm,0.5s | | | | | | |
| **AJM** | **Ajmer** | **21.23** | **309** | *ex* | **P** | **16 11 57.5** | **+3.9** |
| AJM | | | | *e*S | **S** | **16 15 41.5** | **-6.9** |
| **GOMU** | **GeErMu** | **22.24** | **4** | P | **P** | **16 12 04.8** | **+0.2** |
| GOMU | | | | pP | pP | 16 12 12.1 | +0.2 |
| GOMU | | | | sP | sP | 16 12 15.4 | +0.2 |
| GOMU | | | | pmax | pmax | | |
| | comp=E,15nm,1.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,230nm,17.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,230nm,14.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,190nm,15.8s | | | | | | |
| **ENH** | **Enshi** | **22.27** | **40** | P | **P** | **16 12 02.6** | **-2.2** |
| ENH | | | | IAmb | IAmb | 16 12 13.6 | |
| | comp=E,30nm,0.9s | | | | | | |
| **LZH** | **Lanzhou** | **24.12** | **22** | ⇑*i*P | **P** | **16 12 23.8** | **+0.4** |
| LZH | | | | pP | sP | 16 12 33.0 | -1.5 |
| LZH | | | | pmax | pmax | | |
| | comp=E,80nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,700nm,13.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,280nm,14.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,930nm,19.6s | | | | | | |
| **XAN** | **Xi'an** | **24.69** | **33** | ⇑P | **P** | **16 12 27.4** | **-1.0** |
| XAN | | | | pP | pP | 16 12 34.8 | -1.5 |
| XAN | | | | pmax | pmax | | |
| | comp=E,21nm,0.6s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,730nm,11.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,560nm,9.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,440nm,17.2s | | | | | | |
| **GTA** | **Gaotai** | **26.09** | **12** | *e*P | **P** | **16 12 41.8** | **+0.7** |
| GTA | | | | pP | sP | 16 12 51.6 | -0.7 |
| GTA | | | | sS | sS | 16 17 26.8 | +3.0 |
| GTA | | | | pmax | pmax | | |
| | comp=E,13nm,1.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,180nm,16.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,190nm,18.7s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,210nm,16.3s | | | | | | |
| **LYN** | **LuoYang** | **27.05** | **37** | *e*P | P | 16 12 57.6 | +7.9 |
| LYN | | | | pmax | pmax | | |
| | comp=E,36nm,0.4s | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.55** | **225** | T | T | 16 43 50.4 | |
| | baz=43,slow=75 | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.55** | **225** | T | T | 16 44 17.5 | |
| | baz=43,slow=75 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.56** | **225** | T | T | 16 44 08.5 | |
| | baz=43,slow=75 | | | | | | |
| **KSH** | **Kashi** | **29.57** | **333** | P | **P** | **16 13 12.9** | **+0.6** |
| KSH | | | | sP | sP | 16 13 28.6 | +5.1 |
| KSH | | | | pmax | pmax | | |
| | comp=E,13nm,0.7s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,220nm,17.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,490nm,20.3s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,330nm,26.8s | | | | | | |
| **NJ2** | **Nanjing** | **29.75** | **48** | *e*P | **P** | **16 13 13.6** | **-0.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=E,9.0nm,1.0s | | | | | | |
| **WMQ** | **Urumqi** | **30.13** | **352** | *e*P | **P** | **16 13 19.9** | **+2.7** |
| WMQ | | | | LR | LR | | |
| | comp=E,310nm,19.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,400nm,15.5s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,280nm,22.1s | | | | | | |
| **HNS** | **HongShan** | **30.34** | **36** | ⇓P | **P** | **16 13 19.8** | **+0.8** |
| HNS | | | | *e*S | **S** | **16 18 13.3** | **-4.4** |
| HNS | | | | pmax | pmax | | |
| | comp=E,7.0nm,0.6s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,570nm,17.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,790nm,20.7s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,510nm,16.9s | | | | | | |
| **BTO** | **Baotou** | **30.47** | **26** | *e*P | **P** | **16 13 20.8** | **+0.6** |
| BTO | | | | pP | **sP** | **16 13 30.3** | **-1.2** |
| BTO | | | | sP | **pP** | **16 13 34.6** | **+6.5** |
| BTO | | | | PP | **PnPn** | **16 14 20.5** | **+1.1** |
| BTO | | | | S | **S** | **16 18 18.9** | **-1.0** |
| BTO | | | | sS | **sS** | **16 18 35.8** | **+2.9** |
| BTO | | | | SS | **SnSn** | **16 19 57.9** | **+1.0** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,33nm,1.1s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,190nm,4.4s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,660nm,14.3s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,570nm,13.5s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,500nm,12.7s | | | | | | |
| **TIA** | **Tai'an** | **30.98** | **40** | P | **P** | **16 13 22.9** | **-1.8** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,19nm,2.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.34** | **28** | *e*P | **P** | **16 13 29.0** | **+1.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,94nm,4.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,310nm,14.5s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,320nm,14.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,320nm,17.7s | | | | | | |
| **SHLS** | **Shalkode** | **31.37** | **341** | *e*P | **P** | **16 13 29.5** | **+1.3** |
| | comp=Z,4.5nm,0.4s,baz=341 | | | | | | |
| **SHLS** | **Shalkode** | **31.37** | **341** | *e*P | **P** | **16 13 29.4** | **+1.3** |
|

baz=339
**ZHN Zhinishke 31.71 340** *e*P **P** **16 13 33.3 +2.1**
**KPKS Kokpek 31.90 340** *e*P **P** **16 13 34.9 +2.1**
comp=Z,6.2nm,0.9s,baz=340
**KPKS Kokpek 31.90 340** *e*P **P** **16 13 34.9 +2.1**
KPKS pmax pmax
comp=Z,6.0nm,0.9s
**GAR Garm 32.00 325** P **P** **16 13 35.4 +1.6**
**TNSS Tian-Shan 32.13 338** *e*P **P** **16 13 37.0 +1.8**
baz=337
**TNSS Tian-Shan 32.13 338** *e*P **P** **16 13 36.9 +1.8**
**MDOK Medeo 32.20 338** *e*P **P** **16 13 37.9 +2.4**
baz=338
**MDOK Medeo 32.20 338** *e*P **P** **16 13 37.9 +2.4**
**AAA Alma-Ata 32.29 338** *e*P **P** **16 13 38.7 +2.4**
baz=338
**AAA Alma-Ata 32.29 338** *e*P **P** **16 13 38.6 +2.4**
**CHGR Chuyangaron 32.41 324** P **P** **16 13 38.1 +0.8**
**CHGR Chuyangaron 32.41 324** P **P** **16 13 38.1 +0.8**
CHGR pmax pmax
comp=Z,50nm,0.8s
**BTK Batken 32.49 327** IAmb IAmb 16 13 42.4
comp=Z,27nm,1.1s
**SIMJ Simiganj 32.50 324** P **P** **16 13 39.5 +1.3**
**SIMJ Simiganj 32.50 324** P **P** **16 13 39.8 +1.6**
SIMJ pP **pP** **16 13 46.3 +0.3**
**AAK Ala-Archa 32.76 334** LR LR 16 29 27.0
comp=Z,380nm,21.5s,baz=152,slow=41
**AAK Ala-Archa 32.76 334***c* *i*P **P** **16 13 43.0 +2.5**
AAK pmax pmax
comp=Z,15nm,1.4s
**CHKK Chushkaly 32.82 338** *e*P **P** **16 13 43.2 +2.4**
baz=338
**CHKK Chushkaly 32.82 338** *e*P **P** **16 13 43.2 +2.4**
**ARXS Arharly 32.84 340** *e*P **P** **16 13 42.4 +1.3**
**BJI Beijing 33.02 34** P **P** **16 13 43.3 +0.8**
BJI pmax pmax
comp=Z,4.0nm,1.3s
BJI pmax pmax
comp=Z,47nm,4.3s
BJI LR LR
comp=Z,210nm,19.9s
BJI LR LR
comp=Z,330nm,21.3s
BJI LR LR
comp=Z,140nm,20.5s
**KUU Kurty 33.09 338** *e*P **P** **16 13 45.3 +2.2**
comp=Z,16nm,1.0s,baz=338
**KUU Kurty 33.09 338** *e*P **P** **16 13 45.3 +2.2**
KUU pmax pmax
comp=Z,16nm,1.0s
**TDK Taldyqorghan 33.36 341** *e*P **P** **16 13 47.4 +1.9**
comp=Z,5.5nm,0.5s,baz=341
**TDK Taldyqorghan 33.36 341** *e*P **P** **16 13 47.3 +1.9**
TDK pmax pmax
comp=Z,5.0nm,0.5s
**MK31 Makanchi Array 33.97 347** IAmb IAmb 16 13 53.2
comp=Z,12nm,0.9s
**MK31 Makanchi Array 33.97 347***c* *i*P **P** **16 13 52.0 +1.2**
**MKAR Makanchi Array 33.97 347** **P** **16 13 52.2 +1.4**
**MKAR Makanchi Array 33.97 347** P **P** **16 13 51.6 +0.9**
comp=Z,9.9nm,0.7s,baz=162,slow=8.7,SNR=78
MKAR LR LR 16 31 24.3
comp=Z,278nm,20.9s,baz=172,slow=43
comp=Z,9.9nm,0.7s
**MAKZ Makanchi 34.05 346** P **P** **16 13 52.2 +0.7**
MAKZ IAmb IAmb 16 13 53.7
comp=Z,36nm,1.6s
**MAKZ Makanchi 34.05 346** P **P** **16 13 52.2 +0.7**
MAKZ pmax pmax
comp=Z,36nm,1.6s
**MAKZ Makanchi 34.05 346** P **P** **16 13 52.7 +1.2**
MAKZ pP **pP** **16 13 59.1 -0.2**
**ZSN Zaisan 34.10 350** *e*P **P** **16 13 53.9 +2.0**
baz=350
ZSN *e*S **S** **16 19 20.5 +4.4**
baz=350
**ZSN Zaisan 34.10 350** *e*P **P** **16 13 53.8 +2.0**
ZSN *e*S **S** **16 19 20.5 +4.4**
**KK31 Karatay Array 34.92 331** IAmb IAmb 16 14 02.2
comp=Z,21nm,1.4s
**KKAR Karatay Array 34.92 331** P **P** **16 14 00.2 +1.2**
**KKAR Karatay Array 34.92 331** IAmb IAmb 16 14 02.2
comp=Z,20nm,1.4s
**KKAR Karatay Array 34.92 331** P **P** **16 14 00.2 +1.2**
**BTLS Baital 34.94 336** *e*P **P** **16 14 01.1 +2.0**
comp=Z,4.1nm,0.5s,baz=336
**BTLS Baital 34.94 336** *e*P **P** **16 14 01.1 +2.0**
BTLS pmax pmax
comp=Z,4.0nm,0.5s
**BRLS Borolday 35.19 330** *e*P **P** **16 14 02.5 +1.2**
baz=329
**BRLS Borolday 35.19 330** *e*P **P** **16 14 02.5 +1.2**
**SONM Songino Array 35.60 16** P **P** **16 14 05.1 +0.1**
SONM IAmb IAmb 16 14 07.0
comp=Z,22nm,1.4s
**SONM Songino Array 35.60 16** P **P** **16 14 05.3 +0.4**
comp=Z,7.2nm,0.8s,baz=200,slow=9.1,SNR=36
comp=Z,7.2nm,0.8s
**SONM Songino Array 35.60 16** P **P** **16 14 05.1 +0.1**
SONM pmax pmax
comp=Z,22nm,1.4s
**ULN Ulaanbaatar 35.80 16** P **P** **16 14 06.5 -0.2**
ULN IAmb IAmb 16 14 08.5
comp=Z,20nm,1.4s
**ULN Ulaanbaatar 35.80 16***c* *i*P **P** **16 14 07.2 +0.5**
ULN pmax pmax
comp=Z,9.0nm,1.2s
**XLT XiLinHaoTe 35.81 29** *e*P **P** **16 14 07.0 +0.2**
XLT sP sP 16 14 21.3 +3.2
XLT pmax pmax
comp=Z,10.0nm,1.1s
XLT LR LR
comp=Z,310nm,18.3s
XLT LR LR
comp=Z,230nm,16.2s
**DGZ Jazzator, Alta 35.96 354***c* *i*P **P** **16 14 09.4 +1.4**
DGZ pmax pmax
comp=Z,9.0nm,1.0s
**KURBB Kurchatov Arra 38.44 345** P **P** **16 14 29.7 +0.9**
comp=Z,13nm,0.7s,baz=163,slow=8.0,SNR=90
KURBB LR LR 16 33 51.2
comp=Z,293nm,20.4s,baz=162,slow=42
comp=Z,13nm,0.7s
**KURK Kurchatov 38.50 345** P **P** **16 14 30.2 +0.9**
KURK IAmb IAmb 16 14 31.7
comp=Z,41nm,1.4s
**KURK Kurchatov 38.50 345***c* *i*P **P** **16 14 30.6 +1.2**
KURK pmax pmax
comp=Z,43nm,1.7s
**KURK Kurchatov 38.50 345** P **P** **16 14 30.5 +1.1**
KURK pP **pP** **16 14 37.4 +0.1**
**KSRS Korea Array 38.89 47** P **P** **16 14 32.3 -0.6**
comp=Z,1.2nm,0.6s,baz=242,slow=8.6,SNR=7.9
KSRS LR LR 16 33 34.2
comp=Z,241nm,18.6s,baz=220,slow=41
comp=Z,1.2nm,0.6s
**JNU Nakatsue 39.36 54** LR LR 16 31 53.4
comp=Z,201nm,21.1s,baz=252,slow=38
**ZAA0 Zalesovo Array 40.44 353** P **P** **16 14 45.5 0.0**
ZAA0 IAmb IAmb 16 14 47.4
comp=Z,20nm,1.1s
**ZALV Zalesovo Beam 40.44 353** P **P** **16 14 46.0 +0.5**
**ZALV Zalesovo Beam 40.44 353** P **P** **16 14 46.3 +0.8**
comp=Z,12nm,0.6s,baz=176,slow=8.6,SNR=55
ZALV LR LR 16 34 56.2
comp=Z,230nm,20.8s,baz=190,slow=41
comp=Z,12nm,0.6s
**ZALV Zalesovo Beam 40.44 353** P **P** **16 14 46.0 +0.5**
**CN2 Changchun 40.70 37** P **P** **16 14 47.8 0.0**
CN2 pmax pmax
comp=Z,10.0nm,0.8s
CN2 LR LR
comp=Z,400nm,21.0s
CN2 LR LR
comp=Z,300nm,21.0s
CN2 LR LR
comp=Z,300nm,18.0s
**BNX BinXian 42.97 36** ⇓P **P** **16 15 06.0 -0.3**
BNX pmax pmax
comp=Z,11nm,1.3s
**BRVK Borovoye 43.00 340** P **P** **16 15 06.6 +0.1**
**BRVK Borovoye 43.00 340***c* *e*P **P** **16 15 07.2 +0.7**
BRVK pmax pmax
comp=Z,11nm,1.3s
**BRVK Borovoye 43.00 340** P **P** **16 15 07.6 +1.1**
BRVK pP **pP** **16 15 14.3 -0.2**
**ABKAR Akbulak array 44.44 329** **P** **16 15 19.8 +1.7**
**ABKAR Akbulak array 44.44 329** IAmb IAmb 16 15 21.3
comp=Z,16nm,1.1s
**USRK Ussuriysk Ar. 44.85 40** P **P** **16 15 20.7 -0.8**
comp=Z,0.9nm,0.5s,baz=259,slow=5.6,SNR=7.1
comp=Z,0.9nm,0.5s
**HEH HeiHe 45.77 30** *e*P **P** **16 15 28.0 -0.7**
HEH pmax pmax
comp=Z,8.0nm,1.4s
**MAJO Matsushiro 46.16 52***d* *i*P **P** **16 15 31.8 -0.2**
MAJO pmax pmax
comp=Z,4.0nm,0.9s
**MAJO Matsushiro 46.16 52** P **P** **16 15 31.8 -0.2**
**MJAR Matsushiro Arr 46.16 52** P **P** **16 15 31.8 -0.2**
comp=Z,1.9nm,0.9s,baz=265,slow=8.0,SNR=10
comp=Z,1.9nm,0.9s
**KLR Kul'dur 47.39 34** LR LR 16 38 42.1
comp=Z,225nm,18.6s,baz=232,slow=40
**KLR Kul'dur 47.39 34***c* *i*P **P** **16 15 41.0 -0.4**
KLR pmax pmax
comp=Z,10.0nm,1.6s
**ZEA Zeya 48.00 27** *e*P **P** **16 15 46.3 +0.3**
**MAK Makhachkala 48.53 316** *e*P **P** **16 15 49.3 -1.0**
MAK *e*S **S** **16 22 48.6 -1.5**
MAK pmax pmax
comp=Z,32nm,0.4s
MAK MLR MLR
comp=Z,112nm,18.0s
**SVE Sverdlovsk 49.40 337** *e*P **P** **16 15 58.7 +1.9**
SVE pmax pmax
comp=Z,28nm,1.2s
**GNI Garni 49.52 311** LR LR 16 41 20.5
comp=Z,69nm,18.5s,baz=103,slow=41
**JTM Tenmabayashi 49.59 48** P **P** **16 15 57.4 -1.1**
JTM IAmb IAmb 16 16 00.5
comp=Z,17nm,1.1s
**ARU Arti 49.92 336** P **P** **16 16 01.5 +0.8**
**ARU Arti 49.92 336** LR LR 16 40 01.8
comp=Z,168nm,20.0s,baz=134,slow=40
**ARU Arti 49.92 336***c* *i*P **P** **16 16 01.8 +1.0**
ARU 16 17 56.7
ARU S **S** **16 23 10.3 +1.1**
ARU SS **SS** **16 26 38.9 -3.3**
ARU pmax pmax
comp=Z,25nm,1.6s
**ARU Arti 49.92 336** P **P** **16 16 01.8 +1.0**
ARU pP **pP** **16 16 08.7 -0.1**
**ASAJ Asahikawa 51.75 44** LR LR 16 38 54.1
comp=Z,133nm,20.2s,baz=105,slow=37
**KBZ Khabaz 51.95 315** P **P** **16 16 18.9 +2.7**
comp=Z,1.3nm,0.6s,baz=110,slow=8.1,SNR=2.2
comp=Z,1.3nm,0.6s
**KBZ Khabaz 51.95 315***d* *i*P **P** **16 16 19.1 +2.9**
KBZ pmax pmax
comp=Z,7.0nm,1.8s
**SHA1 Shidzhatmaz 52.12 315** *e*P **P** **16 16 20.5 +2.7**
**KVAR Kislovodsk Arr 52.16 315** LR LR 16 43 07.1
comp=Z,111nm,19.1s,baz=30,slow=41
**KIV Kislovodsk 52.17 315** P **P** **16 16 19.6 +1.7**
KIV IAmb IAmb 16 16 30.5
comp=Z,21nm,1.0s
**KIV Kislovodsk 52.17 315** *e*P **P** **16 16 19.7 +1.7**
KIV pmax pmax
comp=Z,19nm,1.1s
KIV MLR MLR
comp=Z,82nm,17.0s
**WRA Warramunga Arr 52.80 129** P **P**
comp=Z,2.6nm,0.9s,baz=313,slow=8.4,SNR=22 **16 16 22.4 -0.5**
comp=Z,2.6nm,0.9s
**YSS Yuzh-Sakhalins 52.85 41***d* *i*P **P** **16 16 23.3 +0.5**
YSS pmax pmax
comp=Z,16nm,1.3s
**FURI Furi 53.38 271** LR LR 16 39 38.8
comp=Z,73nm,18.1s,baz=100,slow=36
**SOC Sochi 54.11 314** *e*P **P** **16 16 30.5 -1.6**
SOC *e* 16 18 35.2
SOC *e*PPP PPP 16 19 45.0
SOC *e*S **S** **16 24 04.2 -2.9**
SOC *e*SS **SS** **16 27 55.6 +6.7**
SOC pmax pmax
comp=Z,9.0nm,0.6s
SOC MLR MLR
comp=Z,54nm,19.0s
**TYV Tymovskoe 54.32 36** *e*P **P** **16 16 34.8 +1.3**
TYV pmax pmax
comp=Z,5.0nm,1.1s
TYV pmax pmax
comp=Z,100nm,3.6s
**YAK Yakutsk 54.69 20***c* *i*P **P** **16 16 35.3 -0.7**
YAK pmax pmax
comp=Z,15nm,1.3s
**AS31 Alice Springs 54.74 133** P **P** **16 16 36.6 -0.5**
**ASAR Alice Springs 54.74 133** P **P** **16 16 36.7 -0.3**
comp=Z,1.8nm,0.7s,baz=310,slow=7.2,SNR=36
comp=Z,1.8nm,0.7s
**KIRV Kirov 55.09 334** LR LR 16 44 52.7
comp=Z,125nm,18.3s,baz=132,slow=41
**MMAI Mount Meron Ar 55.46 301** LR LR 16 44 59.2
comp=Z,97nm,18.2s,baz=62,slow=41
**EIL Elat 55.59 296** LR LR 16 42 53.6
comp=Z,95nm,20.6s,baz=71,slow=39
**ANN Anapa 56.02 315** *e*P **P** **16 16 42.1 -3.8**
ANN *e*PP **pP** **16 16 54.8 +0.8**
ANN *e*S **S** **16 24 32.8 +0.2**
ANN pmax pmax
comp=Z,21nm,0.7s
ANN MLR MLR
comp=Z,197nm,19.0s
**BR104 Keskin Array S 57.72 308** P **P** **16 16 59.4 +1.1**
comp=Z,4.8nm,1.1s,comp=Z,38nm
**BR131 Keskin Array S 57.72 308** P **P** **16 16 59.0 +0.7**
BR131 IAmb IAmb 16 17 13.5
comp=Z,5.0nm,0.8s
**BR131 Keskin Array S 57.72 308***c* *i*P **P** **16 16 59.3 +1.0**
**BRTR Keskin Array B 57.72 308** P **P** **16 16 58.7 +0.4**
**BRTR Keskin Array B 57.72 308** P **P** **16 16 59.2 +1.0**
comp=Z,2.6nm,0.8s,baz=125,slow=6.5,SNR=13
comp=Z,2.6nm,0.8s
**BRTR Keskin Array B 57.72 308** P **P** **16 16 58.7 +0.4**
**BR105 Keskin Array S 57.74 308** P **P** **16 16 59.3 +0.9**
comp=Z,5.1nm,0.8s,comp=Z,44nm
**BR106 Keskin Array S 57.74 308** P **P** **16 16 59.5 +1.1**
comp=Z,5.9nm,0.8s,comp=Z,46nm
**MOS Moscow 59.38 327** *e*P **P** **16 17 08.2 -1.1**
MOS pmax pmax
comp=Z,32nm,0.7s
**OBN Obninsk 59.71 326** LR LR 16 46 48.2
comp=Z,82nm,21.0s,baz=182,slow=40
**OBN Obninsk 59.71 326**⇓ *e*P **P** **16 17 12.8 +1.2**
OBN *PP **sP** **16 17 21.0 -2.2**
OBN *SP pP 16 17 28.0 +8.1
OBN 16 18 02.0
OBN *e*SS SS 16 29 17.0 +0.4
OBN pmax pmax
comp=Z,12nm,1.4s
**TIXI Tiksi 61.57 12**⇓ *i*P **P** **16 17 23.9 -0.1**
TIXI pmax pmax
comp=Z,13nm,1.1s
**AKASG Malin Array Be 62.77 320** P **P** **16 17 33.0 +0.6**
comp=Z,0.3nm,0.4s,baz=92,slow=4.9,SNR=4.7
comp=Z,0.3nm,0.4s
**AKBB Malin Array Si 62.77 320** *e*P **P** **16 17 32.6 +0.1**
AKBB pmax pmax
comp=Z,4.0nm,1.1s
**AKBB Malin Array Si 62.77 320** P **P** **16 17 32.4 -0.1**
**KIEV Kiev 62.78 320** P **P** **16 17 32.4 -0.1**
**AK11 Malin Array Si 62.80 320** P **P** **16 17 33.2 +0.5**
**AK12 Malin Array Si 62.80 320** P **P** **16 17 33.2 +0.5**
**AK04 Malin Array Si 62.81 320** P **P** **16 17 33.0 +0.3**
**LUBAR Lubar, Ukraine 63.55 319** P **P** **16 17 38.1 +0.5**
**NDNU Novodnistrovsk 63.58 318** P **P** **16 17 38.1 +0.2**
**MI28 Mi28,Pidlybu 63.78 320** P **P** **16 17 39.6 +0.4**
**MLR Muntele Rosu 64.12 314** P **P** **16 17 43.2 +1.5**
MLR IAmb IAmb 16 17 45.8
comp=Z,14nm,1.2s
**MLR Muntele Rosu 64.12 314** LR LR 16 48 22.1
comp=Z,113nm,21.2s,baz=52,slow=39
**MLR Muntele Rosu 64.12 314** P **P** **16 17 43.2 +1.5**
MLR pmax pmax
comp=Z,14nm,1.2s
**KMPD K-Podol'skiy 64.17 317** P **P** **16 17 41.9 +0.2**
**MNK Minsk 64.36 324** *i* P **P** **16 17 43.7 +0.8**
comp=E,10.0nm,0.7s
MNK *i* P **P** **16 17 43.7 +0.8**
comp=N,6.0nm,0.8s
MNK *i* P **P** **16 17 43.7 +0.8**
comp=Z,8.0nm,0.7s,baz=102
MNK *i* PcP **PcP** **16 18 17.9 +0.7**
MNK *i* PP **PP** **16 20 05.4 +0.9**
MNK *i* PPP PPP 16 21 36.6
MNK *i* S **S** **16 26 20.2 +0.8**
MNK *i* ScS **SKiKP** **16 28 01.8 +6.4**
MNK *i* SS SS 16 31 34.6 +65
MNK *i* LQ LQ 16 39 16.4
MNK *i* LR LR 16 42 47.8
MNK *i* LRM MLR 16 50 16.3
comp=Z,106nm,18.4s
MNK *i* LRM MLR 16 52 07.6
comp=E,176nm,18.6s
MNK *i* LRM MLR 16 54 11.3
comp=N,121nm,17.8s
**MNK Minsk 64.36 324** *i* P **P** **16 17 43.7 +0.8**
MNK *i* 16 18 17.9
MNK *i* 16 20 05.3
MNK *i* PPP PPP 16 21 36.5
MNK *i* S **S** **16 26 20.2 +0.8**
MNK pmax pmax
comp=Z,8.0nm,0.7s
MNK pmax pmax
comp=E,10.0nm,0.7s
MNK pmax pmax
comp=N,6.0nm,0.8s
MNK MLR MLR
comp=Z,106nm,18.0s
**BURAR Bucovina Array 64.87 316** P **P** **16 17 47.7 +1.2**
**BUR08 Bucovina Ar. S 64.89 316** P **P** **16 17 47.5 +0.9**
**STKA Stephens Creek 65.13 135** P **P** **16 17 49.9 +1.6**
comp=Z,1.8nm,0.5s,baz=302,slow=6.9,SNR=7.6
STKA LR LR 16 46 31.7
comp=Z,88nm,21.6s,baz=316,slow=36
comp=Z,1.8nm,0.5s
**FINES FINESS Array B 66.88 331** P **P** **16 17 59.0 +0.1**
comp=Z,3.1nm,0.7s,baz=137,slow=20,SNR=9.3
comp=Z,3.1nm,0.7s
**NIE Niedzica 68.30 318** *e*P **P** **16 18 10.9 +2.6**
**OJC Ojcow 68.67 319** *e*P **P** **16 18 12.4 +1.8**
**ARCES ARCESS Array B 69.22 340** P **P** **16 18 14.2 +0.5**
comp=Z,1.9nm,0.6s,baz=90,slow=6.7,SNR=9.6
ARCES LR LR 16 51 24.1
comp=Z,121nm,18.9s,baz=111,slow=38
comp=Z,1.9nm,0.6s
**MORC Moravsky Berou 70.10 318** *e*P **P** **16 18 20.7 +1.2**
**VRAC Vranov 70.71 318** *e*P **P** **16 18 24.2 +1.0**
**VRAC Vranov 70.71 318** LR LR 16 53 00.0
comp=Z,82nm,21.2s,baz=60,slow=39
**KRUC Moravsky 70.84 317** *e*P **P** **16 18 22.9 -1.0**
**RONA Rosalia, Austr 70.89 316** *i* P **P** **16 18 24.8 +0.5**
comp=Z,3.2nm,0.8s
**BILL Bilibino 70.93 22**⇑ *e*P **P** **16 18 24.1 0.0**
BILL 16 18 46.0
BILL pmax pmax
comp=Z,6.0nm,1.4s
BILL MLR MLR
comp=Z,90nm,21.0s
**KSP Ksiaz 70.93 319** *e*P **P** **16 18 26.9 +2.4**
**CONA Conrad Observa 71.19 316** *e*P **P** **16 18 28.0 +1.8**
comp=Z,2.7nm,1.2s
**ARSA Arzberg 71.42 315** *i* P **P** **16 18 30.0 +2.4**
comp=Z,1.5nm,0.6s
**SOKA Soboth 71.76 315** *i* P **P** **16 18 31.2 +1.6**
comp=Z,5.5nm,1.3s
**OBKA Obir 72.10 315** *i* P **P** **16 18 33.9 +2.2**
comp=Z,5.2nm,1.2s
**BRG Berggiesshubel 72.42 319** *e*P **P** **16 18 35.6 +2.1**
BRG Amp 16 18 37.3
comp=Z,2.8nm,0.8s
**GERES GERESS Array B 72.61 317** P **P** **16 18 35.8 +1.1**
**GERES GERESS Array B 72.61 317** P **P** **16 18 35.1 +0.4**
comp=Z,2.1nm,0.6s,baz=140,slow=10,SNR=9.6
comp=Z,2.1nm,0.6s
**KHC Kasperske Hory 72.69 317** *e*P **P** **16 18 37.1 +2.0**
**KHC Kasperske Hory 72.69 317***c* *i*P **P** **16 18 36.6 +1.5**
KHC pmax pmax
comp=Z,12nm,1.8s
**HFS Hagfors 72.70 329** P **P** **16 18 35.5 +0.6**
comp=Z,4.6nm,0.8s,baz=99,slow=9.2,SNR=10
HFS LR LR 16 54 12.1
comp=Z,129nm,20.6s,baz=102,slow=39
comp=Z,4.6nm,0.8s
**MYKA Terra Mystica 72.72 315** *i* P **P** **16 18 37.4 +2.1**
comp=Z,2.4nm,0.6s
**PRED Cave del Predi 72.78 315** IAmb IAmb 16 18 44.5
comp=Z,7.0nm,1.0s
**KBA Koelnbreinsper 72.91 315** *i* P **P** **16 18 38.5 +1.8**
comp=Z,5.5nm,1.6s
**CLL Collm 73.01 320** *i* P **P** **16 18 38.0 +1.1**
CLL *i* pP **sP** **16 18 47.2 -1.4**
CLL *i* sP **PcP** **16 18 50.0 -3.7**
CLL AMS AMS 16 55 00.0
comp=Z,100nm,20.4s
**LESA Schwarzleotal 73.35 316** *i* P **P** **16 18 39.9 +0.8**
comp=Z,2.2nm,0.5s
**ABTA Abfaltersbach 73.49 315** *i* P **P** **16 18 40.6 +0.6**
comp=Z,4.6nm,1.5s
**SHEM Shemya Is, Ala 73.67 39** LR LR 16 52 57.1
comp=Z,43nm,20.4s,baz=173,slow=37
**SPITS Spitsbergen Ar 73.72 348** LR LR 16 59 44.8
comp=Z,116nm,19.0s,baz=73,slow=43
**NB2 NORSAR Subarra 73.94 330** P **P** **16 18 42.7 +0.4**
comp=Z,3.4nm,0.8s,baz=91,slow=5.3
**NOA NORSAR Array B 73.94 330** P **P** **16 18 42.5 +0.2**
comp=Z,1.3nm,0.6s,baz=90,slow=5.7,SNR=6.6
NOA LR LR 16 54 31.5
comp=Z,71nm,20.6s,baz=105,slow=38
comp=Z,1.3nm,0.6s
**WTTA Wattenberg 74.06 316** *i* P **P** **16 18 43.7 +0.3**
comp=Z,3.1nm,0.6s
**SQTA Sankt Quirin 74.36 316** *i* P **P** **16 18 46.0 +0.9**
comp=Z,2.9nm,0.5s
**MOTA Moosalm 74.42 316** *i* P **P** **16 18 45.7 +0.2**
comp=Z,4.9nm,1.1s
**RETA Reutte 74.64 316** *i* P **P** **16 18 47.9 +1.2**
comp=Z,8.2nm,1.3s
**FETA Feichten 74.70 315** *i* P **P** **16 18 48.2 +1.1**
comp=Z,4.5nm,1.2s
**DAVA Damuels 75.25 316** *i* P **P** **16 18 51.4 +1.1**
comp=Z,6.5nm,0.9s
**DAVOX Davos/Dischmat 75.30 315** LR LR 16 58 46.7
comp=Z,46nm,18.2s,baz=85,slow=41
**LBTB Lobatse 76.23 240** LR LR 16 47 49.8
comp=Z,128nm,20.8s,baz=64,slow=32
**BOSA Boshof 77.91 236** P **P** **16 19 07.8 +2.3**
comp=Z,2.5nm,0.6s,baz=97,slow=3.7,SNR=5.6
BOSA LR LR 16 50 21.0
comp=Z,80nm,19.7s,baz=52,slow=33
comp=Z,2.5nm,0.6s
**EKA Eskdalemuir Ar 82.13 325** P **P** **16 19 28.2 +0.5**
comp=Z,0.7nm,0.6s,baz=88,slow=5.8,SNR=4.8
comp=Z,0.7nm,0.6s
**F20K Avaraart Lake 85.31 22** P **P** **16 19 44.3 +0.6**
**ESDC Sonseca Array 86.48 310** P **P** **16 19 50.9 +0.7**
comp=Z,0.9nm,0.7s,baz=49,slow=4.8,SNR=6.4
comp=Z,0.9nm,0.7s
**BORG Borgarnes 87.44 337** LR LR 17 01 16.2
comp=Z,56nm,21.6s,baz=37,slow=37
**TORD Torodi Ar. Bea 88.13 283** P **P** **16 19 59.8 +1.2**
comp=Z,0.8nm,0.7s,baz=88,slow=6.3,SNR=4.5
comp=Z,0.8nm,0.7s
**BPAW Bear Paw Mtn. 88.41 23** P **P** **16 19 59.6 +0.6**
**MDT Midelt 88.80 303** LR LR 17 07 27.9
comp=Z,52nm,18.4s,baz=152,slow=41
**MDM Murphy Dome 89.00 22** P **P** **16 20 01.5 -0.2**
**ILAR Eielson Array 89.58 22** P **P** **16 20 04.2 -0.3**
comp=Z,0.8nm,0.8s,baz=278,slow=4.3,SNR=4.4
comp=Z,0.8nm,0.8s
**INK Inuvik 91.51 16** LR LR 17 06 24.5
comp=Z,66nm,21.3s,baz=342,slow=39
**URZ Urewera 93.97 128** LR LR 17 08 04.1
comp=Z,54nm,18.4s,baz=22,slow=39
**SFJD Kangerlussuaq 95.00 346** LR LR 17 12 17.8
comp=Z,66nm,18.9s,baz=46,slow=41
**VNDA Vanda 99.05 168** LR LR 17 04 23.3
comp=Z,40nm,18.5s,baz=281,slow=35
**PDAR Pinedale Array 119.90 19** PKP **PKiKP** **16 25 58.4 +0.2**
comp=Z,0.2nm,0.5s,baz=343,slow=2.8,SNR=2.1
**NVAR Mina Array Bea 120.24 28** PKP **PKiKP** **16 25 59.7 +0.7**
comp=Z,0.2nm,0.4s,baz=338,slow=2.1,SNR=1.6
**TXAR Lajitas Array 134.08 20** PKP **PKPdf** **16 26 25.6 +0.2**
comp=Z,0.2nm,0.5s,baz=174,slow=1.1,SNR=3.7
**PLCA Paso Flores 149.67 205** PKPbc **PKPbc** **16 26 57.4 +0.3**
comp=Z,1.6nm,0.9s,baz=124,slow=3.6,SNR=1.7

*IDC* ***13*** *16:13:58.1±6.1,5.˝57S×151.˚62E,h48km±52km, mb3.4/5, mbtmp3.7/6, ML1.8/1, MS3.6/2, Error ellipse: s-maj=58.4km s-min=35.3km az=112.0*

**ISC 13 16:13:59.0±1.2,5.˝5S±0.˚3×151.˚6E±0.˚3, h57km, n9, σ0s56/8, mb3.6/5, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.84** | **228** | P | **Pn** | **16 15 23.9** | **+0.8** |
| | 1.5nm,0.3s,baz=54,slow=7.4,SNR=7.8 | | | | | | |
| PMG | | | | S | **Sn** | **16 16 27.8** | **-0.9** |
| | 33nm,0.5s,baz=157,slow=21,SNR=9.2 | | | | | | |
| | 12nm,0.7s | | | | | | |
| **HNR** | **Honiara** | **9.16** | **116** | LR | LR | 16 19 54.3 | |
| | comp=Z,315nm,18.1s,baz=92,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.06** | **228** | P | **P** | **16 18 49.3** | **0.0** |
| | 1.5nm,0.5s,baz=53,slow=9.9,SNR=12 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.80** | **222** | P | **P** | **16 19 15.9** | **0.0** |
| | 1.1nm,0.8s,baz=57,slow=8.7,SNR=10 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **RPZ** | **Rata Peaks** | **41.73** | **159** | LR | LR | 16 39 11.4 | |
| | comp=Z,66nm,19.1s,baz=138,slow=36 | | | | | | |
| **VNDA** | **Vanda** | **72.16** | **178** | P | **P** | **16 25 17.2** | **0.0** |
| | 0.3nm,0.5s,baz=352,slow=7.0,SNR=2.7 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **83.28** | **22** | P | **P** | **16 26 19.0** | **-0.2** |
| | 0.5nm,0.6s,baz=251,slow=5.6,SNR=2.4 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.44** | **180** | P | **P** | **16 26 25.2** | **-0.1** |
| | 0.7nm,0.7s,baz=21,slow=6.3,SNR=1.9 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.36** | **286** | PKPbc | **PKPbc** | **16 33 42.6** | **0.0** |
| | 1.7nm,0.7s,baz=86,slow=4.5,SNR=8.8 | | | | | | |

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*BJI* ***13*** *16:19:15.7±0.0,25.˚71N×125.˚32E,h122km, mb4.6/55, mB4.7/20*

*MOS* ***13*** *16:19:15.0±0.9,25.˚78N×125.˚24E,h109km, mb4.7/34, Error ellipse: s-maj=8.1km s-min=5.1km az=113.3*

*NEIC* ***13*** *16:19:16.8±1.6,25.˚80N±0.˚09×125.˚23E±0.˚08, h108km±6km, mb5.1/161, Error ellipse: s-maj=14.1km s-min=8.8km az=146.0*

*IDC* ***13*** *16:19:16.8±2.0,25.˚82N×125.˚21E, h112km±18km, mb4.1/28, mbtmp4.5/33, MS3.5/2, Error ellipse: s-maj=14.2km s-min=10.4km az=66.0*

*NIED* ***13*** *16:19:17.3,25.˚84N×125.˚20E, h103km, MW4.5, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr-3.83; Mθθ-3.16; Mϕϕ6.99; Mrθ-3.54; Mθϕ0.48; Mϕr-1.70; Fault plane solution: M0 7.23000×10^15 NP1:φs 36.00000°, δ 66.00000°, λ -46.00000°. NP2:φs 149.00000°, δ 49.00000°, λ -148.00000°.*

*JMA* ***13*** *16:19:17.3±0.2,25.˚8N±1.˚0×125.˚2E±1.˚0, h103km, MD4.4/25, MV4.5/25, NW OFF MIYAKOJIMA ISLAND*

*JMA Felt I J1 at NW OFF MIYAKOJIMA ISLAND.*

**ISC 13 16:19:17.6±0.4,25.˚74N±0.˚04×125.˚30E±0.˚04, h123km±3km, h129km: pP-P, n364, σ1s18/330, mb4.8/156, 16C-12D, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKM** | **Ikemajima** | **0.82** | **183** | *i* P | **Pn** | **16 19 37.4** | **-0.8** |
| JIKM | | | | S | **Sn** | **16 19 52.2** | **-1.5** |
| **JIKM** | **Ikemajima** | **0.82** | **183** | A | A | 16 19 37.4 | |
| | comp=E,31nm,3.6s,comp=N,35nm,1.3s | | | | | | |
| **JIRB** | **Irabujima** | **0.92** | **187** | *i* P | **Pn** | **16 19 38.0** | **-1.1** |
| JIRB | | | | S | **Sn** | **16 19 52.7** | **-2.6** |
| **JIRB** | **Irabujima** | **0.92** | **187** | A | A | 16 19 38.0 | |
| | comp=E,24nm,2.4s,comp=N,23nm,1.0s | | | | | | |
| **JMJ** | **Miyako jima 2** | **0.92** | **180** | P | **Pn** | **16 19 39.5** | **+0.3** |
| **JOGS** | **Gusukube** | **0.98** | **174** | *i* P | **Pn** | **16 19 39.3** | **-0.4** |
| JOGS | | | | S | **Sn** | **16 19 55.4** | **-1.0** |
| **JMJ2** | **Miyako jima3** | **1.00** | **179** | *i* P | **Pn** | **16 19 39.4** | **-0.5** |
| JMJ2 | | | | S | **Sn** | **16 19 55.0** | **-1.6** |
| **JTJ** | **Tarama** | **1.22** | **206** | *i* P | **Pn** | **16 19 41.2** | **-1.0** |
| JTJ | | | | S | **Sn** | **16 19 58.2** | **-2.5** |
| **JTJ** | **Tarama** | **1.22** | **206** | A | A | 16 19 41.2 | |
| | comp=E,43nm,1.3s,comp=N,32nm,1.2s | | | | | | |
| **JKE** | **Kume jima 2** | **1.46** | **66** | *i* P | **Pn** | **16 19 44.4** | **-0.3** |
| JKE | | | | *e*S | **Sn** | **16 20 04.2** | **-1.1** |
| **JKE** | **Kume jima 2** | **1.46** | **66** | A | A | 16 19 44.4 | |
| | comp=E,4.0nm,3.9s,comp=N,6.0nm,0.9s | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.46** | **218** | *i* P | **Pn** | **16 19 43.8** | **-0.9** |
| JISG | | | | S | **Sn** | **16 20 02.6** | **-2.7** |
| **JISG** | **Ishigakijimahi** | **1.46** | **218** | A | A | 16 19 43.8 | |
| | comp=E,15nm,1.1s,comp=N,32nm,0.7s | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.73** | **218** | *i* P | **Pn** | **16 19 46.6** | **-1.3** |
| JIJ | | | | S | **Sn** | **16 20 07.5** | **-3.5** |
| **JIJ** | **Ishigaki jima** | **1.73** | **218** | A | A | 16 19 46.6 | |
| | comp=E,15nm,1.0s,comp=N,9.0nm,1.1s | | | | | | |
| **JKRS** | **Kuro-shima** | **1.90** | **218** | P | **Pn** | **16 19 48.9** | **-1.1** |
| JKRS | | | | S | **Sn** | **16 20 12.7** | **-2.0** |
| **JAGN** | **Aguni-jima** | **1.94** | **64** | *i* P | **Pn** | **16 19 50.2** | **-0.1** |
| JAGN | | | | S | **Sn** | **16 20 14.0** | **-1.5** |
| **IRIF** | **Iriomote-Funau** | **2.00** | **226** | *i* P | **Pn** | **16 19 50.1** | **-1.1** |
| IRIF | | | | S | **Sn** | **16 20 14.3** | **-2.5** |
| **IRIF** | **Iriomote-Funau** | **2.00** | **226** | A | A | 16 19 50.1 | |
| | comp=E,15nm,3.3s,comp=N,9.0nm,1.0s | | | | | | |
| **HATJ** | **Hateruma jima** | **2.16** | **219** | P | **Pn** | **16 19 52.1** | **-1.1** |
| HATJ | | | | S | **Sn** | **16 20 18.0** | **-2.4** |
| **JJT3** | **Tamagusuku3** | **2.27** | **79** | P | **Pn** | **16 19 54.7** | **+0.1** |
| JJT3 | | | | *e*S | **Sn** | **16 20 22.3** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **2.44** | **239** | P | **Pn** | **16 19 56.3** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **2.44** | **239** | Pn | **Pn** | **16 19 56.0** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **2.44** | **239** | P | **Pn** | **16 19 56.0** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **2.44** | **239** | P | **Pn** | **16 19 56.3** | **-0.4** |
| YOJ | | | | S | **Sn** | **16 20 25.6** | **-1.1** |
| **JYNG** | **Yonagunijimaku** | **2.49** | **239** | *i* P | **Pn** | **16 19 57.2** | **-0.2** |
| JYNG | | | | S | **Sn** | **16 20 26.8** | **-1.2** |
| **JNTH** | **Nagotoyohara** | **2.56** | **72** | *i* P | **Pn** | **16 19 57.9** | **-0.4** |
| JNTH | | | | *e*S | **Sn** | **16 20 27.0** | **-2.6** |
| **JIH** | **Iheya** | **2.72** | **61** | P | **Pn** | **16 19 59.9** | **-0.3** |
| JIH | | | | *e*S | **Sn** | **16 20 31.2** | **-1.9** |
| **JOW** | **Kunigami** | **2.88** | **67** | P | **Pn** | **16 20 01.8** | **-0.6** |
| **JOW** | **Kunigami** | **2.88** | **67** | Pn | **Pn** | **16 20 01.4** | **-1.0** |
| **JOW** | **Kunigami** | **2.88** | **67** | P | **Pn** | **16 20 01.7** | **-0.6** |
| | comp=N,463nm,0.4s,baz=223,slow=8.1,SNR=127 | | | | | | |
| JOW | | | | S | **Sn** | **16 20 34.4** | **-2.6** |
| | comp=N,192nm,0.3s,baz=185,slow=6.3,SNR=7.7 | | | | | | |
| **JOW** | **Kunigami** | **2.88** | **67** | *i* P | **Pn** | **16 20 01.8** | **-0.6** |
| JOW | | | | *e*S | **Sn** | **16 20 35.1** | **-1.8** |
| **JYRO** | **Yoronjima** | **3.10** | **65** | *i* P | **Pn** | **16 20 04.7** | **-0.6** |
| JYRO | | | | *e*S | **Sn** | **16 20 38.9** | **-3.1** |
| **JOKE** | **Okinoerabujima** | **3.34** | **60** | *i* P | **Pn** | **16 20 07.5** | **-1.0** |
| JOKE | | | | S | **Sn** | **16 20 44.6** | **-3.2** |
| **TATO** | **Taipei** | **3.53** | **258** | P | **Pn** | **16 20 12.1** | **+1.1** |
| **TATO** | **Taipei** | **3.53** | **258** | | **Pn** | **16 20 12.0** | **+1.1** |
| **NACB** | **Ninganchiao** | **3.71** | **246** | P | **Pn** | **16 20 12.1** | **-1.3** |
| **NACB** | **Ninganchiao** | **3.71** | **246** | | **Pn** | **16 20 12.1** | **-1.3** |
| **YHNB** | **Yeheng** | **3.71** | **254** | P | **Pn** | **16 20 14.6** | **+1.1** |
| **YHNB** | **Yeheng** | **3.71** | **254** | | **Pn** | **16 20 14.4** | **+1.0** |
| **YULB** | **Yu-li** | **4.33** | **238** | P | **Pn** | **16 20 19.4** | **-2.3** |
| **YULB** | **Yu-li** | **4.33** | **238** | | **Pn** | **16 20 19.1** | **-2.5** |
| **SSLB** | **Suanglung** | **4.41** | **245** | P | **Pn** | **16 20 21.5** | **-1.2** |
| **SSLB** | **Suanglung** | **4.41** | **245** | Pn | **Pn** | **16 20 21.2** | **-1.5** |
| **TWGBT** | **Beinan** | **4.83** | **234** | P | **Pn** | **16 20 25.8** | **-2.5** |
| **TWG** | **Pinlang** | **4.83** | **234** | | **Pn** | **16 20 25.5** | **-2.8** |
| **TPUB** | **Ta-pu** | **4.90** | **241** | P | **Pn** | **16 20 28.8** | **-0.5** |
| **TPUB** | **Ta-pu** | **4.90** | **241** | | **Pn** | **16 20 28.0** | **-1.3** |
| **QZH** | **Quanzhou** | **6.12** | **264** | ⇑*i* P | **Pn** | **16 20 45.9** | **+0.2** |
| QZH | | | | pmax | pmax | | |
| | comp=N,120nm,0.7s | | | | | | |
| **NJ2** | **Nanjing** | **8.45** | **320** | *e*P | **Pn** | **16 21 16.3** | **-0.8** |
| NJ2 | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **8.81** | **32** | P | **Pn** | **16 21 22.2** | **+0.2** |
| | comp=N,9.0nm,0.8s,baz=224,slow=14,SNR=24 | | | | | | |
| JNU | | | | S | **Sn** | **16 22 58.6** | **-1.1** |
| | comp=N,7.1nm,0.9s,baz=164,slow=20,SNR=1.3 | | | | | | |
| **TJN** | **Taejon** | **10.75** | **9** | *d* iP | **Pn** | **16 21 51.0** | **+3.0** |
| **KSAR** | **Wonju Array Be** | **11.87** | **10** | Pn | **Pn** | **16 22 04.0** | **+1.1** |
| **KSAR** | **Wonju Array Be** | **11.87** | **10** | P | **Pn** | **16 22 04.0** | **+1.1** |
| **KSRS** | **Korea Array** | **11.89** | **10** | P | **Pn** | **16 22 03.4** | **+0.3** |
| | comp=N,19nm,1.1s,baz=189,slow=13,SNR=35 | | | | | | |
| **KS19** | **Wonju Array Si** | **11.93** | **10** | | **Pn** | **16 22 02.5** | **-1.2** |
| **DL2** | **Dalian** | **13.49** | **348** | P | **P** | **16 22 31.3** | **+2.5** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,120nm,0.9s | | | | | | |
| **INU** | **Inuyama** | **13.90** | **44** | Pn | **Pn** | **16 22 28.7** | **-0.6** |
| **LYN** | **LuoYang** | **14.14** | **311** | P | **P** | **16 22 36.5** | **+0.3** |
| **JGF** | **Kuroka** | **14.28** | **44** | P | **P** | **16 22 37.8** | **+0.1** |
| **HNS** | **HongShan** | **14.70** | **325** | ⇑P | **P** | **16 22 42.3** | **0.0** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,50nm,1.4s | | | | | | |
| **MAJO** | **Matsushiro** | **15.41** | **43** | P | **P** | **16 22 50.3** | **+0.1** |
| **MAJO** | **Matsushiro** | **15.41** | **43** | *c* iP | **P** | **16 22 51.6** | **+1.4** |
| **MJAR** | **Matsushiro Arr** | **15.41** | **43** | P | **P** | **16 22 49.6** | **-0.7** |
| | comp=Z,13nm,0.7s,baz=229,slow=10,SNR=73 | | | | | | |
| **SNY** | **Shenyang** | **16.11** | **355** | ⇓P | **P** | **16 22 59.3** | **+1.5** |
| SNY | | | | S | **Sn** | **16 25 55.8** | **+0.1** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,180nm,5.0s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,170nm,13.9s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,330nm,17.7s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,350nm,18.2s | | | | | | |
| **BJI** | **Beijing** | **16.17** | **334** | P | **P** | **16 23 00.1** | **+1.5** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,88nm,3.8s | | | | | | |
| **XAN** | **Xi'an** | **16.42** | **304** | ⇑P | **P** | **16 23 03.3** | **+1.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **PSTR** | **Posyet** | **17.46** | **14** | *e*P | **Pn** | **16 23 13.2** | **-0.2** |
| **JMM** | **Marumori** | **17.84** | **44** | P | **P** | **16 23 15.9** | **-1.1** |
| **CN2** | **Changchun** | **18.02** | **0** | P | **Pn** | **16 23 20.6** | **+0.5** |
| CN2 | | | | sP | sP | 16 23 54.4 | -2.0 |
| CN2 | | | | S | **S** | **16 26 34.5** | **-4.8** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,50nm,1.1s | | | | | | |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,200nm,3.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **18.91** | **326** | *e*P | **Pn** | **16 23 30.8** | **+0.1** |
| HHC | | | | sP | sP | 16 24 04.9 | -1.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,190nm,3.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,170nm,11.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,220nm,10.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,230nm,11.0s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **19.20** | **15** | P | **P** | **16 23 30.6** | **-1.2** |
| **USA0B** | **Ussuriysk Arra** | **19.20** | **15** | *e*P | **Pn** | **16 23 32.7** | **-1.3** |
| **USRK** | **Ussuriysk Ar.** | **19.20** | **15** | P | **P** | **16 23 30.8** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **19.20** | **15** | P | **P** | **16 23 31.0** | **-0.8** |
| | comp=Z,32nm,0.5s,baz=196,slow=9.3,SNR=33 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.20** | **15** | P | **P** | **16 23 31.0** | **-0.8** |
| **BTO** | **Baotou** | **19.53** | **323** | *e*P | **Pn** | **16 23 37.3** | **-0.8** |
| BTO | | | | pP | **pP** | **16 23 58.6** | **+0.8** |
| BTO | | | | sP | **sP** | **16 24 16.4** | **+3.1** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,230nm,3.7s | | | | | | |
| **XLT** | **XiLinHaoTe** | **19.61** | **340** | *e*P | **P** | **16 23 37.0** | **+0.7** |
| XLT | | | | pP | pP | 16 24 02.6 | +4.0 |
| XLT | | | | sP | sP | 16 24 20.3 | +6.2 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,26nm,1.0s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,48nm,4.6s | | | | | | |
| **CD2** | **Chengdu** | **19.64** | **290** | P | **P** | **16 23 37.5** | **+0.7** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,50nm,0.7s | | | | | | |
| **JTM** | **Tenmabayashi** | **19.93** | **37** | P | **P** | **16 23 38.8** | **-0.8** |
| **BNX** | **BinXian** | **20.03** | **4** | ⇑P | **P** | **16 23 39.4** | **-1.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **LZH** | **Lanzhou** | **21.06** | **304** | *e*P | **P** | **16 23 53.1** | **+1.0** |
| LZH | | | | pP | pP | 16 24 19.0 | +4.3 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,32nm,1.1s | | | | | | |
| **PZH** | **PanZhiHua** | **21.16** | **277** | P | **P** | **16 23 52.3** | **-1.0** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| **ERM** | **Erimo** | **21.91** | **38** | P | **P** | **16 23 60.0** | **-0.9** |
| **ERM** | **Erimo** | **21.91** | **38** | *d* iP | **P** | **16 24 00.9** | **0.0** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,47nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **23.09** | **33** | P | **P** | **16 24 12.1** | **-0.5** |
| | comp=Z,10nm,0.6s,baz=240,slow=7.9,SNR=22 | | | | | | |
| | comp=Z,10nm,0.6s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **23.09** | **33** | P | **P** | **16 24 11.2** | **-1.3** |
| **HIA** | **Hailar** | **23.88** | **351** | P | **P** | **16 24 19.1** | **-0.6** |
| **HIA** | **Hailar** | **23.88** | **351** | P | **P** | **16 24 19.1** | **-0.6** |
| **KLR** | **Kul'dur** | **23.98** | **10** | P | **P** | **16 24 19.5** | **-1.1** |
| | comp=Z,5.9nm,0.8s,baz=235,slow=4.1,SNR=9.7 | | | | | | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **23.98** | **10** | ⇑*e*P | **P** | **16 24 19.5** | **-1.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,14nm,2.1s | | | | | | |
| **HEH** | **HeiHe** | **24.53** | **3** | *e*P | **P** | **16 24 24.9** | **-0.6** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,280nm,13.2s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,170nm,15.0s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,260nm,15.2s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **25.30** | **29** | P | **P** | **16 24 31.8** | **-0.7** |
| **YSS** | **Yuzh-Sakhalins** | **25.30** | **29** | *e*P | **P** | **16 24 32.7** | **+0.1** |
| YSS | | | | *e*S | **S** | **16 28 49.2** | **-0.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,100nm,5.5s | | | | | | |
| **GTA** | **Gaotai** | **25.33** | **309** | P | **P** | **16 24 32.6** | **-0.5** |
| GTA | | | | pP | pP | 16 25 01.5 | +2.0 |
| GTA | | | | pmax | pmax | | |
| | comp=N,11nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.44** | **259** | P | **P** | **16 24 34.2** | **0.0** |
| | comp=N,0.5nm,0.5s,baz=50,slow=8.4,SNR=2.5 | | | | | | |
| CMAR | | | | LR | LR | 16 35 50.5 | |
| | comp=N,35nm,19.5s,baz=50,slow=39 | | | | | | |
| | comp=N,0.5nm,0.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **26.35** | **332** | P | **P** | **16 24 41.8** | **-0.4** |
| **ULN** | **Ulaanbaatar** | **26.35** | **332** | *c* iP | **P** | **16 24 42.7** | **+0.5** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **SBUM** | **Sibu** | **26.36** | **211** | P | **P** | **16 24 43.8** | **+1.3** |
| **SONM** | **Songino Array** | **26.61** | **331** | P | **P** | **16 24 43.9** | **-0.7** |
| **SONM** | **Songino Array** | **26.61** | **331** | P | **P** | **16 24 43.5** | **-1.1** |
| | comp=Z,7.2nm,0.7s,baz=153,slow=7.6,SNR=5.2 | | | | | | |
| SONM | | | | PcP | **PcP** | **16 28 06.4** | **+0.9** |
| | comp=Z,1.3nm,0.6s,baz=151,slow=3.4,SNR=3.7 | | | | | | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **26.61** | **331** | P | **P** | **16 24 43.9** | **-0.7** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **CIT** | **Chita** | **27.72** | **344** | *e*P | **P** | **16 24 54.7** | **+0.4** |
| CIT | | | | *e* | | 16 25 16.1 | |
| CIT | | | | *e* | | 16 25 36.3 | |
| CIT | | | | *e* | | 16 29 22.8 | |
| CIT | | | | pmax | pmax | | |
| | comp=Z,53nm,1.4s | | | | | | |
| **ZEA** | **Zeya** | **28.00** | **2** | *e*P | **P** | **16 24 56.3** | **-0.4** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **LSA** | **Lhasa** | **30.42** | **285** | P | **P** | **16 25 19.9** | **+0.9** |
| **LSA** | **Lhasa** | **30.42** | **285** | P | **P** | **16 25 19.9** | **+0.9** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **WMQ** | **Urumqi** | **35.39** | **310** | *e*P | **P** | **16 26 03.3** | **+1.7** |
| **YAK** | **Yakutsk** | **36.40** | **3** | P | **P** | **16 26 07.9** | **-1.9** |
| YAK | | | | IAmb | IAmb | 16 26 09.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **36.40** | **3** | *e*P | **P** | **16 26 06.6** | **-3.2** |
| YAK | | | | *e* | | 16 28 32.2 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,5.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,3.0nm,1.8s | | | | | | |
| **YAK** | **Yakutsk** | **36.40** | **3** | P | **P** | **16 26 08.3** | **-1.5** |
| YAK | | | | PcP | **PcP** | **16 28 32.3** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **36.51** | **33** | P | **P** | **16 26 10.4** | **-0.5** |
| | comp=E,3.6nm,0.6s,baz=212,slow=3.9,SNR=16 | | | | | | |
| | comp=E,3.6nm,0.6s | | | | | | |
| **PET** | **Petropavlovsk** | **36.94** | **34** | P | **P** | **16 26 14.4** | **-0.1** |
| PET | | | | IAmb | IAmb | 16 26 15.4 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **PET** | **Petropavlovsk** | **36.94** | **34** | *d* iP | **P** | **16 26 14.5** | **0.0** |
| PET | | | | pmax | pmax | | |
| | comp=Z,34nm,0.7s | | | | | | |
| **PET** | **Petropavlovsk** | **36.94** | **34** | P | **P** | **16 26 14.7** | **+0.2** |
| **DGZ** | **Jazzator, Alta** | **37.74** | **319** | ⇑*i* P | **P** | **16 26 21.9** | **+0.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ZSN** | **Zaisan** | **38.45** | **315** | *e*P | **P** | **16 26 27.3** | **-0.1** |
| | baz=315 | | | | | | |
| **ZSN** | **Zaisan** | **38.45** | **315** | *e*P | **P** | **16 26 27.3** | **-0.1** |
| **MK31** | **Makanchi Array** | **39.92** | **313** | P | **P** | **16 26 37.1** | **-2.5** |
| **MK31** | **Makanchi Array** | **39.92** | **313** | *c* iP | **P** | **16 26 39.5** | **-0.1** |
| MK31 | | | | *i* *PP | **pP** | **16 27 05.7** | **-1.4** |
| **MKAR** | **Makanchi Array** | **39.92** | **313** | P | **P** | **16 26 38.7** | **-0.9** |
| MKAR | | | | PcP | **PcP** | **16 28 43.2** | **+0.5** |
| **MKAR** | **Makanchi Array** | **39.92** | **313** | P | **P** | **16 26 39.1** | **-0.5** |
| | comp=Z,3.0nm,0.7s,baz=90,slow=9.2,SNR=41 | | | | | | |
| MKAR | | | | PP | **PP** | **16 28 15.4** | **+1.7** |
| | comp=Z,2.6nm,1.0s,baz=108,slow=10,SNR=4.4 | | | | | | |
| MKAR | | | | PcP | **PcP** | **16 28 43.0** | **+0.2** |
| | comp=Z,3.5nm,0.7s,baz=85,slow=3.5,SNR=12 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **40.13** | **313** | P | **P** | **16 26 39.7** | **-1.6** |
| MAKZ | | | | | **PcP** | **16 28 43.0** | **-0.4** |
| **MAKZ** | **Makanchi** | **40.13** | **313** | P | **P** | **16 26 41.2** | **-0.2** |
| MAKZ | | | | pP | **pP** | **16 27 10.4** | **+1.5** |
| MAKZ | | | | PcP | **PcP** | **16 28 44.1** | **+0.7** |
| **SHLS** | **Shalkode** | **41.05** | **307** | *e*P | **P** | **16 26 46.1** | **-2.9** |
| | baz=307 | | | | | | |
| **SHLS** | **Shalkode** | **41.05** | **307** | *e*P | **P** | **16 26 46.1** | **-2.9** |
| **ZAA0** | **Zalesovo Array** | **41.07** | **324** | P | **P** | **16 26 47.9** | **-1.0** |
| ZAA0 | | | | IAmb | IAmb | 16 26 49.1 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.07** | **324** | P | **P** | **16 26 47.9** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **41.07** | **324** | P | **P** | **16 26 48.4** | **-0.5** |
| | comp=Z,13nm,0.5s,baz=113,slow=8.5,SNR=72 | | | | | | |
| ZALV | | | | PcP | **PcP** | **16 28 46.3** | **0.0** |
| | comp=Z,3.9nm,0.8s,baz=106,slow=4.8,SNR=8.2 | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **41.36** | **307** | *e*P | **P** | **16 26 51.2** | **-0.5** |
| | baz=307 | | | | | | |
| **UZB** | **Uzynbulak** | **41.36** | **307** | *e*P | **P** | **16 26 51.1** | **-0.5** |
| **KPKS** | **Kokpek** | **41.66** | **307** | *e*P | **P** | **16 26 53.8** | **-0.3** |
| | baz=307 | | | | | | |
| **KPKS** | **Kokpek** | **41.66** | **307** | *e*P | **P** | **16 26 53.7** | **-0.3** |
| **SATY** | **Saty** | **41.79** | **307** | *e*P | **P** | **16 26 54.6** | **-0.6** |
| | baz=307 | | | | | | |
| **SATY** | **Saty** | **41.79** | **307** | *e*P | **P** | **16 26 54.6** | **-0.6** |
| **TDK** | **Taldyqorghan** | **42.13** | **309** | *e*P | **P** | **16 26 57.7** | **0.0** |
| | comp=Z,8.8nm,0.7s,baz=310 | | | | | | |
| **TDK** | **Taldyqorghan** | **42.13** | **309** | *e*P | **P** | **16 26 57.7** | **0.0** |
| TDK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **42.79** | **307** | *e*P | **P** | **16 27 03.0** | **-0.4** |
| | baz=306 | | | | | | |
| **MDOK** | **Medeo** | **42.79** | **307** | *e*P | **P** | **16 27 02.9** | **-0.4** |
| **TNSS** | **Tian-Shan** | **42.85** | **306** | *e*P | **P** | **16 27 03.5** | **-0.5** |
| | baz=306 | | | | | | |
| **TNSS** | **Tian-Shan** | **42.85** | **306** | *e*P | **P** | **16 27 03.5** | **-0.5** |
| **AAA** | **Alma-Ata** | **42.89** | **307** | *e*P | **P** | **16 27 03.7** | **-0.4** |
| | comp=Z,8.0nm,0.4s,baz=307 | | | | | | |
| **AAA** | **Alma-Ata** | **42.89** | **307** | *e*P | **P** | **16 27 03.6** | **-0.4** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.4s | | | | | | |
| **CHKK** | **Chushkaly** | **42.93** | **308** | *e*P | **P** | **16 27 04.2** | **0.0** |
| | baz=308 | | | | | | |
| **CHKK** | **Chushkaly** | **42.93** | **308** | *e*P | **P** | **16 27 04.2** | **0.0** |
| **KSH** | **Kashi** | **43.24** | **301** | P | **P** | **16 27 10.8** | **+3.8** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **43.38** | **318** | P | **P** | **16 27 07.1** | **-0.6** |
| **KURK** | **Kurchatov** | **43.38** | **318** | P | **P** | **16 27 07.1** | **-0.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **43.38** | **318** | P | **P** | **16 27 07.6** | **-0.1** |
| KURK | | | | PcP | **PcP** | **16 28 54.3** | **+0.2** |
| **KUU** | **Kurty** | **43.40** | **307** | *e*P | **P** | **16 27 08.1** | **0.0** |
| | comp=Z,8.3nm,0.9s,baz=308 | | | | | | |
| **KUU** | **Kurty** | **43.40** | **307** | *e*P | **P** | **16 27 08.0** | **0.0** |
| KUU | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.41** | **318** | P | **P** | **16 27 07.6** | **-0.3** |
| | comp=Z,2.9nm,0.4s,baz=108,slow=8.0,SNR=29 | | | | | | |
| KURBB | | | | PcP | **PcP** | **16 28 53.8** | **-0.3** |
| | comp=Z,2.8nm,0.8s,baz=107,slow=3.4,SNR=12 | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.58** | **180** | P | **P** | **16 27 10.0** | **+0.5** |
| **HYB** | **Hyderabad** | **44.07** | **269** | *e*P | **P** | **16 27 13.0** | **-0.7** |
| **AAK** | **Ala-Archa** | **44.59** | **305** | *d* iP | **P** | **16 27 18.2** | **+0.5** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ASAR | **Alice Springs** | **49.82** | **170** | P | | **P** | | **16 27 58.9** | **+0.7** |
| | comp=Z,2.9nm,0.7s,baz=356,slow=14,SNR=36 | | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | | |
| SVE | **Sverdlovsk** | **55.04** | **323** | *e*P | | **P** | | **16 28 37.0** | **+0.7** |
| SVE | | | | pmax | | pmax | | | |
| | comp=Z,39nm,0.8s | | | | | | | | |
| ABKAR | **Akbulak array** | **55.06** | **313** | P | | **P** | | **16 28 36.3** | **-0.3** |
| ABKAR | **Akbulak array** | **55.06** | **313** | IAmb | | IAmb | | 16 28 37.6 | |
| | comp=Z,17nm,0.7s | | | | | | | | |
| ARU | **Arti** | **56.15** | **322** | P | | **P** | | **16 28 43.3** | **-0.9** |
| ARU | **Arti** | **56.15** | **322** | *d* iP | | **P** | | **16 28 43.8** | **-0.4** |
| ARU | | | | | | | | 16 29 39.3 | |
| ARU | | | | | | | | 16 30 47.3 | |
| ARU | | | | S | | **S** | | **16 36 25.9** | **+2.2** |
| ARU | | | | SS | | **SS** | | **16 40 10.3** | **-1.2** |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,33nm,0.8s | | | | | | | | |
| ARU | **Arti** | **56.15** | **322** | P | | **P** | | **16 28 43.5** | **-0.7** |
| | comp=Z,41nm,0.9s,comp=Z,333nm | | | | | | | | |
| ARU | **Arti** | **56.15** | **322** | P | | **P** | | **16 28 44.0** | **-0.3** |
| L14K | **Kuka Creek** | **59.16** | **32** | P | | **P** | | **16 29 07.1** | **+2.0** |
| STKA | **Stephens Creek** | **59.37** | **164** | P | | **P** | | **16 29 07.5** | **+0.5** |
| | comp=Z,1.4nm,0.6s,baz=345,slow=9.4,SNR=4.6 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| KIRV | **Kirov** | **61.11** | **325** | *c* iP | | **P** | | **16 29 17.8** | **-0.7** |
| F19K | **Shaleruckik Mo** | **61.48** | **26** | P | | **P** | | **16 29 21.1** | **+0.2** |
| G19K | **Purcell Mounta** | **61.75** | **27** | IAmb | | IAmb | | 16 29 25.1 | |
| | comp=Z,36nm,1.2s | | | | | | | | |
| L18K | **Granite Mounta** | **62.01** | **31** | IAmb | | IAmb | | 16 29 27.6 | |
| | comp=Z,42nm,1.4s | | | | | | | | |
| DZM | **Mont Dzumac** | **62.05** | **136** | *e*LR | | LR | | 16 47 56.3 | |
| | comp=Z,102nm,24.9s | | | | | | | | |
| DZM | **Mont Dzumac** | **62.05** | **136** | P | | **P** | | **16 29 26.9** | **+1.4** |
| | comp=Z,3.8nm,0.8s,baz=298,slow=15,SNR=6.4 | | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | |
| F20K | **Avaraart Lake** | **62.29** | **26** | P | | **P** | | **16 29 27.1** | **+0.8** |
| F20K | | | | IAmb | | IAmb | | 16 29 29.9 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| L19K | **White Mountain** | **62.87** | **31** | IAmb | | IAmb | | 16 29 33.3 | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| ACHA | **Angle Creek He** | **62.97** | **36** | IAmb | | IAmb | | 16 29 35.1 | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| F21K | **Alatna River** | **63.16** | **26** | IAmb | | IAmb | | 16 29 35.0 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| D22K | **Ayikyak River** | **63.38** | **24** | IAmb | | IAmb | | 16 29 36.4 | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| C23K | **Itkillik River** | **64.06** | **23** | IAmb | | IAmb | | 16 29 40.7 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| SPU | **Mount Spurr** | **64.29** | **32** | IAmb | | IAmb | | 16 29 42.0 | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| BPAW | **Bear Paw Mtn.** | **64.44** | **29** | IAmb | | IAmb | | 16 29 43.5 | |
| | comp=Z,44nm,1.2s | | | | | | | | |
| SKT | **Skwentna** | **64.44** | **31** | IAmb | | IAmb | | 16 29 42.4 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| KDAK | **Kodiak Island** | **64.47** | **36** | P | | **P** | | **16 29 41.6** | **+0.9** |
| KDAK | | | | IAmb | | IAmb | | 16 29 42.3 | |
| | comp=Z,37nm,1.1s | | | | | | | | |
| KDAK | **Kodiak Island** | **64.47** | **36** | P | | **P** | | **16 29 41.6** | **+0.9** |
| KDAK | | | | pmax | | pmax | | | |
| | comp=Z,37nm,1.2s | | | | | | | | |
| KDAK | **Kodiak Island** | **64.47** | **36** | P | | **P** | | **16 29 41.6** | **+0.9** |
| TOLK | **Toolik Lake Re** | **64.53** | **24** | IAmb | | IAmb | | 16 29 43.8 | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| G23K | **Bananza Creek** | **64.56** | **26** | IAmb | | IAmb | | 16 29 44.2 | |
| | comp=Z,32nm,0.9s | | | | | | | | |
| E23K | **Chandalar** | **64.57** | **24** | IAmb | | IAmb | | 16 29 44.5 | |
| | comp=Z,36nm,0.8s | | | | | | | | |
| E24K | **Your Creek** | **64.99** | **24** | IAmb | | IAmb | | 16 29 47.1 | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| I23K | **Minto, Yukon-K** | **65.01** | **28** | IAmb | | IAmb | | 16 29 47.2 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| H24K | **Noodor Dome** | **65.53** | **27** | IAmb | | IAmb | | 16 29 51.0 | |
| | comp=Z,38nm,0.9s | | | | | | | | |
| D25K | **Kavik River** | **65.60** | **23** | IAmb | | IAmb | | 16 29 50.7 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| WRH | **Wood River Hil** | **65.64** | **28** | IAmb | | IAmb | | 16 29 52.7 | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| COLA | **College** | **65.68** | **28** | *c* iP | | **P** | | **16 29 50.1** | **+1.6** |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| COLA | **College** | **65.68** | **28** | P | | **P** | | **16 29 50.4** | **+1.9** |
| KNK | **Knik Glacier** | **65.97** | **32** | IAmb | | IAmb | | 16 29 52.5 | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| ILAR | **Eielson Array** | **66.11** | **28** | P | | **P** | | **16 29 50.6** | **-0.7** |
| ILAR | **Eielson Array** | **66.11** | **28** | P | | **P** | | **16 29 51.5** | **+0.2** |
| | comp=Z,4.4nm,0.8s,baz=260,slow=4.8,SNR=32 | | | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| PWL | **Port Wells** | **66.13** | **32** | IAmb | | IAmb | | 16 29 53.5 | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| HDA | **Harding Lake** | **66.14** | **28** | IAmb | | IAmb | | 16 29 53.5 | |
| | comp=Z,39nm,1.0s | | | | | | | | |
| DHY | **Denali Highway** | **66.19** | **30** | IAmb | | IAmb | | 16 29 57.0 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| SCM | **Sheep Creek Mo** | **66.43** | **31** | IAmb | | IAmb | | 16 29 55.7 | |
| | comp=Z,31nm,0.8s | | | | | | | | |
| FYU | **Fort Yukon** | **66.47** | **26** | IAmb | | IAmb | | 16 29 56.9 | |
| | comp=Z,36nm,1.0s | | | | | | | | |
| PRP | **Porcupine Dome** | **66.54** | **27** | IAmb | | IAmb | | 16 29 57.4 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| BMAR | **Burnt Mountain** | **66.56** | **25** | P | | **P** | | **16 29 56.1** | **+2.0** |
| M24K | **Tolsona, Glenn** | **66.91** | **31** | IAmb | | IAmb | | 16 29 59.3 | |
| | comp=Z,31nm,0.8s | | | | | | | | |
| KLU | **Klutina** | **67.16** | **31** | IAmb | | IAmb | | 16 30 00.4 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| APA | **Apatity** | **67.20** | **335** | ǁ *iP* | | **P** | | **16 29 57.0** | **-1.2** |
| APA | | | | *i* *PP | | **PcP** | | **16 30 22.0** | **-3.2** |
| APA | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| KBZ | **Khabaz** | **67.42** | **309** | P | | **P** | | **16 29 59.8** | **-0.1** |
| | comp=Z,9.4nm,0.9s,baz=111,slow=2.7,SNR=16 | | | | | | | | |
| | comp=Z,9.4nm,0.9s | | | | | | | | |
| KBZ | **Khabaz** | **67.42** | **309** | *d* iP | | **P** | | **16 30 00.3** | **+0.4** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| D27M | **Malcolm River** | **67.50** | **23** | IAmb | | IAmb | | 16 30 03.2 | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| KIV | **Kislovodsk** | **67.51** | **309** | P | | **P** | | **16 30 01.0** | **+0.3** |
| KIV | | | | IAmb | | IAmb | | 16 30 02.4 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| KIV | **Kislovodsk** | **67.51** | **309** | *e*P | | **P** | | **16 30 00.8** | **+0.1** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| KIV | **Kislovodsk** | **67.51** | **309** | P | | **P** | | **16 30 00.7** | **+0.1** |
| | comp=Z,18nm,0.8s | | | | | | | | |
| E27K | **Coleen River** | **67.52** | **24** | IAmb | | IAmb | | 16 30 03.3 | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| J26L | **Joseph Creek** | **67.56** | **28** | IAmb | | IAmb | | 16 30 02.4 | |
| | comp=Z,31nm,1.0s | | | | | | | | |
| SHA1 | **Shidzhatmaz** | **67.59** | **309** | *d* iP | | **P** | | **16 30 01.7** | **+0.4** |
| G27K | **Doyon Strip** | **67.81** | **25** | IAmb | | IAmb | | 16 30 05.4 | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| MOS | **Moscow** | **67.86** | **322** | *e*P | | **P** | | **16 30 00.8** | **-1.7** |
| GLB | **Gilahina Butte** | **68.16** | **31** | IAmb | | IAmb | | 16 30 47.0 | |
| | comp=Z,37nm,1.6s | | | | | | | | |
| E28M | **Babbage River** | **68.16** | **23** | IAmb | | IAmb | | 16 30 07.2 | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| F28M | **Old Crow** | **68.29** | **24** | IAmb | | IAmb | | 16 30 08.2 | |
| | comp=Z,41nm,0.9s | | | | | | | | |
| M26K | **Nabesna, AK** | **68.30** | **30** | IAmb | | IAmb | | 16 30 08.7 | |
| | comp=Z,70nm,1.6s | | | | | | | | |
| K27K | **Chicken** | **68.31** | **28** | IAmb | | IAmb | | 16 30 08.3 | |
| | comp=Z,39nm,1.1s | | | | | | | | |
| VRDI | **Verde Repeater** | **68.37** | **31** | IAmb | | IAmb | | 16 31 59.2 | |
| | comp=Z,79nm,1.7s | | | | | | | | |
| EGAK | **Eagle** | **68.50** | **27** | IAmb | | IAmb | | 16 30 09.2 | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| MCARA | **McCarthy VSAT** | **68.54** | **31** | IAmb | | IAmb | | 16 30 17.3 | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| OBN | **Obninsk** | **68.59** | **322** | ǁ *eP* | | **P** | | **16 30 05.7** | **-1.3** |
| OBN | | | | | | | | 16 30 30.0 | |
| OBN | | | | *e* | | | | 16 32 39.1 | |
| OBN | | | | *SS | | SKiKP | | 16 39 31.0 | -16 |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| OBN | | | | MLR | | MLR | | | |
| | comp=Z,32nm,15.0s | | | | | | | | |
| L27K | **Beaver Creek,** | **68.66** | **29** | IAmb | | IAmb | | 16 30 11.3 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| BCAR | **Beaver Creek A** | **68.67** | **29** | P | | **P** | | **16 30 08.6** | **+1.1** |
| SPITS | **Spitsbergen Ar** | **68.76** | **348** | P | | **P** | | **16 30 07.6** | **-0.2** |
| | comp=Z,6.4nm,0.9s,baz=104,slow=10,SNR=1.9 | | | | | | | | |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| E29M | **Blow River** | **68.80** | **23** | IAmb | | IAmb | | 16 30 11.0 | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| M27K | **Edge Creek, AK** | **68.81** | **30** | IAmb | | IAmb | | 16 30 11.1 | |
| | comp=Z,94nm,2.0s | | | | | | | | |
| I28M | **Miner Creek** | **68.83** | **27** | IAmb | | IAmb | | 16 30 11.8 | |
| | comp=Z,41nm,0.9s | | | | | | | | |
| KEV | **Kevo** | **68.92** | **338** | P | | **P** | | **16 30 08.5** | **-0.3** |
| H29M | **Whitestone** | **69.23** | **26** | IAmb | | IAmb | | 16 30 14.0 | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| DAWY | **Dawson** | **69.44** | **28** | IAmb | | IAmb | | 16 30 14.9 | |
| | comp=Z,27nm,1.0s | | | | | | | | |
| CTGM | **Chitina Glacie** | **69.44** | **31** | IAmb | | IAmb | | 16 30 16.2 | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| ARCES | **ARCESS Array B** | **69.49** | **338** | P | | **P** | | **16 30 11.9** | **-0.4** |
| | comp=Z,4.1nm,0.8s,baz=60,slow=9.4,SNR=6.0 | | | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| I29M | **Ogilvie Camp,** | **69.51** | **26** | IAmb | | IAmb | | 16 30 15.5 | |
| | comp=Z,29nm,0.9s | | | | | | | | |
| G30M | **tAoh Zraii Nji** | **69.83** | **24** | IAmb | | IAmb | | 16 30 16.6 | |
| | comp=Z,38nm,0.8s | | | | | | | | |
| L29M | **L29M** | **70.26** | **29** | IAmb | | IAmb | | 16 30 21.0 | |
| | comp=Z,37nm,1.1s | | | | | | | | |
| K29M | **Barlow Dome** | **70.29** | **28** | IAmb | | IAmb | | 16 30 20.7 | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| M29M | **Somme Creek** | **70.31** | **29** | IAmb | | IAmb | | 16 30 22.8 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| I30M | **Mount Dempster** | **70.32** | **26** | IAmb | | IAmb | | 16 30 20.4 | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| INK | **Inuvik** | **70.36** | **23** | IAmb | | IAmb | | 16 30 20.0 | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| J30M | **Hart River** | **70.55** | **27** | IAmb | | IAmb | | 16 30 22.0 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| G31M | **Satah River** | **70.57** | **24** | IAmb | | IAmb | | 16 30 20.8 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| F31M | **Tsiigehtchic** | **70.59** | **24** | IAmb | | IAmb | | 16 30 21.0 | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| RAYN | **Ar Rayn** | **71.45** | **288** | P | | **P** | | **16 30 26.0** | **+0.8** |
| RAYN | **Ar Rayn** | **71.45** | **288** | P | | **P** | | **16 30 26.0** | **+0.8** |
| RAYN | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.6s | | | | | | | | |
| A36M | **Sachs Harbour** | **71.51** | **18** | IAmb | | IAmb | | 16 30 27.0 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| FINES | **FINESS Array B** | **71.98** | **330** | P | | **P** | | **16 30 27.3** | **-0.3** |
| | comp=Z,5.7nm,0.7s,baz=59,slow=5.2,SNR=15 | | | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | | | |
| WHY | **Whitehorse** | **72.53** | **31** | IAmb | | IAmb | | 16 30 33.8 | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| FARO | **Faro, Yukon** | **72.63** | **29** | IAmb | | IAmb | | 16 30 34.6 | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| VSU | **Vasula** | **72.73** | **327** | *c* iP | | **P** | | **16 30 31.7** | **-0.4** |
| VSU | | | | pmax | | pmax | | | |
| | comp=Z,25nm,1.1s | | | | | | | | |
| C36M | **Paulatuk** | **73.07** | **20** | IAmb | | IAmb | | 16 30 35.6 | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| AK03 | **Malin Array Si** | **74.17** | **319** | P | | **P** | | **16 30 40.2** | **-0.5** |
| AK09 | **Malin Array Si** | **74.17** | **319** | P | | **P** | | **16 30 40.3** | **-0.4** |
| AKASG | **Malin Array Be** | **74.18** | **319** | P | | **P** | | **16 30 40.0** | **-0.7** |
| | comp=Z,4.8nm,0.6s,baz=60,slow=6.5,SNR=11 | | | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | | | |
| AKASG | **Malin Array Be** | **74.18** | **319** | *ce*P | | **P** | | **16 30 40.5** | **-0.2** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| AKBB | **Malin Array Si** | **74.18** | **319** | *d* iP | | **P** | | **16 30 40.2** | **-0.5** |
| AKBB | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| AKBB | **Malin Array Si** | **74.18** | **319** | P | | **P** | | **16 30 40.3** | **-0.5** |
| AK08 | **Malin Array Si** | **74.18** | **319** | P | | **P** | | **16 30 40.1** | **-0.6** |
| AK01 | **Malin Array Si** | **74.19** | **319** | P | | **P** | | **16 30 40.4** | **-0.4** |
| KIEV | **Kiev** | **74.19** | **319** | P | | **P** | | **16 30 39.7** | **-1.1** |
| KIEV | **Kiev** | **74.19** | **319** | P | | **P** | | **16 30 39.7** | **-1.1** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| KIEV | **Kiev** | **74.19** | **319** | P | | **P** | | **16 30 40.3** | **-0.5** |
| | comp=Z,42nm,0.8s | | | | | | | | |
| BR131 | **Keskin Array S** | **75.24** | **307** | ǁ *iP* | | **P** | | **16 30 46.6** | **-0.7** |
| BRTR | **Keskin Array B** | **75.24** | **307** | P | | **P** | | **16 30 47.4** | **+0.1** |
| BRTR | **Keskin Array B** | **75.24** | **307** | P | | **P** | | **16 30 47.0** | **-0.3** |
| | comp=Z,2.9nm,0.9s,baz=81,slow=3.9,SNR=10 | | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| BRTR | **Keskin Array B** | **75.24** | **307** | *ce*P | | **P** | | **16 30 47.7** | **+0.4** |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| LUBAR | **Lubar, Ukraine** | **75.34** | **319** | P | | **P** | | **16 30 46.5** | **-0.9** |
| ASF | **Jabal al Asfar** | **75.51** | **299** | LR | | LR | | 17 09 37.2 | |
| | comp=Z,1μm,19.8s,baz=333,slow=40 | | | | | | | | |
| RNPP8 | **Varash** | **75.90** | **320** | P | | **P** | | **16 30 50.3** | **-0.3** |
| WRGLY | **Wrigley** | **76.28** | **26** | IAmb | | IAmb | | 16 30 55.1 | |
| | comp=Z,31nm,1.0s | | | | | | | | |
| BURAR | **Bucovina Array** | **77.81** | **317** | P | | **P** | | **16 31 01.8** | **+0.3** |
| HFS | **Hagfors** | **78.01** | **332** | P | | **P** | | **16 31 01.4** | **-0.8** |
| | comp=Z,6.0nm,0.8s,baz=92,slow=4.5,SNR=12 | | | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| NB201 | **NORSAR Array S** | **78.53** | **333** | P | | **P** | | **16 31 04.3** | **-0.8** |
| NB201 | | | | IAmb | | IAmb | | 16 31 10.7 | |
| | comp=Z,42nm,1.8s | | | | | | | | |
| NB2 | **NORSAR Subarra** | **78.57** | **333** | P | | **P** | | **16 31 04.8** | **-0.6** |
| | comp=Z,4.0nm,0.8s,baz=59,slow=5.6 | | | | | | | | |
| NOA | **NORSAR Array B** | **78.57** | **333** | P | | **P** | | **16 31 04.7** | **-0.6** |
| | comp=Z,2.8nm,0.7s,baz=55,slow=5.5,SNR=17 | | | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | | | |
| NC204 | **NORSAR Array S** | **78.62** | **333** | P | | **P** | | **16 31 04.7** | **-0.9** |
| KOLS | **Kolonicke sedl** | **79.01** | **319** | *e*P | | **P** | | **16 31 07.2** | **-0.8** |
| KOLS | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| KOLS | **Kolonicke sedl** | **79.01** | **319** | *e*P | | **P** | | **16 31 07.2** | **-0.8** |
| OJC | **Ojcow** | **79.85** | **321** | *e*P | | **P** | | **16 31 13.5** | **+1.0** |
| YKA | **Yellowknife Ar** | **80.06** | **24** | P | | **P** | | **16 31 13.4** | **0.0** |
| YKA | **Yellowknife Ar** | **80.06** | **24** | P | | **P** | | **16 31 14.5** | **+1.1** |
| | comp=Z,17nm,0.8s,baz=313,slow=5.5,SNR=42 | | | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| VYHS | **Vyhne** | **81.23** | **320** | *e*P | | **P** | | **16 31 20.8** | **+0.9** |
| VYHS | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| VYHS | **Vyhne** | **81.23** | **320** | *e*P | | **P** | | **16 31 20.8** | **+0.9** |
| MORC | **Moravsky Berou** | **81.34** | **321** | *e*P | | **P** | | **16 31 21.1** | **+0.6** |
| KSP | **Ksiaz** | **81.50** | **323** | *e*P | | **P** | | **16 31 22.4** | **+1.1** |
| VRAC | **Vranov** | **82.11** | **321** | *e*P | | **P** | | **16 31 25.3** | **+0.8** |
| VRAC | **Vranov** | **82.11** | **321** | P | | **P** | | **16 31 25.0** | **+0.5** |
| | comp=Z,2.7nm,0.6s,baz=40,slow=6.0,SNR=3.8 | | | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| KRUC | **Moravsky** | **82.35** | **321** | *e*P | | **P** | | **16 31 26.2** | **+0.5** |
| TREC | **Trest** | **82.74** | **322** | *e*P | | **P** | | **16 31 27.3** | **-0.5** |
| TREC | **Trest** | **82.74** | **322** | *e*P | | **P** | | **16 31 27.3** | **-0.5** |
| CLL | **Collm** | **83.02** | **324** | *i* P | | **P** | | **16 31 29.2** | **0.0** |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| CLL | **Collm** | **83.02** | **324** | *i* P | | **P** | | **16 31 29.2** | **0.0** |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| CONA | **Conrad Observa** | **83.23** | **320** | *i* P | | **P** | | **16 31 30.1** | **-0.4** |
| | comp=Z,10nm,1.2s | | | | | | | | |
| ZVC | **Zvikov** | **83.38** | **322** | *e*P | | **P** | | **16 31 31.2** | **+0.1** |
| CKRC | **Cesky Krumlov** | **83.65** | **322** | *e*P | | **P** | | **16 31 34.5** | **+2.0** |
| CKRC | **Cesky Krumlov** | **83.65** | **322** | *e*P | | **P** | | **16 31 34.5** | **+2.0** |
| ARSA | **Arzberg** | **83.78** | **320** | *i* PcP | | **P** | | **16 31 35.4** | **+2.2** |
| | comp=Z,3.4nm,1.1s | | | | | | | | |
| KHC | **Kasperske Hory** | **83.89** | **322** | *e*P | | P | | 16 31 38.4 | +4.7 |
| KHC | **Kasperske Hory** | **83.89** | **322** | *e*P | | P | | 16 31 38.4 | +4.7 |
| GERES | **GERESS Array B** | **83.97** | **322** | P | | **P** | | **16 31 34.7** | **+0.5** |
| | comp=Z,1.1nm,0.7s,baz=120,slow=4.8,SNR=5.2 | | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| SOKA | **Soboth** | **84.37** | **320** | *i* P | | **P** | | **16 31 37.1** | **+0.8** |
| | comp=Z,6.8nm,1.2s | | | | | | | | |
| OBKA | **Obir** | **84.74** | **320** | *i* P | | **P** | | **16 31 38.1** | **0.0** |
| | comp=Z,3.4nm,0.9s | | | | | | | | |
| KBA | **Koelnbreinsper** | **85.13** | **320** | *i* PcP | | **P** | | **16 31 41.3** | **+1.1** |
| | comp=Z,13nm,0.5s | | | | | | | | |
| LESA | **Schwarzleotal** | **85.32** | **321** | *i* PcP | | **P** | | **16 31 42.8** | **+1.7** |
| | comp=Z,13nm,1.6s | | | | | | | | |
| ABTA | **Abfaltersbach** | **85.79** | **321** | *i* P | | **P** | | **16 31 42.5** | **-0.8** |
| | comp=Z,6.8nm,1.4s | | | | | | | | |
| WATA | **Walderalm** | **86.00** | **321** | *i* PcP | | **P** | | **16 31 46.0** | **+1.6** |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| WTTA | **Wattenberg** | **86.00** | **321** | *i* PcP | | **P** | | **16 31 44.9** | **+0.4** |
| | comp=Z,12nm,1.4s | | | | | | | | |
| MOTA | **Moosalm** | **86.25** | **322** | *i* PcP | | **P** | | **16 31 46.5** | **+0.8** |
| | comp=Z,4.3nm,0.8s | | | | | | | | |
| SQTA | **Sankt Quirin** | **86.27** | **321** | *i* PcP | | **P** | | **16 31 46.9** | **+1.1** |
| | comp=Z,9.1nm,1.1s | | | | | | | | |
| B08A | **Colville Reser** | **86.32** | **37** | IAmb | | IAmb | | 16 34 03.0 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| RETA | **Reutte** | **86.36** | **322** | *i* PcP | | **P** | | **16 31 46.6** | **+0.4** |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| FETA | **Feichten** | **86.65** | **321** | *i* PcP | | **P** | | **16 31 48.6** | **+1.0** |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| DAVA | **Damuels** | **86.97** | **322** | *i* PcP | | **P** | | **16 31 50.1** | **+0.8** |
| | comp=Z,9.7nm,1.0s | | | | | | | | |
| FUORN | **Ofenpass-Fuorn** | **87.14** | **321** | IAmb | | IAmb | | 16 31 52.2 | |
| | comp=Z,33nm,1.7s | | | | | | | | |
| DAVOX | **Davos/Dischmat** | **87.27** | **322** | P | | **P** | | **16 31 51.5** | **+0.8** |
| | comp=Z,7.1nm,0.8s,baz=49,slow=3.6,SNR=12 | | | | | | | | |
| | comp=Z,7.1nm,0.8s | | | | | | | | |
| PINE | **Pine Mountain** | **88.01** | **42** | P | | **P** | | **16 31 56.2** | **+1.9** |
| BNI | **Bardonecchia** | **90.09** | **322** | P | | **P** | | **16 32 04.5** | **+0.6** |
| BNI | | | | IAmb | | IAmb | | 16 32 06.2 | |
| | comp=Z,9.1nm,0.9s | | | | | | | | |
| BNI | **Bardonecchia** | **90.09** | **322** | P | | **P** | | **16 32 04.5** | **+0.6** |
| BNI | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| FFC | **Flin Flon** | **90.18** | **25** | P | | **P** | | **16 32 04.2** | **+0.2** |
| FFC | **Flin Flon** | **90.18** | **25** | P | | **P** | | **16 32 04.2** | **+0.2** |
| FFC | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| MFID | **Camas Ranch** | **91.23** | **40** | IAmb | | IAmb | | 16 32 12.6 | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| DLMT | **Dillon** | **91.81** | **37** | IAmb | | IAmb | | 16 32 15.1 | |
| | comp=Z,9.9nm,0.9s | | | | | | | | |
| HLID | **Hailey** | **91.95** | **39** | IAmb | | IAmb | | 16 32 16.3 | |
| | comp=Z,6.3nm,0.9s | | | | | | | | |
| NVAR | **Mina Array Bea** | **92.72** | **45** | P | | **P** | | **16 32 17.5** | **+1.1** |
| | comp=Z,1.0nm,0.7s,baz=286,slow=4.1,SNR=5.4 | | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| YHL | **Hebgen Lake** | **92.90** | **36** | IAmb | | IAmb | | 16 32 21.1 | |
| | comp=Z,8.2nm,1.4s | | | | | | | | |
| PPT2 | **Papeete2** | **93.25** | **108** | *e*LR | | LR | | 17 02 27.6 | |
| | comp=Z,60nm,23.5s | | | | | | | | |
| R11B | **Troy Canyon, C** | **94.48** | **44** | P | | **P** | | **16 32 24.3** | **-0.1** |
| PDAR | **Pinedale Array** | **95.17** | **37** | P | | **P** | | **16 32 28.0** | **+0.5** |
| | comp=Z,0.4nm,0.8s,baz=287,slow=3.4,SNR=2.7 | | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | | |
| ULM | **Lac du Bonnet** | **96.00** | **25** | LR | | LR | | 17 20 59.9 | |
| | comp=Z,68nm,18.4s,baz=327,slow=39 | | | | | | | | |
| BOAV | **Boa Vista** | **151.47** | **12** | | | **PKPab** | | **16 39 06.2** | **-0.3** |
| SAML | **Samuel** | **161.45** | **27** | | | **PKPab** | | **16 39 48.9** | **-0.5** |
| SAML | **Samuel** | **161.45** | **27** | PKP2 | | **PKPab** | | **16 39 48.9** | **-0.5** |
| LPAZ | **La Paz** | **164.34** | **56** | PKPab | | **PKPab** | | **16 40 02.6** | **-0.2** |
| | comp=Z,0.9nm,0.7s,baz=262,slow=3.6,SNR=4.4 | | | | | | | | |

*NIC* ***13*** *16:19:41.7, 36˚.04N×30˚.95E, h0km±1km, Ml2.8/9*
*ISK* ***13*** *16:19:42.4, 35˚.94N×30˚.89E, h22km, ML2.8/24*
*AFAD* ***13*** *16:19:43.7±0.0, 36˚.07N×31˚.02E, h7km±2km, ML2.8*
**ISC 13 16:19:42.8**±1.2, **36˚.02N**±0˚.03×**30˚.93E**±0˚.02, **h14**km±11km, **n49, σ0°80/63, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| AKUM | **Antalya-Kumluc** | **0.56** | **303** | P | **Pn** | **16 19 56.0** | **-0.4** |
| AKUM | | | | S | **Sb** | **16 20 04.3** | **+1.9** |
| AKUM | | | | *i* AML | AML | 16 20 06.0 | |
| | comp=N,748nm,0.6s | | | | | | |
| KEMT | **Kemer-ANTALYA** | **0.66** | **333** | Pg | **Pb** | **16 19 56.9** | **+0.9** |
| KEMT | | | | Sg | **Sn** | **16 20 07.6** | **-0.2** |
| DEMR | **Demre-Antalya** | **0.86** | **285** | Pg | **Pb** | **16 19 59.6** | **+0.1** |
| MNVG | **Manavgat-Antal** | **0.87** | **27** | Pg | **Pn** | **16 20 00.9** | **+0.4** |
| ANTB | **Antalya** | **0.91** | **346** | Pg | **Pn** | **16 20 01.1** | **0.0** |
| ANTB | | | | Sg | **Sn** | **16 20 15.1** | **+1.1** |
| ALAN | **Alanya-ANTALYA** | **1.04** | **59** | Pn | **Pn** | **16 20 03.1** | **+0.2** |
| KORT | **Korkueli** | **1.09** | **335** | Pn | **Pb** | **16 20 03.4** | **0.0** |
| KORT | **Korkueli** | **1.09** | **335** | P | **Pn** | **16 20 04.6** | **+0.9** |
| AKAS | **Kas** | **1.09** | **282** | Pn | **Pg** | **16 20 02.9** | **-1.0** |
| AKAS | **Kas** | **1.09** | **282** | P | **Pn** | **16 20 05.4** | **+1.6** |
| ELL | **Elmali** | **1.10** | **312** | Pn | **Pg** | **16 20 03.5** | **-0.6** |
| ELL | **Elmali** | **1.10** | **312** | P | **Pb** | **16 20 03.9** | **+0.2** |
| ELL | | | | S | **Sn** | **16 20 20.2** | **+1.2** |
| ELL | | | | AML | AML | 16 20 25.8 | |
| | 1.5nm,0.5s | | | | | | |
| ELL | | | | AML | AML | 16 20 28.2 | |
| | 2.8nm,0.6s | | | | | | |
| GAZI | **Gazipasa** | **1.14** | **79** | Pn | **Pb** | **16 20 04.3** | **0.0** |
| GAZI | **

*$M_{rr}$-0.03; $M_{\theta\theta}$-3.46; $M_{\phi\phi}$3.50; $M_{r\theta}$-0.11; $M_{\theta\phi}$-5.51; $M_{\phi r}$2.20; Fault plane solution: $M_0$6.88000×10$^{14}$ NP1: $\phi_s$285.27000°,$\delta$72.65000°,$\lambda$174.93000°. NP2: $\phi_s$16.78000°,$\delta$85.16000°,$\lambda$17.41000°. Principal axes: T 7.0882, Plg16.0000°, Azm242.0000°; N -0.4425, Plg72.0000°, Azm32.0000°; P -6.6458, Plg9.0000°, Azm150.0000°;*

*NEIC **13** 16:19:54.8,69°.57N×144°.66W,h2$^{km}$*

**ISC 13 16:19:54.2**±0.8,**69°.59N**±0°.04×**144°.49W**±0°.03,**h14**$^{km}$, **n134,**σ1**9**$^{s}$**30**/106,**Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **83** | | | **Pg** | **16 19 59.0** | **-0.9** |
| **C26K** | **Camden Bay** | **0.36** | **336** | | | **Pg** | **16 20 01.6** | **+0.2** |
| C26K | | | | | | **Sb** | **16 20 07.8** | **+0.1** |
| **D25K** | **Kavik River** | **0.72** | **249** | Pg | | **Pg** | **16 20 05.6** | **-2.5** |
| **D25K** | **Kavik River** | **0.72** | **249** | | | **Sg** | **16 20 15.5** | **-2.1** |
| **D27M** | **Malcolm River** | **1.29** | **104** | | | **Pn** | **16 20 15.7** | **-2.2** |
| **D27M** | **Malcolm River** | **1.29** | **104** | | | **Sb** | **16 20 35.3** | **+0.5** |
| **D27M** | **Malcolm River** comp=E,2μm,0.7s | **1.29** | **104** | IAML | | | 16 20 41.3 | |
| D27M | comp=N,2μm,0.8s | | | IAML | | | 16 20 41.9 | |
| **C24K** | **Franklin Bluff** | **1.48** | **277** | | | **Pn** | **16 20 18.3** | **-2.0** |
| **C24K** | **Franklin Bluff** | **1.48** | **277** | | | **Sn** | **16 20 40.8** | **+1.4** |
| **C24K** | **Franklin Bluff** comp=E,2μm,0.7s | **1.48** | **277** | IAML | | | 16 20 43.3 | |
| C24K | comp=N,3μm,0.7s | | | IAML | | | 16 20 43.6 | |
| **D24K** | **Happy Valley** | **1.60** | **256** | | | **Pn** | **16 20 20.2** | **-1.7** |
| **D24K** | **Happy Valley** | **1.60** | **256** | | | **Sb** | **16 20 45.0** | **+1.6** |
| **D24K** | **Happy Valley** comp=E,2μm,0.7s | **1.60** | **256** | IAML | | | 16 20 46.8 | |
| D24K | comp=N,3μm,0.5s | | | IAML | | | 16 20 47.4 | |
| **E27K** | **Coleen River** | **1.76** | **142** | | | **Pn** | **16 20 22.0** | **-2.3** |
| **E27K** | **Coleen River** | **1.76** | **142** | | | **Sn** | **16 20 49.1** | **+2.7** |
| **F26K** | **Sheenjek River** | **1.91** | **176** | | | **Pn** | **16 20 27.2** | **+0.9** |
| F26K | comp=N,1μm,0.8s | | | IAML | | | 16 20 54.6 | |
| **E28M** | **Babbage River** | **2.04** | **117** | Pn | | **Pn** | **16 20 29.9** | **+1.9** |
| E28M | comp=N,851nm,0.8s | | | IAML | | | 16 21 00.2 | |
| **F25K** | **Christian Rive** | **2.05** | **192** | | | **Pn** | **16 20 29.0** | **+0.7** |
| F25K | comp=E,1μm,0.8s | | | IAML | | | 16 20 59.7 | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **245** | Pn | | **Pn** | **16 20 28.6** | **+0.3** |
| TOLK | comp=E,757nm,0.5s | | | IAML | | | 16 21 01.9 | |
| TOLK | comp=N,855nm,0.6s | | | IAML | | | 16 21 11.7 | |
| **E24K** | **Your Creek** | **2.10** | **225** | | | **Pn** | **16 20 29.8** | **+0.8** |
| **C23K** | **Itkillik River** | **2.15** | **279** | | | **Pn** | **16 20 29.9** | **+0.4** |
| **BMAR** | **Burnt Mountain** | **2.17** | **181** | | | **Pn** | **16 20 30.5** | **+0.5** |
| **D23K** | **Nanushuk River** | **2.29** | **257** | | | **Pn** | **16 20 32.6** | **+1.2** |
| **D23K** | **Nanushuk River** comp=N,602nm,0.9s | **2.29** | **257** | IAML | | | 16 21 13.8 | |
| D23K | comp=E,675nm,0.8s | | | IAML | | | 16 21 19.3 | |
| **E23K** | **Chandalar** | **2.42** | **233** | | | **Pn** | **16 20 33.7** | **+0.4** |
| E23K | comp=E,515nm,0.5s | | | IAML | | | 16 21 14.8 | |
| **F24K** | **Squaw Lake** | **2.43** | **213** | Pn | | **Pn** | **16 20 34.0** | **+0.6** |
| F24K | comp=N,532nm,0.9s | | | IAML | | | 16 21 09.2 | |
| F24K | comp=E,617nm,0.7s | | | IAML | | | 16 21 11.3 | |
| **F28M** | **Old Crow** | **2.61** | **137** | | | **Pn** | **16 20 36.5** | **+0.6** |
| F28M | comp=N,503nm,0.7s | | | IAML | | | 16 21 22.3 | |
| F28M | comp=E,483nm,0.8s | | | IAML | | | 16 21 22.6 | |
| **E29M** | **Blow River** | **2.67** | **114** | Pn | | **Pn** | **16 20 37.9** | **+1.2** |
| E29M | comp=E,616nm,0.7s | | | IAML | | | 16 21 23.5 | |
| E29M | comp=N,447nm,0.8s | | | IAML | | | 16 21 24.3 | |
| **G25K** | **Bearman Lake** | **2.90** | **193** | | | **Pn** | **16 20 41.0** | **+1.1** |
| **G27K** | **Doyon Strip** | **2.99** | **158** | | | **Pn** | **16 20 41.5** | **+0.4** |
| **D22K** | **Ayikyak River** | **3.01** | **260** | Pn | | **Pn** | **16 20 41.7** | **+0.4** |
| D22K | comp=E,409nm,0.8s | | | IAML | | | 16 21 31.3 | |
| D22K | comp=N,498nm,0.8s | | | IAML | | | 16 21 38.1 | |
| **E22K** | **Anaktuvuk Pass** | **3.03** | **245** | | | **Pn** | **16 20 42.1** | **+0.4** |
| **FYU** | **Fort Yukon** | **3.05** | **186** | | | **Pn** | **16 20 43.2** | **+1.2** |
| **G24K** | **Hadweenzic Riv** | **3.11** | **202** | | | **Pn** | **16 20 42.8** | **0.0** |
| G24K | comp=E,522nm,1.1s | | | IAML | | | 16 21 33.9 | |
| G24K | comp=N,512nm,1.2s | | | IAML | | | 16 21 34.5 | |
| **B22K** | **Teshekpuk Lake** | **3.17** | **288** | Pn | | **Pn** | **16 20 44.9** | **+1.5** |
| **COLD** | **Coldfoot** | **3.18** | **224** | | | **Pn** | **16 20 44.4** | **+0.7** |
| **H25L** | **Birch Creek** | **3.38** | **189** | | | **Pn** | **16 20 47.3** | **+0.9** |
| **F22K** | **John River** | **3.52** | **237** | | | **Pn** | **16 20 48.8** | **+0.5** |
| **B21K** | **Ikpikpuk River** | **3.54** | **275** | | | **Pn** | **16 20 49.3** | **+0.6** |
| **G23K** | **Bananza Creek** | **3.56** | **218** | Pn | | **Pn** | **16 20 49.3** | **+0.3** |
| G23K | comp=N,328nm,0.8s | | | IAML | | | 16 21 51.3 | |
| **H27K** | **Steamboat Moun** | **3.56** | **160** | | | **Pn** | **16 20 49.9** | **+1.0** |
| **E21K** | **Killik River** | **3.60** | **256** | | | **Pn** | **16 20 49.7** | **+0.1** |
| **E21K** | **Killik River** comp=E,217nm,0.8s | **3.60** | **256** | IAML | | | 16 21 57.3 | |
| E21K | comp=N,238nm,1.3s | | | IAML | | | 16 22 01.2 | |
| **G29M** | **Pine Creek** | **3.61** | **135** | | | **Pn** | **16 20 50.5** | **+0.9** |
| **G22K** | **Bettles** | **3.74** | **228** | | | **Pn** | **16 20 52.0** | **+0.6** |
| **F30M** | **Barrier River** | **3.76** | **118** | | | **Pn** | **16 20 53.7** | **+2.1** |
| **A22K** | **Sinclair Lake** | **3.82** | **297** | | | **Pn** | **16 20 53.5** | **+1.1** |
| **H24K** | **Noodor Dome** comp=N,241nm,0.8s | **3.99** | **200** | IAML | | | 16 22 00.8 | |
| H24K | comp=E,225nm,1.5s | | | IAML | | | 16 22 06.4 | |
| **G30M** | **tAoh Zraii Nji** | **4.04** | **127** | | | **Pn** | **16 20 56.9** | **+1.4** |
| **G30M** | **tAoh Zraii Nji** comp=N,152nm,1.3s | **4.04** | **127** | IAML | | | 16 22 08.5 | |
| **F21K** | **Alatna River** | **4.09** | **239** | | | **Pn** | **16 20 57.0** | **+0.8** |
| **F21K** | **Alatna River** comp=N,160nm,0.7s | **4.09** | **239** | IAML | | | 16 22 06.8 | |
| F21K | comp=E,188nm,1.0s | | | IAML | | | 16 22 11.0 | |
| **H29M** | **Whitestone** comp=E,209nm,0.6s | **4.10** | **143** | IAML | | | 16 21 48.0 | |
| H29M | comp=N,237nm,1.3s | | | IAML | | | 16 22 11.9 | |
| **PRP** | **Porcupine Dome** | **4.11** | **186** | | | **Pn** | **16 20 57.7** | **+1.0** |
| **PRP** | **Porcupine Dome** comp=N,181nm,0.4s | **4.11** | **186** | IAML | | | 16 21 48.8 | |
| PRP | comp=E,168nm,0.4s | | | IAML | | | 16 21 49.2 | |
| **I27K** | **Kandik River** | **4.16** | **163** | | | **Pn** | **16 20 58.4** | **+1.3** |
| **INK** | **Inuvik** | **4.16** | **103** | Pn | | **Pn** | **16 20 58.2** | **+1.1** |
| **H23K** | **Yukon River** | **4.25** | **209** | | | **Pn** | **16 20 58.9** | **+0.5** |
| **I26K** | **Coal Creek Min** | **4.34** | **173** | | | **Pn** | **16 21 00.4** | **+0.8** |
| **I26K** | **Coal Creek Min** comp=E,197nm,0.8s | **4.34** | **173** | IAML | | | 16 22 15.6 | |
| **EPYK** | **Eagle Plains** | **4.36** | **134** | | | **Pn** | **16 21 00.8** | **+0.9** |
| **B20K** | **Meade River** | **4.41** | **281** | Pn | | **Pn** | **16 21 01.8** | **+1.3** |
| **D20K** | **Etivluk River** | **4.42** | **264** | | | **Pn** | **16 21 01.9** | **+1.2** |
| **A21K** | **Barrow** | **4.43** | **299** | | | **Pn** | **16 21 02.3** | **+1.6** |
| **E20K** | **Nigu River** | **4.43** | **258** | | | **Pn** | **16 21 02.2** | **+1.3** |
| **F31M** | **Tsiigehtchic** | **4.50** | **114** | Pn | | **Pn** | **16 21 02.6** | **+0.8** |
| F31M | comp=E,101nm,1.0s | | | IAML | | | 16 22 30.5 | |
| **I28M** | **Miner Creek** | **4.51** | **155** | | | **Pn** | **16 21 03.3** | **+1.2** |
| **I28M** | **Miner Creek** comp=N,103nm,0.8s | **4.51** | **155** | IAML | | | 16 22 26.4 | |
| **H22K** | **Ishtalitna Cre** | **4.54** | **218** | | | **Pn** | **16 21 03.0** | **+0.5** |
| **G21K** | **Allakaket** comp=E,149nm,1.4s | **4.58** | **232** | IAML | | | 16 22 29.1 | |
| **POKR** | **Poker Plat Res** comp=N,115nm,0.3s | **4.64** | **196** | IAML | | | 16 22 01.0 | |
| POKR | comp=E,113nm,1.0s | | | IAML | | | 16 22 04.9 | |
| **G31M** | **Satah River** comp=N,151nm,1.1s | **4.65** | **120** | IAML | | | 16 22 28.5 | |
| **I23K** | **Minto, Yukon-K** | **4.84** | **205** | | | **Pn** | **16 21 07.0** | **+0.5** |
| **I23K** | **Minto, Yukon-K** comp=N,110nm,0.9s | **4.84** | **205** | IAML | | | 16 22 30.4 | |
| I23K | comp=E,118nm,1.1s | | | IAML | | | 16 22 37.6 | |
| **I29M** | **Ogilvie Camp,** | **4.87** | **148** | | | **Pn** | **16 21 08.3** | **+1.4** |
| **I29M** | **Ogilvie Camp,** comp=N,92nm,0.5s | **4.87** | **148** | IAML | | | 16 22 09.9 | |
| I29M | comp=E,97nm,1.1s | | | IAML | | | 16 22 36.4 | |
| **MDM** | **Murphy Dome** comp=N,117nm,0.8s | **4.88** | **199** | IAML | | | 16 22 29.7 | |
| MDM | comp=E,124nm,0.8s | | | IAML | | | 16 22 33.9 | |
| **F20K** | **Avaraart Lake** | **4.88** | **244** | | | **Pn** | **16 21 08.0** | **+1.0** |
| **F20K** | **Avaraart Lake** comp=N,79nm,1.1s | **4.88** | **244** | IAML | | | 16 22 50.6 | |
| **COLA** | **College** | **4.92** | **197** | | | **Pn** | **16 21 08.8** | **+1.3** |
| **IL31** | | **4.93** | **192** | | | **Pn** | **16 21 09.0** | **+1.3** |
| **ILAR** | **Eielson Array** | **4.93** | **192** | | | **Pn** | **16 21 08.7** | **+0.9** |
| **ILAR** | **Eielson Array** comp=N,3.5nm,0.3s,baz=6.4,slow=13,SNR=45 | **4.93** | **192** | Pn | | **Pn** | **16 21 08.3** | **+0.6** |
| ILAR | comp=N,3.4nm,0.3s,baz=5.4,slow=20,SNR=5.4 | | | Sn | | **Sn** | **16 22 02.9** | **-1.6** |
| ILAR | comp=N,7.8nm,0.3s,baz=3.8,slow=30,SNR=5.7 comp=N,9.4nm,0.5s | | | Lg | | Lg | 16 22 25.6 | |
| **EGAK** | **Eagle** | **5.01** | **163** | Pn | | **Pn** | **16 21 09.7** | **+1.0** |
| EGAK | comp=N,95nm,0.8s | | | IAML | | | 16 22 11.5 | |
| EGAK | comp=N,84nm,1.0s | | | IAML | | | 16 22 48.9 | |
| **D19K** | **Kuna River** | **5.01** | **264** | | | **Pn** | **16 21 09.9** | **+1.0** |
| **D19K** | **Kuna River** comp=E,67nm,1.4s | **5.01** | **264** | IAML | | | 16 22 52.2 | |
| **J25K** | **Salcha River,** | **5.01** | **184** | | | **Pn** | **16 21 10.4** | **+1.4** |
| **J25K** | **Salcha River,** comp=N,89nm,0.7s | **5.01** | **184** | IAML | | | 16 22 35.8 | |
| J25K | comp=E,122nm,1.4s | | | IAML | | | 16 22 43.8 | |
| **H21K** | **Melozitna Rive** comp=N,98nm,0.9s | **5.07** | **223** | IAML | | | 16 22 43.8 | |
| **J26L** | **Joseph Creek** | **5.13** | **176** | | | **Pn** | **16 21 11.7** | **+1.2** |
| **J26L** | **Joseph Creek** comp=N,76nm,0.6s | **5.13** | **176** | IAML | | | 16 22 17.1 | |
| J26L | comp=E,90nm,0.9s | | | IAML | | | 16 22 36.3 | |
| **E19K** | **Redstone River** | **5.15** | **251** | | | **Pn** | **16 21 10.7** | **0.0** |
| **E19K** | **Redstone River** comp=E,98nm,1.0s | **5.15** | **251** | IAML | | | 16 22 52.9 | |
| **MLY** | **Manley** | **5.18** | **211** | Pn | | **Pn** | **16 21 11.6** | **+0.4** |
| **HDA** | **Harding Lake** | **5.30** | **192** | | | **Pn** | **16 21 13.9** | **+1.1** |
| **NEA2** | **Nenana** | **5.33** | **202** | | | **Pn** | **16 21 13.5** | **+0.3** |
| **WRH** | **Wood River Hil** | **5.33** | **197** | | | **Pn** | **16 21 14.1** | **+0.8** |
| **WRH** | **Wood River Hil** comp=N,68nm,0.9s | **5.33** | **197** | IAML | | | 16 22 54.3 | |
| WRH | comp=E,70nm,1.1s | | | IAML | | | 16 22 54.4 | |
| **C19K** | **Lookout Ridge** | **5.37** | **272** | | | **Pn** | **16 21 14.7** | **+1.0** |
| **C19K** | **Lookout Ridge** comp=E,62nm,0.5s | **5.37** | **272** | IAML | | | 16 22 16.3 | |
| C19K | comp=N,80nm,1.3s | | | IAML | | | 16 23 06.1 | |
| **I30M** | **Mount Dempster** | **5.39** | **141** | | | **Pn** | **16 21 14.7** | **+0.6** |
| **I30M** | **Mount Dempster** comp=E,82nm,0.6s | **5.39** | **141** | IAML | | | 16 22 19.0 | |
| I30M | comp=N,60nm,0.8s | | | IAML | | | 16 22 28.5 | |
| **K27K** | **Chicken** | **5.67** | **169** | | | **Pn** | **16 21 19.1** | **+1.2** |
| **A19K** | **Wainwright** | **5.75** | **284** | | | **Pn** | **16 21 20.4** | **+1.5** |
| **K24K** | **Donnelly Dome** | **5.84** | **186** | | | **Pn** | **16 21 22.7** | **+2.4** |
| **DAWY** | **Dawson** | **5.90** | **158** | | | **Pn** | **16 21 22.3** | **+1.2** |
| **DOT** | **Dot Lake** | **5.97** | **178** | | | **Pn** | **16 21 24.2** | **+2.1** |
| **E18K** | **Tukpahlearik C** | **6.30** | **257** | | | **Pn** | **16 21 27.2** | **+0.6** |
| **K29M** | **Barlow Dome** | **6.40** | **151** | | | **Pn** | **16 21 29.4** | **+1.4** |
| **F18K** | **Selawik** | **6.41** | **249** | | | **Pn** | **16 21 28.8** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **6.64** | **169** | Pn | | **Pn** | **16 21 32.5** | **+1.2** |
| **L27K** | **Beaver Creek,** | **6.65** | **169** | | | **Pn** | **16 21 32.6** | **+1.3** |
| **DHY** | **Denali Highway** | **6.65** | **191** | | | **Pn** | **16 21 33.9** | **+2.5** |
| **PAX** | **Paxson** | **6.66** | **184** | | | **Pn** | **16 21 34.0** | **+2.4** |
| **A36M** | **Sachs Harbour** | **6.77** | **60** | Pn | | **Pn** | **16 21 32.6** | **-0.3** |
| **C17K** | **DeLong Mountai** | **6.79** | **269** | | | **Pn** | **16 21 33.2** | **-0.1** |
| **E17K** | **Hotham Inlet** | **6.88** | **257** | | | **Pn** | **16 21 34.4** | **-0.1** |
| **WAT1** | **Susitna Watana** | **6.99** | **196** | | | **Pn** | **16 21 37.5** | **+1.5** |
| **WAT7** | **Susitna Watana** | **7.01** | **197** | | | **Pn** | **16 21 37.9** | **+1.5** |
| **F17K** | **Baldwin Pennin** | **7.03** | **251** | Pn | | **Pn** | **16 21 36.5** | **+0.1** |
| **J19K** | **Poorman** | **7.13** | **223** | | | **Pn** | **16 21 38.3** | **+0.4** |
| **WAT6** | **Susitna Watana** | **7.17** | **192** | | | **Pn** | **16 21 40.9** | **+2.4** |
| **M27K** | **Edge Creek, AK** | **7.34** | **170** | | | **Pn** | **16 21 43.1** | **+2.1** |
| **G17K** | **Kiwalik Mounta** | **7.41** | **244** | | | **Pn** | **16 21 42.1** | **+0.4** |
| **H17K** | **Granite Mounta** | **7.57** | **239** | | | **Pn** | **16 21 44.2** | **+0.3** |
| **C16K** | **Lisburne Hills** | **7.62** | **270** | | | **Pn** | **16 21 44.4** | **-0.1** |
| **SCM** | **Sheep Creek Mo** | **7.88** | **190** | | | **Pn** | **16 21 51.4** | **+3.2** |
| **L20K** | **Farewell, AK** | **8.09** | **213** | | | **Pn** | **16 21 51.5** | **+0.4** |
| **Q32M** | **Nakina River** | **11.88** | **148** | | | **Pn** | **16 22 44.6** | **+1.4** |
| **DLBC** | **Dease Lake** comp=N,95nm,18.7s,baz=297,slow=38 | **12.81** | **144** | LR | | LR | 16 28 11.0 | |
| **YKA** | **Yellowknife Ar** comp=N,0.8nm,0.3s,baz=310,slow=12,SNR=11 | **13.93** | **106** | Pn | | **Pn** | **16 23 08.5** | **-2.3** |
| YKA | comp=N,0.7nm,0.3s,baz=311,slow=24,SNR=5.8 comp=N,1.7nm,0.5s | | | Sn | | Sn | 16 25 32.2 | -13 |
| **FRB** | **Frobisher Bay** comp=N,44nm,21.4s,baz=351,slow=37 | **28.76** | **64** | LR | | LR | 16 37 35.5 | |
| **PFO** | **Pinyon Flats O** comp=N,38nm,21.4s,baz=186,slow=38 | **39.25** | **142** | LR | | LR | 16 44 31.0 | |
| **TXAR** | **Lajitas Array** comp=N,0.5nm,0.9s,baz=330,slow=5.3,SNR=1.3 comp=N,0.5nm,0.9s | **46.51** | **128** | P | | **P** | **16 28 22.8** | **+1.9** |

*DJA **13** 16:28:06.4±1.8,9°.5S±4°.×12°.4E±°,h16$^{km}$±24$^{km}$,M3.2/8, MLv3.2/8*

**ISC 13 16:28:03.1**±1.2,**8°.74S**±0°.06×**124°.3E**±0°.1,**h10**$^{km}$,**n10,** σ1**8**$^{s}$**80/10,Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **1.01** | **182** | P | | **Pb** | **16 28 25.0** | **+2.2** |
| **SOEI** | **Soe** | **1.01** | **182** | P | | **Pb** | **16 28 25.1** | **+2.2** |
| **BATI** | **Baumata** | **1.59** | **203** | P | | **Pn** | **16 28 31.0** | **-0.4** |
| BATI | | | | S | | **Sn** | **16 28 51.1** | **-0.9** |
| **MMRI** | **Maumere** | **2.04** | **273** | P | | **Pn** | **16 28 35.8** | **-1.7** |
| **EDFI** | **Ende, Flores** | **2.58** | **269** | P | | **Pn** | **16 28 44.2** | **-0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.57** | **304** | P | | **Pn** | **16 29 12.6** | **+0.3** |
| **WBSI** | **Waikabubak, Su** | **4.93** | **259** | P | | **Pn** | **16 29 16.3** | **-1.0** |
| **SANI** | **Sanana** | **6.85** | **14** | P | | **Pb** | **16 30 03.5** | **+1.2** |
| **MTN** | **Manton Dam** | **7.86** | **122** | P | | **Pn** | **16 29 55.1** | **-2.4** |
| **KDU** | **Kakadu** | **8.94** | **117** | P | | Pn | 16 30 08.8 | -3.5 |

*CNRM **13** 16:30:20.1,36°.38N×7°.79W,h57$^{km}$,ML3.5*
*MDD **13** 16:30:22.2±0.4,36°.43N×7°.77W,h29$^{km}$±4$^{km}$,mb_Lg3.7/35, Error ellipse: s-maj=2.7km s-min=1.7km az=54.0*
*SFS **13** 16:30:22.4,36°.45N×7°.80W,h41$^{km}$,mb4.1/5,ML3.9/35, ML3.7/25,MLv3.6/35*
*INMG **13** 16:30:22.3±1.5,36°.48N×7°.76W,h17$^{km}$±3$^{km}$,ML3.3,Error ellipse: s-maj=2.8km s-min=2.0km az=49.0*
*IGIL **13** 16:30:22.0,36°.48N×7°.77W,h16$^{km}$,ML3.4*
*LDG **13** 16:30:23.4±0.2,36°.58N×7°.63W,h10$^{km}$,Ml3.7/5, Error ellipse: s-maj=4.0km s-min=2.1km az=44.0*

**ISC 13 16:30:20.1**±0.9,**36°.47N**±0°.03×**7°.73W**±0°.03,**h61**$^{km}$±11$^{km}$, **n164,**σ1**9**$^{s}$**98**/263,**10D,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PFARO** | **Faro** | **0.57** | **344** | *eP* | | **Pn** | **16 30 33.8** | **+0.8** |
| PFARO | | | | *eS* | | **Sn** | **16 30 42.0** | **-0.3** |
| PFARO | 2μm,0.5s | | | A | | A | 16 30 47.8 | |
| **PTAV** | **Tavira** | **0.65** | **5** | *eS* | | **Sn** | **16 30 43.0** | **-0.9** |
| **PBDV** | **Barranco-do-Ve** | **0.79** | **348** | *i* | *P* | **Pn** | **16 30 36.8** | **+1.2** |
| PBDV | | | | *eS* | | **Sn** | **16 30 46.9** | **+0.1** |
| PBDV | 359nm,0.4s | | | A | | A | 16 30 51.3 | |
| **PBDV** | **Barranco-do-Ve** | **0.79** | **348** | Pg | | **Pn** | **16 30 36.8** | **+1.2** |
| PBDV | | | | Sg | | **Sn** | **16 30 46.2** | **-0.6** |
| **PPOR** | **Portimao** | **0.92** | **316** | *eS* | | **Sn** | **16 30 50.3** | **+0.5** |
| **PVAQ** | **Vaqueiros** | **0.93** | **0** | *i* | *eP* | **Pn** | **16 30 38.8** | **+1.5** |
| PVAQ | | | | *eS* | | **Sn** | **16 30 50.8** | **+0.8** |
| PVAQ | 826nm,0.3s | | | A | | A | 16 30 51.6 | |
| **PVAQ** | **Vaqueiros** | **0.93** | **0** | Pg | | **Pn** | **16 30 38.8** | **+1.5** |
| PVAQ | | | | Sg | | **Sn** | **16 30 50.1** | **+0.1** |
| **PVAQ** | **Vaqueiros** | **0.93** | **0** | P | | **Pn** | **16 30 38.3** | **+1.0** |
| **PVAQ** | **Vaqueiros** | **0.93** | **0** | S | | **Sn** | **16 30 51.9** | **+1.9** |
| **PLAGO** | **Lagos** | **0.99** | **309** | *eP* | | **Pn** | **16 30 39.3** | **+1.2** |
| PLAGO | 590nm,0.7s | | | A | | A | 16 30 57.2 | |
| **ARNO** | **Arenosillo** | **1.01** | **52** | Pn | | **Pn** | **16 30 40.4** | **+2.0** |
| ARNO | | | | Sn | | **Sn** | **16 30 53.2** | **+1.3** |
| **EGRO** | **El Granado** | **1.08** | **10** | Pn | | **Pn** | **16 30 41.0** | **+1.8** |
| EGRO | | | | Sn | | **Sn** | **16 30 53.6** | **+0.2** |
| **EGRO** | **El Granado** | **1.08** | **10** | Pn | | **Pn** | **16 30 41.1** | **+1.8** |
| EGRO | | | | Sn | | **Sn** | **16 30 53.4** | **0.0** |
| EGRO | | | | *i* | Vmb_Lg | | 16 30 55.1 | |
| **PFVI** | **Vila Bisbo** | **1.10** | **307** | *i* | *P* | **Pn** | **16 30 40.7** | **+1.2** |
| PFVI | | | | *eS* | | **Sn** | **16 30 54.1** | **+0.1** |
| PFVI | 225nm,0.5s | | | A | | A | 16 31 01.3 | |
| **PFVI** | **Vila Bisbo** | **1.10** | **307** | Pn | | **Pn** | **16 30 40.7** | **+1.2** |
| PFVI | | | | Sn | | **Sn** | **16 30 54.4** | **+0.5** |
| **PFVI** | **Vila Bisbo** | **1.10** | **307** | P | | **Pn** | **16 30 40.2** | **+0.7** |
| **MORF** | **Marmelete** | **1.11** | **318** | *i* | *P* | **Pn** | **16 30 40.9** | **+1.1** |
| MORF | 422nm,0.2s | | | A | | A | 16 31 00.1 | |
| **MORF** | **Marmelete** | **1.11** | **318** | *eP* | | **Pn** | **16 30 40.9** | **+1.1** |
| **PSVI** | **Cabo S. Vicent** | **1.16** | **299** | *eP* | | **Pn** | **16 30 41.1** | **+0.8** |
| PSVI | | | | *eS* | | **Sn** | **16 30 55.5** | **+0.2** |
| **PCVE** | **Castro Verde** | **1.18** | **348** | *eP* | | **Pn** | **16 30 42.5** | **+1.9** |
| PCVE | | | | *i* | S | **Sn** | **16 30 57.0** | **+1.1** |
| PCVE | 394nm,0.1s | | | A | | A | 16 30 57.9 | |
| **PCVE** | **Castro Verde** | **1.18** | **348** | Pn | | **Pn** | **16 30 42.5** | **+1.9** |
| PCVE | | | | Sn | | **Sn** | **16 30 56.3** | **+0.4** |
| **PALJ** | **Aljezur** | **1.20** | **315** | *eS* | | **Sn** | **16 30 57.6** | **+1.3** |
| **SFS** | **San Fernando** | **1.23** | **90** | Pn | | **Pn** | **16 30 45.1** | **+4.0** |
| **PTEO** | **Sao Teotonio** | **1.33** | **324** | *i* | *eP* | **Pn** | **16 30 44.3** | **+1.7** |
| PTEO | | | | *eS* | | **Sn** | **16 31 00.9** | **+1.4** |
| PTEO | 245nm,0.7s | | | A | | A | 16 31 16.6 | |
| **MESJ** | **Messejana** | **1.42** | **344** | *i* | *eP* | **Pn** | **16 30 45.6** | **+1.8** |
| MESJ | | | | *eS* | | **Sn** | **16 31 03.0** | **+1.5** |
| MESJ | 166nm,0.2s | | | A | | A | 16 31 03.5 | |
| **MESJ** | **Messejana** | **1.42** | **344** | *eP* | | **Pn** | **16 30 45.4** | **+1.7** |
| MESJ | | | | *eS* | | **Sn** | **16 31 02.2** | **+0.7** |
| MESJ | comp=N,225nm,0.1s | | | IAML | | | 16 31 04.0 | |
| **EMIN** | **Mina Concepcio** | **1.54** | **33** | Pn | | **Pn** | **16 30 47.2** | **+1.8** |
| EMIN | | | | Sn | | **Sn** | **16 31 04.2** | **-0.2** |
| **EMIN** | **Mina Concepcio** | **1.54** | **33** | Pn | | **Pn** | **16 30 47.3** | **+1.9** |
| EMIN | | | | Sn | | **Sn** | **16 31 04.8** | **+0.4** |
| EMIN | | | | *i* | Vmb_Lg | | 16 31 11.0 | |
| **PBEJ** | **Beja** | **1.55** | **356** | *eP* | | **Pn** | **16 30 47.6** | **+2.0** |
| PBEJ | | | | *eS* | | **Sn** | **16 31 05.9** | **+1.1** |
| PBEJ | comp=N,116nm,0.2s | | | A | | A | 16 31 07.9 | |
| **ESPR** | **Espera** | **1.56** | **75** | Pn | | **Pn** | **16 30 47.7** | **+2.2** |
| ESPR | | | | Sn | | **Sn** | **16 31 06.0** | **+1.3** |
| **ESPR** | **Espera** | **1.56** | **75** | Pn | | **Pn** | **16 30 47.8** | **+2.2** |
| ESPR | | | | Sn | | **Sn** | **16 31 05.2** | **+0.5** |
| ESPR | | | | *i* | Vmb_Lg | | 16 31 08.1 | |
| **PSINE** | **Sines** | **1.74** | **329** | *eS* | | **Sn** | **16 31 10.8** | **+1.6** |
| **PNCL** | **Nicolau / Gran** | **1.76** | **339** | *i* | *eP* | **Pn** | **16 30 50.0** | **+1.7** |
| PNCL | | | | *eS* | | **Sn** | **16 31 11.0** | **+1.4** |
| PNCL | comp=N,131nm,0.1s | | | A | | A | 16 31 13.5 | |
| **PNCL** | **Nicolau / Gran** | **1.76** | **339** | Pn | | **Pn** | **16 30 50.0** | **+1.7** |
| PNCL | | | | Sn | | **Sn** | **16 31 09.8** | **+0.2** |
| **PBAR** | **Barrancos** | **1.79** | **18** | *eP* | | **Pn** | **16 30 50.8** | **+2.1** |
| PBAR | | | | *eS* | | **Sn** | **16 31 12.1** | **+1.8** |
| PBAR | comp=N,117nm,0.4s | | | A | | A | 16 31 24.2 | |
| **PBAR** | **Barrancos** | **1.79** | **18** | Pn | | **Pn** | **16 30 50.7** | **+2.1** |
| PBAR | | | | Sn | | **Sn** | **16 31 11.5** | **+1.1** |
| **EJIF** | **Jimena Fronter** | **1.82** | **90** | Pn | | **Pn** | **16 30 51.8** | **+2.6** |
| EJIF | | | | Sn | | **Sn** | **16 31 13.7** | **+2.5** |
| **LIJA** | **Lijar** | **1.92** | **76** | Pn | | **Pn** | **16 30 52.7** | **+2.1** |
| LIJA | | | | Sn | | **Sn** | **16 31 15.2** | **+1.5** |
| **ECEU** | **Ceuta** | **1.99** | **106** | Pn | | **Pn** | **16 30 54.3** | **+2.9** |
| ECEU | | | | Sn | | **Sn** | **16 31 18.7** | **+3.5** |
| **ECEU** | **Ceuta** | **1.99** | **106** | Pn | | **Pn** | **16 30 54.3** | **+2.9** |
| ECEU | | | | Sn | | **Sn** | **16 31 17.9** | **+2.6** |
| **CEU** | **Ceuta** | **1.99** | **106** | Pn | | **Pn** | **16 30 54.9** | **+3.5** |
| CEU | | | | Sn | | **Sn** | **16 31 19.5** | **+4.2** |
| **EVO** | **Evora** | **2.07** | **354** | *eP* | | **Pn** | **16 30 54.6** | **+2.1** |
| EVO | | | | *eS* | | **Sn** | **16 31 18.7** | **+1.5** |
| EVO | comp=N,232nm,0.1s | | | A | | A | 16 31 21.2 | |
| **EVO** | **Evora** | **2.07** | **354** | Pn | | **Pn** | **16 30 54.5** | **+1.9** |
| EVO | | | | Sn | | **Sn** | **16 31 18.1** | **+0.9** |
| **EBAD** | **Badajoz** | **2.35** | **14** | Pn | | **Pn** | **16 30 58.2** | **+1.8** |
| EBAD | | | | Sn | | **Sn** | **16 31 24.6** | **+0.6** |
| **EBAD** | **Badajoz** | **2.35** | **14** | Pn | | **Pn** | **16 30 58.2** | **+1.8** |
| EBAD | | | | Sn | | **Sn** | **16 31 25.0** | **+1.0** |
| EBAD | | | | *i* | Vmb_Lg | | 16 31 27.8 | |
| **CHEFC** | **Chefchaouen** | **2.37** | **124** | P | | **Pn** | **16 30 56.8** | **0.0** |
| **CHEFC** | **Chefchaouen** | **2.37** | **124** | S | | **Sn** | **16 31 25.0** | **+0.2** |
| **PESTR** | **Estremoz** | **2.39** | **3** | *eP* | | **Pn** | **16 30 58.9** | **+1.9** |
| PESTR | | | | *eS* | | **Sn** | **16 31 26.6** | **+1.4** |
| PESTR | comp=N,88nm,0.3s | | | A | | A | 16 31 27.1 | |
| **PESTR** | **Estremoz** | **2.39** | **3** | Pn | | **Pn** | **16 30 58.8** | **+1.9** |
| PESTR | | | | Sn | | **Sn** | **16 31 25.9** | **+0.7** |
| **PESTR** | **Estremoz** | **2.39** | **3** | P | | **Pn** | **16 30 58.8** | **+1.9** |
| **PESTR** | **Estremoz** | **2.39** | **3** | S | | **Sn** | **16 31 27.7** | **+2.5** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IFR** | **Ifrane** | **3.64** | **143** | Pn | **Pn** | **16 31 14.8** | **+0.6** |
| IFR | | | | Sn | **Sn** | **16 31 52.8** | **-3.2** |
| **AKLM** | **AKL** | **3.71** | **121** | P | **Pn** | **16 31 13.8** | **-1.2** |
| **AKLM** | **AKL** | **3.71** | **121** | S | **Sn** | **16 31 54.6** | **-3.0** |
| **COI** | **Coimbra** | **3.77** | **352** | *e*S | **Sn** | **16 31 59.5** | **+0.7** |
| COI | | | | A | A | 16 32 04.2 | |
| | comp=E,62nm,0.2s | | | | | | |
| **E0802** | **Ubeda,Jaen** | **3.80** | **65** | Pn | **Pn** | **16 31 18.0** | **+1.8** |
| E0802 | | | | Sn | **Sn** | **16 31 59.4** | **-0.4** |
| **EPLA** | **Plasencia** | **3.81** | **19** | Pn | **Pn** | **16 31 18.7** | **+2.3** |
| EPLA | | | | Sn | **Sn** | **16 31 59.3** | **-0.7** |
| EPLA | | | | *i* Vmb_Lg | | 16 32 01.4 | |
| **EALB** | **Alboran** | **3.83** | **97** | Pn | **Pn** | **16 31 17.5** | **+0.9** |
| EALB | | | | Sn | **Sn** | **16 31 59.1** | **-1.3** |
| EALB | | | | *i* Vmb_Lg | | 16 32 02.9 | |
| **EBER** | **Berja** | **3.91** | **82** | Pn | **Pn** | **16 31 20.6** | **+2.7** |
| EBER | | | | Sn | **Sn** | **16 32 04.9** | **+2.3** |
| **EBER** | **Berja** | **3.91** | **82** | Pn | **Pn** | **16 31 21.1** | **+3.2** |
| EBER | | | | Sn | **Sn** | **16 32 02.3** | **-0.3** |
| EBER | | | | *i* Vmb_Lg | | 16 32 16.6 | |
| **MTE** | **Manteigas** | **3.92** | **2** | *e*P | **Pn** | **16 31 20.0** | **+2.1** |
| MTE | | | | *e*S | **Sn** | **16 32 03.0** | **+0.3** |
| MTE | | | | A | A | 16 32 04.5 | |
| | comp=E,121nm,0.3s | | | | | | |
| **SRHM** | **Skhour des Reh** | **4.00** | **182** | P | **Pn** | **16 31 20.6** | **+1.6** |
| **SRHM** | **Skhour des Reh** | **4.00** | **182** | S | **Sn** | **16 32 09.7** | **+5.1** |
| **GOG** | **Mont Gurugu** | **4.04** | **107** | P | **Pn** | **16 31 19.8** | **+0.2** |
| **GOG** | **Mont Gurugu** | **4.04** | **107** | S | **Sn** | **16 32 05.4** | **-0.3** |
| **PAB** | **San Pablo** | **4.07** | **40** | Pn | **Pn** | **16 31 22.1** | **+2.2** |
| PAB | | | | Sn | **Sn** | **16 32 04.5** | **-1.8** |
| PAB | | | | *i* Vmb_Lg | | 16 32 04.5 | |
| **CZD** | **Col de Zad** | **4.08** | **146** | P | **Pn** | **16 31 20.0** | **-0.3** |
| **CZD** | **Col de Zad** | **4.08** | **146** | S | **Sn** | **16 32 06.3** | **-0.7** |
| **PVIS** | **Viseu** | **4.24** | **358** | *e*P | **Pn** | **16 31 24.6** | **+2.4** |
| PVIS | | | | *e*S | **Sn** | **16 32 10.2** | **-0.2** |
| PVIS | | | | A | A | 16 32 12.4 | |
| | comp=E,42nm,0.4s | | | | | | |
| **MD31** | **MD31** | **4.35** | **145** | P | **Pn** | **16 31 23.4** | **-0.4** |
| **MD31** | **MD31** | **4.35** | **145** | S | **Sn** | **16 32 13.3** | **0.0** |
| **ESDC** | **Sonseca Array** | **4.36** | **42** | Pn | **Pn** | **16 31 26.4** | **+2.4** |
| ESDC | | | | Sn | **Sn** | **16 32 10.7** | **-2.8** |
| **ENIJ** | **Nijar** | **4.46** | **82** | Pn | **Pn** | **16 31 27.7** | **+2.4** |
| ENIJ | | | | Sn | **Sn** | **16 32 15.3** | **-0.7** |
| **ENIJ** | **Nijar** | **4.46** | **82** | Pn | **Pn** | **16 31 26.8** | **+1.5** |
| ENIJ | | | | Sn | **Sn** | **16 32 14.6** | **-1.3** |
| ENIJ | | | | *i* Vmb_Lg | | 16 32 23.3 | |
| **MDT** | **Midelt** | **4.46** | **144** | P | **Pn** | **16 31 26.4** | **+1.0** |
| **MDT** | **Midelt** | **4.46** | **144** | S | **Sn** | **16 32 15.2** | **-0.9** |
| **CHAS** | **Isla Isabel II** | **4.49** | **105** | Pn | **Pn** | **16 31 26.0** | **+0.3** |
| CHAS | | | | Sn | **Sn** | **16 32 13.4** | **-3.2** |
| **TAF** | **Taforalt** | **4.63** | **109** | P | **Pn** | **16 31 27.6** | **0.0** |
| **MVO** | **Moncorvo** | **4.72** | **6** | *e*P | **Pn** | **16 31 30.8** | **+2.0** |
| MVO | | | | *e*S | **Sn** | **16 32 21.6** | **-0.6** |
| MVO | | | | A | A | 16 32 23.3 | |
| | comp=E,62nm,0.5s | | | | | | |
| **PVRL** | **Vila Real** | **4.79** | **0** | *e*S | **Sn** | **16 32 23.3** | **-0.8** |
| PVRL | | | | A | A | 16 32 26.2 | |
| | comp=E,74nm,0.1s | | | | | | |
| **EJUZ** | **Juzbado, Salam** | **4.83** | **17** | Pn | **Pn** | **16 31 31.9** | **+1.7** |
| EJUZ | | | | Sn | **Sn** | **16 32 23.7** | **-1.2** |
| **TISM** | **Timmit** | **4.86** | **167** | P | Pn | 16 31 28.9 | -1.8 |
| **TISM** | **Timmit** | **4.86** | **167** | S | **Sn** | **16 32 23.5** | **-2.1** |
| **POLO** | **Lamas de Olo** | **4.89** | **359** | *e*P | **Pn** | **16 31 33.3** | **+2.1** |
| POLO | | | | *e*S | **Sn** | **16 32 25.6** | **-1.0** |
| POLO | | | | A | A | 16 32 28.3 | |
| | comp=E,32nm,0.4s | | | | | | |
| **GUD** | **Guadarrama** | **5.02** | **33** | Pn | **Pn** | **16 31 35.6** | **+2.6** |
| GUD | | | | Sn | **Sn** | **16 32 28.6** | **-1.1** |
| GUD | | | | *i* Vmb_Lg | | 16 32 30.5 | |
| **EAH** | **EAH** | **5.05** | **198** | P | Pn | 16 31 31.3 | -2.1 |
| **UCM** | **Universidad Co** | **5.20** | **41** | Pn | **Pn** | **16 31 38.3** | **+2.9** |
| UCM | | | | Sn | **Sn** | **16 32 31.9** | **-2.1** |
| **PCAB** | **Cabril** | **5.24** | **358** | *e*P | **Pn** | **16 31 38.0** | **+2.2** |
| PCAB | | | | *e*S | **Sn** | **16 32 33.9** | **-1.0** |
| PCAB | | | | A | A | 16 32 37.6 | |
| | comp=E,24nm,0.2s | | | | | | |
| **OUK** | **Oukaimeden** | **5.25** | **181** | P | **Pn** | **16 31 36.1** | **-0.4** |
| **OUK** | **Oukaimeden** | **5.25** | **181** | S | **Sn** | **16 32 33.3** | **-2.6** |
| **EMUR** | **La Murta** | **5.36** | **73** | Pn | **Pn** | **16 31 39.8** | **+2.3** |
| EMUR | | | | Sn | **Sn** | **16 32 37.0** | **-1.0** |
| EMUR | | | | *i* Vmb_Lg | | 16 32 40.0 | |
| **ETOB** | **Tobarra** | **5.37** | **64** | Pn | **Pn** | **16 31 39.2** | **+1.5** |
| **ETOB** | **Tobarra** | **5.37** | **64** | Pn | **Pn** | **16 31 39.5** | **+1.8** |
| ETOB | | | | Sn | **Sn** | **16 32 36.1** | **-2.1** |
| **PBRG** | **Braganca** | **5.38** | **8** | *e*P | **Pn** | **16 31 40.0** | **+2.2** |
| PBRG | | | | *e*S | **Sn** | **16 32 37.3** | **-1.1** |
| PBRG | | | | A | A | 16 32 39.9 | |
| | comp=E,29nm,0.2s | | | | | | |
| **ELOB** | **Lobios** | **5.39** | **357** | Pn | **Pn** | **16 31 40.2** | **+2.2** |
| ELOB | | | | Sn | **Sn** | **16 32 37.3** | **-1.5** |
| ELOB | | | | *i* Vmb_Lg | | 16 32 40.6 | |
| **CART** | **Cartagena** | **5.50** | **76** | Pn | **Pn** | **16 31 41.6** | **+2.2** |
| CART | | | | Sn | **Sn** | **16 32 38.6** | **-2.6** |
| **CART** | **Cartagena** | **5.50** | **76** | P | **Pn** | **16 31 39.6** | **+0.2** |
| **PGAV** | **Gavieira, Arco** | **5.50** | **356** | *e*P | **Pn** | **16 31 41.7** | **+2.2** |
| PGAV | | | | *e*S | **Sn** | **16 32 40.3** | **-1.2** |
| PGAV | | | | A | A | 16 32 41.2 | |
| | comp=E,11nm,0.3s | | | | | | |
| **ECAL** | **Calabor** | **5.51** | **8** | Pn | **Pn** | **16 31 41.7** | **+2.0** |
| ECAL | | | | Sn | **Sn** | **16 32 40.9** | **-0.9** |
| **ECAL** | **Calabor** | **5.51** | **8** | Pn | **Pn** | **16 31 41.9** | **+2.2** |
| ECAL | | | | Sn | **Sn** | **16 32 41.3** | **-0.5** |
| ECAL | | | | *i* Vmb_Lg | | 16 32 43.4 | |
| **TIO** | **Tiouine** | **5.55** | **176** | Pn | **Pn** | **16 31 41.5** | **+1.2** |
| TIO | | | | Sn | **Sn** | **16 32 38.7** | **-4.1** |
| **TIO** | **Tiouine** | **5.55** | **176** | P | **Pn** | **16 31 39.9** | **-0.4** |
| **TIO** | **Tiouine** | **5.55** | **176** | S | **Sn** | **16 32 41.5** | **-1.2** |
| **OUZM** | **OUZ** | **5.61** | **171** | P | **Pn** | **16 31 41.6** | **+0.5** |
| **EZAM** | **Zamans** | **5.72** | **353** | Pn | **Pn** | **16 31 44.9** | **+2.5** |
| EZAM | | | | Sn | **Sn** | **16 32 44.8** | **-1.9** |
| **ARF** | **Arif** | **5.81** | **149** | P | **Pn** | **16 31 43.7** | **-0.1** |
| **ARF** | **Arif** | **5.81** | **149** | S | **Sn** | **16 32 48.7** | **-0.5** |
| **EVIV** | **Cofrentes, Val** | **5.92** | **60** | Pn | **Pn** | **16 31 47.0** | **+1.7** |
| EVIV | | | | Sn | **Sn** | **16 32 50.9** | **-1.0** |
| EVIV | | | | *i* Vmb_Lg | | 16 32 54.4 | |
| **TTIG** | **Tnine Tigouga,** | **5.94** | **186** | P | Pn | 16 31 43.6 | -2.1 |
| **TTIG** | **Tnine Tigouga,** | **5.94** | **186** | S | **Sn** | **16 32 51.1** | **-1.3** |
| **AFON** | **Font Roja** | **6.11** | **67** | Pn | **Pn** | **16 31 50.1** | **+2.1** |
| AFON | | | | Sn | **Sn** | **16 32 55.0** | **-1.6** |
| AFON | | | | *i* Vmb_Lg | | 16 33 02.4 | |
| **ECHE** | **Chera** | **6.18** | **58** | Pn | **Pn** | **16 31 48.2** | **+1.4** |
| ECHE | | | | Sn | **Sn** | **16 32 56.8** | **-1.2** |
| **EAGO** | **Agolada(Pontev** | **6.33** | **358** | Pn | **Pn** | **16 31 52.3** | **+1.5** |
| EAGO | | | | Sn | **Sn** | **16 32 59.8** | **-1.8** |
| EAGO | | | | *i* Vmb_Lg | | 16 33 03.3 | |
| **EBEN2** | **Beniarda presa** | **6.38** | **68** | Pn | **Pn** | **16 31 53.9** | **+2.5** |
| EBEN2 | | | | Sn | **Sn** | **16 33 01.7** | **-1.2** |
| **EMAZ** | **Mazaricos** | **6.54** | **352** | Pn | **Pn** | **16 31 56.4** | **+2.8** |
| EMAZ | | | | Sn | **Sn** | **16 33 05.0** | **-1.8** |
| EMAZ | | | | *i* Vmb_Lg | | 16 33 07.1 | |
| **E0901** | **Celadas (Terue** | **6.54** | **50** | Sn | **Sn** | **16 33 05.6** | **-1.4** |
| E0901 | | | | *i* Vmb_Lg | | 16 33 12.8 | |
| **ZGR** | **Zagora** | **6.58** | **164** | P | **Pn** | **16 31 54.3** | **-0.1** |
| **ZGR** | **Zagora** | **6.58** | **164** | S | **Sn** | **16 33 08.1** | **+0.1** |
| **EPON** | **Pontenova** | **6.86** | **4** | Pn | **Pn** | **16 32 00.2** | **+2.1** |
| EPON | | | | Sn | **Sn** | **16 33 14.3** | **-0.4** |
| **FIGM** | **Figuig** | **6.88** | **127** | P | **Pn** | **16 31 58.3** | **-0.2** |
| **EMOS** | **Mosqueruela** | **6.89** | **54** | Pn | **Pn** | **16 32 01.1** | **+2.4** |
| EMOS | | | | Sn | **Sn** | **16 33 13.8** | **-2.0** |
| EMOS | | | | *i* Vmb_Lg | | 16 33 19.0 | |
| **EARI** | **Arriondas** | **7.09** | **15** | Pn | **Pn** | **16 32 04.0** | **+2.7** |
| EARI | | | | Sn | **Sn** | **16 33 17.8** | **-2.5** |
| **ELAN** | **Lanestosa** | **7.51** | **25** | Pn | **Pn** | **16 32 10.0** | **+3.0** |
| ELAN | | | | Sn | **Sn** | **16 33 27.6** | **-3.1** |
| **EIBI** | **Ibiza** | **7.62** | **68** | Pn | **Pn** | **16 32 11.2** | **+2.6** |
| EIBI | | | | Sn | **Sn** | **16 33 29.3** | **-4.1** |
| **ESAC** | **San Caprasio** | **7.70** | **45** | Pn | **Pn** | **16 32 13.7** | **+4.1** |
| ESAC | | | | Sn | **Sn** | **16 33 31.6** | **-3.8** |
| **ERTA** | **Horta de San J** | **7.73** | **52** | Sn | **Sn** | **16 33 35.4** | **-0.7** |
| **EORO** | **Oroz-Betelu** | **8.10** | **36** | Pn | **Pn** | **16 32 18.1** | **+3.1** |
| EORO | | | | Sn | **Sn** | **16 33 41.8** | **-3.3** |
| **SJPF** | **Ste Jean** | **8.30** | **35** | *e*Pn | **Pn** | **16 32 19.9** | **+2.1** |
| SJPF | | | | *e*Sn | **Sn** | **16 33 46.5** | **-3.6** |
| | comp=E,13nm,0.5s | | | | | | |
| **ETSF** | **Etsaut** | **8.46** | **39** | *e*Pn | **Pn** | **16 32 22.2** | **+2.1** |
| ETSF | | | | *e*Sn | **Sn** | **16 33 50.9** | **-3.2** |
| | comp=E,6.2nm,0.4s | | | | | | |
| **ECHI** | **Chisagues Biel** | **8.69** | **42** | Pn | **Pn** | **16 32 26.0** | **+2.7** |
| ECHI | | | | Sn | **Sn** | **16 33 55.3** | **-4.6** |
| **EPF** | **Esparros** | **9.02** | **41** | *e*Pn | **Pn** | **16 32 31.2** | **+3.5** |
| EPF | | | | *e*Sn | **Sn** | **16 34 03.9** | **-3.9** |
| | comp=E,8.8nm,0.5s | | | | | | |
| **RJF** | **Les Rejaudoux** | **11.25** | **36** | *e*Pn | **Pn** | **16 32 59.5** | **+1.4** |
| RJF | | | | *e*Sn | **Sn** | **16 34 57.1** | **-5.0** |
| | comp=E,1.5nm,0.3s | | | | | | |
| **QUIF** | **Quistinic** | **11.92** | **15** | *e*Pn | **Pn** | **16 33 08.1** | **+0.9** |
| **ROSF** | **Rostrenen** | **12.30** | **14** | *e*Pn | **Pn** | **16 33 14.5** | **+2.2** |
| ROSF | | | | *e*Sn | **Sn** | **16 35 21.3** | **-6.4** |
| | comp=E,2.5nm,0.3s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **12.31** | **34** | *e*Pn | **Pn** | **16 33 14.1** | **+1.5** |
| **BGF** | **Bois d'Agland** | **12.80** | **35** | *e*Pn | **Pn** | **16 33 21.0** | **+1.8** |
| **SSF** | **Saint Saulge** | **13.48** | **35** | *e*Pn | **Pn** | **16 33 29.5** | **+1.1** |

*NEIC* ***13*** *17:01:49.3±1.0, 43°.74N±0°.03×105°.27W±0°.09, h0km±1km, ML3.0/55, Error ellipse: s-maj=11.2km s-min=3.7km az=291.0*

*IDC* ***13*** *17:01:51.3±2.1, 43°.89N×105°.55W, h0km, mbtmp3.2/2, ML3.0/2, Error ellipse: s-maj=60.3km s-min=10.7km az=148.0*

**ISC 13 17:01:50.6±1.0, 43°.64N±0°.04×105°.21W±0°.04, h0km, n33, σ1°.58/31, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.98** | **60** | Pg | **Pg** | **17 02 09.6** | **+0.2** |
| **K22A** | **Casper** | **1.38** | **225** | | **Pg** | **17 02 15.7** | **-1.4** |
| K22A | | | | IAML | | 17 02 44.3 | |
| | comp=N,162nm,0.6s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.34** | **185** | Pn | **Pn** | **17 02 30.7** | **0.0** |
| PHWY | | | | IAML | | 17 03 10.8 | |
| | comp=N,93nm,0.5s | | | | | | |
| **RWWY** | **Rawlins** | **2.44** | **218** | Pn | **Pn** | **17 02 33.1** | **+1.1** |
| RWWY | | | | IAML | | 17 03 07.1 | |
| | comp=N,93nm,0.8s | | | | | | |
| RWWY | | | | IAML | | 17 03 17.2 | |
| | comp=N,107nm,0.6s | | | | | | |
| **N23A** | **Red Feather La** | **2.79** | **191** | Pn | **Pn** | **17 02 37.5** | **+0.7** |
| N23A | | | | IAML | | 17 03 21.6 | |
| | comp=E,65nm,0.8s | | | | | | |
| N23A | | | | IAML | | 17 03 25.9 | |
| | comp=N,55nm,0.6s | | | | | | |
| **BRIGG** | **Briggsdale** | **3.12** | **167** | Pn | **Pb** | **17 02 46.3** | **-0.8** |
| **LAO** | **LASA Array** | **3.14** | **347** | Pn | **Pn** | **17 02 39.9** | **-1.4** |
| LAO | | | | IAML | | 17 03 42.4 | |
| | comp=N,65nm,1.2s | | | | | | |
| **RLMT** | **Red Lodge** | **3.27** | **298** | Pn | **Pn** | **17 02 41.2** | **-2.1** |
| RLMT | | | | IAML | | 17 03 47.5 | |
| | comp=N,36nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **3.29** | **256** | | **Pn** | **17 02 43.7** | **-0.1** |
| **PDAR** | **Pinedale Array** | **3.29** | **256** | | **Pn** | **17 02 45.0** | **+1.3** |
| **PDAR** | **Pinedale Array** | **3.29** | **256** | Pn | **Pn** | **17 02 44.2** | **+0.5** |
| | comp=N,1.5nm,0.3s,baz=68,slow=16,SNR=25 | | | | | | |
| PDAR | | | | Lg | Lg | 17 03 31.2 | |
| | comp=N,6.2nm,0.3s,baz=67,slow=34,SNR=3.4 | | | | | | |
| | comp=N,1.7nm,0.3s | | | | | | |
| **OGNE** | **Ogallala** | **3.58** | **138** | | **Pn** | **17 02 49.4** | **+1.9** |
| **YMP** | **Mirror Lake Pl** | **3.73** | **289** | Pn | **Pn** | **17 02 51.5** | **+1.8** |
| YMP | | | | IAML | | 17 04 00.9 | |
| | comp=N,40nm,0.7s | | | | | | |
| YMP | | | | IAML | | 17 04 07.4 | |
| | comp=E,36nm,0.6s | | | | | | |
| **ISCO** | **Idaho Springs** | **3.84** | **185** | | **Pn** | **17 02 52.6** | **+1.3** |
| ISCO | | | | IAML | | 17 04 36.7 | |
| | comp=E,20nm,4.9s | | | | | | |
| ISCO | | | | IAML | | 17 05 00.2 | |
| | comp=E,22nm,4.2s | | | | | | |
| **LOHW** | **Long Hollow** | **3.92** | **272** | | **Pn** | **17 02 52.4** | **+0.2** |
| **H17A** | **Grant Village** | **3.94** | **283** | | **Pb** | **17 03 02.5** | **+1.3** |
| **FLWY** | **Flagg Ranch** | **4.00** | **278** | Pn | **Pn** | **17 02 53.1** | **-0.2** |
| FLWY | | | | IAML | | 17 04 17.8 | |
| | comp=E,26nm,2.6s | | | | | | |
| FLWY | | | | IAML | | 17 05 26.1 | |
| | comp=E,19nm,4.3s | | | | | | |
| **YPP** | **Pitchstone Pla** | **4.09** | **281** | | **Pn** | **17 02 54.0** | **-0.7** |
| **REDW** | **Red Top Meadow** | **4.11** | **268** | Pn | **Pn** | **17 02 59.6** | **+4.6** |
| **IMW** | **Indian Meadow** | **4.16** | **276** | | **Pn** | **17 02 55.3** | **-0.4** |
| IMW | | | | IAML | | 17 03 23.9 | |
| | comp=E,22nm,0.6s | | | | | | |
| **O20A** | **White River Ci** | **4.17** | **214** | | **Pn** | **17 02 55.6** | **0.0** |
| O20A | | | | IAML | | 17 04 19.0 | |
| | comp=E,24nm,1.5s | | | | | | |
| **TPAW** | **Teton Pass** | **4.17** | **270** | | **Pn** | **17 02 56.3** | **+0.5** |
| **FXWY** | **Fox Creek** | **4.22** | **272** | Pn | **Pn** | **17 02 57.4** | **+1.0** |
| **RDMU** | **Red Mountain** | **4.46** | **228** | | **Pn** | **17 03 02.2** | **+2.5** |
| RDMU | | | | IAML | | 17 04 24.8 | |
| | comp=E,11nm,1.1s | | | | | | |
| RDMU | | | | IAML | | 17 04 26.9 | |
| | comp=N,13nm,0.9s | | | | | | |
| **YHL** | **Hebgen Lake** | **4.46** | **288** | Pn | **Pn** | **17 03 02.4** | **+2.6** |
| YHL | | | | IAML | | 17 04 35.1 | |
| | comp=E,15nm,1.7s | | | | | | |
| YHL | | | | IAML | | 17 04 36.4 | |
| | comp=N,15nm,1.3s | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.99** | **295** | IAML | | 17 04 34.5 | |
| | comp=N,8.0nm,2.8s | | | | | | |
| BOZ | | | | IAML | | 17 06 18.0 | |
| | comp=N,7.5nm,4.2s | | | | | | |
| **HWUT** | **Hardware Ranch** | **5.11** | **249** | | **Pn** | **17 03 11.5** | **+2.9** |
| HWUT | | | | IAML | | 17 04 47.2 | |
| | comp=N,10nm,1.1s | | | | | | |
| HWUT | | | | IAML | | 17 05 46.9 | |
| | comp=N,10nm,3.2s | | | | | | |
| **EGMT** | **Eagleton** | **5.42** | **326** | Pn | **Pn** | **17 03 13.0** | **+0.3** |
| **P18A** | **Preston Nutter** | **5.50** | **225** | | **Pn** | **17 03 14.9** | **+0.8** |
| **SPUT** | **South Promonto** | **5.84** | **249** | Pn | **Pn** | **17 03 18.8** | **+0.2** |
| **SRU** | **San Rafael Swe** | **6.03** | **223** | Pn | **Pn** | **17 03 20.5** | **-0.8** |
| **ULM** | **Lac du Bonnet** | **9.19** | **41** | Pn | **Pn** | **17 04 03.6** | **-0.7** |
| | comp=N,0.4nm,0.3s,baz=235,slow=14,SNR=1.6 | | | | | | |
| ULM | | | | Lg | Lg | 17 06 32.9 | |
| | baz=327,slow=20 | | | | | | |
| | comp=N,1.0nm,0.4s | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **9.50** | **303** | I | I | 17 53 55.0 | |
| | comp=N,0.2nm,1.1s,baz=116,slow=316,SNR=12 | | | | | | |

**IDC 13 17:07:22.4±2.2, 7°.69S×127°.81E, h0km, mb3.8/1, mbtmp3.8/3, ML4.1/2, Error ellipse: s-maj=287.7km s-min=31.3km az=64.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.73** | **153** | Pn | Pn | 17 10 37.1 | -1.4 |
| | 1.2nm,0.3s,baz=330,slow=13,SNR=38 | | | | | | |
| WRA | | | | Sn | Sn | 17 13 01.0 | -11 |
| | 0.6nm,0.3s,baz=334,slow=22,SNR=8.8 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **16.93** | **160** | Pn | P | 17 11 22.1 | -0.9 |
| | 0.4nm,0.3s,baz=335,slow=8.6,SNR=35 | | | | | | |
| ASAR | | | | Sn | Sn | 17 14 22.8 | -7.1 |
| | 0.1nm,0.3s,baz=357,slow=29,SNR=1.5 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.63** | **328** | P | P | 17 18 21.1 | 0.0 |
| | 0.5nm,0.5s,baz=117,slow=7.5,SNR=8.9 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

*NEIC* ***13*** *17:15:08.2±2.0, 69°.53N±0°.02×144°.40W±0°.06, h10km±1km, Error ellipse: s-maj=4.4km s-min=2.8km az=314.0*

**AEIC 13 17:15:08.2±2.6, 69°.51N±0°.02×144°.50W±0°.05, h9km±4km, ML2.6, ML2.7/96(NEIC), Error ellipse: s-maj=3.5km s-min=2.2km az=161.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.30** | **66** | Pg | Pg | 17 15 13.4 | -0.9 |
| C27K | | | | IAML | | 17 15 17.8 | |
| | comp=E,831nm,0.6s | | | | | | |
| C27K | | | | IAML | | 17 15 19.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.44** | **341** | | Pg | 17 15 16.6 | -0.2 |
| C26K | | | | | Sg | 17 15 22.5 | 0.0 |
| **C26K** | **Camden Bay** | **0.44** | **341** | IAML | | 17 15 24.5 | |
| | comp=E,543nm,0.4s | | | | | | |
| C26K | | | | IAML | | 17 15 24.5 | |
| | comp=N,683nm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.69** | **255** | Pg | Pg | 17 15 21.7 | +0.2 |
| **D25K** | **Kavik River** | **0.69** | **255** | | Sb | 17 15 31.6 | -0.5 |
| **D27M** | **Malcolm River** | **1.28** | **100** | Pn | Pn | 17 15 31.8 | -0.5 |
| **D27M** | **Malcolm River** | **1.28** | **100** | | Sb | 17 15 48.6 | -0.5 |
| **D27M** | **Malcolm River** | **1.28** | **100** | IAML | | 17 15 55.6 | |
| | comp=N,132nm,0.4s | | | | | | |
| D27M | | | | IAML | | 17 15 56.0 | |
| | comp=E,114nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.49** | **280** | | Pn | 17 15 34.1 | -1.0 |
| **C24K** | **Franklin Bluff** | **1.49** | **280** | | Sg | 17 15 57.5 | +1.6 |
| **C24K** | **Franklin Bluff** | **1.49** | **280** | IAML | | 17 15 58.8 | |
| | comp=N,103nm,0.8s | | | | | | |
| C24K | | | | IAML | | 17 15 58.9 | |
| | comp=E,88nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.57** | **259** | | Pg | 17 15 38.5 | +0.1 |
| **D24K** | **Happy Valley** | **1.57** | **259** | | Sg | 17 16 01.7 | +3.0 |
| **D24K** | **Happy Valley** | **1.57** | **259** | IAML | | 17 16 05.9 | |
| | comp=N,124nm,0.5s | | | | | | |
| D24K | | | | IAML | | 17 16 07.3 | |
| | comp=E,113nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.69** | **140** | | Pb | 17 15 39.8 | +0.2 |
| E27K | | | | IAML | | 17 16 06.7 | |
| | comp=E,70nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **176** | | Pg | 17 15 42.8 | -0.4 |
| F26K | | | | IAML | | 17 16 13.1 | |
| | comp=N,80nm,0.6s | | | | | | |
| **F25K** | **Christian River** | **1.97** | **193** | | Pg | 17 15 45.2 | -0.6 |
| F25K | | | | IAML | | 17 16 16.2 | |
| | comp=N,70nm,0.9s | | | | | | |
| F25K | | | | IAML | | 17 16 17.8 | |
| | comp=E,53nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **2.00** | **115** | | Pb | 17 15 45.0 | +0.3 |
| **TOLK** | **Toolik Lake Re** | **2.02** | **247** | | Pg | 17 15 46.1 | -0.7 |
| **E24K** | **Your Creek** | **2.04** | **227** | | Pb | 17 15 46.1 | +0.6 |
| **BMAR** | **Burnt Mountain** | **2.09** | **181** | | Pg | 17 15 47.3 | -0.8 |
| **C23K** | **Itkillik River** | **2.16** | **282** | | Pb | 17 15 47.7 | +0.2 |
| C23K | | | | IAML | | 17 16 22.7 | |
| | comp=E,59nm,0.6s | | | | | | |
| C23K | | | | IAML | | 17 16 25.4 | |
| | comp=N,59nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.27** | **259** | | Pb | 17 15 49.6 | +0.2 |
| **F24K** | **Squaw Lake** | **2.35** | **214** | | Pb | 17 15 49.9 | -0.9 |
| F24K | | | | IAML | | 17 16 27.4 | |
| | comp=N,40nm,0.6s | | | | | | |
| F24K | | | | IAML | | 17 16 28.1 | |
| | comp=E,33nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.36** | **234** | | Pb | 17 15 50.4 | -0.5 |
| **F28M** | **Old Crow** | **2.55** | **136** | | Pn | 17 15 51.6 | +1.9 |
| **G26K** | **Porcupine Rive** | **2.58** | **174** | | Pb | 17 15 53.0 | -1.7 |
| **E29M** | **Blow River** | **2.63** | **112** | | Pn | 17 15 52.4 | +1.5 |
| E29M | | | | IAML | | 17 16 34.2 | |
| | comp=E,27nm,0.6s | | | | | | |
| E29M | | | | IAML | | 17 16 34.6 | |
| | comp=N,37nm,0.7s | | | | | | |
| **G25K** | **Bearman Lake** | **2.82** | **193** | | Pb | 17 15 56.1 | -2.6 |
| **G27K** | **Doyon Strip** | **2.91** | **157** | Pn | Pn | 17 15 57.1 | +2.4 |
| **FYU** | **Fort Yukon** | **2.97** | **186** | Pn | Pb | 17 15 58.8 | -2.4 |
| **D22K** | **Ayikyak River** | **2.99** | **262** | | Pn | 17 15 57.8 | +2.1 |
| D22K | | | | IAML | | 17 17 49.2 | |
| | comp=N,24nm,1.0s | | | | | | |
| D22K | | | | IAML | | 17 17 51.2 | |
| | comp=E,20nm,0.7s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.03** | **203** | | Pn | 17 15 57.3 | +0.9 |
| **COLD** | **Coldfoot** | **3.11** | **225** | | Pn | 17 15 60.0 | +2.5 |
| **H27K** | **Steamboat Moun** | **3.48** | **160** | | Pn | 17 16 05.0 | +2.4 |
| **B21K** | **Ikpikpuk River** | **3.55** | **277** | Pn | Pn | 17 16 06.0 | +2.6 |
| B21K | | | | IAML | | 17 17 16.3 | |
| | comp=E,17nm,0.8s | | | | | | |
| B21K | | | | IAML | | 17 18 13.7 | |
| | comp=N,19nm,1.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.55** | **134** | | Pn | 17 16 06.0 | +2.4 |
| **H24K** | **Noodor Dome** | **3.90** | **201** | Pn | Pn | 17 16 10.8 | +2.4 |
| H24K | | | | IAML | | 17 17 16.6 | |
| | comp=N,12nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.03** | **186** | | Pn | 17 16 13.2 | +3.1 |
| PRP | | | | IAML | | 17 18 03.1 | |
| | comp=E,11nm,0.5s | | | | | | |
| **H29M** | **Whitestone** | **4.03** | **142** | | Pn | 17 16 12.8 | +2.6 |
| H29M | | | | IAML | | 17 18 03.2 | |
| | comp=N,12nm,0.5s | | | | | | |
| H29M | | | | IAML | | 17 18 04.3 | |
| | comp=E,11nm,0.6s | | | | | | |
| **F21K** | **Alatna River** | **4.04** | **240** | Pn | Pn | 17 16 12.8 | +2.6 |
| F21K | | | | IAML | | 17 18 26.1 | |
| | comp=E,7.5nm,0.9s | | | | | | |
| F21K | | | | IAML | | 17 18 29.8 | |
| | comp=N,8.9nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.07** | **163** | | Pn | 17 16 13.5 | +2.8 |
| **H23K** | **Yukon River** | **4.17** | **210** | Pn | Pn | 17 16 14.4 | +2.4 |
| H23K | | | | IAML | | 17 17 25.7 | |
| | comp=N,11nm,1.1s | | | | | | |
| H23K | | | | IAML | | 17 18 32.8 | |
| | comp=E,12nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.25** | **172** | Pn | Pn | 17 16 15.0 | +1.9 |
| **EPYK** | **Eagle Plains** | **4.30** | **133** | Pn | Pn | 17 16 16.1 | +2.3 |
| **D20K** | **Etivluk River** | **4.41** | **265** | | Pn | 17 16 17.8 | +2.5 |
| **B20K** | **Meade River** | **4.43** | **282** | Pn | Pn | 17 16 17.5 | +2.0 |
| **I28M** | **Miner Creek** | **4.44** | **155** | | Pn | 17 16 18.8 | +3.1 |
| I28M | | | | IAML | | 17 17 13.6 | |
| | comp=E,8.8nm,0.4s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.47** | **219** | | Pn | 17 16 17.9 | +1.7 |
| **G21K** | **Allakaket** | **4.52** | **233** | Pn | Pn | 17 16 19.0 | +2.1 |
| G21K | | | | IAML | | 17 17 46.9 | |
| | comp=N,8.2nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.61** | **119** | Pn | Pn

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C24K | | | | Sg | 17 16 53.4 | +1.1 |
| **C24K** | **Franklin Bluff** | **1.43 279** | IAML | | 17 16 54.9 | |
| | comp=N,108nm,0.5s | | | | | |
| **D24K** | **Happy Valley** | **1.53 257** | | Pg | 17 16 35.4 | -0.4 |
| **E27K** | **Coleen River** | **1.76 140** | | Pn | 17 16 37.9 | +0.8 |
| **E27K** | **Coleen River** | **1.76 140** | IAML | | 17 17 04.8 | |
| | comp=E,56nm,0.6s | | | | | |
| **F26K** | **Sheenjek River** | **1.87 174** | | Pg | 17 16 41.4 | -0.7 |
| **F26K** | **Sheenjek River** | **1.87 174** | IAML | | 17 17 09.4 | |
| | comp=N,55nm,0.6s | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.99 245** | | Pb | 17 16 43.0 | +0.3 |
| **F25K** | **Christian Rive** | **2.00 191** | Pg | Pb | 17 16 43.5 | +0.7 |
| F25K | | | IAML | | 17 17 14.2 | |
| | comp=E,46nm,0.4s | | | | | |
| F25K | | | IAML | | 17 17 16.7 | |
| | comp=N,48nm,0.7s | | | | | |
| **E28M** | **Babbage River** | **2.06 115** | Pg | Pb | 17 16 43.9 | -0.1 |
| **G23K** | **Bananza Creek** | **3.49 218** | Pn | Pn | 17 16 59.7 | -1.0 |
| G23K | | | IAML | | 17 18 06.3 | |
| | comp=N,15nm,0.8s | | | | | |
| G23K | | | IAML | | 17 18 07.9 | |
| | comp=E,12nm,1.1s | | | | | |
| **B21K** | **Ikpikpuk River** | **3.50 276** | Pn | Pn | 17 17 00.8 | 0.0 |
| B21K | | | IAML | | 17 17 48.1 | |
| | comp=E,14nm,0.9s | | | | | |
| **H23K** | **Yukon River** | **4.18 209** | Pn | Pn | 17 17 09.5 | -0.8 |
| H23K | | | IAML | | 17 18 27.7 | |
| | comp=N,9.1nm,1.0s | | | | | |
| **I28M** | **Miner Creek** | **4.49 154** | Pn | Pn | 17 17 12.1 | -2.6 |
| I28M | | | IAML | | 17 18 39.4 | |
| | comp=N,5.2nm,1.0s | | | | | |
| I28M | | | IAML | | 17 18 43.5 | |
| | comp=E,7.4nm,0.9s | | | | | |
| **G31M** | **Satah River** | **4.67 119** | Pn | Pn | 17 17 15.8 | -1.1 |
| G31M | | | IAML | | 17 18 18.1 | |
| | comp=E,5.1nm,1.1s | | | | | |
| G31M | | | IAML | | 17 18 42.4 | |
| | comp=N,5.9nm,0.9s | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78 205** | Pn | Pn | 17 17 17.1 | -1.3 |
| I23K | | | IAML | | 17 18 50.3 | |
| | comp=E,5.4nm,0.8s | | | | | |
| **MDM** | **Murphy Dome** | **4.81 198** | Pn | Pn | 17 17 17.9 | -1.0 |
| MDM | | | IAML | | 17 17 55.7 | |
| | comp=E,4.3nm,1.1s | | | | | |
| MDM | | | IAML | | 17 18 43.0 | |
| | comp=N,5.2nm,0.7s | | | | | |
| **F20K** | **Avaraart Lake** | **4.81 244** | Pn | Pn | 17 17 20.5 | +1.6 |
| F20K | | | IAML | | 17 18 02.2 | |
| | comp=E,3.8nm,0.9s | | | | | |
| F20K | | | IAML | | 17 18 17.6 | |
| | comp=N,4.6nm,1.0s | | | | | |
| **IL31** | | **4.87 191** | Pn | Pn | 17 17 19.3 | -0.4 |
| **D19K** | **Kuna River** | **4.95 264** | Pn | Pn | 17 17 21.6 | +0.8 |
| D19K | | | IAML | | 17 19 03.4 | |
| | comp=E,3.8nm,1.1s | | | | | |
| **E19K** | **Redstone River** | **5.08 252** | Pn | Pn | 17 17 21.1 | -1.5 |
| E19K | | | IAML | | 17 18 25.8 | |
| | comp=E,5.0nm,1.1s | | | | | |
| **J26L** | **Joseph Creek** | **5.08 175** | Pn | Pn | 17 17 21.0 | -1.7 |
| **MLY** | **Manley** | **5.11 210** | Pn | Pn | 17 17 24.5 | +1.4 |
| **WRH** | **Wood River Hil** | **5.27 196** | Pn | Pn | 17 17 23.4 | -1.8 |
| WRH | | | IAML | | 17 18 09.9 | |
| | comp=E,2.9nm,1.0s | | | | | |
| **C19K** | **Lookout Ridge** | **5.31 272** | Pn | Pn | 17 17 26.3 | +0.4 |
| **I30M** | **Mount Dempster** | **5.38 140** | Pn | Pn | 17 17 28.0 | +1.1 |
| I30M | | | IAML | | 17 18 32.4 | |
| | comp=E,8.6nm,0.5s | | | | | |
| I30M | | | IAML | | 17 18 32.4 | |
| | comp=N,8.6nm,0.5s | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.60 247** | Pn | Pn | 17 17 30.7 | +1.1 |
| **SCRK** | **Sand Creek** | **5.60 177** | Pn | Pn | 17 17 29.0 | -0.8 |
| **J30M** | **Hart River** | **5.95 143** | Pn | Pn | 17 17 32.0 | -2.7 |
| **C18K** | **Utukok River** | **5.99 269** | | Pn | 17 17 35.3 | +0.2 |
| **A36M** | **Sachs Harbour** | **6.84 60** | Pn | Pn | 17 17 45.2 | -1.6 |

*IDC **13** 17:42:37.2±2.2,6°.30S×148°.87E,h73km±18km,mb3.5/8, mbtmp3.9/10,MS3.2/3,Error ellipse: s-maj=34.5km s-min=12.2km az=108.0*

**ISC 13 17:42:36.1±1.0,6°.2S±0°.1×148°.9E±0°.2,h60km,n25, σ0°92/25,mb3.9/10,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.60** | **209** | P | **Pn** | **17 43 30.5** | **+1.0** |
| **PMG** | **Port Moresby** | **3.60** | **209** | P | **Pn** | **17 43 30.7** | **+1.2** |
| **PMG** | **Port Moresby** | **3.60** | **209** | P | **Pn** | **17 43 29.9** | **+0.5** |
| | 59nm,0.4s,baz=23,slow=4.9,SNR=77 | | | | | | |
| PMG | | | | S | **Sn** | **17 44 10.4** | **-0.3** |
| | 189nm,0.7s,baz=37,slow=20,SNR=16 | | | | | | |
| PMG | | | | LR | LR | 17 44 51.8 | |
| | comp=Z,112nm,19.3s,baz=111,slow=38 | | | | | | |
| **COEN** | **Coen** | **9.53** | **216** | P | **Pn** | **17 44 52.3** | **+1.6** |
| **MTN** | **Manton Dam** | **18.72** | **248** | P | **P** | **17 46 50.2** | **+0.2** |
| **WRA** | **Warramunga Arr** | **19.66** | **225** | P | **P** | **17 46 59.8** | **-0.4** |
| | 4.9nm,0.4s,baz=51,slow=11,SNR=60 | | | | | | |
| **AS01** | **Alice Springs** | **22.53** | **218** | P | **P** | **17 47 31.5** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.56** | **218** | P | **P** | **17 47 31.1** | **-0.5** |
| | 2.5nm,0.5s,baz=56,slow=9.8,SNR=95 | | | | | | |
| ASAR | | | | S | **S** | **17 51 33.6** | **-1.3** |
| | 1.3nm,0.7s,baz=32,slow=25,SNR=6.3 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **INKA** | **Innaminka** | **22.76** | **199** | P | **P** | **17 47 34.7** | **+1.2** |
| **OOD** | **Oodnadatta** | **24.85** | **209** | P | **P** | **17 47 54.8** | **+1.7** |
| **STKA** | **Stephens Creek** | **26.42** | **194** | LR | LR | 17 59 37.7 | |
| | comp=Z,67nm,18.1s,baz=0.2,slow=39 | | | | | | |
| **WRKA** | **Warakurna** | **27.20** | **224** | P | **P** | **17 48 14.3** | **-0.1** |
| **MULG** | **Mulgathing** | **27.71** | **208** | P | **P** | **17 48 19.1** | **+0.3** |
| **FORT** | **Forrest** | **31.30** | **216** | P | **P** | **17 48 51.5** | **+0.9** |
| **MEEK** | **Meekatharra** | **35.28** | **231** | P | **P** | **17 49 25.0** | **-0.4** |
| | 14nm,1.6s | | | | | | |
| **KLBR** | **Kellerberrin** | **38.54** | **225** | P | **P** | **17 49 52.0** | **-1.0** |
| | 28nm,2.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **42.10** | **156** | LR | LR | 18 07 18.6 | |
| | comp=Z,62nm,20.8s,baz=136,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.72** | **347** | P | **P** | **17 50 36.2** | **+0.8** |
| | 0.2nm,0.4s,baz=159,slow=13,SNR=1.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **KSRS** | **Korea Array** | **47.67** | **337** | P | **P** | **17 51 06.3** | **-0.3** |
| | 0.8nm,0.8s,baz=139,slow=7.6,SNR=3.2 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.58** | **6** | P | **P** | **17 52 33.8** | **+0.3** |
| | 3.3nm,1.0s,baz=178,slow=5.6,SNR=5.6 | | | | | | |
| | 3.3nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **71.58** | **177** | P | **P** | **17 53 49.0** | **-1.5** |
| | 0.8nm,0.6s,baz=335,slow=5.0,SNR=9.1 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **78.89** | **320** | P | **P** | **17 54 32.0** | **-1.1** |
| | 0.1nm,0.5s,baz=90,slow=7.3,SNR=1.6 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.23** | **327** | P | **P** | **17 54 40.2** | **+0.1** |
| | 0.3nm,0.3s,baz=90,slow=7.2,SNR=2.1 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.74** | **180** | P | **P** | **17 54 58.8** | **+0.2** |
| | 0.6nm,0.5s,baz=326,slow=3.6,SNR=14 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.99** | **284** | PKPbc | **PKPdf** | **18 02 11.3** | **+0.3** |
| | 0.4nm,0.4s,baz=61,slow=4.5,SNR=7.7 | | | | | | |

**IDC 13 17:47:36.7±1.9,7°.49S×127°.01E,h0km,mb3.4/2, mbtmp3.6/4,ML3.8/2,Error ellipse: s-maj=308.7km s-min=30.4km az=63.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.28** | **151** | Pn | Pn | 17 51 00.1 | -0.3 |
| | 0.4nm,0.3s,baz=327,slow=12,SNR=10 | | | | | | |
| WRA | | | | Sn | Sn | 17 53 23.3 | -16 |
| | 0.5nm,0.3s,baz=329,slow=22,SNR=9.0 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **17.40** | **158** | P | Pn | 17 51 41.2 | +0.2 |
| | 0.3nm,0.3s,baz=341,slow=11,SNR=27 | | | | | | |
| ASAR | | | | S | Sn | 17 54 41.7 | -14 |
| | 0.4nm,0.8s,baz=320,slow=18,SNR=1.9 | | | | | | |
| | 1.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.04** | **328** | P | P | 17 58 32.1 | +0.3 |
| | 0.2nm,0.5s,baz=122,slow=5.2,SNR=1.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.40** | **330** | P | P | 17 58 58.4 | -0.3 |
| | 0.3nm,0.4s,baz=129,slow=4.9,SNR=2.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*MDD **13** 17:51:51.8±0.5,35°.76N×3°.21W,h26km±5km,mb_Lg2.6/8, Error ellipse: s-maj=6.6km s-min=4.0km az=80.0*

*CNRM **13** 17:51:51.1,35°.81N×3°.13W,h17km,ML2.3*
*SFS **13** 17:51:52.4,35°.74N×3°.25W,h18km,ML2.5/6,ML2.7/6, MLv2.5/6*

**ISC 13 17:51:51.4±1.4,35°.78N±0°.02×3°.21W±0°.04,h17km±11km, n29,σ1°29/44,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EALB** | **Alboran** | **0.21** | **42** | Pg | **Pb** | **17 51 57.8** | **+1.0** |
| EALB | | | | Sg | **Sb** | **17 52 01.7** | **+1.3** |
| EALB | | | | *i* Vmb_Lg | | 17 52 02.3 | |
| **EMEL** | **Melilla** | **0.52** | **157** | Pg | **Pb** | **17 52 02.2** | **+0.1** |
| EMEL | | | | Sg | **Sb** | **17 52 08.9** | **-0.5** |
| EMEL | | | | *i* Vmb_Lg | | 17 52 11.7 | |
| **EMLI** | **Melilla** | **0.53** | **157** | Sg | **Sb** | **17 52 09.3** | **-0.2** |
| EMLI | | | | Pg | **Pb** | **17 52 02.2** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.59** | **163** | P | **Pb** | **17 52 03.4** | **+0.1** |
| **GOG** | **Mont Gurugu** | **0.59** | **163** | S | **Sb** | **17 52 11.7** | **+0.4** |
| **PALE** | **Palemas** | **0.82** | **227** | P | **Pg** | **17 52 07.7** | **+0.3** |
| **PALE** | **Palemas** | **0.82** | **227** | S | **Sn** | **17 52 20.1** | **0.0** |
| **CHAS** | **Isla Isabel II** | **0.87** | **133** | Pg | **Pb** | **17 52 07.6** | **-0.4** |
| CHAS | | | | Sg | **Sb** | **17 52 19.1** | **-0.3** |
| **ELGU** | **Los Guajares,** | **1.13** | **343** | Pn | **Pn** | **17 52 12.1** | **-0.4** |
| ELGU | | | | Sn | **Sb** | **17 52 27.6** | **+0.5** |
| **ELGU** | **Los Guajares,** | **1.13** | **343** | Pg | **Pn** | **17 52 11.4** | **-1.2** |
| ELGU | | | | Sn | **Sb** | **17 52 25.5** | **-1.6** |
| ELGU | | | | *i* Vmb_Lg | | 17 52 31.2 | |
| **EBER** | **Berja** | **1.14** | **13** | Pn | **Pn** | **17 52 13.1** | **+0.3** |
| EBER | | | | Sn | **Sb** | **17 52 28.3** | **+0.9** |
| **EBER** | **Berja** | **1.14** | **13** | Pg | **Pn** | **17 52 13.3** | **+0.5** |
| EBER | | | | Sg | **Sb** | **17 52 27.6** | **+0.2** |
| EBER | | | | *i* Vmb_Lg | | 17 52 30.7 | |
| **TAF** | **Taforalt** | **1.16** | **146** | P | **Pn** | **17 52 12.5** | **-0.5** |
| **TAF** | **Taforalt** | **1.16** | **146** | S | **Sn** | **17 52 28.4** | **-0.1** |
| **AKLM** | **AKL** | **1.38** | **203** | P | **Pn** | **17 52 15.6** | **-0.4** |
| **AKLM** | **AKL** | **1.38** | **203** | S | **Sg** | **17 52 34.7** | **-1.3** |
| **EMAL** | **Malaga-Limoner** | **1.39** | **315** | Sn | **Sn** | **17 52 32.1** | **-1.9** |
| **EQUE** | **Quentar** | **1.43** | **352** | Pn | **Pn** | **17 52 16.4** | **-0.3** |
| EQUE | | | | Sn | **Sn** | **17 52 32.5** | **-2.6** |
| EQUE | | | | *i* Vmb_Lg | | 17 52 39.8 | |
| **ENIJ** | **Nijar** | **1.43** | **34** | Pn | **Pb** | **17 52 18.0** | **+0.3** |
| ENIJ | | | | Sn | **Sn** | **17 52 35.2** | **0.0** |
| **ENIJ** | **Nijar** | **1.43** | **34** | Pg | **Pn** | **17 52 17.2** | **+0.6** |
| ENIJ | | | | Sn | **Sn** | **17 52 32.9** | **-2.2** |
| ENIJ | | | | *i* Vmb_Lg | | 17 52 37.5 | |
| **EQTA** | **Presa de Quent** | **1.43** | **352** | Pn | **Pb** | **17 52 18.0** | **+0.3** |
| EQTA | | | | Sn | **Sn** | **17 52 36.3** | **+1.1** |
| **EGOR** | **Sierra Gorda,** | **1.51** | **331** | Pn | **Pn** | **17 52 18.4** | **+0.6** |
| EGOR | | | | Sn | **Sn** | **17 52 36.6** | **-0.6** |
| **EGOR** | **Sierra Gorda,** | **1.51** | **331** | Pn | **Pn** | **17 52 15.9** | **-1.9** |
| EGOR | | | | Sn | **Sn** | **17 52 35.1** | **-2.2** |
| EGOR | | | | *i* Vmb_Lg | | 17 52 44.8 | |
| **ECEU** | **Ceuta** | **1.77** | **274** | Sn | **Sn** | **17 52 41.5** | **-1.9** |
| **ECEU** | **Ceuta** | **1.77** | **274** | Sn | **Sn** | **17 52 40.8** | **-2.5** |
| ECEU | | | | *i* Vmb_Lg | | 17 52 47.2 | |
| **MD31** | **MD31** | **3.18** | **204** | P | **Pn** | **17 52 41.6** | **+0.9** |
| **MD31** | **MD31** | **3.18** | **204** | S | **Sn** | **17 53 20.6** | **+2.2** |
| **PBAR** | **Barrancos** | **3.89** | **309** | *e*S | **Sn** | **17 53 35.7** | **+0.1** |
| **PVAQ** | **Vaqueiros** | **3.97** | **295** | *e*P | **Pn** | **17 52 55.0** | **+3.4** |
| PVAQ | | | | *e*S | **Sn** | **17 53 39.1** | **+1.3** |
| PVAQ | | | | A | A | 17 53 49.3 | |
| | 2.3nm,0.7s | | | | | | |

*NEIC **13** 18:01:23.9±0.9,36°.52N±0°.01×99°.02W±0°.01,h5km±1km, Error ellipse: s-maj=3.1km s-min=2.5km az=339.0*

**TUL 13 18:01:24.3±0.6,36°.52N±0°.02×99°.01W±0°.04,h6km±4km, ML3.0,mb_Lg2.8/87(NEIC),ML3.1/10(NEIC),Error ellipse: s-maj=4.6km s-min=1.7km az=108.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOKA** | **Waynoka** | **0.13** | **27** | Pg | | 18 01 27.5 | +0.4 |
| NOKA | | | | Sg | Sg | 18 01 30.0 | +1.1 |
| NOKA | | | | IAML | | 18 01 30.7 | |
| | comp=N,6μm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **0.22** | **100** | Pg | Pg | 18 01 29.0 | +0.4 |
| OK038 | | | | IAML | | 18 01 36.1 | |
| | comp=N,4μm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **0.56** | **217** | | Pg | 18 01 35.0 | -0.1 |
| ELIS | | | | IAML | | 18 01 43.9 | |
| | comp=N,1μm,0.4s | | | | | | |
| ELIS | | | | IAML | | 18 01 52.5 | |
| | comp=E,1μm,0.4s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.70** | **66** | Pg | Pg | 18 01 37.6 | -0.2 |
| OK032 | | | | IAML | | 18 01 50.8 | |
| | comp=E,938nm,0.2s | | | | | | |
| OK032 | | | | IAML | | 18 01 52.3 | |
| | comp=E,1μm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.82** | **90** | Pg | Pg | 18 01 40.0 | -0.1 |
| **CSTR** | **Hydro, Custer** | **0.91** | **163** | Pg | Pg | 18 01 41.4 | -0.3 |
| CSTR | | | | Sg | Sb | 18 01 54.2 | -0.5 |
| **KAN14** | **Manchester OK** | **0.95** | **62** | | Pg | 18 01 42.2 | -0.2 |
| **GC02** | **Grant County #** | **0.98** | **70** | | Pg | 18 01 42.8 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **1.09** | **49** | | Pg | 18 01 44.9 | -0.4 |
| **KAN12** | **Harper NE Stat** | **1.12** | **46** | | Pg | 18 01 45.4 | -0.4 |
| **KAN17** | **Caldwell West** | **1.13** | **62** | | Pg | 18 01 45.4 | -0.5 |
| **KAN01** | **Argonia South** | **1.19** | **57** | Pg | Pg | 18 01 46.4 | -0.7 |
| **KAN09** | **Caldwell North** | **1.27** | **61** | | Pn | 18 01 48.1 | -0.6 |
| **KS21** | **Milan North St** | **1.32** | **54** | | Pn | 18 01 49.2 | -0.2 |
| **KAN13** | **South Haven SW** | **1.32** | **68** | | Pn | 18 01 48.9 | -0.5 |
| **OK029** | **Liberty Lake** | **1.45** | **119** | | Pn | 18 01 50.6 | -0.4 |
| **BLOK** | **Blackwell** | **1.46** | **80** | | Pn | 18 01 51.1 | -0.1 |
| **ADOK** | **Arcadia Dam** | **1.58** | **123** | | Pn | 18 01 52.9 | 0.0 |
| **OK048** | **Pawnee Station** | **1.67** | **93** | | Pn | 18 01 54.5 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **1.69** | **131** | Pg | Pn | 18 01 54.7 | +0.3 |
| **SMWD** | **Samnorwood** | **1.73** | **216** | | Pn | 18 01 55.6 | +0.6 |
| **OK051** | **E0350 and S346** | **1.75** | **90** | | Pn | 18 01 55.6 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.78** | **174** | Pn | Pn | 18 01 55.6 | -0.1 |
| **FNO** | **Franklin** | **1.81** | **133** | | Pn | 18 01 56.8 | +0.7 |
| **OK052** | **Battle Ridge R** | **1.86** | **106** | | Pn | 18 01 57.1 | +0.5 |
| **QUOK** | **Quay** | **1.89** | **100** | | Pn | 18 01 57.6 | +0.5 |
| **R32A** | **Long Quarter,** | **1.92** | **7** | | Pn | 18 01 57.8 | +0.3 |
| R32A | | | | | Pb | 18 01 58.2 | -1.5 |
| **X34A** | **Smith Ranch, M** | **2.14** | **153** | | Pb | 18 02 02.4 | -1.1 |
| X34A | | | | IAmb_Lg | | 18 02 36.3 | |
| | comp=Z,35nm,1.0s | | | | | | |
| **DEOK** | **Depew** | **2.14** | **108** | | Pn | 18 02 00.9 | +0.3 |
| **W35A** | **Tecumseh** | **2.20** | **128** | | Pn | 18 02 01.4 | -0.1 |
| **CBKS** | **Cedar Bluff** | **2.37** | **346** | | Pn | 18 02 04.6 | +0.9 |
| **TUL3** | **Leonard** | **2.67** | **102** | IAmb_Lg | | 18 02 52.5 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **AMTX** | **Amarillo** | **2.72** | **234** | | Pn | 18 02 08.7 | +0.1 |
| **WTFS** | **Witchita Falls** | **2.78** | **171** | | Pn | 18 02 10.6 | +1.3 |
| **LOOK** | **Love County** | **2.93** | **149** | IAmb_Lg | | 18 02 58.8 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.01** | **270** | Pn | Pn | 18 02 10.4 | -2.2 |
| **KSU1** | **Kansas State U** | **3.20** | **36** | IAmb_Lg | | 18 03 14.6 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **APMT** | **Aspermont** | **3.31** | **196** | | Pn | 18 02 18.2 | +1.5 |
| APMT | | | | IAmb_Lg | | 18 03 17.1 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.53** | **122** | Pn | Pn | 18 02 19.9 | +0.2 |
| **FW03** | **Perrin-Whitt E** | **3.55** | **167** | IAmb_Lg | | 18 03 20.5 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **U38A** | **Gravette** | **3.73** | **90** | IAmb_Lg | | 18 03 27.0 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **FW06** | **Azle** | **3.73** | **161** | IAmb_Lg | | 18 03 23.2 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **3.74** | **171** | Pn | Pn | 18 02 23.3 | +0.8 |
| **SN07** | **Snyder 07** | **3.75** | **205** | | Pn | 18 02 23.8 | +1.0 |
| SN07 | | | | IAmb_Lg | | 18 03 28.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.92** | **188** | IAmb_Lg | | 18 03 33.6 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **SN05** | **Snyder 5** | **3.94** | **204** | IAmb_Lg | | 18 03 31.1 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **POST** | **Post** | **4.01** | **212** | IAmb_Lg | | 18 03 36.7 | |
| | comp=Z,30nm,1.0s | | | | | | |
| **HHAR** | **Hobbs** | **4.09** | **92** | IAmb_Lg | | 18 03 32.4 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **4.38** | **280** | IAmb_Lg | | 18 03 44.7 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **FW16** | **Waxahatchie** | **4.38** | **156** | IAmb_Lg | | 18 03 52.4 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.63** | **133** | IAmb_Lg | | 18 03 57.0 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.69** | **74** | | Pn | 18 02 36.0 | +0.4 |
| S39A | | | | IAmb_Lg | | 18 03 52.8 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **WHTX** | **Lake Whitney,** | **4.69** | **164** | IAmb_Lg | | 18 04 00.1 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.84** | **112** | | Pn | 18 02 37.8 | +0.1 |
| **SGCY** | **Sterling City** | **4.91** | **202** | IAmb_Lg | | 18 04 13.5 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **BGNE** | **Belgrade** | **4.93** | **8** | Pn | Pn | 18 02 39.4 | +0.4 |
| BGNE | | | | IAmb_Lg | | 18 04 14.2 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **BRDY** | **Brady** | **5.22** | **180** | IAmb_Lg | | 18 04 14.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.44** | **81** | IAmb_Lg | | 18 04 18.7 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **5.45** | **299** | IAmb_Lg | | 18 04 17.6 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.59** | **101** | IAmb_Lg | | 18 04 26.4 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.60** | **94** | IAmb_Lg | | 18 04 27.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **UALR** | **University of** | **5.70** | **106** | IAmb_Lg | | 18 04 36.3 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **5.84** | **168** | IAmb_Lg | | 18 04 36.7 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **OZNA** | **Ozona** | **5.85** | **198** | IAmb_Lg | | 18 04 40.4 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.15** | **304** | IAmb_Lg | | 18 04 41.8 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **T42A** | **Van Buren** | **6.37** | **83** | IAmb_Lg | | 18 04 47.8 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.38** | **74** | IAmb_Lg | | 18 04 50.6 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.90** | **85** | IAmb_Lg | | 18 05 23.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **7.01** | **38** | IAmb_Lg | | 18 05 12.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.44** | **14** | IAmb_Lg | | 18 05 21.2 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **MVCO** | **Mesa Verde** | **7.64** | **278** | IAmb_Lg | | 18 05 39.6 | |
| | comp=Z,12nm,1.2s | | | | | | |

*NEIC **13** 18:01:28.8±1.0,43°.81N±0°.05×105°.35W±0°.08,h0km±1km, ML3.2/54,Error ellipse: s-maj=12.4km s-min=4.2km az=47.0*
*IDC **13** 18:01:29.9±1.6,43°.79N×105°.55W,h0km,mb3.8/1, mbtmp3.5/4,ML3.5/3,MS4.0/1,Error ellipse: s-maj=47.5km s-min=8.5km az=149.0*

**ISC 13 18:01:29.5±1.0,43°.81N±0°.06×105°.32W±0°.07,h0km,n44, σ0°90/42,Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.98** | **71** | Pg | **Pb** | **18 01 49.0** | **-0.5** |
| **K22A** | **Casper** | **1.46** | **218** | | **Pn** | **18 01 55.7** | **-1.5** |
| K22A | | | | IAML | | 18 02 20.7 | |
| | comp=N,355nm,0.3s | | | | | | |
| K22A | | | | IAML | | 18 02 21.1 | |
| | comp=E,373nm,0.3s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.51** | **182** | Pn | **Pn** | **18 02 12.3** | **+0.5** |
| PHWY | | | | IAML | | 18 02 50.7 | |
| | comp=E,80nm,0.4s | | | | | | |
| **RWWY** | **Rawlins** | **2.54** | **214** | Pn | **Pn** | **18 02 13.3** | **+1.2** |
| RWWY | | | | IAML | | 18 02 48.5 | |
| | comp=E,117nm,0.7s | | | | | | |
| RWWY | | | | IAML | | 18 02 50.6 | |
| | comp=E,118nm,1.1s | | | | | | |
| **LAO** | **LASA Array** | **2.95** | **348** | Pn | **Pn** | **18 02 18.5** | **+0.9** |
| **N23A** | **Red Feather La** | **2.95** | **189** | Pn | **Pn** | **18 02 18.7** | **+0.8** |
| N23A | | | | IAML | | 18 03 01.2 | |
| | comp=N,78nm,0.6s | | | | | | |
| N23A | | | | IAML | | 18 03 05.5 | |
| | comp=E,72nm,0.6s | | | | | | |
| **RLMT** | **Red Lodge** | **3.11** | **296** | Pn | **Pn** | **18 02 20.3** | **+0.2** |
| RLMT | | | | IAML | | 18 03 13.9 | |
| | comp=E,42nm,1.0s | | | | | | |
| RLMT | | | | IAML | | 18 03 17.5 | |
| | comp=E,41nm,1.0s | | | | | | |
| **PD31** | **Pinedale Array** | **3.26** | **253** | | **Pn** | **18 02 23.0** | **+0.8** |
| **PDAR** | **Pinedale Array** | **3.26** | **253** | Pn | **Pn** | **18 02 23.0** | **+0.8** |
| **PDAR** | **Pinedale Array** | **3.26** | **253** | Pn | **Pn** | **18 02 22.8** | **+0.7** |
| | comp=E,6.9nm,0.3s,baz=74,slow=16,SNR=23 | | | | | | |
| PDAR | | | | Lg | Lg | 18 03 06.8 | |
| | comp=E,6.4nm,0.3s,baz=75,slow=35,SNR=7.9 | | | | | | |
| | comp=E,2.9nm,0.3s | | | | | | |
| **OGNE** | **Ogallala** | **3.76** | **138** | Pn | **Pn** | **18 02 29.6** | **+0.8** |
| **LOHW** | **Long Hollow** | **3.83** | **269** | Pn | **Pn** | **18 02 29.8** | **-0.1** |
| **FLWY** | **Flagg Ranch** | **3.89** | **276** | Pn | **Pn** | **18 02 31.6** | **+0.8** |
| FLWY | | | | IAML | | 18 03 39.3 | |
| | comp=E,37nm,2.2s | | | | | | |
| FLWY | | | | IAML | | 18 03 41.6 | |
| | comp=E,30nm,2.1s | | | | | | |
| **YPP** | **Pitchstone Pla** | **3.98** | **279** | Pn | **Pn** | **18 02 31.8** | **-0.2** |
| **ISCO** | **Idaho Springs** | **4.01** | **183** | Pn | **Pn** | **18 02 32.9** | **+0.3** |
| **REDW** | **Red Top Meadow** | **4.04** | **266** | Pn | **Pn** | **18 02 33.6** | **+0.8** |
| **IMW** | **Indian Meadow** | **4.06** | **273** | Pn | **Pn** | **18 02 32.0** | **-1.1** |
| IMW | | | | IAML | | 18 03 46.5 | |
| | comp=E,20nm,0.7s | | | | | | |
| IMW | | | | IAML | | 18 03 46.9 | |
| | comp=E,29nm,0.6s | | | | | | |
| **TPAW** | **Teton Pass** | **4.10** | **267** | Pn | **Pn** | **18 02 32.5** | **-1.1** |
| TPAW | | | | IAML | | 18 03 55.7 | |
| | comp=E,18nm,0.9s | | | | | | |
| TPAW | | | | IAML | | 18 03 57.6 | |
| | comp=E,33nm,0.8s | | | | | | |
| **FXWY** | **Fox Creek** | **4.14** | **270** | Pn | **Pn** | **18 02 33.8** | **-0.3** |
| **YHL** | **Hebgen Lake** | **4.33** | **286** | Pn | **Pn** | **18 02 37.8** | **+1.0** |
| YHL | | | | IAML | | 18 04 06.9 | |
| | comp=E,22nm,0.9s | | | | | | |
| YHL | | | | IAML | | 18 04 09.1 | |
| | comp=N,22nm,1.2s | | | | | | |
| **AH

3.1nm,0.8s,baz=162,slow=20,SNR=4.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **11.55** | **278** | P | **P** | **18 17 04.2** | **+0.3** |
| **LIFNC** | **LIFOU** | **12.27** | **286** | P | **P** | **18 17 09.1** | **-2.2** |
| **DZM** | **Mont Dzumac** | **12.58** | **279** | P | **P** | **18 17 12.9** | **-1.7** |
| **DZM** | **Mont Dzumac** | **12.58** | **279** | P | **P** | **18 17 13.3** | **-1.3** |
| | 2.9nm,0.7s,baz=95,slow=22,SNR=1.9 | | | | | | |
| **PLWZ** | **Palliser** | **17.22** | **192** | P | **P** | **18 17 58.9** | **-1.6** |
| **CTAO** | **Charters Tower** | **31.34** | **272** | P | **P** | **18 20 06.3** | **+0.2** |
| CTAO | | | | IAmb | IAmb | 18 20 32.0 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **34.28** | **249** | P | **P** | **18 20 30.8** | **0.0** |
| STKA | | | | IAmb | IAmb | 18 21 11.9 | |
| | comp=Z,2.2nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **34.28** | **249** | P | **P** | **18 20 33.2** | **+2.4** |
| | comp=Z,1.3nm,0.5s,baz=98,slow=11,SNR=4.2 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **41.76** | **262** | P | **P** | **18 21 32.6** | **+0.9** |
| **ASAR** | **Alice Springs** | **41.76** | **262** | P | **P** | **18 21 32.4** | **+0.6** |
| | comp=Z,1.6nm,0.8s,baz=95,slow=8.6,SNR=8.5 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.02** | **267** | P | **P** | **18 21 33.9** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 18 22 16.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.20** | **267** | P | **P** | **18 21 35.0** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 18 22 18.0 | |
| | comp=Z,9.8nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.21** | **267** | P | **P** | **18 21 34.9** | **-0.3** |
| **WRA** | **Warramunga Arr** | **42.21** | **267** | P | **P** | **18 21 34.9** | **-0.3** |
| | comp=Z,1.3nm,0.4s,baz=91,slow=6.0,SNR=44 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **45.88** | **250** | P | **P** | **18 22 05.5** | **+2.0** |
| FORT | | | | IAmb | IAmb | 18 22 05.6 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **47.37** | **275** | P | **P** | **18 22 13.7** | **-1.2** |
| **KNRA** | **Kununurra** | **48.54** | **271** | P | **P** | **18 22 23.8** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 18 22 51.4 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.62** | **266** | P | **P** | **18 22 36.7** | **-2.2** |
| **QSPA** | **South Pole Qui** | **65.35** | **180** | P | **P** | **18 24 17.9** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 18 24 36.6 | |
| | comp=Z,2.2nm,1.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.50** | **326** | P | **P** | **18 25 01.6** | **+0.4** |
| | comp=Z,0.9nm,0.8s,baz=157,slow=6.8,SNR=5.2 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **143.33** | **348** | PKP | **PKPdf** | **18 33 02.4** | **+1.1** |
| | comp=Z,0.9nm,0.3s,baz=45,slow=4.6,SNR=11 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.90** | **293** | PKPbc | **PKPab** | **18 33 17.7** | **-0.9** |
| | comp=Z,0.5nm,0.4s,baz=66,slow=6.0,SNR=1.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.95** | **306** | PKPbc | **PKiKP** | **18 33 16.0** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=101,slow=4.1,SNR=2.5 | | | | | | |

*NEIC **13** 18:38:18.9±4.1, 69.45N±0.03×144.19W±0.04, h10km±2km, Error ellipse: s-maj=4.6km s-min=3.2km az=19.0*

**AEIC 13 18:38:17.2±2.3, 69.45N±0.02×144.16W±0.04, h3km±7km, ML2.4, ML2.6/**88(NEIC)**, Error ellipse: s-maj=3.3km s-min=1.4km az=201.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **41** | Pg | Pg | 18 38 21.4 | -0.4 |
| **C26K** | **Camden Bay** | **0.54** | **332** | | Pg | 18 38 27.8 | +0.3 |
| C26K | | | | | Sg | 18 38 35.6 | +1.0 |
| **D25K** | **Kavik River** | **0.79** | **262** | Pg | Pg | 18 38 31.8 | -0.6 |
| **D25K** | **Kavik River** | **0.79** | **262** | | Sg | 18 38 42.8 | +0.2 |
| **D27M** | **Malcolm River** | **1.15** | **99** | | Pg | 18 38 39.3 | +0.1 |
| **D27M** | **Malcolm River** | **1.15** | **99** | | Sg | 18 38 54.6 | +0.4 |
| **D27M** | **Malcolm River** | **1.15** | **99** | IAML | | 18 39 00.9 | |
| D27M | comp=E,44nm,0.5s | | | IAML | | 18 39 01.1 | |
| | comp=N,82nm,0.3s | | | | | | |
| **E27K** | **Coleen River** | **1.57** | **142** | | Pg | 18 38 47.6 | +0.3 |
| **C24K** | **Franklin Bluff** | **1.62** | **282** | | Pg | 18 38 48.1 | 0.0 |
| C24K | | | | IAML | | 18 39 44.8 | |
| | comp=N,92nm,0.3s | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **262** | | Pg | 18 38 49.5 | +0.1 |
| D24K | | | | IAML | | 18 39 47.6 | |
| | comp=E,81nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.76** | **180** | | Pg | 18 38 50.8 | 0.0 |
| F26K | | | | IAML | | 18 39 53.6 | |
| | comp=E,77nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.87** | **115** | | Pb | 18 38 51.9 | 0.0 |
| **F25K** | **Christian Rive** | **1.94** | **197** | | Pb | 18 38 53.6 | +0.5 |
| F25K | | | | IAML | | 18 39 24.3 | |
| | comp=E,42nm,0.5s | | | | | | |
| F25K | | | | IAML | | 18 40 03.6 | |
| | comp=N,45nm,0.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.03** | **185** | | Pb | 18 38 54.6 | -0.1 |
| **E24K** | **Your Creek** | **2.09** | **231** | | Pb | 18 38 56.2 | +0.5 |
| **TOLK** | **Toolik Lake Re** | **2.11** | **250** | | Pg | 18 38 56.8 | -0.7 |
| **C23K** | **Itkillik River** | **2.29** | **283** | | Pb | 18 38 58.6 | -0.4 |
| **F24K** | **Squaw Lake** | **2.37** | **217** | Pn | Pb | 18 38 58.9 | -1.6 |
| F24K | | | | IAML | | 18 40 11.6 | |
| | comp=E,28nm,0.5s | | | | | | |
| F24K | | | | IAML | | 18 40 13.4 | |
| | comp=N,28nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.38** | **261** | Pn | Pb | 18 38 58.7 | -1.8 |
| D23K | | | | IAML | | 18 40 15.5 | |
| | comp=N,24nm,0.9s | | | | | | |
| D23K | | | | IAML | | 18 40 23.5 | |
| | comp=E,23nm,1.1s | | | | | | |
| **F28M** | **Old Crow** | **2.42** | **137** | Pn | Pn | 18 38 59.5 | +1.8 |
| F28M | | | | IAML | | 18 40 19.3 | |
| | comp=N,26nm,0.7s | | | | | | |
| F28M | | | | IAML | | 18 40 24.3 | |
| | comp=E,27nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.43** | **238** | | Pb | 18 38 59.9 | -1.5 |
| E23K | | | | IAML | | 18 40 16.4 | |
| | comp=N,25nm,1.1s | | | | | | |
| **E29M** | **Blow River** | **2.50** | **112** | | Pb | 18 39 01.7 | -0.9 |
| **G26K** | **Porcupine Rive** | **2.51** | **177** | | Pb | 18 39 00.9 | -1.9 |
| **G27K** | **Doyon Strip** | **2.81** | **159** | Pn | Pn | 18 39 05.0 | +2.0 |
| **FYU** | **Fort Yukon** | **2.92** | **188** | Pn | Pn | 18 39 06.7 | +2.3 |
| FYU | | | | IAML | | 18 40 37.4 | |
| | comp=E,24nm,0.7s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.02** | **206** | Pn | Pn | 18 39 07.5 | +1.6 |
| G24K | | | | IAML | | 18 40 34.7 | |
| | comp=N,22nm,1.0s | | | | | | |
| G24K | | | | IAML | | 18 40 36.2 | |
| | comp=E,17nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **3.10** | **263** | Pn | Pn | 18 39 08.1 | +1.2 |
| **G29M** | **Pine Creek** | **3.42** | **135** | Pn | Pn | 18 39 12.7 | +1.3 |
| **B21K** | **Ikpikpuk River** | **3.67** | **278** | Pn | Pn | 18 39 17.1 | +2.4 |
| **G30M** | **tAoh Zraii Nji** | **3.86** | **126** | Pn | Pn | 18 39 19.2 | +1.9 |
| **H24K** | **Noodor Dome** | **3.89** | **203** | Pn | Pn | 18 39 19.9 | +2.1 |
| H24K | | | | IAML | | 18 41 03.9 | |
| | comp=E,6.9nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **3.91** | **143** | Pn | Pn | 18 39 20.1 | +2.0 |
| **PRP** | **Porcupine Dome** | **3.98** | **188** | Pn | Pn | 18 39 21.1 | +2.0 |
| **F21K** | **Alatna River** | **4.11** | **242** | Pn | Pn | 18 39 23.6 | +2.8 |
| **H23K** | **Yukon River** | **4.17** | **212** | Pn | Pn | 18 39 24.0 | +2.3 |
| **I28M** | **Miner Creek** | **4.33** | **156** | Pn | Pn | 18 39 26.7 | +2.8 |
| **G31M** | **Satah River** | **4.47** | **120** | Pn | Pn | 18 39 28.4 | +2.6 |
| **B20K** | **Meade River** | **4.56** | **283** | Pn | Pn | 18 39 29.1 | +2.3 |
| **G21K** | **Allakaket** | **4.58** | **235** | Pn | Pn | 18 39 28.9 | +1.6 |
| G21K | | | | IAML | | 18 41 57.4 | |
| | comp=N,4.7nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.76** | **207** | Pn | Pn | 18 39 30.9 | +1.3 |
| I23K | | | | IAML | | 18 41 37.7 | |
| | comp=E,5.0nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.78** | **201** | Pn | Pn | 18 39 31.6 | +1.7 |
| **ILAR** | **Eielson Array** | **4.81** | **194** | Pn | Pn | 18 39 33.3 | +2.9 |
| **EGAK** | **Eagle** | **4.83** | **165** | Pn | Pn | 18 39 32.9 | +2.2 |
| EGAK | | | | IAML | | 18 41 08.5 | |
| | comp=E,4.7nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **4.88** | **186** | Pn | Pn | 18 39 32.0 | +0.7 |
| J25K | | | | IAML | | 18 41 35.9 | |
| | comp=N,4.0nm,1.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.93** | **246** | Pn | Pn | 18 39 33.9 | +2.0 |
| **J26L** | **Joseph Creek** | **4.97** | **177** | Pn | Pn | 18 39 34.4 | +1.7 |
| J26L | | | | IAML | | 18 41 12.9 | |
| | comp=N,4.0nm,1.2s | | | | | | |
| J26L | | | | IAML | | 18 41 38.5 | |
| | comp=E,3.8nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.03** | **198** | Pn | Pn | 18 39 35.5 | +2.3 |
| CCB | | | | IAML | | 18 40 17.0 | |
| | comp=N,3.0nm,1.1s | | | | | | |
| CCB | | | | IAML | | 18 41 37.9 | |
| | comp=E,3.7nm,1.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.04** | **225** | Pn | Pn | 18 39 36.0 | +2.5 |
| **MLY** | **Manley** | **5.11** | **213** | Pn | Pn | 18 39 37.0 | +2.4 |
| **D19K** | **Kuna River** | **5.11** | **266** | Pn | Pn | 18 39 36.0 | +1.4 |
| **J30M** | **Hart River** | **5.77** | **144** | Pn | Pn | 18 39 45.8 | +2.1 |

**TAP 13 19:04:22.9, 23.89N×121.56E, h21km, ML1.5, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TEYL** | **Yanliau Villag** | **0.04** | **121** | P | Pb | 19 04 27.1 | +0.5 |
| TEYL | baz=66 | | | *e*S | Sb | 19 04 30.7 | +1.6 |
| | baz=66 | | | | | | |
| **ETM** | **Tongmen** | **0.10** | **322** | *i* P | Pb | 19 04 27.0 | 0.0 |
| ETM | baz=321 | | | S | Sb | 19 04 30.0 | +0.2 |
| | baz=321 | | | | | | |
| **HWA** | **Hwalien** | **0.10** | **26** | *e*P | Pb | 19 04 27.3 | +0.3 |
| | baz=28 | | | | | | |
| **SHUL** | **Shoufeng** | **0.10** | **178** | P | Pb | 19 04 27.4 | -2.1 |
| SHUL | baz=182 | | | *e*S | Sb | 19 04 31.2 | -3.1 |
| | baz=182 | | | | | | |
| **ESL** | **Shilin** | **0.14** | **237** | P | Pb | 19 04 27.4 | -1.7 |
| ESL | baz=243 | | | S | Sb | 19 04 30.4 | -3.0 |
| | baz=243 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.19** | **315** | P | Pb | 19 04 28.0 | -1.0 |
| | baz=314 | | | | | | |
| **TWD** | **Chiawan** | **0.19** | **10** | P | Pb | 19 04 28.3 | -0.5 |
| TWD | baz=4.0 | | | S | Sb | 19 04 32.0 | -0.9 |
| | baz=4.0 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.23** | **223** | P | Pb | 19 04 28.6 | -0.4 |
| WARBT | baz=229 | | | *e*S | Sb | 19 04 32.4 | -0.7 |
| | baz=229 | | | | | | |
| **EGFH** | **Guangfu** | **0.25** | **209** | *e*P | Pb | 19 04 29.1 | 0.0 |
| EGFH | baz=219 | | | *e*S | Sb | 19 04 33.5 | +0.2 |
| | baz=219 | | | | | | |
| **ETL** | **Fush Village** | **0.27** | **13** | *e*P | Pb | 19 04 29.4 | 0.0 |
| ETL | baz=6.0 | | | S | Sb | 19 04 33.9 | 0.0 |
| | baz=6.0 | | | | | | |
| **NACB** | **Ninganchiao** | **0.28** | **7** | *i* P | Pb | 19 04 29.3 | -0.2 |
| NACB | baz=1.0 | | | S | Sb | 19 04 34.1 | +0.1 |
| | baz=1.0 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.32** | **348** | P | Pb | 19 04 29.9 | -0.1 |
| ETLH | baz=346 | | | *e*S | Sb | 19 04 34.5 | -0.4 |
| | baz=346 | | | | | | |
| **OWD** | **Renai** | **0.36** | **280** | P | Pb | 19 04 30.7 | +0.1 |
| OWD | baz=285 | | | *e*S | Sb | 19 04 36.2 | +0.4 |
| | baz=285 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.37** | **314** | P | Pb | 19 04 30.9 | -0.1 |
| WHF | baz=307 | | | *e*S | Sb | 19 04 36.8 | +0.4 |
| | baz=307 | | | | | | |
| **CHGB** | **Renai** | **0.39** | **296** | P | Pb | 19 04 31.4 | +0.2 |
| CHGB | baz=300 | | | *e*S | Sb | 19 04 38.2 | +1.4 |
| | baz=300 | | | | | | |
| **VWDT** | **VWDT** | **0.41** | **251** | P | Pb | 19 04 31.9 | +0.7 |
| VWDT | baz=252 | | | *e*S | Sb | 19 04 37.9 | +0.9 |
| | baz=252 | | | | | | |
| **HGSD** | **Ruisui** | **0.41** | **197** | *e*P | Pb | 19 04 32.5 | +1.1 |
| | baz=210 | | | | | | |
| **WUSB** | **Renai** | **0.42** | **284** | *e*P | Pb | 19 04 31.8 | +0.3 |
| WUSB | baz=288 | | | *e*S | Sb | 19 04 38.1 | +0.7 |
| | baz=288 | | | | | | |
| **EHY** | **Hungye** | **0.44** | **210** | *e*P | Pb | 19 04 31.1 | -0.8 |
| EHY | baz=217 | | | *e*S | Sb | 19 04 38.2 | +0.2 |
| | baz=217 | | | | | | |
| **FUSS** | **Fushou** | **0.46** | **321** | *i* P | Pb | 19 04 32.6 | +0.2 |
| FUSS | baz=321 | | | S | Sb | 19 04 39.6 | +0.8 |
| | baz=321 | | | | | | |
| **TWT** | **Tachien** | **0.50** | **316** | *e*P | Pb | 19 04 33.4 | +0.2 |
| | baz=313 | | | | | | |
| **TDCB** | **Techi** | **0.51** | **315** | P | Pb | 19 04 33.7 | +0.3 |
| | baz=316 | | | | | | |
| **YULB** | **Yu-li** | **0.55** | **206** | *e*P | Pb | 19 04 33.3 | -0.6 |
| | baz=207 | | | | | | |
| **NNSH** | **Datong** | **0.56** | **343** | P | Pb | 19 04 34.1 | -0.2 |
| NNSH | baz=342 | | | S | Sb | 19 04 41.3 | -0.6 |
| | baz=342 | | | | | | |
| **SSLB** | **Suanglung** | **0.56** | **260** | *e*P | Pb | 19 04 34.2 | 0.0 |
| | baz=268 | | | | | | |
| SSLB | | | | S | Sb | 19 04 41.8 | -0.1 |
| | baz=268 | | | | | | |
| **DPDB** | **Guoxing** | **0.59** | **284** | *e*P | Pb | 19 04 35.0 | +0.2 |
| | baz=292 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.60** | **269** | *e*P | Pb | 19 04 33.7 | -1.3 |
| | baz=270 | | | | | | |
| SMLT | | | | *e*S | Sb | 19 04 42.0 | -1.1 |
| | baz=270 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.61** | **286** | *e*P | Pb | 19 04 34.4 | -0.7 |
| | baz=293 | | | | | | |
| **YUS** | **Yu-Shan** | **0.68** | **234** | P | Pb | 19 04 36.5 | 0.0 |
| | baz=236 | | | | | | |
| YUS | | | | *e*S | Sb | 19 04 46.4 | +0.6 |
| | baz=236 | | | | | | |
| **YHNB** | **Yeheng** | **0.79** | **348** | *e*S | Sb | 19 04 48.6 | +0.2 |
| | baz=347 | | | | | | |

**TAP 13 19:04:26.4, 24.70N×121.70E, h33km, ML1.3, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWE** | **Neicheng** | **0.04** | **310** | P | Pb | 19 04 32.3 | +0.4 |
| TWE | baz=321 | | | S | Sb | 19 04 35.8 | +0.2 |
| | baz=321 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.12** | **302** | P | Pb | 19 04 32.6 | +0.2 |
| FUSB | baz=293 | | | S | Sb | 19 04 36.7 | +0.2 |
| | baz=293 | | | | | | |
| **ENTT** | **Nioudou** | **0.13** | **246** | *i* P | Pb | 19 04 32.8 | +0.4 |
| | baz=245 | | | | | | |
| ENTT | | | | *i* S | Sb | 19 04 37.1 | +0.7 |
| | baz=245 | | | | | | |
| **TWC** | **Suao** | **0.16** | **122** | *e*P | Pb | 19 04 32.2 | -0.3 |
| TWC | baz=121 | | | *e*S | Sb | 19 04 37.5 | +0.8 |
| | baz=121 | | | | | | |
| **NDT** | **Datong Townshi** | **0.19** | **242** | P | Pb | 19 04 33.2 | +0.3 |
| NDT | baz=249 | | | S | Sb | 19 04 37.9 | +0.6 |
| | baz=249 | | | | | | |
| **LATG** | **Datong** | **0.23** | **225** | *e*P | Pb | 19 04 33.6 | +0.3 |
| | baz=354 | | | | | | |
| **LATG** | **Datong** | **0.23** | **225** | *e*P | Pb | 19 04 33.4 | 0.0 |
| | baz=232 | | | | | | |
| LATG | | | | *e*S | Sb | 19 04 38.9 | +0.9 |
| | baz=232 | | | | | | |
| **ENA** | **Nanau** | **0.27** | **172** | *e*P | Pn | 19 04 34.2 | +0.3 |
| | baz=6.0 | | | | | | |
| **ENA** | **Nanau** | **0.27** | **172** | *e*P | Pn | 19 04 34.2 | +0.3 |
| | baz=176 | | | | | | |
| **YHNB** | **Yeheng** | **0.30** | **265** | P | Pb | 19 04 34.1 | 0.0 |
| YHNB | baz=270 | | | S | Sn | 19 04 39.6 | +0.1 |
| | baz=270 | | | | | | |
| **TIPB** | **Shuangxi** | **0.30** | **22** | P | Pb | 19 04 34.0 | -0.1 |
| TIPB | baz=14 | | | S | Sb | 19 04 39.3 | -0.1 |
| | baz=14 | | | | | | |
| **NSK** | **Sanguang** | **0.31** | **267** | P | Pb | 19 04 34.3 | 0.0 |
| NSK | baz=266 | | | *e*S | Sn | 19 04 40.0 | 0.0 |
| | baz=266 | | | | | | |
| **NNS** | **Nan Shan** | **0.39** | **230** | P | Pb | 19 04 34.2 | -1.3 |
| NNS | baz=343 | | | S | Sb | 19 04 41.9 | +0.2 |
| | baz=343 | | | | | | |
| **NNS** | **Nan Shan** | **0.39** | **230** | *e*P | Pb | 19 04 34.2 | -1.3 |
| | baz=233 | | | | | | |
| NNS | | | | *e*S | Sb | 19 04 41.9 | +0.2 |
| | baz=233 | | | | | | |
| **NNSB** | **Datong** | **0.39** | **228** | *i* P | Pb | 19 04 34.0 | -1.4 |
| | baz=343 | | | | | | |
| NNSB | | | | S | Sb | 19 04 41.5 | -0.2 |
| | baz=343 | | | | | | |
| **NNSB** | **Datong** | **0.39** | **228** | *e*P | Pb | 19 04 34.1 | -1.4 |
| | baz=232 | | | | | | |

*NEIC **13** 19:08:11.4±0.8, 34.981N±0.005×97.54W±0.02, h5km±1km, Error ellipse: s-maj=2.7km s-min=2.4km az=266.0*

**TUL 13 19:08:11.5±0.8, 34.99N±0.01×97.54W±0.02, h4km±3km, ML3.0, mb_Lg2.9/**126(NEIC)**, ML3.0/**39(NEIC)**, Error ellipse: s-maj=2.1km s-min=1.7km az=129.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FNO** | **Franklin** | **0.29** | **23** | | Pg | 19 08 17.3 | +0.2 |
| FNO | | | | | Sg | 19 08 22.7 | +1.7 |
| FNO | | | | IAML | | 19 08 26.1 | |
| | comp=E,2μm,0.7s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.42** | **11** | Pg | Pg | 19 08 19.3 | -0.4 |
| OKCSW | | | | IAML | | 19 08 30.2 | |
| | comp=N,1μm,0.5s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.46** | **212** | | Pb | 19 08 21.3 | -0.8 |
| X34A | | | | IAML | | 19 08 32.3 | |
| | comp=E,860nm,0.6s | | | | | | |
| X34A | | | | IAML | | 19 08 32.4 | |
| | comp=N,1μm,0.8s | | | | | | |
| **W35A** | **Tecumseh** | **0.57** | **73** | | Pg | 19 08 22.9 | +0.4 |
| **ADOK** | **Arcadia Dam** | **0.68** | **12** | Pg | Pg | 19 08 25.0 | +0.5 |
| **OK029** | **Liberty Lake** | **0.81** | **5** | | Pg | 19 08 27.2 | +0.2 |
| OK029 | | | | IAML | | 19 08 43.0 | |
| | comp=N,370nm,0.2s | | | | | | |
| OK029 | | | | IAML | | 19 08 45.4 | |
| | comp=N,717nm,0.6s | | | | | | |
| **LOOK** | **Love County** | **1.04** | **163** | | Pg | 19 08 31.6 | +0.2 |
| LOOK | | | | IAML | | 19 08 55.0 | |
| | comp=N,340nm,0.2s | | | | | | |
| LOOK | | | | IAML | | 19 08 57.4 | |
| | comp=E,289nm,0.2s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.05** | **257** | | Pg | 19 08 30.9 | -0.7 |
| **OK031** | **S. Brethren Rd** | **1.12** | **30** | | Pg | 19 08 32.1 | -0.9 |
| OK031 | | | | IAML | | 19 08 49.7 | |
| | comp=E,482nm,0.4s | | | | | | |
| OK031 | | | | IAML | | 19 08 52.8 | |
| | comp=E,467nm,0.5s | | | | | | |
| **CSTR** | **Hydro, Custer** | **1.15** | **305** | | Pg | 19 08 33.3 | -0.2 |
| **OK052** | **Battle Ridge R** | **1.17** | **31** | | Pg | 19 08 33.4 | -0.5 |
| **DEOK** | **Depew** | **1.20** | **45** | Pg | Pg | 19 08 33.9 | -0.7 |
| DEOK | | | | IAML | | 19 08 55.1 | |
| | comp=E,368nm,0.4s | | | | | | |
| DEOK | | | | IAML | | 19 08 57.0 | |
| | comp=N,368nm,0.3s | | | | | | |
| **WTFS** | **Witchita Falls** | **1.44** | **212** | | Pn | 19 08 37.9 | -0.5 |
| **OK048** | **Pawnee Station** | **1.50** | **19** | | Pn | 19 08 38.9 | -0.5 |
| **CROK** | **Carrier** | **1.56** | **347** | Pg | Pn | 19 08 40.1 | +0.1 |
| **Z35A** | **Perchaven, San** | **1.67** | **172** | | Pn | 19 08 41.1 | -0.4 |
| Z35A | | | | | Pn | 19 08 41.3 | -1.5 |
| **TUL3** | **Leonard** | **1.70** | **57** | Pg | Pn | 19 08 42.4 | +0.4 |
| **BLOK** | **Blackwell** | **1.79** | **8** | | Pn | 19 08 43.3 | +0.1 |
| **X37A** | **Clayton** | **1.83** | **102** | Pn | Pn | 19 08 44.6 | -0.9 |
| **ELIS** | **Ellis County** | **1.87** | **306** | | Pn | 19 08 44.3 | -0.1 |
| **GC02** | **Grant County #** | **1.88** | **352** | | Pn | 19 08 44.8 | +0.3 |
| **OK032** | **Salt Plains WL** | **1.89** | **343** | | Pn | 19 08 44.8 | +0.2 |
| OK032 | | | | IAmb_Lg | | 19 09 12.4 | |
| | comp=Z,88nm,0.8s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **1.99** | **193** | | Pn | 19 08 46.0 | 0.0 |
| **NOKA** | **Waynoka** | **2.00** | **326** | IAmb_Lg | | 19 09 15.5 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **FW06** | **Azle** | **2.01** | **180** | Pn | Pb | 19 08 48.0 | -0.7 |
| **KAN13** | **South Haven SW** | **2.02** | **1** | | Pn | 19 08 47.4 | +0.9 |
| **KAN17** | **Caldwell West** | **2.06** | **355** | | Pn | 19 08 47.8 | +0.8 |
| **T35A** | **Sooner Cattle** | **2.10** | **23** | | Pn | 19 08 48.3 | +0.8 |
| **KAN09** | **Caldwell North** | **2.14** | **358** | | Pn | 19 08 47.5 | -0.7 |
| KAN09 | | | | IAmb_Lg | | 19 09 24.5 | |
| | comp=Z,56nm,0.7s | | | | | | |
| **KAN01** | **Argonia South** | **2.17** | **355** | IAmb_Lg | | 19 09 24.9 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **SMWD** | **Samnorwood** | **2.22** | **274** | | Pn | 19 08 50.3 | +1.1 |
| **PLPT** | **Palo Pinto** | **2.26** | **197** | Pn | Pn | 19 08 51.0 | +1.3 |
| **FW07** | **Weatherford** | **2.29** | **185** | | Pb | 19 08 52.4 | -1.0 |
| FW07 | | | | IAmb_Lg | | 19 09 24.4 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **RLO** | **Rose Lookout** | **2.36** | **59** | Pn | Pn | 19 08 51.6 | +0.5 |
| **TREL** | **Terrell** | **2.55** | **151** | IAmb_Lg | | 19 09 38.0 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **FW14** | **Alvarado** | **2.60** | **174** | IAmb_Lg | | 19 09 37.8 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **APMT** | **Aspermont** | **2.71** | **233** | | Pn | 19 08 58.0 | +2.1 |
| **Z38A** | **Mt. Pleasant** | **2.73** | **128** | IAmb_Lg | | 19 09 40.0 | |
| | comp=Z,40nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **2.94** | **217** | Pn | Pn | 19 09 00.4 | +1.3 |
| ABTX | | | | IAmb_Lg | | 19 09 47.4 | |
| | comp=Z,41nm,1.1s | | | | | | |
| **U38A** | **Gravette** | **2.95** | **60** | Pn | Pn | 19 09 00.1 | +1.0 |
| **WHTX** | **Lake Whitney,** | **2.99** | **179** | Pn | Pn | 19 09 00.9 | +1.1 |
| WHTX | | | | IAmb_Lg | | 19 09 44.6 | |
| | comp=Z,28nm,1.0s | | | | | | |
| **DKNS** | **Dickens** | **3.10** | **246** | | Pn | 19 09 03.4 | +2.2 |
| **MIAR** | **Mount Ida** | **3.29** | **97** | | Pn | 19 09 05.5 | +1.6 |
| MIAR | | | | IAmb_Lg | | 19 10 01.0 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **3.31** | **154** | IAmb_Lg | | 19 10 00.4 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **SN07** | **Snyder 07** | **3.37** | **237** | IAmb_Lg | | 19 10 06.3 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.41** | **269** | IAmb_Lg | | 19 10 01.9 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.49** | **234** | IAmb_Lg | | 19 10 07.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **3.56** | **345** | Pn | Pn | 19 09 08.2 | +0.7 |
| R32A | | | | IAmb_Lg | | 19 10 10.4 | |
| | comp=Z,42nm,1.0s | | | | | | |
| **POST** | **Post** | **3.81** | **241** | | Pn | 19 09 11.9 | +0.9 |
| **WLAR** | **White Oak Lake** | **3.88** | **108** | IAmb_Lg | | 19 10 16.9 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **3.89** | **199** | Pn | Pn | 19 09 12.4 | +0.3 |
| BRDY | | | | IAmb_Lg | | 19 10 20.1 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.91** | **96** | IAmb_Lg | | 19 10 24.5 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **4.21** | **336** | Pn | Pn | 19 09 16.9 | +0.4 |
| **UALR** | **University of** | **4.28** | **91** | IAmb_Lg | | 19 10 30.1 | |
| | comp=Z,41nm,0.8s | | | | | | |
| **SGCY** | **Sterling City** | **4.29** | **225** | IAmb_Lg | | 19 10 34.1 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.31** | **84** | Pn | Pn | 19 09 18.7 | +0.8 |
| WHAR | | | | IAmb_Lg | | 19 10 38.7 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.34** | **50** | Pn | Pn | 19 09 18.7 | +0.3 |
| S39A | | | | IAmb_Lg | | 19 10 27.9 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.47** | **290** | IAmb_Lg | | 19 10 45.9 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.78** | **62** | IAmb_Lg | | 19 10 44.0 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **OZNA** | **Ozona** | **5.05** | **218** | IAmb_Lg | | 19 11 03.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **5.37** | **51** | IAmb_Lg | | 19 11 10.0 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **T42A** | **Van Buren** | **5.61** | **67** | IAmb_Lg | | 19 11 10.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **P38A** | **Dawn** | **5.62** | **33** | IAmb_Lg | | 19 11 09.2 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **HNDO** | **Hondo** | **5.64** | **196** | IAmb_Lg | | 19 11 13.3 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **5.72** | **316** | IAmb_Lg | | 19 11 24.9 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.

comp=Z,14nm,0.8s
**Q24A Divide 7.27 305** IAmb_Lg 19 12 13.9
comp=Z,18nm,0.8s
**VHRN Van Horn 7.53 238** IAmb_Lg 19 12 28.3
comp=Z,13nm,1.2s
**L40A Anamosa 8.62 33** IAmb_Lg 19 12 46.5
comp=Z,16nm,0.7s
**ECSD EROS Data Cent 8.76 4** IAmb_Lg 19 13 06.0
comp=Z,7.3nm,0.8s
**N23A Red Feather La 8.88 314** IAmb_Lg 19 13 07.6
comp=Z,10.0nm,0.8s
**L42A Oliver, Polo 9.33 39** IAmb_Lg 19 13 17.1
comp=Z,14nm,0.8s
**JFWS Jewell Farm 9.74 33** IAmb_Lg 19 13 23.8
comp=Z,13nm,0.9s

*IDC **13** 19:08:59.0±0.7,30.°64N×142.°86E,h0km,mb4.0/19, mbtmp4.0/22,ML3.1/3,MS3.1/10,Error ellipse: s-maj=19.2km s-min=16.7km az=57.0*

*NIED **13** 19:08:59.6,30.°65N×143.°05E,h44km,MW4.0,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-5.49; Mθθ6.76; Mϕϕ-1.26; Mrθ-3.18; Mθϕ1.31; Mϕr8.12; Fault plane solution: M₀9.99000×10¹⁴ NP1: ϕs124.00000°,δ71.00000°,λ-56.00000°. NP2: ϕs240.00000°,δ38.00000°,λ-148.00000°.*

*JMA **13** 19:08:59.6±0.4,30.°7N±0.°9×14.°3E±.°,h44km,MV4.2/26, FAR E OFF IZU ISLANDS*

*BJI **13** 19:09:00.0±0.0,30.°43N×143.°03E,h31km,mb4.3/32, mB4.8/12,Ms3.9/4,Ms7 4.0/7*

*NEIC **13** 19:09:01.3±1.8,30.°60N±0.°07×142.°7E±0.°2,h10km±1km, mb4.6/30,Error ellipse: s-maj=24.8km s-min=10.6km az=75.0*

**ISC 13 19:09:04.1±0.5,30.°59N±0.°05×142.°77E±0.°08,h35km,n100, σ1°88/102,mb4.5/46,MS3.1/8,1C,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **CBIJ** | **Chichi jima** | **3.52** | **188** | *eP* | **Pn** | **19 09 55.0** | | **-1.3** |
| CBIJ | | | | *eS* | **Sn** | **19 10 36.1** | | **-0.6** |
| **JCJ** | **Chichijima** | **3.52** | **188** | Pn | **Pn** | **19 09 55.2** | | **-1.1** |
| **JCJ** | **Chichijima** | **3.52** | **188** | Pn | Pn | 19 09 49.9 | | -6.4 |
| | 8.4nm,0.3s,baz=5.0,slow=21,SNR=15 | | | | | | | |
| JCJ | | | | Sn | **Sn** | **19 10 29.7** | | **-7.0** |
| | 31nm,0.3s,baz=289,slow=20,SNR=7.5 | | | | | | | |
| **JHJ2** | **Mitsune** | **3.55** | **316** | Pn | **Pn** | **19 09 54.9** | | **-1.8** |
| **JHJ2** | **Mitsune** | **3.55** | **316** | *eS* | **Sn** | **19 10 34.4** | | **-3.1** |
| **JHJ** | **Hachijo jima 2** | **3.58** | **316** | Pn | **Pn** | **19 09 54.5** | | **-2.5** |
| | 4.5nm,0.3s,baz=113,slow=18,SNR=2.1 | | | | | | | |
| JHJ | | | | Sn | **Sn** | **19 10 33.5** | | **-4.6** |
| | 21nm,0.3s,baz=58,slow=21,SNR=2.4 70nm,0.8s | | | | | | | |
| **JMKN** | **Mikurajimanish** | **4.25** | **322** | *eP* | **Pn** | **19 10 04.8** | | **-1.5** |
| JMKN | | | | *eS* | **Sn** | **19 10 51.5** | | **-3.2** |
| **BSO1** | **Boso 1** | **4.32** | **340** | *eP* | **Pn** | **19 10 04.5** | | **-2.3** |
| **JMYK** | **Miyake Tsubota** | **4.40** | **323** | *eP* | **Pn** | **19 10 08.1** | | **-0.3** |
| **BSO3** | **Boso 3** | **4.61** | **336** | *eP* | **Pn** | **19 10 09.8** | | **-1.2** |
| **JOD2** | **Odawara 2** | **5.59** | **327** | *eP* | **Pn** | **19 10 24.5** | | **-0.2** |
| **JHU** | **Hanno** | **6.00** | **332** | *eS* | **Sn** | **19 11 34.9** | | **-3.0** |
| **JYT** | **Yasato** | **6.02** | **340** | *eP* | **Pn** | **19 10 29.0** | | **-1.6** |
| JYT | | | | *eS* | **Sn** | **19 11 35.8** | | **-2.4** |
| **JHO** | **Hitachi** | **6.28** | **344** | *eP* | **Pn** | **19 10 30.6** | | **-3.5** |
| **JRY** | **Ryogami san** | **6.30** | **330** | *eP* | **Pn** | **19 10 34.3** | | **-0.2** |
| **JAG** | **Ashikaga** | **6.44** | **335** | *eP* | **Pn** | **19 10 35.0** | | **-1.4** |
| **JGF** | **Kuroka** | **6.75** | **319** | Pn | **Pn** | **19 10 39.3** | | **-1.4** |
| **INU** | **Inuyama** | **6.77** | **316** | Pn | **Pn** | **19 10 38.8** | | **-2.1** |
| **MJAR** | **Matsushiro Arr** | **7.05** | **329** | Pn | **Pn** | **19 10 43.5** | | **-1.2** |
| | 0.3nm,0.3s,baz=156,slow=12,SNR=31 | | | | | | | |
| MJAR | | | | Sn | **Sn** | **19 11 59.7** | | **-3.9** |
| | 0.1nm,0.3s,baz=118,slow=27,SNR=5.6 2.2nm,0.4s | | | | | | | |
| **MAJO** | **Matsushiro** | **7.05** | **329** | Pn | **Pn** | **19 10 44.5** | | **-0.3** |
| **MJB9** | **Matsu-Tunnel** | **7.05** | **329** | Pn | **Pn** | **19 10 44.6** | | **-0.3** |
| **JMM** | **Marumori** | **7.44** | **348** | Pn | **Pn** | **19 10 46.5** | | **-3.5** |
| **JMK** | **Ichinoseki** | **8.44** | **352** | *eP* | **Pn** | **19 10 59.4** | | **-4.4** |
| **JNU** | **Nakatsue** | **10.42** | **287** | Pn | **Pn** | **19 11 34.3** | | **+3.3** |
| | 0.2nm,0.3s,baz=141,slow=16,SNR=1.5 | | | | | | | |
| JNU | | | | LR | LR | 19 16 14.3 | | |
| | comp=Z,142nm,18.6s,baz=123,slow=42 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **13.50** | **359** | Pn | **Pn** | **19 12 08.6** | | **-4.4** |
| **ASAJ** | **Asahikawa** | **13.50** | **359** | Pn | **Pn** | **19 12 08.3** | | **-4.7** |
| | 0.8nm,0.3s,baz=228,slow=11,SNR=10 | | | | | | | |
| ASAJ | | | | Sn | Sn | 19 14 27.2 | | -15 |
| | 0.3nm,0.3s,baz=181,slow=13,SNR=2.2 | | | | | | | |
| ASAJ | | | | LR | LR | 19 18 56.2 | | |
| | comp=Z,65nm,19.9s,baz=191,slow=44 | | | | | | | |
| **KSRS** | **Korea Array** | **14.08** | **303** | Pn | **Pn** | **19 12 22.1** | | **+1.2** |
| | 0.1nm,0.3s,baz=112,slow=12,SNR=7.5 | | | | | | | |
| KSRS | | | | LR | LR | 19 17 44.8 | | |
| | comp=Z,64nm,19.0s,baz=105,slow=37 2.7nm,0.9s | | | | | | | |
| **INCN** | **Inchon** | **15.03** | **302** | Pn | **Pn** | **19 12 33.4** | | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **16.04** | **331** | Pn | **P** | **19 12 50.7** | | **+0.8** |
| | 0.1nm,0.3s,baz=152,slow=8.7,SNR=1.7 | | | | | | | |
| **CN2** | **Changchun** | **19.03** | **319** | P | **Pn** | **19 13 26.0** | | **+2.1** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **KLR** | **Kul'dur** | **20.40** | **339** | P | Pn | 19 13 41.7 | | +1.6 |
| | 3.5nm,0.6s,baz=151,slow=8.8,SNR=14 | | | | | | | |
| **BJI** | **Beijing** | **23.59** | **301** | P | **P** | **19 14 11.0** | | **-0.5** |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,63nm,4.6s | | | | | | | |
| **BJT** | **Baijiatuau** | **23.59** | **301** | P | **P** | **19 14 10.3** | | **-1.2** |
| **XLT** | **XiLinHaoTe** | **24.93** | **310** | *eP* | **P** | **19 14 25.0** | | **+1.0** |
| XLT | | | | pP | sP | 19 14 34.4 | | -0.8 |
| XLT | | | | sP | pwP | 19 14 38.4 | | -2.8 |
| XLT | | | | PP | **PnPn** | **19 15 02.0** | | **+4.4** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **25.00** | **22** | P | **P** | **19 14 28.2** | | **+3.8** |
| | 2.0nm,0.8s,baz=205,slow=5.4,SNR=1.8 | | | | | | | |
| **LYN** | **LuoYang** | **25.79** | **287** | P | **P** | **19 14 29.8** | | **-2.0** |
| **HHC** | **Hu-ho-hao-te** | **27.20** | **301** | *eP* | **P** | **19 14 46.5** | | **+2.0** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.5s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,120nm,4.4s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=N,130nm,11.6s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=E,180nm,12.0s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,190nm,10.8s | | | | | | | |
| **DAV** | **Davao City (W)** | **28.41** | **218** | LR | LR | 19 24 44.0 | | |
| | comp=Z,31nm,21.3s,baz=26,slow=33 | | | | | | | |
| **XAN** | **Xi'an** | **28.73** | **286** | ⇑P | **P** | **19 14 55.3** | | **-3.0** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **MA2** | **Magadan** | **29.48** | **8** | LR | LR | 19 26 22.6 | | |
| | comp=Z,13nm,20.5s,baz=130,slow=36 | | | | | | | |
| **YAK** | **Yakutsk** | **32.59** | **349** | P | **P** | **19 15 31.3** | | **-0.6** |
| **YAK** | **Yakutsk** | **32.59** | **349** | LR | LR | 19 31 00.4 | | |
| | comp=Z,17nm,20.4s,baz=134,slow=41 | | | | | | | |
| **SONM** | **Songino Array** | **32.65** | **312** | P | **P** | **19 15 32.7** | | **-0.1** |
| **SONM** | **Songino Array** | **32.65** | **312** | P | **P** | **19 15 33.9** | | **+1.1** |
| | 1.4nm,0.8s,baz=99,slow=7.0,SNR=8.1 | | | | | | | |
| SONM | | | | LR | LR | 19 29 03.4 | | |
| | comp=Z,36nm,18.9s,baz=255,slow=37 1.4nm,0.8s | | | | | | | |
| **LZH** | **Lanzhou** | **32.82** | **290** | *eP* | **P** | **19 15 34.3** | | **-0.1** |
| LZH | | | | pP | sP | 19 15 44.5 | | -0.7 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **GTA** | **Gaotai** | **35.99** | **296** | *eP* | **P** | **19 16 02.9** | | **+1.1** |
| GTA | | | | sP | pwP | 19 16 14.8 | | -4.2 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | |
| **PZH** | **PanZhiHua** | **36.13** | **274** | P | **P** | **19 16 04.6** | | **+1.5** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,170nm,4.4s | | | | | | | |
| **GOMU** | **GeErMu** | **40.10** | **291** | P | **P** | **19 16 38.5** | | **+1.7** |
| GOMU | | | | pP | pP | 19 16 42.1 | | -2.7 |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.42** | **263** | P | **P** | **19 16 47.4** | | **0.0** |
| | 0.5nm,0.6s,baz=110,slow=9.0,SNR=1.9 | | | | | | | |
| CMAR | | | | LR | LR | 19 35 56.3 | | |
| | comp=Z,41nm,18.1s,baz=80,slow=39 0.5nm,0.6s | | | | | | | |
| **WMQ** | **Urumqi** | **45.03** | **303** | *eP* | **P** | **19 17 18.3** | | **+2.0** |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **47.24** | **317** | P | **P** | **19 17 33.4** | | **-0.1** |
| | 0.2nm,0.3s,baz=74,slow=11,SNR=1.9 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **19 19 05.0** | | **+0.6** |
| | 1.2nm,0.6s,baz=104,slow=3.1,SNR=5.5 0.2nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **48.71** | **307** | P | **P** | **19 17 45.6** | | **+0.6** |
| **MKAR** | **Makanchi Array** | **48.71** | **307** | P | **P** | **19 17 45.7** | | **+0.7** |
| | 1.3nm,0.8s,baz=87,slow=10,SNR=8.1 | | | | | | | |
| MKAR | | | | LR | LR | 19 38 52.0 | | |
| | comp=Z,21nm,18.6s,baz=92,slow=37 1.3nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **48.92** | **307** | P | **P** | **19 17 46.9** | | **+0.2** |
| **C19K** | **Lookout Ridge** | **50.34** | **23** | P | **P** | **19 17 57.8** | | **+0.6** |
| **H19K** | **Roundabout Mou** | **50.53** | **28** | P | **P** | **19 17 59.7** | | **+1.2** |
| **J19K** | **Poorman** | **50.56** | **30** | P | **P** | **19 17 59.5** | | **+0.7** |
| J19K | | | | IAmb | IAmb | 19 18 04.3 | | |
| | comp=Z,7.7nm,1.2s | | | | | | | |
| **E19K** | **Redstone River** | **50.69** | **26** | P | **P** | **19 18 00.2** | | **+0.5** |
| E19K | | | | IAmb | IAmb | 19 18 02.2 | | |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **50.88** | **190** | P | **P** | **19 18 02.4** | | **+0.8** |
| WR0 | | | | IAmb | IAmb | 19 18 24.7 | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **50.89** | **190** | P | **P** | **19 18 02.8** | | **+1.0** |
| WB2 | | | | IAmb | IAmb | 19 18 03.5 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.89** | **190** | P | **P** | **19 18 02.3** | | **+0.5** |
| **WRA** | **Warramunga Arr** | **50.89** | **190** | P | **P** | **19 18 02.2** | | **+0.5** |
| | comp=Z,3.6nm,0.7s,baz=9.6,slow=7.9,SNR=22 comp=Z,3.6nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **50.95** | **313** | P | **P** | **19 18 01.0** | | **-0.9** |
| **KURBB** | **Kurchatov Arra** | **51.02** | **312** | P | **P** | **19 18 03.2** | | **+0.8** |
| | comp=Z,2.2nm,0.8s,baz=87,slow=7.4,SNR=12 comp=Z,2.2nm,0.8s | | | | | | | |
| **K20K** | **Telida** | **51.13** | **31** | P | **P** | **19 18 03.6** | | **+0.4** |
| K20K | | | | IAmb | IAmb | 19 18 05.1 | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **F20K** | **Avaraart Lake** | **51.16** | **26** | P | **P** | **19 18 03.8** | | **+0.5** |
| **J20K** | **Nowinta River** | **51.23** | **30** | P | **P** | **19 18 05.3** | | **+1.5** |
| J20K | | | | IAmb | IAmb | 19 18 08.0 | | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **G21K** | **Allakaket** | **51.91** | **27** | P | **P** | **19 18 09.8** | | **+0.9** |
| G21K | | | | IAmb | IAmb | 19 18 11.3 | | |
| | comp=Z,8.6nm,1.0s | | | | | | | |
| **H21K** | **Melozitna Rive** | **52.04** | **28** | P | **P** | **19 18 11.3** | | **+1.5** |
| **D22K** | **Ayikyak River** | **52.68** | **24** | P | **P** | **19 18 14.6** | | **0.0** |
| D22K | | | | IAmb | IAmb | 19 18 17.2 | | |
| | comp=Z,9.6nm,0.8s | | | | | | | |
| **MLY** | **Manley** | **52.81** | **29** | P | **P** | **19 18 16.6** | | **+1.0** |
| **G23K** | **Bananza Creek** | **53.31** | **27** | P | **P** | **19 18 19.5** | | **+0.2** |
| G23K | | | | IAmb | IAmb | 19 18 22.1 | | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **MDM** | **Murphy Dome** | **53.86** | **29** | P | **P** | **19 18 23.3** | | **-0.1** |
| MDM | | | | IAmb | IAmb | 19 18 24.7 | | |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **54.10** | **33** | P | **P** | **19 18 26.0** | | **+0.8** |
| **KSH** | **Kashi** | **54.28** | **299** | P | **P** | **19 18 27.5** | | **+0.5** |
| KSH | | | | sP | sP | 19 18 40.3 | | +2.0 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **54.32** | **27** | P | **P** | **19 18 27.9** | | **+1.3** |
| G24K | | | | IAmb | IAmb | 19 18 29.2 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **54.42** | **30** | P | **P** | **19 18 27.0** | | **-0.4** |
| | comp=Z,2.2nm,0.7s,baz=256,slow=6.2,SNR=21 comp=Z,2.2nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **54.61** | **190** | P | **P** | **19 18 29.9** | | **+0.7** |
| **ASAR** | **Alice Springs** | **54.61** | **190** | P | **P** | **19 18 29.6** | | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=5.2,slow=6.7,SNR=15 comp=Z,0.6nm,0.5s | | | | | | | |
| **SCRK** | **Sand Creek** | **55.66** | **31** | P | **P** | **19 18 36.6** | | **+0.1** |
| SCRK | | | | IAmb | IAmb | 19 18 39.0 | | |
| | comp=Z,5.5nm,1.1s | | | | | | | |
| **BVAR** | **Borovoye Array** | **55.86** | **316** | P | **P** | **19 18 38.9** | | **+1.0** |
| | comp=Z,0.4nm,0.5s,baz=89,slow=7.8,SNR=4.4 comp=Z,0.4nm,0.5s | | | | | | | |
| **EPYK** | **Eagle Plains** | **58.62** | **28** | P | **P** | **19 18 58.5** | | **+1.3** |
| **I30M** | **Mount Dempster** | **58.87** | **29** | P | **P** | **19 19 00.1** | | **+1.0** |
| I30M | | | | IAmb | IAmb | 19 19 01.9 | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **J30M** | **Hart River** | **58.96** | **30** | P | **P** | **19 19 00.1** | | **+0.4** |
| J30M | | | | IAmb | IAmb | 19 19 01.8 | | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **59.53** | **27** | P | **P** | **19 19 03.9** | | **+0.4** |
| **YKA** | **Yellowknife Ar** | **68.84** | **29** | P | **P** | **19 20 03.2** | | **-1.4** |
| | comp=Z,4.7nm,0.9s,baz=301,slow=5.6,SNR=4.6 comp=Z,4.7nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **75.05** | **334** | P | **P** | **19 20 41.6** | | **-0.2** |
| | comp=Z,1.1nm,0.5s,baz=53,slow=7.4,SNR=1.7 comp=Z,1.1nm,0.5s | | | | | | | |
| **KBZ** | **Khabaz** | **76.02** | **313** | P | **P** | **19 20 49.0** | | **+1.3** |
| | comp=Z,1.1nm,0.6s,baz=102,slow=8.1,SNR=2.5 comp=Z,1.1nm,0.6s | | | | | | | |
| **SUMG** | **Summit** | **77.11** | **0** | P | **P** | **19 20 55.0** | | **+1.2** |
| SUMG | | | | IAmb | IAmb | 19 20 56.2 | | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.98** | **52** | P | **P** | **19 20 58.9** | | **-0.3** |
| | comp=Z,1.3nm,0.8s,baz=284,slow=5.7,SNR=8.8 comp=Z,1.3nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **80.11** | **324** | P | **P** | **19 21 10.3** | | **+0.1** |
| | comp=Z,0.5nm,0.3s,baz=49,slow=6.1,SNR=5.3 comp=Z,0.5nm,0.3s | | | | | | | |
| **HFS** | **Hagfors** | **80.42** | **337** | P | **P** | **19 21 11.3** | | **-0.5** |
| | comp=Z,1.4nm,0.7s,baz=94,slow=8.0,SNR=5.5 comp=Z,1.4nm,0.7s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **80.56** | **338** | P | **P** | **19 21 12.8** | | **+0.2** |
| | comp=Z,2.2nm,0.8s,baz=41,slow=5.3 | | | | | | | |
| **NOA** | **NORSAR Array B** | **80.56** | **338** | P | **P** | **19 21 12.3** | | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=40,slow=5.3,SNR=5.6 comp=Z,0.9nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **81.39** | **45** | P | **P** | **19 21 18.0** | | **+0.4** |
| | comp=Z,0.5nm,0.8s,baz=261,slow=3.6,SNR=3.0 comp=Z,0.5nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **84.01** | **313** | P | **P** | **19 21 31.2** | | **+0.1** |
| | comp=Z,1.1nm,0.7s,baz=116,slow=5.6,SNR=7.6 comp=Z,1.1nm,0.7s | | | | | | | |
| **SCHQ** | **Schefferville** | **91.19** | **17** | LR | LR | 20 08 13.4 | | |
| | comp=Z,77nm,18.8s,baz=294,slow=39 | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **91.99** | **329** | P | **P** | **19 22 09.8** | | **+0.3** |
| FUORN | | | | IAmb | IAmb | 19 22 11.5 | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **93.11** | **53** | P | **P** | **19 22 16.1** | | **+1.3** |
| | comp=Z,1.0nm,0.9s,baz=302,slow=2.8,SNR=6.3 comp=Z,1.0nm,0.9s | | | | | | | |
| **LPAZ** | **La Paz** | **148.40** | **70** | PKPbc | **PKiKP** | **19 28 49.1** | | **-0.7** |
| | comp=Z,1.9nm,0.8s,baz=328,slow=3.8,SNR=6.2 | | | | | | | |

*IDC **13** 19:36:08.9±0.4,69.°69N×144.°42W,h0km,mb4.4/30, mbtmp4.4/35,ML4.5/5,MS3.8/28,Error ellipse: s-maj=12.1km s-min=8.6km az=41.0*

*NEIC **13** 19:36:08.6,69.°49N×144.°45W,h12km*

*AEIC **13** 19:36:08.8±3.5,69.°55N±0.°07×144.°5W±0.°1,h17km±4km, ML5.0,mb4.8/161(NEIC),ML5.0/124(NEIC), Mwr4.7/27(NEIC),Error ellipse: s-maj=10.0km s-min=5.5km az=180.0*

*MOS **13** 19:36:08.9±0.9,69.°58N×144.°52W,h14km,mb4.8/44, MS4.0/5,Error ellipse: s-maj=18.1km s-min=5.3km az=94.8*

*NEIC **13** 19:36:09.5±2.1,69.°75N±0.°07×144.°4W±0.°1,h4km±4km, Error ellipse: s-maj=9.7km s-min=5.8km az=194.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr-0.11; Mθθ-0.39; Mϕϕ0.49; Mrθ-0.20; Mθϕ-1.17; Mϕr-0.39; Fault plane solution: M₀1.33000×10¹⁶ NP1: ϕs9.15000°,δ83.49000°,λ-19.00000°. NP2:ϕs101.39000°, δ71.13000°,λ-173.12000°. Principal axes: T 1.3335, Plg9.0000°, Azm57.0000°; N -0.0099, Plg70.0000°, Azm171.0000°; P -1.3236, Plg18.0000°, Azm324.0000°;*

*GCMT **13** 19:36:11.8±0.3,69.°68N±0.°02×144.°36W±0.°06,h15km, MW4.9/76,Moment Tensor Solution. s17,c17; s76,c100; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-0.15±.10; Mθθ-0.59±.09; Mϕϕ0.74±.09; Mrθ1.93±.28; Mθϕ-1.54±.06; Mϕr-1.11±.29; Best double couple: M₀2.72900×10¹⁶ NP1:ϕs289.00000°,δ88.00000°,λ-126.00000°. NP2: ϕs196.00000°,δ36.00000°,λ-3.00000°. Principal axes: T 3.0690, Plg33.0000°, Azm49.0000°; N -0.6790, Plg36.0000°, Azm290.0000°; P -2.3900, Plg36.0000°, Azm167.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 13 19:36:10.6±0.3,69.°51N±0.°03×144.°40W±0.°03,h14km, n474,σ1°45/400,mb4.8/163,MS3.9/27,32C-39D,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **C27K** | **Jago River** | **0.27** | **64** | Pg | **Pg** | **19 36 14.8** | | **-1.4** |
| C27K | | | | Sg | **Sg** | **19 36 19.0** | | **-1.2** |
| **C26K** | **Camden Bay** | **0.45** | **337** | | **Pg** | **19 36 18.3** | | **-1.1** |
| **D25K** | **Kavik River** | **0.72** | **256** | | **Pg** | **19 36 22.1** | | **-2.5** |
| **D27M** | **Malcolm River** | **1.25** | **101** | Pn | **Pn** | **19 36 32.0** | | **-1.6** |
| **C24K** | **Franklin Bluff** | **1.52** | **280** | | **Sg** | **19 36 58.8** | | **-0.7** |
| **C24K** | **Franklin Bluff** | **1.52** | **280** | | **Pn** | **19 36 36.9** | | **-0.4** |
| C24K | | | | IAML | | 19 37 07.0 | | |
| | comp=N,19μm,1.1s | | | | | | | |
| C24K | | | | IAML | | 19 37 17.3 | | |
| | comp=E,23μm,1.1s | | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **259** | Pg | **Pb** | **19 36 40.2** | | **+0.2** |
| D24K | | | | IAML | | 19 37 06.5 | | |
| | comp=E,23μm,1.1s | | | | | | | |
| D24K | | | | IAML | | 19 37 07.6 | | |
| | comp=N,23μm,1.0s | | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **141** | Pn | **Pn** | **19 36 37.0** | | **-2.5** |
| E27K | | | | | **Pb** | **19 36 40.0** | | **-1.2** |
| **E27K** | **Coleen River** | **1.68** | **141** | | **Sg** | **19 37 03.7** | | **-0.7** |
| **F26K** | **Sheenjek River** | **1.83** | **177** | | **Sb** | **19 37 07.0** | | **+0.5** |
| **F26K** | **Sheenjek River** | **1.83** | **177** | | **Pn** | **19 36 42.3** | | **+0.8** |
| **F26K** | **Sheenjek River** | **1.83** | **177** | IAML | | 19 37 09.6 | | |
| | comp=N,14μm,1.0s | | | | | | | |
| F26K | | | | IAML | | 19 37 11.2 | | |
| | comp=E,26μm,0.9s | | | | | | | |
| **E28M** | **Babbage River** | **1.97** | **115** | Pn | **Pn** | **19 36 44.0** | | **+0.4** |
| **E28M** | **Babbage River** | **1.97** | **115** | | **Sb** | **19 37 11.2** | | **+0.5** |
| **F25K** | **Christian Rive** | **1.98** | **194** | | **Pn** | **19 36 43.7** | | **0.0** |
| F25K | | | | IAML | | 19 37 15.8 | | |
| | comp=N,15μm,1.0s | | | | | | | |
| F25K | | | | IAML | | 19 37 17.7 | | |
| | comp=E,8μm,0.7s | | | | | | | |
| **D28M** | **Stokes Point** | **2.01** | **93** | | **Pn** | **19 36 44.5** | | **+0.5** |
| **TOLK** | **Toolik Lake Re** | **2.05** | **247** | | **Pn** | **19 36 44.4** | | **-0.3** |
| TOLK | | | | IAML | | 19 37 22.5 | | |
| | comp=E,11μm,0.9s | | | | | | | |
| TOLK | | | | IAML | | 19 37 24.0 | | |
| | comp=N,10μm,1.2s | | | | | | | |
| **E24K** | **Your Creek** | **2.07** | **228** | | **Pb** | **19 36 47.2** | | **-0.7** |
| **BMAR** | **Burnt Mountain** | **2.09** | **182** | Pg | **Pb** | **19 36 47.3** | | **-1.0** |
| **C23K** | **Itkillik River** | **2.19** | **281** | | **Pn** | **19 36 46.3** | | **-0.2** |
| **D23K** | **Nanushuk River** | **2.30** | **259** | | **Pn** | **19 36 48.1** | | **0.0** |
| D23K | | | | IAML | | 19 37 33.3 | | |
| | comp=E,6μm,0.9s | | | | | | | |
| D23K | | | | IAML | | 19 37 45.2 | | |
| | comp=N,7μm,1.0s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **214** | | **Pn** | **19 36 49.5** | | **+0.4** |
| **E23K** | **Chandalar** | **2.39** | **235** | | **Pn** | **19 36 49.6** | | **+0.2** |
| E23K | | | | IAML | | 19 37 29.8 | | |
| | comp=E,5μm,1.0s | | | | | | | |
| **F28M** | **Old Crow** | **2.53** | **137** | | **Pn** | **19 36 51.6** | | **+0.4** |
| F28M | | | | IAML | | 19 37 36.6 | | |
| | comp=E,4μm,1.0s | | | | | | | |
| F28M | | | | IAML | | 19 37 36.8 | | |
| | comp=N,5μm,1.1s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **175** | | **Pn** | **19 36 52.2** | | **+0.3** |
| **E29M** | **Blow River** | **2.61** | **113** | | **Pn** | **19 36 53.9** | | **+1.7** |
| E29M | | | | IAML | | 19 37 36.8 | | |
| | comp=N,6μm,1.0s | | | | | | | |
| E29M | | | | IAML | | 19 37 41.1 | | |
| | comp=E,6μm,0.8s | | | | | | | |
| **G25K** | **Bearman Lake** | **2.83** | **194** | | **Pn** | **19 36 55.7** | | **+0.4** |
| **G27K** | **Doyon Strip** | **2.90** | **158** | | **Pn** | **19 36 56.1** | | **-0.3** |
| **FYU** | **Fort Yukon** | **2.98** | **186** | | **Pn** | **19 36 58.1** | | **+0.8** |
| **D22K** | **Ayikyak River** | **3.02** | **262** | | **Pn** | **19 36 57.3** | | **-0.7** |
| D22K | | | | IAML | | 19 37 56.7 | | |
| | comp=E,5μm,0.8s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.05** | **204** | | **Pn** | **19 36 58.1** | | **-0.2** |
| G24K | | | | IAML | | 19 37 49.6 | | |
| | comp=N,5μm,1.0s | | | | | | | |
| **COLD** | **Coldfoot** | **3.14** | **226** | | **Pn** | **19 36 59.5** | | **-0.1** |
| **B22K** | **Teshekpuk Lake** | **3.22** | **289** | | **Pn** | **19 37 00.0** | | **-0.6** |
| **H25L** | **Birch Creek** | **3.30** | **190** | | **Pn** | **19 37 02.6** | | **+0.8** |
| **H27K** | **Steamboat Moun** | **3.47** | **160** | | **Pn** | **19 37 04.3** | | **+0.2** |
| **F22K** | **John River** | **3.50** | **239** | | **Pn** | **19 37 04.4** | | **-0.1** |
| **G23K** | **Bananza Creek** | **3.51** | **219** | | **Pn** | **19 37 04.4** | | **-0.4** |
| G23K | | | | IAML | | 19 38 09.5 | | |
| | comp=E,3μm,1.2s | | | | | | | |
| G23K | | | | IAML | | 19 38 12.9 | | |
| | comp=N,2μm,1.1s | | | | | | | |
| **G29M** | **Pine Creek** | **3.53** | **135** | | **Pn** | **19 37 05.4** | | **+0.4** |
| G29M | | | | IAML | | 19 37 50.2 | | |
| | comp=N,4μm,0.8s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.58** | **277** | | **Pn** | **19 37 05.5** | | **-0.1** |
| **E21K** | **Killik River** | **3.61** | **257** | | **Pn** | **19 37 06.0** | | **-0.1** |
| **E21K** | **Killik River** | **3.61** | **257** | IAML | | 19 38 24.8 | | |
| | comp=E,3μm,1.1s | | | | | | | |
| **F30M** | **Barrier River** | **3.69** | **117** | | **Pn** | **19 37 08.4** | | **+1.2** |
| **G22K** | **Bettles** | **3.71** | **229** | | **Pn** | **19 37 07.9** | | **+0.5** |
| **A22K** | **Sinclair Lake** | **3.89** | **298** | | **Pn** | **19 37 09.3** | | **-0.5** |
| **H24K** | **Noodor Dome** | **3.92** | **201** | | **Pn** | **19 37 09.9** | | **-0.4** |
| H24K | | | | IAML | | 19 38 21.4 | | |
| | comp=N,2μm,1.0s | | | | | | | |
| **G30M** | **tAoh Zrail Nji** | **3.96** | **126** | | **Pn** | **19 37 11.5** | | **+0.6** |
| G30M | | | | IAML | | 19 38 27.9 | | |
| | comp=N,2μm,0.9s | | | | | | | |
| **H

COLA College 4.85 198 Pn 19 37 23.2 +0.2
COLA Pn 19 37 23.8 +0.9
COLA College 4.85 198 IAML 19 38 55.7
comp=E,1µm,0.7s
COLA College 4.85 198 d iP Pn 19 37 23.9 +0.9
IL31 4.86 193 Pn 19 37 23.8 +0.7
ILAR Eielson Array 4.86 193 Pn Pn 19 37 23.6 +0.4
ILAR Eielson Array 4.86 193 Pn Pn 19 37 24.2 +1.0
comp=E,14nm,0.3s,baz=3.3,slow=11,SNR=178
ILAR Sn Sn 19 38 20.2 +1.0
comp=E,36nm,0.3s,baz=18,slow=18,SNR=2.3
ILAR Lg Lg 19 38 39.0
comp=E,39nm,0.3s,baz=6.4,slow=29,SNR=1.3
ILAR LR LR 19 39 48.4
comp=E,501nm,20.0s,baz=26,slow=44
comp=E,92nm,0.8s
F20K Avaraart Lake 4.88 245 Pn 19 37 23.4 0.0
F20K IAML 19 38 54.3
comp=N,814nm,1.1s
F20K IAML 19 38 55.1
comp=E,750nm,0.8s
EGAK Eagle 4.92 164 Pn 19 37 24.3 +0.3
EGAK IAML 19 38 53.7
comp=E,1µm,0.9s
EGAK IAML 19 39 01.9
comp=E,1µm,1.1s
J25K Salcha River, 4.94 185 Pn 19 37 24.4 +0.2
J25K IAML 19 38 50.9
comp=N,956nm,1.0s
H21K Melozitna Rive 5.03 224 Pn 19 37 25.9 +0.4
H21K IAML 19 38 58.5
comp=E,717nm,0.9s
D19K Kuna River 5.04 265 Pn 19 37 25.5 -0.1
D19K IAML 19 39 12.4
comp=E,1µm,1.1s
J26L Joseph Creek 5.04 176 Pn 19 37 26.0 +0.2
J26L IAML 19 38 55.4
comp=N,652nm,1.1s
CCB Clear Creek Bu 5.06 197 Pn 19 37 26.1 +0.2
MLY Manley 5.12 212 Pn 19 37 26.8 -0.1
MLY Manley 5.12 212 IAML 19 39 09.4
comp=E,611nm,1.1s
E19K Redstone River 5.15 252 Pn 19 37 26.9 -0.3
E19K Redstone River 5.15 252 IAML 19 39 03.4
comp=N,1µm,0.9s
E19K IAML 19 39 04.6
comp=E,1µm,1.0s
HDA Harding Lake 5.22 192 Pn 19 37 29.5 +1.3
HDA Harding Lake 5.22 192 IAML 19 39 12.5
comp=E,1µm,1.0s
HDA IAML 19 39 15.2
comp=N,925nm,0.9s
I21K Tanana 5.24 218 Pn 19 37 28.4 0.0
WRH Wood River Hil 5.26 198 Pn 19 37 28.9 +0.1
WRH IAML 19 39 04.0
comp=E,575nm,0.7s
WRH IAML 19 39 09.8
comp=N,898nm,1.0s
NEA2 Nenana 5.27 202 Pn 19 37 28.8 0.0
NEA2 IAML 19 39 03.6
comp=E,632nm,1.1s
I30M Mount Dempster 5.30 140 Pn 19 37 29.6 +0.2
I30M IAML 19 38 34.7
comp=E,858nm,0.6s
I30M IAML 19 39 01.2
comp=N,554nm,0.9s
C19K Lookout Ridge 5.40 273 Pn 19 37 30.6 0.0
C19K IAML 19 39 28.6
comp=N,655nm,1.1s
C19K IAML 19 39 29.6
comp=E,723nm,1.2s
SCRK Sand Creek 5.56 178 Pn 19 37 33.9 +0.9
J29N Klondike Camp 5.63 152 Pn 19 37 34.8 +1.0
F19K Shaleruckik Mo 5.66 248 Pn 19 37 33.7 -0.4
H20K Anotleneega Mo 5.69 230 Pn 19 37 34.0 -0.6
BWN Browne 5.72 203 Pn 19 37 35.1 +0.1
K24K Donnelly Dome 5.76 186 Pn 19 37 37.0 +1.5
A19K Wainwright 5.80 285 Pn 19 37 36.0 0.0
DAWY Dawson 5.82 158 Pn 19 37 37.0 +0.6
G19K Purcell Mounta 5.87 241 Pn 19 37 36.0 -1.0
J30M Hart River 5.87 144 Pn 19 37 37.4 +0.2
DOT Dot Lake 5.89 179 Pn 19 37 38.3 +0.9
BPAW Bear Paw Mtn. 6.02 209 Pn 19 37 38.7 -0.5
C18K Utukok River 6.07 270 Pn 19 37 39.4 -0.5
H19K Roundabout Mou 6.10 235 Pn 19 37 39.5 -0.7
B18K Kokolik River 6.13 277 Pn 19 37 39.5 -1.0
I20K Naaghedeneel 6.14 224 Pn 19 37 40.4 -0.3
K29M Barlow Dome 6.31 151 Pn 19 37 43.6 +0.4
E18K Tukpahlearik C 6.32 258 Pn 19 37 43.0 -0.2
F18K Selawik 6.41 250 Pn 19 37 44.3 -0.1
BCAR Beaver Creek A 6.56 170 Pn Pn 19 37 47.0 +0.4
DHY Denali Highway 6.57 192 Pn 19 37 49.3 +2.4
J20K Nowinta River 6.58 220 Pn 19 37 46.6 -0.2
PAX Paxson 6.58 184 Pn 19 37 48.3 +1.4
PAX Paxson 6.58 184 P Pn 19 37 48.3 +1.4
A36M Sachs Harbour 6.79 60 Pn Pn 19 37 48.2 -1.4
C17K DeLong Mountai 6.82 270 Pn 19 37 48.6 -1.4
RDOG Red Dog Mine 6.87 266 Pn 19 37 49.5 -1.2
E17K Hotham Inlet 6.90 258 Pn 19 37 50.0 -1.0
WAT1 Susitna Watana 6.92 196 Pn 19 37 52.8 +1.3
WAT7 Susitna Watana 6.94 197 Pn 19 37 53.4 +1.6
F17K Baldwin Pennin 7.03 252 Pn Pn 19 37 52.7 -0.2
WAT6 Susitna Watana 7.09 193 Pn 19 37 56.4 +2.4
HARP HAARP 7.15 183 Pn 19 37 57.0 +2.4
C36M Paulatuk 7.16 82 Pn 19 37 52.6 -2.0
M27K Edge Creek, AK 7.26 171 Pn 19 37 57.4 +1.2
K20K Telida 7.28 217 Pn 19 37 55.8 -0.6
M24K Tolsona, Glenn 7.47 186 Pn 19 38 01.4 +2.4
H17K Granite Mounta 7.55 240 Pn 19 37 59.8 -0.3
WACK Wrangell Chich 7.56 180 Pn 19 38 01.9 +1.5
C16K Lisburne Hills 7.65 271 Pn 19 37 59.9 -1.4
YUK2 White River 7.89 168 Pn 19 38 06.3 +1.4
G16K Koyuk River 8.02 248 Pn 19 38 05.8 -0.7
L20K Farewell, AK 8.04 213 Pn 19 38 06.5 -0.3
SKT Skwentna 8.11 205 Pn 19 38 08.9 +1.2
GLB Gilahina Butte 8.11 178 Pn 19 38 09.6 +1.9
MCARA McCarthy VSAT 8.18 175 Pn 19 38 11.3 +2.5
M31M Drury Creek, Y 8.39 146 Pn 19 38 11.8 +0.1
J17K VABM Dome 8.47 231 Pn Pn 19 38 12.1 -0.6
L19K White Mountain 8.50 215 Pn 19 38 12.6 -0.5
F15K North Star Dit 8.59 253 Pn 19 38 13.0 -1.3
N30M Aishikik Lake 8.63 156 Pn 19 38 16.0 +1.1
M19K Big River Lodg 8.66 213 Pn 19 38 15.4 +0.1
CTGM Chitina Glacie 8.68 170 Pn 19 38 17.7 +2.0
N31M Braeburn, Yuko 8.81 152 Pn 19 38 18.3 +1.0
G15K Niukluk 8.82 249 Pn 19 38 16.7 -0.8
K17K Iditarod 8.82 226 Pn 19 38 17.5 0.0
PWL Port Wells 8.84 193 Pn 19 38 21.6 +3.8
L18K Granite Mounta 8.86 220 Pn 19 38 18.1 0.0
SPCP Crater Peak Br 8.88 205 Pn 19 38 21.8 +3.3
GRNC Granite Creek 8.89 172 Pn 19 38 21.9 +3.3
YUK6 Outpost Mounta 8.96 161 Pn 19 38 21.3 +1.6
ISLE Juniper Island 8.99 173 Pn 19 38 23.5 +3.6
BAGL Bagley Icefiel 9.11 173 Pn 19 38 24.9 +3.5
WAX Waxell Ridge 9.12 175 Pn 19 38 25.6 +3.9
BARK Barkley Ridge 9.18 174 Pn 19 38 26.3 +3.8
TABL Table Mountain 9.21 170 Pn 19 38 26.6 +3.6
F14K Arctic Creek 9.30 255 Pn 19 38 22.2 -1.8
L17K Donlin 9.32 224 Pn 19 38 23.6 -0.6
M18K Stony River 9.32 216 Pn 19 38 24.1 -0.2
RKAV Rock Avalanche 9.34 171 Pn 19 38 28.6 +3.9
O29M Mount Kennedy 9.57 162 Pn 19 38 30.3 +2.5
WRGLY Wrigley 10.45 117 Pn Pn 19 38 39.4 -0.4
N17K Nushagak Hills 10.48 217 Pn Pn 19 38 41.1 +0.9
P33M Teslin, Yukon 10.53 147 Pn Pn 19 38 40.6 -0.3
KDAK Kodiak Island 12.30 201 Pn Pn 19 39 06.9 +1.9
comp=E,0.2nm,0.3s,baz=18,slow=20,SNR=1.8
KDAK LR LR 19 44 02.8
comp=E,677nm,21.3s,baz=41,slow=38
DLBC Dease Lake 12.73 144 Pn Pn 19 39 10.8 -0.1
comp=E,2.9nm,0.3s,baz=331,slow=10,SNR=26
DLBC Sn Sn 19 41 29.1 -3.2
comp=E,0.4nm,0.3s,baz=257,slow=18,SNR=1.7
DLBC Lg Lg 19 42 54.4
baz=21,slow=17
DLBC LR LR 19 44 52.8
comp=E,172nm,18.1s,baz=302,slow=41
comp=E,13nm,0.5s
YKA Yellowknife Ar 13.87 106 Pn Pn 19 39 22.6 -3.8
comp=E,3.1nm,0.3s,baz=35,slow=4.9,SNR=25
YKA Sn Sn 19 41 47.2 -13
comp=E,4.5nm,0.3s,baz=318,slow=22,SNR=7.5
YKA Lg Lg 19 43 20.8
baz=302,slow=27
comp=E,8.3nm,0.5s
RES Resolute Bay 15.62 49 Sn Sn 19 42 25.3 -17
comp=E,2.1nm,0.3s,baz=278,slow=12,SNR=2.6
BILL Bilibino 17.53 289 ||e P Pn 19 40 13.2 -1.0
BILL S Sn 19 43 15.0 -14
BILL pmax pmax
comp=Z,43nm,1.7s
BILL MLR MLR
comp=Z,754nm,15.0s
BBB Bella Bella 18.98 148 P Pn 19 40 34.0 +2.0
comp=Z,0.4nm,0.3s,baz=299,slow=3.8,SNR=4.4
BBB LR LR 19 49 01.2
comp=Z,89nm,18.6s,baz=336,slow=40
comp=Z,5.2nm,0.8s
FCC Fort Churchill 23.65 92 P P 19 41 20.6 -0.4
FCC IAmb IAmb 19 41 31.9
comp=Z,33nm,0.9s
FCC Fort Churchill 23.65 92 P P 19 41 20.6 -0.4
FCC pmax pmax
comp=Z,33nm,1.0s
NEEM North Greenlan 24.66 32 i P P 19 41 30.3 -0.2
NEEM IAmb IAmb 19 41 31.2
comp=Z,15nm,0.6s
NEW Newport 25.12 134 LR LR 19 51 50.1
comp=Z,453nm,19.8s,baz=338,slow=37
SEY Seymchan 25.19 286 d iP P 19 41 35.2 +0.1
SEY pmax pmax
comp=Z,23nm,0.7s
SHEM Shemya Is, Ala 25.40 250 LR LR 19 53 14.1
comp=Z,103nm,19.4s,baz=102,slow=40
TIXI Tiksi 26.60 315 ⇑i P 19 41 46.5 -1.3
TIXI pmax pmax
comp=Z,8.0nm,0.8s
MSO Missoula 27.27 131 P P 19 41 55.6 +1.4
OVMT Ovando 27.31 129 P P 19 41 59.9 +5.3
EGMT Eagleton 27.36 124 P P 19 41 56.2 +1.3
G08A Pilot Rock 27.45 139 P P 19 41 59.1 +3.2
BPMT Black Pine Rid 27.77 130 P P 19 42 00.1 +1.3
MA2 Magadan 28.13 282 LR LR 19 53 43.9
comp=Z,319nm,20.4s,baz=50,slow=38
ULM Lac du Bonnet 29.85 105 P P 19 42 17.2 +0.2
comp=Z,2.5nm,0.4s,baz=322,slow=9.2,SNR=3.5
comp=Z,2.5nm,0.4s
ULM Lac du Bonnet 29.85 105 eP P 19 42 16.3 -0.7
YBH Yreka Blue Hor 30.05 146 LR LR 19 54 37.3
comp=Z,168nm,20.7s,baz=326,slow=37
DAG Danmarks Havn 30.30 22 i P P 19 42 19.5 -1.1
DAG IAmb IAmb 19 42 20.6
comp=Z,5.0nm,0.7s
SUMG Summit 30.31 35 i P P 19 42 21.0 -0.3
PETK Petropavlovsk- 30.73 268 P P 19 42 24.8 +0.1
comp=Z,4.4nm,0.8s,baz=50,slow=14,SNR=5.0
comp=Z,4.4nm,0.8s
IMW Indian Meadow 30.79 129 IAmb IAmb 19 42 33.6
comp=Z,11nm,0.9s
DBG Daneborg 32.14 25 i P P 19 42 36.2 -0.7
DBG IAmb IAmb 19 42 37.1
comp=Z,6.3nm,0.5s
PD31 Pinedale Array 32.22 128 IAmb IAmb 19 42 43.9
comp=Z,9.5nm,0.9s
PDAR Pinedale Array 32.22 128 P P 19 42 40.0 +1.7
PDAR Pinedale Array 32.22 128 P P 19 42 39.9 +1.7
comp=Z,5.8nm,0.7s,baz=3.9,slow=4.6,SNR=28
PDAR LR LR 19 56 43.2
comp=Z,210nm,18.1s,baz=336,slow=38
comp=Z,5.8nm,0.7s
RSSD Black Hills 32.59 120 P P 19 42 42.8 +1.3
RSSD Black Hills 32.59 120 P P 19 42 42.8 +1.3
RSSD pmax pmax
comp=Z,6.0nm,0.7s
ELK Elko 32.63 137 P P 19 42 44.9 +3.1
ELK ScP ScP 19 49 13.5 +3.0
ELK Elko 32.63 137 P P 19 42 44.9 +3.1
ELK pmax pmax
comp=Z,6.0nm,0.8s
HWUT Hardware Ranch 32.75 131 P P 19 42 45.1 +2.3
HWUT IAmb IAmb 19 42 50.2
comp=Z,12nm,0.8s
YAK Yakutsk 33.15 301 LR LR 19 59 44.4
comp=Z,145nm,18.4s,baz=44,slow=43
YAK Yakutsk 33.15 301 eP P 19 42 45.2 -0.6
YAK pmax pmax
comp=Z,7.0nm,0.9s
YAK pmax pmax
comp=N,4.0nm,1.3s
YAK MLR MLR
comp=Z,349nm,12.0s
YAK MLR MLR
comp=N,92nm,12.0s
YAK MLR MLR
comp=E,143nm,10.0s
TCUT Toone Canyon 33.25 131 P P 19 42 49.5 +2.3
EYMN Ely 33.32 102 P P 19 42 48.1 +0.6
EYMN IAmb IAmb 19 43 18.5
comp=Z,11nm,0.9s
KVN Kaiserville 33.59 141 ScP ScP 19 49 24.8 +11
DUG Dugway, Tooele 33.76 134 P P 19 42 53.9 +2.4
DUG IAmb IAmb 19 42 59.8
comp=Z,15nm,0.8s
DUG Dugway, Tooele 33.76 134 P P 19 42 53.9 +2.4
DUG pmax pmax
comp=Z,15nm,0.8s
WAKR Walker 33.83 143 IAmb IAmb 19 43 00.4
comp=Z,11nm,0.8s
NVAR Mina Array Bea 34.14 142 P P 19 42 57.3 +2.3
comp=Z,6.8nm,0.9s,baz=354,slow=7.1,SNR=24
NVAR LR LR 19 57 44.4
comp=Z,254nm,18.4s,baz=333,slow=38
comp=Z,6.8nm,0.9s
P18A Preston Nutter 34.96 131 IAmb IAmb 19 43 09.1
comp=Z,14nm,0.7s
O20A White River Ci 35.03 128 IAmb IAmb 19 43 09.4
comp=Z,7.1nm,0.7s
ECSD EROS Data Cent 35.29 112 P P 19 43 05.7 +1.1
SRU San Rafael Swe 35.37 131 IAmb IAmb 19 43 16.4
comp=Z,13nm,0.8s
ISCO Idaho Springs 36.08 125 P P 19 43 13.6 +1.8
ISCO Idaho Springs 36.08 125 P P 19 43 13.6 +1.8
ISCO pmax pmax
comp=Z,6.0nm,0.9s
G40A Rib Lake 36.09 103 IAmb IAmb 19 43 18.4
comp=Z,7.6nm,0.8s
I37A Lemond, Waseca 36.10 108 IAmb IAmb 19 43 13.7
comp=Z,16nm,0.9s
SCHQ Schefferville 36.17 73 P P 19 43 11.9 -0.2
SCHQ Schefferville 36.17 73 P P 19 43 12.1 0.0
comp=Z,16nm,0.8s,baz=331,slow=10,SNR=8.0
SCHQ LR LR 19 58 51.6
comp=Z,152nm,18.0s,baz=306,slow=38
comp=Z,16nm,0.8s
SMCO Snowmass 36.27 127 IAmb IAmb 19 43 20.6
comp=Z,12nm,0.9s
PKCU Pink Cliffs 36.48 135 IAmb IAmb 19 43 23.7
comp=Z,19nm,1.2s
E46A Sault Ste Mari 37.17 97 IAmb IAmb 19 43 21.6
comp=Z,12nm,0.8s
S22A 4UR Ranch, Cre 37.65 128 IAmb IAmb 19 43 33.5
comp=Z,16nm,1.3s
TYV Tymovskoe 37.86 279 eP P 19 43 26.7 +0.3
TYV pmax pmax
comp=Z,100nm,4.5s
TYV pmax pmax
comp=Z,7.0nm,0.9s
PFO Pinyon Flats O 39.17 142 LR LR 20 00 03.2
comp=Z,192nm,18.4s,baz=324,slow=36
PFO Pinyon Flats O 39.17 142 eP P 19 43 36.7 -1.1
PFO pmax pmax
comp=Z,4.0nm,0.8s
P38A Dawn 39.99 111 IAmb IAmb 19 43 45.6
comp=Z,11nm,0.6s
GRNR Gornyy 40.09 284 ||i P 19 43 44.7 -0.4
GRNR pmax pmax
comp=Z,5.0nm,0.9s
GRNR MLR MLR
comp=Z,260nm,15.0s
BORG Borgarnes 40.27 34 LR LR 20 02 28.3
comp=Z,114nm,20.4s,baz=333,slow=39
SADO Sadowa 40.37 93 IAmb IAmb 19 43 48.3
comp=Z,19nm,0.8s
ANMO Albuquerque 40.38 129 LR LR 20 02 46.4
comp=Z,107nm,18.1s,baz=65,slow=39
ANMO Albuquerque 40.38 129 ||i P 19 43 49.2 +1.3
ANMO pmax pmax
comp=Z,3.0nm,0.5s
ZEA Zeya 40.63 294 eP P 19 43 49.8 +0.3
ARCES ARCESS Array B 41.04 5 P P 19 43 50.7 -2.0
comp=Z,4.8nm,0.8s,baz=4.7,slow=7.4,SNR=7.2
ARCES PcP PcP 19 45 51.0 -1.2
comp=Z,2.5nm,0.9s,baz=18,slow=4.3,SNR=5.0
comp=Z,4.8nm,0.8s
DELO Deloro Mine 41.12 92 IAmb IAmb 19 43 54.8
comp=Z,17nm,0.9s
YSS Yuzh-Sakhalins 41.15 276 P P 19 43 53.3 -0.5
YSS IAmb IAmb 19 43 54.9
comp=Z,16nm,0.8s
YSS Yuzh-Sakhalins 41.15 276 eP P 19 43 53.6 -0.2
YSS eS S 19 50 09.8 +3.7
YSS pmax pmax
comp=Z,20nm,1.1s
YSS MLR MLR
comp=N,300nm,15.0s
YSS MLR MLR
comp=E,200nm,15.0s
BOD Bodaibo 41.17 307 eP P 19 43 52.4 -1.5
BOD pmax pmax
comp=Z,16nm,1.3s
AMTX Amarillo 41.80 123 IAmb IAmb 19 44 04.0
comp=Z,13nm,0.7s
LONY Lake Ozonia 42.10 89 P P 19 44 01.6 -0.1
LONY IAmb IAmb 19 44 02.3
comp=Z,14nm,0.9s
MSTX Muleshoe 42.33 125 P P 19 44 04.9 +1.1
MSTX IAmb IAmb 19 44 09.2
comp=Z,15nm,0.7s
J56A Wolcott 42.48 92 IAmb IAmb 19 44 06.4
comp=Z,18nm,0.9s
MGMO Mountain Grove 42.65 111 IAmb IAmb 19 44 07.9
comp=Z,15nm,0.9s
J57A Williamstown 42.66 91 IAmb IAmb 19 44 07.6
comp=Z,33nm,1.4s
M53A WI Miller and 42.75 97 IAmb IAmb 19 44 08.2
comp=Z,20nm,0.8s
BATG Bathurst New B 42.78 79 P P 19 44 07.0 -0.2
BATG IAmb IAmb 19 44 08.9
comp=Z,15nm,0.9s
NCB Newcomb 42.80 89 IAmb IAmb 19 44 25.2
comp=Z,24nm,1.5s
J58A Remsen 42.96 90 IAmb IAmb 19 44 09.6
comp=Z,15nm,1.0s
KLR Kul'dur 42.98 287 d iP P 19 44 07.6 -1.2
KLR pmax pmax
comp=Z,5.0nm,1.0s
G62A West of Eustis 43.01 85 P P 19 44 08.4 -0.7
G62A IAmb IAmb 19 44 10.3
comp=Z,29nm,1.4s
S44A Carbondale 43.16 108 IAmb IAmb 19 44 11.1
comp=Z,15nm,1.1s
F64A Sherman 43.21 82 IAmb IAmb 19 44 11.3
comp=Z,22nm,1.5s
PKME Peaks-Kenny Pk 43.40 83 IAmb IAmb 19 44 13.1
comp=Z,12nm,0.8s
ACCN Adirondack Com 43.51 89 IAmb IAmb 19 44 13.7
comp=Z,10nm,0.8s
POST Post 43.55 124 IAmb IAmb 19 44 21.3
comp=Z,8.5nm,0.6s
HEH HeiHe 43.55 291 eP P 19 44 13.1 -0.2
HEH pmax pmax
comp=Z,4.0nm,0.7s
PBMO Poplar Bluff 43.59 110 IAmb IAmb 19 44 14.4
comp=Z,14nm,0.7s
JKA Kamikawa-asahi 43.66 274 P P 19 44 12.2 -2.2
ASAJ Asahikawa 43.66 274 P P 19 44 12.2 -2.1
ASAJ pmax pmax
comp=Z,8.0nm,0.8s
P51A Williamsport 43.66 100 IAmb IAmb 19 44 14.5
comp=Z,16nm,0.6s
BINY Binghamton 43.73 92 P P 19 44 15.1 +0.1
FCAR Ozark Folk Cen 43.85 112 IAmb IAmb 19 44 16.3
comp=Z,19nm,1.4s
O54A Avella 43.97 97 IAmb IAmb 19 44 17.3
comp=Z,11nm,0.5s
LCAR Lake Charles 44.00 111 IAmb IAmb 19 44 18.6
comp=Z,11nm,0.6s
M57A Sunshine Farm, 44.09 93 IAmb IAmb 19 44 24.4
comp=Z,12nm,0.9s
P53A Whipple 44.24 99 IAmb IAmb 19 44 19.3
comp=Z,13nm,0.8s
GGN Saint George 44.38 81 IAmb IAmb 19 44 20.8
comp=Z,12nm,0.6s
SSPA Standing Stone 44.44 95 P P 19 44 19.9 -0.7
SSPA IAmb IAmb 19 44 21.1
comp=Z,19nm,1.1s
LMN Caledonia Moun 44.45 79 P P 19 44 20.4 -0.3
LMN IAmb IAmb 19 44 21.4
comp=Z,12nm,0.8s
MIAR Mount Ida 44.61 114 P P 19 44 22.5 +0.5
MIAR IAmb IAmb 19 44 23.1
comp=Z,8.8nm,0.7s
MIAR Mount Ida 44.61 114 P P 19 44 22.5 +0.5
MIAR pmax pmax
comp=Z,9.0nm,0.7s
Q54A Coxs Mills 44.88 98 IAmb IAmb 19 44 27.6
comp=Z,9.8nm,0.6s
WVT Waverly 45.05 107 P P 19 44 25.5 0.0
WVT Waverly 45.05 107 P P 19 44 25.5 0.0
WVT pmax pmax
comp=Z,24nm,0.7s
T50A Nancy 45.26 104 IAmb IAmb 19 44 28.1
comp=Z,12nm,1.3s
U49A Red Boiling Sp 45.40 105 IAmb IAmb 19 44 29.8
comp=Z,8.8nm,0.6s
P57A Homestead Farm 45.42 95 IAmb IAmb 19 44 29.0
comp=Z,14nm,1.1s
MVL Millersville 45.55 93 IAmb IAmb 19 44 35.3
comp=Z,16nm,1.0s
V48A Smith Brothers 45.75 107 IAmb IAmb 19 44 32.1
comp=Z,16nm,1.0s
BRDY Brady 45.95 122 IAmb IAmb 19 44 38.5
comp=Z,7.4nm,0.9s
GBN Guysborough 45.97 76 P P 19 44 26.8 -5.9
GBN IAmb IAmb 19 44 33.9
comp=Z,12nm,0.7s
PLAL Pickwick Lake 46.01 108 IAmb IAmb 19 44 34.0
comp=Z,8.5nm,0.8s
TZTN Tazewell 46.13 103 IAmb IAmb 19 44 34.9
comp=Z,12nm,0.7s
TX31 Lajitas Ar. Si 46.44 128 P P 19 44 38.2 +1.5
TX31 IAmb IAmb 19 44 43.5
comp=Z,7.2nm,0.9s
TXAR Lajitas Array 46.44 128 P P 19 44 38.2 +1.5
TXAR Lajitas Array 46.44 128 P P 19 44 37.8 +1.1
comp=Z,1.9nm,0.6s,baz=344,slow=6.5,SNR=12
TXAR LR LR 20 05 17.2
comp=Z,72nm,21.0s,baz=328,slow=38
comp=Z,1.9nm,0.6s
JCT Junction City 46.47 123 IAmb IAmb 19 44 41.8
comp=Z,12nm,0.8s
W50A Signal Mountai 46.75 105 IAmb IAmb 19 44 43.7
comp=Z,8.4nm,0.7s
X48A Hartselle 46.84 107 IAmb IAmb 19 44 40.6
comp=Z,10.0nm,0.7s
TKL Tuckaleechee C 46.86 103 P P 19 44 39.7 -0.1
comp=Z,3.1nm,0.5s,baz=62,slow=2.6,SNR=5.5
TKL LR LR 20 05 38.7
comp=Z,103nm,19.1s,baz=347,slow=38
comp=Z,3.1nm,0.5s
V53A Saluda 47.18 102 IAmb IAmb 19 44 43.1
comp=Z,7.4nm,0.7s
USA0B Ussuriysk Arra 47.28 283 P P 19 44 41.5 -1.4
USA0B IAmb IAmb 19 44 47.4
comp=Z,8.5nm,0.8s
USA0B Ussuriysk Arra 47.28 283 P P 19 44 41.5 -1.4
USA0B pmax pmax
comp=Z,8.0nm,0.8s
USRK Ussuriysk Ar. 47.28 283 P P 19 44 42.4 -0.5
comp=Z,10.0nm,0.8s,baz=38,slow=6.7,SNR=11
comp=Z,10.0nm,0.8s
BNX BinXian 47.48 288 ⇑P P 19 44 42.9 -1.6
BNX pmax pmax
comp=Z,4.0nm,1.6s
T59A Double "B" Far 47.83 96 IAmb IAmb 19 44 53.1
comp=Z,11nm,0.8s
NB2 NORSAR Subarra 48.58 16 P P 19 44 51.4 -1.5
comp=Z,11nm,2.0s,baz=348,slow=7.9
NOA NORSAR Array B 48.58 16 P P 19 44 51.1 -1.8
comp=Z,1.1nm,0.9s,baz=347,slow=7.5,SNR=3.3
comp=Z,1.1nm,0.9s
HODGE Hodges 48.67 103 IAmb IAmb 19 44 54.4
comp=Z,17nm,1.3s
JSC Jenkinsville 48.97 102 IAmb IAmb 19 44 59.8
comp=Z,9.9nm,0.6s
GOGA Godfrey 49.00 104 IAmb IAmb 19 45 00.7

comp=Z,8.9nm,0.7s
**FINES FINESS Array B** 49.16 6 P P 19 44 56.2 -1.0
comp=Z,3.9nm,0.6s,baz=4.0,slow=8.0,SNR=35
comp=Z,3.9nm,0.6s
**FINES FINESS Array B** 49.16 6*ce*P P 19 44 56.7 -0.5
FINES pmax pmax
comp=Z,4.0nm,0.6s
**HFS Hagfors** 49.70 14 P P 19 45 00.2 -1.2
comp=Z,6.6nm,0.6s,baz=3.4,slow=5.0,SNR=31
comp=Z,6.6nm,0.6s
**LPIG La Paz** 49.72 138 LR LR 20 07 10.3
comp=Z,104nm,20.1s,baz=18,slow=37
**CN2 Changchun** 49.84 289 P P 19 45 01.8 -0.9
CN2 pmax pmax
comp=Z,10.0nm,0.5s
**MOY Mondy** 50.13 312 *e*P P 19 45 06.2 +1.2
MOY pmax pmax
comp=Z,14nm,2.0s
**ZALV Zalesovo Beam** 51.76 325 P P 19 45 15.8 -1.1
**ZALV Zalesovo Beam** 51.76 325 P P 19 45 16.2 -0.8
comp=Z,2.5nm,0.7s,baz=7.9,slow=7.6,SNR=11
comp=Z,2.5nm,0.7s
**MJB9 Matsu-Tunnel** 51.92 273 IAmb IAmb 19 45 24.2
comp=Z,13nm,0.9s
**MAJO Matsushiro** 51.92 273 P P 19 45 16.0 -2.4
MAJO IAmb IAmb 19 45 24.2
comp=Z,13nm,0.8s
**MAJO Matsushiro** 51.92 273⇓*i*P P 19 45 18.4 0.0
MAJO pmax pmax
comp=Z,6.0nm,0.8s
**MJAR Matsushiro Arr** 51.92 273 P P 19 45 18.8 +0.4
comp=Z,6.5nm,0.8s,baz=10,slow=7.9,SNR=20
MJAR PcP **PcP** 19 46 31.8 +1.0
comp=Z,1.2nm,0.7s,baz=22,slow=3.3,SNR=1.9
comp=Z,6.5nm,0.8s
**ULN Ulaanbaatar** 51.93 306*ce*P P 19 45 18.0 -0.6
ULN pmax pmax
comp=Z,2.0nm,1.2s
**SONM Songino Array** 52.15 306 P P 19 45 20.6 +0.5
comp=Z,2.7nm,0.8s,baz=28,slow=6.3,SNR=12
comp=Z,2.7nm,0.8s
**EKA Eskdalemuir Ar** 52.32 27 P P 19 45 20.5 -0.6
comp=Z,12nm,0.8s,baz=331,slow=6.9,SNR=31
comp=Z,12nm,0.8s
**ESK Eskdalemuir** 52.33 27 P P 19 45 21.2 0.0
**ESK Eskdalemuir** 52.33 27 P P 19 45 21.2 0.0
ESK pmax pmax
comp=Z,39nm,1.4s
**SVE Sverdlovsk** 52.66 343 *e*P P 19 45 24.5 +0.8
SVE pmax pmax
comp=Z,9.0nm,0.9s
**JGF Kuroka** 53.06 273 IAmb IAmb 19 45 31.2
comp=Z,16nm,0.8s
**ARU Arti** 53.26 344*d i*P P 19 45 28.3 +0.2
ARU 19 46 38.2
ARU S **S** 19 53 00.2 +1.8
ARU SS **SS** 19 56 35.2 -1.9
ARU pmax pmax
comp=Z,8.0nm,1.7s
**KSRS Korea Array** 54.68 283 P P 19 45 39.1 +0.5
comp=Z,4.2nm,0.8s,baz=16,slow=6.6,SNR=15
comp=Z,4.2nm,0.8s
**MOS Moscow** 55.05 359 *e*P P 19 45 37.0 -4.1
**BRVK Borovoye** 55.15 335*ce*P P 19 45 41.7 -0.1
BRVK pmax pmax
comp=Z,2.0nm,0.8s
**BVAR Borovoye Array** 55.16 335 P P 19 45 42.1 +0.1
comp=Z,3.1nm,0.8s,baz=10,slow=5.5,SNR=9.8
comp=Z,3.1nm,0.8s
**DGZ Jazzator, Alta** 55.21 322⇓*i*P P 19 45 42.6 0.0
DGZ pmax pmax
comp=Z,6.0nm,1.6s
**TJN Taejon** 55.84 283 *e*P P 19 45 47.3 +0.2
**KURK Kurchatov** 56.02 328*d i*P P 19 45 47.7 -0.5
KURK pmax pmax
comp=Z,10.0nm,0.9s
**KURBB Kurchatov Arra** 56.13 328 P P 19 45 48.5 -0.4
comp=Z,7.0nm,0.9s,baz=12,slow=7.1,SNR=44
comp=Z,7.0nm,0.9s
**MNK Minsk** 56.17 5 *i*P P 19 45 52.7 +3.5
comp=E,6.0nm,0.8s
MNK *i*P P 19 45 52.7 +3.5
comp=N,8.0nm,0.8s
MNK *i*P P 19 45 52.7 +3.5
comp=Z,14nm,0.8s,baz=357
MNK *i*PP PP 19 47 57.9 +4.2
MNK *i*PPP PPP 19 49 12.0
MNK *i*S S 19 53 47.7 +10
MNK *i*SS **SS** 19 57 31.0 +8.1
MNK *i*LQ LQ 20 06 12.8
MNK *i*LR LR 20 09 08.1
MNK *i*LRM MLR 20 12 21.0
comp=N,35nm,16.4s
MNK *i*LRM MLR 20 12 29.7
comp=Z,50nm,14.8s
MNK *i*LRM MLR 20 12 34.1
comp=E,47nm,17.3s
**MNK Minsk** 56.17 5 *i*P P 19 45 52.6 +3.5
MNK *i* 19 47 57.9
MNK *i*PPP PPP 19 49 11.9
MNK *i*S S 19 53 47.7 +10
MNK pmax pmax
comp=E,6.0nm,0.8s
MNK pmax pmax
comp=Z,14nm,0.8s
MNK pmax pmax
comp=N,8.0nm,0.8s
MNK MLR MLR
comp=N,35nm,16.0s
MNK MLR MLR
comp=Z,50nm,15.0s
MNK MLR MLR
comp=E,47nm,17.0s
**HHC Hu-ho-hao-te** 56.97 299 *e*P P 19 45 54.3 -0.9
HHC pmax pmax
comp=Z,12nm,0.5s
HHC pmax pmax
comp=Z,70nm,5.7s
**JNU Nakatsue** 57.57 278 P P 19 45 58.9 -0.6
comp=Z,4.7nm,0.8s,baz=30,slow=8.1,SNR=2.7
comp=Z,4.7nm,0.8s
**BELG Belogornoye** 58.09 351 *e*P P 19 46 03.8 +1.1
BELG pmax pmax
comp=Z,3.0nm,0.8s
**BSTI Sart Tilman** 58.21 22 *d*P P 19 46 04.0 +0.4
**MEM Membach** 58.24 22 *d*P P 19 46 03.9 0.0
comp=Z,14nm,1.1s
**BTNL Ternell** 58.28 22 *d*P P 19 46 04.5 +0.3
**BCLA Clavier** 58.34 22 *d*P P 19 46 04.4 -0.1
**BGES Gesves** 58.34 22 *d*P P 19 46 04.7 +0.1
**CLL Collm** 58.36 16 *i*P P 19 46 04.4 -0.3
comp=Z,7.0nm,1.0s
CLL *i*pP pP 19 46 08.7 -0.6
**CLL Collm** 58.36 16 *i*P P 19 46 04.7 0.0
CLL pmax pmax
comp=Z,7.0nm,1.0s
**BAIF Baives** 58.54 23 *e*P P 19 46 10.7 +4.8
**RCHB Rochefort** 58.59 22 *d*P P 19 46 04.0 -2.2
**BRG Berggiesshubel** 58.88 16 *e*P P 19 46 08.7 +0.3
BRG Amp 19 46 14.6
comp=Z,3.6nm,0.9s
**MK31 Makanchi Array** 59.06 324⇑*i*P P 19 46 08.8 -0.9
**MKAR Makanchi Array** 59.06 324 P P 19 46 09.0 -0.7
**MKAR Makanchi Array** 59.06 324 P P 19 46 08.4 -1.2
comp=Z,1.7nm,0.6s,baz=41,slow=6.2,SNR=19
comp=Z,1.7nm,0.6s
**MKAR Makanchi Array** 59.06 324*ce*P P 19 46 08.8 -0.9
MKAR pmax pmax
comp=Z,2.0nm,0.6s
**HSKC Hora Svate Kat** 59.10 16 *e*P P 19 46 10.4 +0.5
**MAKZ Makanchi** 59.11 325 P P 19 46 09.1 -0.9
MAKZ IAmb IAmb 19 46 15.7
comp=Z,5.7nm,0.8s
**MAKZ Makanchi** 59.11 325 P P 19 46 09.1 -0.9
MAKZ pmax pmax
comp=Z,6.0nm,0.8s
**HNS HongShan** 59.13 294 ⇑P P 19 46 12.5 +2.3
HNS pmax pmax
comp=Z,8.0nm,1.0s
**WLF Walferdange** 59.19 22 *d*P P 19 46 11.1 +0.6
**VSR Storozhevoye** 59.56 357 *e*P P 19 46 10.8 -2.2
VSR pmax pmax
comp=Z,9.0nm,0.6s
**DPC Dobruska-Polom** 59.62 14 *e*P P 19 46 14.2 +0.7
**DPC Dobruska-Polom** 59.62 14 *e*P P 19 46 14.2 +0.7
**VORD Divnogorie** 59.81 357 *e*P P 19 46 14.8 +0.1
VORD pmax pmax
comp=Z,8.0nm,1.0s
**AKASG Malin Array Be** 60.01 5 P P 19 46 15.3 -0.8
comp=Z,12nm,0.7s,baz=357,slow=6.8,SNR=20
comp=Z,12nm,0.7s
**AKASG Malin Array Be** 60.01 5*ce*P P 19 46 17.7 +1.6
AKASG pmax pmax
comp=Z,12nm,0.7s
**AKBB Malin Array Si** 60.01 5⇑*i*P P 19 46 15.7 -0.4
AKBB pmax pmax
comp=Z,8.0nm,0.8s
**KIEV Kiev** 60.02 5 P P 19 46 15.5 -0.6
**KIEV Kiev** 60.02 5 ⇑P P 19 46 15.9 -0.3
**KIEV Kiev** 60.02 5 P P 19 46 15.5 -0.6
KIEV pmax pmax
comp=Z,11nm,0.8s
**ABKAR Akbulak array** 60.20 342 IAmb IAmb 19 46 47.2
comp=Z,9.4nm,1.2s
**CLF Chambon-Foret** 60.24 25 P P 19 46 18.0 +0.2
**MORC Moravsky Berou** 60.29 13 *e*P P 19 46 17.3 -0.8
**ZVC Zvikov** 60.33 16 *e*P P 19 46 19.0 +0.7
**CMIG Matias Romero** 60.53 123 LR LR 20 16 42.6
comp=Z,64nm,18.2s,baz=323,slow=40
**KHC Kasperske Hory** 60.57 16 IAmb IAmb 19 46 27.1
comp=Z,9.4nm,1.4s
**KHC Kasperske Hory** 60.57 16 *e*P P 19 46 23.4 +3.4
KHC *ex* x 19 46 27.2
**KHC Kasperske Hory** 60.57 16*ce*P P 19 46 17.6 -2.4
KHC pmax pmax
comp=Z,11nm,1.3s
**VRAC Vranov** 60.67 14 *e*P P 19 46 20.2 -0.5
**VRAC Vranov** 60.67 14 ⇓P P 19 46 24.1 +3.4
**VRAC Vranov** 60.67 14 ⇓P P 19 46 24.1 +3.4
**WMQ Urumqi** 60.71 319 *e*P P 19 46 21.5 +0.4
WMQ pP pP 19 46 25.6 -0.2
WMQ pmax pmax
comp=Z,8.0nm,0.9s
WMQ LR LR
comp=N,540nm,10.9s
WMQ LR LR
comp=E,730nm,16.7s
WMQ LR LR
comp=Z,340nm,14.7s
**GERES GERESS Array B** 60.87 16 P P 19 46 21.7 -0.4
comp=Z,1.6nm,0.8s,baz=356,slow=6.3,SNR=4.0
comp=Z,1.6nm,0.8s
**HINF Hinteralfeld** 61.09 22 *e*P P 19 46 28.6 +5.0
**LOR Lormes** 61.22 24 *e*P P 19 46 24.2 -0.2
**KOLS Kolonicke sedl** 61.47 10 *e*P P 19 46 29.8 +3.7
KOLS pmax pmax
comp=Z,3.0nm,0.7s
**KOLS Kolonicke sedl** 61.47 10 *e*P P 19 46 29.8 +3.7
**AVF Avril sur Loir** 61.61 25 *e*P P 19 46 26.8 -0.3
**VYHS Vyhne** 61.67 13 *e*P P 19 46 27.4 0.0
VYHS pmax pmax
comp=Z,8.0nm,1.5s
**VYHS Vyhne** 61.67 13 *e*P P 19 46 27.4 0.0
**GTA Gaotai** 61.76 308 *e*P P 19 46 28.6 +0.3
GTA pP sP 19 46 33.9 -0.9
GTA pmax pmax
comp=Z,6.0nm,0.9s
**MOA Molln** 61.91 16 *ep*P P 19 46 30.4 +1.3
comp=Z,0.4nm,0.2s
**CONA Conrad Observa** 61.98 15 *e*P P 19 46 28.1 -1.5
comp=Z,1.6nm,0.5s
**DAVA Damuels** 61.99 20 *ep*P P 19 46 30.5 +0.7
comp=Z,0.6nm,0.3s
**MOTA Moosalm** 62.07 19 *i*pP P 19 46 31.4 +1.1
comp=Z,1.0nm,0.2s
**WATA Walderalm** 62.13 18 *i*pP P 19 46 31.5 +0.8
comp=Z,1.3nm,0.1s
**RONA Rosalia, Austr** 62.24 15 *i*pP P 19 46 32.2 +0.8
comp=Z,4.3nm,0.8s
**PSZ Piszkesteto** 62.32 12 ⇓P P 19 46 33.3 +1.4
**PSZ Piszkesteto** 62.32 12 ⇓P P 19 46 33.3 +1.4
**SORM Soroca** 62.55 5 ⇑P P 19 46 32.8 -0.5
**SORM Soroca** 62.55 5 ⇑P P 19 46 32.8 -0.5
**KBA Koelnbreinsper** 62.58 17 *i*pP P 19 46 34.9 +1.2
comp=Z,4.4nm,0.7s
**NJ2 Nanjing** 62.66 288 *e*P P 19 46 32.5 -1.8
NJ2 pmax pmax
comp=Z,9.0nm,0.7s
**BUR08 Bucovina Ar. S** 62.91 8 P P 19 46 36.1 +0.2
**BURAR Bucovina Array** 62.94 8 P P 19 46 36.1 0.0
BURAR IAmb IAmb 19 46 40.8
comp=Z,4.5nm,0.7s
**BURAR Bucovina Array** 62.94 8 ⇑P P 19 46 36.3 +0.2
**BURAR Bucovina Array** 62.94 8 ⇑P P 19 46 36.3 +0.2
**MYKA Terra Mystica** 63.05 17 *ep*P P 19 46 37.0 +0.2
comp=Z,1.2nm,0.4s
**SOKA Soboth** 63.14 16 *ep*P P 19 46 38.1 +0.7
comp=Z,0.6nm,0.5s
**PRED Cave del Predi** 63.23 17 IAmb IAmb 19 46 49.6
comp=Z,5.2nm,0.7s
**OBKA Obir** 63.26 16 *ep*P P 19 46 38.9 +0.7
comp=Z,9.5nm,0.8s
**LPL La Plagne** 63.34 22 *e*P P 19 46 39.5 +0.6
**LPG La Plagne** 63.36 22 *e*P P 19 46 40.4 +1.3
**MARR Marisel-Cluj** 63.77 10 ⇓P P 19 46 39.6 -1.9
**MILM Milestii Mici** 63.78 5 ⇓P P 19 46 41.4 -0.1
**MILM Milestii Mici** 63.78 5 ⇓P P 19 46 41.4 -0.1
**ORIF Oris-en-Rattie** 63.81 23 *e*P P 19 46 41.9 +0.1
**BOSR Bodos** 64.50 8 ⇑P P 19 46 47.7 +1.4
**AAK Ala-Archa** 64.57 329⇑*i*P P 19 46 47.7 +0.8
AAK pmax pmax
comp=Z,4.0nm,0.9s
**SURR Surduc** 64.62 10 ⇓P P 19 46 47.1 0.0
**BZS Buzias** 64.73 11 ⇓P P 19 46 47.6 -0.1
**BZS Buzias** 64.73 11 ⇓P P 19 46 47.6 -0.1
**COVR Voineasa-Covas** 64.75 7 ⇓P P 19 46 50.3 +2.3
**VRI Vrincioaia** 64.76 7 ⇓P P 19 46 48.9 +0.9
**VRI Vrincioaia** 64.76 7 ⇓P P 19 46 48.9 +0.9
**PLOR Plostina** 64.77 7 ⇓P P 19 46 48.0 0.0
**PLOR Plostina** 64.77 7 ⇓P P 19 46 48.0 0.0
**KKAR Karatay Array** 64.80 332 P P 19 46 48.2 -0.1
**KKAR Karatay Array** 64.80 332 IAmb IAmb 19 46 49.7
comp=Z,3.5nm,0.8s
**KKAR Karatay Array** 64.80 332 P P 19 46 48.2 -0.1
**GZR Gura Zlata** 65.02 10 ⇑P P 19 46 49.3 -0.5
**GZR Gura Zlata** 65.02 10 ⇑P P 19 46 49.3 -0.5
**LOT Lotru** 65.03 9 ⇑P P 19 46 51.8 +1.9
**MLR Muntele Rosu** 65.09 7 ⇓P P 19 46 49.9 -0.4
**MLR Muntele Rosu** 65.09 7 ⇓P P 19 46 49.9 -0.4
**CFR Carcaliu** 65.50 6 ⇑P P 19 46 54.7 +2.0
**CFR Carcaliu** 65.50 6 ⇑P P 19 46 54.7 +2.0
**MDVR Moldovita** 65.57 11 ⇓P P 19 46 48.9 -4.3
**HARR Harsova** 65.98 6 ⇓P P 19 46 55.8 0.0
**HARR Harsova** 65.98 6 ⇓P P 19 46 55.8 0.0
**ICOR Ion Corvin** 66.54 6 ⇑P P 19 47 01.4 +2.0
**BOVS Bovan** 66.71 11 ⇓P P 19 46 59.6 -0.9
**KIV Kislovodsk** 66.73 354 ⇓P P 19 47 06.1 +5.3
**KIV Kislovodsk** 66.73 354 *e*P P 19 47 01.4 +0.6
KIV pmax pmax
comp=Z,9.0nm,1.1s
**SHA1 Shidzhatmaz** 66.95 354⇑*i*P P 19 47 03.2 +0.8
**KBZ Khabaz** 66.95 354 P P 19 47 02.1 +0.1
comp=Z,3.0nm,0.8s,baz=335,slow=1.2,SNR=6.1
comp=Z,3.0nm,0.8s
**KBZ Khabaz** 66.95 354*ce*P P 19 47 04.0 +2.0
KBZ pmax pmax
comp=Z,4.0nm,1.0s
**KSH Kashi** 67.31 327 P P 19 47 07.4 +2.8
KSH sP sP 19 47 13.4 +2.3
KSH pmax pmax
comp=Z,7.0nm,1.0s
**ESDC Sonseca Array** 67.31 32 P P 19 47 04.8 +0.2
comp=Z,2.3nm,0.6s,baz=344,slow=7.3,SNR=20
comp=Z,2.3nm,0.6s
**PDG Podgorica** 67.73 13 IAmb IAmb 19 47 16.5
comp=Z,5.8nm,0.8s
**CHGR Chuyangaron** 69.36 332 P P 19 47 18.1 +0.8
**CHGR Chuyangaron** 69.36 332 P P 19 47 18.2 +0.8
CHGR pmax pmax
comp=Z,37nm,0.8s
**SIMJ Simiganj** 69.38 333 P P 19 47 16.9 -0.6
SIMJ IAmb IAmb 19 47 24.6
comp=Z,6.3nm,0.7s
**RDO Rodhopi** 69.41 8 IAmb IAmb 19 47 29.0
comp=Z,7.6nm,1.0s
**FNA Florina** 69.52 11 IAmb IAmb 19 47 29.3
comp=Z,5.0nm,0.8s
**BR131 Keskin Array S** 71.07 2 *e*P P 19 47 27.4 -0.5
**BRTR Keskin Array B** 71.07 2 P P 19 47 27.9 0.0
comp=Z,1.0nm,0.5s,baz=343,slow=2.6,SNR=4.0
comp=Z,1.0nm,0.5s
**BRTR Keskin Array B** 71.07 2*ce*P P 19 47 28.3 +0.4
BRTR pmax pmax
comp=Z,1.0nm,0.5s
**PZH PanZhiHua** 73.27 301 P P 19 47 40.5 -0.7
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,210nm,5.8s
**KEST Kesra** 73.31 22 P P 19 47 42.1 +0.8
KEST IAmb IAmb 19 47 42.8
comp=Z,7.3nm,0.9s
**KEST Kesra** 73.31 22 P P 19 47 41.4 +0.1
comp=Z,6.7nm,0.9s,baz=342,slow=5.2,SNR=8.6
comp=Z,6.7nm,0.9s
**SDV Santo Domingo** 76.06 102 LR LR 20 23 53.7
comp=Z,51nm,18.2s,baz=26,slow=38
**MMAI Mount Meron Ar** 77.78 0 P P 19 48 07.2 +0.3
comp=Z,0.3nm,0.4s,baz=25,slow=14,SNR=1.5
comp=Z,0.3nm,0.4s
**ROSC El Rosal** 78.58 107 LR LR 20 24 39.1
comp=Z,99nm,18.0s,baz=242,slow=37
**CMAR Chiang Mai Arr** 81.69 301 P P 19 48 28.6 +0.3
comp=Z,5.1nm,0.9s,baz=1.2,slow=6.2,SNR=13
CMAR LR LR 20 30 08.1
comp=Z,98nm,18.8s,baz=5.0,slow=40
comp=Z,5.1nm,0.9s
**MDP Montagnes des** 85.88 87 LR LR 20 25 39.0
comp=Z,51nm,20.8s,baz=311,slow=35
**ATAH Atahualpa** 88.48 115 LR LR 20 31 11.2
comp=Z,55nm,19.1s,baz=346,slow=37
**NNA Nana** 93.53 115 LR LR 20 35 16.7
comp=Z,25nm,18.1s,baz=358,slow=38
**TORD Torodi Ar. Bea** 94.19 33 P P 19 49 27.4 -1.4
comp=Z,0.3nm,0.6s,baz=356,slow=5.0,SNR=2.8
comp=Z,0.3nm,0.6s
**PALK Pallekele** 97.40 315 LR LR 20 37 35.3
comp=Z,76nm,21.9s,baz=153,slow=38
**DZM Mont Dzumac** 97.82 225 LR LR 20 30 16.9
comp=Z,80nm,18.7s,baz=4.0,slow=33
**VNDA Vanda** 150.26 201 PKPbc PKPbc 19 55 58.5 -0.4
comp=Z,0.5nm,0.9s,baz=0.4,slow=4.6,SNR=2.6
**QSPA South Pole Qui** 159.36 180 PKPab PKPab 19 56 45.3 +0.8
comp=Z,2.3nm,0.9s,baz=68,slow=0.6,SNR=9.1
**VNA3 Neumayer Olymp** 164.97 118 ⇑PKPab PKPab 19 57 07.7 -1.3
comp=Z,1.0nm,0.7s
**VNA1 Neumayer--Stat** 165.25 115 ⇑PKPab PKPab 19 57 09.5 -0.6
comp=Z,2.3nm,1.0s
**VNA2 Neumayer--Watz** 165.61 116 ⇑PKPab PKPab 19 57 11.1 -0.6
comp=Z,0.6nm,0.6s,baz=292,slow=5.2
**SNAA Sanae** 167.20 117 ⇑PKPab PKPab 19 57 18.3 -0.5
comp=Z,31nm,1.4s
**SNAA Sanae** 167.20 117 PKPab PKPab 19 57 17.9 -0.9
comp=Z,1.1nm,1.1s,baz=342,slow=3.8,SNR=2.8
**TROLL Troll, Antarti** 168.91 118 ⇑PKPab PKPab 19 57 25.8 -0.7
comp=Z,82nm,0.7s

*IDC **13** 19:48:11.6±0.7,36.09N×137.26E,h243km±7km,mb3.0/5, mbtmp3.6/7,Error ellipse: s-maj=22.1km s-min=11.6km az=67.0*
*JMA **13** 19:48:11.6±0.2,36.1N±0.8×137.4E±0.9,h246km±1km, MV2.9/34,NORTHERN GIFU PREF*
**ISC 13 19:48:11.7±0.8,36.16N±0.06×137.32E±0.06,h244km±6km, n24,σ0s72/34,mb3.1/5,Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JGN** | **Niukaw** | **0.07** | **355** | P | **Pn** | **19 48 43.4** | **+0.3** |
| JGN | | | | S | **S** | **19 49 07.7** | **-0.3** |
| **JYTA** | **Yamagatataniai** | **0.74** | **220** | *i* P | **Pn** | **19 48 44.7** | **-0.1** |
| JYTA | | | | *e*S | **S** | **19 49 09.8** | **-1.0** |
| **JKG** | **Kaga** | **0.81** | **279** | P | **Pn** | **19 48 45.7** | **+0.7** |
| JKG | | | | *e*S | **S** | **19 49 12.0** | **+0.8** |
| **MAT** | **Matsushiro** | **0.81** | **61** | *i* P | **Pn** | **19 48 45.5** | **+0.4** |
| MAT | | | | *e*S | **S** | **19 49 11.5** | **+0.2** |
| **MJAR** | **Matsushiro Arr** 125nm,0.6s,baz=239,slow=6.3,SNR=759 | **0.81** | **62** | P | **Pn** | **19 48 45.6** | **+0.6** |
| MJAR | 8.8nm,0.8s,baz=246,slow=9.2,SNR=1.5 | | | S | **S** | **19 49 11.8** | **+0.5** |
| **JYN** | **Shimob** | **1.19** | **123** | P | **Pn** | **19 48 46.8** | **-0.5** |
| **JRY** | **Ryogami san** | **1.29** | **96** | P | **Pn** | **19 48 47.8** | **-0.1** |
| **JSZ** | **Suzu** | **1.29** | **1** | P | **Pn** | **19 48 48.2** | **+0.4** |
| JSZ | | | | *e*S | **S** | **19 49 16.0** | **-0.3** |
| **JOD2** | **Odawara 2** | **1.69** | **121** | *i* P | **Pn** | **19 48 51.2** | **+0.2** |
| JOD2 | | | | *e*S | **S** | **19 49 22.8** | **+0.9** |
| **JAG** | **Ashikaga** | **1.74** | **81** | *i* P | **Pn** | **19 48 50.8** | **-0.6** |
| **JWT** | **Wachi** | **1.79** | **241** | *i* P | **Pn** | **19 48 51.9** | **+0.2** |
| JWT | | | | *e*S | **S** | **19 49 22.4** | **-0.9** |
| **JIE** | **Ise** | **1.83** | **196** | P | **Pn** | **19 48 52.6** | **+0.4** |
| **JSD** | **Sado** | **2.02** | **22** | *i* P | **Pn** | **19 48 54.3** | **+0.5** |
| JSD | | | | *e*S | **S** | **19 49 26.9** | **-0.1** |
| **JNS** | **Sasagawa** | **2.30** | **43** | P | **Pn** | **19 48 56.9** | **+0.4** |
| **JWY** | **Kouya** | **2.40** | **217** | P | **Pn** | **19 48 58.0** | **+0.4** |
| **JTNC** | **Tanabenakahech** | **2.72** | **212** | S | **S** | **19 49 39.5** | **-0.1** |
| **JHJ** | **Hachijo jima 2** 142nm,1.0s,baz=331,slow=17,SNR=2.9 | **3.65** | **145** | P | **Pn** | **19 49 11.7** | **+0.6** |
| JHJ | 33nm,0.2s,baz=337,slow=18,SNR=9.5 | | | S | **S** | **19 49 58.6** | **+0.5** |
| **JNU** | **Nakatsue** 4.4nm,0.9s,baz=20,slow=15,SNR=2.0 | **6.11** | **242** | P | **Pn** | **19 49 41.7** | **+0.6** |
| **ASAJ** | **Asahikawa** 0.7nm,0.3s,baz=225,slow=20,SNR=1.3 | **8.91** | **25** | P | **Pn** | **19 50 14.1** | **-2.3** |
| ASAJ | 4.7nm,0.7s,baz=127,slow=20,SNR=5.9 | | | S | S | 19 51 49.1 | -8.0 |
| **MKAR** | **Makanchi Array** 0.4nm,0.6s,baz=89,slow=9.9,SNR=4.9 0.4nm,0.6s | **41.80** | **302** | P | **P** | **19 55 37.7** | **+0.3** |
| **KURBB** | **Kurchatov Arra** 1.6nm,0.7s,baz=85,slow=7.7,SNR=15 1.6nm,0.7s | **43.95** | **308** | P | **P** | **19 55 54.3** | **-0.2** |
| **ILAR** | **Eielson Array** 0.4nm,0.8s,baz=277,slow=7.8,SNR=2.4 0.4nm,0.8s | **51.98** | **32** | P | **P** | **19 56 56.6** | **+1.0** |
| **WRA** | **Warramunga Arr** 0.7nm,0.7s,baz=357,slow=7.5,SNR=6.1 0.7nm,0.7s | **55.87** | **183** | P | **P** | **19 57 23.0** | **-1.1** |
| **ASAR** | **Alice Springs** 0.2nm,0.6s,baz=358,slow=6.5,SNR=4.4 0.2nm,0.6s | **59.59** | **184** | P | **P** | **19 57 49.2** | **-0.7** |

*BJI **13** 19:50:36.5±0.0,24.19N×102.73E,h6km,mb4.5/61, mB4.9/33,ML5.2/11,Ms5.0/76,Ms7 4.7/70*
*IDC **13** 19:50:36.5±0.5,24.30N×102.93E,h0km,mb4.4/28, mbtmp4.4/29,ML4.5/1,MS4.2/61,Error ellipse: s-maj=15.4km s-min=12.7km az=41.0*
*MOS **13** 19:50:36.2±1.0,24.19N×102.84E,h13km,mb4.9/35, MS4.2/6,Error ellipse: s-maj=9.5km s-min=5.2km az=121.3*
*GCMT **13** 19:50:38.2±0.3,24.18N±0.02×102.82E±0.01,h15km±1km, MW4.9/93,Moment Tensor Solution. s32,c34; s93,c153; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr0.23±.10; Mθθ-2.18±.09; Mφφ1.95±.08; Mrθ0.40±.18; Mrφ-1.79±.09; Mθφ-0.64±.20; Best double couple: Mo2.84200×10^16 NP1:φs113.00000°,δ81.00000°,λ167.00000°. NP2: φs206.00000°,δ77.00000°,λ9.00000°. Principal axes: T 2.8280, Plg16.0000°, Azm69.0000°; N 0.0300, Plg74.0000°, Azm260.0000°; P -2.8560, Plg3.0000°, Azm160.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **13** 19:50:38.2±1.3,24.19N±0.07×102.87E±0.02,h10km±1km, mb4.9/50 Error ellipse: s-maj=11.3km s-min=3.0km az=190.0*
**ISC 13 19:50:38.5±0.6,24.19N±0.03×102.84E±0.03,h13km±3km, h13km:pP-P,n300,σ1s80/289,mb4.7/110,MS4.3/80, 29C-16D,Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMI** | **Kunming** | **0.94** | **354** | ⇓Pg | **Pb** | **19 50 55.3** | **-1.5** |
| KMI | | | | Sg | **Sn** | **19 51 08.8** | **-2.3** |
| KMI | | | | smax | smax | | |
| | comp=N,13μm,0.9s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,19μm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **2.51** | **337** | Pn | **Pn** | **19 51 18.9** | **-0.3** |
| PZH | | | | Pg | **Pg** | **19 51 24.3** | **-2.5** |
| PZH | | | | Sg | **Sg** | **19 51 55.0** | **-4.4** |
| PZH | | | | smax | smax | | |
| | comp=N,2μm,0.9s | | | | | | |

PZH smax smax
comp=E,2μm,1.0s
**SLVN Son La 3.00 161** Pn **Pn** **19 51 24.8 -1.1**
**TNCH TengChong 4.02 283** ⇑*i*Pn **Pn** **19 51 39.0 -1.0**
TNCH Sn **Sn** **19 52 29.8 +2.7**
TNCH Sg **Sb** **19 52 40.3 +2.3**
TNCH smax smax
comp=N,13μm,1.2s
TNCH smax smax
comp=E,12μm,1.2s
**GYA Guiyang 4.13 56** ⇓Pn **Pn** **19 51 42.1 +0.6**
GYA Sn **Sn** **19 52 32.9 +3.1**
GYA smax smax
comp=N,3μm,1.0s
GYA smax smax
comp=E,2μm,1.3s
GYA LR LR
comp=N,3μm,3.8s
GYA LR LR
comp=E,3μm,3.8s
**CRAI Chiangrai 4.55 211** Pn **Pn** **19 51 46.6 -0.6**
**PHRA Phrae 6.16 204** Pn **Pn** **19 52 09.5 +0.3**
**CD2 Chengdu 6.75 7** Pn **Pn** **19 52 18.6 +1.2**
CD2 Sn **Sn** **19 53 34.3 +0.2**
CD2 LR LR
comp=N,8μm,7.3s
CD2 LR LR
comp=E,8μm,5.9s
CD2 LR LR
comp=Z,7μm,8.4s
**CM31 Chiang Mai Arr 6.76 213** **Pn** **19 52 17.8 +0.3**
**CMAR Chiang Mai Arr 6.76 213** Pn **Pn** **19 52 18.2 +0.7**
2.3nm,0.3s,baz=24,slow=13,SNR=22
CMAR Pg Pg 19 52 43.9 -4.1
5.3nm,0.3s,baz=34,slow=17,SNR=9.5
CMAR Lg Lg 19 54 10.6
baz=40,slow=19
CMAR LR LR 19 55 27.8
comp=Z,608nm,18.8s,baz=65,slow=42
5.5nm,0.5s
**GULI GuiLin 6.93 79** Pn **Pn** **19 52 20.6 +0.8**
GULI Sg **Sg** **19 54 15.4 -5.6**
GULI smax smax
comp=N,1μm,1.3s
GULI smax smax
comp=E,1μm,1.4s
**QIZ Qiongzhong 8.29 127** P **Pn** **19 52 38.6 0.0**
QIZ S **Sn** **19 54 11.5 -0.6**
QIZ LR LR
comp=N,7μm,8.0s
QIZ LR LR
comp=E,7μm,5.5s
QIZ LR LR
comp=Z,4μm,6.3s
**QIZ Qiongzhong 8.29 127** Pn **Pn** **19 52 38.3 -0.3**
**ENH Enshi 8.47 43** Pn **Pn** **19 52 41.4 +0.4**
**UBPT Khong Chiam 9.20 164** Pn **Pn** **19 52 52.0 +1.0**
**CNSH ChangSha 9.90 64** P **Pn** **19 52 59.8 -0.7**
CNSH S **Sn** **19 54 52.4 +0.9**
**XAN Xi'an 11.16 27** ⇑P **Pn** **19 53 16.9 -1.0**
XAN S **Sn** **19 55 20.6 -2.0**
XAN pmax pmax
comp=Z,51nm,0.6s
XAN pmax pmax
comp=Z,510nm,4.5s
XAN LR LR
comp=N,12μm,12.0s
XAN LR LR
comp=E,17μm,11.3s
XAN LR LR
comp=Z,8μm,13.7s
**LSA Lhasa 11.78 300** P **Pn** **19 53 27.8 +1.0**
LSA LR LR
comp=N,2μm,22.0s
LSA LR LR
comp=E,3μm,22.0s
LSA LR LR
comp=Z,1μm,15.8s
**WHN Wuhan 12.03 56** P **Pn** **19 53 31.4 +1.7**
WHN S **Sn** **19 55 42.8 -0.9**
WHN LR LR
comp=N,6μm,10.2s
WHN LR LR
comp=E,7μm,4.7s
WHN LR LR
comp=Z,9μm,8.4s
**LYN LuoYang 13.30 37** P **Pn** **19 53 44.5 -2.6**
LYN sP P 19 53 51.6 -5.2
LYN pmax pmax
comp=Z,29nm,0.7s
LYN LR LR
comp=N,5μm,7.2s
LYN LR LR
comp=E,5μm,6.9s
LYN LR LR
comp=Z,7μm,11.7s
**GOMU GeErMu 13.83 332** P **Pn** **19 53 53.1 -1.5**
GOMU S **Sn** **19 56 34.4 +6.1**
GOMU pmax pmax
comp=Z,21nm,0.9s
GOMU LR LR
comp=N,2μm,7.4s
GOMU LR LR
comp=E,2μm,9.4s
GOMU LR LR
comp=Z,1μm,8.6s
**GTA Gaotai 15.39 351** *e*P **Pn** **19 54 15.4 -0.2**
GTA pP P 19 54 19.9 -0.3
GTA S **S** **19 57 15.6 -6.6**
GTA pmax pmax
comp=Z,3.0nm,1.4s
GTA LR LR
comp=N,2μm,10.8s
GTA LR LR
comp=E,2μm,9.6s
GTA LR LR
comp=Z,2μm,11.6s
**NJ2 Nanjing 16.14 57** *e*P **Pn** **19 54 24.4 -0.8**
NJ2 pmax pmax
comp=Z,8.0nm,0.7s
NJ2 pmax pmax
comp=Z,450nm,6.2s
NJ2 LR LR
comp=N,2μm,10.9s
NJ2 LR LR
comp=E,2μm,10.4s
NJ2 LR LR
comp=Z,2μm,14.7s
**HNS HongShan 16.63 35** ⇑P **P** **19 54 33.0 -0.8**
HNS *e*S **Sn** **19 57 39.8 +3.8**
HNS SS **SnSn** **19 57 56.5 +7.2**
HNS pmax pmax
comp=Z,10.0nm,1.0s
HNS LR LR
comp=N,3μm,10.0s
HNS LR LR
comp=E,3μm,12.7s
HNS LR LR
comp=Z,4μm,13.7s
**TIA Tai'an 17.18 42** P **Pn** **19 54 38.1 -0.3**
TIA pmax pmax
comp=Z,15nm,1.5s
TIA pmax pmax
comp=Z,560nm,4.0s
TIA LR LR
comp=N,2μm,8.5s
TIA LR LR
comp=E,2μm,13.4s
TIA LR LR
comp=Z,3μm,11.4s
**BTO Baotou 17.45 19** *e*P **Pn** **19 54 41.1 -0.6**
BTO pP **pP** **19 54 45.0 -2.2**
BTO sP **sP** **19 54 48.8 -0.3**
BTO PP **PnPn** **19 54 55.3 +3.3**
BTO S **Sn** **19 57 55.3 -0.5**
BTO sS **S** **19 58 00.3 -3.8**
BTO SS **SnSn** **19 58 15.3 +5.8**
BTO pmax pmax
comp=Z,20nm,0.9s
BTO pmax pmax
comp=Z,390nm,6.2s
BTO LR LR
comp=N,10μm,10.4s
BTO LR LR
comp=E,15μm,11.8s
BTO LR LR
comp=Z,3μm,15.6s
**SSE Sheshan 17.64 63** P **Pn** **19 54 42.4 -1.7**
SSE S **Sn** **19 58 01.1 +0.6**
SSE pmax pmax
comp=Z,280nm,4.4s
SSE LR LR
comp=N,750nm,10.1s
SSE LR LR
comp=E,600nm,10.0s
**HHC Hu-ho-hao-te 18.15 22** *e*P **P** **19 54 51.3 +0.6**
HHC sP sP 19 54 56.3 -0.6
HHC PP **PnPn** **19 55 05.3 +3.6**
HHC S **S** **19 58 17.3 -1.2**
HHC SS **SnSn** **19 58 33.8 +7.0**
HHC pmax pmax
comp=Z,13nm,0.5s
HHC pmax pmax
comp=Z,120nm,4.1s
HHC LR LR
comp=N,2μm,11.1s
HHC LR LR
comp=E,2μm,8.6s
HHC LR LR
comp=Z,2μm,10.2s
**KULM Kulim 18.91 187** **P** **19 54 57.6 -1.4**
**BJI Beijing 19.39 32** P **Pn** **19 55 06.3 +1.0**
BJI S **S** **19 58 46.0 +2.8**
BJI pmax pmax
comp=Z,7.0nm,1.0s
BJI pmax pmax
comp=Z,88nm,3.9s
BJI LR LR
comp=N,630nm,19.0s
BJI LR LR
comp=E,730nm,14.8s
BJI LR LR
comp=Z,880nm,18.9s
**MLSI Meulaboh, Aceh 20.75 198** P Pn 19 55 25.2 +3.6
82nm,0.9s
**KCSI Kotacane, Aceh 21.12 194** P **P** **19 55 29.6 +6.4**
**DL2 Dalian 21.66 43** P **P** **19 55 32.4 +3.6**
DL2 pmax pmax
comp=Z,74nm,1.1s
DL2 pmax pmax
comp=Z,280nm,5.9s
DL2 LR LR
comp=N,2μm,13.9s
DL2 LR LR
comp=E,2μm,16.3s
DL2 LR LR
comp=Z,2μm,16.7s
**XLT XiLinHaoTe 22.46 26** *e*P **P** **19 55 37.4 -0.1**
XLT sP sP 19 55 45.9 +2.2
XLT PP **PnPn** **19 56 02.6 +1.9**
XLT S **S** **19 59 43.8 0.0**
XLT sS sS 19 59 49.3 -1.7
XLT pmax pmax
comp=Z,14nm,0.8s
XLT pmax pmax
comp=Z,110nm,4.5s
XLT LR LR
comp=E,4μm,12.8s
XLT LR LR
comp=Z,2μm,12.3s
**JOW Kunigami 23.09 78** LR LR 20 05 31.4
comp=Z,956nm,18.7s,baz=114,slow=39
**WMQ Urumqi 23.19 331** *e*P **P** **19 55 46.8 +1.7**
WMQ pmax pmax
comp=Z,12nm,1.7s
WMQ LR LR
comp=N,650nm,14.3s
WMQ LR LR
comp=E,820nm,10.1s
WMQ LR LR
comp=Z,420nm,21.5s
**GSI Gunungsitoli 23.31 193** P **P** **19 55 46.3 -0.1**
GSI lAmb lAmb 19 55 59.0
comp=Z,40nm,1.1s
**GSI Gunungsitoli 23.31 193** P **P** **19 55 49.6 +3.2**
**SBUM Sibu 23.43 156** P **P** **19 55 46.5 -1.1**
**KSM Kuching 23.71 161** P **P** **19 55 49.2 -1.2**
KSM lAmb lAmb 19 56 05.0
comp=Z,59nm,1.5s
**SONM Songino Array 23.77 6** **P** **19 55 50.3 -0.5**
SONM lAmb lAmb 19 55 54.9
comp=Z,22nm,1.1s
**SONM Songino Array 23.77 6** P **P** **19 55 51.1 +0.2**
comp=Z,11nm,0.9s,baz=190,slow=11,SNR=36
SONM LR LR 20 05 12.7
comp=Z,501nm,19.3s,baz=196,slow=37
comp=Z,11nm,0.9s
**SONM Songino Array 23.77 6** P **P** **19 55 50.3 -0.5**
SONM pmax pmax
comp=Z,22nm,1.1s
**ULN Ulaanbaatar 23.87 7** P **P** **19 55 53.0 +1.1**
ULN lAmb lAmb 19 55 56.0
comp=Z,77nm,1.7s
**ULN Ulaanbaatar 23.87 7***d* *i*P **P** **19 55 53.9 +2.1**
ULN pmax pmax
comp=Z,49nm,1.7s
**SNY Shenyang 24.63 39** ⇓P **P** **19 55 59.3 +0.6**
SNY S **S** **20 00 22.0 +2.3**
SNY pmax pmax
comp=Z,10.0nm,0.9s
SNY pmax pmax
comp=Z,120nm,5.7s
SNY LR LR
comp=Z,1μm,14.8s
SNY LR LR
comp=Z,1μm,15.9s
SNY LR LR
comp=Z,2μm,15.4s
**KSRS Korea Array 25.18 52** P **P** **19 56 01.7 -2.0**
comp=Z,3.2nm,0.8s,baz=244,slow=9.9,SNR=14
comp=Z,3.2nm,0.8s
**JNU Nakatsue 26.10 64** LR LR 20 05 55.2
comp=Z,360nm,20.7s,baz=236,slow=35
**ZAK Zakamensk 26.15 1** *e*P **P** **19 56 13.5 +1.0**
ZAK pmax pmax
comp=Z,26nm,1.2s
**CN2 Changchun 26.95 38** P **P** **19 56 19.6 0.0**
CN2 pP sP 19 56 23.6 -2.5
CN2 S **S** **20 00 54.3 -2.1**
CN2 pmax pmax
comp=Z,10.0nm,0.7s
CN2 LR LR
comp=Z,2μm,16.0s
CN2 LR LR
comp=Z,1μm,16.0s
CN2 LR LR
comp=Z,1μm,15.0s
**PALK Pallekele 27.07 235** LR LR 20 07 51.9
comp=Z,452nm,18.8s,baz=157,slow=38
**KSH Kashi 27.33 310** P **P** **19 56 25.8 +2.5**
KSH sP sP 19 56 32.6 +2.8
KSH S **S** **20 01 10.8 +7.9**
KSH pmax pmax
comp=Z,8.0nm,1.6s
KSH LR LR
comp=Z,1μm,17.2s
KSH LR LR
comp=Z,820nm,14.4s
KSH LR LR
comp=Z,1μm,13.1s
**MOY Mondy 27.47 358** *e*P P 19 56 14.5 -10
MOY pmax pmax
comp=Z,11nm,1.8s
**NIL Nilore 27.48 297** P **P** **19 56 23.8 -0.9**
**NIL Nilore 27.48 297** P **P** **19 56 23.8 -0.9**
NIL pmax pmax
comp=Z,44nm,1.1s
**DAV Davao City (W) 27.66 124** LR LR 20 07 58.7
comp=Z,462nm,18.5s,baz=293,slow=38
**MK31 Makanchi Array 27.93 329** P **P** **19 56 28.0 -0.4**
MK31 lAmb lAmb 19 56 31.3
comp=Z,16nm,1.1s
**MK31 Makanchi Array 27.93 329***d* *i*P **P** **19 56 28.8 +0.3**
**MKAR Makanchi Array 27.93 329** P **P** **19 56 28.4 -0.1**
comp=Z,13nm,0.9s,baz=138,slow=9.8,SNR=44
MKAR PcP **PcP** **19 59 43.7 0.0**
comp=Z,1.0nm,0.7s,baz=108,slow=8.0,SNR=3.4
MKAR LR LR 20 08 59.5
comp=Z,376nm,18.5s,baz=179,slow=40
comp=Z,13nm,0.9s
**IRK Irkutsk 28.04 2** *e*P **P** **19 56 32.1 +2.8**
IRK pmax pmax
comp=Z,42nm,3.4s
**MAKZ Makanchi 28.08 329** P **P** **19 56 28.9 -1.0**
**MAKZ Makanchi 28.08 329** P **P** **19 56 28.9 -1.0**
MAKZ pmax pmax
comp=Z,14nm,1.2s
**DGZ Jazzator, Alta 28.18 339** ⇓*i*P **P** **19 56 31.8 +1.0**
DGZ pmax pmax
comp=Z,17nm,1.0s
**NRN Naryn 28.20 314** P **P** **19 56 30.5 -0.8**
**NRN Naryn 28.20 314** P **P** **19 56 30.5 -0.8**
NRN pmax pmax
comp=Z,7.0nm,0.8s
**HIA Hailar 28.33 24** ⇓*e*P **P** **19 56 32.2 +0.2**
HIA pmax pmax
comp=Z,3.0nm,0.9s
**ARXS Arharly 28.57 321** *e*P **P** **19 56 31.8 -2.5**
**BOOM Boomskoye usch 28.77 316** P **P** **19 56 36.9 +0.7**
BOOM lAmb lAmb 19 56 39.5
comp=Z,25nm,1.5s
**BOOM Boomskoye usch 28.77 316** P **P** **19 56 36.9 +0.7**
BOOM pmax pmax
comp=Z,25nm,1.5s
**CIT Chita 28.98 14** *e*P **P** **19 56 35.9 -1.9**
**BNX BinXian 29.25 37** ⇑P **P** **19 56 39.6 -0.6**
BNX S **S** **20 01 36.8 +4.2**
BNX pmax pmax
comp=Z,4.0nm,0.8s
BNX LR LR
comp=Z,2μm,12.2s
BNX LR LR
comp=Z,980nm,11.9s
BNX LR LR
comp=Z,2μm,16.6s
**AAK Ala-Archa 29.77 315** LR LR 20 09 33.4
comp=Z,465nm,21.4s,baz=108,slow=38
**AAK Ala-Archa 29.77 315** ⇑*i*P **P** **19 56 46.0 +1.0**
AAK pmax pmax
comp=Z,13nm,1.2s
**ARSB Arslanbob 30.17 312** P **P** **19 56 48.5 0.0**
**ARSB Arslanbob 30.17 312** P **P** **19 56 48.6 0.0**
ARSB pmax pmax
comp=Z,2.0nm,1.0s
**DRK Karamyk 30.28 308** P **P** **19 56 49.7 -0.1**
DRK lAmb lAmb 19 56 55.5
comp=Z,16nm,1.1s
**DRK Karamyk 30.28 308** P **P** **19 56 49.7 -0.1**
DRK pmax pmax
comp=Z,16nm,1.1s
**USA0B Ussuriysk Arra 31.05 43** *e*P **P** **19 56 56.7 +0.6**
**USRK Ussuriysk Ar. 31.05 43** P **P** **19 56 54.3 -1.8**
**USRK Ussuriysk Ar. 31.05 43** P **P** **19 56 53.6 -2.5**
comp=Z,2.4nm,0.6s,baz=251,slow=9.4,SNR=8.8
USRK LR LR 20 10 05.6
comp=Z,890nm,18.6s,baz=235,slow=38
comp=Z,2.4nm,0.6s
**USRK Ussuriysk Ar. 31.05 43** P **P** **19 56 54.3 -1.8**
**KBL Kabul 31.08 297** P **P** **19 56 56.1 -0.7**
KBL lAmb lAmb 19 57 04.8
comp=Z,10nm,1.1s
**KBL Kabul 31.08 297** P **P** **19 56 56.1 -0.7**
KBL pmax pmax
comp=Z,11nm,1.1s
**BTK Batken 31.19 308** P **P** **19 56 57.3 -0.3**
BTK lAmb lAmb 19 57 06.1
comp=Z,14nm,1.3s
**BTK Batken 31.19 308** P **P** **19 56 57.3 -0.3**
BTK pmax pmax
comp=Z,14nm,1.3s
**GAR Garm 31.20 306** P **P** **19 56 56.9 -0.8**
GAR lAmb lAmb 19 57 02.2
comp=Z,17nm,1.0s
**CHGR Chuyangaron 31.96 305** P **P** **19 57 03.8 -0.5**
**CHGR Chuyangaron 31.96 305** P **P** **19 57 03.8 -0.5**
CHGR pmax pmax
comp=Z,40nm,1.0s
**SIMJ Simiganj 32.07 305** P **P** **19 57 04.8 -0.6**
SIMJ lAmb lAmb 19 57 14.3
comp=Z,14nm,0.9s
**HEH HeiHe 32.27 30** *e*P **P** **19 57 06.3 -0.5**
HEH pmax pmax
comp=Z,5.0nm,0.9s
**KURBB Kurchatov Arra 32.41 331** P **P** **19 57 07.7 -0.3**
comp=Z,11nm,0.9s,baz=144,slow=8.9,SNR=53
KURBB PcP **PcP** **19 59 54.3 -1.0**
comp=Z,0.8nm,0.7s,baz=145,slow=2.5,SNR=1.9
comp=Z,11nm,0.9s
**KURK Kurchatov 32.44 331** P **P** **19 57 08.0 -0.2**
**KURK Kurchatov 32.44 331***c* *i*P **P** **19 57 08.1 -0.2**
KURK pmax pmax
comp=Z,28nm,0.8s
**KK31 Karatay Array 32.59 313** P **P** **19 57 09.4 -0.3**
**KK31 Karatay Array 32.59 313** P **P** **19 57 09.4 -0.3**
KK31 pmax pmax
comp=Z,5.0nm,1.0s
**KKAR Karatay Array 32.59 313** P **P** **19 57 09.1 -0.6**
**KKAR Karatay Array 32.59 313** P **P** **19 57 09.1 -0.6**
**ZAA0 Zalesovo Array 32.65 340** P **P** **19 57 09.3 -0.8**
**ZALV Zalesovo Beam 32.65 340** P **P** **19 57 09.6 -0.5**
comp=Z,20nm,0.9s,baz=145,slow=8.3,SNR=41
ZALV LR LR 20 11 11.4
comp=Z,382nm,20.3s,baz=127,slow=38
comp=Z,20nm,0.9s
**MJAR Matsushiro Arr 32.73 60** P **P** **19 57 11.0 0.0**
comp=Z,1.6nm,1.0s,baz=253,slow=7.7,SNR=6.1
MJAR LR LR 20 11 35.4
comp=Z,298nm,19.0s,baz=219,slow=39
comp=Z,1.6nm,1.0s
**KAPI Kappang 33.38 148** LR LR 20 11 11.9
comp=Z,151nm,20.8s,baz=350,slow=37
**JHJ Hachijo jima 2 33.48 66** LR LR 20 11 09.4
comp=Z,236nm,19.9s,baz=282,slow=37
**KLR Kul'dur 33.72 35** P **P** **19 57 18.3 -1.2**
comp=Z,6.0nm,0.8s,baz=261,slow=9.4,SNR=18
KLR LR LR 20 12 56.2
comp=Z,1μm,18.4s,baz=230,slow=40
comp=Z,6.0nm,0.8s
**KLR Kul'dur 33.72 35***c* *i*P **P** **19 57 19.2 -0.3**
KLR pmax pmax
comp=Z,7.0nm,0.9s
**ZEA Zeya 34.74 26** *e*P **P** **19 57 28.8 +0.5**
ZEA pmax pmax
comp=Z,10.0nm,1.0s
**JCJ Chichijima 35.49 77** LR LR 20 13 36.7
comp=Z,138nm,18.1s,baz=110,slow=39
**BVAR Borovoye Array 37.80 328** P **P** **19 57 54.1 -0.3**
comp=Z,4.7nm,0.7s,baz=121,slow=9.6,SNR=24
BVAR PcP **PcP** **20 00 10.2 -0.8**
comp=Z,2.0nm,0.6s,baz=145,slow=5.3,SNR=4.5
BVAR LR LR 20 15 07.7
comp=Z,485nm,21.5s,baz=94,slow=39
comp=Z,4.7nm,0.7s
**BRVK Borovoye 37.87 328** P **P** **19 57 55.0 0.0**
BRVK lAmb lAmb 19 58 02.6
comp=Z,10.0nm,0.8s
**BRVK Borovoye 37.87 328***c* *i*P **P** **19 57 54.7 -0.3**
BRVK pmax pmax
comp=Z,9.0nm,0.8s
**ASAJ Asahikawa 37.97 48** P **P** **19 57 54.1 -2.0**
comp=Z,9.0nm,1.0s,baz=277,slow=14,SNR=6.1
ASAJ LR LR 20 13 15.1
comp=Z,216nm,21.0s,baz=312,slow=36
comp=Z,9.0nm,1.0s
**ASAJ Asahikawa 37.97 48** P **P** **19 57 55.6 -0.4**
ASAJ pmax pmax
comp=Z,35nm,1.1s
**JKA Kamikawa-asahi 37.98 48** **P** **19 57 55.6 -0.4**
JKA lAmb lAmb 19 58 06.9
comp=Z,35nm,1.1s
**YSS Yuzh-Sakhalins 39.05 44** *e*P P 19 58 10.4 +5.4
YSS pmax pmax
comp=Z,10.0nm,1.3s
YSS MLR MLR
comp=Z,1μm,12.0s
YSS MLR MLR
comp=N,500nm,14.0s
YSS MLR MLR
comp=E,1μm,12.0s
**WSAR Wadi Sarin 40.36 278** LR LR 20 16 26.4
comp=E,331nm,20.3s,baz=108,slow=38
**GUMO Guam 41.00 97** LR LR 20 12 22.6
comp=E,125nm,21.4s,baz=286,slow=32
**ABKAR Akbulak array 41.74 318** P **P** **19 58 27.5 +0.2**
**ABKAR Akbulak array 41.74 318** P **P** **19 58 28.1 +0.7**
**YAK Yakutsk 41.97 19** LR LR 20 17 15.1
comp=E,730nm,21.5s,baz=210,slow=38
**YAK Yakutsk 41.97 19** *e*P **P** **19 58 31.5 +2.5**

YAK e*PP sP 19 58 37.9 +2.4
YAK e 20 00 08.8
YAK e 20 00 23.6
YAK ePPP PPP 20 00 43.3
YAK eS S 20 04 51.3 +4.2
YAK e*SS sS 20 04 59.6 +4.8
YAK eSS SS 20 07 47.2 -6.6
YAK pmax pmax
comp=Z,13nm,0.8s
YAK pmax pmax
comp=E,3.0nm,1.1s
YAK pmax pmax
comp=N,3.0nm,0.9s
YAK pmax pmax
comp=Z,3.0nm,0.4s
YAK smax smax
comp=E,16nm,1.6s
YAK smax smax
comp=N,35nm,2.7s
YAK MLR MLR
comp=Z,1μm,14.0s
YAK MLR MLR
comp=N,528nm,12.0s
YAK MLR MLR
comp=E,317nm,9.0s
**UOSS Minazif 42.26 281 P 19 58 32.3 +0.4**
**DGAR Diego Garcia 43.19 227** P **P 19 58 37.5 -1.9**
**DGAR Diego Garcia 43.19 227** P **P 19 58 37.5 -1.9**
DGAR pmax pmax
comp=Z,880nm,1.5s
**AKTO Aktyubinsk 43.33 319** LR LR 20 17 02.4
comp=Z,313nm,19.5s,baz=106,slow=37
**SVE Sverdlovsk 44.58 328** *eP* **P 19 58 50.7 +0.5**
SVE pmax pmax
comp=Z,15nm,0.9s
**ARU Arti 45.41 327** P **P 19 58 56.2 -0.6**
ARU IAmb IAmb 19 59 00.3
comp=Z,15nm,0.9s
**ARU Arti 45.41 327** LR LR 20 19 23.8
comp=Z,358nm,18.1s,baz=103,slow=38
**ARU Arti 45.41 327***c i*P **P 19 58 56.5 -0.2**
ARU 20 00 35.6
ARU 20 00 42.5
ARU S **S 20 05 37.2 -0.3**
ARU SS **ScS 20 08 56.7 +3.7**
ARU pmax pmax
comp=Z,16nm,0.9s
ARU MLR MLR
comp=Z,297nm,17.0s
**ARU Arti 45.41 327** P **P 19 58 56.6 -0.2**
comp=Z,18nm,0.9s
**FITZ Fitzroy Crossi 47.55 150** P **P 19 59 13.0 -0.9**
**MBWA Marble Bar 47.98 159** P **P 19 59 17.0 -0.2**
**PSA00 Pilbara Seismi 48.40 159** P **P 19 59 20.9 +0.5**
PSA00 IAmb IAmb 19 59 25.0
comp=Z,7.8nm,0.9s
**MA2 Magadan 48.54 30** LR LR 20 20 00.8
comp=Z,181nm,20.4s,baz=253,slow=36
**MAK Makhachkala 48.86 307** *eP* P 19 59 18.9 -4.9
MAK *e* 20 01 13.9
MAK *eS* **S 20 06 20.0 -7.0**
MAK *eSS* **SS 20 09 56.1 -1.4**
MAK *eSSS* SSS 20 11 12.2
MAK pmax pmax
comp=Z,74nm,1.4s
MAK MLR MLR
comp=Z,434nm,17.0s
**PETK Petropavlovsk- 50.06 40** LR LR 20 22 24.0
comp=Z,329nm,18.4s,slow=38
**BELG Belogornoye 50.12 319** LR LR 20 21 52.2
comp=Z,193nm,21.0s,baz=103,slow=38
**BELG Belogornoye 50.12 319***d i*P **P 19 59 33.5 +0.2**
BELG pmax pmax
comp=Z,3.0nm,0.8s
**KIRV Kirov 50.80 327** LR LR 20 22 42.5
comp=Z,409nm,20.1s,baz=113,slow=38
**KIRV Kirov 50.80 327**⇑*i*P **P 19 59 39.3 +1.0**
**RAYN Ar Rayn 52.12 282** P **P 19 59 47.5 -1.4**
RAYN IAmb IAmb 19 59 51.0
comp=Z,12nm,0.8s
**RAYN Ar Rayn 52.12 282** P **P 19 59 47.5 -1.4**
RAYN pmax pmax
comp=Z,12nm,0.8s
**KBZ Khabaz 52.25 307** P **P 19 59 48.9 -0.6**
comp=Z,1.1nm,0.7s,baz=94,slow=13,SNR=2.1
KBZ LR LR 20 24 21.7
comp=Z,253nm,20.2s,baz=93,slow=39
comp=Z,1.1nm,0.7s
**KIV Kislovodsk 52.41 308** *eP* **P 19 59 50.6 -0.2**
KIV pmax pmax
comp=Z,7.0nm,1.0s
KIV MLR MLR
comp=Z,121nm,17.0s
**GURO Guroymak-BITLI 52.98 301** P **P 19 59 54.5 -0.6**
GURO IAmb IAmb 19 59 58.0
comp=Z,13nm,1.3s
**WB0 Warramunga Arr 53.42 142** P **P 19 59 58.4 0.0**
WB0 IAmb IAmb 20 00 02.4
comp=Z,10nm,1.1s
**WRA Warramunga Arr 53.53 142** P **P 19 59 59.6 +0.4**
**WRA Warramunga Arr 53.53 142** P **P 19 59 59.3 +0.2**
comp=Z,4.9nm,0.7s,baz=331,slow=8.4,SNR=30
comp=Z,4.9nm,0.7s
**WRA Warramunga Arr 53.53 142** P **P 19 59 59.6 +0.4**
WRA pmax pmax
comp=Z,2.0nm,1.9s
**WB2 Warramunga Arr 53.54 142** P **P 19 59 59.4 +0.1**
**VRH Novokhopyorsk 53.55 317** *eP* **P 19 59 57.4 -1.5**
VRH pmax pmax
comp=Z,8.0nm,1.0s
**VORD Divnogorie 55.05 316** *eP* **P 20 00 08.4 -1.5**
VORD pmax pmax
comp=Z,4.0nm,1.0s
**VSR Storozhevoye 55.15 317** *eP* **P 20 00 08.3 -2.3**
VSR pmax pmax
comp=Z,4.0nm,1.1s
**LPSR Galich'ya Gora 55.40 318** *eP* **P 20 00 08.9 -3.5**
LPSR pmax pmax
comp=Z,10.0nm,1.0s
**ANN Anapa 56.17 309** *eP* P 20 00 12.9 -5.1
ANN *eS* **S 20 08 04.4 -2.7**
ANN pmax pmax
comp=Z,11nm,0.7s
ANN MLR MLR
comp=Z,230nm,16.0s
**ASAR Alice Springs 56.31 145** P **P 20 00 20.1 +0.8**
comp=Z,3.1nm,0.9s,baz=326,slow=7.5,SNR=13
comp=Z,3.1nm,0.9s
**MOS Moscow 56.46 322** *eP* **P 20 00 18.2 -1.7**
MOS pmax pmax
comp=Z,32nm,0.7s
**OBN Obninsk 57.00 321** LR LR 20 26 42.8
comp=Z,234nm,18.2s,baz=152,slow=38
**OBN Obninsk 57.00 321**⇓*eP* **P 20 00 24.0 +0.2**
OBN *P **pP 20 00 27.0 -1.6
OBN *e* 20 00 33.6
OBN 20 01 18.0
OBN pmax pmax
comp=Z,11nm,1.3s
OBN MLR MLR
comp=Z,281nm,19.0s
**ATD Arta Tunnel 58.09 269** LR LR 20 24 37.1
comp=Z,5.1nm,19.1s,baz=264,slow=35
**NWAO Narrogin (SRO) 58.43 166** LR LR 20 28 07.0
comp=Z,243nm,18.4s,baz=283,slow=38
**MMAI Mount Meron Ar 58.98 295** P **P 20 00 38.6 +0.4**
comp=Z,2.1nm,0.8s,baz=36,slow=12,SNR=2.0
comp=Z,2.1nm,0.8s
**BRTR Keskin Array B 59.37 303** P **P 20 00 41.1 +0.2**
comp=Z,0.8nm,0.7s,baz=102,slow=12,SNR=5.9
comp=Z,0.8nm,0.7s
**SHEM Shemya Is, Ala 59.88 42** LR LR 20 27 52.4
comp=Z,68nm,20.0s,baz=301,slow=37
**EIL Elat 60.01 291** LR LR 20 32 24.0
comp=Z,106nm,19.2s,baz=68,slow=42
**AKASG Malin Array Be 61.43 316** P **P 20 00 53.2 -1.3**
comp=Z,8.0nm,0.8s,baz=76,slow=6.6,SNR=12
AKASG LR LR 20 30 07.6
comp=Z,222nm,20.5s,baz=84,slow=39
comp=Z,8.0nm,0.8s
**AKBB Malin Array Si 61.43 316** P **P 20 00 52.8 -1.8**
AKBB IAmb IAmb 20 00 56.1
comp=Z,11nm,0.9s
**AKBB Malin Array Si 61.43 316***ceP* **P 20 00 54.3 -0.2**
**KIEV Kiev 61.44 316** P **P 20 00 53.0 -1.6**
KIEV IAmb IAmb 20 00 56.1
comp=Z,10nm,0.9s
**KIEV Kiev 61.44 316** ⇓P **P 20 00 54.1 -0.4**
**KIEV Kiev 61.44 316** P **P 20 00 53.0 -1.6**
KIEV pmax pmax
comp=Z,10.0nm,0.9s
**KIEV Kiev 61.44 316** P **P 20 00 53.9 -0.7**
comp=Z,48nm,1.2s
**SORM Soroca 62.22 313** ⇓P **P 20 00 59.4 -0.5**
**SORM Soroca 62.22 313** P **P 20 00 59.3 -0.5**
**TPGR Topolog 62.56 309** P **P 20 01 02.2 0.0**
**CFR Carcaliu 62.72 310** ⇑P **P 20 01 02.7 -0.5**
**CFR Carcaliu 62.72 310** P **P 20 01 02.7 -0.5**
**FINES FINESS Array B 62.76 328** P **P 20 01 03.2 -0.1**
comp=Z,7.0nm,0.7s,baz=104,slow=8.0,SNR=16
FINES LR LR 20 29 59.9
comp=Z,287nm,20.8s,baz=94,slow=38
comp=Z,7.0nm,0.7s
**FURI Furi 62.88 268** LR LR 20 29 11.8
comp=Z,75nm,18.3s,baz=54,slow=37
**HARR Harsova 62.93 309** ⇑P **P 20 01 05.8 +1.1**
**HARR Harsova 62.93 309** P **P 20 01 05.8 +1.1**
**ICOR Ion Corvin 63.10 309** ⇑P **P 20 01 06.8 +1.0**
**ARCES ARCESS Array B 63.14 337** P **P 20 01 04.9 -0.8**
ARCES IAmb IAmb 20 01 09.7
comp=Z,16nm,1.1s
**ARCES ARCESS Array B 63.14 337** P **P 20 01 04.5 -1.2**
comp=Z,6.8nm,0.9s,baz=69,slow=6.8,SNR=8.3
ARCES LR LR 20 31 31.7
comp=Z,214nm,18.1s,baz=72,slow=39
comp=Z,6.8nm,0.9s
**ARCES ARCESS Array B 63.14 337** P **P 20 01 04.9 -0.8**
ARCES pmax pmax
comp=Z,15nm,1.2s
**VRI Vrincioaia 63.60 311** ⇓P **P 20 01 10.2 +1.0**
**VRI Vrincioaia 63.60 311** P **P 20 01 09.9 +0.7**
**PLOR5 Plostina Array 63.65 311** P **P 20 01 10.1 +0.6**
comp=Z,41nm,0.9s
**PLOR Plostina 63.66 311** ⇑P **P 20 01 10.2 +0.6**
**PLOR Plostina 63.66 311** P **P 20 01 10.2 +0.6**
**PLOR3 Plostina Array 63.66 311** P **P 20 01 09.9 +0.3**
comp=Z,26nm,1.0s
**ISR Istrita 63.84 310** ⇑P **P 20 01 12.1 +1.3**
**ISR Istrita 63.84 310** P **P 20 01 12.1 +1.3**
**COVR Voineasa-Covas 63.97 311** ⇑P **P 20 01 12.4 +0.8**
**TURR Turia 64.06 311** ⇓P **P 20 01 13.1 +0.8**
**MLR Muntele Rosu 64.20 310** P **P 20 01 13.3 0.0**
**MLR Muntele Rosu 64.20 310** P **P 20 01 13.7 +0.5**
comp=Z,9.1nm,0.8s,baz=146,slow=4.9,SNR=20
MLR LR LR 20 33 51.3
comp=Z,246nm,20.8s,baz=66,slow=40
comp=Z,9.1nm,0.8s
**MLR Muntele Rosu 64.20 310** ⇓P **P 20 01 14.1 +0.8**
**MLR Muntele Rosu 64.20 310** P **P 20 01 14.1 +0.8**
**MLR Muntele Rosu 64.20 310** P **P 20 01 13.9 +0.6**
comp=Z,15nm,0.8s
**OZUR 64.22 311** ⇑P **P 20 01 13.8 +0.5**
**BOSR Bodos 64.31 311** ⇑P **P 20 01 14.9 +1.1**
**BURAR Bucovina Array 64.38 313** P **P 20 01 14.1 -0.3**
**BURAR Bucovina Array 64.38 313** ⇑P **P 20 01 15.1 +0.8**
**SUW Suwalki 64.81 320** *eP* **P 20 01 17.6 +0.7**
**LOT Lotru 65.72 311** ⇑P **P 20 01 23.7 +0.6**
**MARR Marisel-Cluj 65.94 312** ⇑P **P 20 01 24.9 +0.4**
**KOLS Kolonicke sedl 66.11 315** *eP* **P 20 01 27.0 +1.5**
KOLS pmax pmax
comp=Z,4.0nm,0.8s
**KOLS Kolonicke sedl 66.11 315** *eP* **P 20 01 27.0 +1.5**
**GZR Gura Zlata 66.41 311** ⇑P **P 20 01 28.6 +1.1**
**GZR Gura Zlata 66.41 311** P **P 20 01 28.6 +1.1**
**HERR Herculane 66.76 310** ⇑P **P 20 01 30.6 +0.9**
**SURR Surduc 66.79 311** ⇑P **P 20 01 30.3 +0.5**
**STKA Stephens Creek 66.93 145** P **P 20 01 30.6 -0.2**
comp=Z,3.5nm,1.0s,baz=321,slow=14,SNR=2.5
STKA LR LR 20 33 40.6
comp=Z,156nm,19.1s,baz=338,slow=39
comp=Z,3.5nm,1.0s
**MDVR Moldovita 67.27 310** ⇑P **P 20 01 33.2 +0.2**
**NIE Niedzica 67.30 315** *eP* **P 20 01 35.1 +2.1**
**OJC Ojcow 67.46 316** *eP* **P 20 01 34.9 +0.8**
**OJC Ojcow 67.46 316** P **P 20 01 34.3 +0.3**
comp=Z,7.1nm,0.9s
**VYHS Vyhne 68.43 315** *eP* **P 20 01 39.8 -0.4**
VYHS pmax pmax
comp=Z,9.0nm,1.4s
**VYHS Vyhne 68.43 315** *eP* **P 20 01 39.8 -0.4**
**FRGS Fruska Gora 68.51 311** ⇑P **P 20 01 41.5 +0.7**
**FRGS Fruska Gora 68.51 311** P **P 20 01 40.4 -0.4**
comp=Z,8.5nm,0.8s
**HFS Hagfors 68.93 328** P **P 20 01 42.4 -0.6**
comp=Z,9.3nm,0.9s,baz=90,slow=3.1,SNR=16
HFS LR LR 20 34 56.9
comp=Z,204nm,18.3s,baz=83,slow=39
comp=Z,9.3nm,0.9s
**MORC Moravsky Berou 68.98 316** *eP* **P 20 01 44.7 +1.1**
**MORC Moravsky Berou 68.98 316** ⇑P **P 20 01 44.2 +0.5**
**MORC Moravsky Berou 68.98 316** P **P 20 01 44.1 +0.5**
**MORH Mrgy, Hungar 69.07 312** ⇑P **P 20 01 44.0 -0.1**
**MORH Mrgy, Hungar 69.07 312** P **P 20 01 44.2 +0.1**
comp=Z,6.3nm,1.3s
**JAVC Velka Javorina 69.10 315** *eP* **P 20 01 45.9 +1.5**
**PUK Puka 69.19 308** IAmb IAmb 20 01 45.9
comp=Z,12nm,1.2s
**KSP Ksiaz 69.52 318** *eP* **P 20 01 47.7 +0.9**
**KSP Ksiaz 69.52 318** P **P 20 01 47.6 +0.7**
comp=Z,8.4nm,1.3s
**MPLH Magyarpolny 69.58 313** P **P 20 01 47.8 +0.5**
comp=Z,27nm,1.1s
**DPC Dobruska-Polom 69.61 317** AMS AMS 20 34 40.0
comp=Z,200nm,14.9s
**DPC Dobruska-Polom 69.61 317** P **P 20 01 48.1 +0.6**
comp=Z,5.6nm,0.9s
**OSTC Ostas 69.63 317** AMS AMS 20 34 00.0
comp=Z,200nm,19.5s
**VRAC Vranov 69.69 316** *eP* **P 20 01 48.5 +0.5**
**VRAC Vranov 69.69 316** P **P 20 01 47.6 -0.3**
comp=Z,8.2nm,0.8s,baz=81,slow=7.4,SNR=10
VRAC LR LR 20 36 58.7
comp=Z,115nm,19.0s,baz=87,slow=40
comp=Z,8.2nm,0.8s
**VRAC Vranov 69.69 316** ⇓P **P 20 01 48.2 +0.2**
**VRAC Vranov 69.69 316** P **P 20 01 48.2 +0.2**
**CHVC Chvalec 69.72 317** AMS AMS 20 34 40.0
comp=Z,200nm,18.1s
**NC303 NORSAR Array S 69.81 329** P **P 20 01 48.4 -0.1**
**KRUC Moravsky 69.87 316** *eP* **P 20 01 49.7 +0.6**
**NB2 NORSAR Subarra 69.92 329** P **P 20 01 48.5 -0.7**
comp=Z,13nm,1.2s,baz=78,slow=6.5
**NB2 NORSAR Subarra 69.92 329** P **P 20 01 48.5 -0.7**
**NOA NORSAR Array B 69.92 329** P **P 20 01 48.8 -0.5**
comp=Z,4.3nm,0.8s,baz=77,slow=6.2,SNR=16
NOA LR LR 20 34 11.3
comp=Z,210nm,18.1s,baz=75,slow=37
comp=Z,4.3nm,0.8s
**NC204 NORSAR Array S 70.08 329** P **P 20 01 49.7 -0.5**
**RONA Rosalia, Austr 70.27 314** *ep*P pP 20 01 54.0 -2.5
comp=Z,4.9nm,1.1s
**CONA Conrad Observa 70.50 315** *eP* **P 20 01 53.7 +0.6**
comp=Z,7.0nm,1.1s
**PRU Pruhonice 70.81 317** AMS AMS 20 35 20.0
comp=Z,200nm,16.9s
**ARSA Arzberg 70.89 314** *i* pP pP 20 01 57.1 -3.2
comp=Z,2.8nm,1.0s
**ZVC Zvikov 71.17 316** *eP* **P 20 01 58.6 +1.6**
ZVC AMS AMS 20 35 40.0
comp=Z,200nm,15.0s
**CKRC Cesky Krumlov 71.26 316** *eP* **P 20 01 58.8 +1.2**
CKRC AMS AMS 20 33 40.0
comp=Z,200nm,29.5s
**CKRC Cesky Krumlov 71.26 316** *eP* **P 20 01 58.8 +1.2**
**HSKC Hora Svate Kat 71.34 318** *eP* P 20 02 04.2 +6.2
**SOKA Soboth 71.37 313** *eP* **P 20 01 58.8 +0.5**
comp=Z,4.5nm,1.3s
**CLL Collm 71.41 319** *i* P **P 20 01 58.8 +0.4**
comp=Z,6.0nm,1.2s
CLL *i* x x 20 02 07.3
CLL AMS AMS 20 32 00.0
comp=Z,100nm,22.0s
**CLL Collm 71.41 319** *i* P **P 20 01 58.8 +0.4**
CLL pmax pmax
comp=Z,6.0nm,1.2s
**MOA Moln 71.55 315** *i* P **P 20 01 59.8 +0.4**
comp=Z,7.1nm,1.4s
**GEC2 GERESS Array S 71.64 316** P **P 20 02 00.7 +0.7**
GEC2 IAmb IAmb 20 02 01.5
comp=Z,9.7nm,1.6s
**GERES GERESS Array B 71.64 316** P **P 20 02 00.0 0.0**
comp=Z,1.4nm,0.6s,baz=146,slow=9.7,SNR=6.1
GERES LR LR 20 38 16.6
comp=Z,113nm,19.2s,baz=80,slow=40
comp=Z,1.4nm,0.6s
**KHC Kasperske Hory 71.64 316** AMS AMS 20 36 10.0
comp=Z,200nm,24.2s
**BIOA Bad Ischl, Aus 72.00 315** *i* P **P 20 02 03.0 +0.9**
comp=Z,3.9nm,1.0s
**MYKA Terra Mystica 72.30 314** *ep*P **P 20 02 05.3 +1.3**
comp=Z,5.2nm,1.4s
**KBA Koelnbreinsper 72.37 314** *i* pP **P 20 02 06.1 +1.7**
comp=Z,8.7nm,1.2s
**LESA Schwarzleotal 72.70 315** *i* P **P 20 02 06.6 +0.2**
comp=Z,4.1nm,0.8s
**ABTA Abfaltersbach 73.01 314** *i* P **P 20 02 08.1 -0.1**
comp=Z,4.9nm,1.5s
**WTTA Wattenberg 73.43 315** *i* pP **P 20 02 12.0 +1.2**
comp=Z,6.7nm,0.8s
**WATA Walderalm 73.44 315** *i* P **P 20 02 10.2 -0.6**
comp=Z,4.1nm,0.7s
**SQTA Sankt Quirin 73.72 315** *eP* **P 20 02 12.1 -0.3**
comp=Z,5.8nm,0.7s
**MOTA Moosalm 73.75 315** *i* P **P 20 02 12.4 -0.2**
comp=Z,9.4nm,1.0s
**RETA Reutte 73.92 315** *eP* **P 20 02 14.4 +0.9**
comp=Z,2.0nm,0.6s
**MBAR Mbarara 73.95 262** LR LR 20 36 12.1
comp=Z,107nm,18.3s,baz=60,slow=37
**JMIC Jan Mayen 73.98 341** LR LR 20 37 32.3
comp=Z,93nm,21.8s,baz=66,slow=38
**FETA Feichten 74.09 315** *i* P **P 20 02 14.5 -0.2**
comp=Z,13nm,1.3s
**DAVA Damuels 74.56 315** *i* P **P 20 02 17.7 +0.3**
comp=Z,7.0nm,1.3s
**DAVOX Davos/Dischmat 74.72 315** LR LR 20 38 54.7
comp=Z,291nm,21.4s,baz=72,slow=39
**ILAR Eielson Array 76.56 24** P **P 20 02 28.5 +0.2**
comp=Z,0.2nm,0.5s,baz=296,slow=4.9,SNR=2.0
ILAR LR LR 20 41 19.6
comp=Z,195nm,18.4s,baz=282,slow=40
comp=Z,0.2nm,0.5s
**BMRD Maredsous 76.68 319** *dP* **P 20 02 31.3 +2.0**
**DZM Mont Dzumac 77.03 122** *eLR* LR 20 26 18.6
comp=Z,231nm,24.4s
**KDAK Kodiak Island 77.24 32** LR LR 20 40 28.3
comp=Z,190nm,19.2s,baz=343,slow=39
**KEST Kesra 78.95 304** P **P 20 02 42.9 +0.5**
comp=Z,1.4nm,0.7s,baz=81,slow=13,SNR=2.5
comp=Z,1.4nm,0.7s
**EKA Eskdalemuir Ar 79.02 326** P **P 20 02 41.6 -0.6**
comp=Z,1.1nm,0.6s,baz=70,slow=6.0,SNR=6.1
comp=Z,1.1nm,0.6s
**INK Inuvik 79.04 18** LR LR 20 42 13.6
comp=Z,206nm,18.9s,baz=266,slow=39
**BORG Borgarnes 81.49 339** LR LR 20 40 35.7
comp=Z,82nm,20.8s,baz=47,slow=37
**MSVF Nonsavu 84.33 112** LR LR 20 39 35.4
comp=Z,44nm,18.6s,baz=314,slow=35
**MATP Matopo 84.85 245** LR LR 20 38 56.6
comp=Z,75nm,20.1s,baz=60,slow=34
**DLBC Dease Lake 86.76 25** LR LR 20 45 09.8
comp=Z,192nm,18.2s,baz=302,slow=38
**ESDC Sonseca Array 86.83 312** P **P 20 03 23.3 +0.2**
comp=Z,0.7nm,0.9s,baz=47,slow=3.7,SNR=4.5
ESDC LR LR 20 48 07.4
comp=Z,86nm,19.3s,baz=39,slow=40
comp=Z,0.7nm,0.9s
**SFJD Kangerlussuaq 86.93 350** LR LR 20 45 04.6
comp=Z,155nm,18.7s,baz=21,slow=38
**YKA Yellowknife Ar 88.61 16** LR LR 20 49 14.7
comp=Z,84nm,18.2s,baz=308,slow=40
**LBTB Lobatse 89.33 242** LR LR 20 39 47.7
comp=Z,125nm,20.4s,baz=40,slow=33
**MDT Midelt 90.62 307** LR LR 20 49 50.0
comp=Z,48nm,19.1s,baz=50,slow=39
**BOSA Boshof 91.23 239** LR LR 20 43 12.7
comp=Z,100nm,18.3s,baz=30,slow=34
**BBB Bella Bella 91.90 29** LR LR 20 47 01.8
comp=Z,108nm,18.8s,baz=327,slow=37
**TORD Torodi Ar. Bea 94.58 287** PP **PP 20 07 46.4 -1.1**
comp=Z,0.5nm,0.8s,baz=22,slow=5.1,SNR=3.8
**MAW Mawson 96.21 194** LR LR 20 43 13.3
comp=Z,94nm,21.4s,baz=84,slow=33
**SUR Sutherland 96.31 237** LR LR 20 46 03.4
comp=Z,93nm,20.8s,baz=53,slow=34
**NEW Newport 99.47 26** LR LR 20 52 48.7
comp=Z,223nm,18.6s,baz=327,slow=38
**PPT2 Papeete2 151.02 100** *eLR* LR 20 42 49.7
PPT2 *eLR* LR 20 42 53.3
comp=Z,132nm,26.8s
**ROSC El Rosal 151.02 354** PKPbc **PKiKP 20 10 33.4 +0.2**
comp=Z,7.9nm,0.4s,baz=280,slow=12,SNR=2.1
**BDFB Brasilia 151.36 282** PKPbc **PKPbc 20 10 33.2 +0.2**
comp=Z,3.2nm,0.8s,baz=78,slow=0.9,SNR=3.9

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*IDC* ***13*** *20:05:54.0±6.1, 69.78N×145.09W, h0km, mb3.3/1, mbtmp3.4/3, ML3.5/2, Error ellipse: s-maj=85.4km s-min=33.7km az=139.0*

*AEIC* ***13*** *20:05:55.3±3.1, 69.48N±0.04×144.47W±0.08, h11km±7km, ML3.5, ML3.6/88(NEIC), Mwr3.5/21(NEIC), Error ellipse: s-maj=6.3km s-min=2.7km az=147.0*

*NEIC* ***13*** *20:05:56.6±1.2, 69.53N±0.03×144.50W±0.06, h7km±7km, Error ellipse: s-maj=4.6km s-min=2.6km az=160.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr0.44; Mθθ-1.20; Mφφ0.76; Mrθ0.26; Mrφ-1.64; Mθφ-0.64; Fault plane solution: M₀2.07000×10¹⁴ NP1: φs197.96000°, δ75.03000°, λ18.72000°. NP2: φs102.95000°, δ71.93000°, λ164.24000°. Principal axes: T 1.9943, Plg24.0000°, Azm61.0000°; N 0.1397, Plg66.0000°, Azm235.0000°; P -2.1340, Plg2.0000°, Azm330.0000°;*

*NEIC* ***13*** *20:05:56.5, 69.52N×144.40W, h5km*

**ISC 13 20:05:55.8±1.2, 69.56N±0.04×144.46W±0.03, h5km±10km, n75, σ1.9 12/81, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.27** | **75** | Pg | **Pg** | **20 06 01.2** | **+0.2** |
| C27K | | | | | **Sg** | **20 06 05.1** | **+0.5** |
| C27K | | | | IAML | | 20 06 06.7 | |
| | comp=E,9μm,0.3s | | | | | | |
| C27K | | | | IAML | | 20 06 06.8 | |
| | comp=N,9μm,0.4s | | | | | | |
| **C26K** | **Camden Bay** | **0.39** | **337** | | **Pb** | **20 06 04.5** | **-0.7** |
| C26K | | | | | **Sb** | **20 06 11.8** | **+0.2** |
| **D25K** | **Kavik River** | **0.72** | **252** | Pg | **Pg** | **20 06 08.4** | **-1.1** |
| D25K | | | | | **Sg** | **20 06 18.7** | **-0.1** |
| **D27M** | **Malcolm River** | **1.28** | **103** | | **Pn** | **20 06 18.4** | **-1.9** |
| D27M | | | | IAML | | 20 06 39.8 | |
| | comp=E,792nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.49** | **278** | Pn | **Pn** | **20 06 20.7** | **-2.5** |
| C24K | | | | | **Pg** | **20 06 24.4** | **+0.1** |
| C24K | | | | | **Sg** | **20 06 44.9** | **+1.2** |
| C24K | | | | IAML | | 20 06 45.6 | |
| | comp=N,919nm,0.6s | | | | | | |
| C24K | | | | IAML | | 20 06 46.5 | |
| | comp=E,879nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.60** | **257** | | **Pn** | **20 06 25.6** | **+0.9** |
| D24K | | | | | **Sg** | **20 06 48.2** | **+1.1** |
| **E27K** | **Coleen River** | **1.73** | **142** | | **Pn** | **20 06 26.5** | **+0.1** |
| E27K | | | | | **Sn** | **20 06 49.5** | **+0.7** |
| E27K | | | | IAML | | 20 06 53.9 | |
| | comp=N,571nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.88** | **176** | | **Pn** | **20 06 28.8** | **+0.2** |
| F26K | | | | IAML | | 20 06 56.3 | |
| | comp=N,583nm,0.3s | | | | | | |
| **E28M** | **Babbage River** | **2.01** | **116** | | **Pn** | **20 06 31.6** | **+1.3** |
| E28M | | | | | **Sn** | **20 06 57.2** | **+1.4** |
| E28M | | | | IAML | | 20 07 03.4 | |
| | comp=N,417nm,0.8s | | | | | | |
| **F25K** | **Christian River** | **2.02** | **193** | | **Pn** | **20 06 31.5** | **+0.9** |
| F25K | | | | IAML | | 20 07 01.9 | |
| | comp=N,420nm,0.8s | | | | | | |
| F25K | | | | IAML | | 20 07 02.9 | |
| | comp=E,550nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.05** | **246** | | **Pn** | **20 06 32.2** | **+1.3** |
| TOLK | | | | IAML | | 20 07 05.6 | |
| | comp=E,342nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.09** | **226** | | **Pn** | **20 06 32.6** | **+1.1** |
| **BMAR** | **Burnt Mountain** | **2.14** | **181** | | **Pn** | **20 06 32.8** | **+0.7** |
| **C23K** | **Itkillik River** | **2.17** | **280** | | **Pb** | **20 06 36.1** | **+0.7** |
| **D23K** | **Nanushuk River** | **2.29** | **258** | | **Pn** | **20 06 35.5** | **+1.3** |
| **E23K** | **Chandalar** | **2.41** | **234** | | **Pb** | **20 06 39.2** | **-0.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F24K** | **Squaw Lake** | **2.41 213** | | | **Pn** | **20 06 36.1** | **+0.3** |
| F24K | | | IAML | | | 20 07 13.1 | |
| | comp=N,250nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.58 137** | | | **Pn** | **20 06 38.4** | **+0.2** |
| F28M | | | IAML | | | 20 07 23.1 | |
| | comp=N,299nm,0.8s | | | | | | |
| F28M | | | IAML | | | 20 07 23.3 | |
| | comp=E,263nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.63 174** | | | **Pn** | **20 06 39.4** | **+0.5** |
| **E29M** | **Blow River** | **2.64 113** | | | **Pn** | **20 06 40.5** | **+1.5** |
| E29M | | | IAML | | | 20 07 23.6 | |
| | comp=N,301nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.87 193** | | | **Pn** | **20 06 42.4** | **+0.2** |
| **G27K** | **Doyon Strip** | **2.95 158** | | | Pn | 20 06 39.4 | -3.9 |
| **D22K** | **Ayikyak River** | **3.01 261** | | | **Pn** | **20 06 44.4** | **+0.3** |
| D22K | | | IAML | | | 20 07 40.1 | |
| | comp=E,180nm,0.8s | | | | | | |
| D22K | | | IAML | | | 20 07 40.3 | |
| | comp=N,218nm,0.8s | | | | | | |
| **FYU** | **Fort Yukon** | **3.02 186** | Pn | | Pn | 20 06 40.3 | -3.8 |
| FYU | | | IAML | | | 20 07 32.3 | |
| | comp=E,222nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.08 203** | | | **Pn** | **20 06 45.2** | **+0.1** |
| G24K | | | IAML | | | 20 07 36.6 | |
| | comp=E,196nm,0.8s | | | | | | |
| G24K | | | IAML | | | 20 07 40.0 | |
| | comp=N,175nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19 288** | | | **Pn** | **20 06 47.3** | **+0.9** |
| **H25L** | **Birch Creek** | **3.35 189** | | | **Pn** | **20 06 48.6** | **0.0** |
| **H27K** | **Steamboat Moun** | **3.52 160** | | | **Pn** | **20 06 50.5** | **-0.6** |
| **G23K** | **Bananza Creek** | **3.54 219** | Pn | | **Pn** | **20 06 48.6** | **-2.8** |
| G23K | | | IAML | | | 20 07 51.5 | |
| | comp=E,94nm,0.9s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.56 276** | | | **Pn** | **20 06 52.2** | **+0.7** |
| B21K | | | IAML | | | 20 08 10.9 | |
| | comp=N,105nm,0.7s | | | | | | |
| B21K | | | IAML | | | 20 08 15.8 | |
| | comp=E,106nm,1.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.58 135** | Pn | | **Pn** | **20 06 52.2** | **+0.4** |
| **E21K** | **Killik River** | **3.60 256** | Pn | | Pn | 20 06 47.2 | -5.0 |
| E21K | | | IAML | | | 20 07 57.7 | |
| | comp=E,93nm,0.7s | | | | | | |
| E21K | | | IAML | | | 20 08 06.4 | |
| | comp=N,122nm,0.9s | | | | | | |
| **F30M** | **Barrier River** | **3.73 117** | | | **Pn** | **20 06 56.0** | **+2.1** |
| **A22K** | **Sinclair Lake** | **3.85 297** | | | **Pn** | **20 06 55.5** | **0.0** |
| **H24K** | **Noodor Dome** | **3.96 201** | Pn | | **Pn** | **20 06 53.8** | **-3.3** |
| H24K | | | IAML | | | 20 08 07.6 | |
| | comp=N,63nm,1.1s | | | | | | |
| H24K | | | IAML | | | 20 08 09.0 | |
| | comp=E,96nm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.01 126** | Pn | | **Pn** | **20 06 58.6** | **+0.8** |
| G30M | | | IAML | | | 20 08 09.7 | |
| | comp=N,75nm,0.7s | | | | | | |
| G30M | | | IAML | | | 20 08 17.0 | |
| | comp=E,72nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **4.07 143** | Pn | | **Pn** | **20 06 59.3** | **+0.7** |
| H29M | | | IAML | | | 20 07 49.8 | |
| | comp=E,94nm,0.5s | | | | | | |
| **F21K** | **Alatna River** | **4.08 239** | Pn | | **Pn** | **20 06 57.1** | **-1.7** |
| F21K | | | IAML | | | 20 08 15.1 | |
| | comp=N,64nm,0.7s | | | | | | |
| F21K | | | IAML | | | 20 08 17.7 | |
| | comp=E,63nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.08 186** | Pn | | **Pn** | **20 06 59.8** | **+0.9** |
| PRP | | | IAML | | | 20 07 49.9 | |
| | comp=N,62nm,0.4s | | | | | | |
| **I27K** | **Kandik River** | **4.12 163** | | | **Pn** | **20 06 59.9** | **+0.5** |
| **INK** | **Inuvik** | **4.14 103** | Pn | | **Pn** | **20 06 56.1** | **-3.5** |
| **H23K** | **Yukon River** | **4.22 210** | Pn | | **Pn** | **20 07 01.0** | **+0.3** |
| H23K | | | IAML | | | 20 08 12.6 | |
| | comp=E,69nm,0.8s | | | | | | |
| H23K | | | IAML | | | 20 08 15.2 | |
| | comp=N,60nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.30 173** | | | **Pn** | **20 07 01.5** | **-0.3** |
| **EPYK** | **Eagle Plains** | **4.33 134** | Pn | | **Pn** | **20 07 02.9** | **+0.7** |
| **D20K** | **Etivluk River** | **4.43 265** | | | **Pn** | **20 07 04.5** | **+0.9** |
| **B20K** | **Meade River** | **4.43 282** | Pn | | **Pn** | **20 07 04.1** | **+0.6** |
| B20K | | | IAML | | | 20 08 37.5 | |
| | comp=E,66nm,0.7s | | | | | | |
| **E20K** | **Nigu River** | **4.43 258** | | | **Pn** | **20 07 04.7** | **+1.0** |
| **A21K** | **Barrow** | **4.45 299** | | | **Pn** | **20 07 04.4** | **+0.6** |
| **I28M** | **Miner Creek** | **4.48 155** | Pn | | **Pn** | **20 07 04.5** | **+0.2** |
| I28M | | | IAML | | | 20 07 58.7 | |
| | comp=N,56nm,0.7s | | | | | | |
| I28M | | | IAML | | | 20 07 59.4 | |
| | comp=E,53nm,0.6s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.52 219** | | | **Pn** | **20 07 04.7** | **-0.2** |
| **G21K** | **Allakaket** | **4.57 232** | Pn | | **Pn** | **20 07 05.1** | **-0.3** |
| G21K | | | IAML | | | 20 08 32.5 | |
| | comp=E,48nm,1.1s | | | | | | |
| G21K | | | IAML | | | 20 08 32.6 | |
| | comp=N,44nm,0.7s | | | | | | |
| **G31M** | **Satah River** | **4.62 120** | Pn | | **Pn** | **20 07 06.7** | **+0.5** |
| **I23K** | **Minto, Yukon-K** | **4.82 205** | Pn | | **Pn** | **20 07 09.1** | **+0.3** |
| I23K | | | IAML | | | 20 08 36.3 | |
| | comp=E,41nm,0.8s | | | | | | |
| I23K | | | IAML | | | 20 08 37.6 | |
| | comp=N,35nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.85 199** | Pn | | **Pn** | **20 07 09.0** | **-0.3** |
| MDM | | | IAML | | | 20 08 30.6 | |
| | comp=N,34nm,0.6s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.88 244** | Pn | | **Pn** | **20 07 10.2** | **+0.5** |
| F20K | | | IAML | | | 20 08 40.5 | |
| | comp=N,31nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **4.90 192** | Pn | | **Pn** | **20 07 10.8** | **+0.8** |
| | comp=N,1.1nm,0.3s,baz=3.7,slow=11,SNR=23 | | | | | | |
| ILAR | | | Sn | | **Sn** | **20 08 06.2** | **-0.8** |
| | comp=N,1.5nm,0.3s,baz=6.7,slow=28,SNR=4.4 | | | | | | |
| ILAR | | | Lg | Lg | | 20 08 26.0 | |
| | comp=N,3.5nm,0.3s,baz=11,slow=30,SNR=4.8 | | | | | | |
| | comp=N,3.1nm,0.6s | | | | | | |
| **I21K** | **Tanana** | **5.27 217** | | | **Pn** | **20 07 14.8** | **-0.3** |
| **A19K** | **Wainwright** | **5.77 284** | | | **Pn** | **20 07 22.4** | **+0.5** |
| **DOT** | **Dot Lake** | **5.94 178** | | | **Pn** | **20 07 26.1** | **+1.8** |
| **B18K** | **Kokolik River** | **6.10 276** | | | **Pn** | **20 07 26.0** | **-0.5** |
| **MCK** | **McKinley** | **6.12 199** | | | **Pn** | **20 07 27.4** | **+0.7** |
| **F18K** | **Selawik** | **6.41 250** | | | **Pn** | **20 07 30.9** | **+0.2** |
| **J20K** | **Nowinta River** | **6.61 220** | | | **Pn** | **20 07 32.9** | **-0.5** |
| **PAX** | **Paxson** | **6.63 184** | | | **Pn** | **20 07 35.5** | **+1.6** |
| **C17K** | **DeLong Mountai** | **6.80 270** | | | **Pn** | **20 07 35.1** | **-1.0** |
| **E17K** | **Hotham Inlet** | **6.89 257** | | | **Pn** | **20 07 36.5** | **-0.7** |
| **D17K** | **Noatak River** | **7.05 263** | | | **Pn** | **20 07 38.8** | **-0.7** |
| **WAT6** | **Susitna Watana** | **7.13 192** | | | **Pn** | **20 07 42.8** | **+2.0** |
| **K20K** | **Telida** | **7.31 216** | | | **Pn** | **20 07 41.9** | **-1.2** |
| **G17K** | **Kiwalik Mounta** | **7.41 244** | | | **Pn** | **20 07 44.0** | **-0.4** |
| **C16K** | **Lisburne Hills** | **7.63 270** | | | **Pn** | **20 07 47.4** | **+0.1** |
| **G16K** | **Koyuk River** | **8.02 247** | | | **Pn** | **20 07 52.0** | **-0.7** |
| **L20K** | **Farewell, AK** | **8.07 213** | | | **Pn** | **20 07 53.4** | **-0.1** |
| **YKA** | **Yellowknife Ar** | **13.90 106** | Pn | | **Pn** | **20 09 11.0** | **-2.2** |
| | comp=N,0.3nm,0.3s,baz=310,slow=20,SNR=1.3 | | | | | | |
| YKA | | | Sn | | Sn | 20 11 37.9 | -10 |
| | comp=N,0.3nm,0.3s,baz=309,slow=24,SNR=1.3 | | | | | | |
| | comp=N,0.7nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.26 128** | P | | **P** | **20 12 26.2** | **+1.0** |
| | comp=N,0.1nm,0.3s,baz=328,slow=3.3,SNR=1.9 | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | |

*IDC **13** 20:06:47.9±1.3,31°.74S×67°.68W,h0km,mb3.8/3, mbtmp3.7/5,ML4.0/2,Error ellipse: s-maj=45.8km s-min=25.2km az=114.0*

*SJA **13** 20:06:48.6±0.8,31°.60S×67°.86W,h6km±2km,ML3.7, MW3.5*

**ISC 13 20:06:47.6±1.1,31°.53S±0°.02×67°.75W±0°.02,h3km±8km, n47,σ1§72/73,mb3.8/3,3C,San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTLL** | **Cerro Villicun** | **0.65** | **288** | *eP* | **Pg** | **20 07 00.6** | **+0.6** |
| RTLL | | | | *eS* | **Sg** | **20 07 10.1** | **+1.6** |
| **RTCV** | **Cerro Valdivia** | **0.75** | **244** | *eP* | **Pg** | **20 07 01.7** | **-0.3** |
| RTCV | | | | *eS* | **Sg** | **20 07 11.6** | **-0.1** |
| **ZON** | **Zonda** | **0.79** | **269** | *eP* | **Pg** | **20 07 02.6** | **-0.1** |
| ZON | | | | *eS* | **Sg** | **20 07 13.5** | **+0.5** |
| **AVFE** | **Valle Fertil** | **0.91** | **16** | *eP* | **Pn** | **20 07 08.0** | **+0.7** |
| AVFE | | | | *eS* | **Sn** | **20 07 22.9** | **+2.0** |
| **ACHE** | **Chepes** | **1.00** | **69** | *eP* | **Pn** | **20 07 09.2** | **+0.5** |
| **DOCA** | **Reserva Natura** | **1.28** | **297** | *eP* | **Pg** | **20 07 13.0** | **+0.9** |
| DOCA | | | | *eS* | **Sn** | **20 07 30.0** | **-0.6** |
| DOCA | | | | IAML | | 20 07 41.6 | |
| | comp=Z,906nm,1.6s | | | | | | |
| **RTLS** | **Leoncito** | **1.34** | **258** | *eP* | **Pn** | **20 07 13.1** | **-0.4** |
| RTLS | | | | *eS* | **Sn** | **20 07 31.4** | **-0.8** |
| RTLS | | | | IAML | | 20 07 33.1 | |
| | comp=Z,1µm,0.9s | | | | | | |
| **ASAL** | **Salagasta** | **1.40** | **221** | *eP* | **Pb** | **20 07 13.9** | **-0.6** |
| ASAL | | | | *eS* | **Sn** | **20 07 31.9** | **-1.3** |
| **ACCO** | **Cerro Coronel** | **1.47** | **309** | *eP* | **Pg** | **20 07 17.1** | **+1.4** |
| ACCO | | | | *eS* | **Sg** | **20 07 38.0** | **+3.2** |
| **APLL** | **PUNTA DE LOS L** | **1.54** | **43** | *eP* | **Pb** | **20 07 16.5** | **-0.4** |
| **ARCO** | **CERRO ARCO** | **1.65** | **217** | *eP* | **Pb** | **20 07 18.8** | **+0.1** |
| ARCO | | | | *eS* | **Sg** | **20 07 41.5** | **+1.0** |
| ARCO | | | | IAML | | 20 07 48.1 | |
| | comp=Z,673nm,0.8s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **1.80** | **319** | *eP* | **Pb** | **20 07 21.2** | **-0.1** |
| ACDV | | | | *eS* | **Sg** | **20 07 47.5** | **+2.2** |
| **AAGR** | **Agrelo** | **1.80** | **210** | *eP* | **Pg** | **20 07 21.9** | **-0.1** |
| AAGR | | | | *eS* | **Sg** | **20 07 45.0** | **-0.4** |
| AAGR | | | | IAML | | 20 07 48.0 | |
| | comp=Z,712nm,1.9s | | | | | | |
| **MRA** | **San Martin** | **1.94** | **118** | *eP* | **Pg** | **20 07 24.7** | **-0.1** |
| MRA | | | | *eS* | **Sg** | **20 07 52.2** | **+2.2** |
| MRA | | | | IAML | | 20 07 53.0 | |
| | comp=Z,627nm,0.6s | | | | | | |
| **AROD** | **Rodeo** | **2.01** | **312** | *eP* | **Pg** | **20 07 26.4** | **+0.2** |
| AROD | | | | *eS* | **Sn** | **20 07 47.8** | **-0.8** |
| **ACLC** | **CERRO LA CRUZ** | **2.21** | **18** | *eP* | **Pg** | **20 07 30.6** | **+0.7** |
| ACLC | | | | *eS* | **Sg** | **20 08 00.3** | **+1.7** |
| ACLC | | | | IAML | | 20 08 07.3 | |
| | comp=Z,300nm,0.2s | | | | | | |
| **CO01** | **Juntas del Tor** | **2.54** | **307** | *eP* | **Pb** | **20 07 34.8** | **+0.7** |
| CO01 | | | | *eS* | **Sg** | **20 08 08.8** | **-0.6** |
| CO01 | | | | IAML | | 20 08 09.7 | |
| | comp=Z,327nm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **2.61** | **285** | *eP* | **Pn** | **20 07 31.4** | **+0.7** |
| CO03 | | | | *eS* | **Sb** | **20 08 06.3** | **-1.3** |
| CO03 | | | | IAML | | 20 08 11.9 | |
| | comp=Z,603nm,0.8s | | | | | | |
| **VA03** | **San Esteban** | **2.67** | **242** | *eP* | Pn | 20 07 23.2 | -8.4 |
| VA03 | | | | *eS* | **Sn** | **20 08 05.3** | **+0.6** |
| VA03 | | | | IAML | | 20 08 13.6 | |
| | comp=Z,469nm,0.5s | | | | | | |
| **VA03** | **San Esteban** | **2.67** | **242** | *eP* | **Pb** | **20 07 35.9** | **-0.3** |
| VA03 | | | | *i* S | **Sb** | **20 08 10.3** | **+0.9** |
| VA03 | | | | IAML | | 20 08 15.5 | |
| | comp=N,665nm,0.4s | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.70** | **225** | *eP* | **Pb** | **20 07 36.0** | **-0.8** |
| MT08 | | | | IAML | | 20 08 15.7 | |
| | comp=Z,363nm,0.9s | | | | | | |
| **TCA** | **Tanti** | **2.70** | **87** | *eP* | **Pn** | **20 07 29.8** | **-2.3** |
| TCA | | | | *eS* | **Sg** | **20 08 12.8** | **-1.7** |
| TCA | | | | IAML | | 20 08 20.8 | |
| | comp=Z,464nm,0.7s | | | | | | |
| **MT04** | **Ro Olivares** | **2.75** | **227** | *eP* | Pn | 20 07 21.4 | -11 |
| MT04 | | | | *eS* | **Sn** | **20 08 08.3** | **+1.6** |
| MT04 | | | | *eS* | **Sg** | **20 08 13.8** | **-2.1** |
| MT04 | | | | IAML | | 20 08 14.6 | |
| | comp=Z,292nm,0.4s | | | | | | |
| **CO02** | **Combarbal** | **2.80** | **276** | *eP* | **Pb** | **20 07 37.6** | **-0.7** |
| CO02 | | | | *eS* | **Sb** | **20 08 11.8** | **-1.3** |
| CO02 | | | | IAML | | 20 08 21.5 | |
| | comp=Z,988nm,0.6s | | | | | | |
| **MT10** | **Hacienda Santa** | **2.93** | **233** | *eP* | **Pb** | **20 07 39.1** | **-1.5** |
| MT10 | | | | *i* S | **Sb** | **20 08 18.6** | **+1.9** |
| MT10 | | | | IAML | | 20 08 21.6 | |
| | comp=N,1µm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **2.95** | **297** | *eP* | **Pn** | **20 07 36.8** | **+1.2** |
| **PEL** | **Peldehue** | **2.96** | **236** | *eP* | **Pn** | **20 07 34.8** | **-0.7** |
| PEL | | | | *eS* | **Sn** | **20 08 13.8** | **+2.2** |
| **MT03** | **Universidad Ad** | **3.04** | **229** | *eP* | **Pn** | **20 07 37.8** | **+1.0** |
| MT03 | | | | *eS* | **Sb** | **20 08 16.3** | **-3.8** |
| **ROCH** | **El Roble** | **3.11** | **242** | *i* P | **Pb** | **20 07 41.1** | **-2.6** |
| ROCH | | | | *i* S | **Sb** | **20 08 21.5** | **-0.7** |
| ROCH | | | | IAML | | 20 08 31.9 | |
| | comp=E,429nm,0.3s | | | | | | |
| **ROC1** | **El Roble** | **3.12** | **242** | *eP* | **Pb** | **20 07 41.1** | **-2.8** |
| ROC1 | | | | *eS* | **Sb** | **20 08 23.7** | **+1.3** |
| **RFA** | **San Rafael** | **3.29** | **190** | IAML | | 20 08 35.8 | |
| | comp=Z,207nm,0.3s | | | | | | |
| **MT02** | **Curacav** | **3.34** | **238** | *eP* | **Pb** | **20 07 44.0** | **-3.5** |
| MT02 | | | | IAML | | 20 08 31.8 | |
| | comp=Z,149nm,0.9s | | | | | | |
| **AC05** | **El Transito** | **3.46** | **320** | *eS* | **Sb** | **20 08 29.8** | **-2.4** |
| AC05 | | | | IAML | | 20 08 37.7 | |
| | comp=Z,77nm,0.4s | | | | | | |
| **CYA** | **Choya** | **3.51** | **29** | *eS* | **Sg** | **20 08 37.8** | **-2.7** |
| CYA | | | | IAML | | 20 08 47.4 | |
| | comp=Z,158nm,0.6s | | | | | | |
| **MT09** | **Talagante** | **3.53** | **230** | *eP* | **Pn** | **20 07 46.1** | **+2.6** |
| MT09 | | | | *i* S | **Sn** | **20 08 29.2** | **+3.3** |
| MT09 | | | | IAML | | 20 08 38.6 | |
| | comp=N,219nm,0.8s | | | | | | |
| **LCO** | **Las Campanas** | **3.58** | **314** | *eS* | **Sb** | **20 08 34.8** | **-0.9** |
| LCO | | | | *eS* | **Sg** | **20 08 38.0** | **-4.6** |
| LCO | | | | IAML | | 20 08 43.4 | |
| | comp=Z,469nm,1.0s | | | | | | |
| **MT01** | **Popeta** | **3.76** | **231** | *eP* | **Pn** | **20 07 49.0** | **+2.5** |
| MT01 | | | | *eS* | **Sn** | **20 08 33.8** | **+2.6** |
| MT01 | | | | IAML | | 20 08 47.8 | |
| | comp=Z,106nm,0.8s | | | | | | |
| **BO01** | **Tunca** | **4.00** | **224** | *eS* | **Sb** | **20 08 50.8** | **+3.3** |
| BO01 | | | | IAML | | 20 08 56.9 | |
| | comp=Z,69nm,1.0s | | | | | | |
| **PLCA** | **Paso Flores** | **9.46** | **193** | Lg | Lg | 20 11 39.2 | |
| | comp=Z,0.1nm,0.3s,baz=348,slow=16,SNR=2.5 | | | | | | |
| **CPUP** | **Villa Florida** | **10.49** | **63** | Pn | **Pn** | **20 09 21.6** | **+2.6** |
| | comp=Z,0.2nm,0.3s,baz=238,slow=9.3,SNR=3.2 | | | | | | |
| CPUP | | | | Lg | Lg | 20 12 22.4 | |
| | comp=Z,0.2nm,0.3s,baz=152,slow=18,SNR=2.2 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **LPAZ** | **La Paz** | **15.18** | **359** | Pn | **P** | **20 10 28.6** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=221,slow=9.3,SNR=5.1 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **52.54** | **159** | P | **P** | **20 16 01.2** | **-0.7** |
| | comp=Z,0.4nm,0.3s,baz=254,slow=14,SNR=14 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **58.70** | **180** | P | **P** | **20 16 45.8** | **-0.5** |
| | comp=Z,1.2nm,0.9s,baz=108,slow=3.2,SNR=2.1 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.95** | **68** | P | **P** | **20 18 58.8** | **+0.3** |
| | comp=Z,0.7nm,0.7s,baz=243,slow=4.1,SNR=5.1 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **148.60** | **43** | PKPbc | **PKiKP** | **20 26 36.3** | **-0.8** |
| | comp=Z,0.5nm,0.7s,baz=300,slow=3.5,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.20** | **33** | PKPbc | **PKiKP** | **20 26 40.3** | **0.0** |
| | comp=Z,0.3nm,0.4s,baz=317,slow=6.1,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **152.43** | **48** | PKPbc | **PKiKP** | **20 26 45.4** | **+0.2** |
| | comp=Z,0.6nm,0.9s,baz=291,slow=3.8,SNR=3.8 | | | | | | |

**IDC 13 20:18:51.1±3.4,17°.68S×179°.01W,h537km±20km, mb3.2/4,mbtmp4.0/5,Error ellipse: s-maj=91.2km s-min=31.9km az=25.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.80** | **268** | P | P | 20 20 04.0 | 0.0 |
| | 15nm,0.7s,baz=129,slow=15,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **38.24** | **241** | P | P | 20 25 26.2 | +0.7 |
| | 1.9nm,0.5s,baz=94,slow=10,SNR=2.8 | | | | | | |
| | 1.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.11** | **259** | P | P | 20 26 11.3 | -0.9 |
| | 0.5nm,0.6s,baz=96,slow=7.7,SNR=7.0 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.30** | **254** | P | P | 20 26 13.7 | 0.0 |
| | 6.0nm,0.5s,baz=90,slow=7.9,SNR=131 | | | | | | |
| ASAR | | | | PcP | PcP | 20 27 46.3 | 0.0 |
| | 0.2nm,0.4s,baz=115,slow=3.9,SNR=1.3 | | | | | | |
| | 6.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.37** | **180** | P | P | 20 29 22.5 | -0.1 |
| | 1.0nm,0.7s,baz=37,slow=3.2,SNR=7.6 | | | | | | |
| | 1.0nm,0.7s | | | | | | |

**AUST 13 20:20:11.6±0.3,37°.08S×146°.34E,h10km,Mjma3.9/7, ML2.9/7,MLv3.4/7,Error ellipse: s-maj=0.0km s-min=0.0km az=0.0,Near southeast coast of Australia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TOO** | **Toolangi** | **0.84** | **233** | P | Pb | 20 20 28.2 | -0.1 |
| | 0.6nm,SNR=10 | | | | | | |
| TOO | | | | S | Sb | 20 20 39.4 | -0.2 |
| **BRAT** | **Ballarat** | **1.98** | **255** | P | Pn | 20 20 45.7 | +0.6 |
| | 0.1nm,SNR=12 | | | | | | |
| **MILA** | **Mila** | **2.25** | **90** | P | Pn | 20 20 49.1 | 0.0 |
| | 0.2nm,SNR=2.3 | | | | | | |
| MILA | | | | S | Sn | 20 21 17.3 | +0.3 |
| **CAN** | **Canberra** | **2.78** | **52** | P | Pn | 20 20 56.5 | +0.3 |
| | 0.1nm,SNR=2.2 | | | | | | |
| **CNB** | **Canberra Magne** | **3.01** | **55** | P | Pn | 20 21 00.0 | +0.5 |
| | 0.1nm,SNR=1.9 | | | | | | |
| **YNG** | **Young** | **3.24** | **32** | P | Pn | 20 21 01.8 | -0.8 |
| | 0.3nm,SNR=1.3 | | | | | | |
| **ARPS** | **Mount Arapiles** | **3.62** | **273** | P | Pn | 20 21 07.2 | -0.5 |
| | 0.1nm,SNR=3.3 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **5.55** | **354** | P | Pn | 20 21 33.1 | -1.2 |
| | 0.1nm,SNR=1.0 | | | | | | |
| CMSA | | | | S | Sn | 20 22 32.9 | -5.3 |

*IDC **13** 20:23:30.4±4.1,22°.25S×67°.23W,h160km±47km,mb3.4/3, mbtmp3.8/4,MS3.9/1,Error ellipse: s-maj=64.9km s-min=24.7km az=107.0*

*SCB **13** 20:23:31.6±1.4,22°.35S×67°.52W,h159km±15km,ML3.6/2, MW3.5,Error ellipse: s-maj=13.0km s-min=5.0km az=0.0*

*GUC **13** 20:23:31.7±0.8,22°.28S×67°.71W,h200km±8km,ML3.8*

**ISC 13 20:23:31.1±0.9,22°.30S±0°.04×67°.57W±0°.05,h175km±8km, n31,σ1§15/43,mb3.6/3,2C,Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB09** | **IPOC Station P** | **1.63** | **287** | *eP* | **Pn** | **20 24 05.3** | **+1.2** |
| PB09 | | | | *eS* | **Sn** | **20 24 31.0** | **+1.4** |
| **PB09** | **IPOC Station P** | **1.63** | **287** | Pg | **Pn** | **20 24 05.4** | **+1.2** |
| **MOCB** | **Mochara** | **2.08** | **60** | Pg | **Pn** | **20 24 09.6** | **+0.5** |
| MOCB | | | | Sg | **Sn** | **20 24 37.5** | **-1.0** |
| MOCB | | | | IAML | | 20 24 38.3 | |
| | 294nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **2.18** | **305** | *eP* | **Pn** | **20 24 10.3** | **+0.4** |
| PB01 | | | | *eS* | **Sn** | **20 24 39.7** | **-0.3** |
| PB01 | | | | IAML | | 20 24 41.4 | |
| | comp=E,322nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **2.18** | **305** | Pg | **Pn** | **20 24 10.4** | **+0.5** |
| PB01 | | | | Sg | **Sn** | **20 24 40.0** | **0.0** |
| PB01 | | | | IAML | | 20 24 40.2 | |
| | comp=E,228nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **2.39** | **269** | *eP* | **Pn** | **20 24 12.9** | **+0.5** |
| PB04 | | | | *eS* | **Sn** | **20 24 43.5** | **-0.9** |
| PB04 | | | | IAML | | 20 24 49.3 | |
| | comp=N,339nm,0.7s | | | | | | |
| **PB05** | **IPOC Station P** | **2.50** | **257** | *eP* | **Pn** | **20 24 13.8** | **+0.3** |
| PB05 | | | | *eS* | **Sn** | **20 24 45.4** | **-1.1** |
| PB05 | | | | IAML | | 20 24 48.0 | |
| | comp=E,223nm,0.4s | | | | | | |
| **AOVT** | **TarijaAcel** | **2.76** | **75** | Pg | **Pn** | **20 24 17.2** | **+0.3** |
| **PATCX** | **Punta Patache** | **2.82** | **301** | *eP* | **Pn** | **20 24 17.2** | **-0.2** |
| PATCX | | | | *eS* | **Sn** | **20 24 51.9** | **-1.5** |
| PATCX | | | | IAML | | 20 24 55.4 | |
| | comp=E,219nm,0.5s | | | | | | |
| **HMBC** | **Humberstone** | **2.95** | **312** | *eP* | **Pn** | **20 24 18.4** | **-0.7** |
| HMBC | | | | *eS* | **Sn** | **20 24 54.7** | **-1.7** |
| **TA01** | **Diego Aracena** | **2.98** | **305** | *eP* | **Pn** | **20 24 19.0** | **-0.3** |
| TA01 | | | | *eS* | **Sn** | **20 24 54.8** | **-1.9** |
| TA01 | | | | IAML | | 20 24 57.2 | |
| | comp=E,222nm,0.3s | | | | | | |
| **GO01** | **Chusmiza** | **3.02** | **330** | *eP* | **Pn** | **20 24 21.1** | **+0.8** |
| GO01 | | | | *eS* | **Sn** | **20 24 58.3** | **-0.3** |
| GO01 | | | | IAML | | 20 25 02.0 | |
| | comp=N,276nm,0.5s | | | | | | |
| **GO01** | **Chusmiza** | **3.02** | **330** | Pg | **Pn** | **20 24 21.2** | **+0.8** |
| **TA02** | **Huaiquique** | **3.13** | **310** | *eS* | **Sn** | **20 24 57.5** | **-2.5** |
| TA02 | | | | IAML | | 20 24 59.1 | |
| | comp=N,106nm,0.3s | | | | | | |
| **GO02** | **Mina Guanaco** | **3.40** | **213** | *eP* | **Pn** | **20 24 25.1** | **+0.4** |
| GO02 | | | | *eS* | **Sn** | **20 25 06.4** | **-0.2** |
| **PB14** | **IPOC Station P** | **3.49** | **228** | *eP* | **Pn** | **20 24 26.0** | **+0.2** |
| PB14 | | | | *eS* | **Sn** | **20 25 06.6** | **-1.9** |
| **SOEO** | **Opoqueri** | **3.73** | **355** | Pg | **Pn** | **20 24 31.0** | **+1.9** |
| **SOTI** | **Planta Incahua** | **4.40** | **57** | Pg | **Pn** | **20 24 37.0** | **-0.4** |
| **SOET** | **ToroToro** | **4.48** | **22** | Pg | **Pn** | **20 24 38.8** | **+0.2** |
| **SOEJ** | **Jacaque** | **5.33** | **354** | Pg | **Pn** | **20 24 51.3** | **+1.5** |
| **BBOE** | **La Paz, Chanca** | **5.47** | **356** | Pg | **Pn** | **20 24 53.4** | **+1.7** |
| **BBOD** | **La Paz, Gloria** | **5.71** | **350** | Pg | **Pn** | **20 24 56.3** | **+1.4** |
| **LPAZ** | **La Paz** | **6.00** | **355** | P | **Pn** | **20 24 59.1** | **+0.4** |
| | comp=N,3.4nm,0.3s,baz=179,slow=8.3,SNR=22 | | | | | | |
| LPAZ | | | | S | **Sn** | **20 26 05.1** | **-2.4** |
| | comp=N,1.7nm,0.6s,baz=104,slow=12,SNR=1.7 | | | | | | |
| **LPAZ** | **La Paz** | **6.00** | **355** | Pg | **Pn** | **20 24 59.6** | **+0.9** |
| **LPAZ** | **La Paz** | **6.00** | **355** | Pg | **Pn** | **20 24 59.7** | **+1.0** |
| **TKL** | **Tuckaleechee C** | **59.65** | **345** | LR | LR | 21 01 51.1 | |
| | comp=N,97nm,19.5s,baz=1.5,slow=38 | | | | | | |
| **SNAA** | **Sanae** | **61.12** | **161** | P | **P** | **20 33 26.5** | **0.0** |
| | comp=N,0.9nm,0.9s,baz=278,slow=8.3,SNR=5.3 | | | | | | |
| | comp=N,0.9nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.90** | **180** | P | **P** | **20 34 11.8** | **+1.2** |
| | comp=N,0.9nm,0.6s,baz=218,slow=1.0,SNR=12 | | | | | | |
| | comp=N,0.9nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.46** | **70** | P | **P** | **20 35 01.1** | **-0.9** |
| | comp=N,0.4nm,0.5s,baz=245,slow=4.7,SNR=11 | | | | | | |
| | comp=N,0.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **132.88** | **209** | PKP | **PKPdf** | **20 42 26.6** | **+0.3** |
| | comp=N,0.3nm,0.8s,baz=159,slow=2.0,SNR=1.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.53** | **38** | PKPbc | **PKPbc** | **20 42 49.2** | **+0.3** |
| | comp=N,0.2nm,0.6s,baz=290,slow=4.2,SNR=2.1 | | | | | | |

*NEIC **13

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JKHN | **Kushirohamanak** | **1.64** | **261** | *i* P | | **Pn** | **20 36 31.8** | **+0.7** |
| JKHN | | | | S | | **Sn** | **20 36 50.9** | **-0.1** |
| **RUSJ** | **Misakicho** | **1.71** | **297** | ⇓*i* PN | | **Pn** | **20 36 32.8** | **+0.6** |
| RUSJ | | | | *e*S | | **Sn** | **20 36 53.9** | **+1.0** |
| **JRA** | **Rausu** | **1.73** | **291** | *i* P | | **Pn** | **20 36 32.9** | **+0.4** |
| JRA | | | | S | | **Sn** | **20 36 52.9** | **-0.5** |
| **JNSB** | **Nemuroshibetsu** | **1.77** | **285** | *i* P | | **Pn** | **20 36 33.5** | **+0.5** |
| JNSB | | | | S | | **Sn** | **20 36 54.0** | **-0.3** |
| **KUR** | **Kuril'sk** | **1.92** | **11** | *e*P | | **Pn** | **20 36 35.0** | **+0.1** |
| KUR | | | | AMB | | AMB | 20 36 36.1 | |
| | comp=E,140nm,0.4s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **20 36 57.3** | **-0.6** |
| KUR | | | | A | | A | 20 37 05.3 | |
| | comp=E,420nm,0.4s | | | | | | | |
| KUR | | | | A | | A | 20 37 05.3 | |
| | comp=E,370nm,0.4s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.92** | **11** | *e*PN | | **Pn** | **20 36 35.1** | **+0.1** |
| KUR | | | | *e*S | | **Sn** | **20 36 57.3** | **-0.6** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,137nm,0.4s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,497nm,0.2s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,250nm,0.1s | | | | | | | |
| **JNK** | **Nakash** | **1.94** | **278** | *i* P | | **Pn** | **20 36 35.5** | **+0.2** |
| JNK | | | | S | | **Sn** | **20 36 57.4** | **-1.2** |
| **JAK** | **Akkeshi** | **1.99** | **261** | *i* P | | **Pn** | **20 36 36.1** | **+0.2** |
| JAK | | | | S | | **Sn** | **20 36 58.7** | **-0.9** |
| **JTKR** | **Abashiri--Toko** | **2.59** | **285** | *i* P | | **Pn** | **20 36 45.6** | **+1.4** |
| JTKR | | | | S | | **Sn** | **20 37 15.4** | **+1.1** |
| **JOB** | **Onbets** | **2.63** | **261** | P | | **Pn** | **20 36 45.5** | **+0.9** |
| **JAR** | **Ashorobuto** | **2.63** | **270** | P | | **Pn** | **20 36 45.6** | **+0.9** |
| JAR | | | | *e*S | | **Sn** | **20 37 15.0** | **-0.4** |
| **JMP** | **Maruseppu** | **2.98** | **284** | *i* P | | **Pn** | **20 36 51.2** | **+1.6** |
| **JCH** | **Churui** | **3.03** | **257** | P | | **Pn** | **20 36 50.7** | **+0.5** |
| JCH | | | | *e*S | | **Sn** | **20 37 24.2** | **-1.1** |
| **ERM** | **Erimo** | **3.38** | **248** | | | **Pn** | **20 36 57.3** | **+2.3** |
| **ERM** | **Erimo** | **3.38** | **248** | *d i* PN | | **Pn** | **20 36 57.4** | **+2.4** |
| ERM | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.5s | | | | | | | |
| **JEM** | **Erimo** | **3.38** | **248** | P | | **Pn** | **20 36 57.2** | **+2.2** |
| **JKK2** | **Kamakawa 2** | **3.40** | **280** | P | | **Pn** | **20 36 57.2** | **+1.9** |
| **JFR** | **Furan** | **3.49** | **269** | P | | **Pn** | **20 36 58.4** | **+1.8** |
| JFR | | | | *e*S | | **Sn** | **20 37 37.5** | **+0.8** |
| **JKA** | **Kamikawa-asahi** | **3.54** | **284** | | | **Pn** | **20 36 58.9** | **+1.7** |
| **JKA** | **Kamikawa-asahi** | **3.54** | **284** | *e*P | | **Pn** | **20 36 59.6** | **+2.4** |
| **ASAJ** | **Asahikawa** | **3.54** | **284** | P | | **Pn** | **20 36 59.5** | **+2.3** |
| | comp=Z,2.3nm,0.3s,baz=111,slow=6.1,SNR=24 | | | | | | | |
| ASAJ | | | | S | | **Sn** | **20 37 41.0** | **+3.1** |
| | comp=Z,34nm,0.5s,baz=11,slow=9.1,SNR=5.0 | | | | | | | |
| | comp=Z,6.4nm,0.3s | | | | | | | |
| **ASAJ** | **Asahikawa** | **3.54** | **284** | *e*P | | **Pn** | **20 36 59.6** | **+2.3** |
| **JNBK** | **Urakawa-nobuka** | **3.56** | **254** | P | | **Pn** | **20 36 58.4** | **+0.9** |
| JNBK | | | | *e*S | | **Sn** | **20 37 35.6** | **-2.7** |
| **JBT2** | **Biratori 2** | **3.71** | **263** | *e*P | | **Pn** | **20 37 00.1** | **+0.5** |
| JBT2 | | | | S | | **Sn** | **20 37 40.6** | **-1.4** |
| **JSE** | **Soyaes** | **3.80** | **297** | P | | **Pn** | **20 37 02.1** | **+1.3** |
| **YSS** | **Yuzh-Sakhalins** | **4.86** | **319** | Pn | | **Pn** | **20 37 15.9** | **+0.6** |
| **YSS** | **Yuzh-Sakhalins** | **4.86** | **319** | *e*P | | **Pn** | **20 37 16.8** | **+1.5** |
| YSS | | | | AMB | | AMB | 20 37 17.3 | |
| | comp=Z,20nm,0.5s | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **20 38 11.0** | **+0.7** |
| YSS | | | | A | | A | 20 38 13.6 | |
| | comp=Z,20nm,0.4s | | | | | | | |
| YSS | | | | A | | A | 20 38 13.6 | |
| | comp=Z,20nm,0.4s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.86** | **319** | *e*PN | | **Pn** | **20 37 16.8** | **+1.5** |
| YSS | | | | *e*S | | **Sn** | **20 38 11.3** | **+1.0** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| YSS | | | | smax | | smax | | |
| | comp=N,20nm,0.8s | | | | | | | |
| YSS | | | | smax | | smax | | |
| | comp=E,30nm,0.6s | | | | | | | |
| **JTM** | **Tenmabayashi** | **5.34** | **244** | Pn | | **Pn** | **20 37 22.6** | **+0.7** |
| **JMM** | **Marumori** | **7.42** | **225** | Pn | | **Pn** | **20 37 49.9** | **-0.5** |
| **JSD** | **Sado** | **8.72** | **236** | Pn | | **Pn** | **20 38 07.7** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **9.78** | **229** | P | | **Pn** | **20 38 24.0** | **+1.3** |
| | baz=28,slow=13,SNR=4.8 | | | | | | | |
| | comp=E,0.6nm,0.6s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **9.78** | **229** | Pn | | **Pn** | **20 38 23.4** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **11.94** | **32** | P | | **Pn** | **20 38 50.4** | **-1.8** |
| | comp=E,0.2nm,0.3s,baz=210,slow=11,SNR=1.9 | | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | | |
| **PSTR** | **Posyet** | **12.15** | **272** | *e*PN | | **Pn** | **20 38 55.2** | **+0.1** |
| **KLR** | **Kul'dur** | **12.29** | **304** | P | | **Pn** | **20 38 56.6** | **-0.4** |
| | comp=E,0.1nm,0.3s,baz=125,slow=18,SNR=1.2 | | | | | | | |
| KLR | | | | LR | | LR | 20 43 46.4 | |
| | comp=E,62nm,18.7s,baz=152,slow=37 | | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | | |
| **KLR** | **Kul'dur** | **12.29** | **304** | *e*PN | | **Pn** | **20 38 56.6** | **-0.4** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,1.3s | | | | | | | |
| **KSRS** | **Korea Array** | **15.93** | **255** | LR | | LR | 20 45 18.5 | |
| | comp=Z,33nm,21.0s,baz=30,slow=34 | | | | | | | |
| **MA2** | **Magadan** | **16.38** | **6** | LR | | LR | 20 45 32.8 | |
| | comp=Z,40nm,18.1s,baz=170,slow=35 | | | | | | | |
| **SEY** | **Seymchan** | **19.84** | **7** | P | | **P** | **20 40 29.8** | **-1.4** |
| | comp=Z,0.1nm,0.3s,baz=253,slow=19,SNR=3.9 | | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **SEY** | **Seymchan** | **19.84** | **7** | *e*P | | **P** | **20 40 32.1** | **+1.0** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **YAK** | **Yakutsk** | **21.43** | **337** | LR | | LR | 20 48 50.1 | |
| | comp=Z,46nm,20.4s,baz=184,slow=36 | | | | | | | |
| **BILL** | **Bilibino** | **26.70** | **16** | *e*P | | **P** | **20 41 40.3** | **+1.4** |
| **BILL** | **Bilibino** | **26.70** | **16** | ⇑*e*P | | **P** | **20 41 40.3** | **+1.4** |
| BILL | | | | *e* | | | 20 41 57.2 | |
| BILL | | | | | | | 20 42 23.0 | |
| BILL | | | | S | | **S** | **20 46 10.0** | **-0.6** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.33** | **293** | P | | **P** | **20 41 54.6** | **+0.7** |
| **ULN** | **Ulaanbaatar** | **28.33** | **293** | *e*P | | **P** | **20 41 54.9** | **+1.0** |
| **ULN** | **Ulaanbaatar** | **28.33** | **293** | *c i*P | | **P** | **20 41 54.9** | **+1.0** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **28.77** | **293** | P | | **P** | **20 41 58.8** | **+1.0** |
| **SONM** | **Songino Array** | **28.77** | **293** | P | | **P** | **20 41 58.8** | **+1.0** |
| | comp=Z,3.9nm,0.6s,baz=89,slow=8.4,SNR=31 | | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | | |
| **TIXI** | **Tiksi** | **29.79** | **348** | *e*P | | **P** | **20 42 07.3** | **+1.0** |
| **TIXI** | **Tiksi** | **29.79** | **348** | ⇑*i*P | | **P** | **20 42 07.3** | **+1.0** |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **L16K** | **Owhat River** | **35.93** | **41** | P | | **P** | **20 42 59.7** | **-0.3** |
| **O16K** | **Kokwok River B** | **36.47** | **44** | P | | **P** | **20 43 06.2** | **+1.6** |
| **H18K** | **Honhosa River** | **36.88** | **35** | P | | **P** | **20 43 09.3** | **+1.3** |
| **G18K** | **Tagagawik** | **36.88** | **34** | P | | **P** | **20 43 09.6** | **+1.5** |
| **L18K** | **Granite Mounta** | **37.28** | **40** | P | | **P** | **20 43 11.4** | **-0.1** |
| L18K | | | | IAmb | | IAmb | 20 43 14.5 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **37.41** | **32** | P | | **P** | **20 43 13.1** | **+0.5** |
| F19K | | | | IAmb | | IAmb | 20 43 48.3 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **H19K** | **Roundabout Mou** | **37.73** | **34** | P | | **P** | **20 43 16.8** | **+1.6** |
| H19K | | | | IAmb | | IAmb | 20 43 18.0 | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **E19K** | **Redstone River** | **37.74** | **31** | P | | **P** | **20 43 16.2** | **+0.9** |
| E19K | | | | IAmb | | IAmb | 20 43 24.5 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **F20K** | **Avaraart Lake** | **38.24** | **32** | P | | **P** | **20 43 20.7** | **+1.2** |
| **COLA** | **College** | **41.30** | **36** | *e*P | | P | 20 43 50.2 | +5.2 |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.37** | **307** | P | | **P** | **20 43 46.1** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **41.37** | **307** | P | | **P** | **20 43 45.8** | **+0.1** |
| | comp=Z,1.5nm,0.5s,baz=76,slow=6.1,SNR=7.8 | | | | | | | |
| ZALV | | | | PcP | | **PcP** | **20 45 42.1** | **-0.9** |
| | comp=Z,0.5nm,0.5s,baz=98,slow=3.2,SNR=2.4 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.37** | **307** | *i* P | | **P** | **20 43 45.9** | **+0.2** |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **41.72** | **36** | P | | **P** | **20 43 48.8** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=283,slow=9.2,SNR=4.4 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **MK31** | **Makanchi Array** | **44.91** | **298** | P | | **P** | **20 44 15.1** | **+0.7** |
| MK31 | | | | IAmb | | IAmb | 20 44 16.0 | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **44.91** | **298** | *c i*P | | **P** | **20 44 15.1** | **+0.7** |
| **MKAR** | **Makanchi Array** | **44.91** | **298** | P | | **P** | **20 44 15.1** | **+0.7** |
| | comp=Z,3.4nm,0.5s,baz=81,slow=9.2,SNR=50 | | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.91** | **298** | *i* P | | **P** | **20 44 15.1** | **+0.7** |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **45.11** | **298** | P | | **P** | **20 44 16.6** | **+0.6** |
| MAKZ | | | | IAmb | | IAmb | 20 44 17.6 | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| **MAKZ** | **Makanchi** | **45.11** | **298** | P | | **P** | **20 44 16.6** | **+0.6** |
| MAKZ | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **KURK** | **Kurchatov** | **45.89** | **304** | *e*P | | **P** | **20 44 22.3** | **+0.3** |
| **KURK** | **Kurchatov** | **45.89** | **304** | *c i*P | | **P** | **20 44 22.3** | **+0.3** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.97** | **304** | P | | **P** | **20 44 22.9** | **+0.2** |
| | comp=Z,1.6nm,0.4s,baz=74,slow=9.0,SNR=16 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.88** | **310** | P | | **P** | **20 44 52.5** | **-0.5** |
| | comp=Z,0.7nm,0.5s,baz=64,slow=6.9,SNR=4.2 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **ARSB** | **Arslanbob** | **53.29** | **295** | P | | **P** | **20 45 19.7** | **+1.0** |
| **ARSB** | **Arslanbob** | **53.29** | **295** | P | | **P** | **20 45 19.7** | **+1.0** |
| ARSB | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | | |
| **KKAR** | **Karatay Array** | **54.04** | **298** | P | | **P** | **20 45 24.8** | **+0.7** |
| **KKAR** | **Karatay Array** | **54.04** | **298** | P | | **P** | **20 45 24.8** | **+0.7** |
| **ARU** | **Arti** | **54.75** | **317** | P | | **P** | **20 45 29.2** | **+0.3** |
| ARU | | | | IAmb | | IAmb | 20 45 29.6 | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **54.75** | **317** | *e*P | | **P** | **20 45 28.2** | **-0.7** |
| **ARU** | **Arti** | **54.75** | **317** | *d i*P | | **P** | **20 45 28.2** | **-0.7** |
| ARU | | | | S | | **S** | **20 53 03.3** | **-2.2** |
| ARU | | | | SS | | **SS** | **20 56 41.9** | **-6.5** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **57.44** | **309** | P | | **P** | **20 45 48.8** | **+0.6** |
| **ABKAR** | **Akbulak array** | **57.44** | **309** | P | | **P** | **20 45 48.8** | **+0.6** |
| ABKAR | | | | IAmb | | IAmb | 20 45 50.0 | |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.68** | **340** | P | | **P** | **20 46 03.7** | **+0.2** |
| ARCES | | | | IAmb | | IAmb | 20 46 37.6 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.68** | **340** | P | | **P** | **20 46 02.5** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=51,slow=7.6,SNR=9.3 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.68** | **340** | P | | **P** | **20 46 03.7** | **+0.2** |
| ARCES | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **64.11** | **194** | P | | **P** | **20 46 33.8** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=12,slow=6.5,SNR=2.8 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **SUMG** | **Summit** | **64.31** | **2** | P | | **P** | **20 46 33.2** | **-1.8** |
| SUMG | | | | IAmb | | IAmb | 20 46 36.1 | |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| **SUMG** | **Summit** | **64.31** | **2** | P | | **P** | **20 46 33.2** | **-1.8** |
| SUMG | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **FIA1** | **FINESS Array S** | **65.30** | **333** | P | | **P** | **20 46 40.9** | **-0.2** |
| **FINES** | **FINESS Array B** | **65.31** | **333** | P | | **P** | **20 46 40.5** | **-0.6** |
| | comp=Z,3.8nm,0.6s,baz=42,slow=7.7,SNR=32 | | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.31** | **333** | *i* P | | **P** | **20 46 41.2** | **+0.1** |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **67.66** | **58** | P | | **P** | **20 46 56.5** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=293,slow=7.9,SNR=4.2 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **67.82** | **193** | P | | **P** | **20 46 58.6** | **+1.0** |
| | comp=Z,0.2nm,0.6s,baz=8.1,slow=6.8,SNR=4.8 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **NC303** | **NORSAR Array S** | **69.84** | **339** | P | | **P** | **20 47 10.2** | **+0.4** |
| NC303 | | | | IAmb | | IAmb | 20 47 51.3 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **NC405** | **NORSAR Array S** | **69.84** | **339** | P | | **P** | **20 47 09.7** | **-0.1** |
| NC405 | | | | IAmb | | IAmb | 20 47 10.5 | |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.03** | **339** | P | | **P** | **20 47 11.3** | **+0.3** |
| | comp=Z,1.8nm,0.5s,baz=32,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.03** | **339** | P | | **P** | **20 47 11.1** | **+0.1** |
| | comp=Z,3.6nm,0.7s,baz=32,slow=6.2,SNR=22 | | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **70.05** | **50** | P | | **P** | **20 47 09.9** | **-1.8** |
| | comp=Z,0.2nm,0.4s,baz=11,slow=0.9,SNR=2.6 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **HFS** | **Hagfors** | **70.12** | **337** | P | | **P** | **20 47 11.4** | **0.0** |
| | comp=Z,4.3nm,0.4s,baz=54,slow=7.5,SNR=42 | | | | | | | |
| | comp=Z,4.3nm,0.4s | | | | | | | |
| **KIV** | **Kislovodsk** | **70.15** | **312** | P | | **P** | **20 47 11.7** | **-0.4** |
| **KIV** | **Kislovodsk** | **70.15** | **312** | *e*P | | **P** | **20 47 11.6** | **-0.5** |
| **KIV** | **Kislovodsk** | **70.15** | **312** | *e*P | | **P** | **20 47 11.6** | **-0.5** |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **KBZ** | **Khabaz** | **70.19** | **312** | P | | **P** | **20 47 12.3** | **+0.2** |
| | comp=Z,4.0nm,0.7s,baz=84,slow=4.8,SNR=10 | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **70.19** | **312** | *e*P | | **P** | **20 47 13.7** | **+1.6** |
| **KBZ** | **Khabaz** | **70.19** | **312** | *ce*P | | **P** | **20 47 13.7** | **+1.6** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **71.72** | **37** | P | | **P** | **20 47 21.6** | **+0.2** |
| | comp=Z,2.6nm,0.7s,baz=245,slow=12,SNR=2.0 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.00** | **324** | P | | **P** | **20 47 23.0** | **+0.1** |
| | comp=Z,2.0nm,0.5s,baz=40,slow=6.2,SNR=8.7 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **AKBB** | **Malin Array Si** | **72.00** | **324** | *ce*P | | **P** | **20 47 23.7** | **+0.7** |
| **BUR08** | **Bucovina Ar. S** | **76.04** | **324** | P | | **P** | **20 47 46.1** | **-0.7** |
| **CLL** | **Collm** | **77.74** | **333** | *i* P | | **P** | **20 47 56.5** | **+0.3** |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **CLL** | **Collm** | **77.74** | **333** | *i* P | | **P** | **20 47 56.5** | **+0.3** |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.94** | **314** | P | | **P** | **20 47 58.2** | **+0.6** |
| | comp=Z,0.8nm,0.7s,baz=54,slow=6.3,SNR=4.8 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.94** | **314** | *i* P | | **P** | **20 47 58.7** | **+1.1** |
| BRTR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **78.55** | **343** | P | | **P** | **20 48 00.9** | **+0.3** |
| | comp=Z,1.1nm,0.6s,baz=23,slow=5.3,SNR=7.3 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **79.39** | **331** | *ce*P | | **P** | **20 48 05.7** | **+0.4** |
| KHC | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **81.86** | **308** | P | | **P** | **20 48 20.0** | **+1.1** |
| | comp=Z,1.9nm,0.5s,baz=42,slow=8.9,SNR=5.1 | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **82.74** | **56** | P | | **P** | **20 48 24.9** | **+1.4** |
| | comp=Z,0.6nm,0.6s,baz=306,slow=3.4,SNR=8.7 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |

**IDC 13 20:49:56.4±8.8,5°20N×93°85E,h0km,mb3.2/3, mbtmp3.2/3,Error ellipse: s-maj=431.8km s-min=31.0km az=58.0,Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **H08S3** | **Diego Garcia H** | **24.84** | **239** | T | T | | 21 21 31.0 | |
| | baz=56 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **24.84** | **239** | T | T | | 21 21 34.3 | |
| | baz=56 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **24.85** | **239** | T | T | | 21 21 33.4 | |
| | baz=56 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.62** | **348** | P | P | | 20 57 54.3 | -0.2 |
| | 0.2nm,0.3s,baz=171,slow=7.2,SNR=5.2 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **47.00** | **123** | P | P | | 20 58 30.4 | +0.6 |
| | 0.2nm,0.6s,baz=301,slow=9.8,SNR=1.7 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.47** | **128** | P | P | | 20 58 40.4 | -0.8 |
| | 0.2nm,0.6s,baz=305,slow=8.2,SNR=1.4 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |

*MDD **13** 20:57:49.8±0.3, 41°66N×8°48W, h12km, mb_Lg3.0/24, Error ellipse: s-maj=3.0km s-min=1.7km az=99.0*
*INMG **13** 20:57:50.4±1.8, 41°69N×8°43W, h15km±3km, ML2.6, Error ellipse: s-maj=4.5km s-min=1.9km az=95.0*

**ISC 13 20:57:48.1±1.1, 41°68N±0°02×8°45W±0°03, h9km±10km, n34, σ1§42/74, 2C-2D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PGAV** | **Gavieira, Arco** | **0.32** | **25** | ⇑*i* Pg | | **Pb** | **20 57 56.4** | **+0.5** |
| PGAV | | | | *i* Sg | | **Sb** | **20 58 00.8** | **-0.4** |
| PGAV | | | | A | | A | 20 58 02.1 | |
| | 243nm,0.1s | | | | | | | |
| **PCAB** | **Cabril** | **0.32** | **84** | ⇑*i* Pg | | **Pb** | **20 57 56.6** | **+0.7** |
| PCAB | | | | *i* Sg | | **Sb** | **20 58 01.1** | **-0.1** |
| PCAB | | | | A | | A | 20 58 01.8 | |
| | 561nm,0.4s | | | | | | | |
| **ELOB** | **Lobios** | **0.35** | **57** | Pg | | **Pb** | **20 57 57.0** | **+0.6** |
| ELOB | | | | Sg | | **Sb** | **20 58 01.9** | **-0.1** |
| ELOB | | | | *i* Vmb_Lg | | | 20 58 02.8 | |
| **EZAM** | **Zamans** | **0.50** | **339** | Pg | | **Pb** | **20 57 59.3** | **+0.3** |
| EZAM | | | | Sg | | **Sb** | **20 58 05.9** | **-0.6** |
| EZAM | | | | *i* Vmb_Lg | | | 20 58 07.6 | |
| **POLO** | **Lamas de Olo** | **0.58** | **122** | ⇓*i* Pg | | **Pb** | **20 58 01.1** | **+0.7** |
| POLO | | | | *e*Sg | | **Sb** | **20 58 08.4** | **-0.4** |
| POLO | | | | A | | A | 20 58 11.7 | |
| | 32nm,0.5s | | | | | | | |
| **PVRL** | **Vila Real** | **0.69** | **126** | ⇓*e*P | | **Pb** | **20 58 02.9** | **+0.7** |
| PVRL | | | | *e*S | | **Sb** | **20 58 11.6** | **-0.1** |
| PVRL | | | | A | | A | 20 58 13.5 | |
| | 106nm,0.3s | | | | | | | |
| **PVIS** | **Viseu** | **1.05** | **156** | *e*P | | **Pb** | **20 58 08.9** | **+0.5** |
| PVIS | | | | *e*S | | **Sb** | **20 58 23.2** | **+0.9** |
| PVIS | | | | A | | A | 20 58 26.3 | |
| | 96nm,0.1s | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **1.15** | **13** | Pg | | **Pn** | **20 58 11.0** | **+0.6** |
| EAGO | | | | Sg | | **Sn** | **20 58 26.4** | **+0.1** |
| EAGO | | | | *i* Vmb_Lg | | | 20 58 27.8 | |
| **MVO** | **Moncorvo** | **1.19** | **115** | *e*P | | **Pn** | **20 58 11.7** | **+0.8** |
| MVO | | | | *e*S | | **Sn** | **20 58 27.1** | **0.0** |
| MVO | | | | A | | A | 20 58 32.4 | |
| | 148nm,0.4s | | | | | | | |
| **PBRG** | **Braganca** | **1.29** | **84** | *e*P | | **Pb** | **20 58 12.2** | **-0.2** |
| PBRG | | | | *e*S | | **Sn** | **20 58 30.4** | **+0.8** |
| PBRG | | | | A | | A | 20 58 32.5 | |
| | 60nm,0.3s | | | | | | | |
| **ECAL** | **Calabor** | **1.31** | **78** | Pn | | **Pn** | **20 58 12.3** | **-0.3** |
| ECAL | | | | Sg | | **Sn** | **20 58 31.1** | **+0.9** |
| ECAL | | | | *i* Vmb_Lg | | | 20 58 36.3 | |
| **EMAZ** | **Mazaricos** | **1.33** | **343** | Pn | | **Pg** | **20 58 12.6** | **-0.9** |
| EMAZ | | | | Pg | | **Pb** | **20 58 14.0** | **+0.8** |
| EMAZ | | | | Sg | | **Sn** | **20 58 31.5** | **+1.0** |
| EMAZ | | | | *i* Vmb_Lg | | | 20 58 33.3 | |
| **MTE** | **Manteigas** | **1.45** | **151** | *e*Pg | | **Pg** | **20 58 16.6** | **+0.7** |
| MTE | | | | *e*Sg | | **Sg** | **20 58 35.6** | **+0.9** |
| MTE | | | | A | | A | 20 58 37.2 | |
| | 70nm,0.4s | | | | | | | |
| **COI** | **Coimbra** | **1.47** | **179** | *e*Sg | | **Sg** | **20 58 35.7** | **+0.4** |
| COI | | | | A | | A | 20 58 39.6 | |
| | 126nm,0.3s | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **1.63** | **181** | *e*Pn | | **Pb** | **20 58 18.8** | **+0.6** |
| PCAS | | | | *e*Sg | | **Sg** | **20 58 41.0** | **+0.7** |
| PCAS | | | | A | | A | 20 58 41.8 | |
| | 55nm,0.3s | | | | | | | |
| **EPON** | **Pontenova** | **1.91** | **30** | Pn | | **Pn** | **20 58 20.4** | **-0.3** |
| EPON | | | | Pg | | **Pg** | **20 58 25.1** | **+0.5** |
| EPON | | | | Sn | | **Sn** | **20 58 43.5** | **-1.3** |
| EPON | | | | Sg | | **Sg** | **20 58 49.3** | **-0.1** |
| EPON | | | | *i* Vmb_Lg | | | 20 58 50.8 | |
| **PCBR** | **Castelo Branco** | **1.98** | **158** | *e*Pg | | **Pg** | **20 58 25.8** | **-0.2** |
| PCBR | | | | *e*Sg | | **Sg** | **20 58 51.6** | **-0.1** |
| PCBR | | | | A | | A | 20 58 53.7 | |
| | 29nm,0.4s | | | | | | | |
| **EJUZ** | **Juzbado, Salam** | **2.02** | **106** | Pg | | **Pg** | **20 58 26.8** | **0.0** |
| EJUZ | | | | Sg | | **Sg** | **20 58 51.7** | **-1.2** |
| **PSBE** | **So Bento** | **2.18** | **187** | *e*Pn | | **Pn** | **20 58 25.2** | **+0.7** |
| PSBE | | | | *e*Sg | | **Sg** | **20 58 57.9** | **-0.2** |
| PSBE | | | | A | | A | 20 59 03.3 | |
| | 26nm,0.3s | | | | | | | |
| **PMRV** | **Marv??o** | **2.39** | **160** | *e*Pn | | **Pn** | **20 58 28.4** | **+1.0** |
| PMRV | | | | A | | A | 20 59 06.7 | |
| | 21nm,0.3s | | | | | | | |
| **EPLA** | **Plasencia** | **2.42** | **131** | Pn | | **Pn** | **20 58 28.6** | **+0.8** |
| EPLA | | | | Pg | | **Pb** | **20 58 31.3** | **-0.4** |
| EPLA | | | | Sn | | **Sn** | **20 58 57.7** | **+0.3** |
| EPLA | | | | Sg | | **Sg** | **20 59 04.8** | **-0.9** |
| EPLA | | | | *i* Vmb_Lg | | | 20 59 13.8 | |
| **PMTG** | **Montargil** | **2.61** | **176** | *e*Pn | | **Pn** | **20 58 31.4** | **+1.0** |
| PMTG | | | | *e*Sn | | **Sn** | **20 59 02.2** | **0.0** |
| PMTG | | | | A | | A | 20 59 18.9 | |
| | 7.5nm,0.5s | | | | | | | |
| **PMAFR** | **Mafra** | **2.79** | **193** | *e*Pn | | **Pn** | **20 58 33.3** | **+0.4** |
| PMAFR | | | | *e*

26nm,2.6s
**JAGI Jajag, Banyuwa 14.85 265** Pn **Pn** **21 02 07.1 -2.0**
**COEN Coen 15.23 116** P **P** **21 02 15.3 -1.3**
**COEN Coen 15.23 116** P **Pn** **21 02 13.8 -0.1**
COEN IAmb IAmb 21 02 31.1
comp=Z,16nm,1.1s
**MBWA Marble Bar 16.35 213** P **Pn** **21 02 28.6 +0.8**
**MBWA Marble Bar 16.35 213** Pn **Pn** **21 02 27.6 -0.2**
MBWA IAmb IAmb 21 02 44.1
comp=Z,10nm,0.9s
**QIS Mount Isa 16.49 143** P **P** **21 02 30.4 -0.2**
**PSA00 Pilbara Seismi 16.62 212** P **Pn** **21 02 31.4 +0.1**
**PSA00 Pilbara Seismi 16.62 212** **Pn** **21 02 31.4 +0.1**
PSA00 IAmb IAmb 21 02 36.9
comp=Z,19nm,0.8s
**PSA00 Pilbara Seismi 16.62 212** **Pn** **21 02 31.3 +0.1**
**AS31 Alice Springs 16.73 165** **Pn** **21 02 31.5 -1.1**
AS31 IAmb IAmb 21 02 37.2
comp=Z,3.7nm,0.4s
**ASAR Alice Springs 16.74 165** **Pn** **21 02 32.2 -0.4**
**ASAR Alice Springs 16.74 165** P **Pn** **21 02 33.0 +0.4**
comp=Z,2.6nm,0.5s,baz=18,slow=13,SNR=41
ASAR S Sn 21 05 27.4 -11
comp=Z,2.3nm,0.7s,baz=326,slow=16,SNR=5.1
ASAR ScP **ScP** **21 10 39.0 -2.7**
comp=Z,0.4nm,0.4s,baz=7.8,slow=1.9,SNR=4.3
**AS01 Alice Springs 16.75 164** P **Pn** **21 02 33.3 +0.6**
comp=Z,11nm,0.7s
**WRKA Warakurna 17.48 182** P **P** **21 02 40.9 -0.5**
**MTSU Mount Surprise 18.20 127** P **Pn** **21 02 51.3 +0.9**
**SBUM Sibu 19.54 300** P **P** **21 03 04.5 +0.5**
**CTA Charters Tower 20.80 129** P **P** **21 03 17.9 +0.3**
comp=Z,0.3nm,0.9s,baz=350,slow=6.1,SNR=1.6
**OOD Oodnadatta 21.14 164** P **P** **21 03 22.3 +1.2**
**BBJI Bungbulang 21.29 269** P **P** **21 03 25.7 +2.8**
comp=Z,11nm,1.4s
**MEEK Meekatharra 21.51 206** P **P** **21 03 26.2 +1.1**
**MULG Mulgathing 23.15 169** P **P** **21 03 43.0 +1.1**
**FORT Forrest 23.20 182** P **P** **21 03 43.7 +1.3**
**MORW Morawa 24.76 208** P **P** **21 03 56.0 -0.5**
MORW IAmb IAmb 21 04 14.7
comp=Z,8.9nm,1.0s
**STKA Stephens Creek 26.91 156** P **P** **21 04 14.7 -1.4**
**STKA Stephens Creek 26.91 156** P **P** **21 04 16.7 +0.7**
comp=Z,1.2nm,0.7s,baz=306,slow=19,SNR=1.4
comp=Z,1.2nm,0.7s
**KULM Kulim 31.11 293** P **P** **21 04 53.5 0.0**
KULM IAmb IAmb 21 05 09.6
comp=Z,6.8nm,1.1s
**CMAR Chiang Mai Arr 39.38 311** P **P** **21 06 04.5 +0.3**
comp=Z,1.1nm,0.3s,baz=139,slow=6.6,SNR=5.5
comp=Z,1.1nm,0.3s
**MJAR Matsushiro Arr 44.62 10** P **P** **21 06 43.8 -2.8**
comp=Z,1.1nm,0.6s,baz=182,slow=11,SNR=7.4
comp=Z,1.1nm,0.6s
**KSRS Korea Array 44.72 359** P **P** **21 06 46.0 -1.3**
comp=Z,0.8nm,0.5s,baz=178,slow=8.6,SNR=4.4
comp=Z,0.8nm,0.5s
**USRK Ussuriysk Ar. 51.51 3** P **P** **21 07 38.8 -0.7**
comp=Z,1.3nm,0.6s,baz=136,slow=13,SNR=3.3
comp=Z,1.3nm,0.6s
**GTA Gaotai 53.98 332** *e*P **P** **21 07 57.8 -0.2**
GTA pmax pmax
comp=Z,4.0nm,1.0s
**SONM Songino Array 58.62 342** P **P** **21 08 31.4 +0.5**
SONM IAmb IAmb 21 08 41.0
comp=Z,1.1nm,1.2s
**SONM Songino Array 58.62 342** P **P** **21 08 31.0 +0.1**
comp=Z,0.6nm,0.6s,baz=161,slow=6.1,SNR=4.7
comp=Z,0.6nm,0.6s
**NIL Nilore 66.87 311** P **P** **21 09 24.9 -0.9**
**MK31 Makanchi Array 68.15 327** P **P** **21 09 32.8 -0.8**
MK31 IAmb IAmb 21 09 35.1
comp=Z,1.2nm,0.6s
**MKAR Makanchi Array 68.15 327** P **P** **21 09 33.1 -0.5**
**MKAR Makanchi Array 68.15 327** P **P** **21 09 33.5 -0.1**
comp=Z,1.3nm,0.4s,baz=119,slow=7.7,SNR=40
comp=Z,1.3nm,0.4s
**MAKZ Makanchi 68.33 327** P **P** **21 09 33.4 -1.3**
MAKZ IAmb IAmb 21 09 36.1
comp=Z,1.8nm,0.7s
**ARSB Arslanbob 70.67 318** P **P** **21 09 50.1 +0.7**
**ZALV Zalesovo Beam 71.63 334** P **P** **21 09 53.4 -1.3**
**ZALV Zalesovo Beam 71.63 334** P **P** **21 09 52.9 -1.8**
comp=Z,1.6nm,0.8s,baz=121,slow=5.5,SNR=7.1
comp=Z,1.6nm,0.8s
**SIMJ Simiganj 72.16 315** P **P** **21 09 58.0 -0.4**
SIMJ IAmb IAmb 21 09 59.0
comp=Z,2.6nm,0.8s
**KURBB Kurchatov Arra 72.47 329** P **P** **21 09 59.7 -0.1**
comp=Z,1.1nm,0.4s,baz=130,slow=4.8,SNR=18
comp=Z,1.1nm,0.4s
**KURK Kurchatov 72.47 329** P **P** **21 09 58.5 -1.3**
KURK IAmb IAmb 21 10 01.4
comp=Z,3.2nm,0.8s
**KKAR Karatay Array 73.13 319** P **P** **21 10 02.2 -1.7**
**BVAR Borovoye Array 78.00 328** P **P** **21 10 30.9 -0.6**
comp=Z,0.7nm,0.6s,baz=114,slow=6.6,SNR=5.5
comp=Z,0.7nm,0.6s
**ABKAR Akbulak array 82.34 322** P **P** **21 10 53.9 -0.9**
**QSPA South Pole Qui 82.50 180** P **P** **21 10 55.3 -0.3**
**QSPA South Pole Qui 82.50 180** P **P** **21 10 56.3 +0.7**
comp=Z,0.4nm,0.4s,baz=270,slow=2.0,SNR=6.3
comp=Z,0.4nm,0.4s
**SNAA Sanae 94.99 194** P **P** **21 11 56.1 +0.9**
comp=Z,0.5nm,0.9s,baz=72,slow=6.4,SNR=1.9
comp=Z,0.5nm,0.9s
**TXAR Lajitas Array 125.92 59** PKP **PKPdf** **21 17 35.3 +0.1**
comp=Z,0.1nm,0.3s,baz=215,slow=3.4,SNR=4.0
**TORD Torodi Ar. Bea 128.04 281** PKP **PKPdf** **21 17 39.5 0.0**
comp=Z,0.3nm,0.5s,baz=78,slow=3.9,SNR=2.4
**CPUP Villa Florida 145.81 170** PKPbc **PKPdf** **21 18 12.9 +1.0**
comp=Z,0.7nm,0.5s,baz=199,slow=8.9,SNR=2.9
**LPAZ La Paz 150.86 144** PKPdf **PKPdf** **21 18 17.3 -3.9**
**LPAZ La Paz 150.86 144** PKPbc **PKiKP** **21 18 27.9 +0.5**
comp=Z,0.9nm,0.5s,baz=229,slow=3.7,SNR=4.6

*IDC **13** 21:06:27.7±6.0,69°.95N×145°.47W,h0km,mb3.3/1, mbtmp3.4/3,ML3.3/2,Error ellipse: s-maj=83.5km s-min=34.6km az=138.0*
*AEIC **13** 21:06:29.8±2.0,69°.61N±0°.05×145°.3W±0°.1,h14km±6km, ML3.0,ML3.1/114(NEIC),Error ellipse: s-maj=8.1km s-min=2.9km az=217.0*
*NEIC **13** 21:06:30.7±1.6,69°.72N±0°.06×145°.03W±0°.07,h10km±2km, Error ellipse: s-maj=10.0km s-min=3.8km az=351.0*
**ISC 13 21:06:31.3±0.9,69°.64N±0°.04×145°.19W±0°.04,h10km, n104,σ1§02/107,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.30** | **19** | | **Pg** | **21 06 37.1** | **-0.1** |
| C26K | | | | | **Sg** | **21 06 41.7** | **+0.5** |
| C26K | | | | IAML | | 21 06 48.5 | |
| | comp=E,2μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.52** | **91** | Pg | **Pg** | **21 06 39.9** | **-1.4** |
| C27K | | | | Sg | **Sg** | **21 06 46.9** | **-1.2** |
| C27K | | | | IAML | | 21 06 50.2 | |
| | comp=N,977nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.53** | **233** | Pg | **Pg** | **21 06 39.7** | **-1.7** |
| D25K | | | | | **Sg** | **21 06 46.4** | **-2.0** |
| **D24K** | **Happy Valley** | **1.38** | **251** | | **Pn** | **21 06 56.3** | **-0.2** |
| **D27M** | **Malcolm River** | **1.54** | **103** | Pn | **Pn** | **21 06 57.4** | **-1.4** |
| D27M | | | | IAML | | 21 07 23.5 | |
| | comp=N,246nm,0.6s | | | | | | |
| D27M | | | | IAML | | 21 07 26.3 | |
| | comp=E,195nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.86** | **240** | Pn | **Pn** | **21 07 03.9** | **+0.7** |
| TOLK | | | | IAML | | 21 07 36.1 | |
| | comp=E,182nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 21 07 42.0 | |
| | comp=N,181nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **1.90** | **279** | Pn | **Pn** | **21 07 04.1** | **+0.5** |
| **E27K** | **Coleen River** | **1.95** | **137** | Pn | **Pn** | **21 07 04.4** | **-0.1** |
| E27K | | | | IAML | | 21 07 33.9 | |
| | comp=N,136nm,0.5s | | | | | | |
| **E24K** | **Your Creek** | **1.97** | **219** | Pn | **Pn** | **21 07 05.4** | **+0.7** |
| **F26K** | **Sheenjek River** | **1.99** | **168** | Pn | **Pn** | **21 07 05.9** | **+1.0** |
| F26K | | | | IAML | | 21 07 36.0 | |
| | comp=N,141nm,0.5s | | | | | | |
| F26K | | | | IAML | | 21 07 37.6 | |
| | comp=E,176nm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **2.06** | **185** | Pn | **Pn** | **21 07 06.6** | **+0.6** |
| F25K | | | | IAML | | 21 07 39.9 | |
| | comp=N,139nm,0.6s | | | | | | |
| F25K | | | | IAML | | 21 07 40.6 | |
| | comp=E,154nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.06** | **254** | Pn | **Pn** | **21 07 07.4** | **+1.4** |
| D23K | | | | IAML | | 21 07 44.8 | |
| | comp=E,116nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.23** | **174** | Pn | **Pn** | **21 07 09.7** | **+1.5** |
| **E23K** | **Chandalar** | **2.26** | **227** | Pn | **Pn** | **21 07 09.6** | **+0.9** |
| E23K | | | | IAML | | 21 07 49.0 | |
| | comp=E,88nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.28** | **114** | Pn | **Pn** | **21 07 08.7** | **-0.2** |
| E28M | | | | IAML | | 21 07 49.3 | |
| | comp=N,120nm,0.7s | | | | | | |
| E28M | | | | IAML | | 21 07 50.5 | |
| | comp=E,85nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **206** | Pn | **Pn** | **21 07 10.6** | **+0.7** |
| F24K | | | | IAML | | 21 07 51.2 | |
| | comp=E,85nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.75** | **168** | | **Pn** | **21 07 16.2** | **+0.8** |
| **D22K** | **Ayikyak River** | **2.77** | **258** | Pn | **Pn** | **21 07 15.9** | **+0.2** |
| D22K | | | | IAML | | 21 08 09.7 | |
| | comp=E,101nm,0.7s | | | | | | |
| D22K | | | | IAML | | 21 08 11.1 | |
| | comp=N,97nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.81** | **134** | Pn | **Pn** | **21 07 16.2** | **-0.1** |
| **G25K** | **Bearman Lake** | **2.91** | **187** | | **Pn** | **21 07 17.9** | **+0.4** |
| **E29M** | **Blow River** | **2.91** | **112** | Pn | **Pn** | **21 07 17.3** | **-0.2** |
| E29M | | | | IAML | | 21 08 03.1 | |
| | comp=E,66nm,0.8s | | | | | | |
| E29M | | | | IAML | | 21 08 03.2 | |
| | comp=N,75nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.92** | **288** | Pn | **Pn** | **21 07 18.1** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **197** | Pn | **Pn** | **21 07 20.1** | **+0.3** |
| G24K | | | | IAML | | 21 08 14.4 | |
| | comp=N,78nm,0.8s | | | | | | |
| G24K | | | | IAML | | 21 08 14.9 | |
| | comp=E,75nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.09** | **180** | Pn | **Pn** | **21 07 20.2** | **+0.3** |
| FYU | | | | IAML | | 21 08 17.9 | |
| | comp=N,76nm,1.3s | | | | | | |
| FYU | | | | IAML | | 21 08 22.1 | |
| | comp=E,57nm,1.4s | | | | | | |
| **G27K** | **Doyon Strip** | **3.13** | **153** | Pn | **Pn** | **21 07 20.5** | **-0.1** |
| **B21K** | **Ikpikpuk River** | **3.30** | **274** | Pn | **Pn** | **21 07 23.4** | **+0.6** |
| B21K | | | | IAML | | 21 08 22.5 | |
| | comp=N,57nm,0.9s | | | | | | |
| B21K | | | | IAML | | 21 08 38.3 | |
| | comp=E,49nm,0.7s | | | | | | |
| **E21K** | **Killik River** | **3.38** | **253** | Pn | **Pn** | **21 07 25.4** | **+1.4** |
| E21K | | | | IAML | | 21 08 24.9 | |
| | comp=N,58nm,0.7s | | | | | | |
| E21K | | | | IAML | | 21 08 30.2 | |
| | comp=E,45nm,0.9s | | | | | | |
| **H25L** | **Birch Creek** | **3.40** | **184** | | **Pn** | **21 07 24.4** | **+0.2** |
| **G23K** | **Bananza Creek** | **3.45** | **214** | Pn | **Pn** | **21 07 27.1** | **+2.1** |
| G23K | | | | IAML | | 21 08 28.8 | |
| | comp=N,34nm,0.9s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.58** | **297** | | **Pn** | **21 07 27.1** | **+0.4** |
| **H27K** | **Steamboat Moun** | **3.69** | **156** | | **Pn** | **21 07 28.3** | **0.0** |
| **G29M** | **Pine Creek** | **3.82** | **132** | Pn | **Pn** | **21 07 29.7** | **-0.4** |
| **F21K** | **Alatna River** | **3.91** | **236** | Pn | **Pn** | **21 07 32.5** | **+1.3** |
| F21K | | | | IAML | | 21 08 41.0 | |
| | comp=E,24nm,0.8s | | | | | | |
| F21K | | | | IAML | | 21 08 47.1 | |
| | comp=N,28nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.95** | **196** | Pn | **Pn** | **21 07 31.8** | **-0.1** |
| H24K | | | | IAML | | 21 08 47.1 | |
| | comp=N,22nm,1.3s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.14** | **182** | Pn | **Pn** | **21 07 35.0** | **+0.4** |
| PRP | | | | IAML | | 21 08 27.0 | |
| | comp=N,28nm,0.4s | | | | | | |
| **B20K** | **Meade River** | **4.16** | **281** | Pn | **Pn** | **21 07 35.8** | **+1.1** |
| **H23K** | **Yukon River** | **4.17** | **205** | Pn | **Pn** | **21 07 35.4** | **+0.5** |
| H23K | | | | IAML | | 21 08 49.3 | |
| | comp=E,26nm,1.2s | | | | | | |
| H23K | | | | IAML | | 21 08 54.5 | |
| | comp=N,24nm,0.8s | | | | | | |
| **D20K** | **Etivluk River** | **4.18** | **263** | | **Pn** | **21 07 36.2** | **+1.1** |
| **A21K** | **Barrow** | **4.19** | **299** | | **Pn** | **21 07 35.4** | **+0.4** |
| **E20K** | **Nigu River** | **4.20** | **256** | | **Pn** | **21 07 36.6** | **+1.2** |
| **G30M** | **tAoh Zraii Nji** | **4.26** | **124** | Pn | **Pn** | **21 07 35.3** | **-0.8** |
| G30M | | | | IAML | | 21 08 30.0 | |
| | comp=E,18nm,0.8s | | | | | | |
| G30M | | | | IAML | | 21 08 50.7 | |
| | comp=N,25nm,1.2s | | | | | | |
| **I27K** | **Kandik River** | **4.28** | **160** | | **Pn** | **21 07 37.3** | **+1.0** |
| **H29M** | **Whitestone** | **4.29** | **140** | Pn | **Pn** | **21 07 36.0** | **-0.5** |
| **INK** | **Inuvik** | **4.41** | **102** | Pn | **Pn** | **21 07 36.6** | **-1.4** |
| **G21K** | **Allakaket** | **4.42** | **229** | Pn | **Pn** | **21 07 38.2** | **-0.1** |
| G21K | | | | IAML | | 21 08 58.9 | |
| | comp=N,23nm,1.3s | | | | | | |
| G21K | | | | IAML | | 21 09 00.6 | |
| | comp=E,25nm,0.6s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.42** | **169** | Pn | **Pn** | **21 07 39.1** | **+0.8** |
| **EPYK** | **Eagle Plains** | **4.57** | **132** | Pn | **Pn** | **21 07 41.1** | **+0.7** |
| **POKR** | **Poker Plat Res** | **4.62** | **192** | Pn | **Pn** | **21 07 42.0** | **+1.0** |
| POKR | | | | IAML | | 21 08 39.6 | |
| | comp=E,13nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **4.66** | **152** | Pn | **Pn** | **21 07 41.9** | **+0.2** |
| **F20K** | **Avaraart Lake** | **4.69** | **241** | Pn | **Pn** | **21 07 43.0** | **+1.1** |
| F20K | | | | IAML | | 21 09 09.9 | |
| | comp=N,17nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **4.78** | **262** | Pn | **Pn** | **21 07 43.5** | **+0.3** |
| **I23K** | **Minto, Yukon-K** | **4.79** | **202** | Pn | **Pn** | **21 07 44.0** | **+0.7** |
| I23K | | | | IAML | | 21 09 11.7 | |
| | comp=N,14nm,1.0s | | | | | | |
| I23K | | | | IAML | | 21 09 17.5 | |
| | comp=E,14nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **196** | Pn | **Pn** | **21 07 44.1** | **0.0** |
| MDM | | | | IAML | | 21 09 06.5 | |
| | comp=E,12nm,0.6s | | | | | | |
| **G31M** | **Satah River** | **4.88** | **119** | Pn | **Pn** | **21 07 44.7** | **+0.1** |
| G31M | | | | IAML | | 21 09 15.1 | |
| | comp=E,16nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **4.93** | **249** | Pn | **Pn** | **21 07 45.7** | **+0.4** |
| E19K | | | | IAML | | 21 09 24.3 | |
| | comp=E,17nm,0.7s | | | | | | |
| **IL31** | | **4.93** | **188** | Pn | **Pn** | **21 07 45.1** | **-0.1** |
| **ILAR** | **Eielson Array** | **4.93** | **188** | Pn | **Pn** | **21 07 46.8** | **+1.5** |
| **ILAR** | **Eielson Array** | **4.93** | **188** | Pn | **Pn** | **21 07 45.3** | **0.0** |
| | comp=E,0.8nm,0.3s,baz=1.3,slow=14,SNR=22 | | | | | | |
| ILAR | | | | Sn | **Sn** | **21 08 45.1** | **+2.7** |
| | comp=E,0.6nm,0.3s,baz=6.5,slow=24,SNR=6.5 | | | | | | |
| ILAR | | | | Lg | Lg | 21 09 04.3 | |
| | comp=E,0.8nm,0.3s,baz=15,slow=18,SNR=4.2 | | | | | | |
| | comp=E,2.4nm,0.6s | | | | | | |
| **H21K** | **Melozitna River** | **4.94** | **220** | Pn | **Pn** | **21 07 48.0** | **+2.6** |
| H21K | | | | IAML | | 21 09 15.8 | |
| | comp=E,13nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.04** | **145** | Pn | **Pn** | **21 07 46.6** | **-0.2** |
| **J25K** | **Salcha River,** | **5.05** | **181** | Pn | **Pn** | **21 07 47.3** | **+0.3** |
| J25K | | | | IAML | | 21 09 19.0 | |
| | comp=E,12nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.10** | **208** | Pn | **Pn** | **21 07 47.9** | **+0.3** |
| **CCB** | **Clear Creek Bu** | **5.12** | **193** | Pn | **Pn** | **21 07 48.0** | **+0.2** |
| **C19K** | **Lookout Ridge** | **5.12** | **271** | Pn | **Pn** | **21 07 49.9** | **+2.0** |
| C19K | | | | IAML | | 21 08 51.7 | |
| | comp=N,14nm,1.4s | | | | | | |
| C19K | | | | IAML | | 21 09 29.8 | |
| | comp=E,12nm,1.4s | | | | | | |
| **EGAK** | **Eagle** | **5.13** | **160** | Pn | **Pn** | **21 07 47.6** | **-0.3** |
| EGAK | | | | IAML | | 21 08 51.2 | |
| | comp=E,16nm,0.7s | | | | | | |
| **I21K** | **Tanana** | **5.18** | **214** | Pn | **Pn** | **21 07 50.4** | **+1.6** |
| I21K | | | | IAML | | 21 09 34.4 | |
| | comp=N,16nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.20** | **172** | Pn | **Pn** | **21 07 50.4** | **+1.3** |
| J26L | | | | IAML | | 21 08 53.1 | |
| | comp=E,8.8nm,1.4s | | | | | | |
| J26L | | | | IAML | | 21 08 56.6 | |
| | comp=N,12nm,0.6s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **198** | Pn | **Pn** | **21 07 50.1** | **-0.1** |
| **HDA** | **Harding Lake** | **5.30** | **188** | Pn | **Pn** | **21 07 50.4** | **+0.1** |
| HDA | | | | IAML | | 21 09 30.4 | |
| | comp=E,11nm,1.0s | | | | | | |
| HDA | | | | IAML | | 21 09 35.3 | |
| | comp=N,11nm,1.4s | | | | | | |
| **WRH** | **Wood River Hil** | **5.31** | **194** | Pn | **Pn** | **21 07 51.0** | **+0.5** |
| WRH | | | | IAML | | 21 09 20.7 | |
| | comp=N,8.7nm,1.2s | | | | | | |
| WRH | | | | IAML | | 21 10 06.7 | |
| | comp=E,11nm,1.2s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.46** | **245** | Pn | **Pn** | **21 07 52.9** | **+0.4** |
| **A19K** | **Wainwright** | **5.50** | **283** | | **Pn** | **21 07 53.4** | **+0.4** |
| **I30M** | **Mount Dempster** | **5.58** | **138** | Pn | **Pn** | **21 07 53.8** | **-0.5** |
| **G19K** | **Purcell Mounta** | **5.70** | **238** | Pn | **Pn** | **21 07 56.0** | **+0.2** |
| **SCRK** | **Sand Creek** | **5.71** | **175** | Pn | **Pn** | **21 07 56.5** | **+0.5** |
| **K27K** | **Chicken** | **5.77** | **166** | Pn | **Pn** | **21 07 57.9** | **+1.2** |
| **C18K** | **Utukok River** | **5.80** | **268** | Pn | **Pn** | **21 07 57.1** | **-0.2** |
| **H19K** | **Roundabout Mou** | **5.96** | **232** | Pn | **Pn** | **21 07 59.4** | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **205** | Pn | **Pn** | **21 08 00.4** | **+0.3** |
| **DAWY** | **Dawson** | **6.04** | **155** | Pn | **Pn** | **21 08 00.8** | **+0.2** |
| **E18K** | **Tukpahlearik C** | **6.08** | **256** | Pn | **Pn** | **21 08 01.5** | **+0.6** |
| **J30M** | **Hart River** | **6.14** | **142** | Pn | **Pn** | **21 08 01.9** | **-0.1** |
| **G18K** | **Tagagawik** | **6.33** | **240** | Pn | **Pn** | **21 08 04.9** | **+0.4** |
| **J20K** | **Nowinta River** | **6.51** | **217** | Pn | **Pn** | **21 08 06.5** | **-0.4** |
| **K29M** | **Barlow Dome** | **6.56** | **149** | Pn | **Pn** | **21 08 08.3** | **+0.6** |
| **DHY** | **Denali Highway** | **6.65** | **189** | Pn | **Pn** | **21 08 10.9** | **+1.9** |
| **L26K** | **Log Cabin Wild** | **6.68** | **173** | Pn | **Pn** | **21 08 08.9** | **-0.4** |
| **BCAR** | **Beaver Creek A** | **6.74** | **167** | Pn | **Pn** | **21 08 09.2** | **-0.9** |
| **L27K** | **Beaver Creek,** | **6.74** | **167** | Pn | **Pn** | **21 08 10.2** | **0.0** |
| **H18K** | **Honhosa River** | **6.78** | **235** | Pn | **Pn** | **21 08 11.7** | **+1.1** |
| **A36M** | **Sachs Harbour** | **6.96** | **61** | Pn | **Pn** | **21 08 11.6** | **-1.5** |
| **L29M** | **L29M** | **7.14** | **153** | Pn | **Pn** | **21 08 17.6** | **+2.0** |
| **C16K** | **Lisburne Hills** | **7.37** | **269** | Pn | **Pn** | **21 08 17.2** | **-1.5** |
| **C36M** | **Paulatuk** | **7.41** | **82** | Pn | **Pn** | **21 08 17.5** | **-1.8** |
| **M29M** | **Somme Creek** | **7.72** | **156** | Pn | **Pn** | **21 08 23.3** | **-0.4** |
| **J17K** | **VABM Dome** | **8.35** | **228** | Pn | **Pn** | **21 08 31.6** | **-0.5** |
| **M20K** | **Styx River** | **8.44** | **207** | Pn | **Pn** | **21 08 35.9** | **+2.5** |
| **K17K** | **Idítarod** | **8.72** | **224** | Pn | **Pn** | **21 08 38.6** | **+1.4** |
| **L18K** | **Granite Mounta** | **8.79** | **218** | Pn | **Pn** | **21 08 39.4** | **+1.3** |
| **CTGM** | **Chitina Glacie** | **8.86** | **168** | Pn | **Pn** | **21 08 41.6** | **+2.3** |
| **N30M** | **Aishikik Lake** | **8.86** | **154** | Pn | **Pn** | **21 08 41.1** | **+1.9** |
| **MMPY** | **Sheldon Lake,** | **9.00** | **135** | Pn | **Pn** | **21 08 41.4** | **+0.3** |
| **YKA** | **Yellowknife Ar** | **14.17** | **105** | Pn | Pn | 21 09 45.8 | -5.9 |
| | comp=E,0.2nm,0.3s,baz=319,slow=13,SNR=2.2 | | | | | | |
| | comp=E,1.3nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.52** | **127** | P | **P** | **21 13 02.9** | **+0.8** |
| | comp=E,0.2nm,0.5s,baz=358,slow=5.4,SNR=2.0 | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | |

*IDC **13** 21:36:32.5±3.7,0°.25N×123°.80E,h121km±33km,mb3.3/6, mbtmp3.6/6,Error ellipse: s-maj=202.5km s-min=16.9km az=65.0*
*DJA **13** 21:36:37.3±1.3,1°S±4°×12°3E±°,h35km±21km,M3.6/6, MLv3.6/6*
**ISC 13 21:36:35.7±0.8,0°.16S±0°.10×123°.49E±0°.09,h157km,n10, σ2§54/15,mb3.5/6,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **0.88** | **34** | P | **Pn** | **21 36 59.8** | **-0.4** |
| KMSI | | | | S | **Sn** | **21 37 18.5** | **-0.5** |
| **GTOI** | **Gorontalo** | **0.93** | **329** | P | **Pn** | **21 37 01.2** | **+0.6** |
| GTOI | | | | S | **Sn** | **21 37 19.8** | **+0.2** |
| **MRSI** | **Marisa** | **1.68** | **292** | P | **Pn** | **21 37 06.4** | **-1.2** |
| MRSI | | | | S | **Sn** | **21 37 28.7** | **-3.5** |
| **SANI** | **Sanana** | **3.12** | **127** | P | **Pn** | **21 37 23.2** | **-1.7** |
| SANI | | | | S | **Sn** | **21 37 58.9** | **-4.1** |
| **WRA** | **Warramunga Arr** | **22.34** | **152** | P | **P** | **21 41 22.3** | **+1.4** |
| | 1.2nm,0.5s,baz=334,slow=10.0,SNR=28 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **25.46** | **157** | P | **P** | **21 41 52.2** | **+2.8** |
| | 0.3nm,0.5s,baz=345,slow=16,SNR=4.4 | | | | | | |
| ASAR | | | | ScP | **ScP** | **21 48 46.9** | **+4.8** |
| | 0.2nm,0.5s,baz=344,slow=2.2,SNR=2.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.89** | **153** | P | **P** | **21 43 23.1** | **+2.3** |
| | 1.9nm,0.7s,baz=326,slow=12,SNR=3.9 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **50.07** | **345** | P | **P** | **21 45 12.9** | **-1.7** |
| | 0.6nm,0.7s,baz=159,slow=6.2,SNR=2.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.01** | **328** | P | **P** | **21 46 18.3** | **-0.7** |
| | 0.3nm,0.5s,baz=131,slow=8.6,SNR=4.3 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.66** | **335** | P | **P** | **21 46 42.3** | **-1.1** |
| | 0.4nm,0.4s,baz=120,slow=8.5,SNR=2.1 | | | | | | |
| | 0.4nm,0.4s | | | | | | |

*NEIC **13** 21:40:03.6±2.3,0°.3N±0°.1×123°.23E±0°.08,h165km±10km, mb4.1/14,Error ellipse: s-maj=16.6km s-min=11.7km az=195.0*
*IDC **13** 21:40:04.1±7.0,0°.06S×123°.12E,h153km±63km,mb3.5/5, mbtmp3.9/6,Error ellipse: s-maj=84.8km s-min=23.2km az=56.0*
*DJA **13** 21:40:05.5±1.8,1°S±5°×12°3E±°,h27km±19km,M4.0/6, MLv4.0/6*
**ISC 13 21:40:04.0±0.7,0°.07N±0°.08×123°.11E±0°.07,h162km,n32, σ1§64/34,mb4.2/11,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GTOI** | **Gorontalo** | **0.57** | **350** | P | **Pn** | **21 40 27.7** | **+0.7** |
| GTOI | | | | S | **Sn** | **21 40 45.4** | **+0.6** |
| **KMSI** | **Cibinong** | **1.00** | **60** | P | **Pn** | **21 40 30.6** | **+0.7** |
| KMSI | | | | S | **Sn** | **21 40 49.3** | **-0.5** |
| **MRSI** | **Marisa** | **1.24** | **289** | P | **Pn** | **21 40 31.3** | **-0.6** |
| MRSI | | | | S | **Sn** | **21 40 50.7** | **-2.7** |
| **TOLI2** | **Tolitoli** | **2.55** | **294** | | **Pn** | **21 40 46.8** | **+0.5** |
| **MPSI** | **Mapaga** | **3.22** | **275** | P | **Pn** | **21 40 55.6** | **+1.0** |
| **SANI** | **Sanana** | **3.56** | **126** | P | **Pn** | **21 40 54.9** | **-4.0** |
| **TNTI** | **Ternate** | **4.31** | **81** | Pn | **Pn** | **21 41 06.4** | **-2.2** |
| **LBMI** | **Labuha** | **4.45** | **99** | P | **Pn** | **21 41 12.3** | **+2.0** |
| **KAPI** | **Kappang** | **6.06** | **214** | Pn | **Pn** | **21 41 33.7** | **+2.0** |
| **KAPI** | **Kappang** | **6.06** | **214** | P | **Pn** | **21 41 30.8** | **-0.8** |
| | 6.7nm,0.4s,baz=19,slow=17,SNR=3.7 | | | | | | |
| **FAKI** | **Fak Fak** | **9.60** | **108** | Pn | **Pn** | **21 42 16.3** | **-2.4** |
| **KNRA** | **Kununurra** | **16.61** | **161** | P | **Pn** | **21 43 48.3** | **+0.7** |
| KNRA | | | | IAmb | IAmb | 21 43 51.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.22** | **172** | P | **P** | **21 44 05.1** | **+0.2** |
| **MBWA** | **Marble Bar** | **21.36** | **189** | P | **P** | **21 44 38.6** | **0.0** |
| MBWA | | | | IAmb | IAmb | 21 44 39.5 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.60** | **151** | P | **P** | **21 44 50.7** | **-0.5** |
| **WRA** | **Warramunga Arr** | **22.73** | **152** | P | **P** | **21 44 50.6** | **-1.7** |
| **WRA** | **Warramunga Arr** | **22.73** | **152** | P | **P** | **21 44 52.1** | **-0.1** |
| | comp=Z,4.2nm,0.5s,baz=330,slow=10,SNR=90 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.73** | **152** | P | **P** | **21 44 52.4** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 21 44 53.2 | |
| |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LOOK | | | | IAML | | 21 40 47.7 | | |
| | comp=N,1μm,0.3s | | | | | | | |
| LOOK | | | | IAML | | 21 40 47.9 | | |
| | comp=E,1μm,0.4s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.65** | **325** | Pg | Pg | 21 40 50.6 | +0.1 | |
| X34A | | | | Sg | Sg | 21 40 58.7 | -0.2 | |
| X34A | | | | IAML | | 21 41 05.7 | | |
| | comp=N,188nm,0.6s | | | | | | | |
| **Z35A** | **Perchaven, San** | **0.74** | **171** | Pg | Pg | 21 40 52.3 | 0.0 | |
| Z35A | | | | Sg | Sg | 21 41 02.5 | +0.5 | |
| Z35A | | | | IAML | | 21 41 06.1 | | |
| | comp=N,195nm,0.6s | | | | | | | |
| **WTFS** | **Witchita Falls** | **0.95** | **252** | Pg | Pg | 21 40 55.4 | -0.8 | |
| WTFS | | | | Sg | Sg | 21 41 08.1 | -0.3 | |
| **FW06** | **Azle** | **1.10** | **187** | Pg | Pg | 21 40 58.8 | -0.4 | |
| **W35A** | **Tecumseh** | **1.16** | **21** | Pg | Pg | 21 40 59.4 | -0.9 | |
| W35A | | | | IAML | | 21 41 21.3 | | |
| | comp=E,201nm,0.5s | | | | | | | |
| W35A | | | | IAML | | 21 41 21.3 | | |
| | comp=N,109nm,0.4s | | | | | | | |
| **FW03** | **Perrin-Whitt E** | **1.17** | **209** | Pg | Pg | 21 40 59.0 | -1.5 | |
| **FNO** | **Franklin** | **1.19** | **359** | Pg | Pg | 21 40 59.1 | -1.7 | |
| FNO | | | | IAML | | 21 41 25.3 | | |
| | comp=E,104nm,0.3s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.33** | **300** | | Pn | 21 41 00.6 | -2.6 | |
| **PLPT** | **Palo Pinto** | **1.48** | **212** | | Pn | 21 41 04.4 | -0.7 | |
| **ADOK** | **Arcadia Dam** | **1.58** | **0** | | Pn | 21 41 05.8 | -0.8 | |
| **OK029** | **Liberty Lake** | **1.72** | **358** | | Pn | 21 41 08.7 | +0.1 | |
| **X37A** | **Clayton** | **1.75** | **72** | Pn | Pn | 21 41 09.4 | +0.5 | |
| **CSTR** | **Hydro, Custer** | **1.90** | **326** | Pn | Pn | 21 41 11.7 | +0.6 | |
| **DEOK** | **Depew** | **1.91** | **22** | Pn | Pn | 21 41 10.9 | -0.3 | |
| **OK031** | **S. Brethren Rd** | **1.93** | **13** | Pn | Pn | 21 41 11.7 | +0.3 | |
| **OK052** | **Battle Ridge R** | **1.98** | **14** | Pn | Pn | 21 41 12.2 | +0.1 | |
| **WHTX** | **Lake Whitney,** | **2.07** | **182** | Pn | Pn | 21 41 13.1 | -0.2 | |
| WHTX | | | | IAmb_Lg | | 21 41 47.6 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **QUOK** | **Quay** | **2.17** | **15** | Pn | Pn | 21 41 14.5 | -0.2 | |
| **TUL3** | **Leonard** | **2.25** | **35** | Pn | Pn | 21 41 15.8 | 0.0 | |
| TUL3 | | | | IAmb_Lg | | 21 41 49.5 | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **2.38** | **233** | Pn | Pn | 21 41 17.0 | -0.5 | |
| ABTX | | | | IAmb_Lg | | 21 41 53.4 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **OK032** | **Salt Plains WL** | **2.81** | **346** | Pn | Pn | 21 41 23.0 | -0.5 | |
| **RLO** | **Rose Lookout** | **2.85** | **42** | IAmb_Lg | | 21 42 12.2 | | |
| | comp=Z,6.7nm,0.9s | | | | | | | |
| **DKNS** | **Dickens** | **2.97** | **263** | Pn | Pn | 21 41 26.6 | +0.9 | |
| **SN07** | **Snyder 07** | **3.08** | **253** | IAmb_Lg | | 21 42 24.0 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **BRDY** | **Brady** | **3.09** | **207** | Pn | Pn | 21 41 27.2 | -0.2 | |
| **SN05** | **Snyder 5** | **3.16** | **249** | Pn | Pn | 21 41 27.0 | -1.3 | |
| SN05 | | | | IAmb_Lg | | 21 42 20.7 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **MIAR** | **Mount Ida** | **3.19** | **80** | IAmb_Lg | | 21 42 19.2 | | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **U38A** | **Gravette** | **3.41** | **45** | IAmb_Lg | | 21 42 32.2 | | |
| | comp=Z,6.9nm,0.7s | | | | | | | |
| **WLAR** | **White Oak Lake** | **3.58** | **95** | IAmb_Lg | | 21 42 39.1 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **POST** | **Post** | **3.58** | **255** | IAmb_Lg | | 21 42 38.5 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **HHAR** | **Hobbs** | **3.58** | **51** | Pn | Pn | 21 41 32.9 | -1.3 | |
| **AMTX** | **Amarillo** | **3.64** | **284** | Pn | Pn | 21 41 34.8 | -0.2 | |
| **SGCY** | **Sterling City** | **3.81** | **237** | Pn | Pn | 21 41 38.0 | +0.7 | |
| SGCY | | | | IAmb_Lg | | 21 42 47.7 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **OZNA** | **Ozona** | **4.45** | **226** | Pn | Pn | 21 41 46.2 | 0.0 | |
| **MSTX** | **Muleshoe** | **4.47** | **270** | IAmb_Lg | | 21 43 02.7 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **HNDO** | **Hondo** | **4.81** | **200** | Pn | Pn | 21 41 50.8 | -0.1 | |
| HNDO | | | | IAmb_Lg | | 21 43 19.0 | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **4.89** | **41** | IAmb_Lg | | 21 43 26.9 | | |
| | comp=Z,5.5nm,1.0s | | | | | | | |
| **KSU1** | **Kansas State U** | **5.06** | **7** | IAmb_Lg | | 21 43 21.9 | | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **MNHN** | **Monahans** | **5.29** | **240** | IAmb_Lg | | 21 43 34.6 | | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| **DRIO** | **Del Rio** | **5.39** | **212** | IAmb_Lg | | 21 43 33.5 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **SAND** | **Sanderson** | **5.75** | **226** | Pn | Pn | 21 42 04.2 | +0.3 | |
| SAND | | | | IAmb_Lg | | 21 43 50.2 | | |
| | comp=Z,9.7nm,1.1s | | | | | | | |
| **R40A** | **Maddies Statio** | **5.91** | **43** | IAmb_Lg | | 21 43 48.6 | | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| **833A** | **Chaparral WMA,** | **5.98** | **197** | IAmb_Lg | | 21 43 53.8 | | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **P38A** | **Dawn** | **6.35** | **28** | IAmb_Lg | | 21 44 15.0 | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **CCM** | **Cathedral Cave** | **6.37** | **50** | IAmb_Lg | | 21 44 12.3 | | |
| | comp=Z,6.5nm,1.0s | | | | | | | |
| **ALPN** | **Alpine** | **6.45** | **237** | IAmb_Lg | | 21 44 18.3 | | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **P40A** | **Paris** | **6.93** | **37** | IAmb_Lg | | 21 44 32.5 | | |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **7.13** | **230** | Pn | Pn | 21 42 22.6 | -0.4 | |
| **TXAR** | **Lajitas Array** | **7.13** | **230** | Pn | Pn | 21 42 24.4 | +1.4 | |
| **VHRN** | **Van Horn** | **7.21** | **245** | Pn | Pn | 21 42 26.3 | +2.2 | |
| **ANMO** | **Albuquerque** | **7.54** | **279** | IAmb_Lg | | 21 44 48.7 | | |
| | comp=Z,5.8nm,1.0s | | | | | | | |

*IDC* ***13*** *21:40:51.7±1.0, 69°.69N×144°.22W, h0km, mb3.9/7, mbtmp3.8/10, ML3.6/3, MS2.6/2, Error ellipse: s-maj=22.1km s-min=18.1km az=54.0*

*AEIC* ***13*** *21:40:51.7±1.6, 69°.48N±0°.04×144°.23W±0°.10, h18km±5km, ML3.8, ML3.9/112(NEIC), Mwr3.6/16(NEIC), Error ellipse: s-maj=6.8km s-min=4.8km az=162.0*

*NEIC* ***13*** *21:40:52.5±1.6, 69°.56N±0°.05×144°.12W±0°.08, h10km±2km, Error ellipse: s-maj=9.2km s-min=4.1km az=17.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr-0.95; Mθθ-1.75; Mϕϕ2.70; Mrθ0.32; Mθϕ-2.39; Mϕr0.60; Fault plane solution: M₀3.43000×10¹⁴ NP1: ϕs200.32000°, δ83.07000°, λ-14.53000°. NP2: ϕs292.11000°, δ75.58000°, λ-172.85000°. Principal axes: T 3.7729, Plg5.0000°, Azm247.0000°; N -0.8431, Plg74.0000°, Azm355.0000°; P -2.9298, Plg15.0000°, Azm155.0000°;*

*NEIC* ***13*** *21:40:52.9, 69°.53N×144°.27W, h8km*

**ISC 13 21:40:51.7±0.6, 69°.50N±0°.04×144°.18W±0°.03, h10km, n152, σ1§62/158, mb3.9/7, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.21** | **52** | | | **Pg** | | **21 40 56.9** | **+0.8** |
| C27K | | | | | | **Sg** | | **21 41 00.2** | **+1.2** |
| **C26K** | **Camden Bay** | **0.49** | **329** | | | **Pb** | | **21 41 02.0** | **-0.4** |
| C26K | | | | | | **Sb** | | **21 41 09.1** | **-0.5** |
| **D25K** | **Kavik River** | **0.80** | **258** | Pg | | **Pg** | | **21 41 05.8** | **-1.1** |
| D25K | | | | Sg | | **Sg** | | **21 41 16.9** | **-0.4** |
| **D27M** | **Malcolm River** | **1.17** | **101** | | | **Pb** | | **21 41 13.1** | **-0.8** |
| D27M | | | | | | **Sb** | | **21 41 29.0** | **-0.1** |
| D27M | | | | IAML | | | | 21 41 36.7 | |
| | comp=N,2μm,0.5s | | | | | | | | |
| **E27K** | **Coleen River** | **1.62** | **143** | Pn | | **Pn** | | **21 41 21.9** | **+1.7** |
| E27K | | | | IAML | | | | 21 41 46.8 | |
| | comp=E,1μm,0.5s | | | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **260** | Pn | | **Pn** | | **21 41 22.2** | **+1.1** |
| D24K | | | | IAML | | | | 21 41 49.8 | |
| | comp=E,2μm,0.4s | | | | | | | | |
| D24K | | | | IAML | | | | 21 41 51.8 | |
| | comp=N,2μm,0.5s | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.81** | **180** | Pn | | **Pn** | | **21 41 24.9** | **+2.0** |
| F26K | | | | IAML | | | | 21 41 52.9 | |
| | comp=N,1μm,0.5s | | | | | | | | |
| **E28M** | **Babbage River** | **1.90** | **116** | Pn | | **Pn** | | **21 41 26.2** | **+2.1** |
| E28M | | | | IAML | | | | 21 41 58.0 | |
| | comp=N,846nm,0.7s | | | | | | | | |
| **D28M** | **Stokes Point** | **1.93** | **92** | | | **Pb** | | **21 41 26.3** | **-0.6** |
| **F25K** | **Christian Rive** | **1.99** | **196** | Pn | | **Pn** | | **21 41 27.5** | **+2.2** |
| **TOLK** | **Toolik Lake Re** | **2.12** | **249** | Pn | | **Pn** | | **21 41 28.2** | **+1.1** |
| TOLK | | | | IAML | | | | 21 42 02.4 | |
| | comp=E,986nm,0.6s | | | | | | | | |
| TOLK | | | | IAML | | | | 21 42 06.5 | |
| | comp=N,694nm,0.7s | | | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **230** | Pn | | **Pn** | | **21 41 28.5** | **+1.3** |
| **C23K** | **Itkillik River** | **2.27** | **282** | Pn | | **Pn** | | **21 41 30.1** | **+0.9** |
| **D23K** | **Nanushuk River** | **2.38** | **260** | Pn | | **Pn** | | **21 41 32.5** | **+1.9** |
| **F24K** | **Squaw Lake** | **2.41** | **216** | Pn | | **Pn** | | **21 41 32.6** | **+1.5** |
| F24K | | | | IAML | | | | 21 42 09.9 | |
| | comp=E,500nm,0.6s | | | | | | | | |
| F24K | | | | IAML | | | | 21 42 13.1 | |
| | comp=N,568nm,0.5s | | | | | | | | |
| **E23K** | **Chandalar** | **2.45** | **236** | Pn | | **Pn** | | **21 41 33.8** | **+2.1** |
| **F28M** | **Old Crow** | **2.47** | **138** | Pn | | **Pn** | | **21 41 33.8** | **+1.9** |
| F28M | | | | IAML | | | | 21 42 16.6 | |
| | comp=N,485nm,0.6s | | | | | | | | |
| F28M | | | | IAML | | | | 21 42 17.5 | |
| | comp=E,618nm,0.6s | | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.56** | **176** | | | **Pn** | | **21 41 35.4** | **+2.2** |
| **G25K** | **Bearman Lake** | **2.84** | **196** | | | **Pn** | | **21 41 39.0** | **+2.1** |
| **G27K** | **Doyon Strip** | **2.86** | **160** | Pn | | **Pn** | | **21 41 39.3** | **+2.0** |
| **FYU** | **Fort Yukon** | **2.97** | **188** | Pn | | **Pn** | | **21 41 41.2** | **+2.5** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **205** | Pn | | **Pn** | | **21 41 40.9** | **+0.7** |
| **D22K** | **Ayikyak River** | **3.10** | **262** | Pn | | **Pn** | | **21 41 41.4** | **+0.9** |
| D22K | | | | IAML | | | | 21 42 36.0 | |
| | comp=N,451nm,0.7s | | | | | | | | |
| D22K | | | | IAML | | | | 21 42 40.3 | |
| | comp=E,287nm,0.8s | | | | | | | | |
| **COLD** | **Coldfoot** | **3.19** | **227** | | | **Pn** | | **21 41 43.1** | **+1.3** |
| **B22K** | **Teshekpuk Lake** | **3.30** | **289** | Pn | | **Pn** | | **21 41 44.4** | **+1.2** |
| **H25L** | **Birch Creek** | **3.30** | **192** | | | **Pn** | | **21 41 45.4** | **+2.0** |
| **H27K** | **Steamboat Moun** | **3.43** | **162** | | | **Pn** | | **21 41 47.5** | **+2.3** |
| **G29M** | **Pine Creek** | **3.47** | **136** | Pn | | **Pn** | | **21 41 47.4** | **+1.7** |
| **G23K** | **Bananza Creek** | **3.55** | **221** | Pn | | **Pn** | | **21 41 47.5** | **+0.7** |
| G23K | | | | IAML | | | | 21 42 49.8 | |
| | comp=E,228nm,1.3s | | | | | | | | |
| G23K | | | | IAML | | | | 21 42 50.0 | |
| | comp=N,287nm,1.1s | | | | | | | | |
| **F22K** | **John River** | **3.56** | **240** | | | **Pn** | | **21 41 47.4** | **+0.5** |
| **F30M** | **Barrier River** | **3.62** | **118** | | | **Pn** | | **21 41 49.6** | **+1.9** |
| **B21K** | **Ikpikpuk River** | **3.66** | **277** | Pn | | **Pn** | | **21 41 49.7** | **+1.5** |
| B21K | | | | IAML | | | | 21 42 34.9 | |
| | comp=E,241nm,0.7s | | | | | | | | |
| B21K | | | | IAML | | | | 21 43 06.6 | |
| | comp=N,237nm,0.9s | | | | | | | | |
| **E21K** | **Killik River** | **3.68** | **258** | Pn | | **Pn** | | **21 41 48.9** | **+0.3** |
| E21K | | | | IAML | | | | 21 43 05.6 | |
| | comp=N,166nm,1.2s | | | | | | | | |
| E21K | | | | IAML | | | | 21 43 07.9 | |
| | comp=E,167nm,0.8s | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.90** | **127** | Pn | | **Pn** | | **21 41 54.2** | **+2.7** |
| G30M | | | | IAML | | | | 21 43 07.7 | |
| | comp=N,136nm,0.7s | | | | | | | | |
| **H24K** | **Noodor Dome** | **3.94** | **203** | Pn | | **Pn** | | **21 41 53.4** | **+1.3** |
| H24K | | | | IAML | | | | 21 43 01.4 | |
| | comp=N,143nm,0.6s | | | | | | | | |
| H24K | | | | IAML | | | | 21 43 01.6 | |
| | comp=E,156nm,0.7s | | | | | | | | |
| **H29M** | **Whitestone** | **3.96** | **143** | Pn | | **Pn** | | **21 41 54.5** | **+2.2** |
| H29M | | | | IAML | | | | 21 43 07.6 | |
| | comp=N,211nm,1.3s | | | | | | | | |
| H29M | | | | IAML | | | | 21 43 10.8 | |
| | comp=E,243nm,1.1s | | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.96** | **297** | | | **Pn** | | **21 41 53.5** | **+1.2** |
| **PRP** | **Porcupine Dome** | **4.03** | **188** | Pn | | **Pn** | | **21 41 55.5** | **+2.0** |
| PRP | | | | IAML | | | | 21 43 06.6 | |
| | comp=E,153nm,1.0s | | | | | | | | |
| **I27K** | **Kandik River** | **4.03** | **165** | | | **Pn** | | **21 41 55.8** | **+2.3** |
| **INK** | **Inuvik** | **4.03** | **102** | Pn | | **Pn** | | **21 41 54.8** | **+1.4** |
| **INK** | **Inuvik** | **4.03** | **102** | Pn | | **Pn** | | **21 41 55.4** | **+2.0** |
| | comp=E,3.7nm,0.3s,baz=323,slow=7.3,SNR=12 | | | | | | | | |
| INK | | | | | Sn | **Sn** | | **21 42 41.5** | **+0.9** |
| | comp=E,5.6nm,0.3s,baz=331,slow=19,SNR=3.4 | | | | | | | | |
| INK | | | | | Lg | Lg | | 21 42 56.9 | |
| | comp=E,6.4nm,0.3s,baz=321,slow=18,SNR=4.3 | | | | | | | | |
| INK | | | | | LR | LR | | 21 44 04.5 | |
| | comp=E,52nm,19.9s,baz=253,slow=47 | | | | | | | | |
| | comp=E,12nm,0.5s | | | | | | | | |
| **F21K** | **Alatna River** | **4.13** | **241** | Pn | | **Pn** | | **21 41 56.1** | **+1.4** |
| F21K | | | | IAML | | | | 21 43 09.3 | |
| | comp=E,128nm,1.1s | | | | | | | | |
| F21K | | | | IAML | | | | 21 43 11.3 | |
| | comp=N,117nm,1.5s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.22** | **135** | Pn | | **Pn** | | **21 41 57.6** | **+1.7** |
| **H23K** | **Yukon River** | **4.22** | **212** | Pn | | **Pn** | | **21 41 57.8** | **+1.9** |
| H23K | | | | IAML | | | | 21 43 11.8 | |
| | comp=E,178nm,1.3s | | | | | | | | |
| H23K | | | | IAML | | | | 21 43 15.2 | |
| | comp=N,139nm,1.2s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.23** | **174** | Pn | | **Pn** | | **21 41 58.4** | **+2.4** |
| **F31M** | **Tsiigehtchic** | **4.37** | **113** | Pn | | **Pn** | | **21 41 59.5** | **+1.6** |
| F31M | | | | IAML | | | | 21 43 15.9 | |
| | comp=N,95nm,0.8s | | | | | | | | |
| F31M | | | | IAML | | | | 21 43 16.7 | |
| | comp=E,110nm,0.8s | | | | | | | | |
| **G31M** | **Satah River** | **4.51** | **120** | Pn | | **Pn** | | **21 42 02.0** | **+2.2** |
| **E20K** | **Nigu River** | **4.52** | **260** | | | **Pn** | | **21 42 01.5** | **+1.5** |
| **D20K** | **Etivluk River** | **4.52** | **266** | | | **Pn** | | **21 42 01.9** | **+1.9** |
| **B20K** | **Meade River** | **4.54** | **283** | Pn | | **Pn** | | **21 42 01.5** | **+1.2** |
| B20K | | | | IAML | | | | 21 42 53.5 | |
| | comp=N,159nm,0.6s | | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.54** | **221** | | | **Pn** | | **21 42 01.6** | **+1.3** |
| **A21K** | **Barrow** | **4.57** | **299** | | | **Pn** | | **21 42 01.4** | **+0.7** |
| **G21K** | **Allakaket** | **4.61** | **234** | Pn | | **Pn** | | **21 42 01.6** | **+0.3** |
| G21K | | | | IAML | | | | 21 43 26.1 | |
| | comp=E,143nm,0.6s | | | | | | | | |
| G21K | | | | IAML | | | | 21 43 27.5 | |
| | comp=N,126nm,1.0s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.73** | **149** | Pn | | **Pn** | | **21 42 04.7** | **+1.7** |
| I29M | | | | IAML | | | | 21 43 02.9 | |
| | comp=N,103nm,0.4s | | | | | | | | |
| I29M | | | | IAML | | | | 21 43 32.0 | |
| | comp=E,118nm,0.9s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.80** | **207** | Pn | | **Pn** | | **21 42 04.8** | **+0.9** |
| I23K | | | | IAML | | | | 21 43 32.4 | |
| | comp=E,122nm,1.1s | | | | | | | | |
| I23K | | | | IAML | | | | 21 43 33.9 | |
| | comp=N,87nm,1.1s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.82** | **201** | Pn | | **Pn** | | **21 42 06.2** | **+2.0** |
| MDM | | | | IAML | | | | 21 43 33.2 | |
| | comp=E,112nm,0.8s | | | | | | | | |
| MDM | | | | IAML | | | | 21 43 40.4 | |
| | comp=N,70nm,1.2s | | | | | | | | |
| **COLA** | **College** | **4.86** | **199** | | | **Pn** | | **21 42 05.7** | **+1.1** |
| **ILAR** | **Eielson Array** | **4.86** | **194** | Pn | | **Pn** | | **21 42 06.2** | **+1.5** |
| **ILAR** | **Eielson Array** | **4.86** | **194** | Pn | | **Pn** | | **21 42 07.0** | **+2.2** |
| | comp=N,3.6nm,0.3s,baz=5.4,slow=13,SNR=79 | | | | | | | | |
| ILAR | | | | | Sn | **Sn** | | **21 43 03.5** | **+2.5** |
| | comp=N,7.0nm,0.3s,baz=8.9,slow=18,SNR=6.6 | | | | | | | | |
| ILAR | | | | | Lg | Lg | | 21 43 23.4 | |
| | comp=N,9.6nm,0.3s,baz=13,slow=28,SNR=6.3 | | | | | | | | |
| | comp=N,8.3nm,0.4s | | | | | | | | |
| **EGAK** | **Eagle** | **4.88** | **165** | Pn | | **Pn** | | **21 42 06.7** | **+1.6** |
| EGAK | | | | IAML | | | | 21 43 41.1 | |
| | comp=N,77nm,1.1s | | | | | | | | |
| EGAK | | | | IAML | | | | 21 45 25.3 | |
| | comp=N,98nm,0.1s | | | | | | | | |
| **J25K** | **Salcha River,** | **4.93** | **186** | Pn | | **Pn** | | **21 42 06.9** | **+1.2** |
| J25K | | | | IAML | | | | 21 43 36.6 | |
| | comp=N,76nm,0.7s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.94** | **246** | Pn | | **Pn** | | **21 42 06.6** | **+0.8** |
| **J26L** | **Joseph Creek** | **5.03** | **177** | Pn | | **Pn** | | **21 42 09.5** | **+2.4** |
| J26L | | | | IAML | | | | 21 43 11.9 | |
| | comp=E,90nm,0.5s | | | | | | | | |
| J26L | | | | IAML | | | | 21 43 15.2 | |
| | comp=N,73nm,0.6s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **5.07** | **225** | Pn | | **Pn** | | **21 42 09.2** | **+1.5** |
| H21K | | | | IAML | | | | 21 43 41.2 | |
| | comp=E,83nm,1.2s | | | | | | | | |
| H21K | | | | IAML | | | | 21 43 44.2 | |
| | comp=N,69nm,0.9s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **198** | Pn | | **Pn** | | **21 42 08.9** | **+1.3** |
| CCB | | | | IAML | | | | 21 43 39.8 | |
| | comp=E,63nm,0.8s | | | | | | | | |
| **D19K** | **Kuna River** | **5.11** | **265** | Pn | | **Pn** | | **21 42 09.6** | **+1.4** |
| D19K | | | | IAML | | | | 21 43 57.3 | |
| | comp=E,61nm,1.1s | | | | | | | | |
| **MLY** | **Manley** | **5.15** | **213** | Pn | | **Pn** | | **21 42 10.3** | **+1.5** |
| **E19K** | **Redstone River** | **5.22** | **253** | Pn | | **Pn** | | **21 42 10.5** | **+0.8** |
| E19K | | | | IAML | | | | 21 43 38.8 | |
| | comp=N,76nm,0.6s | | | | | | | | |
| E19K | | | | IAML | | | | 21 44 02.8 | |
| | comp=E,65nm,1.1s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.24** | **141** | Pn | | **Pn** | | **21 42 11.7** | **+1.6** |
| I30M | | | | IAML | | | | 21 43 16.9 | |
| | comp=N,69nm,0.6s | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.28** | **199** | Pn | | **Pn** | | **21 42 12.8** | **+2.4** |
| WRH | | | | IAML | | | | 21 43 48.4 | |
| | comp=N,60nm,0.8s | | | | | | | | |
| WRH | | | | IAML | | | | 21 43 54.8 | |
| | comp=E,55nm,1.3s | | | | | | | | |
| **I21K** | **Tanana** | **5.28** | **219** | Pn | | **Pn** | | **21 42 11.6** | **+1.2** |
| I21K | | | | IAML | | | | 21 43 42.1 | |
| | comp=E,88nm,1.1s | | | | | | | | |
| **NEA2** | **Nenana** | **5.28** | **204** | Pn | | **Pn** | | **21 42 12.6** | **+2.0** |
| **C19K** | **Lookout Ridge** | **5.48** | **273** | Pn | | **Pn** | | **21 42 14.4** | **+1.2** |
| **SCRK** | **Sand Creek** | **5.55** | **179** | Pn | | **Pn** | | **21 42 16.6** | **+2.4** |
| **F19K** | **Shaleruckik Mo** | **5.73** | **249** | Pn | | **Pn** | | **21 42 18.0** | **+1.4** |
| **BWN** | **Browne** | **5.74** | **204** | Pn | | **Pn** | | **21 42 18.7** | **+2.0** |
| **H20K** | **Anotleneega Mo** | **5.74** | **231** | | | **Pn** | | **21 42 18.1** | **+1.3** |
| **J30M** | **Hart River** | **5.82** | **144** | Pn | | **Pn** | | **21 42 19.8** | **+1.8** |
| **A19K** | **Wainwright** | **5.88** | **285** | | | **Pn** | | **21 42 20.1** | **+1.6** |
| **DOT** | **Dot Lake** | **5.88** | **179** | | | **Pn** | | **21 42 21.2** | **+2.5** |
| **G19K** | **Purcell Mounta** | **5.93** | **242** | Pn | | **Pn** | | **21 42 19.5** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **6.05** | **210** | Pn | | **Pn** | | **21 42 22.0** | **+1.0** |
| **MCK** | **McKinley** | **6.09** | **200** | Pn | | **Pn** | | **21 42 23.5** | **+1.9** |
| **C18K** | **Utukok River** | **6.15** | **270** | Pn | | **Pn** | | **21 42 23.3** | **+0.8** |
| **H19K** | **Roundabout Mou** | **6.16** | **236** | Pn | | **Pn** | | **21 42 22.7** | **+0.2** |
| **I20K** | **Naaghedeneel** | **6.19** | **225** | Pn | | **Pn** | | **21 42 24.6** | **+1.7** |
| **B18K** | **Kokolik River** | **6.21** | **277** | | | **Pn** | | **21 42 23.6** | **+0.5** |
| **K29M** | **Barlow Dome** | **6.26** | **152** | Pn | | **Pn** | | **21 42 25.2** | **+1.1** |
| **E18K** | **Tukpahlearik C** | **6.39** | **259** | Pn | | **Pn** | | **21 42 26.9** | **+1.2** |
| **RND** | **Reindeer** | **6.39** | **199** | Pn | | **Pn** | | **21 42 28.2** | **+2.3** |
| **F18K** | **Selawik** | **6.48** | **251** | | | **Pn** | | **21 42 28.1** | **+1.2** |
| **L26K** | **Log Cabin Wild** | **6.51** | **177** | Pn | | **Pn** | | **21 42 28.8** | **+1.4** |
| **BCAR** | **Beaver Creek A** | **6.53** | **170** | Pn | | **Pn** | | **21 42 29.6** | **+1.9** |
| **L27K** | **Beaver Creek,** | **6.53** | **171** | Pn | | **Pn** | | **21 42 29.5** | **+1.8** |
| **PAX** | **Paxson** | **6.58** | **185** | Pn | | **Pn** | | **21 42 30.5** | **+2.1** |
| **G18K** | **Tagagawik** | **6.58** | **244** | Pn | | **Pn** | | **21 42 29.9** | **+1.6** |
| **J20K** | **Nowinta River** | **6.62** | **221** | Pn | | **Pn** | | **21 42 30.0** | **+1.1** |
| **A36M** | **Sachs Harbour** | **6.73** | **60** | Pn | | **Pn** | | **21 42 30.0** | **-0.3** |
| **L29M** | **L29M** | **6.86** | **156** | Pn | | **Pn** | | **21 42 34.0** | **+1.8** |
| **C17K** | **DeLong Mountai** | **6.90** | **270** | | | **Pn** | | **21 42 32.7** | **0.0** |
| **RDOG** | **Red Dog Mine** | **6.94** | **267** | Pn | | **Pn** | | **21 42 33.5** | **+0.3** |
| **E17K** | **Hotham Inlet** | **6.97** | **258** | | | **Pn** | | **21 42 34.2** | **+0.6** |
| **H18K** | **Honhosa River** | **6.99** | **238** | Pn | | **Pn** | | **21 42 34.9** | **+1.0** |
| **C36M** | **Paulatuk** | **7.08** | **82** | Pn | | **Pn** | | **21 42 35.4** | **+0.3** |
| **F17K** | **Baldwin Pennin** | **7.10** | **253** | Pn | | **Pn** | | **21 42 36.5** | **+1.0** |
| **J19K** | **Poorman** | **7.13** | **225** | Pn | | **Pn** | | **21 42 36.9** | **+1.0** |
| **D17K** | **Noatak River** | **7.14** | **264** | | | **Pn** | | **21 42 35.8** | **-0.1** |
| **M26K** | **Nabesna, AK** | **7.14** | **176** | Pn | | **Pn** | | **21 42 37.6** | **+1.5** |
| **M27K** | **Edge Creek, AK** | **7.23** | **171** | Pn | | **Pn** | | **21 42 39.6** | **+2.3** |
| **K20K** | **Telida** | **7.32** | **217** | Pn | | **Pn** | | **21 42 39.1** | **+0.6** |
| **M29M** | **Somme Creek** | **7.46** | **159** | Pn | | **Pn** | | **21 42 42.3** | **+1.9** |
| **G17K** | **Kiwalik Mounta** | **7.47** | **245** | | | **Pn** | | **21 42 41.2** | **+0.8** |
| **H17K** | **Granite Mounta** | **7.61** | **241** | Pn | | **Pn** | | **21 42 43.9** | **+1.5** |
| **C16K** | **Lisburne Hills** | **7.72** | **271** | Pn | | **Pn** | | **21 42 44.3** | **+0.4** |
| **L20K** | **Farewell, AK** | **8.07** | **214** | | | **Pn** | | **21 42 49.9** | **+1.1** |
| **G16K** | **Koyuk River** | **8.09** | **248** | Pn | | **Pn** | | **21 42 49.5** | **+0.6** |
| **M31M** | **Drury Creek, Y** | **8.34** | **147** | Pn | | **Pn** | | **21 42 53.5** | **+1.0** |
| **M20K** | **Styx River** | **8.48** | **210** | Pn | | **Pn** | | **21 42 56.6** | **+2.2** |
| **J17K** | **VÅBM Dome** | **8.52** | **231** | Pn | | **Pn** | | **21 42 55.1** | **+0.2** |
| **FARO** | **Faro, Yukon** | **8.53** | **144** | Pn | | **Pn** | | **21 42 55.9** | **+0.9** |
| **L19K** | **White Mountain** | **8.53** | **216** | Pn | | **Pn** | | **21 42 55.8** | **+0.6** |
| **N30M** | **Aishikik Lake** | **8.59** | **157** | Pn | | **Pn** | | **21 42 57.8** | **+2.0** |
| **I17K** | **Unalakleet** | **8.61** | **237** | Pn | | **Pn** | | **21 42 57.4** | **+1.3** |
| **MMPY** | **Sheldon Lake,** | **8.65** | **137** | Pn | | **Pn** | | **21 42 58.5** | **+1.7** |
| **F15K** | **North Star Dit** | **8.66** | **254** | Pn | | **Pn** | | **21 42 56.7** | **-0.1** |
| **M19K** | **Big River Lodg** | **8.69** | **214** | Pn | | **Pn** | | **21 42 58.2** | **+1.0** |
| **N31M** | **Braeburn, Yuko** | **8.76** | **153** | Pn | | **Pn** | | **21 43 00.7** | **+2.5** |
| **K17K** | **Iditarod** | **8.87** | **227** | Pn | | **Pn** | | **21 43 01.1** | **+1.4** |
| **L18K** | **Granite Mounta** | **8.90** | **221** | Pn | | **Pn** | | **21 43 01.2** | **+1.1** |
| **J16K** | **Anvik River** | **9.04** | **234** | Pn | | **Pn** | | **21 43 03.1** | **+1.1** |
| **O30N** | **Mendenhall** | **9.39** | **155** | Pn | | **Pn** | | **21 43 09.1** | **+2.2** |
| **WHY** | **Whitehorse** | **9.69** | **152** | Pn | | **Pn** | | **21 43 11.9** | **+0.9** |
| **M17K** | **Holitna River** | **9.79** | **220** | Pn | | **Pn** | | **21 43 13.1** | **+0.7** |
| **L16K** | **Owhat River** | **10.02** | **226** | Pn | | **Pn** | | **21 43 17.5** | **+2.2** |
| **N18K** | **Kilae Creek** | **10.11** | **215** | Pn | | **Pn** | | **21 43 17.8** | **+1.1** |
| **J14K** | **Nanvaranak Lak** | **10.32** | **238** | Pn | | **Pn** | | **21 43 19.4** | **0.0** |
| **WRGLY** | **Wrigley** | **10.38** | **117** | Pn | | **

comp=E,286nm,0.3s
**YUK Yuzh-Kuril'sk 2.85 271** *e*P **Pn 21 47 36.2 0.0**
YUK AMB AMB 21 47 37.1
comp=E,150nm,0.4s
YUK *e*S **Sn 21 48 07.4 -2.9**
YUK A A 21 48 10.8
comp=E,360nm,0.6s
YUK A A 21 48 10.8
comp=E,480nm,0.6s
**YUK Yuzh-Kuril'sk 2.85 271** *i* PN **Pn 21 47 38.1 +1.9**
**NEM2 Nemuro 2 3.04 258** P **Pn 21 47 38.4 -0.3**
NEM2 S **Sn 21 48 10.9 -4.0**
**NMR Nemuro--Hokkai 3.05 258** *e*P **Pn 21 47 38.4 -0.5**
NMR *e*S **Sn 21 48 11.7 -3.4**
**NMR Nemuro--Hokkai 3.05 258** *e*PN **Pn 21 47 38.3 -0.6**
NMR *e*S **Sn 21 48 11.6 -3.5**
**RUSJ Misakicho 3.29 272** *e*PN **Pn 21 47 43.2 +0.9**
RUSJ *e*S **Sn 21 48 20.8 -0.4**
**JRA Rausu 3.39 269** P **Pn 21 47 44.6 +1.0**
JRA *e*S **Sn 21 48 22.9 -0.7**
**JNK Nakash 3.72 264** P **Pn 21 47 48.6 +0.4**
**JAK Akkeshi 3.88 256** *e*P **Pn 21 47 50.2 0.0**
JAK *e*S **Sn 21 48 32.6 -2.9**
**JTKR Abashiri--Toko 4.26 271** *e*P **Pn 21 47 56.6 +1.1**
**JAR Ashorobuto 4.45 262** P **Pn 21 47 59.0 +0.8**
JAR *e*S **Sn 21 48 48.5 -1.4**
**JCH Churui 4.93 255** P **Pn 21 48 05.3 +0.6**
JCH *e*S **Sn 21 48 59.4 -2.1**
**JKA Kamikawa-asahi 5.20 273** **Pn 21 48 10.2 +1.7**
**JKA Kamikawa-asahi 5.20 273** *e*P **Pn 21 48 10.6 +2.1**
**ASAJ Asahikawa 5.20 273** Pn **Pn 21 48 10.6 +2.1**
comp=E,0.8nm,0.3s,baz=85,slow=12,SNR=11
ASAJ Sn **Sn 21 49 08.7 +0.4**
comp=E,0.6nm,0.3s,baz=46,slow=18,SNR=1.5
**ERM Erimo 5.29 249** Pn **Pn 21 48 10.4 +0.7**
**ERM Erimo 5.29 249** *de*PN **Pn 21 48 11.7 +1.9**
ERM pmax pmax
comp=Z,38nm,1.7s
**JNBK Urakawa-nobuka 5.47 253** *e*P **Pn 21 48 12.5 +0.4**
**YSS Yuzh-Sakhalins 5.74 303** *e*P **Pn 21 48 16.9 +1.0**
YSS AMB AMB 21 48 20.4
comp=Z,20nm,0.5s
YSS *e*S **Sn 21 49 20.1 -1.4**
YSS A A 21 49 26.4
comp=Z,60nm,0.6s
YSS A A 21 49 26.4
comp=Z,30nm,0.6s
**YSS Yuzh-Sakhalins 5.74 303** *e*PN **Pn 21 48 13.4 -2.5**
**JANG Nango 7.18 242** *e*P **Pn 21 48 35.1 -0.7**
JANG *e*S **Sn 21 49 49.1 -8.0**
**JTM Tenmabayashi 7.26 246** Pn **Pn 21 48 36.6 -0.1**
**MAJO Matsushiro 11.62 234** Pn **Pn 21 49 38.1 +1.6**
**MAJO Matsushiro 11.62 234** *i* PN **Pn 21 49 37.2 +0.7**
**MJAR Matsushiro Arr 11.62 234** Pn **Pn 21 49 37.4 +1.0**
baz=225,slow=18,SNR=4.2
comp=Z,0.4nm,0.6s
**MJB9 Matsu-Tunnel 11.62 234** Pn **Pn 21 49 37.9 +1.4**
**USRK Ussuriysk Ar. 12.81 277** Pn **Pn 21 49 53.8 +1.1**
comp=Z,0.2nm,0.3s,baz=84,slow=14,SNR=4.2
comp=Z,1.5nm,0.5s
**KLR Kul'dur 13.43 299** Pn **Pn 21 50 04.0 +2.9**
comp=Z,0.1nm,0.3s,baz=110,slow=14,SNR=1.5
KLR LR LR 21 55 48.0
comp=Z,81nm,19.9s,baz=84,slow=40
**KLR Kul'dur 13.43 299** *e*P **Pn 21 49 59.6 -1.6**
**KLR Kul'dur 13.43 299** *i* PN **Pn 21 49 59.6 -1.6**
KLR pmax pmax
comp=Z,1.0nm,1.4s
**BNX BinXian 15.96 284** ⇓P **Pn 21 50 34.6 -0.6**
BNX pmax pmax
comp=Z,5.0nm,0.8s
**CN2 Changchun 17.54 278** P **Pn 21 50 54.6 -0.6**
CN2 pmax pmax
comp=Z,10.0nm,0.5s
**KSRS Korea Array 17.83 256** P **P 21 50 59.6 +0.3**
comp=Z,0.2nm,0.3s,baz=64,slow=9.5,SNR=2.1
comp=Z,0.4nm,0.3s
**JNU Nakatsue 18.36 240** LR LR 21 59 20.3
comp=Z,78nm,18.0s,baz=354,slow=41
**SEY Seymchan 18.96 4** P **P 21 51 10.2 -1.5**
comp=Z,0.2nm,0.3s,baz=164,slow=8.8,SNR=8.3
comp=Z,1.2nm,0.3s
**SEY Seymchan 18.96 4** *ce*P **P 21 51 09.6 -2.0**
SEY pmax pmax
comp=Z,4.0nm,0.9s
**YAK Yakutsk 21.51 334** LR LR 22 00 30.0
comp=Z,46nm,18.6s,baz=132,slow=38
**YAK Yakutsk 21.51 334** *ce*P **P 21 51 38.2 -1.2**
YAK pmax pmax
comp=Z,9.0nm,0.7s
**NJ2 Nanjing 27.01 254** *e*P **P 21 52 33.0 +0.4**
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**HHC Hu-ho-hao-te 28.23 277** *e*P **P 21 52 45.3 +1.6**
HHC pmax pmax
comp=Z,8.0nm,0.5s
HHC pmax pmax
comp=Z,56nm,3.9s
**ULN Ulaanbaatar 29.68 293** *e*P **P 21 52 56.8 +0.2**
**ULN Ulaanbaatar 29.68 293** *ce*P **P 21 52 56.8 +0.2**
ULN pmax pmax
comp=Z,3.0nm,0.9s
**SONM Songino Array 30.12 293** P **P 21 53 00.9 +0.5**
comp=Z,1.8nm,0.8s,baz=88,slow=8.9,SNR=9.3
SONM LR LR 22 06 29.1
comp=Z,58nm,18.4s,baz=346,slow=39
comp=Z,1.8nm,0.8s
**SONM Songino Array 30.12 293** *e*P **P 21 53 00.8 +0.4**
SONM pmax pmax
comp=Z,2.0nm,0.8s
**LZH Lanzhou 35.68 273** *e*P **P 21 53 50.4 +1.3**
LZH sP pwP 21 54 01.9 +1.3
LZH pmax pmax
comp=Z,19nm,1.0s
**GTA Gaotai 37.14 281** *e*P **P 21 54 02.8 +1.3**
GTA pP pwP 21 54 07.8 -5.2
GTA pmax pmax
comp=Z,4.0nm,0.8s
**GYA Guiyang 38.87 258** ⇑P **P 21 54 17.3 +1.1**
GYA pmax pmax
comp=Z,11nm,0.5s
**RND Reindeer 39.23 39** P **P 21 54 15.1 -3.6**
RND IAmb IAmb 21 54 50.8
comp=Z,32nm,0.9s
**RND Reindeer 39.23 39** P **P 21 54 15.1 -3.6**
RND pmax pmax
comp=Z,32nm,0.9s
**DHY Denali Highway 39.91 39** P **P 21 54 20.9 -3.6**
**F26K Sheenjek River 41.20 32** **P 21 54 32.8 -2.2**
F26K IAmb IAmb 21 54 43.6
comp=Z,31nm,1.1s
**PZH PanZhiHua 42.33 262** P **P 21 54 46.8 +2.0**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,280nm,5.2s
**ZALV Zalesovo Beam 42.34 307** P **P 21 54 42.7 -1.7**
comp=Z,0.6nm,0.5s,baz=101,slow=7.7,SNR=3.8
ZALV PcP **PcP 21 56 38.5 +0.9**
comp=Z,0.5nm,0.3s,baz=72,slow=4.8,SNR=4.9
comp=Z,0.6nm,0.5s
**ZALV Zalesovo Beam 42.34 307** *e*P **P 21 54 45.2 +0.8**
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**DAV Davao City (W) 42.52 217** LR LR 22 11 02.6
comp=Z,47nm,21.6s,baz=152,slow=34
**WMQ Urumqi 43.76 292** *e*P **P 21 54 57.4 +1.3**
WMQ pmax pmax
comp=Z,9.0nm,0.9s
**MK31 Makanchi Array 46.14 298** P **P 21 55 14.9 0.0**
MK31 IAmb IAmb 21 55 16.5
comp=Z,4.5nm,0.8s
**MK31 Makanchi Array 46.14 298** *ce*P **P 21 55 15.0 0.0**
**MKAR Makanchi Array 46.14 298** P **P 21 55 15.2 +0.2**
comp=Z,4.5nm,0.8s,baz=72,slow=7.8,SNR=42
MKAR PcP **PcP 21 56 51.5 +0.7**
comp=Z,0.3nm,0.6s,baz=55,slow=3.2,SNR=1.5
comp=Z,4.5nm,0.8s
**MKAR Makanchi Array 46.14 298** *e*P **P 21 55 15.2 +0.2**
MKAR pmax pmax
comp=Z,4.0nm,0.8s
**MAKZ Makanchi 46.33 298** P **P 21 55 16.6 +0.1**
MAKZ IAmb IAmb 21 55 18.0
comp=Z,3.9nm,0.7s
**MAKZ Makanchi 46.33 298** P **P 21 55 16.6 +0.1**
MAKZ pmax pmax
comp=Z,4.0nm,0.7s
**KURK Kurchatov 46.94 305** P **P 21 55 19.8 -1.3**
**KURK Kurchatov 46.94 305** *e*P **P 21 55 20.3 -0.8**
**KURK Kurchatov 46.94 305** ⇑*i*P **P 21 55 20.3 -0.8**
KURK pmax pmax
comp=Z,2.0nm,1.0s
**KURBB Kurchatov Arra 47.03 304** P **P 21 55 21.5 -0.4**
comp=Z,0.8nm,0.3s,baz=72,slow=8.1,SNR=4.1
KURBB PcP **PcP 21 56 54.3 +0.5**
comp=Z,0.3nm,0.3s,baz=63,slow=3.2,SNR=1.5
comp=Z,0.8nm,0.3s
**BOOM Boomskoye usch 52.08 296** P **P 21 56 01.4 +0.7**
BOOM IAmb IAmb 21 56 15.0
comp=Z,6.2nm,0.8s
**BOOM Boomskoye usch 52.08 296** P **P 21 56 01.4 +0.7**
BOOM pmax pmax
comp=Z,6.0nm,0.8s
**AAK Ala-Archa 52.95 297** *e*P **P 21 56 08.6 +1.5**
**AAK Ala-Archa 52.95 297** *ce*P **P 21 56 08.6 +1.5**
AAK pmax pmax
comp=Z,2.0nm,0.9s
**ARSB Arslanbob 54.58 296** P **P 21 56 19.5 +0.4**
**ARSB Arslanbob 54.58 296** P **P 21 56 19.5 +0.4**
ARSB pmax pmax
comp=Z,3.0nm,0.9s
**KK31 Karatay Array 55.26 299** P **P 21 56 23.9 +0.1**
**KK31 Karatay Array 55.26 299** P **P 21 56 23.9 +0.1**
KK31 pmax pmax
comp=Z,2.0nm,0.9s
**KKAR Karatay Array 55.26 299** P **P 21 56 23.4 -0.4**
**KKAR Karatay Array 55.26 299** P **P 21 56 23.4 -0.4**
**ARU Arti 55.42 318** *e*P **P 21 56 24.2 -0.5**
**ARU Arti 55.42 318** *d*/P **P 21 56 24.2 -0.5**
ARU 21 58 25.0
ARU S **S 22 04 07.4 -1.3**
ARU SS **SS 22 07 49.3 -3.3**
ARU pmax pmax
comp=Z,3.0nm,0.8s
**ABKAR Akbulak array 58.35 310** P **P 21 56 45.4 -0.2**
ABKAR IAmb IAmb 21 56 46.8
comp=Z,3.4nm,0.8s
**CHGR Chuyangaron 58.48 295** P **P 21 56 46.9 +0.1**
CHGR IAmb IAmb 21 57 00.3
comp=Z,12nm,0.8s
**CHGR Chuyangaron 58.48 295** P **P 21 56 46.9 +0.1**
CHGR pmax pmax
comp=Z,12nm,0.8s
**SIMJ Simiganj 58.58 295** P **P 21 56 47.3 -0.2**
SIMJ IAmb IAmb 21 57 01.1
comp=Z,7.3nm,0.8s
**AKTO Aktyubinsk 58.77 312** LR LR 22 22 28.7
comp=Z,35nm,18.0s,baz=214,slow=36
**BELG Belogornoye 62.97 318** *i* P **P 21 57 16.2 -0.8**
BELG pmax pmax
comp=Z,1.0nm,0.6s
**DLMT Dillon 64.88 51** P **P 21 57 26.9 -3.1**
DLMT IAmb IAmb 21 57 30.5
comp=Z,8.6nm,1.3s
**WRA Warramunga Arr 65.26 196** P **P 21 57 34.4 +2.1**
comp=Z,1.5nm,0.3s,baz=20,slow=6.9,SNR=4.7
comp=Z,1.5nm,0.3s
**FIA1 FINESS Array S 65.45 334** P **P 21 57 32.5 -0.5**
**FINES FINESS Array B 65.45 334** P **P 21 57 32.8 -0.3**
comp=Z,4.5nm,0.6s,baz=35,slow=8.6,SNR=23
comp=Z,4.5nm,0.6s
**FINES FINESS Array B 65.45 334** *e*P **P 21 57 33.1 0.0**
FINES pmax pmax
comp=Z,5.0nm,0.6s
**NVAR Mina Array Bea 65.77 59** P **P 21 57 36.8 +0.9**
comp=Z,0.6nm,0.8s,baz=276,slow=5.8,SNR=3.7
comp=Z,0.6nm,0.8s
**PDAR Pinedale Array 68.22 51** P **P 21 57 52.1 +0.7**
comp=Z,0.3nm,0.4s,baz=219,slow=1.9,SNR=4.9
comp=Z,0.3nm,0.4s
**ASAR Alice Springs 68.97 196** P **P 21 57 58.3 +2.5**
comp=Z,0.6nm,0.8s,baz=8.8,slow=5.5,SNR=4.7
comp=Z,0.6nm,0.8s
**NC405 NORSAR Array S 69.79 340** P **P 21 58 00.7 +0.1**
**NC204 NORSAR Array S 69.89 340** P **P 21 58 01.3 +0.1**
NC204 IAmb IAmb 21 59 57.5
comp=Z,32nm,1.7s
**NB201 NORSAR Array S 69.95 340** P **P 21 58 01.7 +0.1**
**NB2 NORSAR Subarra 69.98 340** P **P 21 58 01.7 -0.1**
comp=Z,4.6nm,0.7s,baz=31,slow=6.5
**NOA NORSAR Array B 69.98 340** P **P 21 58 01.9 +0.1**
comp=Z,3.3nm,0.7s,baz=31,slow=6.2,SNR=23
comp=Z,3.3nm,0.7s
**NOA NORSAR Array B 69.98 340** *e*P **P 21 58 02.2 +0.4**
NOA pmax pmax
comp=Z,3.0nm,0.7s
**MNK Minsk 70.08 328** *i* P **P 21 58 04.0 +1.6**
MNK *i* 21 58 26.0
MNK *i* 22 00 38.8
MNK *i* PPP PPP 22 02 20.9
MNK *i* S **S 22 07 16.7 +4.1**
MNK pmax pmax
comp=N,5.0nm,0.9s
MNK pmax pmax
comp=E,11nm,0.8s
MNK pmax pmax
comp=Z,10.0nm,0.7s
MNK MLR MLR
comp=E,24nm,18.0s
MNK MLR MLR
comp=Z,27nm,16.0s
MNK MLR MLR
comp=N,25nm,18.0s
**HFS Hagfors 70.12 338** P **P 21 58 02.4 -0.1**
comp=N,5.1nm,0.6s,baz=50,slow=8.0,SNR=13
comp=N,5.1nm,0.6s
**KIV Kislovodsk 70.97 313** P **P 21 58 09.5 +1.4**
KIV IAmb IAmb 21 58 11.2
comp=Z,4.8nm,0.7s
**KIV Kislovodsk 70.97 313** *e*P **P 21 58 09.9 +1.7**
**KIV Kislovodsk 70.97 313** *e*P **P 21 58 09.9 +1.7**
KIV pmax pmax
comp=Z,5.0nm,1.0s
**KBZ Khabaz 71.01 313** P **P 21 58 08.7 +0.4**
comp=Z,3.4nm,0.8s,baz=56,slow=5.9,SNR=8.5
comp=Z,3.4nm,0.8s
**SHA1 Shidzhatmaz 71.13 313** *e*P **P 21 58 11.1 +1.8**
**AKASG Malin Array Be 72.44 325** P **P 21 58 16.6 -0.2**
comp=Z,0.3nm,0.3s,baz=40,slow=6.6,SNR=5.0
comp=Z,0.3nm,0.3s
**AKASG Malin Array Be 72.44 325** *i* P **P 21 58 18.3 +1.5**
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**AKBB Malin Array Si 72.44 325** ⇓*i*P **P 21 58 17.1 +0.3**
AKBB pmax pmax
comp=Z,4.0nm,1.0s
**BUR08 Bucovina Ar. S 76.48 325** P **P 21 58 40.6 +0.1**
**BURAR Bucovina Array 76.50 325** P **P 21 58 40.8 +0.3**
**LANS Liptovska Anna 77.50 329** *e*P **P 21 58 48.5 +2.4**
LANS pmax pmax
comp=Z,2.0nm,0.8s
**LANS Liptovska Anna 77.50 329** *e*P **P 21 58 48.5 +2.4**
**KRLC Kraliky 77.69 331** *e*P **P 21 58 48.2 +1.0**
**KRLC Kraliky 77.69 331** *e*P **P 21 58 48.2 +1.0**
**CLL Collm 77.90 334** *i* P **P 21 58 48.5 +0.3**
comp=Z,4.0nm,0.8s
**CLL Collm 77.90 334** *i* P **P 21 58 48.5 +0.3**
CLL pmax pmax
comp=Z,4.0nm,0.8s
**VYHS Vyhne 78.28 329** *e*P **P 21 58 51.2 +0.8**
VYHS pmax pmax
comp=Z,2.0nm,0.9s
**VYHS Vyhne 78.28 329** *e*P **P 21 58 51.2 +0.8**
**EKA Eskdalemuir Ar 78.35 345** P **P 21 58 51.1 +0.5**
comp=Z,0.4nm,0.6s,baz=24,slow=16,SNR=1.6
comp=Z,0.4nm,0.6s
**BRTR Keskin Array B 78.70 315** P **P 21 58 53.6 +0.6**
comp=Z,0.8nm,0.8s,baz=28,slow=6.5,SNR=3.4
comp=Z,0.8nm,0.8s
**KHC Kasperske Hory 79.59 332** *e*P **P 21 58 58.1 +0.5**
**KHC Kasperske Hory 79.59 332** ⇑*i*P **P 21 58 58.5 +0.9**
KHC pmax pmax
comp=Z,22nm,3.1s
**TXAR Lajitas Array 80.86 58** P **P 21 59 06.8 +1.9**
comp=Z,1.3nm,0.5s,baz=324,slow=5.0,SNR=4.7
comp=Z,1.3nm,0.5s
**MMAI Mount Meron Ar 82.79 310** P **P 21 59 16.3 +1.3**
comp=Z,1.8nm,0.8s,baz=0.0,slow=4.9,SNR=1.8
comp=Z,1.8nm,0.8s
**O54A Avella 84.72 36** P **P 21 59 22.1 -2.6**

*AEIC* ***13*** *21:51:24.3±1.7, 69.43N±0.04×144.17W±0.10, h18km±5km, ML3.7, mb3.8/1(NEIC), ML3.8/116(NEIC), Mwr3.8/21(NEIC), Error ellipse: s-maj=6.4km s-min=4.2km az=211.0*
*NEIC* ***13*** *21:51:26.5±1.5, 69.53N±0.03×144.0W±0.1, h10km±2km, Error ellipse: s-maj=6.8km s-min=4.5km az=49.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.04; $M_{\theta\theta}$=3.61; $M_{\phi\phi}$3.66; $M_{r\theta}$=2.25; $M_{r\phi}$=-4.43; $M_{\theta\phi}$1.00; Fault plane solution: $M_o$6.23000×$10^{14}$ NP1: $\phi_s$291.54000°, $\delta$76.16000°, $\lambda$-164.70000°. NP2: $\phi_s$197.80000°, $\delta$75.16000°, $\lambda$-14.32000°. Principal axes: T 5.7477, Plg1.0000°, Azm65.0000°; N 0.8793, Plg69.0000°, Azm333.0000°; P -6.6271, Plg21.0000°, Azm155.0000°;*
*NEIC* ***13*** *21:51:26.1, 69.54N×144.14W, h9km*
*IDC* ***13*** *21:51:27.2±1.1, 69.59N×144.03W, h0km, mb3.8/4, mbtmp3.8/8, ML3.6/4, MS3.1/5, Error ellipse: s-maj=23.9km s-min=17.0km az=47.0*

**ISC 13 21:51:26.4±0.6, 69.49N±0.05×144.12W±0.04, h10km, n162, σ1$07/164, mb3.9/4, MS3.2/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **47** | Pg | **Pg** | **21 51 29.7** | **-0.9** |
| C27K | | | | | **Sg** | **21 51 32.4** | **-0.9** |
| C27K | | | | IAML | | 21 51 33.6 | |
| | comp=E,17μm,0.6s | | | | | | |
| C27K | | | | IAML | | 21 51 33.6 | |
| | comp=N,18μm,0.4s | | | | | | |
| **C26K** | **Camden Bay** | **0.51** | **328** | | **Pg** | **21 51 35.0** | **-1.3** |
| C26K | | | | | **Sg** | **21 51 42.9** | **-0.1** |
| **D25K** | **Kavik River** | **0.81** | **259** | Pg | **Pg** | **21 51 39.4** | **-2.7** |
| **D27M** | **Malcolm River** | **1.15** | **101** | | **Pb** | **21 51 46.9** | **-1.4** |
| D27M | | | | Sg | **Sg** | **21 52 02.4** | **-0.9** |
| D27M | | | | IAML | | 21 52 09.5 | |
| | comp=N,2μm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.60** | **144** | Pn | **Pn** | **21 51 54.9** | **+0.1** |
| E27K | | | | IAML | | 21 52 20.6 | |
| | comp=N,946nm,0.7s | | | | | | |
| E27K | | | | IAML | | 21 52 22.6 | |
| | comp=E,1μm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.70** | **261** | Pn | **Pn** | **21 51 56.4** | **+0.3** |
| **F26K** | **Sheenjek River** | **1.81** | **180** | Pn | **Pn** | **21 51 58.2** | **+0.6** |
| F26K | | | | IAML | | 21 52 24.6 | |
| | comp=E,1μm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **1.88** | **116** | Pn | **Pn** | **21 51 59.0** | **+0.5** |
| E28M | | | | IAML | | 21 52 31.2 | |
| | comp=E,737nm,1.0s | | | | | | |
| E28M | | | | IAML | | 21 52 33.4 | |
| | comp=N,750nm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **1.91** | **92** | Pn | **Pn** | **21 51 58.8** | **-0.1** |
| **F25K** | **Christian Rive** | **1.99** | **197** | Pn | **Pn** | **21 52 00.9** | **+0.8** |
| F25K | | | | IAML | | 21 52 30.1 | |
| | comp=E,852nm,0.9s | | | | | | |
| F25K | | | | IAML | | 21 52 34.3 | |
| | comp=N,925nm,1.2s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **185** | Pn | **Pn** | **21 52 01.5** | **+0.1** |
| **E24K** | **Your Creek** | **2.13** | **230** | Pn | **Pn** | **21 52 02.4** | **+0.3** |
| **TOLK** | **Toolik Lake Re** | **2.14** | **249** | Pn | **Pn** | **21 52 01.8** | **-0.3** |
| **C23K** | **Itkillik River** | **2.29** | **282** | Pn | **Pn** | **21 52 04.9** | **+0.6** |
| C23K | | | | IAML | | 21 52 40.9 | |
| | comp=E,772nm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.40** | **260** | Pn | **Pn** | **21 52 05.5** | **-0.1** |
| D23K | | | | IAML | | 21 52 55.6 | |
| | comp=N,478nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **217** | Pn | **Pn** | **21 52 06.4** | **+0.4** |
| **F28M** | **Old Crow** | **2.45** | **138** | Pn | **Pn** | **21 52 08.8** | **+0.4** |
| F28M | | | | IAML | | 21 52 48.3 | |
| | comp=N,404nm,0.6s | | | | | | |
| F28M | | | | IAML | | 21 52 51.3 | |
| | comp=E,409nm,1.1s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.56** | **177** | | **Pn** | **21 52 09.3** | **+1.4** |
| **G25K** | **Bearman Lake** | **2.84** | **196** | | **Pn** | **21 52 12.6** | **+0.9** |
| **G27K** | **Doyon Strip** | **2.85** | **160** | Pn | **Pn** | **21 52 12.2** | **+0.3** |
| **FYU** | **Fort Yukon** | **2.97** | **189** | Pn | **Pn** | **21 52 13.5** | **0.0** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **206** | Pn | **Pn** | **21 52 15.1** | **+0.1** |
| G24K | | | | IAML | | 21 53 07.2 | |
| | comp=N,386nm,1.4s | | | | | | |
| G24K | | | | IAML | | 21 53 08.4 | |
| | comp=E,340nm,1.2s | | | | | | |
| **D22K** | **Ayikyak River** | **3.12** | **263** | Pn | **Pn** | **21 52 14.9** | **-0.7** |
| D22K | | | | IAML | | 21 53 11.4 | |
| | comp=E,314nm,1.2s | | | | | | |
| D22K | | | | IAML | | 21 53 13.0 | |
| | comp=N,378nm,1.0s | | | | | | |
| **COLD** | **Coldfoot** | **3.20** | **228** | Pn | **Pn** | **21 52 17.2** | **+0.5** |
| **H25L** | **Birch Creek** | **3.30** | **192** | | **Pn** | **21 52 19.0** | **+0.9** |
| **B22K** | **Teshekpuk Lake** | **3.32** | **289** | Pn | **Pn** | **21 52 18.0** | **-0.2** |
| **H27K** | **Steamboat Moun** | **3.42** | **162** | | **Pn** | **21 52 20.5** | **+0.7** |
| **G29M** | **Pine Creek** | **3.45** | **136** | Pn | **Pn** | **21 52 20.6** | **+0.5** |
| G29M | | | | IAML | | 21 53 29.1 | |
| | comp=N,283nm,0.9s | | | | | | |
| **G23K** | **Bananza Creek** | **3.56** | **221** | Pn | **Pn** | **21 52 22.4** | **+0.7** |
| G23K | | | | IAML | | 21 53 23.1 | |
| | comp=N,175nm,1.4s | | | | | | |
| G23K | | | | IAML | | 21 53 24.6 | |
| | comp=E,251nm,1.3s | | | | | | |
| **F30M** | **Barrier River** | **3.60** | **118** | | **Pn** | **21 52 23.4** | **+1.3** |
| **B21K** | **Ikpikpuk River** | **3.68** | **277** | Pn | **Pn** | **21 52 23.2** | **-0.1** |
| B21K | | | | IAML | | 21 53 26.8 | |
| | comp=N,205nm,1.2s | | | | | | |
| **E21K** | **Killik River** | **3.71** | **258** | Pn | **Pn** | **21 52 22.7** | **-0.9** |
| E21K | | | | IAML | | 21 53 34.4 | |
| | comp=E,187nm,1.2s | | | | | | |
| E21K | | | | IAML | | 21 53 49.9 | |
| | comp=N,179nm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.88** | **127** | Pn | **Pn** | **21 52 26.1** | **+0.1** |
| G30M | | | | IAML | | 21 53 36.5 | |
| | comp=E,131nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.94** | **203** | Pn | **Pn** | **21 52 26.9** | **0.0** |
| H24K | | | | IAML | | 21 53 35.4 | |
| | comp=E,161nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **3.94** | **144** | Pn | **Pn** | **21 52 27.4** | **+0.4** |
| H29M | | | | IAML | | 21 53 46.5 | |
| | comp=E,177nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.01** | **102** | Pn | **Pn** | **21 52 29.2** | **+1.4** |
| **INK** | **Inuvik** | **4.01** | **102** | Pn | **Pn** | **21 52 29.8** | **+2.0** |
| | comp=E,3.1nm,0.3s,baz=324,slow=7.2,SNR=9.2 | | | | | | |
| INK | | | | Sn | **Sn** | **21 53 13.9** | **-0.9** |
| | comp=E,4.5nm,0.3s,baz=267,slow=16,SNR=3.0 | | | | | | |
| INK | | | | LR | LR | 21 54 37.3 | |
| | comp=E,57nm,18.3s,baz=26,slow=48 comp=E,8.3nm,0.5s | | | | | | |
| **I27K** | **Kandik River** | **4.02** | **165** | | **Pn** | **21 52 28.8** | **+0.7** |
| **PRP** | **Porcupine Dome** | **4.03** | **188** | Pn | **Pn** | **21 52 28.9** | **+0.6** |
| PRP | | | | IAML | | 21 53 33.9 | |
| | comp=E,120nm,1.1s | | | | | | |
| PRP | | | | IAML | | 21 53 36.8 | |
| | comp=N,171nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **4.15** | **241** | Pn | **Pn** | **21 52 30.7** | **+0.9** |
| F21K | | | | IAML | | 21 53 39.3 | |
| | comp=N,114nm,0.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.20** | **135** | Pn | **Pn** | **21 52 30.8** | **+0.4** |
| **I26K** | **Coal Creek Min** | **4.22** | **174** | Pn | **Pn** | **21 52 31.4** | **+0.7** |
| **H23K** | **Yukon River** | **4.22** | **212** | Pn | **Pn** | **21 52 30.9** | **+0.1** |
| H23K | | | | IAML | | 21 53 42.2 | |
| | comp=N,129nm,1.3s | | | | | | |
| H23K | | | | IAML | | 21 53 43.4 | |
| | comp=E,125nm,1.0s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.34** | **113** | Pn | **Pn** | **21 52 33.3** | **+1.0** |
| F31M | | | | IAML | | 21 53 51.4 | |
| | comp=N,134nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.37** | **156** | Pn | **Pn** | **21 52 34.1** | **+1.2** |
| I28M | | | | IAML | | 21 54 03.4 | |
| | comp=E,92nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.49** | **120** | Pn | **Pn** | **21 52 34.6** | **+0.3** |
| **E20K** | **Nigu River** | **4.54** | **260** | | **Pn** | **21 52 35.1** | **0.0** |
| **D20K** | **Etivluk River** | **4.54** | **266** | | **Pn** | **21 52 35.7** | **+0.5** |
| **H22K** | **Ishtalitna Cre** | **4.55** | **221** | | **Pn** | **21 52 35.5** | **+0.3** |
| **B20K** | **Meade River** | **4.56** | **283** | Pn | **Pn** | **21 52 35.3** | **0.0** |
| **POKR** | **Poker Plat Res** | **4.58** | **198** | Pn | **Pn** | **21 52 35.7** | **0.0** |
| POKR | | | | IAML | | 21 53 32.9 | |
| | comp=N,85nm,0.7s | | | | | | |
| POKR | | | | IAML | | 21 53 33.0 | |
| | comp=E,110nm,0.7s | | | | | | |
| **A21K** | **Barrow** | **4.59** | **299** | | **Pn** | **21 52 35.0** | **-0.6** |
| **G21K** | **Allakaket** | **4.62** | **234** | Pn | **Pn** | **21 52 37.2** | **+1.0** |
| G21K | | | | IAML | | 21 53 59.7 | |
| | comp=N,90nm,1.1s | | | | | | |
| G21K | | | | IAML | | 21 54 10.8 | |
| | comp=E,94nm,1.2s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.71** | **149** | Pn | **Pn** | **21 52 38.4** | **+0.9** |
| I29M | | | | IAML | | 21 54 04.3 | |

comp=E,82nm,0.9s
I29M IAML 21 55 02.9
comp=N,100nm,0.1s
**I23K Minto, Yukon-K 4.81 207** Pn **Pn 21 52 39.2 +0.4**
I23K IAML 21 54 10.5
comp=E,92nm,1.4s
I23K IAML 21 54 14.5
comp=N,85nm,1.3s
**MDM Murphy Dome 4.83 201** Pn **Pn 21 52 39.9 +0.8**
MDM IAML 21 53 56.6
comp=E,79nm,0.9s
MDM IAML 21 54 03.6
comp=N,74nm,1.2s
**COLA College 4.86 199** Pn **Pn 21 52 39.4 0.0**
**IL31 4.86 194** Pn **Pn 21 52 39.5 0.0**
**ILAR Eielson Array 4.86 194** Pn **Pn 21 52 40.4 +0.9**
**ILAR Eielson Array 4.86 194** Pn **Pn 21 52 41.4 +1.8**
comp=N,2.4nm,0.3s,baz=6.0,slow=14,SNR=57
ILAR Sn **Sn 21 53 35.3 -0.5**
comp=N,2.6nm,0.3s,baz=8.8,slow=22,SNR=5.0
ILAR Lg Lg 21 53 55.7
comp=N,3.7nm,0.3s,baz=10,slow=32,SNR=7.5
comp=N,8.2nm,0.5s
**EGAK Eagle 4.88 165** Pn **Pn 21 52 40.4 +0.7**
EGAK IAML 21 53 39.3
comp=N,62nm,1.1s
EGAK IAML 21 54 13.4
comp=N,62nm,1.2s
**J25K Salcha River, 4.93 186** Pn **Pn 21 52 40.9 +0.4**
J25K IAML 21 54 00.9
comp=E,86nm,1.1s
**F20K Avaraart Lake 4.96 246** Pn **Pn 21 52 40.9 +0.1**
F20K IAML 21 54 19.8
comp=N,60nm,1.3s
**J26L Joseph Creek 5.02 177** Pn **Pn 21 52 42.5 +0.7**
J26L IAML 21 54 17.5
comp=E,68nm,0.8s
**CCB Clear Creek Bu 5.08 198** Pn **Pn 21 52 43.1 +0.6**
**H21K Melozitna Rive 5.08 225** Pn **Pn 21 52 43.3 +0.7**
H21K IAML 21 54 18.1
comp=N,66nm,1.0s
H21K IAML 21 54 18.5
comp=E,56nm,1.1s
**D19K Kuna River 5.13 265** Pn **Pn 21 52 43.0 -0.3**
D19K IAML 21 54 22.3
comp=E,63nm,1.1s
**MLY Manley 5.16 213** Pn **Pn 21 52 44.0 +0.4**
**HDA Harding Lake 5.23 194** Pn **Pn 21 52 45.1 +0.6**
HDA IAML 21 54 08.5
comp=E,69nm,1.1s
**I30M Mount Dempster 5.23 141** Pn **Pn 21 52 44.7 +0.1**
I30M IAML 21 53 49.8
comp=N,52nm,0.6s
**E19K Redstone River 5.24 253** Pn **Pn 21 52 45.0 +0.3**
E19K IAML 21 54 21.2
comp=N,62nm,0.8s
**WRH Wood River Hil 5.28 199** Pn **Pn 21 52 46.0 +0.8**
WRH IAML 21 54 21.7
comp=N,48nm,1.1s
WRH IAML 21 54 22.5
comp=E,70nm,1.2s
**I21K Tanana 5.29 219** Pn **Pn 21 52 45.4 +0.1**
**NEA2 Nenana 5.29 204** Pn **Pn 21 52 45.4 0.0**
NEA2 IAML 21 54 20.4
comp=E,44nm,1.4s
**C19K Lookout Ridge 5.50 273** Pn **Pn 21 52 47.9 -0.4**
**SCRK Sand Creek 5.54 179** Pn **Pn 21 52 50.1 +1.1**
**K27K Chicken 5.55 171** Pn **Pn 21 52 49.6 +0.7**
**J29N Klondike Camp 5.57 153** Pn **Pn 21 52 49.4 +0.2**
**BWN Browne 5.74 204** Pn **Pn 21 52 51.7 +0.1**
**F19K Shaleruckik Mo 5.75 249** Pn **Pn 21 52 51.4 -0.2**
**K24K Donnelly Dome 5.75 187** **Pn 21 52 54.0 +2.3**
**DAWY Dawson 5.76 159** Pn **Pn 21 52 52.7 +0.8**
**J30M Hart River 5.80 145** Pn **Pn 21 52 51.8 -0.8**
**DOT Dot Lake 5.87 180** **Pn 21 52 54.5 +1.1**
**A19K Wainwright 5.90 285** **Pn 21 52 53.3 -0.4**
**G19K Purcell Mounta 5.95 242** Pn **Pn 21 52 54.8 +0.4**
**BPAW Bear Paw Mtn. 6.05 210** Pn **Pn 21 52 55.9 0.0**
**MCK McKinley 6.09 201** Pn **Pn 21 52 56.9 +0.5**
**C18K Utukok River 6.17 270** Pn **Pn 21 52 56.6 -0.9**
**H19K Roundabout Mou 6.17 236** Pn **Pn 21 52 57.3 -0.2**
**I20K Naaghedeneel 6.20 225** Pn **Pn 21 52 59.1 +1.3**
**B18K Kokolik River 6.23 277** **Pn 21 52 57.6 -0.7**
**K29M Barlow Dome 6.25 152** Pn **Pn 21 52 59.6 +1.0**
**RND Reindeer 6.40 199** Pn **Pn 21 53 00.8 +0.2**
**E18K Tukpahlearik C 6.41 259** Pn **Pn 21 53 00.8 +0.1**
**F18K Selawik 6.50 251** **Pn 21 53 02.1 +0.2**
**L26K Log Cabin Wild 6.50 177** Pn **Pn 21 53 03.2 +1.1**
**BCAR Beaver Creek A 6.52 171** Pn **Pn 21 53 03.0 +0.6**
**L27K Beaver Creek, 6.53 171** Pn **Pn 21 53 03.6 +1.2**
**PAX Paxson 6.58 185** Pn **Pn 21 53 04.2 +1.1**
**DHY Denali Highway 6.58 193** Pn **Pn 21 53 05.2 +2.0**
**MENT Mentasta 6.59 178** Pn **Pn 21 53 04.6 +1.3**
**G18K Tagagawik 6.60 244** Pn **Pn 21 53 04.0 +0.7**
**J20K Nowinta River 6.63 221** Pn **Pn 21 53 02.5 -1.3**
**A36M Sachs Harbour 6.71 59** Pn **Pn 21 53 03.3 -1.5**
**L29M L29M 6.85 157** Pn **Pn 21 53 07.6 +0.8**
**C17K DeLong Mountai 6.92 271** **Pn 21 53 06.1 -1.6**
**RDOG Red Dog Mine 6.96 267** Pn **Pn 21 53 07.7 -0.7**
**H18K Honhosa River 7.01 238** Pn **Pn 21 53 08.7 -0.2**
**C36M Paulatuk 7.06 82** Pn **Pn 21 53 07.7 -1.9**
**F17K Baldwin Pennin 7.12 253** Pn **Pn 21 53 10.4 0.0**
**M26K Nabesna, AK 7.14 176** Pn **Pn 21 53 12.0 +1.2**
**J19K Poorman 7.14 225** Pn **Pn 21 53 10.7 -0.1**
**D17K Noatak River 7.16 264** **Pn 21 53 09.1 -1.9**
**M27K Edge Creek, AK 7.22 172** Pn **Pn 21 53 13.2 +1.1**
**K20K Telida 7.33 218** Pn **Pn 21 53 12.6 -0.7**
**M29M Somme Creek 7.44 159** Pn **Pn 21 53 15.9 +0.9**
**H17K Granite Mounta 7.63 241** Pn **Pn 21 53 17.9 +0.5**
**C16K Lisburne Hills 7.75 271** Pn **Pn 21 53 17.9 -1.1**
**SCM Sheep Creek Mo 7.80 191** Pn **Pn 21 53 18.9 +0.9**
**SML Sawmill 7.91 195** Pn **Pn 21 53 22.0 +0.6**
**N25K Chitina, Valde 7.92 182** Pn **Pn 21 53 21.9 +0.4**
**GLB Gilahina Butte 8.09 179** Pn **Pn 21 53 25.3 +1.5**
**G16K Koyuk River 8.11 248** Pn **Pn 21 53 22.9 -1.1**
**SKT Skwentna 8.13 206** Pn **Pn 21 53 25.5 +1.1**
**MCARA McCarthy VSAT 8.16 176** Pn **Pn 21 53 27.6 +2.9**
**M31M Drury Creek, Y 8.32 147** Pn **Pn 21 53 26.3 -0.7**
**M20K Styx River 8.49 210** Pn **Pn 21 53 30.4 +1.1**
**FARO Faro, Yukon 8.51 144** Pn **Pn 21 53 30.4 +0.9**
**SUA Susitna One 8.51 202** Pn **Pn 21 53 32.4 +2.7**
**J17K VABM Dome 8.54 232** Pn **Pn 21 53 29.8 -0.1**
**L19K White Mountain 8.54 216** Pn **Pn 21 53 30.7 +0.7**
**N30M Aishikik Lake 8.57 157** Pn **Pn 21 53 31.2 +0.8**
**I17K Unalakleet 8.62 237** **Pn 21 53 32.4 +1.4**
**MMPY Sheldon Lake, 8.64 137** Pn **Pn 21 53 32.4 +1.1**
**CTGM Chitina Glacie 8.64 171** Pn **Pn 21 53 33.6 +2.1**
**F15K North Star Dit 8.68 254** Pn **Pn 21 53 31.1 -0.8**
**M19K Big River Lodg 8.70 214** Pn **Pn 21 53 33.3 +1.1**
**N31M Braeburn, Yuko 8.74 153** Pn **Pn 21 53 33.3 +0.5**
**K17K Iditarod 8.88 227** Pn **Pn 21 53 35.8 +1.2**
**L18K Granite Mounta 8.91 221** Pn **Pn 21 53 35.3 +0.3**
**J16K Anvik River 9.05 235** Pn **Pn 21 53 38.9 +1.9**
**O30N Mendenhall 9.38 155** Pn **Pn 21 53 42.1 +0.7**
**M17K Holitna River 9.80 221** Pn **Pn 21 53 47.1 -0.2**
**L16K Owhat River 10.03 226** Pn **Pn 21 53 51.0 +0.7**
**WRGLY Wrigley 10.36 117** Pn **Pn 21 53 55.7 +0.9**
**CNPM China Poot 10.46 200** Pn **Pn 21 53 58.5 +2.3**
**P33M Teslin, Yukon 10.46 147** Pn **Pn 21 53 57.9 +1.6**
**M16K Timber Creek 10.49 223** Pn **Pn 21 53 55.4 -1.3**
**R33M Jennings River 11.58 145** Pn **Pn 21 54 11.5 -0.1**
**Q32M Nakina River 11.73 148** Pn **Pn 21 54 15.5 +1.8**
**DLBC Dease Lake 12.65 144** Pn **Pn 21 54 26.6 +0.3**
comp=E,0.2nm,0.3s,baz=0.1,slow=5.2,SNR=3.6
DLBC LR LR 21 59 39.6
comp=E,121nm,18.3s,baz=302,slow=39
comp=E,2.0nm,0.7s
**YKA Yellowknife Ar 13.77 106** Pn **Pn 21 54 37.1 -4.3**
comp=E,0.3nm,0.3s,baz=315,slow=15,SNR=1.7
YKA Sn Sn 21 57 00.6 -14
comp=E,0.4nm,0.3s,baz=317,slow=23,SNR=2.7
comp=E,2.1nm,0.8s
**CHGN Chignik 14.69 213** **Pn 21 54 54.7 +0.8**
**EUNU Eureka 17.38 29** **Pn 21 55 28.1 -0.5**
EUNU IAmb IAmb 21 56 02.3
comp=Z,6.8nm,0.9s
**NEW Newport 25.03 134** LR LR 22 07 24.2
comp=Z,65nm,18.2s,baz=340,slow=38
**SEY Seymchan 25.29 287** P **P 21 56 54.7 +2.2**
comp=Z,3.7nm,0.6s,baz=28,slow=5.3,SNR=9.2
comp=Z,3.7nm,0.6s
**NVAR Mina Array Bea 34.06 142** P **P 21 58 13.3 +2.6**
comp=Z,0.5nm,0.7s,baz=341,slow=5.2,SNR=2.0
comp=Z,0.5nm,0.7s
**PFO Pinyon Flats O 39.09 142** LR LR 22 16 16.5
comp=Z,37nm,18.1s,baz=272,slow=38
**ANMO Albuquerque 40.29 129** LR LR 22 16 11.7
comp=Z,29nm,20.3s,baz=66,slow=37
**MKAR Makanchi Array 59.13 325** P **P 22 01 29.0 +2.4**
comp=Z,0.3nm,0.5s,baz=34,slow=5.4,SNR=3.7
comp=Z,0.3nm,0.5s
**AKASG Malin Array Be 60.02 5** P **P 22 01 34.0 +1.4**
comp=Z,0.9nm,0.5s,baz=358,slow=7.1,SNR=2.6
comp=Z,0.9nm,0.5s

**ROM 13 21:56:56.1±0.1, 41.713N±0.003×13.705E±0.004, h7km, ML1.5/18, 3C-2D, Error ellipse: s-maj=0.3km s-min=0.2km az=91.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **POFI** | **Posta Fibreno** | **0.01** | **48** | ⇑P | | Pg | 21 56 57.5 | -0.1 |
| POFI | | | | S | | Sg | 21 56 58.0 | -0.5 |
| **LRP** | **Arpino** | **0.11** | **234** | P | | Pg | 21 56 59.2 | +0.7 |
| LRP | | | | S | | Sg | 21 57 01.4 | +1.1 |
| LRP | | | | AML | | AML | | |
| | comp=N,290μm,0.5s | | | | | | | |
| LRP | | | | AML | | AML | | |
| | comp=N,290μm,0.5s | | | | | | | |
| LRP | | | | AML | | AML | | |
| | comp=E,338μm,0.2s | | | | | | | |
| LRP | | | | AML | | AML | | |
| | comp=N,290μm,1.5s | | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.17** | **339** | ⇑P | | Pg | 21 57 00.4 | +0.7 |
| VVLD | | | | S | | Sg | 21 57 03.5 | +1.4 |
| VVLD | | | | AML | | AML | | |
| | comp=E,230μm,0.7s | | | | | | | |
| VVLD | | | | AML | | AML | | |
| | comp=E,230μm,1.3s | | | | | | | |
| VVLD | | | | AML | | AML | | |
| | comp=N,236μm,0.4s | | | | | | | |
| **LIK** | **San Giovanni I** | **0.23** | **208** | P | | Pg | 21 57 01.3 | +0.5 |
| LIK | | | | S | | Sg | 21 57 05.8 | +1.9 |
| LIK | | | | AML | | AML | | |
| | comp=N,378μm,0.5s | | | | | | | |
| LIK | | | | AML | | AML | | |
| | comp=E,264μm,0.5s | | | | | | | |
| **MCI** | **Monte Cassino** | **0.24** | **160** | P | | Pg | 21 57 01.6 | +0.6 |
| MCI | | | | S | | Sg | 21 57 05.5 | +1.3 |
| MCI | | | | AML | | AML | | |
| | comp=N,390μm,0.2s | | | | | | | |
| MCI | | | | AML | | AML | | |
| | comp=E,492μm,0.2s | | | | | | | |
| **CERA** | **Filignano** | **0.26** | **116** | P | | Pg | 21 57 02.1 | +0.7 |
| CERA | | | | S | | Sb | 21 57 06.8 | -1.1 |
| CERA | | | | AML | | AML | | |
| | comp=E,128μm,0.3s | | | | | | | |
| CERA | | | | AML | | AML | | |
| | comp=N,109μm,0.5s | | | | | | | |
| **GUAR** | **Guarcino** | **0.30** | **286** | P | | Pb | 21 57 03.3 | -0.6 |
| GUAR | | | | S | | Sb | 21 57 08.1 | -1.1 |
| **INTR** | **Introdacqua** | **0.33** | **26** | ⇓P | | Pg | 21 57 03.5 | +0.8 |
| INTR | | | | S | | Sb | 21 57 09.1 | -0.9 |
| INTR | | | | AML | | AML | | |
| | comp=E,99μm,0.7s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=E,99μm,1.3s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=N,127μm,1.3s | | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.34** | **92** | ⇓P | | Pb | 21 57 04.0 | -0.5 |
| RNI2 | | | | S | | Sb | 21 57 08.8 | -1.2 |
| RNI2 | | | | AML | | AML | | |
| | comp=N,75μm,0.7s | | | | | | | |
| RNI2 | | | | AML | | AML | | |
| | comp=E,91μm,0.7s | | | | | | | |
| **PTQR** | **Pietraquaria** | **0.38** | **324** | P | | Pg | 21 57 04.4 | +0.7 |
| PTQR | | | | S | | Sb | 21 57 10.5 | -1.0 |
| **MIDA** | **Miranda** | **0.42** | **100** | P | | Pg | 21 57 04.9 | +0.6 |
| MIDA | | | | S | | Sb | 21 57 11.9 | -0.5 |
| **LPEL** | **Lama dei Pelig** | **0.49** | **47** | P | | Pb | 21 57 06.6 | -0.4 |
| LPEL | | | | S | | Sb | 21 57 13.9 | -0.5 |
| **VAGA** | **Valle Agricola** | **0.50** | **127** | P | | Pb | 21 57 06.7 | -0.5 |
| **T0110** | **Collepietro** | **0.52** | **6** | P | | Pb | 21 57 06.9 | -0.7 |
| T0110 | | | | S | | Sb | 21 57 15.1 | -0.2 |
| T0110 | | | | AML | | AML | | |
| | comp=E,71μm,0.7s | | | | | | | |
| T0110 | | | | AML | | AML | | |
| | comp=N,94μm,0.5s | | | | | | | |
| T0110 | | | | AML | | AML | | |
| | comp=E,71μm,1.3s | | | | | | | |
| **CERT** | **Cerreto** | **0.59** | **294** | ⇑P | | Pg | 21 57 07.7 | +0.2 |
| CERT | | | | S | | Sb | 21 57 16.9 | -0.4 |
| CERT | | | | AML | | AML | | |
| | comp=N,36μm,1.4s | | | | | | | |
| CERT | | | | AML | | AML | | |
| | comp=N,36μm,0.6s | | | | | | | |
| CERT | | | | AML | | AML | | |
| | comp=E,50μm,0.5s | | | | | | | |
| **LATB** | **Latina** | **0.60** | **249** | P | | Pg | 21 57 07.9 | +0.3 |
| LATB | | | | S | | Sb | 21 57 17.0 | -0.4 |
| **VCEL** | **Villa Celiera** | **0.69** | **8** | P | | Pg | 21 57 09.8 | +0.4 |
| VCEL | | | | S | | Sb | 21 57 20.1 | -0.2 |

*IDC **13** 22:08:48.6±1.7, 44.56N×149.78E, h0km, mb3.9/7, mbtmp3.8/9, ML2.8/2, MS3.3/1, Error ellipse: s-maj=47.9km s-min=21.8km az=170.0*
*JMA **13** 22:08:49.8±0.6, 45°N.3°×15°0E±°, h30km, MV3.9/13, SE OFF ETOROFU*
*NIED **13** 22:08:49.8, 44.55N×149.68E, h30km, MW3.6, Moment Tensor Solution. s3 Moment tensor: Scale 10^14Nm; Mrr2.12; Mθθ 0.27; Mφφ -2.39; Mrθ 0.29; Mφr -1.80; Mθφ 1.23; Fault plane solution: Mo3.01000×10^14 NP1:φs 16.00000°, δ58.00000°, λ76.00000°. NP2:φs 222.00000°, δ34.00000°, λ112.00000°.*
*SKHL **13** 22:08:50.4±0.4, 44.00N×149.80E, h41km±5km, mb4.4/3*
**ISC 13 22:08:50.8±1.0, 43.91N±0.08×149.78E±0.08, h35km, n27, s19/65/39, mb3.8/7, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.90** | **315** | *e*P | | **Pn** | **22 09 18.9** | **-1.8** |
| KUR | | | | | AMB | AMB | 22 09 22.8 | |
| | 110nm,0.3s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **22 09 40.5** | **-2.9** |
| KUR | | | | A | | A | 22 09 45.7 | |
| | 540nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 22 09 45.7 | |
| | 470nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **2.13** | **270** | *i* P | | **Pn** | **22 09 23.6** | **-0.2** |
| SHO | | | | | AMB | AMB | 22 09 25.0 | |
| | 20nm,0.2s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **22 09 47.6** | **-1.4** |
| SHO | | | | A | | A | 22 09 49.6 | |
| | 440nm,0.5s | | | | | | | |
| SHO | | | | A | | A | 22 09 49.6 | |
| | 350nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.83** | **274** | *e*P | | **Pn** | **22 09 33.0** | **-0.4** |
| YUK | | | | | AMB | AMB | 22 09 33.7 | |
| | 90nm,0.3s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **22 10 05.0** | **-1.3** |
| YUK | | | | A | | A | 22 10 08.1 | |
| | 160nm,0.3s | | | | | | | |
| YUK | | | | A | | A | 22 10 08.1 | |
| | 240nm,0.3s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.98** | **261** | P | | **Pn** | **22 09 35.2** | **-0.3** |
| NEM2 | | | | *e*S | | **Sn** | **22 10 09.2** | **-0.8** |
| **NMR** | **Nemuro--Hokkai** | **2.99** | **261** | *i* P | | **Pn** | **22 09 35.7** | **+0.1** |
| NMR | | | | *i* S | | **Sn** | **22 10 09.9** | **-0.3** |
| **JRA** | **Rausu** | **3.36** | **272** | *e*P | | **Pn** | **22 09 41.5** | **+0.7** |
| JRA | | | | *e*S | | **Sn** | **22 10 20.6** | **+1.2** |
| **JNK** | **Nakash** | **3.68** | **267** | *e*P | | **Pn** | **22 09 45.8** | **+0.7** |
| JNK | | | | *e*S | | **Sn** | **22 10 27.1** | **-0.1** |
| **AKK** | **Akkeshi** | **3.70** | **258** | *e*P | | **Pn** | **22 09 46.1** | **+0.7** |
| AKK | | | | *e*S | | **Sn** | **22 10 27.5** | **-0.3** |
| **JAK** | **Akkeshi** | **3.81** | **258** | *e*P | | **Pn** | **22 09 47.6** | **+0.7** |
| JAK | | | | *e*S | | **Sn** | **22 10 28.3** | **-2.1** |
| **JTKR** | **Abashiri--Toko** | **4.24** | **273** | *e*P | | **Pn** | **22 09 53.9** | **+1.1** |
| **JAR** | **Ashorobuto** | **4.41** | **264** | *e*P | | **Pn** | **22 09 56.0** | **+0.9** |
| JAR | | | | *e*S | | **Sn** | **22 10 45.7** | **+0.5** |
| **JOB** | **Onbets** | **4.44** | **259** | *e*P | | **Pn** | **22 09 56.3** | **+0.6** |
| JOB | | | | *e*S | | **Sn** | **22 10 45.8** | **-0.3** |
| **JCH** | **Churui** | **4.86** | **257** | *e*P | | **Pn** | **22 10 02.6** | **+1.2** |
| JCH | | | | *e*S | | **Sn** | **22 10 56.2** | **-0.1** |
| **ASAJ** | **Asahikawa** | **5.18** | **275** | Pn | | **Pn** | **22 10 08.3** | **+2.5** |
| | 0.5nm,0.3s,baz=64,slow=5.7,SNR=6.4 | | | | | | | |
| ASAJ | | | | | Sn | **Sn** | **22 11 07.9** | **+3.6** |
| | 0.4nm,0.3s,baz=5.4,slow=22,SNR=1.5 | | | | | | | |
| | 1.7nm,0.5s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.39** | **255** | *e*P | | **Pn** | **22 10 09.6** | **+0.9** |
| **JANG** | **Nango** | **7.08** | **243** | *e*P | | **Pn** | **22 10 32.2** | **+0.3** |
| JANG | | | | *e*S | | **Sn** | **22 11 46.7** | **-4.4** |
| **JTH** | **Tanohata** | **7.11** | **239** | *e*S | | **Sn** | **22 11 46.8** | **-4.9** |
| **MJAR** | **Matsushiro Arr** | **11.49** | **234** | Pn | | Pn | 22 11 38.3 | +6.0 |
| | baz=33,slow=16,SNR=1.6 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.19** | **298** | P | | **P** | **22 17 12.5** | **+0.5** |
| | 1.2nm,0.8s,baz=73,slow=8.6,SNR=11 | | | | | | | |
| | 1.2nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.10** | **305** | P | | **P** | **22 17 18.8** | **-0.2** |
| | 0.4nm,0.4s,baz=73,slow=7.8,SNR=7.4 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **52.99** | **297** | LR | | LR | 22 40 46.0 | |
| | comp=Z,27nm,19.1s,baz=109,slow=36 | | | | | | | |
| **FINES** | **FINESS Array B** | **65.58** | **334** | P | | **P** | **22 19 29.6** | **-0.9** |
| | 1.8nm,0.6s,baz=29,slow=9.0,SNR=10 | | | | | | | |
| | 1.8nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **68.34** | **51** | P | | **P** | **22 19 48.4** | **-0.3** |
| | 0.2nm,0.4s,baz=326,slow=7.9,SNR=1.8 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.12** | **340** | P | | **P** | **22 19 58.6** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=31,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.12** | **340** | P | | **P** | **22 19 58.9** | **-0.2** |
| | comp=Z,0.9nm,0.7s,baz=30,slow=6.4,SNR=7.1 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **70.26** | **338** | P | | **P** | **22 19 59.3** | **-0.6** |
| | comp=Z,1.1nm,0.5s,baz=46,slow=4.3,SNR=6.5 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.97** | **58** | P | | **P** | **22 21 04.0** | **+2.2** |
| | comp=Z,0.5nm,0.5s,baz=313,slow=4.7,SNR=10 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |

*NEIC **13** 22:10:29.6±1.8, 69.61N±0.08×144.4W±0.1, h10km±2km, Error ellipse: s-maj=13.4km s-min=5.3km az=16.0*
**AEIC 13 22:10:28.3±2.1, 69.50N±0.05×144.5W±0.1, h9km±7km, ML2.6, ML2.8/102(NEIC), Error ellipse: s-maj=7.1km s-min=5.2km az=193.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.30** | **65** | Pg | | Pg | 22 10 34.1 | -0.2 |
| C27K | | | | IAML | | | 22 10 39.6 | |
| | comp=N,1μm,0.3s | | | | | | | |
| C27K | | | | IAML | | | 22 10 39.7 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **C26K** | **Camden Bay** | **0.44** | **341** | | | Pg | 22 10 37.4 | +0.4 |
| C26K | | | | | | Sb | 22 10 44.0 | -0.9 |
| **D25K** | **Kavik River** | **0.69** | **256** | Pg | | Pg | 22 10 41.5 | -0.1 |
| D25K | | | | Sg | | Sg | 22 10 50.6 | 0.0 |
| **D27M** | **Malcolm River** | **1.28** | **100** | Pn | | Pn | 22 10 51.6 | -0.7 |
| D27M | | | | IAML | | | 22 11 14.2 | |
| | comp=N,162nm,0.5s | | | | | | | |
| **D24K** | **Happy Valley** | **1.57** | **259** | Pn | | Pg | 22 10 58.9 | +0.4 |
| **E27K** | **Coleen River** | **1.69** | **140** | Pn | | Pb | 22 10 59.4 | 0.0 |
| **F26K** | **Sheenjek River** | **1.82** | **176** | Pn | | Pg | 22 11 02.5 | -0.6 |
| F26K | | | | IAML | | | 22 11 29.4 | |
| | comp=N,106nm,0.4s | | | | | | | |
| **F25K** | **Christian Rive** | **1.96** | **193** | Pn | | Pg | 22 11 05.1 | -0.8 |
| F25K | | | | IAML | | | 22 11 35.0 | |
| | comp=N,67nm,0.8s | | | | | | | |
| F25K | | | | IAML | | | 22 11 36.0 | |
| | comp=E,96nm,0.8s | | | | | | | |
| **E28M** | **Babbage River** | **2.00** | **114** | Pn | | Pb | 22 11 03.5 | -1.3 |
| **TOLK** | **Toolik Lake Re** | **2.02** | **247** | Pn | | Pg | 22 11 06.4 | -0.5 |
| TOLK | | | | IAML | | | 22 11 36.0 | |
| | comp=E,57nm,0.5s | | | | | | | |
| **E24K** | **Your Creek** | **2.04** | **227** | Pn | | Pb | 22 11 06.3 | +0.9 |
| **BMAR** | **Burnt Mountain** | **2.08** | **181** | Pn | | Pb | 22 11 05.9 | -0.2 |
| **C23K** | **Itkillik River** | **2.16** | **282** | Pn | | Pb | 22 11 06.0 | -1.5 |
| **C23K** | **Itkillik River** | **2.16** | **282** | | | Sg | 22 11 37.2 | -0.5 |
| **C23K** | **Itkillik River** | **2.16** | **282** | IAML | | | 22 11 42.1 | |
| | comp=N,118nm,0.7s | | | | | | | |
| C23K | | | | IAML | | | 22 11 44.8 | |
| | comp=E,92nm,0.6s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.27** | **259** | Pn | | Pb | 22 11 09.0 | -0.4 |
| **F24K** | **Squaw Lake** | **2.35** | **214** | Pn | | Pn | 22 11 08.5 | +1.5 |
| F24K | | | | IAML | | | 22 11 46.2 | |
| | comp=N,40nm,0.5s | | | | | | | |
| **E23K** | **Chandalar** | **2.36** | **235** | Pn | | Pb | 22 11 10.9 | 0.0 |
| **F28M** | **Old Crow** | **2.54** | **136** | Pn | | Pn | 22 11 11.1 | +1.4 |
| **G26K** | **Porcupine Rive** | **2.58** | **174** | | | Pb | 22 11 12.9 | -1.7 |
| **E29M** | **Blow River** | **2.63** | **112** | Pn | | Pn | 22 11 10.5 | -0.3 |
| E29M | | | | IAML | | | 22 11 56.6 | |
| | comp=N,43nm,0.7s | | | | | | | |
| E29M | | | | IAML | | | 22 11 57.3 | |
| | comp=E,48nm,0.6s | | | | | | | |
| **G27K** | **Doyon Strip** | **2.91** | **157** | Pn | | Pn | 22 11 16.4 | +1.7 |
| **FYU** | **Fort Yukon** | **2.96** | **186** | Pn | | Pn | 22 11 17.9 | +2.5 |
| FYU | | | | IAML | | | 22 12 14.3 | |
| | comp=E,38nm,0.8s | | | | | | | |
| **D22K** | **Ayikyak River** | **2.99** | **262** | Pn | | Pn | 22 11 17.5 | +1.8 |
| D22K | | | | IAML | | | 22 12 13.6 | |
| | comp=E,36nm,0.8s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.03** | **203** | Pn | | Pn | 22 11 17.9 | +1.6 |
| G24K | | | | IAML | | | 22 12 08.0 | |
| | comp=E,25nm,1.1s | | | | | | | |
| G24K | | | | IAML | | | 22 12 13.1 | |
| | comp=N,26nm,0.9s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19** | **289** | | | Pn | 22 11 20.4 | +1.9 |
| **G23K** | **Bananza Creek** | **3.48** | **219** | Pn | | Pn | 22 11 26.0 | +3.4 |
| G23K | | | | IAML | | | 22 12 55.5 | |
| | comp=E,14nm,0.8s | | | | | | | |
| **G29M** | **Pine Creek** | **3.55** | **134** | Pn | | Pn | 22 11 25.4 | +1.9 |
| G29M | | | | IAML | | | 22 12 35.9 | |
| | comp=N,24nm,1.4s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.55** | **277** | Pn | | Pn | 22 11 26.4 | +2.9 |
| B21K | | | | IAML | | | 22 12 48.8 | |
| | comp=E,22nm,1.1s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.90** | **201** | Pn | | Pn | 22 11 29.4 | +1.1 |
| **PRP** | **Porcupine Dome** | **4.02** | **186** | Pn | | Pn | 22 11 32.0 | +2.0 |
| **H29M** | **Whitestone** | **4.03** | **142** | Pn | | Pn | 22 11 31.9 | +1.9 |
| **F21K** | **Alatna River** | **4.04** | **240** | Pn | | Pn | 22 11 32.1 | +2.0 |
| F21K | | | | IAML | | | 22 12 48.1 | |
| | comp=N,12nm,0.7s | | | | | | | |
| F21K | | | | IAML | | | 22 12 50.8 | |
| | comp=E,12nm,0.8s | | | | | | | |
| **I27K** | **Kandik River** | **4.07** | **163** | | | Pn | 22 11 34.1 | +3.4 |
| **H23K** | **Yukon River** | **4.16** | **210** | Pn | | Pn | 22 11 33.4 | +1.5 |
| H23K | | | | IAML | | | 22 12 48.3 | |
| | comp=N,8.6nm,0.7s | | | | | | | |
| H23K | | | | IAML | | | 22 12 53.5 | |
| | comp=E,11nm,1.1s | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.25** | **172** | Pn | | Pn | 22 11 36.0 | +3.0 |
| **EPYK** | **Eagle Plains** | **4.30** | **133** | Pn | | Pn | 22 11 35.2 | +1.4 |
| **D20K** | **Etivluk River** | **4.41** | **265** | | | Pn | 22 11 37.6 | +2.3 |
| **B20K** | **Meade River** | **4.43** | **283** | Pn | | Pn | 22 11 36.7 | +1.2 |
| **I28M** | **Miner Creek** | **4.43** | **155** | Pn | | Pn | 22 11 38.4 | +2.7 |
| I28M | | | | IAML | | | 22 12 56.7 | |
| | comp=N,11nm,0.5s | | | | | | | |
| **G21K** | **Allakaket** | **4.52** | **233** | Pn | | Pn | 22 11 39.7 | +2.9 |
| G21K | | | | IAML | | | 22 13 08.2 | |
| | comp=E,11nm,1.4s | | | | | | | |
| G21K | | | | IAML | | | 22 13 25.0 | |
| | comp=N,8.8nm,1.2s | | | | | | | |
| **G31M** | **Satah River** | **4.60** | **119** | Pn | | Pn | 22 11 39.3 | +1.4 |
| G31M | | | | IAML | | | 22 12 59.2 | |
| | comp=E,11nm,0.7s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.76** | **206** | Pn | | Pn | 22 11 42.0 | +2.0 |
| I23K | | | | IAML | | | 22 13 19.8 | |
| | comp=E,7.6nm,1.3s | | | | | | | |
| I23K | | | | IAML | | | 22 13 31.9 | |
| | comp=N,5.5nm,1.4s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.79** | **199** | Pn | | Pn | 22 11 42.7 | +2.3 |
| **I29M** | **Ogilvie Camp,** | **4.79** | **147** | Pn | | Pn | 22 11 41.9 | +1.4 |
| **F20K** | **Avaraart Lake** | **4.84** | **245** | Pn | | Pn | 22 11 44.0 | +2.9 |
| F20K | | | | IAML | | | 22 13 13.6 | |
| | comp=N,5.7nm,0.8s | | | | | | | |
| **EGAK** | **Eagle** | **4.92** | **163** | Pn | | Pn |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **D19K** | **Kuna River** | **5.00** | **265** | Pn | Pn | 22 11 45.4 | +1.9 | |
| D19K | | | | IAML | | 22 12 45.1 | | |
| | comp=E,5.0nm,0.5s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.04** | **175** | Pn | Pn | 22 11 48.2 | +4.2 | |
| **CCB** | **Clear Creek Bu** | **5.04** | **196** | Pn | Pn | 22 11 47.5 | +3.6 | |
| CCB | | | | IAML | | 22 13 17.8 | | |
| | comp=E,4.7nm,1.4s | | | | | | | |
| **MLY** | **Manley** | **5.10** | **211** | Pn | Pn | 22 11 47.1 | +2.4 | |
| **E19K** | **Redstone River** | **5.12** | **252** | Pn | Pn | 22 11 45.8 | +0.9 | |
| E19K | | | | IAML | | 22 12 46.6 | | |
| | comp=N,7.7nm,0.7s | | | | | | | |
| E19K | | | | IAML | | 22 13 23.4 | | |
| | comp=E,6.7nm,1.1s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.24** | **197** | Pn | Pn | 22 11 49.4 | +2.7 | |
| **I30M** | **Mount Dempster** | **5.32** | **140** | Pn | Pn | 22 11 49.8 | +1.9 | |
| I30M | | | | IAML | | 22 13 17.9 | | |
| | comp=E,6.2nm,0.8s | | | | | | | |
| I30M | | | | IAML | | 22 13 17.9 | | |
| | comp=N,6.2nm,1.0s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.37** | **273** | Pn | Pn | 22 11 50.3 | +1.9 | |
| **SCRK** | **Sand Creek** | **5.55** | **178** | Pn | Pn | 22 11 54.2 | +3.2 | |
| **G19K** | **Purcell Mounta** | **5.83** | **241** | Pn | Pn | 22 11 56.2 | +1.4 | |
| **J30M** | **Hart River** | **5.88** | **143** | Pn | Pn | 22 11 57.4 | +1.8 | |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **208** | Pn | Pn | 22 11 58.3 | +1.3 | |
| **C18K** | **Utukok River** | **6.04** | **270** | Pn | Pn | 22 11 58.6 | +0.9 | |
| **H19K** | **Roundabout Mou** | **6.07** | **235** | Pn | Pn | 22 12 00.4 | +2.4 | |
| **E18K** | **Tukpahlearik C** | **6.28** | **258** | Pn | Pn | 22 12 02.0 | +1.1 | |
| **K29M** | **Barlow Dome** | **6.32** | **151** | Pn | Pn | 22 12 03.7 | +2.1 | |
| **G18K** | **Tagagawik** | **6.48** | **243** | Pn | Pn | 22 12 06.2 | +2.5 | |
| **BCAR** | **Beaver Creek A** | **6.55** | **169** | Pn | Pn | 22 12 08.0 | +3.3 | |
| **J20K** | **Nowinta River** | **6.55** | **220** | Pn | Pn | 22 12 06.1 | +1.4 | |
| **L27K** | **Beaver Creek,** | **6.55** | **169** | Pn | Pn | 22 12 07.3 | +2.6 | |
| **DHY** | **Denali Highway** | **6.56** | **192** | Pn | Pn | 22 12 08.5 | +3.6 | |
| **H18K** | **Honhosa River** | **6.90** | **237** | Pn | Pn | 22 12 11.6 | +2.2 | |
| **L29M** | **L29M** | **6.91** | **155** | Pn | Pn | 22 12 12.1 | +2.5 | |
| **M29M** | **Somme Creek** | **7.50** | **158** | Pn | Pn | 22 12 21.5 | +3.8 | |
| **MMPY** | **Sheldon Lake,** | **8.73** | **136** | Pn | Pn | 22 12 36.7 | +2.1 | |

*AEIC **13** 22:44:40.3±1.7, 50°.96N±0°.05×179°.42E±0°.09, h18$^{km}$±4$^{km}$, Error ellipse: s-maj=7.9km s-min=7.2km az=82.0*
*NEIC **13** 22:44:44.1±2.2, 51°.1N±0°.1×179°.6E±0°.1, h47$^{km}$±8$^{km}$, mb4.1/57, ML3.8(AEIC), Error ellipse: s-maj=17.7km s-min=9.0km az=175.0*
*IDC **13** 22:44:45.6±3.8, 51°.21N×179°.61E, h64$^{km}$±27$^{km}$, mb3.7/11, mbtmp4.0/12, ML3.7/2, MS2.9/6, Error ellipse: s-maj=42.2km s-min=17.3km az=176.0*

**ISC 13 22:44:43.0±0.8, 51°.1N±0°.1×179°53E±0°.04, h35$^{km}$, n89, σ1$^{s}$19/86, mb4.1/22, MS3.1/3, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.30** | **331** | Pn | **Pn** | **22 44 49.4** | **-1.5** |
| AMKA | | | | Sn | **Sn** | **22 44 55.7** | **-0.6** |
| **GAEA** | **Gareloi East** | **1.27** | **58** | | **Pn** | **22 45 04.6** | **+0.4** |
| GAEA | | | | | **Sn** | **22 45 22.7** | **+2.7** |
| **GANE** | **Gareloi Northe** | **1.27** | **56** | | **Pn** | **22 45 04.6** | **+0.3** |
| **KIWB** | **Kanaga Island** | **2.20** | **69** | Pn | **Pn** | **22 45 17.6** | **+0.6** |
| **ADK** | **Adak** | **2.49** | **71** | Pn | **Pn** | **22 45 20.6** | **-0.3** |
| **GSTR** | **Great Sitkin T** | **2.92** | **69** | Pn | **Pn** | **22 45 29.3** | **+2.4** |
| **SHEM** | **Shemya Is, Ala** | **3.73** | **298** | P | **Pn** | **22 45 40.1** | **+2.1** |
| | 60nm,0.3s,baz=87,slow=1.9,SNR=37 | | | | | | |
| SHEM | | | | S | **Sn** | **22 46 24.9** | **+4.2** |
| | 69nm,0.4s,baz=329,slow=22,SNR=1.7 | | | | | | |
| SHEM | | | | LR | LR | 22 47 03.7 | |
| | comp=Z,135nm,21.7s,baz=142,slow=37 | | | | | | |
| **CNBA** | **Chernabura Isl** | **13.11** | **65** | Pn | **Pn** | **22 47 46.2** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **13.56** | **287** | P | **Pn** | **22 47 54.8** | **+2.2** |
| | 0.2nm,0.3s,baz=85,slow=16,SNR=2.2 | | | | | | |
| PETK | | | | LR | LR | 22 52 46.5 | |
| | comp=Z,34nm,21.9s,baz=109,slow=35 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| **O14K** | **Tigyukauivet M** | **13.62** | **46** | Pn | **Pn** | **22 47 54.5** | **+1.1** |
| **N15K** | **Kwethluk River** | **14.59** | **44** | P | **P** | **22 48 13.7** | **+1.2** |
| **K15K** | **Wolf Creek Mou** | **15.21** | **35** | P | **P** | **22 48 20.8** | **+1.4** |
| K15K | | | | IAmb | IAmb | 22 48 35.9 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **M16K** | **Timber Creek** | **15.50** | **42** | P | **P** | **22 48 24.3** | **+1.7** |
| M16K | | | | IAmb | IAmb | 22 48 43.2 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **L16K** | **Owhat River** | **15.65** | **39** | P | **P** | **22 48 24.7** | **+0.4** |
| L16K | | | | IAmb | IAmb | 22 48 45.4 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **N17K** | **Nushagak Hills** | **16.03** | **45** | Pn | **Pn** | **22 48 25.8** | **+0.2** |
| N17K | | | | IAmb | IAmb | 22 48 49.0 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **K17K** | **Iditarod** | **16.66** | **37** | P | **P** | **22 48 36.0** | **+0.4** |
| K17K | | | | IAmb | IAmb | 22 48 53.1 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **N18K** | **Kilae Creek** | **16.68** | **46** | P | **Pn** | **22 48 35.4** | **+1.7** |
| N18K | | | | IAmb | IAmb | 22 49 01.4 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **J17K** | **VABM Dome** | **16.77** | **35** | P | **P** | **22 48 37.9** | **+1.1** |
| J17K | | | | IAmb | IAmb | 22 48 55.5 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **OHAK** | **Old Harbor** | **16.97** | **58** | Pn | **Pn** | **22 48 37.0** | **-0.4** |
| **L18K** | **Granite Mounta** | **17.04** | **40** | | **Pn** | **22 48 38.8** | **+0.6** |
| **H18K** | **Honhosa River** | **18.12** | **31** | | **P** | **22 48 53.2** | **+1.5** |
| H18K | | | | IAmb | IAmb | 22 49 07.8 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **MA2** | **Magadan** | **18.29** | **309** | LR | LR | 22 55 47.4 | |
| | comp=Z,46nm,18.4s,baz=104,slow=36 | | | | | | |
| **J19K** | **Poorman** | **18.38** | **36** | P | **P** | **22 48 54.9** | **+0.5** |
| **CNPM** | **China Poot** | **18.51** | **52** | P | **P** | **22 48 56.7** | **+0.8** |
| CNPM | | | | IAmb | IAmb | 22 49 05.4 | |
| | comp=Z,33nm,1.3s | | | | | | |
| **G18K** | **Tagagawik** | **18.52** | **29** | P | **Pn** | **22 48 57.6** | **+1.2** |
| G18K | | | | IAmb | IAmb | 22 49 25.1 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **H19K** | **Roundabout Mou** | **18.98** | **31** | P | **Pn** | **22 49 02.9** | **+1.0** |
| **J20K** | **Nowinta River** | **19.02** | **37** | P | **P** | **22 49 01.5** | **-0.1** |
| **SKT** | **Skwentna** | **19.12** | **44** | P | **P** | **22 49 02.4** | **-0.2** |
| SKT | | | | IAmb | IAmb | 22 49 19.0 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **G19K** | **Purcell Mounta** | **19.17** | **29** | P | **P** | **22 49 04.0** | **+0.9** |
| **C18K** | **Utukok River** | **19.89** | **21** | P | **P** | **22 49 12.4** | **+1.3** |
| C18K | | | | IAmb | IAmb | 22 49 34.0 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **20.01** | **26** | P | **P** | **22 49 12.9** | **+0.7** |
| **F20K** | **Avaraart Lake** | **20.17** | **28** | P | **P** | **22 49 14.3** | **+0.3** |
| F20K | | | | IAmb | IAmb | 22 49 29.2 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **20.21** | **39** | P | **P** | **22 49 15.2** | **+0.7** |
| **H21K** | **Melozitna River** | **20.29** | **34** | P | **P** | **22 49 16.1** | **+0.7** |
| H21K | | | | IAmb | IAmb | 22 49 25.7 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **20.51** | **24** | P | **P** | **22 49 18.0** | **+0.2** |
| D19K | | | | IAmb | IAmb | 22 49 41.5 | |
| | comp=Z,9.2nm,1.0s | | | | | | |
| **G21K** | **Allakaket** | **20.54** | **31** | P | **P** | **22 49 19.1** | **+1.1** |
| G21K | | | | IAmb | IAmb | 22 49 19.9 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **20.96** | **46** | P | **P** | **22 49 21.6** | **-1.1** |
| SCM | | | | IAmb | IAmb | 22 49 25.1 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **NEA2** | **Nenana** | **21.17** | **38** | P | **P** | **22 49 24.8** | **-0.1** |
| NEA2 | | | | IAmb | IAmb | 22 49 29.4 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **21.30** | **37** | P | **P** | **22 49 26.7** | **+0.5** |
| **DHY** | **Denali Highway** | **21.31** | **43** | P | **P** | **22 49 27.4** | **+0.9** |
| **WRH** | **Wood River Hil** | **21.51** | **39** | P | **P** | **22 49 27.2** | **-1.3** |
| **MDM** | **Murphy Dome** | **21.65** | **38** | P | **P** | **22 49 29.9** | **-0.1** |
| **ILAR** | **Eielson Array** | **22.11** | **39** | P | **P** | **22 49 32.6** | **-2.3** |
| | comp=Z,0.5nm,0.6s,baz=244,slow=10.0,SNR=2.8 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **D22K** | **Ayikyak River** | **22.23** | **27** | P | **P** | **22 49 38.4** | **+2.2** |
| D22K | | | | IAmb | IAmb | 22 49 39.3 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **GLB** | **Gilahina Butte** | **22.51** | **49** | P | **P** | **22 49 40.0** | **+0.7** |
| **D23K** | **Nanushuk River** | **22.85** | **28** | P | **P** | **22 49 42.5** | **-0.2** |
| D23K | | | | IAmb | IAmb | 22 49 45.5 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **F24K** | **Squaw Lake** | **22.94** | **32** | P | **P** | **22 49 44.3** | **+0.6** |
| F24K | | | | IAmb | IAmb | 22 49 46.0 | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **23.00** | **29** | P | **P** | **22 49 44.3** | **0.0** |
| **E24K** | **Your Creek** | **23.03** | **31** | P | **P** | **22 49 44.7** | **+0.1** |
| **SCRK** | **Sand Creek** | **23.03** | **42** | P | **P** | **22 49 44.2** | **-0.6** |
| **C23K** | **Itkillik River** | **23.40** | **26** | P | **P** | **22 49 48.9** | **+0.7** |
| **L27K** | **Beaver Creek,** | **23.74** | **45** | P | **P** | **22 49 50.4** | **-1.3** |
| L27K | | | | IAmb | IAmb | 22 50 17.6 | |
| | comp=Z,7.8nm,1.5s | | | | | | |
| **I28M** | **Miner Creek** | **25.11** | **40** | P | **P** | **22 50 03.4** | **-0.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JKA** | **Kamikawa-asahi** | **25.65** | **269** | P | **P** | **22 50 09.8** | **+0.7** |
| JKA | | | | IAmb | IAmb | 22 50 22.3 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **25.65** | **269** | P | **P** | **22 50 09.7** | **+0.5** |
| | comp=Z,3.4nm,0.6s,baz=81,slow=8.7,SNR=5.8 | | | | | | |
| ASAJ | | | | LR | LR | 22 58 13.8 | |
| | comp=Z,18nm,21.8s,baz=130,slow=31 | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **25.75** | **40** | P | **P** | **22 50 10.0** | **+0.1** |
| **KLR** | **Kul'dur** | **30.24** | **285** | P | **P** | **22 50 49.4** | **-0.7** |
| | comp=Z,6.3nm,0.7s,baz=62,slow=8.2,SNR=17 | | | | | | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **LYMT** | **Lyon Mountain** | **43.43** | **68** | P | **P** | **22 52 41.5** | **-0.9** |
| **PMPB** | **Monarch Peak** | **44.43** | **86** | P | **P** | **22 52 52.1** | **+1.8** |
| **SONM** | **Songino Array** | **45.82** | **296** | P | **P** | **22 53 00.9** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=51,slow=11,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **PD31** | **Pinedale Array** | **47.39** | **71** | P | **P** | **22 53 13.4** | **-0.4** |
| PD31 | | | | IAmb | IAmb | 22 53 14.4 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **47.39** | **71** | P | **P** | **22 53 13.4** | **-0.4** |
| | comp=Z,2.0nm,0.6s,baz=301,slow=3.4,SNR=21 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **KBS** | **Kingsbay** | **50.01** | **357** | P | **P** | **22 53 32.6** | **-0.5** |
| **KURK** | **Kurchatov** | **58.44** | **313** | P | **P** | **22 54 34.0** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **58.54** | **313** | P | **P** | **22 54 34.9** | **-0.7** |
| | comp=Z,2.2nm,0.7s,baz=42,slow=6.7,SNR=11 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **58.97** | **72** | P | **P** | **22 54 38.3** | **-0.5** |
| WMOK | | | | IAmb | IAmb | 22 54 40.0 | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **59.37** | **308** | P | **P** | **22 54 40.1** | **-1.3** |
| MK31 | | | | IAmb | IAmb | 22 54 48.6 | |
| | comp=Z,1.9nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.37** | **308** | P | **P** | **22 54 39.7** | **-1.7** |
| **MKAR** | **Makanchi Array** | **59.37** | **308** | P | **P** | **22 54 40.0** | **-1.4** |
| | comp=Z,0.8nm,0.4s,baz=50,slow=6.8,SNR=17 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **59.51** | **308** | P | **P** | **22 54 40.6** | **-1.8** |
| MAKZ | | | | IAmb | IAmb | 22 54 51.1 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **60.40** | **319** | P | **P** | **22 54 48.2** | **-0.2** |
| | comp=Z,4.3nm,0.7s,baz=49,slow=7.1,SNR=25 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **60.42** | **319** | P | **P** | **22 54 47.5** | **-1.0** |
| **L56A** | **Greenwood** | **65.53** | **53** | P | **P** | **22 55 22.1** | **-0.5** |
| **ABKAR** | **Akbulak array** | **67.50** | **322** | P | **P** | **22 55 34.9** | **-0.2** |
| ABKAR | | | | IAmb | IAmb | 22 55 36.2 | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **NC204** | **NORSAR Array S** | **67.60** | **354** | P | **P** | **22 55 34.2** | **-1.3** |
| **KKAR** | **Karatay Array** | **67.78** | **312** | P | **P** | **22 55 35.7** | **-1.3** |
| **NB201** | **NORSAR Array S** | **67.79** | **354** | P | **P** | **22 55 35.1** | **-1.6** |
| **NB2** | **NORSAR Subarra** | **67.80** | **354** | P | **P** | **22 55 35.4** | **-1.4** |
| | comp=Z,0.6nm,0.6s,baz=6.9,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.80** | **354** | P | **P** | **22 55 35.2** | **-1.6** |
| | comp=Z,1.0nm,0.8s,baz=7.8,slow=6.3,SNR=6.4 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **68.51** | **352** | P | **P** | **22 55 39.9** | **-1.3** |
| | comp=Z,1.0nm,0.7s,baz=23,slow=4.8,SNR=6.9 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **SIMJ** | **Simiganj** | **71.94** | **310** | P | **P** | **22 56 02.9** | **+0.2** |
| SIMJ | | | | IAmb | IAmb | 22 56 04.6 | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **75.46** | **341** | LR | LR | 23 33 21.0 | |
| | comp=Z,9.9nm,18.8s,baz=56,slow=39 | | | | | | |
| **KBZ** | **Khabaz** | **78.31** | **329** | LR | LR | 23 36 19.5 | |
| | comp=Z,23nm,18.2s,baz=128,slow=40 | | | | | | |
| **BURAR** | **Buovina Array** | **79.20** | **343** | P | **P** | **22 56 42.9** | **-1.2** |
| **BRTR** | **Keskin Array B** | **84.74** | **334** | P | **P** | **22 57 13.5** | **+0.1** |
| **BRTR** | **Keskin Array B** | **84.74** | **334** | P | **P** | **22 57 13.4** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=42,slow=6.7,SNR=2.5 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **H03N2** | **Juan Fernandez** | **122.09** | **105** | T | T | 01 17 49.8 | |
| | baz=314,slow=76,SNR=6.5 | | | | | | |
| **H03N1** | **Juan Fernandez** | **122.10** | **105** | T | T | 01 17 47.7 | |
| | baz=314,slow=76,SNR=6.9 | | | | | | |
| **H03N3** | **Juan Fernandez** | **122.10** | **105** | T | T | 01 17 49.2 | |
| | baz=314,slow=76,SNR=8.4 | | | | | | |

*IDC **13** 22:56:18.8±2.1, 43°.60N×105°.54W, h0$^{km}$, mbtmp3.1/2, ML3.1/2, Error ellipse: s-maj=53.8km s-min=11.2km az=154.0*
*NEIC **13** 22:56:19.0±0.8, 43°.57N±0°.05×105°.31W±0°.05, h0$^{km}$±1$^{km}$, ML3.0/42, Error ellipse: s-maj=10.3km s-min=5.3km az=328.0*

**ISC 13 22:56:19.8±1.2, 43°58N±0°.06×105°21W±0°.07, h0$^{km}$, n33, σ1$^{s}$12/32, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.01** | **57** | | **Pb** | **22 56 40.1** | **-0.1** |
| **PHWY** | **Pilot Hill** | **2.29** | **185** | Pn | **Pn** | **22 56 59.4** | **+0.3** |
| PHWY | | | | IAML | | 22 57 32.6 | |
| | 77nm,0.4s | | | | | | |
| **RWWY** | **Rawlins** | **2.40** | **219** | Pn | **Pn** | **22 57 00.9** | **+0.4** |
| RWWY | | | | IAML | | 22 57 35.8 | |
| | 90nm,1.2s | | | | | | |
| RWWY | | | | IAML | | 22 57 36.0 | |
| | 115nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **2.74** | **192** | Pn | **Pn** | **22 57 05.5** | **+0.3** |
| N23A | | | | IAML | | 22 57 46.0 | |
| | comp=N,59nm,0.4s | | | | | | |
| N23A | | | | IAML | | 22 57 47.0 | |
| | comp=E,56nm,0.4s | | | | | | |
| **BRIGG** | **Briggsdale** | **3.07** | **167** | Pn | **Pn** | **22 57 09.4** | **-0.3** |
| **LAO** | **LASA Array** | **3.19** | **347** | Pn | **Pn** | **22 57 13.7** | **+2.4** |
| LAO | | | | IAML | | 22 57 58.5 | |
| | comp=E,60nm,0.8s | | | | | | |
| LAO | | | | IAML | | 22 58 13.0 | |
| | comp=E,58nm,0.9s | | | | | | |
| **PD31** | **Pinedale Array** | **3.28** | **257** | Pn | **Pn** | **22 57 12.4** | **-0.3** |
| **PDAR** | **Pinedale Array** | **3.28** | **257** | Pn | **Pn** | **22 57 12.6** | **-0.1** |
| **PDAR** | **Pinedale Array** | **3.28** | **257** | Pn | **Pn** | **22 57 11.4** | **-1.3** |
| | comp=E,2.9nm,0.3s,baz=74,slow=13,SNR=24 | | | | | | |
| PDAR | | | | Lg | Lg | 22 57 54.5 | |
| | comp=E,7.2nm,0.3s,baz=73,slow=35,SNR=15 | | | | | | |
| | comp=E,0.9nm,0.4s | | | | | | |
| **RLMT** | **Red Lodge** | **3.29** | **299** | Pn | **Pn** | **22 57 12.5** | **-0.3** |
| RLMT | | | | IAML | | 22 58 24.3 | |
| | comp=E,31nm,1.6s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **3.74** | **290** | Pn | **Pn** | **22 57 20.3** | **+1.2** |
| **ISCO** | **Idaho Springs** | **3.79** | **185** | Pn | **Pn** | **22 57 20.7** | **+1.0** |
| ISCO | | | | IAML | | 22 58 23.9 | |
| | comp=E,14nm,1.6s | | | | | | |
| **LOHW** | **Long Hollow** | **3.92** | **272** | Pn | **Pn** | **22 57 23.0** | **+1.5** |
| LOHW | | | | IAML | | 22 58 24.6 | |
| | comp=E,17nm,1.1s | | | | | | |
| LOHW | | | | IAML | | 22 58 28.7 | |
| | comp=E,16nm,1.1s | | | | | | |
| **FLWY** | **Flagg Ranch** | **4.00** | **279** | Pn | **Pn** | **22 57 22.3** | **-0.3** |
| FLWY | | | | IAML | | 22 58 27.6 | |
| | comp=E,22nm,2.0s | | | | | | |
| FLWY | | | | IAML | | 22 58 44.9 | |
| | comp=E,25nm,1.4s | | | | | | |
| **YPP** | **Pitchstone Pla** | **4.10** | **282** | Pn | **Pn** | **22 57 24.0** | **0.0** |
| **REDW** | **Red Top Meadow** | **4.11** | **269** | Pn | **Pn** | **22 57 28.1** | **+4.0** |
| **O20A** | **White River Ci** | **4.12** | **214** | Pn | **Pn** | **22 57 23.4** | **-0.8** |
| **TPAW** | **Teton Pass** | **4.17** | **271** | Pn | **Pn** | **22 57 24.9** | **-0.1** |
| TPAW | | | | IAML | | 22 58 42.0 | |
| | comp=E,12nm,1.0s | | | | | | |
| TPAW | | | | IAML | | 22 58 45.0 | |
| | comp=E,23nm,1.2s | | | | | | |
| **FXWY** | **Fox Creek** | **4.22** | **273** | Pn | **Pn** | **22 57 23.6** | **-2.0** |
| **E28A** | **Huff** | **4.38** | **45** | Pn | **Pn** | **22 57 27.1** | **-0.4** |
| **YHL** | **Hebgen Lake** | **4.48** | **289** | Pn | **Pn** | **22 57 29.3** | **+0.2** |
| YHL | | | | IAML | | 22 58 50.1 | |
| | comp=E,21nm,1.3s | | | | | | |
| **BOZ** | **Bozeman (W)** | **5.01** | **296** | Pn | **Pn** | **22 57 36.1** | **-0.2** |
| BOZ | | | | IAML | | 22 59 00.7 | |
| | comp=E,7.3nm,0.8s | | | | | | |
| BOZ | | | | IAML | | 23 00 44.2 | |
| | comp=E,8.9nm,4.2s | | | | | | |
| **HWUT** | **Hardware Ranch** | **5.09** | **249** | Pn | **Pn** | **22 57 37.2** | **-0.3** |
| **EGMT** | **Eagleton** | **5.46** | **326** | Pn | **Pn** | **22 57 42.5** | **0.0** |
| **P18A** | **Preston Nutter** | **5.46** | **225** | Pn | **Pn** | **22 57 43.2** | **+0.4** |
| **SPUT** | **South Promonto** | **5.82** | **249** | Pn | **Pn** | **22 57 47.3** | **-0.1** |
| **HVU** | **Hansel Valley** | **5.86** | **255** | Pn | **Pn** | **22 57 48.1** | **+0.1** |
| **LYMT** | **Lyon Mountain** | **6.03** | **307** | Pn | **Pn** | **22 57 49.6** | **-0.9** |
| **TMUT** | **Trail Mountain** | **6.22** | **228** | Pn | **Pn** | **22 57 53.3** | **+0.2** |
| **BPMT** | **Black Pine Rid** | **6.50** | **299** | Pn | **Pn** | **22 57 56.9** | **0.0** |
| **HMU** | **Henry Mountain** | **7.03** | **219** | Pn | **Pn** | **22 58 03.6** | **-0.6** |
| **ULM** | **Lac du Bonnet** | **9.23** | **40** | Pn | **Pn** | **22 58 33.1** | **-0.9** |
| | comp=E,0.4nm,0.3s,baz=224,slow=14,SNR=3.0 | | | | | | |
| | comp=E,0.8nm,0.4s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **I56US** | **NEWPORT INFRAS** | **9.53** | **304** | I | I | 23 54 50.0 | |
| | baz=117,slow=316,SNR=1.9 | | | | | | |

*AEIC **13** 23:00:32.0±2.6, 69°.46N±0°.06×144°.42W±0°.06, h6$^{km}$±7$^{km}$, ML3.6, ML3.7/50(NEIC), Error ellipse: s-maj=8.5km s-min=2.9km az=183.0*
*NEIC **13** 23:00:32.9±1.1, 69°.65N±0°.05×144°.5W±0°.1, h10$^{km}$±2$^{km}$, Error ellipse: s-maj=10.7km s-min=3.1km az=319.0*
*IDC **13** 23:00:33.1±1.0, 69°.48N×144°.29W, h0$^{km}$, mb3.6/7, mbtmp3.6/10, ML3.6/3, Error ellipse: s-maj=24.7km s-min=14.9km az=88.0*

**ISC 13 23:00:32.9±1.3, 69°52N±0°.04×144°44W±0°.03, h1$^{km}$±9$^{km}$, n60, σ1$^{s}$01/65, mb3.7/7, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **67** | Pg | **Pg** | **23 00 38.2** | **0.0** |
| C27K | | | | Sg | **Sg** | **23 00 42.3** | **+0.5** |
| **C26K** | **Camden Bay** | **0.43** | **338** | | **Pg** | **23 00 41.2** | **0.0** |
| **C26K** | **Camden Bay** | **0.43** | **338** | | **Sg** | **23 00 48.0** | **+1.2** |
| **C26K** | **Camden Bay** | **0.43** | **338** | IAML | | 23 00 49.4 | |
| | comp=N,7μm,0.3s | | | | | | |
| C26K | | | | IAML | | 23 00 54.0 | |
| | comp=E,5μm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **0.71** | **255** | | **Pg** | **23 00 45.2** | **-1.3** |
| **D25K** | **Kavik River** | **0.71** | **255** | | **Sg** | **23 00 55.5** | **-0.3** |
| **D27M** | **Malcolm River** | **1.26** | **101** | Pg | **Pn** | **23 00 55.8** | **-1.9** |
| D27M | | | | Sg | **Sn** | **23 01 15.5** | **+0.2** |
| D27M | | | | IAML | | 23 01 17.5 | |
| | comp=N,1μm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.60** | **259** | | **Pb** | **23 01 02.9** | **-0.3** |
| D24K | | | | Sg | **Sg** | **23 01 24.7** | **+0.4** |
| **E27K** | **Coleen River** | **1.69** | **141** | | **Pn** | **23 01 03.9** | **+0.3** |
| E27K | | | | Sg | **Sn** | **23 01 26.7** | **+0.9** |
| E27K | | | | IAML | | 23 01 31.4 | |
| | comp=N,960nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **177** | Pg | **Pn** | **23 01 06.0** | **+0.4** |
| F26K | | | | IAML | | 23 01 33.0 | |
| | comp=E,713nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **193** | Pg | **Pn** | **23 01 08.8** | **+1.2** |
| F25K | | | | Sg | **Sb** | **23 01 36.6** | **+1.6** |
| F25K | | | | IAML | | 23 01 39.1 | |
| | comp=N,794nm,1.0s | | | | | | |
| F25K | | | | IAML | | 23 01 39.4 | |
| | comp=E,575nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04** | **247** | Sg | **Sg** | **23 01 38.1** | **-0.4** |
| **E24K** | **Your Creek** | **2.07** | **227** | Sg | **Sb** | **23 01 37.5** | **+0.1** |
| E24K | | | | IAML | | 23 01 42.2 | |
| | comp=N,577nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.07** | **227** | | **Pn** | **23 01 09.2** | **+0.4** |
| **BMAR** | **Burnt Mountain** | **2.10** | **182** | Pn | **Pn** | **23 01 10.2** | **+1.0** |
| BMAR | | | | Sn | **Sb** | **23 01 38.3** | **-0.1** |
| **F24K** | **Squaw Lake** | **2.38** | **214** | | **Pn** | **23 01 13.2** | **+0.1** |
| **F24K** | **Squaw Lake** | **2.38** | **214** | IAML | | 23 01 49.9 | |
| | comp=N,565nm,0.7s | | | | | | |
| F24K | | | | IAML | | 23 01 51.9 | |
| | comp=E,472nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.59** | **174** | | **Pn** | **23 01 16.6** | **+0.7** |
| **FYU** | **Fort Yukon** | **2.98** | **186** | Pn | **Pn** | **23 01 21.9** | **+0.7** |
| FYU | | | | IAML | | 23 02 12.6 | |
| | comp=N,302nm,0.6s | | | | | | |
| FYU | | | | IAML | | 23 02 22.4 | |
| | comp=E,304nm,1.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.55** | **135** | | **Pn** | **23 01 29.6** | **+0.5** |
| G29M | | | | IAML | | 23 02 43.5 | |
| | comp=N,225nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **201** | | **Pn** | **23 01 33.2** | **-1.1** |
| H24K | | | | IAML | | 23 02 44.8 | |
| | comp=N,148nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.13** | **102** | Pn | **Pn** | **23 01 35.7** | **-1.3** |
| | comp=N,1.2nm,0.3s,baz=243,slow=29,SNR=3.0 | | | | | | |
| INK | | | | Sn | **Sn** | **23 02 21.6** | **-4.1** |
| | comp=N,4.0nm,0.3s,baz=218,slow=32,SNR=4.6 | | | | | | |
| | comp=N,3.4nm,0.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.26** | **173** | | **Pn** | **23 01 38.5** | **-0.4** |
| **EPYK** | **Eagle Plains** | **4.30** | **134** | | **Pn** | **23 01 40.0** | **+0.6** |
| **G21K** | **Allakaket** | **4.55** | **233** | | **Pn** | **23 01 42.3** | **-0.5** |
| **MDM** | **Murphy Dome** | **4.81** | **200** | | **Pn** | **23 01 46.6** | **+0.2** |
| MDM | | | | IAML | | 23 03 09.4 | |
| | comp=N,64nm,1.0s | | | | | | |
| MDM | | | | IAML | | 23 03 09.8 | |
| | comp=E,74nm,0.8s | | | | | | |
| **IL31** | | **4.86** | **192** | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **26.10** | **250** | T | T | 23 33 51.3 | |
| | baz=70,slow=75,SNR=165 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.10** | **250** | T | T | 23 33 47.2 | |
| | baz=70,slow=75,SNR=174 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.11** | **250** | T | T | 23 33 49.7 | |
| | baz=70,slow=75,SNR=136 | | | | | | |
| **SONM** | **Songino Array** | **47.27** | **8** | P | P | 23 09 49.3 | -0.1 |
| | 0.6nm,0.6s,baz=189,slow=8.2,SNR=4.0 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **47.37** | **346** | P | P | 23 09 50.1 | 0.0 |
| | 0.4nm,0.5s,baz=163,slow=8.8,SNR=9.0 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.85** | **345** | P | P | 23 10 24.0 | -0.2 |
| | 0.3nm,0.5s,baz=158,slow=7.2,SNR=2.6 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.69** | **351** | P | P | 23 10 37.6 | -0.1 |
| | 0.6nm,0.4s,baz=170,slow=8.8,SNR=4.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **61.65** | **214** | T | T | 00 18 34.2 | |
| | baz=53,slow=75,SNR=143 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **61.66** | **214** | T | T | 00 18 35.6 | |
| | baz=53,slow=75,SNR=154 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **61.67** | **214** | T | T | 00 18 33.5 | |
| | baz=53,slow=75,SNR=180 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **61.99** | **214** | T | T | 00 18 56.5 | |
| | baz=53,slow=75,SNR=18 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **62.00** | **214** | T | T | 00 19 09.7 | |
| | baz=53,slow=75,SNR=22 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **62.01** | **214** | T | T | 00 18 57.6 | |
| | baz=53,slow=75,SNR=27 | | | | | | |

**DJA 13 23:11:06.1±2.8,2°S±17″×13°9E±°,h22km±31km,M4.3/4,mb4.8/2,MLv4.1/4,Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GENI** | **Genyem** | **0.84** | **125** | P | Pb | 23 11 22.3 | +0.2 |
| **JAY** | **Jayapura** | **1.29** | **109** | P | Pn | 23 11 28.7 | -0.2 |
| **KMPI** | **Kaimana, Papua** | **5.97** | **255** | P | Pn | 23 12 25.6 | -7.7 |
| **MMPI** | **Merauke** | **6.39** | **172** | P | Pn | 23 12 27.4 | -12 |
| **SWI** | **Sorong** | **8.31** | **278** | P | Pn | 23 13 06.5 | +1.1 |
| | 28nm,0.8s | | | | | | |

*IDC **13** 23:13:12.6±1.9,69°.81N×145°.49W,h0km,mb3.5/2,mbtmp3.6/4,ML3.5/2,MS2.4/1,Error ellipse: s-maj=39.4km s-min=24.2km az=93.0*

*AEIC **13** 23:13:12.9±1.0,69°.62N±0°.07×145°.2W±0°.1,h16km±7km,ML3.4,ML3.5/72(NEIC),Mwr3.5/27(NEIC),Error ellipse: s-maj=10.7km s-min=5.9km az=189.0*

*NEIC **13** 23:13:14.2±0.8,69°.67N±0°.03×145°.24W±0°.10,h10km±2km,Error ellipse: s-maj=6.1km s-min=5.4km az=41.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr=0.13; Mθθ=1.61; Mϕϕ1.74; Mrθ=0.31; Mθϕ=1.35; Mϕr=0.66; Fault plane solution: M₀2.28000×10¹⁴ NP1: ϕs115.70000°,δ71.08000°,λ=178.59000°. NP2: ϕs25.24000°,δ88.66000°,λ=18.92000°. Principal axes: T 2.3298, Plg12.0000°, Azm72.0000°; N -0.1094, Plg71.0000°, Azm201.0000°; P -2.2205, Plg14.0000°, Azm339.0000°;*

*NEIC **13** 23:13:14.2,69°.66N×145°.25W,h10km*

**ISC 13 23:13:13.6±1.2,69°.63N±0°.04×145°.26W±0°.03,h3km±10km,n60,σ0²62/67,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.31** | **23** | | **Pg** | **23 13 19.9** | **+0.3** |
| C26K | | | | | **Sg** | **23 13 25.0** | **+1.3** |
| C26K | | | | IAML | | 23 13 30.1 | |
| | comp=E,4μm,1.0s | | | | | | |
| **D25K** | **Kavik River** | **0.50** | **232** | Pg | **Pg** | **23 13 22.4** | **-0.8** |
| D25K | | | | | **Sg** | **23 13 29.5** | **-0.2** |
| **C27K** | **Jago River** | **0.54** | **90** | Pg | **Pg** | **23 13 23.2** | **-0.8** |
| C27K | | | | IAML | | 23 13 33.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| C27K | | | | IAML | | 23 13 34.2 | |
| | comp=N,2μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.54** | **90** | | **Sg** | **23 13 31.2** | **+0.1** |
| **D24K** | **Happy Valley** | **1.35** | **251** | Pn | **Pn** | **23 13 39.0** | **-0.3** |
| D24K | | | | | **Sn** | **23 13 59.1** | **+1.5** |
| D24K | | | | IAML | | 23 14 01.6 | |
| | comp=N,828nm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.57** | **102** | Pn | **Pn** | **23 13 41.0** | **-1.4** |
| D27M | | | | | **Sn** | **23 14 03.0** | **-0.2** |
| D27M | | | | IAML | | 23 14 06.9 | |
| | comp=N,439nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.84** | **239** | Pn | **Pn** | **23 13 46.1** | **0.0** |
| TOLK | | | | | **Sg** | **23 14 13.1** | **+0.6** |
| TOLK | | | | IAML | | 23 14 16.6 | |
| | comp=E,465nm,0.6s | | | | | | |
| **C23K** | **Itkillik River** | **1.87** | **279** | Pn | **Pn** | **23 13 46.2** | **-0.3** |
| C23K | | | | | **Sn** | **23 14 09.9** | **-0.6** |
| **E24K** | **Your Creek** | **1.95** | **218** | Pn | **Pn** | **23 13 47.4** | **-0.2** |
| E24K | | | | IAML | | 23 14 19.0 | |
| | comp=E,272nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.97** | **136** | Pn | **Pn** | **23 13 47.7** | **-0.1** |
| E27K | | | | | **Sn** | **23 14 13.6** | **+0.6** |
| E27K | | | | IAML | | 23 14 18.1 | |
| | comp=E,392nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.99** | **168** | Pn | **Pn** | **23 13 48.1** | **0.0** |
| F26K | | | | | **Sn** | **23 14 15.6** | **+2.0** |
| F26K | | | | IAML | | 23 14 19.1 | |
| | comp=E,385nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.04** | **253** | Pn | **Pn** | **23 13 48.8** | **+0.1** |
| D23K | | | | IAML | | 23 14 34.3 | |
| | comp=E,259nm,0.7s | | | | | | |
| D23K | | | | IAML | | 23 14 34.4 | |
| | comp=N,308nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.06** | **184** | Pn | **Pn** | **23 13 48.9** | **-0.2** |
| F25K | | | | IAML | | 23 14 21.7 | |
| | comp=N,356nm,0.6s | | | | | | |
| F25K | | | | IAML | | 23 14 24.3 | |
| | comp=E,266nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.23** | **173** | Pn | **Pn** | **23 13 51.5** | **+0.1** |
| **E23K** | **Chandalar** | **2.24** | **227** | Pn | **Pn** | **23 13 51.3** | **-0.3** |
| E23K | | | | IAML | | 23 14 28.6 | |
| | comp=N,234nm,1.0s | | | | | | |
| E23K | | | | IAML | | 23 14 29.6 | |
| | comp=E,252nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **2.30** | **114** | Pn | **Pn** | **23 13 52.4** | **+0.1** |
| E28M | | | | IAML | | 23 14 31.5 | |
| | comp=N,218nm,0.7s | | | | | | |
| **D28M** | **Stokes Point** | **2.32** | **95** | | **Pn** | **23 13 52.7** | **+0.1** |
| **F24K** | **Squaw Lake** | **2.33** | **206** | Pn | **Pn** | **23 13 53.0** | **+0.1** |
| F24K | | | | IAML | | 23 14 28.2 | |
| | comp=N,172nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **2.75** | **257** | Pn | **Pn** | **23 13 58.2** | **-0.3** |
| D22K | | | | IAML | | 23 14 49.4 | |
| | comp=N,199nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.75** | **168** | | **Pn** | **23 13 58.9** | **+0.3** |
| **F28M** | **Old Crow** | **2.83** | **133** | Pn | **Pn** | **23 13 59.3** | **-0.4** |
| **G25K** | **Bearman Lake** | **2.90** | **187** | | **Pn** | **23 14 00.1** | **-0.4** |
| **E29M** | **Blow River** | **2.93** | **112** | Pn | **Pn** | **23 14 01.7** | **+0.7** |
| E29M | | | | IAML | | 23 14 48.6 | |
| | comp=N,135nm,1.0s | | | | | | |
| E29M | | | | IAML | | 23 14 56.3 | |
| | comp=E,162nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.03** | **219** | | **Pn** | **23 14 02.8** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **197** | Pn | **Pn** | **23 14 02.9** | **+0.1** |
| G24K | | | | IAML | | 23 14 52.8 | |
| | comp=N,153nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.08** | **180** | Pn | **Pn** | **23 14 03.4** | **+0.3** |
| **G27K** | **Doyon Strip** | **3.14** | **153** | Pn | **Pn** | **23 14 04.2** | **+0.3** |
| **F22K** | **John River** | **3.32** | **233** | | **Pn** | **23 14 06.2** | **-0.1** |
| **E21K** | **Killik River** | **3.35** | **253** | Pn | **Pn** | **23 14 07.1** | **+0.3** |
| E21K | | | | IAML | | 23 15 08.0 | |
| | comp=E,118nm,0.7s | | | | | | |
| **H25L** | **Birch Creek** | **3.39** | **184** | | **Pn** | **23 14 06.6** | **-0.7** |
| **A22K** | **Sinclair Lake** | **3.56** | **297** | | **Pn** | **23 14 09.5** | **-0.1** |
| **G29M** | **Pine Creek** | **3.84** | **132** | Pn | **Pn** | **23 14 13.4** | **-0.1** |
| **F21K** | **Alatna River** | **3.88** | **235** | Pn | **Pn** | **23 14 14.4** | **+0.3** |
| F21K | | | | IAML | | 23 15 19.9 | |
| | comp=N,58nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.94** | **196** | Pn | **Pn** | **23 14 14.8** | **-0.1** |
| H24K | | | | IAML | | 23 15 20.6 | |
| | comp=N,49nm,0.7s | | | | | | |
| H24K | | | | IAML | | 23 15 22.9 | |
| | comp=E,72nm,1.0s | | | | | | |
| **F30M** | **Barrier River** | **4.02** | **116** | | **Pn** | **23 14 16.6** | **+0.7** |
| **PRP** | **Porcupine Dome** | **4.14** | **182** | Pn | **Pn** | **23 14 17.9** | **+0.2** |
| PRP | | | | IAML | | 23 15 10.2 | |
| | comp=N,51nm,0.5s | | | | | | |
| **D20K** | **Etivluk River** | **4.16** | **263** | | **Pn** | **23 14 17.8** | **0.0** |
| **A21K** | **Barrow** | **4.17** | **299** | | **Pn** | **23 14 18.5** | **+0.5** |
| **E20K** | **Nigu River** | **4.18** | **256** | | **Pn** | **23 14 18.6** | **+0.4** |
| **I27K** | **Kandik River** | **4.28** | **159** | | **Pn** | **23 14 19.6** | **0.0** |
| **H29M** | **Whitestone** | **4.30** | **140** | Pn | **Pn** | **23 14 20.1** | **+0.2** |
| H29M | | | | IAML | | 23 15 45.5 | |
| | comp=N,54nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **4.67** | **152** | Pn | **Pn** | **23 14 25.6** | **+0.6** |
| I28M | | | | IAML | | 23 15 23.3 | |
| | comp=E,42nm,0.5s | | | | | | |
| I28M | | | | IAML | | 23 15 23.7 | |
| | comp=N,40nm,0.4s | | | | | | |
| **D19K** | **Kuna River** | **4.75** | **262** | Pn | **Pn** | **23 14 26.2** | **+0.2** |
| D19K | | | | IAML | | 23 16 00.5 | |
| | comp=E,30nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **195** | | **Pn** | **23 14 27.5** | **+0.3** |
| MDM | | | | IAML | | 23 15 47.7 | |
| | comp=E,30nm,1.1s | | | | | | |
| MDM | | | | IAML | | 23 15 56.3 | |
| | comp=N,26nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.91** | **118** | Pn | **Pn** | **23 14 28.3** | **+0.2** |
| G31M | | | | IAML | | 23 15 54.8 | |
| | comp=E,38nm,1.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.92** | **219** | Pn | **Pn** | **23 14 28.6** | **+0.3** |
| H21K | | | | IAML | | 23 15 57.7 | |
| | comp=E,35nm,1.0s | | | | | | |
| **IL31** | | **4.92** | **188** | | **Pn** | **23 14 28.8** | **+0.4** |
| **ILAR** | **Eielson Array** | **4.92** | **188** | Pn | **Pn** | **23 14 28.5** | **+0.1** |
| | comp=E,0.9nm,0.3s,baz=4.2,slow=14,SNR=34 | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 15 26.4** | **+0.6** |
| | comp=E,1.7nm,0.3s,baz=4.1,slow=24,SNR=6.9 | | | | | | |
| ILAR | | | | Lg | Lg | 23 15 45.4 | |
| | comp=E,1.6nm,0.3s,baz=2.8,slow=29,SNR=4.5 | | | | | | |
| ILAR | | | | LR | LR | 23 16 50.2 | |
| | comp=E,36nm,19.4s,baz=334,slow=43 | | | | | | |
| | comp=E,4.5nm,0.7s | | | | | | |
| **MLY** | **Manley** | **5.08** | **207** | Pn | **Pn** | **23 14 30.7** | **+0.1** |
| **C19K** | **Lookout Ridge** | **5.09** | **271** | | **Pn** | **23 14 30.4** | **-0.3** |
| **C19K** | **Lookout Ridge** | **5.09** | **271** | IAML | | 23 15 30.1 | |
| | comp=N,31nm,0.7s | | | | | | |
| C19K | | | | IAML | | 23 15 30.1 | |
| | comp=E,30nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.11** | **192** | | **Pn** | **23 14 30.9** | **0.0** |
| **F19K** | **Shaleruckik Mo** | **5.43** | **245** | Pn | **Pn** | **23 14 36.0** | **+0.6** |
| **A19K** | **Wainwright** | **5.47** | **283** | | **Pn** | **23 14 35.9** | **0.0** |
| **I30M** | **Mount Dempster** | **5.59** | **138** | Pn | **Pn** | **23 14 37.3** | **-0.4** |
| **F18K** | **Selawik** | **6.17** | **247** | | **Pn** | **23 14 45.1** | **-0.4** |
| **C17K** | **DeLong Mountai** | **6.52** | **268** | | **Pn** | **23 14 49.1** | **-1.2** |
| **YKA** | **Yellowknife Ar** | **14.20** | **105** | Pn | Pn | 23 16 30.0 | -5.2 |
| | comp=E,0.3nm,0.3s,baz=316,slow=14,SNR=6.1 | | | | | | |
| | comp=E,2.1nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.53** | **127** | P | **P** | **23 19 46.8** | **+1.1** |
| | comp=E,0.4nm,0.7s,baz=354,slow=8.4,SNR=5.1 | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **49.06** | **5** | P | **P** | **23 21 59.4** | **-1.9** |
| | comp=E,0.7nm,0.7s,baz=16,slow=9.9,SNR=3.8 | | | | | | |
| | comp=E,0.7nm,0.7s | | | | | | |

**DJA 13 23:25:25.1±0.3,1°S±4°×12°7E±°,h36km±7km,M3.8/8,mb4.0/3,MLv3.7/8,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBMI** | **Labuha** | **0.37** | **14** | P | Pn | 23 25 35.1 | +1.3 |
| LBMI | | | | S | Sn | 23 25 42.9 | +2.5 |
| **SANI** | **Sanana** | **1.76** | **234** | P | Pn | 23 25 53.9 | +0.8 |
| **SWI** | **Sorong** | **3.85** | **88** | P | Pn | 23 26 23.5 | +1.7 |
| **FAKI** | **Fak Fak** | **5.20** | **112** | P | Pn | 23 26 40.5 | +0.1 |
| | 32nm,1.6s,0.3nm | | | | | | |
| **BBSI** | **Bau Bau** | **6.57** | **227** | P | Pn | 23 26 59.9 | +0.6 |

**DJA 13 23:29:34.6±0.6,8°S±5°×11°6E±°,h15km±3km,M3.7/5,mb4.7/5,mB6.5/1,MLv3.2/5,Mw(mB)6.2/1,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.85** | **108** | P | Pg | 23 29 51.4 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **270** | P | Sb | 23 30 33.3 | +0.8 |
| **WBSI** | **Waikabubak, Su** | **3.48** | **110** | P | Pn | 23 30 28.8 | +0.5 |
| **PWJI** | **Pagerwojo** | **4.25** | **276** | P | Pn | 23 30 39.0 | +0.2 |
| **SANI** | **Sanana** | **11.75** | **58** | P | Pn | 23 32 21.2 | -0.7 |
| | 34nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **11.95** | **42** | P | Pn | 23 32 24.6 | 0.0 |

*NEIC **13** 23:53:09.9,69°.50N×144°.25W,h8km*

*AEIC **13** 23:53:10.4±1.6,69°.48N±0°.05×144°.23W±0°.06,h11km±6km,ML3.9,ML4.0/102(NEIC),Mwr4.1/23(NEIC),Error ellipse: s-maj=6.8km s-min=2.9km az=188.0*

*IDC **13** 23:53:11.4±0.8,69°.69N×144°.26W,h0km,mb3.8/10,mbtmp3.8/14,ML3.9/4,MS3.3/33,Error ellipse: s-maj=24.2km s-min=13.5km az=64.0*

*NEIC **13** 23:53:11.5±1.2,69°.54N±0°.05×144°.19W±0°.05,h3km±2km,Error ellipse: s-maj=7.8km s-min=3.1km az=2.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr=0.38; Mθθ=0.74; Mϕϕ1.12; Mrθ=0.20; Mθϕ=-1.29; Mϕr=0.02; Fault plane solution: M₀1.64000×10¹⁵ NP1: ϕs197.53000°,δ81.35000°,λ=-4.66000°. NP2:ϕs288.23000°, δ85.39000°,λ=-171.32000°. Principal axes: T 1.7866, Plg3.0000°, Azm63.0000°; N -0.3570, Plg80.0000°, Azm316.0000°; P -1.4296, Plg9.0000°, Azm153.0000°;*

**ISC 13 23:53:10.6±1.2,69°.55N±0°.04×144°.21W±0°.02,h2km±8km,n147,σ1²05/134,mb3.8/10,MS3.4/28,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.19** | **66** | | **Pg** | **23 53 14.8** | **+0.5** |
| C27K | | | | | **Sg** | **23 53 17.7** | **+0.9** |
| **C26K** | **Camden Bay** | **0.44** | **327** | | **Pg** | **23 53 20.6** | **+1.5** |
| C26K | | | | | **Sg** | **23 53 27.5** | **-0.7** |
| **D25K** | **Kavik River** | **0.80** | **254** | Pg | **Pg** | **23 53 24.8** | **-1.1** |
| D25K | | | | Sg | **Sg** | **23 53 36.5** | **+0.3** |
| **D27M** | **Malcolm River** | **1.19** | **104** | | **Pg** | **23 53 33.3** | **-0.1** |
| D27M | | | | | **Sg** | **23 53 49.3** | **+0.6** |
| **E27K** | **Coleen River** | **1.67** | **144** | Pn | **Pn** | **23 53 38.5** | **-2.4** |
| E27K | | | | Sn | **Sn** | **23 54 03.2** | **+0.4** |
| E27K | | | | IAML | | 23 54 04.6 | |
| | comp=E,1μm,0.8s | | | | | | |
| E27K | | | | IAML | | 23 54 06.4 | |
| | comp=N,1μm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.69** | **258** | | **Pn** | **23 53 38.8** | **-2.3** |
| D24K | | | | Sg | **Sg** | **23 54 05.4** | **+0.7** |
| **F26K** | **Sheenjek River** | **1.87** | **179** | Pn | **Pn** | **23 53 41.2** | **-2.4** |
| F26K | | | | Sn | **Sn** | **23 54 07.8** | **+0.1** |
| F26K | | | | IAML | | 23 54 10.3 | |
| | comp=N,1μm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.93** | **117** | Pn | **Pn** | **23 53 45.0** | **+0.6** |
| E28M | | | | Sn | **Sn** | **23 54 10.1** | **+0.9** |
| E28M | | | | IAML | | 23 54 15.5 | |
| | comp=N,1μm,0.5s | | | | | | |
| E28M | | | | IAML | | 23 54 16.7 | |
| | comp=E,1μm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **1.94** | **94** | | **Pn** | **23 53 45.9** | **+1.3** |
| **F25K** | **Christian Rive** | **2.04** | **196** | | **Pn** | **23 53 46.2** | **+0.3** |
| F25K | | | | Sn | **Sn** | **23 54 11.4** | **-0.5** |
| F25K | | | | IAML | | 23 54 15.9 | |
| | comp=E,1μm,1.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.13** | **247** | | **Pn** | **23 53 47.4** | **+0.2** |
| TOLK | | | | IAML | | 23 54 21.5 | |
| | comp=E,996nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 23 54 29.8 | |
| | comp=N,1μm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.14** | **184** | Pn | **Pn** | **23 53 48.0** | **+0.7** |
| **E24K** | **Your Creek** | **2.15** | **228** | | **Pn** | **23 53 47.8** | **+0.3** |
| E24K | | | | | **Sb** | **23 54 16.3** | **-1.0** |
| **C23K** | **Itkillik River** | **2.25** | **280** | | **Pn** | **23 53 49.5** | **+0.7** |
| **D23K** | **Nanushuk River** | **2.38** | **259** | Pn | **Pn** | **23 53 51.2** | **+0.6** |
| D23K | | | | IAML | | 23 54 36.0 | |
| | comp=E,620nm,1.5s | | | | | | |
| D23K | | | | IAML | | 23 54 40.2 | |
| | comp=N,838nm,1.4s | | | | | | |
| **F24K** | **Squaw Lake** | **2.45** | **215** | Pn | **Pn** | **23 53 51.9** | **+0.3** |
| **E23K** | **Chandalar** | **2.47** | **235** | | **Pn** | **23 53 52.2** | **+0.3** |
| **F28M** | **Old Crow** | **2.51** | **139** | Pn | **Pn** | **23 53 52.8** | **+0.3** |
| F28M | | | | IAML | | 23 54 33.6 | |
| | comp=N,693nm,0.7s | | | | | | |
| F28M | | | | IAML | | 23 54 38.4 | |
| | comp=E,591nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.56** | **114** | Pn | **Pn** | **23 53 54.0** | **+1.0** |
| E29M | | | | IAML | | 23 54 32.4 | |
| | comp=E,584nm,0.6s | | | | | | |
| E29M | | | | IAML | | 23 54 40.0 | |
| | comp=N,702nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.62** | **176** | | **Pn** | **23 53 54.4** | **+0.5** |
| **G25K** | **Bearman Lake** | **2.89** | **195** | | **Pn** | **23 53 57.1** | **-0.4** |
| **G27K** | **Doyon Strip** | **2.92** | **160** | | **Pn** | **23 53 58.1** | **+0.1** |
| **D22K** | **Ayikyak River** | **3.10** | **261** | | **Pn** | **23 54 00.8** | **+0.3** |
| D22K | | | | IAML | | 23 54 57.0 | |
| | comp=E,583nm,0.9s | | | | | | |
| D22K | | | | IAML | | 23 55 05.0 | |
| | comp=N,550nm,1.2s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.11** | **205** | Pn | **Pn** | **23 54 00.8** | **+0.1** |
| G24K | | | | IAML | | 23 54 51.1 | |
| | comp=E,422nm,0.8s | | | | | | |
| G24K | | | | IAML | | 23 54 53.0 | |
| | comp=N,570nm,1.2s | | | | | | |
| **COLD** | **Coldfoot** | **3.22** | **226** | Pn | **Pn** | **23 54 03.2** | **+1.1** |
| **B22K** | **Teshekpuk Lake** | **3.27** | **288** | | **Pn** | **23 54 01.8** | **-1.0** |
| **H25L** | **Birch Creek** | **3.36** | **191** | | **Pn** | **23 54 04.4** | **+0.4** |
| **H27K** | **Steamboat Moun** | **3.49** | **162** | | **Pn** | **23 54 06.5** | **+0.6** |
| **G29M** | **Pine Creek** | **3.51** | **136** | Pn | **Pn** | **23 54 06.7** | **+0.5** |
| G29M | | | | IAML | | 23 55 10.6 | |
| | comp=N,426nm,0.8s | | | | | | |
| **F22K** | **John River** | **3.58** | **239** | | **Pn** | **23 54 07.9** | **+0.8** |
| **G23K** | **Bananza Creek** | **3.59** | **220** | Pn | **Pn** | **23 54 07.1** | **-0.1** |
| G23K | | | | IAML | | 23 55 08.9 | |
| | comp=E,325nm,0.8s | | | | | | |
| G23K | | | | IAML | | 23 55 09.4 | |
| | comp=N,226nm,0.9s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.65** | **276** | | **Pn** | **23 54 09.0** | **+1.0** |
| B21K | | | | IAML | | 23 55 38.6 | |
| | comp=E,341nm,1.5s | | | | | | |
| **F30M** | **Barrier River** | **3.65** | **118** | | **Pn** | **23 54 09.8** | **+1.7** |
| **E21K** | **Killik River** | **3.69** | **257** | | **Pn** | **23 54 08.9** | **+0.4** |
| E21K | | | | IAML | | 23 55 19.2 | |
| | comp=N,364nm,0.9s | | | | | | |
| E21K | | | | IAML | | 23 55 19.9 | |
| | comp=E,331nm,1.2s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.93** | **297** | | **Pn** | **23 54 12.4** | **+0.6** |
| **H24K** | **Noodor Dome** | **3.98** | **202** | | **Pn** | **23 54 12.9** | **+0.2** |
| H24K | | | | IAML | | 23 55 16.8 | |
| | comp=N,201nm,0.7s | | | | | | |
| H24K | | | | IAML | | 23 55 24.7 | |
| | comp=E,230nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **4.01** | **144** | Pn | **Pn** | **23 54 13.8** | **+0.8** |
| H29M | | | | IAML | | 23 55 05.7 | |
| | comp=N,264nm,0.5s | | | | | | |
| H29M | | | | IAML | | 23 55 08.3 | |
| | comp=E,304nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **4.05** | **103** | Pn | **Pn** | **23 54 14.5** | **+1.0** |
| | comp=E,5.2nm,0.3s,baz=336,slow=6.5,SNR=16 | | | | | | |
| INK | | | | Sn | **Sn** | **23 54 59.7** | **-1.8** |
| | comp=E,5.2nm,0.3s,baz=193,slow=12,SNR=4.2 | | | | | | |
| INK | | | | LR | LR | 23 56 14.0 | |
| | comp=E,124nm,18.2s,baz=334,slow=44 | | | | | | |
| | comp=E,12nm,0.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.08** | **188** | Pn | **Pn** | **23 54 14.7** | **+0.6** |
| PRP | | | | IAML | | 23 55 22.6 | |
| | comp=N,252nm,0.8s | | | | | | |
| PRP | | | | IAML | | 23 55 26.4 | |
| | comp=E,203nm,1.2s | | | | | | |
| **I27K** | **Kandik River** | **4.09** | **165** | | **Pn** | **23 54 14.7** | **+0.6** |
| **F21K** | **Alatna River** | **4.15** | **240** | Pn | **Pn** | **23 54 15.7** | **+0.8** |
| F21K | | | | IAML | | 23 55 28.2 | |
| | comp=E,161nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.26** | **211** | Pn | **Pn** | **23 54 17.0** | **+0.5** |
| H23K | | | | IAML | | 23 55 30.4 | |
| | comp=N,190nm,0.7s | | | | | | |
| H23K | | | | IAML | | 23 55 33.9 | |
| | comp=E,210nm,1.4s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.26** | **135** | Pn | **Pn** | **23 54 17.0** | **+0.6** |
| **I26K** | **Coal Creek Min** | **4.28** | **174** | Pn | **Pn** | **23 54 17.3** | **+0.5** |
| **I28M** | **Miner Creek** | **4.44** | **156** | Pn | **Pn** | **23 54 19.9** | **+1.0** |
| I28M | | | | IAML | | 23 55 15.4 | |
| | comp=N,173nm,0.5s | | | | | | |
| I28M | | | | IAML | | 23 55 17.6 | |
| | comp=E,138nm,0.5s | | | | | | |
| **D20K** | **Etivluk River** | **4.52** | **265** | | **Pn** | **23 54 20.1** | **+0.2** |
| **B20K** | **Meade River** | **4.52** | **282** | Pn | **Pn** | **23 54 20.8** | **+0.8** |
| **E20K** | **Nigu River** | **4.52** | **259** | | **Pn** | **23 54 20.4** | **+0.3** |
| **A21K** | **Barrow** | **4.53** | **299** | | **Pn** | **23 54 20.8** | **+0.7** |
| **G31M** | **Satah River** | **4.54** | **121** | Pn | **Pn** | **23 54 20.9** | **+0.7** |
| G31M | | | | IAML | | 23 55 50.0 | |
| | comp=E,168nm,1.1s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.57** | **220** | | **Pn** | **23 54 20.4** | **-0.4** |
| **POKR** | **Poker Plat Res** | **4.63** | **197** | Pn | **Pn** | **23 54 22.4** | **+0.9** |
| POKR | | | | IAML | | 23 55 18.4 | |
| | comp=N,145nm,0.6s | | | | | | |
| **G21K** | **Allakaket** | **4.63** | **233** | Pn | **Pn** | **23 54 21.4** | **-0.2** |
| G21K | | | | IAML | | 23 55 51.0 | |
| | comp=N,155nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.85** | **207** | Pn | **Pn** | **23 54 25.1** | **+0.7** |
| I23K | | | | IAML | | 23 55 51.9 | |
| | comp=E,148nm,0.9s | | | | | | |
| I23K | | | | IAML | | 23 56 02.7 | |
| | comp=N,127nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.87** | **201** | | **Pn** | **23 54 25.4** | **+0.6** |
| MDM | | | | IAML | | 23 55 46.1 | |
| | comp=E,109nm,0.6s | | | | | | |
| MDM | | | | IAML | | 23 55 53.2 | |
| | comp=N,109nm,0.8s | | | | | | |
| **IL03** | **Eielson Array** | **4.91** | **193** | Pn | **Pn** | **23 54 26.5** | **+1.1** |
| **IL31** | | **4.91** | **194** | | **Pn** | **23 54 26.3** | **+1.0** |
| **ILAR** | **Eielson Array** | **4.91** | **194** | Pn | **Pn** | **23 54 26.0** | **+0.6** |
| **ILAR** | **Eielson Array** | **4.91** | **194** | Pn | **Pn** | **23 54 26.3** | **+1.0** |
| | comp=N,4.5nm,0.3s,baz=3.8,slow=13,SNR=127 | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 55 22.6** | **-0.1** |
| | comp=N,9.6nm,0.3s,baz=7.6,slow=21,SNR=10 | | | | | | |
| ILAR | | | | Lg | Lg | 23 55 41.0 | |
| | comp=N,14nm,0.3s,baz=6.6,slow=33,SNR=6.3 | | | | | | |
| ILAR | | | | LR | LR | 23 56 48.8 | |
| | comp=N,57nm,19.6s,baz=66,slow=43 | | | | | | |
| | comp=N,11nm,0.5s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.96** | **245** | Pn | **Pn** | **23 54 26.9** | **+0.9** |
| F20K | | | | IAML | | 23 55 60.0 | |
| | comp=N,109nm,1.4s | | | | | | |
| **J25K** | **Salcha River,** | **4.98** | **186** | Pn | **Pn** | **23 54 27.2** | **+0.8** |
| J25K | | | | IAML | | 23 55 54.5 | |
| | comp=N,92nm,0.7s | | | | | | |
| **J26L** | **Joseph Creek** | **5.08** | **177** | Pn | **Pn** | **23 54 28.4** | **+0.6** |
| J26L | | | | IAML | | 23 55 50.8 | |
| | comp=E,94nm,0.7s | | | | | | |
| J26L | | | | IAML | | 23 55 59.5 | |
| | comp=N,84nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.11** | **224** | Pn | **Pn** | **23 54 28.6** | **+0.5** |
| H21K | | | | IA

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **F18K** | **Selawik** | **6.49** | **250** | | | **Pn** | 23 54 47.4 | **+0.4** |
| **BCAR** | **Beaver Creek A** | **6.59** | **170** | Pn | | **Pn** | 23 54 49.8 | **+1.4** |
| **L27K** | **Beaver Creek,** | **6.59** | **171** | Pn | | **Pn** | 23 54 49.5 | **+1.1** |
| **DHY** | **Denali Highway** | **6.63** | **193** | Pn | | **Pn** | 23 54 50.7 | **+1.7** |
| **PAX** | **Paxson** | **6.63** | **185** | Pn | | **Pn** | 23 54 50.8 | **+1.7** |
| **J20K** | **Nowinta River** | **6.66** | **221** | Pn | | **Pn** | 23 54 49.6 | **+0.3** |
| **A36M** | **Sachs Harbour** | **6.71** | **60** | Pn | | **Pn** | 23 54 49.5 | **-0.5** |
| **C17K** | **DeLong Mountai** | **6.89** | **270** | | | **Pn** | 23 54 51.8 | **-0.7** |
| **L29M** | **L29M** | **6.91** | **156** | Pn | | **Pn** | 23 54 53.7 | **+0.9** |
| **E17K** | **Hotham Inlet** | **6.97** | **258** | | | **Pn** | 23 54 53.2 | **-0.3** |
| **WAT1** | **Susitna Watana** | **6.97** | **197** | | | **Pn** | 23 54 55.6 | **+1.9** |
| **D17K** | **Noatak River** | **7.13** | **264** | | | **Pn** | 23 54 55.1 | **-0.7** |
| **WAT6** | **Susitna Watana** | **7.15** | **193** | | | **Pn** | 23 54 57.6 | **+1.5** |
| **J19K** | **Poorman** | **7.16** | **224** | Pn | | **Pn** | 23 54 56.5 | **+0.3** |
| **G17K** | **Kiwalik Mounta** | **7.48** | **245** | | | **Pn** | 23 55 00.8 | **+0.2** |
| **YUK2** | **White River** | **7.92** | **168** | | | **Pn** | 23 55 08.4 | **+1.7** |
| **G16K** | **Koyuk River** | **8.10** | **248** | | | **Pn** | 23 55 09.4 | **+0.4** |
| **L20K** | **Farewell, AK** | **8.11** | **214** | | | **Pn** | 23 55 09.4 | **+0.1** |
| **F15K** | **North Star Dit** | **8.67** | **253** | | | **Pn** | 23 55 17.2 | **+0.4** |
| **L18K** | **Granite Mounta** | **8.94** | **221** | | | **Pn** | 23 55 20.7 | **+0.2** |
| **KDAK** | **Kodiak Island** | **12.37** | **201** | LR | | LR | 00 01 14.6 | |
| | comp=E,143nm,19.3s,baz=50,slow=39 | | | | | | | |
| **DLBC** | **Dease Lake** | **12.72** | **144** | Pn | | **Pn** | 23 56 10.9 | **-1.4** |
| | comp=E,0.2nm,0.3s,baz=14,slow=25,SNR=1.3 | | | | | | | |
| DLBC | | | | LR | | LR | 00 01 44.3 | |
| | comp=E,114nm,21.1s,baz=46,slow=40 | | | | | | | |
| | comp=E,1.9nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.82** | **106** | Pn | | **Pn** | 23 56 23.6 | **-3.6** |
| | comp=E,0.8nm,0.3s,baz=301,slow=18,SNR=10 | | | | | | | |
| YKA | | | | Sn | | Sn | 23 58 47.2 | -14 |
| | comp=E,0.7nm,0.3s,baz=318,slow=22,SNR=4.2 | | | | | | | |
| | comp=E,2.3nm,0.5s | | | | | | | |
| **RES** | **Resolute Bay** | **15.54** | **49** | Pn | | **Pn** | 23 56 46.4 | **-3.9** |
| | comp=E,0.8nm,0.3s,baz=265,slow=11,SNR=4.7 | | | | | | | |
| **BBB** | **Bella Bella** | **18.98** | **148** | LR | | LR | 00 04 47.4 | |
| | comp=E,48nm,19.4s,baz=342,slow=36 | | | | | | | |
| **NEW** | **Newport** | **25.09** | **134** | LR | | LR | 00 08 59.5 | |
| | comp=E,137nm,19.2s,baz=346,slow=38 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.48** | **250** | LR | | LR | 00 09 23.6 | |
| | comp=E,53nm,18.5s,baz=164,slow=38 | | | | | | | |
| **MA2** | **Magadan** | **28.19** | **282** | LR | | LR | 00 10 26.1 | |
| | comp=E,39nm,22.0s,baz=86,slow=37 | | | | | | | |
| **FRB** | **Frobisher Bay** | **28.69** | **64** | LR | | LR | 00 11 39.7 | |
| | comp=E,96nm,20.6s,baz=350,slow=39 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.05** | **147** | LR | | LR | 00 12 37.1 | |
| | comp=E,26nm,18.2s,baz=298,slow=39 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.80** | **268** | LR | | LR | 00 12 51.2 | |
| | comp=E,50nm,19.2s,baz=60,slow=38 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **31.54** | **49** | LR | | LR | 00 14 29.6 | |
| | comp=E,35nm,19.0s,baz=322,slow=41 | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.19** | **128** | P | | **P** | **23 59 42.1** | **+2.3** |
| | comp=E,0.5nm,0.4s,baz=335,slow=6.7,SNR=4.9 | | | | | | | |
| PDAR | | | | LR | | LR | 00 13 54.8 | |
| | comp=E,66nm,18.7s,baz=345,slow=38 | | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | | |
| **ELK** | **Elko** | **32.62** | **137** | LR | | LR | 00 12 24.2 | |
| | comp=E,44nm,20.8s,baz=343,slow=35 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.13** | **142** | P | | **P** | **23 59 59.6** | **+2.9** |
| | comp=E,0.7nm,0.6s,baz=337,slow=7.7,SNR=6.3 | | | | | | | |
| NVAR | | | | LR | | LR | 00 14 46.0 | |
| | comp=E,108nm,18.1s,baz=282,slow=38 | | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | | |
| **SCHQ** | **Schefferville** | **36.09** | **73** | LR | | LR | 00 17 31.4 | |
| | comp=E,56nm,18.2s,baz=322,slow=40 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.16** | **142** | LR | | LR | 00 18 17.8 | |
| | comp=E,68nm,20.3s,baz=307,slow=38 | | | | | | | |
| **ANMO** | **Albuquerque** | **40.35** | **129** | LR | | LR | 00 19 01.1 | |
| | comp=E,51nm,20.0s,baz=66,slow=38 | | | | | | | |
| **ASAJ** | **Asahikawa** | **43.73** | **274** | LR | | LR | 00 20 12.9 | |
| | comp=E,51nm,18.0s,baz=70,slow=37 | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.41** | **128** | P | | **P** | **00 01 39.9** | **+1.5** |
| | comp=E,0.4nm,0.5s,baz=332,slow=4.7,SNR=5.9 | | | | | | | |
| TXAR | | | | LR | | LR | 00 22 38.9 | |
| | comp=E,41nm,19.9s,baz=317,slow=38 | | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **46.80** | **104** | LR | | LR | 00 20 32.6 | |
| | comp=E,36nm,18.1s,baz=236,slow=35 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.33** | **283** | LR | | LR | 00 24 44.4 | |
| | comp=E,50nm,18.4s,baz=281,slow=40 | | | | | | | |
| **FINES** | **FINESS Array B** | **49.11** | **6** | P | | **P** | **00 01 58.4** | **-0.4** |
| | comp=E,1.8nm,1.0s,baz=1.1,slow=7.2,SNR=4.4 | | | | | | | |
| | comp=E,1.8nm,1.0s | | | | | | | |
| **HFS** | **Hagfors** | **49.64** | **14** | P | | **P** | **00 02 03.3** | **+0.4** |
| | comp=E,1.2nm,0.7s,baz=1.0,slow=8.6,SNR=2.8 | | | | | | | |
| | comp=E,1.2nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.76** | **325** | LR | | LR | 00 27 34.5 | |
| | comp=E,22nm,18.8s,baz=24,slow=40 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.98** | **273** | LR | | LR | 00 26 14.3 | |
| | comp=E,31nm,18.9s,baz=95,slow=38 | | | | | | | |
| **SONM** | **Songino Array** | **52.18** | **306** | P | | **P** | **00 02 23.2** | **+0.9** |
| | comp=E,0.3nm,0.4s,baz=31,slow=9.5,SNR=1.8 | | | | | | | |
| SONM | | | | LR | | LR | 00 28 12.8 | |
| | comp=E,56nm,19.9s,baz=38,slow=40 | | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.25** | **27** | P | | **P** | **00 02 22.6** | **+0.1** |
| | comp=E,1.2nm,0.8s,baz=349,slow=6.5,SNR=2.2 | | | | | | | |
| | comp=E,1.2nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **53.24** | **344** | LR | | LR | 00 26 13.1 | |
| | comp=E,17nm,19.8s,baz=10.0,slow=37 | | | | | | | |
| **KSRS** | **Korea Array** | **54.74** | **283** | LR | | LR | 00 29 00.5 | |
| | comp=E,17nm,20.4s,baz=155,slow=39 | | | | | | | |
| **BVAR** | **Borovoye Array** | **55.15** | **335** | LR | | LR | 00 27 53.0 | |
| | comp=E,25nm,20.6s,baz=4.2,slow=38 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.13** | **329** | P | | **P** | **00 02 51.2** | **+0.3** |
| | comp=E,0.6nm,0.2s,baz=16,slow=6.7,SNR=8.6 | | | | | | | |
| | comp=E,0.6nm,0.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.07** | **324** | P | | **P** | **00 03 11.0** | **-0.7** |
| | comp=E,0.3nm,0.4s,baz=24,slow=6.7,SNR=6.7 | | | | | | | |
| MKAR | | | | LR | | LR | 00 31 49.2 | |
| | comp=E,21nm,18.2s,baz=50,slow=39 | | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.97** | **5** | P | | **P** | **00 03 17.7** | **-0.1** |
| | comp=E,0.9nm,0.5s,baz=359,slow=7.0,SNR=4.6 | | | | | | | |
| | comp=E,0.9nm,0.5s | | | | | | | |
| **VRAC** | **Vranov** | **60.62** | **14** | LR | | LR | 00 29 51.2 | |
| | comp=E,12nm,20.4s,baz=164,slow=36 | | | | | | | |
| **ROSC** | **El Rosal** | **78.53** | **107** | LR | | LR | 00 40 47.7 | |
| | comp=E,54nm,18.3s,baz=126,slow=36 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.72** | **301** | LR | | LR | 00 47 07.3 | |
| | comp=E,17nm,18.3s,baz=130,slow=40 | | | | | | | |
| **MDP** | **Montagnes des** | **85.81** | **87** | LR | | LR | 00 45 40.1 | |
| | comp=E,16nm,18.6s,baz=256,slow=37 | | | | | | | |

*NEIC* ***13*** *23:56:22.3±1.3, 36°.50N±0°.02×98°.99W±0°.02, h5km±1km, Error ellipse: s-maj=3.3km s-min=2.7km az=328.0*

**TUL 13 23:56:22.8±1.3, 36°.52N±0°.02×99°.00W±0°.02, h5km±3km, ML2.4, mb_Lg2.2/**35(NEIC)**, ML2.6/**12(NEIC)**, Error ellipse: s-maj=3.5km s-min=1.8km az=140.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOKA** | **Waynoka** | **0.13** | **26** | Pg | Pg | 23 56 26.0 | +0.5 |
| NOKA | | | | Sg | Sg | 23 56 28.3 | +1.0 |
| **OK038** | **West end E0370** | **0.21** | **100** | Pg | Pg | 23 56 27.5 | +0.5 |
| OK038 | | | | Sg | Sg | 23 56 30.5 | +0.7 |
| OK038 | | | | IAML | | 23 56 32.6 | |
| | 1um,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **0.56** | **217** | Pg | Pg | 23 56 33.6 | 0.0 |
| ELIS | | | | Sg | Sg | 23 56 41.8 | +0.9 |
| ELIS | | | | IAML | | 23 56 47.2 | |
| | comp=N,352nm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.70** | **66** | Pg | | 23 56 35.9 | -0.4 |
| OK032 | | | | Sg | Sg | 23 56 45.1 | -0.2 |
| OK032 | | | | IAML | | 23 56 58.2 | |
| | comp=N,309nm,0.1s | | | | | | |
| OK032 | | | | IAML | | 23 57 01.3 | |
| | comp=N,250nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.82** | **90** | Pg | Pb | 23 56 39.2 | -0.4 |
| CROK | | | | Sg | Sg | 23 56 49.8 | +0.5 |
| CROK | | | | IAML | | 23 56 55.8 | |
| | comp=E,213nm,0.2s | | | | | | |
| CROK | | | | IAML | | 23 56 58.9 | |
| | comp=N,199nm,0.2s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.91** | **164** | Pg | Pg | 23 56 40.0 | -0.2 |
| **KAN14** | **Manchester OK** | **0.94** | **62** | Pg | Pg | 23 56 40.6 | -0.3 |
| **GC02** | **Grant County #** | **0.98** | **70** | | Pg | 23 56 41.5 | -0.1 |
| **KAN17** | **Caldwell West** | **1.13** | **62** | | Pg | 23 56 44.0 | -0.4 |
| **KAN01** | **Argonia South** | **1.18** | **57** | Pg | Pg | 23 56 45.1 | -0.4 |
| **KAN09** | **Caldwell North** | **1.27** | **60** | Pg | Pg | 23 56 46.6 | -0.6 |
| **KAN13** | **South Haven SW** | **1.32** | **68** | | Pn | 23 56 47.5 | -0.5 |
| **OK029** | **Liberty Lake** | **1.45** | **119** | | Pn | 23 56 49.8 | +0.1 |
| **BLOK** | **Blackwell** | **1.46** | **80** | | Pn | 23 56 50.0 | +0.2 |
| **OK048** | **Pawnee Station** | **1.66** | **93** | | Pn | 23 56 52.8 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **1.69** | **131** | | Pn | 23 56 52.7 | -0.2 |
| **SMWD** | **Samnorwood** | **1.73** | **216** | | Pn | 23 56 54.0 | +0.4 |
| **OK051** | **E0350 and S346** | **1.75** | **90** | | Pn | 23 56 53.9 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.78** | **174** | Pn | Pn | 23 56 54.3 | -0.1 |
| WMOK | | | | IAmb_Lg | | 23 57 24.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **FNO** | **Franklin** | **1.81** | **134** | | Pn | 23 56 54.6 | -0.1 |
| **OK031** | **S. Brethren Rd** | **1.84** | **107** | Pn | Pn | 23 56 54.0 | -1.0 |
| **OK052** | **Battle Ridge R** | **1.85** | **106** | Pn | Pn | 23 56 55.1 | -0.1 |
| **QUOK** | **Quay** | **1.89** | **100** | Pn | Pn | 23 56 54.7 | -1.0 |
| **DEOK** | **Depew** | **2.14** | **108** | Pn | Pn | 23 56 59.0 | -0.2 |
| **X34A** | **Smith Ranch, M** | **2.14** | **153** | | Pn | 23 56 59.4 | +0.2 |
| X34A | | | | IAmb_Lg | | 23 57 35.3 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.37** | **346** | | Pn | 23 57 03.7 | +1.3 |
| CBKS | | | | IAmb_Lg | | 23 57 38.4 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **AMTX** | **Amarillo** | **2.72** | **234** | | Pn | 23 57 09.4 | +2.1 |
| AMTX | | | | IAmb_Lg | | 23 57 52.3 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WTFS** | **Witchita Falls** | **2.78** | **171** | | Pn | 23 57 09.1 | +1.1 |
| **LOOK** | **Love County** | **2.93** | **149** | Pn | Pn | 23 57 10.6 | +0.5 |
| **RTBA** | **Rita Blanca** | **3.01** | **270** | Pn | Pn | 23 57 12.0 | +0.7 |
| **RLO** | **Rose Lookout** | **3.23** | **95** | Pn | Pn | 23 57 13.7 | -0.5 |
| **DKNS** | **Dickens** | **3.25** | **210** | Pn | Pn | 23 57 12.2 | -2.3 |
| **APMT** | **Aspermont** | **3.31** | **196** | Pn | Pn | 23 57 15.7 | +0.3 |
| **X37A** | **Clayton** | **3.53** | **122** | Pn | Pn | 23 57 18.1 | -0.2 |
| X37A | | | | IAmb_Lg | | 23 58 19.2 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **3.55** | **167** | IAmb_Lg | | 23 58 16.2 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **3.74** | **171** | IAmb_Lg | | 23 58 31.6 | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **SN07** | **Snyder 07** | **3.75** | **205** | IAmb_Lg | | 23 58 27.3 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.95** | **204** | IAmb_Lg | | 23 58 33.2 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **4.00** | **232** | IAmb_Lg | | 23 58 35.6 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **POST** | **Post** | **4.01** | **212** | IAmb_Lg | | 23 58 40.6 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **4.09** | **92** | IAmb_Lg | | 23 58 33.6 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **5.32** | **53** | IAmb_Lg | | 23 59 18.0 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.42** | **110** | IAmb_Lg | | 23 59 18.1 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **PHWY** | **Pilot Hill** | **6.94** | **315** | IAmb_Lg | | 00 00 06.5 | |
| | comp=Z,2.6nm,0.8s | | | | | | |

*SOME* ***14*** *00:01:13.3, 39°.83N×73°.37E, h5km*
*KRNET* ***14*** *00:01:14.2±0.1, 39°.74N×73°.31E, h23km, mb3.3*
*ISU* ***14*** *00:01:15.1, 39°.67N×73°.35E, h11km*
*NNC* ***14*** *00:01:17.5±1.4, 39°.91N×73°.32E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=11.6km s-min=5.9km az=176.0*

**ISC 14 00:01:11.3±1.4, 39°.72N±0°.04×73°.50E±0°.02, h7km±10km, n58, σ1§82/99, 35C-14D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.30** | **1** | ⇓*i*P | **Pn** | **00 01 20.5** | **-1.8** |
| | baz=28 | | | | | | |
| SFK | | | | ⇓*i*S | **Sb** | **00 01 25.2** | **+0.9** |
| | baz=28 | | | | | | |
| **OHH** | **Osh** | **0.97** | **326** | ⇑*e*P | **Pn** | **00 01 31.0** | **-0.4** |
| | baz=33 | | | | | | |
| OHH | | | | ⇑*e*S | **Sg** | **00 01 43.0** | **+0.3** |
| | baz=33 | | | | | | |
| **DRK** | **Karamyk** | **1.33** | **260** | ⇑*i*P | **Pn** | **00 01 36.3** | **-0.2** |
| | baz=58 | | | | | | |
| DRK | | | | ⇑*i*S | **Sb** | **00 01 52.2** | **-1.9** |
| | baz=58 | | | | | | |
| **FRG** | **Fergana** | **1.47** | **297** | P | **Pg** | **00 01 41.7** | **+2.2** |
| FRG | | | | S | **Sg** | **00 02 00.7** | **+2.2** |
| **NAM** | **Namangan** | **1.90** | **313** | P | **Pg** | **00 01 48.8** | **+1.2** |
| NAM | | | | S | **Sg** | **00 02 13.8** | **+1.6** |
| **KSNS** | **Kasansay** | **2.08** | **314** | P | **Pg** | **00 01 52.0** | **+0.7** |
| KSNS | | | | S | **Sg** | **00 02 19.5** | **+1.2** |
| **BTK** | **Batken** | **2.09** | **280** | ⇑*i*P | **Pb** | **00 01 48.6** | **-0.9** |
| | baz=80 | | | | | | |
| BTK | | | | ⇑*i*S | **Sb** | **00 02 13.8** | **-1.9** |
| | baz=80 | | | | | | |
| **ARLS** | **Aral** | **2.23** | **16** | ⇑*i*P | **Pb** | **00 01 53.0** | **+0.9** |
| | baz=20 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sg** | **00 02 21.3** | **-1.8** |
| | baz=20 | | | | | | |
| **ARK** | **Arkit** | **2.38** | **331** | ⇑*i*P | **Pb** | **00 01 53.7** | **-0.9** |
| | baz=34 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **00 02 22.6** | **-1.6** |
| | baz=34 | | | | | | |
| **AML** | **Almayashu** | **2.42** | **4** | P | **Pg** | **00 01 56.7** | **-1.0** |
| | SNR=7.1 | | | | | | |
| **AML** | **Almayashu** | **2.42** | **4** | ⇓*i*P | **Pb** | **00 01 55.4** | **+0.1** |
| | baz=7.0 | | | | | | |
| AML | | | | ⇓*i*S | **Sb** | **00 02 25.4** | **-0.1** |
| | baz=7.0 | | | | | | |
| **CHDK** | **Chadak** | **2.44** | **302** | P | **Pb** | **00 01 56.8** | **+1.2** |
| CHDK | | | | S | **Sg** | **00 02 28.9** | **-0.9** |
| **TRKS** | **Terek-Say** | **2.55** | **316** | ⇓*e*P | **Pb** | **00 01 55.0** | **-2.4** |
| | baz=17 | | | | | | |
| TRKS | | | | ⇓*e*S | **Sn** | **00 02 24.2** | **-0.3** |
| | baz=17 | | | | | | |
| **GAR** | **Garm** | **2.57** | **255** | ⇑*i*P | **Pb** | **00 01 55.6** | **-2.1** |
| | baz=53 | | | | | | |
| GAR | | | | ⇑*i*S | **Sn** | **00 02 25.8** | **+0.9** |
| | baz=53 | | | | | | |
| **NRN** | **Naryn** | **2.57** | **47** | ⇑*i*P | **Pb** | **00 01 58.4** | **+0.6** |
| | baz=49 | | | | | | |
| NRN | | | | ⇑*i*S | **Sb** | **00 02 30.6** | **+0.9** |
| | baz=49 | | | | | | |
| **MNAS** | **Manas** | **2.87** | **345** | ⇓*e*P | **Pb** | **00 02 01.0** | **-1.9** |
| | baz=48 | | | | | | |
| MNAS | | | | ⇓*e*S | **Sb** | **00 02 34.7** | **-3.5** |
| | baz=48 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.95** | **4** | P | **Pb** | **00 02 05.6** | **+1.3** |
| | SNR=9.6 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.95** | **4** | ⇑*i*P | **Pb** | **00 02 02.5** | **-1.8** |
| | baz=7.0 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **00 02 38.0** | **-2.6** |
| | baz=7.0 | | | | | | |
| **AAK** | **Ala-Archa** | **3.02** | **14** | P | **Pb** | **00 02 05.8** | **+0.5** |
| | SNR=7.9 | | | | | | |
| **AAK** | **Ala-Archa** | **3.02** | **14** | ⇑Pn | **Pb** | **00 02 05.6** | **+0.2** |
| | 14nm,0.7s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 00 02 44.4 | |
| | 34nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **3.02** | **14** | ⇓*i*P | **Pb** | **00 02 03.9** | **-1.5** |
| | baz=17 | | | | | | |
| AAK | | | | ⇓*i*S | **Sb** | **00 02 40.0** | **-2.4** |
| | baz=17 | | | | | | |
| **MRKS** | **Merke** | **3.03** | **356** | *e*P | **Pb** | **00 02 07.0** | **+1.4** |
| | 18nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **00 02 45.8** | **-3.0** |
| | 22nm,0.4s | | | | | | |
| **KBK** | **Karagaybulak** | **3.14** | **20** | P | **Pg** | **00 02 12.8** | **+1.4** |
| | SNR=8.1 | | | | | | |
| **KBK** | **Karagaybulak** | **3.14** | **20** | ⇑*i*P | **Pb** | **00 02 05.8** | **-1.6** |
| | baz=22 | | | | | | |
| KBK | | | | ⇑*i*S | **Sb** | **00 02 43.3** | **-2.6** |
| | baz=22 | | | | | | |
| **CHMG** | **Chimgan** | **3.22** | **306** | P | **Pb** | **00 02 07.9** | **-1.0** |
| CHMG | | | | S | **Sb** | **00 02 50.0** | **+1.6** |
| **ULHL** | **Ulahol** | **3.27** | **39** | P | **Pg** | **00 02 14.7** | **+0.7** |
| | SNR=6.7 | | | | | | |
| **ULHL** | **Ulahol** | **3.27** | **39** | ⇓*i*P | **Pb** | **00 02 08.2** | **-1.6** |
| | baz=41 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sb** | **00 02 47.5** | **-2.4** |
| | baz=41 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.33** | **33** | ⇓*i*P | **Pb** | **00 02 09.0** | **-1.8** |
| | baz=35 | | | | | | |
| BOOM | | | | ⇓*i*S | **Sb** | **00 02 48.7** | **-2.8** |
| | baz=35 | | | | | | |
| **CHMS** | **Chumysh** | **3.41** | **16** | P | **Pb** | **00 02 11.1** | **-1.0** |
| | SNR=27 | | | | | | |
| **CHMS** | **Chumysh** | **3.41** | **16** | ⇑Pn | **Pb** | **00 02 10.8** | **-1.3** |
| | 14nm,0.3s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 00 03 01.2 | |
| | 9.0nm,0.5s | | | | | | |
| **TGS** | **TashGRES** | **3.48** | **301** | P | **Pb** | **00 02 12.7** | **-0.4** |
| TGS | | | | S | **Sg** | **00 02 59.4** | **-3.5** |
| **CHGR** | **Chuyangaron** | **3.53** | **254** | ⇑*i*P | **Pn** | **00 02 08.9** | **+2.3** |
| | baz=53 | | | | | | |
| CHGR | | | | ⇑*i*S | **Sn** | **00 02 48.9** | **+0.3** |
| | baz=53 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.57** | **26** | P | **Pb** | **00 02 13.6** | **-1.3** |
| | SNR=6.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.57** | **26** | ⇑Pn | **Pb** | **00 02 13.2** | **-1.7** |
| | 2.5nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Pg | **Pg** | **00 02 20.3** | **+0.6** |
| | 7.1nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 00 03 09.3 | |
| | 16nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.57** | **26** | ⇑*i*P | **Pb** | **00 02 11.8** | **-3.1** |
| | baz=28 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **00 02 54.1** | **-4.4** |
| | baz=28 | | | | | | |
| **KST** | **Kastek** | **3.81** | **28** | *e*P | **Pg** | **00 02 24.4** | **+0.2** |
| | 6.8nm,0.5s | | | | | | |
| KST | | | | *e*S | **Sg** | **00 03 15.4** | **+1.9** |
| | 12nm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.81** | **28** | Pg | **Pg** | **00 02 24.7** | **+0.5** |
| | 6.8nm,0.5s | | | | | | |
| KST | | | | Lg | Lg | 00 03 16.1 | |
| | 12nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **3.92** | **25** | *e*P | **Pg** | **00 02 24.7** | **-1.7** |
| | 14nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **00 03 15.9** | **-1.2** |
| | 22nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **4.06** | **327** | ⇑Pn | **Pn** | **00 02 16.1** | **+2.3** |
| | 0.8nm,0.3s,baz=134,slow=14,SNR=20 | | | | | | |
| KK31 | | | | ⇑Pg | **Pg** | **00 02 26.3** | **-2.8** |
| | 2.4nm,0.4s,baz=150,slow=15,SNR=11 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **00 03 05.6** | **+4.0** |
| | 4.2nm,0.4s,baz=145,slow=26,SNR=3.9 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 00 03 18.1 | |
| | 9.3nm,0.4s,baz=150,slow=28,SNR=6.9 | | | | | | |
| **KKAR** | **Karatay Array** | **4.06** | **327** | ⇑*i*P | **Pn** | **00 02 16.7** | **+2.9** |
| | baz=29 | | | | | | |
| KKAR | | | | ⇑*i*S | **Sn** | **00 03 02.2** | **+0.6** |
| | baz=29 | | | | | | |
| **MTBS** | **Maitube** | **4.06** | **32** | *e*P | **Pg** | **00 02 29.9** | **+0.8** |
| | 8.6nm,0.4s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **00 03 25.1** | **+3.3** |
| | 10nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **4.06** | **32** | Pg | **Pg** | **00 02 29.9** | **+0.8** |
| | 8.6nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 00 03 25.1 | |
| | 10nm,0.5s | | | | | | |
| **BXML** | **Bakhmal** | **4.21** | **271** | P | **Pb** | **00 02 24.4** | **-1.4** |
| BXML | | | | S | **Sg** | **00 03 24.2** | **-2.4** |
| **TNSS** | **Tian-Shan** | **4.21** | **37** | *e*P | **Pg** | **00 02 32.5** | **+0.5** |
| | 13nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **00 03 29.9** | **+3.3** |
| | 3.9nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.21** | **37** | Pg | **Pg** | **00 02 32.5** | **+0.5** |
| | 13nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 00 03 29.9 | |
| | 3.9nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **4.30** | **22** | *e*P | **Pg** | **00 02 32.8** | **-0.9** |
| | 8.0nm,0.3s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **00 03 29.9** | **+0.6** |
| | 7.2nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **4.30** | **22** | Pg | **Pg** | **00 02 32.8** | **-0.9** |
| | 8.0nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 00 03 29.9 | |
| | 7.2nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **4.31** | **321** | *e*P | **Pb** | **00 02 28.7** | **+1.4** |
| | 2.7nm,0.3s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **00 03 22.8** | **+3.4** |
| | 14nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **4.31** | **321** | Pg | **Pb** | **00 02 28.6** | **+1.4** |
| | 2.7nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 00 03 22.8 | |
| | 14nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **4.36** | **37** | *e*P | **Pg** | **00 02 35.4** | **+0.6** |
| | 10nm,0.5s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **00 03 34.4** | **+3.2** |
| | 9.4nm,0.9s | | | | | | |
| **MDOK** | **Medeo** | **4.36** | **37** | Pg | **Pg** | **00 02 35.2** | **+0.4** |
| | 7.0nm,0.6s | | | | | | |
| MDOK | | | | Pg | Pb | 00 02 35.4 | +7.1 |
| | 10nm,0.5s | | | | | | |
| MDOK | | | | Lg | Lg | 00 03 34.3 | |
| | 8.4nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 00 03 34.4 | |
| | 9.4nm,0.9s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.44** | **37** | *e*P | **Pg** | **00 02 37.1** | **+0.7** |
| | 8.7nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **00 03 37.4** | **+3.4** |
| | 27nm,0.7s | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.44** | **37** | Pg | **Pg** | **00 02 37.1** | **+0.7** |
| | 8.7nm,0.4s | | | | | | |
| KOTS | | | | Lg | Lg | 00 03 37.4 | |
| | 27nm,0.7s | | | | | | |
| **KTBS** | **Karatobe** | **4.65** | **30** | *e*P | **Pg** | **00 02 40.0** | **-0.4** |
| | 8.5nm,0.6s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **00 03 42.2** | **+1.6** |
| | 17nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **4.65** | **30** | Pg | **Pg** | **00 02 39.9** | **-0.4** |
| | 8.5nm,0.6s | | | | | | |
| KTBS | | | | Lg | Lg | 00 03 42.2 | |
| | 17nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **4.89** | **31** | *e*P | **Pg** | **00 02 44.1** | **-0.9** |
| | 5.5nm,0.5s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **00 03 49.3** | **+1.0** |
| | 8.3nm,0.4s | | | | | | |
| **CHKK** | **

| | | | | | | |
|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **22.84 271** | LR | LR | 00 31 25.4 | |
| | comp=Z,34nm,18.6s,baz=101,slow=44 | | | | | |
| **OOD** | **Oodnadatta** | **22.85 196** | P | **P** | **00 19 33.9** | **+2.4** |
| **WRKA** | **Warakurna** | **23.57 214** | P | **P** | **00 19 41.7** | **+2.7** |
| **LCRK** | **Leigh Creek** | **24.86 189** | P | **P** | **00 19 53.4** | **+2.5** |
| **ARMA** | **Armidale** | **25.89 162** | P | **P** | **00 19 57.8** | **-2.5** |
| ARMA | | | IAmb | IAmb | 00 20 19.0 | |
| | comp=Z,24nm,1.4s | | | | | |
| **STKA** | **Stephens Creek** | **25.95 182** | LR | LR | 00 31 12.3 | |
| | comp=Z,109nm,19.7s,baz=21,slow=39 | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.09 232** | P | **P** | **00 20 11.0** | **-0.2** |
| PSA00 | | | IAmb | IAmb | 00 20 44.9 | |
| | comp=Z,6.1nm,1.1s | | | | | |
| **JNU** | **Nakatsue** | **40.31 345** | LR | LR | 00 36 26.5 | |
| | comp=Z,35nm,19.2s,baz=153,slow=32 | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.34 355** | LR | LR | 00 38 44.0 | |
| | comp=Z,12nm,18.0s,baz=212,slow=34 | | | | | |
| **ASAJ** | **Asahikawa** | **49.70 360** | LR | LR | 00 44 22.8 | |
| | comp=Z,7.6nm,21.5s,baz=155,slow=36 | | | | | |
| **YAK** | **Yakutsk** | **68.39 353** | LR | LR | 00 55 52.7 | |
| | comp=Z,16nm,19.4s,baz=194,slow=36 | | | | | |
| **VNDA** | **Vanda** | **72.38 176** | P | **P** | **00 25 57.0** | **+3.1** |
| | comp=Z,0.3nm,0.7s,baz=315,slow=5.7,SNR=2.4 | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | |
| **BVAR** | **Borovoye Array** | **84.11 325** | P | P | 00 27 07.2 | +8.0 |
| | comp=Z,1.9nm,0.9s,baz=108,slow=4.7,SNR=6.7 | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | |
| **QSPA** | **South Pole Qui** | **84.15 180** | P | **P** | **00 26 57.5** | **-1.9** |
| QSPA | | | IAmb | IAmb | 00 27 12.6 | |
| | comp=Z,5.9nm,1.4s | | | | | |
| **SEW** | **Seward** | **84.22 28** | P | **P** | **00 27 01.4** | **+1.9** |
| **O22K** | **Cooper Landing** | **84.24 27** | P | **P** | **00 26 58.4** | **-1.2** |
| **ILAR** | **Eielson Array** | **87.03 24** | P | P | 00 27 20.8 | +7.3 |
| | comp=Z,0.9nm,0.8s,baz=248,slow=5.1,SNR=5.9 | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | |

**NAM 14 00:24:39.5±3.1,19.74S×14.56E,h18km±12km,ML0.0, 6C-1D,Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST1N** | **ST1** | **0.05** | **91** | ⇓*i*P | Pg | 00 24 43.7 | +0.8 |
| ST1N | | | | *i* S | Sg | 00 24 44.9 | -0.3 |
| ST1N | | | | IAML | | 00 24 44.9 | |
| | comp=N,28nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.05** | **91** | *i* P | Pg | 00 24 43.7 | +0.8 |
| ST1N | | | | *i* S | Sg | 00 24 44.8 | -0.3 |
| ST1N | | | | IAML | | 00 24 44.9 | |
| | comp=N,28nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.06** | **264** | ⇑*i*P | Pg | 00 24 44.1 | +1.2 |
| ST3N | | | | *i* S | Sg | 00 24 45.5 | +0.3 |
| ST3N | | | | IAML | | 00 24 45.6 | |
| | comp=Z,1.4nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.06** | **264** | *i* P | Pg | 00 24 44.0 | +1.1 |
| ST3N | | | | *i* S | Sg | 00 24 45.5 | +0.3 |
| ST3N | | | | IAML | | 00 24 45.8 | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **ST9N** | **ST9** | **0.06** | **191** | ⇑*i*P | Pg | 00 24 43.3 | +0.3 |
| ST9N | | | | *i* S | Sg | 00 24 44.2 | -1.1 |
| ST9N | | | | IAML | | 00 24 44.5 | |
| | comp=Z,17nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.06** | **191** | *i* P | Pg | 00 24 43.3 | +0.3 |
| ST9N | | | | *i* S | Sg | 00 24 44.2 | -1.1 |
| ST9N | | | | IAML | | 00 24 44.5 | |
| | comp=Z,16nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.16** | **247** | ⇑*i*P | Pb | 00 24 45.4 | +1.4 |
| ST6N | | | | *i* S | Sg | 00 24 47.9 | +0.8 |
| ST6N | | | | IAML | | 00 24 48.0 | |
| | comp=Z,0.8nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.16** | **247** | *i* P | Pb | 00 24 45.4 | +1.3 |
| ST6N | | | | IAML | | 00 24 45.5 | |
| | comp=Z,0.8nm,0.1s | | | | | | |
| ST6N | | | | *i* S | Sg | 00 24 47.5 | +0.4 |
| **ST2N** | **ST2** | **0.19** | **169** | ⇑*i*P | Pg | 00 24 44.5 | 0.0 |
| ST2N | | | | *i* S | Sg | 00 24 46.9 | -0.9 |
| ST2N | | | | IAML | | 00 24 47.7 | |
| | comp=Z,2.6nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.23** | **281** | ⇑*i*P | Pb | 00 24 47.1 | +1.9 |
| ST8N | | | | IAML | | 00 24 51.0 | |
| | comp=Z,0.2nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **212** | ⇑*i*P | Pb | 00 24 47.1 | +0.6 |
| ST10N | | | | *i* S | Sb | 00 24 51.3 | 0.0 |
| ST10N | | | | IAML | | 00 24 51.4 | |
| | comp=Z,0.8nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **212** | *i* P | Pb | 00 24 47.1 | +0.6 |
| ST10N | | | | IAML | | 00 24 47.2 | |
| | comp=Z,0.8nm,0.1s | | | | | | |
| ST10N | | | | *i* S | Sg | 00 24 48.4 | -2.3 |

*IDC* ***14*** *00:29:12.6±68.0,22.59N×123.67E,h0km,mb3.9/3, mbtmp3.9/3,Error ellipse: s-maj=1226.0km s-min=180.6km az=133.0*

*ASIES* ***14*** *00:29:33.0,24.02N×122.30E,h23km,ML3.7,Mw3.5, Moment Tensor Solution. Moment tensor: Scale 10²¹Nm; Mrr0.82; Mθθ-1.20; Mϕϕ0.37; Mrθ1.56; Mθϕ0.40; Mϕr0.72; Fault plane solution: M₀2.05827×10²¹ NP1:ϕs71.75000°, δ77.20000°,λ66.69000°. NP2:ϕs314.53000°,δ26.42000°, λ150.13000°. Principal axes: T Plg52.1810°, Azm314.6010°; N Plg22.6960°, Azm77.2020°; P Plg28.4610°, Azm180.3060°;*

*JMA* ***14*** *00:29:32.4±0.2,24.1×122.3E±0.5,h17km±4km, MV3.5/15,TAIWAN REGION*

*TAP* ***14*** *00:29:33.0,24.02N×122.30E,h23km,ML3.7,C*

*NIED* ***14*** *00:29:32.4,23.96N×122.29E,h17km,MW3.6,Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁴Nm; Mrr-0.73; Mθθ-1.77; Mϕϕ2.50; Mrθ-0.67; Mθϕ1.19; Mϕr0.22; Fault plane solution: M₀2.59000×10¹⁴ NP1: ϕs152.00000°,δ74.00000°,λ-163.00000°. NP2: ϕs57.00000°,δ73.00000°,λ-16.00000°.*

**ISC 14 00:29:32.6±0.9,23.98N±0.02×122.30E±0.02,h26km±6km, n120,σ0.88/202,mb3.7/3,2D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS4** | **EOS4** | **0.14** | **7** | P | **Pb** | **00 29 37.1** | **-0.1** |
| | baz=10.0 | | | | | | |
| EOS4 | | | | S | **Sb** | **00 29 40.4** | **0.0** |
| | baz=10.0 | | | | | | |
| **EOS3** | **EOS3** | **0.31** | **3** | ⇓*i*P | **Pb** | **00 29 39.8** | **+0.2** |
| | baz=347 | | | | | | |
| EOS3 | | | | S | **Sb** | **00 29 44.9** | **+0.5** |
| | baz=347 | | | | | | |
| **EOS2** | **EOS2** | **0.44** | **352** | ⇓*i*P | **Pb** | **00 29 42.3** | **+0.6** |
| | baz=338 | | | | | | |
| EOS2 | | | | S | **Sn** | **00 29 48.8** | **-1.5** |
| | baz=338 | | | | | | |
| **EAHA** | **Aohua** | **0.62** | **304** | *e*P | **Pb** | **00 29 45.4** | **+0.6** |
| | baz=312 | | | | | | |
| EAHA | | | | *e*S | **Sn** | **00 29 54.3** | **-0.5** |
| | baz=312 | | | | | | |
| **HWA** | **Hwalien** | **0.63** | **270** | *e*P | **Pb** | **00 29 45.6** | **+0.6** |
| | baz=252 | | | | | | |
| HWA | | | | *e*S | **Sn** | **00 29 55.6** | **+0.4** |
| | baz=252 | | | | | | |
| **ETL** | **Fush Village** | **0.64** | **286** | *e*P | **Pb** | **00 29 45.5** | **+0.2** |
| | baz=283 | | | | | | |
| **TWD** | **Chiawan** | **0.65** | **279** | P | **Pb** | **00 29 45.3** | **0.0** |
| | baz=276 | | | | | | |
| TWD | | | | *e*S | **Sb** | **00 29 54.4** | **+0.4** |
| | baz=276 | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.65** | **260** | *e*P | **Pb** | **00 29 45.8** | **+0.5** |
| | baz=248 | | | | | | |
| TEYL | | | | *e*S | **Sn** | **00 29 55.7** | **+0.1** |
| | baz=248 | | | | | | |
| **EWUT** | **Wuta** | **0.66** | **314** | P | **Pb** | **00 29 45.0** | **-0.6** |
| | baz=320 | | | | | | |
| EWUT | | | | *e*S | **Sb** | **00 29 54.0** | **-0.4** |
| | baz=320 | | | | | | |
| **NACB** | **Ninganchiao** | **0.67** | **287** | P | **Pb** | **00 29 45.6** | **-0.1** |
| | baz=270 | | | | | | |
| NACB | | | | S | **Sb** | **00 29 55.3** | **+0.7** |
| | baz=270 | | | | | | |
| **ENA** | **Nanau** | **0.68** | **311** | *i* P | **Pb** | **00 29 45.3** | **-0.5** |
| | baz=318 | | | | | | |
| ENA | | | | *e*S | **Sn** | **00 29 55.8** | **-0.5** |
| | baz=318 | | | | | | |
| **SHUL** | **Shoufeng** | **0.70** | **254** | P | **Pb** | **00 29 46.6** | **+0.4** |
| | baz=251 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **00 29 57.0** | **+0.2** |
| | baz=251 | | | | | | |
| **ESAO** | **Su ao** | **0.72** | **325** | *e*P | **Pb** | **00 29 45.6** | **-1.0** |
| | baz=330 | | | | | | |
| **ETM** | **Tongmen** | **0.74** | **269** | *i* P | **Pb** | **00 29 46.6** | **-0.2** |
| | baz=255 | | | | | | |
| ETM | | | | S | **Sb** | **00 29 56.7** | **+0.2** |
| | baz=255 | | | | | | |
| **TWC** | **Suao** | **0.75** | **327** | P | **Pb** | **00 29 46.3** | **-0.7** |
| | baz=325 | | | | | | |
| TWC | | | | *e*S | **Sb** | **00 29 54.9** | **-1.9** |
| | baz=325 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.75** | **51** | P | **Pb** | **00 29 46.8** | **-0.3** |
| JYNG | | | | S | **Sb** | **00 29 56.4** | **-0.6** |
| **ETLH** | **Xiulin Townshi** | **0.78** | **287** | P | **Pb** | **00 29 47.5** | **0.0** |
| | baz=284 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.81** | **53** | P | **Pb** | **00 29 48.1** | **+0.1** |
| | baz=64 | | | | | | |
| YOJ | | | | S | **Sb** | **00 29 58.0** | **-0.5** |
| | baz=64 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.81** | **53** | P | **Pb** | **00 29 48.3** | **+0.3** |
| YOJ | | | | S | **Sb** | **00 29 58.0** | **-0.5** |
| **ESL** | **Shilin** | **0.81** | **258** | P | **Pb** | **00 29 47.4** | **-0.7** |
| | baz=245 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.81** | **273** | P | **Pb** | **00 29 47.9** | **-0.2** |
| | baz=260 | | | | | | |
| LXIB | | | | *e*S | **Sb** | **00 29 58.7** | **0.0** |
| | baz=260 | | | | | | |
| **NDS** | **Dongshan** | **0.84** | **321** | *e*P | **Pb** | **00 29 48.2** | **-0.3** |
| | baz=325 | | | | | | |
| **EGFH** | **Guangfu** | **0.86** | **249** | *e*P | **Pb** | **00 29 48.9** | **+0.1** |
| | baz=247 | | | | | | |
| EGFH | | | | *e*S | **Sb** | **00 30 00.7** | **+0.8** |
| | baz=247 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.88** | **253** | P | **Pb** | **00 29 48.5** | **-0.7** |
| | baz=241 | | | | | | |
| WARBT | | | | *e*S | **Sb** | **00 29 59.8** | **-0.6** |
| | baz=241 | | | | | | |
| **LATG** | **Datong** | **0.90** | **308** | *e*P | **Pb** | **00 29 49.5** | **-0.1** |
| | baz=305 | | | | | | |
| LATG | | | | *e*S | **Sn** | **00 30 01.7** | **-0.2** |
| | baz=305 | | | | | | |
| **EGS** | | **0.92** | **339** | *e*P | **Pb** | **00 29 49.8** | **-0.2** |
| | baz=327 | | | | | | |
| EGS | | | | *e*S | **Sn** | **00 30 02.6** | **+0.2** |
| | baz=327 | | | | | | |
| **TWE** | **Neicheng** | **0.94** | **322** | *e*P | **Pb** | **00 29 49.8** | **-0.4** |
| | baz=321 | | | | | | |
| **ENTT** | **Nioudou** | **0.94** | **315** | *e*P | **Pb** | **00 29 50.2** | **0.0** |
| | baz=298 | | | | | | |
| **HGSD** | **Ruisui** | **0.94** | **239** | P | **Pb** | **00 29 49.5** | **-0.7** |
| | baz=237 | | | | | | |
| HGSD | | | | S | **Sb** | **00 30 01.9** | **-0.3** |
| | baz=237 | | | | | | |
| **NDT** | **Datong Townshi** | **0.95** | **311** | P | **Pb** | **00 29 50.4** | **0.0** |
| | baz=309 | | | | | | |
| **NNSB** | **Datong** | **0.95** | **298** | P | **Pb** | **00 29 50.2** | **-0.3** |
| | baz=282 | | | | | | |
| NNSB | | | | S | **Sn** | **00 30 03.2** | **+0.1** |
| | baz=282 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.96** | **280** | *e*P | **Pb** | **00 29 50.5** | **-0.3** |
| | baz=277 | | | | | | |
| WHF | | | | *e*S | **Sb** | **00 30 03.0** | **-0.3** |
| | baz=277 | | | | | | |
| **NNS** | **Nan Shan** | **0.96** | **299** | P | **Pb** | **00 29 50.4** | **-0.3** |
| | baz=283 | | | | | | |
| NNS | | | | *e*S | **Sb** | **00 30 03.2** | **+0.2** |
| | baz=283 | | | | | | |
| **EHYH** | **Wanrong** | **1.00** | **241** | *e*P | **Pn** | **00 29 51.0** | **0.0** |
| | baz=240 | | | | | | |
| EHYH | | | | *e*S | **Sb** | **00 30 03.9** | **-0.1** |
| | baz=240 | | | | | | |
| **FUSS** | **Fushou** | **1.00** | **286** | P | **Pb** | **00 29 51.1** | **-0.3** |
| | baz=273 | | | | | | |
| FUSS | | | | S | **Sn** | **00 30 04.9** | **+0.3** |
| | baz=273 | | | | | | |
| **EHY** | **Hungye** | **1.01** | **242** | P | **Pn** | **00 29 51.0** | **-0.1** |
| | baz=241 | | | | | | |
| EHY | | | | *e*S | **Sb** | **00 30 03.7** | **-0.7** |
| | baz=241 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.01** | **320** | *e*P | **Pn** | **00 29 51.4** | **+0.2** |
| | baz=318 | | | | | | |
| **ECBN** | **Changbin** | **1.02** | **230** | P | **Pn** | **00 29 51.0** | **-0.2** |
| | baz=229 | | | | | | |
| ECBN | | | | S | **Sb** | **00 30 04.1** | **-0.5** |
| | baz=229 | | | | | | |
| **OWD** | **Renai** | **1.03** | **269** | P | **Pn** | **00 29 51.3** | **-0.2** |
| | baz=267 | | | | | | |
| OWD | | | | *e*S | **Sb** | **00 30 04.7** | **-0.3** |
| | baz=267 | | | | | | |
| **CHGB** | **Renai** | **1.03** | **275** | P | **Pn** | **00 29 51.5** | **-0.1** |
| | baz=260 | | | | | | |
| CHGB | | | | *e*S | **Sb** | **00 30 05.1** | **-0.1** |
| | baz=260 | | | | | | |
| **TWT** | **Tachien** | **1.06** | **285** | *e*P | **Pb** | **00 29 52.9** | **+0.5** |
| | baz=270 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.06** | **345** | *e*P | **Pn** | **00 29 51.8** | **-0.1** |
| | baz=330 | | | | | | |
| TWB1 | | | | *e*S | **Sn** | **00 30 05.6** | **-0.2** |
| | baz=330 | | | | | | |
| **TDCB** | **Techi** | **1.08** | **285** | *e*P | **Pn** | **00 29 52.4** | **+0.2** |
| | baz=273 | | | | | | |
| TDCB | | | | *e*S | **Sb** | **00 30 05.8** | **-0.5** |
| | baz=273 | | | | | | |
| **TIPB** | **Shuangxi** | **1.08** | **337** | *e*P | **Pb** | **00 29 52.5** | **-0.1** |
| | baz=334 | | | | | | |
| TIPB | | | | *e*S | **Sb** | **00 30 05.6** | **-0.7** |
| | baz=334 | | | | | | |
| **WUSB** | **Renai** | **1.08** | **271** | *e*P | **Pn** | **00 29 52.2** | **0.0** |
| | baz=269 | | | | | | |
| WUSB | | | | *e*S | **Sb** | **00 30 06.5** | **+0.1** |
| | baz=269 | | | | | | |
| **VWDT** | **VWDT** | **1.08** | **258** | P | **Pn** | **00 29 52.2** | **+0.1** |
| | baz=256 | | | | | | |
| VWDT | | | | *e*S | **Sb** | **00 30 06.7** | **+0.3** |
| | baz=256 | | | | | | |
| **YHNB** | **Yeheng** | **1.09** | **309** | *e*P | **Pn** | **00 29 52.6** | **+0.3** |
| | baz=307 | | | | | | |
| **YULB** | **Yu-li** | **1.09** | **238** | P | **Pn** | **00 29 51.9** | **-0.3** |
| | baz=253 | | | | | | |
| YULB | | | | S | **Sb** | **00 30 06.1** | **-0.5** |
| | baz=253 | | | | | | |
| **EYUL** | **Yuli** | **1.10** | **235** | P | **Pn** | **00 29 52.4** | **0.0** |
| | baz=234 | | | | | | |
| EYUL | | | | *e*S | **Sb** | **00 30 06.5** | **-0.3** |
| | baz=234 | | | | | | |
| **NSK** | **Sanguang** | **1.10** | **309** | *e*P | **Pn** | **00 29 52.7** | **+0.2** |
| | baz=306 | | | | | | |
| NSK | | | | *e*S | **Sb** | **00 30 06.4** | **-0.7** |
| | baz=306 | | | | | | |
| **TWF1** | **Yuli** | **1.11** | **236** | P | **Pn** | **00 29 52.5** | **-0.1** |
| | baz=222 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **00 30 06.9** | **-0.3** |
| | baz=222 | | | | | | |
| **CHKH** | **Chenggong** | **1.14** | **227** | *e*P | **Pn** | **00 29 51.8** | **-1.1** |
| | baz=214 | | | | | | |
| CHKH | | | | *e*S | **Sn** | **00 30 05.8** | **-1.9** |
| | baz=214 | | | | | | |
| **SXI1** | **Grass Mountain** | **1.18** | **341** | P | **Pn** | **00 29 53.5** | **+0.1** |
| | baz=339 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.18** | **337** | *e*P | **Pb** | **00 29 54.3** | **-0.1** |
| | baz=351 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.18** | **337** | *e*P | **Pb** | **00 29 54.0** | **-0.4** |
| | baz=334 | | | | | | |
| WFSB | | | | *e*S | **Sb** | **00 30 09.5** | **+0.2** |
| | baz=334 | | | | | | |
| **TWA** | **Mucha** | **1.19** | **327** | P | **Pb** | **00 29 54.9** | **+0.4** |
| | baz=324 | | | | | | |
| TWA | | | | *e*S | **Sb** | **00 30 09.5** | **0.0** |
| | baz=324 | | | | | | |
| **FULB** | **Fuli** | **1.21** | **230** | *e*P | **Pn** | **00 29 53.2** | **-0.6** |
| | baz=216 | | | | | | |
| FULB | | | | *e*S | **Sn** | **00 30 08.6** | **-0.8** |
| | baz=216 | | | | | | |
| **CHKT** | **Chengkung** | **1.23** | **225** | P | **Pn** | **00 29 53.3** | **-0.8** |
| | baz=212 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **00 30 08.0** | **-1.9** |
| | baz=212 | | | | | | |
| **TATO** | **Taipei** | **1.24** | **323** | P | **Pb** | **00 29 55.6** | **+0.4** |
| | baz=320 | | | | | | |
| TATO | | | | *e*S | **Sb** | **00 30 10.8** | **+0.1** |
| | baz=320 | | | | | | |
| **SSLB** | **Suanglung** | **1.25** | **261** | *e*P | **Pn** | **00 29 54.3** | **-0.1** |
| | baz=249 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **00 30 10.8** | **+0.4** |
| | baz=249 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.26** | **301** | *e*P | **Pb** | **00 29 55.4** | **-0.3** |
| | baz=299 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.27** | **274** | *e*P | **Pn** | **00 29 55.4** | **+0.7** |
| | baz=272 | | | | | | |
| **WHP** | **Taichung City** | **1.27** | **284** | *e*P | **Pn** | **00 29 55.7** | **+0.9** |
| | baz=270 | | | | | | |
| **EHD** | **Haiduan** | **1.30** | **231** | *e*P | **Pn** | **00 29 54.9** | **-0.3** |
| | baz=218 | | | | | | |
| EHD | | | | *e*S | **Sn** | **00 30 11.2** | **-0.5** |
| | baz=218 | | | | | | |
| **TYC** | **Yuchr** | **1.32** | **267** | *e*P | **Pn** | **00 29 56.0** | **+0.6** |
| | baz=265 | | | | | | |
| **YM01** | **YM01** | **1.34** | **330** | *e*P | **Pb** | **00 29 56.9** | **-0.1** |
| | baz=345 | | | | | | |
| **LIOB** | **Emei** | **1.34** | **300** | *e*P | **Pb** | **00 29 57.6** | **+0.4** |
| | baz=297 | | | | | | |
| LIOB | | | | *e*S | **Sb** | **00 30 14.7** | **+0.7** |
| | baz=297 | | | | | | |
| **NSTT** | **Nanjuang** | **1.35** | **299** | P | **Pb** | **00 29 57.2** | **0.0** |
| | baz=297 | | | | | | |
| NSTT | | | | *e*S | **Sb** | **00 30 14.2** | **+0.1** |
| | baz=297 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.35** | **258** | *e*P | **Pb** | **00 29 57.7** | **+0.5** |
| | baz=257 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.35** | **75** | P | **Pb** | **00 29 57.5** | **+0.3** |
| IRIF | | | | S | **Sb** | **00 30 14.6** | **+0.5** |
| **EDH** | **Donghe** | **1.36** | **223** | *e*P | **Pn** | **00 29 55.2** | **-0.7** |
| | baz=213 | | | | | | |
| EDH | | | | *e*S | **Sn** | **00 30 11.7** | **-1.3** |
| | baz=213 | | | | | | |
| **YM08** | **YM08** | **1.36** | **332** | *e*P | **Pb** | **00 29 57.0** | **-0.5** |
| | baz=345 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.37** | **324** | *e*P | **Pn** | **00 29 56.1** | **0.0** |
| | baz=322 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.38** | **87** | *e*P | **Pb** | **00 29 57.8** | **+0.1** |
| HATJ | | | | S | **Sb** | **00 30 16.2** | **+1.3** |
| **ANP** | **Anpu** | **1.40** | **330** | *e*P | **Pn** | **00 29 57.1** | **+0.6** |
| | baz=328 | | | | | | |
| **NTST** | **Danshui** | **1.41** | **327** | *e*P | **Pn** | **00 29 56.9** | **+0.3** |
| | baz=342 | | | | | | |
| **NCUH** | **Zhongli** | **1.41** | **314** | *e*P | **Pb** | **00 29 57.8** | **-0.5** |
| | baz=312 | | | | | | |
| **ELDTW** | **Lidau** | **1.42** | **236** | *e*P | **Pn** | **00 29 56.4** | **-0.4** |
| | baz=236 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **00 30 13.4** | **-1.3** |
| | baz=236 | | | | | | |
| **WJS** | **Zhushan** | **1.45** | **264** | *e*P | **Pb** | **00 30 00.2** | **+1.3** |
| | baz=262 | | | | | | |
| WJS | | | | *e*S | **Sb** | **00 30 19.7** | **+2.9** |
| | baz=262 | | | | | | |
| **NSY** | **Sanyi** | **1.47** | **288** | *e*P | **Pn** | **00 29 58.1** | **+0.6** |
| | baz=285 | | | | | | |
| NSY | | | | *e*S | **Sb** | **00 30 19.4** | **+1.8** |
| | baz=285 | | | | | | |
| **WNT** | **Mingjian** | **1.48** | **266** | *e*P | **Pb** | **00 29 59.7** | **+0.2** |
| | baz=265 | | | | | | |
| WNT | | | | *e*S | **Sb** | **00 30 19.1** | **+1.3** |
| | baz=265 | | | | | | |
| **NMLH** | **Miaoli** | **1.48** | **292** | *e*P | **Pb** | **00 29 59.6** | **+0.1** |
| | baz=290 | | | | | | |
| **TCU** | **Taichung** | **1.49** | **277** | *e*P | **Pb** | **00 29 59.6** | **0.0** |
| | baz=275 | | | | | | |
| TCU | | | | *e*S | **Sb** | **00 30 19.6** | **+1.5** |
| | baz=275 | | | | | | |
| **LDUT** | **Ludao** | **1.51** | **211** | *e*P | **Pn** | **00 29 57.2** | **-0.7** |
| | baz=211 | | | | | | |
| LDUT | | | | *e*S | **Sn** | **00 30 15.7** | **-1.1** |
| | baz=211 | | | | | | |
| **LONT** | **Longtian** | **1.51** | **225** | *e*P | **Pn** | **00 29 57.7** | **-0.4** |
| | baz=238 | | | | | | |
| LONT | | | | *e*S | **Sn** | **00 30 16.2** | **-0.8** |
| | baz=238 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.58** | **80** | P | **Pb** | **00 30 01.8** | **+0.7** |
| JKRS | | | | *e*S | **Sb** | **00 30 22.0** | **+1.2** |
| **WCHH** | **Zhanghua** | **1.59** | **274** | *e*P | **Pb** | **00 30 01.2** | **-0.2** |
| | baz=272 | | | | | | |
| WCHH | | | | *e*S | **Sb** | **00 30 22.2** | **+1.2** |
| | baz=272 | | | | | | |
| **TWGBT** | **Beinan** | **1.61** | **224** | *e*P | **Pn** | **00 29 59.1** | **-0.3** |
| | baz=236 | | | | | | |
| TWGBT | | | | *e*S | **Sn** | **00 30 19.8** | **+0.4** |
| | baz=236 | | | | | | |
| **TWG** | **Pinlang** | **1.61** | **225** | *e*P | **Pn** | **00 29 59.4** | **0.0** |
| | baz=236 | | | | | | |
| TWG | | | | *e*S | **Sn** | **00 30 18.4** | **-1.0** |
| | baz=236 | | | | | | |
| **WDLH** | **Douliu** | **1.64** | **260** | *e*P | **Pb** | **00 30 02.1** | **0.0** |
| | baz=259 | | | | | | |
| **WCKO** | **Fanlu** | **1.64** | **251** | *e*P | **Pb** | **00 30 02.6** | **+0.3** |
| | baz=250 | | | | | | |
| WCKO | | | | *e*S | **Sb** | **00 30 23.3** | **+0.7** |
| | baz=250 | | | | | | |
| **TPUB** | **Ta-pu** | **1.67** | **246** | *e*P | **Pn** | **00 30 02.2** | **+1.9** |
| | baz=246 | | | | | | |
| TPUB | | | | *e*S | **Sb** | **00 30 23.7** | **+0.3** |
| | baz=246 | | | | | | |
| **WTP** | **Ta-pu** | **1.71** | **245** | *e*P | **Pn** | **00 30 02.7** | **+1.9** |
| | baz=244 | | | | | | |
| WTP | | | | *e*S | **Sb** | **00 30 24.8** | **+0.4** |
| | baz=244 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.73** | **77** | P | **Pb** | **00 30 02.7** | **-0.9** |
| JIJ | | | | S | **Sb** | **00 30 24.4** | **-0.5** |
| **WTK** | **Tuku** | **1.77** | **261** | *e*P | **Pb** | **00 30 03.8** | **-0.7** |
| | baz=260 | | | | | | |
| WTK | | | | *e*S | **Sb** | **00 30 26.4** | **+0.2** |
| | baz=260 | | | | | | |
| **SLGT** | **Liugui** | **1.81** | **237** | *e*P | **Pn** | **00 30 03.9** | **+1.8** |
| | baz=227 | | | | | | |
| SLGT | | | | *e*S | **Sn** | **00 30 26.7** | **+2.5** |
| | baz=227 | | | | | | |
| **SGST** | **Jiashian** | **1.81** | **241** | *e*P | **Pn** | **00 30 03.5** | **+1.4** |
| | baz=229 | | | | | | |
| SGST | | | | *e*S | **Sb** | **00 30 27.5** | **+0.1** |
| | baz=229 | | | | | | |
| **SNST** | **Tainan City** | **1.82** | **246** | *e*P | **Pn** | **00 30 04.2** | **+1.9** |
| | baz=245 | | | | | | |
| SNST | | | | *e*S | **Sb** | **00 30 27.9** | **+0.4** |
| | baz=245 | | | | | | |
| **ECL** | **Taimali** | **1.85** | **222** | *e*P | **Pn** | **00 30 02.0** | **-0.7** |
| | baz=223 | | | | | | |
| ECL | | | | *e*S | **Sn** | **00 30 23.7** | **-1.6** |
| | baz=223 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.85** | **267** | *e*P | **Pb** | **00 30 05.8** | **+0.1** |
| | baz=265 | | | | | | |
| WTCT | | | | *e*S | **Sb** | **00 30 29.4** | **+1.0** |
| | baz=265 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.93** | **71** | P | **Pn** | **00 30 05.0** | **+1.2** |
| JISG | | | | S | **Sn** | **00 30 29.0** | **+1.8** |
| **ICHU** | **Yijhu** | **1.95** | **252** | P | **Pn** | **00 30 06.4** | **+2.4** |
| | baz=251 | | | | | | |
| ICHU | | | | *e*S | **Sn** | **00 30 30.2** | **+2.5** |
| | baz=251 | | | | | | |
| **TSMG** | **Majia** | **1.98** | **230** | *e*P | **Pn** | **00 30 06.5** | **+2.1** |
| | baz=221 | | | | | | |
| **SCST** | **Cishan** | **1.98** | **237** | *e*P | **Pb** | **00 30 07.4** | **-0.6** |
| | baz=224 | | | | | | |
| SCST | | | | *e*S | **Sb** | **00 30 34.2** | **+1.9** |
| | baz=224 | | | | | | |
| **CHN8** | **Yiju** | **2.02** | **252** | S | **Sb** | **00 30 32.6** | **-0.6** |
| | baz=251 | | | | | | |
| **TSCK** | **Chigu Township** | **2.19** | **248** | *e*P | **Pn** | **00 30 08.6** | **+1.2** |
| | baz=248 | | | | | | |
| TSCK | | | | *e*S | **Sn** | **00 30 36.3** | **+2.6** |
| | baz=248 | | | | | | |
| **SCZT** | **Fangliau** | **2.22** | **224** | *e*P | **Pb** | **00 30 11.2** | **-0.9** |
| | baz=218 | | | | | | |
| SCZT | | | | *e*S | **Sn** | **00 30 38.1** | **+3.6** |
| | baz=218 | | | | | | |
| **SLIU** | **Shizi** | **2.23** | **218** | *e*P | **Pn** | **00 30 07.7** | **-0.3** |
| | baz=219 | | | | | | |
| SLIU | | | | *e*S | **Sn** | **00 30 34.3** | **-0.4** |
| | baz=219 | | | | | | |
| **JTJ** | **Tarama** | **2.29** | **73** | S | **Sn** | **00 30 37.8** | **+1.7** |
| **PHUB** | **P'eng-hu** | **2.54** | **260** | *e*P | **Pn** | **00 30 13.2** | **+1.1** |
| | baz=259 | | | | | | |
| PHUB | | | | *e*S | **Sn** | **00 30 43.4** | **+1.1** |
| | baz=259 | | | | | | |
| **PNG** | **Penghu** | **2.55** | **261** | P | **Pn** | **00 30 13.6** | **+1.3** |
| | baz=260 | | | | | | |
| PNG | | | | *e*S | **Sn** | **00 30 44.0** | **+1.5** |
| | baz=260 | | | | | | |
| **VWUC** | **VWUC** | **2.78** | **292** | *e*P | **Pn** | **00 30 15.7** | **+0.2** |
| | baz=290 | | | | | | |
| **MATB** | **Ma-tsu** | **3.04** | **316** | *e*P | **Pn** | **00 30 18.6** | **-0.5** |
| | baz=313 | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.08** | **291** | *e*P | **Pn** | **00 30 19.8** | **+0.2** |
| | baz=289 | | | | | | |
| **XPSS** | **Dashiqiu** | **3.50** | **327** | *e*P | **Pn** | **00 30 25.5** | **+0.1** |
| | baz=336 | | | | | | |
|

1.7nm,0.6s,baz=152,slow=9.9,SNR=9.6
1.7nm,0.6s
**MKAR Makanchi Array 39.19 316** P **P 00 36 57.9 -0.6**
0.4nm,0.5s,baz=98,slow=8.9,SNR=2.6
0.4nm,0.5s
**ZALV Zalesovo Beam 40.97 327** P **P 00 37 11.9 -1.2**
0.7nm,0.4s,baz=111,slow=8.1,SNR=5.1
0.7nm,0.4s

*NEIC **14** 00:52:59.8±0.3,19°.58N±0°.07×64°.8W±0°.1,h35km±2km, ML3.0/24,Md3.3/10(RSPR),Error ellipse: s-maj=16.7km s-min=11.0km az=79.0*
*RSPR **14** 00:53:00.2,19°.57N×64°.82W,h53km±15km,MD3.3/10 SDD **14** 00:53:03.7±2.7,19°.72N×65°.82W,h17km±578km,MD3.6, ML2.9,MW3.1*
**ISC 14 00:53:01.4**±3.1,**19°.5N**±0°.1×**65°.2W**±0°.1,**h32**km±14km,**n52,**
σ1°**77**/66,**18C-11D**,**Puerto Rico region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GCPR** | **Guaynabo City** | **1.45 216** | | ⇑*e*P | **Pb** | **00 53 27.2** | **-0.6** |
| **GCPR** | **Guaynabo City** | **1.45 216** | | *e*S | **Sb** | **00 53 47.5** | **+1.6** |
| **GCPR** | **Guaynabo City** | **1.45 216** | | | **Pb** | **00 53 27.2** | **-0.6** |
| GCPR | | | | | **Sb** | **00 53 47.5** | **+1.6** |
| **GCPR** | **Guaynabo City** | **1.45 216** | | IAML | | 00 53 49.2 | |
| | comp=N,108nm,0.9s | | | | | | |
| GCPR | | | | IAML | | 00 53 59.0 | |
| | comp=E,106nm,1.0s | | | | | | |
| **HUMP** | **Col San Antoni** | **1.48 205** | | ⇓*e*P | **Pb** | **00 53 27.3** | **-1.1** |
| **HUMP** | **Col San Antoni** | **1.48 205** | | *e*S | **Sb** | **00 53 47.4** | **+0.6** |
| **HUMP** | **Col San Antoni** | **1.48 205** | | | **Pb** | **00 53 27.3** | **-1.1** |
| HUMP | | | | | **Sb** | **00 53 47.7** | **+0.8** |
| HUMP | | | | IAML | | 00 53 51.6 | |
| | comp=E,134nm,0.2s | | | | | | |
| HUMP | | | | IAML | | 00 54 00.5 | |
| | comp=N,102nm,0.4s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **1.62 231** | | ⇑*e*P | **Pb** | **00 53 29.9** | **-0.7** |
| **EMPR** | **Esperanza - Ma** | **1.62 231** | | *e*S | **Sb** | **00 53 53.1** | **+2.3** |
| **EMPR** | **Esperanza - Ma** | **1.62 231** | | | **Pb** | **00 53 29.9** | **-0.7** |
| EMPR | | | | | **Sb** | **00 53 53.1** | **+2.3** |
| **EMPR** | **Esperanza - Ma** | **1.62 231** | | IAML | | 00 54 01.4 | |
| | comp=N,155nm,1.8s | | | | | | |
| EMPR | | | | IAML | | 00 54 04.8 | |
| | comp=E,196nm,1.3s | | | | | | |
| **IGPR** | **InterUniversit** | **1.75 210** | | ⇑*e*P | **Pb** | **00 53 31.0** | **-1.9** |
| **IGPR** | **InterUniversit** | **1.75 210** | | *e*S | **Sb** | **00 53 54.5** | **0.0** |
| **IGPR** | **InterUniversit** | **1.75 210** | | | **Pb** | **00 53 31.0** | **-1.9** |
| **IGPR** | **InterUniversit** | **1.75 210** | | | **Sb** | **00 53 55.5** | **+1.0** |
| IGPR | | | | IAML | | 00 54 01.0 | |
| | comp=E,172nm,0.3s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.86 232** | | ⇑*e*P | **Pb** | **00 53 33.5** | **-1.4** |
| **AOPR** | **Arecibo Observ** | **1.86 232** | | *e*S | **Sb** | **00 54 00.1** | **+2.2** |
| **AOPR** | **Arecibo Observ** | **1.86 232** | | | **Pb** | **00 53 33.5** | **-1.4** |
| AOPR | | | | | **Sb** | **00 54 00.1** | **+2.2** |
| **AOPR** | **Arecibo Observ** | **1.86 232** | | ⇓*e*Pg | **Pb** | **00 53 33.7** | **-1.2** |
| AOPR | | | | ⇓*e* | | 00 53 33.7 | |
| AOPR | | | | ⇑*e*Sg | **Sn** | **00 53 53.5** | **-0.2** |
| AOPR | | | | IAML | | 00 54 04.8 | |
| | comp=E,257nm,0.3s | | | | | | |
| AOPR | | | | IAML | | 00 54 09.7 | |
| | comp=N,183nm,0.3s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **1.90 230** | | ⇑*e*P | **Pb** | **00 53 34.0** | **-1.4** |
| **UUPR** | **Utuado, UPR, P** | **1.90 230** | | *e*S | **Sb** | **00 54 00.2** | **+1.3** |
| **UUPR** | **Utuado, UPR, P** | **1.90 230** | | | **Pb** | **00 53 34.0** | **-1.4** |
| UUPR | | | | | **Sb** | **00 54 00.2** | **+1.3** |
| **CELP** | **Cerrillos** | **1.93 223** | | ⇓*e*P | **Pb** | **00 53 34.2** | **-1.7** |
| **CELP** | **Cerrillos** | **1.93 223** | | *e*S | **Sb** | **00 54 00.3** | **+0.7** |
| **CELP** | **Cerrillos** | **1.93 223** | | | **Pb** | **00 53 34.2** | **-1.7** |
| CELP | | | | | **Sb** | **00 54 00.3** | **+0.7** |
| **CELP** | **Cerrillos** | **1.93 223** | | IAML | | 00 54 07.0 | |
| | comp=N,61nm,0.8s | | | | | | |
| **CELP** | **Cerrillos** | **1.93 223** | | ⇑*e*Pg | **Pb** | **00 53 34.1** | **-1.8** |
| CELP | | | | ⇑*e*Sg | **Sn** | **00 53 56.4** | **+1.2** |
| CELP | | | | IAML | | 00 54 06.6 | |
| | comp=N,58nm,0.9s | | | | | | |
| CELP | | | | IAML | | 00 54 18.3 | |
| | comp=E,49nm,0.5s | | | | | | |
| **OBIP** | **Obispado Ponce** | **1.97 223** | | ⇓*e*P | **Pb** | **00 53 34.3** | **-2.3** |
| **OBIP** | **Obispado Ponce** | **1.97 223** | | *e*S | **Sb** | **00 54 01.8** | **+1.0** |
| **OBIP** | **Obispado Ponce** | **1.97 223** | | | **Pb** | **00 53 34.1** | **-2.5** |
| OBIP | | | | | **Sb** | **00 54 01.4** | **+0.6** |
| OBIP | | | | IAML | | 00 54 19.9 | |
| | comp=E,65nm,1.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.08 241** | | ⇑*e*P | **Pb** | **00 53 36.1** | **-2.4** |
| **AGPR** | **Aguadilla, PR** | **2.08 241** | | *e*S | **Sb** | **00 54 05.1** | **+1.1** |
| **AGPR** | **Aguadilla, PR** | **2.08 241** | | | **Pb** | **00 53 36.6** | **-1.9** |
| AGPR | | | | IAML | | 00 53 57.9 | |
| | comp=E,88nm,2.1s | | | | | | |
| AGPR | | | | | **Sb** | **00 54 05.0** | **+1.1** |
| AGPR | | | | IAML | | 00 54 16.6 | |
| | comp=N,114nm,1.9s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.08 241** | | ⇑*e*Pg | **Pn** | **00 53 33.6** | **-0.5** |
| AGPR | | | | ⇓*e*Sg | **Sn** | **00 53 57.1** | **-1.8** |
| AGPR | | | | IAML | | 00 54 12.5 | |
| | comp=E,71nm,0.8s | | | | | | |
| AGPR | | | | IAML | | 00 54 13.0 | |
| | comp=N,105nm,2.6s | | | | | | |
| **LSP** | **Las Mesas** | **2.22 234** | | ⇓*e*P | **Pb** | **00 53 38.5** | **-2.4** |
| **LSP** | **Las Mesas** | **2.22 234** | | *e*S | **Sb** | **00 54 08.8** | **+0.8** |
| **LSP** | **Las Mesas** | **2.22 234** | | | **Pb** | **00 53 38.5** | **-2.4** |
| LSP | | | | | **Sb** | **00 54 08.8** | **+0.8** |
| **PRSN** | **Puerto Rico Se** | **2.24 236** | | | **Sb** | **00 54 09.7** | **+1.2** |
| **PRSN** | **Puerto Rico Se** | **2.24 236** | | Pn | **Pn** | **00 53 36.9** | **+0.6** |
| **PRSN** | **Puerto Rico Se** | **2.24 236** | | IAML | | 00 54 14.8 | |
| | comp=N,130nm,0.3s | | | | | | |
| PRSN | | | | IAML | | 00 54 16.2 | |
| | comp=E,109nm,0.2s | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.32 229** | | ⇑*e*P | **Pb** | **00 53 39.1** | **-3.4** |
| **MLPR** | **Magueyes Islan** | **2.32 229** | | *e*S | **Sb** | **00 54 10.3** | **-0.5** |
| **MLPR** | **Magueyes Islan** | **2.32 229** | | | **Pb** | **00 53 39.1** | **-3.4** |
| MLPR | | | | | **Sb** | **00 54 10.3** | **-0.5** |
| **MLPR** | **Magueyes Islan** | **2.32 229** | | ⇑*e*Pg | **Pb** | **00 53 38.4** | **-4.1** |
| MLPR | | | | ⇓*e*Sg | **Sn** | **00 54 05.3** | **+0.5** |
| MLPR | | | | IAML | | 00 54 17.2 | |
| | comp=E,27nm,0.5s | | | | | | |
| MLPR | | | | IAML | | 00 54 25.5 | |
| | comp=N,32nm,0.5s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.34 231** | | ⇓*e*P | **Pb** | **00 53 40.0** | **-2.9** |
| **CRPR** | **Cabo Rojo, PR** | **2.34 231** | | *e*S | **Sb** | **00 54 11.0** | **-0.5** |
| **CRPR** | **Cabo Rojo, PR** | **2.34 231** | | | **Pb** | **00 53 40.0** | **-2.9** |
| CRPR | | | | | **Sb** | **00 54 11.0** | **-0.5** |
| **CRPR** | **Cabo Rojo, PR** | **2.34 231** | | ⇑*e*Pg | **Pb** | **00 53 40.1** | **-2.8** |
| CRPR | | | | ⇓*e*Pg | | 00 53 40.9 | |
| CRPR | | | | IAML | | 00 54 06.0 | |
| | comp=E,51nm,1.5s | | | | | | |
| CRPR | | | | IAML | | 00 54 21.0 | |
| | comp=N,47nm,0.3s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.17 253** | | ⇑*e*Pg | **Pn** | **00 53 50.8** | **+1.7** |
| PCDR | | | | ⇑*e*Sg | **Sn** | **00 54 25.3** | **-0.4** |
| PCDR | | | | IAML | | 00 54 31.1 | |
| | comp=N,208nm,1.2s | | | | | | |
| PCDR | | | | IAML | | 00 54 43.6 | |
| | comp=E,101nm,1.4s | | | | | | |
| **SADR** | **Isla Saona** | **3.63 250** | | ⇑*e*Pg | **Pn** | **00 53 56.5** | **+1.0** |
| SADR | | | | ⇑*e*Sg | **Sn** | **00 54 38.4** | **+1.2** |
| SADR | | | | IAML | | 00 54 45.4 | |
| | comp=N,120nm,2.2s | | | | | | |
| SADR | | | | IAML | | 00 54 45.5 | |
| | comp=N,120nm,2.2s | | | | | | |
| SADR | | | | IAML | | 00 54 48.6 | |
| | comp=E,133nm,2.9s | | | | | | |
| **MIDR** | **Miches** | **3.67 263** | | ⇓*e*Pg | **Pn** | **00 53 57.3** | **+1.2** |
| MIDR | | | | ⇑*e*Sg | **Sn** | **00 54 36.1** | **-2.2** |
| MIDR | | | | IAML | | 00 54 44.0 | |
| | comp=N,39nm,1.5s | | | | | | |
| MIDR | | | | IAML | | 00 54 51.8 | |
| | comp=N,24nm,1.5s | | | | | | |
| MIDR | | | | IAML | | 00 54 52.0 | |
| | comp=E,35nm,1.9s | | | | | | |
| **SDDR** | **Presa de Saban** | **5.78 266** | | | **Pn** | **00 54 27.7** | **+2.7** |

*NEIC **14** 00:56:57.9±2.2,69°.46N±0°.06×144°.13W±0°.05,h8km±8km, Error ellipse: s-maj=8.2km s-min=2.6km az=188.0*
**AEIC 14 00:56:56.8**±2.2,**69°.45N**±0°.05×**144°.15W**±0°.03,**h5**km±7km, **ML2.8**,**ML2.9**/110(NEIC),**Error ellipse: s-maj=8.1km s-min=0.5km az=191.0**,**Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **41** | | Pg | 00 57 01.3 | 0.0 |
| C27K | | | | | Sg | 00 57 04.2 | -0.1 |
| C27K | | | | IAML | | 00 57 04.8 | |
| | comp=N,3μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.54 330** | | | Pg | 00 57 07.4 | +0.3 |
| C26K | | | | | Sg | 00 57 14.6 | +0.5 |
| C26K | | | | IAML | | 00 57 17.6 | |
| | comp=N,870nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.80 262** | | | Pg | 00 57 11.7 | -0.4 |
| D25K | | | | | Sg | 00 57 22.9 | +0.4 |
| **D27M** | **Malcolm River** | **1.15 99** | | | Pg | 00 57 18.3 | -0.4 |
| **D27M** | **Malcolm River** | **1.15 99** | | | Sg | 00 57 33.8 | +0.2 |
| D27M | | | | IAML | | 00 57 40.0 | |
| | comp=N,214nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.57 143** | | | Pg | 00 57 27.1 | +0.2 |
| **E27K** | **Coleen River** | **1.57 143** | | IAML | | 00 57 50.7 | |
| | comp=E,161nm,0.4s | | | | | | |
| E27K | | | | IAML | | 00 57 51.1 | |
| | comp=N,122nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.69 262** | | | Pn | 00 57 27.1 | +0.2 |
| D24K | | | | IAML | | 00 57 54.6 | |
| | comp=N,165nm,0.4s | | | | | | |
| **D24K** | **Happy Valley** | **1.69 262** | | | Sg | 00 57 51.3 | +0.3 |
| **F26K** | **Sheenjek River** | **1.77 180** | | | Pg | 00 57 30.3 | -0.3 |
| F26K | | | | | Sg | 00 57 55.0 | +1.5 |
| **F26K** | **Sheenjek River** | **1.77 180** | | IAML | | 00 57 56.8 | |
| | comp=E,139nm,0.6s | | | | | | |
| F26K | | | | IAML | | 00 57 58.7 | |
| | comp=N,107nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.87 115** | | | Pb | 00 57 31.5 | +0.1 |
| E28M | | | | | Sg | 00 57 57.1 | +0.4 |
| **D28M** | **Stokes Point** | **1.92 91** | | | Pg | 00 57 33.0 | -0.5 |
| **D28M** | **Stokes Point** | **1.92 91** | | IAML | | 00 58 03.1 | |
| | comp=N,132nm,0.7s | | | | | | |
| D28M | | | | IAML | | 00 58 07.9 | |
| | comp=E,110nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **1.95 197** | | | Pg | 00 57 34.1 | 0.0 |
| **F25K** | **Christian Rive** | **1.95 197** | | | Sg | 00 57 59.1 | -0.2 |
| **BMAR** | **Burnt Mountain** | **2.04 185** | | | Pg | 00 57 36.0 | +0.1 |
| **E24K** | **Your Creek** | **2.10 231** | | | Pn | 00 57 33.0 | +0.3 |
| **TOLK** | **Toolik Lake Re** | **2.12 250** | | | Pg | 00 57 36.8 | -0.4 |
| **C23K** | **Itkillik River** | **2.29 283** | | | Pn | 00 57 34.4 | -0.8 |
| C23K | | | | | Pg | 00 57 40.2 | -0.5 |
| C23K | | | | IAML | | 00 58 12.6 | |
| | comp=N,85nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **2.38 261** | | Pn | Pn | 00 57 36.7 | +0.2 |
| D23K | | | | Pg | Pg | 00 57 42.4 | 0.0 |
| **F24K** | **Squaw Lake** | **2.38 217** | | | Pn | 00 57 36.6 | +0.1 |
| **F28M** | **Old Crow** | **2.43 138** | | | Pn | 00 57 38.6 | +1.5 |
| F28M | | | | IAML | | 00 58 17.0 | |
| | comp=E,65nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.44 237** | | | Pb | 00 57 42.1 | +1.0 |
| **E29M** | **Blow River** | **2.50 112** | | | Pn | 00 57 38.5 | +0.4 |
| E29M | | | | IAML | | 00 58 18.1 | |
| | comp=N,56nm,0.8s | | | | | | |
| E29M | | | | IAML | | 00 58 22.3 | |
| | comp=E,53nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.52 177** | | | Pb | 00 57 40.6 | -1.8 |
| **G25K** | **Bearman Lake** | **2.80 196** | | | Pb | 00 57 44.9 | -2.3 |
| **G27K** | **Doyon Strip** | **2.82 160** | | | Pn | 00 57 42.3 | -0.2 |
| **FYU** | **Fort Yukon** | **2.93 189** | | Pn | Pn | 00 57 43.9 | -0.1 |
| **G24K** | **Hadweenzic Riv** | **3.04 206** | | | Pn | 00 57 45.7 | +0.3 |
| G24K | | | | IAML | | 00 58 42.5 | |
| | comp=N,31nm,0.7s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.09 248** | | | Pn | 00 57 46.4 | +0.2 |
| E22K | | | | IAML | | 00 58 41.2 | |
| | comp=N,26nm,1.0s | | | | | | |
| **D22K** | **Ayikyak River** | **3.10 263** | | | Pn | 00 57 46.8 | +0.4 |
| D22K | | | | Pg | Pg | 00 57 55.5 | -0.7 |
| D22K | | | | IAML | | 00 58 43.4 | |
| | comp=N,35nm,0.8s | | | | | | |
| D22K | | | | IAML | | 00 58 43.6 | |
| | comp=E,32nm,0.8s | | | | | | |
| **COLD** | **Coldfoot** | **3.17 228** | | | Pn | 00 57 49.2 | +1.9 |
| **B22K** | **Teshekpuk Lake** | **3.32 290** | | | Pn | 00 57 50.6 | +1.3 |
| **B22K** | **Teshekpuk Lake** | **3.32 290** | | IAML | | 00 58 55.2 | |
| | comp=N,35nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.43 135** | | | Pn | 00 57 51.8 | +1.0 |
| **G23K** | **Bananza Creek** | **3.53 221** | | Pn | Pn | 00 57 52.2 | 0.0 |
| G23K | | | | IAML | | 00 59 02.1 | |
| | comp=E,22nm,1.2s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.68 278** | | | Pn | 00 57 55.0 | +0.8 |
| B21K | | | | IAML | | 00 58 40.8 | |
| | comp=E,24nm,0.8s | | | | | | |
| B21K | | | | IAML | | 00 59 12.3 | |
| | comp=N,24nm,1.2s | | | | | | |
| **E21K** | **Killik River** | **3.69 259** | | Pn | Pn | 00 57 55.0 | +0.5 |
| E21K | | | | IAML | | 00 58 58.3 | |
| | comp=E,16nm,0.8s | | | | | | |
| E21K | | | | IAML | | 00 59 06.1 | |
| | comp=N,21nm,1.1s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.86 126** | | Pn | Pn | 00 57 56.9 | +0.1 |
| G30M | | | | IAML | | 00 59 05.5 | |
| | comp=N,14nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.90 203** | | | Pn | 00 57 57.0 | -0.5 |
| H24K | | | | IAML | | 00 59 13.1 | |
| | comp=E,15nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **3.92 143** | | | Pn | 00 57 58.8 | +1.3 |
| **PRP** | **Porcupine Dome** | **3.99 188** | | | Pn | 00 57 58.4 | -0.2 |
| PRP | | | | IAML | | 00 58 51.0 | |
| | comp=N,14nm,0.4s | | | | | | |
| PRP | | | | IAML | | 00 59 10.1 | |
| | comp=E,13nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **4.01 102** | | | Pn | 00 57 58.7 | -0.1 |
| **F21K** | **Alatna River** | **4.12 242** | | | Pn | 00 58 01.1 | +0.7 |
| F21K | | | | IAML | | 00 59 17.4 | |
| | comp=E,14nm,0.8s | | | | | | |
| F21K | | | | IAML | | 00 59 17.7 | |
| | comp=N,12nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.18 134** | | | Pn | 00 58 01.6 | +0.4 |
| **I26K** | **Coal Creek Min** | **4.18 174** | | | Pn | 00 58 01.7 | +0.4 |
| I26K | | | | IAML | | 00 59 13.9 | |
| | comp=E,18nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.19 212** | | | Pn | 00 58 02.0 | +0.7 |
| H23K | | | | IAML | | 00 59 14.3 | |
| | comp=N,15nm,1.0s | | | | | | |
| H23K | | | | IAML | | 00 59 15.7 | |
| | comp=E,14nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **4.34 156** | | Pn | Pn | 00 58 04.9 | +1.5 |
| **G31M** | **Satah River** | **4.47 120** | | | Pn | 00 58 06.7 | +1.6 |
| G31M | | | | IAML | | 00 59 31.4 | |
| | comp=E,13nm,0.8s | | | | | | |
| G31M | | | | IAML | | 00 59 34.1 | |
| | comp=N,14nm,0.9s | | | | | | |
| **E20K** | **Nigu River** | **4.52 260** | | | Pn | 00 58 07.8 | +1.9 |
| **D20K** | **Etivluk River** | **4.53 266** | | | Pn | 00 58 07.7 | +1.7 |
| **POKR** | **Poker Plat Res** | **4.54 198** | | | Pn | 00 58 07.2 | +1.1 |
| POKR | | | | IAML | | 00 59 33.8 | |
| | comp=N,12nm,1.1s | | | | | | |
| POKR | | | | IAML | | 01 00 56.5 | |
| | comp=E,13nm,1.0s | | | | | | |
| **B20K** | **Meade River** | **4.56 283** | | | Pn | 00 58 06.5 | +0.2 |
| **G21K** | **Allakaket** | **4.59 234** | | Pn | Pn | 00 58 07.5 | +0.6 |
| G21K | | | | IAML | | 00 59 35.2 | |
| | comp=E,11nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77 207** | | | Pn | 00 58 10.2 | +0.9 |
| I23K | | | | IAML | | 00 59 37.4 | |
| | comp=E,9.1nm,1.1s | | | | | | |
| I23K | | | | IAML | | 00 59 42.4 | |
| | comp=N,9.4nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79 201** | | | Pn | 00 58 10.6 | +1.1 |
| MDM | | | | IAML | | 00 59 34.0 | |
| | comp=N,8.4nm,0.8s | | | | | | |
| MDM | | | | IAML | | 00 59 34.4 | |
| | comp=E,9.8nm,0.8s | | | | | | |
| **IL31** | | **4.82 194** | | | Pn | 00 58 11.8 | +1.9 |
| **ILAR** | **Eielson Array** | **4.82 194** | | Pn | Pn | 00 58 11.7 | +1.7 |
| **J25K** | **Salcha River,** | **4.89 186** | | Pn | Pn | 00 58 12.4 | +1.5 |
| J25K | | | | IAML | | 00 59 32.2 | |
| | comp=E,9.6nm,0.8s | | | | | | |
| J25K | | | | IAML | | 01 01 23.2 | |
| | comp=N,6.8nm,1.2s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.94 246** | | | Pn | 00 58 12.9 | +1.5 |
| F20K | | | | IAML | | 01 01 25.0 | |
| | comp=N,8.7nm,1.1s | | | | | | |
| F20K | | | | IAML | | 01 01 28.5 | |
| | comp=E,7.4nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **4.98 177** | | Pn | Pn | 00 58 13.6 | +1.3 |
| J26L | | | | IAML | | 01 01 07.5 | |
| | comp=E,6.5nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04 198** | | | Pn | 00 58 14.8 | +1.9 |
| CCB | | | | IAML | | 00 59 37.1 | |
| | comp=E,5.8nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.05 225** | | Pn | Pn | 00 58 14.7 | +1.6 |
| H21K | | | | IAML | | 01 01 30.6 | |
| | comp=E,9.9nm,1.1s | | | | | | |
| H21K | | | | IAML | | 01 01 34.1 | |
| | comp=N,8.8nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **5.12 266** | | | Pn | 00 58 14.8 | +0.7 |
| **MLY** | **Manley** | **5.12 213** | | | Pn | 00 58 15.6 | +1.4 |
| **I30M** | **Mount Dempster** | **5.20 141** | | | Pn | 00 58 16.8 | +1.5 |
| **E19K** | **Redstone River** | **5.22 254** | | | Pn | 00 58 15.6 | +0.2 |
| **WRH** | **Wood River Hil** | **5.24 199** | | Pn | Pn | 00 58 14.9 | -0.8 |
| WRH | | | | IAML | | 01 01 21.7 | |
| | comp=E,7.5nm,1.2s | | | | | | |
| WRH | | | | IAML | | 01 01 46.9 | |
| | comp=N,8.2nm,1.2s | | | | | | |
| **NEA2** | **Nenana** | **5.25 204** | | Pn | Pn | 00 58 17.8 | +2.0 |
| NEA2 | | | | IAML | | 01 01 13.4 | |
| | comp=N,6.1nm,0.8s | | | | | | |
| NEA2 | | | | IAML | | 01 01 45.0 | |
| | comp=E,5.7nm,1.0s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.49 274** | | | Pn | 00 58 20.3 | +1.1 |
| **SCRK** | **Sand Creek** | **5.50 179** | | Pn | Pn | 00 58 22.4 | +3.0 |
| **K27K** | **Chicken** | **5.51 170** | | Pn | Pn | 00 58 23.0 | +3.6 |
| **BWN** | **Browne** | **5.70 204** | | Pn | Pn | 00 58 21.7 | -0.4 |
| **F19K** | **Shaleruckik Mo** | **5.72 249** | | Pn | Pn | 00 58 24.0 | +1.7 |
| **J30M** | **Hart River** | **5.77 144** | | | Pn | 00 58 24.5 | +1.4 |
| **BPAW** | **Bear Paw Mtn.** | **6.02 210** | | Pn | Pn | 00 58 28.4 | +2.0 |
| **H19K** | **Roundabout Mou** | **6.15 236** | | Pn | Pn | 00 58 29.1 | +1.0 |
| **C18K** | **Utukok River** | **6.16 270** | | | Pn | 00 58 29.0 | +0.5 |
| **K29M** | **Barlow Dome** | **6.22 152** | | Pn | Pn | 00 58 31.1 | +1.9 |
| **E18K** | **Tukpahlearik C** | **6.39 259** | | | Pn | 00 58 31.7 | +0.2 |
| **F18K** | **Selawik** | **6.48 251** | | | Pn | 00 58 34.0 | +1.3 |
| **L27K** | **Beaver Creek,** | **6.49 171** | | Pn | Pn | 00 58 35.7 | +2.8 |
| **DHY** | **Denali Highway** | **6.54 193** | | Pn | Pn | 00 58 37.2 | +3.5 |
| **G18K** | **Tagagawik** | **6.57 244** | | Pn | Pn | 00 58 34.7 | +0.8 |
| **E17K** | **Hotham Inlet** | **6.97 258** | | | Pn | 00 58 39.9 | +0.4 |
| **H18K** | **Honhosa River** | **6.98 239** | | Pn | Pn | 00 58 41.2 | +1.6 |
| **M26K** | **Nabesna, AK** | **7.10 176** | | Pn | Pn | 00 58 44.6 | +3.4 |
| **C16K** | **Lisburne Hills** | **7.74 271** | | Pn | Pn | 00 58 49.6 | -0.3 |
| **G16K** | **Koyuk River** | **8.08 249** | | Pn | Pn | 00 58 54.5 | -0.1 |
| **M20K** | **Styx River** | **8.45 210** | | Pn | Pn | 00 59 00.5 | +0.8 |
| **L19K** | **White Mountain** | **8.51 216** | | Pn | Pn | 00 59 00.7 | +0.2 |
| **J17K** | **VABM Dome** | **8.51 232** | | Pn | Pn | 00 58 59.2 | -1.3 |
| **MMPY** | **Sheldon Lake,** | **8.61 137** | | Pn | Pn | 00 59 03.3 | +1.3 |
| **M19K** | **Big River Lodg** | **8.66 214** | | Pn | Pn | 00 59 03.7 | +1.1 |
| **K17K** | **Iditarod** | **8.85 227** | | Pn | Pn | 00 59 03.8 | -1.4 |
| **L18K** | **Granite Mounta** | **8.88 221** | | Pn | Pn | 00 59 05.5 | 0.0 |
| **HMT** | **Hamilton** | **9.16 180** | | Pn | Pn | 00 59 07.6 | -1.8 |

*NEIC **14** 00:59:23.6±1.8,69°.55N±0°.08×144°.3W±0°.1,h10km±2km, Error ellipse: s-maj=13.5km s-min=7.0km az=19.0*
**AEIC 14 00:59:23.5**±1.7,**69°.52N**±0°.07×**144°.3W**±0°.1,**h10**km±7km, **ML2.8**,**ML2.9**/54(NEIC),**Error ellipse: s-maj=9.9km s-min=6.6km az=199.0**,**Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **62** | | Pg | 00 59 28.1 | -0.2 |
| C27K | | | | | Sg | 00 59 31.7 | +0.2 |
| **C26K** | **Camden Bay** | **0.45 332** | | | Pg | 00 59 32.0 | -0.4 |
| C26K | | | | | Sg | 00 59 38.6 | +0.2 |
| **D25K** | **Kavik River** | **0.76 256** | | | Pg | 00 59 37.0 | -1.2 |
| D25K | | | | | Sg | 00 59 48.0 | -0.1 |
| **D27M** | **Malcolm River** | **1.21 102** | | | Pb | 00 59 45.9 | -0.7 |
| D27M | | | | | Sn | 01 00 03.2 | +0.1 |
| D27M | | | | IAML | | 01 00 07.6 | |
| | comp=N,200nm,0.5s | | | | | | |
| **F24K** | **Squaw Lake** | **2.40 215** | | Pn | Pn | 01 00 01.9 | -1.0 |
| **E23K** | **Chandalar** | **2.43 235** | | | Pn | 01 00 03.0 | -0.2 |
| E23K | | | | IAML | | 01 00 19.6 | |
| | comp=N,45nm,0.5s | | | | | | |
| E23K | | | | IAML | | 01 00 19.8 | |
| | comp=E,54nm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.51 138** | | Pn | Pn | 01 00 03.6 | -0.8 |
| F28M | | | | IAML | | 01 00 48.6 | |
| | comp=N,41nm,0.6s | | | | | | |
| F28M | | | | IAML | | 01 00 52.6 | |
| | comp=E,47nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **2.58 113** | | | Pn | 01 00 04.5 | -0.7 |
| E29M | | | | IAML | | 01 00 46.8 | |
| | comp=N,57nm,0.6s | | | | | | |
| E29M | | | | IAML | | 01 00 49.3 | |
| | comp=E,44nm,0.5s | | | | | | |
| **G27K** | **Doyon Strip** | **2.90 159** | | Pn | Pn | 01 00 08.9 | -0.8 |
| **E22K** | **Anaktuvuk Pass** | **3.06 247** | | Pn | Pn | 01 00 12.7 | +0.8 |
| E22K | | | | IAML | | 01 00 44.5 | |
| | comp=E,23nm,0.7s | | | | | | |
| **G29M** | **Pine Creek** | **3.51 135** | | Pn | Pn | 01 00 18.8 | +0.7 |
| **B21K** | **Ikpikpuk River** | **3.62 276** | | | Pn | 01 00 19.6 | +0.1 |
| **G30M** | **tAoh Zraii Nji** | **3.94 126** | | | Pn | 01 00 21.8 | -2.2 |
| G30M | | | | IAML | | 01 01 22.9 | |
| | comp=E,15nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.94 202** | | | Pn | 01 00 23.7 | -0.3 |
| H24K | | | | IAML | | 01 01 01.1 | |
| | comp=E,26nm,1.4s | | | | | | |
| H24K | | | | IAML | | 01 01 37.2 | |
| | comp=N,15nm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **4.00 143** | | | Pn | 01 00 25.1 | +0.3 |
| **PRP** | **Porcupine Dome** | **4.05 187** | | | Pn | 01 00 27.4 | +1.8 |
| **I27K** | **Kandik River** | **4.07 164** | | | Pn | 01 00 27.7 | +2.0 |
| **INK** | **Inuvik** | **4.08 102** | | Pn | Pn | 01 00 26.6 | +0.8 |
| **F21K** | **Alatna River** | **4.11 240** | | Pn | Pn | 01 00 26.9 | +0.7 |
| F21K | | | | IAML | | 01 01 00.5 | |
| | comp=N,25nm,1.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.25 173** | | Pn | Pn | 01 00 26.3 | -2.0 |
| **EPYK** | **Eagle Plains** | **4.26 134** | | Pn | Pn | 01 00 29.2 | +0.7 |
| **I29M** | **Ogilvie Camp,** | **4.77 148** | | Pn | Pn | 01 00 35.5 | +0.1 |
| **I23K** | **Minto, Yukon-K** | **4.80 206** | | Pn | Pn | 01 00 35.3 | -0.5 |
| **MDM** | **Murphy Dome** | **4.83 200** | | Pn | Pn | 01 00 37.2 | +1.1 |
| **EGAK** | **Eagle** | **4.92 164** | | Pn | Pn | 01 00 38.3 | +0.9 |
| EGAK | | | | IAML | | 01 01 39.3 | |
| | comp=N,11nm,0.7s | | | | | | |
| **J26L** | **Joseph Creek** | **5.05 176** | | Pn | Pn | 01 00 39.1 | -0.2 |
| J26L | | | | IAML | | 01 01 41.6 | |
| | comp=N,5.7nm,0.7s | | | | | | |
| J26L | | | | IAML | | 01 02 04.9 | |
| | comp=E,7.2nm,1.2s | | | | | | |
| **MLY** | **Manley** | **5.15 212** | | Pn | Pn | 01 00 41.1 | +0.4 |
| MLY | | | | IAML | | 01 01 44.5 | |
| | comp=N,8.4nm,1.4s | | | | | | |
| **I30M** | **Mount Dempster** | **5.29 141** | | | Pn | 01 00 43.4 | +

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **37.55** | **244** | P | | **P** | **01 37 48.3** | **+0.2** |
| | comp=Z,4.2nm,0.7s,baz=79,slow=10,SNR=4.2 | | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **42.31** | **243** | P | | **P** | **01 38 25.6** | **-0.5** |
| BBOO | | | | IAmb | | IAmb | 01 38 36.3 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.12** | **262** | P | | **P** | **01 38 39.6** | **-0.8** |
| WR0 | | | | IAmb | | IAmb | 01 38 41.2 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **44.24** | **257** | P | | **P** | **01 38 40.8** | **-0.5** |
| AS31 | | | | IAmb | | IAmb | 01 38 41.6 | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.24** | **257** | P | | **P** | **01 38 40.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.24** | **257** | P | | **P** | **01 38 41.0** | **-0.2** |
| | comp=Z,22nm,0.8s,baz=98,slow=7.5,SNR=139 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 40 13.0** | **+0.3** |
| | comp=Z,2.4nm,0.6s,baz=106,slow=3.6,SNR=8.2 | | | | | | | |
| ASAR | | | | S | | **S** | **01 44 31.8** | **-1.5** |
| | comp=Z,1.0nm,0.9s,baz=97,slow=14,SNR=4.2 | | | | | | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.29** | **262** | P | | **P** | **01 38 40.7** | **-0.9** |
| WB0 | | | | IAmb | | IAmb | 01 38 41.5 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.30** | **262** | P | | **P** | **01 38 40.9** | **-0.8** |
| WB2 | | | | IAmb | | IAmb | 01 38 41.3 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.31** | **262** | P | | **P** | **01 38 41.0** | **-0.8** |
| **WRA** | **Warramunga Arr** | **44.31** | **262** | P | | **P** | **01 38 41.1** | **-0.7** |
| | comp=Z,5.8nm,0.3s,baz=96,slow=7.4,SNR=155 | | | | | | | |
| | comp=Z,5.8nm,0.3s | | | | | | | |
| **MTN** | **Manton Dam** | **48.85** | **271** | P | | **P** | **01 39 15.6** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **52.73** | **262** | P | | **P** | **01 39 44.0** | **-0.1** |
| **SOEI** | **Soe** | **56.19** | **272** | P | | **P** | **01 40 09.6** | **+1.1** |
| **PSA00** | **Pilbara Seismi** | **57.39** | **257** | P | | **P** | **01 40 16.1** | **-0.3** |
| PSA00 | | | | IAmb | | IAmb | 01 40 16.6 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | **57.57** | **257** | P | | **P** | **01 40 16.9** | **-0.8** |
| MBWA | | | | IAmb | | IAmb | 01 40 17.4 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **VNDA** | **Vanda** | **57.98** | **185** | P | | **P** | **01 40 20.7** | **+1.3** |
| **VNDA** | **Vanda** | **57.98** | **185** | P | | **P** | **01 40 20.7** | **+1.3** |
| | comp=Z,0.5nm,0.7s,baz=349,slow=7.3,SNR=6.3 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **MORW** | **Morawa** | **59.58** | **248** | P | | **P** | **01 40 31.0** | **0.0** |
| MORW | | | | IAmb | | IAmb | 01 40 51.2 | |
| | comp=Z,40nm,1.4s | | | | | | | |
| **GIRL** | **Giralia** | **62.28** | **255** | P | | **P** | **01 40 49.6** | **+0.8** |
| **QSPA** | **South Pole Qui** | **69.66** | **180** | P | | **P** | **01 41 34.9** | **+1.0** |
| **QSPA** | **South Pole Qui** | **69.66** | **180** | P | | **P** | **01 41 34.5** | **+0.6** |
| | comp=Z,2.5nm,0.8s,baz=360,slow=1.0,SNR=14 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.95** | **324** | P | | **P** | **01 41 35.4** | **-0.5** |
| | comp=Z,2.3nm,0.6s,baz=159,slow=5.9,SNR=10.0 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **MAJO** | **Matsushiro** | **69.95** | **324** | P | | **P** | **01 41 36.0** | **+0.1** |
| MAJO | | | | IAmb | | IAmb | 01 41 36.6 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **69.96** | **324** | P | | **P** | **01 41 36.0** | **+0.1** |
| MJB9 | | | | IAmb | | IAmb | 01 41 36.6 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **AMKA** | **Amchitka** | **71.50** | **358** | P | | **P** | **01 41 44.4** | **-0.1** |
| **ERM** | **Erimo** | **71.59** | **331** | P | | **P** | **01 41 46.2** | **+0.9** |
| ERM | | | | IAmb | | IAmb | 01 42 22.1 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **JTM** | **Tenmabayashi** | **71.63** | **329** | P | | **P** | **01 41 46.3** | **+0.7** |
| JTM | | | | IAmb | | IAmb | 01 42 26.5 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **KIWB** | **Kanaga Island** | **71.95** | **1** | P | | **P** | **01 41 47.0** | **-0.2** |
| **ADK** | **Adak** | **71.99** | **1** | P | | **P** | **01 41 47.2** | **-0.2** |
| **JKA** | **Kamikawa-asahi** | **73.50** | **332** | P | | **P** | **01 41 58.2** | **+2.0** |
| JKA | | | | IAmb | | IAmb | 01 41 59.0 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **76.10** | **345** | P | | **P** | **01 42 11.6** | **+1.0** |
| PEA0B | | | | IAmb | | IAmb | 01 42 39.5 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| **KSRS** | **Korea Array** | **76.61** | **319** | P | | **P** | **01 42 14.3** | **+0.6** |
| | comp=Z,1.3nm,0.6s,baz=129,slow=5.9,SNR=5.1 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **78.71** | **326** | P | | **P** | **01 42 26.5** | **+1.6** |
| **USRK** | **Ussuriysk Ar.** | **78.71** | **326** | P | | **P** | **01 42 26.5** | **+1.6** |
| | comp=Z,4.2nm,0.7s,baz=101,slow=3.7,SNR=11 | | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **GRAC** | **Grapevine Rang** | **80.98** | **45** | P | | **P** | **01 42 38.8** | **+1.8** |
| **NVAR** | **Mina Array Bea** | **81.17** | **44** | P | | **P** | **01 42 39.9** | **+1.8** |
| | comp=Z,1.1nm,0.3s,baz=218,slow=8.5,SNR=2.7 | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| **VHRN** | **Van Horn** | **86.86** | **56** | P | | **P** | **01 43 05.9** | **-0.2** |
| **TXAR** | **Lajitas Array** | **87.26** | **57** | P | | **P** | **01 43 09.9** | **+1.9** |
| | comp=Z,1.6nm,0.8s,baz=216,slow=6.2,SNR=7.3 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **87.67** | **319** | *e*P | | **P** | **01 43 13.6** | **+4.0** |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **ALPN** | **Alpine** | **87.73** | **57** | P | | **P** | **01 43 09.7** | **-0.5** |
| **WRH** | **Wood River Hil** | **87.78** | **13** | P | | **P** | **01 43 09.4** | **0.0** |
| WRH | | | | IAmb | | IAmb | 01 43 10.1 | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **HDA** | **Harding Lake** | **87.96** | **13** | P | | **P** | **01 43 10.6** | **+0.2** |
| HDA | | | | IAmb | | IAmb | 01 43 11.3 | |
| | comp=Z,5.1nm,0.6s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **87.99** | **13** | P | | **P** | **01 43 10.4** | **-0.1** |
| CCB | | | | IAmb | | IAmb | 01 43 10.9 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **88.29** | **13** | P | | **P** | **01 43 11.8** | **-0.1** |
| | comp=Z,1.9nm,0.9s,baz=235,slow=5.9,SNR=9.0 | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| **J26L** | **Joseph Creek** | **88.79** | **14** | P | | **P** | **01 43 15.3** | **+1.0** |
| J26L | | | | IAmb | | IAmb | 01 43 16.2 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **89.10** | **43** | P | | **P** | **01 43 17.1** | **+0.6** |
| | comp=Z,0.6nm,0.6s,baz=206,slow=4.1,SNR=6.8 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.79** | **290** | P | | **P** | **01 43 19.9** | **0.0** |
| | comp=Z,2.4nm,0.3s,baz=119,slow=3.0,SNR=9.4 | | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **110.91** | **313** | PKiKP | | **PKiKP** | **01 48 48.9** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=96,slow=1.2,SNR=4.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **113.77** | **317** | PKiKP | | **PKiKP** | **01 48 54.4** | **-0.6** |
| | comp=Z,0.6nm,0.2s,baz=86,slow=2.2,SNR=5.9 | | | | | | | |
| **BVAR** | **Borovoye Array** | **118.81** | **320** | PKP | | **PKPdf** | **01 49 04.2** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=99,slow=1.9,SNR=14 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.77** | **349** | PKP | | **PKPdf** | **01 49 23.0** | **-0.3** |
| | comp=Z,4.8nm,1.1s,baz=54,slow=4.6,SNR=3.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **135.60** | **344** | PKP | | **PKiKP** | **01 49 37.6** | **-0.4** |
| | comp=Z,0.5nm,0.4s,baz=97,slow=6.0,SNR=7.2 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **138.85** | **353** | PKP | | PKPpre | 01 49 33.7 | |
| | comp=Z,1.1nm,0.8s,baz=16,slow=3.2 | | | | | | | |
| NB2 | | | | SKPa | | | 01 52 26.2 | |
| | comp=Z,1.2nm,0.8s,baz=15,slow=4.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **138.85** | **353** | PKhKP | | PKPpre | 01 49 35.9 | |
| | comp=Z,0.5nm,0.8s,baz=18,slow=2.8,SNR=5.2 | | | | | | | |
| NOA | | | | SKP | | | 01 52 24.9 | |
| | comp=Z,0.9nm,0.9s,baz=6.3,slow=4.0,SNR=3.7 | | | | | | | |
| **HFS** | **Hagfors** | **139.40** | **351** | PKhKP | | PKPpre | 01 49 34.9 | |
| | comp=Z,0.9nm,0.4s,baz=60,slow=5.8,SNR=12 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.78** | **331** | PKhKP | | PKPpre | 01 49 46.8 | |
| | comp=Z,8.4nm,0.5s,baz=44,slow=4.3,SNR=37 | | | | | | | |
| **AKBB** | **Malin Array Si** | **142.78** | **331** | | | **PKPdf** | **01 49 46.5** | **-3.1** |
| **KIEV** | **Kiev** | **142.79** | **331** | | | **PKPdf** | **01 49 46.9** | **-2.8** |
| **GAZ** | **Gaziantep** | **144.91** | **306** | | | **PKPab** | **01 49 55.5** | **-0.1** |
| **EKA** | **Eskdalemuir Ar** | **144.94** | **5** | PKP | | PKPbc | 01 49 53.9 | -0.2 |
| | comp=Z,3.4nm,0.8s,baz=337,slow=3.2,SNR=9.0 | | | | | | | |
| **BNN** | **Bunyan** | **145.34** | **310** | | | **PKPbc** | **01 49 55.7** | **-0.2** |
| **BR131** | **Keskin Array S** | **146.55** | **312** | | | **PKPbc** | **01 49 58.5** | **-0.8** |
| **BRTR** | **Keskin Array B** | **146.55** | **312** | PKPbc | | **PKPbc** | **01 49 59.5** | **+0.2** |
| | comp=Z,2.9nm,0.6s,baz=132,slow=4.3,SNR=19 | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **146.81** | **330** | | | **PKPbc** | **01 50 00.1** | **+0.4** |
| **BURAR** | **Bucovina Array** | **146.83** | **330** | | | **PKPbc** | **01 49 60.0** | **+0.2** |
| **OJC** | **Ojcow** | **146.96** | **338** | | | **PKPbc** | **01 49 59.3** | **-0.6** |
| **ANTO** | **Ankara** | **147.07** | **313** | | | **PKPdf** | **01 49 57.8** | **+0.3** |
| **MMAI** | **Mount Meron Ar** | **147.50** | **300** | PKPbc | | **PKiKP** | **01 50 02.7** | **-0.8** |
| | comp=Z,7.7nm,0.6s,baz=70,slow=5.8,SNR=17 | | | | | | | |
| **OSTC** | **Ostas** | **147.79** | **343** | *e*PKP | | **PKiKP** | **01 50 03.0** | **-0.4** |
| **CHVC** | **Chvalec** | **147.81** | **343** | ⇑*e*PKP | | **PKPbc** | **01 50 02.7** | **+0.6** |
| **UPC** | **Upice** | **147.89** | **343** | ⇑*e*PKP | | **PKiKP** | **01 50 03.2** | **-0.4** |
| **CLL** | **Collm** | **147.90** | **347** | | | **PKiKP** | **01 50 03.0** | **-0.5** |
| **DPC** | **Dobruska-Polom** | **147.94** | **342** | ⇑*e*PKP | | **PKiKP** | **01 50 03.3** | **-0.5** |
| **MLR** | **Muntele Rosu** | **147.98** | **327** | | | **PKPbc** | **01 50 03.1** | **+0.3** |
| **HSKC** | **Hora Svate Kat** | **148.46** | **346** | ⇑*e*PKP | | **PKiKP** | **01 50 04.6** | **-0.2** |
| **PRU** | **Pruhonice** | **148.76** | **344** | ⇑*e*PKP | | **PKiKP** | **01 50 05.0** | **-0.4** |
| **ZVC** | **Zvikov** | **149.35** | **344** | ⇑*e*PKP | | **PKiKP** | **01 50 07.2** | **+0.5** |
| **KHC** | **Kasperske Hory** | **149.79** | **344** | | | **PKPbc** | **01 50 06.8** | **-0.2** |
| **KHC** | **Kasperske Hory** | **149.79** | **344** | ⇑*e*PKP | | **PKPbc** | **01 50 07.0** | **0.0** |
| KHC | | | | *e*PKPAB | | **PKPab** | **01 50 15.7** | **+0.7** |
| **CKRC** | **Cesky Krumlov** | **149.89** | **343** | ⇑*e*PKP | | **PKPbc** | **01 50 06.9** | **-0.3** |
| CKRC | | | | ⇑*e*PKP | | **PKiKP** | **01 50 07.9** | **+0.1** |
| **GEC2** | **GERESS Array S** | **150.03** | **344** | | | **PKiKP** | **01 50 08.4** | **+0.2** |
| **GERES** | **GERESS Array B** | **150.03** | **344** | PKPbc | | **PKiKP** | **01 50 08.1** | **-0.1** |
| | comp=Z,1.9nm,0.9s,baz=182,slow=6.6,SNR=3.5 | | | | | | | |
| **CONA** | **Conrad Observa** | **150.24** | **341** | *i* PKP | | **PKiKP** | **01 50 09.0** | **+0.3** |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **150.30** | **340** | *i* PKP | | **PKiKP** | **01 50 08.8** | **0.0** |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **MOA** | **Molln** | **150.78** | **342** | *e*PKiKP | | **PKiKP** | **01 50 11.4** | **+1.6** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **RDO** | **Rodhopi** | **151.05** | **321** | | | **PKiKP** | **01 50 10.2** | **-0.2** |
| **LESA** | **Schwarzleotal** | **151.60** | **344** | *i* PKP | | **PKiKP** | **01 50 11.7** | **+0.2** |
| | comp=Z,3.7nm,0.8s | | | | | | | |
| **WTTA** | **Wattenberg** | **152.01** | **345** | *i* PKP | | **PKPbc** | **01 50 11.8** | **-0.5** |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| **MOTA** | **Moosalm** | **152.05** | **346** | *i* PKP | | **PKPbc** | **01 50 12.4** | **0.0** |
| | comp=Z,3.1nm,0.7s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **152.15** | **346** | *e*PKP | | **PKiKP** | **01 50 12.7** | **0.0** |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **152.27** | **344** | *i* PKP | | **PKPbc** | **01 50 12.4** | **-0.4** |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **152.44** | **347** | *e*PKP | | **PKPbc** | **01 50 13.1** | **-0.1** |
| **FNA** | **Florina** | **153.65** | **325** | | | **PKPbc** | **01 50 15.7** | **-0.2** |

*NOU* ***14*** *01:36:23.0, 42.64S×173.45E, h4km, MLv3.9/9, South Island, New Zealand*
*WEL* ***14*** *01:36:24.1±0.3, 43.5S±2.1°×17.3E±1.1°, h15km±2km, M3.3/12, ML3.4/14, MLv3.3/12, Error ellipse: s-maj=0.0km s-min=0.0km az=121.6, confirmed*

**ISC 14 01:36:24.2±0.9, 42.56S±0.02°×173.40E±0.03, h14km±6km, n68, σ0.90/96, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KHZ** | **Kahutara** | **0.18** | **36** | P | | **Pg** | **01 36 28.0** | **-0.5** |
| **KHZ** | **Kahutara** | **0.18** | **36** | P | | **Pg** | **01 36 28.1** | **-0.5** |
| KHZ | | | | S | | **Sg** | **01 36 30.8** | **-0.6** |
| **KIKS** | **Kaikoura** | **0.25** | **57** | P | | **Pg** | **01 36 30.2** | **+0.5** |
| KIKS | | | | S | | **Sg** | **01 36 35.1** | **+1.8** |
| **WTMC** | **Te Mara Farm W** | **0.26** | **257** | P | | **Pb** | **01 36 30.5** | **-0.2** |
| WTMC | | | | S | | **Sb** | **01 36 35.4** | **+0.4** |
| **CECS** | **Cheviot Emerge** | **0.27** | **200** | P | | **Pb** | **01 36 31.6** | **+0.8** |
| CECS | | | | S | | **Sb** | **01 36 37.4** | **+2.2** |
| **GVZ** | **Greta Valley S** | **0.48** | **213** | P | | **Pn** | **01 36 35.8** | **-0.9** |
| GVZ | | | | S | | **Sb** | **01 36 44.4** | **+3.0** |
| **WAKC** | **Waikari** | **0.65** | **232** | P | | **Pn** | **01 36 38.4** | **-0.5** |
| WAKC | | | | S | | **Sn** | **01 36 48.5** | **-0.5** |
| **KEKS** | **Kekerengu Vall** | **0.75** | **36** | P | | **Pb** | **01 36 39.0** | **+0.1** |
| KEKS | | | | S | | **Sn** | **01 36 51.0** | **-0.4** |
| **AMBC** | **Amberley HDC** | **0.77** | **219** | P | | **Pn** | **01 36 40.0** | **-0.6** |
| AMBC | | | | S | | **Sn** | **01 36 52.1** | **+0.2** |
| **AMCZ** | **Amberley** | **0.82** | **222** | P | | **Pn** | **01 36 41.3** | **0.0** |
| AMCZ | | | | S | | **Sn** | **01 36 53.7** | **+0.5** |
| **LTZ** | **Lake Taylor** | **0.86** | **255** | P | | **Pb** | **01 36 41.0** | **+0.2** |
| LTZ | | | | S | | **Sb** | **01 36 53.0** | **+0.8** |
| **THZ** | **Tophouse** | **0.88** | **335** | P | | **Pg** | **01 36 40.0** | **-1.3** |
| THZ | | | | S | | **Sg** | **01 36 50.9** | **-1.9** |
| **WDFS** | **Ward Fire Stat** | **0.92** | **37** | P | | **Pn** | **01 36 42.2** | **-0.5** |
| WDFS | | | | S | | **Sn** | **01 36 56.3** | **+0.7** |
| **BSWZ** | **Blackbirch Sta** | **0.92** | **23** | P | | **Pg** | **01 36 41.5** | **-0.5** |
| BSWZ | | | | S | | **Sg** | **01 36 53.9** | **-0.1** |
| **ASHY** | **Ashley** | **0.92** | **219** | P | | **Pg** | **01 36 41.2** | **-0.8** |
| **SJFS** | **Springs Juncti** | **0.93** | **284** | P | | **Pg** | **01 36 42.0** | **-0.2** |
| SJFS | | | | S | | **Sg** | **01 36 53.2** | **-1.2** |
| **OKCZ** | **Okains Bay** | **1.19** | **192** | P | | **Pn** | **01 36 46.7** | **+0.3** |
| **TUWZ** | **Tuamarina** | **1.20** | **20** | P | | **Pn** | **01 36 46.6** | **0.0** |
| TUWZ | | | | S | | **Sg** | **01 37 03.0** | **-0.1** |
| **OXZ** | **Oxford** | **1.25** | **232** | P | | **Pn** | **01 36 46.8** | **-0.5** |
| OXZ | | | | S | | **Sb** | **01 37 03.9** | **+0.3** |
| **MRNZ** | **Matariki Terra** | **1.26** | **338** | P | | **Pn** | **01 36 47.0** | **-0.3** |
| MRNZ | | | | S | | **Sb** | **01 37 04.7** | **+1.0** |
| **MQZ** | **McQueen's Vall** | **1.27** | **205** | P | | **Pn** | **01 36 46.6** | **-0.8** |
| MQZ | | | | S | | **Sb** | **01 37 03.4** | **-0.5** |
| **NNZ** | **Nelson** | **1.34** | **359** | P | | **Pn** | **01 36 48.5** | **0.0** |
| NNZ | | | | S | | **Sb** | **01 37 06.0** | **-0.2** |
| **AKCZ** | **Akaroa Harbour** | **1.36** | **195** | P | | **Pn** | **01 36 48.4** | **-0.3** |
| AKCZ | | | | S | | **Sn** | **01 37 06.3** | **-0.1** |
| **DSZ** | **Denniston Nort** | **1.44** | **304** | P | | **Pn** | **01 36 49.8** | **-0.1** |
| DSZ | | | | S | | **Sn** | **01 37 08.9** | **+0.3** |
| **INZ** | **Inchbonnie** | **1.45** | **263** | P | | **Pn** | **01 36 49.8** | **-0.1** |
| INZ | | | | S | | **Sn** | **01 37 09.4** | **+0.7** |
| **RACZ** | **Rakaia** | **1.48** | **218** | P | | **Pn** | **01 36 49.8** | **-0.6** |
| RACZ | | | | S | | **Sn** | **01 37 09.8** | **+0.3** |
| **TCW** | **Tory Channel** | **1.50** | **26** | P | | **Pn** | **01 36 50.0** | **-0.7** |
| TCW | | | | S | | **Sn** | **01 37 09.7** | **-0.3** |
| **TKNZ** | **Takaka Hill** | **1.56** | **348** | P | | **Pn** | **01 36 52.1** | **+0.6** |
| TKNZ | | | | S | | **Sn** | **01 37 12.8** | **+1.2** |
| **SNZO** | **South Karori** | **1.59** | **38** | P | | **Pn** | **01 36 51.3** | **-0.5** |
| **BHW** | **Baring Head** | **1.59** | **44** | P | | **Pn** | **01 36 50.8** | **-1.1** |
| BHW | | | | S | | **Sn** | **01 37 10.7** | **-1.6** |
| **MHCZ** | **Mount Hutt** | **1.65** | **234** | P | | **Pn** | **01 36 52.2** | **-0.7** |
| MHCZ | | | | S | | **Sn** | **01 37 12.8** | **-1.1** |
| **PLWZ** | **Palliser** | **1.70** | **55** | P | | **Pn** | **01 36 52.0** | **-1.5** |
| **WACZ** | **Wakanui South** | **1.79** | **219** | P | | **Pn** | **01 36 54.1** | **-0.5** |
| WACZ | | | | S | | **Sn** | **01 37 16.8** | **-0.2** |
| **MSWZ** | **Moikau Station** | **1.80** | **51** | P | | **Pn** | **01 36 53.3** | **-1.4** |
| **DUWZ** | **D'Urville Isla** | **1.80** | **13** | P | | **Pn** | **01 36 55.2** | **+0.3** |
| **QRZ** | **Quartz Range** | **1.85** | **339** | P | | **Pn** | **01 36 56.4** | **+0.8** |
| **QRZ** | **Quartz Range** | **1.85** | **339** | P | | **Pn** | **01 36 56.3** | **+0.8** |
| **CAW** | **Cannon Point** | **1.92** | **41** | P | | **Pn** | **01 36 55.3** | **-1.1** |
| **PAWZ** | **Paruwai Farm** | **1.92** | **53** | P | | **Pn** | **01 36 54.8** | **-1.7** |
| **WVZ** | **Waitaha Valley** | **2.02** | **254** | P | | **Pn** | **01 36 58.2** | **+0.4** |
| **KIW** | **Kapiti Island** | **2.04** | **34** | P | | **Pn** | **01 36 57.5** | **-0.6** |
| **RPZ** | **Rata Peaks** | **2.06** | **235** | P | | **Pn** | **01 36 57.9** | **-0.6** |
| **RPZ** | **Rata Peaks** | **2.06** | **235** | P | | **Pn** | **01 36 57.9** | **-0.6** |
| **TRWZ** | **Traveller** | **2.07** | **56** | P | | **Pn** | **01 36 57.9** | **-0.6** |
| **ARCZ** | **Arundel** | **2.13** | **229** | P | | **Pn** | **01 36 58.5** | **-0.8** |
| **OGWZ** | **Otaki Gorge** | **2.19** | **38** | P | | **Pn** | **01 36 59.1** | **-1.1** |
| **HOWZ** | **Holdsworth Sta** | **2.30** | **44** | P | | **Pn** | **01 37 00.6** | **-1.0** |
| **TMWZ** | **Te Maipa** | **2.37** | **53** | P | | **Pn** | **01 37 04.2** | **+1.6** |
| **GCSZ** | **Gaunt Creek Bo** | **2.38** | **251** | P | | **Pn** | **01 37 03.4** | **+0.7** |
| **MRZ** | **Mangatainoka R** | **2.51** | **41** | P | | **Pn** | **01 37 03.1** | **-1.4** |
| **TMZ** | **Timaru** | **2.52** | **223** | P | | **Pn** | **01 37 04.0** | **-0.6** |
| **FOZ** | **Fox Glacier** | **2.80** | **249** | P | | **Pn** | **01 37 09.4** | **+0.9** |
| **BFZ** | **Birch Farm** | **2.85** | **50** | P | | **Pn** | **01 37 09.9** | **+0.7** |
| **BFZ** | **Birch Farm** | **2.85** | **50** | P | | **Pn** | **01 37 07.7** | **-1.4** |
| **LBZ** | **Lake Benmore** | **2.96** | **231** | P | | **Pn** | **01 37 10.6** | **-0.2** |
| **ODZ** | **Otahua Downs** | **3.18** | **218** | P | | **Pn** | **01 37 12.8** | **-0.9** |
| **ODZ** | **Otahua Downs** | **3.18** | **218** | P | | **Pn** | **01 37 12.9** | **-0.9** |
| **PKE** | **Pukeiti** | **3.40** | **8** | P | | **Pn** | **01 37 18.3** | **+1.6** |
| **WNAZ** | **Wahianoa** | **3.64** | **28** | P | | **Pn** | **01 37 20.4** | **+0.1** |
| **JCZ** | **Jackson Bay** | **3.69** | **244** | P | | **Pn** | **01 37 21.3** | **+0.5** |
| **OTVZ** | **Oturere** | **3.81** | **28** | P | | **Pn** | **01 37 22.3** | **-0.2** |
| **HIZ** | **Hauiti** | **4.20** | **16** | P | | **Pn** | **01 37 28.9** | **+1.2** |
| **HIZ** | **Hauiti** | **4.20** | **16** | P | | **Pn** | **01 37 28.7** | **+1.0** |
| **TUZ** | **Tuapeka** | **4.34** | **217** | P | | **Pn** | **01 37 29.0** | **-0.6** |
| **MLZ** | **Mavora Lakes** | **4.73** | **232** | P | | **Pn** | **01 37 33.9** | **-1.2** |
| **SYZ** | **Scrubby Hill** | **5.00** | **216** | P | | **Pn** | **01 37 38.8** | **0.0** |
| **SYZ** | **Scrubby Hill** | **5.00** | **216** | P | | **Pn** | **01 37 38.6** | **-0.2** |
| **AWAZ** | **Awhitu Peninsu** | **5.58** | **10** | P | | **Pn** | **01 37 47.4** | **+0.8** |

**RSNC 14 01:40:28.0±0.0, 5.7N±1.1°×7.4W±1.1°, h143km±2km, M3.2, mb4.0, ML3.2, Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SPBC** | **San Pablo de B** | **0.52** | **319** | P | | Pn | 01 40 47.8 | -1.0 |
| SPBC | | | | S | | Sn | 01 41 03.8 | -0.7 |
| **CHIC** | **Chingaza** | **0.63** | **180** | P | | Pn | 01 40 48.8 | -1.0 |
| CHIC | | | | S | | Sn | 01 41 05.4 | -0.9 |
| **ROSC** | **El Rosal** | **0.72** | **235** | P | | Pn | 01 40 50.6 | +0.2 |
| ROSC | | | | S | | Sn | 01 41 07.8 | +0.5 |
| **RUSC** | **La Rusia** | **0.90** | **46** | P | | Pn | 01 40 51.1 | -0.7 |
| RUSC | | | | S | | Sn | 01 41 09.2 | -0.7 |
| **VILC** | **Villavicencio,** | **1.14** | **178** | P | | Pn | 01 40 52.1 | -1.5 |
| VILC | | | | S | | Sn | 01 41 12.4 | -0.7 |
| **NORC** | **Norcasia** | **1.17** | **285** | P | | Pn | 01 40 52.4 | -1.4 |
| NORC | | | | S | | Sn | 01 41 12.2 | -1.2 |
| **BARC** | **Barichara** | **1.43** | **22** | P | | Pn | 01 40 55.0 | -1.6 |
| BARC | | | | S | | Sn | 01 41 17.3 | -1.1 |
| **PTBC** | **PUERTO BERRIO,** | **1.46** | **330** | P | | Pn | 01 40 54.4 | -2.3 |
| PTBC | | | | S | | Sn | 01 41 17.1 | -1.5 |
| **RECRC** | **Villamaria, Ca** | **1.64** | **260** | P | | Pn | 01 40 58.3 | -0.9 |
| RECRC | | | | S | | Sn | 01 41 22.9 | 0.0 |
| **BRJC** | **Barrancabermej** | **1.70** | **360** | P | | Pn | 01 40 59.0 | -0.3 |
| BRJC | | | | S | | Sn | 01 41 22.6 | -0.7 |
| **NIZA** | **Niza - Manizal** | **1.75** | **263** | P | | Pn | 01 41 00.6 | +0.5 |
| NIZA | | | | S | | Sn | 01 41 25.6 | +1.1 |
| **ANIL** | **Santa Ana** | **1.83** | **245** | P | | Pn | 01 41 00.3 | -0.8 |
| ANIL | | | | S | | Sn | 01 41 25.1 | -1.3 |
| **PTGC** | **Puerto Gaitan,** | **1.91** | **123** | P | | Pn | 01 41 00.0 | -1.7 |
| PTGC | | | | S | | Sn | 01 41 25.3 | -2.1 |
| **PRAC** | **Prado** | **1.92** | **217** | P | | Pn | 01 41 00.5 | -1.3 |
| PRAC | | | | S | | Sn | 01 41 26.4 | -1.4 |
| **ORTC** | **Ortega, Tolima** | **2.02** | **228** | P | | Pn | 01 41 01.3 | -1.7 |
| ORTC | | | | S | | Sn | 01 41 28.3 | -1.6 |
| **URMC** | **La Uribe, Meta** | **2.10** | **198** | P | | Pn | 01 41 02.6 | -1.4 |
| URMC | | | | S | | Sn | 01 41 31.3 | -0.4 |
| **TAMC** | **Tame, Arauca** | **2.25** | **59** | P | | Pn | 01 41 05.2 | -0.6 |
| TAMC | | | | S | | Sn | 01 41 33.4 | -1.5 |
| **PAMC** | **Pamplona, Colo** | **2.31** | **26** | P | | Pn | 01 41 06.1 | -0.8 |
| PAMC | | | | S | | Sn | 01 41 36.7 | 0.0 |
| **CBOC** | **Ciudad Bolivar** | **2.35** | **285** | P | | Pn | 01 41 05.6 | -1.5 |
| CBOC | | | | S | | Sn | 01 41 36.5 | -0.6 |
| **ZARC** | **Zaragoza, Cauc** | **2.48** | **333** | P | | Pn | 01 41 05.3 | -3.3 |
| ZARC | | | | S | | Sn | 01 41 36.9 | -3.0 |
| **PLMC** | **San Jos del P** | **2.57** | **262** | P | | Pn | 01 41 09.2 | -0.5 |
| PLMC | | | | S | | Sn | 01 41 43.9 | +2.1 |
| **YOTC** | **Yotoco, Valle** | **2.90** | **244** | P | | Pn | 01 41 13.5 | -0.4 |
| YOTC | | | | S | | Sn | 01 41 50.0 | +0.6 |
| **GUVC** | **San Jose del G** | **2.91** | **158** | P | | Pn | 01 41 11.9 | -2.1 |
| GUVC | | | | S | | Sn | 01 41 46.9 | -2.7 |
| **OCAC** | **Ocana** | **2.99** | **8** | P | | Pn | 01 41 13.3 | -1.8 |
| OCAC | | | | S | | Sn | 01 41 50.1 | -1.4 |
| **DBBC** | **Dabeiba** | **3.02** | **305** | P | | Pn | 01 41 13.9 | -1.6 |
| DBBC | | | | S | | Sn | 01 41 50.5 | -1.6 |
| **UREC** | **San Jos de Ur** | **3.06** | **324** | P | | Pn | 01 41 12.1 | -3.7 |
| UREC | | | | S | | Sn | 01 41 48.1 | -4.7 |
| **GARC** | **Garzon, Huila** | **3.52** | **210** | P | | Pn | 01 41 19.9 | -2.2 |
| GARC | | | | S | | Sn | 01 41 59.9 | -4.1 |
| **JAMC** | **Jamundi, Valle** | **3.57** | **235** | P | | Pn | 01 41 22.0 | -0.7 

comp=Z,0.9nm,0.3s
KURK **Kurchatov** 72.48 329 P P 01 53 28.4 -0.4
BVAR **Borovoye Array** 78.02 328 P P 01 54 00.9 +0.4
comp=Z,0.9nm,0.6s,baz=134,slow=4.2,SNR=5.4
comp=Z,0.9nm,0.6s
LVA **Lava Point** 81.27 32 P P 01 54 17.9 -0.2
ABKAR **Akbulak array** 82.41 322 P P 01 54 23.7 -0.4
ABKAR **Akbulak array** 82.41 322 P P 01 54 23.6 -0.5
ABKAR IAmb IAmb 01 54 26.4
comp=Z,1.4nm,0.9s
ILAR **Eielson Array** 93.69 25 P P 01 55 18.3 +0.3
comp=Z,0.5nm,0.7s,baz=252,slow=4.8,SNR=4.5
comp=Z,0.5nm,0.7s
TORD **Torodi Ar. Bea** 128.46 281 PKP PKPdf 02 01 08.8 0.0
comp=Z,0.3nm,0.6s,baz=112,slow=3.9,SNR=4.5

*NEIC* ***14*** *01:43:51.4±1.7,21.1S±0.1×177.6W±0.1,h410km±8km, mb4.5/16, Error ellipse: s-maj=21.2km s-min=8.7km az=137.0*
*IDC* ***14*** *01:43:52.2±1.8,21.12S×177.86W,h422km±20km,mb3.3/6, mbtmp4.2/9, Error ellipse: s-maj=26.8km s-min=21.9km az=56.0*

**ISC 14 01:43:50.5±0.6,21.1S±0.1×177.69W±0.09,h400km,n38, σ1§14/34,mb4.2/14,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | 5.21 | 309 | | Pn | 01 45 16.5 | +1.7 |
| MSVF | **Nonsavu** | 5.21 | 309 | P | Pn | 01 45 16.8 | +2.0 |
| | 8.5nm,0.2s,baz=93,slow=23,SNR=23 | | | | | | |
| NIUE | **Niue** | 7.56 | 76 | | Pn | 01 45 40.5 | 0.0 |
| RAR | **Rarotonga** | 16.72 | 94 | P | P | 01 47 21.8 | +0.3 |
| RAR | **Rarotonga** | 16.72 | 94 | P | P | 01 47 23.1 | +1.6 |
| | 14nm,0.7s,baz=315,slow=13,SNR=3.2 | | | | | | |
| URZ | **Urewera** | 17.72 | 194 | P | P | 01 47 31.8 | -0.1 |
| | 9.7nm,0.4s,baz=328,slow=4.3,SNR=12 | | | | | | |
| BHW | **Baring Head** | 21.24 | 196 | P | P | 01 48 06.6 | +0.5 |
| BHW | | | | IAmb | IAmb | 01 48 16.9 | |
| | comp=Z,24nm,1.1s | | | | | | |
| KHZ | **Kahutara** | 22.54 | 197 | P | P | 01 48 19.1 | +1.3 |
| KHZ | | | | IAmb | IAmb | 01 48 31.1 | |
| | comp=Z,31nm,1.2s | | | | | | |
| GVZ | **Greta Valley S** | 23.19 | 197 | P | P | 01 48 24.4 | +0.7 |
| LTZ | **Lake Taylor** | 23.24 | 199 | P | P | 01 48 24.1 | -0.1 |
| ARMA | **Armidale** | 29.09 | 245 | P | P | 01 49 17.4 | +1.0 |
| ARMA | | | | IAmb | IAmb | 01 49 21.8 | |
| | comp=Z,17nm,1.3s | | | | | | |
| STKA | **Stephens Creek** | 37.81 | 245 | P | P | 01 50 30.6 | -0.1 |
| PSA00 | **Pilbara Seismi** | 57.83 | 257 | P | P | 01 53 02.5 | +0.2 |
| PSA00 | | | | IAmb | IAmb | 01 53 14.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| MBWA | **Marble Bar** | 58.02 | 258 | P | P | 01 53 01.8 | -1.7 |
| MBWA | | | | IAmb | IAmb | 01 53 13.7 | |
| | comp=Z,30nm,1.4s | | | | | | |
| MJAR | **Matsushiro Arr** | 70.83 | 324 | P | P | 01 54 23.6 | -1.5 |
| | comp=Z,0.9nm,0.5s,baz=170,slow=6.5,SNR=6.0 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| ADK | **Adak** | 72.63 | 1 | P | P | 01 54 34.9 | -0.5 |
| JKA | **Kamikawa-asahi** | 74.35 | 331 | P | P | 01 54 46.5 | +1.1 |
| JKA | | | | IAmb | IAmb | 01 54 49.5 | |
| | comp=Z,14nm,1.2s | | | | | | |
| ASAJ | **Asahikawa** | 74.35 | 331 | P | P | 01 54 44.8 | -0.7 |
| | comp=Z,6.7nm,1.0s,baz=236,slow=2.7,SNR=4.9 | | | | | | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| USRK | **Ussuriysk Ar.** | 79.59 | 326 | P | P | 01 55 15.4 | +1.1 |
| | comp=Z,1.1nm,0.6s,baz=94,slow=2.1,SNR=6.9 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| DBO | **Dodson Butte** | 81.12 | 37 | P | P | 01 55 21.2 | -1.3 |
| DBO | | | | IAmb | IAmb | 01 55 38.9 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| NVAR | **Mina Array Bea** | 81.23 | 43 | P | P | 01 55 24.9 | +1.5 |
| | comp=Z,0.5nm,0.7s,baz=240,slow=5.0,SNR=4.0 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| J05D | **Fort Rock, OR** | 82.36 | 38 | P | P | 01 55 29.8 | +0.8 |
| M17K | **Holitna River** | 83.77 | 10 | P | P | 01 55 36.1 | +0.6 |
| K17K | **Iditarod** | 84.89 | 9 | P | P | 01 55 40.6 | -0.5 |
| K17K | | | | IAmb | IAmb | 01 55 41.5 | |
| | comp=Z,19nm,1.2s | | | | | | |
| W18A | **Petrified Fore** | 85.25 | 50 | P | P | 01 55 42.3 | -1.4 |
| TXAR | **Lajitas Array** | 87.11 | 57 | P | P | 01 55 54.4 | +1.7 |
| | comp=Z,0.4nm,0.8s,baz=224,slow=5.2,SNR=4.5 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| PDAR | **Pinedale Array** | 89.17 | 43 | P | P | 01 56 01.6 | -0.5 |
| PDAR | **Pinedale Array** | 89.17 | 43 | P | P | 01 56 01.8 | -0.4 |
| | comp=Z,0.6nm,0.8s,baz=212,slow=4.7,SNR=4.9 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| K29M | **Barlow Dome** | 90.22 | 17 | P | P | 01 56 06.5 | 0.0 |
| BVAR | **Borovoye Array** | 119.69 | 320 | PKP | PKPdf | 02 01 51.3 | -2.1 |
| | comp=Z,0.2nm,0.3s,baz=183,slow=2.5,SNR=3.7 | | | | | | |
| ARCES | **ARCESS Array B** | 129.52 | 350 | PKP | PKPdf | 02 02 10.8 | -1.0 |
| | comp=Z,1.2nm,0.7s,baz=11,slow=1.2,SNR=4.4 | | | | | | |
| HFS | **Hagfors** | 140.13 | 351 | PKhKP | PKPpre | 02 02 23.0 | |
| | comp=Z,0.9nm,0.4s,baz=94,slow=4.5,SNR=9.3 | | | | | | |
| AKASG | **Malin Array Be** | 143.64 | 331 | PKhKP | PKPpre | 02 02 34.1 | |
| | comp=Z,3.7nm,0.5s,baz=43,slow=4.3,SNR=11 | | | | | | |
| AKBB | **Malin Array Si** | 143.64 | 331 | | PKPab | 02 02 34.8 | -1.6 |
| KIEV | **Kiev** | 143.65 | 331 | | PKPab | 02 02 35.0 | -1.5 |
| EKA | **Eskdalemuir Ar** | 145.53 | 6 | PKPbc | PKPdf | 02 02 40.6 | -0.8 |
| | comp=Z,0.3nm,0.4s,baz=340,slow=2.9,SNR=4.9 | | | | | | |
| MMAI | **Mount Meron Ar** | 148.34 | 299 | PKPbc | PKPbc | 02 02 50.6 | -0.3 |
| | comp=Z,1.2nm,0.5s,baz=65,slow=6.5,SNR=5.7 | | | | | | |
| GERES | **GERESS Array B** | 150.81 | 344 | PKPbc | PKPbc | 02 02 54.8 | -1.6 |
| | comp=Z,0.9nm,0.7s,baz=17,slow=1.0,SNR=3.3 | | | | | | |

**NAM 14 02:17:15.6±4.4,19.74S×14.46E,h21km±13km,ML0.5,10C, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ST3N | **ST3** | 0.03 | 98⇑ | *i* P | Pb | 02 17 21.1 | +1.6 |
| ST3N | | | | *i* S | Sb | 02 17 22.4 | +0.3 |
| ST3N | | | | IAML | | 02 17 22.8 | |
| | comp=Z,3.8nm,0.0s | | | | | | |
| ST3N | **ST3** | 0.03 | 98 | *i* P | Pb | 02 17 21.1 | +1.6 |
| ST3N | | | | *i* S | Sb | 02 17 22.4 | +0.3 |
| ST3N | | | | IAML | | 02 17 22.6 | |
| | comp=Z,7.8nm,0.1s | | | | | | |
| ST6N | **ST6** | 0.09 | 223⇑ | *i* P | Pb | 02 17 22.1 | +2.2 |
| ST6N | | | | *i* S | Sb | 02 17 24.6 | +2.0 |
| ST6N | | | | IAML | | 02 17 25.0 | |
| | comp=Z,4.0nm,0.1s | | | | | | |
| ST6N | **ST6** | 0.09 | 223 | *i* P | Pb | 02 17 22.3 | +2.5 |
| ST6N | | | | *i* S | Sb | 02 17 24.5 | +1.8 |
| ST6N | | | | IAML | | 02 17 24.8 | |
| | comp=Z,4.7nm,0.1s | | | | | | |
| ST9N | **ST9** | 0.10 | 128⇑ | *i* P | Pb | 02 17 20.0 | +0.1 |
| ST9N | | | | *i* S | Sb | 02 17 20.6 | -2.2 |
| ST9N | | | | IAML | | 02 17 20.9 | |
| | comp=Z,188nm,0.0s | | | | | | |
| ST9N | **ST9** | 0.10 | 128 | *i* P | Pb | 02 17 20.0 | +0.1 |
| ST9N | | | | *i* S | Sb | 02 17 20.6 | -2.2 |
| ST9N | | | | IAML | | 02 17 21.2 | |
| | comp=Z,138nm,0.1s | | | | | | |
| ST1N | **ST1** | 0.14 | 90 | *i* S | Sb | 02 17 22.1 | -4.1 |
| ST1N | | | | *i* S | | 02 17 22.2 | |
| ST1N | **ST1** | 0.14 | 90 | *i* P | Pb | 02 17 20.9 | -0.9 |
| ST1N | | | | *i* S | Sb | 02 17 22.2 | -4.1 |
| ST1N | | | | IAML | | 02 17 22.3 | |
| | comp=N,29nm,0.1s | | | | | | |
| ST8N | **ST8** | 0.14 | 289⇑ | *i* P | Pb | 02 17 24.3 | +2.5 |
| ST8N | | | | *i* S | Sb | 02 17 27.8 | +1.6 |
| ST8N | | | | IAML | | 02 17 29.2 | |
| | comp=Z,0.9nm,0.1s | | | | | | |
| ST2N | **ST2** | 0.23 | 146⇑ | *i* P | Pb | 02 17 21.6 | -0.2 |
| ST2N | | | | *i* S | Sb | 02 17 23.2 | -2.8 |
| ST2N | | | | IAML | | 02 17 23.4 | |
| | comp=Z,13nm,0.0s | | | | | | |
| ST2N | **ST2** | 0.23 | 146 | *i* P | Pb | 02 17 21.6 | -0.1 |
| ST2N | | | | *i* S | Sb | 02 17 23.2 | -2.8 |
| ST2N | | | | IAML | | 02 17 23.7 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| ST10N | **ST10** | 0.27 | 195⇑ | *i* P | Pn | 02 17 23.9 | -0.5 |
| ST10N | | | | *i* S | Sb | 02 17 27.3 | +0.8 |
| ST10N | | | | IAML | | 02 17 27.4 | |
| | comp=Z,3.9nm,0.1s | | | | | | |
| ST10N | **ST10** | 0.27 | 195 | *i* P | Pn | 02 17 23.9 | -0.5 |
| ST10N | | | | *i* S | Sb | 02 17 27.4 | +0.9 |
| ST10N | | | | IAML | | 02 17 28.2 | |
| | comp=Z,11nm,0.5s | | | | | | |
| ST5N | **ST5** | 0.28 | 101⇑ | *i* P | Pb | 02 17 22.5 | +0.2 |
| ST5N | | | | ⇑*i* P | Pn | 02 17 22.8 | -1.8 |
| ST5N | | | | IAML | | 02 17 25.5 | |
| | comp=N,28nm,0.1s | | | | | | |
| ST5N | **ST5** | 0.28 | 101 | *i* P | Pb | 02 17 22.7 | +0.5 |
| ST5N | | | | *i* S | Sb | 02 17 25.3 | -1.5 |
| ST5N | | | | IAML | | 02 17 25.6 | |
| | comp=Z,4.4nm,0.1s | | | | | | |
| ST11N | **ST11** | 0.37 | 77⇑ | *i* P | Pn | 02 17 24.9 | -0.9 |
| ST11N | | | | *i* S | Sb | 02 17 30.4 | +1.6 |
| ST11N | | | | IAML | | 02 17 32.2 | |
| | comp=Z,0.8nm,0.0s | | | | | | |
| ST11N | **ST11** | 0.37 | 77 | *i* P | Pn | 02 17 25.3 | -0.5 |
| ST11N | | | | *i* S | Sb | 02 17 29.8 | +1.0 |
| ST11N | | | | IAML | | 02 17 32.0 | |
| | comp=Z,0.7nm,2.7s | | | | | | |
| ST4N | **ST4** | 0.51 | 108⇑ | *i* P | Pb | 02 17 26.7 | +0.8 |
| ST4N | | | | *i* S | Sb | 02 17 31.7 | -1.1 |
| ST4N | | | | IAML | | 02 17 33.5 | |
| | comp=Z,1.0nm,0.1s | | | | | | |
| ST4N | **ST4** | 0.51 | 108 | *i* P | Pb | 02 17 26.7 | +0.8 |
| ST4N | | | | *i* S | Sb | 02 17 32.0 | -0.8 |
| ST4N | | | | IAML | | 02 17 32.2 | |
| | comp=Z,2.4nm,0.1s | | | | | | |

*AEIC* ***14*** *02:18:49.0±1.6,69.47N±0.04×144.34W±0.07,h7km±6km, ML3.1,ML3.2/108(NEIC), Error ellipse: s-maj=5.8km s-min=3.0km az=201.0*
*IDC* ***14*** *02:18:49.3±1.8,69.68N×144.19W,h0km,mb3.5/3, mbtmp3.3/5,ML3.1/2, Error ellipse: s-maj=31.3km s-min=24.1km az=100.0*
*NEIC* ***14*** *02:18:49.9±1.3,69.51N±0.06×144.34W±0.07,h1km±7km, Error ellipse: s-maj=8.4km s-min=2.8km az=197.0*

**ISC 14 02:18:49.4±1.2,69.51N±0.03×144.33W±0.02,h2km±10km, n124,σ0§92/105,mb3.4/3,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| C27K | **Jago River** | 0.25 | 62 | | Pg | 02 18 54.3 | +0.2 |
| C27K | | | | | Sg | 02 18 57.7 | +0.5 |
| C27K | **Jago River** | 0.25 | 62 | IAML | | 02 18 57.9 | |
| | comp=N,3μm,0.5s | | | | | | |
| C26K | **Camden Bay** | 0.46 | 334 | | Pg | 02 18 58.6 | +0.5 |
| C26K | | | | | Sb | 02 19 06.2 | -1.2 |
| C26K | **Camden Bay** | 0.46 | 334 | IAML | | 02 19 08.6 | |
| | comp=N,2μm,0.4s | | | | | | |
| D25K | **Kavik River** | 0.75 | 256 | | Pg | 02 19 03.0 | -0.6 |
| D25K | | | | | Sg | 02 19 13.2 | -0.1 |
| D27M | **Malcolm River** | 1.22 | 101 | | Pg | 02 19 12.1 | -0.6 |
| D27M | | | | | Sb | 02 19 29.4 | 0.0 |
| D24K | **Happy Valley** | 1.64 | 259 | | Pb | 02 19 20.2 | 0.0 |
| D24K | | | | | Sg | 02 19 42.8 | +1.0 |
| E27K | **Coleen River** | 1.66 | 142 | | Pn | 02 19 19.9 | +0.4 |
| E27K | | | | | Sg | 02 19 42.9 | +0.3 |
| E27K | **Coleen River** | 1.66 | 142 | IAML | | 02 19 47.1 | |
| | comp=E,245nm,0.8s | | | | | | |
| F26K | **Sheenjek River** | 1.83 | 178 | | Pb | 02 19 22.8 | -0.7 |
| F26K | | | | | Sb | 02 19 47.1 | +0.3 |
| F26K | **Sheenjek River** | 1.83 | 178 | IAML | | 02 19 52.1 | |
| | comp=N,217nm,0.6s | | | | | | |
| E28M | **Babbage River** | 1.95 | 116 | | Pb | 02 19 25.1 | -0.4 |
| E28M | | | | | Sb | 02 19 50.7 | +0.4 |
| D28M | **Stokes Point** | 1.98 | 93 | | Sg | 02 19 52.3 | -0.7 |
| F25K | **Christian Rive** | 1.99 | 195 | | Pb | 02 19 25.2 | -1.0 |
| F25K | **Christian Rive** | 1.99 | 195 | IAML | | 02 19 56.2 | |
| | comp=N,183nm,0.8s | | | | | | |
| F25K | | | | IAML | | 02 20 00.3 | |
| | comp=E,172nm,0.4s | | | | | | |
| TOLK | **Toolik Lake Re** | 2.08 | 248 | | Pb | 02 19 27.3 | -0.4 |
| TOLK | **Toolik Lake Re** | 2.08 | 248 | IAML | | 02 20 01.0 | |
| | comp=N,183nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 02 20 02.9 | |
| | comp=E,185nm,0.6s | | | | | | |
| E24K | **Your Creek** | 2.09 | 228 | | Pb | 02 19 26.8 | -1.2 |
| E24K | **Your Creek** | 2.09 | 228 | IAML | | 02 19 58.9 | |
| | comp=N,129nm,0.7s | | | | | | |
| BMAR | **Burnt Mountain** | 2.09 | 183 | Pn | Pn | 02 19 25.2 | -0.2 |
| C23K | **Itkillik River** | 2.22 | 281 | Pn | Pn | 02 19 26.6 | -0.5 |
| C23K | | | | IAML | | 02 20 03.7 | |
| | comp=N,220nm,0.7s | | | | | | |
| C23K | | | | IAML | | 02 20 05.9 | |
| | comp=E,158nm,0.7s | | | | | | |
| D23K | **Nanushuk River** | 2.33 | 259 | | Pn | 02 19 29.9 | +1.3 |
| D23K | | | | IAML | | 02 20 13.9 | |
| | comp=E,97nm,0.7s | | | | | | |
| F24K | **Squaw Lake** | 2.39 | 215 | | Pn | 02 19 30.0 | +0.5 |
| E23K | **Chandalar** | 2.41 | 235 | | Pn | 02 19 31.2 | +1.3 |
| E23K | **Chandalar** | 2.41 | 235 | IAML | | 02 20 12.7 | |
| | comp=N,103nm,0.5s | | | | | | |
| E23K | | | | IAML | | 02 20 13.2 | |
| | comp=E,97nm,0.5s | | | | | | |
| F28M | **Old Crow** | 2.51 | 137 | | Pn | 02 19 32.0 | +0.8 |
| E29M | **Blow River** | 2.58 | 113 | | Pn | 02 19 33.7 | +1.6 |
| G26K | **Porcupine Rive** | 2.58 | 175 | | Pn | 02 19 33.2 | +1.1 |
| G25K | **Bearmouth Lake** | 2.84 | 194 | | Pn | 02 19 36.5 | +1.0 |
| G27K | **Doyon Strip** | 2.89 | 159 | | Pn | 02 19 37.0 | +0.6 |
| FYU | **Fort Yukon** | 2.98 | 187 | | Pn | 02 19 37.1 | -0.4 |
| FYU | | | | IAML | | 02 20 33.4 | |
| | comp=N,88nm,1.7s | | | | | | |
| D22K | **Ayikyak River** | 3.05 | 262 | | Pn | 02 19 39.5 | +0.9 |
| D22K | **Ayikyak River** | 3.05 | 262 | IAML | | 02 20 32.4 | |
| | comp=E,68nm,0.7s | | | | | | |
| D22K | | | | IAML | | 02 20 35.5 | |
| | comp=N,71nm,0.8s | | | | | | |
| E22K | **Anaktuvuk Pass** | 3.05 | 247 | | Pn | 02 19 38.5 | -0.1 |
| E22K | **Anaktuvuk Pass** | 3.05 | 247 | IAML | | 02 20 27.5 | |
| | comp=N,54nm,0.7s | | | | | | |
| G24K | **Hadweenzic Riv** | 3.06 | 204 | | Pn | 02 19 38.6 | -0.1 |
| G24K | **Hadweenzic Riv** | 3.06 | 204 | IAML | | 02 20 29.4 | |
| | comp=E,63nm,0.8s | | | | | | |
| G24K | | | | IAML | | 02 20 36.1 | |
| | comp=N,63nm,0.6s | | | | | | |
| COLD | **Coldfoot** | 3.16 | 226 | | Pn | 02 19 41.0 | +0.9 |
| B22K | **Teshekpuk Lake** | 3.24 | 289 | | Pn | 02 19 41.8 | +0.6 |
| B22K | **Teshekpuk Lake** | 3.24 | 289 | IAML | | 02 20 38.1 | |
| | comp=E,59nm,0.8s | | | | | | |
| B22K | | | | IAML | | 02 20 43.9 | |
| | comp=N,58nm,0.7s | | | | | | |
| H25L | **Birch Creek** | 3.31 | 191 | | Pn | 02 19 42.4 | +0.4 |
| H27K | **Steamboat Moun** | 3.46 | 161 | | Pn | 02 19 44.9 | +0.6 |
| G29M | **Pine Creek** | 3.51 | 135 | | Pn | 02 19 45.6 | +0.7 |
| G29M | **Pine Creek** | 3.51 | 135 | IAML | | 02 20 29.9 | |
| | comp=N,53nm,0.6s | | | | | | |
| F22K | **John River** | 3.52 | 239 | | Pn | 02 19 45.2 | +0.2 |
| G23K | **Bananza Creek** | 3.53 | 220 | Pn | Pn | 02 19 43.9 | -1.3 |
| G23K | | | | IAML | | 02 20 48.7 | |
| | comp=E,39nm,0.7s | | | | | | |
| B21K | **Ikpikpuk River** | 3.61 | 277 | | Pn | 02 19 46.6 | +0.4 |
| B21K | **Ikpikpuk River** | 3.61 | 277 | IAML | | 02 20 58.5 | |
| | comp=N,44nm,0.8s | | | | | | |
| E21K | **Killik River** | 3.64 | 257 | | Pn | 02 19 46.6 | 0.0 |
| E21K | **Killik River** | 3.64 | 257 | IAML | | 02 20 55.9 | |
| | comp=N,41nm,1.1s | | | | | | |
| E21K | | | | IAML | | 02 20 56.0 | |
| | comp=E,46nm,1.2s | | | | | | |
| H24K | **Noodor Dome** | 3.93 | 202 | | Pn | 02 19 50.7 | 0.0 |
| H29M | **Whitestone** | 4.00 | 143 | | Pn | 02 19 52.3 | +0.7 |
| H29M | **Whitestone** | 4.00 | 143 | IAML | | 02 20 40.7 | |
| | comp=E,48nm,0.6s | | | | | | |
| H29M | | | | IAML | | 02 20 45.8 | |
| | comp=N,25nm,0.7s | | | | | | |
| PRP | **Porcupine Dome** | 4.04 | 187 | Pn | Pn | 02 19 53.0 | +0.7 |
| PRP | | | | IAML | | 02 20 44.2 | |
| | comp=N,36nm,0.4s | | | | | | |
| I27K | **Kandik River** | 4.06 | 164 | | Pn | 02 19 53.4 | +0.9 |
| INK | **Inuvik** | 4.09 | 102 | Pn | Pn | 02 19 52.5 | -0.3 |
| | comp=N,0.7nm,0.3s,baz=324,slow=12,SNR=9.6 | | | | | | |
| INK | | | | Sn | Sn | 02 20 38.2 | -2.9 |
| | comp=N,0.9nm,0.3s,baz=103,slow=14,SNR=2.1 | | | | | | |
| | comp=N,1.6nm,0.4s | | | | | | |
| F21K | **Alatna River** | 4.09 | 240 | | Pn | 02 19 53.5 | +0.6 |
| F21K | **Alatna River** | 4.09 | 240 | IAML | | 02 20 58.0 | |
| | comp=N,27nm,0.7s | | | | | | |
| F21K | | | | IAML | | 02 21 09.7 | |
| | comp=E,32nm,0.7s | | | | | | |
| H23K | **Yukon River** | 4.20 | 211 | | Pn | 02 19 54.5 | +0.1 |
| H23K | **Yukon River** | 4.20 | 211 | IAML | | 02 21 10.4 | |
| | comp=E,21nm,0.8s | | | | | | |
| H23K | | | | IAML | | 02 21 14.4 | |
| | comp=N,27nm,1.0s | | | | | | |
| I26K | **Coal Creek Min** | 4.25 | 173 | | Pn | 02 19 55.6 | +0.6 |
| I26K | **Coal Creek Min** | 4.25 | 173 | IAML | | 02 21 05.7 | |
| | comp=E,25nm,0.8s | | | | | | |
| I26K | | | | IAML | | 02 21 14.1 | |
| | comp=N,37nm,0.7s | | | | | | |
| EPYK | **Eagle Plains** | 4.26 | 134 | | Pn | 02 19 56.1 | +0.8 |
| I28M | **Miner Creek** | 4.42 | 155 | | Pn | 02 19 58.4 | +1.0 |
| D20K | **Etivluk River** | 4.47 | 265 | | Pn | 02 19 59.1 | +1.0 |
| E20K | **Nigu River** | 4.47 | 259 | | Pn | 02 19 59.0 | +1.0 |
| B20K | **Meade River** | 4.49 | 282 | | Pn | 02 19 58.6 | +0.4 |
| B20K | **Meade River** | 4.49 | 282 | IAML | | 02 21 18.4 | |
| | comp=N,28nm,2.1s | | | | | | |
| B20K | | | | IAML | | 02 21 25.7 | |
| | comp=E,28nm,1.7s | | | | | | |
| A21K | **Barrow** | 4.51 | 299 | | Pn | 02 19 58.8 | +0.2 |
| H22K | **Ishtalitna Cre** | 4.52 | 220 | | Pn | 02 19 58.7 | 0.0 |
| G31M | **Satah River** | 4.56 | 120 | | Pn | 02 20 00.1 | +0.9 |
| G31M | **Satah River** | 4.56 | 120 | IAML | | 02 21 26.4 | |
| | comp=N,18nm,1.1s | | | | | | |
| G21K | **Allakaket** | 4.57 | 233 | | Pn | 02 19 59.4 | -0.1 |
| G21K | **Allakaket** | 4.57 | 233 | IAML | | 02 21 26.2 | |
| | comp=E,27nm,0.8s | | | | | | |
| G21K | | | | IAML | | 02 21 29.0 | |
| | comp=N,29nm,1.3s | | | | | | |
| POKR | **Poker Plat Res** | 4.57 | 197 | | Pn | 02 20 00.1 | +0.6 |
| POKR | **Poker Plat Res** | 4.57 | 197 | IAML | | 02 22 54.7 | |
| | comp=E,33nm,0.6s | | | | | | |
| I29M | **Ogilvie Camp,** | 4.77 | 148 | Pn | Pn | 02 20 00.1 | -2.1 |
| I29M | | | | IAML | | 02 21 00.4 | |
| | comp=N,24nm,0.4s | | | | | | |
| I29M | | | | IAML | | 02 21 02.9 | |
| | comp=E,26nm,0.6s | | | | | | |
| I23K | **Minto, Yukon-K** | 4.79 | 206 | | Pn | 02 20 02.6 | +0.1 |
| MDM | **Murphy Dome** | 4.82 | 200 | | Pn | 02 20 03.2 | +0.4 |
| IL31 | | 4.86 | 193 | | Pn | 02 19 59.8 | -3.6 |
| ILAR | **Eielson Array** | 4.86 | 193 | | Pn | 02 20 01.2 | -2.3 |
| ILAR | **Eielson Array** | 4.86 | 193 | Pn | Pn | 02 20 03.9 | +0.4 |
| | comp=E,0.9nm,0.3s,baz=3.5,slow=12,SNR=22 | | | | | | |
| ILAR | | | | Sn | Sn | 02 21 02.0 | +1.8 |
| | comp=E,1.6nm,0.3s,baz=9.0,slow=22,SNR=12 | | | | | | |
| | comp=E,1.4nm,0.4s | | | | | | |
| F20K | **Avaraart Lake** | 4.90 | 245 | | Pn | 02 20 05.2 | +1.3 |
| F20K | **Avaraart Lake** | 4.90 | 245 | IAML | | 02 21 37.8 | |
| | comp=N,15nm,0.8s | | | | | | |
| F20K | | | | IAML | | 02 21 38.4 | |
| | comp=E,13nm,0.8s | | | | | | |
| EGAK | **Eagle** | 4.91 | 164 | | Pn | 02 20 04.9 | +0.8 |
| EGAK | **Eagle** | 4.91 | 164 | IAML | | 02 21 03.2 | |
| | comp=E,23nm,0.3s | | | | | | |
| EGAK | | | | IAML | | 02 21 04.0 | |
| | comp=E,18nm,1.1s | | | | | | |
| J25K | **Salcha River,** | 4.94 | 185 | | Pn | 02 20 05.1 | +0.6 |
| J25K | **Salcha River,** | 4.94 | 185 | IAML | | 02 22 59.3 | |
| | comp=N,23nm,0.7s | | | | | | |
| J26L | **Joseph Creek** | 5.04 | 176 | | Pn | 02 20 06.9 | +0.9 |
| H21K | **Melozitna Rive** | 5.05 | 224 | | Pn | 02 20 06.7 | +0.7 |
| D19K | **Kuna River** | 5.06 | 265 | | Pn | 02 20 06.6 | +0.4 |
| D19K | **Kuna River** | 5.06 | 265 | IAML | | 02 21 07.2 | |
| | comp=E,13nm,1.4s | | | | | | |
| CCB | **Clear Creek Bu** | 5.07 | 197 | | Pn | 02 20 06.1 | -0.1 |
| MLY | **Manley** | 5.14 | 212 | Pn | Pn | 02 20 06.5 | -0.8 |
| E19K | **Redstone River** | 5.17 | 253 | | Pn | 02 20 07.7 | 0.0 |
| E19K | **Redstone River** | 5.17 | 253 | IAML | | 02 21 43.8 | |
| | comp=N,20nm,0.9s | | | | | | |
| E19K | | | | IAML | | 02 21 45.0 | |
| | comp=E,13nm,0.8s | | | | | | |
| HDA | **Harding Lake** | 5.23 | 193 | | Pn | 02 20 08.8 | +0.3 |
| WRH | **Wood River Hil** | 5.27 | 198 | | Pn | 02 20 09.7 | +0.7 |
| I30M | **Mount Dempster** | 5.29 | 141 | | Pn | 02 20 09.9 | +0.6 |
| I30M | **Mount Dempster** | 5.29 | 141 | IAML | | 02 21 10.8 | |
| | comp=N,13nm,0.4s | | | | | | |
| I30M | | | | IAML | | 02 21 10.8 | |
| | comp=E,19nm,0.4s | | | | | | |
| C19K | **Lookout Ridge** | 5.42 | 273 | | Pn | 02 20 11.5 | +0.3 |
| SCRK | **Sand Creek** | 5.56 | 178 | Pn | Pn | 02 20 14.1 | +1.0 |
| K27K | **Chicken** | 5.58 | 170 | | Pn | 02 20 14.2 | +0.9 |
| F19K | **Shaleruckit Mo** | 5.69 | 248 | Pn | Pn | 02 20 14.1 | -0.6 |
| DAWY | **Dawson** | 5.81 | 158 | | Pn | 02 20 16.4 | 0.0 |
| J30M | **Hart River** | 5.86 | 144 | | Pn | 02 20 17.9 | +0.7 |
| G19K | **Purcell Mounta** | 5.89 | 241 | | Pn | 02 20 17.7 | +0.2 |
| BPAW | **Bear Paw Mtn.** | 6.03 | 209 | | Pn | 02 20 19.7 | +0.2 |
| C18K | **Utukok River** | 6.10 | 270 | Pn | Pn | 02 20 20.0 | -0.4 |
| H19K | **Roundabout Mou** | 6.12 | 235 | | Pn | 02 20 21.1 | +0.4 |
| K29M | **Barlow Dome** | 6.30 | 151 | | Pn | 02 20 24.4 | +1.2 |
| E18K | **Tukpahlearik C** | 6.34 | 258 | | Pn | 02 20 24.2 | +0.5 |
| L26K | **Log Cabin Wild** | 6.53 | 176 | | Pn | 02 20 26.0 | -0.3 |
| G18K | **Tagagawik** | 6.54 | 243 | | Pn | 02 20 27.7 | +1.3 |
| BCAR | **Beaver Creek A** | 6.55 | 170 | | Pn | 02 20 27.6 | +1.0 |
| DHY | **Denali Highway** | 6.58 | 192 | | Pn | 02 20 29.0 | +1.9 |
| PAX | **Paxson** | 6.59 | 185 | | Pn | 02 20 26.5 | -0.7 |
| J20K | **Nowinta River** | 6.60 | 221 | | Pn | 02 20 27.7 | +0.4 |
| L29M | **L29M** | 6.89 | 156 | | Pn | 02 20 32.4 | +1.1 |
| H18K | **Honhosa River** | 6.96 | 238 | | Pn | 02 20 32.6 | +0.5 |
| G17K | **Kiwalik Mounta** | 7.43 | 245 | | Pn | 02 20 38.8 | +0.2 |
| PDAR | **Pinedale Array** | 32.20 | 128 | P | P | 02 25 18.9 | +0.3 |
| | comp=E,0.2nm,0.4s,baz=350,slow=4.6,SNR=2.4 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| TXAR | **Lajitas Array** | 46.42 | 128 | P | P | 02 27 18.3 | +1.1 |
| | comp=E,0.1nm,0.6s,baz=354,slow=7.3,SNR=4.0 | | | | | | |
| | comp=E,0.1nm,0.6s | | | | | | |
| FINES | **FINESS Array B** | 49.16 | 6 | P | P | 02 27 36.8 | -1.1 |
| | comp=E,3.2nm,1.2s,baz=357,slow=7.0,SNR=3.8 | | | | | | |
| | comp=E,3.2nm,1.2s | | | | | | |

**IDC 14 02:19:47.9±3.5,6.10S×141.39E,h0km,mb3.9/1, mbtmp4.0/3,ML3.7/2,MS2.9/5,Error ellipse: s-maj=135.6km s-min=25.6km az=101.0,New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PMG | **Port Moresby** | 6.59 | 120 | LR | LR | 02 25 19.1 | |
| | comp=Z,42nm,19.9s,baz=182,slow=50 | | | | | | |
| CTA | **Charters Tower** | 14.69 | 162 | LR | LR | 02 29 25.5 | |
| | comp=Z,6.4nm,18.0s,baz=294,slow=39 | | | | | | |
| WRA | **Warramunga Arr** | 15.37 | 206 | Pn | Pn | 02 23 24.3 | -2.0 |
| | 0.3nm,0.3s,baz=25,slow=13,SNR=13 | | | | | | |
| WRA | | | | Sn | Sn | 02 26 12.6 | -4.8 |
| | 0.1nm,0.3s,baz=34,slow=24,SNR=2.8 | | | | | | |
| WRA | | | | Lg | Lg | 02 27 57.9 | |
| | baz=26,slow=26,SNR=1.7 | | | | | | |
| WRA | | | | LR | LR | 02 30 20.7 | |
| | comp=Z,132nm,20.2s,baz=66,slow=41 | | | | | | |
| | 2.3nm,0.9s | | | | | | |
| ASAR | **Alice Springs** | 18.89 | 202 | P | P | 02 24 10.2 | +0.1 |
| | 0.4nm,0.3s,baz=32,slow=10,SNR=39 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BENV | | | | *eS* | | **Sn** | **02 22 55.8** | **-2.1** |
| **CACV** | **CAICARA DEL OR** | **5.58** | **233** | *eP* | | Pn | 02 21 50.8 | -4.2 |
| CACV | | | | *eS* | | Sn | 02 22 46.2 | -12 |
| **BAUV** | **El Baul** | **6.25** | **252** | *eP* | | **Pn** | **02 22 04.6** | **+0.4** |
| BAUV | | | | *eS* | | **Sn** | **02 23 11.3** | **-3.0** |

*IDC* **14** *02:22:09.2±1.5, 63°.07N×151°.36W, h107km±18km, mb3.3/5, mbtmp3.7/8, MS2.9/1, Error ellipse: s-maj=25.3km s-min=10.6km az=110.0*

*NEIC* **14** *02:22:12.1±0.8, 63°.11N±0°.04×150°.91W±0°.08, h125km±4km, Error ellipse: s-maj=5.8km s-min=5.0km az=130.0*

*AEIC* **14** *02:22:12.6±0.8, 63°.11N±0°.02×150°.89W±0°.08, h118km±5km, ML3.4, ML3.6/228(NEIC), Error ellipse: s-maj=5.4km s-min=3.3km az=90.0*

**ISC 14 02:22:12.1±0.8, 63°.09N±0°.03×150°.92W±0°.04, h127km±6km, n224, σ0.79/215, mb3.6/6, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CUT** | **Chulitna** | **0.75** | **156** | | | **Pn** | **02 22 32.9** | **+0.4** |
| CUT | | | | | | **Sn** | **02 22 47.7** | **-0.2** |
| **CUT** | **Chulitna** | **0.75** | **156** | IAML | | | 02 22 52.8 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **WAT7** | **Susitna Watana** | **0.98** | **104** | | | **Pn** | **02 22 34.3** | **-0.4** |
| WAT7 | | | | | | **Sn** | **02 22 50.7** | **-1.0** |
| **RND** | **Reindeer** | **0.99** | **70** | | | **Pn** | **02 22 34.4** | **-0.3** |
| RND | | | | IAML | | | 02 22 53.7 | |
| | comp=E,793nm,0.3s | | | | | | | |
| RND | | | | IAML | | | 02 22 53.8 | |
| | comp=N,1μm,0.5s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.02** | **358** | | | **Pn** | **02 22 34.4** | **-0.5** |
| BPAW | | | | IAML | | | 02 22 51.7 | |
| | comp=N,353nm,0.8s | | | | | | | |
| **MCK** | **McKinley** | **1.10** | **53** | | | **Pn** | **02 22 35.6** | **-0.2** |
| MCK | | | | | | **Sn** | **02 22 52.5** | **-1.2** |
| **WAT1** | **Susitna Watana** | **1.11** | **102** | | | **Pn** | **02 22 35.5** | **-0.4** |
| WAT1 | | | | | | **Sn** | **02 22 53.1** | **-0.8** |
| **SKT** | **Skwentna** | **1.15** | **195** | | | **Pn** | **02 22 36.1** | **-0.1** |
| SKT | | | | IAML | | | 02 22 56.2 | |
| | comp=E,1μm,0.3s | | | | | | | |
| SKT | | | | IAML | | | 02 22 57.3 | |
| | comp=N,987nm,0.4s | | | | | | | |
| **BWN** | **Browne** | **1.27** | **30** | | | **Pn** | **02 22 37.5** | **+0.1** |
| BWN | | | | IAML | | | 02 22 59.6 | |
| | comp=N,411nm,0.7s | | | | | | | |
| BWN | | | | IAML | | | 02 23 01.8 | |
| | comp=E,379nm,0.7s | | | | | | | |
| **M22K** | **Willow** | **1.39** | **164** | | | **Pn** | **02 22 38.9** | **+0.2** |
| **K20K** | **Telida** | **1.45** | **282** | | | **Pn** | **02 22 39.4** | **-0.1** |
| K20K | | | | | | **Sn** | **02 22 58.9** | **-1.4** |
| **K20K** | **Telida** | **1.45** | **282** | IAML | | | 02 22 59.9 | |
| | comp=E,441nm,0.8s | | | | | | | |
| K20K | | | | IAML | | | 02 22 60.0 | |
| | comp=N,292nm,0.7s | | | | | | | |
| **L20K** | **Farewell, AK** | **1.49** | **247** | | | **Pn** | **02 22 40.0** | **+0.1** |
| L20K | | | | | | **Sn** | **02 23 00.5** | **-0.6** |
| **WAT6** | **Susitna Watana** | **1.54** | **108** | | | **Pn** | **02 22 40.2** | **-0.4** |
| WAT6 | | | | | | **Sn** | **02 23 02.0** | **-0.4** |
| **M20K** | **Styx River** | **1.59** | **221** | | | **Pn** | **02 22 41.0** | **-0.1** |
| M20K | | | | | | **Sn** | **02 23 03.2** | **0.0** |
| **M20K** | **Styx River** | **1.59** | **221** | IAML | | | 02 23 03.8 | |
| | comp=E,317nm,0.7s | | | | | | | |
| M20K | | | | IAML | | | 02 23 04.5 | |
| | comp=N,323nm,0.5s | | | | | | | |
| **DHY** | **Denali Highway** | **1.61** | **89** | | | **Pn** | **02 22 41.1** | **-0.3** |
| DHY | | | | IAML | | | 02 23 04.7 | |
| | comp=E,957nm,0.6s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **1.61** | **144** | | | **Pn** | **02 22 41.8** | **+0.4** |
| **GHO** | **Glory Hole Cre** | **1.61** | **144** | | | **Sn** | **02 23 04.3** | **+0.7** |
| **SUA** | **Susitna One** | **1.63** | **177** | | | **Pn** | **02 22 42.1** | **+0.5** |
| SUA | | | | IAML | | | 02 23 07.3 | |
| | comp=N,460nm,0.5s | | | | | | | |
| SUA | | | | IAML | | | 02 23 08.0 | |
| | comp=E,469nm,1.0s | | | | | | | |
| **STLK** | **Strandline Lak** | **1.65** | **195** | | | **Pn** | **02 22 41.7** | **-0.1** |
| STLK | | | | | | **Sn** | **02 23 04.6** | **+0.2** |
| **PMR** | **Palmer** | **1.72** | **150** | | | **Pn** | **02 22 42.4** | **-0.1** |
| PMR | | | | IAML | | | 02 23 10.6 | |
| | comp=N,392nm,0.4s | | | | | | | |
| PMR | | | | IAML | | | 02 23 11.6 | |
| | comp=E,554nm,0.7s | | | | | | | |
| **NEA2** | **Nenana** | **1.72** | **28** | | | **Pn** | **02 22 41.8** | **-0.7** |
| NEA2 | | | | IAML | | | 02 23 06.5 | |
| | comp=E,206nm,0.4s | | | | | | | |
| **NEA2** | **Nenana** | **1.72** | **28** | | | **Sn** | **02 23 04.5** | **-1.3** |
| **SML** | **Sawmill** | **1.76** | **136** | | | **Pn** | **02 22 42.9** | **-0.2** |
| SML | | | | IAML | | | 02 23 11.5 | |
| | comp=N,701nm,0.6s | | | | | | | |
| SML | | | | IAML | | | 02 23 12.2 | |
| | comp=E,561nm,0.7s | | | | | | | |
| **J20K** | **Nowinta River** | **1.81** | **309** | | | **Pn** | **02 22 43.4** | **-0.2** |
| **J20K** | **Nowinta River** | **1.81** | **309** | IAML | | | 02 23 07.5 | |
| | comp=N,348nm,0.8s | | | | | | | |
| J20K | | | | IAML | | | 02 23 08.1 | |
| | comp=E,261nm,0.8s | | | | | | | |
| **WRH** | **Wood River Hil** | **1.87** | **41** | | | **Pn** | **02 22 43.9** | **-0.4** |
| WRH | | | | IAML | | | 02 23 09.1 | |
| | comp=N,179nm,1.2s | | | | | | | |
| WRH | | | | IAML | | | 02 23 15.0 | |
| | comp=E,85nm,0.8s | | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **1.87** | **197** | | | **Pn** | **02 22 44.6** | **+0.1** |
| **SPCP** | **Crater Peak Br** | **1.92** | **198** | | | **Pn** | **02 22 45.6** | **+0.5** |
| **MLY** | **Manley** | **1.95** | **2** | Pn | | **Pn** | **02 22 45.0** | **-0.3** |
| **SPBG** | **Spurr Blockage** | **1.96** | **201** | | | **Pn** | **02 22 45.9** | **+0.4** |
| **M23K** | **Glacier View** | **1.97** | **130** | | | **Pn** | **02 22 45.0** | **-0.6** |
| **FIS** | **Fire Island** | **1.98** | **170** | | | **Pn** | **02 22 46.2** | **+0.6** |
| **SPCR** | **Spurr Chakacha** | **1.99** | **198** | | | **Pn** | **02 22 46.3** | **+0.5** |
| **M19K** | **Big River Lodg** | **2.00** | **235** | | | **Pn** | **02 22 46.1** | **+0.1** |
| **L19K** | **White Mountain** | **2.03** | **245** | | | **Pn** | **02 22 46.2** | **-0.1** |
| **KNK** | **Knik Glacier** | **2.04** | **144** | | | **Pn** | **02 22 46.1** | **-0.3** |
| KNK | | | | IAML | | | 02 23 21.2 | |
| | comp=N,824nm,0.6s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.08** | **164** | Pn | | **Pn** | **02 22 46.7** | **-0.2** |
| **CCB** | **Clear Creek Bu** | **2.09** | **40** | | | **Pn** | **02 22 46.5** | **-0.4** |
| CCB | | | | IAML | | | 02 23 13.5 | |
| | comp=E,149nm,0.9s | | | | | | | |
| CCB | | | | IAML | | | 02 23 14.8 | |
| | comp=N,147nm,0.6s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **2.09** | **125** | | | **Pn** | **02 22 46.7** | **-0.4** |
| **I23K** | **Minto, Yukon-K** | **2.18** | **18** | | | **Pn** | **02 22 47.9** | **-0.2** |
| **HDA** | **Harding Lake** | **2.21** | **51** | | | **Pn** | **02 22 48.0** | **-0.5** |
| HDA | | | | IAML | | | 02 23 16.4 | |
| | comp=E,441nm,0.5s | | | | | | | |
| HDA | | | | IAML | | | 02 23 16.6 | |
| | comp=N,482nm,0.6s | | | | | | | |
| **MDM** | **Murphy Dome** | **2.22** | **31** | | | **Pn** | **02 22 48.3** | **-0.4** |
| MDM | | | | IAML | | | 02 23 16.6 | |
| | comp=N,74nm,1.5s | | | | | | | |
| MDM | | | | IAML | | | 02 23 42.7 | |
| | comp=E,41nm,0.8s | | | | | | | |
| **COLA** | **College** | **2.25** | **36** | | | **Pn** | **02 22 48.6** | **-0.3** |
| COLA | | | | IAML | | | 02 23 20.2 | |
| | comp=E,195nm,0.4s | | | | | | | |
| COLA | | | | IAML | | | 02 23 40.7 | |
| | comp=E,197nm,0.5s | | | | | | | |
| **J19K** | **Poorman** | **2.29** | **295** | | | **Pn** | **02 22 49.5** | **-0.1** |
| **J19K** | **Poorman** | **2.29** | **295** | IAML | | | 02 23 18.6 | |
| | comp=E,143nm,0.9s | | | | | | | |
| J19K | | | | IAML | | | 02 23 18.6 | |
| | comp=N,179nm,0.8s | | | | | | | |
| **I20K** | **Naaghedeneel** | **2.33** | **319** | | | **Pn** | **02 22 49.8** | **-0.1** |
| **CAPN** | **Captain Cook N** | **2.33** | **183** | Pn | | **Pn** | **02 22 52.1** | **+2.2** |
| **M24K** | **Tolsona, Glenn** | **2.40** | **112** | | | **Pn** | **02 22 51.2** | **+0.2** |
| **K24K** | **Donnelly Dome** | **2.42** | **70** | | | **Pn** | **02 22 51.8** | **+0.6** |
| **IL31** | | **2.46** | **45** | | | **Pn** | **02 22 51.0** | **-0.6** |
| **ILAR** | **Eielson Array** | **2.46** | **45** | Pn | | **Pn** | **02 22 50.9** | **-0.7** |
| **ILAR** | **Eielson Array** | **2.46** | **45** | P | | **Pn** | **02 22 50.6** | **-0.9** |
| | comp=N,52nm,0.4s,baz=226,slow=12,SNR=110 | | | | | | | |
| ILAR | | | | S | | **Sn** | **02 23 21.5** | **-0.4** |
| | comp=N,17nm,0.7s,baz=225,slow=22,SNR=10 | | | | | | | |
| **IL03** | **Eielson Array** | **2.47** | **45** | Pn | | **Pn** | **02 22 51.2** | **-0.5** |
| **PAX** | **Paxson** | **2.49** | **90** | | | **Pn** | **02 22 52.1** | **0.0** |
| **PWL** | **Port Wells** | **2.55** | **150** | | | **Pn** | **02 22 52.4** | **-0.4** |
| **POKR** | **Poker Plat Res** | **2.55** | **35** | | | **Pn** | **02 22 52.5** | **-0.3** |
| **SLKM** | **Skilak Lake** | **2.61** | **172** | | | **Pn** | **02 22 53.5** | **-0.1** |
| **RDT** | **Redoubt** | **2.62** | **196** | | | **Pn** | **02 22 53.9** | **+0.1** |
| **J18K** | **Innoko River** | **2.65** | **281** | | | **Pn** | **02 22 54.1** | **+0.1** |
| **J18K** | **Innoko River** | **2.65** | **281** | IAML | | | 02 23 27.2 | |
| | comp=E,107nm,1.2s | | | | | | | |
| **Q22K** | **Cooper Landing** | **2.67** | **167** | | | **Pn** | **02 22 54.7** | **+0.3** |
| **NCT** | **North Crescent** | **2.71** | **202** | | | **Pn** | **02 22 55.5** | **+0.5** |
| **H21K** | **Melozitna Rive** | **2.71** | **343** | | | **Pn** | **02 22 54.4** | **-0.4** |
| **H21K** | **Melozitna Rive** | **2.71** | **343** | IAML | | | 02 23 27.3 | |
| | comp=E,61nm,0.7s | | | | | | | |
| H21K | | | | IAML | | | 02 23 28.2 | |
| | comp=N,126nm,1.0s | | | | | | | |
| **HARP** | **HAARP** | **2.74** | **102** | | | **Pn** | **02 22 55.5** | **+0.2** |
| **RDWB** | **Redoubt West** | **2.76** | **200** | | | **Pn** | **02 22 56.3** | **+0.6** |
| **RSO** | **Redoubt South** | **2.77** | **199** | | | **Pn** | **02 22 56.1** | **+0.2** |
| **M18K** | **Stony River** | **2.80** | **237** | | | **Pn** | **02 22 55.9** | **-0.1** |
| **L18K** | **Granite Mounta** | **2.80** | **254** | | | **Pn** | **02 22 56.1** | **0.0** |
| **H23K** | **Yukon River** | **2.81** | **12** | | | **Pn** | **02 22 55.9** | **-0.2** |
| **H23K** | **Yukon River** | **2.81** | **12** | IAML | | | 02 23 29.6 | |
| | comp=N,92nm,0.6s | | | | | | | |
| **RED** | **Redoubt Volcan** | **2.82** | **199** | | | **Pn** | **02 22 56.8** | **+0.5** |
| **H22K** | **Ishtalitna Cre** | **2.83** | **356** | | | **Pn** | **02 22 56.0** | **-0.3** |
| **KLU** | **Klutina** | **2.83** | **122** | | | **Pn** | **02 22 55.7** | **-0.7** |
| **N19K** | **Bonanza Creek** | **2.84** | **218** | | | **Pn** | **02 22 56.8** | **+0.2** |
| **GLI** | **Glacier Island** | **2.86** | **139** | | | **Pn** | **02 22 56.0** | **-0.7** |
| **J25K** | **Salcha River,** | **2.90** | **56** | | | **Pn** | **02 22 56.8** | **-0.4** |
| **J25K** | **Salcha River,** | **2.90** | **56** | IAML | | | 02 23 32.4 | |
| | comp=N,167nm,0.5s | | | | | | | |
| J25K | | | | IAML | | | 02 23 32.5 | |
| | comp=E,200nm,0.5s | | | | | | | |
| **SVW2** | **Sparrevohn** | **2.97** | **230** | | | **Pn** | **02 22 58.0** | **-0.1** |
| **H20K** | **Anotleneega Mo** | **2.97** | **326** | | | **Pn** | **02 22 57.7** | **-0.4** |
| **H24K** | **Noodor Dome** | **3.06** | **24** | | | **Pn** | **02 22 58.7** | **-0.6** |
| **SEW** | **Seward** | **3.07** | **166** | | | **Pn** | **02 22 59.3** | **-0.2** |
| **DIV** | **Divide** | **3.12** | **127** | | | **Pn** | **02 22 58.8** | **-1.4** |
| **O20K** | **Slope Mountain** | **3.12** | **196** | | | **Pn** | **02 23 01.4** | **+1.1** |
| **DOT** | **Dot Lake** | **3.14** | **77** | | | **Pn** | **02 22 60.0** | **-0.4** |
| **SCRK** | **Sand Creek** | **3.23** | **71** | Pn | | **Pn** | **02 23 01.5** | **-0.2** |
| SCRK | | | | IAML | | | 02 23 34.4 | |
| | comp=E,89nm,0.6s | | | | | | | |
| SCRK | | | | IAML | | | 02 23 39.3 | |
| | comp=N,81nm,0.5s | | | | | | | |
| **IVE** | **Iliamna Volcan** | **3.24** | **199** | | | **Pn** | **02 23 02.4** | **+0.6** |
| **WACK** | **Wrangell Chich** | **3.25** | **107** | | | **Pn** | **02 23 01.7** | **-0.3** |
| **MENT** | **Mentasta** | **3.29** | **89** | | | **Pn** | **02 23 02.4** | **+0.1** |
| **MENT** | **Mentasta** | **3.29** | **89** | IAML | | | 02 23 54.9 | |
| | comp=N,228nm,0.7s | | | | | | | |
| MENT | | | | IAML | | | 02 24 02.5 | |
| | comp=E,238nm,0.7s | | | | | | | |
| **N25K** | **Chitina, Valde** | **3.30** | **114** | | | **Pn** | **02 23 02.2** | **-0.4** |
| **N25K** | **Chitina, Valde** | **3.30** | **114** | IAML | | | 02 23 55.2 | |
| | comp=E,113nm,0.6s | | | | | | | |
| N25K | | | | IAML | | | 02 23 55.4 | |
| | comp=N,235nm,0.5s | | | | | | | |
| **BRLK** | **Bradley Lake** | **3.33** | **180** | | | **Pn** | **02 23 03.5** | **+0.5** |
| BRLK | | | | IAML | | | 02 23 43.3 | |
| | comp=E,238nm,0.1s | | | | | | | |
| BRLK | | | | IAML | | | 02 23 45.2 | |
| | comp=N,287nm,0.2s | | | | | | | |
| **WASW** | **Wrangell South** | **3.34** | **107** | | | **Pn** | **02 23 03.0** | **-0.2** |
| **BRSE** | **Bradley Lake S** | **3.36** | **178** | | | **Pn** | **02 23 03.5** | **+0.2** |
| **N18K** | **Kilae Creek** | **3.37** | **226** | | | **Pn** | **02 23 03.5** | **0.0** |
| **PRP** | **Porcupine Dome** | **3.39** | **42** | Pn | | **Pn** | **02 23 03.2** | **-0.6** |
| **K17K** | **Iditarod** | **3.40** | **267** | | | **Pn** | **02 23 03.7** | **-0.1** |
| **HIN** | **Hinchinbrook I** | **3.42** | **140** | | | **Pn** | **02 23 03.6** | **-0.5** |
| HIN | | | | IAML | | | 02 24 04.2 | |
| | comp=N,222nm,0.7s | | | | | | | |
| HIN | | | | IAML | | | 02 24 06.4 | |
| | comp=E,255nm,1.1s | | | | | | | |
| **H19K** | **Roundabout Mou** | **3.44** | **318** | | | **Pn** | **02 23 03.8** | **-0.5** |
| **L26K** | **Log Cabin Wild** | **3.45** | **88** | | | **Pn** | **02 23 04.7** | **+0.2** |
| **L26K** | **Log Cabin Wild** | **3.45** | **88** | IAML | | | 02 23 52.7 | |
| | comp=N,265nm,0.4s | | | | | | | |
| L26K | | | | IAML | | | 02 24 09.4 | |
| | comp=E,220nm,0.4s | | | | | | | |
| **HOM** | **Homer** | **3.46** | **186** | Pn | | **Pn** | **02 23 05.0** | **+0.5** |
| **M17K** | **Holitna River** | **3.49** | **244** | | | **Pn** | **02 23 04.6** | **-0.4** |
| **M17K** | **Holitna River** | **3.49** | **244** | IAML | | | 02 24 14.3 | |
| | comp=E,51nm,1.0s | | | | | | | |
| **P23K** | **Montague Islan** | **3.53** | **150** | | | **Pn** | **02 23 04.7** | **-0.8** |
| **EYAK** | **Cordova Ski Ar** | **3.53** | **134** | | | **Pn** | **02 23 05.2** | **-0.3** |
| **L17K** | **Donlin** | **3.54** | **258** | | | **Pn** | **02 23 05.6** | **-0.1** |
| **J26L** | **Joseph Creek** | **3.56** | **63** | | | **Pn** | **02 23 05.8** | **-0.1** |
| **J26L** | **Joseph Creek** | **3.56** | **63** | IAML | | | 02 23 51.6 | |
| | comp=N,234nm,0.5s | | | | | | | |
| J26L | | | | IAML | | | 02 23 52.3 | |
| | comp=E,164nm,0.8s | | | | | | | |
| **CNPM** | **China Poot** | **3.58** | **183** | Pn | | **Pn** | **02 23 06.5** | **+0.3** |
| CNPM | | | | IAML | | | 02 23 49.0 | |
| | comp=N,198nm,0.3s | | | | | | | |
| CNPM | | | | IAML | | | 02 23 49.5 | |
| | comp=E,242nm,0.5s | | | | | | | |
| **G21K** | **Allakaket** | **3.62** | **343** | | | **Pn** | **02 23 06.5** | **-0.1** |
| **P19K** | **Oil Pt** | **3.62** | **199** | | | **Pn** | **02 23 07.5** | **+0.7** |
| **P19K** | **Oil Pt** | **3.62** | **199** | IAML | | | 02 23 54.5 | |
| | comp=N,156nm,0.3s | | | | | | | |
| **BMRM** | **Bremner River** | **3.66** | **123** | | | **Pn** | **02 23 06.1** | **-1.1** |
| **G23K** | **Bananza Creek** | **3.66** | **6** | | | **Pn** | **02 23 07.2** | **-0.1** |
| **G23K** | **Bananza Creek** | **3.66** | **6** | IAML | | | 02 23 48.8 | |
| | comp=E,110nm,0.9s | | | | | | | |
| G23K | | | | IAML | | | 02 23 49.1 | |
| | comp=N,49nm,0.7s | | | | | | | |
| **J17K** | **VABM Dome** | **3.71** | **278** | | | **Pn** | **02 23 07.5** | **-0.3** |
| **M26K** | **Nabesna, AK** | **3.71** | **97** | | | **Pn** | **02 23 07.7** | **-0.2** |
| **M26K** | **Nabesna, AK** | **3.71** | **97** | IAML | | | 02 24 09.9 | |
| | comp=N,115nm,0.6s | | | | | | | |
| M26K | | | | IAML | | | 02 24 09.9 | |
| | comp=E,126nm,0.5s | | | | | | | |
| **GLB** | **Gilahina Butte** | **3.71** | **113** | Pn | | **Pn** | **02 23 07.8** | **-0.2** |
| GLB | | | | IAML | | | 02 24 07.3 | |
| | comp=N,124nm,1.0s | | | | | | | |
| GLB | | | | IAML | | | 02 24 08.1 | |
| | comp=E,83nm,0.9s | | | | | | | |
| **O18K** | **Koktuh Hills** | **3.84** | **214** | | | **Pn** | **02 23 09.9** | **+0.2** |
| **O18K** | **Koktuh Hills** | **3.84** | **214** | IAML | | | 02 23 58.9 | |
| | comp=N,39nm,2.3s | | | | | | | |
| **GOAT** | **Goat Mountain** | **3.86** | **128** | | | **Pn** | **02 23 09.0** | **-1.0** |
| **H18K** | **Honhosa River** | **3.87** | **306** | | | **Pn** | **02 23 10.1** | **+0.2** |
| **G24K** | **Hadweenzic Riv** | **3.91** | **20** | Pn | | **Pn** | **02 23 10.2** | **-0.4** |
| G24K | | | | IAML | | | 02 24 58.0 | |
| | comp=N,71nm,1.2s | | | | | | | |
| G24K | | | | IAML | | | 02 24 58.6 | |
| | comp=E,67nm,0.9s | | | | | | | |
| **N17K** | **Nushagak Hills** | **3.93** | **232** | Pn | | **Pn** | **02 23 10.8** | **0.0** |
| **VRDI** | **Verde Repeater** | **3.97** | **115** | Pn | | **Pn** | **02 23 10.8** | **-0.7** |
| VRDI | | | | IAML | | | 02 24 13.8 | |
| | comp=N,92nm,0.9s | | | | | | | |
| VRDI | | | | IAML | | | 02 24 15.3 | |
| | comp=E,61nm,0.8s | | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.02** | **130** | | | **Pn** | **02 23 11.4** | **-0.7** |
| **G19K** | **Purcell Mounta** | **4.06** | **322** | Pn | | **Pn** | **02 23 13.4** | **+0.9** |
| **I26K** | **Coal Creek Min** | **4.06** | **53** | | | **Pn** | **02 23 11.9** | **-0.6** |
| I26K | | | | IAML | | | 02 24 02.9 | |
| | comp=N,76nm,0.8s | | | | | | | |
| I26K | | | | IAML | | | 02 24 06.4 | |
| | comp=E,50nm,0.8s | | | | | | | |
| **K27K** | **Chicken** | **4.07** | **73** | | | **Pn** | **02 23 12.3** | **-0.3** |
| K27K | | | | IAML | | | 02 23 57.3 | |
| | comp=E,65nm,0.6s | | | | | | | |
| K27K | | | | IAML | | | 02 23 59.2 | |
| | comp=N,110nm,0.7s | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **4.07** | **111** | | | **Pn** | **02 23 12.6** | **-0.1** |
| MCARA | | | | IAML | | | 02 24 23.6 | |
| | comp=N,139nm,0.6s | | | | | | | |
| **L27K** | **Beaver Creek,** | **4.13** | **86** | Pn | | **Pn** | **02 23 12.9** | **-0.7** |
| L27K | | | | IAML | | | 02 24 21.2 | |
| | comp=N,34nm,1.4s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **4.15** | **86** | Pn | | **Pn** | **02 23 12.9** | **-0.9** |
| **COLD** | **Coldfoot** | **4.17** | **4** | | | **Pn** | **02 23 13.8** | **-0.1** |
| **HMT** | **Hamilton** | **4.20** | **128** | Pn | | **Pn** | **02 23 13.6** | **-0.9** |
| **L16K** | **Owhat River** | **4.21** | **255** | | | **Pn** | **02 23 14.9** | **+0.3** |
| **M27K** | **Edge Creek, AK** | **4.22** | **96** | | | **Pn** | **02 23 15.5** | **+0.7** |
| M27K | | | | IAML | | | 02 24 26.7 | |
| | comp=E,36nm,0.8s | | | | | | | |
| M27K | | | | IAML | | | 02 24 33.4 | |
| | comp=N,60nm,1.1s | | | | | | | |
| **FYU** | **Fort Yukon** | **4.25** | **32** | Pn | | **Pn** | **02 23 14.8** | **-0.2** |
| FYU | | | | IAML | | | 02 25 01.2 | |
| | comp=E,54nm,1.5s | | | | | | | |
| FYU | | | | IAML | | | 02 25 01.8 | |
| | comp=N,58nm,1.4s | | | | | | | |
| **Q23K** | **Middleton Isla** | **4.28** | **147** | Pn | | **Pn** | **02 23 15.2** | **-0.2** |
| **MID** | **Middleton Isla** | **4.29** | **147** | Pn | | **Pn** | **02 23 15.3** | **-0.2** |
| **F21K** | **Alatna River** | **4.29** | **347** | Pn | | **Pn** | **02 23 15.8** | **+0.2** |
| F21K | | | | IAML | | | 02 24 05.0 | |
| | comp=N,26nm,0.6s | | | | | | | |
| **M16K** | **Timber Creek** | **4.31** | **245** | Pn | | **Pn** | **02 23 15.9** | **0.0** |
| M16K | | | | IAML | | | 02 24 44.0 | |
| | comp=N,31nm,3.7s | | | | | | | |
| M16K | | | | IAML | | | 02 25 08.9 | |
| | comp=E,32nm,2.7s | | | | | | | |
| **CRQM** | **Cirque** | **4.36** | **119** | | | **Pn** | **02 23 16.1** | **-0.6** |
| **H17K** | **Granite Mounta** | **4.37** | **299** | Pn | | **Pn** | **02 23 16.9** | **+0.3** |
| H17K | | | | IAML | | | 02 24 09.7 | |
| | comp=E,28nm,1.4s | | | | | | | |
| **G18K** | **Tagagawik** | **4.37** | **314** | | | **Pn** | **02 23 16.2** | **-0.5** |
| **Q19K** | **Cape Douglas,** | **4.38** | **199** | | | **Pn** | **02 23 16.9** | **+0.1** |
| Q19K | | | | IAML | | | 02 26 04.1 | |
| | comp=N,116nm,1.4s | | | | | | | |
| **J16K** | **Anvik River** | **4.39** | **277** | Pn | | **Pn** | **02 23 17.0** | **+0.1** |
| J16K | | | | IAML | | | 02 24 36.6 | |
| | comp=E,22nm,3.2s | | | | | | | |
| **PTPK** | **Patty Peak** | **4.40** | **112** | | | **Pn** | **02 23 17.5** | **+0.2** |
| **KAIM** | **Kayak Island** | **4.44** | **133** | Pn | | **Pn** | **02 23 16.5** | **-1.1** |
| **I17K** | **Unalakleet** | **4.46** | **285** | | | **Pn** | **02 23 18.2** | **+0.5** |
| I17K | | | | IAML | | | 02 24 28.7 | |
| | comp=E,25nm,2.4s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.47** | **335** | | | **Pn** | **02 23 18.0** | **+0.1** |
| **TGL** | **Tana Glacier** | **4.48** | **118** | | | **Pn** | **02 23 16.9** | **-1.4** |
| TGL | | | | IAML | | | 02 24 32.7 | |
| | comp=N,118nm,0.7s | | | | | | | |
| **KHIT** | **Khitrov Hills** | **4.50** | **123** | | | **Pn** | **02 23 18.5** | **-0.1** |
| **SYI** | **Shuyak Island** | **4.55** | **190** | Pn | | **Pn** | **02 23 18.4** | **-0.6** |
| SYI | | | | IAML | | | 02 24 12.3 | |
| | comp=N,88nm,0.3s | | | | | | | |
| **SUCK** | **Suckling Hills** | **4.56** | **128** | Pn | | **Pn** | **02 23 18.3** | **-0.9** |
| **KIAG** | **Kiagna River** | **4.58** | **114** | | | **Pn** | **02 23 18.5** | **-1.1** |
| **EGAK** | **Eagle** | **4.63** | **64** | Pn | | **Pn** | **02 23 19.6** | **-0.4** |
| EGAK | | | | IAML | | | 02 24 27.1 | |
| | comp=N,60nm,1.1s | | | | | | | |
| EGAK | | | | IAML | | | 02 24 27.7 | |
| | comp=N,81nm,0.9s | | | | | | | |
| **F24K** | **Squaw Lake** | **4.63** | **15** | Pn | | **Pn** | **02 23 19.8** | **-0.3** |
| F24K | | | | IAML | | | 02 24 37.3 | |
| | comp=N,57nm,0.6s | | | | | | | |
| F24K | | | | IAML | | | 02 24 37.7 | |
| | comp=E,51nm,0.5s | | | | | | | |
| **WAX** | **Waxell Ridge** | **4.65** | **121** | | | **Pn** | **02 23 19.3** | **-1.2** |
| **ISLE** | **Juniper Island** | **4.77** | **118** | | | **Pn** | **02 23 21.1** | **-1.0** |
| ISLE | | | | IAML | | | 02 24 40.8 | |
| | comp=E,103nm,0.6s | | | | | | | |
| **BARK** | **Barkley Ridge** | **4.82** | **120** | | | **Pn** | **02 23 22.3** | **-0.5** |
| **SNH** | **Sunshine Point** | **4.83** | **123** | Pn | | **Pn** | **02 23 22.9** | **0.0** |
| **YUK2** | **White River** | **4.86** | **101** | | | **Pn** | **02 23 23.5** | **+0.2** |
| **O16K** | **Kokwok River B** | **4.92** | **228** | Pn | | **Pn** | **02 23 24.4** | **+0.4** |
| O16K | | | | IAML | | | 02 24 13.8 | |
| | comp=N,20nm,3.9s | | | | | | | |
| O16K | | | | IAML | | | 02 25 32.6 | |
| | comp=E,25nm,2.9s | | | | | | | |
| **GRNC** | **Granite Creek** | **4.93** | **114** | | | **Pn** | **02 23 23.4** | **-0.9** |
| **GRNC** | **Granite Creek** | **4.93** | **114** | IAML | | | 02 24 41.7 | |
| | comp=E,30nm,0.6s | | | | | | | |
| GRNC | | | | IAML | | | 02 24 44.7 | |
| | comp=N,69nm,0.6s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **4.95** | **266** | Pn | | **Pn** | **02 23 24.8** | **+0.3** |
| K15K | | | | IAML | | | 02 24 47.0 | |
| | comp=E,26nm,4.1s | | | | | | | |
| K15K | | | | IAML | | | 02 24 59.8 | |
| | comp=N,29nm,3.9s | | | | | | | |
| **CTGM** | **Chitina Glacie** | **4.99** | **111** | | | **Pn** | **02 23 25.1** | **0.0** |
| CTGM | | | | IAML | | | 02 24 50.0 | |
| | comp=N,38nm,1.1s | | | | | | | |
| CTGM | | | | IAML | | | 02 24 51.8 | |
| | comp=E,25nm,0.8s | | | | | | | |
| **F25K** | **Christian Rive** | **5.03** | **24** | Pn | | **Pn** | **02 23 25.4** | **-0.1** |
| **YUK3** | **Moose Creek** | **5.03** | **100** | | | **Pn** | **02 23 26.2** | **+0.5** |
| **E22K** | **Anaktuvuk Pass** | **5.08** | **356** | Pn | | **Pn** | **02 23 26.7** | **+0.5** |
| E22K | | | | IAML | | | 02 24 54.4 | |
| | comp=E,28nm,0.7s | | | | | | | |
| E22K | | | | IAML | | | 02 24 59.3 | |
| | comp=N,30nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **5.11** | **29** | Pn | | **Pn** | **02 23 26.0** | **-0.5** |
| **E24K** | **Your Creek** | **5.11** | **10** | Pn | | **Pn** | **02 23 26.3** | **-0.2** |
| E24K | | | | IAML | | | 02 24 26.7 | |
| | comp=E,63nm,0.7s | | | | | | | |
| E24K | | | | IAML | | | 02 24 29.6 | |
| | comp=N,69nm,0.7s | | | | | | | |
| **E19K** | **Redstone River** | **5.12** | **332** | Pn | | **Pn** | **02 23 26.8** | **+0.1** |
| E19K | | | | IAML | | | 02 24 26.8 | |
| | comp=N,15nm,0.8s | | | | | | | |
| E19K | | | | IAML | | | 02 24 39.1 | |
| | comp=E,14nm,1.1s | | | | | | | |
| **MESA** | **MESA** | **5.17** | **120** | Pn | | **Pn** | **02 23 27.4** | **-0.2** |
| **LOGN** | **Logan Glacier** | **5.20** | **111** | | | **Pn** | **02 23 28.0** | **+0.1** |
| LOGN | | | | IAML | | | 02 24 49.1 | |
| | comp=E,33nm,1.1s | | | | | | | |
| LOGN | | | | IAML | | | 02 24 56.1 | |
| | comp=N,41nm,0.8s | | | | | | | |
| **DAWY** | **Dawson** | **5.24** | **74** | | | **Pn** | **02 23 28.1** | **-0.2** |
| **N15K** | **Kwethluk River** | **5.26** | **240** | Pn | | **Pn** | **02 23 28.4** | **-0.2** |
| N15K | | | | IAML | | | 02 25 07.7 | |
| | comp=N,41nm,3.2s | | | | | | | |
| N15K | | | | IAML | | | 02 26 31.4 | |
| | comp=E,52nm,2.8s | | | | | | | |
| **I28M** | **Miner Creek** | **5.34** | **59** | Pn | | **Pn** | **02 23 29.6** | **-0.1** |
| I28M | | | | IAML | | | 02 24 33.3 | |
| | comp=E,33nm,0.9s | | | | | | | |
| I28M | | | | IAML | | | 02 24 36.0 | |
| | comp=N,29nm,1.0s | | | | | | | |
| **RKAV** | **Rock Avalanche

*NEIC* ***14*** *02:23:14.4±1.4, 69.59°N±0.05°×144.47°W±0.08, h6km±2km, Error ellipse: s-maj=7.8km s-min=3.1km az=159.0*

**AEIC 14 02:23:14.3±1.5, 69.57°N±0.07°×144.59°W±0.07, h5km±6km, ML2.8, ML3.0/56(NEIC), Error ellipse: s-maj=9.9km s-min=3.0km az=192.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.31** | **79** | | Pg | 02 23 20.2 | -0.1 |
| C27K | | | | IAML | | 02 23 25.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.31** | **79** | | Sg | 02 23 24.9 | +0.4 |
| **C26K** | **Camden Bay** | **0.37** | **342** | | Pg | 02 23 21.2 | -0.2 |
| C26K | | | | | Sg | 02 23 26.4 | +0.1 |
| **D25K** | **Kavik River** | **0.68** | **250** | | Pg | 02 23 26.7 | -0.6 |
| D25K | | | | | Sg | 02 23 35.9 | -0.2 |
| **D27M** | **Malcolm River** | **1.32** | **103** | | Pn | 02 23 38.9 | -0.5 |
| D27M | | | | | Sg | 02 23 56.4 | -0.3 |
| D27M | | | | IAML | | 02 24 02.2 | |
| | comp=N,333nm,0.5s | | | | | | |
| D27M | | | | IAML | | 02 24 03.0 | |
| | comp=E,177nm,0.4s | | | | | | |
| **D24K** | **Happy Valley** | **1.56** | **257** | | Sg | 02 24 06.5 | +2.2 |
| **D24K** | **Happy Valley** | **1.56** | **257** | Pn | Pn | 02 23 43.0 | +0.4 |
| **D24K** | **Happy Valley** | **1.56** | **257** | IAML | | 02 24 08.3 | |
| | comp=E,351nm,0.9s | | | | | | |
| D24K | | | | IAML | | 02 24 15.3 | |
| | comp=N,265nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.76** | **141** | Pn | Pn | 02 23 45.2 | -0.2 |
| E27K | | | | | Pb | 02 23 45.5 | -1.6 |
| E27K | | | | | Sn | 02 24 08.1 | 0.0 |
| E27K | | | | IAML | | 02 24 13.6 | |
| | comp=E,130nm,0.5s | | | | | | |
| E27K | | | | IAML | | 02 24 16.1 | |
| | comp=N,114nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **175** | | Pn | 02 23 46.7 | -0.5 |
| F26K | | | | | Sg | 02 24 14.7 | -0.1 |
| F26K | | | | IAML | | 02 24 17.0 | |
| | comp=E,154nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.02** | **245** | | Pn | 02 23 48.4 | -0.6 |
| TOLK | | | | IAML | | 02 24 21.6 | |
| | comp=E,126nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 02 24 30.0 | |
| | comp=N,115nm,0.8s | | | | | | |
| **F25K** | **Christian River** | **2.02** | **192** | | Pn | 02 23 49.2 | +0.2 |
| F25K | | | | IAML | | 02 24 21.5 | |
| | comp=E,90nm,0.7s | | | | | | |
| F25K | | | | IAML | | 02 24 22.7 | |
| | comp=N,101nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.06** | **116** | | Pn | 02 23 48.9 | -0.5 |
| E28M | | | | IAML | | 02 24 26.0 | |
| | comp=N,73nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.06** | **225** | | Pb | 02 23 51.1 | -1.1 |
| **D28M** | **Stokes Point** | **2.08** | **94** | | Pn | 02 23 49.0 | -0.7 |
| D28M | | | | IAML | | 02 24 35.5 | |
| | comp=N,168nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.12** | **280** | | Pn | 02 23 50.3 | +0.1 |
| **BMAR** | **Burnt Mountain** | **2.15** | **180** | Pn | Pb | 02 23 52.6 | -1.0 |
| **D23K** | **Nanushuk River** | **2.25** | **257** | | Pn | 02 23 51.9 | -0.2 |
| D23K | | | | IAML | | 02 24 33.4 | |
| | comp=E,83nm,1.5s | | | | | | |
| D23K | | | | IAML | | 02 24 39.8 | |
| | comp=N,84nm,1.4s | | | | | | |
| **E23K** | **Chandalar** | **2.37** | **233** | | Pn | 02 23 53.7 | -0.2 |
| E23K | | | | IAML | | 02 24 33.8 | |
| | comp=N,60nm,0.8s | | | | | | |
| E23K | | | | IAML | | 02 24 39.6 | |
| | comp=E,63nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.39** | **212** | Pn | Pn | 02 23 54.1 | 0.0 |
| **F28M** | **Old Crow** | **2.62** | **136** | | Pn | 02 23 57.1 | 0.0 |
| F28M | | | | IAML | | 02 24 43.7 | |
| | comp=E,54nm,0.9s | | | | | | |
| F28M | | | | IAML | | 02 24 46.9 | |
| | comp=N,75nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.69** | **113** | Pn | Pn | 02 23 57.6 | -0.5 |
| E29M | | | | IAML | | 02 24 47.0 | |
| | comp=E,54nm,0.7s | | | | | | |
| E29M | | | | IAML | | 02 24 49.2 | |
| | comp=N,62nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **2.97** | **260** | | Pn | 02 24 02.1 | +0.2 |
| D22K | | | | IAML | | 02 24 58.2 | |
| | comp=E,77nm,1.6s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.99** | **245** | Pn | Pn | 02 24 03.1 | +0.8 |
| **B22K** | **Teshekpuk Lake** | **3.14** | **288** | Pn | Pn | 02 24 03.6 | -0.7 |
| **B21K** | **Ikpikpuk River** | **3.51** | **276** | | Pn | 02 24 10.4 | +1.0 |
| B21K | | | | IAML | | 02 24 55.4 | |
| | comp=E,45nm,0.7s | | | | | | |
| **G29M** | **Pine Creek** | **3.62** | **134** | Pn | Pn | 02 24 13.4 | +2.5 |
| G29M | | | | IAML | | 02 25 16.0 | |
| | comp=N,43nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.87** | **147** | Pn | Pn | 02 24 29.4 | +1.4 |
| **D19K** | **Kuna River** | **4.98** | **264** | | Pn | 02 24 30.1 | +0.5 |
| D19K | | | | IAML | | 02 26 15.8 | |
| | comp=E,13nm,1.0s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.33** | **272** | Pn | Pn | 02 24 34.9 | +0.5 |
| **I30M** | **Mount Dempster** | **5.39** | **140** | Pn | Pn | 02 24 36.1 | +0.8 |
| I30M | | | | IAML | | 02 26 04.9 | |
| | comp=N,12nm,0.9s | | | | | | |
| **C18K** | **Utukok River** | **6.01** | **269** | Pn | Pn | 02 24 41.5 | -2.3 |

**NAM 14 02:29:58.3±4.3, 19.70°S×14.48°E, h21km±14km, ML0.9, 4C-5D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.04** | **160** | ⇓*i* P | Pb | 02 30 04.0 | +1.7 |
| ST3N | | | | *i* S | Sb | 02 30 05.4 | +0.5 |
| ST3N | | | | IAML | | 02 30 05.9 | |
| | comp=Z,21nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.04** | **160** | *i* P | Pb | 02 30 04.0 | +1.7 |
| ST3N | | | | *i* S | Sb | 02 30 05.4 | +0.5 |
| ST3N | | | | IAML | | 02 30 05.6 | |
| | comp=Z,21nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.12** | **149** | ⇓*i* P | Pb | 02 30 03.2 | -1.6 |
| ST9N | | | | *i* S | Sb | 02 30 04.1 | -5.3 |
| ST9N | | | | IAML | | 02 30 04.4 | |
| | comp=Z,261nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.12** | **149** | *i* P | Pb | 02 30 03.2 | -1.6 |
| ST9N | | | | *i* S | Sb | 02 30 04.1 | -5.3 |
| ST9N | | | | IAML | | 02 30 04.4 | |
| | comp=Z,249nm,0.7s | | | | | | |
| **ST1N** | **ST1** | **0.13** | **107** | *i* S | Sb | 02 30 04.7 | -4.4 |
| ST1N | | | | *i* S | Sb | 02 30 04.8 | -4.4 |
| **ST1N** | **ST1** | **0.13** | **107** | *i* P | Pb | 02 30 03.6 | -1.0 |
| ST1N | | | | *i* S | Sb | 02 30 04.8 | -4.4 |
| ST1N | | | | IAML | | 02 30 04.9 | |
| | comp=N,206nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.13** | **218** | ⇑*i* P | Pb | 02 30 05.3 | +0.6 |
| ST6N | | | | *i* S | Sb | 02 30 07.6 | -1.5 |
| ST6N | | | | IAML | | 02 30 08.8 | |
| | comp=Z,17nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.13** | **218** | *i* P | Pb | 02 30 05.3 | +0.6 |
| ST6N | | | | *i* S | Sb | 02 30 07.6 | -1.5 |
| ST6N | | | | IAML | | 02 30 07.7 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **274** | ⇓*i* P | Pb | 02 30 07.1 | +2.7 |
| ST8N | | | | *i* S | Sb | 02 30 10.8 | +2.1 |
| ST8N | | | | IAML | | 02 30 12.0 | |
| | comp=Z,4.5nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.25** | **155** | ⇑*i* P | Pb | 02 30 04.8 | +0.1 |
| ST2N | | | | *i* S | Sb | 02 30 06.8 | -2.2 |
| ST2N | | | | IAML | | 02 30 07.5 | |
| | comp=Z,27nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.25** | **155** | *i* P | Pb | 02 30 04.8 | +0.1 |
| ST2N | | | | *i* S | Sb | 02 30 06.2 | -2.8 |
| ST2N | | | | IAML | | 02 30 07.3 | |
| | comp=Z,19nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **109** | ⇓*i* P | Pb | 02 30 05.4 | +0.5 |
| ST5N | | | | *i* S | Sb | 02 30 07.9 | -1.5 |
| ST5N | | | | IAML | | 02 30 08.3 | |
| | comp=Z,12nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **109** | *i* P | Pb | 02 30 05.3 | +0.5 |
| ST5N | | | | *i* S | Sb | 02 30 07.7 | -1.6 |
| ST5N | | | | IAML | | 02 30 07.9 | |
| | comp=Z,28nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.31** | **197** | ⇓*i* P | Pn | 02 30 07.0 | -0.6 |
| ST10N | | | | *i* S | Sb | 02 30 14.1 | +1.4 |
| ST10N | | | | IAML | | 02 30 12.2 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.31** | **197** | *i* P | Pn | 02 30 07.0 | -0.7 |
| ST10N | | | | *i* S | Sb | 02 30 10.4 | +0.4 |
| ST10N | | | | IAML | | 02 30 12.3 | |
| | comp=Z,23nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.34** | **82** | ⇑*i* P | Pn | 02 30 07.8 | -0.4 |
| ST11N | | | | *i* S | Sb | 02 30 11.8 | +1.0 |
| ST11N | | | | IAML | | 02 30 13.5 | |
| | comp=Z,5.8nm,0.0s | | | | | | |
| **ST11N** | **ST11** | **0.34** | **82** | *i* P | Pn | 02 30 07.8 | -0.4 |
| ST11N | | | | *i* S | Sb | 02 30 12.0 | +1.2 |
| ST11N | | | | IAML | | 02 30 12.4 | |
| | comp=Z,4.1nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.50** | **112** | ⇑*i* P | Pb | 02 30 09.4 | +0.9 |
| ST4N | | | | *i* S | Sb | 02 30 14.6 | -0.8 |
| ST4N | | | | IAML | | 02 30 15.2 | |
| | comp=Z,3.3nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.50** | **112** | *i* P | Pb | 02 30 09.3 | +0.9 |
| ST4N | | | | *i* S | Sb | 02 30 14.7 | -0.7 |
| ST4N | | | | IAML | | 02 30 15.1 | |
| | comp=Z,16nm,0.1s | | | | | | |

*NIED* ***14*** *02:41:54.6, 35.36°N×131.02°E, h24km, MW3.4, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr0.10; Mθθ1.24; Mϕϕ-1.34; Mrθ-0.24; Mθϕ0.02; Mϕr-0.18; Fault plane solution: M₀1.33000×10¹⁴ NP1: ϕs224.00000°, δ87.00000°, λ167.00000°. NP2: ϕs315.00000°, δ77.00000°, λ3.00000°.*

**JMA 14 02:41:54.6±0.1, 35.4°N±0.3°×131.0°E±0.4, h24km, MV3.7/32, 4D, OFF W SAN'IN REGION, Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHGM** | **Hagimishima** | **0.59** | **170** | *i* P | Pb | 02 42 06.1 | -0.2 |
| JHGM | | | | *e*S | Sb | 02 42 14.1 | -0.1 |
| **JTY** | **Toyota** | **1.10** | **178** | P | Pn | 02 42 14.2 | -0.4 |
| JTY | | | | S | Sb | 02 42 28.6 | -0.3 |
| **JHIK** | **Hikimi** | **1.11** | **138** | P | Pn | 02 42 14.7 | -0.1 |
| JHIK | | | | S | Sb | 02 42 29.2 | -0.2 |
| **JGT2** | **ShimaneMisato** | **1.25** | **103** | ⇓*i* P | Pn | 02 42 16.9 | +0.2 |
| JGT2 | | | | ⇓*e*S | Sb | 02 42 33.5 | +0.3 |
| **JHT** | **Toyohira** | **1.34** | **121** | *i* P | Pn | 02 42 18.1 | +0.2 |
| JHT | | | | S | Sb | 02 42 36.0 | +0.1 |
| **JISK** | **Izumosakaura** | **1.50** | **84** | ⇓*i* P | Pn | 02 42 20.8 | +0.8 |
| JISK | | | | ⇓S | Sb | 02 42 41.2 | +0.9 |
| **JTU** | **Tsushima** | **1.57** | **238** | P | Pn | 02 42 21.6 | +0.5 |
| JTU | | | | S | Sb | 02 42 42.4 | -0.2 |
| **JHM** | **Kurahashi** | **1.74** | **134** | P | Pn | 02 42 24.5 | +1.2 |
| JHM | | | | S | Sb | 02 42 47.7 | +0.4 |
| **JHS** | **Saijyo** | **1.75** | **101** | P | Pn | 02 42 24.2 | +0.7 |
| JHS | | | | S | Sb | 02 42 46.8 | -0.9 |
| **JII** | **Iki** | **1.89** | **215** | *i* P | Pb | 02 42 27.0 | -1.4 |
| JII | | | | S | Sb | 02 42 51.5 | -0.2 |
| **JOI** | **OKI** | **2.03** | **62** | P | Pn | 02 42 28.3 | +0.9 |
| JOI | | | | S | Sn | 02 42 53.7 | +1.7 |

**DJA 14 02:54:05.0±1.1, 3°S±5°×14°1E±°, h10km, M3.8/3, MLv3.8/3, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **0.79** | **6** | P | Pb | 02 54 21.1 | +0.3 |
| JAY | | | | S | Sg | 02 54 30.6 | +0.2 |
| **GENI** | **Genyem** | **0.83** | **327** | P | Pb | 02 54 22.1 | +0.5 |
| GENI | | | | S | Sb | 02 54 33.1 | +0.2 |
| **MMPI** | **Merauke** | **5.14** | **183** | P | Pb | 02 55 38.3 | +3.3 |
| MMPI | | | | S | Sn | 02 56 23.2 | +1.7 |

**IDC 14 02:56:28.9±16.0, 20.81°S×178.53°E, h664km±207km, mb2.5/4, mbtmp3.6/4, Error ellipse: s-maj=242.7km s-min=75.4km az=159.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **30.22** | **266** | P | P | 03 01 50.0 | +0.5 |
| | 0.1nm,0.3s,baz=104,slow=10,SNR=1.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **41.28** | **257** | P | P | 03 03 18.5 | -1.3 |
| | 0.2nm,0.3s,baz=82,slow=7.6,SNR=2.6 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.33** | **263** | P | P | 03 03 20.8 | +0.5 |
| | 0.7nm,0.4s,baz=96,slow=8.3,SNR=22 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **89.98** | **59** | P | P | 03 08 20.2 | 0.0 |
| | 0.2nm,0.6s,baz=215,slow=7.3,SNR=4.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **139.26** | **348** | PKP | PKPdf | 03 14 41.7 | -0.3 |
| | 0.9nm,0.5s,baz=48,slow=6.4,SNR=5.9 | | | | | | |

**IDC 14 02:57:34.3±4.7, 9.25°N×126.46E, h0km, mb4.0/7, mbtmp4.0/7, Error ellipse: s-maj=198.2km s-min=104.5km az=53.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **42.03** | **340** | P | P | 03 05 27.1 | -0.6 |
| | 1.0nm,0.7s,baz=161,slow=7.7,SNR=3.0 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.95** | **323** | P | P | 03 06 52.5 | -0.1 |
| | 0.8nm,0.7s,baz=117,slow=7.7,SNR=4.5 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.61** | **332** | P | P | 03 07 13.0 | +1.2 |
| | 0.5nm,0.5s,baz=126,slow=7.3,SNR=2.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.02** | **326** | P | P | 03 07 21.3 | -0.6 |
| | 0.6nm,0.7s,baz=126,slow=6.9,SNR=5.1 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.21** | **340** | P | P | 03 10 12.7 | +0.3 |
| | 1.9nm,0.7s,baz=60,slow=7.2,SNR=7.2 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **86.87** | **332** | P | P | 03 10 20.6 | -0.2 |
| | 1.5nm,0.8s,baz=90,slow=7.6,SNR=4.7 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **93.03** | **332** | P | P | 03 10 49.4 | -0.4 |
| | 1.8nm,0.9s,baz=99,slow=15,SNR=4.5 | | | | | | |
| | 1.8nm,0.9s | | | | | | |

**NAM 14 03:01:27.5±4.5, 19.75°S×14.49E, h22km±14km, ML0.6, 7C-1D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.01** | **53** | ⇑*i* P | Pb | 03 01 33.3 | +1.8 |
| ST3N | | | | *i* S | Sb | 03 01 34.9 | +0.6 |
| ST3N | | | | IAML | | 03 01 34.9 | |
| | comp=Z,10nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.01** | **53** | *i* P | Pb | 03 01 33.3 | +1.7 |
| ST3N | | | | *i* S | Sb | 03 01 34.8 | +0.5 |
| ST3N | | | | IAML | | 03 01 35.1 | |
| | comp=Z,17nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **132** | ⇓*i* P | Pb | 03 01 32.1 | +0.3 |
| ST9N | | | | *i* S | Sb | 03 01 33.0 | -1.7 |
| ST9N | | | | IAML | | 03 01 33.4 | |
| | comp=Z,128nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **132** | *i* P | Pb | 03 01 32.1 | +0.3 |
| ST9N | | | | *i* S | Sb | 03 01 32.9 | -1.8 |
| ST9N | | | | IAML | | 03 01 33.4 | |
| | comp=Z,166nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **238** | ⇑*i* P | Pb | 03 01 34.4 | +2.4 |
| ST6N | | | | *i* S | Sb | 03 01 36.8 | +1.8 |
| ST6N | | | | IAML | | 03 01 36.8 | |
| | comp=Z,14nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **238** | *i* P | Pb | 03 01 34.3 | +2.4 |
| ST6N | | | | *i* S | Sb | 03 01 36.8 | +1.8 |
| ST6N | | | | IAML | | 03 01 37.1 | |
| | comp=Z,9.9nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **84** | *i* S | Sb | 03 01 34.3 | -1.0 |
| ST1N | | | | *i* S | | 03 01 34.3 | |
| **ST1N** | **ST1** | **0.12** | **84** | *i* P | Pb | 03 01 33.0 | +0.8 |
| ST1N | | | | *i* S | Sb | 03 01 34.3 | -1.0 |
| ST1N | | | | IAML | | 03 01 34.5 | |
| | comp=N,24nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.17** | **290** | ⇑*i* P | Pb | 03 01 36.5 | +3.8 |
| ST8N | | | | *i* S | Sb | 03 01 40.1 | +3.9 |
| ST8N | | | | IAML | | 03 01 41.5 | |
| | comp=Z,1.5nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.21** | **150** | ⇑*i* P | Pb | 03 01 33.2 | +0.1 |
| ST2N | | | | *i* S | Sb | 03 01 35.1 | -1.8 |
| ST2N | | | | IAML | | 03 01 36.1 | |
| | comp=Z,12nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.26** | **99** | *i* S | Sb | 03 01 36.8 | -1.3 |
| ST5N | | | | *i* S | Sn | 03 01 36.8 | -4.7 |
| **ST5N** | **ST5** | **0.26** | **99** | *i* P | Pb | 03 01 34.3 | +0.5 |
| ST5N | | | | *i* S | Sb | 03 01 36.8 | -1.3 |
| ST5N | | | | IAML | | 03 01 37.0 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **201** | ⇑*i* P | Pn | 03 01 35.6 | -0.6 |
| ST10N | | | | *i* S | Sb | 03 01 39.2 | +1.0 |
| ST10N | | | | IAML | | 03 01 40.0 | |
| | comp=Z,6.7nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **201** | *i* P | Pn | 03 01 35.6 | -0.5 |
| ST10N | | | | *i* S | Sb | 03 01 39.0 | +0.8 |
| ST10N | | | | IAML | | 03 01 40.1 | |
| | comp=Z,20nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **74** | ⇑*i* P | Pn | 03 01 37.1 | -0.3 |
| ST11N | | | | *i* S | Sb | 03 01 41.5 | +1.1 |
| ST11N | | | | IAML | | 03 01 43.0 | |
| | comp=Z,1.6nm,0.0s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **74** | *i* P | Pn | 03 01 37.1 | -0.3 |
| ST11N | | | | *i* S | Sb | 03 01 41.3 | +0.8 |
| ST11N | | | | IAML | | 03 01 41.5 | |
| | comp=Z,1.9nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.48** | **107** | ⇑*i* P | Pb | 03 01 38.2 | +0.8 |
| ST4N | | | | *i* S | Sb | 03 01 43.2 | -0.9 |
| ST4N | | | | IAML | | 03 01 43.9 | |
| | comp=Z,1.6nm,0.1s | | | | | | |

*IDC* ***14*** *03:10:56.8±1.0, 32.66°N×97.30E, h0km, mb3.8/8, mbtmp3.9/10, ML3.7/2, MS3.4/10, Error ellipse: s-maj=34.6km s-min=16.7km az=52.0*

*NEIC* ***14*** *03:11:01.6±2.0, 32.82°N±0.09°×97.34E±0.10°, h15km±6km, mb4.1/17, Error ellipse: s-maj=13.7km s-min=11.6km az=186.0*

*NDI* ***14*** *03:11:10.3±1.8, 32.84°N×96.97E, h15km, ML3.7, mb4.1(NEIC)*

**ISC 14 03:10:59.6±0.7, 32.88°N±0.06°×97.43E±0.09, h10km, n42, σ1§51/40, mb4.0/14, MS3.2/7, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LKP** | **Lekhapani** | **5.70** | **194** | *e*P | Pb | 03 12 32.9 | -6.3 |
| LKP | | | | *e*S | **Sn** | **03 13 32.4** | **+2.5** |
| **ZIRO** | **ZIRO** | **6.17** | **211** | *e*P | Pn | 03 12 38.9 | +7.9 |
| ZIRO | | | | *e*S | **Sn** | **03 13 40.5** | **-1.3** |
| ZIRO | | | | *e*S | **Sn** | **03 13 43.1** | **+1.3** |
| **LSA** | **Lhasa** | **6.24** | **241** | Pn | **Pn** | **03 12 32.7** | **+0.5** |
| LSA | | | | | **Sn** | **03 13 41.9** | **-1.9** |
| **MOKO** | **MOKOCHONG** | **7.01** | **202** | *e*P | Pn | 03 12 49.0 | +6.4 |
| MOKO | | | | IAML | | 03 14 00.4 | |
| | comp=N,90nm,0.6s | | | | | | |
| MOKO | | | | *e*S | **Sn** | **03 14 02.1** | **-0.4** |
| MOKO | | | | IAML | | 03 14 04.8 | |
| | comp=E,52nm,0.2s | | | | | | |
| **KOHI** | **KOHIMA** | **7.70** | **203** | *e*P | Pn | 03 12 59.4 | +7.3 |
| KOHI | | | | IAML | | 03 14 18.0 | |
| | comp=E,67nm,0.8s | | | | | | |
| KOHI | | | | *e*S | **Sn** | **03 14 18.3** | **-1.2** |
| KOHI | | | | IAML | | 03 14 18.4 | |
| | comp=N,75nm,0.6s | | | | | | |
| **SHL** | **Shillong** | **8.75** | **215** | Pn | **Pn** | **03 13 06.9** | **+0.4** |
| **SHL** | **Shillong** | **8.75** | **215** | *e*P | **Pn** | **03 13 11.0** | **+4.6** |
| SHL | | | | *e*S | **Sn** | **03 14 42.7** | **-2.6** |
| **CMAR** | **Chiang Mai Arr** | **14.43** | **174** | Pn | **Pn** | **03 14 22.8** | **-1.3** |
| | baz=343,slow=12 | | | | | | |
| CMAR | | | | LR | LR | 03 20 10.4 | |
| | comp=N,144nm,20.4s,baz=350,slow=39 | | | | | | |
| **PHRA** | **Phrae** | **14.54** | **169** | Pn | **Pn** | **03 14 25.6** | **0.0** |
| **SONM** | **Songino Array** | **16.40** | **22** | Pn | **P** | **03 14 52.8** | **0.0** |
| **SONM** | **Songino Array** | **16.40** | **22** | Pn | **P** | **03 14 52.0** | **-0.8** |
| | comp=N,0.2nm,0.3s,baz=210,slow=13,SNR=5.2 | | | | | | |
| SONM | | | | LR | LR | 03 21 47.8 | |
| | comp=N,96nm,19.1s,baz=208,slow=39 | | | | | | |
| | comp=N,1.1nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **18.07** | **325** | P | **P** | **03 15 11.5** | **+0.4** |
| **MKAR** | **Makanchi Array** | **18.07** | **325** | | **P** | **03 15 13.7** | **+2.5** |
| **MKAR** | **Makanchi Array** | **18.07** | **325** | P | **P** | **03 15 11.7** | **+0.5** |
| | comp=N,0.5nm,0.3s,baz=136,slow=13,SNR=19 | | | | | | |
| MKAR | | | | LR | LR | 03 22 47.5 | |
| | comp=N,106nm,19.0s,baz=151,slow=39 | | | | | | |
| | comp=N,4.9nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **18.23** | **324** | P | **P** | **03 15 13.9** | **+1.0** |
| **NIL** | **Nilore** | **20.22** | **279** | P | **P** | **03 15 34.9** | **0.0** |
| NIL | | | | IAmb | IAmb | 03 15 43.4 | |
| | comp=Z,8.1nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **20.52** | **305** | P | **P** | **03 15 37.7** | **-0.6** |
| AAK | | | | IAmb | IAmb | 03 15 49.2 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **20.52** | **305** | LR | LR | 03 24 17.3 | |
| | comp=Z,77nm,18.4s,baz=104,slow=39 | | | | | | |
| **ARSB** | **Arslanbob** | **21.19** | **300** | P | **P** | **03 15 43.4** | **-2.0** |
| **DRK** | **Karamyk** | **21.67** | **295** | P | **P** | **03 15 49.9** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **22.54** | **327** | P | **P** | **03 15 58.9** | **-0.7** |
| | comp=Z,0.9nm,0.7s,baz=136,slow=11,SNR=8.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **22.56** | **328** | P | **P** | **03 16 00.0** | **+0.2** |
| KURK | | | | IAmb | IAmb | 03 16 24.3 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **22.89** | **341** | P | **P** | **03 16 03.8** | **+0.4** |
| ZAA0 | | | | IAmb | IAmb | 03 16 07.1 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.89** | **341** | P | **P** | **03 16 04.2** | **+0.9** |
| **ZALV** | **Zalesovo Beam** | **22.89** | **341** | P | **P** | **03 16 03.8** | **+0.5** |
| | comp=Z,5.8nm,1.0s,baz=156,slow=11,SNR=8.9 | | | | | | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **KK31** | **Karatay Array** | **23.45** | **304** | P | **P** | **03 16 10.4** | **+1.3** |
| KK31 | | | | IAmb | IAmb | 03 16 12.8 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **23.45** | **304** | P | **P** | **03 16 10.4** | **+1.3** |
| KKAR | | | | IAmb | IAmb | 03 16 12.8 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **23.45** | **304** | P | **P** | **03 16 10.4** | **+1.3** |
| **KBL** | **Kabul** | **23.64** | **282** | P | **P** | **03 16 13.2** | **+1.9** |
| KBL | | | | IAmb | IAmb | 03 16 14.8 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **SIMJ** | **Simiganj** | **23.71** | **292** | P | **P** | **03 16 12.9** | **+1.0** |
| SIMJ | | | | IAmb | IAmb | 03 16 18.1 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **25.28** | **71** | P | **P** | **03 16 27.4** | **+1.3** |
| | comp=Z,3.6nm,0.9s,baz=261,slow=9.7,SNR=10 | | | | | | |
| KSRS | | | | LR | LR | 03 27 01.4 | |
| | comp=Z,39nm,18.7s,baz=245,slow=38 | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **27.95** | **324** | LR | LR | 03 28 53.8 | |
| | comp=Z,105nm,20.3s,baz=119,slow=38 | | | | | | |
| **JNU** | **Nakatsue** | **27.99** | **80** | LR | LR | 03 28 59.3 | |
| | comp=Z,64nm,18.5s,baz=261,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **30.28** | **47** | LR | LR | 03 30 52.8 | |
| | comp=Z,47nm,18.7s,baz=250,slow=39 | | | | | | |
| **AKTO** | **Aktyubinsk** | **33.78** | **313** | P | **P** | **03 17 41.6** | **+0.1** |
| | comp=Z,1.7nm,0.8s,baz=62,slow=7.2,SNR=7.1 | | | | | | |
| AKTO | | | | LR | LR | 03 32 12.9 | |
| | comp=Z,68nm,18.3s,baz=312,slow=38 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **ARU** | **Arti** | **35.58** | **323** | LR | LR | 03 33 45.5 | |
| | comp=Z,89nm,20.4s,baz=112,slow=38 | | | | | | |
| **AGG** | **Agios Georgios** | **59.51** | **299** | P | **P** | **03 21 03.6** | **+0.4** |
| **NC405** | **NORSAR Array S** | **59.80** | **326** | P | **P** | **03 21 05.9** | **+1.1** |
| **NOA** | **NORSAR Array B** | **60.06** | **326** | P | **P** | **03 21 06.2** | **-0.3** |
| | comp=Z,0.4nm,0.7s,baz=5.4,slow=16,SNR=3.6 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **63.28** | **141** | P | **P** | **03 21 25.7** | **-3.0** |
| | comp=Z,2.1nm,0.9s,baz=329,slow=7.7,SNR

*NEIC* **14** *03:29:53.4,58.15S×24.80W,h36km,Moment Tensor Solution. Duration: 53 Moment tensor: Scale 1018Nm; Mrr1.13; Mθθ-1.29; Mφφ0.16; Mrθ0.60; Mrφ-0.51; Mθφ-0.43; Fault plane solution: Mo1.52000×1018 NP1:φ96.69000°, δ59.95000°, λ119.79000°. NP2:φ227.86000°, δ41.30000°, λ49.34000°. Principal axes: T 1.4977, Plg62.0000°, Azm56.0000°; N 0.0361, Plg25.0000°, Azm261.0000°; P -1.5339, Plg10.0000°, Azm166.0000°;*

*IPGP* **14** *03:29:53.0,58.15S×25.26W,h30km, Mw6.1, Fault plane solution: NP1:φ111.00000°, δ64.00000°, λ115.00000°. NP2:φ244.00000°, δ36.00000°, λ49.00000°.*

*NEIC* **14** *03:29:53.4,58.15S×25.18W,h35km*

*NEIC* **14** *03:29:53.4,58.15S×25.18W,h36km*

*IDC* **14** *03:29:54.90.8,58.06S×25.15W,h49km6km, mb5.9/19, mbtmp6.1/21, MS5.9/43, Error ellipse: s-maj=9.7km s-min=8.6km az=84.0*

*GCMT* **14** *03:29:55.10.1,58.27S×24.67W,h32km, MW6.1/169, Moment Tensor Solution. s166,c396; s169,c630; Duration: 27 Moment tensor: Scale 1018Nm; Mrr1.19±.01; Mθθ-1.40±.01; Mφφ0.21±.01; Mrθ0.86±.01; Mθφ-0.40±.01; Mrφ-0.66±.01; Best double couple: Mo1.73800×1018 NP1:φ104.00000°, δ65.00000°, λ119.00000°. NP2:φ231.00000°, δ38.00000°, λ44.00000°. Principal axes: T 1.7980, Plg59.0000°, Azm56.0000°; N -0.1170, Plg26.0000°, Azm271.0000°; P -1.6790, Plg15.0000°, Azm173.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 14 03:29:52.1±0.4, 58.19S±0.03×25.24W±0.03, h31km±2km, h31km:pP-P, n2070, σ1.87/1992, mb6.4/208, MS6.1/389, 177C-28D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **7.39** | **297** | | | **Pn** | **03 31 37.9** | **+0.2** |
| **HOPE** | **Hope Point** | **7.39** | **297** | ⇓P | | Pn | 03 31 44.0 | +6.3 |
| **HOPE** | **Hope Point** | **7.39** | **297** | P | | **Pn** | **03 31 37.9** | **+0.2** |
| **ORCD** | **Orcadas** | **10.24** | **247** | Pn | | Pn | **03 32 12.4** | **-4.3** |
| **VNA1** | **Neumayer--Stat** | **14.41** | **157** | ⇑P | | **Pn** | **03 33 14.6** | **+1.0** |
| | comp=Z,3μm,0.9s | | | | | | | |
| VNA1 | | | | ⇑S | | **Sn** | **03 35 45.2** | **-6.9** |
| | comp=Z,112nm,0.6s | | | | | | | |
| VNA1 | | | | ⇑PcP | | **PcP** | **03 38 29.1** | **+1.5** |
| | comp=Z,98nm,0.9s | | | | | | | |
| VNA1 | | | | ⇑ScP | | **ScP** | **03 41 52.4** | **-6.3** |
| | comp=Z,60nm,1.0s | | | | | | | |
| **I27DE** | **GEORG VON NEUM** | **14.44** | **157** | P | | **Pn** | **03 33 14.7** | **+0.7** |
| | baz=314,slow=9.1,SNR=2.6 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **14.61** | **160** | ⇑P | | **Pn** | **03 33 16.9** | **+0.4** |
| | comp=Z,990nm,0.4s | | | | | | | |
| VNA3 | | | | ⇑S | | Sn | 03 35 44.3 | -13 |
| | comp=Z,24nm,0.3s | | | | | | | |
| VNA3 | | | | ⇑PcP | | **PcP** | **03 38 28.9** | **+1.0** |
| | comp=Z,47nm,0.8s | | | | | | | |
| VNA3 | | | | ⇑ScP | | **ScP** | **03 41 50.3** | **-8.8** |
| | comp=Z,31nm,1.0s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **14.80** | **157** | ⇑P | | **Pn** | **03 33 19.3** | **+0.3** |
| | comp=Z,833nm,0.3s,baz=329,slow=16 | | | | | | | |
| VNA2 | | | | ⇑S | | Sn | 03 35 50.9 | -11 |
| | comp=Z,19nm,0.4s,baz=329,slow=16 | | | | | | | |
| VNA2 | | | | ⇑PcP | | **PcP** | **03 38 28.9** | **+0.7** |
| | comp=Z,60nm,0.7s,baz=308,slow=2.5 | | | | | | | |
| VNA2 | | | | ⇑ScP | | **ScP** | **03 41 50.2** | **-9.2** |
| | comp=Z,28nm,1.0s,baz=206,slow=9.3 | | | | | | | |
| **SNAA** | **Sanae** | **16.35** | **155** | Pn | | **Pn** | **03 33 40.4** | **+1.3** |
| SNAA | | | | IAmb | | IAmb | 03 33 42.5 | |
| | comp=Z,10μm,1.8s | | | | | | | |
| **SNAA** | **Sanae** | **16.35** | **155** | ⇓*iP* | | **Pn** | **03 33 39.8** | **+0.7** |
| SNAA | | | | IAmb | | IAmb | 03 33 42.8 | |
| | comp=Z,1882μm,2.7s | | | | | | | |
| **SNAA** | **Sanae** | **16.35** | **155** | ⇑P | | **Pn** | **03 33 40.3** | **+1.2** |
| | comp=Z,11μm,0.3s | | | | | | | |
| SNAA | | | | ⇑S | | Sn | 03 36 29.3 | -10 |
| | comp=Z,1μm,0.5s | | | | | | | |
| SNAA | | | | ⇑PcP | | **PcP** | **03 38 31.2** | **+0.7** |
| | comp=Z,1μm,0.8s | | | | | | | |
| SNAA | | | | ⇑ScP | | ScP | 03 41 52.8 | -10 |
| | comp=Z,666nm,1.0s | | | | | | | |
| **SNAA** | **Sanae** | **16.35** | **155** | P | | **Pn** | **03 33 40.6** | **+1.5** |
| | comp=Z,535nm,0.4s,baz=325,slow=14,SNR=2824 | | | | | | | |
| SNAA | | | | S | | **Sn** | **03 36 39.6** | **+0.3** |
| | comp=Z,54nm,0.7s,baz=342,slow=19,SNR=2.2 | | | | | | | |
| SNAA | | | | LR | | LR | 03 38 43.0 | |
| | comp=Z,64μm,20.3s,baz=320,slow=32 | | | | | | | |
| SNAA | | | | ScP | | **ScP** | **03 42 01.6** | **-0.8** |
| | comp=Z,38nm,1.1s,baz=290,slow=5.4,SNR=8.4 | | | | | | | |
| SNAA | | | | ScS | | **ScS** | **03 45 40.2** | **-0.8** |
| | comp=Z,8.0nm,1.0s,baz=143,slow=6.7,SNR=13 | | | | | | | |
| SNAA | | | | P3KPbc | | | 04 08 41.0 | |
| | comp=Z,2.6nm,1.1s,baz=122,slow=5.2,SNR=3.5 | | | | | | | |
| **SNAA** | **Sanae** | **16.35** | **155** | *dP* | | **Pn** | **03 33 39.8** | **+0.7** |
| **TROLL** | **Troll, Antarti** | **17.85** | **152** | ⇑P | | **P** | **03 34 00.0** | **+1.6** |
| | comp=Z,37μm,0.8s | | | | | | | |
| TROLL | | | | ⇓S | | **Sn** | **03 37 09.7** | **-6.1** |
| | comp=Z,2μm,0.6s | | | | | | | |
| TROLL | | | | ⇑ScP | | ScP | 03 41 53.4 | -12 |
| | comp=Z,2μm,1.2s | | | | | | | |
| **PMSA** | **Palmer Station** | **19.40** | **234** | P | | **Pn** | **03 34 18.0** | **+1.5** |
| **PMSA** | **Palmer Station** | **19.40** | **234** | P | | **Pn** | **03 34 18.9** | **+2.4** |
| | comp=Z,305nm,1.1s,baz=92,slow=8.7,SNR=28 | | | | | | | |
| PMSA | | | | S | | **Sn** | **03 37 56.6** | **+3.8** |
| | comp=Z,43nm,1.2s,baz=138,slow=16,SNR=1.5 | | | | | | | |
| PMSA | | | | PcP | | **PcP** | **03 38 36.7** | **+1.2** |
| | comp=Z,56nm,0.9s,baz=33,slow=4.6,SNR=3.5 | | | | | | | |
| PMSA | | | | LR | | LR | 03 40 35.1 | |
| | comp=Z,85μm,21.7s,baz=84,slow=33 | | | | | | | |
| PMSA | | | | ScP | | **ScP** | **03 42 08.5** | **-0.3** |
| | comp=Z,100nm,0.9s,baz=51,slow=1.3,SNR=14 | | | | | | | |
| PMSA | | | | ScS | | **ScS** | **03 45 49.2** | **-1.1** |
| | comp=Z,14nm,0.9s,baz=261,slow=24,SNR=18 | | | | | | | |
| **EFI** | **East Falkland** | **19.80** | **275** | P | | **Pn** | **03 34 21.3** | **-0.1** |
| EFI | | | | IAmb | | IAmb | 03 34 30.7 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **EFI** | **East Falkland** | **19.80** | **275** | *ciP* | | **Pn** | **03 34 21.7** | **+0.3** |
| EFI | | | | pmax | | pmax | | |
| | comp=Z,725nm,1.3s | | | | | | | |
| **NVL** | **N'lazarevskaya** | **19.90** | **144** | *eP* | | **P** | **03 34 16.4** | **-4.2** |
| NVL | | | | pmax | | pmax | | |
| | comp=Z,990nm,1.7s | | | | | | | |
| NVL | | | | MLR | | MLR | | |
| | comp=Z,27μm,15.0s | | | | | | | |
| **BELA** | **Belgrano 2** | **20.03** | **186** | P | | **P** | **03 34 22.6** | **+0.5** |
| **SMAI** | **San Martin Ant** | **20.90** | **224** | P | | Pn | 03 34 34.1 | -0.1 |
| SMAI | | | | IAmb | | IAmb | 03 34 39.1 | |
| | comp=Z,1μm,1.3s | | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **22.75** | **28** | P | | **P** | **03 34 52.9** | **+1.4** |
| | SNR=112 | | | | | | | |
| H09W1 | | | | T | | T | 03 59 38.4 | |
| | SNR=20 | | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **22.78** | **28** | P | | **P** | **03 34 52.9** | **+1.1** |
| | SNR=167 | | | | | | | |
| **TRIS** | **Tristan da Cun** | **22.78** | **28** | ⇑*iP* | | **P** | **03 34 52.4** | **+0.6** |
| TRIS | | | | IAmb | | IAmb | 03 34 54.9 | |
| | comp=Z,6μm,1.2s | | | | | | | |
| **MG01** | **Puerto William** | **23.30** | **260** | P | | **P** | **03 34 58.5** | **+1.5** |
| MG01 | | | | IAmb | | IAmb | 03 35 03.0 | |
| | comp=Z,1μm,1.1s | | | | | | | |
| **USHA** | **Ushuaia** | **23.76** | **259** | LR | | LR | 03 42 14.5 | |
| | comp=Z,68μm,21.1s,baz=96,slow=31 | | | | | | | |
| **ELIB** | **Princess Elisa** | **23.77** | **145** | *dP* | | **P** | **03 35 02.6** | **+1.0** |
| **GO10** | **Punta Arenas** | **25.91** | **261** | P | | **P** | **03 35 22.9** | **+1.8** |
| GO10 | | | | IAmb | | IAmb | 03 35 49.6 | |
| | comp=Z,1μm,1.4s | | | | | | | |
| GO10 | | | | IAMs_20 | | IAMs_20 | 03 43 41.7 | |
| | comp=Z,42μm,20.0s | | | | | | | |
| **MG04** | **Isla Riesco** | **26.33** | **261** | P | | **P** | **03 35 25.5** | **+0.6** |
| **MG05** | **Puerto Natales** | **27.43** | **263** | P | | **P** | **03 35 34.2** | **-0.6** |
| **GO09** | **Cerro Castillo** | **27.57** | **264** | P | | **P** | **03 35 35.4** | **-0.6** |
| **GO08** | **Villa O'Higgin** | **29.30** | **269** | P | | **P** | **03 35 52.4** | **+0.9** |
| **AY03** | **Cochrane** | **30.07** | **270** | P | | **P** | **03 35 58.6** | **+0.3** |
| **AY02** | **Valle Explorad** | **30.88** | **271** | P | | **P** | **03 36 07.5** | **+2.1** |
| AY02 | | | | IAmb | | IAmb | 03 36 56.1 | |
| | comp=Z,665nm,0.9s | | | | | | | |
| **COYC** | **Coyhaique** | **30.88** | **273** | P | | **P** | **03 36 05.3** | **-0.2** |
| COYC | | | | IAmb | | IAmb | 03 36 21.8 | |
| | comp=Z,571nm,1.2s | | | | | | | |
| **TRQA** | **Tornquist** | **31.16** | **294** | P | | **P** | **03 36 06.7** | **-1.3** |
| **TRQA** | **Tornquist** | **31.16** | **294** | *eP* | | **P** | **03 36 06.7** | **-1.3** |
| **LPA** | **La Plata** | **31.83** | **303** | *deP* | | **P** | **03 36 12.4** | **-1.5** |
| LPA | | | | PP | | **PnPn** | **03 37 13.7** | **-5.1** |
| LPA | | | | S | | **S** | **03 41 28.5** | **+6.3** |
| LPA | | | | SS | | **SnSn** | **03 43 16.1** | **+5.0** |
| **QSPA** | **South Pole Qui** | **32.06** | **180** | P | | **P** | **03 36 17.1** | **+1.2** |
| QSPA | | | | IAmb | | IAmb | 03 36 20.3 | |
| | comp=Z,1μm,1.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **32.06** | **180** | IAMs_20 | | IAMs_20 | 03 48 48.7 | |
| | comp=Z,48μm,20.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **32.06** | **180** | P | | **P** | **03 36 18.0** | **+2.2** |
| | comp=Z,333nm,1.2s,baz=204,slow=4.0,SNR=236 | | | | | | | |
| QSPA | | | | S | | **S** | **03 41 26.1** | **+0.5** |
| | comp=Z,20nm,1.0s,baz=270,slow=20,SNR=1.4 | | | | | | | |
| QSPA | | | | ScP | | **ScP** | **03 42 44.2** | **-1.2** |
| | comp=Z,68nm,1.1s,baz=257,slow=0.5,SNR=3.7 | | | | | | | |
| QSPA | | | | PKiKP | | **PKiKP** | **03 46 31.1** | **-0.8** |
| | comp=Z,8.6nm,0.8s,baz=237,slow=1.9,SNR=7.5 | | | | | | | |
| QSPA | | | | ScS | | **ScS** | **03 46 41.9** | **-1.9** |
| | comp=Z,7.7nm,1.0s,baz=287,slow=19,SNR=2.0 | | | | | | | |
| QSPA | | | | LR | | LR | 03 49 10.5 | |
| | comp=Z,49μm,19.5s,baz=194,slow=36 | | | | | | | |
| QSPA | | | | P3KPbc | | | 04 07 46.2 | |
| | comp=Z,19nm,1.0s,baz=354,slow=1.8,SNR=30 | | | | | | | |
| QSPA | | | | P3KP | | | 04 09 09.3 | |
| | comp=Z,11nm,1.0s,baz=319,slow=3.1,SNR=4.9 | | | | | | | |
| QSPA | | | | PKP2ab | | | 04 11 44.7 | |
| | comp=Z,2.8nm,1.1s,baz=292,slow=2.3,SNR=3.2 | | | | | | | |
| | comp=Z,333nm,1.2s | | | | | | | |
| **LL02** | **Futaleuf** | **32.37** | **277** | P | | **P** | **03 36 18.4** | **-0.3** |
| LL02 | | | | IAmb | | IAmb | 03 36 23.3 | |
| | comp=Z,712nm,1.1s | | | | | | | |
| **PLTB** | **Pedras Altas** | **32.72** | **312** | P | | **P** | **03 36 20.9** | **-0.8** |
| **PLTB** | **Pedras Altas** | **32.72** | **312** | *eP* | | **P** | **03 36 21.7** | **-0.1** |
| **LL01** | **San Ignacio de** | **33.24** | **277** | P | | **P** | **03 36 25.4** | **-0.8** |
| **GO07** | **Milladeo Hill,** | **33.38** | **275** | P | | **P** | **03 36 26.9** | **-0.5** |
| GO07 | | | | IAmb | | IAmb | 03 36 41.0 | |
| | comp=Z,703nm,1.4s | | | | | | | |
| **PLCA** | **Paso Flores** | **33.45** | **281** | P | | **P** | **03 36 27.8** | **-0.3** |
| PLCA | | | | IAmb | | IAmb | 03 36 30.5 | |
| | comp=Z,660nm,1.0s | | | | | | | |
| **PLCA** | **Paso Flores** | **33.45** | **281** | P | | **P** | **03 36 28.2** | **+0.2** |
| | comp=Z,417nm,0.9s,baz=145,slow=8.3,SNR=493 | | | | | | | |
| PLCA | | | | PcP | | **PcP** | **03 39 09.8** | **+1.1** |
| | comp=Z,64nm,0.9s,baz=142,slow=4.0,SNR=4.6 | | | | | | | |
| PLCA | | | | ScP | | **ScP** | **03 42 49.1** | **-1.4** |
| | comp=Z,80nm,0.9s,baz=132,slow=3.6,SNR=19 | | | | | | | |
| PLCA | | | | LR | | LR | 03 49 53.0 | |
| | comp=Z,19μm,19.2s,baz=134,slow=36 | | | | | | | |
| PLCA | | | | P3KPbc | | | 04 07 37.7 | |
| | comp=Z,4.9nm,1.1s,baz=323,slow=5.4,SNR=5.1 | | | | | | | |
| PLCA | | | | P3KP | | | 04 08 58.8 | |
| | comp=Z,4.5nm,1.0s,baz=358,slow=6.3,SNR=3.1 | | | | | | | |
| PLCA | | | | PKP2ab | | | 04 11 34.2 | |
| | comp=Z,4.9nm,1.1s,baz=347,slow=3.0,SNR=3.3 | | | | | | | |
| | comp=Z,417nm,0.9s | | | | | | | |
| **PLCA** | **Paso Flores** | **33.45** | **281** | *eP* | | **P** | **03 36 28.3** | **+0.2** |
| **LL07** | **Hotel Espejo d** | **33.48** | **276** | P | | **P** | **03 36 26.9** | **-1.3** |
| LL07 | | | | IAmb | | IAmb | 03 36 29.5 | |
| | comp=Z,739nm,0.9s | | | | | | | |
| **TBOT** | **Tacuaremb** | **33.73** | **308** | *eP* | | **P** | **03 36 30.1** | **-0.5** |
| **CPSB** | **Cacapava Do Su** | **33.85** | **313** | *eP* | | **P** | **03 36 31.3** | **-0.3** |
| **LL06** | **Loncomilla** | **33.99** | **277** | P | | **P** | **03 36 32.1** | **-0.6** |
| LL06 | | | | IAmb | | IAmb | 03 36 38.5 | |
| | comp=Z,611nm,1.1s | | | | | | | |
| **LL03** | **Petrohue** | **34.12** | **279** | P | | **P** | **03 36 33.9** | **+0.1** |
| LL03 | | | | IAmb | | IAmb | 03 36 36.5 | |
| | comp=Z,857nm,0.9s | | | | | | | |
| **LL04** | **Puerto Octay** | **34.28** | **279** | P | | **P** | **03 36 35.1** | **-0.2** |
| LL04 | | | | IAmb | | IAmb | 03 36 36.8 | |
| | comp=Z,375nm,0.8s | | | | | | | |
| **LL05** | **Los Muermos** | **34.49** | **278** | P | | **P** | **03 36 34.2** | **-2.8** |
| LL05 | | | | IAmb | | IAmb | 03 36 40.4 | |
| | comp=Z,410nm,0.8s | | | | | | | |
| **LR05** | **Currie** | **34.57** | **281** | P | | **P** | **03 36 37.7** | **0.0** |
| LR05 | | | | IAmb | | IAmb | 03 36 40.0 | |
| | comp=Z,496nm,0.9s | | | | | | | |
| **RODS** | **Rosario do Sul** | **34.60** | **311** | *eP* | | **P** | **03 36 37.2** | **-0.9** |
| **GO06** | **Curarrehue** | **34.77** | **282** | P | | **P** | **03 36 39.3** | **-0.3** |
| **ALGR** | **Alto Alegre (B** | **35.14** | **315** | *eP* | | **P** | **03 36 42.9** | **0.0** |
| **LR03** | **Panguipulli** | **35.19** | **281** | P | | **P** | **03 36 43.3** | **+0.2** |
| LR03 | | | | IAmb | | IAmb | 03 36 46.5 | |
| | comp=Z,469nm,1.1s | | | | | | | |
| **LR04** | **Corral** | **35.57** | **280** | P | | **P** | **03 36 47.0** | **+0.6** |
| **ITQB** | **Itaqui** | **35.78** | **309** | P | | **P** | **03 36 47.0** | **-1.2** |
| ITQB | | | | IAmb | | IAmb | 03 36 48.8 | |
| | comp=Z,448nm,1.0s | | | | | | | |
| ITQB | | | | PcP | | **PcP** | **03 39 16.6** | **+1.1** |
| **ITAB** | **Concordia** | **36.22** | **317** | P | | **P** | **03 36 52.5** | **+0.4** |
| ITAB | | | | IAmb | | IAmb | 03 36 54.8 | |
| | comp=Z,745nm,1.1s | | | | | | | |
| **ITAB** | **Concordia** | **36.22** | **317** | *eP* | | **P** | **03 36 52.6** | **+0.6** |
| **LC02** | **Puerto Saavedr** | **36.35** | **281** | P | | **P** | **03 36 54.3** | **+1.3** |
| **CRSM** | **Crissiumal (Br** | **36.70** | **314** | *eP* | | **P** | **03 36 55.6** | **-0.5** |
| **BI02** | **San Fabin de** | **36.87** | **285** | P | | **P** | **03 36 57.2** | **-0.5** |
| **PET01** | **Itanhaem-SP** | **37.34** | **326** | *eP* | | **P** | **03 37 02.3** | **+0.7** |
| **ML02** | **Panimavida** | **37.65** | **286** | P | | **P** | **03 37 03.4** | **-0.7** |
| **PARB** | **Paraibuna** | **37.77** | **328** | *eP* | | **P** | **03 37 06.3** | **+1.0** |
| **MAW** | **Mawson** | **37.80** | **141** | ⇑P | | **P** | **03 37 06.1** | **+1.1** |
| **MAW** | **Mawson** | **37.80** | **141** | P | | **P** | **03 37 06.7** | **+1.7** |
| | comp=Z,163nm,1.0s,baz=237,slow=8.5,SNR=81 | | | | | | | |
| MAW | | | | PcP | | **PcP** | **03 39 22.5** | **+1.6** |
| | comp=Z,104nm,1.0s,baz=278,slow=4.8,SNR=5.9 | | | | | | | |
| MAW | | | | S | | **S** | **03 42 49.4** | **-4.0** |
| | comp=Z,4.3nm,0.9s,baz=266,slow=14,SNR=1.2 | | | | | | | |
| MAW | | | | ScP | | **ScP** | **03 43 05.7** | **-0.1** |
| | comp=Z,33nm,1.0s,baz=274,slow=5.2,SNR=6.9 | | | | | | | |
| MAW | | | | LR | | LR | 03 50 46.3 | |
| | comp=Z,21μm,20.1s,baz=256,slow=33 | | | | | | | |
| | comp=Z,163nm,1.0s | | | | | | | |
| **ELIM** | **Elim** | **37.96** | **71** | ⇑*iP* | | **P** | **03 37 06.6** | **-0.2** |
| ELIM | | | | IAmb | | IAmb | 03 37 07.9 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **SPB** | **Sao Paulo** | **38.05** | **326** | P | | **P** | **03 37 07.8** | **+0.3** |
| **SPB** | **Sao Paulo** | **38.05** | **326** | ⇑P | | **P** | **03 37 08.9** | **+1.3** |
| **SPB** | **Sao Paulo** | **38.05** | **326** | *eP* | | **P** | **03 37 08.9** | **+1.3** |
| **BO02** | **Sierra Bellavi** | **38.08** | **288** | P | | **P** | **03 37 06.5** | **-1.3** |
| **DUB01** | **Friburgo-RJ** | **38.14** | **334** | *eP* | | **P** | **03 37 09.6** | **+1.2** |
| **VAS01** | **Vassouras-RJ** | **38.20** | **332** | *eP* | | **P** | **03 37 10.0** | **+1.0** |
| **VAO** | **Valinhos** | **38.47** | **327** | P | | **P** | **03 37 11.8** | **+0.6** |
| VAO | | | | ScP | | **ScP** | **03 43 08.2** | **-0.9** |
| **VAO** | **Valinhos** | **38.47** | **327** | *eP* | | **P** | **03 37 12.2** | **+1.0** |
| **AAGR** | **Agrelo** | **38.47** | **291** | *eP* | | **P** | **03 37 10.1** | **-1.1** |
| **GO05** | **Huala** | **38.49** | **286** | P | | **P** | **03 37 10.8** | **-0.5** |
| GO05 | | | | IAmb | | IAmb | 03 37 29.6 | |
| | comp=Z,445nm,1.1s | | | | | | | |
| GO05 | | | | ScP | | **S** | **03 43 06.9** | **+2.2** |
| **PTGB** | **Pitanga** | **38.50** | **319** | *eP* | | **P** | **03 37 11.4** | **-0.1** |
| **LMEL** | **Las Melosas** | **38.54** | **289** | P | | **P** | **03 37 12.9** | **+1.1** |
| **BO01** | **Tunca** | **38.55** | **288** | P | | **P** | **03 37 11.6** | **-0.1** |
| **BO04** | **La Punta** | **38.63** | **289** | P | | **P** | **03 37 12.3** | **-0.2** |
| **MT13** | **San Alfonso** | **38.66** | **289** | P | | **P** | **03 37 13.2** | **+0.4** |
| **CER** | **Ceres** | **38.72** | **70** | ⇑*iP* | | **P** | **03 37 13.0** | **-0.2** |
| CER | | | | IAmb | | IAmb | 03 37 14.2 | |
| | comp=Z,816nm,0.9s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **38.72** | **292** | *eP* | | **P** | **03 37 11.8** | **-1.6** |
| **MT08** | **Bocatoma Ro** | **38.77** | **290** | P | | **P** | **03 37 14.4** | **+0.5** |
| **PRTV** | **Porterville,We** | **38.85** | **69** | ⇑*iP* | | **P** | **03 37 14.4** | **0.0** |
| PRTV | | | | IAmb | | IAmb | 03 37 15.8 | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **ASAL** | **Salagasta** | **38.87** | **292** | *eP* | | **P** | **03 37 13.7** | **-0.8** |
| **FRTB** | **Fartura** | **38.94** | **323** | *eP* | | **P** | **03 37 15.4** | **+0.3** |
| **MT03** | **Universidad Ad** | **38.98** | **289** | P | | **P** | **03 37 16.1** | **+0.7** |
| MT03 | | | | ScP | | **ScP** | **03 43 08.9** | **-2.2** |
| **MT09** | **Talagante** | **38.99** | **289** | P | | **P** | **03 37 15.2** | **-0.4** |
| MT09 | | | | IAmb | | IAmb | 03 37 33.9 | |
| | comp=Z,833nm,1.8s | | | | | | | |
| **CPUP** | **Villa Florida** | **39.02** | **311** | P | | **P** | **03 37 15.1** | **-0.6** |
| CPUP | | | | PcP | | **PcP** | **03 39 25.9** | **+0.5** |
| **CPUP** | **Villa Florida** | **39.02** | **311** | P | | **P** | **03 37 14.6** | **-1.1** |
| | comp=Z,202nm,0.9s,baz=156,slow=7.7,SNR=178 | | | | | | | |
| CPUP | | | | PcP | | **PcP** | **03 39 25.9** | **+0.5** |
| | comp=Z,128nm,1.0s,baz=153,slow=1.3,SNR=5.5 | | | | | | | |
| CPUP | | | | ScP | | **ScP** | **03 43 09.4** | **-1.8** |
| | comp=Z,109nm,1.1s,baz=175,slow=3.6,SNR=16 | | | | | | | |
| CPUP | | | | LR | | LR | 03 52 20.0 | |
| | comp=Z,15μm,20.7s,baz=154,slow=34 | | | | | | | |
| CPUP | | | | P3KPbc | | | 04 07 13.7 | |
| | comp=Z,3.1nm,1.0s,baz=22,slow=1.1,SNR=4.7 | | | | | | | |
| CPUP | | | | P3KP | | | 04 08 42.2 | |
| | comp=Z,1.0nm,0.6s,baz=207,slow=3.9,SNR=3.0 | | | | | | | |
| | comp=Z,202nm,0.9s | | | | | | | |
| **CPUP** | **Villa Florida** | **39.02** | **311** | *eP* | | **P** | **03 37 14.9** | **-0.9** |
| **MT16** | **CCHEN** | **39.04** | **289** | P | | **P** | **03 37 16.2** | **+0.4** |
| MT16 | | | | IAmb | | IAmb | 03 37 34.8 | |
| | comp=Z,786nm,1.4s | | | | | | | |
| MT16 | | | | ScP | | **ScP** | **03 43 09.2** | **-2.1** |
| **MT01** | **Popeta** | **39.05** | **288** | P | | **P** | **03 37 15.3** | **-0.7** |
| **MT05** | **Renca** | **39.17** | **289** | P | | **P** | **03 37 17.4** | **+0.4** |
| **RCLB** | **Rio Claro- Sao** | **39.18** | **326** | *eP* | | **P** | **03 37 18.4** | **+1.2** |
| **ALF01** | **Guarapari-ES** | **39.19** | **337** | *eP* | | **P** | **03 37 18.5** | **+1.4** |
| **PEL** | **Peldehue** | **39.34** | **289** | P | | **P** | **03 37 18.5** | **0.0** |
| PEL | | | | IAmb | | IAmb | 03 37 36.4 | |
| | comp=Z,642nm,1.3s | | | | | | | |
| **PEL** | **Peldehue** | **39.34** | **289** | P | | **P** | **03 37 18.5** | **0.0** |
| PEL | | | | pmax | | pmax | | |
| | comp=Z,642nm,1.3s | | | | | | | |
| **LDASE** | **Londrina, Braz** | **39.40** | **321** | *eP* | | **P** | **03 37 19.6** | **+0.6** |
| **VA05** | **Santo Domingo** | **39.40** | **288** | P | | **P** | **03 37 19.0** | **+0.1** |
| VA05 | | | | IAmb | | IAmb | 03 37 36.1 | |
| | comp=Z,2μm,1.6s | | | | | | | |
| **MATJ** | **Matjiesfontein** | **39.44** | **71** | ⇑*iP* | | **P** | **03 37 19.2** | **-0.1** |
| MATJ | | | | IAmb | | IAmb | 03 37 20.6 | |
| | comp=Z,3μm,1.2s | | | | | | | |
| **AUSP** | **Uspallata** | **39.44** | **292** | *eP* | | **P** | **03 37 19.2** | **-0.4** |
| **MT02** | **Curacav** | **39.48** | **289** | P | | **P** | **03 37 19.1** | **-0.4** |
| MT02 | | | | PcP | | **PcP** | **03 39 26.9** | **+0.1** |
| **VA03** | **San Esteban** | **39.58** | **290** | P | | **P** | **03 37 21.1** | **+0.6** |
| **VA03** | **San Esteban** | **39.58** | **290** | *iP* | | **P** | **03 37 19.9** | **-0.6** |
| **ZON** | **Zonda** | **39.65** | **293** | P | | **P** | **03 37 19.9** | **-1.2** |
| ZON | | | | PcP | | **PcP** | **03 39 28.0** | **+0.6** |
| **ZON** | **Zonda** | **39.65** | **293** | *iP* | | **P** | **03 37 19.0** | **-2.1** |
| **RTLL** | **Cerro Villicun** | **39.73** | **293** | *iP* | | **P** | **03 37 20.1** | **-1.5** |
| **RTLS** | **Leoncito** | **39.74** | **292** | *eP* | | **P** | **03 37 20.9** | **-1.2** |
| **BSCB** | **Bom Sucesso** | **39.77** | **331** | *eP* | | **P** | **03 37 23.1** | **+1.0** |
| **AVFE** | **Valle Fertil** | **39.79** | **295** | *eP* | | **P** | **03 37 20.9** | **-1.4** |
| **VA06** | **Catapilco** | **40.12** | **289** | P | | **P** | **03 37 24.4** | **-0.4** |
| VA06 | | | | IAmb | | IAmb | 03 37 42.5 | |
| | comp=Z,852nm,1.8s | | | | | | | |
| VA06 | | | | ScP | | **ScP** | **03 43 12.1** | **-3.2** |
| **SUR** | **Sutherland** | **40.26** | **70** | P | | **P** | **03 37 26.7** | **+0.4** |
| SUR | | | | IAmb | | IAmb | 03 37 28.3 | |
| | comp=Z,1μm,1.1s | | | | | | | |
| SUR | | | | PcP | | **PcP** | **03 39 30.7** | **+1.2** |
| **SUR** | **Sutherland** | **40.26** | **70** | IAMs_20 | | IAMs_20 | 03 49 36.1 | |
| | comp=Z,32μm,22.0s | | | | | | | |
| **SUR** | **Sutherland** | **40.26** | **70** | ⇑*iP* | | **P** | **03 37 26.0** | **-0.3** |
| SUR | | | | IAmb | | IAmb | 03 37 28.0 | |
| | comp=Z,1μm,1.1s | | | | | | | |
| **SUR** | **Sutherland** | **40.26** | **70** | ⇑P | | **P** | **03 37 26.0** | **-0.3** |
| **SUR** | **Sutherland** | **40.26** | **70** | LR | | LR | 03 49 56.7 | |
| | comp=Z,32μm,21.7s,baz=220,slow=30 | | | | | | | |
| **SUR** | **Sutherland** | **40.26** | **70** | P | | **P** | **03 37 27.3** | **+1.0** |
| SUR | | | | P | | **P** | **03 37 27.3** | **+1.0** |
| **MERW** | **Merweville** | **40.38** | **72** | ⇑*iP* | | **P** | **03 37 26.7** | **-0.5** |
| MERW | | | | IAmb | | IAmb | 03 37 28.3 | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **RIB01** | **Linhares ES** | **40.38** | **338** | *eP* | | **P** | **03 37 28.2** | **+1.1** |
| **CVNA** | **Calvinia** | **40.47** | **69** | ⇑*iP* | | **P** | **03 37 28.2** | **+0.3** |
| CVNA | | | | IAmb | | IAmb | 03 37 29.7 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **TRCB** | **Terra Rica** | **40.47** | **319** | P | | **P** | **03 37 28.2** | **+0.4** |
| TRCB | | | | IAmb | | IAmb | 03 37 29.3 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **TRCB** | **Terra Rica** | **40.47** | **319** | *eP* | | **P** | **03 37 27.8** | **0.0** |
| **ACLC** | **CERRO LA CRUZ** | **40.58** | **297** | *eP* | | **P** | **03 37 26.5** | **-2.3** |
| **ACCO** | **Cerro Coronel** | **40.62** | **293** | *eP* | | **P** | **03 37 28.9** | **-0.5** |
| **KOMG** | **Komaggas** | **40.75** | **65** | ⇑*iP* | | **P** | **03 37 30.4** | **+0.4** |
| KOMG | | | | IAmb | | IAmb | 03 37 31.6 | |
| | comp=Z,2μm,1.3s | | | | | | | |
| **BUFB** | **Buffelsbos** | **40.85** | **76** | *eP* | | **P** | **03 37 31.4** | **+0.5** |
| BUFB | | | | IAmb | | IAmb | 03 37 32.1 | |
| | comp=Z,1μm,1.2s | | | | | | | |
| **CYA** | **Choya** | **40.87** | **299** | *iP* | | **P** | **03 37 28.0** | **-3.1** |
| CYA | | | | *eP* | | **P** | **03 37 28.4** | **-2.7** |
| **FRAZ** | **Fraserburg** | **40.92** | **71** | ⇑*iP* | | **P** | **03 37 31.8** | **+0.2** |
| FRAZ | | | | IAmb | | IAmb | 03 37 33.3 | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **GRAN** | **Grantham** | **41.01** | **72** | ⇑*iP* | | **P** | **03 37 32.2** | **0.0** |
| GRAN | | | | IAmb | | IAmb | 03 37 33.6 | |
| | comp=Z,679nm,0.9s | | | | | | | |
| **CO02** | **Combarbal** | **41.07** | **291** | P | | **P** | **03 37 32.4** | **-0.5** |
| **PCM

comp=Z,490nm,1.0s
AQDB PcP **PcP** **03 39 41.2 +0.5**
**AQDB Aquidauana 43.69 317** *eP* **P** **03 37 52.8 -1.3**
**UPI Upington 43.76 68**⇑*iP* **P** **03 37 54.8 +0.1**
UPI IAmb IAmb 03 37 55.9
comp=Z,3μm,1.2s
**SLA San Lorenzo 43.92 302** *eP* **P** **03 37 54.0 -2.1**
**AC06 Mina Casimiro 43.93 295** P **P** **03 37 55.1 -0.9**
**SBA Scott Base 44.01 184** P **P** **03 37 58.9 +2.9**
SBA IAmb IAmb 03 38 01.6
comp=Z,914nm,1.5s
**SBA Scott Base 44.01 184** IAMs_20 IAMs_20 03 56 17.8
comp=Z,19μm,19.0s
**SBA Scott Base 44.01 184** P **P** **03 37 58.9 +2.9**
SBA pmax pmax
comp=Z,914nm,1.5s
SBA MLR MLR
comp=Z,19μm,19.0s
**HVD Gariep Dam 44.05 74**⇑*iP* **P** **03 37 57.2 +0.1**
HVD IAmb IAmb 03 37 58.2
comp=Z,1μm,1.1s
**AZAP Zapla 44.15 303** *eP* **P** **03 37 55.9 -2.2**
**VNDA Vanda 44.48 182** P **P** **03 38 02.0 +2.3**
VNDA IAmb IAmb 03 38 04.7
comp=Z,785nm,1.6s
**VNDA Vanda 44.48 182** P **P** **03 38 03.1 +3.3**
comp=Z,134nm,1.0s,baz=189,slow=6.8,SNR=461
VNDA ScP **ScP** **03 43 32.0 -0.1**
comp=Z,33nm,1.0s,baz=218,slow=4.0,SNR=6.0
VNDA S **S** **03 44 29.1 -3.2**
comp=Z,3.1nm,0.9s,baz=107,slow=17,SNR=0.6
VNDA LR LR 03 55 24.6
comp=Z,16μm,21.9s,baz=170,slow=34
VNDA P3KP 04 08 33.0
comp=Z,1.3nm,1.0s,baz=207,slow=2.3,SNR=3.4
comp=Z,134nm,1.0s
**VNDA Vanda 44.48 182** P **P** **03 38 02.1 +2.3**
VNDA pmax pmax
comp=Z,785nm,1.7s
**SHEL Horse Pasture 44.59 27** P **P** **03 38 00.5 -0.9**
**SHEL Horse Pasture 44.59 27** IAMs_20 IAMs_20 03 51 17.2
comp=Z,22μm,20.0s
**SHEL Horse Pasture 44.59 27**⇑*iP* **P** **03 38 01.9 +0.5**
**SHEL Horse Pasture 44.59 27**⇑⇑P **P** **03 38 01.7 +0.3**
**SHEL Horse Pasture 44.59 27** P **P** **03 38 00.5 -0.9**
**JANB Januaria 45.36 334** *eP* **P** **03 38 07.5 0.0**
**GO02 Mina Guanaco 45.42 297** P **P** **03 38 07.6 -0.7**
GO02 PcP **PcP** **03 39 46.9 -0.1**
**GO02 Mina Guanaco 45.42 297**⇑⇑P **P** **03 38 07.1 -1.1**
**BOSA Boshof 45.55 72** P **P** **03 38 07.5 -1.5**
**BOSA Boshof 45.55 72**⇑*iP* **P** **03 38 08.2 -0.7**
BOSA IAmb IAmb 03 38 09.4
comp=Z,2μm,1.1s
**BOSA Boshof 45.55 72**⇑⇑P **P** **03 38 07.9 -1.1**
**BOSA Boshof 45.55 72** P **P** **03 38 08.0 -1.0**
comp=Z,942nm,1.0s,baz=214,slow=7.1,SNR=454
BOSA PcP **PcP** **03 39 47.5 +0.3**
comp=Z,155nm,1.0s,baz=237,slow=3.4,SNR=4.0
BOSA LR LR 03 53 13.9
comp=Z,19μm,21.8s,baz=216,slow=31
comp=Z,942nm,1.0s
**BOSA Boshof 45.55 72** *iP* **P** **03 38 09.1 +0.1**
**BOSA Boshof 45.55 72** P **P** **03 38 07.5 -1.5**
BOSA pmax pmax
comp=Z,2μm,1.1s
**BOSA Boshof 45.55 72** *iP* **P** **03 38 09.1 +0.1**
**H04S2 CROZET ISLANDS 45.75 111** T T 04 27 41.8
baz=226,slow=75,SNR=86
**BDFB Brasilia 45.75 329** P **P** **03 38 11.1 +0.5**
BDFB IAmb IAmb 03 38 13.1
comp=Z,988nm,1.2s
**BDFB Brasilia 45.75 329** P **P** **03 38 11.3 +0.7**
comp=Z,529nm,1.1s,baz=153,slow=7.0,SNR=262
BDFB ScP **ScP** **03 43 37.5 -0.8**
comp=Z,40nm,1.0s,baz=180,slow=1.0,SNR=3.0
BDFB S S 03 44 42.7 -9.3
comp=Z,16nm,1.0s,baz=121,slow=19,SNR=1.3
BDFB ScS **ScS** **03 48 00.3 -4.1**
comp=Z,13nm,1.1s,baz=176,slow=19,SNR=2.3
BDFB LR LR 03 56 56.1
comp=Z,23μm,19.0s,baz=157,slow=36
comp=Z,529nm,1.1s
**BDFB Brasilia 45.75 329** P **P** **03 38 11.1 +0.5**
BDFB pmax pmax
comp=Z,989nm,1.2s
**H04S3 CROZET ISLANDS 45.76 111** T T 04 27 43.2
baz=226,slow=75,SNR=71
**H04S1 CROZET ISLANDS 45.76 111** T T 04 27 39.5
baz=226,slow=75,SNR=84
**KSTD Kokstad 46.00 78**⇑*iP* **P** **03 38 13.1 +0.5**
KSTD IAmb IAmb 03 38 13.6
comp=Z,527nm,1.2s
**CRZF Crozet Islands 46.02 110** P **P** **03 38 12.7 +0.3**
CRZF IAmb IAmb 03 38 14.3
comp=Z,427nm,1.1s
**YJA Yavi 46.14 304** *iP* **P** **03 38 12.9 -1.2**
**H04N3 CROZET ISLANDS 46.16 110** P **P** **03 38 14.3 +1.0**
baz=13,slow=75,SNR=7.9
H04N3 T T 04 28 21.2
baz=226,slow=75,SNR=5.3
**H04N1 CROZET ISLANDS 46.17 110** P **P** **03 38 14.2 +0.9**
baz=13,slow=75,SNR=8.3
H04N1 T T 04 28 22.8
baz=226,slow=75,SNR=5.8
**H04N2 CROZET ISLANDS 46.18 110** P **P** **03 38 15.1 +1.7**
baz=13,slow=75,SNR=6.8
H04N2 T T 04 28 21.2
baz=226,slow=75,SNR=7.7
**PB14 IPOC Station P 46.26 297** P **P** **03 38 13.6 -1.3**
PB14 PcP **PcP** **03 39 49.7 -0.3**
**AF01 San Pedro de A 46.66 300** P **P** **03 38 17.9 -0.1**
AF01 IAmb IAmb 03 38 19.4
comp=Z,531nm,1.1s
AF01 PcP **PcP** **03 39 51.3 -0.1**
**WIN Windhoek 46.72 59** P **P** **03 38 18.1 -0.3**
WIN IAmb IAmb 03 38 20.0
comp=Z,950nm,1.7s
WIN IAMs_20 IAMs_20 03 53 13.1
comp=Z,16μm,20.0s
**WIN Windhoek 46.72 59**⇑*iP* **P** **03 38 18.1 -0.3**
WIN IAmb IAmb 03 38 19.6
comp=Z,320nm,1.6s
**WIN Windhoek 46.72 59** P **P** **03 38 18.1 -0.3**
WIN pmax pmax
comp=Z,950nm,1.7s
**SWZ Schweizer 46.76 71** *eP* **P** **03 38 17.7 -0.9**
SWZ IAmb IAmb 03 38 18.9
comp=Z,2μm,1.1s
**ARAG Araguaiana, MT 46.81 324** *eP* **P** **03 38 19.2 +0.4**
**SNKL Senekal, Frees 47.09 74**⇑*iP* **P** **03 38 20.7 -0.5**
SNKL IAmb IAmb 03 38 22.0
comp=Z,1μm,1.1s
**LVC Limon Verde 47.29 300** P **P** **03 38 21.8 -1.2**
**LVC Limon Verde 47.29 300** P **P** **03 38 22.7 -0.3**
comp=Z,65nm,0.6s,baz=150,slow=4.8,SNR=47
LVC PcP **PcP** **03 39 54.6 +0.9**
comp=Z,77nm,0.9s,baz=234,slow=1.6,SNR=3.7
LVC LR LR 03 59 44.2
comp=Z,10μm,19.4s,baz=164,slow=38
comp=Z,65nm,0.6s
**LVC Limon Verde 47.29 300** *eP* **P** **03 38 21.8 -1.2**
**LVC Limon Verde 47.29 300** *eP* **P** **03 38 22.4 -0.6**
**PMBG Pietermaritzbu 47.50 78**⇑*iP* **P** **03 38 24.2 -0.1**
PMBG IAmb IAmb 03 38 25.5
comp=Z,774nm,1.1s
**PB05 IPOC Station P 47.68 298** P **P** **03 38 24.6 -1.1**
PB05 IAmb IAmb 03 38 26.0
comp=Z,268nm,1.2s
**SALV Santo Antonio 47.91 319** *eP* **P** **03 38 27.1 -0.3**
**PRYS Parys 47.99 73**⇑*iP* **P** **03 38 27.1 -1.0**
PRYS IAmb IAmb 03 38 28.4
comp=Z,2μm,1.2s
**SDBA SAO DESIDERIO 48.06 334** *eP* **P** **03 38 28.7 +0.1**
**NBLA Lagarto - SE 48.06 343** *eP* **P** **03 38 28.2 -0.4**
**PB04 IPOC Station P 48.10 299** P **P** **03 38 28.0 -1.1**
PB04 IAmb IAmb 03 38 29.4
comp=Z,289nm,1.1s
**PB09 IPOC Station P 48.15 300** P **P** **03 38 29.2 -0.2**
PB09 IAmb IAmb 03 39 59.3
comp=Z,350nm,1.1s
**WDLM Western Deep L 48.43 72** *eP* **P** **03 38 30.1 -1.5**
WDLM IAmb IAmb 03 38 31.9
comp=Z,820nm,1.1s
**BBSD Serra de San D 48.55 312** *eP* **P** **03 38 31.1 -1.2**
**NWCL Newcastle 48.62 76**⇑*iP* **P** **03 38 32.3 -0.6**
NWCL IAmb IAmb 03 38 33.5
comp=Z,633nm,1.0s
**LBTB Lobatse 48.69 69** P **P** **03 38 33.0 -0.5**
**LBTB Lobatse 48.69 69**⇑*iP* **P** **03 38 32.8 -0.7**
LBTB IAmb IAmb 03 38 34.0
comp=Z,2μm,1.1s
**LBTB Lobatse 48.69 69**⇑⇑P **P** **03 38 32.4 -1.1**
**LBTB Lobatse 48.69 69** LR LR 03 55 03.4
comp=Z,26μm,20.2s,baz=216,slow=31
**LBTB Lobatse 48.69 69** *iP* **P** **03 38 33.8 +0.4**
**LBTB Lobatse 48.69 69** P **P** **03 38 33.0 -0.5**
LBTB pmax pmax
comp=Z,2μm,1.1s
**LBTB Lobatse 48.69 69** *iP* **P** **03 38 33.8 +0.4**
**HRAO HartRAO 49.01 72**⇑*iP* **P** **03 38 34.5 -1.5**
**NBAN Anadia - AL 49.15 346** *eP* **P** **03 38 36.4 -0.5**
**NYAT Nyati, Northwe 49.38 72**⇑*iP* **P** **03 38 37.9 -0.9**
NYAT IAmb IAmb 03 38 39.2
comp=Z,2μm,1.3s
**PATCX Punta Patache 49.41 300** P **P** **03 38 38.5 -0.5**
**PTLB Pontes e Lacer 49.57 315** P **P** **03 38 39.2 -1.0**
PTLB IAmb IAmb 03 38 41.2
comp=Z,627nm,1.0s
**TSWA Tswaing Meteor 49.59 72**⇑*iP* **P** **03 38 39.2 -1.2**
TSWA IAmb IAmb 03 38 40.8
comp=Z,2μm,1.1s
**NHAM Northam, North 49.63 71**⇑*iP* **P** **03 38 40.0 -0.7**
NHAM IAmb IAmb 03 38 41.2
comp=Z,2μm,1.2s
**HMBC Humberstone 49.76 300** P **P** **03 38 41.1 -0.6**
**H10S2 ASCENSION HYDR 49.79 14** P **P** **03 38 42.7 +1.2**
baz=229,slow=74,SNR=5.2
H10S2 T T 04 32 18.9
baz=188,slow=74,SNR=195
**H10S3 ASCENSION HYDR 49.79 14** P **P** **03 38 42.0 +0.5**
baz=351,slow=74,SNR=4.1
H10S3 T T 04 32 26.8
baz=32,slow=74,SNR=308
**SIV San Ignacio 49.81 313** P **P** **03 38 41.0 -1.1**
comp=Z,190nm,0.9s,baz=155,slow=6.9,SNR=392
SIV PcP **PcP** **03 40 03.2 +0.7**
comp=Z,187nm,0.9s,baz=142,slow=3.4,SNR=7.8
SIV ScP **ScP** **03 43 53.2 -2.3**
comp=Z,32nm,0.9s,baz=177,slow=5.3,SNR=5.6
SIV LR LR 03 58 05.6
comp=Z,8μm,21.9s,baz=166,slow=34
comp=Z,190nm,0.9s
**POGA Pongola 49.87 77** P **P** **03 38 41.4 -1.0**
POGA IAmb IAmb 03 38 43.1
comp=Z,481nm,1.0s
**POGA Pongola 49.87 77**⇑*iP* **P** **03 38 41.3 -1.1**
POGA IAmb IAmb 03 38 42.9
comp=Z,382nm,0.9s
**POGA Pongola 49.87 77**⇑⇑P **P** **03 38 41.3 -1.1**
**TSUM Tsumeb 49.88 57** P **P** **03 38 42.4 -0.2**
**TSUM Tsumeb 49.88 57** IAMs_20 IAMs_20 03 54 32.8
comp=Z,20μm,22.0s
**TSUM Tsumeb 49.88 57**⇑*iP* **P** **03 38 42.5 -0.1**
TSUM IAmb IAmb 03 38 43.7
comp=Z,952nm,1.2s
**TSUM Tsumeb 49.88 57**⇑⇑P **P** **03 38 42.0 -0.6**
**RUST Rust De Winter 49.97 73**⇑*iP* **P** **03 38 42.7 -0.6**
RUST IAmb IAmb 03 38 43.8
comp=Z,870nm,1.1s
**GO01 Chusmiza 49.97 301** P **P** **03 38 43.1 -0.7**
**CRLN Carolina, Mapu 50.10 75**⇑*iP* **P** **03 38 43.5 -0.9**
CRLN IAmb IAmb 03 38 44.5
comp=Z,301nm,0.9s
**SNDB Serra Nova Dou 50.17 326** *eP* **P** **03 38 45.3 +0.6**
**TEMBE Tembe Elephant 50.49 78**⇑*iP* **P** **03 38 46.4 -0.6**
TEMBE IAmb IAmb 03 38 48.0
comp=Z,2μm,1.4s
**NBCA Caruaru-PE 50.53 346** *eP* **P** **03 38 47.6 +0.1**
**DULL Dullstroom, Mp 50.70 74**⇑*iP* **P** **03 38 48.1 -0.8**
DULL IAmb IAmb 03 38 49.3
comp=Z,663nm,1.2s
**LEPH Lephalale, Lim 50.75 71**⇑*iP* **P** **03 38 48.3 -0.9**
LEPH IAmb IAmb 03 38 49.5
comp=Z,2μm,1.4s
**ASCN Ascension 50.84 14** P **P** **03 38 50.0 +0.3**
**H10N1 ASCENSION HYDR 50.91 14** P **P** **03 38 51.0 +1.1**
baz=188,slow=9.5,SNR=35
H10N1 T T 04 33 54.4
baz=194
**H10N3 ASCENSION HYDR 50.91 14** P **P** **03 38 51.0 +1.0**
baz=188,slow=9.5,SNR=30
H10N3 T T 04 33 44.3
baz=194,slow=74,SNR=186
**H10N2 ASCENSION HYDR 50.92 14** P **P** **03 38 51.3 +1.3**
baz=188,slow=9.5,SNR=36
H10N2 T T 04 33 46.4
baz=194,slow=74,SNR=92
**WTBG Waterberg Wild 51.00 72**⇑*iP* **P** **03 38 49.5 -1.7**
WTBG IAmb IAmb 03 38 50.3
comp=Z,380nm,1.1s
**PILG Pilgrimsrest, 51.33 74**⇑⇑P **P** **03 38 52.6 -1.0**
PILG IAmb IAmb 03 38 54.0
comp=Z,843nm,1.2s
**CRAIL Swartwater, Li 51.85 71**⇑⇑P **P** **03 38 56.5 -1.0**
**HOED Hoedspruit, Li 51.87 74**⇑⇑P **P** **03 38 55.7 -1.8**
HOED IAmb IAmb 03 38 57.8
comp=Z,997nm,1.2s
**PB18 Visviri 51.92 302** P **P** **03 38 58.8 +0.2**
PB18 IAmb IAmb 03 40 35.6
comp=Z,632nm,1.4s
**SMTB Santa Maria do 52.12 332** *eP* **P** **03 39 00.0 +0.6**
**PDRB Porto dos Gac 52.25 320** *eP* **P** **03 38 59.9 -0.5**
**VILB Vilhena 52.26 315** P **P** **03 39 00.2 -0.2**
**LPAZ La Paz 52.47 304** P **P** **03 39 02.2 -0.6**
LPAZ IAmb IAmb 03 40 15.1
comp=Z,670nm,1.6s
**LPAZ La Paz 52.47 304**⇑⇑P **P** **03 39 02.1 -0.6**
**LPAZ La Paz 52.47 304** P **P** **03 39 02.2 -0.6**
comp=Z,99nm,0.4s,baz=135,slow=4.8,SNR=334
LPAZ PcP **PcP** **03 40 13.8 +0.8**
comp=Z,126nm,0.9s,baz=189,slow=5.4,SNR=3.8
LPAZ S **S** **03 46 21.0 -6.5**
comp=Z,28nm,1.2s,baz=40,slow=25,SNR=5.0
comp=Z,99nm,0.4s
**LPAZ La Paz 52.47 304** *eP* **P** **03 39 02.1 -0.6**
**PAF Port-aux-Franc 52.50 125** P **P** **03 39 03.0 +1.2**
PAF IAmb IAmb 03 39 04.4
comp=Z,671nm,1.2s
**PAF Port-aux-Franc 52.50 125** P **P** **03 39 03.0 +1.2**
PAF pmax pmax
comp=Z,671nm,1.2s
**CLDB Colider 52.63 321** *eP* **P** **03 39 02.8 -0.3**
**MPHEP Siloam, Limpop 52.74 73**⇑*iP* **P** **03 39 03.1 -0.9**
MPHEP IAmb IAmb 03 39 04.4
comp=Z,2μm,1.4s
**MOPA Mopani 52.85 74**⇑*iP* **P** **03 39 04.1 -0.6**
MOPA IAmb IAmb 03 39 05.4
comp=Z,2μm,1.2s
**MOPA Mopani 52.85 74** *iP* **P** **03 39 04.7 0.0**
**MOPA Mopani 52.85 74** *iP* **P** **03 39 04.7 0.0**
**RCBR Riachuelo 52.88 347** P **P** **03 39 05.1 +0.1**
**RCBR Riachuelo 52.88 347** LR LR 03 56 44.4
comp=Z,5μm,22.0s,baz=153,slow=30
**RCBR Riachuelo 52.88 347** P **P** **03 39 05.1 +0.1**
RCBR pmax pmax
comp=Z,76nm,1.1s
**RCBR Riachuelo 52.88 347** *eP* **P** **03 39 05.1 +0.1**
**MUSN Musina, Limpop 53.09 72**⇑*iP* **P** **03 39 06.0 -0.6**
MUSN IAmb IAmb 03 39 07.1
comp=Z,2μm,1.4s
**MUSN Musina, Limpop 53.09 72** *iP* **P** **03 39 07.0 +0.5**
**MUSN Musina, Limpop 53.09 72** *iP* **P** **03 39 07.0 +0.5**
**NBPB Pedra_Branca-C 53.69 342** *eP* **P** **03 39 11.4 +0.5**
**MATP Matopo 53.98 69** LR LR 03 58 35.4
comp=Z,12μm,19.4s,baz=218,slow=32
**MATP Matopo 53.98 69** *iP* **P** **03 39 13.6 +0.4**
**MATP Matopo 53.98 69** *iP* **P** **03 39 13.6 +0.4**
**NBCL Cascavel-CE 54.78 344** *eP* **P** **03 39 19.3 +0.4**
**PRPB Parauapebas 55.28 330** *eP* **P** **03 39 23.1 +0.6**
**NPGB Novo Progresso 56.07 323** *eP* **P** **03 39 27.7 -0.5**
**CHIPN CHIPINGE 56.22 73**⇑*iP* **P** **03 39 28.2 -1.1**
**CHIPN CHIPINGE 56.22 73** *iP* **P** **03 39 29.6 +0.3**
**CHIPN CHIPINGE 56.22 73** *iP* **P** **03 39 29.6 +0.3**
**SAML Samuel 57.06 314** P **P** **03 39 34.7 -0.5**
**SAML Samuel 57.06 314** *eP* **P** **03 39 34.4 -0.7**
**SAML Samuel 57.06 314** *eP* **P** **03 39 34.5 -0.7**
**ETMB Extrema 57.46 310** P **P** **03 39 37.1 -0.9**
ETMB IAmb IAmb 03 39 38.6
comp=Z,431nm,1.0s
**ETMB Extrema 57.46 310** *eP* **P** **03 39 36.9 -1.1**
**KRI Karoi 57.58 68**⇑*iP* **P** **03 39 37.8 -1.3**
**KRI Karoi 57.58 68** *iP* **P** **03 39 38.4 -0.6**
**KRI Karoi 57.58 68** *iP* **P** **03 39 38.4 -0.6**
**LSZ Lusaka 58.22 66**⇑⇑P **P** **03 39 42.6 -0.9**
**LSZ Lusaka 58.22 66** P **P** **03 39 43.4 -0.1**
LSZ P **P** **03 39 43.4 -0.1**
**TMAB Tom-Au,PA,Br 58.50 333** *eP* **P** **03 39 46.4 +1.1**
**FOMA Nahampoana Res 59.80 89** P **P** **03 39 54.6 +0.4**
FOMA IAmb IAmb 03 39 55.9
comp=Z,508nm,1.2s
FOMA IAMs_20 IAMs_20 03 59 16.7
comp=Z,12μm,21.0s
**FOMA Nahampoana Res 59.80 89**⇑⇑P **P** **03 39 54.3 0.0**
**FOMA Nahampoana Res 59.80 89** P **P** **03 39 54.5 +0.2**
SNR=15
**NNA Nana 60.20 298** P **P** **03 39 57.0 -0.1**
NNA IAmb IAmb 03 39 57.9
comp=Z,272nm,1.1s
**NNA Nana 60.20 298** P **P** **03 39 57.1 0.0**
comp=Z,132nm,1.0s,baz=162,slow=6.3,SNR=24
NNA LR LR 04 04 08.8
comp=Z,8μm,21.8s,baz=148,slow=34
comp=Z,132nm,1.0s
**NNA Nana 60.20 298***c iP* **P** **03 39 56.4 -0.7**
NNA pmax pmax
comp=Z,345nm,1.1s
NNA MLR MLR
comp=Z,7μm,16.0s
**MAL2 Monte Alegre, 60.47 326** P **P** **03 39 59.7 +0.8**
**MACA Manacapuru-AM 61.49 319** P **P** **03 40 04.8 -1.0**
**MACA Manacapuru-AM 61.49 319** *eP* **P** **03 40 04.8 -1.0**
**CZSB Cruzeiro do Su 62.08 304** P **P** **03 40 07.9 -1.9**
CZSB IAmb IAmb 03 40 09.8
comp=Z,425nm,1.0s
**CZSB Cruzeiro do Su 62.08 304** *eP* **P** **03 40 08.1 -1.8**
**VOI Vohitsoka 62.20 87** P **P** **03 40 11.3 +0.5**
VOI IAmb IAmb 03 40 12.3
comp=Z,318nm,1.2s
VOI IAMs_20 IAMs_20 04 01 36.2
comp=Z,10μm,20.0s
**VOI Vohitsoka 62.20 87**⇑*iP* **P** **03 40 11.2 +0.5**
**VOI Vohitsoka 62.20 87**⇑⇑P **P** **03 40 11.2 +0.4**
**VOI Vohitsoka 62.20 87** P **P** **03 40 11.6 +0.8**
SNR=31
**TEFE Tefe 62.60 314** *eP* **P** **03 40 12.8 -0.5**
**TBTG Tabatinga, AM 64.07 309** P **P** **03 40 21.7 -1.3**
TBTG IAmb IAmb 03 40 23.0
comp=Z,680nm,1.2s
**RPN Rapa Nui 64.33 260** P **P** **03 40 25.0 +0.4**
**RPN Rapa Nui 64.33 260** LR LR 04 04 00.6
comp=Z,4μm,18.1s,baz=144,slow=32
**RPN Rapa Nui 64.33 260** P **P** **03 40 25.0 +0.4**
RPN pmax pmax
comp=Z,1μm,1.7s
**VA02 Isla de Pascua 64.35 260** P **P** **03 40 25.2 +0.4**
VA02 IAmb IAmb 03 40 27.4
comp=Z,366nm,1.1s
**ABPO Ambohimpanom 64.81 86** P **P** **03 40 28.7 +0.7**
ABPO IAmb IAmb 03 40 30.7
comp=Z,330nm,1.1s
**ABPO Ambohimpanom 64.81 86** IAMs_20 IAMs_20 04 04 56.1
comp=Z,11μm,18.0s
**ABPO Ambohimpanom 64.81 86**⇑*iP* **P** **03 40 29.4 +1.4**
ABPO IAmb IAmb 03 40 30.4
comp=Z,319nm,1.1s
**ABPO Ambohimpanom 64.81 86**⇑⇑P **P** **03 40 29.1 +1.0**
**ABPO Ambohimpanom 64.81 86** P **P** **03 40 28.7 +0.7**
ABPO pmax pmax
comp=Z,330nm,1.2s
**AIS Amsterdam Isla 64.87 121** P **P** **03 40 28.0 0.0**
**AIS Amsterdam Isla 64.87 121**⇑⇑P **P** **03 40 29.4 +1.4**
**OPO Ambohidratompo 65.15 85** LR LR 04 05 16.4
comp=Z,7μm,18.1s,baz=352,slow=33
**ATAH Atahualpa 65.17 299** P **P** **03 40 31.9 +1.2**
comp=Z,250nm,1.0s,baz=161,slow=5.3,SNR=94
ATAH LR LR 04 06 35.4
comp=Z,4μm,21.7s,baz=161,slow=34
comp=Z,250nm,1.0s
**LIC Lamto 66.25 22** *eP* **P** **03 40 35.5 -1.5**
comp=Z,3μm,0.9s
**KIC Kosan Boka 66.44 22** *eP* **P** **03 40 36.8 -1.5**
comp=Z,1μm,0.9s
**BOAV Boa Vista 66.62 321** P **P** **03 40 39.3 -0.2**
**BOAV Boa Vista 66.62 321** *eP* **P** **03 40 38.7 -0.8**
**TIC Toumodi 66.66 22** *eP* **P** **03 40 38.4 -1.3**
comp=Z,383nm,1.0s
**DBIC Dimbokro 66.71 22** P **P** **03 40 40.4 +0.4**
**DBIC Dimbokro 66.71 22**⇑*iP* **P** **03 40 40.0 -0.1**
**DBIC Dimbokro 66.71 22**⇑⇑P **P** **03 40 39.5 -0.5**
**DBIC Dimbokro 66.71 22** P **P** **03 40 39.7 -0.3**
comp=Z,1μm,0.9s,baz=177,slow=6.8,SNR=688
DBIC S **S** **03 49 25.4 -4.3**
comp=Z,5.1nm,1.0s,baz=113,slow=16,SNR=0.9
DBIC LR LR 04 04 28.1
comp=Z,9μm,18.6s,baz=172,slow=31
DBIC PKP2bc 04 09 09.9
comp=Z,8.7nm,1.0s,baz=356,slow=5.6,SNR=5.4
comp=Z,1μm,0.9s
**DBIC Dimbokro 66.71 22** P **P** **03 40 40.4 +0.4**
DBIC pmax pmax
comp=Z,2μm,1.0s
**MDP Montagnes des 66.83 330** LR LR 04 09 26.6
comp=Z,11μm,18.9s,baz=150,slow=36
**MPGF Montagnes des 66.84 330**⇑⇑P **P** **03 40 40.5 -0.4**
**RER Riviere de l'E 67.55 94** P **P** **03 40 46.2 +0.7**
**RER Riviere de l'E 67.55 94**⇑⇑P **P** **03 40 46.5 +1.0**
**RER Riviere de l'E 67.55 94** P **P** **03 40 47.1 +1.6**
SNR=7.4
**MCQ Macquarie Isla 67.62 183** P **P** **03 40 47.1 +1.8**
MCQ IAmb IAmb 03 40 48.5
comp=Z,405nm,1.4s
**MCQ Macquarie Isla 67.62 183** P **P** **03 40 46.9 +1.5**
comp=Z,259nm,0.4s
**MCQ Macquarie Isla 67.62 183** P **P** **03 40 47.1 +1.8**
MCQ pmax pmax
comp=Z,405nm,1.4s
**EKNA AfricaArray - 68.11 38**⇑*eP* **P** **03 40 49.9 +0.9**
**ARNL Arenillas 69.10 299** P **P** **03 40 55.5 +0.3**
**SBV Sambava 70.84 85**⇑*iP* **P** **03 41 07.1 +1.2**
**SBV Sambava 70.84 85**⇑⇑P **P** **03 41 07.0 +1.2**
**SBV Sambava 70.84 85** P **P** **03 41 07.8 +2.0**
SNR=16
**SLOR San Lorenzo - 70.88 302** P **P** **03 41 07.2 +0.6**
SLOR IAmb IAmb 03 41 09.4
comp=Z,215nm,1.0s
**ANTS Antisana-Sarah 70.94 302** P **P** **03 41 07.7 +0.6**
ANTS IAmb IAmb 03 41 16.1
comp=Z,305nm,0.9s
**PULU Pululahua 71.55 302** P **P** **03 41 10.7 +0.1**
**IMBA Imbabura, San 71.64 303** P **P** **03 41 12.2 +1.0**
**TULM Tulcn-Chalpat 71.85 303** P **P** **03 41 13.2 +0.8**
**MBAR Mbarara 72.23 60** P **P** **03 41 15.8 +1.4**
**MBAR Mbarara 72.23 60**⇑*iP* **P** **03 41 16.6 +2.2**
MBAR IAmb IAmb 03 41 18.0
comp=Z,1μm,1.4s
**MBAR Mbarara 72.23 60**⇑⇑P **P** **03 41 16.2 +1.8**
**MBAR Mbarara 72.23 60** LR LR 04 10 42.4
comp=Z,17μm,18.0s,baz=196,slow=34
**MBAR Mbarara 72.23 60** P **P** **03 41 17.1 +2.7**
MBAR P **P** **03 41 17.1 +2.7**
**MBAR Mbarara 72.23 60** *eP* **P** **03 41 13.1 -1.3**
MBAR *eP* **pP** **03 41 16.0 -7.1**
MBAR *eS* **S** **03 50 41.8 +6.6**
**MBAR Mbarara 72.23 60***c iP* **P** **03 41 16.5 +2.1**
MBAR pmax pmax
comp=Z,448nm,1.3s
MBAR MLR MLR
comp=Z,8μm,15.0s
**MBO M'Bour 72.64 8** P **P** **03 41 17.9 +1.5**
**ROCAM Rodrigues Isla 72.72 100** P **P** **03 41 17.9 +0.9**
**SACV Santiago Islan 72.90 2** P **P** **03 41 18.5 +0.4**
SACV IAmb IAmb 03 41 19.9
comp=Z,507nm,1.2s
**SACV Santiago Islan 72.90 2** IAMs_20 IAMs_20 04 05 23.8
comp=Z,8μm,22.0s
**SACV Santiago Islan 72.90 2**⇑⇑P **P** **03 41 18.3 +0.2**
**BBTS Babate 72.94 9** LR LR 04 06 39.9
comp=Z,8μm,21.5s,baz=60,slow=30
**ROSC El Rosal 74.06 308** P **P** **03 41 25.1 -0.3**
ROSC IAmb IAmb 03 41 27.9
comp=Z,254nm,0.9s
**ROSC El Rosal 74.06 308** P **P** **03 41 25.2 -0.3**
comp=Z,226nm,0.8s,baz=156,slow=4.0,SNR=99
ROSC LR LR 04 14 23.2
comp=Z,7μm,21.9s,baz=180,slow=36
comp=Z,226nm,0.8s

**ROSC El Rosal 74.06 308** P **P** **03 41 25.1 -0.3**
ROSC pmax pmax
comp=Z,254nm,0.9s
**KIBK Kibwezi 74.20 68** P **P** **03 41 26.6 +0.6**
KIBK IAmb IAmb 03 41 30.7
comp=Z,1µm,1.4s
**KIBK Kibwezi 74.20 68** P **P** **03 41 25.4 -0.5**
**KIBK Kibwezi 74.20 68** P **P** **03 41 29.5 +3.5**
SNR=95
**TORD Torodi Ar. Bea 74.44 27** P **P** **03 41 27.0 -0.1**
comp=Z,1µm,0.8s,baz=170,slow=4.5,SNR=2820
TORD S **S** **03 50 57.1 -2.5**
comp=Z,2.6nm,1.0s,baz=261,slow=25,SNR=3.8
TORD PKKP **PKKPdf** **04 00 40.8 +0.5**
comp=Z,1.1nm,0.9s,baz=90,slow=4.4,SNR=3.5
TORD LR LR 04 07 17.4
comp=Z,11µm,21.4s,slow=30
comp=Z,1µm,0.8s
**PCRV Puerto La Cruz 75.28 320** S **SKiKP** **03 51 01.3 +9.0**
comp=Z,7.8nm,1.0s,baz=28,slow=16,SNR=1.7
PCRV LR LR 04 14 45.3
comp=Z,7µm,20.2s,slow=36
**PCRV Puerto La Cruz 75.28 320** *e*P **P** **03 41 32.5 +0.5**
**BAUV El Baul 75.35 316** P **P** **03 41 32.2 -0.1**
**BAUV El Baul 75.35 316** *e*P **P** **03 41 31.6 -0.7**
**CTZ Chatham Island 75.68 201** P **P** **03 41 34.9 +0.8**
CTZ IAmb IAmb 03 41 37.1
comp=Z,378nm,1.2s
CTZ IAMs_20 IAMs_20 04 10 03.8
comp=Z,8µm,22.0s
**WHZ Wether Hill Ro 75.71 189** P **P** **03 41 34.8 +0.7**
WHZ IAmb IAmb 03 41 37.1
comp=Z,337nm,1.1s
**GRFF Grenada Fort F 76.08 323** *e*P **P** **03 41 37.0 +0.4**
**GRGR Grenville 76.13 323** P **P** **03 41 36.6 -0.2**
GRGR IAMs_20 IAMs_20 04 16 39.1
comp=Z,9µm,19.0s
**GRGR Grenville 76.13 323** ⇑P **P** **03 41 36.7 -0.2**
**GRGR Grenville 76.13 323** *e*P **P** **03 41 36.9 +0.1**
**GRW Mount Saint Ca 76.16 323** *e*P **P** **03 41 37.4 +0.4**
**DCZ Deep Cove 76.20 189** P **P** **03 41 38.4 +1.4**
DCZ IAmb IAmb 03 41 45.1
comp=Z,276nm,1.2s
DCZ IAMs_20 IAMs_20 04 19 07.9
comp=Z,7µm,18.0s
**GRHS Sauteurs 76.21 323** *e*P **P** **03 41 37.7 +0.5**
**MLZ Mavora Lakes 76.22 190** P **P** **03 41 39.1 +2.0**
MLZ IAmb IAmb 03 41 40.1
comp=Z,347nm,1.1s
MLZ IAMs_20 IAMs_20 04 14 24.3
comp=Z,10µm,19.0s
**SDV Santo Domingo 76.27 314** P **P** **03 41 37.5 -0.3**
SDV IAmb IAmb 03 41 39.1
comp=Z,482nm,0.9s
**SDV Santo Domingo 76.27 314** S **S** **03 51 14.9 -5.4**
comp=Z,5.9nm,0.3s,baz=4.4,slow=13,SNR=1.4
SDV LR LR 04 14 46.1
comp=Z,14µm,21.6s,baz=157,slow=35
**SDV Santo Domingo 76.27 314** *e*P **P** **03 41 37.6 -0.2**
**GRSS Sisters 76.27 323** *e*P **P** **03 41 38.0 +0.4**
**ODZ Otahua Downs 76.29 192** P **P** **03 41 39.6 +2.1**
ODZ IAmb IAmb 03 41 49.2
comp=Z,797nm,1.9s
ODZ IAMs_20 IAMs_20 04 16 54.3
comp=Z,10µm,18.0s
**ODZ Otahua Downs 76.29 192** ⇑P **P** **03 41 39.9 +2.5**
**GCMP Grenada, Carri 76.39 324** *e*P **P** **03 41 38.4 +0.2**
**BBGH Gun Hill 76.44 326** P **P** **03 41 39.1 +0.6**
BBGH IAMs_20 IAMs_20 04 21 35.8
comp=Z,11µm,20.0s
**BBGH Gun Hill 76.44 326** ⇑P **P** **03 41 41.4 +2.9**
**BBGH Gun Hill 76.44 326** *e*P **P** **03 41 41.4 +2.9**
**BCHC Barbados, Cave 76.45 326** *e*P **P** **03 41 38.1 -0.5**
**PAYG Puerto Ayora 76.50 291** P **P** **03 41 39.1 +0.1**
PAYG IAmb IAmb 03 41 41.3
comp=Z,285nm,1.2s
**PAYG Puerto Ayora 76.50 291** IAMs_20 IAMs_20 04 13 47.5
comp=Z,7µm,19.0s
**PAYG Puerto Ayora 76.50 291** ⇑P **P** **03 41 39.7 +0.6**
**WKZ Wanaka 76.67 190** P **P** **03 41 40.6 +0.9**
WKZ IAmb IAmb 03 41 58.3
comp=Z,451nm,1.2s
**SVOC Richmond Hill, 76.95 324** *e*P **P** **03 41 42.1 +0.7**
**SVT Saint Vincent 76.97 324** *e*P **P** **03 41 42.0 +0.5**
**LBZ Lake Benmore 76.99 191** P **P** **03 41 42.8 +1.4**
LBZ IAmb IAmb 03 41 53.0
comp=Z,618nm,1.4s
LBZ IAMs_20 IAMs_20 04 12 28.8
comp=Z,8µm,20.0s
**SVB Belmont 77.07 324** *e*P **P** **03 41 42.2 +0.1**
**SSV Crater Summit 77.11 324** *e*P **P** **03 41 42.4 0.0**
**MQZ McQueen's Vall 77.38 193** P **P** **03 41 45.0 +1.4**
MQZ IAMs_20 IAMs_20 04 12 58.2
comp=Z,9µm,20.0s
**SLB Belfond 77.53 324** *e*P **P** **03 41 46.7 +2.0**
**SLAC Saint Lucia, A 77.55 325** *e*P **P** **03 41 45.2 +0.4**
**RPZ Rata Peaks 77.56 192** P **P** **03 41 45.9 +1.2**
RPZ IAmb IAmb 03 41 47.8
comp=Z,327nm,1.1s
**RPZ Rata Peaks 77.56 192** LR LR 04 13 21.0
comp=Z,5µm,19.7s,baz=164,slow=34
**SLBI Saint Lucia, B 77.70 325** *e*P **P** **03 41 46.1 +0.6**
**OXZ Oxford 77.83 193** P **P** **03 41 47.2 +1.1**
OXZ IAMs_20 IAMs_20 04 13 33.0
comp=Z,7µm,20.0s
**FOZ Fox Glacier 77.87 191** P **P** **03 41 47.7 +1.4**
FOZ IAMs_20 IAMs_20 04 13 29.0
comp=Z,11µm,20.0s
**LODK Lodwar 77.92 63** P **P** **03 41 49.0 +1.9**
LODK IAmb IAmb 03 41 51.9
comp=Z,788nm,1.7s
**LODK Lodwar 77.92 63** P **P** **03 41 50.4 +3.3**
SNR=64
**LODK Lodwar 77.92 63** *e*P **P** **03 41 47.9 +0.8**
LODK *e*P **pP** **03 41 49.6 -6.1**
LODK *e*S **SKSac** **03 51 49.9 -8.9**
**GVZ Greta Valley S 78.06 194** P **P** **03 41 49.4 +1.9**
GVZ IAmb IAmb 03 41 51.2
comp=Z,574nm,1.0s
GVZ IAMs_20 IAMs_20 04 12 57.2
comp=Z,9µm,20.0s
**GVZ Greta Valley S 78.06 194** P **P** **03 41 49.2 +1.7**
**BIM Bigot 78.19 325** P **P** **03 41 49.1 +0.7**
**BIM Bigot 78.19 325** *e*P **P** **03 41 48.7 +0.3**
**LTZ Lake Taylor 78.34 193** P **P** **03 41 50.9 +1.8**
LTZ IAmb IAmb 03 41 52.8
comp=Z,380nm,1.1s
LTZ IAMs_20 IAMs_20 04 13 17.5
comp=Z,10µm,21.0s
**LTZ Lake Taylor 78.34 193** P **P** **03 41 50.7 +1.6**
**ILAM Ilet Lapin Mar 78.37 325** P **P** **03 41 50.2 +0.8**
**ILAM Ilet Lapin Mar 78.37 325** *e*P **P** **03 41 50.0 +0.7**
**FDF Fort de France 78.42 325** P **P** **03 41 50.4 +0.7**
**FDF Fort de France 78.42 325** ⇑P **P** **03 41 50.4 +0.7**
**FDF Fort de France 78.42 325** P **P** **03 41 50.4 +0.7**
FDF pmax pmax
comp=Z,2µm,1.1s
**INZ Inchbonnie 78.49 192** P **P** **03 41 51.1 +1.3**
INZ IAmb IAmb 03 41 54.2
comp=Z,292nm,1.0s
INZ IAMs_20 IAMs_20 04 13 57.5
comp=Z,9µm,20.0s
**SVN Savane Anatole 78.53 325** P **P** **03 41 51.5 +1.3**
**SVN Savane Anatole 78.53 325** *e*P **P** **03 41 51.0 +0.7**
**KHZ Kahutara 78.54 194** P **P** **03 41 51.4 +1.4**
KHZ IAmb IAmb 03 42 00.9
comp=Z,415nm,1.4s
KHZ IAMs_20 IAMs_20 04 12 47.9
comp=Z,9µm,21.0s
**KHZ Kahutara 78.54 194** ⇓P **P** **03 41 51.8 +1.7**
**KHZ Kahutara 78.54 194** P **P** **03 41 50.9 +0.8**
**HATO Hato, Curacao 78.67 316** P **P** **03 41 51.0 0.0**
HATO IAMs_20 IAMs_20 04 15 17.5
comp=Z,12µm,21.0s
**AUTAR Taroona High S 79.05 174** P **P** **03 41 55.1 +2.2**
**TAU Tasmania Unive 79.08 174** P **P** **03 41 54.7 +1.7**
**TAU Tasmania Unive 79.08 174** P **P** **03 41 53.8 +0.8**
TAU IAmb IAmb 03 41 55.3
comp=Z,309nm,1.1s
**TAU Tasmania Unive 79.08 174** ⇓P **P** **03 41 54.3 +1.3**
**TAU Tasmania Unive 79.08 174** P **P** **03 41 53.8 +0.8**
TAU pmax pmax
comp=Z,309nm,1.1s
**CACAO El Cacao, Vera 79.11 304** *e*P **P** **03 41 52.9 -0.6**

**PLWZ Palliser 79.14 196** P **P** **03 41 55.0 +1.5**
**PLWZ Palliser 79.14 196** P **P** **03 41 55.2 +1.7**
**BSWZ Blackbirch Sta 79.19 194** P **P** **03 41 55.3 +1.6**
**BSWZ Blackbirch Sta 79.19 194** P **P** **03 41 56.1 +2.4**
**AZU Azuero 79.25 304** *e*P **P** **03 41 54.3 +0.1**
**TRWZ Traveller 79.25 196** P **P** **03 41 56.2 +2.2**
**THZ Tophouse 79.27 194** P **P** **03 41 55.4 +1.2**
THZ IAmb IAmb 03 42 02.6
comp=Z,206nm,0.7s
THZ IAMs_20 IAMs_20 04 13 14.0
comp=Z,10µm,20.0s
**THZ Tophouse 79.27 194** P **P** **03 41 55.8 +1.6**
**MSWZ Moikau Station 79.29 196** P **P** **03 41 55.6 +1.3**
**MSWZ Moikau Station 79.29 196** P **P** **03 41 55.6 +1.3**
**PAWZ Paruwai Farm 79.30 196** P **P** **03 41 55.4 +1.0**
**AUA1 Aruba 79.35 316** P **P** **03 41 55.1 +0.4**
**BHW Baring Head 79.35 195** P **P** **03 41 56.2 +1.6**
BHW IAmb IAmb 03 41 57.5
comp=Z,666nm,1.9s
**BHW Baring Head 79.35 195** P **P** **03 41 56.4 +1.8**
**DSZ Denniston Nort 79.42 193** P **P** **03 41 55.2 +0.2**
DSZ IAmb IAmb 03 41 56.4
comp=Z,416nm,1.0s
DSZ IAMs_20 IAMs_20 04 14 02.0
comp=Z,9µm,21.0s
**DSZ Denniston Nort 79.42 193** P **P** **03 41 55.1 +0.1**
**TUWZ Tuamarina 79.46 195** P **P** **03 41 56.1 +1.0**
**SNZO South Karori 79.47 195** P **P** **03 41 57.6 +2.4**
**SNZO South Karori 79.47 195** P **P** **03 41 57.1 +1.9**
SNZO IAmb IAmb 03 41 58.3
comp=Z,629nm,1.1s
**SNZO South Karori 79.47 195** IAMs_20 IAMs_20 04 13 23.6
comp=Z,7µm,20.0s
**TMWZ Te Maipa 79.50 196** P **P** **03 41 57.6 +2.2**
**MTW Mount Morrison 79.51 196** P **P** **03 41 57.0 +1.5**
**MOO Moorlands 79.54 174** P **P** **03 41 57.3 +1.7**
**MAGL Barre de l'Ile 79.61 325** P **P** **03 41 56.5 +0.5**
**CAW Cannon Point 79.62 195** P **P** **03 41 57.7 +1.7**
**TBG Guadaloupe-3 79.63 325** *e*P **P** **03 41 56.8 +0.7**
**TCW Tory Channel 79.63 195** P **P** **03 41 56.9 +0.8**
**TCW Tory Channel 79.63 195** P **P** **03 41 57.8 +1.7**
**MRNZ Matariki Terra 79.64 194** P **P** **03 41 57.1 +1.0**
**MRNZ Matariki Terra 79.64 194** P **P** **03 41 57.2 +1.0**
**GMAL Guarumal, Vera 79.64 303** *e*P **P** **03 41 56.5 +0.1**
**NNZ Nelson 79.74 194** IAMs_20 IAMs_20 04 12 45.7
comp=Z,9µm,22.0s
**NNZ Nelson 79.74 194** P **P** **03 41 58.1 +1.4**
**HOWZ Holdsworth Sta 79.76 196** P **P** **03 41 58.5 +1.6**
**TIWZ Tintock 79.83 196** P **P** **03 41 59.2 +2.0**
**BFZ Birch Farm 79.87 196** P **P** **03 41 59.8 +2.4**
**BFZ Birch Farm 79.87 196** IAmb IAmb 03 42 00.6
comp=Z,412nm,1.1s
BFZ IAMs_20 IAMs_20 04 12 07.1
comp=Z,11µm,22.0s
**BFZ Birch Farm 79.87 196** P **P** **03 41 57.3 -0.1**
**H05N1 Guadeloupe/Mar 79.89 325** P **P** **03 41 58.6 +1.0**
SNR=108
**KIW Kapiti Island 79.89 195** P **P** **03 41 59.6 +2.1**
**TKNZ Takaka Hill 79.98 194** P **P** **03 41 58.7 +0.7**
**MRZ Mangatainoka R 79.99 196** IAmb IAmb 03 42 01.8
comp=Z,1µm,1.9s
MRZ IAMs_20 IAMs_20 04 12 24.2
comp=Z,11µm,21.0s
**MRZ Mangatainoka R 79.99 196** P **P** **03 41 59.8 +1.7**
**PRWZ Pori Road 80.03 196** P **P** **03 42 00.7 +2.4**
**DUWZ D'Urville Isla 80.08 195** P **P** **03 41 59.7 +1.2**
**PRHZ Porangahau 80.22 197** P **P** **03 42 01.5 +2.2**
**POWZ Post Office Ro 80.22 196** P **P** **03 42 00.6 +1.3**
**QRZ Quartz Range 80.24 194** IAmb IAmb 03 42 01.5
comp=Z,722nm,1.9s
QRZ IAMs_20 IAMs_20 04 14 25.7
comp=Z,8µm,21.0s
**QRZ Quartz Range 80.24 194** P **P** **03 41 59.5 +0.1**
**DVHZ Dannevirke 80.25 196** P **P** **03 42 01.3 +1.7**
**BCIP Isla Barro Col 80.28 305** ⇑P **P** **03 41 59.6 -0.2**
**RKT Rikitea 80.42 242** *e*P P 03 41 56.5 -4.1
comp=Z,2µm,24.2s
**RKT Rikitea 80.42 242** *e*PP **PP** **03 45 03.8 +0.5**
comp=Z,2µm,28.8s
RKT *e*S **S** **03 52 03.1 -1.4**
comp=Z,7µm,27.0s
**RKT Rikitea 80.42 242** *e*LQ LQ 04 03 46.6
comp=Z,19µm,32.5s
RKT *e*LR LR 04 07 08.3
comp=Z,98µm,28.5s
**CORO Coronation Par 80.52 174** P **P** **03 42 03.1 +2.2**
**KAHZ Kahuranaki 80.64 197** P **P** **03 42 04.3 +2.6**
**MBFL Flemmings, Mon 80.65 324** *e*P **P** **03 42 01.9 +0.2**
**ANBD Bethesda, Anti 80.79 325** *e*P **P** **03 42 02.0 -0.4**
**KRHZ Kereru 80.87 197** P **P** **03 42 04.8 +2.0**
**GLAD Gladstone 81.03 175** P **P** **03 42 05.6 +2.0**
**KWHZ Kaweka Forest 81.07 197** P **P** **03 42 06.4 +2.4**
**MSEY Mahe Island 81.15 85** P **P** **03 42 05.5 +0.8**
MSEY IAmb IAmb 03 42 06.9
comp=Z,440nm,1.3s
**MSEY Mahe Island 81.15 85** IAMs_20 IAMs_20 04 09 52.4
comp=Z,7µm,22.0s
**MSEY Mahe Island 81.15 85** P **P** **03 42 05.5 +0.8**
**MSEY Mahe Island 81.15 85** ⇑*e*P **P** **03 42 04.7 +0.1**
**MSEY Mahe Island 81.15 85** P **P** **03 42 06.0 +1.3**
MSEY P **P** **03 42 06.0 +1.3**
**MSEY Mahe Island 81.15 85** *e*P **P** **03 42 05.5 +0.8**
**MOVZ Moawhango 81.19 196** P **P** **03 42 05.0 +0.4**
**BRU2 Volcan 81.21 303** *e*P **P** **03 42 04.9 -0.1**
**WNVZ Wahianoa 81.29 196** P **P** **03 42 06.7 +1.4**
**BKZ Black Stump Fm 81.31 197** P **P** **03 42 07.6 +2.3**
**BKZ Black Stump Fm 81.31 197** IAmb IAmb 03 42 33.0
comp=Z,329nm,1.2s
BKZ IAMs_20 IAMs_20 04 12 48.4
comp=Z,11µm,22.0s
**TRVZ Turoa 81.33 196** P **P** **03 42 07.6 +2.1**
**WHVZ Whangaehu Hut 81.34 196** P **P** **03 42 07.3 +1.7**
**MAVZ Matarangi 81.36 196** P **P** **03 42 07.5 +1.7**
**FWVZ Far West T-bar 81.37 196** P **P** **03 42 07.5 +1.8**
**ANWB Willy Bob 81.38 325** ⇑P **P** **03 42 05.5 -0.1**
**ANWB Willy Bob 81.38 325** *e*P **P** **03 42 05.1 -0.4**
**COVZ Chateau Observ 81.42 196** P **P** **03 42 07.8 +1.9**
**NGZ Ngauruhoe 81.44 196** P **P** **03 42 08.4 +2.3**
**OTVZ Oturere 81.44 196** P **P** **03 42 07.7 +1.7**
**ETVZ East Tongariro 81.46 196** P **P** **03 42 07.5 +1.4**
**NNVZ North Ngauruho 81.48 196** P **P** **03 42 08.4 +2.1**
**TMVZ Te Maari 81.48 196** P **P** **03 42 07.9 +1.7**
**WTVZ West Tongariro 81.50 196** P **P** **03 42 08.3 +2.0**
**KHEZ Kahui Hut 81.55 195** P **P** **03 42 08.3 +1.8**
**KHEZ Kahui Hut 81.55 195** P **P** **03 42 07.7 +1.2**
**TWVZ Taurewa 81.57 196** P **P** **03 42 08.4 +1.8**
**EDP2 Potrero Grande 81.62 302** *e*P **P** **03 42 07.4 +0.4**
**RTZ Ruatahuna 81.78 197** IAmb IAmb 03 42 11.1
comp=Z,630nm,1.2s
**SABA Saba 81.79 324** IAmb IAmb 03 42 11.8
comp=Z,603nm,0.9s
**URZ Urewera 82.10 198** ⇓P **P** **03 42 11.3 +2.0**
**URZ Urewera 82.10 198** LR LR 04 13 53.8
comp=Z,7µm,22.0s,baz=252,slow=32
**AUALB St Joseph's Co 82.16 150** P **P** **03 42 11.3 +1.6**
**HIZ Hauiti 82.20 196** IAmb IAmb 03 42 11.6
comp=Z,491nm,1.3s
HIZ IAMs_20 IAMs_20 04 13 45.7
comp=Z,9µm,22.0s
**HIZ Hauiti 82.20 196** P **P** **03 42 10.6 +0.7**
**BUS1 Rivas 82.35 302** *e*P **P** **03 42 11.0 -0.3**
**MXZ Matakaoa Point 82.59 199** IAMs_20 IAMs_20 04 20 08.1
comp=Z,7µm,19.0s
**ABE2 San Pablo 82.62 302** *e*P **P** **03 42 12.6 0.0**
**LCR2 La Lucha 2 82.64 302** IAmb IAmb 03 42 14.1
comp=Z,310nm,1.0s
**LCR2 La Lucha 2 82.64 302** *e*P **P** **03 42 12.6 0.0**
**VINA Juan Vinas 82.66 302** *e*P **P** **03 42 13.2 +0.6**
**VERB Verbena 82.68 302** *e*P **P** **03 42 13.2 +0.5**
**RVSTA Santa Teresita 82.68 302** *e*P **P** **03 42 13.3 +0.6**
**IRES Siquirres 82.72 302** *e*P **P** **03 42 13.4 +0.6**
**VTCV VTCV, Calle Va 82.72 302** *e*P **P** **03 42 13.6 +0.6**
**LCOCO El Coco 82.74 302** *e*P **P** **03 42 13.4 +0.6**
**RAFA San Farael, Vo 82.74 302** *e*P **P** **03 42 12.4 -0.8**
**CVTV Tajo 82.75 302** *e*P **P** **03 42 14.1 +0.8**
**ACOS Acosta 82.75 302** *e*P **P** **03 42 13.2 +0.1**
**CVTQ Turrialba Volc 82.76 302** *e*P **P** **03 42 13.6 +0.2**
**VTLA Turrialba Volc 82.76 302** *e*P **P** **03 42 13.6 +0.2**
**VTR0 Volcan Turrial 82.77 302** *e*P **P** **03 42 14.1 +0.6**
**CVTR Volcan Turrial 82.77 302** *e*P **P** **03 42 13.9 +0.4**
**RVLA Villa Bonita 82.77 302** *e*P **P** **03 42 13.2 +0.2**
**VICA Volcano Irazu 82.78 302** *e*P **P** **03 42 13.5 -0.1**
**CVIMO Finca Echandi 82.86 302** *e*P **P** **03 42 14.0 +0.3**

**TOZ Tahuroa Road 82.87 196** IAmb IAmb 03 42 15.3
comp=Z,228nm,1.1s
TOZ IAMs_20 IAMs_20 04 14 02.5
comp=Z,9µm,22.0s
**HDC Heredia 82.91 302** IAmb IAmb 03 42 16.0
comp=Z,459nm,1.1s
**HDC Heredia 82.91 302** *e*P **P** **03 42 14.7 +0.8**
**HDC Heredia 82.91 302** *e*P **P** **03 42 14.4 +0.5**
**BELE Belen 82.92 302** *e*P **P** **03 42 14.2 +0.3**
**TCS1 Tocaras 83.03 302** *e*P **P** **03 42 15.0 +0.5**
**IGPR InterUniversit 83.03 321** IAmb IAmb 03 42 14.6
comp=Z,499nm,1.0s
**SRA1 San Ramn 83.15 302** *e*P **P** **03 42 15.5 +0.4**
**OBIP Obispado Ponce 83.27 321** IAmb IAmb 03 42 14.6
comp=Z,443nm,1.1s
**CELP Cerrillos 83.30 321** IAmb IAmb 03 42 15.7
comp=Z,374nm,1.1s
**GCPR Guaynabo City 83.35 321** IAmb IAmb 03 42 17.0
comp=Z,520nm,1.0s
**ITAL Pital 83.38 302** *e*P **P** **03 42 16.6 +0.4**
**SOCE Pocosol 83.48 302** IAmb IAmb 03 42 18.4
comp=Z,279nm,1.1s
**SOCE Pocosol 83.48 302** *e*P **P** **03 42 16.3 -0.4**
**AUHPC Hawkesdale P12 83.50 170** P **P** **03 42 18.8 +2.3**
**UUPR Utuado, UPR, P 83.51 321** IAmb IAmb 03 42 17.7
comp=Z,380nm,1.1s
**MTEVE Monteverde 83.52 301** *e*P **P** **03 42 18.0 +0.9**
**JTS Las Juntas de 83.55 301** P **P** **03 42 17.4 +0.3**
JTS IAmb IAmb 03 42 18.6
comp=Z,340nm,1.1s
**JTS Las Juntas de 83.55 301** ⇑P **P** **03 42 17.2 +0.2**
**JTS Las Juntas de 83.55 301** *e*P **P** **03 42 17.5 +0.5**
**JTS Las Juntas de 83.55 301** *e*P **P** **03 42 16.9 -0.1**
**GEXS Deakin Univers 83.57 172** P **P** **03 42 18.8 +1.9**
**VACR Volcan Arenal 83.58 302** *e*P **P** **03 42 17.4 +0.2**
**ARE1 Arenal 1 83.59 302** *e*P **P** **03 42 17.5 +0.2**
**AOPR Arecibo Observ 83.61 321** IAmb IAmb 03 42 18.1
comp=Z,342nm,1.1s
**AOPR Arecibo Observ 83.61 321** *e*P **P** **03 42 15.1 -2.1**
**PRSN Puerto Rico Se 83.62 320** IAmb IAmb 03 42 18.2
comp=Z,346nm,0.9s
**NICO Nicoya 83.64 301** *e*P **P** **03 42 16.7 -0.8**
**EMPR Esperanza - Ma 83.65 321** IAmb IAmb 03 42 17.3
comp=Z,476nm,1.0s
**AGPR Aguadilla, PR 83.84 320** IAmb IAmb 03 42 19.6
comp=Z,514nm,1.2s
**TENO El Achiote 83.92 301** *e*P **P** **03 42 18.8 -0.2**
**NWAO Narrogin (SRO) 83.94 149** P **P** **03 42 19.3 +0.3**
**NWAO Narrogin (SRO) 83.94 149** P **P** **03 42 19.8 +0.8**
**NWAO Narrogin (SRO) 83.94 149** P **P** **03 42 19.3 +0.3**
NWAO IAmb IAmb 03 42 20.5
comp=Z,256nm,1.2s
**NWAO Narrogin (SRO) 83.94 149** IAMs_20 IAMs_20 04 15 33.0
comp=Z,8µm,21.0s
**NWAO Narrogin (SRO) 83.94 149** LR LR 04 15 44.1
comp=Z,7µm,20.5s,baz=178,slow=33
**NWAO Narrogin (SRO) 83.94 149** P **P** **03 42 17.7 -1.3**
NWAO P **P** **03 42 17.7 -1.3**
**NWAO Narrogin (SRO) 83.94 149** P **P** **03 42 19.3 +0.3**
NWAO pmax pmax
comp=Z,256nm,1.2s
**CUI Cuipilapa 83.97 301** *e*P **P** **03 42 18.2 -1.0**
**COLC Colonia 83.99 301** *e*P **P** **03 42 18.8 -0.5**
**VERA Finca Concepci 84.01 302** *e*P **P** **03 42 18.9 -0.4**
**ALIBA Liberia Airpor 84.08 301** *e*P **P** **03 42 20.8 +1.1**
**ELI1 Hacienda Flor 84.13 301** *e*P **P** **03 42 20.1 +0.1**
**GPS2 Hotel Rincn d 84.14 301** *e*P **P** **03 42 19.9 -0.2**
**VRLE La Escondida, 84.17 301** *e*P **P** **03 42 18.4 -1.9**
**VORI VORI 84.19 301** *e*P **P** **03 42 20.1 -0.4**
**FURI Furi 84.27 63** LR LR 04 16 19.4
comp=Z,20µm,21.2s,baz=210,slow=33
**FURI Furi 84.27 63** *e*P **P** **03 42 19.0 -2.1**
FURI *e*P **PcP** **03 42 24.3 -0.6**
FURI *e*S **SKSac** **03 52 40.2 -2.4**
FURI IAMs_20 IAMs_20 03 53 20.3
comp=Z,2µm,14.9s
**TOO Toolangi 84.28 173** P **P** **03 42 22.1 +1.4**
**TOO Toolangi 84.28 173** ⇑P **P** **03 42 21.4 +0.7**
**TAM Tamanrasset 84.64 28** IAMs_20 IAMs_20 04 14 10.6
comp=Z,7µm,20.0s
**TAM Tamanrasset 84.64 28** ⇑P **P** **03 42 24.1 +1.5**
**ESPN Las Esperanzas 84.94 303** IAmb IAmb 03 42 24.5
comp=Z,231nm,0.9s
**MILA Mila 85.00 176** P **P** **03 42 26.1 +1.8**
**MILA Mila 85.00 176** ⇑P **P** **03 42 25.4 +1.1**
**ACON Acoyapa 85.13 302** IAmb IAmb 03 42 25.5
comp=Z,434nm,1.0s
**OUZ Omahuta 85.61 195** IAMs_20 IAMs_20 04 16 16.1
comp=Z,9µm,21.0s
**OUZ Omahuta 85.61 195** ⇓P **P** **03 42 28.6 +1.4**
**BOAB BOACO BROADBAN 86.77 302** IAMs_20 IAMs_20 04 24 14.1
comp=Z,6µm,20.0s
**BOAB BOACO BROADBAN 86.77 302** P **P** **03 42 26.1 -2.1**
**BOAB BOACO BROADBAN 86.77 302** ⇑P **P** **03 42 27.3 -0.9**
**SDDR Presa de Saban 85.78 317** IAmb IAmb 03 42 45.8
comp=Z,192nm,0.9s
SDDR IAMs_20 IAMs_20 04 19 13.9
comp=Z,8µm,22.0s
**SDDR Presa de Saban 85.78 317** ⇑P **P** **03 42 27.9 -0.3**
**EOSO Osorio 86.31 9** P **P** **03 42 31.0 +0.3**
**MACI Morro de la Ar 86.42 8** P **P** **03 42 31.9 +0.6**
MACI IAmb IAmb 03 42 34.8
comp=Z,352nm,1.2s
**TBI Tubuai 86.53 230** *e*P **P** **03 42 33.5 +1.5**
comp=Z,2µm,24.5s
**TBI Tubuai 86.53 230** *e*PP **PP** **03 45 56.0 +2.8**
comp=Z,1µm,27.5s
TBI *e*S **S** **03 53 03.5 -2.8**
comp=Z,11µm,28.2s
TBI *e*SS **SS** **03 58 45.3 -0.7**
comp=Z,4µm,25.8s
TBI *e*LQ LQ 04 06 21.9
comp=Z,31µm,33.8s
TBI *e*LR LR 04 09 55.3
comp=Z,7µm,25.0s
TBI *e*LR LR 04 10 01.7
comp=Z,31µm,25.8s
**CAN Canberra 86.72 175** P **P** **03 42 34.6 +1.7**
**CAN Canberra 86.72 175** ⇑P **P** **03 42 34.0 +1.1**
**CNB Canberra Magne 86.74 176** P **P** **03 42 34.9 +1.9**
**HOJ Hope 86.95 312** ⇓*i*P **P** **03 42 35.4 +1.5**
**STH Stony Hill 87.04 312** ⇑*i*P **P** **03 42 35.7 +1.4**
**MORW Morawa 87.24 147** P **P** **03 42 36.1 +0.7**
**MORW Morawa 87.24 147** IAmb IAmb 03 42 37.1
comp=Z,212nm,1.1s
**MORW Morawa 87.24 147** ⇑P **P** **03 42 35.4 -0.1**
**MTDJ Mount Denham 87.47 311** ⇑*i*P **P** **03 42 37.0 +0.5**
**MTDJ Mount Denham 87.47 311** ⇑P **P** **03 42 37.5 +0.9**
**YNG Young 87.71 175** P **P** **03 42 39.3 +1.7**
**HTT Hallett 87.77 167** ⇑P **P** **03 42 39.0 +1.0**
**TGUH Tegucigalpa,Un 87.92 301** IAmb IAmb 03 42 39.6
comp=Z,228nm,1.1s
**TGUH Tegucigalpa,Un 87.92 301** ⇑P **P** **03 42 38.2 -0.6**
**BBOO Buckleboo 88.00 164** IAmb IAmb 03 42 40.2
comp=Z,145nm,1.1s
BBOO IAMs_20 IAMs_20 04 20 45.7
comp=Z,9µm,20.0s
**GTBY Guantanamo Bay 88.06 314** ⇑*i*P **P** **03 42 39.7 +0.5**
**GTBY Guantanamo Bay 88.06 314** ⇑P **P** **03 42 39.4 +0.2**
**RIV Riverview 88.28 177** P **P** **03 42 42.4 +2.1**
**SYDH Sydney Hard Ro 88.34 177** P **P** **03 42 42.7 +2.1**
**ATD Arta Tunnel 88.55 65** P **P** **03 42 43.4 +1.6**
**ATD Arta Tunnel 88.55 65** ⇑P **P** **03 42 44.5 +2.8**
**ATD Arta Tunnel 88.55 65** LR LR 04 20 21.1
comp=Z,928nm,19.0s,baz=206,slow=34
**ATD Arta Tunnel 88.55 65** P **P** **03 42 45.4 +3.6**
SNR=39
**ATD Arta Tunnel 88.55 65** *e*P **P** **03 42 42.6 +0.9**
ATD *e*P **PcP** **03 42 44.9 +1.5**
ATD *e*S **SKSac** **03 53 05.0 -3.5**
ATD IAMs_20 IAMs_20 03 54 02.3
comp=E,5µm,12.3s
**NMDO Nuevo Mundo 88.59 314** IAmb IAmb 03 42 44.1
comp=Z,682nm,1.2s
**FORT Forrest 88.59 157** IAMs_20 IAMs_20 04 18 34.3
comp=Z,8µm,20.0s
**FORT Forrest 88.59 157** ⇑P **P** **03 42 42.6 +0.8**
**CHIV Chivirico 88.61 313** IAmb IAmb 03 42 43.8
comp=Z,509nm,1.0s
**MTO3 Montecristo 89.17 299** IAmb IAmb 03 42 45.5
comp=Z,188nm,0.9s
**NTLH Newcastle Hard 89.23 177** P **P** **03 42 46.4 +1.7**
**STKA Stephens Creek 89.60 169** P **P** **03 42 47.6 +1.0**
**STKA Stephens Creek 89.60 169** P **P** **03 42 47.3 +0.8**

comp=Z,75nm,0.9s,baz=164,slow=5.6,SNR=57
STKA PP **PP** **03 46 14.2 -3.2**
comp=Z,4.4nm,1.0s,baz=171,slow=19,SNR=1.2
STKA LR LR 04 22 46.8
comp=Z,14µm,18.0s,baz=189,slow=35
comp=Z,75nm,0.9s
**AUDCS Dubbo College 89.78 175** P **P** **03 42 48.8 +1.4**
**RAO Raoul Island 89.94 204** IAMs_20 IAMs_20 04 16 34.4
comp=Z,7µm,22.0s
**RAO Raoul Island 89.94 204** LR LR 04 18 08.6
comp=Z,3µm,21.9s,baz=179,slow=32
**TIO Tiouine 90.05 15** P **P** **03 42 50.0 +1.5**
**MULG Mulgathing 90.17 162** P **P** **03 42 50.4 +1.1**
**APG El Apazote 90.21 299** LR LR 04 24 31.0
comp=Z,172nm,19.3s,baz=127,slow=36
**MEEK Meekatharra 90.26 148** P **P** **03 42 50.4 +0.6**
**CMSA Cobar Meteorol 90.30 172** P **P** **03 42 51.3 +1.5**
**LCRK Leigh Creek 90.62 166** P **P** **03 42 52.4 +1.1**
**FUL Funchal 90.76 7**⇑*iP* **P** **03 42 53.1 +1.6**
comp=Z,444nm,1.9s
**PMAR Madeira 90.83 7**⇑*iP* **P** **03 42 54.1 +2.0**
comp=Z,458nm,1.5s
**PMOZ Porto Moniz, M 90.91 7**⇑*iP* **P** **03 42 54.5 +2.1**
comp=Z,323nm,2.1s
**PMOZ Porto Moniz, M 90.91 7** *e*PP **PP** **03 46 36.4 +7.2**
PMOZ *e*S **S** **03 53 43.8 -3.2**
**PMOZ Porto Moniz, M 90.91 7** *e*LR LR 04 11 20.7
comp=Z,4µm,22.0s
**PMOZ Porto Moniz, M 90.91 7** P **P** **03 42 52.6 +0.2**
**PMPST Porto Santo, M 91.22 7**⇑*iP* **P** **03 42 55.9 +2.2**
comp=Z,758nm,1.9s
**ARMA Armidale 91.69 177** P **P** **03 42 58.0 +1.5**
**ARMA Armidale 91.69 177**⇑P **P** **03 42 56.6 +0.1**
**PPT2 Papeete2 91.73 232** *e*P **P** **03 42 54.0 -2.7**
comp=Z,368nm,24.0s
**PPT2 Papeete2 91.73 232** *e*PP **PP** **03 46 34.1 -0.9**
comp=Z,140nm,23.5s
PPT2 *e*S **S** **03 53 53.0 -2.3**
comp=Z,2µm,29.2s
PPT2 *e*SS **SS** **04 00 02.3 +0.5**
comp=Z,638nm,27.2s
PPT2 *e*LQ LQ 04 08 27.9
comp=Z,2µm,25.0s
PPT2 *e*LR LR 04 12 28.5
comp=Z,17µm,28.8s
PPT2 *e*LR LR 04 12 29.2
comp=Z,20µm,22.5s
**PPT Papeete 91.75 232** LR LR 04 15 15.7
comp=Z,11µm,21.0s,baz=148,slow=30
**CCIG Comitan 92.10 298**⇑P **P** **03 42 57.6 -0.7**
**MDT Midelt 92.29 17** P **P** **03 43 01.0 +2.2**
comp=Z,76nm,0.9s,baz=208,slow=4.0,SNR=117
MDT PKKP **PKKPbc** **04 00 15.2 +2.8**
comp=Z,2.4nm,0.8s,baz=126,slow=2.3,SNR=5.1
MDT LR LR 04 20 36.2
comp=Z,6µm,18.7s,baz=194,slow=33
**AVE Averroes 92.36 15** P **P** **03 42 59.1 +0.1**
**AVE Averroes 92.36 15**⇑P **P** **03 43 00.8 +1.9**
**RAR Rarotonga 92.38 222** LR LR 04 20 05.5
comp=Z,2µm,18.0s,baz=200,slow=32
**AULRC Lightning Ridg 92.53 174** P **P** **03 43 01.5 +1.3**
**GIRL Giralia 92.71 143** P **P** **03 43 02.8 +1.7**
**IFR Ifrane 92.90 17** P **P** **03 43 02.8 +1.1**
**RTC Rabat Centre 93.11 15** P **P** **03 43 03.6 +1.2**
**CAMR Camarioca 93.35 310** IAmb IAmb 03 43 06.0
comp=Z,297nm,1.0s
**SOR Soroa 93.78 309** IAmb IAmb 03 43 07.6
comp=Z,145nm,1.1s
**CMIG Matias Romero 94.10 296** LR LR 04 22 58.4
comp=Z,1µm,18.3s,baz=146,slow=34
**WRKA Warakurna 94.20 156** P **P** **03 43 08.9 +0.9**
**WRKA Warakurna 94.20 156**⇑P **P** **03 43 08.4 +0.4**
**OBHAM Bir El Hammam 94.56 20** P **P** **03 43 11.0 +1.7**
**PVLZ Peæn de 94.65 17** P **P** **03 43 07.9 -1.5**
**EASA Ain Sidi Ali 94.69 22** P **P** **03 43 12.9 +3.0**
**PSMA Santa Maria 94.83 0** *e*P **P** **03 43 10.7 +0.5**
comp=Z,308nm,1.3s
**PSMN Pico do Norte, 94.83 0** *e*P **P** **03 43 11.6 +1.4**
comp=Z,302nm,2.0s
**CHAS Isla Isabel II 94.97 19** P **P** **03 43 11.0 +0.1**
**EMLI Melilla 94.99 18** P **P** **03 43 12.1 +1.2**
**QLP Quilpie 95.10 171** P **P** **03 43 13.1 +1.1**
**QLP Quilpie 95.10 171**⇑P **P** **03 43 12.6 +0.6**
**ECEU Ceuta 95.20 16** P **P** **03 43 13.3 +1.3**
**CEU Ceuta 95.20 16** P **P** **03 43 12.1 +0.2**
**TAOE Nuku Hiva Isla 95.21 244** *e*P **P** **03 43 09.7 -3.1**
comp=Z,242nm,24.8s
**TAOE Nuku Hiva Isla 95.21 244** *e*PP **PP** **03 47 00.6 -1.8**
comp=Z,293nm,26.9s
TAOE *e*S **S** **03 54 23.7 -2.4**
comp=Z,1µm,28.1s
**TAOE Nuku Hiva Isla 95.21 244** *e*LR LR 04 14 00.8
comp=Z,12µm,29.4s
**TATN Tataouine 95.26 30** IAMs_20 IAMs_20 04 21 17.8
comp=Z,20nm,20.0s
**TATN Tataouine 95.26 30**⇑P **P** **03 43 14.7 +2.3**
**OTSS Djebel Tessala 95.35 20** P **P** **03 43 16.4 +3.6**
**EADEB Ain Deheb 95.38 22** P **P** **03 43 15.1 +2.1**
**PSA00 Pilbara Seismi 95.41 148** P **P** **03 43 13.9 +0.4**
**PSA00 Pilbara Seismi 95.41 148** P **P** **03 43 13.2 -0.3**
**COCO West Island 95.57 124** IAMs_20 IAMs_20 04 16 33.8
comp=Z,5µm,20.0s
**CMLA Cha da Macela 95.59 360** P **P** **03 43 15.8 +2.1**
CMLA IAmb IAmb 03 43 17.5
comp=Z,93nm,1.0s
**CMLA Cha da Macela 95.59 360**⇑P **P** **03 43 16.0 +2.3**
**CMLA Cha da Macela 95.59 360** *e*P **P** **03 43 16.6 +2.9**
**PGRON Lagoa das Cont 95.60 360** *e*P **P** **03 43 16.4 +2.6**
comp=Z,628nm,1.5s
**EALB Alboran 95.61 18** P **P** **03 43 13.3 -0.5**
**BART Pico Bartolome 95.61 0** *e*P **P** **03 43 16.2 +2.3**
comp=Z,932nm,1.4s
**PCALD Caldeiras da R 95.63 360** A A 03 43 31.4
comp=Z,2µm,1.9s
**SFS San Fernando 95.64 15** P **P** **03 43 14.7 +0.8**
**PSET Sete Cidades 95.65 360** *e*P **P** **03 43 15.7 +1.7**
comp=Z,163nm,2.1s
**PSET Sete Cidades 95.65 360** *e*PP **PP** **03 47 02.9 -3.3**
**MBWA Marble Bar 95.77 147** P **P** **03 43 15.8 +0.7**
**MBWA Marble Bar 95.77 147** P **P** **03 43 15.3 +0.2**
MBWA IAmb IAmb 03 43 16.4
comp=Z,105nm,1.2s
**MBWA Marble Bar 95.77 147** IAMs_20 IAMs_20 04 20 30.5
comp=Z,7µm,20.0s
**MBWA Marble Bar 95.77 147**⇓P **P** **03 43 15.4 +0.3**
**MBWA Marble Bar 95.77 147** P **P** **03 43 12.9 -2.2**
**AFRS Ain Fares 95.85 24** P **P** **03 43 16.5 +1.5**
**CDCN Doucen 95.86 25** P **P** **03 43 16.5 +1.5**
**PFVI Vila Bisbo 95.96 13** IAmb IAmb 03 43 18.7
comp=Z,325nm,1.2s
PFVI IAMs_20 IAMs_20 04 19 47.3
comp=Z,8µm,21.0s
**PFVI Vila Bisbo 95.96 13**⇑*iP* **P** **03 43 17.1 +1.7**
comp=Z,379nm,2.0s
**PFVI Vila Bisbo 95.96 13** P **P** **03 43 15.8 +0.5**
**BBSR BB Station 96.08 327** P **P** **03 43 16.1 +0.1**
BBSR IAmb IAmb 03 47 12.3
comp=Z,112nm,1.2s
**ESPR Espera 96.08 16** P **P** **03 43 17.3 +1.3**
**AFDJ Sidi Ladjel 96.11 23** P **P** **03 43 17.5 +1.3**
**EBGR Bougara 96.14 22** P **P** **03 43 18.7 +2.3**
**MORF Marmelete 96.15 13** IAmb IAmb 03 43 19.6
comp=Z,356nm,1.4s
MORF IAMs_20 IAMs_20 04 19 54.4
comp=Z,7µm,21.0s
**MORF Marmelete 96.15 13**⇑*iP* **P** **03 43 17.9 +1.6**
comp=Z,338nm,1.6s
**MORF Marmelete 96.15 13** *e*P **P** **03 43 16.5 +0.2**
MORF *e*PP **PP** **03 47 10.3 +0.2**
MORF *e*SKSac **SKSac** **03 53 51.1 +1.2**
MORF IAMs_20 IAMs_20 04 17 27.5
comp=N,8µm,29.9s
**MORF Marmelete 96.15 13**⇑P **P** **03 43 17.6 +1.3**
**PBDV Barranco-do-Ve 96.17 14**⇑*iP* **P** **03 43 18.3 +1.9**
comp=N,276nm,1.9s
**PBDV Barranco-do-Ve 96.17 14** P **P** **03 43 17.3 +0.9**
**LIJA Lijar 96.19 16** P **P** **03 43 17.3 +0.7**
**EMAL Malaga-Limoner 96.19 17** P **P** **03 43 17.0 +0.6**
**TLIG Tlapa 96.28 293**⇑P **P** **03 43 17.6 +0.1**
**PID Ribeirinha 96.30 358** *e*P **P** **03 43 18.8 +1.9**
comp=N,141nm,1.5s
**PID Ribeirinha 96.30 358** *e*PP **PP** **03 47 12.4 +1.2**
**CNGR Negrine 96.31 27** P **P** **03 43 19.1 +2.1**
**PCAN Candelaria 96.33 357** *e*P **P** **03 43 18.5 +1.4**
comp=N,157nm,1.8s
**PCAN Candelaria 96.33 357** *e*PP **PP** **03 47 08.7 -2.7**
**PPNO Prainha do Nor 96.33 358** *e*P **P** **03 43 19.4 +2.3**
comp=N,141nm,1.7s
**PPNO Prainha do Nor 96.33 358** *e*PP **PP** **03 47 08.0 -3.5**
**EANR 'Ain N'Sour 96.35 21** P **P** **03 43 20.2 +2.9**
**PVAQ Vaqueiros 96.36 14** IAmb IAmb 03 43 20.7
comp=Z,323nm,1.7s
**PVAQ Vaqueiros 96.36 14**⇑*iP* **P** **03 43 18.7 +1.5**
comp=Z,304nm,1.9s
**PVAQ Vaqueiros 96.36 14** *e*PP **PP** **03 47 11.7 0.0**
PVAQ *e*SKSac **SKSac** **03 53 51.5 +0.6**
**PVAQ Vaqueiros 96.36 14** *e*LR LR 04 15 21.1
comp=Z,4µm,22.0s
**PVAQ Vaqueiros 96.36 14** P **P** **03 43 17.5 +0.3**
**PVAQ Vaqueiros 96.36 14**⇑P **P** **03 43 18.9 +1.7**
**PICO Pico 96.37 357** *e*P **P** **03 43 18.5 +1.2**
comp=Z,204nm,1.6s
**PTEO Sao Teotonio 96.38 13** *e*P **P** **03 43 19.0 +1.8**
comp=Z,314nm,1.5s
**ELGU Los Guajares, 96.42 17** P **P** **03 43 17.0 -0.6**
**ABRIN Birine 96.44 23** P **P** **03 43 20.3 +2.6**
**CALA Caldeira 96.45 357** *e*P **P** **03 43 19.7 +2.0**
comp=Z,242nm,1.7s
**CALA Caldeira 96.45 357** *e*PP **PP** **03 47 08.7 -3.8**
**ABSD Ouled Sidi Bra 96.48 24** P **P** **03 43 19.6 +1.8**
**PMAN Manadas 96.49 358** *e*P **P** **03 43 19.8 +2.1**
comp=Z,235nm,1.1s
**PMAN Manadas 96.49 358** *e*PP **PP** **03 47 08.0 -4.6**
**PCED Cedros 96.50 357** *e*P **P** **03 43 19.3 +1.5**
comp=Z,176nm,1.4s
**PCED Cedros 96.50 357** *e*PP **PP** **03 47 10.2 -2.5**
**EGRO El Granado 96.52 14** P **P** **03 43 19.0 +1.1**
**PSCM Serra do Cume 96.54 359** *e*P **P** **03 43 20.3 +2.3**
comp=Z,91nm,1.9s
**PSCM Serra do Cume 96.54 359** *e*PP **PP** **03 47 10.2 -2.9**
**PCVE Castro Verde 96.55 14**⇑*iP* **P** **03 43 19.8 +1.8**
comp=Z,214nm,1.7s
**PCVE Castro Verde 96.55 14** P **P** **03 43 19.0 +0.9**
**EBER Berja 96.56 18** P **P** **03 43 18.4 0.0**
**EGOR Sierra Gorda, 96.58 17** P **P** **03 43 17.3 -1.1**
**ROSA Rosais 96.58 358** *e*P **P** **03 43 17.1 -1.1**
comp=Z,178nm,1.8s
**ROSA Rosais 96.58 358** *e*PP **PP** **03 47 10.9 -2.4**
**ROSA Rosais 96.58 358**⇑P **P** **03 43 20.4 +2.2**
**CKTS El Kantara 96.61 25** P **P** **03 43 21.2 +2.7**
**PAGU Aguala, Azore 96.61 358** *e*P **P** **03 43 19.8 +1.5**
comp=Z,101nm,2.2s
**PAGU Agualva, Azore 96.61 358** *e*PP **PP** **03 47 10.2 -3.4**
**PSBA Serra de Santa 96.61 358** *e*P **P** **03 43 20.3 +2.0**
comp=Z,126nm,1.3s
**PSBA Serra de Santa 96.61 358** *e*PP **PP** **03 47 08.7 -4.9**
**EDDR Deurdeur 96.62 22** P **P** **03 43 20.7 +2.2**
**ASAR Alice Springs 96.62 161** P **P** **03 43 19.4 +0.3**
comp=Z,51nm,0.9s,baz=193,slow=4.3,SNR=201
ASAR S **SKSac** **03 53 49.8 -3.9**
comp=Z,3.8nm,1.0s,baz=173,slow=8.1,SNR=4.8
ASAR PKKPbc **PKKPbc** **04 00 00.7 +1.2**
comp=Z,3.8nm,0.7s,baz=19,slow=2.0,SNR=11
ASAR PKPPKP P'P'df 04 08 04.8 -16
comp=Z,1.7nm,0.9s,baz=21,slow=2.6,SNR=4.3
ASAR LR LR 04 24 57.1
comp=Z,14µm,19.0s,baz=192,slow=34
comp=Z,51nm,0.9s
**AS01 Alice Springs 96.63 161** P **P** **03 43 19.5 +0.4**
**EIDS Eidsvold 96.71 177** P **P** **03 43 19.8 +0.4**
**MESJ Messejana 96.73 13** IAmb IAmb 03 43 22.5
comp=Z,257nm,1.5s
**MESJ Messejana 96.73 13**⇑*iP* **P** **03 43 20.7 +1.8**
comp=Z,211nm,1.5s
**MESJ Messejana 96.73 13** *e*P **P** **03 43 19.2 +0.4**
MESJ *e*PP **PP** **03 47 14.9 +0.4**
MESJ *e*SKSac **SKSac** **03 53 54.1 +1.2**
MESJ IAMs_20 IAMs_20 04 20 16.5
comp=Z,9µm,20.1s
**MESJ Messejana 96.73 13**⇑P **P** **03 43 20.6 +1.8**
**ENIJ Nijar 96.75 18** P **P** **03 43 19.8 +0.8**
**EQTA Presa de Quent 96.78 17** P **P** **03 43 19.5 +0.3**
**EMIN Mina Concepcio 96.86 15** P **P** **03 43 19.5 +0.1**
**CBBAR Babar 96.87 26** P **P** **03 43 22.1 +2.3**
**PBEJ Beja 96.95 14** *e*P **P** **03 43 21.6 +1.7**
comp=Z,157nm,2.1s
**PNCL Nicolau / Gran 96.96 13**⇑*iP* **P** **03 43 21.7 +1.8**
comp=Z,231nm,1.5s
**PNCL Nicolau / Gran 96.96 13** P **P** **03 43 21.2 +1.4**
**EMHD Djebel Mahouad 96.96 23** P **P** **03 43 24.8 +4.7**
**AKET Djebel Ketaf 97.00 23** P **P** **03 43 22.2 +1.9**
**ADJB Djebel Djouab 97.02 23** P **P** **03 43 22.0 +1.6**
**CTGD Timgad 97.09 26** P Pdif 03 43 23.2 +2.4
**ACHR Chrea 97.16 23** P Pdif 03 43 22.0 +0.8
**PBAR Barrancos 97.21 14**⇑*iP* Pdif 03 43 22.5 +1.4
comp=Z,139nm,1.8s
**PBAR Barrancos 97.21 14** P **P** **03 43 21.2 +0.2**
**CJSR Ain Djasser 97.28 25** P Pdif 03 43 23.4 +1.8
**CKHR Kef el Ahmar 97.33 25** P Pdif 03 43 22.5 +0.6
**ECAB El Cabril 97.33 16** P **P** **03 43 21.5 -0.1**
**CAZD Ain Tagrout 97.40 24** P Pdif 03 43 23.0 +0.9
**ATKJ Tikjda 97.44 23** P Pdif 03 43 25.8 +3.4
**EVO Evora 97.44 14**⇑*iP* Pdif 03 43 23.6 +1.5
comp=Z,141nm,2.0s
**EVO Evora 97.44 14** P Pdif 03 43 23.5 +1.4
**SET Setif 97.48 25** P **P** **03 43 20.0 -2.4**
**LIS Lisbon 97.48 13** *e*P Pdif 03 43 24.3 +2.0
comp=Z,179nm,1.5s
**LIS Lisbon 97.48 13** *e*P **P** **03 43 22.5 +0.3**
LIS *e*PP **PP** **03 47 20.8 +0.5**
LIS IAMs_20 IAMs_20 04 20 49.2
comp=N,11µm,23.8s
**AKED El Kharrouba 97.49 23** P Pdif 03 43 24.3 +1.9
**TLOR Lorca, Murcia 97.50 19** P **P** **03 43 21.8 -0.6**
**CTCHA Tamokra 97.53 24** P Pdif 03 43 24.8 +2.2
**CART Cartagena 97.56 19** IAmb IAmb 03 43 31.4
comp=Z,76nm,1.1s
**ABA Alger-Bouzarea 97.56 23** P Pdif 03 43 23.7 +1.0
**CTEI Djebel Teioual 97.57 25** P Pdif 03 43 23.7 +0.7
**CSGS Sigus 97.71 26** P Pdif 03 43 24.6 +1.1
**CASM Ain Smara 97.78 25** P Pdif 03 43 24.8 +1.0
**PESTR Estremoz 97.82 14** IAmb IAmb 03 43 30.4
comp=Z,109nm,1.1s
PESTR IAMs_20 IAMs_20 04 20 39.7
comp=Z,6µm,22.0s
**PESTR Estremoz 97.82 14**⇑*iP* Pdif 03 43 25.6 +1.8
comp=Z,211nm,1.5s
**PESTR Estremoz 97.82 14**⇑P Pdif 03 43 25.4 +1.5
**DWPF Disney Wildern 97.89 312** IAMs_20 IAMs_20 04 30 31.8
comp=Z,6µm,20.0s
**DWPF Disney Wildern 97.89 312** P **P** **03 43 24.5 +0.2**
baz=154
**DFRA Djebel Bou Aff 97.91 25** P Pdif 03 43 26.0 +1.6
**PMTG Montargil 97.94 13**⇑*iP* Pdif 03 43 25.9 +1.6
comp=Z,181nm,2.0s
**KEST Kesra 97.95 28** P Pdif 03 43 25.9 +1.3
KEST IAmb IAmb 03 43 31.3
comp=Z,190nm,1.0s
**KEST Kesra 97.95 28** P Pdif 03 43 25.9 +1.4
comp=Z,161nm,1.0s,baz=154,slow=3.4,SNR=83
KEST PP **PP** **03 47 23.1 -0.9**
comp=Z,47nm,1.2s,baz=148,slow=14,SNR=5.3
KEST LR LR 04 22 50.9
comp=Z,8µm,20.1s,baz=165,slow=32
comp=Z,161nm,1.0s
**KEST Kesra 97.95 28** P Pdif 03 43 26.1 +1.6
SNR=80
**CKFL Kef-Lekhel 97.97 26** P Pdif 03 43 26.2 +1.5
CKFL P **PcP** **03 43 27.8 +3.1**
**ABSA Djebel Ababsia 98.02 26** P Pdif 03 43 26.8 +1.9
**CBST Bordj Sabath 98.06 26** P Pdif 03 43 26.2 +1.1
**UNM Universidad Na 98.09 294** IAMs_20 IAMs_20 04 21 58.5
comp=Z,6µm,22.0s
**PSBE So Bento, 98.31 13**⇑*iP* Pdif 03 43 26.7 +0.7
comp=Z,134nm,2.2s
**PMRV Marv??o 98.40 14**⇑*iP* Pdif 03 43 27.8 +1.4
comp=Z,134nm,1.3s
**PMRV Marv??o 98.40 14** *e*PP PP 03 47 36.1 +8.8
PMRV *e*SKSac **SKSac** **03 54 12.0 +11**
**PMRV Marv??o 98.40 14** *e*LR LR 04 15 55.0
comp=Z,6µm,20.0s
**CBOGS Bougous 98.65 27** P Pdif 03 43 29.3 +1.7
**ABTO Aybut 98.68 71** P **P** **03 43 28.3 +0.1**
**PCBR Castelo Branco 98.79 14**⇑*iP* Pdif 03 43 29.3 +1.2
comp=Z,66nm,1.5s
**PINNC Pines Island, 98.81 192** IAMs_20 IAMs_20 04 23 15.6
comp=Z,7µm,21.0s
**PCAS Casmilo, Conde 98.88 13**⇑*iP* Pdif 03 43 29.6 +1.1
**PAB San Pablo 98.93 16** P Pdif 03 43 30.3 +1.4
**PAB San Pablo 98.93 16** IAMs_20 IAMs_20 04 21 57.0
comp=Z,5µm,22.0s
**PAB San Pablo 98.93 16**⇑P Pdif 03 43 30.2 +1.3
**PAB San Pablo 98.93 16** P Pdif 03 43 30.3 +1.5
PAB pmax pmax
comp=Z,46nm,1.3s
**COI Coimbra 99.04 13** *i*P Pdif 03 43 29.8 +0.6
comp=Z,88nm,1.4s
**ESDC Sonseca Array 99.11 16** P **Pdif** **03 43 30.7 +1.1**
comp=Z,10nm,0.9s,baz=187,slow=4.4,SNR=60
ESDC PKKPbc **PKKPbc** **03 59 55.6 +1.6**
comp=Z,1.3nm,0.8s,baz=27,slow=2.8,SNR=5.3
ESDC LR LR 04 24 14.5
comp=Z,2µm,19.7s,baz=188,slow=33
comp=Z,10nm,0.9s
**RBK Rabkut 99.26 72** P **Pdif** **03 43 31.4 +0.6**
**MTE Manteigas 99.33 14** IAMs_20 IAMs_20 04 22 42.8
comp=Z,8µm,21.0s
**MTE Manteigas 99.33 14**⇑*iP* **Pdif** **03 43 31.6 +1.0**
comp=Z,82nm,1.3s
**MTE Manteigas 99.33 14** *e*PP PP 03 47 42.4 +7.9
MTE *e*SKSac **SKSac** **03 54 11.1 +5.0**
**MTE Manteigas 99.33 14** *e*LR LR 04 16 19.6
comp=Z,7µm,20.0s
**MTE Manteigas 99.33 14**⇑P **Pdif** **03 43 31.8 +1.2**
**WHFO Wadi Hawf 99.39 71** P **Pdif** **03 43 32.2 +0.8**
**WDD Wied Dalam 99.41 32** IAmb IAmb 03 43 32.7
comp=Z,106nm,1.0s
WDD IAMs_20 IAMs_20 04 26 23.0
comp=Z,6µm,19.0s
**NOUC Port Laguerre 99.44 191** P **Pdif** **03 43 33.0 +1.3**
**DZM Mont Dzumac 99.46 191** P **Pdif** **03 43 33.2 +1.3**
**DZM Mont Dzumac 99.46 191** IAMs_20 IAMs_20 04 25 52.6
comp=Z,6µm,20.0s
**DZM Mont Dzumac 99.46 191** *e*P **Pdif** **03 43 32.2 +0.3**
comp=Z,110nm,1.5s
**DZM Mont Dzumac 99.46 191** *e*PP **PP** **03 47 35.3 +0.9**
comp=Z,200nm,25.4s
**DZM Mont Dzumac 99.46 191** *e*SS SS 04 01 51.0 +0.3
comp=Z,3µm,32.8s
DZM *e*LQ LQ 04 11 47.8
comp=Z,4µm,31.1s
DZM *e*LR LR 04 16 02.4
comp=Z,9µm,23.1s
**DZM Mont Dzumac 99.46 191** LR LR 04 26 13.8
comp=Z,5µm,19.4s,baz=172,slow=34
**PVIS Viseu 99.60 13**⇑*iP* **Pdif** **03 43 32.8 +1.0**
**DMTO DMTO 99.82 72** P **Pdif** **03 43 34.2 +1.0**
**RAYN Ar Rayn 100.15 62** Pdiff **Pdif** **03 43 36.3 +1.6**
**RAYN Ar Rayn 100.15 62** P **Pdif** **03 43 35.9 +1.3**
**MVO Moncorvo 100.15 14**⇑*iP* **Pdif** **03 43 35.4 +1.2**
comp=Z,66nm,1.5s
**MVO Moncorvo 100.15 14** *e*PP **PP** **03 47 41.1 +0.3**
**MVO Moncorvo 100.15 14** *e*LR LR 04 16 44.2
comp=Z,7µm,20.0s
**DOK Doka 100.17 71** P **Pdif** **03 43 35.4 +0.7**
**POLO Lamas de Olo 100.26 13**⇑*iP* **Pdif** **03 43 36.0 +1.3**
comp=Z,27nm,1.2s
**WRA Warramunga Arr 100.34 161** P **Pdif** **03 43 35.4 -0.4**
comp=Z,16nm,1.1s,baz=199,slow=4.2,SNR=40
WRA PP **PP** **03 47 42.4 +1.3**
comp=Z,4.0nm,0.9s,baz=194,slow=6.0,SNR=3.0
WRA S **SKSac** **03 54 08.8 -3.7**
comp=Z,14nm,1.4s,baz=202,slow=6.1,SNR=7.3
WRA PKKP **PKKPbc** **03 59 50.9 +1.7**
comp=Z,7.7nm,0.9s,baz=356,slow=3.1,SNR=18
WRA PKPPKP P'P'df 04 07 58.0 -15
comp=Z,5.7nm,1.1s,baz=357,slow=2.0,SNR=7.1
**WB2 Warramunga Arr 100.34 161** **Pdif** **03 43 35.9 +0.2**
**WRAB Tennant Creek 100.35 161**⇑*iP* **Pdif** **03 43 35.2 -0.6**
WRAB MLR MLR
comp=Z,3µm,17.0s
**QIS Mount Isa 100.55 166** P **Pdif** **03 43 37.6 +0.9**
**PCAB Cabril 100.57 13** *i*P **Pdif** **03 43 37.9 +1.9**
comp=Z,69nm,1.8s
**RAFF Raffo Rosso 100.67 31** IAMs_20 IAMs_20 04 30 25.3
comp=Z,5µm,18.0s
**PGAV Gavieira, Arco 100.79 13** *e*PP **PP** **03 47 46.9 +1.3**
PGAV *e*SKSac **SKSac** **03 54 14.7 +1.5**
**PGAV Gavieira, Arco 100.79 13** *e*LR LR 04 16 47.1
comp=Z,8µm,20.0s
**PBRG Braganca 100.82 14**⇑*iP* **Pdif** **03 43 38.7 +1.6**
comp=Z,63nm,1.8s
**KOUNC Koumac, New Ca 101.16 189** IAMs_20 IAMs_20 04 25 43.3
comp=Z,5µm,20.0s
**TIGA Tifton 101.69 312** P **Pdif** **03 43 41.2 0.0**
baz=153
**NHSC New Hope 101.87 315** P **Pdif** **03 43 42.8 +0.8**
baz=154
**MSVF Nonsavu 101.94 203** IAMs_20 IAMs_20 04 22 59.2
comp=Z,6µm,22.0s
**CEL Celeste 102.06 32** IAMs_20 IAMs_20 04 28 36.2
comp=Z,6µm,19.0s
**CEL Celeste 102.06 32** P **Pdif** **03 43 43.4 +0.6**
comp=Z,70nm,1.2s,comp=Z,960nm
**IDI Anoyia 102.12 40** P **PP** **03 47 51.6 -4.1**
**IDI Anoyia 102.12 40** P **Pdif** **03 43 44.7 +1.6**
comp=Z,24nm,1.0s,baz=210,slow=3.3,SNR=5.8
IDI PP **PP** **03 47 51.7 -4.0**
comp=Z,54nm,1.0s,baz=213,slow=19,SNR=6.7
**PYL PYLOS 102.55 37** P **PP** **03 47 53.1 -5.7**
**VLI Veliai 102.78 38** P **Pdif** **03 43 47.8 +1.9**
**VLI Veliai 102.78 38** P **PP** **03 47 57.4 -3.1**
**CEST Esterri de Car 102.83 20** IAMs_20 IAMs_20 04 24 24.4
comp=Z,15µm,22.0s
**BRAL Brewton 102.85 309** IAMs_20 IAMs_20 04 34 35.2
comp=Z,5µm,20.0s
**BRAL Brewton 102.85 309** P **Pdif** **03 43 46.9 +0.5**
baz=151
**ITM Ithomi 102.87 37** P **PP** **03 47 57.2 -4.0**
**KARP Karpathos 103.14 42** IAMs_20 IAMs_20 04 29 24.8
comp=Z,7µm,20.0s
**TIP Timpagrande 103.16 32** IAMs_20 IAMs_20 04 25 54.3
comp=Z,5µm,22.0s
**TIP Timpagrande 103.16 32** P **Pdif** **03 43 48.3 +0.6**
**RTZL Ratzakli, Kefa 103.33 36** P **PP** **03 48 01.2 -3.4**
**GOGA Godfrey 103.39 313** IAMs_20 IAMs_20 04 29 17.5
comp=Z,5µm,22.0s
**GOGA Godfrey 103.39 313** P **Pdif** **03 43 48.7 0.0**
baz=152
**KRND KRANIDI 103.45 38** P **PP** **03 48 00.6 -4.9**
**RLS Riolos of Patr 103.53 36** P **Pdif** **03 43 51.3 +2.1**
**RLS Riolos of Patr 103.53 36** P **PP** **03 48 03.2 -2.9**
**MZR Muzera 103.54 68** Pdiff **Pdif** **03 43 50.0 +0.3**
**MZR Muzera 103.54 68** P **Pdif** **03 43 50.7 +1.1**
SNR=8.1
**FSK Fiskardo 103.62 35** P **PP** **03 48 02.3 -4.5**
**GUR Goura 103.70 37** P **PP** **03 48 02.9 -4.6**
**SMRA Abu-Samra 103.72 65** P **Pdif** **03 43 51.1 +0.8**
SNR=8.4
**KLV Kalavryta, Ach 103.73 37** P **PP** **03 48 03.8 -3.9**
**EVGI Lefkada island 103.80 35** P **Pdif** **03 43 52.2 +1.8**
**EVGI Lefkada island 103.80 35** P **PP** **03 48 04.6 -3.5**
**NYDR Nydri-Lefkada 103.89 35** P **PKiKP** **03 48 05.0 -3.2**
**TRNA Turayna 103.89 66** P **Pdif** **03 43 53.5 +2.4**
**LKD2 Lefkada island 103.95 35** P **Pdif** **03 43 50.9 -0.2**
**LKD2 Lefkada island 103.95 35** P **PKiKP** **03 48 05.4 -3.0**
**APE Apeiranthos 103.95 40** P **PKiKP** **03 48 05.4 -3.1**
**MMAI Mount Meron Ar 103.99 49** Pdiff **Pdif** **03 43 54.2 +2.7**
comp=Z,14nm,1.0s,baz=201,slow=2.8,SNR=2.2
MMAI PP **PP** **03 48 08.5 -1.2**
comp=Z,52nm,1.2s,baz=216,slow=11,SNR=9.5
**EFP Efpalio 104.01 36** P **PKiKP** **03 48 06.9 -1.5**
**KALE Kalithea 104.05 37** P **Pdif** **03 43 54.8 +3.2**
**KALE Kalithea 104.05 37** P **PKiKP** **03 48 07.1 -1.5**
**GHWR Ruwais 104.05 67** P **Pdif** **03 43 52.0 +0.2**
**PVO Paravola 104.06 36** P **PKiKP** **03 48 07.2 -1.4**
**ARG Arkhangelos 104.08 42** P **PKiKP** **03 48 04.6 -4.1**
**MHTO MHTO 104.09 73** P **Pdif** **03 43 50.5 -1.6**
**KMSC Kings Mountain 104.11 315** P **Pdif** **03 43 52.2 +0.3**
baz=153
**ANX Ano Chora 104.16 36** P **Pdif** **03 43 55.0 +2.8**
**ANX Ano Chora 104.16 36** P **PKiKP** **03 48 08.0 -0.9**
**ATH Athens Observa 104.17 38** P **PKiKP** **03 48 07.8 -1.0**
**ATHU Athens Univers 104.19 38** P **PKiKP** **03 48 07.8 -1.0**
**VILL Villia 104.22 38** P **PKiKP** **03 48 07.1 -1.8**
**PTL Penteli 104.29 38** P **PKiKP** **03 48 07.5 -1.5**
**DION Dionisos Attik 104.34 38** P **PKiKP** **03 48 08.9 -0.2**
**LRAL Lakeview Retre 104.46 310** IAMs_20 IAMs_20 04 30 35.9
comp=Z,6µm,22.0s
**LRAL Lakeview Retre 104.46 310** P **Pdif** **03 43 53.3 -0.1**
baz=151
**KVTX Kingsville 104.47 299** IAMs_20 IAMs_20 04 32 57.6
comp=Z,4µm,19.0s
**SCTE Santa Cesarea 104.48 33** IAMs_20 IAMs_20 04 32 55.2

comp=Z,5µm,20.0s
IGT Igoumenitsa 104.53 35 P Pdif 03 43 55.0 +1.3
KEK Kerkira 104.54 34 P PKiKP 03 48 09.0 -0.4
AXAR Agios Charalam 104.55 37 P PP 03 48 10.4 -3.4
AGG Agios Georgios 104.68 36 P Pdif 03 43 55.6 +1.2
AGG Agios Georgios 104.68 36 P PP 03 48 11.5 -3.3
SHMA Al-Shehemyia 104.72 65 P Pdif 03 43 57.4 +2.6
SNR=6.3
SRN Sarande 104.75 34 P PP 03 48 11.9 -3.3
JAN Janina 104.81 35 P Pdif 03 43 57.1 +2.2
JAN Janina 104.81 35 P PP 03 48 13.2 -2.5
JRN Qarnain Island 104.86 67 P Pdif 03 43 56.2 +0.8
CSS Mathiatis 104.89 46 IAMs_20 IAMs_20 04 28 25.1
comp=Z,5µm,21.0s
Y49A Blount Mountai 104.94 311 IAMs_20 IAMs_20 04 30 41.6
comp=Z,8µm,22.0s
THL Klokotos Trika 105.08 36 P Pdif 03 43 58.0 +1.9
THL Klokotos Trika 105.08 36 P PP 03 48 12.5 -5.1
MNAI Manna 105.22 126 IAMs_20 IAMs_20 04 29 08.5
comp=Z,4µm,18.0s
NEO Neokhori 105.23 37 P PP 03 48 14.9 -3.9
KPRO Kipourio 105.24 35 P Pdif 03 43 59.4 +2.5
CESX Cesi 105.26 28 IAMs_20 IAMs_20 04 28 18.9
comp=Z,7µm,20.0s
JMDO Jabal Madar 105.31 72 P Pdif 03 43 59.7 +2.1
SNR=11
ARQ Araqi 105.33 71 P Pdif 03 43 59.1 +1.4
CBN Corbin Frederi 105.44 320 P PKiKP 03 48 10.6 -0.5
baz=154
TKL Tuckaleechee C 105.49 314 PP PP 03 48 14.8 -6.0
comp=Z,23nm,0.9s,baz=156,slow=11,SNR=7.2
TKL PKKPbc PKKPbc 03 59 36.5 +1.7
comp=Z,6.5nm,1.1s,baz=353,slow=4.2,SNR=4.8
ALNE Al Ain 105.55 70 P Pdif 03 44 01.2 +2.6
SNR=7.7
BLA Blacksburg 105.62 317 P PKiKP 03 48 10.9 -0.6
baz=153
LIT Litokhoron 105.72 36 P Pdif 03 44 00.9 +2.0
LIT Litokhoron 105.72 36 P PP 03 48 17.4 -5.0
JLN Jalan Bani Buh 105.79 74 P Pdif 03 44 01.4 +1.7
SNR=8.9
ASUD Al Ashush, Dub 105.81 69 P Pdif 03 44 01.5 +1.7
SMRI Semarang 105.83 134 IAMs_20 IAMs_20 04 22 24.2
comp=Z,6µm,21.0s
833A Chaparral WMA, 105.83 298 P PKiKP 03 48 12.2 0.0
baz=148
SMDO Samad 105.86 72 P Pdif 03 44 01.1 +1.0
SNR=5.1
HOQ Hoqain 105.93 71 P Pdif 03 44 01.3 +1.0
SNR=6.2
WBK Wadi Bani Khal 105.95 73 P Pdif 03 44 02.6 +2.2
SNR=8.6
KBD Kabd 105.99 60 P Pdif 03 44 03.0 +2.6
SOHO SOHO 106.00 70 P Pdif 03 44 01.8 +1.2
FNA Florina 106.00 35 P Pdif 03 44 00.8 +0.6
FNA Florina 106.00 35 P PP 03 48 18.0 -6.5
FAQ Al Faqa, Dubai 106.04 69 P Pdif 03 44 03.0 +2.2
SNR=6.0
OHR Ohrid 106.12 34 *i* P Pdif 03 44 03.4 +2.6
TZTN Tazewell 106.19 314 IAMs_20 IAMs_20 04 36 57.5
comp=Z,4µm,19.0s
TZTN Tazewell 106.19 314 P PKiKP 03 48 12.5 -0.1
baz=152
ASHO Ashiyiah 106.22 69 P Pdif 03 44 04.1 +2.5
SNR=5.7
NAZ Nazwa, Dubai 106.28 69 P Pdif 03 44 07.2 +5.4
BIDO Bidbid 106.29 72 P Pdif 03 44 04.1 +2.3
WSAR Wadi Sarin 106.31 72 P Pdif 03 44 03.8 +1.8
M65A Busby, Falmout 106.35 326 IAMs_20 IAMs_20 04 30 34.5
comp=Z,5µm,20.0s
M65A Busby, Falmout 106.35 326 P PKiKP 03 48 13.0 +0.3
baz=157
HATD Hatta, Dubai 106.38 69 P Pdif 03 44 06.3 +4.0
SNR=6.4
UOSS Minazif 106.51 69 P Pdif 03 44 06.1 +3.2
PLAL Pickwick Lake 106.59 310 IAMs_20 IAMs_20 04 37 34.3
comp=Z,6µm,19.0s
NATX Nacogdoches 106.60 304 P PKiKP 03 48 13.3 -0.1
baz=149
MTN Manton Dam 106.62 156 IAMs_20 IAMs_20 04 30 12.8
comp=Z,7µm,21.0s
N62A Caumsett State 106.63 324 IAMs_20 IAMs_20 04 33 09.0
comp=Z,4µm,20.0s
OXF Oxford 106.72 309 P PKiKP 03 48 12.0 -1.6
baz=150
V48A Smith Brothers 106.75 312 IAMs_20 IAMs_20 04 31 54.4
comp=Z,6µm,22.0s
L64A Middleborough 106.75 326 IAMs_20 IAMs_20 04 29 23.1
comp=Z,5µm,20.0s
KNT Kendrikon 106.81 36 P Pdif 03 44 06.0 +2.2
PAL Palisades 106.84 324 P PKiKP 03 48 12.7 -0.8
baz=156
MDH Madha 106.85 69 P Pdif 03 44 02.1 -2.3
SNR=6.5
VAY Valandovo 106.86 36 *i* P Pdif 03 43 55.0 -8.9
BCX Boston College 107.22 326 IAMs_20 IAMs_20 04 31 17.9
comp=Z,5µm,20.0s
WES Weston 107.31 326 IAMs_20 IAMs_20 04 31 02.3
comp=Z,5µm,20.0s
PEHC Pehcevo 107.38 36 *i* P Pdif 03 44 07.2 +0.8
SHME Shamm 107.40 69 P Pdif 03 44 08.9 +2.1
SNR=8.6
HRV Adam Dziewonsk 107.49 326 IAMs_20 IAMs_20 04 31 17.1
comp=Z,5µm,20.0s
HRV Adam Dziewonsk 107.49 326 P PKiKP 03 48 15.4 +0.7
baz=156
WVT Waverly 107.49 311 P PKiKP 03 48 14.6 -0.4
baz=150
L61B Northampton 107.77 325 IAMs_20 IAMs_20 04 32 00.1
comp=Z,5µm,20.0s
SSPA Standing Stone 107.80 321 P PKiKP 03 48 14.7 -0.7
baz=154
GSI Gunungsitoli 107.83 118 IAMs_20 IAMs_20 04 27 02.8
comp=Z,5µm,19.0s
JCT Junction City 107.84 299 P PKiKP 03 48 14.8 -1.1
baz=148
R50A Paris 108.01 315 IAMs_20 IAMs_20 04 34 46.7
comp=Z,5µm,21.0s
WHTX Lake Whitney, 108.04 302 P PKiKP 03 48 15.3 -0.8
baz=148
CLF Chambon-Foret 108.26 19 IAMs_20 IAMs_20 04 28 26.1
comp=Z,7µm,21.0s
TRY Troy 108.33 325 IAMs_20 IAMs_20 04 32 49.5
comp=Z,5µm,20.0s
P52A Corning 108.39 317 P PKiKP 03 48 16.7 +0.2
baz=152
FUORN Ofenpass-Fuorn 108.50 25 IAMs_20 IAMs_20 04 28 21.2
comp=Z,7µm,22.0s
MIAR Mount Ida 108.50 306 P PKiKP 03 48 16.6 -0.3
baz=149
BKNI Bangkinang 108.56 122 IAMs_20 IAMs_20 04 22 51.0
comp=Z,5µm,22.0s
DAVOX Davos/Dischmat 108.57 25 Pdiff Pdif 03 44 13.1 +1.4
comp=Z,6.2nm,0.9s,baz=125,slow=6.7,SNR=9.2
DAVOX PKiKP PKiKP 03 48 16.5 -0.4
comp=Z,12nm,1.0s,baz=6.1,slow=1.6,SNR=6.6
DAVOX PKKPbc PKKPbc 03 59 27.2 +1.4
comp=Z,2.7nm,0.7s,baz=49,slow=4.9,SNR=4.1
DAVOX PKKP PKKPdf 03 59 40.4 -0.6
comp=Z,6.4nm,0.9s,baz=320,slow=6.8,SNR=6.4
DAVOX Davos/Dischmat 108.57 25 *i* P PKiKP 03 48 16.5 -0.4
BINY Binghamton 108.58 323 IAMs_20 IAMs_20 04 33 55.5
comp=Z,4µm,20.0s
BINY Binghamton 108.58 323 P PKiKP 03 48 17.2 +0.4
baz=154
O53A New Philadelph 108.60 318 IAMs_20 IAMs_20 04 36 20.4
comp=Z,4µm,19.0s
O53A New Philadelph 108.60 318 P PKiKP 03 48 17.4 +0.5
baz=152
SABO M.te Sabotino 108.68 27 IAMs_20 IAMs_20 04 29 54.7
comp=Z,5µm,20.0s
TXAR Lajitas Array 108.70 295 Pdiff Pdif 03 44 12.7 +0.1
comp=Z,1.3nm,0.9s,baz=134,slow=6.4,SNR=12
TXAR PKiKP PKiKP 03 48 17.8 +0.2
comp=Z,6.0nm,1.0s,baz=161,slow=4.3,SNR=15
TXAR PKKPbc PKKPbc 03 59 27.1 +2.4
comp=Z,6.2nm,1.0s,baz=289,slow=2.1,SNR=11
TXAR PKKP PKKPdf 03 59 40.1 +0.4
comp=Z,10nm,1.0s,baz=300,slow=2.7,SNR=8.6
TXAR PKPPKP P'P'df 04 07 52.5 +0.9
comp=Z,1.4nm,1.1s,baz=319,slow=0.3,SNR=4.4
WCI Wyandotte Cave 108.71 313 P PKiKP 03 48 17.1 -0.1
baz=151
HNH Hanover 108.80 326 IAMs_20 IAMs_20 04 31 57.8
comp=Z,5µm,20.0s
WVL Waterville 108.83 328 IAMs_20 IAMs_20 04 31 57.5
comp=Z,5µm,20.0s
FETA Feichten 108.98 25 *e*Pdiff Pdif 03 44 17.0 +3.5
comp=Z,12nm,1.2s
FETA *e*PKiKP PKiKP 03 48 17.7 +0.1
comp=Z,18nm,1.1s
FETA *e*SKS SKSac 03 54 53.0 +2.7
comp=Z,18nm,1.2s
FETA *i* PKKP PKKPbc 03 59 24.6 +0.1
comp=Z,4.7nm,1.1s
ANTO Ankara 109.01 44 P Pdif 03 44 17.3 +3.7
DAVA Damuels 109.05 24 *e*Pdiff Pdif 03 44 15.8 +2.1
comp=Z,15nm,1.0s
DAVA *e*PKiKP PKiKP 03 48 18.6 +0.9
comp=Z,28nm,1.1s
DAVA *i* SKS SKSac 03 54 51.7 +1.2
comp=Z,15nm,1.9s
DAVA *i* PKKP PKKPbc 03 59 24.8 +0.5
comp=Z,9.8nm,1.1s
ABTA Abfaltersbach 109.14 26 *i* Pdiff Pdif 03 44 16.0 +2.0
comp=Z,19nm,1.2s
ABTA *i* PKiKP PKiKP 03 48 20.4 +2.6
comp=Z,38nm,1.8s
ABTA *e*PKKP PKKPbc 03 59 24.4 +0.6
comp=Z,8.8nm,1.3s
LBNH Lisbon 109.18 326 IAMs_20 IAMs_20 04 30 02.9
comp=Z,4µm,20.0s
LBNH Lisbon 109.18 326 P PKiKP 03 48 18.7 +0.8
baz=156
BR131 Keskin Array S 109.19 44 P Pdif 03 44 17.6 +3.1
BRTR Keskin Array B 109.19 44 Pdiff Pdif 03 44 18.4 +3.8
comp=Z,7.0nm,0.9s,baz=186,slow=5.1,SNR=14
BRTR PKiKP PKiKP 03 48 18.4 +0.2
comp=Z,7.4nm,0.9s,baz=152,slow=3.3,SNR=6.4
BRTR PP PP 03 48 37.2 -11
comp=Z,23nm,1.1s,baz=194,slow=4.5,SNR=6.8
BRTR PKKPbc PKKPbc 03 59 26.1 +2.6
comp=Z,5.0nm,0.8s,baz=96,slow=2.7,SNR=13
BRTR PKKP PKKPdf 03 59 38.0 -1.4
comp=Z,4.1nm,0.9s,baz=52,slow=2.0,SNR=5.5
ACSO Alum Creek Sta 109.22 317 P PKiKP 03 48 16.7 -1.4
baz=152
P49A Miami Univ. Ec 109.25 315 IAMs_20 IAMs_20 04 38 15.6
comp=Z,4µm,20.0s
P49A Miami Univ. Ec 109.25 315 P PKiKP 03 48 18.6 +0.4
baz=151
J59A Piesco 109.25 324 IAMs_20 IAMs_20 04 33 28.3
comp=Z,4µm,19.0s
SQTA Sankt Quirin 109.28 25 *e*Pdiff Pdif 03 44 20.0 +5.3
comp=Z,33nm,1.1s,SNR=10
SQTA *e*PKiKP PKiKP 03 48 18.6 +0.5
comp=Z,16nm,0.9s
SQTA *i* SKS SKSac 03 54 54.2 +2.7
comp=Z,11nm,1.3s
SQTA *e*PKKP PKKPbc 03 59 25.4 +2.0
comp=Z,16nm,1.7s
MYKA Terra Mystica 109.30 27 *e*Pdiff Pdif 03 44 19.2 +4.5
comp=Z,17nm,1.5s
MYKA *e*PKiKP PKiKP 03 48 18.4 +0.3
comp=Z,25nm,1.6s
MYKA *e*SKS SKSac 03 54 51.8 +0.4
comp=Z,7.0nm,1.1s
MYKA *i* PKKP PKKPbc 03 59 24.1 +0.8
comp=Z,7.7nm,1.2s
NGCH Negor - Chabah 109.33 73 P Pdif 03 44 19.0 +3.6
PKME Peaks-Kenny Pk 109.37 329 IAMs_20 IAMs_20 04 31 40.8
comp=Z,4µm,20.0s
PKME Peaks-Kenny Pk 109.37 329 P PKiKP 03 48 18.9 +0.7
baz=157
MOTA Moosalm 109.37 25 *e*Pdiff Pdif 03 44 16.3 +1.1
comp=Z,26nm,1.3s
MOTA *e*PKiKP PKiKP 03 48 18.8 +0.5
comp=Z,34nm,1.3s
MOTA *i* SKS SKSac 03 54 51.8 -0.1
comp=Z,9.3nm,1.1s
MOTA *i* PKKP PKKPbc 03 59 24.7 +1.6
comp=Z,13nm,1.3s
OBKA Obir 109.41 28 *e*Pdiff Pdif 03 44 21.7 +6.4
comp=Z,35nm,1.4s,SNR=7.9
OBKA *i* PKiKP PKiKP 03 48 19.3 +0.9
comp=Z,22nm,1.5s
OBKA *i* PKKP PKKPbc 03 59 25.0 +2.0
comp=Z,6.5nm,1.1s
WTTA Wattenberg 109.42 26 *i* Pdiff Pdif 03 44 17.5 +2.1
comp=Z,23nm,1.0s
WTTA *e*PKiKP PKiKP 03 48 18.5 0.0
comp=Z,28nm,0.8s
WTTA *i* SKS SKSac 03 54 50.7 -1.5
comp=Z,18nm,1.1s
WTTA *e*PKKP PKKPbc 03 59 24.5 +1.4
comp=Z,10nm,1.2s
RETA Reutte 109.43 25 *e*Pdiff Pdif 03 44 19.7 +4.4
comp=Z,22nm,1.4s
RETA *e*PKiKP PKiKP 03 48 18.8 +0.4
comp=Z,29nm,1.3s
RETA *i* SKS SKSac 03 54 50.3 -1.7
comp=Z,13nm,1.5s
RETA *i* PKKP PKKPbc 03 59 24.8 +1.9
comp=Z,13nm,1.2s
M53A WI Miller and 109.47 319 P PKiKP 03 48 18.7 +0.2
baz=152
WATA Walderalm 109.47 26 *i* Pdiff Pdif 03 44 18.0 +2.4
comp=Z,26nm,1.1s
WATA *i* PKiKP PKiKP 03 48 21.6 +3.1
comp=Z,39nm,1.2s
WATA *e*SKS SKSac 03 54 51.4 -0.9
comp=Z,15nm,1.6s
VT1 Waterbury 109.51 326 IAMs_20 IAMs_20 04 32 28.3
comp=Z,5µm,20.0s
ABTX Abilene, Hawle 109.57 300 P PKiKP 03 48 18.4 -0.7
baz=147
T42A Van Buren 109.58 309 IAMs_20 IAMs_20 04 39 28.6
comp=Z,4µm,20.0s
KBA Koelnbreinsper 109.64 27 *e*Pdiff Pdif 03 44 20.7 +4.3
comp=Z,12nm,1.0s
KBA *e*PKiKP PKiKP 03 48 20.6 +1.7
comp=Z,20nm,1.2s
KBA *e*SKS SKSac 03 54 52.3 -0.8
comp=Z,12nm,1.2s
KBA *e*PKKP PKKPbc 03 59 22.0 -0.3
comp=Z,7.5nm,1.4s
J57A Williamstown 109.67 323 IAMs_20 IAMs_20 04 34 17.4
comp=Z,4µm,20.0s
G62A West of Eustis 109.67 328 IAMs_20 IAMs_20 04 32 35.4
comp=Z,5µm,20.0s
RPSI Rantau Prapat 109.68 119 IAMs_20 IAMs_20 04 23 45.9
comp=Z,5µm,21.0s
SOKA Soboth 109.69 28 *e*Pdiff Pdif 03 44 20.3 +3.8
comp=Z,31nm,1.4s,SNR=8.0
SOKA *e*PKiKP PKiKP 03 48 19.7 +0.8
comp=Z,12nm,1.0s
SOKA *i* SKS SKSac 03 54 51.6 -1.5
comp=Z,7.4nm,1.3s
SOKA *e*PKKP PKKPbc 03 59 23.9 +1.8
comp=Z,29nm,2.0s
LESA Schwarzleotal 109.81 26 *e*Pdiff Pdif 03 44 21.0 +4.0
comp=Z,12nm,0.9s
LESA *e*PKiKP PKiKP 03 48 18.7 -0.4
comp=Z,13nm,1.2s
LESA *i* SKS SKSac 03 54 50.4 -3.2
comp=Z,7.7nm,1.2s
LESA *e*PKKP PKKPbc 03 59 23.1 +1.5
comp=Z,8.8nm,1.4s
ERPA Erie 109.83 320 P PKiKP 03 48 18.7 -0.4
baz=153
F62A Pittston Farm, 110.14 328 IAMs_20 IAMs_20 04 32 16.2
comp=Z,4µm,20.0s
BIOA Bad Ischl, Aus 110.29 27 *e*Pdiff Pdif 03 44 24.0 +4.9
comp=Z,20nm,1.8s,SNR=7.1
BIOA *e*PKiKP PKiKP 03 48 22.3 +2.4
comp=Z,23nm,1.4s
BIOA *i* PKKP PKKPab 03 59 33.2 +4.9
comp=Z,20nm,1.1s
LONY Lake Ozonia 110.32 325 IAMs_20 IAMs_20 04 33 37.6
comp=Z,5µm,20.0s
LONY Lake Ozonia 110.32 325 P PKiKP 03 48 19.2 -0.8
baz=155
PQI Presque Isle 110.32 330 IAMs_20 IAMs_20 04 34 15.5
comp=Z,4µm,20.0s
ARSA Arzberg 110.34 28 *e*Pdiff Pdif 03 44 22.2 +2.9
comp=Z,15nm,1.1s
ARSA *e*PKiKP PKiKP 03 48 20.4 +0.4
comp=Z,7.0nm,0.8s
ARSA *e*SKS SKSac 03 55 00.4 +4.7
comp=Z,4.9nm,1.1s
ARSA *i* PKKP PKKPbc 03 59 20.8 +0.9
comp=Z,9.5nm,2.1s
ARPR Arapgir-MALATY 110.44 48 IAMs_20 IAMs_20 04 34 21.4
comp=Z,5µm,20.0s
CCM Cathedral Cave 110.53 310 P PKiKP 03 48 19.7 -0.9
baz=149
WLF Walferdange 110.54 21 IAMs_20 IAMs_20 04 30 01.6
comp=Z,5µm,20.0s
WLF Walferdange 110.54 21 *d*PKiKP PKiKP 03 48 20.9 +0.6
MOA Molln 110.59 27 *e*Pdiff Pdif 03 44 21.3 +0.9
comp=Z,25nm,1.3s,SNR=6.6
MOA *i* PKiKP PKiKP 03 48 20.3 -0.1
comp=Z,20nm,1.0s
MOA *e*SKS SKSac 03 55 01.1 +4.5
comp=Z,15nm,2.0s
MOA *i* PKKP PKKPbc 03 59 21.7 +2.6
comp=Z,7.5nm,1.0s
TUL3 Leonard 110.62 305 P PKiKP 03 48 20.1 -0.8
baz=148
SFIN Lafayette 110.88 314 P PKiKP 03 48 20.4 -0.8
baz=150
BMRD Maredsous 110.90 20 *d*PKiKP PKiKP 03 48 21.1 +0.2
WMOK Wichita Mounta 110.95 302 P PKiKP 03 48 21.0 -0.5
baz=147
RONA Rosalia, Austr 110.95 29 *e*Pdiff Pdif 03 44 25.4 +3.3
comp=Z,15nm,0.9s,SNR=7.4
RONA *i* PKiKP PKiKP 03 48 21.8 +0.6
comp=Z,25nm,1.4s
RONA *i* PKKP PKKPbc 03 59 18.7 +0.9
comp=Z,5.9nm,0.8s
LHMI Lhok Sumawe 110.97 116 IAMs_20 IAMs_20 04 25 21.1
comp=Z,6µm,20.0s
BGES Gesves 111.03 20 *d*Pdif Pdif 03 44 27.8 +5.5
CONA Conrad Observa 111.06 28 *e*Pdiff Pdif 03 44 25.5 +2.9
comp=Z,27nm,1.2s
CONA *e*PKiKP PKiKP 03 48 23.1 +1.7
comp=Z,20nm,1.1s
CONA *i* SKS SKSac 03 55 02.3 +3.6
comp=Z,9.8nm,0.9s
CONA *i* PKKP PKKPbc 03 59 17.9 +0.2
comp=Z,10nm,1.2s
SIRR Siria 111.09 33 ⇑P PKiKP 03 48 17.2 -4.2
BCLA Clavier 111.11 20 *d*Pdif Pdif 03 44 28.1 +5.6
AAM Ann Arbor 111.28 317 IAMs_20 IAMs_20 04 33 04.2
comp=Z,6µm,22.0s
AAM Ann Arbor 111.28 317 P PKiKP 03 48 20.7 -1.2
baz=151
GERES GERESS Array B 111.38 26 Pdiff Pdif 03 44 28.1 +4.1
comp=Z,2.2nm,0.9s,baz=175,slow=17,SNR=5.3
GERES PKiKP PKiKP 03 48 21.1 -0.9
comp=Z,12nm,0.9s,baz=182,slow=10,SNR=4.2
GERES PKKPbc PKKPbc 03 59 18.3 +1.7
comp=Z,1.3nm,0.9s,baz=180,slow=6.7,SNR=4.9
MEM Membach 111.42 21 *d*PP PP 03 49 00.3 -3.4
GURO Guroymak-BITLI 111.47 51 IAMs_20 IAMs_20 04 33 45.2
comp=Z,6µm,20.0s
MNTX Cornudas Mount 111.48 296 P PKiKP 03 48 21.9 -0.8
baz=146,SNR=5.1
CKRC Cesky Krumlov 111.50 27 *e*PS PS 03 58 36.8 +1.2
CKRC *e*PKKP PKKPab 03 59 26.2 +3.3
CKRC AMS AMS 04 29 50.0
comp=Z,12µm,21.2s
CKRC Cesky Krumlov 111.50 27 *e*pP pPKiKP 03 48 35.6 +4.5
CKRC Cesky Krumlov 111.50 27 *e*PKiKP PKiKP 03 48 35.6 +13
CKRC *e* 03 48 46.1
CKRC Cesky Krumlov 111.50 27 *ex* x 03 48 46.1
GRFO Grafenberg 111.61 25 IAMs_20 IAMs_20 04 29 32.5
comp=Z,6µm,22.0s
GRA1 Grafenberg Arr 111.61 25 IAMs_20 IAMs_20 04 29 09.9
comp=Z,6µm,22.0s
GRF Grafenberg Arr 111.61 25 *e*Pdiff Pdif 03 44 32.4 +7.5
GRF *e*L L 04 29 54.5
comp=Z,6µm,21.7s
ZST Bratislava 111.62 29 *i* P Pdif 03 44 29.7 +4.8
ZST Bratislava 111.62 29 *e*PDIFF Pdif 03 44 29.7 +4.8
KHC Kasperske Hory 111.62 26 IAMs_20 IAMs_20 04 32 59.1
comp=Z,5µm,19.0s
KHC Kasperske Hory 111.62 26 *e*PDIFF Pdif 03 44 24.3 -0.7
KHC *e*PKP PKiKP 03 48 25.1 +2.7
KHC *e*PS PS 03 58 38.2 +1.5
KHC AMS AMS 04 27 30.0
comp=Z,7µm,24.3s
KHC Kasperske Hory 111.62 26 *es*P sPKiKP 03 48 38.1 +3.6
KHC Kasperske Hory 111.62 26 *e*P Pdif 03 44 24.3 -0.7
KHC *e*PS PS 03 58 38.2 +1.5
KHC MLR MLR
comp=Z,7µm,24.3s
KHC Kasperske Hory 111.62 26 *ex* x 03 48 48.7
MLR Muntele Rosu 111.67 36 IAMs_20 IAMs_20 04 33 29.5
comp=Z,5µm,21.0s
MLR Muntele Rosu 111.67 36 Pdiff Pdif 03 44 27.7 +2.2
comp=Z,27nm,1.1s,baz=262,slow=2.8,SNR=11
MLR PKiKP PKiKP 03 48 21.9 -0.8
comp=Z,20nm,1.0s,baz=168,slow=2.7,SNR=9.9
MLR PP PP 03 49 04.6 -1.2
comp=Z,25nm,1.0s,baz=140,slow=9.5,SNR=5.1
HDIL Hopedale 111.89 312 P PKiKP 03 48 22.6 -0.5
baz=149
HYB Hyderabad 111.89 92 *e*PKiKP PKiKP 03 48 23.9 +0.1
HYB *e*PP PP 03 49 06.8 -0.5
HYB *e*SKSac SKSac 03 55 04.2 +0.7
HYB *e*SS SS 04 04 43.2 +0.9
HYB IVMs_BB IVMs_BB 04 24 20.1
comp=Z,2µm,15.0s
SADO Sadowa 111.90 322 PKKPbc PKKPbc 03 59 14.7 +0.1
comp=Z,7.4nm,1.1s,baz=13,slow=3.1,SNR=3.3
ZVC Zvikov 112.05 27 *e*PDIFF Pdif 03 44 35.6 +8.8
ZVC *e*PS PS 03 58 44.2 +3.6
ZVC *e*PKiKP PKKPab 03 59 23.9 +3.5
ZVC AMS AMS 04 30 20.0
comp=Z,7µm,20.5s
EPT El Paso 112.08 295 IAMs_20 IAMs_20 04 32 07.5
comp=Z,5µm,20.0s
DSB Dublin 112.13 12 IAMs_20 IAMs_20 04 31 49.6
comp=Z,4µm,20.0s
MSTX Muleshoe 112.13 299 P PKiKP 03 48 23.5 -0.5
baz=146
IPM Ipoh 112.22 120 IAMs_20 IAMs_20 04 26 40.1
comp=Z,4µm,20.0s
TREC Trest 112.23 27 AMS AMS 04 30 00.0
comp=Z,10µm,22.2s
KRUC Moravsky 112.24 28 *e*PDIFF Pdif 03 44 32.2 +4.5
KRUC *e*PKiKP PKiKP 03 48 22.8 -0.7
KRUC *e*PP PP 03 49 07.2 -2.5
KRUC *e*PKKP PKKPbc 03 59 14.9 +1.3
VYHS Vyhne 112.34 30 *e*PKiKP PKiKP 03 48 23.4 -0.3
VYHS pmax pmax
comp=Z,28nm,1.0s
VYHS Vyhne 112.34 30 *e*PDIFF Pdif 03 44 30.4 +2.2
VYHS Vyhne 112.34 30 *e*P PKiKP 03 48 23.4 -0.3
VYHS *e* 03 59 23.7
JAVC Velka Javorina 112.38 29 *e*PDIFF Pdif 03 44 33.5 +5.1
JAVC *e*PKiKP PKiKP 03 48 24.0 +0.2
JAVC *e*PP PP 03 49 09.1 -1.6
AMTX Amarillo 112.38 300 P PKiKP 03 48 24.2 -0.2
baz=146
HQIL Hanson Quary C 112.40 314 IAMs_20 IAMs_20 04 39 05.9
comp=Z,4µm,20.0s
HNR Honiara 112.48 186 IAMs_20 IAMs_20 04 37 00.3
comp=Z,5µm,19.0s
J47A Sunmer 112.52 317 IAMs_20 IAMs_20 04 31 21.0
comp=Z,5µm,22.0s
VRAC Vranov 112.52 28 *e*PDIFF Pdif 03 44 35.5 +6.6
VRAC *e*PKiKP PKiKP 03 48 24.3 +0.3
VRAC *e*PP PP 03 49 09.0 -2.7
VRAC *e*PKKP PKKPbc 03 59 12.6 -0.1
VRAC Vranov 112.52 28 Pdiff Pdif 03 44 35.6 +6.6
comp=Z,3.3nm,0.6s,baz=176,slow=8.2,SNR=7.2
VRAC PKiKP PKiKP 03 48 24.0 0.0
comp=Z,16nm,0.8s,baz=201,slow=3.6,SNR=11
VRAC PP PP 03 49 05.1 -6.6
comp=Z,24nm,1.0s,baz=208,slow=7.8,SNR=6.8
VRAC PKKPbc PKKPbc 03 59 15.2 +2.5
comp=Z,1.7nm,0.6s,baz=72,slow=11,SNR=3.8
MOX Moxa 112.60 24 *e*L L 04 30 32.6
comp=Z,5µm,21.2s
GOPC GO Pecny, Ondr 112.64 27 AMS AMS 04 31 10.0
comp=Z,5µm,20.3s
PRU Pruhonice 112.65 27 *e*PS PS 03 58 50.4 +4.3
PRU AMS AMS 04 31 50.0
comp=Z,5µm,19.8s
PRA Prague 112.70 26 *e*PS PS 03 58 51.5 +5.0
PRA AMS AMS 04 32 00.0
comp=Z,6µm,19.9s
L44A Lake County Fo 112.75 314 IAMs_20 IAMs_20 04 41 21.1
comp=Z,4µm,19.0s
L44A Lake County Fo 112.75 314 P PKiKP 03 48 25.3 +0.6
baz=149
KULM Kulim 112.76 119 IAMs_20 IAMs_20 04 25 52.8
comp=Z,4µm,22.0s
KECS Kecovo 112.78 31 *e*PKiKP PKiKP 03 48 23.8 -0.7

KECS pmax pmax
comp=Z,9.0nm,1.2s
**KECS Kecovo 112.78 31** *e*PDIFF **Pdif 03 44 32.6 +2.5**
**KECS Kecovo 112.78 31** *e*P **PKiKP 03 48 23.8 -0.7**
KECS *e* 03 59 21.9
**MAUC Maruska 112.88 29** *e*PDIFF **Pdif 03 44 38.5 +7.9**
**HSKC Hora Svate Kat 112.97 26** *e*PKP **PKiKP 03 48 26.3 +1.4**
HSKC AMS AMS 04 31 30.0
comp=Z,4μm,20.4s
**RICC Richard 113.06 26** AMS AMS 04 30 20.0
comp=Z,6μm,21.8s
**PVCC Panska Ves 113.16 26** AMS AMS 04 30 10.0
comp=Z,6μm,22.1s
**PVCC Panska Ves 113.16 26** *e*pP **PKiKP 03 48 25.4 +0.2**
**PVCC Panska Ves 113.16 26** *e*PKiKP **PKiKP 03 48 25.4 +0.2**
**MORC Moravsky Berou 113.19 29** IAMs_20 IAMs_20 04 31 05.5
comp=Z,5μm,22.0s
**MORC Moravsky Berou 113.19 29** *e*PDIFF **Pdif 03 44 38.7 +6.8**
MORC *e*PKIKP **PKiKP 03 48 24.8 -0.6**
MORC *e*PP **PP 03 49 14.4 -2.1**
**KRLC Kraliky 113.27 28** *e*PDIFF **Pdif 03 44 38.4 +6.1**
KRLC *e*PS **PS 03 59 00.6 +8.7**
KRLC *e*PKKP **PKKPdf 03 59 27.0 -4.9**
KRLC AMS AMS 04 31 00.0
comp=Z,6μm,22.0s
**KRLC Kraliky 113.27 28** *e*pP **PKiKP 03 48 23.2 -2.3**
**KRLC Kraliky 113.27 28** *e*PKiKP **PKiKP 03 48 23.2 -2.3**
**121A Cookes Peak, D 113.32 294** P **PKiKP 03 48 26.8 +0.5**
baz=145
**121A Cookes Peak, D 113.32 294** P **PKiKP 03 48 27.0 +0.6**
**BRG Berggiesshubel 113.33 26** *e*P **PKiKP 03 48 25.8 +0.3**
BRG Amp 03 48 26.7
comp=Z,16nm,1.0s
**OKC Ostrava-Krasne 113.40 29** *e*PS PS 03 58 59.1 +6.2
OKC AMS AMS 04 32 00.0
comp=Z,3μm,21.7s
**DPC Dobruska-Polom 113.41 28** *e*PDIFF **Pdif 03 44 38.6 +5.7**
DPC *e*PS **PS 03 58 59.1 +5.9**
DPC *e*PKKP **PKKPab 03 59 19.3 +4.8**
DPC AMS AMS 04 31 00.0
comp=Z,7μm,21.0s
**DPC Dobruska-Polom 113.41 28** *e*pP **PKiKP 03 48 25.3 -0.5**
**DPC Dobruska-Polom 113.41 28** *e*PKiKP **PKiKP 03 48 25.3 -0.5**
**UPC Upice 113.48 27** AMS AMS 04 31 20.0
comp=Z,6μm,20.4s
**CLL Collm 113.53 25** IAMs_20 IAMs_20 04 30 52.4
comp=Z,6μm,22.0s
**CLL Collm 113.53 25** *i* P **Pdif 03 44 41.5 +8.2**
CLL *i* 03 48 25.7
CLL *e* 03 55 13.0
CLL pmax pmax
comp=Z,13nm,1.1s
CLL MLR MLR
comp=Z,7μm,23.4s
**CHVC Chvalec 113.57 27** *e*PKKP 03 59 18.6
CHVC AMS AMS 04 31 40.0
comp=Z,5μm,20.3s
**OSTC Ostas 113.58 27** *e*PKKP 03 59 19.2
OSTC AMS AMS 04 31 30.0
comp=Z,6μm,21.0s
**OSTC Ostas 113.58 27** *e*pP **PKiKP 03 48 26.3 +0.3**
**OSTC Ostas 113.58 27** *e*PKiKP **PKiKP 03 48 26.3 +0.3**
**KSU1 Kansas State U 113.65 306** IAMs_20 IAMs_20 04 37 48.6
comp=Z,4μm,20.0s
**KSU1 Kansas State U 113.65 306** P **PKiKP 03 48 25.6 -1.0**
baz=147
**KOLS Kolonicke sedl 113.69 32** *e*PKIKP **PKiKP 03 48 21.5 -4.8**
KOLS pmax pmax
comp=Z,6.0nm,0.7s
**KOLS Kolonicke sedl 113.69 32** *e*P **PKiKP 03 48 21.4 -4.8**
KOLS *e* 03 59 18.2
**GLMI Grayling 113.82 318** IAMs_20 IAMs_20 04 31 01.4
comp=Z,4μm,22.0s
**MILM Milestii Mici 113.85 37** *e*P **Pdif 03 44 43.0 +8.1**
**MILM Milestii Mici 113.85 37** *e*PKP **PKiKP 03 48 26.6 0.0**
**MILM Milestii Mici 113.85 37** *e*P **Pdif 03 44 43.0 +8.1**
MILM *e* 03 48 26.6
MILM *e*PPS PPS 04 00 17.0
**SIM Simferopol' 113.92 42** *i* PKIKP **PKiKP 03 48 26.5 -0.3**
SIM *e* 03 49 22.1
SIM pmax pmax
comp=Z,68nm,1.0s
SIM pmax pmax
comp=Z,58nm,9.5s
**KIS Kishinev 113.93 37** *e*PKP **PKiKP 03 48 27.0 +0.2**
**KIS Kishinev 113.93 37** *e*PKIKP **PKiKP 03 48 27.0 +0.2**
**GNI Garni 113.94 52** PKPdf **PKiKP 03 48 27.2 -0.1**
**GNI Garni 113.94 52** P **Pdif 03 44 33.6 -2.1**
**GNI Garni 113.94 52** *i* PKIKP **PKiKP 03 48 27.4 +0.1**
GNI pmax pmax
comp=Z,76nm,1.5s
**Y22D IRIS PASSCAL I 114.17 296** IAMs_20 IAMs_20 04 35 27.3
comp=Z,4μm,18.0s
**Y22D IRIS PASSCAL I 114.17 296** P PKPdf 03 48 28.2 +0.3
baz=145
**OJC Ojcow 114.18 30** *e*P PKPdf 03 48 27.4 +0.3
**JFWS Jewell Farm 114.27 313** P PKPdf 03 48 27.1 -0.5
baz=148
**ESK Eskdalemuir 114.54 14** IAMs_20 IAMs_20 04 29 04.2
comp=Z,5μm,22.0s
**EKA Eskdalemuir Ar 114.56 14** Pdiff **Pdif 03 44 46.0 +8.2**
comp=Z,1.9nm,0.8s,baz=211,slow=1.5,SNR=3.5
EKA PKP PKPdf 03 48 27.5 -0.2
comp=Z,2.3nm,0.7s,baz=225,slow=2.3,SNR=6.1
EKA PP PP 03 49 14.2 -12
comp=Z,11nm,1.0s,baz=185,slow=8.4,SNR=7.2
EKA PKKPbc **PKKPbc 03 59 06.7 +0.9**
comp=Z,1.3nm,0.6s,baz=352,slow=2.1,SNR=8.1
**KMPD K-Podol'skiy 114.58 35** PKP PKPdf 03 48 27.1 -0.8
**SCIA State Center 114.59 310** P PKPdf 03 48 28.3 +0.1
baz=147
**TUC Tucson 114.60 292** P PKPdf 03 48 29.2 +0.5
baz=145
**ANMO Albuquerque 114.66 297** P PKPdf 03 48 28.9 +0.1
baz=145
**ANMO Albuquerque 114.66 297** *i* PKIKP PKPdf 03 48 28.7 -0.2
ANMO pmax pmax
comp=Z,9.0nm,1.1s
**CBKS Cedar Bluff 114.76 304** P PKPdf 03 48 28.8 +0.1
baz=146
**SOC Sochi 114.82 46** *e*P **Pdif 03 44 36.7 -2.6**
SOC *i* 03 48 27.7
SOC *e*PPP PPP 03 51 56.0
SOC *e* 03 55 14.7
SOC *e*PS **PKKPbc 03 59 05.0 +0.4**
SOC *e*SS SS 04 05 23.5 +2.7
SOC pmax pmax
comp=Z,40nm,0.9s
SOC MLR MLR
comp=Z,3μm,21.0s
**LVV L'vov 114.98 33** *e*PKIKP PKPdf 03 48 27.7 -1.0
LVV *e* 03 52 01.0
LVV *e* 03 59 11.3
LVV MLR MLR
comp=Z,2μm,21.0s
**ANN Anapa 114.99 44** *i* PKIKP PKPdf 03 48 28.0 -0.9
ANN *e* 03 49 32.5
ANN *e* 03 55 12.4
ANN *e*SP SP 03 59 08.8 +4.7
ANN pmax pmax
comp=Z,69nm,1.0s
**SRIT Nakonsritamara 115.16 116** IAMs_20 IAMs_20 04 29 24.3
comp=Z,5μm,20.0s
**NGP Nagpur 115.23 90** *e*P **PKPdf 03 48 29.6 -0.5**
**214A Organ Pipe Nat 115.32 290** P **PKPdf 03 48 30.0 0.0**
baz=144
**T25A Trinidad 115.49 300** P **PKPdf 03 48 30.5 +0.1**
baz=145
**NRDN NARMADA NAGARI 115.52 88** *e*P **PKPdf 03 48 28.4 -2.3**
**BHPL Bhopal 116.08 88** *e*P **PKPdf 03 48 31.2 -0.5**
**LABN Labinsk 116.10 47** *i* PKIKP **PKPdf 03 48 30.5 -0.5**
LABN *e* 03 49 35.8
LABN *e*SP SP 03 59 15.4 +1.1
LABN *e*PS **PS 03 59 18.4 +0.7**
LABN pmax pmax
comp=Z,132nm,1.1s
**KBZ Khabaz 116.18 49** Pdiff **Pdif 03 44 53.2 +7.9**
comp=Z,5.2nm,0.9s,baz=186,slow=8.0,SNR=4.0
KBZ PKP **PKPdf 03 48 31.4 +0.2**
comp=Z,16nm,0.8s,baz=219,slow=3.2,SNR=10
KBZ PP **PP 03 49 34.6 -3.0**
comp=Z,28nm,1.1s,baz=212,slow=5.9,SNR=7.3
KBZ PKKPab **PKKPab 03 59 07.2 +4.1**
comp=Z,5.6nm,1.1s,baz=71,slow=6.3,SNR=5.0

**KBZ Khabaz 116.18 49** *i*PKIKP **PKPdf 03 48 30.4 -0.8**
KBZ MLR MLR
comp=Z,2μm,18.0s
**KSCO Kaye Shedlock'** **116.21 302** P **PKPdf 03 48 31.5 -0.1**
baz=145
**BGNE Belgrade 116.22 307** P **PKPdf 03 48 30.7 -0.7**
baz=146
**G40A Rib Lake 116.25 314** IAMs_20 IAMs_20 04 43 28.3
comp=Z,5μm,19.0s
**KIV Kislovodsk 116.29 48** **PKPdf 03 48 31.3 -0.2**
KIV IAMs_20 IAMs_20 04 38 23.8
comp=Z,3μm,18.0s
**KIV Kislovodsk 116.29 48** PKPdf **PKPdf 03 48 31.5 -0.1**
**KIV Kislovodsk 116.29 48** P **Pdif 03 44 52.8 +6.8**
**KIV Kislovodsk 116.29 48** *i* P **Pdif 03 44 45.0 -0.9**
KIV *i* 03 48 31.0
KIV *e* 03 49 37.4
KIV *e*PS **PS 03 59 19.4 -0.3**
KIV pmax pmax
comp=Z,54nm,1.0s
KIV MLR MLR
comp=Z,2μm,22.0s
**KIV Kislovodsk 116.29 48** PKP **PKPdf 03 48 30.9 -0.7**
**GKP Gorka Klasztor 116.33 27** *e*P **PKPdf 03 48 31.0 -0.1**
**GKP Gorka Klasztor 116.33 27** *e*P **PKPdf 03 48 31.2 0.0**
**W18A Petrified Fore 116.36 294** P **PKPdf 03 48 31.9 -0.2**
baz=144
**SDCO Great Sand Dun 116.49 299** P **PKPdf 03 48 32.4 -0.1**
baz=144
**COWI Conover 116.55 316** IAMs_20 IAMs_20 04 33 59.3
comp=Z,4μm,22.0s
**RGN Rugen 116.62 24** IAMs_20 IAMs_20 04 31 56.3
comp=Z,5μm,22.0s
**MI29 MI29, Kamyanyy 116.64 35** PKP **PKPdf 03 48 31.3 -0.6**
**RNPP5 Staryi Chortor 116.78 33** PKP **PKPdf 03 48 31.4 -0.7**
**RNPP8 Varash 116.86 33** PKP **PKPdf 03 48 31.5 -0.8**
**ERBR Yeremizino-Bor 116.91 46** *i* PKIKP **PKPdf 03 48 31.9 -0.7**
ERBR *e* 03 49 40.9
ERBR *e* 03 55 21.0
ERBR pmax pmax
comp=Z,64nm,1.0s
ERBR MLR MLR
comp=Z,3μm,21.0s
**RNPP9 Sopachiv 116.94 33** PKP **PKPdf 03 48 31.8 -0.6**
**MI28 MI28,Pidlybu 117.04 35** PKP **PKPdf 03 48 32.3 -0.3**
**TOLI2 Tolitoli 117.10 141** **PKPdf 03 48 33.4 -0.6**
**S22A 4UR Ranch, Cre 117.11 298** P **PKPdf 03 48 33.9 +0.3**
baz=144
**AK07 Malin Array Si 117.17 36** PKP **PKPdf 03 48 32.9 0.0**
**GUNA GUNA 117.17 87** *e*P **PKPdf 03 48 33.2 -0.6**
GUNA IAmb IAmb 03 48 33.9
comp=Z,148nm,1.0s
**GLA Glamis 117.21 289** P **PKPdf 03 48 34.0 +0.4**
baz=144,SNR=7.1
**SPMN Marine on St.** **117.21 313** P **PKPdf 03 48 32.4 -0.7**
baz=147
**AJM Ajmer 117.23 83** *e*P **PKPdf 03 48 33.2 -0.7**
AJM IAmb IAmb 03 48 34.1
comp=Z,87nm,1.0s
**AK09 Malin Array Si 117.25 36** PKP **PKPdf 03 48 33.0 0.0**
**KIEV Kiev 117.30 36** **PKPdf 03 48 32.5 -0.6**
**KIEV Kiev 117.30 36** PKPdf **PKPdf 03 48 32.5 -0.6**
**KIEV Kiev 117.30 36** PKIKP **PKPdf 03 48 32.5 -0.6**
KIEV MLR MLR
comp=Z,2μm,20.0s
**AKASG Malin Array Be 117.31 36** **PKPdf 03 48 32.4 -0.7**
**AKASG Malin Array Be 117.31 36** Pdiff **Pdif 03 44 57.2 +7.0**
comp=Z,4.7nm,1.0s,baz=219,slow=4.7,SNR=9.4
AKASG PKP **PKPdf 03 48 32.6 -0.6**
comp=Z,33nm,0.8s,baz=240,slow=1.9,SNR=52
AKASG PP **PP 03 49 40.0 -5.4**
comp=Z,21nm,1.0s,baz=212,slow=7.7,SNR=13
AKASG PKKPbc **PKKPbc 03 58 55.9 -0.1**
comp=Z,0.4nm,0.3s,baz=32,slow=4.2,SNR=4.6
**AKASG Malin Array Be 117.31 36** PKIKP **PKPdf 03 48 32.4 -0.7**
**AKBB Malin Array Si 117.31 36** *i* PKIKP **PKPdf 03 48 32.2 -0.9**
**Q24A Divide 117.31 300** P **PKPdf 03 48 33.8 -0.2**
baz=144
**GOF Gofitskoye 117.35 48** *ce*PKIKP **PKPdf 03 48 32.3 -1.1**
**GTOI Gorontalo 117.37 144** PKP **PKiKP 03 48 36.3 +1.8**
**MAK Makhachkala 117.43 52** *i* P **Pdif 03 44 53.1 +2.2**
MAK *i* 03 48 33.8
MAK *e* 03 49 45.9
MAK *e*PPP PPP 03 52 15.6
MAK *e* 03 55 21.7
MAK *e*SS SS 04 06 00.9 +6.0
MAK *e*SSS SSS 04 10 22.1
MAK pmax pmax
comp=Z,126nm,1.1s
**MVCO Mesa Verde 117.46 297** **PKPdf 03 48 34.5 +0.2**
MVCO IAMs_20 IAMs_20 04 37 38.4
comp=Z,4μm,19.0s
**MVCO Mesa Verde 117.46 297** P **PKPdf 03 48 34.3 +0.1**
baz=144
**WUAZ Wupatki 117.48 293** P **PKPdf 03 48 34.7 +0.5**
baz=144
**BSD Bornholm Skovb 117.49 25** *i* P **PKPdf 03 48 33.1 -0.2**
**ECSD EROS Data Cent 117.49 309** IAMs_20 IAMs_20 04 38 58.4
comp=Z,5μm,22.0s
**ECSD EROS Data Cent 117.49 309** P **PKPdf 03 48 33.2 -0.6**
baz=146
**OGNE Ogallala 117.52 304** P **PKPdf 03 48 34.1 0.0**
baz=144
**IKP In-Ko-Pah, Jac 117.53 288** P **PKPdf 03 48 34.7 +0.4**
baz=143
**SCHQ Schefferville 117.56 334** PKP **PKPdf 03 48 33.1 -0.4**
comp=Z,32nm,0.8s,baz=56,slow=1.6,SNR=24
SCHQ PP **PP 03 49 44.7 -2.3**
comp=Z,22nm,0.9s,baz=180,slow=8.0,SNR=4.6
**SWSC Sam W. Stewart 117.61 288** P **PKPdf 03 48 34.7 +0.4**
baz=143,SNR=12
**BLYC Blythe 117.61 290** **PKPdf 03 48 34.8 +0.4**
**LUNU Lund 117.66 24** *i* P **PKPdf 03 48 33.1 -0.5**
**PDMCI Parker Dam,Lak 117.87 291** P **PKPdf 03 48 35.1 +0.4**
baz=143
**MONP2 Monument Peak 117.88 288** P **PKPdf 03 48 35.8 +0.7**
baz=143
**BJUU Bjuv 117.98 23** *i* P **PKPdf 03 48 33.7 -0.5**
**BC3 Big Chuckawall 118.00 289** P **PKPdf 03 48 35.7 +0.4**
baz=143,SNR=15
**ISCO Idaho Springs** **118.20 300** P **PKPdf 03 48 35.7 0.0**
baz=144
**109C Camp Elliot, M 118.22 287** P **PKPdf 03 48 36.0 +0.5**
baz=143
**IRM Iron Mountain 118.25 290** P **PKPdf 03 48 36.1 +0.5**
baz=143,SNR=25
**GENI Genyem 118.29 163** PKP **PKiKP 03 48 38.7 +2.3**
**JAY Jayapura 118.45 164** PKP **PKPdf 03 48 37.5 +0.8**
**TPFO Pinon Flats 118.47 288** P **PKPdf 03 48 36.6 +0.4**
baz=143
**PFO Pinyon Flats O 118.47 288** **PKPdf 03 48 36.9 +0.7**
**PFO Pinyon Flats O 118.47 288** P **PKPdf 03 48 36.7 +0.6**
baz=143,SNR=10
**PFO Pinyon Flats O 118.47 288** PKIKP **PKPdf 03 48 36.9 +0.7**
**JHNI Jhansi 118.47 87** *e*P **PKPdf 03 48 35.4 -0.9**
JHNI IAmb IAmb 03 48 36.1
comp=Z,196nm,1.0s
**NEE2 Needles Airpor 118.47 291** P **PKPdf 03 48 36.1 +0.2**
baz=143
**SUW Suwalki 118.50 30** *e*P **PKPdf 03 48 35.3 -0.1**
**SUW Suwalki 118.50 30** *e*P **PKPdf 03 48 33.7 -1.6**
**DEL Delary 118.52 23** *e*P **PKPdf 03 48 34.2 -1.1**
**DEL Delary 118.52 23** *i* P **PKPdf 03 48 34.0 -1.3**
**BELC Belle Mtn. Jos 118.55 289** P **PKiKP 03 48 37.2 +0.8**
baz=143,SNR=29
**FABU Falkenberg 118.78 23** *i* P **PKPdf 03 48 35.2 -0.6**
**MURC Murrieta 118.83 288** P **PKPdf 03 48 37.2 +0.4**
baz=143,SNR=6.4
**EYMN Ely 118.98 315** **PKPdf 03 48 36.2 -0.3**
**EYMN Ely 118.98 315** IAMs_20 IAMs_20 04 36 59.6
comp=Z,4μm,22.0s
**EYMN Ely 118.98 315** P **PKPdf 03 48 35.7 -0.8**
baz=146
**ONAU Onsala 118.98 22** *i* P **PKPdf 03 48 34.9 -1.2**
**SNART Snartemo 119.00 19** *e*PKPdf **PKPdf 03 48 36.6 +0.4**
**SNART Snartemo 119.00 19** *i* P **PKPdf 03 48 34.9 -1.3**
**GMRC Granite Mounta 119.00 290** P **PKiKP 03 48 38.0 +0.8**
baz=143
**SCI2 San Clemente I 119.03 286** P **PKPdf 03 48 37.4 +0.4**
baz=143
**SUSD Miller 119.04 308** P **PKPdf 03 48 36.4 -0.4**
baz=144
**HOMB Homborsund 119.16 20** *e*PKPdf **PKPdf 03 48 36.5 0.0**
HOMB IVmB_BB 03 48 36.8
comp=Z,503nm,1.1s
HOMB *e*PP **PP 03 49 58.3 +0.2**
HOMB *e*PS **PS 03 59 49.0 +4.0**
HOMB *e*SS SS 04 06 20.1 +3.2
HOMB IVMs_BB IVMs_BB 04 32 39.3
comp=Z,2μm,20.4s
**HOMB Homborsund 119.16 20** *i* P **PKPdf 03 48 35.8 -0.7**
**BBRC Big Bear Solar 119.22 288** P **PKPdf 03 48 38.4 +0.7**
baz=143,SNR=6.7
**N23A Red Feather La 119.23 301** P **PKPdf 03 48 37.7 +0.1**
baz=143
**CIS Catalina Islan 119.29 287** P **PKPdf 03 48 38.3 +0.7**
baz=143
**BORU Boraas 119.38 22** *i* P **PKiKP 03 48 35.5 -1.4**
**HEC Hector,Ludlow 119.38 289** P **PKiKP 03 48 38.6 +0.7**
baz=143,SNR=6.9
**FMP Fort Macarthur 119.48 287** P **PKPdf 03 48 38.2 +0.3**
baz=143
**KMY Karmoy 119.51 17** *e*PKPdf **PKPdf 03 48 37.2 +0.2**
KMY *e*PP **PP 03 50 00.2 -0.2**
KMY IVMs_BB IVMs_BB 04 33 15.1
comp=Z,2μm,23.5s
**TJOU Tjoern 119.52 22** *i* P **PKPdf 03 48 35.8 -1.3**
**KUDL Kundal 119.54 84** *e*P **PKPdf 03 48 37.7 -0.5**
KUDL IAmb IAmb 03 48 39.6
comp=Z,269nm,1.2s
**BFSC Mount Baldy Ra 119.57 288** P **PKPdf 03 48 38.2 -0.1**
baz=143,SNR=13
**TUQ Turquoise Moun 119.65 290** P **PKPdf 03 48 39.0 +0.7**
baz=142
**O20A White River Ci 119.68 299** P **PKPdf 03 48 38.3 0.0**
baz=143
**SNCC San Nicolas Is 119.74 286** P **PKPdf 03 48 38.8 +0.4**
baz=143
**RRX Edison Barstow 119.75 289** P **PKiKP 03 48 39.2 +0.7**
baz=142
**BLS5 Blasjo 119.91 18** *e*PKPdf **PKPdf 03 48 38.4 +0.4**
BLS5 IAmb IAmb 03 48 39.6
comp=Z,300nm,1.9s
BLS5 *e*PP PP 03 49 54.2 -9.1
BLS5 *e*PS **PS 03 59 56.4 +4.6**
BLS5 *e*SS SS 04 06 27.8 +1.3
BLS5 IVMs_BB IVMs_BB 04 29 29.8
comp=Z,1μm,25.3s
**DECC Green Verdugo 119.93 287** P **PKPdf 03 48 39.4 +0.6**
baz=142
**PBUR Paburge 119.98 28** *e*P **PKPdf 03 48 37.2 -0.9**
**GSC Goldstone, Bar 119.99 289** P **PKPdf 03 48 39.5 +0.5**
baz=142
**PABE Paberze 120.04 30** *e*P **PKPdf 03 48 37.0 -1.2**
**KKM Kota Kinabalu 120.05 134** IAMs_20 IAMs_20 04 34 42.2
comp=Z,4μm,22.0s
**NRS Narsarsuaq 120.05 349** IAMs_20 IAMs_20 04 32 18.3
comp=Z,5μm,20.0s
**ALBI Allahabad 120.08 90** *e*P **PKPdf 03 48 38.5 -0.8**
ALBI IAmb IAmb 03 48 39.1
comp=Z,296nm,1.3s
**SHOC Shoshone, Teco 120.19 290** P **PKPdf 03 48 39.9 +0.7**
baz=142
**EDW2 Edwards Air Fo 120.25 288** P **PKPdf 03 48 40.0 +0.5**
baz=142,SNR=46
**SCZ2 Santa Cruz Isl 120.38 286** P **PKPdf 03 48 40.2 +0.6**
baz=142
**IVI Ivigtut 120.39 347** *i* P **PKPdf 03 48 38.4 -0.3**
**ODD1 Odda 120.40 18** *e*PKPdf **PKPdf 03 48 39.0 +0.1**
ODD1 *e*PP **PP 03 50 06.8 +0.1**
ODD1 *e*PS **PS 03 59 57.3 +1.0**
ODD1 *e*SS SS 04 06 31.7 -1.2
**OSI Osito Audit: C 120.41 287** P **PKPdf 03 48 40.3 +0.5**
baz=142
**VSVD Vaisvydziai 120.46 30** *e*P **PKPdf 03 48 39.0 0.0**
**LRMC Laurel Mtn Rad 120.56 289** P **PKPdf 03 48 40.8 +0.7**
baz=142,SNR=9.9
**BER Bergen 120.64 17** *e*P **PKiKP 03 48 40.0 +0.7**
BER *e*PP **PP 03 50 07.8 +0.4**
BER *e*PP **PP 03 50 08.4 +0.3**
BER *e*PS **PS 04 00 01.6 +3.3**
BER *e*SS SS 04 06 36.7 +0.9**
BER IVMs_BB IVMs_BB 04 34 25.5
comp=Z,2μm,24.9s
**KONO Kongsberg 120.66 20** **PKPdf 03 48 39.4 +0.1**
**KONO Kongsberg 120.66 20** IAMs_20 IAMs_20 04 34 42.6
comp=Z,4μm,22.0s
**KONO Kongsberg 120.66 20** *e*PKPdf **PKPdf 03 48 38.8 -0.5**
KONO *e*PP **PP 03 50 08.6 +0.3**
KONO *e*PS **PS 04 00 01.8 +3.3**
KONO *e*SS SS 04 06 36.1 0.0
KONO IVMs_BB IVMs_BB 04 32 53.7
comp=Z,2μm,28.5s
**KONO Kongsberg 120.66 20** *d* PKIKP **PKPdf 03 48 38.6 -0.7**
KONO MLR MLR
comp=Z,1μm,17.0s
**ISAL Salakas 120.68 31** *e*P **PKiKP 03 48 40.6 +1.1**
**ASK Askoy 120.71 17** *e*P **PKPdf 03 48 39.7 +0.4**
**KBL Kabul 120.76 73** **PKPdf 03 48 40.6 0.0**
**KBL Kabul 120.76 73** P **Pdif 03 45 09.7 +3.4**
**KBL Kabul 120.76 73** PKIKP **PKPdf 03 48 40.6 0.0**
**SBC Santa Barbara 120.77 286** P **PKiKP 03 48 41.2 +0.7**
baz=142
**ARVC Arvin 120.87 288** P **PKPdf 03 48 41.0 +0.4**
baz=142,SNR=5.7
**VORD Divnogorie 120.87 42** *e*P **Pdif 03 45 16.4 +10**
VORD *e* 03 48 38.4
VORD *e* 03 50 06.6
VORD pmax pmax
comp=Z,10.0nm,1.5s
VORD pmax pmax
comp=Z,80nm,1.3s
**K22A Casper 120.89 302** P **PKPdf 03 48 40.2 -0.4**
baz=142
**MPMC Manual Prospec 120.92 289** P **PKPdf 03 48 41.5 +0.7**
baz=142,SNR=53
**AGMN Agassiz Nation 120.93 313** IAMs_20 IAMs_20 04 43 18.3
comp=Z,5μm,19.0s
**AGMN Agassiz Nation 120.93 313** P **PKPdf 03 48 39.4 -0.8**
baz=144
**FURC Furnace Creek,** **120.93 290** P **PKiKP 03 48 41.6 +0.9**
baz=142,SNR=28
**RSSD Black Hills 120.95 305** **PKPdf 03 48 40.4 -0.3**
**RSSD Black Hills 120.95 305** P **PKPdf 03 48 40.0 -0.7**
baz=143
**RSSD Black Hills 120.95 305** PKIKP **PKPdf 03 48 40.4 -0.3**
**VIKU Vikbolandet 121.00 24** *e*P **PKPdf 03 48 38.8 -1.2**
**TPNV Topopah Spring 121.01 291** P **PKiKP 03 48 42.0 +0.9**
baz=142,SNR=43
**BOK Bokaro 121.01 95** *e*P **PKPdf 03 48 40.7 -0.5**
BOK IAmb IAmb 03 48 41.3
comp=Z,87nm,1.3s
**VSR Storozhevoye 121.03 41** *e*P **Pdif 03 45 14.7 +8.0**
VSR *e* 03 48 38.7
VSR pmax pmax
comp=Z,10.0nm,1.5s
VSR pmax pmax
comp=Z,100nm,1.3s
**ISA Isabella, Lake 121.11 288** P **PKiKP 03 48 42.2 +1.0**
baz=142,SNR=52
**OSL Oslo 121.13 20** *e*PKPdf **PKPdf 03 48 40.0 -0.1**
**PKM Mcpherson Peak 121.18 287** P **PKiKP 03 48 42.6 +1.0**
baz=142,SNR=30
**SUE Sulen 121.19 17** *e*PKPdf **PKiKP 03 48 41.4 +1.0**
SUE *e*PP **PP 03 50 08.2 -3.7**
SUE *e*PS **PS 04 00 03.6 +0.4**
SUE *e*SS SS 04 06 44.3 +1.4
SUE IVMs_BB IVMs_BB 04 36 04.1
comp=Z,3μm,22.5s
**VORR Voronezh 121.42 41** *e*PKIKP **PKPdf 03 48 39.9 -1.1**
VORR pmax pmax
comp=Z,110nm,1.1s
**SLIT Slitere, Latvi 121.51 28** *e*P **PKPdf 03 48 39.2 -1.8**
**HYA Hoyanger 121.52 17** *e*PKPdf **PKPdf 03 48 40.9 +0.1**
HYA *e*PP **PP 03 50 14.2 +0.1**
HYA *e*SP SP 04 00 04.2 +2.0
HYA *e*SS **SS 04 06 49.5 +2.5**
HYA IVMs_BB IVMs_BB 04 35 36.0
comp=Z,2μm,25.1s
**CWC Cottonwood Cre 121.52 289** P **PKPdf 03 48 42.6 +0.7**
baz=142
**VES Vestal, Richgr 121.55 288** P **PKPdf 03 48 42.0 +0.2**
baz=142,SNR=14
**GRAC Grapevine Rang 121.60 290** P **PKPdf 03 48 42.7 +0.8**
baz=142
**SMMC Simmler 121.60 287** P **PKiKP 03 48 43.0 +0.9**
baz=142,SNR=21
**FOO Floro 121.75 16** *e*PKPdf **PKPdf 03 48 41.6 +0.3**
FOO *e*PP **PP 03 50 16.3 +0.6**
FOO *e*SP SP 04 00 06.2 +1.8

FOO IVMs_BB IVMs_BB 04 33 06.0
comp=Z,3µm,28.2s
**R11B Troy Canyon, C 121.78 292** P **PKPdf 03 48 43.0 +0.6**
baz=142
**DUG Dugway, Tooele 121.88 296** IAMs_20 IAMs_20 04 42 42.6
comp=Z,4µm,21.0s
**DUG Dugway, Tooele 121.88 296** P **PKPdf 03 48 43.1 +0.5**
baz=142,SNR=34
**HFS Hagfors 121.88 22** PKP **PKPdf 03 48 40.1 -1.5**
comp=Z,66nm,1.0s,baz=190,slow=2.6,SNR=35
HFS PP PP 03 49 57.6 -19
comp=Z,14nm,0.9s,baz=250,slow=4.4,SNR=3.7
HFS PKKPbc **PKKPbc 03 58 40.3 +0.9**
comp=Z,9.7nm,0.8s,baz=66,slow=3.7,SNR=11
**VRH Novokhopyorsk 121.93 43** *e*PKIKP **PKPdf 03 48 41.5 -0.5**
VRH pmax pmax
comp=Z,204nm,0.8s
**NC602 NORSAR Array S 122.03 20** *e*PKPdf **PKPdf 03 48 40.6 -1.3**
NC602 *e*PP **PP 03 50 17.7 0.0**
NC602 *e*PS **PS 04 00 13.4 +2.7**
NC602 IVMs_BB IVMs_BB 04 37 39.5
comp=Z,2µm,23.0s
**MDND Maddock 122.06 310** P **PKPdf 03 48 41.8 -0.6**
baz=143
**TIN Tinemaha, Big 122.07 289** P **PKiKP 03 48 44.0 +0.9**
baz=141
**VOG Valley Oaks Go 122.08 288** P **PKPdf 03 48 42.4 -0.5**
baz=142
**LPSR Galich'ya Gora 122.10 40** *e*P **Pdif 03 45 22.1 +11**
LPSR *e* 03 48 40.4
LPSR pmax pmax
comp=Z,20nm,2.0s
LPSR pmax pmax
comp=Z,140nm,1.2s
**BHK Bhakra 122.11 81** *e*P **PKPdf 03 48 43.0 -0.1**
BHK IAmb IAmb 03 48 43.9
comp=Z,274nm,1.1s
**DLV T Lat 122.19 123** IAMs_20 IAMs_20 04 32 52.4
comp=Z,4µm,20.0s
**NIL Nilore 122.21 77** **PKPdf 03 48 43.1 -0.1**
**NIL Nilore 122.21 77** IAMs_20 IAMs_20 04 43 40.2
comp=Z,4µm,19.0s
**NIL Nilore 122.21 77** P **Pdif 03 45 13.8 +1.3**
**NIL Nilore 122.21 77** PKIKP **PKPdf 03 48 43.1 -0.1**
NIL MLR MLR
comp=Z,4µm,19.0s
**NB2 NORSAR Subarra 122.25 20** PKPdf **PKPdf 03 48 41.7 -0.7**
comp=Z,114nm,1.1s,baz=202,slow=1.9
NB2 PP PP 03 50 11.1 -8.1
comp=Z,31nm,1.1s,baz=220,slow=8.6
NB2 pPKP 03 52 12.9
comp=Z,33nm,1.7s,baz=198,slow=1.6
NB2 PKKP **PKKPbc 03 58 38.8 +0.8**
comp=Z,13nm,1.0s,baz=23,slow=3.3
**NB2 NORSAR Subarra 122.25 20** PKPdf **PKPdf 03 48 41.7 -0.7**
baz=202,slow=1.9
**NOA NORSAR Array B 122.25 20** PKP **PKPdf 03 48 41.9 -0.5**
comp=Z,74nm,1.0s,baz=197,slow=1.7,SNR=90
NOA PP PP 03 50 10.7 -8.6
comp=Z,11nm,0.9s,baz=220,slow=8.3,SNR=6.8
NOA SKP 03 52 13.2
comp=Z,5.0nm,1.1s,baz=216,slow=2.2,SNR=3.4
NOA PKKPbc **PKKPab 03 58 37.3 +1.4**
comp=Z,7.1nm,0.9s,baz=22,slow=2.8,SNR=21
**SMLA Simla 122.27 82** *e*P **PKPdf 03 48 43.1 -0.3**
SMLA IAmb IAmb 03 48 44.0
comp=Z,219nm,1.1s
**BW06 Boulder Array 122.36 300** P **PKPdf 03 48 43.0 -0.5**
baz=141
**PDAR Pinedale Array 122.36 300** PKhKP PKPpre 03 48 29.0
comp=Z,1.2nm,0.8s,baz=132,slow=1.3,SNR=4.0
PDAR PKP **PKPdf 03 48 42.5 -0.9**
comp=Z,16nm,0.7s,baz=131,slow=4.1,SNR=52
PDAR SKP 03 52 13.8
comp=Z,13nm,1.0s,baz=158,slow=2.3,SNR=4.2
PDAR PKKPbc **PKKPbc 03 58 38.4 +0.9**
comp=Z,5.1nm,0.8s,baz=354,slow=0.5,SNR=15
PDAR SKKPbc SKKPbc 04 02 16.7 -8.0
comp=Z,2.7nm,1.1s,baz=42,slow=2.4,SNR=4.3
**UPP Uppsala 122.43 24** *e*P **PKPdf 03 48 40.9 -1.8**
**ULM Lac du Bonnet 122.52 314** PKP **PKPdf 03 48 41.8 -1.4**
comp=Z,73nm,0.8s,baz=129,slow=0.4,SNR=60
ULM PP **PP 03 50 16.2 -5.0**
comp=Z,45nm,0.9s,baz=135,slow=6.8,SNR=6.7
ULM SKP 03 52 14.7
comp=Z,32nm,1.0s,baz=203,slow=0.2,SNR=5.0
ULM PKKPbc **PKKPbc 03 58 38.7 +2.0**
comp=Z,31nm,1.0s,baz=321,slow=4.1,SNR=15
**THN Thein Dam 122.54 80** *e*P **PKPdf 03 48 44.0 +0.2**
THN IAmb IAmb 03 48 45.0
comp=Z,434nm,1.2s
**LGTI Lohaghat 122.56 86** *e*P **PKPdf 03 48 43.4 -0.6**
LGTI IAmb IAmb 03 48 44.3
comp=Z,209nm,1.1s
**PTH Pithoragarh 122.63 86** *e*P **PKPdf 03 48 44.0 -0.3**
PTH IAmb IAmb 03 48 44.9
comp=Z,234nm,1.1s
**BORG Borgarnes 122.65 2** **PKiKP 03 48 44.6 +1.5**
**BORG Borgarnes 122.65 2** PKP **PKPdf 03 48 43.7 +0.7**
comp=Z,73nm,1.0s,baz=138,slow=1.6,SNR=7.0
**DHRM DHARAMSHALA 122.70 81** *e*P **PKPdf 03 48 44.4 0.0**
DHRM IAmb IAmb 03 48 45.3
comp=Z,327nm,1.1s
**DOMB Dombas 122.81 18** *e*PKPdf **PKPdf 03 48 43.3 -0.2**
DOMB *e*PP **PP 03 50 22.9 -0.1**
DOMB IVMs_BB IVMs_BB 04 32 52.0
comp=Z,2µm,21.9s
**MLAC Mammoth, Mammt 122.82 289** P **PKiKP 03 48 45.9 +1.2**
baz=141
**MOL Molde 123.06 17** *e*PKPdf **PKPdf 03 48 44.5 +0.7**
MOL *e*PP **PP 03 50 24.8 +0.2**
MOL IVMs_BB IVMs_BB 04 31 50.3
comp=Z,2µm,25.4s
**AHID Auburn Hatcher 123.07 299** IAMs_20 IAMs_20 04 41 37.2
comp=Z,4µm,21.0s
**JOSI Joshimath 123.08 84** *e*P **PKPdf 03 48 45.8 +0.5**
JOSI IAmb IAmb 03 48 47.5
comp=Z,777nm,1.4s
**KLP Kalpa 123.16 83** *e*P **PKPdf 03 48 45.8 +0.3**
KLP IAmb IAmb 03 48 48.1
comp=Z,516nm,1.5s
**NVAR Mina Array Bea 123.18 290** **PKiKP 03 48 46.7 +1.3**
**NVAR Mina Array Bea 123.18 290** PKP **PKiKP 03 48 46.4 +1.0**
comp=Z,51nm,1.1s,baz=155,slow=3.0,SNR=76
NVAR PKKPab **PKKPab 03 58 37.3 +3.1**
comp=Z,11nm,1.0s,baz=295,slow=4.1,SNR=23
NVAR SKKP 04 02 32.0
comp=Z,3.4nm,1.0s,baz=289,slow=2.8,SNR=6.0
**AAL Aland 123.24 25** *e*P **PKPdf 03 48 42.3 -1.9**
**CMAR Chiang Mai Arr 123.33 110** **PKPdf 03 48 45.6 -0.1**
**CMAR Chiang Mai Arr 123.33 110** PKP **PKPdf 03 48 46.0 +0.2**
comp=Z,127nm,0.9s,baz=235,slow=3.7,SNR=223
CMAR PKKPab **PKKPab 03 58 36.2 +0.6**
comp=Z,3.3nm,0.4s,baz=4.1,slow=3.2,SNR=14
CMAR SKKPbc SKKPbc 04 02 08.6 -10
comp=Z,2.2nm,0.3s,baz=1.9,slow=5.4,SNR=2.4
**CMAR Chiang Mai Arr 123.33 110** PKIKP **PKPdf 03 48 45.7 -0.1**
**VSU Vasula 123.37 30***c* *i*PKIKP **PKPdf 03 48 43.8 -0.7**
VSU pmax pmax
comp=Z,332nm,1.0s
**OBN Obninsk 123.40 37** **PKPdf 03 48 44.5 -0.2**
OBN IAMs_20 IAMs_20 04 41 00.2
comp=Z,3µm,20.0s
**OBN Obninsk 123.40 37** PKP **PKPdf 03 48 43.8 -0.9**
**OBN Obninsk 123.40 37***c* *i*PKIKP **PKPdf 03 48 43.5 -1.2**
OBN *e* 03 50 29.4
OBN *e*PPP PPP 03 53 03.8
OBN *i* SS SS 04 07 31.7 +21
OBN pmax pmax
comp=Z,208nm,0.9s
OBN MLR MLR
comp=Z,3µm,20.0s
**REDW Red Top Meadow 123.42 299** IAMs_20 IAMs_20 04 41 38.4
comp=Z,4µm,20.0s
**SNOW Snow King Moun 123.45 300** IAMs_20 IAMs_20 04 41 50.2
comp=Z,4µm,21.0s
**LOHW Long Hollow 123.50 300** IAMs_20 IAMs_20 04 42 12.5
comp=Z,5µm,20.0s
**TPAW Teton Pass 123.56 299** IAMs_20 IAMs_20 04 41 41.3
comp=Z,4µm,20.0s
**SAIH SAIHA 123.66 102** *e*P **PKPdf 03 48 47.0 +0.5**
SAIH IAmb IAmb 03 48 47.8
comp=Z,434nm,1.2s
**FXWY Fox Creek 123.71 299** IAMs_20 IAMs_20 04 41 47.1
comp=Z,4µm,21.0s
**ANGG Ammassalik, Gr 123.84 354** IAMs_20 IAMs_20 04 37 29.0
comp=Z,4µm,19.0s
**ANGG Ammassalik, Gr 123.84 354** *i* P **PKPdf 03 48 43.0 -2.2**
**IMW Indian Meadow 123.87 300** IAMs_20 IAMs_20 04 42 22.3
comp=Z,5µm,22.0s
**LAO LASA Array 123.92 305** IAMs_20 IAMs_20 04 42 16.6
comp=Z,5µm,22.0s
**LAO LASA Array 123.92 305** P **PKPdf 03 48 46.3 +0.2**
baz=141
**SIMJ Simiganj 123.94 70** **PKPdf 03 48 46.6 +0.1**
SIMJ IAMs_20 IAMs_20 04 44 22.2
comp=Z,4µm,19.0s
**ARBE Arbavere 124.03 29** *e*P **PKPdf 03 48 45.0 -0.8**
**RLMT Red Lodge 124.06 302** IAMs_20 IAMs_20 04 43 15.2
comp=Z,4µm,20.0s
**RLMT Red Lodge 124.06 302** P **PKPdf 03 48 46.7 +0.1**
baz=140,SNR=37
**H17A Grant Village 124.09 300** P **PKiKP 03 48 47.7 +0.7**
baz=140
**TBLU Trondheim 124.14 19** *e*P **PKPdf 03 48 46.3 +0.4**
TBLU *e*PKPdf **PKPdf 03 48 46.3 +0.4**
TBLU *e*SP SP 04 00 28.6 +3.1
**MOS Moscow 124.25 38** *i* PKIKP **PKPdf 03 48 44.9 -1.4**
MOS *e* 03 50 38.7
MOS *e*PPP PPP 03 53 08.3
MOS *e* 03 55 40.6
MOS pmax pmax
comp=Z,244nm,1.0s
MOS MLR MLR
comp=Z,5µm,22.0s
MOS MLR MLR
comp=N,2µm,21.0s
MOS MLR MLR
comp=E,3µm,21.0s
**DGMT Dagmar 124.44 308** IAMs_20 IAMs_20 04 42 11.2
comp=Z,5µm,21.0s
**DGMT Dagmar 124.44 308** P **PKPdf 03 48 47.1 +0.1**
baz=141
**HNLY HANLEY 124.51 82** *e*P **PKPdf 03 48 48.9 +0.6**
**BELG Belogornoye 125.07 46** PP PP 03 50 26.5 -12
comp=Z,102nm,1.2s,baz=297,slow=6.8,SNR=2.0
**BELG Belogornoye 125.07 46** *i* PKIKP **PKPdf 03 48 47.2 -0.8**
**HLID Hailey 125.23 297** P **PKPdf 03 48 49.5 +0.7**
baz=140
**GTK Tadong 125.29 94** *e*P **PKPdf 03 48 50.0 +0.5**
GTK IAmb IAmb 03 48 50.8
comp=Z,163nm,1.1s
**DY2G Dye2 125.34 350** *i* P **PKPdf 03 48 48.2 -0.2**
**BOZ Bozeman (W) 125.49 301** IAMs_20 IAMs_20 04 43 24.2
comp=Z,5µm,20.0s
**BOZ Bozeman (W) 125.49 301** P **PKPdf 03 48 50.0 +0.8**
baz=140
**SHL Shillong 125.60 99** IAMs_20 IAMs_20 04 34 18.8
comp=Z,5µm,21.0s
**SHL Shillong 125.60 99** *e*P **PKPdf 03 48 49.8 -0.4**
SHL IAmb IAmb 03 48 50.8
comp=Z,356nm,1.3s
**SHL Shillong 125.60 99** P **Pdif 03 45 28.6 +0.7**
SNR=5.6
**NSS Namsos 125.62 19** *i* **PKPdf 03 48 48.0 -0.6**
NSS *e*PKPdf **PKiKP 03 48 49.3 +0.2**
NSS IVMs_BB IVMs_BB 04 33 56.7
comp=Z,2µm,27.0s
**DLMT Dillon 125.75 300** IAMs_20 IAMs_20 04 45 47.2
comp=Z,4µm,20.0s
**FINES FINESS Array B 125.79 28** **PKPdf 03 48 48.9 -0.2**
**FINES FINESS Array B 125.79 28** PKP **PKPdf 03 48 48.8 -0.3**
comp=Z,105nm,0.7s,baz=129,slow=2.7,SNR=122
FINES PP **PP 03 50 41.4 -1.6**
comp=Z,33nm,1.1s,baz=180,slow=5.0,SNR=2.7
FINES SKKPbc SKKPbc 04 02 11.7 -2.7
comp=Z,1.2nm,0.8s,baz=27,slow=6.4,SNR=1.2
**FRB Frobisher Bay 126.03 338** PKP **PKPdf 03 48 49.2 -0.2**
comp=Z,102nm,0.8s,baz=142,slow=3.7,SNR=30
FRB PP **PP 03 50 46.5 +2.0**
comp=Z,26nm,0.9s,baz=141,slow=4.2,SNR=3.9
**IMP Imphal 126.08 101** *e*P **PKPdf 03 48 51.4 +0.5**
IMP IAmb IAmb 03 48 52.2
comp=Z,149nm,1.1s
**SOEG Soedalen 126.17 357** *i* P **PKPdf 03 48 50.1 +0.5**
**SFJD Kangerlussuaq 126.29 348** **PKPdf 03 48 49.9 0.0**
**SFJD Kangerlussuaq 126.29 348** PKP **PKPdf 03 48 48.8 -1.0**
comp=Z,89nm,1.0s,baz=195,slow=1.9,SNR=13
**SFJD Kangerlussuaq 126.29 348** PKIKP **PKPdf 03 48 49.9 0.0**
**SFJD Kangerlussuaq 126.29 348** *i* P **PKPdf 03 48 49.2 -0.7**
**EGMT Eagleton 126.49 304** IAMs_20 IAMs_20 04 44 15.5
comp=Z,5µm,21.0s
**EGMT Eagleton 126.49 304** P **PKPdf 03 48 51.5 +0.5**
baz=139,SNR=64
**O02D Mt. Diablo Mer 126.75 289** IAMs_20 IAMs_20 04 37 36.9
comp=Z,3µm,20.0s
**KOHI KOHIMA 126.89 101** *e*P **PKPdf 03 48 52.4 -0.2**
KOHI IAmb IAmb 03 48 55.2
comp=Z,860nm,1.7s
**ICESG Greenland Ices 127.41 354** *i* P **PKPdf 03 48 51.7 -0.7**
**STOK Stokkvaagen 127.45 18** *e*PKPdf **PKPdf 03 48 51.7 -0.4**
STOK *e*PP **PP 03 50 54.1 +0.3**
**MSO Missoula 127.47 300** P **PKPdf 03 48 53.4 +0.5**
baz=138
**MOR8 Moi Rana 127.55 19** *e*PKPdf **PKPdf 03 48 53.0 +0.7**
MOR8 *e*PP **PP 03 50 50.0 -4.5**
MOR8 *e*SP SP 04 00 57.0 +1.6
MOR8 *e*SS **SS 04 08 05.7 +2.7**
MOR8 IVMs_BB IVMs_BB 04 34 46.6
comp=Z,1µm,22.4s
**MOKO MOKOCHONG 127.59 100** *e*P **PKPdf 03 48 54.7 +0.8**
MOKO IAmb IAmb 03 48 57.0
comp=Z,1µm,1.2s
**KONS Konsvik 127.62 18** *e*PKPdf **PKPdf 03 48 53.0 +0.5**
**BRLS Borolday 127.67 67** *e*PKP **PKPdf 03 48 52.4 -1.0**
baz=68
BRLS *e*PP **PP 03 50 54.0 -1.8**
baz=68
**BRLS Borolday 127.67 67** *e*PKIKP **PKPdf 03 48 52.3 -1.0**
BRLS *e* 03 50 53.9
**AB31 Akbulak array 127.71 56** *i* PKIKP **PKPdf 03 48 52.6 -0.6**
**ABKAR Akbulak array 127.71 56** **PKPdf 03 48 53.2 +0.1**
**AKTO Aktyubinsk 127.76 53** PKP **PKPdf 03 48 52.7 -0.5**
comp=Z,220nm,1.0s,baz=230,slow=3.0,SNR=132
**JORH JORHAT 127.79 100** *e*P **PKPdf 03 48 54.4 +0.3**
**ITAN ITANAGAR 127.84 99** *e*P **PKPdf 03 48 54.4 +0.2**
**KK31 Karatay Array 128.05 68** *i* PKIKP **PKPdf 03 48 54.0 -0.1**
**KSH Kashi 128.11 75** PKP **PKPdf 03 48 53.8 -0.7**
KSH sPKP 03 49 07.3
KSH PP **PP 03 50 56.1 -2.7**
KSH SKKS 03 57 47.4
KSH AMB AMB
comp=Z,720nm,5.4s
KSH LR LR
comp=Z,3µm,18.2s
KSH LR LR
comp=Z,2µm,23.3s
KSH LR LR
comp=Z,4µm,23.2s
**SLVN Son La 128.21 113** IAMs_20 IAMs_20 04 34 31.0
comp=Z,3µm,22.0s
**ZIRO ZIRO 128.22 99** *e*P **PKPdf 03 48 55.0 -0.1**
**FFC Flin Flon 128.35 314** **PKPdf 03 48 54.2 0.0**
**FFC Flin Flon 128.35 314** PKIKP **PKPdf 03 48 54.2 0.0**
**SCO Scoresbysund 128.40 1** IAMs_20 IAMs_20 04 32 56.4
comp=Z,4µm,22.0s
**SCO Scoresbysund 128.40 1** *i* P **PKPdf 03 48 54.0 +0.1**
**LSA Lhasa 128.53 95** PKP **PKPdf 03 48 57.1 +1.1**
LSA LR LR
comp=Z,430nm,4.4s
LSA LR LR
comp=Z,450nm,5.0s
LSA LR LR
comp=Z,480nm,4.1s
**LSA Lhasa 128.53 95** IAMs_20 IAMs_20 04 36 56.5
comp=Z,4µm,21.0s
**LSA Lhasa 128.53 95** PKiKP **PKiKP 03 48 57.3 +0.6**
**TNCH TengChong 128.60 105** PKP **PKPdf 03 48 55.8 -0.1**
TNCH sPKP 03 49 02.3
TNCH PP **PP 03 50 59.6 -2.4**
TNCH SS SS 04 08 17.1 +0.1
TNCH AMB AMB
comp=Z,880nm,3.9s
TNCH LR LR
comp=Z,710nm,20.2s
TNCH LR LR
comp=Z,850nm,19.8s
TNCH LR LR
comp=Z,3µm,20.6s
**FAUS Fauske 128.79 19** *e*PKPdf **PKPdf 03 48 54.4 -0.2**
FAUS *e*PP **PP 03 51 02.6 0.0**
FAUS *e*SS SS 04 08 18.9 +0.7
FAUS IVMs_BB IVMs_BB 04 35 29.2
comp=Z,2µm,23.7s
**AML Almayashu 128.91 71** P **PKPdf 03 48 56.4 +0.2**
SNR=55
**QIZ Qiongzhong 129.03 121** PKP **PKPdf 03 48 56.3 -0.4**
QIZ PP **PP 03 51 06.4 +2.0**
QIZ SS SS 04 08 24.9 +3.3
QIZ LR LR
comp=Z,2µm,17.2s
QIZ LR LR
comp=Z,1µm,16.2s
QIZ LR LR
comp=Z,3µm,19.3s
**LOF Lofoten 129.18 18** *e*PKPdf **PKPdf 03 48 55.1 -0.3**
LOF *e*PS **PS 04 01 17.2 +3.8**
LOF IVMs_BB IVMs_BB 04 37 29.9
comp=Z,2µm,23.1s
**STEI Steigen 129.27 18** *e*PKPdf **PKPdf 03 48 55.8 +0.3**
STEI *e*PP **PP 03 51 06.0 +0.3**
STEI *e*SKPdf SKPbc 03 52 22.1 +7.6
STEI IVMs_BB IVMs_BB 04 38 15.8
comp=Z,2µm,23.0s
**EKS2 Erkin-Say 129.34 70** P **PKPdf 03 48 57.2 +0.6**
SNR=46
**JMI Jan Mayen 129.35 7** *e*PKPdf **PKiKP 03 48 57.5 +1.1**
**UCH Uchtor 129.39 71** P **PKPdf 03 48 57.9 +0.7**
SNR=19
**JMIC Jan Mayen 129.43 7** *e*PKPdf **PKiKP 03 48 57.4 +0.9**
**JMIC Jan Mayen 129.43 7** PKP **PKiKP 03 48 56.9 +0.4**
comp=Z,49nm,0.9s,baz=106,slow=4.2,SNR=13
**AAK Ala-Archa 129.68 71** P **PKPdf 03 48 57.6 +0.2**
SNR=38
**AAK Ala-Archa 129.68 71** PKPdf **PKPdf 03 48 57.8 +0.4**
**AAK Ala-Archa 129.68 71** PKP **PKPdf 03 48 57.5 +0.1**
comp=Z,110nm,0.8s,baz=188,slow=2.7,SNR=83
AAK SKPab SKPab 03 52 15.3 -1.1
comp=Z,22nm,1.1s,baz=282,slow=5.9,SNR=3.7
**AAK Ala-Archa 129.68 71** P **Pdif 03 45 47.8 +2.2**
**KBK Karagaybulak 129.92 71** P **PKPdf 03 48 58.1 +0.2**
SNR=24
**UMMG Uummannaq 129.98 349** *i* P **PKPdf 03 48 55.6 -1.2**
**NEW Newport 129.99 299** IAMs_20 IAMs_20 04 48 07.0
comp=Z,4µm,21.0s
**NEW Newport 129.99 299** PKP **PKPdf 03 48 57.0 -0.6**
comp=Z,65nm,1.2s,baz=135,slow=2.6,SNR=28
NEW SKPab SKPab 03 52 15.3 -2.1
comp=Z,120nm,1.0s,baz=182,slow=1.8,SNR=29
NEW SKKPbc **SKKPbc 04 01 52.3 -6.1**
comp=Z,6.0nm,1.0s,baz=76,slow=2.3,SNR=3.6
**NEW Newport 129.99 299** P **PKPdf 03 48 57.2 -0.4**
baz=136
**NEW Newport 129.99 299** PKIKP **PKPdf 03 48 57.0 -0.6**
**KIP Kipapa 130.03 243** **PKPdf 03 48 59.2 +0.7**
**KIP Kipapa 130.03 243** IAMs_20 IAMs_20 04 33 39.0
comp=Z,4µm,22.0s
**KIP Kipapa 130.03 243** PKIKP **PKPdf 03 48 59.2 +0.7**
**CHMS Chumysh 130.07 71** P **PKPdf 03 48 58.1 +0.1**
SNR=25
**USP Ospenovka 130.15 70** P **PKPdf 03 48 58.2 +0.1**
SNR=46
**ULHL Ulahol 130.27 72** P **PKPdf 03 48 59.1 +0.5**
SNR=18
**COR Corvallis 130.28 292** **PKiKP 03 48 59.6 +0.6**
**COR Corvallis 130.28 292** IAMs_20 IAMs_20 04 46 57.8
comp=Z,4µm,22.0s
**COR Corvallis 130.28 292** PKIKP **PKiKP 03 48 59.6 +0.6**
COR MLR MLR
comp=Z,4µm,22.0s
**TKM2 Tokmak 2 130.44 71** P **PKPdf 03 48 58.7 -0.2**
SNR=26
**KIRV Kirov 130.47 42** PKP **PKPdf 03 48 57.9 -0.2**
comp=Z,152nm,0.8s,baz=214,slow=1.5,SNR=94
KIRV PP **PP 03 51 09.4 -4.4**
comp=Z,52nm,0.9s,baz=204,slow=6.5,SNR=6.0
KIRV SKPbc **SKPab 03 52 15.9 -3.1**
comp=Z,130nm,1.1s,baz=234,slow=12,SNR=7.2
KIRV SKKPbc **SKKPbc 04 01 55.5 -1.9**
comp=Z,4.7nm,0.5s,baz=69,slow=9.8,SNR=3.6
**SUMG Summit 130.80 355** PKP **PKPdf 03 48 57.2 -1.6**
**SUMG Summit 130.80 355** *i* P **PKPdf 03 48 57.8 -1.1**
**KMI Kunming 130.81 109** ↑PKP **PKPdf 03 48 59.8 -0.4**
KMI PP **PP 03 51 14.8 -1.6**
KMI SS SS 04 08 41.4 -2.8
KMI AMB AMB
comp=Z,620nm,11.0s
KMI LR LR
comp=Z,1µm,20.4s
KMI LR LR
comp=Z,2µm,18.9s
KMI LR LR
comp=Z,3µm,21.0s
**JOHN Johnston Islan 130.91 228** IAMs_20 IAMs_20 04 42 29.0
comp=Z,4µm,20.0s
**NUUG Nuugaatsiaq 130.91 349** *i* P **PKPdf 03 48 57.2 -1.3**
**ADZR Andozero 131.04 32** *e*PKIKP **PKPdf 03 48 56.7 -2.3**
ADZR pmax pmax
comp=Z,524nm,1.4s
**TNSS Tian-Shan 131.21 72** *e*PKP **PKPdf 03 48 59.9 -0.7**
baz=72
TNSS *e*PP **PP 03 51 18.9 -0.4**
baz=72
**TNSS Tian-Shan 131.21 72** *e*PKIKP **PKPdf 03 48 59.8 -0.8**
TNSS *e* 03 51 18.9
**AAA Alma-Ata 131.31 72** *e*PKP **PKPdf 03 49 00.1 -0.3**
baz=72
AAA LR LR 04 46 27.1
baz=72
**AAA Alma-Ata 131.31 72** *e*PKIKP **PKPdf 03 49 00.0 -0.3**
**MDOK Medeo 131.35 72** *e*PKP **PKPdf 03 49 00.1 -0.5**
baz=72
MDOK *e*PP **PP 03 51 19.9 0.0**
baz=72
MDOK LR LR 04 46 28.2
comp=Z,2µm,20.1s,baz=72
**MDOK Medeo 131.35 72** *e*PKIKP **PKPdf 03 49 00.0 -0.5**
MDOK *e* 03 51 19.8
MDOK MLR MLR
comp=Z,2µm,20.0s
**TRO Tromso 131.41 19** *e*PKPdf **PKPdf 03 48 59.4 -0.2**
TRO *e*PP **PP 03 51 20.8 +1.2**
TRO *e*SKPdf **SKPab 03 52 27.5 +4.9**
**PZH PanZhiHua 131.45 107** PKP **PKPdf 03 49 00.3 -0.9**
PZH PP **PP 03 51 22.3 +1.9**
PZH SS SS 04 08 50.8 -1.1
PZH AMB AMB
comp=Z,290nm,6.5s
PZH LR LR
comp=Z,2µm,18.2s
PZH LR LR
comp=Z,1µm,20.0s
PZH LR LR
comp=Z,2µm,19.6s
**KUU Kurty 131.52 71** *e*PKP **PKPdf 03 49 00.6 0.0**
baz=71
KUU LR LR 04 46 31.6
comp=Z,4µm,20.6s,baz=71
**KUU Kurty 131.52 71** *e*PKIKP **PKPdf 03 49 00.6 0.0**
KUU MLR MLR
comp=Z,4µm,21.0s
**KTK1 Kautokeino 131.66 21** *e*PKPdf **PKPdf 03 48 59.1 -1.0**
KTK1 *e*PP **PP 03 51 21.7 +0.4**
KTK1 IVMs_BB IVMs_BB 04 42 42.8
comp=Z,2µm,19.5s
**SATY Saty 131.96 73** *e*PKP **PKPdf 03 49 01.2 -0.5**
baz=74
SATY *e*PP **PP 03 51 23.8 -0.1**
baz=74
**SATY Saty 131.96 73** *e*PKIKP **PKPdf 03 49 01.2 -0.5**
SATY *e* 03 51 23.7
**ZHN Zhinishke 132.05 73** *e*PKP **PKPdf 03 49 01.2 -0.6**
baz=73
ZHN *e*PP **PP 03 51 24.2 -0.2**
baz=73
**ZHN Zhinishke 132.05 73** *e*PKIKP **PKPdf 03 49 01.2 -0.6**
ZHN *e* 03 51 24.1
**DBG Daneborg 132.26 2** *i* P **PKPdf 03 49 01.1 0.0**
**ARU Arti 132.34 48** IAMs_20 IAMs_20 04 50 50.8
comp=Z,5µm,19.0s
**ARU Arti 132.34 48** PKhKP PKPpre 03 48 45.6
comp=Z,6.0nm,0.3s,baz=282,slow=20,SNR=4.6
ARU PKP **PKPdf 03 49 01.4 -0.3**
comp=Z,19nm,0.5s,baz=214,slow=1.2,SNR=6.3
ARU SKPbc **SKPbc 03 52 23.9 -2.0**
comp=Z,37nm,1.0s,baz=218,slow=6.9,SNR=4.4
**ARU Arti 132.34 48** *i* PKIKP **PKPdf 03 49 00.1 -1.6**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| UZB | **Uzynbulak** | **132.34** | **74** | *e*PKP | **PKPdf** | **03 49 01.8** | **-0.6** | | |
| | baz=74 | | | | | | | | |
| UZB | | | | *e*PP | **PP** | **03 51 25.8** | **-0.5** | | |
| | baz=74 | | | | | | | | |
| **UZB** | **Uzynbulak** | **132.34** | **74** | *e*PKIKP | **PKPdf** | **03 49 01.8** | **-0.6** | | |
| UZB | | | | *e* | | 03 51 25.7 | | | |
| **KPKS** | **Kokpek** | **132.39** | **73** | *e*PKP | **PKPdf** | **03 49 01.8** | **-0.6** | | |
| | baz=73 | | | | | | | | |
| KPKS | | | | *e*PP | **PP** | **03 51 26.0** | **-0.6** | | |
| | baz=73 | | | | | | | | |
| **KPKS** | **Kokpek** | **132.39** | **73** | *e*PKIKP | **PKPdf** | **03 49 01.8** | **-0.6** | | |
| KPKS | | | | *e* | | 03 51 26.0 | | | |
| **UPNV** | **Upernavik** | **132.40** | **348** | *i* P | **PKPdf** | **03 49 00.2** | **-1.2** | | |
| **ARXS** | **Arharly** | **132.50** | **72** | *e*PKIKP | **PKPdf** | **03 49 01.5** | **-1.1** | | |
| **ARA0** | **ARCESS Array S** | **132.54** | **22** | *e*P | **PKPdf** | **03 49 00.8** | **-0.9** | | |
| **ARCES** | **ARCESS Array B** | **132.54** | **22** | PKhKP | PKPpre | 03 48 45.2 | | | |
| | comp=Z,7.5nm,0.9s,baz=242,slow=1.9,SNR=10 | | | | | | | | |
| ARCES | | | | PKP | **PKPdf** | **03 49 00.8** | **-1.0** | | |
| | comp=Z,77nm,0.8s,baz=246,slow=2.4,SNR=5.4 | | | | | | | | |
| ARCES | | | | PP | **PP** | **03 51 24.9** | **-2.0** | | |
| | comp=Z,162nm,1.1s,baz=223,slow=5.0,SNR=21 | | | | | | | | |
| ARCES | | | | SKPbc | **SKPbc** | **03 52 22.6** | **-3.6** | | |
| | comp=Z,33nm,1.0s,baz=242,slow=1.9,SNR=2.8 | | | | | | | | |
| **NLWA** | **Neilton Lookou** | **132.56** | **294** | IAMs_20 | IAMs_20 | 04 56 00.1 | | | |
| | comp=Z,3μm,19.0s | | | | | | | | |
| **SHLS** | **Shalkode** | **132.57** | **74** | *e*PKP | **PKPdf** | **03 49 02.9** | **0.0** | | |
| | baz=74 | | | | | | | | |
| **SHLS** | **Shalkode** | **132.57** | **74** | *e*PKIKP | **PKPdf** | **03 49 02.8** | **0.0** | | |
| **APA** | **Apatity** | **132.65** | **26** | ⇓*i*PKIKP | **PKPdf** | **03 49 00.8** | **-1.2** | | |
| APA | | | | *i* | | 03 51 26.0 | | | |
| APA | | | | *i* | | 04 01 35.0 | | | |
| APA | | | | *i* SS | SS | 04 09 03.0 | -2.5 | | |
| APA | | | | pmax | pmax | | | | |
| | comp=Z,67nm,0.8s | | | | | | | | |
| **OTUK** | **Ortayu** | **132.65** | **64** | PKIKP | **PKPdf** | **03 49 02.7** | **+0.1** | | |
| **PDGK** | **Podgornoye** | **132.71** | **74** | PKIKP | **PKPdf** | **03 49 02.4** | **-0.7** | | |
| **KEV** | **Kevo** | **133.02** | **22** | | **PKPdf** | **03 49 02.8** | **+0.2** | | |
| KEV | | | | IAMs_20 | IAMs_20 | 04 44 39.4 | | | |
| | comp=Z,3μm,20.0s | | | | | | | | |
| **KEV** | **Kevo** | **133.02** | **22** | PKIKP | **PKPdf** | **03 49 02.8** | **+0.2** | | |
| KEV | | | | MLR | MLR | | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **HAMF** | **Hammerfest** | **133.12** | **20** | *e*PKPdf | **PKPdf** | **03 49 02.4** | **-0.4** | | |
| HAMF | | | | *e*PP | **PP** | **03 51 31.8** | **+1.2** | | |
| HAMF | | | | *e*SP | SP | 04 01 44.0 | +0.6 | | |
| HAMF | | | | *e*SS | **SS** | **04 09 13.1** | **+1.9** | | |
| HAMF | | | | IVMs_BB | IVMs_BB | 04 38 04.9 | | | |
| | comp=Z,2μm,25.6s | | | | | | | | |
| **LVZ** | **Lovozero** | **133.20** | **27** | | **PKPdf** | **03 49 02.4** | **-0.7** | | |
| **LVZ** | **Lovozero** | **133.20** | **27** | PKIKP | **PKPdf** | **03 49 02.4** | **-0.7** | | |
| **SVE** | **Sverdlovsk** | **133.44** | **49** | *i* PKIKP | **PKPdf** | **03 49 03.9** | **+0.1** | | |
| SVE | | | | *e* | | 04 14 18.3 | | | |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,308nm,1.8s | | | | | | | | |
| SVE | | | | MLR | MLR | | | | |
| | comp=Z,4μm,24.0s | | | | | | | | |
| **VADS** | **Vadso** | **133.79** | **23** | *e*PKPdf | **PKPdf** | **03 49 03.0** | **-1.0** | | |
| VADS | | | | *e*PP | **PP** | **03 51 36.0** | **+1.1** | | |
| VADS | | | | *e*SKPdf | **SKPdf** | **03 52 36.1** | **-0.4** | | |
| VADS | | | | IVMs_BB | IVMs_BB | 04 42 33.9 | | | |
| | comp=Z,1μm,20.2s | | | | | | | | |
| **HKPS** | **Hong Kong Po S** | **133.80** | **123** | IAMs_20 | IAMs_20 | 04 39 12.9 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | |
| **GYA** | **Guiyang** | **133.87** | **112** | ⇓PKP | **PKPdf** | **03 49 05.9** | **+0.1** | | |
| GYA | | | | PP | **PP** | **03 51 38.6** | **+2.7** | | |
| GYA | | | | SS | SS | 04 09 22.9 | +1.8 | | |
| GYA | | | | AMB | AMB | | | | |
| | comp=Z,940nm,9.9s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=Z,1μm,17.6s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=Z,1μm,18.6s | | | | | | | | |
| GYA | | | | LR | LR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **KULLO** | **Kullorsuaq** | **134.19** | **349** | *i* P | **PKPdf** | **03 49 03.6** | **-1.1** | | |
| **GULI** | **GuiLin** | **134.67** | **117** | PKP | **PKiKP** | **03 49 10.0** | **+1.4** | | |
| GULI | | | | LR | LR | | | | |
| | comp=Z,1μm,20.6s | | | | | | | | |
| GULI | | | | LR | LR | | | | |
| | comp=Z,2μm,19.5s | | | | | | | | |
| GULI | | | | LR | LR | | | | |
| | comp=Z,4μm,22.0s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **134.76** | **2** | PKP | **PKPdf** | **03 49 02.2** | **-3.5** | | |
| **DAG** | **Danmarks Havn** | **134.76** | **2** | *i* P | **PKPdf** | **03 49 03.0** | **-2.7** | | |
| **GUMO** | **Guam** | **134.86** | **166** | IAMs_20 | IAMs_20 | 04 45 14.6 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | |
| **BRVK** | **Borovoye** | **134.99** | **58** | P | **Pdif** | **03 46 12.2** | **+3.5** | | |
| **BVA0** | **Borovoye Array** | **135.02** | **58** | *i* PKIKP | **PKPdf** | **03 49 07.1** | **+0.2** | | |
| **BVAR** | **Borovoye Array** | **135.02** | **58** | PKhKP | PKPpre | 03 48 54.0 | | | |
| | comp=Z,24nm,0.9s,baz=222,slow=2.0,SNR=31 | | | | | | | | |
| BVAR | | | | PKP | **PKPdf** | **03 49 07.6** | **+0.7** | | |
| | comp=Z,114nm,0.8s,baz=179,slow=2.6,SNR=30 | | | | | | | | |
| BVAR | | | | PP | **PP** | **03 51 40.4** | **-2.7** | | |
| | comp=Z,29nm,0.9s,baz=219,slow=6.7,SNR=5.5 | | | | | | | | |
| BVAR | | | | SKPbc | **SKPbc** | **03 52 32.0** | **-2.9** | | |
| | comp=Z,19nm,0.9s,baz=229,slow=5.7,SNR=3.6 | | | | | | | | |
| BVAR | | | | SKKPbc | SKKPbc | 04 01 17.9 | -22 | | |
| | comp=Z,6.0nm,1.0s,baz=120,slow=5.2,SNR=2.9 | | | | | | | | |
| **GOMU** | **GeErMu** | **135.50** | **93** | PKP | PKPdf | 03 48 56.8 | -12 | | |
| GOMU | | | | pPKP | PKiKP | 03 49 03.3 | -7.1 | | |
| GOMU | | | | sPKP | | 03 49 07.1 | | | |
| GOMU | | | | PP | PP | 03 51 38.9 | -7.8 | | |
| **BJO1** | **Bjornoya** | **135.64** | **16** | *e*PKPdf | **PKPdf** | **03 49 01.5** | **-5.9** | | |
| BJO1 | | | | *e*PP | **PP** | **03 51 46.9** | **+0.4** | | |
| BJO1 | | | | *e*SP | SP | 04 02 05.5 | +0.9 | | |
| **CD2** | **Chengdu** | **136.06** | **106** | PKP | **PKPdf** | **03 49 08.9** | **-0.7** | | |
| CD2 | | | | sPKP | | 03 49 26.1 | | | |
| CD2 | | | | PP | **PP** | **03 51 45.6** | **-4.1** | | |
| CD2 | | | | PKS | **PKSdf** | **03 52 42.5** | **-3.5** | | |
| CD2 | | | | SS | SS | 04 09 45.3 | -2.1 | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,2μm,17.1s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| CD2 | | | | LR | LR | | | | |
| | comp=Z,1μm,19.7s | | | | | | | | |
| **NEEM** | **North Greenlan** | **136.33** | **352** | *i* P | **PKPdf** | **03 49 08.5** | **-0.5** | | |
| **MAKZ** | **Makanchi** | **136.40** | **72** | ⇑PKHKP | PKPpre | 03 48 56.7 | | | |
| **MK31** | **Makanchi Array** | **136.54** | **72** | *i* PKHKP | PKPpre | 03 49 02.2 | | | |
| **MKAR** | **Makanchi Array** | **136.54** | **72** | PKhKP | PKPpre | 03 48 56.0 | | | |
| | comp=Z,6.1nm,0.8s,baz=255,slow=3.1,SNR=17 | | | | | | | | |
| MKAR | | | | PKP | **PKPdf** | **03 49 09.0** | **-1.0** | | |
| | comp=Z,65nm,0.9s,baz=242,slow=2.9,SNR=21 | | | | | | | | |
| MKAR | | | | PP | **PP** | **03 51 48.6** | **-4.1** | | |
| | comp=Z,11nm,1.0s,baz=243,slow=9.5,SNR=3.9 | | | | | | | | |
| MKAR | | | | SKPbc | **SKPbc** | **03 52 36.5** | **-3.4** | | |
| | comp=Z,34nm,1.1s,baz=258,slow=3.6,SNR=5.3 | | | | | | | | |
| MKAR | | | | PKKP | **PKKPdf** | **03 58 48.1** | **+1.3** | | |
| | comp=Z,2.7nm,0.8s,baz=335,slow=0.7,SNR=4.7 | | | | | | | | |
| MKAR | | | | SKKPbc | SKKPbc | 04 01 14.3 | -20 | | |
| | comp=Z,4.8nm,1.0s,baz=62,slow=5.5,SNR=3.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **136.54** | **72** | PKIKP | **PKPdf** | **03 49 09.0** | **-1.0** | | |
| **KURBB** | **Kurchatov Arra** | **137.24** | **66** | PKhKP | PKPpre | 03 48 59.6 | | | |
| | comp=Z,20nm,1.1s,baz=233,slow=3.8,SNR=31 | | | | | | | | |
| KURBB | | | | PKP | **PKPdf** | **03 49 10.5** | **-0.5** | | |
| | comp=Z,68nm,0.8s,baz=226,slow=2.6,SNR=27 | | | | | | | | |
| KURBB | | | | PP | **PP** | **03 51 57.5** | **+0.5** | | |
| | comp=Z,23nm,1.1s,baz=234,slow=6.8,SNR=11 | | | | | | | | |
| KURBB | | | | SKPbc | **SKPbc** | **03 52 37.8** | **-3.9** | | |
| | comp=Z,18nm,1.1s,baz=250,slow=4.4,SNR=6.4 | | | | | | | | |
| KURBB | | | | SKKPbc | SKKPbc | 04 01 09.7 | -22 | | |
| | comp=Z,1.5nm,0.3s,baz=46,slow=6.4,SNR=5.3 | | | | | | | | |
| **WMQ** | **Urumqi** | **137.28** | **79** | PKP | **PKPdf** | **03 49 11.4** | **-0.1** | | |
| WMQ | | | | sPKP | | 03 49 20.1 | | | |
| WMQ | | | | PP | **PP** | **03 51 57.8** | **+0.4** | | |
| WMQ | | | | PKS | **PKSdf** | **03 52 46.6** | **-1.0** | | |
| WMQ | | | | AMB | AMB | | | | |
| | comp=Z,880nm,4.3s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,2μm,16.3s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,3μm,18.3s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,2μm,18.3s | | | | | | | | |
| **TULEG** | **Thule** | **137.28** | **346** | *i* P | **PKPdf** | **03 49 09.1** | **-1.3** | | |
| **KURK** | **Kurchatov** | **137.34** | **66** | IAMs_20 | IAMs_20 | 04 54 11.2 | | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **KURK** | **Kurchatov** | **137.34** | **66** | P | **Pdif** | **03 46 20.7** | **+1.5** | | |
| **KURK** | **Kurchatov** | **137.34** | **66** | PKIKP | **PKPdf** | **03 49 10.5** | **-0.7** | | |
| **BBB** | **Bella Bella** | **137.82** | **297** | PKhKP | PKPpre | 03 49 00.7 | | | |
| | comp=Z,13nm,0.9s,baz=62,slow=7.9,SNR=3.9 | | | | | | | | |
| BBB | | | | PKP | **PKPdf** | **03 49 12.4** | **+0.4** | | |
| | comp=Z,48nm,1.0s,baz=59,slow=1.3,SNR=11 | | | | | | | | |
| BBB | | | | SKP | | 03 52 42.6 | | | |
| | comp=Z,113nm,1.2s,baz=140,slow=2.8,SNR=12 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **137.93** | **67** | *e*PKP | **PKPdf** | **03 49 11.9** | **-0.8** | | |
| | baz=67 | | | | | | | | |
| SEM | | | | LR | LR | 04 49 36.6 | | | |
| | comp=Z,980nm,17.8s,baz=67 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **137.93** | **67** | *e*PKIKP | **PKPdf** | **03 49 11.9** | **-0.8** | | |
| **QZH** | **Quanzhou** | **138.07** | **127** | PKP | **PKPdf** | **03 49 08.8** | **-4.6** | | |
| QZH | | | | PP | **PP** | **03 52 03.3** | **+1.4** | | |
| QZH | | | | LR | LR | | | | |
| | comp=Z,2μm,19.2s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=Z,3μm,17.9s | | | | | | | | |
| QZH | | | | LR | LR | | | | |
| | comp=Z,2μm,16.8s | | | | | | | | |
| **HOPEN** | **Hopen** | **138.16** | **16** | *e*PKPdf4 | | 03 49 04.2 | | | |
| HOPEN | | | | IVMs_BB | IVMs_BB | 04 38 54.0 | | | |
| | comp=Z,1μm,16.6s | | | | | | | | |
| **ZSN** | **Zaisan** | **138.29** | **73** | *e*PKP | **PKPdf** | **03 49 12.9** | **-0.3** | | |
| | baz=74 | | | | | | | | |
| ZSN | | | | *e*PP | **PP** | **03 52 03.5** | **-0.2** | | |
| | baz=74 | | | | | | | | |
| **ZSN** | **Zaisan** | **138.29** | **73** | *e*PKIKP | **PKPdf** | **03 49 12.9** | **-0.3** | | |
| ZSN | | | | *e* | | 03 52 03.4 | | | |
| **CNSH** | **ChangSha** | **138.32** | **118** | PKP | PKPdf | 03 49 02.9 | -11 | | |
| CNSH | | | | PP | PP | 03 51 49.5 | -14 | | |
| **ENH** | **Enshi** | **138.41** | **112** | IAMs_20 | IAMs_20 | 04 46 33.4 | | | |
| | comp=Z,3μm,19.0s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **138.46** | **316** | PKhKP | PKPpre | 03 49 02.6 | | | |
| | comp=Z,6.2nm,0.8s,baz=255,slow=4.8,SNR=25 | | | | | | | | |
| YKA | | | | PKP | **PKPdf** | **03 49 13.1** | **+0.2** | | |
| | comp=Z,200nm,1.0s,baz=98,slow=2.9,SNR=85 | | | | | | | | |
| YKA | | | | PP | **PP** | **03 51 59.1** | **-5.3** | | |
| | comp=Z,24nm,0.9s,baz=120,slow=5.8,SNR=7.4 | | | | | | | | |
| YKA | | | | SKP | | 03 52 43.0 | | | |
| | comp=Z,82nm,0.9s,baz=124,slow=2.0,SNR=18 | | | | | | | | |
| YKA | | | | SKKPbc | SKKPbc | 04 01 13.9 | -14 | | |
| | comp=Z,3.9nm,0.9s,baz=320,slow=5.6,SNR=4.7 | | | | | | | | |
| **NACB** | **Ninganchiao** | **138.62** | **131** | IAMs_20 | IAMs_20 | 04 55 43.4 | | | |
| | comp=Z,3μm,20.0s | | | | | | | | |
| **KBS** | **Kingsbay** | **138.64** | **10** | IAMs_20 | IAMs_20 | 04 45 44.2 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **KBS** | **Kingsbay** | **138.64** | **10** | *e*PKPdf4 | | 03 49 05.2 | | | |
| KBS | | | | *e*PP | **PP** | **03 52 06.3** | **+1.1** | | |
| KBS | | | | IVMs_BB | IVMs_BB | 04 47 29.8 | | | |
| | comp=Z,1μm,15.6s | | | | | | | | |
| **KBS** | **Kingsbay** | **138.64** | **10** | *i* P | **PKPdf** | **03 49 09.9** | **-3.0** | | |
| **NOR** | **Nord** | **139.64** | **2** | *i* P | **PKPdf** | **03 49 07.9** | **-6.7** | | |
| **LZH** | **Lanzhou** | **140.17** | **101** | *e*PKP | PKPdf | 03 49 09.8 | -7.4 | | |
| LZH | | | | sPKP | | 03 49 24.8 | | | |
| LZH | | | | PP | **PP** | **03 52 11.9** | **-3.5** | | |
| LZH | | | | PKS | **PKSdf** | **03 52 46.4** | **-6.9** | | |
| LZH | | | | SS | SS | 04 10 31.4 | -4.8 | | |
| LZH | | | | AMB | AMB | | | | |
| | comp=Z,890nm,4.5s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,1μm,14.1s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,1μm,14.1s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,2μm,14.1s | | | | | | | | |
| **H02S1** | **DAWSON INLET TI** | **140.53** | **295** | PKhKP | PKPpre | 03 49 11.0 | | | |
| H02S1 | | | | PKP | **PKPdf** | **03 49 18.7** | **+1.7** | | |
| | SNR=37 | | | | | | | | |
| **GTA** | **Gaotai** | **140.54** | **94** | PKP | PKPdf | 03 49 10.1 | -7.6 | | |
| GTA | | | | PP | **PP** | **03 52 14.3** | **-3.3** | | |
| GTA | | | | PKS | **PKSdf** | **03 52 55.1** | **+1.4** | | |
| GTA | | | | SKKS | | 03 59 05.4 | | | |
| GTA | | | | AMB | AMB | | | | |
| | comp=Z,920nm,11.9s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,1μm,22.3s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,960nm,23.9s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,2μm,24.9s | | | | | | | | |
| **TOAD** | **Toad River Com** | **140.57** | **306** | P | **PKPdf** | **03 49 16.8** | **-0.2** | | |
| | baz=125 | | | | | | | | |
| **KOTAN** | **Kotaneelee Air** | **140.80** | **309** | P | **PKPdf** | **03 49 17.5** | **+0.2** | | |
| | baz=124 | | | | | | | | |
| **WHN** | **Wuhan** | **140.97** | **117** | PKP | PKPdf | 03 49 11.4 | -7.2 | | |
| WHN | | | | PP | **PP** | **03 52 20.3** | **+0.4** | | |
| WHN | | | | SS | SS | 04 10 46.6 | +1.6 | | |
| WHN | | | | LR | LR | | | | |
| | comp=Z,12μm,22.3s | | | | | | | | |
| WHN | | | | LR | LR | | | | |
| | comp=Z,6μm,18.4s | | | | | | | | |
| WHN | | | | LR | LR | | | | |
| | comp=Z,9μm,20.7s | | | | | | | | |
| **U35K** | **Hyder** | **141.00** | **300** | IAMs_20 | IAMs_20 | 04 58 44.9 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **U35K** | **Hyder** | **141.00** | **300** | P | **PKPdf** | **03 49 17.8** | **+0.1** | | |
| | baz=126 | | | | | | | | |
| **XAN** | **Xi'an** | **141.17** | **108** | ⇓PKP | PKPdf | 03 49 11.8 | -7.1 | | |
| XAN | | | | PP | **PP** | **03 52 22.5** | **+1.2** | | |
| XAN | | | | SS | SS | 04 10 46.8 | -0.8 | | |
| XAN | | | | AMB | AMB | | | | |
| | comp=Z,960nm,5.1s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,2μm,21.6s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,4μm,20.6s | | | | | | | | |
| **LIRD** | **Liard River Hi** | **141.25** | **307** | P | **PKPdf** | **03 49 18.1** | **-0.1** | | |
| | baz=124 | | | | | | | | |
| **V35K** | **Ketchikan** | **141.39** | **299** | IAMs_20 | IAMs_20 | 04 57 23.8 | | | |
| | comp=Z,3μm,20.0s | | | | | | | | |
| **V35K** | **Ketchikan** | **141.39** | **299** | P | **PKPdf** | **03 49 18.8** | **+0.4** | | |
| | baz=125 | | | | | | | | |
| **T35M** | **Bob Quinn** | **141.71** | **301** | IAMs_20 | IAMs_20 | 04 56 58.7 | | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
| **T35M** | **Bob Quinn** | **141.71** | **301** | P | **PKPdf** | **03 49 19.6** | **+0.6** | | |
| | baz=124 | | | | | | | | |
| **CRAG** | **Craig** | **142.17** | **298** | P | **PKPdf** | **03 49 20.3** | **+0.4** | | |
| | baz=125 | | | | | | | | |
| **WRGLY** | **Wrigley** | **142.23** | **313** | P | **PKPdf** | **03 49 19.9** | **+0.2** | | |
| | baz=121 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.33** | **65** | | PKPpre | 03 49 14.6 | | | |
| **ZALV** | **Zalesovo Beam** | **142.33** | **65** | PKhKP | PKPpre | 03 49 14.5 | | | |
| | comp=Z,48nm,0.6s,baz=242,slow=4.0,SNR=52 | | | | | | | | |
| ZALV | | | | PKP | **PKPdf** | **03 49 22.2** | **+2.0** | | |
| | comp=Z,45nm,0.7s,baz=210,slow=4.4,SNR=15 | | | | | | | | |
| ZALV | | | | SKKPbc | SKKPbc | 04 01 08.3 | -3.3 | | |
| | comp=Z,11nm,1.1s,baz=55,slow=5.6,SNR=5.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.33** | **65** | PKHKP | PKPpre | 03 49 14.6 | | | |
| **DLBC** | **Dease Lake** | **142.42** | **304** | PKhKP | PKPpre | 03 49 16.4 | | | |
| | comp=Z,57nm,0.9s,baz=137,slow=1.5,SNR=33 | | | | | | | | |
| DLBC | | | | SKPbc | **SKPbc** | **03 52 54.8** | **-0.8** | | |
| | comp=Z,101nm,1.1s,baz=62,slow=2.1,SNR=9.8 | | | | | | | | |
| **DLBC** | **Dease Lake** | **142.42** | **304** | P | **PKPdf** | **03 49 20.7** | **+0.3** | | |
| | baz=123 | | | | | | | | |
| **U33K** | **Whale Pass** | **142.54** | **299** | IAMs_20 | IAMs_20 | 04 58 11.8 | | | |
| | comp=Z,4μm,21.0s | | | | | | | | |
| **U33K** | **Whale Pass** | **142.54** | **299** | P | **PKPdf** | **03 49 20.9** | **+0.5** | | |
| | baz=124 | | | | | | | | |
| **S34M** | **Telegraph Cree** | **142.62** | **302** | IAMs_20 | IAMs_20 | 04 55 29.0 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **S34M** | **Telegraph Cree** | **142.62** | **302** | P | **PKPdf** | **03 49 21.1** | **+0.5** | | |
| | baz=123 | | | | | | | | |
| **WTLY** | **Watson Lake, Y** | **142.78** | **306** | P | **PKPdf** | **03 49 21.3** | **+0.4** | | |
| | baz=122 | | | | | | | | |
| **T33K** | **Petersburg** | **142.85** | **300** | P | **PKPdf** | **03 49 21.5** | **+0.5** | | |
| | baz=123 | | | | | | | | |
| **R33M** | **Jennings River** | **143.34** | **304** | IAMs_20 | IAMs_20 | 05 02 12.7 | | | |
| | comp=Z,3μm,19.0s | | | | | | | | |
| **LYN** | **LuoYang** | **143.35** | **112** | ⇓PKP | PKPab | 03 49 20.0 | +1.3 | | |
| LYN | | | | sPKP | | 03 49 39.3 | | | |
| LYN | | | | PP | **PP** | **03 52 38.3** | **+3.9** | | |
| LYN | | | | AMB | AMB | | | | |
| | comp=Z,2μm,7.3s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,2μm,23.5s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,3μm,22.9s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,4μm,23.3s | | | | | | | | |
| **Q32M** | **Nakina River** | **143.69** | **303** | IAMs_20 | IAMs_20 | 04 54 56.0 | | | |
| | comp=Z,3μm,19.0s | | | | | | | | |
| **S32K** | **Killisnoo** | **143.95** | **300** | IAMs_20 | IAMs_20 | 04 54 04.1 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | |
| **MIDW** | **Midway** | **144.31** | **225** | | **PKPab** | **03 49 23.6** | **+1.1** | | |
| **NJ2** | **Nanjing** | **144.32** | **121** | ⇑*i*PKP | **PKPab** | **03 49 23.0** | **+0.5** | | |
| NJ2 | | | | pPKP | **pPKPdf** | **03 49 31.6** | **-2.0** | | |
| NJ2 | | | | sPKP | | 03 49 37.1 | | | |
| NJ2 | | | | PP | **PP** | **03 52 44.0** | **+3.9** | | |
| NJ2 | | | | AMB | AMB | | | | |
| | comp=Z,1μm,11.3s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=Z,2μm,16.7s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=Z,2μm,15.1s | | | | | | | | |
| NJ2 | | | | LR | LR | | | | |
| | comp=Z,3μm,18.1s | | | | | | | | |
| **R32K** | **Eaglecrest** | **144.34** | **301** | IAMs_20 | IAMs_20 | 05 01 29.5 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | |
| **SSE** | **Sheshan** | **144.54** | **125** | PKP | **PKPab** | **03 49 24.1** | **+0.8** | | |
| SSE | | | | PP | **PP** | **03 52 41.1** | **-0.2** | | |
| SSE | | | | SS | SS | 04 11 29.9 | +3.9 | | |
| SSE | | | | LR | LR | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | |
| SSE | | | | LR | LR | | | | |
| | comp=Z,740nm,19.2s | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **144.56** | **305** | IAMs_20 | IAMs_20 | 04 51 04.0 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **144.56** | **305** | P | **PKPab** | **03 49 23.3** | **+0.6** | | |
| | baz=119 | | | | | | | | |
| **P32M** | **Atlin** | **144.65** | **303** | IAMs_20 | IAMs_20 | 04 57 59.3 | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **P32M** | **Atlin** | **144.65** | **303** | P | PKPbc | 03 49 23.7 | +0.6 | | |
| | baz=120 | | | | | | | | |
| **S31K** | **Pelican** | **144.96** | **300** | P | PKPbc | 03 49 24.7 | +0.7 | | |
| | baz=120 | | | | | | | | |
| **R31K** | **City Hall, Gus** | **144.97** | **301** | P | **PKPab** | **03 49 24.7** | **+0.6** | | |
| | baz=120 | | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **145.05** | **309** | P | **PKPbc** | **03 49 24.9** | **+0.6** | | |
| | baz=117,SNR=351 | | | | | | | | |
| **N32M** | **Quiet Lake** | **145.13** | **306** | IAMs_20 | IAMs_20 | 04 54 26.4 | | | |
| | comp=Z,3μm,21.0s | | | | | | | | |
| **N32M** | **Quiet Lake** | **145.13** | **306** | P | **PKPbc** | **03 49 25.3** | **+0.6** | | |
| | baz=118 | | | | | | | | |
| **C36M** | **Paulatuk** | **145.27** | **322** | P | **PKPbc** | **03 49 24.3** | **-0.4** | | |
| | baz=113 | | | | | | | | |
| **SKAG** | **Skagway** | **145.30** | **303** | P | **PKPab** | **03 49 25.9** | **+0.6** | | |
| | baz=119 | | | | | | | | |
| **WHY** | **Whitehorse** | **145.68** | **305** | P | **PKPdf** | **03 49 26.6** | **+0.6** | | |
| | baz=118 | | | | | | | | |
| **FARO** | **Faro, Yukon** | **145.74** | **308** | P | **PKPdf** | **03 49 26.9** | **+0.9** | | |
| | baz=116,SNR=291 | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **145.76** | **302** | P | **PKPbc** | **03 49 27.2** | **+0.6** | | |
| | baz=118 | | | | | | | | |
| **TIY** | **Taiyuan** | **145.82** | **108** | PKPbc | **PKPdf** | **03 49 27.0** | **0.0** | | |
| TIY | | | | PP | **PP** | **03 52 54.3** | **+5.0** | | |
| TIY | | | | SKKS | | 03 59 34.4 | | | |
| TIY | | | | SS | **SS** | **04 11 39.6** | **-1.6** | | |
| TIY | | | | AMB | AMB | | | | |
| | comp=Z,890nm,6.8s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,2μm,19.3s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,1μm,20.2s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,2μm,20.6s | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **146.17** | **307** | IAMs_20 | IAMs_20 | 04 58 54.4 | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **146.17** | **307** | P | **PKPbc** | **03 49 28.0** | **+0.2** | | |
| | baz=116 | | | | | | | | |
| **O30N** | **Mendenhall** | **146.26** | **304** | IAMs_20 | IAMs_20 | 05 01 22.9 | | | |
| | comp=Z,3μm,18.0s | | | | | | | | |
| **O30N** | **Mendenhall** | **146.26** | **304** | P | **PKPbc** | **03 49 28.8** | **+0.6** | | |
| | baz=117 | | | | | | | | |
| **P30M** | **Million Dollar** | **146.34** | **303** | P | **PKPbc** | **03 49 29.1** | **+0.7** | | |
| | baz=117 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **146.44** | **306** | IAMs_20 | IAMs_20 | 04 53 14.6 | | | |
| | comp=Z,4μm,22.0s | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **146.44** | **306** | P | **PKPbc** | **03 49 29.1** | **+0.4** | | |
| | baz=116 | | | | | | | | |
| **P29M** | **Windy Craggy** | **146.46** | **302** | IAMs_20 | IAMs_20 | 04 53 06.4 | | | |
| | comp=Z,3μm,22.0s | | | | | | | | |
| **P29M** | **Windy Craggy** | **146.46** | **302** | P | **PKPbc** | **03 49 29.2** | **+0.4** | | |
| | baz=118 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **146.59** | **326** | P | **PKPbc** | **03 49 28.9** | **+0.2** | | |
| | baz=109 | | | | | | | | |
| **HNS** | **HongShan** | **146.71** | **111** | ⇑PKPbc | **PKPdf** | **03 49 27.6** | **-0.8** | | |
| HNS | | | | sPKP | | 03 49 40.3 | | | |
| HNS | | | | PP | **PP** | **03 52 57.9** | **+3.5** | | |
| HNS | | | | SS | SS | 04 11 50.8 | -0.2 | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,3μm,19.1s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,1μm,19.9s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,2μm,20.6s | | | | | | | | |
| **BTO** | **Baotou** | **146.76** | **102** | *e*PKPbc | **PKPdf** | **03 49 27.9** | **-0.6** | | |
| BTO | | | | PP | **PP** | **03 52 55.6** | **+0.7** | | |
| BTO | | | | SS | SS | 04 11 51.8 | -0.2 | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,4μm,20.7s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,3μm,19.2s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,4μm,19.3s | | | | | | | | |
| **TIA** | **Tai'an** | **146.94** | **115** | PKPbc | **PKPdf** | **03 49 28.5** | **-0.3** | | |
| TIA | | | | LR | LR | | | | |
| | comp=Z,2μm,18.6s | |

baz=110
**CTGM Chitina Glacie** 148.66 303 IAMs_20 IAMs_20 04 54 32.4
comp=Z,3µm,20.0s
**CTG Chitina Glacier** 148.66 303 P **PKPbc** **03 49 35.4 +0.5**
baz=114,SNR=26
**EPYK Eagle Plains** 148.69 314 P **PKPbc** **03 49 34.7 +0.1**
baz=108
**G30M tAoh Zraii Nji** 148.70 315 IAMs_20 IAMs_20 04 55 21.8
comp=Z,4µm,22.0s
**G30M tAoh Zraii Nji** 148.70 315 P **PKPbc** **03 49 34.8 +0.1**
baz=108
**F30M Barrier River** 148.73 316 P **PKPbc** **03 49 34.7 +0.1**
baz=107
**ISLE Juniper Island** 148.96 302 IAMs_20 IAMs_20 05 02 53.5
comp=Z,4µm,19.0s
**I29M Ogilvie Camp,** 148.99 312 P **PKPbc** **03 49 35.2 -0.2**
baz=109
**DAWY Dawson** 148.99 309 P **PKPbc** **03 49 35.6 +0.2**
baz=110
**SNH Sunshine Point** 149.01 301 IAMs_20 IAMs_20 05 00 14.9
comp=Z,4µm,20.0s
**WAX Waxell Ridge** 149.13 301 IAMs_20 IAMs_20 05 02 46.0
comp=Z,4µm,19.0s
**MOY Mondy** 149.16 79 *e*PKIKP **PKPdf** **03 49 30.9 -1.2**
MOY pmax pmax
comp=Z,3µm,2.1s
**BGLC Bering Glacier** 149.19 300 P **PKPbc** **03 49 36.4 +0.4**
baz=114
**TGL Tana Glacier** 149.24 302 IAMs_20 IAMs_20 05 04 11.9
comp=Z,4µm,20.0s
**H29M Whitestone** 149.28 313 P **PKPbc** **03 49 36.5 +0.4**
baz=107
**G29M Pine Creek** 149.35 314 P **PKPbc** **03 49 36.5 +0.2**
baz=107
**CRQE Cirque** 149.36 302 P **PKPbc** **03 49 37.2 +0.6**
baz=113,SNR=24
**CRQM Cirque** 149.38 302 IAMs_20 IAMs_20 05 02 57.0
comp=Z,3µm,20.0s
**M27K Edge Creek, AK** 149.44 305 IAMs_20 IAMs_20 05 02 07.8
comp=Z,2µm,19.0s
**M27K Edge Creek, AK** 149.44 305 P **PKPbc** **03 49 37.2 +0.5**
baz=111
**BJI Beijing** 149.47 110 PKPbc **PKPdf** **03 49 32.3 -0.5**
BJI pPKP **PKPab** **03 49 42.4 +0.1**
BJI sPKP 03 49 46.3
BJI PP **PP** **03 53 08.8 -1.7**
BJI SKS **SKSdf** **03 56 36.8 -1.4**
BJI SS **SS** **04 12 24.8 +2.7**
BJI AMB AMB
comp=Z,580nm,10.0s
BJI LR LR
comp=Z,500nm,21.2s
BJI LR LR
comp=Z,500nm,21.0s
BJI LR LR
comp=Z,1µm,22.0s
MCARA **McCarthy VSAT** 149.57 303 IAMs_20 IAMs_20 04 56 58.6
comp=Z,3µm,22.0s
MCARA **McCarthy VSAT** 149.57 303 P **PKPbc** **03 49 37.7 +0.8**
baz=112,SNR=18
**ZAK Zakamensk** 149.63 82 *e*PKHKP PKPpre 03 49 32.3
ZAK pmax pmax
comp=Z,1µm,1.5s
**KAIM Kayak Island** 149.63 300 P **PKPbc** **03 49 38.3 +1.2**
baz=114
**BCAR Beaver Creek A** 149.65 306 **PKPdf** **03 49 31.1 -1.4**
**I28M Miner Creek** 149.66 311 P **PKPbc** **03 49 37.2 +0.1**
baz=106
**L27K Beaver Creek,** 149.66 306 IAMs_20 IAMs_20 04 57 45.8
comp=Z,3µm,20.0s
**L27K Beaver Creek,** 149.66 306 P **PKPbc** **03 49 37.6 +0.5**
baz=110,SNR=84
**E29M Blow River** 149.70 317 IAMs_20 IAMs_20 04 55 41.2
comp=Z,3µm,20.0s
**E29M Blow River** 149.70 317 P **PKPbc** **03 49 37.0 0.0**
baz=104
**VRDI Verde Repeater** 149.71 302 IAMs_20 IAMs_20 05 02 45.2
comp=Z,3µm,20.0s
**HMT Hamilton** 149.73 300 IAMs_20 IAMs_20 05 07 08.8
comp=Z,3µm,19.0s
**SONM Songino Array** 149.76 89 **PKPdf** **03 49 32.9 -0.3**
**SONM Songino Array** 149.76 89 PKP **PKPdf** **03 49 32.4 -0.9**
comp=Z,29nm,0.9s,baz=209,slow=2.3,SNR=101
SONM PKPbc **PKPbc** **03 49 38.2 +0.3**
comp=Z,689nm,1.0s,baz=221,slow=3.8,SNR=179
**M26K Nabesna, AK** 149.94 305 IAMs_20 IAMs_20 04 59 09.1
comp=Z,3µm,20.0s
**M26K Nabesna, AK** 149.94 305 P **PKPbc** **03 49 38.1 +0.2**
baz=111,SNR=79
**GLB Gilahina Butte** 149.95 303 IAMs_20 IAMs_20 05 02 12.5
comp=Z,3µm,20.0s
**EGAK Eagle** 149.95 310 P **PKPbc** **03 49 37.9 +0.2**
baz=108
**K27K Chicken** 150.09 308 P **PKPbc** **03 49 39.1 +1.0**
baz=108
**ULN Ulaanbaatar** 150.12 89 **PKPdf** **03 49 33.6 -0.2**
**ULN Ulaanbaatar** 150.12 89 IAMs_20 IAMs_20 05 03 42.8
comp=Z,4µm,19.0s
**ULN Ulaanbaatar** 150.12 89 P **PKPdf** **03 49 32.6 -1.2**
**ULN Ulaanbaatar** 150.12 89 *i* PKIKP **PKPdf** **03 49 32.7 -1.2**
ULN *i* 03 49 38.7
**BMRM Bremner River** 150.13 301 P **PKPbc** **03 49 39.3 +0.9**
baz=112,SNR=20
**JNU Nakatsue** 150.20 137 PKP **PKPdf** **03 49 33.4 -0.9**
comp=Z,46nm,1.2s,baz=162,slow=3.2,SNR=9.7
JNU PKPbc **PKPbc** **03 49 39.4 0.0**
comp=Z,219nm,0.8s,baz=107,slow=3.4,SNR=56
**D28M Stokes Point** 150.22 319 P **PKPbc** **03 49 38.8 +0.6**
baz=102
**F28M Old Crow** 150.23 315 P **PKPbc** **03 49 38.8 +0.5**
baz=104
**L26K Log Cabin Wild** 150.30 306 IAMs_20 IAMs_20 05 05 18.7
comp=Z,3µm,19.0s
**L26K Log Cabin Wild** 150.30 306 P **PKPbc** **03 49 39.5 +0.8**
baz=109
**Q23K Middleton Isla** 150.33 298 P **PKPbc** **03 49 39.6 +0.8**
baz=114
**E28M Babbage River** 150.34 317 IAMs_20 IAMs_20 04 56 10.1
comp=Z,3µm,21.0s
**E28M Babbage River** 150.34 317 P **PKPbc** **03 49 38.5 -0.1**
baz=103
**N25K Chitina, Valde** 150.36 303 IAMs_20 IAMs_20 05 04 58.4
comp=Z,3µm,19.0s
**N25K Chitina, Valde** 150.36 303 P **PKPbc** **03 49 39.9 +1.0**
baz=111
**I27K Kandik River** 150.38 311 P **PKPbc** **03 49 39.5 +0.6**
baz=106,SNR=81
**EYAK Cordova Ski Ar** 150.49 300 P **PKPbc** **03 49 40.2 +1.1**
baz=112,SNR=89
**H27K Steamboat Moun** 150.51 312 P **PKPbc** **03 49 39.8 +0.7**
baz=105
**G27K Doyon Strip** 150.71 314 P **PKPbc** **03 49 40.0 +0.5**
baz=104,SNR=33
**J26L Joseph Creek** 150.85 309 P **PKPbc** **03 49 40.7 +0.6**
baz=107
**SCRK Sand Creek** 150.88 307 P **PKPbc** **03 49 41.0 +0.9**
baz=107
**HARP HAARP** 150.88 304 P **PKPbc** **03 49 40.7 +0.7**
baz=109
**KLU Klutina** 150.91 302 IAMs_20 IAMs_20 04 59 54.0
comp=Z,3µm,21.0s
**KLU Klutina** 150.91 302 P **PKiKP** **03 49 41.4 +0.6**
baz=110,SNR=20
**I26K Coal Creek Min** 150.91 310 P **PKPbc** **03 49 40.7 +0.7**
baz=106
**D27M Malcolm River** 150.98 319 IAMs_20 IAMs_20 04 59 24.8
comp=Z,4µm,20.0s
**D27M Malcolm River** 150.98 319 P **PKPbc** **03 49 40.9 +0.7**
baz=100
**E27K Coleen River** 151.00 316 IAMs_20 IAMs_20 04 56 42.5
comp=Z,4µm,21.0s
**E27K Coleen River** 151.00 316 P **PKPbc** **03 49 40.7 +0.5**
baz=102
**P23K Montague Islan** 151.04 299 P **PKPbc** **03 49 41.3 +0.9**
baz=112
**IRK Irkutsk** 151.18 80 *e*PKIKP **PKPdf** **03 49 34.1 -1.0**
IRK *e* 03 49 41.3
IRK pmax pmax
comp=Z,360nm,2.1s
**PAX Paxson** 151.20 305 P **PKPbc** **03 49 41.2 +0.3**
baz=108,SNR=7.2
**GLI Glacier Island** 151.23 300 IAMs_20 IAMs_20 05 03 32.5
comp=Z,3µm,20.0s
**GLI Glacier Island** 151.23 300 P **PKPbc** **03 49 41.3 +0.5**
baz=111,SNR=39
**M24K Tolsona, Glenn** 151.23 303 IAMs_20 IAMs_20 04 59 45.5
comp=Z,3µm,21.0s
**M24K Tolsona, Glenn** 151.23 303 P **PKiKP** **03 49 42.5 +1.0**
baz=109
**DL2 Dalian** 151.24 118 PKPbc **PKPdf** **03 49 33.5 -2.1**
DL2 PP **PP** **03 53 19.0 -1.6**
DL2 SS SS 04 12 43.8 +2.2
DL2 AMB AMB
comp=Z,2µm,8.8s
DL2 LR LR
comp=Z,1µm,23.1s
DL2 LR LR
comp=Z,1µm,23.5s
DL2 LR LR
comp=Z,4µm,20.1s
**G26K Porcupine Rive** 151.56 313 P **PKPbc** **03 49 42.0 +0.6**
baz=102
**K24K Donnelly Dome** 151.59 307 P **PKPbc** **03 49 42.1 +0.5**
baz=106
**J25K Salcha River,** 151.64 308 P **PKPbc** **03 49 42.4 +0.6**
baz=105
**SCM Sheep Creek Mo** 151.66 302 IAMs_20 IAMs_20 05 00 11.7
comp=Z,2µm,21.0s
**SCM Sheep Creek Mo** 151.66 302 P **PKPbc** **03 49 42.5 +0.6**
baz=109,SNR=8.2
**PWL Port Wells** 151.79 300 P **PKPbc** **03 49 42.7 +0.5**
baz=110,SNR=7.0
**JMN Monobe** 151.79 141 IAMs_20 IAMs_20 05 00 05.3
comp=Z,3µm,20.0s
**M23K Glacier View** 151.82 302 P **PKPbc** **03 49 42.8 +0.5**
baz=109
**F26K Sheenjek River** 151.85 315 P **PKiKP** **03 49 43.1 +0.6**
baz=100
**PRP Porcupine Dome** 151.93 310 P **PKPbc** **03 49 42.7 +0.2**
baz=104,SNR=38
**C27K Jago River** 152.00 319 P **PKPbc** **03 49 43.1 +0.7**
baz=97
**KNK Knik Glacier** 152.03 301 **PKPbc** **03 49 43.3 +0.5**
KNK IAMs_20 IAMs_20 05 05 46.7
comp=Z,3µm,19.0s
**KNK Knik Glacier** 152.03 301 P **PKPbc** **03 49 43.2 +0.5**
baz=109,SNR=5.4
**SEW Seward** 152.04 298 P **PKPbc** **03 49 43.0 +0.3**
baz=111,SNR=32
**DHY Denali Highway** 152.06 305 IAMs_20 IAMs_20 05 03 08.3
comp=Z,3µm,21.0s
**DHY Denali Highway** 152.06 305 P **PKPbc** **03 49 43.7 +0.7**
baz=107,SNR=9.4
**WAT6 Susitna Watana** 152.08 304 P **PKiKP** **03 49 43.9 +0.6**
baz=107,SNR=472
**SML Sawmill** 152.10 302 P **PKPbc** **03 49 43.4 +0.5**
baz=108,SNR=9.6
**H25L Birch Creek** 152.21 312 P **PKPbc** **03 49 43.7 +0.8**
baz=102
**HDA Harding Lake** 152.24 308 IAMs_20 IAMs_20 05 00 22.9
comp=Z,4µm,21.0s
**HDA Harding Lake** 152.24 308 P **PKPbc** **03 49 43.3 +0.2**
baz=104,SNR=16
**XLT XiLinHaoTe** 152.25 104 *e*PKPbc **PKPdf** **03 49 36.8 -0.3**
XLT pPKP PKPbc 03 49 44.8 +0.9
XLT PKPab **sPKPbc** **03 49 54.0 -2.1**
XLT PP **PP** **03 53 25.0 -1.7**
XLT SS SS 04 12 50.6 -2.7
XLT LR LR
comp=Z,2µm,20.6s
XLT LR LR
comp=Z,2µm,20.9s
**O22K Cooper Landing** 152.30 299 P **PKPbc** **03 49 43.7 +0.4**
baz=110
**ILAR Eielson Array** 152.31 308 PKP **PKPdf** **03 49 33.5 -2.9**
comp=Z,14nm,1.0s,baz=321,slow=1.4,SNR=43
ILAR PKPbc **PKPbc** **03 49 43.9 +0.7**
comp=Z,487nm,1.0s,baz=139,slow=3.2,SNR=177
**INCN Inchon** 152.32 126 **PKPdf** **03 49 37.0 -0.3**
**INCN Inchon** 152.32 126 IAMs_20 IAMs_20 04 51 40.5
comp=Z,3µm,21.0s
**INCN Inchon** 152.32 126 P **PKPdf** **03 49 36.1 -1.2**
**INCN Inchon** 152.32 126 PKIKP **PKPdf** **03 49 37.0 -0.3**
**GHO Glory Hole Cre** 152.36 301 IAMs_20 IAMs_20 04 59 14.3
comp=Z,3µm,22.0s
**F25K Christian Rive** 152.39 314 IAMs_20 IAMs_20 04 58 21.5
comp=Z,3µm,20.0s
**F25K Christian Rive** 152.39 314 P **PKPbc** **03 49 44.2 +0.7**
baz=100
**PMR Palmer** 152.40 301 P **PKPbc** **03 49 44.0 +0.5**
baz=108,SNR=10
**HJU Haeju** 152.40 124 PKPbc **PKPdf** **03 49 36.1 -1.3**
HJU AmB
comp=Z,484nm,1.5s
HJU AMS AMS
comp=Z,185nm,3.5s
**G25K Bearman Lake** 152.42 313 P **PKiKP** **03 49 44.5 +0.9**
baz=101
**C26K Camden Bay** 152.44 320 P **PKiKP** **03 49 44.3 +0.7**
baz=96
**WAT1 Susitna Watana** 152.51 304 P **PKPbc** **03 49 44.0 +0.2**
baz=106
**RC01 Rabbit Creek A** 152.51 300 IAMs_20 IAMs_20 05 02 59.4
comp=Z,3µm,19.0s
**RC01 Rabbit Creek A** 152.51 300 P **PKPbc** **03 49 44.5 +0.7**
baz=109,SNR=21
**BRSE Bradley Lake S** 152.52 297 P **PKPbc** **03 49 44.5 +0.6**
baz=111,SNR=24
**BRLK Bradley Lake** 152.59 297 IAMs_20 IAMs_20 05 00 51.4
comp=Z,3µm,20.0s
**POKR Poker Plat Res** 152.61 309 P **PKPbc** **03 49 44.0 +0.1**
baz=103
**KDAK Kodiak Island** 152.67 292 **PKPbc** **03 49 44.7 +0.5**
**KDAK Kodiak Island** 152.67 292 PKPbc **PKPbc** **03 49 44.8 +0.7**
comp=Z,315nm,0.9s,baz=99,slow=2.2,SNR=70
**KDAK Kodiak Island** 152.67 292 P **PKPbc** **03 49 44.9 +0.7**
baz=113
**KDAK Kodiak Island** 152.67 292 PKIKP **PKPbc** **03 49 44.7 +0.5**
**COLA College** 152.73 308 P **PKPbc** **03 49 44.1 0.0**
baz=103
**COLA College** 152.73 308 ⇓PKIKP **PKPdf** **03 49 33.8 -3.2**
**WRH Wood River Hil** 152.74 307 IAMs_20 IAMs_20 05 00 58.1
comp=Z,4µm,21.0s
**FIS Fire Island** 152.75 300 IAMs_20 IAMs_20 05 07 04.8
comp=Z,3µm,20.0s
**OHAK Old Harbor** 152.79 290 P **PKPbc** **03 49 45.0 +0.5**
baz=114
**KSAR Wonju Array Be** 152.82 128 **PKPdf** **03 49 37.5 -0.5**
**KSAR Wonju Array Be** 152.82 128 PKIKP **PKPdf** **03 49 37.5 -0.5**
**KSRS Korea Array** 152.84 128 PKP **PKPdf** **03 49 37.0 -1.0**
comp=Z,20nm,1.1s,baz=207,slow=1.8,SNR=60
KSRS PKPbc **PKPbc** **03 49 46.0 +0.7**
comp=Z,65nm,0.8s,baz=207,slow=2.2,SNR=39
KSRS PKPab **sPKPbc** **03 49 56.5 -1.0**
comp=Z,157nm,1.0s,baz=213,slow=3.7,SNR=23
KSRS PP **PP** **03 53 30.1 +0.5**
comp=Z,4.0nm,0.9s,baz=205,slow=5.4,SNR=3.8
**D25K Kavik River** 152.89 318 P **PKPbc** **03 49 44.5 0.0**
baz=96
**M22K Willow** 152.89 301 IAMs_20 IAMs_20 05 05 24.4
comp=Z,3µm,20.0s
**M22K Willow** 152.89 301 P **PKPbc** **03 49 45.2 +0.6**
baz=107
**SYI Shuyak Island** 152.89 294 IAMs_20 IAMs_20 05 08 22.0
comp=Z,3µm,19.0s
**Q20K Shuyak Island** 152.89 294 P **PKPbc** **03 49 45.3 +0.6**
baz=112
**MDM Murphy Dome** 152.91 308 IAMs_20 IAMs_20 04 59 43.5
comp=Z,3µm,20.0s
**HOM Homer** 152.92 296 IAMs_20 IAMs_20 05 00 11.9
comp=Z,3µm,20.0s
**HOM Homer** 152.92 296 P **PKPbc** **03 49 45.4 +0.7**
baz=110,SNR=9.7
**MCK McKinley** 152.92 306 P **PKPbc** **03 49 45.4 +0.8**
baz=104,SNR=20
**G24K Hadweenzic Riv** 152.95 312 IAMs_20 IAMs_20 05 00 15.3
comp=Z,3µm,20.0s
**G24K Hadweenzic Riv** 152.95 312 P **PKPbc** **03 49 45.3 +0.7**
baz=100
**H24K Noodor Dome** 152.95 310 IAMs_20 IAMs_20 04 56 46.4
comp=Z,4µm,22.0s
**H24K Noodor Dome** 152.95 310 P **PKPbc** **03 49 45.1 +0.4**
baz=101
**SII Sitkinak Islan** 152.96 289 P **PKPbc** **03 49 45.5 +0.6**
baz=115,SNR=20
**CAPN Captain Cook N** 153.06 299 P **PKiKP** **03 49 45.9 +0.8**
baz=109
**SUA Susitna One** 153.09 300 IAMs_20 IAMs_20 05 03 28.8
comp=Z,3µm,21.0s
**SUA Susitna One** 153.09 300 P **PKiKP** **03 49 46.1 +0.7**
baz=108,SNR=13
**CUT Chulitna** 153.15 302 IAMs_20 IAMs_20 05 01 16.1
comp=Z,3µm,22.0s
**CUT Chulitna** 153.15 302 P **PKiKP** **03 49 46.0 +0.7**
baz=106,SNR=14
**NEA2 Nenana** 153.18 307 P **PKPbc** **03 49 45.3 +0.2**
baz=103,SNR=21
**F24K Squaw Lake** 153.23 314 P **PKiKP** **03 49 46.2 +0.8**
baz=98
**PYAG Pyongyang** 153.24 123 PKPbc **PKPdf** **03 49 37.8 -0.8**
PYAG PP **PP** **03 53 34.1 +2.2**
PYAG AmB
comp=Z,982nm,2.7s
PYAG AMS AMS
comp=Z,32nm,2.3s
**I23K Minto, Yukon-K** 153.42 309 P **PKPbc** **03 49 45.7 +0.1**
baz=101
**R18K Karluk** 153.50 291 P **PKPbc** **03 49 46.5 +0.5**
baz=113
**SUJ Sinuiju** 153.53 120 PKPbc **PKPdf** **03 49 37.8 -1.1**
SUJ AMS AMS
comp=Z,266nm,5.8s
**O20K Slope Mountain** 153.53 297 P **PKPbc** **03 49 46.7 +0.5**
baz=109
**E24K Your Creek** 153.53 315 IAMs_20 IAMs_20 04 58 35.5
comp=Z,4µm,21.0s
**E24K Your Creek** 153.53 315 P **PKPbc** **03 49 46.6 +0.6**
baz=96
**SKT Skwentna** 153.60 301 P **PKPbc** **03 49 46.6 +0.4**
baz=106
**Q19K Cape Douglas,** 153.62 294 IAMs_20 IAMs_20 04 59 37.4
comp=Z,3µm,22.0s
**Q19K Cape Douglas,** 153.62 294 P **PKPbc** **03 49 46.5 +0.2**
baz=111
**H23K Yukon River** 153.62 310 P **PKPbc** **03 49 46.6 +0.5**
baz=100
**P19K Oil Pt** 153.67 296 IAMs_20 IAMs_20 05 01 19.4
comp=Z,3µm,20.0s
**P19K Oil Pt** 153.67 296 P **PKPbc** **03 49 46.6 +0.2**
baz=110
**N20K Mount Spurr** 153.68 299 P **PKPbc** **03 49 46.7 +0.2**
baz=107
**SPCR Spurr Chakacha** 153.68 299 P **PKPbc** **03 49 47.0 +0.6**
baz=107
**C24K Franklin Bluff** 153.74 319 IAMs_20 IAMs_20 04 57 51.8
comp=Z,3µm,20.0s
**C24K Franklin Bluff** 153.74 319 P **PKPbc** **03 49 46.7 +0.5**
baz=93
**D24K Happy Valley** 153.75 318 P **PKPbc** **03 49 46.5 +0.3**
baz=94
**BPAW Bear Paw Mtn.** 153.88 306 P **PKPbc** **03 49 47.0 +0.2**
baz=102,SNR=17
**G23K Bananza Creek** 153.95 312 IAMs_20 IAMs_20 04 59 17.8
comp=Z,3µm,22.0s
**G23K Bananza Creek** 153.95 312 P **PKiKP** **03 49 47.8 +0.9**
baz=98
**E23K Chandalar** 153.95 315 IAMs_20 IAMs_20 04 59 31.6
comp=Z,4µm,21.0s
**E23K Chandalar** 153.95 315 P **PKPbc** **03 49 47.2 +0.3**
baz=95
**MLY Manley** 153.97 308 IAMs_20 IAMs_20 04 57 59.6
comp=Z,4µm,21.0s
**MLY Manley** 153.97 308 P **PKPbc** **03 49 46.9 -0.1**
baz=101,SNR=13
**TOLK Toolik Lake Re** 153.98 316 IAMs_20 IAMs_20 04 52 44.4
comp=Z,4µm,22.0s
**TOLK Toolik Lake Re** 153.98 316 P **PKPbc** **03 49 47.4 +0.5**
baz=94
**COLD Coldfoot** 154.08 313 P **PKiKP** **03 49 47.9 +0.8**
baz=96
**Q18K Katmai Hardscr** 154.18 293 P **PKPbc** **03 49 47.7 +0.1**
baz=111
**INU Inuyama** 154.28 145 IAMs_20 IAMs_20 05 00 41.3
comp=Z,2µm,21.0s
**M20K Styx River** 154.30 300 IAMs_20 IAMs_20 05 09 20.8
comp=Z,3µm,19.0s
**M20K Styx River** 154.30 300 P **PKPbc** **03 49 47.7 -0.1**
baz=105
**O19K Port Alsworth** 154.37 296 P **PKPbc** **03 49 47.6 -0.2**
baz=108
**H22K Ishtalitna Cre** 154.38 310 P **PKPbc** **03 49 48.3 +0.6**
baz=98
**D23K Nanushuk River** 154.41 317 P **PKiKP** **03 49 48.5 +0.8**
baz=92
**C23K Itkillik River** 154.41 319 IAMs_20 IAMs_20 04 56 48.4
comp=Z,3µm,22.0s
**C23K Itkillik River** 154.41 319 P **PKiKP** **03 49 48.4 +0.7**
baz=91,SNR=10
**CHUM Lake Minchumin** 154.41 305 P **PKPbc** **03 49 48.1 +0.3**
baz=102
**SNY Shenyang** 154.45 116 ⇓PKPbc **PKPdf** **03 49 39.5 -0.7**
SNY PP **PP** **03 53 41.3 +2.4**
SNY SKKS 04 00 19.5
SNY SS **SS** **04 13 18.4 +1.5**
SNY AMB AMB
comp=Z,1µm,14.9s
SNY LR LR
comp=Z,2µm,19.2s
SNY LR LR
comp=Z,1µm,17.3s
SNY LR LR
comp=Z,3µm,20.6s
**Q17K Contact Creek** 154.47 291 P **PKPbc** **03 49 48.4 +0.2**
baz=111
**R17L Mt. Peulik Vol** 154.47 290 P **PKPbc** **03 49 48.5 +0.3**
baz=112
**P18K Big Mountain,** 154.54 294 IAMs_20 IAMs_20 05 02 18.6
comp=Z,3µm,20.0s
**P18K Big Mountain,** 154.54 294 P **PKPbc** **03 49 48.1 -0.2**
baz=109
**N19K Bonanza Creek** 154.63 298 IAMs_20 IAMs_20 04 59 56.6
comp=Z,4µm,22.0s
**N19K Bonanza Creek** 154.63 298 P **PKPbc** **03 49 48.1 -0.4**
baz=107
**O18K Koktuh Hills** 154.68 295 IAMs_20 IAMs_20 05 06 23.2
comp=Z,3µm,20.0s
**O18K Koktuh Hills** 154.68 295 P **PKPbc** **03 49 48.4 -0.2**
baz=108
**E22K Anaktuvuk Pass** 154.78 315 IAMs_20 IAMs_20 04 57 20.8
comp=Z,4µm,21.0s
**E22K Anaktuvuk Pass** 154.78 315 P **PKPbc** **03 49 49.0 +0.5**
baz=93
**L20K Farewell, AK** 154.79 302 P **PKPbc** **03 49 48.4 -0.3**
baz=104
**F22K John River** 154.87 314 P **PKiKP** **03 49 49.5 +0.8**
baz=94
**M19K Big River Lodg** 154.88 300 P **PKPbc** **03 49 49.0 +0.1**
baz=104
**H21K Melozitna Rive** 154.92 309 IAMs_20 IAMs_20 05 07 32.7
comp=Z,3µm,20.0s
**H21K Melozitna Rive** 154.92 309 P **PKPbc** **03 49 49.5 +0.6**
baz=98
**CNBA Chernabura Isl** 154.96 282 IAMs_20 IAMs_20 04 59 34.3
comp=Z,4µm,22.0s
**CHNA Chernabura Isl** 154.96 282 P **PKPbc** **03 49 49.3 +0.1**
baz=116
**CHGN Chignik** 154.99 286 P **PKPbc** **03 49 49.1 -0.1**
baz=114
**Q16K King Salmon** 155.00 292 P **PKPbc** **03 49 49.5 +0.3**
baz=110
**P17K Kvichak River** 155.07 293 P PKPdf 03 49 49.5 +9.0
baz=109
**K20K Telida** 155.07 304 IAMs_20 IAMs_20 05 02 15.9
comp=Z,3µm,21.0s
**K20K Telida** 155.07 304 P PKPdf 03 49 49.5 +9.1
baz=102
**D22K Ayikyak River** 155.13 317 P PKPdf 03 49 50.1 +10
baz=91
**L19K White Mountain** 155.16 301 P PKPdf 03 49 49.5 +8.9
baz=104
**N18K Kilae Creek** 155.25 297 IAMs_20 IAMs_20 05 03 52.2
comp=Z,3µm,20.0s
**N18K Kilae Creek** 155.25 297 P PKPdf 03 49 49.9 +9.1
baz=106
**J20K Nowinta River** 155.26 305 IAMs_20 IAMs_20 04 59 01.8
comp=Z,3µm,20.0s
**J20K Nowinta River** 155.26 305 P PKPdf 03 49 49.9 +9.3
baz=100
**G21K Allakaket** 155.31 311 IAMs_20 IAMs_20 04 59 48.7
comp=Z,4µm,22.0s
**G21K Allakaket** 155.31 311 P PKPdf 03 49 50.2 +10
baz=95
**F21K Alatna River** 155.36 313 IAMs_20 IAMs_20 05 01 58.9
comp=Z,4µm,20.0s
**F21K Alatna River** 155.36 313 P **PKPab** **03 50 06.7 +0.3**
baz=94
**B22K Teshekpuk Lake** 155.36 320 IAMs_20 IAMs_20 05 05 01.5
comp=Z,3µm,20.0s
**B22K Teshekpuk Lake** 155.36 320 P **PKPab** **03 50 07.2 +1.0**
baz=87,SNR=5.6
**I20K Naaghedeneel** 155.50 307 IAMs_20 IAMs_20 05 01 13.1
comp=Z,3µm,21.0s
**I20K Naaghedeneel** 155.50 307 P **PKPab** **03 50 07.3 +0.4**

baz=98
**O17K Koliganek Bris** 155.56 294 P **PKPab** 03 50 08.0 +0.6
baz=107
**E21K Killik River** 155.59 316 P **PKPab** 03 50 07.8 +0.5
baz=91
**SDPT Sand Point** 155.65 283 P **PKPab** 03 50 08.8 +0.9
baz=115
**MAJO Matsushiro** 155.75 146 **PKPdf** 03 49 41.8 -0.4
**MAJO Matsushiro** 155.75 146 PKIKP **PKPdf** 03 49 41.8 -0.4
**MJAR Matsushiro Arr** 155.75 146 PKP **pPKPdf** 03 49 41.5 -0.7
comp=Z,16nm,1.0s,baz=210,slow=1.9,SNR=46
MJAR PKPbc
comp=Z,40nm,1.0s,baz=174,slow=2.2,SNR=28
MJAR PKPab **PKPab** 03 50 08.9 +0.1
comp=Z,52nm,0.9s,baz=186,slow=4.5,SNR=21
**H20K Anotleneega Mo** 155.76 309 P **PKPab** 03 50 08.6 +0.4
baz=96
**P16K Nushagak River** 155.77 292 P **PKPab** 03 50 08.8 +0.5
baz=108
**B21K Ikpikpuk River** 155.80 319 IAMs_20 IAMs_20 04 59 52.4
comp=Z,3μm,20.0s
**B21K Ikpikpuk River** 155.80 319 P **PKPab** 03 50 09.1 +0.9
baz=87
**A22K Sinclair Lake** 155.82 322 P **PKPab** 03 50 09.4 +1.2
baz=84
**N17K Nushagak Hills** 155.83 296 P **PKPab** 03 50 09.0 +0.5
baz=106
**J19K Poorman** 155.87 305 IAMs_20 IAMs_20 05 01 25.9
comp=Z,3μm,20.0s
**J19K Poorman** 155.87 305 P **PKPab** 03 50 09.0 +0.3
baz=99
**CIT Chita** 155.94 87 *e*PKIKP **PKPdf** **03 49 41.2 -0.8**
CIT *e* 03 49 52.8
CIT *e* 03 50 09.0
CIT *e* 03 53 42.8
CIT pmax pmax
comp=Z,1μm,1.5s
**O16K Kokwok River B** 156.00 294 P **PKPab** 03 50 09.2 -0.1
baz=107
**L18K Granite Mounta** 156.01 300 P **PKPab** 03 50 09.5 +0.2
baz=102
**M17K Holitna River** 156.17 298 P **PKPab** 03 50 10.7 +0.7
baz=104
**F20K Avaraart Lake** 156.22 312 P **PKPab** 03 50 10.5 +0.5
baz=92
**J18K Innoko River** 156.26 303 IAMs_20 IAMs_20 05 02 05.8
comp=Z,3μm,20.0s
**J18K Innoko River** 156.26 303 P **PKPab** 03 50 10.9 +0.6
baz=100
**A21K Barrow** 156.31 323 P **PKPab** 03 50 11.4 +1.1
baz=82
**E20K Nigu River** 156.41 315 P **PKPab** 03 50 12.0 +1.0
baz=89
**H19K Roundabout Mou** 156.41 308 IAMs_20 IAMs_20 05 08 21.1
comp=Z,3μm,19.0s
**H19K Roundabout Mou** 156.41 308 P **PKPab** 03 50 11.5 +0.6
baz=95
**GCSA Galena City Sc** 156.51 306 P **PKPab** 03 50 12.6 +1.3
baz=96
**D20K Etivluk River** 156.56 316 P **PKPab** 03 50 12.5 +1.0
baz=88
**N16K Nishlik Lake** 156.57 295 P **PKPab** 03 50 11.9 +0.1
baz=105
**S12K Black Hills** 156.62 283 IAMs_20 IAMs_20 05 00 15.3
comp=Z,4μm,22.0s
**S12K Black Hills** 156.62 283 P **PKPab** 03 50 12.0 -0.1
baz=114
**B20K Meade River** 156.66 320 IAMs_20 IAMs_20 04 58 53.2
comp=Z,3μm,20.0s
**B20K Meade River** 156.66 320 P **PKPab** 03 50 12.8 +1.0
baz=84
**O15K Ungalikthiuk R** 156.72 292 P **PKPab** 03 50 11.8 -0.6
baz=107
**G19K Purcell Mounta** 156.72 310 IAMs_20 IAMs_20 05 01 07.2
comp=Z,3μm,21.0s
**G19K Purcell Mounta** 156.72 310 P **PKPab** 03 50 12.9 +0.6
baz=93
**L17K Donlin** 156.73 300 P **PKPab** 03 50 13.4 +1.0
baz=101
**M16K Timber Creek** 156.79 297 IAMs_20 IAMs_20 04 57 39.9
comp=Z,4μm,21.0s
**M16K Timber Creek** 156.79 297 P **PKPab** 03 50 14.0 +1.3
baz=104
**E19K Redstone River** 156.81 313 P **PKPab** 03 50 13.0 +0.4
baz=90
**K17K Iditarod** 156.84 301 P **PKPab** 03 50 13.7 +0.9
baz=100
**CN2 Changchun** 156.85 116 PKP **PKPdf** **03 49 41.8 -1.6**
CN2 PP **PP** **03 53 49.6 -2.6**
CN2 SS SS 04 13 40.3 -2.5
CN2 AMB AMB
comp=Z,500nm,6.0s
CN2 LR LR
comp=Z,2μm,19.0s
CN2 LR LR
comp=Z,2μm,19.0s
CN2 LR LR
comp=Z,2μm,20.1s
**F19K Shaleruckik Mo** 157.02 312 P **PKPab** 03 50 13.9 +0.5
baz=91
**D19K Kuna River** 157.12 316 P **PKPab** 03 50 14.9 +1.0
baz=87
**N15K Kwethluk River** 157.12 294 IAMs_20 IAMs_20 05 05 12.8
comp=Z,4μm,20.0s
**N15K Kwethluk River** 157.12 294 P **PKPab** 03 50 15.3 +1.1
baz=105
**H18K Honhosa River** 157.18 307 IAMs_20 IAMs_20 05 05 11.9
comp=Z,3μm,20.0s
**H18K Honhosa River** 157.18 307 P **PKPab** 03 50 15.6 +1.4
baz=94
**L16K Owhat River** 157.19 298 IAMs_20 IAMs_20 05 16 56.3
comp=Z,3μm,20.0s
**L16K Owhat River** 157.19 298 P **PKPab** 03 50 15.7 +1.3
baz=102
**J17K VABM Dome** 157.30 303 IAMs_20 IAMs_20 05 08 26.9
comp=Z,4μm,20.0s
**J17K VABM Dome** 157.30 303 P **PKPab** 03 50 16.1 +1.3
baz=98
**G18K Tagagawik** 157.35 309 IAMs_20 IAMs_20 05 10 44.2
comp=Z,3μm,20.0s
**G18K Tagagawik** 157.35 309 P **PKPab** 03 50 15.8 +0.9
baz=92
**O14K Tigyukauivet M** 157.45 292 P **PKPab** 03 50 16.6 +1.1
baz=106
**M15K Kasigluk River** 157.54 295 P **PKPab** 03 50 16.8 +0.9
baz=103
**C19K Lookout Ridge** 157.60 318 P **PKPab** 03 50 17.3 +1.3
baz=84
**JMM Marumori** 157.71 150 IAMs_20 IAMs_20 05 03 51.4
comp=Z,3μm,20.0s
**F18K Selawik** 157.77 311 P **PKPab** 03 50 17.4 +0.7
baz=90
**H17K Granite Mounta** 157.82 307 P **PKPab** 03 50 17.8 +0.8
baz=94
**N14K Kuskokwak Cree** 157.83 293 P **PKPab** 03 50 18.3 +1.2
baz=104
**A19K Wainwright** 157.96 321 P **PKPab** 03 50 18.7 +1.3
baz=79
**J16K Anvik River** 157.97 302 IAMs_20 IAMs_20 05 02 57.6
comp=Z,3μm,22.0s
**J16K Anvik River** 157.97 302 P **PKPab** 03 50 18.7 +1.0
baz=97
**I17K Unalakleet** 158.07 304 IAMs_20 IAMs_20 05 10 02.4
comp=Z,3μm,20.0s
**I17K Unalakleet** 158.07 304 P **PKPab** 03 50 19.0 +0.9
baz=96
**E18K Tukpahlearik C** 158.12 313 P **PKPab** 03 50 18.8 +0.6
baz=87
**L15K Ungalak Mounta** 158.12 298 P **PKPab** 03 50 19.4 +1.0
baz=100
**UNV Unalaska Valle** 158.14 275 P **PKPab** 03 50 19.6 +1.0
baz=117
**G17K Kiwalik Mounta** 158.16 308 P **PKPab** 03 50 19.5 +1.0
baz=92
**M14K Bethel** 158.16 295 P **PKPab** 03 50 19.8 +1.2
baz=102
**C18K Utukok River** 158.23 317 P **PKPab** 03 50 19.6 +0.9
baz=83
**K15K Wolf Creek Mou** 158.25 299 IAMs_20 IAMs_20 05 17 24.2
comp=Z,3μm,21.0s
**K15K Wolf Creek Mou** 158.25 299 P **PKPab** 03 50 20.4 +1.4
baz=99
**B18K Kokolik River** 158.35 319 P **PKPab** 03 50 20.8 +1.6
baz=81
**F17K Baldwin Pennin** 158.41 311 IAMs_20 IAMs_20 05 01 06.7
comp=Z,3μm,20.0s
**F17K Baldwin Pennin** 158.41 311 P **PKPab** 03 50 20.1 +0.7
baz=89
**E17K Hotham Inlet** 158.61 312 P **PKPab** 03 50 21.2 +0.8
baz=86
**L14K Kuka Creek** 158.62 297 IAMs_20 IAMs_20 05 04 28.3
comp=Z,3μm,20.0s
**L14K Kuka Creek** 158.62 297 P **PKPab** 03 50 21.3 +0.8
baz=100
**BOD Bodaibo** 158.63 73 *e*PKIKP **PKPdf** **03 49 41.9 -3.2**
BOD pmax pmax
comp=Z,163nm,1.2s
**M13K Dall Lake** 158.76 294 P **PKPab** 03 50 22.5 +1.3
baz=102
**H16K Elim** 158.80 306 P **PKPab** 03 50 22.0 +0.8
baz=92
**G16K Koyuk River** 158.87 308 P **PKPab** 03 50 22.4 +0.9
baz=90
**RDOG Red Dog Mine** 158.94 315 P **PKPab** 03 50 22.3 +0.6
baz=83
**NIKH Nikolski High** 158.97 271 P **PKPab** 03 50 23.1 +0.8
baz=119
**C17K DeLong Mountai** 158.98 316 P **PKPab** 03 50 23.2 +1.2
baz=82
**D17K Noatak River** 159.04 314 P **PKPab** 03 50 23.1 +0.9
baz=84
**BNX BinXian** 159.22 115 ⇓PKP **PKPdf** **03 49 44.6 -1.6**
BNX pPKP **sPKPdf** **03 49 56.1 -2.4**
BNX sPKP 03 49 57.9
BNX PP **PP** **03 54 04.3 -0.9**
BNX SS SS 04 14 10.8 +2.8
BNX AMB AMB
comp=Z,1μm,12.2s
BNX LR LR
comp=Z,2μm,20.4s
BNX LR LR
comp=Z,2μm,18.8s
BNX LR LR
comp=Z,4μm,20.9s
**J14K Nanvaranak Lak** 159.24 300 P **PKPab** 03 50 24.7 +1.6
baz=96
**MDJ Mudanjiang** 159.40 120 PKP **PKPdf** **03 49 45.3 -1.2**
MDJ SS SS 04 14 10.6 +0.7
MDJ AMB AMB
comp=Z,520nm,11.3s
MDJ LR LR
comp=Z,3μm,18.5s
MDJ LR LR
comp=Z,2μm,19.9s
MDJ LR LR
comp=Z,5μm,19.2s
**G15K Niukluk** 159.58 307 P **PKPab** 03 50 25.5 +0.8
baz=90
**C16K Lisburne Hills** 159.80 316 P **PKPab** 03 50 26.3 +0.8
baz=80
**F15K North Star Dit** 159.82 309 P **PKPab** 03 50 26.8 +1.1
baz=87
**M11K Mekoryuk** 160.14 293 P **PKPab** 03 50 27.8 +0.6
baz=101
**USRK Ussuriysk Ar.** 160.15 125 PKP **PKPdf** **03 49 45.6 -1.7**
comp=Z,12nm,1.0s,baz=248,slow=3.0,SNR=20
USRK PKPab **PKPab** 03 50 27.4 -0.2
comp=Z,180nm,1.1s,baz=244,slow=3.4,SNR=61
USRK PP **PP** **03 54 08.8 -1.3**
comp=Z,7.9nm,1.1s,baz=273,slow=5.6,SNR=3.7
**ANM Nome** 160.15 305 P **PKPab** 03 50 27.3 +0.1
baz=90
**F14K Arctic Creek** 160.53 308 P **PKPab** 03 50 29.7 +1.0
baz=86
**P08K Saint George I** 160.84 281 P **PKPab** 03 50 29.2 -1.1
baz=110
**TNA Tin City** 161.18 309 P **PKPab** 03 50 32.4 +0.8
baz=84
**ERM Erimo** 162.23 151 **PKPdf** **03 49 50.0 +0.4**
ERM **PKPab** **03 50 37.3 +0.6**
**ERM Erimo** 162.23 151 PKIKP **PKPdf** **03 49 50.0 +0.4**
ERM 03 50 37.3
**HEH HeiHe** 162.25 105 PKP **PKPdf** **03 49 47.8 -1.5**
HEH pPKP **pPKPdf** **03 49 57.1 -1.4**
HEH AMB AMB
comp=Z,2μm,10.0s
HEH LR LR
comp=Z,2μm,22.8s
HEH LR LR
comp=Z,3μm,21.0s
HEH LR LR
comp=Z,5μm,24.9s
**ADK Adak** 162.55 261 **PKPdf** **03 49 49.8 +0.2**
ADK **PKPab** **03 50 37.2 -0.8**
**ADK Adak** 162.55 261 PKIKP **PKPdf** **03 49 49.8 +0.2**
ADK 03 50 37.2
**TIXI Tiksi** 162.83 28 **PKPab** **03 50 39.6 +0.9**
**TIXI Tiksi** 162.83 28 PKP2 **PKPab** **03 50 39.6 +0.9**
**KLR Kul'dur** 163.77 114 PKP **PKPdf** **03 49 50.0 -0.9**
comp=Z,45nm,1.1s,baz=298,slow=3.8,SNR=58
KLR PKPab **PKPab** 03 50 42.7 -0.7
comp=Z,170nm,1.1s,baz=235,slow=4.4,SNR=25
KLR PP **PP** 03 54 26.0 -3.6
comp=Z,25nm,1.2s,baz=232,slow=6.3,SNR=8.2
**ZEA Zeya** 164.03 94 *i* PKIKP **PKPdf** **03 49 49.3 -1.6**
ZEA *e* 03 50 44.1
ZEA *e* 03 54 29.7
ZEA *e* 04 14 55.9
ZEA pmax pmax
comp=Z,600nm,6.2s
ZEA pmax pmax
comp=N,20nm,1.6s
ZEA pmax pmax
comp=Z,60nm,1.5s
ZEA pmax pmax
comp=E,30nm,1.8s
ZEA pmax pmax
comp=N,60nm,1.6s
ZEA pmax pmax
comp=Z,100nm,1.5s
ZEA pmax pmax
comp=N,400nm,5.6s
ZEA pmax pmax
comp=Z,800nm,7.2s
**YSS Yuzh-Sakhalins** 166.62 142 **PKPdf** **03 49 53.1 -0.2**
YSS **PKPab** **03 50 56.9 +0.9**
**YSS Yuzh-Sakhalins** 166.62 142 *c* *i* PKIKP **PKPdf** **03 49 52.7 -0.6**
YSS *e* 03 50 03.0
YSS *e* 03 50 56.7
YSS *e* 03 54 42.7
YSS *e* PPS PPS 04 08 27.1
YSS *e* SS SS 04 15 21.1 -2.9
YSS pmax pmax
comp=Z,1μm,4.8s
YSS pmax pmax
comp=Z,70nm,1.1s
YSS pmax pmax
comp=Z,1μm,6.1s
YSS pmax pmax
comp=N,400nm,5.5s
YSS pmax pmax
comp=E,500nm,5.6s
**YAK Yakutsk** 166.96 62 **PKPab** **03 50 57.7 +0.6**
**YAK Yakutsk** 166.96 62 PKP **PKPdf** **03 49 50.6 -2.4**
comp=E,36nm,0.8s,baz=327,slow=1.4,SNR=1.8
YAK PKPab **PKPab** 03 50 57.3 +0.2
comp=E,315nm,0.9s,baz=127,slow=0.8,SNR=37
YAK PP **PP** 03 54 46.3 +0.2
comp=E,14nm,0.4s,baz=80,slow=4.8,SNR=7.6
**YAK Yakutsk** 166.96 62 *e*PKIKP **PKPdf** **03 49 49.4 -3.7**
YAK *e* 03 54 41.9
YAK *e*SS SS 04 15 23.9 -4.1
YAK *e*SSS SSS 04 22 02.1
YAK pmax pmax
comp=Z,65nm,0.9s
YAK pmax pmax
comp=N,21nm,1.9s
YAK pmax pmax
comp=E,14nm,1.3s
YAK pmax pmax
comp=Z,901nm,2.8s
YAK pmax pmax
comp=N,280nm,5.8s
YAK pmax pmax
comp=E,539nm,6.3s
**GRNR Gornyy** 167.04 117 ⇑ *i* PKIKP **PKPdf** **03 49 52.9 -0.6**
GRNR pmax pmax
comp=Z,20nm,0.8s
**SHEM Shemya Is, Ala** 167.76 252 PKPab **PKPab** 03 51 00.8 -0.1
comp=Z,85nm,1.1s,baz=56,slow=6.9,SNR=5.3
**UGL Uglegorsk** 168.19 135 *e*PKIKP **PKPdf** **03 49 54.6 +0.3**
UGL pmax pmax
comp=Z,170nm,1.1s
**BILL Bilibino** 168.85 337 PKPdf **PKPdf** **03 49 48.8 -5.5**
BILL **PKPab** **03 51 05.7 +0.4**
**BILL Bilibino** 168.85 337 *de*PKIKP **PKPdf** **03 49 49.7 -4.5**
BILL *e* 03 54 50.7
BILL *e*PPP PPP 03 58 52.6
BILL *i* SS SS 04 15 47.2 +1.0
BILL pmax pmax
comp=Z,71nm,1.4s
**TYV Tymovskoe** 169.85 131 *e*PKIKP **PKPdf** **03 49 55.4 +0.1**
TYV pmax pmax
comp=Z,1μm,4.8s
TYV pmax pmax
comp=Z,90nm,1.4s
**NKL Nikolayevsk** 170.59 116 *e*PKIKP **PKPdf** **03 49 52.8 -2.9**
NKL *e*S **PP** **03 55 02.4 -2.1**
NKL pmax pmax
comp=N,173nm,1.3s
NKL pmax pmax
comp=E,167nm,1.4s
NKL pmax pmax
comp=Z,921nm,1.4s
**PET Petropavlovsk** 174.37 205 **PKPdf** **03 49 56.5 -0.8**
**PET Petropavlovsk** 174.37 205 *i* PKIKP **PKPdf** **03 49 55.8 -1.5**
PET *e* 03 51 29.8
PET *e* 03 55 25.4
PET *e*SS SS 04 16 43.9 +3.6
PET pmax pmax
comp=Z,115nm,1.3s
PET pmax pmax
comp=Z,1μm,16.2s
**PETK Petropavlovsk-** 174.64 199 PKP **PKPdf** **03 49 56.5 -0.9**
comp=Z,52nm,1.0s,baz=154,slow=1.3,SNR=32
PETK PKPab **PKPab** **03 51 32.2 +0.8**
comp=Z,22nm,0.8s,baz=150,slow=6.0,SNR=8.4
PETK PP **PP** **03 55 22.3 -1.6**
comp=Z,5.7nm,1.0s,baz=126,slow=7.4,SNR=2.9
**SEY Seymchan** 175.10 13 PKP **PKPdf** **03 49 54.8 -2.5**
comp=Z,103nm,1.3s,baz=135,slow=1.5,SNR=24
SEY PKPab **PKPab** **03 51 33.1 0.0**
comp=Z,56nm,1.0s,baz=347,slow=4.2,SNR=9.5
SEY PP **PP** **03 55 26.0 -0.1**
comp=Z,24nm,1.2s,baz=12,slow=4.2,SNR=6.1
**MA2 Magadan** 177.50 54 **PKPdf** **03 49 56.0 -1.9**
MA2 PKPab 03 51 44.1 +0.1
**MA2 Magadan** 177.50 54 PKP **PKPdf** **03 49 55.6 -2.3**
MA2 PKPab PKPab 03 51 43.9 -0.1
comp=Z,137nm,1.1s,baz=290,slow=3.8,SNR=23
MA2 PP **PP** **03 55 39.5 +1.5**
comp=Z,6.9nm,0.4s,baz=325,slow=6.7,SNR=13
**MA2 Magadan** 177.50 54 PKIKP **PKPdf** **03 49 56.0 -1.9**

*BJI* ***14*** *03:35:44.2±0.0,35.09N×140.82E,h48km,mb4.8/58, mB4.8/24,Ms3.9/14,Ms7 3.9/16*
*MOS* ***14*** *03:35:45.3±1.1,35.21N×140.69E,h39km,mb5.0/38,Error ellipse: s-maj=7.9km s-min=4.3km az=120.5*
*NIED* ***14*** *03:35:48.6,35.20N×140.55E,h59km,MW4.6,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.91; Mθθ5.57; Mθθ-6.48; Mrθ0.41; Mθθ-4.88; Mθr-0.47; Fault plane solution: M₀7.78000×10¹⁵ NP1: ϕs155.00000°,δ88.00000°,λ5.00000°. NP2:ϕs64.00000°, δ85.00000°,λ178.00000°.*
*JMA* ***14*** *03:35:48.6±0.2,35.2N±0.6×14.1E±,h59km±1km, MD4.7/39,MW4.6/39,KUJUKURI COAST BOSO PEN*
*JMA Felt III J1 at KUJUKURI COAST BOSO PEN .*
*IDC* ***14*** *03:35:50.3±1.2,35.11N×140.42E,h64km±11km,mb4.2/25, mbtmp4.5/30,MS3.2/3,Error ellipse: s-maj=13.9km s-min=6.9km az=76.0*
*NEIC* ***14*** *03:35:50.9,35.15N×140.49E,h61km*
*NEIC* ***14*** *03:35:50.8±1.8,35.15N±0.06×140.51E±0.09,h61km±6km, mb4.9/105,Mwr4.5/18,Error ellipse: s-maj=10.3km s-min=8.4km az=94.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr0.56; Mθθ5.43; Mθθ-5.99; Mrθ0.26; Mθθ-6.09; Mθr-0.68; Fault plane solution: M₀8.40000×10¹⁵ NP1:ϕs158.46000°,δ89.57000°, λ4.99000°. NP2:ϕs68.42000°,δ85.01000°,λ179.57000°. Principal axes: T 8.1095, Plg4.0000°, Azm24.0000°; N 0.5509, Plg85.0000°, Azm163.0000°; P -8.6604, Plg3.0000°, Azm293.0000°;*

**ISC 14 03:35:48.9±0.5,35.17N±0.03×140.55E±0.04,h53km±3km, h52km:pP-P,n378,σ1s63/353,mb4.8/118,18C-31D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KTR** | **Katsuura** | **0.19** | **264** | *i* P | **Pn** | | **03 35 57.9** | **+0.5** |
| KTR | | | | S | **Sn** | | **03 36 04.5** | **+0.9** |
| **BSO4** | **Boso 4** | **0.25** | **224** | *i* P | **Pn** | | **03 35 58.7** | **+0.9** |
| **JKUC** | **kamogawauchiur** | **0.28** | **268** | *i* P | **Pn** | | **03 35 58.5** | **+0.4** |
| JKUC | | | | S | **Sn** | | **03 36 05.6** | **+0.9** |
| **JKUC** | **kamogawauchiur** | **0.28** | **268** | A | A | | 03 35 58.5 | |
| | comp=E,171nm,0.5s,comp=N,203nm,0.8s | | | | | | | |
| **BSO3** | **Boso 3** | **0.37** | **185** | *i* P | **Pn** | | **03 35 59.5** | **+0.9** |
| **JCN** | **Nagara** | **0.38** | **312** | ⇓*i* P | **Pn** | | **03 35 59.6** | **+0.6** |
| JCN | | | | ⇓S | **Sn** | | **03 36 08.0** | **+1.8** |
| **JCN** | **Nagara** | **0.38** | **312** | A | A | | 03 35 59.6 | |
| | comp=E,117nm,0.9s,comp=N,69nm,0.6s | | | | | | | |
| **JSMT** | **Sammumatsuo** | **0.48** | **351** | *i* P | **Pn** | | **03 36 00.4** | **+0.3** |
| JSMT | | | | S | **Sn** | | **03 36 09.7** | **+1.5** |
| **JSMT** | **Sammumatsuo** | **0.48** | **351** | A | A | | 03 36 00.4 | |
| | comp=E,245nm,1.1s,comp=N,350nm,0.4s | | | | | | | |
| **TATJ** | **Tateyama 2** | **0.55** | **256** | A | A | | 03 36 01.2 | |
| | comp=E,81nm,0.8s,comp=N,102nm,0.9s | | | | | | | |
| **BSO1** | **Boso 1** | **0.62** | **145** | ⇓*i* P | **Pn** | | **03 36 02.0** | **+0.7** |
| **JYO** | **Yokosk** | **0.72** | **275** | A | A | | 03 36 03.2 | |
| | comp=E,76nm,1.4s,comp=N,110nm,0.4s | | | | | | | |
| **JIHU** | **Itakohorinouch** | **0.80** | **359** | A | A | | 03 36 03.8 | |
| | comp=E,114nm,1.5s,comp=N,101nm,0.7s | | | | | | | |
| **TOK** | **Tokyo** | **0.82** | **309** | A | A | | 03 36 04.3 | |
| | comp=E,94nm,0.8s,comp=N,83nm,0.8s | | | | | | | |
| **JIM2** | **Oshima 3** | **1.02** | **244** | P | **Pn** | | **03 36 06.6** | **-0.4** |
| JIM2 | | | | S | **Sn** | | **03 36 19.4** | **-1.0** |
| **JIM2** | **Oshima 3** | **1.02** | **244** | A | A | | 03 36 06.6 | |
| | comp=E,120nm,0.4s,comp=N,126nm,0.5s | | | | | | | |
| **JYT** | **Yasato** | **1.09** | **345** | A | A | | 03 36 07.8 | |
| | comp=E,29nm,0.4s,comp=N,27nm,0.4s | | | | | | | |
| **JHYU** | **Hitachinakayam** | **1.17** | **2** | A | A | | 03 36 08.8 | |
| | comp=E,21nm,3.0s,comp=N,24nm,2.0s | | | | | | | |
| **JSGW** | **Sagamiharawaka** | **1.18** | **292** | A | A | | 03 36 09.2 | |
| | comp=E,22nm,1.1s,comp=N,13nm,1.7s | | | | | | | |
| **JOD2** | **Odawara 2** | **1.20** | **275** | ⇓*i* P | **Pn** | | **03 36 09.2** | **-0.2** |
| JOD2 | | | | ⇓S | **Sn** | | **03 36 23.8** | **-0.8** |
| **JOD2** | **Odawara 2** | **1.20** | **275** | A | A | | 03 36 09.2 | |
| | comp=E,39nm,0.4s,comp=N,41nm,0.3s | | | | | | | |
| **JTHY** | **Toshimahigashi** | **1.22** | **238** | A | A | | 03 36 10.0 | |
| | comp=E,33nm,0.3s,comp=N,64nm,0.7s | | | | | | | |
| **JHU** | **Hanno** | **1.24** | **304** | A | A | | 03 36 09.9 | |
| | comp=E,19nm,1.2s,comp=N,18nm,0.7s | | | | | | | |
| **JHTM** | **Izuhatsuma** | **1.28** | **261** | A | A | | 03 36 10.8 | |
| | comp=E,99nm,0.8s,comp=N,88nm,0.3s | | | | | | | |
| **JNIO** | **Niijimaoohara** | **1.32** | **233** | A | A | | 03 36 11.5 | |
| | comp=E,32nm,1.4s,comp=N,35nm,1.9s | | | | | | | |
| **JMYK** | **Miyake Tsubota** | **1.38** | **217** | P | **Pn** | | **03 36 11.8** | **0.0** |
| **JMYK** | **Miyake Tsubota** | **1.38** | **217** | A | A | | 03 36 11.8 | |
| | comp=E,37nm,1.0s,comp=N,33nm,0.4s | | | | | | | |
| **JSKK** | **Shikinejimakit** | **1.38** | **233** | A | A | | 03 36 12.3 | |
| | comp=E,24nm,2.6s,comp=N,15nm,1.3s | | | | | | | |
| **JHO** | **Hitachi** | **1.44** | **1** | A | A | | 03 36 12.5 | |
| | comp=E,12nm,3.4s,comp=N,9.0nm,2.6s | | | | | | | |
| **JIZS** | **Izushimoda** | **1.44** | **252** | *i* P | **Pn** | | **03 36 12.5** | **-0.2** |
| JIZS | | | | S | **Sn** | | **03 36 29.7** | **-0.8** |
| **JIZS** | **Izushimoda** | **1.44** | **252** | A | A | | 03 36 12.5 | |
| | comp=E,15nm,1.1s,comp=N,10.0nm,1.4s | | | | | | | |
| **JMKN** | **Mikurajimanish** | **1.50** | **212** | *i* P | **Pn** | | **03 36 13.2** | **-0.2** |
| **JMKN** | **Mikurajimanish** | **1.50** | **212** | A | A | | 03 36 13.2 | |
| | comp=E,13nm,4.1s,comp=N,12nm,0.5s | | | | | | | |
| **JKO** | **Kozu shima** | **1.52** | **230** | A | A | | 03 36 14.2 | |
| | comp=E,37nm,2.0s,comp=N,23nm,2.0s | | | | | | | |
| **JFNN** | **Fujinakano** | **1.52** | **272** | ⇓*i* P | **Pn** | | **03 36 13.9** | **+0.1** |
| **JFNN** | **Fujinakano** | **1.52** | **272** | A | A | | 03 36 13.9 | |
| | comp=E,17nm,0.6s,comp=N,31nm,0.6s | | | | | | | |
| **JAG** | **Ashikaga** | **1.54** | **325** | ⇓*i* P | **Pn** | | **03 36 13.9** | **0.0** |
| **JAG** | **Ashikaga** | **1.54** | **325** | A | A | | 03 36 13.9 | |
| | comp=E,15nm,1.1s,comp=N,18nm,1.6s | | | | | | | |
| **JRY** | **Ryogami san** | **1.58** | **303** | ⇓*i* P | **Pn** | | **03 36 14.7** | **+0.1** |
| **JRY** | **Ryogami san** | **1.58** | **303** | A | A | | 03 36 14.7 | |
| | comp=E,11nm,1.2s,comp=N,9.0nm,1.1s | | | | | | | |
| **JSB** | **Shiboa** | **1.87** | **344** | A | A | | 03 36 18.6 | |
| | comp=E,29nm,3.1s,comp=N,25nm,4.5s | | | | | | | |
| **JKT** | **Katashina** | **1.91** | **327** | A | A | | 03 36 19.4 | |
| | comp=E,21nm,0.5s,comp=N,17nm,0.9s | | | | | | | |

**ONAJ Iwakimizuishiy 1.94 6** A A 03 36 19.6
comp=E,9.0nm,1.1s,comp=N,7.0nm,1.8s
**JSG Sagara 2.00 256** P **Pn** **03 36 21.4 +1.1**
**JSG Sagara 2.00 256** **Pn** **03 36 21.6 +1.3**
**JSG Sagara 2.00 256** A A 03 36 20.9
comp=E,14nm,2.7s,comp=N,15nm,1.5s
**JGK Kuni 2.08 312** A A 03 36 21.7
comp=E,8.0nm,1.4s,comp=N,9.0nm,3.8s
**JNT Takato 2.09 290** A A 03 36 22.1
comp=E,6.0nm,0.7s,comp=N,6.0nm,1.0s
**JHJ2 Mitsune 2.14 197** P **Pn** **03 36 22.5 +0.3**
**JHJ2 Mitsune 2.14 197** **Pn** **03 36 22.2 +0.1**
**JHJ2 Mitsune 2.14 197** A A 03 36 23.1
comp=E,10.0nm,2.6s,comp=N,9.0nm,1.5s
**JHJ Hachijo jima 2 2.14 197** P **Pn** **03 36 22.5 +0.3**
comp=N,3µm,0.3s,baz=331,slow=16,SNR=578
JHJ S **Sn** **03 36 47.6 +0.1**
comp=N,2µm,0.4s,baz=104,slow=23,SNR=11
**JKKS Kakegawashinom 2.14 260** A A 03 36 22.9
comp=E,11nm,0.7s,comp=N,10.0nm,0.8s
**JNY Yasuok 2.20 276** A A 03 36 23.7
comp=E,8.0nm,2.3s,comp=N,13nm,1.4s
**JFK Kawauchi 2.21 7** A A 03 36 23.4
comp=E,6.0nm,3.8s,comp=N,4.0nm,1.9s
**JNG Nsakai 2.34 303** A A 03 36 25.6
comp=E,7.0nm,1.1s,comp=N,6.0nm,1.4s
**MJAR Matsushiro Arr 2.34 307** P **Pn** **03 36 25.0 0.0**
comp=N,305nm,0.5s,baz=155,slow=12,SNR=707
MJAR S **Sn** **03 36 53.2 +0.7**
comp=N,291nm,0.5s,baz=142,slow=14,SNR=3.2
MJAR LR LR 03 37 40.5
comp=N,592nm,20.9s,baz=108,slow=48
**MAJO Matsushiro 2.34 307** P **Pn** **03 36 25.7 +0.7**
**MAJO Matsushiro 2.34 307** **Pn** **03 36 25.6 +0.7**
**MAJO Matsushiro 2.34 307***d* *i*P **Pn** **03 36 25.4 +0.4**
**MJB9 Matsu-Tunnel 2.35 307** **Pn** **03 36 25.8 +0.7**
**JOTO OTAMA OYAMA 2.39 356** A A 03 36 25.9
comp=E,23nm,2.9s,comp=N,17nm,0.7s
**JGF Kuroka 2.64 280** P **Pn** **03 36 30.6 +1.5**
**JGF Kuroka 2.64 280** **Pn** **03 36 30.6 +1.5**
**JMM Marumori 2.70 4** P **Pn** **03 36 29.4 -0.5**
**JMM Marumori 2.70 4** **Pn** **03 36 29.4 -0.5**
**JJN Nakama 2.73 316** A A 03 36 30.9
comp=E,8.0nm,0.9s,comp=N,7.0nm,3.6s
**JYAR Yonezawaarcadi 2.76 353** A A 03 36 31.1
comp=E,10.0nm,1.8s,comp=N,10.0nm,1.1s
**JIZZ Izumozaki 2.79 328** A A 03 36 31.6
comp=E,16nm,2.4s,comp=N,17nm,2.9s
**INU Inuyama 2.89 275** P **Pn** **03 36 33.5 +1.0**
**INU Inuyama 2.89 275** **Pn** **03 36 33.4 +0.9**
**JSD Sado 3.40 328** P **Pn** **03 36 40.7 +1.2**
**JSD Sado 3.40 328** **Pn** **03 36 39.9 +0.4**
**JTM Tenmabayashi 5.62 4** P **Pn** **03 37 09.4 -0.5**
**JTM Tenmabayashi 5.62 4** Pn **Pn** **03 37 09.2 -0.7**
**JMN Monobe 5.69 257** P **Pn** **03 37 14.1 +3.2**
**JMN Monobe 5.69 257** Pn **Pn** **03 37 12.0 +1.1**
**ERM Erimo 7.13 16** P **Pn** **03 37 27.6 -3.1**
**ERM Erimo 7.13 16** Pn **Pn** **03 37 27.8 -2.8**
**ERM Erimo 7.13 16***d* *i*P **Pn** **03 37 27.5 -3.1**
ERM pmax pmax
comp=Z,61nm,1.0s
**JEM Erimo 7.14 16** P **Pn** **03 37 27.6 -3.0**
**JCJ Chichijima 8.17 170** P **Pn** **03 37 44.1 -0.8**
**JCJ Chichijima 8.17 170** Pn **Pn** **03 37 43.2 -1.7**
**JCJ Chichijima 8.17 170** P Pn 03 37 38.4 -6.5
comp=Z,518nm,0.3s,baz=86,slow=9.1,SNR=79
JCJ S Sn 03 39 02.1 -14
comp=Z,74nm,0.5s,baz=289,slow=22,SNR=1.2
**JNU Nakatsue 8.27 258** P **Pn** **03 37 50.3 +4.0**
**JNU Nakatsue 8.27 258** Pn **Pn** **03 37 48.8 +2.5**
**JNU Nakatsue 8.27 258** P **Pn** **03 37 47.0 +0.7**
comp=Z,15nm,0.6s,baz=39,slow=1.5,SNR=17
**JKA Kamikawa-asahi 9.07 9** Pn **Pn** **03 37 53.6 -3.6**
**ASAJ Asahikawa 9.08 9** P **Pn** **03 37 53.5 -3.7**
comp=Z,14nm,0.3s,baz=220,slow=10,SNR=44
ASAJ LR LR 03 42 35.2
comp=Z,145nm,19.6s,baz=176,slow=44
**NMR Nemuro--Hokkai 9.12 25** *e*P Pn 03 37 52.9 -4.9
NMR *e*S Sn 03 39 28.4 -11
**RUSJ Misakicho 9.63 21** *e*P **Pn** **03 38 01.0 -3.8**
RUSJ *e*S **Sn** **03 39 44.2 -7.2**
**YUK Yuzh-Kuril'sk 9.76 23** *e*P **Pn** **03 38 02.7 -3.8**
YUK *e*S Sn 03 39 45.1 -9.4
YUK pmax pmax
comp=N,140nm,0.2s
YUK pmax pmax
comp=E,198nm,0.2s
YUK pmax pmax
comp=Z,266nm,0.2s
**SHO Shikotan 9.95 27** P Pn 03 38 03.7 -5.4
**TEY Ternei 10.31 344** *e*P **Pn** **03 38 12.8 -1.2**
**MSHR Mys Shultsa 10.40 318**⇑ *e*P **Pn** **03 38 15.2 -0.1**
**KSRS Korea Array 10.44 286** P **Pn** **03 38 18.4 +2.5**
comp=Z,36nm,0.8s,baz=102,slow=13,SNR=69
KSRS LR LR 03 42 28.7
comp=Z,120nm,18.3s,baz=100,slow=38
**KSAR Wonju Array Be 10.47 286** Pn **Pn** **03 38 17.8 +1.6**
**KSAR Wonju Array Be 10.47 286** P **Pn** **03 38 17.8 +1.6**
**KS19 Wonju Array Si 10.49 287** **Pn** **03 38 18.0 +1.4**
**PSTR Posyet 10.64 317** *e*P **Pn** **03 38 18.7 +0.1**
**TJN Taejon 10.78 280** P **Pn** **03 38 23.6 +3.1**
**TJN Taejon 10.78 280** Pn **Pn** **03 38 22.7 +2.2**
**TJN Taejon 10.78 280** P **Pn** **03 38 22.7 +2.2**
**USA0B Ussuriysk Arra 11.16 326** **Pn** **03 38 28.2 +2.5**
**USA0B Ussuriysk Arra 11.16 326** *e*P **Pn** **03 38 27.2 +1.5**
**USRK Ussuriysk Ar. 11.16 326** **Pn** **03 38 27.1 +1.4**
**USRK Ussuriysk Ar. 11.16 326** P **Pn** **03 38 27.2 +1.5**
comp=Z,13nm,0.8s,baz=136,slow=12,SNR=27
**USRK Ussuriysk Ar. 11.16 326** P **Pn** **03 38 27.1 +1.4**
**YSS Yuzh-Sakhalins 11.89 7** P **Pn** **03 38 34.2 -1.4**
comp=Z,32nm,0.4s
**YSS Yuzh-Sakhalins 11.89 7** *e*P **Pn** **03 38 33.0 -2.6**
YSS *e*S **Sn** **03 40 41.4 -5.3**
YSS pmax pmax
comp=Z,20nm,0.8s
**MDJ Mudanjiang 12.63 322** P **Pn** **03 38 49.6 +3.9**
MDJ pmax pmax
comp=Z,14nm,0.7s
MDJ LR LR
comp=Z,320nm,17.5s
MDJ LR LR
comp=Z,300nm,19.9s
MDJ LR LR
comp=Z,150nm,17.5s
**MDJ Mudanjiang 12.63 322** Pn **Pn** **03 38 47.9 +2.2**
**CN2 Changchun 14.48 311** *e*P **P** **03 39 14.1 -2.1**
CN2 pmax pmax
comp=Z,10.0nm,0.9s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,200nm,11.0s
CN2 LR LR
comp=Z,300nm,11.0s
CN2 LR LR
comp=Z,200nm,12.0s
**BNX BinXian 14.53 321** ⇓P **Pn** **03 39 11.5 +0.2**
BNX pmax pmax
comp=Z,9.0nm,0.8s
BNX pmax pmax
comp=Z,150nm,4.1s
**SNY Shenyang 14.85 302** ⇑P **P** **03 39 18.5 -1.7**
SNY S **S** **03 42 09.6 -4.9**
SNY pmax pmax
comp=Z,39nm,0.7s
SNY LR LR
comp=Z,190nm,13.0s
SNY LR LR
comp=Z,180nm,15.6s
SNY LR LR
comp=Z,180nm,13.5s
**KLR Kul'dur 15.47 338** P **Pn** **03 39 22.3 -1.3**
comp=Z,4.8nm,0.6s,baz=146,slow=13,SNR=7.8
**KLR Kul'dur 15.47 338***d* *i*P **Pn** **03 39 21.9 -1.7**
KLR pmax pmax
comp=Z,4.0nm,0.7s
**DL2 Dalian 15.56 289** P **P** **03 39 27.4 -0.8**
DL2 pmax pmax
comp=Z,71nm,0.8s
**TYV Tymovskoe 15.76 5** *e*P **Pn** **03 39 27.0 -0.3**
TYV *e*S **Sn** **03 42 21.0 +0.2**
TYV pmax pmax
comp=Z,100nm,4.3s
TYV pmax pmax
comp=Z,20nm,0.8s
TYV smax smax
comp=N,100nm,4.6s
TYV smax smax
comp=E,100nm,4.6s
**HEH HeiHe 17.86 332** *e*P **Pn** **03 39 52.4 -1.0**
HEH pmax pmax
comp=E,19nm,0.5s
HEH pmax pmax
comp=E,94nm,5.1s
**SKR Severo-Kuril's 19.18 31** MLR MLR
comp=Z,300nm,13.0s
SKR pmax pmax
comp=Z,200nm,5.1s
**SKR Severo-Kuril's 19.18 31** *e*P P 03 39 55.4 -13
**BJI Beijing 19.89 291** P **P** **03 40 15.5 -0.4**
BJI pP **pP** **03 40 25.6 -2.1**
BJI sP **sP** **03 40 32.5 -1.9**
BJI pmax pmax
comp=Z,5.0nm,0.8s
BJI pmax pmax
comp=Z,43nm,5.1s
**BJT Baijiatuau 19.89 291** P **P** **03 40 14.8 -1.1**
**BJT Baijiatuau 19.89 291** P **P** **03 40 14.8 -1.1**
BJT pmax pmax
comp=Z,19nm,0.9s
**XLT XiLinHaoTe 20.73 302** *e*P **P** **03 40 22.8 -2.3**
XLT pmax pmax
comp=Z,34nm,0.6s
**HIA Hailar 20.78 319** P **P** **03 40 24.6 -0.9**
**HIA Hailar 20.78 319** P **P** **03 40 24.6 -0.9**
HIA pmax pmax
comp=Z,11nm,0.6s
**ZEA Zeya 20.79 337** *e*P **P** **03 40 23.7 -1.8**
ZEA pmax pmax
comp=E,20nm,0.9s
ZEA pmax pmax
comp=N,40nm,0.8s
ZEA pmax pmax
comp=Z,60nm,0.7s
**HNS HongShan 20.93 284** ⇑P **P** **03 40 24.6 -2.5**
HNS sP **pP** **03 40 40.6 +1.5**
HNS pmax pmax
comp=Z,14nm,0.7s
**PETK Petropavlovsk- 21.65 29** P **P** **03 40 35.8 +1.0**
comp=Z,12nm,0.9s,baz=205,slow=8.9,SNR=9.3
comp=Z,12nm,0.9s
**LYN LuoYang 23.02 277** *e*P **P** **03 40 48.0 -1.5**
LYN pmax pmax
comp=Z,32nm,0.7s
**HHC Hu-ho-hao-te 23.47 293** *e*P **P** **03 40 54.8 +0.9**
HHC PP **PnPn** **03 41 31.3 +9.0**
HHC pmax pmax
comp=Z,13nm,0.7s
HHC pmax pmax
comp=Z,120nm,5.9s
**BTO Baotou 24.62 292** *e*P **P** **03 41 05.9 +1.4**
BTO pP **pP** **03 41 17.5 -0.3**
BTO sP **sP** **03 41 22.9 -1.1**
BTO PP **PnPn** **03 41 43.8 +5.8**
BTO pmax pmax
comp=Z,18nm,0.6s
BTO pmax pmax
comp=Z,150nm,3.9s
**MA2 Magadan 25.32 12** P **P** **03 41 10.8 +0.3**
MA2 IAmb IAmb 03 41 12.4
comp=Z,59nm,0.9s
**MA2 Magadan 25.32 12***c* *i*P **P** **03 41 11.1 +0.7**
MA2 pmax pmax
comp=Z,63nm,1.0s
**MA2 Magadan 25.32 12** P **P** **03 41 11.3 +0.9**
comp=Z,79nm,0.9s
**XAN Xi'an 26.00 277** ⇑P **P** **03 41 15.6 -1.4**
XAN pP pP 03 41 27.1 -3.1
XAN pmax pmax
comp=Z,33nm,1.2s
XAN pmax pmax
comp=Z,190nm,3.6s
**ENH Enshi 26.52 268** P **P** **03 41 20.1 -1.5**
ENH IAmb IAmb 03 41 22.1
comp=Z,28nm,0.7s
**YAK Yakutsk 27.75 349** *e*P **P** **03 41 33.6 +1.4**
YAK *e**PP **pP** **03 41 42.4 -3.2**
YAK *e* 03 42 23.2
YAK *e* 03 44 44.6
YAK *e*S **S** **03 46 15.1 +4.2**
YAK *e**SS **sS** **03 46 35.1 +1.7**
YAK *e*SS **SnSn** **03 47 32.3 +5.0**
YAK pmax pmax
comp=Z,25nm,0.9s
YAK pmax pmax
comp=N,21nm,2.0s
YAK pmax pmax
comp=E,3.0nm,0.8s
YAK pmax pmax
comp=Z,132nm,2.8s
YAK pmax pmax
comp=N,55nm,3.2s
YAK pmax pmax
comp=E,74nm,6.1s
YAK smax smax
comp=E,121nm,5.5s
YAK smax smax
comp=N,97nm,4.9s
**ULN Ulaanbaatar 27.87 307** P **P** **03 41 33.0 -0.7**
**ULN Ulaanbaatar 27.87 307***ce*P **P** **03 41 33.1 -0.7**
ULN pmax pmax
comp=Z,2.0nm,0.7s
**SONM Songino Array 28.30 307** P **P** **03 41 36.9 -0.6**
**SONM Songino Array 28.30 307** P **P** **03 41 36.9 -0.6**
comp=Z,5.5nm,0.5s,baz=109,slow=9.3,SNR=27
comp=Z,5.5nm,0.5s
**SEY Seymchan 28.75 11**⇑ *i*P **P** **03 41 42.3 +1.1**
SEY pmax pmax
comp=Z,9.0nm,0.9s
**GYA Guiyang 30.25 263** ⇓P **P** **03 41 56.9 +1.9**
GYA pmax pmax
comp=Z,29nm,1.0s
**ZAK Zakamensk 30.92 311** *e*P **P** **03 41 59.7 -0.9**
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**CD2 Chengdu 31.02 273** P **P** **03 42 00.3 -1.3**
CD2 pmax pmax
comp=Z,30nm,0.7s
**GTA Gaotai 32.48 290** *e*P **P** **03 42 15.1 +0.5**
GTA pP pP 03 42 25.6 -2.4
GTA pmax pmax
comp=Z,5.0nm,0.6s
**PZH PanZhiHua 34.24 266** P **P** **03 42 31.0 +1.0**
PZH pmax pmax
comp=Z,30nm,1.1s
PZH pmax pmax
comp=Z,230nm,5.2s
**TIXI Tiksi 37.06 354**⇑ *i*P **P** **03 42 52.5 -0.9**
TIXI pmax pmax
comp=Z,12nm,0.9s
**CRAI Chiangrai 38.28 258** P **P** **03 43 03.9 -0.5**
**CMAR Chiang Mai Arr 40.36 257** P **P** **03 43 20.1 -1.7**
comp=Z,1.4nm,0.5s,baz=42,slow=8.0,SNR=7.5
comp=Z,1.4nm,0.5s
**CMAR Chiang Mai Arr 40.36 257** *i* P **P** **03 43 21.1 -0.7**
CMAR pmax pmax
comp=Z,2.0nm,0.4s
**DGZ Jazzator, Alta 40.94 308***d* *i*P **P** **03 43 27.2 +0.8**
DGZ pmax pmax
comp=Z,65nm,0.8s
**WMQ Urumqi 41.08 299** *e*P **P** **03 43 29.8 +2.3**
WMQ pmax pmax
comp=Z,34nm,0.9s
WMQ LR LR
comp=Z,550nm,24.3s
**ZAA0 Zalesovo Array 42.67 314** P **P** **03 43 40.1 -0.1**
**ZALV Zalesovo Beam 42.67 314** P **P** **03 43 40.0 -0.2**
**ZALV Zalesovo Beam 42.67 314** P **P** **03 43 40.3 0.0**
comp=Z,8.0nm,0.7s,baz=94,slow=6.6,SNR=25
ZALV PcP **PcP** **03 45 31.5 +0.3**
comp=Z,2.3nm,0.6s,baz=131,slow=4.5,SNR=3.2
comp=Z,8.0nm,0.7s
**SHL Shillong 42.70 271** P **P** **03 43 40.9 -0.2**
**SHL Shillong 42.70 271** P **P** **03 43 40.9 -0.2**
SHL pmax pmax
comp=Z,9.0nm,0.7s
**ZSN Zaisan 42.73 304** *e*P **P** **03 43 41.1 +0.3**
comp=Z,22nm,0.7s,baz=304
**ZSN Zaisan 42.73 304** *e*P **P** **03 43 41.1 +0.3**
ZSN pmax pmax
comp=Z,22nm,0.7s
**MK31 Makanchi Array 44.54 304** P **P** **03 43 55.4 0.0**
MK31 IAmb IAmb 03 44 00.3
comp=Z,14nm,0.8s
**MK31 Makanchi Array 44.54 304***d* *i*P **P** **03 43 55.0 -0.4**
**MKAR Makanchi Array 44.54 304** P **P** **03 43 55.5 +0.1**
comp=Z,13nm,0.7s,baz=86,slow=7.8,SNR=60
comp=Z,13nm,0.7s
**MAKZ Makanchi 44.75 304** P **P** **03 43 57.4 +0.3**
MAKZ IAmb IAmb 03 44 02.6
comp=Z,15nm,0.7s
**MAKZ Makanchi 44.75 304** P **P** **03 43 57.4 +0.3**
MAKZ pmax pmax
comp=Z,15nm,0.7s
**SEM Semipalatinsk 45.54 309** *e*P **P** **03 44 03.4 -0.2**
comp=Z,4.6nm,0.4s,baz=309
**SEM Semipalatinsk 45.54 309** *e*P **P** **03 44 03.3 -0.2**
SEM pmax pmax
comp=Z,5.0nm,0.4s
**KURK Kurchatov 46.55 309** P **P** **03 44 11.1 -0.1**
**KURK Kurchatov 46.55 309***d* *i*P **P** **03 44 10.7 -0.5**
KURK pmax pmax
comp=Z,27nm,0.6s
**G18K Tagagawik 46.61 30** P **P** **03 44 12.9 +1.4**
G18K IAmb IAmb 03 44 14.0
comp=Z,16nm,1.2s
**KURBB Kurchatov Arra 46.62 309** P **P** **03 44 11.4 -0.3**
comp=Z,16nm,0.4s,baz=86,slow=7.7,SNR=65
comp=Z,16nm,0.4s
**PDGK Podgornoye 47.05 299** P **P** **03 44 14.9 -0.5**
**SHLS Shalkode 47.10 299** *e*P **P** **03 44 13.7 -2.2**
comp=Z,10nm,0.9s,baz=299
**SHLS Shalkode 47.10 299** *e*P **P** **03 44 13.6 -2.2**
SHLS pmax pmax
comp=Z,10.0nm,0.9s
**UZB Uzynbulak 47.42 299** *e*P **P** **03 44 18.3 0.0**
comp=Z,4.8nm,0.4s,baz=299
**UZB Uzynbulak 47.42 299** *e*P **P** **03 44 18.3 0.0**
UZB pmax pmax
comp=Z,5.0nm,0.4s
**E19K Redstone River 47.45 28** P **P** **03 44 19.4 +1.5**
E19K IAmb IAmb 03 44 21.9
comp=Z,9.7nm,0.8s
**H19K Roundabout Mou 47.45 30** P **P** **03 44 19.5 +1.5**
H19K IAmb IAmb 03 44 22.3
comp=Z,11nm,1.1s
**KPKS Kokpek 47.59 300** *e*P **P** **03 44 19.8 +0.2**
baz=300
**KPKS Kokpek 47.59 300** *e*P **P** **03 44 19.7 +0.2**
**ZHN Zhinishke 47.84 299** *e*P **P** **03 44 21.7 +0.3**
baz=299
**ZHN Zhinishke 47.84 299** *e*P **P** **03 44 21.7 +0.3**
**SATY Saty 47.88 299** *e*P **P** **03 44 22.0 +0.1**
baz=299
**SATY Saty 47.88 299** *e*P **P** **03 44 21.9 +0.1**
**PRZ Przheval'sk 48.01 298** P **P** **03 44 24.4 +1.5**
**PRZ Przheval'sk 48.01 298** P **P** **03 44 24.4 +1.5**
PRZ pmax pmax
comp=Z,25nm,0.6s
**ARXS Arharly 48.05 301** *e*P **P** **03 44 23.0 0.0**
**K20K Telida 48.27 33** P **P** **03 44 26.0 +1.6**
K20K IAmb IAmb 03 44 29.1
comp=Z,8.0nm,0.9s
**CHKK Chushkaly 48.72 300** *e*P **P** **03 44 28.5 +0.4**
baz=300
**CHKK Chushkaly 48.72 300** *e*P **P** **03 44 28.5 +0.4**
**E21K Killik River 48.82 27** P **P** **03 44 29.9 +1.3**
E21K IAmb IAmb 03 44 31.3
comp=Z,9.1nm,0.9s
**MDOK Medeo 48.83 300** *e*P **P** **03 44 29.2 +0.1**
baz=300
**MDOK Medeo 48.83 300** *e*P **P** **03 44 29.2 +0.1**
**AAA Alma-Ata 48.91 300** *e*P **P** **03 44 29.9 +0.2**
baz=300
**AAA Alma-Ata 48.91 300** *e*P **P** **03 44 29.8 +0.2**
**TNSS Tian-Shan 48.93 299** *e*P **P** **03 44 30.4 +0.1**
baz=299
**TNSS Tian-Shan 48.93 299** *e*P **P** **03 44 30.3 +0.1**
**KUU Kurty 49.16 301** *e*P **P** **03 44 31.7 +0.2**
comp=Z,8.3nm,0.6s,baz=301
**KUU Kurty 49.16 301** *e*P **P** **03 44 31.7 +0.2**
KUU pmax pmax
comp=Z,8.0nm,0.6s
**D22K Ayikyak River 49.34 26** P **P** **03 44 34.2 +1.7**
D22K IAmb IAmb 03 44 35.4
comp=Z,10nm,1.1s
**E22K Anaktuvuk Pass 49.58 27** P **P** **03 44 36.0 +1.6**
E22K IAmb IAmb 03 44 38.1
comp=Z,9.3nm,0.9s
**BOOM Boomskoye usch 49.78 299** P **P** **03 44 37.2 +0.8**
BOOM IAmb IAmb 03 45 02.1
comp=Z,7.3nm,0.8s
**BOOM Boomskoye usch 49.78 299** P **P** **03 44 37.2 +0.8**
BOOM pmax pmax
comp=Z,7.0nm,0.8s
**MLY Manley 49.80 31** P **P** **03 44 38.1 +2.0**
MLY IAmb IAmb 03 44 40.6
comp=Z,7.7nm,0.9s
**G23K Bananza Creek 50.17 29** P **P** **03 44 40.1 +1.3**
**C23K Itkillik River 50.18 25** P **P** **03 44 40.7 +1.9**
**H23K Yukon River 50.33 30** P **P** **03 44 41.5 +1.4**
H23K IAmb IAmb 03 44 44.9
comp=Z,12nm,0.9s
**BWN Browne 50.34 32** P **P** **03 44 42.3 +2.2**
**I23K Minto, Yukon-K 50.39 31** P **P** **03 44 42.3 +1.8**
**E23K Chandalar 50.40 27** P **P** **03 44 42.7 +2.1**
E23K IAmb IAmb 03 45 26.7
comp=Z,15nm,0.9s
**TOLK Toolik Lake Re 50.45 26** P **P** **03 44 41.2 +0.2**
TOLK IAmb IAmb 03 45 14.7
comp=Z,15nm,0.7s
**NEA2 Nenana 50.51 32** P **P** **03 44 43.0 +1.6**
NEA2 IAmb IAmb 03 44 45.6
comp=Z,14nm,0.9s
**KSH Kashi 50.54 295** P P 03 44 48.3 +6.1
KSH pmax pmax
comp=Z,10.0nm,0.9s
**AAK Ala-Archa 50.77 299** *e*P **P** **03 44 43.8 -0.1**
AAK pmax pmax
comp=Z,5.0nm,0.6s
**E24K Your Creek 50.82 27** **P** **03 44 40.6 -3.2**
E24K IAmb IAmb 03 45 14.8
comp=Z,13nm,0.7s
**MDM Murphy Dome 50.87 31** P **P** **03 44 45.9 +1.7**
MDM IAmb IAmb 03 44 48.4
comp=Z,17nm,0.8s
**WRH Wood River Hil 50.94 32** P **P** **03 44 46.6 +2.0**
WRH IAmb IAmb 03 44 48.4
comp=Z,6.4nm,0.8s
**H24K Noodor Dome 51.01 30** P **P** **03 44 47.2 +2.0**
**F24K Squaw Lake 51.03 28** P **P** **03 44 45.5 +0.1**
F24K IAmb IAmb 03 45 25.6
comp=Z,10nm,0.5s
**COLA College 51.03 31** *e*P **P** **03 44 46.4 +1.1**
COLA pmax pmax
comp=Z,7.0nm,0.7s
**CCB Clear Creek Bu 51.05 32** P **P** **03 44 46.8 +1.3**
**G24K Hadweenzic Riv 51.18 29** P **P** **03 44 48.5 +2.0**
G24K IAmb IAmb 03 44 50.7
comp=Z,9.4nm,1.1s
**POKR Poker Plat Res 51.20 31** P **P** **03 44 48.5 +1.8**
POKR IAmb IAmb 03 44 49.5
comp=Z,15nm,0.8s
**BVA0 Borovoye Array 51.32 313** P **P** **03 44 49.0 +1.3**
**BVAR Borovoye Array 51.32 313** P **P** **03 44 48.1 +0.5**
comp=Z,5.8nm,0.3s,baz=104,slow=9.3,SNR=39
comp=Z,5.8nm,0.3s
**BRVK Borovoye 51.38 313** P **P** **03 44 49.0 +0.9**
BRVK IAmb IAmb 03 44 54.4
comp=Z,11nm,1.1s
**BRVK Borovoye 51.38 313***d* *i*P **P** **03 44 49.2 +1.1**
BRVK pmax pmax
comp=Z,5.0nm,0.5s
**HDA Harding Lake 51.43 32** P **P** **03 44 49.6 +1.2**
HDA IAmb IAmb 03 44 49.8
comp=Z,7.9nm,0.8s
**IL31 51.45 32** P **P** **03 44 49.4 +1.0**
IL31 IAmb IAmb 03 44 51.9
comp=Z,8.6nm,0.8s
**ILAR Eielson Array 51.45 32** P **P** **03 44 49.1 +0.7**
**ILAR Eielson Array 51.45 32** P **P** **03 44 48.6 +0.2**
comp=Z,6.6nm,0.8s,baz=269,slow=6.1,SNR=55
comp=Z,6.6nm,0.8s
**ILAR Eielson Array 51.45 32** P **P** **03 44 49.1 +0.7**
**PRP Porcupine Dome 51.99 31** P **P** **03 44 54.2 +1.5**
**ARSB Arslanbob 52.22 298** P **P** **03 44 55.2 +0.5**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ARSB** | **Arslanbob** | **52.22** | **298** | | P | | **P** | **03 44 55.2** | **+0.5** |
| ARSB | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | | |
| **GSI** | **Gunungsitoli** | **52.24** | **240** | | | | **P** | **03 44 53.9** | **-1.1** |
| GSI | | | | | IAmb | | IAmb | 03 45 07.0 | | |
| | comp=Z,17nm,0.7s | | | | | | | | | |
| **F26K** | **Sheenjek River** | **52.46** | **28** | | P | | **P** | **03 44 58.2** | **+2.2** |
| **SCRK** | **Sand Creek** | **52.75** | **32** | | P | | **P** | **03 44 59.3** | **+1.0** |
| SCRK | | | | | IAmb | | IAmb | 03 45 00.2 | | |
| | comp=Z,6.4nm,0.8s | | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **53.13** | **34** | | P | | **P** | **03 45 02.0** | **+1.1** |
| L26K | | | | | IAmb | | IAmb | 03 45 03.8 | | |
| | comp=Z,7.6nm,0.8s | | | | | | | | | |
| **KK31** | **Karatay Array** | **53.47** | **301** | | P | | **P** | **03 45 05.4** | **+1.6** |
| KK31 | | | | | IAmb | | IAmb | 03 45 12.5 | | |
| | comp=Z,8.9nm,0.9s | | | | | | | | | |
| **KK31** | **Karatay Array** | **53.47** | **301** | | P | | **P** | **03 45 05.4** | **+1.6** |
| KK31 | | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| **KKAR** | **Karatay Array** | **53.47** | **301** | | P | | **P** | **03 45 03.5** | **-0.3** |
| KKAR | | | | | IAmb | | IAmb | 03 45 12.5 | | |
| | comp=Z,8.9nm,0.9s | | | | | | | | | |
| **KKAR** | **Karatay Array** | **53.47** | **301** | | P | | **P** | **03 45 04.1** | **+0.4** |
| **KKAR** | **Karatay Array** | **53.47** | **301** | | P | | **P** | **03 45 03.5** | **-0.3** |
| KKAR | | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| **G27K** | **Doyon Strip** | **53.48** | **29** | | P | | **P** | **03 45 04.6** | **+1.1** |
| **K27K** | **Chicken** | **53.58** | **32** | | P | | **P** | **03 45 06.0** | **+1.8** |
| K27K | | | | | IAmb | | IAmb | 03 45 08.0 | | |
| | comp=Z,12nm,1.1s | | | | | | | | | |
| **L27K** | **Beaver Creek,** | **53.81** | **33** | | P | | **P** | **03 45 08.0** | **+2.0** |
| L27K | | | | | IAmb | | IAmb | 03 45 08.9 | | |
| | comp=Z,6.4nm,0.8s | | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **53.83** | **33** | | P | | **P** | **03 45 07.7** | **+1.5** |
| **M27K** | **Edge Creek, AK** | **53.88** | **34** | | P | | **P** | **03 45 08.2** | **+1.5** |
| M27K | | | | | IAmb | | IAmb | 03 45 09.4 | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| **EGAK** | **Eagle** | **53.89** | **31** | | P | | **P** | **03 45 07.4** | **+0.9** |
| **BRLS** | **Borolday** | **53.96** | **301** | | *eP* | | **P** | **03 45 08.7** | **+1.2** |
| | baz=301 | | | | | | | | | |
| **BRLS** | **Borolday** | **53.96** | **301** | | *eP* | | **P** | **03 45 08.6** | **+1.2** |
| **I28M** | **Miner Creek** | **54.32** | **30** | | P | | **P** | **03 45 11.7** | **+1.9** |
| **CHM** | **Chimkent** | **54.34** | **300** | | *eP* | | **P** | **03 45 10.2** | **+0.1** |
| | comp=Z,6.3nm,0.4s,baz=300 | | | | | | | | | |
| **CHM** | **Chimkent** | **54.34** | **300** | | *eP* | | **P** | **03 45 10.1** | **0.0** |
| CHM | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.4s | | | | | | | | | |
| **NIL** | **Nilore** | **54.55** | **289** | | P | | **P** | **03 45 12.7** | **+0.9** |
| NIL | | | | | IAmb | | IAmb | 03 45 17.2 | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| **NIL** | **Nilore** | **54.55** | **289** | | P | | **P** | **03 45 12.7** | **+0.9** |
| NIL | | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| **GAR** | **Garm** | **54.88** | **296** | | P | | **P** | **03 45 15.4** | **+1.2** |
| GAR | | | | | IAmb | | IAmb | 03 45 47.0 | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| **G29M** | **Pine Creek** | **54.90** | **28** | | P | | **P** | **03 45 15.2** | **+1.4** |
| G29M | | | | | IAmb | | IAmb | 03 45 17.2 | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| **WB0** | **Warramunga Arr** | **54.94** | **187** | | P | | **P** | **03 45 14.3** | **-0.3** |
| **I29M** | **Ogilvie Camp,** | **55.01** | **30** | | P | | **P** | **03 45 16.4** | **+1.8** |
| I29M | | | | | IAmb | | IAmb | 03 45 24.2 | | |
| | comp=Z,7.6nm,0.9s | | | | | | | | | |
| **WRAB** | **Tennant Creek** | **55.11** | **187** | *c* | *iP* | | **P** | **03 45 16.5** | **+0.7** |
| WRAB | | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.8s | | | | | | | | | |
| **WR0** | **Warramunga Arr** | **55.12** | **187** | | P | | **P** | **03 45 15.5** | **-0.3** |
| **WB2** | **Warramunga Arr** | **55.12** | **187** | | P | | **P** | **03 45 15.4** | **-0.4** |
| WB2 | | | | | IAmb | | IAmb | 03 45 22.5 | | |
| | comp=Z,22nm,0.9s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.12** | **187** | | P | | **P** | **03 45 15.4** | **-0.5** |
| **WRA** | **Warramunga Arr** | **55.12** | **187** | | P | | **P** | **03 45 15.2** | **-0.7** |
| | comp=Z,18nm,0.7s,baz=3.0,slow=7.6,SNR=45 | | | | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.12** | **187** | *i* | P | | **P** | **03 45 15.3** | **-0.6** |
| WRA | | | | | pmax | | pmax | | | |
| | comp=Z,18nm,0.7s | | | | | | | | | |
| **M29M** | **Somme Creek** | **55.44** | **34** | | P | | **P** | **03 45 19.9** | **+2.0** |
| M29M | | | | | IAmb | | IAmb | 03 45 21.1 | | |
| | comp=Z,7.4nm,0.8s | | | | | | | | | |
| **L29M** | **L29M** | **55.47** | **33** | | P | | **P** | **03 45 20.0** | **+2.0** |
| L29M | | | | | IAmb | | IAmb | 03 45 21.5 | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| **EPYK** | **Eagle Plains** | **55.49** | **29** | | P | | **P** | **03 45 20.2** | **+2.1** |
| EPYK | | | | | IAmb | | IAmb | 03 45 20.9 | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| **K29M** | **Barlow Dome** | **55.60** | **32** | | P | | **P** | **03 45 20.2** | **+1.1** |
| **I30M** | **Mount Dempster** | **55.83** | **30** | | P | | **P** | **03 45 22.4** | **+1.7** |
| I30M | | | | | IAmb | | IAmb | 03 45 23.8 | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| **CHGR** | **Chuyangaron** | **55.84** | **296** | | P | | **P** | **03 45 21.5** | **+0.4** |
| **CHGR** | **Chuyangaron** | **55.84** | **296** | | P | | **P** | **03 45 21.5** | **+0.4** |
| CHGR | | | | | pmax | | pmax | | | |
| | comp=Z,48nm,0.6s | | | | | | | | | |
| **SIMJ** | **Simiganj** | **55.95** | **296** | | P | | **P** | **03 45 21.8** | **-0.2** |
| SIMJ | | | | | IAmb | | IAmb | 03 45 26.4 | | |
| | comp=Z,9.9nm,0.7s | | | | | | | | | |
| **J30M** | **Hart River** | **55.98** | **31** | | P | | **P** | **03 45 22.9** | **+1.2** |
| **G31M** | **Satah River** | **56.35** | **28** | | P | | **P** | **03 45 25.4** | **+1.2** |
| G31M | | | | | IAmb | | IAmb | 03 45 26.9 | | |
| | comp=Z,15nm,1.4s | | | | | | | | | |
| **INK** | **Inuvik** | **56.36** | **26** | | P | | **P** | **03 45 25.0** | **+0.8** |
| | comp=Z,3.0nm,0.5s,baz=302,slow=6.3,SNR=8.4 | | | | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | | |
| **ARU** | **Arti** | **57.30** | **319** | | P | | **P** | **03 45 31.4** | **+0.4** |
| ARU | | | | | IAmb | | IAmb | 03 45 40.8 | | |
| | comp=Z,12nm,0.6s | | | | | | | | | |
| **ARU** | **Arti** | **57.30** | **319** | *d* | *iP* | | **P** | **03 45 30.9** | **-0.1** |
| ARU | | | | | *PP | | **pP** | **03 45 46.5** | **+1.1** |
| ARU | | | | | | | | 03 46 21.9 | | |
| ARU | | | | | | | | 03 47 36.9 | | |
| ARU | | | | | S | | **S** | **03 53 25.2** | **+2.0** |
| ARU | | | | | SS | | **SS** | **03 57 09.0** | **-3.5** |
| ARU | | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **57.35** | **34** | | P | | **P** | **03 45 33.2** | **+1.9** |
| **AB31** | **Akbulak array** | **58.61** | **311** | *i* | P | | **P** | **03 45 40.1** | **-0.3** |
| **ABKAR** | **Akbulak array** | **58.61** | **311** | | P | | **P** | **03 45 40.3** | **0.0** |
| ABKAR | | | | | IAmb | | IAmb | 03 45 43.5 | | |
| | comp=Z,10nm,0.8s | | | | | | | | | |
| **AS31** | **Alice Springs** | **58.85** | **187** | | P | | **P** | **03 45 43.1** | **+0.8** |
| | comp=Z,5.6nm,0.5s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **58.85** | **187** | | P | | **P** | **03 45 42.4** | **+0.1** |
| | comp=Z,4.1nm,0.5s,baz=17,slow=13,SNR=19 | | | | | | | | | |
| | comp=Z,4.1nm,0.5s | | | | | | | | | |
| **DLBC** | **Dease Lake** | **60.53** | **37** | | P | | **P** | **03 45 54.6** | **+1.1** |
| | comp=Z,2.2nm,0.7s,baz=180,slow=19,SNR=2.3 | | | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | | | |
| **KIRV** | **Kirov** | **61.32** | **323** | ⇑ | *iP* | | **P** | **03 45 58.5** | **-0.2** |
| **WRGLY** | **Wrigley** | **61.80** | **31** | | P | | **P** | **03 46 03.0** | **+1.1** |
| WRGLY | | | | | IAmb | | IAmb | 03 46 04.6 | | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| **EUNU** | **Eureka** | **62.13** | **8** | | P | | **P** | **03 46 04.8** | **+0.7** |
| EUNU | | | | | IAmb | | IAmb | 03 46 05.4 | | |
| | comp=Z,9.4nm,0.9s | | | | | | | | | |
| **RES** | **Resolute Bay** | **64.58** | **14** | | P | | **P** | **03 46 21.1** | **+1.0** |
| **RES** | **Resolute Bay** | **64.58** | **14** | | P | | **P** | **03 46 20.8** | **+0.7** |
| | comp=Z,6.2nm,0.8s,baz=303,slow=4.8,SNR=10 | | | | | | | | | |
| | comp=Z,6.2nm,0.8s | | | | | | | | | |
| **RES** | **Resolute Bay** | **64.58** | **14** | | P | | **P** | **03 46 21.1** | **+1.0** |
| RES | | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| **BELG** | **Belogornoye** | **64.69** | **317** | *c* | *iP* | | **P** | **03 46 20.2** | **-1.0** |
| BELG | | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.49** | **340** | | P | | **P** | **03 46 25.9** | **-0.3** |
| | comp=Z,1.9nm,0.7s,baz=56,slow=8.9,SNR=6.4 | | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **65.77** | **29** | | P | | **P** | **03 46 28.3** | **+0.3** |
| | comp=Z,2.6nm,0.9s,baz=306,slow=7.2,SNR=4.5 | | | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **65.77** | **29** | *i* | P | | **P** | **03 46 29.7** | **+1.7** |
| YKA | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| **FORT** | **Forrest** | **66.64** | **192** | | P | | **P** | **03 46 34.4** | **+0.5** |
| **FORT** | **Forrest** | **66.64** | **192** | | P | | **P** | **03 46 35.5** | **+1.6** |
| | comp=Z,72nm,0.6s | | | | | | | | | |
| **STKA** | **Stephens Creek** | **66.70** | **179** | | P | | **P** | **03 46 33.9** | **-0.4** |
| | comp=Z,5.3nm,0.8s,baz=0.1,slow=6.1,SNR=3.0 | | | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | | | |
| **FINES** | **FINESS Array B** | **70.14** | **332** | | P | | **P** | **03 46 55.4** | **0.0** |
| | comp=Z,2.4nm,0.4s,baz=54,slow=6.1,SNR=32 | | | | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | | | | |
| **B08A** | **Colville Reser** | **70.66** | **44** | | P | | **P** | **03 46 59.8** | **+0.9** |
| **KBZ** | **Khabaz** | **71.58** | **311** | | P | | **P** | **03 47 04.5** | **0.0** |
| | comp=Z,8.7nm,0.8s,baz=26,slow=6.2,SNR=7.7 | | | | | | | | | |
| | comp=Z,8.7nm,0.8s | | | | | | | | | |
| **KBZ** | **Khabaz** | **71.58** | **311** | *d* | *iP* | | **P** | **03 47 04.7** | **+0.2** |
| KBZ | | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| **KIV** | **Kislovodsk** | **71.60** | **311** | | | | **P** | **03 47 05.0** | **+0.2** |
| **KIV** | **Kislovodsk** | **71.60** | **311** | | *eP* | | **P** | **03 47 04.7** | **-0.1** |
| KIV | | | | | pmax | | pmax | | | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| **VSU** | **Vasula** | **71.70** | **330** | *c* | *iP* | | **P** | **03 47 04.1** | **-0.9** |
| VSU | | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.2s | | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **71.73** | **311** | | *eP* | | **P** | **03 47 06.3** | **+0.5** |
| **PINE** | **Pine Mountain** | **72.09** | **49** | | | | **P** | **03 47 09.7** | **+1.8** |
| **AKASG** | **Malin Array Be** | **75.34** | **322** | | P | | **P** | **03 47 24.8** | **-1.7** |
| | comp=Z,1.4nm,0.4s,baz=50,slow=6.1,SNR=9.9 | | | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.34** | **322** | *i* | P | | **P** | **03 47 24.7** | **-1.8** |
| AKASG | | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **75.34** | **322** | | P | | **P** | **03 47 26.1** | **-0.4** |
| AKBB | | | | | IAmb | | IAmb | 03 47 31.3 | | |
| | comp=Z,6.3nm,0.7s | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **75.34** | **322** | *d* | *iP* | | **P** | **03 47 26.2** | **-0.3** |
| AKBB | | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | | | |
| **KIEV** | **Kiev** | **75.35** | **322** | | P | | **P** | **03 47 26.0** | **-0.6** |
| **KIEV** | **Kiev** | **75.35** | **322** | ⇑ | P | | **P** | **03 47 24.9** | **-1.6** |
| **KIEV** | **Kiev** | **75.35** | **322** | | P | | **P** | **03 47 26.0** | **-0.6** |
| KIEV | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | | |
| **NC405** | **NORSAR Array S** | **75.42** | **337** | | P | | **P** | **03 47 27.2** | **+0.4** |
| **HFS** | **Hagfors** | **75.49** | **336** | | P | | **P** | **03 47 27.7** | **+0.4** |
| | comp=Z,3.5nm,0.8s,baz=67,slow=3.9,SNR=12 | | | | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | | | | |
| **NC204** | **NORSAR Array S** | **75.59** | **337** | | P | | **P** | **03 47 28.3** | **+0.4** |
| NC204 | | | | | IAmb | | IAmb | 03 47 30.3 | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.63** | **337** | | P | | **P** | **03 47 28.2** | **+0.1** |
| | comp=Z,6.4nm,1.0s,baz=41,slow=5.9 | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.63** | **337** | | P | | **P** | **03 47 26.7** | **-1.4** |
| **NOA** | **NORSAR Array B** | **75.63** | **337** | | P | | **P** | **03 47 28.5** | **+0.4** |
| | comp=Z,1.5nm,0.6s,baz=40,slow=5.8,SNR=16 | | | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | | | |
| **KVN** | **Kaiserville** | **76.46** | **52** | | P | | **P** | **03 47 34.3** | **+0.9** |
| **KVN** | **Kaiserville** | **76.46** | **52** | | P | | **P** | **03 47 34.3** | **+0.9** |
| KVN | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.67** | **52** | | P | | **P** | **03 47 36.1** | **+1.4** |
| | comp=Z,1.3nm,0.7s,baz=295,slow=5.1,SNR=9.5 | | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **76.98** | **309** | | P | | **P** | **03 47 34.1** | **-2.2** |
| ARPR | | | | | IAmb | | IAmb | 03 47 47.3 | | |
| | comp=Z,27nm,1.0s | | | | | | | | | |
| **BURAR** | **Bucovina Array** | **79.33** | **322** | ⇓ | P | | **P** | **03 47 50.4** | **+1.3** |
| **CFR** | **Carcaliu** | **79.37** | **318** | ⇓ | P | | **P** | **03 47 47.7** | **-1.4** |
| **PDAR** | **Pinedale Array** | **79.48** | **45** | | P | | **P** | **03 47 50.5** | **+0.4** |
| | comp=Z,1.5nm,0.9s,baz=349,slow=1.3,SNR=6.0 | | | | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.56** | **311** | | P | | **P** | **03 47 49.4** | **-1.1** |
| **BRTR** | **Keskin Array B** | **79.56** | **311** | | P | | **P** | **03 47 49.7** | **-0.8** |
| | comp=Z,2.3nm,0.9s,baz=176,slow=3.7,SNR=4.5 | | | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | | | |
| **VRI** | **Vrincioaia** | **79.69** | **319** | ⇑ | P | | **P** | **03 47 49.0** | **-1.9** |
| **VRI** | **Vrincioaia** | **79.69** | **319** | ⇑ | P | | **P** | **03 47 49.0** | **-1.9** |
| **PLOR** | **Plostina** | **79.74** | **320** | ⇓ | P | | **P** | **03 47 48.6** | **-2.6** |
| **PLOR** | **Plostina** | **79.74** | **320** | ⇓ | P | | **P** | **03 47 48.6** | **-2.6** |
| **MLR** | **Muntele Rosu** | **80.35** | **320** | ⇑ | P | | P | 03 47 49.7 | -5.0 |
| **MLR** | **Muntele Rosu** | **80.35** | **320** | ⇑ | P | | P | 03 47 49.7 | -4.9 |
| **VOIR** | | **80.86** | **320** | ⇑ | P | | P | 03 47 41.3 | -16 |
| **MORC** | **Moravsky Berou** | **81.53** | **327** | | *eP* | | **P** | **03 47 56.4** | **-4.3** |
| **VRAC** | **Vranov** | **82.30** | **327** | | *eP* | | **P** | **03 48 03.9** | **-0.8** |
| **CLL** | **Collm** | **82.36** | **330** | | *iP* | | **P** | **03 48 05.7** | **+0.7** |
| | comp=Z,47nm,2.1s | | | | | | | | | |
| **CLL** | **Collm** | **82.36** | **330** | | *iP* | | **P** | **03 48 05.7** | **+0.7** |
| CLL | | | | | pmax | | pmax | | | |
| | comp=Z,47nm,2.1s | | | | | | | | | |
| **KRUC** | **Moravsky** | **82.57** | **327** | | *eP* | | **P** | **03 48 05.4** | **-0.7** |
| **ALN** | **Alexandroupoli** | **83.31** | **316** | | P | | **P** | **03 48 11.4** | **+1.3** |
| **ALN** | **Alexandroupoli** | **83.31** | **316** | | P | | **P** | **03 48 11.4** | **+1.3** |
| ALN | | | | | pmax | | pmax | | | |
| | comp=Z,111nm,1.5s | | | | | | | | | |
| **GEC2** | **GERESS Array S** | **83.92** | **328** | | P | | **P** | **03 48 14.3** | **+1.1** |
| **GERES** | **GERESS Array B** | **83.92** | **328** | | P | | **P** | **03 48 13.6** | **+0.4** |
| **GERES** | **GERESS Array B** | **83.92** | **328** | | P | | **P** | **03 48 13.6** | **+0.4** |
| **S22A** | **4UR Ranch, Cre** | **84.28** | **47** | | P | | **P** | **03 48 15.5** | **-0.1** |
| **KOKK** | **Kokkinochori,** | **84.52** | **317** | | P | | P | 03 48 25.5 | +9.2 |
| **EKA** | **Eskdalemuir Ar** | **84.65** | **340** | | P | | **P** | **03 48 18.6** | **+2.0** |
| | comp=Z,0.7nm,0.6s,baz=32,slow=4.4,SNR=5.2 | | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | | |
| **OUR** | **Ouranopolis** | **84.86** | **317** | | P | | **P** | **03 48 21.6** | **+3.6** |
| **SOH** | **Sokhos** | **84.88** | **317** | | P | | P | 03 48 26.3 | +8.1 |
| **KNT** | **Kendrikon** | **84.90** | **318** | | P | | P | 03 48 26.3 | +8.1 |
| **HORT** | **Hortiatis** | **85.17** | **317** | | P | | **P** | **03 48 22.5** | **+2.8** |
| **BTNL** | **Ternell** | **85.62** | **333** | | *dP* | | **P** | **03 48 22.6** | **+0.9** |
| **MEM** | **Membach** | **85.65** | **333** | | *dP* | | **P** | **03 48 17.1** | **-4.7** |
| **BHOU** | **Houvegnez** | **85.86** | **333** | | *dP* | | **P** | **03 48 23.2** | **+0.3** |
| **PDG** | **Podgorica** | **85.96** | **321** | | P | | **P** | **03 48 24.5** | **+1.0** |
| **BCLA** | **Clavier** | **86.07** | **333** | | *dP* | | **P** | **03 48 22.1** | **-1.8** |
| **BGES** | **Gesves** | **86.18** | **333** | | *dP* | | **P** | **03 48 21.7** | **-2.7** |
| **RCHB** | **Rochefort** | **86.31** | **333** | | *dP* | | **P** | **03 48 25.5** | **+0.5** |
| **STAL** | **STALIGIAL** | **86.31** | **327** | | P | | **P** | **03 48 26.1** | **+0.9** |
| **ANMO** | **Albuquerque** | **86.33** | **49** | | P | | **P** | **03 48 25.3** | **-0.4** |
| ANMO | | | | | IAmb | | IAmb | 03 48 30.1 | | |
| | comp=Z,15nm,1.1s | | | | | | | | | |
| **DOU** | **Dourbes** | **86.59** | **333** | | *dP* | | **P** | **03 48 27.6** | **+1.2** |
| **319A** | **Douglas** | **86.82** | **54** | | P | | **P** | **03 48 26.6** | **-1.5** |
| **COWI** | **Conover** | **87.54** | **32** | | P | | **P** | **03 48 31.6** | **+0.5** |
| **CLF** | **Chambon-Foret** | **89.17** | **333** | | P | | **P** | **03 48 38.7** | **0.0** |
| **W35A** | **Tecumseh** | **91.88** | **44** | | | | **P** | **03 48 51.1** | **-0.6** |
| **I49A** | **Point Hope** | **91.93** | **30** | | P | | **P** | **03 48 52.4** | **+0.7** |
| **SADO** | **Sadowa** | **92.67** | **27** | | LR | | LR | 04 32 36.3 | | |
| | comp=Z,3μm,21.8s,baz=168,slow=37 | | | | | | | | | |
| **CCM** | **Cathedral Cave** | **92.75** | **38** | | P | | **P** | **03 48 55.0** | **-0.6** |
| **CCM** | **Cathedral Cave** | **92.75** | **38** | | P | | **P** | **03 48 55.0** | **-0.6** |
| CCM | | | | | pmax | | pmax | | | |
| | comp=Z,38nm,1.2s | | | | | | | | | |
| **TRQ** | **Mont Tremblant** | **93.02** | **24** | | P | | **P** | **03 48 56.9** | **+0.1** |
| **QSPA** | **South Pole Qui** | **124.92** | **180** | | PKP | | **PKiKP** | **03 54 42.7** | **+0.3** |
| | comp=Z,0.8nm,0.5s,baz=264,slow=2.6,SNR=6.6 | | | | | | | | | |
| **LPAZ** | **La Paz** | **148.23** | **61** | | PKPbc | | **PKiKP** | **03 55 31.4** | **-0.7** |
| | comp=Z,1.7nm,0.8s,baz=352,slow=3.3,SNR=3.1 | | | | | | | | | |

*KNET **14** 03:57:06.4±0.7, 42°.13N×73°.76E, h7km±5km, ml1.5, Error ellipse: s-maj=5.1km s-min=3.8km az=133.0*
*SOME **14** 03:57:06.9, 42°.13N×73°.75E, h5km*
*NNC **14** 03:57:08.1±1.0, 42°.22N×73°.75E, h0km, mb3.1, mpv2.8, Error ellipse: s-maj=8.9km s-min=3.4km az=173.0*

**ISC 14 03:57:07.2±1.1, 42°.14N±0°.06×73°.77E±0°.02, h4km±10km, n27, σ0°73/45, 14C-3D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AML** | **Almayashu** | **0.06** | **266** | ⇓ | P | **Pg** | **03 57 08.7** | **-0.1** |
| | 69nm,0.1s,SNR=189 | | | | | | | |
| AML | | | | | ⇑S | **Sg** | **03 57 09.9** | **0.0** |
| | 763nm,0.1s | | | | | | | |
| **EKS2** | **Erkin-Say** | **0.53** | **1** | ⇑ | P | **Pg** | **03 57 17.5** | **+0.2** |
| | 7.9nm,0.2s,SNR=30 | | | | | | | |
| EKS2 | | | | | ⇑S | **Sg** | **03 57 25.0** | **+0.9** |
| | 11nm,0.1s | | | | | | | |
| **UCH** | **Uchtor** | **0.56** | **80** | ⇑ | P | **Pg** | **03 57 18.4** | **+0.5** |
| | 2.0nm,0.1s,SNR=5.9 | | | | | | | |
| **MRKS** | **Merke** | **0.73** | **327** | | *eP* | **Pg** | **03 57 20.7** | **-0.5** |
| | 6.0nm,0.1s | | | | | | | |
| MRKS | | | | | *e*S | **Sg** | **03 57 30.6** | **-0.1** |
| | 99nm,0.2s | | | | | | | |
| **MRKS** | **Merke** | **0.73** | **327** | | P | **Pg** | **03 57 20.7** | **-0.5** |
| | 6.0nm,0.1s | | | | | | | |
| MRKS | | | | | S | **Sg** | **03 57 30.6** | **-0.1** |
| | 99nm,0.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **0.73** | **47** | ⇑ | P | **Pg** | **03 57 21.6** | **+0.3** |
| | 6.6nm,0.2s | | | | | | | |
| AAK | | | | | ⇑S | **Sb** | **03 57 32.1** | **-1.0** |
| | 17nm,0.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **0.73** | **47** | ⇓ | P | **Pg** | **03 57 21.3** | **0.0** |
| | 1.7nm,0.2s | | | | | | | |
| AAK | | | | | ⇑S | **Sg** | **03 57 31.1** | **+0.3** |
| | 9.3nm,0.5s | | | | | | | |
| **CHMS** | **Chumysh** | **1.13** | **40** | ⇑ | P | **Pg** | **03 57 28.7** | **0.0** |
| | 4.1nm,0.2s,SNR=10.0 | | | | | | | |
| CHMS | | | | | ⇑S | **Sb** | **03 57 44.3** | **0.0** |
| | 3.9nm,0.1s | | | | | | | |
| **USP** | **Ospenovka** | **1.25** | **25** | ⇑ | P | **Pg** | **03 57 30.9** | **-0.3** |
| | 8.0nm,0.2s,SNR=17 | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.56** | **59** | ⇑ | P | **Pb** | **03 57 36.3** | **-0.4** |
| | 3.7nm,0.1s,SNR=17 | | | | | | | |
| TKM2 | | | | | ⇑S | **Sg** | **03 57 57.4** | **0.0** |
| | 7.0nm,0.1s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.56** | **59** | ⇓ | P | **Pn** | **03 57 36.0** | **0.0** |
| | 3.1nm,0.5s | | | | | | | |
| TKM2 | | | | | ⇑S | **Sb** | **03 57 57.2** | **+0.2** |
| | 2.3nm,0.3s | | | | | | | |
| **DGS** | **Degeres** | **1.84** | **52** | *e* | P | **Pg** | **03 57 42.0** | **-0.5** |
| | 4.2nm,0.5s | | | | | | | |
| DGS | | | | | *e*S | **Sg** | **03 58 06.8** | **+0.4** |
| | 7.8nm,0.7s | | | | | | | |
| **DGS** | **Degeres** | **1.84** | **52** | | P | **Pg** | **03 57 42.0** | **-0.5** |
| | 4.2nm,0.5s | | | | | | | |
| DGS | | | | | S | **Sg** | **03 58 06.8** | **+0.4** |
| | 7.8nm,0.7s | | | | | | | |
| **KST** | **Kastek** | **1.86** | **60** | *e* | P | **Pg** | **03 57 42.5** | **-0.2** |
| | 3.6nm,0.3s | | | | | | | |
| KST | | | | | *e*S | **Sg** | **03 58 07.8** | **+1.0** |
| | 12nm,0.8s | | | | | | | |
| **KST** | **Kastek** | **1.86** | **60** | | Pg | **Pg** | **03 57 43.5** | **+0.7** |
| | 3.6nm,0.3s | | | | | | | |
| KST | | | | | Lg | Lg | 03 58 09.2 | |
| | 12nm,0.8s | | | | | | | |
| **KRBS** | **Karabastau** | **2.10** | **41** | *e* | P | **Pb** | **03 57 46.0** | **+0.3** |
| | 5.1nm,0.3s | | | | | | | |
| KRBS | | | | | *e*S | **Sg** | **03 58 13.8** | **-0.7** |
| | 4.2nm,0.3s | | | | | | | |
| **KRBS** | **Karabastau** | **2.10** | **41** | | Pg | **Pb** | **03 57 46.0** | **+0.3** |
| | 5.1nm,0.3s | | | | | | | |
| KRBS | | | | | Lg | Lg | 03 58 13.8 | |
| | 4.2nm,0.3s | | | | | | | |
| **TNSS** | **Tian-Shan** | **2.51** | **68** | *e* | P | **Pg** | **03 57 54.2** | **-1.1** |
| | 3.4nm,0.3s | | | | | | | |
| TNSS | | | | | *e*S | **Sg** | **03 58 28.0** | **+0.1** |
| | 4.9nm,0.8s | | | | | | | |
| **TNSS** | **Tian-Shan** | **2.51** | **68** | | Pg | **Pg** | **03 57 54.2** | **-1.1** |
| | 3.4nm,0.3s | | | | | | | |
| TNSS | | | | | Lg | Lg | 03 58 28.0 | |
| | 4.9nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **2.59** | **293** | | Pg | **Pg** | **03 57 55.7** | **-1.2** |
| | 2.9nm,0.9s,baz=110,slow=16,SNR=3.5 | | | | | | | |
| KK31 | | | | | ⇑Lg | Lg | 03 58 27.9 | |
| | 0.8nm,0.3s,baz=109,slow=28,SNR=4.9 | | | | | | | |
| **MDOK** | **Medeo** | **2.63** | **66** | *e* | P | **Pg** | **03 57 56.4** | **-1.1** |
| | 3.0nm,0.4s | | | | | | | |
| MDOK | | | | | *e*S | **Sg** | **03 58 31.9** | **+0.4** |
| | 8.6nm,0.7s | | | | | | | |
| **MDOK** | **Medeo** | **2.63** | **66** | | Pg | **Pg** | **03 57 56.4** | **-1.1** |
| | 3.0nm,0.4s | | | | | | | |
| MDOK | | | | | Lg | Lg | 03 58 31.9 | |
| | 8.6nm,0.7s | | | | | | | |
| **KTBS** | **Karatobe** | **2.66** | **53** | *e* | P | **Pb** | **03 57 55.9** | **+0.6** |
| | 2.9nm,0.6s | | | | | | | |
| KTBS | | | | | *e*S | **Sg** | **03 58 31.4** | **-1.1** |
| | 9.6nm,0.5s | | | | | | | |
| **KTBS** | **Karatobe** | **2.66** | **53** | | Pg | **Pb** | **03 57 55.9** | **+0.6** |
| | 2.9nm,0.6s | | | | | | | |
| KTBS | | | | | Lg | Lg | 03 58 31.4 | |
| | 9.6nm,0.5s | | | | | | | |
| **CHKK** | **Chushkaly** | **2.92** | **53** | *e* | P | **Pb** | **03 58 00.9** | **+1.1** |
| | 0.9nm,0.2s | | | | | | | |
| CHKK | | | | | *e*S | **Sg** | **03 58 39.2** | **-1.7** |
| | 6.8nm,0.2s | | | | | | | |
| **BRLS** | **Borolday** | **3.04** | **288** | *e* | P | **Pb** | **03 58 02.0** | **+0.1** |
| | 2.4nm,0.3s | | | | | | | |
| BRLS | | | | |

baz=249,slow=14
**ARA0 ARCESS Array S 5.73 66** Pn **Pn 04 17 35.6 +0.9**
baz=249,slow=14
**ARCES ARCESS Array B 5.73 66** Pn **Pn 04 17 35.1 +0.4**
comp=Z,0.2nm,0.3s,baz=260,slow=11,SNR=14
ARCES Sn **Sn 04 18 38.5 -1.9**
comp=Z,0.4nm,0.3s,baz=253,slow=19,SNR=1.7
comp=Z,1.4nm,0.7s
**DOMB Dombas 5.85 187** *e*P **Pn 04 17 37.7 +1.3**
DOMB *e*S **Sn 04 18 39.5 -3.9**
**AKN Aaknes 5.87 196** Pn **Pn 04 17 38.0 +1.3**
AKN Sn **Sn 04 18 40.7 -3.1**
**AKN Aaknes 5.87 196** Pn **Pn 04 17 38.0 +1.3**
AKN Sn **Sn 04 18 40.7 -3.1**
**KEV Kevo 6.29 65** *e*P **Pn 04 17 44.5 +2.2**
**NB201 NORSAR Array S 6.82 177** *e*P **Pn 04 17 51.5 +1.8**
**NB2 NORSAR Subarra 6.83 177** Pn **Pn 04 17 52.2 +2.3**
baz=358,slow=14
NB2 Sn **Sn 04 19 07.2 -0.3**
baz=350,slow=22
**NB2 NORSAR Subarra 6.83 177** Pn **Pn 04 17 52.2 +2.3**
baz=358,slow=14
NB2 Sn **Sn 04 19 07.2 -0.3**
baz=350,slow=22
**NOA NORSAR Array B 6.83 177** Pn **Pn 04 17 51.9 +2.0**
baz=353,slow=14,SNR=10
NOA Sn **Sn 04 19 06.0 -1.5**
comp=Z,0.1nm,0.3s,baz=360,slow=17,SNR=4.2
comp=Z,0.3nm,0.5s
**NRA0 NORESS Array S 7.14 176** Pn **Pn 04 17 56.2 +2.1**
baz=357,slow=14
NRA0 Sn **Sn 04 19 11.4 -3.7**
baz=3.5,slow=28
**NRA0 NORESS Array S 7.14 176** Pn **Pn 04 17 56.2 +2.1**
baz=357,slow=14
NRA0 Sn **Sn 04 19 11.4 -3.7**
baz=3.5,slow=28
**VADS Vadso 7.15 63** *e*P **Pn 04 17 55.9 +1.8**
**JMIC Jan Mayen 7.39 304** Pn **Pn 04 17 56.1 -1.3**
**JMIC Jan Mayen 7.39 304** Pn **Pn 04 17 56.1 -1.3**
**JMIC Jan Mayen 7.39 304** Pn **Pn 04 17 56.1 -1.3**
comp=Z,4.8nm,0.3s,baz=121,slow=5.7,SNR=12
**JMI Jan Mayen 7.44 303** Pn **Pn 04 17 57.5 -0.6**
**JMI Jan Mayen 7.44 303** Pn **Pn 04 17 57.5 -0.6**
**HFS Hagfors 7.86 168** Pn **Pn 04 18 05.7 +1.8**
baz=348,slow=14
HFS Sn **Sn 04 19 29.1 -3.6**
baz=355,slow=22
**HFS Hagfors 7.86 168** Pn **Pn 04 18 05.7 +1.8**
baz=348,slow=14
HFS Sn **Sn 04 19 29.1 -3.6**
baz=355,slow=22
**HFS Hagfors 7.86 168** Pn **Pn 04 18 05.7 +1.8**
comp=Z,0.4nm,0.3s,baz=347,slow=12,SNR=19
HFS Sn **Sn 04 19 31.8 -0.9**
comp=Z,0.5nm,0.3s,baz=352,slow=20,SNR=3.7
comp=Z,0.8nm,0.3s
**APA0 Apatity Array 8.53 81** Pn **Pn 04 18 12.5 -0.7**
baz=286,slow=11
APA0 Sn **Sn 04 19 43.7 -5.5**
baz=290,slow=28
**APA0 Apatity Array 8.53 81** Pn **Pn 04 18 12.5 -0.7**
baz=286,slow=11
APA0 Sn **Sn 04 19 43.7 -5.5**
baz=290,slow=28
**FIA0 FINESS Array S 9.24 126** Pn **Pn 04 18 24.4 +1.7**
baz=326,slow=14
FIA0 Sn **Sn 04 20 04.3 -2.2**
baz=325,slow=22
**FIA0 FINESS Array S 9.24 126** Pn **Pn 04 18 24.4 +1.7**
baz=326,slow=14
FIA0 Sn **Sn 04 20 04.3 -2.2**
baz=325,slow=22
**FINES FINESS Array B 9.24 126** Pn **Pn 04 18 24.1 +1.3**
comp=Z,0.3nm,0.3s,baz=326,slow=13,SNR=14
FINES Sn **Sn 04 20 02.5 -4.0**
comp=Z,0.4nm,0.3s,baz=326,slow=17,SNR=3.1
comp=Z,0.8nm,0.3s

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**IDC 14 04:36:23.0±2.2, 7.00S×128.19E, h0km, mb3.9/2, mbtmp3.9/4, ML3.6/2, Error ellipse: s-maj=283.7km s-min=29.5km az=66.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.18** | **156** | Pn | Pn | 04 39 44.1 | -1.1 |
| | 0.2nm,0.3s,baz=331,slow=14,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 04 42 07.9 | -16 |
| | 0.9nm,0.3s,baz=338,slow=22,SNR=13 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **17.46** | **162** | P | P | 04 40 28.8 | -0.6 |
| | 0.5nm,0.3s,baz=344,slow=11,SNR=30 | | | | | | |
| ASAR | | | | S | Sn | 04 43 30.2 | -13 |
| | 0.4nm,0.5s,baz=350,slow=26,SNR=4.4 | | | | | | |
| | 2.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.25** | **328** | P | P | 04 47 19.7 | +0.3 |
| | 0.5nm,0.4s,baz=131,slow=8.1,SNR=5.4 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.58** | **329** | P | P | 04 47 45.8 | -0.3 |
| | 0.6nm,0.5s,baz=130,slow=5.1,SNR=5.2 | | | | | | |
| | 0.6nm,0.5s | | | | | | |

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*DNK* ***14*** *05:07:46.1±5.2, 57.89N×32.05W, h15km±71km, mb4.6*
*IDC* ***14*** *05:07:48.8±0.4, 58.28N×31.99W, h0km, mb4.3/29, mbtmp4.3/34, ML3.6/5, MS4.6/18, Error ellipse: s-maj=12.9km s-min=9.6km az=172.0*
*GCMT* ***14*** *05:07:48.5±0.3, 58.53N±0.04×31.72W±0.04, h14km±1km, MW5.1/84, Moment Tensor Solution. s17,c18; s84,c130; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~3.79±.40; Mθθ0.20±.23; Mϕϕ3.59±.26; Mrθ2.11±.57; Mrϕ1.46±.12; Mθϕ~2.32±.51; Best double couple: Mo4.97700×10^16 NP1:ϕs352.00000°, δ62.00000°, λ-120.00000°. NP2: ϕs223.00000°, δ40.00000°, λ-47.00000°. Principal axes: T 4.4460, Plg12.0000°, Azm103.0000°; N 1.0630, Plg26.0000°, Azm7.0000°; P -5.5070, Plg61.0000°, Azm216.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC* ***14*** *05:07:50.5±1.5, 58.31N±0.09×32.0W±0.1, h10km±1km, mb4.9/366 Error ellipse: s-maj=14.9km s-min=11.7km az=179.0*
**ISC 14 05:07:50.8±0.3, 58.38N±0.05×32.06W±0.04, h13km, n692, s0994/529, mb4.9/257, MS4.5/32, 1C-10D, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NRS** | **Narsarsuaq** | **7.30** | **298** | *i* P | **Pn** | **05 09 33.8** | **-3.2** |
| **ANGG** | **Ammassalik, Gr** | **7.72** | **343** | Pn | **Pn** | **05 09 42.0** | **-0.8** |
| **ANGG** | **Ammassalik, Gr** | **7.72** | **343** | *i* P | **Pn** | **05 09 40.7** | **-2.0** |
| **BORG** | **Borgarnes** | **8.18** | **34** | | **Pn** | **05 09 50.1** | **+1.1** |
| **BORG** | **Borgarnes** | **8.18** | **34** | Pn | **Pn** | **05 09 50.4** | **+1.4** |
| | 1.4nm,0.3s,baz=108,slow=9.1,SNR=15 | | | | | | |
| BORG | | | | Sn | **Sn** | **05 11 22.2** | **+1.1** |
| | 0.4nm,0.3s,baz=73,slow=19,SNR=1.3 | | | | | | |
| BORG | | | | LR | LR | 05 12 17.1 | |
| | comp=Z,1μm,20.0s,baz=207,slow=33 | | | | | | |
| | 9.1nm,0.5s | | | | | | |
| **IVI** | **Ivigtut** | **8.60** | **296** | Pn | **Pn** | **05 09 56.1** | **+1.3** |
| **SOEG** | **Soedalen** | **9.87** | **1** | *i* P | **Pn** | **05 10 13.7** | **+1.6** |
| **DY2G** | **Dye2** | **10.43** | **327** | *i* P | **Pn** | **05 10 20.6** | **+0.6** |
| **ICESG** | **Greenland Ices** | **11.26** | **346** | *i* P | **Pn** | **05 10 31.6** | **+0.1** |
| **SFJD** | **Kangerlussuaq** | **12.09** | **323** | | **Pn** | **05 10 44.5** | **+2.1** |
| **SFJD** | **Kangerlussuaq** | **12.09** | **323** | Pn | **Pn** | **05 10 43.9** | **+1.5** |
| | 0.9nm,0.3s,baz=130,slow=12,SNR=6.5 | | | | | | |
| SFJD | | | | Sn | Sn | 05 12 46.5 | -10 |
| | 0.5nm,0.3s,baz=138,slow=15,SNR=2.6 | | | | | | |
| SFJD | | | | LR | LR | 05 14 41.6 | |
| | comp=Z,3μm,18.8s,baz=88,slow=34 | | | | | | |
| | 12nm,0.8s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **12.09** | **323** | *i* P | **Pn** | **05 10 40.8** | **-1.6** |
| **IGLA** | **Glengowla, Co** | **13.63** | **102** | Pn | **P** | **05 11 09.3** | **-3.1** |
| **IDGL** | **Inch Island, C** | **13.85** | **93** | Pn | **P** | **05 11 12.1** | **-2.7** |
| **SUMG** | **Summit** | **14.49** | **352** | Pn | **Pn** | **05 11 17.0** | **+1.4** |
| **SUMG** | **Summit** | **14.49** | **352** | *i* P | **Pn** | **05 11 17.0** | **+1.4** |
| **DSB** | **Dublin** | **15.27** | **99** | Pn | **P** | **05 11 29.9** | **-0.8** |
| **DSB** | **Dublin** | **15.27** | **99** | Pn | **Pn** | **05 11 24.9** | **-0.9** |
| **IWEX** | **Carrickbyrne,** | **15.52** | **102** | Pn | **P** | **05 11 33.2** | **-0.2** |
| **NUUG** | **Nuugaatsiaq** | **15.80** | **335** | *i* P | **Pn** | **05 11 30.9** | **-1.7** |
| **ESK** | **Eskdalemuir** | **16.02** | **89** | Pn | **Pn** | **05 11 35.2** | **-0.3** |
| **EKA** | **Eskdalemuir Ar** | **16.04** | **88** | Pn | **Pn** | **05 11 35.5** | **-0.2** |
| | baz=295,slow=9.8 | | | | | | |
| | 19nm,1.0s | | | | | | |
| **DBG** | **Daneborg** | **16.63** | **11** | *i* P | **Pn** | **05 11 42.4** | **-0.8** |
| **FRB** | **Frobisher Bay** | **18.26** | **302** | P | **Pn** | **05 12 03.2** | **-0.3** |
| | 0.1nm,0.3s,baz=90,slow=12,SNR=4.2 | | | | | | |
| FRB | | | | LR | LR | 05 18 13.4 | |
| | comp=Z,2μm,18.9s,baz=46,slow=34 | | | | | | |
| | 21nm,1.1s | | | | | | |
| **DAG** | **Danmarks Havn** | **19.07** | **9** | *i* P | **Pn** | **05 12 14.3** | **+1.0** |
| DAG | | | | IAmb | IAmb | 05 12 24.6 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **SCHQ** | **Schefferville** | **19.33** | **274** | P | **P** | **05 12 15.0** | **-0.5** |
| **SCHQ** | **Schefferville** | **19.33** | **274** | P | **Pn** | **05 12 16.1** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=69,slow=13,SNR=6.6 | | | | | | |
| SCHQ | | | | LR | LR | 05 18 33.8 | |
| | comp=Z,1μm,18.7s,baz=26,slow=33 | | | | | | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **SRBC** | **Serra Branca** | **19.53** | **171** | *e*P | **Pn** | **05 12 21.3** | **+2.3** |
| | comp=Z,182nm,1.6s | | | | | | |
| **ROSA** | **Rosais** | **19.83** | **171** | *e*P | **Pn** | **05 12 24.3** | **+1.7** |
| | comp=Z,136nm,2.1s | | | | | | |
| **PSBA** | **Serra de Santa** | **19.86** | **169** | *e*P | **Pn** | **05 12 25.4** | **+2.4** |
| | comp=Z,86nm,1.6s | | | | | | |
| **PAGU** | **Agualva, Azore** | **19.88** | **169** | *e*P | **Pn** | **05 12 25.7** | **+2.6** |
| | comp=Z,159nm,2.1s | | | | | | |
| **PCED** | **Cedros** | **19.88** | **172** | *e*P | **Pn** | **05 12 27.5** | **+4.3** |
| | comp=Z,56nm,1.7s | | | | | | |
| **PMAN** | **Manadas** | **19.93** | **171** | *e*P | **Pn** | **05 12 26.6** | **+2.9** |
| | comp=Z,162nm,2.1s | | | | | | |
| **PSCM** | **Serra do Cume** | **19.95** | **169** | *e*P | **Pn** | **05 12 28.2** | **+4.2** |
| | comp=Z,106nm,1.6s | | | | | | |
| **PICO** | **Pico** | **20.03** | **172** | *e*P | Pn | 05 12 24.8 | -0.2 |
| | comp=Z,88nm,1.9s | | | | | | |
| **PCAN** | **Candelaria** | **20.06** | **172** | *e*P | **P** | **05 12 24.3** | **+0.7** |
| | comp=Z,80nm,1.5s | | | | | | |
| **PPNO** | **Prainha do Nor** | **20.07** | **171** | *e*P | Pn | 05 12 30.5 | +5.0 |
| | comp=Z,82nm,1.9s | | | | | | |
| **PID** | **Ribeirinha** | **20.11** | **171** | *e*P | Pn | 05 12 31.8 | +5.8 |
| | comp=Z,144nm,1.8s | | | | | | |
| **NEEM** | **North Greenlan** | **20.23** | **348** | *i* P | **P** | **05 12 25.6** | **+0.2** |
| NEEM | | | | IAmb | IAmb | 05 12 32.1 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **PGRON** | **Lagoa das Cont** | **21.07** | **165** | *e*P | **P** | **05 12 38.4** | **+3.8** |
| | comp=Z,83nm,1.9s | | | | | | |
| **BART** | **Pico Bartolome** | **21.10** | **165** | *e*P | **P** | **05 12 35.0** | **+0.1** |
| | comp=Z,79nm,1.8s | | | | | | |
| **NC204** | **NORSAR Array S** | **21.43** | **64** | P | **P** | **05 12 37.5** | **-0.8** |
| NC204 | | | | IAmb | IAmb | 05 12 44.6 | |
| | comp=Z,90nm,1.8s | | | | | | |
| **NBO00** | **NORSAR Array S** | **21.49** | **65** | P | **P** | **05 12 38.1** | **-0.7** |
| NBO00 | | | | IAmb | IAmb | 05 12 45.2 | |
| | comp=Z,82nm,1.6s | | | | | | |
| **NB2** | **NORSAR Subarra** | **21.69** | **65** | P | **P** | **05 12 40.4** | **-0.6** |
| | comp=Z,82nm,2.0s,baz=284,slow=10 | | | | | | |
| **NB2** | **NORSAR Subarra** | **21.69** | **65** | P | **P** | **05 12 40.4** | **-0.6** |
| | baz=284,slow=10 | | | | | | |
| **NOA** | **NORSAR Array B** | **21.69** | **65** | P | **P** | **05 12 40.1** | **-0.9** |
| | comp=Z,3.5nm,1.0s,baz=280,slow=11,SNR=8.6 | | | | | | |
| NOA | | | | LR | LR | 05 19 38.8 | |
| | comp=Z,506nm,21.6s,baz=25,slow=33 | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **NC303** | **NORSAR Array S** | **21.73** | **64** | P | **P** | **05 12 40.1** | **-1.3** |
| **NB201** | **NORSAR Array S** | **21.73** | **64** | P | **P** | **05 12 40.7** | **-0.7** |
| **PSMA** | **Santa Maria** | **21.87** | **165** | *e*P | **P** | **05 12 45.3** | **+2.2** |
| | comp=Z,99nm,1.6s | | | | | | |
| **PSMN** | **Pico do Norte,** | **21.87** | **165** | *e*P | **P** | **05 12 43.5** | **+0.4** |
| | comp=Z,101nm,1.8s | | | | | | |
| **NC405** | **NORSAR Array S** | **21.91** | **64** | P | **P** | **05 12 42.4** | **-1.0** |
| NC405 | | | | IAmb | IAmb | 05 12 50.8 | |
| | comp=Z,83nm,1.7s | | | | | | |
| **NC602** | **NORSAR Array S** | **21.91** | **65** | P | **P** | **05 12 42.7** | **-0.7** |
| **GBN** | **Guysborough** | **22.11** | **247** | P | **P** | **05 12 45.5** | **-0.1** |
| GBN | | | | IAmb | IAmb | 05 12 54.5 | |
| | comp=Z,73nm,1.4s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **22.21** | **127** | *e*P | **P** | **05 12 46.5** | **-0.3** |
| | comp=Z,128nm,1.7s | | | | | | |
| PGAV | | | | *e*LR | LR | 05 18 09.5 | |
| | comp=Z,825nm,18.0s | | | | | | |
| **ICQ** | **Pointe Anglais** | **22.30** | **262** | P | **P** | **05 12 47.0** | **-0.6** |
| **TULEG** | **Thule** | **22.31** | **338** | P | **P** | **05 12 48.7** | **+1.3** |
| TULEG | | | | IAmb | IAmb | 05 12 51.8 | |
| | comp=Z,109nm,1.7s | | | | | | |
| **BMRD** | **Maredsous** | **22.69** | **95** | *d*P | **P** | **05 12 50.9** | **-0.8** |
| **DOU** | **Dourbes** | **22.71** | **95** | *d*P | **P** | **05 12 52.8** | **+0.8** |
| | comp=Z,14nm,1.4s | | | | | | |
| **CLF** | **Chambon-Foret** | **22.77** | **102** | P | **P** | **05 12 51.5** | **-1.0** |
| **BGES** | **Gesves** | **22.81** | **94** | *d*P | **P** | **05 12 52.1** | **-0.9** |
| | comp=Z,20nm,1.2s | | | | | | |
| **BCLA** | **Clavier** | **22.90** | **94** | *d*P | **P** | **05 12 54.5** | **+0.5** |
| **POLO** | **Lamas de Olo** | **22.90** | **127** | *e*P | **P** | **05 12 54.0** | **-0.2** |
| | comp=Z,34nm,1.6s | | | | | | |
| **BSTI** | **Sart Tilman** | **22.95** | **93** | *d*P | **P** | **05 12 53.7** | **-0.7** |
| **PBRG** | **Braganca** | **22.99** | **125** | *e*P | **P** | **05 12 55.4** | **+0.3** |
| | comp=Z,82nm,1.5s | | | | | | |
| **RCHB** | **Rochefort** | **23.01** | **95** | *d*P | **P** | **05 12 55.6** | **+0.5** |
| **PVRL** | **Vila Real** | **23.02** | **127** | *e*P | **P** | **05 12 55.6** | **+0.3** |
| | comp=Z,83nm,1.6s | | | | | | |
| **BATG** | **Bathurst New B** | **23.09** | **256** | P | **P** | **05 12 56.5** | **+0.5** |
| BATG | | | | IAmb | IAmb | 05 13 05.6 | |
| | comp=Z,71nm,1.2s | | | | | | |
| **HFS** | **Hagfors** | **23.10** | **66** | P | **P** | **05 12 55.4** | **-0.6** |
| | comp=Z,8.4nm,0.8s,baz=243,slow=9.8,SNR=14 | | | | | | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **MEM** | **Membach** | **23.16** | **93** | *d*P | **P** | **05 12 57.5** | **+0.8** |
| **BTNL** | **Ternell** | **23.24** | **93** | *d*P | **P** | **05 12 57.5** | **0.0** |
| **BHOU** | **Houvegnez** | **23.31** | **93** | *d*P | **P** | **05 12 58.2** | **0.0** |
| | comp=Z,14nm,1.6s | | | | | | |
| **MVO** | **Moncorvo** | **23.40** | **126** | *e*P | **P** | **05 12 59.3** | **+0.1** |
| | comp=Z,152nm,1.6s | | | | | | |
| MVO | | | | *e*LR | LR | 05 18 45.2 | |
| | comp=Z,661nm,18.0s | | | | | | |
| **PVIS** | **Viseu** | **23.41** | **128** | *e*P | **P** | **05 12 57.7** | **-1.6** |
| | comp=Z,68nm,1.7s | | | | | | |
| **LMN** | **Caledonia Moun** | **23.42** | **252** | P | **P** | **05 12 58.7** | **-0.7** |
| **COI** | **Coimbra** | **23.63** | **130** | IAmb | IAmb | 05 13 08.1 | |
| | comp=Z,72nm,1.2s | | | | | | |
| **COI** | **Coimbra** | **23.63** | **130** | *e*P | **P** | **05 13 00.9** | **-0.4** |
| | comp=Z,92nm,1.6s | | | | | | |
| **HAL** | **Halifax** | **23.69** | **248** | P | **P** | **05 13 00.9** | **-0.9** |
| HAL | | | | IAmb | IAmb | 05 13 11.8 | |
| | comp=Z,62nm,1.7s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **23.72** | **130** | *e*P | **P** | **05 13 01.4** | **-0.9** |
| | comp=Z,71nm,1.6s | | | | | | |
| **NOR** | **Nord** | **23.74** | **6** | *i* P | **P** | **05 13 01.6** | **-0.5** |
| NOR | | | | IAmb | IAmb | 05 13 03.1 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **WLF** | **Walferdange** | **23.79** | **95** | *d*P | **P** | **05 13 02.7** | **-0.1** |
| **MTE** | **Manteigas** | **23.82** | **128** | *e*LR | LR | 05 19 02.8 | |
| | comp=Z,837nm,18.0s | | | | | | |
| **PSBE** | **So Bento** | **24.07** | **131** | *e*P | **P** | **05 13 05.5** | **-0.1** |
| **PCBR** | **Castelo Branco** | **24.32** | **129** | *e*P | **P** | **05 13 06.8** | **-1.1** |
| | comp=Z,80nm,1.6s | | | | | | |
| **PMTG** | **Montargil** | **24.67** | **131** | *e*P | **P** | **05 13 09.2** | **-1.9** |
| | comp=Z,79nm,1.8s | | | | | | |
| **PMRV** | **Marv??o** | **24.70** | **129** | *e*P | **P** | **05 13 12.2** | **+0.8** |
| | comp=Z,37nm,2.1s | | | | | | |
| PMRV | | | | *e*LR | LR | 05 19 25.7 | |
| | comp=Z,727nm,18.0s | | | | | | |
| **GGN** | **Saint George** | **24.96** | **253** | P | **P** | **05 13 12.9** | **-0.7** |
| GGN | | | | IAmb | IAmb | 05 13 18.1 | |
| | comp=Z,54nm,1.6s | | | | | | |
| **PESTR** | **Estremoz** | **25.10** | **130** | P | **P** | **05 13 12.7** | **-2.3** |
| PESTR | | | | IAmb | IAmb | 05 13 18.7 | |
| | comp=Z,49nm,1.5s | | | | | | |
| **PESTR** | **Estremoz** | **25.10** | **130** | *e*P | **P** | **05 13 13.8** | **-1.2** |
| | comp=Z,33nm,1.6s | | | | | | |
| **LMQ** | **La Malbaie** | **25.12** | **261** | P | **P** | **05 13 14.9** | **-0.1** |
| LMQ | | | | IAmb | IAmb | 05 13 20.3 | |
| | comp=Z,43nm,1.3s | | | | | | |
| **ECH** | **Echery** | **25.19** | **97** | IAmb | IAmb | 05 13 23.4 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **EVO** | **Evora** | **25.22** | **131** | *e*P | **P** | **05 13 16.0** | **0.0** |
| | comp=Z,38nm,1.7s | | | | | | |
| **LDAQ** | **Lac Daran** | **25.33** | **263** | P | **P** | **05 13 18.4** | **+1.3** |
| LDAQ | | | | IAmb | IAmb | 05 13 25.9 | |
| | comp=Z,54nm,1.5s | | | | | | |
| **EMMW** | **East Machias** | **25.56** | **253** | IAmb | IAmb | 05 13 28.3 | |
| | comp=Z,51nm,1.5s | | | | | | |
| **PBEJ** | **Beja** | **25.71** | **132** | A | A | 05 13 27.5 | |
| | comp=Z,45nm,1.3s | | | | | | |
| **BFO** | **Black Forest** | **25.73** | **95** | P | **P** | **05 13 19.5** | **-1.2** |
| **PAB** | **San Pablo** | **25.89** | **125** | P | **P** | **05 13 21.5** | **-0.7** |
| **PBAR** | **Barrancos** | **25.92** | **130** | *e*P | **P** | **05 13 23.3** | **+1.0** |
| | comp=Z,49nm,1.5s | | | | | | |
| **ESBB** | **Sonseca Array** | **25.95** | **124** | IAmb | IAmb | 05 13 30.1 | |
| | comp=Z,39nm,1.2s | | | | | | |
| **ESDC** | **Sonseca Array** | **25.95** | **124** | P | **P** | **05 13 22.2** | **-0.5** |
| **ESDC** | **Sonseca Array** | **25.95** | **124** | P | **P** | **05 13 22.3** | **-0.4** |
| | comp=Z,6.1nm,0.9s,baz=323,slow=8.3,SNR=30 | | | | | | |
| ESDC | | | | LR | LR | 05 22 02.4 | |
| | comp=Z,334nm,19.1s,baz=332,slow=33 | | | | | | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **PCVE** | **Castro Verde** | **25.99** | **132** | *e*P | **P** | **05 13 24.6** | **+1.6** |
| | comp=Z,62nm,1.6s | | | | | | |
| **MORF** | **Marmelete** | **26.04** | **134** | A | A | 05 13 37.5 | |
| | comp=Z,72nm,1.7s | | | | | | |
| **CEST** | **Esterri de Car** | **26.06** | **113** | P | **P** | **05 13 23.2** | **-0.7** |
| CEST | | | | IAmb | IAmb | 05 13 29.8 | |
| | comp=Z,110nm,1.9s | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **26.10** | **256** | P | **P** | **05 13 24.4** | **+0.4** |
| PKME | | | | IAmb | IAmb | 05 13 27.9 | |
| | comp=Z,48nm,1.2s | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **26.10** | **256** | P | **P** | **05 13 24.2** | **+0.2** |
| | baz=46 | | | | | | |
| **PVAQ** | **Vaqueiros** | **26.31** | **132** | *e*LR | LR | 05 20 07.9 | |
| | comp=Z,775nm,20.0s | | | | | | |
| **CLL** | **Collm** | **26.46** | **86** | *i* P | **P** | **05 13 27.0** | **-0.2** |
| | comp=Z,15nm,1.5s | | | | | | |
| CLL | | | | *i* x | x | 05 13 30.5 | |
| | comp=Z,33nm,1.7s | | | | | | |
| CLL | | | | AMS | AMS | 05 23 00.0 | |
| | comp=Z,800nm,21.6s | | | | | | |
| **CLL** | **Collm** | **26.46** | **86** | P | **P** | **05 13 27.2** | **0.0** |
| | comp=Z,11nm,1.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.49** | **42** | P | **P** | **05 13 27.2** | **-0.1** |
| ARCES | | | | IAmb | IAmb | 05 13 43.1 | |
| | comp=Z,75nm,1.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.49** | **42** | P | **P** | **05 13 27.4** | **+0.1** |
| | comp=Z,3.5nm,0.6s,baz=269,slow=7.3,SNR=13 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **WVL** | **Waterville** | **26.78** | **255** | IAmb | IAmb | 05 13 36.1 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **HSKC** | **Hora Svate Kat** | **27.07** | **87** | AMS | AMS | 05 24 50.0 | |
| | comp=Z,1μm,15.4s | | | | | | |
| **EUNU** | **Eureka** | **27.08** | **342** | P | **P** | **05 13 33.5** | **+0.9** |
| **DAVA** | **Damuels** | **27.20** | **96** | *i* pP | **P** | **05 13 35.5** | **+1.4** |
| | comp=Z,7.5nm,1.5s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **27.46** | **152** | *e*LR | LR | 05 20 39.9 | |
| | comp=Z,433nm,18.0s | | | | | | |
| **RICC** | **Richard** | **27.46** | **86** | AMS | AMS | 05 25 10.0 | |
| | comp=Z,900nm,15.4s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **27.53** | **96** | LR | LR | 05 23 58.1 | |
| | comp=Z,741nm,19.6s,baz=356,slow=35 | | | | | | |
| **RETA** | **Reute** | **27.54** | **94** | *i* P | **P** | **05 13 36.7** | **-0.3** |
| | comp=Z,5.2nm,1.2s | | | | | | |
| **PVCC** | **Panska Ves** | **27.72** | **86** | AMS | AMS | 05 25 30.0 | |
| | comp=Z,900nm,15.0s | | | | | | |
| **MOTA** | **Moosalm** | **27.81** | **94** | *i* pP | **P** | **05 13 44.5** | **+5.0** |
| | comp=Z,9.8nm,1.2s | | | | | | |
| **FETA** | **Feichten** | **27.82** | **95** | *i* P | **P** | **05 13 39.8** | **+0.2** |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **PRA** | **Prague** | **27.91** | **87** | AMS | AMS | 05 24 50.0 | |
| | comp=Z,900nm,17.8s | | | | | | |
| **SQTA** | **Sankt Quirin** | **27.94** | **94** | *i* P | **P** | **05 13 40.2** | **-0.5** |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **KHC** | **Kasperske Hory** | **28.01** | **89** | *e*P | **P** | **05 13 42.0** | **+0.8** |
| KHC | | | | AMS | AMS | 05 24 40.0 | |
| | comp=Z,800nm,17.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **28.01** | **89** | P | **P** | **05 13 41.8** | **+0.6** |
| | comp=Z,6.1nm,1.6s | | | | | | |
| **PRU** | **Pruhonice** | **28.01** | **87** | AMS | AMS | 05 25 10.0 | |
| | comp=Z,1μm,15.6s | | | | | | |
| **WTTA** | **Wattenberg** | **28.14** | **94** | *i* pP | **P** | **05 13 43.4** | **+0.8** |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **ZVC** | **Zvikov** | **28.15** | **88** | AMS | AMS | 05 24 50.0 | |
| | comp=Z,900nm,16.4s | | | | | | |
| **LBNH** | **Lisbon** | **28.16** | **257** | P | **P** | **05 13 42.5** | **0.0** |
| | baz=46 | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **28.18** | **87** | AMS | AMS | 05 25 20.0 | |
| | comp=Z,1μm,15.7s | | | | | | |
| **GERES** | **GERESS Array B** | **28.25** | **90** | P | **P** | **05 13 42.6** | **-0.7** |
| **GERES** | **GERESS Array B** | **28.25** | **90** | P | **P** | **05 13 43.5** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=269,slow=6.9,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **KSP** | **Ksiaz** | **28.44** | **84** | P | **P** | **05 13 44.9** | **-0.1** |
| | comp=Z,17nm,1.3s | | | | | | |
| **CHVC** | **Chvalec** | **28.46** | **85** | AMS | AMS | 05 26 00.0 | |
| | comp=Z,800nm,13.7s | | | | | | |
| **FINES** | **FINESS Array B** | **28.47** | **59** | P | **P** | **05 13 45.2** | **+0.1** |
| | comp=Z,2.8nm,0.6s,baz=283,slow=9.6,SNR=7.6 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **UPC** | **Upice** | **28.49** | **85** | AMS | AMS | 05 26 10.0 | |
| | comp=Z,800nm,13.9s | | | | | | |
| **VT1** | **Waterbury** | **28.53** | **258** | IAmb | IAmb | 05 13 52.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **OSTC** | **Ostas** | **28.57** | **85** | AMS | AMS | 05 26 20.0 | |
| | comp=Z,700nm,14.6s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **28.58** | **89** | AMS | AMS | 05 25 00.0 | |
| | comp=Z,600nm,16.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **28.59** | **93** | *i* pP | **P** | **05 13 47.5** | **+1.2** |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **DPC** | **Dobruska-Polom** | **28.74** | **85** | *e*P | **P** | **05 13 47.7** | **0.0** |
| DPC | | | | AMS | AMS | 05 26 10.0 | |
| | comp=Z,800nm,14.8s | | | | | | |
| **DPC** | **Dobruska-Polom** | **28.74** | **85** | P | **P** | **05 13 47.5** | **-0.2** |
| | comp=Z,11nm,1.7s | | | | | | |
| **TREC** | **Trest** | **28.92** | **87** | AMS | AMS | 05 25 30.0 | |
| | comp=Z,1μm,16.9s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **28.92** | **91** | *e*pP | **P** | **05 13 49.9** | **+0.6** |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **KRLC** | **Kraliky** | **29.14** | **85** | AMS | AMS | 05 26 20.0 | |
| | comp=Z,1μm,14.8s | | | | | | |
| **KBA** | **Koelnbreinsper** | **29.16** | **93** | *i* pP | **P** | **05 13 52.7** | **+1.2** |
| | comp=Z,8.7nm,1.5s | | | | | | |
| **VRAC** | **Vranov** | **29.49** | **86** | *e*P | **P** | **05 13 54.4** | **+0.1** |
| **KRUC** | **Moravsky** | **29.54** | **87** | *e*P | **P** | **05 13 54.4** | **-0.3** |
| **MYKA** | **Terra Mystica** | **29.60** | **93** | *i* pP | **P** | **05 13 56.1** | **+0.8** |
| | comp=Z,14nm,1.7s | | | | | | |
| **MORC** | **Moravsky Berou** | **29.71** | **85** | *e*P | **P** | **05 13 54.5** | **-1.8** |
| **L61B** | **Northampton** | **29.82** | **256** | P | **P** | **05 13 57.0** | **-0.3** |
| | baz=44 | | | | | | |
| **CONA** | **Conrad Observa** | **29.95** | **89** | *i* P | **P** | **05 13 58.

comp=Z,32nm,1.4s
**M53A WI Miller and** 34.69 262 P P 05 14 39.6 -0.3
baz=44
**LUBAR Lubar, Ukraine** 34.94 77 P P 05 14 41.3 -0.7
**BURAR Bucovina Array** 35.06 82 P P 05 14 43.0 -0.2
**AK21 Malin Array Si** 35.08 75 P P 05 14 42.3 -0.9
**AK20 Malin Array Si** 35.09 75 P P 05 14 42.3 -0.9
**KMPD K-Podol'skiy** 35.11 80 P P 05 14 42.6 -0.8
KMPD P P 05 14 42.1 -1.3
**KIEV Kiev** 35.22 75 P P 05 14 42.9 -1.4
**KIEV Kiev** 35.22 75 P P 05 14 43.4 -0.9
comp=Z,36nm,1.3s
**AKASG Malin Array Be** 35.22 75 P P 05 14 43.9 -0.5
comp=Z,3.3nm,0.7s,baz=305,slow=8.4,SNR=10
comp=Z,3.3nm,0.7s
**AKBB Malin Array Si** 35.22 75 P P 05 14 43.3 -1.1
**AK01 Malin Array Si** 35.22 75 P P 05 14 43.5 -0.9
**KEST Kesra** 35.34 112 IAmb IAmb 05 14 51.7
comp=Z,24nm,1.5s
**KEST Kesra** 35.34 112 P P 05 14 44.5 -1.2
comp=Z,2.1nm,0.8s,baz=285,slow=16,SNR=5.2
KEST LR LR 05 27 31.5
comp=Z,896nm,18.8s,baz=338,slow=34
comp=Z,2.1nm,0.8s
**MCWV Mont Chateau** 35.56 260 P P 05 14 47.7 +0.3
baz=42
**AAM Ann Arbor** 35.64 266 P P 05 14 48.2 +0.2
baz=45
**O53A New Philadelph** 35.83 262 IAmb IAmb 05 14 52.4
comp=Z,28nm,1.2s
**O53A New Philadelph** 35.83 262 P P 05 14 50.2 +0.4
baz=43
**COWI Conover** 35.94 276 IAmb IAmb 05 14 57.5
comp=Z,25nm,1.1s
**EYMN Ely** 35.97 280 P P 05 14 51.4 +0.5
**EYMN Ely** 35.97 280 P P 05 14 50.9 0.0
baz=50,SNR=17
**VOIR** 36.39 85 P P 05 14 54.6 0.0
comp=Z,6.0nm,1.6s
**P52A Corning** 36.76 262 IAmb IAmb 05 15 04.8
comp=Z,40nm,1.2s
**P52A Corning** 36.76 262 P P 05 14 58.3 +0.6
baz=42,SNR=8.6
**ACSO Alum Creek Sta** 36.77 263 IAmb IAmb 05 15 02.4
comp=Z,18nm,0.9s
**ACSO Alum Creek Sta** 36.77 263 P P 05 14 57.2 -0.5
baz=43,SNR=6.3
**ULM Lac du Bonnet** 36.78 286 P P 05 14 57.3 -0.5
ULM IAmb IAmb 05 15 03.4
comp=Z,16nm,1.0s
**ULM Lac du Bonnet** 36.78 286 P P 05 14 57.9 +0.1
comp=Z,9.2nm,0.9s,baz=62,slow=7.9,SNR=7.7
ULM LR LR 05 29 00.4
comp=Z,1µm,18.6s,baz=330,slow=34
comp=Z,9.2nm,0.9s
**PLOR3 Plostina Array** 36.95 83 P P 05 15 00.6 +1.3
comp=Z,7.6nm,1.5s
**PLOR5 Plostina Array** 36.96 83 P P 05 15 00.3 +0.9
comp=Z,9.8nm,1.7s,comp=Z,719nm
**A36M Sachs Harbour** 37.00 329 P P 05 14 58.5 -0.9
baz=61
**FFC Flin Flon** 37.13 296 P P 05 15 00.9 +0.2
**KBN Korca** 37.49 95 IAmb IAmb 05 15 11.0
comp=Z,16nm,0.8s
**FNA Florina** 37.68 94 IAmb IAmb 05 15 06.5
comp=Z,20nm,1.0s
**BLA Blacksburg** 37.69 257 P P 05 15 05.1 -0.5
baz=40
**L44A Lake County Fo** 37.96 270 IAmb IAmb 05 15 14.6
comp=Z,29nm,1.0s
**L44A Lake County Fo** 37.96 270 P P 05 15 07.8 0.0
baz=45
**AGMN Agassiz Nation** 38.00 283 P P 05 15 09.1 +0.9
**AGMN Agassiz Nation** 38.00 283 P P 05 15 07.9 -0.2
baz=50,SNR=6.5
**SSFO Shawnee State** 38.01 262 IAmb IAmb 05 15 16.0
comp=Z,19nm,1.0s
**P49A Miami Univ. Ec** 38.19 264 P P 05 15 09.6 -0.2
baz=43
**YKA Yellowknife Ar** 38.33 312 P P 05 15 11.3 +0.7
comp=Z,6.3nm,0.9s,baz=57,slow=9.2,SNR=12
YKA LR LR 05 29 19.6
comp=Z,1µm,21.7s,baz=324,slow=34
comp=Z,6.3nm,0.9s
**SPMN Marine on St.** 38.44 277 IAmb IAmb 05 15 16.0
comp=Z,30nm,1.1s
**SPMN Marine on St.** 38.44 277 P P 05 15 11.5 -0.3
baz=48,SNR=9.1
**JFWS Jewell Farm** 38.68 273 P P 05 15 14.0 +0.2
baz=46
**SFIN Lafayette** 38.82 267 IAmb IAmb 05 15 21.8
comp=Z,26nm,1.1s
**SFIN Lafayette** 38.82 267 P P 05 15 15.2 +0.1
baz=44,SNR=9.4
**KMSC Kings Mountain** 39.76 256 P P 05 15 23.4 +0.4
baz=39
**TZTN Tazewell** 39.82 260 IAmb IAmb 05 15 31.1
comp=Z,38nm,1.2s
**TZTN Tazewell** 39.82 260 P P 05 15 23.6 +0.1
baz=40,SNR=8.2
**HDIL Hopedale** 39.85 269 IAmb IAmb 05 15 30.7
comp=Z,22nm,0.9s
**HDIL Hopedale** 39.85 269 P P 05 15 24.1 +0.4
baz=44
**WCI Wyandotte Cave** 39.98 264 P P 05 15 25.8 +1.0
**WCI Wyandotte Cave** 39.98 264 P P 05 15 25.0 +0.2
baz=42
**MDND Maddock** 40.20 285 IAmb IAmb 05 15 30.4
comp=Z,43nm,1.1s
**MDND Maddock** 40.20 285 P P 05 15 26.5 -0.1
baz=49
**TKL Tuckaleechee C** 40.61 259 LR LR 05 31 14.1
comp=Z,1µm,19.9s,baz=350,slow=35
**BG3 Lake Jocassee** 40.69 258 P P 05 15 31.1 +0.3
BG3 IAmb IAmb 05 15 38.7
comp=Z,29nm,1.1s
**NHSC New Hope** 40.78 253 P P 05 15 31.3 -0.1
baz=37
**USIN University of** 40.90 265 IAmb IAmb 05 15 39.5
comp=Z,29nm,0.8s
**HODGE Hodges** 40.94 256 IAmb IAmb 05 15 39.9
comp=Z,28nm,1.3s
**CPCT Cooper Cave** 41.16 260 IAmb IAmb 05 15 37.2
comp=Z,26nm,1.2s
**INK Inuvik** 41.41 327 IAmb IAmb 05 15 37.6
comp=Z,22nm,1.1s
**INK Inuvik** 41.41 327 P P 05 15 35.7 -0.4
baz=51,SNR=9.4
**ECSD EROS Data Cent** 41.45 279 P P 05 15 36.4 -0.5
ECSD IAmb IAmb 05 15 43.7
comp=Z,24nm,1.2s
**ECSD EROS Data Cent** 41.45 279 P P 05 15 37.0 +0.2
baz=46,SNR=21
**F31M Tsiigehtchic** 42.02 326 P P 05 15 41.3 +0.1
baz=50,SNR=6.8
**YLV Yalova** 42.05 87 P P 05 15 43.1 +1.2
comp=Z,15nm,2.0s
**DGMT Dagmar** 42.10 289 P P 05 15 42.1 -0.1
baz=48,SNR=9.6
**SUSD Miller** 42.17 281 P P 05 15 42.3 -0.4
baz=46
**GOGA Godfrey** 42.21 257 P P 05 15 42.7 -0.5
baz=38
**WVT Waverly** 42.37 263 P P 05 15 45.1 +0.7
**WVT Waverly** 42.37 263 P P 05 15 44.0 -0.4
baz=40
**FPAL Fort Paine** 42.43 260 IAmb IAmb 05 15 51.8
comp=Z,24nm,1.2s
**F30M Barrier River** 42.51 327 P P 05 15 45.0 -0.2
baz=49,SNR=15
**G31M Satah River** 42.51 325 P P 05 15 45.2 0.0
baz=50
**E29M Blow River** 42.59 328 IAmb IAmb 05 15 53.5
comp=Z,64nm,2.0s
**E29M Blow River** 42.59 328 P P 05 15 46.0 +0.1
baz=48
**CCM Cathedral Cave** 42.71 268 P P 05 15 46.9 -0.3
**CCM Cathedral Cave** 42.71 268 P P 05 15 47.6 +0.4
baz=42
**D27M Malcolm River** 42.84 330 P P 05 15 48.0 0.0
baz=47
**E28M Babbage River** 42.90 329 P P 05 15 48.4 0.0
baz=48,SNR=5.8
**G30M tAoh Zraii Nji** 43.05 326 P P 05 15 49.8 +0.1
baz=48
**PBMO Poplar Bluff** 43.24 266 IAmb IAmb 05 15 57.9
comp=Z,34nm,1.2s
**PLAL Pickwick Lake** 43.37 263 IAmb IAmb 05 16 02.3
comp=Z,35nm,1.8s
**EPYK Eagle Plains** 43.61 326 IAmb IAmb 05 16 00.9
comp=Z,46nm,1.4s
**EPYK Eagle Plains** 43.61 326 P P 05 15 54.1 0.0
baz=48,SNR=12
**G29M Pine Creek** 43.62 327 P P 05 15 54.5 +0.2
baz=47,SNR=14
**F28M Old Crow** 43.67 328 IAmb IAmb 05 15 58.5
comp=Z,31nm,1.0s
**F28M Old Crow** 43.67 328 P P 05 15 54.9 +0.3
baz=46,SNR=17
**E27K Coleen River** 43.74 329 IAmb IAmb 05 15 57.4
comp=Z,30nm,1.0s
**E27K Coleen River** 43.74 329 P P 05 15 55.4 +0.2
baz=46,SNR=13
**TIGA Tifton** 43.84 255 P P 05 15 56.9 +0.6
baz=36
**TGTN Hyland Airport** 44.06 317 P P 05 15 58.3 +0.4
baz=49
**LCAR Lake Charles** 44.16 266 IAmb IAmb 05 16 05.0
comp=Z,22nm,1.4s
**D25K Kavik River** 44.16 332 P P 05 15 58.8 +0.2
baz=44
**H29M Whitestone** 44.20 326 IAmb IAmb 05 16 05.5
comp=Z,31nm,1.2s
**H29M Whitestone** 44.20 326 P P 05 15 59.2 +0.3
baz=46,SNR=9.1
**I30M Mount Dempster** 44.29 324 IAmb IAmb 05 16 06.6
comp=Z,29nm,1.1s
**I30M Mount Dempster** 44.29 324 P P 05 16 00.5 +0.7
baz=47,SNR=23
**LAO LASA Array** 44.32 289 IAmb IAmb 05 16 07.8
comp=Z,29nm,1.0s
**LAO LASA Array** 44.32 289 P P 05 16 01.4 +1.2
baz=46,SNR=14
**LRAL Lakeview Retre** 44.33 260 IAmb IAmb 05 16 07.0
comp=Z,35nm,1.5s
**LRAL Lakeview Retre** 44.33 260 P P 05 16 00.7 +0.5
baz=38
**DIKM Dikmen** 44.36 82 P P 05 16 01.2 +0.8
comp=Z,25nm,1.3s
**C24K Franklin Bluff** 44.42 334 P P 05 16 01.3 +0.7
baz=42
**OXF Oxford** 44.43 263 IAmb IAmb 05 16 06.9
comp=Z,25nm,1.0s
**OXF Oxford** 44.43 263 P P 05 16 01.0 -0.1
baz=39
**TAM Tamanrasset** 44.54 127 P P 05 16 01.9 -0.3
TAM IAmb IAmb 05 16 09.2
comp=Z,24nm,1.3s
**TOAD Toad River Com** 44.69 312 P P 05 16 03.3 +0.3
baz=48,SNR=16
**J30M Hart River** 44.72 324 IAmb IAmb 05 16 13.2
comp=Z,24nm,1.1s
**J30M Hart River** 44.72 324 P P 05 16 03.9 +0.7
baz=46,SNR=14
**G27K Doyon Strip** 44.73 328 IAmb IAmb 05 16 12.6
comp=Z,31nm,1.4s
**G27K Doyon Strip** 44.73 328 P P 05 16 03.9 +0.7
baz=45,SNR=14
**KSU1 Kansas State U** 44.76 274 IAmb IAmb 05 16 07.2
comp=Z,24nm,1.1s
**KSU1 Kansas State U** 44.76 274 P P 05 16 03.7 0.0
baz=42
**F26K Sheenjek River** 44.77 330 P P 05 16 03.7 +0.3
baz=44
**C23K Itkillik River** 44.78 334 P P 05 16 03.9 +0.5
baz=41,SNR=6.6
**I29M Ogilvie Camp,** 44.78 325 P P 05 16 04.2 +0.6
baz=46,SNR=26
**D24K Happy Valley** 44.87 333 P P 05 16 04.3 +0.1
baz=42,SNR=7.5
**BR106 Keskin Array S** 44.89 85 P P 05 16 06.3 +1.4
comp=Z,6.2nm,1.4s,comp=Z,66nm
**BR105 Keskin Array S** 44.90 85 P P 05 16 06.4 +1.4
comp=Z,6.5nm,1.4s,comp=Z,69nm
**BR131 Keskin Array S** 44.91 85 P P 05 16 03.8 -1.2
BR131 IAmb IAmb 05 16 12.4
comp=Z,29nm,1.6s
**BRTR Keskin Array B** 44.91 85 P P 05 16 04.4 -0.6
**BRTR Keskin Array B** 44.91 85 P P 05 16 05.3 +0.3
comp=Z,2.2nm,0.9s,baz=322,slow=7.8,SNR=9.2
comp=Z,2.2nm,0.9s
**BR104 Keskin Array S** 44.92 85 P P 05 16 06.5 +1.4
comp=Z,6.6nm,1.3s,comp=Z,62nm
**RSSD Black Hills** 45.01 284 P P 05 16 06.1 +0.2
baz=45
**BMAR Burnt Mountain** 45.08 330 P P 05 16 07.2 +1.3
**H27K Steamboat Moun** 45.11 327 P P 05 16 06.5 +0.4
baz=44,SNR=25
**EGMT Eagleton** 45.15 292 IAmb IAmb 05 16 14.4
comp=Z,25nm,1.2s
**EGMT Eagleton** 45.15 292 P P 05 16 07.5 +0.7
baz=46,SNR=8.9
**I28M Miner Creek** 45.20 326 IAmb IAmb 05 16 09.1
comp=Z,23nm,1.1s
**I28M Miner Creek** 45.20 326 P P 05 16 07.4 +0.4
baz=45,SNR=18
**G26K Porcupine Rive** 45.22 329 P P 05 16 07.7 +0.8
baz=44,SNR=10.0
**F25K Christian Rive** 45.24 330 IAmb IAmb 05 16 12.2
comp=Z,39nm,1.6s
**F25K Christian Rive** 45.24 330 P P 05 16 08.2 +1.0
baz=43,SNR=7.7
**FARO Faro, Yukon** 45.36 320 IAmb IAmb 05 16 11.8
comp=Z,20nm,1.1s
**FARO Faro, Yukon** 45.36 320 P P 05 16 09.4 +1.2
baz=46,SNR=12
**TOLK Toolik Lake Re** 45.44 333 P P 05 16 09.7 +0.9
baz=41,SNR=11
**D23K Nanushuk River** 45.45 334 P P 05 16 09.4 +0.6
baz=40
**I27K Kandik River** 45.58 327 P P 05 16 10.5 +0.6
baz=44,SNR=13
**E24K Your Creek** 45.60 332 P P 05 16 10.8 +0.8
baz=41
**K29M Barlow Dome** 45.60 323 P P 05 16 10.9 +0.7
baz=45
**M31M Drury Creek, Y** 45.73 320 IAmb IAmb 05 16 15.8
comp=Z,24nm,1.4s
**M31M Drury Creek, Y** 45.73 320 P P 05 16 11.8 +0.6
baz=46
**B21K Ikpikpuk River** 45.83 336 P P 05 16 12.1 +0.3
baz=38
**F24K Squaw Lake** 45.87 331 P P 05 16 12.9 +0.7
baz=41,SNR=9.1
**E23K Chandalar** 45.89 332 P P 05 16 13.5 +1.1
baz=40
**G25K Bearman Lake** 45.97 330 P P 05 16 13.7 +0.8
baz=42,SNR=18
**D22K Ayikyak River** 45.98 334 IAmb IAmb 05 16 15.6
comp=Z,19nm,1.1s
**D22K Ayikyak River** 45.98 334 P P 05 16 13.8 +0.8
baz=39
**DAWY Dawson** 46.03 324 P P 05 16 15.3 +1.8
**DAWY Dawson** 46.03 324 P P 05 16 14.1 +0.6
baz=44,SNR=14
**EGAK Eagle** 46.05 326 P P 05 16 13.7 +0.2
EGAK IAmb IAmb 05 16 15.7
comp=Z,21nm,1.1s
**EGAK Eagle** 46.05 326 P P 05 16 14.2 +0.6
baz=44,SNR=9.8
**RLO Rose Lookout** 46.12 270 IAmb IAmb 05 16 20.1
comp=Z,22nm,1.3s
**I26K Coal Creek Min** 46.24 327 P P 05 16 15.7 +0.6
baz=43
**X40A Basin Creek Fa** 46.25 266 IAmb IAmb 05 16 21.6
comp=Z,14nm,1.1s
**OGNE Ogallala** 46.25 280 P P 05 16 15.8 +0.2
baz=43
**H25L Birch Creek** 46.27 329 P P 05 16 16.2 +1.0
baz=42
**L29M L29M** 46.32 323 P P 05 16 16.5 +0.7
baz=44,SNR=8.7
**E22K Anaktuvuk Pass** 46.36 333 P P 05 16 16.4 +0.3
baz=39
**G24K Hadweenzic Riv** 46.38 330 P P 05 16 17.0 +0.8
baz=41,SNR=14
**R33M Jennings River** 46.49 316 IAmb IAmb 05 16 20.8
comp=Z,18nm,1.1s
**R33M Jennings River** 46.49 316 P P 05 16 17.0 -0.3
baz=46,SNR=8.4
**P33M Teslin, Yukon** 46.59 318 P P 05 16 18.3 +0.3
baz=45
**MIAR Mount Ida** 46.59 267 P P 05 16 18.2 0.0
baz=40,SNR=8.2
**CBKS Cedar Bluff** 46.62 276 P P 05 16 17.7 -0.7
baz=42
**E21K Killik River** 46.62 334 P P 05 16 18.2 +0.1
baz=38
**COLD Coldfoot** 46.68 332 P P 05 16 18.1 -0.3
baz=40
**N31M Braeburn, Yuko** 46.71 320 P P 05 16 19.5 +0.7
baz=45
**TUL3 Leonard** 46.72 270 IAmb IAmb 05 16 25.4
comp=Z,19nm,1.2s
**TUL3 Leonard** 46.72 270 P P 05 16 18.7 -0.5
baz=40
**PRP Porcupine Dome** 46.75 328 IAmb IAmb 05 16 26.7
comp=Z,12nm,1.0s
**PRP Porcupine Dome** 46.75 328 P P 05 16 19.7 +0.4
baz=42,SNR=12
**KBZ Khabaz** 46.80 74 P P 05 16 21.4 +1.7
comp=Z,2.8nm,0.9s,baz=76,slow=4.2,SNR=3.9
comp=Z,2.8nm,0.9s
**DLBC Dease Lake** 46.81 314 P P 05 16 19.3 -0.5
baz=46
**KAN01 Argonia South** 46.81 273 IAmb IAmb 05 16 25.4
comp=Z,20nm,1.1s
**OK051 E0350 and S346** 46.82 272 IAmb IAmb 05 16 20.6
comp=Z,6.7nm,0.8s
**KAN12 Harper NE Stat** 46.83 273 IAmb IAmb 05 16 25.4
comp=Z,17nm,1.1s
**K27K Chicken** 46.87 325 P P 05 16 19.6 -0.4
baz=43
**M29M Somme Creek** 46.91 322 P P 05 16 22.4 +1.9
**M29M Somme Creek** 46.91 322 P P 05 16 20.1 -0.4
baz=44,SNR=10
**RLMT Red Lodge** 46.94 289 IAmb IAmb 05 16 28.3
comp=Z,21nm,1.2s
**RLMT Red Lodge** 46.94 289 P P 05 16 22.1 +1.0
baz=45,SNR=14
**F22K John River** 46.94 333 P P 05 16 20.9 +0.3
baz=38
**J26L Joseph Creek** 46.96 327 P P 05 16 20.8 0.0
baz=42,SNR=11
**D20K Etivluk River** 46.99 336 P P 05 16 21.1 +0.2
baz=36
**G23K Bananza Creek** 47.03 331 P P 05 16 22.1 +0.7
baz=39,SNR=23
**H24K Noodor Dome** 47.15 330 P P 05 16 23.0 +0.7
baz=40,SNR=9.6
**OK031 S. Brethren Rd** 47.24 271 IAmb IAmb 05 16 28.8
comp=Z,8.4nm,1.0s
**G22K Bettles** 47.24 332 P P 05 16 23.4 +0.6
baz=39
**E20K Nigu River** 47.27 335 P P 05 16 23.6 +0.5
baz=36
**Q32M Nakina River** 47.27 316 P P 05 16 23.3 -0.2
baz=45
**C19K Lookout Ridge** 47.30 337 P P 05 16 23.4 +0.1
baz=35
**OK032 Salt Plains WL** 47.32 273 IAmb IAmb 05 16 29.9
comp=Z,21nm,1.4s
**K22A Casper** 47.32 285 IAmb IAmb 05 16 30.6
comp=Z,15nm,1.1s
**K22A Casper** 47.32 285 P P 05 16 24.0 0.0
baz=44,SNR=7.7
**O30N Mendenhall** 47.33 320 IAmb IAmb 05 16 26.9
comp=Z,17nm,1.1s
**O30N Mendenhall** 47.33 320 P P 05 16 24.0 +0.3
baz=44
**J25K Salcha River,** 47.39 327 P P 05 16 24.1 -0.1
baz=41,SNR=11
**SCRK Sand Creek** 47.47 326 P P 05 16 25.2 +0.4
baz=42,SNR=22
**F21K Alatna River** 47.48 333 IAmb IAmb 05 16 31.4
comp=Z,14nm,0.9s
**F21K Alatna River** 47.48 333 P P 05 16 24.1 -0.6
baz=38,SNR=6.7
**BCAR Beaver Creek A** 47.49 324 P P 05 16 26.4 +1.4
**D19K Kuna River** 47.49 336 P P 05 16 25.1 +0.3
baz=35
**L27K Beaver Creek,** 47.51 324 P P 05 16 26.9 +1.8
baz=42,SNR=11
**POKR Poker Plat Res** 47.58 329 P P 05 16 26.3 +0.8
baz=40,SNR=6.2
**H23K Yukon River** 47.60 330 P P 05 16 26.2 +0.5
baz=39,SNR=7.2
**YMP Mirror Lake PI** 47.65 289 IAmb IAmb 05 16 33.7
comp=Z,14nm,0.9s
**IL31** 47.70 328 P P 05 16 27.6 +1.2
**ILAR Eielson Array** 47.70 328 P P 05 16 28.1 +1.6
comp=Z,10nm,1.0s,baz=33,slow=6.2,SNR=80
ILAR PcP PcP 05 17 54.9 -0.6
comp=Z,1.9nm,0.9s,baz=354,slow=3.3,SNR=4.6
comp=Z,10nm,1.0s
**PHWY Pilot Hill** 47.76 283 IAmb IAmb 05 16 34.5
comp=Z,14nm,1.1s
**BOZ Bozeman (W)** 47.77 291 IAmb IAmb 05 16 34.2
comp=Z,8.9nm,0.9s
**BOZ Bozeman (W)** 47.77 291 P P 05 16 27.0 -0.4
baz=44,SNR=13
**YUK4 Talbot Arm** 47.77 321 P P 05 16 27.1 -0.2
baz=43
**OK038 West end E0370** 47.84 273 IAmb IAmb 05 16 33.5
comp=Z,13nm,1.0s
**COLA College** 47.88 329 P P 05 16 29.0 +1.1
**COLA College** 47.88 329 P P 05 16 26.8 -1.1
baz=40
**T35M Bob Quinn** 47.92 313 P P 05 16 27.7 -0.6
baz=45
**YUK6 Outpost Mounta** 47.97 321 P P 05 16 29.1 +0.2
baz=43
**KSCO Kaye Shedlock'** 47.98 279 P P 05 16 29.2 +0.1
baz=42
**HDA Harding Lake** 47.99 328 P P 05 16 29.4 +0.7
baz=40,SNR=6.3
**H22K Ishtalitna Cre** 48.01 331 P P 05 16 29.4 +0.5
baz=38,SNR=9.3
**YUK3 Moose Creek** 48.04 323 P P 05 16 29.6 +0.2
baz=42
**G21K Allakaket** 48.05 333 P P 05 16 29.5 +0.3
baz=37
**M27K Edge Creek, AK** 48.05 324 P P 05 16 29.3 0.0
baz=42
**I23K Minto, Yukon-K** 48.08 330 P P 05 16 29.9 +0.6
baz=39,SNR=10
**YHL Hebgen Lake** 48.08 290 IAmb IAmb 05 16 37.6
comp=Z,12nm,1.1s
**P30M Million Dollar** 48.10 319 P P 05 16 29.5 -0.1
baz=43
**H17A Grant Village** 48.11 289 IAmb IAmb 05 16 38.5
comp=Z,12nm,0.9s
**H17A Grant Village** 48.11 289 P P 05 16 30.9 +0.7
baz=44
**K24K Bonnelly Dome** 48.12 327 P P 05 16 29.9 +0.1
baz=40,SNR=7.9
**F20K Avaraart Lake** 48.14 334 P P 05 16 29.8 0.0
baz=36
**E19K Redstone River** 48.15 335 P P 05 16 30.4 +0.4
baz=35,SNR=8.7
**YUK8 Steele Glacier** 48.18 322 P P 05 16 30.1 -0.4
baz=42
**N23A Red Feather La** 48.31 283 P P 05 16 32.1 +0.3
baz=43,SNR=16
**YPP Pitchstone Pla** 48.31 289 IAmb IAmb 05 16 42.4
comp=Z,19nm,1.2s
**M26K Nabesna, AK** 48.36 324 IAmb IAmb 05 16 34.9
comp=Z,17nm,1.1s
**M26K Nabesna, AK** 48.36 324 P P 05 16 32.6 +0.9
baz=41,SNR=6.7
**FLWY Flagg Ranch** 48.39 289 P P 05 16 33.6 +1.2
FLWY IAmb IAmb 05 16 53.5
comp=Z,24nm,1.4s
**NEA2 Nenana** 48.43 329 P P 05 16 32.3 +0.2
baz=39,SNR=5.4
**NEW Newport** 48.50 297 P P 05 16 32.3 -0.6
baz=44
**MLY Manley** 48.53 330 IAmb IAmb 05 16 40.1
comp=Z,22nm,1.3s
**MLY Manley** 48.53 330 P P 05 16 33.1 +0.1
baz=38,SNR=9.1
**C17K DeLong Mountai** 48.54 338 P P 05 16 33.2 +0.3
baz=32
**H21K Melozitna River** 48.56 332 IAmb IAmb 05 16 35.9
comp=Z,18nm,1.2s
**H21K Melozitna River** 48.56 332 P P 05 16 32.4 -0.8
baz=37,SNR=11
**PAX Paxson** 48.67 326 P P 05 16 33.4 -0.7
baz=40,SNR=13
**P29M Windy Craggy** 48.73 319 P P 05 16 33.8 -0.7
baz=42
**BW06 Boulder Array** 48.78 287 P P 05 16 35.4 0.0
baz=43,SNR=13
**PD31 Pinedale Array** 48.78 287 IAmb IAmb 05 16 40.9

comp=Z,9.4nm,0.9s
PDAR **Pinedale Array** 48.78 287 P P 05 16 35.0 -0.4
PDAR **Pinedale Array** 48.78 287 P P 05 16 35.0 -0.4
comp=Z,4.4nm,0.9s,baz=65,slow=5.9,SNR=37
PDAR PP PP 05 18 27.9 -0.3
comp=Z,1.7nm,1.0s,baz=64,slow=7.1,SNR=4.4
PDAR LR LR 05 36 18.8
comp=Z,811nm,19.9s,baz=340,slow=35
comp=Z,4.4nm,0.9s
**F19K Shaleruckik Mo** 48.79 335 P P 05 16 35.0 +0.2
baz=35
**SNOW Snow King Moun** 48.87 289 IAmb IAmb 05 16 43.5
comp=Z,16nm,1.2s
**FXWY Fox Creek** 48.88 289 IAmb IAmb 05 16 42.8
comp=Z,10nm,1.1s
**E18K Tukpahlearik C** 48.91 336 P P 05 16 35.5 -0.3
baz=33
**LOOK Love County** 48.92 270 IAmb IAmb 05 16 42.6
comp=Z,17nm,0.9s
**CTGM Chitina Glacie** 48.92 322 IAmb IAmb 05 16 44.2
comp=Z,20nm,1.2s
**CTG Chitna Glacier** 48.93 322 P P 05 16 36.3 +0.2
baz=41
**ISCO Idaho Springs** 48.95 282 P P 05 16 38.0 +1.2
ISCO IAmb IAmb 05 16 44.0
comp=Z,20nm,1.2s
**ISCO Idaho Springs** 48.95 282 P P 05 16 37.2 +0.5
baz=42,SNR=15
**TPAW Teton Pass** 48.95 289 IAmb IAmb 05 16 42.3
comp=Z,9.5nm,0.9s
**HARP HAARP** 49.02 325 P P 05 16 36.7 0.0
baz=40
**MCK McKinley** 49.07 328 P P 05 16 38.0 +0.9
baz=38,SNR=8.1
**DHY Denali Highway** 49.14 327 IAmb IAmb 05 16 44.7
comp=Z,12nm,1.0s
**DHY Denali Highway** 49.14 327 P P 05 16 38.4 +0.6
baz=39
**WMOK Wichita Mounta** 49.19 272 IAmb IAmb 05 16 44.6
comp=Z,16nm,1.1s
**WMOK Wichita Mounta** 49.19 272 P P 05 16 38.2 -0.1
baz=40,SNR=17
**G19K Purcell Mounta** 49.20 334 IAmb IAmb 05 16 45.4
comp=Z,28nm,1.4s
**G19K Purcell Mounta** 49.20 334 P P 05 16 38.7 +0.7
baz=35
**H20K Anotleneega Mo** 49.21 332 P P 05 16 38.8 +0.7
baz=36,SNR=12
**RND Reindeer** 49.30 328 IAmb IAmb 05 16 41.0
comp=Z,18nm,1.0s
**Q24A Divide** 49.33 280 P P 05 16 39.6 -0.1
baz=42
**BPAW Bear Paw Mtn.** 49.34 330 P P 05 16 39.8 +0.7
BPAW IAmb IAmb 05 16 42.3
comp=Z,23nm,1.3s
**BPAW Bear Paw Mtn.** 49.34 330 P P 05 16 39.4 +0.3
baz=37,SNR=8.0
**C09A Chrisman Ranch** 49.37 298 IAmb IAmb 05 16 45.8
comp=Z,17nm,0.9s
**F18K Selawik** 49.40 335 P P 05 16 39.2 -0.3
baz=33
**E17K Hotham Inlet** 49.46 337 P P 05 16 40.1 +0.1
baz=32
**B08A Colville Reser** 49.46 299 IAmb IAmb 05 16 46.6
comp=Z,12nm,0.9s
**N25K Chitina, Valde** 49.46 324 P P 05 16 40.7 +0.5
baz=40,SNR=12
**ISLE Juniper Island** 49.52 323 P P 05 16 42.0 +1.3
**M24K Tolsona, Glenn** 49.55 326 P P 05 16 40.6 -0.2
baz=39
**AHID Auburn Hatcher** 49.55 288 IAmb IAmb 05 16 51.9
comp=Z,27nm,1.6s
**H19K Roundabout Mou** 49.56 333 P P 05 16 40.6 -0.1
baz=35
**WAT6 Susitna Watana** 49.64 327 P P 05 16 42.0 +0.4
baz=38,SNR=12
**CRQE Cirque** 49.65 323 P P 05 16 40.9 -0.7
baz=40
**V35K Ketchikan** 49.65 312 P P 05 16 42.0 +0.5
baz=43
**U33K Whale Pass** 49.65 314 P P 05 16 41.8 +0.3
baz=43
**WAT1 Susitna Watana** 49.67 327 P P 05 16 42.3 +0.6
baz=38
**I20K Naaghedeneel** 49.68 332 P P 05 16 42.4 +0.8
baz=36
**G18K Tagagawik** 49.77 334 P P 05 16 43.2 +0.9
baz=34
**CHUM Lake Minchumin** 49.86 330 P P 05 16 43.1 0.0
baz=36
**KLU Klutina** 49.95 325 IAmb IAmb 05 16 51.1
comp=Z,19nm,1.0s
**KLU Klutina** 49.95 325 P P 05 16 42.9 -1.0
baz=39
**BMRM Bremner River** 49.95 324 P P 05 16 43.9 0.0
baz=39
**RTBA Rita Blanca** 49.97 276 IAmb IAmb 05 16 50.8
comp=Z,23nm,1.1s
**O20A White River Ci** 50.05 284 IAmb IAmb 05 16 54.8
comp=Z,23nm,1.4s
**O20A White River Ci** 50.05 284 P P 05 16 45.2 +0.1
baz=42
**J20K Nowinta River** 50.10 331 IAmb IAmb 05 16 47.2
comp=Z,16nm,1.1s
**J20K Nowinta River** 50.10 331 P P 05 16 45.7 +0.9
baz=36,SNR=7.0
**SCM Sheep Creek Mo** 50.10 326 P P 05 16 44.8 -0.2
baz=38
**SMCO Snowmass** 50.11 282 P P 05 16 46.6 +0.8
SMCO IAmb IAmb 05 17 00.4
comp=Z,14nm,1.2s
**T25A Trinidad** 50.31 278 IAmb IAmb 05 16 54.1
comp=Z,17nm,1.0s
**T25A Trinidad** 50.31 278 P P 05 16 47.0 -0.1
baz=41,SNR=14
**H18K Honhosa River** 50.32 334 P P 05 16 46.1 -0.5
baz=33
**GNI Garni** 50.35 76 P P 05 16 48.1 +0.8
comp=Z,13nm,1.1s
**SML Sawmill** 50.42 326 P P 05 16 48.8 +1.4
**SML Sawmill** 50.42 326 P P 05 16 46.4 -1.0
baz=38,SNR=6.4
**SDCO Great Sand Dun** 50.42 280 P P 05 16 48.1 +0.1
baz=41,SNR=8.4
**PLPT Palo Pinto** 50.43 270 IAmb IAmb 05 16 54.4
comp=Z,20nm,1.2s
**AMTX Amarillo** 50.60 274 P P 05 16 49.3 +0.1
baz=40
**HLID Hailey** 50.61 291 P P 05 16 48.2 -1.0
baz=42,SNR=6.6
**WHTX Lake Whitney,** 50.62 268 P P 05 16 48.0 -1.2
baz=38
**J19K Poorman** 50.62 332 IAmb IAmb 05 16 51.3
comp=Z,23nm,1.2s
**J19K Poorman** 50.62 332 P P 05 16 48.9 +0.1
baz=34
**HWUT Hardware Ranch** 50.64 288 IAmb IAmb 05 16 55.4
comp=Z,16nm,1.1s
**K20K Telida** 50.75 330 P P 05 16 49.2 -0.6
baz=35
**KNK Knik Glacier** 50.77 326 P P 05 16 49.1 -0.9
baz=38
**GLI Glacier Island** 50.79 325 P P 05 16 49.8 -0.3
baz=38
**PMR Palmer** 50.82 327 IAmb IAmb 05 17 06.2
comp=Z,28nm,1.3s
**PMR Palmer** 50.82 327 P P 05 16 49.3 -1.0
baz=37
**H17K Granite Mounta** 50.86 334 P P 05 16 50.0 -0.6
baz=32
**TCUT Toone Canyon** 50.92 287 IAmb IAmb 05 16 59.3
comp=Z,30nm,1.4s
**ABKAR Akbulak array** 50.95 57 P P 05 16 52.2 +0.8
**ABKAR Akbulak array** 50.95 57 IAmb IAmb 05 16 55.1
comp=Z,7.6nm,1.0s
**CBB Campbell River** 50.95 304 IAmb IAmb 05 16 58.6
comp=Z,22nm,0.9s
**M22K Willow** 50.98 327 P P 05 16 51.1 -0.4
baz=37
**G16K Koyuk River** 51.01 336 P P 05 16 51.7 0.0
baz=31
**BMO Blue Mountains** 51.06 294 P P 05 16 51.5 -1.0
**S22A 4UR Ranch, Cre** 51.11 281 P P 05 16 53.7 +0.5
baz=41,SNR=15
**DKNS Dickens** 51.14 273 IAmb IAmb 05 17 00.4
comp=Z,26nm,1.1s
**PWL Port Wells** 51.17 326 P P 05 16 53.0 0.0
baz=37

**SKT Skwentna** 51.19 328 IAmb IAmb 05 16 54.9
comp=Z,21nm,0.9s
**SKT Skwentna** 51.19 328 P P 05 16 53.7 +0.6
baz=36,SNR=7.8
**MXC Moxie City** 51.21 298 IAmb IAmb 05 17 00.8
comp=Z,24nm,1.7s
**F15K North Star Dit** 51.23 337 P P 05 16 53.7 +0.4
baz=30
**ABTX Abilene, Hawle** 51.28 271 IAmb IAmb 05 17 00.1
comp=Z,11nm,0.9s
**ABTX Abilene, Hawle** 51.28 271 P P 05 16 54.7 +0.5
baz=39
**SPUT South Promonto** 51.30 288 IAmb IAmb 05 17 01.4
comp=Z,28nm,1.3s
**J18K Innoko River** 51.33 332 P P 05 16 54.9 +0.7
baz=34
**HKT Hockley** 51.37 265 P P 05 16 55.6 +0.8
**SUA Susitna One** 51.39 327 P P 05 16 55.8 +1.0
baz=36
**L20K Farewell, AK** 51.42 330 P P 05 16 55.6 +0.7
baz=35
**P18A Preston Nutter** 51.45 285 IAmb IAmb 05 17 02.8
comp=Z,17nm,1.3s
**P23K Montague Islan** 51.58 325 P P 05 16 56.7 +0.6
baz=37
**M20K Styx River** 51.71 329 P P 05 16 57.0 -0.1
baz=35
**TORD Torodi Ar. Bea** 51.77 136 P P 05 16 56.7 -1.2
comp=Z,3.9nm,0.6s,baz=345,slow=7.5,SNR=42
comp=Z,3.9nm,0.6s
**P17A Butcher Ranch,** 51.82 285 IAmb IAmb 05 17 05.2
comp=Z,20nm,1.3s
**POST Post** 51.91 273 IAmb IAmb 05 17 04.8
comp=Z,10nm,0.9s
**J17K VABM Dome** 51.97 333 P P 05 16 59.8 +0.9
baz=32
**SRU San Rafael Swe** 51.98 285 IAmb IAmb 05 17 06.7
comp=Z,12nm,1.0s
**N20K Mount Spurr** 52.01 328 P P 05 17 00.6 +1.2
baz=35
**M19K Big River Lodg** 52.03 330 P P 05 16 59.9 +0.5
baz=34
**NLU North Lily Min** 52.13 286 IAmb IAmb 05 17 07.4
comp=Z,17nm,1.2s
**DUG Dugway, Tooele** 52.32 287 P P 05 17 03.2 +1.1
baz=41
**K17K Iditarod** 52.36 332 P P 05 17 01.9 +0.1
baz=32
**L18K Granite Mounta** 52.37 331 P P 05 17 02.6 +0.7
baz=33,SNR=6.3
**MVCO Mesa Verde** 52.38 282 IAmb IAmb 05 17 09.9
comp=Z,18nm,0.9s
**MVCO Mesa Verde** 52.38 282 P P 05 17 03.4 +0.7
baz=40,SNR=14
**BRVK Bovoye** 52.43 48 P P 05 17 01.7 -0.8
**BVAR Borovoye Array** 52.50 48 P P 05 17 03.1 0.0
comp=Z,4.7nm,0.7s,baz=317,slow=7.9,SNR=19
comp=Z,4.7nm,0.7s
**SGCY Sterling City** 52.61 271 IAmb IAmb 05 17 10.6
comp=Z,20nm,0.9s
**J08A Circle Bar Ran** 52.74 294 IAmb IAmb 05 17 11.6
comp=Z,14nm,1.0s
**M18K Stony River** 52.76 330 P P 05 17 03.9 -0.9
baz=33
**BRSE Bradley Lake S** 52.79 326 P P 05 17 05.8 +0.7
baz=35
**N19K Bonanza Creek** 52.96 329 P P 05 17 07.0 +0.6
baz=34
**HMU Henry Mountain** 52.98 284 P P 05 17 07.7 +0.6
HMU IAmb IAmb 05 17 14.9
comp=Z,18nm,1.2s
**JCT Junction City** 53.04 269 IAmb IAmb 05 17 13.2
comp=Z,13nm,0.9s
**JCT Junction City** 53.04 269 P P 05 17 07.6 +0.3
baz=38
**ANMO Albuquerque** 53.05 278 P P 05 17 08.2 +0.6
**ANMO Albuquerque** 53.05 278 LR LR 05 38 58.2
comp=Z,756nm,19.1s,baz=82,slow=35
**ANMO Albuquerque** 53.05 278 P P 05 17 08.8 +1.2
baz=39
**M17K Holitna River** 53.25 331 P P 05 17 09.4 +0.9
baz=32
**TCRU Three Creeks R** 53.34 286 IAmb IAmb 05 17 16.5
comp=Z,15nm,1.4s
**WVOR Wild Horse Val** 53.51 293 IAmb IAmb 05 17 21.4
comp=Z,18nm,1.2s
**PINE Pine Mountain** 53.59 296 IAmb IAmb 05 17 18.5
comp=Z,12nm,1.0s
**O18K Koktuh Hills** 53.97 328 P P 05 17 14.4 +0.7
baz=33
**SPR3 Spring Creek 3** 53.99 287 IAmb IAmb 05 17 22.4
comp=Z,11nm,1.2s
**L15K Ungalak Mounta** 54.02 333 P P 05 17 14.3 +0.2
baz=30
**PSUT Pine Spring** 54.11 287 IAmb IAmb 05 17 23.8
comp=Z,9.0nm,1.0s
**PKCU Pink Cliffs** 54.16 285 IAmb IAmb 05 17 22.5
comp=Z,19nm,1.1s
**Q19K Cape Douglas,** 54.30 327 P P 05 17 16.1 -0.1
baz=34
**BMN Bald Mountai** 54.34 291 P P 05 17 17.8 +0.9
**P18K Big Mountain,** 54.36 328 P P 05 17 16.1 -0.5
baz=33
**PECS Pecos** 54.48 273 IAmb IAmb 05 17 26.4
comp=Z,32nm,1.8s
**833A Chaparral WMA,** 54.54 267 P P 05 17 19.7 +1.4
baz=37
**SAND Sanderson** 54.68 271 IAmb IAmb 05 17 25.6
comp=Z,18nm,1.0s
**KNB Kanab** 54.75 285 IAmb IAmb 05 17 26.6
comp=Z,26nm,1.4s
**U15A North Rim** 54.93 284 IAmb IAmb 05 17 27.8
comp=Z,19nm,1.7s
**M14K Bethel** 54.94 333 P P 05 17 20.7 0.0
baz=30
**O16K Kokwok River B** 54.97 330 P P 05 17 21.6 +0.7
baz=31
**MNTX Cornudas Mount** 55.02 275 P P 05 17 22.3 +0.5
baz=38
**R11B Troy Canyon, C** 55.12 288 P P 05 17 23.6 +1.0
baz=40,SNR=11
**ALPN Alpine** 55.15 272 IAmb IAmb 05 17 31.7
comp=Z,24nm,1.5s
**WUAZ Wupatki** 55.16 282 IAmb IAmb 05 17 30.3
comp=Z,19nm,1.2s
**WUAZ Wupatki** 55.16 282 P P 05 17 23.7 +0.8
baz=39
**PRN Pahroc Range** 55.58 287 IAmb IAmb 05 17 33.0
comp=Z,13nm,1.2s
**121A Cookes Peak, D** 55.62 277 P P 05 17 27.3 +1.0
baz=38
**OHAK Old Harbor** 55.63 326 P P 05 17 26.5 +0.7
baz=33
**DBIC Dimbokro** 55.70 147 P P 05 17 25.4 -1.3
comp=Z,5.0nm,0.7s,baz=335,slow=6.6,SNR=4.9
comp=Z,5.0nm,0.7s
**O15K Ungalikthiuk R** 55.78 331 P P 05 17 27.7 +0.9
baz=30
**KVN Kaiserville** 55.83 290 IAmb IAmb 05 17 34.5
comp=Z,19nm,1.1s
**TXAR Lajitas Array** 55.99 272 P P 05 17 28.2 -0.6
**TXAR Lajitas Array** 55.99 272 P P 05 17 29.2 +0.4
comp=Z,2.2nm,0.8s,baz=59,slow=8.7,SNR=18
TXAR PP PP 05 19 30.4 -3.0
comp=Z,0.2nm,0.7s,baz=66,slow=7.2,SNR=2.3
comp=Z,2.2nm,0.8s
**YBH Yreka Blue Hor** 56.00 295 LR LR 05 40 27.5
comp=Z,957nm,21.0s,baz=348,slow=35
**NVAR Mina Array Bea** 56.41 290 P P 05 17 31.4 -0.6
**NVAR Mina Array Bea** 56.41 290 P P 05 17 32.2 +0.3
comp=Z,1.6nm,0.8s,baz=55,slow=6.1,SNR=13
NVAR LR LR 05 42 33.4
comp=Z,679nm,19.5s,baz=342,slow=37
comp=Z,1.6nm,0.8s
**YERR Yerington** 56.45 291 IAmb IAmb 05 17 39.0
comp=Z,19nm,1.6s
**BAUV El Baul** 56.46 224 P P 05 17 31.9 -0.3
**TPNV Topopah Spring** 56.54 287 P P 05 17 33.3 +0.5
baz=39
**PNTR Pine Nut** 56.54 291 IAmb IAmb 05 17 44.9
comp=Z,30nm,1.6s
**LHV Little Huntoon** 56.65 290 IAmb IAmb 05 17 40.0
comp=Z,12nm,1.2s
**GMN Gold Mountain** 56.77 288 IAmb IAmb 05 17 42.7
comp=Z,30nm,1.9s
**WAKR Walker** 56.92 291 P P 05 17 35.6 +0.1
WAKR IAmb IAmb 05 17 37.5
comp=Z,18nm,1.7s

**ZALV Zalesovo Beam** 56.99 39 P P 05 17 36.7 +1.2
comp=Z,1.6nm,0.6s,baz=321,slow=7.7,SNR=7.3
comp=Z,1.6nm,0.6s
**FURC Furnace Creek,** 57.22 287 P P 05 17 37.8 +0.4
baz=38
**TUC Tucson** 57.36 280 P P 05 17 39.6 +1.1
**TUC Tucson** 57.36 280 P P 05 17 39.5 +0.9
baz=38
**SHOC Shoshone, Teco** 57.37 286 P P 05 17 39.2 +0.7
baz=38
**KURK Kurchatov** 57.47 45 P P 05 17 38.8 -0.1
**KURBB Kurchatov Arra** 57.51 45 P P 05 17 39.6 +0.4
comp=Z,3.8nm,0.6s,baz=325,slow=6.9,SNR=19
comp=Z,3.8nm,0.6s
**PDMCI Parker Dam,Lak** 57.53 284 P P 05 17 41.0 +1.4
baz=38
**CWC Cottonwood Cre** 57.85 288 P P 05 17 43.2 +1.1
baz=38
**MPMC Manual Prospec** 57.85 287 P P 05 17 43.3 +1.2
baz=38,SNR=11
**GMRC Granite Mounta** 57.93 285 P P 05 17 43.8 +1.2
baz=38
**GSC Goldstone, Bar** 58.10 286 IAmb IAmb 05 17 51.4
comp=Z,19nm,1.4s
**GSC Goldstone, Bar** 58.10 286 P P 05 17 44.8 +1.0
baz=38
**LRMC Laurel Mtn Rad** 58.41 287 P P 05 17 47.3 +1.4
baz=38
**ISA Isabella, Lake** 58.66 288 IAmb IAmb 05 17 56.5
comp=Z,27nm,1.6s
**ISA Isabella, Lake** 58.66 288 P P 05 17 48.6 +1.0
baz=38
**214A Organ Pipe Nat** 58.69 281 P P 05 17 49.0 +1.2
baz=37
**BC3 Big Chuckawall** 58.71 284 P P 05 17 49.1 +1.0
baz=38
**BELC Belle Mtn. Jos** 58.72 285 P P 05 17 49.1 +1.0
baz=38
**VES Vestal, Richgr** 58.82 288 P P 05 17 49.8 +1.1
baz=38
**GLA Glamis** 58.87 283 P P 05 17 50.4 +1.4
baz=38
**BBRC Big Bear Solar** 58.98 286 P P 05 17 51.3 +1.3
baz=38
**EDW2 Edwards Air Fo** 59.03 287 P P 05 17 51.7 +1.5
baz=38
**PFO Pinyon Flats O** 59.26 285 P P 05 17 52.6 +0.8
PFO IAmb IAmb 05 17 58.9
comp=Z,9.6nm,0.9s
**PFO Pinyon Flats O** 59.26 285 LR LR 05 41 46.3
comp=Z,825nm,20.7s,baz=332,slow=34
**PFO Pinyon Flats O** 59.26 285 P P 05 17 53.1 +1.2
baz=38
**TPFO Pinon Flats** 59.26 285 P P 05 17 53.3 +1.4
baz=38
**BFSC Mount Baldy Ra** 59.37 286 P P 05 17 53.5 +0.8
baz=38
**S12K Black Hills** 59.41 330 P P 05 17 53.9 +1.5
baz=28
**SWSC Sam W. Stewart** 59.45 284 P P 05 17 54.8 +1.8
baz=37
**CHNA Chernabura Isl** 59.50 328 P P 05 17 54.8 +1.8
baz=29
**MONP2 Monument Peak** 59.81 284 P P 05 17 56.9 +1.1
baz=37
**BOAV Boa Vista** 60.13 213 P P 05 17 56.2 -1.6
BOAV IAmb IAmb 05 17 58.5
comp=Z,14nm,1.2s
**CIS Catalina Islan** 60.42 286 P P 05 17 59.3 -0.3
baz=37
**ZAIG Zacatecas** 60.70 266 P P 05 18 03.3 +1.2
ZAIG IAmb IAmb 05 18 09.8
comp=Z,12nm,1.0s
**TMAB Tom-Au,PA,Br** 61.90 198 eP P 05 18 10.9 +1.1
**MAKZ Makanchi** 61.95 45 P P 05 18 10.1 +0.2
MAKZ IAmb IAmb 05 18 12.2
comp=Z,12nm,1.6s
**MK31 Makanchi Array** 62.08 45 P P 05 18 10.8 0.0
**MKAR Makanchi Array** 62.08 45 P P 05 18 10.2 -0.5
**MKAR Makanchi Array** 62.08 45 P P 05 18 11.1 +0.3
comp=Z,3.3nm,0.6s,baz=331,slow=6.0,SNR=34
comp=Z,3.3nm,0.6s
**HDC Heredia** 62.24 241 eP P 05 18 12.5 +0.2
**ROSC El Rosal** 62.62 229 P P 05 18 16.7 +1.5
comp=Z,5.7nm,0.4s,baz=66,slow=2.5,SNR=11
comp=Z,5.7nm,0.4s
**TLIG Tlapa** 62.92 259 P P 05 18 16.4 -0.4
**BTK Batken** 62.95 57 IAmb IAmb 05 18 29.3
comp=Z,11nm,1.1s
**MACA Manacapuru-AM** 65.47 212 eP P 05 18 33.7 +0.4
**KSH Kashi** 65.64 54 P P 05 18 36.8 +2.4
KSH sP pwP 05 18 42.3 +1.9
KSH pmax pmax
comp=Z,9.0nm,1.0s
**PRPB Parauapebas** 65.91 199 eP P 05 18 35.2 -1.0
**TEFE Tefe** 66.95 216 eP P 05 18 42.8 0.0
**H10N2 ASCENSION HYDR** 67.50 161 T T 06 31 32.4
baz=350,slow=75,SNR=14
**H10N3 ASCENSION HYDR** 67.51 161 T T 06 31 38.4
baz=350,slow=75,SNR=17
**H10N1 ASCENSION HYDR** 67.52 161 T T 06 31 36.6
baz=350,slow=75,SNR=14
**NPGB Novo Progresso** 67.87 205 eP P 05 18 48.1 -0.5
**NBAN Anadia - AL** 67.89 184 eP P 05 18 49.9 +1.1
**H10S3 ASCENSION HYDR** 68.57 162 T T 06 32 57.0
baz=229,slow=74,SNR=239
**H10S2 ASCENSION HYDR** 68.58 161 T T 06 32 54.0
baz=351,slow=74,SNR=259
**SONM Songino Array** 68.75 29 P P 05 18 53.4 -0.7
SONM IAmb IAmb 05 18 55.7
comp=Z,8.1nm,1.2s
**SONM Songino Array** 68.75 29 P P 05 18 54.9 +0.8
comp=Z,3.5nm,1.0s,baz=322,slow=4.5,SNR=15
comp=Z,3.5nm,1.0s
**ULN Ulaanbaatar** 68.89 28 P P 05 18 55.4 +0.4
ULN IAmb IAmb 05 18 57.0
comp=Z,15nm,1.2s
**NBLA Lagarto - SE** 69.28 186 eP P 05 18 56.9 -0.5
**TBTG Tabatinga, AM** 69.31 221 eP P 05 18 58.1 +0.4
**HEH HeiHe** 70.43 14 eP P 05 19 05.0 +0.8
HEH pmax pmax
comp=Z,13nm,1.3s
**SDBA SAO DESIDERIO** 71.31 193 eP P 05 19 09.9 0.0
**CLDB Colider** 71.67 205 eP P 05 19 12.5 +0.5
**SAML Samuel** 71.68 213 eP P 05 19 11.2 -0.9
**SNDB Serra Nova Dou** 71.84 200 eP P 05 19 13.6 +0.6
**PDRB Porto dos Gac** 72.59 205 eP P 05 19 17.1 -0.5
**ETMB Extrema** 73.40 215 P P 05 19 20.9 -1.4
ETMB IAmb IAmb 05 19 22.3
comp=Z,11nm,1.2s
**ETMB Extrema** 73.40 215 eP P 05 19 21.6 -0.7
**CZSB Cruzeiro do Su** 73.58 222 eP P 05 19 22.0 -1.5
**GTA Gaotai** 74.64 37 eP P 05 19 30.0 +0.4
GTA sP pwP 05 19 36.9 +1.4
GTA pmax pmax
comp=Z,7.0nm,1.3s
GTA LR LR
comp=N,240nm,17.1s
GTA LR LR
comp=E,540nm,19.5s
GTA LR LR
comp=Z,410nm,19.1s
**VILB Vilhena** 74.71 208 P P 05 19 30.6 +0.6
VILB IAmb IAmb 05 19 31.4
comp=Z,15nm,1.2s
**BDFB Brasilia** 74.91 196 P P 05 19 29.9 -1.3
comp=Z,2.3nm,0.8s,baz=63,slow=4.3,SNR=4.1
comp=Z,2.3nm,0.8s
**ARAG Araguaiana, MT** 75.58 200 eP P 05 19 36.0 +1.1
**BTO Baotou** 76.43 29 eP P 05 19 39.1 -0.7
BTO pP pP 05 19 43.9 +0.3
BTO sP pwP 05 19 46.1 +0.3
BTO pmax pmax
comp=Z,28nm,1.2s
BTO pmax pmax
comp=Z,2µm,11.8s
**SALV Santo Antonio** 76.52 203 eP P 05 19 41.2 +0.9
**HHC Hu-ho-hao-te** 76.59 28 eP P 05 19 38.8 -1.9
HHC pmax pmax
comp=Z,8.0nm,0.5s
HHC pmax pmax
comp=Z,1µm,5.5s
**IPMB Ipameri, GO** 77.24 196 eP P 05 19 45.2 +0.8
**BJI Beijing** 78.42 24 P P 05 19 51.3 +0.5
BJI pmax pmax
comp=Z,4.0nm,1.1s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BBSD** | **Serra de San D** | **78.88** | **208** | *e*P | | **P** | | **05 19 53.8** | **+0.4** |
| **LZH** | **Lanzhou** | **78.94** | **35** | *e*P | | P | | 05 20 03.3 | +9.3 |
| LZH | | | | pP | | PcP | | 05 20 11.6 | +9.0 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.6s | | | | | | | | |
| **LPAZ** | **La Paz** | **80.09** | **215** | P | | **P** | | **05 20 00.5** | **-0.3** |
| | comp=Z,2.7nm,1.1s,baz=11,slow=6.6,SNR=4.7 | | | | | | | | |
| | comp=Z,2.7nm,1.1s | | | | | | | | |
| **LPAZ** | **La Paz** | **80.09** | **215** | *e*P | | **P** | | **05 20 00.5** | **-0.3** |
| **HNS** | **HongShan** | **80.62** | **26** | *e*P | | **P** | | **05 20 02.1** | **-0.7** |
| **XAN** | **Xi'an** | **82.32** | **32** | ⇑P | | **P** | | **05 20 12.1** | **+0.1** |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **MURT** | **Porto Murtinho** | **82.51** | **204** | *e*P | | **P** | | **05 20 12.1** | **-0.6** |
| **LYN** | **LuoYang** | **82.78** | **29** | *e*P | | **P** | | **05 20 15.1** | **+0.8** |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **KSRS** | **Korea Array** | **83.07** | **16** | P | | **P** | | **05 20 15.9** | **+0.3** |
| | comp=Z,1.0nm,0.6s,baz=346,slow=4.9,SNR=7.5 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **83.08** | **16** | P | | **P** | | **05 20 15.7** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **85.09** | **8** | P | | **P** | | **05 20 26.4** | **+0.4** |
| | comp=Z,1.8nm,0.9s,baz=351,slow=5.2,SNR=6.7 | | | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | | | |
| **NJ2** | **Nanjing** | **86.68** | **24** | *e*P | | **P** | | **05 20 32.5** | **-1.5** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | | |
| **CPUP** | **Villa Florida** | **86.98** | **203** | P | | **P** | | **05 20 34.4** | **-0.8** |
| | comp=Z,1.6nm,0.6s,baz=3.2,slow=7.2,SNR=5.8 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **PZH** | **PanZhiHua** | **87.11** | **40** | P | | **P** | | **05 20 36.0** | **-0.3** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **SNAA** | **Sanae** | **131.36** | **168** | PKP | | **PKPdf** | | **05 27 00.8** | **-0.2** |
| | comp=Z,1.2nm,0.9s,baz=192,slow=2.3,SNR=4.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **140.35** | **20** | PKP | | **PKPdf** | | **05 27 19.0** | **-0.3** |
| | comp=Z,0.7nm,0.7s,baz=336,slow=2.5,SNR=3.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **143.90** | **22** | PKP | | PKPbc | | 05 27 23.6 | +0.4 |
| | comp=Z,1.0nm,0.6s,baz=350,slow=2.9,SNR=11 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **148.28** | **180** | PKPbc | | **PKPbc** | | **05 27 34.5** | **-0.5** |
| | comp=Z,3.2nm,0.6s,baz=235,slow=0.7,SNR=32 | | | | | | | | |
| **VNDA** | **Vanda** | **160.19** | **189** | PKPab | | **PKPab** | | **05 28 28.9** | **+0.5** |
| | comp=Z,0.8nm,0.8s,baz=182,slow=4.4,SNR=5.3 | | | | | | | | |

*IDC* ***14*** *05:21:28.3±1.4,* **58°.12N×32°.19W,** *h0km, mb3.6/8, mbtmp3.6/9, ML3.5/1, Error ellipse: s-maj=34.1km s-min=23.8km az=1.0*

**ISC 14 05:21:30.2±1.1, 58°.3N±0°.1×32°.1W±0°.1, h10km, n9, σ1§72/10, mb3.7/8, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BORG** | **Borgarnes** | **8.29** | **34** | Pn | **Pn** | **05 23 31.0** | **+0.7** |
| | 0.6nm,0.3s,baz=219,slow=13,SNR=2.0 | | | | | | |
| BORG | | | | Sn | **Sn** | **05 25 01.8** | **-2.0** |
| | 0.3nm,0.3s,baz=97,slow=19,SNR=2.3 | | | | | | |
| | 6.8nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **21.76** | **64** | P | **P** | **05 26 24.1** | **+2.5** |
| | 0.2nm,0.4s,baz=282,slow=9.2,SNR=3.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **23.16** | **66** | P | **P** | **05 26 38.4** | **+2.0** |
| | 1.6nm,0.7s,baz=289,slow=13,SNR=3.7 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **28.55** | **59** | P | **P** | **05 27 24.8** | **-0.9** |
| | 1.4nm,0.7s,baz=283,slow=12,SNR=3.8 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **47.78** | **328** | P | **P** | **05 30 08.7** | **+1.7** |
| | 0.4nm,0.8s,baz=41,slow=5.8,SNR=4.1 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **48.79** | **287** | P | **P** | **05 30 14.3** | **-1.0** |
| | 0.3nm,0.7s,baz=69,slow=8.1,SNR=3.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **49.31** | **57** | P | **P** | **05 30 19.3** | **+0.3** |
| | 1.5nm,0.6s,baz=319,slow=7.9,SNR=4.5 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.70** | **136** | P | **P** | **05 30 36.6** | **-0.7** |
| | 0.7nm,0.7s,baz=354,slow=8.2,SNR=5.1 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.17** | **45** | P | **P** | **05 31 50.4** | **-0.9** |
| | 0.3nm,0.5s,baz=350,slow=7.3,SNR=2.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**IDC 14 05:26:51.1±7.4, 58°.20N×31°.72W, h0km, mb3.8/4, mbtmp3.8/4, Error ellipse: s-maj=186.8km s-min=40.7km az=96.0, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **28.41** | **59** | P | P | 05 32 47.2 | +0.4 |
| | 1.3nm,0.8s,baz=289,slow=4.3,SNR=2.1 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **49.18** | **58** | P | P | 05 35 39.8 | -0.6 |
| | 1.6nm,0.7s,baz=338,slow=6.1,SNR=5.1 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.52** | **137** | P | P | 05 35 58.3 | -0.1 |
| | 0.6nm,0.7s,baz=353,slow=7.2,SNR=6.1 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.07** | **45** | P | P | 05 37 13.2 | +0.1 |
| | 0.4nm,0.7s,baz=321,slow=7.0,SNR=4.0 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*VAO* ***14*** *05:32:30.5±0.4, 19°.52S×69°.54W, h94km, mb5.0*
*NEIC* ***14*** *05:32:33.5, 19°.61S×69°.27W, h99km*
*NEIC* ***14*** *05:32:33.7±2.0, 19°.60S±0°.05×69°.28W±0°.08, h105km±5km, mb5.0/38, Mwr4.8/32, Mwr5.1(GUC), Error ellipse: s-maj=10.6km s-min=7.2km az=94.0, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr=0.98; Mθθ=0.13; Mφφ 1.11; Mrθ=0.90; Mrφ=0.89; Mθφ=-0.35; Fault plane solution: M0 1.68000×10^16 NP1:φ=240.06000°, δ=59.07000°, λ=-42.74000°. NP2:φ=355.47000°, δ=54.40000°, λ=-140.79000°. Principal axes: T 1.5819, Plg3.0000°, Azm299.0000°; N 0.1841, Plg39.0000°, Azm31.0000°; P -1.7660, Plg51.0000°, Azm205.0000°;*
*BJI* ***14*** *05:32:34.0±0.0, 19°.60S×69°.20W, h100km, mB5.3/2*
*SJA* ***14*** *05:32:35.3±1.7, 19°.56S×69°.23W, h102km, MW5.0(GFZ)*
*IDC* ***14*** *05:32:35.0±0.4, 19°.52S×69°.12W, h103km±3km, mb4.2/16, mbtmp4.6/20, MS3.4/2, Error ellipse: s-maj=14.1km s-min=7.6km az=81.0*
*GUC* ***14*** *05:32:35.6±0.9, 19°.62S×69°.31W, h98km±4km, ML4.9*

**ISC 14 05:32:33.8±0.3, 19°.56S±0°.03×69°.33W±0°.04, h101km±2km, h101km:pP-P, n310, σ1§49/263, mb4.9/39, 10C-5D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GO01** | **Chusmiza** | **0.17** | **129** | | **Pn** | **05 32 49.4** | **+0.7** |
| **GO01** | **Chusmiza** | **0.17** | **129** | *i* P | **Pn** | **05 32 49.5** | **+0.9** |
| GO01 | | | | *i* S | **Sn** | **05 33 00.1** | **+0.4** |
| **GO01** | **Chusmiza** | **0.17** | **129** | ⇓*i* P | **Pn** | **05 32 49.3** | **+0.7** |
| GO01 | | | | *i* S | **Sn** | **05 33 00.9** | **+1.3** |
| **PX03** | **IPOC Station P** | **0.88** | **199** | *i* P | **Pn** | **05 32 53.1** | **-0.1** |
| PX03 | | | | *e*S | **Sn** | **05 33 07.8** | **+0.1** |
| PX03 | | | | IAML | | 05 33 08.9 | |
| | comp=N,28μm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **0.88** | **216** | | **Pn** | **05 32 53.2** | **0.0** |
| **HMBC** | **Humberstone** | **0.88** | **216** | *i* P | **Pn** | **05 32 53.0** | **-0.2** |
| HMBC | | | | *i* S | **Sn** | **05 33 07.8** | **0.0** |
| HMBC | | | | IAML | | 05 33 09.2 | |
| | comp=Z,21μm,0.5s | | | | | | |
| **HMBC** | **Humberstone** | **0.88** | **216** | ⇑*i* P | **Pn** | **05 32 53.8** | **+0.5** |
| HMBC | | | | *i* S | **Sn** | **05 33 08.3** | **+0.5** |
| HMBC | | | | IAML | | 05 33 13.3 | |
| | comp=N,55μm,0.4s | | | | | | |
| **PX02** | **IPOC Station P** | **1.01** | **306** | *e*P | **Pn** | **05 32 54.1** | **-0.5** |
| PX02 | | | | *i* S | **Sn** | **05 33 09.1** | **-1.0** |
| **TA02** | **Huaiquique** | **1.03** | **227** | | **Pn** | **05 32 55.1** | **+0.6** |
| **TA02** | **Huaiquique** | **1.03** | **227** | *i* P | **Pn** | **05 32 54.9** | **+0.2** |
| TA02 | | | | *i* S | **Sn** | **05 33 10.3** | **+0.1** |
| TA02 | | | | IAML | | 05 33 15.1 | |
| | comp=Z,8μm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **1.03** | **227** | ⇑*i* P | **Pn** | **05 32 55.2** | **+0.6** |
| TA02 | | | | *i* S | **Sn** | **05 33 10.7** | **+0.4** |
| TA02 | | | | IAML | | 05 33 11.7 | |
| | comp=E,58μm,0.5s | | | | | | |
| **TA01** | **Diego Aracena** | **1.28** | **219** | Pn | **Pn** | **05 32 57.7** | **+0.3** |
| **TA01** | **Diego Aracena** | **1.28** | **219** | *i* P | **Pn** | **05 32 57.8** | **+0.3** |
| TA01 | | | | *i* S | **Sn** | **05 33 15.5** | **+0.2** |
| TA01 | | | | IAML | | 05 33 22.8 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **1.28** | **219** | ⇑*i* P | **Pn** | **05 32 57.4** | **0.0** |
| TA01 | | | | *i* S | **Sn** | **05 33 15.2** | **-0.1** |
| TA01 | | | | IAML | | 05 33 19.7 | |
| | comp=N,23μm,0.4s | | | | | | |
| **AP01** | **Chacalluta** | **1.52** | **321** | | **Pn** | **05 33 01.2** | **+0.8** |
| **AP01** | **Chacalluta** | **1.52** | **321** | *i* P | **Pn** | **05 33 01.3** | **+0.8** |
| AP01 | | | | *i* S | **Sn** | **05 33 21.8** | **+1.2** |
| AP01 | | | | IAML | | 05 33 24.6 | |
| | comp=Z,20μm,0.2s | | | | | | |
| **AP01** | **Chacalluta** | **1.52** | **321** | ⇑*i* P | **Pn** | **05 33 01.1** | **+0.8** |
| AP01 | | | | *i* S | **Sn** | **05 33 20.7** | **+0.2** |
| AP01 | | | | IAML | | 05 33 27.1 | |
| | comp=N,47μm,0.5s | | | | | | |
| **PB18** | **Visviri** | **1.97** | **356** | | **Pn** | **05 33 09.0** | **+2.4** |
| **PB18** | **Visviri** | **1.97** | **356** | ⇓*i* P | **Pn** | **05 33 09.4** | **+2.8** |
| PB18 | | | | *e*S | **Sn** | **05 33 36.9** | **+5.5** |
| PB18 | | | | IAML | | 05 33 50.9 | |
| | comp=N,9μm,0.8s | | | | | | |
| **PB04** | **IPOC Station P** | **2.86** | **195** | Pn | **Pn** | **05 33 18.6** | **+0.7** |
| **PB04** | **IPOC Station P** | **2.86** | **195** | *i* P | **Pn** | **05 33 18.7** | **+0.8** |
| PB04 | | | | IAML | | 05 34 22.5 | |
| | comp=Z,3μm,0.8s | | | | | | |
| **PB04** | **IPOC Station P** | **2.86** | **195** | ⇑*i* P | **Pn** | **05 33 18.4** | **+0.6** |
| **LVC** | **Limon Verde** | **3.06** | **173** | Pn | **Pn** | **05 33 21.4** | **+0.7** |
| **LVC** | **Limon Verde** | **3.06** | **173** | *i* P | **Pn** | **05 33 22.5** | **+1.8** |
| LVC | | | | IAML | | 05 34 06.0 | |
| | comp=Z,2μm,1.1s | | | | | | |
| **LVC** | **Limon Verde** | **3.06** | **173** | P | **Pn** | **05 33 22.6** | **+2.0** |
| | comp=Z,1μm,0.5s,baz=345,slow=8.6,SNR=408 | | | | | | |
| LVC | | | | S | **Sn** | **05 33 58.3** | **+1.6** |
| | comp=Z,4μm,0.8s,baz=142,slow=20,SNR=18 | | | | | | |
| **LVC** | **Limon Verde** | **3.06** | **173** | ⇓*i* P | **Pn** | **05 33 21.8** | **+1.1** |
| LVC | | | | *e*S | **Sn** | **05 33 57.8** | **+1.1** |
| **LPAZ** | **La Paz** | **3.45** | **20** | Pn | **Pn** | **05 33 28.9** | **+2.7** |
| **LPAZ** | **La Paz** | **3.45** | **20** | *i* P | **Pn** | **05 33 29.2** | **+3.0** |
| **LPAZ** | **La Paz** | **3.45** | **20** | P | **Pn** | **05 33 29.1** | **+2.8** |
| | comp=Z,132nm,0.5s,baz=194,slow=6.5,SNR=490 | | | | | | |
| LPAZ | | | | LR | LR | 05 34 59.2 | |
| | comp=Z,281nm,19.5s,baz=203,slow=43 | | | | | | |
| **AF01** | **San Pedro de A** | **3.54** | **163** | | **Pn** | **05 33 29.4** | **+2.3** |
| **AF01** | **San Pedro de A** | **3.54** | **163** | *i* P | **Pn** | **05 33 29.4** | **+2.3** |
| AF01 | | | | IAML | | 05 34 50.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **AF01** | **San Pedro de A** | **3.54** | **163** | ⇓*e*P | **Pn** | **05 33 28.9** | **+1.8** |
| AF01 | | | | *i* S | **Sn** | **05 34 09.9** | **+1.7** |
| **YJA** | **Yavi** | **4.42** | **127** | *i* P | **Pn** | **05 33 42.6** | **+3.6** |
| **PB14** | **IPOC Station P** | **5.13** | **191** | Pn | **Pn** | **05 33 47.5** | **-1.1** |
| **GO02** | **Mina Guanaco** | **5.58** | **182** | Pn | **Pn** | **05 33 53.8** | **-0.8** |
| **AC01** | **Pan de Azucar** | **6.66** | **190** | | **Pn** | **05 34 06.9** | **-2.1** |
| **AC06** | **Mina Casimiro** | **7.81** | **187** | | **Pn** | **05 34 22.1** | **-2.7** |
| **GO03** | **Copiap** | **8.04** | **186** | Pn | **Pn** | **05 34 25.1** | **-2.7** |
| **SIV** | **San Ignacio** | **8.63** | **67** | P | **Pn** | **05 34 33.8** | **-2.2** |
| | comp=Z,74nm,0.6s,baz=254,slow=11,SNR=456 | | | | | | |
| **AC05** | **El Transito** | **9.27** | **185** | | Pn | 05 34 39.9 | -4.8 |
| **LCO** | **Las Campanas** | **9.49** | **187** | Pn | **Pn** | **05 34 45.1** | **-2.6** |
| **ETMB** | **Extrema** | **10.15** | **18** | Pn | **Pn** | **05 34 55.0** | **-1.6** |
| **ETMB** | **Extrema** | **10.15** | **18** | *e*P | **Pn** | **05 34 53.8** | **-2.8** |
| **CO01** | **Juntas del Tor** | **10.39** | **184** | Pn | **Pn** | **05 34 58.3** | **-1.8** |
| **NNA** | **Nana** | **10.44** | **315** | Pn | **Pn** | **05 34 58.8** | **-1.8** |
| **NNA** | **Nana** | **10.44** | **315** | P | **Pn** | **05 34 58.4** | **-2.2** |
| | comp=Z,22nm,0.3s,baz=161,slow=17,SNR=9.9 | | | | | | |
| NNA | | | | S | **Sn** | **05 36 52.4** | **-3.3** |
| | comp=Z,16nm,0.3s,baz=206,slow=18,SNR=2.0 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.55** | **69** | Pn | **Pn** | **05 34 59.8** | **-2.3** |
| **VILB** | **Vilhena** | **10.96** | **54** | Pn | **Pn** | **05 35 05.5** | **-2.1** |
| **PAPY** | **Pozo Azul** | **11.25** | **116** | *e*P | **Pn** | **05 35 10.2** | **-1.3** |
| **CO02** | **Combarbal** | **11.69** | **187** | Pn | **Pn** | **05 35 16.7** | **-0.7** |
| **SAML** | **Samuel** | **12.12** | **30** | *e*P | **Pn** | **05 35 20.0** | **-3.1** |
| **CZSB** | **Cruzeiro do Su** | **12.21** | **344** | | **Pn** | **05 35 20.6** | **-3.7** |
| **CZSB** | **Cruzeiro do Su** | **12.21** | **344** | *e*P | Pn | 05 35 19.3 | -5.1 |
| **AQDB** | **Aquidauana** | **12.85** | **96** | Pn | **Pn** | **05 35 30.8** | **-1.9** |
| **CPUP** | **Villa Florida** | **12.94** | **124** | | **Pn** | **05 35 32.8** | **-1.1** |
| **CPUP** | **Villa Florida** | **12.94** | **124** | P | **Pn** | **05 35 33.2** | **-0.7** |
| | comp=Z,56nm,1.0s,baz=302,slow=12,SNR=96 | | | | | | |
| CPUP | | | | LR | LR | 05 41 55.5 | |
| | comp=Z,325nm,18.4s,baz=356,slow=44 | | | | | | |
| **ASAL** | **Salagasta** | **12.98** | **178** | *e*P | **Pn** | **05 35 37.0** | **+2.5** |
| ASAL | | | | IAML | | 05 36 20.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **ARCO** | **CERRO ARCO** | **13.23** | **179** | *i* P | **Pn** | **05 35 40.0** | **+2.3** |
| ARCO | | | | IAML | | 05 36 31.0 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **AAGR** | **Agrelo** | **13.47** | **178** | *i* P | **Pn** | **05 35 42.7** | **+1.8** |
| AAGR | | | | IAML | | 05 36 18.9 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **MT02** | **Curacav** | **13.73** | **186** | *i* P | **Pn** | **05 35 44.5** | **+0.2** |
| MT02 | | | | IAML | | 05 36 22.8 | |
| | comp=Z,22nm,1.9s | | | | | | |
| **MT04** | **Ro Olivares** | **13.80** | **183** | *i* P | **P** | **05 35 48.2** | **-2.2** |
| MT04 | | | | IAML | | 05 36 50.8 | |
| | comp=Z,18nm,4.3s | | | | | | |
| **MT05** | **Renca** | **13.83** | **185** | *i* P | **P** | **05 35 54.0** | **+3.5** |
| MT05 | | | | IAML | | 05 36 36.2 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **MT08** | **Bocatoma Ro** | **13.84** | **182** | *i* P | **Pn** | **05 35 48.3** | **+2.5** |
| MT08 | | | | IAML | | 05 36 37.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **AVIZ** | **Vizcacheras** | **13.87** | **177** | *e*P | **Pn** | **05 35 47.4** | **+1.3** |
| **MT03** | **Universidad Ad** | **13.91** | **184** | *i* P | **Pn** | **05 35 47.9** | **+1.2** |
| MT03 | | | | IAML | | 05 36 37.0 | |
| | comp=Z,33nm,1.2s | | | | | | |
| **MT13** | **San Alfonso** | **14.15** | **183** | *i* P | **Pn** | **05 35 51.3** | **+1.6** |
| MT13 | | | | IAML | | 05 36 36.5 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **LMEL** | **Las Melosas** | **14.25** | **183** | *i* P | **Pn** | **05 35 52.4** | **+1.4** |
| LMEL | | | | IAML | | 05 36 46.9 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **MT01** | **Popeta** | **14.35** | **186** | *i* P | **Pn** | **05 35 52.2** | **+0.1** |
| MT01 | | | | IAML | | 05 36 34.3 | |
| | comp=Z,24nm,2.4s | | | | | | |
| **BO01** | **Tunca** | **14.85** | **186** | Pn | **Pn** | **05 35 56.9** | **-1.7** |
| **BO01** | **Tunca** | **14.85** | **186** | *e*P | **Pn** | **05 35 58.9** | **+0.3** |
| BO01 | | | | IAML | | 05 37 26.8 | |
| | comp=Z,16nm,3.4s | | | | | | |
| **ATAH** | **Atahualpa** | **15.17** | **323** | P | **Pn** | **05 36 03.8** | **+0.7** |
| | comp=Z,4.0nm,0.7s,baz=84,slow=9.6,SNR=3.7 | | | | | | |
| **BO02** | **Sierra Bellavi** | **15.22** | **185** | Pn | **Pn** | **05 36 02.5** | **-0.9** |
| **BO02** | **Sierra Bellavi** | **15.22** | **185** | *i* P | **P** | **05 36 08.3** | **+2.3** |
| BO02 | | | | IAML | | 05 37 12.8 | |
| | comp=Z,11nm,2.7s | | | | | | |
| **TBTG** | **Tabatinga, AM** | **15.29** | **358** | Pn | **Pn** | **05 36 01.9** | **-2.4** |
| **TBTG** | **Tabatinga, AM** | **15.29** | **358** | *e*P | **Pn** | **05 35 59.7** | **-4.7** |
| **ITQB** | **Itaqui** | **15.31** | **134** | Pn | **Pn** | **05 36 02.5** | **-1.9** |
| **CLDB** | **Colider** | **15.65** | **58** | *e*P | **Pn** | **05 36 07.8** | **-1.0** |
| **TRCB** | **Terra Rica** | **15.90** | **105** | P | **Pn** | **05 36 11.5** | **-0.4** |
| **CRSM** | **Crissiumal (Br** | **16.08** | **122** | *e*P | **Pn** | **05 36 13.8** | **-0.3** |
| **VA04** | **Juan Fernndez** | **16.38** | **209** | P | **P** | **05 36 20.4** | **+1.7** |
| **TEFE** | **Tefe** | **16.60** | **17** | *e*P | **Pn** | **05 36 19.0** | **-1.6** |
| **RODS** | **Rosario do Sul** | **16.70** | **133** | *e*P | **Pn** | **05 36 21.5** | **-0.2** |
| **PTGB** | **Pitanga** | **16.79** | **111** | *e*P | **Pn** | **05 36 22.1** | **-0.9** |
| **PCMB** | **Pacaembu** | **17.04** | **100** | *e*P | **P** | **05 36 27.0** | **+0.8** |
| **TBOT** | **Tacuaremb** | **17.05** | **138** | *e*P | **Pn** | **05 36 25.7** | **-0.3** |
| **ARAG** | **Araguaiana, MT** | **17.13** | **80** | *e*P | **Pn** | **05 36 25.4** | **-1.6** |
| **LDASE** | **Londrina, Braz** | **17.37** | **106** | *e*P | **P** | **05 36 28.9** | **-1.0** |
| **ALGR** | **Alto Alegre (B** | **17.47** | **125** | *e*P | **P** | **05 36 30.0** | **-0.9** |
| **ITAB** | **Concordia** | **17.52** | **119** | P | **P** | **05 36 30.4** | **-1.1** |
| **ITAB** | **Concordia** | **17.52** | **119** | *e*P | **P** | **05 36 31.2** | **-0.2** |
| **ITRB** | **Iturama** | **17.87** | **94** | *e*P | **P** | **05 36 33.8** | **-1.6** |
| **CPSB** | **Cacapava Do Su** | **17.98** | **130** | *e*P | **P** | **05 36 36.4** | **0.0** |
| **MACA** | **Manacapuru-AM** | **18.36** | **28** | P | **P** | **05 36 38.3** | **-2.4** |
| **MACA** | **Manacapuru-AM** | **18.36** | **28** | *e*P | **P** | **05 36 39.1** | **-1.6** |
| **NPGB** | **Novo Progresso** | **18.41** | **49** | *e*P | **P** | **05 36 39.3** | **-2.0** |
| **PLTB** | **Pedras Altas** | **18.64** | **134** | P | **P** | **05 36 41.7** | **-2.0** |
| **PLTB** | **Pedras Altas** | **18.64** | **134** | *e*P | **P** | **05 36 43.6** | **-0.1** |
| **FRTB** | **Fartura** | **18.78** | **105** | *e*P | **P** | **05 36 45.1** | **-0.2** |
| **SNDB** | **Serra Nova Dou** | **18.92** | **69** | *e*P | **P** | **05 36 45.7** | **-1.1** |
| **ARNL** | **Arenillas** | **19.06** | **325** | P | **P** | **05 36 48.5** | **+0.2** |
| **GO06** | **Curarrehue** | **20.04** | **185** | P | **P** | **05 36 59.1** | **+0.2** |
| **IPMB** | **Ipameri, GO** | **20.06** | **89** | *e*P | **P** | **05 36 58.0** | **-1.2** |
| **RCLB** | **Rio Claro- Sao** | **20.55** | **102** | *e*P | **P** | **05 37 03.1** | **-1.4** |
| **BDFB** | **Brasilia** | **20.69** | **83** | P | **P** | **05 37 04.3** | **-1.8** |
| **BDFB** | **Brasilia** | **20.69** | **83** | P | **P** | **05 37 04.6** | **-1.5** |
| | comp=Z,21nm,0.5s,baz=246,slow=12,SNR=35 | | | | | | |
| | comp=Z,21nm,0.5s | | | | | | |
| **SPB** | **Sao Paulo** | **20.75** | **105** | *e*P | **P** | **05 37 05.5** | **-1.1** |
| **PET01** | **Itanhaem-SP** | **20.99** | **107** | *e*P | **P** | **05 37 07.6** | **-1.5** |
| **VAO** | **Valinhos** | **21.12** | **103** | P | **P** | **05 37 08.6** | **-1.9** |
| **VAO** | **Valinhos** | **21.12** | **103** | *e*P | **P** | **05 37 08.7** | **-1.9** |
| **PLCA** | **Paso Flores** | **21.12** | **183** | P | **P** | **05 37 11.0** | **+0.4** |
| **PLCA** | **Paso Flores** | **21.12** | **183** | P | **P** | **05 37 11.7** | **+1.2** |
| | comp=Z,76nm,0.8s,baz=357,slow=12,SNR=62 | | | | | | |
| PLCA | | | | PcP | **PcP** | **05 41 14.0** | **+1.2** |
| | comp=Z,1.3nm,0.6s,baz=287,slow=1.5,SNR=3.4 | | | | | | |
| | comp=Z,76nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **21.12** | **183** | *e*P | **P** | **05 37 06.8** | **-3.8** |
| **IMBA** | **Imbabura, San** | **21.55** | **335** | P | **P** | **05 37 18.0** | **+2.4** |
| **OTAV** | **Otavalo** | **21.62** | **335** | P | **P** | **05 37 18.0** | **+1.6** |
| **PMNB** | **Patos De Minas** | **21.66** | **91** | *e*P | **P** | **05 37 15.0** | **-1.5** |
| **PARB** | **Paraibuna** | **22.38** | **104** | *e*P | **P** | **05 37 21.8** | **-2.1** |
| **MAL2** | **Monte Alegre,** | **22.89** | **42** | P | **P** | **05 37 26.2** | **-2.9** |
| **BSCB** | **Bom Sucesso** | **23.08** | **98** | *e*P | **P** | **05 37 29.2** | **-1.8** |
| **PRPB** | **Paraupebas** | **23.18** | **58** | *e*P | **P** | **05 37 29.7** | **-2.3** |
| **BOAV** | **Boa Vista** | **23.48** | **23** | P | **P** | **05 37 33.4** | **-1.2** |
| **BOAV** | **Boa Vista** | **23.48** | **23** | *e*P | **P** | **05 37 33.3** | **-1.2** |
| **SMTB** | **Santa Maria do** | **23.58** | **66** | *e*P | **P** | **05 37 35.0** | **-0.6** |
| **LL02** | **Futaleuf** | **23.65** | **185** | P | **P** | **05 37 34.3** | **-1.7** |
| **JANB** | **Januaria** | **24.29** | **83** | *e*P | **P** | **05 37 40.0** | **-2.0** |
| **DIAM** | **Diamantina, MG** | **24.30** | **91** | *e*P | **P** | **05 37 41.7** | **-0.5** |
| **SDBA** | **SAO DESIDERIO** | **24.52** | **77** | *e*P | **P** | **05 37 43.3** | **-0.8** |
| **ROSC** | **El Rosal** | **24.74** | **348** | P | **P** | **05 37 46.3** | **-0.2** |
| | comp=Z,5.9nm,0.7s,baz=342,slow=20,SNR=2.8 | | | | | | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **COYC** | **Coyhaique** | **26.04** | **184** | P | **P** | **05 37 57.3** | **-0.2** |
| COYC | | | | IAmb | IAmb | 05 37 59.1 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **TMAB** | **Tom-Au,PA,Br** | **26.89** | **53** | *e*P | **P** | **05 38 05.2** | **-0.3** |
| **BAUV** | **El Baul** | **28.36** | **3** | P | **P** | **05 38 16.7** | **-1.8** |
| BAUV | | | | IAmb | IAmb | 05 38 43.8 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **GO08** | **Villa O'Higgin** | **28.95** | **184** | IAmb | IAmb | 05 38 28.8 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **NBLA** | **Lagarto - SE** | **31.55** | **79** | *e*P | **P** | **05 38 45.9** | **-1.0** |
| **NBAN** | **Anadia - AL** | **33.41** | **78** | *e*P | **P** | **05 39 02.7** | **-0.4** |
| **RCBR** | **Riachuelo** | **35.26** | **72** | P | **P** | **05 39 19.5** | **+0.4** |
| **UUPR** | **Utuado, UPR, P** | **37.67** | **4** | P | **P** | **05 39 38.6** | **-0.8** |
| UUPR | | | | IAmb | IAmb | 05 40 03.7 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **GCPR** | **Guaynabo City** | **37.77** | **5** | P | **P** | **05 39 36.5** | **-3.7** |
| **HOPE** | **Hope Point** | **42.76** | **152** | P | **P** | **05 40 22.7** | **+1.7** |
| **SOR** | **Soroa** | **44.17** | **342** | P | **P** | **05 40 32.3** | **-0.3** |
| SOR | | | | pP | **pP** | **05 40 58.0** | **+0.8** |
| SOR | | | | IAmb | IAmb | 05 40 59.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **DWPF** | **Disney Wildern** | **48.82** | **346** | P | **P** | **05 41 09.5** | **+0.6** |
| DWPF | | | | pP | **pP** | **05 41 34.4** | **+0.3** |
| DWPF | | | | sP | **sP** | **05 41 47.4** | **+1.5** |
| **TIGA** | **Tifton** | **52.53** | **345** | pP | pP | 05 42 02.7 | +0.5 |
| | baz=163 | | | | | | |
| **BRAL** | **Brewton** | **53.24** | **341** | pP | pP | 05 42 07.8 | +0.6 |
| | baz=159 | | | | | | |
| **NHSC** | **New Hope** | **53.39** | **349** | pP | pP | 05 42 09.1 | +0.6 |
| | baz=167 | | | | | | |
| **GOGA** | **Godfrey** | **54.38** | **345** | P | **P** | **05 41 49.0** | **-1.3** |
| GOGA | | | | pP | **pP** | **05 42 15.2** | **-0.7** |
| GOGA | | | | IAmb | IAmb | 05 42 16.9 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **LRAL** | **Lakeview Retre** | **54.96** | **342** | pP | pP | 05 42 19.4 | -0.4 |
| | baz=160 | | | | | | |
| **PAULI** | **Pauline** | **55.37** | **348** | P | **P** | **05 41 57.1** | **-0.3** |
| PAULI | | | | pP | **pP** | **05 42 22.3** | **-0.7** |
| **HKT** | **Hockley** | **55.45** | **332** | P | **P** | **05 41 59.4** | **+1.4** |
| HKT | | | | pP | **pP** | **05 42 25.0** | **+1.8** |
| **KMSC** | **Kings Mountain** | **55.59** | **348** | pP | pP | 05 42 25.0 | +0.4 |
| | baz=166 | | | | | | |
| **833A** | **Chaparral WMA,** | **55.78** | **328** | pP | pP | 05 42 26.2 | +0.5 |
|

HRV pP **pP** 05 43 07.9 0.0
HRV PcP **PcP** 05 43 22.5 +0.5
**SFIN Lafayette** 61.89 345 pP pP 05 43 07.6 -1.0
baz=161
**VNA3 Neumayer Olymp** 62.03 162 ⇑P **P** 05 42 44.3 +1.2
comp=Z,14nm,0.7s
**MSTX Muleshoe** 62.04 329 pP pP 05 43 10.0 +0.4
baz=144
**ERPA Erie** 62.16 351 pP pP 05 43 10.7 +0.2
baz=169
**VNA1 Neumayer--Stat** 62.23 161 ⇑P **P** 05 42 46.1 +1.7
comp=Z,21nm,1.2s
**VNA2 Neumayer--Watz** 62.60 161 ⇑P **P** 05 42 48.1 +1.2
comp=Z,13nm,0.6s,baz=285,slow=7.8
**HDIL Hopedale** 62.63 343 pP pP 05 43 12.9 -0.7
baz=159
**AAM Ann Arbor** 62.96 348 pP pP 05 43 15.9 +0.2
baz=165
**LBNH Lisbon** 63.53 358 pP pP 05 43 20.3 +0.7
baz=177
**121A Cookes Peak, D** 63.54 324 pP pP 05 43 21.4 +1.7
baz=139
**KSU1 Kansas State U** 63.70 337 IAmb IAmb 05 43 22.5
comp=Z,13nm,1.0s
**KSU1 Kansas State U** 63.70 337 pP pP 05 43 20.7 +0.1
baz=151
**LONY Lake Ozonia** 64.05 356 pP pP 05 43 23.2 +0.1
baz=174
**SNAA Sanae** 64.23 161 ⇑P **P** 05 42 58.8 +1.1
comp=Z,361nm,0.7s
**SNAA Sanae** 64.23 161 P **P** 05 42 58.9 +1.1
comp=Z,12nm,0.6s,baz=284,slow=6.9,SNR=94
comp=Z,12nm,0.6s
**PKME Peaks-Kenny Pk** 64.52 0 pP pP 05 43 26.3 +0.2
baz=180
**ANMO Albuquerque** 64.67 327 pP pP 05 43 27.8 +0.8
baz=141
**CBKS Cedar Bluff** 64.69 334 pP pP 05 43 28.1 +0.8
baz=148
**TUC Tucson** 65.08 322 pP pP 05 43 31.2 +1.5
baz=137
**JFWS Jewell Farm** 65.08 343 IAmb IAmb 05 43 35.8
comp=Z,11nm,0.7s
**T25A Trinidad** 65.38 330 pP pP 05 43 33.3 +1.3
baz=144
**GLMI Grayling** 65.58 348 pP pP 05 43 34.2 +1.2
baz=164
**TROLL Troll, Antarti** 65.94 161 ⇑P **P** 05 43 10.3 +1.4
comp=Z,749nm,0.6s
**214A Organ Pipe Nat** 66.03 320 pP pP 05 43 37.3 +1.4
baz=135
**KSCO Kaye Shedlock'** 66.08 332 pP pP 05 43 37.3 +0.9
baz=146
**BGNE Belgrade** 66.29 337 pP pP 05 43 38.1 +0.5
baz=150
**SDCO Great Sand Dun** 66.39 329 pP pP 05 43 38.9 +0.3
baz=143
**S22A 4UR Ranch, Cre** 67.04 328 pP pP 05 43 43.9 +1.1
baz=142
**Q24A Divide** 67.19 330 pP pP 05 43 44.6 +0.9
baz=143
**OGNE Ogallala** 67.43 334 pP pP 05 43 45.7 +0.8
baz=147
**MVCO Mesa Verde** 67.47 327 pP pP 05 43 46.3 +0.8
baz=140
**WUAZ Wupatki** 67.74 324 pP pP 05 43 48.2 +1.4
baz=137
**ECSD EROS Data Cent** 67.78 339 pP pP 05 43 47.3 -0.1
baz=152
**SPMN Marine on St.** 67.93 342 pP pP 05 43 48.1 0.0
baz=156
**ISCO Idaho Springs** 68.08 331 pP pP 05 43 50.1 +0.8
baz=143
**PDMCI Parker Dam,Lak** 68.47 321 pP pP 05 43 52.4 +1.2
baz=134
**IKP In-Ko-Pah, Jac** 68.53 319 pP pP 05 43 53.3 +1.5
baz=132
**SWSC Sam W. Stewart** 68.53 319 pP pP 05 43 52.9 +1.2
baz=133
**DBIC Dimbokro** 68.58 74 P **P** 05 43 25.6 -0.7
comp=Z,8.9nm,0.8s,baz=245,slow=3.5,SNR=8.8
DBIC pP **pP** 05 43 53.1 0.0
comp=Z,6.7nm,0.8s,baz=229,slow=6.0,SNR=3.4
comp=Z,8.9nm,0.8s
**DBIC Dimbokro** 68.58 74 P **P** 05 43 25.6 -0.8
DBIC pP **pP** 05 43 52.7 -0.4
DBIC sP **sP** 05 44 03.7 -0.9
**BC3 Big Chuckawall** 68.81 320 pP pP 05 43 55.4 +1.8
baz=133
**MONP2 Monument Peak** 68.89 319 pP pP 05 43 56.0 +1.8
baz=132
**IRM Iron Mountain** 68.96 320 pP pP 05 43 56.6 +2.2
baz=134
**N23A Red Feather La** 69.10 331 pP pP 05 43 56.6 +0.9
baz=143
**BELC Belle Mtn. Jos** 69.37 320 pP pP 05 43 58.6 +1.4
baz=133
**TPFO Pinon Flats** 69.38 319 pP pP 05 43 58.5 +1.3
baz=132
**PFO Pinyon Flats O** 69.39 319 pP pP 05 43 59.0 +1.7
baz=132
**O20A White River Ci** 69.58 329 pP pP 05 44 00.3 +1.7
baz=141
**GMRC Granite Mounta** 69.70 321 pP pP 05 44 00.7 +1.6
baz=134
**BBRC Big Bear Solar** 70.11 319 pP pP 05 44 03.4 +1.6
baz=132
**HEC Hector,Ludlow** 70.14 320 pP pP 05 44 03.4 +1.6
baz=133
**BFSC Mount Baldy Ra** 70.55 319 pP pP 05 44 06.8 +2.4
baz=132
**QSPA South Pole Qui** 70.62 180 P **P** 05 43 39.9 +1.8
comp=Z,19nm,0.9s,baz=160,slow=1.0,SNR=127
QSPA pP **pP** 05 44 04.0 -0.6
comp=Z,5.1nm,0.8s,baz=115,slow=6.2,SNR=2.8
comp=Z,19nm,0.9s
**QSPA South Pole Qui** 70.62 180 P **P** 05 43 39.8 +1.7
**GSC Goldstone, Bar** 70.74 320 pP pP 05 44 07.5 +2.0
baz=133
**K22A Casper** 70.76 332 pP pP 05 44 07.3 +1.6
baz=143
**SHOC Shoshone, Teco** 70.83 321 pP pP 05 44 07.8 +1.9
baz=133
**RSSD Black Hills** 70.89 334 P **P** 05 43 40.7 +0.6
RSSD pP **pP** 05 44 08.0 +1.5
RSSD sP **sP** 05 44 20.5 +2.8
**SNCC San Nicolas Is** 71.08 317 pP pP 05 44 09.2 +1.8
baz=130
**EDW2 Edwards Air Fo** 71.18 319 pP pP 05 44 10.4 +2.3
baz=132
**LRMC Laurel Mtn Rad** 71.39 320 pP pP 05 44 11.8 +2.2
baz=132
**TPNV Topopah Spring** 71.53 322 pP pP 05 44 12.5 +2.2
baz=134
**FURC Furnace Creek,** 71.56 321 pP pP 05 44 12.5 +2.2
baz=133
**MPMC Manual Prospec** 71.66 321 pP pP 05 44 12.9 +1.7
baz=132
**DUG Dugway, Tooele** 71.93 326 pP pP 05 44 14.6 +1.6
baz=137
**SBC Santa Barbara** 71.97 318 pP pP 05 44 14.9 +2.1
baz=130
**ISA Isabella, Lake** 71.99 320 pP pP 05 44 15.2 +2.2
baz=132
**R11B Troy Canyon, C** 72.12 323 pP pP 05 44 16.3 +2.4
baz=134
**PDAR Pinedale Array** 72.24 330 P **P** 05 43 49.2 +0.9
comp=Z,0.8nm,0.8s,baz=134,slow=7.2,SNR=5.9
PDAR pP **pP** 05 44 15.3 +0.5
comp=Z,0.6nm,0.6s,baz=134,slow=6.4,SNR=3.5
comp=Z,0.8nm,0.8s
**CWC Cottonwood Cre** 72.27 320 pP pP 05 44 17.1 +2.3
baz=132
**PKM Mcpherson Peak** 72.32 318 pP pP 05 44 17.2 +2.1
baz=130
**ELIB Princess Elisa** 72.39 161 *d*P **P** 05 43 50.1 +1.4
comp=Z,8.5nm,0.8s
**MDND Maddock** 72.39 339 pP pP 05 44 16.2 +0.8
baz=150
**VES Vestal, Richgr** 72.48 319 pP pP 05 44 17.5 +1.6
baz=131
**ULM Lac du Bonnet** 73.36 343 P **P** 05 43 54.6 +0.2
comp=Z,3.0nm,0.8s,baz=152,slow=12,SNR=3.0
ULM pP **pP** 05 44 20.5 -0.6
comp=Z,4.7nm,0.5s,baz=174,slow=4.3,SNR=4.6
comp=Z,3.0nm,0.8s
**NVAR Mina Array Bea** 73.73 322 P **P** 05 43 59.1 +1.9
comp=Z,1.5nm,0.8s,baz=149,slow=6.9,SNR=6.5
NVAR pP **pP** 05 44 25.9 +2.4
comp=Z,1.4nm,0.7s,baz=138,slow=6.2,SNR=4.2
comp=Z,1.5nm,0.8s
**LAO LASA Array** 73.88 335 pP pP 05 44 25.8 +1.6
baz=144
**RLMT Red Lodge** 73.93 332 pP pP 05 44 26.1 +1.3
baz=141
**SCHQ Schefferville** 74.12 2 pP pP 05 44 25.7 -0.2
comp=Z,7.8nm,0.9s,baz=216,slow=7.4,SNR=4.4
**DGMT Dagmar** 74.55 337 pP pP 05 44 29.7 +1.4
baz=146
**HLID Hailey** 75.20 328 pP pP 05 44 33.7 +1.4
baz=136
**BOZ Bozeman (W)** 75.36 331 pP pP 05 44 35.0 +1.9
baz=139
**EGMT Eagleton** 76.40 333 pP pP 05 44 39.8 +1.0
baz=141
**TORD Torodi Ar. Bea** 77.09 71 P **P** 05 44 15.5 -1.1
comp=Z,5.1nm,0.6s,baz=240,slow=3.7,SNR=50
TORD pP **pP** 05 44 42.8 -1.2
comp=Z,6.5nm,0.8s,baz=255,slow=3.5,SNR=6.8
comp=Z,5.1nm,0.6s
**MSO Missoula** 77.35 330 pP pP 05 44 45.6 +1.2
baz=137
**VNDA Vanda** 78.68 190 P **P** 05 44 26.8 +2.5
comp=Z,3.4nm,0.7s,baz=135,slow=5.6,SNR=28
comp=Z,3.4nm,0.7s
**NEW Newport** 79.88 330 pP pP 05 44 59.8 +1.7
baz=135
**BOSA Boshof** 84.70 118 P **P** 05 44 57.2 +0.1
comp=Z,1.7nm,0.3s,baz=246,slow=3.5,SNR=7.9
comp=Z,1.7nm,0.3s
**ESDC Sonseca Array** 84.74 45 P **P** 05 44 57.4 +0.6
comp=Z,1.0nm,0.8s,baz=261,slow=4.5,SNR=3.4
ESDC pP **pP** 05 45 25.0 +0.5
comp=Z,3.7nm,0.9s,baz=252,slow=5.2,SNR=7.1
comp=Z,1.0nm,0.8s
**MAW Mawson** 86.29 163 P **P** 05 45 04.7 +0.7
comp=Z,5.1nm,0.7s,baz=245,slow=6.9,SNR=6.0
comp=Z,5.1nm,0.7s
**YKA Yellowknife Ar** 89.24 341 P **P** 05 45 18.9 +0.9
comp=Z,9.3nm,0.9s,baz=159,slow=9.8,SNR=24
YKA pP **pP** 05 45 45.4 0.0
comp=Z,10nm,0.9s,baz=228,slow=4.1,SNR=12
comp=Z,9.3nm,0.9s
**TOAD Toad River Com** 90.55 335 pP pP 05 45 52.5 +0.8
baz=129
**L29M L29M** 98.13 335 pP pP 05 46 26.7 +0.2
baz=117
**I30M Mount Dempster** 98.45 337 pP pP 05 46 28.6 +0.6
baz=119
**KBZ Khabaz** 119.20 50 PKP **PKiKP** 05 51 12.5 +1.4
comp=Z,0.9nm,0.5s,baz=45,slow=1.4,SNR=2.4
**CTA Charters Tower** 127.38 223 PKP **PKiKP** 05 51 28.4 +0.2
comp=Z,0.8nm,1.1s,baz=109,slow=1.5,SNR=3.1
**SEY Seymchan** 128.17 337 PKP **PKiKP** 05 51 29.2 +0.9
comp=Z,1.7nm,0.5s,baz=117,slow=4.7,SNR=6.2
SEY pPKP **pPKPdf** 05 51 57.1 +0.8
comp=Z,1.1nm,0.2s,baz=71,slow=8.0,SNR=2.2
**ASAR Alice Springs** 131.42 209 PKP **PKPdf** 05 51 35.7 +0.4
comp=Z,2.2nm,0.5s,baz=132,slow=1.8,SNR=18
ASAR PP **PP** 05 53 51.3 -2.3
comp=Z,1.2nm,1.0s,baz=182,slow=8.8,SNR=4.8
ASAR SKPbc **SKPbc** 05 54 51.1 -0.3
comp=Z,1.6nm,1.0s,baz=136,slow=4.4,SNR=5.5
**WRA Warramunga Arr** 134.40 212 PKhKP PKPpre 05 51 36.4
comp=Z,3.2nm,0.8s,baz=155,slow=1.2,SNR=7.0
WRA PKP **PKiKP** 05 51 41.7 -0.6
comp=Z,4.3nm,0.7s,baz=158,slow=1.7,SNR=26
**BVAR Borovoye Array** 134.41 33 PKP **PKiKP** 05 51 40.8 -0.5
comp=Z,0.7nm,0.5s,baz=336,slow=3.2,SNR=3.7
KURBB **Kurchatov Arra** 139.93 32 PKP **PKPdf** 05 51 50.6 +0.5
comp=Z,0.7nm,0.3s,baz=319,slow=1.9,SNR=4.6
**ZALV Zalesovo Beam** 140.36 24 PKhKP PKPpre 05 51 47.5
comp=Z,3.2nm,0.6s,baz=313,slow=1.7,SNR=9.9
ZALV pPKP pPKPdf 05 52 19.9 +0.3
comp=Z,5.1nm,0.7s,baz=282,slow=2.3,SNR=7.6
ZALV SKP 05 55 18.0
comp=Z,1.4nm,0.7s,baz=318,slow=2.0,SNR=4.8
**KSH Kashi** 144.16 49 PKP PKPbc 05 51 56.8 +0.2
**MKAR Makanchi Array** 144.28 34 PKP PKPbc 05 51 56.8 +0.2
comp=Z,1.1nm,0.5s,baz=335,slow=3.8,SNR=13
MKAR pPKP pPKPdf 05 52 27.9 +1.0
comp=Z,1.9nm,0.8s,baz=289,slow=3.7,SNR=4.4
MKAR SKPbc **SKiKP** 05 55 29.1 +0.4
comp=Z,1.1nm,0.9s,baz=309,slow=0.9,SNR=4.0
**KLR Kul'dur** 145.91 335 PKPbc **PKPbc** 05 52 01.8 +0.3
comp=Z,4.7nm,0.5s,baz=82,slow=4.5,SNR=18
KLR pPKPbc pPKPab 05 52 29.8 -0.1
comp=Z,3.5nm,0.6s,baz=86,slow=7.1,SNR=4.7
**HEH HeiHe** 146.60 340 *e*PKPbc **PKPbc** 05 52 02.8 -0.7
**WMQ Urumqi** 149.10 33 *e*PKPbc **PKPdf** 05 52 05.1 -1.2
WMQ LR LR
comp=Z,370nm,17.7s
WMQ LR LR
comp=Z,150nm,17.7s
**USRK Ussuriysk Ar.** 149.66 329 PKPbc **PKiKP** 05 52 13.1 +0.3
comp=Z,11nm,0.8s,baz=16,slow=1.4,SNR=22
USRK pPKPbc **pPKPbc** 05 52 40.1 -0.1
comp=Z,8.2nm,0.9s,baz=30,slow=1.2,SNR=5.0
**MDJ Mudanjiang** 150.47 332 PKPbc **PKPdf** 05 52 09.8 +1.5
**SONM Songino Array** 151.59 6 PKP **PKPdf** 05 52 11.2 +1.1
comp=Z,1.3nm,0.7s,baz=320,slow=1.2,SNR=5.5
SONM PKPbc **PKiKP** 05 52 17.5 +0.7
comp=Z,14nm,0.7s,baz=321,slow=1.6,SNR=39
SONM pPKPbc **pPKPbc** 05 52 46.1 +1.1
comp=Z,9.4nm,0.8s,baz=338,slow=1.6,SNR=8.0
**KAPI Kappang** 153.99 201 PKPab **PKPab** 05 52 37.0 +1.0
comp=Z,33nm,0.9s,baz=204,slow=3.3,SNR=10
**KSRS Korea Array** 156.67 323 PKPab **PKPab** 05 52 48.0 +1.1
comp=Z,0.7nm,0.3s,baz=46,slow=3.5,SNR=5.7
**HHC Hu-ho-hao-te** 158.77 358 *e*PKP **PKPdf** 05 52 18.3 -1.7
HHC AMB AMB
comp=Z,9.0nm,0.6s
HHC AMB AMB
comp=Z,160nm,3.7s
**XAN Xi'an** 165.50 6 PKP **PKPdf** 05 52 24.3 -2.7
**NJ2 Nanjing** 165.55 331 *e*PKP **PKPdf** 05 52 26.6 -0.4
**CMAR Chiang Mai Arr** 168.85 94 PKPab **PKPab** 05 53 41.0 -0.1
comp=Z,1.5nm,0.3s,baz=256,slow=6.0,SNR=4.1
**PZH PanZhiHua** 169.27 48 PKP **PKPdf** 05 52 28.6 -1.4

*IDC **14** 05:38:15.3±0.9,58.°34N×31.°96W,h0km,mb3.7/14, mbtmp3.8/16,ML3.7/2,MS3.8/3,Error ellipse: s-maj=23.6km s-min=17.0km az=1.0*
*NEIC **14** 05:38:15.1±2.0,58.°14N±0.°08×32.°3W±0.°1,h10km±2km, mb4.4/7,Error ellipse: s-maj=13.2km s-min=12.0km az=194.0*

**ISC 14 05:38:16.1±0.6,58°40N±0.°08×32°28W±0.°06,h10km,n43, σ1s92,mb3.9/17,MS4.4/16,Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **NRS** | **Narsarsuaq** | **7.18** | **298** | Pn | **Pn** | **05 40 01.6** | **+0.6** |
| NRS | | | | Sn | **Sn** | **05 41 22.2** | **-0.4** |
| **ANGG** | **Ammassalik, Gr** | **7.67** | **343** | Pn | **Pn** | **05 40 08.3** | **+0.7** |
| ANGG | | | | Sn | **Sn** | **05 41 28.0** | **-6.4** |
| **BORG** | **Borgarnes** | **8.23** | **35** | Pn | **Pn** | **05 40 17.4** | **+2.0** |
| BORG | | | | Sn | **Sn** | **05 41 48.5** | **+0.1** |
| **BORG** | **Borgarnes** | **8.23** | **35** | Pn | **Pn** | **05 40 17.1** | **+1.7** |
| | 0.7nm,0.3s,baz=176,slow=3.1,SNR=7.2 | | | | | | |
| BORG | | | | Sn | **Sn** | **05 41 48.3** | **-0.1** |
| | 0.4nm,0.3s,baz=210,slow=14,SNR=1.7 | | | | | | |
| BORG | | | | LR | LR | 05 42 33.1 | |
| | comp=Z,460nm,20.9s,baz=312,slow=32 13nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.15** | **88** | Pn | **Pn** | **05 42 01.6** | **-1.3** |
| | baz=292,slow=11 2.5nm,0.8s | | | | | | |
| **SCHQ** | **Schefferville** | **19.21** | **274** | P | **P** | **05 42 37.8** | **-2.1** |
| SCHQ | | | | IAmb | IAmb | 05 42 45.1 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **21.79** | **64** | P | **P** | **05 43 07.9** | **0.0** |
| | comp=Z,0.3nm,0.4s,baz=282,slow=8.4,SNR=4.8 | | | | | | |
| NOA | | | | LR | LR | 05 49 51.9 | |
| | comp=Z,209nm,21.9s,baz=80,slow=32 comp=Z,0.3nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **23.20** | **66** | P | **P** | **05 43 23.0** | **+0.3** |
| | comp=Z,3.2nm,0.9s,baz=218,slow=14,SNR=4.1 comp=Z,3.2nm,0.9s | | | | | | |
| **HAL** | **Halifax** | **23.58** | **248** | P | **P** | **05 43 23.2** | **-3.5** |
| **PQI** | **Presque Isle** | **24.38** | **257** | P | **P** | **05 43 32.2** | **-2.0** |
| PQI | | | | IAmb | IAmb | 05 43 36.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **ESDC** | **Sonseca Array** | **26.06** | **124** | P | **P** | **05 43 49.4** | **-0.1** |
| | comp=Z,1.6nm,0.9s,baz=322,slow=9.0,SNR=9.3 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.55** | **42** | P | **P** | **05 43 53.6** | **-0.1** |
| | comp=Z,1.4nm,0.7s,baz=276,slow=8.9,SNR=2.3 comp=Z,1.4nm,0.7s | | | | | | |
| **HSKC** | **Hora Svate Kat** | **27.19** | **87** | AMS | AMS | 05 53 10.0 | |
| | comp=Z,900nm,21.2s | | | | | | |
| **PRA** | **Prague** | **28.03** | **87** | AMS | AMS | 05 55 30.0 | |
| | comp=Z,1μm,17.0s | | | | | | |
| **KHC** | **Kasperske Hory** | **28.13** | **89** | AMS | AMS | 05 53 00.0 | |
| | comp=Z,1μm,20.2s | | | | | | |
| **PRU** | **Pruhonice** | **28.13** | **87** | AMS | AMS | 05 52 30.0 | |
| | comp=Z,1μm,19.6s | | | | | | |
| **ZVC** | **Zvikov** | **28.27** | **88** | AMS | AMS | 05 51 50.0 | |
| | comp=Z,1μm,20.5s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **28.30** | **87** | AMS | AMS | 05 52 10.0 | |
| | comp=Z,1μm,21.0s | | | | | | |
| **FINES** | **FINESS Array B** | **28.57** | **59** | P | **P** | **05 44 12.3** | **+0.6** |
| **FINES** | **FINESS Array B** | **28.57** | **59** | P | **P** | **05 44 11.7** | **0.0** |
| | comp=Z,2.1nm,0.7s,baz=282,slow=3.7,SNR=5.7 comp=Z,2.1nm,0.7s | | | | | | |
| **CHVC** | **Chvalec** | **28.58** | **85** | AMS | AMS | 05 50 10.0 | |
| | comp=Z,1μm,18.5s | | | | | | |
| **UPC** | **Upice** | **28.60** | **85** | AMS | AMS | 05 50 10.0 | |
| | comp=Z,1μm,20.8s | | | | | | |
| **OSTC** | **Ostas** | **28.68** | **84** | AMS | AMS | 05 50 10.0 | |
| | comp=Z,1μm,19.7s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **28.70** | **89** | AMS | AMS | 05 49 50.0 | |
| | comp=Z,800nm,17.1s | | | | | | |
| **DPC** | **Dobruska-Polom** | **28.86** | **85** | AMS | AMS | 05 44 50.0 | |
| | comp=Z,1μm,22.7s | | | | | | |
| **TREC** | **Trest** | **29.04** | **87** | AMS | AMS | 05 55 10.0 | |
| | comp=Z,900nm,18.4s | | | | | | |
| **KRLC** | **Kraliky** | **29.26** | **85** | AMS | AMS | 05 53 00.0 | |
| | comp=Z,700nm,18.3s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **30.11** | **84** | AMS | AMS | 05 52 40.0 | |
| | comp=Z,700nm,19.3s | | | | | | |
| **BURAR** | **Bucovina Array** | **35.17** | **82** | P | **P** | **05 45 09.6** | **-0.3** |
| BURAR | | | | IAmb | IAmb | 05 45 14.9 | |
| | comp=Z,5.4nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **35.33** | **75** | P | **P** | **05 45 09.3** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=305,slow=9.3,SNR=2.0 comp=Z,0.2nm,0.3s | | | | | | |
| **ULM** | **Lac du Bonnet** | **36.66** | **286** | LR | LR | 05 59 00.7 | |
| | comp=Z,350nm,18.1s,baz=5.0,slow=34 | | | | | | |
| **FNA** | **Florina** | **37.80** | **94** | P | **P** | **05 45 31.3** | **-1.1** |
| FNA | | | | IAmb | IAmb | 05 45 34.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **45.02** | **85** | P | **P** | **05 46 30.6** | **-1.1** |
| | comp=Z,0.8nm,0.8s,baz=313,slow=9.1,SNR=3.0 comp=Z,0.8nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **47.62** | **328** | P | **P** | **05 46 53.6** | **+2.0** |
| **ILAR** | **Eielson Array** | **47.62** | **328** | P | **P** | **05 46 54.4** | **+2.8** |
| | comp=Z,1.5nm,0.9s,baz=31,slow=6.5,SNR=14 comp=Z,1.5nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **48.66** | **287** | P | **P** | **05 47 01.4** | **+1.2** |
| | comp=Z,0.7nm,0.8s,baz=60,slow=7.0,SNR=5.1 comp=Z,0.7nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **51.04** | **57** | P | **P** | **05 47 18.4** | **+0.4** |
| **TORD** | **Torodi Ar. Bea** | **51.86** | **136** | P | **P** | **05 47 23.9** | **-0.6** |
| | comp=Z,0.9nm,0.7s,baz=353,slow=7.8,SNR=3.2 comp=Z,0.9nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **52.58** | **48** | P | **P** | **05 47 30.4** | **+1.0** |
| | comp=Z,1.5nm,0.8s,baz=334,slow=9.6,SNR=6.6 comp=Z,1.5nm,0.8s | | | | | | |
| **KVN** | **Kaiserville** | **55.71** | **290** | P | **P** | **05 47 55.1** | **+2.5** |
| **TXAR** | **Lajitas Array** | **55.87** | **271** | P | **P** | **05 47 56.0** | **+2.2** |
| | comp=Z,0.5nm,1.0s,baz=41,slow=9.7,SNR=2.9 comp=Z,0.5nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.58** | **45** | P | **P** | **05 48 04.3** | **-1.2** |
| | comp=Z,1.3nm,0.8s,baz=321,slow=7.6,SNR=7.8 comp=Z,1.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.15** | **45** | P | **P** | **05 48 35.9** | **-1.2** |
| | comp=Z,1.1nm,0.9s,baz=342,slow=7.6,SNR=7.4 comp=Z,1.1nm,0.9s | | | | | | |

*SDD **14** 05:41:04.7±1.8,18.°82N×69.°42W,h102km±11km,MD3.7, ML3.4,MW3.5*
*OSPL **14** 05:41:06.2±3.6,18.°76N×69.°45W,h95km±19km,ML3.0*

**ISC 14 05:41:02.6±1.3,18.°80N±0.°05×69.°48W±0.°03,h106km±9km, n25,σ1s97/47,13C-6D,Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **MIDR** | **Miches** | **0.45** | **66** | ⇑*e*Pg | **Pn** | **05 41 18.6** | **-0.1** |
| MIDR | | | | ⇑*e*Sg | **Sn** | **05 41 29.5** | **-1.2** |
| MIDR | | | | IAML | | 05 41 31.4 | |
| | comp=N,780nm,0.2s | | | | | | |
| MIDR | | | | IAML | | 05 41 31.6 | |
| | comp=E,696nm,0.2s | | | | | | |
| **SDD** | **Santo Domingo** | **0.53** | **230** | *i* P | **Pn** | **05 41 19.0** | **-0.3** |
| SDD | | | | *e*S | **Sn** | **05 41 30.2** | **-1.6** |
| **LONA1** | **Toro Cenizo, N** | **0.68** | **328** | *i* P | **Pn** | **05 41 21.1** | **+0.7** |
| LONA1 | | | | *e*S | **Sn** | **05 41 35.0** | **+1.2** |
| LONA1 | | | | IAML | | 05 41 38.6 | |
| | comp=Z,2μm,0.8s | | | | | | |
| **HIDR** | **Higuey Centro** | **0.76** | **106** | ⇑*e*Pg | **Pn** | **05 41 21.1** | **0.0** |
| HIDR | | | | ⇑*e*Sg | **Sn** | **05 41 34.0** | **-1.0** |
| HIDR | | | | IAML | | 05 41 36.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| HIDR | | | | IAML | | 05 41 36.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| HIDR | | | | IAML | | 05 41 36.5 | |
| | comp=E,1μm,0.2s | | | | | | |
| **SADR** | **Isla Saona** | **0.90** | **132** | ⇑*e*Pg | **Pn** | **05 41 23.0** | **+0.5** |
| SADR | | | | ⇓*e*Sg | **Sn** | **05 41 36.9** | **-0.5** |
| SADR | | | | IAML | | 05 41 38.2 | |
| | comp=N,242nm,0.8s | | | | | | |
| SADR | | | | IAML | | 05 41 42.0 | |
| | comp=E,254nm,0.2s | | | | | | |
| **BANI** | **BANI** | **0.92** | **244** | ⇑*e*Pg | **Pn** | **05 41 24.1** | **+1.3** |
| BANI | | | | ⇓*e*Sg | **Sn** | **05 41 38.8** | **+0.8** |
| BANI | | | | IAML | | 05 41 41.5 | |
| | comp=N,2μm,0.2s | | | | | | |
| BANI | | | | IAML | | 05 41 41.5 | |
| | comp=N,2μm,0.2s | | | | | | |
| BANI | | | | IAML | | 05 41 43.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **CADR** | **Cabrera** | **0.96** | **333** | ⇓*e*Pg | **Pn** | **05 41 23.9** | **+0.7** |
| CADR | | | | ⇑*e*Sg | **Sn** | **05 41 37.7** | **-0.9** |
| CADR | | | | IAML | | 05 41 40.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| CADR | | | | IAML | | 05 41 40.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| CADR | | | | IAML | | 05 41 40.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| **ABDR** | **Alto Bandera** | **1.08** | **271** | ⇑*e*Pg | **Pn** | **05 41 25.5** | **+0.8** |
| ABDR | | | | ⇑*e*Sg | **Sn** | **05 41 41.8** | **+0.3** |
| ABDR | | | | IAML | | 05 41 43.2 | |
| | comp=N,821nm,0.2s | | | | | | |
| ABDR | | | | IAML | | 05 41 43.2 | |
| | comp=N,821nm,0.2s | | | | | | |
| ABDR | | | | IAML | | 05 41 44.0 | |
| | comp=E,1μm,0.2s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.08** | **105** | ⇑*e*Pg | **Pn** | **05 41 24.1** | **-0.2** |
| PCDR | | | | ⇓*e*Sg | **Sn** | **05 41 40.3** | **-0.5** |
| PCDR | | | | IAML | | 05 41 44.1 | |
| | comp=N,283nm,0.8s | | | | | | |
| PCDR | | | | IAML | | 05 41 44.1 | |
| | comp=N,283nm,0.8s | | | | | | |
| PCDR | | | | IAML | | 05 41 49.8 | |
| | comp=E,142nm,1.1s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.08** | **105** | *i* P | **Pn** | **05 41 25.1** | **+0.7** |
| PCDR | | | | *e*S | **Sn** | **05 41 41.1** | **+0.3** |
| PCDR | | | | IAML | | 05 41 48.9 | |
| | comp=Z,220nm,1.3s | | | | | | |
| **SC01** | **Santiago de Io** | **1.33** | **298** | *i* P | **Pn** | **05 41 29.3** | **+2.1** |
| SC01 | | | | *e*S | **Sn** | **05 41 49.6** | **+3.7** |
| SC01 | | | | IAML | | 05 41 58.0 | |
| | comp=Z,159nm,0.2s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **1.69** | **245** | ⇑*e*Pg | **Pn** | **05 41 32.5** | **+1.0** |
| LOBA2 | | | | ⇑*e*Sg | **Sn** | **05 41 53.8** | **+0.3** |
| LOBA2 | | | | IAML | | 05 41 54.2 | |
| | comp=E,60nm,0.2s | | | | | | |
| LOBA2 | | | | IAML | | 05 41 54.3 | |
| | comp=N,64nm,0.7s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.72** | **276** | *e*P | **Pn** | **05 41 34.4** | **+2.5** |
| SDDR | | | | *e*S | **Sn** | **05 41 56.5** | **+2.2** |
| SDDR | | | | IAML | | 05 42 00.7 | |
| | comp=N,118nm,0.2s | | | | | | |
| SDDR | | | | IAML | | 05 42 00.9 | |
| | comp=N,152nm,0.5s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.72** | **276** | *i* P | **Pn** | **05 41 34.6** | **+2.7** |
| SDDR | | | | *e*S | **Sn** | **05 41 57.7** | **+3.4** |
| SDDR | | | | IAML | | 05 42 02.5 | |
| | comp=Z,73nm,0.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.27** | **98** | *i* P | **Pn** | **05 41 40.5** | **+1.6** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AGPR | | | | | *e*S | | **Sn** | **05 42 07.2** | **+0.4** |
| AGPR | | | | | IAML | | | 05 42 15.4 | |
| | comp=Z,85nm,0.2s | | | | | | | | |
| **MCDR** | **Montecristi** | **2.32** | **298** | ⇓ | *e*Pg | | **Pn** | **05 41 40.1** | **+0.6** |
| MCDR | | | | ⇑ | *e*Sg | | **Sn** | **05 42 09.3** | **+1.4** |
| MCDR | | | | | IAML | | | 05 42 21.4 | |
| | comp=N,203nm,0.2s | | | | | | | | |
| MCDR | | | | | IAML | | | 05 42 21.5 | |
| | comp=N,202nm,0.2s | | | | | | | | |
| MCDR | | | | | IAML | | | 05 42 24.0 | |
| | comp=E,108nm,0.7s | | | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.39** | **109** | *i* | P | | **Pn** | **05 41 43.1** | **+2.7** |
| CRPR | | | | | IAML | | | 05 42 25.4 | |
| | comp=Z,56nm,1.4s | | | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.63** | **99** | | *e*P | | **Pn** | **05 41 45.5** | **+1.9** |
| AOPR | | | | | *e*S | | **Sn** | **05 42 16.9** | **+1.8** |
| **GRTK** | **Grand Turk** | **3.11** | **330** | *i* | P | | **Pn** | **05 41 50.3** | **+0.3** |
| GRTK | | | | | *e*S | | **Sn** | **05 42 25.4** | **-1.0** |
| GRTK | | | | | IAML | | | 05 42 27.4 | |
| | comp=Z,81nm,0.9s | | | | | | | | |
| **MASC** | **Masc** | **4.68** | **288** | | *e*P | | **Pn** | **05 42 11.7** | **+0.6** |
| MASC | | | | | *e*S | | **Sn** | **05 43 02.2** | **-2.1** |
| MASC | | | | | IAML | | | 05 43 04.1 | |
| | comp=E,12nm,0.1s | | | | | | | | |
| MASC | | | | | IAML | | | 05 43 04.6 | |
| | comp=N,9.3nm,0.1s | | | | | | | | |
| **QMBU** | **Quimbuelo** | **5.21** | **286** | | *e*P | | **Pn** | **05 42 17.4** | **-0.9** |
| QMBU | | | | | *e*S | | **Sn** | **05 43 12.1** | **-5.3** |
| QMBU | | | | | *e*Sg | | | 05 43 14.4 | |
| QMBU | | | | | IAML | | | 05 43 15.7 | |
| | comp=E,7.4nm,0.3s | | | | | | | | |
| QMBU | | | | | IAML | | | 05 43 16.1 | |
| | comp=N,8.9nm,0.2s | | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **5.43** | **283** | | *e*P | | **Pn** | **05 42 21.3** | **+0.1** |
| GTBY | | | | | *e*S | | **Sn** | **05 43 19.3** | **-3.2** |
| GTBY | | | | | IAML | | | 05 43 24.4 | |
| | comp=N,1.1nm,0.2s | | | | | | | | |
| GTBY | | | | | IAML | | | 05 43 24.4 | |
| | comp=N,5.3nm,0.2s | | | | | | | | |
| **RCC** | **Rio Carpintero** | **5.98** | **282** | ⇓ | *e*P | | **Pn** | **05 42 27.7** | **-1.0** |
| RCC | | | | | *e*S | | **Sn** | **05 43 31.5** | **-4.4** |
| **ANBD** | **Bethesda, Anti** | **7.55** | **102** | | *e*P | | **Pn** | **05 42 50.5** | **+0.5** |
| **ANBD** | **Bethesda, Anti** | **7.55** | **102** | | *e*S | | **Sn** | **05 44 09.5** | **-4.6** |

*IDC* ***14*** *05:50:30.9±0.9,58˚.19N×31˚.96W,h0km,mb3.6/8, mbtmp3.6/9,ML3.4/1,Error ellipse: s-maj=26.4km s-min=20.6km az=12.0*

**ISC 14 05:50:33.5±0.9,58˚.2N±0˚.1×32˚.0W±0˚.1,h14km,n10, σ1§36/10,mb3.5/8,Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BORG** | **Borgarnes** | **8.31** | **33** | Pn | **Pn** | **05 52 34.2** | **+0.9** |
| | 0.4nm,0.3s,baz=86,slow=12,SNR=1.3 10nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **21.74** | **64** | P | **P** | **05 55 24.6** | **+0.5** |
| | 0.3nm,0.5s,baz=282,slow=9.3,SNR=5.0 0.3nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **25.82** | **124** | P | **P** | **05 56 04.9** | **+0.8** |
| | 0.9nm,0.8s,baz=318,slow=9.0,SNR=3.3 0.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **47.86** | **328** | P | **P** | **05 59 10.9** | **+0.7** |
| | 1.4nm,1.0s,baz=35,slow=6.6,SNR=9.9 1.4nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **48.86** | **287** | P | **P** | **05 59 17.2** | **-1.4** |
| | 0.4nm,0.8s,baz=75,slow=6.3,SNR=4.4 0.4nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.62** | **136** | P | **P** | **05 59 38.9** | **-0.5** |
| | 0.5nm,0.7s,baz=358,slow=7.6,SNR=5.2 0.5nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **52.59** | **48** | P | **P** | **05 59 44.7** | **-1.6** |
| | 0.6nm,0.4s,baz=305,slow=5.1,SNR=4.6 0.6nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **56.02** | **272** | P | **P** | **06 00 12.6** | **+1.0** |
| | 0.3nm,0.8s,baz=39,slow=7.2,SNR=3.3 0.3nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.61** | **45** | P | **P** | **06 00 20.5** | **-1.9** |
| | 0.8nm,0.3s,baz=327,slow=6.7,SNR=3.7 0.8nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **148.10** | **180** | PKPbc | **PKPdf** | **06 10 15.1** | **+1.2** |
| | 1.4nm,1.0s,baz=263,slow=2.4,SNR=5.6 | | | | | | |

*IDC* ***14*** *05:55:33.7±0.7,58˚.21N×32˚.17W,h0km,mb4.1/18, mbtmp4.1/20,ML3.8/2,Error ellipse: s-maj=20.3km s-min=13.0km az=12.0*

*GCMT* ***14*** *05:55:36.1±0.3,58˚.46N±0˚.05×31˚.71W±0˚.04,h18km±1km, MW5.0/79,Moment Tensor Solution. s18,c22; s79,c101; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=2.88±.25; Mθθ=0.27±.20; Mϕϕ=2.61±.17; Mrθ=1.34±.50; Mrϕ=0.82±.11; Mθϕ=-1.10±.34; Best double couple: M₀3.30200×10¹⁶ NP1:ϕs218.00000°,δ43.00000°,λ-55.00000°. NP2: ϕs=T 2.9540, Plg7.0000°, Azm103.0000°; N 0.6980, Plg23.0000°, Azm10.0000°; P -3.6510, Plg66.0000°, Azm210.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***14*** *05:55:38.1±1.9,58˚.34N±0˚.09×31˚.9W±0˚.1,h10km±1km, mb4.6/88 Error ellipse: s-maj=15.4km s-min=10.4km az=207.0*

**ISC 14 05:55:37.8±0.4,58˚.31N±0˚.07×31˚.98W±0˚.05,h13km,n168, σ1§45/151,mb4.5/97,1D,Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NRS** | **Narsarsuaq** | **7.37** | **298** | Pn | **Pn** | **05 57 24.8** | **-0.1** |
| **ANGG** | **Ammassalik, Gr** | **7.79** | **342** | Pn | **Pn** | **05 57 29.6** | **-1.2** |
| **BORG** | **Borgarnes** | **8.21** | **34** | Pn | **Pn** | **05 57 36.6** | **+0.2** |
| **BORG** | **Borgarnes** | **8.21** | **34** | Pn | **Pn** | **05 57 36.8** | **+0.3** |
| | 0.4nm,0.3s,baz=183,slow=12,SNR=1.8 | | | | | | |
| BORG | | | | Sn | **Sn** | **05 59 08.8** | **-0.1** |
| | 0.4nm,0.3s,baz=315,slow=5.7,SNR=1.6 9.1nm,0.8s | | | | | | |
| **IDGL** | **Inch Island, C** | **13.80** | **93** | Pn | **P** | **05 59 01.7** | **+0.3** |
| **SUMG** | **Summit** | **14.56** | **352** | | **Pn** | **05 59 05.5** | **+1.9** |
| **ILTH** | **Belurgan, Co L** | **14.87** | **96** | Pn | **P** | **05 59 13.5** | **+0.3** |
| **DSB** | **Dublin** | **15.22** | **98** | Pn | **P** | **05 59 18.3** | **+1.2** |
| **DSB** | **Dublin** | **15.22** | **98** | Pn | **Pn** | **05 59 13.3** | **+1.1** |
| DSB | | | | IAmb | IAmb | 05 59 21.1 | |
| | comp=Z,27nm,1.0s | | | | | | |
| **IWEX** | **Carrickbyrne,** | **15.46** | **102** | Pn | **P** | **05 59 21.2** | **+1.4** |
| **EKB** | **Eskdalemuir** | **15.98** | **88** | Pn | **Pn** | **05 59 22.1** | **0.0** |
| EKB | | | | IAmb | IAmb | 05 59 31.2 | |
| | comp=Z,56nm,1.3s | | | | | | |
| **ESK** | **Eskdalemuir** | **15.98** | **88** | Pn | **Pn** | **05 59 22.5** | **+0.5** |
| ESK | | | | IAmb | IAmb | 05 59 31.2 | |
| | comp=Z,53nm,1.4s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **15.99** | **88** | Pn | **Pn** | **05 59 22.2** | **-0.1** |
| | baz=293,slow=12 comp=Z,12nm,1.0s | | | | | | |
| **SCHQ** | **Schefferville** | **19.38** | **275** | P | **Pn** | **06 00 04.5** | **+0.3** |
| **NC204** | **NORSAR Array S** | **21.42** | **64** | P | **P** | **06 00 22.4** | **-2.7** |
| NC204 | | | | IAmb | IAmb | 06 00 31.8 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **NBO00** | **NORSAR Array S** | **21.47** | **65** | P | **P** | **06 00 24.8** | **-0.9** |
| NBO00 | | | | IAmb | IAmb | 06 00 32.3 | |
| | comp=Z,36nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **21.68** | **64** | P | **P** | **06 00 27.9** | **0.0** |
| | comp=Z,3.4nm,0.9s,baz=282,slow=9.5,SNR=12 comp=Z,3.4nm,0.9s | | | | | | |
| **NC303** | **NORSAR Array S** | **21.71** | **64** | P | **P** | **06 00 27.7** | **-0.6** |
| NC303 | | | | IAmb | IAmb | 06 00 33.7 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **NB201** | **NORSAR Array S** | **21.71** | **64** | P | **P** | **06 00 28.9** | **+0.6** |
| NB201 | | | | IAmb | IAmb | 06 00 36.2 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **NC405** | **NORSAR Array S** | **21.90** | **64** | P | **P** | **06 00 30.6** | **+0.3** |
| NC405 | | | | IAmb | IAmb | 06 00 35.5 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **NC602** | **NORSAR Array S** | **21.90** | **65** | P | **P** | **06 00 29.9** | **-0.4** |
| NC602 | | | | IAmb | IAmb | 06 00 38.3 | |
| | comp=Z,36nm,1.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **22.14** | **127** | *e*P | **P** | **06 00 36.8** | **+3.7** |
| | comp=Z,54nm,1.5s | | | | | | |
| **CLF** | **Chambon-Foret** | **22.71** | **102** | P | **P** | **06 00 38.4** | **-0.6** |
| **POLO** | **Lamas de Olo** | **22.83** | **127** | *e*P | **P** | **06 00 45.7** | **+5.3** |
| **PBRG** | **Braganca** | **22.92** | **125** | *e*P | **P** | **06 00 44.6** | **+3.2** |
| | comp=Z,29nm,1.5s | | | | | | |
| **BATG** | **Bathurst New B** | **23.12** | **256** | P | **P** | **06 00 43.1** | **-0.1** |
| BATG | | | | IAmb | IAmb | 06 00 58.8 | |
| | comp=Z,23nm,1.4s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MVO** | **Moncorvo** | **23.33** | **126** | | *e*P | | **P** | **06 00 47.5** | **+2.0** |
| | comp=Z,63nm,1.6s | | | | | | | | |
| **PVIS** | **Viseu** | **23.34** | **128** | | *e*P | | **P** | **06 00 47.0** | **+1.4** |
| **PCAS** | **Casmilo, Conde** | **23.65** | **130** | | *e*P | | **P** | **06 00 51.3** | **+2.7** |
| **PMTG** | **Montargil** | **24.60** | **131** | | *e*P | | **P** | **06 01 00.6** | **+3.1** |
| | comp=Z,35nm,1.5s | | | | | | | | |
| **D62A** | **Allapoint, All** | **24.79** | **259** | | P | | **P** | **06 01 00.1** | **+0.9** |
| **PESTR** | **Estremoz** | **25.03** | **130** | | P | | **P** | **06 01 02.1** | **+0.8** |
| PESTR | | | | | IAmb | IAmb | | 06 01 07.0 | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **PESTR** | **Estremoz** | **25.03** | **130** | | *e*P | | **P** | **06 01 01.6** | **+0.2** |
| | comp=Z,23nm,1.4s | | | | | | | | |
| **ECH** | **Echery** | **25.14** | **97** | | P | | **P** | **06 01 01.2** | **-1.1** |
| ECH | | | | | IAmb | IAmb | | 06 01 07.7 | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **25.31** | **133** | | *e*P | | **P** | **06 01 06.2** | **+2.3** |
| **PBEJ** | **Beja** | **25.64** | **132** | | *e*P | | **P** | **06 01 07.3** | **+0.4** |
| | comp=Z,32nm,1.5s | | | | | | | | |
| **MESJ** | **Messejana** | **25.67** | **133** | | *e*P | | **P** | **06 01 10.4** | **+3.3** |
| | comp=Z,31nm,1.5s | | | | | | | | |
| **BFO** | **Black Forest** | **25.69** | **95** | | P | | **P** | **06 01 06.9** | **-0.4** |
| BFO | | | | | IAmb | IAmb | | 06 01 12.7 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **PAB** | **San Pablo** | **25.82** | **125** | | P | | **P** | **06 01 07.8** | **-0.8** |
| PAB | | | | | IAmb | IAmb | | 06 01 15.6 | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **ESBB** | **Sonseca Array** | **25.88** | **124** | | P | | **P** | **06 01 08.9** | **-0.2** |
| **ESDC** | **Sonseca Array** | **25.88** | **124** | | P | | **P** | **06 01 08.2** | **-1.0** |
| | comp=Z,3.8nm,1.0s,baz=326,slow=8.1,SNR=12 comp=Z,3.8nm,1.0s | | | | | | | | |
| **PCVE** | **Castro Verde** | **25.92** | **133** | | *e*P | | **P** | **06 01 12.4** | **+3.0** |
| **SENIN** | **Lac Senin/Sane** | **26.40** | **100** | | P | | **P** | **06 01 13.7** | **-0.3** |
| **CLL** | **Collm** | **26.42** | **86** | | *i* P | | **P** | **06 01 14.3** | **+0.4** |
| | comp=Z,18nm,1.4s | | | | | | | | |
| CLL | | | | | AMS | AMS | | 06 10 00.0 | |
| | comp=Z,800nm,20.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.51** | **42** | | P | | **P** | **06 01 14.7** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **26.51** | **42** | | P | | **P** | **06 01 12.4** | **-2.1** |
| | comp=Z,8.9nm,1.1s,baz=272,slow=7.1,SNR=8.9 comp=Z,8.9nm,1.1s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **27.16** | **86** | | *e*P | | **P** | **06 01 22.0** | **+1.5** |
| BRG | | | | | Amp | | | 06 01 24.2 | |
| | comp=Z,4.5nm,1.0s | | | | | | | | |
| **DAVA** | **Damuels** | **27.16** | **96** | | *i* pP | | **P** | **06 01 23.3** | **+2.6** |
| | comp=Z,7.4nm,1.1s | | | | | | | | |
| **RETA** | **Reutte** | **27.49** | **94** | | *i* P | | **P** | **06 01 24.5** | **+0.9** |
| | comp=Z,4.2nm,1.1s | | | | | | | | |
| **MOTA** | **Moosalm** | **27.76** | **94** | | *i* pP | | **P** | **06 01 28.5** | **+2.4** |
| | comp=Z,6.9nm,1.1s | | | | | | | | |
| **FETA** | **Feichten** | **27.77** | **95** | | *i* pP | | **P** | **06 01 28.4** | **+2.2** |
| | comp=Z,5.3nm,1.2s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **27.89** | **94** | | *i* pP | | **P** | **06 01 29.1** | **+1.8** |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| **RES** | **Resolute Bay** | **28.04** | **330** | | P | | **P** | **06 01 29.3** | **+1.2** |
| **WTTA** | **Wattenberg** | **28.09** | **94** | | *e*P | | **P** | **06 01 29.6** | **+0.5** |
| | comp=Z,6.9nm,1.2s | | | | | | | | |
| **KSP** | **Ksiaz** | **28.41** | **84** | | P | | **P** | **06 01 32.2** | **+0.5** |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **FINES** | **FINESS Array B** | **28.47** | **59** | | P | | **P** | **06 01 32.9** | **+0.8** |
| **FINES** | **FINESS Array B** | **28.47** | **59** | | P | | **P** | **06 01 29.6** | **-2.4** |
| | comp=Z,4.9nm,0.7s,baz=295,slow=14,SNR=3.1 comp=Z,4.9nm,0.7s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **28.54** | **93** | | *i* P | | **P** | **06 01 31.8** | **-1.1** |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **28.70** | **85** | | P | | **P** | **06 01 35.4** | **+1.0** |
| | comp=Z,9.5nm,1.1s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **28.88** | **94** | | *i* pP | | **P** | **06 01 38.0** | **+2.0** |
| | comp=Z,7.4nm,1.3s | | | | | | | | |
| **KBA** | **Kleinreinsper** | **29.11** | **93** | | *i* P | | **P** | **06 01 37.7** | **-0.5** |
| | comp=Z,8.1nm,1.2s | | | | | | | | |
| **VRAC** | **Vranov** | **29.45** | **86** | | *e*P | | **P** | **06 01 41.7** | **+0.7** |
| **MYKA** | **Terra Mystica** | **29.55** | **93** | | *i* pP | | **P** | **06 01 43.8** | **+1.8** |
| | comp=Z,8.3nm,1.0s | | | | | | | | |
| **PRED** | **Cave del Predi** | **29.64** | **93** | | IAmb | IAmb | | 06 01 48.3 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **29.68** | **85** | | *e*P | | **P** | **06 01 42.9** | **-0.1** |
| **CONA** | **Conrad Observa** | **29.91** | **89** | | *i* pP | | **P** | **06 01 47.0** | **+1.9** |
| | comp=Z,1.3nm,0.6s | | | | | | | | |
| **OBKA** | **Obir** | **30.11** | **93** | | *i* P | | **P** | **06 01 47.7** | **+0.8** |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| **ARSA** | **Arzberg** | **30.15** | **91** | | *i* pP | | **P** | **06 01 49.0** | **+1.8** |
| | comp=Z,7.9nm,1.0s | | | | | | | | |
| **SOKA** | **Soboth** | **30.26** | **92** | | *i* P | | **P** | **06 01 49.3** | **+1.0** |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **30.28** | **89** | | *i* P | | **P** | **06 01 46.7** | **-1.6** |
| | comp=Z,4.0nm,1.1s | | | | | | | | |
| **OJC** | **Ojcow** | **30.60** | **82** | | P | | **P** | **06 01 50.6** | **-0.5** |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| OJC | | | | | pP | | **pP** | **06 01 54.5** | **-0.1** |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **NIE** | **Niedzica** | **31.34** | **83** | | P | | **P** | **06 01 57.5** | **-0.1** |
| | comp=Z,2.2nm,1.4s | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **32.46** | **89** | | P | | **P** | **06 02 07.6** | **+0.1** |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **HOLU** | **Holmets** | **32.97** | **83** | | P | | **P** | **06 02 12.0** | **+0.1** |
| **SHIU** | **Shidnytsya** | **33.05** | **81** | | P | | **P** | **06 02 12.8** | **+0.1** |
| **RNPP9** | **Sopachiv** | **33.07** | **76** | | P | | **P** | **06 02 12.8** | **0.0** |
| **MUKU** | **Mukachevo** | **33.17** | **83** | | P | | **P** | **06 02 12.8** | **-0.9** |
| **RNPP5** | **Oblaryi Chortor** | **33.17** | **77** | | P | | **P** | **06 02 13.6** | **-0.1** |
| **BERU** | **Beregovo** | **33.29** | **83** | | P | | **P** | **06 02 14.6** | **-0.1** |
| **MORS** | **Morshin** | **33.39** | **81** | | P | | **P** | **06 02 15.9** | **+0.3** |
| **BRIU** | **Brid** | **33.42** | **83** | | P | | **P** | **06 02 16.3** | **+0.5** |
| **FRGS** | **Fruska Gora** | **33.77** | **90** | | P | | **P** | **06 02 19.1** | **+0.1** |
| | comp=Z,8.6nm,1.0s | | | | | | | | |
| **STNU** | **Starunia** | **33.96** | **81** | | P | | **P** | **06 02 21.5** | **+0.9** |
| **RAKU** | **Rahkiv** | **34.21** | **82** | | P | | **P** | **06 02 22.4** | **-0.4** |
| **MI28** | **Mi28,Pidlybu** | **34.26** | **76** | | P | | **P** | **06 02 24.5** | **+1.3** |
| **KSV** | **Kosov** | **34.50** | **81** | | P | | **P** | **06 02 25.5** | **+0.2** |
| **HORU** | **Horodok** | **34.66** | **79** | | P | | **P** | **06 02 26.5** | **-0.1** |
| **LUBAR** | **Lubar, Ukraine** | **34.91** | **77** | | P | | **P** | **06 02 28.6** | **-0.2** |
| **BUR08** | **Bucovina Ar. S** | **34.99** | **82** | | IAmb | IAmb | | 06 02 39.6 | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **35.02** | **82** | | P | | **P** | **06 02 30.5** | **+0.6** |
| BURAR | | | | | IAmb | IAmb | | 06 02 39.9 | |
| | comp=Z,6.9nm,0.9s | | | | | | | | |
| **AK21** | **Malin Array Si** | **35.06** | **75** | | P | | **P** | **06 02 30.0** | **0.0** |
| **AK20** | **Malin Array Si** | **35.06** | **75** | | P | | **P** | **06 02 30.4** | **+0.4** |
| **AK19** | **Malin Array Si** | **35.07** | **75** | | P | | **P** | **06 02 30.0** | **-0.1** |
| **KMPD** | **K-Podol'skiy** | **35.07** | **80** | | P | | **P** | **06 02 30.1** | **-0.1** |
| KMPD | | | | | P | | **P** | **06 02 29.5** | **-0.7** |
| **AK18** | **Malin Array Si** | **35.10** | **75** | | P | | **P** | **06 02 30.2** | **-0.2** |
| **KIEV** | **Kiev** | **35.19** | **75** | | P | | **P** | **06 02 30.1** | **-1.0** |
| **AKASG** | **Malin Array Be** | **35.19** | **75** | | P | | **P** | **06 02 30.4** | **-0.8** |
| | comp=Z,7.1nm,0.9s,baz=306,slow=8.6,SNR=14 comp=Z,7.1nm,0.9s | | | | | | | | |
| **KEST** | **Kesra** | **35.28** | **112** | | IAmb | IAmb | | 06 02 38.4 | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **KEST** | **Kesra** | **35.28** | **112** | | P | | **P** | **06 02 30.4** | **-1.8** |
| | comp=Z,2.8nm,0.8s,baz=225,slow=7.1,SNR=3.1 comp=Z,2.8nm,0.8s | | | | | | | | |
| **SORM** | **Soroca** | **36.33** | **79** | | P | | **P** | **06 02 41.8** | **+0.9** |
| | comp=Z,9.5nm,0.7s,comp=Z,842nm | | | | | | | | |
| **PLOR3** | **Plostina Array** | **36.91** | **83** | | P | | **P** | **06 02 46.5** | **+0.5** |
| | comp=Z,6.3nm,1.4s | | | | | | | | |
| **PLOR5** | **Plostina Array** | **36.93** | **83** | | P | | **P** | **06 02 46.6** | **+0.5** |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **N49A** | **Columbus Grove** | **36.93** | **265** | | P | | **P** | **06 02 47.8** | **+1.6** |
| **YKA** | **Yellowknife Ar** | **38.40** | **312** | | P | | **P** | **06 02 57.8** | **-0.6** |
| | comp=Z,2.5nm,1.0s,baz=59,slow=8.8,SNR=4.5 comp=Z,2.5nm,1.0s | | | | | | | | |
| **INK** | **Inuvik** | **41.48** | **327** | | P | | **P** | **06 03 26.0** | **+2.2** |
| **INK** | **Inuvik** | **41.48** | **327** | | P | | **P** | **06 03 22.1** | **-1.7** |
| | comp=Z,8.6nm,1.2s,baz=129,slow=3.9,SNR=4.0 comp=Z,8.6nm,1.2s | | | | | | | | |
| **DGMT** | **Dagmar** | **42.16** | **289** | | P | | **P** | **06 03 30.6** | **+0.8** |
| DGMT | | | | | IAmb | IAmb | | 06 03 35.9 | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **F28M** | **Old Crow** | **43.74** | **328** | | IAmb | IAmb | | 06 03 47.4 | |
| | comp=Z,9.7nm,1.0s | | | | | | | | |
| **E27K** | **Coleen River** | **43.82** | **329** | | IAmb | IAmb | | 06 03 49.9 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **H29M** | **Whitestone** | **44.28** | **326** | | IAmb | IAmb | | 06 03 53.9 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **I30M** | **Mount Dempster** | **44.36** | **324** | | IAmb | IAmb | | 06 03 53.0 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **LAO** | **LASA Array** | **44.38** | **289** | | IAmb | IAmb | | 06 03 58.9 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **TAM** | **Tamanrasset** | **44.47** | **127** | | P | | **P** | **06 03 48.5** | **-0.2** |
| TAM | | | | | IAmb | IAmb | | 06 03 55.1 | |
| | comp=Z,8.8nm,1.1s | | | | | | | | |
| **J30M** | **Hart River** | **44.79** | **324** | | IAmb | IAmb | | 06 03 57.2 | |
| | comp=Z,8.3nm,1.2s | | | | | | | | |
| **BR106** | **Keskin Array S** | **44.85** | **85** | | P | | **P** | **06 03 53.1** | **+1.5** |
| | comp=Z,7.3nm,1.1s,comp=Z,60nm | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **44.85** | **325** | | IAmb | IAmb | | 06 03 56.8 | |
| | comp=Z,11nm,1.1s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BR105** | **Keskin Array S** | **44.86** | **85** | | P | | **P** | **06 03 52.3** | **+0.6** |
| | comp=Z,8.0nm,1.1s,comp=Z,72nm | | | | | | | | |
| **BR131** | **Keskin Array S** | **44.87** | **85** | | P | | **P** | **06 03 52.9** | **+1.1** |
| **BRTR** | **Keskin Array B** | **44.87** | **85** | | P | | **P** | **06 03 51.7** | **0.0** |
| **BRTR** | **Keskin Array B** | **44.87** | **85** | | P | | **P** | **06 03 52.1** | **+0.4** |
| | comp=Z,6.7nm,1.1s,baz=308,slow=6.1,SNR=14 comp=Z,6.7nm,1.1s | | | | | | | | |
| **BR104** | **Keskin Array S** | **44.88** | **85** | | P | | **P** | **06 03 52.5** | **+0.7** |
| | comp=Z,10nm,1.1s,comp=Z,82nm | | | | | | | | |
| **I28M** | **Miner Creek** | **45.28** | **326** | | P | | **P** | **06 03 56.0** | **+1.4** |
| I28M | | | | | IAmb | IAmb | | 06 04 02.0 | |
| | comp=Z,8.8nm,1.1s | | | | | | | | |
| **ARU** | **Arti** | **45.29** | **51** | | P | | **P** | **06 03 55.9** | **+1.2** |
| ARU | | | | | IAmb | IAmb | | 06 03 58.4 | |
| | comp=Z,8.2nm,1.0s | | | | | | | | |
| **ARU** | **Arti** | **45.29** | **51** | | P | | **P** | **06 03 56.0** | **+1.3** |
| | comp=Z,8.6nm,1.2s | | | | | | | | |
| **DAWY** | **Dawson** | **46.10** | **324** | | P | | **P** | **06 04 03.1** | **+2.0** |
| **EGAK** | **Eagle** | **46.12** | **326** | | P | | **P** | **06 04 02.5** | **+1.4** |
| EGAK | | | | | IAmb | IAmb | | 06 04 17.9 | |
| | comp=Z,8.4nm,1.2s | | | | | | | | |
| **BNN** | **Bunyan** | **46.67** | **84** | | P | | **P** | **06 04 04.6** | **-1.4** |
| **KBZ** | **Khabaz** | **46.77** | **74** | | P | | **P** | **06 04 07.2** | **+0.6** |
| | comp=Z,1.5nm,0.5s,baz=312,slow=6.8,SNR=3.1 comp=Z,1.5nm,0.5s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **46.83** | **328** | | IAmb | IAmb | | 06 04 14.1 | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **H24K** | **Noodor Dome** | **47.22** | **330** | | IAmb | IAmb | | 06 04 16.2 | |
| | comp=Z,5.5nm,1.0s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **47.58** | **325** | | IAmb | IAmb | | 06 04 22.1 | |
| | comp=Z,10.0nm,1.5s | | | | | | | | |
| **IL31** | | **47.77** | **328** | | P | | **P** | **06 04 15.3** | **+1.3** |
| IL31 | | | | | IAmb | IAmb | | 06 04 20.0 | |
| | comp=Z,7.4nm,1.1s | | | | | | | | |
| **ILAR** | **Eielson Array** | **47.77** | **328** | | P | | **P** | **06 04 13.4** | **-0.7** |
| **ILAR** | **Eielson Array** | **47.77** | **328** | | P | | **P** | **06 04 11.8** | **-2.2** |
| | comp=Z,2.5nm,1.0s,baz=28,slow=5.0,SNR=9.4 comp=Z,2.5nm,1.0s | | | | | | | | |
| **YHL** | **Hebgen Lake** | **48.14** | **290** | | IAmb | IAmb | | 06 04 22.6 | |
| | comp=Z,8.2nm,1.5s | | | | | | | | |
| **CSS** | **Mathiatis** | **48.27** | **89** | | P | | **P** | **06 04 19.5** | **+1.2** |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **48.44** | **324** | | IAmb | IAmb | | 06 04 29.2 | |
| | comp=Z,8.4nm,1.1s | | | | | | | | |
| **PD31** | **Pinedale Array** | **48.84** | **287** | | P | | **P** | **06 04 21.6** | **-1.3** |
| **PDAR** | **Pinedale Array** | **48.84** | **287** | | P | | **P** | **06 04 21.9** | **-1.0** |
| **PDAR** | **Pinedale Array** | **48.84** | **287** | | P | | **P** | **06 04 19.4** | **-3.5** |
| | comp=Z,0.8nm,0.6s,baz=54,slow=5.9,SNR=10 comp=Z,0.8nm,0.6s | | | | | | | | |
| **ISCO** | **Idaho Springs** | **49.00** | **282** | | IAmb | IAmb | | 06 04 35.1 | |
| | comp=Z,8.4nm,1.5s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **49.23** | **272** | | P | | **P** | **06 04 25.5** | **-0.3** |
| WMOK | | | | | IAmb | IAmb | | 06 04 44.2 | |
| | comp=Z,7.4nm,1.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **50.95** | **57** | | P | | **P** | **06 04 37.5** | **-0.9** |
| **ABKAR** | **Akbulak array** | **50.95** | **57** | | P | | **P** | **06 04 38.5** | **0.0** |
| ABKAR | | | | | IAmb | IAmb | | 06 04 44.6 | |
| | comp=Z,8.2nm,1.1s | | | | | | | | |
| **DKNS** | **Dickens** | **51.19** | **273** | | P | | **P** | **06 04 41.7** | **+1.1** |
| DKNS | | | | | IAmb | IAmb | | 06 04 50.3 | |
| | comp=Z,6.9nm,1.1s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.69** | **137** | | P | | **P** | **06 04 40.7** | **-3.8** |
| | comp=Z,2.8nm,0.8s,baz=352,slow=10,SNR=14 comp=Z,2.8nm,0.8s | | | | | | | | |
| **SAND** | **Sanderson** | **54.72** | **271** | | P | | **P** | **06 05 08.6** | **+1.9** |
| **KNB** | **Kanab** | **54.80** | **285** | | IAmb | IAmb | | 06 05 19.4 | |
| | comp=Z,8.2nm,1.4s | | | | | | | | |
| **KVN** | **Kaiserville** | **55.90** | **290** | | P | | **P** | **06 05 16.1** | **+0.9** |
| **TXAR** | **Lajitas Array** | **56.03** | **272** | | P | | **P** | **06 05 14.8** | **-1.4** |
| | comp=Z,0.2nm,0.5s,baz=60,slow=5.6,SNR=5.5 comp=Z,0.2nm,0.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.48** | **290** | | P | | **P** | **06 05 15.9** | **-3.5** |
| | comp=Z,0.6nm,0.8s,baz=

*az=205.0*

*DNK 14 06:01:52.0 -3.9, 58°.82N x 32°.67W, h70km, 64km, mb4.1*

**ISC 14 06:01:41.2 -0.3, 58°28N 0°06 x 32°02W +0°04, h13km, n351, σ1§53/219, mb4.6/177, MS4.5/90, 5D, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NRS** | **Narsarsuaq** | **7.36** | **299** | Pn | | **Pn** | | **06 03 25.7** | **-2.5** |
| **ANGG** | **Ammassalik, Gr** | **7.82** | **343** | Pn | | **Pn** | | **06 03 32.8** | **-1.7** |
| **ANGG** | **Ammassalik, Gr** | **7.82** | **343** | *i* P | | **Pn** | | **06 03 35.7** | **+1.3** |
| **BORG** | **Borgarnes** | **8.25** | **34** | Pn | | **Pn** | | **06 03 40.6** | **+0.3** |
| **BORG** | **Borgarnes** | **8.25** | **34** | Pn | | **Pn** | | **06 03 40.9** | **+0.6** |
| | 2.9nm,0.3s,baz=210,slow=7.6,SNR=16 | | | | | | | | |
| BORG | | | | Sn | | **Sn** | | **06 05 12.9** | **-0.3** |
| | 1.7nm,0.3s,baz=98,slow=21,SNR=11 | | | | | | | | |
| BORG | | | | LR | | LR | | 06 05 58.1 | |
| | comp=Z,3μm,18.7s,baz=243,slow=31 | | | | | | | | |
| | 41nm,0.8s | | | | | | | | |
| **IVI** | **Ivigtut** | **8.66** | **297** | Pn | | **Pn** | | **06 03 45.7** | **-0.3** |
| **IVI** | **Ivigtut** | **8.66** | **297** | *i* P | | **Pn** | | **06 03 47.7** | **+1.7** |
| **SOEG** | **Soedalen** | **9.97** | **1** | *i* P | | **Pn** | | **06 04 03.6** | **-0.2** |
| **DY2G** | **Dye2** | **10.52** | **327** | *i* P | | **Pn** | | **06 04 12.6** | **+1.0** |
| **NUUK** | **Nuuk** | **11.15** | **310** | *i* P | | **Pn** | | **06 04 18.6** | **-1.5** |
| **ICESG** | **Greenland Ices** | **11.35** | **346** | *i* P | | **Pn** | | **06 04 22.6** | **-0.6** |
| **SFJD** | **Kangerlussuaq** | **12.17** | **324** | Pn | | **Pn** | | **06 04 34.9** | **+0.9** |
| | 0.3nm,0.3s,baz=126,slow=13,SNR=4.3 | | | | | | | | |
| SFJD | | | | Sn | | Sn | | 06 06 36.4 | -13 |
| | 0.8nm,0.3s,baz=102,slow=20,SNR=2.4 | | | | | | | | |
| SFJD | | | | LR | | LR | | 06 08 34.2 | |
| | comp=Z,4μm,18.8s,baz=131,slow=34 | | | | | | | | |
| | 8.8nm,0.8s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **12.17** | **324** | *i* P | | **Pn** | | **06 04 34.5** | **+0.5** |
| **IGLA** | **Glengowla, Co** | **13.59** | **101** | Pn | | **P** | | **06 05 04.4** | **+2.1** |
| **IDGL** | **Inch Island, C** | **13.82** | **93** | Pn | | **P** | | **06 05 05.3** | **+0.4** |
| **SUMG** | **Summit** | **14.59** | **352** | | | **Pn** | | **06 05 08.2** | **+0.9** |
| **SUMG** | **Summit** | **14.59** | **352** | *i* P | | **Pn** | | **06 05 08.0** | **+0.7** |
| **DSB** | **Dublin** | **15.23** | **98** | Pn | | **P** | | **06 05 21.9** | **+1.3** |
| **DSB** | **Dublin** | **15.23** | **98** | Pn | | **Pn** | | **06 05 15.9** | **+0.2** |
| DSB | | | | IAmb | | IAmb | | 06 05 27.8 | |
| | comp=Z,51nm,1.3s | | | | | | | | |
| **IWEX** | **Carrickbyrne,** | **15.48** | **102** | Pn | | **P** | | **06 05 24.6** | **+1.3** |
| **NUUG** | **Nuugaatsiaq** | **15.90** | **335** | *i* P | | **Pn** | | **06 05 22.4** | **-1.9** |
| **ESK** | **Eskdalemuir** | **16.00** | **88** | Pn | | **Pn** | | **06 05 25.4** | **-0.2** |
| **EKA** | **Eskdalemuir Ar** | **16.02** | **88** | Pn | | **Pn** | | **06 05 26.9** | **+1.1** |
| | baz=295,slow=10 | | | | | | | | |
| | comp=Z,9.7nm,0.9s | | | | | | | | |
| **JMIC** | **Jan Mayen** | **16.07** | **28** | LR | | LR | | 06 10 08.6 | |
| | comp=Z,871nm,20.2s,baz=224,slow=32 | | | | | | | | |
| **DBG** | **Daneborg** | **16.71** | **11** | *i* P | | **Pn** | | **06 05 35.3** | **+0.7** |
| **DRLN** | **Deer Lake** | **17.47** | **250** | | | **P** | | **06 05 45.4** | **0.0** |
| **FRB** | **Frobisher Bay** | **18.33** | **303** | P | | **P** | | **06 05 55.5** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=104,slow=6.9,SNR=3.1 | | | | | | | | |
| FRB | | | | LR | | LR | | 06 12 05.2 | |
| | comp=Z,4μm,18.6s,baz=90,slow=34 | | | | | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **19.16** | **9** | *i* P | | **Pn** | | **06 06 07.0** | **+2.3** |
| DAG | | | | IAmb | | IAmb | | 06 06 09.1 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **SCHQ** | **Schefferville** | **19.36** | **275** | P | | **Pn** | | **06 06 07.6** | **+0.3** |
| **SCHQ** | **Schefferville** | **19.36** | **275** | P | | **Pn** | | **06 06 07.2** | **-0.1** |
| | comp=Z,0.7nm,0.3s,baz=69,slow=11,SNR=12 | | | | | | | | |
| SCHQ | | | | LR | | LR | | 06 12 24.9 | |
| | comp=Z,3μm,18.5s,baz=61,slow=33 | | | | | | | | |
| | comp=Z,7.5nm,0.6s | | | | | | | | |
| **NEEM** | **North Greenlan** | **20.33** | **348** | *i* P | | **P** | | **06 06 15.2** | **-1.7** |
| NEEM | | | | IAmb | | IAmb | | 06 06 32.1 | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| **NC204** | **NORSAR Array S** | **21.45** | **64** | P | | **P** | | **06 06 28.9** | **0.0** |
| NC204 | | | | IAmb | | IAmb | | 06 06 34.8 | |
| | comp=Z,28nm,1.1s | | | | | | | | |
| **NBO00** | **NORSAR Array S** | **21.51** | **64** | P | | **P** | | **06 06 29.6** | **+0.2** |
| NBO00 | | | | IAmb | | IAmb | | 06 06 35.5 | |
| | comp=Z,37nm,1.2s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **21.71** | **64** | P | | **P** | | **06 06 31.2** | **-0.5** |
| | comp=Z,68nm,2.0s,baz=282,slow=11 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **21.71** | **64** | P | | **P** | | **06 06 31.2** | **-0.5** |
| | comp=Z,3.5nm,0.9s,baz=282,slow=9.2,SNR=12 | | | | | | | | |
| NOA | | | | LR | | LR | | 06 13 40.2 | |
| | comp=Z,925nm,21.0s,baz=280,slow=33 | | | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | | | |
| **NC303** | **NORSAR Array S** | **21.75** | **64** | P | | **P** | | **06 06 32.5** | **+0.5** |
| NC303 | | | | IAmb | | IAmb | | 06 06 35.5 | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| **NB201** | **NORSAR Array S** | **21.75** | **64** | P | | **P** | | **06 06 32.8** | **+0.8** |
| NB201 | | | | IAmb | | IAmb | | 06 06 41.7 | |
| | comp=Z,64nm,1.4s | | | | | | | | |
| **NC602** | **NORSAR Array S** | **21.93** | **65** | P | | **P** | | **06 06 32.9** | **-1.1** |
| NC602 | | | | IAmb | | IAmb | | 06 06 39.9 | |
| | comp=Z,34nm,1.3s | | | | | | | | |
| **NC405** | **NORSAR Array S** | **21.94** | **64** | P | | **P** | | **06 06 33.2** | **-0.8** |
| NC405 | | | | IAmb | | IAmb | | 06 06 38.6 | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| **GBN** | **Guysborough** | **22.10** | **247** | P | | **P** | | **06 06 35.2** | **-0.6** |
| GBN | | | | IAmb | | IAmb | | 06 06 47.4 | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **22.14** | **127** | *eP* | | **P** | | **06 06 38.1** | **+1.7** |
| PGAV | | | | *e*LR | | LR | | 06 11 49.5 | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **ICQ** | **Pointe Anglais** | **22.31** | **262** | P | | **P** | | **06 06 38.5** | **+0.4** |
| **BMRD** | **Maredsous** | **22.66** | **95** | *dP* | | **P** | | **06 06 47.0** | **+5.2** |
| **DOU** | **Dourbes** | **22.68** | **95** | *dP* | | **P** | | **06 06 46.1** | **+4.0** |
| **CLF** | **Chambon-Foret** | **22.72** | **102** | P | | **P** | | **06 06 41.4** | **-1.1** |
| CLF | | | | IAmb | | IAmb | | 06 06 59.7 | |
| | comp=Z,37nm,1.0s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **22.83** | **127** | *eP* | | **P** | | **06 06 45.1** | **+1.3** |
| **BCLA** | **Clavier** | **22.87** | **94** | *dP* | | **P** | | **06 06 49.0** | **+5.0** |
| **BSTI** | **Sart Tilman** | **22.92** | **93** | *dP* | | **P** | | **06 06 46.0** | **+1.5** |
| **PBRG** | **Braganca** | **22.92** | **125** | *eP* | | **P** | | **06 06 45.7** | **+1.0** |
| **BATG** | **Bathurst New B** | **23.09** | **256** | P | | **P** | | **06 06 46.6** | **+0.2** |
| **HFS** | **Hagfors** | **23.12** | **66** | P | | **P** | | **06 06 46.0** | **-0.5** |
| | comp=Z,13nm,0.8s,baz=292,slow=12,SNR=25 | | | | | | | | |
| HFS | | | | LR | | LR | | 06 14 42.7 | |
| | comp=Z,806nm,19.1s,baz=276,slow=34 | | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **MVO** | **Moncorvo** | **23.32** | **126** | *eP* | | **P** | | **06 06 50.8** | **+2.0** |
| | comp=Z,83nm,1.5s | | | | | | | | |
| MVO | | | | *e*LR | | LR | | 06 12 29.1 | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **PVIS** | **Viseu** | **23.33** | **128** | *eP* | | **P** | | **06 06 52.4** | **+3.5** |
| **LMN** | **Caledonia Moun** | **23.41** | **252** | P | | **P** | | **06 06 49.7** | **+0.1** |
| LMN | | | | IAmb | | IAmb | | 06 07 00.7 | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| **HAL** | **Halifax** | **23.67** | **249** | P | | **P** | | **06 06 51.5** | **-0.6** |
| HAL | | | | IAmb | | IAmb | | 06 07 01.7 | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **NOR** | **Nord** | **23.83** | **6** | *i* P | | **P** | | **06 06 52.1** | **-1.3** |
| NOR | | | | IAmb | | IAmb | | 06 06 55.3 | |
| | comp=Z,7.7nm,0.9s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **24.24** | **129** | *eP* | | **P** | | **06 06 57.7** | **+0.2** |
| | comp=Z,32nm,1.5s | | | | | | | | |
| **PQI** | **Presque Isle** | **24.50** | **257** | P | | **P** | | **06 07 00.2** | **+0.4** |
| PQI | | | | IAmb | | IAmb | | 06 07 18.5 | |
| | comp=Z,23nm,1.3s | | | | | | | | |
| **D62A** | **Allapoint, All** | **24.76** | **259** | P | | **P** | | **06 07 02.5** | **+0.3** |
| **GGN** | **Saint George** | **24.95** | **253** | P | | **P** | | **06 07 04.5** | **+0.6** |
| GGN | | | | IAmb | | IAmb | | 06 07 06.1 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **PESTR** | **Estremoz** | **25.02** | **130** | P | | **P** | | **06 07 03.9** | **-0.8** |
| PESTR | | | | IAmb | | IAmb | | 06 07 11.4 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **PESTR** | **Estremoz** | **25.02** | **130** | *eP* | | **P** | | **06 07 04.8** | **+0.1** |
| **LMQ** | **La Malbaie** | **25.13** | **262** | P | | **P** | | **06 07 06.4** | **+0.8** |
| LMQ | | | | IAmb | | IAmb | | 06 07 09.1 | |
| | comp=Z,27nm,1.3s | | | | | | | | |
| **EVO** | **Evora** | **25.14** | **131** | *eP* | | **P** | | **06 07 07.6** | **+1.9** |
| **ECH** | **Echery** | **25.16** | **96** | P | | **P** | | **06 07 05.5** | **-0.3** |
| ECH | | | | IAmb | | IAmb | | 06 07 13.1 | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **25.30** | **133** | *eP* | | **P** | | **06 07 08.8** | **+1.7** |
| **LDAQ** | **Lac Daran** | **25.34** | **263** | P | | **P** | | **06 07 08.3** | **+0.8** |
| LDAQ | | | | IAmb | | IAmb | | 06 07 14.9 | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| **EMMW** | **East Machias** | **25.55** | **253** | P | | **P** | | **06 07 10.3** | **+0.9** |
| EMMW | | | | IAmb | | IAmb | | 06 07 12.1 | |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **PBEJ** | **Beja** | **25.64** | **132** | *eP* | | **P** | | **06 07 12.1** | **+1.9** |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **MESJ** | **Messejana** | **25.66** | **132** | *eP* | | **P** | | **06 07 14.1** | **+3.7** |
| | comp=Z,30nm,1.3s | | | | | | | | |
| **BFO** | **Black Forest** | **25.70** | **95** | P | | **P** | | **06 07 10.2** | **-0.6** |
| **PAB** | **San Pablo** | **25.81** | **124** | P | | **P** | | **06 07 12.3** | **+0.4** |
| PAB | | | | IAmb | | IAmb | | 06 07 18.6 | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **PBAR** | **Barrancos** | **25.84** | **130** | *eP* | | **P** | | **06 07 14.2** | **+2.2** |
| | comp=Z,32nm,1.7s | | | | | | | | |
| **ESBB** | **Sonseca Array** | **25.88** | **124** | P | | **P** | | **06 07 12.9** | **+0.5** |
| ESBB | | | | IAmb | | IAmb | | 06 07 21.9 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **25.88** | **124** | P | | **P** | | **06 07 12.0** | **-0.4** |
| **ESDC** | **Sonseca Array** | **25.88** | **124** | P | | **P** | | **06 07 12.4** | **0.0** |
| | comp=Z,7.9nm,0.9s,baz=321,slow=8.9,SNR=22 | | | | | | | | |
| ESDC | | | | LR | | LR | | 06 15 32.9 | |
| | comp=Z,572nm,20.8s,baz=322,slow=32 | | | | | | | | |
| | comp=Z,7.9nm,0.9s | | | | | | | | |
| **PCVE** | **Castro Verde** | **25.91** | **132** | *eP* | | **P** | | **06 07 15.5** | **+2.8** |
| **PKME** | **Peaks-Kenny Pk** | **26.10** | **256** | IAmb | | IAmb | | 06 07 18.4 | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **26.45** | **86** | *eP* | | **P** | | **06 07 17.0** | **-0.4** |
| CLL | | | | *i* x | | x | | 06 07 22.4 | |
| | comp=Z,22nm,1.5s | | | | | | | | |
| CLL | | | | AMS | | AMS | | 06 16 00.0 | |
| | comp=N,500nm,18.3s | | | | | | | | |
| CLL | | | | AMS | | AMS | | 06 16 00.0 | |
| | comp=E,1μm,20.9s | | | | | | | | |
| CLL | | | | AMS | | AMS | | 06 16 00.0 | |
| | comp=Z,1μm,21.2s | | | | | | | | |
| **CLL** | **Collm** | **26.45** | **86** | P | | **P** | | **06 07 15.5** | **-1.9** |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.55** | **42** | P | | **P** | | **06 07 17.6** | **-0.6** |
| **ARCES** | **ARCESS Array B** | **26.55** | **42** | P | | **P** | | **06 07 17.6** | **-0.6** |
| | comp=Z,16nm,1.0s,baz=277,slow=8.9,SNR=14 | | | | | | | | |
| ARCES | | | | LR | | LR | | 06 15 44.0 | |
| | comp=Z,415nm,19.8s,baz=278,slow=32 | | | | | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **WVL** | **Waterville** | **26.77** | **256** | IAmb | | IAmb | | 06 07 24.7 | |
| | comp=Z,28nm,1.4s | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **27.06** | **87** | AMS | | AMS | | 06 18 30.0 | |
| | comp=Z,2μm,15.7s | | | | | | | | |
| **DAVA** | **Damuels** | **27.17** | **95** | *i* pP | | **P** | | **06 07 25.9** | **+1.7** |
| | comp=Z,1.9nm,0.6s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **27.18** | **86** | *eP* | | **P** | | **06 07 25.6** | **+1.6** |
| BRG | | | | Amp | | | | 06 07 32.5 | |
| | comp=Z,3.6nm,0.9s | | | | | | | | |
| **RICC** | **Richard** | **27.45** | **86** | AMS | | AMS | | 06 18 50.0 | |
| | comp=Z,2μm,15.4s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **27.50** | **96** | LR | | LR | | 06 17 48.7 | |
| | comp=Z,1μm,19.3s,baz=306,slow=35 | | | | | | | | |
| **RETA** | **Reutte** | **27.51** | **94** | *i* pP | | **P** | | **06 07 28.0** | **+0.9** |
| | comp=Z,5.8nm,1.0s | | | | | | | | |
| **MOTA** | **Moosalm** | **27.78** | **94** | *i* P | | **P** | | **06 07 34.2** | **+4.6** |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| **FETA** | **Feichten** | **27.79** | **95** | *i* P | | **P** | | **06 07 30.0** | **+0.2** |
| | comp=Z,4.4nm,1.4s | | | | | | | | |
| **PRA** | **Prague** | **27.89** | **87** | AMS | | AMS | | 06 18 50.0 | |
| | comp=Z,2μm,15.1s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **27.91** | **94** | *i* P | | **P** | | **06 07 34.9** | **+4.1** |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **27.99** | **89** | AMS | | AMS | | 06 18 10.0 | |
| | comp=Z,2μm,16.6s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **27.99** | **89** | P | | **P** | | **06 07 29.3** | **-2.1** |
| | comp=Z,3.3nm,1.7s | | | | | | | | |
| **PRU** | **Pruhonice** | **28.00** | **87** | AMS | | AMS | | 06 19 10.0 | |
| | comp=Z,2μm,14.8s | | | | | | | | |
| **WATA** | **Walderalm** | **28.04** | **94** | *i* pP | | **P** | | **06 07 34.3** | **+2.4** |
| | comp=Z,2.3nm,0.4s | | | | | | | | |
| **RES** | **Resolute Bay** | **28.05** | **330** | LR | | LR | | 06 17 39.1 | |
| | comp=Z,447nm,18.8s,baz=136,slow=34 | | | | | | | | |
| **WTTA** | **Wattenberg** | **28.11** | **94** | *i* pP | | **P** | | **06 07 34.2** | **+1.5** |
| | comp=Z,5.0nm,1.3s | | | | | | | | |
| **ZVC** | **Zvikov** | **28.13** | **88** | AMS | | AMS | | 06 18 20.0 | |
| | comp=Z,2μm,17.0s | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **28.17** | **87** | AMS | | AMS | | 06 19 10.0 | |
| | comp=Z,2μm,15.5s | | | | | | | | |
| **TRQ** | **Mont Tremblant** | **28.20** | **263** | IAmb | | IAmb | | 06 07 41.7 | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| **GERES** | **GERESS Array B** | **28.23** | **89** | P | | **P** | | **06 07 34.1** | **+0.5** |
| | comp=Z,1.4nm,0.9s,baz=317,slow=8.5,SNR=1.5 | | | | | | | | |
| GERES | | | | LR | | LR | | 06 18 37.8 | |
| | comp=Z,1μm,18.8s,baz=298,slow=36 | | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | | |
| **KSP** | **Ksiaz** | **28.43** | **84** | P | | **P** | | **06 07 33.3** | **-1.9** |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **CHVC** | **Chvalec** | **28.45** | **85** | AMS | | AMS | | 06 19 50.0 | |
| | comp=Z,1μm,15.2s | | | | | | | | |
| **UPC** | **Upice** | **28.47** | **85** | AMS | | AMS | | 06 19 40.0 | |
| | comp=Z,1μm,15.1s | | | | | | | | |
| **FINES** | **FINESS Array B** | **28.50** | **59** | P | | **P** | | **06 07 35.5** | **-0.2** |
| **FINES** | **FINESS Array B** | **28.50** | **59** | P | | **P** | | **06 07 35.8** | **+0.1** |
| | comp=Z,8.5nm,0.8s,baz=302,slow=8.0,SNR=14 | | | | | | | | |
| FINES | | | | LR | | LR | | 06 18 25.6 | |
| | comp=Z,794nm,18.1s,baz=282,slow=35 | | | | | | | | |
| | comp=Z,8.5nm,0.8s | | | | | | | | |
| **OSTC** | **Ostas** | **28.55** | **84** | AMS | | AMS | | 06 19 50.0 | |
| | comp=Z,2μm,15.3s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **28.56** | **93** | *i* pP | | **P** | | **06 07 38.0** | **+1.5** |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **28.56** | **89** | AMS | | AMS | | 06 18 30.0 | |
| | comp=Z,1μm,18.1s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **28.73** | **85** | AMS | | AMS | | 06 19 50.0 | |
| | comp=Z,2μm,15.3s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **28.73** | **85** | P | | **P** | | **06 07 36.5** | **-1.4** |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **28.90** | **91** | *i* pP | | P | | 06 07 45.6 | +6.1 |
| | comp=Z,0.3nm,0.3s | | | | | | | | |
| **TREC** | **Trest** | **28.90** | **87** | AMS | | AMS | | 06 19 10.0 | |
| | comp=Z,2μm,16.9s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **28.90** | **94** | *i* pP | | **P** | | **06 07 42.5** | **+2.9** |
| | comp=Z,3.8nm,1.1s | | | | | | | | |
| **KRLC** | **Kraliky** | **29.13** | **85** | AMS | | AMS | | 06 20 00.0 | |
| | comp=Z,2μm,15.4s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **29.13** | **93** | *i* P | | **P** | | **06 07 42.2** | **+0.6** |
| | comp=Z,5.0nm,1.3s | | | | | | | | |
| **VRAC** | **Vranov** | **29.48** | **86** | LR | | LR | | 06 19 48.7 | |
| | comp=Z,1μm,18.1s,baz=299,slow=37 | | | | | | | | |
| **MYKA** | **Terra Mystica** | **29.57** | **93** | *i* P | | **P** | | **06 07 45.9** | **+0.4** |
| | comp=Z,5.6nm,1.3s | | | | | | | | |
| **PRED** | **Cave del Predi** | **29.66** | **93** | IAmb | | IAmb | | 06 07 53.0 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **CONA** | **Conrad Observa** | **29.93** | **89** | *i* P | | **P** | | **06 07 45.7** | **-2.9** |
| | comp=Z,3.5nm,1.3s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **29.98** | **84** | AMS | | AMS | | 06 20 50.0 | |
| | comp=Z,2μm,14.4s | | | | | | | | |
| **OBKA** | **Obir** | **30.13** | **92** | *i* P | | **P** | | **06 07 49.8** | **-0.6** |
| | comp=Z,8.9nm,1.5s | | | | | | | | |
| **ARSA** | **Arzberg** | **30.17** | **90** | *i* P | | **P** | | **06 07 51.1** | **+0.4** |
| | comp=Z,4.2nm,1.0s | | | | | | | | |
| **SOKA** | **Soboth** | **30.28** | **92** | *i* P | | **P** | | **06 07 51.8** | **+0.1** |
| | comp=Z,3.1nm,1.1s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **30.30** | **89** | *i* P | | **P** | | **06 07 51.3** | **-0.6** |
| | comp=Z,1.6nm,0.7s | | | | | | | | |
| **OJC** | **Ojcow** | **30.63** | **82** | P | | **P** | | **06 07 51.9** | **-2.8** |
| | comp=Z,5.5nm,0.7s | | | | | | | | |
| **DELO** | **Deloro Mine** | **30.94** | **264** | IAmb | | IAmb | | 06 08 00.3 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **MPLH** | **Mayarpolmy** | **31.29** | **89** | P | | **P** | | **06 07 58.1** | **-2.4** |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **NIE** | **Niedzica** | **31.36** | **83** | P | | **P** | | **06 07 58.8** | **-2.4** |
| | comp=Z,1.6nm,0.9s | | | | | | | | |
| **MDT** | **Midelt** | **31.48** | **132** | LR | | LR | | 06 19 50.9 | |
| | comp=Z,690nm,18.4s,baz=351,slow=35 | | | | | | | | |
| **SADO** | **Sadowa** | **31.57** | **266** | LR | | LR | | 06 19 33.2 | |
| | comp=Z,2μm,18.6s,baz=62,slow=34 | | | | | | | | |
| **MMNY** | **Mt. Morris Dam** | **32.33** | **262** | IAmb | | IAmb | | 06 08 12.7 | |
| | comp=Z,7.5nm,1.1s | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **32.48** | **89** | P | | **P** | | **06 08 08.7** | **-2.3** |
| | comp=Z,7.9nm,0.9s | | | | | | | | |
| **HOLU** | **Holmets** | **32.99** | **83** | P | | **P** | | **06 08 13.1** | **-2.4** |
| **SHIU** | **Shidnytsya** | **33.08** | **81** | P | | **P** | | **06 08 13.4** | **-2.9** |
| **BERU** | **Beregovo** | **33.31** | **83** | P | | **P** | | **06 08 16.1** | **-2.1** |
| **MORS** | **Morshin** | **33.41** | **81** | P | | **P** | | **06 08 17.0** | **-2.1** |
| **BRIU** | **Brid** | **33.44** | **83** | P | | **P** | | **06 08 17.2** | **-2.2** |
| **STNU** | **Starunia** | **33.99** | **81** | P | | **P** | | **06 08 21.9** | **-2.3** |
| **RAKU** | **Rahkiv** | **34.24** | **82** | P | | **P** | | **06 08 23.2** | **-3.1** |
| **MI28** | **MI28,Pidlybu** | **34.29** | **76** | P | | **P** | | **06 08 23.8** | **-2.9** |
| **KSV** | **Kosov** | **34.53** | **81** | P | | **P** | | **06 08 27.0** | **-1.9** |
| **MI30** | **MI30,Zelenitsa** | **34.67** | **76** | P | | **P** | | **06 08 27.6** | **-2.4** |
| **LUBAR** | **Lubar, Ukraine** | **34.94** | **77** | P | | **P** | | **06 08 30.8** | **-1.6** |
| **BURAR** | **Burdina Array** | **35.05** | **82** | P | | **P** | | **06 08 33.4** | **0.0** |
| **AK21** | **Malin Array Si** | **35.09** | **75** | P | | **P** | | **06 08 31.0** | **-2.6** |
| **AK20** | **Malin Array Si** | **35.09** | **75** | P | | **P** | | **06 08 31.0** | **-2.6** |
| **KMPD** | **K-Podol'skiy** | **35.10** | **80** | P | | **P** | | **06 08 31.8** | **-1.9** |
| KMPD | | | | P | | P | | **06 08 31.9** | **-1.8** |
| **KIEV** | **Kiev** | **35.22** | **75** | P | | **P** | | **06 08 32.8** | **-2.0** |
| KIEV | | | | IAmb | | IAmb | | 06 08 35.7 | |
| | comp=Z,7.9nm,0.8s | | | | | | | | |
| **KIEV** | **Kiev** | **35.22** | **75** | P | | **P** | | **06 08 32.0** | **-2.7** |
| | comp=Z,42nm,1.0s | | | | | | | | |
| **AK12** | **Malin Array Si** | **35.22** | **75** | P | | **P** | | **06 08 33.5** | **-1.3** |
| **AKASG** | **Malin Array Be** | **35.22** | **75** | P | | **P** | | **06 08 32.5** | **-2.2** |
| | comp=Z,5.7nm,0.8s,baz=307,slow=8.7,SNR=13 | | | | | | | | |
| AKASG | | | | LR | | LR | | 06 22 26.1 | |
| | comp=Z,524nm,19.8s,baz=292,slow=35 | | | | | | | | |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **35.22** | **75** | IAmb | | IAmb | | 06 08 35.8 | |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **35.22** | **75** | P | | **P** | | **06 08 32.0** | **-2.8** |
| **KEST** | **Kesra** | **35.29** | **111** | P | | **P** | | **06 08 35.9** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=307,slow=5.1,SNR=3.2 | | | | | | | | |
| KEST | | | | LR | | LR | | 06 22 30.5 | |
| | comp=Z,814nm,18.4s,baz=293,slow=36 | | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| **EYMN** | **Ely** | **36.01** | **280** | P | | **P** | | **06 08 42.5** | **+0.9** |
| **OBN** | **Obninsk** | **36.32** | **65** | LR | | LR | | 06 22 44.1 | |
| | comp=Z,775nm,19.0s,baz=336,slow=35 | | | | | | | | |
| **VOIR** | | **36.37** | **85** | P | | **P** | | **06 08 43.8** | **-1.0** |
| | comp=Z,6.7nm,1.2s | | | | | | | | |
| **P52A** | **Corning** | **36.77** | **262** | IAmb | | IAmb | | 06 08 51.2 | |
| | comp=Z,22nm,1.2s | | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **36.78** | **263** | IAmb | | IAmb | | 06 08 51.6 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **36.81** | **84** | LR | | LR | | 06 25 12.5 | |
| | comp=Z,997nm,18.1s,baz=316,slow=38 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **36.83** | **286** | P | | **P** | | **06 08 48.0** | **-0.5** |
| ULM | | | | IAmb | | IAmb | | 06 08 49.9 | |
| | comp=Z,23nm,1.4s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **36.83** | **286** | P | | **P** | | **06 08 48.0** | **-0.5** |
| | comp=Z,4.0nm,0.7s,baz=65,slow=8.4,SNR=5.4 | | | | | | | | |
| ULM | | | | LR | | LR | | 06 22 34.1 | |
| | comp=Z,1μm,19.1s,baz=58,slow=34 | | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **PLOR3** | **Plostina Array** | **36.94** | **83** | P | | **P** | | **06 08 46.3** | **-3.3** |
| | comp=Z,5.9nm,1.2s | | | | | | | | |
| **FFC** | **Flin Flon** | **37.19** | **296** | P | | **P** | | **06 08 50.9** | **-0.6** |
| FFC | | | | IAmb | | IAmb | | 06 08 53.9 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **38.05** | **283** | P | | **P** | | **06 08 58.8** | **-0.1** |
| AGMN | | | | IAmb | | IAmb | | 06 09 00.9 | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **PURM** | **Purcari** | **38.18** | **80** | P | | **P** | | **06 08 57.0** | **-3.0** |
| **P49A** | **Miami Univ. Ec** | **38.20** | **264** | IAmb | | IAmb | | 06 09 02.6 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.41** | **312** | P | | **P** | | **06 09 00.6** | **-1.1** |
| | comp=Z,3.9nm,0.9s,baz=58,slow=9.2,SNR=13 | | | | | | | | |
| YKA | | | | LR | | LR | | 06 24 16.3 | |
| | comp=Z,2μm,18.4s,baz=59,slow=35 | | | | | | | | |
| | comp=Z,3.9nm,0.9s | | | | | | | | |
| **SFIN** | **Lafayette** | **38.84** | **267** | IAmb | | IAmb | | 06 09 08.2 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **39.99** | **264** | P | | **P** | | **06 09 16.2** | **+0.9** |
| WCI | | | | IAmb | | IAmb | | 06 09 29.1 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **KIRV** | **Kirov** | **40.14** | **53** | LR | | LR | | 06 25 43.0 | |
| | comp=Z,414nm,18.1s,baz=302,slow=36 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **40.62** | **259** | LR | | LR | | 06 25 14.1 | |
| | comp=Z,2μm,18.1s,baz=39,slow=35 | | | | | | | | |
| **CPCT** | **Cooper Cave** | **41.17** | **260** | IAmb | | IAmb | | 06 09 28.3 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **41.48** | **279** | P | | **P** | | **06 09 29.0** | **+1.5** |
| ECSD | | | | IAmb | | IAmb | | 06 09 30.2 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **INK** | **Inuvik

| | | | | | | |
|---|---|---|---|---|---|---|
| RTBA | **Rita Blanca** | **50.00** | **276** | IAmb | IAmb | 06 10 37.3 |
| | comp=Z,10nm,1.0s | | | | | |
| O20A | **White River Ci** | **50.09** | **284** | IAmb | IAmb | 06 10 49.2 |
| | comp=Z,13nm,1.4s | | | | | |
| T25A | **Trinidad** | **50.35** | **278** | IAmb | IAmb | 06 10 40.6 |
| | comp=Z,13nm,1.2s | | | | | |
| GNI | **Garni** | **50.35** | **76** | LR | LR | 06 32 23.1 |
| | comp=Z,310nm,20.2s,baz=335,slow=37 | | | | | |
| PLPT | **Palo Pinto** | **50.45** | **270** | IAmb | IAmb | 06 10 40.2 |
| | comp=Z,11nm,1.2s | | | | | |
| BBB | **Bella Bella** | **50.62** | **308** | LR | LR | 06 31 53.7 |
| | comp=Z,825nm,18.2s,baz=27,slow=36 | | | | | |
| AMTX | **Amarillo** | **50.63** | **274** | IAmb | IAmb | 06 10 54.2 |
| | comp=Z,12nm,0.9s | | | | | |
| HLID | **Hailey** | **50.66** | **291** | P | **P** | **06 10 40.8 +0.8** |
| HWUT | **Hardware Ranch** | **50.69** | **288** | IAmb | IAmb | 06 10 42.5 |
| | comp=Z,7.5nm,1.1s | | | | | |
| MMAI | **Mount Meron Ar** | **50.88** | **89** | LR | LR | 06 35 15.9 |
| | comp=Z,411nm,18.9s,baz=268,slow=40 | | | | | |
| TCUT | **Toone Canyon** | **50.97** | **287** | IAmb | IAmb | 06 10 44.4 |
| | comp=Z,19nm,1.5s | | | | | |
| ABKAR | **Akbulak array** | **50.98** | **57** | P | **P** | **06 10 42.2 +0.1** |
| ABKAR | **Akbulak array** | **50.98** | **57** | IAmb | IAmb | 06 10 45.4 |
| | comp=Z,14nm,1.1s | | | | | |
| APMT | **Aspermont** | **51.01** | **272** | IAmb | IAmb | 06 10 49.9 |
| | comp=Z,5.3nm,0.7s | | | | | |
| DKNS | **Dickens** | **51.17** | **273** | IAmb | IAmb | 06 10 55.6 |
| | comp=Z,8.2nm,0.7s | | | | | |
| SKT | **Skwentna** | **51.28** | **328** | P | **P** | **06 10 44.3 +0.1** |
| SKT | | | | IAmb | IAmb | 06 10 48.2 |
| | comp=Z,9.3nm,0.8s | | | | | |
| ABTX | **Abilene, Hawle** | **51.30** | **271** | IAmb | IAmb | 06 10 46.5 |
| | comp=Z,6.5nm,0.8s | | | | | |
| SPUT | **South Promonto** | **51.35** | **288** | IAmb | IAmb | 06 10 47.2 |
| | comp=Z,16nm,1.3s | | | | | |
| TORD | **Torodi Ar. Bea** | **51.68** | **136** | P | **P** | **06 10 46.0 -1.7** |
| | comp=Z,4.2nm,0.7s,baz=355,slow=8.0,SNR=23 | | | | | |
| TORD | | | | LR | LR | 06 29 33.1 |
| | comp=Z,4µm,20.6s,baz=186,slow=32 | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | |
| MPU | **Maple Canyon** | **51.91** | **286** | IAmb | IAmb | 06 10 51.6 |
| | comp=Z,13nm,1.3s | | | | | |
| POST | **Post** | **51.94** | **273** | P | **P** | **06 10 50.0 +0.5** |
| POST | | | | IAmb | IAmb | 06 11 03.4 |
| | comp=Z,5.9nm,0.8s | | | | | |
| SRU | **San Rafael Swe** | **52.02** | **285** | IAmb | IAmb | 06 10 52.5 |
| | comp=Z,11nm,1.5s | | | | | |
| NLU | **North Lily Min** | **52.18** | **287** | IAmb | IAmb | 06 10 53.8 |
| | comp=Z,15nm,1.4s | | | | | |
| TMUT | **Trail Mountain** | **52.23** | **285** | IAmb | IAmb | 06 10 53.4 |
| | comp=Z,10nm,1.4s | | | | | |
| MVCO | **Mesa Verde** | **52.42** | **282** | IAmb | IAmb | 06 10 56.5 |
| | comp=Z,13nm,1.2s | | | | | |
| BRVK | **Borovoye** | **52.48** | **48** | P | **P** | **06 10 52.8 -0.5** |
| BRVK | | | | IAmb | IAmb | 06 10 56.5 |
| | comp=Z,9.5nm,1.1s | | | | | |
| BVAR | **Borovoye Array** | **52.55** | **48** | P | **P** | **06 10 54.1 +0.4** |
| | comp=Z,8.3nm,0.7s,baz=324,slow=7.1,SNR=38 | | | | | |
| BVAR | | | | LR | LR | 06 31 39.9 |
| | comp=Z,266nm,21.5s,baz=318,slow=34 | | | | | |
| | comp=Z,8.3nm,0.7s | | | | | |
| SGCY | **Sterling City** | **52.63** | **271** | IAmb | IAmb | 06 11 06.3 |
| | comp=Z,9.5nm,0.8s | | | | | |
| J08A | **Circle Bar Ran** | **52.80** | **294** | IAmb | IAmb | 06 10 57.5 |
| | comp=Z,7.7nm,1.1s | | | | | |
| HMU | **Henry Mountain** | **53.02** | **284** | IAmb | IAmb | 06 11 26.1 |
| | comp=Z,7.9nm,1.0s | | | | | |
| JCT | **Junction City** | **53.06** | **269** | P | **P** | **06 10 58.1 +0.3** |
| JCT | | | | IAmb | IAmb | 06 11 09.0 |
| | comp=Z,7.8nm,0.8s | | | | | |
| ANMO | **Albuquerque** | **53.09** | **278** | P | **P** | **06 10 58.4 +0.2** |
| ANMO | **Albuquerque** | **53.09** | **278** | LR | LR | 06 32 49.6 |
| | comp=Z,874nm,18.2s,baz=140,slow=35 | | | | | |
| EIL | **Elat** | **53.27** | **92** | LR | LR | 06 37 17.3 |
| | comp=Z,108nm,18.8s,baz=256,slow=40 | | | | | |
| OZNA | **Ozona** | **53.41** | **271** | IAmb | IAmb | 06 11 12.9 |
| | comp=Z,7.9nm,1.1s | | | | | |
| WVOR | **Wild Horse Val** | **53.57** | **293** | IAmb | IAmb | 06 11 09.0 |
| | comp=Z,8.6nm,1.1s | | | | | |
| PINE | **Pine Mountain** | **53.65** | **296** | P | **P** | **06 11 03.2 +0.9** |
| PINE | | | | IAmb | IAmb | 06 11 04.4 |
| | comp=Z,10nm,1.2s | | | | | |
| SPR3 | **Spring Creek 3** | **54.04** | **287** | IAmb | IAmb | 06 11 08.8 |
| | comp=Z,6.6nm,1.3s | | | | | |
| PCRV | **Puerto La Cruz** | **54.05** | **221** | LR | LR | 06 29 15.2 |
| | comp=Z,178nm,21.8s,slow=31 | | | | | |
| SAND | **Sanderson** | **54.70** | **271** | IAmb | IAmb | 06 11 22.6 |
| | comp=Z,6.0nm,0.9s | | | | | |
| KNB | **Kanab** | **54.79** | **285** | IAmb | IAmb | 06 11 12.3 |
| | comp=Z,13nm,1.4s | | | | | |
| LCMT | **Little Creek M** | **55.01** | **285** | P | **P** | **06 11 12.4 +0.3** |
| KDAK | **Kodiak Island** | **55.04** | **326** | LR | LR | 06 35 04.1 |
| | comp=Z,414nm,19.9s,baz=60,slow=36 | | | | | |
| MDP | **Montagnes des** | **55.42** | **205** | LR | LR | 06 29 23.9 |
| | comp=Z,250nm,19.6s,baz=19,slow=30 | | | | | |
| DBIC | **Dimbokro** | **55.61** | **147** | P | **P** | **06 11 15.7 -0.7** |
| | comp=Z,3.2nm,0.6s,baz=347,slow=6.1,SNR=4.9 | | | | | |
| DBIC | | | | LR | LR | 06 32 18.8 |
| | comp=Z,584nm,19.7s,baz=336,slow=33 | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | |
| PRN | **Pahroc Range** | **55.62** | **287** | IAmb | IAmb | 06 11 18.6 |
| | comp=Z,7.0nm,1.3s | | | | | |
| S11A | **Rachel** | **55.79** | **287** | IAmb | IAmb | 06 11 58.4 |
| | comp=Z,11nm,1.1s | | | | | |
| KVN | **Kaiserville** | **55.89** | **290** | P | **P** | **06 11 19.2 +0.7** |
| TXAR | **Lajitas Array** | **56.01** | **272** | P | **P** | **06 11 19.1 -0.2** |
| TXAR | **Lajitas Array** | **56.01** | **272** | P | **P** | **06 11 19.8 +0.4** |
| | comp=Z,1.6nm,0.8s,baz=55,slow=4.9,SNR=11 | | | | | |
| TXAR | | | | LR | LR | 06 34 45.3 |
| | comp=Z,457nm,18.4s,baz=56,slow=36 | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | |
| YBH | **Yreka Blue Hor** | **56.06** | **296** | LR | LR | 06 34 18.8 |
| | comp=Z,726nm,21.0s,baz=24,slow=35 | | | | | |
| BAUV | **El Baul** | **56.41** | **224** | P | **P** | **06 11 22.1 0.0** |
| NVAR | **Mina Array Bea** | **56.47** | **290** | P | **P** | **06 11 22.0 -0.7** |
| NVAR | **Mina Array Bea** | **56.47** | **290** | P | **P** | **06 11 23.2 +0.5** |
| | comp=Z,1.2nm,0.7s,baz=60,slow=6.3,SNR=13 | | | | | |
| NVAR | | | | LR | LR | 06 34 56.8 |
| | comp=Z,575nm,18.6s,baz=55,slow=35 | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | |
| YERR | **Yerington** | **56.50** | **291** | IAmb | IAmb | 06 11 24.8 |
| | comp=Z,6.8nm,1.3s | | | | | |
| ZALV | **Zalesovo Beam** | **57.05** | **39** | P | **P** | **06 11 25.9 -0.4** |
| | comp=Z,1.5nm,0.6s,baz=340,slow=7.8,SNR=5.1 | | | | | |
| ZALV | | | | LR | LR | 06 35 59.4 |
| | comp=Z,150nm,20.9s,baz=318,slow=36 | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | |
| GWY | **Greenwater Val** | **57.39** | **287** | IAmb | IAmb | 06 11 31.8 |
| | comp=Z,9.6nm,1.2s | | | | | |
| SDV | **Santo Domingo** | **57.44** | **227** | LR | LR | 06 33 51.9 |
| | comp=Z,140nm,20.4s,baz=56,slow=34 | | | | | |
| KURK | **Kurchatov** | **57.52** | **45** | P | **P** | **06 11 29.3 -0.4** |
| KURK | | | | IAmb | IAmb | 06 11 32.3 |
| | comp=Z,8.7nm,0.9s | | | | | |
| KURBB | **Kurchatov Arra** | **57.56** | **45** | P | **P** | **06 11 29.1 -0.9** |
| | comp=Z,5.8nm,0.8s,baz=323,slow=7.1,SNR=42 | | | | | |
| KURBB | | | | LR | LR | 06 35 50.2 |
| | comp=Z,243nm,18.8s,baz=150,slow=36 | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | |
| 113A | **Mohawk Valley,** | **58.59** | **282** | IAmb | IAmb | 06 11 55.7 |
| | comp=Z,5.1nm,1.0s | | | | | |
| YAK | **Yakutsk** | **59.18** | **10** | LR | LR | 06 34 57.9 |
| | comp=Z,135nm,21.2s,baz=326,slow=34 | | | | | |
| PFO | **Pinyon Flats O** | **59.30** | **285** | LR | LR | 06 37 01.5 |
| | comp=Z,576nm,19.2s,baz=32,slow=36 | | | | | |
| KK31 | **Karatay Array** | **60.39** | **55** | IAmb | IAmb | 06 11 53.5 |
| | comp=Z,8.3nm,1.4s | | | | | |
| KKAR | **Karatay Array** | **60.39** | **55** | P | **P** | **06 11 49.7 0.0** |
| APG | **El Apazote** | **60.95** | **250** | LR | LR | 06 37 17.5 |
| | comp=Z,26nm,21.1s,baz=26,slow=35 | | | | | |
| CMIG | **Matias Romero** | **61.42** | **256** | LR | LR | 06 37 53.5 |
| | comp=Z,323nm,21.7s,baz=5.5,slow=35 | | | | | |
| MAKZ | **Makanchi** | **62.00** | **45** | P | **P** | **06 12 00.1 -0.5** |
| MK31 | **Makanchi Array** | **62.13** | **45** | IAmb | IAmb | 06 12 02.6 |
| | comp=Z,3.1nm,0.8s | | | | | |
| MKAR | **Makanchi Array** | **62.13** | **45** | P | **P** | **06 12 01.1 -0.4** |
| MKAR | **Makanchi Array** | **62.13** | **45** | P | **P** | **06 12 01.2 -0.2** |
| | comp=Z,6.8nm,1.0s,baz=330,slow=6.2,SNR=36 | | | | | |
| MKAR | | | | LR | LR | 06 39 03.4 |
| | comp=Z,202nm,18.6s,baz=298,slow=36 | | | | | |
| | comp=Z,6.8nm,1.0s | | | | | |
| JTS | **Las Juntas de** | **62.35** | **242** | LR | LR | 06 35 52.2 |
| | comp=Z,296nm,21.3s,baz=9.5,slow=33 | | | | | |
| AAK | **Ala-Archa** | **62.47** | **53** | LR | LR | 06 38 27.9 |
| | comp=Z,368nm,19.7s,baz=326,slow=35 | | | | | |
| ROSC | **El Rosal** | **62.58** | **229** | P | **P** | **06 12 06.8 +1.6** |
| ROSC | **El Rosal** | **62.58** | **229** | P | **P** | **06 12 06.2 +0.9** |
| | comp=Z,5.1nm,0.7s,baz=27,slow=14,SNR=2.3 | | | | | |
| ROSC | | | | LR | LR | 06 40 26.6 |
| | comp=Z,176nm,18.2s,baz=50,slow=37 | | | | | |
| | comp=Z,5.1nm,0.7s | | | | | |
| LPIG | **La Paz** | **63.72** | **274** | LR | LR | 06 38 28.0 |
| | comp=Z,179nm,19.6s,baz=18,slow=35 | | | | | |
| KSH | **Kashi** | **65.68** | **54** | P | **P** | **06 12 26.3 +1.2** |
| KSH | | | | sP | pwP | 06 12 36.0 +5.0 |
| KSH | | | | pmax | pmax | |
| | comp=Z,11nm,1.0s | | | | | |
| WMQ | **Urumqi** | **66.65** | **43** | *eP* | **P** | **06 12 33.8 +2.6** |
| WMQ | | | | LR | LR | |
| | comp=N,360nm,16.9s | | | | | |
| WMQ | | | | LR | LR | |
| | comp=E,260nm,14.1s | | | | | |
| WMQ | | | | LR | LR | |
| | comp=Z,160nm,18.3s | | | | | |
| SHEM | **Shemya Is, Ala** | **67.33** | **343** | P | **P** | **06 12 37.3 +2.1** |
| | comp=Z,7.1nm,0.3s,baz=152,slow=9.4,SNR=6.6 | | | | | |
| SHEM | | | | LR | LR | 06 42 49.1 |
| | comp=Z,158nm,20.6s,baz=1.0,slow=37 | | | | | |
| | comp=Z,7.1nm,0.3s | | | | | |
| H10N2 | **ASCENSION HYDR** | **67.40** | **161** | T | T | 07 25 33.5 |
| | baz=350,slow=75,SNR=6.2 | | | | | |
| H10N3 | **ASCENSION HYDR** | **67.41** | **161** | T | T | 07 25 34.4 |
| | baz=350,slow=75,SNR=6.5 | | | | | |
| H10N1 | **ASCENSION HYDR** | **67.42** | **161** | T | T | 07 25 29.6 |
| | baz=350,slow=75,SNR=5.6 | | | | | |
| H10S3 | **ASCENSION HYDR** | **68.47** | **162** | T | T | 07 26 47.7 |
| | baz=350,slow=74,SNR=163 | | | | | |
| H10S2 | **ASCENSION HYDR** | **68.48** | **162** | T | T | 07 26 53.8 |
| | baz=230,slow=74,SNR=199 | | | | | |
| PETK | **Petropavlovsk-** | **68.69** | **354** | LR | LR | 06 44 48.3 |
| | comp=Z,134nm,18.4s,baz=18,slow=38 | | | | | |
| SONM | **Songino Array** | **68.83** | **29** | P | **P** | **06 12 44.2 -0.7** |
| SONM | | | | IAmb | IAmb | 06 12 47.9 |
| | comp=Z,7.9nm,1.1s | | | | | |
| SONM | **Songino Array** | **68.83** | **29** | P | **P** | **06 12 44.8 -0.1** |
| | comp=Z,6.4nm,1.0s,baz=332,slow=6.5,SNR=14 | | | | | |
| SONM | | | | LR | LR | 06 45 08.0 |
| | comp=Z,190nm,19.4s,baz=276,slow=38 | | | | | |
| | comp=Z,6.4nm,1.0s | | | | | |
| ULN | **Ulaanbaatar** | **68.96** | **28** | P | **P** | **06 12 45.7 -0.1** |
| HEH | **HeiHe** | **70.52** | **14** | *eP* | **P** | **06 12 56.0 +0.9** |
| HEH | | | | pmax | pmax | |
| | comp=Z,11nm,1.4s | | | | | |
| WSAR | **Wadi Sarin** | **70.88** | **77** | LR | LR | 06 47 09.0 |
| | comp=Z,126nm,21.6s,baz=346,slow=38 | | | | | |
| KLR | **Kul'dur** | **72.02** | **11** | P | **P** | **06 13 04.5 +0.2** |
| | comp=Z,0.8nm,0.4s,baz=327,slow=2.1,SNR=3.8 | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | |
| ATD | **Arta Tunnel** | **72.31** | **97** | LR | LR | 06 46 39.9 |
| | comp=Z,6.6nm,18.4s,baz=276,slow=37 | | | | | |
| FURI | **Furi** | **72.36** | **102** | LR | LR | 06 46 16.1 |
| | comp=Z,234nm,19.2s,baz=324,slow=37 | | | | | |
| ETMB | **Extrema** | **73.33** | **215** | P | **P** | **06 13 11.4 -0.9** |
| ETMB | | | | IAmb | IAmb | 06 13 16.3 |
| | comp=Z,6.0nm,1.1s | | | | | |
| GTA | **Gaotai** | **74.70** | **37** | *eP* | **P** | **06 13 21.1 +0.8** |
| GTA | | | | pP | sP | 06 13 25.3 -0.1 |
| GTA | | | | pmax | pmax | |
| | comp=Z,5.0nm,0.9s | | | | | |
| BDFB | **Brasilia** | **74.82** | **196** | P | **P** | **06 13 18.8 -2.3** |
| | comp=Z,1.3nm,0.7s,baz=64,slow=13,SNR=2.0 | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | |
| ATAH | **Atahualpa** | **75.11** | **228** | LR | LR | 06 43 51.2 |
| | comp=Z,223nm,21.9s,baz=16,slow=34 | | | | | |
| MDJ | **Mudanjiang** | **76.33** | **13** | P | **P** | **06 13 29.4 0.0** |
| MDJ | | | | pmax | pmax | |
| | comp=Z,8.0nm,1.0s | | | | | |
| BTO | **Baotou** | **76.51** | **29** | *eP* | **P** | **06 13 30.8 +0.2** |
| BTO | | | | pP | **sP** | **06 13 35.1 -0.6** |
| BTO | | | | sP | **pwP** | **06 13 37.9 +1.3** |
| BTO | | | | pmax | pmax | |
| | comp=Z,27nm,1.0s | | | | | |
| BTO | | | | pmax | pmax | |
| | comp=Z,300nm,4.4s | | | | | |
| MBAR | **Mbarara** | **76.53** | **114** | LR | LR | 06 48 40.0 |
| | comp=Z,221nm,18.1s,baz=160,slow=37 | | | | | |
| HHC | **Hu-ho-hao-te** | **76.66** | **28** | *eP* | **P** | **06 13 29.9 -1.6** |
| HHC | | | | pmax | pmax | |
| | comp=Z,12nm,0.5s | | | | | |
| HHC | | | | pmax | pmax | |
| | comp=Z,210nm,4.1s | | | | | |
| SIV | **San Ignacio** | **77.78** | **209** | LR | LR | 06 43 39.7 |
| | comp=Z,294nm,20.3s,baz=99,slow=32 | | | | | |
| ASAJ | **Asahikawa** | **77.87** | **4** | LR | LR | 06 49 07.2 |
| | comp=Z,65nm,18.6s,baz=11,slow=37 | | | | | |
| NNA | **Nana** | **78.96** | **225** | LR | LR | 06 48 17.9 |
| | comp=Z,93nm,19.6s,baz=356,slow=36 | | | | | |
| LZH | **Lanzhou** | **79.00** | **35** | *eP* | **P** | **06 13 45.0 +0.3** |
| LZH | | | | pP | pwP | 06 13 51.1 +0.4 |
| LZH | | | | pmax | pmax | |
| | comp=Z,22nm,1.4s | | | | | |
| HNS | **HongShan** | **80.69** | **26** | ⇓*P* | **P** | **06 13 54.8 +1.2** |
| HNS | | | | pmax | pmax | |
| | comp=Z,14nm,1.2s | | | | | |
| KSRS | **Korea Array** | **83.15** | **16** | P | **P** | **06 14 06.4 -0.1** |
| | comp=Z,1.5nm,0.6s,baz=352,slow=5.4,SNR=5.6 | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | |
| MJAR | **Matsushiro Arr** | **85.18** | **8** | P | **P** | **06 14 16.1 -0.8** |
| | comp=Z,1.5nm,0.9s,baz=18,slow=4.3,SNR=4.1 | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | |
| NJ2 | **Nanjing** | **86.76** | **24** | *eP* | **P** | **06 14 23.1 -1.6** |
| NJ2 | | | | pmax | pmax | |
| | comp=Z,4.0nm,0.5s | | | | | |
| CPUP | **Villa Florida** | **86.90** | **203** | P | **P** | **06 14 23.5 -1.7** |
| | comp=Z,1.4nm,0.8s,baz=1.8,slow=6.2,SNR=3.1 | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | |
| PZH | **PanZhiHua** | **87.17** | **40** | P | **P** | **06 14 26.8 -0.2** |
| PZH | | | | pmax | pmax | |
| | comp=Z,20nm,0.8s | | | | | |
| PZH | | | | pmax | pmax | |
| | comp=Z,190nm,5.3s | | | | | |
| MATP | **Matopo** | **92.91** | **125** | LR | LR | 06 58 18.0 |
| | comp=Z,186nm,18.7s,baz=39,slow=37 | | | | | |
| CMAR | **Chiang Mai Arr** | **93.53** | **46** | P | **P** | **06 14 57.1 +0.5** |
| | comp=Z,1.2nm,0.3s,baz=334,slow=6.0,SNR=1.0 | | | | | |
| CMAR | | | | LR | LR | 06 59 06.8 |
| | comp=Z,128nm,20.6s,baz=315,slow=37 | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | |
| PALK | **Pallekele** | **95.49** | **67** | LR | LR | 07 02 29.9 |
| | comp=Z,209nm,19.3s,baz=107,slow=38 | | | | | |
| LBTB | **Lobatse** | **95.76** | **130** | LR | LR | 06 57 55.6 |
| | comp=Z,272nm,20.7s,baz=304,slow=35 | | | | | |
| BOSA | **Boshof** | **98.82** | **132** | LR | LR | 07 01 31.9 |
| | comp=Z,170nm,18.1s,baz=282,slow=36 | | | | | |
| WRA | **Warramunga Arr** | **140.43** | **20** | PKP | **PKPdf** | **06 21 09.1 -0.7** |
| | comp=Z,1.4nm,0.8s,baz=337,slow=2.5,SNR=5.8 | | | | | |
| ASAR | **Alice Springs** | **143.97** | **22** | PKP | PKPab | 06 21 13.2 -0.1 |
| | comp=Z,1.5nm,0.7s,baz=341,slow=2.9,SNR=14 | | | | | |
| QSPA | **South Pole Qui** | **148.18** | **180** | PKPbc | **PKPbc** | **06 21 24.8 -0.3** |
| | comp=Z,3.4nm,0.6s,baz=202,slow=1.6,SNR=11 | | | | | |
| URZ | **Urewera** | **152.48** | **304** | PKPbc | **PKPbc** | **06 21 35.5 -0.8** |
| | comp=Z,12nm,0.9s,baz=333,slow=2.3,SNR=2.0 | | | | | |
| VNDA | **Vanda** | **160.10** | **189** | PKPab | **PKPab** | **06 22 18.6 +0.2** |
| | comp=Z,0.7nm,0.9s,baz=186,slow=2.6,SNR=4.0 | | | | | |

*IDC **14** 06:08:48.1±0.7,58.32N×31.96W,h0km,mb3.7/16, mbtmp3.8/18,ML3.6/2,Error ellipse: s-maj=21.8km s-min=13.9km az=176.0*
*NEIC **14** 06:08:49.8±1.6,58.4N±0.1×31.9W±0.2,h10km±2km, mb4.3/18,Error ellipse: s-maj=20.8km s-min=15.6km az=176.0*

**ISC 14 06:08:50.4±0.6,58.36N±0.09×31.98W±0.06,h13km,n47, σ1s20/40,mb4.0/25,Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| ANGG | **Ammassalik, Gr** | **7.75** | **342** | Pn | **Pn** | **06 10 43.3** | **+0.7** |
| BORG | **Borgarnes** | **8.17** | **34** | Pn | **Pn** | **06 10 48.2** | **-0.2** |
| BORG | **Borgarnes** | **8.17** | **34** | Pn | **Pn** | **06 10 50.2** | **+1.8** |
| | 0.7nm,0.3s,baz=151,slow=15,SNR=1.6 | | | | | | |
| BORG | | | | Sn | **Sn** | **06 12 20.8** | **+0.4** |
| | 0.4nm,0.3s,baz=45,slow=20,SNR=1.0 | | | | | | |
| | 12nm,0.8s | | | | | | |
| EKA | **Eskdalemuir Ar** | **15.99** | **89** | Pn | **Pn** | **06 12 34.4** | **-0.4** |
| | baz=294,slow=11 | | | | | | |
| | 2.1nm,0.9s | | | | | | |
| SCHQ | **Schefferville** | **19.37** | **275** | P | **Pn** | **06 13 16.6** | **0.0** |
| SCHQ | **Schefferville** | **19.37** | **275** | P | **Pn** | **06 13 18.6** | **+2.0** |
| | 2.6nm,0.8s,baz=80,slow=12,SNR=3.6 | | | | | | |
| NOA | **NORSAR Array B** | **21.66** | **64** | P | **P** | **06 13 38.4** | **-1.9** |
| | 0.5nm,0.7s,baz=282,slow=8.4,SNR=1.8 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| HFS | **Hagfors** | **23.07** | **66** | P | **P** | **06 13 55.0** | **-0.2** |
| | 1.8nm,0.8s,baz=297,slow=9.5,SNR=2.4 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| BATG | **Bathurst New B** | **23.13** | **256** | P | **P** | **06 13 56.0** | **+0.2** |
| BATG | | | | IAmb | IAmb | 06 13 57.5 | |
| | comp=Z,10nm,0.9s | | | | | | |
| ESDC | **Sonseca Array** | **25.91** | **124** | P | **P** | **06 14 23.2** | **+1.3** |
| | comp=Z,0.6nm,0.8s,baz=332,slow=10,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| PKME | **Peaks-Kenny Pk** | **26.14** | **256** | P | **P** | **06 14 24.4** | **+0.5** |
| PKME | | | | IAmb | IAmb | 06 14 26.3 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| ARCES | **ARCESS Array B** | **26.47** | **42** | P | **P** | **06 14 25.7** | **-1.0** |
| ARCES | **ARCESS Array B** | **26.47** | **42** | P | **P** | **06 14 26.5** | **-0.2** |
| | comp=Z,2.6nm,0.9s,baz=269,slow=8.8,SNR=5.6 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| FINES | **FINESS Array B** | **28.45** | **59** | P | **P** | **06 14 43.7** | **-0.7** |
| | comp=Z,3.9nm,1.1s,baz=289,slow=8.7,SNR=2.6 | | | | | | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| SADO | **Sadowa** | **31.60** | **265** | P | **P** | **06 15 12.7** | **+0.3** |
| SADO | | | | IAmb | IAmb | 06 15 14.2 | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| AKASG | **Malin Array Be** | **35.19** | **75** | P | **P** | **06 15 43.2** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=287,slow=6.7,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| YKA | **Yellowknife Ar** | **38.36** | **312** | P | **P** | **06 16 10.5** | **0.0** |
| | comp=Z,1.7nm,0.8s,baz=57,slow=8.7,SNR=4.8 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| TATN | **Tataouine** | **38.42** | **113** | | **S** | **06 22 09.2** | **+3.2** |
| SPMN | **Marine on St.** | **38.48** | **277** | P | **P** | **06 16 11.5** | **-0.3** |
| SPMN | | | | IAmb | IAmb | 06 16 13.4 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| F26K | **Sheenjek River** | **44.80** | **330** | P | **P** | **06 16 59.6** | **-3.7** |
| DAWY | **Dawson** | **46.06** | **324** | P | **P** | **06 17 14.7** | **+1.4** |
| M29M | **Somme Creek** | **46.94** | **322** | P | **P** | **06 17 22.1** | **+1.9** |
| ILAR | **Eielson Array** | **47.73** | **328** | P | **P** | **06 17 27.0** | **+0.7** |
| | comp=Z,2.3nm,0.9s,baz=36,slow=6.6,SNR=16 | | | | | | |
| ILAR | | | | PcP | **PcP** | **06 18 54.8** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=49,slow=2.9,SNR=3.1 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| PD31 | **Pinedale Array** | **48.82** | **287** | P | **P** | **06 17 33.9** | **-1.4** |
| PDAR | **Pinedale Array** | **48.82** | **287** | P | **P** | **06 17 34.4** | **-0.9** |
| | comp=Z,1.2nm,0.7s,baz=61,slow=7.5,SNR=15 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| J19K | **Poorman** | **50.65** | **332** | P | **P** | **06 17 49.8** | **+1.2** |
| J19K | | | | IAmb | IAmb | 06 17 52.6 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| DKNS | **Dickens** | **51.18** | **273** | P | **P** | **06 17 52.8** | **-0.3** |
| DKNS | | | | IAmb | IAmb | 06 17 54.3 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| TORD | **Torodi Ar. Bea** | **51.73** | **137** | P | **P** | **06 17 55.7** | **-1.5** |
| | comp=Z,0.5nm,0.5s,baz=347,slow=8.7,SNR=5.1 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| SRU | **San Rafael Swe** | **52.02** | **285** | IAmb | IAmb | 06 18 01.0 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| BVAR | **Borovoye Array** | **52.48** | **48** | P | **P** | **06 18 03.1** | **+0.7** |
| | comp=Z,1.1nm,0.6s,baz=332,slow=8.5,SNR=4.8 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| J08A | **Circle Bar Ran** | **52.78** | **294** | IAmb | IAmb | 06 18 10.7 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| KVN | **Kaiserville** | **55.87** | **290** | P | **P** | **06 18 27.7** | **+0.1** |
| KVN | | | | IAmb | IAmb | 06 18 28.9 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| TXAR | **Lajitas Array** | **56.03** | **272** | P | **P** | **06 18 28.6** | **-0.1** |
| | comp=Z,0.4nm,0.8s,baz=64,slow=8.1,SNR=5.8 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| DUN6 | **Lazy B Ranch** | **56.33** | **278** | P | **P** | **06 18 30.8** | **-0.1** |
| NVAR | **Mina Array Bea** | **56.45** | **290** | P | **P** | **06 18 31.8** | **0.0** |
| | comp=Z,0.6nm,0.7s,baz=68,slow=5.1,SNR=5.4 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| ZALV | **Zalesovo Beam** | **56.98** | **39** | P | **P** | **06 18 34.6** | **-0.4** |
| | comp=Z,0.7nm,0.5s,baz=352,slow=8.7,SNR=2.1 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| KURBB | **Kurchatov Arra** | **57.49** | **45** | P | **P** | **06 18 38.5** | **-0.1** |
| | comp=Z,1.1nm,0.7s,baz=323,slow=7.2,SNR=7.0 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| MK31 | **Makanchi Array** | **62.06** | **45** | P | **P** | **06 19 09.8** | **-0.4** |
| MKAR | **Makanchi Array** | **62.06** | **45** | P | **P** | **06 19 10.0** | **-0.1** |
| | comp=Z,0.8nm,0.6s,baz=334,slow=5.9,SNR=9.8 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| H10N2 | **ASCENSION HYDR** | **67.47** | **161** | T | T | 07 32 36.5 | |
| | baz=349 | | | | | | |
| H10N3 | **ASCENSION HYDR** | **67.48** | **161** | T | T | 07 32 39.5 | |
| | baz=349 | | | | | | |
| H10N1 | **ASCENSION HYDR** | **67.49** | **161** | T | T | 07 32 44.1 | |
| | baz=349 | | | | | | |
| H10S3 | **ASCENSION HYDR** | **68.55** | **162** | T | T | 07 34 07.7 | |
| | baz=350,slow=74,SNR=26 | | | | | | |
| H10S2 | **ASCENSION HYDR** | **68.56** | **162** | T | T | 07 34 08.4 | |
| | baz=230,slow=74,SNR=25 | | | | | | |
| H09N1 | **TRISTAN DA CUN** | **96.49** | **164** | T | T | 08 09 42.0 | |
| | SNR=11 | | | | | | |
| ASAR | **Alice Springs** | **143.89** | **22** | PKP | PKPbc | 06 28 22.5 | -0.3 |
| | comp=Z,0.3nm,0.7s,baz=356,slow=3.0,SNR=2.2 | | | | | | |
| QSPA | **South Pole Qui** | **148.26** | **180** | PKPbc | **PKPbc** | **06 28 33.9** | **-0.6** |
| | comp=Z,1.6nm,0.8s,baz=235,slow=1.5,SNR=10 | | | | | | |

*NOU **14** 06:09:23.9,21.21S×169.39E,h0km,MLv4.0/11, Southeast of Loyalty Islands*
*NEIC **14** 06:09:25.7±2.0,21.20S±0.08×169.54E±0.07,h35km±2km, mb4.7/12,Error ellipse: s-maj=13.5km s-min=10.7km az=339.0*
*IDC **14** 06:09:26.3±5.6,21.30S×169.50E,h42km±47km,mb3.9/7, mbtmp4.1/8,ML3.5/1,MS3.5/3,Error ellipse: s-maj=35.0km s-min=25.6km az=77.0*

**ISC 14 06:09:25.2±0.6,21.29S±0.07×169.54E±0.07,h35km,n54, σ0s86/58,mb4.4/13,4C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAW** | **Mawson** | **76.65** | **202** | LR | LR | 06 51 15.9 | | |
| | comp=Z,103nm,19.1s,baz=348,slow=33 | | | | | | | |
| **BELA** | **Belgrano 2** | **80.04** | **175** | P | **P** | **06 21 30.8** | **0.0** | |
| **TROLL** | **Troll, Antarti** | **86.52** | **184** | ⇑P | **P** | **06 22 04.7** | **+0.4** | |
| | comp=Z,282nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **87.14** | **182** | P | **P** | **06 22 07.1** | **-0.2** | |
| SNAA | | | | IAmb | IAmb | 06 22 09.8 | | |
| | comp=Z,3.8nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **87.14** | **182** | ⇑P | **P** | **06 22 06.8** | **-0.5** | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **87.14** | **182** | P | **P** | **06 22 06.7** | **-0.5** | |
| | comp=Z,1.6nm,0.8s,baz=196,slow=7.1,SNR=5.8 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **87.72** | **180** | ⇑P | **P** | **06 22 09.8** | **-0.2** | |
| | comp=Z,5.8nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **88.01** | **181** | ⇑P | **P** | **06 22 11.3** | **-0.1** | |
| | comp=Z,5.7nm,0.6s,baz=182,slow=5.3 | | | | | | | |
| **SONM** | **Songino Array** | **89.02** | **323** | P | **P** | **06 22 17.9** | **+1.3** | |
| | comp=Z,0.4nm,0.6s,baz=133,slow=6.1,SNR=1.9 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.94** | **48** | P | **P** | **06 22 21.4** | **+0.2** | |
| | comp=Z,0.6nm,0.8s,baz=226,slow=7.5,SNR=4.2 | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | |
| **E23K** | **Chandalar** | **93.97** | **14** | P | **P** | **06 22 38.1** | **-0.9** | |
| E23K | | | | IAmb | IAmb | 06 22 39.0 | | |
| | comp=Z,6.6nm,0.5s | | | | | | | |
| **D24K** | **Happy Valley** | **95.02** | **14** | P | **P** | **06 22 43.4** | **-0.3** | |
| **C24K** | **Franklin Bluff** | **95.49** | **13** | P | **P** | **06 22 42.9** | **-2.9** | |
| **EKA** | **Eskdalemuir Ar** | **145.56** | **353** | PKPbc | **PKPdf** | **06 28 58.7** | **-0.7** | |
| | comp=Z,2.7nm,0.5s,baz=358,slow=2.6,SNR=16 | | | | | | | |
| **CONA** | **Conrad Observa** | **146.03** | **328** | *e*PKP | **PKPab** | **06 29 02.4** | **+0.4** | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **GEC2** | **GERESS Array S** | **146.42** | **331** | PKPdf | **PKPdf** | **06 29 00.9** | **-0.3** | |
| **GERES** | **GERESS Array B** | **146.42** | **331** | PKPbc | **PKPbc** | **06 29 02.6** | **0.0** | |
| | comp=Z,2.9nm,0.7s,baz=48,slow=5.5,SNR=8.4 | | | | | | | |
| **SOKA** | **Soboth** | **147.28** | **327** | *e*PKP | **PKPab** | **06 29 06.4** | **-0.5** | |
| | comp=Z,4.7nm,1.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **147.85** | **329** | *e*PKP | **PKPbc** | **06 29 07.1** | **+0.3** | |
| | comp=Z,3.9nm,1.2s | | | | | | | |
| **LESA** | **Schwarzleotal** | **147.92** | **330** | *i* PKP | **PKPbc** | **06 29 06.8** | **0.0** | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **148.49** | **329** | *i* PKP | **PKPbc** | **06 29 07.6** | **-0.7** | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **WTTA** | **Wattenberg** | **148.52** | **331** | *i* PKP | **PKPbc** | **06 29 08.8** | **+0.3** | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **148.70** | **331** | *i* PKP | **PKPbc** | **06 29 08.8** | **-0.1** | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **148.75** | **331** | *i* PKP | **PKPbc** | **06 29 09.2** | **+0.1** | |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **149.11** | **331** | *i* PKP | **PKPbc** | **06 29 10.1** | **+0.1** | |
| | comp=Z,2.2nm,0.7s | | | | | | | |

**IDC 14 06:29:27.7±2.7, 54°.11N×87°.22E, h0km, mbtmp3.1/3, ML2.7/3, Error ellipse: s-maj=24.8km s-min=14.8km az=70.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.43** | **264** | I | I | 06 37 59.4 | |
| | baz=81,slow=312,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.43** | **264** | Pg | Pn | 06 29 52.5 | -2.3 |
| | 4.5nm,0.3s,baz=86,slow=17,SNR=28 | | | | | | |
| ZALV | | | | Lg | Lg | 06 30 12.2 | |
| | 3.6nm,0.3s,baz=79,slow=28,SNR=9.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.37** | **240** | Pn | Pn | 06 31 03.1 | +0.4 |
| | 0.1nm,0.3s,baz=53,slow=13,SNR=8.7 | | | | | | |
| KURBB | | | | Lg | Lg | 06 32 51.5 | |
| | baz=58,slow=31,SNR=3.7 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.97** | **205** | Pn | Pn | 06 31 25.7 | +0.9 |
| | 0.1nm,0.3s,baz=24,slow=14,SNR=4.8 | | | | | | |
| MKAR | | | | Sn | Sn | 06 32 55.4 | -0.3 |
| | 0.1nm,0.3s,baz=26,slow=28,SNR=2.8 | | | | | | |
| MKAR | | | | Lg | Lg | 06 33 40.5 | |
| | 0.2nm,0.3s,baz=8.2,slow=25,SNR=8.6 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **10.07** | **271** | Pn | Pn | 06 31 54.1 | +0.6 |
| | baz=76,slow=15,SNR=2.4 | | | | | | |
| BVAR | | | | Sn | Sn | 06 33 39.1 | -8.0 |
| | baz=73,slow=24,SNR=5.3 | | | | | | |
| | 0.6nm,0.4s | | | | | | |

*AEIC **14** 06:31:00.6±1.1, 69°.47N±0°.06×144°.22W±0°.08, h9km±6km, ML3.6, ML3.7/112(NEIC), Mwr4.0/10(NEIC), Error ellipse: s-maj=8.9km s-min=2.5km az=201.0*

*IDC **14** 06:31:01.9±0.9, 69°.64N×144°.37W, h0km, mb3.6/7, mbtmp3.6/10, ML3.5/3, Error ellipse: s-maj=23.2km s-min=16.6km az=49.0*

*NEIC **14** 06:31:01.5±1.1, 69°.57N±0°.05×144°.15W±0°.08, h5km±8km, Error ellipse: s-maj=7.2km s-min=4.1km az=188.0, Moment Tensor Solution. Moment tensor: Scale 10^15^Nm; Mrr=0.46; Mθθ=0.04; Mϕϕ=0.50; Mrθ=0.48; Mθϕ=-0.65; Mϕr=0.88; Fault plane solution: M0=1.29000×10^15^ NP1: ϕs=309.04000°, δ=18.64000°, λ=-113.59000°. NP2: ϕs=153.78000°, δ=72.97000°, λ=-82.31000°. Principal axes: T 1.4594, Plg=28.0000°, Azm=238.0000°; N -0.4638, Plg=7.0000°, Azm=332.0000°; P -0.9956, Plg=61.0000°, Azm=75.0000°;*

*NEIC **14** 06:31:01.6, 69°.56N×144°.14W, h5km*

**ISC 14 06:31:02.4±0.6, 69°.52N±0°.03×144°.26W±0°.02, h10km, n100, σ0.96/112, mb3.7/7, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.22** | **60** | Pg | **Pg** | **06 31 05.1** | **-1.8** |
| C27K | | | | | **Sg** | **06 31 08.5** | **-1.5** |
| **C26K** | **Camden Bay** | **0.46** | **331** | | **Pg** | **06 31 10.7** | **-0.7** |
| C26K | | | | | **Sb** | **06 31 18.9** | **-0.6** |
| **D25K** | **Kavik River** | **0.77** | **256** | | **Pg** | **06 31 14.9** | **-2.3** |
| D25K | | | | | **Sg** | **06 31 25.8** | **-1.6** |
| **D27M** | **Malcolm River** | **1.20** | **102** | | **Pb** | **06 31 22.4** | **-2.8** |
| D27M | | | | | **Sb** | **06 31 40.8** | **+0.1** |
| D27M | | | | IAML | | 06 31 47.6 | |
| | comp=N,1μm,0.9s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.57** | **280** | | **Pn** | **06 31 29.9** | **-0.3** |
| C24K | | | | | **Sg** | **06 31 52.4** | **-0.3** |
| C24K | | | | IAML | | 06 31 54.4 | |
| | comp=N,868nm,1.1s | | | | | | |
| C24K | | | | IAML | | 06 32 01.4 | |
| | comp=E,1μm,1.0s | | | | | | |
| **E27K** | **Coleen River** | **1.65** | **143** | | **Pn** | **06 31 30.6** | **-0.8** |
| E27K | | | | | **Sn** | **06 31 53.2** | **+0.6** |
| E27K | | | | IAML | | 06 31 58.2 | |
| | comp=E,967nm,0.9s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **259** | | **Pn** | **06 31 32.3** | **+0.8** |
| D24K | | | | | **Sb** | **06 31 54.6** | **+0.7** |
| **F26K** | **Sheenjek River** | **1.83** | **179** | | **Pn** | **06 31 34.5** | **+0.7** |
| F26K | | | | | **Sn** | **06 31 58.1** | **+1.0** |
| F26K | | | | IAML | | 06 32 00.3 | |
| | comp=N,579nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.93** | **116** | | **Pn** | **06 31 35.8** | **+0.6** |
| E28M | | | | IAML | | 06 32 10.2 | |
| | comp=N,428nm,0.7s | | | | | | |
| **D28M** | **Stokes Point** | **1.96** | **93** | Pn | **Pn** | **06 31 36.5** | **+1.0** |
| D28M | | | | | **Sg** | **06 32 04.5** | **-0.8** |
| D28M | | | | IAML | | 06 32 10.1 | |
| | comp=E,720nm,0.8s | | | | | | |
| **F25K** | **Christian River** | **2.00** | **195** | | **Pn** | **06 31 36.7** | **+0.5** |
| F25K | | | | | **Sb** | **06 32 03.2** | **-0.5** |
| F25K | | | | IAML | | 06 32 05.9 | |
| | comp=E,740nm,1.0s | | | | | | |
| F25K | | | | IAML | | 06 32 08.1 | |
| | comp=N,679nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.10** | **183** | | **Pn** | **06 31 37.9** | **+0.3** |
| **TOLK** | **Toolik Lake Re** | **2.10** | **248** | | **Pn** | **06 31 38.3** | **+0.7** |
| TOLK | | | | IAML | | 06 32 13.5 | |
| | comp=E,500nm,1.1s | | | | | | |
| TOLK | | | | IAML | | 06 32 16.2 | |
| | comp=N,437nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.11** | **229** | | **Pn** | **06 31 38.4** | **+0.6** |
| E24K | | | | | **Sb** | **06 32 07.2** | **+0.2** |
| **C23K** | **Itkillik River** | **2.24** | **281** | | **Pn** | **06 31 39.5** | **0.0** |
| C23K | | | | IAML | | 06 32 16.1 | |
| | comp=E,528nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.35** | **259** | | **Pn** | **06 31 41.4** | **+0.3** |
| D23K | | | | IAML | | 06 32 23.1 | |
| | comp=E,325nm,0.8s | | | | | | |
| D23K | | | | IAML | | 06 32 28.4 | |
| | comp=N,377nm,1.1s | | | | | | |
| **F24K** | **Squaw Lake** | **2.41** | **215** | Pn | **Pn** | **06 31 42.2** | **+0.3** |
| **E23K** | **Chandalar** | **2.44** | **236** | | **Pn** | **06 31 42.7** | **+0.4** |
| E23K | | | | IAML | | 06 32 25.9 | |
| | comp=N,256nm,0.8s | | | | | | |
| E23K | | | | IAML | | 06 32 30.9 | |
| | comp=E,257nm,1.2s | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **138** | | **Pn** | **06 31 43.1** | **+0.1** |
| **E29M** | **Blow River** | **2.56** | **113** | | **Pn** | **06 31 43.8** | **-0.1** |
| E29M | | | | IAML | | 06 32 24.7 | |
| | comp=E,235nm,1.1s | | | | | | |
| E29M | | | | IAML | | 06 32 30.2 | |
| | comp=N,322nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **176** | | **Pn** | **06 31 44.7** | **+0.5** |
| **G25K** | **Bearman Lake** | **2.85** | **195** | | **Pn** | **06 31 48.4** | **+0.6** |
| **G27K** | **Doyon Strip** | **2.89** | **159** | | **Pn** | **06 31 48.3** | **-0.1** |
| **FYU** | **Fort Yukon** | **2.99** | **188** | Pn | **Pn** | **06 31 50.4** | **+0.7** |
| **D22K** | **Ayikyak River** | **3.07** | **262** | Pn | **Pn** | **06 31 51.2** | **+0.2** |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **247** | | **Pn** | **06 31 50.8** | **-0.2** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **205** | | **Pn** | **06 31 50.8** | **-0.2** |
| **COLD** | **Coldfoot** | **3.18** | **227** | | **Pn** | **06 31 52.9** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **3.27** | **289** | | **Pn** | **06 31 54.0** | **+0.5** |
| **H25L** | **Birch Creek** | **3.32** | **191** | | **Pn** | **06 31 55.1** | **+0.8** |
| **H27K** | **Steamboat Moun** | **3.46** | **161** | | **Pn** | **06 31 56.6** | **+0.3** |
| **G29M** | **Pine Creek** | **3.50** | **135** | | **Pn** | **06 31 57.1** | **+0.3** |
| G29M | | | | IAML | | 06 33 01.4 | |
| | comp=N,168nm,1.1s | | | | | | |
| G29M | | | | IAML | | 06 33 16.4 | |
| | comp=E,183nm,0.9s | | | | | | |
| **F22K** | **John River** | **3.54** | **239** | | **Pn** | **06 31 57.6** | **+0.2** |
| **G23K** | **Bananza Creek** | **3.55** | **220** | Pn | **Pn** | **06 31 57.3** | **-0.2** |
| G23K | | | | IAML | | 06 32 58.9 | |
| | comp=E,149nm,1.1s | | | | | | |
| G23K | | | | IAML | | 06 32 58.9 | |
| | comp=N,113nm,1.4s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.63** | **277** | | **Pn** | **06 31 59.8** | **+1.2** |
| **F30M** | **Barrier River** | **3.65** | **118** | | **Pn** | **06 31 59.1** | **+0.3** |
| **A22K** | **Sinclair Lake** | **3.93** | **297** | | **Pn** | **06 32 02.7** | **+0.1** |
| **H24K** | **Noodor Dome** | **3.94** | **202** | | **Pn** | **06 32 02.7** | **-0.2** |
| H24K | | | | IAML | | 06 33 13.4 | |
| | comp=E,109nm,0.8s | | | | | | |
| H24K | | | | IAML | | 06 33 20.7 | |
| | comp=N,84nm,1.3s | | | | | | |
| **H29M** | **Whitestone** | **3.99** | **143** | | **Pn** | **06 32 03.9** | **+0.4** |
| H29M | | | | IAML | | 06 32 54.3 | |
| | comp=E,129nm,0.8s | | | | | | |
| H29M | | | | IAML | | 06 33 17.6 | |
| | comp=N,99nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05** | **188** | | **Pn** | **06 32 04.8** | **+0.4** |
| PRP | | | | IAML | | 06 33 16.4 | |
| | comp=E,103nm,1.0s | | | | | | |
| **I27K** | **Kandik River** | **4.06** | **164** | | **Pn** | **06 32 05.0** | **+0.5** |
| **INK** | **Inuvik** | **4.06** | **102** | | **Pn** | **06 32 04.1** | **-0.4** |
| **INK** | **Inuvik** | **4.06** | **102** | Pn | **Pn** | **06 32 04.4** | **-0.1** |
| | comp=E,1.0nm,0.3s,baz=312,slow=9.0,SNR=18 | | | | | | |
| INK | | | | Sn | **Sn** | **06 32 54.7** | **+2.7** |
| | comp=E,1.0nm,0.3s,baz=68,slow=19,SNR=3.1 | | | | | | |
| | comp=E,3.7nm,0.4s | | | | | | |
| **F21K** | **Alatna River** | **4.12** | **240** | | **Pn** | **06 32 05.3** | **0.0** |
| F21K | | | | IAML | | 06 33 19.4 | |
| | comp=N,70nm,0.8s | | | | | | |
| F21K | | | | IAML | | 06 33 27.6 | |
| | comp=E,80nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.22** | **211** | | **Pn** | **06 32 06.7** | **+0.1** |
| H23K | | | | IAML | | 06 33 18.5 | |
| | comp=N,99nm,0.9s | | | | | | |
| H23K | | | | IAML | | 06 33 19.7 | |
| | comp=E,99nm,1.2s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.25** | **134** | | **Pn** | **06 32 07.3** | **+0.3** |
| **I26K** | **Coal Creek Min** | **4.25** | **174** | | **Pn** | **06 32 07.5** | **+0.4** |
| **I28M** | **Miner Creek** | **4.41** | **156** | | **Pn** | **06 32 09.8** | **+0.5** |
| **I28M** | **Miner Creek** | **4.41** | **156** | IAML | | 06 33 40.2 | |
| | comp=E,67nm,1.1s | | | | | | |
| **D20K** | **Etivluk River** | **4.50** | **265** | | **Pn** | **06 32 11.1** | **+0.7** |
| **E20K** | **Nigu River** | **4.50** | **259** | | **Pn** | **06 32 11.5** | **+1.0** |
| **B20K** | **Meade River** | **4.51** | **282** | | **Pn** | **06 32 10.6** | **+0.1** |
| **H22K** | **Ishtalitna Cre** | **4.54** | **220** | | **Pn** | **06 32 10.8** | **-0.2** |
| **A21K** | **Barrow** | **4.54** | **299** | | **Pn** | **06 32 11.6** | **+0.7** |
| **G31M** | **Satah River** | **4.54** | **120** | | **Pn** | **06 32 10.3** | **-0.6** |
| G31M | | | | IAML | | 06 33 22.9 | |
| | comp=N,76nm,0.9s | | | | | | |
| **G21K** | **Allakaket** | **4.60** | **233** | | **Pn** | **06 32 11.4** | **-0.4** |
| G21K | | | | IAML | | 06 33 34.8 | |
| | comp=N,69nm,1.2s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.76** | **148** | Pn | **Pn** | **06 32 14.2** | **+0.2** |
| I29M | | | | IAML | | 06 33 35.9 | |
| | comp=E,70nm,0.8s | | | | | | |
| I29M | | | | IAML | | 06 33 47.8 | |
| | comp=N,54nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **207** | | **Pn** | **06 32 14.9** | **+0.2** |
| I23K | | | | IAML | | 06 33 41.8 | |
| | comp=E,54nm,1.4s | | | | | | |
| I23K | | | | IAML | | 06 33 44.5 | |
| | comp=N,58nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **201** | | **Pn** | **06 32 15.4** | **+0.3** |
| MDM | | | | IAML | | 06 33 36.6 | |
| | comp=E,55nm,1.0s | | | | | | |
| MDM | | | | IAML | | 06 33 39.4 | |
| | comp=N,56nm,0.8s | | | | | | |
| **COLA** | **College** | **4.87** | **198** | | **Pn** | **06 32 16.0** | **+0.5** |
| **IL31** | | **4.88** | **193** | | **Pn** | **06 32 15.9** | **+0.4** |
| **ILAR** | **Eielson Array** | **4.88** | **193** | | **Pn** | **06 32 15.3** | **-0.3** |
| **ILAR** | **Eielson Array** | **4.88** | **193** | Pn | **Pn** | **06 32 16.1** | **+0.5** |
| | comp=N,2.0nm,0.3s,baz=4.2,slow=14,SNR=148 | | | | | | |
| ILAR | | | | Sn | **Sn** | **06 33 12.1** | **0.0** |
| | comp=N,2.5nm,0.3s,baz=9.9,slow=24,SNR=12 | | | | | | |
| ILAR | | | | Lg | Lg | 06 33 33.5 | |
| | comp=N,4.9nm,0.3s,baz=15,slow=29,SNR=4.1 | | | | | | |
| | comp=N,8.0nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **4.91** | **164** | Pn | **Pn** | **06 32 16.6** | **+0.5** |
| EGAK | | | | IAML | | 06 33 48.5 | |
| | comp=N,60nm,1.2s | | | | | | |
| EGAK | | | | IAML | | 06 33 60.0 | |
| | comp=N,58nm,1.5s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92** | **245** | | **Pn** | **06 32 17.5** | **+1.2** |
| F20K | | | | IAML | | 06 33 46.8 | |
| | comp=E,45nm,1.0s | | | | | | |
| F20K | | | | IAML | | 06 33 53.9 | |
| | comp=N,52nm,1.2s | | | | | | |
| **J25K** | **Salcha River,** | **4.94** | **186** | | **Pn** | **06 32 17.2** | **+0.6** |
| J25K | | | | IAML | | 06 33 37.2 | |
| | comp=E,62nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.04** | **177** | Pn | **Pn** | **06 32 18.9** | **+0.8** |
| J26L | | | | IAML | | 06 33 48.7 | |
| | comp=E,48nm,1.4s | | | | | | |
| J26L | | | | IAML | | 06 33 49.5 | |
| | comp=N,41nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.07** | **224** | Pn | **Pn** | **06 32 18.7** | **+0.4** |
| H21K | | | | IAML | | 06 33 53.2 | |
| | comp=E,48nm,1.2s | | | | | | |
| H21K | | | | IAML | | 06 33 54.4 | |
| | comp=N,46nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **198** | Pn | **Pn** | **06 32 18.8** | **+0.3** |
| **D19K** | **Kuna River** | **5.09** | **265** | Pn | **Pn** | **06 32 19.1** | **+0.5** |
| D19K | | | | IAML | | 06 34 01.7 | |
| | comp=E,37nm,1.6s | | | | | | |
| **MLY** | **Manley** | **5.16** | **212** | Pn | **Pn** | **06 32 20.0** | **+0.5** |
| MLY | | | | IAML | | 06 33 57.9 | |
| | comp=N,34nm,1.6s | | | | | | |
| **E19K** | **Redstone River** | **5.20** | **253** | Pn | **Pn** | **06 32 20.4** | **+0.3** |
| E19K | | | | IAML | | 06 33 20.6 | |
| | comp=N,51nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.27** | **141** | Pn | **Pn** | **06 32 21.1** | **-0.1** |
| I30M | | | | IAML | | 06 33 22.4 | |
| | comp=E,37nm,0.7s | | | | | | |
| I30M | | | | IAML | | 06 33 23.1 | |
| | comp=N,32nm,0.6s | | | | | | |
| **WRH** | **Wood River Hil** | **5.28** | **198** | | **Pn** | **06 32 22.2** | **+0.9** |
| WRH | | | | IAML | | 06 33 56.2 | |
| | comp=N,37nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **203** | | **Pn** | **06 32 21.5** | **+0.1** |
| NEA2 | | | | IAML | | 06 33 57.0 | |
| | comp=E,38nm,1.1s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.45** | **273** | Pn | **Pn** | **06 32 24.4** | **+0.8** |
| **SCRK** | **Sand Creek** | **5.56** | **179** | Pn | **Pn** | **06 32 26.2** | **+1.0** |
| **K27K** | **Chicken** | **5.58** | **170** | | **Pn** | **06 32 26.2** | **+0.9** |
| **F19K** | **Shaleruckik Mo** | **5.71** | **248** | Pn | **Pn** | **06 32 27.9** | **+0.8** |
| **H20K** | **Anotleneega Mo** | **5.74** | **230** | | **Pn** | **06 32 27.6** | **+0.1** |
| **BWN** | **Browne** | **5.75** | **203** | | **Pn** | **06 32 28.0** | **+0.4** |
| **K24K** | **Donnelly Dome** | **5.77** | **187** | | **Pn** | **06 32 27.9** | **-0.1** |
| **DAWY** | **Dawson** | **5.80** | **158** | | **Pn** | **06 32 29.0** | **+0.7** |
| **J30M** | **Hart River** | **5.85** | **144** | Pn | **Pn** | **06 32 29.3** | **+0.2** |
| **DOT** | **Dot Lake** | **5.89** | **179** | | **Pn** | **06 32 30.5** | **+0.8** |
| **G19K** | **Purcell Mounta** | **5.91** | **241** | Pn | **Pn** | **06 32 29.9** | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **6.05** | **209** | Pn | **Pn** | **06 32 32.0** | **+0.2** |
| **C18K** | **Utukok River** | **6.12** | **270** | Pn | **Pn** | **06 32 33.0** | **+0.2** |
| **PAX** | **Paxson** | **6.59** | **185** | | **Pn** | **06 32 40.0** | **+0.7** |
| **WAT1** | **Susitna Watana** | **6.94** | **197** | | **Pn** | **06 32 45.0** | **+1.0** |
| **YUK2** | **White River** | **7.89** | **168** | | **Pn** | **06 32 58.8** | **+1.7** |
| **WRGLY** | **Wrigley** | **10.41** | **117** | | **Pn** | **06 33 31.4** | **-0.1** |
| **YKA** | **Yellowknife Ar** | **13.82** | **106** | Pn | **Pn** | **06 34 14.3** | **-3.7** |
| | comp=E,0.3nm,0.3s,baz=317,slow=13,SNR=15 | | | | | | |
| YKA | | | | Sn | Sn | 06 36 38.4 | -13 |
| | comp=E,0.2nm,0.3s,baz=319,slow=22,SNR=4.6 | | | | | | |
| | comp=E,1.4nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.18** | **128** | P | **P** | **06 37 33.1** | **+2.8** |
| | comp=E,0.5nm,0.7s,baz=16,slow=4.7,SNR=6.5 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.11** | **142** | P | **P** | **06 37 49.8** | **+2.7** |
| | comp=E,0.5nm,0.7s,baz=341,slow=7.6,SNR=5.8 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.40** | **128** | P | **P** | **06 39 30.0** | **+1.3** |
| | comp=E,0.4nm,0.5s,baz=12,slow=4.6,SNR=12 | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.97** | **273** | P | **P** | **06 40 13.1** | **+1.9** |
| | comp=E,1.0nm,0.9s,baz=26,slow=7.1,SNR=1.9 | | | | | | |
| | comp=E,1.0nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.29** | **27** | P | **P** | **06 40 15.2** | **+1.9** |
| | comp=E,1.9nm,0.9s,baz=340,slow=9.3,SNR=3.6 | | | | | | |
| | comp=E,1.9nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.15** | **329** | P | **P** | **06 40 41.0** | **-0.5** |
| | comp=E,0.7nm,0.8s,baz=20,slow=6.8,SNR=4.6 | | | | | | |
| | comp=E,0.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.09** | **324** | P | **P** | **06 41 01.1** | **-1.1** |
| | comp=E,0.2nm,0.4s,baz=53,slow=5.6,SNR=2.7 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |

*IDC **14** 06:43:24.4±1.4, 1°.93N×127°.66E, h0km, mb4.0/9, mbtmp4.0/9, Error ellipse: s-maj=141.1km s-min=16.1km az=67.0*

*NEIC **14** 06:43:33.5±1.4, 1°.84N±0°.10×127°.7E±0°.1, h92km±10km, mb4.1/6, Error ellipse: s-maj=21.8km s-min=12.6km az=110.0*

**ISC 14 06:43:35.5±0.9, 1°.7N±0°.1×127°.7E±0°.1, h100km, n18, σ1.958/19, mb4.0/11, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.99** | **199** | | **Pn** | **06 43 53.9** | **-1.9** |
| TNTI | | | | | **Sn** | **06 44 11.3** | **+0.2** |
| **FAKI** | **Fak Fak** | **6.47** | **135** | Pn | **Pn** | **06 45 06.7** | **-1.6** |
| **FITZ** | **Fitzroy Crossi** | **19.79** | **186** | P | **P** | **06 47 57.4** | **-0.6** |
| **WB0** | **Warramunga Arr** | **22.34** | **163** | P | **P** | **06 48 23.6** | **-1.6** |
| **WRA** | **Warramunga Arr** | **22.49** | **163** | P | **P** | **06 48 26.4** | **-0.4** |
| **WRA** | **Warramunga Arr** | **22.49** | **163** | P | **P** | **06 48 28.0** | **+1.2** |
| | 1.1nm,0.6s,baz=342,slow=10,SNR=9.5 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.49** | **163** | P | **P** | **06 48 26.4** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 06 48 44.7 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.56** | **163** | P | **P** | **06 48 26.8** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 06 48 48.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **25.94** | **167** | P | **P** | **06 49 01.2** | **+2.5** |
| | comp=Z,1.2nm,1.0s,baz=356,slow=8.0,SNR=7.3 | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **35.92** | **160** | P | **P** | **06 50 24.4** | **-1.8** |
| STKA | | | | IAmb | IAmb | 06 50 36.9 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **35.92** | **160** | P | **P** | **06 50 27.9** | **+1.7** |
| | comp=Z,2.2nm,0.6s,baz=329,slow=14,SNR=3.9 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.75** | **326** | P | **P** | **06 53 27.4** | **-2.5** |
| **MKAR** | **Makanchi Array** | **59.75** | **326** | P | **P** | **06 53 30.9** | **+1.0** |
| | comp=Z,1.7nm,0.6s,baz=120,slow=8.4,SNR=24 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.95** | **328** | P | **P** | **06 53 58.4** | **+0.4** |
| | comp=Z,2.1nm,0.6s,baz=128,slow=6.2,SNR=27 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.53** | **327** | P | **P** | **06 54 33.9** | **+0.6** |
| | comp=Z,1.4nm,0.6s,baz=130,slow=6.4,SNR=7.6 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **75.83** | **322** | P | **P** | **06 55 09.9** | **-0.8** |
| | comp=Z,0.8nm,0.6s,baz=90,slow=4.0,SNR=2.3 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **ARU** | **Arti** | **77.14** | **328** | P | **P** | **06 55 17.9** | **-0.1** |
| | comp=Z,2.7nm,0.3s,baz=52,slow=21,SNR=1.6 | | | | | | |
| | comp=Z,2.7nm,0.3s | | | | | | |
| **VNDA** | **Vanda** | **81.32** | **173** | P | **P** | **06 55 43.1** | **+2.8** |
| | comp=Z,0.4nm,0.9s,baz=319,slow=7.3,SNR=1.9 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |

**IDC 14 06:58:10.8±2.3, 54°.60N×83°.70E, h0km, mbtmp2.5/2, ML2.1/2, Error ellipse: s-maj=19.2km s-min=11.3km az=170.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.92** | **134** | I | I | 07 03 40.0 | |
| | baz=314,slow=320,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.92** | **134** | Pg | Pb | 06 58 29.8 | +0.2 |
| | 1.3nm,0.3s,baz=317,slow=14,SNR=8.6 | | | | | | |
| ZALV | | | | Lg | Lg | 06 58 40.9 | |
| | 3.6nm,0.3s,baz=318,slow=30,SNR=15 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.07** | **220** | Pn | Pn | 06 59 28.2 | +0.2 |
| | baz=43,slow=13,SNR=4.5 | | | | | | |
| KURBB | | | | Lg | Lg | 07 00 53.0 | |
| | baz=41,slow=30,SNR=4.3 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.86**

comp=Z,16nm,1.4s
**SENIN Lac Senin/Sane 26.36 100 P P 07 10 14.0 +1.2**
**ARCES ARCESS Array B 26.38 42 P P 07 10 11.0 -1.5**
ARCES IAmb IAmb 07 10 30.9
comp=Z,27nm,1.5s
**ARCES ARCESS Array B 26.38 42 P P 07 10 11.2 -1.3**
comp=Z,1.9nm,0.7s,baz=268,slow=7.2,SNR=2.5
comp=Z,1.9nm,0.7s
**EUNU Eureka 27.07 342 P P 07 10 19.1 +0.5**
EUNU IAmb IAmb 07 11 00.9
comp=Z,7.9nm,1.1s
**DAVOX Davos/Dischmat 27.43 97 LR LR 07 20 10.4**
comp=Z,149nm,21.1s,baz=267,slow=34
**GERES GERESS Array B 28.14 90 LR LR 07 21 40.4**
comp=Z,131nm,18.3s,baz=278,slow=36
**FINES FINESS Array B 28.36 59 P P 07 10 30.0 -0.2**
**FINES FINESS Array B 28.36 59 P P 07 10 29.2 -1.0**
comp=Z,2.0nm,0.7s,baz=312,slow=8.6,SNR=4.4
FINES LR LR 07 21 19.1
comp=Z,78nm,19.7s,baz=306,slow=35
comp=Z,2.0nm,0.7s
**FIA1 FINESS Array S 28.36 59 P P 07 10 30.0 -0.2**
**VRAC Vranov 29.39 87 LR LR 07 22 43.4**
comp=Z,133nm,18.6s,baz=306,slow=37
**K62A Royalston 29.55 256 P P 07 10 42.5 +1.5**
**MDT Midelt 31.51 132 LR LR 07 22 26.0**
comp=Z,149nm,19.4s,baz=238,slow=34
**SADO Sadowa 31.66 265 LR LR 07 22 26.0**
comp=Z,184nm,18.8s,baz=66,slow=34
**AKASG Malin Array Be 35.11 75 P P 07 11 28.5 -1.1**
comp=Z,0.8nm,0.5s,baz=309,slow=8.2,SNR=2.5
AKASG LR LR 07 23 53.1
comp=Z,40nm,21.2s,baz=228,slow=33
comp=Z,0.8nm,0.5s
**KEST Kesra 35.27 112 LR LR 07 24 16.8**
comp=Z,170nm,21.9s,baz=214,slow=34
**EYMN Ely 36.06 280 P P 07 11 39.5 +1.6**
**O52A Adamsville 36.36 262 P P 07 11 42.4 +1.9**
O52A IAmb IAmb 07 11 43.8
comp=Z,13nm,1.1s
**MLR Muntele Rosu 36.72 85 LR LR 07 26 41.3**
comp=Z,102nm,19.7s,baz=294,slow=36
**ULM Lac du Bonnet 36.87 286 P P 07 11 42.3 -2.3**
comp=Z,3.3nm,0.9s,baz=43,slow=7.0,SNR=2.4
ULM LR LR 07 25 36.5
comp=Z,111nm,18.1s,baz=44,slow=34
comp=Z,3.3nm,0.9s
**N49A Columbus Grove 37.00 265 P P 07 11 47.1 +1.2**
N49A IAmb IAmb 07 11 48.9
comp=Z,10.0nm,0.8s
**L46A Eue Claire 37.33 268 P P 07 11 51.4 +2.7**
L46A IAmb IAmb 07 11 53.9
comp=Z,20nm,1.4s
**BLA Blacksburg 37.80 258 P P 07 11 53.2 +0.4**
BLA IAmb IAmb 07 12 09.8
comp=Z,14nm,1.2s
**SSFO Shawnee State 38.12 262 P P 07 11 59.0 +3.6**
SSFO IAmb IAmb 07 12 00.8
comp=Z,10nm,1.1s
**YKA Yellowknife Ar 38.37 312 P P 07 11 57.3 +0.1**
comp=Z,1.9nm,0.9s,baz=58,slow=9.8,SNR=4.7
YKA LR LR 07 27 08.1
comp=Z,231nm,18.0s,baz=74,slow=35
comp=Z,1.9nm,0.9s
**L42A Oliver, Polo 39.11 271 P P 07 12 05.2 +1.6**
L42A IAmb IAmb 07 12 06.4
comp=Z,7.9nm,0.8s
**KIRV Kirov 39.99 54 LR LR 07 27 49.1**
comp=Z,61nm,18.7s,baz=276,slow=35
**V53A Saluda 40.22 258 P P 07 12 13.4 +0.4**
V53A IAmb IAmb 07 12 30.4
comp=Z,12nm,1.4s
**TKL Tuckaleechee C 40.72 259 LR LR 07 27 58.0**
comp=Z,185nm,19.6s,baz=72,slow=34
**INK Inuvik 41.42 327 LR LR 07 28 32.1**
comp=Z,89nm,19.7s,baz=9.5,slow=35
**F31M Tsiigehtchic 42.03 326 P P 07 12 27.0 -0.4**
**BELG Belogornoye 43.05 62 LR LR 07 29 55.7**
comp=Z,52nm,18.9s,baz=9.9,slow=35
**456A Hilliard 43.73 253 P P 07 12 44.1 +2.4**
**I30M Mount Dempster 44.31 324 P P 07 12 46.1 0.0**
**LAO LASA Array 44.40 289 P P 07 12 47.5 +0.5**
LAO IAmb IAmb 07 12 52.7
comp=Z,10nm,1.4s
**C24K Franklin Bluff 44.42 334 P P 07 12 47.3 +0.6**
**BR131 Keskin Array S 44.80 85 P P 07 12 50.8 +0.5**
**BRTR Keskin Array B 44.80 85 P P 07 12 51.0 +0.7**
**BRTR Keskin Array B 44.80 85 P P 07 12 50.0 -0.3**
comp=Z,0.7nm,0.8s,baz=318,slow=6.2,SNR=1.6
BRTR LR LR 07 32 01.3
comp=Z,50nm,19.8s,baz=285,slow=37
comp=Z,0.7nm,0.8s
**250A Grady 44.89 258 P P 07 12 51.3 +0.4**
**FCAR Ozark Folk Cen 44.91 267 P P 07 12 52.6 +1.6**
FCAR IAmb IAmb 07 12 53.2
comp=Z,5.4nm,1.3s
**TOLK Toolik Lake Re 45.44 333 P P 07 12 54.6 -0.4**
**DAWV Dawson 46.05 324 P P 07 12 59.6 -0.2**
DAWV IAmb IAmb 07 13 03.6
comp=Z,5.8nm,1.0s
**I26K Coal Creek Min 46.26 327 P P 07 13 01.5 +0.2**
I26K IAmb IAmb 07 13 03.8
comp=Z,12nm,1.5s
**E22K Anaktuvuk Pass 46.37 333 P P 07 13 01.9 -0.4**
**G23K Bananza Creek 47.04 331 P 07 13 08.0 +0.5**
**SCRK Sand Creek 47.49 326 P P 07 13 12.3 +1.1**
SCRK IAmb IAmb 07 13 14.7
comp=Z,8.7nm,1.2s
**IL31 47.71 328 P P 07 13 12.2 -0.4**
IL31 IAmb IAmb 07 13 19.9
comp=Z,5.4nm,1.1s
**ILAR Eielson Array 47.71 328 P P 07 13 12.2 -0.5**
**ILAR Eielson Array 47.71 328 P P 07 13 12.1 -0.6**
comp=Z,3.2nm,1.0s,baz=34,slow=6.5,SNR=14
ILAR LR LR 07 32 35.2
comp=Z,69nm,19.3s,baz=60,slow=35
comp=Z,3.2nm,1.0s
**BOZ Bozeman (W) 47.84 291 P P 07 13 14.2 +0.1**
**MDM Murphy Dome 47.93 329 P P 07 13 16.7 +2.3**
**NEW Newport 48.57 297 LR LR 07 32 52.1**
comp=Z,150nm,20.6s,baz=50,slow=35
**PD31 Pinedale Array 48.86 287 P P 07 13 21.7 -0.5**
**PDAR Pinedale Array 48.86 287 P P 07 13 21.8 -0.4**
**PDAR Pinedale Array 48.86 287 P P 07 13 20.6 -1.5**
comp=Z,1.4nm,0.8s,baz=66,slow=7.4,SNR=12
PDAR LR LR 07 32 53.1
comp=Z,53nm,19.3s,baz=45,slow=35
comp=Z,1.4nm,0.8s
**AKTO Aktyubinsk 49.12 58 P P 07 13 23.1 -0.7**
comp=Z,3.9nm,0.7s,baz=302,slow=5.4,SNR=12
comp=Z,3.9nm,0.7s
**MMAI Mount Meron Ar 50.80 89 LR LR 07 38 38.2**
comp=Z,73nm,18.6s,baz=174,slow=40
**ABKAR Akbulak array 50.84 58 P P 07 13 36.5 -0.2**
**ABKAR Akbulak array 50.84 58 P P 07 13 36.3 -0.4**
**BMO Blue Mountains 51.14 294 P P 07 13 40.3 +1.1**
**S22A 4UR Ranch, Cre 51.20 281 P P 07 13 42.3 +2.2**
**DKNS Dickens 51.24 273 P P 07 13 40.3 +0.2**
DKNS IAmb IAmb 07 13 42.9
comp=Z,4.5nm,0.9s
**TORD Torodi Ar. Bea 51.73 137 P P 07 13 40.3 -3.5**
comp=Z,0.6nm,0.6s,baz=344,slow=7.0,SNR=4.6
comp=Z,0.6nm,0.6s
**BRDY Brady 52.09 269 P P 07 13 46.7 +0.3**
**BVAR Borovoye Array 52.39 48 P P 07 13 47.6 -0.7**
comp=Z,1.1nm,0.7s,baz=330,slow=8.3,SNR=5.9
comp=Z,1.1nm,0.7s
**J08A Circle Bar Ran 52.81 294 P P 07 13 51.9 +0.1**
**ANMO Albuquerque 53.15 278 LR LR 07 35 22.1**
comp=Z,91nm,20.5s,baz=160,slow=35
**ELK Elko 53.20 290 LR LR 07 35 26.0**
comp=Z,89nm,18.4s,baz=86,slow=35
**SPR3 Spring Creek 3 54.08 287 P P 07 14 02.4 +1.0**
**SAND Sanderson 54.78 271 P P 07 14 07.1 +0.8**
SAND IAmb IAmb 07 14 09.1
comp=Z,3.3nm,0.9s
**YBH Yreka Blue Hor 56.08 296 LR LR 07 37 00.9**
comp=Z,100nm,20.4s,baz=44,slow=35
**TXAR Lajitas Array 56.09 272 P P 07 14 14.3 -1.3**
comp=Z,0.4nm,0.8s,baz=43,slow=6.8,SNR=6.0
comp=Z,0.4nm,0.8s
**NVAR Mina Array Bea 56.49 290 P P 07 14 18.4 -0.2**
comp=Z,0.6nm,0.8s,baz=58,slow=6.0,SNR=5.6
NVAR LR LR 07 37 17.6
comp=Z,89nm,19.0s,baz=88,slow=35
comp=Z,0.6nm,0.8s
**KURBB Kurchatov Arra 57.40 45 P P 07 14 23.4 -1.2**
comp=Z,1.0nm,0.8s,baz=322,slow=7.2,SNR=9.4
comp=Z,1.0nm,0.8s
**PFO Pinyon Flats O 59.34 285 LR LR 07 40 09.5**
comp=Z,75nm,18.1s,baz=79,slow=36
**MKAR Makanchi Array 61.97 45 P P 07 14 54.9 -1.3**
comp=Z,0.7nm,0.8s,baz=334,slow=5.1,SNR=6.6
comp=Z,0.7nm,0.8s
**H10S3 ASCENSION HYDR 68.58 162 T T 08 29 54.6**
baz=230,slow=74,SNR=8.4
**H10S2 ASCENSION HYDR 68.59 162 T T 08 29 49.7**
baz=350,slow=74,SNR=12
**SONM Songino Array 68.66 29 P P 07 15 38.3 -1.3**
comp=Z,0.5nm,0.4s,baz=316,slow=4.0,SNR=1.8
comp=Z,0.5nm,0.4s
**QSPA South Pole Qui 148.32 180 PKPbc PKPdf 07 24 20.1 +2.3**
comp=Z,0.4nm,0.6s,baz=176,slow=0.7,SNR=1.6

**IDC 14 07:12:45.3±1.5, 58°21N×31°88W, h0km, mb3.6/4, mbtmp3.7/5, ML3.4/1, MS3.6/1, Error ellipse: s-maj=38.1km s-min=29.1km az=20.0, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **BORG** | **Borgarnes** | **8.27** | **33** | Pn | | Pn | 07 14 47.8 | +1.6 |
| | 0.5nm,0.3s,baz=270,slow=3.0,SNR=1.7 | | | | | | | |
| | 12nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **28.48** | **59** | P | | P | 07 18 40.1 | -1.5 |
| | 0.9nm,0.8s,baz=302,slow=8.0,SNR=1.7 | | | | | | | |
| | 0.9nm,0.8s | | | | | | | |
| **IDI** | **Anoyia** | **43.51** | **96** | LR | | LR | 07 39 20.2 | |
| | comp=Z,78nm,19.8s,baz=313,slow=37 | | | | | | | |
| **ILAR** | **Eielson Array** | **47.88** | **328** | P | | P | 07 21 25.3 | +0.8 |
| | 0.8nm,1.0s,baz=22,slow=8.1,SNR=3.8 | | | | | | | |
| | 0.8nm,1.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.91** | **287** | P | | P | 07 21 32.0 | -1.0 |
| | 0.4nm,0.7s,baz=58,slow=8.6,SNR=4.4 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.58** | **137** | P | | P | 07 21 53.7 | +0.6 |
| | 0.5nm,0.7s,baz=350,slow=6.3,SNR=3.7 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |

**NAM 14 07:24:28.0±4.5, 19°74S×14°46E, h23km±21km, ML0.4, 6C-1D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.03** | **101** | ⇑*i*P | | Pb | 07 24 33.9 | +1.7 |
| **ST3N** | **ST3** | **0.03** | **101** | *i* P | | Pb | 07 24 34.2 | +2.0 |
| ST3N | | | | *i* S | | Sb | 07 24 35.7 | +0.7 |
| ST3N | | | | IAML | | | 07 24 35.8 | |
| | comp=Z,7.8nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.09** | **223** | ⇑*i*P | | Pb | 07 24 35.5 | +3.0 |
| ST6N | | | | *i* S | | Sb | 07 24 37.6 | +2.0 |
| ST6N | | | | IAML | | | 07 24 39.3 | |
| | comp=Z,2.6nm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.10** | **129** | ⇓*i*P | | Pb | 07 24 33.4 | +0.8 |
| ST9N | | | | *i* S | | Sb | 07 24 34.3 | -1.3 |
| ST9N | | | | IAML | | | 07 24 34.8 | |
| | comp=Z,72nm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.10** | **129** | *i* P | | Pb | 07 24 33.4 | +0.8 |
| ST9N | | | | IAML | | | 07 24 34.8 | |
| | comp=Z,48nm,0.1s | | | | | | | |
| ST9N | | | | *i* S | | Sb | 07 24 34.9 | -0.7 |
| **ST1N** | **ST1** | **0.14** | **91** | *i* S | | Sb | 07 24 35.0 | -1.3 |
| ST1N | | | | *i* S | | Sb | 07 24 35.0 | -1.3 |
| **ST1N** | **ST1** | **0.14** | **91** | *i* P | | Pb | 07 24 33.9 | +0.9 |
| ST1N | | | | *i* S | | Sb | 07 24 35.0 | -1.2 |
| ST1N | | | | IAML | | | 07 24 35.1 | |
| | comp=N,20nm,0.1s | | | | | | | |
| **ST8N** | **ST8** | **0.14** | **288** | ⇑*i*P | | Pn | 07 24 37.3 | +2.3 |
| ST8N | | | | *i* S | | Sb | 07 24 40.5 | +4.2 |
| ST8N | | | | IAML | | | 07 24 41.6 | |
| | comp=Z,0.9nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.23** | **147** | ⇑*i*P | | Pb | 07 24 34.8 | +0.8 |
| ST2N | | | | *i* S | | Sb | 07 24 36.8 | -1.2 |
| ST2N | | | | IAML | | | 07 24 37.0 | |
| | comp=Z,9.5nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.23** | **147** | *i* P | | Pb | 07 24 34.8 | +0.8 |
| ST2N | | | | *i* S | | Sb | 07 24 36.5 | -1.6 |
| ST2N | | | | IAML | | | 07 24 37.4 | |
| | comp=Z,2.7nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.27** | **195** | *i* P | | Pn | 07 24 37.1 | +0.4 |
| ST10N | | | | *i* S | | Sn | 07 24 40.9 | -1.2 |
| ST10N | | | | IAML | | | 07 24 42.5 | |
| | comp=Z,4.1nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.28** | **101** | ⇑*i*P | | Pb | 07 24 35.5 | +0.8 |
| ST5N | | | | *i* S | | Sb | 07 24 37.9 | -1.4 |
| ST5N | | | | IAML | | | 07 24 38.2 | |
| | comp=Z,4.1nm,0.0s | | | | | | | |
| **ST5N** | **ST5** | **0.28** | **101** | *i* P | | Pb | 07 24 35.5 | +0.8 |
| ST5N | | | | *i* S | | Sb | 07 24 37.8 | -1.5 |
| ST5N | | | | IAML | | | 07 24 38.0 | |
| | comp=Z,4.2nm,0.1s | | | | | | | |
| **ST11N** | **ST11** | **0.37** | **77** | ⇑*i*P | | Pb | 07 24 37.0 | +0.9 |
| ST11N | | | | *i* S | | Sb | 07 24 42.2 | +0.7 |
| ST11N | | | | IAML | | | 07 24 42.6 | |
| | comp=Z,1.1nm,0.0s | | | | | | | |

*IDC 14 07:26:42.0±1.2, 58°34N×32°02W, h0km, mb3.4/6, mbtmp3.4/6, Error ellipse: s-maj=39.3km s-min=25.7km az=8.0*

**ISC 14 07:26:44.0±1.0, 58°3N±0°2×31°9W±0°1, h13km, n7, σ1s38/7, mb3.5/6, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **IVI** | **Ivigtut** | **8.70** | **296** | *e*S | | **Sg** | **07 31 23.5** | **+0.8** |
| IVI | | | | IAML | | | 07 31 27.2 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **28.46** | **59** | P | | **P** | **07 32 38.7** | **+0.6** |
| | comp=Z,1.4nm,0.9s,baz=278,slow=9.6,SNR=1.7 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **47.80** | **328** | P | | **P** | **07 35 19.0** | **-1.4** |
| | comp=Z,0.5nm,0.9s,baz=39,slow=5.8,SNR=4.2 | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **48.87** | **287** | P | | **P** | **07 35 27.8** | **-1.5** |
| | comp=Z,0.3nm,0.7s,baz=49,slow=4.1,SNR=2.0 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.66** | **137** | P | | **P** | **07 35 50.2** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=352,slow=6.7,SNR=3.9 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **56.05** | **272** | P | | **P** | **07 36 23.9** | **+1.5** |
| | comp=Z,0.1nm,0.6s,baz=45,slow=7.0,SNR=2.0 | | | | | | | |
| | comp=Z,0.1nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.09** | **45** | P | | **P** | **07 37 04.6** | **+0.6** |
| | comp=Z,0.4nm,0.7s,baz=316,slow=8.1,SNR=3.6 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |

**IDC 14 08:14:26.0±3.6, 53°47N×90°46E, h0km, mbtmp2.9/3, ML2.2/3, Error ellipse: s-maj=30.7km s-min=21.6km az=65.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.39** | **280** | I | | I | 08 36 10.0 | |
| | baz=92,slow=313,SNR=2.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.39** | **280** | Pn | | Pn | 08 15 21.3 | +1.2 |
| | 0.2nm,0.3s,baz=95,slow=16,SNR=1.5 | | | | | | | |
| ZALV | | | | Pg | | Pb | 08 15 27.3 | +0.4 |
| | 0.6nm,0.3s,baz=95,slow=18,SNR=7.4 | | | | | | | |
| ZALV | | | | Sn | | Sn | 08 16 01.9 | +0.9 |
| | 0.9nm,0.3s,baz=100,slow=28,SNR=3.6 | | | | | | | |
| ZALV | | | | Lg | | Lg | 08 16 12.0 | |
| | 1.0nm,0.3s,baz=93,slow=29,SNR=7.3 | | | | | | | |
| | 1.1nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.89** | **254** | Pn | | Pn | 08 16 22.2 | +0.2 |
| | 0.1nm,0.3s,baz=65,slow=14,SNR=7.0 | | | | | | | |
| KURBB | | | | Sn | | Sn | 08 17 51.1 | -0.7 |
| | baz=67,slow=26,SNR=5.1 | | | | | | | |
| KURBB | | | | Lg | | Lg | 08 18 34.1 | |
| | baz=64,slow=31,SNR=1.0 | | | | | | | |
| | 1.3nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.50** | **221** | Pn | | Pn | 08 16 30.7 | +0.4 |
| | 0.1nm,0.3s,baz=38,slow=15,SNR=3.1 | | | | | | | |
| MKAR | | | | Sn | | Sn | 08 18 05.1 | -1.7 |
| | 0.1nm,0.3s,baz=49,slow=27,SNR=2.8 | | | | | | | |
| MKAR | | | | Lg | | Lg | 08 18 51.2 | |
| | 0.1nm,0.3s,baz=49,slow=31,SNR=1.3 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |

*IDC 14 08:17:18.2±0.5, 52°74S×27°65E, h0km, mb4.6/18, mbtmp4.6/18, MS4.1/36, Error ellipse: s-maj=17.6km s-min=12.4km az=83.0*

*MOS 14 08:17:18.8±1.1, 52°62S×27°80E, h10km, mb5.0/16, Error ellipse: s-maj=23.2km s-min=9.9km az=88.7*

*NEIC 14 08:17:20.2±1.6, 52°7S±0°1×27°8E±0°2, h10km±1km, mb5.0/33, Error ellipse: s-maj=20.9km s-min=18.0km az=79.0*

*GCMT 14 08:17:21.2±0.2, 52°71S±0°01×27°61E±0°05, h12km, MW5.0/90, Moment Tensor Solution. s28,c31; s90,c124; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=3.31±.11; Mθθ=3.64±.09; Mφφ=-0.32±.11; Mrθ=0.97±.32; Mφθ=0.93±.09; Mφr=2.35±.48; Best double couple: Mo=4.39500×10^16 NP1:φs=232.00000°, δ62.00000°, λ-119.00000°. NP2: φs=101.00000°, δ39.00000°, λ-48.00000°. Principal axes: T 4.1700, Plg12.0000°, Azm342.00000°; N 0.4580, Plg25.0000°, Azm246.0000°; P -4.6210, Plg62.0000°, Azm96.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 14 08:17:19.9±0.3, 52°63S±0°05×27°99E±0°08, h10km, n256, σ1s25/219, mb5.0/64, MS4.2/50, 7C-7D, South of Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **H04S2** | **CROZET ISLANDS** | **16.46** | **79** | T | | T | 08 38 20.5 | |
| | baz=235,slow=74 | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **16.46** | **79** | T | | T | 08 38 23.2 | |
| | baz=235,slow=74 | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **16.48** | **79** | T | | T | 08 38 20.8 | |
| | baz=235,slow=74 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **16.74** | **77** | T | | T | 08 38 48.3 | |
| | baz=241,slow=74 | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **16.74** | **77** | T | | T | 08 38 49.0 | |
| | baz=241 | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **16.75** | **77** | T | | T | 08 38 48.7 | |
| | baz=241,slow=74 | | | | | | | |
| **BUFB** | **Buffelsbos** | **18.62** | **352** | *e*P | | **P** | **08 21 36.0** | **-1.3** |
| **GRHM** | **Grahamstown, E** | **19.38** | **356** | P | | **Pn** | **08 21 47.6** | **+0.7** |
| GRHM | | | | IAmb | | IAmb | 08 21 50.6 | |
| | comp=Z,55nm,0.9s | | | | | | | |
| **GRHM** | **Grahamstown, E** | **19.38** | **356** | *e*P | | **Pn** | **08 21 47.7** | **+0.8** |
| **NVL** | **N'lazarevskaya** | **19.61** | **196** | *e*P | | **Pn** | **08 21 48.8** | **-0.5** |
| NVL | | | | *e*S | | **Sn** | **08 25 32.5** | **+3.4** |
| NVL | | | | pmax | | pmax | | |
| | comp=Z,66nm,1.3s | | | | | | | |
| NVL | | | | MLR | | MLR | | |
| | comp=Z,228nm,16.0s | | | | | | | |
| **SOE** | **Somerset East** | **19.99** | **354** | P | | **Pn** | **08 21 53.2** | **-0.9** |
| SOE | | | | IAmb | | IAmb | 08 21 57.6 | |
| | comp=Z,156nm,1.8s | | | | | | | |
| **SOE** | **Somerset East** | **19.99** | **354** | *e*P | | **P** | **08 21 52.0** | **-0.4** |
| SOE | | | | IAmb | | IAmb | 08 21 59.0 | |
| | comp=Z,36nm,1.1s | | | | | | | |
| **MATJ** | **Matjiesfontein** | **20.08** | **342** | *e*P | | Pn | 08 21 55.0 | -0.3 |
| **CER** | **Ceres** | **20.25** | **339** | *e*P | | Pn | 08 21 56.5 | -0.7 |
| CER | | | | IAmb | | IAmb | 08 21 59.2 | |
| | comp=Z,51nm,1.0s | | | | | | | |
| **ROOI** | **Rooidraai Farm** | **20.38** | **349** | *e*P | | Pn | 08 21 58.7 | 0.0 |
| ROOI | | | | IAmb | | IAmb | 08 22 01.4 | |
| | comp=Z,97nm,1.2s | | | | | | | |
| **MERW** | **Merweville** | **20.49** | **344** | *e*P | | **P** | **08 21 58.2** | **+0.3** |
| MERW | | | | IAmb | | IAmb | 08 22 07.8 | |
| | comp=Z,142nm,1.4s | | | | | | | |
| **GRAF** | **Camdeboo Natio** | **20.50** | **352** | *e*P | | **P** | **08 21 57.5** | **-0.5** |
| GRAF | | | | IAmb | | IAmb | 08 22 19.6 | |
| | comp=Z,307nm,2.0s | | | | | | | |
| **PRTV** | **Porterville,We** | **20.58** | **338** | *e*P | | **P** | **08 21 58.9** | **0.0** |
| PRTV | | | | IAmb | | IAmb | 08 22 04.2 | |
| | comp=Z,63nm,1.1s | | | | | | | |
| **GRAN** | **Grantham** | **20.75** | **346** | *e*P | | **P** | **08 22 01.2** | **+0.4** |
| GRAN | | | | IAmb | | IAmb | 08 22 10.8 | |
| | comp=Z,44nm,0.5s | | | | | | | |
| **SUR** | **Sutherland** | **20.90** | **343** | P | | **P** | **08 22 03.0** | **+0.5** |
| SUR | | | | IAmb | | IAmb | 08 22 04.2 | |
| | comp=Z,37nm,0.9s | | | | | | | |
| **SUR** | **Sutherland** | **20.90** | **343** | *e*P | | **P** | **08 22 02.6** | **+0.2** |
| SUR | | | | IAmb | | IAmb | 08 22 07.5 | |
| | comp=Z,432nm,2.3s | | | | | | | |
| **SUR** | **Sutherland** | **20.90** | **343** | P | | **P** | **08 22 02.9** | **+0.5** |
| | comp=Z,42nm,1.0s,baz=150,slow=12,SNR=17 | | | | | | | |
| SUR | | | | S | | **S** | **08 25 49.3** | **-6.1** |
| | comp=Z,9.5nm,1.0s,baz=346,slow=7.4,SNR=2.0 | | | | | | | |
| SUR | | | | LR | | LR | 08 28 23.8 | |
| | comp=Z,2μm,21.2s,baz=157,slow=32 | | | | | | | |
| | comp=Z,42nm,1.0s | | | | | | | |
| **BFON** | **Badsfontein, M** | **21.05** | **350** | *e*P | | **P** | **08 22 05.2** | **+1.1** |
| BFON | | | | IAmb | | IAmb | 08 22 08.4 | |
| | comp=Z,54nm,0.9s | | | | | | | |
| **BRAK** | **Brakfontein** | **21.16** | **348** | *e*P | | **P** | **08 22 04.4** | **-0.8** |
| BRAK | | | | IAmb | | IAmb | 08 22 17.3 | |
| | comp=Z,722nm,2.9s | | | | | | | |
| **FRAZ** | **Fraserburg** | **21.24** | **344** | *e*P | | **P** | **08 22 06.0** | **0.0** |
| FRAZ | | | | IAmb | | IAmb | 08 22 17.6 | |
| | comp=Z,36nm,1.0s | | | | | | | |
| **CVNA** | **Calvinia** | **21.97** | **341** | *e*P | | **P** | **08 22 14.7** | **+0.8** |
| CVNA | | | | IAmb | | IAmb | 08 22 22.8 | |
| | comp=Z,83nm,1.2s | | | | | | | |
| **KSTD** | **Kokstad** | **22.02** | **3** | *e*P | | **P** | **08 22 15.5** | **+1.0** |
| KSTD | | | | IAmb | | IAmb | 08 22 30.8 | |
| | comp=Z,298nm,2.4s | | | | | | | |
| **HVD** | **Gariep Dam** | **22.09** | **354** | *e*P | | **P** | **08 22 14.6** | **-0.5** |
| HVD | | | | IAmb | | IAmb | 08 22 20.2 | |
| | comp=Z,83nm,1.2s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **22.40** | **201** | ⇓P | | **P** | **08 22 17.6** | **-0.6** |
| | comp=Z,942nm,0.8s | | | | | | | |
| **MAW** | **Mawson** | **22.50** | **145** | P | | **P** | **08 22 20.4** | **+1.2** |
| | comp=Z,7.0nm,1.0s,baz=272,slow=15,SNR=4.3 | | | | | | | |
| MAW | | | | S | | **S** | **08 26 20.4** | **-5.2** |
| | comp=Z,3.6nm,0.6s,baz=266,slow=14,SNR=3.4 | | | | | | | |
| MAW | | | | LR | | LR | 08 29 12.2 | |
| | comp=Z,726nm,21.9s,baz=322,slow=32 | | | | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **PMBG** | **Pietermaritzbu** | **23.18** | **6** | *e*P | | **P** | **08 22 27.4** | **+0.9** |
| PMBG | | | | IAmb | | IAmb | 08 22 30.2 | |
| | comp=Z,100nm,1.6s | | | | | | | |
| **SNAA** | **Sanae** | **23.41** | **204** | P | | **P** | **08 22 28.9** | **+0.2** |
| **SNAA** | **Sanae** | **23.41** | **204** | *e*P | | **P** | **08 22 29.4** | **+0.7** |
| SNAA | | | | IAmb | | IAmb | 08 22 31.9 | |
| | comp=Z,8μm,1.6s | | | | | | | |
| **SNAA** | **Sanae** | **23.41** | **204** | ⇓P | | **P** | **08 22 28.9** | **+0.2** |
| | comp=Z,391nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **23.41** | **204** | P | | **P** | **08 22 28.4** | **-0.2** |
| | comp=Z,26nm,1.1s,baz=65,slow=8.1,SNR=85 | | | | | | | |
| SNAA | | | | S | | **S** | **08 26 38.9** | **-2.6** |
| | comp=Z,1.0nm,1.0s,baz=104,slow=19,SNR=1.5 | | | | | | | |
| SNAA | | | | LR | | LR | 08 29 31.7 | |
| | comp=Z,796nm,21.4s,baz=72,slow=32 | | | | | | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **23.41** | **204** | *c* iP | | **P** | **08 22 29.0** | **+0.3** |
| SNAA | | | | pmax | | pmax | | |
| | comp=Z,41nm,1.2s | | | | | | | |
| **BOSA** | **Boshof** | **24.08** | **354** | P | | **P** | **08 22 35.4** | **-0.1** |
| **BOSA** | **Boshof** | **24.08** | **354** | *e*P | | **P** | **08 22 34.9** | **-0.5** |
| BOSA | | | | IAmb | | IAmb | 08 22 40.6 | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **BOSA** | **Boshof** | **24.08** | **354** | P | | **P** | **08 22 35.5** | **-0.1** |
| | comp=Z,10nm,0.6s,baz=180,slow=10,SNR=27 | | | | | | | |
| BOSA | | | | LR | | LR | 08 30 13.7 | |
| | comp=Z,1μm,20.9s,baz=176,slow=32 | | | | | | | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **BOSA** | **Boshof** | **24.08** | **354** | P | | **P** | **08 22 35.4** | **-0.1** |
| BOSA | | | | pmax | | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **24.20** | **208** | ⇓P | | **P** | **08 22 35.9** | **-0.2** |
| | comp=Z,23nm,0.7s,baz=54,slow=10.0 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **24.32** | **209** | ⇓P | | **P** | **08 22 37.7** | **+0.6** |
| | comp=Z,90nm,0.9s | | | | | | | |
| **SNKL** | **Senekal, Frees** | **24.33** | **360** | *e*P | | **P** | **08 22 38.6** | **+0.7** |
| SNKL | | | | IAmb | | IAmb | 08 22 40.1 | |
| | comp=Z,251nm,2.3s | | | | | | | |
| **KEIM** | **Keimoes** | **24.46** | **345** | *e*P | | **P** | **08 22 38.7** | **-0.2** |
| KEIM | | | | IAmb | | IAmb | 08 23 15.4 | |
| | comp=Z,39nm,1.4s | | | | | | | |
| **AUGR** | **Augrabies** | **24.68** | **344** | *e*P | | **P** | **08 22 39.5** | **-1.3** |
| AUGR | | | | IAmb | | IAmb | 08 22 47.8 | |
| | comp=Z,130nm,2.1s | | | | | | | |
| **UPI** | **Upington** | **24.76** | **346** | *e*P | | **P** | **08 22 41.9** | **+0.3** |
| UPI | | | | IAmb | | IAmb | 08 22 45.7 | |
| | comp=Z,140nm,1.8s | |

ARMS IAmb IAmb 08 22 47.8
comp=Z,169nm,2.1s
**POGA Pongola 25.41 8** P **P** **08 22 47.5 +0.1**
POGA IAmb IAmb 08 22 49.7
comp=Z,36nm,1.3s
**SWZ Schweizer 25.50 355** *eP* **P** **08 22 47.1 -1.3**
SWZ IAmb IAmb 08 22 51.1
comp=Z,182nm,2.3s
**PRYS Parys 25.68 359** *eP* **P** **08 22 51.1 +1.0**
PRYS IAmb IAmb 08 23 00.7
comp=Z,38nm,1.2s
**CRLN Carolina, Mapu 26.65 4** *eP* **P** **08 22 58.1 -0.8**
CRLN IAmb IAmb 08 23 13.3
comp=Z,8.9nm,0.8s
**HRAO HartRAO 26.71 359** *eP* **P** **08 22 58.8 -0.5**
**TSWA Tswaing Meteor 27.17 0** *eP* **P** **08 23 05.7 +2.2**
TSWA IAmb IAmb 08 23 14.1
comp=Z,206nm,2.8s
**NYAT Nyati, Northwe 27.23 359** *eP* **P** **08 23 05.6 +1.6**
NYAT IAmb IAmb 08 23 13.4
comp=Z,28nm,1.1s
**RUST Rust De Winter 27.36 1** *eP* **P** **08 23 05.9 +0.8**
RUST IAmb IAmb 08 23 15.3
comp=Z,72nm,1.6s
**LBTB Lobatse 27.64 355** P **P** **08 23 07.6 -0.1**
**LBTB Lobatse 27.64 355** *eP* **P** **08 23 06.9 -0.8**
LBTB IAmb IAmb 08 23 15.9
comp=Z,22nm,1.4s
**LBTB Lobatse 27.64 355** LR LR 08 32 30.9
comp=Z,1µm,20.2s,baz=174,slow=33
**LBTB Lobatse 27.64 355** P **P** **08 23 07.6 -0.1**
LBTB pmax pmax
comp=Z,14nm,1.1s
**NHAM Northam, North 27.68 359** *eP* **P** **08 23 06.8 -1.3**
NHAM IAmb IAmb 08 23 33.7
comp=Z,207nm,2.8s
**PILG Pilgrimsrest, 27.74 5** *eP* **P** **08 23 08.0 -0.7**
PILG IAmb IAmb 08 23 18.0
comp=Z,15nm,1.0s
**HOED Hoedspruit, Li 28.27 6** *eP* **P** **08 23 14.0 +0.8**
HOED IAmb IAmb 08 23 21.2
comp=Z,11nm,0.8s
**LEPH Lephalale, Lim 28.73 360** *eP* **P** **08 23 17.1 -0.3**
LEPH IAmb IAmb 08 23 34.8
comp=Z,19nm,1.2s
**MOPA Mopani 29.19 6** *eP* **P** **08 23 21.6 +0.2**
MOPA IAmb IAmb 08 23 30.1
comp=Z,38nm,1.4s
**MPHEP Siloam, Limpop 29.73 4** *eP* **P** **08 23 26.9 +0.7**
MPHEP IAmb IAmb 08 23 34.5
comp=Z,30nm,1.5s
**CRAIL Swartwater, Li 29.78 0** *eP* **P** **08 23 26.6 -0.1**
CRAIL IAmb IAmb 08 23 27.6
comp=Z,392nm,1.1s
**MUSN Musina, Limpop 30.33 3** *eP* **P** **08 23 32.3 +0.8**
**WIN Windhoek 31.16 340** *eP* **P** **08 23 38.8 -0.2**
WIN IAmb IAmb 08 23 48.7
comp=Z,6.5nm,1.2s
**MATP Matopo 32.15 1** LR LR 08 34 36.2
comp=Z,355nm,21.8s,baz=233,slow=32
**CHIPN CHIPINGE 32.54 8** *eP* **P** **08 23 51.8 +0.7**
**BELA Belgrano 2 33.47 200** P **P** **08 23 58.4 -0.2**
BELA IAmb IAmb 08 24 01.5
comp=Z,9.9nm,0.9s
**TSUM Tsumeb 34.34 342** P **P** **08 24 06.8 0.0**
TSUM IAmb IAmb 08 24 08.4
comp=Z,17nm,0.8s
**TSUM Tsumeb 34.34 342** *eP* **P** **08 24 07.5 +0.7**
TSUM IAmb IAmb 08 24 08.2
comp=Z,17nm,0.8s
**KRI Karoi 35.74 3** *eP* **P** **08 24 19.4 +0.5**
**LSZ Lusaka 37.27 0** P **P** **08 24 32.2 +0.3**
**LSZ Lusaka 37.27 0** P **P** **08 24 32.2 +0.3**
LSZ pmax pmax
comp=Z,11nm,0.9s
**QSPA South Pole Qui 37.59 180** P **P** **08 24 33.6 -0.7**
**QSPA South Pole Qui 37.59 180** P **P** **08 24 33.5 -0.7**
comp=Z,34nm,1.0s,baz=254,slow=2.6,SNR=74
QSPA LR LR 08 39 30.9
comp=Z,560nm,19.7s,baz=242,slow=36
comp=Z,34nm,1.0s
**CASY Casey 40.80 142** P **P** **08 25 01.6 +0.8**
CASY IAmb IAmb 08 25 03.4
comp=Z,24nm,0.8s
**PMSA Palmer Station 45.01 217** LR LR 08 40 31.3
comp=Z,268nm,21.3s,baz=116,slow=31
**VNDA Vanda 47.01 168** P **P** **08 25 50.7 +0.1**
VNDA IAmb IAmb 08 25 51.5
comp=Z,8.9nm,0.8s
**VNDA Vanda 47.01 168** P **P** **08 25 50.6 +0.1**
comp=Z,8.1nm,0.7s,baz=240,slow=8.0,SNR=70
VNDA LR LR 08 44 45.1
comp=Z,502nm,21.8s,baz=208,slow=35
comp=Z,8.1nm,0.7s
**VNDA Vanda 47.01 168** P **P** **08 25 50.7 +0.1**
VNDA pmax pmax
comp=Z,9.0nm,0.8s
**SBA Scott Base 47.34 169** P **P** **08 25 54.3 +1.2**
SBA IAmb IAmb 08 25 55.3
comp=Z,16nm,0.9s
**SBA Scott Base 47.34 169** P **P** **08 25 54.3 +1.2**
SBA pmax pmax
comp=Z,17nm,0.9s
**MBAR Mbarara 51.90 3** LR LR 08 46 51.8
comp=Z,512nm,21.2s,baz=171,slow=34
**MBAR Mbarara 51.90 3**i *eP* **P** **08 26 28.0 -0.7**
MBAR pmax pmax
comp=Z,15nm,1.3s
**H10S2 ASCENSION HYDR 55.55 306** T T 09 26 46.5
baz=149,slow=74,SNR=91
**H10S3 ASCENSION HYDR 55.56 306** T T 09 26 47.5
baz=71,slow=74,SNR=97
**DGAR Diego Garcia 57.79 55**i *eP* **P** **08 27 11.0 -0.3**
**PLTB Pedras Altas 60.58 255** P **P** **08 27 29.8 -0.6**
PLTB IAmb IAmb 08 27 32.8
comp=Z,13nm,1.0s
**PLTB Pedras Altas 60.58 255** *eP* **P** **08 27 31.8 +1.3**
**TRQA Tornquist 60.86 245** P **P** **08 27 31.1 -1.2**
TRQA IAmb IAmb 08 27 35.0
comp=Z,24nm,1.4s
**TRQA Tornquist 60.86 245** P **P** **08 27 31.1 -1.2**
TRQA pmax pmax
comp=Z,24nm,1.4s
**H01W2 Cape Leeuwin H 60.98 110** T T 09 34 34.3
baz=224,slow=74
**H01W3 Cape Leeuwin H 60.99 110** T T 09 34 41.3
baz=224
**H01W1 Cape Leeuwin H 60.99 110** T T 09 34 36.8
baz=224,slow=74
**CPSB Cacapava Do Su 61.46 257** *eP* **P** **08 27 38.4 +2.0**
**RIB01 Linhares ES 61.79 275** *eP* **P** **08 27 40.8 +2.1**
**FURI Furi 61.97 12** LR LR 08 52 51.5
comp=Z,38nm,21.5s,baz=192,slow=34
**ALGR Alto Alegre (B 62.39 258** *eP* **P** **08 27 44.3 +1.5**
**RODS Rosario do Sul 62.54 255** *eP* **P** **08 27 45.9 +2.2**
**SJMB Sao Joao De Ma 62.73 275** *eP* **P** **08 27 46.5 +1.4**
**ITAB Concordia 63.00 260** *eP* **P** **08 27 49.4 +2.6**
**PLCA Paso Flores 63.48 237** P **P** **08 27 48.7 -1.2**
PLCA IAmb IAmb 08 27 53.3
comp=Z,18nm,1.4s
**PLCA Paso Flores 63.48 237** P **P** **08 27 48.4 -1.5**
comp=Z,9.2nm,1.2s,baz=158,slow=5.2,SNR=9.0
PLCA LR LR 08 50 10.1
comp=Z,38nm,21.8s,baz=134,slow=31
comp=Z,9.2nm,1.2s
**PLCA Paso Flores 63.48 237** *eP* **P** **08 27 48.7 -1.2**
**ITQB Itaqui 63.88 255** P **P** **08 27 51.5 -1.0**
**CRSM Crissiumal (Br 63.95 258** *eP* **P** **08 27 53.0 -0.1**
**NWAO Narrogin (SRO) 64.17 111** LR LR 08 51 23.2
comp=Z,86nm,20.4s,baz=54,slow=32
**DIAM Diamantina, MG 64.56 273** *eP* **P** **08 27 58.2 +0.9**
**GO06 Curarrehue 64.80 237** P **P** **08 27 57.1 -1.5**
**PTGB Pitanga 64.82 262** *eP* **P** **08 27 58.8 -0.1**
**ATD Arta Tunnel 65.17 16** LR LR 08 56 56.7
comp=Z,5.5nm,18.1s,baz=200,slow=36
**DBIC Dimbokro 65.34 324** P **P** **08 28 02.1 0.0**
DBIC IAmb IAmb 08 28 03.9
comp=Z,13nm,0.9s
**DBIC Dimbokro 65.34 324** *eP* **P** **08 28 02.2 0.0**
**DBIC Dimbokro 65.34 324** P **P** **08 28 01.9 -0.2**
comp=Z,8.1nm,0.8s,baz=138,slow=8.4,SNR=9.0
DBIC LR LR 08 50 12.9
comp=Z,200nm,21.6s,baz=170,slow=30
comp=Z,8.1nm,0.8s
**DBIC Dimbokro 65.34 324** P **P** **08 28 02.2 0.0**
DBIC pmax pmax
comp=Z,13nm,1.0s
**PMNB Patos De Minas 66.06 271** *eP* **P** **08 28 08.0 +1.0**
**NBLA Lagarto - SE 66.69 283** *eP* **P** **08 28 12.0 +1.1**
**CPUP Villa Florida 66.77 257** P **P** **08 28 11.0 -0.4**
CPUP IAmb IAmb 08 28 13.4
comp=Z,14nm,0.9s
**CPUP Villa Florida 66.77 257** P **P** **08 28 08.9 -2.4**
comp=Z,8.2nm,0.8s,baz=133,slow=5.9,SNR=23
CPUP LR LR 08 52 01.9
comp=Z,48nm,20.0s,baz=140,slow=31
comp=Z,8.2nm,0.8s
**CPUP Villa Florida 66.77 257** P **P** **08 28 11.0 -0.4**
CPUP pmax pmax
comp=Z,14nm,1.0s
**JANB Januaria 67.44 275** *eP* **P** **08 28 15.3 -0.5**
**IPMB Ipameri, GO 67.56 270** *eP* **P** **08 28 19.3 +2.8**
**BDFB Brasilia 69.24 271** P **P** **08 28 27.0 -0.1**
comp=Z,4.3nm,0.8s,baz=115,slow=9.0,SNR=5.0
BDFB LR LR 08 53 17.7
comp=Z,109nm,19.5s,baz=157,slow=31
comp=Z,4.3nm,0.8s
**BDFB Brasilia 69.24 271** P **P** **08 28 27.0 -0.1**
**TOA0 Torodi Ar. Sit 69.32 333** P **P** **08 28 27.6 +0.3**
**TORD Torodi Ar. Bea 69.32 333** P **P** **08 28 26.9 -0.4**
comp=Z,8.3nm,0.7s,baz=152,slow=6.5,SNR=39
TORD LR LR 08 52 56.1
comp=Z,113nm,20.1s,baz=148,slow=31
comp=Z,8.3nm,0.7s
**SDBA SAO DESIDERIO 69.85 276** *eP* **P** **08 28 32.8 +1.9**
**AQDB Aquidauana 70.21 262** P **P** **08 28 31.2 -1.7**
**AQDB Aquidauana 70.21 262** *eP* **P** **08 28 34.6 +1.7**
**MURT Porto Murtinho 70.46 260** *eP* **P** **08 28 35.5 +1.1**
**CO01 Juntas del Tor 71.35 245** P **P** **08 28 38.8 -1.3**
CO01 IAmb IAmb 08 28 43.8
comp=Z,14nm,0.8s
**ARAG Araguaiana, MT 71.50 268** *eP* **P** **08 28 41.0 +0.2**
**NBPB Pedra_Branca-C 72.09 285** *eP* **P** **08 28 46.3 +1.9**
**NBCL Cascavel-CE 72.39 287** *eP* **P** **08 28 47.4 +1.3**
**SALV Santo Antonio 73.71 265** *eP* **P** **08 28 55.4 +1.4**
**SNDB Serra Nova Dou 74.08 271** *eP* **P** **08 28 58.5 +2.3**
**SMTB Santa Maria do 74.25 276** *eP* **P** **08 28 57.5 +0.3**
**PALK Pallekele 74.54 55** LR LR 08 54 26.7
comp=Z,98nm,19.4s,baz=8.2,slow=30
**PTLB Pontes e Lacer 76.15 263** P **P** **08 29 06.7 -1.4**
**LVC Limon Verde 76.38 251** LR LR 08 59 58.0
comp=Z,30nm,18.9s,baz=172,slow=34
**LVC Limon Verde 76.38 251** *eP* **P** **08 29 10.9 +1.1**
**SIV San Ignacio 76.90 261** LR LR 08 57 14.5
comp=Z,158nm,20.3s,baz=100,slow=31
**BBTS Babate 77.22 316** LR LR 08 58 36.0
comp=Z,152nm,18.4s,baz=8.5,slow=32
**PDRB Porto dos Gac 77.67 267** *eP* **P** **08 29 16.5 -0.2**
**STKA Stephens Creek 77.94 127** P **P** **08 29 17.8 -0.2**
comp=Z,5.1nm,0.8s,baz=217,slow=3.1,SNR=5.4
STKA LR LR 08 55 27.1
comp=Z,96nm,21.4s,baz=207,slow=29
comp=Z,5.1nm,0.8s
**STKA Stephens Creek 77.94 127** *eP* **P** **08 29 18.8 +0.8**
STKA pmax pmax
comp=Z,5.0nm,0.8s
**TMAB Tom-Au,PA,Br 79.69 280** *eP* **P** **08 29 27.6 -0.1**
**FITZ Fitzroy Crossi 80.35 107** P **P** **08 29 30.6 -0.8**
**NPGB Novo Progresso 80.40 271** *eP* **P** **08 29 34.2 +2.5**
**ASAR Alice Springs 80.61 117** P **P** **08 29 32.6 -0.1**
**ASAR Alice Springs 80.61 117** P **P** **08 29 33.1 +0.4**
comp=Z,6.0nm,0.7s,baz=210,slow=4.9,SNR=62
ASAR LR LR 09 02 15.4
comp=Z,90nm,19.2s,baz=239,slow=33
comp=Z,6.0nm,0.7s
**AS31 Alice Springs 80.61 117** P **P** **08 29 32.6 -0.1**
**RPSI Rantau Prapat 80.69 73** P **P** **08 29 34.4 +1.3**
**PSI Prapat 80.77 73** P **P** **08 29 34.4 +0.7**
PSI pmax pmax
comp=Z,38nm,1.4s
**LPAZ La Paz 80.87 255** P **P** **08 29 34.6 -0.3**
**LPAZ La Paz 80.87 255** P **P** **08 29 33.0 -1.9**
comp=Z,0.7nm,0.5s,baz=219,slow=0.3,SNR=6.7
LPAZ LR LR 09 02 07.4
comp=Z,35nm,19.1s,baz=115,slow=33
comp=Z,0.7nm,0.5s
**LPAZ La Paz 80.87 255** P **P** **08 29 34.6 -0.3**
LPAZ pmax pmax
comp=Z,6.0nm,1.3s
**LPAZ La Paz 80.87 255** *eP* **P** **08 29 35.5 +0.6**
**EIL Elat 82.18 6** LR LR 09 06 04.6
comp=Z,112nm,20.1s,baz=250,slow=36
**SAML Samuel 83.67 264** P **P** **08 29 47.7 -1.1**
SAML IAmb IAmb 08 29 51.8
comp=Z,9.9nm,0.9s
**SAML Samuel 83.67 264** P **P** **08 29 47.7 -1.1**
SAML pmax pmax
comp=Z,10.0nm,0.9s
**WRA Warramunga Arr 83.84 115** P **P** **08 29 50.0 +0.3**
**WRA Warramunga Arr 83.84 115** P **P** **08 29 49.3 -0.4**
comp=Z,5.8nm,0.9s,baz=212,slow=4.1,SNR=29
WRA LR LR 08 58 45.0
comp=Z,90nm,20.8s,baz=276,slow=30
comp=Z,5.8nm,0.9s
**WRA Warramunga Arr 83.84 115** *eP* **P** **08 29 50.0 +0.3**
WRA pmax pmax
comp=Z,6.0nm,0.9s
**WRAB Tennant Creek 83.85 115**i *eP* **P** **08 29 49.4 -0.3**
WRAB pmax pmax
comp=Z,10.0nm,1.0s
**ETMB Extrema 84.82 261** P **P** **08 29 52.7 -2.0**
ETMB IAmb IAmb 08 29 55.8
comp=Z,11nm,1.2s
**MMAI Mount Meron Ar 85.53 6** LR LR 09 08 21.1
comp=Z,124nm,19.8s,baz=126,slow=36
**URZ Urewera 85.58 156** LR LR 09 06 08.3
comp=Z,184nm,20.2s,baz=224,slow=34
**MACA Manacapuru-AM 86.70 269** *eP* **P** **08 30 05.2 +1.2**
**MDP Montagnes des 88.35 281** LR LR 09 03 38.3
comp=Z,80nm,20.8s,baz=128,slow=32
**NNA Nana 89.37 251** LR LR 09 08 43.0
comp=Z,22nm,19.0s,baz=138,slow=35
**KEST Kesra 89.49 345** LR LR 09 11 06.4
comp=Z,193nm,20.7s,baz=152,slow=36
**MDT Midelt 89.72 333** LR LR 09 09 39.7
comp=Z,106nm,18.4s,baz=164,slow=35
**CTA Charters Tower 90.04 124** LR LR 09 03 52.5
comp=Z,8.2nm,19.9s,baz=230,slow=31
**BOAV Boa Vista 90.98 273** *eP* **P** **08 30 25.1 +0.8**
**TBTG Tabatinga, AM 91.49 261** *eP* **P** **08 30 27.0 +0.4**
**BR131 Keskin Array S 92.11 4**i *eP* **P** **08 30 30.4 +1.5**
**BRTR Keskin Array B 92.11 4** P **P** **08 30 30.1 +1.2**
comp=Z,0.3nm,0.4s,baz=169,slow=5.2,SNR=1.6
comp=Z,0.3nm,0.4s
**CMAR Chiang Mai Arr 93.48 64** P **P** **08 30 36.9 +1.3**
comp=Z,0.7nm,0.3s,baz=165,slow=3.7,SNR=1.6
comp=Z,0.7nm,0.3s
**GNI Garni 93.55 13** LR LR 09 11 10.1
comp=Z,104nm,21.7s,baz=198,slow=34
**GNI Garni 93.55 13**i *eP* **P** **08 30 34.5 -1.0**
GNI pmax pmax
comp=Z,21nm,1.4s
**ATAH Atahualpa 94.17 253** LR LR 09 12 08.8
comp=Z,45nm,19.1s,baz=46,slow=35
**ESDC Sonseca Array 96.03 336** P **P** **08 30 47.3 +0.5**
comp=Z,0.2nm,0.3s,baz=176,slow=4.8,SNR=1.8
ESDC LR LR 09 12 21.0
comp=Z,65nm,21.0s,baz=149,slow=34
comp=Z,0.2nm,0.3s
**KBZ Khabaz 96.84 11** LR LR 09 14 35.4
comp=Z,66nm,21.6s,baz=188,slow=35
**KBZ Khabaz 96.84 11**i *eP* **P** **08 30 49.9 -0.4**
KBZ pmax pmax
comp=Z,1.0nm,1.0s
**KIV Kislovodsk 97.04 11** *eP* **P** **08 30 51.1 -0.2**
KIV pmax pmax
comp=Z,6.0nm,1.0s
KIV MLR MLR
comp=Z,47nm,20.0s
**DZM Mont Dzumac 97.30 142** *eLR* LR 09 02 23.4
comp=Z,175nm,33.1s
**PZH PanZhiHua 101.48 61** P **Pdif** **08 31 15.3 +3.6**
PZH pmax pmax
comp=Z,30nm,0.9s
PZH pmax pmax
comp=Z,220nm,4.3s
**TREC Trest 102.11 352** AMS AMS 09 21 30.0
comp=Z,100nm,18.4s
**KHC Kasperske Hory 102.12 350** AMS AMS 09 19 00.0
comp=Z,200nm,22.1s
**KHC Kasperske Hory 102.12 350**i *eP* **Pdif** **08 31 14.1 +0.3**
**ZVC Zvikov 102.37 351** AMS AMS 09 19 40.0
comp=Z,200nm,32.2s
**OKC Ostrava-Krasne 102.44 353** AMS AMS 09 19 50.0
comp=Z,100nm,17.0s
**KRLC Kraliky 102.77 353** AMS AMS 09 18 50.0
comp=Z,100nm,20.4s
**GOPC GO Pecny, Ondr 102.78 351** AMS AMS 09 20 00.0
comp=Z,100nm,18.3s
**PRU Pruhonice 102.88 351** AMS AMS 09 19 50.0
comp=Z,200nm,18.0s
**PRA Prague 102.97 351** AMS AMS 09 20 10.0
comp=Z,200nm,21.5s
**DPC Dobruska-Polom 103.08 352** AMS AMS 09 21 00.0
comp=Z,100nm,18.6s
**RKT Rikitea 103.12 196** *e*LR LR 09 04 59.5
comp=Z,776nm,28.5s
**PVCC Panska Ves 103.41 351** AMS AMS 09 21 00.0
comp=Z,200nm,17.1s
**HSKC Hora Svate Kat 103.60 351** AMS AMS 09 21 10.0
comp=Z,100nm,19.2s
**TBI Tubuai 104.31 182** *e*LR LR 09 05 38.8
comp=Z,1µm,29.2s
**AKTO Aktyubinsk 105.79 19** PKiKP **PKiKP** **08 35 43.7 +1.1**
comp=Z,1.1nm,0.7s,baz=89,slow=1.6,SNR=3.8
**WMQ Urumqi 108.94 41** Pdif **Pdif** **08 31 47.0 +2.7**
**PPT2 Papeete2 110.04 182** *e*LR LR 09 08 08.4
comp=Z,166nm,37.2s
PPT2 *e*LR LR 09 08 19.0
comp=Z,359nm,36.2s
**NJ2 Nanjing 115.25 70** *eP* **PKiKP** **08 36 01.8 +0.8**
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
**HHC Hu-ho-hao-te 117.70 58** *eP* **PKPdf** **08 36 01.4 -4.2**
**TAOE Nuku Hiva Isla 117.92 193** *e*LR LR 09 11 42.5
comp=Z,225nm,27.5s
**SONM Songino Array 120.22 50** PKP **PKPdf** **08 36 10.0 -0.3**
comp=Z,0.6nm,0.4s,baz=217,slow=0.8,SNR=2.2
**ARCES ARCESS Array B 121.87 359** PKP **PKPdf** **08 36 12.4 -0.2**
comp=Z,1.2nm,0.5s,baz=174,slow=3.3,SNR=12
**BORG Borgarnes 123.07 337** *i* PKiKP **PKiKP** **08 36 16.8 +1.6**
**SCHQ Schefferville 132.55 309** PKP **PKPdf** **08 36 33.3 -0.1**
comp=Z,2.3nm,0.6s,baz=126,slow=5.4,SNR=2.4
**TXAR Lajitas Array 137.74 256** PKhKP PKPpre 08 36 36.0
comp=Z,0.2nm,0.6s,baz=138,slow=5.2,SNR=5.3
TXAR PKP **PKPdf** **08 36 43.5 -0.6**
comp=Z,0.5nm,0.8s,baz=142,slow=3.4,SNR=6.2
TXAR SKPbc **SKPbc** **08 40 17.5 -0.2**
comp=Z,0.9nm,1.1s,baz=140,slow=5.7,SNR=3.2
**TX31 Lajitas Ar. Si 137.74 256** PKPdf **PKPdf** **08 36 43.3 -0.8**
**ANMO Albuquerque 143.38 260**i *e*PKiKP **PKPdf** **08 36 54.1 -0.1**
**T25A Trinidad 143.61 264** PKPdf **PKPdf** **08 36 54.0 -0.6**
**F33A 5 Mile Ranch, 143.79 282** **PKPdf** **08 36 53.5 -0.8**
**K30B Basset 144.06 275** PKPdf **PKPdf** **08 36 54.4 -0.6**
**SUSD Miller 144.65 278** **PKPab** **08 36 54.1 -0.5**
**SDCO Great Sand Dun 144.66 264** **PKPab** **08 36 54.5 -0.7**
**AGMN Agassiz Nation 144.77 286** PKPdf **PKPab** **08 36 54.2 -0.7**
**S22A 4UR Ranch, Cre 145.47 263** **PKPdf** **08 36 56.8 -1.1**
**EUNU Eureka 145.54 344** PKPdf **PKPab** **08 36 57.0 0.0**
**ULM Lac du Bonnet 145.68 289** PKPdf **PKPdf** **08 36 56.1 -1.3**
**ULM Lac du Bonnet 145.68 289** PKPbc **PKPdf** **08 36 56.8 -0.6**
comp=Z,37nm,1.0s,baz=74,slow=3.1,SNR=12
**ULM Lac du Bonnet 145.68 289** *e*PKiKP **PKPab** **08 36 58.8 +0.6**
ULM pmax pmax
comp=Z,37nm,1.0s
**ISCO Idaho Springs 146.02 267** PKPdf **PKPdf** **08 36 58.4 -0.4**
**ISCO Idaho Springs 146.02 267** PKP2 **PKPdf** **08 36 58.4 -0.4**
**MVCO Mesa Verde 146.13 261** PKPdf **PKPdf** **08 36 59.2 +0.2**
**Y14A Wickenburg 146.54 252** PKPdf **PKPdf** **08 37 00.1 +0.6**
**MDND Maddock 146.76 283** **PKPdf** **08 36 59.9 +0.5**
**PHWY Pilot Hill 146.83 269** **PKPdf** **08 37 00.2 +0.1**
**N23A Red Feather La 146.89 268** PKPdf **PKPdf** **08 37 00.5 +0.3**
**RSSD Black Hills 147.55 274** **PKPbc** **08 37 03.1 -0.7**
**RSSD Black Hills 147.55 274** PKP2 **PKPbc** **08 37 03.1 -0.7**
**U15A North Rim 147.87 256** **PKPdf** **08 37 03.1 +1.2**
**K22A Casper 148.26 270** **PKPdf** **08 37 00.6 -1.6**
K22A PKPbc **PKPbc** **08 37 06.2 +0.6**
**SEY Seymchan 149.60 48** *i* PKHKP PKPpre 08 37 05.0
SEY pmax pmax
comp=Z,14nm,1.4s
**NLU North Lily Min 150.03 261** **PKPdf** **08 37 03.7 -1.6**
NLU PKPbc **pPKPbc** **08 37 11.9 +0.1**
**PDAR Pinedale Array 150.17 268** PKPdf **PKPdf** **08 37 03.5 -1.9**
PDAR PKPbc **PKPbc** **08 37 09.9 -0.6**
**PDAR Pinedale Array 150.17 268** PKP **PKPdf** **08 37 04.5 -0.9**
comp=Z,0.5nm,0.6s,baz=110,slow=6.8,SNR=5.1
PDAR PKPbc **sPKPdf** **08 37 08.8 +1.3**
comp=Z,2.2nm,0.8s,baz=118,slow=4.3,SNR=11
**DUG Dugway, Tooele 150.63 261** PKPdf **PKPdf** **08 37 04.6 -1.5**
DUG PKPab **PKPab** **08 37 19.4 +0.9**
**DUG Dugway, Tooele 150.63 261** PKIKP **PKPab** **08 37 19.4 +0.9**
**FFC Flin Flon 150.79 294** **PKPdf** **08 37 04.3 -1.3**
FFC PKPab **PKPab** **08 37 18.5 0.0**
**FFC Flin Flon 150.79 294** PKIKP **PKPdf** **08 37 04.3 -1.3**
**DSP Deep Springs 151.82 251** PKPdf **PKPdf** **08 37 05.8 -2.0**
DSP PKPab **PKPab** **08 37 22.1 -1.2**
**NVAR Mina Array Bea 152.74 252** PKP **PKPdf** **08 37 08.7 -0.7**
comp=Z,0.4nm,0.6s,baz=121,slow=3.7,SNR=5.2
NVAR PKPbc **PKPbc** **08 37 16.2 -0.3**
comp=Z,1.3nm,0.6s,baz=132,slow=2.6,SNR=15
**LYMT Lyon Mountain 153.99 273** PKPdf **PKPdf** **08 37 08.6 -2.4**
LYMT **PKPab** **08 37 31.9 -0.6**
**MFID Camas Ranch 154.34 264** PKPdf **PKPdf** **08 37 09.4 -2.0**
MFID PKPab **PKPab** **08 37 31.4 -2.6**
**PINE Pine Mountain 157.63 259** PKPdf **PKPdf** **08 37 13.4 -2.5**
PINE PKPab **PKPab** **08 37 48.0 -0.2**
**YKA Yellowknife Ar 157.96 311** PKPab **PKPab** **08 37 48.9 +0.1**
comp=Z,1.0nm,0.9s,baz=69,slow=4.8,SNR=4.8

*AZER* ***14*** *08:34:41.4,38.38N×45.07E,h11km,ml2.5*
*TEH* ***14*** *08:34:41.3,38.39N×44.95E,h6km,ML2.4*
**ISC 14 08:34:42.5±1.9, 38.39N±0.05×45.01E±0.07, h0km±13km, n14,σ1s07/23, Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ISHB** | **Shabestar** | **0.49** | **103** | Pg | **Pg** | **08 34 51.7** | **-0.2** |
| ISHB | | | | Sg | **Sg** | **08 34 59.5** | **+1.4** |
| **IMRD** | **Marand** | **0.63** | **59** | Pg | **Pg** | **08 34 54.5** | **0.0** |
| **NAX** | **Nakhchivan** | **0.87** | **26** | P | **Pg** | **08 34 59.2** | **+0.1** |
| NAX | | | | S | **Sg** | **08 35 11.0** | **+0.7** |
| **ITBZ** | **Tabriz** | **0.91** | **100** | Pg | **Pg** | **08 34 59.5** | **-0.4** |
| **ORD** | **Ordubad** | **0.94** | **55** | P | **Pg** | **08 34 59.5** | **-1.0** |
| ORD | | | | S | **Sb** | **08 35 13.6** | **-1.0** |
| **MAKU** | **Maku** | **0.99** | **345** | Pg | **Pg** | **08 34 59.9** | **-1.6** |
| **IAZR** | **Azarshahr** | **1.05** | **133** | Pg | **Pg** | **08 35 02.3** | **-0.2** |
| **SBZ** | **Shahbuz** | **1.09** | **23** | P | **Pg** | **08 35 03.4** | **+0.1** |
| SBZ | | | | S | **Sn** | **08 35 20.4** | **-0.6** |
| **HYR** | **Heyderabad** | **1.33** | **355** | S | **Sn** | **08 35 28.3** | **+1.5** |
| **GDB** | **GEDABAY** | **2.39** | **14** | P | **Pn** | **08 35 24.9** | **+1.7** |
| GDB | | | | S | **Sb** | **08 35 56.6** | **-0.1** |
| **GANJ** | **Ganja** | **2.47** | **24** | P | **Pn** | **08 35 24.7** | **+0.7** |
| GANJ | | | | S | **Sb** | **08 35 58.0** | **-0.7** |
| **YRD** | **Yardimli** | **2.58** | **77** | P | **Pn** | **08 35 25.6** | **-0.1** |
| YRD | | | | S | **Sb** | **08 36 00.5** | **-1.7** |
| **LRK** | **Lerik** | **2.62** | **84** | P | **Pn** | **08 35 26.7** | **+0.4** |
| LRK | | | | S | **Sb** | **08 36 01.7** | **-1.6** |
| **QZX** | **Qazax, Azerbai** | **2.67** | **6** | P | **Pn** | **08 35 27.2** | **+0.4** |
| QZX | | | | S | **Sb** | **08 36 03.2** | **-1.5** |

*IDC* ***14*** *08:35:02.2±1.0,1.21S×120.80E,h0km,mb3.6/7, mbtmp3.7/8,ML4.0/1,MS3.2/2,Error ellipse: s-maj=46.6km s-min=17.8km az=75.0*
*DJA* ***14*** *08:35:06.2±0.5,1.S±5×12.1E±1.2,h10km,M3.9/6, MLv3.9/6*
*NEIC* ***14*** *08:35:08.2±2.8,1.37S±0.06×120.94E±0.08,h35km±2km, mb4.5/7,Error ellipse: s-maj=14.3km s-min=10.3km az=86.0*
**ISC 14 08:35:07.4±0.6, 1.38S±0.06×120.82E±0.08, h35km, n27, σ1s61/28, mb3.9/12, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TOLI2** | **Tolitoli** | **2.48** | **359** | | **Pn** | **08 35 46.7** | **+1.5** |
| **SPSI** | **Sidrap Palu** | **2.77** | **202** | P | **Pn** | **08 35 49.5** | **+0.2** |
| **GTOI** | **Gorontalo** | **2.96** | **48** | P | **Pn** | **08 35 54.4** | **+2.4** |
| **KAPI** | **Kappang** | **3.77** | **196** | | **Pn** | **08 36 06.0** | **+3.1** |
| **KAPI** | **Kappang** | **3.77** | **196** | Pn | **Pn** | **08 36 05.1** | **+2.2** |
| | 9.4nm,0.3s,baz=339,slow=4.5,SNR=9.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **08 36 48.0** | **+1.9** |
| | 6.6nm,0.3s,baz=189,slow=23,SNR=7.2 | | | | | | |
| KAPI | | | | LR | LR | 08 37 48.1 | |

comp=Z,115nm,19.0s,baz=315,slow=42
42nm,0.5s
**BKB Balikpapan 3.93 272** Pn **Pn 08 36 05.7 +0.5**
**BSSI Bau Bau, Buton 4.74 184** P **Pn 08 36 16.9 +0.5**
**MYLDM Lahad Datu 6.92 340 Pn 08 36 49.3 +3.0**
**SOEI Soe 9.00 158** Pn **Pn 08 37 14.1 -0.9**
**WB0 Warramunga Arr 22.59 145** P **P 08 40 04.6 -0.5**
WB0 IAmb IAmb 08 40 20.8
comp=Z,13nm,1.4s
**WRA Warramunga Arr 22.70 145** P **P 08 40 06.2 0.0**
comp=Z,1.6nm,0.9s,baz=342,slow=9.0,SNR=9.7
comp=Z,1.6nm,0.9s
**WR0 Warramunga Arr 22.82 145** P **P 08 40 07.9 +0.4**
WR0 IAmb IAmb 08 40 33.6
comp=Z,8.4nm,1.1s
**ASAR Alice Springs 25.53 151** P **P 08 40 35.4 +2.5**
comp=Z,0.7nm,0.8s,baz=326,slow=8.0,SNR=7.3
ASAR PcP **PcP 08 44 03.2 -0.8**
comp=Z,0.2nm,0.7s,baz=340,slow=2.6,SNR=1.8
comp=Z,0.7nm,0.8s
**STKA Stephens Creek 36.12 149** P **P 08 42 06.5 +0.3**
**KSRS Korea Array 39.20 9** P **P 08 42 31.3 -0.8**
comp=Z,0.5nm,0.6s,baz=201,slow=9.4,SNR=2.0
comp=Z,0.5nm,0.6s
**MJAR Matsushiro Arr 41.05 21** P **P 08 42 46.0 -1.5**
comp=Z,0.4nm,0.3s,baz=187,slow=8.6,SNR=2.2
comp=Z,0.4nm,0.3s
**JKA Kamikawa-asahi 49.30 21** P **P 08 43 51.4 -1.5**
JKA IAmb IAmb 08 44 01.5
comp=Z,17nm,1.5s
**SONM Songino Array 50.61 347** P **P 08 44 03.2 +0.2**
comp=Z,0.7nm,0.4s,baz=169,slow=9.6,SNR=2.4
comp=Z,0.7nm,0.4s
**FUNA Funafuti 58.53 99** P **P 08 44 58.3 -2.6**
**MKAR Makanchi Array 58.67 330** P **P 08 45 01.3 0.0**
**MKAR Makanchi Array 58.67 330** P **P 08 45 00.3 -1.1**
comp=Z,0.6nm,0.7s,baz=131,slow=7.9,SNR=4.8
comp=Z,0.6nm,0.7s
**AAK Ala-Archa 60.45 322** LR LR 09 14 45.6
comp=Z,54nm,18.3s,baz=232,slow=40
**ZAA0 Zalesovo Array 62.69 337** P **P 08 45 29.3 +0.8**
ZAA0 IAmb IAmb 08 45 33.5
comp=Z,9.3nm,1.4s
**KURBB Kurchatov Arra 63.09 331** P **P 08 45 28.9 -2.4**
comp=Z,0.4nm,0.5s,baz=137,slow=6.1,SNR=2.9
comp=Z,0.4nm,0.5s
**KURK Kurchatov 63.11 331** P **P 08 45 30.4 -0.9**
KURK IAmb IAmb 08 45 36.3
comp=Z,4.6nm,1.1s
**KKAR Karatay Array 63.17 321** P **P 08 45 32.0 0.0**
**ABKAR Akbulak array 72.50 323** P **P 08 46 31.3 +0.7**

**IDC 14 08:35:07.4±6.2, 47.93N×80.67E, h0km, 2C, Error ellipse: s-maj=44.9km s-min=42.9km az=35.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **1.58** | **135** | ⇑P | Pg | 08 35 39.0 | +1.4 |
| | 0.1nm,0.2s,baz=312,slow=12,SNR=14 | | | | | | |
| MK31 | | | | ⇑S | Sn | 08 35 57.4 | -0.5 |
| | 0.2nm,0.3s,baz=313,slow=27,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **1.58** | **135** | Pg | Pn | 08 35 36.4 | -0.3 |
| | 0.3nm,0.3s,baz=321,slow=14,SNR=17 | | | | | | |
| MKAR | | | | Lg | Lg | 08 35 57.5 | |
| | 0.2nm,0.3s,baz=316,slow=26,SNR=5.2 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.57** | **22** | I | I | 09 16 20.0 | |
| | baz=206,slow=323,SNR=3.5 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.00** | **288** | I | I | 09 58 30.0 | |
| | baz=92,slow=318,SNR=4.5 | | | | | | |

*IDC **14** 08:41:51.5±1.0, 58.30N×31.75W, h0km, mb3.5/11, mbtmp3.6/12, ML3.0/1, MS3.3/12, Error ellipse: s-maj=27.4km s-min=19.5km az=0.0*
**ISC 14 08:41:52.6±0.9, 58.3N±0.1×31.6W±0.1, h10km, n22, σ1s55/13, mb3.7/12, MS3.4/8, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BORG** | **Borgarnes** | **8.13** | **33** | Pn | **Pn** | **08 43 50.8** | **+0.3** |
| | 0.2nm,0.3s,baz=316,slow=7.2,SNR=1.2 | | | | | | |
| BORG | | | | LR | LR | 08 45 29.3 | |
| | comp=Z,29nm,18.7s,baz=247,slow=27 | | | | | | |
| | 7.7nm,0.9s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **12.29** | **323** | LR | LR | 08 48 43.9 | |
| | comp=Z,173nm,18.8s,baz=129,slow=34 | | | | | | |
| **FRB** | **Frobisher Bay** | **18.50** | **303** | LR | LR | 08 52 15.9 | |
| | comp=Z,111nm,18.2s,baz=98,slow=34 | | | | | | |
| **SCHQ** | **Schefferville** | **19.56** | **275** | LR | LR | 08 52 27.1 | |
| | comp=Z,89nm,18.1s,baz=270,slow=33 | | | | | | |
| **NOA** | **NORSAR Array B** | **21.53** | **64** | P | **P** | **08 46 42.4** | **+0.9** |
| | 0.2nm,0.3s,baz=282,slow=9.1,SNR=3.6 | | | | | | |
| NOA | | | | LR | LR | 08 53 41.0 | |
| | comp=Z,22nm,19.9s,baz=215,slow=33 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **22.93** | **66** | P | **P** | **08 46 55.4** | **-1.0** |
| | 1.9nm,0.9s,baz=258,slow=6.8,SNR=2.3 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| **ESDC** | **Sonseca Array** | **25.71** | **124** | P | **P** | **08 47 23.6** | **+0.8** |
| | 0.4nm,0.6s,baz=328,slow=12,SNR=2.6 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **SADO** | **Sadowa** | **31.78** | **266** | LR | LR | 08 59 45.7 | |
| | comp=Z,73nm,21.4s,baz=64,slow=34 | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.03** | **286** | LR | LR | 09 02 34.8 | |
| | comp=Z,43nm,20.3s,baz=1.5,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.56** | **312** | LR | LR | 09 04 27.2 | |
| | comp=Z,58nm,19.1s,baz=5.5,slow=35 | | | | | | |
| **TKL** | **Tuckaleechee C** | **40.82** | **260** | LR | LR | 09 05 15.7 | |
| | comp=Z,70nm,18.4s,baz=52,slow=34 | | | | | | |
| **BRTR** | **Keskin Array B** | **44.69** | **85** | P | **P** | **08 50 02.3** | **-3.3** |
| | 0.7nm,0.6s,baz=303,slow=9.8,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **47.89** | **329** | P | **P** | **08 50 29.9** | **-0.4** |
| | 0.9nm,0.9s,baz=24,slow=6.2,SNR=4.8 | | | | | | |
| | 0.9nm,0.9s | | | | | | |
| **NEW** | **Newport** | **48.74** | **298** | LR | LR | 09 10 10.5 | |
| | comp=Z,48nm,18.6s,baz=36,slow=35 | | | | | | |
| **PDAR** | **Pinedale Array** | **49.02** | **287** | P | **P** | **08 50 37.8** | **-1.8** |
| | 0.4nm,0.8s,baz=54,slow=7.5,SNR=4.3 | | | | | | |
| PDAR | | | | LR | LR | 09 09 03.6 | |
| | comp=Z,29nm,18.3s,baz=32,slow=33 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **49.09** | **58** | P | **P** | **08 50 41.0** | **+1.4** |
| | 2.4nm,0.8s,baz=310,slow=4.7,SNR=7.2 | | | | | | |
| | 2.4nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.55** | **137** | P | **P** | **08 50 59.1** | **+0.6** |
| | 0.7nm,0.7s,baz=347,slow=6.7,SNR=4.7 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **52.39** | **48** | P | **P** | **08 51 05.8** | **+1.3** |
| | 0.6nm,0.5s,baz=313,slow=9.8,SNR=4.2 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **56.22** | **272** | P | **P** | **08 51 34.3** | **+1.6** |
| | 0.3nm,0.8s,baz=52,slow=7.3,SNR=2.9 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **56.25** | **296** | LR | LR | 09 13 56.5 | |
| | comp=Z,33nm,20.5s,baz=34,slow=34 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.41** | **45** | P | **P** | **08 51 41.8** | **+0.9** |
| | 0.6nm,0.6s,baz=326,slow=7.8,SNR=5.3 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.98** | **45** | P | **P** | **08 52 12.9** | **+0.6** |
| | 0.5nm,0.6s,baz=319,slow=5.2,SNR=4.3 | | | | | | |
| | 0.5nm,0.6s | | | | | | |

**IDC 14 08:43:19.7±2.9, 53.77N×88.06E, h0km, mbtmp3.2/2, ML3.0/2, Error ellipse: s-maj=24.2km s-min=16.1km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.93** | **277** | I | I | 08 55 50.0 | |
| | 0.2nm,0.9s,baz=92,slow=318,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.93** | **277** | Pg | Pn | 08 43 54.1 | +0.4 |
| | 2.3nm,0.3s,baz=90,slow=14,SNR=31 | | | | | | |
| ZALV | | | | Lg | Lg | 08 44 21.2 | |
| | 7.8nm,0.3s,baz=92,slow=25,SNR=26 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.65** | **246** | Pn | Pn | 08 44 59.5 | +0.9 |
| | 0.2nm,0.3s,baz=62,slow=14,SNR=12 | | | | | | |
| KURBB | | | | Sn | Sn | 08 46 13.6 | -1.5 |
| | 0.1nm,0.3s,baz=50,slow=21,SNR=2.1 | | | | | | |
| KURBB | | | | Lg | Lg | 08 46 50.2 | |
| | baz=64,slow=30,SNR=2.8 | | | | | | |
| | 1.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.90** | **210** | Pn | Pn | 08 45 16.9 | +1.1 |
| | 0.2nm,0.3s,baz=31,slow=14,SNR=7.3 | | | | | | |
| MKAR | | | | Sn | Sn | 08 46 45.8 | -0.1 |
| | 0.2nm,0.3s,baz=32,slow=28,SNR=5.6 | | | | | | |
| MKAR | | | | Lg | Lg | 08 47 28.2 | |
| | 0.1nm,0.3s,baz=30,slow=26,SNR=2.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*MDD **14** 08:49:59.4±0.9, 36.57N×7.68W, h2km±4km, mb_Lg2.2/6, Error ellipse: s-maj=6.9km s-min=3.6km az=11.0*
*CNRM **14** 08:50:00.6, 36.40N×7.66W, h35km, ML2.6*
*IGIL **14** 08:50:02.7, 36.59N×7.83W, h10km, ML1.5*
*INMG **14** 08:50:02.1±2.0, 36.56N×7.81W, h13km±5km, ML1.8, Error ellipse: s-maj=7.2km s-min=6.4km az=40.0*
*SFS **14** 08:50:02.9, 36.58N×7.75W, h26km, ML2.2/11, ML2.3/10, MLv2.2/11*
**ISC 14 08:49:57.7±1.2, 36.46N±0.03×7.72W±0.03, h14km±9km, n50, σ1s06/79, 1D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PBDV** | **Barranco-do-Ve** | **0.80** | **348** | ⇓eP | **Pn** | **08 50 15.6** | **+1.0** |
| PBDV | | | | eS | **Sg** | **08 50 23.1** | **-0.8** |
| PBDV | | | | A | A | 08 50 31.6 | |
| | 13nm,0.5s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.80** | **348** | Pg | **Pn** | **08 50 15.1** | **+0.5** |
| PBDV | | | | Sg | **Sn** | **08 50 25.6** | **-0.7** |
| **PVAQ** | **Vaqueiros** | **0.94** | **360** | eP | **Pn** | **08 50 17.6** | **+1.1** |
| PVAQ | | | | eS | **Sb** | **08 50 29.0** | **+0.8** |
| PVAQ | | | | A | A | 08 50 30.4 | |
| | 24nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.94** | **360** | Sg | **Sb** | **08 50 28.9** | **+0.7** |
| PVAQ | | | | Pg | **Pn** | **08 50 17.4** | **+0.9** |
| **PVAQ** | **Vaqueiros** | **0.94** | **360** | P | **Pn** | **08 50 17.8** | **+1.3** |
| **PVAQ** | **Vaqueiros** | **0.94** | **360** | S | **Sn** | **08 50 31.5** | **+1.7** |
| **EGRO** | **El Granado** | **1.09** | **10** | Pg | **Pn** | **08 50 19.6** | **+1.1** |
| EGRO | | | | Sg | **Sg** | **08 50 32.8** | **-0.2** |
| **EGRO** | **El Granado** | **1.09** | **10** | Pg | **Pn** | **08 50 19.9** | **+1.4** |
| EGRO | | | | Sg | **Sb** | **08 50 31.9** | **-0.5** |
| EGRO | | | | *i* Vmb_Lg | | 08 50 34.1 | |
| **PFVI** | **Vila Bisbo** | **1.12** | **307** | eP | **Pg** | **08 50 19.6** | **+0.3** |
| PFVI | | | | eS | **Sb** | **08 50 32.9** | **-0.3** |
| PFVI | | | | A | A | 08 50 34.9 | |
| | 7.2nm,0.1s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.12** | **307** | Pg | **Pn** | **08 50 19.3** | **+0.4** |
| **PFVI** | **Vila Bisbo** | **1.12** | **307** | P | **Pg** | **08 50 19.6** | **+0.3** |
| **PFVI** | **Vila Bisbo** | **1.12** | **307** | S | **Sn** | **08 50 36.5** | **+2.4** |
| **MORF** | **Marmelete** | **1.13** | **319** | eP | **Pg** | **08 50 19.9** | **+0.4** |
| **MORF** | **Marmelete** | **1.13** | **319** | eP | **Pg** | **08 50 19.8** | **+0.2** |
| **PCVE** | **Castro Verde** | **1.20** | **348** | eP | **Pg** | **08 50 21.4** | **+0.6** |
| PCVE | | | | eS | **Sb** | **08 50 35.7** | **+0.1** |
| PCVE | | | | A | A | 08 50 36.6 | |
| | 17nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **1.20** | **348** | Pg | **Pg** | **08 50 21.2** | **+0.4** |
| PCVE | | | | Sg | **Sb** | **08 50 35.5** | **-0.1** |
| **PTEO** | **Sao Teotonio** | **1.35** | **324** | eP | **Pg** | **08 50 23.4** | **-0.4** |
| PTEO | | | | eS | **Sb** | **08 50 39.0** | **-1.0** |
| PTEO | | | | A | A | 08 50 46.6 | |
| | 7.2nm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **1.44** | **344** | ePn | **Pg** | **08 50 24.9** | **-0.5** |
| MESJ | | | | eSn | **Sn** | **08 50 41.4** | **-0.6** |
| MESJ | | | | A | A | 08 50 52.4 | |
| | 7.5nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **1.44** | **344** | eP | **Pg** | **08 50 24.9** | **-0.5** |
| MESJ | | | | eS | **Sn** | **08 50 41.1** | **-0.8** |
| MESJ | | | | IAML | | 08 50 43.2 | |
| | comp=N,7.2nm,0.1s | | | | | | |
| **EMIN** | **Mina Concepcio** | **1.55** | **32** | Sn | **Sn** | **08 50 43.5** | **-1.2** |
| EMIN | | | | Pn | **Pg** | **08 50 27.2** | **-0.3** |
| **EMIN** | **Mina Concepcio** | **1.55** | **32** | Pg | **Pb** | **08 50 26.2** | **0.0** |
| EMIN | | | | Sg | **Sn** | **08 50 44.6** | **-0.2** |
| EMIN | | | | *i* Vmb_Lg | | 08 50 48.1 | |
| **ESPR** | **Espera** | **1.55** | **74** | Sn | **Sn** | **08 50 45.0** | **+0.3** |
| ESPR | | | | Pn | **Pb** | **08 50 26.9** | **+0.8** |
| **ESPR** | **Espera** | **1.55** | **74** | Pg | **Pb** | **08 50 26.7** | **+0.5** |
| ESPR | | | | Sg | **Sb** | **08 50 46.1** | **+0.4** |
| ESPR | | | | *i* Vmb_Lg | | 08 50 47.1 | |
| **PBEJ** | **Beja** | **1.57** | **356** | eSn | **Sn** | **08 50 44.7** | **-0.6** |
| **PNCL** | **Nicolau / Gran** | **1.77** | **339** | ePn | **Pn** | **08 50 28.9** | **+1.0** |
| PNCL | | | | eSn | **Sn** | **08 50 49.1** | **-1.1** |
| PNCL | | | | A | A | 08 50 52.2 | |
| | comp=N,4.3nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.77** | **339** | Sn | **Sn** | **08 50 48.7** | **-1.5** |
| PNCL | | | | Pn | **Pn** | **08 50 28.9** | **+1.0** |
| **PBAR** | **Barrancos** | **1.80** | **17** | ePn | **Pb** | **08 50 30.7** | **+0.3** |
| PBAR | | | | eSn | **Sn** | **08 50 50.6** | **-0.2** |
| PBAR | | | | A | A | 08 51 02.8 | |
| | comp=N,4.3nm,0.4s | | | | | | |
| **PBAR** | **Barrancos** | **1.80** | **17** | Pn | **Pb** | **08 50 30.4** | **0.0** |
| **LIJA** | **Lijar** | **1.91** | **76** | Pn | **Pg** | **08 50 34.3** | **-0.1** |
| **EVO** | **Evora** | **2.08** | **354** | eSn | **Sn** | **08 50 57.1** | **-0.8** |
| EVO | | | | A | A | 08 50 59.8 | |
| | comp=N,8.5nm,0.4s | | | | | | |
| **EVO** | **Evora** | **2.08** | **354** | Sn | **Sn** | **08 50 56.5** | **-1.4** |
| EVO | | | | Pn | **Pb** | **08 50 35.3** | **0.0** |
| **EBAD** | **Badajoz** | **2.36** | **13** | Pn | **Pb** | **08 50 38.2** | **-1.8** |
| EBAD | | | | Sn | **Sn** | **08 51 02.9** | **-1.8** |
| **EBAD** | **Badajoz** | **2.36** | **13** | Pn | **Pn** | **08 50 36.0** | **0.0** |
| EBAD | | | | Pg | **Pb** | **08 50 38.7** | **-1.2** |
| EBAD | | | | Sn | **Sn** | **08 51 03.8** | **-0.9** |
| EBAD | | | | *i* Vmb_Lg | | 08 51 07.6 | |
| **PESTR** | **Estremoz** | **2.41** | **2** | eSn | **Sn** | **08 51 04.8** | **-1.1** |
| PESTR | | | | A | A | 08 51 07.3 | |
| | comp=N,3.4nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **2.41** | **2** | P | **Pn** | **08 50 38.4** | **+1.7** |
| **PESTR** | **Estremoz** | **2.41** | **2** | S | **Sn** | **08 51 07.7** | **+1.7** |
| **ECAB** | **El Cabril** | **2.44** | **48** | Pn | **Pb** | **08 50 39.5** | **-1.9** |
| ECAB | | | | Sn | **Sn** | **08 51 06.6** | **-0.3** |
| **ECAB** | **El Cabril** | **2.44** | **48** | Pn | **Pn** | **08 50 39.0** | **+1.9** |
| ECAB | | | | Sn | **Sn** | **08 51 05.3** | **-1.5** |
| ECAB | | | | *i* Vmb_Lg | | 08 51 10.2 | |
| **PMTG** | **Montargil** | **2.64** | **351** | ePn | **Pn** | **08 50 41.3** | **+1.5** |
| PMTG | | | | eSn | **Sn** | **08 51 11.0** | **-0.6** |
| PMTG | | | | A | A | 08 51 11.8 | |
| | comp=N,3.1nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **2.79** | **334** | ePn | **Pn** | **08 50 43.4** | **+1.5** |
| PMAFR | | | | eSn | **Sn** | **08 51 13.7** | **-1.6** |
| **PMRV** | **Marv??o** | **2.98** | **5** | ePn | **Pn** | **08 50 46.4** | **+1.9** |
| PMRV | | | | eSn | **Sn** | **08 51 19.1** | **-0.9** |
| PMRV | | | | A | A | 08 51 19.7 | |
| | comp=N,3.7nm,0.3s | | | | | | |
| **EADA** | **Adamuz** | **3.03** | **55** | Pn | **Pn** | **08 50 47.0** | **+1.8** |
| EADA | | | | Sn | **Sn** | **08 51 19.9** | **-1.4** |
| EADA | | | | *i* Vmb_Lg | | 08 51 22.2 | |
| **PSBE** | **So Bento** | **3.17** | **345** | eSn | **Sn** | **08 51 24.3** | **-0.4** |
| **MD31** | **MD31** | **4.33** | **145** | P | **Pn** | **08 51 04.0** | **+0.8** |
| **MD31** | **MD31** | **4.33** | **145** | S | **Sn** | **08 51 52.9** | **-0.6** |
| **MDT** | **Midelt** | **4.45** | **144** | P | **Pn** | **08 51 05.7** | **+0.9** |
| **MDT** | **Midelt** | **4.45** | **144** | S | **Sn** | **08 51 54.4** | **-2.0** |
| **OUK** | **Oukaimeden** | **5.24** | **181** | P | **Pn** | **08 51 16.6** | **+0.7** |
| **OUK** | **Oukaimeden** | **5.24** | **181** | S | **Sn** | **08 52 15.5** | **-0.8** |
| **OUZM** | **OUZ** | **5.59** | **172** | P | **Pn** | **08 51 21.6** | **+1.0** |

*NEIC **14** 08:54:02.7±1.1, 69.59N±0.06×144.15W±0.07, h10km±2km, Error ellipse: s-maj=9.8km s-min=3.9km az=3.0*
**AEIC 14 08:54:01.1±1.4, 69.49N±0.05×144.2W±0.1, h11km±6km, ML3.3, ML3.5/120(NEIC), Error ellipse: s-maj=6.9km s-min=5.1km az=181.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **53** | Pg | Pg | 08 54 06.5 | +0.6 |
| C27K | | | | | Sg | 08 54 09.5 | +0.3 |
| C27K | | | | IAML | | 08 54 09.9 | |
| | comp=E,10μm,0.5s | | | | | | |
| C27K | | | | IAML | | 08 54 10.0 | |
| | comp=N,10μm,0.4s | | | | | | |
| **C26K** | **Camden Bay** | **0.49** | **332** | | Pg | 08 54 10.1 | -0.7 |
| **D25K** | **Kavik River** | **0.77** | **259** | | Pg | 08 54 16.1 | 0.0 |
| **D25K** | **Kavik River** | **0.77** | **259** | | Sb | 08 54 27.4 | +0.2 |
| **D27M** | **Malcolm River** | **1.19** | **100** | | Pn | 08 54 23.7 | 0.0 |
| D27M | | | | IAML | | 08 54 45.4 | |
| | comp=N,1μm,0.2s | | | | | | |
| D27M | | | | IAML | | 08 54 45.7 | |
| | comp=E,925nm,0.3s | | | | | | |
| **D27M** | **Malcolm River** | **1.19** | **100** | | Sg | 08 54 39.3 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.58** | **281** | | Pg | 08 54 31.4 | 0.0 |
| C24K | | | | | Sg | 08 54 53.6 | +1.7 |
| **C24K** | **Franklin Bluff** | **1.58** | **281** | IAML | | 08 54 55.8 | |
| | comp=N,554nm,0.3s | | | | | | |
| C24K | | | | IAML | | 08 55 01.0 | |
| | comp=E,614nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.62** | **142** | | Pg | 08 54 32.0 | -0.1 |
| E27K | | | | IAML | | 08 54 56.0 | |
| | comp=N,478nm,0.4s | | | | | | |
| E27K | | | | IAML | | 08 54 56.2 | |
| | comp=E,615nm,0.4s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **261** | | Pb | 08 54 32.3 | +0.6 |
| D24K | | | | IAML | | 08 54 59.6 | |
| | comp=E,539nm,0.5s | | | | | | |
| D24K | | | | IAML | | 08 55 02.4 | |
| | comp=N,638nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.80** | **179** | | Pg | 08 54 35.5 | -0.2 |
| F26K | | | | IAML | | 08 55 03.5 | |
| | comp=N,533nm,0.4s | | | | | | |
| **E28M** | **Babbage River** | **1.91** | **115** | | Pb | 08 54 36.6 | +0.6 |
| E28M | | | | IAML | | 08 55 07.5 | |
| | comp=N,487nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.95** | **92** | | Pb | 08 54 36.4 | -0.2 |
| **F25K** | **Christian Rive** | **1.97** | **196** | | Pb | 08 54 37.9 | +0.9 |
| **BMAR** | **Burnt Mountain** | **2.07** | **184** | | Pb | 08 54 38.4 | -0.3 |
| **TOLK** | **Toolik Lake Re** | **2.10** | **249** | | Pb | 08 54 39.2 | +0.1 |
| TOLK | | | | IAML | | 08 55 12.6 | |
| | comp=E,376nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 08 55 20.6 | |
| | comp=N,288nm,0.5s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **229** | | Pb | 08 54 39.6 | +0.4 |
| **C23K** | **Itkillik River** | **2.25** | **282** | | Pb | 08 54 41.6 | -0.2 |
| **D23K** | **Nanushuk River** | **2.36** | **260** | | Pb | 08 54 42.2 | -1.4 |
| **F24K** | **Squaw Lake** | **2.39** | **216** | | Pb | 08 54 42.9 | -1.3 |
| F24K | | | | IAML | | 08 55 22.2 | |
| | comp=E,207nm,0.4s | | | | | | |
| **E23K** | **Chandalar** | **2.43** | **236** | | Pb | 08 54 43.8 | -1.0 |
| **F28M** | **Old Crow** | **2.47** | **137** | Pn | Pb | 08 54 43.7 | -1.9 |
| F28M | | | | IAML | | 08 55 25.3 | |
| | comp=E,250nm,0.6s | | | | | | |
| F28M | | | | IAML | | 08 55 27.3 | |
| | comp=N,229nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.54** | **113** | | Pb | 08 54 44.6 | -2.1 |
| E29M | | | | IAML | | 08 55 29.6 | |
| | comp=E,269nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.56** | **176** | | Pb | 08 54 45.4 | -1.6 |
| **G25K** | **Bearman Lake** | **2.82** | **195** | | Pb | 08 54 48.8 | -2.6 |
| **G27K** | **Doyon Strip** | **2.86** | **159** | | Pn | 08 54 49.1 | +2.4 |
| **FYU** | **Fort Yukon** | **2.96** | **188** | | Pn | 08 54 50.8 | +2.9 |
| **G24K** | **Hadweenzic Riv** | **3.05** | **205** | Pn | Pn | 08 54 52.0 | +2.8 |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **247** | | Pn | 08 54 51.5 | +1.9 |
| **D22K** | **Ayikyak River** | **3.08** | **263** | Pn | Pn | 08 54 51.8 | +2.2 |
| D22K | | | | IAML | | 08 55 45.8 | |
| | comp=N,127nm,0.9s | | | | | | |
| D22K | | | | IAML | | 08 55 52.4 | |
| | comp=E,113nm,1.2s | | | | | | |
| **COLD** | **Coldfoot** | **3.17** | **227** | | Pn | 08 54 53.0 | +2.2 |
| **B22K** | **Teshekpuk Lake** | **3.28** | **289** | | Pn | 08 54 54.5 | +2.1 |
| **H25L** | **Birch Creek** | **3.29** | **191** | | Pn | 08 54 55.1 | +2.6 |
| **H27K** | **Steamboat Moun** | **3.43** | **161** | | Pn | 08 54 57.2 | +2.8 |
| **G29M** | **Pine Creek** | **3.47** | **135** | | Pn | 08 54 57.5 | +2.5 |
| **G23K** | **Bananza Creek** | **3.53** | **221** | | Pn | 08 54 58.3 | +2.4 |
| G23K | | | | IAML | | 08 56 01.0 | |
| | comp=E,107nm,1.6s | | | | | | |
| G23K | | | | IAML | | 08 56 01.2 | |
| | comp=N,93nm,0.9s | | | | | | |
| **F22K** | **John River** | **3.54** | **240** | | Pn | 08 54 57.9 | +1.9 |
| **F30M** | **Barrier River** | **3.63** | **117** | | Pn | 08 55 00.3 | +3.0 |
| **B21K** | **Ikpikpuk River** | **3.64** | **277** | Pn | Pn | 08 54 59.7 | +2.3 |
| B21K | | | | IAML | | 08 56 11.7 | |
| | comp=E,90nm,1.3s | | | | | | |
| B21K | | | | IAML | | 08 56 13.8 | |
| | comp=N,90nm,1.0s | | | | | | |
| **E21K** | **Killik River** | **3.66** | **258** | | Pn | 08 54 59.0 | +1.3 |
| **E21K** | **Killik River** | **3.66** | **258** | IAML | | 08 56 08.7 | |
| | comp=E,77nm,0.7s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.90** | **126** | | Pn | 08 55 03.3 | +2.3 |
| G30M | | | | IAML | | 08 56 13.0 | |
| | comp=E,67nm,0.7s | | | | | | |
| G30M | | | | IAML | | 08 56 14.1 | |
| | comp=N,70nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **202** | | Pn | 08 55 04.4 | +3.1 |
| H24K | | | | IAML | | 08 56 14.8 | |
| | comp=N,58nm,0.8s | | | | | | |
| H24K | | | | IAML | | 08 56 14.8 | |
| | comp=E,58nm,1.1s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.95** | **298** | | Pn | 08 55 02.5 | +0.9 |
| **H29M** | **Whitestone** | **3.96** | **143** | Pn | Pn | 08 55 04.8 | +3.0 |
| H29M | | | | IAML | | 08 56 16.0 | |
| | comp=E,95nm,1.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.02** | **188** | Pn | Pn | 08 55 05.7 | +3.0 |
| PRP | | | | IAML | | 08 55 55.0 | |
| | comp=N,83nm,0.4s | | | | | | |
| PRP | | | | IAML | | 08 56 10.5 | |
| | comp=E,67nm,0.9s | | | | | | |
| **I27K** | **Kandik River** | **4.03** | **164** | | Pn | 08 55 05.3 | +2.6 |
| **INK** | **Inuvik** | **4.05** | **102** | | Pn | 08 55 05.7 | +2.8 |
| **F21K** | **Alatna River** | **4.11** | **241** | | Pn | 08 55 06.4 | +2.6 |
| F21K | | | | IAML | | 08 56 19.0 | |
| | comp=N,52nm,1.0s | | | | | | |
| F21K | | | | IAML | | 08 56 23.2 | |
| | comp=E,53nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **211** | | Pn | 08 55 07.0 | +1.9 |
| **H23K** | **Yukon River** | **4.20** | **211** | IAML | | 08 56 19.0 | |
| | comp=N,60nm,0.7s | | | | | | |
| H23K | | | | IAML | | 08 56 21.9 | |
| | comp=E,68nm,0.7s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.22** | **174** | | Pn | 08 55 07.7 | +2.4 |
| **EPYK** | **Eagle Plains** | **4.22** | **134** | | Pn | 08 55 07.7 | +2.3 |
| **F31M** | **Tsiigehtchic** | **4.38** | **113** | Pn | Pn | 08 55 09.8 | +2.4 |
| F31M | | | | IAML | | 08 56 23.4 | |
| | comp=N,49nm,0.6s | | | | | | |
| F31M | | | | IAML | | 08 56 25.6 | |
| | comp=E,50nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **4.38** | **156** | | Pn | 08 55 10.2 | +2.6 |
| **I28M** | **Miner Creek** | **4.38** | **156** | IAML | | 08 56 05.5 | |
| | comp=N,43nm,0.5s | | | | | | |
| **E20K** | **Nigu River** | **4.50** | **260** | | Pn | 08 55 11.0 | +1.8 |
| **D20K** | **Etivluk River** | **4.50** | **266** | | Pn | 08 55 11.1 | +1.9 |
| **H22K** | **Ishtalitna Cre** | **4.52** | **220** | | Pn | 08 55 11.7 | +2.3 |
| **G31M** | **Satah River** | **4.52** | **120** | Pn | Pn | 08 55 12.1 | +2.7 |
| **B20K** | **Meade River** | **4.52** | **283** | | Pn | 08 55 10.9 | +1.5 |
| **B20K** | **Meade River** | **4.52** | **283** | IAML | | 08 56 52.8 | |
| | comp=N,61nm,1.1s | | | | | | |
| **A21K** | **Barrow** | **4.55** | **300** | | Pn | 08 55 11.3 | +1.5 |
| **POKR** | **Poker Plat Res** | **4.56** | **197** | | Pn | 08 55 12.8 | +2.8 |
| POKR | | | | IAML | | 08 56 08.5 | |
| | comp=E,55nm,0.6s | | | | | | |
| POKR | | | | IAML | | 08 56 38.5 | |
| | comp=N,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NEA2** | **Nenana** | **5.26 203** | | | Pn | | 08 55 22.9 | +3.3 |
| **C19K** | **Lookout Ridge** | **5.46 273** | | Pn | Pn | | 08 55 24.7 | +2.4 |
| **SCRK** | **Sand Creek** | **5.54 179** | | Pn | Pn | | 08 55 26.9 | +3.4 |
| **J29N** | **Klondike Camp** | **5.58 152** | | | Pn | | 08 55 26.8 | +2.8 |
| **F19K** | **Shaleruckik Mo** | **5.71 249** | | Pn | Pn | | 08 55 28.4 | +2.7 |
| **BWN** | **Browne** | **5.72 204** | | Pn | Pn | | 08 55 28.4 | +2.5 |
| **DAWY** | **Dawson** | **5.77 158** | | | Pn | | 08 55 29.8 | +3.1 |
| **J30M** | **Hart River** | **5.82 144** | | Pn | Pn | | 08 55 29.5 | +2.1 |
| **G19K** | **Purcell Mounta** | **5.91 242** | | Pn | Pn | | 08 55 30.9 | +2.4 |
| **BPAW** | **Bear Paw Mtn.** | **6.03 209** | | Pn | Pn | | 08 55 32.9 | +2.8 |
| **C18K** | **Utukok River** | **6.13 270** | | Pn | Pn | | 08 55 33.2 | +1.6 |
| **H19K** | **Roundabout Mou** | **6.14 236** | | Pn | Pn | | 08 55 33.7 | +2.1 |
| **I20K** | **Naaghedeneel** | **6.17 225** | | Pn | Pn | | 08 55 34.9 | +2.9 |
| **K29M** | **Barlow Dome** | **6.26 152** | | Pn | Pn | | 08 55 36.4 | +2.9 |
| **E18K** | **Tukpahlearik C** | **6.37 259** | | Pn | Pn | | 08 55 37.1 | +2.3 |
| **RND** | **Reindeer** | **6.38 199** | | | Pn | | 08 55 37.8 | +2.8 |
| **L26K** | **Log Cabin Wild** | **6.50 176** | | | Pn | | 08 55 39.6 | +3.0 |
| **BCAR** | **Beaver Creek A** | **6.53 170** | | Pn | Pn | | 08 55 40.6 | +3.6 |
| **L27K** | **Beaver Creek,** | **6.53 170** | | Pn | Pn | | 08 55 40.2 | +3.2 |
| **DHY** | **Denali Highway** | **6.56 193** | | Pn | Pn | | 08 55 41.8 | +4.2 |
| **J20K** | **Nowinta River** | **6.60 221** | | | Pn | | 08 55 40.5 | +2.5 |
| **A36M** | **Sachs Harbour** | **6.75 59** | | Pn | Pn | | 08 55 40.0 | 0.0 |
| **L29M** | **L29M** | **6.86 156** | | Pn | Pn | | 08 55 44.0 | +2.4 |
| **RDOG** | **Red Dog Mine** | **6.92 267** | | Pn | Pn | | 08 55 43.7 | +1.3 |
| **F17K** | **Baldwin Pennin** | **7.08 253** | | Pn | Pn | | 08 55 47.0 | +2.5 |
| **J19K** | **Poorman** | **7.11 225** | | Pn | Pn | | 08 55 47.6 | +2.7 |
| **M26K** | **Nabesna, AK** | **7.13 175** | | Pn | Pn | | 08 55 48.8 | +3.5 |
| **M27K** | **Edge Creek, AK** | **7.22 171** | | | Pn | | 08 55 50.9 | +4.2 |
| **M29M** | **Somme Creek** | **7.45 159** | | Pn | Pn | | 08 55 53.2 | +3.5 |
| **C16K** | **Lisburne Hills** | **7.71 271** | | Pn | Pn | | 08 55 55.0 | +1.9 |
| **SCM** | **Sheep Creek Mo** | **7.79 191** | | Pn | Pn | | 08 55 57.6 | +3.3 |
| **N25K** | **Chitina, Valde** | **7.92 181** | | Pn | Pn | | 08 55 59.3 | +3.2 |
| **G16K** | **Koyuk River** | **8.06 248** | | Pn | Pn | | 08 55 60.0 | +1.9 |
| **SKT** | **Skwentna** | **8.11 205** | | Pn | Pn | | 08 56 01.7 | +3.1 |
| **PMR** | **Palmer** | **8.18 197** | | Pn | Pn | | 08 56 04.5 | +4.9 |
| **M20K** | **Styx River** | **8.46 210** | | Pn | Pn | | 08 56 06.7 | +3.2 |
| **J17K** | **VABM Dome** | **8.50 231** | | Pn | Pn | | 08 56 06.2 | +2.2 |
| **L19K** | **White Mountain** | **8.51 216** | | Pn | Pn | | 08 56 06.6 | +2.3 |
| **FARO** | **Faro, Yukon** | **8.53 143** | | | Pn | | 08 56 06.0 | +1.6 |
| **N30M** | **Aishikik Lake** | **8.58 156** | | Pn | Pn | | 08 56 08.5 | +3.3 |
| **F15K** | **North Star Dit** | **8.64 254** | | Pn | Pn | | 08 56 07.3 | +1.4 |
| **CTGM** | **Chitina Glacie** | **8.64 171** | | | Pn | | 08 56 10.5 | +4.4 |
| **M19K** | **Big River Lodg** | **8.67 214** | | Pn | Pn | | 08 56 09.4 | +3.0 |
| **GRNC** | **Granite Creek** | **8.85 172** | | | Pn | | 08 56 14.5 | +5.4 |
| **L18K** | **Granite Mounta** | **8.88 221** | | Pn | Pn | | 08 56 11.3 | +2.1 |
| **J16K** | **Anvik River** | **9.02 234** | | Pn | Pn | | 08 56 14.1 | +3.0 |
| **TABL** | **Table Mountain** | **9.18 170** | | Pn | Pn | | 08 56 18.5 | +5.0 |
| **O30N** | **Mendenhall** | **9.39 155** | | Pn | Pn | | 08 56 18.9 | +2.7 |
| **M17K** | **Holitna River** | **9.77 220** | | Pn | Pn | | 08 56 23.1 | +1.7 |
| **WRGLY** | **Wrigley** | **10.39 117** | | | Pn | | 08 56 31.7 | +1.9 |
| **M16K** | **Timber Creek** | **10.46 223** | | Pn | Pn | | 08 56 33.0 | +2.1 |

**IDC 14 08:58:58.7±2.9, 54°00'N×86°49'E, h0km, mbtmp2.6/2, ML2.4/2, Error ellipse: s-maj=23.4km s-min=15.0km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.99** | **268** | I | I | 09 03 40.0 | |
| | baz=87,slow=318,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.99** | **267** | Pg | Pg | 08 59 16.6 | -1.1 |
| | 0.4nm,0.3s,baz=85,slow=16,SNR=3.9 | | | | | | |
| ZALV | | | | Lg | Lg | 08 59 31.7 | |
| | 0.7nm,0.3s,baz=87,slow=28,SNR=2.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.94** | **238** | Pn | Pn | 09 00 28.9 | +1.0 |
| | 0.1nm,0.3s,baz=55,slow=13,SNR=5.7 | | | | | | |
| KURBB | | | | Lg | Lg | 09 02 08.6 | |
| | baz=51,slow=24,SNR=1.9 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.70** | **202** | Pn | Pn | 09 00 52.7 | +0.7 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=1.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*IDC 14 09:02:42.2±1.5, 8°09'S×126°46'E, h0km, mb3.9/3, mbtmp4.1/5, ML4.4/2, Error ellipse: s-maj=159.3km s-min=24.6km az=66.0*

**ISC 14 09:02:42.1±0.9, 7°47'S±0'07×128°50'E±0'09, h10km, n16, σ3§21/18, mb4.0/3, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **4.76** | **241** | P | **Pg** | **09 04 13.8** | **+0.3** |
| **DRS** | **Darwin Rock St** | **5.46** | **155** | P | **Pb** | **09 04 18.2** | **+0.5** |
| **FAKI** | **Fak Fak** | **5.86** | **40** | P | **Pb** | **09 04 24.3** | **-0.2** |
| **MTN** | **Manton Dam** | **5.93** | **154** | P | **Pb** | **09 04 24.0** | **-1.7** |
| **KDU** | **Kakadu** | **6.49** | **143** | P | **Pb** | **09 04 31.1** | **-4.1** |
| **WRA** | **Warramunga Arr** | **13.63** | **156** | Pn | **P** | **09 06 02.0** | **-2.6** |
| | 2.1nm,0.3s,baz=326,slow=14,SNR=78 | | | | | | |
| WRA | | | | Sn | **Sn** | **09 08 26.5** | **-0.8** |
| | 2.0nm,0.3s,baz=332,slow=22,SNR=8.7 | | | | | | |
| | 3.2nm,0.3s | | | | | | |
| **COEN** | **Coen** | **15.79** | **115** | P | **P** | **09 06 32.7** | **+4.1** |
| **QIS** | **Mount Isa** | **16.87** | **142** | P | **P** | **09 06 45.3** | **+4.6** |
| **ASAR** | **Alice Springs** | **16.92** | **163** | P | **P** | **09 06 43.5** | **+2.3** |
| | 1.5nm,0.3s,baz=335,slow=9.7,SNR=111 | | | | | | |
| ASAR | | | | S | **Sn** | **09 09 43.6** | **-3.7** |
| | 1.8nm,0.8s,baz=322,slow=18,SNR=5.7 | | | | | | |
| | 5.8nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **16.93** | **163** | P | **P** | **09 06 46.4** | **+5.1** |
| **OOD** | **Oodnadatta** | **21.33** | **162** | P | **P** | **09 07 33.6** | **+4.2** |
| **INKA** | **Innaminka** | **23.26** | **152** | P | **P** | **09 07 53.3** | **+3.4** |
| **MULG** | **Mulgathing** | **23.28** | **168** | P | **P** | **09 07 53.0** | **+2.9** |
| **MKAR** | **Makanchi Array** | **67.81** | **328** | P | **P** | **09 13 39.3** | **-1.2** |
| | 0.5nm,0.5s,baz=122,slow=7.5,SNR=8.1 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.14** | **329** | P | **P** | **09 14 05.2** | **-1.7** |
| | 0.8nm,0.6s,baz=131,slow=5.0,SNR=12 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.51** | **180** | P | **P** | **09 15 03.3** | **-1.7** |
| | 0.9nm,0.8s,baz=336,slow=12,SNR=5.6 | | | | | | |
| | 0.9nm,0.8s | | | | | | |

*SJA 14 09:03:01.9±0.6, 22°03S×68°47W, h136km±4km, ML3.4, MW3.6*

*GUC 14 09:03:03.3±0.8, 21°94S×68°57W, h123km±4km, ML3.5*

**ISC 14 09:03:04.4±1.4, 21°99S±0'03×68°61W±0'04, h126km±10km, n25, σ1§32/42, 2C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.61** | **288** | ⇑*iP* | **Pn** | **09 03 24.1** | **+0.2** |
| PB09 | | | | *eS* | **Sn** | **09 03 38.8** | **+0.2** |
| PB09 | | | | IAML | | 09 03 40.9 | |
| | comp=E,1μm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **0.68** | **204** | *eP* | **Pn** | **09 03 24.3** | **-0.3** |
| LVC | | | | *eS* | **Sn** | **09 03 40.5** | **+0.6** |
| LVC | | | | IAML | | 09 03 41.8 | |
| | comp=Z,217nm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **0.68** | **204** | *eP* | **Pn** | **09 03 24.0** | **-0.5** |
| LVC | | | | *eS* | **Sn** | **09 03 39.7** | **-0.1** |
| LVC | | | | IAML | | 09 03 41.1 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **AF01** | **San Pedro de A** | **1.04** | **157** | *eP* | **Pn** | **09 03 25.3** | **-2.3** |
| AF01 | | | | IAML | | 09 04 00.1 | |
| | comp=Z,437nm,1.1s | | | | | | |
| **AF01** | **San Pedro de A** | **1.04** | **157** | *eP* | **Pn** | **09 03 27.4** | **-0.2** |
| **PB04** | **IPOC Station P** | **1.46** | **256** | *eP* | **Pn** | **09 03 32.5** | **+0.5** |
| PB04 | | | | *eS* | **Sn** | **09 03 54.7** | **+1.8** |
| PB04 | | | | IAML | | 09 04 01.5 | |
| | comp=Z,408nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **1.46** | **256** | *eP* | **Pn** | **09 03 32.5** | **+0.5** |
| PB04 | | | | *eS* | **Sn** | **09 03 54.0** | **+1.1** |
| PB04 | | | | IAML | | 09 03 57.9 | |
| | comp=E,522nm,0.1s | | | | | | |
| **PB05** | **IPOC Station P** | **1.70** | **239** | *eP* | **Pn** | **09 03 35.3** | **+0.7** |
| PB05 | | | | *eS* | **Sn** | **09 03 58.8** | **+1.0** |
| PB05 | | | | IAML | | 09 04 06.1 | |
| | comp=E,305nm,0.4s | | | | | | |
| **PX03** | **IPOC Station P** | **1.84** | **329** | *eP* | **Pn** | **09 03 35.3** | **-1.1** |
| PX03 | | | | *eS* | **Sn** | **09 03 59.9** | **-0.8** |
| PX03 | | | | IAML | | 09 04 01.1 | |
| | comp=N,722nm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **1.85** | **309** | *eP* | **Pn** | **09 03 36.4** | **0.0** |
| PATCX | | | | *eS* | **Sn** | **09 04 00.4** | **-0.4** |
| PATCX | | | | IAML | | 09 04 04.9 | |
| | comp=E,458nm,0.4s | | | | | | |
| **TA01** | **Diego Aracena** | **2.04** | **314** | *eP* | **Pn** | **09 03 38.4** | **-0.2** |
| TA01 | | | | *eS* | **Sn** | **09 04 06.9** | **+2.2** |
| TA01 | | | | IAML | | 09 04 11.3 | |
| | comp=Z,125nm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **2.04** | **314** | *eP* | **Pn** | **09 03 37.9** | **-0.7** |
| TA01 | | | | *eS* | **Sn** | **09 04 04.2** | **-0.6** |
| **HMBC** | **Humberstone** | **2.08** | **325** | ⇑*iP* | **Pn** | **09 03 38.4** | **-0.9** |
| HMBC | | | | *eS* | **Sn** | **09 04 04.6** | **-1.3** |
| HMBC | | | | IAML | | 09 04 08.6 | |
| | comp=E,389nm,0.2s | | | | | | |
| **TA02** | **Huaiquique** | **2.22** | **320** | *eP* | **Pn** | **09 03 41.5** | **+0.6** |
| TA02 | | | | *eS* | **Sn** | **09 04 09.5** | **+0.6** |
| TA02 | | | | IAML | | 09 04 17.4 | |
| | comp=Z,152nm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **2.37** | **347** | *eP* | **Pn** | **09 03 43.0** | **-0.3** |
| GO01 | | | | *eS* | **Sn** | **09 04 13.7** | **+0.6** |
| **GO01** | **Chusmiza** | **2.37** | **347** | *eP* | **Pn** | **09 03 42.9** | **-0.4** |
| GO01 | | | | *eS* | **Sn** | **09 04 13.0** | **-0.1** |
| GO01 | | | | IAML | | 09 04 16.4 | |
| | comp=N,450nm,0.2s | | | | | | |
| **YJA** | **Yavi** | **2.88** | **94** | *eP* | **Pn** | **09 03 49.3** | **-0.4** |
| YJA | | | | *eS* | **Sn** | **09 04 26.5** | **+1.9** |
| **YJA** | **Yavi** | **2.88** | **94** | *eP* | **Pn** | **09 03 49.3** | **-0.4** |
| **PB14** | **IPOC Station P** | **3.10** | **212** | *eP* | **Pn** | **09 03 53.3** | **+0.9** |
| PB14 | | | | *eS* | **Sn** | **09 04 24.6** | **-4.8** |
| PB14 | | | | IAML | | 09 04 38.8 | |
| | comp=Z,61nm,0.5s | | | | | | |
| **PB14** | **IPOC Station P** | **3.10** | **212** | *eP* | **Pn** | **09 03 53.6** | **+1.2** |
| PB14 | | | | IAML | | 09 04 43.5 | |
| | comp=E,44nm,0.5s | | | | | | |
| **GO02** | **Mina Guanaco** | **3.28** | **196** | *eP* | **Pn** | **09 03 55.2** | **+0.4** |
| GO02 | | | | *eS* | **Sn** | **09 04 35.9** | **+2.0** |
| **SLA** | **San Lorenzo** | **3.94** | **134** | *eP* | Pn | 09 03 49.6 | -14 |
| **SLA** | **San Lorenzo** | **3.94** | **134** | *eP* | **Pn** | **09 04 04.4** | **+0.9** |
| **AC01** | **Pan de Azucar** | **4.52** | **203** | *eP* | **Pn** | **09 04 09.9** | **-1.1** |
| AC01 | | | | *eS* | **Sn** | **09 05 00.4** | **-2.3** |
| AC01 | | | | IAML | | 09 05 04.7 | |
| | comp=Z,59nm,0.9s | | | | | | |
| **FSA** | **Cafayete** | **4.76** | **150** | *eP* | **Pn** | **09 04 15.2** | **+0.8** |

**IDC 14 09:19:44.1±3.3, 53°77N×88°06E, h0km, mbtmp3.0/2, ML2.6/2, Error ellipse: s-maj=26.9km s-min=18.9km az=47.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.93** | **277** | I | I | 09 32 10.0 | |
| | baz=93,slow=320,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.93** | **277** | Pg | Pn | 09 20 18.2 | +0.1 |
| | 1.6nm,0.3s,baz=94,slow=12,SNR=30 | | | | | | |
| ZALV | | | | Lg | Lg | 09 20 45.0 | |
| | 1.9nm,0.3s,baz=98,slow=24,SNR=16 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.65** | **246** | Pn | Pn | 09 21 23.9 | +0.9 |
| | 0.1nm,0.3s,baz=62,slow=14,SNR=5.8 | | | | | | |
| KURBB | | | | Sn | Sn | 09 22 39.6 | +0.3 |
| | baz=182,slow=24,SNR=1.8 | | | | | | |
| KURBB | | | | Lg | Lg | 09 23 14.5 | |
| | baz=62,slow=32,SNR=2.7 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.90** | **210** | Pn | Pn | 09 21 41.0 | +0.9 |
| | 0.1nm,0.3s,baz=38,slow=13,SNR=2.8 | | | | | | |
| MKAR | | | | Lg | Lg | 09 23 53.3 | |
| | baz=7.3,slow=38,SNR=2.2 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*NEIC 14 09:22:39.0±2.4, 25°42N±0°02×130°47E±0°04, h10km±1km, mb4.7/53, Error ellipse: s-maj=6.9km s-min=4.5km az=94.0*

*NIED 14 09:22:38.6, 25°33N×130°36E, h39km, MW5.0, Moment Tensor Solution. s3 Moment tensor: Scale 10^16 Nm; Mrr=0.39; Mθθ1.12; Mϕϕ-0.73; Mrθ2.66; Mθϕ0.68; Mϕr-0.94; Fault plane solution: M03.07000×10^16 NP1: ϕs289.00000°, δ86.00000°, λ-69.00000°. NP2:ϕs30.00000°, δ22.00000°, λ-168.00000°.*

*IDC 14 09:22:38.0±0.8, 25°35N×130°37E, h0km, mb4.2/21, mbtmp4.2/26, ML4.0/5, MS4.1/48 Error ellipse: s-maj=24.0km s-min=15.4km az=77.0*

*JMA 14 09:22:38.6±0.1, 25°3N±0°8×130°4E±0°2, h39km, MD4.9/26, MW4.8/26, NEAR MINAMI-DAITOJIMA IS*

*MOS 14 09:22:38.3±1.1, 25°38N×130°27E, h13km, mb4.7/20, Error ellipse: s-maj=10.8km s-min=5.2km az=104.0*

*GCMT 14 09:22:40.0±0.2, 25°33N±0°01×130°34E±0°01, h12km, MW4.9/98, Moment Tensor Solution. s27,c27; s98,c146; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr-0.06±.07; Mθθ1.59±.06; Mϕϕ-1.53±.07; Mrθ0.86±.17; Mθϕ1.68±.05; Mϕr0.17±.19; Best double couple: M02.43900×10^16 NP1:ϕs113.00000°, δ81.00000°, λ16.00000°. NP2: ϕs20.00000°, δ74.00000°, λ171.00000°. Principal axes: T 2.5990, Plg18.0000°, Azm337.0000°; N -0.3220, Plg71.0000°, Azm140.0000°; P -2.2790, Plg5.0000°, Azm245.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BJI 14 09:22:41.2±0.0, 25°43N×130°46E, h26km, mb4.5/49, mB4.8/26, Ms4.6/48, Ms7 4.2/47*

**ISC 14 09:22:40.4±0.7, 25°38N±0°04×130°43E±0°03, h20km±2km, h19km:pP-P, n226, σ2§04/235, mb4.5/67, MS4.2/56, 9C-8D, Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JMZ** | **Minamidaito 2** | **0.84** | **59** | Pn | **Pg** | **09 22 56.0** | **-0.8** |
| JMZ | | | | | **Sg** | **09 23 04.6** | **-3.3** |
| **JMZ** | **Minamidaito 2** | **0.84** | **59** | P | **Pg** | **09 22 55.3** | **-1.5** |
| JMZ | | | | *eS* | **Sg** | **09 23 07.3** | **-0.6** |
| **JMZ** | **Minamidaito 2** | **0.84** | **59** | A | A | 09 22 55.3 | |
| | comp=E,85nm,4.0s,comp=N,77nm,2.8s | | | | | | |
| **JKDJ** | **Kitadaitoujima** | **0.96** | **54** | P | **Pb** | **09 22 57.1** | **-1.3** |
| JKDJ | | | | S | **Sb** | **09 23 10.4** | **-0.3** |
| **JKDJ** | **Kitadaitoujima** | **0.96** | **54** | A | A | 09 22 57.1 | |
| | comp=E,81nm,5.7s,comp=N,93nm,5.8s | | | | | | |
| **JYRO** | **Yoronjima** | **2.42** | **313** | P | **Pn** | **09 23 17.0** | **-1.8** |
| JYRO | | | | S | **Sn** | **09 23 45.0** | **-2.8** |
| **JOW** | **Kunigami** | **2.42** | **307** | Pn | **Pn** | **09 23 17.1** | **-1.8** |
| **JOW** | **Kunigami** | **2.42** | **307** | Pn | **Pn** | **09 23 17.0** | **-1.8** |
| | comp=N,152nm,0.3s,baz=118,slow=24,SNR=177 | | | | | | |
| JOW | | | | Sn | **Sn** | **09 23 43.0** | **-4.9** |
| | comp=N,138nm,0.3s,baz=114,slow=20,SNR=6.8 | | | | | | |
| JOW | | | | LR | LR | 09 24 27.1 | |
| | comp=N,3μm,20.1s,baz=30,slow=46 | | | | | | |
| | comp=N,348nm,0.3s | | | | | | |
| **JOW** | **Kunigami** | **2.42** | **307** | P | **Pn** | **09 23 16.7** | **-2.2** |
| JOW | | | | S | **Sn** | **09 23 44.6** | **-3.3** |
| **JOW** | **Kunigami** | **2.42** | **307** | A | A | 09 23 16.7 | |
| | comp=E,11nm,6.4s,comp=N,12nm,6.6s | | | | | | |
| **JNTH** | **Nagotoyohara** | **2.44** | **298** | P | **Pn** | **09 23 16.9** | **-2.3** |
| JNTH | | | | S | **Sn** | **09 23 44.3** | **-4.3** |
| **JNTH** | **Nagotoyohara** | **2.44** | **298** | A | A | 09 23 16.9 | |
| | comp=E,7.0nm,6.3s,comp=N,8.0nm,7.7s | | | | | | |
| **JJT3** | **Tamagusuku3** | **2.50** | **288** | P | **Pn** | **09 23 18.0** | **-2.0** |
| JJT3 | | | | S | **Sn** | **09 23 46.6** | **-3.4** |
| **JJT3** | **Tamagusuku3** | **2.50** | **288** | A | A | 09 23 18.0 | |
| | comp=E,38nm,5.6s,comp=N,33nm,4.3s | | | | | | |
| **JOKE** | **Okinoerabujima** | **2.58** | **320** | P | **Pn** | **09 23 20.0** | **-1.1** |
| **JOKE** | **Okinoerabujima** | **2.58** | **320** | A | A | 09 23 20.0 | |
| | comp=E,6.0nm,4.5s,comp=N,8.0nm,4.8s | | | | | | |
| **JTK** | **Tokunoshima** | **2.73** | **331** | P | **Pn** | **09 23 22.5** | **-0.7** |
| **JTK** | **Tokunoshima** | **2.73** | **331** | A | A | 09 23 22.5 | |
| | comp=E,4.0nm,6.3s,comp=N,4.0nm,6.7s | | | | | | |
| **JIH** | **Iheya** | **2.76** | **307** | P | **Pn** | **09 23 21.7** | **-1.8** |
| JIH | | | | S | **Sn** | **09 23 52.7** | **-3.5** |
| **JIH** | **Iheya** | **2.76** | **307** | A | A | 09 23 21.7 | |
| | comp=E,7.0nm,4.9s,comp=N,10.0nm,5.0s | | | | | | |
| **JAMN** | **Amaminishikomi** | **3.06** | **339** | P | **Pn** | **09 23 26.9** | **-0.8** |
| **JAM** | **Amami Oshima** | **3.10** | **346** | P | **Pn** | **09 23 27.9** | **-0.4** |
| **JAGN** | **Aguni-jima** | **3.11** | **293** | P | **Pn** | **09 23 26.5** | **-1.9** |
| JAGN | | | | S | **Sn** | **09 24 00.3** | **-4.6** |
| **JAGN** | **Aguni-jima** | **3.11** | **293** | A | A | 09 23 26.5 | |
| | comp=E,8.0nm,5.7s,comp=N,14nm,5.2s | | | | | | |
| **JKE** | **Kume jima 2** | **3.42** | **287** | P | **Pn** | **09 23 30.0** | **-2.6** |
| JKE | | | | S | **Sn** | **09 24 07.0** | **-5.6** |
| **JTAJ** | **Takarajima** | **3.91** | **344** | P | **Pn** | **09 23 38.9** | **-0.5** |
| **JYAK** | **Yakushimahirau** | **4.84** | **1** | P | **Pn** | **09 23 52.0** | **0.0** |
| JYAK | | | | S | **Sn** | **09 24 44.6** | **-2.9** |
| **JMTN** | **Minamitane** | **5.01** | **5** | P | **Pn** | **09 23 54.7** | **+0.2** |
| JMTN | | | | S | **Sn** | **09 24 51.6** | **-0.3** |
| **JTN** | **Tanegashima 3** | **5.27** | **5** | P | **Pn** | **09 23 58.0** | **-0.1** |
| JTN | | | | S | **Sn** | **09 24 57.5** | **-0.8** |
| **JISG** | **Ishigakijimahi** | **5.61** | **263** | P | **Pn** | **09 23 59.2** | **-3.5** |
| **JIJ** | **Ishigaki jima** | **5.80** | **261** | *eP* | **Pn** | **09 24 01.5** | **-3.8** |
| **JTZ** | **Takazaki** | **6.52** | **5** | P | **Pn** | **09 24 15.7** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **6.80** | **264** | Pn | **Pn** | **09 24 17.5** | **-1.5** |
| **YOJ** | **Yonaguni jima** | **6.80** | **264** | P | **Pn** | **09 24 17.5** | **-1.5** |
| **JNU** | **Nakatsue** | **7.72** | **3** | Pn | **Pn** | **09 24 30.4** | **-1.3** |
| **JNU** | **Nakatsue** | **7.72** | **3** | Pn | **Pn** | **09 24 32.1** | **+0.3** |
| | comp=N,3.9nm,0.3s,baz=248,slow=4.7,SNR=31 | | | | | | |
| JNU | | | | Sn | **Sn** | **09 25 56.0** | **-2.7** |
| | comp=N,2.6nm,0.3s,baz=277,slow=20,SNR=6.4 | | | | | | |
| JNU | | | | LR | LR | 09 27 33.3 | |
| | comp=N,400nm,20.4s,baz=198,slow=38 | | | | | | |
| | comp=N,30nm,0.6s | | | | | | |
| **YHNB** | **Yeheng** | **8.24** | **267** | Pn | **Pn** | **09 24 39.7** | **+0.7** |
| **SSLB** | **Suanglung** | **8.77** | **262** | Pn | **Pn** | **09 24 46.4** | **+0.2** |
| **JMN** | **Monobe** | **8.84** | **19** | Pn | **Pn** | **09 24 45.2** | **-1.9** |
| **TPUB** | **Ta-pu** | **9.18** | **259** | Pn | **Pn** | **09 24 53.2** | **+1.4** |
| **SSE** | **Sheshan** | **9.94** | **307** | P | **Pn** | **09 25 04.0** | **+1.9** |
| SSE | | | | S | **Sn** | **09 26 58.9** | **+5.8** |
| SSE | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=N,370nm,3.8s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=N,1μm,17.2s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=N,840nm,17.3s | | | | | | |
| **JCJ** | **Chichijima** | **10.69** | **78** | LR | LR | 09 28 41.5 | |
| | comp=N,1μm,19.0s,baz=256,slow=34 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **11.22** | **44** | Pn | **Pn** | **09 25 23.9** | **+4.1** |
| | comp=N,6.3nm,0.3s,baz=90,slow=20,SNR=1.2 | | | | | | |
| JHJ | | | | LR | LR | 09 28 52.6 | |
| | comp=N,1μm,21.9s,baz=270,slow=33 | | | | | | |
| **TJN** | **Taejon** | **11.27** | **347** | Pn | **Pn** | **09 25 20.3** | **-0.1** |
| **TJN** | **Taejon** | **11.27** | **347** | *ce*P | **Pn** | **09 25 22.8** | **+2.5** |
| **INU** | **Inuyama** | **11.44** | **28** | Pn | **Pn** | **09 25 22.1** | **-0.6** |
| **JGF** | **Kuroka** | **11.80** | **29** | Pn | **Pn** | **09 25 24.5** | **-3.2** |
| **NJ2** | **Nanjing** | **12.13** | **306** | *eP* | **Pn** | **09 25 34.1** | **+1.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.5s | | | | | | |
| **KSAR** | **Wonju Array Be** | **12.21** | **350** | Pn | **Pn** | **09 25 32.5** | **-0.8** |
| **KSAR** | **Wonju Array Be** | **12.21** | **350** | P | **Pn** | **09 25 32.5** | **-0.8** |
| **KSRS** | **Korea Array** | **12.22** | **351** | Pn | **Pn** | **09 25 34.6** | **+1.3** |
| | comp=N,0.2nm,0.3s,baz=171,slow=14,SNR=82 | | | | | | |
| KSRS | | | | LR | LR | 09 30 28.3 | |
| | comp=N,714nm,20.9s,baz=170,slow=38 | | | | | | |
| | comp=N,28nm,1.0s | | | | | | |
| **KS19** | **Wonju Array Si** | **12.28** | **350** | | **Pn** | **09 25 34.1** | **0.0** |
| **INCN** | **Inchon** | **12.49** | **346** | Pn | **Pn** | **09 25 39.0** | **+1.9** |
| **INCN** | **Inchon** | **12.49** | **346** | P | **Pn** | **09 25 39.0** | **+1.9** |
| **MAJO** | **Matsushiro** | **12.96** | **29** | Pn | **Pn** | **09 25 39.9** | **-3.6** |
| **MAJO** | **Matsushiro** | **12.96** | **29** | ⇑*eP* | **Pn** | **09 25 42.5** | **-1.0** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **12.96** | **29** | Pn | **Pn** | **09 25 46.1** | **+2.6** |
| | comp=Z,0.1nm,0.3s,baz=187,slow=12,SNR=7.5 | | | | | | |
| MJAR | | | | Sn | **Sn** | **09 28 07.9** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=164,slow=11,SNR=2.9 | | | | | | |
| MJAR | | | | LR | LR | 09 30 30.5 | |
| | comp=Z,691nm,18.6s,baz=206,slow=36 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **12.96** | **29** | Pn | **Pn** | **09 25 39.8** | **-3.8** |
| **DL2** | **Dalian** | **15.39** | **333** | P | **P** | **09 26 20.9** | **0.0** |
| DL2 | | | | S | **Sn** | **09 29 12.0** | **+5.6** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,47nm,1.5s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,1μm,18.4s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,1μm,19.4s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,2μm,16.9s | | | | | | |
| **PSTR** | **Posyet** | **17.23** | **1** | ⇑*eP* | **P** | **09 26 41.4** | **+0.2** |
| **GUMO** | **Guam** | **17.95** | **128** | LR | LR | 09 32 10.8 | |
| | comp=Z,476nm,18.6s,baz=316,slow=32 | | | | | | |
| **HNS** | **HongShan** | **17.96** | **316** | ⇓P | **P** | **09 26 49.3** | **-0.1** |
| HNS | | | | pP | **pwP** | **09 26 58.4** | **-1.1** |
| HNS | | | | PP | **PnPn** | **09 27 06.8** | **+6.8** |
| HNS | | | | *eS* | **Sn** | **09 30 06.3** | **-2.4** |
| HNS | | | | SS | **SnSn** | **09 30 24.4** | **+2.0** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,1μm,19.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,790nm,19.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,950nm,13.1s | | | | | | |
| **LYN** | **LuoYang** | **18.02** | **305** | P | **P** | **09 26 51.4** | **+1.3** |
| LYN | | | | PP | PnPn | 09 27 11.4 | +11 |
| LYN | | | | S | **S** | **09 30 14.4** | **-1.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,26nm,1.4s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,280nm,7.0s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,2μm,13.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,1μm,14.1s | | | | | | |
| LYN | | | | L

ASAJ LR LR 09 36 37.4
comp=Z,361nm,18.8s,baz=200,slow=40
comp=Z,2.0nm,0.7s
**XLT XiLinHaoTe 21.86 331** *e*P **P 09 27 35.6 +3.7**
XLT S **S 09 31 30.8 -2.0**
XLT pmax pmax
comp=Z,11nm,1.1s
XLT LR LR
comp=Z,820nm,15.6s
XLT LR LR
comp=Z,890nm,17.4s
**HHC Hu-ho-hao-te 22.01 319** *e*P **P 09 27 33.8 +0.2**
HHC pP pwP 09 27 42.9 -0.5
HHC sP sP 09 27 48.0 +7.9
HHC PP **PnPn 09 27 59.5 +4.0**
HHC S **S 09 31 27.3 -8.4**
HHC sS Sn 09 31 44.4 -2.0
HHC pmax pmax
comp=Z,8.0nm,0.6s
HHC pmax pmax
comp=Z,140nm,4.4s
HHC LR LR
comp=Z,810nm,13.0s
HHC LR LR
comp=Z,1μm,13.4s
HHC LR LR
comp=Z,1μm,16.0s
**BTO Baotou 22.80 317** *e*P **P 09 27 44.9 +2.9**
BTO pP **pwP 09 27 54.3 +2.5**
BTO sP sP 09 27 58.3 +10
BTO PP PnPn 09 28 16.4 +10
BTO S **S 09 31 54.3 +4.1**
BTO pmax pmax
comp=Z,89nm,0.7s
BTO pmax pmax
comp=Z,720nm,5.2s
BTO LR LR
comp=Z,2μm,17.7s
BTO LR LR
comp=Z,2μm,17.0s
BTO LR LR
comp=Z,1μm,18.9s
**YSS Yuzh-Sakhalins 23.66 21** *e*P **P 09 27 51.2 +0.8**
YSS *e*S **S 09 32 01.2 -2.9**
YSS pmax pmax
comp=Z,20nm,1.1s
YSS smax smax
comp=N,200nm,6.0s
YSS smax smax
comp=E,200nm,8.0s
**KLR Kul'dur 23.83 2** P **P 09 27 52.9 +0.8**
comp=E,26nm,0.9s,baz=186,slow=7.7,SNR=45
KLR LR LR 09 37 11.4
comp=E,172nm,19.6s,baz=176,slow=37
comp=E,26nm,0.9s
**KLR Kul'dur 23.83 2***c**e*P **P 09 27 52.8 +0.8**
KLR pmax pmax
comp=Z,76nm,1.7s
**CD2 Chengdu 24.12 289** P **P 09 27 58.1 +3.0**
CD2 S **S 09 32 11.3 -0.8**
CD2 pmax pmax
comp=Z,20nm,1.1s
CD2 LR LR
comp=Z,2μm,16.5s
CD2 LR LR
comp=Z,1μm,15.2s
CD2 LR LR
comp=Z,1μm,10.2s
**SLVN Son La 24.67 266** P **P 09 27 58.5 -1.6**
SLVN IAmb IAmb 09 28 01.7
comp=Z,14nm,1.4s
**HEH HeiHe 24.94 355** *e*P **P 09 28 03.1 +0.9**
HEH pmax pmax
comp=Z,14nm,1.6s
**LZH Lanzhou 25.14 301** *e*P **P 09 28 06.4 +1.9**
LZH pP pwP 09 28 12.6 -1.9
LZH S **S 09 32 28.0 -0.6**
LZH pmax pmax
comp=Z,17nm,1.4s
LZH LR LR
comp=Z,1μm,13.4s
LZH LR LR
comp=Z,460nm,14.1s
LZH LR LR
comp=Z,340nm,14.4s
**HIA Hailar 25.26 343**⇑ *e*P **P 09 28 05.8 +0.6**
HIA pmax pmax
comp=Z,13nm,1.1s
**PZH PanZhiHua 25.80 279** P **P 09 28 12.9 +2.4**
PZH S **S 09 32 42.9 +3.8**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,240nm,4.7s
PZH LR LR
comp=Z,460nm,12.7s
PZH LR LR
comp=Z,530nm,10.2s
PZH LR LR
comp=Z,540nm,10.4s
**TOLI2 Tolitoli 25.87 203** P **P 09 28 10.7 -0.2**
TOLI2 IAmb IAmb 09 28 14.6
comp=Z,10nm,0.9s
**TYV Tymovskoe 27.12 17** *e*P **P 09 28 28.8 +6.8**
TYV pmax pmax
comp=Z,100nm,4.8s
TYV pmax pmax
comp=Z,10.0nm,1.0s
**ZEA Zeya 28.42 356** *e*P **P 09 28 35.4 +1.9**
ZEA pmax pmax
comp=Z,20nm,1.3s
ZEA MLR MLR
comp=E,200nm,12.0s
ZEA MLR MLR
comp=N,200nm,13.0s
ZEA MLR MLR
comp=Z,200nm,13.0s
**TNCH TengChong 28.84 276** P **P 09 28 38.6 +0.7**
TNCH S **S 09 33 28.6 +1.4**
TNCH pmax pmax
comp=Z,170nm,3.8s
TNCH LR LR
comp=Z,470nm,10.7s
TNCH LR LR
comp=Z,640nm,9.7s
TNCH LR LR
comp=Z,550nm,11.0s
**ULN Ulaanbaatar 29.04 327** P **P 09 28 40.0 +0.7**
**ULN Ulaanbaatar 29.04 327**‖ *e*P **P 09 28 40.9 +1.6**
ULN pmax pmax
comp=Z,9.0nm,1.4s
**GTA Gaotai 29.23 306** *e*P **P 09 28 42.3 +1.2**
GTA pP pwP 09 28 49.0 -2.2
GTA pmax pmax
comp=Z,16nm,1.0s
GTA LR LR
comp=Z,740nm,14.3s
GTA LR LR
comp=Z,370nm,15.9s
GTA LR LR
comp=Z,310nm,16.3s
**SONM Songino Array 29.35 326** P **P 09 28 40.3 -1.8**
**SONM Songino Array 29.35 326** P **P 09 28 42.2 +0.1**
comp=Z,2.7nm,1.0s,baz=128,slow=9.6,SNR=9.5
SONM LR LR 09 42 02.0
comp=Z,645nm,19.0s,baz=108,slow=40
comp=Z,2.7nm,1.0s
**SONM Songino Array 29.35 326** P **P 09 28 40.3 -1.8**
SONM pmax pmax
comp=Z,8.0nm,1.4s
**CMAR Chiang Mai Arr 29.96 263** LR LR 09 40 51.1
comp=Z,377nm,21.4s,baz=75,slow=37
**KAPI Kappang 31.95 200** LR LR 09 40 38.3
comp=Z,140nm,21.9s,baz=38,slow=34
**PETK Petropavlovsk- 34.42 29** LR LR 09 43 13.4
comp=Z,179nm,19.7s,baz=215,slow=36
**PET Petropavlovsk 34.79 30** *e*P **P 09 29 25.9 -3.6**
PET 09 37 15.1
PET MLR MLR
comp=Z,200nm,13.0s
PET MLR MLR
comp=Z,200nm,15.0s
**IPM Ipoh 35.04 238** P **P 09 29 32.5 +0.4**
**YAK Yakutsk 36.64 359** P **P 09 29 45.7 +0.4**
**YAK Yakutsk 36.64 359** LR LR 09 43 59.6
comp=Z,244nm,21.6s,baz=174,slow=35

**YAK Yakutsk 36.64 359** *e*P **P 09 29 46.2 +0.9**
YAK *e**PP **pwP 09 29 56.0 +0.6**
YAK *e* 09 31 08.6
YAK *e* 09 32 08.7
YAK *e*S **S 09 35 27.7 +0.6**
YAK *e*SS **SnSn 09 37 56.5 -1.0**
YAK *e* 09 39 59.6
YAK pmax pmax
comp=Z,46nm,0.9s
YAK pmax pmax
comp=N,33nm,1.6s
YAK pmax pmax
comp=E,5.0nm,1.5s
YAK pmax pmax
comp=Z,168nm,5.3s
YAK pmax pmax
comp=N,68nm,4.4s
YAK pmax pmax
comp=E,54nm,3.9s
YAK smax smax
comp=N,75nm,3.5s
YAK smax smax
comp=E,41nm,2.8s
**MA2 Magadan 37.00 17** LR LR 09 45 04.9
comp=E,102nm,18.6s,baz=204,slow=36
**PMG Port Moresby 38.23 153** LR LR 09 43 19.5
comp=E,407nm,20.2s,baz=319,slow=32
**WMQ Urumqi 39.19 309** *e*P **P 09 30 08.5 +1.3**
WMQ LR LR
comp=E,800nm,15.3s
WMQ LR LR
comp=E,310nm,18.1s
WMQ LR LR
comp=E,240nm,20.9s
**GSI Gunungsitoli 39.71 238** P **P 09 30 11.9 +0.2**
GSI IAmb IAmb 09 30 12.4
comp=Z,26nm,1.0s
**SEY Seymchan 40.28 15**⇑ *e*P **P 09 30 17.4 +1.6**
SEY pmax pmax
comp=Z,6.0nm,1.3s
**KNRA Kununurra 40.84 182** P **P 09 30 20.7 -0.2**
KNRA IAmb IAmb 09 30 46.5
comp=Z,28nm,1.3s
**DGZ Jazzator, Alta 41.08 318**‖ *e*P **P 09 30 24.8 +1.9**
DGZ pmax pmax
comp=Z,14nm,2.7s
**SHEM Shemya Is, Ala 42.58 38** LR LR 09 46 39.7
comp=Z,122nm,18.4s,baz=272,slow=34
**MK31 Makanchi Array 43.57 312** **P 09 30 43.1 0.0**
**MK31 Makanchi Array 43.57 312** P **P 09 30 43.1 0.0**
MK31 pmax pmax
comp=Z,2.0nm,0.9s
**MKAR Makanchi Array 43.57 312** P **P 09 30 42.2 -0.9**
**MKAR Makanchi Array 43.57 312** P **P 09 30 44.2 +1.1**
comp=Z,1.4nm,0.7s,baz=95,slow=11,SNR=12
comp=Z,1.4nm,0.7s
**MKAR Makanchi Array 43.57 312** *i* P **P 09 30 44.7 +1.6**
MKAR pmax pmax
comp=Z,1.0nm,0.7s
**MAKZ Makanchi 43.79 312** P **P 09 30 43.4 -1.4**
**MAKZ Makanchi 43.79 312** P **P 09 30 43.4 -1.4**
MAKZ pmax pmax
comp=Z,6.0nm,1.3s
**ZAA0 Zalesovo Array 44.12 323** P **P 09 30 46.7 -0.6**
ZAA0 IAmb IAmb 09 30 50.9
comp=Z,6.9nm,0.8s
**ZALV Zalesovo Beam 44.12 323** P **P 09 30 46.6 -0.7**
**ZALV Zalesovo Beam 44.12 323** P **P 09 30 49.0 +1.7**
comp=Z,6.8nm,0.9s,baz=110,slow=8.1,SNR=14
ZALV LR LR 09 50 52.6
comp=Z,449nm,18.3s,baz=115,slow=38
comp=Z,6.8nm,0.9s
**ZALV Zalesovo Beam 44.12 323** *i* P **P 09 30 49.0 +1.7**
ZALV pmax pmax
comp=Z,7.0nm,0.9s
**HNR Honiara 44.99 137** LR LR 09 48 56.1
comp=Z,1μm,19.1s,baz=324,slow=35
**WB0 Warramunga Arr 45.05 175** P **P 09 30 55.3 +0.3**
WB0 IAmb IAmb 09 31 12.4
comp=Z,19nm,1.3s
**WRAB Tennant Creek 45.21 175** P **P 09 30 55.4 -0.9**
WRAB IAmb IAmb 09 30 58.3
comp=Z,12nm,1.2s
**WRAB Tennant Creek 45.21 175**‖ *e*P **P 09 30 57.6 +1.3**
WRAB pmax pmax
comp=Z,6.0nm,0.9s
**WRA Warramunga Arr 45.22 175** P **P 09 30 55.5 -0.9**
**WRA Warramunga Arr 45.22 175** P **P 09 30 56.1 -0.3**
comp=Z,4.3nm,0.8s,baz=354,slow=8.8,SNR=13
WRA LR LR 09 48 08.4
comp=Z,217nm,21.9s,baz=353,slow=34
comp=Z,4.3nm,0.8s
**WRA Warramunga Arr 45.22 175** *i* P **P 09 30 57.5 +1.1**
WRA pmax pmax
comp=Z,5.0nm,0.8s
**WB2 Warramunga Arr 45.22 175** P **P 09 30 56.0 -0.3**
WB2 IAmb IAmb 09 31 01.9
comp=Z,9.6nm,0.9s
**WR0 Warramunga Arr 45.25 175** P **P 09 30 56.8 +0.1**
WR0 IAmb IAmb 09 31 05.2
comp=Z,12nm,1.0s
**MIDW Midway 46.39 74** P **P 09 31 03.4 -2.3**
**KURK Kurchatov 46.79 317** P **P 09 31 09.9 +1.3**
KURK IAmb IAmb 09 31 12.4
comp=Z,5.4nm,0.8s
**KURK Kurchatov 46.79 317***c**e*P **P 09 31 09.8 +1.3**
KURK pmax pmax
comp=Z,13nm,1.7s
**KURBB Kurchatov Arra 46.83 317** P **P 09 31 09.3 +0.5**
comp=Z,3.9nm,0.9s,baz=103,slow=8.6,SNR=24
KURBB LR LR 09 52 39.2
comp=Z,141nm,19.1s,baz=176,slow=38
comp=Z,3.9nm,0.9s
**NRN Naryn 47.41 304** P **P 09 31 15.8 +1.9**
NRN IAmb IAmb 09 31 43.4
comp=Z,3.7nm,0.8s
**NRN Naryn 47.41 304** P **P 09 31 15.9 +1.9**
NRN pmax pmax
comp=Z,4.0nm,0.8s
**CTA Charters Tower 47.75 160** LR LR 09 51 12.5
comp=Z,9.3nm,18.4s,baz=328,slow=36
**PSA00 Pilbara Seismi 47.79 193** P **P 09 31 17.4 +0.8**
PSA00 IAmb IAmb 09 31 40.3
comp=Z,6.2nm,1.0s
**BILL Bilibino 47.87 17**⇑ *e*P **P 09 31 17.0 +0.4**
BILL *e* 09 33 08.6
BILL *e*S S 09 38 33.1 +21
BILL pmax pmax
comp=Z,4.0nm,1.2s
BILL MLR MLR
comp=Z,113nm,18.0s
**FRU1 Bishkek 48.48 306** P **P 09 31 21.4 -0.5**
**FRU1 Bishkek 48.48 306** P **P 09 31 21.4 -0.5**
FRU1 pmax pmax
comp=Z,40nm,0.4s
**AAK Ala-Archa 48.58 305** LR LR 09 52 52.0
comp=Z,198nm,18.9s,baz=96,slow=37
**AS31 Alice Springs 48.88 176** P **P 09 31 22.9 -2.0**
**ASAR Alice Springs 48.88 176** P **P 09 31 24.7 -0.2**
**ASAR Alice Springs 48.88 176** P **P 09 31 26.6 +1.7**
comp=Z,0.6nm,0.8s,baz=6.2,slow=13,SNR=9.4
ASAR LR LR 09 50 13.1
comp=Z,126nm,21.9s,baz=352,slow=34
comp=Z,0.6nm,0.8s
**PALK Pallekele 50.68 258** LR LR 09 53 05.9
comp=Z,127nm,21.4s,baz=166,slow=36
**KKAR Karatay Array 51.51 306** P **P 09 31 42.4 -2.4**
**KKAR Karatay Array 51.51 306** P **P 09 31 42.4 -2.4**
**GAR Garm 51.80 301** P **P 09 31 45.6 -1.5**
GAR IAmb IAmb 09 32 04.8
comp=Z,17nm,1.3s
**BVAR Borovoye Array 52.22 319** P **P 09 31 51.1 +1.2**
comp=Z,5.7nm,0.8s,baz=91,slow=8.9,SNR=19
BVAR LR LR 09 56 16.5
comp=Z,519nm,18.9s,baz=97,slow=39
comp=Z,5.7nm,0.8s
**BRVK Borovoye 52.29 319** P **P 09 31 51.7 +1.3**
BRVK IAmb IAmb 09 31 53.1
comp=Z,9.6nm,1.0s
**BRVK Borovoye 52.29 319** P **P 09 31 51.7 +1.3**
BRVK pmax pmax
comp=Z,10.0nm,1.0s
**CHGR Chuyangaron 52.73 300** P **P 09 31 52.8 -1.2**
CHGR IAmb IAmb 09 32 02.6
comp=Z,9.5nm,1.0s
**CHGR Chuyangaron 52.73 300** P **P 09 31 52.8 -1.2**
CHGR pmax pmax
comp=Z,9.0nm,1.0s
**KBL Kabul 53.26 295** P **P 09 31 56.6 -1.6**
KBL IAmb IAmb 09 32 36.1
comp=Z,18nm,1.5s
**KBL Kabul 53.26 295** P **P 09 31 56.6 -1.6**
KBL pmax pmax
comp=Z,18nm,1.5s
**GAMB Gambell 53.44 28** P **P 09 31 57.8 -0.9**
**STKA Stephens Creek 57.93 169** LR LR 09 56 31.6
comp=Z,109nm,21.9s,baz=7.7,slow=35
**ABKAR Akbulak array 58.66 314** P **P 09 32 37.2 +0.9**
**DZM Mont Dzumac 58.71 140** *e*LR LR 09 49 48.2
comp=Z,391nm,22.9s
**DZM Mont Dzumac 58.71 140** LR LR 09 54 50.5
comp=Z,162nm,21.7s,baz=2.5,slow=33
**ARU Arti 59.28 322** P **P 09 32 41.3 +0.8**
ARU IAmb IAmb 09 32 42.6
comp=Z,7.8nm,1.1s
**ARU Arti 59.28 322** P **P 09 32 41.1 +0.6**
comp=Z,2.3nm,0.3s,baz=130,slow=4.4,SNR=5.0
ARU LR LR 10 00 54.6
comp=Z,572nm,18.1s,baz=87,slow=39
comp=Z,2.3nm,0.3s
**ARU Arti 59.28 322***d* *i* P **P 09 32 41.2 +0.8**
ARU 09 34 50.1
ARU S **S 09 40 50.7 +3.1**
ARU SS **SS 09 44 43.8 +2.0**
ARU pmax pmax
comp=Z,9.0nm,1.2s
ARU MLR MLR
comp=Z,531nm,17.0s
**NWAO Narrogin (SRO) 59.33 193** LR LR 10 00 49.9
comp=Z,54nm,19.1s,baz=170,slow=39
**AKTO Aktyubinsk 59.83 315** P **P 09 32 45.1 +0.6**
comp=Z,2.6nm,0.9s,baz=92,slow=10,SNR=5.7
AKTO LR LR 10 01 26.5
comp=Z,166nm,18.3s,baz=84,slow=39
comp=Z,2.6nm,0.9s
**H19K Roundabout Mou 60.20 27** P **P 09 32 47.3 +0.7**
H19K IAmb IAmb 09 33 24.7
comp=Z,10nm,1.2s
**KAAM Kaadhehdhoo 60.63 255** P **P 09 32 49.4 -1.0**
**RC01 Rabbit Creek A 63.24 32** P **P 09 33 06.1 -1.2**
**D24K Happy Valley 63.25 23** P **P 09 33 05.9 -1.3**
**C24K Franklin Bluff 63.28 23** P **P 09 33 07.2 -0.1**
**SEW Seward 63.46 33** P **P 09 33 07.1 -1.6**
**RND Reindeer 63.49 30** P **P 09 33 06.2 -2.7**
RND IAmb IAmb 09 33 29.7
comp=Z,7.3nm,1.0s
**RND Reindeer 63.49 30** P **P 09 33 06.2 -2.7**
RND pmax pmax
comp=Z,7.0nm,1.0s
**F24K Squaw Lake 63.65 25** P **P 09 33 08.9 -1.0**
F24K IAmb IAmb 09 33 30.3
comp=Z,9.2nm,0.9s
**MDM Murphy Dome 63.66 28** P **P 09 33 08.4 -1.5**
MDM IAmb IAmb 09 33 47.9
comp=Z,15nm,1.5s
**PWL Port Wells 63.94 33** P **P 09 33 10.6 -1.4**
**KIRV Kirov 64.08 325** LR LR 10 04 20.7
comp=Z,524nm,18.0s,baz=87,slow=39
**KIRV Kirov 64.08 325***c**e*P **P 09 33 13.7 +0.9**
**IL03 Eielson Array 64.26 28** P **P 09 33 13.5 -0.4**
**PRP Porcupine Dome 64.74 27** P **P 09 33 15.4 -1.9**
PRP IAmb IAmb 09 33 43.8
comp=Z,3.2nm,0.9s
**BMAR Burnt Mountain 64.93 25** P **P 09 33 18.2 -0.1**
**F26K Sheenjek River 65.06 25** P **P 09 33 18.8 -0.4**
**SCRK Sand Creek 65.58 29** P **P 09 33 22.7 0.0**
**J26L Joseph Creek 65.69 28** P **P 09 33 23.4 +0.1**
J26L IAmb IAmb 09 33 44.0
comp=Z,3.4nm,0.8s
**BELG Belogornoye 66.03 318** P **P 09 33 26.6 +1.1**
comp=Z,16nm,1.1s,baz=104,slow=3.2,SNR=4.2
BELG LR LR 10 04 40.6
comp=Z,315nm,18.1s,baz=74,slow=38
comp=Z,16nm,1.1s
**VRDI Verde Repeater 66.25 32** P **P 09 33 27.0 -0.1**
**M26K Nabesna, AK 66.27 31** P **P 09 33 25.5 -1.6**
M26K IAmb IAmb 09 34 09.7
comp=Z,5.7nm,1.0s
**MAK Makhachkala 68.20 308** *e*P **P 09 33 38.7 -0.9**
MAK *e* 09 36 09.5
MAK *e*PPP PPP 09 37 51.3
MAK *e*S **S 09 42 37.6 -1.4**
MAK *e*SS **SS 09 47 04.8 +3.3**
MAK pmax pmax
comp=Z,134nm,1.1s
MAK MLR MLR
comp=Z,249nm,13.0s
**GNI Garni 70.98 306** LR LR 10 09 54.0
comp=Z,87nm,18.1s,baz=76,slow=40
**KBZ Khabaz 71.22 310** P **P 09 33 59.5 +1.4**
comp=Z,2.5nm,0.8s,baz=105,slow=2.7,SNR=6.2
KBZ LR LR 10 09 42.8
comp=Z,138nm,18.2s,baz=103,slow=40
comp=Z,2.5nm,0.8s
**KBZ Khabaz 71.22 310**‖ *e*P **P 09 33 59.9 +1.8**
**KIV Kislovodsk 71.30 310** *e*P **P 09 33 59.5 +0.7**
KIV pmax pmax
comp=Z,6.0nm,1.1s
KIV MLR MLR
comp=Z,66nm,18.0s
**ARCES ARCESS Array B 71.51 339** P **P 09 34 00.2 +0.7**
comp=Z,4.9nm,0.9s,baz=53,slow=6.0,SNR=5.7
ARCES LR LR 10 11 03.5
comp=Z,200nm,18.2s,baz=36,slow=41
comp=Z,4.9nm,0.9s
**OBN Obninsk 71.70 323** LR LR 10 08 31.0
comp=Z,453nm,19.2s,baz=4.5,slow=38
**FINES FINESS Array B 74.56 331** P **P 09 34 18.0 +0.4**
**FINES FINESS Array B 74.56 331** P **P 09 34 19.1 +1.4**
comp=Z,2.8nm,0.7s,baz=72,slow=6.2,SNR=7.8
FINES LR LR 10 11 11.7
comp=Z,448nm,18.1s,baz=66,slow=39
comp=Z,2.8nm,0.7s
**AKASG Malin Array Be 77.45 320** P **P 09 34 34.7 +0.4**
comp=Z,0.4nm,0.4s,baz=75,slow=1.1,SNR=1.7
AKASG LR LR 10 11 40.6
comp=Z,448nm,18.8s,baz=57,slow=38
comp=Z,0.4nm,0.4s
**YKA Yellowknife Ar 78.44 25** P **P 09 34 40.2 +0.6**
comp=Z,1.1nm,0.9s,baz=316,slow=5.2,SNR=3.3
comp=Z,1.1nm,0.9s
**BR131 Keskin Array S 79.11 309** P **P 09 34 42.2 -1.7**
BR131 IAmb IAmb 09 35 10.8
comp=Z,6.3nm,1.4s
**BR131 Keskin Array S 79.11 309** P **P 09 34 42.2 -1.7**
BR131 pmax pmax
comp=Z,6.0nm,1.4s
**BRTR Keskin Array B 79.11 309** P **P 09 34 43.2 -0.7**
**BRTR Keskin Array B 79.11 309** P **P 09 34 44.2 +0.3**
comp=Z,1.6nm,0.9s,baz=72,slow=4.0,SNR=6.8
BRTR LR LR 10 14 56.1
comp=Z,47nm,21.6s,baz=34,slow=40
comp=Z,1.6nm,0.9s
**BRTR Keskin Array B 79.11 309** *i* P **P 09 34 45.0 +1.1**
BRTR pmax pmax
comp=Z,2.0nm,0.9s
**HFS Hagfors 80.48 333** P **P 09 34 50.7 0.0**
comp=Z,2.0nm,0.8s,baz=46,slow=6.2,SNR=3.9
HFS LR LR 10 13 01.0
comp=Z,178nm,19.9s,baz=43,slow=38
comp=Z,2.0nm,0.8s
**MMAI Mount Meron Ar 80.53 302** LR LR 10 16 02.5
comp=Z,88nm,20.4s,baz=349,slow=40
**NC405 NORSAR Array S 80.70 334** P **P 09 34 52.0 +0.1**
NC405 IAmb IAmb 09 35 31.3
comp=Z,21nm,1.5s
**NB2 NORSAR Subarra 80.94 335** P **P 09 34 53.6 +0.4**
comp=Z,0.9nm,0.6s,baz=50,slow=5.1
**NOA NORSAR Array B 80.94 335** P **P 09 34 53.2 -0.1**
comp=Z,0.8nm,0.7s,baz=52,slow=5.3,SNR=4.8
comp=Z,0.8nm,0.7s
**BURAR Bucovina Array 81.18 319** P **P 09 34 55.0 +0.1**
**SUMG Summit 82.00 357** P **P 09 34 59.0 -0.1**
SUMG IAmb IAmb 09 35 38.5
comp=Z,8.5nm,1.0s
**SUMG Summit 82.00 357** P **P 09 34 59.0 -0.1**
SUMG pmax pmax
comp=Z,8.0nm,1.0s
**RAR Rarotonga 82.06 118** LR LR 10 03 43.6
comp=Z,48nm,20.2s,baz=284,slow=30
**EIL Elat 82.25 299** LR LR 10 17 48.9
comp=Z,53nm,18.8s,baz=71,slow=40

**GERES GERESS Array B 87.06 324** LR LR 10 17 55.5
comp=Z,182nm,18.5s,baz=75,slow=38
**FURI Furi 87.81 279** LR LR 10 13 08.0
comp=Z,50nm,20.9s,baz=191,slow=34
**PPT Papeete 88.74 110** LR LR 10 09 43.0
comp=Z,78nm,20.0s,baz=304,slow=32
**PPT2 Papeete2 88.75 110** eLR LR 10 03 41.6
comp=Z,262nm,26.2s
PPT2 eLR LR 10 03 44.2
comp=Z,180nm,27.2s
**NVAR Mina Array Bea 89.64 47** P **P 09 35 38.1 +0.7**
comp=Z,0.2nm,0.7s,baz=265,slow=6.2,SNR=1.4
comp=Z,0.2nm,0.7s
**DAVOX Davos/Dischmat 90.36 324** LR LR 10 20 12.1
comp=Z,403nm,18.7s,baz=72,slow=38
**TAOE Nuku Hiva Isla 93.22 98** eLR LR 10 05 52.5
comp=Z,169nm,28.3s

*NEIC **14** 09:26:09.5±2.8,69°.51N±0°.05×144°.72W±0°.06,h10km±2km, Error ellipse: s-maj=8.7km s-min=3.7km az=358.0*
*AEIC **14** 09:26:10.5±2.7,69°.54N±0°.05×144°.73W±0°.05,h17km±6km, ML3.4,ML3.5/116(NEIC), Error ellipse: s-maj=8.4km s-min=0.6km az=196.0*
*IDC **14** 09:26:11.5±6.5,69°.68N×144°.56W,h0km,mb3.3/3, mbtmp3.3/5,ML3.4/2, Error ellipse: s-maj=104.2km s-min=31.9km az=136.0*

**ISC 14 09:26:10.0±0.7,69°.51N±0°.04×144°.77W±0°.03,h10km, n120,σ1°.66/123,mb3.3/3,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.39** | **72** | Pg | **Pb** | **09 26 18.2** | **-0.7** |
| C27K | | | | Sg | **Sb** | **09 26 22.9** | **-2.1** |
| C27K | | | | IAML | | 09 26 24.6 | |
| | comp=E,4μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.41** | **353** | | **Pb** | **09 26 18.8** | **-0.5** |
| C26K | | | | Sg | **Sb** | **09 26 23.7** | **-1.9** |
| **D25K** | **Kavik River** | **0.60** | **252** | | **Pb** | **09 26 22.6** | **0.0** |
| D25K | | | | Sg | **Sb** | **09 26 31.1** | **0.0** |
| **D27M** | **Malcolm River** | **1.38** | **100** | | **Pb** | **09 26 34.9** | **-0.9** |
| D27M | | | | IAML | | 09 26 59.7 | |
| | comp=E,594nm,0.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.39** | **280** | Pn | **Pg** | **09 26 35.8** | **-0.9** |
| **D24K** | **Happy Valley** | **1.48** | **258** | Pn | **Pg** | **09 26 38.6** | **+0.2** |
| D24K | | | | IAML | | 09 27 03.0 | |
| | comp=N,775nm,0.4s | | | | | | |
| D24K | | | | IAML | | 09 27 04.3 | |
| | comp=E,730nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.76** | **138** | | **Pg** | **09 26 43.1** | **-0.6** |
| **F26K** | **Sheenjek River** | **1.84** | **173** | Pn | **Pn** | **09 26 40.5** | **-1.1** |
| F26K | | | | IAML | | 09 27 12.0 | |
| | comp=E,406nm,0.5s | | | | | | |
| F26K | | | | IAML | | 09 27 13.6 | |
| | comp=N,315nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.93** | **245** | Pn | **Pn** | **09 26 42.3** | **-0.6** |
| TOLK | | | | IAML | | 09 27 18.0 | |
| | comp=E,320nm,0.7s | | | | | | |
| **F25K** | **Christian River** | **1.96** | **190** | Pn | **Pn** | **09 26 42.6** | **-0.6** |
| F25K | | | | IAML | | 09 27 18.4 | |
| | comp=E,400nm,0.4s | | | | | | |
| **E24K** | **Your Creek** | **1.98** | **225** | Pn | **Pn** | **09 26 44.0** | **+0.5** |
| E24K | | | | IAML | | 09 27 17.3 | |
| | comp=E,266nm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **2.07** | **282** | Pn | **Pn** | **09 26 44.0** | **-0.7** |
| C23K | | | | IAML | | 09 27 23.2 | |
| | comp=E,410nm,0.3s | | | | | | |
| C23K | | | | IAML | | 09 27 29.0 | |
| | comp=N,402nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.09** | **113** | Pn | **Pn** | **09 26 44.2** | **-0.8** |
| E28M | | | | IAML | | 09 27 21.5 | |
| | comp=N,330nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.09** | **178** | Pn | **Pn** | **09 26 44.2** | **-1.0** |
| **D28M** | **Stokes Point** | **2.14** | **92** | | **Pn** | **09 26 42.6** | **-3.1** |
| **D23K** | **Nanushuk River** | **2.18** | **258** | Pn | **Pn** | **09 26 45.4** | **-0.8** |
| D23K | | | | IAML | | 09 27 27.2 | |
| | comp=E,240nm,0.8s | | | | | | |
| **E23K** | **Chandalar** | **2.29** | **233** | Pn | **Pn** | **09 26 47.5** | **-0.3** |
| E23K | | | | IAML | | 09 27 29.2 | |
| | comp=N,209nm,0.5s | | | | | | |
| E23K | | | | IAML | | 09 27 31.1 | |
| | comp=E,278nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.31** | **211** | Pn | **Pn** | **09 26 47.0** | **-1.0** |
| F24K | | | | IAML | | 09 27 31.2 | |
| | comp=E,220nm,0.5s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.60** | **171** | | **Pb** | **09 26 55.0** | **-1.6** |
| **F28M** | **Old Crow** | **2.62** | **134** | Pn | **Pn** | **09 26 51.1** | **-1.3** |
| F28M | | | | IAML | | 09 27 41.4 | |
| | comp=N,214nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.73** | **111** | Pn | **Pn** | **09 26 54.0** | **+0.3** |
| **G25K** | **Bearman Lake** | **2.81** | **191** | | **Pb** | **09 26 57.9** | **-2.2** |
| **D22K** | **Ayikyak River** | **2.90** | **261** | Pn | **Pn** | **09 26 56.6** | **+0.5** |
| D22K | | | | IAML | | 09 27 54.6 | |
| | comp=E,133nm,0.9s | | | | | | |
| D22K | | | | IAML | | 09 27 56.2 | |
| | comp=N,136nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.91** | **245** | Pn | **Pn** | **09 26 55.2** | **-1.1** |
| **G27K** | **Doyon Strip** | **2.96** | **155** | Pn | **Pn** | **09 26 56.3** | **-0.6** |
| **FYU** | **Fort Yukon** | **2.96** | **184** | Pn | **Pn** | **09 26 57.9** | **+0.9** |
| **G24K** | **Hadweenzic Riv** | **3.00** | **201** | Pn | **Pn** | **09 26 57.3** | **-0.2** |
| **COLD** | **Coldfoot** | **3.05** | **224** | Pn | **Pn** | **09 26 56.7** | **-1.6** |
| **B22K** | **Teshekpuk Lake** | **3.10** | **290** | | **Pn** | **09 26 57.9** | **-0.9** |
| **H25L** | **Birch Creek** | **3.29** | **187** | | **Pb** | **09 27 04.5** | **-3.8** |
| **F22K** | **John River** | **3.39** | **237** | | **Pn** | **09 27 05.3** | **+2.5** |
| **G23K** | **Bananza Creek** | **3.43** | **217** | Pn | **Pn** | **09 27 03.9** | **+0.4** |
| G23K | | | | IAML | | 09 28 08.8 | |
| | comp=N,80nm,0.7s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.46** | **276** | Pn | **Pn** | **09 27 02.5** | **-1.3** |
| B21K | | | | IAML | | 09 28 17.2 | |
| | comp=N,116nm,0.7s | | | | | | |
| **E21K** | **Killik River** | **3.49** | **256** | Pn | **Pn** | **09 27 03.2** | **-1.0** |
| E21K | | | | IAML | | 09 28 11.7 | |
| | comp=E,94nm,1.1s | | | | | | |
| E21K | | | | IAML | | 09 28 16.6 | |
| | comp=N,102nm,1.2s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.52** | **158** | | **Pn** | **09 27 07.5** | **+2.8** |
| **A22K** | **Sinclair Lake** | **3.77** | **298** | | **Pn** | **09 27 09.6** | **+1.5** |
| **F30M** | **Barrier River** | **3.81** | **116** | | **Pn** | **09 27 11.5** | **+2.8** |
| **H24K** | **Noodor Dome** | **3.88** | **199** | Pn | **Pn** | **09 27 10.7** | **+1.1** |
| H24K | | | | IAML | | 09 28 17.3 | |
| | comp=N,64nm,0.8s | | | | | | |
| H24K | | | | IAML | | 09 28 19.3 | |
| | comp=E,63nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **3.96** | **239** | | **Pn** | **09 27 09.1** | **-1.6** |
| F21K | | | | IAML | | 09 28 33.8 | |
| | comp=E,57nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.02** | **184** | | **Pn** | **09 27 11.0** | **-0.7** |
| PRP | | | | IAML | | 09 28 06.7 | |
| | comp=N,61nm,0.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.07** | **125** | Pn | **Pn** | **09 27 10.6** | **-1.7** |
| G30M | | | | IAML | | 09 28 26.9 | |
| | comp=E,62nm,0.7s | | | | | | |
| G30M | | | | IAML | | 09 28 27.8 | |
| | comp=N,64nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.10** | **141** | | **Pn** | **09 27 12.9** | **+0.3** |
| H29M | | | | IAML | | 09 28 26.5 | |
| | comp=E,74nm,0.7s | | | | | | |
| **I27K** | **Kandik River** | **4.11** | **161** | | **Pn** | **09 27 15.8** | **+3.0** |
| **H23K** | **Yukon River** | **4.13** | **208** | Pn | **Pn** | **09 27 12.1** | **-0.9** |
| H23K | | | | IAML | | 09 28 29.3 | |
| | comp=E,57nm,1.3s | | | | | | |
| **INK** | **Inuvik** | **4.24** | **101** | | **Pn** | **09 27 12.6** | **-1.9** |
| **I26K** | **Coal Creek Min** | **4.27** | **171** | Pn | **Pn** | **09 27 13.5** | **-1.5** |
| I26K | | | | IAML | | 09 28 28.0 | |
| | comp=N,59nm,0.7s | | | | | | |
| **D20K** | **Etivluk River** | **4.32** | **265** | | **Pn** | **09 27 17.9** | **+2.3** |
| **E20K** | **Nigu River** | **4.32** | **258** | | **Pn** | **09 27 18.0** | **+2.3** |
| **B20K** | **Meade River** | **4.33** | **282** | | **Pn** | **09 27 14.3** | **-1.4** |
| **EPYK** | **Eagle Plains** | **4.38** | **132** | Pn | **Pn** | **09 27 14.6** | **-1.9** |
| **A21K** | **Barrow** | **4.38** | **300** | | **Pn** | **09 27 18.3** | **+1.9** |
| **H22K** | **Ishtalitna Cre** | **4.42** | **218** | | **Pn** | **09 27 19.5** | **+2.5** |
| **I28M** | **Miner Creek** | **4.49** | **153** | | **Pn** | **09 27 18.0** | **0.0** |
| I28M | | | | IAML | | 09 28 46.1 | |
| | comp=E,38nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.53** | **194** | Pn | **Pn** | **09 27 18.1** | **-0.4** |
| POKR | | | | IAML | | 09 28 36.4 | |
| | comp=E,46nm,0.8s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.56** | **112** | | **Pn** | **09 27 17.9** | **-1.0** |
| F31M | | | | IAML | | 09 28 38.1 | |
| | comp=N,41nm,1.0s | | | | | | |
| F31M | | | | IAML | | 09 28 45.9 | |
| | comp=E,43nm,1.3s | | | | | | |
| **G31M** | **Satah River** | **4.69** | **119** | Pn | **Pn** | **09 27 19.3** | **-1.5** |
| **I23K** | **Minto, Yukon-K** | **4.73** | **204** | | **Pn** | **09 27 21.6** | **+0.4** |
| I23K | | | | IAML | | 09 28 47.9 | |
| | comp=E,39nm,0.9s | | | | | | |
| I23K | | | | IAML | | 09 28 50.2 | |
| | comp=N,39nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.76** | **244** | | **Pn** | **09 27 20.3** | **-1.3** |
| **MDM** | **Murphy Dome** | **4.77** | **198** | | **Pn** | **09 27 20.4** | **-1.4** |
| MDM | | | | IAML | | 09 28 45.0 | |
| | comp=E,37nm,0.8s | | | | | | |
| MDM | | | | IAML | | 09 28 47.6 | |
| | comp=N,40nm,1.3s | | | | | | |
| **COLA** | **College** | **4.81** | **196** | Pn | **Pn** | **09 27 21.4** | **-0.9** |
| **IL31** | | **4.83** | **191** | Pn | **Pn** | **09 27 21.9** | **-0.8** |
| **ILAR** | **Eielson Array** | **4.83** | **191** | Pn | **Pn** | **09 27 26.5** | **+3.8** |
| | comp=N,1.5nm,0.3s,baz=6.6,slow=14,SNR=6.6 | | | | | | |
| ILAR | | | | Sn | **Sn** | **09 28 21.6** | **+3.0** |
| | comp=N,5.6nm,0.3s,baz=286,slow=16,SNR=4.8 | | | | | | |
| ILAR | | | | Lg | Lg | 09 28 40.1 | |
| | comp=N,2.7nm,0.3s,baz=71,slow=35,SNR=3.0 | | | | | | |
| | comp=N,4.1nm,0.5s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.85** | **146** | | **Pn** | **09 27 22.5** | **-0.5** |
| I29M | | | | IAML | | 09 28 52.7 | |
| | comp=E,34nm,1.1s | | | | | | |
| I29M | | | | IAML | | 09 28 53.4 | |
| | comp=N,35nm,0.6s | | | | | | |
| **D19K** | **Kuna River** | **4.91** | **264** | | **Pn** | **09 27 22.6** | **-1.1** |
| D19K | | | | IAML | | 09 29 01.0 | |
| | comp=E,25nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **4.93** | **183** | Pn | **Pn** | **09 27 22.2** | **-1.9** |
| J25K | | | | IAML | | 09 28 51.4 | |
| | comp=N,25nm,0.9s | | | | | | |
| J25K | | | | IAML | | 09 29 04.2 | |
| | comp=E,32nm,1.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.94** | **222** | Pn | **Pn** | **09 27 22.8** | **-1.4** |
| H21K | | | | IAML | | 09 28 56.2 | |
| | comp=N,32nm,0.9s | | | | | | |
| H21K | | | | IAML | | 09 28 59.5 | |
| | comp=E,34nm,1.2s | | | | | | |
| **EGAK** | **Eagle** | **4.96** | **162** | Pn | **Pn** | **09 27 24.7** | **+0.3** |
| EGAK | | | | IAML | | 09 28 59.3 | |
| | comp=E,27nm,1.7s | | | | | | |
| EGAK | | | | IAML | | 09 28 59.6 | |
| | comp=E,30nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **5.03** | **252** | Pn | **Pn** | **09 27 23.0** | **-2.4** |
| E19K | | | | IAML | | 09 28 30.5 | |
| | comp=N,32nm,0.6s | | | | | | |
| E19K | | | | IAML | | 09 29 04.0 | |
| | comp=E,27nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.03** | **195** | Pn | **Pn** | **09 27 23.9** | **-1.5** |
| CCB | | | | IAML | | 09 28 29.7 | |
| | comp=E,23nm,0.5s | | | | | | |
| **J26L** | **Joseph Creek** | **5.06** | **174** | Pn | **Pn** | **09 27 25.3** | **-0.6** |
| J26L | | | | IAML | | 09 28 34.0 | |
| | comp=N,24nm,0.6s | | | | | | |
| J26L | | | | IAML | | 09 28 58.5 | |
| | comp=E,25nm,0.8s | | | | | | |
| **MLY** | **Manley** | **5.06** | **210** | Pn | **Pn** | **09 27 23.5** | **-2.4** |
| MLY | | | | IAML | | 09 28 59.3 | |
| | comp=E,24nm,1.2s | | | | | | |
| **HDA** | **Harding Lake** | **5.20** | **190** | | **Pn** | **09 27 27.4** | **-0.3** |
| HDA | | | | IAML | | 09 28 52.7 | |
| | comp=N,21nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.22** | **201** | | **Pn** | **09 27 27.7** | **-0.3** |
| NEA2 | | | | IAML | | 09 29 12.2 | |
| | comp=E,19nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.23** | **196** | Pn | **Pn** | **09 27 27.3** | **-0.8** |
| WRH | | | | IAML | | 09 29 06.1 | |
| | comp=E,28nm,1.0s | | | | | | |
| **I30M** | **Mount Dempster** | **5.39** | **139** | Pn | **Pn** | **09 27 29.6** | **-0.8** |
| **F19K** | **Shaleruckik Mo** | **5.54** | **247** | Pn | **Pn** | **09 27 33.1** | **+0.7** |
| **SCRK** | **Sand Creek** | **5.57** | **176** | Pn | **Pn** | **09 27 35.5** | **+2.6** |
| **H20K** | **Anotleneega Mo** | **5.59** | **229** | | **Pn** | **09 27 35.5** | **+2.4** |
| **K27K** | **Chicken** | **5.61** | **168** | | **Pn** | **09 27 35.2** | **+1.8** |
| **BWN** | **Browne** | **5.67** | **201** | Pn | **Pn** | **09 27 35.3** | **+1.1** |
| **K24K** | **Donnelly Dome** | **5.75** | **184** | | **Pn** | **09 27 39.0** | **+3.8** |
| **G19K** | **Purcell Mounta** | **5.75** | **240** | | **Pn** | **09 27 37.0** | **+1.7** |
| **DAWY** | **Dawson** | **5.87** | **156** | | **Pn** | **09 27 37.8** | **+0.9** |
| **DOT** | **Dot Lake** | **5.90** | **177** | | **Pn** | **09 27 40.6** | **+3.2** |
| **C18K** | **Utukok River** | **5.94** | **269** | Pn | **Pn** | **09 27 39.6** | **+1.6** |
| **J30M** | **Hart River** | **5.95** | **142** | Pn | **Pn** | **09 27 39.7** | **+1.6** |
| **BPAW** | **Bear Paw Mtn.** | **5.96** | **207** | Pn | **Pn** | **09 27 36.8** | **-1.4** |
| **H19K** | **Roundabout Mou** | **6.00** | **234** | Pn | **Pn** | **09 27 37.8** | **-0.8** |
| **MCK** | **McKinley** | **6.04** | **198** | | **Pn** | **09 27 37.8** | **-1.4** |
| **E18K** | **Tukpahlearik C** | **6.19** | **258** | Pn | **Pn** | **09 27 41.9** | **+0.7** |
| **RND** | **Reindeer** | **6.35** | **197** | Pn | **Pn** | **09 27 43.7** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.38** | **150** | | **Pn** | **09 27 44.1** | **+0.1** |
| **G18K** | **Tagagawik** | **6.40** | **242** | | **Pn** | **09 27 42.8** | **-1.5** |
| **DHY** | **Denali Highway** | **6.55** | **190** | | **Pn** | **09 27 45.4** | **-1.0** |
| **PAX** | **Paxson** | **6.58** | **183** | | **Pn** | **09 27 46.1** | **-0.7** |
| **L27K** | **Beaver Creek,** | **6.59** | **168** | | **Pn** | **09 27 47.5** | **+0.7** |
| **MENT** | **Mentasta** | **6.62** | **176** | Pn | **Pn** | **09 27 46.3** | **-0.9** |
| **RDOG** | **Red Dog Mine** | **6.74** | **266** | Pn | **Pn** | **09 27 48.6** | **-0.2** |
| **A36M** | **Sachs Harbour** | **6.90** | **60** | Pn | **Pn** | **09 27 48.9** | **-2.1** |
| **F17K** | **Baldwin Pennin** | **6.91** | **251** | | **Pn** | **09 27 50.2** | **-0.9** |
| **L29M** | **L29M** | **6.96** | **154** | Pn | **Pn** | **09 27 51.9** | **-0.1** |
| **M26K** | **Nabesna, AK** | **7.18** | **173** | Pn | **Pn** | **09 27 53.9** | **-1.1** |
| **M27K** | **Edge Creek, AK** | **7.28** | **169** | | **Pn** | **09 27 54.9** | **-1.6** |
| **G17K** | **Kiwalik Mounta** | **7.29** | **244** | | **Pn** | **09 27 58.9** | **+2.6** |
| **M29M** | **Somme Creek** | **7.55** | **157** | | **Pn** | **09 27 58.3** | **-1.7** |
| **G16K** | **Koyuk River** | **7.90** | **247** | Pn | **Pn** | **09 28 03.2** | **-1.6** |
| **YUK2** | **White River** | **7.92** | **166** | | **Pn** | **09 28 08.5** | **+3.3** |
| **M19K** | **Big River Lodg** | **8.59** | **212** | Pn | **Pn** | **09 28 12.4** | **-1.9** |
| **N30M** | **Aishikik Lake** | **8.68** | **155** | | **Pn** | **09 28 13.1** | **-2.5** |
| **YUK5** | **Granite Creek** | **8.89** | **158** | | **Pn** | **09 28 21.4** | **+3.0** |
| **ISLE** | **Juniper Island** | **9.01** | **172** | Pn | **Pn** | **09 28 20.1** | **+0.1** |
| **WAX** | **Waxell Ridge** | **9.14** | **174** | Pn | **Pn** | **09 28 20.3** | **-1.4** |
| **O22K** | **Cooper Landing** | **9.30** | **195** | Pn | **Pn** | **09 28 22.8** | **-1.1** |
| **SVW2** | **Sparrevohn** | **9.56** | **213** | Pn | **Pn** | **09 28 27.0** | **-0.5** |
| **WHY** | **Whitehorse** | **9.80** | **150** | Pn | **Pn** | **09 28 31.0** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **14.00** | **105** | Pn | **Pn** | **09 29 26.4** | **-1.6** |
| **YKA** | **Yellowknife Ar** | **14.00** | **105** | Pn | **Pn** | **09 29 24.8** | **-3.3** |
| | comp=E,0.2nm,0.3s,baz=20,slow=2.2,SNR=13 | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.32** | **127** | P | **P** | **09 32 42.5** | **+3.3** |
| | comp=E,0.4nm,0.6s,baz=360,slow=5.5,SNR=7.9 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.22** | **142** | P | P | 09 33 00.2 | +4.5 |
| | comp=E,0.2nm,0.4s,baz=341,slow=7.1,SNR=6.0 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.54** | **128** | P | **P** | **09 34 40.2** | **+2.7** |
| | comp=E,0.3nm,1.0s,baz=349,slow=2.8,SNR=4.0 | | | | | | |
| | comp=E,0.3nm,1.0s | | | | | | |

**ISK 14 09:32:51.7,41°.20N×28°.84E,h0km,ML1.1/5,Suspected Mining explosion.,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BGKT** | **Bogazkoy** | **0.06** | **252** | Pg | Pg | 09 32 53.8 | +1.0 |
| BGKT | | | | Sg | Sg | 09 32 55.3 | +1.8 |
| **KLYT** | **Kilyos** | **0.16** | **70** | Pg | Pg | 09 32 55.6 | +0.9 |
| **ISK** | **Istanbul-Kandi** | **0.21** | **129** | Pg | Pg | 09 32 56.6 | +0.9 |
| ISK | | | | Sg | Sg | 09 33 00.0 | +1.6 |
| **KAVV** | **Kandilli-Istan** | **0.21** | **129** | Pg | Pg | 09 32 56.6 | +0.9 |
| **CTKS** | **Kestanelik-??a** | **0.26** | **279** | Pg | Pg | 09 32 57.4 | +0.8 |
| CTKS | | | | Sg | Sg | 09 33 01.5 | +1.5 |

**AFAD 14 09:33:35.9±0.0,39°.64N×29°.42E,h7km±1km,ML1.1, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DOMA** | **Ktahya-Doman** | **0.26** | **56** | P | Pg | 09 33 41.0 | 0.0 |
| DOMA | | | | S | Sg | 09 33 45.0 | +0.6 |
| DOMA | | | | *i* AML | AML | 09 33 46.0 | |
| | comp=E,43nm,0.6s | | | | | | |
| DOMA | | | | *i* AML | AML | 09 33 48.0 | |
| | comp=N,23nm,0.4s | | | | | | |
| **ANDZ** | **Kutahya, Merke** | **0.39** | **110** | P | Pg | 09 33 43.5 | 0.0 |
| ANDZ | | | | S | Sg | 09 33 49.7 | +1.0 |
| ANDZ | | | | *i* AML | AML | 09 33 51.0 | |
| | comp=E,16nm,0.7s | | | | | | |
| ANDZ | | | | *i* AML | AML | 09 33 52.0 | |
| | comp=N,20nm,0.5s | | | | | | |
| **ULDT** | **Uludag** | **0.55** | **336** | P | Pg | 09 33 46.7 | +0.2 |
| ULDT | | | | S | Sg | 09 33 54.6 | +0.9 |
| ULDT | | | | *i* AML | AML | 09 33 57.0 | |
| | comp=N,11nm,0.6s | | | | | | |
| ULDT | | | | *i* AML | AML | 09 34 01.0 | |
| | comp=E,20nm,0.7s | | | | | | |
| **BORA** | **Eskisehir** | **0.83** | **73** | P | Pg | 09 33 50.8 | -1.0 |
| BORA | | | | S | Sb | 09 34 04.0 | -0.1 |
| BORA | | | | *i* AML | AML | 09 34 08.0 | |
| | comp=E,7.0nm,0.8s | | | | | | |
| BORA | | | | *i* AML | AML | 09 34 10.0 | |
| | comp=N,5.8nm,0.1s | | | | | | |

*SKHL **14** 09:34:02.6±0.3,44°.00N×150°.00E,h42km±5km,mb4.0/3*
*IDC **14** 09:34:03.2±3.1,44°.61N×149°.70E,h0km,mb3.7/3, mbtmp3.6/4,ML2.7/1,MS3.7/5,Error ellipse: s-maj=103.1km s-min=33.1km az=177.0*

**ISC 14 09:34:06.2±1.4,44°.1N±0°.1×149°.7E±0°.1,h35km,n13, σ0°.93/13,mb3.8/3,MS3.8/5,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.75** | **313** | *e*P | **Pn** | **09 34 33.1** | **-0.9** |
| KUR | | | | AMB | AMB | 09 34 35.0 | |
| | 70nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **09 34 55.9** | **+0.8** |
| KUR | | | | A | A | 09 35 04.5 | |
| | 150nm,0.6s | | | | | | |
| KUR | | | | A | A | 09 35 04.5 | |
| | 150nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.08** | **266** | *e*P | **Pn** | **09 34 37.1** | **-1.4** |
| SHO | | | | AMB | AMB | 09 34 38.3 | |
| | 20nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **09 35 02.9** | **-0.2** |
| SHO | | | | A | A | 09 35 11.1 | |
| | 60nm,0.3s | | | | | | |
| SHO | | | | A | A | 09 35 11.1 | |
| | 50nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.76** | **271** | AMB | AMB | 09 34 49.2 | |
| | 40nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **09 35 20.6** | **+0.6** |
| YUK | | | | A | A | 09 35 30.5 | |
| | 50nm,0.4s | | | | | | |
| YUK | | | | A | A | 09 35 30.5 | |
| | 70nm,0.4s | | | | | | |
| **NMR** | **Nemuro--Hokkai** | **2.96** | **258** | *e*P | **Pn** | **09 34 50.0** | **-0.6** |
| NMR | | | | *e*S | **Sn** | **09 35 25.8** | **+1.0** |
| **AKK** | **Akkeshi** | **3.68** | **255** | *e*P | **Pn** | **09 35 00.2** | **-0.3** |
| AKK | | | | *e*S | **Sn** | **09 35 42.6** | **0.0** |
| **ASAJ** | **Asahikawa** | **5.11** | **273** | Pn | **Pn** | **09 35 21.6** | **+1.4** |
| | 0.2nm,0.3s,baz=102,slow=9.3,SNR=2.5 | | | | | | |
| | 5.1nm,1.0s | | | | | | |
| **JOW** | **Kunigami** | **24.38** | **232** | LR | LR | 09 50 23.1 | |
| | comp=Z,62nm,18.1s,baz=158,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.06** | **298** | P | **P** | **09 42 25.9** | **-0.4** |
| | 0.9nm,0.8s,baz=66,slow=7.1,SNR=8.7 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **65.42** | **334** | P | **P** | **09 44 44.3** | **-0.5** |
| | 1.1nm,0.5s,baz=42,slow=11,SNR=6.0 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **68.19** | **8** | LR | LR | 10 15 18.5 | |
| | comp=Z,81nm,21.4s,baz=4.5,slow=37 | | | | | | |
| **LPIG** | **La Paz** | **80.39** | **66** | LR | LR | 10 13 46.4 | |
| | comp=Z,64nm,21.2s,baz=330,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.94** | **58** | P | **P** | **09 46 18.1** | **+0.9** |
| | 0.1nm,0.5s,baz=309,slow=5.0,SNR=5.0 | | | | | | |
| TXAR | | | | LR | LR | 10 20 54.8 | |
| | comp=Z,31nm,20.4s,baz=344,slow=35 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **CMIG** | **Matias Romero** | **95.37** | **60** | LR | LR | 10 32 41.3 | |
| | comp=Z,32nm,18.0s,baz=315,slow=37 | | | | | | |

*IDC **14** 09:40:15.9±1.0,13°.89N×120°.90E,h0km,mb4.0/9, mbtmp4.0/9,MS3.4/2,Error ellipse: s-maj=154.7km s-min=17.4km az=66.0*

**ISC 14 09:40:33.4±1.1,13°.8N±0°.4×120°.9E±0°.8,h152km,n11, σ1°.09/10,mb3.7/9,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **36.00** | **343** | P | **P** | **09 47 18.7** | **-1.1** |
| | 0.6nm,0.4s,baz=151,slow=6.3,SNR=2.3 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **36.06** | **158** | P | **P** | **09 47 19.8** | **-0.7** |
| | 4.9nm,0.6s,baz=335,slow=9.6,SNR=44 | | | | | | |
| | 4.9nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **36.43** | **12** | LR | LR | 10 01 07.2 | |
| | comp=Z,44nm,21.7s,baz=254,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **39.37** | **161** | P | **P** | **09 47 48.1** | **-0.1** |
| | 3.5nm,0.7s,baz=339,slow=6.9,SNR=61 | | | | | | |
| | 3.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.05** | **323** | P | **P** | **09 48 41.5** | **-0.4** |
| | 0.4nm,0.7s,baz=127,slow=9.6,SNR=3.6 | | | | | | |
| MKAR | | | | PcP | **PcP** | **09 50 17.8** | **+2.0** |
| | 0.4nm,0.6s,baz=90,slow=1.7,SNR=2.9 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.20** | **326** | P | **P** | **09 49 13.2** | **-0.3** |
| | 0.3nm,0.3s,baz=124,slow=8.4,SNR=2.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **55.78** | **326** | P | **P** | **09 49 53.8** | **-0.7** |
| | 1.0nm,0.4s,baz=106,slow=9.1,SNR=4.0 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **76.59** | **33** | LR | LR | 10 24 45.1 | |
| | comp=Z,28nm,21.3s,baz=314,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.04** | **339** | P | **P** | **09 52 21.5** | **+1.2** |
| | 5.7nm,1.2s,baz=72,slow=7.8,SNR=5.4 | | | | | | |
| | 5.7nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **80.27** | **331** | P | **P** | **09 52 27.4** | **+0.3** |
| | 1.5nm,1.0s,baz=80,slow=10,SNR=1.7 | | | | | | |
| | 1.5nm,1.0s | | | | | | |
| **NOA** | **NORSAR Array B** | **87.24** | **333** | P | **P** | **09 53 02.9** | **+0.3** |
| | 0.6nm,0.6s,baz=68,slow=4.5,SNR=3.6 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

*UCR **14** 09:50:34.3±0.9,8°.60N×83°.19W,h19km±2km,MW3.5*
*UPA **14** 09:50:34.1±0.8,8°.67N×83°.15W,h13km±3km,MW3.2*

**ISC 14 09:50:34.4±0.8,8°.66N±0°.04×83°.17W±0°.03,h17km±5km, n48,σ0°.80/57,3C-10D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EDAD** | **Golfito** | **0.00** | **184** | ↑*i*P | **Pg** | **09 50 37.2** | **-0.2** |
| EDAD | | | | *e*S | **Sg** | **09 50 39.1** | **+0.1** |
| **FITO** | **Golfito** | **0.03** | **160** | ↑*i*P | **Pg** | **09 50 37.1** | **-0.3** |
| FITO | | | | *e*S | **Sg** | **09 50 39.6** | **+0.2** |
| **JIME** | **Puerto Jimenez** | **0.20** | **233** | *e*P | **Pg** | **09 50 38.5** | **-0.7** |
| JIME | |

| | | | | | | |
|---|---|---|---|---|---|---|
| TRB2 | Turrubares | 1.78 | 315 | *e*P | Pn | 09 51 05.4 +0.9 |
| SOCE | Pocosol | 2.24 | 320 | *e*P | Pb | 09 51 12.8 -1.7 |
| VACR | Volcan Arenal | 2.34 | 321 | *e*P | Pn | 09 51 14.2 +2.0 |
| ARE1 | Arenal 1 | 2.36 | 320 | *e*P | Pb | 09 51 15.4 -1.1 |
| JTS | Las Juntas de | 2.40 | 313 | *e*P | Pn | 09 51 14.0 +1.0 |
| CUI | Cuipilapa | 2.80 | 315 | *e*P | Pn | 09 51 21.2 +2.7 |

**IDC 14 09:57:06.0±11.0, 7°22S×131°18E, h433km±169km, mb2.6/1, mbtmp3.2/3, Error ellipse: s-maj=160.9km s-min=82.5km az=73.0, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.01** | **167** | P | P | 09 59 54.5 | -1.7 |
| | 0.2nm,0.4s,baz=350,slow=11,SNR=7.4 | | | | | | |
| WRA | | | | S | S | 10 02 16.4 | -0.3 |
| | 0.5nm,1.0s,baz=343,slow=20,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **16.56** | **171** | P | P | 10 00 36.0 | +1.8 |
| | 0.2nm,0.5s,baz=349,slow=9.4,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.05** | **326** | P | P | 10 07 27.0 | 0.0 |
| | 0.1nm,0.4s,baz=144,slow=5.5,SNR=1.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **14** 09:58:44.0±0.7, 58°.30N×31°.94W, h0km, mb3.7/15, mbtmp3.7/18, ML3.0/2, MS3.6/13, Error ellipse: s-maj=20.1km s-min=14.5km az=9.0*

**ISC 14 09:58:45.8±0.7, 58°.3N±0°.1×31°.96W±0°.08, h13km, n34, σ0s93/20, mb3.7/15, MS3.7/11, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BORG** | **Borgarnes** | **8.24** | **34** | Pn | **Pn** | **10 00 45.3** | **+0.6** |
| | 0.8nm,0.3s,baz=194,slow=9.2,SNR=5.3 | | | | | | |
| | 16nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **15.99** | **88** | Pn | **Pn** | **10 02 29.3** | **-0.8** |
| | 0.2nm,0.3s,baz=293,slow=18,SNR=1.1 | | | | | | |
| **FRB** | **Frobisher Bay** | **18.36** | **303** | LR | LR | 10 09 10.6 | |
| | comp=Z,182nm,18.7s,baz=24,slow=34 | | | | | | |
| **SCHQ** | **Scheffville** | **19.39** | **275** | P | **Pn** | **10 03 12.3** | **+0.1** |
| | 0.3nm,0.3s,baz=78,slow=13,SNR=2.3 | | | | | | |
| SCHQ | | | | LR | LR | 10 09 30.7 | |
| | comp=Z,162nm,18.5s,baz=170,slow=33 | | | | | | |
| | 2.9nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **21.69** | **64** | P | **P** | **10 03 35.8** | **-0.3** |
| | 0.2nm,0.4s,baz=282,slow=9.6,SNR=2.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **23.09** | **66** | P | **P** | **10 03 51.9** | **+1.1** |
| | 1.8nm,0.7s,baz=263,slow=5.8,SNR=3.3 | | | | | | |
| | 1.8nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **25.85** | **124** | P | **P** | **10 04 18.2** | **+1.4** |
| | 1.0nm,0.7s,baz=331,slow=9.2,SNR=6.6 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.53** | **42** | P | **P** | **10 04 21.7** | **-0.9** |
| | 1.4nm,0.7s,baz=268,slow=9.9,SNR=2.0 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **28.48** | **59** | P | **P** | **10 04 38.2** | **-1.9** |
| | 0.6nm,0.6s,baz=305,slow=4.9,SNR=1.9 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **SADO** | **Sadowa** | **31.60** | **266** | LR | LR | 10 16 29.7 | |
| | comp=Z,180nm,21.6s,baz=56,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **35.20** | **75** | P | **P** | **10 05 39.0** | **-0.1** |
| | 0.3nm,0.3s,baz=301,slow=8.9,SNR=1.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.43** | **312** | P | **P** | **10 06 06.1** | **-0.4** |
| | 1.2nm,0.8s,baz=58,slow=9.2,SNR=4.8 | | | | | | |
| YKA | | | | LR | LR | 10 21 21.5 | |
| | comp=Z,111nm,18.1s,baz=340,slow=35 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **41.52** | **327** | LR | LR | 10 23 06.5 | |
| | comp=Z,68nm,18.0s,baz=19,slow=35 | | | | | | |
| **BELG** | **Belogornoye** | **43.16** | **62** | LR | LR | 10 22 44.9 | |
| | comp=Z,59nm,21.6s,baz=61,slow=33 | | | | | | |
| **BRTR** | **Keskin Array B** | **44.87** | **85** | P | **P** | **10 07 01.1** | **+1.5** |
| | 0.4nm,0.4s,baz=298,slow=6.1,SNR=4.4 | | | | | | |
| BRTR | | | | LR | LR | 10 28 18.9 | |
| | comp=Z,39nm,18.2s,baz=321,slow=40 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **DLBC** | **Dease Lake** | **46.91** | **315** | LR | LR | 10 25 44.9 | |
| | comp=Z,112nm,18.3s,baz=90,slow=35 | | | | | | |
| **ILAR** | **Eielson Array** | **47.81** | **328** | P | **P** | **10 07 23.3** | **+1.0** |
| | 1.0nm,0.9s,baz=39,slow=5.7,SNR=8.6 | | | | | | |
| | 1.0nm,0.9s | | | | | | |
| **NEW** | **Newport** | **48.59** | **297** | LR | LR | 10 26 19.9 | |
| | comp=Z,105nm,20.2s,baz=14,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **48.85** | **287** | P | **P** | **10 07 30.3** | **-0.7** |
| | 0.7nm,0.8s,baz=72,slow=8.7,SNR=6.7 | | | | | | |
| PDAR | | | | LR | LR | 10 26 12.8 | |
| | comp=Z,46nm,20.0s,baz=11,slow=34 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **49.24** | **58** | LR | LR | 10 27 21.1 | |
| | comp=Z,76nm,19.1s,baz=114,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.66** | **137** | P | **P** | **10 07 52.0** | **-0.1** |
| | 1.4nm,0.5s,baz=343,slow=7.8,SNR=23 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **DBIC** | **Dimbokro** | **55.59** | **147** | P | **P** | **10 08 20.1** | **-0.8** |
| | 2.3nm,0.6s,baz=329,slow=5.0,SNR=4.0 | | | | | | |
| | 2.3nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **56.04** | **272** | P | **P** | **10 08 24.9** | **+0.7** |
| | 0.1nm,0.6s,baz=63,slow=5.6,SNR=2.9 | | | | | | |
| | 0.1nm,0.6s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **56.09** | **296** | LR | LR | 10 31 23.6 | |
| | comp=Z,55nm,20.4s,baz=25,slow=35 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.54** | **45** | P | **P** | **10 08 34.2** | **-0.3** |
| | 0.3nm,0.3s,baz=327,slow=6.9,SNR=1.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.11** | **45** | P | **P** | **10 09 05.6** | **-0.4** |
| | 0.3nm,0.5s,baz=330,slow=4.6,SNR=8.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **67.39** | **161** | T | T | 11 22 44.3 | |
| | baz=349 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **67.40** | **161** | T | T | 11 22 33.4 | |
| | baz=349 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **67.41** | **161** | T | T | 11 22 46.1 | |
| | baz=349 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **68.46** | **162** | T | T | 11 23 50.2 | |
| | baz=350,slow=74,SNR=14 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **68.47** | **162** | T | T | 11 23 53.9 | |
| | baz=230,slow=74,SNR=15 | | | | | | |
| **LPAZ** | **La Paz** | **80.04** | **215** | LR | LR | 10 42 59.5 | |
| | comp=Z,35nm,21.7s,baz=18,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **143.97** | **22** | PKP | **PKPdf** | **10 18 19.8** | **-0.9** |
| | 0.2nm,0.7s,baz=332,slow=2.9,SNR=4.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **148.18** | **180** | PKPbc | **PKPbc** | **10 18 29.9** | **+0.1** |
| | 0.9nm,0.6s,baz=255,slow=1.2,SNR=9.1 | | | | | | |

*KOLA **14** 10:00:01.4, 64°.54N×31°.21E, h0km, ML2.0, Error ellipse: s-maj=64.4km s-min=29.5km az=170.0, Karelia*
*IDC **14** 10:00:03.0±3.3, 64°.58N×30°.63E, h0km, mbtmp3.0/3, ML2.0/3, Error ellipse: s-maj=49.3km s-min=10.8km az=103.0*
*HEL **14** 10:00:02.3±0.1, 64°.68N×30°.71E, h0km, ML1.8, Explosion*

**ISC 14 10:00:01.0±0.9, 64°.66N±0°.03×30°.50E±0°.05, h0km, n31, σ1s75/47, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RMF** | **Romuvaara** | **0.51** | **209** | PG | **Pb** | **10 00 12.6** | **-0.1** |
| RMF | | | | MSG | | 10 00 20.5 | |
| | comp=Z,20nm,0.2s | | | | | | |
| **KU6** | **Riekki** | **1.40** | **350** | PG | **Pn** | **10 00 27.5** | **-0.3** |
| | baz=165 | | | | | | |
| KU6 | | | | MSG | | 10 00 44.5 | |
| | comp=Z,8.1nm,0.2s | | | | | | |
| KU6 | | | | SG | **Sg** | **10 00 45.7** | **-0.2** |
| **MSF** | **Maaselka** | **1.40** | **335** | PG | **Pn** | **10 00 28.0** | **+0.2** |
| | baz=151 | | | | | | |
| MSF | | | | SN | **Sb** | **10 00 47.5** | **+1.0** |
| **OLKF** | **Oulanka, Finla** | **1.73** | **345** | PG | **Pn** | **10 00 33.7** | **+1.3** |
| OLKF | | | | MSG | | 10 00 54.1 | |
| | comp=Z,9.2nm,0.2s | | | | | | |
| OLKF | | | | SN | **Sg** | **10 00 57.4** | **+0.8** |
| **NIF** | **Nilsia** | **1.74** | **224** | PG | **Pg** | **10 00 35.1** | **+0.8** |
| | baz=41 | | | | | | |
| **JOF** | **Joensuu** | **1.78** | **168** | PG | **Pb** | **10 00 34.0** | **-0.5** |
| **OUL** | **Oulu** | **2.01** | **284** | PG | **Pg** | **10 00 39.8** | **+0.3** |
| OUL | | | | SG | **Sg** | **10 01 06.6** | **+1.1** |
| **RANF** | **Ranua** | **2.07** | **313** | PG | **Pb** | **10 00 39.9** | **+0.5** |
| | baz=127 | | | | | | |
| RANF | | | | SG | **Sg** | **10 01 07.7** | **+0.3** |
| **OBF4** | **Vikkela, Lumij** | **2.32** | **276** | PG | **Pg** | **10 00 45.0** | **-0.4** |
| OBF4 | | | | MSG | | 10 01 13.6 | |
| | comp=Z,5.2nm,0.2s | | | | | | |
| **OUF** | **Merijarvi** | **2.51** | **266** | PG | **Pb** | **10 00 47.5** | **+0.6** |
| OUF | | | | MSG | | 10 01 19.0 | |
| | comp=Z,6.0nm,0.2s | | | | | | |
| OUF | | | | SG | **Sg** | **10 01 21.2** | **-0.4** |
| **OBF0** | **Syolatti, Pyha** | **2.71** | **269** | PB | **Pb** | **10 00 49.5** | **-0.7** |
| OBF0 | | | | MSG | | 10 01 24.7 | |
| | comp=Z,4.3nm,0.2s | | | | | | |
| OBF0 | | | | SG | **Sg** | **10 01 28.1** | **+0.2** |
| **SUF** | **Sumiainen** | **2.74** | **227** | PB | **Pb** | **10 00 51.1** | **+0.3** |
| | baz=48 | | | | | | |
| SUF | | | | MSG | | 10 01 25.5 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| SUF | | | | SG | **Sg** | **10 01 30.6** | **+1.5** |
| **TOF** | **Tornio** | **2.96** | **302** | PG | **Pg** | **10 00 57.9** | **+0.4** |
| TOF | | | | MSG | | 10 01 31.2 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| TOF | | | | SG | **Sb** | **10 01 33.5** | **+2.4** |
| **OBF8** | **Ulkokalla** | **3.07** | **267** | PB | **Pb** | **10 00 54.6** | **-1.8** |
| **VRF** | **Varrio** | **3.13** | **354** | PB | **Pn** | **10 00 53.6** | **+2.2** |
| VRF | | | | MSG | | 10 01 34.0 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| VRF | | | | SG | **Sb** | **10 01 38.8** | **+2.8** |
| **APA0** | **Apatity Array** | **3.13** | **18** | P | **Pn** | **10 00 53.4** | **+1.9** |
| APA0 | | | | S | **Sn** | **10 01 30.9** | **+1.3** |
| **KAF** | **Kangasniemi** | **3.17** | **218** | SG | **Sg** | **10 01 43.8** | **+0.9** |
| **SGF** | **Sodankyl** | **3.23** | **332** | SB | **Sb** | **10 01 39.6** | **+0.6** |
| **RUF** | **Ruokolahti** | **3.32** | **193** | PB | **Pb** | **10 00 60.0** | **-0.7** |
| **KEF** | **Keuruu** | **3.56** | **228** | PB | **Pb** | **10 01 03.3** | **-1.4** |
| KEF | | | | SB | **Sb** | **10 01 47.2** | **-1.1** |
| **KLF** | **Kolari** | **3.72** | **317** | PB | **Pb** | **10 01 04.1** | **-3.4** |
| **FINES** | **FINESS Array B** | **3.80** | **214** | Pn | **Pn** | **10 01 02.2** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=29,slow=14,SNR=2.1 | | | | | | |
| FINES | | | | Pg | **Pg** | **10 01 12.1** | **-1.6** |
| | comp=Z,0.4nm,0.3s,baz=46,slow=16,SNR=4.7 | | | | | | |
| FINES | | | | Lg | Lg | 10 02 01.0 | |
| | comp=Z,0.3nm,0.3s,baz=41,slow=30,SNR=2.2 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **VAF** | **Ylistaro** | **3.83** | **249** | PB | **Pb** | **10 01 06.7** | **-2.5** |
| | baz=59 | | | | | | |
| VAF | | | | SB | **Sb** | **10 01 55.3** | **-0.7** |
| **PAJU** | **Pajala** | **3.86** | **311** | SG | **Sg** | **10 02 02.3** | **-2.4** |
| **HEF** | **Hetta** | **4.65** | **327** | PN | **Pn** | **10 01 16.1** | **+3.7** |
| HEF | | | | SG | **Sg** | **10 02 26.4** | **-3.9** |
| **TERR** | **Teriberka** | **4.91** | **20** | S | **Sn** | **10 02 08.2** | **-5.1** |
| **PRVG** | **Vayda Guba** | **5.16** | **7** | S | **Sn** | **10 02 19.1** | **-0.3** |
| **ARCES** | **ARCESS Array B** | **5.27** | **341** | P | **Pn** | **10 01 22.3** | **+1.4** |
| ARCES | | | | S | **Sn** | **10 02 24.7** | **+2.4** |
| **ARCES** | **ARCESS Array B** | **5.27** | **341** | Pn | **Pn** | **10 01 21.7** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=14,SNR=5.5 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 02 22.4** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=157,slow=24,SNR=1.2 | | | | | | |
| ARCES | | | | Lg | Lg | 10 02 41.8 | |
| | comp=Z,0.2nm,0.3s,baz=170,slow=27,SNR=1.3 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **I37NO** | **I37NO** | **6.44** | **319** | I | I | 10 37 54.6 | |
| | baz=127,slow=325,SNR=4.5 | | | | | | |
| **HFS** | **Hagfors** | **9.01** | **248** | Pn | **Pn** | **10 02 10.7** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=54,slow=13,SNR=1.6 | | | | | | |
| HFS | | | | Lg | Lg | 10 04 40.4 | |
| | comp=Z,0.1nm,0.3s,baz=78,slow=34,SNR=0.8 | | | | | | |
| | comp=Z,3.8nm,1.2s | | | | | | |

*IDC **14** 10:10:43.5±12.0, 37°.29N×71°.77E, h181km±130km, mb2.9/1, mbtmp3.9/4, MS2.9/1, Error ellipse: s-maj=210.5km s-min=69.2km az=135.0*
*NEIC **14** 10:10:48.1±0.8, 37°.34N±0°.03×72°.2E±0°.1, h225km±13km, mb4.3/1, Error ellipse: s-maj=13.5km s-min=2.9km az=80.0*
*NNC **14** 10:10:52.5±11.0, 37°.86N×72°.43E, h0km, mb4.1, mpv3.7, Error ellipse: s-maj=89.7km s-min=72.2km az=160.0*

**ISC 14 10:10:47.1±0.8, 37°.36N±0°.05×72°.32E±0°.07, h200km, n38, σ2s00/43, mb4.9/3, 4C-3D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DRK** | **Karamyk** | **2.15** | **349** | | **Pn** | **10 11 30.9** | **+3.4** |
| **GAR** | **Garm** | **2.27** | **317** | Pn | **Pn** | **10 11 30.7** | **+2.1** |
| **CHGR** | **Chuyangaron** | **2.81** | **298** | Pn | **Pn** | **10 11 35.7** | **+1.1** |
| **SIMJ** | **Simiganj** | **2.92** | **297** | Pn | **Pn** | **10 11 36.9** | **+1.0** |
| **BTK** | **Batken** | **2.94** | **337** | | **Pn** | **10 11 39.3** | **+3.3** |
| **KSH** | **Kashi** | **3.59** | **52** | P | **Pn** | **10 11 42.3** | **-1.6** |
| KSH | | | | S | **Sn** | **10 12 22.6** | **-5.9** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,32nm,0.4s | | | | | | |
| **NIL** | **Nilore** | **3.78** | **168** | | **Pn** | **10 11 48.7** | **+2.5** |
| **KBL** | **Kabul** | **3.87** | **224** | Pn | **Pn** | **10 11 47.8** | **+0.3** |
| **ARSB** | **Arslanbob** | **3.99** | **7** | Pn | **Pn** | **10 11 51.3** | **+2.4** |
| **NRN** | **Naryn** | **4.97** | **34** | | **Pn** | **10 12 02.9** | **+1.6** |
| **AAK** | **Ala-Archa** | **5.53** | **17** | Pn | **Pn** | **10 12 10.2** | **+1.8** |
| **AAK** | **Ala-Archa** | **5.53** | **17** | ⇑Pn | **Pn** | **10 12 09.2** | **+0.8** |
| | comp=Z,3.1nm,0.5s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **10 13 11.7** | **-0.9** |
| | comp=Z,11nm,0.8s | | | | | | |
| **THN** | **Thein Dam** | **5.65** | **149** | *e*P | **Pn** | **10 12 11.3** | **+1.4** |
| THN | | | | *e*S | **Sn** | **10 13 13.2** | **-2.1** |
| **BOOM** | **Boomskoye usch** | **5.83** | **27** | | **Pn** | **10 12 15.0** | **+2.8** |
| **KK31** | **Karatay Array** | **5.90** | **347** | Pn | **Pn** | **10 12 14.4** | **+1.4** |
| **KK31** | **Karatay Array** | **5.90** | **347** | ⇑Pn | **Pn** | **10 12 14.0** | **+1.1** |
| | comp=Z,7.9nm,0.6s,baz=147,slow=13,SNR=74 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **10 13 18.1** | **-2.9** |
| | comp=Z,29nm,0.7s,baz=184,slow=25,SNR=4.0 | | | | | | |
| **KKAR** | **Karatay Array** | **5.90** | **347** | | **Pn** | **10 12 14.3** | **+1.4** |
| **KKAR** | **Karatay Array** | **5.90** | **347** | | **Pn** | **10 12 14.4** | **+1.4** |
| **DHRM** | **DHARAMSHALA** | **6.06** | **146** | *e*P | **Pn** | **10 12 16.3** | **+0.9** |
| DHRM | | | | *e*S | **Sn** | **10 13 22.6** | **-2.6** |
| DHRM | | | | IAML | | 10 13 25.1 | |
| | comp=E,74nm,0.4s | | | | | | |
| DHRM | | | | IAML | | 10 13 28.5 | |
| | comp=E,73nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.10** | **23** | ⇓Pn | **Pn** | **10 12 17.6** | **+1.9** |
| | comp=E,4.5nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sn** | **10 13 22.3** | **-3.5** |
| | comp=E,1.2nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 10 13 50.1 | |
| | comp=E,3.1nm,0.7s | | | | | | |
| **HNLY** | **HANLEY** | **7.12** | **128** | *e*P | **Pn** | **10 12 29.8** | **+0.4** |
| HNLY | | | | *e*S | **Sn** | **10 13 51.0** | **+0.5** |
| **SMLA** | **Simla** | **7.40** | **146** | *e*P | **Pn** | **10 12 32.6** | **0.0** |
| SMLA | | | | *e*S | **Sn** | **10 13 54.5** | **-1.8** |
| SMLA | | | | IAML | | 10 13 56.0 | |
| | comp=E,40nm,0.6s | | | | | | |
| SMLA | | | | IAML | | 10 13 56.7 | |
| | comp=E,36nm,0.5s | | | | | | |
| **KUDL** | **Kundal** | **9.84** | **158** | *e*P | **Pn** | **10 13 01.9** | **-2.3** |
| KUDL | | | | *e*S | Sn | 10 14 43.8 | -10 |
| KUDL | | | | IAML | | 10 14 46.5 | |
| | comp=E,44nm,0.5s | | | | | | |
| **LGTI** | **Lohaghat** | **10.30** | **138** | *ex* | Sn | 10 14 57.0 | -8.3 |
| **MK31** | **Makanchi Array** | **11.98** | **35** | Pn | **Pn** | **10 13 32.7** | **+1.1** |
| **MKAR** | **Makanchi Array** | **11.98** | **35** | Pn | **Pn** | **10 13 32.7** | **+1.1** |
| **MKAR** | **Makanchi Array** | **11.98** | **35** | P | **Pn** | **10 13 32.5** | **+0.9** |
| | comp=E,0.4nm,0.4s,baz=213,slow=12,SNR=4.9 | | | | | | |
| **WMQ** | **Urumqi** | **13.34** | **56** | *e*P | **P** | **10 13 51.9** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **13.98** | **17** | P | **Pn** | **10 13 56.0** | **-0.6** |
| | comp=E,0.9nm,0.2s,baz=205,slow=11,SNR=3.4 | | | | | | |
| **ABKAR** | **Akbulak array** | **14.89** | **327** | P | **Pn** | **10 14 07.2** | **-0.5** |
| **ABKAR** | **Akbulak array** | **14.89** | **327** | | **Pn** | **10 14 06.4** | **-1.4** |
| **ZAA0** | **Zalesovo Array** | **18.70** | **24** | P | **P** | **10 14 50.5** | **+0.2** |
| ZAA0 | | | | IAmb | IAmb | 10 14 51.1 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.70** | **24** | P | **P** | **10 14 50.7** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **18.70** | **24** | P | **P** | **10 14 50.5** | **+0.3** |
| | comp=Z,7.9nm,0.3s,baz=221,slow=11,SNR=34 | | | | | | |
| **KBZ** | **Khabaz** | **23.17** | **295** | LR | LR | 10 25 51.8 | |
| | comp=Z,32nm,19.2s,baz=332,slow=40 | | | | | | |
| **PZH** | **PanZhiHua** | **27.12** | **105** | P | **P** | **10 16 13.4** | **+1.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,220nm,4.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **30.48** | **71** | *e*P | **P** | **10 16 43.3** | **+2.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,43nm,4.1s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.79** | **269** | P | P | 10 21 13.1 | -4.3 |
| | comp=Z,0.2nm,0.3s,baz=62,slow=7.5,SNR=1.9 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |

*IDC **14** 10:17:47.0±1.4, 10°.90N×144°.75E, h0km, mb3.6/5, mbtmp3.6/6, ML3.2/1, Error ellipse: s-maj=59.9km s-min=20.7km az=95.0*

**ISC 14 10:17:52.1±1.3, 10°.9N±0°.1×144°.8E±0°.4, h35km, n6, σ0s38/7, mb3.6/5, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **2.66** | **2** | Pn | **Pn** | **10 18 32.7** | **+0.2** |
| | 4.1nm,0.3s,baz=342,slow=20,SNR=1.8 | | | | | | |
| GUMO | | | | Sn | **Sn** | **10 19 02.9** | **-0.5** |
| | 16nm,0.3s,baz=131,slow=23,SNR=8.2 | | | | | | |
| | 75nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.34** | **199** | P | **P** | **10 24 18.1** | **-0.2** |
| | 0.6nm,0.6s,baz=21,slow=9.6,SNR=8.1 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **35.98** | **197** | P | **P** | **10 24 49.6** | **-0.2** |
| | 0.4nm,0.5s,baz=20,slow=8.3,SNR=9.4 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.34** | **317** | P | **P** | **10 28 17.8** | **-0.1** |
| | 0.6nm,0.9s,baz=96,slow=8.9,SNR=3.6 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.60** | **321** | P | **P** | **10 28 39.3** | **+0.4** |
| | 0.6nm,0.3s,baz=91,slow=7.6,SNR=7.6 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **71.02** | **25** | P | **P** | **10 29 06.2** | **+0.1** |
| | 0.1nm,0.5s,baz=255,slow=7.0,SNR=2.6 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

**IDC 14 10:29:55.6±3.2, 53°.55N×87°.82E, h0km, mbtmp3.2/2, ML2.4/2, Error ellipse: s-maj=25.1km s-min=15.3km az=64.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.83** | **284** | I | I | 10 41 50.0 | |
| | baz=99,slow=316,SNR=8.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.83** | **284** | Pg | Pn | 10 30 28.3 | 0.0 |
| | 1.0nm,0.3s,baz=100,slow=12,SNR=9.4 | | | | | | |
| ZALV | | | | Lg | Lg | 10 30 54.0 | |
| | 3.0nm,0.3s,baz=104,slow=26,SNR=20 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.43** | **247** | Pn | Pn | 10 31 32.2 | +0.8 |
| | 0.1nm,0.3s,baz=65,slow=13,SNR=2.5 | | | | | | |
| KURBB | | | | Sn | Sn | 10 32 44.1 | -1.3 |
| | 0.1nm,0.3s,baz=56,slow=22,SNR=1.4 | | | | | | |
| KURBB | | | | Lg | Lg | 10 33 20.2 | |
| | 0.1nm,0.3s,baz=13,slow=8.6,SNR=1.8 | | | | | | |
| | 3.5nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.63** | **210** | Pn | Pn | 10 31 49.6 | +1.6 |
| | 0.1nm,0.3s,baz=31,slow=14,SNR=1.8 | | | | | | |
| MKAR | | | | Sn | Sn | 10 33 14.2 | -0.9 |
| | 0.1nm,0.3s,baz=29,slow=29,SNR=3.8 | | | | | | |
| MKAR | | | | Lg | Lg | 10 33 58.6 | |
| | 0.1nm,0.3s,baz=45,slow=51,SNR=1.6 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*AEIC **14** 10:32:16.3±1.5, 69°.52N±0°.05×144°.3W±0°.1, h9km±6km, ML3.3, ML3.4/120(NEIC), Mwr3.4/15(NEIC), Error ellipse: s-maj=5.2km s-min=2.5km az=183.0*
*NEIC **14** 10:32:17.6±1.5, 69°.59N±0°.02×144°.25W±0°.06, h10km±2km, Error ellipse: s-maj=5.1km s-min=2.9km az=318.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr=0.10; Mθθ=0.96; Mφφ1.06; Mrθ0.24; Mrφ-1.43; Mθφ0.03; Fault plane solution: M₀1.77000×10¹⁴ NP1: φs197.42000°, δ82.71000°, λ-3.92000°. NP2: φs287.92000°, δ86.11000°, λ-172.70000°. Principal axes: T 1.8062, Plg2.0000°, Azm63.0000°; N -0.0718, Plg82.0000°, Azm316.0000°; P -1.7344, Plg8.0000°, Azm153.0000°;*
*NEIC **14** 10:32:19.2, 69°.56N×144°.27W, h22km*
*IDC **14** 10:32:20.6±5.6, 69°.36N×144°.06W, h0km, mb3.1/1, mbtmp3.3/3, ML3.4/2, Error ellipse: s-maj=85.4km s-min=30.6km az=141.0*

**ISC 14 10:32:17.3±0.8, 69°.53N±0°.05×144°.27W±0°.03, h10km, n141, σ1s23/147, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.22** | **63** | Pg | **Pg** | **10 32 21.0** | **-0.8** |
| C27K | | | | Sg | **Sg** | **10 32 24.6** | **-0.3** |
| **C26K** | **Camden Bay** | **0.45** | **331** | | **Pg** | **10 32 26.2** | **+0.1** |
| C26K | | | | | **Sg** | **10 32 32.1** | **0.0** |
| **D25K** | **Kavik River** | **0.77** | **256** | Pg | **Pg** | **10 32 30.2** | **-2.0** |
| **D25K** | **Kavik River** | **0.77** | **256** | | **Sg** | **10 32 41.9** | **-0.3** |
| **D27M** | **Malcolm River** | **1.20** | **102** | | **Pb** | **10 32 38.5** | **-1.7** |
| D27M | | | | | **Sb** | **10 32 55.6** | **-0.1** |
| D27M | | | | IAML | | 10 32 57.8 | |
| | comp=N,668nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.56** | **279** | | **Pn** | **10 32 45.5** | **+0.4** |
| C24K | | | | IAML | | 10 33 08.7 | |
| | comp=N,606nm,0.5s | | | | | | |
| C24K | | | | IAML | | 10 33 11.1 | |
| | comp=E,573nm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **259** | | **Pn** | **10 32 46.6** | **+0.3** |
| D24K | | | | IAML | | 10 33 15.1 | |
| | comp=E,530nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **143** | | **Pn** | **10 32 46.9** | **+0.4** |
| E27K | | | | IAML | | 10 33 14.6 | |
| | comp=E,365nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **179** | | **Pn** | **10 32 49.9** | **+1.0** |
| F26K | | | | | **Sn** | **10 33 14.1** | **+1.9** |
| F26K | | | | IAML | | 10 33 17.3 | |
| | comp=N,407nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.94** | **116** | | **Pn** | **10 32 51.5** | **+1.3** |
| E28M | | | | IAML | | 10 33 21.6 | |
| | comp=E,210nm,0.4s | | | | | | |
| E28M | | | | IAML | | 10 33 22.7 | |
| | comp=N,237nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **1.96** | **93** | | **Pn** | **10 32 51.5** | **+0.9** |
| **TOLK** | **Toolik Lake Re** | **2.10** | **247** | Pn | **Pn** | **10 32 52.9** | **+0.4** |
| TOLK | | | | IAML | | 10 33 32.8 | |
| | comp=N,193nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.11** | **183** | | **Pn** | **10 32 

comp=N,46nm,1.1s
G30M IAML 10 34 39.6
comp=E,38nm,1.1s
**H24K Noodor Dome 3.95 202 Pn 10 33 16.3 -1.6**
H24K IAML 10 34 28.0
comp=N,49nm,0.7s
H24K IAML 10 34 29.3
comp=E,58nm,1.6s
**H29M Whitestone 4.00 143** Pn **Pn 10 33 18.4 -0.1**
H29M IAML 10 34 27.6
comp=N,51nm,0.8s
H29M IAML 10 34 31.2
comp=E,56nm,1.0s
**PRP Porcupine Dome 4.06 187 Pn 10 33 20.1 +0.7**
PRP IAML 10 34 12.3
comp=E,52nm,0.5s
**I27K Kandik River 4.07 164 Pn 10 33 21.2 +1.7**
**INK Inuvik 4.07 102** Pn **Pn 10 33 20.6 +1.2**
**F21K Alatna River 4.12 240 Pn 10 33 21.0 +0.8**
F21K IAML 10 34 36.9
comp=E,35nm,0.7s
**H23K Yukon River 4.23 211 Pn 10 33 22.5 +0.8**
H23K IAML 10 34 35.2
comp=E,51nm,1.4s
H23K IAML 10 34 40.9
comp=N,43nm,0.8s
**EPYK Eagle Plains 4.26 135** Pn **Pn 10 33 23.2 +1.1**
**I26K Coal Creek Min 4.26 174 Pn 10 33 23.4 +1.4**
**F31M Tsiigehtchic 4.40 113** Pn **Pn 10 33 25.2 +1.2**
F31M IAML 10 34 42.7
comp=N,36nm,0.8s
**I28M Miner Creek 4.42 156** Pn **Pn 10 33 26.0 +1.6**
I28M IAML 10 34 19.9
comp=N,31nm,0.6s
I28M IAML 10 34 48.3
comp=E,34nm,1.1s
**D20K Etivluk River 4.49 265 Pn 10 33 26.8 +1.5**
**E20K Nigu River 4.49 259 Pn 10 33 26.8 +1.4**
**B20K Meade River 4.50 282** Pn **Pn 10 33 26.2 +0.8**
**A21K Barrow 4.53 299 Pn 10 33 27.2 +1.5**
**H22K Ishtalitna Cre 4.54 220 Pn 10 33 26.3 +0.4**
**G31M Satah River 4.55 120** Pn **Pn 10 33 26.8 +0.8**
**POKR Poker Plat Res 4.60 197** Pn **Pn 10 33 28.1 +1.3**
POKR IAML 10 34 23.3
comp=N,35nm,0.4s
POKR IAML 10 34 54.4
comp=E,40nm,1.1s
**G21K Allakaket 4.60 233** Pn **Pn 10 33 27.1 +0.4**
G21K IAML 10 34 50.0
comp=N,38nm,0.9s
G21K IAML 10 34 50.6
comp=E,38nm,1.2s
**I29M Ogilvie Camp, 4.77 148** Pn **Pn 10 33 30.2 +1.1**
I29M IAML 10 35 02.5
comp=E,29nm,1.0s
**I23K Minto, Yukon-K 4.82 207 Pn 10 33 30.5 +0.8**
I23K IAML 10 34 56.4
comp=N,35nm,1.4s
I23K IAML 10 34 57.3
comp=E,34nm,1.0s
**MDM Murphy Dome 4.84 200 Pn 10 33 31.1 +1.0**
MDM IAML 10 34 49.9
comp=N,27nm,0.7s
MDM IAML 10 34 51.0
comp=E,26nm,0.6s
**IL31 4.88 193** Pn **Pn 10 33 31.2 +0.6**
**ILAR Eielson Array 4.88 193 Pn 10 33 32.4 +1.8**
**ILAR Eielson Array 4.88 193** Pn **Pn 10 33 31.8 +1.1**
comp=E,0.8nm,0.3s,baz=10,slow=14,SNR=40
ILAR Sn **Sn 10 34 24.2 -3.0**
comp=E,1.8nm,0.3s,baz=11,slow=17,SNR=5.8
ILAR Lg Lg 10 34 45.0
comp=E,2.9nm,0.3s,baz=11,slow=33,SNR=8.2
comp=E,3.0nm,0.5s
**EGAK Eagle 4.92 164** Pn **Pn 10 33 32.3 +1.1**
EGAK IAML 10 34 31.4
comp=E,25nm,0.8s
EGAK IAML 10 34 34.5
comp=E,28nm,0.8s
**F20K Avaraart Lake 4.93 245** Pn **Pn 10 33 32.5 +1.3**
F20K IAML 10 35 05.0
comp=N,20nm,1.5s
**J25K Salcha River, 4.96 186 Pn 10 33 33.1 +1.4**
J25K IAML 10 34 59.3
comp=N,22nm,0.8s
**J26L Joseph Creek 5.06 177** Pn **Pn 10 33 34.7 +1.6**
J26L IAML 10 35 00.7
comp=N,21nm,0.7s
J26L IAML 10 35 01.2
comp=E,22nm,0.9s
**H21K Melozitna Rive 5.07 224 Pn 10 33 34.3 +1.1**
H21K IAML 10 35 04.3
comp=N,22nm,2.2s
H21K IAML 10 35 08.4
comp=E,30nm,1.3s
**D19K Kuna River 5.08 265 Pn 10 33 34.3 +0.9**
**CCB Clear Creek Bu 5.09 197** Pn **Pn 10 33 34.9 +1.4**
CCB IAML 10 34 35.4
comp=E,18nm,0.6s
**MLY Manley 5.16 212** Pn **Pn 10 33 35.3 +0.8**
MLY IAML 10 35 06.8
comp=E,16nm,0.8s
**E19K Redstone River 5.20 253 Pn 10 33 35.5 +0.5**
E19K IAML 10 35 07.4
comp=N,19nm,1.4s
E19K IAML 10 35 24.3
comp=E,20nm,1.1s
**HDA Harding Lake 5.25 193** Pn **Pn 10 33 37.1 +1.5**
HDA IAML 10 35 05.2
comp=N,27nm,0.8s
**I21K Tanana 5.28 218 Pn 10 33 36.7 +0.6**
**I30M Mount Dempster 5.29 141** Pn **Pn 10 33 36.7 +0.5**
**WRH Wood River Hil 5.29 198** Pn **Pn 10 33 37.9 +1.6**
WRH IAML 10 35 02.6
comp=N,18nm,0.6s
WRH IAML 10 35 07.5
comp=E,20nm,0.6s
**NEA2 Nenana 5.30 203 Pn 10 33 37.2 +0.9**
NEA2 IAML 10 35 10.1
comp=E,17nm,1.5s
**C19K Lookout Ridge 5.45 273 Pn 10 33 39.4 +1.0**
**K27K Chicken 5.59 170** Pn **Pn 10 33 42.1 +1.8**
**F19K Shaleruckik Mo 5.71 248** Pn **Pn 10 33 43.0 +1.0**
**DAWY Dawson 5.81 158 Pn 10 33 45.1 +1.6**
**A19K Wainwright 5.84 285 Pn 10 33 44.8 +1.1**
**J30M Hart River 5.86 144** Pn **Pn 10 33 45.2 +1.1**
**G19K Purcell Mounta 5.92 241** Pn **Pn 10 33 45.0 +0.2**
**BPAW Bear Paw Mtn. 6.06 209** Pn **Pn 10 33 47.2 +0.4**
**MCK McKinley 6.11 200 Pn 10 33 48.6 +1.1**
**C18K Utukok River 6.12 270** Pn **Pn 10 33 48.4 +0.8**
**H19K Roundabout Mou 6.15 235 Pn 10 33 48.5 +0.6**
**I20K Naaghedeneel 6.19 225** Pn **Pn 10 33 49.7 +1.2**
**K29M Barlow Dome 6.30 152** Pn **Pn 10 33 51.8 +1.6**
**E18K Tukpahlearik C 6.37 258 Pn 10 33 51.7 +0.8**
**F18K Selawik 6.46 250 Pn 10 33 52.9 +0.7**
**L26K Log Cabin Wild 6.54 176 Pn 10 33 55.3 +1.9**
**BCAR Beaver Creek A 6.57 170** Pn **Pn 10 33 55.8 +2.0**
**G18K Tagagawik 6.57 243** Pn **Pn 10 33 55.0 +1.3**
**L27K Beaver Creek, 6.57 170** Pn **Pn 10 33 55.9 +2.1**
**PAX Paxson 6.60 185 Pn 10 33 56.4 +2.0**
**MENT Mentasta 6.62 178** Pn **Pn 10 33 56.6 +2.1**
**J20K Nowinta River 6.63 221 Pn 10 33 55.2 +0.7**
**A36M Sachs Harbour 6.74 60** Pn **Pn 10 33 55.5 -0.5**
**C17K DeLong Mountai 6.87 270 Pn 10 33 57.8 -0.1**
**L29M L29M 6.90 156 Pn 10 33 59.7 +1.4**
**RDOG Red Dog Mine 6.91 266** Pn **Pn 10 33 58.1 -0.4**
**E17K Hotham Inlet 6.95 258 Pn 10 33 58.8 -0.1**
**H18K Honhosa River 6.98 238** Pn **Pn 10 34 01.1 +1.6**
**F17K Baldwin Pennin 7.08 252 Pn 10 34 01.3 +0.6**
**C36M Paulatuk 7.11 82 Pn 10 34 00.5 -0.6**
**D17K Noatak River 7.11 264 Pn 10 34 00.7 -0.5**
**J19K Poorman 7.13 224** Pn **Pn 10 34 01.9 +0.4**
**K20K Telida 7.33 217** Pn **Pn 10 34 04.4 +0.2**
**G17K Kiwalik Mounta 7.45 245 Pn 10 34 06.5 +0.7**
**H17K Granite Mounta 7.60 240** Pn **Pn 10 34 08.7 +0.8**
**C16K Lisburne Hills 7.69 271** Pn **Pn 10 34 09.4 +0.3**
**J18K Innoko River 7.84 225** Pn **Pn 10 34 11.0 -0.3**
**G16K Koyuk River 8.07 248** Pn **Pn 10 34 15.0 +0.7**
**SKT Skwentna 8.14 205** Pn **Pn 10 34 16.9 +1.6**
**J17K VABM Dome 8.52 231** Pn **Pn 10 34 20.3 -0.2**
**SUA Susitna One 8.53 201** Pn **Pn 10 34 21.7 +1.0**
**L19K White Mountain 8.54 215** Pn **Pn 10 34 21.9 +1.1**
**FARO Faro, Yukon 8.57 143** Pn **Pn 10 34 21.9 +0.7**
**I17K Unalakleet 8.60 237** Pn **Pn 10 34 22.4 +0.8**
**N30M Aishikik Lake 8.62 156** Pn **Pn 10 34 23.1 +1.1**
**F15K North Star Dit 8.64 254** Pn **Pn 10 34 22.6 +0.4**
**M19K Big River Lodg 8.70 213** Pn **Pn 10 34 24.7 +1.7**
**N31M Braeburn, Yuko 8.80 152** Pn **Pn 10 34 24.7 +0.3**
**CRQM Cirque 8.82 176** Pn **Pn 10 34 26.5 +1.7**
**YUK5 Granite Creek 8.84 159 Pn 10 34 26.9 +1.9**
**L18K Granite Mounta 8.90 221** Pn **Pn 10 34 26.4 +0.7**
**J16K Anvik River 9.03 234** Pn **Pn 10 34 29.3 +1.8**
**O30N Mendenhall 9.43 155** Pn **Pn 10 34 34.5 +1.5**
**MESA MESA 9.44 173** Pn **Pn 10 34 34.2 +0.9**
**M17K Holitna River 9.80 220** Pn **Pn 10 34 38.8 +0.8**
**L16K Owhat River 10.02 226** Pn **Pn 10 34 43.2 +2.3**
**IVE Iliamna Volcan 10.24 205 Pn 10 34 46.0 +1.9**
**ILSW Iliamna Southw 10.29 206** Pn **Pn 10 34 46.0 +1.2**
**J14K Nanvaranak Lak 10.31 238** Pn **Pn 10 34 46.5 +1.6**
**M16K Timber Creek 10.48 223** Pn **Pn 10 34 47.8 +0.4**
**P33M Teslin, Yukon 10.52 147** Pn **Pn 10 34 48.8 +0.9**
**YKA Yellowknife Ar 13.83 106** Pn **Pn 10 35 30.2 -2.9**
comp=E,0.3nm,0.3s,baz=314,slow=17,SNR=14
YKA Sn Sn 10 37 54.5 -12
comp=E,0.2nm,0.3s,baz=218,slow=24,SNR=5.6
comp=E,0.8nm,0.6s
**TXAR Lajitas Array 46.41 128** P **P 10 40 47.5 +3.8**
comp=E,0.2nm,0.6s,baz=353,slow=6.4,SNR=4.1
comp=E,0.2nm,0.6s

*JMA **14** 10:47:08.9±0.1, 35.1°N±0.7°×135.6°E±0.6, h363km±1km, MV3.2/31, MID KYOTO PREF*
*IDC **14** 10:47:08.2±1.1, 35.04°N×135.70°E, h372km±15km, mb2.7/4, mbtmp3.5/8, Error ellipse: s-maj=25.0km s-min=18.9km az=68.0*
**ISC 14 10:47:07.9±0.8, 35.14°N±0.07°×135.66°E±0.06, h368km±7km, n32, σ1.9 s38/38, mb2.9/4, Western Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **JWT** | **Wachi** | **0.26** | **303** | *i* P | **Pn** | **10 47 54.5** | **+0.7** |
| JWT | | | | S | **S** | **10 48 30.0** | **-0.7** |
| **JWT** | **Kouya** | **0.92** | **184** | P | **Pn** | **10 47 56.0** | **+0.4** |
| **JYTA** | **Yamagatataniai** | **0.98** | **62** | *i* P | **Pn** | **10 47 56.5** | **+1.1** |
| JYTA | | | | S | **S** | **10 48 34.0** | **+0.3** |
| **INU** | **Inuyama** | **1.13** | **79** | P | **Pn** | **10 47 56.8** | **+0.7** |
| **JIE** | **Ise** | **1.14** | **131** | *i* P | **Pn** | **10 47 56.9** | **+0.7** |
| JIE | | | | S | **S** | **10 48 34.5** | **-0.5** |
| **JKG** | **Kaga** | **1.26** | **25** | *i* P | **Pn** | **10 47 57.5** | **+1.0** |
| JKG | | | | S | **S** | **10 48 35.6** | **-0.1** |
| **JTNC** | **Tanabenakahech** | **1.32** | **182** | P | **Pn** | **10 47 57.3** | **+0.2** |
| JTNC | | | | S | **S** | **10 48 35.3** | **-1.4** |
| **JGF** | **Kuroka** | **1.46** | **71** | P | **Pn** | **10 47 58.3** | **+0.6** |
| **JHS** | **Saijyo** | **2.10** | **267** | P | **Pn** | **10 48 02.2** | **+0.6** |
| **JSG** | **Sagara** | **2.12** | **102** | P | **Pn** | **10 48 03.1** | **+1.4** |
| **JOI** | **OKI** | **2.28** | **301** | P | **Pn** | **10 48 03.6** | **+0.9** |
| **JYN** | **Shimob** | **2.38** | **81** | P | **Pn** | **10 48 04.3** | **+0.6** |
| **JFNN** | **Fujinakano** | **2.48** | **88** | P | **Pn** | **10 48 05.5** | **+1.2** |
| **MAJO** | **Matsushiro** | **2.49** | **55** | P | **Pn** | **10 48 05.6** | **+1.2** |
| **MAT** | **Matsushiro** | **2.49** | **55** | P | **Pn** | **10 48 05.3** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **2.50** | **55** | P | **Pn** | **10 48 05.8** | **+1.4** |
| | 21nm,0.5s,baz=220,slow=8.6,SNR=141 | | | | | | |
| **JGT2** | **ShimaneMisato** | **2.59** | **269** | P | **Pn** | **10 48 05.7** | **+0.5** |
| **JSZ** | **Suzu** | **2.68** | **30** | P | **Pn** | **10 48 07.4** | **+1.6** |
| **JHT** | **Toyohira** | **2.71** | **261** | P | **Pn** | **10 48 06.7** | **+0.5** |
| **JRY** | **Ryogami san** | **2.78** | **71** | P | **Pn** | **10 48 07.8** | **+1.0** |
| **JNA** | **Nagahama** | **3.07** | **240** | P | **Pn** | **10 48 10.2** | **+0.9** |
| **JTO** | **Tosashimizu** | **3.29** | **227** | P | **Pn** | **10 48 11.7** | **+0.3** |
| **JSD** | **Sado** | **3.56** | **35** | P | **Pn** | **10 48 15.5** | **+1.8** |
| **JHJ** | **Hachijo jima 2** | **3.97** | **119** | S | **S** | **10 49 15.8** | **+1.7** |
| | 54nm,0.6s,baz=90,slow=20,SNR=1.5 | | | | | | |
| **JNU** | **Nakatsue** | **4.45** | **244** | P | **Pn** | **10 48 22.4** | **-0.3** |
| | 1.5nm,0.4s,baz=45,slow=3.6,SNR=1.0 | | | | | | |
| **KSRS** | **Korea Array** | **6.66** | **293** | P | **Pn** | **10 48 48.1** | **+1.4** |
| | 2.8nm,0.5s,baz=105,slow=13,SNR=15 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.48** | **344** | P | **P** | **10 49 21.7** | **+1.1** |
| | 25nm,0.5s,baz=155,slow=11,SNR=87 | | | | | | |
| **ASAJ** | **Asahikawa** | **10.43** | **29** | P | **Pn** | **10 49 30.8** | **0.0** |
| | 2.8nm,0.4s,baz=244,slow=7.9,SNR=8.8 | | | | | | |
| ASAJ | | | | S | **S** | **10 51 22.4** | **-5.6** |
| | 9.7nm,0.8s,baz=37,slow=20,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.21** | **303** | P | **P** | **10 54 19.7** | **+1.6** |
| | 0.2nm,0.5s,baz=74,slow=10,SNR=2.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **48.42** | **313** | P | **P** | **10 55 13.5** | **-0.6** |
| | 0.5nm,0.4s,baz=100,slow=8.8,SNR=2.2 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **54.80** | **182** | P | **P** | **10 56 00.1** | **-1.0** |
| | 0.5nm,0.8s,baz=359,slow=7.5,SNR=6.4 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **58.51** | **182** | P | **P** | **10 56 26.6** | **-0.3** |
| | 0.4nm,0.9s,baz=359,slow=3.8,SNR=1.3 | | | | | | |
| | 0.4nm,0.9s | | | | | | |

**NOU 14 11:02:39.6, 17.06°S×167.97°E, h4km, MLv4.1/11, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **0.69** | **163** | P | Pb | 11 02 53.7 | -0.6 |
| **RTV** | **Rentapao** | **0.85** | **149** | P | Pg | 11 02 55.9 | 0.0 |
| **MARNC** | **Mare, Loyalty** | **4.40** | **179** | P | Pn | 11 03 47.2 | 0.0 |
| **KOUNC** | **Koumac, New Ca** | **4.92** | **225** | P | Pn | 11 03 54.3 | -0.1 |
| **YATNC** | **Mamie plateau,** | **5.08** | **191** | P | Pn | 11 03 56.0 | -0.5 |
| **DZM** | **Mont Dzumac** | **5.19** | **196** | P | Pn | 11 03 58.1 | 0.0 |
| **PINNC** | **Pines Island,** | **5.55** | **185** | P | Pn | 11 04 03.1 | +0.1 |

*IDC **14** 11:04:58.8±1.7, 43.66°N×127.44°W, h0km, mb3.6/5, mbtmp3.7/13, ML3.6/8, MS3.5/32, Error ellipse: s-maj=26.9km s-min=12.7km az=58.0*
*NEIC **14** 11:05:01.1±2.1, 43.56°N±0.06°×127.37°W±0.04, h10km±2km, mb4.2/26, ML3.5/92, Error ellipse: s-maj=10.7km s-min=4.5km az=162.0*
**ISC 14 11:05:01.6±1.0, 43.68°N±0.08°×127.4°W±0.1, h15km, n200, σ1.9 s54/170, mb4.0/13, MS3.5/24, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **J01E** | **Myrtle Point** | **2.60** | **100** | | **Pn** | **11 05 40.7** | **-2.3** |
| J01E | | | | IAML | | 11 06 17.3 | |
| | comp=N,274nm,0.6s | | | | | | |
| J01E | | | | IAML | | 11 06 17.6 | |
| | comp=E,234nm,0.4s | | | | | | |
| **KBO** | **Bosley Butte** | **2.77** | **121** | Pn | **Pn** | **11 05 43.3** | **-2.2** |
| **K02D** | **Willamette Mer** | **2.92** | **108** | | **Pn** | **11 05 44.9** | **-2.6** |
| K02D | | | | IAML | | 11 06 24.6 | |
| | comp=E,140nm,0.7s | | | | | | |
| K02D | | | | IAML | | 11 06 26.1 | |
| | comp=N,97nm,0.5s | | | | | | |
| **I03D** | **Drain, OR** | **2.96** | **88** | | **Pn** | **11 05 47.1** | **-0.8** |
| I03D | | | | IAML | | 11 06 28.4 | |
| | comp=N,187nm,0.5s | | | | | | |
| I03D | | | | IAML | | 11 06 28.8 | |
| | comp=E,126nm,0.8s | | | | | | |
| **HEBO** | **Mount Hebo** | **3.05** | **58** | | **Pn** | **11 05 49.3** | **0.0** |
| **DBO** | **Dodson Butte** | **3.10** | **99** | | **Pn** | **11 05 48.5** | **-1.6** |
| DBO | | | | IAML | | 11 06 32.1 | |
| | comp=E,123nm,0.7s | | | | | | |
| DBO | | | | IAML | | 11 06 38.5 | |
| | comp=N,101nm,0.8s | | | | | | |
| **COR** | **Corvallis** | **3.10** | **72** | | **Pn** | **11 05 49.9** | **-0.1** |
| COR | | | | IAML | | 11 06 34.0 | |
| | comp=N,78nm,0.7s | | | | | | |
| COR | | | | IAML | | 11 06 35.2 | |
| | comp=N,115nm,0.6s | | | | | | |
| **KSXB** | **Camp Six Broad** | **3.20** | **124** | Pn | **Pn** | **11 05 48.9** | **-2.5** |
| **L02F** | **Cave Junction** | **3.23** | **117** | | **Pn** | **11 05 50.2** | **-1.5** |
| **BUCK** | **Buck Mountain** | **3.25** | **79** | | **Pn** | **11 05 52.0** | **-0.1** |
| BUCK | | | | IAML | | 11 06 37.4 | |
| | comp=N,82nm,1.0s | | | | | | |
| BUCK | | | | IAML | | 11 06 43.0 | |
| | comp=E,88nm,0.8s | | | | | | |
| **G03D** | **McMinnville, O** | **3.35** | **61** | | **Pn** | **11 05 53.5** | **+0.1** |
| G03D | | | | IAML | | 11 06 39.7 | |
| | comp=E,175nm,0.6s | | | | | | |
| **KRMB** | **Red Mountain** | **3.37** | **128** | Pn | **Pn** | **11 05 51.2** | **-2.6** |
| **HUMO** | **Hull Mountain** | **3.44** | **107** | | **Pn** | **11 05 53.1** | **-1.6** |
| HUMO | | | | IAML | | 11 06 40.2 | |
| | comp=N,80nm,0.4s | | | | | | |
| HUMO | | | | IAML | | 11 06 41.9 | |
| | comp=E,72nm,0.7s | | | | | | |
| **H04D** | **Lebanon** | **3.48** | **74** | | **Pn** | **11 05 56.0** | **+0.8** |
| H04D | | | | IAML | | 11 06 23.1 | |
| | comp=E,109nm,0.7s | | | | | | |
| H04D | | | | IAML | | 11 06 48.5 | |
| | comp=N,100nm,0.5s | | | | | | |
| **F03A** | **Seaside** | **3.56** | **49** | | **Pn** | **11 05 56.4** | **+0.1** |
| **I04A** | **Tendick Farm,** | **3.63** | **86** | | **Pn** | **11 05 57.3** | **-0.1** |
| I04A | | | | IAML | | 11 06 47.7 | |
| | comp=E,87nm,0.5s | | | | | | |
| I04A | | | | IAML | | 11 06 48.9 | |
| | comp=N,82nm,0.6s | | | | | | |
| **RADR** | **Rader Ridge** | **3.76** | **42** | | **Pn** | **11 05 59.0** | **0.0** |
| RADR | | | | IAML | | 11 06 47.8 | |
| | comp=N,120nm,0.5s | | | | | | |
| RADR | | | | IAML | | 11 06 53.1 | |
| | comp=E,87nm,0.8s | | | | | | |
| **JCC** | **Jacoby Creek,** | **3.81** | **137** | Pn | **Pn** | **11 05 59.5** | **-0.2** |
| **H04A** | **Detroit Lake** | **3.90** | **73** | | **Pn** | **11 06 01.3** | **+0.3** |
| H04A | | | | IAML | | 11 06 55.6 | |
| | comp=E,63nm,0.4s | | | | | | |
| H04A | | | | IAML | | 11 07 01.4 | |
| | comp=N,70nm,0.5s | | | | | | |
| **KHMM** | **Horse Mountain** | **3.92** | **134** | | **Pn** | **11 06 01.6** | **+0.3** |
| **F04D** | **Rainier, OR** | **3.95** | **51** | | **Pn** | **11 06 02.7** | **+1.0** |
| **E03A** | **Lebam** | **3.96** | **42** | | **Pn** | **11 06 01.7** | **-0.1** |
| **YBH** | **Yreka Blue Hor** | **3.98** | **118** | | **Pn** | **11 06 01.7** | **-0.5** |
| **YBH** | **Yreka Blue Hor** | **3.98** | **118** | Pn | **Pn** | **11 06 01.7** | **-0.5** |
| | comp=N,3.1nm,0.3s,baz=292,slow=7.4,SNR=111 | | | | | | |
| YBH | | | | LR | LR | 11 06 47.2 | |
| | comp=N,56nm,19.5s,baz=302,slow=27 | | | | | | |
| YBH | | | | Sn | **Sn** | **11 06 49.6** | **+1.0** |
| | comp=N,0.9nm,0.3s,baz=201,slow=13,SNR=6.8 | | | | | | |
| | comp=N,10nm,0.3s | | | | | | |
| **L04D** | **Klamath Falls** | **4.03** | **109** | | **Pn** | **11 06 02.6** | **-0.3** |
| L04D | | | | IAML | | 11 06 56.7 | |
| | comp=N,70nm,1.2s | | | | | | |
| L04D | | | | IAML | | 11 07 00.1 | |
| | comp=E,109nm,0.6s | | | | | | |
| **KMPM** | **Mount Pierce** | **4.08** | **142** | | **Pn** | **11 06 02.4** | **-1.1** |
| **F04A** | **Amboy** | **4.22** | **56** | Pn | **Pn** | **11 06 06.0** | **+0.7** |
| **K04D** | **Chiloquin, OR** | **4.28** | **102** | | **Pn** | **11 06 06.0** | **-0.4** |
| **WISH** | **Wishkah** | **4.30** | **36** | | **Pn** | **11 06 06.6** | **+0.2** |
| WISH | | | | IAML | | 11 07 01.0 | |
| | comp=E,78nm,0.6s | | | | | | |
| **KMRM** | **Mail Ridge** | **4.42** | **140** | | **Pn** | **11 06 08.2** | **-0.1** |
| KMRM | | | | IAML | | 11 07 23.8 | |
| | comp=N,32nm,4.4s | | | | | | |
| KMRM | | | | IAML | | 11 08 45.8 | |
| | comp=E,32nm,4.0s | | | | | | |
| **I05D** | **Terrebonne, OR** | **4.44** | **79** | | **Pn** | **11 06 08.6** | **+0.1** |
| I05D | | | | IAML | | 11 07 09.4 | |
| | comp=E,35nm,2.1s | | | | | | |
| I05D | | | | IAML | | 11 07 27.9 | |
| | comp=N,37nm,1.9s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.45** | **66** | | **Pn** | **11 06 09.9** | **+1.3** |
| HOOD | | | | IAML | | 11 06 49.1 | |
| | comp=N,75nm,0.7s | | | | | | |
| HOOD | | | | IAML | | 11 07 13.9 | |
| | comp=E,64nm,1.0s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.48** | **33** | | **Pn** | **11 06 09.0** | **0.0** |
| **J05D** | **Fort Rock, OR** | **4.52** | **93** | | **Pn** | **11 06 09.7** | **0.0** |
| J05D | | | | IAML | | 11 07 34.3 | |
| | comp=E,28nm,3.8s | | | | | | |
| **G05A** | **Wamic** | **4.64** | **68** | | **Pn** | **11 06 12.4** | **+1.2** |
| G05A | | | | IAML | | 11 06 47.0 | |
| | comp=N,46nm,1.7s | | | | | | |
| G05A | | | | IAML | | 11 06 55.7 | |
| | comp=E,52nm,1.9s | | | | | | |
| **PINE** | **Pine Mountain** | **4.70** | **86** | Pn | **Pn** | **11 06 12.2** | **0.0** |
| **C03A** | **Quillayute Air** | **4.72** | **24** | Pn | **Pn** | **11 06 12.5** | **+0.3** |
| C03A | | | | IAML | | 11 07 59.6 | |
| | comp=E,64nm,2.3s | | | | | | |
| **KCPM** | **Cahto Peak** | **4.91** | **143** | Pn | **Pn** | **11 06 11.9** | **-3.1** |
| KCPM | | | | IAML | | 11 06 57.3 | |
| | comp=N,28nm,2.9s | | | | | | |
| KCPM | | | | IAML | | 11 08 45.0 | |
| | comp=E,32nm,2.8s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **4.92** | **134** | Pn | **Pn** | **11 06 14.9** | **-0.1** |
| **LON** | **Longmire** | **5.02** | **50** | | **Pn** | **11 06 17.3** | **+1.0** |
| LON | | | | IAML | | 11 07 22.6 | |
| | comp=E,51nm,0.5s | | | | | | |
| LON | | | | IAML | | 11 07 24.3 | |
| | comp=N,50nm,0.7s | | | | | | |
| **GNW** | **Green Mountain** | **5.05** | **38** | Pn | **Pn** | **11 06 16.6** | **-0.1** |
| **B04A** | **Port Angeles** | **5.17** | **31** | Pn | **Pn** | **11 06 19.0** | **+0.6** |
| **D05A** | **Enumclaw** | **5.19** | **46** | | **Pn** | **11 06 20.1** | **+1.4** |
| **HATC** | **Hat Creek Radi** | **5.27** | **121** | Pn | **Pn** | **11 06 16.6** | **-3.2** |
| HATC | | | | IAML | | 11 07 46.0 | |
| | comp=N,35nm,2.2s | | | | | | |
| HATC | | | | IAML | | 11 08 53.3 | |
| | comp=E,39nm,3.8s | | | | | | |
| **OZB** | **Mount Ozzard** | **5.45** | **14** | Pn | **Pn** | **11 06 21.3** | **-1.0** |
| **LRDM** | **Redding Peak** | **5.47** | **124** | Pn | **Pn** | **11 06 21.9** | **-0.8** |
| LRDM | | | | IAML | | 11 07 23.2 | |
| | comp=E,18nm,1.5s | | | | | | |
| LRDM | | | | IAML | | 11 09 51.5 | |
| | comp=N,20nm,4.1s | | | | | | |
| **CLRS** | **Cowichan Lake** | **5.63** | **23** | Pn | **Pn** | **11 06 24.0** | **-0.7** |
| **PGC** | **Sidney** | **5.69** | **28** | Pn | **Pn** | **11 06 25.8** | **+0.3** |
| **HOPS** | **Hopland Field** | **5.71** | **144** | | **Pn** | **11 06 25.1** | **-0.8** |
| **I07A** | **Izee** | **5.74** | **83** | Pn | **Pn** | **11 06 26.8** | **+0.5** |
| **F07A** | **Phinny Hill Vi** | **5.78** | **65** | | **Pn** | **11 06 27.9** | **+1.1** |
| **MXC** | **Moxie City** | **5.82** | **58** | | **Pn** | **11 06 28.7** | **+1.4** |
| **LTY** | **Liberty** | **5.95** | **51** | | **Pn** | **11 06 30.2** | **+1.1** |
| **ORV** | **Oroville** | **6.05** | **131** | | **Pn** | **11 06 29.1** | **-1.4** |
| **E07A** | **Sunnyside** | **6.08** | **59** | | **Pn** | **11 06 31.8** | **+0.8** |
| **HAWA** | **Hanford** | **6.22** | **61** | Pn | **Pn** | **11 06 34.0** | **+1.2** |
| **G08A** | **Pilot Rock** | **6.27** | **72** | Pn | **Pn** | **11 06 34.0** | **+0.4** |
| **CBB** | **Campbell River** | **6.51** | **12** | Pn | **Pn** | **11 06 37.7** | **+0.8** |
| **J08A** | **Circle Bar Ran** | **6.51** | **90** | Pn | **Pn** | **11 06 33.7** | **-3.3** |
| **WVOR** | **Wild Horse Val** | **6.56** | **98** | | **Pn** | **11 06 36.8** | **-0.7** |
| **E08A** | **Dider Farm, El** | **6.56** | **62** | | **Pn** | **11 06 38.1** | **+0.7** |
| **AFDM** | **Forest Hills D** | **6.77** | **132** | Pn | **Pn** | **11 06 39.1** | **-1.4** |
| **D08A** | **Wollman Farm,** | **6.88** | **58** | Pn | **Pn** | **11 06 42.6** | **+0.7** |
| **HOLB** | **Holberg** | **6.99** | **356** | Pn | **Pn** | **11 06 43.8** | **+0.4** |
| **MPK** | **Martis Peak** | **7.07** | **126** | Pn | **Pn** | **11 06 42.1** | **-2.6** |
| **E09A** | **Wood Farm, Sta** | **7.15** | **63** | | **Pn** | **11 06 44.9** | **-0.7** |
| **PAHR** | **Pah Rah Range** | **7.21** | **121** | | **Pn** | **11 06 44.6** | **-1.9** |
| **EMB** | **Emerald Bay** | **7.24** | **128** | Pn | **Pn** | **11 06 44.7** | **-2.3** |
| **B08A** | **Colville Reser** | **7.32** | **47** | Pn | **Pn** | **11 06 47.8** | **-0.2** |
| **BMO** | **Blue Mountains** | **7.36** | **77** | Pn | **Pn** | **11 06 48.2** | **-0.3** |
| **PNTR** | **Pine Nut** | **7.46** | **125** | Pn | **Pn** | **11 06 48.1** | **-1.9** |
| **F10A** | **Beach Ranch, E** | **7.61** | **69** | Pn | **Pn** | **11 06 52.2** | **+0.3** |
| **C09A** | **Chrisman Ranch** | **7.61** | **54** | | **Pn** | **11 06 52.4** | **+0.4** |
| **YERR** | **Yerington** | **7.74** | **124** | | **Pn** | **11 06 53.0** | **-0.9** |
| **CMB** | **Columbia Colle** | **7.76** | **134** | Pn | **Pn** | **11 06 52.9** | **-1.1** |
| **WAKR** | **Walker** | **7.94** | **128** | Pn | **Pn** | **11 06 55.0** | **-1.6** |
| **SAO** | **San Andreas Ge** | **8.28** | **144** | Pn | **Pn** | **11 07 00.6** | **-0.5** |
| **KVN** | **Kaiserville** | **8.39** | **120** | Pn | **Pn** | **11 07 03.1** | **+0.3** |
| **RYN** | **Ryan** | **8.39** | **124** | | **Pn** | **11 07 00.7** | **-2.2** |
| **MFID** | **Camas Ranch** | **8.43** | **88** | Pn | **Pn** | **11 07 01.8** | **-1.4** |
| **NEW** | **Newport** | **8.52** | **54** | Pn | **Pn** | **11 07 03.8** | **-0.6** |
| **NEW** | **Newport** | **8.52** | **54** | Pn | **Pn** | **11 07 05.2** | **+0.9** |
| | comp=N,1.4nm,0.3s,baz=245,slow=13,SNR=22 | | | | | | |
| NEW | | | | LR | LR | 11 10 26.3 | |
| | comp=N,442nm,19.7s,baz=244,slow=38 | | | | | | |
| | comp=N,4.3nm,0.4s | | | | | | |
| **NEW** | **Newport** | **8.52** | **54** | P | **Pn** | **11 07 04.8** | **+0.4** |
| | baz=240 | | | | | | |
| **BBB** | **Bella Bella** | **8.53** | **357** | Pn | **Pn** | **11 07 06.3** | **+1.9** |
| **BBB** | **Bella Bella** | **8.53** | **357** | Pn | **Pn** | **11 07 04.0** | **-0.4** |
| | comp=N,0.5nm,0.3s,baz=191,slow=11,SNR=7.0 | | | | | | |
| BBB | | | | Sn | **Sn** | **11 08 38.2** | **-2.0** |
| | comp=N,0.1nm,0.3s,baz=135,slow=18,SNR=1.9 | | | | | | |
| BBB | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GMN | Gold Mountain | 10.02 126 | Pn | Pn | 11 07 24.1 | -1.1 |
| VES | Vestal, Richgr | 10.12 138 | P | Pn | 11 07 29.1 | +2.9 |
| | baz=323 | | | | | |
| GRAC | Grapevine Rang | 10.17 128 | Pn | Pn | 11 07 26.8 | -0.3 |
| GRAC | Grapevine Rang | 10.17 128 | P | Pn | 11 07 31.1 | +4.1 |
| | baz=314 | | | | | |
| CWC | Cottonwood Cre | 10.17 132 | P | Pn | 11 07 30.6 | +3.5 |
| | baz=318 | | | | | |
| BPMT | Black Pine Rid | 10.27 70 | Pn | Pn | 11 07 29.5 | +0.9 |
| R11B | Troy Canyon, C | 10.40 117 | P | Pn | 11 07 33.9 | +3.5 |
| | baz=304 | | | | | |
| MCMT | McKenzie Canyo | 10.52 79 | Pn | Pn | 11 07 32.8 | +0.7 |
| ISA | Isabella, Lake | 10.56 136 | P | Pn | 11 07 35.1 | +2.7 |
| | baz=322 | | | | | |
| OVMT | Ovando | 10.70 67 | Pn | Pn | 11 07 34.2 | -0.2 |
| DLMT | Dillon | 10.72 76 | Pn | Pn | 11 07 35.7 | +1.0 |
| MPMC | Manual Prospec | 10.77 132 | P | Pn | 11 07 39.0 | +3.5 |
| | baz=318 | | | | | |
| ARVC | Arvin | 10.81 139 | P | Pn | 11 07 37.6 | +1.8 |
| | baz=325 | | | | | |
| FURC | Furnace Creek, | 10.82 128 | P | Pn | 11 07 40.0 | +4.1 |
| | baz=315 | | | | | |
| TPNV | Topopah Spring | 10.85 124 | P | Pn | 11 07 39.7 | +3.2 |
| | baz=312 | | | | | |
| LRMC | Laurel Mtn Rad | 11.11 134 | P | Pn | 11 07 42.5 | +2.5 |
| | baz=320 | | | | | |
| LYMT | Lyon Mountain | 11.15 68 | Pn | Pn | 11 07 39.9 | -0.8 |
| EDW2 | Edwards Air Fo | 11.42 137 | P | Pn | 11 07 47.0 | +2.8 |
| | baz=323 | | | | | |
| BOZ | Bozeman (W) | 11.42 75 | Pn | Pn | 11 07 43.2 | -1.0 |
| BOZ | Bozeman (W) | 11.42 75 | P | Pn | 11 07 45.5 | +1.3 |
| | baz=266 | | | | | |
| DUG | Dugway, Tooele | 11.43 103 | P | Pn | 11 07 46.9 | +2.6 |
| | baz=292 | | | | | |
| SHOC | Shoshone, Teco | 11.56 128 | P | Pn | 11 07 49.7 | +3.7 |
| | baz=316 | | | | | |
| GSC | Goldstone, Bar | 11.71 132 | P | Pn | 11 07 50.8 | +2.7 |
| | baz=319 | | | | | |
| TUQ | Turquoise Moun | 12.09 129 | P | Pn | 11 07 57.1 | +3.7 |
| | baz=316 | | | | | |
| BFSC | Mount Baldy Ra | 12.10 138 | P | Pn | 11 07 54.1 | +0.6 |
| | baz=324 | | | | | |
| H17A | Grant Village | 12.15 81 | P | Pn | 11 07 56.7 | +2.4 |
| | baz=272 | | | | | |
| CCUT | Cedar City | 12.30 115 | Pn | Pn | 11 07 55.2 | -1.3 |
| HEC | Hector,Ludlow | 12.31 132 | P | Pn | 11 07 59.2 | +2.8 |
| | baz=319 | | | | | |
| BBRC | Big Bear Solar | 12.44 136 | P | Pn | 11 08 01.4 | +3.0 |
| | baz=322 | | | | | |
| GMRC | Granite Mounta | 12.72 130 | P | Pn | 11 08 05.6 | +3.6 |
| | baz=318 | | | | | |
| SCI2 | San Clemente I | 12.74 144 | P | Pn | 11 08 05.0 | +2.8 |
| | baz=330 | | | | | |
| BW06 | Boulder Array | 13.07 88 | P | Pn | 11 08 09.6 | +2.7 |
| | baz=280 | | | | | |
| PDAR | Pinedale Array | 13.07 88 | Pn | Pn | 11 08 10.2 | +3.3 |
| | comp=N,0.1nm,0.3s,baz=274,slow=11,SNR=22 | | | | | |
| PDAR | | | LR | LR | 11 13 33.8 | |
| | comp=N,209nm,19.1s,baz=270,slow=39 | | | | | |
| | comp=N,3.1nm,0.8s | | | | | |
| RLMT | Red Lodge | 13.07 77 | P | Pn | 11 08 08.5 | +1.7 |
| | baz=270 | | | | | |
| BELC | Belle Mtn. Jos | 13.13 134 | P | Pn | 11 08 11.1 | +3.5 |
| | baz=321 | | | | | |
| PFO | Pinyon Flats O | 13.19 136 | LR | LR | 11 13 02.0 | |
| | comp=N,228nm,18.8s,baz=308,slow=37 | | | | | |
| PFO | Pinyon Flats O | 13.19 136 | P | Pn | 11 08 11.6 | +3.1 |
| | baz=323 | | | | | |
| TPFO | Pinon Flats | 13.20 136 | P | Pn | 11 08 11.5 | +2.9 |
| | baz=323 | | | | | |
| T35M | Bob Quinn | 13.44 353 | Pn | Pn | 11 08 13.9 | +2.3 |
| IRM | Iron Mountain | 13.46 131 | P | Pn | 11 08 14.8 | +2.7 |
| | baz=318 | | | | | |
| RDMU | Red Mountain | 13.61 97 | Pn | Pn | 11 08 13.6 | -0.7 |
| BC3 | Big Chuckawall | 13.68 133 | P | Pn | 11 08 17.8 | +2.7 |
| | baz=320 | | | | | |
| PDMCI | Parker Dam,Lak | 13.92 128 | P | Pn | 11 08 20.0 | +1.7 |
| | baz=316 | | | | | |
| O20A | White River Ci | 14.71 97 | P | Pn | 11 08 29.9 | +0.6 |
| | baz=290 | | | | | |
| DLBC | Dease Lake | 14.87 355 | Pn | Pn | 11 08 30.4 | -0.8 |
| | comp=N,0.1nm,0.3s,baz=142,slow=14,SNR=2.6 | | | | | |
| DLBC | | | LR | LR | 11 13 27.7 | |
| | comp=N,193nm,18.2s,baz=194,slow=34 | | | | | |
| | comp=N,3.4nm,1.0s | | | | | |
| RWWY | Rawlins | 15.00 91 | Pn | Pn | 11 08 32.8 | -0.5 |
| SMCO | Snowmass | 15.97 99 | Pn | Pn | 11 08 45.0 | -1.1 |
| N23A | Red Feather La | 16.13 93 | Pn | Pn | 11 08 46.2 | -1.8 |
| N23A | Red Feather La | 16.13 93 | P | Pn | 11 08 48.2 | +0.2 |
| | baz=287 | | | | | |
| S22A | 4UR Ranch, Cre | 16.68 104 | Pn | Pn | 11 08 53.1 | -1.9 |
| S22A | 4UR Ranch, Cre | 16.68 104 | P | Pn | 11 08 54.0 | -1.1 |
| | baz=297 | | | | | |
| ISCO | Idaho Springs | 16.72 96 | P | Pn | 11 08 54.9 | -0.7 |
| | baz=290 | | | | | |
| TUC | Tucson | 17.31 125 | P | Pn | 11 09 01.8 | -0.9 |
| | baz=316 | | | | | |
| Q24A | Divide | 17.37 98 | Pn | Pn | 11 09 02.5 | -1.1 |
| Q24A | | | IAmb | IAmb | 11 09 08.9 | |
| | comp=Z,9.6nm,0.8s | | | | | |
| SDCO | Great Sand Dun | 17.62 102 | | Pn | 11 09 06.2 | -0.6 |
| ANMO | Albuquerque | 18.38 111 | P | P | 11 09 15.9 | -0.2 |
| | comp=Z,0.1nm,0.3s,baz=49,slow=12,SNR=4.2 | | | | | |
| ANMO | | | LR | LR | 11 15 56.0 | |
| | comp=Z,72nm,18.9s,baz=21,slow=36 | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | |
| T25A | Trinidad | 18.67 103 | P | P | 11 09 18.0 | -1.3 |
| T25A | | | IAmb | IAmb | 11 09 23.8 | |
| | comp=Z,13nm,0.6s | | | | | |
| 121A | Cookes Peak, D | 18.99 119 | P | P | 11 09 20.9 | -1.8 |
| E28A | Huff | 19.05 72 | P | P | 11 09 21.7 | -1.5 |
| FFC | Flin Flon | 19.85 47 | P | Pn | 11 09 33.2 | -0.2 |
| FFC | | | IAmb | IAmb | 11 09 36.0 | |
| | comp=Z,31nm,1.4s | | | | | |
| YKA | Yellowknife Ar | 20.29 17 | P | P | 11 09 36.3 | -0.1 |
| | comp=Z,0.4nm,0.6s,baz=208,slow=11,SNR=5.9 | | | | | |
| YKA | | | LR | LR | 11 17 45.4 | |
| | comp=Z,73nm,19.1s,baz=211,slow=38 | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | |
| KDAK | Kodiak Island | 21.11 321 | LR | LR | 11 15 32.4 | |
| | comp=Z,208nm,21.2s,baz=138,slow=30 | | | | | |
| DAWY | Dawson | 21.54 346 | P | P | 11 09 49.9 | -0.1 |
| DAWY | | | IAmb | IAmb | 11 10 00.1 | |
| | comp=Z,9.1nm,1.2s | | | | | |
| J30M | Hart River | 21.54 350 | P | P | 11 09 50.9 | +0.8 |
| J30M | | | IAmb | IAmb | 11 10 11.6 | |
| | comp=Z,6.2nm,1.0s | | | | | |
| ECSD | EROS Data Cent | 22.21 79 | P | P | 11 09 57.3 | -0.1 |
| ECSD | | | IAmb | IAmb | 11 10 02.5 | |
| | comp=Z,7.2nm,0.8s | | | | | |
| ULM | Lac du Bonnet | 22.40 62 | P | P | 11 10 00.1 | +0.9 |
| ULM | | | IAmb | IAmb | 11 10 00.8 | |
| | comp=Z,8.7nm,1.1s | | | | | |
| ULM | Lac du Bonnet | 22.40 62 | P | P | 11 09 59.6 | +0.3 |
| | comp=Z,4.4nm,0.9s,baz=250,slow=9.9,SNR=4.7 | | | | | |
| ULM | | | LR | LR | 11 19 00.7 | |
| | comp=Z,201nm,21.0s,baz=250,slow=38 | | | | | |
| | comp=Z,4.4nm,0.9s | | | | | |
| G31M | Satah River | 23.59 353 | P | P | 11 10 12.4 | +1.0 |
| G31M | | | IAmb | IAmb | 11 10 35.9 | |
| | comp=Z,12nm,1.2s | | | | | |
| TX31 | Lajitas Ar. Si | 23.75 119 | P | P | 11 10 11.6 | -1.9 |
| TXAR | Lajitas Array | 23.75 119 | P | P | 11 10 11.9 | -1.5 |
| TXAR | Lajitas Array | 23.75 119 | P | P | 11 10 13.8 | +0.3 |
| | comp=Z,1.4nm,0.9s,baz=302,slow=8.3,SNR=11 | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | |
| IL31 | | 23.80 339 | P | P | 11 10 12.6 | -0.8 |
| IL31 | | | IAmb | IAmb | 11 10 43.2 | |
| | comp=Z,3.3nm,0.7s | | | | | |
| ILAR | Eielson Array | 23.80 339 | P | P | 11 10 12.7 | -0.8 |
| ILAR | Eielson Array | 23.80 339 | LR | LR | 11 17 54.9 | |
| | comp=Z,159nm,19.7s,baz=138,slow=33 | | | | | |
| WMOK | Wichita Mounta | 23.83 102 | P | P | 11 10 13.4 | -0.6 |
| WMOK | | | IAmb | IAmb | 11 10 15.9 | |
| | comp=Z,8.2nm,0.8s | | | | | |
| G30M | tAoh Zrail Nji | 23.84 351 | P | P | 11 10 14.9 | +1.0 |
| G30M | | | IAmb | IAmb | 11 10 18.2 | |
| | comp=Z,4.6nm,0.9s | | | | | |
| LPIG | La Paz | 24.06 139 | LR | LR | 11 18 53.6 | |
| | comp=Z,92nm,19.8s,baz=282,slow=35 | | | | | |
| O16K | Kokwok River B | 24.51 321 | P | P | 11 10 21.5 | +1.5 |
| QUOK | Quay | 24.62 97 | P | P | 11 10 21.5 | +0.2 |
| QUOK | | | IAmb | IAmb | 11 10 22.3 | |
| | comp=Z,6.7nm,0.8s | | | | | |
| OK031 | S. Brethren Rd | 24.63 98 | P | P | 11 10 21.8 | +0.4 |
| OK052 | Battle Ridge R | 24.63 98 | P | P | 11 10 21.5 | 0.0 |
| INK | Inuvik | 24.90 355 | P | P | 11 10 26.2 | +2.8 |
| INK | | | IAmb | IAmb | 11 10 31.6 | |
| | comp=Z,9.4nm,1.4s | | | | | |
| INK | Inuvik | 24.90 355 | LR | LR | 11 19 41.7 | |
| | comp=Z,138nm,20.2s,baz=198,slow=35 | | | | | |
| SADO | Sadowa | 34.22 71 | LR | LR | 11 26 01.9 | |
| | comp=Z,110nm,20.8s,baz=68,slow=37 | | | | | |
| TKL | Tuckaleechee C | 34.22 88 | LR | LR | 11 26 31.3 | |
| | comp=Z,190nm,18.5s,baz=302,slow=38 | | | | | |
| CMIG | Matias Romero | 38.19 124 | LR | LR | 11 30 39.0 | |
| | comp=Z,80nm,20.4s,baz=291,slow=40 | | | | | |
| FRB | Frobisher Bay | 38.45 38 | LR | LR | 11 28 36.6 | |
| | comp=Z,55nm,18.3s,baz=270,slow=37 | | | | | |
| SHEM | Shemya Is, Ala | 39.02 305 | LR | LR | 11 25 39.8 | |
| | comp=Z,20nm,19.4s,baz=139,slow=32 | | | | | |
| SCHQ | Schefferville | 39.88 52 | LR | LR | 11 29 14.9 | |
| | comp=Z,120nm,19.9s,baz=274,slow=36 | | | | | |
| MA2 | Magadan | 49.84 319 | LR | LR | 11 33 30.2 | |
| | comp=Z,48nm,19.0s,baz=112,slow=34 | | | | | |
| BORG | Borgarnes | 57.63 29 | LR | LR | 11 38 40.7 | |
| | comp=Z,29nm,21.1s,baz=298,slow=35 | | | | | |
| YAK | Yakutsk | 57.96 327 | LR | LR | 11 37 55.9 | |
| | comp=Z,57nm,19.1s,baz=65,slow=34 | | | | | |
| PCRV | Puerto La Cruz | 63.42 102 | LR | LR | 11 44 33.8 | |
| | comp=Z,44nm,21.5s,slow=37 | | | | | |
| NOA | NORSAR Array B | 70.36 20 | LR | LR | 11 45 01.3 | |
| | comp=Z,13nm,20.3s,baz=345,slow=34 | | | | | |
| HFS | Hagfors | 71.76 19 | LR | LR | 11 46 15.1 | |
| | comp=Z,27nm,18.9s,baz=348,slow=34 | | | | | |
| MDP | Montagnes des | 75.49 97 | LR | LR | 11 53 25.6 | |
| | comp=Z,24nm,18.5s,baz=270,slow=38 | | | | | |
| ZALV | Zalesovo Beam | 78.91 341 | LR | LR | 11 54 18.9 | |
| | comp=Z,20nm,19.8s,baz=45,slow=38 | | | | | |
| LPAZ | La Paz | 80.56 123 | P | P | 11 17 14.0 | -0.1 |
| | comp=Z,1.0nm,0.6s,baz=338,slow=5.6,SNR=4.1 | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | |
| ESDC | Sonseca Array | 82.60 40 | LR | LR | 11 53 15.8 | |
| | comp=Z,22nm,18.0s,baz=115,slow=35 | | | | | |
| KURBB | Kurchatov Arra | 83.40 344 | P | P | 11 17 27.0 | -0.9 |
| | comp=Z,0.4nm,0.7s,baz=19,slow=4.9,SNR=2.4 | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | |
| BELG | Belogornoye | 84.22 3 | LR | LR | 11 58 35.3 | |
| | comp=Z,12nm,19.3s,baz=150,slow=38 | | | | | |
| MKAR | Makanchi Array | 86.16 340 | LR | LR | 11 57 21.9 | |
| | comp=Z,20nm,19.6s,baz=98,slow=36 | | | | | |
| DZM | Mont Dzumac | 89.13 238 | LR | LR | 11 51 36.9 | |
| | comp=Z,55nm,19.1s,baz=245,slow=31 | | | | | |

*NEIC **14** 11:06:41.4±0.5,36.159N±0.010×98.28W±0.01,h5km±1km, Error ellipse: s-maj=2.6km s-min=1.9km az=146.0*

**TUL 14 11:06:41.4±0.4,36.16N±0.01×98.29W±0.01,h5km±3km, ML2.7,mb_Lg2.4/57(NEIC),ML2.8/51(NEIC),Error ellipse: s-maj=1.6km s-min=1.4km az=131.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CROK | Carrier | 0.43 | 36 | Pg | Pg | 11 06 50.1 | +0.4 |
| CROK | | | | Sg | Sg | 11 06 56.4 | +1.1 |
| CSTR | Hydro, Custer | 0.60 | 212 | Pg | Pg | 11 06 53.4 | +0.4 |
| CSTR | | | | Sg | Sg | 11 07 02.0 | +1.2 |
| OK032 | Salt Plains WL | 0.65 | 6 | Pg | Pg | 11 06 54.0 | +0.1 |
| OK032 | | | | Sg | Sg | 11 07 03.2 | +0.9 |
| OK032 | | | | IAML | | 11 07 03.4 | |
| | 500nm,0.1s | | | | | | |
| OK032 | | | | IAML | | 11 07 10.0 | |
| | 517nm,0.1s | | | | | | |
| NOKA | Waynoka | 0.70 | 313 | Pg | Pg | 11 06 54.9 | 0.0 |
| NOKA | | | | Sg | Sg | 11 07 04.8 | +0.8 |
| NOKA | | | | IAML | | 11 07 07.3 | |
| | comp=N,719nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 11 07 08.5 | |
| | comp=E,542nm,0.3s | | | | | | |
| OK029 | Liberty Lake | 0.77 | 118 | Pg | Pg | 11 06 56.0 | -0.1 |
| OK029 | | | | Sg | Sg | 11 07 06.7 | +0.6 |
| OK029 | | | | IAML | | 11 07 06.9 | |
| | comp=E,375nm,0.5s | | | | | | |
| GC02 | Grant County # | 0.78 | 27 | Pg | Pg | 11 06 56.3 | 0.0 |
| GC02 | | | | Sg | Sg | 11 07 07.0 | +0.6 |
| KAN14 | Manchester OK | 0.84 | 18 | Pg | Pg | 11 06 57.4 | -0.2 |
| KAN14 | | | | Sg | Sg | 11 07 09.0 | +0.5 |
| KAN14 | | | | IAML | | 11 07 10.6 | |
| | comp=N,460nm,0.1s | | | | | | |
| ADOK | Arcadia Dam | 0.90 | 124 | Pg | Pg | 11 06 58.3 | -0.4 |
| ADOK | | | | Sg | Sg | 11 07 10.9 | +0.5 |
| ELIS | Ellis County | 0.92 | 265 | Pg | Pg | 11 06 59.0 | 0.0 |
| ELIS | | | | IAML | | 11 07 22.3 | |
| | comp=E,216nm,0.2s | | | | | | |
| ELIS | | | | IAML | | 11 07 24.5 | |
| | comp=N,261nm,0.2s | | | | | | |
| KAN17 | Caldwell West | 0.98 | 25 | | Pg | 11 06 59.9 | -0.3 |
| KAN17 | | | | IAML | | 11 07 13.9 | |
| | comp=E,357nm,0.2s | | | | | | |
| KAN17 | | | | IAML | | 11 07 21.3 | |
| | comp=N,312nm,0.2s | | | | | | |
| OKCSW | OKLAHOMA CITY | 1.02 | 137 | Pg | Pg | 11 07 00.5 | -0.5 |
| OKCSW | | | | IAML | | 11 07 17.1 | |
| | comp=N,250nm,0.5s | | | | | | |
| OKCSW | | | | IAML | | 11 07 19.7 | |
| | comp=E,197nm,0.2s | | | | | | |
| BLOK | Blackwell | 1.06 | 55 | | Pg | 11 07 01.1 | -0.5 |
| BLOK | | | | IAML | | 11 07 21.4 | |
| | comp=E,323nm,0.2s | | | | | | |
| KAN13 | South Haven SW | 1.08 | 37 | | Pg | 11 07 01.8 | -0.2 |
| KAN01 | Argonia South | 1.08 | 23 | Pg | Pg | 11 07 01.6 | -0.6 |
| KAN08 | Anthony NE Sta | 1.10 | 13 | | Pg | 11 07 02.0 | -0.4 |
| KAN09 | Caldwell North | 1.12 | 29 | | Pg | 11 07 02.4 | -0.4 |
| OK048 | Pawnee Station | 1.12 | 76 | Pg | Pg | 11 07 02.4 | -0.5 |
| OK048 | | | | IAML | | 11 07 21.5 | |
| | comp=E,177nm,0.2s | | | | | | |
| FNO | Franklin | 1.15 | 141 | Pg | Pg | 11 07 02.9 | -0.6 |
| FNO | | | | IAML | | 11 07 24.0 | |
| | comp=E,198nm,0.6s | | | | | | |
| KAN12 | Harper NE Stat | 1.16 | 12 | | Pg | 11 07 03.3 | -0.4 |
| OK031 | S. Brethren Rd | 1.19 | 99 | | Pg | 11 07 03.6 | -0.7 |
| OK031 | | | | IAML | | 11 07 20.9 | |
| | comp=E,251nm,0.2s | | | | | | |
| OK031 | | | | IAML | | 11 07 21.0 | |
| | comp=E,245nm,0.3s | | | | | | |
| OK052 | Battle Ridge R | 1.22 | 97 | | Pg | 11 07 04.0 | -0.7 |
| OK052 | | | | IAML | | 11 07 23.9 | |
| | comp=E,272nm,0.3s | | | | | | |
| OK052 | | | | IAML | | 11 07 23.9 | |
| | comp=E,278nm,0.2s | | | | | | |
| OK051 | E0350 and S346 | 1.23 | 73 | | Pg | 11 07 04.2 | -0.7 |
| QUOK | Quay | 1.28 | 89 | | Pn | 11 07 05.2 | -0.8 |
| QUOK | | | | IAML | | 11 07 25.6 | |
| | comp=E,223nm,0.2s | | | | | | |
| QUOK | | | | IAML | | 11 07 26.0 | |
| | comp=N,272nm,0.2s | | | | | | |
| WMOK | Wichita Mounta | 1.47 | 196 | | Pn | 11 07 07.8 | -0.8 |
| DEOK | Depew | 1.49 | 102 | Pg | Pn | 11 07 08.1 | -0.7 |
| W35A | Tecumseh | 1.53 | 131 | | Pn | 11 07 08.4 | -0.9 |
| X34A | Smith Ranch, M | 1.60 | 166 | | Pn | 11 07 10.0 | -0.2 |
| T35A | Sooner Cattle | 1.62 | 62 | | Pn | 11 07 10.6 | 0.0 |
| T35A | | | | Pn | Pb | 11 07 10.8 | -1.0 |
| SMWD | Samnorwood | 1.91 | 237 | | Pn | 11 07 15.2 | +0.7 |
| SMWD | | | | IAmb_Lg | | 11 07 45.9 | |
| | comp=Z,24nm,0.8s | | | | | | |
| TUL3 | Leonard | 2.04 | 96 | | Pn | 11 07 15.7 | -0.7 |
| TUL3 | | | | IAmb_Lg | | 11 07 50.5 | |
| | comp=Z,29nm,0.9s | | | | | | |
| LOOK | Love County | 2.34 | 157 | | Pn | 11 07 19.8 | -0.8 |
| RLO | Rose Lookout | 2.65 | 89 | Pn | Pn | 11 07 23.1 | -1.5 |
| X37A | Clayton | 2.85 | 122 | Pn | Pn | 11 07 25.7 | -1.8 |
| X37A | | | | IAmb_Lg | | 11 08 16.4 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| CBKS | Cedar Bluff | 2.89 | 337 | Pn | Pn | 11 07 26.6 | -1.5 |
| CBKS | | | | IAmb_Lg | | 11 08 13.2 | |
| | comp=Z,10nm,0.8s | | | | | | |
| AMTX | Amarillo | 3.04 | 246 | Pn | Pn | 11 07 28.6 | -1.7 |
| U38A | Gravette | 3.17 | 84 | Pn | Pn | 11 07 31.4 | -0.5 |
| U38A | | | | IAmb_Lg | | 11 08 25.3 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| APMT | Aspermont | 3.20 | 209 | Pn | Pn | 11 07 30.6 | -1.8 |
| KSU1 | Kansas State U | 3.23 | 24 | Pn | Pn | 11 07 31.0 | -1.7 |
| KSU1 | | | | IAmb_Lg | | 11 08 29.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| DKNS | Dickens | 3.29 | 222 | Pn | Pn | 11 07 31.7 | -2.0 |
| HHAR | Hobbs | 3.52 | 87 | Pn | Pn | 11 07 35.8 | -1.0 |
| RTBA | Rita Blanca | 3.60 | 276 | Pn | Pn | 11 07 36.4 | -1.6 |
| ABTX | Abilene, Hawle | 3.70 | 198 | IAmb_Lg | | 11 08 40.5 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| SN07 | Snyder 07 | 3.73 | 216 | Pn | Pn | 11 07 38.3 | -1.4 |
| SN07 | | | | IAmb_Lg | | 11 08 45.4 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| SN05 | Snyder 5 | 3.91 | 214 | IAmb_Lg | | 11 08 51.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| Z38A | Mt. Pleasant | 3.97 | 136 | IAmb_Lg | | 11 08 52.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| POST | Post | 4.06 | 222 | Pn | Pn | 11 07 41.4 | -2.9 |
| POST | | | | IAmb_Lg | | 11 08 57.9 | |
| | comp=Z,7.7nm,0.7s | | | | | | |
| MIAR | Mount Ida | 4.18 | 111 | Pn | Pn | 11 07 44.0 | -1.7 |
| MIAR | | | | IAmb_Lg | | 11 09 03.2 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| S39A | Bolivar | 4.26 | 67 | Pn | Pn | 11 07 45.5 | -1.4 |
| S39A | | | | | Pn | 11 07 45.8 | -1.2 |
| MSTX | Muleshoe | 4.27 | 241 | Pn | Pn | 11 07 45.4 | -1.8 |
| KSCO | Kaye Shedlock' | 4.47 | 311 | IAmb_Lg | | 11 09 13.5 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| X40A | Basin Creek Fa | 4.76 | 109 | Pn | Pn | 11 07 53.2 | -0.6 |
| X40A | | | | IAmb_Lg | | 11 09 15.3 | |
| | comp=Z,6.4nm,1.0s | | | | | | |
| BRDY | Brady | 4.89 | 187 | Pn | Pn | 11 07 54.0 | -1.6 |
| MGMO | Mountain Grove | 4.94 | 77 | IAmb_Lg | | 11 09 18.6 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| WHAR | Wooly Hollow | 4.96 | 98 | IAmb_Lg | | 11 09 23.3 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| T25A | Trinidad | 5.02 | 283 | IAmb_Lg | | 11 09 22.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| UALR | University of | 5.05 | 104 | IAmb_Lg | | 11 09 28.2 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| P38A | Dawn | 5.11 | 46 | Pn | Pn | 11 07 57.3 | -1.3 |
| P38A | | | | IAmb_Lg | | 11 09 30.6 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| R40A | Maddies Statio | 5.26 | 64 | Pn | Pn | 11 07 57.9 | -2.7 |
| R40A | | | | IAmb_Lg | | 11 09 34.9 | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| OGNE | Ogallala | 5.61 | 330 | Pn | Pn | 11 08 03.8 | -1.7 |
| CCM | Cathedral Cave | 5.94 | 69 | IAmb_Lg | | 11 09 49.4 | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| Q24A | Divide | 6.13 | 299 | IAmb_Lg | | 11 10 02.8 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| PBMO | Poplar Bluff | 6.37 | 82 | IAmb_Lg | | 11 10 13.4 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| FVM | French Village | 6.55 | 71 | IAmb_Lg | | 11 10 13.2 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| ISCO | Idaho Springs | 6.83 | 304 | IAmb_Lg | | 11 10 18.2 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| N23A | Red Feather La | 7.64 | 311 | IAmb_Lg | | 11 10 48.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | |

*CNRM **14** 11:07:49.6,37.45N×9.51W,h34km,ML2.4*

**SFS 14 11:07:50.0,37.57N×6.10W,h0km,ML2.1/9,ML2.1/8, MLv2.1/9,Spain**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EMIN | Mina Concepcio | 0.50 | 294 | Sg | Sg | 11 08 06.2 | +0.1 |
| EMIN | | | | Pg | Pg | 11 07 58.1 | -1.5 |
| ESPR | Espera | 0.72 | 165 | Pg | Pg | 11 08 03.7 | -0.2 |
| ESPR | | | | Sg | Sb | 11 08 14.7 | -1.2 |
| ECAB | El Cabril | 0.74 | 46 | Pg | Pg | 11 08 02.6 | -1.6 |
| ECAB | | | | Sg | Sg | 11 08 14.5 | +0.7 |
| LIJA | Lijar | 0.86 | 140 | Pg | Pg | 11 08 05.5 | -1.0 |
| PBAR | Barrancos | 0.96 | 309 | Pg | Pg | 11 08 06.6 | -2.0 |
| PBAR | | | | Sg | Sg | 11 08 21.5 | +0.5 |
| EGRO | El Granado | 1.10 | 269 | Pg | Pg | 11 08 09.2 | -2.0 |
| EGRO | | | | Sg | Sg | 11 08 25.2 | -0.3 |
| PVAQ | Vaqueiros | 1.30 | 263 | Pn | Pg | 11 08 12.4 | -2.5 |
| PVAQ | | | | Sn | Sg | 11 08 30.4 | -1.4 |
| PVAQ | Vaqueiros | 1.30 | 263 | P | Pg | 11 08 12.5 | -2.4 |
| PVAQ | Vaqueiros | 1.30 | 263 | S | Sg | 11 08 31.3 | -0.5 |
| EADA | Adamuz | 1.34 | 63 | Pn | Pg | 11 08 13.2 | -2.6 |
| EADA | | | | Sn | Sg | 11 08 32.7 | -0.5 |
| EBAD | Badajoz | 1.39 | 329 | Sn | Sg | 11 08 34.1 | -0.7 |
| PCVE | Castro Verde | 1.54 | 273 | Pn | Pn | 11 08 17.0 | -1.8 |
| PCVE | | | | Sn | Sn | 11 08 38.6 | -1.0 |
| PESTR | Estremoz | 1.75 | 318 | Pn | Pn | 11 08 21.8 | +0.1 |
| PESTR | | | | Sn | Sn | 11 08 44.3 | -0.5 |
| PESTR | Estremoz | 1.75 | 318 | P | Pn | 11 08 22.4 | +0.7 |
| PESTR | Estremoz | 1.75 | 318 | S | Sg | 11 08 47.2 | +0.8 |
| PNCL | Nicolau / Gran | 2.00 | 287 | Pn | Pn | 11 08 23.7 | -1.4 |
| PNCL | | | | Sn | Sn | 11 08 50.3 | -0.6 |
| MD31 | MD31 | 4.81 | 166 | P | Pb | 11 09 16.5 | +1.1 |
| MDT | Midelt | 4.90 | 165 | P | Pb | 11 09 18.2 | +1.5 |
| SRHM | Skhour des Reh | 5.29 | 197 | P | Pn | 11 09 07.1 | -3.3 |

*IDC **14** 11:19:25.1±55.0,19.99S×174.44W,h0km,mb4.2/3, mbtmp4.2/3,Error ellipse: s-maj=1033.0km s-min=174.9km az=83.0*

*NEIC **14** 11:20:53.9±0.8,21.85±0.1×178.5W±0.2,h639km±14km, mb4.2/16,Error ellipse: s-maj=27.7km s-min=11.3km az=115.0*

**ISC 14 11:20:50.7±1.3,21.9S±0.1×178.4W±0.2,h600km,n24, σ1°19/24,mb4.2/11,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 5.38 | 321 | P | P | 11 22 30.4 | +3.5 |
| FUNA | Funafuti | 13.54 | 350 | P | P | 11 23 45.1 | -0.1 |
| ARMA | Armidale | 28.16 | 246 | P | P | 11 25 56.7 | 0.0 |
| EIDS | Eidsvold | 28.16 | 257 | P | P | 11 25 56.2 | -0.6 |
| EIDS | | | | IAmb | IAmb | 11 26 12.9 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| CTAO | Charters Tower | 33.04 | 267 | P | P | 11 26 37.7 | -0.8 |
| CTAO | | | | IAmb | IAmb | 11 26 43.9 | |
| | comp=Z,14nm,1.2s | | | | | | |
| TOO | Toolangi | 34.79 | 235 | P | P | 11 26 53.7 | +0.9 |
| PMG | Port Moresby | 35.36 | 285 | P | P | 11 26 58.0 | +0.2 |
| STKA | Stephens Creek | 36.87 | 246 | P | P | 11 27 10.5 | +0.4 |
| STKA | Stephens Creek | 36.87 | 246 | P | P | 11 27 10.1 | +0.1 |
| | comp=Z,2.1nm,0.6s,baz=96,slow=12,SNR=4.2 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| BBOO | Buckleboo | 41.62 | 245 | P | P | 11 27 47.9 | -0.1 |
| AS31 | Alice Springs | 43.87 | 258 | P | P | 11 28 05.3 | -0.5 |
| ASAR | Alice Springs | 43.88 | 258 | P | P | 11 28 05.2 | -0.6 |
| ASAR | Alice Springs | 43.88 | 258 | P | P | 11 28 05.2 | -0.6 |
| | comp=Z,3.1nm,0.8s,baz=96,slow=8.1,SNR=46 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| WR0 | Warramunga Arr | 43.89 | 264 | P | P | 11 28 04.9 | -1.1 |
| WR0 | | | | IAmb | IAmb | 11 28 20.2 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| WB0 | Warramunga Arr | 44.07 | 264 | P | P | 11 28 06.3 | -0.9 |
| WB0 | | | | IAmb | IAmb | 11 28 12.9 | |
| | comp=Z,15nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 44.07 | 264 | P | P | 11 28 06.2 | -1.1 |
| WB2 | | | | IAmb | IAmb | 11 28 09.8 | |
| | comp=Z,16nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 44.08 | 264 | P | P | 11 28 06.3 | -1.1 |
| WRA | Warramunga Arr | 44.08 | 264 | P | P | 11 28 06.1 | -1.3 |
| | comp=Z,1.0nm,0.3s,baz=96,slow=8.1,SNR=49 | | | | | | |
| | comp=Z,1.0nm,0

*ISK **14** 11:45:27.7, 37.65N×26.81E, h8km, ML2.9/24*
*ATH **14** 11:45:28.2, 37.66N×26.85E, h19km±3km, ML2.9/5, Error ellipse: s-maj=4.3km s-min=1.3km az=91.0*
*THE **14** 11:45:28.6, 37.63N×26.77E, h4km±4km, ML2.7/2, Error ellipse: s-maj=4.7km s-min=0.7km az=158.0*
*AFAD **14** 11:45:28.3±0.0, 37.68N×26.82E, h7km±1km, ML2.8*

**ISC 14 11:45:28.1±0.9, 37°65N±0.02×26°78E±0.02, h15km±8km, n45, σ0s88/62, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GCAM** | **G?zelcami?** | **0.36** | **81** | Pg | **Pg** | | **11 45 35.3** | **-0.2** |
| GCAM | | | | Sg | **Sg** | | **11 45 40.3** | **-0.2** |
| **DDIM** | **Aydin, Didim** | **0.41** | **117** | P | **Pg** | | **11 45 36.5** | **+0.2** |
| DDIM | | | | S | **Sg** | | **11 45 42.2** | **+0.3** |
| DDIM | | | | *i* AML | AML | | 11 45 43.0 | |
| | comp=E,842nm,0.3s | | | | | | | |
| **DGB** | **zmir** | **0.41** | **11** | P | **Pg** | | **11 45 36.1** | **-0.3** |
| DGB | | | | S | **Sg** | | **11 45 41.9** | **-0.2** |
| **GMLD** | **Gumuldur** | **0.44** | **14** | Pg | **Pg** | | **11 45 36.7** | **-0.3** |
| **ZEYE** | **Izmir, Urla-Ze** | **0.63** | **340** | P | **Pg** | | **11 45 40.2** | **-0.4** |
| ZEYE | | | | S | **Sg** | | **11 45 49.4** | **+0.5** |
| ZEYE | | | | *i* AML | AML | | 11 45 53.0 | |
| | comp=N,749nm,0.3s | | | | | | | |
| ZEYE | | | | *i* AML | AML | | 11 45 53.0 | |
| | comp=E,582nm,0.2s | | | | | | | |
| **YKAV** | **Yalikavak-Bodr** | **0.65** | **143** | Pg | **Pg** | | **11 45 41.0** | **+0.1** |
| **KLNA** | **Kalymnos** | **0.70** | **168** | P | **Pg** | | **11 45 41.3** | **-0.5** |
| KLNA | | | | S | **Sg** | | **11 45 50.9** | **-0.2** |
| KLNA | | | | AML | AML | | 11 45 55.2 | |
| | comp=E,4871μm,0.2s | | | | | | | |
| KLNA | | | | AML | AML | | 11 45 55.5 | |
| | comp=N,4982μm,0.2s | | | | | | | |
| **BODT** | **Bodrum** | **0.72** | **144** | Pg | **Pg** | | **11 45 41.9** | **-0.2** |
| BODT | | | | Sg | **Sb** | | **11 45 52.4** | **+0.4** |
| **BODT** | **Bodrum** | **0.72** | **144** | P | **Pg** | | **11 45 42.1** | **0.0** |
| BODT | | | | S | **Sb** | | **11 45 53.1** | **+1.1** |
| **URLA** | **Izmir** | **0.73** | **348** | Pg | **Pg** | | **11 45 42.3** | **0.0** |
| **MLSB** | **Milas** | **0.86** | **114** | Pg | **Pg** | | **11 45 44.1** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.93** | **71** | Pg | **Pb** | | **11 45 45.9** | **-0.1** |
| **CHOS** | **Chios island** | **0.94** | **322** | Pg | **Pg** | | **11 45 46.4** | **+0.2** |
| **CHOS** | **Chios island** | **0.94** | **322** | P | **Pg** | | **11 45 46.5** | **+0.2** |
| CHOS | | | | S | **Sb** | | **11 46 00.1** | **+1.7** |
| | comp=N,520nm,0.3s | | | | | | | |
| **CHOS** | **Chios island** | **0.94** | **322** | P | **Pg** | | **11 45 46.5** | **+0.2** |
| CHOS | | | | S | **Sg** | | **11 45 58.0** | **-0.6** |
| CHOS | | | | AML | AML | | 11 46 02.0 | |
| | comp=E,1163μm,0.3s | | | | | | | |
| CHOS | | | | AML | AML | | 11 46 02.1 | |
| | comp=N,906μm,0.3s | | | | | | | |
| **IZMR** | **zmir-demi** | **1.05** | **62** | P | **Pg** | | **11 45 47.8** | **-0.6** |
| IZMR | | | | S | **Sg** | | **11 45 59.7** | **-2.4** |
| **KARB** | **zmir-Karabur** | **1.06** | **344** | P | **Pg** | | **11 45 48.1** | **-0.4** |
| KARB | | | | S | **Sn** | | **11 46 03.5** | **+0.7** |
| KARB | | | | *i* AML | AML | | 11 46 07.0 | |
| | comp=N,178nm,0.5s | | | | | | | |
| **FOCM** | **Foa** | **1.07** | **358** | Pg | **Pg** | | **11 45 48.3** | **-0.4** |
| FOCM | | | | Sg | **Sb** | | **11 46 03.3** | **+1.3** |
| **YAZI** | **Mula-Dat§a-** | **1.10** | **151** | P | **Pg** | | **11 45 48.6** | **-0.7** |
| YAZI | | | | S | **Sb** | | **11 46 04.0** | **+1.0** |
| YAZI | | | | *i* AML | AML | | 11 46 07.0 | |
| | comp=N,192nm,0.4s | | | | | | | |
| **DAT** | **Datca** | **1.11** | **145** | Pn | **Pg** | | **11 45 48.8** | **-0.8** |
| **DAT** | **Datca** | **1.11** | **145** | P | **Pg** | | **11 45 48.8** | **-0.8** |
| **APE** | **Apeiranthos** | **1.15** | **240** | P | **Pg** | | **11 45 50.2** | **-0.1** |
| APE | | | | S | **Sg** | | **11 46 05.7** | **+0.3** |
| | comp=N,338nm,0.2s | | | | | | | |
| **APE** | **Apeiranthos** | **1.15** | **240** | P | **Pg** | | **11 45 48.9** | **-1.4** |
| APE | | | | S | **Sg** | | **11 46 05.0** | **-0.3** |
| APE | | | | AML | AML | | 11 46 07.5 | |
| | comp=N,650μm,0.3s | | | | | | | |
| APE | | | | AML | AML | | 11 46 09.8 | |
| | comp=E,717μm,0.2s | | | | | | | |
| **ODEM** | **Odemis-Izmir** | **1.20** | **58** | Pn | **Pg** | | **11 45 50.3** | **-0.9** |
| **NAZL** | **Nazilli-Aydin** | **1.24** | **75** | Pn | **Pb** | | **11 45 50.7** | **-0.5** |
| **YER** | **Yerkesik** | **1.30** | **113** | Pn | **Pn** | | **11 45 52.1** | **+0.3** |
| **YER** | **Yerkesik** | **1.30** | **113** | P | **Pn** | | **11 45 52.1** | **+0.3** |
| **CAND** | **Candarli** | **1.31** | **1** | Pn | **Pn** | | **11 45 52.0** | **+0.2** |
| **GOMA** | **Golmarmara-Man** | **1.39** | **40** | Pn | **Pb** | | **11 45 54.1** | **+0.4** |
| **DKL** | **Dikili** | **1.43** | **4** | Pn | **Pb** | | **11 45 54.9** | **+0.5** |
| **AKS** | **Akhisar** | **1.48** | **33** | Pn | **Pn** | | **11 45 55.0** | **+0.9** |
| **SOMA** | **Soma-Manisa** | **1.62** | **21** | Pn | **Pn** | | **11 45 57.4** | **+1.3** |
| **PRK** | **Paraskevi** | **1.65** | **346** | P | **Pn** | | **11 45 57.8** | **+1.3** |
| **PRK** | **Paraskevi** | **1.65** | **346** | P | **Pn** | | **11 45 55.5** | **-1.0** |
| PRK | | | | S | **Sn** | | **11 46 15.8** | **-1.6** |
| PRK | | | | AML | AML | | 11 46 26.2 | |
| | comp=N,574μm,0.7s | | | | | | | |
| PRK | | | | AML | AML | | 11 46 33.5 | |
| | comp=E,773μm,0.8s | | | | | | | |
| **GORD** | **Gordes-Manisa** | **1.67** | **41** | Pn | **Pn** | | **11 45 58.0** | **+1.1** |
| **DALY** | **Dalyan (Mula)** | **1.71** | **118** | Pn | **Pn** | | **11 45 57.9** | **+0.6** |
| **KULA** | **Kula-Manisa** | **1.72** | **59** | Pn | **Pn** | | **11 45 58.7** | **+1.2** |
| **SIGR** | **SIGRI** | **1.73** | **335** | P | **Pn** | | **11 45 57.4** | **-0.2** |
| SIGR | | | | S | **Sn** | | **11 46 16.5** | **-2.8** |
| SIGR | | | | AML | AML | | 11 46 26.6 | |
| | comp=N,312μm,0.5s | | | | | | | |
| SIGR | | | | AML | AML | | 11 46 26.7 | |
| | comp=E,164μm,0.5s | | | | | | | |
| **DNIZ** | **Denizli-Tavas-** | **1.79** | **90** | P | **Pn** | | **11 45 58.9** | **+0.4** |
| **APMY** | **Acipayam-Deniz** | **2.01** | **94** | Pn | **Pn** | | **11 46 02.4** | **+0.9** |
| **BAYC** | **CANAKKALE_Bayr** | **2.10** | **355** | P | **Pn** | | **11 46 02.1** | **-0.6** |
| **CAME** | **Cameli-Denizli** | **2.13** | **108** | Pn | **Pn** | | **11 46 04.4** | **+1.2** |
| **SIMA** | **Simav-Kutahya** | **2.25** | **50** | Pn | **Pn** | | **11 46 06.3** | **+1.5** |
| **VLY** | **Voula,Athens** | **2.38** | **276** | P | **Pn** | | **11 46 07.2** | **+0.6** |
| **SMTH** | **Samothraki Isl** | **2.99** | **341** | P | **Pn** | | **11 46 14.3** | **-0.6** |

*IDC **14** 11:48:33.7±1.9, 37.23N×73.01E, h0km, mb3.7/9, mbtmp3.7/15, ML3.1/6, MS3.4/2, Error ellipse: s-maj=37.7km s-min=17.5km az=136.0*
*NNC **14** 11:48:40.3±1.3, 37.58N×72.56E, h0km, mb4.1, mpv3.7, Error ellipse: s-maj=10.6km s-min=9.8km az=71.0*
*NEIC **14** 11:48:41.3±1.7, 37.59N±0.06×72.67E±0.04, h10km±1km, mb4.1/8, Error ellipse: s-maj=10.2km s-min=5.5km az=171.0*

**ISC 14 11:48:38.5±0.6, 37.49N±0.05×72.75E±0.07, h10km, n53, σ2s25/60, mb3.8/11, 4C-2D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DRK** | **Karamyk** | **2.12** | **340** | Pn | **Pn** | | **11 49 14.3** | **0.0** |
| **GAR** | **Garm** | **2.44** | **309** | Pn | **Pn** | | **11 49 18.9** | **+0.3** |
| **BTK** | **Batken** | **2.98** | **330** | Pn | **Pn** | | **11 49 28.1** | **+2.2** |
| **CHGR** | **Chuyangaron** | **3.07** | **293** | | **Pn** | | **11 49 28.5** | **+1.4** |
| **SIMJ** | **Simiganj** | **3.18** | **293** | | **Pn** | | **11 49 30.6** | **+1.9** |
| **ARSB** | **Arslanbob** | **3.83** | **3** | Pn | **Pn** | | **11 49 39.4** | **+1.7** |
| **NIL** | **Nilore** | **3.85** | **174** | Pn | **Pn** | | **11 49 41.5** | **+3.6** |
| **KBL** | **Kabul** | **4.21** | **227** | Pn | **Pn** | | **11 49 46.0** | **+3.1** |
| **NRN** | **Naryn** | **4.67** | **32** | Pn | **Pn** | | **11 49 50.7** | **+1.4** |
| **AAK** | **Ala-Archa** | **5.31** | **14** | Pn | **Pn** | | **11 49 59.6** | **+1.6** |
| **AAK** | **Ala-Archa** | **5.31** | **14** | Pn | **Pn** | | **11 50 02.0** | **+4.0** |
| | 1.3nm,0.3s,baz=216,slow=17,SNR=4.5 | | | | | | | |
| AAK | | | | Sn | **Sn** | | **11 51 02.8** | **+3.5** |
| | 1.2nm,0.3s,baz=345,slow=18,SNR=4.4 | | | | | | | |
| AAK | | | | Lg | Lg | | 11 51 25.8 | |
| | 0.5nm,0.3s,baz=278,slow=23,SNR=1.8 5.1nm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | **5.31** | **14** | Pn | **Pn** | | **11 50 00.2** | **+2.2** |
| | 9.2nm,0.6s | | | | | | | |
| AAK | | | | Sn | **Sn** | | **11 51 03.1** | **+3.8** |
| | 48nm,1.2s | | | | | | | |
| AAK | | | | ⇑Lg | Lg | | 11 51 27.1 | |
| | 27nm,0.9s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **5.56** | **25** | Pn | **Pn** | | **11 50 03.8** | **+2.4** |
| **THN** | **Thein Dam** | **5.60** | **153** | *e*P | **Pn** | | **11 50 04.5** | **+2.6** |
| THN | | | | *e*S | **Sn** | | **11 51 08.6** | **+2.3** |
| THN | | | | IAML | | | 11 51 13.1 | |
| | comp=N,59nm,0.9s | | | | | | | |
| THN | | | | IAML | | | 11 51 20.9 | |
| | comp=E,45nm,0.4s | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.84** | **21** | ⇑Pn | **Pn** | | **11 50 07.7** | **+2.4** |
| | comp=E,11nm,1.1s | | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | | 11 51 47.2 | |
| | comp=E,23nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **5.86** | **344** | Pn | **Pn** | | **11 50 07.7** | **+2.3** |
| **KK31** | **Karatay Array** | **5.86** | **344** | ⇓Pn | **Pn** | | **11 50 07.3** | **+1.9** |
| | comp=E,1.5nm,0.3s,baz=142,slow=11,SNR=82 | | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | | **11 51 14.3** | **+1.6** |
| | comp=E,33nm,0.9s,baz=162,slow=24,SNR=7.5 | | | | | | | |
| KK31 | | | | ⇓Lg | Lg | | 11 51 42.5 | |
| | comp=E,37nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **5.86** | **344** | Pn | **Pn** | | **11 50 07.4** | **+2.0** |
| **DHRM** | **DHARAMSHALA** | **5.99** | **150** | *e*P | **Pn** | | **11 50 09.3** | **+2.0** |
| DHRM | | | | *e*S | **Sn** | | **11 51 16.6** | **+0.5** |
| DHRM | | | | IAML | | | 11 51 20.5 | |
| | comp=N,441nm,0.8s | | | | | | | |
| DHRM | | | | IAML | | | 11 51 21.3 | |
| | comp=E,397nm,0.7s | | | | | | | |
| **PRZ** | **Przheval'sk** | **6.61** | **39** | Pn | **Pn** | | **11 50 17.9** | **+2.1** |
| **SMLA** | **Simla** | **7.32** | **149** | *e*P | **Pn** | | **11 50 25.7** | **+0.2** |
| SMLA | | | | *e*S | **Sn** | | **11 51 47.0** | **-1.6** |
| SMLA | | | | IAML | | | 11 51 49.6 | |
| | comp=N,92nm,0.5s | | | | | | | |
| SMLA | | | | IAML | | | 11 51 51.4 | |
| | comp=E,150nm,0.8s | | | | | | | |
| **KUDL** | **Kundal** | **9.84** | **160** | *e*P | **Pn** | | **11 51 01.5** | **+1.6** |
| KUDL | | | | *e*S | **Sn** | | **11 52 43.2** | **-7.2** |
| KUDL | | | | IAML | | | 11 52 49.0 | |
| | comp=E,13nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **11.54** | **33** | Pn | **Pn** | | **11 51 25.6** | **+2.3** |
| **MK31** | **Makanchi Array** | **11.67** | **34** | Pn | **Pn** | | **11 51 26.2** | **+1.1** |
| **MKAR** | **Makanchi Array** | **11.67** | **34** | Pn | **Pn** | | **11 51 26.2** | **+1.1** |
| **MKAR** | **Makanchi Array** | **11.67** | **34** | Pn | **Pn** | | **11 51 25.6** | **+0.5** |
| | comp=E,0.1nm,0.3s,baz=218,slow=13,SNR=6.2 | | | | | | | |
| MKAR | | | | Sn | **Sn** | | **11 53 32.0** | **-3.4** |
| | comp=E,0.1nm,0.3s,baz=215,slow=29,SNR=1.6 | | | | | | | |
| MKAR | | | | Lg | Lg | | 11 54 40.3 | |
| | comp=E,0.1nm,0.3s,baz=207,slow=28,SNR=3.4 comp=E,0.8nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.76** | **16** | Pn | **Pn** | | **11 51 51.7** | **-1.8** |
| | baz=198,slow=14,SNR=2.0 | | | | | | | |
| KURBB | | | | Lg | Lg | | 11 55 48.1 | |
| | baz=202,slow=28,SNR=1.6 comp=E,0.3nm,0.3s | | | | | | | |
| **KURK** | **Kurchatov** | **13.87** | **16** | Pn | **Pn** | | **11 51 56.0** | **+1.0** |
| **ABKAR** | **Akbulak array** | **14.97** | **326** | Pn | **Pn** | | **11 52 09.5** | **-0.6** |
| **BVAR** | **Borovoye Array** | **15.62** | **355** | Pn | **Pn** | | **11 52 16.4** | **-2.2** |
| | baz=170,slow=13,SNR=1.6 comp=E,0.3nm,0.4s | | | | | | | |
| **BRVK** | **Borovoye** | **15.66** | **354** | Pn | **Pn** | | **11 52 19.7** | **+0.6** |
| **AKTO** | **Aktyubinsk** | **16.69** | **325** | P | **Pn** | | **11 52 33.7** | **+1.3** |
| | comp=E,0.3nm,0.3s,baz=127,slow=9.5,SNR=12 comp=E,3.4nm,0.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **18.44** | **23** | P | **P** | | **11 52 51.7** | **-2.3** |
| ZAA0 | | | | IAmb | IAmb | | 11 52 53.1 | |
| | comp=E,5.9nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.44** | **23** | P | **P** | | **11 52 51.9** | **-2.1** |
| **ZALV** | **Zalesovo Beam** | **18.44** | **23** | P | **P** | | **11 52 51.4** | **-2.6** |
| | comp=E,0.8nm,0.3s,baz=219,slow=10,SNR=26 comp=E,7.0nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **21.20** | **338** | P | **P** | | **11 53 24.4** | **+0.4** |
| | comp=E,3.1nm,0.4s,baz=175,slow=4.8,SNR=6.0 comp=E,3.1nm,0.4s | | | | | | | |
| **KBZ** | **Khabaz** | **23.43** | **295** | P | **P** | | **11 53 47.4** | **-0.2** |
| | comp=E,1.1nm,0.7s,baz=91,slow=4.3,SNR=2.5 | | | | | | | |
| KBZ | | | | LR | LR | | 12 05 11.0 | |
| | comp=Z,58nm,19.3s,baz=194,slow=42 comp=Z,1.1nm,0.7s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **29.75** | **122** | P | **P** | | **11 54 48.2** | **+3.0** |
| CM31 | | | | IAmb | IAmb | | 11 55 09.6 | |
| | comp=E,5.2nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.75** | **122** | P | **P** | | **11 54 48.7** | **+3.5** |
| **BR131** | **Keskin Array S** | **30.48** | **286** | P | **P** | | **11 54 53.5** | **+1.8** |
| BR131 | | | | IAmb | IAmb | | 11 54 58.5 | |
| | comp=E,1.8nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **30.49** | **286** | P | **P** | | **11 54 51.4** | **-0.3** |
| **BRTR** | **Keskin Array B** | **30.49** | **286** | P | **P** | | **11 54 51.0** | **-0.8** |
| | comp=E,2.3nm,0.3s,baz=81,slow=8.8,SNR=2.0 comp=E,2.3nm,0.3s | | | | | | | |
| **MLR** | **Mutele Rosu** | **35.54** | **298** | P | **P** | | **11 55 36.5** | **+0.7** |
| **BURAR** | **Bucovina Array** | **35.94** | **302** | P | **P** | | **11 55 40.5** | **+1.3** |
| **BUR08** | **Bucovina Ar. S** | **35.95** | **302** | P | **P** | | **11 55 39.1** | **-0.2** |
| BUR08 | | | | IAmb | IAmb | | 11 55 45.6 | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **37.46** | **325** | P | **P** | | **11 55 51.5** | **-0.2** |
| | comp=E,2.3nm,1.0s,baz=111,slow=10,SNR=4.8 comp=Z,2.3nm,1.0s | | | | | | | |
| **TIR** | **Tirane** | **40.52** | **292** | P | **P** | | **11 56 18.8** | **+1.2** |
| **HFS** | **Hagfors** | **43.16** | **321** | P | **P** | | **11 56 38.7** | **-0.3** |
| | comp=Z,2.2nm,0.8s,baz=120,slow=8.5,SNR=3.8 comp=Z,2.2nm,0.8s | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.44** | **322** | P | **P** | | **11 56 47.9** | **-1.5** |
| | comp=E,0.3nm,0.5s,baz=94,slow=7.7,SNR=2.2 comp=Z,0.3nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.14** | **269** | P | **P** | | **11 59 29.9** | **-2.8** |
| | comp=E,0.3nm,0.6s,baz=52,slow=7.3,SNR=2.2 comp=Z,0.3nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **73.44** | **17** | P | **P** | | **12 00 08.6** | **-2.0** |
| | comp=Z,0.8nm,0.9s,baz=305,slow=4.2,SNR=5.9 comp=Z,0.8nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.18** | **3** | P | **P** | | **12 00 46.7** | **-1.9** |
| | comp=E,0.5nm,0.7s,baz=349,slow=6.9,SNR=4.1 comp=Z,0.5nm,0.7s | | | | | | | |
| **SCHQ** | **Schefferville** | **81.72** | **338** | LR | LR | | 12 35 01.5 | |
| | comp=Z,26nm,19.8s,baz=205,slow=34 | | | | | | | |

*NIED **14** 11:51:00.9, 34.75N×137.50E, h37km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10^14 Nm; Mrr=6.52; Mθθ=1.64; Mφφ=4.89; Mrθ=1.51; Mθφ=-3.58; Mφr=1.36; Fault plane solution: M0 7.18000×10^14 NP1: φs=164.00000°, δ=49.00000°, λ=-67.00000°. NP2: φs=311.00000°, δ=46.00000°, λ=-114.00000°.*
*JMA **14** 11:51:00.9±0.1, 34.8N±0.2×137.5E±0.2, h37km, MD3.9/39, MV3.9/39, HAMANAKO LAKE REGION*
*JMA Felt III J1 at HAMANAKO LAKE REGION .*
*IDC **14** 11:51:01.1±1.6, 34.69N×137.51E, h40km±22km, mb3.3/3, mbtmp3.5/6, ML3.3/3, MS3.0/2, Error ellipse: s-maj=17.5km s-min=8.7km az=67.0*
*NEIC **14** 11:51:01.1±1.1, 34.78N±0.04×137.48E±0.05, h52km±7km, mb4.6/13, Error ellipse: s-maj=7.3km s-min=4.1km az=218.0*

**ISC 14 11:50:59.9±0.8, 34.73N±0.04×137.49E±0.03, h41km±6km, n59, σ1s09/61, mb4.5/11, 2D, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JSSY** | **Shinshiroyabe** | **0.18** | **5** | ⇓P | **Pn** | | **11 51 07.6** | **+0.4** |
| JSSY | | | | ⇓S | **Sn** | | **11 51 12.3** | **0.0** |
| **JSSY** | **Shinshiroyabe** | **0.18** | **5** | A | A | | 11 51 07.6 | |
| | comp=E,101nm,0.2s,comp=N,134nm,0.2s | | | | | | | |
| **HMMJ** | **Hamamatsu 2** | **0.23** | **57** | P | **Pn** | | **11 51 07.8** | **+0.2** |
| HMMJ | | | | S | **Sn** | | **11 51 12.6** | **-0.3** |
| **HMMJ** | **Hamamatsu 2** | **0.23** | **57** | A | A | | 11 51 07.8 | |
| | comp=E,24nm,1.9s,comp=N,14nm,1.4s | | | | | | | |
| **JHMK** | **Hamakita** | **0.24** | **69** | P | **Pn** | | **11 51 07.8** | **+0.3** |
| JHMK | | | | S | **Sn** | | **11 51 12.6** | **-0.2** |
| **JAA** | **Atsumi** | **0.30** | **251** | *i* P | **Pn** | | **11 51 09.0** | **+0.7** |
| JAA | | | | S | **Sn** | | **11 51 14.6** | **+0.6** |
| **JAA** | **Atsumi** | **0.30** | **251** | A | A | | 11 51 09.0 | |
| | comp=E,35nm,1.3s,comp=N,27nm,1.3s | | | | | | | |
| **JKKS** | **Kakegawashinom** | **0.41** | **87** | A | A | | 11 51 10.0 | |
| | comp=E,13nm,0.4s,comp=N,19nm,0.9s | | | | | | | |
| **TTO5** | **TONANKAI O.B.S** | **0.51** | **158** | A | A | | 11 51 11.8 | |
| | comp=E,15nm,0.4s,comp=N,19nm,0.4s | | | | | | | |
| **JAO** | **Obara** | **0.57** | **341** | A | A | | 11 51 12.1 | |
| | comp=E,12nm,1.1s,comp=N,8.0nm,0.2s | | | | | | | |
| **JSG** | **Sagara** | **0.58** | **95** | | **Pn** | | **11 51 12.6** | **+0.9** |
| JSG | | | | Sn | **Sn** | | **11 51 22.0** | **+1.9** |
| **JSG** | **Sagara** | **0.58** | **95** | A | A | | 11 51 12.3 | |
| | comp=E,8.0nm,1.2s,comp=N,9.0nm,0.6s | | | | | | | |
| **SHZ3** | **Shizuoka 3** | **0.68** | **60** | *i* P | **Pn** | | **11 51 13.5** | **+0.3** |
| SHZ3 | | | | S | **Sn** | | **11 51 22.7** | **0.0** |
| **JNY** | **Yasuok** | **0.70** | **26** | A | A | | 11 51 13.9 | |
| | comp=E,7.0nm,0.7s,comp=N,12nm,0.3s | | | | | | | |
| **INU** | **Inuyama** | **0.73** | **328** | Pn | **Pn** | | **11 51 14.4** | **+0.6** |
| INU | | | | Sn | **Sn** | | **11 51 24.1** | **+0.3** |
| **JIE** | **Ise** | **0.73** | **243** | P | **Pn** | | **11 51 14.3** | **+0.6** |
| JIE | | | | S | **Sn** | | **11 51 24.1** | **+0.4** |
| **JICN** | **Ichinomiyachia** | **0.78** | **317** | A | A | | 11 51 15.3 | |
| | comp=E,8.0nm,0.3s,comp=N,8.0nm,0.6s | | | | | | | |
| **JGF** | **Kuroka** | **0.88** | **353** | Pn | **Pn** | | **11 51 16.7** | **+0.8** |
| JGF | | | | Sn | **Sn** | | **11 51 25.2** | **-2.3** |
| **JGF** | **Kuroka** | **0.88** | **353** | A | A | | 11 51 16.6 | |
| | comp=E,5.0nm,1.1s,comp=N,4.0nm,0.6s | | | | | | | |
| **TSUJ** | **Tsu 2** | **0.88** | **269** | P | **Pn** | | **11 51 16.4** | **+0.6** |
| **JYTA** | **Yamagatataniai** | **1.06** | **325** | P | **Pn** | | **11 51 19.4** | **+1.1** |
| JYTA | | | | S | **Sn** | | **11 51 32.6** | **+0.7** |
| **TTO2** | **TONANKAI O.B.S** | **1.06** | **201** | P | **Pn** | | **11 51 19.2** | **+1.1** |
| **JFNN** | **Fujinakano** | **1.09** | **64** | P | **Pn** | | **11 51 19.2** | **+0.5** |
| **JKN2** | **Miekihoku** | **1.12** | **244** | P | **Pn** | | **11 51 19.6** | **+0.6** |
| JKN2 | | | | S | **Sn** | | **11 51 33.8** | **+0.5** |
| **JIZS** | **Izushimoda** | **1.14** | **90** | P | **Pn** | | **11 51 19.1** | **-0.3** |
| JIZS | | | | S | **Sn** | | **11 51 33.6** | **-0.4** |
| **JYN** | **Shimob** | **1.16** | **48** | P | **Pn** | | **11 51 20.3** | **+0.6** |
| **JHTM** | **Izuhatsuma** | **1.27** | **79** | A | A | | 11 51 22.7 | |
| | comp=E,12nm,0.3s,comp=N,27nm,0.3s | | | | | | | |
| **MAJO** | **Matsushiro** | **1.90** | **18** | Pn | **Pn** | | **11 51 31.6** | **+1.7** |
| **MJAR** | **Matsushiro Arr** | **1.90** | **18** | P | **Pn** | | **11 51 31.5** | **+1.6** |
| | comp=N,105nm,0.3s,baz=206,slow=14,SNR=512 | | | | | | | |
| MJAR | | | | S | **Sn** | | **11 51 54.9** | **+2.3** |
| | comp=N,40nm,0.3s,baz=206,slow=26,SNR=2.3 | | | | | | | |
| MJAR | | | | LR | LR | | 11 52 32.5 | |
| | comp=N,143nm,18.7s,baz=159,slow=47 | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **1.90** | **18** | Pn | **Pn** | | **11 51 31.6** | **+1.6** |
| **JHJ** | **Hachijo jima 2** | **2.49** | **129** | P | **Pn** | | **11 51 39.5** | **+1.5** |
| | comp=N,6.0nm,0.3s,baz=146,slow=23,SNR=8.2 | | | | | | | |
| JHJ | | | | S | **Sn** | | **11 52 08.0** | **+0.8** |
| | comp=N,90nm,0.3s,baz=110,slow=20,SNR=7.8 comp=N,101nm,0.9s | | | | | | | |
| **JHJ2** | **Mitsune** | **2.52** | **129** | Pn | **Pn** | | **11 51 39.9** | **+1.5** |
| **JMN** | **Monobe** | **3.15** | **253** | Pn | **Pn** | | **11 51 48.7** | **+1.5** |
| **JMM** | **Marumori** | **4.11** | **39** | Pn | **Pn** | | **11 52 02.3** | **+2.1** |
| **JNU** | **Nakatsue** | **5.72** | **256** | Pn | **Pn** | | **11 52 24.2** | **+1.7** |
| **JNU** | **Nakatsue** | **5.72** | **256** | P | **Pn** | | **11 52 24.6** | **+2.1** |
| | comp=N,1.9nm,0.3s,baz=67,slow=4.6,SNR=39 comp=N,3.9nm,0.3s | | | | | | | |
| **JTM** | **Tenmabayashi** | **6.68** | **24** | Pn | **Pn** | | **11 52 35.6** | **+0.2** |
| **KSRS** | **Korea Array** | **8.21** | **292** | P | **Pn** | | **11 52 58.4** | **+2.0** |
| | comp=N,0.2nm,0.3s,baz=98,slow=14,SNR=4.1 | | | | | | | |
| KSRS | | | | S | Sn | | 11 54 14.5 | -13 |
| | comp=N,5.5nm,0.9s,baz=118,slow=26,SNR=14 | | | | | | | |
| KSRS | | | | LR | LR | | 11 56 14.1 | |
| | comp=N,48nm,18.4s,baz=140,slow=38 comp=N,0.7nm,0.4s | | | | | | | |
| **ERM** | **Erimo** | **8.53** | **30** | Pn | **Pn** | | **11 53 01.0** | **+0.2** |
| **HHC** | **Hu-ho-hao-te** | **21.34** | **294** | *e*P | **P** | | **11 55 44.5** | **+0.9** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.7s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,49nm,4.7s | | | | | | | |
| **YAK** | **Yakutsk** | **27.77** | **352** | LR | LR | | 12 08 10.4 | |
| | comp=Z,47nm,18.1s,baz=198,slow=37 | | | | | | | |
| **FAKI** | **Fak Fak** | **37.77** | **189** | P | **P** | | **11 58 11.1** | **-1.1** |
| **CMAR** | **Chiang Mai Arr** | **37.82** | **255** | P | **P** | | **11 58 11.8** | **-1.0** |
| **KURBB** | **Kurchatov Arra** | **44.95** | **309** | P | **P** | | **11 59 12.1** | **+1.4** |
| | comp=Z,0.1nm,0.4s,baz=87,slow=8.0,SNR=1.7 comp=Z,0.1nm,0.4s | | | | | | | |
| **BRVK** | **Borovoye** | **49.85** | **313** | P | **P** | | **11 59 46.9** | **-1.9** |
| BRVK | | | | IAmb | IAmb | | 11 59 57.1 | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **I20K** | **Naaghedeneel** | **49.88** | **31** | P | **P** | | **11 59 48.7** | **-0.1** |
| **K20K** | **Telida** | **50.01** | **33** | P | **P** | | **11 59 49.6** | **-0.3** |
| K20K | | | | IAmb | IAmb | | 12 00 04.9 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **I21K** | **Tanana** | **50.95** | **31** | P | **P** | | **11 59 56.6** | **-0.3** |
| I21K | | | | IAmb | IAmb | | 12 00 18.3 | |
| | comp=Z,5.6nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **54.27** | **184** | P | **P** | | **12 00 22.2** | **+0.2** |
| WB0 | | | | IAmb | IAmb | | 12 00 40.3 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **54.45** | **184** | P | **P** | | **12 00 23.9** | **+0.6** |
| WB2 | | | | IAmb | IAmb | | 12 00 24.9 | |
| | comp=Z,7.8nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.45** | **184** | P | **P** | | **12 00 23.2** | **-0.1** |
| **WRA** | **Warramunga Arr** | **54.45** | **184** | P | **P** | | **12 00 23.8** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=5.0,slow=7.0,SNR=12 comp=Z,0.5nm,0.6s | | | | | | | |
| **WR0** | **Warramunga Arr** | **54.46** | **183** | P | **P** | | **12 00 22.3** | **-1.1** |
| WR0 | | | | IAmb | IAmb | | 12 00 34.5 | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| **N25K** | **Chitina, Valde** | **54.51** | **35** | P | **P** | | **12 00 22.3** | **-1.1** |
| N25K | | | | IAmb | IAmb | | 12 00 45.7 | |
| | comp=Z,6.4nm,1.2s | | | | | | | |
| **E29M** | **Blow River** | **56.26** | **26** | P | **P** | | **12 00 35.4** | **-0.4** |
| **TABL** | **Table Mountain** | **56.37** | **36** | P | **P** | | **12 00 36.4** | **-0.6** |
| **AS31** | **Alice Springs** | **58.17** | **184** | | **P** | | **12 00 49.5** | **-0.2** |
| **ASAR** | **Alice Springs** | **58.17** | **184** | | **P** | | **12 00 49.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **58.17** | **184** | P | **P** | | **12 00 50

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=314 | | | | | | | | |
| WARBT | **Fenglin Townsh** | **0.98** | **258** | *i* | P | **Pb** | **11 56 42.1** | **-1.1** |
| | baz=246 | | | | | | | | |
| WARBT | | | | | S | **Sn** | **11 56 56.3** | **+0.4** |
| | baz=246 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.02** | **245** | *i* | P | **Pb** | **11 56 42.8** | **-1.0** |
| | baz=242 | | | | | | | | |
| HGSD | | | | *e* | S | **Sn** | **11 56 57.3** | **+0.4** |
| | baz=242 | | | | | | | | |
| **EGS** | | **1.02** | **334** | *i* | P | **Pb** | **11 56 43.3** | **-0.6** |
| | baz=319 | | | | | | | | |
| EGS | | | | | S | **Sn** | **11 56 56.8** | **0.0** |
| | baz=319 | | | | | | | | |
| **LATG** | **Datong** | **1.02** | **306** | *i* | P | **Pb** | **11 56 43.5** | **-0.5** |
| | baz=303 | | | | | | | | |
| LATG | | | | | S | **Sn** | **11 56 58.0** | **+0.9** |
| | baz=303 | | | | | | | | |
| **TWE** | **Neicheng** | **1.05** | **319** | *i* | P | **Pb** | **11 56 43.9** | **-0.5** |
| | baz=316 | | | | | | | | |
| TWE | | | | | S | **Sn** | **11 56 57.7** | **0.0** |
| | baz=316 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.06** | **312** | *i* | P | **Pb** | **11 56 44.0** | **-0.6** |
| | baz=296 | | | | | | | | |
| ENTT | | | | | S | **Sn** | **11 56 58.9** | **+0.9** |
| | baz=296 | | | | | | | | |
| **NDT** | **Datong Townshi** | **1.07** | **309** | *i* | P | **Pb** | **11 56 44.4** | **-0.5** |
| | baz=306 | | | | | | | | |
| NDT | | | | | S | **Sn** | **11 56 58.7** | **+0.5** |
| | baz=306 | | | | | | | | |
| **NNSB** | **Datong** | **1.08** | **298** | *i* | P | **Pb** | **11 56 44.1** | **-0.9** |
| | baz=294 | | | | | | | | |
| NNSB | | | | | S | **Sb** | **11 56 58.0** | **-0.7** |
| | baz=294 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.09** | **282** | *i* | P | **Pb** | **11 56 44.2** | **-1.1** |
| | baz=278 | | | | | | | | |
| WHF | | | | *i* | S | **Sb** | **11 56 59.0** | **-0.2** |
| | baz=278 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.09** | **298** | *i* | P | **Pb** | **11 56 46.2** | **+1.0** |
| | baz=295 | | | | | | | | |
| NNS | | | | *i* | S | **Sb** | **11 56 58.4** | **-0.7** |
| | baz=295 | | | | | | | | |
| **EHY** | **Hungye** | **1.10** | **248** | *i* | P | **Pn** | **11 56 44.9** | **+0.3** |
| | baz=260 | | | | | | | | |
| EHY | | | | *i* | S | **Sb** | **11 56 59.1** | **0.0** |
| | baz=260 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.13** | **317** | | P | **Pn** | **11 56 45.0** | **0.0** |
| | baz=315 | | | | | | | | |
| FUSB | | | | | S | **Sn** | **11 57 01.0** | **+1.3** |
| | baz=315 | | | | | | | | |
| **FUSS** | **Fushou** | **1.13** | **287** | *i* | P | **Pn** | **11 56 45.3** | **+0.2** |
| | baz=283 | | | | | | | | |
| FUSS | | | | | S | **Sn** | **11 57 00.9** | **+1.0** |
| | baz=283 | | | | | | | | |
| **OWD** | **Renai** | **1.15** | **272** | *i* | P | **Pn** | **11 56 45.2** | **-0.1** |
| | baz=268 | | | | | | | | |
| OWD | | | | | S | **Sb** | **11 56 59.6** | **-1.1** |
| | baz=268 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.15** | **340** | *e* | P | **Pn** | **11 56 44.2** | **-1.0** |
| | baz=354 | | | | | | | | |
| TWB1 | | | | | S | **Sn** | **11 57 01.1** | **+1.1** |
| | baz=354 | | | | | | | | |
| **CHGB** | **Renai** | **1.16** | **277** | *i* | P | **Pn** | **11 56 45.1** | **-0.4** |
| | baz=273 | | | | | | | | |
| CHGB | | | | | S | **Sn** | **11 57 01.8** | **+1.3** |
| | baz=273 | | | | | | | | |
| **YULB** | **Yu-li** | **1.17** | **243** | | P | **Pn** | **11 56 45.7** | **+0.2** |
| **YULB** | **Yu-li** | **1.17** | **243** | *i* | P | **Pn** | **11 56 45.7** | **+0.2** |
| | baz=240 | | | | | | | | |
| YULB | | | | | S | **Sn** | **11 57 01.2** | **+0.7** |
| | baz=240 | | | | | | | | |
| **EYUL** | **Yuli** | **1.17** | **241** | *i* | P | **Pn** | **11 56 45.0** | **-0.5** |
| | baz=238 | | | | | | | | |
| EYUL | | | | | S | **Sb** | **11 57 00.9** | **-0.3** |
| | baz=238 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.18** | **332** | *i* | P | **Pn** | **11 56 45.2** | **-0.5** |
| | baz=330 | | | | | | | | |
| TIPB | | | | | S | **Sb** | **11 57 00.8** | **-0.7** |
| | baz=330 | | | | | | | | |
| **TWF1** | **Yuli** | **1.19** | **241** | *i* | P | **Pn** | **11 56 46.0** | **+0.3** |
| | baz=238 | | | | | | | | |
| TWF1 | | | | | S | **Sb** | **11 57 01.1** | **-0.6** |
| | baz=238 | | | | | | | | |
| **TWT** | **Tachien** | **1.19** | **286** | *e* | P | **Pb** | **11 56 46.7** | **-0.2** |
| | baz=270 | | | | | | | | |
| TWT | | | | *i* | S | **Sn** | **11 57 02.6** | **+1.3** |
| | baz=270 | | | | | | | | |
| **VWDT** | **VWDT** | **1.19** | **262** | *i* | P | **Pn** | **11 56 46.1** | **+0.3** |
| | baz=259 | | | | | | | | |
| VWDT | | | | | S | **Sb** | **11 57 01.6** | **-0.2** |
| | baz=259 | | | | | | | | |
| **CHKH** | **Chenggong** | **1.20** | **233** | | P | **Pn** | **11 56 44.5** | **-1.4** |
| | baz=230 | | | | | | | | |
| CHKH | | | | *i* | S | **Sb** | **11 57 00.7** | **-1.3** |
| | baz=230 | | | | | | | | |
| **WUSB** | **Renai** | **1.20** | **273** | *i* | P | **Pn** | **11 56 46.1** | **+0.1** |
| | baz=270 | | | | | | | | |
| WUSB | | | | | S | **Sn** | **11 57 02.3** | **+0.8** |
| | baz=270 | | | | | | | | |
| **TDCB** | **Techi** | **1.21** | **286** | *i* | P | **Pb** | **11 56 46.7** | **-0.5** |
| | baz=270 | | | | | | | | |
| TDCB | | | | | S | **Sn** | **11 57 02.8** | **+1.1** |
| | baz=270 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.21** | **308** | | P | **Pb** | **11 56 46.7** | **-0.5** |
| **YHNB** | **Yeheng** | **1.21** | **308** | *i* | P | **Pn** | **11 56 46.4** | **+0.2** |
| | baz=293 | | | | | | | | |
| YHNB | | | | *e* | S | **Sb** | **11 57 01.9** | **-0.6** |
| | baz=293 | | | | | | | | |
| **NSK** | **Sanguang** | **1.23** | **308** | *i* | P | **Pn** | **11 56 46.4** | **0.0** |
| | baz=304 | | | | | | | | |
| NSK | | | | | S | **Sn** | **11 57 03.1** | **+1.0** |
| | baz=304 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.26** | **71** | | P | **Pb** | **11 56 47.3** | **-0.6** |
| IRIF | | | | | S | **Sb** | **11 57 03.6** | **0.0** |
| **HATJ** | **Hateruma jima** | **1.27** | **84** | | S | **Sb** | **11 57 04.5** | **+0.6** |
| **SXI1** | **Grass Mountain** | **1.27** | **337** | *i* | P | **Pn** | **11 56 46.4** | **-0.5** |
| | baz=335 | | | | | | | | |
| SXI1 | | | | *e* | S | **Sb** | **11 57 04.3** | **+0.2** |
| | baz=335 | | | | | | | | |
| **FULB** | **Fuli** | **1.27** | **235** | *i* | P | **Pn** | **11 56 46.8** | **-0.1** |
| | baz=222 | | | | | | | | |
| FULB | | | | | S | **Sb** | **11 57 04.5** | **+0.4** |
| | baz=222 | | | | | | | | |
| **TATO** | **Taipei** | **1.35** | **321** | *e* | P | **Pb** | **11 56 48.8** | **-0.8** |
| | baz=302 | | | | | | | | |
| TATO | | | | *e* | S | **Sb** | **11 57 06.8** | **+0.4** |
| | baz=302 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.36** | **264** | | P | **Pn** | **11 56 48.8** | **+0.7** |
| **SSLB** | **Suanglung** | **1.36** | **264** | | P | **Pn** | **11 56 47.8** | **-0.4** |
| | baz=261 | | | | | | | | |
| SSLB | | | | *e* | S | **Sb** | **11 57 06.4** | **-0.2** |
| | baz=261 | | | | | | | | |
| **EHD** | **Haiduan** | **1.36** | **236** | *e* | P | **Pn** | **11 56 48.4** | **+0.2** |
| | baz=248 | | | | | | | | |
| EHD | | | | *e* | S | **Sn** | **11 57 05.8** | **+0.4** |
| | baz=248 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.39** | **301** | *i* | P | **Pb** | **11 56 49.6** | **-0.6** |
| | baz=297 | | | | | | | | |
| NFF | | | | | S | **Sb** | **11 57 07.8** | **+0.3** |
| | baz=297 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.39** | **276** | *i* | P | **Pb** | **11 56 49.5** | **-0.8** |
| | baz=265 | | | | | | | | |
| WCS | | | | *e* | S | **Sn** | **11 57 07.0** | **+0.8** |
| | baz=265 | | | | | | | | |
| **WHP** | **Taichung City** | **1.40** | **285** | *i* | P | **Pb** | **11 56 51.0** | **+0.6** |
| | baz=271 | | | | | | | | |
| WHP | | | | | S | **Sb** | **11 57 07.4** | **-0.5** |
| | baz=271 | | | | | | | | |
| **EDH** | **Donghe** | **1.40** | **228** | *e* | P | **Pn** | **11 56 49.1** | **+0.4** |
| | baz=217 | | | | | | | | |
| EDH | | | | *i* | S | **Sn** | **11 57 06.0** | **-0.3** |
| | baz=217 | | | | | | | | |
| **TYC** | **Yuchr** | **1.44** | **269** | *i* | P | **Pn** | **11 56 49.8** | **+0.6** |
| | baz=266 | | | | | | | | |
| TYC | | | | *e* | S | **Sn** | **11 57 08.1** | **+0.9** |
| | baz=266 | | | | | | | | |
| **YM01** | **YM01** | **1.44** | **327** | | P | **Pn** | **11 56 49.5** | **+0.2** |
| | baz=341 | | | | | | | | |
| YM01 | | | | *e* | S | **Sb** | **11 57 08.3** | **-0.8** |
| | baz=341 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.46** | **261** | *i* | P | **Pb** | **11 56 50.8** | **-0.7** |
| | baz=247 | | | | | | | | |
| WHYT | | | | | S | **Sb** | **11 57 10.5** | **+0.9** |
| | baz=247 | | | | | | | | |
| **YM08** | **YM08** | **1.47** | **329** | *e* | P | **Pn** | **11 56 50.3** | **+0.7** |
| | baz=327 | | | | | | | | |
| YM08 | | | | *e* | S | **Sb** | **11 57 09.8** | **-0.1** |
| | baz=327 | | | | | | | | |
| **LIOB** | **Emei** | **1.47** | **299** | *i* | P | **Pb** | **11 56 50.9** | **-0.8** |
| | baz=296 | | | | | | | | |
| LIOB | | | | | S | **Sb** | **11 57 10.8** | **+0.8** |
| | baz=296 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.48** | **78** | | P | **Pb** | **11 56 51.0** | **-0.6** |
| JKRS | | | | | S | **Sb** | **11 57 10.3** | **+0.2** |
| **NSTT** | **Nanjuang** | **1.48** | **299** | *i* | P | **Pb** | **11 56 51.8** | **+0.1** |
| | baz=295 | | | | | | | | |
| NSTT | | | | *i* | S | **Sb** | **11 57 09.8** | **-0.3** |
| | baz=295 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.49** | **241** | *i* | P | **Pn** | **11 56 49.3** | **-0.7** |
| | baz=238 | | | | | | | | |
| ELDTW | | | | *i* | S | **Sn** | **11 57 08.5** | **-0.1** |
| | baz=238 | | | | | | | | |
| **LONT** | **Longtian** | **1.57** | **230** | *i* | P | **Pn** | **11 56 51.0** | **0.0** |
| | baz=241 | | | | | | | | |
| LONT | | | | | S | **Sn** | **11 57 11.7** | **+1.3** |
| | baz=241 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.57** | **286** | *i* | P | **Pb** | **11 56 52.8** | **-0.4** |
| | baz=282 | | | | | | | | |
| TWQ1 | | | | | S | **Sb** | **11 57 13.3** | **+0.6** |
| | baz=282 | | | | | | | | |
| **WNT** | **Mingjian** | **1.60** | **269** | *e* | P | **Pb** | **11 56 53.3** | **-0.4** |
| | baz=265 | | | | | | | | |
| WNT | | | | *e* | S | **Sb** | **11 57 12.9** | **-0.5** |
| | baz=265 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.62** | **74** | | P | **Pb** | **11 56 53.9** | **-0.3** |
| JIJ | | | | | S | **Sb** | **11 57 14.2** | **-0.1** |
| **TWGBT** | **Beinan** | **1.66** | **229** | | P | **Pn** | **11 56 52.5** | **+0.2** |
| **TWGBT** | **Beinan** | **1.66** | **229** | *i* | P | **Pn** | **11 56 52.5** | **+0.2** |
| | baz=239 | | | | | | | | |
| TWGBT | | | | | S | **Sn** | **11 57 12.9** | **+0.2** |
| | baz=239 | | | | | | | | |
| **TWG** | **Pinlang** | **1.66** | **229** | *i* | P | **Pn** | **11 56 51.9** | **-0.4** |
| | baz=239 | | | | | | | | |
| TWG | | | | *i* | S | **Sn** | **11 57 12.4** | **-0.4** |
| | baz=239 | | | | | | | | |
| **WCKO** | **Fanlu** | **1.74** | **254** | *e* | P | **Pb** | **11 56 55.2** | **-1.0** |
| | baz=251 | | | | | | | | |
| WCKO | | | | | S | **Sb** | **11 57 16.9** | **-0.7** |
| | baz=251 | | | | | | | | |
| **WDLH** | **Douliu** | **1.75** | **263** | | P | **Pb** | **11 56 54.9** | **-1.4** |
| | baz=259 | | | | | | | | |
| WDLH | | | | | S | **Sb** | **11 57 18.5** | **+0.7** |
| | baz=259 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.76** | **250** | | P | **Pb** | **11 56 56.0** | **-0.6** |
| **TPUB** | **Ta-pu** | **1.76** | **250** | *e* | P | **Pb** | **11 56 56.5** | **-0.1** |
| | baz=247 | | | | | | | | |
| TPUB | | | | *e* | S | **Sb** | **11 57 18.1** | **-0.2** |
| | baz=247 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.80** | **248** | *i* | P | **Pb** | **11 56 55.9** | **-1.3** |
| | baz=245 | | | | | | | | |
| WTP | | | | | S | **Sn** | **11 57 17.6** | **+1.4** |
| | baz=245 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.84** | **69** | *e* | P | **Pn** | **11 56 54.9** | **+0.2** |
| JISG | | | | | S | **Sn** | **11 57 18.0** | **+0.9** |
| **SLGT** | **Liugui** | **1.88** | **241** | *i* | P | **Pb** | **11 56 57.2** | **-1.4** |
| | baz=231 | | | | | | | | |
| SLGT | | | | | S | **Sb** | **11 57 21.0** | **-0.7** |
| | baz=231 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.89** | **247** | *i* | P | **Pb** | **11 56 58.3** | **-0.5** |
| | baz=245 | | | | | | | | |
| CHN1 | | | | *i* | S | **Sb** | **11 57 22.7** | **+0.7** |
| | baz=245 | | | | | | | | |
| **TWK** | **Hsinying** | **1.90** | **250** | *i* | P | **Pn** | **11 56 57.2** | **+1.6** |
| | baz=247 | | | | | | | | |
| TWK | | | | *e* | S | **Sn** | **11 57 20.1** | **+1.5** |
| | baz=247 | | | | | | | | |
| **SNST** | **Tainan City** | **1.91** | **249** | | P | **Pb** | **11 56 58.2** | **-0.8** |
| | baz=246 | | | | | | | | |
| SNST | | | | *e* | S | **Sn** | **11 57 20.5** | **+1.7** |
| | baz=246 | | | | | | | | |
| **TSMG** | **Majia** | **2.04** | **234** | *i* | P | **Pb** | **11 57 00.0** | **-1.3** |
| | baz=227 | | | | | | | | |
| TSMG | | | | *e* | S | **Sn** | **11 57 23.0** | **+0.9** |
| | baz=227 | | | | | | | | |
| **SCST** | **Cishan** | **2.06** | **240** | | P | **Pn** | **11 56 59.8** | **+2.0** |
| | baz=227 | | | | | | | | |
| SCST | | | | *e* | S | **Sb** | **11 57 27.1** | **+0.4** |
| | baz=227 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.11** | **232** | *i* | P | **Pn** | **11 56 59.6** | **+1.2** |
| | baz=226 | | | | | | | | |
| MASBT | | | | *e* | S | **Sn** | **11 57 25.9** | **+2.1** |
| | baz=226 | | | | | | | | |
| **EAST** | **Anshuo** | **2.12** | **224** | *i* | P | **Pn** | **11 56 59.0** | **+0.4** |
| | baz=222 | | | | | | | | |
| EAST | | | | *e* | S | **Sn** | **11 57 24.1** | **+0.1** |
| | baz=222 | | | | | | | | |

*MCSM **14** 12:25:17.7±0.6,41°N±4°×2°8E±°, h10km±4km, mb3.5*
*AFAD **14** 12:25:18.1±0.0,40.80N×28.27E, h7km±3km, ML2.6*
*ISK **14** 12:25:18.0,40.83N×28.27E, h9km, ML2.7/37*
**ISC 14 12:25:18.5**±1.0,**40.83N**±0.02×**28.27E**±0.02,**h13**km±10km,
**n53**,σ**0.42**/70,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ELBA** | **Catalca** | **0.34** | **20** | | P | **Pg** | **12 25 25.8** | **+0.3** |
| ELBA | | | | | S | **Sg** | **12 25 30.5** | **+0.3** |
| **SLVT** | **Silivri** | **0.41** | **353** | | Pg | **Pg** | **12 25 26.7** | **0.0** |
| **CTKS** | **Kestanelik-??a** | **0.45** | **23** | | Pg | **Pg** | **12 25 27.4** | **0.0** |
| CTKS | | | | | Sg | **Sg** | **12 25 33.6** | **+0.2** |
| **BAND** | **Balkesir-Ban** | **0.49** | **196** | | P | **Pg** | **12 25 27.8** | **-0.3** |
| BAND | | | | | S | **Sg** | **12 25 34.4** | **-0.2** |
| **ARMT** | **Armutlu** | **0.52** | **120** | | Pg | **Pg** | **12 25 28.6** | **-0.1** |
| **BGKT** | **Bogazkoy** | **0.52** | **47** | | Pg | **Pg** | **12 25 28.8** | **+0.1** |
| **KCTX** | **Karacabey (Bur** | **0.56** | **173** | | Pg | **Pg** | **12 25 29.6** | **+0.1** |
| **EDC** | **Edincik** | **0.57** | **213** | | Pg | **Pg** | **12 25 29.6** | **-0.1** |
| **TKR** | **Tekirdag** | **0.58** | **287** | | Pg | **Pg** | **12 25 29.9** | **0.0** |
| **ISK** | **Istanbul-Kandi** | **0.64** | **68** | | Pg | **Pg** | **12 25 30.7** | **-0.3** |
| **KAVV** | **Kandilli-Istan** | **0.64** | **68** | | Pg | **Pb** | **12 25 31.7** | **+0.1** |
| KAVV | | | | | Sg | **Sb** | **12 25 40.7** | **+0.3** |
| **CTYL** | **Yalikoy Yolu** | **0.65** | **1** | | Pg | **Pg** | **12 25 31.2** | **0.0** |
| **MDNY** | **Mudanya-Bursa** | **0.65** | **134** | | Pg | **Pg** | **12 25 31.2** | **0.0** |
| **KIYI** | **Yalıkoy-Catalc** | **0.66** | **2** | | Pg | **Pg** | **12 25 30.5** | **-0.9** |
| **YYLC** | **Yaylacik** | **0.67** | **141** | | P | **Pg** | **12 25 31.5** | **0.0** |
| YYLC | | | | | S | **Sg** | **12 25 40.6** | **+0.3** |
| YYLC | | | | *i* | AML | AML | 12 25 43.0 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **KLYT** | **Kilyos** | **0.72** | **53** | | Pg | **Pg** | **12 25 32.4** | **-0.1** |
| KLYT | | | | | Sg | **Sb** | **12 25 42.9** | **+0.2** |
| **GEMT** | **Gemlik** | **0.80** | **119** | | Pg | **Pg** | **12 25 33.6** | **-0.4** |
| **SART** | **Tekirdag** | **0.84** | **261** | | P | **Pg** | **12 25 34.6** | **-0.3** |
| SART | | | | | S | **Sb** | **12 25 46.2** | **-0.1** |
| SART | | | | *i* | AML | AML | 12 25 47.0 | |
| | comp=N,213nm,0.3s | | | | | | | |
| SART | | | | *i* | AML | AML | 12 26 06.0 | |
| | comp=E,225nm,0.9s | | | | | | | |
| **RKY** | **Sarkoy-Tekirda** | **0.84** | **261** | | Pg | **Pg** | **12 25 34.6** | **-0.2** |
| **KRBG** | **Karabiga-Canak** | **0.86** | **240** | | Pg | **Pg** | **12 25 35.1** | **0.0** |
| **AVDN** | **Avdancik/Bursa** | **0.86** | **128** | | P | **Pg** | **12 25 35.0** | **-0.2** |
| AVDN | | | | | S | **Sg** | **12 25 46.5** | **+0.1** |
| **SUSR** | **Susurluk-Balik** | **0.87** | **190** | | Pg | **Pg** | **12 25 35.3** | **-0.1** |
| **YLV** | **Yalova** | **0.88** | **107** | | Pg | **Pg** | **12 25 35.1** | **-0.4** |
| **GONE** | **Gonen-Balikesi** | **0.90** | **210** | | Pg | **Pg** | **12 25 35.6** | **-0.3** |
| **IGD** | **Bursa** | **0.90** | **128** | | P | **Pg** | **12 25 35.7** | **-0.3** |
| IGD | | | | *i* | AML | AML | 12 25 48.0 | |
| | comp=N,141nm,0.3s | | | | | | | |
| IGD | | | | | S | **Sb** | **12 25 48.1** | **+0.2** |
| IGD | | | | *i* | AML | AML | 12 25 49.0 | |
| | comp=E,154nm,0.4s | | | | | | | |
| **ORLT** | **Orhaneli** | **0.91** | **148** | | Pg | **Pb** | **12 25 36.4** | **+0.2** |
| **ULDT** | **Uludag** | **0.95** | **136** | | P | **Pg** | **12 25 36.3** | **-0.5** |
| ULDT | | | | | S | **Sg** | **12 25 48.7** | **-0.6** |
| **HRT** | **Hereke** | **1.06** | **90** | | Pg | **Pb** | **12 25 37.9** | **-0.8** |
| **SILT** | **Sile** | **1.09** | **72** | | Pn | **Pb** | **12 25 38.8** | **-0.4** |
| **OSMT** | **Osmaniye** | **1.11** | **101** | | Pn | **Pb** | **12 25 39.7** | **+0.1** |
| **SEMS** | **Kocaeli-K¶rfe** | **1.11** | **87** | | P | **Pb** | **12 25 38.5** | **-1.1** |
| SEMS | | | | | S | **Sb** | **12 25 53.6** | **-0.5** |
| SEMS | | | | *i* | AML | AML | 12 25 54.0 | |
| | comp=N,103nm,0.7s | | | | | | | |
| SEMS | | | | *i* | AML | AML | 12 25 56.0 | |
| | comp=E,124nm,0.2s | | | | | | | |
| **BKES** | **Balkesir-Mer** | **1.12** | **194** | | P | **Pb** | **12 25 39.4** | **-0.4** |
| BKES | | | | | S | **Sb** | **12 25 54.2** | **-0.1** |
| BKES | | | | *i* | AML | AML | 12 25 56.0 | |
| | comp=E,143nm,0.1s | | | | | | | |
| **ADVT** | **Abdulvahap** | **1.18** | **109** | | Pn | **Pb** | **12 25 40.3** | **-0.5** |
| **YENI** | **Yenice-Canakka** | **1.19** | **222** | | Pn | **Pg** | **12 25 41.3** | **-0.1** |
| **DURS** | **Dursunbey** | **1.23** | **173** | | P | **Pg** | **12 25 42.1** | **-0.2** |
| DURS | | | | | S | **Sb** | **12 25 57.6** | **+0.1** |
| **LPK** | **Lapseki** | **1.24** | **249** | | Pn | **Pn** | **12 25 41.6** | **+0.1** |
| **UKOP** | **Uzunkopru-Edir** | **1.28** | **284** | | Pn | **Pn** | **12 25 41.7** | **-0.4** |
| **HISA** | **Bilecik-Osmane** | **1.30** | **105** | | P | **Pn** | **12 25 42.3** | **-0.2** |
| HISA | | | | | S | **Sb** | **12 25 59.0** | **-0.6** |
| HISA | | | | *i* | AML | AML | 12 26 04.0 | |
| | comp=N,93nm,0.4s | | | | | | | |
| **ERIK** | **Erikli-Kesan** | **1.35** | **264** | | Pn | **Pn** | **12 25 42.7** | **-0.3** |
| **CAVI** | **Cavuskoy** | **1.35** | **117** | | Pn | **Pn** | **12 25 43.4** | **+0.3** |
| **BILE** | **Bilecik/Merkez** | **1.39** | **118** | | P | **Pn** | **12 25 44.0** | **+0.3** |
| BILE | | | | | S | **Sb** | **12 26 02.4** | **+0.3** |
| **GELI** | **Tayfur-Gelibol** | **1.43** | **253** | | Pn | **Pn** | **12 25 44.6** | **+0.4** |
| **KAND** | **Kocaeli-Kandir** | **1.48** | **79** | | P | **Pn** | **12 25 45.1** | **+0.3** |
| KAND | | | | | S | **Sb** | **12 26 04.8** | **+0.3** |
| KAND | | | | *i* | AML | AML | 12 26 07.0 | |
| | comp=N,67nm,0.6s | | | | | | | |
| **DOMA** | **Ktahya-Doman** | **1.50** | **133** | | P | **Pb** | **12 25 46.4** | **+0.1** |
| DOMA | | | | | S | **Sb** | **12 26 05.6** | **+0.3** |
| DOMA | | | | *i* | AML | AML | 12 26 10.0 | |
| | comp=E,61nm,0.2s | | | | | | | |
| **EDRB** | **Edirne** | **1.54** | **312** | | Pn | **Pb** | **12 25 46.5** | **-0.4** |
| **COMU** | **Canakkale** | **1.55** | **243** | | Pn | **Pn** | **12 25 46.6** | **+0.7** |
| **ENEZ** | **Enez** | **1.61** | **268** | | Pn | **Pn** | **12 25 47.0** | **+0.4** |
| **ALN** | **Alexandroupoli** | **1.69** | **273** | | Pn | **Pn** | **12 25 48.1** | **+0.4** |
| **EZN** | **Ezine** | **1.79** | **237** | | Pn | **Pn** | **12 25 49.9** | **+0.8** |
| **EZNE** | **Ezine-Canakkal** | **1.81** | **234** | | Pn | **Pn** | **12 25 50.2** | **+0.9** |
| **GORD** | **Gordes-Manisa** | **1.92** | **182** | | Pn | **Pn** | **12 25 50.7** | **-0.2** |
| **DKL** | **Dikili** | **2.04** | **211** | | Pn | **Pn** | **12 25 53.5** | **+0.9** |
| **YUVA** | **Yuva-Kibriscik** | **2.63** | **98** | | Pn | **Pn** | **12 26 02.0** | **+1.2** |

*TAP **14** 12:51:41.8,25.38N×122.63E, h243km±1km, ML3.6, D*
*JMA **14** 12:51:43.9±0.3,25.5N×122.6E±0.7, h217km±4km,*
*MV3.5/18, NW OFF ISHIGAKIJIMA IS*
**ISC 14 12:51:42.9**±1.9,**25.37N**±0.07×**122.59E**±0.04,
**h228**km±10km,**n88**,σ**0.66**/147,**1C-11D**,**Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCYT** | **Pengchaiyu** | **0.54** | **299** | *e* | P | **Pn** | **12 52 14.0** | **+0.5** |
| | baz=296 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.65** | **237** | ⇓ *i* | P | **Pn** | **12 52 14.4** | **+0.5** |
| | baz=237 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.70** | **248** | ⇓ | P | **Pn** | **12 52 14.5** | **+0.3** |
| | baz=247 | | | | | | | |
| SXI1 | | | | *e* | S | **Sb** | **12 52 38.7** | **+0.1** |
| | baz=247 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.79** | **249** | *e* | P | **Pn** | **12 52 15.1** | **+0.5** |
| | baz=248 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.79** | **249** | *e* | P | **Pn** | **12 52 15.1** | **+0.6** |
| | baz=248 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.80** | **241** | ⇓ | P | **Pn** | **12 52 15.1** | **+0.5** |
| | baz=241 | | | | | | | |
| TIPB | | | | *e* | S | **Sb** | **12 52 39.3** | **0.0** |
| | baz=241 | | | | | | | |
| **TWY** | **Chenhua** | **0.91** | **265** | *e* | P | **Pn** | **12 52 16.0** | **+0.9** |
| | baz=263 | | | | | | | |
| **YM01** | **YM01** | **0.95** | **257** | *e* | P | **Pn** | **12 52 16.0** | **+0.6** |
| | baz=256 | | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.96** | **161** | | P | **Pn** | **12 52 15.7** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **0.98** | **157** | *e* | P | **Pn** | **12 52 15.8** | **+0.2** |
| | baz=159 | | | | | | | |
| YOJ | | | | *e* | S | **Sb** | **12 52 38.4** | **-2.6** |
| | baz=159 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.98** | **157** | | P | **Pn** | **12 52 15.9** | **+0.4** |
| **TWA** | **Mucha** | **0.99** | **248** | *e* | S | **S** | **12 52 41.5** | **+0.4** |
| | baz=247 | | | | | | | |
| **EOS2** | **EOS2** | **1.00** | **199** | | P | **Pn** | **12 52 16.2** | **+0.7** |
| | baz=200 | | | | | | | |
| EOS2 | | | | *e* | S | **S** | **12 52 42.0** | **+1.0** |
| | baz=200 | | | | | | | |
| **TWC** | **Suao** | **1.01** | **222** | *e* | P | **Pn** | **12 52 15.7** | **-0.1** |
| | baz=222 | | | | | | | |
| TWC | | | | *e* | S | **S** | **12 52 39.8** | **-1.5** |
| | baz=222 | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.05** | **248** | *e* | S | **S** | **12 52 42.4** | **+0.7** |
| | baz=247 | | | | | | | |
| **TWE** | **Neicheng** | **1.06** | **233** | *e* | P | **Pn** | **12 52 16.2** | **+0.2** |
| | baz=232 | | | | | | | |
| TWE | | | | *e* | S | **S** | **12 52 42.6** | **+0.9** |
| | baz=232 | | | | | | | |
| **NDS** | **Dongshan** | **1.08** | **228** | *e* | P | **Pn** | **12 52 17.3** | **+1.1** |
| | baz=228 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.09** | **237** | | P | **Pn** | **12 52 16.4** | **0.0** |
| | baz=236 | | | | | | | |
| FUSB | | | | | S | **S** | **12 52 42.0** | **-0.4** |
| | baz=236 | | | | | | | |
| **EOS3** | **EOS3** | **1.10** | **193** | *e* | P | **Pn** | **12 52 16.8** | **+0.7** |
| | baz=194 | | | | | | | |
| EOS3 | | | | *e* | S | **S** | **12 52 42.6** | **+0.5** |
| | baz=194 | | | | | | | |
| **EWUT** | **Wuta** | **1.18** | **219** | | P | **Pn** | **12 52 17.2** | **+0.4** |
| | baz=219 | | | | | | | |
| EWUT | | | | *i* | S | **S** | **12 52 42.9** | **-0.3** |
| | baz=219 | | | | | | | |
| **ENTT** | **Nioudou** | **1.18** | **232** | | P | **Pn** | **12 52 17.1** | **+0.3** |
| | baz=232 | | | | | | | |
| ENTT | | | | | S | **S** | **12 52 43.3** | **0.0** |
| | baz=232 | | | | | | | |
| **ENA** | **Nanau** | **1.21** | **220** | | P | **Pn** | **12 52 17.5** | **+0.5** |
| | baz=220 | | | | | | | |
| ENA | | | | *e* | S | **S** | **12 52 43.1** | **-0.6** |
| | baz=220 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.24** | **233** | *e* | P | **Pn** | **12 52 17.8** | **+0.5** |
| | baz=232 | | | | | | | |
| NDT | | | | *e* | S | **S** | **12 52 44.0** | **0.0** |
| | baz=232 | | | | | | | |
| **EOS4** | **EOS4** | **1.26** | **192** | *e* | S | **S** | **12 52 43.5** | **-0.2** |
| | baz=192 | | | | | | | |
| **LATG** | **Datong** | **1.27** | **230** | *e* | P | **Pn** | **12 52 18.2** | **+0.5** |
| | baz=230 | | | | | | | |
| LATG | | | | *e* | S | **S** | **12 52 44.3** | **-0.3** |
| | baz=230 | | | | | | | |
| **EAHA** | **Aohua** | **1.29** | **217** | *e* | P | **Pn** | **12 52 17.9** | **+0.3** |
| | baz=217 | | | | | | | |
| EAHA | | | | *e* | S | **S** | **12 52 44.3** | **-0.4** |
| | baz=217 | | | | | | | |
| **YHNB** | **Yeheng** | **1.30** | **238** | | P | **Pn** | **12 52 17.6** | **-0.2** |
| **YHNB** | **Yeheng** | **1.30** | **238** | ⇓ | P | **Pn** | **12 52 17.7** | **-0.2** |
| | baz=238 | | | | | | | |
| YHNB | | | | *e* | S | **S** | **12 52 43.7** | **-1.3** |
| | baz=238 | | | | | | | |
| **NSK** | **Sanguang** | **1.31** | **239** | | P | **Pn** | **12 52 17.7** | **-0.2** |
| | baz=238 | | | | | | | |
| NSK | | | | | S | **S** | **12 52 43.9** | **-1.2** |
| | baz=238 | | | | | | | |
| **NNS** | **Nan Shan** | **1.44** | **231** | *e* | P | **Pn** | **12 52 19.5** | **+

baz=228
**TWT Tachien 1.70 230** *e*P Pn 12 52 21.9 +0.8
baz=229
TWT S S 12 52 51.5 +0.6
baz=229
**JKRS Kuro-shima 1.71 131** P Pn 12 52 21.9 +0.9
JKRS S 12 52 50.5 0.0
**TDCB Techi 1.71 230** ⇓P Pn 12 52 21.9 +0.7
baz=230
TDCB S S 12 52 50.6 -0.4
baz=230
**WHF Hehuan Shan 1.71 225** P Pn 12 52 22.0 +0.5
baz=225
WHF *e*S S 12 52 51.5 0.0
baz=225
**ETM Tongmen 1.72 216** P Pn 12 52 20.9 -0.2
baz=216
ETM *e*S S 12 52 49.3 -1.5
baz=216
**LXIB Xiulin Townshi 1.72 219** P Pn 12 52 21.0 -0.3
baz=219
LXIB S S 12 52 49.6 -1.4
baz=219
**JIJ Ishigaki jima 1.72 125** P Pn 12 52 21.4 +0.3
JIJ S S 12 52 49.5 -1.3
**JISG Ishigakijimahi 1.74 116** P Pn 12 52 21.6 +0.4
JISG S S 12 52 50.4 -0.6
**TEYL Yanliau Villag 1.75 212** *e*P Pn 12 52 21.7 +0.4
baz=212
TEYL *e*S S 12 52 51.7 +0.4
baz=212
**SHUL Shoufeng 1.83 211** ⇑*i*P Pn 12 52 22.4 +0.4
baz=211
SHUL S S 12 52 53.0 +0.4
baz=211
**CHGB Renai 1.83 225** ⇓P Pn 12 52 23.2 +0.9
baz=225
CHGB *e*S S 12 52 53.3 +0.3
baz=225
**WHP Taichung City 1.85 234** *e*P Pn 12 52 22.7 +0.4
baz=234
WHP *e*S S 12 52 52.4 -0.7
baz=234
**ESL Shilin 1.87 215** *e*P Pn 12 52 22.0 -0.5
baz=214
ESL *e*S S 12 52 51.2 -2.1
baz=214
**OWD Renai 1.91 223** *e*P Pn 12 52 23.8 +0.8
baz=223
OWD *e*S S 12 52 54.3 +0.1
baz=223
**WUSB Renai 1.92 225** ⇓P Pn 12 52 23.8 +0.8
baz=224
WUSB *e*S S 12 52 54.5 +0.2
baz=224
**TWQ1 Liyutan 1.94 239** *e*P Pn 12 52 23.4 +0.3
baz=238
TWQ1 *e*S S 12 52 53.9 -0.5
baz=238
**WARBT Fenglin Townsh 1.98 214** ⇓P Pn 12 52 22.9 -0.6
baz=214
WARBT *e*S S 12 52 53.1 -1.9
baz=214
**WCS Beigang Elemen 2.01 230** ⇓*i*P Pn 12 52 24.2 +0.5
baz=229
WCS *e*S S 12 52 55.4 -0.1
baz=229
**JTJ Tarama 2.04 110** P Pn 12 52 24.8 +0.8
JTJ S S 12 55.8 -0.3
**VWDT VWDT 2.08 220** ⇓P Pn 12 52 25.5 +1.1
baz=220
VWDT *e*S S 12 57.5 +0.7
baz=220
**HGSD Ruisui 2.15 210** P Pn 12 52 25.6 +0.5
baz=210
HGSD *e*S S 12 58.1 +0.1
baz=210
**TYC Yuchr 2.15 228** *e*P Pn 12 52 25.5 +0.4
baz=227
TYC S S 12 58.1 +0.1
baz=227
**SSLB Suanglung 2.17 224** P Pn 12 52 25.7 +0.4
**SSLB Suanglung 2.17 224** ⇓P Pn 12 52 25.8 +0.4
baz=223
SSLB S S 12 58.0 -0.4
baz=223
**EHY Hungye 2.18 212** *e*P Pn 12 52 25.6 +0.1
baz=212
**WNT Mingjian 2.28 230** *e*P Pn 12 52 26.7 +0.3
baz=229
WNT *e*S S 12 53 00.3 -0.1
baz=229
**YULB Yu-li 2.29 211** *e*P Pn 12 52 25.9 -0.7
baz=211
**WHYT Xinyi Township 2.30 224** *e*P Pn 12 52 27.1 +0.5
baz=224
WHYT S S 12 53 01.0 +0.2
baz=224
**TWF1 Yuli 2.33 211** *e*P Pn 12 52 26.4 -0.6
baz=210
**JIRB Irabujima 2.40 102** S S 12 53 01.5 -0.9
**JIKM Ikemajima 2.44 100** S S 12 53 03.2 -0.1
**FULB Fuli 2.46 209** *e*P Pn 12 52 27.9 -0.4
baz=209
**JMJ Miyako jima 2 2.51 102** *e*P Pn 12 52 30.0 +1.3
baz=102
JMJ *e*S S 12 53 04.3 -0.2
baz=102
**MATB Ma-tsu 2.51 289** *e*P Pn 12 52 28.1 -0.6
baz=287
**JMJ2 Miyako jima3 2.56 103** *e*S S 12 53 05.1 -0.3
**ELDTW Lidau 2.60 214** *e*P Pn 12 52 30.2 +0.3
baz=213
**JOGS Gusukube 2.62 103** *e*S S 12 53 06.5 -0.1
**TPUB Ta-pu 2.73 221** P Pn 12 52 31.7 +0.5
**TPUB Ta-pu 2.73 221** P Pn 12 52 31.6 +0.4
baz=221
TPUB *e*S S 12 53 08.7 -0.2
baz=221
**WTP Ta-pu 2.78 221** *e*P Pn 12 52 32.3 +0.5
baz=220
WTP *e*S S 12 53 09.9 0.0
baz=220
**TWK Hsinying 2.84 223** *e*P Pn 12 52 32.8 +0.4
baz=222
**SNST Tainan City 2.87 222** *e*P Pn 12 52 33.3 +0.7
baz=222
SNST *e*S S 12 53 11.4 -0.2
baz=222
**CHN1 Nanshi 2.88 221** *e*P Pn 12 52 33.3 +0.5
baz=221
CHN1 *e*S S 12 53 11.9 +0.1
baz=221
**SGST Jiashian 2.92 219** *e*P Pn 12 52 33.2 -0.1
baz=219
**MASBT Mashibuluo 3.27 214** *e*P Pn 12 52 37.5 +0.2
baz=213
MASBT *e*S S 12 53 20.1 +0.1
baz=213
**JKE Kume jima 2 3.90 75** *e*P Pn 12 52 44.3 -0.2

### KRNET 14 13:03:22.2±0.1, 39°.59N×72°.98E, h14km, mb2.2, 16C-6D, Kyrgyzstan

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.58** | **44** | ⇓*e*P | Pg | 13 03 33.8 | +0.1 |
| | baz=43 | | | | | | |
| SFK | | | | ⇓*i*S | Sb | 13 03 42.2 | -0.4 |
| | baz=43 | | | | | | |
| **DRK** | **Karamyk** | **0.92** | **263** | ⇑*e*P | Pg | 13 03 39.6 | -0.4 |
| | baz=64 | | | | | | |
| DRK | | | | ⇑*e*S | Sb | 13 03 53.0 | +0.7 |
| | baz=64 | | | | | | |
| **BTK** | **Batken** | **1.73** | **286** | ⇑*e*P | Pg | 13 03 54.6 | -0.8 |
| | baz=86 | | | | | | |
| BTK | | | | ⇑*e*S | Sg | 13 04 18.1 | +0.3 |
| | baz=86 | | | | | | |
| **ARSB** | **Arslanbob** | **1.73** | **0** | ⇓*e*P | Pb | 13 03 54.6 | +0.7 |
| | baz=0.0 | | | | | | |
| ARSB | | | | ⇓*e*S | Sg | 13 04 18.5 | +0.6 |
| | baz=0.0 | | | | | | |
| **GAR** | **Garm** | **2.15** | **255** | ⇑*e*P | Pb | 13 04 01.2 | +0.2 |
| | baz=55 | | | | | | |
| GAR | | | | ⇑*e*S | Sg | 13 04 29.8 | -1.5 |
| | baz=55 | | | | | | |
| **ARK** | **Arkit** | **2.34** | **341** | ⇑*e*P | Pb | 13 04 03.8 | -0.4 |
| | baz=41 | | | | | | |
| ARK | | | | ⇑*e*S | Sb | 13 04 34.7 | +1.8 |
| | baz=41 | | | | | | |
| **TRKS** | **Terek-Say** | **2.39** | **325** | ⇑*e*P | Pb | 13 04 04.3 | -0.8 |
| | baz=24 | | | | | | |
| TRKS | | | | ⇑*e*S | Sb | 13 04 34.3 | -0.2 |
| | baz=24 | | | | | | |
| **ARLS** | **Aral** | **2.49** | **24** | ⇑*e*P | Pb | 13 04 06.0 | -0.8 |
| | baz=24 | | | | | | |
| ARLS | | | | ⇑*i*S | Sb | 13 04 38.1 | +0.8 |
| | baz=24 | | | | | | |
| **AML** | **Almayashu** | **2.59** | **12** | ⇓*e*P | Pb | 13 04 07.9 | -0.8 |
| | baz=12 | | | | | | |
| AML | | | | ⇓*e*S | Sb | 13 04 41.2 | +0.6 |
| | baz=12 | | | | | | |
| **MNAS** | **Manas** | **2.92** | **353** | ⇑*e*P | Pb | 13 04 11.8 | -2.2 |
| | baz=53 | | | | | | |
| MNAS | | | | ⇑*e*S | Sb | 13 04 48.1 | -1.5 |
| | baz=53 | | | | | | |
| **KK31** | **Karatay Array** | **3.97** | **333** | ⇑Pn | Pn | 13 04 26.5 | +3.8 |
| | 0.4nm,0.3s,baz=144,slow=13,SNR=4.8 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 13 05 14.5 | |
| | 0.9nm,0.5s,baz=144,slow=28,SNR=3.6 | | | | | | |

### ISU 14 13:03:37.2, 41°.35N×71°.89E, h38km, Kyrgyzstan

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRG** | **Fergana** | **0.98** | **185** | P | Pn | 13 03 55.8 | +1.4 |
| FRG | | | | S | Sn | 13 04 09.6 | +2.6 |
| **CHMI** | **Chimion** | **1.11** | **195** | P | Pn | 13 03 58.0 | +1.7 |
| CHMI | | | | S | Sn | 13 04 13.3 | +2.9 |

*IDC **14** 13:26:18.6±6.9, 0°.28N×122°.17E, h156km±67km, mb3.5/10, mbtmp3.9/10, Error ellipse: s-maj=36.9km s-min=13.0km az=66.0*
*DJA **14** 13:26:21.3±0.6, 1°N±12°×12°2E±1°.2, h163km, M3.3/4, MLv3.3/4*
**ISC 14 13:26:18.4±0.8, 0°.1N±0°.1×121°.9E±0°.1, h150km, n14, σ2s29/18, mb3.8/11, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **0.36** | **5** | P | Pn | 13 26 43.3 | +4.2 |
| MRSI | | | | S | Sn | 13 26 59.8 | +4.9 |
| **GTOI** | **Gorontalo** | **1.21** | **65** | P | Pn | 13 26 47.2 | +2.2 |
| GTOI | | | | S | Sn | 13 27 07.7 | +2.3 |
| **KMSI** | **Cibinong** | **2.12** | **78** | P | Pn | 13 26 57.4 | +2.5 |
| **WRA** | **Warramunga Arr** | **23.36** | **149** | P | P | 13 31 13.3 | -0.2 |
| | 6.5nm,0.9s,baz=326,slow=10,SNR=50 | | | | | | |
| WRA | | | | PcP | PcP | 13 34 54.6 | -1.5 |
| | 0.3nm,0.7s,baz=324,slow=2.1,SNR=1.1 | | | | | | |
| | 6.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **26.36** | **155** | P | P | 13 31 41.1 | +0.5 |
| | 1.4nm,0.6s,baz=344,slow=13,SNR=24 | | | | | | |
| ASAR | | | | PcP | PcP | 13 35 01.6 | -1.2 |
| | 0.4nm,0.3s,baz=340,slow=2.1,SNR=6.2 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.00** | **310** | P | P | 13 32 03.5 | -0.8 |
| | 0.4nm,0.5s,baz=143,slow=9.1,SNR=1.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **36.87** | **151** | P | P | 13 33 12.0 | -0.5 |
| | 5.1nm,0.8s,baz=326,slow=7.1,SNR=5.3 | | | | | | |
| | 5.1nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.27** | **21** | P | P | 13 33 29.3 | -3.2 |
| | 1.0nm,0.8s,baz=213,slow=9.3,SNR=4.7 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **GTA** | **Gaotai** | **44.02** | **335** | *e*P | P | 13 34 12.5 | +1.3 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **49.41** | **346** | P | P | 13 34 52.1 | -0.9 |
| | comp=Z,1.3nm,0.5s,baz=165,slow=6.0,SNR=4.7 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.95** | **329** | P | P | 13 35 55.3 | +0.3 |
| | comp=Z,0.5nm,0.4s,baz=129,slow=8.7,SNR=6.9 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **60.62** | **24** | P | P | 13 36 11.4 | -1.8 |
| | comp=Z,1.0nm,0.7s,baz=247,slow=7.5,SNR=1.0 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.76** | **336** | P | P | 13 36 20.2 | -0.6 |
| | comp=Z,0.8nm,0.8s,baz=142,slow=7.2,SNR=1.9 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.32** | **330** | P | P | 13 36 24.6 | -0.1 |
| | comp=Z,0.4nm,0.4s,baz=116,slow=5.7,SNR=7.0 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |

*IDC **14** 14:00:50.0±0.7, 54°.41N×168°.84E, h0km, mb3.8/19, mbtmp3.8/21, ML3.7/2, MS3.1/5, Error ellipse: s-maj=21.0km s-min=13.5km az=177.0*
*NEIC **14** 14:00:51.5±1.3, 54°.32N±0°.09×168°.9E±0°.2, h10km±1km, mb4.3/16, Error ellipse: s-maj=17.4km s-min=11.9km az=314.0*
*KRSC **14** 14:00:54.7±1.4, 54°.08N×168°.12E, h16km±25km, Ml4.2*
**ISC 14 14:00:51.0±0.5, 54°.16N±0°.07×168°.80E±0°.05, h10km, n74, σ1s89/85, mb4.0/21, MS3.2/3, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **1.95** | **304** | *e*P | Pn | 14 01 22.4 | -1.6 |
| BKI | | | | *e*S | Sn | 14 01 46.4 | -2.2 |
| **SHEM** | **Shemya Is, Ala** | **3.48** | **112** | Pn | Pn | 14 01 44.5 | -0.5 |
| | 18nm,0.3s,baz=12,slow=4.5,SNR=35 | | | | | | |
| SHEM | | | | Sn | Sn | 14 02 28.8 | +2.7 |
| | 13nm,0.3s,baz=113,slow=22,SNR=5.7 | | | | | | |
| | 54nm,0.4s | | | | | | |
| **ZLN** | **Zelenaya** | **4.96** | **295** | *e*P | Pn | 14 02 09.7 | +4.2 |
| **TUMD** | **Tumrok D** | **4.99** | **286** | *e*P | Pn | 14 02 07.7 | +1.8 |
| TUMD | | | | *e*S | Sn | 14 03 01.3 | -2.2 |
| **BZGR** | **Bezymyannyi-Gr** | **4.99** | **294** | *e*P | Pn | 14 02 09.5 | +3.6 |
| BZGR | | | | *e*S | Sn | 14 03 04.2 | +0.5 |
| **KLY** | **Klyuchi** | **5.14** | **298** | *e*P | Pn | 14 02 10.0 | +2.2 |
| KLY | | | | *e*S | Sn | 14 03 04.4 | -2.8 |
| **KRSR** | **Krestovskiy** | **5.15** | **297** | *e*P | Pn | 14 02 11.1 | +3.0 |
| KRSR | | | | *e*S | Sn | 14 03 07.7 | +0.1 |
| **KIRR** | **Kirishev** | **5.19** | **294** | *e*P | Pn | 14 02 10.7 | +2.0 |
| KIRR | | | | *e*S | Sn | 14 03 07.6 | -1.0 |
| **SPN** | **Mys Shipunski** | **5.33** | **262** | *e*P | Pn | 14 02 11.9 | +1.3 |
| SPN | | | | *e*S | Sn | 14 03 08.6 | -3.4 |
| **KII** | **Karymskiy** | **5.51** | **273** | *e*P | Pn | 14 02 14.7 | +1.7 |
| KII | | | | *e*S | Sn | 14 03 14.5 | -1.9 |
| **NLC** | **Nalytchevo** | **5.71** | **264** | *e*P | Pn | 14 02 17.2 | +1.5 |
| NLC | | | | *e*S | Sn | 14 03 18.1 | -3.1 |
| **UGLR** | **Uglovaya** | **6.01** | **265** | *e*P | Pn | 14 02 22.0 | +2.1 |
| **SMAR** | **Somma** | **6.01** | **265** | *e*S | Sn | 14 03 24.3 | -4.6 |
| **AVH** | **Avacha** | **6.04** | **266** | *e*P | Pn | 14 02 22.7 | +2.3 |
| **ESO** | **Esso** | **6.07** | **291** | *e*P | Pn | 14 02 23.5 | +2.8 |
| ESO | | | | *e*S | Sn | 14 03 29.4 | -0.8 |
| **DALK** | **Dalny** | **6.09** | **263** | *e*P | Pn | 14 02 22.9 | +2.0 |
| DALK | | | | *e*S | Sn | 14 03 27.9 | -2.6 |
| **KOK** | **Koryaka** | **6.10** | **266** | *e*S | Sn | 14 03 29.3 | -1.7 |
| **PET** | **Petropavlovsk** | **6.15** | **263** | *e*P | Pn | 14 02 23.7 | +2.0 |
| **GNL** | **Ganaly** | **6.43** | **270** | *e*P | Pn | 14 02 28.4 | +2.6 |
| **KRMR** | **Karymshinskiy** | **6.51** | **263** | *e*P | Pn | 14 02 28.6 | +2.0 |
| KRMR | | | | *e*S | Sn | 14 03 37.4 | -3.5 |
| **MTVR** | **Mutnovka** | **6.58** | **260** | *e*P | Pn | 14 02 29.9 | +2.1 |
| MTVR | | | | *e*S | Sn | 14 03 40.3 | -2.6 |
| **GRL** | **Gorelyy** | **6.62** | **260** | *e*S | Sn | 14 03 41.8 | -2.1 |
| **PETK** | **Petropavlovsk-** | **6.69** | **265** | Pn | Pn | 14 02 29.8 | +0.6 |
| | 2.9nm,0.3s,baz=80,slow=20,SNR=128 | | | | | | |
| PETK | | | | Sn | Sn | 14 03 47.0 | +1.7 |
| | 2.0nm,0.3s,baz=83,slow=21,SNR=2.4 | | | | | | |
| PETK | | | | LR | LR | 14 05 00.9 | |
| | comp=Z,88nm,21.9s,baz=78,slow=37 | | | | | | |
| | 5.3nm,0.4s | | | | | | |
| **ASAK** | **Asacha** | **6.78** | **259** | *e*P | Pn | 14 02 33.1 | +2.7 |
| ASAK | | | | *e*S | Sn | 14 03 46.1 | -1.6 |
| **KDTR** | **Khodutka, Kamc** | **6.89** | **254** | *e*P | Pn | 14 02 33.6 | +1.7 |
| KDTR | | | | *e*S | Sn | 14 03 46.8 | -3.5 |
| **PALN** | **Palana** | **6.94** | **319** | *e*P | Pn | 14 02 38.0 | +5.5 |
| **AMKA** | **Amchitka** | **6.95** | **109** | Pn | Pn | 14 02 32.6 | -0.1 |
| **SKR** | **Severo-Kuril's** | **8.50** | **251** | *e*P | Pn | 14 02 56.4 | +2.5 |
| **KIWB** | **Kanaga Island** | **8.78** | **100** | Pn | Pn | 14 02 57.5 | -0.4 |
| **ADK** | **Adak** | **9.04** | **99** | Pn | Pn | 14 03 01.1 | -0.3 |
| **MA2** | **Magadan** | **11.24** | **306** | LR | LR | 14 07 37.1 | |
| | comp=Z,50nm,18.3s,baz=126,slow=37 | | | | | | |
| **N17K** | **Nushagak Hills** | **19.26** | **57** | Pn | Pn | 14 05 15.6 | -0.7 |
| N17K | | | | IAmb | IAmb | 14 05 37.1 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **G18K** | **Tagagawik** | **19.77** | **41** | Pn | Pn | 14 05 21.2 | -1.1 |
| **J18K** | **Innoko River** | **19.89** | **48** | | P | 14 05 20.8 | -1.4 |
| **J19K** | **Poorman** | **20.48** | **47** | | P | 14 05 27.5 | -1.0 |
| **H19K** | **Roundabout Mou** | **20.52** | **43** | | P | 14 05 28.2 | -0.7 |
| H19K | | | | IAmb | IAmb | 14 05 45.0 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **L19K** | **White Mountain** | **20.53** | **52** | P | P | 14 05 27.8 | -1.3 |
| L19K | | | | IAmb | IAmb | 14 05 31.0 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **N19K** | **Bonanza Creek** | **20.60** | **56** | Pn | P | 14 05 30.6 | +0.6 |
| N19K | | | | IAmb | IAmb | 14 05 31.8 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **M19K** | **Big River Lodg** | **20.72** | **53** | Pn | P | 14 05 31.8 | +0.7 |
| M19K | | | | IAmb | IAmb | 14 05 42.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **20.83** | **32** | Pn | Pn | 14 05 33.0 | -1.8 |
| C19K | | | | IAmb | IAmb | 14 05 51.2 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **22.02** | **31** | P | P | 14 05 44.2 | -0.8 |
| B20K | | | | IAmb | IAmb | 14 06 15.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **23.30** | **273** | LR | LR | 14 15 20.1 | |
| | comp=Z,56nm,18.5s,baz=183,slow=37 | | | | | | |
| **SML** | **Sawmill** | **23.59** | **54** | P | P | 14 06 00.7 | -0.8 |
| **WRH** | **Wood River Hil** | **23.80** | **47** | P | P | 14 06 02.1 | -1.4 |
| **SCM** | **Sheep Creek Mo** | **24.06** | **54** | P | P | 14 06 04.9 | -1.1 |
| **ILAR** | **Eielson Array** | **24.34** | **47** | P | P | 14 06 07.8 | -0.7 |
| | comp=Z,0.7nm,0.6s,baz=251,slow=7.5,SNR=10 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **24.60** | **53** | P | P | 14 06 10.3 | -0.6 |
| **N25K** | **Chitina, Valde** | **25.37** | **54** | P | P | 14 06 17.2 | -0.7 |
| N25K | | | | IAmb | IAmb | 14 06 31.6 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **32.48** | **256** | P | P | 14 07 23.0 | +1.6 |
| | comp=Z,0.7nm,0.6s,baz=45,slow=11,SNR=4.3 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **BBB** | **Bella Bella** | **36.75** | **67** | LR | LR | 14 21 07.8 | |
| | comp=Z,45nm,19.9s,baz=306,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **38.63** | **287** | P | P | 14 08 14.7 | +0.5 |
| | comp=Z,0.6nm,0.5s,baz=21,slow=9.3,SNR=2.3 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.77** | **46** | P | P | 14 08 15.0 | -0.1 |
| | comp=Z,0.1nm,0.4s,baz=314,slow=11,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **46.85** | **352** | P | P | 14 09 19.1 | -1.3 |
| | comp=Z,0.9nm,0.4s,baz=52,slow=12,SNR=1.2 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **LYMT** | **Lyon Mountain** | **48.18** | **64** | P | P | 14 09 31.2 | -0.2 |
| **NVAR** | **Mina Array Bea** | **50.47** | **77** | P | P | 14 09 48.8 | -0.2 |
| | comp=Z,0.5nm,0.8s,baz=308,slow=7.8,SNR=2.4 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Array** | **51.56** | **306** | P | P | 14 09 56.2 | -0.6 |
| | comp=Z,1.3nm,0.3s,baz=55,slow=7.8,SNR=6.0 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.25** | **300** | P | P | 14 10 00.9 | -1.1 |
| **MKAR** | **Makanchi Array** | **52.25** | **300** | P | P | 14 10 00.7 | -1.3 |
| | comp=Z,0.5nm,0.6s,baz=47,slow=7.5,SNR=4.0 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **52.40** | **67** | P | P | 14 10 02.2 | -1.2 |
| | comp=Z,0.2nm,0.4s,baz=11,slow=1.5,SNR=3.5 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **53.66** | **312** | P | P | 14 10 11.9 | -0.3 |
| | comp=Z,2.1nm,0.5s,baz=56,slow=7.4,SNR=13 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.75** | **345** | P | P | 14 10 10.6 | -2.2 |
| | comp=Z,1.5nm,0.8s,baz=30,slow=9.8,SNR=4.8 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **FRB** | **Frobisher Bay** | **54.32** | **27** | LR | LR | 14 37 21.7 | |
| | comp=Z,18nm,18.1s,baz=208,slow=40 | | | | | | |
| **HMU** | **Henry Mountain** | **55.09** | **72** | P | P | 14 10 23.2 | -0.1 |
| **FINES** | **FINESS Array B** | **61.03** | **341** | P | P | 14 11 03.0 | -1.0 |
| | comp=Z,2.3nm,0.9s,baz=93,slow=8.4,SNR=3.6 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **63.47** | **265** | P | P | 14 11 22.0 | +1.0 |
| | comp=Z,0.9nm,0.7s,baz=22,slow=8.4,SNR=4.2 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **NB2** | **NORSAR Subarra** | **63.77** | **348** | P | P | 14 11 21.7 | -0.8 |
| | comp=Z,1.9nm,0.8s,baz=16,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **63.77** | **348** | P | P | 14 11 21.1 | -1.5 |
| | comp=Z,0.6nm,0.6s,baz=17,slow=6.7,SNR=3.7 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **64.33** | **346** | P | P | 14 11 25.0 | -1.2 |
| | comp=Z,0.7nm,0.7s,baz=99,slow=6.3,SNR=2.5 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **65.40** | **74** | P | P | 14 11 33.8 | +0.1 |
| **TXAR** | **Lajitas Array** | **65.40** | **74** | P | P | 14 11 34.2 | +0.6 |
| | comp=Z,0.7nm,0.6s,baz=295,slow=4.4,SNR=8.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.52** | **213** | P | P | 14 12 59.8 | +2.2 |
| | comp=Z,0.6nm,0.9s,baz=27,slow=6.3,SNR=1.6 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **83.14** | **212** | P | P | 14 13 19.1 | +2.3 |
| **ASAR** | **Alice Springs** | **83.14** | **212** | P | P | 14 13 19.5 | +2.7 |
| | comp=Z,0.3nm,0.7s,baz=15,slow=4.4,SNR=1.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **84.31** | **322** | P | P | 14 13 24.2 | +1.2 |
| | comp=Z,0.6nm,0.3s,baz=54,slow=13,SNR=1.6 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |

*UCR **14** 14:19:46.1±1.6, 12°.05N×81°.84W, h12km±64km, MW3.8*
*UPA **14** 14:19:48.0±2.8, 11°.98N×81°.76W, h32km±91km, MW4.6*
**ISC 14 14:19:40.1±1.4, 11°.70N±0°.07×81°.51W±0°.04, h10km, n31, σ1s39/43, 2C-4D, North of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VTCV** | **VTCV, Calle Va** | **2.77** | **232** | *e*P | Pb | 14 20 30.9 | +1.1 |
| **ESPN** | **Las Esperanzas** | **2.77** | **281** | *e*P | Pn | 14 20 24.3 | -0.3 |
| ESPN | | | | *e*S | Sn | 14 20 56.9 | -1.2 |
| **CHGR2** | **Aguacate** | **2.81** | **193** | ⇓*i*P | Pg | 14 20 33.9 | -0.1 |
| CHGR2 | | | | *e*S | Sg | 14 21 10.4 | -0.1 |
| **VICA** | **Volcano Irazu** | **2.86** | **234** | *e*P | Pb | 14 20 31.9 | +0.4 |
| VICA | | | | *e*S | Sb | 14 21 07.6 | +0.9 |
| **MLIR** | **Monte Lirio** | **2.94** | **146** | ⇑*e*P | Pg | 14 20 36.2 | -0.2 |
| MLIR | | | | *i*S | Sg | 14 21 15.9 | +1.5 |
| **DRK0** | **Durika** | **2.96** | **215** | ⇓*i*P | Pg | 14 20 35.5 | -1.4 |
| DRK0 | | | | *i*S | Sb | 14 21 10.6 | +1.1 |
| **DRK0** | **Durika** | **2.96** | **215** | *e*P | Pg | 14 20 35.1 | -1.7 |
| **BCIP** | **Isla Barro Col** | **3.01** | **147** | *e*P | Pg | 14 20 37.3 | -0.5 |
| BCIP | | | | *e*S | Sg | 14 21 16.0 | -0.7 |
| **FRIJ** | **El Hiral** | **3.02** | **144** | *e*P | Pg | 14 20 37.2 | -0.9 |
| FRIJ | | | | *i*S | Sg | 14 21 15.5 | -1.8 |
| **BUS1** | **Rivas** | **3.06** | **226** | *e*P | Pb | 14 20 35.4 | +0.4 |
| **PSOM3** | **Paja de Sombre** | **3.10** | **195** | *e*P | Pg | 14 20 39.3 | -0.2 |
| **BRU2** | **Volcan** | **3.11** | **202** | *e*P | Pb | 14 20 36.7 | +1.1 |
| **BCO2** | **Palmira** | **3.13** | **199** | *e*P | Pb | 14 20 37.8 | +1.9 |
| BCO2 | | | | *e*S | Sb | 14 21 15.3 | +1.1 |
| **LCR2** | **La Lucha 2** | **3.13** | **232** | *e*P | Pb | 14 20 35.9 | -0.1 |
| LCR2 | | | | *e*S | Sb | 14 21 13.1 | -1.2 |
| **ZANG** | **Zanguenga, Cho** | **3.17** | **149** | ⇓*i*P | Pg | 14 20 39.9 | -1.0 |
| ZANG | | | | *i*S | Sg | 14 21 19.7 | -2.3 |
| **ABE2** | **San Pablo** | **3.19** | **232** | *e*P | Pb | 14 20 37.0 | 0.0 |
| ABE2 | | | | *e*S | Sb | 14 21 15.6 | -0.5 |
| **SAFE3** | **Santa Fe, Vera** | **3.19** | **172** | *i*P | Pg | 14 20 41.4 | +0.1 |
| SAFE3 | | | | *i*S | Sg | 14 21 20.8 | -1.9 |
| **ARRA3** | **Arraijan, Pana** | **3.27** | **146** | *e*P | Pg | 14 20 40.8 | -2.0 |
| **UPA** | **Univ. de Panam** | **3.33** | **144** | *e*P | Pg | 14 20 44.3 | +0.4 |
| **CHPO** | **Chepo, Panama** | **3.44** | **137** | ⇑*e*P | Pg | 14 20 47.1 | +0.9 |
| **SFRA3** | **San Francisco,** | **3.47** | **171** | *e*P | Pb | 14 20 38.5 | -3.1 |
| **CRIS3** | **El Cristo, Coc** | **3.53** | **165** | *e*P | Pg | 14 20 45.5 | -2.4 |
| **MESA3** | **La Mesa, Verag** | **3.54** | **175** | ⇓*e*P | Pg | 14 20 47.6 | -0.5 |
| **JTS** | **Las Juntas de** | **3.66** | **248** | *e*P | Pn | 14 20 40.0 | +3.2 |
| **CHIT3** | **Chitre** | **3.87** | **164** | *e*P | Pb | 14 20 50.7 | +2.2 |
| **GMAL** | **Guarumal, Vera** | **3.92** | **176** | *e*P | Pb | 14 20 49.3 | 0.0 |
| **MARI3** | **Mariato, Verag** | **4.06** | **173** | *e*P | Pb | 14 20 52.5 | +0.8 |
| **AZU** | **Azuero** | **4.07** | **162** | *e*P | Pb | 14 20 54.2 | +2.3 |
| AZU | | | | *e*S | Sb | 14 21 40.4 | -0.7 |
| **CACAO** | **El Cacao, Vera** | **4.37** | **172** | *e*P | Pb | 14 20 56.9 | -0.2 |
| **UPD2** | **Meteti** | **4.65** | **132** | *e*P | Pb | 14 21 01.9 | 0.0 |
| **UREC** | **San Jos de Ur** | **7.08** | **123** | *e*P | Pb | 14 21 35.7 | -7.5 |

### IDC 14 14:22:37.4±52.0, 22°.35S×174°.01W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=979.4km s-min=177.1km az=87.0, Tonga Islands region

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **40.41** | **247** | P | P | 14 30 16.2 | -1.2 |
| | 1.9nm,0.5s,baz=84,slow=10,SNR=4.8 | |

*IDC **14** 14:26:06.3±0.8,28°.19N×139°.53E,h432$^{km}_{\pm 13}$,mb3.0/9, mbtmp3.8/12, Error ellipse: s-maj=30.7km s-min=13.3km az=71.0*

*NEIC **14** 14:26:06.2±1.9,28°.2N±0°.2×139°.6E±0°.2,h438$^{km}_{\pm 14}$, mb4.1/8, Error ellipse: s-maj=29.5km s-min=23.2km az=200.0*

**ISC 14 14:26:06.5±0.7,28°.1N±0°.1×139°.6E±0°.1,h450km,n31, σ2$^{s}$19/32,mb3.4/13,3C,Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **2.50** | **113** | P | **P** | **14 27 08.6** | **-1.4** |
| **JCJ** | **Chichijima** | **2.50** | **113** | P | **P** | **14 27 08.8** | **-1.3** |
| | 48nm,0.3s,baz=280,slow=24,SNR=11 | | | | | | |
| JCJ | | | | S | **S** | **14 28 00.1** | **-1.5** |
| | 66nm,0.3s,baz=251,slow=23,SNR=11 | | | | | | |
| **JSG** | **Sagara** | **6.67** | **350** | P | **P** | **14 27 44.7** | **-2.8** |
| **INU** | **Inuyama** | **7.56** | **344** | P | **P** | **14 27 55.9** | **-1.1** |
| **MJAR** | **Matsushiro Arr** | **8.50** | **352** | P | **P** | **14 28 05.8** | **-1.5** |
| | 1.1nm,0.4s,baz=168,slow=11,SNR=15 | | | | | | |
| **MAJO** | **Matsushiro** | **8.50** | **352** | P | **P** | **14 28 05.3** | **-1.9** |
| **MJB9** | **Matsu-Tunnel** | **8.51** | **352** | P | **P** | **14 28 05.5** | **-1.8** |
| **JMM** | **Marumori** | **9.79** | **6** | P | **P** | **14 28 20.3** | **-0.9** |
| **JTM** | **Tenmabayashi** | **12.71** | **5** | P | **P** | **14 28 54.2** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **17.19** | **341** | P | **P** | **14 29 39.8** | **-0.8** |
| | 1.9nm,0.6s,baz=131,slow=8.6,SNR=4.6 | | | | | | |
| **MA2** | **Magadan** | **32.39** | **11** | P | **P** | **14 31 58.5** | **+1.3** |
| **SONM** | **Songino Array** | **32.41** | **316** | P | **P** | **14 31 58.1** | **+0.5** |
| **SONM** | **Songino Array** | **32.41** | **316** | P | **P** | **14 31 57.4** | **-0.2** |
| | 0.5nm,0.4s,baz=123,slow=8.2,SNR=3.5 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ADK** | **Adak** | **40.23** | **42** | P | **P** | **14 33 03.2** | **+0.9** |
| ADK | | | | IAmb | IAmb | 14 33 31.1 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.03** | **187** | P | **P** | **14 34 07.0** | **+3.4** |
| | comp=Z,1.0nm,1.0s,baz=2.2,slow=8.2,SNR=6.2 | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.07** | **309** | P | **P** | **14 34 04.2** | **+0.6** |
| | comp=Z,0.3nm,0.4s,baz=94,slow=8.9,SNR=4.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Array** | **50.70** | **314** | P | **P** | **14 34 23.6** | **+0.6** |
| | comp=Z,0.6nm,0.3s,baz=90,slow=7.0,SNR=9.1 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **51.76** | **187** | P | **P** | **14 34 31.1** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=85,slow=8.3,SNR=5.9 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **L16K** | **Owhat River** | **51.94** | **32** | P | **P** | **14 34 31.4** | **-0.5** |
| L16K | | | | IAmb | IAmb | 14 34 31.7 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **SPU** | **Mount Spurr** | **55.40** | **33** | P | **P** | **14 34 55.7** | **-0.9** |
| SPU | | | | IAmb | IAmb | 14 35 25.6 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **CNPM** | **China Poot** | **55.72** | **35** | P | **P** | **14 34 58.7** | **-0.1** |
| **BVAR** | **Borovoye Array** | **55.75** | **317** | P | **P** | **14 34 59.2** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=80,slow=9.2,SNR=4.6 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **KKAR** | **Karatay Array** | **56.64** | **305** | P | **P** | **14 35 06.4** | **+0.9** |
| **H23K** | **Yukon River** | **56.89** | **28** | P | **P** | **14 35 06.8** | **-0.1** |
| H23K | | | | IAmb | IAmb | 14 35 08.1 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **62.75** | **314** | P | **P** | **14 35 46.6** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **71.84** | **340** | P | **P** | **14 36 42.6** | **+0.5** |
| | comp=Z,2.1nm,0.9s,baz=64,slow=6.5,SNR=1.6 | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **76.03** | **333** | P | **P** | **14 37 06.5** | **+0.4** |
| | comp=Z,0.7nm,0.4s,baz=60,slow=5.4,SNR=11 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.68** | **51** | P | **P** | **14 37 39.0** | **+1.9** |
| | comp=Z,0.4nm,0.6s,baz=305,slow=3.2,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **133.32** | **194** | ⇑P | **Pdif** | **14 41 28.1** | **-1.6** |
| | comp=Z,0.3nm,0.2s,baz=332,slow=14 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **133.55** | **193** | ⇑P | **Pdif** | **14 41 25.7** | **-5.0** |
| | comp=Z,0.2nm,0.2s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **133.72** | **194** | ⇑P | **Pdif** | **14 41 23.5** | **-8.0** |
| | comp=Z,0.3nm,0.2s | | | | | | |

*NEIC **14** 14:38:44.4±1.4,20°.1S±0°.2×175°.8W±0°.1,h188$^{km}_{\pm 13}$, mb4.9/22, Error ellipse: s-maj=27.9km s-min=15.3km az=191.0*

*NOU **14** 14:38:47.1,20°.77S×175°.90W,h141km,mb4.6/18, Tonga Islands*

*IDC **14** 14:38:49.4±2.6,20°.33S×176°.04W,h226$^{km}_{\pm 25}$km,mb3.5/6, mbtmp4.3/10, Error ellipse: s-maj=22.5km s-min=17.6km az=169.0*

**ISC 14 14:38:47.7±0.7,20°.5S±0°.1×175°.84W±0°.07,h211km,n57, σ1$^{s}$81/57,mb4.7/18,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **5.73** | **77** | Pn | Pn | 14 40 06.2 | -5.5 |
| **MSVF** | **Nonsavu** | **6.39** | **294** | P | **Pn** | **14 40 20.5** | **+0.2** |
| **MSVF** | **Nonsavu** | **6.39** | **294** | Pn | **Pn** | **14 40 18.0** | **-2.3** |
| **MSVF** | **Nonsavu** | **6.39** | **294** | P | **Pn** | **14 40 19.7** | **-0.5** |
| | 20nm,0.7s,baz=107,slow=17,SNR=16 | | | | | | |
| **AFI** | **Afiamalu** | **7.59** | **31** | Pn | Pn | 14 40 26.0 | -10 |
| **RAR** | **Rarotonga** | **15.04** | **96** | P | **P** | **14 42 13.1** | **+2.7** |
| | 14nm,0.9s,baz=233,slow=5.1,SNR=1.5 | | | | | | |
| RAR | | | | S | **S** | **14 44 52.3** | **-4.2** |
| | 5.0nm,0.6s,baz=269,slow=14,SNR=1.5 | | | | | | |
| **DVP** | **Devils Point** | **15.35** | **278** | P | **P** | **14 42 16.8** | **+3.0** |
| **PINNC** | **Pines Island,** | **15.70** | **259** | P | **Pn** | **14 42 20.8** | **+2.8** |
| **LIFNC** | **LIFOU** | **15.85** | **266** | P | **Pn** | **14 42 20.2** | **+0.4** |
| **YATNC** | **Mamie plateau,** | **16.18** | **261** | P | **Pn** | **14 42 25.8** | **+2.0** |
| **DZM** | **Mont Dzumac** | **16.59** | **261** | P | **Pn** | **14 42 30.3** | **+1.5** |
| **DZM** | **Mont Dzumac** | **16.59** | **261** | P | **Pn** | **14 42 29.1** | **+0.3** |
| **DZM** | **Mont Dzumac** | **16.59** | **261** | P | **Pn** | **14 42 27.5** | **-1.3** |
| | 22nm,0.6s,baz=62,slow=20,SNR=26 | | | | | | |
| **ONTNC** | **Ouen Toro** | **16.60** | **260** | P | **Pn** | **14 42 30.0** | **+1.3** |
| **NOUC** | **Port Laguerre** | **16.73** | **261** | P | **Pn** | **14 42 31.5** | **+1.2** |
| **KOUNC** | **Koumac, New Ca** | **18.62** | **266** | P | **Pn** | **14 42 54.4** | **+1.8** |
| **URZ** | **Urewera** | **18.75** | **197** | P | **P** | **14 42 51.1** | **+0.2** |
| **URZ** | **Urewera** | **18.75** | **197** | P | **P** | **14 42 51.4** | **+0.6** |
| | 4.2nm,0.3s,baz=347,slow=3.4,SNR=10.0 | | | | | | |
| URZ | | | | S | **S** | **14 46 08.4** | **-4.6** |
| | 4.3nm,0.4s,baz=113,slow=19,SNR=7.4 | | | | | | |
| **BKZ** | **Black Stump Fm** | **19.77** | **198** | P | **P** | **14 43 02.4** | **+0.5** |
| **QRZ** | **Quartz Range** | **22.59** | **203** | P | **P** | **14 43 32.4** | **+2.1** |
| **MRNZ** | **Matariki Terra** | **23.00** | **202** | P | **P** | **14 43 36.0** | **+1.9** |
| **KHZ** | **Kahutara** | **23.65** | **200** | P | **P** | **14 43 42.8** | **+3.0** |
| **GVZ** | **Greta Valley S** | **24.30** | **200** | P | **P** | **14 43 48.0** | **+2.2** |
| **LTZ** | **Lake Taylor** | **24.39** | **202** | P | **P** | **14 43 48.8** | **+2.1** |
| LTZ | | | | IAmb | IAmb | 14 44 15.2 | |
| | comp=Z,76nm,1.6s | | | | | | |
| **INZ** | **Inchbonnie** | **24.64** | **203** | P | **P** | **14 43 50.3** | **+1.5** |
| INZ | | | | IAmb | IAmb | 14 44 17.8 | |
| | comp=Z,51nm,1.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **25.64** | **202** | P | **P** | **14 44 01.3** | **+3.4** |
| **LBZ** | **Lake Benmore** | **26.53** | **203** | P | **P** | **14 44 06.6** | **+0.7** |
| **JCZ** | **Jackson Bay** | **26.80** | **205** | P | **P** | **14 44 11.7** | **+3.3** |
| **EIDS** | **Eidsvold** | **30.81** | **255** | P | **P** | **14 44 43.8** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 14 44 53.8 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **34.22** | **237** | P | **P** | **14 45 13.0** | **-0.6** |
| CAN | | | | IAmb | IAmb | 14 45 25.6 | |
| | comp=Z,50nm,1.6s | | | | | | |
| **CTAO** | **Charters Tower** | **35.51** | **264** | P | **P** | **14 45 23.3** | **-1.5** |
| CTAO | | | | IAmb | IAmb | 14 45 25.2 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **35.51** | **264** | P | **P** | **14 45 24.5** | **-0.3** |
| **COEN** | **Coen** | **39.61** | **273** | P | **P** | **14 45 58.6** | **-0.5** |
| COEN | | | | IAmb | IAmb | 14 46 19.5 | |
| | comp=Z,109nm,1.8s | | | | | | |
| **STKA** | **Stephens Creek** | **39.63** | **244** | P | **P** | **14 45 58.4** | **-0.7** |
| **STKA** | **Stephens Creek** | **39.63** | **244** | P | **P** | **14 45 58.1** | **-1.0** |
| | comp=Z,5.6nm,0.9s,baz=70,slow=10.0,SNR=6.5 | | | | | | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **44.38** | **244** | P | **P** | **14 46 36.8** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 14 48 01.5 | |
| | comp=Z,125nm,1.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.42** | **262** | P | **P** | **14 46 52.3** | **-1.3** |
| WR0 | | | | IAmb | IAmb | 14 48 15.0 | |
| | comp=Z,40nm,1.9s | | | | | | |
| **AS31** | **Alice Springs** | **46.50** | **256** | P | **P** | **14 46 53.4** | **-0.9** |
| **ASAR** | **Alice Springs** | **46.50** | **256** | P | **P** | **14 46 53.3** | **-1.0** |
| **ASAR** | **Alice Springs** | **46.50** | **256** | P | **P** | **14 46 53.4** | **-0.9** |
| | comp=Z,5.1nm,0.6s,baz=99,slow=8.4,SNR=80 | | | | | | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.59** | **262** | P | **P** | **14 46 53.3** | **-1.7** |
| **WB2** | **Warramunga Arr** | **46.60** | **262** | P | **P** | **14 46 53.4** | **-1.6** |
| **WRAB** | **Tennant Creek** | **46.60** | **262** | P | **P** | **14 46 53.4** | **-1.7** |
| WRAB | | | | IAmb | IAmb | 14 47 27.9 | |
| | comp=Z,35nm,1.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.61** | **262** | P | **P** | **14 46 53.5** | **-1.7** |
| | comp=Z,3.9nm,0.5s,baz=97,slow=7.6,SNR=93 | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **51.19** | **270** | P | **P** | **14 47 28.5** | **-1.4** |
| MTN | | | | IAmb | IAmb | 14 48 58.9 | |
| | comp=Z,99nm,1.9s | | | | | | |
| **KNRA** | **Kununurra** | **52.68** | **266** | P | **P** | **14 47 40.1** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 14 47 41.2 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **53.47** | **282** | P | **P** | **14 47 45.4** | **-1.3** |
| **FITZ** | **Fitzroy Crossi** | **55.04** | **262** | P | **P** | **14 47 57.7** | **-0.2** |
| **MBWA** | **Marble Bar** | **59.84** | **257** | P | **P** | **14 48 30.9** | **-0.5** |
| MBWA | | | | IAmb | IAmb | 14 50 14.2 | |
| | comp=Z,55nm,1.8s | | | | | | |
| **MBWA** | **Marble Bar** | **59.84** | **257** | P | **P** | **14 48 31.8** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **60.19** | **243** | P | **P** | **14 48 32.8** | **-0.9** |
| **QSPA** | **South Pole Qui** | **69.60** | **180** | P | **P** | **14 49 36.1** | **+2.2** |
| **QSPA** | **South Pole Qui** | **69.60** | **180** | P | **P** | **14 49 35.8** | **+1.9** |
| | comp=Z,2.0nm,0.3s,baz=58,slow=1.4,SNR=9.4 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.60** | **180** | P | **P** | **14 49 36.5** | **+2.6** |
| **NVAR** | **Mina Array Bea** | **79.62** | **42** | P | **P** | **14 50 32.1** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=228,slow=4.8,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.34** | **57** | P | **P** | **14 51 01.5** | **0.0** |
| | comp=Z,0.2nm,0.7s,baz=211,slow=8.6,SNR=4.2 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **148.30** | **314** | PKPbc | **PKPbc** | **14 58 08.4** | **-0.9** |
| | comp=Z,0.7nm,0.5s,baz=174,slow=2.9,SNR=4.0 | | | | | | |

*AEIC **14** 14:49:57.4±1.0,69°.47N±0°.02×144°.21W±0°.06,h7km±3km, ML4.2,mb4.2/6(NEIC),ML4.2/116(NEIC),Mwr4.3/45(NEIC), Error ellipse: s-maj=3.3km s-min=3.0km az=196.0*

*NEIC **14** 14:49:58.1±1.9,69°.47N±0°.01×144°.19W±0°.06,h10$^{km}_{\pm 1}$km, Error ellipse: s-maj=3.6km s-min=2.8km az=297.0, Moment Tensor Solution. Moment tensor: Scale 10$^{15}$Nm; $M_{rr}$=0.74; $M_{\theta\theta}$=2.59; $M_{\phi\phi}$=3.33; $M_{r\theta}$=-0.03; $M_{\theta\phi}$=-2.41; $M_{\phi r}$=1.40; Fault plane solution: $M_o$=4.12000×10$^{15}$ NP1: $\phi_s$=294.52000°,$\delta$=72.89000°,$\lambda$=176.87000°. NP2: $\phi_s$=25.44000°,$\delta$=87.01000°,$\lambda$=17.13000°. Principal axes: T 4.5237, Plg14.0000°, Azm251.0000°; N -1.0019, Plg73.0000°, Azm35.0000°; P -3.5218, Plg10.0000°, Azm159.0000°;*

*NEIC **14** 14:49:58.3,69°.50N×144°.19W,h0km*

*IDC **14** 14:49:59.4±0.6,69°.70N×144°.06W,h0km,mb3.9/20, mbtmp3.9/24,ML4.0/4,MS3.6/41,Error ellipse: s-maj=15.2km s-min=10.2km az=47.0*

**ISC 14 14:49:59.8±0.4,69°.51N±0°.04×144°.15W±0°.03,h10km, n217,σ1$^{s}$25/167,mb4.0/26,MS3.6/38,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.19** | **53** | | **Pg** | **14 50 02.1** | **-1.7** |
| **C26K** | **Camden Bay** | **0.49** | **327** | | **Pg** | **14 50 07.9** | **-1.4** |
| C26K | | | | | **Sg** | **14 50 15.4** | **-0.3** |
| **D25K** | **Kavik River** | **0.81** | **257** | | **Pg** | **14 50 12.1** | **-3.3** |
| **D25K** | **Kavik River** | **0.81** | **257** | | **Sg** | **14 50 23.8** | **-2.1** |
| **D25K** | **Kavik River** | **0.81** | **257** | IAML | | 14 50 26.8 | |
| | comp=E,3μm,0.6s | | | | | | |
| D25K | | | | IAML | | 14 50 29.7 | |
| | comp=N,4μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.16** | **102** | | **Sb** | **14 50 36.4** | **-0.6** |
| **D27M** | **Malcolm River** | **1.16** | **102** | | **Pb** | **14 50 19.8** | **-2.2** |
| **D27M** | **Malcolm River** | **1.16** | **102** | IAML | | 14 50 45.2 | |
| | comp=E,3μm,0.6s | | | | | | |
| D27M | | | | IAML | | 14 50 46.3 | |
| | comp=N,4μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.61** | **280** | | **Pn** | **14 50 27.2** | **-0.9** |
| C24K | | | | | **Sn** | **14 50 49.7** | **+0.8** |
| **C24K** | **Franklin Bluff** | **1.61** | **280** | IAML | | 14 50 51.8 | |
| | comp=N,3μm,0.7s | | | | | | |
| C24K | | | | IAML | | 14 50 54.6 | |
| | comp=E,3μm,1.2s | | | | | | |
| **E27K** | **Coleen River** | **1.62** | **144** | Pn | **Pn** | **14 50 27.9** | **-0.5** |
| E27K | | | | IAML | | 14 50 56.2 | |
| | comp=E,2μm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.70** | **260** | | **Sb** | **14 50 52.8** | **+0.4** |
| **D24K** | **Happy Valley** | **1.70** | **260** | Pn | **Pn** | **14 50 26.4** | **-3.0** |
| **D24K** | **Happy Valley** | **1.70** | **260** | IAML | | 14 50 55.0 | |
| | comp=N,4μm,0.6s | | | | | | |
| D24K | | | | IAML | | 14 50 60.0 | |
| | comp=E,4μm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **180** | | **Sb** | **14 50 56.0** | **-0.1** |
| **F26K** | **Sheenjek River** | **1.82** | **180** | Pn | **Pn** | **14 50 31.6** | **+0.4** |
| F26K | | | | IAML | | 14 50 58.6 | |
| | comp=E,3μm,0.5s | | | | | | |
| F26K | | | | IAML | | 14 51 01.9 | |
| | comp=N,2μm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.89** | **117** | Pn | **Pn** | **14 50 29.8** | **-2.3** |
| **D28M** | **Stokes Point** | **1.92** | **93** | | **Sg** | **14 51 00.9** | **-0.6** |
| **D28M** | **Stokes Point** | **1.92** | **93** | | **Pn** | **14 50 30.5** | **-2.0** |
| D28M | | | | IAML | | 14 51 08.7 | |
| | comp=N,2μm,1.3s | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **197** | | **Pn** | **14 50 33.7** | **0.0** |
| F25K | | | | IAML | | 14 51 05.7 | |
| | comp=N,2μm,1.4s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.10** | **185** | | **Pn** | **14 50 35.3** | **+0.3** |
| **TOLK** | **Toolik Lake Re** | **2.13** | **248** | Pn | **Pn** | **14 50 34.5** | **-0.9** |
| TOLK | | | | IAML | | 14 51 14.7 | |
| | comp=N,1μm,1.2s | | | | | | |
| TOLK | | | | IAML | | 14 51 15.4 | |
| | comp=E,2μm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.14** | **230** | Pn | **Pn** | **14 50 35.2** | **-0.3** |
| **C23K** | **Itkillik River** | **2.28** | **281** | Pn | **Pn** | **14 50 36.4** | **-1.0** |
| C23K | | | | IAML | | 14 51 18.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.39** | **260** | | **Pn** | **14 50 37.9** | **-1.0** |
| D23K | | | | IAML | | 14 51 22.4 | |
| | comp=E,1μm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **216** | Pn | **Pn** | **14 50 39.0** | **-0.5** |
| **E23K** | **Chandalar** | **2.47** | **236** | | **Pn** | **14 50 39.5** | **-0.6** |
| E23K | | | | IAML | | 14 51 21.0 | |
| | comp=N,1μm,1.1s | | | | | | |
| E23K | | | | IAML | | 14 51 25.3 | |
| | comp=E,1μm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.47** | **138** | Pn | **Pn** | **14 50 40.2** | **+0.1** |
| F28M | | | | IAML | | 14 51 24.2 | |
| | comp=N,935nm,1.1s | | | | | | |
| **E29M** | **Blow River** | **2.52** | **114** | Pn | **Pn** | **14 50 41.6** | **+0.8** |
| E29M | | | | IAML | | 14 51 28.4 | |
| | comp=N,1μm,0.8s | | | | | | |
| **G27K** | **Doyon Strip** | **2.87** | **160** | | **Pn** | **14 50 45.5** | **-0.1** |
| **FYU** | **Fort Yukon** | **2.99** | **188** | Pn | **Pn** | **14 50 46.9** | **-0.2** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **205** | Pn | **Pn** | **14 50 47.7** | **-0.8** |
| **D22K** | **Ayikyak River** | **3.11** | **262** | Pn | **Pn** | **14 50 47.5** | **-1.3** |
| D22K | | | | IAML | | 14 51 46.3 | |
| | comp=E,878nm,1.4s | | | | | | |
| D22K | | | | IAML | | 14 51 54.3 | |
| | comp=N,733nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.30** | **289** | Pn | **Pn** | **14 50 50.5** | **-0.9** |
| **H25L** | **Birch Creek** | **3.32** | **192** | | **Pn** | **14 50 51.8** | **+0.1** |
| **H27K** | **Steamboat Moun** | **3.44** | **162** | | **Pn** | **14 50 54.0** | **+0.5** |
| **G29M** | **Pine Creek** | **3.47** | **136** | | **Pn** | **14 50 53.8** | **0.0** |
| **G29M** | **Pine Creek** | **3.47** | **136** | IAML | | 14 51 54.1 | |
| | comp=N,640nm,1.1s | | | | | | |
| **G23K** | **Bananza Creek** | **3.57** | **221** | Pn | **Pn** | **14 50 53.6** | **-1.6** |
| G23K | | | | IAML | | 14 51 57.3 | |
| | comp=E,612nm,1.1s | | | | | | |
| G23K | | | | IAML | | 14 51 57.3 | |
| | comp=N,620nm,0.9s | | | | | | |
| **F22K** | **John River** | **3.57** | **240** | | **Pn** | **14 50 54.8** | **-0.4** |
| **F30M** | **Barrier River** | **3.62** | **118** | | **Pn** | **14 50 56.4** | **+0.6** |
| **B21K** | **Ikpikpuk River** | **3.67** | **277** | Pn | **Pn** | **14 50 56.0** | **-0.5** |
| B21K | | | | IAML | | 14 52 15.4 | |
| | comp=E,591nm,1.0s | | | | | | |
| **E21K** | **Killik River** | **3.70** | **258** | | **Pn** | **14 50 56.0** | **-0.9** |
| **E21K** | **Killik River** | **3.70** | **258** | IAML | | 14 52 04.7 | |
| | comp=E,572nm,1.1s | | | | | | |
| E21K | | | | IAML | | 14 52 17.5 | |
| | comp=N,475nm,0.7s | | | | | | |
| **G30M** | **tAoh Zrail Nji** | **3.89** | **127** | | **Pn** | **14 50 59.6** | **0.0** |
| **G30M** | **tAoh Zrail Nji** | **3.89** | **127** | IAML | | 14 52 17.0 | |
| | comp=N,271nm,1.3s | | | | | | |
| **H24K** | **Noodor Dome** | **3.95** | **203** | IAML | | 14 52 12.6 | |
| | comp=E,346nm,1.4s | | | | | | |
| H24K | | | | IAML | | 14 52 20.7 | |
| | comp=N,312nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **3.96** | **144** | | **Pn** | **14 51 01.1** | **+0.6** |
| **H29M** | **Whitestone** | **3.96** | **144** | IAML | | 14 52 23.9 | |
| | comp=N,319nm,1.4s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.96** | **297** | | **Pn** | **14 50 59.7** | **-0.8** |
| **INK** | **Inuvik** | **4.03** | **102** | Pn | **Pn** | **14 51 02.0** | **+0.7** |
| **INK** | **Inuvik** | **4.03** | **102** | Pn | **Pn** | **14 51 01.4** | **+0.1** |
| | comp=N,5.0nm,0.3s,baz=315,slow=12,SNR=13 | | | | | | |
| INK | | | | Sn | **Sn** | **14 51 47.9** | **-0.6** |
| | comp=N,6.4nm,0.3s,baz=290,slow=19,SNR=5.6 | | | | | | |
| INK | | | | Lg | Lg | 14 52 06.2 | |
| | comp=N,8.2nm,0.3s,baz=35,slow=25,SNR=5.0 | | | | | | |
| INK | | | | LR | LR | 14 52 23.1 | |
| | comp=N,265nm,21.0s,baz=292,slow=36 | | | | | | |
| | comp=N,18nm,0.5s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05** | **188** | Pn | **Pn** | **14 51 01.7** | **-0.1** |
| PRP | | | | IAML | | 14 52 13.4 | |
| | comp=E,294nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.15** | **241** | | **Pn** | **14 51 02.7** | **-0.4** |
| **F21K** | **Alatna River** | **4.15** | **241** | IAML | | 14 52 16.8 | |
| | comp=N,292nm,1.5s | | | | | | |
| F21K | | | | IAML | | 14 52 17.5 | |
| | comp=E,375nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.23** | **212** | IAML | | 14 52 18.4 | |
| | comp=N,377nm,0.8s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.36** | **114** | Pn | **Pn** | **14 51 06.8** | **+0.9** |
| F31M | | | | IAML | | 14 52 26.5 | |
| | comp=E,249nm,1.1s | | | | | | |
| F31M | | | | IAML | | 14 52 27.1 | |
| | comp=N,201nm,1.4s | | | | | | |
| **I28M** | **Miner Creek** | **4.39** | **156** | IAML | | 14 52 05.7 | |
| | comp=N,232nm,0.6s | | | | | | |
| I28M | | | | IAML | | 14 52 39.2 | |
| | comp=E,270nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.50** | **121** | Pn | **Pn** | **14 51 08.1** | **+0.1** |
| G31M | | | | IAML | | 14 52 30.9 | |
| | comp=E,255nm,1.4s | | | | | | |
| **E20K** | **Nigu River** | **4.53** | **260** | | **Pn** | **14 51 08.6** | **+0.2** |
| **D20K** | **Etivluk River** | **4.53** | **266** | | **Pn** | **14 51 08.1** | **-0.2** |
| **B20K** | **Meade River** | **4.55** | **282** | Pn | **Pn** | **14 51 07.7** | **-0.8** |
| **A21K** | **Barrow** | **4.57** | **299** | | **Pn** | **14 51 08.4** | **-0.4** |
| **POKR** | **Poker Plat Res** | **4.59** | **198** | | **Pn** | **14 51 08.8** | **-0.4** |
| **POKR** | **Poker Plat Res** | **4.59** | **198** | IAML | | 14 52 35.9 | |
| | comp=E,266nm,1.1s | | | | | | |
| POKR | | | | IAML | | 14 52 39.0 | |
| | comp=N,233nm,0.8s | | | | | | |
| **G21K** | **Allakaket** | **4.62** | **234** | | **Pn** | **14 51 08.6** | **-1.0** |
| **I29M** | **Ogilvie Camp,** | **4.74** | **149** | Pn | **Pn** | **14 51 11.1** | **-0.1** |
| I29M | | | | IAML | | 14 52 39.8 | |
| | comp=N,171nm,1.3s | | | | | | |
| I29M | | | | IAML | | 14 52 49.0 | |
| | comp=E,202nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.82** | **207** | | **Pn** | **14 51 11.8** | **-0.5** |
| **I23K** | **Minto, Yukon-K** | **4.82** | **207** | IAML | | 14 52 40.8 | |
| | comp=N,222nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **201** | | **Pn** | **14 51 12.1** | **-0.5** |
| **MDM** | **Murphy Dome** | **4.84** | **201** | IAML | | 14 52 31.0 | |
| | comp=E,217nm,0.9s | | | | | | |
| MDM | | | | IAML | | 14 52 38.0 | |
| | comp=N,187nm,0.8s | | | | | | |
| **COLA** | **College** | **4.88** | **199** | | **Pn** | **14 51 13.9** | **+0.9** |
| **ILAR** | **Eielson Array** | **4.88** | **194** | | **Pn** | **14 51 12.9** | **-0.2** |
| **ILAR** | **Eielson Array** | **4.88** | **194** | Pn | **Pn** | **14 51 13.2** | **+0.1** |
| | comp=N,5.5nm,0.3s,baz=4.9,slow=13,SNR=198 | | | | | | |
| ILAR | | | | Sn | **Sn** | **14 52 11.8** | **+2.2** |
| | comp=N,9.4nm,0.3s,baz=10,slow=22,SNR=8.4 | | | | | | |
| ILAR | | | | LR | LR | 14 53 26.9 | |
| | comp=N,376nm,20.1s,baz=53,slow=41 | | | | | | |
| | comp=N,25nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **4.90** | **165** | | **Pn** | **14 51 13.7** | **+0.4** |
| **EGAK** | **Eagle** | **4.90** | **165** | IAML | | 14 52 13.2 | |
| | comp=N,208nm,1.0s | | | | | | |
| EGAK | | | | IAML | | 14 52 16.9 | |
| | comp=N,204nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **4.94** | **186** | IAML | | 14 52 52.5 | |
| | comp=N,145nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.96** | **246** | | **Pn** | **14 51 13.7** | **-0.4** |
| **F20K** | **Avaraart Lake** | **4.96** | **246** | IAML | | 14 52 48.3 | |
| | comp=N,194nm,1.2s | | | | | | |
| **J26L** | **Joseph Creek** | **5.04** | **177** | | **Pn** | **14 51 15.5** | **+0.1** |
| **J26L** | **Joseph Creek** | **5.04** | **177** | IAML | | 14 52 24.4 | |
| | comp=N,137nm,0.7s | | | | | | |
| J26L | | | | IAML | | 14 52 50.4 | |
| | comp=E,156nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **198** | IAML | | 14 52 16.5 | |
| | comp=E,126nm,0.6s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.09** | **225** | | **Pn** | **14 51 15.4** | **-0.7** |
| **H21K** | **Melozitna Rive** | **5.09** | **225** | IAML | | 14 52 52.1 | |
| | comp=E,175nm,1.0s | | | | | | |
| H21K | | | | IAML | | 14 52 58.3 | |
| | comp=N,139nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **5.12** | **265** | | **Pn** | **14 51 16.0** | **-0.5** |
| **D19K** | **Kuna River** | **5.12** | **265** | IAML | | 14 52 56.2 | |
| | comp=E,120nm,1.2s | | | | | | |
| **HDA** | **Harding Lake** | **5.24** | **193** | | **Pn** | **14 51 18.6** | **+0.5** |
| **I30M** | **Mount Dempster** | **5.25** | **141** | | **Pn** | **14 51 18.2** | **0.0** |
| **I30M

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **12.34** | **202** | LR | LR | 14 58 03.6 | |
| | comp=E,270nm,18.7s,baz=44,slow=39 | | | | | | |
| **DLBC** | **Dease Lake** | **12.68** | **144** | Pn | **Pn** | **14 53 01.0** | **+1.1** |
| | comp=E,0.3nm,0.3s,baz=348,slow=12,SNR=6.7 | | | | | | |
| DLBC | | | | Sn | **Sn** | **14 55 14.8** | **-6.1** |
| | comp=E,0.1nm,0.3s,baz=66,slow=26,SNR=2.1 | | | | | | |
| DLBC | | | | LR | LR | 14 58 13.4 | |
| | comp=E,438nm,19.1s,baz=336,slow=39 | | | | | | |
| | comp=E,4.2nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.79** | **106** | Pn | Pn | 14 53 10.6 | -4.4 |
| | comp=E,1.2nm,0.3s,baz=315,slow=13,SNR=41 | | | | | | |
| YKA | | | | Sn | Sn | 14 55 37.4 | -11 |
| | comp=E,0.9nm,0.3s,baz=308,slow=27,SNR=5.7 | | | | | | |
| | comp=E,4.6nm,0.6s | | | | | | |
| **EUNU** | **Eureka** | **17.37** | **29** | P | **Pn** | **14 54 02.0** | **+0.1** |
| **BBB** | **Bella Bella** | **18.94** | **148** | LR | LR | 15 01 14.5 | |
| | comp=E,95nm,20.6s,baz=340,slow=35 | | | | | | |
| **NEW** | **Newport** | **25.05** | **134** | LR | LR | 15 05 57.2 | |
| | comp=E,263nm,19.9s,baz=337,slow=38 | | | | | | |
| **SEY** | **Seymchan** | **25.28** | **287** | LR | LR | 15 08 01.0 | |
| | comp=E,130nm,18.7s,baz=149,slow=43 | | | | | | |
| **LON** | **Longmire** | **25.38** | **142** | P | **P** | **14 55 30.4** | **+3.6** |
| LON | | | | IAmb | IAmb | 14 55 32.5 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.48** | **250** | LR | LR | 15 07 02.6 | |
| | comp=Z,107nm,18.0s,baz=42,slow=40 | | | | | | |
| **EGMT** | **Eagleton** | **27.28** | **124** | P | **P** | **14 55 46.3** | **+2.2** |
| EGMT | | | | IAmb | IAmb | 14 55 49.2 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **FRB** | **Frobisher Bay** | **28.69** | **64** | LR | LR | 15 09 11.8 | |
| | comp=Z,183nm,19.9s,baz=330,slow=40 | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.82** | **268** | LR | LR | 15 09 06.4 | |
| | comp=Z,113nm,21.9s,baz=46,slow=37 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **31.56** | **49** | LR | LR | 15 11 16.6 | |
| | comp=Z,62nm,19.4s,baz=334,slow=41 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **32.07** | **7** | P | **P** | **14 56 24.5** | **-1.6** |
| | comp=Z,7.7nm,0.8s,baz=353,slow=10,SNR=4.4 | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **32.15** | **128** | P | **P** | **14 56 31.8** | **+4.4** |
| **PDAR** | **Pinedale Array** | **32.15** | **128** | P | **P** | **14 56 29.8** | **+2.4** |
| | comp=Z,1.1nm,0.6s,baz=359,slow=5.9,SNR=7.4 | | | | | | |
| PDAR | | | | LR | LR | 15 10 41.5 | |
| | comp=Z,116nm,18.3s,baz=342,slow=38 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **ELK** | **Elko** | **32.57** | **137** | LR | LR | 15 08 55.6 | |
| | comp=Z,74nm,20.6s,baz=348,slow=35 | | | | | | |
| **HWUT** | **Hardware Ranch** | **32.69** | **132** | P | **P** | **14 56 29.9** | **-2.1** |
| HWUT | | | | IAmb | IAmb | 14 56 35.9 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **33.23** | **301** | LR | LR | 15 10 54.4 | |
| | comp=Z,70nm,18.1s,baz=36,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.08** | **142** | P | **P** | **14 56 41.8** | **-2.5** |
| **NVAR** | **Mina Array Bea** | **34.08** | **142** | P | **P** | **14 56 46.5** | **+2.2** |
| | comp=Z,1.9nm,0.7s,baz=348,slow=7.5,SNR=13 | | | | | | |
| NVAR | | | | LR | LR | 15 11 11.9 | |
| | comp=Z,133nm,18.3s,baz=352,slow=37 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **CCUT** | **Cedar City** | **36.06** | **136** | P | **P** | **14 56 59.1** | **-2.2** |
| CCUT | | | | IAmb | IAmb | 14 57 07.0 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **SCHQ** | **Schefferville** | **36.09** | **73** | LR | LR | 15 14 08.1 | |
| | comp=Z,96nm,18.5s,baz=308,slow=40 | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.12** | **142** | LR | LR | 15 14 57.1 | |
| | comp=Z,192nm,18.2s,baz=339,slow=38 | | | | | | |
| **SADO** | **Sadowa** | **40.28** | **93** | LR | LR | 15 14 44.2 | |
| | comp=Z,47nm,18.3s,baz=358,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **40.31** | **129** | LR | LR | 15 14 55.3 | |
| | comp=Z,52nm,19.5s,baz=65,slow=37 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.03** | **6** | P | **P** | **14 57 43.3** | **+0.8** |
| | comp=Z,1.4nm,0.7s,baz=358,slow=9.5,SNR=1.6 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **43.07** | **287** | LR | LR | 15 19 40.4 | |
| | comp=Z,51nm,19.4s,baz=44,slow=41 | | | | | | |
| **ASAJ** | **Asahikawa** | **43.75** | **274** | LR | LR | 15 17 22.0 | |
| | comp=Z,80nm,19.3s,baz=46,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **46.37** | **128** | P | **P** | **14 58 28.1** | **+2.2** |
| | comp=Z,0.7nm,0.6s,baz=346,slow=6.3,SNR=8.0 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **TKL** | **Tuckaleechee C** | **46.77** | **104** | LR | LR | 15 18 28.0 | |
| | comp=Z,105nm,19.4s,baz=340,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.36** | **284** | P | **P** | **14 58 34.3** | **+0.9** |
| | comp=Z,1.7nm,0.6s,baz=27,slow=6.9,SNR=4.9 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **49.15** | **6** | P | **P** | **14 58 46.2** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=354,slow=7.3,SNR=6.5 | | | | | | |
| FINES | | | | LR | LR | 15 20 31.5 | |
| | comp=Z,28nm,18.6s,baz=6.0,slow=37 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **LPIG** | **La Paz** | **49.66** | **138** | LR | LR | 15 18 24.6 | |
| | comp=Z,75nm,21.3s,baz=18,slow=34 | | | | | | |
| **HFS** | **Hagfors** | **49.68** | **14** | P | **P** | **14 58 50.6** | **-0.5** |
| | comp=Z,1.9nm,0.6s,baz=349,slow=8.5,SNR=6.4 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.81** | **325** | P | **P** | **14 59 07.8** | **+0.6** |
| | comp=Z,0.5nm,0.4s,baz=23,slow=8.8,SNR=2.4 | | | | | | |
| ZALV | | | | LR | LR | 15 24 30.4 | |
| | comp=Z,39nm,19.0s,baz=23,slow=40 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Ar** | **52.01** | **273** | P | **P** | **14 59 11.7** | **+2.8** |
| | comp=Z,0.8nm,0.9s,baz=37,slow=10,SNR=4.7 | | | | | | |
| MJAR | | | | LR | LR | 15 23 12.1 | |
| | comp=Z,52nm,19.1s,baz=48,slow=38 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **52.22** | **307** | P | **P** | **14 59 11.1** | **+0.6** |
| | comp=Z,0.6nm,0.4s,baz=30,slow=8.0,SNR=1.9 | | | | | | |
| SONM | | | | LR | LR | 15 25 33.9 | |
| | comp=Z,102nm,18.3s,baz=42,slow=41 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.28** | **27** | P | **P** | **14 59 11.4** | **+0.7** |
| | comp=Z,0.8nm,0.5s,baz=334,slow=7.4,SNR=5.1 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **ARU** | **Arti** | **53.29** | **344** | LR | LR | 15 21 58.7 | |
| | comp=Z,39nm,21.9s,baz=6.5,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **54.77** | **283** | P | **P** | **14 59 29.6** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=17,slow=7.7,SNR=4.7 | | | | | | |
| KSRS | | | | LR | LR | 15 25 47.6 | |
| | comp=Z,50nm,18.2s,baz=20,slow=39 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **55.20** | **335** | LR | LR | 15 25 11.1 | |
| | comp=Z,32nm,18.9s,baz=24,slow=38 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.17** | **329** | P | **P** | **14 59 38.8** | **-0.3** |
| | comp=Z,1.4nm,0.8s,baz=13,slow=7.0,SNR=11 | | | | | | |
| KURBB | | | | LR | LR | 15 25 18.2 | |
| | comp=Z,42nm,21.6s,baz=180,slow=38 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.05** | **299** | *e*P | **P** | **14 59 46.4** | **+0.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,4.1s | | | | | | |
| **JNU** | **Nakatsue** | **57.66** | **278** | LR | LR | 15 25 20.8 | |
| | comp=Z,56nm,18.9s,baz=7.0,slow=37 | | | | | | |
| **BELG** | **Belogornoye** | **58.10** | **352** | LR | LR | 15 28 39.5 | |
| | comp=Z,19nm,18.5s,baz=334,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.11** | **325** | P | **P** | **14 59 58.6** | **-1.3** |
| | comp=Z,0.7nm,0.7s,baz=49,slow=8.3,SNR=7.3 | | | | | | |
| MKAR | | | | LR | LR | 15 29 05.1 | |
| | comp=Z,37nm,18.7s,baz=58,slow=40 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **60.00** | **5** | P | **P** | **15 00 05.2** | **-0.6** |
| | comp=Z,1.8nm,0.5s,baz=358,slow=6.7,SNR=6.1 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **CMIG** | **Matias Romero** | **60.45** | **124** | LR | LR | 15 30 31.2 | |
| | comp=Z,40nm,19.8s,baz=353,slow=40 | | | | | | |
| **WMQ** | **Urumqi** | **60.77** | **319** | *e*P | **P** | **15 00 14.1** | **+2.8** |
| WMQ | | | | LR | LR | | |
| | comp=Z,64nm,18.7s | | | | | | |
| **GERES** | **GERESS Array B** | **60.84** | **17** | P | **P** | **15 00 12.3** | **+0.5** |
| | comp=Z,0.4nm,0.4s,baz=347,slow=6.0,SNR=1.9 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **64.61** | **329** | LR | LR | 15 31 44.9 | |
| | comp=Z,37nm,18.9s,baz=14,slow=39 | | | | | | |
| **ESDC** | **Sonseca Array** | **67.27** | **32** | P | **P** | **15 00 53.7** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=340,slow=7.0,SNR=3.0 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **KSH** | **Kashi** | **67.36** | **327** | P | **P** | **15 00 58.3** | **+3.5** |
| **CHGR** | **Chuyangaron** | **69.40** | **333** | P | **P** | **15 01 06.6** | **-0.9** |
| **GUMO** | **Guam** | **70.72** | **257** | LR | LR | 15 31 27.8 | |
| | comp=Z,9.1nm,20.3s,baz=80,slow=35 | | | | | | |
| **BRTR** | **Keskin Array B** | **71.07** | **2** | P | **P** | **15 01 18.3** | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=2.2,slow=5.3,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **PZH** | **PanZhiHua** | **73.35** | **301** | P | **P** | **15 01 31.9** | **+0.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,210nm,4.8s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **76.86** | **96** | LR | LR | 15 36 41.7 | |
| | comp=Z,42nm,18.9s,slow=36 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **81.76** | **301** | P | **P** | **15 02 19.0** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=1.1,slow=7.3,SNR=6.0 | | | | | | |
| CMAR | | | | LR | LR | 15 43 53.8 | |
| | comp=Z,69nm,18.6s,baz=210,slow=40 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **MDP** | **Montagnes des** | **85.79** | **87** | LR | LR | 15 41 53.3 | |
| | comp=Z,31nm,18.0s,baz=337,slow=36 | | | | | | |
| **HNR** | **Honiara** | **87.57** | **235** | LR | LR | 15 38 27.7 | |
| | comp=Z,547nm,21.6s,baz=124,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **97.88** | **225** | LR | LR | 15 44 45.9 | |
| | comp=Z,54nm,19.4s,baz=26,slow=34 | | | | | | |

*IDC **14** 15:14:36.8±0.8,2°.32N×128°.95E,h0km,mb3.7/9,*
*mbtmp3.7/9,Error ellipse: s-maj=50.9km s-min=17.2km*
*az=75.0*
**ISC 14 15:14:42.2**±0.9,**2°.3N**±0°.2×**129°.0E**±0°.4,**h35**km,**n9,**
**σ0°78/11,mb3.8/9,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.76** | **167** | P | | **P** | **P** | **15 19 42.3** | **+0.6** |
| | 0.7nm,0.6s,baz=344,slow=10,SNR=12 | | | | | | | | |
| | 0.7nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.29** | **170** | P | | **P** | **P** | **15 20 14.2** | **-0.5** |
| | 0.3nm,0.4s,baz=353,slow=8.0,SNR=10 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **PcP** | **15 23 39.2** | **-1.3** |
| | 0.4nm,1.0s,baz=1.2,slow=2.1,SNR=1.7 | | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **ScP** | **15 27 19.2** | **+1.3** |
| | 0.2nm,0.7s,baz=342,slow=2.3,SNR=1.5 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **KSRS** | **Korea Array** | **34.96** | **359** | P | | **P** | **P** | **15 21 31.5** | **+0.5** |
| | 0.4nm,0.5s,baz=174,slow=9.3,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.09** | **13** | P | | **P** | **P** | **15 21 31.9** | **-0.2** |
| | 0.9nm,0.8s,baz=186,slow=8.3,SNR=4.8 | | | | | | | | |
| | 0.9nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.98** | **325** | P | | **P** | **P** | **15 24 45.5** | **+0.3** |
| | 1.6nm,0.6s,baz=119,slow=8.1,SNR=19 | | | | | | | | |
| | 1.6nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.85** | **332** | P | | **P** | **P** | **15 25 03.8** | **-0.6** |
| | 0.6nm,0.5s,baz=143,slow=5.0,SNR=2.2 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.12** | **327** | P | | **P** | **P** | **15 25 13.0** | **+0.1** |
| | 1.8nm,0.6s,baz=127,slow=6.0,SNR=29 | | | | | | | | |
| | 1.8nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **69.71** | **327** | P | | **P** | **P** | **15 25 48.3** | **-0.1** |
| | 1.3nm,0.6s,baz=125,slow=7.6,SNR=7.3 | | | | | | | | |
| | 1.3nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.39** | **25** | P | | **P** | **P** | **15 27 15.9** | **+0.2** |
| | 0.1nm,0.5s,baz=208,slow=30,SNR=1.7 | | | | | | | | |
| | 0.1nm,0.5s | | | | | | | | |

**TAP 14 15:17:12.0,23°.09N×121°.18E,h26km,ML1.3,2C,B,**
**Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ECS** | **Chishang** | **0.04** | **86** | *i* | P | | Pb | 15 17 17.3 | +0.9 |
| | baz=84 | | | | | | | | |
| ECS | | | | *i* | S | | Sb | 15 17 21.2 | +1.8 |
| | baz=84 | | | | | | | | |
| **EHD** | **Haiduan** | **0.06** | **23** | *i* | P | | Pb | 15 17 16.8 | +0.3 |
| | baz=9.0 | | | | | | | | |
| EHD | | | | | S | | Sb | 15 17 19.6 | 0.0 |
| | baz=9.0 | | | | | | | | |
| **FULB** | **Fuli** | **0.15** | **45** | *e* | P | | Pn | 15 17 18.2 | -0.5 |
| | baz=35 | | | | | | | | |
| FULB | | | | | S | | Sb | 15 17 21.7 | +1.0 |
| | baz=35 | | | | | | | | |
| **EDH** | **Donghe** | **0.17** | **137** | ⇑ | P | | Pb | 15 17 17.7 | +0.4 |
| | baz=129 | | | | | | | | |
| EDH | | | | *i* | S | | Sb | 15 17 21.6 | +0.7 |
| | baz=129 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.17** | **88** | *e* | P | | Pn | 15 17 19.4 | +0.4 |
| | baz=95 | | | | | | | | |
| CHKT | | | | *e* | S | | Sb | 15 17 22.5 | +1.5 |
| | baz=95 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.18** | **302** | *e* | P | | Pn | 15 17 18.4 | -0.8 |
| | baz=303 | | | | | | | | |
| ELDTW | | | | *e* | S | | Sb | 15 17 22.2 | +0.8 |
| | baz=303 | | | | | | | | |
| **LONT** | **Longtian** | **0.19** | **194** | P | | | Pb | 15 17 18.2 | +0.6 |
| | baz=201 | | | | | | | | |
| LONT | | | | *i* | S | | Sb | 15 17 22.1 | +0.7 |
| | baz=201 | | | | | | | | |
| **CHKH** | **Chenggong** | **0.22** | **64** | *e* | P | | Pn | 15 17 18.8 | -0.8 |
| | baz=73 | | | | | | | | |
| CHKH | | | | | S | | Sb | 15 17 22.7 | +0.7 |
| | baz=73 | | | | | | | | |
| **TWF1** | **Yuli** | **0.28** | **22** | *i* | P | | Pb | 15 17 18.7 | 0.0 |
| | baz=18 | | | | | | | | |
| TWF1 | | | | *e* | S | | Sb | 15 17 22.9 | -0.5 |
| | baz=18 | | | | | | | | |
| **EYUL** | **Yuli** | **0.28** | **27** | P | | | Pb | 15 17 19.4 | +0.5 |
| | baz=21 | | | | | | | | |
| EYUL | | | | *i* | S | | Sb | 15 17 24.0 | +0.5 |
| | baz=21 | | | | | | | | |
| **TWG** | **Pinlang** | **0.29** | **200** | *i* | P | | Pb | 15 17 19.1 | +0.2 |
| | baz=200 | | | | | | | | |
| TWG | | | | *i* | S | | Sb | 15 17 24.2 | +0.6 |
| | baz=200 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.29** | **199** | P | | | Pb | 15 17 19.2 | +0.3 |
| | baz=200 | | | | | | | | |
| TWGBT | | | | | S | | Sb | 15 17 24.0 | +0.4 |
| | baz=200 | | | | | | | | |
| **YULB** | **Yu-li** | **0.32** | **20** | *i* | P | | Pb | 15 17 19.3 | -0.1 |
| | baz=23 | | | | | | | | |
| YULB | | | | *e* | S | | Sb | 15 17 23.7 | -0.7 |
| | baz=23 | | | | | | | | |
| **ECBN** | **Changbin** | **0.33** | **48** | *e* | P | | Pn | 15 17 21.8 | +0.6 |
| | baz=58 | | | | | | | | |
| ECBN | | | | *i* | S | | Sb | 15 17 25.6 | +0.9 |
| | baz=58 | | | | | | | | |
| **EHY** | **Hungye** | **0.43** | **17** | P | | | Pb | 15 17 20.9 | -0.2 |
| | baz=20 | | | | | | | | |
| EHY | | | | *e* | S | | Sb | 15 17 26.2 | -1.1 |
| | baz=20 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.46** | **29** | *i* | S | | Sb | 15 17 28.4 | +0.4 |
| | baz=20 | | | | | | | | |
| **SLGT** | **Liugui** | **0.50** | **259** | *e* | P | | Pn | 15 17 23.9 | +0.4 |
| | baz=262 | | | | | | | | |
| SLGT | | | | *i* | S | | Sn | 15 17 31.4 | 0.0 |
| | baz=262 | | | | | | | | |
| **SLGT** | **Liugui** | **0.50** | **259** | ⇑ | *e*P | | Pn | 15 17 23.8 | +0.3 |
| | baz=166 | | | | | | | | |
| SLGT | | | | *e* | S | | Sn | 15 17 31.4 | +0.1 |
| | baz=166 | | | | | | | | |
| **VWDT** | **VWDT** | **0.66** | **357** | *e* | P | | Pn | 15 17 25.9 | +0.3 |
| | baz=356 | | | | | | | | |
| VWDT | | | | *e* | S | | Sn | 15 17 35.3 | +0.1 |
| | baz=356 | | | | | | | | |
| **OWD** | **Renai** | **0.86** | **360** | P | | | Pn | 15 17 29.2 | +0.7 |
| | baz=359 | | | | | | | | |
| OWD | | | | | S | | Sb | 15 17 39.7 | +0.2 |
| | baz=359 | | | | | | | | |
| **WUSB** | **Renai** | **0.90** | **356** | P | | | Pn | 15 17 29.9 | +0.8 |
| | baz=355 | | | | | | | | |
| WUSB | | | | | S | | Sn | 15 17 41.5 | +0.3 |
| | baz=355 | | | | | | | | |
| **FUSS** | **Fushou** | **1.15** | **3** | *e* | P | | Pb | 15 17 33.6 | +0.2 |
| | baz=12 | | | | | | | | |
| FUSS | | | | | S | | Sb | 15 17 48.0 | 0.0 |
| | baz=12 | | | | | | | | |

**TAP 14 15:17:12.7,23°.47N×120°.51E,h23km±1km,ML1.5,C,**
**Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CHN2** | **Minshiung** | **0.07** | **332** | *i* | P | | Pb | 15 17 17.3 | +0.5 |
| | baz=331 | | | | | | | | |
| CHN2 | | | | *e* | S | | Sb | 15 17 21.4 | +1.8 |
| | baz=331 | | | | | | | | |
| **WCKO** | **Fanlu** | **0.09** | **108** | *e* | P | | Pb | 15 17 16.6 | -0.4 |
| | baz=109 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.20** | **147** | P | | | Pb | 15 17 18.8 | +0.6 |
| | baz=147 | | | | | | | | |
| TPUB | | | | *e* | S | | Sb | 15 17 24.6 | +2.8 |
| | baz=147 | | | | | | | | |
| **TWK** | **Hsinying** | **0.20** | **186** | P | | | Pb | 15 17 18.4 | +0.2 |
| | baz=183 | | | | | | | | |
| TWK | | | | *e* | S | | Sb | 15 17 23.3 | +1.4 |
| | baz=183 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.24** | **157** | *e* | P | | Pb | 15 17 16.6 | -2.1 |
| | baz=156 | | | | | | | | |
| WTP | | | | *e* | S | | Sb | 15 17 23.1 | +0.3 |
| | baz=156 | | | | | | | | |
| **SNST** | **Tainan City** | **0.25** | **183** | *i* | P | | Pb | 15 17 19.3 | +0.6 |
| | baz=178 | | | | | | | | |
| SNST | | | | | S | | Sb | 15 17 23.8 | +1.0 |
| | baz=178 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.28** | **177** | *e* | P | | Pb | 15 17 17.6 | -1.6 |
| | baz=177 | | | | | | | | |
| CHN1 | | | | *e* | S | | Sb | 15 17 24.1 | +0.4 |
| | baz=177 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.38** | **143** | *e* | P | | Pb | 15 17 20.9 | +0.1 |
| | baz=136 | | | | | | | | |
| STYT | | | | *i* | S | | Sb | 15 17 27.5 | +1.2 |
| | baz=136 | | | | | | | | |
| **SGST** | **Jiashian** | **0.39** | **170** | P | | | Pb | 15 17 21.2 | +0.2 |
| | baz=173 | | | | | | | | |
| SGST | | | | | S | | Sb | 15 17 28.1 | +1.5 |
| | baz=173 | | | | | | | | |

*TIR **14** 15:22:14.6,41°.48N×19°.61E,h20km±3km,Md2.7,Ml2.1*
*BEO **14** 15:22:16.2±0.8,41°.53N×19°.98E,h10km±9km,ML1.8/6*
**ISC 14 15:22:15.4**±1.3,**41°.51N**±0°.02×**19°.77E**±0°.04,**h13**km±12km,
**n13,σ0°94/26,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.18** | **157** | P | | | **Pb** | **15 22 20.7** | **+0.1** |
| | baz=123 | | | | | | | | |
| TIR | | | | S | | | **Sb** | **15 22 24.8** | **+0.8** |
| | baz=123 | | | | | | | | |
| TIR | | | | AMP | | | | | |
| | comp=E,2.3nm,0.5s,baz=123 | | | | | | | | |
| **TIR** | **Tirane** | **0.18** | **157** | *e*Pg | | | **Pb** | **15 22 20.6** | **0.0** |
| TIR | | | | *e*Sg | | | **Sb** | **15 22 24.9** | **+0.9** |
| **PUK** | **Puka** | **0.54** | **9** | P | | | **Pb** | **15 22 26.6** | **-0.1** |
| | baz=20 | | | | | | | | |
| PUK | | | | S | | | **Sn** | **15 22 36.3** | **-1.6** |
| | baz=20 | | | | | | | | |
| PUK | | | | AMP | | | | | |
| | comp=E,0.5nm,0.2s,baz=20 | | | | | | | | |
| **BCI** | **Bajram Curri** | **0.88** | **14** | P | | | Pn | **15 22 33.6** | **+0.1** |
| | baz=20 | | | | | | | | |
| BCI | | | | S | | | **Sn** | **15 22 46.7** | **+0.4** |
| | baz=20 | | | | | | | | |
| BCI | | | | AMP | | | | | |
| | comp=E,0.2nm,0.5s,baz=20 | | | | | | | | |
| **PDG** | **Podgorica** | **1.00** | **337** | *e*Pg | | | **Pb** | **15 22 34.5** | **0.0** |
| PDG | | | | *e*Sg | | | **Sn** | **15 22 49.9** | **+0.9** |
| **FNA** | **Florina** | **1.41** | **120** | P | | | **Pg** | **15 22 42.0** | **-0.6** |
| | baz=116 | | | | | | | | |
| FNA | | | | S | | | **Sg** | **15 23 03.8** | **+2.9** |
| | baz=116 | | | | | | | | |
| **SRN** | **Sarande** | **1.64** | **174** | P | | | **Pn** | **15 22 43.8** | **-0.1** |
| | baz=169 | | | | | | | | |
| SRN | | | | S | | | **Sg** | **15 23 08.7** | **+0.6** |
| | baz=169 | | | | | | | | |
| **DBRK** | **Dubrovnik** | **1.68** | **314** | *e*Pn | | | **Pb** | **15 22 46.3** | **+0.2** |
| DBRK | | | | Sg | | | **Sb** | **15 23 07.3** | **+0.2** |
| **SCTE** | **Santa Cesarea** | **1.75** | **215** | P | | | **Pn** | **15 22 45.5** | **+0.1** |
| | baz=213 | | | | | | | | |
| SCTE | | | | S | | | **Sn** | **15 23 07.8** | **+0.3** |
| | baz=213 | | | | | | | | |
| **SJES** | **Sjenica** | **1.75** | **5** | *e*Pg | | | **Pb** | **15 22 47.6** | **+0.1** |
| SJES | | | | *e*Sg | | | **Sg** | **15 23 11.6** | **-0.3** |
| **SELS** | **Selova** | **1.98** | **30** | *e*Pg | | | **Pb** | **15 22 50.6** | **-0.7** |
| SELS | | | | *e*Sg | | | **Sb** | **15 23 16.0** | **+0.2** |
| **IGT** | **Igoumenitsa** | **2.02** | **168** | P | | | **Pb** | **15 22 50.3** | **-1.7** |
| | baz=163 | | | | | | | | |
| IGT | | | | S | | | **Sg** | **15 23 19.3** | **-1.2** |
| | baz=163 | | | | | | | | |
| **STON** | **Ston** | **2.06** | **312** | *i* | Pn | | **Pb** | **15 22 53.1** | **+0.6** |
| STON | | | | | Sn | | **Sb** | **15 23 17.8** | **-0.2** |

*IDC **14** 15:23:33.4±0.6,38°.11S×49°.04E,h0km,mb4.2/11,*
*mbtmp4.1/12,ML4.0/1,MS3.6/4,Error ellipse:*
*s-maj=23.5km s-min=21.1km az=76.0*
*NEIC **14** 15:23:34.3±1.7,38°.17S±0°.09×49°.01E±0°.08,h10km±1km,*
*mb4.6/13,Error ellipse: s-maj=14.9km s-min=10.2km*
*az=342.0*
**ISC 14 15:23:34.5**±0.5,**38°.13S**±0°.08×**49°.0E**±0°.1,**h10**km,**n48,**
**σ1°14/37,mb4.4/19,MS3.5/3,Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H04N1** | **CROZET ISLANDS** | **8.27** | **167** | T | | T | T | 15 34 04.2 | |
| | baz=346,slow=75,SNR=2634 | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **8.28** | **167** | T | | T | T | 15 34 02.9 | |
| | baz=346,slow=75,SNR=2361 | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **8.29** | **167** | T | | T | T | 15 34 03.8 | |
| | baz=346,slow=75,SNR=3558 | | | | | | | | |
| **CRZF** | **Crozet Islands** | **8.55** | **167** | Pn | | **Pn** | **Pn** | **15 25 38.0** | **-0.3** |
| **FOMA** | **Nahampoana Res** | **13.23** | **352** | Pn | | **Pn** | **Pn** | **15 26 41.9** | **-0.6** |
| **VOI** | **Vohitsoka** | **16.29** | **353** | P | | **P** | **Pn** | **15 27 24.5** | **+1.0** |
| **OPO** | **Ambohidratompo** | **19.56** | **355** | P | | **P** | **Pn** | **15 28 03.3** | **-0.6** |
| | baz=145,slow=15,SNR=2.5 | | | | | | | | |
| OPO | | | | LR | | LR | LR | 15 34 18.2 | |
| | comp=Z,177nm,19.4s,baz=8.0,slow=33 | | | | | | | | |
| | 1.3nm,0.4s | | | | | | | | |
| **BOSA** | **Boshof** | **21.97** | **289** | P | | **P** | **P** | **15 28 27.4** | **-1.2** |
| **BOSA** | **Boshof** | **21.97** | **289** | P | | **P** | **P** | **15 28 30.4** | **+1.8** |
| | 4.9nm,0.9s,baz=122,slow=7.2,SNR=5.0 | | | | | | | | |
| BOSA | | | | LR | | LR | LR | 15 35 24.0 | |
| | comp=Z,258nm,20.9s,baz=136,slow=32 | | | | | | | | |
| | 4.9nm,0.9s | | | | | | | | |
| **SUR** | **Sutherland** | **23.71** | **275** | P | | **P** | **P** | **15 28 46.2** | **-0.6** |
| SUR | | | | IAmb | | IAmb | IAmb | 15 29 28.5 | |
| | comp=Z,28nm,1.4s | | | | | | | | |
| **SUR** | **Sutherland** | **23.71** | **275** | LR | | LR | LR | 15 36 26.1 | |
| | comp=Z,95nm,18.4s,baz=108,slow=33 | | | | | | | | |
| **LBTB** | **Lobatse** | **23.80** | **297** | LR | | LR | LR | 15 36 17.0 | |
| | comp=Z,170nm,21.9s,baz=146,slow=32 | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **37.01** | **41** | T | | T | T | 16 09 46.2 | |
| | baz=211,slow=76,SNR=40 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **37.02** | **41** | T | | T | T | 16 09 45.1 | |
| | baz=211,slow=76,SNR=35 | | | | | | | | |

BURAR IAmb IAmb 15 36 27.8
comp=Z,2.6nm,1.3s
**MAKZ Makanchi 89.56 22** P **P** **15 36 31.1 -0.6**
MAKZ IAmb IAmb 15 36 33.4
comp=Z,4.6nm,1.4s
**MKAR Makanchi Array 89.64 22** P **P** **15 36 32.3 +0.3**
**MKAR Makanchi Array 89.64 22** P **P** **15 36 29.6 -2.5**
comp=Z,1.1nm,1.0s,baz=174,slow=14,SNR=2.1
**ESDC Sonseca Array 91.42 322** P **P** **15 36 41.6 +1.0**
comp=Z,0.7nm,0.9s,baz=143,slow=3.2,SNR=4.0
comp=Z,0.7nm,0.9s
**KURBB Kurchatov Arra 92.11 18** P **P** **15 36 43.4 -0.1**
comp=Z,2.7nm,0.2s,baz=220,slow=5.2,SNR=6.8
**BVAR Borovoye Array 92.66 13** P **P** **15 36 46.2 +0.2**
comp=Z,1.6nm,0.7s,baz=170,slow=4.0,SNR=8.8
comp=Z,1.6nm,0.7s
**ZALV Zalesovo Beam 96.77 20** P **P** **15 37 04.6 -0.1**
comp=Z,1.1nm,0.7s,baz=230,slow=6.6,SNR=4.5
comp=Z,1.1nm,0.7s
**ILAR Eielson Array 151.71 14** PKPbc **PKPbc** **15 43 27.6 -0.6**
comp=Z,2.7nm,0.8s,baz=311,slow=3.3,SNR=22
**ULM Lac du Bonnet 152.35 307** PKPbc **PKPbc** **15 43 29.8 -0.3**
comp=Z,1.5nm,0.8s,baz=80,slow=3.7,SNR=4.0
**YKA Yellowknife Ar 153.63 343** PKPbc **PKiKP** **15 43 32.9 +0.3**
comp=Z,0.5nm,0.7s,baz=14,slow=2.7,SNR=4.4

**NDI 14 15:37:52.6±4.2, 17.71N×80.87E, h10km, ML3.6, MW3.5, Southern India**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NGP** | **Nagpur** | **3.83** | **334** | *eP* | Pn | 15 38 52.9 | +1.2 |
| NGP | | | | IAML | | 15 39 57.6 | |
| | comp=E,262nm,0.4s | | | | | | |
| NGP | | | | IAML | | 15 40 14.4 | |
| | comp=E,257nm,0.4s | | | | | | |
| **LATR** | **Latur** | **4.16** | **280** | *eP* | Pn | 15 38 56.2 | 0.0 |
| LATR | | | | *eS* | Sn | 15 39 41.4 | -3.5 |
| **BLSP** | **Bilaspur** | **4.55** | **15** | *eS* | Sn | 15 39 53.9 | -0.8 |
| **MDRS** | **Chennai** | **4.65** | **188** | *eP* | Pn | 15 39 05.4 | +2.4 |
| MDRS | | | | *eS* | Sn | 15 39 56.8 | -0.3 |
| **AKL** | **Akola** | **4.70** | **310** | *eP* | Pn | 15 39 05.2 | +1.5 |
| AKL | | | | *ex* | Sn | 15 39 48.8 | -10 |
| AKL | | | | IAML | | 15 39 57.3 | |
| | comp=E,63nm,0.1s | | | | | | |
| AKL | | | | IAML | | 15 40 10.0 | |
| | comp=E,60nm,0.1s | | | | | | |
| **KAD** | **Karad** | **6.39** | **267** | *eS* | Sn | 15 40 32.2 | -7.8 |
| **KNTI** | **KHUNTI** | **6.74** | **37** | *eP* | Pn | 15 39 28.5 | -3.2 |
| KNTI | | | | *eS* | Sn | 15 40 41.5 | -7.2 |
| KNTI | | | | IAML | | 15 40 41.8 | |
| | comp=N,48nm,0.2s | | | | | | |
| KNTI | | | | IAML | | 15 40 41.9 | |
| | comp=E,41nm,0.2s | | | | | | |
| **GUNA** | **GUNA** | **7.65** | **335** | *eS* | Sn | 15 41 05.5 | -5.5 |
| **BOM** | **Bombay** | **7.74** | **280** | *eS* | Sn | 15 41 08.9 | -4.4 |
| BOM | | | | IAML | | 15 41 54.2 | |
| | comp=E,174nm,0.7s | | | | | | |

**IDC 14 15:37:53.5±2.1, 6.17S×143.58E, h0km, mb3.5/1, mbtmp3.4/4, ML3.1/2, MS3.2/1, Error ellipse: s-maj=50.6km s-min=34.8km az=73.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.79** | **132** | Pn | Pn | 15 39 06.3 | -0.6 |
| | 8.8nm,0.8s,baz=297,slow=14,SNR=1.2 | | | | | | |
| PMG | | | | Sn | Sn | 15 40 00.3 | -2.9 |
| | 0.4nm,0.3s,baz=300,slow=20,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.37** | **212** | Pn | Pn | 15 41 42.9 | -2.0 |
| | 0.1nm,0.3s,baz=32,slow=13,SNR=2.6 | | | | | | |
| WRA | | | | Sn | Sn | 15 44 32.0 | -15 |
| | baz=38,slow=25,SNR=1.5 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **19.73** | **207** | P | Pn | 15 42 25.9 | -0.4 |
| | 0.1nm,0.3s,baz=34,slow=9.3,SNR=11 | | | | | | |
| | 1.0nm,0.9s | | | | | | |
| **DAV** | **Davao City (W)** | **22.26** | **306** | LR | LR | 15 52 01.5 | |
| | comp=Z,54nm,18.5s,baz=191,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.48** | **322** | P | P | 15 49 39.8 | +0.1 |
| | 0.2nm,0.5s,baz=127,slow=3.8,SNR=2.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **14** 15:38:31.0±0.5, 38.08S×49.14E, h0km, mb4.3/20, mbtmp4.3/21, ML3.6/1, MS3.9/36, Error ellipse: s-maj=19.2km s-min=14.6km az=72.0*
*NEIC **14** 15:38:33.2±1.0, 38.11S±0.08×49.0E±0.2, h10km±1km, mb4.8/34, Error ellipse: s-maj=22.1km s-min=13.0km az=256.0*
*GCMT **14** 15:38:35.2±0.3, 38.06S±0.03×48.92E±0.04, h22km, MW4.9/75, Moment Tensor Solution. s30,c30; s75,c91; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.40±.20; $M_{\theta\theta}$2.20±.14; $M_{\phi\phi}$1.20±.14; $M_{r\theta}$0.01±.22; $M_{r\phi}$0.85±.09; $M_{\theta\phi}$1.16±.25; Best double couple: $M_o$3.21300×$10^{16}$ NP1:ϕs226.00000°, δ52.00000°, λ-106.00000°. NP2: ϕs71.00000°, δ41.00000°, λ-71.00000°. Principal axes: T 2.7430, Plg6.0000°, Azm327.0000°; N 0.9390, Plg12.0000°, Azm236.0000°; P -3.6820, Plg76.0000°, Azm82.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 14 15:38:32.7±0.4, 38.14S±0.06×49.08E±0.09, h10km, n117, σ1.26/84, mb4.5/41, MS3.9/37, 5C, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H04N1** | **CROZET ISLANDS** | **8.26** | **167** | T | T | 15 49 05.5 | |
| | baz=347,slow=75 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **8.27** | **167** | T | T | 15 49 05.1 | |
| | baz=347,slow=75 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **8.28** | **167** | T | T | 15 49 05.1 | |
| | baz=347,slow=75 | | | | | | |
| **CRZF** | **Crozet Islands** | **8.53** | **167** | Pn | **Pn** | **15 40 36.1** | **-0.1** |
| **FOMA** | **Nahampoana Res** | **13.25** | **352** | Pn | **Pn** | **15 41 39.7** | **-1.2** |
| **VOI** | **Vohitsoka** | **16.30** | **352** | Pn | **Pn** | **15 42 21.2** | **-0.7** |
| **OPO** | **Ambohidratompo** | **19.57** | **355** | P | **Pn** | **15 43 01.6** | **-0.7** |
| | baz=166,slow=12,SNR=5.1 | | | | | | |
| OPO | | | | LR | LR | 15 48 53.7 | |
| | comp=Z,284nm,19.3s,baz=14,slow=32 | | | | | | |
| | 8.1nm,1.0s | | | | | | |
| **SOE** | **Somerset East** | **19.89** | **279** | P | **P** | **15 43 02.5** | **-1.9** |
| SOE | | | | IAmb | IAmb | 15 43 10.3 | |
| | comp=Z,38nm,1.2s | | | | | | |
| **BOSA** | **Boshof** | **22.00** | **289** | P | **P** | **15 43 24.1** | **-3.1** |
| **BOSA** | **Boshof** | **22.00** | **289** | P | **P** | **15 43 28.8** | **+1.7** |
| | comp=Z,8.9nm,1.1s,baz=130,slow=12,SNR=4.6 | | | | | | |
| BOSA | | | | S | **S** | **15 47 29.6** | **-0.4** |
| | comp=Z,1.1nm,0.3s,baz=90,slow=20,SNR=5.0 | | | | | | |
| BOSA | | | | LR | LR | 15 50 52.0 | |
| | comp=Z,235nm,18.6s,baz=132,slow=34 | | | | | | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **SUR** | **Sutherland** | **23.73** | **275** | LR | LR | 15 51 02.9 | |
| | comp=Z,172nm,19.1s,baz=120,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **23.82** | **297** | P | **P** | **15 43 44.3** | **-1.8** |
| **LBTB** | **Lobatse** | **23.82** | **297** | LR | LR | 15 51 25.1 | |
| | comp=Z,188nm,21.1s,baz=130,slow=32 | | | | | | |
| **MAW** | **Mawson** | **30.51** | **170** | P | **P** | **15 44 45.9** | **+0.3** |
| | comp=Z,2.6nm,0.6s,baz=332,slow=15,SNR=4.6 | | | | | | |
| MAW | | | | S | **S** | **15 49 39.8** | **-6.9** |
| | comp=Z,2.0nm,0.5s,baz=316,slow=14,SNR=2.4 | | | | | | |
| MAW | | | | LR | LR | 15 53 49.6 | |
| | comp=Z,519nm,21.9s,baz=3.0,slow=30 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **TSUM** | **Tsumeb** | **33.23** | **296** | LR | LR | 15 57 00.2 | |
| | comp=Z,115nm,21.3s,baz=144,slow=33 | | | | | | |
| **H08S1** | **Diego Carcia H** | **37.00** | **41** | T | T | 16 24 35.0 | |
| | baz=210,slow=75,SNR=50 | | | | | | |
| **H08S2** | **Diego Garcia H** | **37.01** | **41** | T | T | 16 24 37.4 | |
| | baz=210,slow=75,SNR=58 | | | | | | |
| **H08S3** | **Diego Garcia H** | **37.02** | **41** | T | T | 16 24 39.1 | |
| | baz=210,slow=75,SNR=131 | | | | | | |
| **MBAR** | **Mbarara** | **40.99** | **331** | LR | LR | 16 00 56.3 | |
| | comp=Z,78nm,19.9s,baz=128,slow=33 | | | | | | |
| **TROLL** | **Troll, Antarti** | **41.14** | **200** | ⇑P | **P** | **15 46 17.4** | **+0.7** |
| | comp=Z,118nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **42.49** | **202** | P | **P** | **15 46 28.7** | **+0.9** |
| **SNAA** | **Sanae** | **42.49** | **202** | ⇑P | **P** | **15 46 28.7** | **+0.9** |
| | comp=Z,48nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **42.49** | **202** | P | **P** | **15 46 28.3** | **+0.5** |
| | comp=Z,2.0nm,0.9s,baz=45,slow=5.7,SNR=3.6 | | | | | | |
| SNAA | | | | LR | LR | 15 59 59.0 | |
| | comp=Z,173nm,21.5s,baz=106,slow=30 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **43.61** | **203** | ⇑P | **P** | **15 46 38.0** | **+1.3** |
| | comp=Z,3.1nm,0.8s,baz=66,slow=4.9 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **43.80** | **204** | ⇑P | **P** | **15 46 39.9** | **+1.6** |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **CASY** | **Casey** | **44.37** | **149** | P | **P** | **15 46 43.5** | **+0.7** |
| **VNA3** | **Neumayer Olymp** | **44.41** | **203** | ⇑P | **P** | **15 46 44.0** | **+0.9** |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **FURI** | **Furi** | **47.79** | **346** | LR | LR | 16 06 25.7 | |
| | comp=Z,181nm,18.8s,baz=161,slow=35 | | | | | | |
| **ATD** | **Arta Tunnel** | **49.75** | **352** | LR | LR | 16 08 02.0 | |
| | comp=Z,4.8nm,18.0s,baz=193,slow=36 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **51.42** | **108** | T | T | 16 42 38.0 | |
| | baz=246,slow=75,SNR=63 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **51.43** | **108** | T | T | 16 42 40.1 | |
| | baz=246,slow=75,SNR=52 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **51.44** | **108** | T | T | 16 42 39.3 | |
| | baz=246,slow=75,SNR=61 | | | | | | |
| **QSPA** | **South Pole Qui** | **52.05** | **180** | P | **P** | **15 47 41.7** | **-0.7** |
| QSPA | | | | IAmb | IAmb | 15 47 49.6 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **52.05** | **180** | P | **P** | **15 47 42.4** | **0.0** |
| | comp=Z,6.7nm,0.9s,baz=250,slow=3.0,SNR=17 | | | | | | |
| QSPA | | | | LR | LR | 16 07 20.9 | |
| | comp=Z,240nm,21.8s,baz=259,slow=33 | | | | | | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **PALK** | **Pallekele** | **53.93** | **40** | LR | LR | 16 04 54.1 | |
| | comp=Z,99nm,21.2s,baz=313,slow=29 | | | | | | |
| **VNDA** | **Vanda** | **57.73** | **166** | P | **P** | **15 48 23.8** | **+0.7** |
| **VNDA** | **Vanda** | **57.73** | **166** | P | **P** | **15 48 23.8** | **+0.7** |
| | comp=Z,1.5nm,0.6s,baz=255,slow=7.7,SNR=13 | | | | | | |
| VNDA | | | | LR | LR | 16 10 43.4 | |
| | comp=Z,286nm,20.7s,baz=244,slow=33 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **SBA** | **Scott Base** | **58.43** | **167** | P | **P** | **15 48 29.7** | **+1.7** |
| SBA | | | | IAmb | IAmb | 15 48 36.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **RAYN** | **Ar Rayn** | **61.43** | **356** | P | **P** | **15 48 49.8** | **+0.5** |
| RAYN | | | | IAmb | IAmb | 15 48 55.4 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **WSAR** | **Wadi Sarin** | **61.71** | **10** | LR | LR | 16 10 36.0 | |
| | comp=Z,124nm,19.2s,baz=210,slow=31 | | | | | | |
| **MBWA** | **Marble Bar** | **62.32** | **96** | P | **P** | **15 48 55.2** | **-0.3** |
| **FORT** | **Forrest** | **63.71** | **110** | P | **P** | **15 49 05.1** | **+0.5** |
| **SMAI** | **San Martin Ant** | **63.90** | **202** | P | **P** | **15 49 07.0** | **+1.9** |
| SMAI | | | | IAmb | IAmb | 15 50 29.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **PMSA** | **Palmer Station** | **64.97** | **206** | LR | LR | 16 12 47.2 | |
| | comp=Z,41nm,18.1s,baz=290,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **67.04** | **299** | P | **P** | **15 49 29.2** | **+3.0** |
| | comp=Z,3.0nm,0.8s,baz=128,slow=9.1,SNR=3.3 | | | | | | |
| DBIC | | | | LR | LR | 16 16 35.6 | |
| | comp=Z,71nm,19.6s,baz=135,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.60** | **309** | P | **P** | **15 49 30.2** | **+0.4** |
| TORD | | | | IAmb | IAmb | 15 49 31.0 | |
| | comp=Z,4.8nm,1.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.60** | **309** | P | **P** | **15 49 30.1** | **+0.4** |
| | comp=Z,1.7nm,0.9s,baz=180,slow=2.9,SNR=8.0 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **68.49** | **115** | P | **P** | **15 49 35.8** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **68.64** | **97** | P | **P** | **15 49 36.5** | **+0.1** |
| **EIL** | **Elat** | **68.74** | **347** | LR | LR | 16 17 48.5 | |
| | comp=Z,73nm,18.3s,baz=244,slow=34 | | | | | | |
| **KAPI** | **Kappang** | **71.74** | **82** | LR | LR | 16 18 35.5 | |
| | comp=Z,39nm,18.9s,baz=302,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **71.90** | **106** | P | **P** | **15 49 56.4** | **0.0** |
| | comp=Z,3.3nm,0.8s,baz=234,slow=6.0,SNR=33 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **71.90** | **106** | P | **P** | **15 49 56.3** | **0.0** |
| **MMAI** | **Mount Meron Ar** | **71.93** | **348** | LR | LR | 16 20 19.7 | |
| | comp=Z,104nm,18.6s,baz=116,slow=35 | | | | | | |
| **KNRA** | **Kununurra** | **72.47** | **96** | P | **P** | **15 49 59.7** | **-0.1** |
| **STKA** | **Stephens Creek** | **72.92** | **117** | P | **P** | **15 50 02.6** | **+0.3** |
| STKA | | | | IAmb | IAmb | 15 51 47.4 | |
| | comp=Z,8.1nm,1.6s | | | | | | |
| **STKA** | **Stephens Creek** | **72.92** | **117** | P | **P** | **15 50 02.0** | **-0.2** |
| | comp=Z,4.6nm,0.7s,baz=225,slow=1.4,SNR=9.3 | | | | | | |
| STKA | | | | LR | LR | 16 14 56.4 | |
| | comp=Z,123nm,18.8s,baz=205,slow=30 | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.21** | **49** | P | **P** | **15 50 03.9** | **-0.1** |
| | comp=Z,1.8nm,0.7s,baz=229,slow=6.2,SNR=9.5 | | | | | | |
| CMAR | | | | LR | LR | 16 17 30.5 | |
| | comp=Z,60nm,19.2s,baz=250,slow=32 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **74.35** | **103** | P | **P** | **15 50 10.9** | **+0.1** |
| **WRA** | **Warramunga Arr** | **74.35** | **103** | P | **P** | **15 50 11.1** | **+0.2** |
| | comp=Z,4.0nm,0.7s,baz=232,slow=5.0,SNR=31 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **74.36** | **103** | P | **P** | **15 50 11.1** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 15 50 21.9 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **74.36** | **103** | P | **P** | **15 50 10.9** | **0.0** |
| WRAB | | | | IAmb | IAmb | 15 50 11.8 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **74.49** | **103** | P | **P** | **15 50 11.7** | **0.0** |
| WB0 | | | | IAmb | IAmb | 15 50 21.2 | |
| | comp=Z,40nm,1.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **74.49** | **103** | P | **P** | **15 50 11.7** | **0.0** |
| WR0 | | | | IAmb | IAmb | 15 51 53.5 | |
| | comp=Z,24nm,1.7s | | | | | | |
| **CAN** | **Canberra** | **75.94** | **124** | P | **P** | **15 50 20.8** | **+0.9** |
| **GNI** | **Garni** | **78.02** | **357** | LR | LR | 16 25 53.8 | |
| | comp=Z,52nm,18.9s,baz=182,slow=36 | | | | | | |
| **SIMJ** | **Simiganj** | **78.60** | **16** | P | **P** | **15 50 34.7** | **+0.2** |
| SIMJ | | | | IAmb | IAmb | 15 50 41.2 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **CHGR** | **Chuyangaron** | **78.63** | **16** | P | **P** | **15 50 35.1** | **+0.5** |
| CHGR | | | | IAmb | IAmb | 15 50 38.9 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **78.78** | **348** | P | **P** | **15 50 35.3** | **-0.1** |
| **BRTR** | **Keskin Array B** | **78.78** | **348** | P | **P** | **15 50 35.1** | **-0.3** |
| | comp=Z,1.2nm,0.9s,baz=186,slow=8.3,SNR=5.6 | | | | | | |
| BRTR | | | | LR | LR | 16 24 11.6 | |
| | comp=Z,41nm,19.1s,baz=152,slow=35 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **AGG** | **Agios Georgios** | **80.63** | **339** | P | **P** | **15 50 45.5** | **+0.1** |
| **BBTS** | **Babate** | **80.77** | **297** | LR | LR | 16 22 52.1 | |
| | comp=Z,97nm,21.1s,baz=324,slow=33 | | | | | | |
| **PZH** | **PanZhiHua** | **81.05** | **46** | P | **P** | **15 50 50.6** | **+2.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,250nm,4.8s | | | | | | |
| **KSH** | **Kashi** | **81.13** | **21** | P | **P** | **15 50 46.4** | **-1.8** |
| KSH | | | | pP | sP | 15 50 51.6 | -0.2 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **KBZ** | **Khabaz** | **81.69** | **355** | LR | LR | 16 24 27.5 | |
| | comp=Z,41nm,21.4s,baz=156,slow=34 | | | | | | |
| **KEST** | **Kesra** | **82.20** | **328** | LR | LR | 16 29 09.4 | |
| | comp=Z,84nm,18.2s,baz=328,slow=37 | | | | | | |
| **KK31** | **Karatay Array** | **83.18** | **16** | P | **P** | **15 50 57.8** | **-0.8** |
| KK31 | | | | IAmb | IAmb | 15 51 05.3 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **83.18** | **16** | P | **P** | **15 50 57.9** | **-0.8** |
| **AAK** | **Ala-Archa** | **83.66** | **19** | LR | LR | 16 26 38.1 | |
| | comp=Z,43nm,18.4s,baz=206,slow=34 | | | | | | |
| **BOOM** | **Boomskoye usch** | **83.89** | **20** | P | **P** | **15 51 01.1** | **-1.5** |
| BOOM | | | | IAmb | IAmb | 15 51 06.3 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **PLCA** | **Paso Flores** | **84.06** | **222** | P | **P** | **15 51 03.5** | **-0.2** |
| **PLCA** | **Paso Flores** | **84.06** | **222** | P | **P** | **15 51 03.9** | **+0.2** |
| | comp=Z,2.2nm,0.9s,baz=199,slow=0.6,SNR=4.0 | | | | | | |
| PLCA | | | | LR | LR | 16 21 55.8 | |
| | comp=Z,28nm,18.9s,baz=158,slow=31 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **GO06** | **Curarrehue** | **85.37** | **222** | P | **P** | **15 51 10.3** | **-0.1** |
| GO06 | | | | IAmb | IAmb | 15 52 55.2 | |
| | comp=Z,24nm,1.8s | | | | | | |
| **MLR** | **Muntele Rosu** | **85.82** | **344** | P | **P** | **15 51 11.6** | **-0.5** |
| MLR | | | | IAmb | IAmb | 15 51 13.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **85.82** | **344** | P | **P** | **15 51 11.2** | **-0.9** |
| | comp=Z,1.4nm,0.5s,baz=230,slow=5.0,SNR=3.6 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **CPUP** | **Villa Florida** | **85.90** | **240** | P | **P** | **15 51 13.8** | **+0.7** |
| | comp=Z,2.6nm,0.9s,baz=164,slow=3.0,SNR=3.3 | | | | | | |
| CPUP | | | | LR | LR | 16 21 13.8 | |
| | comp=Z,34nm,20.8s,baz=140,slow=30 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **MDT** | **Midelt** | **86.47** | **317** | LR | LR | 16 30 53.5 | |
| | comp=Z,313nm,18.1s,baz=163,slow=36 | | | | | | |
| **ABKAR** | **Akbulak array** | **87.55** | **7** | P | **P** | **15 51 19.4** | **-0.9** |
| **BO02** | **Sierra Bellavi** | **88.49** | **226** | P | **P** | **15 51 25.5** | **-0.1** |
| **AKTO** | **Aktyubinsk** | **88.55** | **6** | P | **P** | **15 51 24.2** | **-0.9** |
| | comp=Z,1.0nm,0.6s,baz=193,slow=5.0,SNR=3.3 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **88.77** | **27** | *eP* | **P** | **15 51 27.9** | **+1.5** |
| WMQ | | | | LR | LR | | |
| | comp=Z,73nm,18.3s | | | | | | |
| **LZH** | **Lanzhou** | **89.56** | **41** | *eP* | **P** | **15 51 29.8** | **-0.6** |
| LZH | | | | pP | pwP | 15 51 37.4 | +1.7 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **89.64** | **22** | P | **P** | **15 51 29.7** | **-0.6** |
| | comp=Z,0.6nm,1.0s,baz=202,slow=7.4,SNR=2.2 | | | | | | |
| MKAR | | | | LR | LR | 16 27 59.2 | |
| | comp=Z,28nm,21.4s,baz=130,slow=33 | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | |
| **BELG** | **Belogornoye** | **90.17** | **359** | LR | LR | 16 32 15.5 | |
| | comp=Z,45nm,21.4s,baz=151,slow=36 | | | | | | |
| **URZ** | **Urewera** | **90.18** | **142** | LR | LR | 16 25 04.4 | |
| | comp=Z,104nm,20.6s,baz=315,slow=31 | | | | | | |
| **PMG** | **Port Moresby** | **90.55** | **102** | LR | LR | 16 29 04.8 | |
| | comp=Z,82nm,18.3s,baz=260,slow=34 | | | | | | |
| **ESDC** | **Sonseca Array** | **91.44** | **322** | P | **P** | **15 51 39.1** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=157,slow=4.3,SNR=5.1 | | | | | | |
| ESDC | | | | LR | LR | 16 34 14.3 | |
| | comp=Z,63nm,19.2s,baz=140,slow=37 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **92.11** | **18** | P | **P** | **15 51 41.4** | **-0.3** |
| | comp=Z,1.1nm,0.3s,baz=216,slow=4.6,SNR=1.8 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **92.66** | **13** | P | **P** | **15 51 44.1** | **-0.1** |
| | comp=Z,1.2nm,0.6s,baz=162,slow=5.2,SNR=8.7 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **95.36** | **53** | *eP* | **P** | **15 51 57.8** | **+0.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **96.11** | **124** | *eLR* | LR | 16 23 06.1 | |
| | comp=Z,70nm,30.5s | | | | | | |
| **LVC** | **Limon Verde** | **96.13** | **235** | LR | LR | 16 27 41.5 | |
| | comp=Z,31nm,19.6s,baz=201,slow=31 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **96.77** | **20** | P | **P** | **15 52 01.5** | **-1.4** |
| | comp=Z,0.7nm,0.5s,baz=203,slow=6.3,SNR=2.6 | | | | | | |
| ZALV | | | | LR | LR | 16 32 45.2 | |
| | comp=Z,23nm,19.3s,baz=214,slow=34 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **97.15** | **43** | *eP* | **P** | **15 52 05.5** | **+0.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,26nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,84nm,4.1s | | | | | | |
| **TBI** | **Tubuai** | **116.40** | **161** | *eLR* | LR | 16 32 25.3 | |
| | comp=Z,1μm,34.8s | | | | | | |
| **RKT** | **Rikitea** | **118.94** | **176** | *eLR* | LR | 16 33 33.7 | |
| | comp=Z,742nm,39.5s | | | | | | |
| **PPT2** | **Papeete2** | **121.86** | **159** | *eLR* | LR | 16 35 01.6 | |
| PPT2 | comp=Z,118nm,24.8s | | | *eLR* | LR | 16 35 01.8 | |
| | comp=Z,108nm,22.8s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **132.46** | **168** | *eLR* | LR | 16 39 44.8 | |
| | comp=Z,67nm,24.5s | | | | | | |
| **COWI** | **Conover** | **148.30** | **298** | | **PKPbc** | **15 58 18.6** | **-0.2** |
| **CCM** | **Cathedral Cave** | **148.94** | **282** | | **PKPbc** | **15 58 20.5** | **-0.1** |
| **WHAR** | **Wooly Hollow** | **149.05** | **277** | | **PKPbc** | **15 58 20.9** | **-0.1** |
| **H21K** | **Melozitna Rive** | **149.66** | **18** | | **PKPbc** | **15 58 22.2** | **+0.7** |
| **EYMN** | **Ely** | **149.86** | **302** | | **PKPbc** | **15 58 22.3** | **-0.4** |
| **ILAR** | **Eielson Array** | **151.72** | **14** | PKPbc | **PKPbc** | **15 58 25.1** | **-1.4** |
| | comp=Z,4.0nm,0.8s,baz=317,slow=2.7,SNR=18 | | | | | | |
| **ULM** | **Lac du Bonnet** | **152.37** | **307** | PKPbc | **PKPbc** | **15 58 27.4** | **-1.0** |
| | comp=Z,4.5nm,0.7s,baz=61,slow=3.7,SNR=7.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **153.65** | **343** | PKPbc | **PKPbc** | **15 58 28.9** | **-1.9** |
| | comp=Z,0.7nm,0.7s,baz=28,slow=1.8,SNR=5.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **155.76** | **257** | PKP | **PKPdf** | **15 58 26.0** | **-1.2** |
| | comp=Z,0.5nm,0.9s,baz=149,slow=3.9,SNR=4.1 | | | | | | |
| TXAR | | | | PKPab | **PKPab** | **15 58 52.9** | **-0.8** |
| | comp=Z,0.6nm,0.8s,baz=101,slow=4.8,SNR=5.1 | | | | | | |

*NEIC **14** 15:56:30.7±3.0, 69.50N±0.02×144.22W±0.03, h10km±1km, Error ellipse: s-maj=3.5km s-min=2.4km az=343.0*
**AEIC 14 15:56:29.9±3.2, 69.49N±0.02×144.24W±0.04, h4km±2km, ML3.2, ML3.3/104(NEIC), Error ellipse: s-maj=3.2km s-min=2.0km az=187.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.23** | **53** | Pg | Pg | 15 56 34.2 | -0.1 |
| C27K | | | | IAML | | 15 56 38.0 | |
| | comp=N,4μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.49** | **332** | | Pg | 15 56 40.2 | +0.9 |
| C26K | | | | | Sb | 15 56 47.7 | -0.9 |
| **D25K** | **Kavik River** | **0.78** | **259** | | Pg | 15 56 44.8 | +0.1 |
| D25K | | | | | Sb | 15 56 56.2 | -0.6 |
| **D27M** | **Malcolm River** | **1.19** | **100** | | Sb | 15 57 09.0 | +0.4 |
| **D27M** | **Malcolm River** | **1.19** | **100** | | Pg | 15 56 51.5 | -1.1 |
| **D27M** | **Malcolm River** | **1.19** | **100** | IAML | | 15 57 10.7 | |
| | comp=N,411nm,0.4s | | | | | | |
| D27M | | | | IAML | | 15 57 13.3 | |
| | comp=E,306nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **281** | | Sg | 15 57 21.8 | +1.2 |
| **C24K** | **Franklin Bluff** | **1.58** | **281** | | Pb | 15 56 59.4 | -0.3 |
| **C24K** | **Franklin Bluff** | **1.58** | **281** | IAML | | 15 57 23.3 | |
| | comp=N,309nm,0.5s | | | | | | |
| C24K | | | | IAML | | 15 57 25.9 | |
| | comp=E,252nm,1.2s | | | | | | |
| **E27K** | **Coleen River** | **1.62** | **142** | | Pn | 15 56 58.3 | -0.9 |
| E27K | | | | IAML | | 15 57 23.7 | |
| | comp=E,353nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **261** | | Sg | 15 57 24.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,89nm,0.8s | | | | | | | |
| **G29M** | **Pine Creek** | **3.47** | **135** | Pn | Pn | 15 57 26.7 | +2.0 | |
| G29M | | | | IAML | | 15 58 33.7 | | |
| | comp=N,74nm,0.8s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.64** | **277** | | Pn | 15 57 28.7 | +1.7 | |
| **E21K** | **Killik River** | **3.66** | **258** | | Pn | 15 57 29.6 | +2.3 | |
| **H29M** | **Whitestone** | **3.96** | **143** | Pn | Pn | 15 57 32.6 | +1.2 | |
| H29M | | | | IAML | | 15 58 21.8 | | |
| | comp=E,46nm,0.7s | | | | | | | |
| H29M | | | | IAML | | 15 58 49.8 | | |
| | comp=N,44nm,0.9s | | | | | | | |
| **F21K** | **Alatna River** | **4.11** | **241** | IAML | | 15 59 60.0 | | |
| | comp=E,34nm,0.6s | | | | | | | |
| F21K | | | | IAML | | 16 00 01.2 | | |
| | comp=N,47nm,0.7s | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.22** | **134** | Pn | Pn | 15 57 36.6 | +1.6 | |
| **I28M** | **Miner Creek** | **4.38** | **156** | IAML | | 15 58 36.7 | | |
| | comp=N,25nm,0.6s | | | | | | | |
| **B20K** | **Meade River** | **4.52** | **283** | | Pn | 15 57 40.6 | +1.6 | |
| **G21K** | **Aliakaket** | **4.59** | **234** | IAML | | 16 00 20.8 | | |
| | comp=E,31nm,0.7s | | | | | | | |
| G21K | | | | IAML | | 16 00 26.6 | | |
| | comp=N,35nm,1.1s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.80** | **201** | | Pn | 15 57 45.2 | +2.2 | |
| MDM | | | | IAML | | 16 00 26.5 | | |
| | comp=E,24nm,0.9s | | | | | | | |
| MDM | | | | IAML | | 16 00 27.3 | | |
| | comp=N,25nm,0.6s | | | | | | | |
| **EGAK** | **Eagle** | **4.88** | **164** | IAML | | 15 59 13.4 | | |
| | comp=N,21nm,1.1s | | | | | | | |
| **J25K** | **Salcha River,** | **4.92** | **186** | IAML | | 16 00 36.8 | | |
| | comp=E,27nm,1.0s | | | | | | | |
| J25K | | | | IAML | | 16 00 38.5 | | |
| | comp=N,17nm,0.8s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92** | **246** | IAML | | 16 00 34.8 | | |
| | comp=N,15nm,1.4s | | | | | | | |
| F20K | | | | IAML | | 16 00 41.0 | | |
| | comp=E,15nm,0.8s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.02** | **177** | IAML | | 16 00 13.9 | | |
| | comp=N,17nm,0.6s | | | | | | | |
| J26L | | | | IAML | | 16 00 41.8 | | |
| | comp=E,24nm,0.9s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.06** | **198** | Pn | Pn | 15 57 48.5 | +2.1 | |
| CCB | | | | IAML | | 15 59 15.1 | | |
| | comp=N,16nm,0.4s | | | | | | | |
| **MLY** | **Manley** | **5.13** | **212** | IAML | | 16 00 43.5 | | |
| | comp=E,15nm,0.9s | | | | | | | |
| **NEA2** | **Nenana** | **5.27** | **203** | IAML | | 16 00 45.1 | | |
| | comp=E,13nm,1.1s | | | | | | | |
| NEA2 | | | | IAML | | 16 00 49.8 | | |
| | comp=N,14nm,1.0s | | | | | | | |
| **SCRK** | **Sand Creek** | **5.54** | **179** | Pn | Pn | 15 57 55.5 | +2.4 | |
| **DHY** | **Denali Highway** | **6.56** | **193** | | Pn | 15 58 10.9 | +3.7 | |
| **A36M** | **Sachs Harbour** | **6.75** | **59** | Pn | Pn | 15 58 08.8 | -0.8 | |

*LDG **14** 16:27:39.8±0.1, 43°.16N×0°.49W, h2km, Md2.5/1, Ml2.6/9, Error ellipse: s-maj=2.3km s-min=2.2km az=125.0*
*STR **14** 16:27:40.7±0.6, 43°.N×3°.°×°.°, h0km, MLv1.9/8, Error ellipse: s-maj=0.0km s-min=0.0km az=62.0, preliminary*
*MDD **14** 16:27:41.1±0.3, 43°.10N×0°.48W, h0km, mb_Lg2.8/14, Error ellipse: s-maj=2.9km s-min=1.9km az=11.0*

**ISC 14 16:27:39.5±0.8, 43°.11N±0°.02×0°.49W±0°.02, h0km, n32, σ2s20/54, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ETSF** | **Etsaut** | **0.22** | **194** | *e*Pg | | **Pg** | **16 27 45.3** | **+1.6** |
| ETSF | | | | *e*Sg | | **Sg** | **16 27 48.3** | **+1.7** |
| | 122nm,0.2s | | | | | | | |
| **PYLO** | **Lourdes** | **0.32** | **93** | Pg | | **Pg** | **16 27 46.6** | **+1.0** |
| PYLO | | | | Sg | | **Sg** | **16 27 51.8** | **+2.0** |
| **URDF** | **Urds** | **0.33** | **347** | Pg | | **Pg** | **16 27 47.5** | **+1.6** |
| URDF | | | | Sg | | **Sg** | **16 27 53.5** | **+3.3** |
| **CANF** | **Canfranc** | **0.35** | **184** | Pg | | **Pg** | **16 27 47.5** | **+1.3** |
| CANF | | | | Sg | | **Sg** | **16 27 52.4** | **+1.7** |
| **VIEF** | **Viey** | **0.44** | **121** | Pg | | **Pg** | **16 27 48.5** | **+0.6** |
| VIEF | | | | Sg | | **Sg** | **16 27 54.8** | **+1.2** |
| **SJPF** | **Ste Jean** | **0.54** | **270** | *e*Pg | | **Pg** | **16 27 50.2** | **+0.3** |
| SJPF | | | | *e*Sg | | **Sg** | **16 27 57.1** | **+0.2** |
| | 43nm,0.2s | | | | | | | |
| **OSSF** | **Osses** | **0.58** | **284** | Pg | | **Pg** | **16 27 50.4** | **-0.3** |
| **EPF** | **Esparros** | **0.61** | **97** | *e*Pg | | **Pg** | **16 27 52.0** | **+0.8** |
| EPF | | | | *e*Sg | | **Sg** | **16 28 00.4** | **+1.3** |
| | 23nm,0.2s | | | | | | | |
| **EORO** | **Oroz-Betelu** | **0.64** | **250** | Pg | | **Pg** | **16 27 52.7** | **+0.9** |
| EORO | | | | Sg | | **Sg** | **16 28 01.2** | **+1.0** |
| EORO | | | | *i* Vmb_Lg | | | 16 28 05.1 | |
| **ECHI** | **Chisagues Biel** | **0.67** | **132** | Pg | | **Pg** | **16 27 52.7** | **+0.4** |
| ECHI | | | | Sg | | **Sg** | **16 28 01.5** | **+0.4** |
| ECHI | | | | *i* Vmb_Lg | | | 16 28 03.1 | |
| **ECHI** | **Chisagues Biel** | **0.67** | **132** | Pg | | **Pg** | **16 27 52.7** | **+0.4** |
| **TERF** | **Tercis-les-Bai** | **0.73** | **321** | Pg | | **Pg** | **16 27 54.7** | **+1.2** |
| **CRAS** | **Crastes** | **1.07** | **55** | Pg | | **Pg** | **16 28 00.9** | **+0.9** |
| CRAS | | | | Sg | | **Sg** | **16 28 15.7** | **+1.7** |
| **MLS** | **Moulis** | **1.17** | **97** | Pg | | **Pg** | **16 28 01.8** | **-0.1** |
| **SALF** | **Salau** | **1.28** | **105** | Pg | | **Pg** | **16 28 04.0** | **0.0** |
| SALF | | | | Sg | | **Sg** | **16 28 21.7** | **+1.1** |
| **ESAC** | **San Caprasio** | **1.39** | **179** | Pn | | **Pg** | **16 28 03.2** | **-3.0** |
| ESAC | | | | Sn | | **Sg** | **16 28 21.8** | **-2.3** |
| ESAC | | | | *i* Vmb_Lg | | | 16 28 25.1 | |
| **EMIR** | **Miracle** | **1.91** | **128** | Pn | | **Pn** | **16 28 14.2** | **+0.9** |
| EMIR | | | | Sn | | **Sn** | **16 28 37.5** | **-0.7** |
| EMIR | | | | *i* Vmb_Lg | | | 16 28 42.3 | |
| **MTLF** | **Montolieu** | **1.99** | **83** | *e*Pn | | **Pn** | **16 28 12.4** | **-2.0** |
| **MTLF** | **Montolieu** | **1.99** | **83** | *e*Pg | | **Pn** | **16 28 16.4** | **+2.0** |
| MTLF | | | | *e*Sg | | **Sb** | **16 28 42.5** | **+0.6** |
| | 7.1nm,0.3s | | | | | | | |
| **LFF** | **La Frestale** | **2.03** | **25** | *e*Pn | | **Pn** | **16 28 12.9** | **-2.0** |
| **LFF** | **La Frestale** | **2.03** | **25** | *e*Pg | | **Pn** | **16 28 17.2** | **+2.3** |
| LFF | | | | *e*Sn | | **Sn** | **16 28 36.9** | **-4.1** |
| | 10.0nm,0.3s | | | | | | | |
| **EPOB** | **Poblet** | **2.11** | **146** | Pg | | **Pb** | **16 28 18.4** | **-0.3** |
| EPOB | | | | Sn | | **Sn** | **16 28 42.2** | **-0.9** |
| EPOB | | | | *i* Vmb_Lg | | | 16 28 48.2 | |
| **ERTA** | **Horta de San J** | **2.24** | **164** | Pn | | **Pn** | **16 28 19.3** | **+1.4** |
| ERTA | | | | Sn | | **Sn** | **16 28 46.2** | **0.0** |
| ERTA | | | | *i* Vmb_Lg | | | 16 28 57.6 | |
| **CAF** | **Calviac** | **2.58** | **45** | *e*Pn | | **Pn** | **16 28 20.1** | **-2.5** |
| **CAF** | **Calviac** | **2.58** | **45** | *e*Pg | | **Pb** | **16 28 27.4** | **+0.7** |
| CAF | | | | *e*Sn | | **Sn** | **16 28 50.4** | **-4.3** |
| | 4.3nm,0.2s | | | | | | | |
| **RJF** | **Les Rejaudoux** | **2.62** | **33** | *e*Pn | | **Pn** | **16 28 21.0** | **-2.1** |
| **RJF** | **Les Rejaudoux** | **2.62** | **33** | *e*Pg | | **Pb** | **16 28 28.2** | **+0.9** |
| RJF | | | | *e*Sn | | **Sn** | **16 28 51.3** | **-4.3** |
| RJF | | | | *e*Sg | | **Sb** | **16 29 01.2** | **+1.1** |
| | 6.1nm,0.3s | | | | | | | |
| **EMOS** | **Mosqueruela** | **2.75** | **180** | Pn | | **Pn** | **16 28 26.0** | **+1.1** |
| EMOS | | | | Sn | | **Sn** | **16 28 55.1** | **-3.9** |
| EMOS | | | | *i* Vmb_Lg | | | 16 29 12.3 | |
| **LASF** | **Ste Croix** | **3.30** | **72** | *e*Pn | | **Pn** | **16 28 30.9** | **-1.5** |
| **MFF** | **Saint Martin d** | **3.50** | **4** | *e*Pg | | **Pb** | **16 28 43.4** | **+1.1** |
| MFF | | | | *e*Sn | | **Sn** | **16 29 11.3** | **-5.9** |
| | 2.4nm,0.4s | | | | | | | |
| **BGF** | **Bois d'Agland** | **4.18** | **33** | *e*Sn | | **Sn** | **16 29 29.0** | **-5.1** |
| | 11nm,0.3s | | | | | | | |
| **AVF** | **Avril sur Loir** | **4.58** | **35** | *e*Sg | | **Sb** | **16 30 01.1** | **+4.8** |
| | 3.6nm,0.5s | | | | | | | |

**NAM 14 16:32:30.8±4.1, 19°.66S×14°.48E, h22km±15km, ML2.2, 6C-2D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.08** | **167** | ⇑*i*P | | Pb | 16 32 37.0 | +1.9 |
| ST3N | | | | *i* S | | Sb | 16 32 38.4 | +0.4 |
| ST3N | | | | IAML | | | 16 32 38.5 | |
| | comp=Z,336nm,0.1s | | | | | | | |
| **ST3N** | **ST3** | **0.08** | **167** | *i* P | | Pb | 16 32 37.0 | +1.9 |
| ST3N | | | | *i* S | | Sb | 16 32 38.4 | +0.4 |
| ST3N | | | | IAML | | | 16 32 38.6 | |
| | comp=Z,832nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.15** | **121** | *i* S | | Sb | 16 32 37.8 | -2.6 |
| ST1N | | | | *i* S | | Sb | 16 32 37.8 | -2.5 |
| **ST1N** | **ST1** | **0.15** | **121** | *i* P | | Pb | 16 32 36.6 | +0.2 |
| ST1N | | | | *i* S | | Sb | 16 32 37.7 | -2.6 |
| ST1N | | | | IAML | | | 16 32 37.9 | |
| | comp=N,2μm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.15** | **156** | *i* P | | Pb | 16 32 36.1 | -0.3 |
| ST9N | | | | *i* S | | Sb | 16 32 37.1 | -3.2 |
| ST9N | | | | IAML | | | 16 32 37.3 | |
| | comp=Z,3μm,0.0s | | | | | | | |
| **ST9N** | **ST9** | **0.15** | **156** | *i* P | | Pb | 16 32 36.2 | -0.3 |
| ST9N | | | | *i* S | | Sb | 16 32 37.1 | -3.2 |
| ST9N | | | | IAML | | | 16 32 38.4 | |
| | comp=Z,5μm,0.1s | | | | | | | |
| **ST8N** | **ST8** | **0.15** | **259** | ⇑*i*P | | Pb | 16 32 40.1 | +3.7 |
| ST8N | | | | *i* S | | Sb | 16 32 43.6 | +3.3 |
| ST8N | | | | IAML | | | 16 32 44.0 | |
| | comp=Z,35nm,0.1s | | | | | | | |
| **ST8N** | **ST8** | **0.15** | **259** | *i* P | | Pb | 16 32 40.1 | +3.7 |
| ST8N | | | | *i* S | | Sb | 16 32 43.8 | +3.5 |
| ST8N | | | | IAML | | | 16 32 43.9 | |
| | comp=Z,184nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.16** | **208** | ⇑*i*P | | Pb | 16 32 38.3 | +1.8 |
| ST6N | | | | *i* S | | Sb | 16 32 40.7 | +0.3 |
| ST6N | | | | IAML | | | 16 32 40.9 | |
| | comp=Z,171nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.16** | **208** | *i* P | | Pb | 16 32 38.2 | +1.8 |
| ST6N | | | | *i* S | | Sb | 16 32 40.6 | +0.3 |
| ST6N | | | | IAML | | | 16 32 40.8 | |
| | comp=Z,289nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.29** | **157** | ⇓⇓*i*P | | Pb | 16 32 37.7 | +0.1 |
| ST2N | | | | ⇓⇓*i*P | | Pb | 16 32 37.7 | +0.1 |
| ST2N | | | | IAML | | | 16 32 39.9 | |
| | comp=Z,400nm,0.1s | | | | | | | |
| ST2N | | | | IAML | | | 16 32 40.1 | |
| | comp=N,596nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.29** | **157** | *i* P | | Pb | 16 32 37.7 | +0.1 |
| ST2N | | | | *i* S | | Sb | 16 32 39.5 | -2.6 |
| ST2N | | | | IAML | | | 16 32 40.2 | |
| | comp=Z,391nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.29** | **116** | ⇑*i*P | | Pb | 16 32 38.3 | +0.7 |
| ST5N | | | | *i* S | | Sb | 16 32 40.9 | -1.4 |
| ST5N | | | | IAML | | | 16 32 41.3 | |
| | comp=Z,136nm,0.0s | | | | | | | |
| **ST5N** | **ST5** | **0.29** | **116** | *i* P | | Pb | 16 32 38.4 | +0.8 |
| ST5N | | | | *i* S | | Sb | 16 32 40.7 | -1.5 |
| ST5N | | | | IAML | | | 16 32 40.9 | |
| | comp=Z,485nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.34** | **194** | ⇑*i*P | | Pn | 16 32 40.0 | -0.6 |
| ST10N | | | | *i* S | | Sb | 16 32 43.6 | +0.1 |
| ST10N | | | | IAML | | | 16 32 44.3 | |
| | comp=Z,134nm,0.0s | | | | | | | |
| **ST10N** | **ST10** | **0.34** | **194** | *i* P | | Pn | 16 32 40.0 | -0.7 |
| ST10N | | | | *i* S | | Sb | 16 32 43.8 | +0.3 |
| ST10N | | | | IAML | | | 16 32 45.2 | |
| | comp=Z,616nm,0.1s | | | | | | | |
| **ST11N** | **ST11** | **0.34** | **89** | *i* S | | Sb | 16 32 44.7 | +1.2 |
| ST11N | | | | *i* S | | Sn | 16 32 45.4 | -1.5 |
| **ST11N** | **ST11** | **0.34** | **89** | *i* P | | Pn | 16 32 40.8 | +0.1 |
| ST11N | | | | *i* S | | Sb | 16 32 45.0 | +1.5 |
| ST11N | | | | IAML | | | 16 32 46.6 | |
| | comp=Z,55nm,0.2s | | | | | | | |
| **ST4N** | **ST4** | **0.52** | **116** | ⇑*i*P | | Pn | 16 32 42.2 | -0.8 |
| ST4N | | | | *i* S | | Sb | 16 32 47.7 | -0.8 |
| ST4N | | | | IAML | | | 16 32 47.9 | |
| | comp=Z,52nm,0.1s | | | | | | | |

**IDC 14 16:39:38.4±6.2, 17°.97N×147°.02E, h263km±42km, mb2.5/3, mbtmp3.4/4, Error ellipse: s-maj=139.8km s-min=19.3km az=90.0, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **4.82** | **206** | P | | Pn | 16 40 51.4 | -1.2 |
| | 90nm,1.1s,baz=21,slow=19,SNR=2.1 | | | | | | | |
| GUMO | | | | S | | S | 16 41 53.0 | +1.2 |
| | 65nm,1.1s,baz=18,slow=20,SNR=1.7 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.07** | **339** | P | | P | 16 43 52.3 | -0.1 |
| | 1.0nm,1.0s,baz=164,slow=9.6,SNR=1.9 | | | | | | | |
| | 1.0nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **39.68** | **199** | P | | P | 16 46 45.6 | +0.1 |
| | 0.3nm,0.5s,baz=22,slow=10,SNR=5.9 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **43.32** | **198** | P | | P | 16 47 14.6 | -0.4 |
| | 0.2nm,0.8s,baz=6.7,slow=6.4,SNR=4.3 | | | | | | | |
| | 0.2nm,0.8s | | | | | | | |

**IDC 14 16:51:17.6±2.8, 4°.68N×127°.34E, h0km, mb3.3/3, mbtmp3.3/3, MS3.1/1, Error ellipse: s-maj=222.6km s-min=30.1km az=66.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **12.25** | **218** | LR | | LR | 16 59 06.0 | |
| | comp=Z,78nm,19.4s,baz=50,slow=38 | | | | | | | |
| **WRA** | **Warramunga Arr** | **25.42** | **165** | P | | P | 16 56 47.3 | +0.1 |
| | 0.3nm,0.7s,baz=346,slow=10,SNR=5.4 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **28.89** | **167** | P | | P | 16 57 18.2 | -0.2 |
| | 0.8nm,1.1s,baz=330,slow=11,SNR=2.9 | | | | | | | |
| | 0.8nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.13** | **325** | P | | P | 17 01 06.1 | -0.1 |
| | 0.2nm,0.6s,baz=123,slow=8.8,SNR=2.0 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |

*AEIC **14** 16:53:10.2±2.3, 69°.54N±0°.02×144°.77W±0°.04, h12km±4km, Error ellipse: s-maj=3.0km s-min=2.2km az=185.0*
*NEIC **14** 16:53:10.1, 69°.55N×144°.76W, h13km*
*NEIC **14** 16:53:11.6±1.6, 69°.57N±0°.02×144°.77W±0°.05, h10km±1km, mb4.6/100, ML4.6/118, Mwr4.4/33, ML4.5(AEIC), Error ellipse: s-maj=3.1km s-min=2.7km az=5.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr=1.00; Mθθ=-2.24; Mφφ 3.24; Mrθ=0.47; Mrφ=-2.91; Mθφ=0.94; Fault plane solution: M₀4.22000×10¹⁵ NP1:φs292.35000°, δ73.20000°, λ-173.00000°. NP2:φs200.31000°, δ83.30000°, λ-16.92000°. Principal axes: T 4.5811, Plg7.0000°, Azm247.0000°; N -0.8428, Plg72.0000°, Azm359.0000°; P -3.7383, Plg17.0000°, Azm155.0000°;*
*IDC **14** 16:53:11.5±0.5, 69°.68N×144°.86W, h0km, mb4.2/25, mbtmp4.2/29, ML4.3/4, MS3.7/52 Error ellipse: s-maj=13.8km s-min=10.0km az=53.0*

**ISC 14 16:53:12.3±0.3, 69°.56N±0°.03×144°.75W±0°.03, h14km, n543, σ1s18/455, mb4.5/79, MS3.7/49, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.37** | **351** | | | **Pg** | **16 53 17.9** | **-1.8** |
| C26K | | | | | | **Sg** | **16 53 23.4** | **-1.3** |
| **C26K** | **Camden Bay** | **0.37** | **351** | IAML | | | 16 53 24.7 | |
| | comp=N,29μm,0.9s | | | | | | | |
| C26K | | | | IAML | | | 16 53 30.9 | |
| | comp=E,35μm,0.8s | | | | | | | |
| **C26K** | **Camden Bay** | **0.37** | **351** | P | | **Pg** | **16 53 18.0** | **-1.7** |
| | baz=172,SNR=1000 | | | | | | | |
| **C27K** | **Jago River** | **0.37** | **79** | | | **Pg** | **16 53 17.7** | **-2.1** |
| C27K | | | | | | **Sg** | **16 53 22.9** | **-2.0** |
| **C27K** | **Jago River** | **0.37** | **79** | IAML | | | 16 53 23.9 | |
| | comp=E,29μm,0.8s | | | | | | | |
| C27K | | | | IAML | | | 16 53 25.4 | |
| | comp=N,41μm,0.8s | | | | | | | |
| **C27K** | **Jago River** | **0.37** | **79** | P | | **Pg** | **16 53 17.4** | **-2.4** |
| | baz=258,SNR=903 | | | | | | | |
| **D25K** | **Kavik River** | **0.62** | **248** | Pg | | **Pg** | **16 53 21.6** | **-2.9** |
| **D25K** | **Kavik River** | **0.62** | **248** | | | **Sg** | **16 53 30.6** | **-2.0** |
| **D25K** | **Kavik River** | **0.62** | **248** | P | | **Pg** | **16 53 21.6** | **-2.9** |
| | baz=68,SNR=974 | | | | | | | |
| **D27M** | **Malcolm River** | **1.38** | **102** | | | **Sb** | **16 53 55.4** | **+0.1** |
| **D27M** | **Malcolm River** | **1.38** | **102** | Pn | | **Pn** | **16 53 35.9** | **-1.2** |
| **D27M** | **Malcolm River** | **1.38** | **102** | IAML | | | 16 53 58.8 | |
| | comp=E,4μm,1.1s | | | | | | | |
| D27M | | | | IAML | | | 16 54 01.5 | |
| | comp=N,8μm,1.1s | | | | | | | |
| **D27M** | **Malcolm River** | **1.38** | **102** | P | | **Pn** | **16 53 35.7** | **-1.5** |
| | baz=284,SNR=253 | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.39** | **279** | | | **Pn** | **16 53 36.6** | **-0.6** |
| **C24K** | **Franklin Bluff** | **1.39** | **279** | IAML | | | 16 53 59.7 | |
| | comp=N,9μm,1.2s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.39** | **279** | P | | **Pn** | **16 53 36.6** | **-0.6** |
| | baz=96 | | | | | | | |
| **D24K** | **Happy Valley** | **1.50** | **256** | Pn | | **Pn** | **16 53 38.4** | **-0.4** |
| D24K | | | | IAML | | | 16 54 03.2 | |
| | comp=E,9μm,1.0s | | | | | | | |
| D24K | | | | IAML | | | 16 54 04.4 | |
| | comp=N,8μm,0.6s | | | | | | | |
| **D24K** | **Happy Valley** | **1.50** | **256** | P | | **Pn** | **16 53 38.3** | **-0.5** |
| | baz=73,SNR=678 | | | | | | | |
| **E27K** | **Coleen River** | **1.79** | **139** | | | **Sn** | **16 54 05.7** | **+0.4** |
| **E27K** | **Coleen River** | **1.79** | **139** | Pn | | **Pn** | **16 53 43.1** | **+0.3** |
| **E27K** | **Coleen River** | **1.79** | **139** | IAML | | | 16 54 12.8 | |
| | comp=E,3μm,1.2s | | | | | | | |
| E27K | | | | IAML | | | 16 54 16.2 | |
| | comp=N,3μm,1.1s | | | | | | | |
| **E27K** | **Coleen River** | **1.79** | **139** | P | | **Pn** | **16 53 43.1** | **+0.3** |
| | baz=321,SNR=471 | | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **173** | | | **Sb** | **16 54 09.6** | **-0.3** |
| **F26K** | **Sheenjek River** | **1.89** | **173** | | | **Pn** | **16 53 44.8** | **+0.7** |
| **F26K** | **Sheenjek River** | **1.89** | **173** | IAML | | | 16 54 13.6 | |
| | comp=N,2μm,0.7s | | | | | | | |
| F26K | | | | IAML | | | 16 54 14.1 | |
| | comp=E,3μm,0.8s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **173** | P | | **Pn** | **16 53 44.8** | **+0.7** |
| | baz=353,SNR=272 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **244** | Pn | | **Pn** | **16 53 44.8** | **-0.3** |
| TOLK | | | | IAML | | | 16 54 15.7 | |
| | comp=E,4μm,0.8s | | | | | | | |
| TOLK | | | | IAML | | | 16 54 20.3 | |
| | comp=N,4μm,1.1s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **244** | | | **Sb** | **16 54 10.8** | **-1.2** |
| **TOLK** | **Toolik Lake Re** | **1.96** | **244** | P | | **Pn** | **16 53 44.8** | **-0.3** |
| | baz=60,SNR=757 | | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **190** | | | **Sb** | **16 54 12.6** | **-0.6** |
| **F25K** | **Christian Rive** | **2.00** | **190** | | | **Pn** | **16 53 46.3** | **+0.6** |
| **F25K** | **Christian Rive** | **2.00** | **190** | IAML | | | 16 54 18.9 | |
| | comp=N,4μm,0.8s | | | | | | | |
| F25K | | | | IAML | | | 16 54 19.9 | |
| | comp=E,5μm,1.1s | | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **190** | P | | **Pn** | **16 53 46.3** | **+0.6** |
| | baz=8.9,SNR=384 | | | | | | | |
| **E24K** | **Your Creek** | **2.02** | **224** | | | **Pn** | **16 53 46.4** | **+0.5** |
| **E24K** | **Your Creek** | **2.02** | **224** | P | | **Pn** | **16 53 46.6** | **+0.7** |
| | baz=41,SNR=224 | | | | | | | |
| **C23K** | **Itkillik River** | **2.06** | **281** | | | **Pn** | **16 53 45.7** | **-0.8** |
| C23K | | | | IAML | | | 16 54 23.6 | |
| | comp=N,5μm,0.9s | | | | | | | |
| C23K | | | | IAML | | | 16 54 29.7 | |
| | comp=E,5μm,0.8s | | | | | | | |
| **C23K** | **Itkillik River** | **2.06** | **281** | P | | **Pn** | **16 53 45.8** | **-0.8** |
| | baz=96,SNR=481 | | | | | | | |
| **E28M** | **Babbage River** | **2.10** | **115** | Pn | | **Pn** | **16 53 47.4** | **+0.3** |
| E28M | | | | IAML | | | 16 54 29.1 | |
| | comp=E,3μm,0.9s | | | | | | | |
| **E28M** | **Babbage River** | **2.10** | **115** | P | | **Pn** | **16 53 47.4** | **+0.3** |
| | baz=295,SNR=302 | | | | | | | |
| **D28M** | **Stokes Point** | **2.13** | **93** | | | **Pn** | **16 53 48.3** | **+0.8** |
| **D28M** | **Stokes Point** | **2.13** | **93** | P | | **Pn** | **16 53 48.6** | **+1.2** |
| | baz=278,SNR=40 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.14** | **178** | | | **Pn** | **16 53 48.4** | **+0.8** |
| **D23K** | **Nanushuk River** | **2.19** | **257** | | | **Pn** | **16 53 48.0** | **-0.3** |
| D23K | | | | IAML | | | 16 54 27.7 | |
| | comp=N,3μm,0.9s | | | | | | | |
| D23K | | | | IAML | | | 16 54 39.5 | |
| | comp=E,3μm,1.1s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.19** | **257** | P | | **Pn** | **16 53 48.2** | **-0.1** |
| | baz=72 | | | | | | | |
| **E23K** | **Chandalar** | **2.32** | **232** | | | **Pn** | **16 53 50.2** | **+0.1** |
| **E23K** | **Chandalar** | **2.32** | **232** | P | | **Pn** | **16 53 50.2** | **+0.1** |
| | baz=48,SNR=360 | | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **211** | Pn | | **Pn** | **16 53 50.9** | **+0.4** |
| **F24K** | **Squaw Lake** | **2.35** | **211** | P | | **Pn** | **16 53 51.1** | **+0.6** |
| | baz=28,SNR=180 | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.65** | **172** | | | **Pn** | **16 53 54.8** | **+0.4** |
| **G26K** | **Porcupine Rive** | **2.65** | **172** | P | | **Pn** | **16 53 54.8** | **+0.4** |
| | baz=352,SNR=163 | | | | | | | |
| **F28M** | **Old Crow** | **2.65** | **135** | Pn | | **Pn** | **16 53 54.6** | **0.0** |
| F28M | | | | IAML | | | 16 54 40.0 | |
| | comp=E,2μm,1.2s | | | | | | | |
| F28M | | | | IAML | | | 16 54 44.3 | |
| | comp=N,2μm,1.1s | | | | | | | |
| **F28M** | **Old Crow** | **2.65** | **135** | P | | **Pn** | **16 53 54.9** | **+0.3** |
| | baz=319,SNR=348 | | | | | | | |
| **E29M** | **Blow River** | **2.74** | **112** | Pn | | **Pn** | **16 53 55.2** | **-0.5** |
| E29M | | | | IAML | | | 16 54 41.0 | |
| | comp=N,3μm,1.0s | | | | | | | |
| E29M | | | | IAML | | | 16 54 44.5 | |
| | comp=E,2μm,1.0s | | | | | | | |
| **E29M** | **Blow River** | **2.74** | **112** | P | | **Pn** | **16 53 55.8** | **+0.1** |
| | baz=298,SNR=252 | | | | | | | |
| **G25K** | **Bearman Lake** | **2.85** | **191** | | | **Pn** | **16 53 57.7** | **+0.4** |
| **G25K** | **Bearman Lake** | **2.85** | **191** | P | | **Pn** | **16 53 57.7** | **+0.4** |
| | baz=9.5,SNR=26 | | | | | | | |
| **D22K** | **Ayikyak River** | **2.91** | **260** | Pn | | **Pn** | **16 53 57.5** | **-0.6** |
| D22K | | | | IAML | | | 16 54 56.3 | |
| | comp=N,2μm,1.2s | | | | | | | |
| **D22K** | **Ayikyak River** | **2.91** | **260** | P | | **Pn** | **16 53 57.8** | **-0.4** |
| | baz=73,SNR=236 | | | | | | | |
| **G27K** | **Doyon Strip** | **2.99** | **156** | | | **Pn** | **16 53 59.6** | **+0.2** |
| **G27K** | **Doyon Strip** | **2.99** | **156** | P | | **Pn** | **16 53 59.4** | **+0.1** |
| | baz=338,SNR=101 | | | | | | | |
| **FYU** | **Fort Yukon** | **3.01** | **184** | Pn | | **Pn** | **16 53 59.7** | **+0.2** |
| FYU | | | | IAML | | | 16 54 53.2 | |
| | comp=N,2μm,1.2s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.05** | **201** | | | **Pn** | **16 53 60.0** | **-0.1** |
| **G24K** | **Hadweenzic Riv** | **3.05** | **201** | P | | **Pn** | **16 54 00.2** | **+0.1** |
| | baz=18,SNR=63 | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.09** | **289** | | | **Pn** | **16 53 59.5** | **-1.1** |
| B22K | | | | IAML | | | 16 54 57.6 | |
| | comp=N,4μm,1.5s | | | | | | | |
| B22K | | | | IAML | | | 16 54 58.2 | |
| | comp=E,4μm,1.1s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.09** | **289** | P | | **Pn** | **16 53 59.8** | **-0.8** |
| | baz=101,SNR=98 | | | | | | | |
| **COLD** | **Coldfoot** | **3.09** | **223** | | | **Pn** | **16 54 00.7** | **+0.1** |
| **COLD** | **Coldfoot** | **3.09** | **223** | P | | **Pn** | **16 54 00.9** | **+0.2** |
| | baz=38,SNR=52 | | | | | | | |
| **H25L** | **Birch Creek** | **3.33** | **187** | | | **Pn** | **16 54 04.0** | **+0.1** |
| **H25L** | **Birch Creek** | **3.33** | **187** | P | | **Pn** | **16 54 04.2** | **+0.3** |
| | baz=6.4,SNR=56 | | | | | | | |
| **F22K** | **John River** | **3.42** | **237** | | | **Pn** | **16 54 06.0** | **+0.8** |
| **F22K** | **John River** | **3.42** | **237** | P | | **Pn** | **16 54 05.0** | **-0.1** |
| | baz=50,SNR=43 | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.46** | **276** | | | **Pn** | **16 54 04.9** | **-0.7** |
| **B21K** | **Ikpikpuk River** | **3.46** | **276** | P | | **Pn** | **16 54 05.4** | **-0.2** |
| | baz=87,SNR=76 | | | | | | | |
| **G23K** | **Bananza Creek** | **3.47** | **217** | P | | **

baz=344,SNR=268
**H23K Yukon River 4.17 208 Pn 16 54 16.0 +0.5**
**H23K Yukon River 4.17 208** P **Pn 16 54 16.2 +0.7**
baz=24,SNR=72
**INK Inuvik 4.24 102 Pn 16 54 16.1 -0.3**
**INK Inuvik 4.24 102** Pn **Pn 16 54 17.1 +0.7**
comp=N,4.6nm,0.3s,baz=312,slow=8.1,SNR=27
INK Sn **Sn 16 55 04.9 -0.7**
comp=N,14nm,0.3s,baz=270,slow=12,SNR=8.9
INK LR LR 16 55 41.0
comp=N,332nm,22.0s,baz=291,slow=35
comp=N,39nm,0.7s
**INK Inuvik 4.24 102** P **Pn 16 54 17.1 +0.7**
baz=292,SNR=23
**I26K Coal Creek Min 4.32 171 Pn 16 54 18.0 +0.6**
**I26K Coal Creek Min 4.32 171** IAML 16 55 52.5
comp=E,687nm,1.1s
**I26K Coal Creek Min 4.32 171** P **Pn 16 54 17.8 +0.4**
baz=352
**D20K Etivluk River 4.33 264 Pn 16 54 18.1 +0.5**
**D20K Etivluk River 4.33 264** P **Pn 16 54 17.1 -0.5**
baz=73,SNR=114
**B20K Meade River 4.33 282 Pn 16 54 17.0 -0.6**
B20K IAML 16 56 10.2
comp=E,851nm,1.5s
**B20K Meade River 4.33 282** P **Pn 16 54 17.1 -0.5**
baz=90,SNR=24
**E20K Nigu River 4.33 258 Pn 16 54 17.5 -0.2**
**E20K Nigu River 4.33 258** P **Pn 16 54 17.5 -0.2**
baz=67,SNR=97
**A21K Barrow 4.36 299 Pn 16 54 17.8 -0.2**
**A21K Barrow 4.36 299** P **Pn 16 54 18.1 +0.1**
baz=108
**EPYK Eagle Plains 4.40 133 Pn 16 54 19.0 +0.3**
**EPYK Eagle Plains 4.40 133** P **Pn 16 54 18.9 +0.2**
baz=320,SNR=152
**H22K Ishtalitna Cre 4.46 218 Pn 16 54 19.5 0.0**
**H22K Ishtalitna Cre 4.46 218** P **Pn 16 54 19.9 +0.5**
baz=32,SNR=12
**G21K Allakaket 4.49 231 Pn 16 54 19.4 -0.4**
**G21K Allakaket 4.49 231** P **Pn 16 54 19.1 -0.7**
baz=43,SNR=10
**I28M Miner Creek 4.52 154 Pn 16 54 20.9 +0.5**
I28M IAML 16 55 51.1
comp=E,648nm,1.0s
I28M IAML 16 56 03.7
comp=N,422nm,1.2s
**I28M Miner Creek 4.52 154** P **Pn 16 54 21.2 +0.8**
baz=338,SNR=270
**F31M Tsiigehtchic 4.57 112 Pn 16 54 21.1 +0.2**
**F31M Tsiigehtchic 4.57 112** IAML 16 55 44.9
comp=E,528nm,1.0s
F31M IAML 16 55 53.1
comp=N,535nm,1.4s
**F31M Tsiigehtchic 4.57 112** P **Pn 16 54 20.7 -0.2**
baz=302,SNR=18
**POKR Poker Plat Res 4.58 194 Pn 16 54 21.5 +0.4**
**POKR Poker Plat Res 4.58 194** IAML 16 55 54.6
comp=N,445nm,1.0s
**POKR Poker Plat Res 4.58 194** P **Pn 16 54 21.1 0.0**
baz=12,SNR=22
**G31M Satah River 4.71 119 Pn 16 54 22.8 -0.1**
**G31M Satah River 4.71 119** P **Pn 16 54 22.6 -0.2**
baz=309,SNR=75
**I23K Minto, Yukon-K 4.77 204** IAML 16 55 56.7
comp=E,600nm,1.2s
**I23K Minto, Yukon-K 4.77 204** P **Pn 16 54 23.8 +0.1**
baz=20,SNR=43
**F20K Avaraart Lake 4.79 243** IAML 16 56 07.0
comp=E,382nm,1.1s
F20K IAML 16 56 08.3
comp=N,405nm,1.5s
**F20K Avaraart Lake 4.79 243** P **Pn 16 54 24.1 +0.2**
baz=53,SNR=92
**MDM Murphy Dome 4.81 198 Pn 16 54 24.3 0.0**
MDM IAML 16 55 58.6
comp=E,524nm,1.4s
MDM IAML 16 56 01.8
comp=N,374nm,1.4s
**COLA College 4.86 196 Pn 16 54 25.2 +0.3**
**COLA College 4.86 196** P **Pn 16 54 25.1 +0.3**
baz=13
**ILAR Eielson Array 4.88 191 Pn 16 54 25.4 +0.2**
**ILAR Eielson Array 4.88 191** Pn **Pn 16 54 25.6 +0.4**
comp=N,5.7nm,0.3s,baz=6.4,slow=14,SNR=67
ILAR Sn **Sn 16 55 22.9 +1.6**
comp=N,20nm,0.3s,baz=5.1,slow=30,SNR=7.7
ILAR Lg Lg 16 55 40.0
comp=N,17nm,0.3s,baz=8.0,slow=32,SNR=6.2
ILAR LR LR 16 56 49.9
comp=N,567nm,20.6s,baz=8.0,slow=44
comp=N,26nm,0.6s
**I29M Ogilvie Camp, 4.89 146 Pn 16 54 25.6 +0.3**
**I29M Ogilvie Camp, 4.89 146** IAML 16 55 47.3
comp=E,436nm,0.9s
I29M IAML 16 55 50.2
comp=N,312nm,1.2s
**I29M Ogilvie Camp, 4.89 146** P **Pn 16 54 25.3 0.0**
baz=332,SNR=245
**D19K Kuna River 4.92 264 Pn 16 54 26.0 +0.2**
**D19K Kuna River 4.92 264** IAML 16 56 06.1
comp=E,465nm,1.4s
**D19K Kuna River 4.92 264** P **Pn 16 54 25.5 -0.3**
baz=72
**J25K Salcha River, 4.97 183** IAML 16 55 48.5
comp=E,286nm,1.2s
**J25K Salcha River, 4.97 183** P **Pn 16 54 27.2 +0.6**
baz=2.5,SNR=37
**H21K Melozitna Rive 4.98 222 Pn 16 54 27.0 +0.4**
**H21K Melozitna Rive 4.98 222** IAML 16 55 57.0
comp=E,508nm,1.2s
H21K IAML 16 55 58.4
comp=N,410nm,1.5s
**H21K Melozitna Rive 4.98 222** P **Pn 16 54 26.4 -0.1**
baz=35,SNR=36
**EGAK Eagle 5.00 162 Pn 16 54 27.2 +0.4**
**EGAK Eagle 5.00 162** IAML 16 55 59.3
comp=N,302nm,1.0s
EGAK IAML 16 56 00.5
comp=N,336nm,0.9s
**EGAK Eagle 5.00 162** P **Pn 16 54 27.4 +0.6**
baz=345,SNR=208
**E19K Redstone River 5.05 251 Pn 16 54 27.8 +0.3**
**E19K Redstone River 5.05 251** IAML 16 56 01.5
comp=E,351nm,1.1s
E19K IAML 16 56 09.4
comp=N,366nm,1.1s
**E19K Redstone River 5.05 251** P **Pn 16 54 26.3 -1.2**
baz=60
**CCB Clear Creek Bu 5.08 195** IAML 16 55 58.9
comp=E,316nm,1.1s
**J26L Joseph Creek 5.10 174** IAML 16 55 34.6
comp=N,304nm,0.6s
J26L IAML 16 55 59.0
comp=E,405nm,1.4s
**J26L Joseph Creek 5.10 174** P **Pn 16 54 28.7 +0.4**
baz=355,SNR=94
**MLY Manley 5.10 210** IAML 16 56 08.6
comp=E,286nm,1.5s
**MLY Manley 5.10 210** P **Pn 16 54 28.4 +0.1**
baz=24,SNR=29
**HDA Harding Lake 5.24 191** IAML 16 56 09.6
comp=N,420nm,1.2s
**HDA Harding Lake 5.24 191** P **Pn 16 54 30.3 +0.2**
baz=8.4,SNR=60
**NEA2 Nenana 5.26 201** IAML 16 56 10.4
comp=N,223nm,1.1s
**NEA2 Nenana 5.26 201** P **Pn 16 54 30.1 -0.3**
baz=17,SNR=55
**C19K Lookout Ridge 5.27 272** IAML 16 56 30.1
comp=N,431nm,1.2s
C19K IAML 16 56 35.2
comp=E,367nm,1.4s
**C19K Lookout Ridge 5.27 272** P **Pn 16 54 30.1 -0.6**
baz=78,SNR=35
**WRH Wood River Hil 5.27 196** IAML 16 56 00.5
comp=N,251nm,1.3s
WRH IAML 16 56 04.4
comp=E,427nm,1.3s
**I30M Mount Dempster 5.42 139 Pn 16 54 32.9 +0.2**
**I30M Mount Dempster 5.42 139** P **Pn 16 54 32.7 0.0**
baz=327,SNR=272
**F19K Shaleruckik Mo 5.57 247** P **Pn 16 54 34.8 +0.2**
baz=55,SNR=106
**SCRK Sand Creek 5.62 177 Pn 16 54 36.3 +0.9**
**SCRK Sand Creek 5.62 177** P **Pn 16 54 36.5 +1.1**
baz=357,SNR=153

**H20K Anotleneega Mo 5.63 228** P **Pn 16 54 35.2 -0.3**
baz=39,SNR=12
**K27K Chicken 5.65 168 Pn 16 54 36.9 +1.1**
**K27K Chicken 5.65 168** P **Pn 16 54 36.5 +0.7**
baz=350,SNR=165
**A19K Wainwright 5.67 284 Pn 16 54 35.5 -0.4**
**A19K Wainwright 5.67 284** P **Pn 16 54 35.5 -0.4**
baz=89,SNR=9.1
**BWN Browne 5.72 201 Pn 16 54 36.7 0.0**
**J29N Klondike Camp 5.73 150** P **Pn 16 54 37.0 +0.1**
baz=336,SNR=11
**G19K Purcell Mounta 5.78 240** P **Pn 16 54 37.6 0.0**
baz=48,SNR=20
**K24K Donnelly Dome 5.79 185** P **Pn 16 54 38.9 +1.1**
baz=3.5,SNR=42
**DAWY Dawson 5.91 156 Pn 16 54 39.7 +0.4**
**DAWY Dawson 5.91 156** P **Pn 16 54 40.2 +0.9**
baz=341,SNR=182
**C18K Utukok River 5.95 269 Pn 16 54 38.2 -1.7**
**C18K Utukok River 5.95 269** P **Pn 16 54 38.8 -1.1**
baz=74,SNR=58
**J30M Hart River 5.98 143** P **Pn 16 54 40.7 +0.2**
baz=330,SNR=191
**B18K Kokolik River 6.00 276 Pn 16 54 39.9 -0.6**
**B18K Kokolik River 6.00 276** P **Pn 16 54 40.1 -0.4**
baz=80
**BPAW Bear Paw Mtn. 6.01 207** P **Pn 16 54 40.9 +0.2**
baz=21,SNR=33
**H19K Roundabout Mou 6.03 233** P **Pn 16 54 40.2 -0.8**
baz=43,SNR=16
**MCK McKinley 6.08 198** P **Pn 16 54 41.7 0.0**
baz=14,SNR=46
**I20K Naaghedeneel 6.09 223** P **Pn 16 54 42.1 +0.3**
baz=34
**E18K Tukpahlearik C 6.21 257** P **Pn 16 54 43.4 0.0**
baz=63,SNR=91
**F18K Selawik 6.31 249** P **Pn 16 54 44.4 -0.3**
baz=55,SNR=85
**K29M Barlow Dome 6.41 150** P **Pn 16 54 46.5 +0.2**
baz=337,SNR=204
**G18K Tagagawik 6.43 242** P **Pn 16 54 46.5 +0.1**
baz=49,SNR=73
**J20K Nowinta River 6.54 219** P **Pn 16 54 48.1 +0.1**
baz=30
**L26K Log Cabin Wild 6.59 174** P **Pn 16 54 49.4 +0.8**
baz=356,SNR=60
**DHY Denali Highway 6.60 190 Pn 16 54 50.5 +1.6**
**DHY Denali Highway 6.60 190** P **Pn 16 54 50.0 +1.1**
baz=8.0,SNR=66
**PAX Paxson 6.62 183** P **Pn 16 54 50.1 +0.9**
baz=2.1,SNR=70
**BCAR Beaver Creek A 6.63 168 Pn 16 54 49.8 +0.6**
**L27K Beaver Creek, 6.63 168** P **Pn 16 54 49.9 +0.7**
baz=351,SNR=103
**C17K DeLong Mountai 6.70 269** P **Pn 16 54 49.0 -1.1**
baz=72,SNR=12
**GCSA Galena City Sc 6.75 230** P **Pn 16 54 50.3 -0.5**
baz=39
**RDOG Red Dog Mine 6.75 266** P **Pn 16 54 49.1 -1.7**
baz=69,SNR=18
**E17K Hotham Inlet 6.79 257** P **Pn 16 54 50.4 -0.9**
baz=61,SNR=34
**H18K Honhosa River 6.86 236** P **Pn 16 54 52.3 0.0**
baz=44,SNR=16
**A36M Sachs Harbour 6.87 60 Pn 16 54 50.6 -1.8**
**A36M Sachs Harbour 6.87 60** P **Pn 16 54 51.2 -1.2**
baz=259,SNR=30
**WAT1 Susitna Watana 6.93 195 Pn 16 54 53.8 +0.5**
**WAT1 Susitna Watana 6.93 195** P **Pn 16 54 53.2 -0.1**
baz=11
**F17K Baldwin Pennin 6.93 251** P **Pn 16 54 51.9 -1.4**
baz=56,SNR=30
**D17K Noatak River 6.95 263** P **Pn 16 54 51.0 -2.4**
baz=66,SNR=23
**WAT7 Susitna Watana 6.95 196 Pn 16 54 54.4 +0.6**
**L29M L29M 7.00 155** P **Pn 16 54 54.7 +0.4**
baz=340,SNR=94
**J19K Poorman 7.04 223 Pn 16 54 55.0 +0.3**
**J19K Poorman 7.04 223** P **Pn 16 54 55.1 +0.3**
baz=33
**WAT6 Susitna Watana 7.11 191 Pn 16 54 56.9 +0.9**
**WAT6 Susitna Watana 7.11 191** P **Pn 16 54 56.3 +0.4**
baz=8.5,SNR=13
**HARP HAARP 7.19 182 Pn 16 54 58.5 +1.5**
**HARP HAARP 7.19 182** P **Pn 16 54 56.5 -0.4**
baz=1.1,SNR=13
**M26K Nabesna, AK 7.22 173** P **Pn 16 54 58.1 +0.7**
baz=355,SNR=84
**C36M Paulatuk 7.27 82 Pn 16 54 56.3 -1.6**
**C36M Paulatuk 7.27 82** P **Pn 16 54 54.9 -3.0**
baz=281
**G17K Kiwalik Mounta 7.31 244** P **Pn 16 54 57.8 -0.8**
baz=49,SNR=32
**M27K Edge Creek, AK 7.33 169** P **Pn 16 54 59.5 +0.7**
baz=352,SNR=179
**H17K Granite Mounta 7.47 239** P **Pn 16 55 00.5 -0.2**
baz=45,SNR=14
**M24K Tolsona, Glenn 7.51 185 Pn 16 55 02.9 +1.6**
**M24K Tolsona, Glenn 7.51 185** P **Pn 16 55 03.4 +2.1**
baz=3.8
**WAZA Wrangell Mount 7.52 178 Pn 16 55 03.1 +1.5**
**C16K Lisburne Hills 7.53 270** P **Pn 16 54 59.7 -1.7**
baz=71,SNR=7.9
**M29M Somme Creek 7.58 157** P **Pn 16 55 03.2 +0.8**
baz=343,SNR=259
**WACK Wrangell Chich 7.61 178 Pn 16 55 04.1 +1.3**
**WASW Wrangell South 7.67 178 Pn 16 55 04.3 +0.7**
**J18K Innoko River 7.75 224 Pn 16 55 04.8 +0.3**
**J18K Innoko River 7.75 224** P **Pn 16 55 06.3 +1.7**
baz=33
**SCM Sheep Creek Mo 7.83 189** P **Pn 16 55 07.3 +1.6**
baz=6.6,SNR=7.1
**M23K Glacier View 7.89 190** P **Pn 16 55 06.2 -0.3**
baz=7.6,SNR=13
**SML Sawmill 7.92 192 Pn 16 55 08.6 +1.6**
**SML Sawmill 7.92 192** P **Pn 16 55 06.3 -0.6**
baz=9.1,SNR=6.2
**G16K Koyuk River 7.93 247** P **Pn 16 55 06.0 -0.9**
baz=50
**N25K Chitina, Valde 7.99 179 Pn 16 55 09.1 +1.2**
**N25K Chitina, Valde 7.99 179** P **Pn 16 55 08.8 +1.0**
baz=360
**L20K Farewell, AK 8.01 212** P **Pn 16 55 07.5 -0.7**
baz=24
**YUK3 Moose Creek 8.01 165** P **Pn 16 55 09.3 +1.0**
baz=349,SNR=75
**SKT Skwentna 8.10 203 Pn 16 55 10.3 +1.0**
**SKT Skwentna 8.10 203** P **Pn 16 55 10.3 +1.0**
baz=17,SNR=5.9
**KLU Klutina 8.12 184 Pn 16 55 09.4 -0.2**
**KLU Klutina 8.12 184** P **Pn 16 55 10.8 +1.2**
baz=2.9
**MCARA McCarthy VSAT 8.24 174 Pn 16 55 11.8 +0.5**
**MCARA McCarthy VSAT 8.24 174** P **Pn 16 55 12.8 +1.6**
baz=356,SNR=12
**KNK Knik Glacier 8.32 192 Pn 16 55 12.2 -0.2**
**KNK Knik Glacier 8.32 192** P **Pn 16 55 15.7 +3.2**
baz=9.0,SNR=14
**H16K Elim 8.39 242** P **Pn 16 55 12.3 -1.1**
baz=46
**J17K VABM Dome 8.41 230** P **Pn 16 55 13.2 -0.4**
baz=36
**M20K Styx River 8.44 208** P **Pn 16 55 15.9 +1.9**
baz=20
**L19K White Mountain 8.47 214** P **Pn 16 55 14.4 -0.1**
baz=25
**I17K Unalakleet 8.48 236** P **Pn 16 55 13.4 -1.1**
baz=41
**F15K North Star Dit 8.49 253** P **Pn 16 55 12.6 -2.1**
baz=54
**SUA Susitna One 8.49 200** P **Pn 16 55 13.9 -1.0**
baz=14
**M31M Drury Creek, Y 8.50 145** P **Pn 16 55 15.5 +0.7**
baz=335,SNR=22
**YUK8 Steele Glacier 8.56 164** P **Pn 16 55 16.3 +0.4**
baz=348,SNR=22
**BALM Baldy 8.62 172 Pn 16 55 17.5 +1.0**
**BMRM Bremner River 8.63 180 Pn 16 55 18.7 +2.0**
**BMRM Bremner River 8.63 180** P **Pn 16 55 17.7 +1.1**
baz=360,SNR=22
**M19K Big River Lodg 8.64 212** P **Pn 16 55 18.0 +1.3**
baz=23
**FARO Faro, Yukon 8.69 142** P **Pn 16 55 17.3 -0.2**
baz=333,SNR=45
**N30M Aishikik Lake 8.72 155** P **Pn 16 55 18.9 +1.0**
baz=342,SNR=74
**KIAG Kiagna River 8.73 172 Pn 16 55 19.9 +1.8**

**CTG Chitna Glacier 8.74 169** P **Pn 16 55 20.5 +2.2**
baz=352,SNR=56
**RC01 Rabbit Creek A 8.75 196** P **Pn 16 55 18.3 +0.1**
baz=12
**K17K Iditarod 8.77 225** P **Pn 16 55 19.1 +0.5**
baz=33
**L18K Granite Mounta 8.82 219** P **Pn 16 55 19.6 +0.4**
baz=28
**PWL Port Wells 8.86 191** P **Pn 16 55 22.3 +2.5**
baz=8.2
**CRQE Cirque 8.87 175** P **Pn 16 55 21.6 +1.6**
baz=356,SNR=31
**TGL Tana Glacier 8.88 174 Pn 16 55 22.2 +2.2**
**N31M Braeburn, Yuko 8.91 151** P **Pn 16 55 21.6 +1.2**
baz=339,SNR=48
**J16K Anvik River 8.91 233** P **Pn 16 55 21.7 +1.2**
baz=38
**N20K Mount Spurr 8.94 204** P **Pn 16 55 20.9 0.0**
baz=17
**O28M Mount Upton 9.03 166** P **Pn 16 55 22.9 +0.6**
baz=350,SNR=26
**YUK6 Outpost Mounta 9.05 160** P **Pn 16 55 24.3 +1.7**
baz=346,SNR=26
**BAGL Bagley Icefiel 9.17 172 Pn 16 55 26.8 +2.8**
**WAX Waxell Ridge 9.18 174 Pn 16 55 27.1 +2.9**
**F14K Arctic Creek 9.19 254** P **Pn 16 55 22.9 -1.4**
baz=54
**L17K Donlin 9.27 223** P **Pn 16 55 24.4 -0.9**
baz=31
**M18K Stony River 9.29 215** P **Pn 16 55 26.6 +0.9**
baz=25
**MESA MESA 9.49 171** P **Pn 16 55 29.3 +0.7**
baz=354,SNR=11
**O30N Mendenhall 9.53 153** P **Pn 16 55 28.6 -0.4**
baz=341,SNR=20
**O29M Mount Kennedy 9.65 161** P **Pn 16 55 32.9 +2.2**
baz=347,SNR=14
**N19K Bonanza Creek 9.67 210** P **Pn 16 55 32.3 +1.4**
baz=21
**M17K Holitna River 9.71 219** P **Pn 16 55 32.1 +0.6**
baz=27
**N32M Quiet Lake 9.72 144** P **Pn 16 55 31.5 -0.1**
baz=335
**WHY Whitehorse 9.84 150** P **Pn 16 55 33.6 +0.3**
baz=339,SNR=10
**L16K Owhat River 9.92 225** P **Pn 16 55 34.6 +0.4**
baz=31
**K15K Wolf Creek Mou 9.97 231** P **Pn 16 55 35.8 +0.9**
baz=36
**P30M Million Dollar 10.03 157** P **Pn 16 55 37.5 +1.7**
baz=344
**J14K Nanvaranak Lak 10.18 237 Pn 16 55 37.8 0.0**
**J14K Nanvaranak Lak 10.18 237** P **Pn 16 55 37.8 0.0**
baz=40,SNR=7.4
**PNL Peninsula 10.19 164** P **Pn 16 55 36.6 -1.3**
baz=349
**M16K Timber Creek 10.39 222** P **Pn 16 55 40.7 -0.1**
baz=29
**P29M Windy Craggy 10.40 160** P **Pn 16 55 42.4 +1.5**
baz=346,SNR=9.6
**N17K Nushagak Hills 10.45 216** P **Pn 16 55 42.8 +1.3**
baz=25
**L15K Ungalak Mounta 10.46 229** P **Pn 16 55 38.7 -3.0**
baz=34
**WRGLY Wrigley 10.58 116 Pn 16 55 41.6 -1.7**
**WRGLY Wrigley 10.58 116** P **Pn 16 55 42.7 -0.6**
baz=316,SNR=17
**P33M Teslin, Yukon 10.64 146 Pn 16 55 44.6 +0.5**
**P33M Teslin, Yukon 10.64 146** P **Pn 16 55 44.0 -0.1**
baz=337
**PLBC Pleasant Camp 10.75 156** P **Pn 16 55 47.8 +2.2**
baz=344,SNR=20
**P32M Atlin 11.05 149 Pn 16 55 50.5 +0.8**
**P32M Atlin 11.05 149** P **Pn 16 55 51.1 +1.4**
baz=339
**R33M Jennings River 11.76 143 Pn 16 55 59.7 +0.2**
**R33M Jennings River 11.76 143** P **Pn 16 56 01.8 +2.3**
baz=336,SNR=7.6
**Q32M Nakina River 11.90 147** P **Pn 16 56 03.5 +1.9**
baz=338,SNR=18
**R32K Eaglecrest 12.16 154** P **Pn 16 56 06.3 +1.5**
baz=343
**S31K Pelican 12.22 158** P **Pn 16 56 05.4 -0.2**
baz=346
**KDAK Kodiak Island 12.30 200** Pn **Pn 16 56 07.6 +0.8**
comp=E,0.2nm,0.3s,baz=325,slow=20,SNR=1.9
KDAK LR LR 17 01 04.8
comp=E,240nm,19.1s,baz=41,slow=38
**DLBC Dease Lake 12.84 143** Pn **Pn 16 56 14.9 +0.7**
comp=E,1.4nm,0.3s,baz=329,slow=12,SNR=15
DLBC Sn **Sn 16 58 34.1 -2.6**
comp=E,0.1nm,0.3s,baz=306,slow=25,SNR=2.5
DLBC Lg Lg 16 59 48.7
comp=E,0.3nm,0.3s,baz=72,slow=20,SNR=1.9
DLBC LR LR 17 01 32.3
comp=E,678nm,19.6s,baz=310,slow=39
comp=E,9.7nm,0.5s
**DLBC Dease Lake 12.84 143** P **Pn 16 56 15.3 +1.1**
baz=336,SNR=8.3
**S32K Killisnoo 12.93 155** P **Pn 16 56 17.0 +1.7**
baz=344
**S34M Telegraph Cree 13.10 146** P **Pn 16 56 19.5 +1.8**
baz=339,SNR=9.8
**TOAD Toad River Com 13.60 132** P **Pn 16 56 25.3 +0.7**
baz=330
**YKA Yellowknife Ar 14.00 106** Pn **Pn 16 56 26.1 -3.8**
comp=E,1.8nm,0.3s,baz=327,slow=14,SNR=26
YKA Sn Sn 16 58 50.6 -14
comp=E,0.6nm,0.3s,baz=314,slow=23,SNR=4.3
YKA LR LR 17 01 17.9
comp=E,126nm,20.8s,baz=294,slow=34
comp=E,6.4nm,0.7s
**T35M Bob Quinn 14.14 146** P **Pn 16 56 34.4 +2.4**
baz=339
**RES Resolute Bay 15.68 49** Pn **Pn 16 56 48.2 -4.1**
comp=E,1.6nm,0.3s,baz=258,slow=11,SNR=16
RES Sn Sn 16 59 30.6 -15
comp=E,1.8nm,0.3s,baz=180,slow=20,SNR=7.9
RES LR LR 17 05 55.6
comp=E,225nm,19.3s,baz=247,slow=49
**P08K Saint George I 16.98 233** P **Pn 16 57 06.2 -2.7**
baz=30
**EUNU Eureka 17.43 30 Pn 16 57 14.3 -0.3**
EUNU IAmb IAmb 16 57 19.2
comp=Z,22nm,0.6s
**BBB Bella Bella 19.09 147** LR LR 17 04 54.7
comp=Z,156nm,20.1s,baz=347,slow=37
**FFC Flin Flon 24.18 106** P **P 16 58 27.3 -0.5**
FFC IAmb IAmb 16 58 31.9
comp=Z,12nm,1.1s
**B08A Colville Reser 24.60 137** IAmb IAmb 16 58 35.4
comp=Z,14nm,0.9s
**AMKA Amchitka 24.80 241** P **P 16 58 33.0 -0.4**
**NEW Newport 25.24 133** P **P 16 58 38.0 +0.6**
NEW IAmb IAmb 16 58 41.5
comp=Z,12nm,1.1s
**NEW Newport 25.24 133** LR LR 17 09 16.0
comp=Z,332nm,19.3s,baz=340,slow=38
**NEW Newport 25.24 133** P **P 16 58 38.1 +0.6**
baz=338,SNR=7.2
**SHEM Shemya Is, Ala 25.30 249** LR LR 17 10 09.2
comp=Z,125nm,18.1s,baz=142,slow=40
**D08A Wollman Farm, 25.91 137** IAmb IAmb 16 58 45.7
comp=Z,9.0nm,1.0s
**MXC Moxie City 26.05 139** IAmb IAmb 16 58 47.3
comp=Z,11nm,0.8s
**E07A Sunnyside 26.16 139** IAmb IAmb 16 58 48.2
comp=Z,11nm,0.8s
**E08A Dider Farm, El 26.41 138** IAmb IAmb 16 58 50.5
comp=Z,15nm,1.2s
**TIXI Tiksi 26.48 315** LR LR 17 13 19.6
comp=Z,99nm,18.1s,baz=93,slow=46
**E09A Wood Farm, Sta 26.61 136** IAmb IAmb 16 58 52.2
comp=Z,12nm,1.0s
**F10A Beach Ranch, E 27.34 135** IAmb IAmb 16 58 59.2
comp=Z,16nm,1.2s
**MSO Missoula 27.39 130** P **P 16 58 56.1 -1.0**
baz=337,SNR=8.0
**EGMT Eagleton 27.48 123** IAmb IAmb 16 58 59.9
comp=Z,14nm,0.9s
**EGMT Eagleton 27.48 123** P **P 16 58 58.3 +0.5**
baz=334,SNR=11
**MA2 Magadan 28.00 282** LR LR 17 11 38.1
comp=Z,148nm,18.8s,baz=318,slow=40
**FRB Frobisher Bay 28.86 63** LR LR 17 11 19.6
comp=Z,339nm,22.0s,baz=324,slow=38
**BOZ Bozeman (W) 29.16 128** P **P 16 59 14.4 +1.6**
baz=337

**LAO LASA Array 29.74 120** P **P** **16 59 19.7 +1.9**
baz=334
**ULM Lac du Bonnet 29.98 105** P **P** **16 59 22.6 +2.7**
comp=Z,1.3nm,0.5s,baz=311,slow=8.2,SNR=3.2
ULM LR LR 17 12 10.3
comp=Z,70nm,18.3s,baz=16,slow=38
comp=Z,1.3nm,0.5s
**YBH Yreka Blue Hor 30.16 146** LR LR 17 11 35.5
comp=Z,84nm,18.0s,baz=346,slow=36
**RLMT Red Lodge 30.26 125** IAmb IAmb 16 59 25.5
comp=Z,11nm,1.2s
**RLMT Red Lodge 30.26 125** P **P** **16 59 24.3 +1.7**
baz=336
**HLID Hailey 30.30 133** P **P** **16 59 21.8 -1.2**
baz=339
**PETK Petropavlovsk- 30.61 267** P **P** **16 59 27.5 +2.1**
comp=Z,1.5nm,0.7s,baz=60,slow=8.5,SNR=1.7
PETK LR LR 17 12 55.8
comp=Z,126nm,19.1s,baz=36,slow=39
comp=Z,1.5nm,0.7s
**IMW Indian Meadow 30.92 128** IAmb IAmb 16 59 32.2
comp=Z,8.7nm,1.0s
**TPAW Teton Pass 31.29 129** IAmb IAmb 16 59 36.6
comp=Z,12nm,1.2s
**SFJD Kangerlussuaq 31.68 48** LR LR 17 14 44.1
comp=Z,105nm,20.8s,baz=334,slow=41
**SPITS Spitsbergen Ar 32.05 7** P **P** **16 59 38.6 +0.7**
comp=Z,3.4nm,0.6s,baz=346,slow=8.8,SNR=4.2
comp=Z,3.4nm,0.6s
**BW06 Boulder Array 32.34 128** P **P** **16 59 42.0 +0.9**
baz=338,SNR=15
**PD31 Pinedale Array 32.34 128** IAmb IAmb 16 59 43.9
comp=Z,6.7nm,0.8s
**PDAR Pinedale Array 32.34 128** P **P** **16 59 41.7 +0.6**
**PDAR Pinedale Array 32.34 128** P **P** **16 59 43.0 +1.9**
comp=Z,5.4nm,0.8s,baz=5.3,slow=4.9,SNR=37
comp=Z,5.4nm,0.8s
**RSSD Black Hills 32.72 120** P **P** **16 59 45.2 +0.9**
RSSD IAmb IAmb 16 59 46.5
comp=Z,13nm,1.5s
**RSSD Black Hills 32.72 120** P **P** **16 59 45.4 +1.1**
baz=335
**ELK Elko 32.75 136** LR LR 17 12 01.0
comp=Z,114nm,21.8s,baz=353,slow=34
**HWUT Hardware Ranch 32.88 131** IAmb IAmb 16 59 48.7
comp=Z,6.5nm,0.8s
**YAK Yakutsk 33.02 300** P **P** **16 59 45.5 -0.9**
YAK IAmb IAmb 16 59 48.4
comp=Z,8.9nm,0.8s
**YAK Yakutsk 33.02 300** LR LR 17 14 56.1
comp=Z,87nm,20.8s,baz=38,slow=40
**K22A Casper 33.32 124** IAmb IAmb 16 59 52.1
comp=Z,6.9nm,0.9s
**K22A Casper 33.32 124** P **P** **16 59 50.7 +1.2**
baz=337
**EYMN Ely 33.45 102** P **P** **16 59 50.6 +0.2**
EYMN IAmb IAmb 16 59 52.1
comp=Z,6.8nm,0.9s
**EYMN Ely 33.45 102** P **P** **16 59 50.5 +0.2**
baz=329
**DUG Dugway, Tooele 33.88 133** P **P** **16 59 54.4 +0.1**
DUG IAmb IAmb 16 59 57.8
comp=Z,8.2nm,1.0s
**DUG Dugway, Tooele 33.88 133** P **P** **16 59 55.1 +0.8**
baz=341,SNR=6.0
**WAKR Walker 33.94 143** IAmb IAmb 16 59 58.0
comp=Z,5.7nm,0.7s
**NVAR Mina Array Bea 34.25 142** P **P** **16 59 59.2 +1.5**
**NVAR Mina Array Bea 34.25 142** P **P** **17 00 00.4 +2.7**
comp=Z,4.1nm,0.8s,baz=326,slow=7.3,SNR=25
NVAR LR LR 17 14 40.6
comp=Z,205nm,19.0s,baz=346,slow=38
comp=Z,4.1nm,0.8s
**NLU North Lily Min 34.29 133** IAmb IAmb 17 00 01.1
comp=Z,6.8nm,1.1s
**R11B Troy Canyon, C 34.94 138** P **P** **17 00 04.7 +1.1**
baz=343,SNR=7.2
**N23A Red Feather La 35.10 124** P **P** **17 00 06.1 +1.1**
baz=338
**O20A White River Ci 35.15 128** P **P** **17 00 06.5 +1.1**
baz=339
**ECSD EROS Data Cent 35.42 111** IAmb IAmb 17 00 10.5
comp=Z,5.9nm,0.9s
**ECSD EROS Data Cent 35.42 111** P **P** **17 00 07.7 +0.2**
baz=333
**SRU San Rafael Swe 35.49 131** IAmb IAmb 17 00 32.9
comp=Z,11nm,1.3s
**GRAC Grapevine Rang 35.83 141** P **P** **17 00 12.6 +1.5**
baz=344
**PRN Pahroc Range 35.97 138** IAmb IAmb 17 00 15.9
comp=Z,9.5nm,1.3s
**MTPU Mount Pierson 36.07 134** IAmb IAmb 17 00 18.2
comp=Z,7.9nm,1.0s
**TPNV Topopah Spring 36.13 140** P **P** **17 00 14.8 +1.0**
baz=344,SNR=12
**CWC Cottonwood Cre 36.21 142** P **P** **17 00 16.9 +2.4**
baz=345
**ISCO Idaho Springs 36.21 125** P **P** **17 00 16.0 +1.3**
baz=338,SNR=6.9
**CCUT Cedar City 36.24 136** IAmb IAmb 17 00 19.1
comp=Z,5.4nm,0.9s
**SCHQ Schefferville 36.27 73** P **P** **17 00 14.8 +0.1**
**SCHQ Schefferville 36.27 73** P **P** **17 00 15.3 +0.6**
comp=Z,11nm,0.9s,baz=314,slow=8.5,SNR=10
SCHQ LR LR 17 17 54.4
comp=Z,124nm,19.2s,baz=331,slow=41
comp=Z,11nm,0.9s
**SMCO Snowmass 36.40 127** IAmb IAmb 17 00 20.6
comp=Z,6.1nm,0.8s
**MPMC Manual Prospec 36.70 142** P **P** **17 00 21.0 +2.3**
baz=344
**ISA Isabella, Lake 36.87 143** P **P** **17 00 22.5 +2.5**
baz=345
**Q24A Divide 37.12 125** P **P** **17 00 23.9 +1.5**
baz=338
**SHOC Shoshone, Teco 37.13 140** P **P** **17 00 25.4 +3.3**
baz=344,SNR=7.9
**LRMC Laurel Mtn Rad 37.22 142** P **P** **17 00 25.6 +2.6**
baz=345,SNR=9.6
**GSC Goldstone, Bar 37.58 141** P **P** **17 00 28.5 +2.4**
baz=344,SNR=5.1
**TUQ Turquoise Moun 37.65 140** P **P** **17 00 28.1 +1.4**
baz=344
**EDW2 Edwards Air Fo 37.73 143** P **P** **17 00 28.3 +1.0**
baz=345
**S22A 4UR Ranch, Cre 37.77 127** P **P** **17 00 29.4 +1.5**
baz=339,SNR=8.5
**MVCO Mesa Verde 37.82 130** P **P** **17 00 30.2 +2.0**
baz=340
**HEC Hector,Ludlow 38.14 141** P **P** **17 00 31.4 +0.6**
baz=344
**SDCO Great Sand Dun 38.15 126** P **P** **17 00 33.0 +1.9**
baz=339,SNR=12
**JFWS Jewell Farm 38.27 105** P **P** **17 00 31.3 -0.4**
baz=333
**GMRC Granite Mounta 38.33 140** P **P** **17 00 32.9 +0.4**
baz=344
**BFSC Mount Baldy Ra 38.42 143** P **P** **17 00 33.4 +0.2**
baz=345
**WUAZ Wupatki 38.66 134** P **P** **17 00 37.1 +1.8**
baz=342
**CBKS Cedar Bluff 38.88 118** P **P** **17 00 37.4 +0.5**
baz=337
**BELC Belle Mtn. Jos 39.01 141** P **P** **17 00 39.3 +1.2**
baz=344
**T25A Trinidad 39.03 125** P **P** **17 00 37.6 -0.8**
baz=339
**IRM Iron Mountain 39.05 139** P **P** **17 00 40.2 +1.8**
baz=344
**PDMCI Parker Dam,Lak 39.15 138** P **P** **17 00 40.9 +1.8**
baz=344
**PFO Pinyon Flats O 39.28 141** LR LR 17 17 53.1
comp=Z,141nm,18.8s,baz=334,slow=38
**PFO Pinyon Flats O 39.28 141** P **P** **17 00 41.4 +0.9**
baz=345
**TPFO Pinon Flats 39.29 141** P **P** **17 00 41.7 +1.2**
baz=345
**W18A Petrified Fore 39.46 132** P **P** **17 00 43.8 +1.8**
baz=342
**BC3 Big Chuckawall 39.47 140** P **P** **17 00 43.1 +1.2**
baz=344
**MONP2 Monument Peak 39.98 142** P **P** **17 00 47.9 +1.5**
baz=345,SNR=5.9
**GLA Glamis 40.19 140** P **P** **17 00 50.4 +2.5**
baz=344
**BORG Borgarnes 40.30 34** LR LR 17 19 48.9
comp=Z,37nm,18.8s,baz=332,slow=40
**SADO Sadowa 40.49 93** LR LR 17 17 49.1
comp=Z,101nm,20.3s,baz=30,slow=36
**ANMO Albuquerque 40.50 128** P **P** **17 00 52.3 +1.7**
**ANMO Albuquerque 40.50 128** LR LR 17 19 15.0
comp=Z,159nm,19.0s,baz=66,slow=38
**ANMO Albuquerque 40.50 128** P **P** **17 00 51.9 +1.3**
baz=340
**HDIL Hopedale 40.70 106** P **P** **17 00 51.7 -0.2**
baz=334
**TRQ Mont Tremblant 40.85 87** IAmb IAmb 17 00 55.0
comp=Z,7.5nm,0.9s
**ARCES ARCESS Array B 41.01 5** P **P** **17 00 54.2 +0.1**
comp=Z,2.1nm,0.7s,baz=0.9,slow=7.5,SNR=9.1
ARCES LR LR 17 18 02.8
comp=Z,33nm,18.6s,baz=341,slow=36
comp=Z,2.1nm,0.7s
**KAN14 Manchester OK 41.13 117** IAmb IAmb 17 00 57.8
comp=Z,9.2nm,1.1s
**OK032 Salt Plains WL 41.20 118** IAmb IAmb 17 00 57.4
comp=Z,6.7nm,0.7s
**TUC Tucson 41.86 135** P **P** **17 01 03.9 +2.2**
baz=343
**OK051 E0350 and S346 41.90 116** IAmb IAmb 17 01 04.5
comp=Z,8.0nm,0.8s
**AMTX Amarillo 41.92 123** IAmb IAmb 17 01 03.9
comp=Z,6.1nm,0.7s
**AMTX Amarillo 41.92 123** P **P** **17 01 02.7 +0.5**
baz=339
**OK048 Pawnee Station 41.95 117** P **P** **17 01 02.5 +0.3**
OK048 IAmb IAmb 17 01 04.5
comp=Z,7.9nm,0.9s
**LONY Lake Ozonia 42.23 88** P **P** **17 01 04.9 +0.5**
baz=331
**CCM Cathedral Cave 42.30 109** P **P** **17 01 05.3 +0.3**
baz=335
**121A Cookes Peak, D 42.42 131** P **P** **17 01 08.0 +1.6**
baz=342,SNR=6.6
**ERPA Erie 42.52 95** P **P** **17 01 05.7 -1.2**
baz=332
**MGMO Mountain Grove 42.78 111** IAmb IAmb 17 01 12.4
comp=Z,17nm,1.0s
**TUL3 Leonard 42.78 116** P **P** **17 01 08.6 -0.4**
baz=337
**KLR Kul'dur 42.85 287** LR LR 17 21 04.0
comp=Z,92nm,19.7s,baz=32,slow=39
**M53A WI Miller and 42.88 96** P **P** **17 01 08.9 -0.9**
baz=332
**BATG Bathurst New B 42.90 79** P **P** **17 01 10.3 +0.4**
BATG IAmb IAmb 17 01 12.7
comp=Z,11nm,0.9s
**WMOK Wichita Mounta 42.93 120** P **P** **17 01 10.6 +0.3**
**WMOK Wichita Mounta 42.93 120** P **P** **17 01 11.3 +1.0**
baz=338,SNR=9.6
**HHAR Hobbs 43.03 113** IAmb IAmb 17 01 12.7
comp=Z,7.2nm,0.8s
**ACSO Alum Creek Sta 43.15 100** P **P** **17 01 11.3 -0.6**
baz=333
**P49A Miami Univ. Ec 43.17 102** P **P** **17 01 11.1 -1.1**
baz=334
**HEH HeiHe 43.41 291** *e*P **P** **17 01 12.8 -1.2**
HEH pmax pmax
comp=Z,3.0nm,1.0s
**PKME Peaks-Kenny Pk 43.52 83** P **P** **17 01 14.1 -0.8**
baz=330
**ASAJ Asahikawa 43.54 274** LR LR 17 19 57.6
comp=Z,144nm,19.7s,baz=54,slow=37
**POST Post 43.67 124** IAmb IAmb 17 01 18.7
comp=Z,8.8nm,1.1s
**BINY Binghamton 43.85 91** P **P** **17 01 17.4 -0.3**
baz=332
**MNTX Cornudas Mount 43.86 129** P **P** **17 01 17.6 -0.2**
baz=341
**FCAR Ozark Folk Cen 43.98 112** IAmb IAmb 17 01 20.4
comp=Z,9.5nm,0.9s
**LCAR Lake Charles 44.13 111** IAmb IAmb 17 01 22.7
comp=Z,13nm,1.0s
**WHAR Wooly Hollow 44.47 112** IAmb IAmb 17 01 25.0
comp=Z,9.8nm,0.9s
**SSPA Standing Stone 44.57 94** P **P** **17 01 22.7 -0.7**
baz=333
**MIAR Mount Ida 44.74 114** P **P** **17 01 23.5 -1.3**
baz=337,SNR=12
**VHRN Van Horn 44.83 129** P **P** **17 01 27.3 +1.6**
**X40A Basin Creek Fa 45.03 113** IAmb IAmb 17 01 29.5
comp=Z,0.4nm,0.8s
**WVT Waverly 45.18 107** P **P** **17 01 28.5 +0.2**
**WVT Waverly 45.18 107** P **P** **17 01 28.3 0.0**
baz=336
**PAL Palisades 45.64 90** P **P** **17 01 32.1 +0.3**
baz=332
**WHTX Lake Whitney, 45.88 120** P **P** **17 01 33.1 -0.8**
baz=339
**BRDY Brady 46.08 122** P **P** **17 01 34.9 -0.6**
**OXF Oxford 46.13 110** P **P** **17 01 35.7 -0.1**
baz=336
**PLAL Pickwick Lake 46.14 108** IAmb IAmb 17 01 38.6
comp=Z,7.1nm,0.8s
**TZTN Tazewell 46.26 102** P **P** **17 01 36.6 -0.2**
baz=335
**TXAR Lajitas Array 46.56 128** P **P** **17 01 40.2 +0.9**
**TXAR Lajitas Array 46.56 128** P **P** **17 01 40.6 +1.2**
comp=Z,1.7nm,0.8s,baz=352,slow=5.7,SNR=17
TXAR LR LR 17 22 53.2
comp=Z,83nm,21.9s,baz=328,slow=38
comp=Z,1.7nm,0.8s
**JCT Junction City 46.59 123** P **P** **17 01 40.0 +0.4**
baz=340
**TKL Tuckaleechee C 46.99 103** LR LR 17 21 53.5
comp=Z,144nm,18.1s,baz=352,slow=37
**USRK Ussuriysk Ar. 47.15 283** P **P** **17 01 46.2 +2.5**
comp=Z,1.9nm,0.8s,baz=62,slow=13,SNR=2.2
USRK LR LR 17 25 03.1
comp=Z,103nm,18.4s,baz=46,slow=41
comp=Z,1.9nm,0.8s
**LRAL Lakeview Retre 48.28 108** P **P** **17 01 52.2 -0.4**
baz=337
**KMSC Kings Mountain 48.29 101** P **P** **17 01 52.1 -0.5**
baz=335
**NOA NORSAR Array B 48.57 15** P **P** **17 01 55.3 +0.8**
comp=Z,0.7nm,0.8s,baz=348,slow=6.6,SNR=3.2
comp=Z,0.7nm,0.8s
**FINES FINESS Array B 49.12 6** P **P** **17 01 58.5 -0.2**
comp=Z,1.8nm,0.5s,baz=358,slow=7.8,SNR=13
FINES LR LR 17 22 18.1
comp=Z,31nm,21.1s,baz=8.0,slow=36
comp=Z,1.8nm,0.5s
**GOGA Godfrey 49.13 104** P **P** **17 01 57.4 -1.7**
baz=336
**HFS Hagfors 49.68 14** P **P** **17 02 02.9 -0.1**
comp=Z,8.8nm,0.5s,baz=18,slow=5.2,SNR=12
comp=Z,3.8nm,0.5s
**LPIG La Paz 49.84 137** LR LR 17 22 40.7
comp=Z,76nm,20.2s,baz=358,slow=35
**ZAA0 Zalesovo Array 51.65 325** P **P** **17 02 17.9 +0.1**
**ZALV Zalesovo Beam 51.65 325** P **P** **17 02 17.5 -0.4**
**ZALV Zalesovo Beam 51.65 325** P **P** **17 02 16.5 -1.4**
comp=Z,2.1nm,0.8s,baz=10,slow=9.0,SNR=9.7
ZALV LR LR 17 27 17.8
comp=Z,66nm,18.8s,baz=24,slow=40
comp=Z,2.1nm,0.8s
**MJAR Matsushiro Arr 51.80 273** P **P** **17 02 19.4 +0.2**
comp=Z,3.1nm,0.9s,baz=11,slow=7.8,SNR=13
MJAR LR LR 17 25 58.3
comp=Z,84nm,18.1s,baz=38,slow=38
comp=Z,3.1nm,0.9s
**SONM Songino Array 52.02 306** P **P** **17 02 21.8 +0.8**
comp=Z,3.4nm,1.0s,baz=16,slow=6.6,SNR=11
SONM LR LR 17 28 37.5
comp=Z,180nm,18.3s,baz=47,slow=41
comp=Z,3.4nm,1.0s
**EKA Eskdalemuir Ar 52.33 27** P **P** **17 02 23.5 +0.5**
comp=Z,2.3nm,0.8s,baz=335,slow=6.3,SNR=8.3
comp=Z,2.3nm,0.8s
**ARU Arti 53.19 344** P **P** **17 02 28.9 -0.4**
ARU IAmb IAmb 17 02 31.7
comp=Z,4.5nm,0.7s
**ARU Arti 53.19 344** LR LR 17 25 06.5
comp=Z,45nm,21.6s,baz=18,slow=36
**ARU Arti 53.19 344** P **P** **17 02 29.1 -0.1**
comp=Z,6.5nm,1.2s
**KSRS Korea Array 54.55 283** P **P** **17 02 40.2 +0.8**
comp=Z,1.5nm,0.9s,baz=22,slow=8.7,SNR=5.4
comp=Z,1.5nm,0.9s
**BVAR Borovoye Array 55.07 335** P **P** **17 02 44.5 +1.4**
comp=Z,2.5nm,0.9s,baz=35,slow=5.4,SNR=12
BVAR LR LR 17 27 14.4
comp=Z,67nm,21.9s,baz=29,slow=37
comp=Z,2.5nm,0.9s
**KURK Kurchatov 55.92 328** P **P** **17 02 48.1 -1.1**
KURK IAmb IAmb 17 02 51.2
comp=Z,8.3nm,0.9s
**KURBB Kurchatov Arra 56.02 328** P **P** **17 02 50.2 +0.3**
comp=Z,7.2nm,1.0s,baz=13,slow=7.1,SNR=36
KURBB LR LR 17 29 21.2
comp=Z,68nm,19.1s,baz=163,slow=39
comp=Z,7.2nm,1.0s
**HHC Hu-ho-hao-te 56.84 298** *e*P **P** **17 02 54.6 -1.4**
HHC pmax pmax
comp=Z,16nm,0.6s
HHC pmax pmax
comp=Z,94nm,5.0s
HHC LR LR
comp=N,140nm,17.6s
HHC LR LR
comp=E,170nm,17.6s
HHC LR LR
comp=Z,220nm,17.0s
**JNU Nakatsue 57.45 278** LR LR 17 29 26.2
comp=Z,64nm,18.5s,baz=22,slow=38
**BELG Belogornoye 58.02 351** LR LR 17 30 16.9
comp=Z,32nm,19.2s,baz=42,slow=38
**CLL Collm 58.35 16** *i* P **P** **17 03 03.6 -2.7**
comp=Z,4.0nm,0.9s
**MKAR Makanchi Array 58.95 324** P **P** **17 03 10.2 -0.5**
comp=Z,1.1nm,0.8s,baz=34,slow=6.5,SNR=8.7
MKAR LR LR 17 31 43.6
comp=Z,62nm,18.1s,baz=24,slow=39
comp=Z,1.1nm,0.8s
**MAKZ Makanchi 59.00 324** P **P** **17 03 10.1 -0.9**
MAKZ IAmb IAmb 17 03 12.5
comp=Z,6.6nm,1.1s
**HSKC Hora Svate Kat 59.09 16** *e*P **P** **17 03 13.6 +2.1**
**AKTO Aktyubinsk 59.16 343** LR LR 17 28 33.3
comp=Z,42nm,21.6s,baz=359,slow=36
**DPC Dobruska-Polom 59.60 14** *e*P **P** **17 03 17.4 +2.3**
**DPC Dobruska-Polom 59.60 14** P **P** **17 03 16.8 +1.7**
comp=Z,4.4nm,0.9s
**AK22 Malin Array Si 59.91 5** P **P** **17 03 17.6 +0.5**
**AK20 Malin Array Si 59.93 5** P **P** **17 03 17.7 +0.5**
**AKASG Malin Array Be 59.98 4** P **P** **17 03 19.0 +1.4**
comp=Z,2.2nm,0.6s,baz=358,slow=7.0,SNR=8.2
AKASG LR LR 17 30 16.3
comp=Z,26nm,18.4s,baz=343,slow=37
comp=Z,2.2nm,0.6s
**AKBB Malin Array Si 59.98 4** P **P** **17 03 15.2 -2.4**
AKBB IAmb IAmb 17 03 19.2
comp=Z,5.4nm,0.9s
**AKBB Malin Array Si 59.98 4** P **P** **17 03 17.5 -0.1**
**KIEV Kiev 59.98 4** P **P** **17 03 15.0 -2.6**
KIEV IAmb IAmb 17 03 19.2
comp=Z,4.8nm,0.9s
**KIEV Kiev 59.98 4** P **P** **17 03 17.5 -0.1**
comp=Z,30nm,0.8s
**AK01 Malin Array Si 59.98 4** P **P** **17 03 17.6 0.0**
**ABKAR Akbulak array 60.12 342** P **P** **17 03 18.2 -0.4**
**KHC Kasperske Hory 60.56 16** *e*P **P** **17 03 24.3 +2.6**
**WMQ Urumqi 60.59 319** *e*P **P** **17 03 22.8 +0.8**
WMQ LR LR
comp=Z,97nm,22.9s
**CMIG Matias Romero 60.66 123** LR LR 17 31 02.9
comp=Z,46nm,19.0s,baz=7.0,slow=37
**GERES GERESS Array B 60.86 16** P **P** **17 03 25.4 +1.7**
comp=Z,0.8nm,0.7s,baz=281,slow=6.9,SNR=4.0
comp=Z,0.8nm,0.7s
**SHIU Shidnytsya 61.21 9** P **P** **17 03 28.5 +2.4**
**GTA Gaotai 61.63 307** *e*P **P** **17 03 30.6 +1.4**
GTA pP sP 17 03 37.3 +1.6
GTA pmax pmax
comp=Z,6.0nm,1.1s
GTA LR LR
comp=N,62nm,11.2s
GTA LR LR
comp=E,100nm,12.7s
GTA LR LR
comp=Z,110nm,16.7s
**STNU Starunia 61.78 8** P **P** **17 03 30.8 +0.9**
**AAK Ala-Archa 64.46 329** LR LR 17 36 45.5
comp=Z,52nm,18.1s,baz=30,slow=41
**KBZ Khabaz 66.89 354** LR LR 17 37 35.7
comp=Z,20nm,19.9s,baz=74,slow=40
**KSH Kashi 67.21 327** P **P** **17 04 10.0 +4.3**
KSH pmax pmax
comp=Z,4.0nm,0.9s
**ESDC Sonseca Array 67.34 32** P **P** **17 04 07.4 +1.0**
comp=Z,1.4nm,0.9s,baz=348,slow=6.6,SNR=7.9
ESDC LR LR 17 37 09.5
comp=Z,31nm,18.5s,baz=326,slow=39
comp=Z,1.4nm,0.9s
**CHGR Chuyangaron 69.26 332** P **P** **17 04 18.0 -0.5**
**JTS Las Juntas de 70.12 115** LR LR 17 37 37.7
comp=Z,44nm,19.3s,baz=26,slow=38
**BRTR Keskin Array B 71.03 1** P **P** **17 04 31.0 +1.6**
comp=Z,0.5nm,0.6s,baz=323,slow=1.9,SNR=3.8
comp=Z,0.5nm,0.6s
**PZH PanZhiHua 73.14 301** P **P** **17 04 40.1 -2.1**
PZH pmax pmax
comp=Z,30nm,1.0s
PZH pmax pmax
comp=Z,180nm,4.7s
**SDV Santo Domingo 76.19 102** LR LR 17 41 36.4
comp=Z,50nm,18.1s,baz=26,slow=38
**CMAR Chiang Mai Arr 81.56 301** P **P** **17 05 29.8 +0.5**
comp=Z,1.4nm,0.5s,baz=2.5,slow=6.2,SNR=7.9
comp=Z,1.4nm,0.5s
**MDP Montagnes des 86.00 86** LR LR 17 42 42.8
comp=Z,59nm,21.8s,baz=318,slow=34
**HNR Honiara 87.43 234** LR LR 17 39 53.2
comp=Z,542nm,21.4s,baz=332,slow=32
**PALK Pallekele 97.28 315** LR LR 17 58 21.0
comp=Z,50nm,18.1s,baz=170,slow=40
**DBIC Dimbokro 99.14 40** LR LR 17 51 53.1
comp=Z,52nm,19.1s,baz=334,slow=36
**VNDA Vanda 150.26 201** PKPbc **PKiKP** **17 13 02.2 +0.8**
comp=Z,1.2nm,1.1s,baz=27,slow=2.3,SNR=4.4
**QSPA South Pole Qui 159.41 180** PKPab **PKPab** **17 13 48.2 +1.8**
comp=Z,2.0nm,1.1s,baz=90,slow=2.0,SNR=2.8

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*NEIC* ***14*** *17:04:27.9,69.61N,144.22W,h0km*
*NEIC* ***14*** *17:04:28.4±1.9,69.58N±0.05,144.34W±0.06,h10km±1km, Error ellipse: s-maj=7.9km s-min=3.4km az=10.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr=0.19; Mθθ=3.48; Mϕϕ3.67; Mrθ1.29; Mrϕ-1.49; Mθϕ-1.68; Fault plane solution: M₀4.41000×10¹⁴ NP1: ϕs215.49000°,δ63.39000°,λ4.60000°. NP2:ϕs123.42000°, δ85.88000°,λ153.31000°. Principal axes: T 4.7175, Plg22.0000°, Azm76.0000°; N -0.6866, Plg63.0000°, Azm295.0000°; P -4.0309, Plg15.0000°, Azm172.0000°;*
**AEIC 14** 17:04:26.9±2.4, **69.50N**±0.04×**144.32W**±0.07, **h5**km±6km, **ML3.5, mb3.6**/2(NEIC), **ML3.6**/100(NEIC), **Mwr3.7**/18(NEIC) **Error ellipse: s-maj=6.2km s-min=3.5km az=187.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.25** | **60** | Pg | Pg | 17 04 31.6 | -0.1 |
| **C26K** | **Camden Bay** | **0.47** | **334** | | Pg | 17 04 36.1 | +0.3 |
| C26K | | | | | Sg | 17 04 42.4 | +0.5 |
| **C26K** | **Camden Bay** | **0.47** | **334** | IAML | | 17 04 51.0 | |
| | comp=E,4μm,1.1s | | | | | | |
| **D25K** | **Kavik River** | **0.75** | **257** | Pg | Pg | 17 04 40.5 | -0.7 |
| **D25K** | **Kavik River** | **0.75** | **257** | | Sg | 17 04 51.7 | +0.9 |
| **D27M** | **Malcolm River** | **1.22** | **101** | Pg | Pg | 17 04 49.4 | -0.8 |
| **D27M** | **Malcolm River** | **1.22** | **101** | | Sn | 17 05 07.3 | -0.1 |
| **D27M** | **Malcolm River** | **1.22** | **101** | IAML | | 17 05 14.4 | |
| | comp=N,2μm,0.6s | | | | | | |
| D27M | | | | IAML | | 17 05 15.0 | |
| | comp=E,786nm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.55** | **280** | | Pn | 17 04 53.9 | -1.1 |
| C24K | | | | | Sn | 17 05 17.3 | +0.7 |
| C24K | | | | | Sg | 17 05 19.0 | |
| | comp=N,730nm,0.8s | | | | | | |
| C24K | | | | IAML | | 17 05 20.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **260** | Pn | Pg | 17 04 57.8 | -0.4 |
| D24K | | | | | Sn | 17 05 20.9 | +1.6 |
| **E27K** | **Coleen River** | **1.65** | **142** | | Pb | 17 04 58.0 | +0.2 |
| E27K | | | | | Sn | 17 05 19.3 | +0.5 |
| E27K | | | | IAML | | 17 05 28.4 | |
| | comp=E,569nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **178** | | Pb | 17 05 00.9 | +0.4 |
| F26K | | | | | Sn | 17 05 25.6 | +0.4 |
| F26K | | | | IAML | | 17 05 28.6 | |
| | comp=E,817nm,0.7s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **E28M** | **Babbage River** | **1.94** | **115** | | **Pb** | 17 05 02.4 -0.3 |
| E28M | | | | Sn | Sb | 17 05 27.0 -0.2 |
| **F25K** | **Christian Rive** | **1.98** | **195** | | **Pb** | 17 05 03.7 +0.3 |
| F25K | | | | Sn | Sb | 17 05 29.0 +0.8 |
| F25K | | | | IAML | | 17 05 34.7 |
| | comp=E,472nm,1.4s | | | | | |
| F25K | | | | IAML | | 17 05 34.8 |
| | comp=N,458nm,1.3s | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **92** | | **Pb** | 17 05 02.2 -1.1 |
| **D28M** | **Stokes Point** | **1.98** | **92** | | **Sg** | 17 05 31.4 +0.9 |
| **TOLK** | **Toolik Lake Re** | **2.07** | **248** | | **Pn** | 17 05 03.0 +0.7 |
| TOLK | | | | IAML | | 17 05 43.4 |
| | comp=N,454nm,0.6s | | | | | |
| TOLK | | | | IAML | | 17 05 44.4 |
| | comp=E,586nm,0.8s | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **183** | | **Pb** | 17 05 04.4 -0.7 |
| **E24K** | **Your Creek** | **2.08** | **229** | | **Pb** | 17 05 04.8 -0.3 |
| E24K | | | | IAML | | 17 05 37.4 |
| | comp=N,354nm,0.8s | | | | | |
| **C23K** | **Itkillik River** | **2.22** | **282** | | **Pn** | 17 05 05.1 +0.9 |
| **F24K** | **Squaw Lake** | **2.39** | **215** | Pn | Pb | 17 05 08.6 -1.6 |
| F24K | | | | IAML | | 17 05 55.5 |
| | comp=E,268nm,0.8s | | | | | |
| **E23K** | **Chandalar** | **2.41** | **236** | | **Pb** | 17 05 08.8 -1.9 |
| E23K | | | | IAML | | 17 05 54.6 |
| | comp=E,288nm,0.8s | | | | | |
| **F28M** | **Old Crow** | **2.50** | **137** | | **Pn** | 17 05 09.9 +1.7 |
| F28M | | | | IAML | | 17 05 56.6 |
| | comp=E,254nm,0.9s | | | | | |
| F28M | | | | IAML | | 17 05 57.3 |
| | comp=N,272nm,0.8s | | | | | |
| **E29M** | **Blow River** | **2.58** | **113** | | **Pb** | 17 05 11.8 -1.7 |
| E29M | | | | IAML | | 17 05 53.8 |
| | comp=N,280nm,0.8s | | | | | |
| E29M | | | | IAML | | 17 05 57.6 |
| | comp=E,246nm,0.7s | | | | | |
| **G27K** | **Doyon Strip** | **2.88** | **158** | | **Pn** | 17 05 15.6 +2.2 |
| **FYU** | **Fort Yukon** | **2.97** | **187** | | **Pn** | 17 05 15.7 +1.2 |
| FYU | | | | IAML | | 17 06 10.1 |
| | comp=E,274nm,1.6s | | | | | |
| **D22K** | **Ayikyak River** | **3.05** | **262** | Pn | Pn | 17 05 16.9 +1.2 |
| **G24K** | **Hadweenzic Riv** | **3.05** | **204** | Pn | Pn | 17 05 17.3 +1.6 |
| G24K | | | | IAML | | 17 06 12.5 |
| | comp=E,210nm,1.4s | | | | | |
| G24K | | | | IAML | | 17 06 14.1 |
| | comp=N,253nm,1.0s | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.25** | **289** | | **Pn** | 17 05 19.2 +0.8 |
| **H27K** | **Steamboat Moun** | **3.45** | **161** | | **Pn** | 17 05 23.1 +1.9 |
| **G29M** | **Pine Creek** | **3.51** | **135** | | **Pn** | 17 05 23.8 +1.9 |
| **B21K** | **Ikpikpuk River** | **3.61** | **277** | Pn | Pn | 17 05 24.4 +1.1 |
| B21K | | | | IAML | | 17 06 42.6 |
| | comp=E,152nm,1.1s | | | | | |
| **E21K** | **Killik River** | **3.64** | **258** | Pn | Pn | 17 05 25.2 +1.5 |
| E21K | | | | IAML | | 17 06 28.7 |
| | comp=N,157nm,1.0s | | | | | |
| E21K | | | | IAML | | 17 06 44.0 |
| | comp=E,95nm,0.9s | | | | | |
| **F30M** | **Barrier River** | **3.67** | **117** | | **Pn** | 17 05 26.7 +2.6 |
| **H24K** | **Noodor Dome** | **3.92** | **202** | Pn | Pn | 17 05 29.7 +2.0 |
| H24K | | | | IAML | | 17 06 43.1 |
| | comp=E,85nm,1.4s | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.94** | **126** | Pn | Pn | 17 05 30.0 +2.1 |
| G30M | | | | IAML | | 17 06 40.5 |
| | comp=N,81nm,1.1s | | | | | |
| **H29M** | **Whitestone** | **3.99** | **143** | Pn | Pn | 17 05 31.1 +2.5 |
| H29M | | | | IAML | | 17 06 52.0 |
| | comp=E,120nm,1.8s | | | | | |
| **PRP** | **Porcupine Dome** | **4.03** | **187** | Pn | Pn | 17 05 31.9 +2.6 |
| **INK** | **Inuvik** | **4.08** | **102** | | **Pn** | 17 05 31.1 +1.3 |
| **F21K** | **Alatna River** | **4.09** | **240** | Pn | Pn | 17 05 31.8 +1.8 |
| F21K | | | | IAML | | 17 06 42.3 |
| | comp=N,102nm,0.7s | | | | | |
| **H23K** | **Yukon River** | **4.20** | **211** | Pn | Pn | 17 05 31.4 0.0 |
| **EPYK** | **Eagle Plains** | **4.25** | **134** | Pn | Pn | 17 05 34.3 +2.0 |
| **I28M** | **Miner Creek** | **4.41** | **155** | | **Pn** | 17 05 36.6 +2.2 |
| I28M | | | | IAML | | 17 06 32.4 |
| | comp=N,64nm,0.5s | | | | | |
| I28M | | | | IAML | | 17 06 58.1 |
| | comp=E,73nm,1.1s | | | | | |
| **F31M** | **Tsiigehtchic** | **4.41** | **113** | | **Pn** | 17 05 36.1 +1.8 |
| F31M | | | | IAML | | 17 06 53.5 |
| | comp=E,63nm,1.2s | | | | | |
| F31M | | | | IAML | | 17 07 04.9 |
| | comp=N,52nm,0.7s | | | | | |
| **B20K** | **Meade River** | **4.49** | **282** | Pn | Pn | 17 05 36.5 +1.2 |
| **G31M** | **Satah River** | **4.55** | **120** | | **Pn** | 17 05 37.4 +1.1 |
| G31M | | | | IAML | | 17 06 59.2 |
| | comp=E,82nm,1.2s | | | | | |
| G31M | | | | IAML | | 17 07 06.9 |
| | comp=N,73nm,1.0s | | | | | |
| **POKR** | **Poker Plat Res** | **4.57** | **197** | Pn | Pn | 17 05 36.5 +0.1 |
| POKR | | | | IAML | | 17 07 03.1 |
| | comp=N,46nm,1.0s | | | | | |
| POKR | | | | IAML | | 17 07 05.8 |
| | comp=E,77nm,1.3s | | | | | |
| **G21K** | **Allakaket** | **4.57** | **233** | Pn | Pn | 17 05 36.1 -0.4 |
| G21K | | | | IAML | | 17 07 03.3 |
| | comp=E,94nm,1.4s | | | | | |
| G21K | | | | IAML | | 17 07 07.7 |
| | comp=N,87nm,1.8s | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.76** | **148** | Pn | Pn | 17 05 41.1 +1.9 |
| I29M | | | | IAML | | 17 07 02.1 |
| | comp=N,45nm,0.2s | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **206** | Pn | Pn | 17 05 42.2 +2.7 |
| I23K | | | | IAML | | 17 07 05.9 |
| | comp=N,62nm,1.2s | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **200** | Pn | Pn | 17 05 42.9 +3.1 |
| MDM | | | | IAML | | 17 07 07.1 |
| | comp=N,48nm,0.6s | | | | | |
| MDM | | | | IAML | | 17 07 22.6 |
| | comp=E,48nm,1.0s | | | | | |
| **F20K** | **Avaraart Lake** | **4.90** | **245** | Pn | Pn | 17 05 42.6 +1.6 |
| F20K | | | | IAML | | 17 07 20.8 |
| | comp=N,48nm,1.4s | | | | | |
| **EGAK** | **Eagle** | **4.90** | **164** | Pn | Pn | 17 05 42.9 +1.8 |
| **J26L** | **Joseph Creek** | **5.03** | **176** | Pn | Pn | 17 05 46.2 +3.3 |
| J26L | | | | IAML | | 17 07 07.0 |
| | comp=E,34nm,0.8s | | | | | |
| **D19K** | **Kuna River** | **5.06** | **265** | Pn | Pn | 17 05 44.7 +1.4 |
| D19K | | | | IAML | | 17 07 19.8 |
| | comp=E,34nm,1.0s | | | | | |
| **E19K** | **Redstone River** | **5.17** | **253** | | **Pn** | 17 05 46.1 +1.3 |
| E19K | | | | IAML | | 17 07 31.3 |
| | comp=E,49nm,0.9s | | | | | |
| **NEA2** | **Nenana** | **5.27** | **203** | Pn | Pn | 17 05 47.9 +1.8 |
| **I30M** | **Mount Dempster** | **5.28** | **141** | Pn | Pn | 17 05 47.9 +1.5 |
| I30M | | | | IAML | | 17 06 51.2 |
| | comp=N,34nm,0.7s | | | | | |
| I30M | | | | IAML | | 17 06 53.4 |
| | comp=E,43nm,0.7s | | | | | |
| **C19K** | **Lookout Ridge** | **5.43** | **273** | Pn | Pn | 17 05 49.5 +1.2 |
| **K27K** | **Chicken** | **5.57** | **170** | Pn | Pn | 17 05 53.6 +2.8 |
| **J29N** | **Klondike Camp** | **5.61** | **152** | | **Pn** | 17 05 51.5 +0.7 |
| **F19K** | **Shaleruckik Mo** | **5.68** | **248** | Pn | Pn | 17 05 52.9 +1.1 |
| **DAWY** | **Dawson** | **5.80** | **158** | Pn | Pn | 17 05 56.2 +2.8 |
| **G19K** | **Purcell Mounta** | **5.89** | **241** | Pn | Pn | 17 05 55.6 +1.0 |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **209** | Pn | Pn | 17 05 59.8 +3.3 |
| **C18K** | **Utukok River** | **6.10** | **270** | Pn | Pn | 17 05 58.4 +0.8 |
| **K29M** | **Barlow Dome** | **6.29** | **151** | Pn | Pn | 17 06 00.7 +0.5 |
| **G18K** | **Tagagawik** | **6.54** | **243** | Pn | Pn | 17 06 03.5 0.0 |
| **A36M** | **Sachs Harbour** | **6.77** | **60** | Pn | Pn | 17 06 06.4 -0.2 |
| **H18K** | **Honhosa River** | **6.95** | **238** | Pn | Pn | 17 06 09.9 +0.7 |
| **F17K** | **Baldwin Pennin** | **7.06** | **252** | Pn | Pn | 17 06 10.9 +0.3 |
| **M27K** | **Edge Creek, AK** | **7.24** | **171** | Pn | Pn | 17 06 13.6 +0.2 |
| **M29M** | **Somme Creek** | **7.48** | **159** | Pn | Pn | 17 06 16.8 +0.3 |
| **H17K** | **Granite Mounta** | **7.57** | **240** | Pn | Pn | 17 06 18.5 +0.8 |
| **C16K** | **Lisburne Hills** | **7.67** | **271** | Pn | Pn | 17 06 18.3 -0.8 |
| **G16K** | **Koyuk River** | **8.04** | **248** | Pn | Pn | 17 06 23.4 -0.7 |
| **FARO** | **Faro, Yukon** | **8.56** | **143** | | **Pn** | 17 06 31.7 +0.5 |
| **I17K** | **Unalakleet** | **8.57** | **237** | Pn | Pn | 17 06 31.1 -0.2 |
| **N30M** | **Aishikik Lake** | **8.61** | **156** | Pn | Pn | 17 06 33.0 +1.1 |
| **F15K** | **North Star Dit** | **8.62** | **254** | Pn | Pn | 17 06 32.1 +0.2 |
| **LOGN** | **Logan Glacier** | **8.82** | **169** | Pn | Pn | 17 06 35.7 +0.7 |
| **TABL** | **Table Mountain** | **9.20** | **170** | Pn | Pn | 17 06 42.1 +2.0 |
| **CAPN** | **Captain Cook N** | **9.22** | **201** | Pn | Pn | 17 06 42.3 +2.1 |
| **O30N** | **Mendenhall** | **9.41** | **155** | Pn | Pn | 17 06 43.7 +0.7 |
| **WHY** | **Whitehorse** | **9.71** | **151** | Pn | Pn | 17 06 47.4 +0.3 |
| **K15K** | **Wolf Creek Mou** | **10.05** | **232** | Pn | Pn | 17 06 51.7 +0.1 |
| **J14K** | **Nanvaranak Lak** | **10.28** | **238** | Pn | Pn | 17 06 54.8 +0.1 |
| **P33M** | **Teslin, Yukon** | **10.51** | **147** | Pn | Pn | 17 06 58.2 +0.2 |
| **Q32M** | **Nakina River** | **11.78** | **148** | Pn | Pn | 17 07 14.4 -1.0 |
| **YKA** | **Yellowknife Ar** | **13.84** | **106** | Pn | Pn | 17 07 40.1 -3.3 |
| **RES** | **Resolute Bay** | **15.60** | **49** | Pn | Pn | 17 08 03.6 -3.4 |
| RES | | | | IAmb | IAmb | 17 08 24.9 |

comp=Z,4.3nm,1.1s

| | | | | | | |
|---|---|---|---|---|---|---|
| **EUNU** | **Eureka** | **17.41** | **29** | Pn | Pn | 17 08 29.5 -0.5 |
| EUNU | | | | IAmb | IAmb | 17 09 09.1 |

comp=Z,6.7nm,1.3s

*UPP **14** 17:05:22.7±0.1, 67˚.07N×20˚.95E, h0km, ML2.2, Unknown*
*IDC **14** 17:05:24.0±1.1, 67˚.07N×21˚.31E, h0km, mbtmp2.7/4, ML1.8/4, Error ellipse: s-maj=19.6km s-min=9.1km az=107.0*

**ISC 14 17:05:23.3**±1.0, **67˚.10N**±0˚.04×**20˚.90E**±0˚.04, **h10km, n16,** σ1§**20**/18, **Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DUNU** | **Dundret** | **0.13** | **281** | P | **Pg** | **17 05 25.9** | **-0.4** |
| DUNU | | | | S | **Sg** | **17 05 28.0** | **-0.5** |
| **PAJU** | **Pajala** | **0.87** | **94** | P | **Pg** | **17 05 38.7** | **-1.3** |
| **HARU** | **Harads** | **0.94** | **178** | P | **Pg** | **17 05 39.7** | **-1.6** |
| **SALU** | **Saltoluokta** | **0.97** | **288** | *eP* | **Pg** | **17 05 40.7** | **-1.3** |
| **SALU** | **Saltoluokta** | **0.97** | **288** | P | **Pg** | **17 05 41.3** | **-0.7** |
| **LANU** | **Lannavaara** | **1.04** | **23** | P | **Pg** | **17 05 42.2** | **-1.1** |
| **KOVU** | **Salmi** | **1.17** | **346** | P | **Pn** | **17 05 44.8** | **-0.8** |
| **KALU** | **Kalix** | **1.59** | **140** | P | **Pn** | **17 05 51.5** | **+0.1** |
| **SJUU** | **Sjulsmark** | **1.62** | **170** | P | **Pn** | **17 05 52.1** | **+0.2** |
| **HEF** | **Hetta** | **1.68** | **37** | *eP* | **Pn** | **17 05 53.7** | **+0.9** |
| **LILU** | **Lilltraesk** | **1.87** | **194** | P | **Pn** | **17 05 56.0** | **+0.8** |
| **I37NO** | **I37NO** | **2.16** | **338** | I | I | 17 19 10.5 | |
| | baz=155,slow=328,SNR=16 | | | | | | |
| **ARCES** | **ARCESS Array B** | **2.99** | **33** | Pn | **Pn** | **17 06 11.8** | **+1.1** |
| | 0.2nm,0.3s,baz=215,slow=13,SNR=20 | | | | | | |
| ARCES | | | | Sn | **Sn** | **17 06 48.6** | **+2.1** |
| | 0.4nm,0.3s,baz=210,slow=23,SNR=8.4 | | | | | | |
| | 0.6nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **6.11** | **156** | Pn | **Pn** | **17 06 55.0** | **+1.6** |
| | 0.1nm,0.3s,baz=344,slow=13,SNR=5.7 | | | | | | |
| FINES | | | | Sn | **Sn** | **17 08 02.7** | **-0.6** |
| | 0.1nm,0.3s,baz=349,slow=22,SNR=11 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **7.41** | **219** | Pn | **Pn** | **17 07 11.9** | **+0.6** |
| | baz=38,slow=13,SNR=1.9 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **7.69** | **208** | Pn | **Pn** | **17 07 16.7** | **+1.6** |
| | baz=22,slow=15,SNR=1.5 | | | | | | |
| | 0.7nm,0.6s | | | | | | |

*CATAC **14** 17:12:37.5±0.9, 13˚.92N×91˚.53W, h15km±9km, ML4.0*
*SNET **14** 17:12:39.5±0.9, 13˚.98N×91˚.43W, h27km±999km, ML3.6*
*GCG **14** 17:12:44.0±0.4, 14˚.36N×91˚.31W, h28km±17km, MD3.6*

**ISC 14 17:12:39.3**±3.0, **14˚.0N**±0˚.1×**91˚.42W**±0˚.07, **h19km**±**8km, n21,** σ0§**66**/29, **1D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SULM** | **Suchitepequez,** | **0.36** | **337** | *eP* | **Pn** | **17 12 50.5** | **+1.1** |
| **RTAL** | **Retalhuleu** | **0.61** | **334** | ↓*i* P | **Pb** | **17 12 51.2** | **0.0** |
| RTAL | | | | *eS* | **Sb** | **17 12 60.0** | **+0.7** |
| **RTAL** | **Retalhuleu** | **0.61** | **334** | *i* P | **Pb** | **17 12 51.2** | **0.0** |
| RTAL | | | | IAML | | 17 12 51.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| RTAL | | | | *i* S | **Sb** | **17 12 59.0** | **-0.3** |
| **FUG** | **Fuego 3** | **0.73** | **50** | *eP* | **Pn** | **17 12 54.2** | **-0.6** |
| **STG3** | **Santiaguito 3,** | **0.75** | **349** | *eP* | **Pb** | **17 12 53.7** | **-0.1** |
| **SOKI** | **Kika Raxquin** | **0.84** | **1** | *i* P | **Pb** | **17 12 54.9** | **-0.6** |
| SOKI | | | | *i* S | **Sn** | **17 13 07.4** | **-1.1** |
| SOKI | | | | IAML | | 17 13 09.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CHTG** | **Tecpan** | **0.89** | **28** | *i* P | **Pb** | **17 12 56.2** | **-0.1** |
| CHTG | | | | *i* S | **Sn** | **17 13 10.3** | **+0.7** |
| CHTG | | | | IAML | | 17 13 11.9 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **PCG** | **Pacaya** | **0.89** | **62** | *eP* | **Pn** | **17 12 57.7** | **+0.7** |
| **NBG** | **Las Nubes** | **1.21** | **60** | *eP* | **Pb** | **17 13 02.5** | **+0.8** |
| **SLOZ** | **Alcaldia de Sa** | **1.59** | **88** | *eP* | **Pn** | **17 13 05.7** | **-0.8** |
| SLOZ | | | | *eS* | **Sb** | **17 13 27.2** | **-0.7** |
| SLOZ | | | | IAML | | 17 13 32.7 | |
| | comp=Z,254nm,0.4s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.59** | **89** | *i* P | **Pn** | **17 13 06.7** | **+0.2** |
| LOAL | | | | IAML | | 17 13 33.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **1.60** | **92** | *eP* | **Pn** | **17 13 06.1** | **-0.6** |
| NUBE | | | | *eS* | **Sn** | **17 13 26.7** | **-0.2** |
| NUBE | | | | IAML | | 17 13 28.4 | |
| | comp=Z,592nm,0.4s | | | | | | |
| **NUBE** | **Las Nubes** | **1.60** | **92** | *i* P | **Pn** | **17 13 06.0** | **-0.6** |
| NUBE | | | | IAML | | 17 13 27.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **RTR** | **El Retiro** | **1.73** | **92** | *eP* | **Pn** | **17 13 08.9** | **+0.5** |
| **CEVE** | **Cerro Verde** | **1.75** | **95** | *eP* | **Pn** | **17 13 08.9** | **0.0** |
| CEVE | | | | *eS* | **Sn** | **17 13 31.7** | **+0.8** |
| CEVE | | | | IAML | | 17 13 34.6 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.75** | **95** | *i* P | **Pn** | **17 13 08.9** | **0.0** |
| CEVE | | | | IAML | | 17 13 34.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **1.75** | **94** | *eP* | **Pn** | **17 13 08.8** | **-0.1** |
| SBLS | | | | *eS* | **Sn** | **17 13 31.3** | **+0.4** |
| **SNJE** | **San Jose** | **1.77** | **93** | *eP* | **Pn** | **17 13 09.0** | **0.0** |
| SNJE | | | | *eS* | **Sb** | **17 13 32.2** | **-0.9** |
| **JAYA** | **Jayaque - finc** | **1.94** | **99** | *i* P | **Pn** | **17 13 10.7** | **-0.7** |
| JAYA | | | | IAML | | 17 13 36.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CCIG** | **Comitan** | **2.40** | **343** | *i* P | **Pn** | **17 13 16.6** | **-1.1** |
| CCIG | | | | IAML | | 17 13 57.2 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **5.00** | **100** | *i* P | Pn | 17 13 58.1 | +4.7 |

*IDC **14** 17:25:09.0±0.5, 9˚.38N×126˚.20E, h0km, mb4.1/20, mbtmp4.1/21, ML4.2/1, MS3.2/11, Error ellipse: s-maj=24.5km s-min=10.6km az=88.0*
*NEIC **14** 17:25:18.4±2.5, 9˚.32N±0˚.04×126˚.5E±0˚.1, h64km±7km, mb4.5/64, Error ellipse: s-maj=15.5km s-min=3.3km az=68.0*

**ISC 14 17:25:15.2**±0.4, **9˚.40N**±0˚.06×**126˚.3E**±0˚.1, **h43km, n105,** σ1§**42**/95, **mb4.4**/47, **MS3.3**/8, **Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **2.43** | **198** | Pn | **Pn** | **17 25 53.8** | **+1.4** |
| **DAV** | **Davao City (W)** | **2.43** | **198** | Pn | **Pn** | **17 25 51.2** | **-1.2** |
| | 61nm,0.3s,baz=286,slow=13,SNR=1.9 | | | | | | |
| DAV | | | | Lg | Lg | 17 26 26.0 | |
| | 54nm,0.3s,baz=291,slow=20,SNR=5.5 | | | | | | |
| DAV | | | | LR | LR | 17 26 44.5 | |
| | comp=Z,311nm,18.1s,baz=10,slow=40 | | | | | | |
| | 135nm,0.3s | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.82** | **242** | | Pn | 17 27 26.5 | +6.3 |
| **TOLI2** | **Tolitoli** | **9.91** | **214** | Pn | Pn | 17 27 39.7 | +4.6 |
| **KKM** | **Kota Kinabalu** | **10.56** | **252** | Pn | Pn | 17 27 48.9 | +4.7 |
| **YULB** | **Yu-li** | **14.73** | **342** | Pn | **P** | **17 28 42.2** | **-3.9** |
| **SBUM** | **Sibu** | **15.63** | **245** | P | **P** | **17 28 58.1** | **+1.9** |
| **KAPI** | **Kappang** | **15.74** | **205** | LR | LR | 17 36 19.0 | |
| | comp=Z,65nm,19.0s,baz=14,slow=43 | | | | | | |
| **TATO** | **Taipei** | **16.16** | **344** | Pn | **P** | **17 28 59.7** | **-2.3** |
| TATO | | | | IAmb | IAmb | 17 29 22.7 | |
| | comp=Z,93nm,1.4s | | | | | | |
| **KSM** | **Kuching** | **17.77** | **245** | P | P | 17 29 24.7 | +4.7 |
| **GUMO** | **Guam** | **18.64** | **75** | LR | LR | 17 35 16.7 | |
| | comp=Z,46nm,21.3s,baz=194,slow=32 | | | | | | |
| **MTN** | **Manton Dam** | **22.61** | **168** | P | **P** | **17 30 12.8** | **+0.4** |
| MTN | | | | IAmb | IAmb | 17 30 18.6 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **25.03** | **174** | P | **P** | **17 30 34.9** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 17 31 04.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **IPM** | **Ipoh** | **25.58** | **261** | P | **P** | **17 30 43.8** | **+3.2** |
| IPM | | | | IAmb | IAmb | 17 30 48.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.33** | **181** | P | **P** | **17 30 56.0** | **-0.2** |
| **INU** | **Inuyama** | **27.62** | **19** | P | **P** | **17 30 59.6** | **+0.9** |
| INU | | | | IAmb | IAmb | 17 31 28.0 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **KSRS** | **Korea Array** | **27.97** | **3** | P | **P** | **17 31 02.7** | **+0.9** |
| | comp=Z,2.9nm,0.9s,baz=184,slow=9.5,SNR=13 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.03** | **292** | P | **P** | **17 31 00.7** | **-1.9** |
| | comp=Z,0.4nm,0.4s,baz=78,slow=8.4,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **COEN** | **Coen** | **28.60** | **144** | P | **P** | **17 31 05.7** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **29.10** | **20** | P | **P** | **17 31 11.2** | **-0.7** |
| | comp=Z,0.9nm,0.8s,baz=202,slow=7.8,SNR=4.2 | | | | | | |
| MJAR | | | | LR | LR | 17 43 06.2 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | comp=Z,38nm,18.2s,baz=178,slow=37 | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | |
| **GSI** | **Gunungsitoli** | **29.71** | **256** | P | **P** | **17 31 18.9** | **+1.4** |
| GSI | | | | IAmb | IAmb | 17 31 36.5 |
| | comp=Z,11nm,1.1s | | | | | |
| **WB0** | **Warramunga Arr** | **30.05** | **165** | P | **P** | **17 31 16.8** | **-3.6** |
| WB0 | | | | IAmb | IAmb | 17 31 31.9 |
| | comp=Z,13nm,1.4s | | | | | |
| **WRA** | **Warramunga Arr** | **30.20** | **165** | P | **P** | **17 31 19.1** | **-2.8** |
| **WRA** | **Warramunga Arr** | **30.20** | **165** | P | **P** | **17 31 20.0** | **-1.8** |
| | comp=Z,0.7nm,0.6s,baz=345,slow=7.9,SNR=18 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 34 24.2** | **+2.0** |
| | comp=Z,0.5nm,0.5s,baz=340,slow=3.0,SNR=5.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **30.27** | **165** | | **P** | **17 31 20.3** | **-2.1** |
| WR0 | | | | IAmb | IAmb | 17 31 42.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **31.05** | **192** | P | **P** | **17 31 26.8** | **-2.4** |
| MBWA | | | | IAmb | IAmb | 17 32 01.3 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **31.43** | **192** | P | **P** | **17 31 31.8** | **-0.7** |
| PSA00 | | | | IAmb | IAmb | 17 31 42.0 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **31.43** | **192** | P | **P** | **17 31 32.7** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 17 32 15.0 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **33.68** | **167** | P | **P** | **17 31 51.2** | **-1.2** |
| **ASAR** | **Alice Springs** | **33.69** | **167** | P | **P** | **17 31 50.9** | **-1.4** |
| **ASAR** | **Alice Springs** | **33.69** | **167** | P | **P** | **17 31 51.1** | **-1.2** |
| | comp=Z,1.1nm,0.3s,baz=351,slow=7.4,SNR=50 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 34 33.4** | **+1.7** |
| | comp=Z,0.7nm,0.6s,baz=344,slow=2.6,SNR=6.6 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **35.02** | **7** | P | **P** | **17 32 04.8** | **+1.2** |
| USA0B | | | | IAmb | IAmb | 17 32 09.4 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.02** | **7** | P | **P** | **17 32 04.2** | **+0.6** |
| | comp=Z,3.7nm,0.8s,baz=212,slow=8.5,SNR=11 | | | | | | |
| USRK | | | | LR | LR | 17 46 30.9 | |
| | comp=Z,35nm,20.6s,baz=208,slow=37 | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **37.37** | **19** | LR | LR | 17 47 56.5 | |
| | comp=Z,17nm,20.4s,baz=186,slow=36 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **37.37** | **19** | P | **P** | **17 32 25.7** | **+2.0** |
| **MORW** | **Morawa** | **39.51** | **194** | P | **P** | **17 32 41.7** | **-0.2** |
| **KLR** | **Kul'dur** | **39.96** | **6** | LR | LR | 17 49 38.4 | |
| | comp=Z,34nm,19.1s,baz=209,slow=37 | | | | | | |
| **FORT** | **Forrest** | **39.98** | **178** | P | **P** | **17 32 45.8** | **+0.1** |
| **NWAO** | **Narrogin (SRO)** | **42.97** | **191** | P | **P** | **17 33 12.5** | **+2.2** |
| **BBOO** | **Buckleboo** | **42.98** | **168** | P | **P** | **17 33 09.9** | **-0.5** |
| **STKA** | **Stephens Creek** | **43.56** | **161** | P | **P** | **17 33 14.2** | **-0.8** |
| **STKA** | **Stephens Creek** | **43.56** | **161** | P | **P** | **17 33 14.6** | **-0.5** |
| | comp=Z,2.4nm,0.4s,baz=340,slow=13,SNR=6.8 | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **50.41** | **24** | P | **P** | **17 34 10.2** | **+2.0** |
| **PETK** | **Petropavlovsk-** | **50.41** | **24** | P | **P** | **17 34 09.8** | **+1.5** |
| | comp=Z,3.4nm,0.7s,baz=245,slow=2.5,SNR=8.7 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.75** | **323** | P | **P** | **17 34 25.3** | **-0.6** |
| **MKAR** | **Makanchi Array** | **52.75** | **323** | P | **P** | **17 34 25.6** | **-0.3** |
| | comp=Z,1.3nm,0.6s,baz=121,slow=7.6,SNR=11 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **52.95** | **323** | P | **P** | **17 34 26.8** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **55.42** | **332** | P | **P** | **17 34 44.2** | **-0.9** |
| | comp=Z,0.5nm,0.3s,baz=116,slow=6.6,SNR=2.7 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **55.98** | **316** | LR | LR | 18 00 16.4 | |
| | comp=Z,79nm,20.1s,baz=98,slow=38 | | | | | | |
| **KURK** | **Kurchatov** | **56.82** | **326** | P | **P** | **17 34 54.6** | **-0.5** |
| KURK | | | | IAmb | IAmb | 17 35 31.8 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.82** | **326** | P | **P** | **17 34 54.4** | **-0.9** |
| | comp=Z,0.7nm,0.5s,baz=125,slow=7.1,SNR=5.8 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **58.90** | **315** | P | **P** | **17 35 09.0** | **-1.1** |
| **KKAR** | **Karatay Array** | **58.90** | **315** | P | **P** | **17 35 08.5** | **-1.6** |
| **TIXI** | **Tiksi** | **62.22** | **1** | LR | LR | 18 03 12.5 | |
| | comp=Z,31nm,20.2s,baz=148,slow=37 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.41** | **326** | P | **P** | **17 35 33.1** | **-0.7** |
| | comp=Z,0.5nm,0.5s,baz=95,slow=12,SNR=2.7 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **LBZ** | **Lake Benmore** | **66.60** | **147** | P | **P** | **17 36 00.6** | **-0.5** |
| **RPZ** | **Rata Peaks** | **66.63** | **146** | P | **P** | **17 36 01.6** | **+0.2** |
| **URZ** | **Urewera** | **66.98** | **138** | LR | LR | 18 06 49.5 | |
| | comp=Z,49nm,18.9s,baz=32,slow=37 | | | | | | |
| **BKZ** | **Black Stump Fm** | **67.08** | **140** | P | **P** | **17 36 04.6** | **+0.2** |
| **ABKAR** | **Akbulak array** | **67.57** | **319** | P | **P** | **17 36 07.9** | **+0.6** |
| **N15K** | **Kwethluk River** | **73.74** | **30** | P | **P** | **17 36 45.7** | **+1.0** |
| **M16K** | **Timber Creek** | **74.43** | **29** | P | **P** | **17 36 50.6** | **+1.9** |
| **K17K** | **Iditarod** | **75.00** | **27** | P | **P** | **17 36 53.9** | **+

comp=Z,1.2nm,0.7s,baz=74,slow=6.8,SNR=11
comp=Z,1.2nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **89.06** | **173** | P | **P** | **17 38 05.5** | **+0.3** |
| VNDA | | | | IAmb | IAmb | 17 38 21.3 | |

comp=Z,3.7nm,1.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **89.06** | **173** | P | **P** | **17 38 05.1** | **-0.1** |

comp=Z,0.7nm,0.5s,baz=308,slow=6.4,SNR=8.4
comp=Z,0.7nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HFS** | **Hagfors** | **92.84** | **332** | P | **P** | **17 38 24.7** | **+1.4** |

comp=Z,0.8nm,0.8s,baz=115,slow=7.0,SNR=4.2
comp=Z,0.8nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NOA** | **NORSAR Array B** | **93.56** | **334** | LR | LR | 18 24 47.8 | |

comp=Z,12nm,18.6s,baz=130,slow=38

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YKA** | **Yellowknife Ar** | **94.53** | **24** | P | **P** | **17 38 31.0** | **+0.1** |

comp=Z,0.6nm,0.7s,baz=310,slow=4.8,SNR=6.1
comp=Z,0.6nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PLCA** | **Paso Flores** | **145.38** | **157** | PKPbc | **PKPab** | **17 44 49.0** | **-0.1** |

comp=Z,2.4nm,0.7s,baz=281,slow=3.5,SNR=5.8

**NAM 14 17:43:37.3±4.4, 19.66S×14.47E, h17km±20km, ML0.8, 5C-2D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.08** | **163** | ↑*i* P | Pg | 17 43 42.8 | +2.0 |
| ST3N | | | | *i* S | Sg | 17 43 44.2 | +1.0 |
| ST3N | | | | IAML | | 17 43 44.5 | |

comp=Z,13nm,0.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.08** | **163** | *i* P | Pg | 17 43 42.8 | +1.9 |
| ST3N | | | | *i* S | Sg | 17 43 44.2 | +1.0 |
| ST3N | | | | IAML | | 17 43 44.3 | |

comp=Z,30nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST1N** | **ST1** | **0.15** | **119** | *i* S | Sg | 17 43 43.6 | -0.8 |
| ST1N | | | | *i* S | Sb | 17 43 43.6 | -1.1 |
| **ST1N** | **ST1** | **0.15** | **119** | *i* P | Pb | 17 43 42.5 | +0.8 |
| ST1N | | | | *i* S | Sg | 17 43 43.6 | -0.8 |
| ST1N | | | | IAML | | 17 43 43.8 | |

comp=N,64nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST8N** | **ST8** | **0.15** | **260** | ↓*i* P | Pb | 17 43 46.0 | +4.3 |
| ST8N | | | | *i* S | Sb | 17 43 49.5 | +4.8 |
| ST8N | | | | IAML | | 17 43 50.5 | |

comp=Z,1.4nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.15** | **153** | ↑*i* P | Pb | 17 43 42.1 | +0.3 |
| ST9N | | | | *i* S | Sg | 17 43 42.9 | -1.6 |
| ST9N | | | | IAML | | 17 43 43.2 | |

comp=Z,189nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.15** | **153** | *i* P | Pb | 17 43 42.1 | +0.3 |
| ST9N | | | | *i* S | Sg | 17 43 42.9 | -1.5 |
| ST9N | | | | IAML | | 17 43 43.3 | |

comp=Z,142nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST6N** | **ST6** | **0.15** | **207** | ↑*i* P | Pb | 17 43 44.2 | +2.4 |
| ST6N | | | | *i* S | Sb | 17 43 46.6 | +1.7 |
| ST6N | | | | IAML | | 17 43 46.8 | |

comp=Z,7.5nm,0.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST2N** | **ST2** | **0.29** | **156** | ↑*i* P | Pg | 17 43 43.6 | -0.1 |
| ST2N | | | | *i* S | Sg | 17 43 45.9 | -2.0 |
| ST2N | | | | IAML | | 17 43 46.9 | |

comp=Z,15nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST5N** | **ST5** | **0.30** | **115** | ↓*i* P | Pb | 17 43 44.3 | +0.1 |
| ST5N | | | | *i* S | Sg | 17 43 46.8 | -1.4 |
| ST5N | | | | IAML | | 17 43 46.9 | |

comp=Z,9.8nm,0.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST5N** | **ST5** | **0.30** | **115** | *i* P | Pb | 17 43 44.4 | +0.1 |
| ST5N | | | | *i* S | Sg | 17 43 46.7 | -1.5 |
| ST5N | | | | IAML | | 17 43 46.9 | |

comp=Z,6.2nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST10N** | **ST10** | **0.34** | **194** | ↑*i* P | Pb | 17 43 46.0 | +1.0 |
| ST10N | | | | *i* S | Sb | 17 43 50.3 | +0.1 |
| **ST10N** | **ST10** | **0.34** | **194** | *i* P | Pb | 17 43 46.0 | +1.0 |
| ST10N | | | | *i* S | Sg | 17 43 49.6 | +0.1 |
| ST10N | | | | IAML | | 17 43 50.1 | |

comp=Z,12nm,0.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ST11N** | **ST11** | **0.35** | **89** | *i* S | Sb | 17 43 51.0 | +0.5 |

*NEIC **14** 17:45:45.1, 69.46N×144.24W, h6km*
*AEIC **14** 17:45:45.0±2.0, 69.45N±0.05×144.24W±0.05, h3km±6km, ML3.8, mb3.8/1(NEIC), ML3.9/114(NEIC), Mwr3.8/25(NEIC), Error ellipse: s-maj=6.7km s-min=2.7km az=184.0*
*NEIC **14** 17:45:46.5±0.8, 69.56N±0.05×144.22W±0.06, h6km±6km, Error ellipse: s-maj=7.9km s-min=2.7km az=187.0, Moment Tensor Solution. Moment tensor: Scale 10^14^Nm; Mrr=2.76; Mθθ=2.83; Mφφ=5.60; Mrθ=-1.47; Mθφ=-2.80; Mφr=1.68; Fault plane solution: M0=6.03000×10^14^ NP1: φs=126.52000°, δ=74.02000°, λ=-143.66000°. NP2: φs=25.07000°, δ=55.28000°, λ=-19.57000°. Principal axes: T 6.8763, Plg=12.0000°, Azm=252.0000°; N -2.5004, Plg=51.0000°, Azm=147.0000°; P -4.3758, Plg=37.0000°, Azm=351.0000°;*
*IDC **14** 17:45:46.5±0.7, 69.61N×143.97W, h0km, mb3.7/13, mbtmp3.8/17, ML3.8/4, MS2.6/2 Error ellipse: s-maj=18.9km s-min=11.5km az=44.0*

**ISC 14 17:45:46.7±0.5, 69.52N±0.05×144.19W±0.03, h10km, n189, σ1§15/200, mb3.7/14, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **57** | Pg | **Pg** | **17 45 50.2** | **-0.7** |
| C27K | | | | IAML | | 17 45 53.7 | |

comp=E,20μm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C27K | | | | IAML | | 17 45 53.7 | |

comp=N,22μm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **D25K** | **Kavik River** | **0.80** | **257** | | **Pg** | **17 45 59.7** | **-2.4** |
| D25K | | | | Sg | **Sg** | **17 46 09.9** | **-2.6** |
| **D27M** | **Malcolm River** | **1.17** | **102** | Pn | **Pb** | **17 46 06.8** | **-2.4** |
| D27M | | | | Sg | **Sb** | **17 46 23.4** | **-0.9** |
| D27M | | | | IAML | | 17 46 29.3 | |

comp=E,2μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D27M | | | | IAML | | 17 46 30.3 | |

comp=N,3μm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **C24K** | **Franklin Bluff** | **1.59** | **279** | | **Pn** | **17 46 14.6** | **-0.3** |
| C24K | | | | | **Sb** | **17 46 36.6** | **+0.2** |
| C24K | | | | IAML | | 17 46 41.3 | |

comp=E,1μm,1.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E27K** | **Coleen River** | **1.64** | **144** | | **Pn** | **17 46 15.6** | **+0.1** |
| E27K | | | | Sn | **Sn** | **17 46 37.9** | **+1.2** |
| E27K | | | | IAML | | 17 46 40.3 | |

comp=N,1μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| E27K | | | | IAML | | 17 46 40.5 | |

comp=E,1μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **D24K** | **Happy Valley** | **1.69** | **260** | | **Pn** | **17 46 16.1** | **-0.1** |
| D24K | | | | Sn | **Sb** | **17 46 39.6** | **+0.6** |
| D24K | | | | IAML | | 17 46 46.2 | |

comp=E,1μm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F26K** | **Sheenjek River** | **1.83** | **180** | | **Pn** | **17 46 19.1** | **+0.8** |
| F26K | | | | Sn | **Sn** | **17 46 42.1** | **+0.6** |
| F26K | | | | IAML | | 17 46 47.1 | |

comp=N,1μm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F26K | | | | IAML | | 17 46 48.8 | |

comp=E,1μm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E28M** | **Babbage River** | **1.91** | **117** | | **Pn** | **17 46 20.1** | **+0.8** |
| E28M | | | | Sn | **Sn** | **17 46 44.5** | **+1.2** |
| E28M | | | | IAML | | 17 46 50.5 | |

comp=E,890nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| E28M | | | | IAML | | 17 46 51.4 | |

comp=N,906nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F25K** | **Christian Rive** | **2.01** | **196** | | **Pn** | **17 46 21.3** | **+0.6** |
| F25K | | | | Sn | **Sn** | **17 46 47.0** | **+1.1** |
| **BMAR** | **Burnt Mountain** | **2.10** | **184** | | **Pn** | **17 46 22.6** | **+0.6** |
| **TOLK** | **Toolik Lake Re** | **2.12** | **248** | Pn | **Pn** | **17 46 22.6** | **+0.2** |
| TOLK | | | | Sn | **Sb** | **17 46 51.1** | **-0.6** |
| TOLK | | | | IAML | | 17 46 56.6 | |

comp=E,652nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E24K** | **Your Creek** | **2.13** | **229** | Pn | **Pn** | **17 46 22.9** | **+0.5** |
| E24K | | | | Sn | **Sn** | **17 46 51.0** | **+2.1** |
| **C23K** | **Itkillik River** | **2.27** | **281** | | **Pn** | **17 46 23.9** | **-0.3** |
| C23K | | | | IAML | | 17 47 04.5 | |

comp=E,612nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F24K** | **Squaw Lake** | **2.43** | **216** | | **Pn** | **17 46 27.1** | **+0.7** |
| **F24K** | **Squaw Lake** | **2.43** | **216** | | **Sn** | **17 46 58.1** | **+1.9** |
| **E23K** | **Chandalar** | **2.46** | **236** | | **Pn** | **17 46 27.3** | **+0.4** |
| E23K | | | | IAML | | 17 47 07.4 | |

comp=N,502nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F28M** | **Old Crow** | **2.48** | **138** | | **Pn** | **17 46 27.6** | **+0.3** |
| F28M | | | | IAML | | 17 47 06.1 | |

comp=N,770nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F28M | | | | IAML | | 17 47 06.5 | |

comp=E,497nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E29M** | **Blow River** | **2.54** | **114** | Pn | **Pn** | **17 46 29.0** | **+1.1** |
| E29M | | | | IAML | | 17 47 09.9 | |

comp=E,560nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **G26K** | **Porcupine Rive** | **2.58** | **176** | | **Pn** | **17 46 29.3** | **+0.7** |
| **G25K** | **Bearman Lake** | **2.86** | **195** | | **Pn** | **17 46 33.7** | **+1.4** |
| **G27K** | **Doyon Strip** | **2.88** | **160** | | **Pn** | **17 46 32.7** | **0.0** |
| **FYU** | **Fort Yukon** | **2.99** | **188** | | **Pn** | **17 46 34.5** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **205** | Pn | **Pn** | **17 46 35.5** | **0.0** |
| G24K | | | | IAML | | 17 47 27.9 | |

comp=E,432nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G24K | | | | IAML | | 17 47 28.5 | |

comp=N,399nm,1.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **D22K** | **Ayikyak River** | **3.10** | **262** | Pn | **Pn** | **17 46 35.8** | **+0.1** |
| D22K | | | | IAML | | 17 47 35.7 | |

comp=E,310nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **B22K** | **Teshekpuk Lake** | **3.29** | **289** | Pn | **Pn** | **17 46 38.0** | **-0.2** |
| **H27K** | **Steamboat Moun** | **3.45** | **162** | | **Pn** | **17 46 41.4** | **+0.8** |
| **G29M** | **Pine Creek** | **3.48** | **136** | Pn | **Pn** | **17 46 41.4** | **+0.5** |
| **G23K** | **Bananza Creek** | **3.57** | **221** | Pn | **Pn** | **17 46 42.8** | **+0.7** |
| G23K | | | | IAML | | 17 47 43.5 | |

comp=E,239nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G23K | | | | IAML | | 17 47 43.5 | |

comp=N,254nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F30M** | **Barrier River** | **3.63** | **118** | | **Pn** | **17 46 45.0** | **+2.1** |
| **B21K** | **Ikpikpuk River** | **3.66** | **276** | Pn | **Pn** | **17 46 43.4** | **+0.1** |
| B21K | | | | IAML | | 17 47 56.6 | |

comp=N,259nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| B21K | | | | IAML | | 17 48 08.7 | |

comp=E,185nm,1.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E21K** | **Killik River** | **3.69** | **258** | Pn | **Pn** | **17 46 43.2** | **-0.5** |
| E21K | | | | IAML | | 17 47 52.4 | |

comp=N,166nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **G30M** | **tAoh Zraii Nji** | **3.91** | **127** | Pn | **Pn** | **17 46 47.4** | **+0.6** |
| G30M | | | | IAML | | 17 48 03.5 | |

comp=N,197nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G30M | | | | IAML | | 17 48 11.4 | |

comp=E,137nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H24K** | **Noodor Dome** | **3.96** | **203** | | **Pn** | **17 46 47.9** | **+0.5** |
| H24K | | | | IAML | | 17 47 55.4 | |

comp=E,189nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H24K | | | | IAML | | 17 48 01.3 | |

comp=N,164nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H29M** | **Whitestone** | **3.98** | **144** | Pn | **Pn** | **17 46 48.5** | **+0.8** |
| **INK** | **Inuvik** | **4.04** | **102** | | **Pn** | **17 46 48.7** | **+0.2** |
| **INK** | **Inuvik** | **4.04** | **102** | Pn | **Pn** | **17 46 49.7** | **+1.2** |

comp=N,2.5nm,0.3s,baz=302,slow=4.8,SNR=7.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| INK | | | | Sn | **Sn** | **17 47 35.2** | **-0.5** |

comp=N,11nm,0.3s,baz=233,slow=20,SNR=5.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| INK | | | | Lg | Lg | 17 47 52.1 | |

comp=N,7.4nm,0.3s,baz=7.8,slow=26,SNR=5.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| INK | | | | LR | LR | 17 48 19.9 | |

comp=N,74nm,18.2s,baz=26,slow=38
comp=N,8.9nm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PRP** | **Porcupine Dome** | **4.05** | **188** | Pn | **Pn** | **17 46 49.5** | **+0.6** |
| PRP | | | | IAML | | 17 47 41.4 | |

comp=N,170nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PRP | | | | IAML | | 17 47 54.5 | |

comp=E,186nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F21K** | **Alatna River** | **4.14** | **241** | Pn | **Pn** | **17 46 50.0** | **0.0** |
| F21K | | | | IAML | | 17 47 59.8 | |

comp=N,140nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EPYK** | **Eagle Plains** | **4.23** | **135** | Pn | **Pn** | **17 46 51.8** | **+0.6** |
| **H23K** | **Yukon River** | **4.23** | **211** | | **Pn** | **17 46 51.9** | **+0.6** |
| **I26K** | **Coal Creek Min** | **4.25** | **174** | | **Pn** | **17 46 51.9** | **+0.5** |
| I26K | | | | IAML | | 17 48 07.0 | |

comp=E,183nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F31M** | **Tsiigehtchic** | **4.38** | **114** | Pn | **Pn** | **17 46 53.7** | **+0.6** |
| F31M | | | | IAML | | 17 48 10.8 | |

comp=E,137nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F31M | | | | IAML | | 17 48 16.6 | |

comp=N,147nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **I28M** | **Miner Creek** | **4.40** | **156** | Pn | **Pn** | **17 46 54.4** | **+0.7** |
| I28M | | | | IAML | | 17 47 55.1 | |

comp=N,98nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I28M | | | | IAML | | 17 48 23.8 | |

comp=E,111nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **G31M** | **Satah River** | **4.52** | **121** | Pn | **Pn** | **17 46 55.4** | **+0.3** |
| **B20K** | **Meade River** | **4.53** | **282** | Pn | **Pn** | **17 46 55.2** | **0.0** |
| B20K | | | | IAML | | 17 48 40.6 | |

comp=N,115nm,1.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **POKR** | **Poker Plat Res** | **4.60** | **197** | | **Pn** | **17 46 56.9** | **+0.7** |
| POKR | | | | IAML | | 17 47 52.9 | |

comp=N,118nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **G21K** | **Allakaket** | **4.62** | **234** | | **Pn** | **17 46 57.4** | **+0.9** |
| G21K | | | | IAML | | 17 48 31.2 | |

comp=E,130nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **I29M** | **Ogilvie Camp,** | **4.75** | **149** | Pn | **Pn** | **17 46 58.3** | **0.0** |
| I29M | | | | IAML | | 17 48 21.9 | |

comp=E,115nm,1.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I29M | | | | IAML | | 17 48 23.9 | |

comp=N,87nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **I23K** | **Minto, Yukon-K** | **4.82** | **207** | | **Pn** | **17 46 59.8** | **+0.6** |
| I23K | | | | IAML | | 17 48 33.9 | |

comp=E,117nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I23K | | | | IAML | | 17 48 36.7 | |

comp=N,106nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MDM** | **Murphy Dome** | **4.84** | **201** | | **Pn** | **17 47 00.2** | **+0.6** |
| **COLA** | **College** | **4.88** | **199** | | **Pn** | **17 47 00.4** | **+0.4** |
| **IL31** | | **4.88** | **194** | | **Pn** | **17 47 00.3** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.88** | **194** | Pn | **Pn** | **17 47 00.9** | **+0.8** |

comp=N,4.2nm,0.3s,baz=6.7,slow=13,SNR=122

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ILAR | | | | Sn | **Sn** | **17 47 56.2** | **-0.4** |

comp=N,5.9nm,0.3s,baz=17,slow=17,SNR=4.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ILAR | | | | Lg | Lg | 17 48 15.3 | |

comp=N,6.2nm,0.3s,baz=9.2,slow=30,SNR=5.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ILAR | | | | LR | LR | 17 49 25.2 | |

comp=N,70nm,21.0s,baz=292,slow=44
comp=N,12nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EGAK** | **Eagle** | **4.91** | **165** | Pn | **Pn** | **17 47 01.1** | **+0.7** |
| EGAK | | | | IAML | | 17 48 30.1 | |

comp=N,103nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F20K** | **Avaraart Lake** | **4.95** | **245** | Pn | **Pn** | **17 47 01.6** | **+0.6** |
| F20K | | | | IAML | | 17 48 27.7 | |

comp=N,68nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J25K** | **Salcha River,** | **4.95** | **186** | | **Pn** | **17 47 01.6** | **+0.5** |
| J25K | | | | IAML | | 17 48 26.2 | |

comp=N,71nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J26L** | **Joseph Creek** | **5.05** | **177** | Pn | **Pn** | **17 47 03.5** | **+1.0** |
| J26L | | | | IAML | | 17 48 29.8 | |

comp=E,88nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| J26L | | | | IAML | | 17 48 30.9 | |

comp=N,63nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H21K** | **Melozitna Rive** | **5.09** | **224** | | **Pn** | **17 47 03.2** | **+0.3** |
| H21K | | | | IAML | | 17 48 35.8 | |

comp=E,79nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H21K | | | | IAML | | 17 48 38.6 | |

comp=N,74nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CCB** | **Clear Creek Bu** | **5.09** | **198** | Pn | **Pn** | **17 47 03.8** | **+0.8** |
| CCB | | | | IAML | | 17 48 15.1 | |

comp=E,66nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **D19K** | **Kuna River** | **5.11** | **265** | Pn | **Pn** | **17 47 03.8** | **+0.5** |
| **MLY** | **Manley** | **5.17** | **213** | Pn | **Pn** | **17 47 04.8** | **+0.6** |
| **E19K** | **Redstone River** | **5.22** | **253** | Pn | **Pn** | **17 47 04.6** | **-0.3** |
| E19K | | | | IAML | | 17 48 45.3 | |

comp=N,59nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HDA** | **Harding Lake** | **5.25** | **193** | | **Pn** | **17 47 05.9** | **+0.8** |
| HDA | | | | IAML | | 17 48 45.2 | |

comp=N,89nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **I30M** | **Mount Dempster** | **5.26** | **141** | Pn | **Pn** | **17 47 05.8** | **+0.4** |
| I30M | | | | IAML | | 17 48 07.5 | |

comp=N,74nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I30M | | | | IAML | | 17 48 08.1 | |

comp=E,77nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRH** | **Wood River Hil** | **5.29** | **199** | | **Pn** | **17 47 06.7** | **+0.9** |
| WRH | | | | IAML | | 17 48 08.5 | |

comp=N,59nm,1.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NEA2** | **Nenana** | **5.30** | **203** | | **Pn** | **17 47 06.5** | **+0.6** |
| **C19K** | **Lookout Ridge** | **5.47** | **273** | Pn | **Pn** | **17 47 08.2** | **0.0** |
| **SCRK** | **Sand Creek** | **5.57** | **179** | Pn | **Pn** | **17 47 10.7** | **+1.0** |
| **J29N** | **Klondike Camp** | **5.60** | **152** | | **Pn** | **17 47 11.0** | **+1.0** |
| **F19K** | **Shaleruckik Mo** | **5.74** | **248** | Pn | **Pn** | **17 47 12.0** | **+0.3** |
| **BWN** | **Browne** | **5.76** | **204** | | **Pn** | **17 47 12.9** | **+0.8** |
| **K24K** | **Donnelly Dome** | **5.78** | **187** | | **Pn** | **17 47 13.9** | **+1.5** |
| **DAWY** | **Dawson** | **5.79** | **159** | | **Pn** | **17 47 13.9** | **+1.2** |
| **J30M** | **Hart River** | **5.83** | **145** | Pn | **Pn** | **17 47 13.9** | **+0.6** |
| **C19K** | **Purcell Mounta** | **5.94** | **241** | Pn | **Pn** | **17 47 14.6** | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **6.07** | **209** | Pn | **Pn** | **17 47 16.8** | **+0.4** |
| **C18K** | **Utukok River** | **6.15** | **270** | Pn | **Pn** | **17 47 17.1** | **-0.5** |
| **H19K** | **Roundabout Mou** | **6.17** | **235** | Pn | **Pn** | **17 47 18.0** | **+0.3** |
| **I20K** | **Naaghedeneel** | **6.20** | **225** | Pn | **Pn** | **17 47 18.9** | **+0.8** |
| **K29M** | **Barlow Dome** | **6.28** | **152** | Pn | **Pn** | **17 47 20.4** | **+1.0** |
| **E18K** | **Tukpahlearik C** | **6.39** | **259** | Pn | **Pn** | **17 47 20.9** | **+0.1** |
| **RND** | **Reindeer** | **6.42** | **199** | Pn | **Pn** | **17 47 22.4** | **+1.2** |
| **L26K** | **Log Cabin Wild** | **6.53** | **177** | | **Pn** | **17 47 24.1** | **+1.3** |
| **BCAR** | **Beaver Creek A** | **6.55** | **170** | Pn | **Pn** | **17 47 23.3** | **+0.3** |
| **L27K** | **Beaver Creek,** | **6.55** | **171** | Pn | **Pn** | **17 47 23.9** | **+0.8** |
| **G18K** | **Tagagawik** | **6.59** | **243** | | **Pn** | **17 47 24.4** | **+0.9** |
| **DHY** | **Denali Highway** | **6.60** | **193** | Pn | **Pn** | **17 47 24.9** | **+1.1** |
| **J20K** | **Nowinta River** | **6.64** | **221** | Pn | **Pn** | **17 47 24.4** | **+0.2** |
| **A36M** | **Sachs Harbour** | **6.72** | **60** | Pn | **Pn** | **17 47 24.0** | **-1.2** |
| **L29M** | **L29M** | **6.88** | **156** | Pn | **Pn** | **17 47 28.3** | **+0.8** |
| **RDOG** | **Red Dog Mine** | **6.94** | **267** | Pn | **Pn** | **17 47 27.4** | **-0.9** |
| **WAT7** | **Susitna Watana** | **6.97** | **198** | | **Pn** | **17 47 30.6** | **+1.8** |
| **H18K** | **Honhosa River** | **7.00** | **238** | Pn | **Pn** | **17 47 29.2** | **0.0** |
| **F17K** | **Baldwin Pennin** | **7.11** | **252** | Pn | **Pn** | **17 47 30.2** | **-0.4** |
| **WAT6** | **Susitna Watana** | **7.12** | **193** | | **Pn** | **17 47 32.2** | **+1.3** |
| **J19K** | **Poorman** | **7.15** | **225** | Pn | **Pn** | **17 47 31.5** | **+0.4** |
| **HARP** | **HAARP** | **7.16** | **184** | | **Pn** | **17 47 32.7** | **+1.3** |
| **M26K** | **Nabesna, AK** | **7.17** | **176** | Pn | **Pn** | **17 47 32.6** | **+1.1** |
| **M27K** | **Edge Creek, AK** | **7.25** | **171** | | **Pn** | **17 47 33.9** | **+1.1** |
| **K20K** | **Telida** | **7.33** | **217** | Pn | **Pn** | **17 47 33.3** | **-0.5** |
| **M29M** | **Somme Creek** | **7.47** | **159** | Pn | **Pn** | **17 47 36.5** | **+0.7** |
| **M24K** | **Tolsona, Glenn** | **7.49** | **187** | | **Pn** | **17 47 37.8** | **+1.9** |
| **CUT** | **Chulitna** | **7.56** | **202** | Pn | **Pn** | **17 47 38.2** | **+1.4** |
| **H17K** | **Granite Mounta** | **7.62** | **240** | | **Pn** | **17 47 37.7** | **0.0** |
| **C16K** | **Lisburne Hills** | **7.72** | **271** | Pn | **Pn** | **17 47 38.3** | **-0.8** |
| **SCM** | **Sheep Creek Mo** | **7.83** | **191** | | **Pn** | **17 47 38.8** | **-1.8** |
| **J18K** | **Innoko River** | **7.86** | **225** | Pn | **Pn** | **17 47 39.0** | **-2.0** |
| **SML** | **Sawmill** | **7.93** | **194** | | **Pn** | **17 47 41.5** | **-0.5** |
| **N25K** | **Chitina, Valde** | **7.95** | **181** | Pn | **Pn** | **17 47 42.3** | **0.0** |
| **GHO** | **Glory Hole Cre** | **8.02** | **196** | Pn | **Pn** | **17 47 43.7** | **+0.5** |
| **KLU** | **Klutina** | **8.09** | **186** | | **Pn** | **17 47 41.7** | **-2.5** |
| **G16K** | **Koyuk River** | **8.09** | **248** | Pn | **Pn** | **17 47 42.2** | **-1.9** |
| **SKT** | **Skwentna** | **8.14** | **205** | Pn | **Pn** | **17 47 46.1** | **+1.3** |
| **MCARA** | **McCarthy VSAT** | **8.18** | **176** | | **Pn** | **17 47 44.5** | **-0.9** |
| **PMR** | **Palmer** | **8.22** | **197** | Pn | **Pn** | **17 47 47.2** | **+1.4** |
| **KNK** | **Knik Glacier** | **8.33** | **194** | | **Pn** | **17 47 48.5** | **+1.1** |
| **VRDI** | **Verde Repeater** | **8.33** | **178** | Pn | **Pn** | **17 47 46.6** | **-1.0** |
| **M31M** | **Drury Creek, Y** | **8.36** | **147** | | **Pn** | **17 47 47.1** | **-0.7** |
| **SUA** | **Susitna One** | **8.53** | **202** | Pn | **Pn** | **17 47 51.2** | **+1.0** |
| **J17K** | **VABM Dome** | **8.54** | **231** | Pn | **Pn** | **17 47 49.6** | **-0.6** |
| **FARO** | **Faro, Yukon** | **8.54** | **144** | | **Pn** | **17 47 50.0** | **-0.4** |
| **L19K** | **White Mountain** | **8.55** | **216** | Pn | **Pn** | **17 47 50.7** | **+0.3** |
| **BMRM** | **Bremner River** | **8.59** | **181** | | **Pn** | **17 47 53.4** | **+2.4** |
| **N30M** | **Aishikik Lake** | **8.61** | **157** | Pn | **Pn** | **17 47 51.6** | **+0.4** |
| **I17K** | **Unalakleet** | **8.62** | **237** | Pn | **Pn** | **17 47 50.1** | **-1.2** |
| **KIAG** | **Kiagna River** | **8.66** | **174** | | **Pn** | **17 47 55.0** | **+2.8** |
| **F15K** | **North Star Dit** | **8.67** | **254** | Pn | **Pn** | **17 47 50.6** | **-1.4** |
| **CTGM** | **Chitina Glacie** | **8.67** | **171** | | **Pn** | **17 47 54.3** | **+2.1** |
| **MMPY** | **Sheldon Lake,** | **8.67** | **137** | | **Pn** | **17 47 52.5** | **+0.4** |
| **M19K** | **Big River Lodg** | **8.71** | **214** | Pn | **Pn** | **17 47 53.2** | **+0.6** |
| **GLI** | **Glacier Island** | **8.76** | **189** | Pn | **Pn** | **17 47 55.2** | **+1.9** |
| **RC01** | **Rabbit Creek A** | **8.77** | **198** | Pn | **Pn** | **17 47 53.9** | **+0.5** |
| **N31M** | **Braeburn, Yuko** | **8.78** | **153** | Pn | **Pn** | **17 47 54.6** | **+1.1** |
| **CRQM** | **Cirque** | **8.81** | **177** | | **Pn** | **17 47 56.6** | **+2.5** |
| **TGL** | **Tana Glacier** | **8.82** | **176** | | **Pn** | **17 47 56.3** | **+2.1** |
| **LOGN** | **Logan Glacier** | **8.83** | **170** | | **Pn** | **17 47 55.8** | **+1.4** |
| **PWL** | **Port Wells** | **8.87** | **193** | Pn | **Pn** | **17 47 56.8** | **+2.0** |
| **GRNC** | **Granite Creek** | **8.88** | **172** | | **Pn** | **17 47 56.0** | **+0.8** |
| **K17K** | **Iditarod** | **8.88** | **227** | Pn | **Pn** | **17 47 56.9** | **+1.9** |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PRGZ** | **Paritu Road** | **0.45** | **81** | P | **Pn** | **17 48 05.7** | **+0.2** |
| PRGZ | | | | S | **Sn** | **17 48 14.6** | **+1.9** |
| **RIGZ** | **Rimuhau** | **0.46** | **50** | P | **Pn** | **17 48 05.4** | **-0.2** |
| RIGZ | | | | S | **Sn** | **17 48 14.1** | **+1.3** |
| **RTZ** | **Ruatahuna** | **0.46** | **325** | P | **Pn** | **17 48 04.9** | **-0.8** |
| RTZ | | | | S | **Sn** | **17 48 12.4** | **-0.7** |
| **MHGZ** | **Mahia Peninsul** | **0.49** | **109** | P | **Pn** | **17 48 06.4** | **+0.4** |
| **RAGZ** | **Rawiri** | **0.51** | **9** | ⇓P | **Pn** | **17 48 05.6** | **-0.7** |
| RAGZ | | | | S | **Sn** | **17 48 13.9** | **-0.2** |
| **NGHS** | **Napier Girls H** | **0.58** | **212** | P | **Pn** | **17 48 08.3** | **+1.2** |
| **NAAS** | **Napier Airport** | **0.58** | **216** | P | **Pn** | **17 48 07.2** | **0.0** |
| **GWTS** | **Gisborne Waipa** | **0.60** | **52** | P | **Pn** | **17 48 06.9** | **-0.5** |
| **GKBS** | **Kaiti Beach** | **0.64** | **61** | P | **Pn** | **17 48 08.8** | **+0.9** |
| **MCHZ** | **McNeill Hill** | **0.66** | **227** | P | **Pn** | **17 48 09.3** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **0.66** | **255** | P | **Pn** | **17 48 08.8** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **0.66** | **255** | P | **Pn** | **17 48 08.8** | **+0.5** |
| BKZ | | | | S | **Sn** | **17 48 19.5** | **+1.9** |
| **MUGZ** | **Murupara** | **0.67** | **321** | P | **Pn** | **17 48 07.9** | **-0.4** |
| MUGZ | | | | S | **Sn** | **17 48 17.9** | **+0.1** |
| **MWZ** | **Matawai** | **0.68** | **14** | P | **Pn** | **17 48 08.1** | **-0.4** |
| MWZ | | | | S | **Sn** | **17 48 18.3** | **+0.2** |
| **CKHZ** | **Cape Kidnapper** | **0.69** | **196** | P | **Pn** | **17 48 09.2** | **+0.7** |
| **TKGZ** | **Te Karaka** | **0.70** | **37** | P | **Pn** | **17 48 08.9** | **+0.3** |
| TKGZ | | | | S | **Sn** | **17 48 20.3** | **+2.0** |
| **MRHZ** | **Matea Rd** | **0.72** | **283** | P | **Pn** | **17 48 09.3** | **+0.3** |
| MRHZ | | | | S | **Sn** | **17 48 19.8** | **+0.8** |
| **URZ** | **Urewera** | **0.76** | **348** | P | **Pn** | **17 48 09.1** | **-0.4** |
| **URZ** | **Urewera** | **0.76** | **348** | P | **Pn** | **17 48 08.9** | **-0.5** |
| URZ | | | | S | **Sn** | **17 48 19.8** | **+0.1** |
| **KWHZ** | **Kaweka Forest** | **0.81** | **238** | P | **Pn** | **17 48 11.1** | **+0.7** |
| **KAHZ** | **Kahuranaki** | **0.86** | **203** | P | **Pn** | **17 48 11.8** | **+0.8** |
| **CNGZ** | **Carnagh Statio** | **0.87** | **54** | P | **Pn** | **17 48 12.3** | **+1.4** |
| **ALRZ** | **Allen Road** | **0.88** | **300** | P | **Pn** | **17 48 11.4** | **+0.2** |
| **PRRZ** | **Plateau Road** | **0.88** | **304** | P | **Pn** | **17 48 11.1** | **0.0** |
| **RRRZ** | **Republican Roa** | **0.91** | **316** | P | **Pn** | **17 48 11.4** | **-0.2** |
| **HATZ** | **Hinemaiaia** | **0.96** | **276** | P | **Pn** | **17 48 12.8** | **+0.5** |
| **TWGZ** | **Tauwhareparae** | **0.97** | **33** | P | **Pn** | **17 48 13.1** | **+0.6** |
| **KRHZ** | **Kereru** | **0.98** | **228** | P | **Pn** | **17 48 12.9** | **+0.4** |
| **TARZ** | **Mount Tarawera** | **0.99** | **320** | P | **Pn** | **17 48 12.9** | **+0.1** |
| **EDRZ** | **Edgecumbe** | **1.00** | **333** | P | **Pn** | **17 48 12.5** | **-0.3** |
| **HRRZ** | **Handcock Road** | **1.01** | **307** | P | **Pn** | **17 48 13.0** | **0.0** |
| **WPRZ** | **Whakapapataran** | **1.02** | **298** | P | **Pn** | **17 48 13.4** | **+0.2** |
| **HLRZ** | **Highlands Stat** | **1.06** | **314** | P | **Pn** | **17 48 13.8** | **+0.1** |
| **RUGZ** | **Raukumara Rang** | **1.07** | **16** | P | **Pn** | **17 48 13.8** | **-0.1** |
| **HSRZ** | **Hossack Road** | **1.08** | **309** | P | **Pn** | **17 48 13.9** | **-0.1** |
| **PXZ** | **Pawanui** | **1.09** | **199** | P | **Pn** | **17 48 13.7** | **-0.3** |
| **WHTZ** | **Whakaora** | **1.11** | **287** | P | **Pn** | **17 48 14.9** | **+0.5** |
| **MARZ** | **Manawahe** | **1.13** | **333** | P | **Pn** | **17 48 14.8** | **+0.1** |
| **GRRZ** | **Galatos Road** | **1.14** | **304** | P | **Pn** | **17 48 15.1** | **+0.3** |
| **OMRZ** | **Omania** | **1.16** | **320** | P | **Pn** | **17 48 14.7** | **-0.3** |
| **WHRZ** | **Whale Island** | **1.17** | **347** | P | **Pn** | **17 48 15.2** | **0.0** |
| **PUZ** | **Puketiti** | **1.18** | **39** | P | **Pn** | **17 48 15.0** | **-0.3** |
| **UTU** | **Utuhina** | **1.20** | **313** | P | **Pn** | **17 48 15.9** | **+0.3** |
| **RATZ** | **Rangitukua** | **1.21** | **276** | P | **Pn** | **17 48 16.7** | **+0.9** |
| **LIRZ** | **Lichensteins R** | **1.23** | **323** | P | **Pn** | **17 48 15.8** | **-0.2** |
| **ETVZ** | **East Tongariro** | **1.26** | **263** | P | **Pn** | **17 48 17.3** | **+0.8** |
| **PNHZ** | **Pukenui** | **1.26** | **223** | P | **Pn** | **17 48 16.4** | **0.0** |
| **TMVZ** | **Te Maari** | **1.26** | **264** | P | **Pn** | **17 48 17.2** | **+0.7** |
| **WPHZ** | **Waipukurau** | **1.26** | **212** | P | **Pn** | **17 48 16.5** | **+0.1** |
| **KUTZ** | **Kaahu Road** | **1.27** | **293** | P | **Pn** | **17 48 16.7** | **+0.1** |
| **NTVZ** | **North Tongarir** | **1.28** | **265** | P | **Pn** | **17 48 17.9** | **+1.1** |
| **PKGZ** | **Pakihiroa** | **1.28** | **28** | P | **Pn** | **17 48 16.6** | **-0.1** |
| **MOVZ** | **Moawhango** | **1.28** | **251** | P | **Pn** | **17 48 17.5** | **+0.7** |
| **KARZ** | **Kaharoa** | **1.29** | **319** | P | **Pn** | **17 48 16.3** | **-0.5** |
| **HAZ** | **Te Kaha** | **1.29** | **17** | P | **Pn** | **17 48 16.7** | **-0.1** |
| **OTVZ** | **Oturere** | **1.29** | **262** | P | **Pn** | **17 48 18.5** | **+1.5** |
| **OPVZ** | **Ohinepanea** | **1.30** | **332** | P | **Pn** | **17 48 16.0** | **-0.9** |
| **KRVZ** | **Karewarewa** | **1.31** | **265** | P | **Pn** | **17 48 18.1** | **+0.9** |
| **SNVZ** | **South Ngauruho** | **1.32** | **261** | P | **Pn** | **17 48 18.2** | **+0.9** |
| **TUVZ** | **Tukino** | **1.32** | **258** | P | **Pn** | **17 48 18.2** | **+0.8** |
| **NNVZ** | **North Ngauruho** | **1.33** | **264** | P | **Pn** | **17 48 19.0** | **+1.5** |
| **NGZ** | **Ngauruhoe** | **1.35** | **262** | P | **Pn** | **17 48 18.5** | **+0.8** |
| **WTVZ** | **West Tongariro** | **1.35** | **264** | P | **Pn** | **17 48 18.9** | **+1.2** |
| **PRHZ** | **Porangahau** | **1.37** | **202** | P | **Pn** | **17 48 17.4** | **-0.5** |
| **WHVZ** | **Whangaehu Hut** | **1.37** | **258** | P | **Pn** | **17 48 18.8** | **+0.7** |
| **WNVZ** | **Wahianoa** | **1.38** | **256** | P | **Pn** | **17 48 18.7** | **+0.6** |
| **MAVZ** | **Matarangi** | **1.39** | **258** | P | **Pn** | **17 48 19.2** | **+0.7** |
| **COVZ** | **Chateau Observ** | **1.39** | **261** | P | **Pn** | **17 48 19.8** | **+1.5** |
| **FWVZ** | **Far West T-bar** | **1.40** | **259** | P | **Pn** | **17 48 19.0** | **+0.6** |
| **TRVZ** | **Turoa** | **1.41** | **257** | P | **Pn** | **17 48 19.0** | **+0.4** |
| **WMGZ** | **Waiomatatini S** | **1.46** | **37** | P | **Pn** | **17 48 20.1** | **+1.0** |
| **TWVZ** | **Taurewa** | **1.46** | **267** | P | **Pn** | **17 48 20.4** | **+1.1** |
| **WIZ** | **White Island** | **1.47** | **356** | P | **Pn** | **17 48 18.7** | **-0.6** |
| **MTVZ** | **Mangateitei** | **1.48** | **254** | P | **Pn** | **17 48 20.4** | **+0.9** |
| **TSZ** | **Takapari Road** | **1.48** | **253** | P | **Pn** | **17 48 19.3** | **-0.3** |
| **TGRZ** | **Tauranga** | **1.51** | **326** | P | **Pn** | **17 48 19.1** | **-0.8** |
| **DVHZ** | **Dannevirke** | **1.57** | **214** | P | **Pn** | **17 48 20.0** | **-0.7** |
| **ANWZ** | **Angora Road** | **1.60** | **204** | P | **Pn** | **17 48 20.7** | **-0.3** |
| **POWZ** | **Post Office Ro** | **1.83** | **220** | P | **Pn** | **17 48 23.8** | **-0.5** |
| **PRWZ** | **Pori Road** | **1.87** | **213** | P | **Pn** | **17 48 24.2** | **-0.5** |
| **BFZ** | **Birch Farm** | **1.87** | **206** | P | **Pn** | **17 48 23.8** | **-1.0** |
| **HIZ** | **Hauiti** | **1.98** | **283** | P | **Pn** | **17 48 29.0** | **+2.7** |
| **HIZ** | **Hauiti** | **1.98** | **283** | P | **Pn** | **17 48 27.0** | **+0.7** |
| **VRZ** | **Vera Road** | **2.00** | **266** | P | **Pn** | **17 48 27.3** | **+0.9** |
| **TIWZ** | **Tintock** | **2.09** | **211** | P | **Pn** | **17 48 27.4** | **-0.4** |
| **MRZ** | **Mangatainoka R** | **2.13** | **218** | P | **Pn** | **17 48 27.1** | **-1.3** |
| **HOWZ** | **Holdsworth Sta** | **2.35** | **216** | P | **Pn** | **17 48 29.7** | **-1.6** |
| **TMWZ** | **Te Maipa** | **2.37** | **207** | P | **Pn** | **17 48 30.0** | **-1.6** |
| **OGWZ** | **Otaki Gorge** | **2.45** | **222** | P | **Pn** | **17 48 31.4** | **-1.4** |
| **MTW** | **Mount Morrison** | **2.57** | **212** | P | **Pn** | **17 48 32.4** | **-2.0** |
| **KUZ** | **Kuaotunu** | **2.58** | **330** | P | **Pn** | **17 48 34.4** | **-0.1** |
| **KIW** | **Kapiti Island** | **2.62** | **224** | P | **Pn** | **17 48 33.8** | **-1.3** |
| **TRWZ** | **Traveller** | **2.70** | **207** | P | **Pn** | **17 48 33.9** | **-2.2** |
| **ETAZ** | **East Tamaki Re** | **2.78** | **317** | P | **Pn** | **17 48 38.1** | **+0.9** |
| **PAWZ** | **Paruwai Farm** | **2.79** | **211** | P | **Pn** | **17 48 35.2** | **-2.2** |
| **MSWZ** | **Moikau Station** | **2.89** | **213** | P | **Pn** | **17 48 36.5** | **-2.2** |
| **MBAZ** | **Motutapu North** | **2.93** | **319** | P | **Pn** | **17 48 40.2** | **+0.8** |
| **PLWZ** | **Palliser** | **3.01** | **211** | P | **Pn** | **17 48 38.1** | **-2.4** |
| **SNZO** | **South Karori** | **3.06** | **220** | P | **Pn** | **17 48 38.7** | **-2.3** |
| **DUWZ** | **D'Urville Isla** | **3.17** | **234** | P | **Pn** | **17 48 41.5** | **-1.2** |
| **TCW** | **Tory Channel** | **3.21** | **226** | P | **Pn** | **17 48 40.8** | **-2.3** |
| **TUWZ** | **Tuamarina** | **3.54** | **226** | P | **Pn** | **17 48 45.6** | **-2.2** |
| **NNZ** | **Nelson** | **3.74** | **232** | P | **Pn** | **17 48 48.9** | **-1.6** |
| **BSWZ** | **Blackbirch Sta** | **3.78** | **223** | P | **Pn** | **17 48 48.5** | **-2.4** |
| **TKNZ** | **Takaka Hill** | **3.91** | **237** | P | **Pn** | **17 48 51.5** | **-1.3** |
| **QRZ** | **Quartz Range** | **4.11** | **242** | P | **Pn** | **17 48 56.0** | **+0.5** |
| **QRZ** | **Quartz Range** | **4.11** | **242** | P | **Pn** | **17 48 54.3** | **-1.2** |
| **MRNZ** | **Matariki Terra** | **4.23** | **234** | P | **Pn** | **17 48 55.5** | **-1.8** |
| **THZ** | **Tophouse** | **4.36** | **229** | P | **Pn** | **17 48 56.8** | **-2.2** |
| **KHZ** | **Kahutara** | **4.46** | **219** | P | **Pn** | **17 48 56.0** | **-1.3** |
| **OUZ** | **Omahuta** | **4.80** | **321** | P | **Pn** | **17 49 05.5** | **+1.5** |
| **OUZ** | **Omahuta** | **4.80** | **321** | P | **Pn** | **17 49 05.7** | **+0.6** |
| **GVZ** | **Greta Valley S** | **5.12** | **218** | P | **Pn** | **17 49 06.8** | **-2.6** |
| **CTZ** | **Chatham Island** | **6.57** | **138** | P | **Pn** | **17 49 29.4** | **+0.2** |
| **ODZ** | **Otahua Downs** | **7.82** | **217** | P | **Pn** | **17 49 42.7** | **-3.7** |

*JSN* ***14*** *18:01:38.5±0.3, 18°.02N×76°.03W, h4km±5km, MD3.3*
*SSNC* ***14*** *18:01:39.4±1.0, 18°.04N×76°.06W, h5km±8km, MD3.1, ML2.5*

**ISC 14 18:01:40.2±2.4, 18°2N±0°2×76°2W±0°1, h12km±18km, n8, σ1§03/13, 1C-3D, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STH** | **Stony Hill** | **0.61** | **262** | *i*P | **Pg** | **18 01 52.1** | **-0.1** |
| **MTDJ** | **Mount Denham** | **1.30** | **273** | ⇓*i*P | **Pn** | **18 02 03.8** | **-0.5** |
| MTDJ | | | | ⇑*i*S | **Sb** | **18 02 22.8** | **+1.5** |
| **MTDJ** | **Mount Denham** | **1.30** | **273** | *e*P | **Pn** | **18 02 03.6** | **-0.7** |
| MTDJ | | | | *e*S | **Sb** | **18 02 22.2** | **+0.9** |
| MTDJ | | | | IAML | | 18 02 25.9 | |
| | 385nm,0.3s | | | | | | |
| MTDJ | | | | IAML | | 18 02 26.7 | |
| | comp=Z,340nm,0.4s | | | | | | |
| **MARVS** | **Santiago de Cu** | **1.84** | **8** | *e*P | **Pn** | **18 02 11.2** | **-0.5** |
| MARVS | | | | *e*S | **Sn** | **18 02 35.0** | **0.0** |
| MARVS | | | | IAML | | 18 02 37.0 | |
| | comp=E,7.7nm,0.1s | | | | | | |
| MARVS | | | | IAML | | 18 02 37.3 | |
| | comp=N,6.1nm,0.1s | | | | | | |
| **RCC** | **Rio Carpintero** | **1.87** | **14** | *e*P | **Pn** | **18 02 11.6** | **-0.6** |
| RCC | | | | *e*S | **Sn** | **18 02 35.9** | **+0.1** |
| **GTBY** | **Guantanamo Bay** | **2.02** | **30** | ⇓*e*P | **Pn** | **18 02 15.9** | **+1.7** |
| **LMGC** | **Las Mercedes** | **2.05** | **337** | *e*P | **Pn** | **18 02 14.1** | **-0.4** |
| **QMBU** | **Quimbuelo** | **2.40** | **32** | *e*P | **Pn** | **18 02 18.8** | **-0.6** |
| QMBU | | | | *e*S | **Sn** | **18 02 47.4** | **-1.3** |
| QMBU | | | | IAML | | 18 02 54.6 | |
| | comp=N,20nm,0.4s | | | | | | |
| QMBU | | | | IAML | | 18 02 55.5 | |
| | comp=E,16nm,0.1s | | | | | | |

# 2018 AUG

*MOS* ***14*** *18:13:26.2±0.9, 58°.05S×25°.32W, h33km, mb5.5/22, Error ellipse: s-maj=19.6km s-min=10.2km az=106.4*
*GCMT* ***14*** *18:13:26.8±0.2, 58°.26S±0°.02×24°.59W±0°.03, h36km, MW5.1/91, Moment Tensor Solution. s77,c107°; s91,c114°; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr5.01±.15; Mθθ-3.31±.14; Mϕϕ-1.70±.14; Mrθ-1.58±.12; Mrϕ-1.17±.09; Mθr-1.89±.11; Best double couple: M₀5.08400×10¹⁶ NP1:ϕs233.00000°, δ59.00000°, λ82.00000°. NP2:ϕs67.00000°, δ32.00000°, λ103.00000°. Principal axes: T 5.6800, Plg75.0000°, Azm122.0000°; N -1.1930, Plg7.0000°, Azm237.0000°; P -4.4870, Plg14.0000°, Azm328.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC* ***14*** *18:13:27.8±1.6, 58°.04S±0°.08×25°.1W±0°.1, h35km±1km, mb5.4/145 Error ellipse: s-maj=14.5km s-min=11.9km az=214.0*
*IDC* ***14*** *18:13:29.2±1.1, 58°.08S×25°.14W, h50km±9km, mb4.9/19, mbtmp5.2/21, MS4.4/36, Error ellipse: s-maj=14.3km s-min=10.3km az=50.0*

**ISC 14 18:13:27.9±0.2, 58°15S±0°.04×25°18W±0°.05, h40km, h40km:pP-P, n899, σ1§10/937, mb5.4/127, MS4.4/48, 26C-15D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **7.40** | **297** | | **Pn** | **18 15 18.4** | **+5.2** |
| **HOPE** | **Hope Point** | **7.40** | **297** | P | **Pn** | **18 15 18.4** | **+5.2** |
| **ORCD** | **Orcadas** | **10.28** | **247** | Pn | **Pn** | **18 15 53.7** | **+1.1** |
| **VNA1** | **Neumayer--Stat** | **14.43** | **157** | ⇓P | **Pn** | **18 16 49.9** | **+0.7** |
| | comp=Z,339nm,0.7s | | | | | | |
| VNA1 | | | | ⇑S | **Sn** | **18 19 22.0** | **-5.6** |
| | comp=Z,18nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **14.64** | **160** | ⇓P | **Pn** | **18 16 51.7** | **-0.3** |
| | comp=Z,108nm,0.4s | | | | | | |
| VNA3 | | | | ⇓S | Sn | 18 19 21.1 | -12 |
| | comp=Z,21nm,0.5s | | | | | | |
| VNA3 | | | | ⇑PcP | **PcP** | **18 22 03.8** | **+1.4** |
| | comp=Z,8.4nm,0.7s | | | | | | |
| VNA3 | | | | ⇑ScP | **ScP** | **18 25 37.2** | **+4.5** |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **14.83** | **157** | ⇓P | **Pn** | **18 16 54.4** | **0.0** |
| | comp=Z,47nm,0.3s,baz=328,slow=14 | | | | | | |
| VNA2 | | | | ⇑S | **Sn** | **18 19 29.7** | **-7.5** |
| | comp=Z,1.9nm,0.2s,baz=317,slow=16 | | | | | | |
| VNA2 | | | | ⇑PcP | **PcP** | **18 22 03.8** | **+1.1** |
| | comp=Z,10nm,0.6s,baz=323,slow=3.4 | | | | | | |
| VNA2 | | | | ⇑ScP | **ScP** | **18 25 38.3** | **+5.3** |
| | comp=Z,3.6nm,0.6s,baz=311,slow=4.2 | | | | | | |
| **SNAA** | **Sanae** | **16.37** | **155** | | **Pn** | **18 17 14.6** | **+0.2** |
| SNAA | | | | IAmb | IAmb | 18 17 20.6 | |
| | comp=Z,367nm,1.6s | | | | | | |
| **SNAA** | **Sanae** | **16.37** | **155** | *e*P | **Pn** | **18 17 15.4** | **+1.0** |
| **SNAA** | **Sanae** | **16.37** | **155** | ⇓P | **Pn** | **18 17 15.5** | **+1.0** |
| | comp=Z,2μm,0.4s | | | | | | |
| SNAA | | | | ⇑S | **Sn** | **18 20 06.0** | **-8.8** |
| | comp=Z,458nm,0.7s | | | | | | |
| SNAA | | | | ⇑PcP | **PcP** | **18 22 05.1** | **+0.1** |
| | comp=Z,145nm,0.7s | | | | | | |
| SNAA | | | | ⇑ScP | **ScP** | **18 25 39.8** | **+3.8** |
| | comp=Z,44nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **16.37** | **155** | P | **P** | **18 17 15.7** | **-1.1** |
| | comp=Z,51nm,0.4s,baz=318,slow=16,SNR=359 | | | | | | |
| SNAA | | | | S | **Sn** | **18 20 06.0** | **-8.8** |
| | comp=Z,10.0nm,0.7s,baz=327,slow=17,SNR=2.4 | | | | | | |
| SNAA | | | | PcP | **PcP** | **18 22 05.1** | **+0.1** |
| | comp=Z,5.4nm,0.8s,baz=230,slow=2.4,SNR=3.5 | | | | | | |
| SNAA | | | | LR | LR | 18 22 09.3 | |
| | comp=Z,2μm,21.4s,baz=312,slow=32 | | | | | | |
| SNAA | | | | ScP | **ScP** | **18 25 35.3** | **-0.7** |
| | comp=Z,2.6nm,1.0s,baz=287,slow=2.5,SNR=3.6 | | | | | | |
| **SNAA** | **Sanae** | **16.37** | **155** | *c i*P | **Pn** | **18 17 15.1** | **+0.6** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,340nm,2.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **17.87** | **152** | ⇓P | **P** | **18 17 34.8** | **+1.3** |
| | comp=Z,2μm,0.5s | | | | | | |
| TROLL | | | | ⇓S | Sn | 18 20 39.4 | -12 |
| | comp=Z,259nm,0.6s | | | | | | |
| TROLL | | | | ⇑x | x | 18 22 08.6 | |
| | comp=Z,168nm,0.5s | | | | | | |
| TROLL | | | | ⇑ScP | **ScP** | **18 25 39.2** | **+0.1** |
| | comp=Z,179nm,0.9s | | | | | | |
| **PMSA** | **Palmer Station** | **19.45** | **234** | P | **Pn** | **18 17 52.2** | **+0.1** |
| PMSA | | | | IAmb | IAmb | 18 17 59.5 | |
| | comp=Z,111nm,0.7s | | | | | | |
| **PMSA** | **Palmer Station** | **19.45** | **234** | P | **Pn** | **18 17 53.0** | **+1.0** |
| | comp=Z,56nm,1.0s,baz=72,slow=7.9,SNR=14 | | | | | | |
| PMSA | | | | PcP | **PcP** | **18 22 10.7** | **+0.6** |
| | comp=Z,5.7nm,0.7s,baz=163,slow=3.1,SNR=2.1 | | | | | | |
| PMSA | | | | LR | LR | 18 24 11.0 | |
| | comp=Z,2μm,21.4s,baz=84,slow=33 | | | | | | |
| PMSA | | | | ScP | **ScP** | **18 25 41.8** | **-0.7** |
| | comp=Z,24nm,0.9s,baz=68,slow=1.8,SNR=6.4 | | | | | | |
| **PMSA** | **Palmer Station** | **19.45** | **234** | *e*P | **P** | **18 17 51.3** | **+0.7** |
| **EFI** | **East Falkland** | **19.83** | **275** | | **Pn** | **18 17 56.0** | **-0.8** |
| EFI | | | | IAmb | IAmb | 18 18 04.9 | |
| | comp=Z,215nm,0.8s | | | | | | |
| **EFI** | **East Falkland** | **19.83** | **275** | *c e*P | **Pn** | **18 17 56.3** | **-0.5** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,55nm,0.8s | | | | | | |
| **SMAI** | **San Martin Ant** | **20.95** | **224** | P | Pn | 18 18 09.0 | -0.7 |
| **TRIS** | **Tristan da Cun** | **22.73** | **27** | P | **P** | **18 18 25.1** | **-1.1** |
| TRIS | | | | IAmb | IAmb | 18 18 28.6 | |
| | comp=Z,122nm,1.1s | | | | | | |
| **MG01** | **Puerto William** | **23.34** | **260** | P | **P** | **18 18 33.1** | **+0.9** |
| MG01 | | | | IAmb | IAmb | 18 18 48.1 | |
| | comp=Z,113nm,0.9s | | | | | | |
| **ELIB** | **Princess Elisa** | **23.78** | **145** | *d*P | **P** | **18 18 36.9** | **+0.4** |
| | comp=Z,26nm,0.8s | | | | | | |
| **GO10** | **Punta Arenas** | **25.95** | **261** | P | **P** | **18 18 57.3** | **+1.0** |
| **MG05** | **Puerto Natales** | **27.47** | **263** | P | **P** | **18 19 10.8** | **+0.9** |
| MG05 | | | | IAmb | IAmb | 18 19 22.9 | |
| | comp=Z,55nm,0.9s | | | | | | |
| **GO09** | **Cerro Castillo** | **27.61** | **264** | P | **P** | **18 19 11.3** | **+0.1** |
| GO09 | | | | IAmb | IAmb | 18 19 37.8 | |
| | comp=Z,239nm,1.9s | | | | | | |
| **GO08** | **Villa O'Higgin** | **29.34** | **268** | P | **P** | **18 19 27.7** | **+1.1** |
| GO08 | | | | IAmb | IAmb | 18 19 32.0 | |
| | comp=Z,73nm,0.8s | | | | | | |
| **AY02** | **Valle Explorad** | **30.91** | **271** | P | **P** | **18 19 41.8** | **+1.4** |
| **COYC** | **Coyhaique** | **30.91** | **273** | P | **P** | **18 19 41.2** | **+0.7** |
| COYC | | | | IAmb | IAmb | 18 20 07.0 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **TRQA** | **Tornquist** | **31.17** | **294** | P | **P** | **18 19 43.5** | **+0.7** |
| TRQA | | | | | **PcP** | **18 22 36.2** | **-0.7** |
| **TRQA** | **Tornquist** | **31.17** | **294** | P | **P** | **18 19 43.5** | **+0.7** |
| TRQA | | | | | | 18 22 36.3 | |
| TRQA | | | | pmax | pmax | | |
| | comp=Z,68nm,1.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **32.09** | **180** | P | **P** | **18 19 52.4** | **+1.5** |
| QSPA | | | | PcP | **PcP** | **18 22 39.1** | **0.0** |
| **QSPA** | **South Pole Qui** | **32.09** | **180** | P | **P** | **18 19 52.5** | **+1.6** |
| | comp=Z,66nm,1.1s,baz=207,slow=3.8,SNR=163 | | | | | | |
| QSPA | | | | PcP | **PcP** | **18 22 39.4** | **+0.3** |
| | comp=Z,10nm,0.8s,baz=178,slow=5.2,SNR=2.1 | | | | | | |
| QSPA | | | | ScP | **ScP** | **18 26 18.0** | **-1.0** |
| | comp=Z,3.1nm,0.9s,baz=291,slow=8.6,SNR=2.6 | | | | | | |
| QSPA | | | | LR | LR | 18 32 37.5 | |
| | comp=Z,1μm,19.8s,baz=190,slow=36 | | | | | | |
| | comp=Z,66nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **32.09** | **180** | P | **P** | **18 19 52.9** | **+2.0** |
| QSPA | | | | ScP | **ScP** | **18 26 18.9** | **-0.2** |
| **LL02** | **Futaleuf** | **32.40** | **277** | P | **P** | **18 19 52.7** | **-0.9** |
| LL02 | | | | IAmb | IAmb | 18 20 09.7 | |
| | comp=Z,88nm,1.4s | | | | | | |
| LL02 | | | | PcP | **PcP** | **18 22 40.1** | **-0.1** |
| **PLTB** | **Pedras Altas** | **32.72** | **311** | P | **P** | **18 19 56.3** | **-0.1** |
| PLTB | | | | IAmb | IAmb | 18 20 07.2 | |
| | comp=Z,161nm,1.8s | | | | | | |
| **LL01** | **San Ignacio de** | **33.27** | **277** | P | **P** | **18 20 00.4** | **-0.7** |
| **PLCA** | **Paso Flores** | **33.47** | **281** | P | **P** | **18 20 02.9** | **-0.2** |
| PLCA | | | | IAmb | IAmb | 18 20 07.8 | |
| | comp=Z,51nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **33.47** | **281** | P | **P** | **18 20 03.2** | **+0.2** |
| | comp=Z,53nm,0.9s,baz=143,slow=6.6,SNR=122 | | | | | | |
| PLCA | | | | PcP | **PcP** | **18 22 43.2** | **-0.1** |
| | comp=Z,5.1nm,0.9s,baz=152,slow=8.2,SNR=2.6 | | | | | | |
| PLCA | | | | ScP | **ScP** | **18 26 21.4** | **-2.8** |
| | comp=Z,8.3nm,0.9s,baz=134,slow=4.8,SNR=12 | | | | | | |
| PLCA | | | | LR | LR | 18 33 36.0 | |
| | comp=Z,717nm,18.9s,baz=134,slow=36 | | | | | | |
| | comp=Z,53nm,0.9s | | | | | | |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PLCA** | **Paso Flores** | **33.47** | **281** | *e*P | **P** | **18 20 01.7** | **-1.4** |
| **PLCA** | **Paso Flores** | **33.47** | **281** | P | **P** | **18 20 03.2** | **+0.2** |
| PLCA | | | | PcP | **PcP** | **18 22 43.7** | **+0.5** |
| PLCA | | | | ScP | **ScP** | **18 26 23.1** | **-1.1** |
| **TBOT** | **Tacuarembo** | **33.74** | **308** | *e*P | **P** | **18 20 04.7** | **-0.6** |
| **LL06** | **Loncomilla** | **34.02** | **276** | P | **P** | **18 20 07.2** | **-0.5** |
| **LL03** | **Petrohue** | **34.14** | **279** | P | **P** | **18 20 08.0** | **-0.8** |
| **LL04** | **Puerto Octay** | **34.31** | **279** | P | **P** | **18 20 09.7** | **-0.5** |
| LL04 | | | | IAmb | IAmb | 18 20 14.6 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **LL05** | **Los Muermos** | **34.51** | **278** | P | **P** | **18 20 12.2** | **+0.2** |
| **LR05** | **Currie** | **34.59** | **280** | P | **P** | **18 20 12.0** | **-0.7** |
| **RODS** | **Rosario do Sul** | **34.60** | **310** | *e*P | **P** | **18 20 13.1** | **+0.2** |
| **GO06** | **Curarrehue** | **34.79** | **282** | P | **P** | **18 20 13.0** | **-1.6** |
| GO06 | | | | IAmb | IAmb | 18 20 19.8 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **ALGR** | **Alto Alegre (B** | **35.13** | **315** | *e*P | **P** | **18 20 17.9** | **+0.3** |
| **LR04** | **Coral** | **35.59** | **279** | P | **P** | **18 20 21.1** | **-0.2** |
| **ITQB** | **Itaqui** | **35.78** | **309** | P | **P** | **18 20 22.5** | **-0.4** |
| ITQB | | | | IAmb | IAmb | 18 20 26.7 | |
| | comp=Z,42nm,0.8s | | | | | | |
| **ITAB** | **Concordia** | **36.22** | **317** | P | **P** | **18 20 26.3** | **-0.5** |
| **LC02** | **Puerto Saavedr** | **36.38** | **281** | P | **P** | **18 20 28.1** | **+0.2** |
| **CRSM** | **Crissiumal (Br** | **36.69** | **314** | *e*P | **P** | **18 20 30.6** | **-0.2** |
| **BI02** | **San Fabin de** | **36.90** | **265** | P | **P** | **18 20 31.7** | **-0.8** |
| **PET01** | **Itanhaem-SP** | **37.33** | **326** | *e*P | **P** | **18 20 36.8** | **+0.6** |
| **PARB** | **Paraibuna** | **37.75** | **328** | *e*P | **P** | **18 20 40.9** | **+1.0** |
| **MAW** | **Mawson** | **37.81** | **141** | P | **P** | **18 20 40.1** | **+0.3** |
| | comp=Z,34nm,1.0s,baz=238,slow=9.4,SNR=25 | | | | | | |
| MAW | | | | PcP | **PcP** | **18 22 55.9** | **+0.4** |
| | comp=Z,9.6nm,1.0s,baz=270,slow=4.0,SNR=3.3 | | | | | | |
| MAW | | | | LR | LR | 18 34 12.5 | |
| | comp=Z,907nm,20.3s,baz=253,slow=33 | | | | | | |
| | comp=Z,34nm,1.0s | | | | | | |
| **ELIM** | **Elim** | **37.91** | **71** | *e*P | **P** | **18 20 42.0** | **+0.8** |
| ELIM | | | | IAmb | IAmb | 18 20 42.5 | |
| | comp=Z,86nm,1.0s | | | | | | |
| **SPB** | **Sao Paulo** | **38.04** | **326** | P | **P** | **18 20 42.3** | **+0.1** |
| SPB | | | | IAmb | IAmb | 18 20 45.9 | |
| | comp=Z,93nm,1.0s | | | | | | |
| **SPB** | **Sao Paulo** | **38.04** | **326** | *e*P | **P** | **18 20 43.6** | **+1.4** |
| **SPB** | **Sao Paulo** | **38.04** | **326** | P | **P** | **18 20 43.6** | **+1.4** |
| **BO02** | **Sierra Bellavi** | **38.10** | **288** | P | **P** | **18 20 44.1** | **+1.3** |
| **DUB01** | **Friburgo-RJ** | **38.12** | **334** | *e*P | **P** | **18 20 44.2** | **+1.3** |
| **VAS01** | **Vassouras-RJ** | **38.19** | **332** | *e*P | **P** | **18 20 45.1** | **+1.6** |
| **VAO** | **Valinhos** | **38.45** | **327** | P | **P** | **18 20 46.7** | **+0.9** |
| VAO | | | | IAmb | IAmb | 18 20 49.5 | |
| | comp=Z,84nm,0.8s | | | | | | |
| **GO05** | **Huala** | **38.52** | **286** | P | **P** | **18 20 46.4** | **+0.2** |
| **LMEL** | **Las Melosas** | **38.56** | **289** | P | **

**AC04 Llanos de Chal 43.59 293** P **P** **18 21 27.5 -0.4**
AC04 IAmb IAmb 18 21 34.1
comp=Z,64nm,1.0s
**AQDB Aquidauana 43.69 316** P **P** **18 21 27.8 -1.0**
**UPI Upington 43.72 68** *eP* **P** **18 21 30.0 +0.9**
UPI IAmb IAmb 18 21 31.1
comp=Z,89nm,1.2s
**HVD Gariep Dam 44.01 74** *eP* **P** **18 21 30.5 -0.9**
HVD IAmb IAmb 18 21 32.2
comp=Z,28nm,1.0s
**SBA Scott Base 44.05 184** P **P** **18 21 33.6 +2.7**
SBA IAmb IAmb 18 21 35.3
comp=Z,66nm,1.0s
**SBA Scott Base 44.05 184** P **P** **18 21 33.7 +2.7**
SBA pmax pmax
comp=Z,66nm,1.0s
**SBA Scott Base 44.05 184** P **P** **18 21 33.8 +2.7**
SBA sP **sP** **18 21 48.3 +2.2**
SBA ScP **ScP** **18 27 05.9 +2.0**
**VNDA Vanda 44.52 182** P **P** **18 21 37.2 +2.5**
VNDA IAmb IAmb 18 21 38.4
comp=Z,49nm,0.8s
**VNDA Vanda 44.52 182** P **P** **18 21 37.3 +2.5**
comp=Z,39nm,0.7s,baz=185,slow=7.1,SNR=275
VNDA PcP **PcP** **18 23 17.6 +0.3**
comp=Z,4.1nm,0.9s,baz=166,slow=4.7,SNR=1.2
VNDA ScP **ScP** **18 27 05.1 -0.7**
comp=Z,0.9nm,0.8s,baz=162,slow=3.2,SNR=2.1
VNDA LR LR 18 39 01.9
comp=Z,397nm,21.7s,baz=180,slow=34
comp=Z,39nm,0.7s
**VNDA Vanda 44.52 182** P **P** **18 21 37.2 +2.5**
VNDA pmax pmax
comp=Z,49nm,0.8s
**VNDA Vanda 44.52 182** P **P** **18 21 37.2 +2.5**
VNDA pP **pP** **18 21 46.0 +0.6**
**JANB Januaria 45.34 334** *eP* **P** **18 21 42.9 +0.8**
**CCD Concordia, Ant 45.41 169** ⇑P **P** **18 21 43.6 +1.2**
**GO02 Mina Guanaco 45.43 297** P **P** **18 21 41.9 -1.1**
**BOSA Boshof 45.50 72** P **P** **18 21 43.0 -0.3**
BOSA IAmb IAmb 18 21 44.2
comp=Z,60nm,1.2s
**BOSA Boshof 45.50 72** *eP* **P** **18 21 43.2 -0.1**
BOSA IAmb IAmb 18 21 43.9
comp=Z,68nm,1.2s
**BOSA Boshof 45.50 72** P **P** **18 21 43.1 -0.3**
comp=Z,39nm,1.1s,baz=207,slow=7.7,SNR=38
BOSA PcP **PcP** **18 23 21.9 +0.3**
comp=Z,8.2nm,0.9s,baz=221,slow=4.6,SNR=2.8
BOSA LR LR 18 36 35.4
comp=Z,531nm,22.0s,baz=178,slow=30
comp=Z,39nm,1.1s
**BOSA Boshof 45.50 72** P **P** **18 21 43.0 -0.3**
BOSA pmax pmax
comp=Z,60nm,1.2s
**BOSA Boshof 45.50 72** P **P** **18 21 43.0 -0.3**
BOSA PcP **PcP** **18 23 22.5 +0.9**
**H04S2 CROZET ISLANDS 45.73 111** T T 19 12 19.8
baz=226,slow=75,SNR=117
**BDFB Brasilia 45.73 329** P **P** **18 21 45.1 -0.1**
BDFB IAmb IAmb 18 21 49.0
comp=Z,35nm,0.8s
**BDFB Brasilia 45.73 329** P **P** **18 21 45.7 +0.5**
comp=Z,31nm,0.7s,baz=143,slow=4.8,SNR=21
BDFB LR LR 18 40 27.7
comp=Z,502nm,19.5s,baz=147,slow=35
comp=Z,31nm,0.7s
**BDFB Brasilia 45.73 329** P **P** **18 21 45.1 -0.1**
BDFB pmax pmax
comp=Z,35nm,0.8s
**H04S3 CROZET ISLANDS 45.74 111** T T 19 12 21.4
baz=226,slow=75,SNR=123
**H04S1 CROZET ISLANDS 45.75 111** T T 19 12 17.3
baz=226,slow=75,SNR=76
**PB14 IPOC Station P 46.27 297** P **P** **18 21 47.8 -1.8**
**SWZ Schweizer 46.71 71** *eP* **P** **18 21 52.0 -0.8**
SWZ IAmb IAmb 18 21 53.3
comp=Z,44nm,1.0s
**ARAG Araguaiana, MT 46.80 324** *eP* **P** **18 21 54.2 +0.8**
**SNKL Senekal, Frees 47.05 74** *eP* **P** **18 21 55.2 -0.4**
SNKL IAmb IAmb 18 21 56.4
comp=Z,57nm,1.1s
**LVC Limon Verde 47.30 300** P **P** **18 21 57.1 -0.6**
**LVC Limon Verde 47.30 300** LR LR 18 43 05.9
comp=Z,429nm,19.7s,baz=184,slow=38
**LVC Limon Verde 47.30 300** P **P** **18 21 57.2 -0.6**
LVC pmax pmax
comp=Z,17nm,0.8s
**LVC Limon Verde 47.30 300** *eP* **P** **18 21 57.2 -0.6**
**LVC Limon Verde 47.30 300** P **P** **18 21 57.2 -0.6**
LVC ScP **ScP** **18 27 18.0 -0.7**
**PB05 IPOC Station P 47.69 298** P **P** **18 21 59.0 -1.5**
PB05 IAmb IAmb 18 22 12.6
comp=Z,109nm,1.8s
**PRYS Parys 47.95 73** *eP* **P** **18 22 02.1 -0.3**
PRYS IAmb IAmb 18 22 02.8
comp=Z,84nm,1.3s
**SDBA SAO DESIDERIO 48.04 334** *eP* **P** **18 22 03.8 +0.6**
**PB04 IPOC Station P 48.11 298** P **P** **18 22 01.9 -1.9**
PB04 IAmb IAmb 18 22 29.1
comp=Z,75nm,1.3s
**PB09 IPOC Station P 48.16 300** P **P** **18 22 03.3 -0.9**
PB09 IAmb IAmb 18 22 05.6
comp=Z,134nm,1.7s
**BBSD Serra de San D 48.55 312** *eP* **P** **18 22 06.5 -0.5**
**NWCL Newcastle 48.58 76** *eP* **P** **18 22 05.8 -1.5**
NWCL IAmb IAmb 18 22 07.7
comp=Z,21nm,0.7s
**LBTB Lobatse 48.64 69** P **P** **18 22 07.1 -0.7**
LBTB IAmb IAmb 18 22 08.8
comp=Z,47nm,1.0s
LBTB PcP **PcP** **18 23 33.6 +0.9**
**LBTB Lobatse 48.64 69** ⇑*iP* **P** **18 22 07.4 -0.3**
LBTB IAmb IAmb 18 22 08.5
comp=Z,49nm,1.0s
**LBTB Lobatse 48.64 69** LR LR 18 38 36.5
comp=Z,527nm,20.1s,baz=190,slow=31
**LBTB Lobatse 48.64 69** P **P** **18 22 07.5 -0.3**
LBTB PcP **PcP** **18 23 33.6 +0.9**
LBTB ScP **ScP** **18 27 23.9 -0.1**
**PB01 IPOC Station P 48.92 300** P **P** **18 22 08.8 -1.1**
PB01 PcP **PcP** **18 23 32.4 -1.4**
**HRAO HartRAO 48.96 72** *eP* **P** **18 22 09.9 -0.4**
**NBAN Anadia - AL 49.12 345** *eP* **P** **18 22 11.3 -0.1**
**NYAT Nyati, Northwe 49.33 72** *eP* **P** **18 22 11.1 -2.0**
NYAT IAmb IAmb 18 22 13.7
comp=Z,42nm,1.2s
**TSWA Tswaing Meteor 49.55 72** *eP* **P** **18 22 14.5 -0.2**
TSWA IAmb IAmb 18 22 15.2
comp=Z,88nm,1.1s
**PTLB Pontes e Lacer 49.57 315** P **P** **18 22 13.8 -1.0**
PTLB IAmb IAmb 18 22 19.1
comp=Z,30nm,0.7s
**NHAM Northam, North 49.58 71** *eP* **P** **18 22 13.6 -1.4**
NHAM IAmb IAmb 18 22 15.7
comp=Z,59nm,1.2s
**H10S2 ASCENSION HYDR 49.74 14** T T 19 16 52.9
baz=188,slow=74,SNR=1102
**H10S3 ASCENSION HYDR 49.75 14** T T 19 16 53.3
baz=32,slow=74,SNR=1147
**SIV San Ignacio 49.81 312** LR LR 18 41 37.8
comp=Z,319nm,21.9s,baz=116,slow=34
**TSUM Tsumeb 49.83 57** P **P** **18 22 15.8 -1.1**
TSUM IAmb IAmb 18 22 18.5
comp=Z,37nm,1.3s
**TSUM Tsumeb 49.83 57** *eP* **P** **18 22 17.0 +0.1**
TSUM IAmb IAmb 18 22 18.1
comp=Z,44nm,1.4s
**TSUM Tsumeb 49.83 57** P **P** **18 22 17.2 +0.3**
TSUM PcP **PcP** **18 23 38.8 +1.6**
**POGA Pongola 49.83 77** P **P** **18 22 15.8 -0.9**
POGA IAmb IAmb 18 22 17.6
comp=Z,27nm,1.0s
**POGA Pongola 49.83 77** *eP* **P** **18 22 16.1 -0.6**
POGA IAmb IAmb 18 22 17.1
comp=Z,21nm,0.9s
**RUST Rust De Winter 49.92 73** *eP* **P** **18 22 16.4 -1.1**
RUST IAmb IAmb 18 22 18.1
comp=Z,54nm,1.4s
**GO01 Chusmiza 49.98 301** P **P** **18 22 18.0 -0.5**
GO01 IAmb IAmb 18 22 19.3
comp=Z,22nm,0.5s
**SNDB Serra Nova Dou 50.16 326** *eP* **P** **18 22 20.2 +0.9**
**MTLB Matlabas, Limp 50.37 70** *eP* **P** **18 22 20.7 -0.3**
MTLB IAmb IAmb 18 22 21.5
comp=Z,33nm,1.1s
**DULL Dullstroom, Mp 50.66 74** *eP* **P** **18 22 22.4 -0.9**
DULL IAmb IAmb 18 22 23.9
comp=Z,27nm,1.2s
**LEPH Lephalale, Lim 50.70 71** *eP* **P** **18 22 22.9 -0.5**
LEPH IAmb IAmb 18 22 23.9
comp=Z,87nm,1.5s
**H10N1 ASCENSION HYDR 50.86 14** T T 19 18 18.2
baz=180,slow=72,SNR=66
**H10N3 ASCENSION HYDR 50.86 14** T T 19 18 14.5
baz=180,slow=72,SNR=177
**H10N2 ASCENSION HYDR 50.88 14** T T 19 18 18.5
baz=180,slow=72,SNR=187
**PILG Pilgrimsrest, 51.29 74** *eP* **P** **18 22 27.0 -1.0**
PILG IAmb IAmb 18 22 28.4
comp=Z,63nm,1.5s
**CASY Casey 51.55 159** P **P** **18 22 30.3 +1.1**
CASY IAmb IAmb 18 22 31.9
comp=Z,42nm,0.8s
**CASY Casey 51.55 159** ⇑P **P** **18 22 30.7 +1.5**
CASY pP **pP** **18 22 39.6 -0.3**
**CRAIL Swartwater, Li 51.81 71** *eP* **P** **18 22 31.3 -0.4**
**HOED Hoedspruit, Li 51.83 74** *eP* **P** **18 22 30.3 -1.6**
HOED IAmb IAmb 18 22 32.2
comp=Z,21nm,1.0s
**PB18 Visviri 51.93 302** P **P** **18 22 32.8 -0.5**
PB18 IAmb IAmb 18 23 47.5
comp=Z,57nm,1.3s
**PDRB Porto dos Gac 52.24 320** *eP* **P** **18 22 34.6 -0.3**
**VILB Vilhena 52.25 315** P **P** **18 22 34.3 -0.7**
VILB IAmb IAmb 18 22 36.6
comp=Z,59nm,0.7s
**LPAZ La Paz 52.48 304** P **P** **18 22 36.3 -1.1**
**LPAZ La Paz 52.48 304** P **P** **18 22 37.0 -0.4**
comp=Z,11nm,0.5s,baz=134,slow=5.0,SNR=31
LPAZ PcP **PcP** **18 23 46.4 -1.2**
comp=Z,11nm,0.7s,baz=79,slow=4.6,SNR=1.8
LPAZ ScP **ScP** **18 27 38.7 -2.5**
comp=Z,2.6nm,0.8s,baz=110,slow=6.8,SNR=3.6
comp=Z,11nm,0.5s
**LPAZ La Paz 52.48 304** P **P** **18 22 36.3 -1.1**
LPAZ pmax pmax
comp=Z,20nm,0.7s
**LPAZ La Paz 52.48 304** *eP* **P** **18 22 37.0 -0.4**
**LPAZ La Paz 52.48 304** P **P** **18 22 36.9 -0.4**
LPAZ PcP **PcP** **18 23 48.4 +0.8**
LPAZ ScP **ScP** **18 27 40.3 -0.9**
**CLDB Colider 52.62 321** *eP* **P** **18 22 37.4 -0.3**
**MPHEP Siloam, Limpop 52.69 72** *eP* **P** **18 22 37.7 -0.6**
MPHEP IAmb IAmb 18 22 38.8
comp=Z,44nm,1.2s
**MOPA Mopani 52.81 74** *eP* **P** **18 22 38.2 -0.9**
MOPA IAmb IAmb 18 22 39.9
comp=Z,63nm,1.0s
**RCBR Riachuelo 52.85 347** P **P** **18 22 37.7 -1.8**
**RCBR Riachuelo 52.85 347** LR LR 18 40 36.5
comp=Z,121nm,20.9s,baz=164,slow=31
**RCBR Riachuelo 52.85 347** P **P** **18 22 37.7 -1.8**
RCBR pmax pmax
comp=Z,18nm,1.4s
**MUSN Musina, Limpop 53.05 72** *eP* **P** **18 22 41.0 0.0**
MUSN IAmb IAmb 18 22 41.6
comp=Z,89nm,1.5s
**NBPB Pedra_Branca-C 53.66 342** *eP* **P** **18 22 46.1 +0.7**
**DRV Dumont d'Urvil 55.01 173** P **P** **18 22 55.6 +1.0**
DRV ScP **ScP** **18 27 54.5 +3.8**
**PRPB Parauapebas 55.27 330** *eP* **P** **18 22 58.1 +1.1**
**NPGB Novo Progresso 56.06 323** *eP* **P** **18 23 02.9 +0.1**
**CHIPN CHIPINGE 56.17 73** *eP* **P** **18 23 02.1 -1.6**
**SAML Samuel 57.06 314** P **P** **18 23 08.5 -1.3**
SAML IAmb IAmb 18 23 11.5
comp=Z,38nm,0.7s
**SAML Samuel 57.06 314** P **P** **18 23 08.5 -1.3**
SAML pmax pmax
comp=Z,38nm,0.7s
**SAML Samuel 57.06 314** *eP* **P** **18 23 09.3 -0.5**
**ETMB Extrema 57.47 310** P **P** **18 23 11.7 -1.0**
ETMB PcP **PcP** **18 24 05.1 -0.9**
**ETMB Extrema 57.47 310** *eP* **P** **18 23 11.6 -1.0**
**KRI Karoi 57.54 68** *eP* **P** **18 23 13.3 -0.1**
**LSZ Lusaka 58.17 66** P **P** **18 23 17.4 -0.5**
LSZ IAmb IAmb 18 23 18.9
comp=Z,39nm,1.0s
LSZ PcP **PcP** **18 24 10.2 +1.3**
**LSZ Lusaka 58.17 66** P **P** **18 23 18.1 +0.3**
**TMAB Tom-Au,PA,Br 58.48 333** *eP* **P** **18 23 21.1 +1.4**
**NNA Nana 60.21 298** LR LR 18 48 02.5
comp=Z,375nm,21.9s,baz=149,slow=34
**MAL2 Monte Alegre, 60.45 326** P **P** **18 23 34.0 +0.6**
**MACA Manacapuru-AM 61.48 319** P **P** **18 23 38.7 -1.7**
**MACA Manacapuru-AM 61.48 319** *eP* **P** **18 23 39.5 -0.8**
**CZSB Cruzeiro do Su 62.09 304** P **P** **18 23 42.6 -1.8**
CZSB IAmb IAmb 18 23 45.2
comp=Z,21nm,0.9s
**CZSB Cruzeiro do Su 62.09 304** *eP* **P** **18 23 45.0 +0.5**
**VOI Vohitsoka 62.17 87** P **P** **18 23 44.7 -0.5**
VOI IAmb IAmb 18 24 10.1
comp=Z,73nm,1.8s
**ABPO Ambohimpanom 64.77 86** P **P** **18 24 02.9 +0.5**
**ABPO Ambohimpanom 64.77 86** P **P** **18 24 02.9 +0.5**
ABPO pmax pmax
comp=Z,18nm,1.2s
**AIS Amsterdam Isla 64.86 121** P **P** **18 24 03.1 +0.6**
**OPO Ambohidratompo 65.12 85** LR LR 18 45 44.5
comp=Z,244nm,21.4s,baz=356,slow=30
**ATAH Atahualpa 65.19 299** P **P** **18 24 06.0 +0.6**
comp=Z,15nm,1.1s,baz=195,slow=3.9,SNR=7.3
ATAH LR LR 18 52 08.0
comp=Z,238nm,21.0s,baz=174,slow=36
comp=Z,15nm,1.1s
**LIC Lamto 66.20 22**⇑ *eP* **P** **18 24 11.8 +0.5**
comp=Z,148nm,0.6s
**KIC Kosan Boka 66.39 22**⇑ *eP* **P** **18 24 13.0 +0.4**
comp=Z,80nm,0.7s
**TIC Toumodi 66.61 22**⇑ *eP* **P** **18 24 14.4 +0.4**
comp=Z,82nm,0.7s
**BOAV Boa Vista 66.61 321** P **P** **18 24 13.0 -1.0**
**BOAV Boa Vista 66.61 321** *eP* **P** **18 24 13.5 -0.6**
**DBIC Dimbokro 66.67 22** P **P** **18 24 14.7 +0.4**
DBIC IAmb IAmb 18 24 15.6
comp=Z,39nm,0.8s
**DBIC Dimbokro 66.67 22**⇑ *iP* **P** **18 24 14.7 +0.4**
**DBIC Dimbokro 66.67 22** P **P** **18 24 14.4 +0.1**
comp=Z,33nm,0.5s,baz=178,slow=6.5,SNR=61
DBIC LR LR 18 48 18.9
comp=Z,195nm,18.1s,baz=161,slow=31
comp=Z,33nm,0.5s
**DBIC Dimbokro 66.67 22** P **P** **18 24 14.7 +0.4**
DBIC pmax pmax
comp=Z,39nm,0.8s
**DBIC Dimbokro 66.67 22** P **P** **18 24 14.5 +0.2**
**MDP Montagnes des 66.81 330** LR LR 18 50 42.6
comp=Z,258nm,21.6s,baz=144,slow=34
**MPGF Montagnes des 66.82 330** P **P** **18 24 15.3 0.0**
MPGF pP **pP** **18 24 24.4 -1.7**
MPGF sP **sP** **18 24 28.5 -1.9**
**ANTS Antisana-Sarah 70.95 302** P **P** **18 24 41.1 -0.6**
ANTS IAmb IAmb 18 24 47.7
comp=Z,22nm,0.7s
**PULU Pululahua 71.56 302** P **P** **18 24 45.2 0.0**
**OTAV Otavalo 71.72 302** P **P** **18 24 46.8 +0.5**
**TULM Tulcn-Chalpat 71.85 303** P **P** **18 24 47.3 +0.2**
TULM IAmb IAmb 18 24 50.2
comp=Z,48nm,0.8s
**MBAR Mbarara 72.18 60** P **P** **18 24 49.5 +0.8**
**MBAR Mbarara 72.18 60** *eP* **P** **18 24 51.1 +2.4**
MBAR IAmb IAmb 18 24 52.3
comp=Z,42nm,1.4s
**MBAR Mbarara 72.18 60** LR LR 18 54 24.9
comp=Z,340nm,18.1s,baz=192,slow=34
**MBAR Mbarara 72.18 60**⇑ *eP* **P** **18 24 51.0 +2.3**
MBAR pmax pmax
comp=Z,33nm,1.4s
**BBTS Babate 72.89 9** LR LR 18 49 26.2
comp=Z,282nm,21.2s,baz=69,slow=30
**ROSC El Rosal 74.06 308** P **P** **18 24 59.5 -0.5**
**ROSC El Rosal 74.06 308** P **P** **18 24 59.9 -0.2**
comp=Z,18nm,0.7s,baz=155,slow=17,SNR=5.1
ROSC LR LR 18 57 53.9
comp=Z,284nm,21.5s,baz=130,slow=36
comp=Z,18nm,0.7s
**ROSC El Rosal 74.06 308** P **P** **18 24 59.5 -0.5**
ROSC pmax pmax
comp=Z,24nm,1.0s
**KIBK Kibwezi 74.15 68** P **P** **18 25 00.8 +0.6**
KIBK IAmb IAmb 18 25 05.2
comp=Z,59nm,1.5s
**TOA0 Torodi Ar. Sit 74.39 27** P **P** **18 25 01.5 +0.1**
**TORD Torodi Ar. Bea 74.39 27** P **P** **18 25 01.3 0.0**
TORD IAmb IAmb 18 25 03.0
comp=Z,48nm,0.7s
**TORD Torodi Ar. Bea 74.39 27** P **P** **18 25 02.1 +0.8**
comp=Z,39nm,0.6s,baz=174,slow=5.7,SNR=279
TORD LR LR 18 50 59.6
comp=Z,174nm,21.1s,baz=179,slow=30
comp=Z,39nm,0.6s
**PCRV Puerto La Cruz 75.27 320** P **P** **18 25 07.4 +0.9**
comp=Z,96nm,0.7s,baz=161,slow=3.6,SNR=72
PCRV LR LR 18 59 52.7
comp=Z,201nm,19.5s,slow=37
comp=Z,96nm,0.7s
**BAUV El Baul 75.34 316** P **P** **18 25 06.5 -0.5**
BAUV IAmb IAmb 18 25 22.1
comp=Z,88nm,1.0s
**WHZ Wether Hill Ro 75.75 189** P **P** **18 25 10.0 +1.0**
WHZ IAmb IAmb 18 25 11.3
comp=Z,72nm,1.0s
**DCZ Deep Cove 76.24 189** P **P** **18 25 12.9 +1.2**
DCZ IAmb IAmb 18 25 26.8
comp=Z,64nm,1.2s
**MLZ Mavora Lakes 76.26 190** P **P** **18 25 12.5 +0.6**
**SDV Santo Domingo 76.27 314** P **P** **18 25 12.0 -0.5**
SDV IAmb IAmb 18 25 18.0
comp=Z,25nm,0.7s
**SDV Santo Domingo 76.27 314** P **P** **18 25 12.6 +0.1**
comp=Z,25nm,0.7s,baz=163,slow=2.9,SNR=7.8
SDV LR LR 18 58 17.3
comp=Z,568nm,22.0s,baz=136,slow=35
comp=Z,25nm,0.7s
**SDV Santo Domingo 76.27 314** *eP* **P** **18 25 12.7 +0.3**
**ODZ Otahua Downs 76.33 191** P **P** **18 25 12.4 +0.1**
ODZ IAmb IAmb 18 26 53.8
comp=Z,173nm,2.0s
**WKZ Wanaka 76.71 190** P **P** **18 25 16.0 +1.5**
**LBZ Lake Benmore 77.03 191** P **P** **18 25 17.0 +0.7**
LBZ IAmb IAmb 18 25 19.0
comp=Z,49nm,0.9s
**MQZ McQueen's Vall 77.43 193** P **P** **18 25 19.1 +0.6**
**RPZ Rata Peaks 77.60 192** P **P** **18 25 20.9 +1.4**
RPZ IAmb IAmb 18 25 22.0
comp=Z,62nm,1.0s
**LODK Lodwar 77.87 63** P **P** **18 25 22.7 +1.3**
**FOZ Fox Glacier 77.92 191** P **P** **18 25 22.5 +1.4**
**AMCZ Amberley 77.95 193** P **P** **18 25 22.8 +1.4**
**GVZ Greta Valley S 78.11 194** P **P** **18 25 23.7 +1.4**
**GVZ Greta Valley S 78.11 194** P **P** **18 25 24.0 +1.6**
**BIM Bigot 78.18 325** P **P** **18 25 22.7 -0.2**
**LTZ Lake Taylor 78.38 193** P **P** **18 25 24.9 +1.0**
**LTZ Lake Taylor 78.38 193** P **P** **18 25 25.5 +1.6**
**FDF Fort de France 78.41 325** P **P** **18 25 24.5 +0.4**
**FDF Fort de France 78.41 325** P **P** **18 25 24.5 +0.4**
FDF pmax pmax
comp=Z,204nm,1.2s
**SVN Savane Anatole 78.52 325** P **P** **18 25 25.4 +0.6**
**KHZ Kahutara 78.59 194** P **P** **18 25 25.7 +0.8**
**TAU Tasmania Unive 79.11 174** P **P** **18 25 27.3 -0.5**
**TAU Tasmania Unive 79.11 174** P **P** **18 25 27.3 -0.5**
TAU pmax pmax
comp=Z,119nm,1.2s
**BSWZ Blackbirch Sta 79.23 194** P **P** **18 25 29.6 +1.1**
**THZ Tophouse 79.31 194** P **P** **18 25 30.2 +1.3**
**THZ Tophouse 79.31 194** P **P** **18 25 30.3 +1.3**
**PAWZ Paruwai Farm 79.35 196** P **P** **18 25 30.6 +1.4**
**DSZ Denniston Nort 79.46 193** P **P** **18 25 30.0 +0.2**
**TUWZ Tuamarina 79.50 195** P **P** **18 25 32.3 +2.3**
**TMWZ Te Maipa 79.55 196** P **P** **18 25 32.3 +2.0**
**MAGL Barre de l'ile 79.60 325** P **P** **18 25 32.0 +1.4**
**CAW Cannon Point 79.67 195** P **P** **18 25 31.7 +0.8**
**TCW Tory Channel 79.68 195** P **P** **18 25 32.0 +1.1**
**TCW Tory Channel 79.68 195** P **P** **18 25 32.2 +1.3**
**MRNZ Matariki Terra 79.69 194** P **P** **18 25 31.3 +0.3**
**MRNZ Matariki Terra 79.69 194** P **P** **18 25 31.9 +0.9**
**NNZ Nelson 79.79 194** P **P** **18 25 32.7 +1.2**
**CBE Ff, Capester 79.81 325** P **P** **18 25 32.5 +0.7**
**HOWZ Holdsworth Sta 79.81 196** P **P** **18 25 33.3 +1.7**
**BFZ Birch Farm 79.91 196** P **P** **18 25 33.5 +1.3**
BFZ IAmb IAmb 18 25 34.6
comp=Z,64nm,1.0s
**BFZ Birch Farm 79.91 196** P **P** **18 25 33.9 +1.7**
**TKNZ Takaka Hill 80.02 194** P **P** **18 25 33.1 +0.3**
**MRZ Mangatainoka R 80.03 196** P **P** **18 25 34.1 +1.3**
**GDHS Morne Mazeau, 80.05 324** P **P** **18 25 34.1 +1.0**
**DUWZ D'Urville Isla 80.12 195** P **P** **18 25 34.6 +1.2**
**POWZ Post Office Ro 80.27 196** P **P** **18 25 35.8 +1.6**
**QRZ Quartz Range 80.28 194** P **P** **18 25 33.5 -0.7**
**DVHZ Dannevirke 80.30 196** P **P** **18 25 35.6 +1.2**
**RKT Rikitea 80.46 241** *e*LR LR 18 50 43.9
comp=Z,1μm,29.0s
**WNVZ Wahianoa 81.34 196** P **P** **18 25 40.6 +0.6**
**BKZ Black Stump Fm 81.36 197** P **P** **18 25 41.2 +1.2**
**BKZ Black Stump Fm 81.36 197** P **P** **18 25 41.8 +1.7**
**TRVZ Turoa 81.37 196** P **P** **18 25 43.2 +2.9**
**WHVZ Whangaehu Hut 81.38 196** P **P** **18 25 42.3 +1.9**
**MAVZ Mataranga 81.40 196** P **P** **18 25 42.2 +1.6**
**PKVZ Pokaka 81.41 196** P **P** **18 25 42.0 +1.7**
**FWVZ Far West T-bar 81.42 196** P **P** **18 25 42.2 +1.6**
**ETVZ East Tongariro 81.51 196** P **P** **18 25 42.7 +1.8**
**TMVZ Te Maari 81.53 196** P **P** **18 25 42.5 +1.5**
**VRZ Vera Road 81.66 196** P **P** **18 25 42.1 +0.6**
**RTZ Ruatahuna 81.82 197** P **P** **18 25 43.0 +0.5**
RTZ IAmb IAmb 18 25 45.9
comp=Z,63nm,1.0s
**URZ Urewera 82.15 198** LR LR 18 57 32.3
comp=Z,139nm,22.0s,baz=215,slow=32
**HIZ Hauiti 82.24 196** P **P** **18 25 45.1 +0.4**
**LCR2 La Lucha 2 82.64 302** P **P** **18 25 46.7 -0.4**
LCR2 IAmb IAmb 18 26 01.8
comp=Z,31nm,1.0s
**TOZ Tahuroa Road 82.92 196** P **P** **18 25 48.4 +0.3**
TOZ IAmb IAmb 18 25 49.5
comp=Z,34nm,0.8s
**IGPR InterUniversit 83.03 321** P **P** **18 25 48.2 -0.5**
IGPR IAmb IAmb 18 25 53.4
comp=Z,30nm,0.8s
**HUMP Col San Antoni 83.11 321** P **P** **18 25 48.6 -0.5**
HUMP IAmb IAmb 18 26 03.7
comp=Z,43nm,0.8s
**CELP Cerrillos 83.29 321** P **P** **18 25 49.1 -1.0**
CELP IAmb IAmb 18 26 03.5
comp=Z,24nm,0.9s
**MLPR Magueyes Islan 83.35 320** P **P** **18 25 48.6 -1.7**
**CRPR Cabo Rojo, PR 83.40 320** P **P** **18 25 48.8 -1.8**
**JTS Las Juntas de 83.56 301** P **P** **18 25 51.4 -0.3**
JTS IAmb IAmb 18 26 06.3
comp=Z,43nm,1.2s
**JTS Las Juntas de 83.56 301** P **P** **18 25 50.7 -1.0**
comp=Z,8.2nm,0.5s,baz=93,slow=17,SNR=4.3
comp=Z,8.2nm,0.5s
**JTS Las Juntas de 83.56 301** *eP* **P** **18 25 51.3 -0.3**
**NWAO Narrogin (SRO) 83.95 149** LR LR 18 59 09.8
comp=Z,299nm,20.5s,baz=236,slow=33
**FURI Furi 84.22 63** LR LR 19 00 13.0
comp=Z,387nm,20.7s,baz=194,slow=33
**MUN Mundaring 84.56 148** P **P** **18 25 56.9 +0.2**
comp=Z,58nm,1.2s
**TAM Tamanrasset 84.59 28** P **P** **18 25 57.8 +0.9**
TAM IAmb IAmb 18 26 01.2
comp=Z,32nm,1.3s
**TAM Tamanrasset 84.59 28** P **P** **18 25 57.8 +0.9**
TAM pmax pmax
comp=Z,32nm,1.3s
**ACON Acoyapa 85.14 302** P **P** **18 25 58.1 -1.5**
ACON IAmb IAmb 18 26 12.7
comp=Z,51nm,1.2s
**KLBR Kellerberrin 85.36 149** P **P** **18 26 00.7 0.0**
comp=Z,42nm,1.1s
**BOAB BOACO BROADBAN 85.78 302** P **P** **18 26 02.0 -0.8**
**YNG Young 87.75 175** P **P** **18 26 13.0 +0.7**
comp=Z,88nm,1.6s
**HTT Hallett 87.80 167** P **P** **18 26 13.3 +0.7**
comp=Z,33nm,1.1s
**ATD Arta Tunnel 88.50 65** P **P** **18 26 17.7 +1.6**
ATD IAmb IAmb 18 26 21.6
comp=Z,41nm,1.2s
**ATD Arta Tunnel 88.50 65** LR LR 19 04 04.0
comp=Z,20nm,18.9s,baz=185,slow=34
**FORT Forrest 88.61 157** P **P** **18 26 16.9 +0.5**
**FORT Forrest 88.61 157** P **P** **18 26 17.6 +1.2**
comp=Z,98nm,1.0s

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| STKA | Stephens Creek | 89.63 | 169 | | P | | P | | 18 26 22.1 | +0.8 | |
| | comp=Z,7.1nm,1.6s | | | | | | | | | | |
| STKA | Stephens Creek | 89.63 | 169 | | P | | P | | 18 26 21.9 | +0.6 | |
| | comp=Z,10nm,0.8s,baz=165,slow=4.4,SNR=12 | | | | | | | | | | |
| STKA | | | | | LR | | LR | | 19 06 23.5 | | |
| | comp=Z,312nm,18.1s,baz=206,slow=35 | | | | | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | | | | | |
| STKA | Stephens Creek | 89.63 | 169 | ǁ | /P | | P | | 18 26 22.1 | +0.8 | |
| APG | El Apazote | 90.22 | 299 | | P | | P | | 18 26 24.1 | -0.2 | |
| | comp=Z,1.1nm,0.7s,baz=102,slow=12,SNR=8.8 | | | | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | | | | |
| MEEK | Meekatharra | 90.28 | 148 | | P | | P | | 18 26 18.9 | -5.5 | |
| CMSA | Cobar Meteorol | 90.33 | 172 | | P | | P | | 18 26 24.9 | +0.4 | |
| | comp=Z,22nm,1.3s | | | | | | | | | | |
| PMOZ | Porto Moniz, M | 90.87 | 7 | | eLR | | LR | | 18 56 09.0 | | |
| | comp=Z,108nm,20.0s | | | | | | | | | | |
| PPT2 | Papeete2 | 91.78 | 232 | | eLR | | LR | | 18 55 57.7 | | |
| | comp=Z,390nm,26.8s | | | | | | | | | | |
| PPT2 | | | | | eLR | | LR | | 18 56 02.7 | | |
| | comp=Z,453nm,22.5s | | | | | | | | | | |
| PPT | Papeete | 91.80 | 232 | | PKKPbc | | PKKPbc | | 18 43 45.6 | -0.8 | |
| | comp=Z,7.5nm,0.3s,baz=77,slow=19,SNR=1.7 | | | | | | | | | | |
| PPT | | | | | LR | | LR | | 18 59 11.3 | | |
| | comp=Z,239nm,20.5s,baz=144,slow=30 | | | | | | | | | | |
| RAR | Rarotonga | 92.43 | 222 | | LR | | LR | | 19 00 09.1 | | |
| | comp=Z,88nm,20.2s,baz=298,slow=30 | | | | | | | | | | |
| CMIG | Matias Romero | 94.11 | 296 | | LR | | LR | | 19 03 39.1 | | |
| | comp=Z,112nm,21.8s,baz=186,slow=32 | | | | | | | | | | |
| TAOE | Nuku Hiva Isla | 95.25 | 244 | | eLR | | LR | | 18 57 33.2 | | |
| | comp=Z,132nm,25.4s | | | | | | | | | | |
| PVAQ | Vaqueiros | 96.32 | 14 | | eSKSac | | SKSac | | 18 37 27.6 | +3.4 | |
| PVAQ | Vaqueiros | 96.32 | 14 | | eLR | | LR | | 18 59 05.2 | | |
| | comp=Z,115nm,20.0s | | | | | | | | | | |
| ASAR | Alice Springs | 96.64 | 161 | | P | | P | | 18 26 52.9 | -0.8 | |
| ASAR | Alice Springs | 96.64 | 161 | | P | | P | | 18 26 53.5 | -0.2 | |
| | comp=Z,8.5nm,0.8s,baz=180,slow=3.9,SNR=72 | | | | | | | | | | |
| ASAR | | | | | PP | | PP | | 18 30 48.2 | +0.7 | |
| | comp=Z,1.1nm,0.8s,baz=193,slow=6.8,SNR=4.3 | | | | | | | | | | |
| ASAR | | | | | PKKPbc | | PKKPdf | | 18 43 33.1 | -0.6 | |
| | comp=Z,0.4nm,0.6s,baz=5.1,slow=2.0,SNR=7.0 | | | | | | | | | | |
| ASAR | | | | | LR | | LR | | 19 08 14.0 | | |
| | comp=Z,433nm,19.3s,baz=199,slow=34 | | | | | | | | | | |
| | comp=Z,8.5nm,0.8s | | | | | | | | | | |
| AS31 | Alice Springs | 96.65 | 161 | | P | | P | | 18 26 52.8 | -1.0 | |
| AS31 | Alice Springs | 96.65 | 161 | | P | | P | | 18 26 53.4 | -0.3 | |
| | comp=Z,5.3nm,0.9s | | | | | | | | | | |
| PMRV | Marv??o | 98.35 | 14 | | eLR | | LR | | 18 59 57.0 | | |
| | comp=Z,132nm,20.0s | | | | | | | | | | |
| ESDC | Sonseca Array | 99.07 | 16 | | P | | Pdif | | 18 27 04.1 | +0.1 | |
| | comp=Z,0.3nm,0.4s,baz=189,slow=4.7,SNR=5.1 | | | | | | | | | | |
| ESDC | | | | | LR | | LR | | 19 08 17.1 | | |
| | comp=Z,64nm,19.0s,baz=190,slow=33 | | | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | | | |
| MTE | Manteigas | 99.29 | 14 | | ePP | | PP | | 18 31 10.4 | +1.5 | |
| MTE | Manteigas | 99.29 | 14 | | eLR | | LR | | 19 00 30.8 | | |
| | comp=Z,146nm,20.0s | | | | | | | | | | |
| DZM | Mont Dzumac | 99.50 | 191 | | eLR | | LR | | 18 59 32.1 | | |
| | comp=Z,193nm,23.6s | | | | | | | | | | |
| DZM | Mont Dzumac | 99.50 | 191 | | LR | | LR | | 19 09 39.9 | | |
| | comp=Z,105nm,19.1s,baz=204,slow=34 | | | | | | | | | | |
| WRA | Warramunga Arr | 100.36 | 160 | | P | | Pdif | | 18 27 09.8 | -0.6 | |
| | comp=Z,1.2nm,0.8s,baz=198,slow=4.1,SNR=11 | | | | | | | | | | |
| WRA | | | | | PKKPbc | | PKKPbc | | 18 43 25.2 | +1.6 | |
| | comp=Z,1.3nm,0.8s,baz=357,slow=2.6,SNR=8.2 | | | | | | | | | | |
| PGAV | Gavieira, Arco | 100.75 | 13 | | ePP | | PP | | 18 31 20.0 | +0.1 | |
| PGAV | Gavieira, Arco | 100.75 | 13 | | eLR | | LR | | 19 02 20.8 | | |
| | comp=Z,175nm,20.0s | | | | | | | | | | |
| TXAR | Lajitas Array | 108.71 | 295 | | PP | | PP | | 18 32 05.8 | -13 | |
| | comp=Z,0.4nm,0.7s,baz=106,slow=4.0,SNR=4.4 | | | | | | | | | | |
| TXAR | | | | | PKKP | | PKKPdf | | 18 43 13.0 | -1.1 | |
| | comp=Z,0.9nm,1.0s,baz=292,slow=6.6,SNR=4.8 | | | | | | | | | | |
| BRTR | Keskin Array B | 109.14 | 44 | | PKKPbc | | PKKPbc | | 18 42 59.3 | +1.1 | |
| | comp=Z,1.2nm,0.7s,baz=86,slow=2.1,SNR=7.8 | | | | | | | | | | |
| CKRC | Cesky Krumlov | 111.45 | 27 | | AMS | | AMS | | 19 13 40.0 | | |
| | comp=Z,200nm,22.8s | | | | | | | | | | |
| KHC | Kasperske Hory | 111.57 | 26 | | AMS | | AMS | | 19 16 10.0 | | |
| | comp=Z,100nm,18.9s | | | | | | | | | | |
| ZVC | Zvikov | 112.00 | 27 | | AMS | | AMS | | 19 14 30.0 | | |
| | comp=Z,100nm,17.9s | | | | | | | | | | |
| TREC | Trest | 112.18 | 27 | | AMS | | AMS | | 19 13 40.0 | | |
| | comp=Z,200nm,20.7s | | | | | | | | | | |
| PRU | Pruhonice | 112.60 | 27 | | AMS | | AMS | | 19 17 00.0 | | |
| | comp=Z,100nm,18.8s | | | | | | | | | | |
| PVCC | Panska Ves | 113.11 | 26 | | AMS | | AMS | | 19 13 50.0 | | |
| | comp=Z,100nm,17.9s | | | | | | | | | | |
| DPC | Dobruska-Polom | 113.36 | 28 | | AMS | | AMS | | 19 14 50.0 | | |
| | comp=Z,100nm,19.8s | | | | | | | | | | |
| CLL | Collm | 113.48 | 25 | | ePS | | PS | | 18 42 30.0 | +1.7 | |
| OSTC | Ostas | 113.53 | 27 | | AMS | | AMS | | 19 15 00.0 | | |
| | comp=Z,100nm,22.2s | | | | | | | | | | |
| ANMO | Albuquerque | 114.67 | 297 | | PKKPbc | | PKKPbc | | 18 42 40.8 | +1.1 | |
| | comp=Z,0.4nm,0.4s,baz=30,slow=8.0,SNR=3.9 | | | | | | | | | | |
| SOC | Sochi | 114.77 | 46 | | /PKIKP | | PKiKP | | 18 32 05.1 | +2.1 | |
| SOC | | | | | e | | | | 18 33 04.0 | | |
| SOC | | | | | ePPP | | PPP | | 18 35 31.6 | | |
| SOC | | | | | e | | | | 18 38 49.0 | | |
| SOC | | | | | ePS | | PKKPab | | 18 42 42.5 | -1.2 | |
| SOC | | | | | eSS | | SS | | 18 48 57.2 | +3.3 | |
| SOC | | | | | eSSS | | SSS | | 18 53 15.7 | | |
| SOC | | | | | MLR | | MLR | | | | |
| | comp=Z,51nm,19.0s | | | | | | | | | | |
| KIV | Kislovodsk | 116.24 | 48 | | /PKIKP | | PKiKP | | 18 32 06.7 | +0.7 | |
| KIV | | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | | |
| KIV | | | | | MLR | | MLR | | | | |
| | comp=Z,57nm,22.0s | | | | | | | | | | |
| SDCO | Great Sand Dun | 116.50 | 299 | | | | PKPdf | | 18 32 06.3 | -0.6 | |
| KIEV | Kiev | 117.25 | 36 | | | | PKPdf | | 18 32 06.5 | -0.9 | |
| KIEV | Kiev | 117.25 | 36 | | PKIKP | | PKPdf | | 18 32 06.6 | -0.9 | |
| AKASG | Malin Array Be | 117.26 | 36 | | PKP | | PKPdf | | 18 32 06.5 | -1.0 | |
| | comp=Z,1.3nm,0.6s,baz=238,slow=1.5,SNR=4.4 | | | | | | | | | | |
| AKASG | | | | | PKKPbc | | PKKPab | | 18 42 32.6 | +0.3 | |
| | comp=Z,0.2nm,0.3s,baz=215,slow=33,SNR=5.4 | | | | | | | | | | |
| AKBB | Malin Array Si | 117.26 | 36 | ǁ | /PKIKP | | PKPdf | | 18 32 06.9 | -0.6 | |
| WUAZ | Wupatki | 117.50 | 293 | | P | | PKiKP | | 18 32 08.8 | 0.0 | |
| | baz=143 | | | | | | | | | | |
| ECSD | EROS Data Cent | 117.50 | 309 | | P | | PKiKP | | 18 32 09.1 | +0.8 | |
| | baz=145 | | | | | | | | | | |
| SCHQ | Schefferville | 117.54 | 334 | | | | PKPdf | | 18 32 07.5 | -0.5 | |
| SCHQ | Schefferville | 117.54 | 334 | | PKP | | PKPdf | | 18 32 07.2 | -0.8 | |
| | comp=Z,3.6nm,0.5s,baz=84,slow=2.0,SNR=4.8 | | | | | | | | | | |
| IKP | In-Ko-Pah, Jac | 117.55 | 288 | | P | | PKiKP | | 18 32 09.3 | +0.5 | |
| | baz=143 | | | | | | | | | | |
| SWSC | Sam W. Stewart | 117.63 | 288 | | P | | PKiKP | | 18 32 09.5 | +0.6 | |
| | baz=143 | | | | | | | | | | |
| MONP2 | Monument Peak | 117.90 | 288 | | P | | PKiKP | | 18 32 10.1 | +0.4 | |
| | baz=143 | | | | | | | | | | |
| BC3 | Big Chuckawall | 118.02 | 289 | | P | | PKiKP | | 18 32 10.0 | +0.3 | |
| | baz=143 | | | | | | | | | | |
| ISCO | Idaho Springs | 118.21 | 300 | | P | | PKiKP | | 18 32 10.5 | +0.3 | |
| | baz=144 | | | | | | | | | | |
| 109C | Camp Elliot, M | 118.24 | 287 | | P | | PKiKP | | 18 32 10.6 | +0.5 | |
| | baz=143 | | | | | | | | | | |
| IRM | Iron Mountain | 118.27 | 290 | | P | | PKiKP | | 18 32 10.6 | +0.5 | |
| | baz=143 | | | | | | | | | | |
| W13A | Hualapai Mount | 118.39 | 291 | | PKPdf | | PKPdf | | 18 32 10.4 | -0.2 | |
| TPFO | Pinon Flats | 118.49 | 288 | | P | | PKiKP | | 18 32 11.1 | +0.4 | |
| | baz=143 | | | | | | | | | | |
| NEE2 | Needles Airpor | 118.49 | 291 | | P | | PKiKP | | 18 32 11.0 | +0.5 | |
| | baz=143 | | | | | | | | | | |
| PFO | Pinyon Flats O | 118.49 | 288 | | P | | PKiKP | | 18 32 11.1 | +0.4 | |
| | baz=143 | | | | | | | | | | |
| BELC | Belle Mtn. Jos | 118.57 | 289 | | P | | PKiKP | | 18 32 11.5 | +0.6 | |
| | baz=143 | | | | | | | | | | |
| MURC | Murrieta | 118.86 | 288 | | P | | PKiKP | | 18 32 11.7 | +0.4 | |
| | baz=143 | | | | | | | | | | |
| EYMN | Ely | 118.98 | 315 | | P | | PKiKP | | 18 32 12.4 | +1.4 | |
| | baz=146 | | | | | | | | | | |
| GMRC | Granite Mounta | 119.02 | 290 | | P | | PKiKP | | 18 32 12.0 | +0.3 | |
| | baz=143 | | | | | | | | | | |
| SUSD | Miller | 119.05 | 308 | | P | | PKiKP | | 18 32 12.4 | +1.1 | |
| | baz=144 | | | | | | | | | | |
| SCI2 | San Clemente I | 119.05 | 286 | | P | | PKiKP | | 18 32 12.2 | +0.5 | |
| | baz=143 | | | | | | | | | | |
| N23A | Red Feather La | 119.24 | 301 | | P | | PKiKP | | 18 32 12.3 | +0.1 | |
| | baz=143 | | | | | | | | | | |
| BBRC | Big Bear Solar | 119.24 | 288 | | P | | PKiKP | | 18 32 12.4 | +0.1 | |
| | baz=143 | | | | | | | | | | |
| CIS | Catalina Islan | 119.31 | 287 | | P | | PKiKP | | 18 32 12.6 | +0.4 | |
| | baz=143 | | | | | | | | | | |
| HEC | Hector,Ludlow | 119.40 | 289 | | P | | PKiKP | | 18 32 13.0 | +0.6 | |
| | baz=142 | | | | | | | | | | |
| PKCU | Pink Cliffs | 119.48 | 294 | | | | PKiKP | | 18 32 13.2 | +0.4 | |
| BFSC | Mount Baldy Ra | 119.59 | 288 | | P | | PKiKP | | 18 32 13.1 | +0.3 | |
| | baz=142 | | | | | | | | | | |
| TUQ | Turquoise Moun | 119.67 | 290 | | P | | PKiKP | | 18 32 13.4 | +0.4 | |
| | baz=142 | | | | | | | | | | |
| O20A | White River Ci | 119.69 | 299 | | P | | PKPdf | | 18 32 12.9 | 0.0 | |
| | baz=143 | | | | | | | | | | |
| SNCC | San Nicolas Is | 119.76 | 286 | | P | | PKiKP | | 18 32 13.1 | +0.1 | |
| | baz=142 | | | | | | | | | | |
| RRX | Edison Barstow | 119.77 | 289 | | P | | PKiKP | | 18 32 13.3 | +0.3 | |
| | baz=142 | | | | | | | | | | |
| DECC | Green Verdugo | 119.95 | 287 | | P | | PKiKP | | 18 32 13.7 | +0.3 | |
| | baz=142 | | | | | | | | | | |
| GSC | Goldstone, Bar | 120.01 | 289 | | P | | PKiKP | | 18 32 14.0 | +0.4 | |
| | baz=142 | | | | | | | | | | |
| SHPR | Sheep Range | 120.14 | 291 | | PKPdf | | PKiKP | | 18 32 14.3 | +0.4 | |
| MNK | Minsk | 120.19 | 33 | | /PKIKP | | PKPdf | | 18 32 12.6 | -0.4 | |
| MNK | | | | | / | | | | 18 33 38.1 | | |
| MNK | | | | | /PPP | | PPP | | 18 36 13.8 | | |
| MNK | | | | | / | | | | 18 39 24.2 | | |
| MNK | | | | | /PS | | PS | | 18 43 30.6 | +1.5 | |
| MNK | | | | | /SS | | SS | | 18 50 04.9 | +0.9 | |
| MNK | | | | | /SSS | | SSS | | 18 54 31.9 | | |
| MNK | | | | | pmax | | pmax | | | | |
| | comp=E,9.0nm,0.7s | | | | | | | | | | |
| MNK | | | | | pmax | | pmax | | | | |
| | comp=Z,15nm,0.9s | | | | | | | | | | |
| MNK | | | | | pmax | | pmax | | | | |
| | comp=N,10.0nm,0.7s | | | | | | | | | | |
| MNK | | | | | MLR | | MLR | | | | |
| | comp=E,93nm,19.0s | | | | | | | | | | |
| MNK | | | | | MLR | | MLR | | | | |
| | comp=N,122nm,24.0s | | | | | | | | | | |
| SHOC | Shoshone, Teco | 120.21 | 290 | | P | | PKiKP | | 18 32 14.4 | +0.5 | |
| | baz=142 | | | | | | | | | | |
| EDW2 | Edwards Air Fo | 120.27 | 288 | | P | | PKiKP | | 18 32 14.4 | +0.3 | |
| | baz=142 | | | | | | | | | | |
| MVU | Marysvale | 120.28 | 295 | | | | PKiKP | | 18 32 14.8 | +0.6 | |
| SCZ2 | Santa Cruz Isl | 120.41 | 286 | | P | | PKiKP | | 18 32 14.6 | +0.3 | |
| | baz=142 | | | | | | | | | | |
| OSI | Osito Audit: C | 120.43 | 287 | | P | | PKiKP | | 18 32 14.8 | +0.4 | |
| | baz=142 | | | | | | | | | | |
| LRMC | Laurel Mtn Rad | 120.58 | 289 | | P | | PKiKP | | 18 32 15.1 | +0.3 | |
| | baz=142 | | | | | | | | | | |
| SBC | Santa Barbara | 120.80 | 286 | | P | | PKiKP | | 18 32 15.7 | +0.7 | |
| | baz=142 | | | | | | | | | | |
| VORD | Divnogorie | 120.82 | 42 | | ePKIKP | | PKPdf | | 18 32 12.0 | -2.4 | |
| VORD | | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | | | |
| ARVC | Arvin | 120.89 | 288 | | P | | PKiKP | | 18 32 15.8 | +0.6 | |
| | baz=142 | | | | | | | | | | |
| K22A | Casper | 120.90 | 302 | | P | | PKiKP | | 18 32 16.0 | +0.8 | |
| | baz=142 | | | | | | | | | | |
| AGMN | Agassiz Nation | 120.93 | 313 | | P | | PKiKP | | 18 32 15.5 | +0.7 | |
| | baz=144 | | | | | | | | | | |
| MPMC | Manual Prospec | 120.94 | 289 | | P | | PKiKP | | 18 32 15.8 | +0.3 | |
| | baz=142 | | | | | | | | | | |
| FURC | Furnace Creek, | 120.95 | 290 | | P | | PKiKP | | 18 32 16.0 | +0.7 | |
| | baz=142 | | | | | | | | | | |
| RSSD | Black Hills | 120.96 | 305 | | PKPdf | | PKPdf | | 18 32 14.6 | -0.6 | |
| RSSD | Black Hills | 120.96 | 305 | | P | | PKPdf | | 18 32 15.0 | -0.3 | |
| | baz=143 | | | | | | | | | | |
| RSSD | Black Hills | 120.96 | 305 | | PKIKP | | PKPdf | | 18 32 14.6 | -0.6 | |
| VSR | Storozhevoye | 120.98 | 41 | | ePKIKP | | PKPdf | | 18 32 12.9 | -1.8 | |
| VSR | | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | | | |
| TPNV | Topopah Spring | 121.02 | 291 | | P | | PKiKP | | 18 32 16.1 | +0.5 | |
| | baz=142 | | | | | | | | | | |
| PSUT | Pine Spring | 121.09 | 294 | | | | PKPdf | | 18 32 15.7 | 0.0 | |
| ISA | Isabella, Lake | 121.13 | 288 | | P | | PKiKP | | 18 32 16.1 | +0.4 | |
| | baz=142 | | | | | | | | | | |
| PKM | Mcpherson Peak | 121.20 | 287 | | P | | PKiKP | | 18 32 16.3 | +0.2 | |
| | baz=142 | | | | | | | | | | |
| CWC | Cottonwood Cre | 121.54 | 289 | | P | | PKiKP | | 18 32 17.1 | +0.5 | |
| VES | Vestal, Richgr | 121.58 | 288 | | P | | PKiKP | | 18 32 17.0 | +0.5 | |
| | baz=142 | | | | | | | | | | |
| GRAC | Grapevine Rang | 121.62 | 290 | | P | | PKiKP | | 18 32 17.2 | +0.6 | |
| | baz=142 | | | | | | | | | | |
| SMMC | Simmler | 121.62 | 287 | | P | | PKiKP | | 18 32 16.7 | 0.0 | |
| | baz=142 | | | | | | | | | | |
| R11B | Troy Canyon, C | 121.79 | 292 | | P | | PKiKP | | 18 32 17.3 | +0.2 | |
| | baz=141 | | | | | | | | | | |
| GMN | Gold Mountain | 121.80 | 290 | | | | PKiKP | | 18 32 17.8 | +0.5 | |
| HFS | Hagfors | 121.83 | 22 | | PKP | | PKPdf | | 18 32 15.1 | -1.0 | |
| | comp=Z,1.9nm,0.6s,baz=174,slow=4.5,SNR=6.1 | | | | | | | | | | |
| HFS | | | | | PKKPbc | | PKKPab | | 18 42 13.0 | +0.9 | |
| | comp=Z,1.4nm,0.8s,baz=47,slow=6.7,SNR=4.1 | | | | | | | | | | |
| VRH | Novokhopyorsk | 121.88 | 43 | | ePKIKP | | PKPdf | | 18 32 14.2 | -2.2 | |
| VRH | | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | | | |
| DUG | Dugway, Tooele | 121.89 | 296 | | P | | PKiKP | | 18 32 17.5 | +0.3 | |
| | baz=141 | | | | | | | | | | |
| Q12A | Willow Creek R | 121.96 | 293 | | | | PKiKP | | 18 32 17.5 | +0.1 | |
| LPSR | Galich'ya Gora | 122.05 | 40 | | ePKIKP | | PKPdf | | 18 32 14.1 | -2.6 | |
| LPSR | | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | | | |
| MDND | Maddock | 122.06 | 310 | | P | | PKiKP | | 18 32 18.0 | +0.9 | |
| | baz=143 | | | | | | | | | | |
| TIN | Tinemaha, Big | 122.09 | 289 | | P | | PKiKP | | 18 32 18.1 | +0.5 | |
| | baz=141 | | | | | | | | | | |
| VOG | Valley Oaks Go | 122.10 | 288 | | P | | PKiKP | | 18 32 18.2 | +0.6 | |
| | baz=141 | | | | | | | | | | |
| NIL | Nilore | 122.17 | 77 | | PKPdf | | PKPdf | | 18 32 17.2 | -0.4 | |
| NIL | Nilore | 122.17 | 77 | | PKIKP | | PKPdf | | 18 32 17.2 | -0.4 | |
| NB2 | NORSAR Subarra | 122.20 | 20 | | PKPdf | | PKPdf | | 18 32 16.4 | -0.4 | |
| | comp=Z,8.9nm,1.2s,baz=202,slow=1.9 | | | | | | | | | | |
| NB2 | | | | | PKKP | | PKKPbc | | 18 42 13.4 | +0.6 | |
| | comp=Z,0.6nm,0.7s,baz=30,slow=4.4 | | | | | | | | | | |
| NB2 | NORSAR Subarra | 122.20 | 20 | | PKPdf | | PKPdf | | 18 32 16.4 | -0.4 | |
| | baz=202,slow=1.9 | | | | | | | | | | |
| NB2 | NORSAR Subarra | 122.20 | 20 | | PKIKP | | PKPdf | | 18 32 16.2 | -0.6 | |
| NOA | NORSAR Array B | 122.20 | 20 | | PKP | | PKPdf | | 18 32 16.9 | +0.1 | |
| | comp=Z,1.8nm,0.7s,baz=202,slow=1.8,SNR=9.8 | | | | | | | | | | |
| NOA | | | | | PKKPbc | | PKKPbc | | 18 42 12.9 | +0.2 | |
| | comp=Z,0.7nm,0.7s,baz=24,slow=3.4,SNR=4.7 | | | | | | | | | | |
| BW06 | Boulder Array | 122.37 | 300 | | P | | PKiKP | | 18 32 18.2 | +0.1 | |
| | baz=141 | | | | | | | | | | |
| PDAR | Pinedale Array | 122.37 | 300 | | PKPdf | | PKPdf | | 18 32 16.8 | -1.2 | |
| PDAR | Pinedale Array | 122.37 | 300 | | PKP | | PKPdf | | 18 32 17.4 | -0.6 | |
| | comp=Z,1.4nm,0.6s,baz=144,slow=5.1,SNR=16 | | | | | | | | | | |
| ULM | Lac du Bonnet | 122.52 | 314 | | PKP | | PKPdf | | 18 32 17.0 | -0.7 | |
| | comp=Z,6.2nm,0.5s,baz=147,slow=0.9,SNR=11 | | | | | | | | | | |
| ULM | | | | | PKKPbc | | PKKPab | | 18 42 10.6 | +0.5 | |
| | comp=Z,2.6nm,0.7s,baz=340,slow=7.5,SNR=3.9 | | | | | | | | | | |
| ULM | Lac du Bonnet | 122.52 | 314 | | /PKIKP | | PKPdf | | 18 32 15.6 | -2.1 | |
| MTSE | Matsula | 122.80 | 28 | | eP | | PKPdf | | 18 32 17.8 | -0.1 | |
| MLAC | Mammoth, Mammt | 122.84 | 289 | | P | | PKiKP | | 18 32 19.2 | -0.1 | |
| | baz=141 | | | | | | | | | | |
| AHID | Auburn Hatcher | 123.08 | 299 | | | | PKPdf | | 18 32 19.2 | -0.1 | |
| NVAR | Mina Array Bea | 123.20 | 290 | | | | PKiKP | | 18 32 20.1 | +0.2 | |
| NVAR | Mina Array Bea | 123.20 | 290 | | PKP | | PKiKP | | 18 32 20.8 | +0.9 | |
| | comp=Z,2.3nm,0.8s,baz=139,slow=3.6,SNR=12 | | | | | | | | | | |
| NVAR | | | | | PKKPbc | | PKKPab | | 18 42 09.0 | +0.3 | |
| | comp=Z,0.7nm,0.8s,baz=287,slow=4.2,SNR=4.2 | | | | | | | | | | |
| CMAR | Chiang Mai Arr | 123.31 | 110 | | PKPdf | | PKPdf | | 18 32 19.7 | -0.5 | |
| CMAR | Chiang Mai Arr | 123.31 | 110 | | PKP | | PKPdf | | 18 32 19.1 | -1.1 | |
| | comp=Z,12nm,0.8s,baz=231,slow=3.7,SNR=50 | | | | | | | | | | |
| CMAR | Chiang Mai Arr | 123.31 | 110 | | PKIKP | | PKPdf | | 18 32 19.7 | -0.5 | |
| VSU | Vasula | 123.32 | 30 | ǁ | /PKIKP | | PKiKP | | 18 32 19.2 | 0.0 | |
| VSU | | | | | pmax | | pmax | | | | |
| | comp=Z,13nm,1.3s | | | | | | | | | | |
| LOHW | Long Hollow | 123.51 | 300 | | | | PKPdf | | 18 32 20.2 | 0.0 | |
| SIMJ | Simiganj | 123.90 | 70 | | PKPdf | | PKPdf | | 18 32 20.8 | -0.1 | |
| LAO | LASA Array | 123.93 | 305 | | PKPdf | | PKPdf | | 18 32 20.6 | 0.0 | |
| LAO | LASA Array | 123.93 | 305 | | P | | PKiKP | | 18 32 20.9 | 0.0 | |
| | baz=141 | | | | | | | | | | |
| ARBE | Arbavere | 123.97 | 29 | | eP | | PKiKP | | 18 32 20.5 | +0.1 | |
| RLMT | Red Lodge | 124.06 | 302 | | P | | PKiKP | | 18 32 21.6 | +0.1 | |
| | baz=140 | | | | | | | | | | |
| H17A | Grant Village | 124.10 | 300 | | P | | PKiKP | | 18 32 22.6 | +1.0 | |
| | baz=140 | | | | | | | | | | |
| MEF | Metsahovi | 124.26 | 27 | | eP | | PKPdf | | 18 32 20.5 | -0.2 | |
| RAF | Rauma | 124.35 | 26 | | eP | | PKPdf | | 18 32 19.4 | -1.4 | |
| DGMT | Dagmar | 124.44 | 308 | | P | | PKiKP | | 18 32 22.0 | +0.2 | |
| | baz=141 | | | | | | | | | | |
| AFDM | Forest Hills D | 124.93 | 289 | | PKPdf | | PKiKP | | 18 32 23.2 | +0.1 | |
| HLID | Hailey | 125.25 | 297 | | PKPdf | | PKiKP | | 18 32 23.6 | -0.2 | |
| BOZ | Bozeman (W) | 125.50 | 301 | | P | | PKiKP | | 18 32 24.6 | +0.4 | |
| | baz=139 | | | | | | | | | | |
| FINES | FINESS Array B | 125.74 | 27 | | PKPdf | | PKPdf | | 18 32 22.9 | -0.5 | |
| FINES | FINESS Array B | 125.74 | 27 | | PKP | | PKPdf | | 18 32 23.3 | -0.2 | |
| | comp=Z,10nm,0.6s,baz=169,slow=1.7,SNR=90 | | | | | | | | | | |
| DLMT | Dillon | 125.77 | 300 | | PKPdf | | PKiKP | | 18 32 24.9 | +0.1 | |
| BTK | Batken | 125.87 | 70 | | PKPdf | | PKPdf | | 18 32 24.6 | 0.0 | |
| BTK | Batken | 125.87 | 70 | | PKIKP | | PKPdf | | 18 32 24.6 | 0.0 | |
| KEF | Keuruu | 126.07 | 26 | | eP | | PKPdf | | 18 32 23.5 | -0.6 | |
| VAF | Ylistaro | 126.33 | 25 | | eP | | PKPdf | | 18 32 24.5 | -0.1 | |
| EGMT | Eagleton | 126.50 | 304 | | PKPdf | | PKPdf | | 18 32 25.1 | -0.4 | |
| EGMT | Eagleton | 126.50 | 304 | | P | | PKiKP | | 18 32 26.0 | 0.0 | |
| | baz=139 | | | | | | | | | | |
| BPMT | Black Pine Rid | 126.97 | 300 | | PKPdf | | PKPdf | | 18 32 26.5 | -0.2 | |
| MSO | Missoula | 127.48 | 300 | | P | | PKiKP | | 18 32 28.0 | 0.0 | |
| | baz=138 | | | | | | | | | | |
| BRLS | Boroldav | 127.62 | 67 | | ePKP | | PKPdf | | 18 32 27.1 | -0.7 | |
| | baz=68 | | | | | | | | | | |
| BRLS | Boroldav | 127.62 | 67 | | ePKIKP | | PKPdf | | 18 32 27.0 | -0.7 | |
| AB31 | Akbulak array | 127.66 | 56 | | /PKIKP | | PKPdf | | 18 32 27.4 | -0.2 | |
| ABKAR | Akbulak array | 127.66 | 56 | | PKPdf | | PKPdf | | 18 32 26.9 | -0.7 | |
| KK31 | Karatay Array | 128.01 | 68 | | PKIKP | | PKPdf | | 18 32 28.1 | -0.4 | |
| KKAR | Karatay Array | 128.01 | 68 | | PKPdf | | PKPdf | | 18 32 27.7 | -0.8 | |
| KKAR | Karatay Array | 128.01 | 68 | | PKIKP | | PKPdf | | 18 32 27.7 | -0.8 | |
| KSH | Kashi | 128.07 | 75 | | PKP | | PKPdf | | 18 32 28.9 | 0.0 | |
| KSH | | | | | sPKP | | | | 18 32 43.3 | | |
| JOF | Joensuu | 128.30 | 29 | | eP | | PKPdf | | 18 32 28.5 | +0.2 | |
| F10A | Beach Ranch, E | 128.38 | 297 | | PKPdf | | PKPdf | | 18 32 28.9 | -0.3 | |
| LSA | Lhasa | 128.50 | 95 | | | | PKPdf | | 18 32 29.6 | -0.9 | |
| LSA | Lhasa | 128.50 | 95 | | PKIKP | | PKPdf | | 18 32 29.6 | -0.9 | |
| AML | Almayashu | 128.86 | 71 | | P | | PKPdf | | 18 32 30.9 | +0.2 | |
| | SNR=22 | | | | | | | | | | |
| E09A | Wood Farm, Sta | 129.21 | 297 | | PKPdf | | PKPdf | | 18 32 30.2 | -0.4 | |
| EKS2 | Erkin-Say | 129.30 | 70 | | P | | PKPdf | | 18 32 31.3 | +0.2 | |
| | SNR=17 | | | | | | | | | | |
| AAK | Ala-Archa | 129.64 | 71 | | P | | PKPdf | | 18 32 32.0 | +0.2 | |
| | SNR=6.2 | | | | | | | | | | |
| AAK | Ala-Archa | 129.64 | 71 | | PKPdf | | PKPdf | | 18 32 31.2 | -0.6 | |
| AAK | Ala-Archa | 129.64 | 71 | | /PKIKP | | PKPdf | | 18 32 32.2 | +0.4 | |
| AAK | | | | | pmax | | pmax | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | | | |
| KBK | Karagaybulak | 129.88 | 71 | | P | | PKiKP | | 18 32 33.9 | +0.8 | |
| | SNR=6.2 | | | | | | | | | | |
| NEW | Newport | 130.00 | 299 | | P | | PKPdf | | 18 32 32.2 | +0.1 | |
| | baz=136 | | | | | | | | | | |
| USP | Ospenovka | 130.10 | 70 | | P | | PKPdf | | 18 32 32.6 | +0.1 | |
| | SNR=11 | | | | | | | | | | |
| BOOM | Boomskoye usch | 130.26 | 72 | | | | PKPdf | | 18 32 32.5 | -0.5 | |
| BOOM | Boomskoye usch | 130.26 | 72 | | PKIKP | | PKPdf | | 18 32 32.5 | -0.5 | |
| TKM2 | Tokmak 2 | 130.40 | 71 | | P | | PKPdf | | 18 32 33.2 | -0.1 | |
| | SNR=9.4 | | | | | | | | | | |
| KIRV | Kirov | 130.42 | 42 | | /PKIKP | | PKPdf | | 18 32 32.7 | +0.2 | |
| LON | Longmire | 131.12 | 295 | | | | PKPdf | | 18 32 34.1 | -0.2 | |
| LON | Longmire | 131.12 | 295 | | PKIKP | | PKPdf | | 18 32 34.1 | -0.2 | |
| BTLS | Baital | 131.16 | 68 | | ePKP | | PKPdf | | 18 32 34.0 | -0.4 | |
| | baz=68 | | | | | | | | | | |
| BTLS | | | | | ePP | | PP | | 18 34 52.8 | -0.3 | |
| | baz=68 | | | | | | | | | | |
| BTLS | Baital | 131.16 | 68 | | ePKIKP | | PKPdf | | 18 32 34.0 | -0.4 | |
| BTLS | | | | | e | | | | 18 34 52.7 | | |
| TNSS | Tian-Shan | 131.16 | 72 | | ePKP | | PKPdf | | 18 32 34.3 | -0.8 | |
| | baz=72 | | | | | | | | | | |
| TNSS | Tian-Shan | 131.16 | 72 | | ePKIKP | | PKPdf | | 18 32 34.2 | -0.8 | |
| AAA | Alma-Ata | 131.27 | 72 | | ePKP | | PKPdf | | 18 32 34.4 | -0.3 | |
| | baz=72 | | | | | | | | | | |
| AAA | Alma-Ata | 131.27 | 72 | | ePKIKP | | PKPdf | | 18 32 34.4 | -0.3 | |
| MDOK | Medeo | 131.31 | 72 | | ePKP | | PKPdf | | 18 32 34.5 | -0.4 | |
| | baz=72 | | | | | | | | | | |
| MDOK | Medeo | 131.31 | 72 | | ePKIKP | | PKPdf | | 18

P32M Atlin 144.66 304 PKPdf PKPbc 18 32 57.8 +0.1
P32M Atlin 144.66 304 P PKPbc 18 32 57.8 +0.1
baz=120,SNR=5.3
S31K Pelican 144.97 300 P PKPdf 18 32 59.4 +0.3
baz=120
R31K City Hall, Gus 144.98 301 P PKPdf 18 32 59.5 +0.3
baz=120
MMPY Sheldon Lake, 145.06 309 PKPbc 18 32 58.4 -0.5
MMPY Sheldon Lake, 145.06 309 P PKPdf 18 32 59.5 +0.1
baz=117
N32M Quiet Lake 145.14 306 P PKPdf 18 33 00.2 +0.7
baz=118
C36M Paulatuk 145.26 322 P PKPab 18 32 59.8 +0.4
baz=113
SKAG Skagway 145.31 303 P PKPab 18 33 00.4 +0.5
baz=119
WHY Whitehorse 145.68 305 P PKPab 18 33 01.2 -0.2
baz=118
FARO Faro, Yukon 145.75 308 P PKPab 18 33 01.9 +0.4
baz=116
PLBC Pleasant Camp 145.77 302 P PKPab 18 33 01.9 +0.3
baz=118,SNR=8.7
TIY Taiyuan 145.80 108 ePKPbc PKPab 18 33 02.8 +0.3
M31M Drury Creek, Y 146.17 307 P PKPbc 18 33 02.3 -0.1
baz=116
O30N Mendenhall 146.26 304 PKPdf PKPdf 18 33 02.0 +0.5
O30N Mendenhall 146.26 304 P PKPbc 18 33 02.9 +0.3
baz=117
P30M Million Dollar 146.35 303 P PKPbc 18 33 03.4 +0.4
baz=117
N31M Braeburn, Yuko 146.45 306 P PKPbc 18 33 03.4 +0.2
baz=116
P29M Windy Craggy 146.47 302 P PKPbc 18 33 03.5 +0.2
baz=117
A36M Sachs Harbour 146.57 326 P PKPbc 18 33 03.3 +0.2
baz=108
HNS HongShan 146.69 111 ⇑PKPbc PKPbc 18 33 05.0 +0.5
HNS pPKP pPKPdf 18 33 14.4 0.0
HNS LR LR
comp=Z,120nm,21.5s
BTO Baotou 146.73 102 ePKPbc PKPdf 18 33 03.5 +0.5
BTO PP PP 18 36 33.3 +3.9
TIA Tai'an 146.93 115 PKPbc PKPbc 18 33 05.6 +0.3
N30M Aishikik Lake 147.00 305 P PKPbc 18 33 05.5 +0.7
baz=115,SNR=15
O29M Mount Kennedy 147.15 303 P PKPbc 18 33 06.2 +0.9
baz=116
PNL Peninsula 147.24 301 P PKPbc 18 33 06.1 +0.7
baz=116
YUK6 Outpost Mounta 147.34 304 P PKPbc 18 33 06.3 +0.3
baz=115,SNR=5.9
YUK4 Talbot Arm 147.63 304 P PKPbc 18 33 07.3 +0.6
baz=114
HHC Hu-ho-hao-te 147.71 103 ePKPbc PKPbc 18 33 07.8 +0.3
HHC pPKP pPKPdf 18 33 17.3 +1.1
HHC LR LR
comp=Z,110nm,16.8s
HHC LR LR
comp=Z,170nm,16.8s
HHC LR LR
comp=Z,140nm,16.8s
F31M Tsiigehtchic 147.92 316 P PKPbc 18 33 07.1 +0.1
baz=109
J30M Hart River 147.93 311 PKPdf PKPdf 18 33 04.1 -0.1
J30M Hart River 147.93 311 P PKPbc 18 33 07.2 -0.1
baz=111,SNR=12
G31M Satah River 147.95 315 PKPdf PKPdf 18 33 04.2 +0.2
G31M Satah River 147.95 315 P PKPbc 18 33 07.1 0.0
baz=109
M29M Somme Creek 148.00 306 P PKPbc 18 33 08.2 +0.6
baz=113
O28M Mount Upton 148.07 303 P PKPbc 18 33 08.9 +0.8
baz=114
YUK8 Steele Glacier 148.10 304 P PKPbc 18 33 08.8 +0.7
baz=114
INK Inuvik 148.12 318 P PKPbc 18 33 07.6 +0.1
baz=108
L29M L29M 148.12 308 P PKPbc 18 33 08.2 +0.4
baz=112,SNR=29
K29M Barlow Dome 148.14 309 P PKPbc 18 33 08.1 +0.2
baz=112
I30M Mount Dempster 148.18 312 PKPdf 18 33 03.7 -0.9
I30M PKPbc 18 33 07.8 -0.1
I30M Mount Dempster 148.18 312 P PKPbc 18 33 08.0 0.0
baz=110,SNR=28
TABL Table Mountain 148.36 302 PKPbc 18 33 09.4 +0.7
YUK3 Moose Creek 148.60 304 P PKPbc 18 33 09.8 +0.6
baz=113
MESA MESA 148.62 301 P PKiKP 18 33 10.2 -0.6
baz=114
J29N Klondike Camp 148.65 310 P PKPbc 18 33 09.7 +0.6
baz=110
CTG Chitna Glacier 148.67 303 P PKPbc 18 33 10.0 +0.7
baz=114
EPYK Eagle Plains 148.69 314 PKPdf PKPdf 18 33 03.3 -2.0
EPYK PKPbc PKPbc 18 33 08.8 -0.4
EPYK Eagle Plains 148.69 314 P PKPbc 18 33 09.2 0.0
baz=108
G30M tAoh Zraii Nji 148.69 315 P PKPbc 18 33 09.1 0.0
baz=108
F30M Barrier River 148.72 316 P PKPbc 18 33 09.3 +0.2
baz=107
I29M Ogilvie Camp, 148.99 312 P PKPbc 18 33 09.7 -0.2
baz=109
DAWY Dawson 148.99 309 P PKPbc 18 33 09.8 -0.2
baz=110
MOY Mondy 149.12 78 ePKP2 PKPbc 18 33 11.2 +0.4
MOY pmax pmax
comp=Z,106nm,1.9s
BGLC Bering Glacier 149.20 300 P PKPbc 18 33 10.3 -0.2
baz=114
TGL Tana Glacier 149.25 302 PKPdf PKPdf 18 33 05.4 -1.1
TGL PKPbc 18 33 11.1 +0.3
H29M Whitestone 149.28 313 P PKPbc 18 33 10.8 +0.2
baz=107,SNR=14
G29M Pine Creek 149.35 315 P PKPbc 18 33 11.1 +0.4
baz=106
CRQE Cirque 149.37 302 P PKPbc 18 33 11.4 +0.3
baz=113
M27K Edge Creek, AK 149.44 305 P PKPbc 18 33 11.8 +0.5
baz=111
BJI Beijing 149.45 109 PKPbc PKiKP 18 33 12.6 -0.3
MCARA McCarthy VSAT 149.58 303 P PKiKP 18 33 12.2 -0.2
baz=112
ZAK Zakamensk 149.59 82 ePKHKP PKPpre 18 33 10.9
ZAK pmax pmax
comp=Z,68nm,1.4s
KAIM Kayak Island 149.65 300 P PKPbc 18 33 11.8 +0.2
baz=114
BCAR Beaver Creek A 149.65 306 PKPdf PKPdf 18 33 04.7 -2.3
BCAR PKPbc PKPbc 18 33 11.2 -0.4
I28M Miner Creek 149.66 311 P PKPbc 18 33 11.7 +0.1
baz=107
L27K Beaver Creek, 149.67 306 P PKiKP 18 33 12.2 -0.5
baz=110
E29M Blow River 149.70 317 P PKPbc 18 33 11.4 -0.1
baz=104
VRDI Verde Repeater 149.72 302 PKPdf 18 33 05.7 -1.6
VRDI PKPbc 18 33 12.2 +0.2
SONM Songino Array 149.72 89 PKPdf PKPdf 18 33 05.6 -2.0
SONM PKPbc PKPbc 18 33 12.5 +0.2
SONM Songino Array 149.72 89 PKP PKPdf 18 33 07.4 -0.3
comp=Z,1.7nm,0.7s,baz=190,slow=2.1,SNR=6.5
SONM PKPbc PKPbc 18 33 12.6 +0.2
comp=Z,26nm,0.8s,baz=224,slow=2.6,SNR=69
M26K Nabesna, AK 149.94 305 P PKPbc 18 33 12.7 +0.4
baz=110
EGAK Eagle 149.95 310 P PKPbc 18 33 12.3 +0.1
baz=108
ULN Ulaanbaatar 150.09 89 PKPbc 18 33 12.7 -0.5
ULN Ulaanbaatar 150.09 89c iPKIKP PKPbc 18 33 12.8 -0.5
ULN pmax pmax
comp=Z,54nm,1.7s
K27K Chicken 150.10 308 P PKiKP 18 33 13.4 0.0
baz=108
BMRM Bremner River 150.14 301 P PKiKP 18 33 13.7 0.0
baz=112
JNU Nakatsue 150.20 137 PKPbc PKPbc 18 33 13.7 -0.2
comp=Z,22nm,0.8s,baz=279,slow=2.0,SNR=12
D28M Stokes Point 150.21 319 P PKiKP 18 33 13.2 -0.2
baz=102
F28M Old Crow 150.23 316 P PKiKP 18 33 13.3 -0.4
baz=104
L26K Log Cabin Wild 150.31 306 P PKiKP 18 33 14.0 0.0
baz=109
E28M Babbage River 150.34 318 P PKPbc 18 33 12.8 -0.3
baz=102
Q23K Middleton Isla 150.34 298 P PKiKP 18 33 13.7 -0.3
baz=113
N25K Chitina, Valde 150.37 303 P PKiKP 18 33 14.5 +0.3
baz=111
I27K Kandik River 150.38 311 P PKiKP 18 33 14.0 -0.1
baz=106
EYAK Cordova Ski Ar 150.50 300 P PKiKP 18 33 14.7 +0.4
H27K Steamboat Moun 150.51 312 P PKiKP 18 33 14.2 -0.2
baz=105,SNR=20
G27K Doyon Strip 150.71 314 P PKiKP 18 33 14.6 -0.1
baz=104
HIN Hinchinbrook I 150.79 300 PKPbc 18 33 14.6 +0.2
J26L Joseph Creek 150.86 309 PKPdf PKPdf 18 33 07.4 -1.5
J26L PKPbc PKiKP 18 33 14.9 -0.2
J26L PKPab PKPab 18 33 22.5 +0.5
J26L Joseph Creek 150.86 309 P PKiKP 18 33 15.0 -0.1
baz=106,SNR=6.0
SCRK Sand Creek 150.88 307 P PKiKP 18 33 15.6 +0.3
baz=107,SNR=18
HARP HAARP 150.89 304 P PKiKP 18 33 15.2 0.0
baz=109
I26K Coal Creek Min 150.91 310 P PKiKP 18 33 15.2 +0.1
baz=105
KLU Klutina 150.92 302 PKPdf PKPdf 18 33 07.2 -1.8
KLU PKPbc 18 33 15.0 +0.3
KLU Klutina 150.92 302 P PKiKP 18 33 15.8 +0.5
baz=110
D27M Malcolm River 150.97 319 P PKiKP 18 33 15.4 +0.2
baz=102
E27K Coleen River 150.99 316 P PKiKP 18 33 15.1 -0.1
baz=102
P23K Montague Islan 151.06 299 P PKiKP 18 33 15.5 -0.1
baz=112
IRK Irkutsk 151.14 80 ePKIKP PKPbc 18 33 14.0 -1.5
IRK pmax pmax
comp=Z,84nm,1.3s
PAX Paxson 151.21 305 P PKiKP 18 33 15.7 -0.2
baz=108
DL2 Dalian 151.22 117 PKPbc PKiKP 18 33 16.4 -0.2
GLI Glacier Island 151.24 300 P PKiKP 18 33 16.0 +0.1
baz=110
M24K Tolsona, Glenn 151.24 303 P PKiKP 18 33 16.6 +0.7
baz=109
G26K Porcupine Rive 151.56 313 P PKiKP 18 33 16.5 +0.1
baz=102
K24K Donnelly Dome 151.59 307 P PKiKP 18 33 16.5 -0.1
baz=106
J25K Salcha River, 151.64 308 P PKPbc 18 33 16.5 +0.2
baz=105
SCM Sheep Creek Mo 151.67 302 P PKiKP 18 33 17.1 +0.2
baz=109
PWL Port Wells 151.80 300 P PKiKP 18 33 17.3 +0.2
baz=110
M23K Glacier View 151.83 302 P PKiKP 18 33 17.4 +0.2
baz=108
F26K Sheenjek River 151.84 315 P PKiKP 18 33 17.7 +0.7
baz=100
PRP Porcupine Dome 151.93 310 P PKiKP 18 33 17.3 -0.1
baz=103
BMAR Burnt Mountain 151.96 314 PKPdf PKPdf 18 33 09.3 -1.1
BMAR PKiKP 18 33 17.5 +0.3
C27K Jago River 151.99 319 P PKiKP 18 33 17.5 +0.3
baz=97
KNK Knik Glacier 152.04 301 P PKiKP 18 33 17.8 +0.2
baz=109
SEW Seward 152.05 298 P PKiKP 18 33 17.5 0.0
baz=110
DHY Denali Highway 152.07 305 P PKiKP 18 33 18.2 +0.4
baz=106
WAT6 Susitna Watana 152.09 304 P PKiKP 18 33 18.1 +0.2
baz=107
SML Sawmill 152.11 302 P PKiKP 18 33 18.0 +0.3
baz=108
H25L Birch Creek 152.21 312 P PKiKP 18 33 18.3 +0.6
baz=102
HDA Harding Lake 152.25 308 P PKiKP 18 33 18.0 +0.2
baz=104
IL31 152.31 308 PKPdf PKPdf 18 33 07.9 -3.0
IL31 PKPbc 18 33 17.3 -0.3
ILAR Eielson Array 152.31 308 PKPdf 18 33 07.2 -3.8
ILAR PKPbc PKPbc 18 33 17.5 -0.3
ILAR Eielson Array 152.31 308 PKP PKPdf 18 33 09.4 -1.5
comp=Z,0.8nm,0.7s,baz=154,slow=4.6,SNR=7.6
ILAR PKPbc PKPbc 18 33 17.8 0.0
comp=Z,17nm,0.7s,baz=144,slow=4.9,SNR=59
O22K Cooper Landing 152.31 299 P PKiKP 18 33 18.6 +0.5
baz=110
INCN Inchon 152.32 126 PKPbc 18 33 18.7 0.0
INCN Inchon 152.32 126 PKIKP PKPbc 18 33 18.7 0.0
F25K Christian Rive 152.39 315 P PKiKP 18 33 18.9 +0.7
baz=99
G25K Bearman Lake 152.42 313 P PKiKP 18 33 19.0 +0.8
baz=100
C26K Camden Bay 152.44 320 P PKiKP 18 33 18.8 +0.7
baz=96
WAT1 Susitna Watana 152.51 304 P PKiKP 18 33 18.9 +0.3
baz=105
RC01 Rabbit Creek A 152.52 300 P PKiKP 18 33 19.0 +0.5
baz=109
BRSE Bradley Lake S 152.53 297 P PKiKP 18 33 19.0 +0.4
baz=110
POKR Poker Plat Res 152.62 309 P PKiKP 18 33 19.0 +0.3
baz=103
KDAK Kodiak Island 152.68 292 PKPbc 18 33 18.5 -0.2
KDAK Kodiak Island 152.68 292 P PKiKP 18 33 19.6 +0.7
baz=113
KDAK Kodiak Island 152.68 292 PKIKP PKPbc 18 33 18.5 -0.2
COLA College 152.74 308 PKPbc 18 33 18.0 -0.6
COLA College 152.74 308 P PKiKP 18 33 19.6 +0.8
baz=103
COLA College 152.74 308 PKIKP PKPbc 18 33 18.0 -0.6
OHAK Old Harbor 152.81 291 P PKiKP 18 33 19.5 +0.3
baz=114
KSAR Wonju Array Be 152.81 128 PKPdf PKPdf 18 33 11.3 -1.2
KSAR PKPbc 18 33 19.5 -0.2
KSAR PKPab sPKPdf 18 33 27.7 -0.7
KSRS Korea Array 152.84 128 PKP PKPdf 18 33 11.7 -0.9
comp=Z,0.5nm,0.5s,baz=236,slow=1.3,SNR=5.6
KSRS PKPbc PKPbc 18 33 19.5 -0.2
comp=Z,5.7nm,0.7s,baz=198,slow=2.1,SNR=32
KSRS PKPab sPKPdf 18 33 28.8 +0.4
comp=Z,14nm,0.9s,baz=216,slow=3.5,SNR=21
KS19 Wonju Array Si 152.86 128 PKPdf PKPdf 18 33 10.3 -2.3
KS19 PKPbc 18 33 19.0 -0.8
KS19 PKPab 18 33 31.0 0.0
D25K Kavik River 152.89 318 P PKiKP 18 33 19.3 +0.2
baz=95
M22K Willow 152.90 301 P PKiKP 18 33 19.3 +0.1
baz=107
Q20K Shuyak Island 152.91 294 P PKiKP 18 33 19.8 +0.4
baz=112
MCK McKinley 152.92 306 P PKiKP 18 33 19.6 +0.3
baz=104
HOM Homer 152.93 296 P PKiKP 18 33 20.1 +0.7
baz=110
G24K Hadweenzic Riv 152.95 312 P PKiKP 18 33 19.9 +0.6
baz=100
H24K Noodor Dome 152.95 310 P PKiKP 18 33 20.1 +0.8
baz=101
SII Sitkinak Islan 152.98 289 P PKiKP 18 33 20.1 +0.4
baz=115
CAPN Captain Cook N 153.07 299 P PKiKP 18 33 20.2 +0.6
baz=108
SUA Susitna One 153.10 300 P PKiKP 18 33 20.0 +0.1
baz=107
CUT Chulitna 153.16 302 P PKiKP 18 33 20.1 +0.3
baz=106
NEA2 Nenana 153.18 307 P PKPbc 18 33 19.3 -0.3
baz=102
F24K Squaw Lake 153.23 314 P PKiKP 18 33 20.2 +0.3
baz=98
CHIR Chirikof Islan 153.39 287 P PKiKP 18 33 21.0 +0.5
baz=116
I23K Minto, Yukon-K 153.42 309 P PKiKP 18 33 20.8 +0.6
baz=101
R18K Karluk 153.52 291 P PKiKP 18 33 20.7 +0.1
baz=113
E24K Your Creek 153.53 315 P PKiKP 18 33 21.0 +0.5
baz=96
O20K Slope Mountain 153.54 297 P PKiKP 18 33 20.9 +0.2
baz=109
SKT Skwentna 153.61 301 PKPdf PKPdf 18 33 12.1 -0.8
SKT PKPbc PKPbc 18 33 20.7 0.0
SKT Skwentna 153.61 301 P PKiKP 18 33 21.2 +0.4
baz=106
H23K Yukon River 153.62 310 P PKiKP 18 33 21.2 +0.5
baz=100
Q19K Cape Douglas, 153.63 294 P PKiKP 18 33 21.3 +0.4
baz=111
P19K Oil Pt 153.69 296 P PKiKP 18 33 21.1 +0.1
baz=109
N20K Mount Spurr 153.69 299 P PKPbc 18 33 20.5 -0.5
baz=107
SPCR Spurr Chakacha 153.69 299 P PKPbc 18 33 20.8 -0.1
baz=107
C24K Franklin Bluff 153.73 319 P PKPbc 18 33 20.7 0.0
baz=92
D24K Happy Valley 153.74 318 P PKPbc 18 33 20.7 0.0
baz=94
BPAW Bear Paw Mtn. 153.89 306 P PKPbc 18 33 21.3 0.0
baz=102
E23K Chandalar 153.95 315 P PKiKP 18 33 21.6 +0.2
baz=95
G23K Bananza Creek 153.95 312 P PKiKP 18 33 22.2 +0.8
baz=98
MLY Manley 153.97 308 P PKiKP 18 33 21.5 0.0
baz=100
TOLK Toolik Lake Re 153.98 316 PKPdf PKPdf 18 33 12.3 -0.9
TOLK PKiKP 18 33 21.4 0.0
TOLK Toolik Lake Re 153.98 316 P PKiKP 18 33 21.6 +0.2
baz=94
COLD Coldfoot 154.08 313 P PKiKP 18 33 22.2 +0.6
baz=96
Q18K Katmai Hardscr 154.20 293 P PKiKP 18 33 22.8 +0.6
baz=110
M20K Styx River 154.31 300 P PKPbc 18 33 22.2 -0.1
baz=105
H22K Ishtalitna Cre 154.38 310 P PKiKP 18 33 22.4 +0.1
baz=98
D23K Nanushuk River 154.40 317 P PKiKP 18 33 22.7 +0.5
baz=92
C23K Itkillik River 154.40 319 P PKiKP 18 33 22.6 +0.4
baz=90
Q17K Contact Creek 154.49 292 P PKiKP 18 33 22.8 0.0
baz=111
R17L Mt. Peulik Vol 154.49 290 P PKiKP 18 33 23.4 +0.6
baz=112
G22K Bettles 154.56 312 P PKiKP 18 33 23.1 +0.6
baz=96
P18K Big Mountain, 154.56 294 P PKiKP 18 33 23.6 +0.7
baz=109
N19K Bonanza Creek 154.64 298 P PKiKP 18 33 23.7 +0.6
baz=106
O18K Koktuh Hills 154.70 295 P PKiKP 18 33 24.0 +0.9
baz=108
L20K Farewell, AK 154.80 302 P PKiKP 18 33 24.6 +1.4
baz=103
F22K John River 154.87 314 P PKiKP 18 33 24.3 +1.0
baz=94
M19K Big River Lodg 154.89 300 P PKiKP 18 33 23.6 +0.1
baz=104
H21K Melozitna Rive 154.93 309 PKPdf PKPdf 18 33 12.7 -1.9
H21K PKPbc PKiKP 18 33 23.8 +0.3
H21K PKPab PKPab 18 33 37.1 -2.0
H21K Melozitna Rive 154.93 309 P PKiKP 18 33 24.0 +0.6
baz=98
CHNA Chernabura Isl 154.99 282 P PKiKP 18 33 24.2 +0.5
baz=116
CHGN Chignik 155.01 286 P PKiKP 18 33 25.1
baz=114
Q16K King Salmon 155.02 292 P PKiKP 18 33 25.3
baz=110
R16K Pilot Point 155.08 289 P PKPdf 18 33 25.3 +10
baz=111
K20K Telida 155.08 304 P PKPdf 18 33 24.9 +10
baz=101
P17K Kvichak River 155.08 293 P PKPdf 18 33 24.8 +10
baz=109
D22K Ayikyak River 155.12 317 P PKPdf 18 33 24.3 +10
baz=91
L19K White Mountain 155.17 301 P PKPdf 18 33 25.8 +11
baz=103
J20K Nowinta River 155.26 306 pPKPdf 18 33 29.9 +3.1
J20K Nowinta River 155.26 306 P PKPdf 18 33 25.3 +10
baz=100
N18K Kilae Creek 155.27 297 P PKPdf 18 33 25.3 +10
baz=106
G21K Allakaket 155.31 311 P PKPdf 18 33 25.5 +10
baz=95
B22K Teshekpuk Lake 155.35 320 PKPdf PKPdf 18 33 13.6 -1.4
B22K pPKPdf 18 33 24.3 -2.4
B22K PKPab PKPab 18 33 40.4 -0.3
B22K Teshekpuk Lake 155.35 320 P PKPab 18 33 42.1 +1.4
baz=87
F21K Alatna River 155.35 313 P PKPab 18 33 41.8 +0.9
baz=94
M18K Stony River 155.45 299 P PKPab 18 33 42.1 +0.7
baz=104
I20K Naaghedeneel 155.50 307 P PKPab 18 33 42.2 +0.7
baz=98
O17K Koliganek Bris 155.58 294 P PKPab 18 33 42.9 +0.9
baz=107
S14K Fog Glacier 155.59 285 P PKPab 18 33 43.0 +0.7
baz=113
E21K Killik River 155.59 316 P PKPab 18 33 42.3 +0.4
baz=90
SDPT Sand Point 155.67 283 P PKPab 18 33 43.0 +0.5
baz=115
MJAR Matsushiro Arr 155.76 146 PKP PKPdf 18 33 16.2 -0.5
comp=Z,0.4nm,0.7s,baz=188,slow=7.4,SNR=2.8
MJAR PKPab PKPab 18 33 43.9 +0.5
comp=Z,5.0nm,0.7s,baz=185,slow=4.1,SNR=12
MAJO Matsushiro 155.76 146 PKPdf PKPdf 18 33 15.0 -1.7
MAJO PKPab PKPab 18 33 43.0 -0.4
MAJO Matsushiro 155.76 146 PKIKP PKPdf 18 33 15.0 -1.7
MAJO 18 33 43.0
H20K Anotleneega Mo 155.76 309 P PKPab 18 33 44.2 +1.5
baz=96
P16K Nushagak River 155.79 292 P PKPab 18 33 44.1 +1.2
baz=108
B21K Ikpikpuk River 155.80 319 P PKPab 18 33 43.5 +0.8
baz=87
A22K Sinclair Lake 155.82 322 P PKPab 18 33 44.1 +1.4
baz=84
N17K Nushagak Hills 155.84 296 P PKPab 18 33 44.2 +1.1
baz=105
J19K Poorman 155.87 305 P PKPab 18 33 44.4 +1.2
baz=99
O16K Kokwok River B 156.01 294 P PKPab 18 33 45.1 +1.3
baz=107
L18K Granite Mounta 156.02 300 P PKPab 18 33 44.7 +0.9
baz=102
M17K Holitna River 156.18 298 P PKPab 18 33 45.9 +1.4
baz=103
F20K Avaraart Lake 156.22 312 P PKPab 18 33 46.0 +1.4
baz=92
J18K Innoko River 156.27 303 P PKPab 18 33 46.4 +1.5
baz=99
A21K Barrow 156.31 323 P PKPab 18 33 46.1 +1.3
baz=81
E20K Nigu River 156.41 315 P PKPab 18 33 46.7 +1.3
baz=89
H19K Roundabout Mou 156.42 309 P PKPab 18 33 46.7 +1.2
baz=95
GCSA Galena City Sc 156.52 307 P PKPab 18 33 46.5 +0.6
baz=96
D20K Etivluk River 156.55 317 P PKPab 18 33 46.8 +0.8
baz=87
N16K Nishlik Lake 156.58 295 P PKPab 18 33 47.4 +1.0
baz=105
S12K Black Hills 156.64 283 P PKPab 18 33 47.8 +1.1
baz=114
B20K Meade River 156.65 320 P PKPab 18 33 47.3 +1.0
baz=84
G19K Purcell Mounta 156.72 310 P PKPab 18 33 47.9 +1.1
baz=93
O15K Ungaliktiuk R 156.73 292 P PKPab 18 33 48.1 +1.1
baz=107
L17K Donlin 156.74 300 P PKPab 18 33 48.3 +1.3
baz=101
M16K Timber Creek 156.81 297 PKPab 18 33 45.7 -1.6
M16K Timber Creek 156.81 297 P PKPab 18 33 48.0 +0.7
baz=103
E19K Redstone River 156.81 313 P PKPab 18 33 47.8 +0.6
baz=90
CN2 Changchun 156.83 115 ePKP PKPdf 18 33 17.9 +0.1
K17K Iditarod 156.85 301 P PKPab 18 33 48.2 +0.8
baz=100
FALS False Pass 156.99 280 P PKPab 18 33 49.2 +1.0
baz=115
F19K Shaleruckik Mo 157.02 312 P PKPab 18 33 49.2 +1.1
baz=91
N15K Kwethluk River 157.14 294 P PKPab 18 33 50.1 +1.4
baz=105

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H18K** | **Honhosa River** | **157.19** | **307** | P | | **PKPab** | **18 33 49.9** | **+1.0** |
| | baz=94 | | | | | | | |
| **L16K** | **Owhat River** | **157.20** | **298** | P | | **PKPab** | **18 33 50.3** | **+1.4** |
| | baz=101 | | | | | | | |
| **J17K** | **VABM Dome** | **157.31** | **303** | P | | **PKPab** | **18 33 50.8** | **+1.4** |
| | baz=98 | | | | | | | |
| **G18K** | **Tagagawik** | **157.35** | **309** | P | | **PKPab** | **18 33 50.9** | **+1.4** |
| | baz=92 | | | | | | | |
| **O14K** | **Tigyukauivet M** | **157.46** | **292** | P | | **PKPab** | **18 33 51.5** | **+1.3** |
| | baz=106 | | | | | | | |
| **M15K** | **Kasigluk River** | **157.55** | **295** | P | | **PKPab** | **18 33 51.8** | **+1.3** |
| | baz=103 | | | | | | | |
| **C19K** | **Lookout Ridge** | **157.60** | **318** | P | | **PKPab** | **18 33 51.4** | **+0.9** |
| | baz=83 | | | | | | | |
| **F18K** | **Selawik** | **157.77** | **311** | P | | **PKPab** | **18 33 51.7** | **+0.4** |
| | baz=89 | | | | | | | |
| **H17K** | **Granite Mounta** | **157.83** | **307** | P | | **PKPab** | **18 33 52.2** | **+0.6** |
| | baz=93 | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **157.85** | **293** | P | | **PKPab** | **18 33 52.6** | **+0.8** |
| | baz=104 | | | | | | | |
| **A19K** | **Wainwright** | **157.95** | **321** | P | | **PKPab** | **18 33 53.0** | **+1.1** |
| | baz=79 | | | | | | | |
| **J16K** | **Anvik River** | **157.97** | **302** | P | | **PKPab** | **18 33 53.3** | **+1.0** |
| | baz=97 | | | | | | | |
| **I17K** | **Unalakleet** | **158.08** | **304** | P | | **PKPab** | **18 33 53.8** | **+1.1** |
| | baz=95 | | | | | | | |
| **E18K** | **Tukpahlearik C** | **158.12** | **313** | P | | **PKPab** | **18 33 54.0** | **+1.3** |
| | baz=86 | | | | | | | |
| **L15K** | **Ungalak Mounta** | **158.14** | **298** | P | | **PKPab** | **18 33 53.8** | **+0.8** |
| | baz=100 | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **158.16** | **308** | P | | **PKPab** | **18 33 53.8** | **+0.8** |
| | baz=91 | | | | | | | |
| **UNV** | **Unalaska Valle** | **158.17** | **275** | P | | **PKPab** | **18 33 54.9** | **+1.5** |
| | baz=117 | | | | | | | |
| **M14K** | **Bethel** | **158.18** | **295** | P | | **PKPab** | **18 33 54.3** | **+1.1** |
| | baz=102 | | | | | | | |
| **C18K** | **Utukok River** | **158.23** | **317** | P | | **PKPab** | **18 33 54.6** | **+1.3** |
| | baz=83 | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **158.26** | **299** | P | | **PKPab** | **18 33 54.7** | **+1.1** |
| | baz=98 | | | | | | | |
| **B18K** | **Kokolik River** | **158.34** | **319** | P | | **PKPab** | **18 33 55.2** | **+1.5** |
| | baz=80 | | | | | | | |
| **F17K** | **Baldwin Pennin** | **158.41** | **311** | P | | **PKPab** | **18 33 55.6** | **+1.6** |
| | baz=88 | | | | | | | |
| **E17K** | **Hotham Inlet** | **158.61** | **313** | P | | **PKPab** | **18 33 55.7** | **+0.8** |
| | baz=86 | | | | | | | |
| **L14K** | **Kuka Creek** | **158.64** | **297** | P | | **PKPab** | **18 33 56.5** | **+1.4** |
| | baz=100 | | | | | | | |
| **M13K** | **Dall Lake** | **158.77** | **294** | P | | **PKPab** | **18 33 57.2** | **+1.4** |
| | baz=102 | | | | | | | |
| **H16K** | **Elim** | **158.81** | **306** | P | | **PKPab** | **18 33 57.1** | **+1.2** |
| | baz=92 | | | | | | | |
| **G16K** | **Koyuk River** | **158.87** | **308** | P | | **PKPab** | **18 33 56.8** | **+0.7** |
| | baz=90 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **158.93** | **315** | P | | **PKPab** | **18 33 56.8** | **+0.5** |
| | baz=82 | | | | | | | |
| **C17K** | **DeLong Mountai** | **158.97** | **317** | P | | **PKPab** | **18 33 57.6** | **+1.1** |
| | baz=81 | | | | | | | |
| **NIKH** | **Nikolski High** | **159.00** | **271** | P | | **PKPab** | **18 33 58.4** | **+1.4** |
| | baz=118 | | | | | | | |
| **D17K** | **Noatak River** | **159.04** | **314** | P | | **PKPab** | **18 33 57.5** | **+0.8** |
| | baz=83 | | | | | | | |
| **BNX** | **BinXian** | **159.20** | **115** | ⇓P | | **PKPab** | **18 33 57.5** | **-0.5** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **159.25** | **300** | P | | **PKPab** | **18 33 59.3** | **+1.5** |
| | baz=96 | | | | | | | |
| **MDJ** | **Mudanjiang** | **159.39** | **120** | P | | **PKPab** | **18 33 58.6** | **-0.3** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **G15K** | **Niukluk** | **159.58** | **307** | P | | **PKPab** | **18 34 00.4** | **+1.2** |
| | baz=90 | | | | | | | |
| **C16K** | **Lisburne Hills** | **159.80** | **316** | P | | **PKPab** | **18 34 01.4** | **+1.4** |
| | baz=79 | | | | | | | |
| **F15K** | **North Star Dit** | **159.82** | **309** | P | | **PKPab** | **18 34 02.1** | **+1.8** |
| | baz=87 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **160.14** | **125** | PKPab | | **PKPab** | **18 34 01.9** | **-0.2** |
| | comp=Z,13nm,1.0s,baz=232,slow=3.7,SNR=16 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **160.14** | **125** | PKP2 | | **PKPab** | **18 34 02.0** | **-0.2** |
| **M11K** | **Mekoryuk** | **160.16** | **293** | P | | **PKPab** | **18 34 03.1** | **+1.3** |
| | baz=100 | | | | | | | |
| **ANM** | **Nome** | **160.16** | **305** | P | | **PKPab** | **18 34 02.8** | **+1.1** |
| | baz=89 | | | | | | | |
| **F14K** | **Arctic Creek** | **160.53** | **308** | P | | **PKPab** | **18 34 04.2** | **+0.8** |
| | baz=86 | | | | | | | |
| **HEH** | **HeiHe** | **162.22** | **105** | *e*PKP | | **PKPdf** | **18 33 22.4** | **-1.4** |
| **TIXI** | **Tiksi** | **162.78** | **28** | PKPab | | **PKPab** | **18 34 12.6** | **-0.4** |
| | comp=Z,6.6nm,1.0s,baz=346,slow=4.2,SNR=4.6 | | | | | | | |
| **KLR** | **Kul'dur** | **163.75** | **113** | PKP | | **PKPdf** | **18 33 24.4** | **-0.9** |
| | comp=Z,4.5nm,1.1s,baz=295,slow=4.0,SNR=6.6 | | | | | | | |
| KLR | | | | PKPab | | **PKPab** | **18 34 17.3** | **-0.6** |
| | comp=Z,10.0nm,0.9s,baz=263,slow=4.0,SNR=14 | | | | | | | |
| **KLR** | **Kul'dur** | **163.75** | **113** | *e*PKIKP | | **PKPdf** | **18 33 22.8** | **-2.5** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **166.62** | **142** | PKPdf | | **PKPdf** | **18 33 26.6** | **-1.1** |
| YSS | | | | PKPab | | **PKPab** | **18 34 29.9** | **-0.7** |
| **YSS** | **Yuzh-Sakhalins** | **166.62** | **142** | *e*PKP2 | | **PKPab** | **18 34 30.8** | **+0.3** |
| YSS | | | | *e* | | | 18 38 27.0 | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **YAK** | **Yakutsk** | **166.91** | **62** | PKPab | | **PKPab** | **18 34 30.8** | **-0.6** |
| | comp=Z,13nm,0.6s,baz=292,slow=3.8,SNR=11 | | | | | | | |
| **YAK** | **Yakutsk** | **166.91** | **62** | *e*PKP2 | | **PKPab** | **18 34 31.5** | **+0.1** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,8.0nm,2.3s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,8.0nm,2.0s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,54nm,1.5s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,48nm,3.3s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,36nm,2.5s | | | | | | | |
| **GRNR** | **Gornyy** | **167.02** | **117** | ⇑*i*PKP2 | | **PKPab** | **18 34 32.2** | **-0.1** |
| GRNR | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=E,70nm,13.0s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **167.80** | **252** | PKPab | | **PKPab** | **18 34 34.0** | **-1.7** |
| | comp=E,18nm,0.6s,baz=158,slow=3.9,SNR=4.6 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **174.69** | **199** | PKP | | **PKPdf** | **18 33 32.7** | **+0.7** |
| | comp=E,3.0nm,0.9s,baz=83,slow=4.5,SNR=3.0 | | | | | | | |
| PETK | | | | PKPab | | **PKPab** | **18 35 05.7** | **-0.4** |
| | comp=E,3.4nm,0.7s,baz=115,slow=7.0,SNR=4.0 | | | | | | | |

*NEIC* ***14*** *18:16:26.3±1.4, 62°.38N±0°.03×151°.29W±0°.05, h84km±8km, Error ellipse: s-maj=5.9km s-min=1.5km az=147.0*

**AEIC 14 18:16:27.4±1.3, 62°.37N±0°.04×151°.27W±0°.07, h82km±6km, ML3.3, ML3.6/**226(NEIC), **Error ellipse: s-maj=5.9km s-min=4.6km az=177.0, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **SKT** | **Skwentna** | **0.41** | **197** | | | Pn | 18 16 39.7 | -1.0 |
| SKT | | | | Sn | | Sn | 18 16 49.9 | -0.5 |
| SKT | | | | IAML | | | 18 16 50.8 | |
| | comp=E,3μm,0.2s | | | | | | | |
| **CUT** | **Chulitna** | **0.47** | **85** | | | Pn | 18 16 40.5 | -0.5 |
| CUT | | | | Sn | | Sn | 18 16 51.1 | 0.0 |
| **M22K** | **Willow** | **0.82** | **138** | | | Pn | 18 16 43.5 | -1.0 |
| M22K | | | | Sn | | Sn | 18 16 57.0 | -0.2 |
| **STLK** | **Strandline Lak** | **0.91** | **197** | | | Pn | 18 16 44.8 | -0.8 |
| **SUA** | **Susitna One** | **0.94** | **164** | | | Pn | 18 16 45.3 | -0.7 |
| SUA | | | | Sn | | Sn | 18 16 59.0 | -0.8 |
| SUA | | | | IAML | | | 18 17 01.2 | |
| | comp=N,916nm,0.4s | | | | | | | |
| SUA | | | | IAML | | | 18 17 01.3 | |
| | comp=E,1μm,0.6s | | | | | | | |
| **M20K** | **Styx River** | **1.00** | **242** | | | Pn | 18 16 45.6 | -1.1 |
| M20K | | | | Sn | | Sn | 18 16 59.7 | -1.3 |
| M20K | | | | IAML | | | 18 17 00.5 | |
| | comp=N,776nm,0.6s | | | | | | | |
| M20K | | | | IAML | | | 18 17 00.8 | |
| | comp=E,812nm,0.3s | | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **1.14** | **198** | | | Pn | 18 16 47.5 | -0.9 |
| SPCG | | | | | | Sn | 18 17 04.5 | +0.5 |
| **SPCP** | **Crater Peak Br** | **1.18** | **201** | | | Pn | 18 16 48.3 | -0.7 |
| SPCP | | | | | | Sn | 18 17 06.4 | +1.3 |
| **WAT7** | **Susitna Watana** | **1.21** | **66** | | | Sn | 18 17 04.8 | -0.9 |
| **L20K** | **Farewell, AK** | **1.22** | **276** | | | Sn | 18 17 04.8 | -0.8 |
| **GHO** | **Glory Hole Cre** | **1.26** | **117** | | | Pn | 18 16 49.1 | -0.7 |
| GHO | | | | IAML | | | 18 17 11.7 | |
| | comp=N,1μm,0.5s | | | | | | | |
| GHO | | | | IAML | | | 18 17 11.7 | |
| | comp=E,915nm,0.6s | | | | | | | |
| **PMR** | **Palmer** | **1.28** | **127** | | | Pn | 18 16 48.7 | -1.2 |
| PMR | | | | IAML | | | 18 17 09.1 | |
| | comp=E,666nm,0.5s | | | | | | | |
| PMR | | | | IAML | | | 18 17 09.9 | |
| | comp=N,707nm,0.3s | | | | | | | |
| **FIS** | **Fire Island** | **1.33** | **157** | | | Pn | 18 16 51.4 | +0.8 |
| **WAT1** | **Susitna Watana** | **1.34** | **69** | | | Sn | 18 17 07.8 | -0.6 |
| **RC01** | **Rabbit Creek A** | **1.48** | **150** | | | Pn | 18 16 51.2 | -1.3 |
| **RC01** | **Rabbit Creek A** | **1.48** | **150** | | | Sn | 18 17 11.3 | -0.1 |
| **RC01** | **Rabbit Creek A** | **1.48** | **150** | IAML | | | 18 17 15.4 | |
| | comp=E,790nm,0.4s | | | | | | | |
| RC01 | | | | IAML | | | 18 17 15.9 | |
| | comp=N,953nm,0.5s | | | | | | | |
| **SML** | **Sawmill** | **1.50** | **111** | | | Pn | 18 16 51.8 | -1.0 |
| SML | | | | IAML | | | 18 17 15.3 | |
| | comp=E,955nm,1.1s | | | | | | | |
| SML | | | | IAML | | | 18 17 22.5 | |
| | comp=N,599nm,0.7s | | | | | | | |
| **RND** | **Reindeer** | **1.52** | **46** | | | Pn | 18 16 52.3 | -0.8 |
| RND | | | | IAML | | | 18 17 13.2 | |
| | comp=E,683nm,0.4s | | | | | | | |
| RND | | | | IAML | | | 18 17 13.2 | |
| | comp=N,659nm,0.3s | | | | | | | |
| **M19K** | **Big River Lodg** | **1.54** | **254** | Pn | | Pn | 18 16 52.0 | -1.2 |
| M19K | | | | IAML | | | 18 17 13.8 | |
| | comp=E,368nm,0.7s | | | | | | | |
| **CAPN** | **Captain Cook N** | **1.61** | **178** | | | Pn | 18 16 54.7 | +0.6 |
| **K20K** | **Telida** | **1.62** | **309** | Pn | | Pn | 18 16 53.3 | -1.0 |
| **K20K** | **Telida** | **1.62** | **309** | | | Sn | 18 17 13.0 | -1.7 |
| **K20K** | **Telida** | **1.62** | **309** | IAML | | | 18 17 13.8 | |
| | comp=E,577nm,0.7s | | | | | | | |
| K20K | | | | IAML | | | 18 17 14.2 | |
| | comp=N,360nm,0.6s | | | | | | | |
| **KNK** | **Knik Glacier** | **1.64** | **125** | | | Pn | 18 16 53.6 | -1.1 |
| **L19K** | **White Mountain** | **1.69** | **265** | | | Pn | 18 16 54.2 | -1.0 |
| L19K | | | | IAML | | | 18 17 16.2 | |
| | comp=E,286nm,0.6s | | | | | | | |
| L19K | | | | IAML | | | 18 17 16.5 | |
| | comp=N,334nm,0.7s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.74** | **4** | | | Pn | 18 16 54.8 | -1.2 |
| BPAW | | | | IAML | | | 18 17 15.9 | |
| | comp=N,390nm,0.2s | | | | | | | |
| BPAW | | | | IAML | | | 18 17 16.8 | |
| | comp=E,428nm,0.5s | | | | | | | |
| **DHY** | **Denali Highway** | **1.93** | **67** | | | Pn | 18 16 57.5 | -1.1 |
| DHY | | | | IAML | | | 18 17 22.9 | |
| | comp=N,622nm,0.5s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.93** | **104** | | | Pn | 18 16 56.9 | -1.6 |
| SCM | | | | IAML | | | 18 17 27.0 | |
| | comp=N,424nm,0.6s | | | | | | | |
| SCM | | | | IAML | | | 18 17 32.4 | |
| | comp=E,441nm,0.7s | | | | | | | |
| **BWN** | **Browne** | **1.98** | **24** | | | Pn | 18 16 58.6 | -0.5 |
| BWN | | | | IAML | | | 18 17 29.5 | |
| | comp=E,258nm,0.6s | | | | | | | |
| BWN | | | | IAML | | | 18 17 43.7 | |
| | comp=N,345nm,0.9s | | | | | | | |
| **Q22K** | **Cooper Landing** | **2.04** | **158** | | | Pn | 18 16 58.3 | -1.5 |
| **RSO** | **Redoubt South** | **2.04** | **201** | | | Pn | 18 16 59.1 | -1.0 |
| **PWL** | **Port Wells** | **2.07** | **136** | | | Pn | 18 16 58.2 | -2.0 |
| PWL | | | | IAML | | | 18 17 31.7 | |
| | comp=N,625nm,0.6s | | | | | | | |
| **N19K** | **Bonanza Creek** | **2.19** | **226** | Pn | | Pn | 18 17 00.9 | -1.0 |
| **J20K** | **Nowinta River** | **2.23** | **326** | Pn | | Pn | 18 17 01.4 | -1.0 |
| J20K | | | | IAML | | | 18 17 28.4 | |
| | comp=E,382nm,0.7s | | | | | | | |
| J20K | | | | IAML | | | 18 17 28.4 | |
| | comp=N,495nm,0.5s | | | | | | | |
| **O20K** | **Slope Mountain** | **2.39** | **196** | | | Pn | 18 17 04.3 | -0.3 |
| **M24K** | **Tolsona, Glenn** | **2.40** | **94** | | | Pn | 18 17 03.7 | -1.0 |
| M24K | | | | IAML | | | 18 17 44.7 | |
| | comp=E,436nm,0.5s | | | | | | | |
| M24K | | | | IAML | | | 18 17 52.0 | |
| | comp=N,422nm,0.8s | | | | | | | |
| **SVW2** | **Sparrevohn** | **2.42** | **240** | | | Pn | 18 17 03.7 | -1.1 |
| **SEW** | **Seward** | **2.44** | **158** | | | Pn | 18 17 04.3 | -0.9 |
| **NEA2** | **Nenana** | **2.44** | **23** | | | Pn | 18 17 03.6 | -1.5 |
| NEA2 | | | | IAML | | | 18 17 33.3 | |
| | comp=E,132nm,0.6s | | | | | | | |
| **GLI** | **Glacier Island** | **2.49** | **125** | | | Pn | 18 17 03.9 | -2.0 |
| GLI | | | | IAML | | | 18 17 43.5 | |
| | comp=E,309nm,0.6s | | | | | | | |
| GLI | | | | IAML | | | 18 17 44.6 | |
| | comp=N,287nm,0.5s | | | | | | | |
| **L18K** | **Granite Mounta** | **2.54** | **269** | Pn | | Pn | 18 17 05.3 | -1.1 |
| **WRH** | **Wood River Hil** | **2.55** | **33** | | | Pn | 18 17 05.3 | -1.3 |
| WRH | | | | IAML | | | 18 17 35.1 | |
| | comp=E,139nm,0.4s | | | | | | | |
| WRH | | | | IAML | | | 18 17 36.1 | |
| | comp=N,118nm,0.6s | | | | | | | |
| **J19K** | **Poorman** | **2.56** | **311** | Pn | | Pn | 18 17 05.7 | -1.1 |
| J19K | | | | IAML | | | 18 17 35.9 | |
| | comp=E,154nm,0.7s | | | | | | | |
| J19K | | | | IAML | | | 18 17 36.9 | |
| | comp=N,219nm,0.4s | | | | | | | |
| **ILSW** | **Iliamna Southw** | **2.56** | **202** | | | Pn | 18 17 06.2 | -0.7 |
| **BRLK** | **Bradley Lake** | **2.62** | **176** | | | Pn | 18 17 07.0 | -0.7 |
| BRLK | | | | IAML | | | 18 17 45.2 | |
| | comp=E,230nm,0.6s | | | | | | | |
| BRLK | | | | IAML | | | 18 17 46.5 | |
| | comp=N,270nm,0.4s | | | | | | | |
| **BRSE** | **Bradley Lake S** | **2.65** | **174** | | | Pn | 18 17 07.4 | -0.6 |
| **KLU** | **Klutina** | **2.68** | **107** | | | Pn | 18 17 06.3 | -2.1 |
| KLU | | | | IAML | | | 18 17 50.1 | |
| | comp=E,208nm,1.0s | | | | | | | |
| KLU | | | | IAML | | | 18 17 53.9 | |
| | comp=N,260nm,0.4s | | | | | | | |
| **MLY** | **Manley** | **2.68** | **5** | | | Pn | 18 17 06.7 | -1.8 |
| **J18K** | **Innoko River** | **2.72** | **296** | Pn | | Pn | 18 17 07.4 | -1.6 |
| J18K | | | | IAML | | | 18 17 39.4 | |
| | comp=E,141nm,0.7s | | | | | | | |
| J18K | | | | IAML | | | 18 17 40.1 | |
| | comp=N,173nm,0.7s | | | | | | | |
| **HOM** | **Homer** | **2.73** | **184** | Pn | | Pn | 18 17 06.7 | -2.4 |
| **CCB** | **Clear Creek Bu** | **2.76** | **33** | | | Pn | 18 17 08.1 | -1.4 |
| CCB | | | | IAML | | | 18 17 40.7 | |
| | comp=E,119nm,0.6s | | | | | | | |
| **N18K** | **Kilae Creek** | **2.79** | **235** | Pn | | Pn | 18 17 08.5 | -1.4 |
| **HDA** | **Harding Lake** | **2.82** | **42** | | | Pn | 18 17 09.0 | -1.3 |
| HDA | | | | IAML | | | 18 17 48.5 | |
| | comp=N,308nm,0.4s | | | | | | | |
| **I20K** | **Naaghedeneel** | **2.83** | **331** | | | Pn | 18 17 09.9 | -0.4 |
| **CNPM** | **China Poot** | **2.85** | **180** | Pn | | Pn | 18 17 09.4 | -1.4 |
| CNPM | | | | IAML | | | 18 17 51.8 | |
| | comp=E,304nm,0.5s | | | | | | | |
| **K24K** | **Donnelly Dome** | **2.88** | **58** | | | Pn | 18 17 10.4 | -0.8 |
| **P19K** | **Oil Pt** | **2.89** | **200** | Pn | | Pn | 18 17 11.1 | -0.2 |
| P19K | | | | IAML | | | 18 17 54.8 | |
| | comp=N,145nm,0.4s | | | | | | | |
| P19K | | | | IAML | | | 18 18 06.5 | |
| | comp=E,180nm,0.5s | | | | | | | |
| **DIV** | **Divide** | **2.90** | **113** | | | Pn | 18 17 08.9 | -2.5 |
| **I23K** | **Minto, Yukon-K** | **2.92** | **16** | | | Pn | 18 17 10.4 | -1.1 |
| **MDM** | **Murphy Dome** | **2.93** | **26** | | | Pn | 18 17 10.8 | -1.0 |
| **COLA** | **College** | **2.94** | **30** | | | Pn | 18 17 10.6 | -1.3 |
| COLA | | | | IAML | | | 18 17 47.7 | |
| | comp=E,286nm,0.5s | | | | | | | |
| **HIN** | **Hinchinbrook I** | **3.03** | **129** | | | Pn | 18 17 10.9 | -2.3 |
| **M17K** | **Holitna River** | **3.08** | **254** | Pn | | Pn | 18 17 11.7 | -2.1 |
| M17K | | | | IAML | | | 18 17 50.3 | |
| | comp=E,111nm,0.9s | | | | | | | |
| M17K | | | | IAML | | | 18 18 21.0 | |
| | comp=N,96nm,0.6s | | | | | | | |
| **IL31** | | **3.11** | **37** | | | Pn | 18 17 12.4 | -1.7 |
| **ILAR** | **Eielson Array** | **3.11** | **37** | | | Pn | 18 17 12.6 | -1.5 |
| **O18K** | **Koktuh Hills** | **3.17** | **219** | | | Pn | 18 17 13.5 | -1.5 |
| **N25K** | **Chitina, Valde** | **3.24** | **101** | | | Pn | 18 17 14.2 | -1.9 |
| N25K | | | | IAML | | | 18 18 05.1 | |
| | comp=N,115nm,0.5s | | | | | | | |
| N25K | | | | IAML | | | 18 18 05.4 | |
| | comp=E,146nm,0.7s | | | | | | | |
| **POKR** | **Poker Flat Res** | **3.24** | **30** | | | Pn | 18 17 14.8 | -1.1 |
| **K17K** | **Iditarod** | **3.27** | **279** | Pn | | Pn | 18 17 15.4 | -1.0 |
| K17K | | | | IAML | | | 18 17 54.4 | |
| | comp=N,68nm,0.8s | | | | | | | |
| K17K | | | | IAML | | | 18 17 54.7 | |
| | comp=E,128nm,0.9s | | | | | | | |
| **H21K** | **Melozitna Rive** | **3.37** | **349** | Pn | | Pn | 18 17 16.5 | -1.2 |
| **N17K** | **Nushagak Hills** | **3.39** | **240** | Pn | | Pn | 18 17 16.6 | -1.3 |
| **J25K** | **Salcha River,** | **3.47** | **47** | | | Pn | 18 17 17.8 | -1.4 |
| J25K | | | | IAML | | | 18 18 05.7 | |
| | comp=E,157nm,0.5s | | | | | | | |
| **BMRM** | **Bremner River** | **3.48** | **111** | | | Pn | 18 17 16.7 | -2.5 |
| **H23K** | **Yukon River** | **3.55** | **12** | | | Pn | 18 17 19.0 | -1.2 |
| **P18K** | **Big Mountain,** | **3.56** | **215** | Pn | | Pn | 18 17 18.9 | -1.4 |
| **Q19K** | **Cape Douglas,** | **3.65** | **200** | Pn | | Pn | 18 17 21.4 | -0.1 |
| **GLB** | **Gilahina Butte** | **3.65** | **101** | | | Pn | 18 17 19.6 | -2.0 |
| GLB | | | | IAML | | | 18 18 17.1 | |
| | comp=E,59nm,0.5s | | | | | | | |
| GLB | | | | IAML | | | 18 18 17.3 | |
| | comp=N,97nm,0.7s | | | | | | | |
| **SCRK** | **Sand Creek** | **3.68** | **61** | | | Pn | 18 17 20.9 | -1.1 |
| SCRK | | | | IAML | | | 18 18 08.8 | |
| | comp=E,106nm,0.6s | | | | | | | |
| SCRK | | | | IAML | | | 18 18 10.4 | |
| | comp=N,104nm,0.5s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **3.71** | **76** | | | Pn | 18 17 21.4 | -1.0 |
| **J17K** | **VABM Dome** | **3.72** | **290** | Pn | | Pn | 18 17 21.0 | -1.4 |
| J17K | | | | IAML | | | 18 18 03.7 | |
| | comp=N,49nm,0.7s | | | | | | | |
| **RAGM** | **Ragged Mountai** | **3.75** | **119** | | | Pn | 18 17 21.9 | -0.9 |
| **H24K** | **Noodor Dome** | **3.79** | **22** | | | Pn | 18 17 22.6 | -0.8 |
| **Q23K** | **Middleton Isla** | **3.81** | **139** | Pn | | Pn | 18 17 23.6 | 0.0 |
| **MID** | **Middleton Isla** | **3.81** | **139** | Pn | | Pn | 18 17 23.6 | 0.0 |
| **SYI** | **Shuyak Island** | **3.81** | **189** | Pn | | Pn | 18 17 23.1 | -0.7 |
| SYI | | | | IAML | | | 18 18 16.9 | |
| | comp=E,72nm,0.8s | | | | | | | |
| SYI | | | | IAML | | | 18 18 19.1 | |
| | comp=N,58nm,0.6s | | | | | | | |
| **M26K** | **Nabesna, AK** | **3.85** | **86** | Pn | | Pn | 18 17 22.7 | -1.6 |
| M26K | | | | IAML | | | 18 18 21.8 | |
| | comp=N,107nm,0.6s | | | | | | | |
| M26K | | | | IAML | | | 18 18 21.9 | |
| | comp=E,94nm,0.5s | | | | | | | |
| **VRDI** | **Verde Repeater** | **3.88** | **104** | Pn | | Pn | 18 17 22.3 | -2.6 |
| VRDI | | | | IAML | | | 18 18 25.0 | |
| | comp=E,57nm,0.8s | | | | | | | |
| VRDI | | | | IAML | | | 18 18 29.8 | |
| | comp=N,67nm,1.1s | | | | | | | |
| **M16K** | **Timber Creek** | **3.90** | **253** | Pn | | Pn | 18 17 23.8 | -1.2 |
| **H19K** | **Roundabout Mou** | **3.91** | **327** | Pn | | Pn | 18 17 24.3 | -0.6 |
| **L16K** | **Owhat River** | **3.92** | **264** | Pn | | Pn | 18 17 24.0 | -1.1 |
| **HMT** | **Hamilton** | **3.94** | **118** | | | Pn | 18 17 23.4 | -2.2 |
| **MCARA** | **McCarthy VSAT** | **4.03** | **101** | | | Pn | 18 17 24.7 | -2.0 |
| **PRP** | **Porcupine Dome** | **4.05** | **36** | | | Pn | 18 17 25.9 | -1.1 |
| PRP | | | | IAML | | | 18 18 12.0 | |
| | comp=N,52nm,0.5s | | | | | | | |
| PRP | | | | IAML | | | 18 18 30.3 | |
| | comp=E,64nm,0.7s | | | | | | | |
| **J26L** | **Joseph Creek** | **4.07** | **55** | Pn | | Pn | 18 17 26.1 | -1.2 |
| J26L | | | | IAML | | | 18 18 20.9 | |
| | comp=E,115nm,0.5s | | | | | | | |
| **KAIM** | **Kayak Island** | **4.13** | **123** | Pn | | Pn | 18 17 26.4 | -1.6 |
| KAIM | | | | IAML | | | 18 18 59.5 | |
| | comp=E,107nm,2.8s | | | | | | | |
| KAIM | | | | IAML | | | 18 19 44.0 | |
| | comp=N,106nm,3.0s | | | | | | | |
| **H18K** | **Honhosa River** | **4.21** | **315** | Pn | | Pn | 18 17 28.5 | -0.5 |
| **CRQM** | **Cirque** | **4.21** | **109** | | | Pn | 18 17 27.4 | -2.0 |
| **G21K** | **Allakaket** | **4.27** | **348** | | | Pn | 18 17 29.3 | -0.7 |
| G21K | | | | IAML | | | 18 18 19.6 | |
| | comp=N,39nm,1.0s | | | | | | | |
| G21K | | | | IAML | | | 18 18 19.7 | |
| | comp=E,36nm,0.8s | | | | | | | |
| **SUCK** | **Suckling Hills** | **4.29** | **119** | Pn | | Pn | 18 17 27.7 | -2.5 |
| SUCK | | | | IAML | | | 18 18 45.0 | |
| | comp=E,67nm,1.5s | | | | | | | |
| SUCK | | | | IAML | | | 18 18 48.9 | |
| | comp=N,81nm,2.3s | | | | | | | |
| **O16K** | **Kokwok River B** | **4.33** | **233** | Pn | | Pn | 18 17 30.0 | -0.8 |
| **TGL** | **Tana Glacier** | **4.35** | **108** | | | Pn | 18 17 29.2 | -1.9 |
| **J16K** | **Anvik River** | **4.38** | **286** | Pn | | Pn | 18 17 30.3 | -1.1 |
| J16K | | | | IAML | | | 18 18 53.7 | |
| | comp=N,35nm,0.8s | | | | | | | |
| J16K | | | | IAML | | | 18 18 55.6 | |
| | comp=E,28nm,1.1s | | | | | | | |
| **M27K** | **Edge Creek, AK** | **4.38** | **86** | | | Pn | 18 17 30.2 | -1.4 |
| M27K | | | | IAML | | | 18 18 45.3 | |
| | comp=N,56nm,1.1s | | | | | | | |
| M27K | | | | IAML | | | 18 18 53.7 | |
| | comp=E,30nm,1.2s | | | | | | | |
| **G23K** | **Bananza Creek** | **4.39** | **7** | Pn | | Pn | 18 17 30.9 | -0.8 |
| **L27K** | **Beaver Creek,** | **4.40** | **77** | Pn | | Pn | 18 17 30.0 | -1.8 |
| L27K | | | | IAML | | | 18 18 48.5 | |
| | comp=N,33nm,0.7s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **4.42** | **77** | Pn | | Pn | 18 17 30.5 | -1.6 |
| **WAX** | **Waxell Ridge** | **4.48** | **112** | | | Pn | 18 17 31.3 | -1.6 |
| **I17K** | **Unalakleet** | **4.54** | **294** | | | Pn | 18 17 33.0 | -0.5 |
| I17K | | | | IAML | | | 18 18 26.8 | |
| | comp=E,37nm,0.8s | | | | | | | |
| I17K | | | | IAML | | | 18 18 52.8 | |
| | comp=N,31nm,2.2s | | | | | | | |
| **G19K** | **Purcell Mounta** | **4.56** | **329** | Pn | | Pn | 18 17 33.0 | -0.8 |
| **SNH** | **Sunshine Point** | **4.62** | **115** | Pn | | Pn | 18 17 33.0 | -1.9 |
| SNH | | | | IAML | | | 18 18 44.8 | |
| | comp=E,59nm,1.8s | | | | | | | |
| SNH | | | | IAML | | | 18 19 21.9 | |
| | comp=N,72nm,2.6s | | | | | | | |
| **H17K** | **Granite Mounta** | **4.63** | **308** | Pn | | Pn | 18 17 34.6 | -0.3 |
| H17K | | | | IAML | | | 18 18 26.2 | |
| | comp=N,25nm,0.8s | | | | | | | |
| H17K | | | | IAML | | | 18 18 26.2 | |
| | comp=E,33nm,0.8s | | | | | | | |
| **ISLE** | **Juniper Island** | **4.63** | **109** | | | Pn | 18 17 32.6 | -2.4 |
| ISLE | | | | IAML | | | 18 18 50.2 | |
| | comp=E,76nm,0.9s | | | | | | | |
| ISLE | | | | IAML | | | 18 18 51.8 | |
| | comp=N,67nm,1.4s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **4.65** | **19** | Pn | | Pn | 18 17 34.3 | -0.7 |
| **I26K** | **Coal Creek Min** | **4.65** | **47** | | | Pn | 18 17 34.4 | -0.6 |
| **KDAK** | **Kodiak Island** | **4.65** | **189** | Pn | | Pn | 18 17 32.7 | -2.4 |
| KDAK | | | | IAML | | | 18 18 30.2 | |
| | comp=N,42nm,2.7s | | | | | | | |
| KDAK | | | | IAML | | | 18 19 56.8 | |
| | comp=N,38nm,2.6s | | | | | | | |
| **CNTC** | **Contact Creek** | **4.71** | **211** | | | Pn | 18 17 35.2 | -0.9 |
| **K15K** | **Wolf Creek Mou** | **4.78** | **274** | Pn | | Pn | 18 17 36.1 | -0.8 |
| K15K | | | | IAML | | | 18 18 59.3 | |
| | comp=E,25nm,3.5s | | | | | | | |
| K15K | | | | IAML | | | 18 19 33.2 | |
| | comp=N,32nm,2.9s | | | | | | | |
| **G18K** | **Tagagawik** | **4.79** | **321** | Pn | | Pn | 18 17 36.4 | -0.6 |
| G18K | | | | IAML | | | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OHAK | | | | IAML | | 18 20 58.4 | | |
| | comp=N,48nm,3.9s | | | | | | | |
| OHAK | | | | IAML | | 18 21 00.8 | | |
| | comp=E,28nm,3.2s | | | | | | | |
| **F19K** | **Shaleruckih Mo** | **5.28** | **331** | Pn | Pn | 18 17 42.2 | -1.4 | |
| **M14K** | **Bethel** | **5.36** | **257** | Pn | Pn | 18 17 42.3 | -2.4 | |
| **F24K** | **Squaw Lake** | **5.37** | **14** | Pn | Pn | 18 17 44.1 | -0.8 | |
| **PLK4** | **Peulik 4** | **5.39** | **210** | Pn | Pn | 18 17 42.4 | -2.9 | |
| PLK4 | | | | IAML | | 18 18 48.1 | | |
| | comp=E,44nm,3.2s | | | | | | | |
| **G26K** | **Porcupine Rive** | **5.61** | **32** | | Pn | 18 17 46.7 | -1.4 | |
| **DAWY** | **Dawson** | **5.64** | **67** | | Pn | 18 17 46.7 | -1.9 | |
| **J14K** | **Nanvaranak Lak** | **5.69** | **279** | Pn | Pn | 18 17 48.0 | -1.3 | |
| **E19K** | **Redstone River** | **5.70** | **336** | Pn | Pn | 18 17 48.4 | -1.0 | |
| **E23K** | **Chandalar** | **5.75** | **6** | | Pn | 18 17 48.2 | -2.0 | |
| **G16K** | **Koyuk River** | **5.76** | **307** | Pn | Pn | 18 17 49.7 | -0.4 | |
| **F25K** | **Christian Rive** | **5.76** | **22** | Pn | Pn | 18 17 49.1 | -1.2 | |
| **O14K** | **Tigyukauivet M** | **5.80** | **242** | Pn | Pn | 18 17 49.3 | -1.5 | |
| **BMAR** | **Burnt Mountain** | **5.82** | **26** | | | 18 17 50.2 | -0.8 | |
| **E24K** | **Your Creek** | **5.85** | **10** | Pn | Pn | 18 17 51.1 | -0.3 | |
| **I28M** | **Miner Creek** | **5.88** | **53** | Pn | Pn | 18 17 50.6 | -1.3 | |
| **F17K** | **Baldwin Pennin** | **5.95** | **318** | Pn | Pn | 18 17 52.3 | -0.4 | |
| **M29M** | **Somme Creek** | **5.96** | **84** | Pn | Pn | 18 17 51.6 | -1.3 | |
| **G27K** | **Doyon Strip** | **6.08** | **39** | | Pn | 18 17 53.3 | -1.3 | |
| **L29M** | **L29M** | **6.09** | **77** | Pn | Pn | 18 17 53.4 | -1.3 | |
| **BCPM** | **Bancas Point** | **6.11** | **108** | Pn | Pn | 18 17 53.3 | -2.0 | |
| **F26K** | **Sheenjek River** | **6.13** | **26** | | Pn | 18 17 54.4 | -0.9 | |
| **E21K** | **Killik River** | **6.20** | **351** | Pn | Pn | 18 17 56.3 | +0.1 | |
| **TOLK** | **Toolik Lake Re** | **6.34** | **6** | Pn | Pn | 18 17 58.3 | +0.3 | |
| **K29M** | **Barlow Dome** | **6.41** | **71** | Pn | Pn | 18 17 57.6 | -1.6 | |
| **E18K** | **Tukpahlearik C** | **6.43** | **326** | Pn | Pn | 18 17 59.0 | -0.4 | |
| **I29M** | **Ogilvie Camp,** | **6.46** | **57** | Pn | Pn | 18 17 58.3 | -1.5 | |
| **D22K** | **Ayikyak River** | **6.56** | **356** | Pn | Pn | 18 18 01.7 | +0.6 | |
| **F15K** | **North Star Dit** | **6.75** | **306** | Pn | Pn | 18 18 02.6 | -1.2 | |
| **N30M** | **Aishikik Lake** | **6.76** | **91** | | Pn | 18 18 01.5 | -2.4 | |
| **D19K** | **Kuna River** | **6.77** | **338** | Pn | Pn | 18 18 03.3 | -0.8 | |
| **H29M** | **Whitestone** | **6.81** | **50** | Pn | Pn | 18 18 03.8 | -0.7 | |
| **D24K** | **Happy Valley** | **6.89** | **7** | Pn | Pn | 18 18 06.7 | +1.2 | |
| **J30M** | **Hart River** | **7.05** | **65** | Pn | Pn | 18 18 07.2 | -0.7 | |
| **E27K** | **Coleen River** | **7.10** | **31** | Pn | Pn | 18 18 07.6 | -0.9 | |
| **F28M** | **Old Crow** | **7.13** | **38** | Pn | Pn | 18 18 08.2 | -0.7 | |
| **I30M** | **Mount Dempster** | **7.18** | **60** | Pn | Pn | 18 18 08.5 | -1.2 | |
| **D25K** | **Kavik River** | **7.26** | **14** | | Pn | 18 18 11.3 | +0.6 | |
| **G29M** | **Pine Creek** | **7.28** | **46** | Pn | Pn | 18 18 10.2 | -0.7 | |
| **B21K** | **Ikpikpuk River** | **7.41** | **351** | Pn | Pn | 18 18 10.8 | -1.8 | |
| **O30N** | **Mendenhall** | **7.42** | **96** | Pn | Pn | 18 18 09.9 | -3.0 | |
| **C23K** | **Itkillik River** | **7.50** | **2** | Pn | Pn | 18 18 14.5 | +0.6 | |
| **C18K** | **Utukok River** | **7.52** | **331** | Pn | Pn | 18 18 13.8 | -0.4 | |
| **C19K** | **Lookout Ridge** | **7.57** | **337** | Pn | Pn | 18 18 13.9 | -1.0 | |
| **E28M** | **Babbage River** | **7.92** | **33** | Pn | Pn | 18 18 17.3 | -2.4 | |
| **G30M** | **tAoh Zraii Nji** | **7.93** | **48** | Pn | Pn | 18 18 16.6 | -3.1 | |
| **WHY** | **Whitehorse** | **8.02** | **95** | Pn | Pn | 18 18 18.6 | -2.5 | |
| **B20K** | **Meade River** | **8.03** | **345** | Pn | Pn | 18 18 20.5 | -0.5 | |
| **E29M** | **Blow River** | **8.21** | **37** | Pn | Pn | 18 18 23.0 | -0.5 | |
| **FARO** | **Faro, Yukon** | **8.35** | **83** | Pn | Pn | 18 18 24.5 | -1.1 | |
| **G31M** | **Satah River** | **8.59** | **51** | Pn | Pn | 18 18 26.6 | -2.1 | |
| **SIT** | **Sitka** | **9.64** | **116** | Pn | Pn | 18 18 40.6 | -2.5 | |
| **Q32M** | **Nakina River** | **9.92** | **102** | Pn | Pn | 18 18 44.7 | -2.4 | |
| **R33M** | **Jennings River** | **10.32** | **98** | Pn | Pn | 18 18 50.3 | -2.2 | |
| **U33K** | **Whale Pass** | **11.18** | **116** | Pn | Pn | 18 19 02.7 | -1.4 | |

*IDC* ***14*** *18:20:19.1±0.8, 69°.67N×144°.88W, h0km, mb3.6/9, mbtmp3.7/14, ML3.8/5, MS3.3/5, Error ellipse: s-maj=21.0km s-min=13.5km az=79.0*

*AEIC* ***14*** *18:20:19.4±1.1, 69°.54N±0°.05×144°.7W±0°.1, h15km±6km, ML3.8, mb3.7/2(NEIC), ML3.9/122(NEIC), Mwr3.8/27(NEIC), Error ellipse: s-maj=8.2km s-min=5.2km az=199.0*

*NEIC* ***14*** *18:20:19.5±1.1, 69°.57N±0°.04×144°.60W±0°.09, h3km±5km, Error ellipse: s-maj=6.9km s-min=2.1km az=217.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.34; $M_{\theta\theta}$-3.60; $M_{\phi\phi}$3.27; $M_{r\theta}$0.85; $M_{\theta\phi}$-4.59; $M_{\phi r}$-1.12; Fault plane solution: $M_0$5.91000×$10^{14}$ NP1: $\phi_s$199.25000°, $\delta$78.46000°, $\lambda$8.26000°. NP2:$\phi_s$107.58000°, $\delta$81.90000°, $\lambda$168.34000°. Principal axes: T 5.9043, Plg14.0000°, Azm63.0000°; N 0.0065, Plg76.0000°, Azm253.0000°; P -5.9108, Plg2.0000°, Azm154.0000°;*

*NEIC* ***14*** *18:20:19.2, 69°.54N×144°.68W, h14km*

**ISC 14 18:20:20.1±0.5, 69°.57N±0°.04×144°.59W±0°.03, h14km, n188, σ1s06/185, mb3.5/9, MS3.5/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **C27K** | **Jago River** | **0.31** | **79** | | **Pg** | **18 20 25.7** | **-0.8** | |
| C27K | | | | | **Sg** | **18 20 29.9** | **-1.0** | |
| C27K | | | | IAML | | 18 20 30.3 | | |
| | comp=N,10μm,0.4s | | | | | | | |
| C27K | | | | IAML | | 18 20 32.0 | | |
| | comp=E,9μm,0.2s | | | | | | | |
| **C26K** | **Camden Bay** | **0.37** | **342** | | **Pg** | **18 20 27.6** | **+0.1** | |
| **D25K** | **Kavik River** | **0.68** | **250** | | **Pg** | **18 20 31.2** | **-2.1** | |
| **D27M** | **Malcolm River** | **1.32** | **103** | | **Pn** | **18 20 43.2** | **-0.9** | |
| D27M | | | | IAML | | 18 21 07.8 | | |
| | comp=N,2μm,0.8s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.45** | **278** | | **Pb** | **18 20 46.7** | **0.0** | |
| C24K | | | | | **Sg** | **18 21 06.2** | **-0.4** | |
| **C24K** | **Franklin Bluff** | **1.45** | **278** | IAML | | 18 21 08.2 | | |
| | comp=E,2μm,0.4s | | | | | | | |
| **D24K** | **Happy Valley** | **1.56** | **257** | Pn | **Pn** | **18 20 47.7** | **+0.4** | |
| D24K | | | | | **Sg** | **18 21 10.1** | **-0.1** | |
| D24K | | | | IAML | | 18 21 13.5 | | |
| | comp=N,2μm,0.5s | | | | | | | |
| D24K | | | | IAML | | 18 21 16.4 | | |
| | comp=E,1μm,0.7s | | | | | | | |
| **E27K** | **Coleen River** | **1.76** | **141** | | **Pn** | **18 20 50.8** | **+0.6** | |
| **E27K** | **Coleen River** | **1.76** | **141** | | **Sn** | **18 21 13.7** | **+1.4** | |
| **E27K** | **Coleen River** | **1.76** | **141** | IAML | | 18 21 18.5 | | |
| | comp=E,847nm,0.7s | | | | | | | |
| E27K | | | | IAML | | 18 21 19.6 | | |
| | comp=N,725nm,0.8s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **175** | | **Pn** | **18 20 52.5** | **+0.6** | |
| **F26K** | **Sheenjek River** | **1.89** | **175** | | **Sb** | **18 21 17.6** | **-0.1** | |
| **F26K** | **Sheenjek River** | **1.89** | **175** | IAML | | 18 21 19.9 | | |
| | comp=E,2μm,0.8s | | | | | | | |
| F26K | | | | IAML | | 18 21 25.1 | | |
| | comp=N,819nm,0.6s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.02** | **245** | | **Pn** | **18 20 54.4** | **+0.7** | |
| **TOLK** | **Toolik Lake Re** | **2.02** | **245** | | **Sb** | **18 21 20.9** | **-0.5** | |
| **F25K** | **Christian Rive** | **2.02** | **192** | | **Pn** | **18 20 54.7** | **+0.9** | |
| **F25K** | **Christian Rive** | **2.02** | **192** | | **Sb** | **18 21 21.8** | **+0.2** | |
| **F25K** | **Christian Rive** | **2.02** | **192** | IAML | | 18 21 24.9 | | |
| | comp=E,909nm,0.9s | | | | | | | |
| F25K | | | | IAML | | 18 21 27.8 | | |
| | comp=N,913nm,0.6s | | | | | | | |
| **E28M** | **Babbage River** | **2.06** | **116** | Pn | **Pn** | **18 20 55.4** | **+1.2** | |
| **E28M** | **Babbage River** | **2.06** | **116** | | **Sb** | **18 21 23.2** | **+0.7** | |
| **E28M** | **Babbage River** | **2.06** | **116** | IAML | | 18 21 26.3 | | |
| | comp=N,698nm,0.5s | | | | | | | |
| E28M | | | | IAML | | 18 21 27.8 | | |
| | comp=E,603nm,0.8s | | | | | | | |
| **E24K** | **Your Creek** | **2.06** | **225** | | **Pn** | **18 20 55.2** | **+0.9** | |
| **D28M** | **Stokes Point** | **2.08** | **94** | | **Pb** | **18 20 57.4** | **-0.1** | |
| **C23K** | **Itkillik River** | **2.12** | **280** | Pn | **Pn** | **18 20 55.1** | **+0.1** | |
| C23K | | | | IAML | | 18 21 32.6 | | |
| | comp=E,969nm,0.4s | | | | | | | |
| C23K | | | | IAML | | 18 21 41.9 | | |
| | comp=N,834nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.15** | **180** | | **Pn** | **18 20 56.2** | **+0.7** | |
| **D23K** | **Nanushuk River** | **2.25** | **257** | | **Pn** | **18 20 57.8** | **+1.0** | |
| **E23K** | **Chandalar** | **2.37** | **233** | | **Pn** | **18 20 59.3** | **+0.7** | |
| **F24K** | **Squaw Lake** | **2.39** | **212** | | **Pn** | **18 20 59.8** | **+0.7** | |
| **F28M** | **Old Crow** | **2.62** | **136** | | **Pn** | **18 21 02.3** | **+0.4** | |
| F28M | | | | IAML | | 18 21 44.4 | | |
| | comp=E,506nm,0.6s | | | | | | | |
| F28M | | | | IAML | | 18 21 50.1 | | |
| | comp=N,458nm,0.5s | | | | | | | |
| **E29M** | **Blow River** | **2.69** | **113** | Pn | **Pn** | **18 21 04.7** | **+1.9** | |
| E29M | | | | IAML | | 18 21 45.1 | | |
| | comp=N,568nm,0.6s | | | | | | | |
| E29M | | | | IAML | | 18 21 49.4 | | |
| | comp=E,577nm,0.5s | | | | | | | |
| **D22K** | **Ayikyak River** | **2.97** | **260** | Pn | **Pn** | **18 21 07.2** | **+0.5** | |
| D22K | | | | IAML | | 18 22 07.4 | | |
| | comp=E,365nm,1.0s | | | | | | | |
| D22K | | | | IAML | | 18 22 08.5 | | |
| | comp=N,378nm,1.1s | | | | | | | |
| **G27K** | **Doyon Strip** | **2.98** | **157** | | **Pn** | **18 21 07.5** | **+0.6** | |
| **FYU** | **Fort Yukon** | **3.02** | **185** | | **Pn** | **18 21 08.6** | **+1.2** | |
| **G24K** | **Hadweenzic Riv** | **3.08** | **202** | | **Pn** | **18 21 08.5** | **+0.3** | |
| **B22K** | **Teshekpuk Lake** | **3.14** | **288** | Pn | **Pn** | **18 21 09.8** | **+0.8** | |
| B22K | | | | IAML | | 18 22 13.1 | | |
| | comp=E,410nm,1.0s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.51** | **276** | Pn | **Pn** | **18 21 14.9** | **+0.7** | |
| B21K | | | | IAML | | 18 22 42.7 | | |
| | comp=E,211nm,1.5s | | | | | | | |
| **G23K** | **Bananza Creek** | **3.52** | **218** | Pn | **Pn** | **18 21 15.0** | **+0.8** | |
| G23K | | | | IAML | | 18 22 19.9 | | |
| | comp=E,230nm,1.1s | | | | | | | |
| G23K | | | | IAML | | 18 22 22.0 | | |
| | comp=N,174nm,1.5s | | | | | | | |
| **E21K** | **Killik River** | **3.56** | **256** | Pn | **Pn** | **18 21 14.8** | **-0.1** | |
| E21K | | | | IAML | | 18 22 23.8 | | |
| | comp=N,188nm,0.7s | | | | | | | |
| **G29M** | **Pine Creek** | **3.62** | **134** | Pn | **Pn** | **18 21 16.4** | **+0.8** | |
| **F30M** | **Barrier River** | **3.78** | **117** | | **Pn** | **18 21 19.2** | **+1.4** | |
| **H24K** | **Noodor Dome** | **3.95** | **200** | | **Pn** | **18 21 20.5** | **+0.2** | |
| H24K | | | | IAML | | 18 22 31.6 | | |
| | comp=N,192nm,1.0s | | | | | | | |
| **F21K** | **Alatna River** | **4.04** | **239** | Pn | **Pn** | **18 21 21.9** | **+0.4** | |
| F21K | | | | IAML | | 18 22 38.4 | | |
| | comp=E,141nm,1.0s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.05** | **126** | Pn | **Pn** | **18 21 23.0** | **+1.4** | |
| G30M | | | | IAML | | 18 22 35.0 | | |
| | comp=E,149nm,1.1s | | | | | | | |
| G30M | | | | IAML | | 18 22 41.8 | | |
| | comp=N,160nm,0.7s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.08** | **185** | | **Pn** | **18 21 22.3** | **+0.1** | |
| PRP | | | | IAML | | 18 22 14.8 | | |
| | comp=E,133nm,0.4s | | | | | | | |
| PRP | | | | IAML | | 18 22 14.8 | | |
| | comp=N,193nm,0.5s | | | | | | | |
| **H29M** | **Whitestone** | **4.10** | **142** | Pn | **Pn** | **18 21 23.4** | **+1.1** | |
| H29M | | | | IAML | | 18 22 38.6 | | |
| | comp=N,164nm,1.1s | | | | | | | |
| **INK** | **Inuvik** | **4.19** | **102** | Pn | **Pn** | **18 21 25.0** | **+1.6** | |
| **INK** | **Inuvik** | **4.19** | **102** | Pn | **Pn** | **18 21 25.5** | **+2.1** | |
| | comp=N,2.3nm,0.3s,baz=331,slow=5.6,SNR=11 | | | | | | | |
| INK | | | | Sn | **Sn** | **18 22 11.8** | **-0.2** | |
| | comp=N,4.5nm,0.3s,baz=300,slow=13,SNR=5.1 | | | | | | | |
| INK | | | | Lg | Lg | 18 22 32.3 | | |
| | comp=N,6.8nm,0.3s,baz=342,slow=20,SNR=4.6 comp=N,9.7nm,0.6s | | | | | | | |
| **H23K** | **Yukon River** | **4.21** | **209** | | **Pn** | **18 21 24.3** | **+0.6** | |
| H23K | | | | IAML | | 18 22 30.9 | | |
| | comp=N,162nm,0.9s | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.32** | **172** | | **Pn** | **18 21 25.9** | **+0.7** | |
| **EPYK** | **Eagle Plains** | **4.37** | **134** | Pn | **Pn** | **18 21 26.6** | **+0.7** | |
| **B20K** | **Meade River** | **4.38** | **282** | | **Pn** | **18 21 26.5** | **+0.4** | |
| B20K | | | | IAML | | 18 23 04.9 | | |
| | comp=N,147nm,1.1s | | | | | | | |
| **I28M** | **Miner Creek** | **4.51** | **154** | Pn | **Pn** | **18 21 29.1** | **+1.2** | |
| I28M | | | | IAML | | 18 22 29.1 | | |
| | comp=N,102nm,0.5s | | | | | | | |
| I28M | | | | IAML | | 18 22 54.7 | | |
| | comp=E,95nm,1.5s | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.52** | **113** | | **Pn** | **18 21 29.1** | **+1.1** | |
| F31M | | | | IAML | | 18 22 42.9 | | |
| | comp=N,111nm,1.2s | | | | | | | |
| F31M | | | | IAML | | 18 22 58.8 | | |
| | comp=E,95nm,1.2s | | | | | | | |
| **G21K** | **Allakaket** | **4.54** | **232** | | **Pn** | **18 21 28.1** | **-0.1** | |
| G21K | | | | IAML | | 18 22 50.1 | | |
| | comp=N,106nm,1.5s | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.60** | **195** | | **Pn** | **18 21 29.8** | **+0.6** | |
| POKR | | | | IAML | | 18 22 53.4 | | |
| | comp=E,106nm,0.8s | | | | | | | |
| POKR | | | | IAML | | 18 22 54.0 | | |
| | comp=N,108nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **4.67** | **120** | Pn | **Pn** | **18 21 31.2** | **+1.2** | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **205** | | **Pn** | **18 21 32.4** | **+0.5** | |
| I23K | | | | IAML | | 18 22 55.1 | | |
| | comp=E,106nm,0.8s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **199** | | **Pn** | **18 21 32.8** | **+0.4** | |
| MDM | | | | IAML | | 18 22 56.7 | | |
| | comp=N,111nm,1.0s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.84** | **244** | Pn | **Pn** | **18 21 32.8** | **+0.4** | |
| **I29M** | **Ogilvie Camp,** | **4.87** | **147** | Pn | **Pn** | **18 21 33.4** | **+0.6** | |
| I29M | | | | IAML | | 18 22 38.4 | | |
| | comp=N,102nm,0.6s | | | | | | | |
| I29M | | | | IAML | | 18 22 59.0 | | |
| | comp=E,82nm,1.1s | | | | | | | |
| **COLA** | **College** | **4.88** | **197** | | **Pn** | **18 21 34.5** | **+1.6** | |
| **IL31** | | **4.90** | **192** | | **Pn** | **18 21 33.5** | **+0.4** | |
| **ILAR** | **Eielson Array** | **4.90** | **192** | | **Pn** | **18 21 33.6** | **+0.4** | |
| **ILAR** | **Eielson Array** | **4.90** | **192** | Pn | **Pn** | **18 21 34.2** | **+1.0** | |
| | comp=E,2.5nm,0.3s,baz=5.6,slow=13,SNR=18 | | | | | | | |
| ILAR | | | | Sn | **Sn** | **18 22 30.6** | **+1.0** | |
| | comp=E,3.5nm,0.3s,baz=29,slow=18,SNR=6.1 | | | | | | | |
| ILAR | | | | Lg | Lg | 18 22 53.1 | | |
| | comp=E,5.0nm,0.3s,baz=3.2,slow=30,SNR=4.1 | | | | | | | |
| ILAR | | | | LR | LR | 18 23 53.2 | | |
| | comp=E,90nm,19.3s,baz=102,slow=43 comp=E,4.3nm,0.4s | | | | | | | |
| **D19K** | **Kuna River** | **4.98** | **264** | Pn | **Pn** | **18 21 34.7** | **+0.4** | |
| D19K | | | | IAML | | 18 23 14.3 | | |
| | comp=E,58nm,1.0s | | | | | | | |
| **J25K** | **Salcha River,** | **4.99** | **184** | | **Pn** | **18 21 35.4** | **+0.9** | |
| J25K | | | | IAML | | 18 23 04.9 | | |
| | comp=N,69nm,0.9s | | | | | | | |
| J25K | | | | IAML | | 18 23 05.3 | | |
| | comp=E,84nm,1.4s | | | | | | | |
| **EGAK** | **Eagle** | **4.99** | **163** | Pn | **Pn** | **18 21 35.1** | **+0.6** | |
| EGAK | | | | IAML | | 18 23 04.3 | | |
| | comp=E,70nm,1.4s | | | | | | | |
| EGAK | | | | IAML | | 18 23 07.0 | | |
| | comp=E,63nm,1.1s | | | | | | | |
| **H21K** | **Melozitna Rive** | **5.03** | **223** | | **Pn** | **18 21 35.5** | **+0.5** | |
| H21K | | | | IAML | | 18 23 03.9 | | |
| | comp=E,102nm,1.2s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10** | **196** | Pn | **Pn** | **18 21 36.4** | **+0.4** | |
| CCB | | | | IAML | | 18 23 07.7 | | |
| | comp=E,75nm,1.1s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.11** | **175** | Pn | **Pn** | **18 21 37.0** | **+0.8** | |
| J26L | | | | IAML | | 18 22 39.8 | | |
| | comp=N,61nm,0.6s | | | | | | | |
| J26L | | | | IAML | | 18 23 10.7 | | |
| | comp=E,72nm,1.4s | | | | | | | |
| **E19K** | **Redstone River** | **5.11** | **252** | Pn | **Pn** | **18 21 35.9** | **-0.2** | |
| E19K | | | | IAML | | 18 23 17.5 | | |
| | comp=N,95nm,0.7s | | | | | | | |
| E19K | | | | IAML | | 18 23 19.5 | | |
| | comp=E,76nm,0.8s | | | | | | | |
| **MLY** | **Manley** | **5.14** | **211** | Pn | **Pn** | **18 21 37.2** | **+0.7** | |
| MLY | | | | IAML | | 18 23 12.6 | | |
| | comp=E,55nm,1.9s | | | | | | | |
| **HDA** | **Harding Lake** | **5.26** | **191** | | **Pn** | **18 21 39.2** | **+1.0** | |
| HDA | | | | IAML | | 18 23 12.5 | | |
| | comp=N,66nm,1.2s | | | | | | | |
| HDA | | | | IAML | | 18 23 14.8 | | |
| | comp=E,86nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **201** | | **Pn** | **18 21 38.9** | **+0.3** | |
| NEA2 | | | | IAML | | 18 23 11.5 | | |
| | comp=E,49nm,1.6s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **197** | | **Pn** | **18 21 39.2** | **+0.5** | |
| WRH | | | | IAML | | 18 23 09.0 | | |
| | comp=E,67nm,1.5s | | | | | | | |
| WRH | | | | IAML | | 18 23 12.9 | | |
| | comp=N,61nm,1.3s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.33** | **272** | Pn | **Pn** | **18 21 39.3** | **+0.1** | |
| C19K | | | | IAML | | 18 23 34.5 | | |
| | comp=E,46nm,1.5s | | | | | | | |
| C19K | | | | IAML | | 18 23 41.8 | | |
| | comp=N,61nm,1.7s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.39** | **140** | Pn | **Pn** | **18 21 40.6** | **+0.6** | |
| **SCRK** | **Sand Creek** | **5.62** | **177** | Pn | **Pn** | **18 21 44.5** | **+1.3** | |
| **F19K** | **Shaleruckih Mo** | **5.62** | **247** | Pn | **Pn** | **18 21 43.2** | **+0.1** | |
| **J29N** | **Klondike Camp** | **5.71** | **151** | | **Pn** | **18 21 46.0** | **+1.6** | |
| **BWN** | **Browne** | **5.75** | **202** | | **Pn** | **18 21 45.8** | **+1.0** | |
| **K24K** | **Donnelly Dome** | **5.81** | **185** | | **Pn** | **18 21 46.5** | **+0.8** | |
| **G19K** | **Purcell Mounta** | **5.84** | **240** | Pn | **Pn** | **18 21 46.9** | **+0.8** | |
| **DAWY** | **Dawson** | **5.89** | **157** | | **Pn** | **18 21 48.2** | **+1.3** | |
| **J30M** | **Hart River** | **5.96** | **143** | Pn | **Pn** | **18 21 48.5** | **+0.7** | |
| **C18K** | **Utukok River** | **6.01** | **269** | Pn | **Pn** | **18 21 48.6** | **+0.1** | |
| **BPAW** | **Bear Paw Mtn.** | **6.04** | **208** | Pn | **Pn** | **18 21 49.2** | **+0.4** | |
| **H19K** | **Roundabout Mou** | **6.08** | **234** | Pn | **Pn** | **18 21 49.8** | **+0.4** | |
| **MCK** | **McKinley** | **6.11** | **198** | | **Pn** | **18 21 50.2** | **+0.3** | |
| **I20K** | **Naaghedeneel** | **6.14** | **223** | Pn | **Pn** | **18 21 50.9** | **+0.7** | |
| **E18K** | **Tukpahlearik C** | **6.26** | **258** | Pn | **Pn** | **18 21 52.2** | **+0.3** | |
| **K29M** | **Barlow Dome** | **6.39** | **151** | Pn | **Pn** | **18 21 55.0** | **+1.2** | |
| **RND** | **Reindeer** | **6.42** | **197** | Pn | **Pn** | **18 21 54.7** | **+0.6** | |
| **G18K** | **Tagagawik** | **6.49** | **242** | Pn | **Pn** | **18 21 55.5** | **+0.5** | |
| **J20K** | **Nowinta River** | **6.59** | **219** | Pn | **Pn** | **18 21 57.1** | **+0.8** | |
| **L26K** | **Log Cabin Wild** | **6.59** | **175** | | **Pn** | **18 21 57.7** | **+1.3** | |
| **DHY** | **Denali Highway** | **6.62** | **191** | Pn | **Pn** | **18 21 58.2** | **+1.3** | |
| **BCAR** | **Beaver Creek A** | **6.63** | **169** | Pn | **Pn** | **18 21 58.1** | **+1.1** | |
| **L27K** | **Beaver Creek,** | **6.63** | **169** | Pn | **Pn** | **18 21 58.1** | **+1.1** | |
| **PAX** | **Paxson** | **6.64** | **183** | | **Pn** | **18 21 57.4** | **+0.2** | |
| **RDOG** | **Red Dog Mine** | **6.80** | **266** | Pn | **Pn** | **18 21 58.8** | **-0.5** | |
| **A36M** | **Sachs Harbour** | **6.81** | **60** | Pn | **Pn** | **18 21 59.5** | **+0.1** | |
| **H18K** | **Honhosa River** | **6.91** | **237** | Pn | **Pn** | **18 22 01.1** | **+0.3** | |
| **WAT1** | **Susitna Watana** | **6.95** | **195** | | **Pn** | **18 22 03.0** | **+1.6** | |
| **L29M** | **L29M** | **6.98** | **155** | Pn | **Pn** | **18 22 03.1** | **+1.3** | |
| **F17K** | **Baldwin Pennin** | **6.99** | **251** | Pn | **Pn** | **18 22 02.1** | **+0.3** | |
| **J19K** | **Poorman** | **7.08** | **223** | Pn | **Pn** | **18 22 04.0** | **+0.9** | |
| **M26K** | **Nabesna, AK** | **7.23** | **174** | Pn | **Pn** | **18 22 07.3** | **+2.1** | |
| **K20K** | **Telida** | **7.29** | **216** | Pn | **Pn** | **18 22 06.4** | **+0.3** | |
| **M27K** | **Edge Creek, AK** | **7.32** | **170** | | **Pn** | **18 22 07.6** | **+1.0** | |
| **M24K** | **Tolsona, Glenn** | **7.52** | **186** | Pn | **Pn** | **18 22 09.9** | **+0.7** | |
| **H17K** | **Granite Mounta** | **7.53** | **239** | Pn | **Pn** | **18 22 09.7** | **+0.5** | |
| **CUT** | **Chulitna** | **7.55** | **201** | Pn | **Pn** | **18 22 10.2** | **+0.6** | |
| **M29M** | **Somme Creek** | **7.57** | **158** | Pn | **Pn** | **18 22 10.8** | **+0.8** | |
| **C16K** | **Lisburne Hills** | **7.58** | **270** | Pn | **Pn** | **18 22 08.9** | **-1.0** | |
| **J18K** | **Innoko River** | **7.79** | **224** | Pn | **Pn** | **18 22 12.8** | **-0.1** | |
| **SCM** | **Sheep Creek Mo** | **7.85** | **190** | Pn | **Pn** | **18 22 13.9** | **+0.2** | |
| **SML** | **Sawmill** | **7.94** | **193** | Pn | **Pn** | **18 22 15.0** | **0.0** | |
| **G16K** | **Koyuk River** | **7.98** | **247** | Pn | **Pn** | **18 22 15.1** | **-0.4** | |
| **N25K** | **Chitina, Valde** | **8.00** | **180** | Pn | **Pn** | **18 22 16.1** | **+0.3** | |
| **GHO** | **Glory Hole Cre** | **8.03** | **195** | Pn | **Pn** | **18 22 16.8** | **+0.7** | |
| **KLU** | **Klutina** | **8.13** | **185** | Pn | **Pn** | **18 22 18.5** | **+1.0** | |
| **SKT** | **Skwentna** | **8.13** | **204** | Pn | **Pn** | **18 22 18.2** | **+0.7** | |
| **GLB** | **Gilahina Butte** | **8.17** | **177** | Pn | **Pn** | **18 22 18.3** | **+0.2** | |
| **MCARA** | **McCarthy VSAT** | **8.24** | **175** | Pn | **Pn** | **18 22 16.1** | **-2.9** | |
| **KNK** | **Knik Glacier** | **8.34** | **193** | | **Pn** | **18 22 20.2** | **-0.3** | |
| **J17K** | **VABM Dome** | **8.46** | **230** | Pn | **Pn** | **18 22 21.8** | **-0.2** | |
| **M20K** | **Styx River** | **8.47** | **209** | | **Pn** | **18 22 23.3** | **+1.1** | |
| **M31M** | **Drury Creek, Y** | **8.48** | **146** | Pn | **Pn** | **18 22 23.0** | **+0.7** | |
| **L19K** | **White Mountain** | **8.51** | **214** | Pn | **Pn** | **18 22 22.6** | **-0.2** | |
| **SUA** | **Susitna One** | **8.52** | **200** | Pn | **Pn** | **18 22 24.5** | **+1.5** | |
| **I17K** | **Talalkeet** | **8.53** | **236** | Pn | **Pn** | **18 22 23.3** | **-0.6** | |
| **F15K** | **North Star Dit** | **8.55** | **253** | Pn | **Pn** | **18 22 21.9** | **-1.3** | |
| **FARO** | **Faro, Yukon** | **8.67** | **143** | | **Pn** | **18 22 25.5** | **+0.6** | |
| **M19K** | **Big River Lodg** | **8.67** | **212** | Pn | **Pn** | **18 22 25.8** | **+0.9** | |
| **N30M** | **Aishikik Lake** | **8.71** | **156** | Pn | **Pn** | **18 22 26.9** | **+1.4** | |
| **CTGM** | **Chitina Glacie** | **8.74** | **170** | | **Pn** | **18 22 28.0** | **+1.9** | |
| **FIS** | **Fire Island** | **8.77** | **198** | Pn | **Pn** | **18 22 27.2** | **+1.0** | |
| **MMPY** | **Sheldon Lake,** | **8.80** | **136** | | **Pn** | **18 22 27.2** | **+0.5** | |
| **K17K** | **Iditarod** | **8.82** | **225** | Pn | **Pn** | **18 22 27.5** | **+0.6** | |
| **L18K** | **Granite Mounta** | **8.86** | **220** | Pn | **Pn** | **18 22 27.8** | **+0.3** | |
| **CRQM** | **Cirque** | **8.87** | **175** | | **Pn** | **18 22 29.5** | **+1.7** | |
| **TGL** | **Tana Glacier** | **8.88** | **174** | Pn | **Pn** | **18 22 29.8** | **+2.0** | |
| **PWL** | **Port Wells** | **8.88** | **192** | Pn | **Pn** | **18 22 30.0** | **+2.2** | |
| **N31M** | **Braeburn, Yuko** | **8.89** | **152** | Pn | **Pn** | **18 22 29.0** | **+1.1** | |
| **LOGN** | **Logan Glacier** | **8.91** | **169** | Pn | **Pn** | **18 22 29.0** | **+0.7** | |
| **GRNC** | **Granite Creek** | **8.95** | **171** | | **Pn** | **18 22 30.5** | **+1.5** | |
| **J16K** | **Anvik River** | **8.97** | **233** | Pn | **Pn** | **18 22 28.9** | **-0.1** | |
| **YUK6** | **Outpost Mounta** | **9.04** | **160** | | **Pn** | **18 22 31.2** | **+1.1** | |
| **ISLE** | **Juniper Island** | **9.05** | **173** | | **Pn** | **18 22 30.9** | **+0.6** | |
| **WAX** | **Waxell Ridge** | **9.19** | **175** | Pn | **Pn** | **18 22 33.8** | **+1.8** | |
| **RAGM** | **Ragged Mountai** | **9.22** | **180** | Pn | **Pn** | **18 22 33.5** | **+1.0** | |
| **HIN** | **Hinchinbrook I** | **9.24** | **186** | Pn | **Pn** | **18 22 32.9** | **+0.1** | |
| **HMT** | **Hamilton** | **9.27** | **179** | Pn | **Pn** | **18 22 35.2** | **+2.0** | |
| **TABL** | **Table Mountain** | **9.28** | **169** | | **Pn** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** | **18.62** | **221** | | **Pn** | **18 30 09.2** | **-0.1** |
| JAGI | | | | IAmb | IAmb | 18 30 39.5 | |
| | comp=Z,53nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **21.36** | **174** | P | **P** | **18 30 37.2** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **23.65** | **182** | P | **P** | **18 30 59.4** | **+0.5** |
| **COEN** | **Coen** | **25.67** | **140** | P | **P** | **18 31 18.4** | **+1.1** |
| COEN | | | | IAmb | IAmb | 18 31 38.2 | |
| | comp=Z,37nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **26.50** | **163** | P | **P** | **18 31 25.2** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 18 31 54.2 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **26.65** | **163** | P | **P** | **18 31 26.4** | **+0.3** |
| **WRA** | **Warramunga Arr** | **26.65** | **163** | P | **P** | **18 31 26.0** | **-0.1** |
| | comp=Z,1.4nm,1.1s,baz=344,slow=9.9,SNR=17 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 34 47.1** | **+0.8** |
| | comp=Z,0.5nm,0.9s,baz=334,slow=2.1,SNR=1.7 | | | | | | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.84** | **193** | P | **P** | **18 31 36.8** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 18 31 51.4 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **GSI** | **Gunungsitoli** | **29.07** | **262** | P | **P** | **18 31 49.0** | **+1.2** |
| GSI | | | | IAmb | IAmb | 18 32 29.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **ENH** | **Enshi** | **29.17** | **329** | P | **P** | **18 31 50.7** | **+2.2** |
| ENH | | | | IAmb | IAmb | 18 32 15.1 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **30.09** | **166** | P | **P** | **18 31 56.8** | **+0.2** |
| **ASAR** | **Alice Springs** | **30.09** | **166** | P | **P** | **18 31 56.6** | **-0.1** |
| | comp=Z,0.6nm,0.5s,baz=343,slow=7.1,SNR=16 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 34 55.3** | **+0.5** |
| | comp=Z,0.7nm,0.5s,baz=348,slow=2.3,SNR=9.8 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **GIRL** | **Giralia** | **30.57** | **202** | P | **P** | **18 32 02.4** | **+1.6** |
| **PATS** | **Pohnpei** | **31.76** | **86** | P | **P** | **18 32 13.1** | **+1.7** |
| **MORW** | **Morawa** | **35.96** | **196** | P | **P** | **18 32 47.9** | **+0.4** |
| **FORT** | **Forrest** | **36.30** | **178** | P | **P** | **18 32 50.9** | **+0.5** |
| **XLT** | **XiLinHaoTe** | **39.12** | **348** | *e*PKPbc | P | 18 33 19.1 | +5.1 |
| **NWAO** | **Narrogin (SRO)** | **39.38** | **192** | P | **P** | **18 33 17.1** | **+0.9** |
| **BBOO** | **Buckleboo** | **39.38** | **167** | P | **P** | **18 33 16.8** | **+0.6** |
| **STKA** | **Stephens Creek** | **40.08** | **160** | P | **P** | **18 33 22.7** | **+0.7** |
| **STKA** | **Stephens Creek** | **40.08** | **160** | P | **P** | **18 33 21.2** | **-0.8** |
| | comp=Z,2.7nm,0.7s,baz=319,slow=6.6,SNR=4.3 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.76** | **325** | P | **P** | **18 35 21.3** | **-1.1** |
| | comp=Z,0.7nm,0.7s,baz=105,slow=8.1,SNR=2.8 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **BOOM** | **Boomskoye usch** | **57.65** | **318** | P | **P** | **18 35 38.9** | **+2.9** |
| BOOM | | | | IAmb | IAmb | 18 35 54.4 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **GNI** | **Garni** | **79.97** | **310** | LR | LR | 19 18 43.2 | |
| | comp=Z,178nm,20.3s,baz=214,slow=40 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.50** | **340** | P | **P** | **18 38 35.4** | **-0.9** |
| | comp=Z,2.6nm,1.0s,baz=87,slow=6.2,SNR=3.7 | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.96** | **289** | PKP | **PKPdf** | **18 44 36.2** | **-2.6** |
| | comp=Z,0.4nm,0.7s,baz=112,slow=3.2,SNR=3.7 | | | | | | |

*IDC **14** 18:45:51.8±1.5, 10°.90N×145°.08E, h0km, mb3.6/8, mbtmp3.6/9, ML3.2/1, Error ellipse: s-maj=59.2km s-min=18.2km az=92.0*

**ISC 14 18:45:57.0±1.4, 10°.9N±0°.1×145°.0E±0°.4, h35km, n9, σ0s89/10, mb3.6/8, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **2.67** | **357** | Pn | **Pn** | **18 46 37.2** | **-0.3** |
| | 3.9nm,0.3s,baz=107,slow=18,SNR=1.5 | | | | | | |
| GUMO | | | | Sn | **Sn** | **18 47 08.7** | **+0.1** |
| | 7.3nm,0.3s,baz=88,slow=23,SNR=1.7 | | | | | | |
| | 73nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **26.26** | **348** | P | **P** | **18 51 27.8** | **-1.2** |
| | 1.6nm,1.1s,baz=120,slow=7.2,SNR=1.3 | | | | | | |
| | 1.6nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.41** | **199** | P | **P** | **18 52 22.5** | **-1.3** |
| | 0.5nm,0.7s,baz=20,slow=9.4,SNR=5.9 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **36.04** | **197** | P | **P** | **18 52 56.0** | **+0.8** |
| | 0.2nm,0.5s,baz=22,slow=9.1,SNR=7.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.53** | **317** | P | **P** | **18 56 24.7** | **+0.7** |
| | 0.4nm,0.8s,baz=90,slow=8.5,SNR=3.6 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.89** | **325** | P | **P** | **18 56 26.8** | **+0.7** |
| | 0.2nm,0.3s,baz=90,slow=6.3,SNR=1.7 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.77** | **321** | P | **P** | **18 56 45.1** | **+0.2** |
| | 1.2nm,0.7s,baz=106,slow=6.1,SNR=9.8 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **70.92** | **25** | P | **P** | **18 57 10.7** | **+0.3** |
| | 0.1nm,0.6s,baz=250,slow=5.4,SNR=1.2 | | | | | | |
| | 0.1nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **72.12** | **322** | P | **P** | **18 57 18.7** | **+0.8** |
| | 1.3nm,0.6s,baz=95,slow=8.6,SNR=10 | | | | | | |
| | 1.3nm,0.6s | | | | | | |

*IDC **14** 19:04:47.2±10.0, 35°.81N×70°.36E, h0km, mb3.8/3, mbtmp3.7/5, ML2.8/2, MS3.8/1, Error ellipse: s-maj=184.1km s-min=41.3km az=160.0*

*NNC **14** 19:05:02.1±2.5, 36°.67N×70°.60E, h0km, mb4.3, mpv3.9, Error ellipse: s-maj=22.6km s-min=18.4km az=121.0*

**ISC 14 19:05:02.2±2.3, 36°.4N±0°.2×70°.5E±0°.2, h100km, n15, σ0s46/18, 6C-1D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **6.26** | **22** | P | **Pn** | **19 06 32.7** | **+0.4** |
| | SNR=95 | | | | | | |
| **KK31** | **Karatay Array** | **6.72** | **0** | P | **Pn** | **19 06 38.2** | **0.0** |
| | 3.0nm,0.3s,baz=176,slow=12,SNR=65 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **19 07 52.6** | **-0.7** |
| | 1.1nm,0.3s,baz=53,slow=39,SNR=4.1 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.77** | **21** | P | **Pn** | **19 06 39.7** | **+0.6** |
| | SNR=9.7 | | | | | | |
| **AAK** | **Ala-Archa** | **6.97** | **25** | ⇑P | **Pn** | **19 06 41.1** | **-0.8** |
| | 4.1nm,0.6s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **19 08 00.2** | **+0.5** |
| | 8.3nm,0.6s | | | | | | |
| **CHMS** | **Chumysh** | **7.38** | **25** | P | **Pn** | **19 06 47.7** | **+0.4** |
| | SNR=7.6 | | | | | | |
| **CHMS** | **Chumysh** | **7.38** | **25** | ⇑P | **Pn** | **19 06 47.0** | **-0.3** |
| | 6.4nm,0.4s | | | | | | |
| CHMS | | | | ⇓S | **Sn** | **19 08 09.2** | **-0.2** |
| | 8.8nm,0.6s | | | | | | |
| **USP** | **Ospenovka** | **7.54** | **23** | P | **Pn** | **19 06 49.7** | **+0.3** |
| | SNR=5.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.63** | **29** | P | **Pn** | **19 06 51.2** | **+0.4** |
| | SNR=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.63** | **29** | ⇑P | **Pn** | **19 06 50.5** | **-0.3** |
| | 3.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **19 08 16.0** | **+0.3** |
| | 3.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.63** | **37** | Pn | **Pn** | **19 08 10.5** | **-0.7** |
| | 0.1nm,0.3s,baz=220,slow=12,SNR=4.4 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.65** | **360** | P | **Pn** | **19 08 49.3** | **0.0** |
| | baz=178,slow=7.2,SNR=2.9 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.20** | **25** | P | **P** | **19 09 28.6** | **-0.1** |
| | 1.9nm,0.4s,baz=213,slow=11,SNR=12 | | | | | | |
| | 1.9nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.11** | **338** | P | **P** | **19 12 35.7** | **-0.1** |
| | 1.0nm,0.7s,baz=108,slow=8.6,SNR=1.5 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **42.91** | **322** | P | **P** | **19 12 50.8** | **+0.2** |
| | 0.9nm,0.5s,baz=81,slow=8.9,SNR=4.1 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **46.58** | **60** | LR | LR | 19 36 58.5 | |
| | comp=Z,102nm,21.1s,baz=207,slow=41 | | | | | | |

*IDC **14** 19:08:06.9±1.0, 67°.83N×20°.68E, h0km, mbtmp2.8/4, ML2.2/4, Error ellipse: s-maj=16.5km s-min=5.9km az=120.0*

*HEL **14** 19:08:07.4±0.1, 67°.85N×20°.24E, h1km, ML2.1, Confirmed Induced event*

*BER **14** 19:08:07.5±1.6, 67°.80N×20°.24E, h0km, ML2.0, Confirmed Induced event*

**ISC 14 19:08:05.6±0.7, 67°.85N±0°.03×20°.24E±0°.02, h0km, n23, σ0s79/34, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LANU** | **Lannavaara** | **0.69** | **72** | *e*P | **Pg** | **19 08 19.4** | **+0.6** |
| LANU | | | | *e*S | **Sg** | **19 08 28.9** | **+1.1** |
| **SALU** | **Saltoluokta** | **0.81** | **235** | *e*P | **Pg** | **19 08 21.0** | **-0.2** |
| SALU | | | | *e*S | **Sg** | **19 08 32.5** | **+0.9** |
| **PAJU** | **Pajala** | **1.39** | **125** | *e*P | **Pg** | **19 08 31.7** | **-0.4** |
| PAJU | | | | *e*S | **Sg** | **19 08 49.8** | **-0.2** |
| **HEF** | **Hetta** | **1.40** | **65** | *e*P | **Pn** | **19 08 32.0** | **-0.3** |
| HEF | | | | *e*S | **Sb** | **19 08 50.7** | **-0.3** |
| **HEF** | **Hetta** | **1.40** | **65** | *e*P | **Pn** | **19 08 32.3** | **-0.1** |
| HEF | | | | *e*S | **Sg** | **19 08 50.4** | **-0.1** |
| **KLF** | **Kolari** | **1.56** | **112** | *e*P | **Pb** | **19 08 35.3** | **+0.1** |
| KLF | | | | *e*S | **Sn** | **19 08 55.2** | **-0.2** |
| **KTK1** | **Kautokeino** | **1.61** | **42** | *e*P | **Pb** | **19 08 36.0** | **-0.2** |
| KTK1 | | | | *e*S | **Sg** | **19 08 57.0** | **-0.2** |
| KTK1 | | | | IAML | | 19 09 00.3 | |
| | comp=Z,26nm,0.2s | | | | | | |
| **KTK1** | **Kautokeino** | **1.61** | **42** | *e*P | **Pg** | **19 08 36.4** | **0.0** |
| KTK1 | | | | *e*S | **Sb** | **19 08 56.9** | **-0.1** |
| **TRO** | **Tromso** | **1.85** | **346** | *e*P | **Pb** | **19 08 39.9** | **-0.4** |
| TRO | | | | *e*S | **Sb** | **19 09 03.9** | **0.0** |
| **STEI** | **Steigen** | **1.89** | **275** | *e*P | **Pb** | **19 08 40.6** | **-0.3** |
| STEI | | | | *e*Sg | **Sg** | **19 09 06.0** | **-0.3** |
| STEI | | | | IAML | | 19 09 12.4 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **FAUS** | **Fauske** | **1.95** | **258** | *e*Sg | **Sb** | **19 09 07.3** | **+0.6** |
| FAUS | | | | IAML | | 19 09 12.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **KALU** | **Kalix** | **2.35** | **147** | *e*SB | **Sb** | **19 09 18.0** | **-0.1** |
| **TOF** | **Tornio** | **2.40** | **136** | *e*P | **Pb** | **19 08 48.0** | **-1.4** |
| TOF | | | | *e*SB | **Sb** | **19 09 19.5** | **0.0** |
| **SGF** | **Sodankyl** | **2.44** | **97** | *e*P | **Pn** | **19 08 48.2** | **+1.6** |
| SGF | | | | *e*S | **Sn** | **19 09 18.0** | **+1.0** |
| **ARCES** | **ARCESS Array B** | **2.56** | **46** | Pn | **Pn** | **19 08 48.5** | **+0.1** |
| | comp=Z,1.8nm,0.3s,baz=229,slow=26,SNR=16 | | | | | | |
| ARCES | | | | Pg | **Pb** | **19 08 50.8** | **-1.5** |
| | comp=Z,1.8nm,0.3s,baz=226,slow=15,SNR=46 | | | | | | |
| ARCES | | | | Lg | Lg | 19 09 23.5 | |
| | comp=Z,2.8nm,0.3s,baz=232,slow=23,SNR=19 | | | | | | |
| | comp=Z,3.4nm,0.3s | | | | | | |
| **RNF** | **Rovaniemi** | **2.57** | **116** | *e*SG | **Sb** | **19 09 25.6** | **+1.0** |
| **VRF** | **Varrio** | **3.56** | **87** | MSG | | 19 09 57.5 | |
| | comp=Z,4.9nm,0.2s | | | | | | |
| **OUL** | **Oulu** | **3.58** | **138** | MSG | | 19 09 57.3 | |
| | comp=Z,4.4nm,0.3s | | | | | | |
| **OBF4** | **Vikkela, Lumij** | **3.62** | **145** | MSG | | 19 10 07.1 | |
| | comp=Z,2.6nm,0.3s | | | | | | |
| **MSF** | **Maaselka** | **3.98** | **115** | MSG | | 19 10 15.5 | |
| | comp=Z,3.4nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **6.90** | **156** | Pn | **Pn** | **19 09 49.1** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=342,slow=12,SNR=5.5 | | | | | | |
| FINES | | | | Sn | **Sn** | **19 11 04.9** | **-2.0** |
| | comp=Z,0.2nm,0.3s,baz=349,slow=21,SNR=5.5 | | | | | | |
| FINES | | | | Lg | Lg | 19 11 39.0 | |
| | comp=Z,0.4nm,0.3s,baz=345,slow=28,SNR=9.9 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **7.86** | **214** | Pn | **Pn** | **19 10 01.4** | **+0.4** |
| | baz=27,slow=14,SNR=1.3 | | | | | | |
| NOA | | | | Sn | **Sn** | **19 11 29.8** | **-0.8** |
| | baz=20,slow=19,SNR=3.2 | | | | | | |
| NOA | | | | Lg | Lg | 19 12 16.1 | |
| | baz=34,slow=11,SNR=2.2 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **8.26** | **203** | Pn | **Pn** | **19 10 06.5** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=24,slow=11,SNR=2.4 | | | | | | |
| HFS | | | | Lg | Lg | 19 12 24.9 | |
| | comp=Z,0.2nm,0.3s,baz=20,slow=34,SNR=2.0 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |

*JSN **14** 19:08:50.6±0.3, 18°.00N×76°.13W, h6km±5km, MD3.8*

*SSNC **14** 19:08:53.2±2.4, 18°.22N×76°.26W, h5km±17km, MD3.1*

**ISC 14 19:08:47.9±1.9, 18°.16N±0°.09×76°.14W±0°.06, h10km±14km, n10, σ1s22/15, 2D, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STH** | **Stony Hill** | **0.65** | **263** | ⇓*i*P | **Pn** | **19 09 02.5** | **-0.7** |
| **MTDJ** | **Mount Denham** | **1.33** | **273** | ⇓*i*P | **Pg** | **19 09 14.4** | **+0.9** |
| **MTDJ** | **Mount Denham** | **1.33** | **273** | *e*P | **Pg** | **19 09 14.2** | **+0.7** |
| MTDJ | | | | *e*S | **Sg** | **19 09 30.8** | **0.0** |
| **CHIV** | **Chivirico** | **1.82** | **352** | *e*P | **Pb** | **19 09 21.3** | **-0.2** |
| CHIV | | | | *e*S | **Sb** | **19 09 43.3** | **-1.0** |
| **MARVS** | **Santiago de Cu** | **1.84** | **7** | *e*P | **Pg** | **19 09 23.8** | **+0.5** |
| MARVS | | | | *e*S | **Sb** | **19 09 45.7** | **+0.8** |
| **RCC** | **Rio Carpintero** | **1.87** | **13** | *e*P | **Pb** | **19 09 22.3** | **+0.1** |
| **GTBY** | **Guantanamo Bay** | **2.01** | **29** | *e*P | **Pg** | **19 09 27.0** | **+0.6** |
| GTBY | | | | *e*S | **Sb** | **19 09 51.0** | **+1.4** |
| **LMGC** | **Las Mercedes** | **2.06** | **337** | *e*S | **Sb** | **19 09 49.1** | **-2.1** |
| **QMBU** | **Quimbuelo** | **2.38** | **31** | *e*P | **Pg** | **19 09 32.9** | **-0.7** |
| QMBU | | | | *e*S | **Sn** | **19 09 58.3** | **+1.9** |
| **MASC** | **Masc** | **2.69** | **42** | *e*P | **Pb** | **19 09 35.0** | **-1.3** |

**NAM 14 19:25:53.9±4.3, 19°.67S×14°.46E, h13km±26km, ML0.4, 7C-1D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.08** | **153** | *i* P | Pg | 19 25 59.1 | +2.2 |
| ST3N | | | | IAML | | 19 26 00.6 | |
| | comp=Z,3.1nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.14** | **263** | ⇑*i*P | Pb | 19 26 01.9 | +3.5 |
| ST8N | | | | *i* S | Sb | 19 26 05.9 | +4.5 |
| ST8N | | | | IAML | | 19 26 07.0 | |
| | comp=Z,1.0nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.14** | **263** | *i* P | Pb | 19 26 02.3 | +3.9 |
| ST8N | | | | *i* S | Sb | 19 26 05.9 | +4.5 |
| ST8N | | | | IAML | | 19 26 06.9 | |
| | comp=Z,1.0nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.14** | **205** | ⇑*i*P | Pb | 19 26 00.4 | +1.9 |
| ST6N | | | | *i* S | Sb | 19 26 02.8 | +1.3 |
| ST6N | | | | IAML | | 19 26 03.7 | |
| | comp=Z,2.6nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.15** | **148** | ⇑*i*P | Pb | 19 25 58.2 | -0.4 |
| ST9N | | | | *i* S | Sg | 19 25 59.0 | -1.3 |
| ST9N | | | | IAML | | 19 25 59.7 | |
| | comp=Z,26nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.15** | **148** | *i* P | Pb | 19 25 58.2 | -0.4 |
| ST9N | | | | *i* S | Sg | 19 25 59.1 | -1.2 |
| ST9N | | | | IAML | | 19 25 59.9 | |
| | comp=Z,53nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.16** | **114** | ⇓*i*P | Pb | 19 25 58.7 | 0.0 |
| ST1N | | | | *i* S | Sg | 19 25 59.9 | -0.7 |
| ST1N | | | | IAML | | 19 25 60.0 | |
| | comp=N,56nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.16** | **114** | *i* P | Pb | 19 25 58.7 | 0.0 |
| ST1N | | | | *i* S | Sg | 19 25 59.9 | -0.6 |
| ST1N | | | | IAML | | 19 26 00.1 | |
| | comp=N,17nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.28** | **153** | ⇑*i*P | Pg | 19 25 59.8 | -0.2 |
| ST2N | | | | *i* S | Sg | 19 26 01.9 | -2.0 |
| ST2N | | | | IAML | | 19 26 02.0 | |
| | comp=Z,9.2nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.28** | **153** | *i* P | Pg | 19 25 59.8 | -0.1 |
| ST2N | | | | *i* S | Sg | 19 26 01.8 | -2.1 |
| ST2N | | | | IAML | | 19 26 01.9 | |
| | comp=Z,5.0nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.30** | **113** | ⇑*i*P | Pg | 19 26 00.5 | +0.3 |
| ST5N | | | | *i* S | Sg | 19 26 02.9 | -1.6 |
| ST5N | | | | IAML | | 19 26 03.1 | |
| | comp=Z,4.4nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.30** | **113** | *i* P | Pg | 19 26 00.5 | +0.2 |
| ST5N | | | | *i* S | Sg | 19 26 03.0 | -1.5 |
| ST5N | | | | IAML | | 19 26 03.3 | |
| | comp=Z,2.9nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.33** | **192** | ⇑*i*P | Pb | 19 26 02.1 | +0.4 |
| ST10N | | | | *i* S | Sg | 19 26 05.9 | +0.6 |
| ST10N | | | | IAML | | 19 26 07.2 | |
| | comp=Z,2.3nm,0.0s | | | | | | |
| **ST10N** | **ST10** | **0.33** | **192** | *i* P | Pb | 19 26 02.1 | +0.4 |
| ST10N | | | | *i* S | Sg | 19 26 05.8 | +0.5 |
| ST10N | | | | IAML | | 19 26 06.9 | |
| | comp=Z,3.8nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.36** | **87** | ⇑*i*P | Pb | 19 26 02.5 | +0.2 |
| ST11N | | | | *i* S | Sb | 19 26 07.5 | -0.3 |
| ST11N | | | | IAML | | 19 26 09.6 | |
| | comp=Z,1.2nm,0.0s | | | | | | |

*SDD **14** 19:32:36.6±2.6, 18°.94N×69°.43W, h92km±15km, MD3.6, ML2.8, MW3.7*

*OSPL **14** 19:32:36.1±2.5, 18°.71N×69°.39W, h108km±15km, ML2.9*

**ISC 14 19:32:35.1±1.4, 18°.83N±0°.07×69°.39W±0°.03, h99km±10km, n22, σ1s48/38, 17C-5D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MIDR** | **Miches** | **0.35** | **65** | ⇑*e*Pg | **Pn** | **19 32 50.1** | **+0.4** |
| MIDR | | | | IAML | | 19 33 03.2 | |
| | comp=E,217nm,0.1s | | | | | | |
| MIDR | | | | IAML | | 19 33 03.5 | |
| | comp=N,403nm,0.2s | | | | | | |
| **SDD** | **Santo Domingo** | **0.62** | **233** | *i* P | **Pn** | **19 32 51.6** | **-0.1** |
| SDD | | | | *e*S | **Sn** | **19 33 03.0** | **-1.1** |
| **HIDR** | **Higuey Centro** | **0.68** | **111** | ⇓*e*Pg | **Pn** | **19 32 51.9** | **-0.2** |
| HIDR | | | | ⇑*e*Sg | **Sn** | **19 33 04.7** | **-0.3** |
| HIDR | | | | IAML | | 19 33 06.7 | |
| | comp=N,334nm,0.7s | | | | | | |
| HIDR | | | | IAML | | 19 33 06.8 | |
| | comp=N,334nm,0.7s | | | | | | |
| HIDR | | | | IAML | | 19 33 07.5 | |
| | comp=E,352nm,0.3s | | | | | | |
| **SADR** | **Isla Saona** | **0.86** | **138** | *e*Pg | **Pn** | **19 32 53.7** | **-0.2** |
| SADR | | | | ⇓*e*Pg | **Pn** | **19 32 53.7** | **-0.2** |
| SADR | | | | *e*Sg | **Sn** | **19 33 09.0** | **+1.0** |
| SADR | | | | ⇑*e*Sg | | 19 33 09.1 | |
| SADR | | | | IAML | | 19 33 12.0 | |
| | comp=E,82nm,1.4s | | | | | | |
| SADR | | | | IAML | | 19 33 21.5 | |
| | comp=N,84nm,0.4s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.01** | **108** | *e*Pg | **Pn** | **19 32 55.0** | **-0.5** |
| PCDR | | | | ⇑*e*Sg | **Sn** | **19 33 11.0** | **+0.2** |
| PCDR | | | | IAML | | 19 33 12.2 | |
| | comp=E,66nm,1.6s | | | | | | |
| PCDR | | | | IAML | | 19 33 12.8 | |
| | comp=Z,125nm,1.9s | | | | | | |
| PCDR | | | | IAML | | 19 33 13.0 | |
| | comp=N,127nm,1.3s | | | | | | |
| PCDR | | | | IAML | | 19 33 24.2 | |
| | comp=N,145nm,2.7s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.01** | **108** | *i* P | **Pn** | **19 32 55.4** | **0.0** |
| PCDR | | | | *e*S | **Sn** | **19 33 11.5** | **+0.7** |
| PCDR | | | | IAML | | 19 33 12.8 | |
| | comp=Z,141nm,1.9s | | | | | | |
| **BANI** | **BANI** | **1.02** | **245** | ⇓*e*Pg | **Pn** | **19 32 55.4** | **-0.3** |
| BANI | | | | *e*Sg | **Sn** | **19 33 11.7** | **+0.5** |
| BANI | | | | IAML | | 19 33 15.0 | |
| | comp=N,402nm,0.3s | | | | | | |
| BANI | | | | IAML | | 19 33 15.0 | |
| | comp=N,402nm,0.3s | | | | | | |
| BANI | | | | IAML | | 19 33 15.3 | |
| | comp=E,316nm,0.1s | | | | | | |
| **ABDR** | **Alto Bandera** | **1.17** | **269** | ⇑*e*Pg | **Pn** | **19 32 57.1** | **-0.6** |
| ABDR | | | | IAML | | 19 33 14.0 | |
| | comp=E,200nm,2.0s | | | | | | |
| ABDR | | | | IAML | | 19 33 21.0 | |
| | comp=N,269nm,0.4s | | | | | | |
| ABDR | | | | IAML | | 19 33 21.1 | |
| | comp=N,269nm,0.4s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **1.78** | **245** | ⇑*e*Pg | **Pn** | **19 33 03.7** | **-1.1** |
| LOBA2 | | | | ⇑*e*Sg | **Sn** | **19 33 24.9** | **-2.5** |
| LOBA2 | | | | IAML | | 19 33 26.4 | |
| | comp=E,37nm,0.2s | | | | | | |
| LOBA2 | | | | IAML | | 19 33 27.2 | |
| | comp=N,18nm,0.2s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.80** | **275** | ⇑*e*Pg | **Pn** | **19 33 05.9** | **+0.8** |
| SDDR | | | | IAML | | 19 33 35.7 | |
| | comp=N,50nm,0.3s | | | | | | |
| SDDR | | | | IAML | | 19 33 35.8 | |
| | comp=N,50nm,0.3s | | | | | | |
| SDDR | | | | IAML | | 19 33 38.6 | |
| | comp=E,48nm,0.5s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.80** | **275** | *i* P | **Pn** | **19 33 05.9** | **+0.8** |
| SDDR | | | | *e*S | **Sn** | **19 33 29.5** | **+1.5** |
| SDDR | | | | IAML | | 19 33 34.1 | |
| | comp=Z,17nm,0.3s | | | | | | |
| **PODR** | **Polo** | **1.91** | **250** | ⇑*e*Pg | **Pn** | **19 33 05.8** | **-0.9** |
| PODR | | | | ⇑*e*Sg | **Sn** | **19 33 30.1** | **-0.6** |
| PODR | | | | IAML | | 19 33 31.8 | |
| | comp=E,111nm,0.7s | | | | | | |
| PODR | | | | IAML | | 19 33 35.5 | |
| | comp=N,86nm,0.5s | | | | | | |
| PODR | | | | IAML | | 19 33 35.5 | |
| | comp=N,86nm,0.5s | | | | | | |
| **PODR** | **Polo** | **1.91** | **250** | *i* P | **Pn** | **19 33 06.0** | **-0.6** |
| PODR | | | | *e*S | **Sn** | **19 33 30.0** | **-0.8** |
| PODR | | | | IAML | | 19 33 32.2 | |
| | comp=Z,78nm,0.7s | | | | | | |
| **REDR** | **Restauracion** | **1.93** | **280** | ⇓*e*Pg | **Pn** | **19 33 09.8** | **+3.3** |
| REDR | | | | ⇑*e*Sg | **Sn** | **19 33 35.8** | **+5.1** |
| REDR | | | | IAML | | 19 33 39.6 | |
| | comp=N,43nm,0.1s | | | | | | |
| REDR | | | | IAML | | 19 33 39.6 | |
| | comp=N,43nm,0.1s | | | | | | |
| REDR | | | | IAML | | 19 33 40.3 | |
| | comp=E,69nm,0.1s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.19** | **99** | *i* P | **Pn** | **19 33 09.6** | **-0.4** |
| AGPR | | | | IAML | | 19 33 48.0 | |
| | comp=Z,126nm,1.4s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.32** | **110** | ⇑*e*Pg | **Pn** | **19 33 13.1** | **+1.4** |
| CRPR | | | | ⇑*e*Sg | **Sn** | **19 33 39.5** | **-0.3** |
| CRPR | | | | IAML | | 19 33 49.4 | |
| | comp=E,27nm,1.4s | | | | | | |
| CRPR | | | | IAML | | 19 33 50.6 | |
| | comp=N,29nm,1.1s | | | | | | |
| CRPR | | | | IAML | | 19 33 51.2 | |
| | comp=N,29nm,1.4s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.32** | **110** | *i* P | **Pn** | **19 33 11.8** | **+0.1** |
| CRPR | | | | IAML | | 19 33 48.8 | |
| | comp=Z,56nm,1.9s | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.39** | **111** | ⇑*e*Pg | **Pn** | **19 33 12.0** | **-0.7** |
| MLPR | | | | ⇑*e*Sg | **Sn** | **19 33 41.5** | **+0.1** |
| MLPR | | | | IAML | | 19 33 44.6 | |
| | comp=E,29nm,1.8s | | | | | | |
| MLPR | | | | IAML | | 19 33 51.9 | |
| | comp=N,21nm,1.7s | | | | | | |
| MLPR | | | | IAML | | 19 33 52.0 | |
| | comp=N,21nm,1.7s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.55** | **101** | ⇓*e*Pg | **Pn** | **19 33 16.5** | **+1.7** |
| AOPR | | | | ⇑*e*Sg | **Sn** | **19 33 43.7** | **-1.6** |
| AOPR | | | | IAML | | 19 33 44.4 | |
| | comp=N,65nm,0.1s | | | | | | |
| AOPR | | | | IAML | | 19 33 53.5 | |
| | comp=E,161nm,0.4s | | | | | | |
| AOPR | | | | IAML | | 19 33 56.5 | |
| | comp=N,116nm,0.3s | | | | | | |
| **CELP** | **Cerrillos** | **2.77** | **105** | ⇑*e*Pg |

**JMA 14 20:10:42.2±0.2, 32°0N±0°7×140°9E±0°5, h2km, MV3.9/35, NEAR TORISHIMA IS, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHCJ** | **Hachijojimaka** | **1.45** | **319** | *eP* | Pn | 20 11 09.2 | -0.3 |
| JHCJ | | | | S | Sg | 20 11 28.5 | -0.4 |
| **JHJ2** | **Mitsune** | **1.47** | **321** | P | Pn | 20 11 09.8 | 0.0 |
| JHJ2 | | | | *eS* | Sb | 20 11 29.3 | -0.1 |
| **JMKN** | **Mikurajimanish** | **2.22** | **330** | *eP* | Pn | 20 11 20.8 | +0.7 |
| JMKN | | | | *eS* | Sn | 20 11 49.3 | +1.2 |
| **BSO1** | **Boso 1** | **2.67** | **1** | P | Pn | 20 11 26.8 | +1.0 |
| **BSO3** | **Boso 3** | **2.84** | **353** | P | Pn | 20 11 29.4 | +1.0 |
| BSO3 | | | | S | Sn | 20 12 04.2 | +1.2 |
| **BSO4** | **Boso 4** | **3.05** | **351** | P | Pn | 20 11 32.8 | +1.5 |
| BSO4 | | | | *eS* | Sn | 20 12 10.7 | +2.3 |
| **JOD2** | **Odawara 2** | **3.62** | **335** | P | Pn | 20 11 41.2 | +1.8 |
| **JYN** | **Shimob** | **4.04** | **331** | P | Pn | 20 11 48.3 | +3.2 |
| **JHU** | **Hanno** | **4.10** | **341** | P | Pn | 20 11 48.0 | +2.0 |
| **JRY** | **Ryogami san** | **4.37** | **338** | P | Pn | 20 11 52.3 | +2.6 |
| **JAG** | **Ashikaga** | **4.61** | **345** | P | Pn | 20 11 54.3 | +1.4 |
| **JHO** | **Hitachi** | **4.63** | **356** | P | Pn | 20 11 55.9 | +2.6 |

*ASRS 14 20:12:06.4±0.2, 48°N±2°×8°3E±°, h4km, MLh3.8/11, Error ellipse: s-maj=4.8km s-min=2.3km az=128.6, confirmed*
*NNC 14 20:12:08.9±0.7, 47°.44N×82°.67E, h0km, mb3.6, mpv3.6, Error ellipse: s-maj=7.4km s-min=3.0km az=99.0*
*SOME 14 20:12:11.3, 47°.43N×82°.48E, h5km*

**ISC 14 20:12:06.6±0.6, 47°.43N±0°.03×82°.79E±0°.03, h10km, n44, σ2§26/76, 16C-10D, Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **0.72** | **209** | ⇓P | **Pn** | **20 12 22.6** | **-0.3** |
| | 7.4nm,0.2s,baz=140,slow=36 | | | | | | |
| MK31 | | | | ⇑S | **Sn** | **20 12 32.1** | **-1.9** |
| | 198nm,0.3s,baz=29,slow=41,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **0.72** | **209** | ⇑Pg | **Pn** | **20 12 22.7** | **-0.2** |
| MKAR | | | | Sg | **Sn** | **20 12 32.5** | **-1.6** |
| **MAKZ** | **Makanchi** | **0.84** | **222** | ⇓P | **Pn** | **20 12 24.4** | **0.0** |
| | 43nm,0.4s | | | | | | |
| MAKZ | | | | ⇑S | **Sn** | **20 12 35.4** | **-1.4** |
| | 131nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **0.84** | **222** | ⇑Pg | **Pn** | **20 12 24.7** | **+0.2** |
| MAKZ | | | | Sg | **Sn** | **20 12 35.5** | **-1.2** |
| **ZSN** | **Zaisan** | **1.41** | **88** | *eP* | **Pg** | **20 12 34.7** | **+1.2** |
| | 52nm,0.2s | | | | | | |
| ZSN | | | | *eS* | **Sg** | **20 12 53.1** | **+1.3** |
| | 60nm,0.2s | | | | | | |
| **SEM** | **Semipalatinsk** | **3.42** | **332** | *eP* | **Pg** | **20 13 12.8** | **+0.8** |
| | 9.8nm,0.2s | | | | | | |
| SEM | | | | *eS* | **Sg** | **20 13 55.7** | **-0.7** |
| | 49nm,0.1s | | | | | | |
| **SEM** | **Semipalatinsk** | **3.42** | **332** | Pg | **Pg** | **20 13 12.7** | **+0.6** |
| | 9.4nm,0.2s | | | | | | |
| SEM | | | | Lg | Lg | 20 13 58.7 | |
| | 69nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **3.74** | **215** | *eP* | **Pg** | **20 13 16.6** | **-1.6** |
| | 6.6nm,0.4s | | | | | | |
| DJR | | | | *eS* | **Sg** | **20 14 03.0** | **-3.7** |
| | 21nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **3.74** | **215** | Pg | **Pg** | **20 13 17.2** | **-1.1** |
| | 6.6nm,0.4s | | | | | | |
| DJR | | | | Lg | Lg | 20 14 03.7 | |
| | 21nm,0.5s | | | | | | |
| **UKR** | **Ust'-Kan** | **3.74** | **20** | Pg | **Pg** | **20 13 16.5** | **-1.8** |
| UKR | | | | Sg | **Sg** | **20 14 04.7** | **-2.0** |
| **DGZ** | **Jazzator, Alta** | **3.83** | **52** | Pg | **Pg** | **20 13 19.3** | **-0.5** |
| DGZ | | | | Sg | **Sg** | **20 14 08.5** | **-1.0** |
| **KNOS** | **Konyrlen** | **3.98** | **221** | Pg | **Pg** | **20 13 23.9** | **+1.2** |
| | 1.0nm,0.1s | | | | | | |
| KNOS | | | | Lg | Lg | 20 14 15.3 | |
| | 21nm,0.3s | | | | | | |
| **CHBI** | **Chibit, Altay** | **4.24** | **45** | Pg | **Pg** | **20 13 28.0** | **+0.2** |
| CHBI | | | | Sg | **Sg** | **20 14 20.9** | **-1.8** |
| **KURBB** | **Kurchatov Arra** | **4.25** | **320** | ⇑Pg | **Pg** | **20 13 27.1** | **-0.9** |
| | 4.3nm,0.4s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 20 14 19.2 | |
| | 102nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **4.28** | **322** | ⇓Pg | **Pg** | **20 13 26.3** | **-2.3** |
| | 2.8nm,0.4s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 20 14 19.6 | |
| | 70nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **4.28** | **322** | Pn | **Pn** | **20 13 14.6** | **+2.9** |
| KURK | | | | Pg | **Pg** | **20 13 28.7** | **+0.2** |
| KURK | | | | Sg | **Sg** | **20 14 22.0** | **-2.0** |
| **AKAR** | **Aktash** | **4.30** | **46** | Pn | **Pb** | **20 13 17.8** | **-4.5** |
| AKAR | | | | Pg | **Pg** | **20 13 27.0** | **-2.0** |
| AKAR | | | | Sg | **Sg** | **20 14 24.4** | **-0.3** |
| **ELDR** | **Elanda** | **4.36** | **28** | Pn | **Pb** | **20 13 18.7** | **-4.6** |
| ELDR | | | | Pg | **Pg** | **20 13 29.2** | **-0.8** |
| ELDR | | | | Sg | **Sg** | **20 14 25.2** | **-1.3** |
| **BLB** | **Baldybastay** | **4.50** | **224** | Pg | **Pg** | **20 13 32.3** | **-0.4** |
| | 32nm,0.4s | | | | | | |
| BLB | | | | Lg | Lg | 20 14 29.7 | |
| | 34nm,1.1s | | | | | | |
| **CUR** | **Chagan-Uzun** | **4.54** | **52** | Pn | Pb | 20 13 20.5 | -5.9 |
| CUR | | | | Pg | **Pg** | **20 13 33.7** | **+0.2** |
| CUR | | | | Sg | **Sg** | **20 14 31.5** | **-0.9** |
| **ULGR** | **Ulagan, Altay** | **4.67** | **45** | Pn | **Pb** | **20 13 24.5** | **-4.0** |
| ULGR | | | | Pg | **Pg** | **20 13 37.5** | **+1.6** |
| ULGR | | | | Sg | **Sg** | **20 14 36.5** | **+0.2** |
| **PDGK** | **Podgornoye** | **4.71** | **211** | ⇑Pn | **Pn** | **20 13 21.4** | **+3.5** |
| | 1.7nm,0.3s | | | | | | |
| PDGK | | | | ⇑Sn | **Sn** | **20 14 14.1** | **+1.4** |
| | 3.1nm,0.3s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 20 14 36.7 | |
| | 24nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **4.73** | **229** | *eP* | **Pg** | **20 13 34.9** | **-2.3** |
| | 5.1nm,0.6s | | | | | | |
| ARXS | | | | *eS* | **Sg** | **20 14 33.4** | **-5.1** |
| | 32nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **4.73** | **229** | Pg | **Pg** | **20 13 36.7** | **-0.5** |
| | 5.1nm,0.6s | | | | | | |
| ARXS | | | | Lg | Lg | 20 14 37.1 | |
| | 32nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **4.88** | **210** | *eP* | **Pg** | **20 13 35.6** | **-4.4** |
| | 7.3nm,0.1s | | | | | | |
| SHLS | | | | *eS* | **Sb** | **20 14 35.0** | **+4.1** |
| | 47nm,0.8s | | | | | | |
| **SHLS** | **Shalkode** | **4.88** | **210** | Pg | **Pb** | **20 13 35.0** | **+2.9** |
| | 7.3nm,0.1s | | | | | | |
| SHLS | | | | Lg | Lg | 20 14 34.0 | |
| | 47nm,0.8s | | | | | | |
| **KPKS** | **Kokpek** | **4.91** | **218** | *eP* | **Pg** | **20 13 39.1** | **-1.4** |
| | 6.7nm,0.1s | | | | | | |
| KPKS | | | | *eS* | **Sg** | **20 14 41.0** | **-3.0** |
| | 73nm,0.1s | | | | | | |
| **KPKS** | **Kokpek** | **4.91** | **218** | Pg | **Pg** | **20 13 39.1** | **-1.4** |
| | 6.7nm,0.1s | | | | | | |
| KPKS | | | | Lg | Lg | 20 14 41.0 | |
| | 73nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **5.04** | **213** | *eP* | **Pg** | **20 13 41.4** | **-1.8** |
| | 3.2nm,0.2s | | | | | | |
| UZB | | | | *eS* | **Sg** | **20 14 45.2** | **-3.2** |
| | 21nm,1.6s | | | | | | |
| **UZB** | **Uzynbulak** | **5.04** | **213** | Pg | **Pg** | **20 13 41.4** | **-1.8** |
| | 3.2nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 20 14 45.2 | |
| | 21nm,1.6s | | | | | | |
| **ARTR** | **Artybash** | **5.25** | **32** | Pn | Pn | 20 13 31.1 | +6.0 |
| ARTR | | | | Sg | **Sg** | **20 14 51.1** | **-4.1** |
| **YALR** | **Yailyu, Altay** | **5.35** | **34** | Pn | Pn | 20 13 32.3 | +5.8 |
| YALR | | | | Pg | **Pg** | **20 13 46.5** | **-2.5** |
| YALR | | | | Sg | **Sg** | **20 14 55.2** | **-3.2** |
| **SATY** | **Saty** | **5.36** | **217** | *eP* | **Pg** | **20 13 47.6** | **-1.6** |
| | 3.3nm,0.1s | | | | | | |
| SATY | | | | *eS* | **Sg** | **20 14 55.7** | **-2.8** |
| | 33nm,0.2s | | | | | | |
| **SATY** | **Saty** | **5.36** | **217** | Pg | **Pg** | **20 13 47.6** | **-1.6** |
| | 3.3nm,0.1s | | | | | | |
| SATY | | | | Lg | Lg | 20 14 55.7 | |
| | 33nm,0.2s | | | | | | |
| **MDOK** | **Medeo** | **5.88** | **226** | Pn | **Pn** | **20 13 36.6** | **+2.6** |
| | 1.4nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 20 15 11.9 | |
| | 17nm,1.1s | | | | | | |
| **TEL** | **Teeli** | **6.04** | **51** | Pn | Pn | 20 13 41.1 | +5.1 |
| TEL | | | | Pg | **Pg** | **20 14 01.9** | **-0.2** |
| TEL | | | | Sg | **Sg** | **20 15 20.3** | **+0.1** |
| **ELT** | **Eltsovka** | **6.24** | **19** | P | **Pn** | **20 13 41.9** | **+3.3** |
| ELT | | | | S | **Sn** | **20 14 50.6** | **+0.7** |
| ELT | | | | Sg | **Sg** | **20 15 24.2** | **-2.5** |
| **TASR** | **Tashtagol** | **6.26** | **30** | Sg | **Sg** | **20 15 24.3** | **-3.0** |
| **ZAA0** | **Zalesovo Array** | **6.65** | **10** | ⇑Pn | **Pn** | **20 13 47.4** | **+3.2** |
| | 0.2nm,0.4s | | | | | | |
| ZAA0 | | | | ⇓Sn | **Sn** | **20 15 02.4** | **+2.3** |
| | 0.3nm,0.3s | | | | | | |
| ZAA0 | | | | ⇑Lg | Lg | 20 15 39.0 | |
| | 1.3nm,0.5s | | | | | | |
| **VCHU** | **Verkh-Chumysh,** | **6.93** | **18** | Sg | **Sg** | **20 15 47.9** | **-1.0** |
| **OTUK** | **Ortayu** | **7.08** | **280** | ⇓Pn | **Pn** | **20 13 52.9** | **+2.6** |
| | 0.5nm,0.3s | | | | | | |
| OTUK | | | | ⇑Sn | **Sn** | **20 15 11.6** | **+0.8** |
| | 1.7nm,0.6s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 20 15 49.7 | |
| | 18nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **9.68** | **248** | ⇓Pn | **Pn** | **20 14 27.0** | **+1.2** |
| | 0.3nm,0.3s,baz=63,slow=13,SNR=5.6 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **20 16 17.6** | **+3.0** |
| | 0.6nm,0.5s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 20 17 14.0 | |
| | 2.6nm,0.7s,baz=60,slow=26,SNR=2.6 | | | | | | |
| **BVA0** | **Borovoye Array** | **9.72** | **310** | ⇑Sn | **Sn** | **20 16 18.4** | **+2.9** |
| | 3.3nm,1.1s,baz=234,slow=40,SNR=5.6 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 20 17 14.8 | |
| | 9.4nm,1.5s,baz=120,slow=28,SNR=6.0 | | | | | | |
| **BRVK** | **Borovoye** | **9.79** | **310** | ⇑Sn | **Sn** | **20 16 18.2** | **+1.0** |
| | 1.0nm,0.5s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 20 17 14.8 | |
| | 6.2nm,0.7s | | | | | | |

**NAM 14 20:27:03.0±0.3, 19°.83S×14°.58E, h5km±1km, ML0.1, 6C-1D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.04** | **308** | *iP* | Pg | 20 27 04.3 | +0.1 |
| ST9N | | | | *i* S | Sg | 20 27 05.2 | 0.0 |
| ST9N | | | | IAML | | 20 27 05.6 | |
| | comp=Z,67nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.04** | **308** | *i* P | Pg | 20 27 04.3 | +0.1 |
| ST9N | | | | *i* S | Sg | 20 27 05.2 | 0.0 |
| ST9N | | | | IAML | | 20 27 06.1 | |
| | comp=Z,73nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.09** | **20** | *i* S | Sg | 20 27 06.4 | 0.0 |
| ST1N | | | | *i* S | | 20 27 06.4 | |
| **ST1N** | **ST1** | **0.09** | **20** | *i* P | Pg | 20 27 05.1 | +0.1 |
| ST1N | | | | *i* S | Sg | 20 27 06.4 | 0.0 |
| ST1N | | | | IAML | | 20 27 06.6 | |
| | comp=N,5.2nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.10** | **171** | *i*P | Pg | 20 27 05.3 | +0.1 |
| ST2N | | | | *i* S | Sg | 20 27 07.0 | +0.3 |
| ST2N | | | | IAML | | 20 27 07.4 | |
| | comp=Z,4.6nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.10** | **171** | *i* P | Pg | 20 27 05.3 | +0.1 |
| ST2N | | | | *i* S | Sg | 20 27 06.9 | +0.1 |
| ST2N | | | | IAML | | 20 27 07.0 | |
| | comp=Z,3.6nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.11** | **317** | *i*P | Pg | 20 27 05.4 | +0.1 |
| ST3N | | | | *i* S | Sg | 20 27 07.0 | 0.0 |
| ST3N | | | | IAML | | 20 27 07.3 | |
| | comp=Z,1.4nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.11** | **317** | *i* P | Pg | 20 27 05.5 | +0.1 |
| ST3N | | | | *i* S | Sg | 20 27 07.0 | +0.1 |
| ST3N | | | | IAML | | 20 27 07.2 | |
| | comp=Z,2.2nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **79** | ⇓*i*P | Pg | 20 27 06.4 | 0.0 |
| ST5N | | | | *i* S | Sg | 20 27 08.9 | +0.2 |
| ST5N | | | | IAML | | 20 27 09.1 | |
| | comp=Z,2.1nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **79** | *i* P | Pg | 20 27 06.4 | 0.0 |
| ST5N | | | | *i* S | Sg | 20 27 08.8 | +0.1 |
| ST5N | | | | IAML | | 20 27 09.2 | |
| | comp=Z,2.9nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.17** | **278** | *i*P | Pg | 20 27 06.5 | +0.1 |
| ST6N | | | | *i* S | Sg | 20 27 08.9 | +0.2 |
| ST6N | | | | IAML | | 20 27 08.9 | |
| | comp=Z,2.9nm,0.0s | | | | | | |
| **ST10N** | **ST10** | **0.25** | **227** | *i*P | Pg | 20 27 07.8 | -0.1 |
| ST10N | | | | *i* S | Sg | 20 27 11.3 | +0.1 |
| ST10N | | | | IAML | | 20 27 12.2 | |
| | comp=Z,1.9nm,0.0s | | | | | | |
| **ST10N** | **ST10** | **0.25** | **227** | *i* P | Pg | 20 27 07.8 | 0.0 |
| ST10N | | | | *i* S | Sg | 20 27 11.2 | 0.0 |
| ST10N | | | | IAML | | 20 27 11.4 | |
| | comp=Z,5.6nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.28** | **298** | *i*P | Pg | 20 27 08.6 | +0.1 |
| ST8N | | | | *i* S | Sg | 20 27 12.0 | -0.2 |
| ST8N | | | | IAML | | 20 27 12.6 | |
| | comp=Z,0.3nm,0.1s | | | | | | |

*NEIC 14 20:30:11.9±1.8, 43°.53N±0°.06×105°.23W±0°.08, h0km±1km, ML3.4/70, Error ellipse: s-maj=9.8km s-min=9.4km az=48.0*
*IDC 14 20:30:13.7±1.2, 43°.80N×105°.71W, h0km, mbtmp3.3/4, ML3.2/3, Error ellipse: s-maj=18.7km s-min=10.2km az=149.0*

**ISC 14 20:30:12.8±1.0, 43°.45N±0°.05×105°.25W±0°.06, h0km, n53, σ1§51/49, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.10** | **52** | Pg | **Pb** | **20 30 35.0** | **+0.1** |
| **N23A** | **Red Feather La** | **2.61** | **192** | Pn | **Pb** | **20 30 59.2** | **-1.5** |
| N23A | | | | IAML | | 20 31 40.2 | |
| | comp=N,131nm,0.7s | | | | | | |
| **BRIGG** | **Briggsdale** | **2.95** | **166** | | **Pn** | **20 31 01.2** | **+0.1** |
| BRIGG | | | | IAML | | 20 31 51.9 | |
| | comp=N,133nm,0.5s | | | | | | |
| BRIGG | | | | IAML | | 20 31 56.3 | |
| | comp=E,109nm,0.9s | | | | | | |
| **PD31** | **Pinedale Array** | **3.23** | **259** | | **Pn** | **20 31 05.9** | **+0.8** |
| **PDAR** | **Pinedale Array** | **3.23** | **259** | Pn | **Pn** | **20 31 05.9** | **+0.8** |
| **PDAR** | **Pinedale Array** | **3.23** | **259** | Pn | **Pn** | **20 31 05.6** | **+0.6** |
| | comp=E,1.4nm,0.3s,baz=80,slow=16,SNR=26 | | | | | | |
| PDAR | | | | Lg | Lg | 20 31 48.0 | |
| | comp=E,8.8nm,0.3s,baz=73,slow=35,SNR=4.5 | | | | | | |
| | comp=E,1.8nm,0.4s | | | | | | |
| **LAO** | **LASA Array** | **3.31** | **348** | | **Pn** | **20 31 03.7** | **-2.3** |
| LAO | | | | IAML | | 20 32 03.3 | |
| | comp=E,112nm,1.6s | | | | | | |
| LAO | | | | IAML | | 20 32 22.3 | |
| | comp=E,132nm,0.9s | | | | | | |
| **RLMT** | **Red Lodge** | **3.34** | **301** | Pn | **Pn** | **20 31 06.5** | **+0.1** |
| RLMT | | | | IAML | | 20 32 06.7 | |
| | comp=E,64nm,2.1s | | | | | | |
| **OGNE** | **Ogallala** | **3.46** | **135** | | **Pn** | **20 31 08.7** | **+0.7** |
| OGNE | | | | IAML | | 20 32 26.4 | |
| | comp=E,128nm,1.0s | | | | | | |
| **ISCO** | **Idaho Springs** | **3.66** | **184** | | **Pn** | **20 31 11.8** | **+0.8** |
| **YMP** | **Mirror Lake Pl** | **3.77** | **292** | | **Pn** | **20 31 12.8** | **+0.4** |
| YMP | | | | IAML | | 20 32 14.5 | |
| | comp=E,89nm,1.2s | | | | | | |
| YMP | | | | IAML | | 20 32 21.4 | |
| | comp=N,104nm,1.1s | | | | | | |
| **LOHW** | **Long Hollow** | **3.90** | **274** | | **Pn** | **20 31 15.5** | **+1.3** |
| **H17A** | **Grant Village** | **3.96** | **286** | | **Pn** | **20 31 15.7** | **+0.6** |
| H17A | | | | IAML | | 20 32 20.5 | |
| | comp=E,50nm,1.9s | | | | | | |
| H17A | | | | IAML | | 20 32 22.1 | |
| | comp=N,69nm,1.8s | | | | | | |
| **FLWY** | **Flagg Ranch** | **4.00** | **281** | | **Pn** | **20 31 16.5** | **+0.9** |
| FLWY | | | | IAML | | 20 32 27.8 | |
| | comp=N,65nm,2.4s | | | | | | |
| **O20A** | **White River Ci** | **4.00** | **215** | | **Pn** | **20 31 16.2** | **+0.6** |
| O20A | | | | IAML | | 20 32 57.4 | |
| | comp=N,83nm,2.0s | | | | | | |
| O20A | | | | IAML | | 20 33 01.7 | |
| | comp=E,72nm,1.7s | | | | | | |
| **SNOW** | **Snow King Moun** | **4.01** | **272** | | **Pn** | **20 31 16.6** | **+0.8** |
| SNOW | | | | IAML | | 20 32 30.8 | |
| | comp=E,69nm,1.6s | | | | | | |
| **REDW** | **Red Top Meadow** | **4.09** | **271** | | **Pn** | **20 31 18.3** | **+1.5** |
| **YPP** | **Pitchstone Pla** | **4.10** | **283** | | **Pn** | **20 31 15.9** | **-1.1** |
| YPP | | | | IAML | | 20 32 37.5 | |
| | comp=N,36nm,1.7s | | | | | | |
| **YNR** | **Norris Junctio** | **4.11** | **290** | Pn | **Pn** | **20 31 20.3** | **+3.1** |
| **YNM** | **Yellowstone No** | **4.13** | **290** | Pn | **Pn** | **20 31 19.9** | **+2.5** |
| **TPAW** | **Teton Pass** | **4.15** | **272** | | **Pn** | **20 31 18.1** | **+0.4** |
| TPAW | | | | IAML | | 20 32 41.4 | |
| | comp=N,46nm,1.6s | | | | | | |
| TPAW | | | | IAML | | 20 32 49.1 | |
| | comp=N,35nm,1.9s | | | | | | |
| **IMW** | **Indian Meadow** | **4.16** | **278** | | **Pn** | **20 31 19.1** | **+1.3** |
| **K30B** | **Basset** | **4.20** | **99** | Pn | **Pn** | **20 31 18.2** | **0.0** |
| **FXWY** | **Fox Creek** | **4.21** | **275** | | **Pn** | **20 31 19.8** | **+1.3** |
| **YHH** | **Holmes Hill** | **4.25** | **290** | | **Pn** | **20 31 20.2** | **+1.0** |
| **RDMU** | **Red Mountain** | **4.32** | **230** | | **Pn** | **20 31 23.3** | **+3.3** |
| RDMU | | | | IAML | | 20 32 41.2 | |
| | comp=N,30nm,1.4s | | | | | | |
| RDMU | | | | IAML | | 20 33 05.7 | |
| | comp=E,48nm,1.8s | | | | | | |
| **AHID** | **Auburn Hatcher** | **4.34** | **263** | | **Pn** | **20 31 21.4** | **+1.1** |
| AHID | | | | IAML | | 20 32 35.8 | |
| | comp=E,30nm,1.6s | | | | | | |
| AHID | | | | IAML | | 20 32 55.0 | |
| | comp=E,39nm,1.6s | | | | | | |
| **SMCO** | **Snowmass** | **4.47** | **198** | | **Pn** | **20 31 23.8** | **+1.7** |
| SMCO | | | | IAML | | 20 32 46.7 | |
| | comp=E,31nm,2.2s | | | | | | |
| SMCO | | | | IAML | | 20 32 47.2 | |
| | comp=E,44nm,1.6s | | | | | | |
| **Q24A** | **Divide** | **4.49** | **179** | | **Pn** | **20 31 23.6** | **+1.2** |
| Q24A | | | | IAML | | 20 32 43.9 | |
| | comp=E,26nm,1.5s | | | | | | |
| **E28A** | **Huff** | **4.49** | **44** | Pn | **Pn** | **20 31 23.4** | **+1.3** |
| **YHL** | **Hebgen Lake** | **4.50** | **290** | | **Pn** | **20 31 25.2** | **+2.7** |
| YHL | | | | IAML | | 20 32 42.6 | |
| | comp=E,40nm,1.1s | | | | | | |
| YHL | | | | IAML | | 20 32 48.7 | |
| | comp=N,40nm,1.6s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.86** | **155** | | **Pn** | **20 31 30.3** | **+3.0** |
| **HWUT** | **Hardware Ranch** | **5.02** | **251** | | **Pn** | **20 31 30.5** | **+0.9** |
| HWUT | | | | IAML | | 20 33 08.4 | |
| | comp=N,35nm,1.6s | | | | | | |
| HWUT | | | | IAML | | 20 33 15.3 | |
| | comp=N,33nm,1.5s | | | | | | |
| **BOZ** | **Bozeman (W)** | **5.04** | **297** | | **Pn** | **20 31 29.7** | **-0.1** |
| BOZ | | | | IAML | | 20 32 58.6 | |
| | comp=N,17nm,1.6s | | | | | | |
| **DGMT** | **Dagmar** | **5.07** | **8** | | **Pn** | **20 31 31.6** | **+1.5** |
| **TCUT** | **Toone Canyon** | **5.13** | **245** | | **Pn** | **20 31 33.2** | **+2.1** |
| **P18A** | **Preston Nutter** | **5.36** | **226** | | **Pn** | **20 31 35.4** | **+1.1** |
| **DLMT** | **Dillon** | **5.60** | **292** | | **Pn** | **20 31 38.5** | **+1.0** |
| **SDCO** | **Great Sand Dun** | **5.71** | **182** | Pn | **Pn** | **20 31 40.5** | **+1.4** |
| **P17A** | **Butcher Ranch,** | **5.73** | **228** | | **Pn** | **20 31 41.0** | **+1.6** |
| **HVU** | **Hansel Valley** | **5.80** | **256** | | **Pn** | **20 31 41.9** | **+1.6** |
| **SRU** | **San Rafael Swe** | **5.88** | **224** | | **Pn** | **20 31 43.4** | **+2.0** |
| **MDND** | **Maddock** | **5.91** | **40** | | **Pn** | **20 31 42.0** | **+0.4** |
| **LYMT** | **Lyon Mountain** | **6.09** | **308** | | **Pn** | **20 31 43.7** | **-0.6** |
| **TMUT** | **Trail Mountain** | **6.11** | **229** | | **Pn** | **20 31 46.1** | **+1.4** |
| **ECSD** | **EROS Data Cent** | **6.27** | **84** | Pn | **Pn** | **20 31 48.4** | **+1.7** |
| **MSU** | **Marysvale** | **7.20** | **229** | | Pn | 20 31 55.5 | -4.0 |
| **RTBA** | **Rita Blanca** | **7.27** | **164** | | **Pn** | **20 32 01.0** | **+0.7** |
| **I10CA** | **LAC DU BONNET** | **9.24** | **40** | I | I | 21 32 06.7 | |
| | baz=229,slow=311,SNR=7.1 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.35** | **40** | Pn | **Pn** | **20 32 26.2** | **-2.4** |
| | comp=N,0.6nm,0.3s,baz=219,slow=13,SNR=3.3 | | | | | | |
| ULM | | | | Lg | Lg | 20 35 04.6 | |
| | comp=N,0.4nm,0.3s,baz=343,slow=6.8,SNR=6.5 | | | | | | |
| | comp=N,1.4nm,0.4s | | | | | | |
| **NEW** | **Newport** | **9.58** | **304** | Pn | Pn | 20 32 25.3 | -6.7 |
| | comp=N,0.3nm,0.3s,baz=76,slow=12,SNR=2.0 | | | | | | |
| NEW | | | | Lg | Lg | 20 35 04.6 | |
| | comp=N,0.1nm,0.3s,baz=0.7,slow=21,SNR=3.2 | | | | | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **9.58** | **304** | I | I | 21 28 50.0 | |
| | baz=118,slow=314,SNR=3.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **14.15** | **174** | Pn | **P** | **20 33 42.3** | **-0.1** |
| | comp=N,0.1nm,0.4s,baz=358,slow=12,SNR=1.3 | | | | | | |
| TXAR | | | | Lg | Lg | 20 37 47.7 | |
| | comp=N,0.1nm,0.3s,baz=9.2,slow=34,SNR=2.0 | | | | | | |

*IDC 14 20:34:39.6±1.3, 1°.47S×123°.33E, h0km, mb3.3/4, mbtmp3.4/5, ML3.6/1, Error ellipse: s-maj=39.4km s-min=22.5km az=74.0*
*DJA 14 20:34:41.9±0.5, 2°.5×4°×12°.3E±°, h10km, M3.7/6, MLv3.7/6*

**ISC 14 20:34:45.7±1.0, 1°.51S±0°.06×123°.4E±0°.1, h49km, n9, σ1§54/12, mb3.4/4, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTOI** | **Gorontalo** | **2.15** | **351** | P | **Pn** | **20 35 19.1** | **-0.1** |
| **KMSI** | **Cibinong** | **2.16** | **17** | P | **Pn** | **20 35 17.4** | **-1.8** |
| KMSI | | | | S | **Sn** | **20 35 46.1** | **+1.3** |
| **MRSI** | **Marisa** | **2.42** | **324** | P | **Pn** | **20 35 20.9** | **-1.9** |
| MRSI | | | | S | **Sn** | **20 35 51.9** | **+0.6** |
| **BNSI** | **Bone** | **4.33** | **228** | P | **Pn** | **20 35 48.7** | **-0.3** |
| **KAPI** | **Kappang** | **5.00** | **226** | Pn | **Pn** | **20 35 55.6** | **-2.7** |
| | 2.2nm,0.3s,baz=100,slow=6.1,SNR=2.5 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 36 56.8** | **+1.9** |
| | 2.8nm,0.3s,baz=140,slow=14,SNR=2.4 | | | | | | |
| | 4.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.24** | **150** | P | **P** | **20 39 27.7** | **-0.1** |
| | 0.3nm,0.5s,baz=322,slow=11,SNR=7.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.29** | **156** | P | **P** | **20 39 59.4** | **+0.8** |
| | 0.5nm,0.7s,baz=333,slow=7.6,SNR=5.8 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **51.32** | **345** | P | **P** | **20 43 45.0** | **-0.2** |
| | 0.4nm,0.5s,baz=158,slow=9.2,SNR=3.0 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.07** | **329** | P | **P** | **20 44 48.6** | **+0.8** |
| | 0.2nm,0.5s,baz=118,slow=8.5,SNR=4.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*DJA 14 20:40:34.2±0.4, 1°N±8°×12°6E±°, h10km, M3.0/5, MLv3.0/5*
*IDC 14 20:40:36.3±2.3, 0°.15N×125°.70E, h0km, mb3.2/3, mbtmp3.2/3, Error ellipse: s-maj=241.8km s-min=28.7km az=64.0*

**ISC 14 20:40:31.7±1.9, 1°.0N±0°.4×126°.09E±0°.06, h10km, n6, σ1§27/7, mb3.1/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.29** | **99** | P | **Pg** | **20 40 56.4** | **-0.2** |
| TNTI | | | | S | **Sg** | **20 41 14.2** | **+0.7** |
| **KMSI** | **Cibinong** | **2.15** | **259** | P | **Pn** | **20 41 08.6** | **+1.0** |
| KMSI | | | | S | **Sn** | **20 41 35.6** | **+1.3** |
| **GTOI** | **Gorontalo** | **3.10** | **264** | P | **Pb** | **20 41 25.5** | **-1.5** |
| **WRA** | **Warramunga Arr** | **22.31** | **159** | P | **P** | **20 45 28.6** | **-1.0** |
| | 0.6nm,0.9s,baz=336,slow=11,SNR=4.9 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **25.65** | **163** | P | **P** | **20 46 02.3** | **+0.4** |
| | 0.1nm,0.4s,baz=340,slow=8.8,SNR=1.5 | | | | | | |
| | 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E27K** | **Coleen River** | **1.70** | **144** | | **Pn** | **20 49 37.8** | **-0.8** |
| E27K | | | | | **Sb** | **20 50 00.5** | **-1.1** |
| E27K | | | | IAML | | 20 50 05.8 | |
| | comp=E,822nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **179** | | **Pn** | **20 49 39.9** | **-1.3** |
| **F26K** | **Sheenjek River** | **1.89** | **179** | | **Sb** | **20 50 06.8** | **-0.3** |
| **F26K** | **Sheenjek River** | **1.89** | **179** | IAML | | 20 50 10.6 | |
| | comp=N,525nm,0.8s | | | | | | |
| F26K | | | | IAML | | 20 50 10.9 | |
| | comp=E,694nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.96** | **118** | | **Pn** | **20 49 41.4** | **-0.8** |
| **D28M** | **Stokes Point** | **1.97** | **95** | | **Pn** | **20 49 41.3** | **-0.9** |
| D28M | | | | IAML | | 20 50 21.0 | |
| | comp=E,752nm,1.1s | | | | | | |
| D28M | | | | IAML | | 20 50 21.2 | |
| | comp=N,788nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **2.05** | **195** | | **Pn** | **20 49 41.5** | **-2.0** |
| **F25K** | **Christian Rive** | **2.05** | **195** | | **Sb** | **20 50 11.8** | **0.0** |
| **F25K** | **Christian Rive** | **2.05** | **195** | IAML | | 20 50 14.5 | |
| | comp=N,393nm,0.7s | | | | | | |
| F25K | | | | IAML | | 20 50 16.4 | |
| | comp=E,392nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.12** | **246** | | **Pn** | **20 49 44.7** | **+0.3** |
| TOLK | | | | IAML | | 20 50 26.7 | |
| | comp=N,637nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.15** | **227** | | **Pn** | **20 49 44.9** | **+0.1** |
| **E24K** | **Your Creek** | **2.15** | **227** | | **Sb** | **20 50 14.3** | **-0.2** |
| **E24K** | **Your Creek** | **2.15** | **227** | IAML | | 20 50 24.3 | |
| | comp=E,399nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.16** | **183** | | **Pn** | **20 49 44.4** | **-0.6** |
| **C23K** | **Itkillik River** | **2.23** | **280** | Pn | **Pn** | **20 49 46.0** | **+0.2** |
| **D23K** | **Nanushuk River** | **2.36** | **258** | | **Pn** | **20 49 47.5** | **-0.2** |
| **D23K** | **Nanushuk River** | **2.36** | **258** | | **Sb** | **20 50 21.4** | **+0.8** |
| **D23K** | **Nanushuk River** | **2.36** | **258** | IAML | | 20 50 39.4 | |
| | comp=E,414nm,0.8s | | | | | | |
| D23K | | | | IAML | | 20 50 39.9 | |
| | comp=N,441nm,1.3s | | | | | | |
| **F24K** | **Squaw Lake** | **2.46** | **214** | Pn | **Pn** | **20 49 47.8** | **-1.2** |
| **E23K** | **Chandalar** | **2.47** | **234** | | **Pn** | **20 49 49.8** | **+0.6** |
| E23K | | | | IAML | | 20 50 37.8 | |
| | comp=E,368nm,0.8s | | | | | | |
| E23K | | | | IAML | | 20 50 39.6 | |
| | comp=N,315nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.55** | **139** | | **Pn** | **20 49 50.0** | **-0.3** |
| F28M | | | | IAML | | 20 50 36.3 | |
| | comp=E,273nm,1.4s | | | | | | |
| F28M | | | | IAML | | 20 50 37.7 | |
| | comp=N,254nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.59** | **114** | | **Pn** | **20 49 50.2** | **-0.5** |
| **G26K** | **Porcupine Rive** | **2.64** | **176** | | **Pn** | **20 49 52.8** | **+1.3** |
| **G27K** | **Doyon Strip** | **2.95** | **159** | | **Pn** | **20 49 55.4** | **-0.3** |
| **FYU** | **Fort Yukon** | **3.04** | **187** | Pn | **Pn** | **20 49 56.2** | **-0.8** |
| **D22K** | **Ayikyak River** | **3.08** | **261** | Pn | **Pn** | **20 49 57.4** | **-0.1** |
| **G24K** | **Hadweenzic Riv** | **3.13** | **204** | Pn | **Pn** | **20 49 57.2** | **-0.9** |
| G24K | | | | IAML | | 20 50 53.1 | |
| | comp=E,192nm,1.0s | | | | | | |
| G24K | | | | IAML | | 20 51 03.7 | |
| | comp=N,191nm,0.8s | | | | | | |
| **COLD** | **Coldfoot** | **3.22** | **226** | | **Pn** | **20 49 58.8** | **-0.7** |
| **B22K** | **Teshekpuk Lake** | **3.24** | **288** | Pn | **Pn** | **20 50 00.1** | **+0.4** |
| **H25L** | **Birch Creek** | **3.38** | **191** | | **Pn** | **20 50 02.9** | **+1.4** |
| **H27K** | **Steamboat Moun** | **3.52** | **162** | | **Pn** | **20 50 04.7** | **+1.1** |
| **G29M** | **Pine Creek** | **3.54** | **136** | Pn | **Pn** | **20 50 04.3** | **+0.4** |
| **F22K** | **John River** | **3.57** | **238** | | **Pn** | **20 50 05.4** | **+1.1** |
| **G23K** | **Bananza Creek** | **3.59** | **220** | Pn | **Pn** | **20 50 01.7** | **-2.9** |
| G23K | | | | IAML | | 20 51 11.4 | |
| | comp=E,147nm,1.1s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.62** | **276** | | **Pn** | **20 50 04.8** | **-0.2** |
| **E21K** | **Killik River** | **3.67** | **257** | | **Pn** | **20 50 04.7** | **-1.0** |
| E21K | | | | IAML | | 20 51 15.2 | |
| | comp=E,164nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.68** | **118** | | **Pn** | **20 50 07.7** | **+1.9** |
| **G30M** | **tAoh Zraii Nji** | **3.97** | **127** | Pn | **Pn** | **20 50 08.3** | **-1.4** |
| **H24K** | **Noodor Dome** | **4.00** | **202** | Pn | **Pn** | **20 50 08.3** | **-1.9** |
| H24K | | | | IAML | | 20 51 30.3 | |
| | comp=E,91nm,1.0s | | | | | | |
| H24K | | | | IAML | | 20 51 31.2 | |
| | comp=N,72nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **4.04** | **144** | Pn | **Pn** | **20 50 09.2** | **-1.5** |
| H29M | | | | IAML | | 20 51 26.0 | |
| | comp=E,130nm,1.5s | | | | | | |
| H29M | | | | IAML | | 20 51 28.7 | |
| | comp=N,121nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.08** | **103** | Pn | **Pn** | **20 50 10.9** | **-0.3** |
| **INK** | **Inuvik** | **4.08** | **103** | Pn | **Pn** | **20 50 13.2** | **+2.0** |
| | comp=N,1.1nm,0.3s,baz=322,slow=8.0,SNR=3.4 | | | | | | |
| INK | | | | Sn | **Sn** | **20 50 59.4** | **+0.7** |
| | comp=N,3.1nm,0.3s,baz=203,slow=18,SNR=3.4 | | | | | | |
| | comp=N,8.7nm,0.6s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.11** | **187** | | **Pn** | **20 50 10.3** | **-1.4** |
| PRP | | | | IAML | | 20 51 17.9 | |
| | comp=E,68nm,1.1s | | | | | | |
| PRP | | | | IAML | | 20 51 33.0 | |
| | comp=N,82nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **4.14** | **240** | Pn | **Pn** | **20 50 10.6** | **-1.6** |
| F21K | | | | IAML | | 20 51 27.4 | |
| | comp=E,87nm,0.8s | | | | | | |
| F21K | | | | IAML | | 20 51 31.3 | |
| | comp=N,110nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.27** | **211** | | **Pn** | **20 50 11.8** | **-2.0** |
| H23K | | | | IAML | | 20 51 36.6 | |
| | comp=N,84nm,0.8s | | | | | | |
| H23K | | | | IAML | | 20 51 40.5 | |
| | comp=E,74nm,1.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.29** | **135** | | **Pn** | **20 50 11.4** | **-2.8** |
| EPYK | | | | IAML | | 20 51 25.2 | |
| | comp=N,113nm,1.2s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.31** | **174** | | **Pn** | **20 50 12.6** | **-1.8** |
| **F31M** | **Tsiigehtchic** | **4.42** | **114** | | **Pn** | **20 50 13.2** | **-2.7** |
| F31M | | | | IAML | | 20 51 36.1 | |
| | comp=E,54nm,1.7s | | | | | | |
| F31M | | | | IAML | | 20 51 42.0 | |
| | comp=N,58nm,1.8s | | | | | | |
| **I28M** | **Miner Creek** | **4.47** | **156** | Pn | **Pn** | **20 50 14.7** | **-2.0** |
| I28M | | | | IAML | | 20 51 12.6 | |
| | comp=N,63nm,1.2s | | | | | | |
| I28M | | | | IAML | | 20 51 44.8 | |
| | comp=E,73nm,1.2s | | | | | | |
| **B20K** | **Meade River** | **4.49** | **282** | Pn | **Pn** | **20 50 15.8** | **-1.1** |
| **G31M** | **Satah River** | **4.57** | **121** | Pn | **Pn** | **20 50 16.3** | **-1.7** |
| G31M | | | | IAML | | 20 51 45.8 | |
| | comp=E,60nm,1.2s | | | | | | |
| G31M | | | | IAML | | 20 51 48.8 | |
| | comp=N,60nm,0.9s | | | | | | |
| **G21K** | **Allakaket** | **4.63** | **233** | Pn | **Pn** | **20 50 16.6** | **-2.2** |
| G21K | | | | IAML | | 20 51 44.7 | |
| | comp=N,84nm,1.1s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.64** | **197** | | **Pn** | **20 50 17.1** | **-1.9** |
| POKR | | | | IAML | | 20 51 19.5 | |
| | comp=E,59nm,0.8s | | | | | | |
| POKR | | | | IAML | | 20 51 48.9 | |
| | comp=N,54nm,0.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.81** | **149** | Pn | **Pn** | **20 50 18.8** | **-2.5** |
| I29M | | | | IAML | | 20 51 41.7 | |
| | comp=E,67nm,0.8s | | | | | | |
| I29M | | | | IAML | | 20 51 45.7 | |
| | comp=N,53nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.86** | **206** | | **Pn** | **20 50 19.6** | **-2.4** |
| I23K | | | | IAML | | 20 51 46.9 | |
| | comp=N,54nm,1.0s | | | | | | |
| I23K | | | | IAML | | 20 52 03.8 | |
| | comp=E,44nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.88** | **200** | | **Pn** | **20 50 20.9** | **-1.4** |
| MDM | | | | IAML | | 20 51 53.9 | |
| | comp=E,46nm,0.7s | | | | | | |
| **COLA** | **College** | **4.92** | **198** | | Pn | 20 50 16.8 | -5.9 |
| **IL31** | | **4.93** | **193** | | **Pn** | **20 50 23.8** | **+0.9** |
| **ILAR** | **Eielson Array** | **4.93** | **193** | | **Pn** | **20 50 24.1** | **+1.1** |
| **ILAR** | **Eielson Array** | **4.93** | **193** | Pn | **Pn** | **20 50 23.8** | **+0.8** |
| | comp=E,3.4nm,0.3s,baz=5.8,slow=13,SNR=82 | | | | | | |
| ILAR | | | | Sn | **Sn** | **20 51 21.5** | **+1.8** |
| | comp=E,2.7nm,0.3s,baz=7.2,slow=22,SNR=14 | | | | | | |
| ILAR | | | | LR | LR | 20 52 29.7 | |
| | comp=E,120nm,21.6s,baz=292,slow=39 | | | | | | |
| | comp=E,14nm,0.5s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.95** | **245** | Pn | **Pn** | **20 50 24.0** | **+0.9** |
| F20K | | | | IAML | | 20 51 54.4 | |
| | comp=E,51nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **4.97** | **164** | Pn | **Pn** | **20 50 24.1** | **+0.6** |
| **J25K** | **Salcha River,** | **5.00** | **185** | | **Pn** | **20 50 22.5** | **-1.5** |
| J25K | | | | IAML | | 20 51 50.3 | |
| | comp=E,53nm,1.3s | | | | | | |
| **D19K** | **Kuna River** | **5.09** | **264** | Pn | **Pn** | **20 50 26.4** | **+1.3** |
| D19K | | | | IAML | | 20 52 06.2 | |
| | comp=E,46nm,1.6s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J26L** | **Joseph Creek** | **5.11** | **177** | Pn | **Pn** | **20 50 23.6** | **-1.8** |
| J26L | | | | IAML | | 20 51 35.6 | |
| | comp=N,35nm,0.7s | | | | | | |
| J26L | | | | IAML | | 20 51 55.1 | |
| | comp=E,39nm,1.5s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.11** | **224** | Pn | **Pn** | **20 50 25.1** | **-0.3** |
| H21K | | | | IAML | | 20 52 02.9 | |
| | comp=N,43nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.14** | **197** | Pn | **Pn** | **20 50 26.4** | **+0.6** |
| **MLY** | **Manley** | **5.20** | **212** | | **Pn** | **20 50 25.8** | **-0.9** |
| **E19K** | **Redstone River** | **5.21** | **252** | Pn | **Pn** | **20 50 26.1** | **-0.7** |
| E19K | | | | IAML | | 20 51 31.2 | |
| | comp=E,56nm,0.7s | | | | | | |
| **HDA** | **Harding Lake** | **5.29** | **193** | | **Pn** | **20 50 26.6** | **-1.3** |
| HDA | | | | IAML | | 20 52 12.9 | |
| | comp=N,46nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.32** | **141** | Pn | **Pn** | **20 50 27.0** | **-1.4** |
| I30M | | | | IAML | | 20 51 30.8 | |
| | comp=N,29nm,0.5s | | | | | | |
| I30M | | | | IAML | | 20 52 01.0 | |
| | comp=E,40nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **5.34** | **198** | | **Pn** | **20 50 27.5** | **-1.0** |
| WRH | | | | IAML | | 20 52 04.2 | |
| | comp=N,38nm,1.2s | | | | | | |
| WRH | | | | IAML | | 20 52 07.4 | |
| | comp=E,42nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.34** | **203** | | **Pn** | **20 50 27.8** | **-0.8** |
| **C19K** | **Lookout Ridge** | **5.44** | **272** | Pn | **Pn** | **20 50 30.5** | **+0.5** |
| **SCRK** | **Sand Creek** | **5.62** | **179** | Pn | **Pn** | **20 50 32.8** | **+0.2** |
| **K27K** | **Chicken** | **5.64** | **170** | | **Pn** | **20 50 32.9** | **+0.2** |
| **F19K** | **Shaleruckik Mo** | **5.73** | **248** | Pn | **Pn** | **20 50 34.4** | **+0.5** |
| **BWN** | **Browne** | **5.80** | **203** | | **Pn** | **20 50 34.1** | **-0.7** |
| **DAWY** | **Dawson** | **5.86** | **159** | | **Pn** | **20 50 34.5** | **-1.2** |
| **J30M** | **Hart River** | **5.90** | **145** | Pn | **Pn** | **20 50 36.5** | **+0.1** |
| **G19K** | **Purcell Mounta** | **5.94** | **241** | Pn | **Pn** | **20 50 36.9** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.10** | **209** | Pn | **Pn** | **20 50 39.7** | **+0.7** |
| **C18K** | **Utukok River** | **6.12** | **269** | Pn | **Pn** | **20 50 39.5** | **+0.2** |
| **H19K** | **Roundabout Mou** | **6.18** | **235** | Pn | **Pn** | **20 50 41.8** | **+1.7** |
| **I20K** | **Naaghedeneel** | **6.22** | **224** | Pn | **Pn** | **20 50 40.5** | **-0.1** |
| **K29M** | **Barlow Dome** | **6.34** | **152** | Pn | **Pn** | **20 50 40.0** | **-2.5** |
| **E18K** | **Tukpahlearik C** | **6.38** | **258** | Pn | **Pn** | **20 50 43.4** | **+0.7** |
| **RND** | **Reindeer** | **6.46** | **199** | Pn | **Pn** | **20 50 42.7** | **-1.3** |
| **G18K** | **Tagagawik** | **6.59** | **243** | Pn | **Pn** | **20 50 46.0** | **+0.4** |
| **L26K** | **Log Cabin Wild** | **6.59** | **176** | | **Pn** | **20 50 46.2** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **6.61** | **170** | Pn | **Pn** | **20 50 46.0** | **-0.1** |
| **L27K** | **Beaver Creek,** | **6.62** | **170** | | **Pn** | **20 50 45.4** | **-0.7** |
| **DHY** | **Denali Highway** | **6.65** | **192** | Pn | **Pn** | **20 50 48.0** | **+1.3** |
| **J20K** | **Nowinta River** | **6.66** | **220** | Pn | **Pn** | **20 50 47.0** | **+0.3** |
| **A36M** | **Sachs Harbour** | **6.71** | **60** | | **Pn** | **20 50 46.7** | **-0.6** |
| **RDOG** | **Red Dog Mine** | **6.92** | **266** | Pn | **Pn** | **20 50 50.6** | **+0.4** |
| **L29M** | **L29M** | **6.94** | **156** | | **Pn** | **20 50 50.5** | **-0.1** |
| **H18K** | **Honhosa River** | **7.01** | **237** | Pn | **Pn** | **20 50 51.6** | **+0.2** |
| **F17K** | **Baldwin Pennin** | **7.10** | **252** | Pn | **Pn** | **20 50 52.5** | **-0.1** |
| **C36M** | **Paulatuk** | **7.10** | **82** | Pn | **Pn** | **20 50 51.7** | **-0.9** |
| **J19K** | **Poorman** | **7.17** | **224** | Pn | **Pn** | **20 50 52.2** | **-1.4** |
| **M26K** | **Nabesna, AK** | **7.22** | **175** | Pn | **Pn** | **20 50 53.4** | **-1.0** |
| **M27K** | **Edge Creek, AK** | **7.31** | **171** | | **Pn** | **20 50 54.7** | **-1.0** |
| **K20K** | **Telida** | **7.36** | **217** | Pn | **Pn** | **20 50 56.7** | **+0.4** |
| **M29M** | **Somme Creek** | **7.54** | **159** | Pn | **Pn** | **20 50 58.9** | **+0.1** |
| **M24K** | **Tolsona, Glenn** | **7.54** | **187** | Pn | **Pn** | **20 50 57.8** | **-1.0** |
| **H17K** | **Granite Mounta** | **7.63** | **240** | Pn | **Pn** | **20 50 59.3** | **-0.6** |
| **C16K** | **Lisburne Hills** | **7.69** | **270** | Pn | **Pn** | **20 51 00.6** | **-0.2** |
| **SCM** | **Sheep Creek Mo** | **7.88** | **191** | | **Pn** | **20 51 03.9** | **+0.5** |
| **J18K** | **Innoko River** | **7.88** | **225** | Pn | **Pn** | **20 51 01.9** | **-1.5** |
| **SML** | **Sawmill** | **7.98** | **194** | | **Pn** | **20 51 03.6** | **-1.2** |
| **N25K** | **Chitina, Valde** | **8.01** | **181** | Pn | **Pn** | **20 51 03.5** | **-1.6** |
| **KLU** | **Klutina** | **8.15** | **186** | Pn | **Pn** | **20 51 08.9** | **+1.8** |
| **GLB** | **Gilahina Butte** | **8.17** | **178** | Pn | **Pn** | **20 51 07.3** | **-0.2** |
| **SKT** | **Skwentna** | **8.18** | **205** | Pn | **Pn** | **20 51 06.0** | **-1.6** |
| **KNK** | **Knik Glacier** | **8.38** | **194** | Pn | **Pn** | **20 51 12.2** | **+2.0** |
| **VRDI** | **Verde Repeater** | **8.39** | **177** | Pn | **Pn** | **20 51 11.8** | **+1.3** |
| **M20K** | **Styx River** | **8.53** | **209** | Pn | **Pn** | **20 51 12.6** | **+0.2** |
| **J17K** | **VABM Dome** | **8.55** | **231** | Pn | **Pn** | **20 51 12.2** | **-0.4** |
| **SUA** | **Susitna One** | **8.57** | **201** | Pn | **Pn** | **20 51 13.7** | **+0.7** |
| **L19K** | **White Mountain** | **8.58** | **215** | Pn | **Pn** | **20 51 12.2** | **-0.7** |
| **I17K** | **Unalakleet** | **8.63** | **237** | Pn | **Pn** | **20 51 14.3** | **+0.7** |
| **F15K** | **North Star Dit** | **8.65** | **253** | Pn | **Pn** | **20 51 14.0** | **0.0** |
| **N30M** | **Aishikik Lake** | **8.67** | **157** | Pn | **Pn** | **20 51 14.0** | **-0.2** |
| **CTGM** | **Chitina Glacie** | **8.73** | **171** | Pn | **Pn** | **20 51 13.8** | **-1.4** |
| **MMPY** | **Sheldon Lake,** | **8.73** | **137** | Pn | **Pn** | **20 51 14.9** | **-0.2** |
| **M19K** | **Big River Lodg** | **8.74** | **213** | Pn | **Pn** | **20 51 16.9** | **+1.7** |
| **TGL** | **Tana Glacier** | **8.88** | **175** | Pn | **Pn** | **20 51 18.1** | **+0.9** |
| **K17K** | **Iditarod** | **8.90** | **226** | Pn | **Pn** | **20 51 17.2** | **-0.2** |
| **PWL** | **Port Wells** | **8.91** | **193** | Pn | **Pn** | **20 51 17.4** | **-0.2** |
| **L18K** | **Granite Mounta** | **8.94** | **220** | Pn | **Pn** | **20 51 17.4** | **-0.5** |
| **GRNC** | **Granite Creek** | **8.96** | **172** | Pn | **Pn** | **20 51 19.1** | **+0.9** |
| **ISLE** | **Jupiter Island** | **9.05** | **174** | Pn | **Pn** | **20 51 18.5** | **-1.0** |
| **J16K** | **Anvik River** | **9.06** | **234** | Pn | **Pn** | **20 51 18.9** | **-0.7** |
| **HIN** | **Hinchinbrook I** | **9.27** | **187** | Pn | **Pn** | **20 51 21.6** | **-0.8** |
| **TABL** | **Table Mountain** | **9.27** | **170** | Pn | **Pn** | **20 51 20.1** | **-2.5** |
| **O30N** | **Mendenhall** | **9.47** | **155** | Pn | **Pn** | **20 51 22.1** | **-3.1** |
| **N18K** | **Kilae Creek** | **10.16** | **214** | Pn | **Pn** | **20 51 31.3** | **-3.3** |
| **KDAK** | **Kodiak Island** | **12.38** | **201** | LR | LR | 20 57 12.7 | |
| | comp=E,85nm,18.1s,baz=84,slow=39 | | | | | | |
| **DLBC** | **Dease Lake** | **12.75** | **144** | Pn | **Pn** | **20 52 09.8** | **-0.2** |
| | comp=E,0.1nm,0.3s,baz=120,slow=17,SNR=4.6 | | | | | | |
| | comp=E,3.3nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.85** | **106** | Pn | Pn | 20 52 19.6 | -5.3 |
| | comp=E,0.3nm,0.3s,baz=315,slow=13,SNR=5.4 | | | | | | |
| YKA | | | | Sn | Sn | 20 54 44.1 | -14 |
| | comp=E,0.2nm,0.3s,baz=314,slow=27,SNR=2.3 | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | |
| **ULM** | **Lac du Bonnet** | **29.82** | **105** | LR | LR | 21 08 38.1 | |
| | comp=E,25nm,19.1s,baz=282,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.22** | **128** | P | **P** | **20 55 39.4** | **+2.4** |
| | comp=E,0.3nm,0.7s,baz=13,slow=8.6,SNR=1.5 | | | | | | |
| | comp=E,0.3nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.16** | **142** | P | **P** | **20 55 57.8** | **+3.9** |
| | comp=E,0.5nm,0.7s,baz=344,slow=8.7,SNR=2.6 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |
| **BORG** | **Borgarnes** | **40.19** | **34** | LR | LR | 21 15 17.0 | |
| | comp=E,29nm,18.7s,baz=318,slow=39 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.31** | **283** | P | **P** | **20 57 42.8** | **+0.8** |
| | comp=E,0.8nm,0.6s,baz=40,slow=7.6,SNR=3.2 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **49.09** | **6** | P | **P** | **20 57 55.0** | **-0.5** |
| | comp=E,1.2nm,0.9s,baz=12,slow=9.1,SNR=1.9 | | | | | | |
| | comp=E,1.2nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **49.62** | **14** | P | **P** | **20 57 59.5** | **-0.1** |
| | comp=E,1.0nm,0.7s,baz=9.5,slow=1.8,SNR=2.6 | | | | | | |
| | comp=E,1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.73** | **325** | P | **P** | **20 58 13.8** | **-1.7** |
| | comp=E,0.8nm,0.6s,baz=25,slow=7.9,SNR=2.8 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **52.15** | **306** | P | **P** | **20 58 19.5** | **+0.5** |
| | comp=E,0.4nm,0.6s,baz=25,slow=4.9,SNR=3.8 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **54.50** | **270** | LR | LR | 21 22 36.8 | |
| | comp=E,35nm,21.7s,baz=72,slow=37 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.10** | **329** | P | **P** | **20 58 48.4** | **+0.9** |
| | comp=E,1.3nm,0.9s,baz=14,slow=7.2,SNR=9.5 | | | | | | |
| | comp=E,1.3nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.03** | **324** | P | **P** | **20 59 08.6** | **+0.4** |
| | comp=E,0.4nm,0.5s,baz=31,slow=6.7,SNR=5.4 | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | |

*NEIC* ***14*** *20:49:55.2±1.2,35°.897N±0°.007×97°.28W±0°.01,h6km±3km, Error ellipse: s-maj=1.5km s-min=1.0km az=108.0*
**TUL 14 20:49:55.3±1.3,35°.899N±0°.010×97°.27W±0°.01,h7km±3km, ML2.6,mb_Lg2.3/28(NEIC),ML2.5/51(NEIC),Error ellipse: s-maj=1.4km s-min=1.3km az=134.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK029** | **Liberty Lake** | **0.18** | **235** | Pg | Pg | 20 49 59.1 | +0.2 |
| OK029 | | | | Sg | Sg | 20 50 01.8 | +0.4 |
| OK029 | | | | IAML | | 20 50 02.1 | |
| | 779nm,0.3s | | | | | | |
| OK029 | | | | IAML | | 20 50 02.1 | |
| | 1µm,0.1s | | | | | | |
| **ADOK** | **Arcadia Dam** | **0.26** | **198** | Pg | Pg | 20 49 59.6 | -0.8 |
| **OK031** | **S. Brethren Rd** | **0.36** | **81** | | Pg | 20 50 02.6 | +0.4 |
| OK031 | | | | Sg | Sg | 20 50 07.8 | +0.9 |
| **OK052** | **Battle Ridge R** | **0.39** | **76** | | Pg | 20 50 03.4 | +0.4 |
| OK052 | | | | Sg | Sg | 20 50 09.0 | +0.8 |
| OK052 | | | | IAML | | 20 50 09.4 | |
| | 615nm,0.3s | | | | | | |
| OK052 | | | | IAML | | 20 50 09.9 | |
| | 393nm,0.2s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.51** | **195** | Pg | Pg | 20 50 05.0 | -0.1 |
| OKCSW | | | | Sg | Sg | 20 50 12.4 | +0.6 |
| OKCSW | | | | IAML | | 20 50 12.7 | |
| | comp=N,420nm,0.2s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **QUOK** | **Quay** | **0.53** | **59** | Pg | Pg | 20 50 05.9 | +0.3 |
| QUOK | | | | Sg | Sg | 20 50 13.1 | +0.5 |
| QUOK | | | | IAML | | 20 50 14.7 | |
| | comp=E,238nm,0.2s | | | | | | |
| **OK048** | **Pawnee Station** | **0.58** | **27** | Pg | Pg | 20 50 06.7 | +0.2 |
| OK048 | | | | Sg | Sg | 20 50 14.3 | +0.2 |
| OK048 | | | | IAML | | 20 50 14.8 | |
| | comp=E,199nm,0.2s | | | | | | |
| OK048 | | | | IAML | | 20 50 14.9 | |
| | comp=E,260nm,0.2s | | | | | | |
| **DEOK** | **Depew** | **0.63** | **95** | Pg | Pg | 20 50 07.4 | -0.1 |
| DEOK | | | | Sg | Sg | 20 50 16.2 | +0.5 |
| DEOK | | | | IAML | | 20 50 16.9 | |
| | comp=E,206nm,0.1s | | | | | | |
| DEOK | | | | IAML | | 20 50 16.9 | |
| | comp=N,327nm,0.3s | | | | | | |
| **FNO** | **Franklin** | **0.65** | **189** | Pg | Pg | 20 50 05.8 | -2.0 |
| FNO | | | | Sg | Sg | 20 50 16.7 | +0.4 |
| **OK051** | **E0350 and S346** | **0.70** | **30** | | Pg | 20 50 08.8 | 0.0 |
| OK051 | | | | IAML | | 20 50 23.3 | |
| | comp=N,214nm,0.2s | | | | | | |
| OK051 | | | | IAML | | 20 50 28.5 | |
| | comp=N,206nm,0.2s | | | | | | |
| **W35A** | **Tecumseh** | **0.81** | **156** | | Pg | 20 50 10.3 | -0.7 |
| W35A | | | | Sg | Sg | 20 50 21.4 | -0.1 |
| W35A | | | | IAML | | 20 50 24.4 | |
| | comp=N,136nm,0.4s | | | | | | |
| W35A | | | | IAML | | 20 50 24.6 | |
| | comp=E,119nm,0.5s | | | | | | |
| **CROK** | **Carrier** | **0.83** | **317** | Pg | Pg | 20 50 10.5 | -0.8 |
| CROK | | | | Sg | Sg | 20 50 22.2 | 0.0 |
| CROK | | | | IAML | | 20 50 27.4 | |
| | comp=E,184nm,0.3s | | | | | | |
| CROK | | | | IAML | | 20 50 29.0 | |
| | comp=N,237nm,0.2s | | | | | | |
| **BLOK** | **Blackwell** | **0.86** | **3** | | Pg | 20 50 11.6 | -0.2 |
| BLOK | | | | Sg | Sg | 20 50 23.6 | +0.5 |
| **GC02** | **Grant County #** | **1.06** | **334** | | Pg | 20 50 15.1 | -0.6 |
| GC02 | | | | Sg | Sg | 20 50 29.1 | -0.4 |
| **KAN13** | **South Haven SW** | **1.12** | **352** | Pg | Pg | 20 50 16.1 | -0.8 |
| KAN13 | | | | Sg | Sg | 20 50 31.2 | -0.2 |
| **OK032** | **Salt Plains WL** | **1.18** | **320** | Pg | Pg | 20 50 17.2 | -0.7 |
| **CSTR** | **Hydro, Custer** | **1.18** | **258** | Pg | Pg | 20 50 16.6 | -1.3 |
| CSTR | | | | Sg | Sg | 20 50 33.1 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.19** | **31** | Pg | Pg | 20 50 17.3 | -0.8 |
| T35A | | | | Sg | Sg | 20 50 33.0 | -0.5 |
| T35A | | | | IAML | | 20 50 34.4 | |
| | comp=E,94nm,0.3s | | | | | | |
| T35A | | | | IAML | | 20 50 34.5 | |
| | comp=N,81nm,0.2s | | | | | | |
| **KAN14** | **Manchester OK** | **1.19** | **332** | Pg | Pg | 20 50 16.7 | -1.5 |
| KAN14 | | | | | Pb | 20 50 17.5 | -0.8 |
| KAN14 | | | | Sg | Sg | 20 50 33.4 | -0.3 |
| **TUL3** | **Leonard** | **1.20** | **89** | Pg | Pg | 20 50 17.2 | -1.1 |
| TUL3 | | | | Sg | Sg | 20 50 33.8 | -0.2 |
| TUL3 | | | | IAML | | 20 50 34.5 | |
| | comp=N,126nm,0.2s | | | | | | |
| **KAN17** | **Caldwell West** | **1.21** | **341** | | Pg | 20 50 18.2 | -0.3 |
| KAN17 | | | | Sg | Sg | 20 50 34.0 | -0.2 |
| **KAN09** | **Caldwell North** | **1.27** | **347** | | Pg | 20 50 17.2 | -2.3 |
| KAN09 | | | | Sg | Sg | 20 50 35.8 | -0.2 |
| **KAN01** | **Argonia South** | **1.31** | **343** | | Pn | 20 50 19.4 | -0.8 |
| KAN01 | | | | Sg | Sb | 20 50 37.1 | -0.3 |
| **OK038** | **West end E0370** | **1.32** | **296** | | Pn | 20 50 19.3 | -1.0 |
| OK038 | | | | Sg | Sg | 20 50 37.8 | 0.0 |
| **X34A** | **Smith Ranch, M** | **1.37** | **200** | | Pn | 20 50 20.7 | -0.3 |
| X34A | | | | | Sg | 20 50 39.8 | +0.4 |
| **KS21** | **Milan North St** | **1.42** | **347** | | Pn | 20 50 20.4 | -1.3 |
| KS21 | | | | | Sn | 20 50 40.6 | 0.0 |
| **KAN08** | **Anthony NE Sta** | **1.44** | **337** | | Pn | 20 50 21.2 | -0.6 |
| KAN08 | | | | | Sg | 20 50 41.8 | +0.2 |
| **KAN12** | **Harper NE Stat** | **1.51** | **338** | | Pn | 20 50 21.6 | -1.3 |
| KAN12 | | | | | Sb | 20 50 43.2 | +0.1 |
| **NOKA** | **Waynoka** | **1.53** | **299** | Pg | Pn | 20 50 23.3 | +0.2 |
| NOKA | | | | | Sb | 20 50 43.5 | -0.2 |
| **WMOK** | **Wichita Mounta** | **1.69** | **227** | | Pn | 20 50 25.5 | +0.1 |
| WMOK | | | | | Sb | 20 50 48.5 | +0.2 |
| WMOK | | | | IAmb_Lg | | 20 50 50.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **ELIS** | **Ellis County** | **1.75** | **276** | | Pn | 20 50 25.5 | -0.6 |
| ELIS | | | | | Sg | 20 50 51.1 | -0.4 |
| **RLO** | **Rose Lookout** | **1.84** | **81** | | Pn | 20 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ADK | | | | IAML | | 21 01 18.9 | |
| | 4μm,0.4s | | | | | | |
| **ADK** | **Adak** | **1.63** | **265** | | **Sn** | **21 01 15.7** | **+0.5** |
| **KIRH** | **Kanaga Island** | **1.88** | **266** | | **Pn** | **21 00 58.6** | **+0.9** |
| **KIWB** | **Kanaga Island** | **1.92** | **265** | Pn | **Pn** | **21 00 59.2** | **+1.0** |
| **KIWB** | **Kanaga Island** | **1.92** | **265** | | **Sb** | **21 01 25.1** | **+0.5** |
| **KICM** | **Kanaga Island** | **1.94** | **267** | | **Pn** | **21 00 59.3** | **+0.8** |
| **KIMD** | **Kanaga Island** | **1.98** | **262** | | **Sb** | **21 01 26.9** | **+0.5** |
| **TAFP** | **Tanaga Falls P** | **2.42** | **268** | | **Pn** | **21 01 05.9** | **+0.7** |
| TAFP | | | | | **Sn** | **21 01 36.4** | **+1.5** |
| **TASE** | **Tanaga Southea** | **2.46** | **266** | | **Pn** | **21 01 06.9** | **+1.1** |
| **TANO** | **Tanaga North** | **2.51** | **268** | | **Pn** | **21 01 07.3** | **+0.9** |
| **CLES** | **Cleveland East** | **2.67** | **72** | Pn | **Pn** | **21 01 09.7** | **+1.2** |
| CLES | | | | IAML | | 21 01 54.8 | |
| | comp=E,729nm,0.7s | | | | | | |
| CLES | | | | IAML | | 21 01 57.4 | |
| | comp=N,902nm,1.0s | | | | | | |
| **CLCO** | **Concord Point,** | **2.76** | **73** | | **Pn** | **21 01 10.6** | **+0.8** |
| **GAEA** | **Gareloi East** | **2.91** | **266** | | **Pn** | **21 01 12.6** | **+0.7** |
| **GANE** | **Gareloi Northe** | **2.92** | **267** | | **Pn** | **21 01 12.6** | **+0.5** |
| **GANO** | **Gareloi North** | **2.94** | **267** | | **Pn** | **21 01 12.8** | **+0.5** |
| **NIKH** | **Nikolski High** | **3.31** | **72** | | **Pn** | **21 01 18.3** | **+0.9** |
| **OKFG** | **Magazine Ridge** | **3.98** | **68** | | **Pn** | **21 01 28.5** | **+2.0** |
| **MSW** | **Makushin Switc** | **4.78** | **64** | | **Pn** | **21 01 39.5** | **+2.0** |
| **UNV** | **Unalaska Valle** | **4.91** | **66** | | **Pn** | **21 01 41.2** | **+1.9** |
| **LVA** | **Lava Point** | **5.28** | **63** | Pn | **Pn** | **21 01 46.1** | **+1.8** |
| LVA | | | | IAML | | 21 03 32.3 | |
| | comp=N,134nm,0.7s | | | | | | |
| **CNBA** | **Chernabura Isl** | **9.07** | **67** | Pn | **Pn** | **21 02 38.1** | **+1.7** |
| **O14K** | **Tigyukauivet M** | **10.20** | **40** | Pn | **Pn** | **21 02 52.6** | **+0.9** |
| **N15K** | **Kwethluk River** | **11.24** | **38** | Pn | **Pn** | **21 03 07.8** | **+1.8** |
| **O16K** | **Kokwok River B** | **11.71** | **44** | Pn | **Pn** | **21 03 12.8** | **+0.4** |
| **M16K** | **Timber Creek** | **12.22** | **37** | Pn | **Pn** | **21 03 20.1** | **+0.7** |
| **L16K** | **Owhat River** | **12.50** | **34** | Pn | **Pn** | **21 03 25.2** | **+2.0** |
| **N17K** | **Nushagak Hills** | **12.61** | **41** | Pn | **Pn** | **21 03 26.9** | **+2.2** |
| **KDAK** | **Kodiak Island** | **13.59** | **57** | P | **Pn** | **21 03 40.8** | **+2.7** |
| | comp=N,0.2nm,0.3s,baz=139,slow=7.0,SNR=1.7 | | | | | | |
| KDAK | | | | LR | LR | 21 09 18.7 | |
| | comp=N,61nm,19.3s,baz=324,slow=39 | | | | | | |
| | comp=N,7.6nm,0.9s | | | | | | |
| **K17K** | **Iditarod** | **13.60** | **32** | Pn | **Pn** | **21 03 41.1** | **+2.9** |
| **L18K** | **Granite Mounta** | **13.82** | **36** | Pn | **Pn** | **21 03 42.4** | **+1.1** |
| **N19K** | **Bonanza Creek** | **13.88** | **43** | Pn | **Pn** | **21 03 45.0** | **+2.8** |
| **L19K** | **White Mountain** | **14.48** | **38** | Pn | **Pn** | **21 03 51.8** | **+1.5** |
| **J18K** | **Innoko River** | **14.64** | **32** | Pn | **Pn** | **21 03 54.4** | **+1.9** |
| **J19K** | **Poorman** | **15.36** | **32** | Pn | **Pn** | **21 04 03.4** | **+1.3** |
| J19K | | | | IAmb | IAmb | 21 04 09.7 | |
| | comp=E,7.2nm,1.1s | | | | | | |
| **J20K** | **Nowinta River** | **15.97** | **33** | | **P** | **21 04 12.5** | **-1.1** |
| **BPAW** | **Bear Paw Mtn.** | **17.02** | **36** | | **P** | **21 04 25.0** | **-0.3** |
| **E19K** | **Redstone River** | **17.51** | **22** | | **P** | **21 04 31.2** | **+0.7** |
| **MLY** | **Manley** | **17.65** | **34** | | **P** | **21 04 33.6** | **+1.4** |
| **DHY** | **Denali Highway** | **17.91** | **42** | Pn | **Pn** | **21 04 34.1** | **-0.5** |
| **D19K** | **Kuna River** | **18.17** | **19** | P | **P** | **21 04 39.0** | **+1.1** |
| D19K | | | | IAmb | IAmb | 21 04 57.3 | |
| | comp=E,18nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **18.20** | **34** | P | **P** | **21 04 38.8** | **+0.7** |
| I23K | | | | IAmb | IAmb | 21 04 42.6 | |
| | comp=E,7.1nm,0.8s | | | | | | |
| **WRH** | **Wood River Hil** | **18.29** | **37** | P | **Pn** | **21 04 38.5** | **-0.5** |
| **CCB** | **Clear Creek Bu** | **18.49** | **37** | P | **P** | **21 04 40.5** | **-0.8** |
| **H23K** | **Yukon River** | **18.53** | **33** | P | **Pn** | **21 04 42.7** | **+0.7** |
| H23K | | | | IAmb | IAmb | 21 05 00.1 | |
| | comp=E,6.9nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **18.89** | **37** | P | **P** | **21 04 46.2** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=233,slow=8.6,SNR=11 | | | | | | |
| ILAR | | | | LR | LR | 21 12 33.7 | |
| | comp=Z,19nm,18.1s,baz=326,slow=38 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **19.10** | **34** | P | **Pn** | **21 04 49.4** | **+0.5** |
| **J25K** | **Salcha River,** | **19.39** | **39** | P | **P** | **21 04 51.1** | **-0.3** |
| J25K | | | | IAmb | IAmb | 21 04 56.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **19.67** | **41** | P | **P** | **21 04 53.2** | **-1.2** |
| SCRK | | | | IAmb | IAmb | 21 04 57.2 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **20.25** | **28** | | **P** | **21 05 01.1** | **+0.5** |
| E24K | | | | IAmb | IAmb | 21 05 03.8 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **20.32** | **26** | P | **P** | **21 05 02.2** | **+0.8** |
| TOLK | | | | IAmb | IAmb | 21 05 06.6 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **20.79** | **315** | P | Pn | 21 05 08.7 | -0.1 |
| | comp=Z,3.7nm,0.8s,baz=113,slow=13,SNR=6.8 | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **21.11** | **40** | P | **P** | **21 05 09.1** | **-0.8** |
| EGAK | | | | IAmb | IAmb | 21 05 14.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **21.84** | **39** | P | **P** | **21 05 17.9** | **+0.1** |
| I28M | | | | IAmb | IAmb | 21 05 22.4 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **22.72** | **38** | P | **P** | **21 05 25.6** | **-1.6** |
| H29M | | | | IAmb | IAmb | 21 05 44.7 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **23.18** | **41** | P | **P** | **21 05 29.9** | **-2.2** |
| **E29M** | **Blow River** | **23.75** | **33** | P | **P** | **21 05 37.4** | **-0.2** |
| E29M | | | | IAmb | IAmb | 21 05 38.8 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **32.61** | **48** | LR | LR | 21 20 45.8 | |
| | comp=Z,36nm,19.3s,baz=270,slow=37 | | | | | | |
| **LON** | **Longmire** | **33.80** | **78** | P | **P** | **21 07 08.1** | **+0.6** |
| **H11N2** | **WAKE ISLAND Hy** | **35.53** | **212** | T | T | 21 44 55.2 | |
| | baz=20,slow=76,SNR=86 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.54** | **212** | T | T | 21 44 56.6 | |
| | baz=20,slow=76,SNR=76 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.55** | **212** | T | T | 21 44 56.6 | |
| | baz=20,slow=76,SNR=76 | | | | | | |
| **I07A** | **Izee** | **36.55** | **80** | P | **P** | **21 07 32.0** | **+0.7** |
| I07A | | | | IAmb | IAmb | 21 07 34.8 | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.74** | **211** | T | T | 21 46 18.1 | |
| | baz=20,slow=76,SNR=226 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **36.76** | **211** | T | T | 21 46 26.1 | |
| | baz=20,slow=76,SNR=80 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.76** | **212** | T | T | 21 46 28.3 | |
| | baz=20,slow=76,SNR=40 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.79** | **264** | P | **P** | **21 07 33.7** | **+0.4** |
| | comp=Z,1.1nm,0.6s,baz=49,slow=7.4,SNR=5.0 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **WVOR** | **Wild Horse Val** | **37.99** | **82** | P | **P** | **21 07 43.6** | **+0.1** |
| WVOR | | | | IAmb | IAmb | 21 07 46.5 | |
| | comp=Z,7.1nm,1.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.56** | **87** | P | **P** | **21 08 06.3** | **+1.1** |
| | comp=Z,1.0nm,0.7s,baz=292,slow=8.0,SNR=6.5 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ELK** | **Elko** | **41.04** | **82** | P | **P** | **21 08 09.5** | **+0.4** |
| ELK | | | | IAmb | IAmb | 21 08 10.9 | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **DUG** | **Dugway, Tooele** | **42.85** | **81** | P | **P** | **21 08 24.2** | **+0.4** |
| DUG | | | | IAmb | IAmb | 21 08 26.6 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **PRN** | **Pahroc Range** | **43.20** | **86** | P | **P** | **21 08 26.9** | **+0.2** |
| PRN | | | | IAmb | IAmb | 21 08 28.8 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **PD31** | **Pinedale Array** | **43.29** | **76** | P | **P** | **21 08 26.7** | **-0.7** |
| PD31 | | | | IAmb | IAmb | 21 08 30.4 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **43.29** | **76** | | **P** | **21 08 26.7** | **-0.7** |
| **PDAR** | **Pinedale Array** | **43.29** | **76** | P | **P** | **21 08 27.7** | **+0.2** |
| | comp=Z,2.0nm,0.6s,baz=306,slow=5.1,SNR=16 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **TMUT** | **Trail Mountain** | **44.38** | **81** | P | **P** | **21 08 36.2** | **-0.2** |
| **RDMU** | **Red Mountain** | **44.59** | **78** | P | **P** | **21 08 37.6** | **-0.3** |
| **SRU** | **San Rafael Swe** | **44.91** | **81** | P | **P** | **21 08 40.7** | **+0.3** |
| **U15A** | **North Rim** | **45.53** | **85** | P | **P** | **21 08 46.2** | **+0.7** |
| **O20A** | **White River Ci** | **45.66** | **78** | P | **P** | **21 08 45.9** | **-0.5** |
| **POST** | **Post** | **54.38** | **80** | P | **P** | **21 09 51.2** | **-1.3** |
| **MNHN** | **Monahans** | **54.80** | **83** | P | **P** | **21 09 54.9** | **-0.7** |
| **TXAR** | **Lajitas Array** | **55.65** | **85** | P | **P** | **21 10 02.0** | **+0.2** |
| | comp=Z,2.1nm,0.8s,baz=296,slow=5.0,SNR=23 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.87** | **352** | LR | LR | 21 38 10.8 | |
| | comp=Z,23nm,18.9s,baz=97,slow=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.73** | **316** | P | **P** | **21 10 35.0** | **-1.9** |
| | comp=Z,0.3nm,0.7s,baz=43,slow=6.5,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **62.00** | **311** | P | **P** | **21 10 45.1** | **-0.4** |
| **BVAR** | **Borovoye Array** | **62.21** | **322** | P | **P** | **21 10 46.1** | **-0.8** |
| | comp=Z,0.2nm,0.4s,baz=32,slow=8.5,SNR=1.6 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **88.03** | **226** | P | **P** | **21 13 14.1** | **-1.7** |
| | comp=Z,0.3nm,0.5s,baz=22,slow=5.3,SNR=1.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **H03N2** | **Juan Fernandez** | **118.54** | **109** | T | T | 23 29 19.8 | |
| | baz=317,slow=77,SNR=6.9 | | | | | | |
| **H03N1** | **Juan Fernandez** | **118.55** | **109** | T | T | 23 29 06.2 | |
| | baz=317,slow=77,SNR=4.9 | | | | | | |
| **H03N3** | **Juan Fernandez** | **118.55** | **109** | T | T | 23 29 14.1 | |
| | baz=317,slow=77,SNR=4.3 | | | | | | |

*IDC **14** 21:40:43.0±1.5, 69.63N×145.03W, h0km, mb3.5/3, mbtmp3.4/5, ML3.1/2, Error ellipse: s-maj=39.9km s-min=17.3km az=97.0*
*AEIC **14** 21:40:43.3±1.0, 69.67N±0.05×145.16W±0.06, h14km±5km, ML3.0, ML3.0/107(NEIC), Error ellipse: s-maj=7.6km s-min=3.1km az=179.0*
*NEIC **14** 21:40:44.5±1.0, 69.65N±0.06×145.2W±0.1, h10km±2km, Error ellipse: s-maj=9.8km s-min=6.7km az=18.0*

**ISC 14 21:40:44.1±0.8, 69.62N±0.04×145.22W±0.03, h10km, n82, σ0890/85, mb3.7/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.32** | **19** | | **Pg** | **21 40 50.2** | **-0.2** |
| **D25K** | **Kavik River** | **0.51** | **234** | | **Pg** | **21 40 52.5** | **-1.3** |
| D25K | | | | | **Sg** | **21 40 59.9** | **-0.6** |
| **C27K** | **Jago River** | **0.53** | **88** | | **Pg** | **21 40 53.1** | **-1.2** |
| C27K | | | | | **Sg** | **21 41 00.4** | **-0.9** |
| **C24K** | **Franklin Bluff** | **1.22** | **276** | | **Pn** | **21 41 07.1** | **-0.1** |
| C24K | | | | | **Sb** | **21 41 24.3** | **+1.3** |
| **D24K** | **Happy Valley** | **1.36** | **252** | Pn | **Pn** | **21 41 09.2** | **+0.2** |
| D24K | | | | | **Sn** | **21 41 28.3** | **+1.2** |
| **D27M** | **Malcolm River** | **1.55** | **102** | Pn | **Pn** | **21 41 12.0** | **+0.2** |
| D27M | | | | IAML | | 21 41 36.9 | |
| | comp=N,194nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.84** | **240** | Pn | **Pn** | **21 41 16.8** | **+1.0** |
| TOLK | | | | IAML | | 21 41 46.6 | |
| | comp=E,161nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 21 41 53.1 | |
| | comp=N,126nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **1.89** | **279** | Pn | **Pn** | **21 41 16.9** | **+0.5** |
| C23K | | | | IAML | | 21 41 55.5 | |
| | comp=E,176nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.95** | **136** | Pn | **Pn** | **21 41 18.2** | **+1.0** |
| **E24K** | **Your Creek** | **1.95** | **219** | Pn | **Pn** | **21 41 18.4** | **+1.1** |
| E24K | | | | IAML | | 21 41 54.4 | |
| | comp=E,161nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.97** | **168** | | **Pn** | **21 41 18.7** | **+1.1** |
| F26K | | | | IAML | | 21 41 52.4 | |
| | comp=E,133nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **185** | | **Pn** | **21 41 19.2** | **+0.7** |
| F25K | | | | IAML | | 21 41 54.4 | |
| | comp=E,92nm,0.6s | | | | | | |
| F25K | | | | IAML | | 21 41 59.6 | |
| | comp=N,106nm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.05** | **254** | | **Pn** | **21 41 19.0** | **+0.5** |
| D23K | | | | IAML | | 21 42 03.7 | |
| | comp=E,136nm,0.8s | | | | | | |
| D23K | | | | IAML | | 21 42 04.4 | |
| | comp=N,120nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.24** | **228** | | **Pn** | **21 41 21.8** | **+0.6** |
| E23K | | | | IAML | | 21 42 03.7 | |
| | comp=N,89nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.28** | **114** | Pn | **Pn** | **21 41 22.9** | **+1.2** |
| **F24K** | **Squaw Lake** | **2.33** | **206** | Pn | **Pn** | **21 41 23.3** | **+0.9** |
| F24K | | | | IAML | | 21 42 04.3 | |
| | comp=N,67nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **2.76** | **258** | Pn | **Pn** | **21 41 28.6** | **+0.2** |
| **F28M** | **Old Crow** | **2.81** | **133** | Pn | **Pn** | **21 41 29.6** | **+0.6** |
| F28M | | | | IAML | | 21 42 19.7 | |
| | comp=N,49nm,0.6s | | | | | | |
| F28M | | | | IAML | | 21 42 21.1 | |
| | comp=E,46nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.91** | **112** | Pn | **Pn** | **21 41 32.0** | **+1.6** |
| E29M | | | | IAML | | 21 42 20.0 | |
| | comp=E,52nm,0.8s | | | | | | |
| E29M | | | | IAML | | 21 42 20.2 | |
| | comp=N,69nm,1.0s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.91** | **288** | Pn | **Pn** | **21 41 30.9** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.05** | **197** | Pn | Pn | 21 41 29.9 | -2.4 |
| G24K | | | | IAML | | 21 42 33.3 | |
| | comp=E,61nm,0.8s | | | | | | |
| G24K | | | | IAML | | 21 42 34.4 | |
| | comp=N,56nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.07** | **180** | | **Pn** | **21 41 32.0** | **-0.5** |
| FYU | | | | IAML | | 21 42 25.7 | |
| | comp=N,44nm,1.1s | | | | | | |
| FYU | | | | IAML | | 21 42 34.1 | |
| | comp=E,50nm,1.2s | | | | | | |
| **G27K** | **Doyon Strip** | **3.12** | **153** | | **Pn** | **21 41 33.7** | **+0.4** |
| **B21K** | **Ikpikpuk River** | **3.29** | **274** | Pn | **Pn** | **21 41 35.8** | **+0.3** |
| B21K | | | | IAML | | 21 42 38.0 | |
| | comp=E,36nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.36** | **254** | | **Pn** | **21 41 37.6** | **+1.0** |
| E21K | | | | IAML | | 21 42 39.6 | |
| | comp=E,46nm,0.6s | | | | | | |
| **G23K** | **Bananza Creek** | **3.43** | **214** | | **Pn** | **21 41 39.3** | **+1.8** |
| G23K | | | | IAML | | 21 42 40.7 | |
| | comp=N,26nm,1.5s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.58** | **297** | | **Pn** | **21 41 40.4** | **+0.8** |
| **G29M** | **Pine Creek** | **3.81** | **132** | Pn | **Pn** | **21 41 43.5** | **+0.7** |
| **F21K** | **Alatna River** | **3.89** | **236** | Pn | **Pn** | **21 41 44.8** | **+1.0** |
| F21K | | | | IAML | | 21 42 52.1 | |
| | comp=N,26nm,0.8s | | | | | | |
| F21K | | | | IAML | | 21 42 56.5 | |
| | comp=E,28nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **3.93** | **196** | Pn | **Pn** | **21 41 45.0** | **+0.6** |
| H24K | | | | IAML | | 21 42 57.6 | |
| | comp=N,17nm,0.7s | | | | | | |
| H24K | | | | IAML | | 21 42 58.4 | |
| | comp=E,18nm,1.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.12** | **182** | Pn | **Pn** | **21 41 48.1** | **+1.0** |
| PRP | | | | IAML | | 21 42 39.6 | |
| | comp=E,20nm,0.7s | | | | | | |
| PRP | | | | IAML | | 21 43 04.6 | |
| | comp=N,16nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.15** | **205** | | **Pn** | **21 41 48.2** | **+0.8** |
| H23K | | | | IAML | | 21 43 04.2 | |
| | comp=E,20nm,0.9s | | | | | | |
| H23K | | | | IAML | | 21 43 11.3 | |
| | comp=N,19nm,0.8s | | | | | | |
| **B20K** | **Meade River** | **4.16** | **281** | Pn | **Pn** | **21 41 48.1** | **+0.6** |
| **G30M** | **tAoh Zrail Nji** | **4.26** | **124** | Pn | **Pn** | **21 41 49.8** | **+0.8** |
| G30M | | | | IAML | | 21 43 04.4 | |
| | comp=E,14nm,0.9s | | | | | | |
| G30M | | | | IAML | | 21 43 10.2 | |
| | comp=N,17nm,1.1s | | | | | | |
| **I27K** | **Kandik River** | **4.26** | **159** | | **Pn** | **21 41 50.6** | **+1.6** |
| **H29M** | **Whitestone** | **4.28** | **140** | Pn | **Pn** | **21 41 50.1** | **+0.9** |
| H29M | | | | IAML | | 21 43 07.3 | |
| | comp=E,22nm,1.3s | | | | | | |
| H29M | | | | IAML | | 21 43 18.5 | |
| | comp=N,21nm,1.0s | | | | | | |
| **G21K** | **Allakaket** | **4.40** | **229** | | **Pn** | **21 41 50.8** | **0.0** |
| **I26K** | **Coal Creek Min** | **4.40** | **169** | | **Pn** | **21 41 51.0** | **+0.2** |
| **EPYK** | **Eagle Plains** | **4.57** | **132** | Pn | **Pn** | **21 41 54.1** | **+1.0** |
| **POKR** | **Poker Plat Res** | **4.60** | **192** | Pn | **Pn** | **21 41 54.2** | **+0.6** |
| POKR | | | | IAML | | 21 42 50.1 | |
| | comp=N,14nm,0.8s | | | | | | |
| POKR | | | | IAML | | 21 42 53.4 | |
| | comp=E,16nm,0.7s | | | | | | |
| **I28M** | **Miner Creek** | **4.65** | **152** | Pn | **Pn** | **21 41 55.5** | **+1.1** |
| I28M | | | | IAML | | 21 42 53.5 | |
| | comp=E,12nm,0.5s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.67** | **241** | Pn | **Pn** | **21 41 55.8** | **+1.3** |
| F20K | | | | IAML | | 21 43 26.5 | |
| | comp=N,15nm,0.9s | | | | | | |
| F20K | | | | IAML | | 21 43 26.9 | |
| | comp=E,12nm,1.0s | | | | | | |
| **D19K** | **Kuna River** | **4.76** | **262** | Pn | **Pn** | **21 41 56.9** | **+1.1** |
| D19K | | | | IAML | | 21 43 25.9 | |
| | comp=E,12nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **202** | | **Pn** | **21 41 55.7** | **-0.2** |
| I23K | | | | IAML | | 21 43 31.6 | |
| | comp=E,15nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **4.82** | **195** | | **Pn** | **21 41 57.5** | **+0.8** |
| MDM | | | | IAML | | 21 43 27.0 | |
| | comp=N,10.0nm,0.8s | | | | | | |
| MDM | | | | IAML | | 21 43 30.5 | |
| | comp=E,11nm,1.2s | | | | | | |
| **G31M** | **Satah River** | **4.88** | **118** | | **Pn** | **21 41 57.6** | **+0.1** |
| G31M | | | | IAML | | 21 43 18.7 | |
| | comp=N,14nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **4.91** | **188** | Pn | **Pn** | **21 41 58.1** | **+0.2** |
| | comp=N,0.4nm,0.3s,baz=5.5,slow=14,SNR=10 | | | | | | |
| ILAR | | | | Sn | **Sn** | **21 42 55.6** | **+1.0** |
| | comp=N,0.3nm,0.3s,baz=4.3,slow=15,SNR=4.4 | | | | | | |
| ILAR | | | | Lg | Lg | 21 43 18.1 | |
| | comp=N,0.5nm,0.3s,baz=3.7,slow=24,SNR=4.5 | | | | | | |
| | comp=N,1.9nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **4.91** | **250** | Pn | **Pn** | **21 41 58.8** | **+0.9** |
| **H21K** | **Melozitna Rive** | **4.92** | **220** | Pn | **Pn** | **21 41 58.8** | **+0.8** |
| H21K | | | | IAML | | 21 43 30.0 | |
| | comp=E,12nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **5.03** | **181** | | **Pn** | **21 42 00.2** | **+0.7** |
| J25K | | | | IAML | | 21 43 35.2 | |
| | comp=E,11nm,0.8s | | | | | | |
| **MLY** | **Manley** | **5.08** | **207** | Pn | **Pn** | **21 42 00.7** | **+0.6** |
| MLY | | | | IAML | | 21 43 39.8 | |
| | comp=E,8.1nm,1.5s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **193** | Pn | **Pn** | **21 42 00.7** | **+0.4** |
| **C19K** | **Lookout Ridge** | **5.11** | **271** | Pn | **Pn** | **21 42 01.0** | **+0.4** |
| C19K | | | | IAML | | 21 43 03.7 | |
| | comp=E,10nm,0.6s | | | | | | |
| C19K | | | | IAML | | 21 44 24.2 | |
| | comp=N,11nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **5.11** | **160** | Pn | **Pn** | **21 42 01.4** | **+0.8** |
| EGAK | | | | IAML | | 21 43 40.8 | |
| | comp=N,8.6nm,1.0s | | | | | | |
| **J26L** | **Joseph Creek** | **5.18** | **172** | Pn | **Pn** | **21 42 03.1** | **+1.4** |
| J26L | | | | IAML | | 21 43 09.2 | |
| | comp=N,9.0nm,0.7s | | | | | | |
| **HDA** | **Harding Lake** | **5.28** | **188** | | **Pn** | **21 42 03.7** | **+0.9** |
| HDA | | | | IAML | | 21 43 08.8 | |
| | comp=E,11nm,0.8s | | | | | | |
| HDA | | | | IAML | | 21 43 38.7 | |
| | comp=N,7.8nm,0.8s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **194** | | **Pn** | **21 42 03.7** | **+0.6** |
| WRH | | | | IAML | | 21 43 39.0 | |
| | comp=E,7.2nm,1.5s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.44** | **245** | Pn | **Pn** | **21 42 06.2** | **+1.1** |
| **A19K** | **Wainwright** | **5.49** | **284** | | **Pn** | **21 42 06.8** | **+1.0** |
| **H20K** | **Anotleneega Mo** | **5.55** | **226** | | **Pn** | **21 42 07.1** | **+0.5** |
| **I30M** | **Mount Dempster** | **5.57** | **138** | Pn | **Pn** | **21 42 07.5** | **+0.5** |
| **G19K** | **Purcell Mounta** | **5.67** | **238** | Pn | **Pn** | **21 42 08.2** | **-0.1** |
| **SCRK** | **Sand Creek** | **5.69** | **175** | Pn | **Pn** | **21 42 09.4** | **+0.8** |
| **K27K** | **Chicken** | **5.75** | **166** | | **Pn** | **21 42 10.9** | **+1.6** |
| **C18K** | **Utukok River** | **5.79** | **268** | Pn | **Pn** | **21 42 09.8** | **-0.1** |
| **BPAW** | **Bear Paw Mtn.** | **5.99** | **205** | Pn | **Pn** | **21 42 12.3** | **-0.3** |
| **DOT** | **Dot Lake** | **6.01** | **175** | | **Pn** | **21 42 14.3** | **+1.3** |
| **E18K** | **Tukpahlearik C** | **6.06** | **256** | Pn | **Pn** | **21 42 14.3** | **+0.7** |
| **J30M** | **Hart River** | **6.13** | **141** | Pn | **Pn** | **21 42 15.2** | **+0.4** |
| **J20K** | **Nowinta River** | **6.49** | **217** | | **Pn** | **21 42 19.8** | **+0.3** |
| **C17K** | **DeLong Mountai** | **6.54** | **268** | | **Pn** | **21 42 20.2** | **+0.1** |
| **K29M** | **Barlow Dome** | **6.55** | **149** | | **Pn** | **21 42 21.6** | **+1.2** |
| **E17K** | **Hotham Inlet** | **6.64** | **255** | | **Pn** | **21 42 21.9** | **+0.3** |
| **L26K** | **Log Cabin Wild** | **6.67** | **173** | | **Pn** | **21 42 23.4** | **+1.4** |
| **D17K** | **Noatak River** | **6.79** | **262** | | **Pn** | **21 42 23.5** | **-0.1** |
| **C36M** | **Paulatuk** | **7.42** | **82** | Pn | **Pn** | **21 42 32.2** | **0.0** |
| **M29M** | **Somme Creek** | **7.71** | **156** | Pn | **Pn** | **21 42 37.3** | **+1.0** |
| **YUK2** | **White River** | **8.07** | **165** | | **Pn** | **21 42 43.5** | **+2.3** |
| **YKA** | **Yellowknife Ar** | **14.18** | **105** | Pn | Pn | 21 43 59.3 | -5.3 |
| | comp=E,0.2nm,0.3s,baz=315,slow=13,SNR=3.7 | | | | | | |
| | comp=E,0.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.40** | **141** | P | **P** | **21 47 29.9** | **-1.5** |
| | comp=E,0.1nm,0.4s,baz=353,slow=4.5,SNR=1.8 | | | | | | |
| | comp=E,0.1nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **49.08** | **6** | P | **P** | **21 49 30.9** | **+0.1** |
| | comp=E,1.3nm,0.9s,baz=1.0,slow=8.3,SNR=1.6 | | | | | | |
| | comp=E,1.3nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **49.66** | **14** | P | **P** | **21 49 36.0** | **+0.7** |
| | comp=E,0.5nm,0.6s,baz=350,slow=7.8,SNR=1.5 | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | |

*NAO **14** 21:48:00.8, 38.72N×15.40E, h33km, mb4.2*
*PDG **14** 21:48:29.4±0.6, 41.93N×14.87E, h2km±1km, MD4.8/10, ML4.7/11, Error ellipse: s-maj=0.5km s-min=0.8km az=0.0*
*ROM **14** 21:48:31.0±0.1, 41.888N±0.004×14.841E±0.006, h19km±1km, ML4.7/494, Mw4.6, Error ellipse: s-maj=0.6km s-min=0.1km az=42.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-1.04; $M_{\theta\theta}$-3.68; $M_{\phi\phi}$4.72; $M_{r\theta}$-0.97; $M_{\theta\phi}$-7.69; $M_{\phi r}$0.16; Fault plane solution: $M_o$8.82137×$10^{15}$ NP1:$\phi_s$14.00000°, $\delta$83.00000°, $\lambda$-2.00000°. NP2:$\phi_s$104.00000°, $\delta$88.00000°, $\lambda$-173.00000°.*
*LDG **14** 21:48:30.0±0.5, 42.07N×15.07E, h10km, Ml4.4/39 Error ellipse: s-maj=9.7km s-min=8.8km az=158.0*
*IDC **14** 21:48:30.3±0.5, 41.92N×14.77E, h0km, mb4.3/26, mbtmp4.4/39, ML4.4/14, MS4.0/75, Error ellipse: s-maj=10.1km s-min=9.7km az=136.0*
*MOS **14** 21:48:30.6±1.1, 41.93N×14.73E, h14km, mb4.8/36, MS4.0/15, Error ellipse: s-maj=3.6km s-min=2.6km az=83.4*
*BJI **14** 21:48:31.0±0.0, 41.90N×14.70E, h10km, mb4.5/33, mB5.0/12, Ms4.6/15, Ms7 4.2/16*
*NEIC **14** 21:48:31.8, 41.85N×14.79E, h10km*
*BGR **14** 21:48:31.1±0.5, 41.80N×14.99E, h10km, ML5.0/24, Error ellipse: s-maj=12.2km s-min=10.0km az=76.0*
*MED_RC **14** 21:48:32.0±0.1, 41.83N×14.85E, h12km,

TRIV AML AML
TRIV AML AML
TRIV AML AML
**MELA Melanico ??? S 0.28 126** ⇓P **Pg 21 48 37.4 -0.5**
MELA S **Sg 21 48 42.1 +0.5**
MELA AML AML
MELA AML AML
MELA AML AML
MELA AML AML
MELA AML AML
MELA AML AML
MELA AML AML
**GATE Gambatesa 0.36 170** ⇓P **Pg 21 48 39.6 +0.2**
GATE S **Sb 21 48 45.9 -0.3**
GATE AML AML
GATE AML AML
GATE AML AML
GATE AML AML
GATE AML AML
GATE AML AML
GATE AML AML
**BSSO Busso 0.37 209** ⇑P **Pg 21 48 39.5 -0.1**
BSSO S **Sb 21 48 45.6 -0.9**
BSSO AML AML
BSSO AML AML
BSSO AML AML
BSSO AML AML
**SACR S. Croce Del S 0.48 191** ⇑P **Pg 21 48 40.9 -0.8**
SACR S **Sg 21 48 48.0 -0.1**
SACR AML AML
SACR AML AML
SACR AML AML
SACR AML AML
SACR AML AML
SACR AML AML
**MIDA Miranda 0.49 242** ⇑P **Pg 21 48 40.9 -0.8**
MIDA S **Sg 21 48 48.4 +0.1**
MIDA AML AML
MIDA AML AML
MIDA AML AML
comp=N,74800µm,0.7s
MIDA AML AML
comp=N,78400µm,1.3s
MIDA AML AML
**LPEL Lama dei Pelig 0.51 290** ⇓P **Pg 21 48 41.8 -0.5**
LPEL S **Sg 21 48 49.4 +0.3**
LPEL AML AML
LPEL AML AML
**RNI2 Rionero Sannit 0.53 252** ⇑P **Pg 21 48 42.0 -0.7**
RNI2 S **Sb 21 48 50.5 -0.8**
RNI2 AML AML
comp=E,90550µm,1.3s
RNI2 AML AML
RNI2 AML AML
comp=E,85250µm,1.3s
RNI2 AML AML
comp=E,87400µm,0.6s
RNI2 AML AML
comp=E,90600µm,0.7s
RNI2 AML AML
**APRC Apricena 0.55 102** ⇑P **Pg 21 48 41.3 -1.5**
APRC S **Sg 21 48 49.1 -0.9**
APRC AML AML
comp=E,86750µm,0.8s
APRC AML AML
comp=E,86750µm,1.2s
APRC AML AML
comp=N,50400µm,0.3s
APRC AML AML
APRC AML AML
comp=E,88100µm,0.3s
**PTRJ Pietraroja 0.55 204** ⇑P **Pg 21 48 41.7 -1.3**
PTRJ S **Sg 21 48 49.6 -0.7**
PTRJ AML AML
PTRJ AML AML
comp=E,456µm,0.4s
PTRJ AML AML
PTRJ AML AML
PTRJ AML AML
PTRJ AML AML
PTRJ AML AML
comp=E,456µm,1.6s
**MOCO Biccari - m.te 0.56 154** ⇓P **Pg 21 48 42.2 -0.8**
MOCO AML AML
comp=E,41750µm,1.5s
MOCO AML AML
comp=E,41700µm,1.5s
MOCO AML AML
comp=N,28900µm,0.8s
MOCO AML AML
comp=E,42800µm,1.5s
MOCO AML AML
comp=N,29900µm,0.8s
MOCO AML AML
comp=N,29900µm,1.2s
MOCO AML AML
comp=E,42800µm,0.5s
MOCO AML AML
comp=N,28900µm,1.2s
MOCO AML AML
comp=E,41700µm,0.5s
**TREM Isole Tremiti 0.57 63** ⇑P **Pg 21 48 42.2 -1.1**
TREM S **Sg 21 48 50.9 +0.1**
**SGG Gregorio Mates 0.59 215** ⇑P **Pg 21 48 42.4 -1.3**
SGG S **Sg 21 48 51.1 -0.4**
SGG AML AML
comp=N,290nm,0.4s
SGG AML AML
comp=E,79550µm,0.6s
SGG AML AML
comp=N,290nm,0.4s
SGG AML AML
comp=N,95250µm,0.5s
SGG AML AML
comp=E,242nm,0.6s
**VAGA Valle Agricola 0.64 225** ⇑P **Pg 21 48 43.2 -1.3**
VAGA AML AML
VAGA AML AML
comp=E,92750µm,0.4s
VAGA AML AML
comp=E,96850µm,0.4s
VAGA AML AML
comp=E,96850µm,1.6s
VAGA AML AML
comp=E,92750µm,1.6s
VAGA AML AML
**PSB1 Pescosannita 0.65 181** ⇓P **Pg 21 48 43.4 -1.3**
PSB1 S **Sg 21 48 52.8 -0.4**
**CERA Filignano 0.67 246** ⇑P **Pg 21 48 43.6 -1.5**
CERA AML AML
CERA AML AML
CERA AML AML
CERA AML AML
CERA AML AML
CERA AML AML
CERA AML AML
CERA AML AML
**SGRT San Giovanni R 0.69 99** Pg **Pg 21 48 43.9 -1.8**
**SGRT San Giovanni R 0.69 99** P **Pg 21 48 43.7 -1.9**
baz=104
SGRT S **Sg 21 48 53.8 -0.9**
baz=104
SGRT AMP
comp=E,323nm,0.5s,baz=104
**SGRT San Giovanni R 0.69 99** P **Pg 21 48 44.0 -1.6**
SGRT S **Sg 21 48 54.7 -0.1**
SGRT AML AML
SGRT AML AML
**VITU Vitulano (BN) 0.70 192** ⇑P **Pg 21 48 44.1 -1.7**
VITU S **Sg 21 48 54.2 -0.9**
VITU AML AML
VITU AML AML
comp=E,87100µm,0.5s
VITU AML AML
VITU AML AML
VITU AML AML
**INTR Introdacqua 0.70 282** Pg **Pg 21 48 44.5 -1.3**
INTR Sg **Sg 21 48 54.9 -0.3**
**INTR Introdacqua 0.70 282** ⇑P **Pg 21 48 44.6 -1.3**
INTR S **Sg 21 48 54.8 -0.3**
INTR AML AML
INTR AML AML
INTR AML AML
INTR AML AML

INTR AML AML
INTR AML AML
INTR AML AML
**BIOG Biogem 0.71 161** ⇓P **Pg 21 48 45.4 -0.5**
BIOG AML AML
comp=E,69650µm,0.6s
BIOG AML AML
BIOG AML AML
BIOG AML AML
comp=N,88250µm,0.7s
BIOG AML AML
comp=E,83500µm,0.8s
BIOG AML AML
BIOG AML AML
BIOG AML AML
comp=E,83500µm,1.2s
BIOG AML AML
**MRB1 Monte Rocchett 0.75 172** ⇓P **Pg 21 48 45.4 -1.3**
MRB1 AML AML
MRB1 AML AML
MRB1 AML AML
MRB1 AML AML
**MSAG Monte S. Angel 0.82 101** P **Pg 21 48 46.8 -1.3**
MSAG S **Sg 21 48 58.3 -0.6**
MSAG AML AML
MSAG AML AML
comp=N,65650µm,0.6s
MSAG AML AML
MSAG AML AML
comp=N,65650µm,1.4s
MSAG AML AML
comp=E,35400µm,0.4s
MSAG AML AML
comp=E,85050µm,0.4s
**PIGN Pignataro Magg 0.83 216** ⇑P **Pg 21 48 46.3 -1.9**
PIGN AML AML
comp=N,52250µm,0.5s
PIGN AML AML
comp=N,51750µm,0.5s
PIGN AML AML
comp=E,44300µm,1.1s
PIGN AML AML
comp=E,45500µm,1.1s
**SGTA Sant Agata di 0.84 151** ⇓P **Pg 21 48 46.4 -1.9**
SGTA AML AML
comp=N,92300µm,0.5s
SGTA AML AML
SGTA AML AML
SGTA AML AML
comp=N,92350µm,0.5s
SGTA AML AML
comp=N,95200µm,0.5s
SGTA AML AML
SGTA AML AML
**POFI Posta Fibreno 0.85 260** ⇑P **Pg 21 48 46.7 -1.9**
POFI S **Sg 21 48 59.9 +0.2**
POFI AML AML
comp=N,34150µm,1.3s
POFI AML AML
comp=E,53950µm,0.8s
POFI AML AML
comp=E,52800µm,0.8s
POFI AML AML
comp=N,36850µm,1.4s
POFI AML AML
comp=N,34150µm,0.7s
POFI AML AML
comp=N,36850µm,0.6s
**MCI Monte Cassino 0.85 243** ⇑P **Pg 21 48 46.9 -1.8**
MCI AML AML
MCI AML AML
comp=N,71950µm,0.7s
MCI AML AML
comp=N,71950µm,1.3s
**T0110 Collepietro 0.86 295** ⇓P **Pg 21 48 47.2 -1.6**
T0110 AML AML
T0110 AML AML
T0110 AML AML
**PAOL Paolisi 0.86 193** Pg **Pg 21 48 46.6 -2.2**
**PAOL Paolisi 0.86 193** ⇑P **Pg 21 48 46.5 -2.3**
**CAFE Carife 0.90 160** ⇓P **Pg 21 48 47.5 -2.0**
CAFE AML AML
comp=E,83800µm,0.4s
CAFE AML AML
comp=N,39400µm,0.6s
CAFE AML AML
comp=E,86650µm,0.4s
CAFE AML AML
comp=N,41100µm,0.6s
CAFE AML AML
comp=N,39400µm,1.4s
CAFE AML AML
comp=N,41100µm,1.4s
**VVLD Villa Vallelon 0.90 270** ⇑P **Pg 21 48 47.5 -2.1**
VVLD S **Sg 21 49 00.8 -0.6**
VVLD AML AML
comp=E,89200µm,0.6s
VVLD AML AML
comp=E,89200µm,1.4s
VVLD AML AML
comp=N,89400µm,0.8s
**VCEL Villa Celiera 0.90 306** ⇓P **Pg 21 48 48.1 -1.5**
VCEL AML AML
VCEL AML AML
VCEL AML AML
**LRP Arpino 0.96 257** ⇑P **Pg 21 48 48.5 -2.2**
**MTMR Montemarano 0.96 172** ⇓P **Pg 21 48 48.0 -2.6**
MTMR AML AML
comp=E,68300µm,0.5s
MTMR AML AML
comp=N,60000µm,0.4s
MTMR AML AML
MTMR AML AML
**SNAL S. Angelo Dei 0.99 163** ⇓P **Pg 21 48 48.6 -2.6**
SNAL AML AML
comp=E,78550µm,1.4s
SNAL AML AML
comp=N,65050µm,0.9s
SNAL AML AML
comp=E,83100µm,1.5s
SNAL AML AML
comp=N,62300µm,0.9s
SNAL AML AML
comp=N,65050µm,1.1s
SNAL AML AML
comp=E,83100µm,0.5s
SNAL AML AML
comp=E,78550µm,0.6s
SNAL AML AML
comp=N,62300µm,1.1s
**FAGN Fagnano 1.01 293** ⇓P **Pg 21 48 49.4 -2.2**
FAGN AML AML
comp=N,91200µm,1.0s
FAGN AML AML
FAGN AML AML
comp=N,91200µm,1.0s
**LIK San Giovanni I 1.02 249** ⇑P **Pg 21 48 49.7 -2.1**
LIK AML AML
comp=E,95650µm,0.6s
LIK AML AML
comp=N,89650µm,0.5s
LIK AML AML
comp=N,89650µm,1.5s
**CAPA Cerignola FG 1.03 134** P **Pg 21 48 49.2 -2.7**
**PTQR Pietraquaria 1.08 279** ⇑P **Pb 21 48 50.5 -2.4**
PTQR AML AML
comp=N,32100µm,1.2s
PTQR AML AML
comp=E,28150µm,0.6s
**VVDG Vesuvio Valle 1.08 197** ⇑P **Pb 21 48 52.3 -0.5**
VVDG S **Sn 21 49 07.9 -0.3**
**CRTO Cratere Ovest, 1.09 196** ⇑P **Pb 21 48 52.4 -0.7**
CRTO S **Sn 21 49 08.8 +0.3**
CRTO AML AML
CRTO AML AML
CRTO AML AML
CRTO AML AML
**OVO Vesuviano 1.09 197** ⇑P **Pb 21 48 52.4 -0.7**
OVO S **Sn 21 49 08.6 +0.1**
OVO AML AML
comp=E,78250µm,0.7s
OVO AML AML
OVO AML AML
comp=E,78250µm,1.3s
OVO AML AML

**GIGS Gran Sasso 1.10 302** ⇓P **Pb 21 48 50.9 -2.4**
GIGS S **Sn 21 49 10.6 +1.7**
GIGS AML AML
comp=E,18150µm,1.3s
GIGS AML AML
comp=N,15950µm,0.6s
**MCRV Calabrutti - M 1.12 167** P **Pb 21 48 50.5 -3.0**
MCRV S **Sn 21 49 09.7 +0.5**
MCRV AML AML
comp=E,85450µm,1.0s
MCRV AML AML
comp=N,60950µm,0.6s
MCRV AML AML
comp=E,85450µm,1.0s
MCRV AML AML
comp=N,60950µm,1.4s
**GUAR Guarcino 1.14 267** ⇑P **Pb 21 48 51.2 -2.7**
GUAR S **Sn 21 49 11.5 +1.9**
GUAR AML AML
comp=N,45600µm,1.4s
GUAR AML AML
comp=N,45600µm,0.6s
GUAR AML AML
comp=E,21100µm,1.0s
**CMSN Campi Flegrei 1.14 206** ⇑P **Pb 21 48 53.0 -0.8**
**TRTR Tortoreto Alta 1.16 324** P **Pb 21 48 53.7 -0.4**
TRTR AML AML
TRTR AML AML
TRTR AML AML
**CSFT Campi Flegrei 1.16 207** ⇑P **Pb 21 48 53.2 -1.0**
CSFT AML AML
comp=E,68250µm,0.7s
CSFT AML AML
comp=N,91700µm,0.7s
**CSOB Campi Flegrei 1.16 207** ⇑P **Pb 21 48 53.2 -1.0**
**SNR3 Senerchia 1.17 166** P **Pb 21 48 52.3 -2.1**
SNR3 S **Sn 21 49 10.9 +0.5**
**CAAM Accademia Aero 1.17 207** ⇑P **Pb 21 48 53.2 -1.1**
CAAM S **Sb 21 49 09.0 -0.5**
**CFMN Campi Flegrei 1.18 208** ⇑P **Pb 21 48 53.3 -1.2**
CFMN S **Sb 21 49 09.6 0.0**
CFMN AML AML
comp=E,50400µm,1.0s
CFMN AML AML
comp=N,34050µm,1.0s
CFMN AML AML
comp=E,50400µm,1.0s
CFMN AML AML
comp=N,34050µm,1.0s
**CPOZ Campi Flegrei, 1.18 207** P **Pb 21 48 51.9 -2.6**
CPOZ AML AML
CPOZ AML AML
comp=N,40050µm,0.6s
**TERO Teramo 1.18 310** P **Pb 21 48 52.4 -2.2**
TERO S **Sn 21 49 12.5 +1.8**
**MRLC Muro Lucano 1.22 156** P **Pn 21 48 52.4 -2.7**
MRLC AML AML
comp=E,9385µm,1.3s
MRLC AML AML
comp=E,19750µm,1.3s
MRLC AML AML
comp=N,23650µm,0.9s
MRLC AML AML
comp=E,9385µm,0.7s
MRLC AML AML
comp=N,11810µm,0.9s
MRLC AML AML
comp=E,19750µm,0.7s
**COL3 Colliano 1.24 162** ⇓P **Pn 21 48 54.6 -0.9**
COL3 S **Sn 21 49 12.4 +0.1**
**CAMP Campotosto 1.25 303** **Pn 21 48 53.1 -2.5**
**CAMP Campotosto 1.25 303** ⇓P **Pn 21 48 53.3 -2.3**
CAMP AML AML
comp=N,41200µm,0.9s
CAMP AML AML
comp=E,28250µm,0.5s
**PALZ Palazzo San Ge 1.26 137** ⇓P **Pn 21 48 54.8 -0.9**
PALZ S **Sg 21 49 12.9 +0.3**
PALZ AML AML
comp=E,86200µm,1.4s
PALZ AML AML
comp=N,68650µm,1.1s
PALZ AML AML
comp=N,68650µm,0.9s
PALZ AML AML
comp=E,86200µm,0.6s
**SCL3 Muro Lucano (S 1.28 156** P **Pn 21 48 53.9 -2.2**
**IOCA Ischia Osserva 1.32 212** ⇑P **Pn 21 48 55.1 -1.4**
IOCA S **Sn 21 49 14.3 +0.2**
IOCA AML AML
comp=N,82150µm,0.4s
IOCA AML AML
**FIAM Fiamignano 1.34 288** ⇑P **Pn 21 48 54.5 -2.3**
FIAM S **Sg 21 49 17.2 +2.0**
FIAM AML AML
comp=E,38300µm,0.8s
FIAM AML AML
comp=N,43950µm,0.7s
**PST3 Postiglione 1.34 166** P **Pn 21 48 55.9 -1.0**
**SMA1 SAN MARTINO 1.34 305** ⇓P **Pn 21 48 54.9 -2.0**
SMA1 AML AML
comp=N,63850µm,1.2s
SMA1 AML AML
comp=E,56300µm,1.5s
**RM33 Pellescritta ( 1.36 299** P **Pn 21 48 55.3 -1.9**
RM33 AML AML
comp=E,55600µm,0.9s
RM33 AML AML
comp=N,26150µm,1.2s
RM33 AML AML
comp=E,54700µm,0.9s
RM33 AML AML
comp=N,25200µm,1.2s
RM33 AML AML
comp=N,26150µm,0.8s
RM33 AML AML
comp=E,55600µm,1.1s
RM33 AML AML
comp=N,25200µm,0.8s
RM33 AML AML
comp=E,54700µm,1.1s
**ACER Acerenza 1.37 142** ⇓P **Pn 21 48 56.3 -1.0**
ACER S **Sn 21 49 15.5 +0.1**
ACER AML AML
comp=E,33250µm,0.5s
ACER AML AML
comp=N,31000µm,0.6s
ACER AML AML
comp=E,35050µm,0.5s
ACER AML AML
comp=N,32700µm,0.6s
**VDP3 Vietri Di Pote 1.38 156** P **Pn 21 48 56.4 -1.1**
**CAGG Caggiano 1.41 158** ⇓P **Pn 21 48 56.9 -1.0**
**SRN3 Sant'Arsenio 1.46 161** ⇓P **Pn 21 48 57.7 -0.8**
SRN3 S **Sg 21 49 19.4 +0.1**
**PGN3 Pignola, Italy 1.49 150** P **Pn 21 48 57.1 -1.8**
**MMO1 Montemonaco 1.52 313** ⇓P **Pn 21 48 57.8 -1.5**
MMO1 S **Sg 21 49 20.8 -0.2**
**LNSS Leonessa 1.52 299** P **Pn 21 48 58.3 -1.0**
LNSS AML AML
comp=E,37300µm,0.5s
LNSS AML AML
comp=N,30650µm,0.7s
LNSS AML AML
comp=E,37300µm,1.5s
**CADA Capodarco di F 1.54 330** P **Pb 21 49 00.5 -0.2**
**CMPR Campora 1.59 167** ⇓P **Pn 21 48 59.5 -0.8**
CMPR S **Sn 21 49 20.8 0.0**
CMPR AML AML
comp=N,18850µm,0.8s
CMPR AML AML
comp=N,18850µm,1.2s
CMPR AML AML
comp=E,22250µm,0.7s
**MRN3 Marsico Nuovo 1.59 155** P **Pn 21 48 58.7 -1.6**
**NRCA Norcia 1.59 308** **Pn 21 48 59.0 -1.3**
**NRCA Norcia 1.59 308** P **Pn 21 48 59.0 -1.3**
NRCA AML AML
comp=N,34900µm,0.8s
NRCA AML AML
comp=E,30000µm,0.7s
NRCA AML AML
comp=E,31000µm,0.7s
NRCA AML AML
comp=N,36950µm,0.7s

**SLCN Sala Consilina 1.60 157** ⇓P Pn 21 48 59.5 -0.9
SLCN AML AML
comp=N,17150µm,0.6s
SLCN AML AML
comp=E,31950µm,0.6s
SLCN AML AML
comp=N,17750µm,0.5s
SLCN AML AML
comp=N,17750µm,1.5s
SLCN AML AML
comp=N,17150µm,1.4s
SLCN AML AML
comp=E,28550µm,0.6s
**MC2 Monte Cornacci 1.60 311** P Pn 21 48 59.2 -1.3
**GUMA Gualdo di Mace 1.63 318** Pn 21 49 00.9 +0.1
**FDMO Fiordimonte 1.74 313** Pn Pn 21 49 01.9 -0.4
**CESX Cesi 1.83 295** Pn Pn 21 49 03.4 -0.1
**MATE Matera 1.87 130** ⇑P Pn 21 49 03.2 -0.8
**NOCI Noci 2.00 122** P Pn 21 49 05.4 -0.4
baz=126
NOCI S Sn 21 49 31.4 +0.6
baz=126
NOCI AMP
comp=E,45nm,0.3s,baz=126
**STON Ston 2.35 64** *e*Pn Pn 21 49 10.5 -0.1
STON *e*Sn Sn 21 49 40.3 +0.9
**STON Ston 2.35 64** ⇑*i*Pn Pn 21 49 10.2 -0.4
**TREB Trebinje 2.75 71** ⇑*i*Pn Pn 21 49 15.9 -0.2
**A050A Klekovaca 2.89 25** ⇑*i*Pn Pn 21 49 19.4 +1.2
**BRY Bratogost 2.93 68** ⇑*i*Pn Pn 21 49 18.5 -0.3
**BRY Bratogost 2.93 68** ⇑*i*Pn Pn 21 49 18.5 -0.3
BRY *i* Sn Sn 21 49 54.9 +0.8
**ASQU Asqua 2.95 312** P Pn 21 49 19.9 +0.9
**BUM Brajici-Budva 3.06 81** ⇑*i*Pn Pn 21 49 20.2 -0.2
BUM *i* Sn Sn 21 49 58.5 +1.5
**TIP Timpagrande 3.06 151** Pn Pn 21 49 20.4 -0.1
**TIP Timpagrande 3.06 151** ⇓P Pn 21 49 20.8 +0.3
**TIP Timpagrande 3.06 151** P Pn 21 49 21.3 +0.8
**CASP Castiglione de 3.08 289** Pn Pn 21 49 21.2 +0.5
**CEME Cevo 3.11 76** ⇓*i*Pn Pn 21 49 21.1 -0.1
CEME *i* Sn Sn 21 49 59.3 +1.0
**RUFI Rufina 3.14 310** P Pn 21 49 22.7 +1.3
**LMD Lutirano 3.18 315** P Pn 21 49 23.8 +1.6
**NKME Niksic 3.19 72** ⇓*i*Pn Pn 21 49 22.1 -0.1
NKME *i* Sn Sn 21 50 02.2 +2.0
**DRME Dracevica, Mon 3.26 83** ⇑*i*Pn Pn 21 49 23.7 +0.5
**DRME Dracevica, Mon 3.26 83** ⇑*i*Pn Pn 21 49 23.2 0.0
DRME *i* Sn Sn 21 50 03.0 +1.1
**SCTE Santa Cesarea 3.29 122** Pn Pn 21 49 23.0 -0.5
**SCTE Santa Cesarea 3.29 122** P Pn 21 49 24.4 +0.8
baz=124
SCTE AMP
comp=E,17nm,0.9s,baz=124
**UPM Unac-Piva 3.29 65** ⇑*i*Pn Pn 21 49 24.3 +0.5
**UPM Unac-Piva 3.29 65** ⇑*i*Pn Pn 21 49 24.3 +0.5
UPM *i* Sn Sn 21 50 03.9 +0.9
**PDG Podgorica 3.34 79** Pn Pn 21 49 24.5 +0.3
**PDG Podgorica 3.34 79** *e*Pn Pn 21 49 24.7 +0.5
PDG *e*Sn Sn 21 50 03.7 -0.1
**PDG Podgorica 3.34 79** ⇑*i*Pn Pn 21 49 24.8 +0.5
**PDG Podgorica 3.34 79** ⇓P Pn 21 49 24.7 +0.5
**PDG Podgorica 3.34 79** ⇓*i*Pn Pn 21 49 24.7 +0.5
PDG *i* Sn Sn 21 50 05.3 +1.5
**BLY Banja Luka 3.35 30** ⇑*i*Pn Pn 21 49 25.5 +1.1
**SEI Scarperia 3.36 312** P Pn 21 49 26.2 +1.6
**IMOL Imola, Italy 3.36 319** P Pn 21 49 26.5 +1.9
**PRIJ Prijedor 3.40 23** *e*Pn Pb 21 49 31.6 -0.7
**A051A Mrakovica 3.49 25** ⇑*i*Pn Pn 21 49 27.1 +0.8
**MTRZ Monterenzio 3.51 317** P Pn 21 49 28.9 +2.2
**MTCR Monte La Croce 3.54 309** P Pn 21 49 28.3 +1.1
**KOME Kolasin 3.61 73** ⇑*i*Pn Pn 21 49 28.8 +0.8
KOME *i* Sn Sn 21 50 11.6 +1.0
**BOJS Bojanci 3.65 5** *i*Pn Pn 21 49 28.8 +0.3
**BOJS Bojanci 3.65 5** ⇓*i*Pn Pn 21 49 28.6 +0.1
**GBRS Gornja Briga 3.66 360** *i*Pn Pn 21 49 28.7 0.0
**PLE Pljevlja 3.67 65** ⇓*i*Pn Pn 21 49 30.0 +1.1
PLE *i* Sn Sn 21 50 10.1 -2.0
**CEL Celeste 3.70 167** Pn Pn 21 49 27.9 -1.3
**SKDS Skadanscina 3.72 351** *i*Pn Pn 21 49 28.6 -0.9
**DOB Doboj 3.73 39** *e*Pn Pn 21 49 32.8 +3.2
**HAPS Han Pijesak,BI 3.75 52** ⇑*i*Pn Pn 21 49 30.9 +0.9
**ZCCA Zocca 3.76 313** Pn Pn 21 49 30.7 +0.7
**ZCCA Zocca 3.76 313** P Pn 21 49 32.9 +2.9
**RUDO Rudo 3.77 61** *e*Pn Pn 21 49 30.6 +0.4
**PUK Puka 3.78 86** Pn Pn 21 49 31.2 +0.8
**PUK Puka 3.78 86** P Pn 21 49 30.5 +0.1
baz=85
PUK S Sn 21 50 13.8 -1.0
baz=85
PUK AMP
comp=E,12nm,0.5s,baz=85
**MAIM Mastiano 3.79 304** P Pn 21 49 32.4 +2.0
**VLO Vlora 3.79 110** Pn Pn 21 49 30.7 +0.3
**VLO Vlora 3.79 110** P Pn 21 49 31.5 +1.1
baz=111
VLO S Sn 21 50 15.0 +0.1
baz=111
VLO AMP
comp=E,31nm,0.8s,baz=111
**VLO Vlora 3.79 110** P Pn 21 49 30.7 +0.3
**BDI Bagni Di Lucca 3.80 307** P Pn 21 49 31.8 +1.1
**TIR Tirane 3.81 96** Pn Pn 21 49 30.2 -0.6
**TIR Tirane 3.81 96** P Pn 21 49 30.5 -0.3
baz=96
TIR S Sn 21 50 12.3 -3.2
baz=96
TIR AMP
comp=N,2.3nm,0.4s,baz=96
**TIR Tirane 3.81 96** P Pn 21 49 31.3 +0.5
**TIR Tirane 3.81 96** *e*Pn Pn 21 49 31.2 +0.5
TIR *e*Sn Sn 21 50 14.1 -1.4
**TIR Tirane 3.81 96** ⇓P Pn 21 49 30.9 +0.2
**TIR Tirane 3.81 96** P Pn 21 49 30.9 +0.2
**TIR Tirane 3.81 96** P Pn 21 49 31.0 +0.2
**CARD Cardoso 3.85 305** P Pn 21 49 33.0 +1.7
**PVY Plav 3.88 78** ⇓*i*Pn Pn 21 49 33.7 +1.9
PVY *i* Sn Sn 21 50 18.1 +0.8
**CEY Cerknica 3.88 356** *e*Pn Pn 21 49 31.8 +0.1
**IVA Berane 3.88 73** ⇑*i*Pn Pn 21 49 33.7 +1.9
IVA *i* Sn Sn 21 50 18.0 +0.6
**BBLS Lazi&#263i 3.91 58** *e*Pn Pn 21 49 32.9 +0.7
BBLS *e*Sn Sn 21 50 16.7 -1.3
**BBLS Lazi&#263i 3.91 58** ⇑*i*Pn Pn 21 49 32.9 +0.7
**BCI Bajram Curri 3.93 81** P Pn 21 49 32.7 +0.4
baz=80
**RAVA Ravarino 3.96 318** P Pn 21 49 34.3 +1.6
**GSCL Gusciola 3.97 310** P Pn 21 49 35.1 +2.1
**VLC Villacollemand 3.98 307** P Pn 21 49 33.9 +0.8
**SARO Sassorosso 3.99 307** P Pn 21 49 34.2 +1.0
**ZAG Zagreb 4.04 12** P Pn 21 49 34.6 +0.7
**SJES Sjenica 4.04 68** *e*Pn Pn 21 49 35.4 +1.3
**SJES Sjenica 4.04 68** ⇑*i*Pn Pn 21 49 35.2 +1.1
**PTJ Puntijarka 4.12 11** P Pn 21 49 35.0 0.0
**TEOL Teolo 4.17 328** Pn Pn 21 49 35.0 -0.7
**SABO M.te Sabotino 4.20 348** Pn Pn 21 49 35.5 -0.7
**KEK Kerkira 4.34 118** Pn Pn 21 49 38.2 +0.1
**KEK Kerkira 4.34 118** P Pn 21 49 38.2 +0.1
**PGF Pioggiola 4.38 281** *e*P Pn 21 49 39.7 +1.0
PGF *e*Sn Sn 21 50 23.6 -6.2
comp=N,196nm,0.7s
**PGF Pioggiola 4.38 281** P Pn 21 49 40.4 +1.7
**PRMA PARMA 4.38 313** Pn Pn 21 49 40.0 +1.4
**DIVS Divibare 4.39 58** *e*Pn Pn 21 49 38.9 +0.1
**SRN Sarande 4.39 115** P Pn 21 49 39.1 +0.4
baz=116
SRN S Sn 21 50 29.4 -0.5
baz=116
**SRN Sarande 4.39 115** P Pn 21 49 39.6 +0.8
**CADS Cadrg 4.43 350** *i*Pn Pn 21 49 38.5 -0.7
CADS *e*Sn Sn 21 50 26.6 -4.1
**CLTB Caltabellotta 4.46 197** Pn Pn 21 49 41.9 +2.1
**OHR Ohrid 4.55 98** *i*Pn Pn 21 49 42.6 +1.7
OHR *i* Sn Sn 21 50 34.1 +0.3
**MSSA Maissana 4.59 304** Pn Pn 21 49 42.7 +1.1
**OBKA Obir 4.64 358** *i*Pn Pn 21 49 41.8 -0.5
comp=N,109nm,0.3s,SNR=48
OBKA *e*Sn Sn 21 50 36.6 +0.5
comp=N,654nm,0.7s
**OBKA Obir 4.64 358** ⇓*i*Pn Pn 21 49 41.6 -0.6
**OBKA Obir 4.64 358** *e*Pn Pn 21 49 42.4 +0.2
**OBKA Obir 4.64 358** *e*Pn Pn 21 49 42.4 +0.2
**STAL STALIGIAL 4.65 342** Pn 21 49 41.0 -1.2

**RAFF Raffo Rosso 4.66 185** Pn Pn 21 49 45.1 +2.7
**KBN Korca 4.66 104** Pn 21 49 44.1 +1.6
**KBN Korca 4.66 104** P Pn 21 49 44.4 +1.9
baz=104
KBN S Sn 21 50 35.4 -1.1
baz=104
KBN AMP
comp=N,11nm,0.7s,baz=104
**KBN Korca 4.66 104** P Pn 21 49 44.0 +1.5
**KBN Korca 4.66 104** P Pn 21 49 44.1 +1.6
**PRED Cave del Predi 4.66 349** Pn Pn 21 49 41.6 -0.9
**TRUS Trudelj 4.71 58** *e*Pn Pn 21 49 42.9 -0.3
**CTI Castel Tesino 4.76 332** Pn Pn 21 49 43.2 -0.8
**CTI Castel Tesino 4.76 332** P Pn 21 49 43.2 -0.8
**GRUS Gruza 4.77 63** *e*Pn Pn 21 49 44.1 +0.2
**VSL Villasalto 4.78 242** Pn Pn 21 49 42.9 -1.1
**IGT Igoumenitsa 4.79 117** P Pn 21 49 45.0 +0.8
baz=118
**IGT Igoumenitsa 4.79 117** P Pn 21 49 44.1 -0.2
**IGT Igoumenitsa 4.79 117** P Pn 21 49 44.0 -0.2
**SOKA Soboth 4.81 2** *i*Pn Pn 21 49 44.0 -0.5
comp=N,50nm,0.5s,SNR=25
**MYKA Terra Mystica 4.83 350** *i*Pn Pn 21 49 44.6 -0.3
comp=N,69nm,0.4s,SNR=38
MYKA *e*Sn Sn 21 50 39.7 -1.1
comp=N,159nm,0.3s
**SELS Selova 4.84 72** *e*Pn Pn 21 49 45.4 +0.5
SELS *e*Sn Sn 21 50 38.0 -2.9
**VARA Varagna 4.87 326** AML AML
comp=E,3175µm,1.4s
VARA AML AML
comp=N,4685µm,1.1s
VARA AML AML
comp=E,4795µm,1.1s
VARA AML AML
comp=N,3185µm,1.4s
VARA AML AML
comp=E,4795µm,0.9s
VARA AML AML
comp=N,4685µm,0.9s
**ZOU Zoufplan 4.87 345** AML AML
comp=E,1505µm,0.6s
ZOU AML AML
comp=N,1605µm,1.1s
ZOU AML AML
comp=E,1465µm,1.2s
ZOU AML AML
comp=N,1585µm,1.1s
ZOU AML AML
comp=N,1585µm,0.9s
ZOU AML AML
comp=N,1605µm,0.9s
**BOB Bobbio (Coli) 4.88 308** AML AML
comp=N,1270µm,1.4s
BOB AML AML
comp=E,1250µm,1.0s
BOB AML AML
comp=N,1380µm,0.6s
BOB AML AML
comp=E,1335µm,1.2s
BOB AML AML
comp=N,1270µm,0.6s
BOB AML AML
comp=E,1250µm,1.0s
BOB AML AML
comp=N,1380µm,1.4s
**PANI Panarotta 4.88 330** AML AML
comp=N,1825µm,0.6s
PANI AML AML
comp=E,1260µm,0.6s
PANI AML AML
comp=E,1260µm,1.4s
**FRGS Fruska Gora 4.89 46** *e*Pn Pn 21 49 45.3 -0.3
**FRGS Fruska Gora 4.89 46** *e*Pn Pn 21 49 44.5 -1.1
**FRGS Fruska Gora 4.89 46** ⇑P Pn 21 49 45.3 -0.3
**FRGS Fruska Gora 4.89 46** P Pn 21 49 46.0 +0.4
**NEST Nestorio 4.92 105** P Pn 21 49 47.8 +1.8
**FVI Forni Avoltri 4.95 343** AML AML
comp=N,1175µm,1.4s
FVI AML AML
comp=E,969µm,0.9s
FVI AML AML
comp=N,1175µm,0.6s
**LUSI Trento, Gardas 4.96 327** AML AML
comp=E,1545µm,0.9s
LUSI AML AML
comp=N,2335µm,0.6s
**ZIAN Ziano 4.99 333** AML AML
comp=E,1420µm,1.4s
ZIAN AML AML
comp=E,1760µm,0.4s
ZIAN AML AML
comp=N,1355µm,1.4s
ZIAN AML AML
comp=N,1745µm,0.4s
ZIAN AML AML
comp=E,1420µm,0.6s
ZIAN AML AML
comp=N,1355µm,0.6s
**ORZI Orzinuovi 5.01 316** AML AML
comp=E,2545µm,0.6s
ORZI AML AML
comp=N,2540µm,0.6s
ORZI AML AML
comp=N,2540µm,1.4s
**AVAS Avala Beograd 5.02 54** *e*Pn Pn 21 49 46.7 -0.6
AVAS *e*Sn Sn 21 50 42.5 -2.8
**FNA Florina 5.05 100** Pn Pn 21 49 48.6 +0.9
**FNA Florina 5.05 100** P Pn 21 49 48.6 +0.9
baz=101
FNA S Sn 21 50 43.3 -2.7
baz=101
FNA AMP
comp=N,4.0nm,0.8s,baz=101
**FNA Florina 5.05 100** P Pn 21 49 48.3 +0.5
**FNA Florina 5.05 100** P Pn 21 49 48.5 +0.7
FNA *e*Sn Sn 21 50 43.0 -3.1
**FNA Florina 5.05 100** P Pn 21 49 48.7 +0.9
**GAGG Gaggia 5.05 328** AML AML
comp=E,1580µm,0.8s
GAGG AML AML
comp=N,1890µm,0.5s
GAGG AML AML
comp=E,2015µm,0.5s
GAGG AML AML
comp=N,1890µm,1.5s
GAGG AML AML
comp=N,1615µm,0.8s
GAGG AML AML
comp=E,2015µm,1.5s
**PENT Pentalofos 5.05 107** P Pn 21 49 49.9 +2.0
**JAN Janina 5.08 114** P Pn 21 49 48.9 +0.7
**RONC Roncone 5.11 325** AML AML
comp=N,2765µm,0.7s
RONC AML AML
comp=N,3200µm,0.7s
RONC AML AML
comp=E,3350µm,0.3s
RONC AML AML
comp=E,3380µm,0.7s
**MORH Mrgy, Hungar 5.14 31** ⇑P Pn 21 49 50.2 +1.2
**MORH Mrgy, Hungar 5.14 31** P Pn 21 49 49.5 +0.5
comp=E,193nm,1.0s,comp=E,2µmcomp=E,1.2nm
**ABTA Abfaltersbach 5.15 342** *i*Pn Pn 21 49 48.8 -0.4
comp=E,86nm,0.6s,SNR=56
ABTA *e*Sn Sn 21 50 48.1 -0.5
comp=E,137nm,0.4s
**ZONE Zone 5.17 320** AML AML
comp=N,4235µm,0.4s
ZONE AML AML
comp=E,1100µm,0.3s
ZONE AML AML
comp=E,4365µm,0.3s
ZONE AML AML
comp=N,962µm,0.4s
**SVIS Svilajnac 5.25 61** *e*Pn Pn 21 49 49.2 -1.3
**BARS Barje 5.26 77** *e*Pn Pn 21 49 51.1 +0.4
BARS *e*Sn Sn 21 50 48.7 -2.6
**KPRO Kipourio 5.31 109** P Pn 21 49 53.2 +1.8
**KBA Koelnbreinsper 5.31 349** *i*Pn Pn 21 49 51.1 -0.4
comp=N,35nm,0.3s,SNR=35
KBA *e*Sn Sn 21 50 51.7 -1.1
comp=N,120nm,0.5s
**KBA Koelnbreinsper 5.31 349** *e*Pn Pn 21 49 52.6 +1.0
KBA *e*Sn Sn 21 50 51.6 -1.2
**KBA Koelnbreinsper 5.31 349** *e*Pn Pn 21 49 52.6 +1.0

KBA *e*Sn Sn 21 50 51.6 -1.2
**BOVS Bovan 5.36 68** *e*Pn Pn 21 49 52.1 +0.1
BOVS *e*Sn Sn 21 50 49.5 -4.2
**BOVS Bovan 5.36 68** ⇓P Pn 21 49 51.5 -0.5
**TSLK Tsoukalades, L 5.39 122** P Pn 21 49 53.1 +0.7
**ARSA Arzberg 5.40 5** *i*Pn Pn 21 49 52.1 -0.4
comp=N,19nm,0.4s,SNR=35
ARSA *e*Sn Sn 21 50 51.9 -2.9
comp=N,103nm,0.5s
**ARSA Arzberg 5.40 5** *e*Pn Pn 21 49 52.2 -0.4
ARSA *e*Sn Sn 21 50 51.7 -3.1
**ARSA Arzberg 5.40 5** *e*Pn Pn 21 49 52.2 -0.4
ARSA *e*Sn Sn 21 50 51.7 -3.1
**LKD2 Lefkada island 5.41 123** P Pn 21 49 53.4 +0.5
baz=124
**LKD2 Lefkada island 5.41 123** P Pn 21 49 53.3 +0.5
**KZN Kozani 5.47 104** P Pn 21 49 54.8 +1.2
**NYDR Nydri-Lefkada 5.48 123** P Pn 21 49 53.9 +0.2
**EVGI Lefkada island 5.51 124** P Pn 21 49 54.5 +0.4
**FSK Fiskardo 5.56 126** P Pn 21 49 54.9 +0.2
**DMLN Damoulianata-K 5.59 129** P Pn 21 49 55.3 +0.1
**KUBS Kucevo 5.62 61** *e*Pn Pn 21 49 53.5 -2.0
KUBS *e*Sn Sn 21 50 56.2 -3.8
**MPLH Magyarpolny 5.64 19** P Pn 21 49 55.7 -0.2
comp=N,484nm,0.8s,comp=N,7µmcomp=N,6.2nm
**VRSS Vrsac 5.73 53** *e*Pn Pn 21 49 56.9 -0.3
**VLS Valsamata 5.76 128** P Pn 21 49 57.4 -0.1
**LESA Schwarzleotal 5.76 345** *i*Pn Pn 21 49 57.2 -0.5
comp=N,58nm,0.3s
LESA *e*Sn Sn 21 51 02.9 -0.8
comp=N,102nm,0.4s
**FUORN Ofenpass-Fuorn 5.77 327** Pn Pn 21 49 58.4 +0.5
**ZAGS Zajecar 5.78 68** *e*Pn Pn 21 49 57.5 -0.3
**SBF Sospel 5.79 293** *e*P Pn 21 49 59.9 +1.9
SBF *e*Sn Sn 21 50 57.3 -7.0
**MDVR Moldovita 5.80 58** ⇑P Pn 21 49 57.8 -0.4
**VAY Valandovo 5.83 93** *i*Pn Pn 21 49 58.8 +0.3
VAY *i* Sn Sn 21 51 01.0 -4.3
**WTTA Wattenberg 5.86 338** *e*Pn Pn 21 49 58.6 -0.4
comp=N,20nm,0.3s,SNR=36
WTTA *e*Sn Sn 21 51 05.1 -1.0
comp=N,320nm,0.5s
**WTTA Wattenberg 5.86 338** *e*Pn Pn 21 49 59.6 +0.6
WTTA *e*Sn Sn 21 51 07.0 +0.9
**WTTA Wattenberg 5.86 338** *e*Pn Pn 21 49 59.6 +0.6
WTTA *e*Sn Sn 21 51 07.0 +0.9
**BIOA Bad Ischl, Aus 5.88 352** *i*Pn Pn 21 49 59.0 -0.2
comp=N,67nm,0.2s,SNR=89
BIOA *e*Sn Sn 21 51 05.6 -0.9
comp=N,178nm,0.3s
**RONA Rosalia, Austr 5.92 10** *i*Pn Pn 21 49 59.5 -0.2
comp=N,14nm,0.3s,SNR=19
**THL Klokotos Trika 5.92 111** P Pn 21 50 00.6 +0.8
**FETA Feichten 5.93 332** *e*Pn Pn 21 49 58.8 -1.1
comp=N,153nm,0.8s,SNR=95
**ZAPS Zavoj 5.93 74** *e*Pn Pn 21 50 00.7 +0.8
ZAPS *e*Sn Sn 21 51 03.9 -3.9
**RTZL Ratzakli, Kefa 5.93 128** P Pn 21 50 00.4 +0.5
**WATA Walderalm 5.94 338** *i*Pn Pn 21 50 00.6 +0.6
comp=N,19nm,0.2s,SNR=39
WATA *e*Sn Sn 21 51 07.3 -0.8
comp=N,108nm,0.3s
**SOP Sopron 5.94 11** P Pn 21 50 00.0 0.0
**SQTA Sankt Quirin 5.94 335** *i*Pn Pn 21 50 00.4 +0.2
SNR=103
SQTA *e*Sn Sn 21 51 07.7 -0.4
comp=N,208nm,0.4s
**MOA Molln 5.99 356** *i*Pn Pn 21 50 00.9 +0.2
comp=N,121nm,0.5s,SNR=88
MOA *e*Sn Sn 21 51 07.8 -1.5
comp=N,274nm,0.7s
**MOA Molln 5.99 356** *e*Pn Pn 21 50 01.6 +0.9
MOA *e*Sn Sn 21 51 07.9 -1.4
**MOA Molln 5.99 356** *e*Pn Pn 21 50 01.6 +0.9
MOA *e*Sn Sn 21 51 07.9 -1.4
**TYRN Tyrnavos 6.02 109** P Pn 21 50 01.8 +0.7
**RJOB Jochberg 6.04 347** *e*Pn Pn 21 50 01.7 +0.3
RJOB *e*Sn Sn 21 51 11.4 +0.8
**RJOB Jochberg 6.04 347** *e*Pn Pn 21 50 01.7 +0.3
RJOB *e*Sn Sn 21 51 11.4 +0.8
**DAVOX Davos/Dischmat 6.06 326** Pn Pn 21 50 01.8 0.0
comp=N,27nm,0.3s,baz=159,slow=9.0,SNR=498
DAVOX Sn Sn 21 51 08.4 -2.7
comp=N,35nm,0.3s,baz=286,slow=18,SNR=4.4
DAVOX LR LR 21 53 20.1
comp=N,1µm,18.3s,baz=144,slow=48
comp=N,218nm,0.5s
**LIT Litokhoron 6.06 104** Pn 21 50 02.2 +0.5
**LIT Litokhoron 6.06 104** P Pn 21 50 02.0 +0.3
**LIT Litokhoron 6.06 104** P Pn 21 50 02.2 +0.5
**PVO Paravola 6.07 120** P Pn 21 50 02.6 +0.9
**MOTA Moosalm 6.08 335** *i*Pn Pn 21 50 02.5 +0.4
comp=N,58nm,0.6s
MOTA *e*Sn Sn 21 51 10.9 -0.8
comp=N,126nm,0.4s
**EVR Evrytania 6.09 117** P Pn 21 50 04.8 +2.7
**KNT Kendrikon 6.10 94** P Pn 21 50 02.1 -0.1
**CONA Conrad Observa 6.10 7** *i*Pn Pn 21 50 02.0 -0.3
comp=N,45nm,0.4s,SNR=67
CONA *e*Sn Sn 21 51 08.8 -3.3
comp=N,222nm,0.5s
**LRSO Larissa Observ 6.15 108** P Pn 21 50 04.1 +1.3
**ISO Isola 6.15 295** P Pn 21 50 06.5 +3.5
**BZS Buzias 6.18 50** ⇑P Pn 21 50 05.6 +2.4
**BZS Buzias 6.18 50** P Pn 21 50 05.6 +2.4
**KKB Krupnik 6.20 88** *i*P Pn 21 50 04.6 +1.1
**LTHK Lithakia 6.22 130** P Pn 21 50 03.4 -0.4
**THE Thessaloniki 6.25 99** P Pn 21 50 04.0 -0.3
**DJES Djerdap 6.27 61** *e*Pn Pn 21 50 06.1 +1.6
**VTS Vitosha 6.28 80** *i*P Pn 21 50 05.6 +0.8
**HERR Herculane 6.29 59** ⇑P Pn 21 50 05.2 +0.4
**LMR La Mourre 6.31 286** *e*P Pn 21 50 06.0 +0.9
**RETA Reutte 6.32 334** *i*Pn Pn 21 50 05.2 -0.1
comp=N,51nm,0.5s,SNR=34
RETA Sn Sn 21 51 15.3 -2.1
comp=N,81nm,0.5s
**ANX Ano Chora 6.34 119** P Pn 21 50 06.8 +1.3
**BUD Budapest 6.36 27** P Pn 21 50 08.5 +2.8
**HORT Hortiatis 6.36 99** P Pn 21 50 05.4 -0.5
**RLS Riolos of Patr 6.36 125** P Pn 21 50 06.4 +0.6
**RMGR Halanga-Turnu 6.38 61** ⇓P Pn 21 50 06.9 +0.9
**AGG Agios Georgios 6.39 114** Pn Pn 21 50 07.2 +1.0
**AGG Agios Georgios 6.39 114** P Pn 21 50 07.1 +1.0
**AGG Agios Georgios 6.39 114** P Pn 21 50 07.2 +1.0
**PUNG Punghina 6.40 65** ⇑P Pn 21 50 07.1 +0.8
**OBER Oberstdorf 6.41 331** *e*Pn Pn 21 50 07.0 +0.5
OBER *e*Sn Sn 21 51 19.5 -0.2
**OBER Oberstdorf 6.41 331** *e*Pn Pn 21 50 07.0 +0.5
OBER *e*Sn Sn 21 51 19.5 -0.2
**EFP Efpalio 6.42 120** P Pn 21 50 07.5 +0.9
**SRO Srobarova 6.44 21** *e*P Pn 21 50 07.5 +0.7
SRO *e* 21 51 17.3
SRO MLR MLR
comp=Z,400nm,0.7s
**SRO Srobarova 6.44 21** *e*PN Pn 21 50 07.5 +0.7
SRO *e*SN Sn 21 51 17.3 -2.8
SRO *e*LG Lg 21 51 53.8
**DAVA Damuels 6.46 329** *e*Pn Pn 21 50 06.9 -0.4
comp=Z,52nm,0.3s,SNR=40
DAVA *e*Sn Sn 21 51 19.7 -1.4
comp=Z,217nm,0.5s
**DAVA Damuels 6.46 329** *e*Pn Pn 21 50 07.9 +0.6
**DAVA Damuels 6.46 329** *e*Pn Pn 21 50 07.9 +0.6
**PLONS Plons/SG 6.48 325** *e*Pn Pn 21 50 08.7 +1.2
PLONS *e*Sn Sn 21 51 20.3 -1.1
**PLONS Plons/SG 6.48 325** *e*Pn Pn 21 50 08.7 +1.2
PLONS *e*Sn Sn 21 51 20.3 -1.1
**SOH Sokhos 6.50 96** P Pn 21 50 08.4 +0.7
**ZST Bratislava 6.53 13** *e*P Pn 21 50 08.3 +0.3
ZST *e* 21 51 17.4
ZST MLR MLR
comp=Z,300nm,0.5s
**ZST Bratislava 6.53 13** *e*PN Pn 21 50 08.3 +0.3
ZST *e*SN Sn 21 51 17.4 -5.0
ZST *e*LG Lg 21 51 19.6
**MBDF Montbardon 6.54 299** *e*P Pn 21 50 08.6 +0.3
MBDF *e*Sn Sn 21 51 12.6 -10
comp=Z,81nm,0.5s
**MBDF Montbardon 6.54 299** P Pn 21 50 09.1 +0.8
**SURR Surduc 6.55 51** ⇓P Pn 21 50 07.6 -0.8
**SIRR Siria 6.59 46** ⇓P Pn 21 50 09.0 0.0
**SRS Serrai 6.62 94** *e*Pn Pn 21 50 09.0 -0.4
**SRS Serrai 6.62 94** P Pn 21 50 08.9 -0.4

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MMB** | **Musomishta** | **6.68** | **90** | *i* P | | **Pn** | **21 50 10.9** | **+0.7** |
| **UBR** | **Ueberruh** | **6.71** | **332** | *e*Pn | | **Pn** | **21 50 10.5** | **-0.1** |
| UBR | | | | *e*Sn | | **Sn** | **21 51 28.3** | **+1.3** |
| **UBR** | **Ueberruh** | **6.71** | **332** | *e*Pn | | **Pn** | **21 50 10.5** | **-0.1** |
| UBR | | | | *e*Sn | | **Sn** | **21 51 28.3** | **+1.3** |
| **SRE** | **Strehaia** | **6.72** | **63** | ⇑P | | **Pn** | **21 50 11.6** | **+0.9** |
| **SRE** | **Strehaia** | **6.72** | **63** | P | | **Pn** | **21 50 11.6** | **+0.9** |
| **BNI** | **Bardonecchia** | **6.73** | **301** | Pn | | **Pn** | **21 50 10.8** | **-0.1** |
| **BNI** | **Bardonecchia** | **6.73** | **301** | P | | **Pn** | **21 50 10.8** | **-0.1** |
| **LPG** | **La Plagne** | **6.89** | **304** | *e*Pn | | **Pn** | **21 50 11.7** | **-1.6** |
| LPG | | | | *e*Sn | | **Sn** | **21 51 25.8** | **-5.9** |
| | comp=Z,444nm,0.8s | | | | | | | |
| **LPG** | **La Plagne** | **6.89** | **304** | P | | **Pn** | **21 50 11.4** | **-1.9** |
| **SMOL** | **Smolenice** | **6.89** | **15** | *e*P | | **Pn** | **21 50 13.1** | **+0.1** |
| SMOL | | | | *e* | | | 21 51 27.7 | |
| SMOL | | | | MLR | | MLR | | |
| | comp=Z,100nm,0.4s | | | | | | | |
| **LPL** | **La Plagne** | **6.91** | **305** | *e*Pn | | **Pn** | **21 50 11.3** | **-2.2** |
| LPL | | | | *e*Sn | | **Sn** | **21 51 24.1** | **-8.0** |
| | comp=Z,128nm,0.3s | | | | | | | |
| **LPL** | **La Plagne** | **6.91** | **305** | P | | **Pn** | **21 50 12.1** | **-1.4** |
| **CKRC** | **Cesky Krumlov** | **6.96** | **357** | *e*PN | | **Pn** | **21 50 13.3** | **-0.7** |
| CKRC | | | | *e*SN | | **Sn** | **21 51 28.8** | **-4.3** |
| CKRC | | | | AMS | | AMS | 21 53 20.0 | |
| | comp=Z,1µm,11.9s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **6.96** | **357** | *e*P | | **Pn** | **21 50 13.3** | **-0.7** |
| CKRC | | | | *e* | | | 21 51 28.8 | |
| CKRC | | | | MLR | | MLR | | |
| | comp=Z,1µm,11.9s | | | | | | | |
| **WILA** | **Wila** | **6.97** | **325** | *e*Pn | | **Pn** | **21 50 13.9** | **-0.2** |
| **WILA** | **Wila** | **6.97** | **325** | *e*Pn | | **Pn** | **21 50 13.9** | **-0.2** |
| **PGB** | **Panagyurishte** | **6.97** | **82** | *i* P | | **Pn** | **21 50 15.9** | **+1.7** |
| **GEC2** | **GERESS Array S** | **7.02** | **354** | *e*Pn | | **Pn** | **21 50 13.9** | **-1.0** |
| GEC2 | | | | *e*Sn | | **Sn** | **21 51 30.9** | **-3.8** |
| **GEC2** | **GERESS Array S** | **7.02** | **354** | *e*Pn | | **Pn** | **21 50 13.9** | **-1.0** |
| GEC2 | | | | *e*Sn | | **Sn** | **21 51 30.9** | **-3.8** |
| **GERES** | **GERESS Array B** | **7.02** | **354** | Pn | | **Pn** | **21 50 13.9** | **-1.0** |
| | comp=Z,29nm,0.3s,baz=173,slow=24,SNR=372 | | | | | | | |
| GERES | | | | Sn | | **Sn** | **21 51 30.6** | **-4.1** |
| | comp=Z,42nm,0.3s,baz=153,slow=25,SNR=14 | | | | | | | |
| GERES | | | | LR | | LR | 21 53 34.6 | |
| | comp=Z,796nm,19.3s,baz=178,slow=44 | | | | | | | |
| | comp=Z,38nm,0.4s | | | | | | | |
| **PSZ** | **Piszkesteto** | **7.03** | **29** | Pn | | **Pn** | **21 50 14.3** | **-0.7** |
| **PSZ** | **Piszkesteto** | **7.03** | **29** | ⇓P | | **Pn** | **21 50 15.5** | **+0.4** |
| **PSZ** | **Piszkesteto** | **7.03** | **29** | P | | **Pn** | **21 50 15.4** | **+0.4** |
| **SENIN** | **Lac Senin/Sane** | **7.04** | **312** | Pn | | **Pn** | **21 50 14.8** | **-0.4** |
| **SMRF** | **Simiane la Rot** | **7.11** | **290** | *e*P | | **Pn** | **21 50 19.7** | **+3.6** |
| SMRF | | | | *e*Sn | | **Sn** | **21 51 28.2** | **-8.7** |
| | comp=Z,31nm,0.6s | | | | | | | |
| **WALHA** | **Wallhausen, DE** | **7.14** | **327** | *e*Pn | | **Pn** | **21 50 16.5** | **0.0** |
| **WALHA** | **Wallhausen, DE** | **7.14** | **327** | *e*Pn | | **Pn** | **21 50 16.5** | **0.0** |
| **ORIF** | **Oris-en-Rattie** | **7.20** | **298** | *e*P | | **Pn** | **21 50 19.1** | **+1.8** |
| ORIF | | | | *e*Sn | | **Sn** | **21 51 32.8** | **-6.2** |
| | comp=Z,87nm,0.7s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **7.20** | **298** | *e*P | | **Pn** | **21 50 18.6** | **+1.3** |
| **VYHS** | **Vyhne** | **7.20** | **22** | *e*P | | **Pn** | **21 50 17.7** | **+0.4** |
| VYHS | | | | *e* | | | 21 51 36.2 | |
| **VYHS** | **Vyhne** | **7.20** | **22** | *e*PN | | **Pn** | **21 50 17.7** | **+0.4** |
| VYHS | | | | *e*SN | | **Sn** | **21 51 36.2** | **-2.8** |
| **ITM** | **Ithomi** | **7.21** | **128** | Pn | | **Pn** | **21 50 17.2** | **-0.3** |
| **JAVC** | **Velka Javorina** | **7.27** | **15** | *e*PN | | **Pn** | **21 50 19.1** | **+0.8** |
| JAVC | | | | *e*SN | | **Sn** | **21 51 38.9** | **-1.8** |
| **KRUC** | **Moravsky** | **7.28** | **8** | *e*PN | | **Pn** | **21 50 17.8** | **-0.5** |
| KRUC | | | | *e*SN | | **Sn** | **21 51 36.8** | **-4.0** |
| **KHC** | **Kasperske Hory** | **7.31** | **354** | Pn | | **Pn** | **21 50 18.0** | **-0.9** |
| **KHC** | **Kasperske Hory** | **7.31** | **354** | *e*PN | | **Pn** | **21 50 17.9** | **-1.0** |
| KHC | | | | *e*PG | | **Pg** | **21 50 49.0** | **-3.1** |
| KHC | | | | *e*SN | | **Sn** | **21 51 37.2** | **-4.6** |
| KHC | | | | AMS | | AMS | 21 53 40.0 | |
| | comp=Z,2µm,8.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **7.31** | **354** | *e*P | | **Pn** | **21 50 17.9** | **-1.0** |
| KHC | | | | *e* | | | 21 51 37.2 | |
| KHC | | | | MLR | | MLR | | |
| | comp=Z,2µm,8.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **7.31** | **354** | P | | **Pn** | **21 50 17.9** | **-1.0** |
| | comp=Z,98nm,0.8s,comp=Z,1µmcomp=Z,0.7nm | | | | | | | |
| **VLAD** | **Vladila** | **7.34** | **70** | ⇓P | | **Pn** | **21 50 20.0** | **+0.8** |
| **EMING** | **Emmingen-Lipti** | **7.37** | **327** | *e*Pn | | **Pn** | **21 50 18.6** | **-1.0** |
| **EMING** | **Emmingen-Lipti** | **7.37** | **327** | *e*Pn | | **Pn** | **21 50 18.6** | **-1.0** |
| **PLD** | **Plovdiv** | **7.39** | **85** | *i* P | | **Pn** | **21 50 21.0** | **+1.1** |
| **LOT** | **Lotru** | **7.40** | **58** | ⇑P | | **Pn** | **21 50 21.1** | **+1.0** |
| **WET** | **Wettzell** | **7.40** | **350** | *e*Pn | | **Pn** | **21 50 18.7** | **-1.4** |
| WET | | | | *e*Sn | | **Sn** | **21 51 38.8** | **-5.2** |
| **WET** | **Wettzell** | **7.40** | **350** | *e*Pn | | **Pn** | **21 50 18.7** | **-1.4** |
| WET | | | | *e*Sn | | **Sn** | **21 51 38.8** | **-5.2** |
| **SULZ** | **Cheisacher** | **7.41** | **322** | *e*Sn | | **Sn** | **21 51 40.1** | **-4.0** |
| **SULZ** | **Cheisacher** | **7.41** | **322** | *e*Sn | | **Sn** | **21 51 40.1** | **-4.0** |
| **RZN** | **Rozhen** | **7.41** | **88** | *i* P | | **Pn** | **21 50 21.2** | **+0.9** |
| **SLE** | **Schleitheim** | **7.42** | **325** | *e*Pn | | **Pn** | **21 50 19.2** | **-1.0** |
| **SLE** | **Schleitheim** | **7.42** | **325** | P | | **Pn** | **21 50 19.1** | **-1.2** |
| **SLE** | **Schleitheim** | **7.42** | **325** | *e*Pn | | **Pn** | **21 50 19.2** | **-1.0** |
| **TREC** | **Trest** | **7.44** | **3** | *e*PN | | **Pn** | **21 50 19.8** | **-0.8** |
| **TREC** | **Trest** | **7.44** | **3** | *e*P | | **Pn** | **21 50 19.8** | **-0.8** |
| **NORI** | **Noerdlinger Ri** | **7.46** | **338** | *e*Pn | | **Pn** | **21 50 20.2** | **-0.7** |
| **NORI** | **Noerdlinger Ri** | **7.46** | **338** | *e*Pn | | **Pn** | **21 50 20.2** | **-0.7** |
| **KEST** | **Kesra** | **7.47** | **217** | Pn | | **Pn** | **21 50 21.1** | **0.0** |
| | comp=Z,6.0nm,0.3s,baz=313,slow=5.1,SNR=89 | | | | | | | |
| KEST | | | | LR | | LR | 21 53 28.9 | |
| | comp=Z,1µm,19.2s,baz=9.0,slow=40 | | | | | | | |
| | comp=Z,34nm,0.6s | | | | | | | |
| **METMA** | **Mettma DE** | **7.48** | **324** | *e*Pn | | **Pn** | **21 50 19.8** | **-1.4** |
| METMA | | | | *e*Sn | | **Sn** | **21 51 41.0** | **-5.0** |
| **METMA** | **Mettma DE** | **7.48** | **324** | *e*Pn | | **Pn** | **21 50 19.8** | **-1.4** |
| METMA | | | | *e*Sn | | **Sn** | **21 51 41.0** | **-5.0** |
| **DRGR** | | **7.49** | **46** | ⇓P | | **Pn** | **21 50 22.4** | **+1.0** |
| **DRGR** | | **7.49** | **46** | P | | **Pn** | **21 50 22.3** | **+1.0** |
| **VRAC** | **Vranov** | **7.54** | **9** | *e*PN | | **Pn** | **21 50 21.3** | **-0.7** |
| VRAC | | | | *e*SN | | **Sn** | **21 51 42.8** | **-4.6** |
| **VRAC** | **Vranov** | **7.54** | **9** | Pn | | **Pn** | **21 50 21.2** | **-0.7** |
| | comp=Z,1.5nm,0.3s,baz=203,slow=11,SNR=15 | | | | | | | |
| VRAC | | | | Sn | | **Sn** | **21 51 41.9** | **-5.4** |
| | comp=Z,7.1nm,0.3s,baz=292,slow=23,SNR=5.1 | | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **VRAC** | **Vranov** | **7.54** | **9** | ⇑P | | **Pn** | **21 50 21.3** | **-0.7** |
| **ZVC** | **Zvikov** | **7.58** | **357** | *e*PN | | **Pn** | **21 50 22.1** | **-0.4** |
| ZVC | | | | *e*SN | | **Sn** | **21 51 44.7** | **-3.7** |
| **MARR** | **Marisel-Cluj** | **7.64** | **48** | ⇓P | | **Pn** | **21 50 25.1** | **+1.6** |
| **KECS** | **Kecovo** | **7.72** | **29** | *e*P | | **Pn** | **21 50 27.4** | **+2.9** |
| KECS | | | | *e* | | | 21 51 48.2 | |
| **KECS** | **Kecovo** | **7.72** | **29** | *e*PN | | **Pn** | **21 50 27.4** | **+2.9** |
| KECS | | | | *e*SN | | **Sn** | **21 51 48.2** | **-3.6** |
| KECS | | | | *e*LG | | Lg | 21 52 14.5 | |
| **CMAH** | **Djebel Manchou** | **7.78** | **230** | P | | **Pn** | **21 50 27.4** | **+2.1** |
| **MAUC** | **Maruska** | **7.78** | **15** | *e*SN | | **Sn** | **21 51 50.4** | **-3.0** |
| **MESR** | **Meseseni** | **7.84** | **45** | ⇑P | | **Pn** | **21 50 28.7** | **+2.7** |
| **CABF** | **La Chapelle** | **7.86** | **310** | *e*Pn | | **Pn** | **21 50 24.3** | **-2.2** |
| CABF | | | | *e*Sn | | **Sn** | **21 51 47.4** | **-8.0** |
| | comp=Z,48nm,0.4s | | | | | | | |
| **CABF** | **La Chapelle** | **7.86** | **310** | P | | **Pn** | **21 50 25.0** | **-1.5** |
| **HUMR** | **Humele** | **7.88** | **67** | ⇑P | | **Pn** | **21 50 27.7** | **+1.1** |
| **ARR** | **Arges** | **7.92** | **61** | ⇑P | | **Pn** | **21 50 29.6** | **+2.3** |
| **BFO** | **Black Forest** | **7.93** | **327** | Pn | | **Pn** | **21 50 26.1** | **-1.2** |
| **BFO** | **Black Forest** | **7.93** | **327** | *e*Pn | | **Pn** | **21 50 26.1** | **-1.2** |
| **BFO** | **Black Forest** | **7.93** | **327** | P | | **Pn** | **21 50 26.1** | **-1.2** |
| **BFO** | **Black Forest** | **7.93** | **327** | *e*Pn | | **Pn** | **21 50 26.1** | **-1.2** |
| **CJR** | **Cluj-Napoca** | **7.94** | **49** | ⇑P | | **Pn** | **21 50 29.8** | **+2.3** |
| **CJR** | **Cluj-Napoca** | **7.94** | **49** | P | | **Pn** | **21 50 29.7** | **+2.3** |
| **COPA** | **Copaceanca** | **7.94** | **70** | ⇑P | | **Pn** | **21 50 28.7** | **+1.3** |
| **STU** | **Stuttgart** | **7.96** | **332** | | | **Pn** | **21 50 26.5** | **-1.2** |
| **STU** | **Stuttgart** | **7.96** | **332** | P | | **Pn** | **21 50 26.5** | **-1.2** |
| **VIVF** | **Saint-Julien-l** | **7.98** | **295** | *e*P | | **Pn** | **21 50 29.0** | **+1.0** |
| VIVF | | | | *e*Sn | | Sn | 21 51 49.0 | -9.2 |
| | comp=Z,30nm,0.7s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **7.98** | **295** | *e*P | | **Pn** | **21 50 28.6** | **+0.6** |
| **ABSA** | **Djebel Ababsia** | **7.99** | **228** | P | | **Pn** | **21 50 31.6** | **+3.3** |
| **CAEH** | **'Ain El Ouahch** | **8.00** | **233** | P | | **Pn** | **21 50 30.1** | **+1.8** |
| **GOPC** | **GO Pecny, Ondr** | **8.04** | **360** | *e*PN | | **Pn** | **21 50 28.1** | **-0.8** |
| **GOPC** | **GO Pecny, Ondr** | **8.04** | **360** | *e*P | | **Pn** | **21 50 28.1** | **-0.8** |
| **RDO** | **Rodhopi** | **8.07** | **92** | | | **Pn** | **21 50 29.0** | **-0.2** |
| **ROTZ** | **Rotzenmuhle** | **8.11** | **348** | *e*Pn | | **Pn** | **21 50 27.4** | **-2.3** |
| **ROTZ** | **Rotzenmuhle** | **8.11** | **348** | *e*Pn | | **Pn** | **21 50 27.4** | **-2.3** |
| **PRU** | **Pruhonice** | **8.12** | **359** | *e*PN | | **Pn** | **21 50 28.7** | **-1.2** |
| PRU | | | | *e*SN | | **Sn** | **21 51 55.8** | **-5.8** |
| **PRU** | **Pruhonice** | **8.12** | **359** | *e*P | | **Pn** | **21 50 28.7** | **-1.2** |
| PRU | | | | *e* | | | 21 51 55.8 | |
| **MORC** | **Moravsky Berou** | **8.13** | **13** | Pn | | **Pn** | **21 50 30.2** | **+0.1** |
| **MORC** | **Moravsky Berou** | **8.13** | **13** | *e*PN | | **Pn** | **21 50 30.2** | **+0.1** |
| MORC | | | | *e*SN | | **Sn** | **21 51 56.9** | **-5.0** |
| **MORC** | **Moravsky Berou** | **8.13** | **13** | ⇑P | | **Pn** | **21 50 30.2** | **+0.1** |
| **MORC** | **Moravsky Berou** | **8.13** | **13** | P | | **Pn** | **21 50 30.2** | **+0.1** |
| **PRA** | **Prague** | **8.21** | **358** | *e*PN | | **Pn** | **21 50 31.0** | **0.0** |
| **PRA** | **Prague** | **8.21** | **358** | *e*P | | **Pn** | **21 50 31.0** | **0.0** |
| **SSB** | **Saint Sauveur** | **8.21** | **298** | Pn | | **Pn** | **21 50 31.0** | **-0.2** |
| **SSB** | **Saint Sauveur** | **8.21** | **298** | P | | **Pn** | **21 50 31.0** | **-0.2** |
| **HINF** | **Hinteralfeld** | **8.21** | **319** | *e*Pn | | **Pn** | **21 50 29.5** | **-1.7** |
| HINF | | | | *e*Sn | | **Sn** | **21 51 55.0** | **-8.9** |
| | comp=Z,24nm,0.1s | | | | | | | |
| **HINF** | **Hinteralfeld** | **8.21** | **319** | *e*P | | **Pn** | **21 50 28.6** | **-2.6** |
| **GRFO** | **Grafenberg** | **8.22** | **343** | Pn | | **Pn** | **21 50 29.1** | **-2.1** |
| **GRFO** | **Grafenberg** | **8.22** | **343** | *e*Pn | | **Pn** | **21 50 29.0** | **-2.2** |
| **GRFO** | **Grafenberg** | **8.22** | **343** | P | | **Pn** | **21 50 29.1** | **-2.1** |
| **GRFO** | **Grafenberg** | **8.22** | **343** | *e*Pn | | **Pn** | **21 50 29.0** | **-2.2** |
| **GRA1** | **Grafenberg Arr** | **8.22** | **343** | | | **Pn** | **21 50 28.7** | **-2.5** |
| **GRF** | **Grafenberg Arr** | **8.22** | **343** | *e*Pn | | **Pn** | **21 50 29.0** | **-2.2** |
| **GRF** | **Grafenberg Arr** | **8.22** | **343** | P | | **Pn** | **21 50 28.7** | **-2.5** |
| **GRF** | **Grafenberg Arr** | **8.22** | **343** | *e*Pn | | **Pn** | **21 50 29.0** | **-2.2** |
| **VOIR** | | **8.22** | **61** | ⇑P | | **Pn** | **21 50 34.2** | **+2.8** |
| **VOIR** | | **8.22** | **61** | P | | **Pn** | **21 50 34.1** | **+2.8** |
| **VOIR** | | **8.22** | **61** | P | | **Pn** | **21 50 34.1** | **+2.8** |
| | comp=Z,231nm,0.8s,comp=Z,2µm | | | | | | | |
| **KRLC** | **Kraliky** | **8.32** | **9** | *e*PN | | **Pn** | **21 50 32.8** | **+0.2** |
| KRLC | | | | *e*SN | | **Sn** | **21 52 02.2** | **-4.3** |
| KRLC | | | | AMS | | AMS | 21 54 00.0 | |
| | comp=Z,1µm,9.6s | | | | | | | |
| **KRLC** | **Kraliky** | **8.32** | **9** | *e*P | | **Pn** | **21 50 32.8** | **+0.2** |
| KRLC | | | | *e* | | | 21 52 02.2 | |
| KRLC | | | | MLR | | MLR | | |
| | comp=Z,1µm,9.6s | | | | | | | |
| **MANZ** | **Manzenberg** | **8.34** | **348** | *e*Pn | | **Pn** | **21 50 31.0** | **-1.8** |
| **MANZ** | **Manzenberg** | **8.34** | **348** | *e*Pn | | **Pn** | **21 50 31.0** | **-1.8** |
| **CKFL** | **Kef-Lekhel** | **8.34** | **232** | P | | **Pn** | **21 50 34.8** | **+1.8** |
| **LASF** | **Ste Croix** | **8.34** | **289** | *e*P | | **Pn** | **21 50 35.7** | **+2.7** |
| **SZH** | **Strazhitsa** | **8.35** | **77** | *i* P | | **Pn** | **21 50 34.1** | **+1.1** |
| **ECH** | **Echery** | **8.35** | **322** | Pn | | **Pn** | **21 50 31.5** | **-1.5** |
| **ECH** | **Echery** | **8.35** | **322** | *e*Pn | | **Pn** | **21 50 31.7** | **-1.3** |
| **ECH** | **Echery** | **8.35** | **322** | P | | **Pn** | **21 50 31.5** | **-1.5** |
| **ECH** | **Echery** | **8.35** | **322** | *e*Pn | | **Pn** | **21 50 31.7** | **-1.3** |
| **BERU** | **Beregovo** | **8.43** | **38** | P | | **Pn** | **21 50 36.0** | **+1.9** |
| **CDF** | **Champ du Feu** | **8.44** | **323** | *e*Pn | | **Pn** | **21 50 32.7** | **-1.7** |
| CDF | | | | *e*Sn | | **Sn** | **21 52 01.0** | **-8.6** |
| | comp=Z,432nm,0.6s | | | | | | | |
| **BMR** | **Baia Mare** | **8.46** | **44** | ⇑P | | **Pn** | **21 50 36.9** | **+2.3** |
| **BMR** | **Baia Mare** | **8.46** | **44** | P | | **Pn** | **21 50 36.9** | **+2.3** |
| **NIE** | **Niedzica** | **8.46** | **25** | *e*P | | **Pn** | **21 50 35.1** | **+0.5** |
| **ALN** | **Alexandroupoli** | **8.49** | **93** | Pn | | **Pn** | **21 50 35.1** | **+0.1** |
| **ALN** | **Alexandroupoli** | **8.49** | **93** | P | | **Pn** | **21 50 35.1** | **+0.1** |
| **SGRR** | **Singureni** | **8.49** | **70** | ⇓P | | **Pn** | **21 50 35.6** | **+0.6** |
| **HOLU** | **Holmets** | **8.53** | **36** | P | | **Pn** | **21 50 36.8** | **+1.4** |
| **DPC** | **Dobruska-Polom** | **8.54** | **6** | AMS | | AMS | 21 54 00.0 | |
| | comp=Z,900nm,13.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **8.54** | **6** | P | | **Pn** | **21 50 37.7** | **+1.9** |
| | comp=Z,23nm,1.1s | | | | | | | |
| **UZHM** | **Uzhgorod** | **8.56** | **35** | P | | **Pn** | **21 50 36.3** | **+0.4** |
| **CASM** | **Ain Smara** | **8.57** | **232** | P | | **Pn** | **21 50 39.5** | **+3.4** |
| **HAU** | **Haudompre** | **8.59** | **318** | *e*Pn | | **Pn** | **21 50 35.0** | **-1.3** |
| HAU | | | | *e*Sn | | **Sn** | **21 52 04.6** | **-8.5** |
| | comp=Z,465nm,0.5s | | | | | | | |
| **KORU** | **Korolevo** | **8.61** | **40** | P | | **Pn** | **21 50 38.4** | **+1.9** |
| **MUKU** | **Mukachevo** | **8.61** | **37** | P | | **Pn** | **21 50 38.8** | **+2.3** |
| **PVCC** | **Panska Ves** | **8.66** | **359** | *e*PN | | **Pn** | **21 50 36.5** | **-0.8** |
| **PVCC** | **Panska Ves** | **8.66** | **359** | *e*P | | **Pn** | **21 50 36.5** | **-0.8** |
| **BRIU** | **Brid** | **8.68** | **39** | P | | **Pn** | **21 50 39.4** | **+1.9** |
| **UPC** | **Upice** | **8.68** | **5** | *e*PN | | **Pn** | **21 50 37.0** | **-0.5** |
| **UPC** | **Upice** | **8.68** | **5** | *e*P | | **Pn** | **21 50 37.0** | **-0.5** |
| **RICC** | **Richard** | **8.69** | **357** | *e*PN | | **Pn** | **21 50 36.0** | **-1.7** |
| **TANN** | **Tannenbergstha** | **8.70** | **350** | *e*Pn | | **Pn** | **21 50 36.2** | **-1.8** |
| **TANN** | **Tannenbergstha** | **8.70** | **350** | *e*Pn | | **Pn** | **21 50 36.2** | **-1.8** |
| **JMB** | **Yambol** | **8.71** | **82** | *i* P | | **Pn** | **21 50 38.7** | **+0.7** |
| **OSTC** | **Ostas** | **8.74** | **6** | *e*PN | | **Pn** | **21 50 38.4** | **0.0** |
| **OSTC** | **Ostas** | **8.74** | **6** | *e*P | | **Pn** | **21 50 38.4** | **0.0** |
| **CHVC** | **Chvalec** | **8.76** | **5** | *e*PN | | **Pn** | **21 50 38.3** | **-0.4** |
| **CHVC** | **Chvalec** | **8.76** | **5** | *e*P | | **Pn** | **21 50 38.3** | **-0.4** |
| **KOLS** | **Kolonicke sedl** | **8.79** | **34** | *e*P | | **Pn** | **21 50 42.3** | **+3.2** |
| KOLS | | | | *e* | | | 21 52 11.5 | |
| KOLS | | | | MLR | | MLR | | |
| | comp=Z,100nm,0.9s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **8.79** | **34** | *e*PN | | **Pn** | **21 50 42.3** | **+3.2** |
| KOLS | | | | *e*SN | | **Sn** | **21 52 11.5** | **-6.5** |
| KOLS | | | | *e*LG | | Lg | 21 52 28.4 | |
| **HSKC** | **Hora Svate Kat** | **8.79** | **354** | *e*PN | | **Pn** | **21 50 38.5** | **-0.6** |
| HSKC | | | | AMS | | AMS | 21 54 30.0 | |
| | comp=Z,2µm,11.9s | | | | | | | |
| **SULR** | | **8.79** | **68** | ⇓P | | **Pn** | **21 50 40.2** | **+1.1** |
| **PLN** | **Plauen** | **8.81** | **349** | *e*Pn | | **Pn** | **21 50 38.3** | **-1.1** |
| **PLN** | **Plauen** | **8.81** | **349** | *e*Pn | | **Pn** | **21 50 38.3** | **-1.1** |
| **MLR** | **Muntele Rosu** | **8.83** | **62** | Pn | | **Pn** | **21 50 41.7** | **+2.0** |
| **MLR** | **Muntele Rosu** | **8.83** | **62** | Pn | | **Pn** | **21 50 41.6** | **+1.9** |
| | comp=Z,3.1nm,0.3s,baz=225,slow=3.5,SNR=226 | | | | | | | |
| MLR | | | | LR | | LR | 21 55 08.8 | |
| | comp=Z,2µm,18.8s,baz=246,slow=45 | | | | | | | |
| **MLR** | **Muntele Rosu** | **8.83** | **62** | ⇑P | | **Pn** | **21 50 41.8** | **+2.0** |
| **MILB** | **Miltenberg** | **8.85** | **336** | *e*Pn | | **Pn** | **21 50 38.5** | **-1.3** |
| **MILB** | **Miltenberg** | **8.85** | **336** | *e*Pn | | **Pn** | **21 50 38.5** | **-1.3** |
| **EZN** | **Ezine** | **8.95** | **99** | P | | **Pn** | **21 50 41.5** | **+0.2** |
| | comp=Z,51nm,0.8s,comp=Z,454nm | | | | | | | |
| **BRG** | **Berggiesshubel** | **9.03** | **356** | Pn | | **Pn** | **21 50 40.5** | **-1.8** |
| BRG | | | | Amp | | | 21 50 42.4 | |
| | comp=Z,16nm,0.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **9.03** | **356** | Sn | | **Sn** | **21 52 17.7** | **-6.2** |
| BRG | | | | Sg | | | 21 53 25.2 | |
| BRG | | | | Amp | | | 21 54 02.2 | |
| | comp=Z,115nm,1.1s | | | | | | | |
| BRG | | | | Amp | | | 21 54 36.0 | |
| | comp=N,0.9nm,16.6s | | | | | | | |
| BRG | | | | Amp | | | 21 54 51.0 | |
| | comp=Z,1.2nm,11.2s | | | | | | | |
| BRG | | | | Amp | | | 21 54 51.0 | |
| | comp=E,1.2nm,9.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **9.03** | **356** | *e*Pn | | **Pn** | **21 50 41.0** | **-1.3** |
| **BRG** | **Berggiesshubel** | **9.03** | **356** | *e*Pn | | **Pn** | **21 50 41.0** | **-1.3** |
| **KSP** | **Ksiaz** | **9.03** | **6** | *e*P | | **Pn** | **21 50 43.1** | **+0.8** |
| **KSP** | **Ksiaz** | **9.03** | **6** | P | | **Pn** | **21 50 43.3** | **+0.9** |
| | comp=E,29nm,0.8s | | | | | | | |
| **OJC** | **Ojcow** | **9.03** | **21** | *e*P | | **Pn** | **21 50 45.4** | **+3.0** |
| **OJC** | **Ojcow** | **9.03** | **21** | Pn | | **Pn** | **21 50 43.4** | **+1.0** |
| **OJC** | **Ojcow** | **9.03** | **21** | P | | **Pn** | **21 50 43.4** | **+1.0** |
| **OJC** | **Ojcow** | **9.03** | **21** | P | | **Pn** | **21 50 45.0** | **+2.6** |
| | comp=E,16nm,1.0s,comp=E,213nm | | | | | | | |
| **RAKU** | **Rahkiv** | **9.03** | **44** | P | | **Pn** | **21 50 44.1** | **+1.7** |
| **MEZ** | **Mezhgor'ye** | **9.04** | **40** | P | | **Pn** | **21 50 43.9** | **+1.5** |
| **NEHR** | **Nehoiu** | **9.04** | **63** | ⇓P | | **Pn** | **21 50 44.8** | **+2.3** |
| **MOX** | **Moxa** | **9.05** | **347** | *e*Pn | | **Pn** | **21 50 40.8** | **-1.8** |
| **MOX** | **Moxa** | **9.05** | **347** | *e*Pn | | **Pn** | **21 50 40.8** | **-1.8** |
| **TURR** | **Turia** | **9.09** | **59** | ⇓P | | **Pn** | **21 50 45.7** | **+2.5** |
| **ISR** | **Istrita** | **9.11** | **65** | P | | **Pn** | **21 50 44.9** | **+1.4** |
| | comp=E,128nm,1.0s | | | | | | | |
| **COVR** | **Voineasa-Covas** | **9.13** | **60** | ⇑P | | **Pn** | **21 50 46.3** | **+2.6** |
| **SMF** | **Signal de Mont** | **9.21** | **305** | *e*Pn | | **Pn** | **21 50 42.5** | **-2.4** |
| SMF | | | | *e*Sn | | Sn | 21 52 18.9 | -10 |
| | comp=E,161nm,0.7s | | | | | | | |
| **SMF** | **Signal de Mont** | **9.21** | **305** | *e*P | | **Pn** | **21 50 42.9** | **-2.0** |
| **PAGF** | **Fort de Pagny** | **9.27** | **319** | *e*Pn | | **Pn** | **21 50 43.4** | **-2.2** |
| PAGF | | | | *e*Sn | | **Sn** | **21 52 20.8** | **-9.0** |
| | comp=E,213nm,0.6s,baz=131 | | | | | | | |
| **BISRR** | **Bisoca** | **9.36** | **63** | ⇑P | | **Pn** | **21 50 49.3** | **+2.4** |
| **BISRR** | **Bisoca** | **9.36** | **63** | P | | **Pn** | **21 50 49.8** | **+2.9** |
| | comp=E,564nm,1.1s,comp=E,4µm | | | | | | | |
| **BURAR** | **Bucovina Array** | **9.36** | **49** | ⇓P | | **Pn** | **21 50 49.5** | **+2.6** |
| **BURAR** | **Bucovina Array** | **9.36** | **49** | P | | **Pn** | **21 50 49.5** | **+2.6** |
| **BUR08** | **Bucovina Ar. S** | **9.36** | **48** | Pn | | **Pn** | **21 50 49.6** | **+2.5** |
| **SFTF** | **Sexfontaines** | **9.38** | **316** | *e*Pn | | **Pn** | **21 50 45.1** | **-2.1** |
| | baz=130 | | | | | | | |
| SFTF | | | | *e*Sn | | Sn | 21 52 22.9 | -10 |
| | comp=E,80nm,0.5s | | | | | | | |
| **PLOR3** | **Plostina Array** | **9.42** | **61** | P | | **Pn** | **21 50 48.7** | **+1.0** |
| | comp=E,122nm,0.9s,comp=E,925nm | | | | | | | |
| **MTLF** | **Montolieu** | **9.42** | **283** | *e*P | | **Pn** | **21 50 47.1** | **-0.6** |
| MTLF | | | | *e*Sn | | Sn | 21 52 23.8 | -10 |
| | comp=E,14nm,0.7s | | | | | | | |
| **PLOR** | **Plostina** | **9.42** | **61** | ⇓P | | **Pn** | **21 50 48.9** | **+1.1** |
| **PLOR** | **Plostina** | **9.42** | **61** | P | | **Pn** | **21 50 48.8** | **+1.1** |
| **TNS** | **Taunus Mts** | **9.46** | **334** | *e*Pn | | **Pn** | **21 50 47.1** | **-1.1** |
| **TNS** | **Taunus Mts** | **9.46** | **334** | *e*Pn | | **Pn** | **21 50 47.1** | **-1.1** |
| **VRI** | **Vrincioaia** | **9.47** | **61** | ⇑P | | **Pn** | **21 50 50.0** | **+1.5** |
| **VRI** | **Vrincioaia** | **9.47** | **61** | P | | **Pn** | **21 50 49.9** | **+1.5** |
| **SHIU** | **Shidnytsya** | **9.48** | **36** | P | | **Pn** | **21 50 50.3** | **+1.8** |
| **ABH** | **Alteburg** | **9.48** | **330** | *e*Pn | | **Pn** | **21 50 47.7** | **-0.9** |
| **ABH** | **Alteburg** | **9.48** | **330** | *e*Pn | | **Pn** | **21 50 47.7** | **-0.9** |
| **LOR** | **Lormes** | **9.51** | **308** | *e*Pn | | **Pn** | **21 50 45.9** | **-3.0** |
| | baz=120 | | | | | | | |
| LOR | | | | *e*Sn | | Sn | 21 52 26.3 | -9.4 |
| **LOR** | **Lormes** | **9.51** | **308** | *e*P | | **Pn** | **21 50 46.3** | **-2.6** |
| **KWP** | **Kalwaria Pacla** | **9.51** | **33** | P | | **Pn** | **21 50 51.4** | **+2.4** |
| | comp=E,92nm,0.7s,comp=E,2µm | | | | | | | |
| **CLL** | **Collm** | **9.52** | **353** | Pn | | **Pn** | **21 50 48.3** | **-0.8** |
| **CLL** | **Collm** | **9.52** | **353** | *i* Pn | | **Pn** | **21 50 48.9** | **-0.2** |
| | comp=Z,68nm,0.5s | | | | | | | |
| CLL | | | | *ex* | | x | 21 51 31.0 | |
| CLL | | | | *e*Sn | | Sn | 21 52 24.0 | -12 |
| CLL | | | | *ex* | | x | 21 52 39.0 | |
| CLL | | | | *e*Sb | | | 21 53 05.0 | |
| CLL | | | | *ex* | | x | 21 53 24.0 | |
| CLL | | | | *e*Sg | | | 21 53 35.0 | |
| | comp=Z,317nm,1.2s | | | | | | | |
| **CLL** | **Collm** | **9.52** | **353** | *e*Pn | | **Pn** | **21 50 48.3** | **-0.8** |
| **CLL** | **Collm** | **9.52** | **353** | *i* P | | **Pn** | **21 50 48.9** | **-0.2** |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,68nm,0.5s | | | | | | | |
| **CLL** | **Collm

MFF Saint Martin d 11.73 299 eP Pn 21 51 18.6 -0.8
PURM Purcari 11.76 62 P Pn 21 51 19.5 -0.1
comp=Z,88nm,1.0s,comp=Z,2µm
ARG Arkhangelos 11.77 114 Pn Pn 21 51 18.5 -1.5
ARG Arkhangelos 11.77 114 P Pn 21 51 18.5 -1.5
SJPF Ste Jean 11.92 281 eP Pn 21 51 24.2 +2.2
SJPF eSn Sn 21 53 24.4 -10
comp=Z,5.1nm,0.5s
RNPP5 Staryi Chortor 12.05 35 P Pn 21 51 24.7 +1.0
LUBAR Lubar, Ukraine 12.07 44 P Pn 21 51 24.8 +0.9
RNPP9 Varash 12.12 35 P Pn 21 51 24.8 +0.3
RNPP9 Sopachiv 12.19 35 P Pn 21 51 26.0 +0.5
MDUB Mudurnu 12.42 91 Pn Pn 21 51 30.2 +1.3
MI29 MI29, Kamyanyy 12.42 42 P Pn 21 51 29.5 +0.8
BSEG Bad Segeberg 12.44 348 ePn Pn 21 51 29.6 +0.6
BSEG Bad Segeberg 12.44 348 ePn Pn 21 51 29.6 +0.6
LDF La Druitiere 12.49 308 eP Pn 21 51 31.5 +1.8
LDF eSn Sn 21 53 37.4 -11
comp=Z,12nm,0.6s
LDF La Druitiere 12.49 308 eP Pn 21 51 28.4 -1.3
FLN La Foliniere 12.78 308 ePn Pn 21 51 30.6 -3.0
FLN eSn Sn 21 53 44.4 -11
comp=Z,22nm,0.5s
MI30 MI30,Zelenitsa 12.79 42 P Pn 21 51 34.6 +0.8
GRR Gorron 12.84 306 ePn Pn 21 51 31.3 -3.2
GRR eSn Sn 21 53 45.8 -11
comp=Z,34nm,0.8s
AK14 Malin Array Si 13.19 44 P Pn 21 51 39.0 -0.2
AK07 Malin Array Si 13.19 44 P Pn 21 51 39.2 0.0
AK08 Malin Array Si 13.26 44 P Pn 21 51 40.1 -0.1
AK09 Malin Array Si 13.27 44 P Pn 21 51 40.2 -0.1
KIEV Kiev 13.28 43 Pn Pn 21 51 39.0 -1.4
KIEV Kiev 13.28 43 Pn Pn 21 51 40.6 +0.2
KIEV Kiev 13.28 43 P Pn 21 51 39.0 -1.4
AKASG Malin Array Be 13.29 43 Pn Pn 21 51 39.6 -1.0
comp=Z,1.0nm,0.3s,baz=236,slow=12,SNR=15
AKASG LR LR 21 57 31.1
comp=Z,1µm,18.1s,baz=230,slow=41
comp=Z,6.9nm,1.0s
AKBB Malin Array Si 13.29 43 ceP Pn 21 51 40.3 -0.2
AKBB Malin Array Si 13.29 43 P Pn 21 51 40.4 -0.1
SUW Suwalki 13.36 22 eP P 21 51 46.3 -4.8
SUW Suwalki 13.36 22 Pn Pn 21 51 42.0 +0.4
SUW Suwalki 13.36 22 eP Pn 21 51 46.1 +4.5
SUW Suwalki 13.36 22 P Pn 21 51 42.0 +0.4
SGMF Saint Gilles 13.83 303 ePn Pn 21 51 44.4 -3.6
SGMF eSn Sn 21 54 12.6 -8.9
comp=Z,10nm,0.6s
QUIF Quistinic 14.10 301 eP P 21 51 57.4 -2.0
QUIF eSn Sn 21 54 12.4 -16
comp=Z,3.9nm,0.4s
QUIF Quistinic 14.10 301 eP Pn 21 51 48.9 -2.8
ROSF Rostrenen 14.31 303 ePn Pn 21 51 55.1 +0.5
ROSF eSn Sn 21 54 20.0 -13
comp=Z,13nm,0.6s
ROSF Rostrenen 14.31 303 eP Pn 21 51 54.0 -0.6
SIM Simferopol' 14.35 71 eP Pn 21 51 55.8 +0.7
SIM eS Sn 21 54 35.4 +1.2
SIM pmax pmax
comp=Z,27nm,0.9s
BR106 Keskin Array S 14.39 92 P Pn 21 51 57.5 +1.6
comp=Z,23nm,1.0s,comp=Z,174nm
BR105 Keskin Array S 14.39 92 P Pn 21 51 57.7 +1.8
comp=Z,26nm,0.9s,comp=Z,191nm
BR131 Keskin Array S 14.41 92 eP Pn 21 51 57.9 +1.8
BRTR Keskin Array B 14.41 92 Pn Pn 21 51 57.5 +1.4
comp=Z,0.2nm,0.3s,baz=286,slow=12,SNR=11
BRTR LR LR 21 58 52.8
comp=Z,342nm,18.2s,baz=297,slow=43
comp=Z,2.6nm,0.7s
ESDC Sonseca Array 14.41 267 Pn Pn 21 51 55.3 -0.8
comp=Z,0.1nm,0.3s,baz=74,slow=13,SNR=18
ESDC LR LR 21 57 17.1
comp=Z,514nm,19.7s,baz=78,slow=37
comp=Z,2.2nm,0.8s
DEL Delary 14.63 358 eP Pn 21 52 01.7 +2.9
PABE Paberze 14.90 21 Pn Pn 21 52 03.3 +0.8
PABE Paberze 14.90 21 eP P 21 52 08.1 -0.1
PBUR Paburge 14.90 16 eP P 21 52 07.9 -0.3
MUD Monsted U'grnd 15.05 348 eP P 21 52 11.0 +1.2
FABU Falkenberg 15.21 356 i P P 21 52 12.8 +1.2
NACGM Naroch 15.24 27 i P Pn 21 52 06.6 -0.5
comp=N,1µm,0.9s,baz=217
MNK Minsk 15.31 30 i P Pn 21 52 07.3 -0.7
comp=E,24nm,0.9s
MNK i P Pn 21 52 07.3 -0.7
comp=N,22nm,0.9s
MNK i P Pn 21 52 07.3 -0.7
comp=Z,37nm,0.8s,baz=220
MNK i PP pP 21 52 14.6 -1.5
MNK i S Sn 21 54 57.0 -0.5
MNK i SS SnSn 21 55 11.4 +1.4
MNK i LR LR 21 57 20.6
MNK i LRM MLR 21 57 39.2
comp=N,2µm,17.9s
MNK i LRM MLR 21 57 39.5
comp=E,1µm,17.8s
MNK i LRM MLR 21 58 30.4
comp=Z,602nm,17.3s
MNK Minsk 15.31 30 i P Pn 21 52 07.3 -0.7
MNK i S Sn 21 54 56.9 -0.5
MNK pmax pmax
comp=Z,37nm,0.8s
MNK pmax pmax
comp=E,24nm,0.9s
MNK pmax pmax
comp=N,22nm,0.9s
MNK MLR MLR
comp=N,2µm,18.0s
MNK MLR MLR
comp=E,1µm,18.0s
MNK MLR MLR
comp=Z,602nm,17.0s
VSVD Vaisvydziai 15.31 20 eP P 21 52 12.6 -0.2
IIGN Ignalina 15.42 25 eP P 21 52 13.0 -1.0
ISAL Salakas 15.57 24 eP P 21 52 15.4 -0.3
IZAR Zarasai 15.76 24 eP P 21 52 17.6 -0.2
BORU Boraas 15.84 356 i P P 21 52 18.5 -0.1
PBRG Braganca 16.08 277 eP P 21 52 24.0 +2.5
BNN Bunyan 16.30 94 Pn Pn 21 52 21.0 0.0
BNN IAmb IAmb 21 52 30.3
comp=Z,82nm,1.1s
TJOU Tjoern 16.31 354 i P P 21 52 24.3 +0.5
MVO Moncorvo 16.39 275 A A 21 59 44.6
comp=Z,627nm,14.0s
SLIT Slitere, Latvi 16.48 14 eP P 21 52 26.8 +1.2
VIKU Vikbolandet 16.69 3 eP P 21 52 28.8 +0.7
MTE Manteigas 16.92 272 eP P 21 52 32.5 +1.7
MTE eS S 21 55 54.1 +7.0
MTE A A 21 59 37.2
comp=Z,808nm,18.0s
POLO Lamas de Olo 16.92 276 eP P 21 52 32.8 +1.9
PMRV Marv??o 17.03 269 A A 21 59 13.7
comp=Z,387nm,18.0s
PVIS Viseu 17.11 274 eP P 21 52 33.9 +1.0
PBAR Barrancos 17.14 265 eP P 21 52 34.5 +1.3
SNART Snartemo 17.18 346 i P P 21 52 39.0 +5.6
PGAV Gavieira, Arco 17.19 278 eS S 21 56 00.0 +7.4
PGAV A A 21 59 44.5
comp=Z,663nm,18.0s
STRU Stroemstad 17.34 354 eP Pn 21 52 34.2 +0.3
PESTR Estremoz 17.34 267 eP Pn 21 52 34.4 +0.3
MTSE Matsula 17.78 15 eP P 21 52 40.6 +0.5
MDT Midelt 17.87 246 P P 21 52 41.5 +0.1
comp=Z,0.1nm,0.3s,baz=74,slow=12,SNR=9.1
MDT LR LR 21 58 47.9
comp=Z,370nm,19.2s,baz=52,slow=35
comp=Z,6.9nm,0.9s
EKA Eskdalemuir Ar 17.90 325 P Pn 21 52 40.6 -0.2
baz=135,slow=13
EKA S Sn 21 55 51.1 -9.0
comp=Z,1.2nm,0.5s,baz=141,slow=25,SNR=3.7
comp=Z,7.9nm,0.5s
ESK Eskdalemuir 17.91 325 Pn Pn 21 52 39.7 -1.2
ESK Eskdalemuir 17.91 325 P Pn 21 52 39.7 -1.2
ESK pmax pmax
comp=Z,56nm,1.4s
PVAQ Vaqueiros 17.92 263 eP P 21 52 47.5 +5.7
PVAQ eS S 21 56 08.0 +0.7
PVAQ A A 21 58 49.3
comp=Z,304nm,20.0s
PSBE So Bento 18.06 270 eP P 21 52 48.4 +5.0
UPP Uppsala 18.09 5 eP P 21 52 44.0 +0.5
KONO Kongsberg 18.10 351 eP Pn 21 52 41.5 -1.7
KONO pmax pmax
comp=Z,30nm,1.4s
MESJ Messejana 18.14 265 eP P 21 52 46.3 +2.1
DSB Dublin 18.21 316 Pn P 21 52 46.1 +1.3
DSB Dublin 18.21 316 P 21 52 45.4 +0.5
VSU Vasula 18.23 20 ceP P 21 52 46.3 +1.3
VSU pmax pmax
comp=Z,53nm,0.8s
PNCL Nicolau / Gran 18.27 266 eP P 21 52 52.1 +6.4
HFS Hagfors 18.30 358 P Pn 21 52 44.6 -1.1
comp=Z,0.5nm,0.3s,baz=187,slow=10,SNR=16
comp=Z,14nm,0.9s
SOC Sochi 18.35 76 eP P 21 52 46.5 0.0
SOC e 21 56 13.5
SOC pmax pmax
comp=Z,9.0nm,0.7s
SOC MLR MLR
comp=Z,144nm,18.0s
MMAI Mount Meron Ar 18.54 112 P P 21 52 47.6 -1.2
comp=Z,1.4nm,0.3s,baz=310,slow=12,SNR=10.0
MMAI S Sn 21 56 04.4 -12
comp=Z,0.5nm,0.3s,baz=310,slow=30,SNR=1.9
comp=Z,17nm,0.8s
ILTH Belurgan, Co L 18.59 318 Pn Pn 21 52 52.1 +2.8
AAL Aland 18.61 8 eP Pn 21 52 49.5 0.0
ARBE Arbavere 18.91 18 eP Pn 21 52 55.6 +2.5
VORD Divnogorie 19.09 53 eP P 21 52 53.9 -0.6
VORD pmax pmax
comp=Z,20nm,0.7s
VSR Storozhevoye 19.09 52 eP P 21 52 54.1 -0.5
VSR pmax pmax
comp=Z,20nm,0.7s
MEF Metsahovi 19.29 15 eP P 21 52 55.7 -1.0
NB2 NORSAR Subarra 19.32 355 P P 21 52 56.6 -0.5
comp=Z,7.6nm,0.7s,baz=171,slow=10
NOA NORSAR Array B 19.32 355 P P 21 52 55.6 -1.5
comp=Z,0.1nm,0.3s,baz=168,slow=11,SNR=44
NOA LR LR 22 00 52.0
comp=Z,455nm,18.9s,baz=170,slow=38
comp=Z,4.2nm,0.8s
OBN Obninsk 19.46 40 P 21 52 57.5 -1.1
OBN IAmb IAmb 21 53 01.6
comp=Z,36nm,0.7s
OBN Obninsk 19.46 40 P P 21 52 57.7 -0.9
comp=Z,4.5nm,0.3s,baz=230,slow=5.5,SNR=14
OBN LR LR 22 01 43.1
comp=Z,255nm,19.3s,baz=200,slow=41
comp=Z,29nm,0.6s
LPSR Galich'ya Gora 19.47 48 eP Pn 21 52 59.8 -0.2
LPSR pmax pmax
comp=Z,70nm,1.3s
RAF Rauma 19.64 10 eP P 21 52 60.0 -0.5
ASF Jabal al Asfar 20.05 112 P Pn 21 53 07.2 0.0
comp=Z,13nm,1.0s,baz=264,slow=0.0,SNR=3.1
comp=Z,13nm,1.0s
EIL Elat 20.31 120 P P 21 53 08.2 +0.1
comp=Z,9.5nm,0.7s,baz=314,slow=12,SNR=8.4
EIL S S 21 56 44.4 -11
comp=Z,8.0nm,0.6s,baz=330,slow=6.3,SNR=7.1
EIL LR LR 22 03 46.3
comp=Z,263nm,21.5s,baz=258,slow=45
comp=Z,9.5nm,0.7s
MOS Moscow 20.31 39 eP P 21 53 05.5 -2.4
MOS eS S 21 56 52.8 -2.4
MOS pmax pmax
comp=Z,40nm,0.7s
MOS MLR MLR
comp=Z,600nm,14.0s
PUL Pulkovo 20.33 23 eP P 21 53 08.2 +0.2
PUL pmax pmax
comp=Z,29nm,0.6s
SHA1 Shidzhatmaz 20.47 75 eP P 21 53 10.8 +0.9
KIV Kislovodsk 20.47 75 P P 21 53 08.8 -1.0
KIV IAmb IAmb 21 53 29.6
comp=Z,27nm,0.8s
KIV Kislovodsk 20.47 75 Pn Pn 21 53 12.0 0.0
KIV Kislovodsk 20.47 75 eP P 21 53 08.9 -1.0
KIV eS S 21 56 59.8 +1.0
KIV pmax pmax
comp=Z,19nm,1.0s
KIV MLR MLR
comp=Z,126nm,14.0s
KIV Kislovodsk 20.47 75 P Pn 21 53 11.3 -0.7
comp=Z,29nm,1.1s,comp=Z,353nm
TAM Tamanrasset 20.56 205 P P 21 53 11.3 +0.3
TAM Tamanrasset 20.56 205 P P 21 53 11.3 +0.3
TAM pmax pmax
comp=Z,21nm,1.0s
VRH Novokhopyorsk 20.62 54 eP P 21 53 11.6 +0.4
VRH pmax pmax
comp=Z,36nm,0.6s
KBZ Khabaz 20.64 75 P P 21 53 12.3 +0.7
comp=Z,26nm,0.9s,baz=295,slow=9.8,SNR=31
KBZ LR LR 22 05 01.5
comp=Z,176nm,18.4s,baz=266,slow=48
comp=Z,26nm,0.9s
KBZ Khabaz 20.64 75 ceP Pn 21 53 13.1 -0.7
KBZ pmax pmax
comp=Z,40nm,1.0s
GOF Gofitskoye 20.68 72 ceP Pn 21 53 15.1 +0.8
FINES FINESS Array B 20.75 15 P P 21 53 11.8 -0.8
comp=Z,21nm,0.8s,baz=187,slow=10,SNR=36
FINES PcP PcP 21 57 21.5 +0.1
comp=Z,1.5nm,0.6s,baz=180,slow=3.2,SNR=4.0
FINES LR LR 22 00 49.4
comp=Z,263nm,18.2s,baz=204,slow=36
comp=Z,21nm,0.8s
FIA1 FINESS Array S 20.75 15 P P 21 53 11.5 -1.1
NCK Nalchik 21.17 76 eP P 21 53 16.0 -1.3
NCK pmax pmax
comp=Z,7.0nm,1.3s
KEF Keuruu 21.20 13 eP P 21 53 17.5 +0.1
KARS Kars 21.24 84 P P 21 53 19.2 +1.0
KARS Kars 21.24 84 P P 21 53 19.3 +1.0
KARS pmax pmax
comp=Z,86nm,1.2s
VAF Ylistaro 21.71 10 eP P 21 53 23.9 +1.2
VAF Ylistaro 21.71 10 eP P 21 53 25.7 +2.9
VALR Valaam 21.80 21 ceP P 21 53 22.4 -1.4
VALR pmax pmax
comp=Z,22nm,0.8s
GNI Garni 22.59 84 P P 21 53 32.5 -0.2
GNI IAmb IAmb 21 54 14.8
comp=Z,49nm,1.2s
GNI Garni 22.59 84 P P 21 53 33.5 +0.7
GNI Garni 22.59 84 P P 21 53 32.7 0.0
comp=Z,7.7nm,0.6s,baz=263,slow=8.1,SNR=5.5
GNI LR LR 22 02 59.9
comp=Z,186nm,20.6s,baz=283,slow=38
comp=Z,7.7nm,0.6s
GNI Garni 22.59 84 deP P 21 53 33.4 +0.7
GNI pmax pmax
comp=Z,31nm,1.6s
GNI Garni 22.59 84 P P 21 53 33.2 +0.5
comp=Z,23nm,1.4s
JOF Joensuu 23.22 19 eP P 21 53 40.1 +1.3
MAK Makhachkala 24.07 76 eP P 21 53 42.5 -4.8
MAK eS S 21 57 58.6 -5.8
MAK pmax pmax
comp=Z,74nm,1.0s
MAK MLR MLR
comp=Z,326nm,15.0s
OUL Oulu 24.10 11 eP P 21 53 47.6 +0.3
BELG Belogornoye 24.46 53 LR LR 22 04 38.7
comp=Z,282nm,18.6s,baz=253,slow=40
BELG Belogornoye 24.46 53 c iP P 21 53 50.5 -0.3
BELG pmax pmax
comp=Z,20nm,0.9s
KIRV Kirov 27.31 40 LR LR 22 06 01.6
comp=Z,445nm,20.7s,baz=249,slow=38
KIRV Kirov 27.31 40 deP P 21 54 16.1 -0.4
APA Apatity 27.66 15 iP P 21 54 19.6 +0.1
APA pmax pmax
comp=Z,7.0nm,1.1s
APA MLR MLR
comp=Z,500nm,12.0s
LVZ Lovozero 28.19 16 P P 21 54 24.6 +0.3
LVZ Lovozero 28.19 16 P P 21 54 24.6 +0.3
LVZ pmax pmax
comp=Z,57nm,1.4s
LVZ Lovozero 28.19 16 P P 21 54 24.0 -0.3
comp=Z,36nm,2.0s
ARCES ARCESS Array B 28.28 8 P P 21 54 23.1 -2.0
comp=Z,2.9nm,0.9s,baz=193,slow=4.4,SNR=10
ARCES PcP PcP 21 57 37.4 -0.4
comp=Z,3.1nm,0.9s,baz=198,slow=2.4,SNR=5.9
ARCES LR LR 22 05 21.7
comp=Z,329nm,18.2s,baz=196,slow=36
comp=Z,2.9nm,0.9s
BORG Borgarnes 30.76 330 LR LR 22 08 53.9
comp=Z,155nm,18.7s,baz=126,slow=40
TORD Torodi Ar. Bea 30.82 206 P P 21 54 47.6 -0.5
comp=Z,4.3nm,0.6s,baz=29,slow=9.9,SNR=36
TORD LR LR 22 07 34.5
comp=Z,100nm,20.5s,baz=37,slow=37
comp=Z,4.3nm,0.6s
RAYN Ar Rayn 31.40 116 P P 21 54 54.0 +0.8
RAYN Ar Rayn 31.40 116 P P 21 54 55.2 +2.0
RAYN Ar Rayn 31.40 116 P P 21 54 54.0 +0.8
RAYN pmax pmax
comp=Z,7.0nm,1.0s
JMIC Jan Mayen 31.46 346 LR LR 22 07 57.7
comp=Z,97nm,18.0s,baz=118,slow=37
ARU Arti 31.49 47 P P 21 54 53.0 -0.7
ARU Arti 31.49 47 LR LR 22 08 37.6
comp=Z,518nm,18.4s,baz=256,slow=38
ARU Arti 31.49 47 d iP P 21 54 52.8 -0.8
ARU PPP PPP 21 56 01.7
ARU S S 22 00 01.8 +0.5
ARU SS SnSn 22 01 43.2 -2.6
ARU pmax pmax
comp=Z,46nm,0.9s
ARU MLR MLR
comp=Z,501nm,19.0s
ABKAR Akbulak array 32.04 61 P P 21 54 58.2 -0.3
SVE Sverdlovsk 32.68 47 eP P 21 55 04.2 +0.1
SVE pmax pmax
comp=Z,26nm,0.7s
SVE MLR MLR
comp=Z,529nm,16.0s
SCO Scoresbysund 34.17 339 P P 21 55 18.7 +1.8
SCO IAmb IAmb 21 55 23.1
comp=Z,20nm,1.2s
SCO Scoresbysund 34.17 339 P P 21 55 18.7 +1.8
SCO pmax pmax
comp=Z,19nm,1.2s
SPITS Spitsbergen Ar 36.43 1 P P 21 55 36.2 -0.1
comp=Z,3.3nm,0.8s,baz=148,slow=8.4,SNR=1.8
comp=Z,3.3nm,0.8s
KBS Kingsbay 37.19 359 P P 21 55 42.6 -0.1
KBS IAmb IAmb 21 56 10.5
comp=Z,30nm,1.5s
KBS Kingsbay 37.19 359 P P 21 55 42.6 -0.1
KBS pmax pmax
comp=Z,30nm,1.5s
SHME Shamm 37.34 102 P P 21 55 45.8 +1.2
HRA Herat 37.64 86 P P 21 55 47.9 +0.6
HRA IAmb IAmb 21 55 52.6
comp=Z,16nm,1.4s
FAQ Al Faqa, Dubai 37.70 104 P P 21 55 48.1 +0.4
MSFE Esma-Masafi 37.75 103 P P 21 55 48.7 +0.6
UOSS Minazif 38.03 103 P P 21 55 49.5 -0.9
UOSS IAmb IAmb 21 55 54.5
comp=Z,20nm,0.9s
UOSS Minazif 38.03 103 P P 21 55 50.9 +0.5
HATD Hatta, Dubai 38.05 103 P P 21 55 50.8 +0.2
ASHO Ashiyiah 38.08 104 P P 21 55 51.1 +0.2
BRVK Borovoye 38.20 53 P P 21 55 52.3 +0.8
BRVK Borovoye 38.20 53 c iP P 21 55 52.1 +0.5
BRVK pmax pmax
comp=Z,35nm,0.8s
BVAR Borovoye Array 38.27 54 P P 21 55 52.2 +0.1
comp=Z,15nm,0.7s,baz=270,slow=6.1,SNR=35
BVAR PP PP 21 57 19.4 -0.1
comp=Z,6.0nm,0.9s,baz=290,slow=9.0,SNR=2.8
BVAR LR LR 22 13 13.8
comp=Z,217nm,18.0s,baz=277,slow=39
comp=Z,15nm,0.7s
BBTS Babate 38.33 234 LR LR 22 12 05.2
comp=Z,200nm,18.1s,baz=317,slow=37
SOHO SOHO 38.76 104 P P 21 55 57.4 +0.9
FURI Furi 39.00 141 LR LR 22 13 38.0
comp=Z,119nm,20.5s,baz=326,slow=39
DBIC Dimbokro 39.17 212 P P 21 55 59.7 -0.3
DBIC Dimbokro 39.17 212 P P 21 55 58.7 -1.3
comp=Z,3.9nm,0.6s,baz=10,slow=11,SNR=6.0
DBIC LR LR 22 13 29.9
comp=Z,180nm,18.4s,baz=14,slow=38
comp=Z,3.9nm,0.6s
DBIC Dimbokro 39.17 212 P P 21 55 59.7 -0.3
DBIC pmax pmax
comp=Z,7.0nm,0.8s
SUMG Summit 39.77 338 P P 21 56 04.9 -0.1
SUMG Summit 39.77 338 P P 21 56 04.9 -0.1
SUMG pmax pmax
comp=Z,9.0nm,0.9s
OTUK Ortayu 40.29 61 i P P 21 56 09.9 +0.8
OTUK pmax pmax
comp=Z,13nm,0.8s
KK31 Karatay Array 40.43 69 P P 21 56 11.7 +1.4
KK31 IAmb IAmb 21 56 15.4
comp=Z,12nm,0.9s
KK31 Karatay Array 40.43 69 P P 21 56 11.7 +1.4
KK31 pmax pmax
comp=Z,12nm,1.0s
KKAR Karatay Array 40.43 69 P P 21 56 11.1 +0.7
KKAR IAmb IAmb 21 56 15.4
comp=Z,12nm,0.9s
KKAR Karatay Array 40.43 69 P P 21 56 11.1 +0.7
KKAR pmax pmax
comp=Z,12nm,1.0s
SIMJ Simiganj 40.89 76 P P 21 56 13.9 -0.5
CHGR Chuyangaron 41.00 76 P P 21 56 14.9 -0.3
CHGR Chuyangaron 41.00 76 P P 21 56 14.9 -0.3
CHGR pmax pmax
comp=Z,26nm,0.8s
BTK Batken 41.68 73 P P 21 56 20.4 -0.3
BTK Batken 41.68 73 P P 21 56 20.4 -0.3
BTK pmax pmax
comp=Z,5.0nm,0.9s
GAR Garm 41.71 75 P P 21 56 21.3 +0.3
GAR IAmb IAmb 21 56 29.3
comp=Z,20nm,1.0s
KBL Kabul 42.62 81 P P 21 56 28.5 -0.1
KBL IAmb IAmb 21 56 34.1
comp=Z,14nm,1.1s
KBL Kabul 42.62 81 P P 21 56 28.5 -0.1
KBL pmax pmax
comp=Z,14nm,1.1s
ARSB Arslanbob 42.76 70 P P 21 56 29.9 +0.3
ARSB Arslanbob 42.76 70 P P 21 56 29.9 +0.3
ARSB pmax pmax
comp=Z,2.0nm,0.8s
SFJD Kangerlussuaq 42.83 328 LR LR 22 15 08.1
comp=Z,200nm,18.2s,baz=89,slow=37
AAK Ala-Archa 43.35 68 P P 21 56 34.5 +0.1
AAK IAmb IAmb 21 56 40.9
comp=Z,15nm,1.1s
AAK Ala-Archa 43.35 68 LR LR 22 17 49.2
comp=Z,139nm,19.8s,baz=306,slow=40
AAK Ala-Archa 43.35 68 eP P 21 56 36.2 +1.8
AAK pmax pmax
comp=Z,27nm,1.7s
FRU1 Bishkek 43.39 68 P P 21 56 33.5 -1.1
FRU1 Bishkek 43.39 68 P P 21 56 33.5 -1.1
FRU1 pmax pmax
comp=Z,39nm,0.7s
KURBB Kurchatov Arra 43.66 56 P P 21 56 36.0 -0.6
comp=Z,1.3nm,0.5s,baz=288,slow=9.4,SNR=16
KURBB PP PP 21 58 16.0 -1.9
comp=Z,0.9nm,0.6s,baz=285,slow=11,SNR=2.3
comp=Z,1.3nm,0.5s
KURK Kurchatov 43.70 56 P P 21 56 36.0 -0.8
KURK Kurchatov 43.70 56 deP P 21 56 39.0 +2.2
KURK pmax pmax
comp=Z,7.0nm,1.1s
MBAR Mbarara 44.66 157 LR LR 22 18 41.3
comp=Z,106nm,19.0s,baz=334,slow=40
NRN Naryn 44.83 69 P P 21 56 46.5 0.0
NRN Naryn 44.83 69 P P 21 56 46.5 0.0
NRN pmax pmax
comp=Z,5.0nm,0.8s
KSH Kashi 45.55 72 P P 21 56 53.4 +1.4
KSH sP sP 21 57 01.8 +4.7
KSH pmax pmax
comp=Z,15nm,1.0s
PRZ Przheval'sk 46.10 67 P P 21 56 56.4 0.0
PRZ Przheval'sk 46.10 67 P P 21 56 56.4 0.0
PRZ pmax pmax
comp=Z,33nm,1.3s
NIL Nilore 46.13 80 P P 21 56 56.7 +0.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NIL** | **Nilore** | **46.13** | **80** | P | **P** | **21 56 56.7 +0.2** |
| NIL | | | | pmax | pmax | |
| | comp=Z,59nm,1.1s | | | | | |
| **PDGK** | **Podgornoye** | **46.53** | **65** | *i* P | **P** | **21 57 00.2 +0.5** |
| PDGK | | | | pmax | pmax | |
| | comp=Z,24nm,0.9s | | | | | |
| **ZAA0** | **Zalesovo Array** | **46.57** | **50** | P | **P** | **21 56 59.4 -0.2** |
| ZAA0 | | | | IAmb | IAmb | 21 57 10.2 |
| | comp=Z,4.5nm,0.7s | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.57** | **50** | P | **P** | **21 56 59.5 -0.1** |
| | comp=Z,3.1nm,0.7s,baz=289,slow=8.1,SNR=15 | | | | | |
| ZALV | | | | PP | **PP** | **21 58 48.0 -0.8** |
| | comp=Z,3.7nm,0.9s,baz=284,slow=10,SNR=4.1 | | | | | |
| ZALV | | | | LR | LR | 22 18 42.1 |
| | comp=Z,270nm,18.3s,baz=281,slow=39 | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.57** | **50** | *i* P | **P** | **21 56 59.7 +0.1** |
| ZALV | | | | pmax | pmax | |
| | comp=Z,2.0nm,0.5s | | | | | |
| **MAKZ** | **Makanchi** | **46.96** | **60** | P | **P** | **21 57 03.1 +0.3** |
| MAKZ | | | | IAmb | IAmb | 21 57 07.3 |
| | comp=Z,10nm,1.4s | | | | | |
| **MAKZ** | **Makanchi** | **46.96** | **60** | P | **P** | **21 57 03.1 +0.3** |
| MAKZ | | | | pmax | pmax | |
| | comp=Z,10.0nm,1.4s | | | | | |
| **MK31** | **Makanchi Array** | **47.17** | **60** | P | **P** | **21 57 04.7 +0.2** |
| MK31 | | | | IAmb | IAmb | 21 57 21.9 |
| | comp=Z,4.1nm,0.8s | | | | | |
| **MK31** | **Makanchi Array** | **47.17** | **60** | P | **P** | **21 57 04.7 +0.2** |
| MK31 | | | | pmax | pmax | |
| | comp=Z,4.0nm,0.8s | | | | | |
| **MKAR** | **Makanchi Array** | **47.17** | **60** | P | **P** | **21 57 04.7 +0.2** |
| | comp=Z,2.3nm,0.5s,baz=272,slow=8.0,SNR=18 | | | | | |
| MKAR | | | | LR | LR | 22 19 19.5 |
| | comp=Z,183nm,18.7s,baz=281,slow=39 | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | |
| **DGZ** | **Jazzator, Alta** | **49.40** | **55**⇑ | *i* P | **P** | **21 57 22.3 +0.5** |
| DGZ | | | | pmax | pmax | |
| | comp=Z,3.0nm,0.6s | | | | | |
| **FRB** | **Frobisher Bay** | **50.66** | **325** | LR | LR | 22 20 04.0 |
| | comp=Z,172nm,18.1s,baz=136,slow=37 | | | | | |
| **EUNU** | **Eureka** | **50.99** | **347** | P | **P** | **21 57 33.8 +0.5** |
| **WMQ** | **Urumqi** | **51.82** | **62** | *e*P | **P** | **21 57 44.3 +4.2** |
| WMQ | | | | pmax | pmax | |
| | comp=Z,14nm,0.7s | | | | | |
| WMQ | | | | LR | LR | |
| | comp=Z,390nm,16.5s | | | | | |
| WMQ | | | | LR | LR | |
| | comp=Z,320nm,12.3s | | | | | |
| WMQ | | | | LR | LR | |
| | comp=Z,120nm,17.1s | | | | | |
| **SCHQ** | **Schefferville** | **52.77** | **314** | P | **P** | **21 57 46.6 -0.2** |
| **SCHQ** | **Schefferville** | **52.77** | **314** | P | **P** | **21 57 46.5 -0.4** |
| | comp=Z,3.6nm,0.8s,baz=56,slow=6.0,SNR=5.7 | | | | | |
| SCHQ | | | | LR | LR | 22 18 19.5 |
| | comp=Z,163nm,21.8s,baz=80,slow=34 | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | |
| **BATG** | **Bathurst New B** | **55.42** | **305** | P | **P** | **21 58 06.8 +0.5** |
| BATG | | | | IAmb | IAmb | 21 58 36.8 |
| | comp=Z,5.1nm,0.9s | | | | | |
| **D62A** | **Allapoint, All** | **57.33** | **306** | P | **P** | **21 58 20.0 +0.1** |
| D62A | | | | IAmb | IAmb | 21 58 42.4 |
| | comp=Z,15nm,1.4s | | | | | |
| **TIXI** | **Tiksi** | **57.70** | **20** | LR | LR | 22 24 13.4 |
| | comp=Z,314nm,21.1s,baz=326,slow=37 | | | | | |
| **TSUM** | **Tsumeb** | **60.82** | **177** | LR | LR | 22 27 22.6 |
| | comp=Z,114nm,18.1s,baz=1.0,slow=38 | | | | | |
| **LSA** | **Lhasa** | **61.22** | **75** | P | **P** | **21 58 47.1 -0.5** |
| LSA | | | | IAmb | IAmb | 21 58 53.6 |
| | comp=Z,6.0nm,0.7s | | | | | |
| **LSA** | **Lhasa** | **61.22** | **75** | P | **P** | **21 58 47.1 -0.5** |
| LSA | | | | pmax | pmax | |
| | comp=Z,6.0nm,0.7s | | | | | |
| **SONM** | **Songino Array** | **61.47** | **50** | P | **P** | **21 58 49.1 +0.4** |
| | comp=Z,3.7nm,0.9s,baz=294,slow=8.1,SNR=10 | | | | | |
| SONM | | | | LR | LR | 22 27 28.6 |
| | comp=Z,214nm,19.3s,baz=295,slow=38 | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | |
| **ULN** | **Ulaanbaatar** | **61.83** | **50**⇑ | *e*P | **P** | **21 58 52.5 +1.4** |
| ULN | | | | pmax | pmax | |
| | comp=Z,1.0nm,1.0s | | | | | |
| **GTA** | **Gaotai** | **61.90** | **61** | *e*P | **P** | **21 58 54.6 +2.9** |
| GTA | | | | sP | sP | 21 59 01.3 +4.4 |
| GTA | | | | pmax | pmax | |
| | comp=Z,2.0nm,0.9s | | | | | |
| GTA | | | | LR | LR | |
| | comp=Z,140nm,11.5s | | | | | |
| GTA | | | | LR | LR | |
| | comp=Z,190nm,13.1s | | | | | |
| GTA | | | | LR | LR | |
| | comp=Z,140nm,16.3s | | | | | |
| **YAK** | **Yakutsk** | **63.99** | **28** | P | **P** | **21 59 05.2 +0.1** |
| **YAK** | **Yakutsk** | **63.99** | **28** | *e*P | **P** | **21 59 07.4 +2.3** |
| YAK | | | | *e* | | 21 59 42.9 |
| YAK | | | | *e* | | 22 01 27.3 |
| YAK | | | | *e*PPP | PPP | 22 02 58.9 |
| YAK | | | | *e*S | **S** | **22 07 45.1 +4.4** |
| YAK | | | | *e* | | 22 08 59.6 |
| YAK | | | | *e*SS | **SS** | **22 11 55.3 +6.9** |
| YAK | | | | pmax | pmax | |
| | comp=Z,9.0nm,1.4s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=N,4.0nm,2.0s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=E,3.0nm,2.0s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=Z,106nm,4.5s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=N,51nm,3.5s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=E,77nm,6.6s | | | | | |
| YAK | | | | smax | smax | |
| | comp=E,72nm,5.3s | | | | | |
| YAK | | | | smax | smax | |
| | comp=N,38nm,3.0s | | | | | |
| YAK | | | | MLR | MLR | |
| | comp=Z,138nm,18.0s | | | | | |
| YAK | | | | MLR | MLR | |
| | comp=N,108nm,14.0s | | | | | |
| YAK | | | | MLR | MLR | |
| | comp=E,145nm,18.0s | | | | | |
| **SADO** | **Sadowa** | **64.54** | **308** | LR | LR | 22 26 22.0 |
| | comp=E,133nm,18.2s,baz=96,slow=35 | | | | | |
| **RCBR** | **Riachuelo** | **66.22** | **237** | LR | LR | 22 25 02.4 |
| | comp=E,31nm,21.1s,baz=154,slow=33 | | | | | |
| **PALK** | **Pallekele** | **67.26** | **101** | LR | LR | 22 31 42.1 |
| | comp=E,72nm,18.4s,baz=44,slow=38 | | | | | |
| **LBTB** | **Lobatse** | **67.29** | **169** | LR | LR | 22 33 01.6 |
| | comp=E,143nm,18.3s,baz=348,slow=40 | | | | | |
| **C23K** | **Itkillik River** | **68.10** | **355** | P | **P** | **21 59 31.3 0.0** |
| **E29M** | **Blow River** | **68.18** | **349** | P | **P** | **21 59 32.0 +0.1** |
| **YKA** | **Yellowknife Ar** | **68.37** | **337** | P | **P** | **21 59 33.7 +0.5** |
| | comp=E,3.4nm,1.0s,baz=45,slow=6.4,SNR=8.3 | | | | | |
| YKA | | | | LR | LR | 22 30 19.0 |
| | comp=E,96nm,18.4s,baz=34,slow=37 | | | | | |
| | comp=E,3.4nm,1.0s | | | | | |
| **YKA** | **Yellowknife Ar** | **68.37** | **337** | *i* P | **P** | **21 59 36.7 +3.6** |
| YKA | | | | pmax | pmax | |
| | comp=Z,3.0nm,0.9s | | | | | |
| **HHC** | **Hu-ho-hao-te** | **68.48** | **54** | *e*P | **P** | **21 59 29.9 -4.5** |
| **MDP** | **Montagnes des** | **69.89** | **258** | LR | LR | 22 27 57.2 |
| | comp=Z,90nm,19.3s,baz=58,slow=34 | | | | | |
| **ULM** | **Lac du Bonnet** | **70.10** | **320** | P | **P** | **21 59 43.0 -1.2** |
| | comp=Z,2.2nm,0.8s,baz=49,slow=9.3,SNR=4.1 | | | | | |
| ULM | | | | LR | LR | 22 29 04.5 |
| | comp=Z,120nm,19.5s,baz=48,slow=35 | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | |
| **ULM** | **Lac du Bonnet** | **70.10** | **320**‖ | *e*P | **P** | **21 59 45.0 +0.9** |
| **SEY** | **Seymchan** | **70.17** | **19** | LR | LR | 22 33 35.4 |
| | comp=Z,382nm,21.2s,baz=330,slow=39 | | | | | |
| **SEY** | **Seymchan** | **70.17** | **19**⇑ | *e*P | **P** | **21 59 47.6 +3.3** |
| SEY | | | | pmax | pmax | |
| | comp=Z,7.0nm,1.4s | | | | | |
| **PZH** | **PanZhiHua** | **70.66** | **71** | P | **P** | **21 59 48.3 +0.2** |
| PZH | | | | pmax | pmax | |
| | comp=Z,20nm,1.1s | | | | | |
| PZH | | | | pmax | pmax | |
| | comp=Z,190nm,5.3s | | | | | |
| **BOSA** | **Boshof** | **70.79** | **170** | P | **P** | **21 59 47.2 -1.3** |
| | comp=Z,2.5nm,0.8s,baz=11,slow=3.2,SNR=4.0 | | | | | |
| BOSA | | | | LR | LR | 22 33 33.1 |
| | comp=Z,90nm,18.1s,baz=357,slow=38 | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | |
| **XAN** | **Xi'an** | **70.96** | **61** | ⇑P | **P** | **21 59 52.8 +3.1** |
| XAN | | | | pP | sP | 21 59 55.8 +0.9 |
| XAN | | | | pmax | pmax | |
| | comp=Z,10.0nm,0.8s | | | | | |
| **HEH** | **HeiHe** | **70.99** | **39** | *e*P | **P** | **21 59 51.4 +1.9** |
| HEH | | | | pmax | pmax | |
| | comp=Z,5.0nm,0.8s | | | | | |
| **J30M** | **Hart River** | **71.50** | **347** | P | **P** | **21 59 52.6 +0.1** |
| J30M | | | | IAmb | IAmb | 21 59 58.2 |
| | comp=Z,5.8nm,0.9s | | | | | |
| **G21K** | **Allakaket** | **71.57** | **355** | P | **P** | **21 59 53.6 +0.8** |
| **DAWY** | **Dawson** | **72.45** | **348** | P | **P** | **21 59 59.2 +1.1** |
| DAWY | | | | IAmb | IAmb | 22 00 04.0 |
| | comp=Z,10nm,1.0s | | | | | |
| **MA2** | **Magadan** | **72.59** | **22** | LR | LR | 22 33 46.1 |
| | comp=Z,120nm,19.2s,baz=298,slow=37 | | | | | |
| **ILAR** | **Eielson Array** | **72.73** | **352** | P | **P** | **22 00 00.3 +0.6** |
| | comp=Z,1.6nm,0.8s,baz=3.2,slow=5.0,SNR=14 | | | | | |
| ILAR | | | | LR | LR | 22 32 35.5 |
| | comp=Z,54nm,21.6s,baz=26,slow=36 | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | |
| **TKL** | **Tuckaleechee C** | **72.85** | **303** | LR | LR | 22 31 18.3 |
| | comp=Z,111nm,18.9s,baz=46,slow=35 | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.62** | **81** | P | **P** | **22 00 06.2 +0.4** |
| **CMAR** | **Chiang Mai Arr** | **73.62** | **80** | P | **P** | **22 00 05.9 +0.2** |
| | comp=Z,3.1nm,0.6s,baz=307,slow=7.2,SNR=11 | | | | | |
| CMAR | | | | LR | LR | 22 40 29.6 |
| | comp=Z,24nm,19.6s,baz=305,slow=42 | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.62** | **80** | *i* P | **P** | **22 00 07.0 +1.2** |
| CMAR | | | | pmax | pmax | |
| | comp=Z,3.0nm,0.6s | | | | | |
| **KLR** | **Kul'dur** | **73.71** | **38** | LR | LR | 22 35 57.8 |
| | comp=Z,165nm,20.2s,baz=359,slow=39 | | | | | |
| **KLR** | **Kul'dur** | **73.71** | **38**‖ | *e*P | **P** | **22 00 05.2 -0.6** |
| KLR | | | | pmax | pmax | |
| | comp=Z,5.0nm,2.0s | | | | | |
| **L27K** | **Beaver Creek,** | **73.76** | **349** | P | **P** | **22 00 06.6 +0.7** |
| L27K | | | | IAmb | IAmb | 22 00 14.0 |
| | comp=Z,6.2nm,1.1s | | | | | |
| **SUR** | **Sutherland** | **74.09** | **175** | LR | LR | 22 34 02.5 |
| | comp=Z,199nm,18.6s,baz=340,slow=37 | | | | | |
| **CN2** | **Changchun** | **74.44** | **45** | *e*P | **P** | **22 00 07.8 -2.4** |
| CN2 | | | | *e*S | **SKiKP** | **22 09 36.6 +0.2** |
| CN2 | | | | pmax | pmax | |
| | comp=Z,10.0nm,0.7s | | | | | |
| CN2 | | | | pmax | pmax | |
| | comp=Z,100nm,3.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,200nm,12.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,200nm,12.0s | | | | | |
| CN2 | | | | LR | LR | |
| | comp=Z,200nm,10.0s | | | | | |
| **ECSD** | **EROS Data Cent** | **74.92** | **316** | P | **P** | **22 00 12.8 -0.2** |
| **CCM** | **Cathedral Cave** | **75.82** | **309** | P | **P** | **22 00 16.5 -1.7** |
| CCM | | | | IAmb | IAmb | 22 00 25.5 |
| | comp=Z,4.0nm,0.7s | | | | | |
| **CCM** | **Cathedral Cave** | **75.82** | **309** | P | **P** | **22 00 16.5 -1.7** |
| CCM | | | | pmax | pmax | |
| | comp=Z,4.0nm,0.7s | | | | | |
| **DLBC** | **Dease Lake** | **75.86** | **342** | LR | LR | 22 34 51.7 |
| | comp=Z,96nm,19.7s,baz=9.5,slow=37 | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.48** | **41** | P | **P** | **22 00 26.2 -1.2** |
| | comp=Z,1.5nm,0.7s,baz=358,slow=2.5,SNR=5.0 | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | |
| **EGMT** | **Eagleton** | **77.98** | **326** | P | **P** | **22 00 29.5 -0.8** |
| EGMT | | | | IAmb | IAmb | 22 00 35.6 |
| | comp=Z,12nm,1.1s | | | | | |
| **NJ2** | **Nanjing** | **78.61** | **57** | *e*P | **P** | **22 00 33.0 -0.9** |
| NJ2 | | | | pmax | pmax | |
| | comp=Z,6.0nm,0.5s | | | | | |
| **PETK** | **Petropavlovsk-** | **80.12** | **22** | LR | LR | 22 39 47.9 |
| | comp=Z,106nm,19.8s,baz=326,slow=38 | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **80.21** | **33** | *e*P | **P** | **22 00 45.5 +3.1** |
| YSS | | | | pmax | pmax | |
| | comp=Z,20nm,0.8s | | | | | |
| YSS | | | | MLR | MLR | |
| | comp=Z,200nm,15.0s | | | | | |
| **KSRS** | **Korea Array** | **80.24** | **48** | P | **P** | **22 00 42.5 -0.2** |
| | comp=Z,0.8nm,0.7s,baz=316,slow=4.9,SNR=2.5 | | | | | |
| KSRS | | | | LR | LR | 22 41 35.7 |
| | comp=Z,93nm,18.9s,baz=320,slow=40 | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | |
| **NEW** | **Newport** | **80.73** | **330** | LR | LR | 22 36 00.1 |
| | comp=Z,130nm,21.6s,baz=22,slow=35 | | | | | |
| **BBB** | **Bella Bella** | **80.97** | **338** | LR | LR | 22 37 42.2 |
| | comp=Z,61nm,21.7s,baz=56,slow=36 | | | | | |
| **BDFB** | **Brasilia** | **81.36** | **240** | LR | LR | 22 36 06.2 |
| | comp=Z,44nm,19.9s,baz=339,slow=35 | | | | | |
| **PDAR** | **Pinedale Array** | **82.00** | **322** | P | **P** | **22 00 52.5 +0.1** |
| | comp=Z,0.6nm,0.4s,baz=39,slow=7.2,SNR=2.5 | | | | | |
| PDAR | | | | LR | LR | 22 36 40.1 |
| | comp=Z,109nm,20.3s,baz=24,slow=35 | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | |
| **ASAJ** | **Asahikawa** | **82.42** | **35** | LR | LR | 22 41 06.2 |
| | comp=Z,136nm,18.0s,baz=346,slow=38 | | | | | |
| **HWUT** | **Hardware Ranch** | **83.83** | **323** | P | **P** | **22 01 01.8 0.0** |
| HWUT | | | | IAmb | IAmb | 22 01 07.1 |
| | comp=Z,8.3nm,1.1s | | | | | |
| **SHEM** | **Shemya Is, Ala** | **84.08** | **12** | LR | LR | 22 41 27.8 |
| | comp=Z,38nm,20.4s,baz=40,slow=38 | | | | | |
| **MFID** | **Camas Ranch** | **84.22** | **326** | P | **P** | **22 01 03.8 +0.2** |
| MFID | | | | IAmb | IAmb | 22 01 09.5 |
| | comp=Z,9.8nm,1.4s | | | | | |
| **JNU** | **Nakatsue** | **85.04** | **49** | LR | LR | 22 42 46.9 |
| | comp=Z,106nm,18.4s,baz=355,slow=38 | | | | | |
| **ELK** | **Elko** | **86.16** | **324** | LR | LR | 22 39 14.7 |
| | comp=Z,101nm,20.4s,baz=42,slow=35 | | | | | |
| **ROSC** | **El Rosal** | **86.17** | **273** | LR | LR | 22 34 51.3 |
| | comp=Z,157nm,21.4s,baz=62,slow=32 | | | | | |
| **MJAR** | **Matsushiro Arr** | **86.37** | **42** | P | **P** | **22 01 15.0 +0.6** |
| | comp=Z,1.4nm,0.7s,baz=324,slow=4.8,SNR=5.6 | | | | | |
| MJAR | | | | LR | LR | 22 43 28.7 |
| | comp=Z,108nm,19.2s,baz=346,slow=38 | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | |
| **ANMO** | **Albuquerque** | **86.53** | **315** | LR | LR | 22 38 45.2 |
| | comp=Z,110nm,21.2s,baz=135,slow=35 | | | | | |
| **ANMO** | **Albuquerque** | **86.53** | **315**‖ | *e*P | **P** | **22 01 15.0 -0.5** |
| **YBH** | **Yreka Blue Hor** | **88.36** | **330** | LR | LR | 22 41 44.3 |
| | comp=Z,102nm,19.1s,baz=16,slow=36 | | | | | |
| **TXAR** | **Lajitas Array** | **89.26** | **310** | P | **P** | **22 01 29.0 +0.5** |
| | comp=Z,3.2nm,1.1s,baz=69,slow=4.2,SNR=14 | | | | | |
| TXAR | | | | LR | LR | 22 41 25.9 |
| | comp=Z,73nm,19.5s,baz=4.0,slow=36 | | | | | |
| | comp=Z,3.2nm,1.1s | | | | | |
| **TXAR** | **Lajitas Array** | **89.26** | **310** | P | **P** | **22 01 29.0 +0.5** |
| **NVAR** | **Mina Array Bea** | **89.40** | **325** | P | **P** | **22 01 29.1 0.0** |
| | comp=Z,2.4nm,1.2s,baz=59,slow=5.7,SNR=3.8 | | | | | |
| NVAR | | | | LR | LR | 22 42 16.6 |
| | comp=Z,117nm,19.3s,baz=38,slow=36 | | | | | |
| | comp=Z,2.4nm,1.2s | | | | | |
| **JHJ** | **Hachijo jima 2** | **89.86** | **43** | LR | LR | 22 46 25.4 |
| | comp=Z,92nm,19.0s,baz=88,slow=39 | | | | | |
| **JTS** | **Las Juntas de** | **90.39** | **284** | LR | LR | 22 40 30.8 |
| | comp=Z,32nm,18.4s,baz=64,slow=34 | | | | | |
| **PFO** | **Pinyon Flats O** | **92.57** | **321** | LR | LR | 22 45 00.7 |
| | comp=Z,52nm,18.3s,baz=32,slow=37 | | | | | |
| **CMIG** | **Matias Romero** | **92.68** | **296** | LR | LR | 22 40 30.3 |
| | comp=Z,54nm,21.3s,baz=8.5,slow=34 | | | | | |
| **CPUP** | **Villa Florida** | **95.05** | **239** | LR | LR | 22 42 59.0 |
| | comp=Z,68nm,20.1s,baz=50,slow=34 | | | | | |
| **LPAZ** | **La Paz** | **95.59** | **253** | LR | LR | 22 41 51.5 |
| | comp=Z,47nm,19.3s,baz=49,slow=34 | | | | | |
| **LPIG** | **La Paz** | **97.05** | **311** | LR | LR | 22 46 05.1 |
| | comp=Z,66nm,18.1s,baz=352,slow=36 | | | | | |
| **NNA** | **Nana** | **99.12** | **262** | LR | LR | 22 45 21.2 |
| | comp=Z,45nm,19.2s,baz=16,slow=34 | | | | | |
| **WRA** | **Warramunga Arr** | **124.86** | **86** | PKP | **PKPdf** | **22 07 31.9 -0.5** |
| | comp=Z,0.5nm,1.0s,baz=323,slow=2.1,SNR=1.5 | | | | | |
| **ASAR** | **Alice Springs** | **126.74** | **90** | PKP | **PKiKP** | **22 07 37.4 +1.1** |
| | comp=Z,0.5nm,0.6s,baz=308,slow=1.7,SNR=4.8 | | | | | |

*NEIC* ***14*** *21:52:10.8±1.5,35.90N±0.03×120.42W±0.01,h16km±5km, Error ellipse: s-maj=4.4km s-min=1.1km az=183.0*
*ANF* ***14*** *21:52:10.2±0.5,35.94N×120.40W,h3km±2km, ML3.3/23, Error ellipse: s-maj=4.5km s-min=2.2km az=111.0*
*NCEDC* ***14*** *21:52:11.1±1.9,35.90N±0.03×120.45W±0.04,h7km±6km, Mwr3.5/5,ML3.0/64(NEIC), Error ellipse: s-maj=6.4km s-min=2.2km az=224.0*
*NEIC* ***14*** *21:52:11.1,35.90N×120.45W,h6km*
*NEIC* ***14*** *21:52:11.1,35.90N×120.45W,h8km, Moment Tensor Solution. Moment tensor: Scale 10^14^Nm; Mrr=0.00; Mθθ=1.98; Mφφ 1.98; Mrθ=0.06; Mφr=0.64; Mθr=0.48; Fault plane solution: M0=2.14000×10^14^ NP1:φ=234.70000°, δ80.81000°, λ,8.48000°. NP2:φ=143.33000°, δ81.63000°, λ170.71000°. Principal axes: T 2.1928, Plg12.0000°, Azm99.0000°; N -0.1105, Plg78.0000°, Azm282.0000°; P*

*-2.0823, Plg1.0000°, Azm189.0000°;*
**ISC 14 21:52:11.5±0.8,35°90N±0'02×120°42W±0'02,h14km±4km, n127,σ0s99/147,Central California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PHFM** | **Heflinger Ranc** | **0.03** | **144** | | | | **Pg** | **21 52 12.9** | **-1.2** |
| **PHAM** | **Harlan Ranch** | **0.07** | **165** | | | | **Pg** | **21 52 13.4** | **-1.0** |
| **CTM** | **Castle Mountai** | **0.07** | **66** | | | | **Pg** | **21 52 14.3** | **-0.3** |
| **PSTM** | **Stockdale Moun** | **0.08** | **290** | | | | **Pg** | **21 52 13.1** | **-1.4** |
| **GHC** | **Gold Hill** | **0.09** | **142** | | | | **Pg** | **21 52 13.8** | **-0.8** |
| **PVCM** | **Vineyard Canyo** | **0.10** | **282** | | | | **Pg** | **21 52 13.3** | **-1.4** |
| **PWKM** | **Work Ranch** | **0.11** | **220** | | | | **Pg** | **21 52 14.0** | **-0.9** |
| **PKLM** | **Kerr Lake** | **0.14** | **153** | | | | **Pg** | **21 52 14.9** | **-0.3** |
| **PSNM** | **Stone Corral** | **0.15** | **138** | | | | **Pg** | **21 52 15.0** | **-0.4** |
| **PPO** | **Portuguese Can** | **0.16** | **258** | | | | **Pg** | **21 52 14.8** | **-0.7** |
| **PHPM** | **Hope Ranch** | **0.17** | **297** | | | | **Pg** | **21 52 14.7** | **-1.0** |
| **PMCM** | **McMillan Canyo** | **0.18** | **167** | | | | **Pg** | **21 52 15.6** | **-0.3** |
| **PMRM** | **Maxey Ranch** | **0.19** | **128** | | | | **Pg** | **21 52 15.8** | **-0.1** |
| **TCHL** | **Shandon** | **0.21** | **176** | | | | **Pg** | **21 52 16.3** | **0.0** |
| TCHL | | | | | | | **Sg** | **21 52 20.5** | **+1.0** |
| **PSMM** | **Smith Mountain** | **0.22** | **320** | | | | **Pg** | **21 52 16.3** | **-0.2** |
| PSMM | | | | | | | **Sg** | **21 52 21.2** | **+1.4** |
| **THIS** | **South End of C** | **0.24** | **139** | | | | **Pg** | **21 52 16.7** | **0.0** |
| **TRAM** | **Private Proper** | **0.26** | **152** | | | | **Pb** | **21 52 17.0** | **-0.9** |
| TRAM | | | | | | | **Sb** | **21 52 21.4** | **-0.7** |
| **TCAS** | **Cass Winery, P** | **0.31** | **201** | | | | **Pg** | **21 52 17.5** | **-0.5** |
| TCAS | | | | | | | **Sg** | **21 52 22.3** | **-0.1** |
| **PPTM** | **Peach Tree Val** | **0.32** | **310** | | | | **Pg** | **21 52 17.7** | **-0.5** |
| **PJUM** | **Juniper Ridge** | **0.35** | **337** | | | | **Pb** | **21 52 19.5** | **-0.1** |
| **TSCN** | **Private Proper** | **0.36** | **171** | | | | **Pb** | **21 52 18.9** | **-0.8** |
| **PSAM** | **San Ardo** | **0.40** | **288** | | | | **Pg** | **21 52 18.9** | **-0.7** |
| **PANM** | **San Antonio Re** | **0.41** | **253** | | | | **Pg** | **21 52 19.1** | **-0.7** |
| **TRAY** | **Twisselman Ran** | **0.42** | **146** | | | | **Pb** | **21 52 19.9** | **-0.9** |
| **PBPM** | **Bitterwater Pu** | **0.43** | **139** | | | | **Pb** | **21 52 20.3** | **-0.5** |
| **PDRM** | **Domengine Ranc** | **0.43** | **5** | | | | **Pb** | **21 52 21.5** | **+0.5** |
| **PMPB** | **Monarch Peak** | **0.44** | **315** | | | | **Pg** | **21 52 19.9** | **-0.4** |
| PMPB | | | | IAML | | | | 21 52 31.5 | |
| | comp=N,2μm,0.8s | | | | | | | | |
| PMPB | | | | IAML | | | | 21 52 34.3 | |
| | comp=E,2μm,0.8s | | | | | | | | |
| **RAMR** | **Ramage Ranch** | **0.45** | **234** | | | | **Pg** | **21 52 19.9** | **-0.5** |
| **TSCS** | **Shell Creek So** | **0.46** | **173** | | | | **Pg** | **21 52 20.2** | **-0.5** |
| TSCS | | | | | | | **Sg** | **21 52 26.7** | **-0.3** |
| **PHSB** | **Hesperia Broad** | **0.52** | **262** | | | | **Pg** | **21 52 20.9** | **-0.9** |
| **PWMM** | **Westland Maint** | **0.56** | **18** | | | | **Pb** | **21 52 24.0** | **+1.0** |
| **PTAM** | **Tassajara Cree** | **0.56** | **205** | | | | **Pg** | **21 52 21.9** | **-0.6** |
| **EFD** | **Emergency Oper** | **0.63** | **203** | | | | **Pg** | **21 52 23.1** | **-0.7** |
| **PCCM** | **Crazy Canyon** | **0.63** | **287** | | | | **Pg** | **21 52 23.1** | **-0.8** |
| **HULI** | **Fort Hunter Li** | **0.67** | **280** | | | | **Pg** | **21 52 23.8** | **-0.8** |
| **SMMC** | **Simmler** | **0.68** | **149** | | | | **Pb** | **21 52 24.7** | **-0.5** |
| **SMMC** | **Simmler** | **0.68** | **149** | P | | | **Pb** | **21 52 24.5** | **-0.6** |
| | baz=328,SNR=90 | | | | | | | | |
| SMMC | | | | S | | | **Sb** | **21 52 33.9** | **-0.5** |
| | baz=328 | | | | | | | | |
| **LSDC** | **Los Osos Digit** | **0.69** | **210** | | | | **Pb** | **21 52 24.7** | **-0.6** |
| **LRV** | **Little Rabbit** | **0.71** | **317** | | | | **Pb** | **21 52 25.1** | **-0.6** |
| **CARC** | **Carrizo Plain** | **0.76** | **142** | | | | **Pb** | **21 52 26.1** | **-0.3** |
| **PAPM** | **Alder Peak** | **0.77** | **271** | | | | **Pg** | **21 52 25.2** | **-1.2** |
| **BBGB** | **Big Mountain B** | **0.84** | **324** | | | | **Pb** | **21 52 27.8** | **-0.1** |
| **BSGM** | **Shirttail Gulc** | **0.85** | **307** | | | | **Pg** | **21 52 26.6** | **-1.3** |
| **CRGC** | **Crocker Grade** | **0.87** | **139** | | | | **Pb** | **21 52 28.4** | **0.0** |
| **BVL** | **Bear Valley** | **0.92** | **317** | | | | **Pg** | **21 52 28.3** | **-0.9** |
| **VOG** | **Valley Oaks Go** | **0.94** | **63** | | | | **Pb** | **21 52 29.2** | **-0.3** |
| **VOG** | **Valley Oaks Go** | **0.94** | **63** | P | | | **Pg** | **21 52 27.3** | **-2.3** |
| | baz=244 | | | | | | | | |
| VOG | | | | S | | | **Sg** | **21 52 40.5** | **-1.5** |
| | baz=244 | | | | | | | | |
| **BSMM** | **Soledad Missio** | **0.95** | **301** | | | | **Pg** | **21 52 28.6** | **-1.2** |
| **BJCM** | **Johnson Can.** | **1.02** | **310** | | | | **Pg** | **21 52 29.7** | **-1.4** |
| **BJOM** | **Mount Johnson** | **1.02** | **315** | | | | **Pg** | **21 52 29.7** | **-1.6** |
| **HAST** | **Hastings Reser** | **1.04** | **298** | | | | **Pg** | **21 52 29.8** | **-1.7** |
| **SCZ** | **Santa Cruz** | **1.05** | **311** | | | | **Pg** | **21 52 30.4** | **-1.5** |
| **VES** | **Vestal, Richgr** | **1.09** | **93** | | | | **Pg** | **21 52 31.0** | **-1.4** |
| **VES** | **Vestal, Richgr** | **1.09** | **93** | P | | | **Pg** | **21 52 30.9** | **-1.5** |
| | baz=273,SNR=38 | | | | | | | | |
| VES | | | | S | | | **Sg** | **21 52 45.7** | **-0.9** |
| | baz=273 | | | | | | | | |
| **PKM** | **Mcpherson Peak** | **1.13** | **154** | | | | **Pg** | **21 52 32.4** | **-0.9** |
| **PKM** | **Mcpherson Peak** | **1.13** | **154** | P | | | **Pg** | **21 52 32.3** | **-0.9** |
| | baz=333,SNR=81 | | | | | | | | |
| PKM | | | | S | | | **Sb** | **21 52 47.9** | **+0.5** |
| | baz=333 | | | | | | | | |
| **MRHM** | **Rocky Hill** | **1.15** | **70** | | | | **Pg** | **21 52 31.8** | **-1.8** |
| **BSLM** | **Silva Ranch** | **1.15** | **320** | | | | **Pb** | **21 52 33.2** | **0.0** |
| **BSRM** | **Salinas Radio** | **1.17** | **311** | | | | **Pg** | **21 52 32.5** | **-1.6** |
| **BPRM** | **Ponciano Ridge** | **1.17** | **296** | | | | **Pg** | **21 52 31.8** | **-2.3** |
| **BPCNC** | **Pine Canyon** | **1.18** | **305** | | | | **Pg** | **21 52 33.0** | **-1.3** |
| **SAO** | **San Andreas Ge** | **1.20** | **316** | Pg | | | **Pg** | **21 52 32.7** | **-1.9** |
| **FRP** | **Fremont Peak** | **1.21** | **315** | | | | **Pg** | **21 52 32.7** | **-2.2** |
| **FIGC** | **Figueroa Mtn.** | **1.22** | **163** | | | | **Pg** | **21 52 34.1** | **-1.0** |
| **BCW** | **Bitter Crk WRg** | **1.26** | **139** | | | | **Pn** | **21 52 34.1** | **0.7** |
| **HFEM** | **San Felipe** | **1.34** | **324** | | | | **Pn** | **21 52 35.5** | **-0.2** |
| **HPCM** | **Pacheco Lake** | **1.35** | **329** | | | | **Pn** | **21 52 35.8** | **-0.1** |
| **HERM** | **Elkhorn Road** | **1.37** | **311** | | | | **Pn** | **21 52 35.9** | **-0.3** |
| **HMOM** | **Monterey** | **1.40** | **300** | | | | **Pn** | **21 52 35.4** | **-1.1** |
| **MYLM** | **Yosemite Lake** | **1.48** | **360** | | | | **Pn** | **21 52 37.8** | **+0.2** |
| **ARVC** | **Arvin** | **1.51** | **120** | | | | **Pn** | **21 52 38.1** | **0.0** |
| **ARVC** | **Arvin** | **1.51** | **120** | P | | | **Pn** | **21 52 37.8** | **-0.3** |

comp=N,108nm,1.3s
DSP IAML 21 53 40.0
comp=E,140nm,1.3s
**PASC Pasadena Art C 2.52 133 Pn 21 52 51.8 -0.1**
PASC IAML 21 53 42.5
comp=E,61nm,1.1s
**SNCC San Nicolas Is 2.75 164** S **Sn 21 53 30.1 +2.0**
baz=344
**LHV Little Huntoon 2.80 33 Pn 21 52 57.7 +1.9**
LHV IAML 21 53 51.1
comp=E,97nm,1.1s
**BFSC Mount Baldy Ra 2.81 125** S **Sn 21 53 30.8 +1.0**
baz=307
**GMN Gold Mountain 2.90 60 Pn 21 52 57.8 +0.4**
GMN IAML 21 53 47.6
comp=E,35nm,0.7s
GMN IAML 21 54 07.6
comp=N,38nm,1.0s
**GSC Goldstone, Bar 3.01 100** Pn **Pn 21 52 58.2 -0.5**
GSC IAML 21 53 39.1
comp=E,58nm,0.6s
GSC IAML 21 54 00.5
comp=N,55nm,0.8s
**GSC Goldstone, Bar 3.01 100** P **Pn 21 52 58.7 0.0**
baz=282
GSC S **Sn 21 53 36.4 +1.8**
baz=282
**GWY Greenwater Val 3.05 84 Pn 21 52 58.8 -0.7**
GWY IAML 21 54 04.0
comp=E,40nm,1.0s
GWY IAML 21 54 12.7
comp=N,30nm,1.2s
**AFDM Forest Hills D 3.07 352 Pn 21 53 01.1 +1.5**
AFDM IAML 21 54 08.1
comp=E,26nm,1.2s
**WCT Wildcat Mounta 3.19 73 Pn 21 53 02.1 +0.8**
**ELS Elsinore Mount 3.34 132 Pn 21 53 03.1 -0.2**
**HEC Hector,Ludlow 3.51 107** P **Pn 21 53 06.5 +0.8**
baz=289
**TPNV Topopah Spring 3.52 72** Pn **Pn 21 53 06.9 +1.0**
TPNV IAML 21 54 19.1
comp=E,34nm,1.6s
TPNV IAML 21 54 20.7
comp=E,34nm,1.4s
**TPNV Topopah Spring 3.52 72** P **Pn 21 53 06.3 +0.4**
baz=254,SNR=8.3
**KVN Kaiserville 3.65 30 Pn 21 53 08.4 +0.8**
KVN IAML 21 54 15.6
comp=E,17nm,0.9s
KVN IAML 21 54 16.4
comp=N,20nm,1.0s
**ORV Oroville 3.75 347 Pn 21 53 10.7 +1.9**
ORV IAML 21 54 37.8
comp=E,18nm,0.9s
**PAHR Pah Rah Range 3.88 12 Pn 21 53 12.0 +1.1**
PAHR IAML 21 54 22.9
comp=N,23nm,1.2s
PAHR IAML 21 54 30.3
comp=E,27nm,1.5s
**PFO Pinyon Flats O 3.98 124** Pn **Pn 21 53 11.7 -0.5**
**PFO Pinyon Flats O 3.98 124** P **Pn 21 53 12.9 +0.7**
baz=306
**GMRC Granite Mounta 4.05 105** P **Pn 21 53 12.8 -0.3**
baz=287
**BELC Belle Mtn. Jos 4.10 116** P **Pn 21 53 14.5 +0.7**
baz=299
**S11A Rachel 4.13 64 Pn 21 53 16.1 +1.7**
**SHPR Sheep Range 4.30 80 Pn 21 53 17.5 +0.9**
**MONP2 Monument Peak 4.46 131** P **Pn 21 53 19.6 +0.6**
baz=313
**V12A Nelson 4.53 91 Pn 21 53 21.3 +1.6**
V12A IAML 21 54 46.8
comp=N,10nm,1.6s
**R11B Troy Canyon, C 4.57 56** Pg **Pg 21 53 37.9 -1.1**
baz=239
**LRDM Redding Peak 4.63 350** Pn **Pn 21 53 21.7 +0.7**
**CBX Cerro Bola 4.75 138** Pn **Pn 21 53 22.6 -0.1**
CBX IAML 21 54 51.4
comp=N,19nm,1.3s
**YUH Yuha Desert 4.94 130** Pn **Pn 21 53 25.5 +0.2**
YUH IAML 21 54 57.1
comp=N,6.9nm,4.7s
YUH IAML 21 55 03.0
comp=E,7.6nm,4.9s
**ESJX Sierra Juarez 5.38 135** Pn **Pn 21 53 32.3 +0.9**
**KSXB Camp Six Broad 6.50 337** Pn **Pn 21 53 47.3 +0.5**

*NEIC **14** 21:59:15.0±0.8,36.46N±0.01×98.74W±0.02,h5$^{km}_{\pm}$1$^{km}$,*
*Error ellipse: s-maj=2.4km s-min=2.1km az=317.0*
**TUL 14 21:59:15.5±1.0,36.465N±0.009×98.75W±0.02,h7$^{km}_{\pm}$1$^{km}$,**
**ML2.6,mb_Lg2.4/30(NEIC),ML2.7/33(NEIC),Error**
**ellipse: s-maj=2.3km s-min=1.3km az=92.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK038** | **West end E0370** | **0.01** | **26** | | Pg | 21 59 17.3 | +0.5 |
| OK038 | | | | Sg | Sg | 21 59 18.8 | +1.1 |
| **NOKA** | **Waynoka** | **0.22** | **319** | Pg | Pg | 21 59 20.2 | +0.3 |
| NOKA | | | | Sg | Sg | 21 59 23.8 | +0.8 |
| **OK032** | **Salt Plains WL** | **0.55** | **52** | Pg | Pg | 21 59 25.3 | -0.8 |
| OK032 | | | | Sg | Sg | 21 59 33.1 | -0.2 |
| OK032 | | | | IAML | | 21 59 35.8 | |
| | 372nm,0.2s | | | | | | |
| OK032 | | | | IAML | | 21 59 36.7 | |
| | 300nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.62** | **86** | Pg | Pg | 21 59 27.3 | -0.1 |
| CROK | | | | Sg | Sg | 21 59 36.1 | +0.6 |
| CROK | | | | IAML | | 21 59 42.5 | |
| | comp=E,273nm,0.3s | | | | | | |
| CROK | | | | IAML | | 21 59 43.1 | |
| | comp=N,317nm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **0.67** | **234** | Pg | Pg | 21 59 27.9 | -0.5 |
| ELIS | | | | Sg | Sg | 21 59 37.7 | +0.5 |
| ELIS | | | | IAML | | 21 59 38.7 | |
| | comp=E,354nm,0.2s | | | | | | |
| ELIS | | | | IAML | | 21 59 45.6 | |
| | comp=N,406nm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.80** | **52** | | Pg | 21 59 30.3 | -0.6 |
| KAN14 | | | | IAML | | 21 59 41.9 | |
| | comp=E,191nm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **0.81** | **61** | Pg | Pg | 21 59 30.8 | -0.4 |
| **CSTR** | **Hydro, Custer** | **0.82** | **177** | Pg | Pg | 21 59 30.8 | -0.5 |
| **KAN17** | **Caldwell West** | **0.98** | **54** | Pg | Pg | 21 59 33.8 | -0.5 |
| KAN17 | | | | IAML | | 21 59 48.0 | |
| | comp=N,310nm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 21 59 48.6 | |
| | comp=E,314nm,0.3s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.98** | **39** | Pg | Pg | 21 59 33.9 | -0.5 |
| KAN08 | | | | IAML | | 21 59 47.6 | |
| | comp=E,147nm,0.3s | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.03** | **36** | Pg | Pg | 21 59 34.3 | -0.9 |
| **KAN01** | **Argonia South** | **1.05** | **49** | | Pg | 21 59 35.1 | -0.6 |
| KAN01 | | | | IAML | | 21 59 49.8 | |
| | comp=E,142nm,0.3s | | | | | | |
| KAN01 | | | | IAML | | 21 59 49.9 | |
| | comp=N,129nm,0.2s | | | | | | |
| **KAN09** | **Caldwell North** | **1.13** | **53** | Pg | Pg | 21 59 36.4 | -0.8 |
| KAN09 | | | | IAML | | 21 59 54.0 | |
| | comp=E,264nm,0.2s | | | | | | |
| **OK029** | **Liberty Lake** | **1.24** | **122** | | Pb | 21 59 38.5 | -0.8 |
| OK029 | | | | IAML | | 21 59 55.9 | |
| | comp=E,196nm,0.4s | | | | | | |
| **BLOK** | **Blackwell** | **1.27** | **76** | | Pn | 21 59 38.6 | -1.1 |
| **OK048** | **Pawnee Station** | **1.46** | **91** | | Pn | 21 59 41.9 | -0.5 |
| **OK051** | **E0350 and S346** | **1.54** | **88** | | Pn | 21 59 43.4 | -0.1 |
| **OK031** | **S. Brethren Rd** | **1.63** | **108** | | Pn | 21 59 44.3 | -0.3 |
| **OK052** | **Battle Ridge R** | **1.64** | **106** | | Pn | 21 59 44.6 | -0.3 |
| **QUOK** | **Quay** | **1.68** | **99** | | Pn | 21 59 45.4 | +0.1 |
| **WMOK** | **Wichita Mounta** | **1.72** | **181** | Pn | Pn | 21 59 45.5 | -0.5 |
| **SMWD** | **Samnorwood** | **1.82** | **222** | | Pn | 21 59 47.6 | +0.2 |
| **DEOK** | **Depew** | **1.93** | **108** | | Pn | 21 59 48.7 | -0.1 |
| **X34A** | **Smith Ranch, M** | **2.00** | **158** | IAmb_Lg | | 22 00 18.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.86** | **237** | IAmb_Lg | | 22 00 46.0 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **3.13** | **32** | IAmb_Lg | | 22 00 56.9 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.21** | **271** | | Pn | 22 00 06.8 | +0.2 |
| **DKNS** | **Dickens** | **3.31** | **213** | | Pn | 22 00 08.1 | +0.2 |
| **APMT** | **Aspermont** | **3.33** | **200** | | Pn | 22 00 07.7 | -0.3 |
| **X37A** | **Clayton** | **3.33** | **123** | IAmb_Lg | | 22 01 06.7 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **3.52** | **89** | IAmb_Lg | | 22 01 11.7 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **SN07** | **Snyder 07** | **3.80** | **208** | IAmb_Lg | | 22 01 24.2 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **3.89** | **91** | IAmb_Lg | | 22 01 17.3 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.90** | **191** | Pn | Pn | 22 00 15.4 | -0.6 |
| **SN05** | **Snyder 5** | **3.99** | **207** | IAmb_Lg | | 22 01 22.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.99** | **311** | IAmb_Lg | | 22 01 23.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.51** | **73** | IAmb_Lg | | 22 01 46.5 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **T25A** | **Trinidad** | **4.59** | **280** | IAmb_Lg | | 22 01 45.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.63** | **113** | IAmb_Lg | | 22 01 49.9 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **SGCY** | **Sterling City** | **4.95** | **204** | IAmb_Lg | | 22 02 04.6 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **6.03** | **189** | IAmb_Lg | | 22 02 38.8 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **P40A** | **Paris** | **6.11** | **58** | IAmb_Lg | | 22 02 34.4 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.35** | **304** | IAmb_Lg | | 22 02 36.8 | |
| | comp=Z,4.3nm,1.0s | | | | | | |

**IDC 14 22:01:36.8±6.1,16.17N×148.57E,h0$^{km}$,mb3.6/5,**
**mbtmp3.6/5,Error ellipse: s-maj=229.4km**
**s-min=24.8km az=83.0,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **38.51** | **202** | P | P | 22 09 00.7 | -0.5 |
| | 0.5nm,0.8s,baz=27,slow=8.6,SNR=8.2 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **42.10** | **200** | P | P | 22 09 31.2 | +0.3 |
| | 0.2nm,0.5s,baz=24,slow=8.5,SNR=4.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.19** | **315** | P | P | 22 11 59.9 | -0.4 |
| | 0.4nm,0.4s,baz=90,slow=7.9,SNR=8.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.03** | **319** | P | P | 22 12 19.3 | +0.4 |
| | 0.8nm,0.5s,baz=105,slow=6.6,SNR=5.0 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **70.16** | **321** | P | P | 22 12 51.3 | 0.0 |
| | 0.2nm,0.3s,baz=92,slow=7.2,SNR=2.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**NAM 14 22:19:28.1±0.7,19.80S×14.58E,h7$^{km}_{\pm}$3$^{km}$,ML0.7,5C-4D,**
**Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.03** | **278** | ⇓*i* P | Pg | 22 19 29.5 | -0.1 |
| ST9N | | | | *i* S | Sg | 22 19 30.4 | -0.2 |
| ST9N | | | | IAML | | 22 19 30.8 | |
| | comp=Z,225nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.03** | **278** | *i* P | Pg | 22 19 29.5 | -0.1 |
| ST9N | | | | *i* S | Sg | 22 19 31.2 | +0.6 |
| ST9N | | | | IAML | | 22 19 31.3 | |
| | comp=Z,157nm,1.4s | | | | | | |
| **ST1N** | **ST1** | **0.07** | **27** | *i* S | Sg | 22 19 31.1 | -0.4 |
| ST1N | | | | *i* S | | 22 19 31.1 | |
| **ST1N** | **ST1** | **0.07** | **27** | *i* P | Pg | 22 19 30.0 | -0.1 |
| ST1N | | | | *i* S | Sg | 22 19 31.1 | -0.4 |
| ST1N | | | | IAML | | 22 19 31.2 | |
| | comp=N,90nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.10** | **309** | ⇓*i* P | Pg | 22 19 30.3 | -0.1 |
| ST3N | | | | *i* S | Sg | 22 19 31.8 | -0.2 |
| ST3N | | | | IAML | | 22 19 31.9 | |
| | comp=Z,19nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.10** | **309** | *i* P | Pg | 22 19 30.3 | -0.1 |
| ST3N | | | | *i* S | Sg | 22 19 31.9 | -0.1 |
| ST3N | | | | IAML | | 22 19 32.0 | |
| | comp=Z,22nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.13** | **172** | ⇓*i* P | Pg | 22 19 31.0 | +0.1 |
| ST2N | | | | *i* S | Sg | 22 19 33.1 | +0.3 |
| ST2N | | | | IAML | | 22 19 33.2 | |
| | comp=Z,32nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.13** | **172** | *i* P | Pg | 22 19 31.0 | +0.1 |
| ST2N | | | | *i* S | Sg | 22 19 32.6 | -0.1 |
| ST2N | | | | IAML | | 22 19 33.5 | |
| | comp=Z,10nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.17** | **271** | ⇑*i* P | Pg | 22 19 31.6 | 0.0 |
| ST6N | | | | *i* S | Sg | 22 19 34.5 | +0.6 |
| ST6N | | | | IAML | | 22 19 35.2 | |
| | comp=Z,11nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **86** | ⇑*i* P | Pg | 22 19 31.7 | +0.1 |
| ST5N | | | | *i* S | Sg | 22 19 34.1 | +0.1 |
| ST5N | | | | IAML | | 22 19 34.4 | |
| | comp=Z,18nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **86** | *i* P | Pg | 22 19 31.7 | 0.0 |
| ST5N | | | | *i* S | Sg | 22 19 34.0 | 0.0 |
| ST5N | | | | IAML | | 22 19 34.2 | |
| | comp=Z,13nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **223** | ⇑*i* P | Pg | 22 19 33.3 | 0.0 |
| ST10N | | | | *i* S | Sg | 22 19 36.8 | -0.1 |
| ST10N | | | | IAML | | 22 19 37.6 | |
| | comp=Z,8.6nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **223** | *i* P | Pg | 22 19 33.3 | 0.0 |
| ST10N | | | | *i* S | Sg | 22 19 37.0 | +0.2 |
| ST10N | | | | IAML | | 22 19 38.7 | |
| | comp=Z,12nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.27** | **295** | ⇓*i* P | Pg | 22 19 33.5 | 0.0 |
| ST8N | | | | *i* S | Sg | 22 19 37.2 | +0.1 |
| ST8N | | | | IAML | | 22 19 37.5 | |
| | comp=Z,3.4nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.29** | **60** | ⇑*i* P | Pg | 22 19 34.1 | +0.2 |
| ST11N | | | | *i* S | Sg | 22 19 38.4 | +0.6 |
| ST11N | | | | IAML | | 22 19 39.4 | |
| | comp=Z,2.5nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.29** | **60** | *i* P | Pg | 22 19 34.1 | +0.2 |
| ST11N | | | | *i* S | Sg | 22 19 38.4 | +0.6 |
| ST11N | | | | IAML | | 22 19 38.5 | |
| | comp=Z,2.1nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.38** | **103** | ⇑*i* P | Pg | 22 19 35.6 | 0.0 |
| ST4N | | | | *i* S | Sg | 22 19 40.7 | +0.1 |
| ST4N | | | | IAML | | 22 19 41.1 | |
| | comp=Z,2.3nm,0.1s | | | | | | |

*CATAC **14** 22:24:11.8±0.8,11.98N×87.81W,h10$^{km}_{\pm}$6$^{km}$,ML3.5*
*SNET **14** 22:24:13.5±1.0,12.00N×87.85W,h18$^{km}_{\pm}$5$^{km}$,ML3.2*
**ISC 14 22:24:10.3±2.0,11.95N±0.08×87.79W±0.04,h2$^{km}_{\pm}$11$^{km}$,**
**n31,σ0s51/46,Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **1.04** | **44** | *e*P | **Pn** | **22 24 31.9** | **-0.1** |
| CRIN | | | | *e*S | **Sn** | **22 24 47.5** | **+0.3** |
| **CRIN** | **San Cristobal** | **1.04** | **44** | *i* P | **Pn** | **22 24 31.9** | **-0.1** |
| CRIN | | | | *i* S | **Sn** | **22 24 46.2** | **-1.0** |
| CRIN | | | | IAML | | 22 24 58.6 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **TEL3** | **Telica 3** | **1.11** | **56** | *i* P | **Pg** | **22 24 31.5** | **-0.2** |
| TEL3 | | | | IAML | | 22 24 32.8 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **QUEN** | **Al S del Volca** | **1.12** | **55** | *i* P | **Pn** | **22 24 32.8** | **-0.3** |
| QUEN | | | | IAML | | 22 24 52.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **ROCN** | **Rota Cerro Neg** | **1.17** | **61** | *i* P | **Pn** | **22 24 33.8** | **0.0** |
| ROCN | | | | IAML | | 22 25 01.5 | |
| | comp=Z,520nm,1.0s | | | | | | |
| **CNGA** | **Al SSO del Vol** | **1.20** | **63** | *i* P | **Pg** | **22 24 32.0** | **-1.3** |
| CNGA | | | | IAML | | 22 24 32.8 | |
| | comp=Z,960nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **1.20** | **79** | *i* P | **Pn** | **22 24 34.5** | **+0.3** |
| COPN | | | | IAML | | 22 24 35.2 | |
| | comp=Z,960nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **1.20** | **63** | *e*P | **Pn** | **22 24 34.5** | **+0.2** |
| CNGN | | | | *e*S | **Sn** | **22 24 52.5** | **+1.3** |
| **CNGN** | **Cerro Negro** | **1.20** | **63** | *i* P | **Pn** | **22 24 34.4** | **+0.2** |
| CNGN | | | | IAML | | 22 24 58.3 | |
| | comp=Z,800nm,1.0s | | | | | | |
| **MACN** | **El Madrono** | **1.21** | **65** | *i* P | **Pb** | **22 24 34.0** | **0.0** |
| MACN | | | | *i* S | **Sn** | **22 24 51.3** | **0.0** |
| MACN | | | | IAML | | 22 24 57.6 | |
| | comp=Z,610nm,1.0s | | | | | | |
| **ILCN** | **San Idelfonso** | **1.24** | **60** | *i* P | **Pg** | **22 24 34.0** | **0.0** |
| ILCN | | | | IAML | | 22 24 35.7 | |
| | comp=Z,580nm,1.0s | | | | | | |
| ILCN | | | | *i* S | **Sb** | **22 24 51.1** | **+0.2** |
| **INTP** | **Intipuca** | **1.26** | **348** | *e*P | **Pg** | **22 24 35.1** | **+0.5** |
| INTP | | | | *e*S | **Sg** | **22 24 51.0** | **+0.1** |
| INTP | | | | IAML | | 22 24 53.1 | |
| | comp=Z,222nm,0.3s | | | | | | |
| **CNCH** | **Conchagua** | **1.31** | **358** | *e*P | **Pg** | **22 24 36.1** | **+0.6** |
| CNCH | | | | *e*S | **Sb** | **22 24 53.5** | **+0.3** |
| **CNCH** | **Conchagua** | **1.31** | **358** | *i* P | **Pg** | **22 24 36.0** | **+0.4** |
| CNCH | | | | *i* S | **Sg** | **22 24 52.3** | **-0.4** |
| CNCH | | | | IAML | | 22 24 57.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LCND** | **La Caada** | **1.35** | **356** | *e*P | **Pg** | **22 24 36.7** | **+0.5** |
| LCND | | | | *e*S | **Sn** | **22 24 54.6** | **-0.2** |
| LCND | | | | IAML | | 22 24 58.2 | |
| | comp=Z,648nm,0.3s | | | | | | |
| **LCND** | **La Caada** | **1.35** | **356** | *i* P | **Pb** | **22 24 36.5** | **+0.1** |
| LCND | | | | *i* S | **Sb** | **22 24 53.6** | **-0.6** |
| LCND | | | | IAML | | 22 24 58.0 | |
| | comp=Z,660nm,1.0s | | | | | | |
| **JUCU** | **Jucuarįn** | **1.37** | **341** | *e*P | **Pn** | **22 24 36.5** | **-0.1** |
| **SAPS** | **Ciudad Sandino** | **1.38** | **81** | *i* P | **Pb** | **22 24 36.7** | **-0.1** |
| SAPS | | | | *i* S | **Sg** | **22 24 55.1** | **+0.5** |
| SAPS | | | | IAML | | 22 25 00.5 | |
| | comp=Z,930nm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **1.54** | **344** | *e*P | **Pn** | **22 24 39.1** | **+0.1** |
| **RANC** | **El Ranchito** | **1.55** | **342** | *e*P | **Pb** | **22 24 39.4** | **-0.5** |
| **PACA** | **Pacayal** | **1.59** | **341** | *e*P | **Pb** | **22 24 40.4** | **-0.2** |
| PACA | | | | *e*S | **Sn** | **22 25 00.5** | **-0.5** |
| **HUEN** | | **1.63** | **76** | *i* P | **Pb** | **22 24 40.6** | **-0.6** |
| HUEN | | | | *i* S | **Sb** | **22 25 02.3** | **+0.1** |
| HUEN | | | | IAML | | 22 25 04.5 | |
| | comp=Z,250nm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **1.68** | **336** | *e*P | **Pn** | **22 24 41.4** | **+0.4** |
| **LIMN** | **Finca el Limon** | **1.78** | **52** | *i* P | **Pn** | **22 24 42.1** | **-0.1** |
| LIMN | | | | IAML | | 22 25 07.8 | |
| | comp=Z,430nm,1.0s | | | | | | |
| **SOMN** | **Somoto** | **1.86** | **38** | *i* P | **Pb** | **22 24 45.2** | **+0.1** |
| SOMN | | | | IAML | | 22 24 46.7 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.96** | **332** | *e*P | **Pb** | **22 24 46.0** | **-0.8** |
| SCLA | | | | *e*S | **Sn** | **22 25 10.0** | **0.0** |
| **COEG** | **Centro de Oper** | **1.97** | **327** | *e*P | **Pn** | **22 24 45.0** | **+0.2** |
| COEG | | | | *e*S | **Sn** | **22 25 09.8** | **-0.4** |
| COEG | | | | IAML | | 22 25 15.0 | |
| | comp=Z,285nm,0.4s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.14** | **76** | *i* P | **Pn** | **22 24 47.9** | **+0.8** |
| BOAB | | | | IAML | | 22 25 21.7 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.34** | **316** | *e*P | **Pn** | **22 24 49.9** | **-0.1** |
| **NUBE** | **Las Nubes** | **2.74** | **315** | *e*P | **Pn** | **22 24 55.4** | **-0.1** |
| **MTO3** | **Montecristo** | **2.87** | **328** | *e*P | **Pn** | **22 24 58.6** | **+1.2** |

*MDD **14** 22:40:10.9±0.9,36.60N×11.30W,h40$^{km}_{\pm}$29$^{km}$,Mb4.3/11,*
*M_mb3.7/11,Error ellipse: s-maj=10.0km s-min=5.0km*
*az=84.0*
*IGIL **14** 22:40:11.6,36.63N×11.24W,h26$^{km}$,ML1.6*
*INMG **14** 22:40:12.2±1.5,36.62N×11.23W,h28$^{km}_{\pm}$22$^{km}$,ML2.0,*
*Error ellipse: s-maj=15.4km s-min=5.0km az=61.0*
**ISC 14 22:40:08.6±2.5,36.59N±0.07×11.3W±0.1,h35$^{km}$,n51,**
**σ1s84/90,11C-1D,Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **2.04** | **74** | *e*P | **Pn** | **22 40 42.2** | **+1.8** |
| PFVI | | | | *e*S | **Sn** | **22 41 04.3** | **-0.3** |
| **PFVI** | **Vila Bisbo** | **2.04** | **74** | P | **Pn** | **22 40 41.1** | **+0.7** |
| PFVI | | | | S | **Sn** | **22 41 03.8** | **-0.8** |
| **MORF** | **Marmelete** | **2.22** | **70** | *e*P | **Pn** | **22 40 45.0** | **+2.1** |
| **MORF** | **Marmelete** | **2.22** | **70** | *e*P | **Pn** | **22 40 44.9** | **+1.9** |
| MORF | | | | *e*S | **Sn** | **22 41 09.1** | **0.0** |
| MORF | | | | IAML | | 22 41 10.7 | |
| | comp=N,5.5nm,0.1s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.25** | **64** | *e*P | **Pn** | **22 40 45.4** | **+2.1** |
| PTEO | | | | *e*S | **Sn** | **22 41 10.1** | **+0.2** |
| **PNCL** | **Nicolau / Gran** | **2.66** | **54** | *e*P | **Pn** | **22 40 50.9** | **+1.9** |
| PNCL | | | | *e*S | **Sn** | **22 41 19.6** | **-0.4** |
| PNCL | | | | A | A | 22 41 22.8 | |
| | comp=N,3.1nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.66** | **54** | S | **Sn** | **22 41 20.2** | **+0.2** |
| PNCL | | | | P | **Pn** | **22 40 50.7** | **+1.7** |
| **MESJ** | **Messejana** | **2.74** | **62** | *e*P | **Pn** | **22 40 51.9** | **+1.8** |
| MESJ | | | | *e*S | **Sn** | **22 41 22.6** | **+0.7** |
| MESJ | | | | A | A | 22 41 25.6 | |
| | comp=N,1.9nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **2.74** | **62** | *e*P | **Pn** | **22 40 51.8** | **+1.8** |
| MESJ | | | | *e*S | **Sn** | **22 41 21.5** | **-0.4** |
| MESJ | | | | IAML | | 22 41 23.0 | |
| | comp=E,1.4nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.76** | **75** | *e*P | **Pn** | **22 40 52.5** | **+2.2** |
| PBDV | | | | *e*S | **Sn** | **22 41 22.7** | **+0.3** |
| **PBDV** | **Barranco-do-Ve** | **2.76** | **75** | P | **Pn** | **22 40 51.1** | **+0.8** |
| **PCVE** | **Castro Verde** | **2.79** | **67** | ⇓*e*P | **Pn** | **22 40 52.7** | **+2.0** |
| PCVE | | | | *e*S | **Sn** | **22 41 23.2** | **+0.1** |
| PCVE | | | | A | A | 22 41 29.2 | |
| | comp=E,2.4nm,0.3s | | | | | | |
| **PCVE** | **Castro Verde** | **2.79** | **67** | P | **Pn** | **22 40 51.8** | **+1.1** |
| PCVE | | | | S | **Sn** | **22 41 22.8** | **-0.3** |
| **PMAFR** | **Mafra** | **2.84** | **33** | *e*P | **Pn** | **22 40 53.0** | **+1.5** |
| PMAFR | | | | *e*S | **Sn** | **22 41 23.9** | **-0.6** |
| PMAFR | | | | A | A | 22 41 25.4 | |
| | comp=E,12nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **2.84** | **33** | P | **Pn** | **22 40 52.6** | **+1.1** |
| PMAFR | | | | S | **Sn** | **22 41 23.4** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **2.96** | **73** | *e*P | **Pn** | **22 40 55.2** | **+2.1** |
| PVAQ | | | | *e*S | **Sn** | **22 41 26.9** | **-0.5** |
| PVAQ | | | | A | A | 22 41 32.0 | |
| | comp=E,2.4nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.96** | **73** | P | **Pn** | **22 40 54.8** | **+1.7** |
| PVAQ | | | | S | **Sn** | **22 41 26.6** | **-0.8** |
| **PBEJ** | **Beja** | **3.07** | **61** | *e*S | **Sn** | **22 41 29.4** | **-0.8** |
| PBEJ | | | | A | A | 22 41 31.2 | |
| | comp=E,2.8nm,0.3s | | | | | | |
| **EGRO** | **El Granado** | **3.17** | **72** | P | **Pn** | **22 40 58.2** | **+2.2** |
| **EGRO** | **El Granado** | **3.17** | **72** | P | **Pn** | **22 40 58.3** | **+2.2** |
| EGRO | | | | ⇑*i*Vmb_V | | 22 40 58.8 | |
| | comp=E,91nm,SNR=1.6 | | | | | | |
| EGRO | | | | S | **Sn** | **22 41 33.4** | **+0.7** |
| **EVO** | **Evora** | **3.24** | **52** | *e*P | **Pn** | **22 40 59.3** | **+2.4** |
| EVO | | | | *e*S | **Sn** | **22 41 34.0** | **-0.2** |
| EVO | | | | A | A | 22 41 36.0 | |
| | comp=E,2.8nm,0.2s | | | | | | |
| **EVO** | **Evora** | **3.24** | **52** | P | **Pn** | **22 40 57.8** | **+0.9** |
| EVO | | | | S | **Sn** | **22 41 33.0** | **-1.2** |
| **PMTG** | **Montargil** | **3.46** | **43** | *e*P | **Pn** | **22 41 01.2** | **+1.3** |
| PMTG | | | | *e*S | **Sn** | **22 41 38.5** | **-1.1** |
| PMTG | | | | A | A | 22 41 41.7 | |
| | comp=E,2.0nm,0.3s | | | | | | |
| **PSBE** | **So Bento** | **3.52** | **33** | *e*P | **Pn** | **22 41 03.3** | **+2.5** |
| PSBE | | | | *e*S | **Sn** | **22 41 40.7** | **-0.4** |
| **PESTR** | **Estremoz** | **3.70** | **51** | *e*P | **Pn** | **22 41 05.5** | **+2.2** |
| PESTR | | | | *e*S | **Sn** | **22 41 45.2** | **-0.5** |
| PESTR | | | | A | A | 22 41 53.3 | |
| | comp=E,1.4nm,0.5s | | | | | | |
| **PESTR** | **Estremoz** | **3.70** | **51** | P | **Pn** | **22 41 04.6** | **+1.3** |
| PESTR | | | | S | **Sn** | **22 41 44.1** | **-1.5** |
| **PBAR** | **Barrancos** | **3.73** | **64** | *e*P | **Pn** | **22 41 05.7** | **+2.1** |
| PBAR | | | | *e*S | **Sn** | **22 41 45.7** | **-0.6** |
| PBAR | | | | A | A | 22 41 52.2 | |
| | comp=E,1.3nm,0.4s | | | | | | |
| **PBAR** | **Barrancos** | **3.73** | **64** | P | **Pn** | **22 41 04.8** | **+1.2** |
| PBAR | | | | S | **Sn** | **22 41 44.1** | **-2.1** |
| **EMIN** | **Mina Concepcio** | **3.86** | **71** | P | **Pn** | **22 41 07.4** | **+1.9** |
| EMIN | | | | ⇑*i*Vmb_V | | 22 41 08.0 | |
| | comp=E,83nm,SNR=1.8 | | | | | | |
| EMIN | | | | S | **Sn** | **22 41 49.1** | **-0.4** |
| **EBAD** | **Badajoz** | **4.01** | **56** | P | **Pn** | **22 41 08.7** | **+1.1** |
| EBAD | | | | S | **Sn** | **22 41 51.6** | **-1.7** |
| **EBAD

ECAB S **Sn** **22 42 11.7 -3.5**
**ECAB El Cabril 4.90 71** P **Pn** **22 41 21.3 +1.6**
ECAB ⇑*i*Vmb_V 22 41 21.6
comp=E,91nm,SNR=2.0
ECAB S **Sn** **22 42 12.7 -2.5**
**PVIS Viseu 4.90 32** *e*S **Sn** **22 42 13.2 -2.0**
**EPLA Plasencia 5.36 48** P **Pn** **22 41 28.1 +2.0**
EPLA ⇑*i*Vmb_V 22 41 34.8
comp=E,106nm,SNR=1.7
EPLA S **Sn** **22 42 24.6 -1.9**
**POLO Lamas de Olo 5.49 28** *e*S **Sn** **22 42 27.6 -2.4**
**EADA Adamuz 5.56 72** P **Pn** **22 41 29.8 +1.0**
EADA S **Sn** **22 42 28.4 -3.2**
**EADA Adamuz 5.56 72** P **Pn** **22 41 30.7 +1.9**
EADA ⇑*i*Vmb_V 22 41 32.0
comp=E,83nm,SNR=1.5
EADA S **Sn** **22 42 29.4 -2.1**
**MVO Moncorvo 5.64 35** *e*S **Sn** **22 42 30.9 -2.7**
MVO A A 22 42 33.4
comp=E,2.3nm,0.6s
**PCAB Cabril 5.70 25** *e*P **Pn** **22 41 31.7 +0.9**
PCAB *e*S **Sn** **22 42 33.2 -1.8**
**ELOB Lobios 5.83 24** ⇑*i*Vmb_V 22 41 41.5
comp=E,494nm,SNR=3.1
ELOB S **Sn** **22 42 35.7 -2.6**
**PGAV Gavieira, Arco 5.85 23** *e*S **Sn** **22 42 35.9 -2.9**
**IFR Ifrane 5.90 120** S **Sn** **22 42 35.5 -4.6**
**EZAM Zamans 5.90 19** ⇑*i*Vmb_V 22 41 38.2
comp=E,169nm,SNR=1.1
EZAM S **Sn** **22 42 36.2 -3.6**
**PAB San Pablo 6.21 60** P **Pn** **22 41 39.1 +1.3**
PAB ⇑*i*Vmb_V 22 41 40.1
comp=E,62nm,SNR=1.3
PAB S **Sn** **22 42 45.3 -2.3**
**TIO Tiouine 6.56 148** P **Pn** **22 41 44.4 +1.6**
TIO S **Sn** **22 42 51.5 -4.9**
**EMEL Melilla 6.87 98** P **Pn** **22 41 47.8 +1.1**
EMEL ⇑*i*Vmb_V 22 41 49.8
comp=E,5µm,SNR=2.5

*IDC **14** 23:04:16.1±1.3,37.°34N×73.°01E,h0km,mb3.6/10, mbtmp3.7/14,ML3.2/4,MS3.1/2,Error ellipse: s-maj=25.6km s-min=19.7km az=163.0*
**ISC 14 23:04:17.7±1.1,37.°3N±0.°1×73.°0E±0.°1,h10km,n20, σ1°18/19,mb3.6/10,3C-1D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **5.45** | **12** | Pn | **Pn** | **23 05 39.7** | **+0.5** |
| | 1.5nm,0.3s,baz=84,slow=5.7,SNR=3.4 | | | | | | |
| AAK | | | | Sn | **Sn** | **23 06 40.6** | **-1.5** |
| | 3.1nm,0.3s,baz=195,slow=5.6,SNR=4.7 | | | | | | |
| **AAK** | **Ala-Archa** | **5.45** | **12** | ⇑Pg | **Pb** | **23 05 56.1** | **+2.9** |
| | 8.9nm,0.8s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 23 06 38.6 | |
| | 26nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **6.08** | **343** | ⇓Pn | **Pn** | **23 05 48.9** | **+1.2** |
| | 2.3nm,0.3s,baz=146,slow=11,SNR=53 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 23 06 26.2 | |
| | 11nm,0.6s,baz=149,slow=11,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **11.74** | **33** | Pn | **Pn** | **23 07 04.9** | **-0.4** |
| | baz=216,slow=14,SNR=6.2 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.90** | **15** | Pn | **Pn** | **23 07 33.4** | **-1.2** |
| | baz=204,slow=13,SNR=1.5 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **15.82** | **354** | Pn | **Pn** | **23 08 00.2** | **-0.2** |
| | 0.1nm,0.3s,baz=170,slow=9.9,SNR=13 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.93** | **326** | Pn | **Pn** | **23 08 13.3** | **-1.3** |
| | 0.5nm,0.3s,baz=127,slow=11,SNR=7.3 | | | | | | |
| | 1.8nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.55** | **22** | P | **P** | **23 08 33.1** | **-1.4** |
| | 1.0nm,0.3s,baz=219,slow=11,SNR=27 | | | | | | |
| | 6.0nm,0.6s | | | | | | |
| **ARU** | **Arti** | **21.43** | **338** | P | **P** | **23 09 04.6** | **-1.1** |
| | 1.7nm,0.5s,baz=210,slow=9.1,SNR=4.7 | | | | | | |
| | 1.7nm,0.5s | | | | | | |
| **KBZ** | **Khabaz** | **23.64** | **295** | P | **P** | **23 09 29.2** | **+0.2** |
| | 0.5nm,0.4s,baz=104,slow=12,SNR=1.6 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **26.59** | **56** | P | **P** | **23 09 55.3** | **-0.9** |
| | 0.3nm,0.5s,baz=265,slow=11,SNR=2.2 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **30.68** | **287** | P | **P** | **23 10 33.6** | **+0.8** |
| | 0.3nm,0.5s,baz=72,slow=5.2,SNR=2.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **33.67** | **308** | LR | LR | 23 27 53.8 | |
| | comp=Z,20nm,20.2s,baz=54,slow=42 | | | | | | |
| **FINES** | **FINESS Array B** | **37.70** | **325** | P | **P** | **23 11 32.9** | **-0.1** |
| | 0.8nm,0.6s,baz=117,slow=11,SNR=8.5 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.01** | **337** | P | **P** | **23 12 00.1** | **-0.5** |
| | 2.0nm,0.9s,baz=96,slow=6.5,SNR=3.6 | | | | | | |
| | 2.0nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **43.41** | **321** | P | **P** | **23 12 20.3** | **+0.1** |
| | 1.9nm,0.8s,baz=95,slow=18,SNR=2.7 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **43.41** | **55** | LR | LR | 23 30 30.4 | |
| | comp=Z,40nm,19.1s,baz=226,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.29** | **269** | P | **P** | **23 15 12.6** | **-0.4** |
| | 0.3nm,0.5s,baz=60,slow=8.2,SNR=6.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **73.57** | **17** | P | **P** | **23 15 49.9** | **-0.6** |
| | 0.3nm,0.7s,baz=290,slow=2.7,SNR=2.6 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.11** | **123** | P | **P** | **23 16 34.6** | **+1.1** |
| | 0.4nm,0.9s,baz=332,slow=5.5,SNR=1.7 | | | | | | |
| | 0.4nm,0.9s | | | | | | |

*IDC **14** 23:05:01.2±4.9,37.°53N×72.°97E,h71km±40km,mb3.5/9, mbtmp3.8/15,ML3.3/5,MS3.1/3,Error ellipse: s-maj=33.9km s-min=21.4km az=4.0*
**ISC 14 23:04:57.0±1.1,37.°3N±0.°1×72.°9E±0.°1,h35km,n18, σ1°08/17,mb3.7/9,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **5.43** | **12** | P | **Pn** | **23 06 16.5** | **+0.9** |
| | 0.9nm,0.3s,baz=216,slow=17,SNR=3.6 | | | | | | |
| AAK | | | | S | **Sn** | **23 07 16.5** | **-0.4** |
| | 13nm,0.7s,baz=43,slow=19,SNR=1.6 | | | | | | |
| | 6.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **11.73** | **33** | P | **Pn** | **23 07 42.6** | **+0.8** |
| | 0.1nm,0.3s,baz=225,slow=16,SNR=2.2 | | | | | | |
| MKAR | | | | LR | LR | 23 12 29.3 | |
| | comp=Z,63nm,18.2s,baz=222,slow=39 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.88** | **15** | P | **Pn** | **23 08 13.2** | **+2.2** |
| | 1.2nm,0.7s,baz=206,slow=10,SNR=6.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.78** | **354** | P | **Pn** | **23 08 37.7** | **+1.2** |
| | baz=161,slow=9.4,SNR=9.7 | | | | | | |
| | 5.1nm,0.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.89** | **326** | P | **P** | **23 08 51.9** | **-0.4** |
| | 0.4nm,0.3s,baz=114,slow=11,SNR=5.6 | | | | | | |
| | 3.7nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.54** | **23** | P | **P** | **23 09 08.9** | **-1.4** |
| | 0.7nm,0.3s,baz=218,slow=10,SNR=14 | | | | | | |
| | 7.4nm,0.6s | | | | | | |
| **ARU** | **Arti** | **21.39** | **338** | P | **P** | **23 09 40.9** | **-0.4** |
| | 2.9nm,0.6s,baz=132,slow=3.5,SNR=6.2 | | | | | | |
| | 2.9nm,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **23.61** | **295** | LR | LR | 23 21 37.0 | |
| | comp=Z,47nm,18.3s,baz=86,slow=42 | | | | | | |
| **SONM** | **Songino Array** | **26.60** | **56** | P | **P** | **23 10 31.8** | **-0.2** |
| | 0.3nm,0.3s,baz=251,slow=13,SNR=1.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **OBN** | **Obninsk** | **30.32** | **318** | LR | LR | 23 25 33.8 | |
| | comp=Z,33nm,19.3s,baz=281,slow=41 | | | | | | |
| **BRTR** | **Keskin Array B** | **30.65** | **287** | P | **P** | **23 11 09.6** | **+1.4** |
| | 0.7nm,1.0s,baz=97,slow=11,SNR=3.0 | | | | | | |
| | 0.7nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **37.66** | **325** | P | **P** | **23 12 08.5** | **+0.1** |
| | 2.1nm,0.6s,baz=114,slow=9.2,SNR=4.2 | | | | | | |
| | 2.1nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **43.36** | **321** | P | **P** | **23 12 55.1** | **-0.5** |
| | 2.9nm,0.8s,baz=104,slow=12,SNR=2.5 | | | | | | |
| | 2.9nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.64** | **322** | P | **P** | **23 13 05.1** | **-0.8** |
| | comp=Z,2.9nm,0.9s,baz=94,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.64** | **322** | P | **P** | **23 13 04.8** | **-1.0** |
| | comp=Z,1.2nm,0.9s,baz=92,slow=7.8,SNR=2.7 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.26** | **269** | P | **P** | **23 15 47.6** | **-0.7** |
| | comp=Z,0.3nm,0.7s,baz=53,slow=6.8,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **73.55** | **17** | P | **P** | **23 16 24.9** | **-1.0** |
| | comp=Z,0.7nm,0.8s,baz=301,slow=5.0,SNR=5.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.15** | **123** | P | **P** | **23 17 09.9** | **+0.8** |
| | comp=Z,0.4nm,0.7s,baz=328,slow=4.6,SNR=2.2 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |

*NEIC **14** 23:08:35.6±1.7,69.°63N±0.°08×144.°6W±0.°1,h5km±7km, Error ellipse: s-maj=12.4km s-min=6.2km az=194.0*
**AEIC 14 23:08:35.1±2.2,69.°57N±0.°08×144.°65W±0.°08,h9km±7km, ML2.4,ML2.5/56(NEIC),Error ellipse: s-maj=11.9km s-min=3.7km az=186.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.33** | **81** | | Pg | 23 08 41.4 | -0.3 |
| C27K | | | | | Sg | 23 08 46.1 | 0.0 |
| **C26K** | **Camden Bay** | **0.36** | **345** | Pg | Pg | 23 08 41.4 | -0.7 |
| C26K | | | | Sg | Sg | 23 08 47.4 | +0.5 |
| **D25K** | **Kavik River** | **0.66** | **248** | Pg | Pg | 23 08 45.8 | -2.0 |
| D25K | | | | Sg | Sg | 23 08 55.2 | -1.3 |
| **D27M** | **Malcolm River** | **1.34** | **103** | | Pg | 23 09 01.0 | +0.1 |
| D27M | | | | IAML | | 23 09 24.6 | |
| | comp=N,58nm,0.8s | | | | | | |
| D27M | | | | IAML | | 23 09 27.3 | |
| | comp=E,58nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.43** | **278** | Pn | Pn | 23 09 01.3 | +0.2 |
| C24K | | | | IAML | | 23 09 22.7 | |
| | comp=E,114nm,0.7s | | | | | | |
| C24K | | | | IAML | | 23 09 23.1 | |
| | comp=N,115nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.54** | **256** | | Pb | 23 09 03.3 | -0.4 |
| D24K | | | | IAML | | 23 09 29.2 | |
| | comp=N,86nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.78** | **140** | Pn | Pn | 23 09 06.7 | +0.6 |
| E27K | | | | IAML | | 23 09 37.9 | |
| | comp=E,34nm,1.2s | | | | | | |
| **F26K** | **Sheenjek River** | **1.90** | **174** | Pn | Pn | 23 09 08.4 | +0.7 |
| F26K | | | | IAML | | 23 09 43.3 | |
| | comp=E,54nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.00** | **244** | Pn | Pb | 23 09 10.8 | -0.8 |
| TOLK | | | | IAML | | 23 09 41.5 | |
| | comp=E,40nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 23 09 49.0 | |
| | comp=N,34nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **191** | Pn | Pb | 23 09 11.1 | -0.9 |
| F25K | | | | IAML | | 23 09 43.9 | |
| | comp=E,32nm,0.8s | | | | | | |
| F25K | | | | IAML | | 23 09 48.0 | |
| | comp=N,38nm,1.2s | | | | | | |
| **E24K** | **Your Creek** | **2.05** | **225** | Pn | Pb | 23 09 11.8 | -0.7 |
| **E28M** | **Babbage River** | **2.08** | **116** | Pn | Pb | 23 09 12.2 | -0.7 |
| E28M | | | | IAML | | 23 09 57.4 | |
| | comp=E,25nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.36** | **232** | Pn | Pn | 23 09 15.9 | +1.8 |
| E23K | | | | IAML | | 23 10 02.6 | |
| | comp=N,22nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **211** | Pn | Pb | 23 09 16.6 | -1.6 |
| F24K | | | | IAML | | 23 09 56.9 | |
| | comp=E,21nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.71** | **113** | Pn | Pn | 23 09 19.0 | +0.2 |
| E29M | | | | IAML | | 23 10 05.7 | |
| | comp=N,22nm,0.9s | | | | | | |
| E29M | | | | IAML | | 23 10 08.0 | |
| | comp=E,22nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **2.95** | **260** | Pn | Pn | 23 09 23.1 | +1.0 |
| **G27K** | **Doyon Strip** | **3.00** | **157** | Pn | Pn | 23 09 24.5 | +1.7 |
| G27K | | | | IAML | | 23 11 17.3 | |
| | comp=E,12nm,0.5s | | | | | | |
| G27K | | | | IAML | | 23 11 18.6 | |
| | comp=N,11nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.49** | **275** | Pn | Pn | 23 09 32.0 | +2.6 |
| **H24K** | **Noodor Dome** | **3.95** | **200** | Pn | Pn | 23 09 36.5 | +0.6 |
| H24K | | | | IAML | | 23 11 49.4 | |
| | comp=E,9.4nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **4.12** | **142** | Pn | Pn | 23 09 40.0 | +1.8 |
| **I28M** | **Miner Creek** | **4.52** | **154** | Pn | Pn | 23 09 45.1 | +1.4 |
| I28M | | | | IAML | | 23 11 43.5 | |
| | comp=E,5.4nm,0.4s | | | | | | |
| I28M | | | | IAML | | 23 12 18.7 | |
| | comp=N,6.1nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.69** | **120** | Pn | Pn | 23 09 46.9 | +0.9 |
| **I23K** | **Minto, Yukon-K** | **4.80** | **204** | Pn | Pn | 23 09 48.6 | +1.1 |
| **F20K** | **Avaraart Lake** | **4.83** | **244** | Pn | Pn | 23 09 48.9 | +1.1 |
| F20K | | | | IAML | | 23 12 17.9 | |
| | comp=N,4.5nm,1.0s | | | | | | |
| **D19K** | **Kuna River** | **4.96** | **264** | Pn | Pn | 23 09 49.6 | -0.1 |
| **E19K** | **Redstone River** | **5.09** | **251** | Pn | Pn | 23 09 53.7 | +2.3 |
| **CCB** | **Clear Creek Bu** | **5.10** | **195** | Pn | Pn | 23 09 51.2 | -0.4 |
| CCB | | | | IAML | | 23 12 16.0 | |
| | comp=N,3.3nm,0.8s | | | | | | |
| CCB | | | | IAML | | 23 12 22.9 | |
| | comp=E,3.2nm,0.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **196** | Pn | Pn | 23 09 55.9 | +1.5 |
| WRH | | | | IAML | | 23 11 59.4 | |
| | comp=E,4.1nm,0.8s | | | | | | |
| WRH | | | | IAML | | 23 12 40.0 | |
| | comp=N,3.5nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.41** | **140** | Pn | Pn | 23 09 57.8 | +1.9 |
| **F19K** | **Shaleruckik Mo** | **5.61** | **247** | Pn | Pn | 23 09 58.8 | +0.3 |
| **SCRK** | **Sand Creek** | **5.63** | **177** | Pn | Pn | 23 09 59.7 | +0.7 |
| **J30M** | **Hart River** | **5.97** | **143** | Pn | Pn | 23 10 05.7 | +1.9 |
| **E18K** | **Tukpahlearik C** | **6.25** | **257** | Pn | Pn | 23 10 09.5 | +2.2 |
| **K29M** | **Barlow Dome** | **6.41** | **150** | Pn | Pn | 23 10 12.2 | +2.5 |
| **G18K** | **Tagagawik** | **6.47** | **242** | Pn | Pn | 23 10 13.0 | +2.6 |
| **L27K** | **Beaver Creek,** | **6.64** | **169** | Pn | Pn | 23 10 14.9 | +2.2 |
| **F17K** | **Baldwin Pennin** | **6.97** | **251** | Pn | Pn | 23 10 18.7 | +1.5 |
| **L29M** | **L29M** | **7.00** | **155** | Pn | Pn | 23 10 19.2 | +1.5 |
| **M29M** | **Somme Creek** | **7.59** | **158** | Pn | Pn | 23 10 27.4 | +1.5 |
| **MMPY** | **Sheldon Lake,** | **8.82** | **136** | Pn | Pn | 23 10 44.4 | +1.7 |

**IDC 14 23:28:29.9±2.9,5.°19S×146.°07E,h0km,mb2.9/1, mbtmp3.1/2,ML3.3/1,Error ellipse: s-maj=142.4km s-min=43.8km az=135.0,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.58** | **217** | P | P | 23 32 48.2 | -0.6 |
| | 0.1nm,0.3s,baz=38,slow=12,SNR=2.2 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **21.79** | **211** | P | P | 23 33 23.8 | +0.1 |
| | 0.4nm,0.7s,baz=38,slow=12,SNR=2.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **143.99** | **285** | PKP | PKPdf | 23 48 08.3 | -0.3 |
| | 1.1nm,1.2s,baz=64,slow=2.5,SNR=6.1 | | | | | | |
| **SIV** | **San Ignacio** | **145.87** | **129** | PKPbc | PKPdf | 23 48 11.6 | -0.3 |
| | 0.8nm,0.4s,baz=236,slow=5.7,SNR=7.8 | | | | | | |

*NEIC **14** 23:29:25.5±1.8,69.°61N±0.°06×144.°5W±0.°1,h10km±2km, Error ellipse: s-maj=10.8km s-min=6.9km az=10.0*
**AEIC 14 23:29:25.2±2.1,69.°62N±0.°06×144.°41W±0.°09,h16km±6km, ML3.3,ML3.5/118(NEIC),Error ellipse: s-maj=8.8km s-min=4.6km az=172.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **88** | | Pg | 23 29 30.6 | -0.1 |
| C27K | | | | | Sg | 23 29 34.5 | +0.2 |
| **C26K** | **Camden Bay** | **0.35** | **330** | Pg | Pg | 23 29 31.8 | -0.7 |
| C26K | | | | Sg | Sg | 23 29 37.3 | -0.1 |
| **D25K** | **Kavik River** | **0.76** | **248** | Pg | Pg | 23 29 37.9 | -2.0 |
| D25K | | | | Sg | Sg | 23 29 48.7 | -1.2 |
| **D27M** | **Malcolm River** | **1.27** | **106** | Pn | Pn | 23 29 47.9 | -0.5 |
| **C24K** | **Franklin Bluff** | **1.50** | **276** | Pn | Pn | 23 29 48.6 | -0.8 |
| **D24K** | **Happy Valley** | **1.63** | **255** | Pn | Pn | 23 29 51.6 | -1.6 |
| D24K | | | | IAML | | 23 30 20.0 | |
| | comp=N,719nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.76** | **143** | Pn | Pn | 23 29 53.2 | -1.8 |
| E27K | | | | IAML | | 23 30 25.1 | |
| | comp=E,341nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.94** | **177** | Pn | Pn | 23 29 56.3 | -1.1 |
| F26K | | | | IAML | | 23 30 33.3 | |
| | comp=N,348nm,1.1s | | | | | | |
| **D28M** | **Stokes Point** | **2.02** | **96** | Pn | Pn | 23 29 58.0 | -0.5 |
| D28M | | | | IAML | | 23 30 42.6 | |
| | comp=E,414nm,1.0s | | | | | | |
| D28M | | | | IAML | | 23 30 47.2 | |
| | comp=N,431nm,1.1s | | | | | | |
| **E28M** | **Babbage River** | **2.02** | **118** | Pn | Pn | 23 29 58.7 | +0.2 |
| **F25K** | **Christian Rive** | **2.09** | **193** | Pn | Pn | 23 29 57.8 | -1.7 |
| F25K | | | | IAML | | 23 30 33.9 | |
| | comp=N,347nm,1.0s | | | | | | |
| F25K | | | | IAML | | 23 30 34.2 | |
| | comp=E,343nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.10** | **244** | Pn | Pn | 23 29 59.5 | -0.2 |
| TOLK | | | | IAML | | 23 30 36.1 | |
| | comp=E,302nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 23 30 45.1 | |
| | comp=N,242nm,1.0s | | | | | | |
| **E24K** | **Your Creek** | **2.15** | **226** | Pn | Pn | 23 29 59.5 | -0.8 |
| **C23K** | **Itkillik River** | **2.17** | **279** | Pn | Pn | 23 30 01.8 | +1.2 |
| **D23K** | **Nanushuk River** | **2.33** | **257** | Pn | Pn | 23 30 03.0 | +0.3 |
| D23K | | | | IAML | | 23 30 44.6 | |
| | comp=N,199nm,0.7s | | | | | | |
| D23K | | | | IAML | | 23 30 51.7 | |
| | comp=E,262nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.46** | **233** | Pn | Pn | 23 30 06.1 | +1.5 |
| **F24K** | **Squaw Lake** | **2.47** | **213** | Pn | Pn | 23 30 06.0 | +1.3 |
| **F28M** | **Old Crow** | **2.61** | **138** | Pn | Pn | 23 30 08.8 | +2.1 |
| **E29M** | **Blow River** | **2.65** | **115** | Pn | Pn | 23 30 07.5 | +0.3 |
| E29M | | | | IAML | | 23 30 53.2 | |
| | comp=N,172nm,1.1s | | | | | | |
| E29M | | | | IAML | | 23 31 00.8 | |
| | comp=E,160nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.69** | **175** | | Pb | 23 30 10.7 | -2.2 |
| **G25K** | **Bearman Lake** | **2.94** | **193** | | Pn | 23 30 13.8 | +2.7 |
| **G27K** | **Doyon Strip** | **3.00** | **159** | Pn | Pn | 23 30 13.1 | +1.0 |
| **D22K** | **Ayikyak River** | **3.04** | **260** | Pn | Pn | 23 30 12.7 | +0.2 |
| D22K | | | | IAML | | 23 31 10.2 | |
| | comp=N,140nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.08** | **186** | Pn | Pn | 23 30 13.9 | +0.8 |
| FYU | | | | IAML | | 23 31 09.5 | |
| | comp=E,176nm,0.7s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.15** | **203** | Pn | Pn | 23 30 13.7 | -0.4 |
| **B22K** | **Teshekpuk Lake** | **3.18** | **287** | Pn | Pn | 23 30 15.3 | +0.8 |
| **B21K** | **Ikpikpuk River** | **3.57** | **275** | Pn | Pn | 23 30 20.6 | +0.8 |
| B21K | | | | IAML | | 23 31 26.2 | |
| | comp=E,110nm,0.8s | | | | | | |
| **G23K** | **Bananza Creek** | **3.60** | **218** | Pn | Pn | 23 30 21.8 | +1.5 |
| G23K | | | | IAML | | 23 31 24.0 | |
| | comp=N,72nm,1.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.61** | **136** | Pn | Pn | 23 30 21.5 | +1.1 |
| G29M | | | | IAML | | 23 31 31.9 | |
| | comp=N,108nm,1.2s | | | | | | |
| **E21K** | **Killik River** | **3.64** | **256** | Pn | Pn | 23 30 20.7 | -0.1 |
| E21K | | | | IAML | | 23 31 28.7 | |
| | comp=E,113nm,1.0s | | | | | | |
| E21K | | | | IAML | | 23 31 39.8 | |
| | comp=N,91nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **4.02** | **201** | Pn | Pn | 23 30 26.6 | +0.6 |
| H24K | | | | IAML | | 23 31 33.1 | |
| | comp=N,47nm,0.7s | | | | | | |
| H24K | | | | IAML | | 23 31 45.1 | |
| | comp=E,68nm,1.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.03** | **127** | Pn | Pn | 23 30 28.0 | +1.8 |
| **H29M** | **Whitestone** | **4.11** | **143** | Pn | Pn | 23 30 29.2 | +2.0 |
| H29M | | | | IAML | | 23 31 49.8 | |
| | comp=E,78nm,1.3s | | | | | | |
| **F21K** | **Alatna River** | **4.13** | **239** | Pn | Pn | 23 30 27.8 | +0.3 |
| F21K | | | | IAML | | 23 31 43.8 | |
| | comp=E,39nm,0.7s | | | | | | |
| F21K | | | | IAML | | 23 31 53.0 | |
| | comp=N,53nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **4.14** | **103** | Pn | Pn | 23 30 29.9 | +2.3 |
| **PRP** | **Porcupine Dome** | **4.14** | **186** | Pn | Pn | 23 30 29.3 | +1.5 |
| PRP | | | | IAML | | 23 31 22.5 | |
| | comp=N,59nm,0.7s | | | | | | |
| PRP | | | | IAML | | 23 31 24.1 | |
| | comp=E,42nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.28** | **210** | Pn | Pn | 23 30 31.3 | +1.7 |
| H23K | | | | IAML | | 23 31 40.3 | |
| | comp=N,67nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.36** | **135** | Pn | Pn | 23 30 31.8 | +1.1 |
| EPYK | | | | IAML | | 23 31 56.4 | |
| | comp=E,63nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.36** | **173** | Pn | Pn | 23 30 32.5 | +1.9 |
| **B20K** | **Meade River** | **4.44** | **281** | Pn | Pn | 23 30 33.2 | +1.5 |
| **E20K** | **Nigu River** | **4.46** | **258** | | Pn | 23 30 34.5 | +2.3 |
| **I28M** | **Miner Creek** | **4.53** | **156** | Pn | Pn | 23 30 35.4 | +2.3 |
| I28M | | | | IAML | | 23 31 31.8 | |
| | comp=N,37nm,0.5s | | | | | | |
| I28M | | | | IAML | | 23 31 57.4 | |
| | comp=E,54nm,1.3s | | | | | | |
| **G21K** | **Allakaket** | **4.62** | **232** | Pn | Pn | 23 30 34.4 | +0.2 |
| G21K | | | | IAML | | 23 32 06.1 | |
| | comp=N,53nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **4.64** | **121** | Pn | Pn | 23 30 35.4 | +1.0 |
| G31M | | | | IAML | | 23 31 58.3 | |
| | comp=E,31nm,1.0s | | | | | | |
| G31M | | | | IAML | | 23 32 04.8 | |
| | comp=N,34nm,1.1s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.67** | **196** | Pn | Pn | 23 30 36.0 | +1.0 |
| POKR | | | | IAML | | 23 32 01.2 | |
| | comp=N,34nm,1.0s | | | | | | |
| POKR | | | | IAML | | 23 32 03.5 | |
| | comp=E,39nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.88** | **148** | Pn | Pn | 23 30 38.7 | +0.9 |
| I29M | | | | IAML | | 23 31 51.3 | |
| | comp=E,28nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.88** | **205** | Pn | Pn | 23 30 38.0 | +0.3 |
| I23K | | | | IAML | | 23 32 06.0 | |
| | comp=N,36nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.91** | **199** | Pn | Pn | 23 30 39.0 | +0.7 |
| MDM | | | | IAML | | 23 32 03.9 | |
| | comp=N,35nm,1.1s | | | | | | |
| MDM | | | | IAML | | 23 32 06.5 | |
| | comp=E,34nm,1.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92** | **244** | Pn | Pn | 23 30 39.7 | +1.4 |
| F20K | | | | IAML | | 23 32 16.8 | |
| | comp=E,25nm,1.1s | | | | | | |
| F20K | | | | IAML | | 23 32 19.0 | |
| | comp=N,33nm,1.1s | | | | | | |
| **COLA** | **College** | **4.95** | **197** | Pn | Pn | 23 30 39.6 | +0.8 |
| **EGAK** | **Eagle** | **5.03** | **164** | Pn | Pn | 23 30 41.4 | +1.6 |
| EGAK | | | | IAML | | 23 31 45.9 | |
| | comp=N,34nm,0.9s | | | | | | |
| EGAK | | | | IAML | | 23 32 11.4 | |
| | comp=N,35nm,1.2s | | | | | | |
| **J25K** | **Salcha River,** | **5.04** | **185** | Pn | Pn | 23 30 42.2 | +2.1 |
| J25K | | | | IAML | | 23 32 13.2 | |
| | comp=E,25nm,1.4s | | | | | | |
| J25K | | | | IAML | | 23 32 15.1 | |
| | comp=N,21nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **5.04** | **264** | Pn | Pn | 23 30 41.3 | +1.2 |
| D19K | | | | IAML | | 23 32 27.5 | |
| | comp=E,32nm,1.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.11** | **223** | Pn | Pn | 23 30 42.5 | +1.6 |
| H21K | | | | IAML | | 23 32 11.4 | |
| | comp=N,27nm,1.0s | | | | | | |
| H21K | | | | IAML | | 23 32 11.9 | |
| | comp=E,36nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.15** | **176** | Pn | Pn | 23 30 43.3 | +1.7 |
| J26L | | | | IAML | | 23 31 45.5 | |
| | comp=E,30nm,0.5s | | | | | | |
| J26L | | | | IAML | | 23 31 50.4 | |
| | comp=N,21nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.17** | **196** | Pn | Pn | 23 30 42.4 | +0.7 |
| CCB | | | | IAML | | 23 32 19.6 | |
| | comp=E,20nm,1.

| | | | | | |
|---|---|---|---|---|---|
| C18K | Utukok River | 6.07 269 | Pn | Pn | 23 30 55.0 +0.7 |
| BPAW | Bear Paw Mtn. | 6.12 208 | Pn | Pn | 23 30 54.7 -0.1 |
| H19K | Roundabout Mou | 6.17 234 | Pn | Pn | 23 30 56.5 +1.1 |
| E18K | Tukpahlearik C | 6.34 257 | Pn | Pn | 23 30 57.8 0.0 |
| K29M | Barlow Dome | 6.41 152 | Pn | Pn | 23 31 01.6 +2.7 |
| G18K | Tagagawik | 6.56 242 | Pn | Pn | 23 31 01.6 +0.7 |
| L26K | Log Cabin Wild | 6.64 176 | Pn | Pn | 23 31 02.9 +0.9 |
| J20K | Nowinta River | 6.67 220 | Pn | Pn | 23 31 02.7 +0.4 |
| L27K | Beaver Creek, | 6.67 170 | Pn | Pn | 23 31 03.1 +0.8 |
| DHY | Denali Highway | 6.68 192 | Pn | Pn | 23 31 04.1 +1.5 |
| A36M | Sachs Harbour | 6.73 61 | Pn | Pn | 23 31 05.3 +2.1 |
| RDOG | Red Dog Mine | 6.87 266 | Pn | Pn | 23 31 05.2 +0.1 |
| L29M | L29M | 7.00 156 | Pn | Pn | 23 31 08.7 +1.7 |
| M26K | Nabesna, AK | 7.27 175 | Pn | Pn | 23 31 12.6 +1.9 |
| M27K | Edge Creek, AK | 7.37 171 | Pn | Pn | 23 31 16.1 +4.0 |
| M29M | Somme Creek | 7.60 159 | Pn | Pn | 23 31 17.8 +2.6 |
| H17K | Granite Mounta | 7.61 239 | Pn | Pn | 23 31 16.6 +1.4 |
| C16K | Lisburne Hills | 7.65 270 | Pn | Pn | 23 31 16.6 +0.9 |
| FARO | Faro, Yukon | 8.67 143 | Pn | Pn | 23 31 31.1 +1.3 |
| N30M | Aishikik Lake | 8.73 156 | Pn | Pn | 23 31 33.1 +2.4 |
| L18K | Granite Mounta | 8.94 220 | Pn | Pn | 23 31 35.0 +1.4 |
| J16K | Anvik River | 9.05 233 | Pn | Pn | 23 31 37.2 +2.2 |
| J14K | Nanvaranak Lak | 10.32 237 | Pn | Pn | 23 31 53.5 +1.3 |

*NEIC* ***14*** *23:40:31.9±1.8, 69°.45N±0°.05×143°.89W±0°.07, h10km±2km, Error ellipse: s-maj=9.6km s-min=3.2km az=15.0*

**AEIC 14 23:40:30.7±2.5, 69°.35N±0°.05×144°.0W±0°.1, h1km±7km, ML2.6, ML2.8/**82(NEIC), **Error ellipse: s-maj=9.6km s-min=2.0km az=215.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.29** | **20** | | Pg | 23 40 35.8 | -0.6 |
| C27K | | | | | Sg | 23 40 38.6 | -1.5 |
| **C26K** | **Camden Bay** | **0.65** | **331** | Pg | Pg | 23 40 43.2 | 0.0 |
| C26K | | | | Sg | Sg | 23 40 51.5 | -0.1 |
| **D25K** | **Kavik River** | **0.84** | **269** | Pg | Pg | 23 40 46.2 | -0.7 |
| D25K | | | | Sg | Sg | 23 40 57.5 | -0.2 |
| **D27M** | **Malcolm River** | **1.08** | **94** | Pg | Pg | 23 40 50.7 | -0.8 |
| D27M | | | | Sg | Sg | 23 41 04.0 | -1.5 |
| D27M | | | | IAML | | 23 41 09.8 | |
| | comp=N,199nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.46** | **142** | | Pb | 23 40 58.8 | +0.1 |
| E27K | | | | | Sb | 23 41 17.7 | 0.0 |
| E27K | | | | IAML | | 23 41 22.5 | |
| | comp=N,98nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.67** | **182** | | Pg | 23 41 02.4 | -0.2 |
| F26K | | | | | Sg | 23 41 24.9 | +0.8 |
| F26K | | | | IAML | | 23 41 30.1 | |
| | comp=E,141nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.69** | **285** | Pn | Pn | 23 41 01.9 | +0.5 |
| C24K | | | | Sn | Sb | 23 41 24.7 | +0.3 |
| C24K | | | | IAML | | 23 41 31.9 | |
| | comp=E,77nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.73** | **266** | Pn | Pg | 23 41 03.6 | -0.2 |
| D24K | | | | IAML | | 23 41 31.6 | |
| | comp=N,96nm,0.8s | | | | | | |
| D24K | | | | IAML | | 23 41 34.1 | |
| | comp=E,96nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.78** | **113** | Pn | Pb | 23 41 04.0 | -0.1 |
| E28M | | | | IAML | | 23 41 36.8 | |
| | comp=N,65nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **1.87** | **200** | Pn | Pn | 23 41 02.7 | -1.1 |
| F25K | | | | IAML | | 23 41 37.3 | |
| | comp=N,87nm,0.3s | | | | | | |
| F25K | | | | IAML | | 23 41 38.0 | |
| | comp=E,69nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.08** | **234** | Pn | Pn | 23 41 07.3 | +0.5 |
| **TOLK** | **Toolik Lake Re** | **2.13** | **253** | Pn | Pn | 23 41 05.8 | -1.7 |
| TOLK | | | | IAML | | 23 41 46.7 | |
| | comp=N,45nm,0.6s | | | | | | |
| **F28M** | **Old Crow** | **2.32** | **137** | Pn | Pn | 23 41 10.4 | +0.4 |
| **F24K** | **Squaw Lake** | **2.33** | **220** | Pn | Pn | 23 41 10.0 | -0.3 |
| F24K | | | | IAML | | 23 42 39.4 | |
| | comp=N,43nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **2.37** | **285** | Pn | Pn | 23 41 11.0 | +0.3 |
| **E29M** | **Blow River** | **2.41** | **111** | Pn | Pn | 23 41 12.2 | +0.9 |
| E29M | | | | IAML | | 23 41 52.3 | |
| | comp=N,45nm,0.6s | | | | | | |
| E29M | | | | IAML | | 23 41 53.4 | |
| | comp=E,45nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.42** | **264** | Pn | Pn | 23 41 12.1 | +0.7 |
| D23K | | | | IAML | | 23 42 41.1 | |
| | comp=E,41nm,0.9s | | | | | | |
| D23K | | | | IAML | | 23 42 43.0 | |
| | comp=N,45nm,1.0s | | | | | | |
| **E23K** | **Chandalar** | **2.43** | **240** | Pn | Pn | 23 41 10.4 | -1.2 |
| E23K | | | | IAML | | 23 42 40.6 | |
| | comp=E,43nm,0.6s | | | | | | |
| E23K | | | | IAML | | 23 42 43.3 | |
| | comp=N,48nm,0.8s | | | | | | |
| **G27K** | **Doyon Strip** | **2.70** | **160** | Pn | Pn | 23 41 16.1 | +0.8 |
| **G25K** | **Bearman Lake** | **2.71** | **198** | | Pb | 23 41 18.4 | -1.6 |
| **G24K** | **Hadweenzic Riv** | **2.97** | **208** | Pn | Pn | 23 41 19.2 | +0.3 |
| G24K | | | | IAML | | 23 43 00.1 | |
| | comp=N,35nm,0.6s | | | | | | |
| G24K | | | | IAML | | 23 43 06.3 | |
| | comp=E,36nm,1.2s | | | | | | |
| **D22K** | **Ayikyak River** | **3.15** | **265** | Pn | Pn | 23 41 22.0 | +0.6 |
| **G29M** | **Pine Creek** | **3.32** | **135** | Pn | Pn | 23 41 24.2 | +0.5 |
| **B22K** | **Teshekpuk Lake** | **3.41** | **291** | Pn | Pn | 23 41 25.0 | +0.1 |
| **B21K** | **Ikpikpuk River** | **3.75** | **279** | Pn | Pn | 23 41 30.3 | +0.8 |
| **H29M** | **Whitestone** | **3.80** | **143** | Pn | Pn | 23 41 30.4 | +0.1 |
| H29M | | | | IAML | | 23 43 50.1 | |
| | comp=N,17nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.83** | **205** | Pn | Pn | 23 41 30.4 | -0.4 |
| H24K | | | | IAML | | 23 43 36.6 | |
| | comp=E,19nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.90** | **189** | Pn | Pn | 23 41 33.6 | +1.9 |
| PRP | | | | IAML | | 23 42 39.7 | |
| | comp=E,9.9nm,0.5s | | | | | | |
| PRP | | | | IAML | | 23 43 16.9 | |
| | comp=N,13nm,0.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.07** | **134** | Pn | Pn | 23 41 34.3 | +0.3 |
| **F21K** | **Alatna River** | **4.12** | **243** | Pn | Pn | 23 41 35.9 | +1.2 |
| F21K | | | | IAML | | 23 43 35.6 | |
| | comp=E,17nm,0.8s | | | | | | |
| F21K | | | | IAML | | 23 43 38.6 | |
| | comp=N,15nm,0.9s | | | | | | |
| **H23K** | **Yukon River** | **4.13** | **214** | Pn | Pn | 23 41 38.2 | +3.4 |
| **I28M** | **Miner Creek** | **4.22** | **156** | Pn | Pn | 23 41 38.8 | +2.6 |
| **B20K** | **Meade River** | **4.63** | **284** | Pn | Pn | 23 41 41.6 | -0.2 |
| **I23K** | **Minto, Yukon-K** | **4.71** | **209** | Pn | Pn | 23 41 45.7 | +3.0 |
| I23K | | | | IAML | | 23 44 16.0 | |
| | comp=N,9.1nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.71** | **202** | Pn | Pn | 23 41 44.9 | +2.1 |
| **EGAK** | **Eagle** | **4.73** | **165** | Pn | Pn | 23 41 44.5 | +1.5 |
| **J25K** | **Salcha River,** | **4.79** | **187** | Pn | Pn | 23 41 46.1 | +2.1 |
| J25K | | | | IAML | | 23 43 06.3 | |
| | comp=E,6.5nm,0.5s | | | | | | |
| J25K | | | | IAML | | 23 43 08.7 | |
| | comp=N,6.5nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **4.88** | **178** | Pn | Pn | 23 41 48.2 | +3.0 |
| J26L | | | | IAML | | 23 42 47.7 | |
| | comp=E,5.2nm,0.3s | | | | | | |
| J26L | | | | IAML | | 23 42 47.9 | |
| | comp=N,5.2nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **4.96** | **199** | Pn | Pn | 23 41 48.2 | +2.1 |
| CCB | | | | IAML | | 23 44 14.4 | |
| | comp=E,4.7nm,0.6s | | | | | | |
| **MLY** | **Manley** | **5.07** | **214** | Pn | Pn | 23 41 50.0 | +2.3 |
| MLY | | | | IAML | | 23 43 43.7 | |
| | comp=N,4.7nm,1.4s | | | | | | |
| MLY | | | | IAML | | 23 44 16.0 | |
| | comp=E,7.0nm,1.4s | | | | | | |
| **I30M** | **Mount Dempster** | **5.09** | **141** | Pn | Pn | 23 41 49.2 | +1.1 |
| I30M | | | | IAML | | 23 42 48.6 | |
| | comp=N,6.1nm,0.5s | | | | | | |
| I30M | | | | IAML | | 23 43 47.1 | |
| | comp=E,7.9nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.17** | **267** | Pn | Pn | 23 41 50.1 | +1.0 |
| D19K | | | | IAML | | 23 44 15.2 | |
| | comp=E,7.7nm,1.5s | | | | | | |
| **K27K** | **Chicken** | **5.40** | **171** | Pn | Pn | 23 41 55.0 | +2.7 |
| **C19K** | **Lookout Ridge** | **5.55** | **275** | Pn | Pn | 23 41 55.0 | +0.6 |
| **C18K** | **Utukok River** | **6.22** | **272** | Pn | Pn | 23 42 04.0 | +0.5 |
| **L26K** | **Log Cabin Wild** | **6.36** | **177** | Pn | Pn | 23 42 07.8 | +2.3 |

*NEIC* ***14*** *23:41:23.1±1.6, 69°.56N±0°.04×144°.39W±0°.06, h10km±1km, Error ellipse: s-maj=6.5km s-min=3.7km az=341.0*

**AEIC 14 23:41:22.2±2.6, 69°.49N±0°.04×144°.43W±0°.08, h2km±6km, ML2.5, ML2.8/**36(NEIC), **Error ellipse: s-maj=5.7km s-min=3.9km az=206.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.29** | **61** | | Pg | 23 41 27.4 | -0.4 |
| C27K | | | | Sg | Sg | 23 41 31.1 | -0.4 |
| **C26K** | **Camden Bay** | **0.47** | **339** | Pg | Pg | 23 41 30.7 | -0.4 |
| C26K | | | | Sg | Sg | 23 41 36.8 | -0.3 |
| **D25K** | **Kavik River** | **0.71** | **257** | Pg | Pg | 23 41 35.5 | -0.2 |
| **D27M** | **Malcolm River** | **1.25** | **100** | Pg | Pb | 23 41 46.7 | 0.0 |
| D27M | | | | | Sn | 23 42 04.1 | -0.2 |
| D27M | | | | IAML | | 23 42 09.4 | |
| | comp=E,130nm,0.7s | | | | | | |
| D27M | | | | IAML | | 23 42 09.5 | |
| | comp=N,141nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **281** | Pn | Pn | 23 41 50.0 | -0.4 |
| C24K | | | | | Sn | 23 42 10.2 | -0.5 |
| **D24K** | **Happy Valley** | **1.60** | **260** | Pn | Pn | 23 41 51.9 | +0.4 |
| D24K | | | | | Sn | 23 42 13.9 | +0.5 |
| **E27K** | **Coleen River** | **1.66** | **140** | Pn | Pn | 23 41 52.6 | +0.1 |
| E27K | | | | | Sn | 23 42 15.5 | 0.0 |
| E27K | | | | IAML | | 23 42 18.4 | |
| | comp=N,74nm,1.2s | | | | | | |
| E27K | | | | IAML | | 23 42 19.2 | |
| | comp=E,95nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **1.95** | **194** | Pn | Pn | 23 41 57.1 | +0.7 |
| F25K | | | | IAML | | 23 42 30.1 | |
| | comp=N,70nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.97** | **114** | Pn | Pn | 23 41 56.0 | -0.7 |
| E28M | | | | | Sn | 23 42 23.5 | -0.3 |
| **H24K** | **Noodor Dome** | **3.90** | **201** | Pn | Pn | 23 42 20.2 | -2.9 |
| H24K | | | | IAML | | 23 43 32.4 | |
| | comp=N,16nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.23** | **173** | Pn | Pn | 23 42 26.1 | -1.6 |
| **I28M** | **Miner Creek** | **4.41** | **155** | Pn | Pn | 23 42 29.0 | -1.3 |
| I28M | | | | IAML | | 23 43 56.6 | |
| | comp=E,9.6nm,1.2s | | | | | | |
| I28M | | | | IAML | | 23 43 59.9 | |
| | comp=N,8.5nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.76** | **206** | Pn | Pn | 23 42 36.1 | +1.2 |
| I23K | | | | IAML | | 23 43 10.2 | |
| | comp=E,7.8nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.78** | **200** | Pn | Pn | 23 42 36.6 | +1.3 |
| MDM | | | | IAML | | 23 43 58.0 | |
| | comp=N,7.8nm,1.3s | | | | | | |
| MDM | | | | IAML | | 23 44 02.3 | |
| | comp=E,7.9nm,0.9s | | | | | | |
| **IL31** | | **4.83** | **193** | Pn | Pn | 23 42 35.2 | -0.7 |
| **F20K** | **Avaraart Lake** | **4.86** | **245** | Pn | Pn | 23 42 39.4 | +3.2 |
| F20K | | | | IAML | | 23 44 19.5 | |
| | comp=E,5.8nm,1.3s | | | | | | |
| **EGAK** | **Eagle** | **4.90** | **163** | Pn | Pn | 23 42 37.6 | +0.8 |
| EGAK | | | | IAML | | 23 44 17.0 | |
| | comp=E,6.9nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 23 44 19.4 | |
| | comp=E,8.2nm,1.4s | | | | | | |
| **J25K** | **Salcha River,** | **4.91** | **185** | Pn | Pn | 23 42 39.5 | +2.4 |
| J25K | | | | IAML | | 23 43 12.7 | |
| | comp=E,5.9nm,0.8s | | | | | | |
| J25K | | | | IAML | | 23 43 25.4 | |
| | comp=N,4.9nm,1.2s | | | | | | |
| **WRH** | **Wood River Hil** | **5.24** | **198** | Pn | Pn | 23 42 42.3 | +0.8 |
| WRH | | | | IAML | | 23 43 23.1 | |
| | comp=E,6.2nm,0.8s | | | | | | |
| WRH | | | | IAML | | 23 43 46.4 | |
| | comp=N,5.9nm,0.9s | | | | | | |
| **SCRK** | **Sand Creek** | **5.54** | **178** | Pn | Pn | 23 42 46.3 | +0.5 |
| **K27K** | **Chicken** | **5.56** | **169** | Pn | Pn | 23 42 47.4 | +1.5 |
| **F19K** | **Shaleruckik Mo** | **5.64** | **248** | Pn | Pn | 23 42 47.5 | +0.4 |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **209** | Pn | Pn | 23 42 52.8 | +0.9 |
| **C18K** | **Utukok River** | **6.06** | **270** | Pn | Pn | 23 42 52.7 | -0.2 |
| **E18K** | **Tukpahlearik C** | **6.30** | **258** | Pn | Pn | 23 42 57.6 | +1.5 |
| **G18K** | **Tagagawik** | **6.50** | **243** | Pn | Pn | 23 43 00.3 | +1.5 |
| **L26K** | **Log Cabin Wild** | **6.50** | **176** | Pn | Pn | 23 43 01.5 | +2.6 |
| **L27K** | **Beaver Creek,** | **6.54** | **170** | Pn | Pn | 23 43 01.3 | +1.9 |
| **MENT** | **Mentasta** | **6.58** | **177** | Pn | Pn | 23 42 59.5 | -0.5 |
| **F17K** | **Baldwin Pennin** | **7.02** | **252** | Pn | Pn | 23 43 06.0 | +0.2 |
| **N30M** | **Aishikik Lake** | **8.61** | **156** | Pn | Pn | 23 43 29.1 | +1.3 |

*IDC* ***14*** *23:46:18.7±6.7, 69°.88N×145°.27W, h0km, mb3.3/1, mbtmp3.2/4, ML3.1/3, Error ellipse: s-maj=93.6km s-min=31.2km az=139.0*

*NEIC* ***14*** *23:46:22.0±1.4, 69°.60N±0°.07×144°.4W±0°.1, h6km±7km, Error ellipse: s-maj=9.7km s-min=4.7km az=194.0*

*AEIC* ***14*** *23:46:21.9±1.3, 69°.52N±0°.06×144°.5W±0°.1, h13km±6km, ML3.1, ML3.2/114(NEIC), Error ellipse: s-maj=8.4km s-min=5.4km az=197.0*

**ISC 14 23:46:22.2±0.8, 69°.57N±0°.05×144°.47W±0°.03, h14km, n110, σ1ş45/**116**, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.27** | **78** | | **Pg** | **23 46 27.0** | **-0.9** |
| C27K | | | | | **Sg** | **23 46 31.1** | **-0.7** |
| **C26K** | **Camden Bay** | **0.38** | **336** | Pg | **Pg** | **23 46 30.0** | **+0.2** |
| C26K | | | | Sg | **Sg** | **23 46 36.1** | **-0.3** |
| **D25K** | **Kavik River** | **0.72** | **250** | Pg | **Pg** | **23 46 34.2** | **-2.0** |
| D25K | | | | Sg | **Sg** | **23 46 43.4** | **-2.1** |
| **D27M** | **Malcolm River** | **1.28** | **103** | Pn | **Pn** | **23 46 44.4** | **-1.3** |
| D27M | | | | IAML | | 23 47 06.9 | |
| | comp=N,380nm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.49** | **278** | Pn | **Pn** | **23 46 49.2** | **+0.8** |
| C24K | | | | | **Sb** | **23 47 09.2** | **+1.0** |
| C24K | | | | IAML | | 23 47 14.3 | |
| | comp=N,470nm,0.8s | | | | | | |
| C24K | | | | IAML | | 23 47 19.4 | |
| | comp=E,434nm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.60** | **257** | | **Pn** | **23 46 51.3** | **+1.4** |
| **E27K** | **Coleen River** | **1.74** | **142** | Pn | **Pn** | **23 46 52.9** | **+1.0** |
| E27K | | | | IAML | | 23 47 21.7 | |
| | comp=E,210nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **176** | Pn | **Pn** | **23 46 55.0** | **+1.0** |
| F26K | | | | IAML | | 23 47 22.5 | |
| | comp=E,226nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.02** | **116** | Pn | **Pn** | **23 46 57.3** | **+1.5** |
| **F25K** | **Christian Rive** | **2.03** | **193** | Pn | **Pn** | **23 46 56.8** | **+0.7** |
| F25K | | | | IAML | | 23 47 29.4 | |
| | comp=N,183nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.06** | **245** | Pn | **Pb** | **23 46 58.6** | **-0.6** |
| TOLK | | | | IAML | | 23 47 32.0 | |
| | comp=E,268nm,0.9s | | | | | | |
| TOLK | | | | IAML | | 23 47 33.9 | |
| | comp=N,206nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **226** | Pn | **Pn** | **23 46 57.0** | **+0.2** |
| E24K | | | | IAML | | 23 47 29.8 | |
| | comp=N,143nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **2.16** | **280** | Pn | **Pn** | **23 46 58.8** | **+1.2** |
| **D23K** | **Nanushuk River** | **2.29** | **258** | Pn | **Pn** | **23 47 00.8** | **+1.3** |
| D23K | | | | IAML | | 23 47 48.3 | |
| | comp=N,152nm,0.9s | | | | | | |
| D23K | | | | IAML | | 23 47 51.0 | |
| | comp=E,197nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.41** | **233** | Pn | **Pn** | **23 47 02.4** | **+1.2** |
| E23K | | | | IAML | | 23 47 42.7 | |
| | comp=N,118nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **213** | Pn | **Pn** | **23 47 02.1** | **+0.9** |
| **F28M** | **Old Crow** | **2.59** | **137** | Pn | **Pn** | **23 47 04.0** | **+0.4** |
| F28M | | | | IAML | | 23 47 48.9 | |
| | comp=N,132nm,0.9s | | | | | | |
| F28M | | | | IAML | | 23 47 52.5 | |
| | comp=E,98nm,1.1s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.65** | **174** | | **Pn** | **23 47 05.5** | **+1.2** |
| **E29M** | **Blow River** | **2.65** | **114** | Pn | **Pn** | **23 47 04.9** | **+0.5** |
| E29M | | | | IAML | | 23 47 50.2 | |
| | comp=N,118nm,0.7s | | | | | | |
| E29M | | | | IAML | | 23 47 52.7 | |
| | comp=E,96nm,0.7s | | | | | | |
| **G25K** | **Bearman Lake** | **2.88** | **193** | | **Pn** | **23 47 08.8** | **+1.2** |
| **G27K** | **Doyon Strip** | **2.97** | **158** | Pn | **Pn** | **23 47 09.6** | **+0.8** |
| **D22K** | **Ayikyak River** | **3.01** | **261** | Pn | **Pn** | **23 47 11.2** | **+1.9** |
| **FYU** | **Fort Yukon** | **3.03** | **186** | Pn | **Pn** | **23 47 10.8** | **+1.2** |
| FYU | | | | IAML | | 23 48 04.2 | |
| | comp=E,97nm,0.9s | | | | | | |
| FYU | | | | IAML | | 23 48 06.5 | |
| | comp=N,86nm,1.3s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.10** | **203** | Pn | **Pn** | **23 47 10.7** | **+0.1** |
| G24K | | | | IAML | | 23 47 59.5 | |
| | comp=N,76nm,0.6s | | | | | | |
| G24K | | | | IAML | | 23 48 04.1 | |
| | comp=E,77nm,0.9s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.18** | **288** | Pn | **Pn** | **23 47 13.3** | **+1.7** |
| **H25L** | **Birch Creek** | **3.36** | **189** | | **Pn** | **23 47 15.7** | **+1.5** |

| | | | | | |
|---|---|---|---|---|---|
| H27K | Steamboat Moun | 3.54 160 | | Pn | 23 47 18.8 +2.2 |
| G23K | Bananza Creek | 3.54 218 | Pn | Pn | 23 47 17.6 +0.9 |
| G23K | | | IAML | | 23 48 19.9 |
| | comp=N,58nm,0.9s | | | | |
| B21K | Ikpikpuk River | 3.55 276 | Pn | Pn | 23 47 18.5 +1.7 |
| G29M | Pine Creek | 3.59 135 | Pn | Pn | 23 47 18.3 +0.9 |
| E21K | Killik River | 3.60 256 | Pn | Pn | 23 47 19.1 +1.5 |
| E21K | | | IAML | | 23 48 21.5 |
| | comp=E,68nm,1.0s | | | | |
| F30M | Barrier River | 3.74 118 | | Pn | 23 47 21.9 +2.5 |
| H24K | Noodor Dome | 3.97 201 | Pn | Pn | 23 47 23.3 +0.8 |
| H24K | | | IAML | | 23 48 31.8 |
| | comp=N,32nm,0.9s | | | | |
| H24K | | | IAML | | 23 48 37.1 |
| | comp=E,31nm,1.5s | | | | |
| G30M | tAoh Zraii Nji | 4.02 126 | Pn | Pn | 23 47 24.4 +1.1 |
| G30M | | | IAML | | 23 48 11.9 |
| | comp=N,28nm,0.9s | | | | |
| G30M | | | IAML | | 23 48 40.3 |
| | comp=E,28nm,1.1s | | | | |
| H29M | Whitestone | 4.08 143 | Pn | Pn | 23 47 25.4 +1.3 |
| H29M | | | IAML | | 23 48 42.9 |
| | comp=N,38nm,1.0s | | | | |
| F21K | Alatna River | 4.08 239 | Pn | Pn | 23 47 25.5 +1.4 |
| F21K | | | IAML | | 23 48 38.0 |
| | comp=N,32nm,1.1s | | | | |
| F21K | | | IAML | | 23 48 39.3 |
| | comp=E,42nm,1.1s | | | | |
| PRP | Porcupine Dome | 4.09 186 | Pn | Pn | 23 47 25.4 +1.0 |
| PRP | | | IAML | | 23 48 15.7 |
| | comp=E,25nm,0.8s | | | | |
| PRP | | | IAML | | 23 48 17.5 |
| | comp=N,31nm,0.8s | | | | |
| I27K | Kandik River | 4.13 163 | | Pn | 23 47 26.7 +1.8 |
| INK | Inuvik | 4.15 103 | Pn | Pn | 23 47 26.4 +1.5 |
| | comp=N,0.7nm,0.3s,baz=301,slow=12,SNR=2.0 | | | | |
| INK | | | Sn | Sn | 23 48 11.8 -1.3 |
| | comp=N,1.3nm,0.3s,baz=38,slow=8.2,SNR=2.4 | | | | |
| | comp=N,2.0nm,0.3s | | | | |
| H23K | Yukon River | 4.23 210 | Pn | Pn | 23 47 26.9 +0.8 |
| I26K | Coal Creek Min | 4.32 173 | Pn | Pn | 23 47 27.9 +0.7 |
| I26K | | | IAML | | 23 48 39.1 |
| | comp=E,31nm,0.7s | | | | |
| EPYK | Eagle Plains | 4.34 134 | Pn | Pn | 23 47 28.4 +0.8 |
| B20K | Meade River | 4.42 282 | Pn | Pn | 23 47 30.5 +1.8 |
| D20K | Etivluk River | 4.43 264 | | Pn | 23 47 31.2 +2.4 |
| E20K | Nigu River | 4.43 258 | | Pn | 23 47 32.0 +3.1 |
| I28M | Miner Creek | 4.49 155 | Pn | Pn | 23 47 30.4 +0.6 |
| I28M | | | IAML | | 23 48 48.8 |
| | comp=E,22nm,1.3s | | | | |
| I28M | | | IAML | | 23 48 52.1 |
| | comp=N,19nm,0.9s | | | | |
| G21K | Allakaket | 4.57 232 | Pn | Pn | 23 47 31.4 +0.6 |
| G21K | | | IAML | | 23 48 56.2 |
| | comp=N,33nm,1.5s | | | | |
| POKR | Poker Plat Res | 4.62 196 | Pn | Pn | 23 47 31.9 +0.4 |
| POKR | | | IAML | | 23 48 29.6 |
| | comp=E,20nm,0.7s | | | | |
| G31M | Satah River | 4.63 120 | Pn | Pn | 23 47 32.3 +0.7 |
| G31M | | | IAML | | 23 48 52.2 |
| | comp=N,32nm,1.1s | | | | |
| I23K | Minto, Yukon-K | 4.83 205 | Pn | Pn | 23 47 35.1 +0.8 |
| I23K | | | IAML | | 23 49 05.3 |
| | comp=E,16nm,1.2s | | | | |
| I23K | | | IAML | | 23 49 09.4 |
| | comp=N,24nm,1.5s | | | | |
| I29M | Ogilvie Camp, | 4.85 148 | Pn | Pn | 23 47 34.9 +0.3 |
| MDM | Murphy Dome | 4.86 199 | Pn | Pn | 23 47 35.2 +0.5 |
| MDM | | | IAML | | 23 48 57.7 |
| | comp=N,16nm,0.7s | | | | |
| MDM | | | IAML | | 23 49 02.1 |
| | comp=E,21nm,0.8s | | | | |
| F20K | Avaraart Lake | 4.88 244 | Pn | Pn | 23 47 36.1 +1.1 |
| F20K | | | IAML | | 23 49 16.5 |
| | comp=N,22nm,1.1s | | | | |
| F20K | | | IAML | | 23 49 16.7 |
| | comp=E,14nm,1.4s | | | | |
| IL31 | | 4.91 192 | Pn | Pn | 23 47 37.1 +1.7 |
| ILAR | Eielson Array | 4.91 192 | Pn | Pn | 23 47 36.8 +1.3 |
| | comp=E,0.8nm,0.3s,baz=5.5,slow=13,SNR=23 | | | | |
| ILAR | | | Sn | Sn | 23 48 32.6 +0.6 |
| | comp=E,0.8nm,0.3s,baz=3.3,slow=17,SNR=4.4 | | | | |
| ILAR | | | Lg | Lg | 23 48 52.0 |
| | comp=E,0.7nm,0.3s,baz=18,slow=24,SNR=5.2 | | | | |
| | comp=E,3.0nm,0.6s | | | | |
| EGAK | Eagle | 4.99 163 | Pn | Pn | 23 47 37.7 +1.3 |
| EGAK | | | IAML | | 23 49 15.9 |
| | comp=E,15nm,0.9s | | | | |
| EGAK | | | IAML | | 23 49 18.7 |
| | comp=E,19nm,1.3s | | | | |
| J25K | Salcha River, | 4.99 184 | Pn | Pn | 23 47 38.0 +1.3 |
| D19K | Kuna River | 5.02 264 | Pn | Pn | 23 47 38.1 +1.1 |
| D19K | | | IAML | | 23 49 25.9 |
| | comp=E,18nm,1.0s | | | | |
| H21K | Melozitna River | 5.06 223 | Pn | Pn | 23 47 38.9 +1.4 |
| H21K | | | IAML | | 23 49 13.5 |
| | comp=E,21nm,1.2s | | | | |
| H21K | | | IAML | | 23 49 16.5 |
| | comp=N,18nm,0.9s | | | | |
| J26L | Joseph Creek | 5.11 176 | Pn | Pn | 23 47 39.1 +0.9 |
| J26L | | | IAML | | 23 49 12.8 |
| | comp=E,13nm,1.0s | | | | |
| CCB | Clear Creek Bu | 5.12 196 | Pn | Pn | 23 47 39.0 +0.8 |
| CCB | | | IAML | | 23 49 14.3 |
| | comp=E,12nm,0.9s | | | | |
| E19K | Redstone River | 5.15 252 | Pn | Pn | 23 47 40.5 +1.8 |
| MLY | Manley | 5.17 211 | Pn | Pn | 23 47 40.1 +1.1 |
| MLY | | | IAML | | 23 49 15.4 |
| | comp=E,18nm,1.5s | | | | |
| HDA | Harding Lake | 5.28 192 | Pn | Pn | 23 47 41.2 +0.7 |
| HDA | | | IAML | | 23 49 14.1 |
| | comp=N,13nm,0.9s | | | | |
| HDA | | | IAML | | 23 49 22.8 |
| | comp=E,16nm,1.3s | | | | |
| NEA2 | Nenana | 5.31 202 | Pn | Pn | 23 47 41.5 +0.6 |
| WRH | Wood River Hil | 5.32 197 | Pn | Pn | 23 47 42.0 +1.0 |
| WRH | | | IAML | | 23 49 15.4 |
| | comp=E,12nm,0.8s | | | | |
| I30M | Mount Dempster | 5.37 141 | Pn | Pn | 23 47 42.6 +0.8 |
| I30M | | | IAML | | 23 48 45.3 |
| | comp=E,16nm,0.5s | | | | |
| I30M | | | IAML | | 23 49 10.9 |
| | comp=N,11nm,1.3s | | | | |
| C19K | Lookout Ridge | 5.37 272 | Pn | Pn | 23 47 43.1 +1.3 |
| C19K | | | IAML | | 23 48 47.3 |
| | comp=E,15nm,0.5s | | | | |
| C19K | | | IAML | | 23 48 47.8 |
| | comp=N,16nm,1.1s | | | | |
| SCRK | Sand Creek | 5.62 178 | Pn | Pn | 23 47 46.7 +1.3 |
| K27K | Chicken | 5.65 169 | Pn | Pn | 23 47 46.3 +0.8 |
| F19K | Shaleruckik Mo | 5.66 247 | Pn | Pn | 23 47 47.6 +1.8 |
| G19K | Purcell Mounta | 5.88 240 | Pn | Pn | 23 47 49.8 +1.1 |
| DAWY | Dawson | 5.88 158 | Pn | Pn | 23 47 50.0 +1.2 |
| J30M | Hart River | 5.94 144 | Pn | Pn | 23 47 50.2 +0.5 |
| DOT | Dot Lake | 5.95 178 | | Pn | 23 47 51.5 +1.7 |
| C18K | Utukok River | 6.05 269 | Pn | Pn | 23 47 52.1 +1.0 |
| BPAW | Bear Paw Mtn. | 6.06 208 | Pn | Pn | 23 47 51.7 +0.4 |
| E18K | Tukpahlearik C | 6.31 258 | Pn | Pn | 23 47 56.2 +1.7 |
| K29M | Barlow Dome | 6.38 151 | Pn | Pn | 23 47 57.4 +1.8 |
| F18K | Selawik | 6.41 250 | | Pn | 23 47 57.8 +

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M19K | Big River Lodg | 8.70 | 213 | Pn | | Pn | 23 48 29.0 | +1.6 |
| MMPY | Sheldon Lake, | 8.78 | 136 | Pn | | Pn | 23 48 29.8 | +1.3 |
| L18K | Granite Mounta | 8.89 | 220 | Pn | | Pn | 23 48 30.9 | +0.9 |
| M17K | Holitna River | 9.79 | 219 | Pn | | Pn | 23 48 42.5 | +0.2 |
| YKA | Yellowknife Ar | 13.91 | 106 | Pn | | Pn | 23 49 37.7 | -0.9 |
| | comp=N,0.1nm,0.3s,baz=319,slow=16,SNR=1.8 | | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | | |
| PDAR | Pinedale Array | 32.27 | 128 | P | | P | 23 52 52.5 | +2.2 |
| | comp=N,0.1nm,0.3s,baz=328,slow=3.3,SNR=1.6 | | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | | |

*UPA* ***14*** *23:49:51.3±0.7,4.7S9.2×82.98W, h1km±9km, MW4.9*
*IDC* ***14*** *23:49:54.9±0.5,4.90N×82.53W, h0km, mb4.6/21, mbtmp4.7/26, ML4.8/4, MS4.2/52, Error ellipse: s-maj=22.9km s-min=10.2km az=62.0*
*MOS* ***14*** *23:49:55.4±1.6,4.93N×82.60W, h10km, mb5.2/29, Error ellipse: s-maj=12.3km s-min=5.9km az=108.2*
*UCR* ***14*** *23:49:55.6±1.7,4.93N×82.73W, h8km±108km, MW4.8*
*NEIC* ***14*** *23:49:57.1±2.0,4.93N±0.06×82.51W±0.07, h10km±1km, mb5.0/439, Error ellipse: s-maj=12.5km s-min=9.6km az=248.0*
*CATAC* ***14*** *23:49:59.1±0.7,5.17N×82.51W, h8km±9km, MB5.7, ML5.6*
*GCMT* ***14*** *23:50:01.1±0.1,4.85N±0.01×82.62W±0.01, h19km, MW5.2/138, Moment Tensor Solution. s87,c138; s138,c253; Duration: 1s0 Moment tensor: Scale 10¹⁶ Nm; Mrr-0.17±.12; Mθθ0.86±.10; Mϕϕ-0.69±.13; Mrθ0.60±.21; Mϕ7.93±.10; Mϕr0.66±.24; Best double couple: M₀8.01500×10¹⁶ NP1:ϕs3.00000°, δ86.00000°, λ175.00000°. NP2:ϕs93.00000°, δ85.00000°, λ4.00000°. Principal axes: T 8.1460, Plg6.0000°, Azm318.0000°; N -0.2620, Plg84.0000°, Azm143.0000°; P -7.8850, Plg1.0000°, Azm48.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 14 23:49:56.7**±0.3,**4.89N**±0.04×**82.63W**±0.04,**h12km**,**n940**, σ1s34/773,**mb5.0**/244,**MS4.2**/48,**17C-15D,South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CACAO | **El Cacao, Vera** | **3.00** | **36** | *eP* | **Pn** | **23 50 42.6** | **-1.5** |
| MARI3 | **Mariato, Verag** | **3.18** | **31** | *eP* | **Pn** | **23 50 45.7** | **-0.9** |
| PTPM | **Petroterminale** | **3.30** | **356** | *eP* | **Pn** | **23 50 45.3** | **-2.9** |
| PTPM | | | | *eS* | **Sn** | **23 51 25.9** | **-1.5** |
| NANC3 | **Nancito, Chiri** | **3.44** | **15** | *eP* | **Pn** | **23 50 48.6** | **-1.5** |
| PEDE3 | **Pedregal, Chir** | **3.47** | **3** | *eP* | **Pn** | **23 50 48.3** | **-2.3** |
| ACHO3 | **Achotines, Los** | **3.50** | **44** | *eP* | **Pn** | **23 50 51.4** | **+0.5** |
| LOCO3 | **Loma Colorada,** | **3.50** | **3** | *eP* | **Pn** | **23 50 48.7** | **-2.2** |
| LOMA3 | **Las Lomas, Chi** | **3.52** | **4** | *eP* | **Pn** | **23 50 48.9** | **-2.3** |
| DVD | **David** | **3.52** | **3** | *eP* | **Pn** | **23 50 48.7** | **-2.6** |
| DVD | | | | *eS* | **Sn** | **23 51 31.6** | **-1.3** |
| MESA3 | **La Mesa, Verag** | **3.54** | **24** | *eP* | **Pn** | **23 50 50.5** | **-0.9** |
| STIA3 | **Santiago, Vera** | **3.58** | **27** | *eP* | **Pn** | **23 50 51.2** | **-0.9** |
| PESE3 | **Pese, Herrera** | **3.60** | **34** | *eP* | **Pn** | **23 50 51.6** | **-0.8** |
| CDITO | **Canoas** | **3.66** | **356** | *ǁiP* | **Pn** | **23 50 51.0** | **-2.2** |
| CDITO | | | | *i* S | **Sn** | **23 51 34.0** | **-2.4** |
| CDITO | | | | IAML | | 23 51 37.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| PEDA3 | **Pedasi** | **3.68** | **45** | *eP* | **Pn** | **23 50 53.0** | **-0.4** |
| PTJ1 | **Puerto Jimnez** | **3.68** | **350** | *i* P | **Pn** | **23 50 51.5** | **-1.9** |
| PTJ1 | | | | IAML | | 23 50 53.7 | |
| | comp=Z,12μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | **Sn** | **23 51 34.3** | **-2.5** |
| PTJ1 | **Puerto Jimnez** | **3.68** | **350** | *eP* | **Pn** | **23 50 49.6** | **-3.8** |
| PTJ1 | | | | *eS* | **Sn** | **23 51 34.5** | **-2.2** |
| PTJ1 | **Puerto Jimnez** | **3.68** | **350** | *eP* | **Pn** | **23 50 51.4** | **-2.0** |
| PTJ1 | | | | *eS* | **Sn** | **23 51 35.3** | **-1.4** |
| JIME | **Puerto Jimenez** | **3.69** | **349** | *eP* | **Pn** | **23 50 51.6** | **-1.9** |
| JIME | | | | *eS* | **Sn** | **23 51 36.3** | **-0.6** |
| AZU | **Azuero** | **3.71** | **39** | *eP* | **Pn** | **23 50 54.0** | **+0.2** |
| AZU | **Azuero** | **3.71** | **39** | *eP* | **Pn** | **23 50 52.2** | **-1.6** |
| PCRI3 | **Pocri, Los San** | **3.71** | **42** | *eP* | **Pn** | **23 50 53.6** | **-0.2** |
| FITO | **Golfito** | **3.74** | **352** | *eP* | **Pn** | **23 50 51.7** | **-2.6** |
| NELY | **Ciudad Neily** | **3.75** | **355** | *eP* | **Pn** | **23 50 52.6** | **-1.7** |
| CHIT3 | **Chitre** | **3.75** | **36** | *eP* | **Pn** | **23 50 53.5** | **-0.9** |
| EDAD | **Golfito** | **3.77** | **352** | *eP* | **Pn** | **23 50 52.2** | **-2.5** |
| BCO2 | **Palmira** | **3.80** | **1** | *eP* | **Pn** | **23 50 53.3** | **-1.9** |
| BCO2 | | | | *eS* | **Sn** | **23 51 39.8** | **-0.2** |
| BRU2 | **Volcan** | **3.88** | **359** | Pn | **Pn** | **23 50 54.3** | **-1.9** |
| BRU2 | **Volcan** | **3.88** | **359** | *ǁiP* | **Pn** | **23 50 54.5** | **-1.7** |
| BRU2 | | | | IAML | | 23 50 57.2 | |
| | comp=Z,3μm,1.0s | | | | | | |
| BRU2 | | | | *i* S | **Sn** | **23 51 40.1** | **-1.7** |
| BRU2 | **Volcan** | **3.88** | **359** | *eP* | **Pn** | **23 50 53.6** | **-2.6** |
| BRU2 | | | | *eS* | **Sn** | **23 51 40.7** | **-1.1** |
| BRU2 | **Volcan** | **3.88** | **359** | *eP* | **Pn** | **23 50 54.3** | **-1.9** |
| LNBQ3 | **Los Naranjos,** | **3.88** | **3** | *eP* | **Pn** | **23 50 53.6** | **-2.6** |
| MLIR3 | **Monte Lirio, C** | **3.88** | **357** | *eP* | **Pn** | **23 50 53.4** | **-2.7** |
| CRIS3 | **El Cristo, Coc** | **3.89** | **31** | *eP* | **Pn** | **23 50 55.4** | **-0.9** |
| CHGR2 | **Aguacate** | **4.05** | **7** | *eP* | **Pn** | **23 50 56.2** | **-2.3** |
| CHGR2 | | | | *eS* | **Sn** | **23 51 45.6** | **-0.2** |
| EDPN | **Palmar Norte** | **4.12** | **349** | *eP* | **Pn** | **23 50 58.0** | **-1.5** |
| EDP2 | **Potrero Grande** | **4.13** | **352** | *eP* | **Pn** | **23 50 58.7** | **-0.9** |
| PNME | **Penonome** | **4.24** | **32** | *eP* | **Pn** | **23 51 00.8** | **-0.3** |
| PNME | | | | *eS* | **Sn** | **23 51 53.7** | **+3.2** |
| EDBA | **Buenos Aires** | **4.29** | **351** | *eP* | **Pn** | **23 51 01.1** | **-0.8** |
| OCHAL | **Ojochal** | **4.30** | **346** | *ǁiP* | **Pn** | **23 50 59.8** | **-2.1** |
| OCHAL | | | | *i* S | **Sn** | **23 51 50.7** | **-1.3** |
| OCHAL | | | | IAML | | 23 51 51.9 | |
| | comp=Z,7μm,1.0s | | | | | | |
| DRK0 | **Durika** | **4.38** | **352** | *ǁiP* | **Pn** | **23 51 01.7** | **-1.6** |
| DRK0 | | | | *i* S | **Sn** | **23 51 53.7** | **-0.7** |
| DRK0 | | | | IAML | | 23 51 56.7 | |
| | comp=Z,10μm,1.0s | | | | | | |
| DRK0 | **Durika** | **4.38** | **352** | *eP* | **Pn** | **23 50 59.6** | **-3.6** |
| DRK0 | **Durika** | **4.38** | **352** | *eP* | **Pn** | **23 51 01.9** | **-1.4** |
| ZELE | **Perez Zeledon** | **4.58** | **347** | *eP* | **Pn** | **23 51 04.9** | **-0.9** |
| BUS1 | **Rivas** | **4.76** | **347** | *eP* | **Pn** | **23 51 06.9** | **-1.8** |
| LLNJ | **Naranjito** | **4.78** | **342** | *eP* | **Pn** | **23 51 06.5** | **-2.0** |
| ZANG | **Zanguenga, Cho** | **4.88** | **34** | *eP* | **Pn** | **23 51 09.1** | **-0.8** |
| ZANG | **Zanguenga, Cho** | **4.88** | **34** | *eP* | **Pn** | **23 51 11.1** | **+1.2** |
| TUMC | **Tumaco** | **4.95** | **128** | Pn | **Pn** | **23 51 10.2** | **-0.6** |
| ABE2 | **San Pablo** | **4.98** | **344** | *eP* | **Pn** | **23 51 08.5** | **-3.1** |
| LCR2 | **La Lucha 2** | **5.01** | **344** | Pn | **Pn** | **23 51 09.9** | **-2.0** |
| LCR2 | **La Lucha 2** | **5.01** | **344** | *ǁiP* | **Pn** | **23 51 10.1** | **-1.8** |
| LCR2 | | | | *i* S | **Sn** | **23 52 07.8** | **-2.0** |
| LCR2 | | | | IAML | | 23 52 09.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| LCR2 | **La Lucha 2** | **5.01** | **344** | *eP* | **Pn** | **23 51 10.1** | **-1.8** |
| FLAM | **Flamenco Islan** | **5.03** | **37** | *eP* | **Pn** | **23 51 12.2** | **+0.1** |
| REPA | **Paraso** | **5.05** | **346** | *eP* | **Pn** | **23 51 12.6** | **+0.2** |
| BCIP | **Isla Barro Col** | **5.07** | **33** | | **Pn** | **23 51 12.4** | **-0.1** |
| BCIP | **Isla Barro Col** | **5.07** | **33** | *ǁiP* | **Pn** | **23 51 13.2** | **+0.7** |
| BCIP | | | | *i* S | **Sn** | **23 52 08.6** | **-2.4** |
| BCIP | | | | IAML | | 23 52 49.1 | |
| | comp=Z,460nm,1.0s | | | | | | |
| BCIP | **Isla Barro Col** | **5.07** | **33** | P | **Pn** | **23 51 12.4** | **-0.1** |
| BCIP | **Isla Barro Col** | **5.07** | **33** | *eP* | **Pn** | **23 51 11.9** | **-0.6** |
| UPA | **Univ. de Panam** | **5.09** | **37** | *eP* | **Pn** | **23 51 12.6** | **-0.2** |
| VINA | **Juan Vinas** | **5.09** | **347** | *eP* | **Pn** | **23 51 12.3** | **-0.6** |
| ACOS | **Acosta** | **5.10** | **343** | *eP* | **Pn** | **23 51 11.9** | **-1.2** |
| TRIO | **Tres Rios** | **5.16** | **345** | *eP* | **Pn** | **23 51 12.5** | **-1.4** |
| RAFA | **San Farael, Vo** | **5.17** | **347** | *ǁiP* | **Pn** | **23 51 13.5** | **-0.7** |
| RAFA | | | | *i* S | **Sn** | **23 52 13.9** | **0.0** |
| RAFA | | | | IAML | | 23 52 15.5 | |
| | comp=Z,20μm,1.0s | | | | | | |
| RAFA | **San Farael, Vo** | **5.17** | **347** | *eP* | **Pn** | **23 51 12.8** | **-1.4** |
| VTCV | **VTCV, Calle Va** | **5.17** | **348** | *eP* | **Pn** | **23 51 12.9** | **-1.2** |
| CVTV | **Tajo** | **5.20** | **348** | *eP* | **Pn** | **23 51 13.2** | **-1.4** |
| VICA | **Volcano Irazu** | **5.20** | **347** | *eP* | **Pn** | **23 51 13.3** | **-1.4** |
| LUJA | **Lujan** | **5.20** | **344** | *eP* | **Pn** | **23 51 14.2** | **-0.3** |
| CVTQ | **Turrialba Volc** | **5.20** | **348** | *eP* | **Pn** | **23 51 13.6** | **-1.1** |
| VTLA | **Turrialba Volc** | **5.20** | **347** | *eP* | **Pn** | **23 51 13.6** | **-1.1** |
| SJS3 | **Mercedes San J** | **5.21** | **344** | *eP* | **Pn** | **23 51 13.5** | **-1.0** |
| SJS | **Escuela Geolog** | **5.21** | **344** | *eP* | **Pn** | **23 51 13.7** | **-0.9** |
| MEXI | **Barrio Mexico** | **5.22** | **344** | *eP* | **Pn** | **23 51 13.8** | **-1.0** |
| CORON | **Coronado** | **5.23** | **345** | *eP* | **Pn** | **23 51 14.7** | **-0.2** |
| LCOCO | **El Coco** | **5.24** | **350** | *eP* | **Pn** | **23 51 14.8** | **0.0** |
| IRES | **Siquirres** | **5.24** | **350** | *eP* | **Pn** | **23 51 15.2** | **+0.3** |
| RVLA | **Villa Bonita** | **5.27** | **350** | *eP* | **Pn** | **23 51 15.4** | **+0.1** |
| BELE | **Belen** | **5.28** | **343** | *eP* | **Pn** | **23 51 14.5** | **-1.1** |
| HDC | **Heredia** | **5.28** | **344** | | **Pn** | **23 51 14.9** | **-0.7** |
| HDC | **Heredia** | **5.28** | **344** | *eP* | **Pn** | **23 51 14.4** | **-1.2** |
| HDC3 | **Heredia 3** | **5.28** | **344** | *ǁiP* | **Pn** | **23 51 14.9** | **-0.7** |
| HDC3 | | | | IVmB_BB | | 23 51 16.3 | |
| | comp=Z,27μm,1.0s | | | | | | |
| HDC3 | | | | *i* S | **Sn** | **23 52 15.7** | **-0.9** |
| HDC3 | | | | IAML | | 23 52 20.1 | |
| | comp=Z,7μm,1.0s | | | | | | |
| PTAC | **Punta Ardita,** | **5.29** | **65** | *eP* | **Pn** | **23 51 16.1** | **+0.6** |
| SRA1 | **San Ramn** | **5.47** | **340** | *eP* | **Pn** | **23 51 16.4** | **-1.9** |
| CNTA3 | **Canitas, Panam** | **5.68** | **41** | *eP* | **Pn** | **23 51 21.1** | **+0.2** |
| INDI | **Punta indio, G** | **5.70** | **330** | *i* P | **Pn** | **23 51 19.3** | **-2.0** |
| INDI | | | | *i* S | **Sn** | **23 52 21.6** | **-5.1** |
| SOCE | **Pocosol** | **5.80** | **340** | | **Pn** | **23 51 21.8** | **-0.8** |
| SOCE | **Pocosol** | **5.80** | **340** | *ǁiP* | **Pn** | **23 51 21.9** | **-0.7** |
| SOCE | | | | IAML | | 23 51 26.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| SOCE | | | | IVmB_BB | | 23 51 26.1 | |
| | comp=Z,28μm,1.0s | | | | | | |
| SOCE | | | | *i* S | **Sn** | **23 52 27.2** | **-1.9** |
| JTS | **Las Juntas de** | **5.84** | **337** | Pn | **Pn** | **23 51 21.6** | **-1.5** |
| | comp=Z,88nm,0.3s,baz=87,slow=6.7,SNR=120 | | | | | | |
| JTS | | | | Sn | **Sn** | **23 52 27.7** | **-2.3** |
| | comp=Z,122nm,0.3s,baz=307,slow=22,SNR=16 | | | | | | |
| | comp=Z,170nm,0.3s | | | | | | |
| JTS | **Las Juntas de** | **5.84** | **337** | *eP* | **Pn** | **23 51 18.6** | **-4.6** |
| UPD2 | **Meteti** | **5.84** | **51** | *eP* | **Pn** | **23 51 23.5** | **+0.3** |
| TOTI | **Torti** | **5.87** | **47** | *eP* | **Pn** | **23 51 23.7** | **+0.2** |
| COVE | **Coope Vega, Sa** | **6.05** | **343** | *ǁiP* | **Pn** | **23 51 25.0** | **-1.0** |
| COVE | | | | IVmB_BB | | 23 51 31.8 | |
| | comp=Z,9μm,1.0s | | | | | | |
| COVE | | | | *i* S | **Sn** | **23 52 33.1** | **-2.1** |
| COVE | | | | IAML | | 23 52 44.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| CUI | **Cuipilapa** | **6.25** | **336** | *eP* | **Pn** | **23 51 28.0** | **-0.9** |
| PULU | **Pululahua** | **6.36** | **139** | | **Pn** | **23 51 29.1** | **-1.5** |
| TULM | **Tulcn-Chalpat** | **6.37** | **131** | Pn | **Pn** | **23 51 30.8** | **-0.1** |
| IMBA | **Imbabura, San** | **6.37** | **136** | Pn | **Pn** | **23 51 30.1** | **-0.8** |
| SLOR | **San Lorenzo -** | **6.95** | **143** | | **Pn** | **23 51 38.9** | **+0.2** |
| ESPN | **Las Esperanzas** | **7.44** | **347** | | **Pn** | **23 51 43.2** | **-1.9** |
| ACON | **Acoyapa** | **7.47** | **340** | Pn | **Pn** | **23 51 44.5** | **-1.0** |
| UREC | **San Jos de Ur** | **7.60** | **68** | *eP* | **Pn** | **23 51 47.4** | **0.0** |
| BOAB | **BOACO BROADBAN** | **8.09** | **338** | | **Pn** | **23 51 53.0** | **-1.0** |
| BOAB | **BOACO BROADBAN** | **8.09** | **338** | *i* P | **Pn** | **23 51 53.5** | **-0.5** |
| BOAB | | | | IAML | | 23 52 11.8 | |
| | comp=Z,79nm,1.0s | | | | | | |
| BOAB | | | | IVmB_BB | | 23 52 11.8 | |
| | comp=Z,900nm,1.0s | | | | | | |
| BOAB | | | | *i* S | **Sn** | **23 53 23.8** | **-1.6** |
| SAPS | **Ciudad Sandino** | **8.14** | **333** | *i* P | **Pn** | **23 51 57.3** | **+2.6** |
| SAPS | | | | *i* S | **Sn** | **23 53 26.3** | **-0.4** |
| COPN | **Copaltepe** | **8.23** | **332** | *i* P | **Pn** | **23 51 57.8** | **+1.8** |
| COPN | | | | IVmB_BB | | 23 52 13.3 | |
| | comp=Z,1μm,1.0s | | | | | | |
| ROSC | **El Rosal** | **8.28** | **90** | Pn | **Pn** | **23 51 59.9** | **+2.9** |
| | comp=Z,11nm,0.3s,baz=0.8,slow=3.0,SNR=12 | | | | | | |
| ROSC | | | | Sn | **Sn** | **23 53 29.8** | **-0.9** |
| | baz=218,slow=23 | | | | | | |
| ROSC | | | | LR | LR | 23 55 21.1 | |
| | comp=Z,1μm,19.1s,baz=344,slow=40 | | | | | | |
| LEVN | **Ruinas Leon Vi** | **8.44** | **332** | *i* P | **Pn** | **23 52 00.8** | **+2.0** |
| LEVN | | | | IVmB_BB | | 23 52 02.3 | |
| | comp=Z,7μm,1.0s | | | | | | |
| CNGN | **Cerro Negro** | **8.56** | **332** | Pn | **Pn** | **23 52 01.7** | **+1.1** |
| CNGN | **Cerro Negro** | **8.56** | **332** | *i* P | **Pn** | **23 52 01.5** | **+0.9** |
| CNGN | | | | *i* S | **Sn** | **23 53 36.6** | **-0.6** |
| ROCN | **Rota Cerro Neg** | **8.60** | **332** | *i* P | **Pn** | **23 52 03.2** | **+2.1** |
| ROCN | | | | IVmB_BB | | 23 52 04.4 | |
| | comp=Z,4μm,1.0s | | | | | | |
| QUEN | **Al S del Volca** | **8.71** | **332** | *i* P | **Pn** | **23 52 04.7** | **+2.0** |
| QUEN | | | | IVmB_BB | | 23 52 09.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| CRIN | **San Cristobal** | **8.90** | **331** | Pn | **Pn** | **23 52 06.6** | **+1.4** |
| CRIN | **San Cristobal** | **8.90** | **331** | *i* P | **Pn** | **23 52 07.1** | **+1.8** |
| CRIN | | | | IVmB_BB | | 23 52 10.6 | |
| | comp=Z,6μm,1.0s | | | | | | |
| PAYG | **Puerto Ayora** | **9.44** | **234** | Pn | **Pn** | **23 52 14.6** | **+2.0** |
| RUSI | **La Rusia** | **9.55** | **84** | *ǁiP* | **Pn** | **23 52 16.6** | **+2.0** |
| RUSI | | | | IVmB_BB | | 23 52 55.5 | |
| | comp=Z,610nm,1.0s | | | | | | |
| RUSI | | | | *i* S | **Sn** | **23 54 01.2** | **-1.0** |
| TGUH | **Tegucigalpa,Un** | **10.19** | **334** | Pn | **Pn** | **23 52 22.9** | **-0.1** |
| SNET | **Serv Nac Est T** | **10.90** | **324** | Pn | **Pn** | **23 52 34.4** | **+1.8** |
| MTO3 | **Montecristo** | **11.54** | **325** | Pn | **Pn** | **23 52 43.4** | **+1.8** |
| ESQI | **Esquipulas** | **11.66** | **326** | Pn | **Pn** | **23 52 43.3** | **+0.2** |
| NBG | **Las Nubes** | **12.27** | **322** | *eP* | Pn | 23 52 57.4 | +5.8 |
| FUG | **Fuego 3** | **12.47** | **320** | *eP* | Pn | 23 52 59.8 | +5.5 |
| SDV | **Santo Domingo** | **12.55** | **71** | | **Pn** | **23 52 55.3** | **0.0** |
| SDV | **Santo Domingo** | **12.55** | **71** | Pn | **Pn** | **23 52 56.3** | **+1.0** |
| | comp=Z,3.0nm,0.3s,baz=244,slow=10,SNR=14 | | | | | | |
| SDV | | | | LR | LR | 23 57 35.2 | |
| | comp=Z,1μm,21.2s,baz=240,slow=37 | | | | | | |
| SDV | **Santo Domingo** | **12.55** | **71** | *eP* | **Pn** | **23 52 56.1** | **+0.7** |
| APG | **El Apazote** | **12.66** | **323** | Pn | **Pn** | **23 52 59.7** | **+2.7** |
| | comp=Z,0.2nm,0.3s,baz=150,slow=12,SNR=16 | | | | | | |
| APG | | | | LR | LR | 23 57 15.4 | |
| | comp=Z,219nm,20.5s,baz=134,slow=35 | | | | | | |
| ATAH | **Atahualpa** | **12.67** | **161** | Pn | **Pn** | **23 52 57.8** | **+0.5** |
| | comp=Z,6.1nm,0.3s,baz=351,slow=7.9,SNR=28 | | | | | | |
| ATAH | | | | LR | LR | 23 57 27.4 | |
| | comp=Z,6μm,19.9s,baz=336,slow=36 | | | | | | |
| | comp=Z,31nm,0.4s | | | | | | |
| STG3 | **Santiaguito 3,** | **13.14** | **319** | *eP* | **P** | **23 53 09.7** | **-4.0** |
| CCIG | **Comitn** | **14.67** | **321** | Pn | **Pn** | **23 53 24.9** | **+0.6** |
| BAUV | **El Baul** | **15.03** | **74** | Pn | **Pn** | **23 53 25.1** | **-3.9** |
| TBTG | **Tabatinga, AM** | **15.58** | **125** | Pn | **Pn** | **23 53 32.6** | **-3.7** |
| TBTG | **Tabatinga, AM** | **15.58** | **125** | *eP* | **Pn** | **23 53 33.6** | **-2.8** |
| CZSB | **Cruzeiro do Su** | **15.98** | **142** | Pn | **Pn** | **23 53 38.8** | **-2.7** |
| CZSB | | | | IAmb | IAmb | 23 53 48.9 | |
| | comp=Z,183nm,1.2s | | | | | | |
| CZSB | **Cruzeiro do Su** | **15.98** | **142** | *eP* | **Pn** | **23 53 39.3** | **-2.2** |
| CHIV | **Chivirico** | **16.16** | **21** | | **Pn** | **23 53 42.9** | **-0.9** |
| CHIV | | | | IAmb | IAmb | 23 53 48.8 | |
| | comp=Z,60nm,1.2s | | | | | | |
| GTBY | **Guantanamo Bay** | **16.64** | **25** | Pn | **Pn** | **23 53 49.2** | **-0.6** |
| GTBY | | | | IAmb | IAmb | 23 53 55.8 | |
| | comp=Z,240nm,1.6s | | | | | | |
| CMIG | **Matias Romero** | **17.06** | **316** | P | **P** | **23 53 56.5** | **-0.5** |
| | comp=Z,9.2nm,0.9s,baz=134,slow=10.0,SNR=16 | | | | | | |
| CMIG | | | | LR | LR | 23 59 29.9 | |
| | comp=Z,1μm,19.6s,baz=132,slow=34 | | | | | | |
| NMDO | **Nuevo Mundo** | **17.25** | **25** | Pn | **Pn** | **23 53 55.8** | **-1.8** |
| NMDO | | | | IAmb | IAmb | 23 54 03.2 | |
| | comp=Z,84nm,1.6s | | | | | | |
| NNA | **Nana** | **17.73** | **161** | | **Pn** | **23 54 02.3** | **-1.3** |
| NNA | | | | IAmb | IAmb | 23 54 09.2 | |
| | comp=Z,152nm,1.1s | | | | | | |
| NNA | **Nana** | **17.73** | **161** | P | **P** | **23 54 04.2** | **-0.2** |
| | comp=Z,8.8nm,0.3s,baz=338,slow=12,SNR=20 | | | | | | |
| NNA | | | | LR | LR | 00 00 20.9 | |
| | comp=Z,932nm,20.5s,baz=318,slow=35 | | | | | | |
| | comp=Z,171nm,1.1s | | | | | | |
| NNA | **Nana** | **17.73** | **161** | *de*P | **Pn** | **23 54 02.8** | **-0.8** |
| NNA | | | | pmax | pmax | | |
| | comp=Z,165nm,0.8s | | | | | | |
| SOR | **Soroa** | **17.80** | **359** | P | **Pn** | **23 54 03.4** | **-0.9** |
| SOR | **Soroa** | **17.80** | **359** | P | **Pn** | **23 54 03.4** | **-0.9** |
| SOR | | | | pmax | pmax | | |
| | comp=Z,45nm,1.3s | | | | | | |
| SDDR | **Presa de Saban** | **17.85** | **37** | P | **Pn** | **23 54 04.1** | **-0.9** |
| PCRV | **Puerto La Cruz** | **18.59** | **73** | P | **Pn** | **23 54 14.8** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=233,slow=5.3,SNR=16 | | | | | | |
| PCRV | | | | LR | LR | 00 03 01.6 | |
| | comp=Z,792nm,20.5s,slow=42 | | | | | | |
| | comp=Z,41nm,1.0s | | | | | | |
| TEFE | **Tefe** | **19.82** | **115** | *eP* | **P** | **23 54 27.6** | **+0.2** |
| MLPR | **Magueyes Islan** | **20.03** | **48** | P | Pn | 23 54 32.4 | +1.1 |
| MLPR | | | | IAmb | IAmb | 23 54 36.6 | |
| | comp=Z,76nm,0.9s | | | | | | |
| TLIG | **Tlapa** | **20.05** | **310** | P | Pn | 23 54 31.2 | -0.6 |
| TLIG | | | | IAmb | IAmb | 23 54 38.7 | |
| | comp=Z,137nm,1.8s | | | | | | |
| OBIP | **Obispado Ponce** | **20.40** | **49** | P | **P** | **23 54 34.0** | **+0.3** |
| OBIP | | | | IAmb | IAmb | 23 54 44.2 | |
| | comp=Z,62nm,1.0s | | | | | | |
| CELP | **Cerrillos** | **20.44** | **49** | P | **P** | **23 54 34.0** | **-0.1** |
| CELP | | | | IAmb | IAmb | 23 54 44.5 | |
| | comp=Z,53nm,0.9s | | | | | | |
| UUPR | **Utuado, UPR, P** | **20.44** | **48** | P | Pn | 23 54 35.9 | -0.4 |
| UUPR | | | | IAmb | IAmb | 23 54 38.0 | |
| | comp=Z,99nm,1.1s | | | | | | |
| AOPR | **Arecibo Observ** | **20.48** | **48** | P | **P** | **23 54 35.5** | **+1.0** |
| IGPR | **InterUniversit** | **20.73** | **50** | P | **P** | **23 54 37.4** | **+0.2** |
| IGPR | | | | IAmb | IAmb | 23 54 43.5 | |
| | comp=Z,71nm,1.2s | | | | | | |
| GCPR | **Guaynabo City** | **20.95** | **49** | P | **P** | **23 54 39.6** | **-0.1** |
| GCPR | | | | IAmb | IAmb | 23 54 49.7 | |
| | comp=Z,70nm,0.8s | | | | | | |
| HUMP | **Col San Antoni** | **21.03** | **50** | P | **P** | **23 54 40.7** | **+0.2** |
| HUMP | | | | IAmb | IAmb | 23 54 49.8 | |
| | comp=Z,113nm,1.1s | | | | | | |
| ETMB | **Extrema** | **21.93** | **132** | P | **P** | **23 54 48.8** | **-1.4** |
| ETMB | **Extrema** | **21.93** | **132** | *eP* | **P** | **23 54 49.3** | **-0.9** |
| 060A | **Indiantown** | **22.12** | **5** | P | **P** | **23 54 51.9** | **-0.3** |
| 060A | | | | IAmb | IAmb | 23 54 59.3 | |
| | comp=Z,69nm,0.9s | | | | | | |
| BOAV | **Boa Vista** | **22.20** | **96** | P | **P** | **23 54 53.0** | **-0.1** |
| BOAV | **Boa Vista** | **22.20** | **96** | *eP* | **P** | **23 54 52.7** | **-0.4** |
| DWPF | **Disney Wildern** | **23.12** | **3** | P | **P** | **23 55 04.1** | **+1.4** |
| DWPF | **Disney Wildern** | **23.12** | **3** | P | **P** | **23 55 03.7** | **+1.1** |
| | baz=183 | | | | | | |
| BIM | **Bigot** | **23.27** | **64** | P | **P** | **23 55 02.7** | **-1.8** |
| MOIG | **Morelia** | **23.30** | **311** | P | **P** | **23 55 07.0** | **+2.1** |
| MACA | **Manacapuru-AM** | **23.34** | **110** | *eP* | **P** | **23 55 03.8** | **-1.3** |
| JRQG | **Juriquilla Cam** | **23.38** | **314** | P | **P** | **23 55 07.7** | **+2.0** |
| SAML | **Samuel** | **23.77** | **125** | P | **P** | **23 55 07.2** | **-2.0** |
| SAML | **Samuel** | **23.77** | **125** | P | **P** | **23 55 07.3** | **-2.0** |
| SAML | | | | pmax | pmax | | |
| | comp=Z,115nm,1.0s | | | | | | |
| SAML | **Samuel** | **23.77** | **125** | *eP* | **P** | **23 55 07.8** | **-1.5** |
| LPAZ | **La Paz** | **25.47** | **146** | P | **P** | **23 55 25.2** | **-0.3** |
| LPAZ | **La Paz** | **25.47** | **146** | P | **P** | **23 55 25.7** | **+0.2** |
| | comp=Z,20nm,0.7s,baz=333,slow=8.5,SNR=66 | | | | | | |
| LPAZ | | | | LR | LR | 00 06 36.0 | |
| | comp=Z,2μm,19.6s,baz=296,slow=39 | | | | | | |
| | comp=Z,20nm,0.7s | | | | | | |
| LPAZ | **La Paz** | **25.47** | **146** | P | **P** | **23 55 25.2** | **-0.3** |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,125nm,1.7s | | | | | | |
| 451A | **Vernon** | **25.75** | **354** | P | **P** | **23 55 28.4** | **+1.1** |
| PB18 | **Visviri** | **25.84** | **150** | P | **P** | **23 55 28.4** | **-0.4** |
| ZAIG | **Zacatecas** | **26.21** | **315** | P | **P** | **23 55 33.1** | **+1.1** |
| ZAIG | | | | IAmb | IAmb | 23 55 35.6 | |
| | comp=Z,30nm,1.3s | | | | | | |
| TIGA | **Tifton** | **26.42** | **358** | P | **P** | **23 55 32.9** | **-0.5** |
| TIGA | | | | IAmb | IAmb | 23 55 41.5 | |
| | comp=Z,36nm,1.2s | | | | | | |
| TIGA | **Tifton** | **26.42** | **358** | P | **P** | **23 55 34.3** | **+0.9** |
| | baz=178 | | | | | | |
| 352A | **Blakely** | **26.54** | **356** | P | **P** | **23 55 34.1** | **-0.2** |
| 352A | | | | IAmb | IAmb | 23 55 36.6 | |
| | comp=Z,46nm,1.1s | | | | | | |
| HBVL | **Hebbronville** | **26.84** | **327** | P | **P** | **23 55 40.8** | **+3.6** |
| 250A | **Grady** | **27.16** | **353** | P | **P** | **23 55 39.7** | **-0.3** |
| 152A | **Waverly Hall** | **27.70** | **356** | P | **P** | **23 55 44.7** | **-0.2** |
| 152A | | | | IAmb | IAmb | 23 55 46.8 | |
| | comp=Z,30nm,1.2s | | | | | | |
| GO01 | **Chusmiza** | **27.76** | **152** | P | **P** | **23 55 45.5** | **-0.5** |
| HKT | **Hockley** | **27.87** | **335** | P | **P** | **23 55 45.6** | **-0.7** |
| HKT | **Hockley** | **27.87** | **335** | *ce*P | **P** | **23 55 46.6** | **+0.3** |
| HKT | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| NHSC | **New Hope** | **28.16** | **4** | P | **P** | **23 55 49.3** | **+0.3** |
| | baz=185 | | | | | | |
| 833A | **Chaparral WMA,** | **28.23** | **327** | P | **P** | **23 55 49.7** | **+0.1** |
| 833A | | | | IAmb | IAmb | 23 56 34.8 | |
| | comp=Z,36nm,1.2s | | | | | | |
| 833A | **Chaparral WMA,** | **28.23** | **327** | P | **P** | **23 55 50.9** | **+1.3** |
| | baz=142 | | | | | | |
| LRAL | **Lakeview Retre** | **28.29** | **352** | IAmb | IAmb | 23 55 54.0 | |
| | comp=Z,18nm,0.9s | | | | | | |
| LRAL | **Lakeview Retre** | **28.29** | **352** | P | **P** | **23 55 50.8** | **+0.7** |
| | baz=171,SNR=14 | |

T50A **Nancy** 32.04 357 IAmb IAmb 23 56 24.6
comp=Z,28nm,1.5s
HICK **Hickman** 32.07 350 P **P** **23 56 23.1 -0.5**
T57A **Hurt** 32.10 5 IAmb IAmb 23 56 27.6
comp=Z,18nm,0.9s
ALPN **Alpine** 32.17 324 IAmb IAmb 23 56 27.5
comp=Z,32nm,1.2s
T47A **Sharon Grove** 32.20 353 IAmb IAmb 23 56 26.2
comp=Z,39nm,1.2s
BLA **Blacksburg** 32.23 3 P **P** **23 56 24.9 0.0**
baz=184
T59A **Double "B" Far** 32.26 8 IAmb IAmb 23 56 29.3
comp=Z,20nm,1.1s
S51A **Beattyville** 32.60 359 IAmb IAmb 23 56 31.9
comp=Z,17nm,1.1s
APMT **Aspermont** 32.65 332 P **P** **23 56 27.8 -0.9**
LPIG **La Paz** 32.78 308 LR LR 00 06 54.1
comp=Z,423nm,20.1s,baz=116,slow=31
W35A **Tecumseh** 32.87 338 IAmb IAmb 23 56 31.2
comp=Z,33nm,1.4s
S57A **Dark Hollow, R** 32.88 5 IAmb IAmb 23 56 34.5
comp=Z,14nm,1.1s
T42A **Van Buren** 32.91 347 IAmb IAmb 23 56 31.3
comp=Z,16nm,1.1s
PECS **Pecos** 33.04 325 P **P** **23 56 32.1 -0.1**
TUL3 **Leonard** 33.16 340 IAmb IAmb 23 56 34.1
comp=Z,28nm,1.3s
TUL3 **Leonard** 33.16 340 P **P** **23 56 32.7 -0.4**
baz=155
U38A **Gravette** 33.20 343 IAmb IAmb 23 56 35.8
comp=Z,23nm,1.5s
S44A **Carbondale** 33.20 350 IAmb IAmb 23 56 36.5
comp=Z,29nm,1.1s
SIUC **Southern Illin** 33.22 350 IAmb IAmb 23 56 36.6
comp=Z,25nm,0.9s
USIN **University of** 33.24 353 P **P** **23 56 32.8 -0.9**
WMOK **Wichita Mounta** 33.25 335 P **P** **23 56 34.1 +0.2**
baz=150
R50A **Paris** 33.27 358 IAmb IAmb 23 56 35.5
comp=Z,48nm,1.6s
MGMO **Mountain Grove** 33.30 346 IAmb IAmb 23 56 37.5
comp=Z,23nm,1.0s
DEOK **Depew** 33.35 339 IAmb IAmb 23 56 36.6
comp=Z,19nm,1.0s
WCI **Wyandotte Cave** 33.35 355 P **P** **23 56 33.7 -1.0**
WCI **Wyandotte Cave** 33.35 355 P **P** **23 56 33.9 -0.8**
baz=173
WCI **Wyandotte Cave** 33.35 355 P **P** **23 56 33.7 -1.0**
WCI pmax pmax
comp=Z,66nm,1.6s
SSFO **Shawnee State** 33.65 359 P **P** **23 56 36.6 -0.7**
SSFO IAmb IAmb 23 56 41.0
comp=Z,18nm,1.2s
SALV **Santo Antonio** 33.73 128 *e*P **P** **23 56 37.8 -0.5**
CCM **Cathedral Cave** 33.93 348 P **P** **23 56 38.8 -1.0**
CCM IAmb IAmb 23 56 40.3
comp=Z,24nm,1.1s
CCM **Cathedral Cave** 33.93 348 P **P** **23 56 38.9 -0.9**
baz=164
CCM **Cathedral Cave** 33.93 348 P **P** **23 56 38.8 -1.0**
CCM pmax pmax
comp=Z,24nm,1.1s
Q54A **Coxs Mills** 33.97 2 IAmb IAmb 23 56 43.8
comp=Z,18nm,1.2s
S39A **Bolivar** 34.07 345 IAmb IAmb 23 56 43.2
comp=Z,20nm,1.2s
Q56A **Snyder Ridge,** 34.13 5 IAmb IAmb 23 56 46.2
comp=Z,21nm,1.0s
MNTX **Cornudas Mount** 34.15 324 P **P** **23 56 42.1 +0.3**
baz=137,SNR=35
Q44A **Meyer Farm, Va** 34.35 351 IAmb IAmb 23 56 44.6
comp=Z,28nm,1.0s
MSTX **Muleshoe** 34.46 330 P **P** **23 56 45.1 +0.6**
baz=143
CROK **Carrier** 34.48 338 P **P** **23 56 43.2 -1.3**
CROK IAmb IAmb 23 56 45.2
comp=Z,27nm,1.3s
P48A **Milroy** 34.50 356 IAmb IAmb 23 56 45.1
comp=Z,36nm,1.3s
P49A **Miami Univ. Ec** 34.53 357 P **P** **23 56 44.3 -0.7**
baz=176
P52A **Corning** 34.59 1 P **P** **23 56 45.0 -0.4**
baz=181
AMTX **Amarillo** 34.66 332 P **P** **23 56 46.6 +0.3**
baz=145
P57A **Homestead Farm** 34.69 6 IAmb IAmb 23 56 51.7
comp=Z,19nm,1.1s
MCWV **Mont Chateau** 34.70 4 P **P** **23 56 47.2 +0.8**
baz=185
P46A **Rosedale** 34.81 354 IAmb IAmb 23 56 47.8
comp=Z,16nm,0.9s
OK032 **Salt Plains WL** 34.83 338 IAmb IAmb 23 56 48.2
comp=Z,28nm,1.2s
KAN09 **Caldwell North** 34.90 339 P **P** **23 56 48.0 -0.2**
KAN08 **Anthony NE Sta** 35.11 338 IAmb IAmb 23 56 52.7
comp=Z,18nm,1.0s
ACSO **Alum Creek Sta** 35.18 360 P **P** **23 56 50.8 +0.2**
baz=179
O53A **New Philadelph** 35.22 2 P **P** **23 56 51.0 0.0**
baz=182
SNDB **Serra Nova Dou** 35.38 118 *e*P **P** **23 56 51.8 -0.8**
MVL **Millersville** 35.40 8 P **P** **23 56 52.0 -0.5**
MVL IAmb IAmb 23 56 57.0
comp=Z,16nm,0.9s
P40A **Paris** 35.52 347 IAmb IAmb 23 56 53.9
comp=Z,22nm,1.2s
SSPA **Standing Stone** 35.84 6 P **P** **23 56 56.5 +0.4**
SSPA IAmb IAmb 23 57 00.8
comp=Z,20nm,1.1s
SSPA **Standing Stone** 35.84 6 P **P** **23 56 56.6 +0.4**
baz=188
N47A **Urbana** 35.93 356 IAmb IAmb 23 56 57.0
comp=Z,28nm,1.4s
HDIL **Hopedale** 36.01 351 IAmb IAmb 23 57 04.1
comp=Z,14nm,0.8s
HDIL **Hopedale** 36.01 351 P **P** **23 56 56.8 -0.9**
baz=168
MURT **Porto Murtinho** 36.02 138 *e*P **P** **23 56 57.2 -0.8**
121A **Cookes Peak, D** 36.18 323 P **P** **23 57 00.5 +1.1**
121A **Cookes Peak, D** 36.18 323 P **P** **23 57 01.4 +1.9**
baz=134,SNR=28
N58A **Sunbury** 36.18 8 IAmb IAmb 23 57 03.4
comp=Z,16nm,0.9s
KSU1 **Kansas State U** 36.34 341 IAmb IAmb 23 57 01.6
comp=Z,26nm,1.1s
KSU1 **Kansas State U** 36.34 341 P **P** **23 57 00.2 -0.3**
baz=156
N41A **Harden Midland** 36.41 349 IAmb IAmb 23 57 01.4
comp=Z,28nm,1.0s
M53A **WI Miller and** 36.43 2 P **P** **23 57 01.5 +0.2**
baz=183
R32A **Long Quarter,** 36.44 339 P **P** **23 57 00.7 -0.8**
AQDB **Aquidauana** 36.54 135 P **P** **23 57 01.4 -1.1**
AQDB **Aquidauana** 36.54 135 *e*P **P** **23 57 01.9 -0.5**
ARAG **Araguaiana, MT** 36.74 124 *e*P **P** **23 57 03.1 -1.1**
Y22D **IRIS PASSCAL I** 36.77 325 P **P** **23 57 05.9 +1.5**
Y22D **IRIS PASSCAL I** 36.77 325 P **P** **23 57 06.3 +1.9**
baz=137
KSPA **Keystone Colle** 37.02 9 IAmb IAmb 23 57 10.6
comp=Z,25nm,0.9s
ANMO **Albuquerque** 37.15 327 P **P** **23 57 09.2 +1.4**
ANMO IAmb IAmb 23 57 11.4
comp=Z,40nm,1.2s
ANMO **Albuquerque** 37.15 327 LR LR 00 13 34.0
comp=Z,332nm,20.6s,baz=226,slow=38
ANMO **Albuquerque** 37.15 327 P **P** **23 57 09.4 +1.6**
baz=138
ANMO **Albuquerque** 37.15 327 *c i* P **P** **23 57 09.5 +1.8**
ANMO pmax pmax
comp=Z,14nm,1.1s
CBKS **Cedar Bluff** 37.17 338 P **P** **23 57 07.5 -0.2**
baz=151
PAPY **Pozo Azul** 37.35 142 *e*P **P** **23 57 09.1 -0.2**
L42A **Oliver, Polo** 37.48 351 P **P** **23 57 07.5 -2.6**
L42A IAmb IAmb 23 57 10.1
comp=Z,29nm,1.3s
SMTB **Santa Maria do** 37.51 111 *e*P **P** **23 57 10.3 -0.6**
CO02 **Combarbal** 37.57 164 P **P** **23 57 11.1 -0.2**
BINY **Binghamton** 37.62 8 IAmb IAmb 23 57 15.6
comp=Z,24nm,0.9s
BINY **Binghamton** 37.62 8 P **P** **23 57 12.0 +0.6**
baz=191
L59A **Walton** 37.75 9 IAmb IAmb 23 57 20.6
comp=Z,32nm,1.3s
T25A **Trinidad** 37.78 331 IAmb IAmb 23 57 16.9
comp=Z,30nm,1.2s
T25A **Trinidad** 37.78 331 P **P** **23 57 14.9 +1.8**
baz=143,SNR=13
L40A **Anamosa** 37.80 350 IAmb IAmb 23 57 13.1
comp=Z,29nm,1.3s
TUC **Tucson** 37.91 319 P **P** **23 57 15.1 +1.0**
TUC **Tucson** 37.91 319 P **P** **23 57 15.5 +1.4**
baz=130
TUC **Tucson** 37.91 319 P **P** **23 57 15.1 +1.0**
TUC pmax pmax
comp=Z,20nm,1.2s
K57A **Scipio Center** 38.07 7 IAmb IAmb 23 57 19.3
comp=Z,39nm,1.1s
H03N2 **Juan Fernandez** 38.28 175 T T 00 37 42.1
baz=354,slow=76,SNR=12
H03N1 **Juan Fernandez** 38.29 175 T T 00 37 44.1
baz=354,slow=76,SNR=114
H03N3 **Juan Fernandez** 38.30 175 T T 00 37 42.9
baz=354,slow=76,SNR=154
KSCO **Kaye Shedlock'** 38.50 335 P **P** **23 57 20.2 +1.2**
baz=147
TRY **Troy** 38.51 11 IAmb IAmb 23 57 21.4
comp=Z,51nm,1.4s
ZON **Zonda** 38.60 161 P **P** **23 57 19.3 -0.5**
ZON IAmb IAmb 23 57 24.8
comp=Z,40nm,1.3s
ZON **Zonda** 38.60 161 P **P** **23 57 19.3 -0.5**
ZON pmax pmax
comp=Z,40nm,1.3s
SDCO **Great Sand Dun** 38.79 331 IAmb IAmb 23 57 25.3
comp=Z,37nm,1.1s
SDCO **Great Sand Dun** 38.79 331 P **P** **23 57 24.1 +2.4**
baz=142,SNR=27
J58A **Remsen** 38.85 9 IAmb IAmb 23 57 25.6
comp=Z,27nm,0.9s
X18A **Snowflake** 38.86 323 P **P** **23 57 23.8 +1.6**
X18A IAmb IAmb 23 57 26.0
comp=Z,34nm,1.1s
214A **Organ Pipe Nat** 39.03 317 P **P** **23 57 25.2 +1.7**
baz=127,SNR=5.4
W18A **Petrified Fore** 39.14 324 P **P** **23 57 26.5 +2.0**
baz=134,SNR=22
S22A **4UR Ranch, Cre** 39.46 329 P **P** **23 57 28.9 +1.7**
baz=140,SNR=26
CPUP **Villa Florida** 39.55 143 P **P** **23 57 26.6 -1.2**
comp=Z,12nm,0.9s,baz=326,slow=9.3,SNR=20
CPUP LR LR 00 14 57.2
comp=Z,629nm,18.7s,baz=322,slow=38
comp=Z,12nm,0.9s
Q24A **Divide** 39.59 332 P **P** **23 57 30.2 +1.8**
baz=143
H43A **Windswept, Lux** 39.67 354 P **P** **23 57 27.1 -1.5**
SADO **Sadowa** 39.83 4 LR LR 00 13 49.0
comp=Z,424nm,18.3s,baz=196,slow=36
BDFB **Brasilia** 39.88 121 P **P** **23 57 29.1 -1.7**
comp=Z,6.0nm,0.9s,baz=287,slow=10,SNR=7.9
BDFB LR LR 00 14 28.4
comp=Z,815nm,18.6s,baz=308,slow=37
comp=Z,6.0nm,0.9s
OGNE **Ogallala** 39.89 337 P **P** **23 57 31.6 +1.0**
baz=149
MVCO **Mesa Verde** 39.93 327 P **P** **23 57 33.4 +2.2**
baz=137,SNR=30
MT08 **Bocatoma Ro** 39.96 163 P **P** **23 57 30.9 -0.4**
MT08 IAmb IAmb 23 57 36.0
comp=Z,62nm,1.3s
ITRB **Iturama** 40.06 129 *e*P **P** **23 57 31.8 -0.4**
113A **Mohawk Valley,** 40.17 318 IAmb IAmb 23 57 36.2
comp=Z,34nm,1.4s
LONY **Lake Ozonia** 40.19 9 P **P** **23 57 33.5 +0.6**
LONY **Lake Ozonia** 40.19 9 P **P** **23 57 34.7 +1.7**
baz=192
TRCB **Terra Rica** 40.21 134 *e*P **P** **23 57 32.5 -0.9**
VT1 **Waterbury** 40.23 11 IAmb IAmb 23 57 37.8
comp=Z,29nm,0.9s
LBNH **Lisbon** 40.30 12 P **P** **23 57 35.0 +1.2**
baz=196
WUAZ **Wupatki** 40.39 323 P **P** **23 57 35.5 +0.7**
WUAZ IAmb IAmb 23 57 38.6
comp=Z,52nm,1.1s
WUAZ **Wupatki** 40.39 323 P **P** **23 57 37.0 +2.1**
baz=132,SNR=19
WBO **Williamsburg** 40.46 8 P **P** **23 57 35.4 +0.3**
ISCO **Idaho Springs** 40.47 332 P **P** **23 57 35.5 -0.2**
ISCO **Idaho Springs** 40.47 332 P **P** **23 57 37.6 +1.9**
baz=143,SNR=8.1
ISCO **Idaho Springs** 40.47 332 P **P** **23 57 35.5 -0.2**
ISCO pmax pmax
comp=Z,20nm,1.3s
PCMB **Pacaembu** 40.47 132 *e*P **P** **23 57 34.9 -0.7**
BO01 **Tunca** 40.56 165 IAmb IAmb 23 57 50.0
comp=Z,45nm,1.4s
ECSD **EROS Data Cent** 40.60 344 P **P** **23 57 35.3 -1.1**
ECSD **EROS Data Cent** 40.60 344 P **P** **23 57 35.2 -1.1**
baz=158,SNR=7.5
IPMB **Ipameri, GO** 40.86 125 *e*P **P** **23 57 37.6 -1.2**
GLA **Glamis** 41.05 317 P **P** **23 57 39.7 -0.6**
baz=126
SPMN **Marine on St.** 41.15 349 P **P** **23 57 40.5 -0.3**
baz=164
ESJX **Sierra Juarez** 41.23 315 P **P** **23 57 43.1 +1.2**
SDBA **SAO DESIDERIO** 41.25 115 *e*P **P** **23 57 41.4 -0.8**
BLYC **Blythe** 41.26 318 IAmb IAmb 23 57 45.4
comp=Z,34nm,1.6s
PDMCI **Parker Dam,Lak** 41.35 319 P **P** **23 57 43.9 +1.3**
baz=128
N23A **Red Feather La** 41.50 333 P **P** **23 57 45.4 +1.3**
baz=143,SNR=10
G62A **West of Eustis** 41.53 13 IAmb IAmb 23 57 48.7
comp=Z,31nm,1.0s
U15A **North Rim** 41.55 323 IAmb IAmb 23 57 48.6
comp=Z,54nm,1.3s
YUH **Yuha Desert** 41.57 316 IAmb IAmb 23 57 48.1
comp=Z,38nm,1.8s
SWSC **Sam W. Stewart** 41.66 316 P **P** **23 57 46.7 +1.5**
baz=125
LDASE **Londrina, Braz** 41.67 134 *e*P **P** **23 57 44.1 -1.3**
W13A **Hualapai Mount** 41.67 320 IAmb IAmb 23 57 49.3
comp=Z,32nm,1.2s
HMU **Henry Mountain** 41.69 326 P **P** **23 57 47.2 +1.5**
IKP **In-Ko-Pah, Jac** 41.70 316 P **P** **23 57 47.2 +1.5**
baz=124,SNR=5.1
BC3 **Big Chuckawall** 41.83 317 P **P** **23 57 48.8 +2.1**
baz=126,SNR=7.4
PTGB **Pitanga** 41.84 136 *e*P **P** **23 57 45.9 -0.9**
PKME **Peaks-Kenny Pk** 41.87 14 P **P** **23 57 47.4 +0.7**
baz=200
IRM **Iron Mountain** 41.92 318 P **P** **23 57 49.5 +2.2**
baz=127,SNR=11
SUSD **Miller** 41.92 342 P **P** **23 57 46.4 -0.8**
baz=155
NEE2 **Needles Airpor** 41.94 319 P **P** **23 57 49.2 +1.7**
baz=128
O20A **White River Ci** 41.99 330 IAmb IAmb 23 58 13.7
comp=Z,31nm,1.4s
O20A **White River Ci** 41.99 330 P **P** **23 57 49.1 +1.1**
baz=140
MONP2 **Monument Peak** 42.06 316 P **P** **23 57 50.0 +1.3**
baz=124
BB19B **Bebedouro** 42.24 129 *e*P **P** **23 57 49.4 -0.7**
G65A **Princeton** 42.25 16 IAmb IAmb 23 58 11.0
comp=Z,35nm,1.6s
KNB **Kanab** 42.26 323 IAmb IAmb 23 57 54.1
comp=Z,37nm,1.2s
BELC **Belle Mtn. Jos** 42.40 317 P **P** **23 57 52.0 +0.6**
baz=126,SNR=9.3
SRU **San Rafael Swe** 42.41 327 IAmb IAmb 23 57 54.5
comp=Z,36nm,1.2s
CRSM **Crissiumal (Br** 42.41 141 *e*P **P** **23 57 51.7 +0.3**
ITQB **Itaqui** 42.47 146 P **P** **23 57 50.9 -0.9**
TPFO **Pinon Flats** 42.48 317 P **P** **23 57 53.7 +1.6**
baz=125,SNR=7.2
PFO **Pinyon Flats O** 42.49 317 P **P** **23 57 52.7 +0.6**
PFO **Pinyon Flats O** 42.49 317 LR LR 00 14 55.5
comp=Z,384nm,18.2s,baz=128,slow=35
PFO **Pinyon Flats O** 42.49 317 P **P** **23 57 53.8 +1.7**
baz=125,SNR=5.7
PFO **Pinyon Flats O** 42.49 317 *i* *e*P **P** **23 57 53.9 +1.7**
PFO pmax pmax
comp=Z,25nm,1.3s
109C **Camp Elliot, M** 42.53 315 P **P** **23 57 53.8 +1.5**
baz=123
PMNB **Patos De Minas** 42.59 124 *e*P **P** **23 57 51.8 -1.4**
Q16A **Castle Valley** 42.62 327 P **P** **23 57 53.9 +0.7**
Q16A IAmb IAmb 23 57 56.7
comp=Z,52nm,1.8s
GMRC **Granite Mounta** 42.63 319 P **P** **23 57 55.3 +2.0**
baz=127,SNR=6.7
V12A **Nelson** 42.68 320 IAmb IAmb 23 57 56.9
comp=Z,45nm,1.3s
BI02 **San Fabin de** 42.68 166 P **P** **23 57 53.3 -0.2**
RWWY **Rawlins** 42.71 333 P **P** **23 57 54.4 +0.4**
RWWY IAmb IAmb 23 57 57.1
comp=Z,31nm,1.1s
FRTB **Fartura** 42.77 132 *e*P **P** **23 57 53.4 -1.0**
JANB **Januaria** 42.83 118 *e*P **P** **23 57 53.9 -1.1**
MSU **Marysvale** 42.90 325 P **P** **23 57 56.5 +1.0**
MSU **Marysvale** 42.90 325 P **P** **23 57 56.5 +1.0**
MURC **Murrieta** 42.99 316 P **P** **23 57 57.3 +1.2**
baz=124
HEC **Hector,Ludlow** 43.11 318 P **P** **23 57 58.5 +1.4**
baz=126,SNR=7.1
K22A **Casper** 43.17 334 P **P** **23 57 58.2 +0.6**
K22A **Casper** 43.17 334 P **P** **23 57 59.0 +1.4**
baz=144
TUQ **Turquoise Moun** 43.20 319 P **P** **23 57 59.1 +1.3**
baz=127
SHPR **Sheep Range** 43.36 321 P **P** **23 57 59.9 +0.7**
RSSD **Black Hills** 43.37 337 P **P** **23 58 00.1 +0.9**
RSSD IAmb IAmb 23 58 02.5
comp=Z,45nm,1.4s
RSSD **Black Hills** 43.37 337 P **P** **23 58 00.5 +1.3**
baz=148
RSSD **Black Hills** 43.37 337 P **P** **23 58 00.1 +0.9**
RSSD pmax pmax
comp=Z,45nm,1.4s
ITAB **Concordia** 43.46 139 P **P** **23 57 58.5 -1.3**
ITAB **Concordia** 43.46 139 *e*P **P** **23 57 59.7 -0.2**
MPU **Maple Canyon** 43.65 327 P **P** **23 58 02.0 +0.5**
BFSC **Mount Baldy Ra** 43.66 316 P **P** **23 58 03.0 +1.3**
baz=124
GSC **Goldstone, Bar** 43.70 318 IAmb IAmb 23 58 05.2
comp=Z,34nm,1.4s
GSC **Goldstone, Bar** 43.70 318 P **P** **23 58 03.2 +1.3**
baz=126,SNR=13
SHOC **Shoshone, Teco** 43.70 319 P **P** **23 58 03.3 +1.5**
baz=127
CIS **Catalina Islan** 43.73 315 P **P** **23 58 03.6 +1.5**
baz=122
RCLB **Rio Claro- Sao** 43.76 130 *e*P **P** **23 58 01.3 -1.2**
RODS **Rosario do Sul** 43.79 145 *e*P **P** **23 58 02.5 0.0**
LMQ **La Malbaie** 43.79 12 IAmb IAmb 23 58 06.0
comp=Z,28nm,1.0s
ALGR **Alto Alegre (B** 43.96 141 *e*P **P** **23 58 02.7 -1.3**
DECC **Green Verdugo** 44.14 316 P **P** **23 58 06.8 +1.4**
baz=123
EDW2 **Edwards Air Fo** 44.25 317 P **P** **23 58 07.3 +1.0**
baz=124,SNR=6.5
TPNV **Topopah Spring** 44.32 321 P **P** **23 58 09.3 +2.4**
baz=128,SNR=18
TCUT **Toone Canyon** 44.33 329 IAmb IAmb 23 58 10.1
comp=Z,47nm,1.4s
LRMC **Laurel Mtn Rad** 44.38 318 P **P** **23 58 09.3 +1.9**
baz=125
TBOT **Tacuaremb** 44.38 147 *e*P **P** **23 58 07.0 -0.2**
DUG **Dugway, Tooele** 44.42 327 P **P** **23 58 08.2 +0.5**
DUG IAmb IAmb 23 58 11.0
comp=Z,31nm,1.6s
DUG **Dugway, Tooele** 44.42 327 P **P** **23 58 09.4 +1.8**
baz=134,SNR=10.0
DUG **Dugway, Tooele** 44.42 327 P **P** **23 58 08.2 +0.5**
DUG pmax pmax
comp=Z,31nm,1.7s
FURC **Furnace Creek,** 44.42 320 P **P** **23 58 09.4 +1.9**
baz=127,SNR=7.3
SNCC **San Nicolas Is** 44.44 314 P **P** **23 58 09.3 +1.5**
baz=121
SPR3 **Spring Creek 3** 44.47 324 IAmb IAmb 23 58 11.0
comp=Z,50nm,1.5s
WCT **Wildcat Mounta** 44.47 320 IAmb IAmb 23 58 13.4
comp=Z,24nm,1.2s
VAO **Valinhos** 44.52 130 *e*P **P** **23 58 08.0 -0.6**
BATG **Bathurst New B** 44.57 16 P **P** **23 58 09.5 +1.0**
MPMC **Manual Prospec** 44.59 319 P **P** **23 58 10.5 +1.3**
baz=126,SNR=9.3
BW06 **Boulder Array** 44.64 332 P **P** **23 58 10.2 +0.7**
baz=140,SNR=6.0
PD31 **Pinedale Array** 44.64 332 IAmb IAmb 23 58 11.9
comp=Z,30nm,1.7s
PDAR **Pinedale Array** 44.64 332 P **P** **23 58 09.9 +0.4**
PDAR **Pinedale Array** 44.64 332 P **P** **23 58 10.6 +1.1**
comp=Z,2.4nm,0.8s,baz=139,slow=9.9,SNR=22
PDAR LR LR 00 18 58.4
comp=Z,218nm,19.3s,baz=132,slow=39
comp=Z,2.4nm,0.8s
AGMN **Agassiz Nation** 44.70 347 P **P** **23 58 11.1 +1.5**
baz=161
HWUT **Hardware Ranch** 44.77 329 IAmb IAmb 23 58 12.9
comp=Z,28nm,1.1s
Q12A **Willow Creek R** 44.78 324 IAmb IAmb 23 58 13.8
comp=Z,40nm,1.4s
DIAM **Diamantina, MG** 44.79 122 *e*P **P** **23 58 10.5 -0.4**
R11B **Troy Canyon, C** 44.79 323 IAmb IAmb 23 58 14.1
comp=Z,29nm,1.4s
R11B **Troy Canyon, C** 44.79 323 P **P** **23 58 12.8 +2.1**
baz=130,SNR=28
CPSB **Cacapava Do Su** 44.86 143 *e*P **P** **23 58 11.3 +0.2**
ARVC **Arvin** 44.96 317 P **P** **23 58 13.5 +1.6**
baz=124
SPUT **South Promonto** 45.01 328 P **P** **23 58 13.2 +0.8**
SPUT IAmb IAmb 23 58 15.2
comp=Z,42nm,1.5s
PET01 **Itanhaem-SP** 45.02 132 *e*P **P** **23 58 12.3 -0.1**
ISA **Isabella, Lake** 45.02 318 P **P** **23 58 14.0 +1.6**
baz=124
BGU **Big Grassy Mou** 45.05 327 IAmb IAmb 23 58 15.5
comp=Z,29nm,1.3s
GRAC **Grapevine Rang** 45.06 320 P **P** **23 58 14.4 +1.7**
baz=127,SNR=5.5
GMN **Gold Mountain** 45.18 320 IAmb IAmb 23 58 17.0
comp=Z,22nm,1.2s
SBC **Santa Barbara** 45.20 315 P **P** **23 58 16.5 +2.7**
baz=122
CWC **Cottonwood Cre** 45.20 319 P **P** **23 58 15.0 +1.1**
baz=125
MDND **Maddock** 45.21 344 P **P** **23 58 15.3 +1.6**
baz=156
GO06 **Curarrehue** 45.44 168 P **P** **23 58 14.1 -1.6**
MZP **Montezuma Peak** 45.50 321 P **P** **23 58 16.3 -0.1**
PKM **Mcpherson Peak** 45.51 316 P **P** **23 58 16.9 +0.4**
baz=122,SNR=6.7
HVU **Hansel Valley** 45.52 328 IAmb IAmb 23 58 19.0
comp=Z,21nm,1.4s
VES **Vestal, Richgr** 45.53 317 P **P** **23 58 17.7 +1.4**
baz=124,SNR=6.0
TIN **Tinemaha, Big** 45.66 319 P **P** **23 58 19.8 +2.3**
baz=126
DSP **Deep Springs** 45.67 320 P **P** **23 58 19.3 +1.9**
DSP IAmb IAmb 23 58 20.9
comp=Z,24nm,1.4s
PARB **Paraibuna** 45.73 129 *e*P **P** **23 58 17.5 -0.8**
PLTB **Pedras Altas** 45.75 145 P **P** **23 58 19.2 +1.1**
PLTB **Pedras Altas** 45.75 145 *e*P **P** **23 58 17.7 -0.4**
LOHW **Long Hollow** 45.78 332 P **P** **23 58 18.4 -0.1**
LOHW IAmb IAmb 23 58 21.1
comp=Z,28nm,1.8s
TPAW **Teton Pass** 45.85 331 IAmb IAmb 23 58 25.3
comp=Z,20nm,1.2s
SMMC **Simmler** 45.86 316 P **P** **23 58 21.1 +2.1**
baz=122
LR05 **Currie** 45.95 169 P **P** **23 58 18.6 -1.0**
ELK **Elko** 46.15 325 LR LR 00 17 27.5
comp=Z,431nm,21.7s,baz=138,slow=36
FLWY **Flagg Ranch** 46.18 332 IAmb IAmb 23 58 23.7
comp=Z,19nm,1.2s
ICQ **Pointe Anglais** 46.34 14 P **P** **23 58 21.5 -1.0**
ICQ IAmb IAmb 23 58 23.2
comp=Z,20nm,1.1s
RLMT **Red Lodge** 46.34 334 IAmb IAmb 23 58 24.4
comp=Z,12nm,1.1s
RLMT **Red Lodge** 46.34 334 P **P** **23 58 23.9 +1.0**
baz=142,SNR=7.6
H17A **Grant Village** 46.36 332 P **P** **23 58 24.7 +1.6**
baz=140
LAO **LASA Array** 46.37 338 P **P** **23 58 23.6 +0.7**
baz=146,SNR=6.3
YPP **Pitchstone Pla** 46.38 332 IAmb IAmb 23 58 26.3
comp=Z,15nm,1.4s
NV11 **Mina Array Sit** 46.42 321 P **P** **23 58 23.1 -0.4**
NVAR **Mina Array Bea** 46.52 321 P **P** **23 58 25.7 +1.3**
NVAR **Mina Array Bea** 46.52 321 P **P** **23 58 26.0 +1.6**
comp=Z,14nm,0.9s,baz=137,slow=7.4,SNR=38
NVAR LR LR 00 18 07.7
comp=Z,470nm,19.2s,baz=100,slow=36
comp=Z,14nm,0.9s

**ULM Lac du Bonnet 46.56 348** P **P** **23 58 23.5 -0.7**
comp=Z,5.4nm,0.9s,baz=156,slow=8.9,SNR=7.6
comp=Z,5.4nm,0.9s
**ULM Lac du Bonnet 46.56 348** *ce*P **P** **23 58 22.7 -1.5**
**PLCA Paso Flores 46.74 167** P **P** **23 58 25.3 -0.5**
PLCA IAmb IAmb 23 58 27.1
comp=Z,28nm,1.3s
**PLCA Paso Flores 46.74 167** P **P** **23 58 25.4 -0.4**
comp=Z,10nm,1.0s,baz=338,slow=11,SNR=15
comp=Z,10nm,1.0s
**PLCA Paso Flores 46.74 167** P **P** **23 58 25.3 -0.5**
PLCA pmax pmax
comp=Z,28nm,1.3s
**KVN Kaiserville 46.76 322** IAmb IAmb 23 58 28.9
comp=Z,15nm,1.1s
**YHH Holmes Hill 46.79 332** P **P** **23 58 26.7 +0.2**
**TRQA Tornquist 46.84 158** P **P** **23 58 25.2 -1.4**
**TRQA Tornquist 46.84 158** P **P** **23 58 25.2 -1.4**
TRQA pmax pmax
comp=Z,55nm,1.7s
**BMN Battle Mountai 47.09 324** P **P** **23 58 29.3 +0.5**
**BMN Battle Mountai 47.09 324** P **P** **23 58 29.3 +0.5**
BMN pmax pmax
comp=Z,56nm,1.3s
**DGMT Dagmar 47.16 341** P **P** **23 58 29.9 +0.9**
baz=150
**GUA01 Guaratinga, BA 47.41 118** *e*P **P** **23 58 30.6 -0.8**
**CMB Columbia Colle 47.62 319** P **P** **23 58 32.1 -0.7**
**CMB Columbia Colle 47.62 319** P **P** **23 58 32.1 -0.7**
CMB pmax pmax
comp=Z,13nm,1.5s
**HLID Hailey 47.63 329** P **P** **23 58 34.3 +1.3**
baz=135,SNR=8.3
**DUB01 Friburgo-RJ 47.65 126** *e*P **P** **23 58 33.5 +0.3**
**PNTR Pine Nut 47.72 321** IAmb IAmb 23 58 36.7
comp=Z,16nm,1.0s
**BOZ Bozeman (W) 47.76 333** IAmb IAmb 23 58 36.6
comp=Z,23nm,1.2s
**BOZ Bozeman (W) 47.76 333** P **P** **23 58 34.8 +0.9**
baz=139,SNR=26
**RCBR Riachuelo 47.85 102** LR LR 00 20 18.4
comp=Z,114nm,19.1s,baz=159,slow=38
**LL01 San Ignacio de 47.96 170** IAmb IAmb 23 58 37.6
comp=Z,13nm,0.9s
**RIB01 Linhares ES 48.02 121** *e*P **P** **23 58 35.5 -0.5**
**MFID Camas Ranch 48.27 328** P **P** **23 58 38.3 +0.5**
**NBAN Anadia - AL 48.40 107** *e*P **P** **23 58 37.8 -1.3**
**EGMT Eagleton 48.84 336** IAmb IAmb 23 58 44.6
comp=Z,30nm,1.4s
**EGMT Eagleton 48.84 336** P **P** **23 58 43.4 +1.3**
baz=143,SNR=6.4
**LL02 Futaleuf 48.85 170** P **P** **23 58 41.8 -0.2**
**DRLN Deer Lake 49.07 22** IAmb IAmb 23 58 52.5
comp=Z,18nm,0.9s
**OVMT Ovando 49.49 333** P **P** **23 58 46.1 -1.1**
**MSO Missoula 49.75 332** IAmb IAmb 23 58 51.3
comp=Z,20nm,1.2s
**MSO Missoula 49.75 332** P **P** **23 58 49.6 +0.5**
baz=137,SNR=13
**BMO Blue Mountains 50.03 328** P **P** **23 58 50.2 -1.0**
BMO IAmb IAmb 23 58 52.6
comp=Z,28nm,1.9s
**BMO Blue Mountains 50.03 328** P **P** **23 58 50.2 -1.0**
BMO pmax pmax
comp=Z,28nm,1.9s
**KCPM Cahto Peak 50.61 319** IAmb IAmb 23 58 58.9
comp=Z,30nm,1.0s
**COYC Coyhaique 51.12 170** IAmb IAmb 23 59 10.0
comp=Z,26nm,1.0s
**YBH Yreka Blue Hor 51.19 322** LR LR 00 21 05.0
comp=Z,396nm,20.4s,baz=130,slow=36
**G08A Pilot Rock 51.20 328** IAmb IAmb 23 59 02.5
comp=Z,23nm,1.3s
**J05D Fort Rock, OR 51.21 324** IAmb IAmb 23 59 02.7
comp=Z,31nm,1.4s
**PINE Pine Mountain 51.35 325** IAmb IAmb 23 59 04.0
comp=Z,30nm,1.6s
**SCHQ Schefferville 51.40 12** P **P** **23 59 01.1 -0.2**
**SCHQ Schefferville 51.40 12** P **P** **23 59 00.7 -0.7**
comp=Z,28nm,1.0s,baz=178,slow=6.5,SNR=16
SCHQ LR LR 00 25 03.4
comp=Z,124nm,18.3s,baz=208,slow=41
comp=Z,28nm,1.0s
**KRMB Red Mountain 51.81 321** P **P** **23 59 05.5 +0.7**
**FFC Flin Flon 52.09 346** P **P** **23 59 06.7 +0.2**
**FFC Flin Flon 52.09 346** *e*P **P** **23 59 07.4 +0.9**
**I04A Tendick Farm, 52.20 324** IAmb IAmb 23 59 10.9
comp=Z,15nm,1.0s
**HAWA Hanford 52.22 328** IAmb IAmb 23 59 09.9
comp=Z,34nm,1.7s
**NEW Newport 52.28 331** LR LR 00 23 18.5
comp=Z,268nm,18.0s,baz=136,slow=38
**NEW Newport 52.28 331** P **P** **23 59 08.3 +0.3**
baz=134
**K02D Willamette Mer 52.31 322** IAmb IAmb 23 59 10.5
comp=Z,32nm,1.2s
**E07A Sunnyside 52.50 328** P **P** **23 59 09.3 -0.4**
**H04A Detroit Lake 52.60 325** IAmb IAmb 23 59 12.3
comp=Z,20nm,1.0s
**MXC Moxie City 52.74 328** IAmb IAmb 23 59 14.4
comp=Z,19nm,1.1s
**BUCK Buck Mountain 52.77 324** IAmb IAmb 23 59 13.4
comp=Z,28nm,1.1s
**LTY Liberty 53.38 328** P **P** **23 59 16.6 +0.4**
LTY IAmb IAmb 23 59 18.6
comp=Z,25nm,1.2s
**GNW Green Mountain 54.71 328** IAmb IAmb 23 59 27.4
comp=Z,18nm,1.1s
**NLWA Neilton Lookou 55.16 327** P **P** **23 59 29.9 +0.7**
NLWA IAmb IAmb 23 59 32.2
comp=Z,29nm,1.4s
**B04A Port Angeles 55.37 328** IAmb IAmb 23 59 33.5
comp=Z,27nm,1.1s
**CBB Campbell River 57.54 329** P **P** **23 59 46.6 +0.6**
CBB IAmb IAmb 23 59 49.3
comp=Z,24nm,1.3s
**RKT Rikitea 58.18 239** *e*LR LR 00 16 59.7
comp=Z,3µm,28.8s
**TAOE Nuku Hiva Isla 58.95 257** *e*LR LR 00 17 18.0
comp=Z,346nm,24.9s
**FRB Frobisher Bay 59.62 7** LR LR 00 25 17.3
comp=Z,255nm,21.3s,baz=198,slow=36
**BBB Bella Bella 60.21 330** LR LR 00 28 30.3
comp=Z,149nm,19.1s,baz=169,slow=38
**YKA Yellowknife Ar 62.13 344** P **P** **00 00 17.4 +0.1**
comp=Z,5.5nm,0.9s,baz=138,slow=6.5,SNR=18
YKA LR LR 00 28 44.8
comp=Z,123nm,18.8s,baz=132,slow=38
comp=Z,5.5nm,0.9s
**TOAD Toad River Com 63.02 337** P **P** **00 00 24.4 +0.9**
baz=131
**V35K Ketchikan 63.69 331** P **P** **00 00 29.5 +1.6**
baz=123
**LIRD Liard River Hi 63.73 337** P **P** **00 00 29.0 +1.0**
baz=130
**T35M Bob Quinn 63.98 333** P **P** **00 00 31.4 +1.5**
baz=125
**CRAG Craig 64.49 331** P **P** **00 00 34.7 +1.6**
baz=122
**DLBC Dease Lake 64.73 335** LR LR 00 31 28.7
comp=Z,329nm,20.4s,baz=102,slow=38
**DLBC Dease Lake 64.73 335** P **P** **00 00 35.9 +1.2**
baz=126,SNR=12
**BBTS Babate 65.66 76** LR LR 00 27 08.8
comp=Z,88nm,20.2s,baz=143,slow=34
**R33M Jennings River 65.69 335** P **P** **00 00 41.3 +0.3**
R33M IAmb IAmb 00 00 45.2
comp=Z,13nm,1.1s
**R33M Jennings River 65.69 335** P **P** **00 00 42.2 +1.2**
baz=125
**SFJD Kangerlussuaq 65.79 13** LR LR 00 31 34.8
comp=Z,115nm,19.3s,baz=220,slow=38
**Q32M Nakina River 65.99 334** P **P** **00 00 44.0 +0.9**
baz=124
**S32K Killisnoo 66.22 332** P **P** **00 00 45.6 +1.2**
baz=121
**R32K Eaglecrest 66.62 333** P **P** **00 00 47.1 +0.3**
baz=121
**P33M Teslin, Yukon 66.92 335** P **P** **00 00 49.0 +0.1**
P33M IAmb IAmb 00 00 53.2
comp=Z,16nm,1.1s
**P33M Teslin, Yukon 66.92 335** P **P** **00 00 49.5 +0.7**
baz=124
**P32M Atlin 66.96 335** P **P** **00 00 49.0 -0.1**
baz=122
**S31K Pelican 67.24 332** P **P** **00 00 51.7 +0.9**
baz=120

**N32M Quiet Lake 67.56 336** P **P** **00 00 54.1 +1.3**
baz=124
**MMPY Sheldon Lake, 67.69 338** P **P** **00 00 54.8 +1.1**
MMPY IAmb IAmb 00 00 58.4
comp=Z,8.5nm,1.1s
**MMPY Sheldon Lake, 67.69 338** P **P** **00 00 55.1 +1.4**
baz=126
**WHY Whitehorse 68.03 335** P **P** **00 00 57.6 +1.7**
baz=122
**PLBC Pleasant Camp 68.05 334** P **P** **00 00 58.1 +2.2**
baz=120
**FARO Faro, Yukon 68.26 337** P **P** **00 00 59.3 +2.1**
baz=124
**O30N Mendenhall 68.59 335** IAmb IAmb 00 01 04.4
comp=Z,15nm,1.0s
**O30N Mendenhall 68.59 335** P **P** **00 01 01.4 +2.0**
baz=121
**P30M Million Dollar 68.64 334** P **P** **00 01 01.0 +1.3**
baz=120
**M31M Drury Creek, Y 68.66 337** IAmb IAmb 00 01 21.4
comp=Z,9.2nm,1.2s
**M31M Drury Creek, Y 68.66 337** P **P** **00 01 01.2 +1.5**
baz=123
**P29M Windy Craggy 68.74 333** IAmb IAmb 00 01 06.8
comp=Z,16nm,1.1s
**P29M Windy Craggy 68.74 333** P **P** **00 01 01.2 +0.9**
baz=119
**N31M Braeburn, Yuko 68.83 336** IAmb IAmb 00 01 05.2
comp=Z,16nm,1.1s
**N31M Braeburn, Yuko 68.83 336** P **P** **00 01 01.6 +0.8**
baz=121
**N30M Aishikik Lake 69.36 335** IAmb IAmb 00 01 09.6
comp=Z,9.8nm,1.0s
**N30M Aishikik Lake 69.36 335** P **P** **00 01 05.5 +1.3**
baz=120
**O29M Mount Kennedy 69.43 334** P **P** **00 01 06.1 +1.4**
baz=118
**PNL Peninsula 69.50 333** P **P** **00 01 06.5 +1.5**
baz=117
**YUK6 Outpost Mounta 69.65 335** P **P** **00 01 07.9 +1.8**
baz=118
**PPT Papeete 69.71 249** LR LR 00 26 03.8
comp=Z,142nm,18.4s,baz=100,slow=31
**PPT2 Papeete2 69.72 249** *e*S **S** **00 10 14.1 -2.3**
comp=Z,95nm,24.5s
**PPT2 Papeete2 69.72 249** *e*LR LR 00 22 13.1
comp=Z,361nm,29.8s
PPT2 *e*LR LR 00 22 18.7
comp=Z,228nm,34.0s
**YUK4 Talbot Arm 69.96 335** P **P** **00 01 09.4 +1.3**
baz=118
**ICESG Greenland Ices 70.07 15** *e*P **P** **00 01 08.6 -0.2**
**YUK8 Steele Glacier 70.41 334** P **P** **00 01 12.4 +1.6**
baz=117
**M29M Somme Creek 70.41 336** IAmb IAmb 00 01 13.5
comp=Z,27nm,1.6s
**M29M Somme Creek 70.41 336** P **P** **00 01 12.1 +1.5**
baz=119,SNR=9.2
**L29M L29M 70.60 337** P **P** **00 01 12.2 +0.4**
L29M IAmb IAmb 00 01 16.1
comp=Z,14nm,1.0s
**L29M L29M 70.60 337** P **P** **00 01 13.2 +1.4**
baz=119
**J30M Hart River 70.67 338** IAmb IAmb 00 01 17.5
comp=Z,12nm,1.2s
**J30M Hart River 70.67 338** P **P** **00 01 13.7 +1.5**
baz=122
**K29M Barlow Dome 70.73 337** IAmb IAmb 00 01 17.3
comp=Z,14nm,0.9s
**K29M Barlow Dome 70.73 337** P **P** **00 01 13.4 +0.8**
baz=120,SNR=12
**MESA MESA 70.88 333** P **P** **00 01 15.0 +1.3**
baz=115
**TBI Tubuai 70.92 243** *e*S **S** **00 10 33.4 +3.3**
comp=Z,853nm,32.5s
**TBI Tubuai 70.92 243** *e*LR LR 00 22 50.1
comp=Z,4µm,28.0s
**YUK3 Moose Creek 70.93 335** P **P** **00 01 15.6 +1.6**
baz=117
**CTG Chitna Glacier 70.95 334** P **P** **00 01 15.4 +1.4**
baz=116
**I30M Mount Dempster 71.03 339** P **P** **00 01 14.6 +0.2**
I30M IAmb IAmb 00 01 31.3
comp=Z,18nm,1.3s
**I30M Mount Dempster 71.03 339** P **P** **00 01 15.0 +0.7**
baz=122,SNR=8.5
**G31M Satah River 71.24 341** IAmb IAmb 00 01 20.3
comp=Z,12nm,0.8s
**G31M Satah River 71.24 341** P **P** **00 01 16.1 +0.7**
baz=124
**F31M Tsiigehtchic 71.37 342** P **P** **00 01 16.8 +0.7**
baz=125
**DAWY Dawson 71.56 337** P **P** **00 01 18.0 +0.5**
DAWY IAmb IAmb 00 01 21.9
comp=Z,9.4nm,0.9s
**DAWY Dawson 71.56 337** P **P** **00 01 18.0 +0.5**
baz=118
**CRQE Cirque 71.64 333** P **P** **00 01 18.5 +0.4**
baz=114
**EPYK Eagle Plains 71.75 340** P **P** **00 01 19.4 +0.8**
baz=122
**M27K Edge Creek, AK 71.79 335** P **P** **00 01 19.5 +0.5**
baz=116
**I29M Ogilvie Camp, 71.79 339** P **P** **00 01 20.1 +1.2**
baz=120,SNR=12
**INK Inuvik 71.80 342** IAmb IAmb 00 01 23.8
comp=Z,16nm,0.9s
**INK Inuvik 71.80 342** LR LR 00 35 19.1
comp=Z,330nm,19.1s,baz=118,slow=38
**INK Inuvik 71.80 342** P **P** **00 01 19.8 +1.0**
baz=125
**MCARA McCarthy VSAT 71.87 334** P **P** **00 01 20.3 +1.0**
baz=114
**G30M tAoh Zraii Nji 71.91 341** P **P** **00 01 20.1 +0.5**
baz=122
**KAIM Kayak Island 71.92 332** P **P** **00 01 20.1 +0.4**
baz=112
**VRDI Verde Repeater 71.99 334** P **P** **00 01 19.6 -0.7**
VRDI IAmb IAmb 00 01 24.8
comp=Z,15nm,1.2s
**A36M Sachs Harbour 72.02 347** P **P** **00 01 21.5 +1.5**
baz=135
**L27K Beaver Creek, 72.07 336** IAmb IAmb 00 01 25.8
comp=Z,16nm,1.0s
**L27K Beaver Creek, 72.07 336** P **P** **00 01 21.5 +0.9**
baz=116,SNR=20
**F30M Barrier River 72.11 341** P **P** **00 01 22.0 +1.3**
baz=123,SNR=11
**GLB Gilahina Butte 72.23 334** IAmb IAmb 00 01 26.3
comp=Z,12nm,1.0s
**H29M Whitestone 72.25 339** IAmb IAmb 00 01 26.8
comp=Z,18nm,1.1s
**H29M Whitestone 72.25 339** P **P** **00 01 22.8 +1.2**
baz=120,SNR=7.7
**M26K Nabesna, AK 72.28 335** P **P** **00 01 22.9 +1.0**
baz=114
**BMRM Bremner River 72.40 333** P **P** **00 01 23.7 +1.1**
baz=113
**I28M Miner Creek 72.43 338** IAmb IAmb 00 01 45.6
comp=Z,11nm,1.1s
**I28M Miner Creek 72.43 338** P **P** **00 01 23.8 +1.0**
baz=118
**G29M Pine Creek 72.48 340** P **P** **00 01 22.8 -0.2**
G29M IAmb IAmb 00 01 27.9
comp=Z,17nm,0.8s
**G29M Pine Creek 72.48 340** P **P** **00 01 23.7 +0.8**
baz=121,SNR=7.8
**EGAK Eagle 72.58 337** P **P** **00 01 24.6 +1.1**
EGAK IAmb IAmb 00 01 28.1
comp=Z,8.8nm,0.8s
**EGAK Eagle 72.58 337** P **P** **00 01 24.5 +1.0**
baz=117,SNR=6.4
**K27K Chicken 72.60 337** P **P** **00 01 24.0 +0.3**
baz=116
**Q23K Middleton Isla 72.64 331** P **P** **00 01 24.3 +0.3**
baz=110
**N25K Chitina, Valde 72.65 334** P **P** **00 01 23.5 -0.6**
baz=113
**L26K Log Cabin Wild 72.68 335** IAmb IAmb 00 01 29.2
comp=Z,9.3nm,0.9s
**L26K Log Cabin Wild 72.68 335** P **P** **00 01 25.1 +0.8**
baz=114
**SUMG Summit 72.78 13** P **P** **00 01 23.5 -1.5**
SUMG IAmb IAmb 00 01 38.7
comp=Z,18nm,1.0s
**SUMG Summit 72.78 13** P **P** **00 01 23.5 -1.5**
SUMG pmax pmax
comp=Z,18nm,1.0s

**SUMG Summit 72.78 13** *i* P **P** **00 01 24.0 -1.1**
**I27K Kandik River 73.12 338** P **P** **00 01 27.4 +0.6**
baz=117,SNR=11
**KLU Klutina 73.19 333** P **P** **00 01 28.2 +0.8**
KLU IAmb IAmb 00 01 33.0
comp=Z,11nm,1.0s
**KLU Klutina 73.19 333** P **P** **00 01 27.6 +0.3**
baz=112
**E29M Blow River 73.20 341** P **P** **00 01 28.4 +1.3**
baz=121
**SCRK Sand Creek 73.34 336** P **P** **00 01 29.1 +0.9**
baz=114
**P23K Montague Islan 73.34 332** P **P** **00 01 28.8 +0.7**
baz=110
**H27K Steamboat Moun 73.38 339** P **P** **00 01 29.1 +0.8**
baz=117,SNR=7.4
**J26L Joseph Creek 73.39 337** IAmb IAmb 00 01 33.7
comp=Z,14nm,0.9s
**J26L Joseph Creek 73.39 337** P **P** **00 01 29.2 +0.7**
baz=114,SNR=10
**F28M Old Crow 73.45 340** P **P** **00 01 29.6 +0.9**
baz=119
**GLI Glacier Island 73.50 333** P **P** **00 01 29.7 +0.6**
baz=110
**M24K Tolsona, Glenn 73.53 334** P **P** **00 01 30.2 +0.9**
baz=111
**PAX Paxson 73.55 335** P **P** **00 01 29.6 +0.1**
baz=112
**I26K Coal Creek Min 73.57 338** P **P** **00 01 28.7 -0.7**
**I26K Coal Creek Min 73.57 338** P **P** **00 01 30.3 +0.9**
baz=115
**BORG Borgarnes 73.63 23** LR LR 00 29 00.1
comp=Z,62nm,21.6s,baz=248,slow=32
**SMAI San Martin Ant 73.67 174** P **P** **00 01 30.8 +0.9**
SMAI IAmb IAmb 00 01 36.3
comp=Z,23nm,1.0s
**G27K Doyon Strip 73.69 339** P **P** **00 01 30.3 +0.2**
baz=117,SNR=5.1
**E28M Babbage River 73.83 341** P **P** **00 01 31.3 +0.4**
baz=120
**SCM Sheep Creek Mo 73.94 333** IAmb IAmb 00 01 35.8
comp=Z,18nm,1.0s
**SCM Sheep Creek Mo 73.94 333** P **P** **00 01 32.2 +0.5**
baz=110
**PWL Port Wells 74.07 332** P **P** **00 01 32.9 +0.5**
baz=109
**M23K Glacier View 74.10 333** P **P** **00 01 33.3 +0.7**
baz=110
**J25K Salcha River, 74.15 337** P **P** **00 01 33.0 +0.1**
J25K IAmb IAmb 00 01 37.2
comp=Z,12nm,1.1s
**J25K Salcha River, 74.15 337** P **P** **00 01 33.3 +0.4**
baz=113,SNR=5.4
**PTEO Sao Teotonio 74.27 53** *e*P **P** **00 01 36.3 +2.2**
**E27K Coleen River 74.30 341** P **P** **00 01 34.4 +0.7**
baz=117
**KNK Knik Glacier 74.31 333** P **P** **00 01 33.9 +0.1**
baz=109
**MORF Marmelete 74.31 53** *e*P **P** **00 01 36.3 +2.0**
**SML Sawmill 74.38 333** IAmb IAmb 00 01 38.2
comp=Z,20nm,1.1s
**SML Sawmill 74.38 333** P **P** **00 01 34.3 0.0**
baz=109
**WAT6 Susitna Watana 74.38 334** P **P** **00 01 34.4 0.0**
baz=110,SNR=14
**DHY Denali Highway 74.40 335** P **P** **00 01 35.6 +1.1**
baz=111
**NEEM North Greenlan 74.43 7** *e*P **P** **00 01 33.3 -1.3**
**PNCL Nicolau / Gran 74.49 52** *e*P **P** **00 01 36.8 +1.5**
**G26K Porcupine Rive 74.50 339** P **P** **00 01 35.9 +1.1**
baz=115
**PRP Porcupine Dome 74.56 337** IAmb IAmb 00 01 37.6
comp=Z,19nm,1.5s
**PRP Porcupine Dome 74.56 337** P **P** **00 01 35.5 +0.1**
baz=113
**D27M Malcolm River 74.59 342** IAmb IAmb 00 01 39.6
comp=Z,16nm,1.2s
**D27M Malcolm River 74.59 342** P **P** **00 01 36.7 +1.3**
baz=118
**GHO Glory Hole Cre 74.63 333** IAmb IAmb 00 01 39.6
comp=Z,14nm,1.0s
**PMR Palmer 74.67 333** P **P** **00 01 37.1 +1.3**
baz=108
**HDA Harding Lake 74.70 336** IAmb IAmb 00 01 40.3
comp=Z,14nm,0.9s
**HDA Harding Lake 74.70 336** P **P** **00 01 36.7 +0.7**
baz=111,SNR=5.7
**PCAS Casmilo, Conde 74.72 50** *e*P **P** **00 01 38.5 +1.8**
comp=Z,50nm,1.2s
**RC01 Rabbit Creek A 74.79 332** P **P** **00 01 37.5 +0.9**
baz=108
**COI Coimbra 74.81 50** P **P** **00 01 37.6 +0.5**
**COI Coimbra 74.81 50** *e*P **P** **00 01 39.3 +2.2**
comp=Z,67nm,1.9s
**COI Coimbra 74.81 50** P **P** **00 01 37.6 +0.5**
COI pmax pmax
comp=Z,37nm,0.9s
**ILAR Eielson Array 74.81 336** P **P** **00 01 36.8 +0.1**
comp=Z,5.2nm,0.9s,baz=114,slow=4.1,SNR=22
ILAR LR LR 00 37 31.7
comp=Z,130nm,20.1s,baz=108,slow=38
comp=Z,5.2nm,0.9s
**WAT1 Susitna Watana 74.82 334** P **P** **00 01 38.0 +1.2**
baz=109
**PCVE Castro Verde 74.83 52** *e*P **P** **00 01 40.7 +3.4**
**PMTG Montargil 74.83 51** *e*P **P** **00 01 38.3 +1.1**
comp=Z,25nm,1.4s
**FYU Fort Yukon 74.87 338** IAmb IAmb 00 01 41.8
comp=Z,21nm,1.0s
**EVO Evora 74.93 52** *e*P **P** **00 01 40.9 +3.0**
**F26K Sheenjek River 74.95 340** P **P** **00 01 38.4 +0.9**
**F26K Sheenjek River 74.95 340** P **P** **00 01 38.1 +0.7**
baz=115
**H25L Birch Creek 74.97 338** P **P** **00 01 38.4 +0.9**
baz=113
**PVAQ Vaqueiros 75.06 53** *e*S **S** **00 11 23.3 +6.5**
**PVAQ Vaqueiros 75.06 53** *e*LR LR 00 24 54.7
comp=Z,134nm,22.0s
**PGAV Gavieira, Arco 75.12 48** *e*S **S** **00 11 23.0 +5.4**
**PGAV Gavieira, Arco 75.12 48** *e*LR LR 00 25 25.6
comp=Z,134nm,20.0s
**POKR Poker Plat Res 75.15 337** P **P** **00 01 39.0 +0.4**
**POKR Poker Plat Res 75.15 337** P **P** **00 01 39.1 +0.5**
baz=111
**COLA College 75.23 336** *i* *e*P **P** **00 01 40.1 +1.1**
COLA pmax pmax
comp=Z,2.0nm,0.9s
**PVIS Viseu 75.25 49** *e*P **P** **00 01 40.6 +0.8**
**KDAK Kodiak Island 75.26 329** LR LR 00 35 34.4
comp=Z,168nm,21.1s,baz=111,slow=36
**G25K Bearman Lake 75.27 338** P **P** **00 01 40.8 +1.6**
baz=113
**MCK McKinley 75.28 335** P **P** **00 01 41.0 +1.6**
baz=109
**PESTR Estremoz 75.30 51** P **P** **00 01 39.9 -0.1**
**PESTR Estremoz 75.30 51** *e*P **P** **00 01 41.3 +1.3**
comp=Z,42nm,2.8s
**SUA Susitna One 75.37 333** P **P** **00 01 40.8 +0.7**
baz=107
**POLO Lamas de Olo 75.40 49** *e*P **P** **00 01 41.9 +1.2**
comp=Z,18nm,2.5s
**F25K Christian Rive 75.43 339** P **P** **00 01 41.7 +1.4**
baz=113
**CUT Chulitna 75.43 334** P **P** **00 01 41.7 +1.5**
baz=108
**PVRL Vila Real 75.45 49** *e*P **P** **00 01 42.1 +1.2**
**PCBR Castelo Branco 75.48 50** *e*P **P** **00 01 42.4 +1.4**
**MTE Manteigas 75.49 50** *e*P **P** **00 01 43.6 +2.5**
comp=Z,27nm,2.1s
MTE *e*S **S** **00 11 25.7 +4.1**
**MTE Manteigas 75.49 50** *e*LR LR 00 25 14.5
comp=Z,134nm,22.0s
**OHAK Old Harbor 75.49 328** P **P** **00 01 41.7 +1.1**
baz=104
**PMRV Marv??o 75.50 51** *e*P **P** **00 01 43.8 +2.6**
comp=Z,19nm,1.6s
PMRV *e*S **S** **00 11 25.4 +3.6**
**PMRV Marv??o 75.50 51** *e*LR LR 00 24 47.0
comp=Z,85nm,20.0s
**H24K Noodor Dome 75.58 337** IAmb IAmb 00 01 45.9
comp=Z,13nm,1.1s
**H24K Noodor Dome 75.58 337** P **P** **00 01 41.7 +0.5**
baz=111
**NEA2 Nenana 75.63 336** IAmb IAmb 00 01 42.5
comp=Z,14nm,1.3s
**NEA2 Nenana 75.63 336** P **P** **00 01 41.8 +0.4**
baz=109

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BWN | Browne | 75.65 | 335 | P | P | 00 01 41.2 | -0.3 |
| PBAR | Barrancos | 75.66 | 52 | *e*P | P | 00 01 43.7 | +1.6 |
| G24K | Hadweenzic Riv | 75.75 | 338 | IAmb | IAmb | 00 01 47.2 | |
| | comp=Z,21nm,1.3s | | | | | | |
| G24K | Hadweenzic Riv | 75.75 | 338 | P | P | 00 01 43.5 | +1.5 |
| | baz=111 | | | | | | |
| SII | Sitkinak Islan | 75.81 | 327 | P | P | 00 01 43.7 | +1.1 |
| | baz=103 | | | | | | |
| SKT | Skwentna | 75.87 | 333 | P | P | 00 01 43.7 | +0.9 |
| SKT | | | | IAmb | IAmb | 00 01 46.7 | |
| | comp=Z,13nm,1.0s | | | | | | |
| SKT | Skwentna | 75.87 | 333 | P | P | 00 01 43.1 | +0.3 |
| | baz=106 | | | | | | |
| I23K | Minto, Yukon-K | 75.93 | 336 | IAmb | IAmb | 00 01 45.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| I23K | Minto, Yukon-K | 75.93 | 336 | P | P | 00 01 43.6 | +0.6 |
| | baz=109,SNR=7.7 | | | | | | |
| MVO | Moncorvo | 75.95 | 49 | *e*P | P | 00 01 44.8 | +1.0 |
| N20K | Mount Spurr | 75.97 | 332 | P | P | 00 01 44.1 | +0.6 |
| | baz=106 | | | | | | |
| F24K | Squaw Lake | 76.20 | 339 | P | P | 00 01 45.4 | +0.8 |
| | baz=111 | | | | | | |
| H23K | Yukon River | 76.22 | 337 | P | P | 00 01 45.2 | +0.4 |
| | baz=109 | | | | | | |
| PBRG | Braganca | 76.23 | 48 | *e*P | P | 00 01 47.5 | +2.1 |
| BPAW | Bear Paw Mtn. | 76.26 | 335 | IAmb | IAmb | 00 01 49.1 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| BPAW | Bear Paw Mtn. | 76.26 | 335 | P | P | 00 01 45.4 | +0.4 |
| | baz=108 | | | | | | |
| D25K | Kavik River | 76.36 | 341 | P | P | 00 01 46.2 | +0.6 |
| D25K | | | | IAmb | IAmb | 00 01 50.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| D25K | Kavik River | 76.36 | 341 | P | P | 00 01 46.1 | +0.5 |
| | baz=113 | | | | | | |
| MLY | Manley | 76.44 | 336 | P | P | 00 01 46.5 | +0.4 |
| | baz=108 | | | | | | |
| M20K | Styx River | 76.58 | 333 | P | P | 00 01 47.4 | +0.5 |
| | baz=105 | | | | | | |
| E24K | Your Creek | 76.61 | 339 | P | P | 00 01 47.9 | +1.0 |
| | baz=111 | | | | | | |
| G23K | Bananza Creek | 76.70 | 338 | P | P | 00 01 47.0 | -0.5 |
| G23K | | | | IAmb | IAmb | 00 01 52.6 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| G23K | Bananza Creek | 76.70 | 338 | P | P | 00 01 48.1 | +0.6 |
| | baz=109 | | | | | | |
| COLD | Coldfoot | 76.94 | 338 | P | P | 00 01 49.8 | +1.0 |
| | baz=104 | | | | | | |
| N19K | Bonanza Creek | 76.94 | 331 | P | P | 00 01 49.6 | +0.6 |
| | baz=104 | | | | | | |
| H22K | Ishtalitna Cre | 76.96 | 337 | P | P | 00 01 49.5 | +0.5 |
| | baz=108 | | | | | | |
| E23K | Chandalar | 77.00 | 339 | IAmb | IAmb | 00 01 57.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| E23K | Chandalar | 77.00 | 339 | P | P | 00 01 49.7 | +0.5 |
| | baz=110,SNR=8.0 | | | | | | |
| L20K | Farewell, AK | 77.07 | 333 | P | P | 00 01 50.2 | +0.6 |
| | baz=104 | | | | | | |
| O18K | Koktuh Hills | 77.07 | 330 | P | P | 00 01 50.3 | +0.7 |
| | baz=103 | | | | | | |
| Q17K | Contact Creek | 77.08 | 329 | P | P | 00 01 49.8 | 0.0 |
| | baz=102 | | | | | | |
| TOLK | Toolik Lake Re | 77.19 | 340 | P | P | 00 01 50.6 | +0.4 |
| | baz=110 | | | | | | |
| R17L | Mt. Peulik Vol | 77.20 | 328 | P | P | 00 01 50.8 | +0.4 |
| | baz=101 | | | | | | |
| MDT | Midelt | 77.30 | 58 | LR | LR | 00 30 43.2 | |
| | comp=Z,67nm,21.8s,baz=286,slow=32 | | | | | | |
| DBIC | Dimbokro | 77.32 | 84 | P | P | 00 01 52.1 | +0.2 |
| | comp=Z,5.5nm,1.0s,baz=299,slow=5.5,SNR=3.9 | | | | | | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| K20K | Telida | 77.37 | 334 | IAmb | IAmb | 00 01 52.8 | |
| | comp=Z,25nm,1.4s | | | | | | |
| K20K | Telida | 77.37 | 334 | P | P | 00 01 51.5 | +0.2 |
| | baz=104 | | | | | | |
| L19K | White Mountain | 77.44 | 333 | P | P | 00 01 52.1 | +0.4 |
| | baz=104 | | | | | | |
| H21K | Melozitna Rive | 77.46 | 336 | P | P | 00 01 52.0 | +0.3 |
| | baz=106 | | | | | | |
| N18K | Kilae Creek | 77.58 | 331 | P | P | 00 01 52.3 | -0.3 |
| | baz=102 | | | | | | |
| J20K | Nowinta River | 77.61 | 335 | IAmb | IAmb | 00 01 56.7 | |
| | comp=Z,11nm,1.1s | | | | | | |
| J20K | Nowinta River | 77.61 | 335 | P | P | 00 01 52.4 | -0.2 |
| | baz=104 | | | | | | |
| D23K | Nanushuk River | 77.67 | 340 | P | P | 00 01 53.2 | +0.3 |
| | baz=109 | | | | | | |
| M18K | Stony River | 77.73 | 332 | P | P | 00 01 54.2 | +0.9 |
| | baz=102 | | | | | | |
| F22K | John River | 77.75 | 338 | P | P | 00 01 54.1 | +0.7 |
| | baz=107 | | | | | | |
| PAB | San Pablo | 77.86 | 51 | P | P | 00 01 54.4 | -0.2 |
| PAB | | | | IAmb | IAmb | 00 02 02.4 | |
| | comp=Z,18nm,1.4s | | | | | | |
| PAB | San Pablo | 77.86 | 51 | P | P | 00 01 54.4 | -0.2 |
| PAB | | | | pmax | pmax | | |
| | comp=Z,18nm,1.5s | | | | | | |
| I20K | Naaghedeneel | 77.91 | 335 | P | P | 00 01 54.6 | +0.4 |
| | baz=104 | | | | | | |
| C23K | Itkillik River | 77.94 | 341 | P | P | 00 01 54.7 | +0.5 |
| | baz=109 | | | | | | |
| G21K | Allakaket | 77.97 | 337 | P | P | 00 01 55.1 | +0.5 |
| G21K | | | | IAmb | IAmb | 00 01 58.8 | |
| | comp=Z,13nm,1.0s | | | | | | |
| G21K | Allakaket | 77.97 | 337 | P | P | 00 01 55.4 | +0.9 |
| | baz=106 | | | | | | |
| O17K | Koliganek Bris | 77.99 | 330 | P | P | 00 01 55.4 | +0.7 |
| | baz=101 | | | | | | |
| CHGN | Chignik | 78.07 | 326 | P | P | 00 01 55.8 | +0.5 |
| | baz=99 | | | | | | |
| F21K | Alatna River | 78.15 | 338 | IAmb | IAmb | 00 02 00.5 | |
| | comp=Z,15nm,1.1s | | | | | | |
| F21K | Alatna River | 78.15 | 338 | P | P | 00 01 56.2 | +0.6 |
| | baz=106,SNR=5.1 | | | | | | |
| ESDC | Sonseca Array | 78.17 | 51 | P | P | 00 01 57.0 | +0.7 |
| | comp=Z,4.9nm,0.9s,baz=273,slow=5.5,SNR=22 | | | | | | |
| ESDC | | | | LR | LR | 00 30 39.2 | |
| | comp=Z,46nm,21.3s,baz=260,slow=31 | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| N17K | Nushagak Hills | 78.18 | 331 | P | P | 00 01 56.7 | +0.9 |
| | baz=101 | | | | | | |
| J19K | Poorman | 78.20 | 334 | P | P | 00 01 56.5 | +0.6 |
| | baz=103 | | | | | | |
| H20K | Anotleneega Mo | 78.25 | 336 | P | P | 00 01 56.1 | 0.0 |
| | baz=104 | | | | | | |
| L18K | Granite Mounta | 78.28 | 333 | P | P | 00 01 57.4 | +1.0 |
| | baz=102 | | | | | | |
| P16K | Nushagak River | 78.30 | 329 | P | P | 00 01 57.2 | +0.7 |
| | baz=100 | | | | | | |
| D22K | Ayikyak River | 78.34 | 340 | P | P | 00 01 57.1 | +0.5 |
| | baz=107 | | | | | | |
| J18K | Innoko River | 78.56 | 334 | P | P | 00 01 58.4 | +0.6 |
| | baz=102 | | | | | | |
| E21K | Killik River | 78.67 | 339 | P | P | 00 01 57.8 | -0.6 |
| E21K | | | | IAmb | IAmb | 00 02 05.6 | |
| | comp=Z,25nm,1.6s | | | | | | |
| E21K | Killik River | 78.67 | 339 | P | P | 00 01 58.5 | +0.1 |
| | baz=106 | | | | | | |
| S14K | Fog Glacier | 78.69 | 326 | P | P | 00 01 58.7 | -0.2 |
| | baz=98 | | | | | | |
| H19K | Roundabout Mou | 78.89 | 336 | P | P | 00 01 59.9 | +0.3 |
| | baz=103 | | | | | | |
| F20K | Avaraart Lake | 78.96 | 338 | P | P | 00 02 00.2 | +0.3 |
| | baz=104 | | | | | | |
| L17K | Donlin | 79.01 | 332 | P | P | 00 02 00.8 | +0.4 |
| | baz=100 | | | | | | |
| SDPT | Sand Point | 79.08 | 325 | P | P | 00 02 01.4 | +0.5 |
| | baz=97 | | | | | | |
| K17K | Iditarod | 79.12 | 333 | P | P | 00 02 01.3 | +0.3 |
| | baz=100 | | | | | | |
| B21K | Ikpikpuk River | 79.20 | 340 | P | P | 00 02 01.5 | +0.2 |
| | baz=105 | | | | | | |
| O15K | Ungalikthiuk R | 79.26 | 329 | P | P | 00 02 01.8 | 0.0 |
| | baz=98 | | | | | | |
| G19K | Purcell Mounta | 79.28 | 336 | IAmb | IAmb | 00 02 21.3 | |
| | comp=Z,33nm,1.6s | | | | | | |
| G19K | Purcell Mounta | 79.28 | 336 | P | P | 00 02 01.9 | +0.1 |
| | baz=102 | | | | | | |
| E20K | Nigu River | 79.41 | 339 | P | P | 00 02 03.0 | +0.4 |
| | baz=103 | | | | | | |
| L16K | Owhat River | 79.48 | 332 | P | P | 00 02 02.9 | 0.0 |
| | baz=99 | | | | | | |
| N15K | Kwethluk River | 79.54 | 330 | P | P | 00 02 04.0 | +0.7 |
| | baz=98 | | | | | | |
| J17K | VABM Dome | 79.58 | 334 | P | P | 00 02 03.8 | +0.3 |
| | baz=100 | | | | | | |
| H18K | Honhosa River | 79.60 | 335 | P | P | 00 02 04.1 | +0.5 |
| | baz=101 | | | | | | |
| E19K | Redstone River | 79.62 | 338 | P | P | 00 02 03.7 | +0.1 |
| | baz=102 | | | | | | |
| D20K | Etivluk River | 79.67 | 339 | P | P | 00 02 04.5 | +0.6 |
| | baz=103 | | | | | | |
| F19K | Shaleruckik Mo | 79.69 | 337 | P | P | 00 02 03.8 | -0.2 |
| | baz=102 | | | | | | |
| RAR | Rarotonga | 79.84 | 248 | LR | LR | 00 30 28.3 | |
| | comp=Z,102nm,20.9s,baz=90,slow=30 | | | | | | |
| G18K | Tagagawik | 79.86 | 336 | P | P | 00 02 05.0 | +0.1 |
| | baz=101 | | | | | | |
| M15K | Kasigluk River | 79.91 | 331 | P | P | 00 02 05.2 | -0.1 |
| | baz=98 | | | | | | |
| EKA | Eskdalemuir Ar | 80.00 | 35 | P | P | 00 02 05.4 | -0.5 |
| | comp=Z,7.6nm,0.9s,baz=267,slow=6.4,SNR=9.6 | | | | | | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| J16K | Anvik River | 80.25 | 333 | P | P | 00 02 07.6 | +0.5 |
| | baz=98 | | | | | | |
| JMIC | Jan Mayen | 80.25 | 19 | LR | LR | 00 34 39.2 | |
| | comp=Z,67nm,21.8s,baz=265,slow=34 | | | | | | |
| N14K | Kuskokwak Cree | 80.30 | 330 | P | P | 00 02 07.7 | +0.3 |
| | baz=97 | | | | | | |
| I17K | Unalakleet | 80.38 | 334 | P | P | 00 02 07.9 | +0.1 |
| | baz=98 | | | | | | |
| M14K | Bethel | 80.54 | 331 | P | P | 00 02 08.9 | +0.3 |
| | baz=97 | | | | | | |
| G17K | Kiwalik Mounta | 80.61 | 336 | P | P | 00 02 09.7 | +0.8 |
| | baz=99 | | | | | | |
| C19K | Lookout Ridge | 80.81 | 339 | P | P | 00 02 10.4 | +0.4 |
| | baz=100 | | | | | | |
| C18K | Utukok River | 81.30 | 339 | P | P | 00 02 13.4 | +0.7 |
| | baz=99 | | | | | | |
| E17K | Hotham Inlet | 81.31 | 337 | P | P | 00 02 13.3 | +0.7 |
| | baz=98 | | | | | | |
| D17K | Noatak River | 81.87 | 338 | P | P | 00 02 15.5 | -0.1 |
| | baz=97 | | | | | | |
| C17K | DeLong Mountai | 82.00 | 338 | P | P | 00 02 16.6 | +0.3 |
| | baz=97 | | | | | | |
| UNV | Unalaska Valle | 82.46 | 324 | P | P | 00 02 19.4 | +0.5 |
| | baz=92 | | | | | | |
| TORD | Torodi Ar. Bea | 83.39 | 77 | P | P | 00 02 24.0 | -0.5 |
| | comp=Z,1.5nm,0.8s,baz=298,slow=5.9,SNR=9.4 | | | | | | |
| TORD | | | | LR | LR | 00 36 49.5 | |
| | comp=Z,84nm,21.1s,baz=266,slow=34 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| KBS | Kingsbay | 86.11 | 11 | *de*P | P | 00 02 38.4 | +1.3 |
| KBS | | | | pmax | pmax | | |
| | comp=Z,25nm,1.5s | | | | | | |
| ECH | Echery | 86.24 | 42 | P | P | 00 02 38.5 | +0.1 |
| ECH | | | | IAmb | IAmb | 00 02 41.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| ECH | Echery | 86.24 | 42 | P | P | 00 02 38.5 | +0.1 |
| ECH | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| TAM | Tamanrasset | 86.43 | 68 | P | P | 00 02 39.3 | -0.7 |
| TAM | Tamanrasset | 86.43 | 68 | P | P | 00 02 39.3 | -0.7 |
| TAM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| BELA | Belgrano 2 | 86.67 | 171 | P | P | 00 02 39.1 | -0.7 |
| BELA | | | | IAmb | IAmb | 00 02 44.3 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| KONO | Kongsberg | 86.94 | 31 | *ce*P | P | 00 02 40.4 | -1.1 |
| KONO | | | | pmax | pmax | | |
| | comp=Z,24nm,2.4s | | | | | | |
| SPITS | Spitsbergen Ar | 87.09 | 12 | LR | LR | 00 44 35.0 | |
| | comp=Z,80nm,19.2s,baz=249,slow=38 | | | | | | |
| NB2 | NORSAR Subarra | 87.62 | 29 | P | P | 00 02 46.7 | +1.9 |
| | comp=Z,32nm,2.0s,baz=272,slow=4.8 | | | | | | |
| NB2 | NORSAR Subarra | 87.62 | 29 | P | P | 00 02 46.7 | +1.9 |
| | baz=272,slow=4.8 | | | | | | |
| NOA | NORSAR Array B | 87.62 | 29 | P | P | 00 02 45.3 | +0.5 |
| | comp=Z,2.2nm,1.0s,baz=273,slow=4.6,SNR=6.5 | | | | | | |
| NOA | | | | LR | LR | 00 37 18.7 | |
| | comp=Z,63nm,21.9s,baz=265,slow=32 | | | | | | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| DAVA | Damuels | 88.14 | 43 | *e*PcP | PcP | 00 02 49.5 | 0.0 |
| | comp=Z,6.6nm,0.9s | | | | | | |
| DAVOX | Davos/Dischmat | 88.19 | 43 | LR | LR | 00 36 30.4 | |
| | comp=Z,75nm,21.5s,baz=280,slow=32 | | | | | | |
| RETA | Reutte | 88.72 | 43 | *e*PcP | PcP | 00 02 52.0 | 0.0 |
| | comp=Z,4.2nm,1.1s | | | | | | |
| FETA | Feichten | 88.74 | 43 | PcP | PcP | 00 02 52.0 | -0.3 |
| | comp=Z,4.9nm,0.9s | | | | | | |
| HFS | Hagfors | 88.94 | 30 | LR | LR | 00 38 05.1 | |
| | comp=Z,86nm,21.1s,baz=276,slow=32 | | | | | | |
| MOTA | Mosalm | 88.97 | 43 | *e*PcP | PcP | 00 02 52.7 | -0.5 |
| | comp=Z,1.3nm,0.8s | | | | | | |
| SQTA | Sankt Quirin | 89.05 | 43 | *e*PcP | PcP | 00 02 53.0 | -0.5 |
| | comp=Z,7.6nm,1.4s | | | | | | |
| VNA3 | Neumayer Olymp | 89.18 | 162 | ⇑P | P | 00 02 50.8 | -1.1 |
| | comp=Z,2.8nm,0.7s | | | | | | |
| CLL | Collm | 89.73 | 39 | *i* P | P | 00 02 58.1 | +3.2 |
| | comp=Z,6.0nm,1.1s | | | | | | |
| CLL | Collm | 89.73 | 39 | *i* P | P | 00 02 58.1 | +3.2 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| CLL | | | | MLR | MLR | | |
| | comp=Z,200nm,24.8s | | | | | | |
| VNA2 | Neumayer--Watz | 89.80 | 161 | ⇑P | P | 00 02 53.8 | -1.0 |
| | comp=Z,0.8nm,0.4s,baz=296,slow=4.8 | | | | | | |
| ABTA | Abfaltersbach | 89.99 | 43 | *e*P | P | 00 02 56.6 | +0.2 |
| | comp=Z,3.6nm,1.0s | | | | | | |
| LESA | Schwarzleotal | 90.02 | 43 | pP | pP | 00 02 59.0 | -0.6 |
| | comp=Z,4.1nm,1.0s | | | | | | |
| KHC | Kasperske Hory | 90.39 | 41 | *e*P | P | 00 02 58.0 | -0.1 |
| KHC | Kasperske Hory | 90.39 | 41 | *e*P | P | 00 03 01.5 | +3.4 |
| GERES | GERESS Array B | 90.51 | 41 | P | P | 00 02 59.3 | +0.5 |
| | comp=Z,1.4nm,0.9s,baz=281,slow=4.9,SNR=6.5 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| CKRC | Cesky Krumlov | 90.91 | 41 | *e*P | P | 00 03 04.3 | +3.8 |
| CKRC | Cesky Krumlov | 90.91 | 41 | *e*P | P | 00 03 04.3 | +3.8 |
| SNAA | Sanae | 91.41 | 162 | ⇑P | P | 00 03 00.7 | -1.6 |
| | comp=Z,29nm,0.9s | | | | | | |
| SNAA | Sanae | 91.41 | 162 | P | P | 00 03 02.1 | -0.2 |
| | comp=Z,1.7nm,0.9s,baz=240,slow=7.2,SNR=6.3 | | | | | | |
| SNAA | | | | LR | LR | 00 43 29.7 | |
| | comp=Z,59nm,20.5s,baz=300,slow=35 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| SNAA | Sanae | 91.41 | 162 | ⇑*e*P | P | 00 03 03.9 | +1.6 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| OBKA | Obir | 91.41 | 43 | *e*pP | pP | 00 03 05.5 | -0.6 |
| | comp=Z,6.8nm,1.5s | | | | | | |
| ARCES | ARCESS Array B | 91.70 | 20 | LR | LR | 00 38 06.1 | |
| | comp=Z,70nm,21.9s,baz=267,slow=32 | | | | | | |
| OSTC | Ostas | 91.86 | 39 | *e*P | P | 00 03 08.2 | +3.3 |
| OSTC | Ostas | 91.86 | 39 | *e*P | P | 00 03 08.2 | +3.3 |
| DPC | Dobruska-Polom | 91.96 | 39 | *e*P | P | 00 03 08.5 | +3.1 |
| DPC | Dobruska-Polom | 91.96 | 39 | *e*P | P | 00 03 08.5 | +3.1 |
| CONA | Conrad Observa | 92.07 | 42 | pP | pP | 00 03 08.5 | -0.6 |
| | comp=Z,5.2nm,1.4s | | | | | | |
| KRUC | Moravsky | 92.23 | 41 | *e*P | P | 00 03 06.3 | -0.3 |
| VRAC | Vranov | 92.32 | 40 | *e*P | P | 00 03 06.5 | -0.5 |
| VRAC | Vranov | 92.32 | 40 | LR | LR | 00 38 39.0 | |
| | comp=Z,122nm,21.1s,baz=282,slow=32 | | | | | | |
| RONA | Rosalia, Austr | 92.40 | 42 | *e*pP | pP | 00 03 09.3 | -1.2 |
| | comp=Z,3.3nm,0.9s | | | | | | |
| MORC | Moravsky Berou | 92.84 | 40 | *e*P | P | 00 03 10.7 | +1.2 |
| TROLL | Troll, Antarti | 93.12 | 162 | ⇑P | P | 00 03 10.3 | -0.1 |
| | comp=Z,114nm,0.8s | | | | | | |
| BILL | Bilibino | 93.23 | 339 | ⇑*e*P | P | 00 03 10.8 | 0.0 |
| BILL | | | | *e* | | 00 06 55.0 | |
| BILL | | | | *e*PPP | PPP | 00 08 57.3 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| FINES | FINESS Array B | 94.54 | 27 | LR | LR | 00 41 17.4 | |
| | comp=Z,87nm,21.7s,baz=287,slow=33 | | | | | | |
| QSPA | South Pole Qui | 94.91 | 180 | P | P | 00 03 18.9 | +0.3 |
| QSPA | | | | IAmb | IAmb | 00 03 26.1 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 94.91 | 180 | P | P | 00 03 18.3 | -0.3 |
| | comp=Z,3.4nm,0.9s,baz=164,slow=1.6,SNR=14 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| VSU | Vasula | 95.83 | 30 | ⇑*e*P | P | 00 03 21.5 | -1.4 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| NVL | N'lazarevskaya | 96.06 | 161 | *e*P | P | 00 03 27.5 | +3.8 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| VALR | Valaam | 96.73 | 26 | *de*P | P | 00 03 27.3 | +0.4 |
| VALR | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| MLR | Muntele Rosu | 99.38 | 43 | LR | LR | 00 44 28.1 | |
| | comp=Z,84nm,20.9s,baz=287,slow=33 | | | | | | |
| AKASG | Malin Array Be | 99.81 | 37 | LR | LR | 00 44 21.9 | |
| | comp=Z,75nm,21.2s,baz=288,slow=33 | | | | | | |
| H11N3 | WAKE ISLAND Hyl | 07.44 | 292 | T | T | 02 04 41.6 | |
| | baz=78,slow=75,SNR=101 | | | | | | |
| H11N2 | WAKE ISLAND Hyl | 07.45 | 292 | T | T | 02 04 41.9 | |
| | baz=78,slow=75,SNR=77 | | | | | | |
| H11N1 | WAKE ISLAND Hyl | 07.46 | 292 | T | T | 02 04 42.9 | |
| | baz=78,slow=75,SNR=78 | | | | | | |
| H11S2 | WAKE ISLAND Hyl | 07.88 | 291 | T | T | 02 05 08.6 | |
| | baz=77,slow=75,SNR=14 | | | | | | |
| H11S1 | WAKE ISLAND Hyl | 07.88 | 291 | T | T | 02 05 00.5 | |
| | baz=77,slow=75,SNR=12 | | | | | | |
| H11S3 | WAKE ISLAND Hyl | 07.90 | 291 | T | T | 02 05 07.7 | |
| | baz=77,slow=75,SNR=17 | | | | | | |
| KIV | Kislovodsk | 110.94 | 39 | *i* PKIKP | PKiKP | 00 08 32.3 | +2.0 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| DZM | Mont Dzumac | 111.21 | 248 | *e*LR | LR | 00 41 30.0 | |
| | comp=Z,186nm,30.2s | | | | | | |
| YSS | Yuzh-Sakhalins | 114.69 | 328 | ⇑*i* PKIKP | PKiKP | 00 08 35.9 | -1.3 |
| ABKAR | Akbulak array | 117.03 | 27 | PKPdf | PKPdf | 00 08 39.8 | -1.9 |
| BRVK | Borovoye | 117.89 | 18 | ⇑*i* PKIKP | PKiKP | 00 08 44.6 | +1.3 |
| ZALV | Zalesovo Beam | 120.43 | 9 | PKP | PKPdf | 00 08 47.7 | -0.4 |
| | comp=Z,0.4nm,0.4s,baz=325,slow=2.3,SNR=4.6 | | | | | | |
| KURK | Kurchatov | 122.30 | 14 | ⇑*i* PKIKP | PKiKP | 00 08 53.3 | +1.3 |
| KURBB | Kurchatov Arra | 122.37 | 14 | PKP | PKPdf | 00 08 51.6 | -0.3 |
| | comp=Z,0.6nm,0.4s,baz=338,slow=2.9,SNR=1.3 | | | | | | |
| MKAR | Makanchi Array | 126.83 | 13 | PKP | PKPdf | 00 09 00.4 | -0.3 |
| | comp=Z,1.9nm,0.9s,baz=337,slow=2.8,SNR=6.3 | | | | | | |
| SONM | Songino Array | 126.90 | 352 | PKP | PKPdf | 00 09 00.9 | 0.0 |
| | comp=Z,1.4nm,1.0s,baz=360,slow=3.9,SNR=5.3 | | | | | | |
| KSRS | Korea Array | 129.16 | 329 | PKP | PKPdf | 00 09 05.3 | 0.0 |
| | comp=Z,0.6nm,0.4s,baz=47,slow=46,SNR=1.8 | | | | | | |
| CHGR | Chuyangaron | 129.40 | 29 | PKPdf | PKiKP | 00 09 07.0 | +0.4 |
| CHGR | Chuyangaron | 129.40 | 29 | PKiKP | PKiKP | 00 09 07.0 | +0.4 |
| PRZ | Przheval'sk | 129.79 | 18 | PKPdf | PKiKP | 00 09 08.2 | +0.8 |
| PRZ | Przheval'sk | 129.79 | 18 | PKiKP | PKiKP | 00 09 08.2 | +0.8 |
| WMQ | Urumqi | 130.73 | 9 | *e*PKP | PKiKP | 00 09 08.8 | -0.3 |
| WMQ | | | | LR | LR | | |
| | comp=Z,150nm,24.1s | | | | | | |
| KSH | Kashi | 131.60 | 22 | PKP | PKiKP | 00 09 12.3 | +1.2 |
| HHC | Hu-ho-hao-te | 132.66 | 345 | *e*P | PKPdf | 00 09 08.1 | -3.9 |
| HHC | | | | LR | LR | | |
| | comp=N,160nm,16.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,130nm,16.8s | | | | | | |
| ASAR | Alice Springs | 140.17 | 238 | PKP | PKPdf | 00 09 25.8 | -0.5 |
| | comp=Z,1.3nm,0.7s,baz=109,slow=3.0,SNR=6.8 | | | | | | |
| WRA | Warramunga Arr | 141.05 | 244 | PKhKP | PKPpre | 00 09 21.2 | |
| | comp=Z,1.5nm,0.9s,baz=111,slow=2.9,SNR=7.0 | | | | | | |
| WRA | | | | PKP | PKPdf | 00 09 28.5 | +0.5 |
| | comp=Z,1.7nm,0.6s,baz=104,slow=3.1,SNR=13 | | | | | | |
| H01W1 | Cape Leeuwin H | 146.35 | 205 | T | T | 02 53 30.3 | |
| | baz=150,slow=76,SNR=11 | | | | | | |
| H01W2 | Cape Leeuwin H | 146.35 | 205 | T | T | 02 53 44.2 | |
| | baz=150,slow=76,SNR=12 | | | | | | |
| H01W3 | Cape Leeuwin H | 146.37 | 205 | T | T | 02 53 37.9 | |
| | baz=150,slow=76,SNR=8.7 | | | | | | |
| GYA | Guiyang | 147.56 | 344 | ⇓PKPbc | PKPdf | 00 09 37.9 | -1.4 |
| GYA | | | | ⇓PKPbc | PKPdf | 00 09 37.9 | -1.4 |
| GYA | | | | PP | PP | 00 13 06.6 | +0.2 |
| GYA | | | | AMB | AMB | | |
| | comp=Z,300nm,4.5s | | | | | | |
| PZH | PanZhiHua | 148.50 | 352 | PKPbc | PKPdf | 00 09 39.8 | -1.0 |
| SHL | Shillong | 149.25 | 10 | PKPbc | PKPbc | 00 09 44.7 | -1.7 |
| SHL | Shillong | 149.25 | 10 | PKiKP | PKPbc | 00 09 44.7 | -1.7 |
| HYB | Hyderabad | 151.07 | 40 | *e*PKPdf | PKPdf | 00 09 43.4 | -1.6 |
| CMAR | Chiang Mai Arr | 156.74 | 356 | PKP | PKPdf | 00 09 53.1 | +0.1 |
| | comp=Z,0.6nm,0.3s,baz=318,slow=1.9,SNR=5.3 | | | | | | |
| CMAR | | | | PKPab | PKPab | 00 10 21.8 | -0.2 |
| | comp=Z,0.9nm,0.4s,baz=344,slow=5.4,SNR=5.4 | | | | | | |

*IDC* ***15*** *00:41:35.9±4.6,5.˚58S×131.˚79E, h0km, mb3.8/1, mbtmp3.9/3,ML3.9/2,MS2.3/1,Error ellipse: s-maj=315.9km s-min=31.0km az=74.0*
*DJA* ***15*** *00:41:51.7±2.2,7.˚3S±4.˚1×13.˚1E±.˚1, h16km±19km, M4.3/6, mb4.4/2,mB5.2/2,MLv4.3/6,Mw(mB)4.5/2*
**ISC 15 00:41:49.1±1.2,6.˚60S±.˚05×131.˚4E±.˚1, h10km, n9, σ2s 96/9, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| SAUI | Saumlaki | 1.38 | 184 | P | | Pn | 00 42 17.0 | +2.6 |
| KMPI | Kaimana, Papua | 3.72 | 38 | P | | Pn | 00 42 47.6 | +0.9 |
| FAKI | Fak Fak | 3.76 | 13 | P | | Pn | 00 42 50.6 | +3.4 |
| FAKI | | | | S | | Sn | 00 43 31.7 | +0.2 |
| NLAI | Namlea | 5.42 | 308 | P | | Pn | 00 43 11.2 | +1.2 |
| SWI | Sorong | 5.70 | 359 | P | | Pn | 00 43 11.9 | -2.0 |
| | 41nm,0.9s,2µm0.2nm | | | | | | | |
| WRA | Warramunga Arr | 13.57 | 168 | Pn | | Pn | 00 45 01.7 | -0.1 |
| | 0.5nm,0.3s,baz=350,slow=13,SNR=24 | | | | | | | |
| WRA | | | | Sn | | Sn | 00 47 28.3 | -4.5 |
| | 1.1nm,0.3s,baz=343,slow=22,SNR=10 | | | | | | | |
| | 1.0nm,0.5s | | | | | | | |
| ASAR | Alice Springs | 17.14 | 172 | P | | Pn | 00 45 49.2 | +0.2 |
| | 0.7nm,0.3s,baz=349,slow=11,SNR=27 | | | | | | | |
| ASAR | | | | S | | Sn | 00 48 54.5 | -5.3 |
| | 0.5nm,0.4s,baz=359,slow=28,SNR=6.0 | | | | | | | |
| | 3.1nm,0.7s | | | | | | | |
| CTA | Charters Tower | 19.70 | 134 | LR | | LR | 00 54 16.4 | |
| | comp=Z,8.8nm,19.1s,baz=108,slow=38 | | | | | | | |
| MKAR | Makanchi Array | 68.65 | 326 | P | | P | 00 52 37.3 | -15 |
| | 0.5nm,0.5s,baz=120,slow=7.0,SNR=6.7 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |

*JMA* ***15*** *00:52:52.8±0.2,44.˚4N±0.˚8×14.˚2E±.˚, h232km±1km, MV3.3/40,KAMIKAWA-SORACHI REGION*
*IDC* ***15*** *00:52:53.2±0.8,45.˚12N×142.˚40E,h200km±66km,mb3.4/8, mbtmp3.9/9,Error ellipse: s-maj=163.1km s-min=27.2km az=169.0*
**ISC 15 00:52:52.6±0.8, 44.˚43N±0.˚06×142.˚51E±0.˚06, h234km±6km, n29, σ0s 86/47, mb3.7/8, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| ASAJ | Asahikawa | 0.32 | 168 | P | | Pn | 00 53 23.6 | +0.4 |
| | 32nm,0.3s,baz=284,slow=3.9,SNR=93 | | | | | | | |
| ASAJ | | | | S | | S | 00 53 46.3 | -0.8 |
| | 84nm,0.8s,baz=106,slow=29,SNR=11 | | | | | | | |
| ASAJ | Asahikawa | 0.32 | 168 | P | | Pn | 00 53 23.6 | +0.4 |
| ASAJ | | | | S | | S | 00 53 46.9 | -0.2 |
| JSS | Shosan | 0.47 | 267 | P | | Pn | 00 53 23.5 | +0.1 |
| JSS | | | | S | | S | 00 53 47.3 | -0.4 |
| JSE | Soyaes | 0.54 | 6 | P | | Pn | 00 53 23.9 | +0.3 |
| JSE | | | | S | | S | 00 53 46.7 | -1.4 |
| JKK2 | Kamakawa 2 | 0.58 | 163 | *i* P | | Pn | 00 53 24.5 | +0.5 |
| JKK2 | | | | S | | S | 00 53 48.6 | +0.2 |
| JMP | Maruseppu | 0.74 | 124 | *i* P | | Pn | 00 53 25.1 | +0.5 |
| JMP | | | | S | | S | 00 53 49.9 | +0.3 |
| JYG | Yagishiri | 0.78 | 270 | P | | Pn | 00 53 24.5 | -0.2 |
| JYG | | | | S | | S | 00 53 48.

2.5nm,0.6s,baz=72,slow=8.9,SNR=20
2.5nm,0.6s
**BVAR Borovoye Array 46.46 308** P **P** **01 00 56.4 +0.4**
1.0nm,0.4s,baz=67,slow=8.3,SNR=11
1.0nm,0.4s
**FINES FINESS Array B 62.71 331** P **P** **01 02 51.8 -0.4**
0.9nm,0.5s,baz=40,slow=6.9,SNR=15
0.9nm,0.5s
**NOA NORSAR Array B 67.71 337** P **P** **01 03 24.5 +0.1**
0.1nm,0.3s,baz=35,slow=7.3,SNR=2.7
0.1nm,0.3s
**HFS Hagfors 67.72 335** P **P** **01 03 24.5 +0.2**
0.7nm,0.3s,baz=46,slow=6.4,SNR=9.9
0.7nm,0.3s

**IDC 15 00:56:37.2±1.9,3˚.47N×128˚.65E,h0km,mb3.7/7, mbtmp3.7/7,Error ellipse: s-maj=169.0km s-min=18.2km az=70.0,North of Haimahera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.93** | **167** | P | | P | | 01 01 53.2 | 0.0 |
| | 1.2nm,0.4s,baz=345,slow=9.9,SNR=24 | | | | | | | | |
| | 1.2nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **27.45** | **170** | P | | P | | 01 02 25.2 | +0.1 |
| | 0.5nm,0.4s,baz=360,slow=8.3,SNR=5.2 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.87** | **324** | P | | P | | 01 06 38.6 | +0.6 |
| | 0.5nm,0.5s,baz=119,slow=7.3,SNR=5.6 | | | | | | | | |
| | 0.5nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.70** | **332** | P | | P | | 01 06 56.8 | -0.3 |
| | 0.2nm,0.3s,baz=147,slow=8.8,SNR=2.1 | | | | | | | | |
| | 0.2nm,0.3s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.00** | **327** | P | | P | | 01 07 06.2 | +0.3 |
| | 0.4nm,0.6s,baz=129,slow=6.5,SNR=3.4 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **68.59** | **327** | P | | P | | 01 07 42.1 | +0.1 |
| | 0.3nm,0.4s,baz=140,slow=3.4,SNR=1.9 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **VNDA** | **Vanda** | | **82.93** | **173** | P | | P | | 01 09 02.5 | -1.1 |
| | 0.5nm,0.8s,baz=317,slow=5.6,SNR=3.7 | | | | | | | | |
| | 0.5nm,0.8s | | | | | | | | |

*IDC **15** 01:05:27.0±4.3,44˚.57N×149˚.65E,h0km,mb3.7/6, mbtmp3.7/6,Error ellipse: s-maj=128.6km s-min=40.2km az=5.0*
*SKHL **15** 01:05:29.1±0.3,44˚.10N×149˚.80E,h43km±3km,mb4.1/3*
*JMA **15** 01:05:29.2±0.8,44˚N±3˚×15˚0E±˚,h30km,MV3.7/11,SE OFF ETOROFU*

**ISC 15 01:05:30.4±1.3,44˚.05N±0˚.09×149˚.6E±0˚.1,h38km,n18, σ1ᵗ12/24,mb3.8/6,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.72** | **314** | *eP* | | | **Pn** | **01 05 56.9** | **-0.9** |
| KUR | | | | | AMB | | AMB | 01 05 58.1 | |
| | 70nm,0.4s | | | | | | | | |
| KUR | | | | *eS* | | | **Sn** | **01 06 18.0** | **-0.5** |
| KUR | | | | | A | | A | 01 06 22.0 | |
| | 130nm,0.4s | | | | | | | | |
| KUR | | | | | A | | A | 01 06 22.0 | |
| | 90nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **2.02** | **266** | *eP* | | | **Pn** | **01 06 01.7** | **-0.3** |
| SHO | | | | | AMB | | AMB | 01 06 02.6 | |
| | 10.0nm,0.3s | | | | | | | | |
| SHO | | | | *eS* | | | **Sn** | **01 06 25.9** | **-0.1** |
| SHO | | | | | A | | A | 01 06 28.3 | |
| | 130nm,0.5s | | | | | | | | |
| SHO | | | | | A | | A | 01 06 28.3 | |
| | 100nm,0.5s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.71** | **271** | *eP* | | | **Pn** | **01 06 12.4** | **+1.0** |
| YUK | | | | | AMB | | AMB | 01 06 14.2 | |
| | 70nm,0.4s | | | | | | | | |
| YUK | | | | *eS* | | | **Sn** | **01 06 44.4** | **+1.5** |
| YUK | | | | | A | | A | 01 06 46.8 | |
| | 90nm,0.4s | | | | | | | | |
| YUK | | | | | A | | A | 01 06 46.8 | |
| | 80nm,0.4s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.90** | **258** | P | | | **Pn** | **01 06 13.8** | **-0.1** |
| NEM2 | | | | *eS* | | | **Sn** | **01 06 46.8** | **-0.6** |
| **JRA** | **Rausu** | **3.25** | **270** | *eP* | | | **Pn** | **01 06 19.8** | **+1.0** |
| **JAK** | **Akkeshi** | **3.73** | **255** | P | | | **Pn** | **01 06 25.6** | **+0.2** |
| JAK | | | | *eS* | | | **Sn** | **01 07 08.1** | **-0.1** |
| **JTKR** | **Abashiri--Toko** | **4.12** | **271** | P | | | **Pn** | **01 06 32.6** | **+1.8** |
| **JAR** | **Ashorobuto** | **4.31** | **262** | P | | | **Pn** | **01 06 34.7** | **+1.3** |
| **JOB** | **Onbets** | **4.37** | **257** | P | | | **Pn** | **01 06 34.9** | **+0.7** |
| **JCH** | **Churui** | **4.79** | **255** | P | | | **Pn** | **01 06 40.7** | **+0.8** |
| JCH | | | | *eS* | | | **Sn** | **01 07 33.1** | **-1.0** |
| **JNBK** | **Urakawa-nobuka** | **5.33** | **253** | P | | | **Pn** | **01 06 48.3** | **+0.9** |
| **JANG** | **Nango** | **7.05** | **241** | *eS* | | | **Sn** | **01 08 26.6** | **-3.3** |
| **MKAR** | **Makanchi Array** | **46.02** | **298** | P | | | **P** | **01 13 49.9** | **-0.1** |
| | 0.8nm,0.8s,baz=78,slow=8.1,SNR=5.5 | | | | | | | | |
| | 0.8nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.92** | **304** | P | | | **P** | **01 13 57.0** | **+0.1** |
| | 0.6nm,0.3s,baz=63,slow=7.2,SNR=2.0 | | | | | | | | |
| | 0.6nm,0.3s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.40** | **334** | P | | | **P** | **01 16 07.9** | **-0.7** |
| | 0.9nm,0.7s,baz=44,slow=8.5,SNR=5.2 | | | | | | | | |
| | 0.9nm,0.7s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.95** | **340** | P | | | **P** | **01 16 37.0** | **-0.3** |
| | 0.5nm,0.8s,baz=28,slow=6.5,SNR=2.5 | | | | | | | | |
| | 0.5nm,0.8s | | | | | | | | |
| **HFS** | **Hagfors** | | **70.09** | **338** | P | | **P** | **01 16 37.4** | **-0.8** |
| | 1.4nm,0.9s,baz=51,slow=7.8,SNR=4.3 | | | | | | | | |
| | 1.4nm,0.9s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.98** | **58** | P | | | **P** | **01 17 42.2** | **+0.9** |
| | 0.2nm,0.5s,baz=316,slow=2.5,SNR=2.4 | | | | | | | | |
| | 0.2nm,0.5s | | | | | | | | |

**NAM 15 01:20:18.3±4.4,19˚.78S×14˚.54E,h24km±14km,ML0.0, 9C-1D,Namibia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.02** | **167** | ⇑*iP* | | | Pb | 01 20 23.2 | +0.6 |
| ST9N | | | | *i* S | | | Sb | 01 20 24.3 | -1.1 |
| ST9N | | | | IAML | | | | 01 20 25.1 | |
| | comp=Z,8.8nm,0.1s | | | | | | | | |
| **ST9N** | **ST9** | **0.02** | **167** | *i* P | | | Pb | 01 20 23.2 | +0.6 |
| ST9N | | | | *i* S | | | Sb | 01 20 24.4 | -1.1 |
| ST9N | | | | IAML | | | | 01 20 25.1 | |
| | comp=Z,8.6nm,0.1s | | | | | | | | |
| **ST3N** | **ST3** | **0.05** | **311** | ⇑*iP* | | | Pb | 01 20 24.4 | +1.7 |
| ST3N | | | | *i* S | | | Sb | 01 20 26.3 | +0.8 |
| ST3N | | | | IAML | | | | 01 20 28.1 | |
| | comp=Z,0.7nm,0.1s | | | | | | | | |
| **ST3N** | **ST3** | **0.05** | **311** | *i* P | | | Pb | 01 20 24.4 | +1.7 |
| ST3N | | | | IAML | | | | 01 20 25.4 | |
| | comp=Z,0.5nm,0.1s | | | | | | | | |
| ST3N | | | | *i* S | | | Sb | 01 20 26.3 | +0.8 |
| **ST1N** | **ST1** | **0.08** | **60** | ⇑*iP* | | | Pb | 01 20 23.4 | +0.7 |
| ST1N | | | | *i* S | | | Sb | 01 20 24.9 | -0.9 |
| ST1N | | | | IAML | | | | 01 20 24.9 | |
| | comp=Z,5.2nm,0.0s | | | | | | | | |
| **ST1N** | **ST1** | **0.08** | **60** | *i* P | | | Pb | 01 20 23.4 | +0.7 |
| ST1N | | | | IAML | | | | 01 20 24.9 | |
| | comp=Z,5.2nm,0.0s | | | | | | | | |
| **ST6N** | **ST6** | **0.14** | **259** | ⇑*iP* | | | Pn | 01 20 25.5 | +0.4 |
| ST6N | | | | *i* S | | | Sb | 01 20 28.4 | +1.9 |
| ST6N | | | | IAML | | | | 01 20 29.2 | |
| | comp=Z,1.6nm,0.0s | | | | | | | | |
| **ST2N** | **ST2** | **0.16** | **160** | ⇓*iP* | | | Pb | 01 20 23.5 | 0.0 |
| ST2N | | | | *i* S | | | Sb | 01 20 25.0 | -2.0 |
| ST2N | | | | IAML | | | | 01 20 25.1 | |
| | comp=Z,14nm,0.1s | | | | | | | | |
| **ST2N** | **ST2** | **0.16** | **160** | *i* P | | | Pb | 01 20 23.5 | 0.0 |
| ST2N | | | | *i* S | | | Sb | 01 20 25.0 | -2.0 |
| ST2N | | | | IAML | | | | 01 20 25.1 | |
| | comp=Z,14nm,0.1s | | | | | | | | |
| **ST5N** | **ST5** | **0.21** | **94** | ⇑*iP* | | | Pb | 01 20 24.2 | +0.2 |
| ST5N | | | | *i* S | | | Sb | 01 20 26.2 | -1.7 |
| ST5N | | | | IAML | | | | 01 20 26.2 | |
| | comp=Z,5.6nm,0.1s | | | | | | | | |
| **ST8N** | **ST8** | **0.23** | **292** | ⇑*iP* | | | Pn | 01 20 27.6 | +1.3 |
| ST8N | | | | *i* S | | | Sb | 01 20 32.2 | +3.8 |
| ST8N | | | | IAML | | | | 01 20 32.2 | |
| | comp=Z,0.3nm,0.1s | | | | | | | | |
| **ST10N** | **ST10** | **0.26** | **213** | ⇑*iP* | | | Pn | 01 20 26.6 | -0.3 |
| ST10N | | | | *i* S | | | Sb | 01 20 30.3 | +1.1 |
| ST10N | | | | IAML | | | | 01 20 30.7 | |
| | comp=Z,1.0nm,0.1s | | | | | | | | |
| **ST11N** | **ST11** | **0.31** | **67** | ⇑*iP* | | | Pn | 01 20 27.2 | -0.3 |
| ST11N | | | | *i* S | | | Sb | 01 20 31.3 | +0.9 |
| ST11N | | | | IAML | | | | 01 20 31.8 | |
| | comp=Z,0.7nm,0.0s | | | | | | | | |
| **ST4N** | **ST4** | **0.42** | **106** | ⇑*iP* | | | Pb | 01 20 28.0 | +0.7 |
| ST4N | | | | *i* S | | | Sb | 01 20 32.4 | -1.0 |
| ST4N | | | | IAML | | | | 01 20 33.6 | |
| | comp=Z,0.5nm,0.1s | | | | | | | | |

*ANF **15** 01:24:25.5±0.1,33˚.46N×116˚.82W,h0km,ML4.9/47,Error ellipse: s-maj=1.7km s-min=1.4km az=26.0*
*PAS **15** 01:24:26.3±1.1,33˚.477N±0˚.008×116˚.803W±0˚.009, h2km±1km,Mwr4.4/7,mb4.3/61(NEIC),ML4.6/53(NEIC), Mwr4.4/97(NEIC),Mww4.6/30(NEIC),Error ellipse: s-maj=1.1km s-min=1.0km az=145.0*
*NEIC **15** 01:24:26.3,33˚.48N×116˚.80W,h12km*
*NEIC **15** 01:24:26.3,33˚.48N×116˚.80W,h12km,Moment Tensor Solution. Duration: 0 Moment tensor: Scale 10¹⁵Nm; Mrr-1.57; Mθθ-2.44; Mϕϕ4.01; Mrθ-5.88; Mθϕ6.12; Mϕr2.38; Fault plane solution: M₀9.19000×10¹⁵ NP1:ϕs72.07000°, δ72.43000°,λ-32.45000°. NP2:ϕs172.94000°,δ59.23000°, λ-159.43000°. Principal axes: T 7.8492, Plg9.0000°, Azm125.0000°; N 2.6831, Plg54.0000°, Azm227.0000°; P -10.5323, Plg35.0000°, Azm29.0000°;*
*NEIC **15** 01:24:26.3,33˚.48N×116˚.80W,h2km*
*NEIC **15** 01:24:26.0±1.2,33˚.472N±0˚.008×116˚.806W±0˚.010, h5km±2km,Error ellipse: s-maj=1.2km s-min=1.1km az=137.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr-0.80; Mθθ-1.80; Mϕϕ2.60; Mrθ0.98; Mθϕ3.40; Mϕr0.22; Fault plane solution: M₀4.23000×10¹⁵ NP1:ϕs344.01000°,δ74.83000°,λ-174.92000°. NP2: ϕs252.68000°,δ85.10000°,λ-15.22000°. Principal axes: T 4.5314, Plg7.0000°, Azm299.0000°; N -0.6886, Plg74.0000°, Azm55.0000°; P -3.8428, Plg14.0000°, Azm207.0000°;*
*IDC **15** 01:24:27.3±1.0,33˚.49N×116˚.72W,h0km,mb4.0/7, mbtmp4.1/14,ML4.0/7,MS3.7/50 Error ellipse: s-maj=11.7km s-min=6.8km az=9.0*

**ISC 15 01:24:27.3±0.8,33˚.46N±0˚.01×116˚.82W±0˚.01,h9km±5km, n472,σ1ᵗ42/524,mb4.3/27,MS3.8/45,Southern California**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PLM** | **Palomar** | **0.12** | **197** | | | | **Pg** | **01 24 29.6** | **-0.5** |
| PLM | | | | | | | **Sg** | **01 24 32.1** | **0.0** |
| **CRY** | **Cary Ranch** | **0.12** | **35** | | | | **Pg** | **01 24 30.1** | **-0.1** |
| **BZNA** | **Buzz No.'s Pla** | **0.13** | **78** | | | | **Pg** | **01 24 30.4** | **0.0** |
| **FRD** | **Ford Ranch, An** | **0.19** | **80** | | | | **Pg** | **01 24 29.7** | **-1.5** |
| FRD | | | | | | | **Pg** | **01 24 32.0** | **+0.8** |
| **FRD** | **Ford Ranch, An** | **0.19** | **80** | | | | **Pg** | **01 24 32.0** | **+0.8** |
| **SNDA** | **J Saunders Pla** | **0.20** | **63** | | | | **Pg** | **01 24 29.9** | **-1.5** |
| SNDA | | | | | | | **Sg** | **01 24 32.5** | **-1.7** |
| **BACC** | **Bachelor Mtn.** | **0.23** | **309** | | | | **Pg** | **01 24 31.1** | **-1.0** |
| BACC | | | | | | | **Sg** | **01 24 34.4** | **-1.0** |
| **POB** | **Polly Butte** | **0.24** | **339** | | | | **Pg** | **01 24 30.9** | **-1.3** |
| POB | | | | | | | **Sg** | **01 24 34.0** | **-1.4** |
| **GVDA** | **Garner Valley** | **0.24** | **31** | | | | **Pg** | **01 24 33.6** | **+1.5** |
| **DGR** | **Domenigoni Val** | **0.24** | **320** | | | | **Pg** | **01 24 31.1** | **-1.1** |
| DGR | | | | | | | **Sg** | **01 24 34.5** | **-1.1** |
| **HMTC** | **Hemet** | **0.29** | **328** | | | | **Pg** | **01 24 31.8** | **-1.3** |
| HMTC | | | | | | | **Sg** | **01 24 35.5** | **-1.4** |
| **MATG** | **Mataguay Scout** | **0.30** | **151** | | | | **Pg** | **01 24 32.7** | **-0.6** |
| MATG | | | | | | | **Sg** | **01 24 37.0** | **-0.4** |
| **PFO** | **Pinyon Flats O** | **0.34** | **64** | Pg | | | **Pg** | **01 24 32.5** | **-1.5** |
| PFO | | | | Sg | | | **Sg** | **01 24 36.4** | **-2.1** |
| PFO | | | | IAML | | | | 01 24 37.1 | |
| | 91μm,0.7s | | | | | | | | |
| PFO | | | | IAML | | | | 01 24 38.5 | |
| | 43μm,1.0s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.34** | **64** | Pg | | | **Pg** | **01 24 32.3** | **-1.7** |
| | 2μm,0.3s,baz=258,slow=16 | | | | | | | | |
| PFO | | | | Lg | | | Lg | 01 24 36.5 | |
| | 7μm,0.3s,baz=334,slow=23,SNR=64 | | | | | | | | |
| PFO | | | | LR | | | LR | 01 24 52.0 | |
| | comp=Z,1μm,21.1s,baz=76,slow=98 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.34** | **64** | P | | | **Pg** | **01 24 32.3** | **-1.7** |
| | baz=245,SNR=1000 | | | | | | | | |
| PFO | | | | S | | | **Sg** | **01 24 36.5** | **-1.9** |
| | baz=245 | | | | | | | | |
| **I57US** | **PINON FLAT INF** | **0.34** | **65** | Pg | | | **Pg** | **01 24 32.5** | **-1.6** |
| | baz=248,slow=32 | | | | | | | | |
| I57US | | | | I | | | I | 01 25 10.0 | |
| | baz=233,slow=328,SNR=0.4 | | | | | | | | |
| **MURC** | **Murrieta** | **0.34** | **294** | | | | **Pg** | **01 24 33.3** | **-0.8** |
| **MURC** | **Murrieta** | **0.34** | **294** | P | | | **Pg** | **01 24 33.0** | **-1.0** |
| | baz=110,SNR=1000 | | | | | | | | |
| MURC | | | | S | | | **Sg** | **01 24 37.7** | **-0.9** |
| | baz=110 | | | | | | | | |
| **BORC** | **Borrego Spring** | **0.39** | **120** | | | | **Pg** | **01 24 34.0** | **-1.0** |
| BORC | | | | | | | **Sg** | **01 24 39.1** | **-1.0** |
| **PMD** | **Palm Desert** | **0.41** | **64** | | | | **Pg** | **01 24 33.8** | **-1.6** |
| PMD | | | | | | | **Sg** | **01 24 39.0** | **-1.9** |
| **JUEM** | **Julian Eagle M** | **0.43** | **154** | | | | **Pg** | **01 24 34.8** | **-0.8** |
| JUEM | | | | | | | **Sg** | **01 24 40.8** | **-0.5** |
| **GORC** | **Green Oak Ranc** | **0.46** | **228** | | | | **Pg** | **01 24 35.6** | **-0.7** |
| GORC | | | | | | | **Sg** | **01 24 42.3** | **0.0** |
| **BBSC** | **Beaumont Base** | **0.47** | **344** | | | | **Pg** | **01 24 35.8** | **-0.8** |
| BBSC | | | | | | | **Sg** | **01 24 42.3** | **-0.5** |
| **DPP** | **Dos Picos Cty** | **0.47** | **192** | | | | **Pg** | **01 24 35.7** | **-0.8** |
| DPP | | | | | | | **Sg** | **01 24 42.3** | **-0.5** |
| **PEC** | **Perris** | **0.51** | **327** | | | | **Pg** | **01 24 35.9** | **-1.4** |
| PEC | | | | | | | **Sg** | **01 24 42.7** | **-1.3** |
| **DEVC** | **Devers** | **0.51** | **23** | | | | **Pg** | **01 24 36.0** | **-1.2** |
| DEVC | | | | | | | **Sg** | **01 24 43.0** | **-1.0** |
| **ELS** | **Elsinore Mount** | **0.54** | **290** | Pg | | | **Pg** | **01 24 36.7** | **-1.0** |
| ELS | | | | Sg | | | **Sg** | **01 24 44.1** | **-0.8** |
| **SLH** | **Sleepy Hollow** | **0.55** | **120** | | | | **Pg** | **01 24 37.1** | **-0.8** |
| SLH | | | | | | | **Sg** | **01 24 45.1** | **0.0** |
| **EML** | **El Monte Cty P** | **0.57** | **182** | | | | **Pg** | **01 24 37.3** | **-1.0** |
| EML | | | | | | | **Sg** | **01 24 45.2** | **-0.7** |
| **EW2** | **E Wide Canyon** | **0.59** | **36** | | | | **Pg** | **01 24 37.2** | **-1.4** |
| EW2 | | | | | | | **Sg** | **01 24 44.9** | **-1.5** |
| **CFT** | **Crafton Hills** | **0.62** | **337** | | | | **Pg** | **01 24 38.3** | **-1.0** |
| CFT | | | | | | | **Sg** | **01 24 46.8** | **-0.6** |
| **109C** | **Camp Elliot, M** | **0.62** | **203** | Pg | | | **Pg** | **01 24 38.3** | **-1.0** |
| 109C | | | | Sg | | | **Sg** | **01 24 46.5** | **-0.9** |
| 109C | | | | IAML | | | | 01 24 50.8 | |
| | comp=E,33μm,0.7s | | | | | | | | |
| 109C | | | | IAML | | | | 01 24 53.1 | |
| | comp=N,22μm,0.8s | | | | | | | | |
| **109C** | **Camp Elliot, M** | **0.62** | **203** | P | | | **Pg** | **01 24 38.3** | **-1.0** |
| | baz=23,SNR=1000 | | | | | | | | |
| 109C | | | | S | | | **Sg** | **01 24 46.6** | **-0.9** |
| | baz=23 | | | | | | | | |
| **CPE** | **Camp Elliot** | **0.62** | **203** | | | | **Pg** | **01 24 38.3** | **-1.0** |
| CPE | | | | | | | **Sg** | **01 24 47.0** | **-0.5** |
| **RSBC** | **Riverside Bore** | **0.66** | **320** | | | | **Pg** | **01 24 38.6** | **-1.4** |
| RSBC | | | | | | | **Sg** | **01 24 47.8** | **-0.9** |
| **RSBC** | **Riverside Bore** | **0.66** | **320** | | | | **Pg** | **01 24 38.6** | **-1.4** |
| **MONP2** | **Monument Peak** | **0.66** | **149** | | | | **Pg** | **01 24 39.2** | **-0.9** |
| MONP2 | | | | | | | **Sg** | **01 24 47.7** | **-1.1** |
| **MONP2** | **Monument Peak** | **0.66** | **149** | P | | | **Pg** | **01 24 38.9** | **-1.1** |
| | baz=332,SNR=1000 | | | | | | | | |
| MONP2 | | | | S | | | **Sg** | **01 24 47.6** | **-1.2** |
| | baz=332 | | | | | | | | |
| **MTRP** | **Mission Trails** | **0.67** | **197** | | | | **Pg** | **01 24 39.2** | **-1.1** |
| MTRP | | | | | | | **Sg** | **01 24 48.4** | **-0.6** |
| **SVD** | **Seven Oaks Dam** | **0.68** | **340** | | | | **Pg** | **01 24 39.3** | **-1.1** |
| SVD | | | | | | | **Sg** | **01 24 48.6** | **-0.8** |
| **RVR** | **Riverside** | **0.70** | **319** | | | | **Pg** | **01 24 39.3** | **-1.5** |
| RVR | | | | | | | **Sg** | **01 24 48.8** | **-1.2** |
| **BLAC** | **Blackrock camp** | **0.70** | **31** | | | | **Pg** | **01 24 39.3** | **-1.6** |
| BLAC | | | | | | | **Sg** | **01 24 48.4** | **-1.7** |
| **CTCC** | **Cactus City** | **0.72** | **74** | | | | **Pg** | **01 24 40.1** | **-1.0** |
| CTCC | | | | | | | **Sg** | **01 24 49.4** | **-1.2** |
| **SALN** | **Salton City** | **0.72** | **104** | | | | **Pg** | **01 24 40.4** | **-0.8** |
| SALN | | | | | | | **Sg** | **01 24 50.2** | **-0.4** |
| **SDMC** | **San Diego Miss** | **0.73** | **201** | | | | **Pg** | **01 24 40.3** | **-1.0** |
| SDMC | | | | | | | **Sg** | **01 24 50.5** | **-0.3** |
| **HLNC** | **Highland** | **0.73** | **333** | | | | **Pg** | **01 24 40.4** | **-1.0** |
| HLNC | | | | | | | **Sg** | **01 24 50.4** | **-0.7** |
| **SDRC** | **San Diego Road** | **0.73** | **188** | | | | **Pg** | **01 24 40.1** | **-1.3** |
| SDRC | | | | | | | **Sg** | **01 24 50.0** | **-1.0** |
| **CRNC** | **Corona** | **0.74** | **304** | | | | **Pg** | **01 24 40.3** | **-1.3** |
| CRNC | | | | | | | **Sg** | **01 24 50.2** | **-1.1** |
| **CFSC** | **Central Fire S** | **0.75** | **329** | | | | **Pg** | **01 24 40.5** | **-1.1** |
| CFSC | | | | | | | **Sg** | **01 24 50.6** | **-0.9** |
| **CLTC** | **Calectric** | **0.75** | **327** | | | | **Pg** | **01 24 40.6** | **-1.1** |
| **BAR** | **Barrett** | **0.79** | **171** | | | | **Pg** | **01 24 41.2** | **-1.4** |
| BAR | | | | | | | **Sg** | **01 24 51.7** | **-1.2** |
| **BBRC** | **Big Bear Solar** | **0.80** | **354** | | | | **Pg** | **01 24 41.4** | **-1.3** |
| BBRC | | | | | | | **Sg** | **01 24 52.1** | **-1.1** |
| **BBRC** | **Big Bear Solar** | **0.80** | **354** | P | | | **Pg** | **01 24 41.5** | **-1.3** |
| | baz=173,SNR=223 | | | | | | | | |
| BBRC | | | | S | | | **Sg** | **01 24 52.2** | **-1.1** |
| | baz=173 | | | | | | | | |
| **FON** | **Fontana** | **0.82** | **321** | | | | **Pg** | **01 24 41.5** | **-1.6** |
| FON | | | | | | | **Sg** | **01 24 52.4** | **-1.3** |
| **MLSC** | **Mira Loma** | **0.82** | **311** | | | | **Pg** | **01 24 41.6** | **-1.4** |
| MLSC | | | | | | | **Sg** | **01 24 52.6** | **-1.2** |
| **CTW** | **Cottonwood Mou** | **0.82** | **75** | | | | **Pg** | **01 24 41.7** | **-1.4** |
| CTW | | | | | | | **Sg** | **01 24 52.4** | **-1.4** |
| **DUZA** | **Dulzura** | **0.86** | **177** | | | | **Pg** | **01 24 42.2** | **-1.5** |
| DUZA | | | | | | | **Sg** | **01 24 53.7** | **-1.2** |
| **OLP** | **Otay Lakes Par** | **0.86** | **186** | | | | **Pg** | **01 24 42.4** | **-1.4** |
| OLP | | | | | | | **Sg** | **01 24 53.9** | **-1.1** |
| **BELC** | **Belle Mtn. Jos** | **0.87** | **52** | | | | **Pg** | **01 24 42.5** | **-1.6** |
| BELC | | | | | | | **Sg** | **01 24 53.7** | **-1.8** |
| **BELC** | **Belle Mtn. Jos** | **0.87** | **52** | P | | | **Pg** | **01 24 42.3** | **-1.7** |
| | baz=232,SNR=1000 | | | | | | | | |
| BELC | | | | S | | | **Sg** | **01 24 53.6** | **-1.8** |
| | baz=232 | | | | | | | | |
| **CHNC** | **Chino** | **0.89** | **307** | | | | **Pg** | **01 24 43.1** | **-1.4** |
| **ERRC** | **Elmore Ranch** | **0.91** | **112** | | | | **Pg** | **01 24 43.9** | **-0.8** |
| ERRC | | | | | | | **Sb** | **01 24 56.3** | **-1.0** |
| **TPC** | **Twentynine Pal** | **0.91** | **45** | | | | **Pg** | **01 24 42.9** | **-1.9** |
| **TKX** | **Tecate** | **0.91** | **169** | Pg | | | **Pg** | **01 24 43.1** | **-1.7** |
| TKX | | | | Sg | | | **Sg** | **01 24 54.5** | **-2.1** |
| TKX | | | | IAML | | | | 01 24 56.1 | |
| | comp=E,33μm,0.7s | | | | | | | | |
| TKX | | | | IAML | | | | 01 25 00.9 | |
| | comp=N,14μm,0.5s | | | | | | | | |
| **GTM** | **Goat Mountain** | **0.91** | **25** | | | | **Pg** | **01 24 43.0** | **-1.9** |
| GTM | | | | | | | **Sg** | **01 24 54.3** | **-2.5** |
| **CRR** | **Carrizo Plain** | **0.92** | **129** | | | | **Pg** | **01 24 44.0** | **-0.9** |
| **BOMB** | **Bombay Beach** | **0.92** | **96** | | | | **Pg** | **01 24 43.7** | **-1.2** |
| **SANC** | **Santa Ana** | **0.92** | **285** | | | | **Pg** | **01 24 44.0** | **-0.9** |
| **SSS2** | **San Sevaine** | **0.93** | **323** | | | | **Pg** | **01 24 43.5** | **-1.7** |
| **CSP** | **Cedar Springs** | **0.94** | **332** | | | | **Pg** | **01 24 43.9** | **-1.6** |
| **TJX** | **Tijuana** | **0.97** | **192** | Pg | | | **Pg** | **01 24 44.4** | **-1.5** |
| TJX | | | | Sg | | | **Sg** | **01 24 57.7** | **-0.9** |
| TJX | | | | IAML | | | | 01 25 02.8 | |
| | comp=N,25μm,0.5s | | | | | | | | |
| **SUP** | **Superstition M** | **0.98** | **121** | | | | **Pg** | **01 24 44.5** | **-1.5** |
| **HAY** | **Hayfield** | **0.98** | **75** | | | | **Pb** | **01 24 45.3** | **-1.2** |
| **SWSC** | **Sam W. Stewart** | **1.00** | **121** | | | | **Pg** | **01 24 44.8** | **-1.8** |
| **SWSC** | **Sam W. Stewart** | **1.00** | **121** | P | | | **Pg** | **01 24 44.7** | **-1.8** |
| | baz=303,SNR=1000 | | | | | | | | |
| SWSC | | | | S | | | **Sg** | **01 24 58.6** | **-1.0** |
| | baz=303 | | | | | | | | |
| **IKP** | **In-Ko-Pah, Jac** | **1.01** | **143** | | | | **Pg** | **01 24 45.6** | **-1.1** |
| **IKP** | **In-Ko-Pah, Jac** | **1.01** | **143** | P | | | **Pg** | **01 24 45.3** | **-1.4** |
| | baz=325,SNR=1000 | | | | | | | | |
| IKP | | | | S | | | **Sg** | **01 24 58.8** | **-1.0** |
| | baz=325 | | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **1.04** | **318** | P | | | **Pg** | **01 24 45.1** | **-2.2** |
| | baz=137,SNR=1000 | | | | | | | | |
| BFSC | | | | S | | | **Sg** | **01 24 59.2** | **-1.6** |
| | baz=137 | | | | | | | | |
| **RMX** | **La Rumorosa** | **1.06** | **144** | Pg | | | **Pb** | **01 24 47.4** | **-0.5** |
| RMX | | | | Sg | | | **Sb** | **01 25 02.0** | **0.0** |
| RMX | | | | IAML | | | | 01 25 05.2 | |
| | comp=E,16μm,0.8s | | | | | | | | |
| RMX | | | | IAML | | | | 01 25 05.3 | |
| | comp=N,13μm,0.6s | | | | | | | | |
| **YUH** | **Yuha Desert** | **1.11** | **137** | Pg | | | **Pg** | **01 24 46.9** | **-1.7** |
| YUH | | | | Sg | | | **Sg** | **01 25 01.2** | **-1.9** |
| YUH | | | | IAML | | | | 01 25 03.7 | |
| | comp=E,10μm,0.9s | | | | | | | | |
| **CBX** | **Cerro Bola** | **1.16** | **173** | Pg | | | **Pg** | **01 24 47.4** | **-2.1** |
| CBX | | | | Sg | | | **Sg** | **01 25 02.7** | **-1.8** |
| **BC3** | **Big Chuckawall** | **1.16** | **80** | P | | | **Pg** | **01 24 47.2** | **-2.4** |
| | baz=261,SNR=1000 | | | | | | | | |
| BC3 | | | | S | | | **Sg** | **01 25 02.6** | **-2.0** |
| | baz=261 | | | | | | | | |
| **FMP** | **Fort Macarthur** | **1.25** | **282** | P | | | **Pg** | **01 24 48.8** | **-2.6** |
| | baz=100,SNR=169 | | | | | | | | |
| FMP | | | | S | | | **Sg** | **01 25 06.5** | **-1.1** |
| | baz=100 | | | | | | | | |
| **CIS** | **Catalina Islan** | **1.33** | **268** | P | | | **Pg** | **01 24 50.1** | **-2.8** |
| | baz=86,SNR=426 | | | | | | | | |
| CIS | | | | S | | | **Sg** | **01 25 08.8** | **-1.4** |
| | baz=86 | | | | | | | | |
| **PASC** | **Pasadena Art C** | **1.34** | **302** | Pg | | | **Pg** | **01 24 50.5** | **-2.5** |
| PASC | | | | Sg | | | **Sg** | **01 25 08.1** | **-2.2** |
| **RRX** | **Edison Barstow** | **1.42** | **354** | P | | | **Pn** | **01 24 52.4** | **-0.8** |
| | baz=173,SNR=214 | | | | | | | | |
| RRX | | | | S | | | **Sg** | **01 25 11.4** | **-1.4** |
| | baz=173 | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **1.42** | **16** | P | | | **Pn** | **01 24 52.0** | **-1.4** |
| | baz=196,SNR=1000 | | | | | | | | |
| HEC | | | | S | | | **Sb** | **01 25 11.6** | **-0.7** |
| | baz=196 | | | | | | | | |
| **UABX** | **UABC, Campus M** | **1.43** | **125** | | | | **Pn** | **01 24 51.3** | **-2.0** |
| **DECC** | **Green Verdugo** | **1.48** | **302** | P | | | **Pn** | **01 24 52.7** | **-1.5** |
| | baz=121,SNR=424 | | | | | | | | |
| **SCI2** | **San Clemente I** | **1.52** | **252** | P | | | **Pn** | **01 24 53.4** | **-1.3** |
| | baz=71,SNR=278 | | | | | | | | |
| SCI2 | | | | S | | | **Sn** | **01 25 13.1** | **-1.6** |
| | baz=71 | | | | | | | | |
| **IRM** | **Iron Mountain** | **1.56** | **63** | P | | | **Pn** | **01 24 53.2** | **-2.0** |

SNCC IAML 01 25 43.4
comp=N,3µm,0.8s
**SNCC San Nicolas Is 2.27 265 P Pn 01 25 03.5 -1.5**
baz=84,SNR=30
SNCC S Sn **01 25 30.9 -2.2**
baz=84
**ARVC Arvin 2.35 315 P Pn 01 25 05.6 -0.5**
baz=134,SNR=582
ARVC Sb Sb **01 25 39.8 +0.9**
baz=134
**PDMCI Parker Dam,Lak 2.38 69 P Pn 01 25 04.9 -1.6**
baz=250,SNR=160
**SCZ2 Santa Cruz Isl 2.40 284 P Pn 01 25 05.0 -1.8**
baz=102,SNR=64
**SHOC Shoshone, Teco 2.47 10 P Pn 01 25 07.0 -0.7**
baz=190,SNR=275
SHOC Sb Sg **01 25 44.4 -2.2**
baz=190
**ISA Isabella, Lake 2.58 329 Pn Pn 01 25 08.5 -0.8**
ISA IAML 01 25 55.0
comp=E,2µm,1.6s
**ISA Isabella, Lake 2.58 329 P Pn 01 25 08.8 -0.5**
baz=147,SNR=444
ISA S Sn **01 25 41.2 +0.3**
baz=147
**SBC Santa Barbara 2.59 293 P Pn 01 25 08.5 -0.9**
baz=111,SNR=18
**MPMC Manual Prospec 2.65 348 P Pn 01 25 09.6 -0.7**
baz=168,SNR=226
MPMC S Sn **01 25 43.3 +0.6**
baz=168
**GWY Greenwater Val 2.72 3 Pn Pn 01 25 10.5 -0.8**
**V12A Nelson 2.78 35 Pn Pn 01 25 10.8 -1.3**
**PKM Mcpherson Peak 2.86 301 P Pn 01 25 12.7 -0.6**
baz=119,SNR=113
**SFX San Felipe 2.94 145 Pn Pn 01 25 13.2 -1.0**
**FURC Furnace Creek, 3.00 359 P Pn 01 25 14.5 -0.5**
baz=179,SNR=70
FURC Sb Sg **01 26 01.2 -2.3**
baz=179
**VES Vestal, Richgr 3.02 322 P Pn 01 25 14.9 -0.3**
baz=141,SNR=152
VES S Sn **01 25 51.5 0.0**
baz=141
**CWC Cottonwood Cre 3.14 341 P Pn 01 25 17.1 -0.1**
baz=160
CWC Sb Sb **01 26 04.4 +2.4**
baz=160
**SMMC Simmler 3.21 306 P Pn 01 25 17.3 -0.6**
baz=124,SNR=16
**WCT Wildcat Mounta 3.33 3 Pn Pn 01 25 19.1 -0.4**
**SHPR Sheep Range 3.33 24 Pn Pn 01 25 18.8 -0.8**
**PIX Pinacate 3.42 123 Pn Pn 01 25 19.1 -1.6**
**TPNV Topopah Spring 3.51 8 P Pn 01 25 22.1 -0.1**
baz=188,SNR=536
TPNV Sb Sb **01 26 14.2 +1.8**
baz=188
**VOG Valley Oaks Go 3.54 324 P Pn 01 25 22.3 -0.1**
baz=143,SNR=9.0
VOG S Sn **01 26 05.6 +1.1**
baz=143
**GRAC Grapevine Rang 3.55 353 P Pn 01 25 23.0 +0.3**
baz=172,SNR=141
GRAC Sb Sg **01 26 17.7 -3.7**
baz=172
**214A Organ Pipe Nat 3.70 113 P Pn 01 25 22.4 -2.2**
baz=295,SNR=21
214A S Sn **01 26 07.4 -1.1**
baz=295
**TIN Tinemaha, Big 3.76 343 P Pn 01 25 26.1 +0.5**
baz=162,SNR=32
TIN Sb Sg **01 26 24.9 -3.2**
baz=162
**GMN Gold Mountain 3.84 355 Pn Pn 01 25 26.9 0.0**
**DSP Deep Springs 4.01 347 Pn Pn 01 25 29.3 +0.4**
**PRN Pahroc Range 4.19 20 Pn Pn 01 25 31.7 +0.2**
**MZP Montezuma Peak 4.25 354 Pn Pn 01 25 32.9 +0.4**
**S11A Rachel 4.26 12 Pn Pn 01 25 33.2 +0.7**
**PMPB Monarch Peak 4.27 311 Pn Pn 01 25 31.9 -0.7**
**MLAC Mammoth, Mammo 4.47 339 P Pn 01 25 36.7 +1.3**
baz=158,SNR=15
MLAC S Sn **01 26 27.8 +0.1**
baz=158
**OMMB Old Mammoth Mi 4.50 337 Pn Pn 01 25 37.0 +1.0**
**MDPB Devils Postpil 4.55 337 Pn Pn 01 25 38.0 +1.4**
**X16A Lo Mia Camp, P 4.57 77 Pn Pn 01 25 35.8 -1.0**
**LCMT Little Creek M 4.59 39 Pn Pn 01 25 36.5 -0.5**
**TPH Tonopah 4.61 356 Pn Pn 01 25 37.8 +0.4**
**BBGB Big Mountain B 4.65 313 Pn Pn 01 25 37.7 -0.1**
**U15A North Rim 4.75 50 Pn Pn 01 25 38.9 -0.5**
**KNB Kanab 4.82 42 Pn Pn 01 25 40.1 -0.1**
**WUAZ Wupatki 4.94 64 Pn Pn 01 25 42.0 +0.2**
WUAZ IAML 01 27 09.3
comp=E,647nm,1.4s
WUAZ IAML 01 27 09.4
comp=E,632nm,0.9s
**WUAZ Wupatki 4.94 64 P Pn 01 25 42.1 +0.2**
baz=247,SNR=110
WUAZ S Sn **01 26 39.6 +0.3**
baz=247
**CCUT Cedar City 4.96 34 Pn Pn 01 25 42.0 -0.2**
**LHV Little Huntoon 4.97 345 Pn Pn 01 25 43.4 +1.3**
**R11B Troy Canyon, C 4.98 11 Pn Pn 01 25 42.5 +0.2**
**R11B Troy Canyon, C 4.98 11 P Pn 01 25 42.6 +0.2**
baz=192,SNR=67
R11B Sb Sb **01 26 59.4 +4.7**
baz=192
**SAO San Andreas Ge 5.02 312 Pn Pn 01 25 41.4 -1.4**
**NV11 Mina Array Sit 5.07 348 Pn Pn 01 25 44.3 +0.7**
NV11 IAML 01 27 17.1
comp=E,303nm,1.4s
**NVAR Mina Array Bea 5.10 347 Pn Pn 01 25 45.0 +0.9**
comp=E,7.2nm,0.3s,baz=170,slow=15,SNR=130
NVAR Lg Lg 01 27 07.1
baz=155,slow=32
comp=E,19nm,0.5s
**SZCU Shurtz Canyon 5.12 35 Pn Pn 01 25 44.4 -0.1**
**TUC Tucson 5.21 101 Pn Pn 01 25 43.3 -2.2**
TUC IAML 01 27 29.4
comp=E,217nm,1.1s
**TUC Tucson 5.21 101 P Pn 01 25 43.4 -2.0**
baz=285
TUC Sb Sb **01 27 03.5 +2.3**
baz=285
**RYN Ryan 5.33 346 Pn Pn 01 25 48.0 +0.7**
**Q09A Carvers 5.37 357 Pn Pn 01 25 49.1 +1.4**
**CMB Columbia Colle 5.40 329 Pn Pn 01 25 48.3 +0.2**
**WAKR Walker 5.46 338 Pn Pn 01 25 50.5 +1.5**
**PSUT Pine Spring 5.60 25 Pn Pn 01 25 51.2 +0.2**
**KVN Kaiserville 5.67 350 Pn Pn 01 25 52.8 +0.9**
**Q12A Willow Creek R 5.79 16 Pn Pn 01 25 54.4 +0.9**
**X18A Snowflake 5.81 78 Pn 01 25 53.1 -0.6**
**YERR Yerington 5.85 341 Pn Pn 01 25 55.5 +1.2**
**SPR3 Spring Creek 3 5.88 19 Pn Pn 01 25 53.8 -1.0**
**MTPU Mount Pierson 5.92 38 Pn Pn 01 25 55.9 +0.4**
**PNTR Pine Nut 6.04 339 Pn Pn 01 25 59.2 +2.1**
**W18A Petrified Fore 6.09 72 Pn Pn 01 25 59.0 +1.4**
**W18A Petrified Fore 6.09 72 P Pn 01 25 58.7 +1.0**
baz=256,SNR=13
W18A Sb Sb **01 27 32.0 +5.2**
baz=256
**EMB Emerald Bay 6.11 335 Pn Pn 01 26 00.2 +2.3**
**TCRU Three Creeks R 6.24 33 Pn Pn 01 26 00.3 +0.6**
**MVU Marysvale 6.26 35 Pn Pn 01 26 00.8 +0.6**
**MSU Marysvale 6.29 35 Pn Pn 01 26 00.9 +0.5**
**MPK Martis Peak 6.37 337 Pn Pn 01 26 03.1 +1.5**
**AFDM Forest Hills D 6.42 330 Pn Pn 01 26 01.7 -0.3**
**DUN6 Lazy B Ranch 6.56 96 Pn Pn 01 26 04.2 +0.1**
**PAHR Pah Rah Range 6.56 342 Pn Pn 01 26 05.8 +1.7**
**HMU Henry Mountain 6.66 46 Pn Pn 01 26 05.8 +0.2**
**319A Douglas 6.71 106 Pn Pn 01 26 05.4 -0.7**
**MCCM Marconi Confer 6.78 315 Pn Pn 01 26 06.9 0.0**
**BMN Battle Mountai 6.96 357 Pn Pn 01 26 09.5 -0.1**
**Q16A Castle Valley 7.10 38 Pn Pn 01 26 08.5 -3.0**
**ORV Oroville 7.15 330 Pn Pn 01 26 11.1 -1.0**
**GDXM Geysers 7.20 320 Pn Pn 01 26 11.7 -1.0**
**TMUT Trail Mountain 7.37 36 Pn Pn 01 26 16.8 +1.4**
**ELK Elko 7.38 9 Pn Pn 01 26 16.1 +0.7**
**ELK Elko 7.38 9 Pn Pn 01 26 16.6 +1.3**
comp=E,6.4nm,0.3s,baz=183,slow=9.1,SNR=82
ELK Lg Lg 01 28 17.4
comp=E,2.8nm,0.3s,baz=325,slow=23,SNR=2.6
comp=E,15nm,0.4s
**DUG Dugway, Tooele 7.45 24 Pn Pn 01 26 17.1 +0.9**
**DUG Dugway, Tooele 7.45 24 P Pn 01 26 15.8 -0.4**
baz=207,SNR=15
DUG Sb Sb **01 28 13.4 +7.8**
baz=207
**HOPS Hopland Field 7.48 319 Pn Pn 01 26 15.8 -0.8**
**NLU North Lily Min 7.51 29 Pn 01 26 18.0 +0.8**
**SRU San Rafael Swe 7.59 40 Pn Pn 01 26 20.0 +1.8**
**121A Cookes Peak, D 7.65 95 Pn Pn 01 26 18.3 -0.8**
**121A Cookes Peak, D 7.65 95 P Pn 01 26 18.2 -0.9**
baz=280,SNR=28
**P17A Butcher Ranch, 7.74 38 Pn 01 26 20.8 +0.5**
**MVCO Mesa Verde 7.76 59 Pn Pn 01 26 21.4 +0.8**
**MVCO Mesa Verde 7.76 59 P Pn 01 26 22.1 +1.4**
baz=244,SNR=54
**BGU Big Grassy Mou 8.04 21 Pn Pn 01 26 24.8 +0.4**
**P18A Preston Nutter 8.11 39 Pn Pn 01 26 26.7 +1.1**
**O02D Mt. Diablo Mer 8.23 326 Pn Pn 01 26 24.8 -2.1**
**CTU Camp Tracy 8.27 28 Pn 01 26 28.4 +0.8**
**JLU Jordanelle 8.32 30 Pn Pn 01 26 27.0 -1.3**
**SPUT South Promonto 8.57 23 Pn Pn 01 26 32.5 +0.9**
**ANMO Albuquerque 8.71 77 Pn Pn 01 26 34.1 +0.4**
**ANMO Albuquerque 8.71 77 Pn Pn 01 26 34.3 +0.6**
comp=E,0.5nm,0.3s,baz=358,slow=12,SNR=10
ANMO Lg Lg 01 28 55.6
comp=E,1.2nm,0.3s,baz=223,slow=21,SNR=7.5
ANMO LR LR 01 30 21.1
comp=E,188nm,19.9s,baz=355,slow=41
comp=E,2.2nm,0.5s
**ANMO Albuquerque 8.71 77 P Pn 01 26 34.3 +0.6**
baz=263
**KMRM Mail Ridge 8.71 323 Pn Pn 01 26 34.3 +0.7**
**HVU Hansel Valley 8.90 20 Pn Pn 01 26 36.6 +0.5**
**KMPM Mount Pierce 9.07 322 Pn Pn 01 26 39.2 +0.8**
**HWUT Hardware Ranch 9.13 26 Pn Pn 01 26 41.3 +1.8**
**S22A 4UR Ranch, Cre 9.19 59 Pn Pn 01 26 41.8 +1.6**
**S22A 4UR Ranch, Cre 9.19 59 P Pn 01 26 40.8 +0.5**
baz=245,SNR=40
**KHMM Horse Mountain 9.22 325 Pn Pn 01 26 42.0 +1.5**
**JCC Jacoby Creek, 9.32 324 Pn Pn 01 26 43.2 +1.4**
**YBH Yreka Blue Hor 9.48 332 Pn Pn 01 26 46.7 +2.6**
**YBH Yreka Blue Hor 9.48 332 Pn Pn 01 26 48.0 +3.9**
comp=E,0.3nm,0.3s,baz=142,slow=7.6,SNR=22
YBH Lg Lg 01 29 23.3
comp=E,0.1nm,0.3s,baz=48,slow=9.7,SNR=6.0
YBH LR LR 01 30 41.7
comp=E,142nm,21.6s,baz=172,slow=39
comp=E,4.2nm,0.6s
**O20A White River Ci 9.57 43 Pn Pn 01 26 45.5 +0.1**
**O20A White River Ci 9.57 43 P Pn 01 26 46.2 +0.8**
baz=228,SNR=13
**KRPM Rodgers 9.58 325 Pn Pn 01 26 45.7 +0.2**
**SMCO Snowmass 9.78 52 Pn Pn 01 26 49.2 +0.8**
**MNTX Cornudas Mount 9.81 97 P Pn 01 26 48.0 -0.6**
baz=284,SNR=12
**KRMB Red Mountain 9.81 327 Pn Pn 01 26 51.1 +2.4**
**MFID Camas Ranch 9.97 4 Pn Pn 01 26 52.1 +1.3**
**KSXB Camp Six Broad 10.05 328 Pn Pn 01 26 52.6 +0.7**
**SDCO Great Sand Dun 10.16 62 Pn Pn 01 26 51.8 -1.8**
**SDCO Great Sand Dun 10.16 62 P Pn 01 26 53.1 -0.4**
baz=248
**HLID Hailey 10.26 10 Pn Pn 01 26 55.3 +0.5**
**HLID Hailey 10.26 10 P Pn 01 26 56.9 +2.1**
baz=191,SNR=17
**HUMO Hull Mountain 10.33 334 Pn Pn 01 26 57.8 +2.2**
**VHRN Van Horn 10.38 102 Pn Pn 01 26 57.9 +1.4**
**J05D Fort Rock, OR 10.40 342 Pn Pn 01 26 58.4 +1.7**
**T25A Trinidad 10.78 67 Pn Pn 01 27 03.7 +1.6**
**T25A Trinidad 10.78 67 P Pn 01 27 02.0 0.0**
baz=254
**BW06 Boulder Array 10.90 29 P Pn 01 27 06.1 +2.5**
baz=214,SNR=23
**PD31 Pinedale Array 10.90 29 Pn Pn 01 27 05.0 +1.4**
**PDAR Pinedale Array 10.90 29 Pn Pn 01 27 04.8 +1.1**
**PDAR Pinedale Array 10.90 29 Pn Pn 01 27 06.7 +3.0**
comp=E,0.2nm,0.3s,baz=218,slow=12,SNR=51
PDAR Lg Lg 01 30 07.0
baz=211,slow=30
comp=E,18nm,1.1s
**Q24A Divide 10.91 56 P Pn 01 27 05.1 +1.3**
baz=243
**LPIG La Paz 10.94 147 LR LR 01 31 05.8**
comp=E,191nm,21.6s,baz=319,slow=36
**ISCO Idaho Springs 11.00 52 Pn Pn 01 27 06.5 +1.4**
**ISCO Idaho Springs 11.00 52 P Pn 01 27 06.4 +1.4**
baz=238
**RWWY Rawlins 11.20 40 Pn Pn 01 27 08.1 +0.4**
**IMW Indian Meadow 11.38 22 Pn Pn 01 27 12.7 +2.4**
**N23A Red Feather La 11.41 46 Pn Pn 01 27 11.5 +0.9**
**N23A Red Feather La 11.41 46 P Pn 01 27 10.7 +0.1**
baz=233
**ALPN Alpine 11.62 102 Pn Pn 01 27 12.8 -0.6**
**FLWY Flagg Ranch 11.62 22 Pn Pn 01 27 16.6 +3.1**
**MSTX Muleshoe 11.71 84 Pn Pn 01 27 17.0 +2.3**
**MSTX Muleshoe 11.71 84 P Pn 01 27 14.5 -0.2**
baz=272
**YPP Pitchstone Pla 11.76 22 Pn Pn 01 27 17.9 +2.4**
**TXAR Lajitas Array 11.97 107 Pn Pn 01 27 18.9 +0.7**
comp=E,0.6nm,0.3s,baz=286,slow=11,SNR=29
TXAR Lg Lg 01 30 41.9
baz=298,slow=32,SNR=1.3
TXAR LR LR 01 32 18.7
comp=E,510nm,18.9s,baz=286,slow=40
comp=E,2.4nm,0.6s
**ODSA Odessa 12.09 92 Pn Pn 01 27 20.1 +0.3**
**YHH Holmes Hill 12.22 20 Pn Pn 01 27 22.1 +0.4**
**K22A Casper 12.24 38 Pn Pn 01 27 22.4 +0.6**
**YMP Mirror Lake Pl 12.39 23 Pn Pn 01 27 24.7 +0.6**
**HOOD Mount Hood Mea 12.41 344 Pn Pn 01 27 25.9 +1.6**
**AMTX Amarillo 12.62 79 Pn Pn 01 27 28.0 +0.9**
**BOZ Bozeman (W) 12.76 17 P Pn 01 27 30.6 +1.7**
baz=200,SNR=6.8
**SAND Sanderson 12.99 102 Pn Pn 01 27 33.9 +1.7**
**RLMT Red Lodge 13.02 24 Pn Pn 01 27 35.5 +2.9**
**RLMT Red Lodge 13.02 24 P Pn 01 27 32.4 -0.2**
baz=209,SNR=6.2
**HAWA Hanford 13.08 352 Pn Pn 01 27 35.6 +2.4**
**BPMT Black Pine Rid 13.21 10 Pn Pn 01 27 36.5 +1.3**
**SGCY Sterling City 13.31 92 Pn Pn 01 27 36.5 0.0**
**SN07 Snyder 07 13.34 87 Pn Pn 01 27 39.2 +2.4**
**MSO Missoula 13.53 8 Pn Pn 01 27 42.4 +3.0**
**MSO Missoula 13.53 8 P Pn 01 27 40.6 +1.2**
baz=190,SNR=7.7
**LYMT Lyon Mountain 13.92 13 Pn Pn 01 27 44.6 -0.4**
**LTY Liberty 14.08 349 Pn Pn 01 27 46.4 -0.6**
**DRIO Del Rio 14.40 102 Pn Pn 01 27 52.2 +0.8**
**ABTX Abilene, Hawle 14.44 89 Pn Pn 01 27 52.7 +0.8**
**RSSD Black Hills 14.56 39 Pn Pn 01 27 52.5 -1.2**
**RSSD Black Hills 14.56 39 P Pn 01 27 53.4 -0.3**
baz=227
**JCT Junction City 14.75 97 Pn Pn 01 27 56.3 +0.2**
**JCT Junction City 14.75 97 P Pn 01 27 56.0 -0.1**
baz=286
**NEW Newport 14.79 359 Pn Pn 01 27 55.8 -0.8**
**NEW Newport 14.79 359 Pn P 01 27 59.4 -3.2**
comp=E,0.1nm,0.3s,baz=176,slow=14,SNR=9.7
NEW LR LR 01 34 10.3
comp=E,197nm,18.4s,baz=182,slow=40
comp=E,4.6nm,0.9s
**NEW Newport 14.79 359 P Pn 01 27 57.7 +1.1**
baz=179,SNR=10.0
**GNW Green Mountain 14.80 344 Pn Pn 01 27 56.8 +0.2**
**B08A Colville Reser 15.00 354 Pn Pn 01 27 56.4 -3.1**
**WMOK Wichita Mounta 15.00 80 Pn Pn 01 27 59.2 -0.4**
**WMOK Wichita Mounta 15.00 80 P Pn 01 27 59.1 -0.4**
baz=270
**BRDY Brady 15.22 93 Pn Pn 01 28 01.2 -1.2**
BRDY IAmb IAmb 01 28 12.2
comp=E,19nm,1.3s
**HNDO Hondo 15.47 100 P 01 28 08.6 -1.6**
**LAO LASA Array 15.48 28 Pn Pn 01 28 05.5 -0.3**
**LAO LASA Array 15.48 28 P Pn 01 28 06.7 +0.9**
baz=215
**EGMT Eagleton 15.49 18 Pn Pn 01 28 05.9 0.0**
EGMT IAmb IAmb 01 28 16.1
comp=E,34nm,1.4s
**EGMT Eagleton 15.49 18 P Pn 01 28 05.9 0.0**
baz=203
**PLPT Palo Pinto 15.52 87 Pn Pn 01 28 04.8 -1.5**
**FW03 Perrin-Whitt E 15.70 86 P P 01 28 11.4 -1.4**
**FW07 Weatherford 15.98 87 Pn Pn 01 28 10.2 -2.1**
FW07 IAmb IAmb 01 28 29.4
comp=Z,21nm,1.1s
**FW06 Azle 16.13 86 P Pn 01 28 14.8 +0.5**
FW06 IAmb IAmb 01 28 30.8
comp=Z,22nm,1.0s
**FW13 Cleburne 16.32 89 Pn Pn 01 28 15.3 -1.4**
FW13 IAmb IAmb 01 28 27.9
comp=Z,25nm,1.2s
**Z35A Perchaven, San 16.35 85 P P 01 28 19.1 -0.8**
Z35A IAmb IAmb 01 28 35.7
comp=Z,25nm,0.7s
**WHTX Lake Whitney, 16.36 90 Pn Pn 01 28 18.0 +0.7**
**WHTX Lake Whitney, 16.36 90 P Pn 01 28 17.8 +0.5**
baz=280
**ZAIG Zacatecas 16.46 127 P P 01 28 21.5 -0.1**
ZAIG IAmb IAmb 01 28 25.4
comp=Z,63nm,1.4s
**435B Jarrell 16.52 94 P Pn 01 28 19.9 +0.7**
435B IAmb IAmb 01 28 28.1
comp=Z,35nm,1.4s
**FW14 Alvarado 16.52 88 Pn Pn 01 28 17.2 -2.0**
FW14 IAmb IAmb 01 28 42.6
comp=Z,21nm,1.0s
**OK052 Battle Ridge R 16.65 76 Pn Pn 01 28 21.0 +0.1**
OK052 IAmb IAmb 01 28 37.9
comp=Z,25nm,1.1s
**FW16 Waxahatchie 16.75 88 Pn Pn 01 28 19.1 -3.1**
**BGNE Belgrade 16.80 56 Pn Pn 01 28 22.4 -0.3**
**KSU1 Kansas State U 17.23 65 Pn Pn 01 28 26.3 -1.8**
**TREL Terrell 17.39 87 P 01 28 30.7 -0.8**
TREL IAmb IAmb 01 28 37.3
comp=Z,29nm,1.2s
**TUL3 Leonard 17.47 76 Pn Pn 01 28 29.2 -2.0**
**SUSD Miller 17.66 46 P 01 28 34.3 -0.1**
**DGMT Dagmar 17.73 29 P 01 28 35.7 +0.5**
**DGMT Dagmar 17.73 29 P P 01 28 35.0 -0.1**
baz=217
**E28A Huff 17.95 38 Pn Pn 01 28 36.4 -0.7**
**HKT Hockley 18.20 95 Pn Pn 01 28 38.5 -1.5**
**ECSD EROS Data Cent 18.79 51 P Pn 01 28 47.3 0.0**
**ECSD EROS Data Cent 18.79 51 P P 01 28 46.8 -0.1**
baz=244,SNR=7.9
**HHAR Hobbs 18.98 75 P P 01 28 47.1 -1.9**
**MIAR Mount Ida 19.30 80 P P 01 28 52.3 -0.2**
baz=273
**F33A 5 Mile Ranch, 20.00 46 P P 01 28 58.5 -1.6**
F33A IAmb IAmb 01 29 03.3
comp=Z,24nm,1.1s
**BBB Bella Bella 20.42 340 LR LR 01 36 53.8**
comp=Z,306nm,18.9s,baz=160,slow=37
**FCAR Ozark Folk Cen 20.44 76 P P 01 29 05.6 +0.6**
**R40A Maddies Statio 20.45 69 P Pn 01 29 05.9 -1.2**
**P40A Paris 20.78 66 P Pn 01 29 09.8 -1.3**
**T42A Van Buren 21.29 73 P P 01 29 15.1 +1.0**
**AGMN Agassiz Nation 21.60 40 P P 01 29 18.4 +1.1**
**AGMN Agassiz Nation 21.60 40 P P 01 29 19.0 +1.7**
baz=234
**PBMO Poplar Bluff 21.82 74 P P 01 29 20.1 +0.3**
**SPMN Marine on St. 21.89 50 P P 01 29 21.1 +0.7**
SPMN IAmb IAmb 01 29 26.4
comp=Z,12nm,1.0s
**SPMN Marine on St. 21.89 50 P P 01 29 21.2 +0.7**
baz=246
**OXF Oxford 22.73 80 P P 01 29 31.0 +1.4**
**ULM Lac du Bonnet 22.78 36 P P 01 29 29.5 -0.4**
comp=Z,13nm,0.8s,baz=230,slow=8.8,SNR=14
ULM LR LR 01 38 45.2
comp=Z,343nm,20.4s,baz=232,slow=38
comp=Z,13nm,0.8s
**L42A Oliver, Polo 23.03 60 P P 01 29 33.9 +1.2**
L42A IAmb IAmb 01 29 36.6
comp=Z,13nm,1.0s
**E38A The Farm, Brul 23.26 48 P P 01 29 35.1 +0.2**
E38A IAmb IAmb 01 29 39.6
comp=Z,12nm,1.1s
**G40A Rib Lake 23.61 52 P P 01 29 37.3 -1.2**
G40A IAmb IAmb 01 29 41.7
comp=Z,6.8nm,0.8s
**FFC Flin Flon 23.68 22 P P 01 29 39.9 +0.9**
FFC IAmb IAmb 01 29 41.9
comp=Z,7.9nm,0.9s
**COWI Conover 24.60 51 P P 01 29 47.2 -0.6**
**CMIG Matias Romero 25.59 124 LR LR 01 40 27.4**
comp=Z,434nm,19.0s,baz=290,slow=38
**DLBC Dease Lake 26.51 344 LR LR 01 41 03.3**
comp=Z,401nm,20.1s,baz=122,slow=38
**TKL Tuckaleechee C 27.23 76 LR LR 01 40 29.1**
comp=Z,50nm,20.0s,baz=289,slow=35
**YKA Yellowknife Ar 29.08 2 P P 01 30 29.2 +1.4**
comp=Z,0.5nm,0.5s,baz=180,slow=8.6,SNR=4.9
YKA LR LR 01 41 38.0
comp=Z,133nm,19.4s,baz=150,slow=36
comp=Z,0.5nm,0.5s
**APG El Apazote 30.12 121 LR LR 01 44 35.0**
comp=Z,15nm,20.4s,baz=249,slow=40
**MMPY Sheldon Lake, 30.58 347 P P 01 30 41.7 +0.6**
baz=156
**N31M Braeburn, Yuko 30.58 342 P P 01 30 41.2 0.0**
baz=148
**FARO Faro, Yukon 30.65 345 P P 01 30 42.9 +1.2**
baz=152
**SADO Sadowa 31.08 58 LR LR 01 44 00.6**
comp=Z,80nm,19.0s,baz=276,slow=38
**YUK8 Steele Glacier 31.53 339 P P 01 30 51.6 +1.8**
baz=142
**M29M Somme Creek 32.09 341 P P 01 30 53.6 -0.9**
M29M IAmb IAmb 01 30 58.2
comp=Z,3.8nm,1.1s
**M29M Somme Creek 32.09 341 P P 01 30 56.7 +2.2**
baz=144
**L29M L29M 32.55 342 P P 01 30 58.9 +0.4**
**L29M L29M 32.55 342 P P 01 31 00.1 +1.6**
baz=146
**M27K Edge Creek, AK 33.00 339 P P 01 31 04.6 +2.1**
baz=140
**K29M Barlow Dome 33.01 343 P P 01 31 03.8 +1.2**
K29M IAmb IAmb 01 31 06.2
comp=Z,4.4nm,0.9s
**K29M Barlow Dome 33.01 343 P P 01 31 05.1 +2.5**
baz=147
**J30M Hart River 33.36 345 P P 01 31 06.8 +1.2**
J30M IAmb IAmb 01 31 18.9
comp=Z,7.8nm,1.4s
**J30M Hart River 33.36 345 P P 01 31 08.2 +2.5**
baz=150
**M26K Nabesna, AK 33.38 338 P P 01 31 08.5 +2.7**
baz=138
**DAWY Dawson 33.66 342 P P 01 31 07.1 -1.1**
DAWY IAmb IAmb 01 31 12.8
comp=Z,9.2nm,1.3s
**DAWY Dawson 33.66 342 P P 01 31 10.3 +2.2**
baz=145
**I30M Mount Dempster 33.93 345 P P 01 31 12.3 +1.7**
baz=150
**L26K Log Cabin Wild 33.95 339 P P 01 31 11.7 +1.0**
L26K IAmb IAmb 01 31 14.7
comp=Z,4.5nm,1.1s
**L26K Log Cabin Wild 33.95 339 P P 01 31 12.7 +2.0**
baz=138
**KDAK Kodiak Island 34.23 326 LR LR 01 44 18.4**
comp=Z,154nm,18.6s,baz=163,slow=35
**KNK Knik Glacier 34.56 334 P P 01 31 17.3 +1.3**
baz=129
**EGAK Eagle 34.69 342 P P 01 31 17.1 +0.2**
EGAK IAmb IAmb 01 31 23.4
comp=Z,11nm,1.5s
**EGAK Eagle 34.69 342 P P 01 31 18.8 +1.8**
baz=143
**SCRK Sand Creek 34.85 339 P P 01 31 20.0 +1.4**
SCRK IAmb IAmb 01 31 23.8
comp=Z,5.7nm,1.2s
**SCRK Sand Creek 34.85 339 P P 01 31 20.6 +2.0**
baz=138
**I28M Miner Creek 34.93 343 P P 01 31 19.2 0.0**
I28M IAmb IAmb 01 31 22.4
comp=Z,4.3nm,0.8s
**I28M Miner Creek 34.93 343 P P 01 31 21.1 +1.9**
baz=145,SNR=7.6
**PMR Palmer 34.93 333 P P 01 31 21.2 +2.2**
baz=129
**EPYK Eagle Plains 35.00 346 P P 01 31 20.0 +0.2**
baz=150
**G31M Satah River 35.04 348 P P 01 31 21.9 +1.9**
baz=154
**J26L Joseph Creek 35.13 340 P P 01 31 23.2 +2.3**
baz=139
**H29M Whitestone 35.22 345 P P 01 31 23.2 +1.6**
baz=148
**DHY Denali Highway 35.28 336 P P 01 31 23.8 +1.6**
baz=133
**SUA Susitna One 35.46 332 P P 01 31 26.0 +2.2**

baz=126
I26K **Coal Creek Min** 35.63 341 P P 01 31 27.7 +2.6
baz=140
J25K **Salcha River,** 35.73 339 P P 01 31 27.9 +1.9
baz=137
G29M **Pine Creek** 35.74 346 P P 01 31 27.0 +1.0
baz=149
H27K **Steamboat Moun** 35.95 343 P P 01 31 29.2 +1.3
baz=144
HDA **Harding Lake** 36.06 338 P P 01 31 30.2 +1.3
baz=135
INK **Inuvik** 36.18 350 LR LR 01 47 08.8
comp=Z,230nm,19.8s,baz=158,slow=38
MCK **McKinley** 36.24 336 P P 01 31 31.9 +1.5
baz=131
ILAR **Eielson Array** 36.30 339 P P 01 31 32.7 +1.8
comp=Z,1.6nm,0.8s,baz=153,slow=7.5,SNR=20
ILAR LR LR 01 45 51.8
comp=Z,99nm,18.2s,baz=103,slow=35
comp=Z,1.6nm,0.8s
G27K **Doyon Strip** 36.45 344 P P 01 31 33.7 +1.5
baz=144
CCB **Clear Creek Bu** 36.49 338 P P 01 31 32.7 +0.2
N19K **Bonanza Creek** 36.61 330 P P 01 31 35.0 +1.3
baz=121
M20K **Styx River** 36.63 332 P P 01 31 35.2 +1.4
baz=124
G26K **Porcupine Rive** 37.07 343 P P 01 31 40.1 +2.8
baz=141,SNR=6.0
H25L **Birch Creek** 37.08 341 P P 01 31 39.0 +1.6
baz=138
BPAW **Bear Paw Mtn.** 37.17 336 P P 01 31 39.6 +1.3
baz=129
JTS **Las Juntas de** 37.24 121 LR LR 01 47 16.4
comp=Z,126nm,20.4s,baz=312,slow=37
L20K **Farewell, AK** 37.26 332 P P 01 31 39.7 +0.6
baz=124
H24K **Noodor Dome** 37.35 340 P P 01 31 41.5 +1.6
baz=135
L19K **White Mountain** 37.48 332 P P 01 31 42.2 +1.2
baz=122
G25K **Bearman Lake** 37.53 341 P P 01 31 42.8 +1.6
baz=138
MLY **Manley** 37.69 337 P P 01 31 43.8 +1.1
MLY IAmb IAmb 01 31 53.6
comp=Z,6.5nm,1.3s
MLY **Manley** 37.69 337 P P 01 31 44.1 +1.4
baz=130
F26K **Sheenjek River** 37.74 343 P P 01 31 43.8 +0.7
F26K IAmb IAmb 01 31 48.5
comp=Z,10nm,1.3s
K20K **Telida** 37.83 334 P P 01 31 44.4 +0.6
K20K **Telida** 37.83 334 P P 01 31 45.9 +2.0
baz=124,SNR=5.6
F25K **Christian Rive** 38.03 343 P P 01 31 47.6 +2.0
baz=139
M17K **Holitna River** 38.15 330 P P 01 31 47.6 +1.0
baz=118
L18K **Granite Mounta** 38.23 331 P P 01 31 48.3 +1.0
baz=120
J20K **Nowinta River** 38.32 335 P P 01 31 49.3 +1.3
J20K IAmb IAmb 01 31 50.5
comp=Z,5.0nm,0.8s
J20K **Nowinta River** 38.32 335 P P 01 31 48.3 +0.3
baz=125
H22K **Ishtalitna Cre** 38.45 338 P P 01 31 50.1 +1.0
baz=130,SNR=5.2
M16K **Timber Creek** 38.63 328 P P 01 31 52.0 +1.4
baz=116
H21K **Melozitna River** 38.75 337 P P 01 31 52.2 +0.6
H21K IAmb IAmb 01 31 54.5
comp=Z,9.8nm,1.1s
H21K **Melozitna Rive** 38.75 337 P P 01 31 52.9 +1.2
baz=128
J19K **Poorman** 38.76 334 P P 01 31 52.1 +0.4
J19K IAmb IAmb 01 31 53.8
comp=Z,7.8nm,1.0s
J19K **Poorman** 38.76 334 P P 01 31 52.7 +1.0
baz=123
N15K **Kwethluk River** 38.77 327 P P 01 31 52.2 +0.4
baz=114
I20K **Naaghedeneel** 38.80 335 P P 01 31 53.6 +1.7
baz=125
L17K **Donlin** 38.85 330 P P 01 31 53.5 +1.0
baz=118
J18K **Innoko River** 38.88 333 P P 01 31 53.5 +0.8
baz=121
O14K **Tigyukauivet M** 38.97 325 P P 01 31 53.6 +0.2
baz=112
E24K **Your Creek** 39.12 342 P P 01 31 56.3 +1.6
baz=136
K17K **Iditarod** 39.13 331 P P 01 31 55.2 +0.4
baz=119
L16K **Owhat River** 39.16 329 P P 01 31 56.2 +1.2
baz=116
H20K **Anotleneega Mo** 39.34 336 P P 01 31 58.6 +2.0
baz=126
E23K **Chandalar** 39.40 341 P P 01 31 58.9 +1.7
baz=134
G21K **Allakaket** 39.51 338 P P 01 31 59.4 +1.4
baz=128
F22K **John River** 39.74 340 P P 01 31 59.8 -0.2
baz=131
M14K **Bethel** 39.85 327 P P 01 32 01.4 +0.6
baz=112
H19K **Roundabout Mou** 39.90 336 P P 01 32 02.2 +1.0
baz=124
SCHQ **Schefferville** 40.66 43 LR LR 01 49 39.7
comp=Z,108nm,18.4s,baz=251,slow=37
F19K **Shaleruckik Mo** 41.08 337 P P 01 32 11.9 +1.0
baz=124
E19K **Redstone River** 41.25 338 P P 01 32 13.3 +1.0
baz=125
E20K **Nigu River** 41.40 339 P P 01 32 15.3 +1.7
baz=127
FRB **Frobisher Bay** 42.35 30 LR LR 01 49 47.5
comp=Z,126nm,18.3s,baz=226,slow=36
TAOE **Nuku Hiva Isla** 47.57 212 eLR LR 01 46 29.2
comp=Z,93nm,23.9s
AMKA **Amchitka** 48.83 312 P P 01 33 12.9 +0.2
SDV **Santo Domingo** 49.00 109 LR LR 01 57 02.2
comp=Z,74nm,18.3s,baz=252,slow=40
SFJD **Kangerlussuaq** 50.41 28 LR LR 01 54 06.0
comp=Z,115nm,21.2s,baz=253,slow=35
SHEM **Shemya Is, Ala** 51.89 314 LR LR 01 51 22.1
comp=Z,40nm,22.0s,baz=240,slow=31
SUMG **Summit** 54.96 21 P P 01 34 00.6 +1.9
NNA **Nana** 59.10 133 LR LR 01 56 23.2
comp=Z,49nm,19.2s,baz=322,slow=32
PPT **Papeete** 59.60 217 LR LR 01 53 46.5
comp=Z,49nm,19.4s,baz=5.5,slow=30
PPT2 **Papeete2** 59.62 217 eLR LR 01 52 04.9
comp=Z,77nm,22.2s
PPT2 eLR LR 01 52 08.4
comp=Z,97nm,25.0s
PETK **Petropavlovsk-** 61.47 317 LR LR 01 56 21.3
comp=Z,22nm,20.4s,baz=112,slow=31
BORG **Borgarnes** 62.52 29 LR LR 02 02 15.1
comp=Z,90nm,18.9s,baz=291,slow=36
MA2 **Magadan** 62.96 325 LR LR 02 00 25.5
comp=Z,42nm,20.1s,baz=256,slow=34
JMIC **Jan Mayen** 64.38 20 LR LR 02 02 20.3
comp=Z,60nm,18.2s,baz=290,slow=35
ETMB **Extrema** 64.54 122 P P 01 35 05.2 +0.3
ETMB IAmb IAmb 01 35 07.5
comp=Z,2.5nm,0.8s
TIXI **Tiksi** 65.70 342 P P 01 35 12.5 +0.9
TIXI **Tiksi** 65.70 342 LR LR 02 05 36.7
comp=Z,110nm,18.6s,baz=156,slow=38
YAK **Yakutsk** 70.92 333 LR LR 02 05 57.1
comp=Z,75nm,20.4s,baz=46,slow=35
VILB **Vilhena** 70.97 121 P P 01 35 46.1 +0.6
SIV **San Ignacio** 72.41 123 LR LR 02 05 41.7
comp=Z,35nm,21.5s,baz=298,slow=34
ARCES **ARCESS Array B** 73.68 13 LR LR 02 10 23.0
comp=Z,74nm,19.6s,baz=284,slow=37
NOA **NORSAR Array B** 76.78 23 P P 01 36 20.9 +2.0
comp=Z,0.4nm,0.8s,baz=316,slow=4.5,SNR=2.9
NOA LR LR 02 10 07.2
comp=Z,33nm,21.1s,baz=315,slow=36
comp=Z,0.4nm,0.8s
KLR **Kul'dur** 77.63 321 LR LR 02 10 39.9
comp=Z,73nm,18.0s,baz=108,slow=36
HFS **Hagfors** 78.27 23 LR LR 02 10 43.9
comp=Z,63nm,20.4s,baz=331,slow=36
FINES **FINESS Array B** 80.74 17 P P 01 36 42.1 +1.5
comp=Z,1.7nm,0.9s,baz=338,slow=7.3,SNR=4.9
FINES LR LR 02 14 16.0
comp=Z,37nm,18.0s,baz=346,slow=37
comp=Z,1.7nm,0.9s
MJAR **Matsushiro Arr** 81.29 308 LR LR 02 04 42.7
comp=Z,49nm,21.9s,baz=88,slow=30
CPUP **Villa Florida** 82.03 129 P P 01 36 49.0 +1.1
comp=Z,1.6nm,0.8s,baz=12,slow=3.2,SNR=2.9
CPUP LR LR 02 12 03.0
comp=Z,31nm,20.4s,baz=20,slow=35
comp=Z,1.6nm,0.8s
ESDC **Sonseca Array** 84.35 46 LR LR 02 11 32.0
comp=Z,26nm,20.4s,baz=302,slow=34
DAVOX **Davos/Dischmat** 86.83 33 LR LR 02 15 39.3
comp=Z,50nm,20.5s,baz=320,slow=35
KSRS **Korea Array** 87.22 314 LR LR 02 14 26.5
comp=Z,14nm,19.4s,baz=215,slow=34
KIRV **Kirov** 87.58 7 LR LR 02 20 12.0
comp=Z,26nm,19.4s,baz=22,slow=38
VRAC **Vranov** 87.77 28 LR LR 02 18 30.6
comp=Z,36nm,19.5s,baz=332,slow=37
JNU **Nakatsue** 88.15 309 LR LR 02 15 51.8
comp=Z,28nm,18.2s,baz=176,slow=35
MDT **Midelt** 88.29 51 LR LR 02 13 36.6
comp=Z,43nm,20.6s,baz=304,slow=33
ARU **Arti** 90.38 3 LR LR 02 22 51.8
comp=Z,30nm,18.6s,baz=333,slow=39
AKASG **Malin Array Be** 91.00 21 LR LR 02 17 35.7
comp=Z,50nm,21.9s,baz=353,slow=35
BELG **Belogornoye** 93.43 9 LR LR 02 21 27.2
comp=Z,36nm,19.6s,baz=72,slow=37
HHC **Hu-ho-hao-te** 93.64 325 eP P 01 37 40.6 -3.7
HHC pmax pmax
comp=Z,5.0nm,0.8s
HHC pmax pmax
comp=Z,83nm,4.5s
BVAR **Borovoye Array** 93.64 356 P P 01 37 45.5 +1.6
comp=Z,0.5nm,0.5s,baz=12,slow=5.0,SNR=4.5
comp=Z,0.5nm,0.5s
MLR **Muntele Rosu** 94.48 25 LR LR 02 22 38.4
comp=Z,83nm,18.8s,baz=297,slow=37
MKAR **Makanchi Array** 98.27 347 LR LR 02 28 11.0
comp=Z,26nm,19.0s,baz=60,slow=39

*CATAC **15** 01:31:52.0±0.7, 11°.96N×87°.84W, h7km±5km, ML3.6*
*SNET **15** 01:31:53.9±0.9, 12°.02N×87°.82W, h20km±5km, ML3.2*
**ISC 15 01:31:54.2±2.4, 12°.03N±0°.08×87°.80W±0°.05, h20km±6km, n33, σ0°93/52, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **0.99** | **48** | *eP* | | | **Pb** | **01 32 12.3** | **-0.5** |
| CRIN | | | | *eS* | | | **Sg** | **01 32 26.8** | **0.0** |
| **CRIN** | **San Cristobal** | **0.99** | **48** | *i P* | | | **Pb** | **01 32 12.4** | **-0.5** |
| CRIN | | | | *i S* | | | **Sg** | **01 32 26.5** | **-0.3** |
| CRIN | | | | | IAML | | | 01 32 29.6 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **QUEN** | **Al S del Volca** | **1.08** | **59** | *i P* | | | **Pb** | **01 32 12.9** | **-1.5** |
| QUEN | | | | | IAML | | | 01 32 14.2 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| QUEN | | | | *i S* | | | **Sg** | **01 32 29.4** | **-0.2** |
| **ROCN** | **Rota Cerro Neg** | **1.14** | **64** | *i S* | | | **Sg** | **01 32 33.5** | **+2.0** |
| **CNGA** | **Al SSO del Vol** | **1.17** | **66** | *i P* | | | **Pn** | **01 32 12.5** | **-3.1** |
| CNGA | | | | *i S* | | | **Sg** | **01 32 34.3** | **+1.9** |
| **CNGN** | **Cerro Negro** | **1.18** | **66** | *eP* | | | **Pn** | **01 32 14.7** | **-0.9** |
| CNGN | | | | | IAML | | | 01 32 39.8 | |
| | comp=Z,693nm,0.4s | | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.18** | **66** | *i P* | | | **Pn** | **01 32 14.7** | **-0.9** |
| CNGN | | | | *i S* | | | **Sg** | **01 32 33.5** | **+1.0** |
| CNGN | | | | | IAML | | | 01 32 36.8 | |
| | comp=Z,870nm,1.0s | | | | | | | | |
| **MACN** | **El Madrono** | **1.19** | **68** | *i P* | | | **Pn** | **01 32 14.6** | **-1.2** |
| MACN | | | | *i S* | | | **Sg** | **01 32 32.7** | **-0.1** |
| MACN | | | | | IAML | | | 01 32 40.8 | |
| | comp=Z,560nm,1.0s | | | | | | | | |
| **INTP** | **Intipuca** | **1.19** | **348** | *eP* | | | **Pn** | **01 32 15.5** | **-0.3** |
| INTP | | | | *eS* | | | **Sb** | **01 32 31.0** | **-0.1** |
| **COPN** | **Copaltepe** | **1.19** | **82** | *i P* | | | **Pn** | **01 32 14.6** | **-1.2** |
| **ILCN** | **San Idelfonso** | **1.21** | **63** | *i P* | | | **Pn** | **01 32 14.7** | **-1.3** |
| ILCN | | | | | IAML | | | 01 32 16.1 | |
| | comp=Z,530nm,1.0s | | | | | | | | |
| ILCN | | | | *i S* | | | **Sn** | **01 32 32.6** | **+0.7** |
| **LEVN** | **Ruinas Leon Vi** | **1.22** | **72** | *i P* | | | **Pn** | **01 32 15.2** | **-0.9** |
| LEVN | | | | *i S* | | | **Sn** | **01 32 32.9** | **+0.8** |
| LEVN | | | | | IAML | | | 01 32 39.9 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **CNCH** | **Conchagua** | **1.24** | **359** | *eP* | | | **Pn** | **01 32 16.7** | **+0.1** |
| CNCH | | | | *eS* | | | **Sb** | **01 32 33.4** | **+0.6** |
| **CNCH** | **Conchagua** | **1.24** | **359** | *i P* | | | **Pn** | **01 32 15.8** | **-0.8** |
| CNCH | | | | *i S* | | | **Sb** | **01 32 33.4** | **+0.6** |
| CNCH | | | | | IAML | | | 01 32 43.4 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **LCND** | **La Caada** | **1.28** | **356** | *eP* | | | **Pn** | **01 32 17.1** | **+0.1** |
| LCND | | | | *eS* | | | **Sn** | **01 32 34.6** | **+1.0** |
| LCND | | | | | IAML | | | 01 32 37.0 | |
| | comp=Z,516nm,0.3s | | | | | | | | |
| **LCND** | **La Caada** | **1.28** | **356** | *i P* | | | **Pn** | **01 32 16.9** | **-0.1** |
| LCND | | | | *i S* | | | **Sg** | **01 32 35.4** | **-0.4** |
| LCND | | | | | IAML | | | 01 32 38.5 | |
| | comp=Z,540nm,1.0s | | | | | | | | |
| **JUCU** | **Jucuarįn** | **1.30** | **340** | *i P* | | | **Pn** | **01 32 16.9** | **-0.5** |
| **JUCU** | **Jucuarįn** | **1.30** | **340** | *i P* | | | Pg | 01 32 34.1 | +15 |
| **MOM2** | **El Cardon** | **1.35** | **72** | *i P* | | | Pg | 01 32 35.6 | +15 |
| **SAPS** | **Ciudad Sandino** | **1.37** | **84** | *i P* | | | **Pn** | **01 32 17.3** | **-1.0** |
| SAPS | | | | *i S* | | | **Sn** | **01 32 36.2** | **+0.3** |
| SAPS | | | | | IAML | | | 01 32 39.6 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **APQ2** | **Apoyeque** | **1.45** | **83** | *i P* | | | **Pn** | **01 32 19.3** | **-0.1** |
| APQ2 | | | | *i S* | | | **Sb** | **01 32 39.9** | **+1.2** |
| APQ2 | | | | | IAML | | | 01 32 46.5 | |
| | comp=Z,930nm,1.0s | | | | | | | | |
| **BLLM** | **Bellamira** | **1.47** | **343** | *eP* | | | **Pn** | **01 32 19.2** | **-0.5** |
| **RANC** | **El Ranchito** | **1.48** | **341** | *eP* | | | **Pn** | **01 32 19.7** | **-0.2** |
| **PACA** | **Pacayal** | **1.52** | **341** | *eP* | | | **Pn** | **01 32 20.7** | **+0.2** |
| PACA | | | | *eS* | | | **Sb** | **01 32 40.7** | **-0.1** |
| **PACA** | **Pacayal** | **1.52** | **341** | *i P* | | | **Pn** | **01 32 20.6** | **+0.2** |
| PACA | | | | *i S* | | | **Sn** | **01 32 40.3** | **+0.5** |
| PACA | | | | | IAML | | | 01 32 41.3 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **HUEN** | | **1.62** | **79** | *i P* | | | **Pn** | **01 32 20.9** | **-0.8** |
| HUEN | | | | *i S* | | | **Sn** | **01 32 42.7** | **+0.6** |
| HUEN | | | | | IAML | | | 01 32 45.5 | |
| | comp=Z,230nm,1.0s | | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.90** | **332** | *eP* | | | **Pn** | **01 32 25.4** | **-0.1** |
| SCLA | | | | *eS* | | | **Sn** | **01 32 50.2** | **+1.2** |
| **SCLA** | **Alcaldia de Sa** | **1.90** | **332** | *i P* | | | **Pn** | **01 32 25.7** | **+0.1** |
| SCLA | | | | *i S* | | | **Sb** | **01 32 51.0** | **-0.5** |
| SCLA | | | | | IAML | | | 01 32 53.9 | |
| | comp=Z,240nm,1.0s | | | | | | | | |
| **COEG** | **Centro de Oper** | **1.90** | **327** | *eP* | | | **Pn** | **01 32 24.8** | **-0.9** |
| COEG | | | | *eS* | | | **Sn** | **01 32 49.4** | **+0.3** |
| COEG | | | | | IAML | | | 01 32 53.7 | |
| | comp=Z,268nm,0.4s | | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.13** | **78** | *i P* | | | **Pn** | **01 32 28.3** | **-0.4** |
| BOAB | | | | | IAML | | | 01 33 05.3 | |
| | comp=Z,100nm,1.0s | | | | | | | | |
| **JAPN** | **Al SSO del Vol** | **2.14** | **103** | *i P* | | | **Pn** | **01 32 29.4** | **+0.6** |
| JAPN | | | | | IAML | | | 01 33 08.4 | |
| | comp=Z,280nm,1.0s | | | | | | | | |
| **PMON** | **Piamonte** | **2.23** | **319** | *eS* | | | **Sn** | **01 32 58.6** | **+1.2** |
| **JAYA** | **Jayaque - finc** | **2.28** | **315** | *eP* | | | **Pn** | **01 32 30.0** | **-1.0** |
| JAYA | | | | | IAML | | | 01 33 06.9 | |
| | comp=Z,88nm,0.5s | | | | | | | | |

**NAM 15 01:48:26.8±4.3, 19°.74S×14°.48E, h22km±15km, ML0.3, 5C-4D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.02** | **95** | ⇓*iP* | | | Pb | 01 48 32.5 | +1.7 |
| ST3N | | | | *i S* | | | Sb | 01 48 34.1 | +0.6 |
| ST3N | | | | | IAML | | | 01 48 34.3 | |
| | comp=Z,2.1nm,0.1s | | | | | | | | |
| **ST3N** | **ST3** | **0.02** | **95** | *i P* | | | Pb | 01 48 32.5 | +1.7 |
| ST3N | | | | *i S* | | | Sb | 01 48 34.2 | +0.6 |
| ST3N | | | | | IAML | | | 01 48 34.4 | |
| | comp=Z,4.3nm,0.1s | | | | | | | | |
| **ST9N** | **ST9** | **0.08** | **134** | ⇑*iP* | | | Pb | 01 48 31.5 | +0.4 |
| ST9N | | | | *i S* | | | Sb | 01 48 32.5 | -1.6 |
| ST9N | | | | | IAML | | | 01 48 32.8 | |
| | comp=Z,63nm,0.1s | | | | | | | | |
| **ST9N** | **ST9** | **0.08** | **134** | *i P* | | | Pb | 01 48 31.5 | +0.3 |
| ST9N | | | | *i S* | | | Sb | 01 48 32.5 | -1.5 |
| ST9N | | | | | IAML | | | 01 48 32.9 | |
| | comp=Z,53nm,0.1s | | | | | | | | |
| **ST6N** | **ST6** | **0.10** | **232** | ⇑*iP* | | | Pb | 01 48 33.6 | +2.3 |
| ST6N | | | | *i S* | | | Sb | 01 48 36.0 | +1.8 |
| **ST6N** | **ST6** | **0.10** | **232** | *i P* | | | Pb | 01 48 33.6 | +2.3 |
| ST6N | | | | *i S* | | | Sb | 01 48 36.2 | +1.9 |
| ST6N | | | | | IAML | | | 01 48 36.7 | |
| | comp=Z,1.8nm,0.1s | | | | | | | | |
| **ST1N** | **ST1** | **0.12** | **88** | ⇓*iP* | | | Pb | 01 48 32.1 | +0.5 |
| ST1N | | | | *i S* | | | Sb | 01 48 33.5 | -1.4 |
| ST1N | | | | | IAML | | | 01 48 33.8 | |
| | comp=Z,7.9nm,0.1s | | | | | | | | |
| **ST1N** | **ST1** | **0.12** | **88** | *i P* | | | Pb | 01 48 32.2 | +0.6 |
| ST1N | | | | *i S* | | | Sb | 01 48 33.3 | -1.5 |
| ST1N | | | | | IAML | | | 01 48 33.6 | |
| | comp=Z,6.4nm,0.1s | | | | | | | | |
| **ST8N** | **ST8** | **0.16** | **288** | ⇑*iP* | | | Pb | 01 48 35.6 | +3.7 |
| ST8N | | | | *i S* | | | Sb | 01 48 39.4 | +4.0 |
| ST8N | | | | | IAML | | | 01 48 41.0 | |
| | comp=Z,0.5nm,0.1s | | | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | ⇑*iP* | | | Pb | 01 48 32.5 | -0.1 |
| ST2N | | | | *i S* | | | Sb | 01 48 34.3 | -2.2 |
| ST2N | | | | | IAML | | | 01 48 34.8 | |
| | comp=Z,13nm,0.0s | | | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | *i P* | | | Pb | 01 48 32.5 | -0.1 |
| ST2N | | | | *i S* | | | Sb | 01 48 33.8 | -2.7 |
| ST2N | | | | | IAML | | | 01 48 34.9 | |
| | comp=Z,3.8nm,0.1s | | | | | | | | |
| **ST5N** | **ST5** | **0.27** | **101** | ⇓*iP* | | | Pb | 01 48 33.5 | +0.2 |
| ST5N | | | | | IAML | | | 01 48 35.9 | |
| | comp=Z,6.5nm,0.0s | | | | | | | | |
| ST5N | | | | *i S* | | | Sb | 01 48 36.0 | -1.6 |
| **ST5N** | **ST5** | **0.27** | **101** | *i P* | | | Pb | 01 48 33.4 | +0.2 |
| ST5N | | | | *i S* | | | Sb | 01 48 35.7 | -1.8 |
| ST5N | | | | | IAML | | | 01 48 35.9 | |
| | comp=Z,2.6nm,0.1s | | | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | ⇓*iP* | | | Pn | 01 48 34.9 | -0.6 |
| ST10N | | | | *i S* | | | Sb | 01 48 38.5 | +0.8 |
| ST10N | | | | | IAML | | | 01 48 40.6 | |
| | comp=Z,1.9nm,0.0s | | | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | *i P* | | | Pn | 01 48 34.9 | -0.6 |
| ST10N | | | | | IAML | | | 01 48 35.8 | |
| | comp=Z,4.4nm,0.1s | | | | | | | | |
| ST10N | | | | *i S* | | | Sb | 01 48 38.6 | +0.9 |
| **ST11N** | **ST11** | **0.35** | **76** | ⇑*iP* | | | Pn | 01 48 36.1 | -0.6 |
| ST11N | | | | *i S* | | | Sb | 01 48 40.3 | +0.5 |
| ST11N | | | | | IAML | | | 01 48 42.5 | |
| | comp=Z,0.6nm,0.0s | | | | | | | | |

**NAM 15 02:08:09.0±4.1, 19°.70S×14°.47E, h18km±15km, ML0.1, 8C-2D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.05** | **145** | ⇓*iP* | | | Pg | 02 08 14.3 | +1.9 |
| ST3N | | | | *i S* | | | Sg | 02 08 15.5 | +0.7 |
| ST3N | | | | | IAML | | | 02 08 16.6 | |
| | comp=Z,2.3nm,0.1s | | | | | | | | |
| **ST3N** | **ST3** | **0.05** | **145** | *i S* | | | Sg | 02 08 15.5 | +0.7 |
| ST3N | | | | | IAML | | | 02 08 15.7 | |
| | comp=Z,2.8nm,0.1s | | | | | | | | |
| **ST6N** | **ST6** | **0.12** | **212** | ⇑*iP* | | | Pg | 02 08 15.6 | +2.6 |
| ST6N | | | | *i S* | | | Sg | 02 08 17.7 | +2.0 |
| ST6N | | | | | IAML | | | 02 08 17.9 | |
| | comp=Z,2.5nm,0.0s | | | | | | | | |
| **ST9N** | **ST9** | **0.12** | **143** | ⇑*iP* | | | Pg | 02 08 13.3 | +0.2 |
| ST9N | | | | *i S* | | | Sb | 02 08 13.7 | -0.8 |
| ST9N | | | | | IAML | | | 02 08 14.2 | |
| | comp=Z,143nm,0.1s | | | | | | | | |
| **ST9N** | **ST9** | **0.12** | **143** | *i P* | | | Pg | 02 08 13.3 | +0.2 |
| ST9N | | | | *i S* | | | Sb | 02 08 13.8 | -0.7 |
| ST9N | | | | | IAML | | | 02 08 14.3 | |
| | comp=Z,180nm,0.1s | | | | | | | | |
| **ST8N** | **ST8** | **0.14** | **273** | ⇑*iP* | | | Pg | 02 08 17.6 | +4.4 |
| ST8N | | | | *i S* | | | Sg | 02 08 21.1 | +5.0 |
| ST8N | | | | | IAML | | | 02 08 21.7 | |
| | comp=Z,0.4nm,0.1s | | | | | | | | |
| **ST1N** | **ST1** | **0.14** | **106** | ⇑*iP* | | | Pg | 02 08 14.3 | +1.0 |
| ST1N | | | | *i S* | | | Sb | 02 08 15.4 | +0.2 |
| ST1N | | | | | IAML | | | 02 08 15.6 | |
| | comp=Z,7.2nm,0.0s | | | | | | | | |
| **ST1N** | **ST1** | **0.14** | **106** | *i P* | | | Pg | 02 08 14.2 | +1.0 |
| ST1N | | | | *i S* | | | Sb | 02 08 15.5 | +0.3 |
| ST1N | | | | | IAML | | | 02 08 15.6 | |
| | comp=Z,3.9nm,0.1s | | | | | | | | |
| **ST2N** | **ST2** | **0.26** | **152** | ⇑*iP* | | | Pb | 02 08 15.3 | +0.1 |
| ST2N | | | | | IAML | | | 02 08 17.0 | |
| | comp=Z,2.9nm,0.1s | | | | | | | | |
| ST2N | | | | *i S* | | | Sg | 02 08 17.1 | -1.9 |
| **ST2N** | **ST2** | **0.26** | **152** | *i P* | | | Pb | 02 08 15.3 | +0.1 |
| ST2N | | | | | IAML | | | 02 08 17.3 | |
| | comp=Z,1.3nm,0.1s | | | | | | | | |
| ST2N | | | | *i S* | | | Sg | 02 08 17.7 | -1.3 |
| **ST5N** | **ST5** | **0.29** | **109** | ⇑*iP* | | | Pb | 02 08 16.3 | +0.5 |
| ST5N | | | | *i S* | | | Sg | 02 08 18.8 | -1.0 |
| **ST5N** | **ST5** | **0.29** | **109** | *i P* | | | Pb | 02 08 16.2 | +0.5 |
| ST5N | | | | *i S* | | | Sg | 02 08 18.9 | -0.9 |
| ST5N | | | | | IAML | | | 02 08 19.0 | |
| | comp=Z,1.3nm,0.1s | | | | | | | | |
| **ST10N** | **ST10** | **0.30** | **194** | ⇓*iP* | | | Pn | 02 08 17.4 | -1.3 |
| ST10N | | | | *i S* | | | Sb | 02 08 20.9 | +0.1 |
| ST10N | | | | | IAML | | | 02 08 21.5 | |
| | comp=Z,2.2nm,0.1s | | | | | | | | |
| **ST10N** | **ST10** | **0.30** | **194** | *i P* | | | Pn | 02 08 17.4 | -1.3 |
| ST10N | | | | *i S* | | | Sb | 02 08 20.8 | +0.1 |
| ST10N | | | | | IAML | | | 02 08 21.0 | |
| | comp=Z,5.1nm,0.1s | | | | | | | | |
| **ST11N** | **ST11** | **0.36** | **83** | ⇑*iP* | | | Pg | 02 08 16.3 | -0.3 |
| ST11N | | | | *i S* | | | Sb | 02 08 23.1 | +0.7 |
| ST11N | | | | | IAML | | | 02 08 26.8 | |
| | comp=Z,0.4nm,0.1s | | | | | | | | |
| **ST4N** | **ST4** | **0.52** | **112** | ⇑*iP* | | | Pg | 02 08 18.5 | -1.0 |
| ST4N | | | | | IAML | | | 02 08 32.7 | |
| | comp=Z,0.3nm,0.1s | | | | | | | | |

*IDC **15** 02:12:28.6±0.8, 58°.00S×25°.12W, h0km, mb4.0/7, mbtmp4.1/8, ML4.5/1, Error ellipse: s-maj=25.8km s-min=21.1km az=92.0*
**ISC 15 02:12:33.5±0.7, 58°.34S±0°.09×24°.8W±0°.1, h35km, n21, σ3°63/22, mb4.0/7, 9C-1D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **14.17** | **157** | ⇑*P* | | | **Pn** | **02 15 54.8** | **+3.4** |
| | comp=Z,9.1nm,0.4s | | | | | | | | |
| VNA1 | | | | ⇑*S* | | | **Sn** | **02 18 23.2** | **-3.9** |
| | comp=Z,1.8nm,0.9s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **14.39** | **160** | ⇑*P* | | | **Pn** | **02 15 57.0** | **+2.7** |
| | comp=Z,5.1nm,0.3s | | | | | | | | |
| VNA3 | | | | ⇓*S* | | | **Sn** | **02 18 25.9** | **-6.5** |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **14.57** | **157** | ⇑*P* | | | **Pn** | **02 15 59.7** | **+2.9** |
| | comp=Z,2.3nm,0.2s,baz=328,slow=14 | | | | | | | | |
| VNA2 | | | | ⇑*S* | | | **Sn** | **02 18 31.4** | **-5.4** |
| | comp=Z,0.0nm,0.1s,baz=294,slow=5.9 | | | | | | | | |
| **SNAA** | **Sanae** | **16.11** | **155** | ⇑*P* | | | **P** | **02 16 20.9** | **+1.0** |
| | comp=Z,58nm,0.4s | | | | | | | | |
| SNAA | | | | ⇑*S* | | | **Sn** | **02 19 09.6** | **-4.6** |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **SNAA** | **Sanae** | **16.11** | **155** | Pn | | | **P** | **02 16 20.9** | **+1.0** |
| | comp=Z,1.6nm,0.3s,baz=322,slow=15,SNR=59 | | | | | | | | |
| SNAA | | | | | | Sn | **Sn** | **02 19 08.7** | **-5.5** |
| | comp=Z,0.1nm,0.3s,baz=120,slow=10.0,SNR=1.5 | | | | | | | | |
| | comp=Z,3.8nm,0.4s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **17.61** | **152** | ⇑*P* | | | **P** | **02 16 40.4** | **+3.8** |
| | comp=Z,54nm,0.2s | | | | | | | | |
| TROLL | | | | ⇑*S* | | | **Sn** | **02 19 44.5** | **-6.0** |
| | comp=Z,3.2nm,0.2s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **31.91** | **180** | *P* | | | **P** | **02 18 58.1** | **+2.8** |
| | comp=Z,1.7nm,1.1s,baz=231,slow=1.3,SNR=7.9 | | | | | | | | |
| | comp=Z,1.7nm,1.1s | | | | | | | | |
| **PLCA** | **Paso Flores** | **33.71** | **281** | *P* | | | **P** | **02 19 09.5** | **-1.7** |
| | comp=Z,1.1nm,0.6s,baz=154,slow=7.3,SNR=8.9 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| **VNDA** | **Vanda** | **44.33** | **182** | *P* | | | **P** | **02 20 43.0** | **+3.6** |
| | comp=Z,0.6nm,0.7s,baz=180,slow=7.4,SNR=5.5 | | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | | |
| **BOSA** | **Boshof** | **45.36** | **71** | *P* | | | **P** | **02 20 48.7** | **+0.4** |
| | comp=Z,2.1nm,0.9s,baz=97,slow=22,SNR=1.8 | | | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **45.47** | **110** | T | | | T | 03 11 23.5 | |
| | baz=225,slow=75,SNR=7.2 | | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **45.48** | **110** | T | | | T | 03 11 25.0 | |
| | baz=225,slow=75,SNR=5.3 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H04S1** | **CROZET ISLANDS** | **45.48** | **110** | T | T | 03 11 24.6 | | |
| | baz=225,slow=75,SNR=6.0 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **51.00** | **13** | T | T | 03 16 31.2 | | |
| | baz=186 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **51.00** | **13** | T | T | 03 16 34.2 | | |
| | baz=186 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **51.01** | **13** | T | T | 03 16 35.4 | | |
| | baz=186 | | | | | | | |
| **LPAZ** | **La Paz** | **52.76** | **304** | P | **P** | **02 21 43.0** | **-2.6** | |
| | comp=Z,0.6nm,0.4s,baz=181,slow=3.8,SNR=2.2 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **DBIC** | **Dimbokro** | **66.76** | **22** | P | **P** | **02 23 20.3** | **-0.8** | |
| | comp=Z,1.7nm,0.4s,baz=173,slow=5.2,SNR=5.2 | | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.46** | **27** | P | **P** | **02 24 07.7** | **-0.2** | |
| | comp=Z,2.1nm,0.5s,baz=194,slow=5.8,SNR=59 | | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **125.81** | **27** | PKP | **PKPdf** | **02 31 28.8** | **-1.0** | |
| | comp=Z,0.4nm,0.4s,baz=191,slow=1.7,SNR=9.4 | | | | | | | |
| **ILAR** | **Eielson Array** | **152.59** | **308** | PKPbc | **PKPbc** | **02 32 24.0** | **-0.5** | |
| | comp=Z,0.3nm,0.4s,baz=98,slow=2.7,SNR=2.3 | | | | | | | |
| ILAR | | | | PKPab | **pPKPbc** | **02 32 34.1** | **-1.1** | |
| | comp=Z,1.2nm,0.7s,baz=112,slow=2.4,SNR=7.1 | | | | | | | |

*THE **15** 02:13:26.9, 36.97N×27.38E, h16km±2km, ML2.5/2, Error ellipse: s-maj=2.8km s-min=1.2km az=282.0*
*AFAD **15** 02:13:27.3±0.0, 36.94N×27.38E, h9km±1km, ML2.6*
*ISK **15** 02:13:27.1, 36.94N×27.35E, h7km, ML2.4/20*
**ISC 15 02:13:27.2±0.9, 36.93N±0.02×27.37E±0.03, h12km±6km, n34, σ0.64/47, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BODT** | **Bodrum** | **0.14** | **340** | Pg | **Pg** | **02 13 30.4** | **-0.2** |
| BODT | | | | Sg | **Sg** | **02 13 32.7** | **-0.3** |
| **BODT** | **Bodrum** | **0.14** | **340** | P | **Pg** | **02 13 30.6** | **0.0** |
| BODT | | | | S | **Sg** | **02 13 32.8** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.14** | **24** | P | **Pg** | **02 13 30.6** | **-0.1** |
| BDRM | | | | S | **Sg** | **02 13 32.6** | **-0.6** |
| **YKAV** | **Yalikavak-Bodr** | **0.20** | **339** | Pg | **Pg** | **02 13 31.2** | **-0.4** |
| YKAV | | | | Sg | **Sg** | **02 13 34.9** | **+0.2** |
| **YAZI** | **Mula-Dat§a-** | **0.26** | **165** | P | **Pg** | **02 13 33.2** | **+0.6** |
| YAZI | | | | S | **Sb** | **02 13 37.5** | **-0.8** |
| **DAT** | **Datca** | **0.26** | **141** | Pg | **Pg** | **02 13 33.2** | **+0.5** |
| **DAT** | **Datca** | **0.26** | **141** | P | **Pg** | **02 13 33.3** | **+0.5** |
| DAT | | | | S | **Sg** | **02 13 37.3** | **+0.9** |
| DAT | | | | *i* AML | AML | 02 13 39.0 | |
| | comp=E,704nm,0.1s | | | | | | |
| **DAT** | **Datca** | **0.26** | **141** | P | **Pg** | **02 13 33.2** | **+0.5** |
| DAT | | | | S | **Sb** | **02 13 38.1** | **-0.4** |
| **NISR** | **Nisiros** | **0.37** | **211** | P | **Pb** | **02 13 35.7** | **-0.1** |
| NISR | | | | S | **Sb** | **02 13 41.7** | **+0.2** |
| | 990nm,0.2s | | | | | | |
| **DIDI** | **Didim-Aydin** | **0.46** | **347** | Pg | **Pg** | **02 13 36.4** | **+0.2** |
| **MLSB** | **Milas** | **0.49** | **42** | Pg | **Pg** | **02 13 37.1** | **+0.3** |
| **DDIM** | **Aydin, Didim** | **0.53** | **349** | P | **Pg** | **02 13 37.5** | **-0.2** |
| DDIM | | | | S | **Sb** | **02 13 45.7** | **-0.5** |
| DDIM | | | | *i* AML | AML | 02 13 47.0 | |
| | comp=N,470nm,0.5s | | | | | | |
| DDIM | | | | *i* AML | AML | 02 13 47.0 | |
| | comp=E,506nm,0.3s | | | | | | |
| **MRSB** | **Marmaris-Mugla** | **0.70** | **108** | Pg | **Pb** | **02 13 41.1** | **-0.2** |
| **YER** | **Yerkesik** | **0.76** | **74** | Pg | **Pb** | **02 13 42.5** | **+0.1** |
| **YER** | **Yerkesik** | **0.76** | **74** | P | **Pg** | **02 13 41.9** | **0.0** |
| YER | | | | S | **Sg** | **02 13 51.9** | **+0.1** |
| **GCAM** | **G?zelcaml?** | **0.77** | **352** | Pg | **Pg** | **02 13 42.4** | **+0.2** |
| **GCAM** | **G?zelcaml?** | **0.77** | **352** | P | **Pg** | **02 13 42.2** | **0.0** |
| GCAM | | | | S | **Sb** | **02 13 53.6** | **+0.6** |
| GCAM | | | | *i* AML | AML | 02 13 55.0 | |
| | comp=N,290nm,0.2s | | | | | | |
| GCAM | | | | *i* AML | AML | 02 13 55.0 | |
| | comp=E,247nm,0.2s | | | | | | |
| **MULA** | **Mugla, Merkez-** | **0.83** | **67** | P | **Pb** | **02 13 43.5** | **-0.1** |
| **ARG** | **Arkhangelos** | **0.94** | **139** | P | **Pg** | **02 13 43.0** | **-2.3** |
| ARG | | | | S | **Sg** | **02 13 57.1** | **-0.4** |
| | 228nm,0.3s | | | | | | |
| **DALY** | **Dalyan (Mula)** | **1.03** | **96** | Pg | **Pn** | **02 13 47.7** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.09** | **22** | Pn | **Pb** | **02 13 48.2** | **0.0** |
| **ESEN** | **Aydn-Nazilli** | **1.16** | **42** | P | **Pb** | **02 13 48.6** | **-0.6** |
| ESEN | | | | S | **Sb** | **02 14 03.4** | **-0.9** |
| **NAZL** | **Nazilli-Aydin** | **1.27** | **35** | Pn | **Pg** | **02 13 51.7** | **+0.2** |
| **SABU** | **Mula-Dalaman** | **1.29** | **94** | P | **Pb** | **02 13 51.5** | **+0.1** |
| **FETY** | **Fethiye** | **1.41** | **102** | Pn | **Pg** | **02 13 54.0** | **-0.2** |
| **ODEM** | **Odemis-Izmir** | **1.45** | **22** | Pn | **Pn** | **02 13 53.4** | **0.0** |
| **APE** | **Apeiranthos** | **1.48** | **276** | Pn | **Pn** | **02 13 54.1** | **+0.4** |
| **CAME** | **Cameli-Denizli** | **1.55** | **89** | Pn | **Pb** | **02 13 56.0** | **+0.1** |
| **URLA** | **Izmir** | **1.55** | **337** | Pn | **Pb** | **02 13 55.8** | **-0.1** |
| **APMY** | **Acipayam-Deniz** | **1.63** | **70** | Pn | **Pb** | **02 13 57.2** | **-0.1** |
| **CHOS** | **Chios island** | **1.79** | **325** | Pn | **Pb** | **02 13 59.1** | **-0.9** |
| **KULA** | **Kula-Manisa** | **1.88** | **33** | Pn | **Pb** | **02 14 00.5** | **-1.1** |
| **GORD** | **Gordes-Manisa** | **2.07** | **18** | Pn | **Pn** | **02 14 03.3** | **+1.4** |
| **SOMA** | **Soma-Manisa** | **2.22** | **3** | Pn | **Pn** | **02 14 05.5** | **+1.6** |

*IDC **15** 02:32:23.9±1.5, 34.57N×46.39E, h0km, mb3.7/8, mbtmp3.7/15, ML3.4/6, MS2.7/3, Error ellipse: s-maj=24.9km s-min=18.5km az=138.0*
*TEH **15** 02:32:24.4, 34.61N×46.32E, h6km±46km, ML3.7*
*ISN **15** 02:32:25.5±0.5, 34.65N×46.29E, h19km±3km, ML3.9*
*AFAD **15** 02:32:26.5±0.0, 34.56N×45.90E, h6km±3km, MW4.0*
*ISK **15** 02:33:11.4, 37.45N×43.66E, h56km±1km, ML3.0/4*
**ISC 15 02:32:25.7±1.3, 34.61N±0.03×46.30E±0.03, h6km±9km, n79, σ1§71/86, mb3.6/7, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.12** | **39** | Pg | **Pg** | **02 32 28.1** | **-0.2** |
| **IGHG** | **Ghaleghazi** | **0.36** | **141** | Pg | **Pg** | **02 32 32.7** | **0.0** |
| **GLG1** | **Gilan-e-Gharb** | **0.59** | **213** | Pg | **Pg** | **02 32 36.9** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.59** | **260** | Pg | **Pg** | **02 32 37.1** | **0.0** |
| **KCHF** | **Cheshme Sefid,** | **0.70** | **118** | Pg | **Pg** | **02 32 38.8** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **184** | Pg | **Pb** | **02 32 44.8** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.12** | **77** | Pg | **Pg** | **02 32 46.9** | **-0.4** |
| **IBZA** | **Bozab** | **1.30** | **96** | Pg | **Pn** | **02 32 50.1** | **-0.4** |
| **IBDR** | **Badra** | **1.52** | **192** | *e*Pg | **Pb** | **02 32 54.0** | **-0.3** |
| IBDR | | | | *e*Sg | **Sb** | **02 33 14.0** | **+0.1** |
| IBDR | | | | AML | AML | 02 33 21.6 | |
| | comp=E,2μm,0.3s | | | | | | |
| IBDR | | | | AML | AML | 02 33 38.9 | |
| | comp=N,686nm,0.6s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.68** | **337** | Pg | **Pn** | **02 32 56.1** | **+0.4** |
| **IKFM** | **Kafar-mosalman** | **1.68** | **130** | Pg | **Pb** | **02 32 56.8** | **-0.1** |
| **IKRK** | **Kirkuk** | **1.79** | **297** | *e*Pn | **Pn** | **02 32 57.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sn** | **02 33 20.0** | **-0.2** |
| IKRK | | | | AML | AML | 02 33 26.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 02 33 28.6 | |
| | comp=E,3μm,0.6s | | | | | | |
| **HSAM** | **Samen** | **1.95** | **101** | Pn | **Pb** | **02 33 01.4** | **-0.3** |
| **BHD** | **Baghdad** | **2.08** | **231** | *e*Pn | **Pn** | **02 33 01.5** | **+0.5** |
| BHD | | | | *e*Sn | **Sn** | **02 33 28.0** | **+0.8** |
| BHD | | | | AML | AML | 02 33 38.8 | |
| | comp=E,819nm,1.1s | | | | | | |
| **MAHB** | **Mahabad** | **2.21** | **348** | Pn | **Pb** | **02 33 05.2** | **-0.9** |
| **HAGD** | **Aghdareh** | **2.35** | **84** | Pn | **Pb** | **02 33 07.7** | **-0.9** |
| **IHSH** | **Hashtrud** | **2.80** | **16** | Pn | **Pn** | **02 33 13.3** | **+2.0** |
| **RAFI** | **Al-Rafai** | **2.88** | **183** | *e*Pn | **Pn** | **02 33 13.0** | **+0.9** |
| RAFI | | | | *e*Sn | **Sn** | **02 33 48.0** | **+1.0** |
| **QABG** | **Abgarm-Qazvin** | **2.91** | **67** | Pn | **Pn** | **02 33 14.6** | **+1.9** |
| **IAZR** | **Azarshahr** | **3.08** | **355** | Pn | **Pn** | **02 33 16.7** | **+1.6** |
| **IRAZ** | **Razeghan** | **3.09** | **74** | Pn | **Pn** | **02 33 17.5** | **+2.4** |
| **YOVA** | **Hakkari_Yksek** | **3.39** | **332** | P | **Pn** | **02 33 21.8** | **+2.6** |
| YOVA | | | | S | **Sn** | **02 34 02.6** | **+2.7** |
| YOVA | | | | *i* AML | AML | 02 34 21.0 | |
| | comp=E,110nm,0.7s | | | | | | |
| YOVA | | | | *i* AML | AML | 02 34 26.0 | |
| | comp=E,125nm,0.7s | | | | | | |
| **ISRB** | **Sarab** | **3.40** | **19** | Pn | **Pn** | **02 33 21.8** | **+2.4** |
| **CUKT** | **Cukurca** | **3.42** | **321** | Pg | **Pn** | **02 33 20.8** | **+1.2** |
| **CUKT** | **Cukurca** | **3.42** | **321** | P | **Pn** | **02 33 21.2** | **+1.6** |
| CUKT | | | | S | **Sn** | **02 34 02.7** | **+2.1** |
| CUKT | | | | *i* AML | AML | 02 34 21.0 | |
| | comp=E,491nm,0.8s | | | | | | |
| CUKT | | | | *i* AML | AML | 02 34 26.0 | |
| | comp=E,602nm,0.6s | | | | | | |
| **HAKT** | **HAKKARI** | **3.62** | **325** | P | **Pn** | **02 33 23.5** | **+1.1** |
| HAKT | | | | S | **Sn** | **02 34 07.0** | **+1.5** |
| HAKT | | | | *i* AML | AML | 02 34 24.0 | |
| | comp=E,199nm,0.5s | | | | | | |
| HAKT | | | | *i* AML | AML | 02 34 27.0 | |
| | comp=E,188nm,1.2s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ISHB** | **Shabestar** | **3.71** | **352** | Pn | **Pn** | **02 33 25.2** | **+1.5** | |
| **IHRS** | **Heris** | **3.75** | **9** | Pn | **Pn** | **02 33 26.6** | **+2.3** | |
| **IQOM** | **Qom** | **3.94** | **85** | Pn | **Pn** | **02 33 29.2** | **+2.3** | |
| **IMRD** | **Marand** | **4.13** | **354** | Pn | **Pn** | **02 33 32.1** | **+2.7** | |
| **SIRN** | **Sırnak** | **4.27** | **314** | P | **Pn** | **02 33 32.3** | **+1.0** | |
| SIRN | | | | S | **Sn** | **02 34 22.6** | **+1.2** | |
| SIRN | | | | *i* AML | AML | 02 34 51.0 | | |
| | comp=E,229nm,0.7s | | | | | | | |
| SIRN | | | | *i* AML | AML | 02 34 55.0 | | |
| | comp=E,184nm,1.2s | | | | | | | |
| **IPIR** | **Pirpir** | **4.29** | **115** | Pn | **Pn** | **02 33 33.8** | **+2.1** | |
| **QAMS** | **Qamsar** | **4.32** | **100** | Pn | **Pn** | **02 33 34.2** | **+2.2** | |
| **JHBN** | **Jahan bin** | **4.36** | **122** | Pn | **Pn** | **02 33 34.7** | **+2.0** | |
| **GRMI** | **Germi** | **4.38** | **17** | Pn | **Pn** | **02 33 35.4** | **+2.5** | |
| **IVRN** | **Varamin** | **4.49** | **84** | Pn | **Pn** | **02 33 36.4** | **+2.1** | |
| **PERV** | **Siirt/Pervari-** | **4.50** | **319** | P | **Pn** | **02 33 36.5** | **+1.9** | |
| PERV | | | | S | **Sn** | **02 34 55.0** | | |
| | comp=E,132nm,0.7s | | | | | | | |
| PERV | | | | *i* AML | AML | 02 34 57.0 | | |
| | comp=E,123nm,0.7s | | | | | | | |
| **ZNGN** | **Zangian** | **4.55** | **122** | Pn | **Pn** | **02 33 37.7** | **+2.3** | |
| **IKLH** | **Kolahrood** | **4.57** | **105** | Pn | **Pn** | **02 33 37.7** | **+2.0** | |
| **AKDM** | **Akdamar-Van** | **4.58** | **325** | Pg | Pn | 02 33 30.6 | -5.0 | |
| **VANB** | **Van** | **4.62** | **330** | Pg | Pn | 02 33 31.1 | -5.0 | |
| **IDMV** | **Damavand** | **4.80** | **77** | Pn | **Pn** | **02 33 41.0** | **+2.2** | |
| **MIDY** | **Mardin/Midyat-** | **4.85** | **307** | P | **Pn** | **02 33 40.7** | **+1.4** | |
| MIDY | | | | S | **Sn** | **02 34 34.5** | **-1.4** | |
| MIDY | | | | *i* AML | AML | 02 34 38.0 | | |
| | comp=E,110nm,0.9s | | | | | | | |
| MIDY | | | | *i* AML | AML | 02 35 23.0 | | |
| | comp=E,136nm,0.6s | | | | | | | |
| **KRSH** | **Karshahi** | **4.88** | **96** | Pn | **Pn** | **02 33 42.4** | **+2.7** | |
| **SRTM** | **Siirt_Merkez** | **4.89** | **315** | P | **Pn** | **02 33 40.7** | **+1.0** | |
| SRTM | | | | S | **Sn** | **02 34 36.5** | **-0.2** | |
| SRTM | | | | *i* AML | AML | 02 35 15.0 | | |
| | comp=E,143nm,0.7s | | | | | | | |
| SRTM | | | | *i* AML | AML | 02 35 21.0 | | |
| | comp=E,92nm,0.8s | | | | | | | |
| **MAKU** | **Maku** | **4.91** | **345** | Pn | **Pn** | **02 33 42.5** | **+2.4** | |
| **CLDR** | **Caldiran** | **4.91** | **338** | Pn | **Pn** | **02 33 39.6** | **-0.6** | |
| **ISFB** | **Sefidab** | **4.92** | **91** | Pn | **Pn** | **02 33 42.3** | **+2.1** | |
| **GURO** | **Guroymak-BITLI** | **5.22** | **320** | Pn | **Pn** | **02 33 39.8** | **-4.6** | |
| **MARD** | **Mardín** | **5.23** | **303** | P | **Pn** | **02 33 44.5** | **+0.1** | |
| MARD | | | | S | **Sn** | **02 34 44.1** | **-1.0** | |
| MARD | | | | *i* AML | AML | 02 35 25.0 | | |
| | comp=E,153nm,0.6s | | | | | | | |
| MARD | | | | *i* AML | AML | 02 35 26.0 | | |
| | comp=E,98nm,0.6s | | | | | | | |
| **IGAR** | **Gharneh** | **5.28** | **113** | Pn | **Pn** | **02 33 47.5** | **+2.2** | |
| **IZEF** | **Zefreh** | **5.31** | **107** | Pn | **Pn** | **02 33 48.0** | **+2.3** | |
| **IFIR** | **Firoozkooh** | **5.39** | **77** | Pn | **Pn** | **02 33 48.9** | **+2.0** | |
| **SVAN** | **Silvan-Diyarba** | **5.42** | **312** | Pn | **Pn** | **02 33 45.1** | **-2.0** | |
| **MAZI** | **Mazidag** | **5.53** | **303** | Pn | **Pn** | **02 33 51.8** | **+3.2** | |
| **AGRB** | **Hanur-Agry** | **5.62** | **333** | Pn | **Pn** | **02 33 46.5** | **-3.4** | |
| **MUSM** | **Mu-Merkez** | **5.63** | **318** | P | **Pn** | **02 33 50.4** | **+0.5** | |
| MUSM | | | | *i* AML | AML | 02 35 44.0 | | |
| | comp=E,15nm,1.0s | | | | | | | |
| MUSM | | | | *i* AML | AML | 02 35 49.0 | | |
| | comp=E,14nm,0.7s | | | | | | | |
| **GNI** | **Garni** | **5.67** | **348** | Pn | **Pn** | **02 33 53.9** | **+3.3** | |
| | comp=E,0.5nm,0.3s,baz=22,slow=22,SNR=1.1 | | | | | | | |
| GNI | | | | Lg | Lg | 02 35 27.1 | | |
| | comp=E,0.3nm,0.3s,baz=156,slow=22,SNR=0.8 | | | | | | | |
| | comp=E,3.5nm,0.5s | | | | | | | |
| **IRAM** | **Ramesheh** | **5.81** | **117** | Pn | **Pn** | **02 33 54.7** | **+2.1** | |
| **DYBB** | **Diyarbakir** | **5.99** | **306** | Pn | **Pn** | **02 33 55.8** | **+0.9** | |
| **SURC** | **SANLIURFA_SURC** | **6.65** | **292** | P | **Pn** | **02 34 04.8** | **+0.9** | |
| SURC | | | | *i* AML | AML | 02 36 13.0 | | |
| | comp=E,35nm,0.6s | | | | | | | |
| SURC | | | | *i* AML | AML | 02 36 27.0 | | |
| | comp=E,36nm,0.8s | | | | | | | |
| **SVRC** | **Sivrice-ELAZID** | **6.77** | **306** | Pn | **Pn** | **02 34 06.2** | **+0.5** | |
| **PTK** | **Pertek** | **7.00** | **310** | Pn | **Pn** | **02 34 07.5** | **-1.4** | |
| **ASF** | **Jabal al Asfar** | **8.23** | **255** | Pn | **Pn** | **02 34 26.2** | **+0.6** | |
| | comp=E,0.7nm,0.3s,baz=250,slow=0.5,SNR=6.5 | | | | | | | |
| | comp=E,2.3nm,0.3s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.20** | **263** | Pn | **Pn** | **02 34 39.7** | **+0.7** | |
| | comp=E,1.1nm,0.3s,baz=78,slow=17,SNR=4.6 | | | | | | | |
| MMAI | | | | Lg | Lg | 02 37 19.9 | | |
| | comp=E,0.7nm,0.3s,baz=80,slow=32,SNR=1.4 | | | | | | | |
| MMAI | | | | LR | LR | 02 39 15.2 | | |
| | comp=E,49nm,18.4s,baz=63,slow=44 | | | | | | | |
| | comp=E,0.6nm,0.3s | | | | | | | |
| **EIL** | **Elat** | **10.80** | **246** | Lg | Lg | 02 38 06.2 | | |
| | comp=E,0.2nm,0.3s,baz=96,slow=20,SNR=1.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **11.31** | **301** | Pn | **Pn** | **02 35 11.4** | **+3.5** | |
| | comp=E,0.1nm,0.3s,baz=114,slow=14,SNR=10 | | | | | | | |
| BRTR | | | | LR | LR | 02 39 16.4 | | |
| | comp=E,29nm,20.4s,baz=126,slow=36 | | | | | | | |
| | comp=E,1.6nm,0.8s | | | | | | | |
| **WSAR** | **Wadi Sarin** | **15.63** | **133** | Pn | **Pn** | **02 36 05.3** | **-1.3** | |
| | comp=E,0.9nm,0.3s,baz=316,slow=12,SNR=7.0 | | | | | | | |
| | comp=E,2.2nm,0.3s | | | | | | | |
| **IDI** | **Anoyia** | **17.56** | **278** | P | **P** | **02 36 31.8** | **-0.4** | |
| | comp=E,8.8nm,1.1s,baz=346,slow=23,SNR=3.2 | | | | | | | |
| **BELG** | **Belogornoye** | **17.80** | **3** | LR | LR | 02 44 15.7 | | |
| | comp=E,25nm,18.9s,baz=142,slow=40 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.99** | **25** | P | **Pn** | **02 36 35.2** | **-1.0** | |
| | comp=E,0.1nm,0.3s,baz=251,slow=2.3,SNR=1.5 | | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **20.32** | **327** | P | **P** | **02 37 02.5** | **+0.2** | |
| | comp=E,0.3nm,0.3s,baz=135,slow=11,SNR=2.5 | | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **25.12** | **36** | P | **P** | **02 37 51.3** | **+0.1** | |
| | comp=E,0.5nm,0.5s,baz=233,slow=8.7,SNR=1.3 | | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **29.80** | **340** | P | **P** | **02 38 31.9** | **-1.1** | |
| | comp=E,1.7nm,0.9s,baz=142,slow=9.6,SNR=4.6 | | | | | | | |
| | comp=E,1.7nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **33.15** | **330** | P | **P** | **02 39 02.1** | **-0.4** | |
| | comp=E,1.0nm,0.6s,baz=127,slow=8.0,SNR=11 | | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **36.83** | **348** | P | **P** | **02 39 33.0** | **-1.1** | |
| | comp=E,3.1nm,1.0s,baz=147,slow=8.5,SNR=2.3 | | | | | | | |
| | comp=E,3.1nm,1.0s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.62** | **317** | P | **P** | **02 39 57.5** | **-0.3** | |
| | comp=E,0.9nm,0.5s,baz=104,slow=9.3,SNR=4.8 | | | | | | | |
| | comp=E,0.9nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **39.96** | **292** | P | **P** | **02 40 00.4** | **-0.5** | |
| | comp=E,0.6nm,0.8s,baz=72,slow=8.3,SNR=2.8 | | | | | | | |
| | comp=E,0.6nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.58** | **253** | P | **P** | **02 40 46.0** | **-0.7** | |
| | comp=E,0.5nm,0.9s,baz=53,slow=8.0,SNR=1.6 | | | | | | | |
| | comp=E,0.5nm,0.9s | | | | | | | |

**IDC 15 02:36:06.3±9.2, 8.41S×149.92E, h60km±68km, mb2.8/1, mbtmp3.3/3, ML3.1/1, Error ellipse: s-maj=75.8km s-min=63.2km az=135.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **2.90** | **250** | P | Pn | 02 36 49.5 | -0.7 |
| | 9.8nm,0.3s,baz=72,slow=9.6,SNR=2.3 | | | | | | |
| PMG | | | | S | Sn | 02 37 24.9 | +1.0 |
| | 22nm,0.5s,baz=99,slow=18,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.94** | **231** | P | P | 02 40 21.5 | -1.2 |
| | 0.1nm,0.3s,baz=56,slow=11,SNR=3.3 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **21.57** | **223** | P | P | 02 40 51.7 | +0.6 |
| | 0.5nm,0.6s,baz=54,slow=9.4,SNR=6.6 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.45** | **281** | PKPbc | PKPbc | 02 55 46.8 | -0.5 |
| | 0.5nm,0.9s,baz=80,slow=3.5,SNR=4.3 | | | | | | |

*NEIC **15** 02:45:48.8±2.0, 69.54N±0.02×144.29W±0.06, h5km±9km, Error ellipse: s-maj=3.3km s-min=2.2km az=121.0*
**AEIC 15 02:45:48.6±2.2, 69.53N±0.02×144.22W±0.06, h5km±7km, ML3.2, mL2.6/46(NEIC), Error ellipse: s-maj=3.3km s-min=2.1km az=121.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **62** | | Pg | 02 45 52.4 | -0.2 |
| C27K | | | | | Sg | 02 45 55.0 | -0.2 |
| **C26K** | **Camden Bay** | **0.46** | **328** | Pg | Pg | 02 45 57.0 | -0.4 |
| C26K | | | | Sg | Sg | 02 46 03.9 | +0.6 |
| **D25K** | **Kavik River** | **0.79** | **255** | Pg | Pg | 02 46 02.8 | -1.0 |
| D25K | | | | Sg | Sg | 02 46 13.4 | -0.6 |
| **D27M** | **Malcolm River** | **1.19** | **103** | Pg | Pg | 02 46 10.4 | -1.0 |
| D27M | | | | Sg | Sn | 02 46 28.2 | -0.3 |
| D27M | | | | IAML | | 02 46 32.9 | |
| | comp=N,38nm,0.4s | | | | | | |
| D27M | | | | IAML | | 02 46 34.8 | |
| | comp=E,24nm,0.4s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **C24K** | **Franklin Bluff** | **1.58** | **279** | Pn | Pn | 02 46 15.5 | -1.7 | |
| C24K | | | | IAML | | 02 46 40.3 | | |
| | comp=N,22nm,0.6s | | | | | | | |
| C24K | | | | IAML | | 02 46 41.0 | | |
| | comp=E,19nm,1.1s | | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **144** | Pn | Pn | 02 46 18.2 | -0.1 | |
| **D24K** | **Happy Valley** | **1.68** | **259** | Pn | Pn | 02 46 18.0 | -0.6 | |
| D24K | | | | IAML | | 02 46 46.4 | | |
| | comp=N,19nm,0.5s | | | | | | | |
| D24K | | | | IAML | | 02 46 51.9 | | |
| | comp=E,19nm,0.5s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.85** | **179** | Pn | Pn | 02 46 21.9 | +0.9 | |
| F26K | | | | IAML | | 02 46 52.2 | | |
| | comp=E,18nm,0.5s | | | | | | | |
| F26K | | | | IAML | | 02 46 54.4 | | |
| | comp=N,9.7nm,0.5s | | | | | | | |
| **E28M** | **Babbage River** | **1.93** | **117** | Pn | Pn | 02 46 21.9 | -0.1 | |
| **F25K** | **Christian Rive** | **2.02** | **196** | Pn | Pn | 02 46 23.9 | +0.6 | |
| F25K | | | | IAML | | 02 46 58.7 | | |
| | comp=E,9.4nm,1.2s | | | | | | | |
| F25K | | | | IAML | | 02 46 58.9 | | |
| | comp=N,9.2nm,0.5s | | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **229** | Pn | Pn | 02 46 24.8 | -0.1 | |
| E24K | | | | IAML | | 02 47 44.0 | | |
| | comp=N,141nm,0.5s | | | | | | | |
| E24K | | | | IAML | | 02 47 45.6 | | |
| | comp=E,86nm,0.7s | | | | | | | |
| **C23K** | **Itkillik River** | **2.25** | **281** | Pn | Pn | 02 46 24.9 | -1.5 | |
| C23K | | | | IAML | | 02 47 52.6 | | |
| | comp=N,101nm,0.7s | | | | | | | |
| C23K | | | | IAML | | 02 47 53.3 | | |
| | comp=E,199nm,0.5s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.37** | **259** | Pn | Pb | 02 46 30.8 | -0.9 | |
| D23K | | | | IAML | | 02 47 58.8 | | |
| | comp=N,55nm,0.7s | | | | | | | |
| D23K | | | | IAML | | 02 47 59.3 | | |
| | comp=E,82nm,0.8s | | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **138** | Pn | Pn | 02 46 29.1 | -0.9 | |
| F28M | | | | IAML | | 02 47 58.0 | | |
| | comp=N,56nm,0.8s | | | | | | | |
| F28M | | | | IAML | | 02 47 58.9 | | |
| | comp=E,67nm,0.7s | | | | | | | |
| **E29M** | **Blow River** | **2.56** | **114** | Pn | Pn | 02 46 31.3 | +0.7 | |
| E29M | | | | IAML | | 02 47 58.8 | | |
| | comp=E,41nm,0.6s | | | | | | | |
| E29M | | | | IAML | | 02 48 09.9 | | |
| | comp=N,50nm,0.9s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.60** | **176** | | Pb | 02 46 33.8 | -1.9 | |
| **G24K** | **Hadweenzic Riv** | **3.10** | **205** | Pn | Pn | 02 46 38.5 | +0.4 | |
| G24K | | | | IAML | | 02 48 33.6 | | |
| | comp=N,78nm,0.8s | | | | | | | |
| G24K | | | | IAML | | 02 48 34.4 | | |
| | comp=E,67nm,0.5s | | | | | | | |
| **G29M** | **Pine Creek** | **3.50** | **136** | Pn | Pn | 02 46 44.7 | +1.1 | |
| **B21K** | **Ikpikpuk River** | **3.64** | **276** | Pn | Pn | 02 46 47.5 | +2.0 | |
| **H24K** | **Noodor Dome** | **3.97** | **202** | Pn | Pn | 02 46 50.4 | +0.3 | |
| **H29M** | **Whitestone** | **4.00** | **144** | Pn | Pn | 02 46 53.1 | +2.6 | |
| **F21K** | **Alatna River** | **4.14** | **240** | Pn | Pn | 02 46 51.8 | -0.6 | |
| F21K | | | | IAML | | 02 49 23.0 | | |
| | comp=N,64nm,0.8s | | | | | | | |
| **D19K** | **Kuna River** | **5.10** | **265** | Pn | Pn | 02 47 04.2 | -1.4 | |
| **I30M** | **Mount Dempster** | **5.28** | **141** | Pn | Pn | 02 47 08.9 | +0.7 | |
| **C19K** | **Lookout Ridge** | **5.46** | **273** | Pn | Pn | 02 47 11.1 | +0.5 | |

*AEIC **15** 02:47:02.8±1.9, 69.52N±0.05×144.35W±0.08, h9km±6km, ML3.6, ML3.7/120(NEIC), Mwr3.6/18(NEIC), Error ellipse: s-maj=6.7km s-min=3.7km az=190.0*
*NEIC **15** 02:47:03, 69.51N×144.31W, h9km*
*NEIC **15** 02:47:04.5±1.8, 69.59N±0.05×144.24W±0.08, h10km±2km, Error ellipse: s-maj=7.8km s-min=4.4km az=8.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.88; $M_{\theta\theta}$=1.88; $M_{\phi\phi}$=2.76; $M_{r\theta}$=1.14; $M_{\theta\phi}$=-2.11; $M_{\phi r}$=0.70; Fault plane solution: $M_0$3.50000×$10^{14}$ NP1: $\phi_s$116.29000°, $\delta$83.74000°, $\lambda$-154.50000°. NP2: $\phi_s$23.31000°, $\delta$64.66000°, $\lambda$-6.93000°. Principal axes: T 3.8248, Plg13.0000°, Azm247.0000°; N -0.7929, Plg64.0000°, Azm129.0000°; P -3.0318, Plg22.0000°, Azm343.0000°;*
*IDC **15** 02:47:05.3±1.2, 69.68N×144.31W, h0km, mb3.5/5, m

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=N,147nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.62 276** | Pn | **Pn** | **02 48 01.1** | **+0.1** | |
| **E21K** | **Killik River** | **3.65 257** | Pn | **Pn** | **02 48 00.9** | **-0.6** | |
| E21K | | | IAML | | 02 49 08.7 | | |
| | comp=E,131nm,1.0s | | | | | | |
| E21K | | | IAML | | 02 49 11.4 | | |
| | comp=N,156nm,0.9s | | | | | | |
| **F30M** | **Barrier River** | **3.67 118** | | **Pn** | **02 48 01.9** | **+0.2** | |
| **A22K** | **Sinclair Lake** | **3.91 297** | | **Pn** | **02 48 05.3** | **+0.3** | |
| **G30M** | **tAoh Zraii Nji** | **3.95 127** | Pn | **Pn** | **02 48 05.7** | **+0.2** | |
| G30M | | | IAML | | 02 49 23.0 | | |
| | comp=N,95nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.95 202** | Pn | **Pn** | **02 48 05.3** | **-0.4** | |
| H24K | | | IAML | | 02 49 15.0 | | |
| | comp=N,93nm,0.9s | | | | | | |
| H24K | | | IAML | | 02 49 16.3 | | |
| | comp=E,92nm,1.3s | | | | | | |
| **H29M** | **Whitestone** | **4.01 143** | Pn | **Pn** | **02 48 06.6** | **+0.2** | |
| **PRP** | **Porcupine Dome** | **4.06 187** | Pn | **Pn** | **02 48 07.5** | **+0.3** | |
| PRP | | | IAML | | 02 48 59.2 | | |
| | comp=E,109nm,0.7s | | | | | | |
| PRP | | | IAML | | 02 49 00.2 | | |
| | comp=N,110nm,0.5s | | | | | | |
| **I27K** | **Kandik River** | **4.08 164** | | **Pn** | **02 48 08.2** | **+0.8** | |
| **INK** | **Inuvik** | **4.08 102** | Pn | **Pn** | **02 48 06.8** | **-0.5** | |
| **INK** | **Inuvik** | **4.08 102** | Pn | **Pn** | **02 48 08.3** | **+1.0** | |
| | comp=N,1.3nm,0.3s,baz=309,slow=15,SNR=26 | | | | | | |
| INK | | | Sn | **Sn** | **02 48 57.0** | **+2.0** | |
| | comp=N,2.8nm,0.3s,baz=34,slow=28,SNR=6.3 | | | | | | |
| INK | | | Lg | Lg | 02 49 15.7 | | |
| | comp=N,2.5nm,0.3s,baz=121,slow=11,SNR=5.6 | | | | | | |
| | comp=N,6.7nm,0.4s | | | | | | |
| **F21K** | **Alatna River** | **4.12 240** | Pn | **Pn** | **02 48 07.6** | **-0.3** | |
| F21K | | | IAML | | 02 49 17.9 | | |
| | comp=E,83nm,0.9s | | | | | | |
| **H23K** | **Yukon River** | **4.23 211** | Pn | **Pn** | **02 48 09.0** | **-0.4** | |
| H23K | | | IAML | | 02 49 26.5 | | |
| | comp=E,78nm,0.9s | | | | | | |
| H23K | | | IAML | | 02 49 27.5 | | |
| | comp=N,82nm,1.2s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.27 174** | Pn | **Pn** | **02 48 10.4** | **+0.5** | |
| I26K | | | IAML | | 02 49 25.1 | | |
| | comp=E,104nm,0.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.27 134** | Pn | **Pn** | **02 48 09.2** | **-0.8** | |
| **F31M** | **Tsiigehtchic** | **4.41 113** | Pn | **Pn** | **02 48 12.6** | **+0.7** | |
| F31M | | | IAML | | 02 49 28.1 | | |
| | comp=N,63nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **4.43 156** | Pn | **Pn** | **02 48 12.2** | **0.0** | |
| I28M | | | IAML | | 02 49 07.1 | | |
| | comp=N,54nm,0.5s | | | | | | |
| I28M | | | IAML | | 02 49 34.7 | | |
| | comp=E,67nm,0.9s | | | | | | |
| **D20K** | **Etivluk River** | **4.48 265** | | **Pn** | **02 48 13.6** | **+0.6** | |
| **E20K** | **Nigu River** | **4.49 259** | | **Pn** | **02 48 13.6** | **+0.6** | |
| **B20K** | **Meade River** | **4.49 282** | Pn | **Pn** | **02 48 12.4** | **-0.6** | |
| **H22K** | **Ishtalitna Cre** | **4.54 220** | | **Pn** | **02 48 13.2** | **-0.5** | |
| **G31M** | **Satah River** | **4.56 120** | Pn | **Pn** | **02 48 14.2** | **+0.3** | |
| G31M | | | IAML | | 02 49 32.1 | | |
| | comp=E,84nm,1.1s | | | | | | |
| G31M | | | IAML | | 02 49 40.8 | | |
| | comp=N,84nm,1.1s | | | | | | |
| **G21K** | **Allakaket** | **4.60 233** | Pn | **Pn** | **02 48 13.5** | **-1.0** | |
| G21K | | | IAML | | 02 49 36.9 | | |
| | comp=E,77nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.60 197** | Pn | **Pn** | **02 48 15.1** | **+0.6** | |
| POKR | | | IAML | | 02 49 10.5 | | |
| | comp=N,71nm,0.4s | | | | | | |
| POKR | | | IAML | | 02 49 41.4 | | |
| | comp=E,61nm,1.2s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.78 148** | Pn | **Pn** | **02 48 16.1** | **-0.8** | |
| I29M | | | IAML | | 02 49 13.8 | | |
| | comp=N,51nm,0.4s | | | | | | |
| I29M | | | IAML | | 02 49 17.2 | | |
| | comp=E,51nm,0.6s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.82 206** | Pn | **Pn** | **02 48 17.1** | **-0.3** | |
| I23K | | | IAML | | 02 49 43.4 | | |
| | comp=N,58nm,1.4s | | | | | | |
| I23K | | | IAML | | 02 49 44.3 | | |
| | comp=E,63nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.84 200** | Pn | **Pn** | **02 48 17.8** | **0.0** | |
| MDM | | | IAML | | 02 49 36.9 | | |
| | comp=N,49nm,0.6s | | | | | | |
| **COLA** | **College** | **4.88 198** | Pn | **Pn** | **02 48 17.6** | **-0.7** | |
| **IL31** | | **4.89 193** | Pn | **Pn** | **02 48 18.1** | **-0.3** | |
| **ILAR** | **Eielson Array** | **4.89 193** | Pn | **Pn** | **02 48 19.5** | **+1.1** | |
| | comp=N,1.6nm,0.3s,baz=6.8,slow=14,SNR=50 | | | | | | |
| ILAR | | | Sn | **Sn** | **02 49 15.5** | **+0.5** | |
| | comp=N,4.1nm,0.3s,baz=10,slow=25,SNR=12 | | | | | | |
| ILAR | | | Lg | Lg | 02 49 34.0 | | |
| | comp=N,4.6nm,0.3s,baz=13,slow=31,SNR=7.8 | | | | | | |
| ILAR | | | LR | LR | 02 50 32.4 | | |
| | comp=N,65nm,20.5s,baz=99,slow=41 | | | | | | |
| | comp=N,5.2nm,0.6s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92 245** | Pn | **Pn** | **02 48 19.0** | **+0.2** | |
| F20K | | | IAML | | 02 49 52.0 | | |
| | comp=N,40nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **4.93 164** | Pn | **Pn** | **02 48 18.8** | **-0.2** | |
| EGAK | | | IAML | | 02 49 18.3 | | |
| | comp=N,40nm,0.9s | | | | | | |
| EGAK | | | IAML | | 02 49 21.2 | | |
| | comp=N,59nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **4.96 185** | Pn | **Pn** | **02 48 19.5** | **0.0** | |
| J25K | | | IAML | | 02 49 44.8 | | |
| | comp=E,46nm,1.1s | | | | | | |
| J25K | | | IAML | | 02 49 46.3 | | |
| | comp=N,41nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.06 176** | Pn | **Pn** | **02 48 21.2** | **+0.3** | |
| J26L | | | IAML | | 02 49 29.4 | | |
| | comp=N,35nm,0.7s | | | | | | |
| J26L | | | IAML | | 02 49 46.6 | | |
| | comp=E,41nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.07 224** | Pn | **Pn** | **02 48 20.9** | **-0.1** | |
| H21K | | | IAML | | 02 49 52.0 | | |
| | comp=N,43nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **5.08 265** | Pn | **Pn** | **02 48 21.0** | **-0.1** | |
| D19K | | | IAML | | 02 50 03.4 | | |
| | comp=E,35nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09 197** | Pn | **Pn** | **02 48 21.1** | **-0.2** | |
| **MLY** | **Manley** | **5.16 212** | Pn | **Pn** | **02 48 21.9** | **-0.4** | |
| **E19K** | **Redstone River** | **5.19 253** | Pn | **Pn** | **02 48 21.4** | **-1.2** | |
| E19K | | | IAML | | 02 50 05.2 | | |
| | comp=N,47nm,0.8s | | | | | | |
| E19K | | | IAML | | 02 50 12.3 | | |
| | comp=E,40nm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **5.25 193** | Pn | **Pn** | **02 48 23.8** | **+0.4** | |
| HDA | | | IAML | | 02 49 52.0 | | |
| | comp=N,50nm,0.8s | | | | | | |
| HDA | | | IAML | | 02 49 56.2 | | |
| | comp=E,48nm,1.0s | | | | | | |
| **I30M** | **Mount Dempster** | **5.29 141** | Pn | **Pn** | **02 48 23.6** | **-0.5** | |
| I30M | | | IAML | | 02 49 28.4 | | |
| | comp=E,48nm,0.6s | | | | | | |
| I30M | | | IAML | | 02 49 29.2 | | |
| | comp=N,31nm,0.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29 198** | Pn | **Pn** | **02 48 24.2** | **+0.2** | |
| WRH | | | IAML | | 02 49 49.3 | | |
| | comp=N,31nm,0.6s | | | | | | |
| WRH | | | IAML | | 02 49 54.5 | | |
| | comp=E,42nm,0.6s | | | | | | |
| **NEA2** | **Nenana** | **5.30 203** | Pn | **Pn** | **02 48 23.3** | **-0.8** | |
| **C19K** | **Lookout Ridge** | **5.44 273** | Pn | **Pn** | **02 48 26.2** | **+0.2** | |
| **SCRK** | **Sand Creek** | **5.58 179** | Pn | **Pn** | **02 48 28.3** | **+0.2** | |
| **K27K** | **Chicken** | **5.60 170** | Pn | **Pn** | **02 48 28.8** | **+0.6** | |
| **F19K** | **Shaleruckik Mo** | **5.71 248** | Pn | **Pn** | **02 48 28.9** | **-0.7** | |
| **H20K** | **Anotleneega Mo** | **5.74 230** | | **Pn** | **02 48 29.9** | **-0.2** | |
| **BWN** | **Browne** | **5.75 203** | Pn | **Pn** | **02 48 30.1** | **-0.3** | |
| **K24K** | **Donnelly Dome** | **5.78 187** | | **Pn** | **02 48 31.8** | **+1.1** | |
| **DAWY** | **Dawson** | **5.82 158** | Pn | **Pn** | **02 48 31.4** | **+0.1** | |
| **A19K** | **Wainwright** | **5.83 284** | | **Pn** | **02 48 31.2** | **-0.1** | |
| **J30M** | **Hart River** | **5.87 144** | Pn | **Pn** | **02 48 31.7** | **-0.3** | |
| **DOT** | **Dot Lake** | **5.91 179** | | **Pn** | **02 48 33.0** | **+0.5** | |
| **G19K** | **Purcell Mounta** | **5.91 241** | Pn | **Pn** | **02 48 31.4** | **-1.0** | |
| **BPAW** | **Bear Paw Mtn.** | **6.06 209** | Pn | **Pn** | **02 48 34.0** | **-0.5** | |
| **MCK** | **McKinley** | **6.11 200** | | **Pn** | **02 48 35.8** | **+0.6** | |
| **C18K** | **Utukok River** | **6.11 270** | Pn | **Pn** | **02 48 34.7** | **-0.6** | |
| **H19K** | **Roundabout Mou** | **6.15 235** | Pn | **Pn** | **02 48 34.8** | **-0.9** | |
| **B18K** | **Kokolik River** | **6.16 277** | | **Pn** | **02 48 35.1** | **-0.9** | |
| **K29M** | **Barlow Dome** | **6.31 152** | Pn | **Pn** | **02 48 38.4** | **+0.4** | |
| **E18K** | **Tukpahlearik C** | **6.36 258** | Pn | **Pn** | **02 48 38.4** | **-0.2** | |
| **RND** | **Reindeer** | **6.42 199** | Pn | **Pn** | **02 48 40.4** | **+0.9** | |
| **F18K** | **Selawik** | **6.45 250** | | **Pn** | **02 48 39.5** | **-0.4** | |
| **L26K** | **Log Cabin Wild** | **6.55 176** | Pn | **Pn** | **02 48 42.5** | **+1.3** | |
| **G18K** | **Tagagawik** | **6.56 243** | Pn | **Pn** | **02 48 41.3** | **-0.1** | |
| **L27K** | **Beaver Creek,** | **6.57 170** | Pn | **Pn** | **02 48 41.8** | **+0.2** | |
| **DHY** | **Denali Highway** | **6.60 192** | Pn | **Pn** | **02 48 44.3** | **+2.2** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PAX** | **Paxson** | **6.61 185** | | **Pn** | **02 48 43.3** | **+1.1** | |
| **J20K** | **Nowinta River** | **6.62 221** | Pn | **Pn** | **02 48 41.2** | **-1.1** | |
| **A36M** | **Sachs Harbour** | **6.74 60** | Pn | **Pn** | **02 48 41.9** | **-1.9** | |
| **RDOG** | **Red Dog Mine** | **6.91 266** | Pn | **Pn** | **02 48 44.7** | **-1.4** | |
| **L29M** | **L29M** | **6.91 156** | Pn | **Pn** | **02 48 46.4** | **+0.2** | |
| **E17K** | **Hotham Inlet** | **6.94 258** | | **Pn** | **02 48 45.6** | **-0.9** | |
| **WAT7** | **Susitna Watana** | **6.97 197** | | **Pn** | **02 48 48.5** | **+1.3** | |
| **H18K** | **Honhosa River** | **6.98 238** | Pn | **Pn** | **02 48 46.1** | **-1.0** | |
| **F17K** | **Baldwin Pennin** | **7.08 252** | Pn | **Pn** | **02 48 47.3** | **-1.1** | |
| **J19K** | **Poorman** | **7.13 224** | Pn | **Pn** | **02 48 48.5** | **-0.7** | |
| **M26K** | **Nabesna, AK** | **7.18 175** | Pn | **Pn** | **02 48 50.8** | **+0.8** | |
| **M27K** | **Edge Creek, AK** | **7.27 171** | Pn | **Pn** | **02 48 52.2** | **+0.9** | |
| **K20K** | **Telida** | **7.32 217** | Pn | **Pn** | **02 48 50.2** | **-1.6** | |
| **G17K** | **Kiwalik Mounta** | **7.45 245** | | **Pn** | **02 48 52.7** | **-0.8** | |
| **M24K** | **Tolsona, Glenn** | **7.50 187** | Pn | **Pn** | **02 48 54.5** | **+0.2** | |
| **M29M** | **Somme Creek** | **7.50 159** | Pn | **Pn** | **02 48 55.0** | **+0.6** | |
| **H17K** | **Granite Mounta** | **7.60 240** | Pn | **Pn** | **02 48 55.7** | **+0.1** | |
| **C16K** | **Lisburne Hills** | **7.69 271** | Pn | **Pn** | **02 48 55.8** | **-0.9** | |
| **SCM** | **Sheep Creek Mo** | **7.83 191** | Pn | **Pn** | **02 49 00.2** | **+1.3** | |
| **J18K** | **Innoko River** | **7.84 225** | Pn | **Pn** | **02 48 57.5** | **-1.4** | |
| **YUK2** | **White River** | **7.91 168** | | **Pn** | **02 49 01.4** | **+1.5** | |
| **SML** | **Sawmill** | **7.93 194** | Pn | **Pn** | **02 49 00.5** | **+0.2** | |
| **N25K** | **Chitina, Valde** | **7.96 181** | Pn | **Pn** | **02 49 01.8** | **+1.2** | |
| **G16K** | **Koyuk River** | **8.06 248** | Pn | **Pn** | **02 49 01.1** | **-0.8** | |
| **L20K** | **Farewell, AK** | **8.07 213** | | **Pn** | **02 49 01.9** | **-0.3** | |
| **KLU** | **Klutina** | **8.10 186** | | **Pn** | **02 49 03.1** | **+0.5** | |
| **MCARA** | **McCarthy VSAT** | **8.20 176** | Pn | **Pn** | **02 49 06.1** | **+2.3** | |
| **VRDI** | **Verde Repeater** | **8.35 177** | Pn | **Pn** | **02 49 08.2** | **+2.1** | |
| **M31M** | **Drury Creek, Y** | **8.39 146** | Pn | **Pn** | **02 49 05.4** | **-1.1** | |
| **M20K** | **Styx River** | **8.49 210** | Pn | **Pn** | **02 49 08.8** | **+1.0** | |
| **J17K** | **VABM Dome** | **8.52 231** | Pn | **Pn** | **02 49 07.0** | **-1.1** | |
| **SUA** | **Susitna One** | **8.53 201** | | **Pn** | **02 49 10.0** | **+1.5** | |
| **L19K** | **White Mountain** | **8.54 215** | Pn | **Pn** | **02 49 06.5** | **-2.0** | |
| **FARO** | **Faro, Yukon** | **8.57 143** | Pn | **Pn** | **02 49 08.2** | **-0.9** | |
| **I17K** | **Unalakleet** | **8.59 237** | Pn | **Pn** | **02 49 08.2** | **-1.0** | |
| **N30M** | **Aishikik Lake** | **8.63 156** | Pn | **Pn** | **02 49 10.5** | **+0.7** | |
| **F15K** | **North Star Dit** | **8.63 253** | Pn | **Pn** | **02 49 07.5** | **-2.3** | |
| **CTGM** | **Chitina Glacie** | **8.69 170** | Pn | **Pn** | **02 49 11.6** | **+0.9** | |
| **M19K** | **Big River Lodg** | **8.70 213** | Pn | **Pn** | **02 49 10.4** | **-0.3** | |
| **CRQM** | **Cirque** | **8.82 176** | Pn | **Pn** | **02 49 15.6** | **+3.0** | |
| **TGL** | **Tana Glacier** | **8.83 175** | Pn | **Pn** | **02 49 14.6** | **+1.9** | |
| **LOGN** | **Logan Glacier** | **8.85 169** | Pn | **Pn** | **02 49 12.2** | **-0.7** | |
| **K17K** | **Iditarod** | **8.87 226** | Pn | **Pn** | **02 49 13.3** | **+0.3** | |
| **PWL** | **Port Wells** | **8.87 193** | Pn | **Pn** | **02 49 15.4** | **+2.3** | |
| **GRNC** | **Granite Creek** | **8.90 172** | Pn | **Pn** | **02 49 16.7** | **+3.0** | |
| **L18K** | **Granite Mounta** | **8.90 221** | Pn | **Pn** | **02 49 12.3** | **-1.2** | |
| **YUK6** | **Outpost Mounta** | **8.97 161** | | **Pn** | **02 49 16.2** | **+1.6** | |
| **ISLE** | **Juniper Island** | **9.00 174** | Pn | **Pn** | **02 49 17.6** | **+2.6** | |
| **J16K** | **Anvik River** | **9.03 234** | Pn | **Pn** | **02 49 15.0** | **-0.2** | |
| **RAGM** | **Ragged Mountai** | **9.19 181** | Pn | **Pn** | **02 49 20.2** | **+2.8** | |
| **TABL** | **Table Mountain** | **9.22 170** | Pn | **Pn** | **02 49 20.7** | **+2.6** | |
| **HMT** | **Hamilton** | **9.23 180** | Pn | **Pn** | **02 49 19.8** | **+1.8** | |
| **O30N** | **Mendenhall** | **9.44 155** | Pn | **Pn** | **02 49 21.0** | **+0.1** | |
| **WHY** | **Whitehorse** | **9.73 152** | Pn | **Pn** | **02 49 24.0** | **-0.9** | |
| **M17K** | **Holitna River** | **9.79 220** | Pn | **Pn** | **02 49 24.1** | **-1.6** | |
| **J14K** | **Nanvaranak Lak** | **10.30 238** | Pn | **Pn** | **02 49 33.0** | **+0.4** | |
| **HOM** | **Homer** | **10.39 201** | Pn | **Pn** | **02 49 35.4** | **+1.6** | |
| **M16K** | **Timber Creek** | **10.48 223** | Pn | **Pn** | **02 49 34.0** | **-1.1** | |
| **N17K** | **Nushagak Hills** | **10.52 217** | Pn | **Pn** | **02 49 35.3** | **-0.3** | |
| **P19K** | **Oil Pt** | **10.62 205** | Pn | **Pn** | **02 49 35.2** | **-1.8** | |
| **Q32M** | **Nakina River** | **11.79 148** | Pn | **Pn** | **02 49 51.2** | **-2.0** | |
| **DLBC** | **Dease Lake** | **12.72 144** | Pn | **Pn** | **02 50 07.5** | **+1.7** | |
| | comp=E,0.1nm,0.3s,baz=152,slow=26,SNR=1.7 | | | | | | |
| | comp=E,1.3nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.84 106** | Pn | **Pn** | **02 50 16.9** | **-4.0** | |
| | comp=E,0.3nm,0.3s,baz=308,slow=12,SNR=1.2 | | | | | | |
| YKA | | | Sn | Sn | 02 52 44.1 | -10 | |
| | comp=E,0.3nm,0.3s,baz=312,slow=27,SNR=3.9 | | | | | | |
| | comp=E,0.8nm,0.5s | | | | | | |
| **SEY** | **Seymchan** | **25.23 286** | P | **P** | **02 52 32.2** | **+1.7** | |
| | comp=E,1.6nm,0.5s,baz=66,slow=13,SNR=4.0 | | | | | | |
| | comp=E,1.6nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.20 128** | P | **P** | **02 53 35.7** | **+2.7** | |
| | comp=E,0.2nm,0.3s,baz=346,slow=5.0,SNR=4.2 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.13 142** | P | **P** | **02 53 53.3** | **+3.4** | |
| | comp=E,0.5nm,0.6s,baz=342,slow=5.7,SNR=3.8 | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | |
| **BORG** | **Borgarnes** | **40.23 34** | LR | LR | 03 15 06.5 | | |
| | comp=E,15nm,18.7s,baz=286,slow=42 | | | | | | |
| **SADO** | **Sadowa** | **40.33 93** | LR | LR | 03 12 16.1 | | |
| | comp=E,23nm,19.3s,baz=44,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **46.42 128** | P | **P** | **02 55 34.4** | **+2.9** | |
| | comp=E,0.2nm,0.6s,baz=349,slow=7.5,SNR=5.4 | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.13 329** | P | **P** | **02 56 44.5** | **+0.5** | |
| | comp=E,0.4nm,0.7s,baz=19,slow=7.2,SNR=2.9 | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | |

*IDC* ***15*** *03:14:27.1±0.6, 14°.90S×173°.99W, h0km, mb4.4/14, mbtmp4.4/14, MS3.9/46, Error ellipse: s-maj=23.4km s-min=17.1km az=129.0*

*GCMT* ***15*** *03:14:31.5±0.4, 14°.67S±0°.03×173°.66W±0°.03, h23km±2km, MW4.9/68, Moment Tensor Solution. s17,c20; s68,c87; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=1.27±.21; Mθθ=0.76±.14; Mφφ=0.51±.12; Mrθ=1.38±.22; Mφθ=1.72±.10; Mφr=1.09±.18; Best double couple: M0=2.53400×10^16 NP1:φs=306.00000°, δ67.00000°, λ82.00000°. NP2: φs=146.00000°, δ24.00000°, λ109.00000°. Principal axes: T 1.9970, Plg67.0000°, Azm202.0000°; N 1.0690, Plg7.0000°, Azm309.0000°; P -3.0700, Plg22.0000°, Azm42.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***15*** *03:14:33.5±2.0, 15°.0S±0°.1×173°.65W±0°.08, h33km±4km, mb4.9/154 Error ellipse: s-maj=16.6km s-min=8.5km az=152.0*

**ISC 15 03:14:31.6±0.5, 14°.89S±0°.07×173°.74W±0°.07, h28km±2km, h28km:pP-P, n230, σ1°53/137, mb4.8/88, MS4.0/46, 9C-5D, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.14** | **63** | Pn | | **Pn** | **03 15 00.9** | **-4.7** |
| AFI | | | | | | Pb | 03 15 01.3 | -8.4 |
| **NIUE** | **Niue** | **5.54** | **139** | | | **Pn** | **03 15 51.6** | **-0.6** |
| **MSVF** | **Nonsavu** | **8.37** | **249** | Pn | | **Pn** | **03 16 33.2** | **+2.0** |
| **MSVF** | **Nonsavu** | **8.37** | **249** | Pn | | **Pn** | **03 16 30.7** | **-0.5** |
| | 0.6nm,0.3s,baz=80,slow=17,SNR=8.6 | | | | | | | |
| MSVF | | | | LR | | LR | 03 19 08.9 | |
| | comp=Z,3μm,18.3s,baz=32,slow=35 | | | | | | | |
| **RAR** | **Rarotonga** | **14.69** | **117** | LR | | LR | 03 22 18.5 | |
| | comp=Z,368nm,22.0s,baz=279,slow=32 | | | | | | | |
| **PINNC** | **Pines Island,** | **19.39** | **244** | P | | **P** | **03 18 56.0** | **+0.6** |
| PINNC | | | | | IAmb | IAmb | 03 19 07.0 | |
| | comp=Z,98nm,1.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.09** | **246** | *e*P | | **P** | **03 19 03.3** | **0.0** |
| | comp=Z,154nm,1.6s | | | | | | | |
| DZM | | | | *e*S | | **S** | **03 22 44.1** | **-3.7** |
| | comp=Z,121nm,24.3s | | | | | | | |
| DZM | | | | *e*LR | | LR | 03 23 54.2 | |
| | comp=Z,1μm,26.2s | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.09** | **246** | P | | Pn | 03 19 05.3 | +0.1 |
| DZM | | | | | IAmb | IAmb | 03 19 09.7 | |
| | comp=Z,129nm,1.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.09** | **246** | P | | **P** | **03 19 03.8** | **+0.6** |
| | comp=Z,25nm,1.1s,baz=82,slow=11,SNR=7.7 | | | | | | | |
| DZM | | | | LR | | LR | 03 25 24.7 | |
| | comp=Z,561nm,19.8s,baz=56,slow=33 | | | | | | | |
| **ONTNC** | **Ouen Toro** | **20.15** | **246** | P | | Pn | 03 19 05.0 | -0.8 |
| **PPT** | **Papeete** | **23.35** | **100** | LR | | LR | 03 26 15.2 | |
| | comp=Z,151nm,21.9s,baz=232,slow=30 | | | | | | | |
| **PPT2** | **Papeete2** | **23.35** | **100** | *e*S | | **S** | **03 23 46.2** | **-3.2** |
| | comp=Z,744nm,25.8s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 03 25 17.3 | |
| | comp=Z,312nm,25.2s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 03 25 17.6 | |
| | comp=Z,450nm,24.5s | | | | | | | |
| **TBI** | **Tubuai** | **24.41** | **114** | *e*S | | **S** | **03 24 03.6** | **-2.5** |
| | comp=Z,3μm,26.5s | | | | | | | |
| TBI | | | | *e*LR | | LR | 03 25 46.2 | |
| | comp=Z,2μm,26.2s | | | | | | | |
| **URZ** | **Urewera** | **24.64** | **197** | LR | | LR | 03 28 12.0 | |
| | comp=Z,515nm,19.1s,baz=91,slow=34 | | | | | | | |
| **RTZ** | **Ruatahuna** | **25.01** | **197** | P | | **P** | **03 19 53.9** | **+0.6** |
| **HNR** | **Honiara** | **26.27** | **279** | LR | | LR | 03 28 28.2 | |
| | comp=Z,4μm,18.5s,baz=290,slow=32 | | | | | | | |
| **RPZ** | **Rata Peaks** | **31.53** | **201** | LR | | LR | 03 33 15.9 | |
| | comp=Z,212nm,19.4s,baz=306,slow=36 | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **33.39** | **83** | *e*LR | | LR | 03 29 55.7 | |
| | comp=Z,464nm,23.1s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RKT** | **Rikitea** | **37.47** | **109** | *e*LR | | LR | 03 31 45.4 |
| | comp=Z,936nm,25.0s | | | | | | |
| **CTA** | **Charters Tower** | **38.44** | **256** | LR | | LR | 03 35 15.7 |
| | comp=Z,17nm,19.4s,baz=94,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **38.44** | **256** | P | | **P** | **03 21 49.3** | **-2.0** |
| CTAO | | | | pP | | **pP** | **03 21 56.0** | **-2.7** |
| **PMG** | **Port Moresby** | **38.57** | **274** | LR | | LR | 03 36 26.8 |
| | comp=Z,196nm,18.3s,baz=102,slow=34 | | | | | | |
| **CAN** | **Canberra** | **39.08** | **232** | P | | **P** | **03 21 55.6** | **-0.9** |
| **CAN** | **Canberra** | **39.08** | **232** | P | | **P** | **03 21 55.1** | **-1.5** |
| CAN | | | | pP | | **pP** | **03 22 02.2** | **-1.9** |
| **TOO** | **Toolangi** | **42.53** | **230** | P | | **P** | **03 22 22.9** | **-2.1** |
| **STKA** | **Stephens Creek** | **44.01** | **239** | P | | **P** | **03 22 33.7** | **-3.2** |
| | comp=Z,9.9nm,1.1s,baz=34,slow=10,SNR=3.6 | | | | | | | |
| STKA | | | | LR | | LR | 03 40 10.5 | |
| | comp=Z,172nm,18.3s,baz=33,slow=35 | | | | | | | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **48.78** | **239** | P | | **P** | **03 23 12.9** | **-1.5** |
| **WRAB** | **Tennant Creek** | **49.63** | **256** | P | | **P** | **03 23 18.9** | **-2.2** |
| **WRA** | **Warramunga Arr** | **49.64** | **256** | P | | **P** | **03 23 18.1** | **-3.0** |
| | comp=Z,14nm,1.0s,baz=90,slow=7.3,SNR=47 | | | | | | | |
| WRA | | | | LR | | LR | 03 42 54.4 | |
| | comp=Z,151nm,18.8s,baz=40,slow=35 | | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **GUMO** | **Guam** | **49.78** | **303** | LR | | LR | 03 42 04.1 | |
| | comp=Z,52nm,18.7s,baz=100,slow=33 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.96** | **251** | P | | **P** | **03 23 21.3** | **-2.3** |
| | comp=Z,77nm,0.8s,baz=85,slow=7.6,SNR=271 | | | | | | | |
| ASAR | | | | LR | | LR | 03 42 56.3 | |
| | comp=Z,164nm,18.5s,baz=93,slow=34 | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **59.96** | **199** | P | | **P** | **03 24 37.0** | **+1.9** |
| **PSA00** | **Pilbara Seismi** | **63.03** | **253** | P | | **P** | **03 24 56.2** | **-0.5** |
| **SBA** | **Scott Base** | **63.73** | **185** | P | | **P** | **03 25 01.9** | **+1.6** |
| SBA | | | | pP | | **pP** | **03 25 09.2** | **+1.1** |
| SBA | | | | sP | | **pwP** | **03 25 12.4** | **+0.3** |
| **VNDA** | **Vanda** | **63.85** | **186** | P | | **P** | **03 25 00.9** | **-0.2** |
| | comp=Z,2.3nm,0.9s,baz=358,slow=6.1,SNR=10 | | | | | | | |
| VNDA | | | | LR | | LR | 03 47 48.7 | |
| | comp=Z,51nm,21.5s,baz=15,slow=31 | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **VNDA** | **Vanda** | **63.85** | **186** | P | | **P** | **03 25 01.9** | **+0.8** |
| VNDA | | | | pP | | **pP** | **03 25 09.1** | **+0.2** |
| **DAV** | **Davao City (W)** | **63.98** | **286** | LR | | LR | 03 51 26.7 |
| | comp=Z,104nm,18.2s,baz=14,slow=35 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **64.58** | **240** | LR | | LR | 03 50 42.9 |
| | comp=Z,143nm,21.8s,baz=224,slow=34 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **68.15** | **352** | LR | | LR | 03 50 12.6 |
| | comp=Z,70nm,19.6s,baz=192,slow=32 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.34** | **320** | LR | | LR | 03 49 03.8 |
| | comp=Z,52nm,21.4s,baz=135,slow=30 | | | | | | | |
| **MAJO** | **Matsushiro** | **68.34** | **320** | P | | **P** | **03 25 33.0** | **+2.5** |
| **CCD** | **Concordia, Ant** | **68.88** | **194** | P | | **P** | **03 25 33.5** | **-0.4** |
| **CASY** | **Casey** | **70.73** | **205** | P | | **P** | **03 25 45.6** | **+0.7** |
| CASY | | | | pP | | **pP** | **03 25 53.5** | **+0.8** |
| CASY | | | | sP | | **sP** | **03 25 56.0** | **+0.3** |
| **ASAJ** | **Asahikawa** | **70.93** | **328** | P | | **P** | **03 25 45.6** | **-0.7** |
| | comp=Z,4.2nm,0.7s,baz=192,slow=10,SNR=3.8 | | | | | | | |
| ASAJ | | | | LR | | LR | 03 50 38.0 | |
| | comp=Z,25nm,21.6s,baz=180,slow=31 | | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **JNU** | **Nakatsue** | **71.21** | **313** | P | | **P** | **03 25 46.8** | **-1.6** |
| | comp=Z,8.2nm,0.9s,baz=309,slow=11,SNR=4.2 | | | | | | | |
| JNU | | | | LR | | LR | 03 49 47.3 | |
| | comp=Z,49nm,20.7s,baz=149,slow=30 | | | | | | | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.05** | **342** | LR | | LR | 03 52 45.8 |
| | comp=Z,28nm,19.4s,baz=115,slow=32 | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **72.39** | **39** | | | **P** | **03 25 56.0** | **+0.6** |
| O02D | | | | | IAmb | IAmb | 03 26 00.2 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **CMB** | **Columbia Colle**

comp=Z,14nm,1.1s
**SPUT South Promonto 79.52 42** IAmb IAmb 03 26 38.2
comp=Z,18nm,1.5s
**NJ2 Nanjing 79.59 307** *e*P **P** **03 26 40.3 +3.8**
NJ2 pmax pmax
comp=Z,13nm,0.5s
NJ2 pmax pmax
comp=Z,470nm,4.3s
**VHRN Van Horn 80.13 55** IAmb IAmb 03 26 42.4
comp=Z,20nm,1.5s
**HWUT Hardware Ranch 80.24 42** IAmb IAmb 03 26 41.9
comp=Z,16nm,1.8s
**NEW Newport 80.47 34** LR LR 03 56 30.7
comp=Z,121nm,19.2s,baz=218,slow=31
**TXAR Lajitas Array 80.60 56** P **P** **03 26 43.5 +1.3**
comp=Z,6.3nm,1.1s,baz=231,slow=5.7,SNR=25
TXAR LR LR 03 54 17.3
comp=Z,99nm,21.8s,baz=231,slow=30
comp=Z,6.3nm,1.1s
**ANMO Albuquerque 80.73 50** P **P** **03 26 44.0 +1.1**
ANMO IAmb IAmb 03 26 47.5
comp=Z,14nm,1.3s
**ANMO Albuquerque 80.73 50** LR LR 03 56 05.2
comp=Z,185nm,19.2s,baz=328,slow=31
**M27K Edge Creek, AK 80.96 14** IAmb IAmb 03 26 52.7
comp=Z,22nm,1.1s
**AHID Auburn Hatcher 81.11 41** IAmb IAmb 03 26 46.6
comp=Z,17nm,1.6s
**DLBC Dease Lake 81.35 22** LR LR 03 54 45.4
comp=Z,134nm,19.7s,baz=264,slow=30
**DLMT Dillon 81.50 39** IAmb IAmb 03 26 50.6
comp=Z,10nm,1.2s
**TPAW Teton Pass 81.57 41** IAmb IAmb 03 26 58.9
comp=Z,11nm,1.2s
**G19K Purcell Mounta 81.75 7** IAmb IAmb 03 26 50.8
comp=Z,12nm,1.1s
**IMW Indian Meadow 81.78 41** IAmb IAmb 03 26 53.1
comp=Z,16nm,1.6s
**LOHW Long Hollow 81.85 41** IAmb IAmb 03 26 50.7
comp=Z,15nm,1.6s
**ILAR Eielson Array 82.01 11** P **P** **03 26 48.1 -0.6**
comp=Z,2.4nm,1.0s,baz=224,slow=5.0,SNR=1.4
ILAR LR LR 03 54 54.8
comp=Z,67nm,22.0s,baz=228,slow=30
comp=Z,2.4nm,1.0s
**FLWY Flagg Ranch 82.02 40** IAmb IAmb 03 26 54.6
comp=Z,21nm,1.5s
**YPP Pitchstone Pla 82.05 40** IAmb IAmb 03 26 54.4
comp=Z,17nm,1.9s
**YHL Hebgen Lake 82.10 40** IAmb IAmb 03 26 55.3
comp=Z,20nm,1.3s
**PD31 Pinedale Array 82.11 42** IAmb IAmb 03 26 53.6
comp=Z,11nm,1.4s
**PDAR Pinedale Array 82.11 42** P **P** **03 26 50.0 -0.1**
**PDAR Pinedale Array 82.11 42** P **P** **03 26 49.8 -0.2**
comp=Z,1.7nm,0.9s,baz=199,slow=3.1,SNR=12
PDAR LR LR 03 59 01.8
comp=Z,79nm,19.0s,baz=212,slow=32
comp=Z,1.7nm,0.9s
**SMCO Snowmass 82.20 46** IAmb IAmb 03 27 00.0
comp=Z,11nm,1.1s
**L29M L29M 82.53 15** IAmb IAmb 03 27 00.3
comp=Z,14nm,1.1s
**G21K Allakaket 82.55 8** IAmb IAmb 03 26 55.0
comp=Z,13nm,1.2s
**E19K Redstone River 83.00 6** IAmb IAmb 03 27 07.5
comp=Z,7.8nm,1.0s
**DAWY Dawson 83.01 14** IAmb IAmb 03 27 03.0
comp=Z,13nm,1.0s
**DRIO Del Rio 83.10 57** IAmb IAmb 03 27 05.1
comp=Z,9.0nm,1.0s
**T25A Trinidad 83.15 49** IAmb IAmb 03 26 59.7
comp=Z,8.2nm,1.0s
**OZNA Ozona 83.24 56** IAmb IAmb 03 27 00.0
comp=Z,22nm,1.7s
**RLMT Red Lodge 83.42 40** IAmb IAmb 03 27 00.9
comp=Z,6.9nm,1.1s
**N23A Red Feather La 83.66 45** IAmb IAmb 03 27 02.5
comp=Z,11nm,1.0s
**833A Chaparral WMA, 83.72 59** IAmb IAmb 03 27 02.1
comp=Z,7.6nm,0.8s
**POST Post 83.74 54** IAmb IAmb 03 27 02.2
comp=Z,18nm,1.2s
**CMIG Matias Romero 84.03 71** LR LR 03 57 59.5
comp=Z,140nm,18.1s,baz=212,slow=31
**K22A Casper 84.04 43** IAmb IAmb 03 27 04.3
comp=Z,14nm,1.2s
**I28M Miner Creek 84.05 14** IAmb IAmb 03 27 04.6
comp=Z,6.1nm,0.9s
**RTBA Rita Blanca 84.10 50** IAmb IAmb 03 27 01.7
comp=Z,17nm,1.4s
**J30M Hart River 84.19 15** IAmb IAmb 03 27 09.1
comp=Z,6.4nm,1.0s
**HNDO Hondo 84.23 58** IAmb IAmb 03 27 05.1
comp=Z,11nm,0.9s
**AMTX Amarillo 84.29 52** IAmb IAmb 03 27 05.1
comp=Z,11nm,1.0s
**I30M Mount Dempster 84.70 15** IAmb IAmb 03 27 11.1
comp=Z,13nm,1.1s
**PMSA Palmer Station 84.77 156** LR LR 03 58 39.2
comp=Z,30nm,19.8s,baz=124,slow=31
**G27K Doyon Strip 84.84 12** IAmb IAmb 03 30 20.6
comp=Z,5.7nm,0.8s
**HNS HongShan 84.88 311** *e*P **P** **03 27 01.8 -2.2**
**BRDY Brady 85.07 56** IAmb IAmb 03 27 09.1
comp=Z,7.9nm,1.1s
**EPYK Eagle Plains 85.56 14** IAmb IAmb 03 27 09.9
comp=Z,14nm,1.2s
**G29M Pine Creek 85.70 13** IAmb IAmb 03 27 10.6
comp=Z,13nm,1.1s
**H03S2 Juan Fernandez 85.76 124** T T 05 02 22.9
baz=252,slow=75,SNR=13
**H03S1 Juan Fernandez 85.77 124** T T 05 02 22.8
baz=252,slow=75,SNR=9.0
**H03S3 Juan Fernandez 85.78 124** T T 05 02 21.3
baz=252,slow=75,SNR=8.8
**H03N2 Juan Fernandez 85.86 123** T T 05 02 20.1
baz=257
**H03N3 Juan Fernandez 85.86 123** T T 05 02 31.8
baz=257
**H03N1 Juan Fernandez 85.87 123** T T 05 02 28.8
baz=257
**RSSD Black Hills 86.31 43** P **P** **03 27 10.2 -1.1**
**F31M Tsiigehtchic 87.12 14** P **P** **03 27 14.3 -0.1**
**HKT Hockley 87.19 58** P **P** **03 27 16.4 +0.8**
HKT IAmb IAmb 03 27 18.5
comp=Z,10nm,1.2s
**APG El Apazote 87.50 74** LR LR 03 59 24.9
comp=Z,6.4nm,18.6s,baz=236,slow=31
**GYA Guiyang 87.51 298** ⇓P **P** **03 27 19.8 +2.3**
GYA pmax pmax
comp=Z,15nm,0.9s
**INK Inuvik 87.85 14** LR LR 03 59 56.4
comp=Z,37nm,19.2s,baz=293,slow=31
**XAN Xi'an 88.07 306** ⇓P **P** **03 27 19.9 0.0**
XAN PcP **PcP** **03 27 23.8 +2.2**
XAN pP pP 03 27 27.3 -0.5
XAN pmax pmax
comp=Z,15nm,1.1s
**MAW Mawson 88.17 199** LR LR 04 05 07.3
comp=Z,138nm,18.2s,baz=129,slow=34
**HHC Hu-ho-hao-te 88.44 313** *e*P **P** **03 27 22.8 +1.3**
HHC pmax pmax
comp=Z,24nm,0.7s
HHC pmax pmax
comp=Z,82nm,4.4s
**BTO Baotou 89.45 312** *e*P **P** **03 27 29.3 +3.0**
BTO pP **sP** **03 27 37.3 +0.2**
BTO sP **pwP** **03 27 40.6 +2.1**
BTO pmax pmax
comp=Z,19nm,0.8s
BTO pmax pmax
comp=Z,210nm,4.5s
**YKA Yellowknife Ar 89.76 23** LR LR 04 03 16.3
comp=Z,83nm,18.1s,baz=244,slow=33
**JTS Las Juntas de 91.45 80** LR LR 03 59 25.2
comp=Z,113nm,19.2s,baz=286,slow=29
**PZH PanZhiHua 91.75 297** P **P** **03 27 38.9 +1.6**
PZH pmax pmax
comp=Z,20nm,0.5s
PZH pmax pmax
comp=Z,20nm,4.3s
**CMAR Chiang Mai Arr 92.14 288** P **P** **03 27 38.5 -0.7**
comp=Z,1.4nm,0.3s,baz=107,slow=2.8,SNR=5.4
CMAR LR LR 04 03 15.9
comp=Z,33nm,21.9s,baz=150,slow=32
comp=Z,1.4nm,0.3s
**R40A Maddies Statio 92.57 51** IAmb IAmb 03 27 43.9
comp=Z,6.8nm,1.1s
**ATAH Atahualpa 93.32 98** LR LR 04 01 21.0
comp=Z,104nm,19.0s,baz=289,slow=30
**SNAA Sanae 93.43 177** P **P** **03 27 44.1 -0.1**
comp=Z,1.2nm,1.0s,baz=195,slow=4.5,SNR=1.7
comp=Z,1.2nm,1.0s
**NNA Nana 93.50 103** LR LR 03 59 57.1
comp=Z,43nm,21.0s,baz=282,slow=29
**ULM Lac du Bonnet 93.75 39** LR LR 04 05 49.5
comp=Z,139nm,18.1s,baz=278,slow=33
**SONM Songino Array 94.25 318** P **P** **03 27 46.8 -1.6**
comp=Z,0.5nm,0.5s,baz=105,slow=3.4,SNR=1.5
comp=Z,0.5nm,0.5s
**TKL Tuckaleechee C 98.50 55** LR LR 04 06 23.2
comp=Z,99nm,19.7s,baz=264,slow=32
**KURBB Kurchatov Arra 112.60 319** PKiKP **PKiKP** **03 33 04.3 -1.1**
comp=Z,0.2nm,0.5s,baz=53,slow=2.8,SNR=4.5
**KRLC Kraliky 143.88 348** *e*PKP **PKPdf** **03 34 05.6 +1.2**
**MORC Moravsky Berou 144.01 348** *e*PKP **PKPdf** **03 34 05.2 +0.6**
**LANS Liptovska Anna 144.16 345** *e*PKP **PKPdf** **03 34 06.5 +1.6**
**MAUC Maruska 144.34 347** *e*PKP **PKPdf** **03 34 05.8 +0.6**
**KECS Kecovo 144.50 344** *e*PKP **PKPdf** **03 34 07.2 +1.7**
**VRAC Vranov 144.65 348** *e*PKP **PKPdf** **03 34 06.0 +0.3**
**JAVC Velka Javorina 144.85 347** *e*PKP **PKPdf** **03 34 07.5 +1.4**
**KRUC Moravsky 144.92 348** *e*PKP **PKPdf** **03 34 06.6 +0.4**
**VYHS Vyhne 144.92 345** *e*PKP **PKPdf** **03 34 06.2 0.0**
**ZVC Zvikov 144.94 351** *e*PKP **PKPdf** **03 34 06.2 0.0**
**GRF Grafenberg Arr 145.06 354** *e*PKPbc **PKPdf** **03 34 07.4 +1.0**
baz=8.4,slow=2.7
**PSZ Piszkesteto 145.18 344** ⇑P **PKPdf** **03 34 06.9 +0.2**
**MLR Muntele Rosu 145.27 335** ⇑P **PKPab** **03 34 06.8 -0.1**
**KHC Kasperske Hory 145.33 352** *e*PKP **PKPdf** **03 34 08.2 +1.3**
KHC *ep*PKP **sPKPdf** **03 34 19.4 +1.6**
**DRGR 145.35 340** ⇑P **PKPdf** **03 34 08.4 +1.3**
**BRTR Keskin Array B 145.55 321** PKPbc **PKPdf** **03 34 07.6 -0.2**
comp=Z,5.7nm,0.8s,baz=97,slow=2.7,SNR=34
**GERES GERESS Array B 145.59 351** PKPbc **PKPab** **03 34 07.9 0.0**
comp=Z,4.1nm,1.0s,baz=41,slow=4.4,SNR=13
**VOIR 145.67 336** ⇑P **PKPab** **03 34 08.4 +0.1**
**ARR Arges 145.89 337** ⇑P **PKPab** **03 34 09.5 +0.4**
**CONA Conrad Observa 146.11 348** *e*PKP **PKPab** **03 34 10.0 +0.2**
comp=Z,11nm,1.2s
**SIRR Sirla 146.15 341** ⇑P **PKPbc** **03 34 09.5 +0.2**
**RONA Rosalia, Austr 146.24 348** *e*PKP **PKPab** **03 34 10.4 +0.1**
comp=Z,12nm,1.4s
**SURR Surduc 146.46 340** ⇓P **PKPbc** **03 34 10.4 +0.1**
**MOA Molln 146.47 350** *e*PKP **PKPbc** **03 34 10.6 +0.3**
comp=Z,13nm,1.3s
**GZR Gura Zlata 146.55 339** ⇑P **PKPbc** **03 34 10.9 +0.3**
**BIOA Bad Ischl, Aus 146.72 351** *e*PKP **PKPab** **03 34 12.4 +0.2**
comp=Z,10nm,1.3s
**BZS Buzias 146.74 340** ⇓P **PKPbc** **03 34 10.6 -0.5**
**ARSA Arzberg 146.82 348** *e*PKP **PKPdf** **03 34 09.5 0.0**
comp=Z,10.0nm,1.6s
**MORH Mrgy, Hungar 147.09 344** ⇑P **PKPdf** **03 34 10.9 +1.0**
**HERR Herculane 147.12 339** ⇑P **PKPbc** **03 34 11.9 -0.2**
**RETA Reutte 147.28 354** *e*PKP **PKPbc** **03 34 12.2 -0.5**
comp=Z,8.7nm,1.7s
**WATA Walderalm 147.35 353** *e*PKP **PKPdf** **03 34 11.0 +0.5**
comp=Z,3.2nm,0.8s
**MOTA Moosalm 147.39 354** *e*PKP **PKPdf** **03 34 10.2 -0.4**
comp=Z,5.6nm,1.4s
**WTTA Wattenberg 147.41 353** *e*PKP **PKPdf** **03 34 11.6 +0.9**
comp=Z,5.9nm,0.8s
**MDVR Moldovita 147.45 339** ⇓P **PKPbc** **03 34 13.7 +0.5**
**SOKA Soboth 147.47 349** *e*PKP **PKPdf** **03 34 10.6 -0.1**
comp=Z,11nm,1.7s
**SQTA Sankt Quirin 147.50 354** *e*PKP **PKPbc** **03 34 12.9 -0.4**
comp=Z,6.6nm,1.2s
**DAVA Damuels 147.56 355** *e*PKP **PKPbc** **03 34 13.5 0.0**
comp=Z,9.8nm,1.0s
**OBKA Obir 147.72 349** *e*PKP **PKPbc** **03 34 13.5 -0.4**
comp=Z,6.5nm,1.0s
**FETA Feichten 147.75 354** *e*PKP **PKPbc** **03 34 13.6 -0.5**
comp=Z,9.2nm,1.2s
**MYKA Terra Mystica 147.76 350** *e*PKP **PKPbc** **03 34 13.1 -0.9**
comp=Z,6.7nm,1.0s
**ABTA Abfaltersbach 147.81 352** *e*PKP **PKPbc** **03 34 13.1 -1.1**
comp=Z,6.2nm,0.9s
**MMAI Mount Meron Ar 147.99 309** PKPbc **PKPbc** **03 34 15.7 +0.6**
comp=Z,4.5nm,0.7s,baz=147,slow=2.9,SNR=3.3
**PGAV Gavieira, Arco 150.24 22** *e*PKPbc **PKPbc** **03 34 19.5 -1.0**
**PGAV Gavieira, Arco 150.24 22** *e*LR LR 04 35 24.7
comp=Z,107nm,18.0s
**PBRG Braganca 150.92 20** *e*PKPab **PKPab** **03 34 35.0 +5.7**
**POLO Lamas de Olo 150.93 22** *e*PKPbc **PKiKP** **03 34 23.2 +0.5**
**POLO Lamas de Olo 150.93 22** *e*PKPab **PKPab** **03 34 29.4 0.0**
**PVRL Vila Real 151.04 22** *e*PKPbc **PKiKP** **03 34 24.1 +1.2**
**MVO Moncorvo 151.39 21** *e*PKPbc **PKiKP** **03 34 24.6 +1.0**
**MTE Manteigas 151.87 23** *e*PKPbc **PKiKP** **03 34 27.9 +3.2**
**MTE Manteigas 151.87 23** *e*LR LR 04 33 25.4
comp=Z,65nm,20.0s
**PSBE So Bento 152.14 25** *e*PKPbc **PKiKP** **03 34 26.2 +1.0**
**PCBR Castelo Branco 152.38 23** *e*PKPbc **PKiKP** **03 34 29.0 +3.4**
**PMRV Marv??o 152.77 24** *e*PKPbc **PKiKP** **03 34 27.4 +0.9**
**PMRV Marv??o 152.77 24** *e*LR LR 04 34 37.9
comp=Z,72nm,20.0s
**ESDC Sonseca Array 153.73 18** PKPbc **PKiKP** **03 34 29.1 +0.5**
comp=Z,1.4nm,1.0s,baz=335,slow=2.2,SNR=6.7
ESDC PKPab **PKPab** **03 34 41.2 +0.1**
comp=Z,1.5nm,0.9s,baz=336,slow=2.9,SNR=7.2
**PBEJ Beja 153.78 26** *e*PKPab **PKPab** **03 34 42.0 +0.7**
**MESJ Messejana 153.79 27** *e*PKPbc **PKiKP** **03 34 32.0 +3.4**
**PTEO Sao Teotonio 153.81 28** *e*PKPbc **PKPbc** **03 34 27.8 -0.7**
**PVAQ Vaqueiros 154.37 26** *e*LR LR 04 32 25.6
comp=Z,80nm,20.0s

**GUC 15 03:14:37.9±0.8, 38°.70S×75°.07W, h9km±15km, ML3.4, 4C,**
**Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BI04** | **Isla Mocha** | **0.97** | **73** | ⇑*i*P | Pg | 03 14 54.4 | -2.1 |
| BI04 | | | | *e*S | Sg | 03 15 07.9 | -1.2 |
| **BI04** | **Isla Mocha** | **0.97** | **73** | ⇑*i*P | Pg | 03 14 54.4 | -2.1 |
| BI04 | | | | *i* S | Sg | 03 15 08.0 | -1.1 |
| BI04 | | | | IAML | | 03 15 09.3 | |
| comp=E,889nm,0.3s | | | | | | | |
| **LC02** | **Puerto Saavedr** | **1.32** | **94** | *e*P | Pn | 03 15 00.9 | -1.6 |
| **LR04** | **Corral** | **1.73** | **133** | ⇑*i*P | Pn | 03 15 07.6 | -0.6 |
| LR04 | | | | *i* S | Sn | 03 15 28.8 | -1.6 |
| LR04 | | | | IAML | | 03 15 31.6 | |
| comp=N,1μm,0.3s | | | | | | | |
| **LR03** | **Panguipulli** | **2.31** | **115** | *e*P | Pn | 03 15 16.5 | +0.4 |
| LR03 | | | | *e*S | Sn | 03 15 45.4 | +0.7 |
| LR03 | | | | IAML | | 03 15 48.6 | |
| comp=E,188nm,0.3s | | | | | | | |
| **LR03** | **Panguipulli** | **2.31** | **115** | *e*P | Pn | 03 15 16.5 | +0.4 |
| LR03 | | | | *i* S | Sn | 03 15 45.3 | +0.7 |
| LR03 | | | | IAML | | 03 15 48.6 | |
| comp=E,182nm,0.4s | | | | | | | |
| **LR05** | **Currie** | **2.82** | **124** | *e*P | Pn | 03 15 23.8 | +0.7 |
| LR05 | | | | IAML | | 03 16 01.9 | |
| comp=E,123nm,0.2s | | | | | | | |
| **LR05** | **Currie** | **2.82** | **124** | IAML | | 03 16 01.9 | |
| comp=E,123nm,0.2s | | | | | | | |
| **GO06** | **Curarrehue** | **2.93** | **109** | *e*P | Pn | 03 15 25.1 | +0.4 |
| GO06 | | | | *i* S | Sn | 03 16 01.4 | +1.3 |
| **GO06** | **Curarrehue** | **2.93** | **109** | ⇑*i*P | Pn | 03 15 25.0 | +0.2 |
| GO06 | | | | *i* S | Sn | 03 16 01.4 | +1.3 |
| **LL05** | **Los Muermos** | **2.96** | **156** | *e*P | Pn | 03 15 25.1 | -0.1 |
| LL05 | | | | IAML | | 03 16 03.3 | |
| comp=N,53nm,0.3s | | | | | | | |
| **LL04** | **Puerto Octay** | **3.01** | **138** | *e*P | Pn | 03 15 25.8 | +0.1 |
| LL04 | | | | IAML | | 03 16 04.6 | |
| comp=N,153nm,0.4s | | | | | | | |
| **LL04** | **Puerto Octay** | **3.01** | **138** | *e*P | Pn | 03 15 25.8 | 0.0 |
| LL04 | | | | IAML | | 03 16 04.6 | |
| comp=N,158nm,0.2s | | | | | | | |

*IDC **15** 03:19:31.5±0.7, 26°.46N×141°.28E, h299km±11km, mb3.4/6, mbtmp4.1/9, Error ellipse: s-maj=46.1km s-min=16.0km az=74.0*
*NEIC **15** 03:19:34.0±0.8, 26°.7N±0°.1×141°.5E±0°.2, h332km±6km, mb4.2/13, Error ellipse: s-maj=20.9km s-min=14.6km az=67.0*
*JMA **15** 03:19:36.4±0.1, 27°.1N±1°.1×14°.2E±°, h313km, MV4.3/13, NEAR CHICHIJIMA ISLAND*
**ISC 15 03:19:32.4±0.7, 26°.59N±0°.07×141°.2E±0°.1, h300km, n34, σ2°.69/40, mb4.0/12, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **0.92** | **87** | *e*P | **Pn** | **03 20 17.0** | **+4.6** |
| JHH2 | | | | *e*S | **S** | **03 20 48.8** | **+4.6** |
| **CBIJ** | **Chichi jima** | **1.05** | **61** | P | **Pn** | **03 20 17.1** | **+4.1** |
| CBIJ | | | | *e*S | **S** | **03 20 48.8** | **+3.6** |
| **JCJ** | **Chichijima** | **1.05** | **61** | Pn | **Pn** | **03 20 16.8** | **+3.8** |
| JCJ | | | | Sn | **S** | **03 20 49.2** | **+3.9** |
| **JCJ** | **Chichijima** | **1.05** | **61** | P | **Pn** | **03 20 12.4** | **-0.6** |
| 114nm,0.3s,baz=281,slow=16,SNR=68 | | | | | | | |
| JCJ | | | | S | **S** | **03 20 44.1** | **-1.2** |
| 172nm,0.3s,baz=289,slow=21,SNR=15 | | | | | | | |
| **JHJ2** | **Mitsune** | **6.60** | **350** | Pn | **Pn** | **03 21 10.6** | **+1.7** |
| **BSO1** | **Boso 1** | **8.04** | **359** | *e*P | **Pn** | **03 21 29.1** | **+3.3** |
| BSO1 | | | | *e*S | **S** | **03 22 58.0** | **+0.2** |
| **BSO3** | **Boso 3** | **8.20** | **356** | *e*P | **Pn** | **03 21 31.2** | **+3.2** |
| BSO3 | | | | *e*S | **S** | **03 23 01.3** | **-0.7** |
| **JMN** | **Monobe** | **9.49** | **320** | Pn | **Pn** | **03 21 47.3** | **+3.0** |
| **JRY** | **Ryogami san** | **9.59** | **349** | *e*P | **Pn** | **03 21 48.3** | **+2.9** |
| **JAG** | **Ashikaga** | **9.91** | **352** | *e*P | **Pn** | **03 21 50.9** | **+1.6** |
| JAG | | | | *e*S | **S** | **03 23 35.5** | **-5.5** |
| **JNU** | **Nakatsue** | **11.03** | **309** | Pn | **Pn** | **03 22 04.7** | **+1.5** |
| **JNU** | **Nakatsue** | **11.03** | **309** | P | **Pn** | **03 22 05.5** | **+2.4** |
| 3.2nm,0.5s,baz=14,slow=19,SNR=1.8 | | | | | | | |
| **JMM** | **Marumori** | **11.24** | **359** | P | **P** | **03 22 08.9** | **+1.1** |
| **KSRS** | **Korea Array** | **15.57** | **317** | P | **P** | **03 22 58.6** | **+3.0** |
| 6.8nm,0.6s,baz=135,slow=12,SNR=22 | | | | | | | |
| **KS19** | **Wonju Array Si** | **15.64** | **317** | | **P** | **03 22 57.4** | **+1.0** |
| KS19 | | | | IAmb | IAmb | 03 23 02.2 | |
| comp=Z,6.3nm,0.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.07** | **339** | P | **P** | **03 23 34.5** | **+1.2** |
| comp=Z,3.8nm,0.9s,baz=134,slow=8.3,SNR=3.9 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **19.07** | **339** | P | **P** | **03 23 33.8** | **+0.5** |
| **MANU** | **Manus Island** | **29.10** | **167** | P | **P** | **03 25 04.5** | **-1.6** |
| **MTN** | **Manton Dam** | **40.39** | **195** | P | **P** | **03 26 40.3** | **-1.8** |
| MTN | | | | IAmb | IAmb | 03 26 42.5 | |
| comp=Z,39nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **46.55** | **189** | P | **P** | **03 27 29.9** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 03 27 32.8 | |
| comp=Z,19nm,1.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **46.72** | **189** | P | **P** | **03 27 31.0** | **-1.1** |
| **WB2** | **Warramunga Arr** | **46.73** | **189** | P | **P** | **03 27 31.3** | **-0.9** |
| **WRA** | **Warramunga Arr** | **46.73** | **189** | P | **P** | **03 27 30.6** | **-1.7** |
| comp=Z,1.5nm,0.5s,baz=17,slow=9.0,SNR=34 | | | | | | | |
| comp=Z,1.5nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **50.09** | **310** | P | **P** | **03 27 56.8** | **-0.7** |
| comp=Z,0.2nm,0.5s,baz=100,slow=10.0,SNR=1.6 | | | | | | | |
| comp=Z,0.2nm,0.5s | | | | | | | |
| **M14K** | **Bethel** | **51.09** | **32** | P | **P** | **03 28 01.6** | **-3.0** |
| **J16K** | **Anvik River** | **52.40** | **29** | P | **P** | **03 28 10.9** | **-3.3** |
| J16K | | | | IAmb | IAmb | 03 28 18.0 | |
| comp=Z,24nm,1.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **52.73** | **315** | P | **P** | **03 28 16.5** | **-0.3** |
| comp=Z,2.4nm,0.3s,baz=93,slow=8.3,SNR=6.6 | | | | | | | |
| comp=Z,2.4nm,0.3s | | | | | | | |
| **K17K** | **Iditarod** | **53.27** | **30** | P | **P** | **03 28 17.7** | **-2.8** |
| K17K | | | | IAmb | IAmb | 03 28 32.1 | |
| comp=Z,28nm,1.5s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **53.65** | **24** | P | **P** | **03 28 19.0** | **-4.2** |
| E18K | | | | IAmb | IAmb | 03 28 29.8 | |
| comp=Z,9.5nm,1.1s | | | | | | | |
| **O18K** | **Koktuh Hills** | **54.19** | **34** | P | **P** | **03 28 23.9** | **-3.3** |
| **BVAR** | **Borovoye Array** | **57.79** | **318** | P | **P** | **03 28 52.7** | **0.0** |
| comp=Z,0.9nm,0.4s,baz=93,slow=6.2,SNR=4.5 | | | | | | | |
| comp=Z,0.9nm,0.4s | | | | | | | |
| **ABKAR** | **Akbulak array** | **64.78** | **314** | P | P | 03 29 35.6 | -3.7 |
| ABKAR | | | | IAmb | IAmb | 03 29 38.1 | |
| comp=Z,1.4nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **73.71** | **341** | P | **P** | **03 30 34.4** | **+1.0** |
| comp=Z,2.7nm,1.1s,baz=352,slow=5.6,SNR=3.6 | | | | | | | |
| comp=Z,2.7nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **77.99** | **334** | P | **P** | **03 30 57.8** | **+0.3** |
| comp=Z,0.6nm,0.4s,baz=69,slow=4.4,SNR=8.6 | | | | | | | |
| comp=Z,0.6nm,0.4s | | | | | | | |

**IDC 15 03:37:24.2±14.0, 4°.65N×126°.38E, h92km±138km, mb3.4/4, mbtmp3.7/4, MS3.5/2, Error ellipse: s-maj=172.8km s-min=27.6km az=66.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **25.66** | **162** | P | P | 03 42 45.5 | 0.0 |
| 0.5nm,0.8s,baz=342,slow=10,SNR=11 | | | | | | | |
| 0.5nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.61** | **325** | P | P | 03 46 57.4 | -0.1 |
| 0.8nm,0.5s,baz=120,slow=7.7,SNR=7.3 | | | | | | | |
| MKAR | | | | LR | LR | 04 13 42.0 | |
| comp=Z,41nm,18.4s,baz=68,slow=38 | | | | | | | |
| 0.8nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.62** | **333** | LR | LR | 04 16 15.4 | |
| comp=Z,31nm,18.0s,baz=58,slow=39 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.78** | **327** | P | P | 03 47 26.4 | 0.0 |
| 0.5nm,0.5s,baz=114,slow=8.4,SNR=4.1 | | | | | | | |
| 0.5nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **66.37** | **327** | P | P | 03 48 03.2 | +0.1 |
| 0.5nm,0.5s,baz=120,slow=8.7,SNR=3.6 | | | | | | | |
| 0.5nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.30** | **289** | PKP | PKPdf | 03 56 09.3 | -0.3 |
| 0.6nm,1.1s,baz=135,slow=4.7,SNR=2.8 | | | | | | | |

*KRNET **15** 03:58:02.4±0.1, 42°.05N×77°.84E, h20km, mb2.6*
*SOME **15** 03:58:03.5, 42°.10N×77°.78E, h15km*
*NNC **15** 03:58:05.2±0.8, 42°.22N×77°.83E, h0km, mb3.4, mpv3.3, Error ellipse: s-maj=5.6km s-min=2.6km az=169.0*
**ISC 15 03:58:04.0±1.2, 42°.15N±0°.04×77°.75E±0°.02, h4km±10km, n53, σ1°.72/99, 20C-8D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDJ** | **Kajisay** | **0.43** | **268** | *i* P | **Pg** | **03 58 11.9** | **-0.4** |
| baz=80 | | | | | | | |
| KDJ | | | | *i* S | **Sg** | **03 58 18.9** | **+1.0** |
| baz=80 | | | | | | | |
| **PRZ** | **Przheval'sk** | **0.58** | **55** | ⇑*i*P | **Pg** | **03 58 14.1** | **-1.2** |
| baz=43 | | | | | | | |
| PRZ | | | | ⇑*i*S | **Sg** | **03 58 22.9** | **0.0** |
| baz=43 | | | | | | | |
| **SATY** | **Saty** | **1.03** | **28** | *e*P | **Pb** | **03 58 23.2** | **-1.3** |
| 4.4nm,0.1s | | | | | | | |
| SATY | | | | *e*S | **Sb** | **03 58 36.6** | **-1.9** |
| 79nm,0.1s | | | | | | | |
| **SATY** | **Saty** | **1.03** | **28** | P | **Pb** | **03 58 23.2** | **-1.3** |
| 4.4nm,0.1s | | | | | | | |
| SATY | | | | S | **Sb** | **03 58 36.6** | **-1.9** |
| 79nm,0.1s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.07** | **326** | *e*P | **Pb** | **03 58 25.1** | **-0.2** |
| 6.6nm,0.1s | | | | | | | |
| TNSS | | | | *e*S | **Sb** | **03 58 40.0** | **+0.2** |
| 17nm,0.3s | | | | | | | |
| **TNSS** | **Tian-Shan** | **1.07** | **326** | P | **Pb** | **03 58 25.1** | **-0.2** |
| 6.6nm,0.1s | | | | | | | |
| TNSS | | | | S | **Sb** | **03 58 40.0** | **+0.2** |
| 17nm,0.3s | | | | | | | |
| **ULHL** | **Ulahol** | **1.13** | **275** | ⇑*i*P | **Pn** | **03 58 24.7** | **-2.1** |
| baz=80 | | | | | | | |
| ULHL | | | | ⇑*i*S | **Sb** | **03 58 40.8** | **-0.6** |
| baz=80 | | | | | | | |
| **ZHN** | **Zhinishke** | **1.14** | **26** | *e*P | **Pb** | **03 58 25.0** | **-1.4** |
| 10nm,0.1s | | | | | | | |
| ZHN | | | | *e*S | **Sb** | **03 58 39.6** | **-1.9** |
| 47nm,0.2s | | | | | | | |
| **ZHN** | **Zhinishke** | **1.14** | **26** | P | **Pb** | **03 58 25.0** | **-1.4** |
| 10nm,0.1s | | | | | | | |
| ZHN | | | | S | **Sb** | **03 58 39.6** | **-1.9** |
| 47nm,0.2s | | | | | | | |
| **MDOK** | **Medeo** | **1.14** | **333** | *e*P | **Pb** | **03 58 26.5** | **+0.1** |
| 6.1nm,0.2s | | | | | | | |
| MDOK | | | | *e*S | **Sn** | **03 58 42.1** | **-1.0** |
| 11nm,0.2s | | | | | | | |
| **MDOK** | **Medeo** | **1.14** | **333** | ⇑P | **Pn** | **03 58 25.0** | **-1.9** |
| 0.7nm,0.2s | | | | | | | |
| MDOK | | | | Pg | **Pb** | **03 58 26.5** | **+0.1** |
| 6.1nm,0.2s | | | | | | | |
| MDOK | | | | Lg | Lg | 03 58 42.1 | |
| 11nm,0.2s | | | | | | | |
| MDOK | | | | S | **Sn** | **03 58 42.3** | **-0.8** |
| 3.7nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.18** | **337** | *e*P | **Pb** | **03 58 27.1** | **0.0** |
| 9.6nm,0.1s | | | | | | | |
| KOTS | | | | *e*S | **Sn** | **03 58 43.1** | **-1.1** |
| 21nm,0.2s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.18** | **337** | P | **Pb** | **03 58 27.1** | **0.0** |
| 9.6nm,0.1s | | | | | | | |
| KOTS | | | | S | **Sn** | **03 58 43.1** | **-1.1** |
| 21nm,0.2s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UZB** | **Uzynbulak** | **1.37** | **43** | *e*P | **Pb** | **03 58 29.0** | **-1.3** |
| | 3.7nm,0.1s | | | | | | | |
| UZB | | | | *e*S | **Sb** | **03 58 46.5** | **-1.8** |
| | 15nm,0.1s | | | | | | | |
| **UZB** | **Uzynbulak** | **1.37** | **43** | P | **Pb** | **03 58 29.0** | **-1.3** |
| | 3.7nm,0.1s | | | | | | | |
| UZB | | | | S | **Sb** | **03 58 46.5** | **-1.8** |
| | 15nm,0.1s | | | | | | | |
| **KURS** | **Kuram** | **1.37** | **13** | *e*P | **Pg** | **03 58 30.1** | **-0.2** |
| | 2.1nm,0.1s | | | | | | | |
| KURS | | | | *e*S | **Sg** | **03 58 48.3** | **+0.2** |
| | 11nm,0.6s | | | | | | | |
| **KURS** | **Kuram** | **1.37** | **13** | P | **Pg** | **03 58 30.1** | **-0.2** |
| | 2.1nm,0.1s | | | | | | | |
| KURS | | | | S | **Sg** | **03 58 48.3** | **+0.2** |
| | 11nm,0.6s | | | | | | | |
| **MTBS** | **Maitube** | **1.38** | **316** | *e*P | **Pb** | **03 58 30.9** | **+0.3** |
| | 3.2nm,0.1s | | | | | | | |
| MTBS | | | | *e*S | **Sg** | **03 58 50.0** | **+1.5** |
| | 46nm,0.2s | | | | | | | |
| **MTBS** | **Maitube** | **1.38** | **316** | P | **Pb** | **03 58 30.9** | **+0.3** |
| | 3.2nm,0.1s | | | | | | | |
| MTBS | | | | S | **Sg** | **03 58 50.1** | **+1.5** |
| | 46nm,0.2s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.39** | **285** | ⇑*i*P | **Pn** | **03 58 29.5** | **-0.9** |
| | baz=88 | | | | | | | |
| BOOM | | | | ⇑*i*S | **Sb** | **03 58 49.1** | **+0.3** |
| | baz=88 | | | | | | | |
| **KPKS** | **Kokpek** | **1.48** | **27** | *e*P | **Pb** | **03 58 31.6** | **-0.6** |
| | 9.1nm,0.1s | | | | | | | |
| KPKS | | | | *e*S | **Sb** | **03 58 50.9** | **-0.6** |
| | 24nm,0.2s | | | | | | | |
| **KPKS** | **Kokpek** | **1.48** | **27** | P | **Pb** | **03 58 31.6** | **-0.6** |
| | 9.1nm,0.1s | | | | | | | |
| KPKS | | | | S | **Sb** | **03 58 50.9** | **-0.6** |
| | 24nm,0.2s | | | | | | | |
| **NRN** | **Naryn** | **1.49** | **242** | ⇓*e*P | **Pn** | **03 58 30.3** | **-1.7** |
| | baz=46 | | | | | | | |
| NRN | | | | ⇓*i*S | **Sb** | **03 58 50.6** | **-1.4** |
| | baz=46 | | | | | | | |
| **KST** | **Kastek** | **1.59** | **305** | *e*P | **Pb** | **03 58 34.1** | **-0.1** |
| | 4.7nm,0.2s | | | | | | | |
| KST | | | | *e*S | **Sb** | **03 58 55.2** | **+0.5** |
| | 15nm,0.2s | | | | | | | |
| **KST** | **Kastek** | **1.59** | **305** | P | **Pb** | **03 58 33.9** | **-0.3** |
| | 4.7nm,0.2s | | | | | | | |
| KST | | | | S | **Sb** | **03 58 55.7** | **+1.0** |
| | 15nm,0.2s | | | | | | | |
| **SHLS** | **Shalkode** | **1.61** | **51** | *e*P | **Pg** | **03 58 38.1** | **+3.1** |
| | 17nm,0.2s | | | | | | | |
| SHLS | | | | *e*S | **Sg** | **03 59 02.0** | **+6.2** |
| | 36nm,0.3s | | | | | | | |
| **SHLS** | **Shalkode** | **1.61** | **51** | P | **Pg** | **03 58 38.1** | **+3.1** |
| | 17nm,0.2s | | | | | | | |
| SHLS | | | | S | **Sg** | **03 59 02.0** | **+6.2** |
| | 36nm,0.3s | | | | | | | |
| **PDGK** | **Podgornoye** | **1.74** | **47** | P | **Pb** | **03 58 35.2** | **-1.5** |
| | 5.2nm,0.2s | | | | | | | |
| PDGK | | | | S | **Sb** | **03 58 57.0** | **-1.9** |
| | 5.6nm,0.2s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.77** | **297** | ⇑Pn | **Pb** | **03 58 36.6** | **-0.6** |
| | 3.9nm,0.3s | | | | | | | |
| TKM2 | | | | ⇓Sn | **Sb** | **03 59 01.3** | **+1.5** |
| | 6.6nm,0.3s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.77** | **297** | ⇑*i*P | **Pb** | **03 58 36.1** | **-1.1** |
| | baz=99 | | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **03 59 00.9** | **+1.0** |
| | baz=99 | | | | | | | |
| **DGS** | **Degeres** | **1.82** | **307** | *e*P | **Pb** | **03 58 38.3** | **+0.3** |
| | 4.6nm,0.2s | | | | | | | |
| DGS | | | | *e*S | **Sb** | **03 59 02.8** | **+1.5** |
| | 19nm,0.4s | | | | | | | |
| **DGS** | **Degeres** | **1.82** | **307** | P | **Pb** | **03 58 38.3** | **+0.3** |
| | 4.6nm,0.2s | | | | | | | |
| DGS | | | | S | **Sb** | **03 59 02.8** | **+1.5** |
| | 19nm,0.4s | | | | | | | |
| **BLB** | **Baldybastay** | **2.02** | **15** | Pg | **Pb** | **03 58 41.4** | **0.0** |
| | 21nm,0.2s | | | | | | | |
| BLB | | | | Lg | Lg | 03 59 08.2 | | |
| | 41nm,0.2s | | | | | | | |
| **KUU** | **Kurty** | **2.03** | **330** | *e*P | **Pb** | **03 58 42.1** | **+0.6** |
| | 4.9nm,0.0s | | | | | | | |
| KUU | | | | *e*S | **Sb** | **03 59 08.8** | **+1.7** |
| | 17nm,0.4s | | | | | | | |
| **KUU** | **Kurty** | **2.03** | **330** | Pg | **Pb** | **03 58 42.1** | **+0.6** |
| | 4.9nm,0.0s | | | | | | | |
| KUU | | | | Lg | Lg | 03 59 08.8 | | |
| | 17nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **2.06** | **1** | *e*P | **Pb** | **03 58 42.6** | **+0.5** |
| | 8.4nm,0.3s | | | | | | | |
| ARXS | | | | *e*S | **Sg** | **03 59 09.6** | **-0.7** |
| | 37nm,0.3s | | | | | | | |
| **ARXS** | **Arharly** | **2.06** | **1** | Pg | **Pb** | **03 58 42.6** | **+0.5** |
| | 8.4nm,0.3s | | | | | | | |
| ARXS | | | | Lg | Lg | 03 59 09.6 | | |
| | 37nm,0.3s | | | | | | | |
| **KBK** | **Karagaybulak** | **2.14** | **285** | ⇑*i*P | **Pn** | **03 58 41.0** | **+0.3** |
| | baz=87 | | | | | | | |
| KBK | | | | ⇑*i*S | **Sb** | **03 59 09.0** | **-1.4** |
| | baz=87 | | | | | | | |
| **KRBS** | **Karabastau** | **2.17** | **316** | *e*P | **Pb** | **03 58 44.1** | **+0.1** |
| | 5.8nm,0.3s | | | | | | | |
| KRBS | | | | *e*S | **Sb** | **03 59 12.2** | **+1.0** |
| | 28nm,0.3s | | | | | | | |
| **KRBS** | **Karabastau** | **2.17** | **316** | Pg | **Pb** | **03 58 44.1** | **+0.1** |
| | 5.8nm,0.3s | | | | | | | |
| KRBS | | | | Lg | Lg | 03 59 12.3 | | |
| | 28nm,0.3s | | | | | | | |
| **CHMS** | **Chumysh** | **2.37** | **292** | ⇓*i*P | **Pn** | **03 58 44.4** | **+0.6** |
| | baz=94 | | | | | | | |
| CHMS | | | | ⇓*i*S | **Sn** | **03 59 14.6** | **+1.2** |
| | baz=94 | | | | | | | |
| **KNOS** | **Konyrlen** | **2.44** | **25** | Pg | **Pb** | **03 58 46.8** | **-1.8** |
| | 2.8nm,0.2s | | | | | | | |
| KNOS | | | | Lg | Lg | 03 59 16.9 | | |
| | 5.2nm,0.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.46** | **283** | ⇓Pn | **Pb** | **03 58 48.4** | **-0.6** |
| | 2.8nm,0.4s | | | | | | | |
| AAK | | | | ⇓Sn | **Sg** | **03 59 22.4** | **-0.8** |
| | 9.9nm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.46** | **283** | ⇑*i*P | **Pn** | **03 58 45.4** | **+0.3** |
| | baz=84 | | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **03 59 16.8** | **+1.0** |
| | baz=84 | | | | | | | |
| **DJR** | **Jarkent** | **2.64** | **34** | *e*P | **Pb** | **03 58 51.2** | **-0.8** |
| | 1.6nm,0.1s | | | | | | | |
| DJR | | | | *e*S | **Sb** | **03 59 24.6** | **-0.2** |
| | 15nm,0.2s | | | | | | | |
| **DJR** | **Jarkent** | **2.64** | **34** | Pg | **Pb** | **03 58 50.2** | **-1.8** |
| | 3.8nm,0.2s | | | | | | | |
| DJR | | | | Lg | Lg | 03 59 23.9 | | |
| | 15nm,0.2s | | | | | | | |
| **USP** | **Ospenovka** | **2.65** | **296** | ⇑*e*P | **Pn** | **03 58 48.2** | **+0.7** |
| | baz=97 | | | | | | | |
| USP | | | | ⇑*i*S | **Sn** | **03 59 21.4** | **+1.3** |
| | baz=97 | | | | | | | |
| **AML** | **Almayashu** | **3.02** | **271** | ⇑*e*P | **Pn** | **03 58 53.2** | **+0.2** |
| | baz=73 | | | | | | | |
| AML | | | | ⇑*i*S | **Sn** | **03 59 30.1** | **+0.3** |
| | baz=73 | | | | | | | |
| **MRKS** | **Merke** | **3.40** | **282** | *e*P | **Pb** | **03 59 06.7** | **+1.7** |
| | 1.3nm,0.2s | | | | | | | |
| MRKS | | | | *e*S | **Sg** | **03 59 51.0** | **-2.3** |
| | 7.2nm,0.4s | | | | | | | |
| **MRKS** | **Merke** | **3.40** | **282** | Pg | **Pb** | **03 59 06.7** | **+1.7** |
| | 1.3nm,0.2s | | | | | | | |
| MRKS | | | | Lg | Lg | 03 59 51.0 | | |
| | 7.2nm,0.4s | | | | | | | |
| **BTLS** | **Baital** | **3.95** | **318** | *e*P | **Pb** | **03 59 16.8** | **+2.6** |
| | 1.8nm,0.6s | | | | | | | |
| BTLS | | | | *e*S | **Sg** | **04 00 08.6** | **-2.3** |
| | 1.7nm,0.2s | | | | | | | |
| **BTLS** | **Baital** | **3.95** | **318** | Pg | **Pg** | **03 59 17.7** | **-2.0** |
| | 2.7nm,0.9s | | | | | | | |
| BTLS | | | | Lg | Lg | 04 00 09.0 | | |
| | 1.2nm,0.2s | | | | | | | |
| **KK31** | **Karatay Array** | **5.43** | **283** | ⇑Pg | **Pg** | **03 59 44.4** | **-3.6** |
| | 0.3nm,0.3s,baz=92,slow=15,SNR=4.5 | | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **04 00 35.8** | **+7.2** |
| | 0.4nm,0.5s,baz=33,slow=30,SNR=3.2 | | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 04 00 55.7 | | |
| | 0.5nm,0.4s,baz=92,slow=28,SNR=5.0 | | | | | | | |

*NEIC* ***15*** *04:20:17.3±1.3, 69.47N±0.02×144.29W±0.05, h4km±2km, Error ellipse: s-maj=3.6km s-min=2.7km az=166.0*
**AEIC 15 04:20:16.8**±1.5**, 69.45N**±0.02×**144.33W**±0.05**, h0**km±3km**,**

**ML2.9, ML2.9**/48(NEIC)**, Error ellipse: s-maj=3.4km s-min=2.6km az=169.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **51** | | Pg | 04 20 21.7 | -0.4 |
| **C27K** | **Jago River** | **0.28** | **51** | | Sg | 04 20 25.7 | 0.0 |
| **C26K** | **Camden Bay** | **0.51** | **337** | | Pg | 04 20 25.9 | -0.7 |
| C26K | | | | | Sg | 04 20 33.2 | 0.0 |
| **D25K** | **Kavik River** | **0.74** | **261** | | Pg | 04 20 30.6 | -0.3 |
| D25K | | | | | Sg | 04 20 41.7 | +1.3 |
| **D27M** | **Malcolm River** | **1.21** | **98** | | Pb | 04 20 40.8 | +0.2 |
| D27M | | | | | Sg | 04 20 55.5 | -0.1 |
| **C24K** | **Franklin Bluff** | **1.56** | **282** | | Sn | 04 21 06.2 | -0.3 |
| **E27K** | **Coleen River** | **1.61** | **141** | | Pn | 04 20 46.3 | -0.2 |
| E27K | | | | IAML | | 04 21 38.0 | |
| | comp=N,46nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.63** | **261** | | Pn | 04 20 46.4 | -0.2 |
| D24K | | | | | Sn | 04 21 08.1 | -0.1 |
| D24K | | | | IAML | | 04 21 30.5 | |
| | comp=E,151nm,1.0s | | | | | | |
| D24K | | | | IAML | | 04 21 33.7 | |
| | comp=N,60nm,1.1s | | | | | | |
| **F26K** | **Sheenjek River** | **1.77** | **178** | | Pn | 04 20 47.9 | -0.7 |
| F26K | | | | IAML | | 04 21 38.8 | |
| | comp=N,31nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **114** | | Pn | 04 20 50.4 | -0.4 |
| E28M | | | | IAML | | 04 21 46.5 | |
| | comp=E,40nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **1.93** | **195** | | Pn | 04 20 51.1 | +0.2 |
| F25K | | | | IAML | | 04 22 02.8 | |
| | comp=N,48nm,1.2s | | | | | | |
| **E24K** | **Your Creek** | **2.05** | **230** | | Pn | 04 20 52.6 | +0.1 |
| E24K | | | | IAML | | 04 22 06.7 | |
| | comp=E,93nm,1.2s | | | | | | |
| E24K | | | | IAML | | 04 22 09.2 | |
| | comp=N,74nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.05** | **249** | | Pn | 04 20 53.0 | +0.4 |
| **C23K** | **Itkillik River** | **2.23** | **283** | | Pn | 04 20 55.3 | +0.3 |
| **D23K** | **Nanushuk River** | **2.32** | **261** | | Pn | 04 20 56.3 | +0.1 |
| D23K | | | | IAML | | 04 22 16.7 | |
| | comp=N,90nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.34** | **216** | | Pn | 04 20 57.5 | +1.0 |
| F24K | | | | IAML | | 04 22 25.6 | |
| | comp=E,72nm,0.8s | | | | | | |
| **E23K** | **Chandalar** | **2.38** | **236** | | Pn | 04 20 58.4 | +1.3 |
| E23K | | | | IAML | | 04 22 16.6 | |
| | comp=E,91nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.47** | **136** | | Pn | 04 20 58.8 | +0.5 |
| F28M | | | | IAML | | 04 22 30.3 | |
| | comp=N,60nm,0.7s | | | | | | |
| F28M | | | | IAML | | 04 22 32.8 | |
| | comp=E,60nm,0.5s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.52** | **175** | | Pb | 04 21 01.1 | -1.8 |
| **E29M** | **Blow River** | **2.56** | **112** | | Pn | 04 20 59.7 | +0.2 |
| E29M | | | | IAML | | 04 22 32.3 | |
| | comp=E,73nm,1.1s | | | | | | |
| **G25K** | **Bearman Lake** | **2.78** | **195** | | Pb | 04 21 05.3 | -1.9 |
| **G27K** | **Doyon Strip** | **2.84** | **158** | | Pn | 04 21 05.2 | +1.9 |
| G27K | | | | IAML | | 04 22 50.0 | |
| | comp=N,26nm,1.1s | | | | | | |
| G27K | | | | IAML | | 04 22 50.2 | |
| | comp=E,28nm,1.6s | | | | | | |
| **G29M** | **Pine Creek** | **3.47** | **134** | | Pn | 04 21 13.3 | +1.3 |
| **B21K** | **Ikpikpuk River** | **3.62** | **278** | | Pn | 04 21 14.7 | +0.8 |
| **E21K** | **Killik River** | **3.63** | **258** | | Pn | 04 21 14.2 | +0.1 |
| **H24K** | **Noodor Dome** | **3.88** | **202** | | Pn | 04 21 18.9 | +1.3 |
| H24K | | | | IAML | | 04 23 07.2 | |
| | comp=N,33nm,1.0s | | | | | | |
| H24K | | | | IAML | | 04 23 08.2 | |
| | comp=E,34nm,1.8s | | | | | | |
| **H29M** | **Whitestone** | **3.95** | **142** | | Pn | 04 21 19.7 | +1.1 |
| **PRP** | **Porcupine Dome** | **3.98** | **187** | | Pn | 04 21 21.3 | +2.2 |
| PRP | | | | IAML | | 04 23 16.7 | |
| | comp=E,19nm,0.9s | | | | | | |

**IDC 15 04:31:38.7**±1.5**, 4.84N×122.26E, h0**km**, mb4.0**/4**, mbtmp4.0**/4**, Error ellipse: s-maj=206.1km s-min=21.2km az=63.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **27.35** | **155** | P | P | 04 37 25.4 | -0.3 |
| | 1.2nm,0.5s,baz=332,slow=10,SNR=32 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **30.53** | **159** | P | P | 04 37 54.5 | +0.4 |
| | 0.7nm,0.3s,baz=338,slow=7.5,SNR=10 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.15** | **327** | P | P | 04 41 06.3 | +0.5 |
| | 0.7nm,0.5s,baz=124,slow=8.4,SNR=10 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.44** | **329** | P | P | 04 41 35.3 | -1.0 |
| | 0.5nm,0.3s,baz=132,slow=6.6,SNR=1.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |

*UPA* ***15*** *04:34:37.1±2.0, 9.87N×85.03W, h43km±812km, MD4.4, MW4.8*
*UCR* ***15*** *04:34:41.9±0.8, 9.44N×84.50W, h10km±3km, MW4.3*
*IDC* ***15*** *04:34:42.9±4.6, 9.76N×84.24W, h0km, mb3.7/3, mbtmp3.7/3, MS3.2/5, Error ellipse: s-maj=148.6km s-min=13.2km az=27.0*
*CATAC* ***15*** *04:34:42.0±0.4, 9.41N×84.48W, h5km, ML4.0*
**ISC 15 04:34:41.8**±1.2**, 9.42N**±0.03×**84.51W**±0.02**, h6**km±9km**, n96,** σ1**813**/111**, mb3.4/3, MS3.1/4, 19C-4D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVQ2** | **Quepos** | **0.34** | **88** | *e*P | **Pg** | **04 34 48.7** | **+0.4** |
| SVQ2 | | | | *e*S | **Sg** | **04 34 54.0** | **+1.3** |
| **LLNJ** | **Naranjito** | **0.40** | **83** | *e*P | **Pg** | **04 34 50.0** | **+0.4** |
| LLNJ | | | | *e*S | **Sb** | **04 34 56.7** | **-1.1** |
| **TRB2** | **Turrubares** | **0.49** | **7** | ⇓*e*P | **Pg** | **04 34 51.0** | **-0.3** |
| **ACOS** | **Acosta** | **0.50** | **42** | ⇑*e*P | **Pg** | **04 34 51.3** | **-0.2** |
| **ABE2** | **San Pablo** | **0.53** | **58** | *e*P | **Pg** | **04 34 51.9** | **-0.1** |
| **LCR2** | **La Lucha 2** | **0.59** | **57** | *i*P | **Pg** | **04 34 52.7** | **-0.4** |
| LCR2 | | | | *i*S | **Sb** | **04 35 02.0** | **-1.3** |
| LCR2 | | | | IAML | | 04 35 02.7 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **0.59** | **57** | ⇑*e*P | **Pg** | **04 34 52.7** | **-0.4** |
| LCR2 | | | | *e*S | **Sg** | **04 35 01.0** | **+0.1** |
| **ARZA** | **Esparza** | **0.59** | **344** | *e*P | **Pg** | **04 34 53.0** | **-0.2** |
| ARZA | | | | *e*S | **Sb** | **04 35 01.8** | **-1.4** |
| **SANTA** | **Santa Ana** | **0.60** | **32** | *e*P | **Pg** | **04 34 53.0** | **-0.4** |
| **CBL1** | **Cabuya** | **0.60** | **286** | ⇑*e*P | **Pg** | **04 34 53.8** | **+0.4** |
| **BELE** | **Belen** | **0.63** | **30** | *e*P | **Pg** | **04 34 53.7** | **-0.3** |
| **AMPA** | **Desamparados** | **0.64** | **43** | *e*P | **Pg** | **04 34 54.2** | **0.0** |
| **LUJA** | **Lujan** | **0.66** | **40** | *e*P | **Pb** | **04 34 55.1** | **-0.7** |
| **SRA1** | **San Ramn** | **0.66** | **2** | ⇓*e*P | **Pg** | **04 34 54.0** | **-0.5** |
| **RAMO** | **San Ramon** | **0.66** | **3** | *e*P | **Pb** | **04 34 55.2** | **-0.7** |
| **SJS3** | **Mercedes San J** | **0.68** | **41** | *e*P | **Pg** | **04 34 54.6** | **-0.3** |
| **HDC** | **Heredia** | **0.69** | **34** | *e*P | **Pg** | **04 34 54.7** | **-0.4** |
| **HDC3** | **Heredia 3** | **0.69** | **34** | *i*P | **Pg** | **04 34 54.7** | **-0.5** |
| HDC3 | | | | *i*S | **Sb** | **04 35 04.9** | **-1.5** |
| HDC3 | | | | IAML | | 04 35 19.3 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **TRIO** | **Tres Rios** | **0.70** | **46** | *e*P | **Pg** | **04 34 54.6** | **-0.6** |
| **CORON** | **Coronado** | **0.74** | **42** | *e*P | **Pg** | **04 34 55.8** | **-0.2** |
| **REPA** | **Paraso** | **0.75** | **57** | ⇓*e*P | **Pb** | **04 34 56.5** | **-0.8** |
| **BUS1** | **Rivas** | **0.76** | **80** | ⇑*e*P | **Pg** | **04 34 55.7** | **-0.7** |
| **ZELE** | **Perez Zeledon** | **0.79** | **94** | ⇑*e*P | **Pg** | **04 34 56.2** | **-0.8** |
| **CVIMO** | **Finca Echandi** | **0.81** | **43** | ⇑*e*P | **Pg** | **04 34 57.0** | **-0.5** |
| **PCAYA** | **Pacayas** | **0.84** | **54** | *e*P | **Pg** | **04 34 57.7** | **-0.4** |
| **VICA** | **Volcano Irazu** | **0.86** | **49** | ⇑*e*P | **Pg** | **04 34 57.5** | **-0.8** |
| **RAFA** | **San Farael, Vo** | **0.87** | **52** | *i*P | **Pg** | **04 34 57.8** | **-0.7** |
| RAFA | | | | *i*S | **Sb** | **04 35 10.3** | **-1.2** |
| RAFA | | | | IAML | | 04 35 16.9 | |
| | comp=Z,55μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.87** | **52** | *e*P | **Pg** | **04 34 57.9** | **-0.7** |
| **VINA** | **Juan Vinas** | **0.88** | **58** | ⇑*e*P | **Pg** | **04 34 58.1** | **-0.8** |
| **OCHAL** | **Ojochal** | **0.91** | **111** | *i*P | **Pg** | **04 34 58.4** | **-0.9** |
| **VTLA** | **Turrialba Volc** | **0.92** | **51** | *e*P | **Pg** | **04 34 58.9** | **-0.7** |
| **CVTO** | **Turrialba Volc** | **0.93** | **51** | *e*P | **Pg** | **04 34 59.3** | **-0.4** |
| **TURIB** | **Turrialba** | **0.94** | **59** | *e*P | **Pg** | **04 34 58.9** | **-1.0** |
| **CVTV** | **Tajo** | **0.94** | **52** | ⇑*e*P | **Pg** | **04 34 59.4** | **-0.5** |
| **VTR0** | **Volcan Turrial** | **0.94** | **51** | *e*P | **Pn** | **04 35 00.9** | **-1.1** |
| **MTEVE** | **Monteverde** | **0.95** | **340** | *e*P | **Pb** | **04 35 00.0** | **-0.7** |
| **VTCV** | **VTCV, Calle Va** | **0.95** | **54** | ⇑*e*P | **Pg** | **04 34 59.2** | **-0.8** |
| **VERB** | **Verbena** | **0.95** | **57** | ⇑*e*P | **Pg** | **04 34 59.5** | **-0.7** |
| **SOCE** | **Pocosol** | **0.96** | **353** | *i*P | **Pg** | **04 34 59.8** | **-0.5** |
| SOCE | | | | *i*S | **Sb** | **04 35 13.9** | **-0.1** |
| **SOCE** | **Pocosol** | **0.96** | **353** | *e*P | **Pg** | **04 34 59.6** | **-0.7** |
| **JTS** | **Las Juntas de** | **0.97** | **333** | Pg | **Pg** | **04 34 59.2** | **-1.2** |
| | comp=Z,88nm,0.3s,baz=357,slow=9.0,SNR=169 | | | | | | |
| JTS | | | | Lg | Lg | 04 35 12.5 | |
| | comp=Z,153nm,0.3s,baz=311,slow=19,SNR=8.4 | | | | | | |
| **JTS** | **Las Juntas de** | **0.97** | **333** | ⇑*e*P | **Pg** | **04 34 59.1** | **-1.4** |
| **RVSTA** | **Santa Teresita** | **1.01** | **57** | *e*P | **Pg** | **04 35 00.2** | **-1.0** |
| **ARE1** | **Arenal 1** | **1.05** | **349** | *e*P | **Pg** | **04 35 01.3** | **-0.8** |
| **VACR** | **Volcan Arenal** | **1.06** | **351** | *e*P | **Pg** | **04 35 01.4** | **-0.7** |
| **INDI** | **Punta indio, G** | **1.08** | **294** | *i*P | **Pg** | **04 35 01.3** | **-1.2** |
| INDI | | | | *i*S | **Sn** | **04 35 17.5** | **-1.3** |
| INDI | | | | IAML | | 04 35 24.2 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **EDPN** | **Palmar Norte** | **1.13** | **114** | *e*P | **Pb** | **04 35 01.9** | **-1.9** |
| **LCOCO** | **El Coco** | **1.14** | **55** | *e*P | **Pb** | **04 35 02.7** | **-1.3** |
| **NICO** | **Nicoya** | **1.17** | **307** | *e*P | **Pb** | **04 35 03.0** | **-1.4** |
| **BURE** | **Buenos Aires** | **1.18** | **102** | *e*P | **Pb** | **04 35 03.1** | **-1.6** |
| **IRES** | **Siquirres** | **1.19** | **56** | *e*P | **Pb** | **04 35 03.7** | **-1.2** |
| **EDBA** | **Buenos Aires** | **1.24** | **102** | *e*P | **Pn** | **04 35 03.6** | **-2.2** |
| **DRK0** | **Durika** | **1.25** | **97** | *i*P | **Pn** | **04 35 04.2** | **-1.9** |
| DRK0 | | | | IAML | | 04 35 22.2 | |
| | comp=Z,18μm,1.0s | | | | | | |
| DRK0 | | | | *i*S | **Sg** | **04 35 22.3** | **+0.1** |
| **DRK0** | **Durika** | **1.25** | **97** | ⇑*e*P | **Pn** | **04 35 03.9** | **-2.2** |
| **COVE** | **Coope Vega, Sa** | **1.29** | **5** | *i*S | **Sn** | **04 35 26.4** | **+2.2** |
| **SACU** | **Santa Cruz** | **1.35** | **308** | *e*P | **Pn** | **04 35 06.1** | **-1.2** |
| **TENO** | **El Achiote** | **1.35** | **340** | *e*P | **Pn** | **04 35 05.7** | **-1.8** |
| **EDP2** | **Potrero Grande** | **1.37** | **107** | *e*P | **Pn** | **04 35 06.6** | **-1.0** |
| **CUI** | **Cuipilapa** | **1.39** | **332** | ⇑*e*P | **Pn** | **04 35 06.5** | **-1.4** |
| **COLC** | **Colonia** | **1.41** | **331** | ⇑*e*P | **Pn** | **04 35 06.8** | **-1.3** |
| **DELF** | **Filadelfia** | **1.45** | **315** | *e*P | **Pn** | **04 35 08.1** | **-0.6** |
| **VERA** | **Finca Concepci** | **1.47** | **346** | *e*P | **Pn** | **04 35 07.9** | **-1.0** |
| **PTJ1** | **Puerto Jimnez** | **1.48** | **126** | *i*S | **Pn** | **04 35 08.9** | **-0.1** |
| **EDAD** | **Golfito** | **1.53** | **120** | *e*P | **Pn** | **04 35 08.0** | **-1.8** |
| **ALIBA** | **Liberia Airpor** | **1.55** | **319** | ⇑*e*P | **Pb** | **04 35 10.4** | **-0.6** |
| **GPS2** | **Hotel Rincn d** | **1.56** | **328** | ⇓*e*P | **Pn** | **04 35 09.5** | **-0.8** |
| **GPS3** | **Bodega del ICE** | **1.57** | **327** | *e*P | **Pb** | **04 35 10.7** | **-0.7** |
| **VRLE** | **La Escondida,** | **1.60** | **328** | ⇑*e*P | **Pn** | **04 35 09.7** | **-1.1** |
| **VORI** | **VORI** | **1.61** | **329** | *e*P | **Pn** | **04 35 10.2** | **-0.9** |
| **BRIBI** | **Bribri** | **1.65** | **83** | ⇑*e*P | **Pb** | **04 35 12.4** | **-0.2** |
| **BRU2** | **Volcan** | **1.90** | **109** | *i*P | **Pn** | **04 35 14.5** | **-0.4** |
| BRU2 | | | | *i*S | **Sg** | **04 35 43.1** | **+0.2** |
| BRU2 | | | | IAML | | 04 36 03.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.90** | **109** | *e*P | **Pb** | **04 35 16.1** | **-0.9** |
| BRU2 | | | | *e*S | **Sg** | **04 35 47.0** | **+4.1** |
| **BRU2** | **Volcan** | **1.90** | **109** | *e*P | **Pn** | **04 35 14.3** | **-0.6** |
| **LCRUZ** | **La Cruz** | **1.98** | **326** | *e*P | **Pb** | **04 35 16.7** | **-1.7** |
| **CNI2** | **El Empalme, Bo** | **2.01** | **90** | *e*P | **Pn** | **04 35 16.3** | **0.0** |
| CNI2 | | | | *e*S | **Sb** | **04 35 44.0** | **-0.1** |
| **PTPM** | **Petroterminale** | **2.01** | **127** | *e*P | **Pb** | **04 35 18.0** | **-0.8** |
| PTPM | | | | *e*S | **Sg** | **04 35 48.7** | **+2.2** |
| **BCO2** | **Palmira** | **2.07** | **110** | *e*P | **Pn** | **04 35 17.7** | **+0.4** |
| BCO2 | | | | *e*S | **Sg** | **04 35 49.1** | **+0.6** |
| **DVD** | **David** | **2.25** | **116** | *e*P | **Pb** | **04 35 21.6** | **-1.3** |
| DVD | | | | *e*S | **Sg** | **04 35 55.8** | **+1.5** |
| **JAPN** | **Al SSO del Vol** | **2.39** | **331** | *i*P | **Pb** | **04 35 23.6** | **-1.7** |
| JAPN | | | | IAML | | 04 35 54.0 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **2.61** | **345** | *i*P | **Pn** | **04 35 24.9** | **+0.2** |
| ACON | | | | *i*S | **Sb** | **04 36 01.7** | **+0.2** |
| ACON | | | | IAML | | 04 36 10.6 | |
| | comp=Z,660nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **2.61** | **345** | ⇓*e*P | **Pn** | **04 35 24.5** | **-0.1** |
| **BLUN** | **Bluefields** | **2.67** | **16** | *i*P | **Pn** | **04 35 26.0** | **+0.6** |
| BLUN | | | | *i*S | **Sb** | **04 36 00.8** | **-2.2** |
| BLUN | | | | IAML | | 04 36 08.5 | |
| | comp=Z,400nm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **2.76** | **4** | *i*P | **Pn** | **04 35 27.3** | **+0.6** |
| ESPN | | | | *i*S | **Sn** | **04 36 01.0** | **+0.6** |
| ESPN | | | | IAML | | 04 36 16.2 | |
| | comp=Z,640nm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **2.76** | **4** | *e*P | **Pn** | **04 35 27.3** | **+0.6** |
| **BOAB** | **BOACO BROADBAN** | **3.22** | **339** | *i*P | **Pn** | **04 35 34.9** | **+1.9** |
| BOAB | | | | *i*S | **Sb** | **04 36 18.3** | **-0.6** |
| BOAB | | | | IAML | | 04 36 36.6 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **3.42** | **323** | *i*P | **Pn** | **04 35 37.7** | **+1.9** |
| COPN | | | | IAML | | 04 36 57.9 | |
| | comp=Z,90nm,1.0s | | | | | | |
| **MACN** | **El Madrono** | **3.70** | **325** | *i*P | **Pn** | **04 35 40.8** | **+1.2** |
| MACN | | | | IAML | | 04 35 48.5 | |
| | comp=Z,62nm,1.0s | | | | | | |
| **STIA3** | **Santiago, Vera** | **3.73** | **110** | *e*P | **Pn** | **04 35 40.8** | **+0.7** |
| **SDV** | **Santo Domingo** | **13.71** | **91** | LR | LR | 04 43 17.9 | |
| | comp=Z,64nm,20.8s,baz=262,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **26.73** | **320** | P | **P** | **04 40 23.9** | **+1.4** |
| | comp=Z,0.4nm,0.8s,baz=145,slow=9.6,SNR=3.4 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **30.25** | **147** | LR | LR | 04 53 32.7 | |
| | comp=Z,28nm,20.3s,baz=256,slow=37 | | | | | | |
| **MDP** | **Montagnes des** | **31.89** | **95** | LR | LR | 04 57 35.8 | |
| | comp=Z,32nm,18.7s,baz=318,slow=43 | | | | | | |
| **PFO** | **Pinyon Fl

**ILAR Eielson Array 89.64 13** P **P** **04 58 25.7 0.0**
comp=Z,0.2nm,0.4s,baz=216,slow=5.2,SNR=5.8
comp=Z,0.2nm,0.4s
**KSCO Kaye Shedlock' 92.88 49** P **P** **04 58 41.4 -0.1**
**ARCES ARCESS Array B 130.22 349** PKP **PKiKP** **05 04 36.3 +0.1**
comp=Z,0.6nm,0.5s,baz=20,slow=2.9,SNR=5.0

**IDC 15 04:59:14.6±3.1, 54°.16N×86°.62E, h0km, mbtmp2.9/2, ML2.5/2, Error ellipse: s-maj=24.2km s-min=15.4km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.08** | **260** | I | I | 05 05 10.0 | |
| | baz=80,slow=314,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.08** | **260** | Pg | Pg | 04 59 34.2 | -1.1 |
| | 0.6nm,0.3s,baz=74,slow=16,SNR=7.4 | | | | | | |
| ZALV | | | | Lg | Lg | 04 59 51.2 | |
| | 1.6nm,0.3s,baz=77,slow=27,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.09** | **238** | Pn | Pn | 05 00 46.3 | +0.6 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=4.3 | | | | | | |
| KURBB | | | | Lg | Lg | 05 02 26.5 | |
| | baz=61,slow=32,SNR=1.7 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.87** | **202** | Pn | Pn | 05 01 11.5 | +1.3 |
| | 0.1nm,0.3s,baz=27,slow=14,SNR=2.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC **15** 05:18:36.5±1.4, 13°.93N×145°.27E, h0km, mb3.7/7, mbtmp3.7/7, Error ellipse: s-maj=54.5km s-min=23.1km az=90.0*
**ISC 15 05:18:48.5±1.4, 13°.8N±0°.2×145°.3E±0°.4, h100km, n13, σ0s.57/7, mb3.8/7, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H11S3** | **WAKE ISLAND Hy** | **21.07** | **74** | T | T | 05 45 43.1 | |
| | baz=261 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.08** | **74** | T | T | 05 45 45.5 | |
| | baz=261 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.08** | **74** | T | T | 05 45 44.3 | |
| | baz=261 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.48** | **71** | T | T | 05 46 36.0 | |
| | baz=258,slow=76 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.49** | **71** | T | T | 05 46 36.9 | |
| | baz=258 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.50** | **71** | T | T | 05 46 46.2 | |
| | baz=258,slow=76 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.26** | **198** | P | **P** | **05 25 33.6** | **-0.1** |
| | 0.8nm,0.5s,baz=17,slow=9.1,SNR=6.7 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **38.91** | **197** | P | **P** | **05 26 04.8** | **+0.1** |
| | 0.5nm,0.7s,baz=12,slow=11,SNR=2.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.59** | **316** | P | **P** | **05 28 54.5** | **-1.0** |
| | 0.4nm,0.5s,baz=85,slow=7.1,SNR=2.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.65** | **324** | P | **P** | **05 28 56.0** | **+0.3** |
| | 0.3nm,0.3s,baz=104,slow=4.6,SNR=1.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.69** | **320** | P | **P** | **05 29 16.4** | **+0.5** |
| | 0.5nm,0.5s,baz=104,slow=7.0,SNR=5.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **68.17** | **25** | P | **P** | **05 29 37.7** | **-0.1** |
| | 0.2nm,0.5s,baz=254,slow=5.4,SNR=4.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.98** | **322** | P | **P** | **05 29 49.4** | **+0.2** |
| | 0.8nm,0.4s,baz=108,slow=5.5,SNR=5.4 | | | | | | |
| | 0.8nm,0.4s | | | | | | |

**IDC 15 05:29:36.2±3.5, 54°.32N×86°.77E, h0km, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=29.9km s-min=18.0km az=52.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.21** | **253** | I | I | 05 37 20.4 | |
| | baz=70,slow=316,SNR=9.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.21** | **253** | Pg | Pg | 05 29 57.6 | -1.6 |
| | 0.3nm,0.3s,baz=71,slow=18,SNR=5.7 | | | | | | |
| ZALV | | | | Lg | Lg | 05 30 15.9 | |
| | 1.0nm,0.3s,baz=75,slow=30,SNR=8.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.25** | **237** | Pn | Pn | 05 31 10.5 | +0.9 |
| | baz=55,slow=13,SNR=4.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.06** | **202** | Pn | Pn | 05 31 35.7 | +1.2 |
| | 0.1nm,0.3s,baz=24,slow=14,SNR=2.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**IDC 15 05:31:31.2±293.0, 37°.98N×116°.04W, h0km, Error ellipse: s-maj=116.5km s-min=89.9km az=15.0, Southern Nevada**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I57US** | **PINON FLAT INF** | **4.38** | **185** | I | I | 05 59 20.0 | |
| | baz=5.9,slow=317,SNR=1.0 | | | | | | |
| **I56US** | **NEWPORT INFRASI** | **0.31** | **356** | I | I | 06 31 00.0 | |
| | baz=180,slow=312,SNR=1.0 | | | | | | |
| **I53US** | **FAIRBANKS INFR** | **32.77** | **335** | I | I | 08 53 20.0 | |
| | baz=130,slow=330,SNR=2.6 | | | | | | |

*PRE **15** 05:39:16.5±2.0, 21°.52S×33°.76E, h10km, ML4.1*
*IDC **15** 05:39:18.6±0.6, 21°.61S×33°.51E, h0km, mb4.1/16, mbtmp4.2/21, ML4.4/5, MS3.7/15, Error ellipse: s-maj=17.8km s-min=16.0km az=98.0*
*NEIC **15** 05:39:20.1±2.6, 21°.67S±0°.08×33°.5E±0°.1, h10km±1km, mb4.5/8, Error ellipse: s-maj=16.1km s-min=13.8km az=70.0*
*BUL **15** 05:39:24.0±1.2, 21°.82S×33°.42E, h10km, MD3.3*
**ISC 15 05:39:20.4±0.5, 21°.62S±0°.04×33°.41E±0°.05, h13km, n100, σ2s.20/127, mb4.2/23, MS3.7/11, 10C-2D, Mozambique**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHIPN** | **CHIPINGE** | **1.56** | **333** | ↑*i* P | **Pn** | **05 39 47.5** | **-0.3** |
| CHIPN | | | | *e*S | **Sn** | **05 40 07.7** | **-0.2** |
| **CHIPN** | **CHIPINGE** | **1.56** | **333** | *i* P | **Pn** | **05 39 48.6** | **+0.8** |
| CHIPN | | | | *i* S | **Sn** | **05 40 08.8** | **+0.9** |
| **CHIPN** | **CHIPINGE** | **1.56** | **333** | *i* P | **Pn** | **05 39 48.6** | **+0.8** |
| CHIPN | | | | *i* S | **Sn** | **05 40 08.8** | **+0.9** |
| **MOPA** | **Mopani** | **2.65** | **224** | *e*P | **Pn** | **05 40 04.4** | **+1.6** |
| MOPA | | | | *e*S | **Sn** | **05 40 38.8** | **+4.1** |
| MOPA | | | | IAML | | 05 40 50.9 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **MOPA** | **Mopani** | **2.65** | **224** | *i* P | **Pn** | **05 40 05.3** | **+2.6** |
| MOPA | | | | *i* S | **Sn** | **05 40 37.2** | **+2.4** |
| **MOPA** | **Mopani** | **2.65** | **224** | *i* P | **Pn** | **05 40 05.3** | **+2.6** |
| MOPA | | | | *i* S | **Sn** | **05 40 37.2** | **+2.4** |
| **MPHEP** | **Siloam, Limpop** | **3.25** | **246** | *e*P | **Pn** | **05 40 13.5** | **+2.3** |
| MPHEP | | | | *e*S | **Sn** | **05 40 56.6** | **+6.7** |
| MPHEP | | | | IAML | | 05 41 08.7 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **MUSN** | **Musina, Limpop** | **3.36** | **258** | *e*P | **Pn** | **05 40 14.6** | **+2.0** |
| MUSN | | | | *e*S | **Sn** | **05 40 57.9** | **+5.5** |
| MUSN | | | | IAML | | 05 41 10.9 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **MUSN** | **Musina, Limpop** | **3.36** | **258** | *i* P | **Pn** | **05 40 15.7** | **+3.0** |
| MUSN | | | | *i* S | **Sn** | **05 40 53.5** | **+1.1** |
| **MUSN** | **Musina, Limpop** | **3.36** | **258** | *i* P | **Pn** | **05 40 15.7** | **+3.0** |
| MUSN | | | | *i* S | **Sn** | **05 40 53.5** | **+1.1** |
| **PILG** | **Pilgrimsrest,** | **4.12** | **216** | *e*P | **Pn** | **05 40 24.8** | **+1.5** |
| PILG | | | | *e*S | **Sn** | **05 41 15.3** | **+3.8** |
| PILG | | | | IAML | | 05 41 44.0 | |
| | comp=Z,388nm,0.5s | | | | | | |
| **MATP** | **Matopo** | **4.74** | **284** | Pn | **Pn** | **05 40 34.1** | **+2.5** |
| | comp=Z,4.6nm,0.3s,baz=90,slow=14,SNR=86 | | | | | | |
| MATP | | | | Sn | **Sn** | **05 41 27.8** | **+1.3** |
| | comp=Z,20nm,0.3s,baz=197,slow=22,SNR=11 | | | | | | |
| | comp=Z,27nm,0.5s | | | | | | |
| **MATP** | **Matopo** | **4.74** | **284** | *i* P | **Pn** | **05 40 36.1** | **+4.4** |
| MATP | | | | *i* S | **Sn** | **05 41 28.0** | **+1.5** |
| **MATP** | **Matopo** | **4.74** | **284** | *i* P | **Pn** | **05 40 36.1** | **+4.4** |
| MATP | | | | *i* S | **Sn** | **05 41 28.0** | **+1.5** |
| **CRLN** | **Carolina, Mapu** | **5.34** | **215** | *e*P | **Pn** | **05 40 42.1** | **+2.1** |
| CRLN | | | | *e*S | **Sn** | **05 41 42.5** | **+1.0** |
| CRLN | | | | IAML | | 05 42 35.2 | |
| | comp=Z,117nm,0.8s | | | | | | |
| **TEMBE** | **Tembe Elephant** | **5.47** | **189** | *e*P | **Pn** | **05 40 43.5** | **+2.0** |
| TEMBE | | | | *e*S | **Sn** | **05 41 42.9** | **-1.5** |
| TEMBE | | | | IAML | | 05 42 31.0 | |
| | comp=Z,317nm,0.7s | | | | | | |
| **LEPH** | **Lephalale, Lim** | **5.63** | **246** | *e*P | **Pn** | **05 40 45.6** | **+1.6** |
| LEPH | | | | *e*S | **Sn** | **05 41 51.2** | **+2.6** |
| LEPH | | | | IAML | | 05 42 24.1 | |
| | comp=Z,614nm,0.6s | | | | | | |
| **POGA** | **Pongola** | **5.90** | **195** | | **Pn** | **05 40 48.9** | **+1.4** |
| **POGA** | **Pongola** | **5.90** | **195** | *e*P | **Pn** | **05 40 49.1** | **+1.5** |
| POGA | | | | *e*S | **Sn** | **05 41 55.1** | **0.0** |
| POGA | | | | IAML | | 05 42 56.4 | |
| | comp=Z,185nm,0.6s | | | | | | |
| **KRI** | **Karoi** | **5.96** | **322** | ↑*i* P | **Pn** | **05 40 47.7** | **-0.8** |
| KRI | | | | *e*S | **Sn** | **05 41 54.6** | **-2.3** |
| **KRI** | **Karoi** | **5.96** | **322** | *i* P | **Pn** | **05 40 45.2** | **-3.3** |
| KRI | | | | *i* S | Sn | 05 41 44.3 | -13 |
| **KRI** | **Karoi** | **5.96** | **322** | *i* P | **Pn** | **05 40 45.2** | **-3.3** |
| KRI | | | | *i* S | Sn | 05 41 44.3 | -13 |
| **MTLB** | **Matlabas, Limp** | **6.25** | **248** | *e*P | **Pn** | **05 40 54.4** | **+1.9** |
| MTLB | | | | *e*S | **Sn** | **05 42 05.2** | **+1.3** |
| MTLB | | | | IAML | | 05 42 52.1 | |
| | comp=Z,543nm,0.8s | | | | | | |
| **NHAM** | **Northam, North** | **6.49** | **238** | *e*P | **Pn** | **05 40 57.9** | **+2.3** |
| NHAM | | | | *e*S | **Sn** | **05 42 13.2** | **+3.5** |
| NHAM | | | | IAML | | 05 42 55.6 | |
| | comp=Z,192nm,0.5s | | | | | | |
| **NWCL** | **Newcastle** | **6.87** | **207** | ↓*i* P | **Pn** | **05 41 01.8** | **+0.8** |
| NWCL | | | | *e*S | **Sn** | **05 42 20.9** | **+1.8** |
| NWCL | | | | IAML | | 05 43 09.7 | |
| | comp=Z,155nm,0.5s | | | | | | |
| **PRYS** | **Parys** | **7.63** | **225** | *e*P | **Pn** | **05 41 12.2** | **+0.7** |
| PRYS | | | | *e*S | **Sn** | **05 42 38.0** | **+0.1** |
| PRYS | | | | IAML | | 05 43 34.7 | |
| | comp=Z,135nm,0.6s | | | | | | |
| **LBTB** | **Lobatse** | **7.93** | **243** | Pn | **Pn** | **05 41 16.6** | **+1.1** |
| | comp=Z,6.5nm,0.3s,baz=55,slow=13,SNR=62 | | | | | | |
| LBTB | | | | Sn | **Sn** | **05 42 43.9** | **-1.3** |
| | comp=Z,11nm,0.3s,baz=147,slow=16,SNR=7.0 | | | | | | |
| LBTB | | | | Lg | Lg | 05 43 24.7 | |
| | comp=Z,16nm,0.3s,baz=334,slow=23,SNR=12 | | | | | | |
| LBTB | | | | LR | LR | 05 44 22.3 | |
| | comp=Z,593nm,18.7s,baz=66,slow=38 | | | | | | |
| | comp=Z,91nm,0.7s | | | | | | |
| **LSZ** | **Lusaka** | **8.02** | **321** | | **Pn** | **05 41 15.8** | **-1.0** |
| **PMBG** | **Pietermaritzbu** | **8.28** | **198** | *e*P | **Pn** | **05 41 21.1** | **+0.9** |
| PMBG | | | | *e*S | **Sn** | **05 42 51.8** | **-1.8** |
| PMBG | | | | IAML | | 05 43 10.7 | |
| | comp=Z,51nm,0.6s | | | | | | |
| **SNKL** | **Senekal, Frees** | **8.37** | **217** | ↓*i* P | **Pn** | **05 41 22.2** | **+0.7** |
| SNKL | | | | *e*S | **Sn** | **05 42 55.2** | **-0.8** |
| SNKL | | | | IAML | | 05 44 02.0 | |
| | comp=Z,253nm,0.8s | | | | | | |
| **SWZ** | **Schweizer** | **9.21** | **231** | *e*P | **Pn** | **05 41 34.7** | **+1.7** |
| SWZ | | | | *e*S | **Sn** | **05 43 17.4** | **+0.7** |
| SWZ | | | | IAML | | 05 44 23.1 | |
| | comp=Z,86nm,0.7s | | | | | | |
| **KSTD** | **Kokstad** | **9.68** | **201** | *e*P | **Pn** | **05 41 41.4** | **+1.8** |
| **BOSA** | **Boshof** | **10.14** | **225** | Pn | **Pn** | **05 41 44.2** | **-1.7** |
| **BOSA** | **Boshof** | **10.14** | **225** | Pn | **Pn** | **05 41 45.3** | **-0.6** |
| | comp=Z,2.7nm,0.3s,baz=50,slow=12,SNR=58 | | | | | | |
| BOSA | | | | Sn | **Sn** | **05 43 34.2** | **-5.4** |
| | comp=Z,3.5nm,0.3s,baz=285,slow=22,SNR=5.3 | | | | | | |
| BOSA | | | | Lg | Lg | 05 44 36.6 | |
| | comp=Z,5.1nm,0.3s,baz=330,slow=18,SNR=4.3 | | | | | | |
| BOSA | | | | LR | LR | 05 46 08.3 | |
| | comp=Z,258nm,19.1s,baz=54,slow=40 | | | | | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **HVD** | **Gariep Dam** | **11.42** | **217** | *e*P | **Pn** | **05 42 03.9** | **+0.6** |
| **VOI** | **Vohitsoka** | **12.44** | **94** | Pn | **Pn** | **05 42 15.1** | **-2.3** |
| **VOI** | **Vohitsoka** | **12.44** | **94** | *e*P | Pn | 05 42 09.8 | -7.6 |
| VOI | | | | *e*S | Sn | 05 44 16.3 | -20 |
| **UPI** | **Upington** | **12.90** | **236** | *e*P | **Pn** | **05 42 24.0** | **+0.5** |
| UPI | | | | *e*S | **Sn** | **05 44 43.4** | **-3.6** |
| UPI | | | | IAML | | 05 46 28.6 | |
| | comp=Z,50nm,0.6s | | | | | | |
| **FOMA** | **Nahampoana Res** | **12.91** | **108** | Pn | **Pn** | **05 42 21.7** | **-1.9** |
| **SOE** | **Somerset East** | **13.06** | **211** | Pn | **Pn** | **05 42 25.8** | **+0.1** |
| **SOE** | **Somerset East** | **13.06** | **211** | *e*P | **Pn** | **05 42 26.1** | **+0.3** |
| **GRHM** | **Grahamstown, E** | **13.17** | **207** | Pn | **Pn** | **05 42 26.1** | **-1.1** |
| **GRHM** | **Grahamstown, E** | **13.17** | **207** | *e*P | **Pn** | **05 42 30.7** | **+3.5** |
| **ABPO** | **Ambohimpanom** | **13.22** | **81** | Pn | **Pn** | **05 42 25.0** | **-3.1** |
| **GRAF** | **Camdeboo Natio** | **13.25** | **215** | *e*P | **Pn** | **05 42 29.0** | **+0.7** |
| **KEIM** | **Keimoes** | **13.28** | **235** | *e*P | **Pn** | **05 42 31.9** | **+3.1** |
| **OPO** | **Ambohidratompo** | **13.30** | **79** | Pn | **Pn** | **05 42 29.7** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=258,slow=15,SNR=10 | | | | | | |
| OPO | | | | Sn | Sn | 05 44 44.4 | -13 |
| | comp=Z,0.2nm,0.3s,baz=145,slow=17,SNR=4.2 | | | | | | |
| | comp=Z,3.6nm,0.4s | | | | | | |
| **AUGR** | **Augrabies** | **13.72** | **237** | *e*P | **Pn** | **05 42 35.9** | **+1.3** |
| **BRAK** | **Brakfontein** | **13.80** | **221** | *e*P | **Pn** | **05 42 34.8** | **-0.9** |
| **ROOI** | **Rooidraai Farm** | **13.93** | **217** | *e*P | **Pn** | **05 42 36.8** | **-0.8** |
| **GRAN** | **Grantham** | **14.60** | **221** | *e*P | **Pn** | **05 42 45.7** | **-1.1** |
| **FRAZ** | **Fraserburg** | **14.82** | **244** | *e*P | **Pn** | **05 42 48.8** | **-1.1** |
| **TSUM** | **Tsumeb** | **15.03** | **276** | Pn | **Pn** | **05 42 50.0** | **-2.7** |
| TSUM | | | | IAmb | IAmb | 05 43 06.9 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **TSUM** | **Tsumeb** | **15.03** | **276** | Pn | **Pn** | **05 42 50.9** | **-1.8** |
| | comp=Z,0.9nm,0.3s,baz=113,slow=9.9,SNR=12 | | | | | | |
| TSUM | | | | Sn | **Sn** | **05 45 31.1** | **-8.1** |
| | comp=Z,1.3nm,0.3s,baz=1.5,slow=22,SNR=3.9 | | | | | | |
| TSUM | | | | Lg | Lg | 05 47 09.2 | |
| | comp=Z,1.6nm,0.3s,baz=7.2,slow=20,SNR=4.3 | | | | | | |
| TSUM | | | | LR | LR | 05 48 49.8 | |
| | comp=Z,440nm,18.5s,baz=98,slow=38 | | | | | | |
| **WIN** | **Windhoek** | **15.14** | **263** | Pn | **Pn** | **05 42 55.0** | **+0.8** |
| WIN | | | | IAmb | IAmb | 05 43 04.8 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **MERW** | **Merweville** | **15.25** | **221** | *e*P | **Pn** | **05 42 54.5** | **-1.0** |
| **SUR** | **Sutherland** | **15.50** | **224** | Pn | **Pn** | **05 42 58.3** | **-0.7** |
| SUR | | | | IAmb | IAmb | 05 43 10.8 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **SUR** | **Sutherland** | **15.50** | **224** | Pn | **Pn** | **05 42 58.2** | **-0.7** |
| | comp=Z,2.3nm,0.3s,baz=48,slow=14,SNR=21 | | | | | | |
| SUR | | | | Sn | **Sn** | **05 45 43.9** | **-6.8** |
| | comp=Z,0.7nm,0.3s,baz=316,slow=21,SNR=3.0 | | | | | | |
| SUR | | | | Lg | Lg | 05 47 23.2 | |
| | comp=Z,1.9nm,0.3s,baz=317,slow=11,SNR=5.0 | | | | | | |
| SUR | | | | LR | LR | 05 49 01.8 | |
| | comp=Z,332nm,19.3s,baz=48,slow=37 | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| **CVNA** | **Calvinia** | **15.65** | **228** | *e*P | **Pn** | **05 43 02.1** | **+1.3** |
| **KOMG** | **Komaggas** | **16.48** | **237** | *e*P | **Pn** | **05 43 12.9** | **+1.5** |
| **PRTV** | **Porterville,We** | **17.06** | **225** | *e*P | **Pn** | **05 43 18.8** | **+0.2** |
| **CER** | **Ceres** | **17.11** | **224** | *e*P | **Pn** | **05 43 20.8** | **+1.4** |
| **ELIM** | **Elim** | **17.65** | **220** | *e*P | **Pn** | **05 43 27.4** | **+1.4** |
| **MBAR** | **Mbarara** | **21.05** | **353** | P | **P** | **05 44 08.2** | **+3.7** |
| | comp=Z,2.7nm,0.2s,baz=169,slow=16,SNR=5.4 | | | | | | |
| MBAR | | | | LR | LR | 05 52 23.6 | |
| | comp=Z,106nm,19.1s,baz=150,slow=37 | | | | | | |
| **FURI** | **Furi** | **30.77** | **10** | LR | LR | 05 58 01.0 | |
| | comp=Z,30nm,22.0s,baz=140,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.51** | **315** | P | **P** | **05 47 48.4** | **+0.7** |
| | comp=Z,6.1nm,1.0s,baz=114,slow=9.1,SNR=24 | | | | | | |
| TORD | | | | PP | **PP** | **05 49 36.2** | **-1.0** |
| | comp=Z,2.1nm,0.8s,baz=129,slow=10.0,SNR=5.6 | | | | | | |
| TORD | | | | LR | LR | 06 07 42.5 | |
| | comp=Z,133nm,19.2s,baz=154,slow=37 | | | | | | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **KIC** | **Kosan Boka** | **46.61** | **302** | ↑*e*P | **P** | **05 47 49.3** | **+0.7** |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **LIC** | **Lamto** | **46.75** | **302** | ↑*e*P | **P** | **05 47 49.4** | **-0.3** |
| | comp=Z,11nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro** | **46.89** | **303** | P | **P** | **05 47 51.5** | **+0.8** |
| **DBIC** | **Dimbokro** | **46.89** | **303** | P | **P** | **05 47 51.6** | **+0.8** |
| | comp=Z,13nm,1.0s,baz=124,slow=9.2,SNR=8.4 | | | | | | |
| DBIC | | | | LR | LR | 06 06 03.9 | |
| | comp=Z,89nm,21.1s,baz=133,slow=34 | | | | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **TIC** | **Toumodi** | **47.00** | **302** | ↑*e*P | **P** | **05 47 52.6** | **+0.9** |
| | comp=Z,21nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **49.55** | **166** | P | **P** | **05 48 11.8** | **+1.2** |
| | comp=Z,6.3nm,1.0s,baz=315,slow=10.0,SNR=2.9 | | | | | | |
| MAW | | | | PP | **PP** | **05 50 01.9** | **-2.8** |
| | comp=Z,23nm,0.2s,baz=45,slow=6.9,SNR=96 | | | | | | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **TROLL** | **Troll, Antarti** | **53.39** | **191** | ↑P | **P** | **05 48 41.1** | **+1.6** |
| | comp=Z,114nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **54.20** | **193** | P | **P** | **05 48 46.6** | **+1.3** |
| **SNAA** | **Sanae** | **54.20** | **193** | ↑P | **P** | **05 48 46.7** | **+1.3** |
| | comp=Z,11nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **54.20** | **193** | P | **P** | **05 48 46.4** | **+1.1** |
| | comp=Z,1.2nm,0.9s,baz=67,slow=7.7,SNR=8.5 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **54.72** | **195** | ↑P | **P** | **05 48 50.1** | **+1.1** |
| | comp=Z,1.5nm,0.6s,baz=45,slow=6.1 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **54.75** | **196** | ↑P | **P** | **05 48 50.5** | **+1.2** |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **55.49** | **196** | ↑P | **P** | **05 48 55.2** | **+0.5** |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **BBTS** | **Babate** | **60.83** | **302** | LR | LR | 06 15 23.5 | |
| | comp=Z,37nm,18.4s,baz=325,slow=36 | | | | | | |
| **BRTR** | **Keskin Array B** | **61.03** | **0** | P | **P** | **05 49 34.2** | **+0.4** |
| | comp=Z,1.1nm,0.8s,baz=184,slow=8.4,SNR=5.9 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **64.43** | **193** | P | **P** | **05 49 56.8** | **+0.9** |
| **MDT** | **Midelt** | **65.18** | **325** | LR | LR | 06 19 49.8 | |
| | comp=Z,132nm,18.2s,baz=153,slow=37 | | | | | | |
| **KBZ** | **Khabaz** | **65.61** | **8** | P | **P** | **05 50 05.3** | **+1.5** |
| | comp=Z,0.5nm,0.3s,baz=180,slow=6.1,SNR=1.5 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.53** | **180** | P | **P** | **05 50 22.4** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 05 51 00.7 | |
| | comp=Z,3.9nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.53** | **180** | P | **P** | **05 50 23.1** | **+0.6** |
| | comp=Z,1.3nm,0.7s,baz=233,slow=3.8,SNR=3.2 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **70.26** | **330** | P | **P** | **05 50 35.2** | **+1.9** |
| | comp=Z,2.7nm,1.0s,baz=142,slow=5.1,SNR=13 | | | | | | |
| ESDC | | | | LR | LR | 06 23 58.1 | |
| | comp=Z,20nm,19.0s,baz=168,slow=38 | | | | | | |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **ESPZ** | **Base Esperanza** | **71.08** | **208** | P | **P** | **05 50 37.9** | **-0.1** |
| **AKASG** | **Main Array Be** | **72.10** | **357** | P | **P** | **05 50 43.8** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=93,slow=1.9,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **BDFB** | **Brasilia** | **76.59** | **258** | P | **P** | **05 51 12.6** | **+1.3** |
| | comp=Z,3.3nm,0.7s,baz=184,slow=9.5,SNR=4.5 | | | | | | |
| BDFB | | | | LR | LR | 06 21 25.0 | |
| | comp=Z,92nm,19.2s,baz=141,slow=33 | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **80.97** | **22** | P | **P** | **05 51 33.2** | **-1.2** |
| | comp=Z,1.1nm,0.7s,baz=229,slow=11,SNR=3.5 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **81.13** | **32** | P | **P** | **05 51 35.0** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=210,slow=4.3,SNR=2.2 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **81.32** | **245** | LR | LR | 06 24 02.0 | |
| | comp=Z,34nm,18.5s,baz=93,slow=33 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.20** | **27** | P | **P** | **05 51 40.5** | **-0.4** |
| | comp=Z,2.4nm,1.1s,baz=222,slow=5.6,SNR=3.8 | | | | | | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **84.30** | **349** | P | **P** | **05 51 52.1** | **+0.5** |
| | comp=Z,0.5nm,0.7s,baz=152,slow=4.7,SNR=2.5 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **PLCA** | **Paso Flores** | **86.12** | **228** | LR | LR | 06 25 17.1 | |
| | comp=Z,24nm,22.0s,baz=140,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **90.53** | **116** | P | **P** | **05 52 23.0** | **+0.3** |
| | comp=Z,1.5nm,0.7s,baz=241,slow=3.7,SNR=8.8 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **92.39** | **112** | P | **P** | **05 52 29.7** | **-1.7** |
| | comp=Z,0.4nm,0.8s,baz=251,slow=4.4,SNR=1.8 | | | | | | |
| WRA | | | | LR | LR | 06 28 20.6 | |
| | comp=Z,90nm,20.0s,baz=6.0,slow=32 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **140.67** | **290** | PKP | **PKPdf** | **05 58 51.0** | **+0.6** |
| | comp=Z,0.5nm,0.8s,baz=116,slow=2.1,SNR=4.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **150.49** | **311** | PKPbc | **PKPbc** | **05 59 10.5** | **-1.9** |
| | comp=Z,1.0nm,0.6s,baz=70,slow=1.1,SNR=4.2 | | | | | | |

**IDC 15 05:42:53.8±6.7, 17°.94S×173°.89W, h0km, mb4.2/2, mbtmp4.2/2, Error ellipse: s-maj=298.8km s-min=67.3km az=144.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **48.85** | **259** | P | P | 05 51 40.8 | -0.7 |
| | 0.5nm,0.3s,baz=97,slow=6.6,SNR=24 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **48.92** | **254** | P | P | 05 51 42.5 | +0.4 |
| | 5.6nm,0.6s,baz=89,slow=8.4,SNR=55 | | | | | | |
| | 5.6nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **147.77** | **318** | PKPbc | PKPbc | 06 02 40.5 | -0.6 |
| | 0.6nm,0.8s,baz=64,slow=3.4,SNR=2.3 | | | | | | |

**IDC 15 05:58:49.2±2.9, 54°.16N×86°.48E, h0km, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=22.5km s-min=14.3km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.00** | **258** | I | I | 06 04 50.0 | |
| | baz=80,slow=309,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.00** | **258** | Pg | Pg | 05 59 08.2 | -0.2 |
| | 1.0nm,0.3s,baz=76,slow=16,SNR=8.3 | | | | | | |
| ZALV | | | | Lg | Lg | 05 59 22.5 | |
| | 2.3nm,0.3s,baz=75,slow=30,SNR=8.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.02** | **237** | Pn | Pn | 06 00 19.1 | -0.4 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=5.0 | | | | | | |
| KURBB | | | | Lg | Lg | 06 02 02.6 | |
| | baz=56,slow=35,SNR=1.8 | | | | | | |
| | 0.5nm,

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AGPR** | **Aguadilla, PR** | **2.15 261** | IAML | | | 06 02 04.4 | |
| | comp=E,103nm,2.0s | | | | | | |
| **LSP** | **Las Mesas** | **2.19 254** | *eP* | **Pn** | | **06 01 33.2** | **+1.0** |
| **LSP** | **Las Mesas** | **2.19 254** | *eS* | **Sn** | | **06 01 58.5** | **-0.1** |
| **LSP** | **Las Mesas** | **2.19 254** | | **Pn** | | **06 01 33.2** | **+1.0** |
| LSP | | | | **Sn** | | **06 01 58.5** | **-0.1** |
| **MLPR** | **Magueyes Islan** | **2.22 248** | *eP* | **Pn** | | **06 01 32.7** | **0.0** |
| **MLPR** | **Magueyes Islan** | **2.22 248** | *eS* | **Sn** | | **06 01 59.0** | **-0.3** |
| **MLPR** | **Magueyes Islan** | **2.22 248** | | **Pn** | | **06 01 32.7** | **0.0** |
| **MLPR** | **Magueyes Islan** | **2.22 248** | | **Sn** | | **06 01 59.0** | **-0.3** |
| **MLPR** | **Magueyes Islan** | **2.22 248** | IAML | | | 06 01 51.2 | |
| | comp=N,28nm,2.7s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **2.23 255** | Pn | **Pn** | | **06 01 33.6** | **+0.8** |
| PRSN | | | IAML | | | 06 02 07.5 | |
| | comp=E,64nm,0.3s | | | | | | |
| PRSN | | | IAML | | | 06 02 10.4 | |
| | comp=N,105nm,0.3s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.27 250** | *eP* | **Pn** | | **06 01 33.0** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **2.27 250** | *eS* | **Sn** | | **06 02 00.8** | **+0.3** |
| **CRPR** | **Cabo Rojo, PR** | **2.27 250** | | **Pn** | | **06 01 33.0** | **-0.3** |
| CRPR | | | | **Sn** | | **06 02 00.8** | **+0.3** |
| **CRPR** | **Cabo Rojo, PR** | **2.27 250** | IAML | | | 06 02 04.0 | |
| | comp=E,32nm,2.4s | | | | | | |
| CRPR | | | IAML | | | 06 02 51.7 | |
| | comp=N,32nm,2.0s | | | | | | |
| **ANBD** | **Bethesda, Anti** | **3.44 120** | *eP* | **Pn** | | **06 01 49.7** | **+0.2** |
| ANBD | | | *eS* | **Sn** | | **06 02 28.9** | **-0.6** |

*NEIC* ***15*** *06:08:35.9, 69.54N×144.19W, h2km*
*AEIC* ***15*** *06:08:35.0±1.1, 69.51N±0.03×144.2W±0.1, h11km±7km, ML3.8, ML3.8/108(NEIC), Mwr3.8/29(NEIC), Error ellipse: s-maj=6.7km s-min=2.9km az=131.0*
*IDC* ***15*** *06:08:36.0±0.7, 69.71N×144.38W, h0km, mb3.7/15, mbtmp3.8/19, ML3.8/4, MS3.1/11, Error ellipse: s-maj=17.6km s-min=11.1km az=46.0*
*NEIC* ***15*** *06:08:37.1±1.0, 69.52N±0.04×144.28W±0.06, h10km±2km, Error ellipse: s-maj=7.2km s-min=3.4km az=17.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr-1.56; Mθθ-0.76; Mφφ2.32; Mrθ-1.62; Mθφ-5.01; M₀r1.35; Fault plane solution: M₀5.81000×10¹⁴ NP1: φs278.95000°, δ87.74000°, λ162.03000°. NP2:φs9.69000°, δ72.05000°, λ2.37000°. Principal axes: T 6.5415, Plg14.0000°, Azm233.0000°; N -1.9856, Plg72.0000°, Azm92.0000°; P -4.5559, Plg11.0000°, Azm326.0000°;*

**ISC 15 06:08:35.5±1.3, 69.53N±0.04×144.21W±0.03, h3km±9km, n131, σ1§11/129, mb3.8/15, MS3.1/9, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **61** | Pg | | **Pg** | **06 08 39.6** | **+0.2** |
| **C26K** | **Camden Bay** | **0.46** | **328** | | | **Pg** | **06 08 45.3** | **+1.0** |
| **D25K** | **Kavik River** | **0.79** | **256** | Pg | | **Pb** | **06 08 49.2** | **-2.8** |
| D25K | | | | | | **Sb** | **06 09 00.5** | **-2.6** |
| **D27M** | **Malcolm River** | **1.19** | **103** | | | **Pn** | **06 08 56.3** | **-2.7** |
| **C24K** | **Franklin Bluff** | **1.58** | **279** | | | **Pn** | **06 09 03.9** | **-0.6** |
| C24K | | | | IAML | | | 06 09 28.1 | |
| | comp=N,1μm,0.5s | | | | | | | |
| C24K | | | | IAML | | | 06 09 33.8 | |
| | comp=E,1μm,0.6s | | | | | | | |
| **E27K** | **Coleen River** | **1.65** | **144** | Pn | | **Pn** | **06 09 05.0** | **-0.4** |
| E27K | | | | | | **Sb** | **06 09 27.9** | **+0.1** |
| E27K | | | | IAML | | | 06 09 32.0 | |
| | comp=E,890nm,0.7s | | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **259** | | | **Pn** | **06 09 06.8** | **+1.1** |
| D24K | | | | Sg | | **Sg** | **06 09 30.3** | **+0.9** |
| **F26K** | **Sheenjek River** | **1.85** | **179** | | | **Pn** | **06 09 07.0** | **-1.1** |
| F26K | | | | Sg | | **Sb** | **06 09 32.8** | **-0.6** |
| F26K | | | | IAML | | | 06 09 34.5 | |
| | comp=N,917nm,0.5s | | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **117** | Pn | | **Pn** | **06 09 09.8** | **+0.7** |
| E28M | | | | Sg | | **Sb** | **06 09 35.5** | **0.0** |
| **D28M** | **Stokes Point** | **1.94** | **93** | | | **Pn** | **06 09 10.7** | **+1.3** |
| D28M | | | | Sg | | **Sg** | **06 09 38.9** | **+1.0** |
| **F25K** | **Christian Rive** | **2.02** | **196** | | | **Pn** | **06 09 11.0** | **+0.5** |
| F25K | | | | Sg | | **Sb** | **06 09 37.7** | **-0.6** |
| F25K | | | | IAML | | | 06 09 40.1 | |
| | comp=E,921nm,0.8s | | | | | | | |
| F25K | | | | IAML | | | 06 09 42.8 | |
| | comp=N,945nm,0.8s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.12** | **248** | Pn | | **Pn** | **06 09 12.7** | **+0.8** |
| TOLK | | | | IAML | | | 06 09 47.7 | |
| | comp=E,729nm,0.9s | | | | | | | |
| TOLK | | | | IAML | | | 06 09 53.8 | |
| | comp=N,684nm,0.8s | | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **229** | | | **Pn** | **06 09 12.7** | **+0.6** |
| **E24K** | **Your Creek** | **2.13** | **229** | | | **Sb** | **06 09 42.7** | **+1.0** |
| **E24K** | **Your Creek** | **2.13** | **229** | IAML | | | 06 09 49.3 | |
| | comp=E,344nm,0.6s | | | | | | | |
| E24K | | | | IAML | | | 06 09 55.3 | |
| | comp=N,325nm,0.8s | | | | | | | |
| **C23K** | **Itkillik River** | **2.26** | **281** | Pn | | **Pn** | **06 09 13.7** | **+0.1** |
| C23K | | | | IAML | | | 06 09 58.8 | |
| | comp=E,708nm,0.7s | | | | | | | |
| **C23K** | **Itkillik River** | **2.26** | **281** | | | **Sb** | **06 09 44.6** | **-0.5** |
| **D23K** | **Nanushuk River** | **2.37** | **259** | | | **Pn** | **06 09 16.3** | **+1.0** |
| D23K | | | | IAML | | | 06 09 57.4 | |
| | comp=E,532nm,0.8s | | | | | | | |
| D23K | | | | IAML | | | 06 10 02.7 | |
| | comp=N,605nm,1.1s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **216** | Pn | | **Pn** | **06 09 16.6** | **+0.4** |
| **E23K** | **Chandalar** | **2.46** | **236** | | | **Pn** | **06 09 17.6** | **+1.0** |
| E23K | | | | IAML | | | 06 09 57.5 | |
| | comp=E,432nm,0.6s | | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **138** | Pn | | **Pn** | **06 09 17.1** | **0.0** |
| F28M | | | | IAML | | | 06 09 58.1 | |
| | comp=E,323nm,0.5s | | | | | | | |
| **E29M** | **Blow River** | **2.55** | **114** | Pn | | **Pn** | **06 09 18.6** | **+0.9** |
| **E29M** | **Blow River** | **2.55** | **114** | | | **Sb** | **06 09 52.3** | **-1.3** |
| **E29M** | **Blow River** | **2.55** | **114** | IAML | | | 06 10 00.3 | |
| | comp=N,415nm,0.8s | | | | | | | |
| E29M | | | | IAML | | | 06 10 02.8 | |
| | comp=E,311nm,0.8s | | | | | | | |
| **G27K** | **Doyon Strip** | **2.90** | **160** | | | **Pn** | **06 09 22.7** | **+0.2** |
| **D22K** | **Ayikyak River** | **3.09** | **262** | Pn | | **Pn** | **06 09 25.8** | **+0.6** |
| **G24K** | **Hadweenzic Riv** | **3.10** | **205** | Pn | | **Pn** | **06 09 25.2** | **-0.1** |
| G24K | | | | IAML | | | 06 10 17.9 | |
| | comp=N,349nm,1.2s | | | | | | | |
| **COLD** | **Coldfoot** | **3.21** | **227** | | | **Pn** | **06 09 27.3** | **+0.6** |
| **B22K** | **Teshekpuk Lake** | **3.28** | **289** | Pn | | **Pn** | **06 09 28.2** | **+0.5** |
| **H25L** | **Birch Creek** | **3.34** | **191** | | | **Pn** | **06 09 28.9** | **+0.5** |
| **H27K** | **Steamboat Moun** | **3.47** | **162** | | | **Pn** | **06 09 31.3** | **+1.0** |
| **G29M** | **Pine Creek** | **3.50** | **136** | Pn | | **Pn** | **06 09 31.5** | **+0.7** |
| **F22K** | **John River** | **3.57** | **239** | | | **Pn** | **06 09 32.7** | **+1.0** |
| **G23K** | **Bananza Creek** | **3.57** | **220** | Pn | | **Pn** | **06 09 31.4** | **-0.4** |
| G23K | | | | IAML | | | 06 10 33.0 | |
| | comp=E,167nm,1.1s | | | | | | | |
| **F30M** | **Barrier River** | **3.64** | **118** | | | **Pn** | **06 09 34.2** | **+1.5** |
| **B21K** | **Ikpikpuk River** | **3.65** | **276** | Pn | | **Pn** | **06 09 33.5** | **+0.7** |
| **E21K** | **Killik River** | **3.68** | **257** | | | **Pn** | **06 09 33.0** | **-0.3** |
| **G30M** | **tAoh Zrail Nji** | **3.92** | **127** | | | **Pn** | **06 09 37.6** | **+1.0** |
| G30M | | | | IAML | | | 06 10 53.6 | |
| | comp=N,106nm,0.9s | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.94** | **297** | | | **Pn** | **06 09 37.4** | **+0.7** |
| **H24K** | **Noodor Dome** | **3.97** | **202** | Pn | | **Pn** | **06 09 37.0** | **-0.2** |
| H24K | | | | IAML | | | 06 10 47.5 | |
| | comp=E,113nm,0.8s | | | | | | | |
| H24K | | | | IAML | | | 06 10 54.8 | |
| | comp=N,134nm,0.8s | | | | | | | |
| **H29M** | **Whitestone** | **3.99** | **144** | Pn | | **Pn** | **06 09 38.5** | **+0.9** |
| H29M | | | | IAML | | | 06 10 53.0 | |
| | comp=N,142nm,0.9s | | | | | | | |
| H29M | | | | IAML | | | 06 10 53.9 | |
| | comp=E,157nm,0.9s | | | | | | | |
| **INK** | **Inuvik** | **4.05** | **103** | Pn | | **Pn** | **06 09 38.5** | **+0.3** |
| **INK** | **Inuvik** | **4.05** | **103** | Pn | | **Pn** | **06 09 39.2** | **+0.9** |
| | comp=E,3.0nm,0.3s,baz=324,slow=6.3,SNR=52 | | | | | | | |
| INK | | | | Sn | | **Sn** | **06 10 27.1** | **+0.9** |
| | comp=E,2.7nm,0.3s,baz=212,slow=32,SNR=7.6 | | | | | | | |
| INK | | | | Lg | | Lg | 06 10 44.1 | |
| | comp=E,3.1nm,0.3s,baz=9.0,slow=19,SNR=2.0 | | | | | | | |
| INK | | | | LR | | LR | 06 11 39.8 | |
| | comp=E,45nm,20.3s,baz=284,slow=44 comp=E,11nm,0.5s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.07** | **188** | | | **Pn** | **06 09 39.4** | **+0.8** |
| PRP | | | | IAML | | | 06 10 50.6 | |
| | comp=E,138nm,1.0s | | | | | | | |
| **I27K** | **Kandik River** | **4.07** | **165** | | | **Pn** | **06 09 39.5** | **+0.8** |
| **F21K** | **Alatna River** | **4.14** | **240** | Pn | | **Pn** | **06 09 39.9** | **+0.3** |
| F21K | | | | IAML | | | 06 10 52.2 | |
| | comp=E,113nm,0.7s | | | | | | | |
| F21K | | | | IAML | | | 06 10 53.7 | |
| | comp=N,103nm,0.7s | | | | | | | |
| **H23K** | **Yukon River** | **4.24** | **211** | | | **Pn** | **06 09 41.2** | **+0.2** |
| H23K | | | | IAML | | | 06 10 52.8 | |
| | comp=N,112nm,0.8s | | | | | | | |
| H23K | | | | IAML | | | 06 10 53.8 | |
| | comp=E,114nm,1.0s | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.25** | **135** | Pn | | **Pn** | **06 09 41.6** | **+0.5** |
| **F31M** | **Tsiigehtchic** | **4.39** | **114** | | | **Pn** | **06 09 43.7** | **+0.8** |
| F31M | | | | IAML | | | 06 10 56.5 | |
| | comp=N,80nm,1.0s | | | | | | | |
| **I28M** | **Miner Creek** | **4.42** | **156** | Pn | | **Pn** | **06 09 44.2** | **+0.7** |
| I28M | | | | IAML | | | 06 10 43.1 | |
| | comp=N,87nm,0.6s | | | | | | | |
| I28M | | | | IAML | | | 06 11 07.9 | |
| | comp=E,85nm,1.1s | | | | | | | |
| **D20K** | **Etivluk River** | **4.51** | **265** | | | **Pn** | **06 09 45.5** | **+0.8** |
| **E20K** | **Nigu River** | **4.51** | **259** | | | **Pn** | **06 09 45.9** | **+1.2** |
| **B20K** | **Meade River** | **4.52** | **282** | | | **Pn** | **06 09 45.1** | **+0.4** |
| **G31M** | **Satah River** | **4.53** | **121** | Pn | | **Pn** | **06 09 45.1** | **+0.2** |
| G31M | | | | IAML | | | 06 10 57.1 | |
| | comp=N,91nm,0.9s | | | | | | | |
| G31M | | | | IAML | | | 06 11 13.3 | |
| | comp=E,93nm,1.2s | | | | | | | |
| **G21K** | **Allakaket** | **4.62** | **233** | Pn | | **Pn** | **06 09 45.5** | **-0.6** |
| G21K | | | | IAML | | | 06 11 15.1 | |
| | comp=N,79nm,1.5s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83** | **207** | | | **Pn** | **06 09 49.2** | **+0.2** |
| I23K | | | | IAML | | | 06 11 15.9 | |
| | comp=E,76nm,0.8s | | | | | | | |
| I23K | | | | IAML | | | 06 11 26.3 | |
| | comp=N,80nm,1.1s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.85** | **201** | | | **Pn** | **06 09 49.6** | **+0.3** |
| MDM | | | | IAML | | | 06 11 14.2 | |
| | comp=N,69nm,0.8s | | | | | | | |
| MDM | | | | IAML | | | 06 11 17.2 | |
| | comp=E,72nm,1.1s | | | | | | | |
| **IL31** | | **4.89** | **194** | | | **Pn** | **06 09 50.5** | **+0.7** |
| **ILAR** | **Eielson Array** | **4.89** | **194** | Pn | | **Pn** | **06 09 50.8** | **+0.8** |
| | comp=E,4.5nm,0.3s,baz=4.9,slow=13,SNR=239 | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **06 10 45.8** | **-1.2** |
| | comp=E,3.4nm,0.3s,baz=8.4,slow=22,SNR=10.0 | | | | | | | |
| ILAR | | | | Lg | | Lg | 06 11 08.6 | |
| | comp=E,6.3nm,0.3s,baz=13,slow=26,SNR=1.7 comp=E,16nm,0.5s | | | | | | | |
| **EGAK** | **Eagle** | **4.92** | **165** | Pn | | **Pn** | **06 09 50.9** | **+0.6** |
| EGAK | | | | IAML | | | 06 10 52.2 | |
| | comp=E,66nm,0.8s | | | | | | | |
| EGAK | | | | IAML | | | 06 11 27.1 | |
| | comp=E,68nm,1.2s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.95** | **245** | | | **Pn** | **06 09 51.9** | **+1.3** |
| F20K | | | | IAML | | | 06 11 29.6 | |
| | comp=N,64nm,1.3s | | | | | | | |
| F20K | | | | IAML | | | 06 11 37.5 | |
| | comp=E,52nm,1.1s | | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **186** | | | **Pn** | **06 09 51.5** | **+0.6** |
| J25K | | | | IAML | | | 06 11 23.3 | |
| | comp=E,69nm,1.0s | | | | | | | |
| J25K | | | | IAML | | | 06 11 24.3 | |
| | comp=N,49nm,1.4s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.06** | **177** | Pn | | **Pn** | **06 09 53.1** | **+0.8** |
| J26L | | | | IAML | | | 06 11 11.7 | |
| | comp=E,52nm,0.6s | | | | | | | |
| J26L | | | | IAML | | | 06 11 20.7 | |
| | comp=N,45nm,0.7s | | | | | | | |
| **H21K** | **Melozitna Rive** | **5.09** | **224** | Pn | | **Pn** | **06 09 52.8** | **+0.2** |
| H21K | | | | IAML | | | 06 11 27.4 | |
| | comp=E,51nm,1.2s | | | | | | | |
| H21K | | | | IAML | | | 06 11 28.0 | |
| | comp=N,54nm,1.4s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10** | **198** | Pn | | **Pn** | **06 09 53.2** | **+0.4** |
| CCB | | | | IAML | | | 06 11 18.5 | |
| | comp=N,46nm,0.9s | | | | | | | |
| CCB | | | | IAML | | | 06 11 34.7 | |
| | comp=E,47nm,1.2s | | | | | | | |
| **D19K** | **Kuna River** | **5.11** | **265** | Pn | | **Pn** | **06 09 53.4** | **+0.6** |
| D19K | | | | IAML | | | 06 10 53.1 | |
| | comp=E,51nm,0.8s | | | | | | | |
| **MLY** | **Manley** | **5.18** | **212** | Pn | | **Pn** | **06 09 54.4** | **+0.5** |
| MLY | | | | IAML | | | 06 11 32.2 | |
| | comp=N,43nm,1.6s | | | | | | | |
| **E19K** | **Redstone River** | **5.22** | **253** | Pn | | **Pn** | **06 09 54.9** | **+0.5** |
| **I30M** | **Mount Dempster** | **5.28** | **141** | Pn | | **Pn** | **06 09 55.4** | **+0.1** |
| I30M | | | | IAML | | | 06 10 57.3 | |
| | comp=N,45nm,0.6s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **198** | | | **Pn** | **06 09 56.2** | **+0.6** |
| WRH | | | | IAML | | | 06 11 33.5 | |
| | comp=E,59nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.31** | **203** | | | **Pn** | **06 09 56.0** | **+0.4** |
| NEA2 | | | | IAML | | | 06 10 58.9 | |
| | comp=N,38nm,0.6s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.46** | **273** | Pn | | **Pn** | **06 09 58.5** | **+0.8** |
| **SCRK** | **Sand Creek** | **5.58** | **179** | Pn | | **Pn** | **06 10 00.3** | **+0.8** |
| **K27K** | **Chicken** | **5.59** | **170** | | | **Pn** | **06 10 00.7** | **+1.5** |
| **F19K** | **Shalerockik Mo** | **5.73** | **248** | Pn | | **Pn** | **06 10 01.9** | **+0.5** |
| **H20K** | **Anotleneega Mo** | **5.76** | **230** | | | **Pn** | **06 10 01.8** | **0.0** |
| **DAWY** | **Dawson** | **5.81** | **159** | | | **Pn** | **06 10 03.2** | **+0.7** |
| **J30M** | **Hart River** | **5.85** | **145** | Pn | | **Pn** | **06 10 03.6** | **+0.5** |
| **A19K** | **Wainwright** | **5.86** | **284** | | | **Pn** | **06 10 03.4** | **+0.3** |
| **DOT** | **Dot Lake** | **5.91** | **179** | | | **Pn** | **06 10 04.9** | **+1.0** |
| **G19K** | **Purcell Mounta** | **5.94** | **241** | | | **Pn** | **06 10 04.0** | **-0.2** |
| **MCK** | **McKinley** | **6.12** | **200** | | | **Pn** | **06 10 06.9** | **+0.2** |
| **C18K** | **Utukok River** | **6.14** | **270** | | | **Pn** | **06 10 07.2** | **+0.2** |
| **B18K** | **Kokolik River** | **6.19** | **277** | | | **Pn** | **06 10 07.8** | **+0.1** |
| **F18K** | **Selawik** | **6.48** | **250** | | | **Pn** | **06 10 11.8** | **+0.2** |
| **MENT** | **Mentasta** | **6.63** | **178** | | | **Pn** | **06 10 15.1** | **+1.4** |
| **E17K** | **Hotham Inlet** | **6.97** | **258** | | | **Pn** | **06 10 18.2** | **-0.1** |
| **WAT7** | **Susitna Watana** | **6.98** | **198** | | | **Pn** | **06 10 20.2** | **+1.5** |
| **WAT6** | **Susitna Watana** | **7.13** | **193** | | | **Pn** | **06 10 21.4** | **+0.7** |
| **HARP** | **HAARP** | **7.18** | **184** | | | **Pn** | **06 10 21.4** | **+0.1** |
| **WAZA** | **Wrangell Mount** | **7.49** | **180** | | | **Pn** | **06 10 27.3** | **+1.5** |
| **WACK** | **Wrangell Chich** | **7.58** | **180** | | | **Pn** | **06 10 28.8** | **+1.8** |
| **C16K** | **Lisburne Hills** | **7.71** | **271** | | | **Pn** | **06 10 28.2** | **-0.4** |
| **YUK2** | **White River** | **7.90** | **168** | | | **Pn** | **06 10 32.7** | **+1.5** |
| **YUK3** | **Moose Creek** | **7.94** | **167** | | | **Pn** | **06 10 33.3** | **+1.4** |
| **G16K** | **Koyuk River** | **8.09** | **248** | | | **Pn** | **06 10 33.7** | **0.0** |
| **L20K** | **Farewell, AK** | **8.09** | **214** | | | **Pn** | **06 10 34.1** | **+0.3** |
| **SKT** | **Skwentna** | **8.15** | **205** | | | **Pn** | **06 10 35.8** | **+1.2** |
| **KNK** | **Knik Glacier** | **8.34** | **194** | | | **Pn** | **06 10 38.9** | **+1.7** |
| **H16K** | **Elim** | **8.55** | **244** | | | **Pn** | **06 10 40.2** | **+0.1** |
| **L19K** | **White Mountain** | **8.56** | **216** | | | **Pn** | **06 10 40.4** | **+0.3** |
| **KIAG** | **Kiagna River** | **8.68** | **174** | | | **Pn** | **06 10 44.4** | **+2.4** |
| **YUK6** | **Outpost Mounta** | **8.96** | **161** | | | **Pn** | **06 10 47.4** | **+1.5** |
| **BAGL** | **Bagley Icefiel** | **9.12** | **173** | | | **Pn** | **06 10 48.9** | **+1.0** |
| **KDAK** | **Kodiak Island** | **12.35** | **201** | LR | | LR | 06 16 26.0 | |
| | comp=N,68nm,20.9s,baz=23,slow=38 | | | | | | | |
| **DLBC** | **Dease Lake** | **12.71** | **144** | Pn | | **Pn** | **06 11 38.6** | **+1.7** |
| | comp=N,0.2nm,0.3s,baz=350,slow=9.0,SNR=4.9 | | | | | | | |
| DLBC | | | | Sn | | **Sn** | **06 13 55.5** | **-3.2** |
| | comp=N,0.1nm,0.3s,baz=291,slow=12,SNR=1.6 comp=N,2.4nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.81** | **106** | Pn | | **Pn** | **06 11 48.1** | **-3.8** |
| | comp=N,0.5nm,0.3s,baz=29,slow=14,SNR=6.0 | | | | | | | |
| YKA | | | | Sn | | Sn | 06 14 14.1 | -12 |
| | comp=N,0.3nm,0.3s,baz=306,slow=23,SNR=3.0 comp=N,1.6nm,0.5s | | | | | | | |
| **NEW** | **Newport** | **25.08** | **134** | LR | | LR | 06 24 34.8 | |
| | comp=N,57nm,19.0s,baz=342,slow=38 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.47** | **250** | LR | | LR | 06 23 19.8 | |
| | comp=N,30nm,19.0s,baz=96,slow=35 | | | | | | | |
| **FRB** | **Frobisher Bay** | **28.70** | **64** | LR | | LR | 06 27 03.7 | |
| | comp=N,45nm,20.4s,baz=3.5,slow=39 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.80** | **268** | LR | | LR | 06 28 04.8 | |
| | comp=N,33nm,18.1s,baz=185,slow=38 | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.18** | **128** | P | | **P** | **06 15 06.6** | **+2.1** |
| | comp=N,0.5nm,0.6s,baz=7.1,slow=6.0,SNR=6.4 comp=N,0.5nm,0.6s | | | | | | | |
| **YAK** | **Yakutsk** | **33.20** | **301** | LR | | LR | 06 30 26.3 | |
| | comp=N,32nm,18.5s,baz=265,slow=40 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.11** | **142** | P | | **P** | **06 15 25.3** | **+3.9** |
| | comp=N,0.8nm,0.8s,baz=340,slow=7.2,SNR=8.2 comp=N,0.8nm,0.8s | | | | | | | |
| **SCHQ** | **Schefferville** | **36.10** | **73** | P | | **P** | **06 15 39.4** | **+1.3** |
| | comp=N,2.1nm,0.8s,baz=329,slow=12,SNR=2.2 comp=N,2.1nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.01** | **5** | P | | **P** | **06 16 18.8** | **-0.3** |
| | comp=N,1.3nm,0.8s,baz=12,slow=13,SNR=1.8 comp=N,1.3nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.40** | **128** | P | | **P** | **06 17 05.5** | **+2.5** |
| | comp=N,0.4nm,0.5s,baz=334,slow=4.7,SNR=14 comp=N,0.4nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.34** | **284** | LR | | LR | 06 37 43.9 | |
| | comp=N,42nm,18.8s,baz=182,slow=37 | | | | | | | |
| **FINES** | **FINESS Array B** | **49.13** | **6** | P | | **P** | **06 17 23.3** | **-0.4** |
| | comp=N,0.7nm,0.7s,baz=328,slow=4.9,SNR=1.9 comp=N,0.7nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **49.66** | **14** | P | | **P** | **06 17 27.2** | **-0.6** |
| | comp=N,1.3nm,0.7s,baz=350,slow=7.3,SNR=2.2 comp=N,1.3nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.78** | **325** | P | | **P** | **06 17 43.2** | **-0.6** |
| | comp=N,0.5nm,0.4s,baz=39,slow=9.3,SNR=2.5 comp=N,0.5nm,0.4s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.98** | **273** | P | | **P** | **06 17 44.8** | **-0.8** |
| | comp=N,0.5nm,0.6s,baz=17,slow=7.6,SNR=2.2 comp=N,0.5nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **52.19** | **306** | P | | **P** | **06 17 46.3** | **-0.9** |
| | comp=N,0.6nm,0.5s,baz=28,slow=6.5,SNR=2.1 comp=N,0.6nm,0.5s | | | | | | | |
| **KSRS** | **Korea Array** | **54.74** | **283** | P | | **P** | **06 18 06.4** | **+0.6** |
| | comp=N,0.8nm,0.6s,baz=14,slow=6.0,SNR=1.8 comp=N,0.8nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.15** | **329** | P | | **P** | **06 18 15.2** | **-0.5** |
| | comp=N,0.4nm,0.2s,baz=11,slow=7.0,SNR=5.4 comp=N,0.4nm,0.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.08** | **324** | P | | **P** | **06 18 36.2** | **-0.3** |
| | comp=N,0.4nm,0.6s,baz=40,slow=7.5,SNR=4.6 comp=N,0.4nm,0.6s | | | | | | | |
| **JCJ** | **Chichijima** | **59.16** | **265** | LR | | LR | 06 45 54.0 | |
| | comp=N,54nm,20.5s,baz=105,slow=38 | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.98** | **5** | P | | **P** | **06 18 42.6** | **0.0** |
| | comp=N,0.5nm,0.5s,baz=359,slow=7.4,SNR=1.9 comp=N,0.5nm,0.5s | | | | | | | |
| **APG** | **El Apazote** | **63.78** | **120** | LR | | LR | 06 51 11.6 | |
| | comp=N,7.3nm,19.4s,baz=144,slow=40 | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.26** | **32** | P | | **P** | **06 19 31.3** | **+0.4** |
| | comp=N,0.2nm,0.4s,baz=352,slow=6.9,SNR=2.2 comp=N,0.2nm,0.4s | | | | | | | |
| **MDT** | **Midelt** | **73.78** | **35** | LR | | LR | 06 56 36.3 | |
| | comp=N,17nm,18.1s,baz=190,slow=39 | | | | | | | |

*IDC* ***15*** *06:15:13.7±0.8, 9.42N×84.56W, h0km, mb4.0/14, mbtmp4.1/18, ML3.2/4, MS3.4/13, Error ellipse: s-maj=26.8km s-min=9.3km az=57.0*
*CATAC* ***15*** *06:15:13.4±0.3, 9.41N×84.49W, h4km±2km, ML4.6*
*UPA* ***15*** *06:15:14.5±2.0, 9.48N×84.61W, h10km±18km, MD4.5, MW4.8*
*UCR* ***15*** *06:15:14.0±0.8, 9.46N×84.49W, h17km±4km, MW4.7, Fault plane solution: NP1:φs200.76000°, δ52.24000°, λ-50.77000°.*
*NEIC* ***15*** *06:15:17.7±2.5, 9.69N±0.06×84.25W±0.08, h10km±1km, mb4.5/46, Error ellipse: s-maj=14.8km s-min=6.9km az=240.0*

**ISC 15 06:15:14.1±1.1, 9.44N±0.02×84.49W±0.02, h5km±7km, n220, σ1§76/219, mb4.5/37, MS3.4/9, 42C-20D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SVQ2** | **Quepos** | **0.32** | **91** | *eP* | | **Pg** | **06 15 20.4** | **0.0** |
| SVQ2 | | | | *eS* | | **Sb** | **06 15 26.4** | **-1.4** |
| **LLNJ** | **Naranjito** | **0.39** | **85** | *eP* | | **Pg** | **06 15 21.6** | **0.0** |
| **TRB2** | **Turrubares** | **0.48** | **5** | *eP* | | **Pg** | **06 15 22.7** | **-0.6** |
| **ACOS** | **Acosta** | **0.48** | **42** | *eP* | | **Pg** | **06 15 23.0** | **-0.5** |
| ACOS | | | | *eS* | | **Sb** | **06 15 30.2** | **-2.3** |
| **ABE2** | **San Pablo** | **0.51** | **58** | *eP* | | **Pg** | **06 15 23.6** | **-0.3** |
| **LCR2** | **La Lucha 2** | **0.57** | **58** | *i* Pg | | **Pg** | **06 15 24.6** | **-0.5** |
| **LCR2** | **La Lucha 2** | **0.57** | **58** | *i* P | | **Pg** | **06 15 24.4** | **-0.7** |
| LCR2 | | | | *i* S | | **Sn** | **06 15 35.0** | **-3.8** |
| LCR2 | | | | IAML | | | 06 15 40.8 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **0.57** | **58** | *eP* | | **Pg** | **06 15 24.4** | **-0.7** |
| **SANTA** | **Santa Ana** | **0.58** | **31** | *eP* | | **Pg** | **06 15 24.5** | **-0.8** |
| **CBL1** | **Cabuya** | **0.61** | **284** | *eP* | | **Pg** | **06 15 25.5** | **-0.4** |
| CBL1 | | | | *eS* | | **Sn** | **06 15 36.0** | **-3.6** |
| **BELE** | **Belen** | **0.61** | **29** | *eP* | | **Pg** | **06 15 25.0** | **-0.9** |
| **AMPA** | **Desamparados** | **0.62** | **43** | *eP* | | **Pb** | **06 15 26.2** | **-1.4** |
| **TCS1** | **Tacares** | **0.63** | **17** | *i* P | | **Pg** | **06 15 26.0** | **-0.3** |
| TCS1 | | | | IAML | | | 06 15 51.0 | |
| | comp=Z,66μm,1.0s | | | | | | | |
| **TCS1** | **Tacares** | **0.63** | **17** | *eP* | | **Pg** | **06 15 25.9** | **-0.4** |
| **CENT** | **San Jose** | **0.64** | **40** | *eP* | | **Pb** | **06 15 26.5** | **-1.3** |
| **LUJA** | **Lujan** | **0.64** | **40** | *eP* | | **Pb** | **06 15 26.6** | **-1.3** |
| **MEXI** | **Barrio Mexico** | **0.64** | **39** | *eP* | | **Pg** | **06 15 25.8** | **-0.7** |
| **SRA1** | **San Ramn** | **0.64** | **1** | *eP* | | **Pg** | **06 15 25.8** | **-0.7** |
| **RAMO** | **San Ramon** | **0.65** | **2** | *eP* | | **Pb** | **06 15 26.9** | **-1.1** |
| **GREC** | **Grecia** | **0.66** | **16** | *eP* | | **Pb** | **06 15 27.6** | **-0.6** |
| **SJS** | **Escuela Geolog** | **0.66** | **41** | *eP* | | **Pg** | **06 15 26.1** | **-0.8** |
| **SJS3** | **Mercedes San J** | **0.66** | **41** | *eP* | | **Pg** | **06 15 26.2** | **-0.6** |
| **SARCI** | **Sarchi** | **0.66** | **12** | *eP* | | **Pg** | **06 15 26.7** | **-0.2** |
| **LUP

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SACU | Santa Cruz | 1.35 | 307 | *eP* | | Pn | 06 15 37.6 | -2.1 |
| EDP2 | Potrero Grande | 1.36 | 108⇓ | *eP* | | Pn | 06 15 38.0 | -1.7 |
| CUI | Cuipilapa | 1.38 | 331⇑ | *eP* | | Pn | 06 15 38.3 | -1.8 |
| COLC | Colonia | 1.41 | 330 | *eP* | | Pn | 06 15 38.6 | -1.9 |
| DELF | Filadelfia | 1.45 | 314 | *eP* | | Pb | 06 15 39.9 | -1.7 |
| VERA | Finca Concepci | 1.46 | 345 | *eP* | | Pn | 06 15 39.6 | -1.5 |
| JIME | Puerto Jimenez | 1.46 | 128 | *eP* | | Pn | 06 15 39.6 | -1.5 |
| PTJ1 | Puerto Jimnez | 1.48 | 127 | *i* P | | Pn | 06 15 40.5 | -0.8 |
| PTJ1 | | | | IAML | | | 06 15 48.8 | |
| | comp=Z,16μm,1.0s | | | | | | | |
| PTJ1 | Puerto Jimnez | 1.48 | 127⇓ | *i* P | | Pb | 06 15 41.5 | -0.5 |
| PTJ1 | Puerto Jimnez | 1.48 | 127 | *eP* | | Pn | 06 15 39.7 | -1.6 |
| EDAD | Golfito | 1.52 | 121 | *eP* | | Pn | 06 15 39.6 | -2.4 |
| FITO | Golfito | 1.55 | 121 | *eP* | | Pn | 06 15 39.8 | -2.5 |
| ALIBA | Liberia Airpor | 1.55 | 318 | *eP* | | Pb | 06 15 41.9 | -1.4 |
| GPS2 | Hotel Rincn d | 1.56 | 327 | *eP* | | Pb | 06 15 41.1 | -1.5 |
| GPS3 | Bodega del ICE | 1.57 | 327 | *eP* | | Pb | 06 15 43.1 | -0.5 |
| VRLE | La Escondida, | 1.59 | 327⇑ | *eP* | | Pn | 06 15 41.5 | -1.6 |
| VORI | VORI | 1.61 | 329 | *eP* | | Pn | 06 15 41.8 | -1.6 |
| BRIBI | Bribri | 1.63 | 83⇑ | *eP* | | Pb | 06 15 43.9 | -0.7 |
| NELY | Ciudad Neily | 1.71 | 117 | *eP* | | Pn | 06 15 43.2 | -1.5 |
| MLIR3 | Monte Lirio, C | 1.77 | 111 | *eP* | | Pb | 06 15 45.8 | -1.3 |
| CDITO | Canoas | 1.81 | 118 | *i* P | | Pn | 06 15 44.6 | -1.4 |
| CDITO | | | | *i* S | | Sg | 06 16 14.0 | +1.5 |
| CDITO | | | | IAML | | | 06 16 32.8 | |
| | comp=Z,10μm,1.0s | | | | | | | |
| BRU2 | Volcan | 1.89 | 110 | Pn | | Pb | 06 15 46.9 | -2.2 |
| BRU2 | Volcan | 1.89 | 110 | *i* P | | Pb | 06 15 47.1 | -2.1 |
| BRU2 | | | | *i* S | | Sg | 06 16 23.2 | +8.3 |
| BRU2 | | | | IAML | | | 06 16 41.4 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| BRU2 | Volcan | 1.89 | 110 | *eP* | | Pb | 06 15 46.9 | -2.2 |
| BRU2 | | | | *eS* | | Sg | 06 16 14.9 | +0.1 |
| BRU2 | Volcan | 1.89 | 110 | *eP* | | Pn | 06 15 45.8 | -1.3 |
| CNI2 | El Empalme, Bo | 1.99 | 90⇓ | *i* P | | Pn | 06 15 48.2 | -0.2 |
| CNI2 | | | | *i* S | | Sb | 06 16 13.8 | -2.2 |
| PTPM | Petroterminale | 2.01 | 127 | *i* P | | Pb | 06 15 49.9 | -1.3 |
| BCO2 | Palmira | 2.06 | 110⇓ | *eP* | | Pb | 06 15 50.3 | -1.9 |
| BCO2 | | | | *i* S | | Sb | 06 16 17.8 | -0.4 |
| LNBQ3 | Los Naranjos, | 2.12 | 107⇓ | *i* P | | Pn | 06 15 50.2 | -0.1 |
| LNBQ3 | | | | *i* S | | Sb | 06 16 20.3 | +0.4 |
| DVD | David | 2.25 | 116⇓ | *eP* | | Pb | 06 15 52.9 | -2.3 |
| LOCO3 | Loma Colorada, | 2.29 | 116⇓ | *eP* | | Pb | 06 15 53.4 | -2.5 |
| PEDE3 | Pedregal, Chir | 2.30 | 117⇓ | *eP* | | Pb | 06 15 54.4 | -1.6 |
| LOMA3 | Las Lomas, Chi | 2.30 | 116⇓ | *eP* | | Pb | 06 15 53.4 | -2.8 |
| CHGR2 | Aguacate | 2.37 | 102 | *eP* | | Pb | 06 15 54.3 | -3.0 |
| CHGR2 | | | | *i* S | | Sb | 06 16 24.9 | -1.9 |
| JAPN | Al SSO del Vol | 2.38 | 331 | *i* P | | Pb | 06 15 55.9 | -1.6 |
| JAPN | | | | *i* S | | Sn | 06 16 07.7 | -16 |
| ACON | Acoyapa | 2.60 | 345 | | | Pn | 06 16 56.6 | -0.3 |
| ACON | Acoyapa | 2.60 | 345 | *i* P | | Pn | 06 15 57.2 | +0.3 |
| ACON | | | | *i* S | | Sb | 06 16 33.6 | 0.0 |
| ACON | | | | IAML | | | 06 16 38.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| ACON | Acoyapa | 2.60 | 345 | *eP* | | Pn | 06 15 55.9 | -0.9 |
| BLUN | Bluefields | 2.65 | 15 | *i* P | | Pn | 06 15 56.5 | -1.0 |
| BLUN | | | | *i* S | | Sb | 06 16 32.3 | -2.5 |
| BLUN | | | | IAML | | | 06 16 38.6 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| ESPN | Las Esperanzas | 2.75 | 4 | | | Pn | 06 15 58.4 | -0.4 |
| ESPN | Las Esperanzas | 2.75 | 4 | *i* P | | Pn | 06 15 58.8 | 0.0 |
| ESPN | | | | *i* S | | Sb | 06 16 37.9 | +0.2 |
| ESPN | | | | IAML | | | 06 16 48.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| ESPN | Las Esperanzas | 2.75 | 4 | *eP* | | Pn | 06 15 56.5 | -2.3 |
| NANC3 | Nancito, Chiri | 2.97 | 113 | *eP* | | Pn | 06 16 02.9 | +0.9 |
| BOAB | BOACO BROADBAN | 3.21 | 339 | Pn | | Pn | 06 16 05.2 | 0.0 |
| BOAB | BOACO BROADBAN | 3.21 | 339 | *i* P | | Pn | 06 16 04.8 | -0.4 |
| BOAB | | | | IAML | | | 06 17 07.9 | |
| | comp=Z,660nm,1.0s | | | | | | | |
| COPN | Copaltepe | 3.42 | 323 | *i* P | | Pb | 06 16 11.8 | -3.4 |
| MESA3 | La Mesa, Verag | 3.51 | 111 | *eP* | | Pn | 06 16 10.8 | +1.5 |
| GMAL | Guarumal, Vera | 3.62 | 117 | *eP* | | Pn | 06 16 11.0 | +0.1 |
| GMAL | | | | *i* S | | Sn | 06 16 55.0 | +0.9 |
| MACN | El Madrono | 3.70 | 325 | *i* P | | Pn | 06 16 12.9 | +1.0 |
| MACN | | | | *i* S | | Pg | 06 16 24.7 | -0.3 |
| MACN | | | | IAML | | | 06 16 26.7 | |
| | comp=Z,99nm,1.0s | | | | | | | |
| STIA3 | Santiago, Vera | 3.72 | 111 | *eP* | | Pb | 06 16 17.0 | -3.4 |
| CNGN | Cerro Negro | 3.74 | 325 | | | Pb | 06 16 16.6 | -4.0 |
| MARI3 | Mariato, Verag | 3.89 | 117⇑ | *eP* | | Pb | 06 16 17.9 | -5.3 |
| CRIS3 | El Cristo, Coc | 4.00 | 107⇑ | *iP* | | Pb | 06 16 22.7 | -2.5 |
| LIMN | Finca el Limon | 4.05 | 333 | *i* P | | Pn | 06 16 16.5 | -0.3 |
| LIMN | | | | IAML | | | 06 18 03.2 | |
| | comp=Z,300nm,1.0s | | | | | | | |
| CRIN | San Cristobal | 4.10 | 322 | | | Pn | 06 16 20.0 | +2.4 |
| PESE3 | Pese, Herrera | 4.12 | 111 | *eP* | | Pb | 06 16 23.8 | -3.4 |
| CACAO | El Cacao, Vera | 4.15 | 120⇓ | *eP* | | Pn | 06 16 20.4 | +2.2 |
| CACAO | | | | *eS* | | Sn | 06 17 07.8 | +0.8 |
| PNME | Penonome | 4.22 | 103 | *eP* | | Pn | 06 16 19.4 | +0.3 |
| CHIT3 | Chitre | 4.29 | 110 | *eP* | | Pn | 06 16 22.0 | +2.0 |
| AZU | Azuero | 4.48 | 111 | *eP* | | Pn | 06 16 24.5 | +1.9 |
| AZU | Azuero | 4.48 | 111 | *eP* | | Pn | 06 16 24.7 | +2.0 |
| ZANG | Zanguenga, Cho | 4.59 | 96 | *eP* | | Pn | 06 16 24.6 | +0.4 |
| BCIP | Isla Barro Col | 4.60 | 93 | | | Pn | 06 16 25.5 | +1.1 |
| BCIP | Isla Barro Col | 4.60 | 93 | *eP* | | Pn | 06 16 24.8 | +0.4 |
| BCIP | Isla Barro Col | 4.60 | 93⇑ | *eP* | | Pn | 06 16 24.6 | +0.3 |
| PCRI3 | Pocri, Los San | 4.67 | 112⇓ | *eP* | | Pb | 06 16 32.5 | -4.1 |
| FRIJ | El Hiral | 4.71 | 92 | *eP* | | Pn | 06 16 26.4 | +0.6 |
| ACHO3 | Achotines, Los | 4.72 | 115 | *i* P | | Pb | 06 16 31.8 | -5.6 |
| ARRA3 | Arraijan, Pana | 4.79 | 95 | *eP* | | Pn | 06 16 30.7 | +3.6 |
| UPA | Univ. de Panam | 4.92 | 95 | *eP* | | Pn | 06 16 29.5 | +0.9 |
| CHPO | Chepo, Panama | 5.31 | 92 | *eP* | | Pn | 06 16 36.2 | +2.0 |
| TGUH | Tegucigalpa,Un | 5.34 | 330 | Pn | | Pn | 06 16 36.6 | +2.0 |
| CNTA3 | Canitas, Panam | 5.53 | 92 | *eP* | | Pn | 06 16 42.7 | +5.6 |
| TOTI | Torti | 6.12 | 94 | *eP* | | Pn | 06 16 46.5 | +1.2 |
| SNET | Serv Nac Est T | 6.28 | 313 | Pn | | Pn | 06 16 52.2 | +4.7 |
| UPD2 | Meteti | 6.46 | 97 | *eP* | | Pn | 06 16 51.3 | +1.4 |
| APG | El Apazote | 8.04 | 314 | Pn | | Pn | 06 17 13.1 | +1.2 |
| | baz=126,slow=12,SNR=2.8 | | | | | | | |
| UREC | San Jos de Ur | 9.02 | 100 | *eP* | | Pn | 06 17 25.7 | +0.6 |
| ROSC | El Rosal | 11.07 | 114 | Pn | | Pn | 06 17 53.0 | -0.7 |
| | comp=Z,0.9nm,0.3s,baz=230,slow=13,SNR=1.6 | | | | | | | |
| ROSC | | | | LR | | LR | 06 21 53.1 | |
| | comp=Z,184nm,18.2s,baz=308,slow=36 | | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | | |
| PULU | Pululahua | 11.09 | 147 | Pn | | Pn | 06 17 58.4 | +4.6 |
| ANTS | Antisana-Sarah | 11.71 | 147 | | | Pn | 06 18 05.5 | +3.1 |
| SDV | Santo Domingo | 13.69 | 91 | Pn | | Pn | 06 18 29.5 | +0.2 |
| | comp=Z,1.8nm,0.3s,baz=317,slow=14,SNR=1.6 | | | | | | | |
| SDV | | | | LR | | LR | 06 24 36.6 | |
| | comp=Z,202nm,18.7s,baz=254,slow=41 | | | | | | | |
| | comp=Z,7.4nm,0.4s | | | | | | | |
| ATAH | Atahualpa | 17.55 | 160 | P | | P | 06 19 19.3 | -1.9 |
| | comp=Z,0.1nm,0.3s,baz=321,slow=19,SNR=1.1 | | | | | | | |
| ATAH | | | | LR | | LR | 06 25 23.6 | |
| | comp=Z,182nm,20.3s,baz=356,slow=35 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| PCRV | Puerto La Cruz | 19.58 | 86 | P | | Pn | 06 19 43.4 | -1.1 |
| | comp=Z,0.1nm,0.3s,baz=320,slow=16,SNR=3.1 | | | | | | | |
| PCRV | | | | LR | | LR | 06 29 26.0 | |
| | comp=Z,165nm,18.1s,slow=43 | | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| CZSB | Cruzeiro do Su | 20.70 | 145 | P | | Pn | 06 19 57.6 | -0.2 |
| NNA | Nana | 22.60 | 160 | LR | | LR | 06 28 25.2 | |
| | comp=Z,55nm,19.5s,baz=340,slow=35 | | | | | | | |
| 152A | Waverly Hall | 23.12 | 360 | P | | P | 06 20 22.9 | +1.8 |
| 152A | | | | IAmb | | IAmb | 06 20 27.1 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| 833A | Chaparral WMA, | 23.44 | 325 | P | | P | 06 20 26.2 | +1.8 |
| 146A | Union | 23.47 | 350 | P | | P | 06 20 23.5 | -1.1 |
| LRAL | Lakeview Retre | 23.60 | 355 | P | | P | 06 20 24.9 | -1.0 |
| LRAL | | | | IAmb | | IAmb | 06 20 30.4 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| Z47A | Carrollton | 23.88 | 353 | P | | P | 06 20 29.3 | +0.7 |
| GOGA | Godfrey | 23.88 | 2 | P | | P | 06 20 30.6 | +1.9 |
| GOGA | | | | IAmb | | IAmb | 06 20 32.4 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| Y52A | Lilburn | 24.31 | 1 | P | | P | 06 20 32.5 | -0.2 |
| Y52A | | | | IAmb | | IAmb | 06 20 36.3 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| Y49A | Blount Mountai | 24.37 | 356 | P | | P | 06 20 34.2 | +1.0 |
| 435B | Jarrell | 24.50 | 332 | P | | P | 06 20 35.1 | +0.7 |
| HODGE | Hodges | 24.76 | 4 | IAmb | | IAmb | 06 20 40.7 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| BOAV | Boa Vista | 24.83 | 105 | P | | P | 06 20 37.2 | -0.4 |
| JSC | Jenkinsville | 24.91 | 6 | P | | P | 06 20 36.8 | -1.2 |
| JSC | | | | IAmb | | IAmb | 06 20 41.6 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| DRIO | Del Rio | 24.97 | 325 | P | | P | 06 20 39.2 | +0.5 |
| DRIO | | | | IAmb | | IAmb | 06 20 43.4 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| FPAL | Fort Paine | 25.01 | 358 | P | | P | 06 20 39.7 | +0.7 |
| W52A | Murphy | 25.54 | 1 | IAmb | | IAmb | 06 20 47.7 | |
| | comp=Z,8.5nm,1.0s | | | | | | | |
| BRDY | Brady | 25.59 | 330 | P | | P | 06 20 45.9 | +1.6 |
| PLAL | Pickwick Lake | 25.64 | 353 | P | | P | 06 20 44.9 | +0.2 |
| MIAR | Mount Ida | 26.34 | 343 | P | | P | 06 20 52.5 | +1.4 |
| MIAR | | | | IAmb | | IAmb | 06 20 55.8 | |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| ETMB | Extrema | 26.40 | 136 | P | | P | 06 20 51.6 | -0.1 |
| ETMB | | | | IAmb | | IAmb | 06 20 56.0 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| TXAR | Lajitas Array | 26.73 | 320 | P | | P | 06 20 54.8 | 0.0 |
| | comp=Z,0.5nm,0.8s,baz=137,slow=9.3,SNR=12 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| MACA | Manacapuru-AM | 26.82 | 117 | P | | P | 06 20 56.6 | +1.0 |
| MACA | | | | IAmb | | IAmb | 06 21 09.6 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| LCAR | Lake Charles | 27.20 | 348 | IAmb | | IAmb | 06 21 00.7 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| T47A | Sharon Grove | 27.53 | 355 | IAmb | | IAmb | 06 21 04.2 | |
| | comp=Z,9.4nm,1.1s | | | | | | | |
| T42A | Van Buren | 28.11 | 349 | IAmb | | IAmb | 06 21 09.2 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| CGM3 | Cape Girardeau | 28.13 | 351 | IAmb | | IAmb | 06 21 09.3 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| MGMO | Mountain Grove | 28.48 | 347 | IAmb | | IAmb | 06 21 12.4 | |
| | comp=Z,6.2nm,0.9s | | | | | | | |
| WCI | Wyandotte Cave | 28.71 | 357 | P | | P | 06 21 13.2 | +0.9 |
| WCI | | | | IAmb | | IAmb | 06 21 15.2 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| CCM | Cathedral Cave | 29.14 | 349 | P | | P | 06 21 16.1 | 0.0 |
| CCM | | | | IAmb | | IAmb | 06 21 17.8 | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| OLIL | Olney | 29.35 | 354 | IAmb | | IAmb | 06 21 19.9 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| P48A | Milroy | 29.91 | 359 | IAmb | | IAmb | 06 21 24.9 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| LPAZ | La Paz | 30.26 | 148 | P | | P | 06 21 26.8 | -0.1 |
| | comp=Z,1.1nm,1.0s,baz=293,slow=15,SNR=3.9 | | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | | |
| ACSO | Alum Creek Sta | 30.70 | 2 | P | | P | 06 21 29.7 | -0.2 |
| SFIN | Lafayette | 30.90 | 356 | IAmb | | IAmb | 06 21 33.1 | |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| MDP | Montagnes des | 31.87 | 96 | LR | | LR | 06 34 54.0 | |
| | comp=Z,89nm,20.1s,baz=350,slow=37 | | | | | | | |
| X16A | Lo Mia Camp, P | 35.04 | 319 | P | | P | 06 22 09.6 | +1.4 |
| SADO | Sadowa | 35.51 | 7 | LR | | LR | 06 36 47.1 | |
| | comp=Z,63nm,20.8s,baz=233,slow=36 | | | | | | | |
| SPMN | Marine on St. | 36.37 | 350 | IAmb | | IAmb | 06 22 19.7 | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| E38A | The Farm, Brul | 37.53 | 352 | IAmb | | IAmb | 06 22 29.8 | |
| | comp=Z,7.9nm,1.0s | | | | | | | |
| ULM | Lac du Bonnet | 41.77 | 349 | P | | P | 06 23 04.1 | -0.2 |
| | comp=Z,5.8nm,0.9s,baz=143,slow=6.4,SNR=6.1 | | | | | | | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| NVAR | Mina Array Bea | 41.87 | 319 | P | | P | 06 23 05.1 | -0.5 |
| | comp=Z,0.3nm,0.7s,baz=135,slow=7.0,SNR=2.8 | | | | | | | |
| NVAR | | | | PcP | | PcP | 06 25 03.7 | +2.2 |
| | comp=Z,1.2nm,0.8s,baz=135,slow=4.7,SNR=6.1 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| BDFB | Brasilia | 43.89 | 124 | P | | P | 06 23 22.0 | -0.1 |
| | comp=Z,3.9nm,1.0s,baz=11,slow=9.6,SNR=3.5 | | | | | | | |
| | comp=Z,3.9nm,1.0s | | | | | | | |
| YBH | Yreka Blue Hor | 46.51 | 320 | LR | | LR | 06 44 21.8 | |
| | comp=Z,53nm,20.6s,baz=156,slow=38 | | | | | | | |
| SCHQ | Schefferville | 47.41 | 14 | P | | P | 06 23 49.5 | +0.2 |
| | comp=Z,3.4nm,0.7s,baz=232,slow=17,SNR=3.5 | | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| RCBR | Riachuelo | 50.74 | 105 | LR | | LR | 06 46 39.0 | |
| | comp=Z,25nm,18.6s,baz=151,slow=37 | | | | | | | |
| PLCA | Paso Flores | 51.55 | 166 | P | | P | 06 24 20.8 | -0.4 |
| | comp=Z,2.4nm,0.8s,baz=344,slow=9.9,SNR=6.0 | | | | | | | |
| PLCA | | | | LR | | LR | 06 42 03.2 | |
| | comp=Z,27nm,20.1s,baz=270,slow=31 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| BBB | Bella Bella | 55.38 | 329 | LR | | LR | 06 50 09.8 | |
| | comp=Z,34nm,20.9s,baz=148,slow=38 | | | | | | | |
| ILAR | Eielson Array | 69.93 | 336 | P | | P | 06 26 26.8 | +0.7 |
| | comp=Z,0.7nm,0.9s,baz=105,slow=3.8,SNR=5.0 | | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | | |
| KDAK | Kodiak Island | 70.44 | 328 | LR | | LR | 06 58 23.2 | |
| | comp=Z,29nm,18.7s,baz=145,slow=37 | | | | | | | |
| ESDC | Sonseca Array | 76.77 | 51 | P | | P | 06 27 08.8 | +1.8 |
| | comp=Z,4.0nm,0.7s,baz=279,slow=6.0,SNR=31 | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| EKA | Eskdalemuir Ar | 77.37 | 35 | P | | P | 06 27 10.9 | +1.0 |
| | comp=Z,1.7nm,0.7s,baz=243,slow=3.7,SNR=5.0 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| TORD | Torodi Ar. Bea | 84.22 | 78 | P | | P | 06 27 49.4 | +2.0 |
| | comp=Z,0.4nm,0.7s,baz=299,slow=1.5,SNR=2.4 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| NOA | NORSAR Array B | 84.57 | 29 | LR | | LR | 07 06 04.1 | |
| | comp=Z,12nm,18.0s,baz=125,slow=36 | | | | | | | |
| HFS | Hagfors | 85.94 | 30 | P | | P | 06 27 55.9 | +0.7 |
| | comp=Z,3.0nm,0.8s,baz=297,slow=5.0,SNR=5.0 | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| GERES | GERESS Array B | 88.31 | 41 | P | | P | 06 28 08.1 | +1.1 |
| | comp=Z,0.3nm,0.3s,baz=282,slow=4.9,SNR=2.2 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| FINES | FINESS Array B | 91.36 | 27 | P | | P | 06 28 21.8 | +1.0 |
| | comp=Z,1.2nm,0.7s,baz=274,slow=5.4,SNR=2.6 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| WRA | Warramunga Arr | 141.11 | 250 | PKP | | PKPdf | 06 34 44.3 | -2.3 |
| | comp=Z,0.7nm,0.8s,baz=77,slow=1.5,SNR=2.9 | | | | | | | |

*SDD **15** 06:16:42.9±2.0, 18°.75N×70°.32W, h66$^{km}$±10$^{km}$, MD3.4, ML2.7, MW3.6*
*OSPL **15** 06:16:43.2±2.5, 18°.69N×70°.30W, h61$^{km}$±17$^{km}$, ML2.8*
**ISC 15 06:16:42.6±1.3, 18°.66N±0°.06×70°.28W±0°.03, h62$^{km}$±9$^{km}$, n19, σ1°.35/33, 18C-4D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| BANI | BANI | 0.28 | 195⇑ | *ePg* | | Pn | | 06 16 52.6 | -0.2 |
| BANI | | | | ⇑*eSg* | | Sn | | 06 17 01.9 | +1.7 |
| BANI | | | | IAML | | | | 06 17 02.6 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| BANI | | | | IAML | | | | 06 17 02.8 | |
| | comp=E,2μm,0.2s | | | | | | | | |
| ABDR | Alto Bandera | 0.36 | 294⇑ | *ePg* | | Pn | | 06 16 53.4 | -0.4 |
| ABDR | | | | ⇓*eSg* | | Sn | | 06 17 01.5 | -0.3 |
| ABDR | | | | IAML | | | | 06 17 04.0 | |
| | comp=N,626nm,0.3s | | | | | | | | |
| ABDR | | | | IAML | | | | 06 17 06.3 | |
| | comp=E,760nm,0.3s | | | | | | | | |
| SDD | Santo Domingo | 0.40 | 120⇑ | *ePg* | | Pn | | 06 16 53.6 | 0.0 |
| SDD | | | | ⇓*eSg* | | Sn | | 06 17 02.4 | +0.6 |
| SDD | | | | IAML | | | | 06 17 02.5 | |
| | comp=N,49nm,0.5s | | | | | | | | |
| SDD | | | | IAML | | | | 06 17 02.8 | |
| | comp=E,29nm,0.7s | | | | | | | | |
| SDD | Santo Domingo | 0.40 | 120 | *i* P | | Pn | | 06 16 52.9 | -0.8 |
| SDD | | | | *eS* | | Sn | | 06 17 02.0 | +0.2 |
| SC01 | Santiago de lo | 0.87 | 331 | *i* P | | Pn | | 06 16 59.1 | 0.0 |
| SC01 | | | | IAML | | | | 06 17 16.2 | |
| | comp=Z,112nm,0.4s | | | | | | | | |
| LOBA2 | Hotel Casa Bon | 0.96 | 233⇓ | *ePg* | | Pn | | 06 16 58.9 | -1.3 |
| LOBA2 | | | | ⇑*eSg* | | Sn | | 06 17 12.4 | -0.9 |
| LOBA2 | | | | IAML | | | | 06 17 12.8 | |
| | comp=E,50nm,0.3s | | | | | | | | |
| LOBA2 | | | | IAML | | | | 06 17 13.4 | |
| | comp=N,33nm,0.4s | | | | | | | | |
| SDDR | Presa de Saban | 1.01 | 289⇑ | *ePg* | | Pn | | 06 16 60.0 | -0.8 |
| SDDR | | | | ⇑*eSg* | | Sn | | 06 17 12.0 | -2.3 |
| SDDR | | | | IAML | | | | 06 17 20.8 | |
| | comp=E,111nm,0.5s | | | | | | | | |
| SDDR | | | | IAML | | | | 06 17 21.5 | |
| | comp=N,136nm,1.4s | | | | | | | | |
| SDDR | Presa de Saban | 1.01 | 289 | *i* P | | Pn | | 06 17 00.1 | -0.7 |
| SDDR | | | | *eS* | | Sn | | 06 17 13.7 | -0.6 |
| SDDR | | | | IAML | | | | 06 17 20.0 | |
| | comp=Z,63nm,3.1s | | | | | | | | |
| PODR | Polo | 1.07 | 243⇑ | *ePg* | | Pn | | 06 17 00.8 | -1.0 |
| PODR | | | | ⇑*eSg* | | Sn | | 06 17 16.7 | +0.7 |
| PODR | | | | IAML | | | | 06 17 17.5 | |
| | comp=E,380nm,0.6s | | | | | | | | |
| PODR | | | | IAML | | | | 06 17 18.6 | |
| | comp=N,215nm,0.2s | | | | | | | | |
| PODR | Polo | 1.07 | 243 | *i* P | | Pn | | 06 17 01.0 | -0.8 |
| PODR | | | | *eS* | | Sn | | 06 17 17.0 | +0.9 |
| PODR | | | | IAML | | | | 06 17 18.5 | |
| | comp=Z,283nm,0.5s | | | | | | | | |
| REDR | Restauracion | 1.17 | 296⇓ | *ePg* | | Pn | | 06 17 05.7 | +2.9 |
| REDR | | | | ⇑*eSg* | | Sn | | 06 17 22.3 | +4.3 |
| REDR | | | | IAML | | | | 06 17 28.7 | |
| | comp=E,97nm,0.2s | | | | | | | | |
| REDR | | | | IAML | | | | 06 17 28.9 | |
| | comp=N,146nm,0.2s | | | | | | | | |
| MIDR | Miches | 1.21 | 74⇑ | *ePg* | | Pn | | 06 17 02.8 | -0.6 |
| MIDR | | | | ⇑*eSg* | | Sn | | 06 17 17.8 | -1.1 |
| MIDR | | | | IAML | | | | 06 17 18.9 | |
| | comp=E,74nm,0.5s | | | | | | | | |
| MIDR | | | | IAML | | | | 06 17 19.5 | |
| | comp=N,50nm,0.3s | | | | | | | | |
| MIDR | | | | IAML | | | | 06 17 19.7 | |
| | comp=N,54nm,0.5s | | | | | | | | |
| HIDR | Higuey Centro | 1.48 | 92⇑ | *ePg* | | Pn | | 06 17 05.8 | -1.2 |
| HIDR | | | | ⇑*eSg* | | Sn | | 06 17 24.6 | -0.9 |
| HIDR | | | | IAML | | | | 06 17 29.4 | |
| | comp=N,312nm,0.2s | | | | | | | | |
| HIDR | | | | IAML | | | | 06 17 30.0 | |
| | comp=E,369nm,0.2s | | | | | | | | |
| SADR | Isla Saona | 1.50 | 108⇑ | *ePg* | | Pn | | 06 17 07.8 | +0.6 |
| SADR | | | | ⇑*eSg* | | Sn | | 06 17 26.7 | +0.8 |
| SADR | | | | IAML | | | | 06 17 31.0 | |
| | comp=E,96nm,0.8s | | | | | | | | |
| SADR | | | | IAML | | | | 06 17 31.2 | |
| | comp=N,168nm,1.6s | | | | | | | | |
| SADR | | | | IAML | | | | 06 17 31.2 | |
| | comp=N,168nm,1.6s | | | | | | | | |
| PCDR | Punta Cana, DR | 1.81 | 94⇑ | *ePg* | | Pn | | 06 17 12.3 | +0.9 |
| PCDR | | | | ⇑*eSg* | | Sn | | 06 17 33.7 | +0.4 |
| PCDR | | | | IAML | | | | 06 17 46.0 | |
| | comp=E,74nm,1.9s | | | | | | | | |
| PCDR | | | | IAML | | | | 06 17 48.2 | |
| | comp=N,139nm,1.1s | | | | | | | | |
| PCDR | Punta Cana, DR | 1.81 | 94 | *i* P | | Pn | | 06 17 11.6 | +0.2 |
| PCDR | | | | IAML | | | | 06 17 40.8 | |
| | comp=Z,157nm,1.1s | | | | | | | | |
| GRTK | Grand Turk | 2.95 | 344 | *i* P | | Pn | | 06 17 25.3 | -1.6 |
| GRTK | | | | IAML | | | | 06 18 02.8 | |
| | comp=Z,55nm,2.5s | | | | | | | | |
| AGPR | Aguadilla, PR | 3.01 | 93 | *i* P | | Pn | | 06 17 28.9 | +1.1 |
| AGPR | | | | IAML | | | | 06 18 04.0 | |
| | comp=Z,69nm,1.9s | | | | | | | | |
| CRPR | Cabo Rojo, PR | 3.08 | 102 | *i* P | | Pn | | 06 17 28.7 | -0.1 |
| CRPR | | | | IAML | | | | 06 18 23.5 | |
| | comp=Z,35nm,2.5s | | | | | | | | |

*IDC **15** 06:17:42.4±0.5, 16°.97N×94°.67W, h106$^{km}$±4$^{km}$, mb3.4/8, mbtmp3.8/10, Error ellipse: s-maj=31.0km s-min=11.0km az=36.0*
*MEX **15** 06:17:43.9±1.2, 16°.87N×94°.86W, h109$^{km}$±9$^{km}$, MD4.6*
*NEIC **15** 06:17:43.3±2.7, 16°.83N±0°.07×94°.83W±0°.04, h108$^{km}$±12$^{km}$, mb4.3/17, Md4.6/60(MEX), Error ellipse: s-maj=10.0km s-min=5.2km az=177.0*
**ISC 15 06:17:43.1±0.7, 16°.89N±0°.03×94°.83W±0°.02, h117$^{km}$±5$^{km}$, n89, σ1°.91/134, mb3.5/8, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| CMIG | Matias Romero | 0.21 | 345 | LR | | LR | | 06 17 36.9 | |
| | comp=Z,55nm,20.5s,baz=3.5,slow=23 | | | | | | | | |
| CMIG | | | | P | | Pn | | 06 17 58.7 | -0.7 |
| | 3μm,0.3s,baz=172,slow=4.8 | | | | | | | | |
| CMIG | | | | S | | Sn | | 06 18 10.1 | -1.6 |
| | 1μm,0.3s,baz=30,slow=22,SNR=13 | | | | | | | | |
| CMIG | Matias Romero | 0.21 | 345 | *i* P | | Pn | | 06 17 58.7 | -0.7 |
| CMIG | | | | *i* S | | Sn | | 06 18 10.2 | -1.6 |
| NILT | Santiago Nilte | 0.38 | 148 | *i* P | | Pn | | 06 17 59.5 | -0.6 |
| UXUV | UXUV | 0.78 | 57 | *i* P | | Pn | | 06 18 02.2 | -0.6 |
| UXUV | | | | *eS* | | Sn | | 06 18 15.7 | -2.0 |
| CARR | Arriaga | 1.09 | 126 | *i* P | | Pn | | 06 18 05.1 | -0.7 |
| CARR | | | | *eS* | | Sn | | 06 18 21.6 | -1.2 |
| TUIG | Tuzandepetl | 1.20 | 19 | *i* P | | Pn | | 06 18 06.3 | -0.7 |
| TUIG | | | | *eS* | | Sn | | 06 18 23.7 | -1.4 |
| NEUV | Arroyo Zacate | 1.24 | 311 | *i* P | | Pn | | 06 18 06.5 | -0.9 |
| NEUV | | | | *eS* | | Sn | | 06 18 23.7 | -2.1 |
| TGIG | | 1.64 | 94 | | | Pn | | 06 18 11.5 | -0.6 |
| TGIG | | | | | | Sn | | 06 18 32.2 | -1.8 |
| TGIG | | 1.64 | 94 | *i* P | | Pn | | 06 18 11.5 | -0.6 |
| TGIG | | | | *eS* | | Sn | | 06 18 32.2 | -1.8 |
| HUIG | Huatulco | 1.66 | 228 | | | Pn | | 06 18 10.3 | -2.0 |
| HUIG | Huatulco | 1.66 | 228 | *i* P | | Pn | | 06 18 10.3 | -2.0 |
| PMUV | Sontecomapan | 1.67 | 350 | *i* P | | Pn | | 06 18 11.1 | -1.4 |
| PMUV | | | | *eS* | | Sn | | 06 18 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UNM | Universidad Na | 4.79 | 301 | Pn | | Pn | 06 18 52.5 | -1.0 |
| ESQI | Esquipulas | 5.77 | 113 | Pn | | Pn | 06 19 05.9 | -0.7 |
| MTO3 | Montecristo | 5.82 | 114 | Pn | | Pn | 06 19 05.9 | -1.5 |
| MOIG | Morelia | 6.65 | 296 | | | Pn | 06 19 18.1 | -0.5 |
| JTS | Las Juntas de | 11.62 | 123 | P | | Pn | 06 20 25.6 | 0.0 |
| | 2.5nm,0.3s,baz=300,slow=16,SNR=1.7 | | | | | | | |
| SOR | Soroa | 12.57 | 60 | Pn | | Pn | 06 20 32.9 | -5.0 |
| HNDO | Hondo | 13.23 | 343 | | | Pn | 06 20 48.6 | +2.1 |
| DRIO | Del Rio | 13.56 | 338 | Pn | | Pn | 06 20 53.1 | +2.3 |
| JCT | Junction City | 14.27 | 342 | Pn | | Pn | 06 21 01.9 | +2.0 |
| OZNA | Ozona | 15.10 | 339 | | | P | 06 21 15.3 | +2.5 |
| OZNA | | | | | IAmb | IAmb | 06 21 22.0 | |
| | comp=Z,13nm,0.5s | | | | | | | |
| WHTX | Lake Whitney, | 15.22 | 351 | | | P | 06 21 16.2 | +2.1 |
| MNHN | Monahans | 16.09 | 335 | P | | P | 06 21 25.6 | +1.8 |
| MNHN | | | | | IAmb | IAmb | 06 21 29.8 | |
| | comp=Z,9.4nm,0.8s | | | | | | | |
| PLPT | Palo Pinto | 16.16 | 349 | | | P | 06 21 25.5 | +0.9 |
| PLPT | | | | | IAmb | IAmb | 06 21 42.0 | |
| | comp=Z,18nm,0.5s | | | | | | | |
| FW06 | Azle | 16.20 | 352 | | | P | 06 21 26.6 | +1.6 |
| FW06 | | | | | IAmb | IAmb | 06 21 41.3 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| ABTX | Abilene, Hawle | 16.26 | 345 | Pn | | Pn | 06 21 24.5 | -0.2 |
| FW03 | Perrin-Whitt E | 16.34 | 350 | | | P | 06 21 28.1 | +1.5 |
| FW03 | | | | | IAmb | IAmb | 06 21 43.2 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| APMT | Aspermont | 17.05 | 345 | | | P | 06 21 36.8 | +2.5 |
| APMT | | | | | IAmb | IAmb | 06 21 53.4 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| WTFS | Witchita Falls | 17.12 | 350 | Pn | | Pn | 06 21 38.1 | +2.8 |
| LOOK | Love County | 17.16 | 353 | Pn | | Pn | 06 21 38.4 | +2.7 |
| LOOK | | | | | IAmb | IAmb | 06 21 46.8 | |
| | comp=Z,37nm,1.2s | | | | | | | |
| MIAR | Mount Ida | 17.62 | 3 | P | | P | 06 21 40.5 | 0.0 |
| X37A | Clayton | 17.63 | 359 | P | | P | 06 21 41.9 | +1.2 |
| X37A | | | | | IAmb | IAmb | 06 21 51.3 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| X34A | Smith Ranch, M | 17.84 | 352 | Pn | | Pn | 06 21 46.1 | +2.1 |
| WMOK | Wichita Mounta | 18.12 | 349 | Pn | | Pn | 06 21 48.3 | +1.0 |
| SMWD | Samnorwood | 18.77 | 346 | P | | P | 06 21 54.6 | +1.4 |
| FCAR | Ozark Folk Cen | 19.08 | 7 | P | | P | 06 21 56.5 | 0.0 |
| QUOK | Quay | 19.28 | 355 | P | | P | 06 21 58.3 | -0.4 |
| QUOK | | | | | IAmb | IAmb | 06 22 13.2 | |
| | comp=Z,7.6nm,0.8s | | | | | | | |
| NVAR | Mina Array Bea | 29.72 | 321 | P | | P | 06 23 40.0 | +1.5 |
| | comp=Z,0.4nm,0.6s,baz=118,slow=8.8,SNR=1.8 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| LPAZ | La Paz | 42.19 | 140 | P | | P | 06 25 24.9 | -0.4 |
| | comp=Z,0.5nm,0.6s,baz=332,slow=13,SNR=2.0 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| BDFB | Brasilia | 56.37 | 122 | P | | P | 06 27 12.3 | -0.3 |
| | comp=Z,1.2nm,0.6s,baz=305,slow=7.0,SNR=1.8 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| ILAR | Eielson Array | 59.12 | 337 | P | | P | 06 27 31.6 | +0.4 |
| | comp=Z,0.4nm,0.9s,baz=134,slow=5.2,SNR=5.1 | | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | | |
| PLCA | Paso Flores | 61.61 | 159 | P | | P | 06 27 48.9 | +0.5 |
| | comp=Z,1.2nm,0.7s,baz=328,slow=6.1,SNR=5.7 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| EKA | Eskdalemuir Ar | 77.23 | 36 | P | | P | 06 29 23.0 | -1.2 |
| | comp=Z,0.6nm,0.6s,baz=281,slow=5.0,SNR=2.1 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| ESDC | Sonseca Array | 80.07 | 52 | P | | P | 06 29 40.4 | +0.2 |
| | comp=Z,0.4nm,0.6s,baz=284,slow=4.2,SNR=2.1 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| ARCES | ARCESS Array B | 84.25 | 18 | P | | P | 06 30 00.7 | -0.6 |
| | comp=Z,1.7nm,0.9s,baz=336,slow=4.0,SNR=1.8 | | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | | |
| WRA | Warramunga Arr | 133.38 | 258 | PKP | | PKPdf | 06 36 45.7 | -0.6 |
| | comp=Z,0.3nm,0.6s,baz=85,slow=1.4,SNR=1.8 | | | | | | | |
| ASAR | Alice Springs | 133.37 | 253 | PKP | | PKPdf | 06 36 47.3 | 0.0 |
| | comp=Z,0.3nm,0.5s,baz=83,slow=1.9,SNR=2.1 | | | | | | | |

*GUC* ***15*** *06:30:29.4±0.8,24°.16S×67°.07W, h214km±9km, ML3.6*
*IDC* ***15*** *06:30:30.9±1.8,24°.11S×66°.93W, h176km±23km, mb3.2/3, mbtmp3.6/8, Error ellipse: s-maj=30.0km s-min=15.5km az=130.0*

**ISC 15 06:30:30.9±0.7,24°.14S±0°.06×67°.04W±0°.06,h181km,n20, σ1s20/25,mb3.5/3,3C,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| SLA | San Lorenzo | 1.52 | 113 | ⇑*i*P | P | Pn | 06 31 04.5 | +1.2 |
| AF01 | San Pedro de A | 1.58 | 318 | *e*P | P | Pn | 06 31 05.0 | +0.9 |
| AF01 | | | | *e*S | S | Sn | 06 31 32.6 | +2.9 |
| AF01 | | | | IAML | | | 06 31 34.9 | |
| | comp=N,164nm,0.4s | | | | | | | |
| LVC | Limon Verde | 2.29 | 311 | P | P | Pn | 06 31 13.0 | +1.3 |
| | comp=N,20nm,0.3s,baz=136,slow=7.0,SNR=58 | | | | | | | |
| LVC | | | | S | S | Sn | 06 31 44.0 | +0.7 |
| | comp=N,84nm,0.4s,baz=108,slow=20,SNR=7.5 | | | | | | | |
| LVC | Limon Verde | 2.29 | 311 | *e*P | P | Pn | 06 31 12.4 | +0.7 |
| LVC | | | | *e*S | S | Sn | 06 31 44.2 | +0.9 |
| YJA | Yavi | 2.41 | 36 | *e*P | P | Pn | 06 31 14.3 | +1.1 |
| YJA | | | | *e*S | S | Sn | 06 31 47.4 | +1.5 |
| GO02 | Mina Guanaco | 2.53 | 246 | ⇑*i*P | P | Pn | 06 31 14.8 | +0.5 |
| GO02 | | | | IAML | | | 06 31 49.2 | |
| | comp=E,244nm,0.5s | | | | | | | |
| PB09 | IPOC Station P | 3.09 | 319 | *e*P | P | Pn | 06 31 22.4 | +1.5 |
| PB14 | IPOC Station P | 3.10 | 260 | *e*P | P | Pn | 06 31 21.0 | -0.1 |
| PB05 | IPOC Station P | 3.17 | 293 | *e*P | P | Pn | 06 31 22.1 | +0.2 |
| PB04 | IPOC Station P | 3.38 | 302 | ⇑*i*P | P | Pn | 06 31 24.6 | +0.2 |
| LPAZ | La Paz | 7.88 | 352 | P | P | Pn | 06 32 23.5 | +0.2 |
| | comp=E,1.0nm,0.3s,baz=146,slow=5.8,SNR=20 | | | | | | | |
| LPAZ | | | | S | | Sn | 06 33 51.2 | -0.9 |
| | comp=E,0.4nm,0.5s,baz=210,slow=8.1,SNR=1.4 | | | | | | | |
| CPUP | Villa Florida | 9.06 | 106 | P | | Pn | 06 32 45.0 | +6.8 |
| | comp=E,0.4nm,0.4s,baz=287,slow=11,SNR=3.2 | | | | | | | |
| SIV | San Ignacio | 9.86 | 36 | P | P | Pn | 06 32 46.7 | -2.0 |
| | comp=E,0.8nm,0.6s,baz=220,slow=13,SNR=6.7 | | | | | | | |
| SIV | | | | S | | Sn | 06 34 39.3 | +0.7 |
| | comp=E,0.3nm,0.5s,baz=144,slow=18,SNR=1.7 | | | | | | | |
| PLCA | Paso Flores | 16.80 | 189 | P | P | Pn | 06 34 16.3 | +0.5 |
| | comp=E,1.9nm,1.2s,baz=345,slow=18,SNR=1.7 | | | | | | | |
| BDFB | Brasilia | 19.77 | 68 | P | P | P | 06 34 46.6 | -0.8 |
| | comp=E,2.5nm,0.7s,baz=240,slow=7.5,SNR=6.1 | | | | | | | |
| SNAA | Sanae | 59.23 | 161 | P | P | P | 06 40 12.8 | 0.0 |
| | comp=E,0.4nm,0.5s,baz=289,slow=16,SNR=2.0 | | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | | |
| QSPA | South Pole Qui | 66.06 | 180 | P | P | P | 06 40 58.9 | +0.7 |
| | comp=E,0.6nm,0.5s,baz=114,slow=6.0,SNR=14 | | | | | | | |
| | comp=E,0.6nm,0.5s | | | | | | | |
| TORD | Torodi Ar. Bea | 76.66 | 69 | P | P | P | 06 42 01.7 | -0.5 |
| | comp=E,0.4nm,0.9s,baz=250,slow=5.6,SNR=2.0 | | | | | | | |
| | comp=E,0.4nm,0.9s | | | | | | | |
| WRA | Warramunga Arr | 131.48 | 207 | PKP | | PKiKP | 06 49 22.5 | -1.1 |
| | comp=E,0.3nm,0.8s,baz=162,slow=1.8,SNR=1.9 | | | | | | | |
| MKAR | Makanchi Array | 146.66 | 40 | PKPbc | | PKiKP | 06 49 52.0 | -1.8 |
| | comp=E,0.5nm,0.7s,baz=282,slow=7.2,SNR=2.7 | | | | | | | |

*SDD* ***15*** *06:34:46.3±2.3,18°.82N×69°.63W, h81km±13km, MD3.6, ML2.8, MW3.6*
*OSPL* ***15*** *06:34:47.7±2.3,18°.75N×69°.64W, h76km±15km, ML2.7*

**ISC 15 06:34:47.0±1.4,18°.77N±0°.07×69°.63W±0°.03,h64km±12km, n16,σ1s36/31,18C-4D,Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| SDD | Santo Domingo | 0.41 | 221 | ⇓*e*Pg | P | Pn | 06 34 58.2 | -0.1 |
| SDD | | | | ⇓*e*Sg | S | Sn | 06 35 08.0 | +1.3 |
| SDD | | | | IAML | | | 06 35 08.3 | |
| | comp=N,185nm,0.2s | | | | | | | |
| SDD | | | | IAML | | | 06 35 08.5 | |
| | comp=E,117nm,0.1s | | | | | | | |
| SDD | Santo Domingo | 0.41 | 221 | *i* P | P | Pn | 06 34 58.0 | -0.4 |
| SDD | | | | *e*S | S | Sn | 06 35 07.8 | +1.1 |
| MIDR | Miches | 0.59 | 69 | ⇑*e*Pg | P | Pn | 06 34 59.2 | -1.1 |
| MIDR | | | | ⇓*e*Sg | S | Sn | 06 35 09.9 | 0.0 |
| MIDR | | | | IAML | | | 06 35 11.2 | |
| | comp=E,366nm,0.1s | | | | | | | |
| MIDR | | | | IAML | | | 06 35 11.6 | |
| | comp=N,200nm,0.2s | | | | | | | |
| MIDR | | | | IAML | | | 06 35 11.6 | |
| | comp=N,164nm,0.1s | | | | | | | |
| BANI | BANI | 0.78 | 242 | ⇑*e*Pg | P | Pn | 06 35 02.3 | -0.3 |
| BANI | | | | ⇑*e*Sg | S | Sn | 06 35 14.8 | +0.7 |
| BANI | | | | IAML | | | 06 35 16.0 | |
| | comp=E,448nm,0.6s | | | | | | | |
| BANI | | | | IAML | | | 06 35 20.5 | |
| | comp=N,531nm,0.2s | | | | | | | |
| HIDR | Higuey Centro | 0.88 | 101 | ⇓*e*Pg | P | Pn | 06 35 03.4 | -0.3 |
| HIDR | | | | ⇑*e*Sg | S | Sn | 06 35 17.3 | +1.2 |
| HIDR | | | | IAML | | | 06 35 18.5 | |
| | comp=N,2μm,0.2s | | | | | | | |
| HIDR | | | | IAML | | | 06 35 18.6 | |
| | comp=E,1μm,0.2s | | | | | | | |
| ABDR | Alto Bandera | 0.94 | 273 | ⇑*e*Pg | P | Pn | 06 35 03.4 | -1.4 |
| ABDR | | | | ⇑*e*Sg | S | Sn | 06 35 17.0 | -1.0 |
| ABDR | | | | IAML | | | 06 35 18.5 | |
| | comp=E,299nm,0.1s | | | | | | | |
| ABDR | | | | IAML | | | 06 35 23.1 | |
| | comp=N,280nm,0.7s | | | | | | | |
| SADR | Isla Saona | 0.99 | 125 | ⇑*e*Pg | P | Pn | 06 35 03.0 | -2.0 |
| SADR | | | | ⇑*e*Sg | S | Sn | 06 35 18.9 | +0.4 |
| SADR | | | | IAML | | | 06 35 28.7 | |
| | comp=E,95nm,0.6s | | | | | | | |
| SADR | | | | IAML | | | 06 35 35.7 | |
| | comp=N,163nm,2.5s | | | | | | | |
| SADR | | | | IAML | | | 06 35 35.8 | |
| | comp=N,163nm,2.5s | | | | | | | |
| PCDR | Punta Cana, DR | 1.21 | 102 | ⇑*e*Pg | P | Pn | 06 35 08.2 | +0.3 |
| PCDR | | | | ⇑*e*Sg | S | Sn | 06 35 22.9 | -0.7 |
| PCDR | | | | IAML | | | 06 35 31.9 | |
| | comp=N,255nm,2.4s | | | | | | | |
| PCDR | | | | IAML | | | 06 35 34.8 | |
| | comp=E,85nm,0.7s | | | | | | | |
| PCDR | Punta Cana, DR | 1.21 | 102 | *i* P | P | Pn | 06 35 07.8 | -0.1 |
| PCDR | | | | *e*S | S | Sn | 06 35 24.7 | +1.1 |
| PCDR | | | | IAML | | | 06 35 29.6 | |
| | comp=Z,147nm,0.8s | | | | | | | |
| SC01 | Santiago de lo | 1.23 | 303 | ⇑*e*Pg | P | Pn | 06 35 07.3 | -0.8 |
| SC01 | | | | ⇑*e*Sg | S | Sn | 06 35 23.5 | -0.5 |
| SC01 | | | | IAML | | | 06 35 26.4 | |
| | comp=E,315nm,0.5s | | | | | | | |
| SC01 | | | | IAML | | | 06 35 27.1 | |
| | comp=N,207nm,0.4s | | | | | | | |
| SC01 | Santiago de lo | 1.23 | 303 | *i* P | P | Pn | 06 35 07.0 | -1.1 |
| SC01 | | | | *e*S | S | Sn | 06 35 24.8 | +0.8 |
| SC01 | | | | IAML | | | 06 35 28.9 | |
| | comp=Z,100nm,0.2s | | | | | | | |
| LOBA2 | Hotel Casa Bon | 1.55 | 244 | ⇑*e*Pg | P | Pn | 06 35 11.1 | -1.3 |
| LOBA2 | | | | ⇑*e*Sg | S | Sn | 06 35 31.5 | 0.0 |
| LOBA2 | | | | IAML | | | 06 35 32.3 | |
| | comp=N,27nm,0.2s | | | | | | | |
| LOBA2 | | | | IAML | | | 06 35 32.7 | |
| | comp=E,25nm,0.2s | | | | | | | |
| SDDR | Presa de Saban | 1.58 | 278 | ⇑*e*Pg | P | Pn | 06 35 12.4 | -0.5 |
| SDDR | | | | ⇑*e*Sg | S | Sn | 06 35 30.7 | -1.8 |
| SDDR | | | | IAML | | | 06 35 35.7 | |
| | comp=N,55nm,0.9s | | | | | | | |
| SDDR | | | | IAML | | | 06 35 37.4 | |
| | comp=E,70nm,0.6s | | | | | | | |
| SDDR | Presa de Saban | 1.58 | 278 | *i* P | P | Pn | 06 35 12.4 | -0.5 |
| SDDR | | | | *e*S | S | Sn | 06 35 32.9 | +0.4 |
| SDDR | | | | IAML | | | 06 35 37.5 | |
| | comp=Z,35nm,0.9s | | | | | | | |
| REDR | Restauracion | 1.71 | 284 | ⇑*e*Pg | P | Pn | 06 35 15.8 | +1.2 |
| REDR | | | | ⇑*e*Sg | S | Sn | 06 35 40.6 | +5.0 |
| REDR | | | | IAML | | | 06 35 46.6 | |
| | comp=E,76nm,0.2s | | | | | | | |
| REDR | | | | IAML | | | 06 35 50.1 | |
| | comp=N,78nm,0.1s | | | | | | | |
| AGPR | Aguadilla, PR | 2.41 | 97 | *i* P | P | Pn | 06 35 24.3 | +0.3 |

*IDC* ***15*** *06:35:21.0±0.7,36°.21N×26°.05E, h125km±13km, mb3.5/8, mbtmp3.8/15, Error ellipse: s-maj=21.0km s-min=13.6km az=171.0*
*MCSM* ***15*** *06:35:21.8±0.9,36°.N±6°×2°.6E±1°.0, h129km±6km, mb4.2, mB4.8, MLv3.8, Mw(mB)4.0*
*ISK* ***15*** *06:35:21.0,36°.36N×25°.99E, h134km±2km, ML3.5/17*
*THE* ***15*** *06:35:23.3,36°.33N×25°.93E, h131km±2km, ML3.7/8, Error ellipse: s-maj=2.1km s-min=0.9km az=208.0*
*ATH* ***15*** *06:35:24.3,36°.50N×25°.89E, h29km±5km, ML3.5/14, Error ellipse: s-maj=5.8km s-min=1.3km az=22.0*

**ISC 15 06:35:20.9±0.6,36°.34N±0°.04×26°.01E±0°.04,h124km±6km, n101,σ1s71/126,mb3.9/9,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| THR8 | Santorini-Mono | 0.44 | 279 | P | P | Pn | 06 35 39.9 | +1.0 |
| SANT | Santorini | 0.45 | 274 | Pg | P | Pn | 06 35 40.8 | +1.8 |
| SNT1 | Gialos, Santor | 0.48 | 279 | P | P | Pn | 06 35 40.2 | +1.1 |
| SNT1 | | | | S | S | Sn | 06 35 53.2 | +0.4 |
| | 1μm,0.5s | | | | | | | |
| THR3 | Thira Island, | 0.50 | 278 | P | P | Pn | 06 35 40.3 | +1.1 |
| CMBO | Columbo, Santo | 0.51 | 285 | P | P | Pn | 06 35 40.4 | +1.1 |
| CMBO | | | | S | S | Sn | 06 35 53.9 | +0.7 |
| | 3μm,0.6s | | | | | | | |
| THR9 | Santorini-Faro | 0.53 | 272 | P | P | Pn | 06 35 40.5 | +1.1 |
| SAP3 | Santorini-Thir | 0.55 | 280 | P | P | Pn | 06 35 40.6 | +1.1 |
| APE | Apeiranthos | 0.82 | 332 | Pg | P | Pn | 06 35 42.2 | +0.5 |
| APE | Apeiranthos | 0.82 | 332 | P | P | Pn | 06 35 42.5 | +0.8 |
| KARP | Karpathos | 1.22 | 130 | Pn | P | Pn | 06 35 47.3 | +1.7 |
| KARP | Karpathos | 1.22 | 130 | P | P | Pn | 06 35 47.4 | +1.9 |
| KARP | | | | S | S | Sn | 06 36 05.3 | +1.0 |
| | 5μm,0.2s | | | | | | | |
| KARP | Karpathos | 1.22 | 130 | P | P | Pn | 06 35 47.4 | +1.9 |
| KARP | Karpathos | 1.22 | 130 | P | P | Pn | 06 35 47.5 | +1.9 |
| KARP | | | | S | S | Sn | 06 36 05.1 | +0.9 |
| KARP | | | | AML | AML | | 06 36 06.1 | |
| | comp=N,12124μm,0.2s | | | | | | | |
| KARP | | | | AML | AML | | 06 36 06.2 | |
| | comp=E,9157μm,0.2s | | | | | | | |
| ZKR | Zakros | 1.24 | 172 | Pn | P | Pn | 06 35 47.4 | +1.8 |
| ZKR | Zakros | 1.24 | 172 | P | P | Pn | 06 35 47.5 | +1.8 |
| ZKR | | | | S | S | Sn | 06 36 06.1 | +1.6 |
| | comp=E,952nm,0.2s | | | | | | | |
| ZKR | Zakros | 1.24 | 172 | P | P | Pn | 06 35 47.5 | +1.8 |
| ZKR | | | | S | S | Sn | 06 36 05.1 | +0.6 |
| ZKR | | | | AML | AML | | 06 36 08.6 | |
| | comp=N,1149μm,0.2s | | | | | | | |
| ZKR | | | | AML | AML | | 06 36 08.7 | |
| | comp=E,2641μm,0.3s | | | | | | | |
| BODT | Bodrum | 1.27 | 55 | Pn | P | Pn | 06 35 47.2 | +1.2 |
| BODT | Bodrum | 1.27 | 55 | P | P | Pn | 06 35 47.4 | +1.4 |
| IACM | Heraklion | 1.29 | 217 | P | P | Pn | 06 35 47.2 | +1.0 |
| IACM | | | | S | S | Sn | 06 36 04.8 | -0.6 |
| | comp=E,5μm,0.4s | | | | | | | |
| IACM | Heraklion | 1.29 | 217 | P | P | Pn | 06 35 47.2 | +1.0 |
| IACM | | | | S | S | Sn | 06 36 02.4 | -3.0 |
| IACM | | | | AML | AML | | 06 36 07.8 | |
| | comp=N,8647μm,0.2s | | | | | | | |
| IACM | | | | AML | AML | | 06 36 10.2 | |
| | comp=E,8978μm,0.5s | | | | | | | |
| KSTL | Kastelli Herak | 1.29 | 217 | P | P | Pn | 06 35 47.1 | +0.9 |
| KSTL | | | | S | S | Sn | 06 36 05.0 | -0.4 |
| | comp=E,490nm,0.3s | | | | | | | |
| KSTL | Kastelli Herak | 1.29 | 217 | P | P | Pn | 06 35 47.0 | +0.8 |
| KSTL | | | | S | S | Sn | 06 36 03.8 | -1.7 |
| KSTL | | | | AML | AML | | 06 36 06.1 | |
| | comp=N,3744μm,0.3s | | | | | | | |
| KSTL | | | | AML | AML | | 06 36 06.3 | |
| | comp=E,1999μm,0.3s | | | | | | | |
| DAT | Datca | 1.32 | 73 | Pn | P | Pn | 06 35 48.1 | +1.5 |
| DAT | Datca | 1.32 | 73 | P | P | Pn | 06 35 48.3 | +1.7 |
| MHLO | Agia Marina, M | 1.34 | 285 | P | P | Pn | 06 35 48.2 | +1.4 |
| MHLO | Agia Marina, M | 1.34 | 285 | P | P | Pn | 06 35 44.6 | -2.1 |
| MHLO | | | | S | S | Sn | 06 36 00.9 | -5.6 |
| MHLO | | | | AML | AML | | 06 36 10.3 | |
| | comp=E,1414μm,0.7s | | | | | | | |
| MHLO | | | | AML | AML | | 06 36 19.8 | |
| | comp=N,1070μm,0.3s | | | | | | | |
| IDI | Anoyia | 1.39 | 221 | Pn | P | Pn | 06 35 48.2 | +0.7 |
| IDI | Anoyia | 1.39 | 221 | P | P | Pn | 06 35 48.1 | +0.7 |
| IDI | | | | S | S | Sn | 06 36 06.8 | -0.8 |
| | comp=N,830nm,0.3s | | | | | | | |
| IDI | Anoyia | 1.39 | 221 | P | P | Pn | 06 35 48.1 | +0.7 |
| | comp=N,90nm,0.3s,baz=45,slow=5.5,SNR=1216 | | | | | | | |
| IDI | | | | S | S | Sn | 06 36 06.1 | -1.5 |
| | comp=N,381nm,0.2s,baz=323,slow=23,SNR=30 | | | | | | | |
| IDI | Anoyia | 1.39 | 221 | P | P | Pn | 06 35 48.1 | +0.7 |
| IDI | | | | S | S | Sn | 06 36 05.9 | -1.7 |
| IDI | | | | AML | AML | | 06 36 08.1 | |
| | comp=E,1819μm,0.3s | | | | | | | |
| IDI | | | | AML | AML | | 06 36 08.6 | |
| | comp=N,2145μm,0.3s | | | | | | | |
| MLSB | Milas | 1.70 | 56 | Pn | P | Pn | 06 35 52.5 | +1.5 |
| ARG | Arkhangelos | 1.71 | 94 | Pn | P | Pn | 06 35 52.6 | +1.6 |
| ARG | Arkhangelos | 1.71 | 94 | P | P | Pn | 06 35 52.8 | +1.8 |
| ARG | Arkhangelos | 1.71 | 94 | P | P | Pn | 06 35 52.7 | +1.8 |
| ARG | | | | S | S | Sn | 06 36 13.2 | -0.8 |
| ARG | | | | AML | AML | | 06 36 15.8 | |
| | comp=N,766μm,0.3s | | | | | | | |
| ARG | | | | AML | AML | | 06 36 15.9 | |
| | comp=E,1288μm,0.4s | | | | | | | |
| MRSB | Marmaris-Mugla | 1.80 | 77 | Pn | | Pn | 06 35 53.7 | +1.6 |
| CHAN | Chania | 1.80 | 243 | P | | Pn | 06 35 52.8 | +0.7 |
| CHAN | | | | S | | Sn | 06 36 13.8 | -2.0 |
| CHAN | | | | AML | AML | | 06 36 15.9 | |
| | comp=N,2815μm,0.4s | | | | | | | |
| CHAN | | | | AML | AML | | 06 36 20.0 | |
| | comp=E,2126μm,0.3s | | | | | | | |
| IMMV | Iera Moni Meta | 1.87 | 243 | P | | Pn | 06 35 54.4 | +1.5 |
| IMMV | Iera Moni Meta | 1.87 | 243 | P | | Pn | 06 35 53.6 | +0.7 |
| IMMV | | | | S | | Sn | 06 36 16.1 | -1.3 |
| | comp=E,1μm,0.3s | | | | | | | |
| IMMV | Iera Moni Meta | 1.87 | 243 | P | | Pn | 06 35 53.8 | +0.8 |
| IMMV | | | | S | | Sn | 06 36 15.4 | -2.1 |
| IMMV | | | | AML | AML | | 06 36 18.6 | |
| | comp=E,1899μm,0.3s | | | | | | | |
| IMMV | | | | AML | AML | | 06 36 22.4 | |
| | comp=N,2239μm,0.3s | | | | | | | |
| YER | Yerkesik | 1.99 | 66 | Pn | | Pn | 06 35 56.0 | +1.6 |
| YER | Yerkesik | 1.99 | 66 | P | | Pn | 06 35 56.8 | +2.4 |
| RODP | Rodopos | 1.99 | 248 | Pn | | Pn | 06 35 55.8 | +1.4 |
| RODP | Rodopos | 1.99 | 248 | P | | Pn | 06 35 55.2 | +0.8 |
| CHOS | Chios island | 2.04 | 1 | Pn | | Pn | 06 35 56.3 | +1.2 |
| URLA | Izmir | 2.07 | 13 | Pn | | Pn | 06 35 56.5 | +1.1 |
| GVD | Gavdhos | 2.17 | 227 | Pn | | Pn | 06 35 57.9 | +1.2 |
| GVD | Gavdhos | 2.17 | 227 | P | | Pn | 06 35 58.1 | +1.4 |
| GVD | Gavdhos | 2.17 | 227 | P | | Pn | 06 35 58.0 | +1.4 |
| GVD | | | | S | | Sn | 06 36 23.7 | -0.4 |
| GVD | | | | AML | AML | | 06 36 27.8 | |
| | comp=N,1508μm,0.4s | | | | | | | |
| GVD | | | | AML | AML | | 06 36 31.5 | |
| | comp=E,1959μm,0.4s | | | | | | | |
| DALY | Dalyan (Mula) | 2.18 | 77 | Pn | | Pn | 06 35 58.4 | +1.7 |
| KNDR | Palaiochora Ch | 2.19 | 240 | Pn | | Pn | 06 35 58.7 | +1.8 |
| KNDR | Palaiochora Ch | 2.19 | 240 | P | | Pn | 06 35 59.0 | +2.1 |
| KNDR | | | | S | | Sn | 06 36 25.0 | +0.5 |
| KNDR | | | | AML | AML | | 06 36 30.1 | |
| | comp=N,2163μm,0.3s | | | | | | | |
| KNDR | | | | AML | AML | | 06 36 30.6 | |
| | comp=N,1890μm,0.4s | | | | | | | |
| AYDB | Zeytinkoy-Aydi | 2.19 | 43 | Pn | | Pn | 06 35 58.4 | +1.4 |
| ANKY | Antikythira Is | 2.25 | 259 | P | | Pn | 06 35 57.9 | +0.3 |
| ANKY | Antikythira Is | 2.25 | 259 | P | | Pn | 06 35 58.0 | +0.4 |
| ANKY | | | | S | | Sn | 06 36 22.4 | -3.3 |
| ANKY | | | | AML | AML | | 06 36 26.6 | |
| | comp=N,531μm,0.3s | | | | | | | |
| ANKY | | | | AML | AML | | 06 36 29.4 | |
| | comp=E,609μm,0.4s | | | | | | | |
| VLY | Voula,Athens | 2.33 | 311 | P | | Pn | 06 35 59.3 | +0.7 |
| KTHA | Kythira Island | 2.39 | 269 | Pn | | Pn | 06 35 59.7 | +0.3 |
| KTHA | Kythira Island | 2.39 | 269 | P | | Pn | 06 35 59.9 | +0.5 |
| KTHA | Kythira Island | 2.39 | 269 | P | | Pn | 06 35 59.9 | +0.5 |
| KTHA | | | | S | | Sn | 06 36 26.2 | -2.7 |
| KTHA | | | | AML | AML | | 06 36 30.9 | |
| | comp=N,884μm,0.3s | | | | | | | |
| KTHA | | | | AML | AML | | 06 36 32.3 | |
| | comp=E,704μm,0.3s | | | | | | | |
| DION | Dionisos Attik | 2.40 | 317 | P | | Pn | 06 36 01.4 | +1.9 |
| ATHU | Athens Univers | 2.41 | 313 | P | | Pn | 06 36 00.4 | +0.8 |
| PTL | Penteli | 2.42 | 315 | P | | Pn | 06 36 00.6 | +0.8 |
| FETY | Fethiye | 2.49 | 82 | Pn | | Pn | 06 36 02.3 | +1.6 |
| VLI | Veliai | 2.51 | 280 | P | | Pn | 06 36 01.1 | +0.2 |
| VLI | Veliai | 2.51 | 280 | P | | Pn | 06 36 01.0 | +0.1 |
| VLI | | | | S | | Sn | 06 36 28.0 | -3.7 |
| VLI | | | | AML | AML | | 06 36 29.7 | |
| | comp=E,199μm,0.4s | | | | | | | |
| VLI | | | | AML | AML | | 06 36 30.4 | |
| | comp=N,286μm,0.4s | | | | | | | |
| KRND | KRANIDI | 2.52 | 295 | P | | Pn | 06 36 02.0 | +0.9 |
| KRND | KRANIDI | 2.52 | 295 | P | | Pn | 06 36 01.9 | +0.9 |
| ODEM | Odemis-Izmir | 2.53 | 40 | Pn | | Pn | 06 36 02.7 | +1.4 |
| CAME | Cameli-Denizli | 2.71 | 76 | Pn | | Pn | 06 36 05.1 | +1.4 |
| KYMI | Kymi, Euboea I | 2.75 | 327 | P | | Pn | 06 36 04.8 | +0.8 |
| APMY | Acipayam-Deniz | 2.87 | 66 | Pn | | Pn | 06 36 06.9 | +1.3 |
| PYL | PYLOS | 3.48 | 280 | P | | Pn | 06 36 13.2 | -0.4 |
| AGG | Agios Georgios | 3.96 | 314 | Pn | | Pn | 06 36 20.9 | +0.9 |
| CTYL | Yalikoy Yolu | 5.42 | 18 | P | | Pn | 06 36 41.1 | +1.6 |
| | comp=N,49nm,0.9s,comp=N,0.2nm | | | | | | | |
| ANTO | Ankara | 6.40 | 55 | P | | Pn | 06 36 53.6 | +0.8 |
| | comp=N,5.5nm,0.5s,comp=N,0.0nm | | | | | | | |
| BR105 | Keskin Array S | 6.88 | 58 | P | | Pn | 06 37 00.3 | +1.0 |
| | comp=N,1.7nm,0.8s,comp=N,0.0nm | | | | | | | |
| BRTR | Keskin Array B | 6.90 | 58 | P | | Pn | 06 37 02.1 | +2.6 |
| | comp=N,0.9nm,0.4s,baz=172,slow=21,SNR=7.1 | | | | | | | |
| MMA0 | Mount Meron ar | 8.41 | 111 | P | | Pn | 06 37 18.4 | -1.6 |
| MMAI | Mount Meron Ar | 8.41 | 111 | P | | Pn | 06 37 19.1 | -0.9 |
| | comp=N,2.6nm,0.3s,baz=308,slow=11,SNR=12 | | | | | | | |
| MMAI | | | | S | | Sn | 06 38 48.5 | -4.8 |
| | comp=N,1.5nm,0.3s,baz=224,slow=48,SNR=4.2 | | | | | | | |
| NATI | Neve Ativ | 8.57 | 108 | P | | Pn | 06 37 20.1 | -1.8 |
| SHMJ | Saham | 8.81 | 111 | P | | Pn | 06 37 25.3 | 0.0 |
| KZIT | Kziot | 8.84 | 125 | P | | Pn | 06 37 24.0 | -1.7 |
| LISJ | El Lisan | 9.38 | 120 | P | | Pn | 06 37 31.3 | -1.5 |
| HRFI | Mount Harif | 9.83 | 127 | P | | Pn | 06 37 36.3 | -2.7 |
| MBRI | Mt Berech | 9.92 | 129 | P | | Pn | 06 37 38.9 | -1.4 |
| ASF | Jabal al Asfar | 9.92 | 112 | P | | Pn | 06 37 40.1 | -0.2 |
| | comp=N,1.3nm,0.3s,baz=210,slow=0.2,SNR=2.2 | | | | | | | |
| EIL | Elat | 10.03 | 129 | P | | Pn | 06 37 40.1 | -1.5 |
| | comp=N,2.5nm,0.2s,baz=219,slow=3.2,SNR=17 | | | | | | | |
| EIL | | | | S | | Sn | 06 39 24.6 | -7.7 |
| | comp=N,11nm,0.4s,baz=347,slow=23,SNR=

TCS1 IAML 06 46 52.4
comp=Z,42µm,1.0s
**CENT San Jose** 0.59 40 eP Pg 06 46 40.3 +0.4
**LUJA Lujan** 0.59 41⇑eP Pg 06 46 40.4 +0.4
**SRA1 San Ramn** 0.61 359⇓eP Pb 06 46 39.5 -1.5
**RAMO San Ramon** 0.61 0⇓eP Pg 06 46 40.5 +0.3
**SJS Escuela Geolog** 0.62 41⇑eP Pb 06 46 39.8 -1.3
**LUPE Guadalupe** 0.62 41⇑eP Pb 06 46 39.8 -1.4
**CBL1 Cabuya** 0.62 280⇑eP Pb 06 46 39.3 -1.9
CBL1 eS Sn 06 46 49.5 -3.5
**DOMI Santo Domingo** 0.63 36⇑eP Pb 06 46 40.1 -1.2
**HDC Heredia** 0.63 34⇑eP Pb 06 46 40.0 -1.4
HDC eS Sg 06 46 49.8 +0.9
**HDC3 Heredia 3** 0.63 34 iP Pb 06 46 40.2 -1.2
HDC3 iS Sg 06 46 50.0 +1.0
HDC3 IAML 06 47 02.8
comp=Z,4µm,1.0s
**TRIO Tres Rios** 0.63 47 eP Pb 06 46 39.9 -1.6
**TAGO Cartago** 0.66 54⇑eP Pb 06 46 40.6 -1.4
**CORON Coronado** 0.68 43 eP Pb 06 46 41.1 -1.0
**REPA Paraso** 0.69 59⇑eP Pg 06 46 41.9 +0.2
**BUS1 Rivas** 0.72 84⇑eP Pb 06 46 41.2 -1.8
BUS1 eS Sb 06 46 52.3 -0.7
BUS1 eS Sg 06 46 53.1 +1.4
**CVIMO Finca Echandi** 0.75 43⇑eP Pb 06 46 42.3 -1.2
**ZELE Perez Zeledon** 0.76 98 eP Pb 06 46 41.5 -2.0
**PCAYA Pacayas** 0.78 56⇑eP Pb 06 46 42.7 -1.3
**VICA Volcano Irazu** 0.80 50⇑eP Pb 06 46 42.9 -1.5
**RAFA San Farael, Vo** 0.81 53 iP Pb 06 46 43.2 -1.3
RAFA IAML 06 47 02.1
comp=Z,46µm,1.0s
**RAFA San Farael, Vo** 0.81 53⇑eP Pb 06 46 43.2 -1.3
**VINA Juan Vinas** 0.83 60⇑eP Pb 06 46 43.4 -1.3
**CVTV Tajo** 0.88 53⇑eP Pb 06 46 44.6 -1.1
**TURIB Turrialba** 0.88 61⇑eP Pb 06 46 44.1 -1.5
**CVTR Volcan Turrial** 0.89 52⇑eP Pb 06 46 44.7 -1.2
**VTCV VTCV, Calle Va** 0.89 55⇑eP Pb 06 46 44.7 -1.1
**OCHAL Ojochal** 0.89 115 iP Pb 06 46 44.0 -1.8
OCHAL iS Sg 06 46 57.1 -0.1
OCHAL IAML 06 47 02.0
comp=Z,3µm,1.0s
**VERB Verbena** 0.89 58⇑eP Pb 06 46 44.8 -1.1
**MTEVE Monteverde** 0.91 337⇓eP Pg 06 46 45.5 -0.4
**SOCE Pocosol** 0.92 351 iP Pb 06 46 45.2 -1.0
SOCE iS Sn 06 46 59.2 -1.0
SOCE IAML 06 47 01.4
comp=Z,6µm,1.0s
**SOCE Pocosol** 0.92 351⇓eP Pb 06 46 45.0 -1.1
**JUNT Juntas** 0.94 329⇓eP Pb 06 46 44.5 -2.0
**JTS Las Juntas de** 0.94 330 eP Pb 06 46 44.5 -2.1
**TUNA La Fortuna** 1.00 350⇓eP Pb 06 46 46.5 -1.2
**ARE1 Arenal 1** 1.01 346⇓eP Pb 06 46 46.8 -1.0
**VACR Volcan Arenal** 1.01 348⇓eP Pb 06 46 46.7 -1.2
**RVLA Villa Bonita** 1.07 54⇑eP Pn 06 46 47.9 -1.2
**LCOCO El Coco** 1.08 56 eP Pn 06 46 48.1 -1.3
**INDI Punta indio, G** 1.09 291 iP Pb 06 46 47.1 -2.0
INDI iS Sg 06 46 47.4 +1.2
**EDPN Palmar Norte** 1.12 117 eP Pn 06 46 47.4 -2.4
**IRES Siquirres** 1.13 57 eP Pn 06 46 49.0 -1.0
**BURE Buenos Aires** 1.16 105 eP Pn 06 46 48.9 -1.4
**EDBA Buenos Aires** 1.22 105 eP Pn 06 46 48.6 -2.6
**DRK0 Durika** 1.23 100 iP Pn 06 46 50.1 -1.4
DRK0 iS Sn 06 46 07.2 -0.9
DRK0 IAML 06 47 07.5
comp=Z,24µm,1.0s
**DRK0 Durika** 1.23 100⇑eP Pn 06 46 49.4 -2.1
**COVE Coope Vega, Sa** 1.24 3 iP Pn 06 46 50.0 -1.5
COVE iS Sg 06 47 08.1 -0.2
**TENO El Achiote** 1.32 338⇓eP Pn 06 46 51.1 -1.6
**EDP2 Potrero Grande** 1.35 110⇓eP Pn 06 46 52.2 -0.9
**CUI Cuipilapa** 1.36 330⇓eP Pn 06 46 51.9 -1.3
**COLC Colonia** 1.39 329 eP Pn 06 46 52.3 -1.2
**PTJ1 Puerto Jimnez** 1.48 129 iP Pb 06 46 55.4 -0.4
PTJ1 iS Sg 06 47 20.8 +4.8
PTJ1 IAML 06 47 29.5
comp=Z,5µm,1.0s
**ALIBA Liberia Airpor** 1.54 316 eP Pb 06 46 55.9 -0.8
**VRLE La Escondida,** 1.58 326 eP Pn 06 46 55.2 -1.0
**CDITO Canoas** 1.81 119 iP Pn 06 46 58.6 -0.8
CDITO iS Sb 06 47 24.8 +0.7
CDITO IAML 06 47 46.3
comp=Z,2µm,1.0s
**BRU2 Volcan** 1.88 111 iP Pn 06 47 00.2 -0.3
BRU2 iS Sg 06 47 28.2 -0.6
BRU2 IAML 06 47 49.1
comp=Z,2µm,1.0s
**LCRUZ La Cruz** 1.96 324⇓eP Pb 06 47 02.6 -1.5
**JAPN Al SSO del Vol** 2.36 330 iP Pb 06 47 09.0 -1.8
**ACON Acoyapa** 2.57 344 iP Pn 06 47 10.4 +0.5
ACON iS Sb 06 47 47.1 +1.0
ACON IAML 06 47 51.4
comp=Z,540nm,1.0s
**ACON Acoyapa** 2.57 344⇓eP Pn 06 47 09.6 -0.2
**BLUN Bluefields** 2.61 15 iP Pn 06 47 10.0 -0.3
BLUN iS Sb 06 47 45.6 -1.4
**ESPN Las Esperanzas** 2.71 3 iP Pn 06 47 13.2 +1.5
ESPN iS Sb 06 47 48.3 -1.7
ESPN IAML 06 48 01.5
comp=Z,590nm,1.0s
**NADN Granada** 2.73 326 iP Pn 06 47 11.7 -0.4
NADN IAML 06 47 14.9
comp=Z,320nm,1.0s
**BOAB BOACO BROADBAN** 3.18 338 iP Pn 06 47 19.7 +1.5
BOAB IAML 06 48 18.5
comp=Z,190nm,1.0s
**COPN Copaltepe** 3.40 322 iP Pn 06 47 23.5 +2.2
**MACN El Madrono** 3.68 324 iP Pn 06 47 26.5 +1.4
**LIMN Finca el Limon** 4.02 333 iP Pn 06 47 29.8 -0.1
LIMN IAML 06 47 47.3
comp=Z,72nm,1.0s
**SDV Santo Domingo** 13.67 91 LR LR 06 55 38.3
comp=Z,52nm,21.3s,baz=248,slow=40
**PCRV Puerto La Cruz** 19.55 86 LR LR 06 59 36.7
comp=Z,41nm,18.5s,slow=40
**TXAR Lajitas Array** 26.72 320 P P 06 52 10.6 +2.7
comp=Z,0.3nm,0.7s,baz=141,slow=10,SNR=2.2
comp=Z,0.3nm,0.7s
**NVAR Mina Array Bea** 41.86 319 P P 06 54 23.4 +4.7
comp=Z,0.5nm,0.8s,baz=130,slow=8.3,SNR=4.4
comp=Z,0.5nm,0.8s
**ESDC Sonseca Array** 76.73 51 P P 06 58 23.4 +3.5
comp=Z,0.8nm,0.6s,baz=282,slow=6.0,SNR=8.4
comp=Z,0.8nm,0.6s
**TORD Torodi Ar. Bea** 84.19 78 P P 06 59 02.9 +2.5
comp=Z,0.4nm,0.8s,baz=260,slow=3.7,SNR=2.5
comp=Z,0.4nm,0.8s

**IDC 15 07:00:03.7±3.4, 53°57N×87°96E, h0km, mbtmp2.9/2, ML2.5/2, Error ellipse: s-maj=34.9km s-min=21.6km az=81.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.91** | **283** | I | I | | | 07 12 00.0 | |
| | baz=98,slow=315,SNR=2.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.91** | **283** | Pn | Pn | | | 07 00 38.0 | +0.6 |
| | 1.9nm,0.3s,baz=104,slow=14,SNR=8.5 | | | | | | | | |
| ZALV | | | | Sn | Sb | | | 07 01 03.1 | -0.5 |
| | 1.7nm,0.3s,baz=99,slow=26,SNR=4.6 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.52** | **247** | Pn | Pn | | | 07 01 40.5 | -0.2 |
| | 0.1nm,0.3s,baz=64,slow=15,SNR=4.1 | | | | | | | | |
| KURBB | | | | Lg | Lg | | | 07 03 30.0 | |
| | baz=61,slow=29 | | | | | | | | |
| | 0.8nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.70** | **210** | Pn | Pn | | | 07 01 58.6 | +1.6 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=6.0 | | | | | | | | |
| MKAR | | | | Lg | Lg | | | 07 04 08.1 | |
| | 0.1nm,0.3s,baz=33,slow=31,SNR=2.1 | | | | | | | | |
| | 0.2nm,0.2s | | | | | | | | |

*NEIC **15** 07:01:15.7±2.3, 22°36S×65°07W×0°09, h254km±8km, mb4.5/161, ML4.4(GUC), Error ellipse: s-maj=12.1km s-min=10.2km az=92.0*
*SJA **15** 07:01:15.3±0.9, 22°30S×65°93W, h280km±6km, ML3.8, MW4.2*
*IDC **15** 07:01:16.0±0.8, 22°29S×65°85W, h254km±7km, mb3.8/12, mbtmp4.4/20, Error ellipse: s-maj=10.5km s-min=9.2km az=71.0*
*VAO **15** 07:01:16.0±0.3, 22°31S×65°93W, h260km, mb4.6*
*GUC **15** 07:01:18.1±0.7, 22°23S×66°08W, h267km±4km, ML4.4*

**ISC 15 07:01:16.1±0.5, 22°28S±0°04×65°93W±0°04, h260km±5km, n373, σ1°29/335, mb4.4/90, 16C-2D, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **YJA** | **Yavi** | **0.40** | **76** | eP | Pn | | | 07 01 52.9 | +2.4 |
| YJA | | | | eS | S | | | 07 02 19.5 | +2.0 |
| YJA | | | | IAML | | | | 07 02 21.1 | |
| | comp=Z,364nm,0.4s | | | | | | | | |
| **YJA** | **Yavi** | **0.40** | **76** | ⇓iP | Pn | | | 07 01 52.9 | +2.4 |
| YJA | | | | iS | S | | | 07 02 19.3 | +1.8 |
| **AZAP** | **Zapla** | **2.10** | **158** | eP | Pn | | | 07 02 01.4 | +0.8 |
| AZAP | | | | IAML | | | | 07 02 42.1 | |
| | comp=Z,402nm,0.6s | | | | | | | | |
| **AF01** | **San Pedro de A** | **2.19** | **252** | | Pn | | | 07 02 03.2 | +1.8 |
| **AF01** | **San Pedro de A** | **2.19** | **252** | eP | Pn | | | 07 02 02.5 | +1.1 |
| AF01 | | | | IAML | | | | 07 02 40.1 | |
| | comp=Z,235nm,0.5s | | | | | | | | |
| **AF01** | **San Pedro de A** | **2.19** | **252** | iP | Pn | | | 07 02 03.3 | +1.8 |
| AF01 | | | | eS | S | | | 07 02 37.0 | -0.3 |
| AF01 | | | | IAML | | | | 07 02 45.4 | |
| | comp=E,362nm,0.6s | | | | | | | | |
| **ALOL** | **LOMAS DE OLMED** | **2.36** | **131** | eP | Pn | | | 07 02 03.6 | +0.8 |
| **SLA** | **San Lorenzo** | **2.47** | **171** | eP | Pn | | | 07 02 05.2 | +1.3 |
| SLA | | | | IAML | | | | 07 02 47.8 | |
| | comp=Z,144nm,2.6s | | | | | | | | |
| **SLA** | **San Lorenzo** | **2.47** | **171** | ⇓eP | Pn | | | 07 02 05.2 | +1.3 |
| **LVC** | **Limon Verde** | **2.78** | **263** | eP | Pn | | | 07 02 08.1 | +0.8 |
| LVC | | | | eS | S | | | 07 02 47.2 | -0.7 |
| LVC | | | | IAML | | | | 07 02 48.7 | |
| | comp=Z,89nm,0.8s | | | | | | | | |
| **LVC** | **Limon Verde** | **2.78** | **263** | P | Pn | | | 07 02 08.1 | +0.8 |
| | comp=Z,209nm,0.4s,baz=86,slow=5.4,SNR=502 | | | | | | | | |
| LVC | | | | S | S | | | 07 02 47.4 | -0.5 |
| | comp=Z,105nm,0.4s,baz=72,slow=20,SNR=30 | | | | | | | | |
| **LVC** | **Limon Verde** | **2.78** | **263** | ⇑iP | Pn | | | 07 02 08.2 | +0.8 |
| LVC | | | | iS | S | | | 07 02 47.1 | -0.7 |
| LVC | | | | IAML | | | | 07 02 49.4 | |
| | comp=Z,2µm,0.6s | | | | | | | | |
| **LVC** | **Limon Verde** | **2.78** | **263** | eP | Pn | | | 07 02 07.3 | 0.0 |
| **PB09** | **IPOC Station P** | **3.11** | **278** | | Pn | | | 07 02 11.9 | +1.3 |
| **PB09** | **IPOC Station P** | **3.11** | **278** | ⇑iP | Pn | | | 07 02 11.9 | +1.3 |
| PB09 | | | | iS | S | | | 07 02 53.3 | -0.6 |
| **FSA** | **Cafayete** | **3.82** | **181** | eP | Pn | | | 07 02 18.7 | +0.3 |
| FSA | | | | eS | S | | | 07 03 06.5 | -1.5 |
| **PB04** | **IPOC Station P** | **3.91** | **268** | | Pn | | | 07 02 19.7 | +0.2 |
| **PB04** | **IPOC Station P** | **3.91** | **268** | eP | Pn | | | 07 02 19.7 | +0.2 |
| **PB04** | **IPOC Station P** | **3.91** | **268** | ⇑iP | Pn | | | 07 02 19.8 | +0.2 |
| PB04 | | | | eS | S | | | 07 03 07.0 | -3.0 |
| **PX03** | **IPOC Station P** | **3.92** | **298** | eP | Pn | | | 07 02 19.8 | +0.2 |
| PX03 | | | | eS | S | | | 07 03 07.7 | -2.5 |
| **PB05** | **IPOC Station P** | **3.99** | **261** | | Pn | | | 07 02 20.3 | -0.1 |
| **PB05** | **IPOC Station P** | **3.99** | **261** | ⇑iP | Pn | | | 07 02 20.3 | -0.1 |
| **GO01** | **Chusmiza** | **4.01** | **310** | Pn | Pn | | | 07 02 22.4 | +1.4 |
| **GO01** | **Chusmiza** | **4.01** | **310** | eP | Pn | | | 07 02 22.4 | +1.4 |
| **GO01** | **Chusmiza** | **4.01** | **310** | eP | Pn | | | 07 02 22.4 | +1.4 |
| GO01 | | | | eS | S | | | 07 03 13.2 | +0.7 |
| **PATCX** | **Punta Patache** | **4.19** | **289** | | Pn | | | 07 02 23.1 | +0.4 |
| **PATCX** | **Punta Patache** | **4.19** | **289** | eP | Pn | | | 07 02 23.1 | +0.4 |
| PATCX | | | | eS | S | | | 07 03 13.2 | -2.5 |
| **PATCX** | **Punta Patache** | **4.19** | **289** | ⇑iP | Pn | | | 07 02 23.2 | +0.5 |
| PATCX | | | | iS | S | | | 07 03 12.9 | -2.8 |
| **HMBC** | **Humberstone** | **4.19** | **298** | | Pn | | | 07 02 22.8 | 0.0 |
| **HMBC** | **Humberstone** | **4.19** | **298** | eP | Pn | | | 07 02 22.9 | +0.1 |
| HMBC | | | | eS | S | | | 07 03 13.6 | -2.3 |
| **HMBC** | **Humberstone** | **4.19** | **298** | ⇑iP | Pn | | | 07 02 22.9 | +0.1 |
| HMBC | | | | eS | S | | | 07 03 13.3 | -2.6 |
| **TA01** | **Diego Aracena** | **4.31** | **292** | | Pn | | | 07 02 24.1 | 0.0 |
| **TA01** | **Diego Aracena** | **4.31** | **292** | eP | Pn | | | 07 02 24.1 | 0.0 |
| TA01 | | | | eS | S | | | 07 03 15.7 | -2.4 |
| **TA01** | **Diego Aracena** | **4.31** | **292** | ⇑iP | Pn | | | 07 02 24.0 | 0.0 |
| TA01 | | | | iS | S | | | 07 03 14.7 | -3.5 |
| **TA02** | **Huaiquique** | **4.40** | **296** | | Pn | | | 07 02 25.3 | +0.2 |
| **TA02** | **Huaiquique** | **4.40** | **296** | eP | Pn | | | 07 02 25.1 | +0.1 |
| TA02 | | | | eS | S | | | 07 03 17.9 | -2.1 |
| **TA02** | **Huaiquique** | **4.40** | **296** | eP | Pn | | | 07 02 25.2 | +0.2 |
| TA02 | | | | eS | S | | | 07 03 16.6 | -3.5 |
| **GO02** | **Mina Guanaco** | **4.42** | **229** | | Pn | | | 07 02 25.3 | -0.3 |
| **GO02** | **Mina Guanaco** | **4.42** | **229** | eP | Pn | | | 07 02 25.5 | 0.0 |
| GO02 | | | | eS | S | | | 07 03 18.1 | -2.8 |
| **GO02** | **Mina Guanaco** | **4.42** | **229** | ⇑iP | Pn | | | 07 02 25.3 | -0.3 |
| GO02 | | | | iS | S | | | 07 03 17.8 | -3.1 |
| **PB14** | **IPOC Station P** | **4.73** | **239** | | Pn | | | 07 02 28.5 | -0.8 |
| **PB14** | **IPOC Station P** | **4.73** | **239** | ⇑iP | Pn | | | 07 02 28.5 | -0.8 |
| **PB18** | **Visviri** | **5.74** | **324** | | Pn | | | 07 02 44.4 | +2.6 |
| **AC01** | **Pan de Azucar** | **5.75** | **227** | | Pn | | | 07 02 39.5 | -1.8 |
| **LPAZ** | **La Paz** | **6.31** | **340** | P | Pn | | | 07 02 50.8 | +1.8 |
| | comp=Z,13nm,0.3s,baz=146,slow=5.9,SNR=133 | | | | | | | | |
| LPAZ | | | | S | S | | | 07 04 02.8 | -0.6 |
| | comp=Z,19nm,0.8s,baz=234,slow=14,SNR=5.9 | | | | | | | | |
| **AC06** | **Mina Casimiro** | **6.46** | **218** | | Pn | | | 07 02 47.5 | -2.8 |
| **GO03** | **Copiap** | **6.58** | **216** | Pn | Pn | | | 07 02 49.6 | -2.1 |
| **BBSD** | **Serra de San D** | **7.12** | **46** | eP | Pn | | | 07 02 59.1 | +0.6 |
| **PAPY** | **Pozo Azul** | **7.31** | **106** | eP | Pn | | | 07 03 00.0 | -0.7 |
| **AC04** | **Llanos de Chal** | **7.52** | **217** | Pn | Pn | | | 07 03 00.9 | -2.5 |
| **AC05** | **El Transito** | **7.62** | **210** | | Pn | | | 07 03 02.6 | -2.2 |
| **MURT** | **Porto Murtinho** | **7.74** | **87** | eP | Pn | | | 07 03 06.2 | -0.1 |
| **SIV** | **San Ignacio** | **7.75** | **37** | P | Pn | | | 07 03 06.8 | +0.3 |
| | comp=Z,58nm,0.7s,baz=219,slow=8.8,SNR=298 | | | | | | | | |
| SIV | | | | S | S | | | 07 04 27.3 | -8.1 |
| | comp=Z,8.3nm,0.8s,baz=225,slow=14,SNR=4.0 | | | | | | | | |
| **LCO** | **Las Campanas** | **7.97** | **212** | Pn | Pn | | | 07 03 06.5 | -2.8 |
| **CPUP** | **Villa Florida** | **8.82** | **119** | P | Pn | | | 07 03 20.0 | +0.3 |
| | comp=Z,3.0nm,0.8s,baz=298,slow=11,SNR=5.9 | | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **9.35** | **45** | Pn | Pn | | | 07 03 26.5 | 0.0 |
| **ZON** | **Zonda** | **9.55** | **194** | | Pn | | | 07 03 26.8 | -2.2 |
| **AQDB** | **Aquidauana** | **9.70** | **81** | Pn | Pn | | | 07 03 31.1 | +0.3 |
| **AQDB** | **Aquidauana** | **9.70** | **81** | eP | Pn | | | 07 03 31.1 | +0.3 |
| **VILB** | **Vilhena** | **10.76** | **31** | Pn | Pn | | | 07 03 44.1 | -0.1 |
| **VA03** | **San Esteban** | **11.22** | **200** | P | Pn | | | 07 03 49.1 | -0.8 |
| **SALV** | **Santo Antonio** | **11.56** | **59** | eP | Pn | | | 07 03 54.2 | 0.0 |
| **MT08** | **Bocatoma Ro** | **11.70** | **197** | P | Pn | | | 07 03 55.9 | 0.0 |
| **MT16** | **CCHEN** | **11.83** | **199** | P | Pn | | | 07 03 58.1 | +0.7 |
| **MT02** | **Curacav** | **11.87** | **202** | | Pn | | | 07 03 56.2 | -1.6 |
| **CRSM** | **Crissiumal (Br** | **11.97** | **118** | eP | Pn | | | 07 03 59.4 | +0.3 |
| **MT13** | **San Alfonso** | **12.05** | **198** | P | Pn | | | 07 03 60.0 | -0.2 |
| **LMEL** | **Las Melosas** | **12.13** | **197** | P | Pn | | | 07 04 01.3 | +0.1 |
| **TRCB** | **Terra Rica** | **12.30** | **95** | P | Pn | | | 07 04 03.2 | -0.1 |
| **TRCB** | **Terra Rica** | **12.30** | **95** | eP | Pn | | | 07 04 03.4 | +0.2 |
| **BO04** | **La Punta** | **12.38** | **198** | Pn | Pn | | | 07 04 03.0 | -1.1 |
| **ETMB** | **Extrema** | **12.39** | **359** | Pn | Pn | | | 07 04 04.9 | +0.5 |
| **ETMB** | **Extrema** | **12.39** | **359** | eP | Pn | | | 07 04 05.3 | +0.9 |
| **MT01** | **Popeta** | **12.46** | **201** | P | Pn | | | 07 04 04.1 | -1.0 |
| **RODS** | **Rosario do Sul** | **12.53** | **132** | eP | Pn | | | 07 04 05.4 | -0.6 |
| **BO01** | **Tunca** | **12.89** | **199** | Pn | Pn | | | 07 04 08.8 | -1.7 |
| **TBOT** | **Tacuaremb** | **12.92** | **139** | eP | Pn | | | 07 04 10.0 | -0.7 |
| **PTGB** | **Pitanga** | **12.95** | **104** | eP | Pn | | | 07 04 11.8 | +0.5 |
| **BO02** | **Sierra Bellavi** | **13.18** | **198** | | Pn | | | 07 04 12.9 | -1.1 |
| **ALGR** | **Alto Alegre (B** | **13.33** | **122** | eP | Pn | | | 07 04 15.6 | -0.2 |
| **ITAB** | **Concordia** | **13.47** | **114** | | Pn | | | 07 04 17.8 | +0.3 |
| **ITAB** | **Concordia** | **13.47** | **114** | eP | Pn | | | 07 04 17.1 | -0.4 |
| **SAML** | **Samuel** | **13.51** | **12** | | Pn | | | 07 04 18.2 | +0.1 |
| **SAML** | **Samuel** | **13.51** | **12** | eP | P | | | 07 04 19.0 | 0.0 |
| **PCMB** | **Pacaembu** | **13.63** | **90** | eP | Pn | | | 07 04 19.3 | -0.2 |
| **LDASE** | **Londrina, Braz** | **13.70** | **98** | eP | Pn | | | 07 04 20.1 | -0.4 |
| **PDRB** | **Porto dos Gac** | **13.77** | **41** | eP | Pn | | | 07 04 20.7 | -0.6 |
| **CPSB** | **Cacapava Do Su** | **13.81** | **128** | eP | Pn | | | 07 04 19.5 | -2.1 |
| **PLTB** | **Pedras Altas** | **14.48** | **133** | | P | | | 07 04 29.1 | -0.5 |
| **PLTB** | **Pedras Altas** | **14.48** | **133** | eP | P | | | 07 04 28.6 | -1.0 |
| **NNA** | **Nana** | **14.60** | **313** | P | Pn | | | 07 04 33.5 | +2.1 |
| | comp=Z,20nm,0.9s,baz=163,slow=10,SNR=6.6 | | | | | | | | |
| NNA | | | | S | S | | | 07 07 10.7 | -2.0 |
| | comp=Z,4.0nm,0.5s,baz=231,slow=19,SNR=1.4 | | | | | | | | |
| **ITRB** | **Iturama** | **14.76** | **83** | eP | Pn | | | 07 04 33.5 | +0.3 |
| **ARAG** | **Araguaiana, MT** | **14.86** | **66** | eP | Pn | | | 07 04 34.5 | +0.1 |
| **CLDB** | **Colider** | **14.92** | **42** | eP | Pn | | | 07 04 35.4 | +0.3 |
| **BI02** | **San Fabin de** | **15.07** | **197** | | P | | | 07 04 35.0 | -1.1 |
| **FRTB** | **Fartura** | **15.13** | **97** | eP | Pn | | | 07 04 37.5 | -0.1 |
| **CZSB** | **Cruzeiro do Su** | **15.87** | **335** | P | P | | | 07 04 44.6 | -0.5 |
| **CZSB** | **Cruzeiro do Su** | **15.87** | **335** | eP | P | | | 07 04 43.9 | -1.1 |
| **TRQA** | **Tornquist** | **16.09** | **169** | P | P | | | 07 04 44.9 | -2.4 |
| **BB19B** | **Bebedouro** | **16.22** | **89** | eP | P | | | 07 04 49.7 | +0.8 |
| **RCLB** | **Rio Claro- Sao** | **17.02** | **94** | eP | P | | | 07 04 56.9 | -0.7 |
| **SPB** | **Sao Paulo** | **17.09** | **98** | eP | P | | | 07 04 58.4 | +0.1 |
| **IPMB** | **Ipameri, GO** | **17.17** | **79** | eP | P | | | 07 04 59.9 | +0.6 |
| **PET01** | **Itanhaem-SP** | **17.25** | **100** | eP | P | | | 07 05 00.7 | +0.6 |
| **SNDB** | **Serra Nova Dou** | **17.32** | **56** | eP | P | | | 07 05 01.2 | +0.3 |
| **VAO** | **Valinhos** | **17.52** | **96** | P | P | | | 07 05 03.2 | +0.1 |
| **VAO** | **Valinhos** | **17.52** | **96** | eP | P | | | 07 05 03.0 | -0.2 |
| **GO06** | **Curarrehue** | **17.89** | **194** | P | P | | | 07 05 05.8 | -1.1 |
| **BDFB** | **Brasilia** | **18.17** | **72** | P | P | | | 07 05 11.0 | +0.8 |
| | comp=Z,30nm,0.7s,baz=242,slow=13,SNR=46 | | | | | | | | |
| **NPGB** | **Novo Progresso** | **18.25** | **36** | eP | P | | | 07 05 10.0 | -1.0 |
| **TBTG** | **Tabatinga, AM** | **18.39** | **347** | P | P | | | 07 05 14.1 | +1.6 |
| **TBTG** | **Tabatinga, AM** | **18.39** | **347** | eP | P | | | 07 05 13.8 | +1.3 |
| **PMNB** | **Patos De Minas** | **18.64** | **82** | eP | P | | | 07 05 15.8 | +0.5 |
| **TEFE** | **Tefe** | **18.70** | **4** | eP | P | | | 07 05 16.2 | +0.4 |
| **PARB** | **Paraibuna** | **18.75** | **97** | eP | P | | | 07 05 16.3 | -0.1 |
| **PLCA** | **Paso Flores** | **18.81** | **191** | P | P | | | 07 05 16.4 | -0.4 |
| | comp=Z,3.8nm,0.6s,baz=12,slow=11,SNR=25 | | | | | | | | |
| **ATAH** | **Atahualpa** | **19.26** | **320** | P | Pn | | | 07 05 24.9 | -1.7 |
| | comp=Z,5.6nm,0.7s,baz=142,slow=17,SNR=6.3 | | | | | | | | |
| **LL04** | **Puerto Octay** | **19.37** | **195** | IAmb | IAmb | | | 07 05 24.4 | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| **MACA** | **Manacapuru-AM** | **19.67** | **16** | P | P | | | 07 05 24.9 | -1.3 |
| **BSCB** | **Bom Sucesso** | **19.71** | **90** | eP | P | | | 07 05 27.3 | +0.8 |
| **LL01** | **San Ignacio de** | **20.77** | **194** | P | P | | | 07 05 35.7 | -1.8 |
| LL01 | | | | IAmb | IAmb | | | 07 05 36.8 | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **VAS01** | **Vassouras-RJ** | **20.81** | **94** | eP | P | | | 07 05 38.2 | +0.1 |
| **DIAM** | **Diamantina, MG** | **21.24** | **83** | eP | P | | | 07 05 42.5 | -0.1 |
| **LL02** | **Futaleuf** | **21.43** | **192** | P | P | | | 07 05 43.7 | -0.3 |
| LL02 | | | | IAmb | IAmb | | | 07 05 43.9 | |
| | comp=Z,9.3nm,0.7s | | | | | | | | |
| **JANB** | **Januaria** | **21.68** | **74** | eP | P | | | 07 05 45.7 | -1.0 |
| **DUB01** | **Friburgo-RJ** | **21.81** | **94** | eP | P | | | 07 05 47.5 | -0.3 |
| **SMTB** | **Santa Maria do** | **22.10** | **56** | eP | P | | | 07 05 49.7 | -0.7 |
| **SDBA** | **SAO DESIDERIO** | **22.31** | **67** | eP | P | | | 07 05 51.4 | -1.0 |
| **PRPB** | **Parauapebas** | **22.32** | **47** | eP | P | | | 07 05 51.3 | -1.2 |
| **MAL2** | **Monte Alegre,** | **23.15** | **31** | P | P | | | 07 05 59.5 | -0.4 |
| **SJMB** | **Sao Joao De Ma** | **23.44** | **86** | eP | P | | | 07 06 01.7 | -0.9 |
| **ALF01** | **Guarapari-ES** | **23.51** | **91** | eP | P | | | 07 06 03.1 | 0.0 |
| **RIB01** | **Linhares ES** | **24.04** | **88** | eP | P | | | 07 06 07.5 | -0.5 |
| **ANTS** | **Antisana-Sarah** | **24.71** | **330** | P | P | | | 07 06 14.7 | -0.1 |
| ANTS | | | | IAmb | IAmb | | | 07 06 21.7 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **BOAV** | **Boa Vista** | **25.08** | **13** | P | P | | | 07 06 17.0 | -0.4 |
| BOAV | | | | IAmb | IAmb | | | 07 06 18.0 | |
| | comp=Z,8.8nm,0.9s | | | | | | | | |
| **BOAV** | **Boa Vista** | **25.08** | **13** | eP | P | | | 07 06 17.0 | -0.4 |
| **GUA01** | **Guaratinga, BA** | **25.26** | **82** | eP | P | | | 07 06 18.3 | -0.7 |
| **NBLA** | **Lagarto - SE** | **29.14** | **72** | eP | P | | | 07 06 51.8 | -1.7 |
| **NBPB** | **Pedra_Branca-C** | **30.41** | **61** | eP | P | | | 07 07 04.0 | -0.7 |
| **NBAN** | **Anadia - AL** | **31.07** | **71** | eP | P | | | 07 07 09.1 | -1.4 |
| **SDV** | **Santo Domingo** | **31.31** | **351** | eP | P | | | 07 07 13.5 | +0.8 |
| **NBCA** | **Caruaru-PE** | **31.98** | **69** | eP | P | | | 07 07 17.3 | -1.2 |
| **NBCL** | **Cascavel-CE** | **32.23** | **60** | eP | P | | | 07 07 20.4 | -0.1 |
| **RCBR** | **Riachuelo** | **33.29** | **65** | eP | P | | | 07 07 29.6 | -0.3 |
| **GRGR** | **Grenville** | **34.45** | **7** | eP | P | | | 07 07 39.9 | +0.2 |
| **GRW** | **Mount Saint Ca** | **34.48** | **7** | eP | P | | | 07 07 40.7 | +0.8 |
| **GRHS** | **Sauteurs** | **34.54** | **7** | eP | P | | | 07 07 39.9 | -0.5 |
| **GRSS** | **Sisters** | **34.62** | **7** | eP | P | | | 07 07 41.2 | +0.2 |
| **SVB** | **Belmont** | **35.62** | **8** | eP | P | | | 07 07 51.0 | +1.3 |
| **SLAC** | **Saint Lucia, A** | **36.28** | **8** | eP | P | | | 07 07 54.4 | -0.8 |
| **SLBI** | **Saint Lucia, B** | **36.40** | **8** | eP | P | | | 07 07 55.6 | -0.5 |
| **BIM** | **Bigot** | **36.87** | **8** | eP | P | | | 07 07 59.3 | -0.9 |
| **MVM** | **Montagne Vaucl** | **36.93** | **8** | eP | P | | | 07 08 00.8 | +0.1 |
| **LPMF** | **Morne Lapointe** | **36.94** | **8** | eP | P | | | 07 07 59.8 | -1.0 |
| **FDF** | **Fort de France** | **37.08** | **8** | eP | P | | | 07 08 01.4 | -0.5 |
| **PML** | **Morne Lenard** | **37.12** | **8** | eP | P | | | 07 08 02.1 | -0.2 |
| **GBMF** | **Grand Be** | **37.14** | **8** | eP | P | | | 07 08 02.2 | -0.3 |
| **PCM** | **Pelee Case Pet** | **37.15** | **8** | eP | P | | | 07 08 02.3 | -0.2 |
| **CXM** | **Morne La Croix** | **37.15** | **8** | eP | P | | | 07 08 02.7 | +0.1 |
| **ILAM** | **Ilet Lapin Mar** | **37.15** | **8** | eP | P | | | 07 08 01.9 | -0.6 |
| **SVN** | **Savane Anatole** | **37.18** | **8** | P | P | | | 07 08 02.7 | -0.1 |
| **SVN** | **Savane Anatole** | **37.18** | **8** | eP | P | | | 07 08 02.1 | -0.7 |
| **SVN** | **Savane Anatole** | **37.18** | **8** | eP | P | | | 07 08 02.5 | -0.3 |
| **ANBD** | **Bethesda, Anti** | **39.29** | **6** | eP | P | | | 07 08 17.9 | -2.3 |
| **ANBD** | **Bethesda, Anti** | **39.29** | **6** | eP | P | | | 07 08 18.0 | -2.3 |
| **ANWB** | **Willy Bob** | **39.90** | **6** | eP | P | | | 07 08 23.2 | -2.0 |
| **ANWB** | **Willy Bob** | **39.90** | **6** | eP | P | | | 07 08 23.3 | -1.9 |
| **PETF** | **Flores** | **45.46** | **327** | IAmb | IAmb | | | 07 09 12.0 | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| **DWPF** | **Disney Wildern** | **52.28** | **343** | P | P | | | 07 10 00.2 | -1.0 |
| | baz=162 | | | | | | | | |
| **TIGA** | **Tifton** | **56.03** | **

| | | | | | | |
|---|---|---|---|---|---|---|
| ABTX | Abilene, Hawle<br>baz=145 | 63.39 328 | P | P | 07 11 18.6 | +0.4 |
| P52A | Corning<br>baz=163 | 63.42 346 | P | P | 07 11 17.7 | -0.5 |
| O53A | New Philadelph<br>baz=164 | 63.81 347 | P | P | 07 11 20.5 | -0.3 |
| P49A | Miami Univ. Ec<br>baz=161 | 63.95 344 | P | P | 07 11 21.4 | -0.2 |
| HHAR | Hobbs<br>comp=Z,9.1nm,0.8s | 63.98 335 | IAmb | IAmb | 07 11 23.0 | |
| P48A | Milroy<br>comp=Z,5.3nm,0.6s | 64.06 343 | IAmb | IAmb | 07 11 22.2 | |
| MGMO | Mountain Grove<br>comp=Z,10.0nm,0.8s | 64.11 337 | IAmb | IAmb | 07 11 23.9 | |
| ACSO | Alum Creek Sta<br>baz=162 | 64.19 346 | P | P | 07 11 22.8 | -0.4 |
| APMT | Aspermont<br>comp=Z,11nm,0.7s | 64.19 328 | IAmb | IAmb | 07 11 24.8 | |
| FVM | French Village<br>comp=Z,12nm,1.1s | 64.21 339 | IAmb | IAmb | 07 11 24.2 | |
| RLO | Rose Lookout<br>comp=Z,16nm,1.1s | 64.31 334 | IAmb | IAmb | 07 11 25.6 | |
| TUL3 | Leonard<br>baz=149 | 64.41 333 | P | P | 07 11 24.9 | +0.3 |
| CCM | Cathedral Cave | 64.56 338 | P | P | 07 11 25.7 | +0.1 |
| CCM | Cathedral Cave<br>baz=154 | 64.56 338 | P | P | 07 11 25.4 | -0.2 |
| L61B | Northampton<br>baz=173 | 64.70 354 | P | P | 07 11 26.3 | -0.2 |
| WMOK | Wichita Mounta<br>baz=146 | 64.72 330 | P | P | 07 11 27.3 | +0.6 |
| VHRN | Van Horn<br>comp=Z,5.8nm,0.8s | 64.72 323 | IAmb | IAmb | 07 11 28.6 | |
| BINY | Binghamton<br>baz=170 | 64.82 352 | P | P | 07 11 26.8 | -0.5 |
| M53A | Wl Miller and<br>baz=165 | 64.85 348 | P | P | 07 11 27.1 | -0.4 |
| OK029 | Liberty Lake<br>comp=Z,14nm,0.9s | 65.01 332 | IAmb | IAmb | 07 11 29.8 | |
| N49A | Columbus Grove<br>comp=Z,10nm,0.8s | 65.12 345 | IAmb | IAmb | 07 11 29.9 | |
| R40A | Maddies Statio<br>comp=Z,9.0nm,0.8s | 65.13 337 | IAmb | IAmb | 07 11 29.9 | |
| SFIN | Lafayette<br>baz=158 | 65.38 342 | P | P | 07 11 30.4 | -0.4 |
| N47A | Urbana<br>comp=Z,10nm,0.9s | 65.47 344 | IAmb | IAmb | 07 11 31.6 | |
| MNTX | Cornudas Mount<br>baz=140,SNR=10 | 65.63 324 | P | P | 07 11 32.6 | -0.1 |
| J59A | Piesco<br>comp=Z,12nm,0.8s | 65.89 353 | IAmb | IAmb | 07 11 35.9 | |
| LIC | Lamto<br>comp=Z,14nm,0.5s | 65.97 72⇑ *e*P | P | P | 07 11 33.9 | -1.3 |
| MSTX | Muleshoe<br>baz=143,SNR=9.7 | 66.02 327 | P | P | 07 11 35.4 | +0.2 |
| P40A | Paris<br>comp=Z,7.8nm,0.9s | 66.15 338 | IAmb | IAmb | 07 11 36.6 | |
| TIC | Toumodi<br>comp=Z,12nm,0.9s | 66.17 72⇑ *e*P | P | P | 07 11 36.5 | 0.0 |
| HDIL | Hopedale<br>baz=156 | 66.19 341 | P | P | 07 11 35.2 | -0.8 |
| AMTX | Amarillo<br>comp=Z,8.4nm,1.1s | 66.21 328 | IAmb | IAmb | 07 11 37.6 | |
| AMTX | Amarillo<br>baz=144 | 66.21 328 | P | P | 07 11 36.6 | +0.2 |
| KIC | Kosan Boka<br>comp=Z,32nm,0.5s | 66.28 72⇑ *e*P | P | P | 07 11 36.1 | -1.1 |
| DBIC | Dimbokro<br>comp=Z,12nm,0.6s,baz=232,slow=6.8,SNR=25<br>comp=Z,12nm,0.6s | 66.32 72 | P | P | 07 11 36.8 | -0.7 |
| LONY | Lake Ozonia<br>baz=171 | 67.04 353 | P | P | 07 11 41.2 | -0.1 |
| PKME | Peaks-Kenny Pk<br>baz=177 | 67.28 357 | P | P | 07 11 42.7 | 0.0 |
| KSU1 | Kansas State U<br>comp=Z,14nm,1.0s | 67.47 335 | IAmb | IAmb | 07 11 45.2 | |
| KSU1 | Kansas State U<br>baz=149 | 67.47 335 | P | P | 07 11 44.1 | 0.0 |
| WBO | Williamsburg<br>comp=Z,7.8nm,0.8s | 67.49 353 | IAmb | IAmb | 07 11 45.5 | |
| 121A | Cookes Peak, D<br>comp=Z,8.0nm,0.9s | 67.60 322 | IAmb | IAmb | 07 11 48.2 | |
| 121A | Cookes Peak, D<br>baz=138,SNR=6.7 | 67.60 322 | P | P | 07 11 46.9 | +1.6 |
| 319A | Douglas<br>comp=Z,6.8nm,0.9s | 67.62 321 | IAmb | IAmb | 07 11 47.9 | |
| R32A | Long Quarter,<br>R32A<br>comp=Z,17nm,1.2s | 67.76 333 | P<br>IAmb | P<br>IAmb | 07 11 46.2<br>07 11 47.7 | +0.2 |
| QSPA | South Pole Qui<br>QSPA<br>comp=Z,5.3nm,0.6s | 67.92 180 | P<br>IAmb | P<br>IAmb | 07 11 47.2<br>07 11 48.3 | +0.5 |
| QSPA | South Pole Qui<br>comp=Z,4.4nm,0.5s,baz=157,slow=3.2,SNR=76<br>comp=Z,4.4nm,0.5s | 67.92 180 | P | P | 07 11 47.8 | +1.1 |
| CBKS | Cedar Bluff<br>comp=Z,16nm,1.0s | 68.53 332 | IAmb | IAmb | 07 11 52.8 | |
| CBKS | Cedar Bluff<br>baz=146 | 68.53 332 | P | P | 07 11 51.7 | +1.0 |
| JFWS | Jewell Farm<br>comp=Z,16nm,1.1s | 68.63 341 | IAmb | IAmb | 07 11 52.1 | |
| JFWS | Jewell Farm<br>baz=156 | 68.63 341 | P | P | 07 11 51.3 | +0.1 |
| SCIA | State Center<br>comp=Z,10nm,0.8s | 68.67 338 | IAmb | IAmb | 07 11 52.4 | |
| SCIA | State Center<br>baz=153 | 68.67 338 | P | P | 07 11 51.5 | 0.0 |
| ANMO | Albuquerque<br>ANMO<br>comp=Z,6.6nm,1.1s | 68.69 325 | P<br>IAmb | P<br>IAmb | 07 11 53.3<br>07 11 54.5 | +1.3 |
| ANMO | Albuquerque<br>baz=140 | 68.69 325 | P | P | 07 11 53.1 | +1.1 |
| GLMI | Grayling<br>baz=162 | 68.92 346 | P | P | 07 11 53.3 | +0.4 |
| TUC | Tucson<br>baz=136 | 69.17 320 | P | P | 07 11 56.4 | +1.5 |
| T25A | Trinidad<br>comp=Z,5.1nm,0.8s | 69.34 328 | IAmb | IAmb | 07 11 58.4 | |
| T25A | Trinidad<br>baz=142 | 69.34 328 | P | P | 07 11 57.5 | +1.5 |
| KSCO | Kaye Shedlock'<br>baz=144 | 69.98 330 | P | P | 07 12 00.8 | +1.0 |
| BGNE | Belgrade<br>baz=148 | 70.06 335 | P | P | 07 12 00.5 | +0.6 |
| 214A | Organ Pipe Nat<br>baz=134 | 70.14 319 | P | P | 07 12 02.4 | +1.7 |
| SDCO | Great Sand Dun<br>baz=141 | 70.35 328 | P | P | 07 12 03.7 | +1.5 |
| W18A | Petrified Fore<br>comp=Z,8.9nm,1.1s | 70.60 323 | IAmb | IAmb | 07 12 06.4 | |
| W18A | Petrified Fore<br>baz=137 | 70.60 323 | P | P | 07 12 05.1 | +1.5 |
| S22A | 4UR Ranch, Cre<br>baz=140,SNR=6.4 | 71.02 327 | P | P | 07 12 07.6 | +1.4 |
| Q24A | Divide<br>comp=Z,8.9nm,0.9s | 71.13 329 | IAmb | IAmb | 07 12 09.4 | |
| Q24A | Divide<br>baz=142,SNR=5.0 | 71.13 329 | P | P | 07 12 08.4 | +1.5 |
| OGNE | Ogallala<br>baz=145 | 71.28 332 | P | P | 07 12 08.6 | +1.1 |
| ECSD | EROS Data Cent<br>comp=Z,19nm,1.5s | 71.47 337 | IAmb | IAmb | 07 12 09.6 | |
| ECSD | EROS Data Cent<br>baz=150,SNR=6.6 | 71.47 337 | P | P | 07 12 08.8 | +0.4 |
| MVCO | Mesa Verde<br>MVCO<br>comp=Z,16nm,1.4s | 71.48 325 | P<br>IAmb | P<br>IAmb | 07 12 09.4<br>07 12 11.6 | +0.5 |
| MVCO | Mesa Verde<br>baz=139,SNR=7.1 | 71.48 325 | P | P | 07 12 10.4 | +1.5 |
| SPMN | Marine on St.<br>comp=Z,6.3nm,0.8s | 71.50 340 | IAmb | IAmb | 07 12 09.3 | |
| SPMN | Marine on St.<br>baz=154 | 71.50 340 | P | P | 07 12 08.8 | +0.2 |
| WUAZ | Wupatki<br>comp=Z,9.2nm,1.1s | 71.81 322 | IAmb | IAmb | 07 12 13.9 | |
| WUAZ | Wupatki<br>baz=136 | 71.81 322 | P | P | 07 12 12.7 | +1.9 |
| ISCO | Idaho Springs<br>baz=142 | 72.01 329 | P | P | 07 12 13.6 | +1.5 |
| SWSC | Sam W. Stewart<br>baz=132 | 72.66 318 | P | P | 07 12 17.5 | +1.8 |
| BC3 | Big Chuckawall<br>baz=133 | 72.93 318 | P | P | 07 12 19.5 | +2.2 |
| U15A | North Rim<br>comp=Z,5.9nm,0.9s | 72.98 322 | IAmb | IAmb | 07 12 21.1 | |
| MONP2 | Monument Peak<br>baz=132 | 73.02 317 | P | P | 07 12 20.2 | +2.2 |
| N23A | Red Feather La<br>comp=Z,20µm,1.0s | 73.02 329 | IAmb | IAmb | 07 12 20.6 | |
| N23A | Red Feather La<br>baz=142,SNR=5.4 | 73.02 329 | P | P | 07 12 19.4 | +1.5 |
| IRM | Iron Mountain<br>baz=133 | 73.08 319 | P | P | 07 12 20.4 | +2.2 |
| PHWY | Pilot Hill<br>comp=Z,12nm,1.4s | 73.11 330 | IAmb | IAmb | 07 12 21.1 | |
| HMU | Henry Mountain<br>comp=Z,11nm,1.3s | 73.21 324 | IAmb | IAmb | 07 12 22.4 | |
| TPFO | Pinon Flats<br>baz=132 | 73.51 318 | P | P | 07 12 22.6 | +1.8 |
| O20A | White River Ci<br>comp=Z,9.7nm,0.8s | 73.55 327 | IAmb | IAmb | 07 12 23.7 | |
| O20A | White River Ci<br>baz=140,SNR=9.9 | 73.55 327 | P | P | 07 12 22.9 | +2.0 |
| KNB | Kanab<br>comp=Z,11nm,1.0s | 73.70 322 | IAmb | IAmb | 07 12 25.3 | |
| GMRC | Granite Mounta<br>baz=133,SNR=5.1 | 73.81 319 | P | P | 07 12 24.6 | +2.1 |
| SRU | San Rafael Swe<br>comp=Z,8.8nm,0.8s | 73.96 325 | IAmb | IAmb | 07 12 25.8 | |
| P18A | Preston Nutter<br>comp=Z,8.0nm,0.7s | 74.19 326 | IAmb | IAmb | 07 12 27.7 | |
| RWWY | Rawlins<br>comp=Z,7.7nm,0.9s | 74.24 329 | IAmb | IAmb | 07 12 27.7 | |
| HEC | Hector,Ludlow<br>baz=132 | 74.25 319 | P | P | 07 12 27.1 | +2.1 |
| CCUT | Cedar City<br>comp=Z,6.7nm,0.9s | 74.38 323 | IAmb | IAmb | 07 12 29.4 | |
| SCI2 | San Clemente I<br>baz=130 | 74.43 316 | P | P | 07 12 28.7 | +2.7 |
| K22A | Casper<br>baz=141 | 74.67 330 | P | P | 07 12 28.5 | +1.2 |
| BFSC | Mount Baldy Ra<br>baz=131 | 74.68 318 | P | P | 07 12 29.6 | +2.1 |
| RSSD | Black Hills | 74.73 333 | P | P | 07 12 29.2 | +1.5 |
| RSSD | Black Hills<br>baz=144 | 74.73 333 | P | P | 07 12 28.9 | +1.2 |
| GSC | Goldstone, Bar<br>baz=132 | 74.86 319 | P | P | 07 12 30.7 | +2.3 |
| SHOC | Shoshone, Teco<br>baz=133 | 74.94 320 | P | P | 07 12 30.6 | +1.7 |
| TORD | Torodi Ar. Bea<br>comp=Z,4.9nm,0.4s,baz=254,slow=5.0,SNR=80<br>comp=Z,4.9nm,0.4s | 75.03 69 | P | P | 07 12 28.8 | -1.0 |
| AGMN | Agassiz Nation<br>comp=Z,6.3nm,0.9s | 75.20 340 | IAmb | IAmb | 07 12 31.3 | |
| AGMN | Agassiz Nation<br>baz=152,SNR=5.0 | 75.20 340 | P | P | 07 12 30.6 | +0.6 |
| MPU | Maple Canyon<br>comp=Z,5.9nm,0.9s | 75.20 325 | IAmb | IAmb | 07 12 33.2 | |
| EDW2 | Edwards Air Fo<br>baz=131 | 75.31 318 | P | P | 07 12 32.9 | +1.8 |
| PSUT | Pine Spring<br>comp=Z,4.7nm,0.8s | 75.35 323 | IAmb | IAmb | 07 12 34.3 | |
| GWY | Greenwater Val<br>GWY<br>comp=Z,6.1nm,0.8s | 75.36 320 | P<br>IAmb | P<br>IAmb | 07 12 32.1<br>07 12 33.9 | +0.7 |
| LRMC | Laurel Mtn Rad<br>baz=132 | 75.51 319 | P | P | 07 12 34.1 | +1.8 |
| TPNV | Topopah Spring<br>baz=133,SNR=6.1 | 75.63 320 | P | P | 07 12 34.8 | +1.8 |
| FURC | Furnace Creek,<br>baz=132,SNR=6.9 | 75.67 320 | P | P | 07 12 34.9 | +2.0 |
| WCT | Wildcat Mounta<br>comp=Z,6.6nm,1.1s | 75.75 320 | IAmb | IAmb | 07 12 36.7 | |
| MPMC | Manual Prospec<br>baz=132 | 75.78 319 | P | P | 07 12 35.3 | +1.5 |
| DUG | Dugway, Tooele<br>baz=136,SNR=5.8 | 75.96 325 | P | P | 07 12 36.1 | +1.4 |
| ARVC | Arvin<br>baz=131 | 75.99 318 | P | P | 07 12 36.5 | +1.7 |
| MDND | Maddock<br>baz=148 | 76.08 337 | P | P | 07 12 36.0 | +1.1 |
| ISA | Isabella, Lake<br>baz=131 | 76.12 318 | P | P | 07 12 37.4 | +1.8 |
| BW06 | Boulder Array<br>baz=139 | 76.19 328 | P | P | 07 12 37.6 | +1.6 |
| PD31 | Pinedale Array | 76.19 328 | P | P | 07 12 36.5 | +0.5 |
| PDAR | Pinedale Array | 76.19 328 | P | P | 07 12 36.2 | +0.2 |
| PDAR | Pinedale Array<br>comp=Z,1.2nm,0.7s,baz=122,slow=8.0,SNR=13<br>comp=Z,1.2nm,0.7s | 76.19 328 | P | P | 07 12 37.0 | +1.0 |
| R11B | Troy Canyon, C | 76.20 322 | P | P | 07 12 35.5 | -0.6 |
| R11B | Troy Canyon, C<br>baz=134,SNR=8.3 | 76.20 322 | P | P | 07 12 37.9 | +1.8 |
| CWC | Cottonwood Cre<br>baz=131 | 76.39 319 | P | P | 07 12 39.1 | +1.9 |
| PKM | Mcpherson Peak<br>baz=130 | 76.46 317 | P | P | 07 12 39.7 | +2.1 |
| VNDA | Vanda<br>comp=Z,0.6nm,0.6s,baz=130,slow=6.8,SNR=6.9<br>comp=Z,0.6nm,0.6s | 76.56 190 | P | P | 07 12 38.9 | +1.6 |
| SPUT | South Promonto<br>comp=Z,6.0nm,0.7s | 76.57 326 | IAmb | IAmb | 07 12 40.6 | |
| VES | Vestal, Richgr<br>baz=130 | 76.61 318 | P | P | 07 12 40.2 | +2.0 |
| SCHQ | Schefferville<br>comp=Z,3.0nm,0.7s,baz=185,slow=8.5,SNR=4.2<br>comp=Z,3.0nm,0.7s | 76.80 359 | P | P | 07 12 39.4 | +0.5 |
| SMMC | Simmler<br>baz=130 | 76.84 317 | P | P | 07 12 41.8 | +2.2 |
| ULM | Lac du Bonnet<br>comp=Z,2.9nm,0.4s,baz=158,slow=7.7,SNR=12<br>comp=Z,2.9nm,0.4s | 76.92 341 | P | P | 07 12 39.9 | +0.3 |
| DSP | Deep Springs | 76.93 320 | P | P | 07 12 41.6 | +1.7 |
| LAO | LASA Array<br>baz=142 | 77.70 333 | P | P | 07 12 45.3 | +1.1 |
| OMMB | Old Mammoth Mi | 77.71 319 | P | P | 07 12 46.4 | +1.6 |
| NVAR | Mina Array Bea<br>comp=Z,1.3nm,0.7s,baz=155,slow=6.7,SNR=13<br>comp=Z,1.3nm,0.7s | 77.83 320 | P | P | 07 12 47.1 | +1.9 |
| RLMT | Red Lodge<br>comp=Z,4.3nm,0.7s | 77.83 330 | IAmb | IAmb | 07 12 47.1 | |
| RLMT | Red Lodge<br>baz=140,SNR=7.9 | 77.83 330 | P | P | 07 12 46.6 | +1.5 |
| H17A | Grant Village<br>baz=138 | 77.90 329 | P | P | 07 12 47.1 | +1.6 |
| KVN | Kaiserville<br>comp=Z,5.5nm,0.8s | 78.12 321 | IAmb | IAmb | 07 12 49.1 | |
| DGMT | Dagmar<br>baz=144 | 78.31 335 | P | P | 07 12 48.8 | +1.4 |
| PNTR | Pine Nut<br>PNTR<br>comp=Z,9.3nm,0.8s | 79.03 320 | P<br>IAmb | P<br>IAmb | 07 12 53.4<br>07 12 54.7 | +1.7 |
| HLID | Hailey<br>baz=135,SNR=22 | 79.19 326 | P | P | 07 12 54.5 | +2.0 |
| BOZ | Bozeman (W)<br>baz=138 | 79.29 329 | P | P | 07 12 54.7 | +1.8 |
| EGMT | Eagleton<br>baz=140,SNR=5.1 | 80.26 332 | P | P | 07 12 58.9 | +0.9 |
| BOSA | Boshof<br>comp=Z,1.4nm,0.5s,baz=276,slow=2.8,SNR=6.1<br>comp=Z,1.4nm,0.5s | 80.63 117 | P | P | 07 13 01.4 | +0.8 |
| MSO | Missoula<br>baz=136 | 81.29 329 | P | P | 07 13 05.2 | +1.7 |
| NEW | Newport<br>baz=134 | 83.83 328 | P | P | 07 13 18.3 | +1.9 |
| ESDC | Sonseca Array<br>comp=Z,1.1nm,0.8s,baz=236,slow=3.9,SNR=7.1<br>comp=Z,1.1nm,0.8s | 84.47 43 | P | P | 07 13 20.5 | +0.7 |
| ASAR | Alice Springs<br>comp=Z,2.3nm,0.7s,baz=144,slow=2.5,SNR=17<br>ASAR<br>comp=Z,1.2nm,0.8s,baz=142,slow=3.2,SNR=8.1 | 130.43 204 | PKP<br>SKPbc | PKPdf<br>SKPbc | 07 19 56.5<br>07 22 54.9 | +0.1<br>-0.3 |
| WRA | Warramunga Arr<br>comp=Z,1.4nm,0.4s,baz=160,slow=1.7,SNR=24<br>WRA<br>comp=Z,1.1nm,0.9s,baz=159,slow=2.8,SNR=5.5 | 133.60 207 | PKP<br>SKPbc | PKPdf<br>SKPbc | 07 20 02.8<br>07 23 06.2 | +0.3<br>-0.2 |
| KURBB | Kurchatov Arra<br>comp=Z,1.2nm,0.7s,baz=295,slow=2.7,SNR=10 | 140.41 36 | PKP | PKPdf | 07 20 14.9 | +0.9 |
| ZALV | Zalesovo Beam<br>comp=Z,1.4nm,0.6s,baz=302,slow=2.9,SNR=6.0 | 141.41 28 | PKP | PKPdf | 07 20 15.2 | -0.6 |
| MKAR | Makanchi Array<br>comp=Z,2.3nm,0.7s,baz=306,slow=4.1,SNR=18 | 144.57 39 | PKP | PKPdf | 07 20 21.8 | +0.2 |
| USRK | Ussuriysk Ar.<br>comp=Z,1.8nm,0.7s,baz=50,slow=3.4,SNR=5.9 | 153.60 330 | PKPbc | PKiKP | 07 20 44.4 | +0.4 |
| SONM | Songino Array<br>comp=Z,0.7nm,0.3s,baz=318,slow=1.9,SNR=2.5 | 153.76 12 | PKPbc | PKiKP | 07 20 44.7 | +0.2 |
| MJAR | Matsushiro Arr<br>comp=Z,0.7nm,0.6s,baz=100,slow=1.7,SNR=4.7 | 154.71 310 | PKPbc | PKiKP | 07 20 47.1 | +0.5 |

*VIE* ***15*** *07:03:04.2±0.7, 48.°01N×8.°66E, h0km, mb1.7/2, ml1.7/3,*
*Error ellipse: s-maj=6.6km s-min=4.4km az=28.0,*
*Suspected Mining explosion.*
**STR 15 07:03:05.4**±0.7**, 48.°N**±3.°×**±**, **h0**km**, MLv1.7**/12**, Error**

**ellipse: s-maj=0.0km s-min=0.0km az=60.6, preliminary, Germany**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GUT | Gutenstein | 0.40 | 155 | Pg | Pg | 07 03 12.5 | -0.5 |
| GUT | Gutenstein | 0.40 | 155 | Sg | Sg | 07 03 18.1 | 0.0 |
| OPP | Oppenau | 0.46 | 278 | Sg | Sg | 07 03 20.3 | +0.2 |
| BABA | Baden-Baden-Ne | 0.53 | 303 | Pg | Pg | 07 03 15.1 | -0.6 |
| SLE | Schleitheim | 0.71 | 201 | Pg | Pb | 07 03 20.0 | -0.8 |
| SLE | Schleitheim | 0.71 | 201 | Sg | Sb | 07 03 31.0 | -0.1 |
| KIZ | Kirchzarten | 0.80 | 233 | Pg | Pg | 07 03 20.4 | -0.2 |
| KIZ | Kirchzarten | 0.80 | 233 | Sg | Sg | 07 03 31.8 | +0.9 |
| FELD | Feldberg im Sc | 0.80 | 226 | Sg | Sb | 07 03 32.7 | -1.1 |
| FELD | Feldberg im Sc | 0.80 | 226 | Pg | Pg | 07 03 21.0 | +0.2 |
| HOHE | HOHENGOEFT | 0.95 | 284 | Pg | Pg | 07 03 23.4 | -0.2 |
| HOHE | | | | Sg | Sg | 07 03 36.3 | +0.5 |
| LEMB | Lembach | 0.95 | 310 | Pg | Pg | 07 03 23.3 | -0.3 |
| LEMB | | | | Sg | Sg | 07 03 36.8 | +0.9 |
| WLS | Welschbruch | 1.01 | 269 | Pg | Pg | 07 03 24.6 | -0.2 |
| WLS | | | | Sg | Sg | 07 03 38.5 | +0.7 |
| SULZ | Cheisacher | 1.04 | 210 | Pg | Pg | 07 03 24.5 | -0.8 |
| SULZ | Cheisacher | 1.04 | 210 | Sg | Sg | 07 03 39.6 | +0.8 |
| ENDD | Endenburg | 1.04 | 227 | Pg | Pg | 07 03 25.0 | -0.4 |
| ENDD | Endenburg | 1.04 | 227 | Sg | Sg | 07 03 38.6 | -0.4 |
| ECH | Echery | 1.16 | 260 | Pg | Pg | 07 03 27.1 | -0.5 |
| ECH | | | | Sg | Sg | 07 03 42.5 | -0.2 |
| WALT | Westhalten | 1.16 | 247 | Pg | Pg | 07 03 27.5 | -0.2 |
| WALT | | | | Sg | Sb | 07 03 43.4 | -0.6 |
| VOEL | Voellerdingen | 1.27 | 295 | Pg | Pg | 07 03 29.5 | -0.4 |
| VOEL | | | | Sg | Sg | 07 03 46.4 | +0.1 |
| DAVA | Damuels<br>0.5nm,0.1s | 1.33 | 149 | *e*Pg | Pg | 07 03 25.6 | -5.4 |
| DAVA | 5.3nm,0.3s | | | Sg | Sg | 07 03 42.3 | -5.9 |
| OBER | Oberstdorf | 1.40 | 136 | Pg | Pg | 07 03 20.6 | -12 |
| RETA | Reutte<br>2.3nm,0.3s | 1.59 | 126 | *e*Sg | Sn | 07 03 53.7 | -2.4 |
| MOTA | Moosalm<br>0.1nm,0.1s | 1.86 | 125 | Pn | Pn | 07 03 36.5 | -2.2 |
| MOTA | 1.2nm,0.2s | | | Sg | Sn | 07 04 01.9 | -0.9 |

*IDC* ***15*** *07:51:56.8±1.2, 12.°86N×87.°12W, h113km±19km, mb3.4/6,*
*mbtmp3.7/8, Error ellipse: s-maj=45.5km s-min=8.9km*
*az=43.0*
*CATAC* ***15*** *07:51:57.5±0.5, 12.°30N×87.°70W, h29km±5km, ML3.9*
*UCR* ***15*** *07:51:57.3±0.6, 12.°71N×87.°39W, h101km±5km, MW4.0*
*SNET* ***15*** *07:51:57.4±0.9, 12.°73N×87.°50W, h106km±8km, ML3.7*
**ISC 15 07:51:56.3**±0.8**, 12.°67N**±0.°06×**87.°47W**±0.°04**, h104**km±6km**,**
**n96,** σ1.9**s4/**138**, mb3.6/6, 1D, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CRIN | San Cristobal | 0.41 | 86 | *i* P | Pn | 07 52 12.7 | +0.7 |
| CRIN | | | | *i* S | Sn | 07 52 25.4 | +1.6 |
| CRIN | | | | IAML | | 07 52 28.6 | |
| | comp=Z,20µm,1.0s | | | | | | |
| CRIN | San Cristobal | 0.41 | 86 | *e*P | Pn | 07 52 12.6 | +0.7 |
| CRIN | | | | *e*S | Sn | 07 52 24.5 | +0.7 |
| QUEN | Al S del Volca | 0.60 | 97 | *i* P | Pn | 07 52 13.9 | +0.6 |
| QUEN | | | | *i* S | Sn | 07 52 26.7 | +0.6 |
| QUEN | | | | IAML | | 07 52 35.0 | |
| | comp=Z,7µm,1.0s | | | | | | |
| CNCH | Conchagua | 0.70 | 329 | *e*P | Pn | 07 52 14.8 | +0.6 |
| CNCH | | | | *e*S | Sn | 07 52 28.8 | +1.1 |
| CNCH | Conchagua | 0.70 | 329 | *i* P | Pn | 07 52 14.9 | +0.6 |
| CNCH | | | | *i* S | Sn | 07 52 28.7 | +1.0 |
| CNCH | | | | IAML | | 07 52 33.3 | |
| | comp=Z,4µm,1.0s | | | | | | |
| ROCN | Rota Cerro Neg | 0.72 | 102 | *i* P | Pn | 07 52 14.2 | -0.1 |
| ROCN | | | | *i* S | Sn | 07 52 28.2 | +0.4 |
| ROCN | | | | IAML | | 07 52 31.2 | |
| | comp=Z,3µm,1.0s | | | | | | |
| LCND | La Caada | 0.76 | 327 | *e*P | Pn | 07 52 15.2 | +0.6 |
| LCND | | | | *e*S | Sn | 07 52 29.8 | +1.4 |
| LCND | | | | IAML | | 07 52 31.1 | |
| | comp=Z,1µm,0.4s | | | | | | |
| LCND | La Caada | 0.76 | 327 | *i* P | Pn | 07 52 15.2 | +0.6 |
| LCND | | | | *i* S | Sn | 07 52 30.2 | +1.8 |
| LCND | | | | IAML | | 07 52 30.8 | |
| | comp=Z,2µm,1.0s | | | | | | |
| CNGA | Al SSO del Vol | 0.77 | 103 | *i* P | Pn | 07 52 12.6 | -2.1 |
| CNGA | | | | *i* S | Sn | 07 52 27.2 | -1.4 |
| CNGN | Cerro Negro | 0.77 | 103 | *i* P | Pn | 07 52 14.8 | +0.1 |
| CNGN | | | | *i* S | Sn | 07 52 29.0 | +0.3 |
| CNGN | | | | IAML | | 07 52 37.1 | |
| | comp=Z,4µm,1.0s | | | | | | |
| CNGN | Cerro Negro | 0.77 | 103 | *e*P | Pn | 07 52 14.8 | +0.1 |
| MACN | El Madrono | 0.80 | 105 | *i* P | Pn | 07 52 15.4 | +0.4 |
| MACN | | | | *i* S | Sn | 07 52 29.8 | +0.7 |
| MACN | | | | IAML | | 07 52 34.4 | |
| | comp=Z,3µm,1.0s | | | | | | |
| LEVN | Ruinas Leon Vi | 0.87 | 108 | *i* P | Pn | 07 52 16.1 | +0.4 |
| LEVN | | | | *i* S | Sn | 07 52 31.4 | +1.1 |
| LEVN | | | | IAML | | 07 52 39.3 | |
| | comp=Z,3µm,1.0s | | | | | | |
| JUCU | Jucuarįn | 0.96 | 307 | *e*P | Pn | 07 52 17.6 | +0.9 |
| JUCU | | | | *e*S | Sn | 07 52 33.1 | +1.1 |
| JUCU | Jucuarįn | 0.96 | 307 | *i* P | Pn | 07 52 16.9 | +0.2 |
| JUCU | | | | *i* S | Sn | 07 52 32.4 | +0.4 |
| JUCU | | | | IAML | | 07 52 35.4 | |
| | comp=Z,3µm,1.0s | | | | | | |
| BC86 | Nagarote | 0.97 | 115 | *i* P | Pn | 07 52 17.9 | +1.2 |
| BC86 | | | | *i* S | Sn | 07 52 32.2 | +0.1 |
| BC86 | | | | IAML | | 07 52 40.0 | |
| | comp=Z,6µm,1.0s | | | | | | |
| COPN | Copaltepe | 0.98 | 120 | *i* P | Pn | 07 52 17.2 | +0.3 |
| COPN | | | | IAML | | 07 52 35.9 | |
| | comp=Z,2µm,1.0s | | | | | | |
| MOM2 | El Cardon | 0.99 | 103 | *i* P | Pn | 07 52 17.4 | +0.5 |
| MOM2 | | | | *i* S | Sn | 07 52 33.9 | +1.5 |
| MOM2 | | | | IAML | | 07 52 40.4 | |
| | comp=Z,680nm,1.0s | | | | | | |
| CNRM | Centro Naciona | 1.05 | 319 | *i* P | Pn | 07 52 18.4 | +0.8 |
| CNRM | | | | *i* S | Sn | 07 52 35.3 | +1.6 |
| CNRM | | | | IAML | | 07 52 43.0 | |
| | comp=Z,5µm,1.0s | | | | | | |
| BLLM | Bellamira | 1.07 | 316 | *e*P | Pn | 07 52 18.5 | +0.6 |
| VSM | San Miguel | 1.09 | 314 | *e*P | Pn | 07 52 19.1 | +0.8 |
| BRAN | Las Pilas | 1.09 | 87 | *i* P | Pn | 07 52 18.8 | +0.8 |
| BRAN | | | | *i* S | Sn | 07 52 36.8 | +2.4 |
| LCY | Lacayo | 1.10 | 313 | *e*P | Pn | 07 52 18.9 | +0.7 |
| RANC | El Ranchito | 1.10 | 314 | *i* P | Pn | 07 52 19.2 | +0.9 |
| RANC | | | | *i* S | Sn | 07 52 37.0 | +2.1 |
| RANC | | | | IAML | | 07 52 40.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| LIMN | Finca el Limon | 1.14 | 70 | *i* P | Pn | 07 52 19.2 | +0.5 |
| SAPS | Ciudad Sandino | 1.15 | 116 | *i* P | Pn | 07 52 19.5 | +0.8 |
| SAPS | | | | *i* S | Sn | 07 52 36.7 | +1.1 |
| SAPS | | | | IAML | | 07 52 41.6 | |
| | comp=Z,4µm,1.0s | | | | | | |
| PACA | Pacayal | 1.15 | 314 | *e*P | Pn | 07 52 19.9 | +1.1 |
| PACA | Pacayal | 1.15 | 314 | *i* P | Pn | 07 52 19.7 | +0.9 |
| PACA | | | | *i* S | Sn | 07 52 42.1 | +6.3 |
| PACA | | | | IAML | | 07 52 44.7 | |
| | comp=Z,7µm,1.0s | | | | | | |
| APYN | Apoyeque | 1.17 | 112 | *i* S | Sn | 07 52 37.4 | +1.3 |
| APQ2 | Apoyeque | 1.21 | 113 | *i* P | Pn | 07 52 20.4 | +1.1 |
| APQ2 | | | | *i* S | Sn | 07 52 38.1 | +1.3 |
| APQ2 | | | | IAML | | 07 52 40.8 | |
| | comp=Z,2µm,1.0s | | | | | | |
| RE6B4 | Centro civico | 1.27 | 115 | *i* P | Pn | 07 52 20.6 | +0.6 |
| RE6B4 | | | | IAML | | 07 52 41.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| RB28C | Hialeah | 1.28 | 115 | *i* P | Pn | 07 52 20.9 | +0.7 |
| RB28C | | | | IAML | | 07 52 41.6 | |
| | comp=Z,2µm,1.0s | | | | | | |
| USIM | UNAN | 1.29 | 115 | *i* P | Pn | 07 52 19.8 | -0.5 |
| USIM | | | | *i* S | Sn | 07 52 39.2 | +0.8 |
| R4DEC | Barrio San Lui | 1.30 | 113 | *i* P | Pn | 07 52 21.0 | +0.7 |
| R4DEC | | | | *i* P | | 07 52 21.1 | |
| R4DEC | | | | *i* S | Sn | 07 52 39.9 | +1.3 |
| R4DEC | | | | IAML | | 07 52 41.2 | |
| | comp=Z,1µm,1.0s | | | | | | |
| R4DEC | | | | IAML | | 07 52 41.2 | |
| | comp=Z,1µm,1.0s | | | | | | |
| TECA | Tecapa | 1.30 | 309 | *e*P | Pn | 07 52 21.4 | +0.9 |
| HUEN | | 1.31 | 105 | *i* P | Pn | 07 52 20.6 | +0.2 |
| HUEN | | | | *i* S | Sn | 07 52 40.7 | +2.0 |
| RA5A7 | El Crucero | 1.32 | 121 | *i* P | Pn | 07 52 21.7 | +1.0 |
| RA5A7 | | | | IAML | | 07 52 43.6 | |

comp=Z,8μm,1.0s
**R0529 La Mascota 1.32 114** *i* P **Pn** **07 52 21.4 +0.8**
R0529 IAML 07 52 45.0
comp=Z,1μm,1.0s
**CRUN El Crucero 1.33 121** *i* P **Pn** **07 52 21.9 +1.1**
CRUN IAML 07 52 41.5
comp=Z,7.9nm,1.0s
**TGUH Tegucigalpa,Un 1.39 8** *i* P **Pn** **07 52 22.6 +1.0**
TGUH *i* S **Sn** **07 52 42.1 +1.3**
**PQSS Presa 15 de Se 1.43 312** *e*P **Pn** **07 52 22.8 +0.9**
**PQSS Presa 15 de Se 1.43 312** *i* P **Pn** **07 52 22.8 +0.9**
PQSS *i* S **Sn** **07 52 42.4 +1.1**
PQSS IAML 07 52 54.0
comp=Z,390nm,1.0s
**RB213 Mirador 2 Volc 1.44 118** *i* P **Pn** **07 52 20.8 -1.3**
RB213 IAML 07 52 42.7
comp=Z,2μm,1.0s
**TECO Alcaldia de Te 1.54 304** *e*P **Pn** **07 52 23.7 +0.4**
**TECO Alcaldia de Te 1.54 304** *i* P **Pn** **07 52 24.0 +0.7**
TECO *i* S **Sn** **07 52 44.2 +0.3**
TECO IAML 07 52 50.4
comp=Z,370nm,1.0s
**SCLA Alcaldia de Sa 1.60 310** *i* P **Pn** **07 52 25.0 +0.9**
SCLA *e*S **Sn** **07 52 46.5 +1.4**
**SCLA Alcaldia de Sa 1.60 310** *i* P **Pn** **07 52 25.0 +0.9**
SCLA *i* S **Sn** **07 52 46.5 +1.4**
SCLA IAML 07 52 57.5
comp=Z,230nm,1.0s
**COEG Centro de Oper 1.67 305** *e*P **Pn** **07 52 25.5 +0.6**
COEG *e*S **Sn** **07 52 47.5 +0.8**
**COEG Centro de Oper 1.67 305** *i* P **Pn** **07 52 25.5 +0.6**
COEG *i* S **Sn** **07 52 47.6 +0.8**
COEG IAML 07 52 55.2
comp=Z,480nm,1.0s
**NADN Granada 1.68 123** *i* P **Pn** **07 52 21.1 -3.8**
NADN *i* S **Sn** **07 52 46.2 -0.5**
**BOAB BOACO BROADBAN.77 97** *i* P **Pn** **07 52 26.8 +0.7**
BOAB *i* S **Sn** **07 52 49.8 +0.9**
**LFRS El Faro 1.82 302** *e*P **Pn** **07 52 26.9 0.0**
**LOMA Loma Larga 1.92 300** *e*P **Pn** **07 52 29.3 +1.1**
LOMA *e*S **Sn** **07 52 53.9 +1.4**
LOMA AMP 07 52 56.3
comp=E,72μm,6.6s
**LOMA Loma Larga 1.92 300** *i* P **Pn** **07 52 29.3 +1.1**
LOMA *i* S **Sn** **07 52 54.5 +2.0**
LOMA IAML 07 52 56.9
comp=Z,1μm,1.0s
**SNET Serv Nac Est T 1.99 301** *e*P **Pn** **07 52 29.9 +0.9**
SNET IAML 07 52 56.8
comp=Z,498nm,0.3s
**UEES Universidad Ev 2.02 301** *i* P **Pn** **07 52 30.6 +1.3**
UEES *i* S **Sn** **07 52 56.5 +2.0**
UEES IAML 07 53 01.5
comp=Z,490nm,1.0s
**PMON Piamonte 2.08 300** *i* P **Pn** **07 52 31.3 +1.2**
PMON *i* S **Sn** **07 52 57.2 +1.2**
PMON IAML 07 53 05.4
comp=Z,2μm,1.0s
**JAPN Al SSO del Vol 2.09 123** *i* P **Pn** **07 52 31.6 +1.4**
JAPN IAML 07 53 09.2
comp=Z,460nm,1.0s
**JAYA Jayaque - finc 2.16 297** *e*P **Pn** **07 52 32.0 +0.7**
JAYA *e*S **Sn** **07 52 58.5 +0.4**
**JAYA Jayaque - finc 2.16 297** *i* P **Pn** **07 52 31.8 +0.5**
JAYA *i* S **Sn** **07 52 58.1 0.0**
JAYA IAML 07 52 59.7
comp=Z,2μm,1.0s
**ACON Acoyapa 2.35 107** *i* P **Pn** **07 52 34.2 +0.7**
**ACON Acoyapa 2.35 107** ⇓*i* P **Pn** **07 52 34.1 +0.5**
**LCRUZ La Cruz 2.40 131** *e*P **Pn** **07 52 34.8 +0.6**
**UNIC Universidad Ca 2.41 303** *i* P **Pn** **07 52 35.4 +1.0**
UNIC IAML 07 53 17.4
comp=Z,160nm,1.0s
**MTO3 Montecristo 2.52 313** *e*P **Pn** **07 52 37.2 +1.2**
**NUBE Las Nubes 2.56 299** *e*P **Pn** **07 52 37.7 +1.2**
**NUBE Las Nubes 2.56 299** *i* P **Pn** **07 52 38.2 +1.7**
NUBE *i* S **Sn** **07 53 08.2 +0.8**
NUBE IAML 07 53 13.8
comp=Z,430nm,1.0s
**ESQI Esquipulas 2.62 316** *i* P Pn 07 52 45.7 +8.5
**VRLE La Escondida, 2.78 132** *e*P **Pn** **07 52 40.1 +0.7**
**CUI Cuipilapa 3.02 131** *e*P **Pn** **07 52 43.3 +0.9**
**ESPN Las Esperanzas 3.13 98** *i* P **Pn** **07 52 45.3 +1.4**
**ESPN Las Esperanzas 3.13 98** *e*P **Pn** **07 52 44.8 +0.9**
**INDI Punta índio, G 3.39 145** *i* P **Pn** **07 52 48.2 +0.9**
**JTS Las Juntas de 3.42 134** P **Pn** **07 52 48.9 +1.1**
comp=Z,12nm,0.3s,baz=82,slow=23,SNR=21
JTS S **Sn** **07 53 25.8 -1.7**
comp=Z,15nm,0.3s,baz=275,slow=17,SNR=5.7
**JTS Las Juntas de 3.42 134** *e*P **Pn** **07 52 48.8 +1.1**
**JUNT Juntas 3.42 134** *e*P **Pn** **07 52 49.0 +1.2**
**BLUN Bluefields 3.67 100** *i* P Pn 07 52 57.5 +6.4
**APG El Apazote 3.72 309** P **Pn** **07 52 54.0 +2.0**
comp=Z,0.4nm,0.6s,baz=105,slow=14,SNR=5.6
APG S **Sn** **07 53 41.6 +6.4**
comp=Z,0.4nm,0.3s,baz=114,slow=22,SNR=5.3
**TRB2 Turrubares 4.03 132** *e*P **Pn** **07 52 57.6 +1.5**
**VICA Volcano Irazu 4.44 127** *e*P **Pn** **07 53 03.5 +1.5**
**ABE2 San Pablo 4.46 131** *e*P **Pn** **07 53 04.2 +2.2**
**LCR2 La Lucha 2 4.47 130** *i* P **Pn** **07 53 04.3 +2.2**
**LCR2 La Lucha 2 4.47 130** *e*P **Pn** **07 53 04.1 +1.9**
**BUS1 Rivas 4.79 130** *e*P **Pn** **07 53 08.9 +2.3**
**ZELE Perez Zeledon 4.94 131** *e*P **Pn** **07 53 11.0 +2.7**
**OCHAL Ojochal 5.17 133** *i* P **Pn** **07 53 14.0 +2.7**
**DRK0 Durika 5.35 129** *i* P **Pn** **07 53 16.5 +2.5**
**DRK0 Durika 5.35 129** *e*P **Pn** **07 53 16.0 +2.0**
**CMIG Matias Romero 8.41 302** P **Pn** **07 53 57.0 +1.6**
comp=Z,0.7nm,0.3s,baz=162,slow=12,SNR=17
CMIG S **Sn** **07 55 22.6 -6.1**
comp=Z,1.5nm,0.6s,baz=90,slow=20,SNR=2.4
**TXAR Lajitas Array 22.39 320** P **P** **07 56 46.3 -0.1**
comp=Z,0.8nm,0.6s,baz=146,slow=8.5,SNR=18
comp=Z,0.8nm,0.6s
**LPAZ La Paz 34.55 146** P **P** **07 58 35.7 0.0**
comp=Z,0.3nm,0.3s,baz=342,slow=6.4,SNR=2.2
comp=Z,0.3nm,0.3s
**PDAR Pinedale Array 35.57 332** P **P** **07 58 43.1 -0.8**
comp=Z,0.4nm,0.5s,baz=133,slow=11,SNR=6.8
comp=Z,0.4nm,0.5s
**NVAR Mina Array Bea 37.53 319** P **P** **07 59 01.0 +0.5**
comp=Z,0.3nm,0.7s,baz=119,slow=6.9,SNR=4.5
comp=Z,0.3nm,0.7s
**ULM Lac du Bonnet 38.10 351** P **P** **07 59 02.5 -2.4**
comp=Z,1.2nm,0.3s,baz=165,slow=7.4,SNR=6.3
comp=Z,1.2nm,0.3s
**SCHQ Schefferville 45.07 17** P **P** **08 00 00.2 -1.6**
comp=Z,3.0nm,0.7s,baz=134,slow=13,SNR=2.2
comp=Z,3.0nm,0.7s
**WRA Warramunga Arr 139.31 254** PKP **PKPdf** **08 11 11.6 -0.5**
comp=Z,0.3nm,0.4s,baz=89,slow=2.3,SNR=16

*IDC* ***15*** *08:10:08.7±2.7,53.5°N×87.7°E, h0km, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=22.9km s-min=15.3km az=66.0*
*NNC* ***15*** *08:10:08.2±3.2,53.5°N×87.7°E, h0km, mb3.1, mpv2.7, Error ellipse: s-maj=23.5km s-min=13.4km az=67.0, Suspected Mining explosion.*

**ISC 15 08:10:03.4±2.9, 52.81°N±0.08°×87.3°E±0.1, h0km, n8, σ1s 78/12, 5C-6D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.88** | **309** | I | I | 08 21 40.0 | |
| | 0.1nm,0.7s,baz=100,slow=314,SNR=10 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.88** | **309** | ⇓P | **Pg** | **08 10 40.2** | **+0.9** |
| | 0.4nm,0.6s | | | | | | |
| ZAA0 | | | | ⇑S | **Sg** | **08 11 04.1** | **+0.4** |
| | 0.6nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.88** | **309** | Pn | **Pg** | **08 10 40.1** | **+0.7** |
| | 2.1nm,0.3s,baz=100,slow=15,SNR=21 | | | | | | |
| ZALV | | | | Lg | Lg | 08 11 05.6 | |
| | 1.6nm,0.3s,baz=106,slow=25,SNR=7.0 | | | | | | |
| **KURK** | **Kurchatov** | **5.78** | **252** | ⇓Pn | **Pb** | **08 11 43.6** | **-1.4** |
| | 0.8nm,0.6s | | | | | | |
| KURK | | | | ⇑Sn | **Sb** | **08 12 56.7** | **+1.9** |
| | 0.6nm,0.5s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 13 28.7 | |
| | 1.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.87** | **252** | Pn | **Pb** | **08 11 44.8** | **-1.8** |
| | 0.1nm,0.3s,baz=61,slow=14,SNR=9.6 | | | | | | |
| KURBB | | | | Sn | **Sb** | **08 12 55.6** | **-1.7** |
| | baz=65,slow=24,SNR=1.1 | | | | | | |
| KURBB | | | | Lg | Lg | 08 13 31.6 | |
| | baz=61,slow=31,SNR=1.6 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.87** | **252** | ⇓Pn | **Pb** | **08 11 44.2** | **-2.4** |
| | 1.4nm,0.5s | | | | | | |
| KURBB | | | | ⇑Sn | **Sb** | **08 12 59.1** | **+1.7** |
| | 1.6nm,0.5s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 08 13 30.3 | |
| | 2.2nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **6.83** | **210** | ⇑Pn | Pb | 08 11 57.4 | -5.6 |
| | 0.3nm,0.5s,baz=30,slow=14,SNR=4.6 | | | | | | |
| MK31 | | | | ⇓Sn | **Sb** | **08 13 26.1** | **+1.0** |
| | 0.6nm,0.7s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 08 14 00.7 | |
| | 0.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **6.83** | **210** | Pn | **Pb** | **08 12 01.9** | **-1.1** |
| | 0.2nm,0.3s,baz=28,slow=14,SNR=6.0 | | | | | | |
| MKAR | | | | Sn | **Sb** | **08 13 27.0** | **+1.9** |
| | 0.1nm,0.3s,baz=27,slow=19,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 08 14 11.3 | |
| | 0.1nm,0.3s,baz=32,slow=30,SNR=1.9 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*IDC* ***15*** *08:52:38.2±1.0, 36.61°N×27.16°E, h123km±13km, mb3.6/5, mbtmp3.9/8, Error ellipse: s-maj=24.8km s-min=9.4km az=158.0*
*ISK* ***15*** *08:52:39.5, 36.73°N×27.13°E, h138km, ML3.3/21*
*NEIC* ***15*** *08:52:39.3±2.1, 36.61°N±0.08°×27.13°E±0.07, h153km±9km, mb4.1/6, Error ellipse: s-maj=12.1km s-min=7.7km az=166.0*
*AFAD* ***15*** *08:52:40.7±0.0, 36.65°N×26.22°E, h8km±4km, ML2.8*
*THE* ***15*** *08:52:42.0, 36.70°N×27.02°E, h146km±2km, ML3.6/4, Error ellipse: s-maj=2.7km s-min=1.1km az=61.0*
*ATH* ***15*** *08:52:43.3, 36.83°N×26.81°E, h30km±9km, ML3.4/4, Error ellipse: s-maj=11.2km s-min=1.9km az=354.0*

**ISC 15 08:52:38.8±0.7, 36.67°N±0.04°×27.11°E±0.04, h144km±5km, n101, σ1s 22/125, mb3.9/9, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YAZI** | **Mula-Dat§a-** | **0.28** | **87** | P | **Pn** | **08 52 59.0** | **+0.5** |
| YAZI | | | | S | **Sn** | **08 53 13.1** | **-0.3** |
| **DAT** | **Datca** | **0.38** | **81** | Pg | **Pn** | **08 52 59.2** | **+0.2** |
| **DAT** | **Datca** | **0.38** | **81** | P | **Pn** | **08 52 59.6** | **+0.6** |
| DAT | | | | S | **Sn** | **08 53 14.0** | **-0.3** |
| DAT | | | | *i* AML | AML | 08 53 14.0 | |
| | comp=N,315nm,0.8s | | | | | | |
| DAT | | | | *i* AML | AML | 08 53 15.0 | |
| | comp=E,252nm,0.7s | | | | | | |
| **DAT** | **Datca** | **0.38** | **81** | P | **Pn** | **08 52 59.5** | **+0.6** |
| DAT | | | | S | **Sn** | **08 53 14.2** | **-0.1** |
| **BODT** | **Bodrum** | **0.42** | **22** | Pg | **Pn** | **08 52 59.2** | **+0.2** |
| **BODT** | **Bodrum** | **0.42** | **22** | P | **Pn** | **08 52 59.5** | **+0.5** |
| BODT | | | | S | **Sn** | **08 53 13.5** | **-1.0** |
| **BDRM** | **Kayabasi** | **0.48** | **34** | P | **Pn** | **08 52 59.8** | **+0.5** |
| BDRM | | | | S | **Sn** | **08 53 14.3** | **-0.6** |
| BDRM | | | | *i* AML | AML | 08 53 15.0 | |
| | comp=E,241nm,0.4s | | | | | | |
| **DDIM** | **Aydin, Didim** | **0.79** | **8** | P | **Pn** | **08 53 02.1** | **+0.9** |
| DDIM | | | | *i* AML | AML | 08 53 18.0 | |
| | comp=E,202nm,0.7s | | | | | | |
| DDIM | | | | S | **Sn** | **08 53 18.2** | **-0.2** |
| DDIM | | | | *i* AML | AML | 08 53 19.0 | |
| | comp=N,362nm,0.5s | | | | | | |
| **MLSB** | **Milas** | **0.82** | **40** | Pg | **Pn** | **08 53 01.6** | **+0.1** |
| **MRSB** | **Marmaris-Mugla** | **0.87** | **87** | Pg | **Pn** | **08 53 02.3** | **+0.4** |
| MRSB | | | | Sg | **Sn** | **08 53 19.1** | **-0.4** |
| **ARG** | **Arkhangelos** | **0.94** | **119** | Pg | **Pn** | **08 53 03.2** | **+0.8** |
| **ARG** | **Arkhangelos** | **0.94** | **119** | Pn | **Pn** | **08 53 03.3** | **+1.0** |
| **ARG** | **Arkhangelos** | **0.94** | **119** | P | **Pn** | **08 53 03.4** | **+1.0** |
| ARG | | | | S | **Sn** | **08 53 20.3** | **0.0** |
| | 1μm,0.4s | | | | | | |
| **ARG** | **Arkhangelos** | **0.94** | **119** | P | **Pn** | **08 53 03.5** | **+1.1** |
| ARG | | | | S | **Sn** | **08 53 19.3** | **-1.0** |
| ARG | | | | AML | AML | 08 53 22.0 | |
| | comp=E,2332μm,0.3s | | | | | | |
| ARG | | | | AML | AML | 08 53 22.1 | |
| | comp=N,1515μm,0.4s | | | | | | |
| **GCAM** | **G?zelcami?** | **1.03** | **5** | Pg | **Pn** | **08 53 03.4** | **+0.2** |
| **GCAM** | **G?zelcami?** | **1.03** | **5** | P | **Pn** | **08 53 03.7** | **+0.5** |
| GCAM | | | | S | **Sn** | **08 53 21.3** | **-0.6** |
| GCAM | | | | *i* AML | AML | 08 53 22.0 | |
| | comp=N,234nm,0.8s | | | | | | |
| GCAM | | | | *i* AML | AML | 08 53 22.0 | |
| | comp=N,152nm,0.7s | | | | | | |
| **YER** | **Yerkesik** | **1.05** | **63** | Pg | **Pn** | **08 53 03.6** | **+0.2** |
| **YER** | **Yerkesik** | **1.05** | **63** | P | **Pn** | **08 53 04.4** | **+1.0** |
| YER | | | | S | **Sn** | **08 53 21.9** | **-0.3** |
| **KARP** | **Karpathos** | **1.12** | **178** | Pn | **Pn** | **08 53 05.2** | **+1.1** |
| **KARP** | **Karpathos** | **1.12** | **178** | | **Pn** | **08 53 04.7** | **+0.6** |
| **KARP** | **Karpathos** | **1.12** | **178** | P | **Pn** | **08 53 05.2** | **+1.1** |
| KARP | | | | S | **Sn** | **08 53 21.9** | **-1.5** |
| | comp=N,2μm,0.3s | | | | | | |
| **KARP** | **Karpathos** | **1.12** | **178** | P | **Pn** | **08 53 05.0** | **+0.9** |
| **KARP** | **Karpathos** | **1.12** | **178** | P | **Pn** | **08 53 05.0** | **+0.9** |
| KARP | | | | S | **Sn** | **08 53 20.9** | **-2.5** |
| KARP | | | | AML | AML | 08 53 24.7 | |
| | comp=E,3136μm,0.2s | | | | | | |
| KARP | | | | AML | AML | 08 53 27.2 | |
| | comp=N,4856μm,0.4s | | | | | | |
| **MULA** | **Mugla, Merkez-** | **1.13** | **58** | P | **Pn** | **08 53 05.2** | **+1.0** |
| MULA | | | | S | **Sn** | **08 53 24.0** | **+0.3** |
| **DALY** | **Dalyan (Mula)** | **1.25** | **83** | Pn | **Pn** | **08 53 05.9** | **+0.7** |
| **APE** | **Apeiranthos** | **1.33** | **288** | Pn | **Pn** | **08 53 06.9** | **+0.8** |
| **SANT** | **Santorini** | **1.36** | **258** | Pn | **Pn** | **08 53 07.7** | **+1.3** |
| **SANT** | **Santorini** | **1.36** | **258** | Pn | **Pn** | **08 53 08.4** | **+2.0** |
| **DGB** | **zmir** | **1.39** | **353** | P | **Pn** | **08 53 06.9** | **+0.3** |
| DGB | | | | S | **Sn** | **08 53 26.7** | **-1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.42** | **26** | Pn | **Pn** | **08 53 07.2** | **+0.1** |
| **ESEN** | **Aydn-Nazilli** | **1.50** | **41** | P | **Pn** | **08 53 08.7** | **+0.9** |
| ESEN | | | | S | **Sn** | **08 53 29.2** | **-0.8** |
| **FETY** | **Fethiye** | **1.59** | **91** | Pn | **Pn** | **08 53 09.5** | **+0.7** |
| **ZKR** | **Zakros** | **1.71** | **205** | Pn | **Pn** | **08 53 12.0** | **+1.7** |
| ZKR | | | | Sn | **Sn** | **08 53 35.7** | **+1.4** |
| **ZKR** | **Zakros** | **1.71** | **205** | P | **Pn** | **08 53 11.9** | **+1.7** |
| ZKR | | | | S | **Sn** | **08 53 35.0** | **+0.7** |
| | comp=N,842nm,0.3s | | | | | | |
| **ZKR** | **Zakros** | **1.71** | **205** | P | **Pn** | **08 53 11.8** | **+1.6** |
| ZKR | | | | S | **Sn** | **08 53 31.2** | **-3.0** |
| ZKR | | | | AML | AML | 08 53 37.0 | |
| | comp=E,2806μm,0.3s | | | | | | |
| ZKR | | | | AML | AML | 08 53 38.9 | |
| | comp=N,693μm,0.5s | | | | | | |
| **URLA** | **Izmir** | **1.74** | **347** | Pn | **Pn** | **08 53 10.8** | **+0.3** |
| **ODEM** | **Odemis-Izmir** | **1.78** | **25** | Pn | **Pn** | **08 53 11.3** | **+0.3** |
| **CAME** | **Cameli-Denizli** | **1.78** | **80** | Pn | **Pn** | **08 53 11.8** | **+0.7** |
| **CHOS** | **Chios island** | **1.91** | **334** | Pn | **Pn** | **08 53 12.9** | **+0.4** |
| **CHOS** | **Chios island** | **1.91** | **334** | P | **Pn** | **08 53 12.9** | **+0.4** |
| **APMY** | **Acipayam-Deniz** | **1.93** | **65** | Pn | **Pn** | **08 53 13.4** | **+0.7** |
| **AKAS** | **Kas** | **2.06** | **101** | Pn | **Pn** | **08 53 15.2** | **+0.9** |
| **AKAS** | **Kas** | **2.06** | **101** | Pn | **Pn** | **08 53 15.4** | **+1.1** |
| **IACM** | **Heraklion** | **2.14** | **231** | P | **Pn** | **08 53 16.2** | **+1.0** |
| IACM | | | | S | **Sn** | **08 53 39.7** | **-3.4** |
| **KULA** | **Kula-Manisa** | **2.22** | **33** | Pn | **Pn** | **08 53 16.6** | **+0.5** |
| **ELL** | **Elmali** | **2.25** | **87** | Pn | **Pn** | **08 53 17.5** | **+0.9** |
| **ELL** | **Elmali** | **2.25** | **87** | | **Pn** | **08 53 17.6** | **+0.9** |
| **IDI** | **Anoyia** | **2.27** | **233** | Pn | **Pn** | **08 53 17.5** | **+0.7** |
| **IDI** | **Anoyia** | **2.27** | **233** | | **Pn** | **08 53 17.4** | **+0.6** |
| **IDI** | **Anoyia** | **2.27** | **233** | P | **Pn** | **08 53 17.1** | **+0.3** |
| IDI | | | | S | **Sn** | **08 53 44.0** | **-2.0** |
| | comp=N,542nm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **2.27** | **233** | P | **Pn** | **08 53 16.8** | **0.0** |
| | comp=N,63nm,0.3s,baz=45,slow=8.4,SNR=101 | | | | | | |
| IDI | | | | S | **Sn** | **08 53 43.5** | **-2.4** |
| | comp=N,94nm,0.3s,baz=74,slow=13,SNR=5.5 | | | | | | |
| **IDI** | **Anoyia** | **2.27** | **233** | P | **Pn** | **08 53 17.1** | **+0.3** |
| IDI | | | | S | **Sn** | **08 53 41.7** | **-4.3** |
| IDI | | | | AML | AML | 08 53 45.2 | |
| | comp=N,1201μm,0.3s | | | | | | |
| IDI | | | | AML | AML | 08 53 45.9 | |
| | comp=E,1502μm,0.5s | | | | | | |
| **DEMR** | **Demre-Antalya** | **2.29** | **100** | Pn | **Pn** | **08 53 17.9** | **+0.9** |
| **DKL** | **Dikili** | **2.40** | **356** | Pn | **Pn** | **08 53 18.8** | **+0.5** |
| **SOMA** | **Soma-Manisa** | **2.51** | **8** | Pn | **Pn** | **08 53 20.0** | **+0.4** |
| **KORT** | **Korkueli** | **2.62** | **82** | Pn | **Pn** | **08 53 22.2** | **+1.0** |
| **SIGR** | **SIGRI** | **2.73** | **339** | Pn | **Pn** | **08 53 22.8** | **+0.5** |
| **IMMV** | **Iera Moni Meta** | **2.81** | **245** | P | **Pn** | **08 53 24.8** | **+1.4** |
| **ANTB** | **Antalya** | **2.85** | **84** | Pn | **Pn** | **08 53 24.9** | **+1.0** |
| **BCK** | **Bucak** | **2.89** | **73** | Pn | **Pn** | **08 53 25.3** | **+0.8** |
| **RODP** | **Rodopos** | **2.93** | **249** | P | **Pn** | **08 53 25.9** | **+0.9** |
| **GVD** | **Gavdhos** | **3.06** | **234** | P | **Pn** | **08 53 28.2** | **+1.5** |
| **ANKY** | **Antikythira Is** | **3.18** | **257** | P | **Pn** | **08 53 29.1** | **+0.9** |
| **KTHA** | **Kythira Island** | **3.29** | **264** | P | **Pn** | **08 53 30.6** | **+1.0** |
| **VLI** | **Veliai** | **3.35** | **272** | P | **Pn** | **08 53 31.3** | **+0.9** |
| **ITM** | **Ithomi** | **4.18** | **279** | Pn | **Pn** | **08 53 43.1** | **+1.9** |
| **ALN** | **Alexandroupoli** | **4.30** | **349** | Pn | **Pn** | **08 53 43.8** | **+1.0** |
| **AGG** | **Agios Georgios** | **4.45** | **303** | | **Pn** | **08 53 47.2** | **+2.4** |
| **RDO** | **Rodhopi** | **4.64** | **345** | Pn | **Pn** | **08 53 48.3** | **+1.1** |
| **CSS** | **Mathiatis** | **5.33** | **107** | | **Pn** | **08 53 55.7** | **-0.8** |
| **CSS** | **Mathiatis** | **5.33** | **107** | P | **Pn** | **08 53 55.8** | **-0.7** |
| **BR131** | **Keskin Array S** | **5.98** | **57** | Pn | **Pn** | **08 54 06.1** | **+0.9** |
| **BRTR** | **Keskin Array B** | **5.98** | **57** | P | **Pn** | **08 54 06.2** | **+1.0** |
| | comp=E,2.2nm,0.7s,baz=230,slow=15,SNR=12 | | | | | | |
| BRTR | | | | S | **Sn** | **08 55 11.2** | **-1.5** |
| | comp=E,0.7nm,0.6s,baz=250,slow=14,SNR=1.0 | | | | | | |
| **FNA** | **Florina** | **6.08** | **314** | Pn | **Pn** | **08 54 07.8** | **+1.4** |
| **KEK** | **Kerkira** | **6.51** | **300** | Pn | **Pn** | **08 54 14.2** | **+2.0** |
| **HNTI** | **Hanita** | **7.53** | **116** | P | **Pn** | **08 54 25.1** | **-0.8** |
| **SCTE** | **Santa Cesarea** | **7.59** | **299** | Pn | **Pn** | **08 54 27.0** | **+0.4** |
| **MMAI** | **Mount Meron Ar** | **7.73** | **116** | P | **Pn** | **08 54 27.8** | **-0.8** |
| | comp=E,15nm,0.3s,baz=306,slow=12,SNR=55 | | | | | | |
| MMAI | | | | S | **Sn** | **08 55 50.6** | **-4.2** |
| | comp=E,3.5nm,0.4s,baz=318,slow=15,SNR=5.4 | | | | | | |
| **MMA0** | **Mount Meron ar** | **7.73** | **116** | P | **Pn** | **08 54 28.2** | **-0.4** |
| **PUK** | **Puka** | **7.75** | **316** | Pn | **Pn** | **08 54 30.7** | **+1.9** |
| **QRNJ** | **Al-Qirein** | **8.21** | **119** | P | **Pn** | **08 54 35.1** | **+0.1** |
| **HMDT** | **Nahal Hemdat** | **8.23** | **120** | P | **Pn** | **08 54 35.2** | **0.0** |
| **TIP** | **Timpagrande** | **8.56** | **290** | Pn | **Pn** | **08 54 38.6** | **-1.0** |
| **LISJ** | **El Lisan** | **8.81** | **126** | P | **Pn** | **08 54 42.9** | **0.0** |
| **CEL** | **Celeste** | **9.06** | **283** | Pn | **Pn** | **08 54 44.9** | **-1.4** |
| **HRFI** | **Mount Harif** | **9.36** | **133** | P | Pn | 08 54 56.5 | +6.1 |
| **MBRI** | **Mt Berech** | **9.47** | **134** | P | **Pn** | **08 54 51.2** | **-0.7** |
| **SGRT** | **San Giovanni R** | **10.18** | **303** | Pn | **Pn** | **08 54 59.0** | **-2.2** |
| **WDD** | **Wied Dalam** | **10.20** | **269** | Pn | **Pn** | **08 55 01.8** | **+0.3** |
| **RAFF** | **Raffo Rosso** | **10.22** | **277** | | **Pn** | **08 55 01.3** | **-0.5** |
| **SENIN** | **Lac Senin/Sane** | **17.68** | **309** | P | **Pn** | **08 56 35.9** | **-0.2** |
| **ESBB** | **Sonseca Array** | **24.55** | **287** | P | **P** | **08 57 45.0** | **-0.1** |
| ESBB | | | | IAmb | IAmb | 08 58 15.5 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **ESDC** | **Sonseca Array** | **24.55** | **287** | P | **P** | **08 57 46.1** | **+1.0** |
| | comp=Z,2.0nm,0.6s,baz=85,slow=9.2,SNR=18 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **PAB** | **San Pablo** | **24.86** | **286** | P | **P** | **08 57 48.1** | **+0.2** |
| PAB | | | | IAmb | IAmb | 08 57 54.5 | |
| | comp=Z,5.4nm,1.2s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.67** | **231** | P | **P** | **08 58 59.0** | **+1.7** |
| | comp=Z,1.2nm,0.5s,baz=42,slow=9.8,SNR=19 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.95** | **52** | P | **P** | **08 59 51.7** | **+1.3** |
| | comp=Z,0.6nm,0.3s,baz=274,slow=8.9,SNR=1.5 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **41.63** | **58** | P | **P** | **09 00 11.7** | **-0.9** |
| **MKAR** | **Makanchi Array** | **41.63** | **58** | P | **P** | **09 00 14.1** | **+1.5** |
| | comp=Z,0.5nm,0.4s,baz=269,slow=8.8,SNR=11 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.82** | **47** | P | **P** | **09 00 23.2** | **+1.2** |
| | comp=Z,0.8nm,0.5s,baz=282,slow=8.9,SNR=2.9 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **74.98** | **359** | P | **P** | **09 04 04.6** | **+0.9** |
| TOLK | | | | IAmb | IAmb | 09 04 39.5 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **75.52** | **358** | P | **P** | **09 04 06.1** | **-0.8** |
| E24K | | | | IAmb | IAmb | 09 04 40.4 | |
| | comp=Z,4.9nm,1.1s | | | | | | |

*IDC* ***15*** *08:56:09.1±1.0, 37.11°N×141.26°E, h0km, mb3.8/7, mbtmp3.7/12, ML3.3/4, MS3.5/2, Error ellipse: s-maj=21.7km s-min=17.3km az=108.0*
*NIED* ***15*** *08:56:11.6, 37.18°N×141.24°E, h20km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10^14 Nm; Mrr=3.54; Mθθ2.43; Mϕϕ 1.11; Mrθ 1.78; Mθϕ 1.53; Mϕr2.56; Fault plane solution: Mw4.67000×10^14 NP1: ϕs=223.00000°, δ66.00000°, λ-101.00000°. NP2: ϕs=68.00000°, δ26.00000°, λ-67.00000°.*
*JMA* ***15*** *08:56:11.6±0.1, 37.2°N±0.2°×141.2°E±0.6, h20km, MD4.0/40, MV3.6/40, E OFF FUKUSHIMA PREF*
*JMA Felt I J1 at E OFF FUKUSHIMA PREF .*

**ISC 15 08:56:10.6±1.8, 37.13°N±0.04°×141.22°E±0.06, h8km±11km, n35, σ1s 78/31, mb3.6/7, 2D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ONAJ** | **Iwakimizuishiy** | **0.34** | **265** | P | **Pb** | **08 56 18.9** | **+0.1** |
| ONAJ | | | | S | **Sb** | **08 56 24.2** | **-0.1** |
| **JFK** | **Kawauchi** | **0.36** | **311** | P | **Pb** | **08 56 18.7** | **-0.6** |
| JFK | | | | S | **Sb** | **08 56 23.9** | **-1.3** |
| **JFFD** | **Fukushimafurud** | **0.53** | **266** | *i* P | **Pb** | **08 56 22.2** | **+0.2** |
| JFFD | | | | S | **Sb** | **08 56 29.9** | **0.0** |
| **JMST** | **Minamisoumatoc** | **0.65** | **336** | *i* P | **Pb** | **08 56 23.3** | **-0.8** |
| JMST | | | | S | **Sg** | **08 56 32.0** | **+0.4** |
| **JMST** | **Minamisoumatoc** | **0.65** | **336** | A | A | 08 56 23.3 | |
| | comp=E,5.0nm,0.3s,comp=N,10.0nm,0.3s | | | | | | |
| **JHO** | **Hitachi** | **0.73** | **225** | ⇓*i* P | **Pb** | **08 56 25.4** | **-0.2** |
| JHO | | | | ⇓S | **Sb** | **08 56 36.5** | **+0.7** |
| **JMM** | **Marumori** | **0.81** | **335** | *i* P | **Pg** | **08 56 26.0** | **-0.2** |
| JMM | | | | S | **Sg** | **08 56 36.7** | **0.0** |
| **JOTO** | **OTAMA OYAMA** | **0.82** | **302** | *i* P | **Pb** | **08 56 27.3** | **+0.1** |
| JOTO | | | | S | **Sb** | **08 56 38.5** | **0.0** |
| **JSB** | **Shiboa** | **1.05** | **262** | *i* P | **Pn** | **08 56 32.1** | **+0.5** |
| JSB | | | | S | **Sn** | **08 56 47.0** | **+0.6** |
| **JSB** | **Shiboa** | **1.05** | **262** | A | A | 08 56 32.1 | |
| | comp=E,6.0nm,2.0s,comp=N,4.0nm,1.1s | | | | | | |
| **JYAR** | **Yonezawaarcadi** | **1.16** | **313** | A | A | 08 56 32.2 | |
| | comp=E,14nm,0.5

comp=N,0.6nm,0.6s,baz=3.8,slow=7.3,SNR=16
comp=N,0.6nm,0.6s

| | | | | | | |
|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **82.01** | **152** | LR | LR | 09 41 23.2 |
| | comp=N,56nm,18.7s,baz=28,slow=33 | | | | | |
| **TXAR** | **Lajitas Array** | **90.19** | **52** | P | **P** | **09 09 12.3 +0.4** |
| | comp=N,0.2nm,0.7s,baz=333,slow=1.2,SNR=3.7 | | | | | |
| | comp=N,0.2nm,0.7s | | | | | |

**ISC 15 09:01:06.8±1.0, 49°.68N±0°.06×17°.80E±0°.05, h10km, n7, σ1§52/11, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MORC** | **Moravsky Berou** | **0.19** | **300** | *e*PG | **Pg** | **09 01 09.7** | **-1.2** |
| MORC | | | | *e*SG | **Sg** | **09 01 12.1** | **-1.6** |
| **JAVC** | **Velka Javorina** | **0.83** | **186** | *e*PG | **Pb** | **09 01 23.8** | **+0.5** |
| **VRAC** | **Vranov** | **0.87** | **245** | *e*PG | **Pg** | **09 01 23.1** | **-0.5** |
| **KRUC** | **Moravsky** | **1.11** | **236** | *e*PG | **Pb** | **09 01 27.3** | **-0.8** |
| **OJC** | **Ojcow** | **1.40** | **67** | *e*Pg | **Pn** | **09 01 32.2** | **-0.2** |
| OJC | | | | *e*Sg | **Sn** | **09 01 51.3** | **+0.4** |
| **KSP** | **Ksiaz** | **1.51** | **321** | *e*Pg | **Pn** | **09 01 34.2** | **+0.2** |
| KSP | | | | *e*Sg | **Sb** | **09 01 54.9** | **+0.7** |
| **BRG** | **Berggiesshubel** | **2.75** | **297** | Pg | **Pb** | **09 01 56.1** | **+0.2** |
| BRG | | | | Sg | **Sb** | **09 02 33.2** | **+3.5** |
| BRG | | | | Amp | | 09 02 38.7 | |
| | comp=Z,4.7nm,0.4s | | | | | | |

*IDC 15 09:04:08.4±0.8, 8°.18S×116°.62E, h0km, mb4.0/12, mbtmp4.0/13, ML4.0/1, MS3.5/15, Error ellipse: s-maj=20.0km s-min=10.7km az=59.0*
*NEIC 15 09:04:08.9±0.8, 8°.28S±0°.06×116°.52E±0°.06, h10km±2km, mb4.4/10, Error ellipse: s-maj=11.8km s-min=7.7km az=222.0*
*DJA 15 09:04:10.4±0.3, 8°.3S±3°×11°.7E±°, h10km, M4.8/13, mb4.9/3, mbS5.0/2, MLv4.7/13, Mw(mB)4.4/2*

**ISC 15 09:04:09.5±0.4, 8°.23S±0°.05×116°.56E±0°.03, h10km, n81, σ1§44/71, mb4.3/20, MS3.4/14, 4C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.60** | **148** | P | **Pb** | **09 04 22.1** | **-0.1** |
| TWSI | | | | S | **Sb** | **09 04 30.5** | **-0.2** |
| **SRBI** | **Singaraja** | **1.34** | **276** | P | **Pg** | **09 04 34.5** | **-0.7** |
| **PLAI** | **Plampang** | **1.35** | **116** | P | **Pg** | **09 04 35.5** | **+0.1** |
| **PLAI** | **Plampang** | **1.35** | **116** | P | **Pg** | **09 04 35.2** | **-0.2** |
| PLAI | | | | S | **Sg** | **09 04 52.5** | **-0.4** |
| **DNP** | **Denpasar** | **1.41** | **251** | P | **Pg** | **09 04 38.1** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **264** | P | **Pb** | **09 04 49.6** | **-3.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **264** | | **Pn** | **09 04 47.6** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **264** | P | **Pn** | **09 04 49.4** | **+0.6** |
| **WBSI** | **Waikabubak, Su** | **3.13** | **117** | P | **Pn** | **09 04 59.3** | **+0.3** |
| **BSSI** | **Bau Bau, Buton** | **4.42** | **62** | P | **Pn** | **09 05 16.5** | **-0.2** |
| **BASI** | **Baing, Sumba** | **4.44** | **117** | P | **Pn** | **09 05 17.6** | **+0.7** |
| **KAPI** | **Kappang** | **4.50** | **45** | | **Pn** | **09 05 17.5** | **-0.3** |
| **KAPI** | **Kappang** | **4.50** | **45** | Pn | **Pn** | **09 05 16.8** | **-0.9** |
| | 7.5nm,0.3s,baz=204,slow=2.5,SNR=7.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **09 06 09.0** | **-1.2** |
| | 16nm,0.3s,baz=64,slow=21,SNR=9.3 | | | | | | |
| KAPI | | | | Lg | Lg | 09 06 28.9 | |
| | 11nm,0.3s,baz=61,slow=20,SNR=6.3 | | | | | | |
| | 16nm,0.2s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.71** | **272** | P | **Pn** | **09 05 23.3** | **+2.7** |
| **EDFI** | **Ende, Flores** | **5.11** | **96** | P | **Pn** | **09 05 26.4** | **+0.2** |
| | 114nm,0.7s,1μm0.5nm | | | | | | |
| **BNSI** | **Bone** | **5.19** | **43** | P | **Pn** | **09 05 27.1** | **-0.1** |
| | 131nm,1.2s,2μm1.2nm | | | | | | |
| **MMRI** | **Maumere** | **5.64** | **95** | | **Pn** | **09 05 33.3** | **-0.1** |
| **UGM** | **Wanagama** | **5.98** | **273** | P | Pn | 09 05 43.6 | +5.4 |
| **UGM** | **Wanagama** | **5.98** | **273** | Pn | **Pn** | **09 05 37.0** | **-1.2** |
| **UGM** | **Wanagama** | **5.98** | **273** | P | **Pn** | **09 05 40.2** | **+2.0** |
| **BKB** | **Balikpapan** | **6.93** | **3** | Pn | **Pn** | **09 05 53.0** | **+1.8** |
| **SOEI** | **Soe** | **7.77** | **102** | Pn | **Pn** | **09 06 01.8** | **-1.0** |
| **SBUM** | **Sibu** | **11.45** | **338** | Pn | **Pn** | **09 06 52.6** | **-0.6** |
| **KSM** | **Kuching** | **11.47** | **327** | Pn | **Pn** | **09 06 52.7** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **13.21** | **139** | Pn | **Pn** | **09 07 16.1** | **-1.1** |
| **MBWA** | **Marble Bar** | **13.22** | **167** | P | **Pn** | **09 07 15.3** | **-2.1** |
| **MBWA** | **Marble Bar** | **13.22** | **167** | | **Pn** | **09 07 15.1** | **-2.3** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **167** | P | **Pn** | **09 07 23.1** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **13.64** | **167** | Pn | **Pn** | **09 07 21.1** | **-2.1** |
| **KNRA** | **Kununurra** | **14.05** | **123** | | **Pn** | **09 07 27.5** | **-1.2** |
| **KKM** | **Kota Kinabalu** | **14.18** | **359** | Pn | **Pn** | **09 07 29.4** | **-1.2** |
| **GIRL** | **Giralia** | **14.51** | **189** | P | **Pn** | **09 07 34.6** | **-0.4** |
| **GIRL** | **Giralia** | **14.51** | **189** | Pn | **Pn** | **09 07 32.2** | **-2.8** |
| **DAV** | **Davao City (W)** | **17.66** | **31** | LR | LR | 09 15 35.1 | |
| | comp=Z,176nm,21.0s,baz=169,slow=39 | | | | | | |
| **MEEK** | **Meekatharra** | **18.42** | **174** | P | **P** | **09 08 25.9** | **+0.8** |
| **WRKA** | **Warakurna** | **20.12** | **148** | P | Pn | 09 08 45.0 | -0.7 |
| **MORW** | **Morawa** | **20.74** | **181** | P | Pn | 09 08 53.1 | +0.3 |
| **MORW** | **Morawa** | **20.74** | **181** | P | **P** | **09 08 48.2** | **-2.2** |
| MORW | | | | IAmb | IAmb | 09 09 25.2 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.74** | **125** | P | **P** | **09 08 49.8** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 09 08 59.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.79** | **126** | P | **P** | **09 08 50.8** | **-0.2** |
| | comp=Z,7.0nm,0.9s,baz=301,slow=12,SNR=43 | | | | | | |
| WRA | | | | S | **S** | **09 12 42.9** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=293,slow=22,SNR=2.1 | | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.79** | **126** | P | **P** | **09 08 49.6** | **-1.5** |
| WRAB | | | | IAmb | IAmb | 09 09 02.7 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.80** | **126** | P | **P** | **09 08 50.5** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 09 09 14.9 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.96** | **126** | P | **P** | **09 08 51.6** | **-1.3** |
| WR0 | | | | IAmb | IAmb | 09 09 01.7 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **BLDU** | **Ballidu** | **22.28** | **180** | P | **P** | **09 09 09.4** | **+2.5** |
| **AS31** | **Alice Springs** | **22.63** | **135** | P | **P** | **09 09 09.1** | **-1.7** |
| **ASAR** | **Alice Springs** | **22.63** | **135** | P | **P** | **09 09 10.7** | **-0.2** |
| | comp=Z,6.3nm,0.8s,baz=312,slow=8.5,SNR=46 | | | | | | |
| ASAR | | | | S | **S** | **09 13 23.7** | **+4.8** |
| | comp=Z,1.5nm,0.7s,baz=310,slow=24,SNR=6.0 | | | | | | |
| ASAR | | | | LR | LR | 09 18 41.5 | |
| | comp=Z,80nm,20.8s,baz=307,slow=39 | | | | | | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **22.66** | **135** | P | **P** | **09 09 11.2** | **0.0** |
| | comp=Z,19nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.59** | **179** | LR | LR | 09 19 02.8 | |
| | comp=Z,106nm,20.2s,baz=202,slow=36 | | | | | | |
| **FORT** | **Forrest** | **24.88** | **156** | P | **P** | **09 09 34.4** | **+1.9** |
| **QIS** | **Mount Isa** | **25.43** | **121** | P | **P** | **09 09 40.0** | **+2.4** |
| **OOD** | **Oodnadatta** | **26.57** | **140** | P | **P** | **09 09 48.5** | **+0.6** |
| **COEN** | **Coen** | **26.72** | **105** | P | **P** | **09 09 48.0** | **-1.4** |
| COEN | | | | IAmb | IAmb | 09 09 54.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **30.26** | **95** | P | **P** | **09 10 19.7** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **31.70** | **327** | P | **P** | **09 10 34.6** | **+1.0** |
| | comp=Z,0.7nm,0.3s,baz=155,slow=6.9,SNR=0.8 | | | | | | |
| CMAR | | | | LR | LR | 09 23 57.6 | |
| | comp=Z,83nm,20.1s,baz=205,slow=38 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **33.10** | **139** | P | **P** | **09 10 45.0** | **-0.8** |
| **STKA** | **Stephens Creek** | **33.10** | **139** | P | **P** | **09 10 45.9** | **+0.1** |
| | comp=Z,3.8nm,0.8s,baz=308,slow=9.2,SNR=6.3 | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **37.40** | **338** | P | **P** | **09 11 25.4** | **+2.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,210nm,4.0s | | | | | | |
| **NJ2** | **Nanjing** | **40.11** | **3** | *e*P | **P** | **09 11 46.8** | **+1.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,280nm,4.0s | | | | | | |
| **XAN** | **Xi'an** | **42.65** | **351** | ⇑P | P | 09 12 13.0 | +6.6 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **JCJ** | **Chichijima** | **43.01** | **34** | LR | LR | 09 29 42.3 | |
| | comp=Z,79nm,21.7s,baz=115,slow=36 | | | | | | |
| **JNU** | **Nakatsue** | **43.32** | **18** | LR | LR | 09 31 47.6 | |
| | comp=Z,56nm,19.4s,baz=160,slow=38 | | | | | | |
| **KSRS** | **Korea Array** | **46.67** | **12** | P | **P** | **09 12 38.2** | **-0.1** |
| | comp=Z,0.4nm,0.5s,baz=207,slow=7.9,SNR=1.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.96** | **23** | P | **P** | **09 12 56.4** | **+0.2** |
| | comp=Z,1.2nm,0.8s,baz=217,slow=31,SNR=3.2 | | | | | | |
| MJAR | | | | LR | LR | 09 31 51.3 | |
| | comp=Z,24nm,21.8s,baz=180,slow=34 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **HHC** | **Hu-ho-hao-te** | **49.05** | **355** | *e*P | **P** | **09 12 59.3** | **+2.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,96nm,4.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.02** | **14** | P | **P** | **09 13 34.5** | **+0.6** |
| | comp=Z,1.2nm,0.7s,baz=180,slow=7.1,SNR=2.7 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.54** | **352** | P | **P** | **09 13 53.1** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=142,slow=7.4,SNR=5.1 | | | | | | |
| SONM | | | | LR | LR | 09 39 58.2 | |
| | comp=Z,44nm,18.2s,baz=212,slow=38 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **57.18** | **22** | LR | LR | 09 40 49.3 | |
| | comp=Z,23nm,19.1s,baz=170,slow=38 | | | | | | |
| **HEH** | **HeiHe** | **59.00** | **8** | *e*P | P | 09 14 15.4 | +6.1 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **KSH** | **Kashi** | **60.57** | **325** | P | **P** | **09 14 21.8** | **+1.3** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.69** | **334** | P | **P** | **09 14 34.7** | **+0.2** |
| | comp=Z,1.0nm,0.7s,baz=141,slow=7.8,SNR=9.1 | | | | | | |
| MKAR | | | | LR | LR | 09 45 24.5 | |
| | comp=Z,19nm,18.1s,baz=153,slow=40 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.48** | **340** | P | **P** | **09 15 04.8** | **-0.6** |
| | comp=Z,1.1nm,0.5s,baz=164,slow=6.0,SNR=4.4 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **73.13** | **171** | P | **P** | **09 15 41.2** | **+1.5** |
| | comp=Z,1.5nm,1.0s,baz=318,slow=5.1,SNR=6.4 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **77.86** | **32** | LR | LR | 09 45 49.2 | |
| | comp=Z,16nm,21.2s,baz=334,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **81.77** | **180** | P | **P** | **09 16 28.1** | **-0.4** |
| | comp=Z,2.9nm,1.1s,baz=338,slow=3.7,SNR=4.4 | | | | | | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **KIRV** | **Kirov** | **85.39** | **331** | LR | LR | 09 59 02.6 | |
| | comp=Z,40nm,19.2s,baz=147,slow=39 | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.44** | **196** | ⇑P | **P** | **09 17 07.9** | **+1.4** |
| | comp=Z,70nm,0.6s | | | | | | |
| **OBN** | **Obninsk** | **91.00** | **326** | LR | LR | 10 02 19.1 | |
| | comp=Z,33nm,18.9s,baz=194,slow=38 | | | | | | |
| **SNAA** | **Sanae** | **91.08** | **196** | ⇑P | **P** | **09 17 13.6** | **-0.5** |
| | comp=Z,26nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.72** | **196** | ⇑P | **P** | **09 17 22.3** | **+0.7** |
| | comp=Z,0.8nm,0.6s,baz=128,slow=2.5 | | | | | | |
| **KDAK** | **Kodiak Island** | **97.35** | **33** | LR | LR | 10 02 12.0 | |
| | comp=Z,18nm,20.9s,baz=280,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **98.02** | **339** | LR | LR | 10 06 14.9 | |
| | comp=Z,26nm,18.8s,baz=53,slow=38 | | | | | | |

*DJA 15 09:08:40.6±0.5, 8°.S±7°×11°.7E±°, h10km, M4.0/7, MLv4.0/7*
*IDC 15 09:08:42.5±3.4, 7°.71S×116°.98E, h0km, mb3.4/3, mbtmp3.5/3, Error ellipse: s-maj=271.4km s-min=28.6km az=51.0*

**ISC 15 09:08:41.4±1.1, 8°.2S±0°.1×116°.58E±0°.06, h10km, n9, σ1§92/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.58** | **149** | P | **Pg** | **09 08 52.0** | **-0.6** |
| **PLAI** | **Plampang** | **1.32** | **116** | P | **Pb** | **09 09 05.7** | **-0.5** |
| **SRBI** | **Singaraja** | **1.37** | **276** | P | **Pn** | **09 09 05.5** | **-1.0** |
| **DNP** | **Denpasar** | **1.43** | **252** | P | **Pn** | **09 09 05.6** | **-1.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.42** | **264** | P | **Pn** | **09 09 20.6** | **-0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.40** | **62** | P | **Pn** | **09 09 46.9** | **-1.4** |
| **WRA** | **Warramunga Arr** | **20.76** | **126** | P | Pn | 09 13 25.5 | +0.5 |
| | 0.9nm,0.5s,baz=301,slow=12,SNR=5.0 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.60** | **135** | P | **P** | **09 13 45.8** | **+3.3** |
| | 1.5nm,0.8s,baz=314,slow=9.6,SNR=7.1 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.72** | **334** | P | **P** | **09 19 07.3** | **+0.7** |
| | 0.2nm,0.5s,baz=146,slow=8.0,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

**DJA 15 09:17:17.1±0.3, 8°.S±4°×11°.7E±°, h10km, M4.1/9, mb4.2/1, MLv4.0/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.56** | **149** | P | Pg | 09 17 28.1 | +0.2 |
| TWSI | | | | S | Sb | 09 17 36.2 | -0.8 |
| **PLAI** | **Plampang** | **1.30** | **116** | P | Pn | 09 17 41.5 | +0.1 |
| **SRBI** | **Singaraja** | **1.38** | **277** | P | Pn | 09 17 42.0 | -0.4 |
| **DNP** | **Denpasar** | **1.43** | **253** | P | Pn | 09 17 43.4 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.42** | **265** | P | Pn | 09 17 55.9 | -0.9 |
| **WBSI** | **Waikabubak, Su** | **3.09** | **117** | P | Pn | 09 18 07.0 | +1.0 |
| **BASI** | **Baing, Sumba** | **4.39** | **117** | P | Pn | 09 18 24.6 | +0.7 |
| **BSSI** | **Bau Bau, Buton** | **4.41** | **62** | P | Pn | 09 18 23.0 | -1.1 |
| **EDFI** | **Ende, Flores** | **5.07** | **96** | P | Pn | 09 18 32.6 | -0.7 |

*IDC 15 09:19:32.9±0.9, 69°.78N×144°.83W, h0km, mb3.6/8, mbtmp3.7/12, ML3.6/4, MS2.9/1, Error ellipse: s-maj=20.6km s-min=13.4km az=71.0*
*AEIC 15 09:19:32.7±1.1, 69°.54N±0°.06×144°.6W±0°.1, h13km±6km, ML3.7, ML3.7/118(NEIC), Mwr3.6/35(NEIC), Error ellipse: s-maj=8.9km s-min=5.6km az=189.0*
*NEIC 15 09:19:34.0±1.0, 69°.61N±0°.06×144°.4W±0°.1, h10km±2km, Error ellipse: s-maj=10.1km s-min=6.5km az=7.0, Moment Tensor Solution. Moment tensor: Scale 10^19 Nm; Mrr-2.56; Mθθ1.21; Mφφ 1.35; Mrθ 0.38; Mφθ-1.15; Mφr-1.86; Fault plane solution: M0 3.14000×10^19 NP1: φs 123.39000°, δ 29.94000°, λ -117.11000°. NP2: φs 333.97000°, δ 63.63000°, λ -75.29000°. Principal axes: T 2.9388, Plg 17.0000°, Azm 53.0000°; N 0.3638, Plg 13.0000°, Azm 147.0000°; P -3.3026, Plg 68.0000°, Azm 273.0000°;*
*NEIC 15 09:19:33.9, 69°.62N×144°.43W, h10km*

**ISC 15 09:19:33.3±1.1, 69°.60N±0°.04×144°.42W±0°.02, h8km±7km, n117, σ1§34/126, mb3.8/8, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.25** | **84** | | **Pg** | **09 19 38.4** | **+0.2** |
| C27K | | | | | **Sg** | **09 19 42.5** | **+1.0** |
| C27K | | | | IAML | | 09 19 44.4 | |
| | comp=E,12μm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.36** | **332** | | **Pg** | **09 19 41.0** | **+0.6** |
| C26K | | | | | **Sb** | **09 19 48.9** | **+1.2** |
| **D25K** | **Kavik River** | **0.75** | **249** | | **Pg** | **09 19 45.6** | **-2.0** |
| D25K | | | | Sg | **Sg** | **09 19 55.9** | **-1.4** |
| **D27M** | **Malcolm River** | **1.27** | **105** | | **Pn** | **09 19 56.0** | **-1.4** |
| D27M | | | | IAML | | 09 20 18.8 | |
| | comp=N,1μm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.50** | **277** | | **Pn** | **09 20 00.4** | **0.0** |
| C24K | | | | | **Sb** | **09 20 21.2** | **+0.8** |
| C24K | | | | IAML | | 09 20 22.3 | |
| | comp=N,1μm,0.6s | | | | | | |
| C24K | | | | IAML | | 09 20 23.8 | |
| | comp=E,1μm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.62** | **256** | | **Pn** | **09 20 02.3** | **+0.2** |
| D24K | | | | | **Sg** | **09 20 25.6** | **+0.2** |
| **E27K** | **Coleen River** | **1.75** | **143** | Pn | **Pn** | **09 20 04.9** | **+1.0** |
| E27K | | | | | **Sb** | **09 20 28.0** | **+0.3** |
| **F26K** | **Sheenjek River** | **1.92** | **177** | | **Pn** | **09 20 06.9** | **+0.7** |
| F26K | | | | IAML | | 09 20 35.7 | |
| | comp=E,827nm,0.8s | | | | | | |
| F26K | | | | IAML | | 09 20 36.2 | |
| | comp=N,606nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **2.02** | **117** | | **Pn** | **09 20 08.6** | **+1.0** |
| E28M | | | | | **Pb** | **09 20 08.8** | **-1.3** |
| **D28M** | **Stokes Point** | **2.02** | **95** | | **Pn** | **09 20 08.3** | **+0.8** |
| D28M | | | | IAML | | 09 20 44.7 | |
| | comp=E,738nm,0.7s | | | | | | |
| D28M | | | | IAML | | 09 20 45.3 | |
| | comp=N,630nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **2.07** | **193** | | **Pn** | **09 20 08.6** | **+0.3** |
| F25K | | | | IAML | | 09 20 43.8 | |
| | comp=E,514nm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.08** | **245** | Pn | **Pn** | **09 20 08.6** | **+0.1** |
| TOLK | | | | | **Sb** | **09 20 39.0** | **+1.7** |
| TOLK | | | | IAML | | 09 20 43.3 | |
| | comp=E,718nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 09 20 58.1 | |
| | comp=N,435nm,1.0s | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **226** | | **Pn** | **09 20 09.8** | **+0.7** |
| **C23K** | **Itkillik River** | **2.17** | **279** | Pn | **Pn** | **09 20 09.6** | **0.0** |
| **D23K** | **Nanushuk River** | **2.32** | **257** | | **Pn** | **09 20 11.7** | **0.0** |
| **D23K** | **Nanushuk River** | **2.32** | **257** | | **Sn** | **09 20 42.0** | **+1.7** |
| **D23K** | **Nanushuk River** | **2.32** | **257** | IAML | | 09 20 59.7 | |
| | comp=E,514nm,1.2s | | | | | | |
| D23K | | | | IAML | | 09 21 08.0 | |
| | comp=N,440nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **233** | | **Pn** | **09 20 13.6** | **+0.2** |
| **E23K** | **Chandalar** | **2.44** | **233** | | **Sn** | **09 20 44.7** | **+1.2** |
| **E23K** | **Chandalar** | **2.44** | **233** | IAML | | 09 20 54.9 | |
| | comp=N,446nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.45** | **213** | Pn | **Pn** | **09 20 14.1** | **+0.6** |
| F24K | | | | IAML | | 09 20 52.7 | |
| | comp=N,308nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.60** | **138** | Pn | **Pn** | **09 20 16.0** | **+0.4** |
| F28M | | | | IAML | | 09 21 01.0 | |
| | comp=N,322nm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.60** | **138** | | **Sn** | **09 20 47.9** | **+0.6** |
| **E29M** | **Blow River** | **2.65** | **114** | | **Pn** | **09 20 17.8** | **+1.6** |
| E29M | | | | IAML | | 09 20 59.5 | |
| | comp=N,268nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.67** | **175** | | **Pn** | **09 20 17.2** | **+0.7** |
| **G25K** | **Bearman Lake** | **2.92** | **193** | | **Pn** | **09 20 20.7** | **+0.8** |
| **G27K** | **Doyon Strip** | **2.99** | **159** | Pn | **Pn** | **09 20 21.7** | **+0.8** |
| **D22K** | **Ayikyak River** | **3.03** | **260** | | **Pn** | **09 20 21.7** | **+0.2** |
| D22K | | | | IAML | | 09 21 18.2 | |
| | comp=N,253nm,0.9s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **245** | | **Pn** | **09 20 21.6** | **-0.3** |
| E22K | | | | IAML | | 09 21 20.5 | |
| | comp=N,200nm,0.7s | | | | | | |
| **FYU** | **Fort Yukon** | **3.06** | **186** | Pn | **Pn** | **09 20 22.4** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.13** | **203** | | **Pn** | **09 20 22.8** | **0.0** |
| G24K | | | | IAML | | 09 21 15.6 | |
| | comp=E,237nm,1.0s | | | | | | |
| G24K | | | | IAML | | 09 21 22.7 | |
| | comp=N,272nm,1.0s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19** | **288** | | **Pn** | **09 20 24.1** | **+0.6** |
| **COLD** | **Coldfoot** | **3.20** | **225** | | **Pn** | **09 20 24.3** | **+0.5** |
| **H25L** | **Birch Creek** | **3.39** | **190** | | **Pn** | **09 20 27.1** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **3.57** | **275** | | **Pn** | **09 20 29.1** | **+0.3** |
| **G23K** | **Bananza Creek** | **3.58** | **218** | | **Pn** | **09 20 28.8** | **-0.2** |
| G23K | | | | IAML | | 09 21 32.4 | |
| | comp=N,172nm,0.7s | | | | | | |
| G23K | | | | IAML | | 09 21 35.8 | |
| | comp=E,195nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.60** | **136** | | **Pn** | **09 20 30.2** | **+0.9** |
| G29M | | | | IAML | | 09 21 41.9 | |
| | comp=N,199nm,0.9s | | | | | | |
| **E21K** | **Killik River** | **3.63** | **256** | | **Pn** | **09 20 29.1** | **-0.6** |
| E21K | | | | IAML | | 09 21 30.6 | |
| | comp=E,178nm,0.7s | | | | | | |
| **F30M** | **Barrier River** | **3.74** | **118** | | **Pn** | **09 20 33.3** | **+2.1** |
| **A22K** | **Sinclair Lake** | **3.84** | **296** | | **Pn** | **09 20 33.1** | **+0.6** |
| **H24K** | **Noodor Dome** | **4.00** | **201** | | **Pn** | **09 20 34.8** | **-0.1** |
| H24K | | | | IAML | | 09 21 43.0 | |
| | comp=E,117nm,0.9s | | | | | | |
| H24K | | | | IAML | | 09 21 54.6 | |
| | comp=N,100nm,0.8s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.02** | **127** | | **Pn** | **09 20 36.1** | **+1.0** |
| G30M | | | | IAML | | 09 21 51.1 | |
| | comp=N,94nm,0.9s | | | | | | |
| G30M | | | | IAML | | 09 21 54.3 | |
| | comp=E,76nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **4.09** | **143** | | **Pn** | **09 20 37.4** | **+1.3** |
| H29M | | | | IAML | | 09 21 55.8 | |
| | comp=N,113nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.11** | **239** | Pn | **Pn** | **09 20 36.4** | **+0.1** |
| F21K | | | | IAML | | 09 21 49.0 | |
| | comp=E,97nm,0.8s | | | | | | |
| F21K | | | | IAML | | 09 21 54.8 | |
| | comp=N,124nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.12** | **186** | | **Pn** | **09 20 37.5** | **+0.9** |
| PRP | | | | IAML | | 09 21 41.0 | |
| | comp=N,79nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **4.14** | **103** | | **Pn** | **09 20 37.4** | **+0.8** |
| **INK** | **Inuvik** | **4.14** | **103** | Pn | **Pn** | **09 20 38.6** | **+2.0** |
| | comp=N,1.3nm,0.3s,baz=308,slow=11,SNR=53 | | | | | | |
| INK | | | | Sn | **Sn** | **09 21 25.9** | **+0.9** |
| | comp=N,3.5nm,0.3s,baz=203,slow=32,SNR=4.5 | | | | | | |
| | comp=N,9.8nm,0.4s | | | | | | |
| **I27K** | **Kandik River** | **4.16** | **164** | | **Pn** | **09 20 38.1** | **+1.1** |
| **H23K** | **Yukon River** | **4.26** | **210** | | **Pn** | **09 20 38.6** | **+0.2** |
| H23K | | | | IAML | | 09 22 01.4 | |
| | comp=N,99nm,0.8s | | | | | | |
| H23K | | | | IAML | | 09 22 03.3 | |
| | comp=E,102nm,1.0s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.34** | **173** | | **Pn** | **09 20 40.1** | **+0.7** |
| **B20K** | **Meade River** | **4.44** | **281** | | **Pn** | **09 20 41.3** | **+0.6** |
| B20K | | | | IAML | | 09 22 15.1 | |
| | comp=E,108nm,0.8s | | | | | | |
| **A21K** | **Barrow** | **4.45** | **299** | | **Pn** | **09 20 41.6** | **+0.9** |
| **D20K** | **Etivluk River** | **4.45** | **264** | | **Pn** | **09 20 42.1** | **+1.2** |
| **E20K** | **Nigu River** | **4.46** | **258** | | **Pn** | **09 20 42.1** | **+1.0** |
| **I28M** | **Miner Creek** | **4.51** | **155** | | **Pn** | **09 20 43.4** | **+1.6** |
| I28M | | | | IAML | | 09 21 40.7 | |
| | comp=N,85nm,0.7s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.57** | **219** | | **Pn** | **09 20 42.0** | **-0.5** |
| **G21K** | **Allakaket** | **4.61** | **232** | | **Pn** | **09 20 42.7** | **-0.3** |
| **G31M** | **Satah River** | **4.63** | **121** | | **Pn** | **09 20 44.4** | **+1.0** |
| **PO

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| C19K | | | | IAML | | | 09 22 47.0 | |
| | comp=N,44nm,1.1s | | | | | | | |
| C19K | | | | IAML | | | 09 22 50.3 | |
| | comp=E,36nm,1.1s | | | | | | | |
| **SCRK** | **Sand Creek** | **5.65** | **178** | | **Pn** | **Pn** | **09 20 58.9** | **+1.4** |
| **K27K** | **Chicken** | **5.67** | **170** | | **Pn** | **Pn** | **09 20 59.0** | **+1.3** |
| **F19K** | **Shaleruckik Mo** | **5.69** | **247** | | **Pn** | **Pn** | **09 20 58.3** | **+0.4** |
| **A19K** | **Wainwright** | **5.77** | **284** | | **Pn** | **Pn** | **09 20 59.6** | **+0.6** |
| **K24K** | **Donnelly Dome** | **5.85** | **186** | | **Pn** | **Pn** | **09 21 01.5** | **+1.4** |
| **DAWY** | **Dawson** | **5.90** | **158** | | **Pn** | **Pn** | **09 21 02.5** | **+1.6** |
| **G19K** | **Purcell Mounta** | **5.91** | **240** | | **Pn** | **Pn** | **09 21 00.9** | **0.0** |
| **DOT** | **Dot Lake** | **5.98** | **178** | | **Pn** | **Pn** | **09 21 03.3** | **+1.3** |
| **C18K** | **Utukok River** | **6.07** | **269** | Pn | **Pn** | **Pn** | **09 21 03.3** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.10** | **208** | | **Pn** | **Pn** | **09 21 04.0** | **+0.5** |
| **B18K** | **Kokolik River** | **6.11** | **276** | | **Pn** | **Pn** | **09 21 04.2** | **+0.5** |
| **E18K** | **Tukpahlearik C** | **6.33** | **257** | Pn | **Pn** | **Pn** | **09 21 06.9** | **+0.2** |
| **PAX** | **Paxson** | **6.67** | **184** | | **Pn** | **Pn** | **09 21 13.2** | **+1.7** |
| **MENT** | **Mentasta** | **6.70** | **177** | | **Pn** | **Pn** | **09 21 13.1** | **+1.3** |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | Pn | **Pn** | **Pn** | **09 21 12.3** | **-0.1** |
| **RDOG** | **Red Dog Mine** | **6.87** | **266** | Pn | **Pn** | **Pn** | **09 21 13.8** | **-0.3** |
| **H18K** | **Honhosa River** | **6.98** | **237** | | **Pn** | **Pn** | **09 21 15.6** | **-0.1** |
| **WAT1** | **Susitna Watana** | **7.00** | **196** | | **Pn** | **Pn** | **09 21 17.2** | **+1.3** |
| **WAT7** | **Susitna Watana** | **7.03** | **197** | | **Pn** | **Pn** | **09 21 18.2** | **+1.8** |
| **F17K** | **Baldwin Pennin** | **7.06** | **251** | Pn | **Pn** | **Pn** | **09 21 15.8** | **-0.8** |
| **D17K** | **Noatak River** | **7.07** | **263** | | **Pn** | **Pn** | **09 21 15.8** | **-0.9** |
| **WAT6** | **Susitna Watana** | **7.18** | **192** | | **Pn** | **Pn** | **09 21 20.1** | **+1.7** |
| **HARP** | **HAARP** | **7.24** | **183** | | **Pn** | **Pn** | **09 21 21.4** | **+2.2** |
| **WACK** | **Wrangell Chich** | **7.65** | **180** | | **Pn** | **Pn** | **09 21 27.3** | **+2.3** |
| **WASW** | **Wrangell South** | **7.71** | **179** | | **Pn** | **Pn** | **09 21 27.0** | **+1.2** |
| **F15K** | **North Star Dit** | **8.61** | **253** | Pn | **Pn** | **Pn** | **09 21 37.0** | **-1.0** |
| **STLK** | **Strandline Lak** | **8.69** | **204** | | **Pn** | **Pn** | **09 21 40.3** | **+1.2** |
| **G15K** | **Niukluk** | **8.85** | **248** | | **Pn** | **Pn** | **09 21 41.4** | **+0.1** |
| **KDAK** | **Kodiak Island** | **12.39** | **201** | LR | LR | | 09 27 07.0 | |
| | comp=E,45nm,18.1s,baz=74,slow=36 | | | | | | | |
| **DLBC** | **Dease Lake** | **12.80** | **144** | Pn | **Pn** | **Pn** | **09 22 36.5** | **+1.1** |
| | comp=E,0.2nm,0.3s,baz=3.8,slow=7.3,SNR=5.6 | | | | | | | |
| DLBC | | | | Sn | **Sn** | | **09 24 55.9** | **-2.0** |
| | comp=E,0.1nm,0.3s,baz=151,slow=19,SNR=1.8 | | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.90** | **106** | Pn | **Pn** | **Pn** | **09 22 47.3** | **-3.0** |
| | comp=E,0.5nm,0.3s,baz=322,slow=16,SNR=8.2 | | | | | | | |
| YKA | | | | Sn | **Sn** | | **09 25 16.4** | **-8.2** |
| | comp=E,0.4nm,0.3s,baz=11,slow=9.0,SNR=4.2 | | | | | | | |
| | comp=E,2.5nm,0.7s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.73** | **268** | P | **P** | **P** | **09 25 48.7** | **+0.4** |
| | comp=E,1.0nm,0.6s,baz=52,slow=10.0,SNR=2.1 | | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.28** | **128** | P | **P** | **P** | **09 26 05.8** | **+3.5** |
| | comp=E,0.5nm,0.6s,baz=12,slow=4.2,SNR=8.7 | | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.21** | **142** | P | **P** | **P** | **09 26 22.6** | **+3.4** |
| | comp=E,0.2nm,0.6s,baz=332,slow=8.6,SNR=4.6 | | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.50** | **128** | P | **P** | **P** | **09 28 03.4** | **+2.7** |
| | comp=E,0.2nm,0.6s,baz=326,slow=4.3,SNR=3.9 | | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **49.07** | **6** | P | **P** | **P** | **09 28 20.3** | **+0.2** |
| | comp=E,0.5nm,0.5s,baz=3.0,slow=9.1,SNR=5.8 | | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **49.61** | **14** | P | **P** | **P** | **09 28 24.3** | **0.0** |
| | comp=E,0.6nm,0.4s,baz=17,slow=6.2,SNR=4.9 | | | | | | | |
| | comp=E,0.6nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.98** | **324** | P | **P** | **P** | **09 29 31.5** | **-1.2** |
| | comp=E,0.3nm,0.5s,baz=48,slow=8.6,SNR=3.0 | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.92** | **5** | P | **P** | **P** | **09 29 37.3** | **-1.7** |
| | comp=E,1.3nm,0.6s,baz=8.9,slow=6.8,SNR=1.6 | | | | | | | |
| | comp=E,1.3nm,0.6s | | | | | | | |

*IDC **15** 09:23:31.5±2.0,8°.14S×116°.58E,h0km,mb3.7/3, mbtmp3.7/4,ML3.4/1,Error ellipse: s-maj=42.6km s-min=26.9km az=63.0*

*DJA **15** 09:23:35.3±0.7,8°.5±10°×11°.7E±°,h18km±7km,M4.0/7, mb4.2/1,MLv3.9/7*

**ISC 15 09:23:33.7±0.9,8°.20S±0.07×116°.64E±0.05,h10km,n12, σ1°.02/13,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.59** | **156** | P | **Pb** | **09 23 45.9** | **-0.2** |
| **PLAI** | **Plampang** | **1.29** | **119** | P | **Pn** | **09 23 58.6** | **+0.8** |
| **SRBI** | **Singaraja** | **1.42** | **275** | P | **Pb** | **09 24 01.3** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.47** | **264** | P | **Pn** | **09 24 14.8** | **+0.7** |
| **WBSI** | **Waikabubak, Su** | **3.08** | **118** | P | **Pn** | **09 24 22.3** | **-0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.33** | **62** | P | **Pn** | **09 24 41.1** | **+1.4** |
| **KAPI** | **Kappang** | **4.42** | **45** | Pn | **Pn** | **09 24 40.4** | **-0.6** |
| | 2.0nm,0.3s,baz=225,slow=16,SNR=1.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **09 25 32.3** | **-0.3** |
| | 7.8nm,0.3s,baz=194,slow=19,SNR=8.1 | | | | | | |
| | 4.2nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.79** | **272** | P | **Pn** | **09 24 44.4** | **-1.5** |
| **EDFI** | **Ende, Flores** | **5.03** | **97** | P | **Pn** | **09 24 50.8** | **+1.5** |
| **WRA** | **Warramunga Arr** | **20.74** | **126** | P | **P** | **09 28 14.8** | **+0.1** |
| | 6.0nm,1.2s,baz=302,slow=12,SNR=14 | | | | | | |
| | 6.0nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **22.59** | **135** | P | **P** | **09 28 34.7** | **+0.1** |
| | 2.2nm,0.8s,baz=309,slow=8.8,SNR=14 | | | | | | |
| | 2.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.70** | **334** | P | **P** | **09 33 57.7** | **-1.1** |
| | 0.4nm,0.8s,baz=131,slow=8.0,SNR=2.9 | | | | | | |
| | 0.4nm,0.8s | | | | | | |

**IDC 15 09:33:57.6±3.7,54°.52N×87°.16E,h0km,mbtmp3.0/2, ML2.6/2,Error ellipse: s-maj=32.2km s-min=21.4km az=45.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.49** | **248** | I | I | 09 41 59.6 | |
| | baz=69,slow=315,SNR=1.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.49** | **248** | Pg | Pn | 09 34 23.0 | -2.6 |
| | 1.0nm,0.3s,baz=64,slow=17,SNR=8.7 | | | | | | |
| ZALV | | | | Lg | Lg | 09 34 45.6 | |
| | 0.9nm,0.3s,baz=68,slow=28,SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.55** | **237** | Pn | Pn | 09 35 35.7 | +0.6 |
| | 0.1nm,0.3s,baz=52,slow=14,SNR=2.5 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.33** | **204** | Pn | Pn | 09 36 01.3 | +1.7 |
| | 0.1nm,0.3s,baz=23,slow=14,SNR=2.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*NEIC **15** 09:47:16.6,69°.56N×144°.62W,h1km*

*NEIC **15** 09:47:17.4±1.0,69°.60N±0°.04×144°.61W±0°.05,h10km±2km, Error ellipse: s-maj=6.7km s-min=3.1km az=159.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; $M_{rr}$0.24; $M_{\theta\theta}$-1.26; $M_{\phi\phi}$1.02; $M_{r\theta}$0.43; $M_{\theta\phi}$-1.44; $M_{r\phi}$0.07; Fault plane solution: $M_0$1.90000×10¹⁴ NP1: $\phi_s$289.38000°,δ86.14000°,λ-169.27000°. NP2: $\phi_s$198.65000°,δ79.29000°,λ-3.93000°. Principal axes: T 1.7250, Plg5.0000°, Azm64.0000°; N 0.3101, Plg79.0000°, Azm309.0000°; P -2.0351, Plg10.0000°, Azm154.0000°;*

**AEIC 15 09:47:15.2±1.1,69°.58N±0°.05×144°.62W±0°.08,h11km±6km, ML3.4,MLv3.5/116(NEIC),Mwr3.5/22(NEIC) Error ellipse: s-maj=8.1km s-min=3.8km az=190.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.32** | **81** | | Pg | 09 47 22.3 | +0.6 |
| C27K | | | | | Sg | 09 47 26.6 | +0.6 |
| C27K | | | | IAML | | 09 47 27.0 | |
| | comp=N,6μm,0.4s | | | | | | |
| C27K | | | | IAML | | 09 47 28.6 | |
| | comp=E,6μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.36** | **344** | | Pb | 09 47 23.7 | +0.2 |
| C26K | | | | | Sb | 09 47 30.2 | +1.0 |
| **D25K** | **Kavik River** | **0.67** | **248** | Pg | Pg | 09 47 27.9 | -0.2 |
| D25K | | | | | Sb | 09 47 38.5 | +0.4 |
| **D27M** | **Malcolm River** | **1.34** | **103** | | Pg | 09 47 40.8 | 0.0 |
| D27M | | | | | Sg | 09 48 00.3 | +2.2 |
| D27M | | | | IAML | | 09 48 02.2 | |
| | comp=E,649nm,0.6s | | | | | | |
| D27M | | | | IAML | | 09 48 03.2 | |
| | comp=N,854nm,0.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.43** | **278** | | Pg | 09 47 43.3 | +0.7 |
| C24K | | | | | Sg | 09 48 02.8 | +1.6 |
| **D24K** | **Happy Valley** | **1.55** | **256** | | Pg | 09 47 45.5 | +0.7 |
| D24K | | | | | Sg | 09 48 08.0 | +3.2 |
| D24K | | | | IAML | | 09 48 10.9 | |
| | comp=E,549nm,0.7s | | | | | | |
| D24K | | | | IAML | | 09 48 14.4 | |
| | comp=N,761nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **E27K** | **Coleen River** | **1.78** | **140** | | Pg | | 09 47 48.5 | -0.6 |
| **F26K** | **Sheenjek River** | **1.90** | **174** | | Pb | | 09 47 50.6 | +0.8 |
| F26K | | | | | Sg | | 09 48 15.2 | -0.9 |
| F26K | | | | IAML | | | 09 48 20.7 | |
| | comp=N,530nm,0.4s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.01** | **244** | Pg | Pb | | 09 47 51.7 | 0.0 |
| TOLK | | | | IAML | | | 09 48 25.9 | |
| | comp=E,343nm,0.5s | | | | | | | |
| **F25K** | **Christian Rive** | **2.03** | **191** | | Pb | | 09 47 51.8 | -0.2 |
| F25K | | | | | Sg | | 09 48 19.5 | -0.7 |
| F25K | | | | IAML | | | 09 48 23.6 | |
| | comp=E,424nm,0.6s | | | | | | | |
| F25K | | | | IAML | | | 09 48 25.2 | |
| | comp=N,461nm,0.9s | | | | | | | |
| **E24K** | **Your Creek** | **2.06** | **225** | Pg | Pb | | 09 47 52.8 | +0.3 |
| **E24K** | **Your Creek** | **2.06** | **225** | | Sb | | 09 48 18.9 | +0.7 |
| **E24K** | **Your Creek** | **2.06** | **225** | IAML | | | 09 48 27.3 | |
| | comp=E,190nm,0.6s | | | | | | | |
| E24K | | | | IAML | | | 09 48 29.7 | |
| | comp=N,146nm,0.7s | | | | | | | |
| **E28M** | **Babbage River** | **2.07** | **116** | Pg | Pb | | 09 47 52.7 | 0.0 |
| **D28M** | **Stokes Point** | **2.09** | **94** | | Pb | | 09 47 53.5 | +0.5 |
| **C23K** | **Itkillik River** | **2.10** | **280** | | Pb | | 09 47 53.0 | -0.2 |
| **D23K** | **Nanushuk River** | **2.24** | **257** | | Pb | | 09 47 54.5 | -1.1 |
| **E23K** | **Chandalar** | **2.37** | **232** | | Pb | | 09 47 56.4 | -1.4 |
| **F24K** | **Squaw Lake** | **2.39** | **212** | | Pb | | 09 47 57.1 | -1.1 |
| F24K | | | | IAML | | | 09 48 36.0 | |
| | comp=N,219nm,0.5s | | | | | | | |
| F24K | | | | IAML | | | 09 48 37.9 | |
| | comp=E,222nm,0.4s | | | | | | | |
| **F28M** | **Old Crow** | **2.63** | **136** | | Pn | | 09 47 59.6 | +2.1 |
| F28M | | | | IAML | | | 09 48 42.9 | |
| | comp=N,194nm,0.7s | | | | | | | |
| F28M | | | | IAML | | | 09 48 46.0 | |
| | comp=E,209nm,0.6s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.66** | **173** | | Pb | | 09 48 00.5 | -2.2 |
| G26K | | | | | Sb | | 09 48 33.9 | -1.3 |
| **E29M** | **Blow River** | **2.70** | **113** | Pg | Pb | | 09 48 01.8 | -1.6 |
| E29M | | | | IAML | | | 09 48 49.2 | |
| | comp=N,198nm,0.7s | | | | | | | |
| E29M | | | | IAML | | | 09 48 50.1 | |
| | comp=E,188nm,0.6s | | | | | | | |
| **G25K** | **Bearman Lake** | **2.88** | **192** | | Pn | | 09 48 03.4 | +2.6 |
| **D22K** | **Ayikyak River** | **2.96** | **260** | | Pn | | 09 48 04.6 | +2.6 |
| **D22K** | **Ayikyak River** | **2.96** | **260** | | Sb | | 09 48 41.4 | -2.5 |
| **D22K** | **Ayikyak River** | **2.96** | **260** | IAML | | | 09 49 04.6 | |
| | comp=N,191nm,0.8s | | | | | | | |
| D22K | | | | IAML | | | 09 49 04.8 | |
| | comp=E,151nm,0.7s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.98** | **244** | | Pn | | 09 48 04.2 | +1.8 |
| **G27K** | **Doyon Strip** | **2.99** | **157** | Pn | Pn | | 09 48 04.8 | +2.3 |
| **FYU** | **Fort Yukon** | **3.03** | **185** | | Pb | | 09 48 06.0 | -3.0 |
| **G24K** | **Hadweenzic Riv** | **3.08** | **202** | | Pn | | 09 48 05.7 | +2.1 |
| **B22K** | **Teshekpuk Lake** | **3.12** | **288** | | Pn | | 09 48 07.0 | +2.7 |
| **COLD** | **Coldfoot** | **3.13** | **224** | | Pn | | 09 48 06.7 | +2.3 |
| **H25L** | **Birch Creek** | **3.35** | **188** | | Pn | | 09 48 09.8 | +2.3 |
| **F22K** | **John River** | **3.47** | **237** | | Pn | | 09 48 11.4 | +2.4 |
| **B21K** | **Ikpikpuk River** | **3.50** | **275** | | Pn | | 09 48 11.8 | +2.4 |
| B21K | | | | IAML | | | 09 49 27.0 | |
| | comp=E,119nm,0.9s | | | | | | | |
| B21K | | | | IAML | | | 09 49 29.2 | |
| | comp=N,133nm,0.9s | | | | | | | |
| **G23K** | **Bananza Creek** | **3.52** | **218** | Pn | Pn | | 09 48 12.1 | +2.5 |
| G23K | | | | IAML | | | 09 49 15.4 | |
| | comp=N,105nm,0.8s | | | | | | | |
| **E21K** | **Killik River** | **3.55** | **256** | | Pn | | 09 48 11.9 | +1.8 |
| E21K | | | | IAML | | | 09 49 20.4 | |
| | comp=N,72nm,0.8s | | | | | | | |
| **H27K** | **Steamboat Moun** | **3.56** | **159** | | Pn | | 09 48 12.2 | +1.9 |
| **G29M** | **Pine Creek** | **3.63** | **134** | Pn | Pn | | 09 48 13.5 | +2.3 |
| **A22K** | **Sinclair Lake** | **3.79** | **297** | | Pn | | 09 48 16.1 | +2.7 |
| **F30M** | **Barrier River** | **3.79** | **117** | | Pn | | 09 48 16.7 | +3.2 |
| **H24K** | **Noodor Dome** | **3.96** | **200** | Pn | Pn | | 09 48 17.8 | +2.0 |
| H24K | | | | IAML | | | 09 49 23.5 | |
| | comp=N,69nm,0.6s | | | | | | | |
| **F21K** | **Alatna River** | **4.04** | **238** | Pn | Pn | | 09 48 19.1 | +2.2 |
| F21K | | | | IAML | | | 09 49 37.0 | |
| | comp=E,60nm,0.8s | | | | | | | |
| **G30M** | **tAoh Zrail Nji** | **4.07** | **126** | Pn | Pn | | 09 48 20.0 | +2.8 |
| G30M | | | | IAML | | | 09 49 38.1 | |
| | comp=N,65nm,1.1s | | | | | | | |
| G30M | | | | IAML | | | 09 49 42.0 | |
| | comp=E,52nm,0.8s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **185** | | Pn | | 09 48 20.6 | +2.9 |
| PRP | | | | IAML | | | 09 49 11.8 | |
| | comp=E,54nm,0.6s | | | | | | | |
| **H29M** | **Whitestone** | **4.12** | **142** | | Pn | | 09 48 20.4 | +2.5 |
| H29M | | | | IAML | | | 09 49 40.0 | |
| | comp=N,82nm,0.7s | | | | | | | |
| **I27K** | **Kandik River** | **4.15** | **162** | | Pn | | 09 48 21.4 | +2.9 |
| **INK** | **Inuvik** | **4.20** | **102** | | Pn | | 09 48 21.2 | +2.2 |
| **H23K** | **Yukon River** | **4.21** | **209** | | Pn | | 09 48 21.5 | +2.3 |
| **I26K** | **Coal Creek Min** | **4.33** | **172** | | Pn | | 09 48 23.4 | +2.7 |
| **B20K** | **Meade River** | **4.37** | **282** | Pn | Pn | | 09 48 23.9 | +2.5 |
| **D20K** | **Etivluk River** | **4.37** | **264** | | Pn | | 09 48 24.5 | +3.1 |
| **E20K** | **Nigu River** | **4.38** | **258** | | Pn | | 09 48 24.6 | +3.1 |
| **EPYK** | **Eagle Plains** | **4.38** | **133** | | Pn | | 09 48 24.4 | +2.8 |
| **H22K** | **Ishtalitna Cre** | **4.50** | **218** | | Pn | | 09 48 25.6 | +2.4 |
| **I28M** | **Miner Creek** | **4.52** | **154** | Pn | Pn | | 09 48 26.8 | +3.3 |
| I28M | | | | IAML | | | 09 49 23.9 | |
| | comp=N,40nm,0.6s | | | | | | | |
| **G21K** | **Allakaket** | **4.53** | **232** | | Pn | | 09 48 25.4 | +1.8 |
| G21K | | | | IAML | | | 09 49 53.8 | |
| | comp=E,58nm,0.8s | | | | | | | |
| G21K | | | | IAML | | | 09 49 56.7 | |
| | comp=N,53nm,0.8s | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.54** | **113** | | Pn | | 09 48 26.3 | +2.6 |
| F31M | | | | IAML | | | 09 49 49.6 | |
| | comp=N,36nm,0.9s | | | | | | | |
| F31M | | | | IAML | | | 09 49 51.3 | |
| | comp=E,37nm,1.0s | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.61** | **195** | | Pn | | 09 48 27.2 | +2.5 |
| POKR | | | | IAML | | | 09 49 25.0 | |
| | comp=N,41nm,0.3s | | | | | | | |
| POKR | | | | IAML | | | 09 49 47.3 | |
| | comp=E,56nm,0.7s | | | | | | | |
| **G31M** | **Satah River** | **4.68** | **120** | | Pn | | 09 48 28.2 | +2.6 |
| G31M | | | | IAML | | | 09 49 48.7 | |
| | comp=E,46nm,0.9s | | | | | | | |
| G31M | | | | IAML | | | 09 49 51.9 | |
| | comp=N,47nm,0.9s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **205** | | Pn | | 09 48 29.6 | +2.3 |
| I23K | | | | IAML | | | 09 49 56.1 | |
| | comp=E,47nm,0.8s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.83** | **244** | Pn | Pn | | 09 48 30.0 | +2.3 |
| **MDM** | **Murphy Dome** | **4.84** | **198** | | Pn | | 09 48 30.1 | +2.2 |
| MDM | | | | IAML | | | 09 49 51.2 | |
| | comp=E,40nm,0.9s | | | | | | | |
| MDM | | | | IAML | | | 09 49 52.6 | |
| | comp=N,38nm,0.9s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.88** | **147** | Pn | Pn | | 09 48 30.2 | +1.8 |
| I29M | | | | IAML | | | 09 49 32.4 | |
| | comp=N,37nm,0.4s | | | | | | | |
| I29M | | | | IAML | | | 09 49 39.8 | |
| | comp=E,34nm,0.6s | | | | | | | |
| **IL31** | | **4.91** | **191** | | Pn | | 09 48 31.7 | +3.0 |
| **D19K** | **Kuna River** | **4.96** | **264** | | Pn | | 09 48 32.0 | +2.5 |
| D19K | | | | IAML | | | 09 50 15.6 | |
| | comp=E,26nm,1.1s | | | | | | | |
| **J25K** | **Salcha River,** | **4.99** | **184** | Pn | Pn | | 09 48 32.7 | +2.7 |
| J25K | | | | IAML | | | 09 49 55.7 | |
| | comp=N,30nm,0.7s | | | | | | | |
| J25K | | | | IAML | | | 09 50 00.0 | |
| | comp=E,40nm,0.9s | | | | | | | |
| **EGAK** | **Eagle** | **5.00** | **163** | Pn | Pn | | 09 48 32.4 | +2.4 |
| EGAK | | | | IAML | | | 09 49 34.1 | |
| | comp=E,40nm,0.7s | | | | | | | |
| EGAK | | | | IAML | | | 09 49 34.5 | |
| | comp=E,34nm,0.8s | | | | | | | |
| **H21K** | **Melozitna Rive** | **5.02** | **222** | Pn | Pn | | 09 48 33.0 | +2.6 |
| H21K | | | | IAML | | | 09 50 02.6 | |
| | comp=E,36nm,1.1s | | | | | | | |
| H21K | | | | IAML | | | 09 50 04.6 | |
| | comp=N,39nm,0.9s | | | | | | | |
| **E19K** | **Redstone River** | **5.10** | **251** | | Pn | | 09 48 33.2 | +1.8 |
| E19K | | | | IAML | | | 09 50 17.3 | |
| | comp=N,35nm,0.7s | | | | | | | |
| E19K | | | | IAML | | | 09 50 20.5 | |
| | comp=E,25nm,1.0s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10** | **196** | Pn | Pn | | 09 48 33.6 | +2.2 |
| CCB | | | | IAML | | | 09 50 05.7 | |
| | comp=E,24nm,1.1s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.12** | **175** | Pn | Pn | | 09 48 34.3 | +2.6 |
| J26L | | | | IAML | | | 09 50 01.7 | |
| | comp=E,37nm,0.8s | | | | | | | |
| J26L | | | | IAML | | | 09 50 09.8 | |
| | comp=N,29nm,0.7s | | | | | | | |
| **MLY** | **Manley** | **5.14** | **210** | Pn | Pn | | 09 48 34.0 | +2.0 |
| MLY | | | | IAML | | | 09 50 06.8 | |
| | comp=E,28nm,1.0s | | | | | | | |
| **I21K** | **Tanana** | **5.25** | **216** | | Pn | | 09 48 36.0 | +2.6 |
| **NEA2** | **Nenana** | **5.30** | **201** | | Pn | | 09 48 36.2 | +2.1 |
| NEA2 | | | | IAML | | | 09 49 40.8 | |
| | comp=N,22nm,0.4s | | | | | | | |
| NEA2 | | | | IAML | | | 09 50 05.1 | |
| | comp=E,20nm,1.0s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.32** | **272** | | Pn | | 09 48 36.9 | +2.5 |
| C19K | | | | IAML | | | 09 49 39.0 | |
| | comp=E,19nm,0.7s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.40** | **140** | Pn | Pn | | 09 48 37.8 | +2.2 |
| **F19K** | **Shaleruckik Mo** | **5.61** | **247** | Pn | Pn | | 09 48 40.7 | +2.3 |
| **SCRK** | **Sand Creek** | **5.63** | **177** | Pn | Pn | | 09 48 41.8 | +3.0 |
| **K27K** | **Chicken** | **5.66** | **169** | | Pn | | 09 48 41.8 | +2.7 |
| **H20K** | **Anotleneega Mo** | **5.67** | **229** | | Pn | | 09 48 40.8 | +1.5 |
| **A19K** | **Wainwright** | **5.71** | **284** | | Pn | | 09 48 42.0 | +2.3 |
| **K24K** | **Donnelly Dome** | **5.82** | **185** | | Pn | | 09 48 44.7 | +3.5 |
| **G19K** | **Purcell Mounta** | **5.83** | **240** | Pn | Pn | | 09 48 42.6 | +1.2 |
| **DAWY** | **Dawson** | **5.91** | **157** | | Pn | | 09 48 45.5 | +3.1 |
| **DOT** | **Dot Lake** | **5.96** | **178** | | Pn | | 09 48 45.9 | +2.6 |
| **J30M** | **Hart River** | **5.97** | **143** | Pn | Pn | | 09 48 45.9 | +2.4 |
| **B18K** | **Kokolik River** | **6.04** | **276** | | Pn | | 09 48 46.8 | +2.5 |
| **MCK** | **McKinley** | **6.11** | **198** | | Pn | | 09 48 48.1 | +2.8 |
| **F18K** | **Selawik** | **6.36** | **249** | | Pn | | 09 48 50.9 | +2.3 |
| **PAX** | **Paxson** | **6.64** | **183** | | Pn | | 09 48 56.0 | +3.3 |
| **E17K** | **Hotham Inlet** | **6.83** | **257** | | Pn | | 09 48 56.9 | +1.8 |
| **H18K** | **Honhosa River** | **6.90** | **237** | | Pn | | 09 48 58.5 | +2.3 |
| **G17K** | **Kiwalik Mounta** | **7.36** | **244** | | Pn | | 09 49 04.7 | +2.3 |
| **H17K** | **Granite Mounta** | **7.52** | **239** | | Pn | | 09 49 07.0 | +2.4 |
| **WACK** | **Wrangell Chich** | **7.62** | **179** | | Pn | | 09 49 09.7 | +3.4 |
| **YUK2** | **White River** | **7.97** | **167** | | Pn | | 09 49 14.2 | +3.3 |
| **M20K** | **Styx River** | **8.47** | **208** | | Pn | | 09 49 21.0 | +3.3 |
| **KIAG** | **Kiagna River** | **8.74** | **173** | | Pn | | 09 49 25.2 | +3.8 |

*IDC **15** 09:50:55.4±2.7,52°.60N×160°.87E,h0km,mb3.6/4, mbtmp3.6/4,Error ellipse: s-maj=45.7km s-min=35.7km az=135.0*

*KRSC **15** 09:50:56.6±1.5,52°.12N×160°.71E,h41km±21km,Ml4.1*

**ISC 15 09:50:56.3±2.1,52°.20N±0°.06×160°.64E±0°.08,h8km±12km, n28,σ1°.62/35,mb3.7/4,Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.98** | **338** | *i* P | **Pg** | **09 51 15.9** | **+0.7** |
| SPN | | | | *e*S | **Sg** | **09 51 28.0** | **+0.2** |
| **NLC** | **Nalytchevo** | **1.25** | **322** | *e*P | **Pn** | **09 51 20.4** | **+0.2** |
| NLC | | | | *e*S | **Sb** | **09 51 37.0** | **+0.5** |
| **DALK** | **Dalny** | **1.42** | **307** | *e*P | **Pn** | **09 51 22.6** | **+0.2** |
| DALK | | | | *e*S | **Sn** | **09 51 40.7** | **-0.7** |
| **PET** | **Petropavlovsk** | **1.47** | **305** | *e*P | **Pn** | **09 51 23.2** | **+0.1** |
| PET | | | | *e*S | **Sn** | **09 51 41.8** | **-0.7** |
| **UGLR** | **Uglovaya** | **1.50** | **313** | *e*P | **Pn** | **09 51 24.5** | **+0.8** |
| **MTVR** | **Mutnovka** | **1.53** | **282** | *e*P | **Pn** | **09 51 24.5** | **+0.4** |
| MTVR | | | | *e*S | **Sn** | **09 51 44.1** | **-0.2** |
| **SMAR** | **Somma** | **1.55** | **315** | *e*P | **Pn** | **09 51 24.6** | **+0.2** |
| **AVH** | **Avacha** | **1.57** | **314** | *e*P | **Pn** | **09 51 25.7** | **+1.0** |
| **GRL** | **Gorelyy** | **1.61** | **284** | *e*P | **Pn** | **09 51 26.7** | **+1.5** |
| **KDTR** | **Khodutka, Kamc** | **1.63** | **257** | *e*P | **Pn** | **09 51 25.3** | **0.0** |
| KDTR | | | | *e*S | **Sn** | **09 51 45.5** | **-0.9** |
| **KOK** | **Koryaka** | **1.64** | **313** | *e*P | **Pn** | **09 51 26.6** | **+1.0** |
| **KRMR** | **Karymshinskiy** | **1.66** | **294** | *e*P | **Pn** | **09 51 26.1** | **+0.4** |
| KRMR | | | | *e*S | **Sn** | **09 51 47.8** | **+0.5** |
| **ASAK** | **Asacha** | **1.69** | **277** | *e*P | **Pn** | **09 51 27.0** | **+0.7** |
| ASAK | | | | *e*S | **Sn** | **09 51 49.6** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **2.01** | **298** | Pn | **Pn** | **09 51 32.0** | **+1.4** |
| | 9.5nm,0.3s,baz=102,slow=15,SNR=82 | | | | | | |
| PETK | | | | Sn | **Sn** | **09 51 57.5** | **+1.6** |
| | 31nm,0.3s,baz=145,slow=18,SNR=7.1 | | | | | | |
| **GNL** | **Ganaly** | **2.22** | **314** | *e*P | **Pn** | **09 51 35.0** | **+1.5** |
| **APC** | **Apacha** | **2.25** | **290** | *e*P | **Pn** | **09 51 34.9** | **+1.2** |
| APC | | | | *e*S | **Sn** | **09 52 03.2** | **+1.6** |
| **TUMD** | **Tumrok D** | **3.02** | **357** | *e*P | **Pn** | **09 51 45.6** | **+1.1** |
| **SKR** | **Severo-Kuril's** | **3.21** | **244** | *e*P | **Pn** | **09 51 47.8** | **+0.8** |
| **KMNR** | **Kamenistaya** | **3.58** | **356** | *e*P | **Pb** | **09 51 56.5** | **-3.3** |
| **ESO** | **Esso** | **3.91** | **344** | *e*P | **Pn** | **09 52 00.2** | **+3.5** |
| **KBTR** | **Krutoberegovo** | **4.22** | **17** | *e*P | **Pn** | **09 52 02.7** | **+1.7** |
| **MJAR** | **Matsushiro Arr** | **22.27** | **234** | P | **P** | **09 55 58.3** | **+4.6** |
| | 1.0n

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DPC | | | | *e*SG | | **Sg** | **10 04 14.1** | **+0.6** |
| | comp=Z,23nm,0.5s | | | | | | | |
| **VYHS** | **Vyhne** | **1.74** | **182** | *e*PG | | **Pg** | **10 03 52.9** | **+0.1** |
| VYHS | | | | *e*SG | | **Sg** | **10 04 16.1** | **+0.7** |
| **VRAC** | **Vranov** | **1.78** | **240** | *e*Pn | | **Pn** | **10 03 52.2** | **+0.7** |
| | baz=59 | | | | | | | |
| VRAC | | | | *e*Sg | | **Sb** | **10 04 16.3** | **+0.4** |
| | 27nn,0.5s,baz=59 | | | | | | | |
| **VRAC** | **Vranov** | **1.78** | **240** | Pn | | **Pb** | **10 03 52.7** | **-0.3** |
| | 5.1nm,0.3s,baz=62,slow=15,SNR=18 | | | | | | | |
| VRAC | | | | Lg | | Lg | 10 04 17.8 | |
| | 6.8nm,0.3s,baz=143,slow=22,SNR=13 | | | | | | | |
| **VRAC** | **Vranov** | **1.78** | **240** | ⇓P | | **Pn** | **10 03 52.5** | **+1.0** |
| VRAC | | | | ⇓S | | **Sn** | **10 04 13.7** | **-1.2** |
| **KSP** | **Ksiaz** | **1.80** | **291** | *e*Pg | | **Pn** | **10 03 53.0** | **+1.3** |
| KSP | | | | *e*Sg | | **Sg** | **10 04 17.9** | **+0.7** |
| **CHVC** | **Chvalec** | **1.88** | **282** | *e*PG | | **Pn** | **10 03 53.7** | **+0.8** |
| **KRUC** | **Moravsky** | **2.03** | **236** | *e*Pn | | **Pn** | **10 03 55.6** | **+0.7** |
| | baz=54 | | | | | | | |
| KRUC | | | | *e*Sg | | **Sb** | **10 04 23.5** | **+0.6** |
| | 11nm,0.5s,baz=54 | | | | | | | |
| **KRUC** | **Moravsky** | **2.03** | **236** | *e*PN | | **Pn** | **10 03 55.7** | **+0.8** |
| KRUC | | | | *e*SG | | **Sb** | **10 04 23.6** | **+0.6** |
| **PSZ** | **Piszkesteto** | **2.40** | **165** | ⇑P | | **Pn** | **10 04 00.2** | **+0.1** |
| PSZ | | | | ⇓S | | **Sn** | **10 04 29.3** | **-0.8** |
| **GOPC** | **GO Pecny, Ondr** | **2.70** | **265** | *e*SG | | **Sg** | **10 04 45.6** | **-0.4** |
| | comp=Z,9.9nm,0.3s | | | | | | | |
| **PRU** | **Pruhonice** | **2.84** | **267** | *e*SG | | **Sg** | **10 04 50.1** | **-0.7** |
| | comp=Z,9.5nm,0.7s | | | | | | | |
| **BRG** | **Berggiesshubel** | **3.25** | **283** | Pg | | **Pg** | **10 04 22.0** | **+0.3** |
| BRG | | | | Sg | | **Sg** | **10 05 04.5** | **+0.7** |
| BRG | | | | Amp | | | 10 05 11.7 | |
| | comp=Z,4.5nm,0.5s | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **3.54** | **278** | *e*PN | | **Pn** | **10 04 16.6** | **+0.9** |
| HSKC | | | | *e*PG | | **Pb** | **10 04 24.7** | **+1.7** |
| **KHC** | **Kasperske Hory** | **3.65** | **254** | *e*PN | | **Pn** | **10 04 17.9** | **+0.6** |
| KHC | | | | *e*PG | | **Pb** | **10 04 25.0** | **+0.1** |
| KHC | | | | *e*SG | | **Sg** | **10 05 17.7** | **+0.9** |
| | comp=Z,9.1nm,0.4s | | | | | | | |
| **BORR** | **Bors** | **3.67** | **148** | ⇓P | | **Pn** | **10 04 20.5** | **+3.1** |
| **GERES** | **GERESS Array B** | **3.69** | **250** | Pn | | **Pn** | **10 04 19.5** | **+1.8** |
| | comp=Z,0.3nm,0.3s,baz=104,slow=12,SNR=2.4 | | | | | | | |
| GERES | | | | Pg | | **Pg** | **10 04 28.9** | **-1.2** |
| | comp=Z,1.1nm,0.3s,baz=36,slow=23,SNR=8.5 | | | | | | | |
| GERES | | | | Lg | | Lg | 10 05 17.6 | |
| | comp=Z,0.9nm,0.3s,baz=52,slow=30,SNR=3.5 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **CLL** | **Collm** | **3.92** | **288** | *i* Sg | | **Sg** | **10 05 25.8** | **+0.5** |
| **DRGR** | | **4.26** | **143** | ⇓P | | **Pn** | **10 04 26.2** | **+0.6** |
| **MARR** | **Marisel-Cluj** | **4.52** | **140** | ⇑P | | **Pn** | **10 04 30.4** | **+1.3** |
| **BURAR** | **Bucovina Array** | **4.90** | **120** | ⇑P | | **Pn** | **10 04 35.2** | **+0.8** |
| **BZS** | **Buzias** | **4.96** | **158** | ⇑P | | **Pn** | **10 04 35.4** | **+0.3** |
| **SURR** | **Surduc** | **4.96** | **153** | ⇓P | | **Pn** | **10 04 35.4** | **+0.2** |
| **AKASG** | **Malin Array Be** | **6.58** | **82** | Pn | | **Pn** | **10 04 55.3** | **-2.1** |
| | comp=Z,1.1nm,0.3s,baz=299,slow=14,SNR=5.1 | | | | | | | |
| AKASG | | | | Lg | | Lg | 10 06 46.2 | |
| | comp=Z,0.5nm,0.3s,baz=283,slow=24,SNR=1.6 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **11.92** | **17** | Pn | | **Pn** | **10 06 08.1** | **-2.4** |
| | comp=Z,0.2nm,0.3s,baz=199,slow=12,SNR=8.3 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |

*IDC* ***15*** *10:05:45.2±4.0,36.°66N×71.°64E,h99km±35km,mb3.6/12, mbtmp3.9/17,Error ellipse: s-maj=25.7km s-min=15.8km az=14.0*

*NEIC* ***15*** *10:05:45.6±1.5,36.°78N±0.°06×71.°41E±0.°05,h91km±7km, mb4.1/6,Error ellipse: s-maj=8.9km s-min=5.4km az=153.0*

*NNC* ***15*** *10:05:47.0±3.7,36.°86N×70.°96E,h105km±75km,mb3.7, mpv4.1,Error ellipse: s-maj=38.2km s-min=26.6km az=151.0*

**ISC 15 10:05:45.6±0.5,36.°63N±0.°05×71.°57E±0.°06,h114km,n46, σ2ş17/54,mb3.8/12,2C-3D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GAR** | **Garm** | **2.57** | **338** | | **Pn** | **10 06 23.9** | **-2.1** |
| **CHGR** | **Chuyangaron** | **2.79** | **317** | | **Pn** | **10 06 25.7** | **-3.2** |
| **DRK** | **Karamyk** | **2.85** | **4** | | **Pn** | **10 06 28.0** | **-2.0** |
| **SIMJ** | **Simiganj** | **2.87** | **316** | | **Pn** | **10 06 27.0** | **-3.1** |
| **KBL** | **Kabul** | **2.93** | **225** | Pn | **Pn** | **10 06 31.5** | **+0.5** |
| **NIL** | **Nilore** | **3.28** | **155** | | **Pn** | **10 06 37.4** | **+2.1** |
| **JMU** | **Jammu** | **4.77** | **144** | *e*P | **Pn** | **10 06 56.6** | **+1.3** |
| JMU | | | | *e*S | **Sn** | **10 07 48.6** | **-1.0** |
| JMU | | | | IAML | | 10 07 51.3 | |
| | comp=N,1μm,0.8s | | | | | | |
| JMU | | | | IAML | | 10 07 51.4 | |
| | comp=E,839nm,0.7s | | | | | | |
| **THN** | **Thein Dam** | **5.41** | **140** | *e*P | **Pn** | **10 07 05.0** | **+1.1** |
| THN | | | | *e*S | **Sn** | **10 08 02.0** | **-2.8** |
| THN | | | | IAML | | 10 08 08.7 | |
| | comp=E,261nm,0.3s | | | | | | |
| THN | | | | IAML | | 10 08 09.1 | |
| | comp=N,362nm,0.3s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **5.86** | **137** | *e*P | **Pn** | **10 07 10.4** | **+0.1** |
| DHRM | | | | *e*S | **Sn** | **10 08 14.5** | **-1.7** |
| DHRM | | | | IAML | | 10 08 17.2 | |
| | comp=N,534nm,0.5s | | | | | | |
| DHRM | | | | IAML | | 10 08 20.2 | |
| | comp=E,576nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **6.41** | **20** | | **Pn** | **10 07 17.1** | **-0.5** |
| **AAK** | **Ala-Archa** | **6.41** | **20** | P | **Pn** | **10 07 17.4** | **-0.2** |
| | comp=E,9.2nm,0.4s,baz=186,slow=9.2,SNR=8.2 | | | | | | |
| AAK | | | | S | **Sn** | **10 08 25.8** | **-3.5** |
| | comp=E,5.0nm,0.3s,baz=319,slow=20,SNR=4.6 | | | | | | |
| **KK31** | **Karatay Array** | **6.52** | **353** | ⇓P | **Pn** | **10 07 16.9** | **-2.0** |
| | comp=E,6.3nm,0.3s,baz=192,slow=18,SNR=111 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **10 08 26.6** | **-5.1** |
| | comp=E,3.9nm,0.3s,baz=180,slow=24,SNR=5.0 | | | | | | |
| **KKAR** | **Karatay Array** | **6.52** | **353** | | **Pn** | **10 07 16.7** | **-2.1** |
| **BHK** | **Bhakra** | **6.57** | **141** | *e*P | **Pn** | **10 07 20.7** | **+1.0** |
| BHK | | | | *e*S | **Sn** | **10 08 30.5** | **-2.8** |
| **BOOM** | **Boomskoye usch** | **6.75** | **29** | Pn | **Pn** | **10 07 22.9** | **+0.7** |
| **TKM2** | **Tokmak 2** | **7.00** | **25** | ⇓P | **Pn** | **10 07 26.9** | **+1.3** |
| | comp=E,7.5nm,0.6s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **10 08 46.5** | **+2.6** |
| | comp=E,5.4nm,0.7s | | | | | | |
| **SMLA** | **Simla** | **7.19** | **138** | *e*P | **Pn** | **10 07 27.4** | **-0.6** |
| SMLA | | | | *e*S | **Sn** | **10 08 43.6** | **-4.6** |
| SMLA | | | | IAML | | 10 08 48.3 | |
| | comp=E,251nm,0.3s | | | | | | |
| SMLA | | | | IAML | | 10 08 50.8 | |
| | comp=E,190nm,0.3s | | | | | | |
| **KLP** | **Kalpa** | **7.52** | **131** | *e*P | **Pn** | **10 07 33.2** | **+0.5** |
| KLP | | | | *e*S | **Sn** | **10 08 51.2** | **-5.4** |
| KLP | | | | IAML | | 10 08 55.8 | |
| | comp=E,194nm,0.4s | | | | | | |
| KLP | | | | IAML | | 10 09 00.1 | |
| | comp=N,147nm,0.7s | | | | | | |
| **HRA** | **Herat** | **7.93** | **256** | | **Pn** | **10 07 36.5** | **-1.8** |
| **KUDL** | **Kundal** | **9.43** | **152** | *e*P | **Pn** | **10 07 56.5** | **-1.8** |
| KUDL | | | | *e*S | Sn | 10 09 33.3 | -9.2 |
| KUDL | | | | IAML | | 10 09 37.8 | |
| | comp=E,38nm,0.7s | | | | | | |
| KUDL | | | | IAML | | 10 09 38.2 | |
| | comp=N,37nm,0.3s | | | | | | |
| **LGTI** | **Lohaghat** | **10.21** | **132** | *e*P | Pn | 10 08 05.5 | -3.4 |
| LGTI | | | | *e*S | Sn | 10 09 51.9 | -9.4 |
| LGTI | | | | IAML | | 10 09 55.2 | |
| | comp=N,32nm,0.8s | | | | | | |
| LGTI | | | | IAML | | 10 10 01.1 | |
| | comp=E,28nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **12.92** | **35** | Pn | **Pn** | **10 08 45.6** | **+0.8** |
| **MKAR** | **Makanchi Array** | **12.92** | **35** | P | **Pn** | **10 08 44.6** | **-0.2** |
| | comp=E,1.3nm,0.8s,baz=222,slow=12,SNR=7.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.86** | **18** | P | **Pn** | **10 09 10.3** | **+0.7** |
| | comp=E,1.0nm,0.6s,baz=207,slow=10,SNR=11 | | | | | | |
| **AB31** | **Akbulak array** | **15.20** | **330** | ⇑P | **Pn** | **10 09 10.2** | **-3.8** |
| | comp=E,3.1nm,0.4s,baz=138,slow=13,SNR=68 | | | | | | |
| **ABKAR** | **Akbulak array** | **15.20** | **330** | | **Pn** | **10 09 10.6** | **-3.4** |
| ABKAR | | | | IAmb | IAmb | 10 09 11.5 | |
| | comp=Z,7.5nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **16.45** | **357** | Pn | **Pn** | **10 09 27.6** | **-1.8** |
| **AKTO** | **Aktyubinsk** | **16.90** | **329** | P | **Pn** | **10 09 35.1** | **+0.1** |
| | comp=Z,3.6nm,0.4s,baz=134,slow=12,SNR=5.3 | | | | | | |
| **UOSS** | **Minazif** | **17.58** | **233** | P | **P** | **10 09 42.6** | **-0.3** |
| UOSS | | | | IAmb | IAmb | 10 10 10.1 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.61** | **24** | P | **P** | **10 10 05.2** | **+0.6** |
| ZAA0 | | | | IAmb | IAmb | 10 10 19.3 | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.61** | **24** | P | **P** | **10 10 05.3** | **+0.7** |
| | comp=Z,2.2nm,0.4s,baz=219,slow=11,SNR=7.4 | | | | | | |
| **SHL** | **Shillong** | **20.55** | **117** | P | **P** | **10 10 16.4** | **+1.0** |
| SHL | | | | IAmb | IAmb | 10 10 18.7 | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **KBZ** | **Khabaz** | **22.95** | **297** | P | **P** | **10 10 42.4** | **+2.4** |
| | comp=Z,2.1nm,0.9s,baz=107,slow=11,SNR=2.6 | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **SNOP** | **Sinop** | **28.50** | **292** | P | **P** | **10 11 29.4** | **-0.6** |
| **BRTR** | **Keskin Array B** | **29.84** | **288** | P | **P** | **10 11 45.0** | **+3.0** |
| | comp=Z,0.4nm,0.4s,baz=110,slow=6.6,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **37.63** | **326** | P | **P** | **10 12 51.1** | **+2.0** |
| | comp=Z,0.5nm,0.3s,baz=125,slow=8.8,SNR=7.3 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.20** | **337** | P | **P** | **10 13 20.8** | **+2.3** |
| | comp=Z,2.8nm,0.9s,baz=120,slow=10,SNR=2.4 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **43.25** | **322** | P | **P** | **10 13 36.9** | **+1.6** |
| | comp=Z,1.6nm,0.5s,baz=102,slow=12,SNR=7.4 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.55** | **323** | P | **P** | **10 13 47.2** | **+1.5** |
| | comp=Z,0.8nm,0.5s,baz=97,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.55** | **323** | P | **P** | **10 13 45.9** | **+0.1** |
| | comp=Z,0.8nm,0.6s,baz=97,slow=7.7,SNR=4.5 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **57.80** | **298** | P | **P** | **10 15 26.4** | **+1.4** |
| | comp=Z,0.7nm,0.7s,baz=69,slow=7.9,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.18** | **269** | P | **P** | **10 16 21.3** | **0.0** |
| | comp=Z,0.9nm,0.4s,baz=46,slow=6.3,SNR=17 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **74.53** | **16** | P | **P** | **10 17 11.7** | **+0.4** |
| | comp=Z,0.6nm,0.9s,baz=309,slow=5.6,SNR=5.8 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **KDAK** | **Kodiak Island** | **78.90** | **22** | P | **P** | **10 17 37.3** | **+1.3** |
| | comp=Z,4.0nm,0.9s,baz=18,slow=3.2,SNR=5.1 | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.67** | **122** | P | **P** | **10 17 52.9** | **+1.5** |
| | comp=Z,0.6nm,0.5s,baz=323,slow=5.0,SNR=16 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **83.95** | **125** | P | **P** | **10 18 04.7** | **+1.6** |
| | comp=Z,0.8nm,0.6s,baz=307,slow=4.7,SNR=16 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |

**NEIC 15 10:27:57.5±0.2,37.°36N±0.°01×97.°98W±0.°01,h5km±1km, mb_Lg3.0/126,ML3.4/36,Error ellipse: s-maj=2.3km s-min=2.1km az=208.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.06** | **193** | | Pg | 10 27 59.4 | +0.4 |
| KAN12 | | | | Sg | Sg | 10 28 00.7 | +0.6 |
| KAN12 | | | | IAML | | 10 28 00.9 | |
| | comp=N,34μm,0.4s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.13** | **177** | | Pg | 10 28 00.7 | +0.6 |
| KAN08 | | | | Sg | Sg | 10 28 02.9 | +1.0 |
| **KS21** | **Milan North St** | **0.26** | **105** | | Pg | 10 28 03.2 | +0.6 |
| KS21 | | | | Sg | Sg | 10 28 07.1 | +1.0 |
| **KS21** | **Milan North St** | **0.26** | **105** | IAML | | 10 28 07.3 | |
| | comp=N,3μm,0.4s | | | | | | |
| KS21 | | | | IAML | | 10 28 09.1 | |
| | comp=N,6μm,0.3s | | | | | | |
| **KAN01** | **Argonia South** | **0.27** | **139** | Pg | Pg | 10 28 03.4 | +0.6 |
| KAN01 | | | | Sg | Sg | 10 28 07.3 | +1.1 |
| **KAN17** | **Caldwell West** | **0.36** | **151** | | Pg | 10 28 05.0 | +0.6 |
| **KAN09** | **Caldwell North** | **0.36** | **127** | | Pg | 10 28 05.1 | +0.6 |
| KAN09 | | | | Sg | Sg | 10 28 10.3 | +1.0 |
| KAN09 | | | | IAML | | 10 28 10.6 | |
| | comp=N,5μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 10 28 11.6 | |
| | comp=E,5μm,0.2s | | | | | | |
| **KAN14** | **Manchester OK** | **0.40** | **178** | | Pg | 10 28 05.7 | +0.5 |
| KAN14 | | | | Sg | Sg | 10 28 11.4 | +1.0 |
| KAN14 | | | | IAML | | 10 28 11.6 | |
| | comp=E,3μm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **0.51** | **169** | Pg | Pg | 10 28 07.8 | +0.4 |
| **KAN13** | **South Haven SW** | **0.53** | **130** | Pg | Pg | 10 28 08.1 | +0.4 |
| KAN13 | | | | Sg | Sg | 10 28 15.5 | +1.0 |
| KAN13 | | | | IAML | | 10 28 15.7 | |
| | comp=E,4μm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 10 28 16.2 | |
| | comp=N,3μm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.58** | **199** | Pg | Pg | 10 28 09.0 | +0.3 |
| OK032 | | | | IAML | | 10 28 19.8 | |
| | comp=N,2μm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.85** | **180** | Pg | Pg | 10 28 13.8 | 0.0 |
| CROK | | | | IAML | | 10 28 30.3 | |
| | comp=N,1μm,0.3s | | | | | | |
| **BLOK** | **Blackwell** | **0.85** | **134** | | Pg | 10 28 14.0 | +0.1 |
| **NOKA** | **Waynoka** | **1.05** | **227** | Pg | Pg | 10 28 17.2 | -0.4 |
| NOKA | | | | IAML | | 10 28 39.3 | |
| | comp=E,941nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 10 28 40.9 | |
| | comp=N,1μm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **1.07** | **215** | | Pg | 10 28 17.7 | -0.3 |
| **R32A** | **Long Quarter,** | **1.21** | **332** | | Pg | 10 28 20.1 | -0.7 |
| R32A | | | | IAML | | 10 28 41.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| R32A | | | | IAML | | 10 28 42.0 | |
| | comp=E,780nm,0.3s | | | | | | |
| **OK051** | **E0350 and S346** | **1.25** | **132** | | Pg | 10 28 21.1 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.25** | **110** | | Pg | 10 28 21.3 | -0.3 |
| T35A | | | | IAML | | 10 28 44.9 | |
| | comp=E,932nm,0.3s | | | | | | |
| **OK048** | **Pawnee Station** | **1.25** | **138** | | Pg | 10 28 21.2 | -0.3 |
| OK048 | | | | IAML | | 10 28 41.9 | |
| | comp=E,635nm,0.2s | | | | | | |
| OK048 | | | | IAML | | 10 28 42.2 | |
| | comp=E,741nm,0.3s | | | | | | |
| **QUOK** | **Quay** | **1.56** | **139** | | Pn | 10 28 26.4 | +0.5 |
| **OK029** | **Liberty Lake** | **1.61** | **165** | | Pb | 10 28 27.3 | -0.5 |
| **OK052** | **Battle Ridge R** | **1.66** | **145** | | Pb | 10 28 27.9 | -0.6 |
| **OK031** | **S. Brethren Rd** | **1.68** | **146** | | Pn | 10 28 28.1 | +0.6 |
| **CSTR** | **Hydro, Custer** | **1.80** | **199** | | Pn | 10 28 30.1 | +0.8 |
| **DEOK** | **Depew** | **1.93** | **141** | Pn | Pn | 10 28 31.1 | +0.1 |
| **OKCSW** | **OKLAHOMA CITY** | **2.00** | **167** | Pn | Pn | 10 28 32.2 | +0.3 |
| **CBKS** | **Cedar Bluff** | **2.01** | **317** | Pn | Pn | 10 28 32.4 | +0.2 |
| **KSU1** | **Kansas State U** | **2.05** | **31** | Pn | Pn | 10 28 33.1 | +0.4 |
| KSU1 | | | | IAmb_Lg | | 10 29 07.7 | |
| | comp=Z,64nm,0.8s | | | | | | |
| **FNO** | **Franklin** | **2.15** | **167** | | Pb | 10 28 35.6 | -1.2 |
| **TUL3** | **Leonard** | **2.28** | **129** | | Pn | 10 28 37.1 | +1.4 |
| **RLO** | **Rose Lookout** | **2.66** | **116** | | Pn | 10 28 42.5 | +1.5 |
| **X34A** | **Smith Ranch, M** | **2.75** | **177** | | Pn | 10 28 43.4 | +1.1 |
| **SMWD** | **Samnorwood** | **2.90** | **220** | Pn | Pn | 10 28 45.7 | +1.3 |
| **U38A** | **Gravette** | **3.02** | **107** | | Pn | 10 28 47.4 | +1.4 |
| **HHAR** | **Hobbs** | **3.42** | **107** | | Pn | 10 28 53.1 | +1.6 |
| **X37A** | **Clayton** | **3.48** | **142** | | Pn | 10 28 53.5 | +1.3 |
| **WTFS** | **Witchita Falls** | **3.60** | **186** | Pn | Pn | 10 28 55.1 | +1.1 |
| **S39A** | **Bolivar** | **3.72** | **83** | | Pn | 10 28 56.1 | +0.6 |
| **AMTX** | **Amarillo** | **3.88** | **232** | | Pn | 10 28 59.1 | +1.2 |
| AMTX | | | | IAmb_Lg | | 10 30 06.6 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.92** | **258** | | Pn | 10 28 59.4 | +0.8 |
| **KSCO** | **Kaye Shedlock'** | **4.02** | **296** | IAmb_Lg | | 10 30 05.7 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **BGNE** | **Belgrade** | **4.05** | **358** | | Pn | 10 29 00.8 | +0.7 |
| **Z35A** | **Perchaven, San** | **4.06** | **171** | IAmb_Lg | | 10 30 17.2 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **P38A** | **Dawn** | **4.16** | **56** | | Pn | 10 29 02.1 | +0.4 |
| P38A | | | | IAmb_Lg | | 10 30 15.3 | |
| | comp=Z,46nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **4.39** | **214** | | Pn | 10 29 04.4 | -0.6 |
| DKNS | | | | IAmb_Lg | | 10 30 21.8 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **MIAR** | **Mount Ida** | **4.54** | **127** | | Pn | 10 29 08.0 | +1.1 |
| MIAR | | | | IAmb_Lg | | 10 30 32.9 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **PLPT** | **Palo Pinto** | **4.54** | **184** | Pn | Pn | 10 29 07.6 | +0.7 |
| **MGMO** | **Mountain Grove** | **4.56** | **91** | | Pn | 10 29 08.0 | +0.8 |
| MGMO | | | | IAmb_Lg | | 10 30 29.5 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.62** | **77** | | Pn | 10 29 08.1 | +0.2 |
| R40A | | | | IAmb_Lg | | 10 30 26.1 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.76** | **148** | Pn | Pn | 10 29 09.9 | -0.1 |
| Z38A | | | | IAmb_Lg | | 10 30 39.9 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **4.77** | **320** | | Pn | 10 29 11.4 | +1.3 |
| OGNE | | | | IAmb_Lg | | 10 30 31.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **TREL** | **Terrell** | **4.87** | **161** | IAmb_Lg | | 10 30 44.5 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **4.88** | **210** | IAmb_Lg | | 10 30 35.5 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.93** | **106** | IAmb_Lg | | 10 30 39.6 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **FW16** | **Waxahatchie** | **4.94** | **169** | IAmb_Lg | | 10 30 46.9 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **N38A** | **Joes South For** | **5.04** | **46** | | Pn | 10 29 13.9 | +0.2 |
| N38A | | | | IAmb_Lg | | 10 30 44.3 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.06** | **123** | | Pn | 10 29 15.6 | +1.5 |
| X40A | | | | IAmb_Lg | | 10 30 44.9 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.14** | **63** | | Pn | 10 29 14.8 | -0.2 |
| **POST** | **Post** | **5.16** | **215** | IAmb_Lg | | 10 30 55.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **5.16** | **231** | | Pn | 10 29 16.1 | +0.6 |
| **UALR** | **University of** | **5.24** | **118** | Pn | Pn | 10 29 16.1 | -0.4 |
| UALR | | | | IAmb_Lg | | 10 30 51.8 | |
| | comp=Z,39nm,1.1s | | | | | | |
| **WHTX** | **Lake Whitney,** | **5.37** | **175** | Pn | Pn | 10 29 18.2 | -0.1 |
| **CCM** | **Cathedral Cave** | **5.39** | **81** | IAmb_Lg | | 10 30 49.1 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.40** | **131** | Pn | Pn | 10 29 17.9 | -0.8 |
| WLAR | | | | IAmb_Lg | | 10 30 49.1 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **K30B** | **Basset** | **5.46** | **347** | IAmb_Lg | | 10 30 59.6 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **T42A** | **Van Buren** | **5.51** | **91** | IAmb_Lg | | 10 30 59.7 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **5.63** | **161** | IAmb_Lg | | 10 31 09.0 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **SCIA** | **State Center** | **5.84** | **38** | IAmb_Lg | | 10 31 11.4 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **5.87** | **288** | IAmb_Lg | | 10 31 16.5 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **5.90** | **305** | IAmb_Lg | | 10 31 15.1 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **SGCY** | **Sterling City** | **6.02** | **206** | IAmb_Lg | | 10 31 22.4 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **FVM** | **French Village** | **6.03** | **82** | IAmb_Lg | | 10 31 19.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.07** | **93** | IAmb_Lg | | 10 31 22.8 | |
| | comp=Z,35nm,0.7s | | | | | | |
| **CCAR** | **Cane Creek** | **6.11** | **122** | IAmb_Lg | | 10 31 24.8 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **6.11** | **188** | Pn | Pn | 10 29 28.5 | -0.1 |
| **SLM** | **Saint Louis** | **6.25** | **76** | IAmb_Lg | | 10 31 18.2 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.45** | **9** | | Pn | 10 29 33.2 | +0.1 |
| ECSD | | | | IAmb_Lg | | 10 31 21.5 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **ISCO** | **Idaho Springs** | **6.46** | **295** | IAmb_Lg | | 10 31 31.9 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **435B** | **Jarrell** | **6.57** | **177** | IAmb_Lg | | 10 31 37.6 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **OZNA** | **Ozona** | **6.93** | **203** | IAmb_Lg | | 10 31 44.1 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.01** | **68** | IAmb_Lg | | 10 31 47.2 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **7.03** | **193** | IAmb_Lg | | 10 31 51.6 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **7.04** | **276** | IAmb_Lg | | 10 31 57.6 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **SUSD** | **Miller** | **7.12** | **354** | IAmb_Lg | | 10 31 51.8 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **7.13** | **302** | Pn | Pn | 10 29 42.4 | -0.2 |
| **HDIL** | **Hopedale** | **7.48** | **62** | Pn | Pn | 10 29 46.4 | -0.9 |
| **OXF** | **Oxford** | **7.51** | **110** | IAmb_Lg | | 10 32 11.1 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **PECS** | **Pecos** | **7.70** | **221** | IAmb_Lg | | 10 32 16.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **HNDO** | **Hondo** | **7.88** | **188** | IAmb_Lg | | 10 32 10.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **L42A** | **Oliver, Polo** | **7.91** | **52** | IAmb_Lg | | 10 32 24.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **7.97** | **248** | IAmb_Lg | | 10 32 27.3 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **SAND** | **Sanderson** | **8.15** | **206** | IAmb_Lg | | 10 32 35.9 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **DRIO** | **Del Rio** | **8.21** | **196** | IAmb_Lg | | 10 32 37.4 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.35** | **104** | IAmb_Lg | | 10 32 21.0 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **ALPN** | **Alpine** | **8.40** | **216** | IAmb_Lg | | 10 32 35.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **K22A** | **Casper** | **8.42** | **312** | IAmb_Lg | | 10 32 40.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **8.57** | **8** | IAmb_Lg | | 10 32 29.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **I40A** | **Norwalk** | **8.60** | **38** | IAmb_Lg | | 10 32 48.3 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **146A** | **Union** | **8.70** | **120** | IAmb_Lg | | 10 32 52.6 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **H01W3** | **Cape Leeuwin H** | **29.77** | **164** | T | T | 11 20 16.4 | | | |
| | baz=342,slow=76 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **29.78** | **164** | T | T | 11 20 17.5 | | | |
| | baz=342,slow=76 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **29.79** | **164** | T | T | 11 20 15.6 | | | |
| | baz=342,slow=76 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **31.65** | **266** | T | T | 11 22 55.0 | | | |
| | baz=88,slow=75,SNR=197 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **31.66** | **266** | T | T | 11 22 54.9 | | | |
| | baz=88,slow=75,SNR=263 | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **31.66** | **266** | T | T | 11 22 54.8 | | | |
| | baz=88,slow=75,SNR=93 | | | | | | | | |
| **WB0** | **Warramunga Arr** | **32.07** | **117** | P | **P** | **10 49 16.3** | **-0.4** | | |
| WB0 | | | | IAmb | IAmb | 10 49 42.9 | | | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.08** | **118** | P | **P** | **10 49 16.8** | **0.0** | | |
| | comp=Z,1.1nm,0.4s,baz=295,slow=10.0,SNR=47 | | | | | | | | |
| WRA | | | | PcP | **PcP** | **10 52 06.9** | **+1.1** | | |
| | comp=Z,0.2nm,0.4s,baz=309,slow=1.7,SNR=2.0 | | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **32.09** | **118** | P | **P** | **10 49 16.9** | **0.0** | | |
| WRAB | | | | IAmb | IAmb | 10 49 20.0 | | | |
| | comp=Z,6.2nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **32.09** | **118** | P | **P** | **10 49 16.7** | **-0.2** | | |
| **WR0** | **Warramunga Arr** | **32.27** | **118** | P | **P** | **10 49 18.6** | **+0.2** | | |
| WR0 | | | | IAmb | IAmb | 10 49 52.2 | | | |
| | comp=Z,15nm,1.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **33.20** | **124** | P | **P** | **10 49 27.5** | **+0.9** | | |
| | comp=Z,1.2nm,0.4s,baz=303,slow=7.4,SNR=28 | | | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 52 09.4** | **+0.6** | | |
| | comp=Z,0.4nm,0.8s,baz=314,slow=2.6,SNR=2.8 | | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | | |
| **AS31** | **Alice Springs** | **33.20** | **124** | P | **P** | **10 49 26.6** | **0.0** | | |
| **YOJ** | **Yonaguni jima** | **35.64** | **30** | P | P | 10 49 42.7 | -4.9 | | |
| **OOD** | **Oodnadatta** | **36.56** | **129** | P | **P** | **10 49 57.6** | **+2.2** | | |
| **MULG** | **Mulgathing** | **36.67** | **134** | P | **P** | **10 49 58.5** | **+2.1** | | |
| **QIS** | **Mount Isa** | **36.95** | **116** | P | **P** | **10 50 00.9** | **+1.9** | | |
| **COEN** | **Coen** | **38.90** | **104** | P | **P** | **10 50 14.6** | **-0.8** | | |
| COEN | | | | IAmb | IAmb | 10 50 20.9 | | | |
| | comp=Z,9.9nm,1.0s | | | | | | | | |
| **LCRK** | **Leigh Creek** | **39.79** | **131** | P | **P** | **10 50 25.9** | **+3.2** | | |
| **INKA** | **Innaminka** | **40.52** | **126** | P | **P** | **10 50 30.0** | **+1.3** | | |
| **MTSU** | **Mount Surprise** | **40.66** | **110** | P | **P** | **10 50 30.7** | **+0.6** | | |
| **PMG** | **Port Moresby** | **42.48** | **97** | P | **P** | **10 50 43.3** | **-1.8** | | |
| PMG | | | | IAmb | IAmb | 10 51 09.6 | | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **CTAO** | **Charters Tower** | **42.86** | **113** | P | **P** | **10 50 46.9** | **-1.1** | | |
| CTAO | | | | IAmb | IAmb | 10 50 50.6 | | | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **STKA** | **Stephens Creek** | **43.02** | **131** | P | **P** | **10 50 51.4** | **+2.2** | | |
| STKA | | | | IAmb | IAmb | 10 50 53.1 | | | |
| | comp=Z,3.3nm,0.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **43.02** | **131** | P | **P** | **10 50 51.4** | **+2.2** | | |
| | comp=Z,12nm,0.4s,baz=310,slow=7.3,SNR=30 | | | | | | | | |
| | comp=Z,12nm,0.4s | | | | | | | | |
| **JCJ** | **Chichijima** | **49.47** | **46** | LR | LR | 11 13 12.8 | | | |
| | comp=Z,98nm,20.7s,baz=110,slow=37 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.17** | **24** | P | **P** | **10 52 26.9** | **-2.1** | | |
| | comp=Z,0.6nm,0.5s,baz=200,slow=4.5,SNR=4.6 | | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.45** | **342** | P | **P** | **10 52 30.0** | **-1.0** | | |
| | comp=Z,0.3nm,0.4s,baz=146,slow=7.8,SNR=3.6 | | | | | | | | |
| MKAR | | | | PcP | **PcP** | **10 53 28.6** | **+1.0** | | |
| | comp=Z,0.3nm,0.4s,baz=190,slow=7.3,SNR=2.5 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **60.05** | **220** | T | T | 11 58 48.8 | | | |
| | baz=66,slow=75,SNR=243 | | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.06** | **220** | T | T | 11 58 46.2 | | | |
| | baz=66,slow=75,SNR=250 | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.06** | **220** | T | T | 11 58 44.8 | | | |
| | baz=66,slow=75,SNR=178 | | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **60.26** | **219** | T | T | 11 58 57.0 | | | |
| | baz=66,slow=76,SNR=31 | | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **60.27** | **219** | T | T | 11 58 58.0 | | | |
| | baz=66,slow=76,SNR=20 | | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **60.28** | **219** | T | T | 11 58 59.4 | | | |
| | baz=66,slow=76,SNR=40 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.00** | **342** | P | **P** | **10 53 02.3** | **-0.3** | | |
| | comp=Z,1.1nm,0.2s,baz=156,slow=6.1,SNR=1.6 | | | | | | | | |
| | comp=Z,1.1nm,0.2s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.31** | **347** | P | **P** | **10 53 09.6** | **-1.7** | | |
| | comp=Z,0.6nm,0.3s,baz=147,slow=5.6,SNR=3.7 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **67.55** | **330** | P | **P** | **10 53 45.9** | **+0.4** | | |
| ABKAR | | | | IAmb | IAmb | 10 53 46.3 | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **72.16** | **129** | P | **P** | **10 54 15.2** | **+1.0** | | |
| **BRTR** | **Keskin Array B** | **79.46** | **312** | P | **P** | **10 54 57.0** | **+1.0** | | |
| | comp=Z,1.0nm,0.6s,baz=117,slow=8.8,SNR=5.1 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **83.61** | **180** | P | **P** | **10 55 15.0** | **-2.4** | | |
| **NIUE** | **Niue** | **83.91** | **108** | P | **P** | **10 55 17.1** | **-2.6** | | |
| **TXAR** | **Lajitas Array** | **145.07** | **46** | PKP | **PKPab** | **11 02 27.3** | **+0.6** | | |
| | comp=Z,1.7nm,0.7s,baz=271,slow=1.5,SNR=32 | | | | | | | | |

*KRSC **15** 11:12:14.1±1.7,54.˚19N×169.˚07E,h45$^{km}$±25$^{km}$,Ml5.0*
*IDC **15** 11:12:15.0±0.6,54.˚47N×168.˚98E,h0$^{km}$,mb4.1/27,*
*mbtmp4.1/30,ML3.8/3,MS3.5/44,Error ellipse:*
*s-maj=17.2km s-min=11.5km az=179.0*
*MOS **15** 11:12:18.3±1.0,54.˚31N×168.˚85E,h35$^{km}$,mb4.5/27,Error*
*ellipse: s-maj=6.5km s-min=5.3km az=130.5*
*NEIC **15** 11:12:19.6±1.4,54.˚1N±0.˚2×168.˚87E±0.˚10,h35$^{km}$±7$^{km}$,*
*mb4.3/107,Error ellipse: s-maj=24.1km s-min=7.5km*
*az=188.0*

**ISC 15 11:12:20.1**±0.4,**54.˚28N**±0.˚06×**168.˚94E**±0.˚04,**h35**$^{km}$,**n282**,
σ1§**12**/248,**mb4.3**/87,**MS3.6**/51,**14C-9D,Komandorsky**
**Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **1.96** | **300** | *eP* | | **Pn** | **11 12 48.3** | **-2.4** |
| BKI | | | | *eS* | | **Sn** | **11 13 12.5** | **-1.4** |
| **BKI** | **Bering** | **1.96** | **300** | PN | | **Pn** | **11 12 48.3** | **-2.4** |
| BKI | | | | S | | **Sn** | **11 13 12.5** | **-1.4** |
| **SHEM** | **Shemya Is, Ala** | **3.45** | **115** | Pn | | **Pn** | **11 13 08.8** | **-2.4** |
| | 33nm,0.3s,baz=346,slow=11,SNR=27 | | | | | | | |
| SHEM | | | | Sn | | **Sn** | **11 13 50.5** | **-0.3** |
| | 20nm,0.3s,baz=296,slow=18,SNR=5.3 | | | | | | | |
| | 142nm,0.6s | | | | | | | |
| **KBTR** | **Krutoberegovo** | **4.00** | **301** | *eP* | | **Pn** | **11 13 18.2** | **-0.7** |
| **KBTR** | **Krutoberegovo** | **4.00** | **301** | PN | | **Pn** | **11 13 18.1** | **-0.7** |
| **KBG** | **Krutoberegovo** | **4.08** | **302** | *eP* | | **Pn** | **11 13 19.5** | **-0.3** |
| KBG | | | | *eS* | | **Sn** | **11 14 07.0** | **+0.7** |
| **KBG** | **Krutoberegovo** | **4.08** | **302** | PN | | **Pn** | **11 13 19.5** | **-0.3** |
| KBG | | | | S | | **Sn** | **11 14 07.0** | **+0.7** |
| **BZGR** | **Bezymyannyi-Gr** | **5.02** | **293** | *eP* | | **Pn** | **11 13 33.4** | **+0.5** |
| **BZGR** | **Bezymyannyi-Gr** | **5.02** | **293** | PN | | **Pn** | **11 13 33.3** | **+0.5** |
| **TUMD** | **Tumrok D** | **5.03** | **284** | *eP* | | **Pn** | **11 13 32.8** | **-0.2** |
| **BZMR** | **Bezymyannaya** | **5.13** | **292** | *eP* | | **Pn** | **11 13 35.2** | **+0.8** |
| **BZMR** | **Bezymyannaya** | **5.13** | **292** | PN | | **Pn** | **11 13 35.2** | **+0.8** |
| **BZWR** | **Bezymyannyi-We** | **5.13** | **293** | *eP* | | **Pn** | **11 13 35.6** | **+1.1** |
| **BZWR** | **Bezymyannyi-We** | **5.13** | **293** | PN | | **Pn** | **11 13 35.5** | **+1.1** |
| **KLY** | **Klyuchi** | **5.16** | **297** | *eP* | | **Pn** | **11 13 33.1** | **-1.6** |
| **KLY** | **Klyuchi** | **5.16** | **297** | PN | | **Pn** | **11 13 33.0** | **-1.6** |
| **KIRR** | **Kirishev** | **5.21** | **292** | *eP* | | **Pn** | **11 13 36.2** | **+0.6** |
| **KIRR** | **Kirishev** | **5.21** | **292** | PN | | **Pn** | **11 13 36.2** | **+0.6** |
| **KMNR** | **Kamenistaya** | **5.22** | **290** | *eP* | | **Pn** | **11 13 36.6** | **+1.0** |
| **KMNR** | **Kamenistaya** | **5.22** | **290** | PN | | **Pn** | **11 13 36.6** | **+1.0** |
| **KPT** | **Kopyto** | **5.28** | **292** | *eP* | | **Pn** | **11 13 37.6** | **+1.2** |
| **KPT** | **Kopyto** | **5.28** | **292** | PN | | **Pn** | **11 13 37.6** | **+1.2** |
| **SPN** | **Mys Shipunski** | **5.43** | **261** | *eP* | | **Pn** | **11 13 36.9** | **-1.5** |
| **SPN** | **Mys Shipunski** | **5.43** | **261** | PN | | **Pn** | **11 13 36.9** | **-1.5** |
| **KOZ** | **Kozyrevsk** | **5.49** | **293** | *eP* | | **Pn** | **11 13 40.8** | **+1.5** |
| **KOZ** | **Kozyrevsk** | **5.49** | **293** | PN | | **Pn** | **11 13 40.8** | **+1.5** |
| **SRDR** | **Sredinnyy** | **5.65** | **295** | *eP* | | **Pn** | **11 13 42.4** | **+0.8** |
| **SRDR** | **Sredinnyy** | **5.65** | **295** | PN | | **Pn** | **11 13 42.3** | **+0.8** |
| **NLC** | **Nalytchevo** | **5.80** | **263** | *eP* | | **Pn** | **11 13 42.3** | **-1.3** |
| **NLC** | **Nalytchevo** | **5.80** | **263** | PN | | **Pn** | **11 13 42.2** | **-1.3** |
| **OSSR** | **Ossora** | **5.94** | **329** | *eP* | | **Pn** | **11 13 44.0** | **-1.5** |
| **OSSR** | **Ossora** | **5.94** | **329** | PN | | **Pn** | **11 13 43.9** | **-1.5** |
| **SMAR** | **Somma** | **6.10** | **265** | *eP* | | **Pn** | **11 13 46.5** | **-1.3** |
| **SMAR** | **Somma** | **6.10** | **265** | PN | | **Pn** | **11 13 46.5** | **-1.3** |
| **UGLR** | **Uglovaya** | **6.10** | **264** | *eP* | | **Pn** | **11 13 47.1** | **-0.6** |
| **UGLR** | **Uglovaya** | **6.10** | **264** | PN | | **Pn** | **11 13 47.0** | **-0.6** |
| **ESO** | **Esso** | **6.11** | **290** | *eP* | | **Pn** | **11 13 47.8** | **+0.1** |
| **ESO** | **Esso** | **6.11** | **290** | PN | | **Pn** | **11 13 47.8** | **+0.1** |
| **AVH** | **Avacha** | **6.13** | **265** | *eP* | | **Pn** | **11 13 47.4** | **-0.7** |
| **AVH** | **Avacha** | **6.13** | **265** | PN | | **Pn** | **11 13 47.4** | **-0.7** |
| **DALK** | **Dalny** | **6.18** | **263** | *eP* | | **Pn** | **11 13 47.8** | **-0.9** |
| **DALK** | **Dalny** | **6.18** | **263** | PN | | **Pn** | **11 13 47.8** | **-0.9** |
| **KOK** | **Koryaka** | **6.19** | **265** | *eP* | | **Pn** | **11 13 48.2** | **-0.7** |
| **KOK** | **Koryaka** | **6.19** | **265** | PN | | **Pn** | **11 13 48.2** | **-0.7** |
| **PET** | **Petropavlovsk** | **6.24** | **263** | Pn | | **Pn** | **11 13 48.6** | **-1.0** |
| **PET** | **Petropavlovsk** | **6.24** | **263** | *eP* | | **Pn** | **11 13 48.7** | **-0.8** |
| **PET** | **Petropavlovsk** | **6.24** | **263** | *e*PN | | **Pn** | **11 13 48.5** | **-1.0** |
| PET | | | | MLR | | MLR | | |
| | comp=Z,200nm,13.0s | | | | | | | |
| PET | | | | MLR | | MLR | | |
| | comp=Z,500nm,12.0s | | | | | | | |
| **TILK** | **Tilichiki** | **6.37** | **347** | *eP* | | **Pn** | **11 13 50.5** | **-0.7** |
| **TILK** | **Tilichiki** | **6.37** | **347** | PN | | **Pn** | **11 13 50.5** | **-0.7** |
| **GNL** | **Ganaly** | **6.51** | **269** | *eP* | | **Pn** | **11 13 53.4** | **-0.1** |
| **GNL** | **Ganaly** | **6.51** | **269** | PN | | **Pn** | **11 13 53.3** | **-0.1** |
| **KRMR** | **Karymshinskiy** | **6.60** | **262** | *eP* | | **Pn** | **11 13 53.7** | **-0.8** |
| **KRMR** | **Karymshinskiy** | **6.60** | **262** | PN | | **Pn** | **11 13 53.7** | **-0.8** |
| **MTVR** | **Mutnovka** | **6.68** | **259** | *eP* | | **Pn** | **11 13 54.8** | **-0.9** |
| **MTVR** | **Mutnovka** | **6.68** | **259** | PN | | **Pn** | **11 13 54.8** | **-0.9** |
| **GRL** | **Gorelyy** | **6.72** | **260** | *eP* | | **Pn** | **11 13 56.6** | **+0.3** |
| **GRL** | **Gorelyy** | **6.72** | **260** | PN | | **Pn** | **11 13 56.6** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **6.78** | **265** | Pn | | **Pn** | **11 13 57.0** | **0.0** |
| | comp=Z,7.0nm,0.3s,baz=81,slow=19,SNR=19 | | | | | | | |
| PETK | | | | Sn | | **Sn** | **11 15 12.3** | **-0.5** |
| | comp=Z,5.9nm,0.3s,baz=78,slow=24,SNR=5.0 | | | | | | | |
| PETK | | | | LR | | LR | 11 16 36.9 | |
| | comp=Z,376nm,20.1s,baz=84,slow=38 | | | | | | | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.78** | **265** | PN | | **Pn** | **11 13 57.0** | **0.0** |
| **ASAK** | **Asacha** | **6.88** | **258** | *eP* | | **Pn** | **11 13 58.0** | **-0.4** |
| **ASAK** | **Asacha** | **6.88** | **258** | PN | | **Pn** | **11 13 57.9** | **-0.4** |
| **PALN** | **Palana** | **6.90** | **318** | *eP* | | **Pn** | **11 14 00.1** | **+1.5** |
| **PALN** | **Palana** | **6.90** | **318** | PN | | **Pn** | **11 14 00.1** | **+1.5** |
| **AMKA** | **Amchitka** | **6.92** | **111** | Pn | | **Pn** | **11 13 58.0** | **-0.8** |
| **KDTR** | **Khodutka, Kamc** | **7.00** | **254** | *eP* | | **Pn** | **11 13 58.6** | **-1.4** |
| **KDTR** | **Khodutka, Kamc** | **7.00** | **254** | PN | | **Pn** | **11 13 58.5** | **-1.4** |
| **APC** | **Apacha** | **7.14** | **264** | *eP* | | **Pn** | **11 14 01.8** | **-0.1** |
| **APC** | **Apacha** | **7.14** | **264** | PN | | **Pn** | **11 14 01.8** | **-0.1** |
| **KMSK** | **Kamenskaya** | **8.34** | **351** | *eP* | | **Pn** | **11 14 17.2** | **-1.1** |
| **KMSK** | **Kamenskaya** | **8.34** | **351** | PN | | **Pn** | **11 14 17.1** | **-1.1** |
| **SKR** | **Severo-Kuril's** | **8.61** | **251** | *e*PN | | **Pn** | **11 14 20.8** | **-1.2** |
| **KIWB** | **Kanaga Island** | **8.72** | **100** | Pn | | **Pn** | **11 14 22.6** | **-1.0** |
| **ADK** | **Adak** | **8.98** | **100** | *eP* | | **Pn** | **11 14 25.2** | **-1.9** |
| **ADK** | **Adak** | **8.98** | **100** | PN | | **Pn** | **11 14 24.8** | **-2.3** |
| **GSTR** | **Great Sitkin T** | **9.27** | **98** | Pn | | **Pn** | **11 14 30.3** | **-0.8** |
| **MA2** | **Magadan** | **11.24** | **305** | LR | LR | 11 19 10.5 | | |
| | comp=Z,179nm,18.1s,baz=92,slow=37 | | | | | | | |
| **SEY** | **Seymchan** | **12.20** | **322** | Pn | | **Pn** | **11 15 08.2** | **-2.8** |
| | comp=Z,0.2nm,0.3s,baz=122,slow=12,SNR=9.2 | | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **SEY** | **Seymchan** | **12.20** | **322**⇑ | *e*PN | | **Pn** | **11 15 12.3** | **+1.2** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| SEY | | | | MLR | | MLR | | |
| | comp=Z,319nm,13.0s | | | | | | | |
| **BILL** | **Bilibino** | **13.87** | **356** | *eP* | | **Pn** | **11 15 33.6** | **-0.2** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.5s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,224nm,12.0s | | | | | | | |
| **M14K** | **Bethel** | **16.82** | **56** | | | **P** | **11 16 14.9** | **+0.6** |
| M14K | | | | IAmb | | IAmb | 11 16 17.3 | |
| | comp=Z,32nm,1.1s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **17.34** | **51** | P | | **P** | **11 16 21.4** | **+1.3** |
| K15K | | | | IAmb | | IAmb | 11 16 43.3 | |
| | comp=Z,31nm,1.1s | | | | | | | |
| **N15K** | **Kwethluk River** | **17.66** | **58** | P | | **P** | **11 16 25.5** | **+1.8** |
| N15K | | | | IAmb | | IAmb | 11 16 42.7 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **J16K** | **Anvik River** | **18.01** | **48** | P | | **Pn** | **11 16 28.2** | **+0.9** |
| **YSS** | **Yuzh-Sakhalins** | **18.08** | **257** | *eP* | | P | 11 16 34.8 | +6.4 |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **L16K** | **Owhat River** | **18.17** | **53** | P | | **Pn** | **11 16 30.6** | **+1.4** |
| **M16K** | **Timber Creek** | **18.31** | **55** | P | | **P** | **11 16 31.6** | **+0.7** |
| **C16K** | **Lisburne Hills** | **18.48** | **31** | P | | **P** | **11 16 34.1** | **+1.5** |
| **CHGN** | **Chignik** | **18.61** | **70** | P | | **P** | **11 16 34.8** | **+0.7** |
| CHGN | | | | IAmb | | IAmb | 11 16 36.0 | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **M17K** | **Holitna River** | **19.09** | **55** | P | | **P** | **11 16 40.8** | **+1.5** |
| **N17K** | **Nushagak Hills** | **19.13** | **57** | P | | **P** | **11 16 41.2** | **+1.5** |
| **L18K** | **Granite Mounta** | **19.55** | **52** | P | | **P** | **11 16 46.2** | **+1.9** |
| **PLK4** | **Peulik 4** | **19.58** | **66** | P | | **P** | **11 16 45.7** | **+0.8** |
| PLK4 | | | | IAmb | | IAmb | 11 16 47.3 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **G18K** | **Tagagawik** | **19.64** | **41** | P | | **P** | **11 16 47.5** | **+2.2** |
| G18K | | | | IAmb | | IAmb | 11 16 58.4 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **N18K** | **Kilae Creek** | **19.78** | **57** | P | | **P** | **11 16 48.3** | **+1.4** |
| **ASAJ** | **Asahikawa** | **19.88** | **250** | LR | | LR | 11 25 36.7 | |
| | comp=Z,76nm,18.2s,baz=45,slow=40 | | | | | | | |
| **C18K** | **Utukok River** | **19.96** | **32** | P | | **P** | **11 16 50.6** | **+1.8** |
| C18K | | | | IAmb | | IAmb | 11 16 58.1 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **ACHA** | **Angle Creek He** | **20.09** | **64** | P | | **P** | **11 16 51.4** | **+1.1** |
| **O18K** | **Koktuh Hills** | **20.09** | **59** | P | | **P** | **11 16 51.5** | **+1.2** |
| O18K | | | | IAmb | | IAmb | 11 17 00.8 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **20.31** | **39** | P | | **P** | **11 16 54.0** | **+1.5** |
| F19K | | | | IAmb | | IAmb | 11 17 05.5 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **G19K** | **Purcell Mounta** | **20.32** | **41** | P | | **P** | **11 16 54.8** | **+2.1** |
| G19K | | | | IAmb | | IAmb | 11 17 05.0 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **J19K** | **Poorman** | **20.34** | **47** | P | | **P** | **11 16 53.9** | **+1.0** |
| J19K | | | | IAmb | | IAmb | 11 17 07.1 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **H19K** | **Roundabout Mou** | **20.38** | **43** | P | | **P** | **11 16 54.8** | **+1.5** |
| **L19K** | **White Mountain** | **20.40** | **53** | P | | **P** | **11 16 55.1** | **+1.5** |
| L19K | | | | IAmb | | IAmb | 11 17 05.0 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **N19K** | **Bonanza Creek** | **20.47** | **57** | P | | **P** | **11 16 55.7** | **+1.2** |
| N19K | | | | IAmb | | IAmb | 11 16 56.5 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **M19K** | **Big River Lodg** | **20.59** | **54** | P | | **P** | **11 16 57.1** | **+1.5** |
| M19K | | | | IAmb | | IAmb | 11 17 09.3 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **20.92** | **62** | P | | **P** | **11 16 60.0** | **+0.7** |
| **I20K** | **Naaghedeneel** | **21.00** | **45** | P | | **P** | **11 17 01.4** | **+1.4** |
| **J20K** | **Nowinta River** | **21.01** | **47** | P | | **P** | **11 17 01.1** | **+1.0** |
| **F20K** | **Avaraart Lake** | **21.14** | **39** | P | | **P** | **11 17 02.9** | **+1.4** |
| F20K | | | | IAmb | | IAmb | 11 17 19.9 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **M20K** | **Styx River** | **21.18** | **54** | P | | **P** | **11 17 03.2** | **+1.1** |
| **OHAK** | **Old Harbor** | **21.28** | **67** | P | | **P** | **11 17 02.1** | **-1.0** |
| **KDAK** | **Kodiak Island** | **21.58** | **65** | P | | **P** | **11 17 03.1** | **-3.2** |
| | comp=Z,8.8nm,1.2s,baz=306,slow=8.7,SNR=14 | | | | | | | |
| | comp=Z,8.8nm,1.2s | | | | | | | |
| **KDAK** | **Kodiak Island** | **21.58** | **65**⇑ | *eP* | | **P** | **11 17 05.9** | **-0.4** |
| KDAK | | | | pmax | | pmax | | |
| | comp=Z,55nm,1.8s | | | | | | | |
| **SYI** | **Shuyak Island** | **21.59** | **63** | P | | **P** | **11 17 05.9** | **-0.5** |
| **YAK** | **Yakutsk** | **21.81** | **307** | LR | | LR | 11 25 49.3 | |
| | comp=Z,93nm,18.5s,baz=94,slow=38 | | | | | | | |
| **YAK** | **Yakutsk** | **21.81** | **307**⇓ | *e*P | | **P** | **11 17 10.3** | **+1.5** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,21nm,0.7s | | | | | | | |
| YAK | | | | MLR | | MLR | | |
| | comp=Z,118nm,16.0s | | | | | | | |
| **H21K** | **Melozitna Rive** | **21.88** | **44** | P | | **P** | **11 17 10.9** | **+1.5** |
| H21K | | | | IAmb | | IAmb | 11 17 25.0 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **SKT** | **Skwentna** | **21.94** | **54** | P | | **P** | **11 17 11.6** | **+1.4** |
| SKT | | | | IAmb | | IAmb | 11 17 40.8 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **F21K** | **Alatna River** | **22.02** | **39** | P | | **P** | **11 17 12.3** | **+1.2** |
| **CNPM** | **China Poot** | **22.11** | **60** | P | | **P** | **11 17 12.6** | **+0.5** |
| **BRLK** | **Bradley Lake** | **22.28** | **59** | P | | **P** | **11 17 14.2** | **+0.4** |
| **SUA** | **Susitna One** | **22.30** | **55** | P | | **P** | **11 17 14.1** | **0.0** |
| **MLY** | **Manley** | **22.61** | **46** | P | | **P** | **11 17 17.9** | **+0.6** |
| **O22K** | **Cooper Landing** | **22.82** | **58** | P | | **P** | **11 17 19.1** | **-0.4** |
| **PMR** | **Palmer** | **23.07** | **55** | P | | **P** | **11 17 22.1** | **0.0** |
| **PMR** | **Palmer** | **23.07** | **55** | P | | **P** | **11 17 22.1** | **0.0** |
| PMR | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **23.20** | **46** | P | | **P** | **11 17 24.6** | **+1.2** |
| **RND** | **Reindeer** | **23.25** | **50** | P | | **P** | **11 17 22.1** | **-1.9** |
| RND | | | | IAmb | | IAmb | 11 17 36.1 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **RND** | **Reindeer** | **23.25** | **50** | P | | **P** | **11 17 22.1** | **-1.9** |
| RND | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **23.37** | **273** | LR | | LR | 11 26 46.0 | |
| | comp=Z,88nm,19.6s,baz=55,slow=37 | | | | | | | |
| **KLR** | **Kul'dur** | **23.37** | **273**⇑ | *eP* | | **P** | **11 17 25.2** | **0.0** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| KLR | | | | MLR | | MLR | | |
| | comp=Z,79nm,16.0s | | | | | | | |
| **KNK** | **Knik Glacier** | **23.40** | **55** | P | | **P** | **11 17 25.5** | **+0.1** |
| KNK | | | | IAmb | | IAmb | 11 17 40.8 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **SML** | **Sawmill** | **23.45** | **54** | P | | **P** | **11 17 25.5** | **-0.5** |
| **PWL** | **Port Wells** | **23.48** | **56** | P | | **P** | **11 17 24.7** | **-1.5** |
| **MDM** | **Murphy Dome** | **23.65** | **46** | P | | **P** | **11 17 28.6** | **+0.7** |
| **CCB** | **Clear Creek Bu** | **23.80** | **47** | P | | **P** | **11 17 29.6** | **+0.5** |
| CCB | | | | IAmb | | IAmb | 11 17 40.4 | |
| | comp=Z,8.1nm,0.7s | | | | | | | |
| **COLA** | **College** | **23.80** | **46** | *ce*P | | **P** | **11 17 30.8** | **+1.6** |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **23.85** | **37** | P | | **P** | **11 17 29.6** | **0.0** |
| **DHY** | **Denali Highway** | **23.90** | **51** | P | | **P** | **11 17 30.8** | **+0.5** |
| **SCM** | **Sheep Creek Mo** | **23.93** | **54** | P | | **P** | **11 17 29.8** | **-0.7** |
| **SCM** | **Sheep Creek Mo** | **23.93** | **54** | P | | **P** | **11 17 29.8** | **-0.7** |
| SCM | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **POKR** | **Poker Flat Res** | **24.01** | **46** | P | | **P** | **11 17 32.4** | **+1.2** |
| **HDA** | **Harding Lake** | **24.15** | **48** | IAmb | | IAmb | 11 17 46.2 | |
| | comp=Z,7.4nm,0.9s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **24.20** | **42** | P | | **P** | **11 17 32.7** | **-0.2** |
| G24K | | | | IAmb | | IAmb | 11 17 44.3 | |
| | comp=Z,9.1nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **24.21** | **47** | P | | **P** | **11 17 31.8** | **-1.1** |
| | comp=Z,2.8nm,0.8s,baz=248,slow=7.3,SNR=30 | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **ZEA** | **Zeya** | **24.25** | **286** | *eP* | | **P** | **11 17 32.7** | **-0.8** |
| ZEA | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| ZEA | | | | MLR | | MLR | | |
| | comp=N,100nm,13.0s | | | | | | | |
| ZEA | | | | MLR | | MLR | | |
| | comp=Z,100nm,15.0s | | | | | | | |
| **TIXI** | **Tiksi** | **24.44** | **330** | P | | **P** | **11 17 34.9** | **-0.1** |
| **TIXI** | **Tiksi** | **24.44** | **330** | LR | | LR | 11 27 08.1 | |
| | comp=Z,90nm,19.9s,baz=143,slow=37 | | | | | | | |
| **TIXI** | **Tiksi** | **24.44** | **330** | *ce*P | | **P** | **11 17 34.2** | **-0.7** |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| TIXI | | | | MLR | | MLR | | |
| | comp=Z,113nm,17.0s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **24.46** | **53** | P | | **P** | **11 17 35.7** | **+0.3** |
| **KLU** | **Klutina** | **24.61** | **55** | P | | **P** | **11 17 36.9** | **+0.1** |
| KLU | | | | IAmb | | IAmb | 11 17 57.9 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **PRP** | **Porcupine Dome** | **24.84** | **45** | P | | **P** | **11 17 40.4** | **+1.5** |
| **J25K** | **Salcha River,** | **24.85** | **47** | P | | **P** | **11 17 38.6** | **-0.2** |
| **FYU** | **Fort Yukon** | **25.07** | **43** | P | | **P** | **11 17 41.6** | **+0.9** |
| **N25K** | **Chitina, Valde** | **25.24** | **54** | P | | **P** | **11 17 41.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NEW** | **Newport** | **44.68** | **66** | LR | LR | 11 37 24.7 | | |
| | comp=Z,65nm,21.4s,baz=293,slow=34 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **45.65** | **77** | LR | LR | 11 37 20.1 | | |
| | comp=Z,48nm,19.5s,baz=304,slow=33 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.46** | **306** | P | **P** | **11 20 42.6** | **-0.5** | |
| | comp=Z,0.4nm,0.4s,baz=56,slow=5.4,SNR=1.8 | | | | | | | |
| ZALV | | | | LR | LR | 11 42 04.9 | | |
| | comp=Z,56nm,19.6s,baz=26,slow=39 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **46.75** | **353** | P | **P** | **11 20 43.8** | **-1.3** | |
| | comp=Z,11nm,1.1s,baz=33,slow=19,SNR=2.3 | | | | | | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **LZH** | **Lanzhou** | **47.54** | **275** | *e*P | P | 11 20 41.5 | -10 | |
| LZH | | | | sP | pP | 11 20 52.4 | -10 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **47.76** | **300** | ⇓*i*P | **P** | **11 20 52.9** | **-0.6** | |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| DGZ | | | | MLR | MLR | | | |
| | comp=Z,72nm,15.0s | | | | | | | |
| **FFC** | **Flin Flon** | **48.30** | **51** | *i* P | **P** | **11 20 59.0** | **+1.6** | |
| **PNTR** | **Pine Nut** | **49.18** | **77** | P | **P** | **11 21 05.2** | **+0.6** | |
| **WAKR** | **Walker** | **49.67** | **78** | P | **P** | **11 21 09.1** | **+0.8** | |
| WAKR | | | | IAmb | IAmb | 11 21 17.6 | | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **YHL** | **Hebgen Lake** | **50.01** | **66** | IAmb | IAmb | 11 21 22.2 | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **KVN** | **Kaiserville** | **50.06** | **76** | P | **P** | **11 21 11.6** | **+0.3** | |
| KVN | | | | IAmb | IAmb | 11 21 26.6 | | |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **KVN** | **Kaiserville** | **50.06** | **76** | P | **P** | **11 21 11.6** | **+0.3** | |
| KVN | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **50.37** | **77** | P | **P** | **11 21 13.9** | **+0.2** | |
| | comp=Z,0.9nm,0.7s,baz=311,slow=7.1,SNR=9.9 | | | | | | | |
| NVAR | | | | LR | LR | 11 39 13.2 | | |
| | comp=Z,40nm,21.5s,baz=306,slow=32 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **50.78** | **67** | IAmb | IAmb | 11 21 46.4 | | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **RLMT** | **Red Lodge** | **50.85** | **65** | IAmb | IAmb | 11 21 18.7 | | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| **WMQ** | **Urumqi** | **51.43** | **294** | *e*P | **P** | **11 21 24.3** | **+2.9** | |
| WMQ | | | | LR | LR | | | |
| | comp=N,490nm,18.3s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=E,390nm,17.1s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,130nm,24.0s | | | | | | | |
| **KURK** | **Kurchatov** | **51.45** | **306** | P | **P** | **11 21 20.5** | **-0.8** | |
| **KURK** | **Kurchatov** | **51.45** | **306** | *de*P | **P** | **11 21 20.0** | **-1.4** | |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| KURK | | | | MLR | MLR | | | |
| | comp=Z,78nm,16.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.56** | **306** | P | **P** | **11 21 20.9** | **-1.3** | |
| | comp=Z,3.6nm,0.8s,baz=53,slow=7.6,SNR=18 | | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **SPR3** | **Spring Creek 3** | **52.23** | **74** | IAmb | IAmb | 11 21 45.1 | | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.26** | **300** | P | **P** | **11 21 26.2** | **-1.3** | |
| | comp=Z,0.9nm,0.6s,baz=54,slow=6.8,SNR=7.4 | | | | | | | |
| MKAR | | | | LR | LR | 11 45 12.0 | | |
| | comp=Z,74nm,19.0s,baz=47,slow=38 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **52.28** | **67** | P | **P** | **11 21 27.8** | **-0.2** | |
| | comp=Z,1.1nm,0.8s,baz=317,slow=3.8,SNR=12 | | | | | | | |
| PDAR | | | | LR | LR | 11 43 33.8 | | |
| | comp=Z,40nm,18.9s,baz=316,slow=36 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **52.41** | **300** | P | **P** | **11 21 28.2** | **-0.4** | |
| MAKZ | | | | IAmb | IAmb | 11 21 42.4 | | |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| **MAKZ** | **Makanchi** | **52.41** | **300** | P | **P** | **11 21 28.2** | **-0.4** | |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **GWY** | **Greenwater Val** | **52.86** | **78** | IAmb | IAmb | 11 21 50.5 | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **PRN** | **Pahroc Range** | **52.93** | **76** | IAmb | IAmb | 11 21 56.8 | | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **BVAR** | **Borovoye Array** | **53.64** | **312** | P | **P** | **11 21 36.8** | **-0.7** | |
| | comp=Z,8.3nm,0.7s,baz=45,slow=8.6,SNR=27 | | | | | | | |
| BVAR | | | | LR | LR | 11 45 36.0 | | |
| | comp=Z,92nm,19.3s,baz=55,slow=37 | | | | | | | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.66** | **345** | P | **P** | **11 21 36.3** | **-1.2** | |
| | comp=Z,2.2nm,0.8s,baz=42,slow=14,SNR=5.0 | | | | | | | |
| ARCES | | | | LR | LR | 11 47 20.5 | | |
| | comp=Z,35nm,18.8s,baz=54,slow=39 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **53.66** | **312** | *d* P | **P** | **11 21 36.7** | **-1.0** | |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| BRVK | | | | MLR | MLR | | | |
| | comp=Z,76nm,14.0s | | | | | | | |
| **TMUT** | **Trail Mountain** | **53.77** | **71** | IAmb | IAmb | 11 21 40.9 | | |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **54.06** | **52** | P | **P** | **11 21 40.1** | **-0.5** | |
| | comp=Z,1.2nm,0.7s,baz=334,slow=5.3,SNR=2.3 | | | | | | | |
| ULM | | | | LR | LR | 11 46 50.5 | | |
| | comp=Z,51nm,19.7s,baz=287,slow=38 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **LCMT** | **Little Creek M** | **54.23** | **75** | IAmb | IAmb | 11 21 44.4 | | |
| | comp=Z,2.1nm,0.9s | | | | | | | |
| **RSSD** | **Black Hills** | **54.28** | **62** | P | **P** | **11 21 42.6** | **0.0** | |
| RSSD | | | | IAmb | IAmb | 11 21 53.9 | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **RSSD** | **Black Hills** | **54.28** | **62** | P | **P** | **11 21 42.6** | **0.0** | |
| RSSD | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **54.81** | **80** | LR | LR | 11 40 46.3 | | |
| | comp=Z,65nm,21.2s,baz=281,slow=31 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **55.45** | **18** | LR | LR | 11 46 04.3 | | |
| | comp=Z,32nm,21.9s,baz=327,slow=37 | | | | | | | |
| **PZH** | **PanZhiHua** | **55.72** | **269** | P | **P** | **11 21 53.3** | **+0.2** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,200nm,4.2s | | | | | | | |
| **ARU** | **Arti** | **55.94** | **321** | P | **P** | **11 21 52.8** | **-1.4** | |
| | comp=Z,3.7nm,0.3s,baz=16,slow=5.0,SNR=6.0 | | | | | | | |
| | comp=Z,3.7nm,0.3s | | | | | | | |
| **ARU** | **Arti** | **55.94** | **321** | *d* P | **P** | **11 21 53.3** | **-0.8** | |
| ARU | | | | | | 11 23 53.7 | | |
| ARU | | | | S | **S** | **11 29 39.4** | **+0.2** | |
| ARU | | | | SS | **SS** | **11 33 22.0** | **-2.5** | |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **57.28** | **70** | IAmb | IAmb | 11 22 06.3 | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **KIRV** | **Kirov** | **57.41** | **327** | LR | LR | 11 48 17.1 | | |
| | comp=Z,51nm,20.4s,baz=46,slow=38 | | | | | | | |
| **KIRV** | **Kirov** | **57.41** | **327** | ⇓*e*P | **P** | **11 22 06.9** | **+2.4** | |
| **AAK** | **Ala-Archa** | **59.13** | **301** | ⇓*e*P | **P** | **11 22 16.6** | **-0.4** | |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| AAK | | | | MLR | MLR | | | |
| | comp=Z,81nm,18.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **59.53** | **72** | LR | LR | 11 46 16.3 | | |
| | comp=Z,41nm,19.6s,baz=46,slow=34 | | | | | | | |
| **ANMO** | **Albuquerque** | **59.53** | **72** | ⇓*e*P | **P** | **11 22 21.1** | **+1.2** | |
| **KSH** | **Kashi** | **60.67** | **298** | P | **P** | **11 22 30.8** | **+3.2** | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **60.74** | **317** | P | **P** | **11 22 26.8** | **-0.9** | |
| | comp=Z,3.0nm,0.8s,baz=58,slow=5.5,SNR=8.3 | | | | | | | |
| AKTO | | | | LR | LR | 11 51 25.4 | | |
| | comp=Z,84nm,18.4s,baz=68,slow=39 | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **ABKAR** | **Akbulak array** | **60.87** | **315** | P | **P** | **11 22 27.6** | **-1.0** | |
| ABKAR | | | | IAmb | IAmb | 11 22 28.2 | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **60.94** | **341** | P | **P** | **11 22 28.4** | **-0.5** | |
| | comp=Z,2.1nm,0.8s,baz=46,slow=8.0,SNR=5.4 | | | | | | | |
| FINES | | | | LR | LR | 11 50 47.7 | | |
| | comp=Z,34nm,21.6s,baz=45,slow=38 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **60.94** | **341** | *i* P | **P** | **11 22 29.6** | **+0.7** | |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **BORG** | **Borgarnes** | **61.05** | **5** | LR | LR | 11 51 08.5 | | |
| | comp=Z,22nm,18.1s,baz=335,slow=38 | | | | | | | |
| **SMWD** | **Samnorwood** | **62.82** | **67** | P | **P** | **11 22 41.6** | **-0.4** | |
| **BELG** | **Belogornoye** | **63.05** | **324** | LR | LR | 11 52 38.2 | | |
| | comp=Z,83nm,18.4s,baz=55,slow=38 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **63.55** | **265** | P | **P** | **11 22 48.3** | **+1.2** | |
| | comp=Z,2.1nm,0.8s,baz=20,slow=8.5,SNR=9.7 | | | | | | | |
| CMAR | | | | LR | LR | 11 52 29.1 | | |
| | comp=Z,50nm,18.1s,baz=125,slow=38 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **63.55** | **265** | *i* P | **P** | **11 22 48.2** | **+1.2** | |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **63.68** | **348** | P | **P** | **11 22 46.6** | **-0.7** | |
| | comp=Z,2.1nm,0.6s,baz=15,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **63.68** | **348** | P | **P** | **11 22 46.3** | **-1.0** | |
| | comp=Z,1.7nm,0.6s,baz=16,slow=6.7,SNR=7.1 | | | | | | | |
| NOA | | | | LR | LR | 11 51 05.9 | | |
| | comp=Z,14nm,21.4s,baz=120,slow=37 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **HNR** | **Honiara** | **63.92** | **190** | LR | LR | 11 45 15.4 | | |
| | comp=Z,580nm,19.9s,baz=7.0,slow=31 | | | | | | | |
| **OBN** | **Obninsk** | **64.16** | **332** | *e*P | **P** | **11 22 48.9** | **-1.5** | |
| OBN | | | | *e* | | 11 23 24.9 | | |
| OBN | | | | *e* | | 11 25 12.7 | | |
| OBN | | | | *e*PPP | PPP | 11 26 41.5 | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **64.24** | **347** | P | **P** | **11 22 49.3** | **-1.6** | |
| | comp=Z,2.5nm,0.8s,baz=53,slow=13,SNR=3.5 | | | | | | | |
| HFS | | | | LR | LR | 11 52 29.4 | | |
| | comp=Z,20nm,19.6s,baz=34,slow=38 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **65.29** | **74** | P | **P** | **11 22 58.8** | **+0.5** | |
| | comp=Z,1.5nm,0.7s,baz=299,slow=4.3,SNR=25 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **MNK** | **Minsk** | **66.93** | **337** | *i* P | **P** | **11 23 07.9** | **-0.4** | |
| MNK | | | | *i* | | 11 25 34.8 | | |
| MNK | | | | *i* PPP | PPP | 11 27 11.2 | | |
| MNK | | | | *i* S | **S** | **11 31 58.8** | **+0.3** | |
| MNK | | | | *i* SS | **SS** | **11 36 17.8** | **+1.7** | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,14nm,1.1s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,24nm,0.9s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,246nm,22.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,225nm,20.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,32nm,17.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.08** | **334** | P | **P** | **11 23 27.2** | **-0.9** | |
| | comp=Z,0.4nm,0.3s,baz=28,slow=6.2,SNR=5.4 | | | | | | | |
| AKASG | | | | LR | LR | 11 58 09.0 | | |
| | comp=Z,35nm,18.3s,baz=49,slow=39 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.08** | **334** | *i* P | **P** | **11 23 28.2** | **+0.1** | |
| **AKBB** | **Malin Array Si** | **70.08** | **334** | ⇑*e*P | **P** | **11 23 27.7** | **-0.4** | |
| **EKA** | **Eskdalemuir Ar** | **70.56** | **355** | P | **P** | **11 23 29.5** | **-1.5** | |
| | comp=Z,1.1nm,0.7s,baz=68,slow=4.1,SNR=3.5 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **70.84** | **55** | LR | LR | 11 55 49.5 | | |
| | comp=Z,67nm,19.4s,baz=331,slow=37 | | | | | | | |
| **KBZ** | **Khabaz** | **72.07** | **322** | P | **P** | **11 23 40.6** | **+0.4** | |
| | comp=Z,0.9nm,0.5s,baz=72,slow=6.4,SNR=3.5 | | | | | | | |
| KBZ | | | | LR | LR | 11 58 50.1 | | |
| | comp=Z,36nm,19.5s,baz=119,slow=39 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **KBZ** | **Khabaz** | **72.07** | **322** | ⇑*e*P | **P** | **11 23 40.8** | **+0.6** | |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **MSVF** | **Nonsavu** | **72.14** | **171** | LR | LR | 11 48 50.8 | | |
| | comp=Z,25nm,21.1s,baz=271,slow=30 | | | | | | | |
| **VRAC** | **Vranov** | **74.19** | **342** | LR | LR | 12 00 13.2 | | |
| | comp=Z,30nm,19.8s,baz=26,slow=39 | | | | | | | |
| **GNI** | **Garni** | **74.48** | **319** | LR | LR | 12 00 47.7 | | |
| | comp=Z,47nm,18.0s,baz=187,slow=39 | | | | | | | |
| **GNI** | **Garni** | **74.48** | **319** | *de*P | **P** | | | |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **KHC** | **Kasperske Hory** | **74.89** | **344** | ⇓*e*P | **P** | **11 23 57.3** | **+0.5** | |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **MLR** | **Muntele Rosu** | **75.74** | **334** | LR | LR | 12 00 40.3 | | |
| | comp=Z,54nm,18.4s,baz=115,slow=38 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **77.76** | **345** | LR | LR | 12 01 13.6 | | |
| | comp=Z,13nm,18.3s,baz=255,slow=38 | | | | | | | |
| **BR131** | **Keskin Array S** | **78.81** | **326** | ⇑*e*P | **P** | **11 24 19.1** | **-0.1** | |
| **BRTR** | **Keskin Array B** | **78.81** | **326** | P | **P** | **11 24 18.6** | **-0.5** | |
| | comp=Z,1.1nm,0.7s,baz=48,slow=4.7,SNR=4.9 | | | | | | | |
| BRTR | | | | LR | LR | 12 01 33.6 | | |
| | comp=Z,20nm,19.4s,baz=99,slow=38 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.81** | **326** | *i* P | **P** | **11 24 19.6** | **+0.4** | |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **79.64** | **213** | ⇑*e*P | **P** | **11 24 25.5** | **+1.9** | |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **79.66** | **213** | P | **P** | **11 24 24.7** | **+1.0** | |
| | comp=Z,0.8nm,0.9s,baz=26,slow=5.9,SNR=6.4 | | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **79.66** | **213** | *i* P | **P** | **11 24 26.2** | **+2.5** | |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **CMIG** | **Matias Romero** | **79.85** | **75** | LR | LR | 11 58 26.7 | | |
| | comp=Z,63nm,19.4s,baz=192,slow=35 | | | | | | | |
| **PPT** | **Papeete** | **79.86** | **140** | LR | LR | 11 50 27.6 | | |
| | comp=Z,44nm,21.4s,baz=322,slow=29 | | | | | | | |
| **ASAR** | **Alice Springs** | **83.28** | **212** | P | **P** | **11 24 44.4** | **+1.6** | |
| | comp=Z,1.3nm,0.9s,baz=15,slow=4.8,SNR=8.7 | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **86.22** | **355** | LR | LR | 12 03 22.3 | | |
| | comp=Z,12nm,19.2s,baz=341,slow=36 | | | | | | | |
| **EIL** | **Elat** | **87.45** | **321** | LR | LR | 12 08 25.8 | | |
| | comp=Z,33nm,18.1s,baz=256,slow=39 | | | | | | | |

*IDC **15** 11:34:40.9±2.5,30.45N×48.45E,h0km,mb3.8/4, mbtmp3.9/5,ML3.1/1,MS3.1/6,Error ellipse: s-maj=57.1km s-min=28.9km az=143.0*
*TEH **15** 11:34:46.8,30.88N×48.29E,h17km±20km,ML3.7*
**ISC 15 11:34:45.4±0.9,30.76N±0.07×48.32E±0.07,h10km,n46, σ1§74/38,mb3.8/3,MS3.2/3,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **AHWZ** | **Ahwaz** | **0.63** | **26** | Pg | **Pg** | **11** | **34** | **57.6** | **-0.1** |
| **ABEH** | **Behbahan** | **1.68** | **95** | Pg | **Pn** | **11** | **35** | **17.4** | **+2.6** |
| **JHBN** | **Jahan bin** | **2.48** | **53** | Pn | **Pn** | **11** | **35** | **28.1** | **+1.9** |
| **ZNGN** | **Zangian** | **2.56** | **57** | Pn | **Pn** | **11** | **35** | **29.0** | **+1.8** |
| **IBRJ** | **Brojen** | **2.77** | **65** | Pn | **Pn** | **11** | **35** | **31.9** | **+1.8** |
| **KLNJ** | **Kolanjah** | **2.83** | **84** | Pn | **Pn** | **11** | **35** | **33.4** | **+2.4** |
| **IPIR** | **Pirpir** | **2.91** | **48** | Pn | **Pn** | **11** | **35** | **33.8** | **+1.6** |
| **AHBU** | **AHRAM** | **3.21** | **125** | Pn | **Pn** | **11** | **35** | **39.5** | **+3.7** |
| **ILBA** | **Ilam Banvizeh** | **3.37** | **328** | Pn | **Pn** | **11** | **35** | **39.1** | **+0.9** |
| **HSAM** | **Samen** | **3.45** | **4** | Pn | **Pn** | **11** | **35** | **40.0** | **+0.5** |
| **DSBU** | **Dashti - Bushe** | **3.51** | **132** | Pn | **Pn** | **11** | **35** | **43.7** | **+3.6** |
| **IGAR** | **Gharneh** | **3.58** | **62** | Pn | **Pn** | **11** | **35** | **42.9** | **+1.7** |
| **IRAM** | **Ramesheh** | **3.63** | **72** | Pn | **Pn** | **11** | **35** | **43.8** | **+1.8** |
| **IKLH** | **Kolahrood** | **3.77** | **47** | Pn | **Pn** | **11** | **35** | **45.2** | **+1.4** |
| **IGHG** | **Ghaleghazi** | **3.85** | **338** | Pn | **Pn** | **11** | **35** | **45.7** | **+0.7** |
| **QAMS** | **Qamsar** | **3.95** | **41** | Pn | **Pn** | **11** | **35** | **48.0** | **+1.7** |
| **IZEF** | **Zefreh** | **4.02** | **57** | Pn | **Pn** | **11** | **35** | **48.9** | **+1.5** |
| **HAGD** | **Aghdareh** | **4.11** | **10** | Pn | **Pn** | **11** | **35** | **49.2** | **+0.7** |
| **IDHR** | **Dehrash** | **4.25** | **338** | Pn | **Pn** | **11** | **35** | **50.6** | **+0.2** |
| **KRSH** | **Karshahi** | **4.55** | **44** | Pn | **Pn** | **11** | **35** | **56.5** | **+2.1** |
| **IQOM** | **Qom** | **4.68** | **29** | Pn | **Pn** | **11** | **35** | **57.7** | **+1.3** |
| **ISAD** | **Sadrabad** | **4.74** | **75** | Pn | **Pn** | **11** | **35** | **58.6** | **+1.4** |
| **ISFB** | **Sefidab** | **4.88** | **42** | Pn | **Pn** | **11** | **36** | **00.4** | **+1.5** |
| **ANAR** | **Anarak** | **5.20** | **61** | Pn | **Pn** | **11** | **36** | **05.0** | **+1.6** |
| **SHME** | **Shamn** | **8.34** | **122** | Pn | **Pn** | **11** | **36** | **46.4** | **0.0** |
| **NAZ** | **Nazwa, Dubai** | **8.68** | **130** | Pn | **Pn** | **11** | **36** | **51.3** | **+0.2** |
| **ASUD** | **Al Ashush, Dub** | **8.72** | **133** | Pn | **Pn** | **11** | **36** | **50.2** | **-1.4** |
| **MSFE** | **Esma-Masafi** | **8.77** | **126** | Pn | **Pn** | **11** | **36** | **51.9** | **-0.5** |
| MSFE | | | | Sn | Sn | 11 | 38 | 23.3 | -8.1 |
| **MDH** | **Madha** | **8.91** | **126** | Pn | **Pn** | **11** | **36** | **54.0** | **-0.2** |
| **MZR** | **Muzera** | **9.00** | **148** | Pn | Pn | 11 | 36 | 47.5 | -8.0 |
| **UOSS** | **Minazif** | **9.07** | **128** | Pn | **Pn** | **11** | **36** | **55.5** | **-1.0** |
| **HATD** | **Hatta, Dubai** | **9.10** | **129** | Pn | **Pn** | **11** | **36** | **55.8** | **-1.1** |
| **ASHO** | **Ashiyiah** | **9.15** | **130** | Pn | **Pn** | **11** | **36** | **57.0** | **-0.6** |
| **ALNE** | **Al Ain** | **9.39** | **134** | Pn | Pn | 11 | 36 | 58.1 | -2.7 |
| **GNI** | **Garni** | **9.81** | **344** | LR | LR | 11 | 41 | 35.7 | |
| | comp=Z,56nm,18.3s,baz=170,slow=41 | | | | | | | | |
| **SOHO** | **SOHO** | **9.84** | **130** | Pn | **Pn** | **11** | **37** | **05.3** | **-1.7** |
| **MMAI** | **Mount Meron Ar** | **11.20** | **285** | LR | LR | 11 | 42 | 50.2 | |
| | comp=Z,70nm,18.7s,baz=50,slow=43 | | | | | | | | |
| **EIL** | **Elat** | **11.61** | **268** | LR | LR | 11 | 42 | 53.0 | |
| | comp=Z,80nm,19.8s,baz=70,slow=42 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **14.94** | **311** | Pn | **Pn** | **11** | **38** | **19.2** | **+2.3** |
| | 0.1nm,0.3s,baz=129,slow=14,SNR=2.1 | | | | | | | | |
| | 1.7nm,0.9s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **20.95** | **18** | P | **P** | **11** | **39** | **28.8** | **+0.4** |
| | 1.1nm,0.4s,baz=214,slow=10,SNR=4.0 | | | | | | | | |
| | 1.1nm,0.4s | | | | | | | | |
| **BELG** | **Belogornoye** | **21.62** | **359** | P | **P** | **11** | **39** | **35.8** | **+0.3** |
| | 20nm,0.9s,baz=236,slow=3.6,SNR=7.8 | | | | | | | | |
| | 20nm,0.9s | | | | | | | | |
| **FURI** | **Furi** | **23.54** | **204** | LR | LR | 11 | 48 | 29.3 | |
| | comp=Z,56nm,18.1s,baz=178,slow=36 | | | | | | | | |
| **AAK** | **Ala-Archa** | **24.00** | **53** | LR | LR | 11 | 51 | 11.7 | |
| | comp=Z,84nm,19.7s,baz=24,slow=41 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **30.66** | **49** | P | **P** | **11** | **40** | **57.6** | **-2.4** |
| | 0.9nm,0.9s,baz=232,slow=10,SNR=2.6 | | | | | | | | |
| | 0.9nm,0.9s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.29** | **258** | P | **P** | **11** | **43** | **09.1** | **-2.5** |
| | 0.8nm,0.8s,baz=59,slow=11,SNR=5.0 | | | | | | | | |
| | 0.8nm,0.8s | | | | | | | | |
| **KSRS** | **Korea Array** | **64.42** | **60** | LR | LR | 12 | 17 | 02.2 | |
| | comp=Z,14nm,18.4s,baz=200,slow=39 | | | | | | | | |

*HEL **15** 11:37:00.6±0.1,63.96N×28.10E,h0km,ML1.4,Explosion*
*IDC **15** 11:37:01.7±2.1,63.93N×28.29E,h0km,mbtmp2.4/2, ML1.7/2,Error ellipse: s-maj=49.9km s-min=10.8km az=96.0*
**ISC 15 11:36:59.4±0.8,63.94N±0.02×28.18E±0.03,h0km,n24, σ1§13/36,Finland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **NIF** | **Nilsia** | **0.58** | **197** | PG | **Pb** | **11** | **37** | **11.4** | **-1.0** |
| NIF | | | | SG | **Sb** | **11** | **37** | **19.6** | **-1.6** |
| **RMF** | **Romuvaara** | **0.82** | **69** | PG | **Pb** | **11** | **37** | **16.0** | **-0.5** |
| RMF | | | | SG | **Sb** | **11** | **37** | **26.3** | **-1.7** |
| RMF | | | | MSG | | 11 | 37 | 26.8 | |
| | comp=Z,4.6nm,0.2s | | | | | | | | |
| **OUL** | **Oulu** | **1.52** | **320** | PG | **Pn** | **11** | **37** | **27.5** | **-0.2** |
| OUL | | | | SN | **Sn** | **11** | **37** | **50.3** | **+2.2** |
| **SUF** | **Sumiainen** | **1.53** | **218** | PN | **Pg** | **11** | **37** | **28.8** | **0.0** |
| | baz=33 | | | | | | | | |
| SUF | | | | MSG | | 11 | 37 | 46.5 | |
| | comp=Z,1.8nm,0.2s | | | | | | | | |
| **OUF** | **Merijarvi** | **1.57** | **287** | PG | **Pn** | **11** | **37** | **28.0** | **-0.5** |
| OUF | | | | MSG | | 11 | 37 | 46.5 | |
| | comp=Z,3.1nm,0.2s | | | | | | | | |
| OUF | | | | SN | **Sn** | **11** | **37** | **49.3** | **-0.2** |
| **OBF4** | **Vikkela, Lumij** | **1.60** | **305** | PG | **Pn** | **11** | **37** | **28.6** | **-0.3** |
| | baz=121 | | | | | | | | |
| OBF4 | | | | MSG | | 11 | 37 | 47.3 | |
| | comp=Z,2.3nm,0.2s | | | | | | | | |
| OBF4 | | | | SN | **Sg** | **11** | **37** | **52.8** | **+2.1** |
| **JOF** | **Joensuu** | **1.74** | **125** | PG | **Pg** | **11** | **37** | **32.4** | **-0.3** |
| | baz=303 | | | | | | | | |
| **OBF0** | **Syolatti, Pyha** | **1.81** | **290** | PG | **Pb** | **11** | **37** | **32.4** | **-1.0** |
| OBF0 | | | | MSG | | 11 | 37 | 53.5 | |
| | comp=Z,1.8nm,0.2s | | | | | | | | |
| OBF0 | | | | SN | **Sb** | **11** | **37** | **56.4** | **-0.2** |
| **MSF** | **Maaselka** | **2.01** | **10** | SB | **Sb** | **11** | **38** | **02.2** | **-0.1** |
| **OBF8** | **Ulkokalla** | **2.11** | **283** | PG | **Pb** | **11** | **37** | **37.6** | **-0.9** |
| OBF8 | | | | MSG | | 11 | 38 | 02.3 | |
| | comp=Z,1.8nm,0.2s | | | | | | | | |
| **RANF** | **Ranua** | **2.16** | **345** | PG | **Pb** | **11** | **37** | **38.9** | **-0.5** |
| | baz=166 | | | | | | | | |
| RANF | | | | SN | **Sb** | **11** | **38** | **05.5** | **-1.2** |
| **KU6** | **Riekki** | **2.21** | **18** | PG | **Pb** | **11** | **37** | **39.6** | **-0.6** |
| | baz=200 | | | | | | | | |
| KU6 | | | | MSG | | 11 | 38 | 05.9 | |
| | comp=Z,0.9nm,0.2s | | | | | | | | |
| KU6 | | | | SB | **Sb** | **11** | **38** | **07.6** | **-0.6** |
| **KEF** | **Keuruu** | **2.33** | **222** | MSG | | 11 | 38 | 09.5 | |
| | comp=Z,3.1nm,0.2s | | | | | | | | |
| KEF | | | | SG | **Sb** | **11** | **38** | **12.1** | **+0.5** |
| **OLKF** | **Oulanka, Finla** | **2.44** | **12** | PG | **Pb** | **11** | **37** | **43.6** | **-0.6** |
| OLKF | | | | MSG | | 11 | 38 | 12.4 | |
| | comp=Z,1.3nm,0.2s | | | | | | | | |
| OLKF | | | | SB | **Sb** | **11** | **38** | **14.4** | **-0.4** |
| **RUF** | **Ruokolahti** | **2.55** | **172** | PG | **Pb** | **11** | **37** | **45.8** | **-0.1** |
| RUF | | | | MSG | | 11 | 38 | 16.5 | |
| | comp=Z,1.6nm,0.2s | | | | | | | | |
| **VAF** | **Ylistaro** | **2.63** | **252** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KAHG | **Katmai Hook Gl** | 1.46 | 26 | | | Pn | 11 40 42.8 | +0.1 |
| KAHG | | | | | | Sn | 11 41 03.0 | +1.7 |
| KAHC | **Katmai Hardscr** | 1.52 | 15 | | | Pn | 11 40 43.3 | -0.3 |
| Q16K | **King Salmon** | 1.57 | 342 | | | Pn | 11 40 43.7 | -0.4 |
| KAPH | **Katmai Pasha** | 1.60 | 27 | | | Pn | 11 40 43.3 | -1.3 |
| KAPH | | | | | | Sn | 11 41 04.7 | +0.1 |
| CHGN | **Chignik** | 1.72 | 240 | | | Pn | 11 40 44.7 | -1.4 |
| CHGN | | | | | IAML | | 11 41 06.4 | |
| | comp=N,413nm,0.6s | | | | | | | |
| CHGN | | | | | IAML | | 11 41 08.6 | |
| | comp=E,428nm,0.2s | | | | | | | |
| KDAK | **Kodiak Island** | 1.81 | 70 | Pn | | Pn | 11 40 46.9 | -0.5 |
| KDAK | | | | | IAML | | 11 41 17.1 | |
| | comp=E,338nm,0.4s | | | | | | | |
| KDAK | | | | | IAML | | 11 41 17.7 | |
| | comp=E,355nm,0.5s | | | | | | | |
| KDAK | **Kodiak Island** | 1.81 | 70 | P | | Pn | 11 40 46.8 | -0.5 |
| | comp=E,76nm,0.3s,baz=255,slow=9.0,SNR=1901 | | | | | | | |
| KDAK | | | | S | | Sn | 11 41 08.7 | -0.8 |
| | comp=E,71nm,0.3s,baz=259,slow=16,SNR=8.2 | | | | | | | |
| P17K | **Kvichak River** | 2.04 | 350 | | | Pn | 11 40 50.1 | -0.3 |
| P17K | | | | | | Sn | 11 41 14.7 | -0.3 |
| Q19K | **Cape Douglas,** | 2.07 | 32 | | | Pn | 11 40 51.2 | +0.3 |
| P16K | **Nushagak River** | 2.20 | 328 | | | Pn | 11 40 52.3 | -0.2 |
| P18K | **Big Mountain,** | 2.23 | 7 | Pn | | Pn | 11 40 52.6 | -0.3 |
| P18K | | | | | | Sn | 11 41 19.6 | +0.1 |
| VNFG | **Fog Glacier, M** | 2.28 | 248 | | | Pn | 11 40 53.2 | -0.5 |
| VNFG | | | | | IAML | | 11 41 37.0 | |
| | comp=N,414nm,0.7s | | | | | | | |
| VNFG | | | | | IAML | | 11 41 39.6 | |
| | comp=E,429nm,1.1s | | | | | | | |
| SYI | **Shuyak Island** | 2.29 | 50 | Pn | | Pn | 11 40 54.3 | +0.5 |
| SYI | | | | | IAML | | 11 41 30.0 | |
| | comp=N,265nm,0.5s | | | | | | | |
| SYI | | | | | IAML | | 11 41 30.5 | |
| | comp=E,194nm,0.3s | | | | | | | |
| AUCH | **Augustine Cone** | 2.50 | 28 | | | Pn | 11 40 57.7 | +1.0 |
| O17K | **Koliganek Bris** | 2.69 | 345 | | | Pn | 11 40 58.7 | -0.4 |
| O18K | **Koktuh Hills** | 2.69 | 6 | | | Pn | 11 40 59.2 | 0.0 |
| O16K | **Kokwok River B** | 2.71 | 334 | | | Pn | 11 40 59.0 | -0.4 |
| O16K | | | | | | Sn | 11 41 30.8 | -0.3 |
| O16K | | | | | IAML | | 11 41 44.6 | |
| | comp=E,117nm,0.8s | | | | | | | |
| P19K | **Oil Pt** | 2.80 | 27 | Pn | | Pn | 11 41 00.5 | -0.2 |
| P19K | | | | | IAML | | 11 41 39.7 | |
| | comp=E,187nm,0.7s | | | | | | | |
| P19K | | | | | IAML | | 11 41 40.4 | |
| | comp=N,193nm,0.6s | | | | | | | |
| O15K | **Ungalikthiuk R** | 2.94 | 314 | | | Pn | 11 41 02.3 | -0.2 |
| ILSW | **Iliamna Southw** | 3.12 | 25 | | | Pn | 11 41 05.8 | +0.7 |
| ILSW | | | | | IAML | | 11 41 46.4 | |
| | comp=E,91nm,0.7s | | | | | | | |
| IVE | **Iliamna Volcan** | 3.18 | 26 | | | Pn | 11 41 06.8 | +0.9 |
| CNBA | **Chernabura Isl** | 3.21 | 224 | | | Pn | 11 41 04.0 | -2.2 |
| SDPT | **Sand Point** | 3.22 | 237 | P | | Pn | 11 41 05.6 | -0.7 |
| SDPT | **Sand Point** | 3.22 | 237 | | | Pn | 11 41 05.4 | -0.9 |
| SDPT | | | | | IAML | | 11 41 54.2 | |
| | comp=E,146nm,0.7s | | | | | | | |
| SDPT | | | | | IAML | | 11 41 56.0 | |
| | comp=N,110nm,0.5s | | | | | | | |
| HOM | **Homer** | 3.29 | 39 | Pn | | Pn | 11 41 04.8 | -2.5 |
| O20K | **Slope Mountain** | 3.33 | 28 | | | Pn | 11 41 09.0 | +1.1 |
| CNPM | **China Poot** | 3.34 | 44 | Pn | | Pn | 11 41 08.2 | +0.2 |
| N17K | **Nushagak Hills** | 3.43 | 348 | | | Pn | 11 41 09.0 | -0.2 |
| N17K | | | | | IAML | | 11 42 02.2 | |
| | comp=E,80nm,0.8s | | | | | | | |
| N17K | | | | | IAML | | 11 42 11.6 | |
| | comp=N,64nm,0.6s | | | | | | | |
| N18K | **Kilae Creek** | 3.50 | 359 | | | Pn | 11 41 10.4 | +0.2 |
| O14K | **Tigyukauivet M** | 3.58 | 308 | | | Pn | 11 41 11.1 | 0.0 |
| O14K | | | | | IAML | | 11 42 16.0 | |
| | comp=N,73nm,1.0s | | | | | | | |
| BRLK | **Bradley Lake** | 3.63 | 43 | | | Pn | 11 41 11.5 | -0.5 |
| BRLK | | | | | IAML | | 11 41 52.8 | |
| | comp=N,83nm,0.3s | | | | | | | |
| BRLK | | | | | IAML | | 11 42 04.8 | |
| | comp=E,90nm,1.0s | | | | | | | |
| RSO | **Redoubt South** | 3.63 | 24 | | | Pn | 11 41 12.2 | 0.0 |
| RDWB | **Redoubt West** | 3.64 | 23 | | | Pn | 11 41 13.3 | +1.1 |
| N16K | **Nishlik Lake** | 3.65 | 336 | | | Pn | 11 41 12.3 | +0.1 |
| BRSE | **Bradley Lake S** | 3.67 | 44 | | | Pn | 11 41 12.2 | -0.3 |
| N19K | **Bonanza Creek** | 3.69 | 10 | | | Pn | 11 41 13.6 | +0.8 |
| N19K | | | | | IAML | | 11 42 00.0 | |
| | comp=N,55nm,0.6s | | | | | | | |
| N19K | | | | | IAML | | 11 42 11.8 | |
| | comp=E,60nm,0.8s | | | | | | | |
| N15K | **Kwethluk River** | 3.75 | 325 | | | Pn | 11 41 14.0 | +0.5 |
| N15K | | | | | IAML | | 11 42 15.4 | |
| | comp=E,90nm,0.9s | | | | | | | |
| N15K | | | | | IAML | | 11 42 22.0 | |
| | comp=N,107nm,0.8s | | | | | | | |
| DFR | **Drift River** | 3.77 | 24 | | | Pn | 11 41 14.5 | +0.6 |
| PS1A | **Pavlof South-1** | 3.78 | 245 | | | Pn | 11 41 13.7 | -0.3 |
| S12K | **Black Hills** | 3.81 | 250 | Pn | | Pn | 11 41 13.5 | -0.9 |
| RDT | **Redoubt** | 3.81 | 26 | | | Pn | 11 41 15.5 | +1.0 |
| PVV | **Pavlof Volcano** | 3.83 | 244 | | | Pn | 11 41 14.3 | -0.3 |
| PS4A | **Pavlof South-4** | 3.87 | 244 | | | Pn | 11 41 15.5 | +0.2 |
| PN7A | **Pavlof North-7** | 3.90 | 246 | | | Pn | 11 41 15.6 | -0.1 |
| HAG | **Hague Volcano** | 3.91 | 244 | | | Pn | 11 41 15.9 | +0.1 |
| SVW2 | **Sparrevohn** | 3.92 | 1 | Pn | | Pn | 11 41 15.9 | +0.1 |
| SVW2 | | | | | IAML | | 11 42 14.3 | |
| | comp=N,55nm,0.8s | | | | | | | |
| N14K | **Kuskokwak Cree** | 4.14 | 314 | | | Pn | 11 41 19.3 | +0.4 |
| M16K | **Timber Creek** | 4.18 | 338 | Pn | | Pn | 11 41 19.8 | +0.3 |
| M16K | | | | | IAML | | 11 42 09.5 | |
| | comp=E,60nm,0.8s | | | | | | | |
| M16K | | | | | IAML | | 11 42 10.0 | |
| | comp=N,45nm,0.7s | | | | | | | |
| M17K | **Holitna River** | 4.31 | 349 | | | Pn | 11 41 21.4 | +0.2 |
| M18K | **Stony River** | 4.32 | 360 | | | Pn | 11 41 21.7 | +0.4 |
| M15K | **Kasigluk River** | 4.35 | 326 | | | Pn | 11 41 21.9 | +0.3 |
| SLKM | **Skilak Lake** | 4.39 | 38 | | | Pn | 11 41 21.6 | -0.8 |
| SPU | **Mount Spurr** | 4.43 | 24 | | | Pn | 11 41 23.3 | +0.4 |
| O22K | **Cooper Landing** | 4.55 | 41 | Pn | | Pn | 11 41 25.6 | +1.2 |
| M19K | **Big River Lodg** | 4.78 | 8 | | | Pn | 11 41 28.2 | +0.6 |
| M19K | | | | | IAML | | 11 43 06.9 | |
| | comp=E,24nm,0.9s | | | | | | | |
| M14K | **Bethel** | 4.80 | 321 | | | Pn | 11 41 28.3 | +0.4 |
| M14K | | | | | IAML | | 11 42 25.0 | |
| | comp=E,26nm,0.8s | | | | | | | |
| M14K | | | | | IAML | | 11 42 45.9 | |
| | comp=N,35nm,1.0s | | | | | | | |
| M20K | **Styx River** | 4.89 | 15 | | | Pn | 11 41 30.8 | +1.6 |
| FALS | **False Pass** | 4.89 | 245 | P | | Pn | 11 41 28.5 | -0.7 |
| FALS | **False Pass** | 4.89 | 245 | | | Pn | 11 41 28.4 | -0.7 |
| L16K | **Owhat River** | 4.92 | 339 | | | Pn | 11 41 29.3 | -0.1 |
| L16K | | | | | IAML | | 11 42 47.8 | |
| | comp=N,22nm,0.9s | | | | | | | |
| L16K | | | | | IAML | | 11 42 56.4 | |
| | comp=E,24nm,1.1s | | | | | | | |
| RC01 | **Rabbit Creek A** | 4.99 | 36 | Pn | | Pn | 11 41 30.4 | 0.0 |
| RC01 | | | | | IAML | | 11 42 30.8 | |
| | comp=E,35nm,0.4s | | | | | | | |
| RC01 | | | | | IAML | | 11 42 32.0 | |
| | comp=N,34nm,0.4s | | | | | | | |
| SUA | **Susitna One** | 4.99 | 29 | Pn | | Pn | 11 41 31.3 | +0.7 |
| SUA | | | | | IAML | | 11 42 33.6 | |
| | comp=N,32nm,1.0s | | | | | | | |
| L19K | **White Mountain** | 5.03 | 5 | | | Pn | 11 41 31.7 | +0.7 |
| L19K | | | | | IAML | | 11 42 28.3 | |
| | comp=E,42nm,0.7s | | | | | | | |
| L18K | **Granite Mounta** | 5.07 | 355 | | | Pn | 11 41 31.8 | +0.3 |
| L18K | | | | | IAML | | 11 42 29.9 | |
| | comp=E,34nm,0.6s | | | | | | | |
| ISNN | **Isanotski Nort** | 5.09 | 246 | | | Pn | 11 41 31.3 | -0.5 |
| M13K | **Dall Lake** | 5.10 | 312 | Pn | | Pn | 11 41 32.5 | +0.5 |
| M13K | | | | | IAML | | 11 43 26.2 | |
| | comp=E,30nm,1.1s | | | | | | | |
| L17K | **Donlin** | 5.12 | 346 | | | Pn | 11 41 32.2 | -0.1 |
| P23K | **Montague Islan** | 5.20 | 54 | | | Pn | 11 41 32.6 | -0.7 |
| SKT | **Skwentna** | 5.26 | 22 | Pn | | Pn | 11 41 34.2 | 0.0 |
| PWL | **Port Wells** | 5.31 | 43 | Pn | | Pn | 11 41 33.9 | -1.0 |
| PWL | | | | | IAML | | 11 42 51.1 | |
| | comp=E,35nm,1.0s | | | | | | | |
| L15K | **Ungalak Mounta** | 5.37 | 329 | | | Pn | 11 41 35.8 | +0.2 |
| L20K | **Farewell, AK** | 5.39 | 9 | | | Pn | 11 41 36.4 | +0.5 |
| M22K | **Willow** | 5.40 | 30 | | | Pn | 11 41 36.7 | +0.6 |
| Q23K | **Middleton Isla** | 5.44 | 62 | Pn | | Pn | 11 41 36.2 | -0.4 |
| MID | **Middleton Isla** | 5.45 | 62 | | | Pn | 11 41 35.7 | -0.9 |
| L14K | **Kuka Creek** | 5.47 | 322 | | | Pn | 11 41 37.6 | +0.6 |
| PMR | **Palmer** | 5.56 | 35 | Pn | | Pn | 11 41 35.7 | -2.5 |
| KNK | **Knik Glacier** | 5.65 | 38 | | | Pn | 11 41 39.7 | +0.3 |
| K17K | **Iditarod** | 5.69 | 348 | | | Pn | 11 41 40.4 | +0.4 |
| GHO | **Glory Hole Cre** | 5.76 | 34 | | | Pn | 11 41 41.0 | -0.1 |
| HIN | **Hinchinbrook I** | 5.78 | 52 | | | Pn | 11 41 40.9 | -0.4 |
| GLI | **Glacier Island** | 5.80 | 47 | | | Pn | 11 41 39.9 | -1.6 |
| K15K | **Wolf Creek Mou** | 5.89 | 333 | | | Pn | 11 41 43.5 | +0.7 |
| SML | **Sawmill** | 5.97 | 36 | Pn | | Pn | 11 41 44.0 | +0.1 |
| EYAK | **Cordova Ski Ar** | 6.18 | 53 | P | | Pn | 11 41 46.2 | -0.5 |
| EYAK | **Cordova Ski Ar** | 6.18 | 53 | | | Pn | 11 41 46.0 | -0.8 |
| K20K | **Telida** | 6.24 | 7 | | | Pn | 11 41 48.4 | +0.8 |
| J18K | **Innoko River** | 6.32 | 356 | | | Pn | 11 41 49.1 | +0.6 |
| SCM | **Sheep Creek Mo** | 6.33 | 39 | | | Pn | 11 41 48.7 | -0.1 |
| J17K | **VABM Dome** | 6.44 | 347 | | | Pn | 11 41 49.9 | -0.4 |
| DIV | **Divide** | 6.47 | 48 | Pn | | Pn | 11 41 49.5 | -1.3 |
| KAIM | **Kayak Island** | 6.53 | 60 | Pn | | Pn | 11 41 51.7 | +0.2 |
| J16K | **Anvik River** | 6.57 | 340 | Pn | | Pn | 11 41 51.7 | -0.3 |
| KLU | **Klutina** | 6.62 | 45 | | | Pn | 11 41 52.3 | -0.5 |
| GOAT | **Goat Mountain** | 6.65 | 55 | | | Pn | 11 41 52.6 | -0.6 |
| WAT6 | **Susitna Watana** | 6.74 | 33 | | | Pn | 11 41 53.8 | -0.7 |
| HMT | **Hamilton** | 6.76 | 57 | Pn | | Pn | 11 41 54.5 | -0.1 |
| J14K | **Nanvaranak Lak** | 6.81 | 328 | Pn | | Pn | 11 41 55.9 | +0.7 |
| J19K | **Poorman** | 6.83 | 0 | | | Pn | 11 41 56.0 | +0.4 |
| NICHA | **Nichawak Mount** | 6.85 | 59 | | | Pn | 11 41 55.4 | -0.6 |
| BMRM | **Bremner River** | 6.88 | 52 | Pn | | Pn | 11 41 55.4 | -0.9 |
| SUCK | **Suckling Hills** | 6.89 | 60 | Pn | | Pn | 11 41 56.3 | -0.1 |
| M24K | **Tolsona, Glenn** | 6.91 | 41 | | | Pn | 11 41 57.0 | +0.3 |
| UNV | **Unalaska Valle** | 6.96 | 246 | P | | Pn | 11 41 56.8 | -0.6 |
| UNV | **Unalaska Valle** | 6.96 | 246 | Pn | | Pn | 11 41 56.3 | -1.1 |
| J20K | **Nowinta River** | 7.05 | 6 | | | Pn | 11 41 59.8 | +1.2 |
| MSW | **Makushin Switc** | 7.07 | 247 | | | Pn | 11 41 57.6 | -1.2 |
| MREP | **Makushin Rep't** | 7.10 | 246 | | | Pn | 11 41 58.6 | -0.8 |
| RND | **Reindeer** | 7.11 | 26 | | | Pn | 11 41 59.8 | +0.3 |
| I17K | **Unalakleet** | 7.14 | 342 | Pn | | Pn | 11 41 59.6 | -0.2 |
| GRIN | **Grindle Hills** | 7.17 | 59 | | | Pn | 11 41 59.8 | -0.4 |
| N25K | **Chitina, Valde** | 7.21 | 47 | Pn | | Pn | 11 42 00.8 | 0.0 |
| DHY | **Denali Highway** | 7.23 | 32 | | | Pn | 11 42 01.3 | +0.1 |
| KHIT | **Khitrov Hills** | 7.26 | 58 | | | Pn | 11 42 00.5 | -1.1 |
| BPAW | **Bear Paw Mtn.** | 7.32 | 17 | | | Pn | 11 42 01.6 | -0.6 |
| SNH | **Sunshine Point** | 7.37 | 61 | Pn | | Pn | 11 42 02.7 | -0.2 |
| CRQM | **Cirque** | 7.43 | 56 | Pn | | Pn | 11 42 03.5 | -0.5 |
| GLB | **Gilahina Butte** | 7.45 | 50 | Pn | | Pn | 11 42 03.2 | -0.8 |
| WAX | **Waxell Ridge** | 7.45 | 59 | Pn | | Pn | 11 42 03.3 | -0.8 |
| VRDI | **Verde Repeater** | 7.50 | 52 | Pn | | Pn | 11 42 04.2 | -0.6 |
| WACK | **Wrangell Chich** | 7.53 | 46 | | | Pn | 11 42 05.3 | 0.0 |
| WASW | **Wrangell South** | 7.55 | 46 | | | Pn | 11 42 05.3 | -0.4 |
| TGL | **Tana Glacier** | 7.57 | 56 | Pn | | Pn | 11 42 05.0 | -0.8 |
| BARK | **Barkley Ridge** | 7.60 | 59 | | | Pn | 11 42 05.9 | -0.2 |
| BWN | **Browne** | 7.65 | 21 | Pn | | Pn | 11 42 07.8 | +1.0 |
| ISLE | **Juniper Island** | 7.74 | 58 | | | Pn | 11 42 07.7 | -0.4 |
| MCARA | **McCarthy VSAT** | 7.75 | 52 | Pn | | Pn | 11 42 08.1 | 0.0 |
| MESA | **MESA** | 7.79 | 62 | Pn | | Pn | 11 42 09.1 | +0.2 |
| H17K | **Granite Mounta** | 8.03 | 347 | | | Pn | 11 42 12.8 | +0.9 |
| GRNC | **Granite Creek** | 8.05 | 58 | | | Pn | 11 42 12.2 | -0.3 |
| H18K | **Honhosa River** | 8.09 | 352 | | | Pn | 11 42 13.5 | +0.8 |
| NEA2 | **Nenana** | 8.11 | 21 | Pn | | Pn | 11 42 12.5 | -0.4 |
| WRH | **Wood River Hil** | 8.20 | 24 | Pn | | Pn | 11 42 13.5 | -0.8 |
| MLY | **Manley** | 8.23 | 15 | Pn | | Pn | 11 42 14.9 | +0.2 |
| TABL | **Table Mountain** | 8.25 | 61 | | | Pn | 11 42 15.1 | 0.0 |
| M26K | **Nabesna, AK** | 8.28 | 46 | Pn | | Pn | 11 42 15.5 | +0.1 |
| CTGM | **Chitina Glacie** | 8.33 | 57 | | | Pn | 11 42 16.1 | 0.0 |
| H19K | **Roundabout Mou** | 8.37 | 358 | | | Pn | 11 42 17.1 | +0.6 |
| CCB | **Clear Creek Bu** | 8.42 | 24 | Pn | | Pn | 11 42 17.8 | +0.6 |
| LOGN | **Logan Glacier** | 8.43 | 58 | Pn | | Pn | 11 42 17.2 | -0.4 |
| I23K | **Minto, Yukon-K** | 8.56 | 18 | | | Pn | 11 42 18.6 | -0.5 |
| MDM | **Murphy Dome** | 8.60 | 22 | Pn | | Pn | 11 42 19.0 | -0.6 |
| H21K | **Melozitna Rive** | 8.61 | 8 | | | Pn | 11 42 20.6 | +0.7 |
| M27K | **Edge Creek, AK** | 8.70 | 48 | Pn | | Pn | 11 42 21.2 | +0.1 |
| IL31 | | 8.73 | 26 | Pn | | Pn | 11 42 21.9 | +0.4 |
| ILAR | **Eielson Array** | 8.73 | 26 | P | | Pn | 11 42 18.8 | -2.7 |
| | comp=E,0.6nm,0.4s,baz=220,slow=13,SNR=7.4 | | | | | | | |
| ILAR | | | | S | | Sn | 11 43 51.6 | -6.5 |
| | comp=E,0.3nm,0.5s,baz=219,slow=26,SNR=2.2 | | | | | | | |
| ANM | **Nome** | 8.75 | 332 | Pn | | Pn | 11 42 22.6 | +0.9 |
| G18K | **Tagagawik** | 8.84 | 352 | Pn | | Pn | 11 42 23.6 | +0.5 |
| POKR | **Poker Plat Res** | 8.90 | 23 | Pn | | Pn | 11 42 23.8 | -0.1 |
| PNL | **Peninsula** | 8.93 | 67 | P | | Pn | 11 42 23.5 | -0.7 |
| J25K | **Salcha River,** | 8.99 | 30 | Pn | | Pn | 11 42 25.9 | +0.8 |
| G19K | **Purcell Mounta** | 9.01 | 357 | Pn | | Pn | 11 42 25.4 | +0.2 |
| L27K | **Beaver Creek,** | 9.09 | 44 | Pn | | Pn | 11 42 26.7 | +0.2 |
| H23K | **Yukon River** | 9.15 | 16 | Pn | | Pn | 11 42 26.8 | -0.5 |
| F15K | **North Star Dit** | 9.54 | 337 | Pn | | Pn | 11 42 33.8 | +1.4 |
| F17K | **Baldwin Pennin** | 9.64 | 347 | Pn | | Pn | 11 42 35.6 | +1.9 |
| PRP | **Porcupine Dome** | 9.68 | 26 | Pn | | Pn | 11 42 33.9 | -0.6 |
| F19K | **Shaleruckik Mo** | 9.72 | 355 | Pn | | Pn | 11 42 35.8 | +0.8 |
| F20K | **Avraart Lake** | 9.90 | 0 | | | Pn | 11 42 38.4 | +1.1 |
| G23K | **Bananza Creek** | 9.92 | 13 | Pn | | Pn | 11 42 39.3 | +1.5 |
| M29M | **Somme Creek** | 10.16 | 52 | Pn | | Pn | 11 42 41.3 | +0.3 |
| TNA | **Tin City** | 10.21 | 330 | Pn | | Pn | 11 42 43.1 | +1.6 |
| G24K | **Hadweenzic Riv** | 10.30 | 19 | Pn | | Pn | 11 42 41.6 | -1.2 |
| N30M | **Aishikik Lake** | 10.44 | 58 | Pn | | Pn | 11 42 44.6 | -0.2 |
| S31K | **Pelican** | 10.51 | 78 | Pn | | Pn | 11 42 45.2 | -0.5 |
| L29M | **L29M** | 10.57 | 49 | Pn | | Pn | 11 42 46.9 | +0.3 |
| N31M | **Braeburn, Yuko** | 11.05 | 59 | Pn | | Pn | 11 42 52.9 | -0.3 |
| WHY | **Whitehorse** | 11.31 | 63 | Pn | | Pn | 11 42 56.9 | +0.1 |
| D19K | **Kuna River** | 11.40 | 356 | Pn | | Pn | 11 42 59.9 | +2.1 |
| FARO | **Faro, Yukon** | 12.35 | 57 | Pn | | Pn | 11 43 10.6 | -0.2 |
| R33M | **Jennings River** | 13.20 | 70 | Pn | | Pn | 11 43 22.4 | +0.1 |
| AMKA | **Amchitka** | 15.63 | 259 | Pn | | Pn | 11 43 52.9 | -1.0 |
| PETK | **Petropavlovsk-** | 26.50 | 281 | P | | P | 11 45 50.0 | +1.8 |
| | comp=E,0.7nm,0.5s,baz=65,slow=12,SNR=1.7 | | | | | | | |
| | comp=E,0.7nm,0.5s | | | | | | | |
| NVAR | **Mina Array Bea** | 30.83 | 111 | P | | P | 11 46 30.0 | +2.9 |
| | comp=E,0.5nm,0.7s,baz=310,slow=8.8,SNR=5.6 | | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | | |
| PDAR | **Pinedale Array** | 32.33 | 96 | P | | P | 11 46 41.9 | +1.6 |
| | comp=E,0.5nm,0.6s,baz=300,slow=3.3,SNR=5.1 | | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | | |
| YAK | **Yakutsk** | 36.09 | 310 | LR | | LR | 12 02 03.1 | |
| | comp=E,40nm,18.7s,baz=135,slow=36 | | | | | | | |
| KLR | **Kul'dur** | 42.20 | 291 | LR | | LR | 12 09 22.6 | |
| | comp=E,34nm,18.1s,baz=202,slow=41 | | | | | | | |
| TXAR | **Lajitas Array** | 45.50 | 105 | P | | P | 11 48 31.4 | +1.3 |
| | comp=E,0.4nm,0.7s,baz=297,slow=5.5,SNR=5.4 | | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | | |
| NOA | **NORSAR Array B** | 61.67 | 7 | P | | P | 11 50 26.9 | -0.8 |
| | comp=E,0.5nm,0.5s,baz=353,slow=6.8,SNR=2.4 | | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | | |
| FINES | **FINESS Array B** | 61.70 | 359 | P | | P | 11 50 27.1 | -0.7 |
| | comp=E,1.6nm,0.9s,baz=355,slow=3.3,SNR=2.3 | | | | | | | |
| | comp=E,1.6nm,0.9s | | | | | | | |
| HFS | **Hagfors** | 62.72 | 6 | P | | P | 11 50 34.1 | -0.6 |
| | comp=E,1.5nm,0.6s,baz=2.6,slow=3.2,SNR=7.5 | | | | | | | |
| | comp=E,1.5nm,0.6s | | | | | | | |
| BVAR | **Borovoye Array** | 63.86 | 331 | P | | P | 11 50 41.6 | -0.7 |
| | comp=E,1.7nm,0.6s,baz=46,slow=6.8,SNR=9.0 | | | | | | | |
| | comp=E,1.7nm,0.6s | | | | | | | |
| EKA | **Eskdalemuir Ar** | 65.66 | 17 | P | | P | 11 50 53.9 | 0.0 |
| | comp=E,2.4nm,0.7s,baz=339,slow=6.3,SNR=4.6 | | | | | | | |
| | comp=E,2.4nm,0.7s | | | | | | | |
| MKAR | **Makanchi Array** | 65.70 | 320 | P | | P | 11 50 52.9 | -1.6 |
| | comp=E,0.3nm,0.5s,baz=23,slow=4.1,SNR=2.4 | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | |
| AKASG | **Malin Array Be** | 72.39 | 357 | P | | P | 11 51 33.8 | -2.0 |
| | comp=E,1.0nm,0.6s,baz=3.7,slow=5.5,SNR=2.5 | | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | | |
| GERES | **GERESS Array B** | 73.97 | 7 | P | | P | 11 51 45.5 | +0.3 |
| | comp=E,0.3nm,0.3s,baz=339,slow=5.2,SNR=1.9 | | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | | |
| KBZ | **Khabaz** | 78.24 | 346 | P | | P | 11 52 09.4 | +0.1 |
| | comp=E,1.2nm,0.6s,baz=27,slow=9.0,SNR=4.2 | | | | | | | |
| | comp=E,1.2nm,0.6s | | | | | | | |
| PCRV | **Puerto La Cruz** | 82.14 | 84 | LR | | LR | 12 29 22.2 | |
| | comp=E,40nm,18.3s,slow=36 | | | | | | | |
| QSPA | **South Pole Qui** | 146.98 | 180 | PKPbc | | PKPdf | 11 59 50.4 | +1.8 |
| | comp=E,0.7nm,0.8s,baz=43,slow=2.9,SNR=7.1 | | | | | | | |

*IDC **15** 11:49:02.5±2.2,6°.11S×104°.25E,h0km,mb3.7/7, mbtmp3.7/7, Error ellipse: s-maj=89.1km s-min=22.3km az=50.0*

*DJA **15** 11:49:02.2±0.5,7°.5S×107°.4E±°,h10km,M4.2/7,mb4.6/1, MLv4.0/7*

**ISC 15 11:49:00.4±1.6,6°.8S±0°.2×104°.2E±0°.2,h10km,n16, σ1°.22/11,mb3.8/7,Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| KASI | **Kota Agung** | 1.33 | 14 | P | | Pn | 11 49 25.3 | | +0.4 |
| LWLI | **Liwa** | 1.79 | 357 | P | | Pn | 11 49 33.6 | | +2.1 |
| BLSI | **Bandar Lampung** | 1.79 | 37 | P | | Pn | 11 49 32.2 | | +0.8 |
| CNJI | **Cibinong** | 2.98 | 100 | P | | Pn | 11 49 48.3 | | +0.6 |
| CMJI | **Cimerak** | 4.35 | 103 | P | | Pn | 11 50 08.1 | | +1.5 |
| H08S2 | **Diego Garcia H** baz=89,slow=74 | 31.43 | 267 | T | | T | 12 29 13.9 | | |
| H08S3 | **Diego Garcia H** baz=89,slow=74 | 31.44 | 267 | T | | T | 12 29 13.8 | | |
| H08S1 | **Diego Carcia H** baz=89 | 31.45 | 267 | T | | T | 12 29 13.9 | | |
| WRA | **Warramunga Arr** 0.3nm,0.8s,baz=290,slow=9.6,SNR=6.6 0.3nm,0.8s | 32.05 | 117 | P | | P | 11 55 33.9 | | +6.3 |
| ASAR | **Alice Springs** 0.2nm,0.7s,baz=305,slow=8.3,SNR=3.0 0.2nm,0.7s | 33.11 | 124 | P | | P | 11 55 43.4 | | +6.6 |
| USRK | **Ussuriysk Ar.** 1.3nm,0.6s,baz=215,slow=5.6,SNR=6.1 1.3nm,0.6s | 56.65 | 24 | P | | P | 11 58 42.4 | | -1.4 |
| MKAR | **Makanchi Array** 0.6nm,0.7s,baz=171,slow=8.5,SNR=5.3 0.6nm,0.7s | 56.81 | 342 | P | | P | 11 58 44.2 | | -0.7 |
| KURBB | **Kurchatov Arra** 0.5nm,0.7s,baz=146,slow=6.7,SNR=2.0 0.5nm,0.7s | 61.36 | 342 | P | | P | 11 59 16.2 | | -0.1 |
| ZALV | **Zalesovo Beam** 1.3nm,0.3s,baz=154,slow=6.6,SNR=6.8 1.3nm,0.3s | 62.70 | 347 | P | | P | 11 59 24.7 | | -0.6 |
| BVAR | **Borovoye Array** 0.3nm,0.4s,baz=140,slow=4.7,SNR=2.0 0.3nm,0.4s | 66.13 | 338 | P | | P | 11 59 47.3 | | -0.5 |
| TXAR | **Lajitas Array** 0.4nm,0.6s,baz=318,slow=1.2,SNR=8.2 | 145.51 | 46 | PKP | | PKPbc | 12 08 40.9 | | +1.1 |

*NEIC **15** 12:17:11.6±1.5,69°.59N±0°.04×144°.37W±0°.10,h10km±2km, Error ellipse: s-maj=7.1km s-min=4.0km az=42.0*

**AEIC 15 12:17:10.0±1.6,69°.52N±0°.06×144°.44W±0°.10,h12km±7km, ML2.7,ML2.8/92(NEIC),Error ellipse: s-maj=9.2km s-min=5.0km az=182.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| C27K | **Jago River** | 0.28 | 68 | | | Pg | 12 17 15.2 | | -0.5 |
| C27K | | | | | | Sg | 12 17 18.7 | | -0.8 |
| C27K | | | | | IAML | | 12 17 20.7 | | |
| | comp=E,1μm,0.4s | | | | | | | | |
| C26K | **Camden Bay** | 0.43 | 338 | | | Pg | 12 17 19.0 | | +0.5 |
| D25K | **Kavik River** | 0.71 | 254 | | | Pg | 12 17 23.0 | | -0.8 |
| D25K | | | | | | Pb | 12 17 23.5 | | -0.9 |
| D27M | **Malcolm River** | 1.26 | 101 | Pn | | Pn | 12 17 33.0 | | -0.6 |
| D27M | | | | | IAML | | 12 17 54.9 | | |
| | comp=N,167nm,0.3s | | | | | | | | |
| C24K | **Franklin Bluff** | 1.50 | 279 | Pn | | Pg | 12 17 39.3 | | +0.5 |
| C24K | | | | | IAML | | 12 18 03.7 | | |
| | comp=N,116nm,0.9s | | | | | | | | |
| C24K | | | | | IAML | | 12 18 08.7 | | |
| | comp=E,136nm,0.8s | | | | | | | | |
| D24K | **Happy Valley** | 1.60 | 259 | | | Pg | 12 17 41.0 | | +0.4 |
| D24K | | | | | IAML | | 12 18 07.7 | | |
| | comp=N,153nm,0.6s | | | | | | | | |
| E27K | **Coleen River** | 1.70 | 141 | | | Pb | 12 17 41.7 | | +0.6 |
| F26K | **Sheenjek River** | 1.84 | 176 | | | Pb | 12 17 44.2 | | +0.6 |
| F26K | | | | | IAML | | 12 18 09.8 | | |
| | comp=E,83nm,0.7s | | | | | | | | |
| F26K | | | | | IAML | | 12 18 11.7 | | |
| | comp=N,68nm,0.5s | | | | | | | | |
| F25K | **Christian Rive** | 1.99 | 193 | | | Pb | 12 17 46.8 | | +0.7 |
| E28M | **Babbage River** | 1.99 | 115 | | | Pb | 12 17 46.4 | | +0.3 |
| D28M | **Stokes Point** | 2.03 | 93 | | | Pb | 12 17 46.8 | | +0.1 |
| D28M | | | | | IAML | | 12 18 18.6 | | |
| | comp=N,92nm,0.8s | | | | | | | | |
| TOLK | **Toolik Lake Re** | 2.04 | 247 | | | Pg | 12 17 48.8 | | -0.3 |
| TOLK | | | | | IAML | | 12 18 21.6 | | |
| | comp=E,74nm,0.7s | | | | | | | | |
| TOLK | | | | | IAML | | 12 18 23.1 | | |
| | comp=N,49nm,1.1s | | | | | | | | |
| E24K | **Your Creek** | 2.07 | 227 | | | Pb | 12 17 47.9 | | +0.4 |
| E24K | | | | | IAML | | 12 18 21.4 | | |
| | comp=E,52nm,1.1s | | | | | | | | |
| C23K | **Itkillik River** | 2.18 | 281 | | | Pb | 12 17 48.3 | | -1.0 |
| C23K | | | | | IAML | | 12 18 30.8 | | |
| | comp=N,81nm,0.8s | | | | | | | | |
| C23K | | | | | IAML | | 12 18 34.0 | | |
| | comp=E,72nm,0.7s | | | | | | | | |
| D23K | **Nanushuk River** | 2.29 | 259 | | | Pb | 12 17 50.3 | | -1.0 |
| D23K | | | | | IAML | | 12 18 40.3 | | |
| | comp=E,42nm,0.8s | | | | | | | | |
| F24K | **Squaw Lake** | 2.38 | 214 | |

*MLv3.2/16*
*INMG **15** 12:18:29.5±1.2,35°.71N×8°.85W,h31$^{km}$±8$^{km}$,ML2.6,Error ellipse: s-maj=3.9km s-min=2.7km az=96.0*
**ISC 15 12:18:27.3±1.2,35°.73N±0'.04×8°.81W±0'.05,h35$^{km}$,n86,**
**σ1$^{s}$71**/148**,1C-4D,West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.40** | **359** | ⇓*i* P | **Pn** | **12 18 51.5** | **+1.2** |
| PFVI | | | | *e*S | **Sn** | **12 19 07.8** | **+0.3** |
| PFVI | | | | A | A | 12 19 10.0 | |
| | 43nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.40** | **359** | P | **Pn** | **12 18 51.4** | **+1.2** |
| PFVI | | | | S | **Sn** | **12 19 07.8** | **+0.3** |
| **PFVI** | **Vila Bisbo** | **1.40** | **359** | P | **Pn** | **12 18 51.3** | **+1.0** |
| **PFVI** | **Vila Bisbo** | **1.40** | **359** | S | **Sn** | **12 19 09.8** | **+2.3** |
| **MORF** | **Marmelete** | **1.57** | **4** | ⇓*i* P | **Pn** | **12 18 54.0** | **+1.2** |
| MORF | | | | *e*S | **Sn** | **12 19 12.7** | **+0.8** |
| MORF | | | | A | A | 12 19 13.7 | |
| | 92nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **1.57** | **4** | *e*P | **Pn** | **12 18 54.0** | **+1.2** |
| MORF | | | | *e*S | **Sn** | **12 19 12.3** | **+0.4** |
| MORF | | | | IAML | | 12 19 13.7 | |
| | comp=E,125nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **1.67** | **25** | ⇓*e*P | **Pn** | **12 18 55.6** | **+1.6** |
| PBDV | | | | *e*S | **Sn** | **12 19 15.1** | **+1.0** |
| PBDV | | | | A | A | 12 19 20.2 | |
| | comp=E,22nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **1.67** | **25** | P | **Pn** | **12 18 55.5** | **+1.6** |
| PBDV | | | | S | **Sn** | **12 19 15.3** | **+1.1** |
| **PTEO** | **Sao Teotonio** | **1.81** | **2** | ⇓*i* P | **Pn** | **12 18 57.3** | **+1.3** |
| PTEO | | | | *e*S | **Sn** | **12 19 18.3** | **+0.6** |
| PTEO | | | | A | A | 12 19 19.0 | |
| | comp=E,35nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.89** | **27** | *e*P | **Pn** | **12 18 58.5** | **+1.5** |
| PVAQ | | | | *e*S | **Sn** | **12 19 20.3** | **+0.8** |
| PVAQ | | | | A | A | 12 19 25.8 | |
| | comp=E,26nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.89** | **27** | P | **Pn** | **12 18 58.4** | **+1.5** |
| PVAQ | | | | S | **Sn** | **12 19 20.9** | **+1.4** |
| **PVAQ** | **Vaqueiros** | **1.89** | **27** | P | **Pn** | **12 18 58.3** | **+1.3** |
| **PVAQ** | **Vaqueiros** | **1.89** | **27** | S | **Sn** | **12 19 21.7** | **+2.2** |
| **PCVE** | **Castro Verde** | **2.00** | **18** | *e*P | **Pn** | **12 19 00.2** | **+1.7** |
| PCVE | | | | *e*S | **Sn** | **12 19 23.0** | **+0.7** |
| PCVE | | | | A | A | 12 19 24.2 | |
| | comp=E,60nm,0.1s | | | | | | |
| **PCVE** | **Castro Verde** | **2.00** | **18** | P | **Pn** | **12 19 00.2** | **+1.7** |
| PCVE | | | | S | **Sn** | **12 19 22.9** | **+0.7** |
| **EGRO** | **El Granado** | **2.09** | **30** | P | **Pn** | **12 19 01.5** | **+1.8** |
| EGRO | | | | S | **Sn** | **12 19 25.0** | **+0.5** |
| **EGRO** | **El Granado** | **2.09** | **30** | P | **Pn** | **12 19 01.6** | **+1.8** |
| EGRO | | | | S | **Sn** | **12 19 24.9** | **+0.3** |
| EGRO | | | | *i* Vmb_Lg | | 12 19 26.1 | |
| **MESJ** | **Messejana** | **2.16** | **12** | *e*P | **Pn** | **12 19 02.2** | **+1.5** |
| MESJ | | | | *e*S | **Sn** | **12 19 26.7** | **+0.5** |
| MESJ | | | | A | A | 12 19 29.6 | |
| | comp=E,24nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.16** | **12** | *e*P | **Pn** | **12 19 02.1** | **+1.5** |
| MESJ | | | | *e*S | **Sn** | **12 19 26.3** | **+0.1** |
| MESJ | | | | IAML | | 12 19 28.7 | |
| | comp=N,25nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.39** | **5** | *e*P | **Pn** | **12 19 05.0** | **+1.1** |
| PNCL | | | | *e*S | **Sn** | **12 19 31.7** | **-0.1** |
| PNCL | | | | A | A | 12 19 43.8 | |
| | comp=N,18nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.39** | **5** | P | **Pn** | **12 19 04.9** | **+1.0** |
| PNCL | | | | S | **Sn** | **12 19 31.8** | **-0.1** |
| **PBEJ** | **Beja** | **2.41** | **18** | *e*P | **Pn** | **12 19 05.5** | **+1.3** |
| PBEJ | | | | *e*S | **Sn** | **12 19 32.5** | **0.0** |
| PBEJ | | | | A | A | 12 19 33.5 | |
| | comp=N,17nm,0.5s | | | | | | |
| **ESPR** | **Espera** | **2.64** | **64** | P | **Pn** | **12 19 08.9** | **+1.6** |
| ESPR | | | | S | **Sn** | **12 19 38.9** | **+0.8** |
| **ESPR** | **Espera** | **2.64** | **64** | *i* Vmb_Lg | | 12 19 06.1 | |
| ESPR | | | | P | **Pn** | **12 19 08.9** | **+1.6** |
| ESPR | | | | S | **Sn** | **12 19 36.4** | **-1.7** |
| **EMIN** | **Mina Concepcio** | **2.66** | **40** | P | **Pn** | **12 19 08.8** | **+1.2** |
| EMIN | | | | S | **Sn** | **12 19 38.0** | **-0.6** |
| **EMIN** | **Mina Concepcio** | **2.66** | **40** | P | **Pn** | **12 19 09.0** | **+1.4** |
| EMIN | | | | S | **Sn** | **12 19 38.1** | **-0.5** |
| EMIN | | | | *i* Vmb_Lg | | 12 19 39.6 | |
| **AVE** | **Averroes** | **2.69** | **154** | P | **Pn** | **12 19 08.8** | **+0.8** |
| AVE | | | | S | **Sn** | **12 19 39.5** | **+0.2** |
| **EJIF** | **Jimena Fronter** | **2.80** | **74** | P | **Pn** | **12 19 12.1** | **+2.6** |
| EJIF | | | | S | **Sn** | **12 19 37.9** | **-4.1** |
| **PBAR** | **Barrancos** | **2.82** | **30** | ⇑*i* P | **Pn** | **12 19 11.3** | **+1.5** |
| PBAR | | | | *e*S | **Sn** | **12 19 42.9** | **+0.3** |
| PBAR | | | | A | A | 12 19 44.8 | |
| | comp=N,13nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **2.82** | **30** | P | **Pn** | **12 19 11.1** | **+1.3** |
| PBAR | | | | S | **Sn** | **12 19 43.3** | **+0.8** |
| **EVO** | **Evora** | **2.87** | **13** | *e*P | **Pn** | **12 19 11.6** | **+1.1** |
| EVO | | | | *e*S | **Sn** | **12 19 43.6** | **-0.1** |
| EVO | | | | A | A | 12 19 44.4 | |
| | comp=N,27nm,0.1s | | | | | | |
| **ZHG** | **ZHG** | **2.90** | **141** | P | **Pn** | **12 19 12.0** | **+1.0** |
| **ZHG** | **ZHG** | **2.90** | **141** | S | **Sn** | **12 19 47.3** | **+2.8** |
| **PESTR** | **Estremoz** | **3.28** | **17** | *e*P | **Pn** | **12 19 17.1** | **+1.0** |
| PESTR | | | | *e*S | **Sn** | **12 19 53.4** | **-0.5** |
| PESTR | | | | A | A | 12 19 55.2 | |
| | comp=N,8.0nm,0.3s | | | | | | |
| **PESTR** | **Estremoz** | **3.28** | **17** | P | **Pn** | **12 19 17.0** | **+0.8** |
| PESTR | | | | S | **Sn** | **12 19 53.2** | **-0.7** |
| **PESTR** | **Estremoz** | **3.28** | **17** | P | **Pn** | **12 19 17.7** | **+1.6** |
| **PESTR** | **Estremoz** | **3.28** | **17** | S | **Sn** | **12 19 55.0** | **+1.2** |
| **EBAD** | **Badajoz** | **3.34** | **25** | P | **Pn** | **12 19 15.0** | **+1.0** |
| EBAD | | | | S | **Sn** | **12 19 55.3** | **-0.1** |
| **EBAD** | **Badajoz** | **3.34** | **25** | P | **Pn** | **12 19 18.2** | **+1.2** |
| EBAD | | | | S | **Sn** | **12 19 55.1** | **-0.3** |
| EBAD | | | | *i* Vmb_Lg | | 12 19 57.6 | |
| **PMTG** | **Montargil** | **3.36** | **8** | *e*P | **Pn** | **12 19 18.4** | **+1.1** |
| PMTG | | | | *e*S | **Sn** | **12 19 54.6** | **-1.4** |
| PMTG | | | | A | A | 12 19 57.1 | |
| | comp=N,12nm,0.4s | | | | | | |
| **ECAB** | **El Cabril** | **3.58** | **48** | P | **Pn** | **12 19 21.6** | **+1.3** |
| ECAB | | | | S | **Sn** | **12 20 00.0** | **-1.4** |
| **ECAB** | **El Cabril** | **3.58** | **48** | P | **Pn** | **12 19 21.7** | **+1.4** |
| ECAB | | | | S | **Sn** | **12 19 59.2** | **-2.3** |
| ECAB | | | | *i* Vmb_Lg | | 12 20 03.2 | |
| **IFR** | **Ifrane** | **3.75** | **125** | P | **Pn** | **12 19 22.8** | **0.0** |
| IFR | | | | S | **Sn** | **12 20 02.0** | **-3.9** |
| **PSBE** | **So Bento** | **3.78** | **0** | *e*P | **Pn** | **12 19 24.4** | **+1.4** |
| PSBE | | | | *e*S | **Sn** | **12 20 06.0** | **-0.2** |
| PSBE | | | | A | A | 12 20 07.0 | |
| | comp=N,8.4nm,0.5s | | | | | | |
| **PMRV** | **Marv??o** | **3.86** | **17** | *e*P | **Pn** | **12 19 25.3** | **+1.2** |
| PMRV | | | | *e*S | **Sn** | **12 20 06.9** | **-1.3** |
| PMRV | | | | A | A | 12 20 08.8 | |
| | comp=N,10nm,0.5s | | | | | | |
| **EGOR** | **Sierra Gorda,** | **4.03** | **69** | P | **Pn** | **12 19 29.0** | **+2.4** |
| EGOR | | | | S | **Sn** | **12 20 11.9** | **-0.7** |
| **EGOR** | **Sierra Gorda,** | **4.03** | **69** | P | **Pn** | **12 19 29.0** | **+2.4** |
| EGOR | | | | S | **Sn** | **12 20 09.3** | **-3.3** |
| **CZD** | **Col de Zad** | **4.12** | **130** | P | **Pn** | **12 19 28.3** | **+0.4** |
| **CZD** | **Col de Zad** | **4.12** | **130** | S | **Sn** | **12 20 16.3** | **+1.3** |
| **EADA** | **Adamuz** | **4.17** | **53** | P | **Pn** | **12 19 30.1** | **+1.7** |
| EADA | | | | S | **Sn** | **12 20 15.3** | **-0.7** |
| **EADA** | **Adamuz** | **4.17** | **53** | P | **Pn** | **12 19 30.0** | **+1.7** |
| EADA | | | | S | **Sn** | **12 20 13.3** | **-2.6** |
| **AKLM** | **AKL** | **4.23** | **105** | P | **Pn** | **12 19 28.6** | **-0.7** |
| **AKLM** | **AKL** | **4.23** | **105** | S | **Sn** | **12 20 18.0** | **+0.5** |
| **PCBR** | **Castelo Branco** | **4.24** | **14** | *e*P | **Pn** | **12 19 30.6** | **+1.3** |
| PCBR | | | | *e*S | **Sn** | **12 20 16.7** | **-0.8** |
| PCBR | | | | A | A | 12 20 17.4 | |
| | comp=N,11nm,0.2s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **4.32** | **3** | *e*P | **Pn** | **12 19 31.9** | **+1.4** |
| PCAS | | | | *e*S | **Sn** | **12 20 17.5** | **-2.1** |
| PCAS | | | | A | A | 12 20 22.1 | |
| | comp=N,3.9nm,0.2s | | | | | | |
| **MD31** | **MD31** | **4.40** | **129** | P | **Pn** | **12 19 32.1** | **+0.4** |
| **TISM** | **Timmit** | **4.46** | **153** | P | **Pn** | **12 19 30.4** | **-2.0** |
| **TISM** | **Timmit** | **4.46** | **153** | S | **Sn** | **12 20 23.0** | **0.0** |
| **MDT** | **Midelt** | **4.53** | **129** | P | **Pn** | **12 19 34.0** | **+0.5** |
| **MDT** | **Midelt** | **4.53** | **129** | S | **Sn** | **12 20 25.2** | **+0.1** |
| **OUK** | **Oukaimeden** | **4.58** | **170** | P | **Pn** | **12 19 35.0** | **+0.6** |
| **OUK** | **Oukaimeden** | **4.58** | **170** | S | **Sn** | **12 20 24.9** | **-1.6** |
| **MTE** | **Manteigas** | **4.77** | **12** | *e*P | **Pn** | **12 19 37.5** | **+0.9** |
| MTE | | | | *e*S | **Sn** | **12 20 28.5** | **-2.2** |
| MTE | | | | A | A | 12 20 30.4 | |
| | comp=N,7.5nm,0.3s | | | | | | |
| **EPLA** | **Plasencia** | **4.83** | **26** | P | **Pn** | **12 19 38.7** | **+1.1** |
| EPLA | | | | S | **Sn** | **12 20 31.1** | **-1.2** |
| EPLA | | | | *i* Vmb_Lg | | 12 20 32.8 | |
| **TIO** | **Tiouine** | **4.96** | **164** | P | **Pn** | **12 19 39.1** | **-0.3** |
| TIO | | | | S | **Sn** | **12 20 32.3** | **-3.4** |
| **TIO** | **Tiouine** | **4.96** | **164** | P | **Pn** | **12 19 38.9** | **-0.5** |
| **TIO** | **Tiouine** | **4.96** | **164** | S | **Sn** | **12 20 34.6** | **-1.1** |
| **PVIS** | **Viseu** | **5.03** | **8** | *e*P | **Pn** | **12 19 41.7** | **+1.5** |
| PVIS | | | | *e*S | **Sn** | **12 20 35.8** | **-1.3** |
| PVIS | | | | A | A | 12 20 37.7 | |
| | comp=N,6.4nm,0.2s | | | | | | |
| **OUZM** | **OUZ** | **5.11** | **160** | P | **Pn** | **12 19 41.5** | **+0.2** |
| **TTIG** | **Tnine Tigouga,** | **5.18** | **177** | P | **Pn** | **12 19 39.3** | **-3.1** |
| **PAB** | **San Pablo** | **5.20** | **42** | P | **Pn** | **12 19 44.2** | **+1.6** |
| PAB | | | | S | **Sn** | **12 20 37.1** | **-4.2** |
| PAB | | | | *i* Vmb_Lg | | 12 20 39.2 | |
| **MVO** | **Moncorvo** | **5.60** | **14** | *e*P | **Pn** | **12 19 49.6** | **+1.5** |
| MVO | | | | *e*S | **Sn** | **12 20 48.1** | **-3.1** |
| MVO | | | | A | A | 12 20 50.5 | |
| | comp=N,4.9nm,0.3s | | | | | | |
| **PVRL** | **Vila Real** | **5.60** | **8** | *e*P | **Pn** | **12 19 49.2** | **+1.1** |
| PVRL | | | | *e*S | **Sn** | **12 20 48.6** | **-2.6** |
| PVRL | | | | A | A | 12 20 52.0 | |
| | comp=N,7.4nm,0.1s | | | | | | |
| **POLO** | **Lamas de Olo** | **5.69** | **8** | *e*P | **Pn** | **12 19 50.5** | **+1.2** |
| POLO | | | | *e*S | **Sn** | **12 20 50.6** | **-2.9** |
| POLO | | | | A | A | 12 20 53.1 | |
| | comp=N,2.6nm,0.4s | | | | | | |
| **PCAB** | **Cabril** | **6.00** | **6** | *e*P | **Pn** | **12 19 54.9** | **+1.3** |
| PCAB | | | | *e*S | **Sn** | **12 20 58.1** | **-2.9** |
| **ELOB** | **Lobios** | **6.16** | **5** | P | **Pn** | **12 19 56.3** | **+0.6** |
| ELOB | | | | S | **Sn** | **12 21 03.0** | **-1.9** |
| ELOB | | | | *i* Vmb_Lg | | 12 21 05.7 | |
| **PGAV** | **Gavieira, Arco** | **6.24** | **4** | *e*P | **Pn** | **12 19 58.0** | **+1.1** |
| PGAV | | | | *e*S | **Sn** | **12 21 03.2** | **-3.8** |
| PGAV | | | | A | A | 12 21 10.6 | |
| | comp=N,2.6nm,0.5s | | | | | | |
| **PBRG** | **Braganca** | **6.28** | **14** | *e*P | **Pn** | **12 19 58.4** | **+1.1** |
| PBRG | | | | *e*S | **Sn** | **12 21 04.7** | **-3.1** |
| PBRG | | | | A | A | 12 21 07.0 | |
| | comp=N,3.6nm,0.2s | | | | | | |
| **UCM** | **Universidad Co** | **6.33** | **42** | P | **Pn** | **12 19 59.9** | **+1.7** |
| UCM | | | | S | **Sn** | **12 21 06.2** | **-3.0** |
| **ECAL** | **Calabor** | **6.41** | **14** | P | **Pn** | **12 20 00.2** | **+1.0** |
| ECAL | | | | S | **Sn** | **12 21 09.3** | **-1.8** |
| **ECAL** | **Calabor** | **6.41** | **14** | P | **Pn** | **12 20 00.5** | **+1.3** |
| ECAL | | | | S | **Sn** | **12 21 08.5** | **-2.6** |
| ECAL | | | | *i* Vmb_Lg | | 12 22 58.1 | |
| **ETOB** | **Tobarra** | **6.48** | **61** | P | **Pn** | **12 20 00.4** | **+0.2** |
| **ETOB** | **Tobarra** | **6.48** | **61** | P | **Pn** | **12 20 01.0** | **+0.8** |
| ETOB | | | | S | **Sn** | **12 21 09.5** | **-3.4** |
| **PMPST** | **Porto Santo, M** | **6.76** | **249** | *e*P | **Pn** | **12 20 03.9** | **-0.1** |
| PMPST | | | | *e*S | **Sn** | **12 21 13.8** | **-5.9** |
| **EAGO** | **Agolada(Pontev** | **7.08** | **4** | P | **Pn** | **12 20 09.5** | **+1.1** |
| EAGO | | | | S | **Sn** | **12 21 24.7** | **-2.9** |
| EAGO | | | | *i* Vmb_Lg | | 12 23 42.8 | |
| **EMAZ** | **Mazaricos** | **7.21** | **359** | P | **Pn** | **12 20 10.5** | **+0.4** |
| EMAZ | | | | S | **Sn** | **12 21 27.5** | **-3.2** |
| EMAZ | | | | *i* Vmb_Lg | | 12 25 03.6 | |

*GII **15** 12:20:03.7±0.2,33°.493N±0°.003×35°.683E±0°.001,h0$^{km}$, Md1.0/3,confirmed*
*GRAL **15** 12:20:05.4±0.3,33°.45N×35°.68E,h1$^{km}$±17$^{km}$,MD2.6*
**ISC 15 12:20:05.4±1.2,33°.47N±0°.02×35°.68E±0°.05,h0$^{km}$,n14,**
**σ0$^{s}$66**/17**,Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **QRWL** | **Qaraoun** | **0.08** | **4** | *e*P | **Pg** | **12 20 07.0** | **+0.1** |
| QRWL | | | | *e*S | **Sg** | **12 20 08.5** | **+0.6** |
| **RCY** | **Rachaya** | **0.14** | **80** | *e*P | **Pg** | **12 20 07.9** | **-0.2** |
| **NATI** | **Neve Ativ** | **0.22** | **166** | S | **Sg** | **12 20 13.5** | **+1.1** |
| **NATI** | **Neve Ativ** | **0.22** | **166** | P | **Pg** | **12 20 09.0** | **-0.6** |
| **DQRL** | **Deir Qamar** | **0.25** | **339** | *e*P | **Pg** | **12 20 10.3** | **+0.1** |
| DQRL | | | | *e*S | **Sg** | **12 20 13.8** | **+0.3** |
| **GEM** | **Giv'at Ha'Em** | **0.26** | **182** | S | **Sg** | **12 20 15.2** | **+1.4** |
| **GEM** | **Giv'at Ha'Em** | **0.26** | **182** | P | **Pg** | **12 20 10.6** | **+0.2** |
| **BHL** | **Bhannes** | **0.43** | **358** | *e*P | **Pg** | **12 20 13.4** | **-0.3** |
| **KSHT** | **Keshet** | **0.50** | **167** | P | **Pg** | **12 20 15.2** | **+0.2** |
| KSHT | | | | S | **Sb** | **12 20 24.2** | **-0.9** |
| **MMC7** | **Mount Meron ar** | **0.51** | **208** | P | **Pg** | **12 20 15.1** | **-0.1** |
| **MMA0** | **Mount Meron ar** | **0.51** | **207** | P | **Pg** | **12 20 15.2** | **0.0** |
| **MMA0B** | **Mount Meron ar** | **0.51** | **207** | P | **Pg** | **12 20 15.0** | **-0.2** |
| **MMA0B** | **Mount Meron ar** | **0.51** | **207** | S | **Sb** | **12 20 24.5** | **-0.8** |
| **HMDT** | **Nahal Hemdat** | **1.22** | **186** | P | **Pg** | **12 20 28.3** | **-0.6** |

*SOME **15** 12:34:54.3,42°.97N×83°.12E,h0$^{km}$*
*NNC **15** 12:34:55.9±2.0,43°.02N×83°.14E,h0$^{km}$,mb3.7,mpv3.4, Error ellipse: s-maj=15.5km s-min=7.3km az=139.0*
**ISC 15 12:34:56.7±2.1,42°.99N±0°.09×83°.05E±0°.08,h10$^{km}$,n28,**
**σ2$^{s}$45**/39**,7C-5D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PDGK** | **Podgornoye** | **2.63** | **279** | Pg | **Pb** | **12 35 44.0** | **0.0** |
| | 6.1nm,0.4s | | | | | | |
| PDGK | | | | Lg | Lg | 12 36 19.9 | |
| | 14nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **2.63** | **279** | ⇑Pg | **Pb** | **12 35 45.1** | **+1.1** |
| | 6.6nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 12 36 19.6 | |
| | 12nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **2.64** | **275** | *e*P | **Pn** | **12 35 39.6** | **+0.1** |
| | 33nm,0.2s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **12 36 12.3** | **+0.7** |
| | 88nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.64** | **275** | Pg | **Pn** | **12 35 39.3** | **-0.1** |
| | 29nm,0.2s | | | | | | |
| SHLS | | | | Lg | Lg | 12 36 12.3 | |
| | 88nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **2.72** | **301** | *e*P | **Pb** | **12 35 45.9** | **+0.3** |
| | 4.8nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **12 36 23.1** | **-1.1** |
| | 21nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.72** | **301** | Pg | **Pb** | **12 35 45.9** | **+0.3** |
| | 6.5nm,0.2s | | | | | | |
| DJR | | | | Lg | Lg | 12 36 23.6 | |
| | 21nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.96** | **274** | *e*P | **Pb** | **12 35 49.7** | **+0.1** |
| | 6.9nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sb** | **12 36 29.8** | **+3.9** |
| | 18nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **2.96** | **274** | Pg | **Pb** | **12 35 49.7** | **+0.1** |
| | 6.9nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 12 36 29.8 | |
| | 13nm,0.4s | | | | | | |
| **KNOS** | **Konyrlen** | **3.13** | **297** | Pg | **Pb** | **12 35 54.1** | **+1.5** |
| | 1.5nm,0.5s | | | | | | |
| KNOS | | | | Lg | Lg | 12 36 37.1 | |
| | 11nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **3.23** | **280** | *e*P | **Pb** | **12 35 55.8** | **+1.6** |
| | 6.7nm,0.3s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **12 36 40.1** | **-0.4** |
| | 36nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **3.23** | **280** | Pg | **Pb** | **12 35 55.8** | **+1.6** |
| | 6.7nm,0.3s | | | | | | |
| KPKS | | | | Lg | Lg | 12 36 40.1 | |
| | 36nm,0.3s | | | | | | |
| **BLB** | **Baldybastay** | **3.51** | **290** | Pg | **Pb** | **12 35 59.5** | **+0.5** |
| | 21nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 12 36 47.2 | |
| | 13nm,0.3s | | | | | | |
| **KURS** | **Kuram** | **3.60** | **280** | *e*P | **Pg** | **12 36 03.5** | **-2.2** |
| | 3.5nm,0.4s | | | | | | |
| KURS | | | | *e*S | **Sg** | **12 36 53.2** | **+0.8** |
| | 10.0nm,0.8s | | | | | | |
| **KURS** | **Kuram** | **3.60** | **280** | Pg | **Pg** | **12 36 03.5** | **-2.2** |
| | 3.5nm,0.4s | | | | | | |
| KURS | | | | Lg | Lg | 12 36 52.5 | |
| | 10.0nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **3.84** | **352** | ⇑Pg | **Pb** | **12 36 04.4** | **-0.2** |
| | 1.0nm,0.4s,baz=174,slow=15,SNR=20 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 12 36 55.0 | |
| | 3.2nm,0.3s,baz=162,slow=34,SNR=8.4 | | | | | | |
| **MAKZ** | **Makanchi** | **3.90** | **349** | ⇑Pg | **Pg** | **12 36 07.4** | **-3.9** |
| | 1.0nm,0.3s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 12 36 59.9 | |
| | 4.1nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.99** | **290** | *e*P | **Pb** | **12 36 08.8** | **+1.7** |
| | 2.9nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **12 37 02.6** | **-2.2** |
| | 11nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **4.40** | **274** | ⇑Pg | **Pg** | **12 36 19.4** | **-1.7** |
| | 1.5nm,0.3s | | | | | | |
| MDOK | | | | Sn | **Sb** | **12 37 02.9** | **-4.6** |
| | 2.1nm,0.4s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 12 37 23.3 | |
| | 4.9nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.48** | **273** | *e*P | **Pg** | **12 36 20.0** | **-2.5** |
| | 2.9nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **12 37 21.5** | **+1.0** |
| | 4.6nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.48** | **273** | Pg | **Pg** | **12 36 20.0** | **-2.5** |
| | 2.9nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 12 37 21.5 | |
| | 4.6nm,0.3s | | | | | | |
| **ZSN** | **Zaisan** | **4.64** | **15** | *e*P | **Pb** | **12 36 18.0** | **-0.3** |
| | 3.8nm,0.5s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **12 37 17.7** | **+3.5** |
| | 9.4nm,0.4s | | | | | | |
| **ZSN** | **Zaisan** | **4.64** | **15** | Pg | **Pb** | **12 36 18.0** | **-0.3** |
| | 3.8nm,0.5s | | | | | | |
| ZSN | | | | Lg | Lg | 12 37 17.7 | |
| | 9.4nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **5.34** | **275** | *e*P | **Pb** | **12 36 33.2** | **+3.0** |
| | 1.5nm,0.4s | | | | | | |
| DGS | | | | *e*S | **Sg** | **12 37 44.6** | **-3.4** |
| | 5.5nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **5.34** | **275** | Pg | **Pb** | **12 36 33.0** | **+2.9** |
| | 1.5nm,0.4s | | | | | | |
| DGS | | | | Lg | Lg | 12 37 44.6 | |
| | 5.0nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **5.43** | **280** | *e*P | **Pb** | **12 36 34.7** | **+3.1** |
| | 1.3nm,0.4s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **12 37 46.8** | **-4.2** |
| | 0.4nm,0.4s | | | | | | |
| **KRBS** | **Karabastau** | **5.43** | **280** | Pg | **Pb** | **12 36 34.7** | **+3.1** |
| | 1.3nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 12 37 46.8 | |
| | 0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.24** | **339** | ⇓Sn | **Sn** | **12 38 33.9** | **+4.5** |
| | 2.7nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 12 39 16.1 | |
| | 7.2nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **8.30** | **340** | ⇑Sn | **Sn** | **12 38 35.5** | **+4.6** |
| | 0.9nm,0.7s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 12 39 19.9 | |
| | 2.4nm,0.7s | | | | | | |

*DNK **15** 12:55:09.1±0.4,57°.24N×14°.16E,h0$^{km}$,ML1.5(UPP), Explosion*
**UPP 15 12:55:08.8±0.1,57°.23N×14°.15E,h0$^{km}$,ML1.5,Unknown, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GNOU** | **Gnosjoe** | **0.22** | **285** | P | Pg | 12 55 13.3 | +0.3 |
| GNOU | | | | S | Sg | 12 55 16.5 | +0.6 |
| **GNOU** | **Gnosjoe** | **0.22** | **285** | P | Pg | 12 55 13.3 | +0.3 |
| GNOU | | | | S | Sg | 12 55 16.5 | +0.6 |
| **VXJU** | **Vaexsjoe** | **0.53** | **126** | P | Pg | 12 55 19.0 | 0.0 |
| **VXJU** | **Vaexsjoe** | **0.53** | **126** | P | Pg | 12 55 19.0 | 0.0 |
| **DEL** | **Delary** | **0.78** | **191** | P | Pg | 12 55 23.3 | -0.4 |
| **DEL** | **Delary** | **0.78** | **191** | *e*P | Pg | 12 55 22.4 | -1.3 |
| DEL | | | | *i* S | Sg | 12 55 34.2 | +0.4 |
| **DEL** | **Delary** | **0.78** | **191** | P | Pg | 12 55 23.3 | -0.4 |
| **FABU** | **Falkenberg** | **0.81** | **254** | P | Pg | 12 55 24.0 | -0.3 |
| **FABU** | **Falkenberg** | **0.81** | **254** | *e*P | Pb | 12 55 26.0 | +0.2 |
| FABU | | | | *i* S | Sg | 12 55 35.6 | +0.6 |
| **FABU** | **Falkenberg** | **0.81** | **254** | P | Pg | 12 55 24.0 | -0.3 |
| **BORU** | **Boraas** | **0.85** | **299** | P | Pg | 12 55 24.4 | -0.6 |
| **BORU** | **Boraas** | **0.85** | **299** | P | Pg | 12 55 24.4 | -0.6 |
| **FKPU** | **Falk** | **0.96** | **346** | P | Pg | 12 55 26.6 | -0.6 |
| **FKPU** | **Falk** | **0.96** | **346** | P | Pg | 12 55 26.6 | -0.6 |
| **OSKU** | **Oskarshamn** | **1.06** | **91** | P | Pg | 12 55 28.3 | -0.8 |
| **OSKU** | **Oskarshamn** | **1.06** | **91** | P | Pg | 12 55 28.3 | -0.8 |
| **ONAU** | **Onsala** | **1.22** | **279** | P | Pg | 12 55 31.3 | -0.9 |
| **ONAU** | **Onsala** | **1.22** | **279** | P | Pg | 12 55 31.3 | -0.9 |
| **LNKU** | **Linkoeping** | **1.23** | **36** | P | Pg | 12 55 31.5 | -0.9 |
| **LNKU** | **Linkoeping** | **1.23** | **36** | P | Pg | 12 55 31.5 | -0.9 |
| **BYXU** | **Byxelkrok** | **1.55** | **87** | P | Pn | 12 55 37.3 | -0.4 |
| **BYXU** | **Byxelkrok** | **1.55** | **87** | P | Pn | 12 55 37.3 | -0.4 |
| **LUNU** | **Lund** | **1.65** | **194** | *i* P | Pn | 12 55 38.0 | -1.0 |
| **BSD** | **Bornholm Skovb** | **2.17** | **168** | *i* P | Pn | 12 55 42.0 | -4.1 |

*IDC **15** 12:55:35.3±6.4,23°.44S×179°.31W,h537$^{km}$±62$^{km}$,mb3.3/3, mbtmp4.3/5,Error ellipse: s-maj=68.3km s-min=43.9km az=28.0*
*NEIC **15** 12:55:35.5±0.8,23°.5S±0°.2×179°.4W±0°.1,h522km±11km, mb4.2/21,Error ellipse: s-maj=25.9km s-min=14.5km az=200.0*
**ISC 15 12:55:35.5±0.8,23°.6S±0°.1×179°.3W±0°.1,h536$^{km}$,n35,**
**σ1$^{s}$15**/36**,mb4.1**/13**,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **5.80** | **168** | P | **P** | **12 57 10.9** | **-0.6** |
| **NIUE** | **Niue** | **9.83** | **65** | P | **P** | **12 57 51.0** | **-0.6** |
| **PINNC** | **Pines Island,** | **12.21** | **272** | P | **P** | **12 58 17.5** | **+1.2** |
| **LIFNC** | **LIFOU** | **12.75** | **280** | P | **P** | **12 58 21.0** | **-0.9** |
|

*CNRM **15** 13:18:39.5, 36°37N×8°51W, h75km, ML1.4*
*MDD **15** 13:18:42.9±0.7, 36°54N×8°48W, h43km, mb_Lg2.7/15, Error ellipse: s-maj=6.0km s-min=3.3km az=38.0*
*SFS **15** 13:18:43.2, 36°58N×8°37W, h23km, ML2.7/12, ML2.4/12, MLv2.4/12*
*INMG **15** 13:18:43.8±1.1, 36°59N×8°39W, h21km±2km, ML2.0, Error ellipse: s-maj=4.4km s-min=1.7km az=55.0*
*IGIL **15** 13:18:44.3, 36°60N×8°38W, h21km, ML2.0*

**ISC 15 13:18:42.0±1.3, 36°56N±0°04×8°33W±0°04, h31km±12km, n68, σ1§64/111, 3C-2D, West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **0.69** | **325** | ⇓*i*P | **Pb** | **13 18 55.7** | **0.0** |
| PFVI | | | | *e*S | **Sb** | **13 19 04.8** | **-0.2** |
| PFVI | | | | A | A | 13 19 08.9 | |
| | 25nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.69** | **325** | P | **Pb** | **13 18 55.6** | **0.0** |
| **PFVI** | **Vila Bisbo** | **0.69** | **325** | S | **Sn** | **13 19 08.4** | **+3.1** |
| **PBDV** | **Barranco-do-Ve** | **0.75** | **25** | ⇑*i*P | **Pn** | **13 18 57.7** | **+1.3** |
| PBDV | | | | *e*S | **Sn** | **13 19 07.5** | **+0.8** |
| PBDV | | | | A | A | 13 19 13.7 | |
| | 13nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **0.78** | **341** | ⇓*e*P | **Pb** | **13 18 57.3** | **+0.1** |
| MORF | | | | *e*S | **Sn** | **13 19 07.8** | **+0.2** |
| MORF | | | | A | A | 13 19 08.3 | |
| | 34nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **0.78** | **341** | *e*P | **Pb** | **13 18 57.3** | **+0.1** |
| MORF | | | | *e*S | **Sb** | **13 19 07.5** | **0.0** |
| MORF | | | | IAML | | 13 19 10.3 | |
| | comp=E,46nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.97** | **30** | *e*P | **Pn** | **13 19 00.6** | **+1.2** |
| PVAQ | | | | *e*S | **Sn** | **13 19 13.7** | **+1.5** |
| PVAQ | | | | A | A | 13 19 17.7 | |
| | comp=E,13nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.97** | **30** | P | **Pn** | **13 19 00.6** | **+1.2** |
| PVAQ | | | | S | **Sn** | **13 19 12.9** | **+0.7** |
| **PVAQ** | **Vaqueiros** | **0.97** | **30** | P | **Pn** | **13 19 01.0** | **+1.6** |
| **PVAQ** | **Vaqueiros** | **0.97** | **30** | S | **Sn** | **13 19 17.8** | **+5.7** |
| **PTEO** | **Sao Teotonio** | **1.03** | **342** | ⇑*i*P | **Pn** | **13 19 00.9** | **+0.6** |
| PTEO | | | | *e*S | **Sb** | **13 19 13.9** | **-0.5** |
| PTEO | | | | A | A | 13 19 18.8 | |
| | comp=E,11nm,0.1s | | | | | | |
| **PCVE** | **Castro Verde** | **1.09** | **12** | ⇑*i*P | **Pb** | **13 19 02.5** | **+0.2** |
| PCVE | | | | *e*S | **Sn** | **13 19 16.2** | **+1.1** |
| PCVE | | | | A | A | 13 19 17.3 | |
| | comp=E,10.0nm,0.1s | | | | | | |
| **PCVE** | **Castro Verde** | **1.09** | **12** | P | **Pb** | **13 19 02.4** | **+0.2** |
| PCVE | | | | S | **Sn** | **13 19 15.8** | **+0.7** |
| **EGRO** | **El Granado** | **1.18** | **35** | P | **Pb** | **13 19 03.7** | **0.0** |
| EGRO | | | | S | **Sn** | **13 19 17.9** | **+0.5** |
| **EGRO** | **El Granado** | **1.18** | **35** | Pn | **Pb** | **13 19 03.8** | **0.0** |
| EGRO | | | | Sn | **Sn** | **13 19 17.9** | **+0.5** |
| EGRO | | | | *i* Vmb_Lg | | 13 19 19.3 | |
| **MESJ** | **Messejana** | **1.28** | **4** | *e*P | **Pb** | **13 19 04.9** | **-0.5** |
| MESJ | | | | *e*S | **Sb** | **13 19 20.6** | **-0.9** |
| MESJ | | | | A | A | 13 19 21.5 | |
| | comp=E,31nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **1.28** | **4** | *e*P | **Pb** | **13 19 04.9** | **-0.5** |
| MESJ | | | | *e*S | **Sn** | **13 19 20.1** | **+0.3** |
| MESJ | | | | IAML | | 13 19 21.4 | |
| | comp=N,24nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **1.50** | **14** | *e*S | **Sn** | **13 19 26.1** | **+0.7** |
| PBEJ | | | | A | A | 13 19 28.4 | |
| | comp=N,6.5nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.55** | **354** | *e*P | **Pn** | **13 19 08.2** | **+0.8** |
| PNCL | | | | *e*S | **Sn** | **13 19 26.8** | **+0.3** |
| PNCL | | | | A | A | 13 19 34.6 | |
| | comp=N,12nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.55** | **354** | P | **Pn** | **13 19 08.3** | **+0.8** |
| PNCL | | | | S | **Sn** | **13 19 26.5** | **0.0** |
| **EMIN** | **Mina Concepcio** | **1.79** | **47** | P | **Pn** | **13 19 11.8** | **+1.2** |
| EMIN | | | | S | **Sn** | **13 19 33.5** | **+1.2** |
| **EMIN** | **Mina Concepcio** | **1.79** | **47** | Pn | **Pn** | **13 19 11.9** | **+1.2** |
| EMIN | | | | Sn | **Sn** | **13 19 33.3** | **+1.0** |
| EMIN | | | | *i* Vmb_Lg | | 13 19 43.1 | |
| **PBAR** | **Barrancos** | **1.91** | **32** | *e*P | **Pn** | **13 19 13.4** | **+1.1** |
| PBAR | | | | *e*S | **Sn** | **13 19 36.1** | **+0.8** |
| PBAR | | | | A | A | 13 19 49.8 | |
| | comp=N,3.7nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **1.91** | **32** | S | **Sn** | **13 19 35.9** | **+0.6** |
| **EVO** | **Evora** | **1.98** | **7** | *e*P | **Pn** | **13 19 14.4** | **+1.1** |
| EVO | | | | *e*S | **Sn** | **13 19 37.0** | **-0.1** |
| EVO | | | | A | A | 13 19 38.0 | |
| | comp=N,12nm,0.4s | | | | | | |
| **EVO** | **Evora** | **1.98** | **7** | P | **Pn** | **13 19 14.3** | **+0.9** |
| EVO | | | | S | **Sn** | **13 19 37.2** | **+0.1** |
| **ESPR** | **Espera** | **2.01** | **81** | P | **Pn** | **13 19 15.0** | **+1.4** |
| ESPR | | | | S | **Sn** | **13 19 39.0** | **+1.2** |
| **ESPR** | **Espera** | **2.01** | **81** | Pn | **Pn** | **13 19 15.1** | **+1.4** |
| ESPR | | | | Sn | **Sn** | **13 19 39.0** | **+1.2** |
| ESPR | | | | *i* Vmb_Lg | | 13 19 40.5 | |
| **EJIF** | **Jimena Fronter** | **2.31** | **92** | Pn | **Pn** | **13 19 19.2** | **+1.4** |
| EJIF | | | | Sn | **Sn** | **13 19 46.9** | **+1.8** |
| **PESTR** | **Estremoz** | **2.37** | **14** | *e*P | **Pn** | **13 19 19.6** | **+0.9** |
| PESTR | | | | *e*S | **Sn** | **13 19 46.4** | **-0.4** |
| PESTR | | | | A | A | 13 19 48.0 | |
| | comp=N,1.7nm,0.2s | | | | | | |
| **PESTR** | **Estremoz** | **2.37** | **14** | P | **Pn** | **13 19 19.6** | **+0.9** |
| PESTR | | | | S | **Sn** | **13 19 46.9** | **+0.1** |
| **PESTR** | **Estremoz** | **2.37** | **14** | P | **Pn** | **13 19 19.8** | **+1.0** |
| **PESTR** | **Estremoz** | **2.37** | **14** | S | **Sn** | **13 19 49.4** | **+2.6** |
| **LIJA** | **Lijar** | **2.37** | **81** | S | **Sn** | **13 19 48.3** | **+1.4** |
| **EBAD** | **Badajoz** | **2.42** | **25** | P | **Pn** | **13 19 20.1** | **+0.7** |
| EBAD | | | | S | **Sn** | **13 19 48.1** | **+0.1** |
| **EBAD** | **Badajoz** | **2.42** | **25** | Pn | **Pn** | **13 19 19.9** | **+0.5** |
| EBAD | | | | Sn | **Sn** | **13 19 46.3** | **-1.7** |
| EBAD | | | | *i* Vmb_Lg | | 13 19 50.0 | |
| **PMTG** | **Montargil** | **2.50** | **2** | *e*P | **Pn** | **13 19 21.6** | **+1.1** |
| PMTG | | | | *e*S | **Sn** | **13 19 49.2** | **-0.7** |
| PMTG | | | | A | A | 13 19 52.1 | |
| | comp=N,5.1nm,0.1s | | | | | | |
| **ECAB** | **El Cabril** | **2.77** | **56** | P | **Pn** | **13 19 24.7** | **+0.5** |
| ECAB | | | | S | **Sn** | **13 19 56.1** | **-0.4** |
| **ECAB** | **El Cabril** | **2.77** | **56** | Pn | **Pn** | **13 19 24.7** | **+0.5** |
| ECAB | | | | Sn | **Sn** | **13 19 55.4** | **-1.1** |
| ECAB | | | | *i* Vmb_Lg | | 13 20 00.8 | |
| **PMRV** | **Marv??o** | **2.95** | **14** | *e*P | **Pn** | **13 19 27.6** | **+0.9** |
| PMRV | | | | *e*S | **Sn** | **13 20 00.3** | **-0.8** |
| PMRV | | | | A | A | 13 20 02.5 | |
| | comp=N,3.7nm,0.3s | | | | | | |
| **PSBE** | **So Bento** | **2.97** | **353** | *e*P | **Pn** | **13 19 28.7** | **+1.8** |
| PSBE | | | | *e*S | **Sn** | **13 20 02.3** | **+0.8** |
| PSBE | | | | A | A | 13 20 03.3 | |
| | comp=N,4.0nm,0.2s | | | | | | |
| **PCBR** | **Castelo Branco** | **3.34** | **11** | *e*S | **Sn** | **13 20 09.6** | **-1.0** |
| PCBR | | | | A | A | 13 20 11.6 | |
| | comp=N,5.2nm,0.3s | | | | | | |
| **EADA** | **Adamuz** | **3.39** | **61** | P | **Pn** | **13 19 34.2** | **+1.4** |
| EADA | | | | S | **Sn** | **13 20 11.4** | **-0.5** |
| **EADA** | **Adamuz** | **3.39** | **61** | Pn | **Pn** | **13 19 33.8** | **+1.0** |
| EADA | | | | Sn | **Sn** | **13 20 11.4** | **-0.5** |
| EADA | | | | *i* Vmb_Lg | | 13 20 14.1 | |
| **ZHG** | **ZHG** | **3.41** | **156** | P | **Pn** | **13 19 30.5** | **-2.5** |
| **ZHG** | **ZHG** | **3.41** | **156** | S | **Sn** | **13 20 08.8** | **-3.6** |
| **EGOR** | **Sierra Gorda,** | **3.43** | **80** | Pn | **Pn** | **13 19 35.7** | **+2.3** |
| EGOR | | | | *i* Vmb_Lg | | 13 20 09.8 | |
| EGOR | | | | Sn | **Sn** | **13 20 13.7** | **+0.7** |
| **PCAS** | **Casmilo, Conde** | **3.49** | **358** | *e*P | **Pn** | **13 19 35.8** | **+1.8** |
| PCAS | | | | *e*S | **Sn** | **13 20 13.6** | **-0.6** |
| PCAS | | | | A | A | 13 20 17.6 | |
| | comp=N,3.7nm,0.3s | | | | | | |
| **ELGU** | **Los Guajares,** | **3.79** | **84** | Pn | **Pn** | **13 19 39.9** | **+1.6** |
| ELGU | | | | Sn | **Sn** | **13 20 22.8** | **+1.0** |
| ELGU | | | | *i* Vmb_Lg | | 13 20 27.5 | |
| **EPLA** | **Plasencia** | **3.92** | **26** | Pn | **Pn** | **13 19 41.4** | **+1.4** |
| EPLA | | | | Sn | **Sn** | **13 20 24.3** | **-0.6** |
| EPLA | | | | *i* Vmb_Lg | | 13 20 26.2 | |
| **PAB** | **San Pablo** | **4.33** | **45** | Pn | **Pn** | **13 19 47.0** | **+1.3** |
| PAB | | | | Sn | **Sn** | **13 20 33.8** | **-1.3** |
| PAB | | | | *i* Vmb_Lg | | 13 20 39.0 | |
| **ESDC** | **Sonseca Array** | **4.63** | **47** | Pn | **Pn** | **13 19 50.9** | **+1.0** |
| ESDC | | | | Sn | **Sn** | **13 20 41.0** | **-1.6** |
| ESDC | | | | *i* Vmb_Lg | | 13 21 49.1 | |
| **MVO** | **Moncorvo** | **4.70** | **12** | *e*S | **Sn** | **13 20 42.0** | **-2.4** |
| MVO | | | | A | A | 13 20 44.1 | |
| | comp=N,2.0nm,0.2s | | | | | | |
| **POLO** | **Lamas de Olo** | **4.82** | **5** | *e*P | **Pn** | **13 19 54.0** | **+1.5** |
| POLO | | | | *e*S | **Sn** | **13 20 44.1** | **-3.2** |
| POLO | | | | A | A | 13 20 47.3 | |
| | comp=N,1.3nm,0.3s | | | | | | |
| **MDT** | **Midelt** | **4.84** | **140** | P | **Pn** | **13 19 50.3** | **-2.4** |
| **MDT** | **Midelt** | **4.84** | **140** | S | **Sn** | **13 20 43.8** | **-3.9** |
| **GUD** | **Guadarrama** | **5.22** | **37** | Pn | **Pn** | **13 19 59.0** | **+1.0** |
| GUD | | | | Sn | **Sn** | **13 20 56.3** | **-0.9** |
| GUD | | | | *i* Vmb_Lg | | 13 21 42.1 | |
| **ELOB** | **Lobios** | **5.30** | **2** | Sn | **Sn** | **13 20 55.6** | **-3.4** |
| ELOB | | | | *i* Vmb_Lg | | 13 21 01.6 | |
| **OUK** | **Oukaimeden** | **5.36** | **176** | P | Pn | 13 19 55.2 | -4.9 |
| **OUK** | **Oukaimeden** | **5.36** | **176** | S | Sn | 13 20 54.3 | -6.6 |
| **PGAV** | **Gavieira, Arco** | **5.39** | **0** | *e*S | **Sn** | **13 20 58.3** | **-3.1** |
| **ECAL** | **Calabor** | **5.51** | **12** | Pn | **Pn** | **13 20 02.0** | **+0.1** |
| ECAL | | | | Sn | **Sn** | **13 21 00.5** | **-3.8** |
| ECAL | | | | *i* Vmb_Lg | | 13 21 21.9 | |
| **ETOB** | **Tobarra** | **5.77** | **67** | P | **Pn** | **13 20 05.8** | **+0.3** |
| ETOB | | | | S | **Sn** | **13 21 08.7** | **-1.9** |
| **ETOB** | **Tobarra** | **5.77** | **67** | Pn | **Pn** | **13 20 05.4** | **-0.1** |
| ETOB | | | | Sn | **Sn** | **13 21 09.0** | **-1.6** |
| **OUZM** | **OUZ** | **5.79** | **167** | P | Pn | 13 20 01.9 | -3.9 |
| **OUZM** | **OUZ** | **5.79** | **167** | S | **Sn** | **13 21 07.1** | **-4.2** |
| **EAGO** | **Agolada(Pontev** | **6.23** | **2** | Pn | **Pn** | **13 20 11.9** | **+0.1** |
| EAGO | | | | Sn | **Sn** | **13 21 17.2** | **-4.8** |
| **EMAZ** | **Mazaricos** | **6.40** | **356** | Sn | **Sn** | **13 21 21.7** | **-4.2** |

*NOU **15** 13:19:50.9, 34°75S×174°25E, h208km, MLv4.1/5, Off E. Coast of N. Island, N.Z.*
*WEL **15** 13:20:05.2±0.5, 36°S±4°×17°4E±°, h5km, M2.5/9, ML2.7/11, MLv2.5/9, Error ellipse: s-maj=0.0km s-min=0.0km az=59.8, confirmed*

**ISC 15 13:20:04.9±1.2, 35°92S±0°03×173°98E±0°05, h8km±10km, n31, σ1§38/52, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WCZ** | **Waipu Caves** | **0.30** | **93** | P | **Pg** | **13 20 10.3** | **-0.4** |
| WCZ | | | | S | **Sg** | **13 20 14.8** | **+0.1** |
| **WBSC** | **Whangarei Boys** | **0.35** | **53** | P | **Pg** | **13 20 11.3** | **-0.4** |
| WBSC | | | | S | **Sg** | **13 20 15.9** | **-0.3** |
| **OUZ** | **Omahuta** | **0.77** | **336** | P | **Pb** | **13 20 20.5** | **0.0** |
| **OUZ** | **Omahuta** | **0.77** | **336** | P | **Pg** | **13 20 20.0** | **+0.4** |
| OUZ | | | | S | **Sb** | **13 20 31.6** | **+0.5** |
| **ABAZ** | **Army Bay** | **0.97** | **135** | P | **Pg** | **13 20 23.8** | **+0.3** |
| ABAZ | | | | S | **Sn** | **13 20 40.4** | **+1.7** |
| **RVAZ** | **Riverhead Bore** | **0.98** | **150** | P | **Pg** | **13 20 23.7** | **+0.1** |
| RVAZ | | | | S | **Sb** | **13 20 39.0** | **+1.9** |
| **HBAZ** | **Herne Bay Bore** | **1.11** | **147** | P | **Pg** | **13 20 26.0** | **-0.2** |
| HBAZ | | | | S | **Sb** | **13 20 42.1** | **+1.2** |
| **WTAZ** | **Waiatarua** | **1.12** | **155** | P | **Pg** | **13 20 26.2** | **-0.1** |
| **MBAZ** | **Motutapu North** | **1.13** | **139** | P | **Pg** | **13 20 26.3** | **-0.2** |
| MBAZ | | | | S | **Sn** | **13 20 43.8** | **+1.1** |
| **EPAZ** | **Eden Park BICE** | **1.14** | **147** | P | **Pg** | **13 20 25.4** | **-1.3** |
| EPAZ | | | | S | **Sb** | **13 20 42.6** | **+0.9** |
| **GRZ** | **Great Barrier** | **1.25** | **106** | P | **Pg** | **13 20 27.3** | **-1.4** |
| **AWAZ** | **Awhitu Peninsu** | **1.26** | **155** | P | **Pg** | **13 20 28.0** | **-1.0** |
| AWAZ | | | | S | **Sg** | **13 20 45.5** | **+0.1** |
| **WIAZ** | **Waiheke Island** | **1.28** | **133** | P | **Pg** | **13 20 28.9** | **-0.4** |
| WIAZ | | | | S | **Sb** | **13 20 46.4** | **+0.6** |
| **ETAZ** | **East Tamaki Re** | **1.28** | **144** | P | **Pn** | **13 20 28.6** | **-0.5** |
| ETAZ | | | | S | **Sb** | **13 20 46.7** | **+0.7** |
| **MKAZ** | **Moumakai** | **1.52** | **141** | P | **Pn** | **13 20 32.4** | **0.0** |
| MKAZ | | | | S | **Sb** | **13 20 53.5** | **+0.9** |
| **KUZ** | **Kuaotunu** | **1.63** | **121** | P | **Pn** | **13 20 33.2** | **-0.7** |
| **KUZ** | **Kuaotunu** | **1.63** | **121** | P | **Pn** | **13 20 32.7** | **-1.2** |
| **TOZ** | **Tahuroa Road** | **2.18** | **146** | P | **Pn** | **13 20 41.4** | **-0.1** |
| **HIZ** | **Hauiti** | **2.68** | **165** | P | **Pn** | **13 20 51.1** | **+2.8** |
| **HIZ** | **Hauiti** | **2.68** | **165** | P | **Pn** | **13 20 48.7** | **+0.4** |
| HIZ | | | | S | **Sn** | **13 21 20.4** | **-0.6** |
| **VRZ** | **Vera Road** | **3.26** | **169** | P | **Pn** | **13 20 56.7** | **+0.5** |
| VRZ | | | | S | **Sn** | **13 21 35.7** | **+0.5** |
| **NBEZ** | **Newall Road No** | **3.34** | **181** | P | **Pn** | **13 20 58.2** | **+0.8** |
| NBEZ | | | | S | **Sn** | **13 21 36.9** | **-0.4** |
| **NEZ** | **North Egmont** | **3.34** | **178** | P | **Pn** | **13 20 58.2** | **+0.6** |
| NEZ | | | | S | **Sn** | **13 21 37.1** | **-0.3** |
| **KHEZ** | **Kahui Hut** | **3.37** | **179** | P | **Pn** | **13 20 58.8** | **+1.0** |
| **KHEZ** | **Kahui Hut** | **3.37** | **179** | P | **Pn** | **13 20 58.4** | **+0.6** |
| KHEZ | | | | S | **Sn** | **13 21 37.4** | **-0.7** |
| **WAZ** | **Wanganui** | **3.91** | **168** | P | **Pn** | **13 21 05.7** | **+0.5** |
| WAZ | | | | S | **Sn** | **13 21 52.6** | **+1.2** |
| **QRZ** | **Quartz Range** | **5.03** | **193** | P | **Pn** | **13 21 21.1** | **+0.5** |
| **QRZ** | **Quartz Range** | **5.03** | **193** | P | **Pn** | **13 21 21.1** | **+0.5** |
| QRZ | | | | S | **Sn** | **13 22 12.8** | **-6.1** |
| **TKNZ** | **Takaka Hill** | **5.16** | **189** | P | **Pn** | **13 21 23.5** | **+1.0** |
| TKNZ | | | | S | **Sn** | **13 22 20.2** | **-2.1** |
| **NNZ** | **Nelson** | **5.31** | **185** | P | **Pn** | **13 21 24.8** | **+0.4** |
| NNZ | | | | S | **Sn** | **13 22 22.0** | **-3.7** |
| **MRNZ** | **Matariki Terra** | **5.55** | **190** | P | **Pn** | **13 21 29.2** | **+1.4** |

*IDC **15** 13:27:22.7±18.0, 36°47N×70°69E, h233km±147km, mb3.2/5, mbtmp3.7/8, Error ellipse: s-maj=176.8km s-min=72.4km az=168.0*
*NNC **15** 13:27:24.9±3.8, 37°03N×70°26E, h201km±74km, mb2.8, mpv3.8, Error ellipse: s-maj=39.6km s-min=19.9km az=17.0*

**ISC 15 13:27:24.3±2.3, 37°0N±0°2×70°3E±0°1, h200km, n12, σ0§73/15, mb3.5/4, 3C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK31** | **Karatay Array** | **6.14** | **2** | ⇑P | **Pn** | **13 28 54.5** | **+1.2** |
| | 1.2nm,0.2s,baz=183,slow=14,SNR=4.8 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **13 30 02.9** | **-0.9** |
| | 4.1nm,0.3s,baz=192,slow=21,SNR=1.4 | | | | | | |
| **AAK** | **Ala-Archa** | **6.54** | **29** | P | **Pn** | **13 28 58.3** | **-0.4** |
| | 2.9nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **13 30 14.0** | **+0.6** |
| | 38nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.23** | **33** | ⇑P | **Pn** | **13 29 07.1** | **-0.5** |
| | 6.8nm,0.5s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **13 30 29.0** | **-0.6** |
| | 8.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.28** | **39** | P | **Pn** | **13 30 25.0** | **-0.2** |
| | 0.8nm,0.7s,baz=208,slow=9.7,SNR=4.8 | | | | | | |
| **AB31** | **Akbulak array** | **14.40** | **332** | P | **Pn** | **13 30 39.0** | **0.0** |
| | 0.9nm,0.4s,baz=146,slow=12,SNR=28 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.89** | **21** | P | **Pn** | **13 30 44.5** | **-0.4** |
| | 0.3nm,0.5s,baz=211,slow=9.9,SNR=5.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.07** | **0** | P | **Pn** | **13 31 00.7** | **+1.5** |
| | 1.0nm,0.4s,baz=170,slow=9.6,SNR=7.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.75** | **26** | P | **P** | **13 31 38.3** | **-0.5** |
| | 1.2nm,0.3s,baz=218,slow=11,SNR=7.8 | | | | | | |
| | 1.2nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **36.77** | **326** | P | **P** | **13 34 12.6** | **+0.3** |
| | 0.6nm,0.4s,baz=120,slow=6.8,SNR=4.6 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.50** | **338** | P | **P** | **13 34 43.4** | **+0.2** |
| | 0.8nm,0.6s,baz=107,slow=8.6,SNR=1.8 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **42.34** | **322** | P | **P** | **13 34 58.3** | **+0.1** |
| | 1.5nm,0.6s,baz=96,slow=9.0,SNR=4.6 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **43.66** | **323** | P | **P** | **13 35 08.2** | **-0.6** |
| | 0.5nm,0.5s,baz=98,slow=8.0,SNR=2.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

*BJI **15** 13:28:10.9±0.0, 27°37N×103°95E, h5km, mb4.7/51, mB4.8/23, ML4.7/21, Ms4.3/59, Ms7 4.1/56*
*MOS **15** 13:28:10.3±1.0, 27°42N×103°98E, h10km, mb4.8/28, MS4.0/7, Error ellipse: s-maj=7.8km s-min=5.3km az=114.2*
*NEIC **15** 13:28:13.4±1.8, 27°53N±0°07×104°00E±0°09, h10km±1km, mb4.8/41, Error ellipse: s-maj=13.8km s-min=11.5km az=129.0*
*IDC **15** 13:28:17.3±3.1, 27°44N×103°94E, h52km±28km, mb4.1/25, mbtmp4.3/26, ML3.7/1, MS3.7/47, Error ellipse: s-maj=16.1km s-min=11.5km az=45.0*

**ISC 15 13:28:12.6±0.3, 27°48N±0°03×104°00E±0°03, h10km, n228, σ1§81/238, mb4.6/82, MS3.8/56, 36C-19D, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PZH** | **PanZhiHua** | **2.24** | **245** | Pn | **Pn** | **13 28 51.3** | **+1.4** |
| PZH | | | | Sn | **Sb** | **13 29 21.3** | **+0.3** |
| PZH | | | | Sg | **Sg** | **13 29 23.3** | **-1.3** |
| PZH | | | | smax | smax | | |
| | comp=N,4μm,1.1s | | | | | | |
| PZH | | | | smax | smax | | |
| | comp=E,2μm,1.1s | | | | | | |
| **GYA** | **Guiyang** | **2.58** | **113** | ⇓Pn | **Pn** | **13 28 57.3** | **+2.7** |
| GYA | | | | Sn | **Sn** | **13 29 29.0** | **+2.9** |
| GYA | | | | smax | smax | | |
| | comp=N,8μm,1.0s | | | | | | |
| GYA | | | | smax | smax | | |
| | comp=E,6μm,1.0s | | | | | | |
| **KMI** | **Kunming** | **2.60** | **206** | ⇑Pn | **Pn** | **13 28 55.8** | **+0.8** |
| KMI | | | | Sn | **Sn** | **13 29 30.5** | **+3.7** |
| KMI | | | | smax | smax | | |
| | comp=N,590nm,1.2s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,640nm,1.3s | | | | | | |
| **CD2** | **Chengdu** | **3.43** | **356** | Pn | **Pn** | **13 29 08.4** | **+2.2** |
| CD2 | | | | Pg | **Pg** | **13 29 17.5** | **-0.8** |
| CD2 | | | | Sn | **Sb** | **13 29 50.8** | **-4.4** |
| CD2 | | | | Sg | **Sg** | **13 30 02.8** | **+0.1** |
| CD2 | | | | smax | smax | | |
| | comp=N,3μm,0.6s | | | | | | |
| CD2 | | | | smax | smax | | |
| | comp=E,5μm,1.0s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=N,6μm,4.9s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,3μm,7.3s | | | | | | |
| **TNCH** | **TengChong** | **5.49** | **245** | Pn | **Pn** | **13 29 37.8** | **+3.1** |
| TNCH | | | | Pg | **Pg** | **13 29 59.3** | **+1.4** |
| TNCH | | | | P* | Pb | 13 30 26.9 | +38 |
| TNCH | | | | Sn | **Sn** | **13 30 40.3** | **+2.3** |
| TNCH | | | | S* | **Sb** | **13 30 59.3** | **+4.5** |
| TNCH | | | | Sg | **Sg** | **13 31 07.6** | **-1.5** |
| TNCH | | | | smax | smax | | |
| | comp=N,650nm,1.7s | | | | | | |
| TNCH | | | | smax | smax | | |
| | comp=E,520nm,1.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=N,1μm,2.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,2μm,2.3s | | | | | | |
| **ENH** | **Enshi** | **5.56** | **59** | Pn | **Pn** | **13 29 37.2** | **+1.8** |
| **GULI** | **GuiLin** | **6.11** | **109** | P | **Pn** | **13 29 47.4** | **+4.4** |
| GULI | | | | S | **Sn** | **13 30 54.1** | **+1.2** |
| GULI | | | | LR | LR | | |
| | comp=N,1μm,3.8s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=E,3μm,5.2s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,3μm,6.8s | | | | | | |
| **SLVN** | **Son La** | **6.12** | **181** | Pn | **Pn** | **13 29 43.7** | **+0.5** |
| **XAN** | **Xi'an** | **7.79** | **32** | ⇑P | **Pn** | **13 30 06.0** | **-0.1** |
| XAN | | | | S | **Sn** | **13 31 32.8** | **-1.6** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,46nm,0.6s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,110nm,4.2s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,3μm,22.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,2μm,21.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,2μm,24.1s | | | | | | |
| **CNSH** | **ChangSha** | **7.94** | **83** | P | **Pn** | **13 30 10.3** | **+2.2** |
| CNSH | | | | S | **Sn** | **13 31 34.3** | **-3.6** |
| CNSH | | | | smax | smax | | |
| | comp=Z,380nm,0.9s | | | | | | |
| CNSH | | | | smax | smax | | |
| | comp=Z,310nm,1.1s | | | | | | |
| **CRAI** | **Chiangrai** | **7.94** | **205** | Pn | **Pn** | **13 30 08.6** | **+0.4** |
| **LZH** | **Lanzhou** | **8.59** | **359** | P | **Pn** | **13 30 20.3** | **+3.2** |
| LZH | | | | S | **Sn** | **13 31 55.5** | **+1.4** |
| LZH | | | | smax | smax | | |
| | comp=Z,190nm,1.6s | | | | | | |
| LZH | | | | smax | smax | | |
| | comp=Z,340nm,1.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,950nm,7.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,950nm,7.6s | | | | | | |
| **WHN** | **Wuhan** | **9.56** | **69** | ⇑P | **Pn** | **13 30 32.0** | **+1.7** |
| WHN | | | | pP | | 13 30 34.8 | |
| WHN | | | | S | **Sn** | **13 32 17.4** | **-0.4** |
| WHN | | | | pmax | pmax | | |
| | comp=Z,78nm,0.6s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,8μm,11.0s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,6μm,11.4s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,5μm,7.2s | | | | | | |
| **PHRA** | **Phrae** | **9.59** | **202** | Pn | **Pn** | **13 30 31.7** | **+1.0** |
| **QIZ** | **Qiongzhong** | **9.97** | **146** | P | **Pn** | **13 30 35.0** | **-1.1** |
| QIZ | | | | S | **Sn** | **13 32 27.8** | **-0.3** |
| QIZ | | | | LR | LR | | |
| | comp=Z,940nm,6.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,1μm,7.4s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,2μm,9.6s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **10.11** | **208** | Pn | **Pn** | **13 30 40.3** | **+2.3** |
| **CMAR** | **Chiang Mai Arr** | **10.11** | **208** | P | **Pn** | **13 30 39.9** | **+1.9** |
| | comp=Z,0.2nm,0.3s,baz=17,slow=12,SNR=35 | | | | | | |
| CMAR | | | | LR | LR | 13 34 59.8 | |
| | comp=Z,542nm,20.3s,baz=30,slow=40 | | | | | | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **LYN** | **LuoYang** | **10.12** | **44** | P | **Pn** | **13 30 37.4** | **-0.6** |
| LYN | | | | PP | **PnPn** | **13 30 45.5** | **-0.2** |
| LYN | | | | S | **Sn** | **13 32 28.8** | **-2.7** |
| LYN | | | | SS | **SnSn** | **13 32 50.4** | **+6.9** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,110nm,0.8s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,400nm,4.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,3μm,7.4s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,3μm,7.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,2μm,11.0s | | | | | | |
| **SHL** | **Shillong** | **11.02** | **263** | Pn | **Pn** | **13 30 50.1** | **-0.4** |
| **SHL** | **Shillong** | **11.02** | **263** | P | **Pn** | **13 30 50.1** | **-0.4** |
| **LSA** | **Lhasa** | **11.51** | **284** | P | **Pn** | **13 30 53.8** | **-3.7** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.4s | | | | | | |
| **

comp=Z,53nm,1.3s
BTO pmax pmax
comp=Z,220nm,3.9s
BTO LR LR
comp=Z,2µm,11.9s
BTO LR LR
comp=Z,4µm,12.3s
BTO LR LR
comp=Z,2µm,15.5s
**TIA Tai'an 14.14 49** P **Pn** **13 31 36.1 +3.2**
TIA S **Sn** **13 34 10.0 +0.1**
TIA pmax pmax
comp=Z,15nm,0.7s
TIA pmax pmax
comp=Z,41nm,4.3s
TIA LR LR
comp=Z,400nm,11.5s
TIA LR LR
comp=Z,750nm,10.8s
TIA LR LR
comp=Z,780nm,8.6s
**HHC Hu-ho-hao-te 14.72 23** *e*P **Pn** **13 31 42.3 +1.3**
HHC sP P 13 31 50.3 +3.1
HHC PP **PnPn** **13 31 55.3 +6.2**
HHC *e*S **Sn** **13 34 29.3 +5.0**
HHC pmax pmax
comp=Z,24nm,0.7s
HHC pmax pmax
comp=Z,160nm,4.2s
HHC LR LR
comp=Z,510nm,10.2s
HHC LR LR
comp=Z,840nm,12.0s
**BJT Baijiatuau 16.07 36** Pn **Pn** **13 31 58.5 -0.1**
**BJT Baijiatuau 16.07 36** P **Pn** **13 31 58.5 -0.1**
BJT pmax pmax
comp=Z,22nm,0.9s
**BJI Beijing 16.09 36** P **Pn** **13 31 58.1 -0.7**
BJI pP **P** **13 32 01.3 -0.9**
BJI sP **pP** **13 32 04.9 -0.5**
BJI S **Sn** **13 34 56.1 -1.2**
BJI pmax pmax
comp=Z,6.0nm,0.9s
BJI pmax pmax
comp=Z,110nm,4.1s
BJI LR LR
comp=Z,190nm,8.6s
BJI LR LR
comp=Z,200nm,9.6s
BJI LR LR
comp=Z,200nm,8.4s
**DL2 Dalian 18.61 48** P **Pn** **13 32 33.6 +3.3**
DL2 pmax pmax
comp=Z,75nm,1.0s
**XLT XiLinHaoTe 19.06 28** *e*P **Pn** **13 32 38.3 +2.4**
XLT sS sS 13 36 17.3 +0.5
XLT pmax pmax
comp=Z,36nm,1.0s
XLT pmax pmax
comp=Z,110nm,3.7s
XLT LR LR
comp=Z,510nm,8.5s
XLT LR LR
comp=Z,370nm,14.8s
**SONM Songino Array 20.41 5** P **P** **13 32 50.3 +0.4**
comp=Z,11nm,0.7s,baz=190,slow=10,SNR=33
SONM LR LR 13 41 30.0
comp=Z,389nm,18.6s,baz=182,slow=39
comp=Z,11nm,0.7s
**ULN Ulaanbaatar 20.49 6** P **P** **13 32 50.0 -0.8**
**ULN Ulaanbaatar 20.49 6***d i*P **P** **13 32 51.4 +0.6**
ULN pmax pmax
comp=Z,22nm,1.0s
**WMQ Urumqi 20.95 325** *e*P **P** **13 32 55.6 -0.1**
WMQ pmax pmax
comp=Z,42nm,0.7s
WMQ pmax pmax
comp=Z,93nm,5.1s
WMQ LR LR
comp=Z,450nm,10.1s
WMQ LR LR
comp=Z,120nm,13.1s
**SNY Shenyang 21.48 43** ⇑P **P** **13 32 59.3 -2.0**
SNY pmax pmax
comp=Z,11nm,1.7s
**INCN Inchon 21.49 57** P **P** **13 33 01.9 +0.4**
INCN IAmb IAmb 13 33 08.2
comp=Z,35nm,0.8s
**INCN Inchon 21.49 57** P **P** **13 33 01.9 +0.4**
INCN pmax pmax
comp=Z,35nm,0.8s
**JOW Kunigami 21.60 86** P **P** **13 33 02.1 -0.7**
**TJN Taejon 21.68 60** P **P** **13 33 04.9 +1.4**
**TJN Taejon 21.68 60** P **P** **13 33 04.9 +1.4**
TJN pmax pmax
comp=Z,173nm,1.0s
**KULM Kulim 22.30 189** P **P** **13 33 09.9 -0.3**
KULM IAmb IAmb 13 33 15.8
comp=Z,42nm,1.6s
**KSRS Korea Array 22.45 58** P **P** **13 33 11.2 -0.5**
comp=Z,6.8nm,0.6s,baz=243,slow=9.4,SNR=32
KSRS LR LR 13 41 39.6
comp=Z,169nm,18.8s,baz=250,slow=36
comp=Z,6.8nm,0.6s
**ZAK Zakamensk 22.88 359** *e*P **P** **13 33 16.0 -0.3**
ZAK pmax pmax
comp=Z,10.0nm,1.3s
**CN2 Changchun 23.75 41** *e*P **P** **13 33 25.4 +0.4**
CN2 *es*P sP 13 33 32.3 +2.4
CN2 *e*S **S** **13 37 35.8 -4.5**
CN2 pmax pmax
comp=Z,40nm,0.7s
CN2 LR LR
comp=Z,180nm,13.0s
CN2 LR LR
comp=Z,300nm,13.0s
**JNU Nakatsue 23.84 70** P **P** **13 33 26.0 -0.1**
JNU IAmb IAmb 13 33 37.1
comp=Z,40nm,1.3s
**JNU Nakatsue 23.84 70** P **P** **13 33 26.1 0.0**
comp=Z,14nm,1.0s,baz=270,slow=2.2,SNR=4.5
JNU LR LR 13 42 58.6
comp=Z,277nm,20.1s,baz=260,slow=37
comp=Z,14nm,1.0s
**IRK Irkutsk 24.74 0** *e*P **P** **13 33 34.8 +0.7**
IRK pmax pmax
comp=Z,68nm,0.8s
**DGZ Jazzator, Alta 25.58 335***de*P **P** **13 33 42.9 +1.0**
DGZ pmax pmax
comp=Z,25nm,0.7s
**PRZ Przheval'sk 25.64 312** P **P** **13 33 43.0 +0.4**
PRZ IAmb IAmb 13 33 47.8
comp=Z,9.9nm,0.8s
**PRZ Przheval'sk 25.64 312** P **P** **13 33 43.0 +0.4**
PRZ pmax pmax
comp=Z,10.0nm,0.8s
**MK31 Makanchi Array 25.76 324***de*P **P** **13 33 44.5 +1.0**
**MKAR Makanchi Array 25.76 324** P **P** **13 33 43.4 -0.1**
comp=Z,19nm,0.6s,baz=129,slow=12,SNR=141
MKAR LR LR 13 45 21.1
comp=Z,183nm,19.6s,baz=138,slow=40
comp=Z,19nm,0.6s
**MAKZ Makanchi 25.94 324** P **P** **13 33 45.9 +0.9**
MAKZ IAmb IAmb 13 33 48.1
comp=Z,17nm,0.7s
**MAKZ Makanchi 25.94 324** P **P** **13 33 45.9 +0.9**
MAKZ pmax pmax
comp=Z,17nm,0.7s
**BNX BinXian 26.02 39** ⇑P **P** **13 33 45.3 -0.5**
BNX pmax pmax
comp=Z,31nm,1.0s
**SBUM Sibu 26.10 161** P **P** **13 33 48.4 +1.7**
**KSH Kashi 26.17 304** P **P** **13 33 50.4 +3.1**
KSH sP sP 13 33 58.0 +5.6
KSH PP **PnPn** **13 34 27.3 +1.5**
KSH S **S** **13 38 22.5 +3.2**
KSH pmax pmax
comp=Z,13nm,1.6s
KSH LR LR
comp=Z,350nm,15.8s
KSH LR LR
comp=Z,280nm,16.5s
KSH LR LR
comp=Z,280nm,15.3s
**GSI Gunungsitoli 26.74 194** P **P** **13 33 54.3 +1.7**
GSI IAmb IAmb 13 33 56.1
comp=Z,17nm,0.9s
**NRN Naryn 26.82 309** P **P** **13 33 53.0 -0.5**
**NRN Naryn 26.82 309** P **P** **13 33 53.0 -0.5**
NRN pmax pmax
comp=Z,7.0nm,1.0s
**NIL Nilore 27.12 291** P **P** **13 33 56.2 +0.3**
NIL IAmb IAmb 13 33 58.8
comp=Z,32nm,0.7s
**NIL Nilore 27.12 291** P **P** **13 33 56.2 +0.3**
NIL pmax pmax
comp=Z,32nm,0.7s
**BOOM Boomskoye usch 27.28 311** P **P** **13 33 57.0 -0.4**
**BOOM Boomskoye usch 27.28 311** P **P** **13 33 57.0 -0.4**
BOOM pmax pmax
comp=Z,5.0nm,0.7s
**USA0B Ussuriysk Arra 27.97 46***d i*P **P** **13 34 04.7 +1.3**
**USRK Ussuriysk Ar. 27.97 46** P **P** **13 34 03.8 +0.5**
comp=Z,17nm,0.8s,baz=244,slow=8.6,SNR=38
USRK LR LR 13 46 19.0
comp=Z,129nm,20.4s,baz=218,slow=39
comp=Z,17nm,0.8s
**AAK Ala-Archa 28.32 310** LR LR 13 46 16.5
comp=Z,128nm,20.3s,baz=96,slow=38
**AAK Ala-Archa 28.32 310**⇓*e*P **P** **13 34 08.2 +1.5**
AAK pmax pmax
comp=Z,2.0nm,0.6s
**DAV Davao City (W) 28.82 131** LR LR 13 47 31.1
comp=Z,156nm,19.7s,baz=354,slow=40
**HEH HeiHe 28.92 32** *e*P **P** **13 34 13.8 +2.1**
HEH pmax pmax
comp=Z,6.0nm,1.0s
HEH pmax pmax
comp=Z,71nm,3.9s
HEH LR LR
comp=Z,190nm,9.0s
HEH LR LR
comp=Z,210nm,9.6s
HEH LR LR
comp=Z,290nm,11.8s
**PALK Pallekele 29.86 232** LR LR 13 47 41.2
comp=Z,108nm,19.5s,baz=147,slow=39
**ZALV Zalesovo Beam 29.98 337** P **P** **13 34 20.8 -0.3**
comp=Z,23nm,0.7s,baz=145,slow=9.0,SNR=64
ZALV PcP **PcP** **13 37 21.5 -1.7**
comp=Z,0.5nm,0.4s,baz=171,slow=2.2,SNR=1.9
ZALV LR LR 13 46 48.5
comp=Z,117nm,18.4s,baz=140,slow=37
comp=Z,23nm,0.7s
**BTK Batken 30.13 303** P **P** **13 34 22.5 -0.2**
**BTK Batken 30.13 303** P **P** **13 34 22.5 -0.2**
BTK pmax pmax
comp=Z,8.0nm,0.9s
**KURBB Kurchatov Arra 30.15 327** P **P** **13 34 22.6 0.0**
KURBB PcP **PcP** **13 37 22.1 -1.6**
comp=Z,6.7nm,0.7s,baz=131,slow=9.8,SNR=71
comp=Z,1.7nm,0.8s,baz=123,slow=2.6,SNR=5.5
comp=Z,6.7nm,0.7s
**KURK Kurchatov 30.17 327** P **P** **13 34 22.4 -0.4**
KURK IAmb IAmb 13 34 26.3
comp=Z,12nm,0.8s
**KURK Kurchatov 30.17 327** P **P** **13 34 22.4 -0.4**
KURK pmax pmax
comp=Z,12nm,0.8s
**MJAR Matsushiro Arr 30.25 64** P **P** **13 34 24.5 +0.7**
comp=Z,1.1nm,0.8s,baz=271,slow=9.5,SNR=3.3
MJAR LR LR 13 47 13.8
comp=Z,260nm,19.1s,baz=262,slow=38
comp=Z,1.1nm,0.8s
**KLR Kul'dur 30.45 37** P **P** **13 34 25.7 +0.4**
comp=Z,3.6nm,0.8s,baz=267,slow=10.0,SNR=7.0
KLR LR LR 13 48 27.5
comp=Z,214nm,18.3s,baz=221,slow=40
comp=Z,3.6nm,0.8s
**KLR Kul'dur 30.45 37**⇑*i*P **P** **13 34 27.1 +1.8**
KLR pmax pmax
comp=Z,6.0nm,1.1s
**KBL Kabul 30.67 292** P **P** **13 34 27.6 -0.1**
KBL IAmb IAmb 13 34 30.2
comp=Z,8.8nm,0.7s
**KBL Kabul 30.67 292** P **P** **13 34 27.6 -0.1**
KBL pmax pmax
comp=Z,9.0nm,0.7s
**CHGR Chuyangaron 31.08 300** P **P** **13 34 31.0 -0.2**
CHGR IAmb IAmb 13 34 32.0
comp=Z,13nm,0.6s
**CHGR Chuyangaron 31.08 300** P **P** **13 34 31.0 -0.2**
CHGR pmax pmax
comp=Z,13nm,0.6s
**KKAR Karatay Array 31.22 309** P **P** **13 34 31.6 -0.6**
**KKAR Karatay Array 31.22 309** P **P** **13 34 31.6 -0.6**
KKAR pmax pmax
comp=Z,4.0nm,1.2s
**ZEA Zeya 31.34 27** *e*P **P** **13 34 34.5 +1.5**
ZEA pmax pmax
comp=Z,10.0nm,0.8s
ZEA MLR MLR
comp=E,100nm,14.0s
ZEA MLR MLR
comp=N,300nm,15.0s
ZEA MLR MLR
comp=Z,300nm,10.0s
**ASAJ Asahikawa 35.06 51** LR LR 13 49 48.6
comp=Z,80nm,20.5s,baz=264,slow=37
**BVAR Borovoye Array 35.64 325** P **P** **13 35 10.4 -0.1**
comp=Z,5.6nm,0.8s,baz=116,slow=10,SNR=12
BVAR PcP **PcP** **13 37 38.0 -1.0**
comp=Z,2.4nm,0.5s,baz=134,slow=3.1,SNR=8.0
comp=Z,5.6nm,0.8s
**KAPI Kappang 35.71 152** LR LR 13 49 53.4
comp=Z,102nm,21.3s,baz=132,slow=36
**BRVK Borovoye 35.71 325** P **P** **13 35 11.2 +0.1**
BRVK IAmb IAmb 13 35 14.9
comp=Z,7.0nm,0.8s
**BRVK Borovoye 35.71 325***c i*P **P** **13 35 11.3 +0.1**
BRVK pmax pmax
comp=Z,7.0nm,0.8s
**YSS Yuzh-Sakhalins 36.00 47** *e*P **P** **13 35 15.5 +1.8**
**YAK Yakutsk 38.53 19** LR LR 13 52 38.9
comp=Z,199nm,18.2s,baz=208,slow=38
**YAK Yakutsk 38.53 19**⇓*e*P **P** **13 35 34.0 -1.0**
YAK pmax pmax
comp=Z,23nm,0.6s
**ABKAR Akbulak array 40.09 315** P **P** **13 35 48.6 +0.4**
**AKTO Aktyubinsk 41.62 316** LR LR 13 54 45.4
comp=Z,120nm,18.8s,baz=112,slow=38
**SVE Sverdlovsk 42.40 326** *e*P **P** **13 36 07.3 +0.2**
SVE pmax pmax
comp=Z,17nm,1.0s
**ARU Arti 43.29 325** LR LR 13 53 56.2
comp=Z,76nm,18.4s,baz=86,slow=36
**ARU Arti 43.29 325***c i*P **P** **13 36 14.5 +0.2**
ARU 13 37 53.9
ARU S **S** **13 42 44.8 +3.4**
ARU SS **SS** **13 45 52.5 -2.0**
ARU pmax pmax
comp=Z,13nm,0.9s
**ARU Arti 43.29 325** P **P** **13 36 14.3 0.0**
comp=Z,16nm,0.9s
**MA2 Magadan 45.19 32** LR LR 13 56 06.5
comp=Z,47nm,18.9s,baz=237,slow=37
**MA2 Magadan 45.19 32**⇑*e*P **P** **13 36 29.7 +0.3**
MA2 pmax pmax
comp=Z,26nm,1.2s
**TIXI Tiksi 46.32 11** P **P** **13 36 37.5 -0.7**
TIXI IAmb IAmb 13 36 45.3
comp=Z,6.4nm,0.6s
**TIXI Tiksi 46.32 11** LR LR 13 57 39.2
comp=Z,202nm,19.5s,baz=215,slow=38
**TIXI Tiksi 46.32 11**⇓*e*P **P** **13 36 36.8 -1.4**
TIXI pmax pmax
comp=Z,15nm,1.6s
**PETK Petropavlovsk- 46.90 42** LR LR 13 58 45.7
comp=Z,110nm,18.8s,baz=246,slow=39
**SEY Seymchan 47.31 28**⇑*e*P **P** **13 36 45.8 -0.3**
SEY pmax pmax
comp=Z,12nm,2.0s
**MAK Makhachkala 47.80 304** *e*P **P** **13 36 46.2 -4.0**
MAK *e* 13 38 36.8
MAK *e*PPP PPP 13 39 24.3
MAK *e*S **S** **13 43 43.0 -3.9**
MAK *e*SS **SS** **13 47 12.3 -2.9**
MAK *e*SSS SSS 13 48 19.1
MAK pmax pmax
comp=Z,132nm,1.2s
MAK MLR MLR
comp=Z,167nm,15.0s
**BELG Belogornoye 48.38 317** LR LR 13 57 35.9
comp=Z,63nm,20.9s,baz=106,slow=36
**BELG Belogornoye 48.38 317***d i*P **P** **13 36 54.0 -0.5**
BELG pmax pmax
comp=Z,5.0nm,0.9s
**KIRV Kirov 48.65 325** LR LR 13 58 17.0
comp=Z,77nm,21.6s,baz=101,slow=37
**KIRV Kirov 48.65 325**⇑*e*P **P** **13 36 56.2 -0.3**
**GNI Garni 50.00 301** LR LR 14 02 53.5
comp=Z,38nm,19.2s,baz=104,slow=42
**MBWA Marble Bar 50.69 161** P **P** **13 37 11.9 -0.5**
MBWA IAmb IAmb 13 37 25.5
comp=Z,35nm,1.5s
**KBZ Khabaz 51.14 305** P **P** **13 37 15.6 -0.1**
comp=Z,2.3nm,0.8s,baz=103,slow=11,SNR=5.3
KBZ LR LR 14 02 28.4
comp=Z,59nm,20.4s,baz=72,slow=40
comp=Z,2.3nm,0.8s
**KBZ Khabaz 51.14 305**⇓*i*P **P** **13 37 17.7 +2.0**
KBZ pmax pmax
comp=Z,4.0nm,1.0s
**KIV Kislovodsk 51.29 306** *e*P **P** **13 37 17.0 +0.1**
KIV pmax pmax
comp=Z,14nm,1.1s
KIV MLR MLR
comp=Z,60nm,16.0s
**SHA1 Shidzhatmaz 51.32 305***c i*P **P** **13 37 17.6 +0.3**
**SOC Sochi 53.46 305** *e*P **P** **13 37 29.3 -3.6**
SOC *e* 13 39 29.3
SOC *e*PPP PPP 13 40 37.4
SOC *e*S **S** **13 45 02.3 -3.2**
SOC *e*SS **SS** **13 48 43.5 -1.8**
SOC *e*SSS SSS 13 50 34.3
SOC MLR MLR
comp=Z,92nm,16.0s
**BILL Bilibino 54.50 24**⇑*e*P **P** **13 37 39.6 -0.5**
BILL *e* 13 38 47.1
BILL *e* 13 39 47.8
BILL pmax pmax
comp=Z,5.0nm,0.8s
BILL MLR MLR
comp=Z,193nm,18.0s
**MOS Moscow 54.56 321** *e*P **P** **13 37 40.1 -0.6**
MOS *e* 13 38 45.0
MOS pmax pmax
comp=Z,43nm,0.7s
**OBN Obninsk 55.14 320** LR LR 14 02 46.6
comp=Z,95nm,21.2s,baz=182,slow=38
**OBN Obninsk 55.14 320**⇓*e*P **P** **13 37 45.3 +0.3**
OBN *e* 13 38 43.8
OBN *e* 13 39 44.5
OBN *e*PPP PPP 13 40 59.9
OBN pmax pmax
comp=Z,8.0nm,0.5s
OBN MLR MLR
comp=Z,86nm,19.0s
**WRAB Tennant Creek 55.54 145** P **P** **13 37 47.2 -1.1**
WRAB IAmb IAmb 13 38 46.1
comp=Z,12nm,1.2s
**WRAB Tennant Creek 55.54 145** P **P** **13 37 47.2 -1.1**
WRAB pmax pmax
comp=Z,12nm,1.3s
**WRA Warramunga Arr 55.54 145** P **P** **13 37 47.4 -0.9**
comp=Z,2.5nm,0.7s,baz=333,slow=8.5,SNR=31
comp=Z,2.5nm,0.7s
**SHEM Shemya Is, Ala 56.75 43** LR LR 14 04 22.9
comp=Z,23nm,19.5s,baz=313,slow=38
**KIRS Kirsehir-Merke 58.41 301** ⇓P **P** **13 38 08.5 -0.1**
**ASAR Alice Springs 58.47 148** P **P** **13 38 07.8 -1.2**
comp=Z,1.3nm,0.6s,baz=329,slow=6.8,SNR=13
comp=Z,1.3nm,0.6s
**BR131 Keskin Array S 58.51 302**⇓*i*P **P** **13 38 09.1 -0.2**
**BRTR Keskin Array B 58.51 302** P **P** **13 38 07.3 -2.0**
comp=Z,2.5nm,0.7s,baz=117,slow=7.2,SNR=10
BRTR LR LR 14 05 26.6
comp=Z,32nm,21.9s,baz=104,slow=38
comp=Z,2.5nm,0.7s
**BR104 Keskin Array S 58.51 302** P **P** **13 38 09.1 -0.2**
**MMAI Mount Meron Ar 58.58 294** LR LR 14 07 12.5
comp=Z,89nm,19.8s,baz=57,slow=40
**ANTO Ankara 59.12 302** P **P** **13 38 12.4 -1.1**
ANTO IAmb IAmb 13 38 14.3
comp=Z,9.3nm,0.8s
**ANTO Ankara 59.12 302** P **P** **13 38 12.4 -1.1**
ANTO pmax pmax
comp=Z,9.0nm,0.8s
**CSS Mathiatis 59.78 296** P **P** **13 38 17.6 -0.5**
**AKASG Malin Array Be 59.83 315** P **P** **13 38 15.7 -2.4**
comp=Z,1.8nm,0.6s,baz=73,slow=6.2,SNR=7.1
comp=Z,1.8nm,0.6s
**AKBB Malin Array Si 59.83 315**⇑*e*P **P** **13 38 16.7 -1.4**
AKBB pmax pmax
comp=Z,5.0nm,0.8s
**KIEV Kiev 59.84 315** P **P** **13 38 16.9 -1.3**
KIEV IAmb IAmb 13 38 20.3
comp=Z,4.7nm,0.8s
**KIEV Kiev 59.84 315** ⇑P **P** **13 38 17.2 -1.0**
**KIEV Kiev 59.84 315** P **P** **13 38 16.9 -1.3**
KIEV pmax pmax
comp=Z,5.0nm,0.8s
**MNK Minsk 60.19 319** *i* P **P** **13 38 19.5 -1.0**
MNK *i* 13 40 32.1
MNK *i* S **S** **13 46 34.9 +0.8**
MNK *i* SS **SS** **13 50 34.4 +3.6**
MNK pmax pmax
comp=N,18nm,0.9s
MNK pmax pmax
comp=Z,9.0nm,0.9s
MNK pmax pmax
comp=E,18nm,0.8s
MNK MLR MLR
comp=E,175nm,21.0s
MNK MLR MLR
comp=Z,92nm,19.0s
MNK MLR MLR
comp=N,89nm,17.0s
**ARCES ARCESS Array B 60.53 337** P **P** **13 38 21.6 -1.0**
comp=N,2.4nm,0.8s,baz=94,slow=7.3,SNR=7.9
ARCES LR LR 14 07 04.2
comp=N,56nm,19.3s,baz=80,slow=38
comp=N,2.4nm,0.8s
**FINES FINESS Array B 60.54 327** P **P** **13 38 21.8 -1.0**
comp=N,3.8nm,0.7s,baz=73,slow=6.4,SNR=12
comp=N,3.8nm,0.7s
**CFR Carcaliu 61.45 309** ⇑P **P** **13 38 28.8 -0.5**
**RNPP9 Sopachiv 61.81 316** P **P** **13 38 31.3 -0.3**
**VRI Vrincioaia 62.28 310** ⇑P **P** **13 38 36.2 +1.3**
**VRI Vrincioaia 62.28 310** ⇑P **P** **13 38 36.2 +1.3**
**PLOR Plostina 62.34 310** ⇓P **P** **13 38 36.3 +1.0**
**PLOR Plostina 62.34 310** ⇓P **P** **13 38 36.3 +1.0**
**ISR Istrita 62.57 309** ⇑P **P** **13 38 37.9 +1.0**
**ISR Istrita 62.57 309** ⇑P **P** **13 38 37.9 +1.0**
**SPITS Spitsbergen Ar 62.83 347** P **P** **13 38 37.6 -0.4**
comp=N,0.6nm,0.4s,baz=72,slow=14,SNR=5.2
SPITS LR LR 14 08 05.0
comp=N,130nm,20.6s,baz=51,slow=38
comp=N,0.6nm,0.4s
**MLR Muntele Rosu 62.90 309** ⇑P **P** **13 38 40.5 +1.3**
**MLR Muntele Rosu 62.90 309** ⇑P **P** **13 38 40.5 +1.3**
**BURAR Bucovina Array 62.94 312** ⇑P **P** **13 38 39.8 +0.4**
**BURAR Bucovina Array 62.94 312** ⇑P **P** **13 38 39.8 +0.4**
**MORS Morshin 63.49 314** P **P** **13 38 43.0 +0.1**
**MARR Marisel-Cluj 64.55 311** ⇑P **P** **13 38 49.8 -0.2**
**HOLU Holmets 64.60 313** P **P** **13 38 50.3 +0.2**
**DRGR 64.79 311** ⇑P **P** **13 38 51.7 +0.2**
**DRGR 64.79 311** ⇑P **P** **13 38 51.7 +0.2**
**C16K Lisburne Hills 65.03 24** P **P** **13 38 52.9 +0.3**
**GZR Gura Zlata 65.09 310** ⇓P **P** **13 38 53.9 +0.4**
**GZR Gura Zlata 65.09 310** ⇓P **P** **13 38 53.9 +0.4**
**SURR Surduc 65.44 310** ⇑P **P** **13 38 56.0 +0.3**
**HERR Herculane 65.47 309** ⇑P **P** **13 38 56.7 +0.8**
**SIRR Siria 65.63 311** ⇓P **P** **13 38 56.8 -0.1**
**BZS Buzias 65.82 310** ⇑P **P** **13 38 57.7 -0.5**
**BZS Buzias 65.82 310** ⇑P **P** **13 38 57.7 -0.5**
**MDVR Moldovita 65.98 309** ⇑P **P** **13 38 59.3 +0.1**
**BOVS Bovan 66.29 308** ⇑P **P** **13 39 01.3 +0.1**
**HFS Hagfors 66.74 327** P **P** **13 39 02.0 -1.8**
comp=N,0.8nm,0.3s,baz=128,slow=4.3,SNR=9.2
comp=N,0.8nm,0.3s
**HFS Hagfors 66.74 327** P **P** **13 39 02.0 -1.8**
**G16K Koyuk River 66.85 27** P **P** **13 39 04.6 +0.3**
**MORC Moravsky Berou 67.36 315** ⇑P **P** **13 39 07.3 -0.6**
**MORC Moravsky Berou 67.36 315** ⇑P **P** **13 39 07.3 -0.6**
**MORH Mrgy, Hungar 67.65 312** ⇑P **P** **13 39 09.7 -0.1**
**NB2 NORSAR Subarra 67.67 328** P **P** **13 39 08.0 -1.7**

comp=Z,2.2nm,0.7s,baz=73,slow=6.5
**NOA NORSAR Array B 67.67 328** P **P** 13 39 07.7 -2.1
comp=Z,1.8nm,0.8s,baz=74,slow=6.6,SNR=7.2
NOA LR LR 14 08 25.7
comp=Z,36nm,18.2s,baz=100,slow=36
comp=Z,1.8nm,0.8s
**VRAC Vranov 68.08 315** LR LR 14 11 04.3
comp=Z,51nm,18.1s,baz=48,slow=38
**RONA Rosalia, Austr 68.75 314** *e*P **P** **13 39 17.0 +0.3**
comp=Z,2.3nm,0.6s
**CONA Conrad Observa 68.96 314** *e*P **P** **13 39 18.1 0.0**
comp=Z,2.7nm,0.9s
**STKA Stephens Creek 69.04 146** P **P** **13 39 17.9 -0.6**
comp=Z,2.7nm,0.9s,baz=300,slow=8.1,SNR=2.0
comp=Z,2.7nm,0.9s
**STKA Stephens Creek 69.04 146** P **P** **13 39 18.0 -0.6**
**BRG Berggiesshubel 69.24 317** *e*P **P** **13 39 19.7 0.0**
BRG Amp 13 39 20.7
comp=Z,2.2nm,0.6s
**BRG Berggiesshubel 69.24 317** P P 13 39 26.0 +6.4
BRG Amp 13 39 26.4
comp=Z,4.5nm,0.6s
BRG Amp 14 11 33.0
comp=Z,0.1nm,21.4s
**ARSA Arzberg 69.39 313** *e*P **P** **13 39 21.2 +0.5**
comp=Z,3.0nm,1.2s
**SOKA Soboth 69.89 313** *e*P **P** **13 39 23.2 -0.7**
comp=Z,4.4nm,0.9s
**GERES GERESS Array B 70.03 315** P **P** **13 39 23.8 -0.9**
comp=Z,1.3nm,0.7s,baz=149,slow=11,SNR=6.3
GERES LR LR 14 14 14.2
comp=Z,63nm,20.1s,baz=72,slow=39
comp=Z,1.3nm,0.7s
**BIOA Bad Ischl, Aus 70.45 314** *e*pP pP 13 39 30.9 -0.3
comp=Z,1.2nm,0.4s
**L19K White Mountain 71.05 29** P **P** **13 39 30.2 -0.4**
**SABO M.te Sabotino 71.06 313** P **P** **13 39 31.0 +0.1**
SABO IAmb IAmb 13 40 30.7
comp=Z,42nm,1.4s
**ABTA Abfaltersbach 71.50 314** *e*pP pP 13 39 36.9 -0.8
comp=Z,2.5nm,0.8s
**CNBA Chernabura Isl 71.53 37** P **P** **13 39 34.4 +0.9**
**WTTA Wattenberg 71.88 314** *e*pP pP 13 39 39.1 -0.9
comp=Z,3.8nm,0.8s
**SQTA Sankt Quirin 72.16 314** *e*P **P** **13 39 37.1 -0.6**
comp=Z,3.2nm,0.6s
**MOTA Moosalm 72.19 314** *e*P **P** **13 39 37.8 -0.1**
comp=Z,6.7nm,1.3s
**RETA Reutte 72.35 315** *e*P **P** **13 39 39.1 +0.4**
comp=Z,3.5nm,1.0s
**NEA2 Nenana 72.39 26** P **P** **13 39 39.4 +0.8**
NEA2 IAmb IAmb 13 39 41.5
comp=Z,5.0nm,0.8s
**FETA Feichten 72.54 314** *e*P **P** **13 39 39.4 -0.7**
comp=Z,4.8nm,0.8s
**FUORN Ofenpass-Fuorn 72.99 314** P **P** **13 39 42.0 -0.8**
**ILAR Eielson Array 73.14 25** P **P** **13 39 42.5 -0.5**
comp=Z,0.6nm,0.7s,baz=290,slow=4.6,SNR=4.1
comp=Z,0.6nm,0.7s
**DAVOX Davos/Dischmat 73.17 314** LR LR 14 13 11.4
comp=Z,53nm,18.2s,baz=74,slow=37
**PRP Porcupine Dome 73.28 24** P **P** **13 39 44.2 +0.2**
PRP IAmb IAmb 13 39 49.5
comp=Z,5.8nm,0.8s
**KLU Klutina 75.14 28** P **P** **13 39 55.7 +0.8**
KLU IAmb IAmb 13 40 03.0
comp=Z,11nm,1.1s
**GLB Gilahina Butte 76.04 27** P **P** **13 39 59.7 -0.3**
GLB IAmb IAmb 13 40 09.4
comp=Z,6.2nm,0.8s
**KEST Kesra 77.98 304** LR LR 14 22 45.7
comp=Z,30nm,18.5s,baz=298,slow=42
**SFJD Kangerlussuaq 83.89 350** LR LR 14 21 14.8
comp=Z,61nm,18.2s,baz=30,slow=38
**YKA Yellowknife Ar 85.17 17** LR LR 14 23 21.8
comp=Z,27nm,18.6s,baz=316,slow=39
**ESDC Sonseca Array 85.39 313** P **P** **13 40 49.8 -0.6**
comp=Z,1.2nm,1.0s,baz=36,slow=4.8,SNR=5.3
ESDC LR LR 14 22 31.9
comp=Z,29nm,18.2s,baz=16,slow=38
comp=Z,1.2nm,1.0s
**BBB Bella Bella 88.52 29** LR LR 14 25 30.5
comp=Z,22nm,18.6s,baz=263,slow=39
**MDT Midelt 89.50 307** LR LR 14 30 40.9
comp=Z,26nm,19.4s,baz=352,slow=42
**LBTB Lobatse 91.78 243** LR LR 14 20 05.0
comp=Z,38nm,21.8s,baz=132,slow=34
**BOSA Boshof 93.80 240** LR LR 14 24 46.4
comp=Z,34nm,18.4s,baz=26,slow=36
**TORD Torodi Ar. Bea 94.63 287** P **P** **13 41 32.5 -1.9**
comp=Z,0.6nm,0.9s,baz=53,slow=7.8,SNR=4.1
comp=Z,0.6nm,0.9s
**TSUM Tsumeb 95.60 251** LR LR 14 24 23.6
comp=Z,30nm,19.3s,baz=346,slow=35
**NEW Newport 96.07 26** LR LR 14 28 51.0
comp=Z,52nm,18.3s,baz=308,slow=38
**SCHQ Schefferville 97.65 355** LR LR 14 30 13.8
comp=Z,24nm,18.3s,baz=276,slow=38
**YBH Yreka Blue Hor 98.72 33** LR LR 14 28 36.9
comp=Z,13nm,18.1s,baz=277,slow=37
**SUR Sutherland 98.94 238** LR LR 14 24 18.2
comp=Z,39nm,18.6s,baz=87,slow=34
**QSPA South Pole Qui 117.27 180** PKP **PKPdf** **13 46 55.5 -2.0**
comp=Z,0.8nm,0.7s,baz=256,slow=0.9,SNR=7.3
**TXAR Lajitas Array 117.61 27** PKP **PKPdf** **13 46 57.8 -1.7**
comp=Z,0.2nm,0.4s,baz=56,slow=0.5,SNR=3.5
**ROSC El Rosal 147.83 357** PKPbc **PKPdf** **13 47 58.0 +1.8**
comp=Z,28nm,0.7s,baz=90,slow=15,SNR=7.2

*SJA **15** 13:29:34.0±0.7, 19°.86S×69°.37W, h107km±4km, ML3.6, MW3.6*
*GUC **15** 13:29:37.7±0.7, 20°.08S×69°.22W, h83km±4km, ML3.4*
**ISC 15 13:29:38.2±1.5, 20°.00S±0°.04×69°.34W±0°.05, h81km±10km, n21, σ1°.48/36, 5C-1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GO01** | **Chusmiza** | **0.36** | **22** | *e*P | **Pn** | **13 29 50.4** | **-1.2** |
| GO01 | | | | *e*S | **Sn** | **13 30 02.6** | **+1.1** |
| **GO01** | **Chusmiza** | **0.36** | **22** | *e*P | **Pn** | **13 29 51.1** | **-0.5** |
| GO01 | | | | *e*S | **Sn** | **13 30 01.9** | **+0.5** |
| **PX03** | **IPOC Station P** | **0.48** | **215** | *e*P | **Pn** | **13 29 50.9** | **-1.2** |
| PX03 | | | | *e*S | **Sn** | **13 30 02.1** | **-0.3** |
| PX03 | | | | IAML | | 13 30 03.3 | |
| | comp=N,4μm,0.2s | | | | | | |
| **HMBC** | **Humberstone** | **0.59** | **242** | *e*P | Pn | 13 29 47.0 | -6.0 |
| HMBC | | | | *e*P | | 13 29 52.4 | |
| HMBC | | | | *e*S | **Sn** | **13 30 05.8** | **+1.8** |
| **HMBC** | **Humberstone** | **0.59** | **242** | *i*P | **Pn** | **13 29 52.6** | **-0.4** |
| HMBC | | | | *e*S | **Sn** | **13 30 04.9** | **+0.9** |
| **TA02** | **Huaiquique** | **0.79** | **250** | *e*P | **Pn** | **13 29 54.7** | **-0.2** |
| TA02 | | | | *e*P | | 13 29 55.2 | |
| TA02 | | | | IAML | | 13 30 10.9 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **0.79** | **250** | *e*P | **Pn** | **13 29 54.7** | **-0.2** |
| TA02 | | | | *e*S | **Sn** | **13 30 08.1** | **+0.7** |
| TA02 | | | | IAML | | 13 30 10.3 | |
| | comp=N,2μm,0.1s | | | | | | |
| **TA01** | **Diego Aracena** | **0.97** | **235** | *e*P | **Pn** | **13 29 56.3** | **-0.7** |
| **TA01** | **Diego Aracena** | **0.97** | **235** | *e*P | **Pn** | **13 29 56.2** | **-0.7** |
| TA01 | | | | *e*S | **Sn** | **13 30 11.2** | **+0.2** |
| TA01 | | | | IAML | | 13 30 12.2 | |
| | comp=E,1μm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **1.12** | **223** | *e*P | **Pn** | **13 29 58.0** | **-0.9** |
| PATCX | | | | *e*S | **Sn** | **13 30 15.8** | **+1.5** |
| PATCX | | | | IAML | | 13 30 19.1 | |
| | comp=Z,519nm,0.3s | | | | | | |
| **PATCX** | **Punta Patache** | **1.12** | **223** | *e*P | **Pn** | **13 29 57.9** | **-0.9** |
| PATCX | | | | *e*S | **Sn** | **13 30 14.0** | **-0.3** |
| PATCX | | | | IAML | | 13 30 18.2 | |
| | comp=N,864nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **1.79** | **177** | *e*P | **Pn** | **13 30 07.0** | **-0.6** |
| PB09 | | | | *e*S | **Sn** | **13 30 32.2** | **+2.5** |
| PB09 | | | | IAML | | 13 30 34.7 | |
| | comp=Z,354nm,0.6s | | | | | | |
| **PB09** | **IPOC Station P** | **1.79** | **177** | *e*P | **Pn** | **13 30 06.8** | **-0.7** |
| PB09 | | | | *e*S | **Sn** | **13 30 28.0** | **-1.7** |
| PB09 | | | | IAML | | 13 30 35.4 | |
| | comp=E,478nm,0.5s | | | | | | |
| **AP01** | **Chacalluta** | **1.88** | **329** | *e*S | Pn | 13 30 03.2 | -5.4 |
| AP01 | | | | *e*S | **Sn** | **13 30 31.4** | **-0.3** |
| **PB18** | **Visviri** | **2.40** | **357** | *e*S | **Sn** | **13 30 46.3** | **+1.3** |
| PB18 | | | | IAML | | 13 31 06.0 | |
| | comp=E,94nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **2.44** | **198** | *e*P | **Pn** | **13 30 15.7** | **-0.5** |
| PB04 | | | | *e*S | **Sn** | **13 30 48.0** | **+2.7** |
| PB04 | | | | IAML | | 13 31 07.9 | |
| | comp=Z,311nm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **2.44** | **198** | *e*P | **Pn** | **13 30 15.7** | **-0.5** |
| PB04 | | | | *e*S | **Sn** | **13 30 44.4** | **-0.9** |
| PB04 | | | | IAML | | 13 30 53.3 | |
| | comp=E,355nm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **2.62** | **171** | *e*P | **Pn** | **13 30 18.4** | **-0.4** |
| LVC | | | | *e*S | **Sn** | **13 30 55.2** | **+5.2** |
| **LVC** | **Limon Verde** | **2.62** | **171** | *e*P | **Pn** | **13 30 17.8** | **-1.1** |
| LVC | | | | *e*S | **Sn** | **13 30 47.9** | **-2.2** |
| **PB05** | **IPOC Station P** | **2.95** | **196** | *e*P | **Pn** | **13 30 21.7** | **-1.3** |
| PB05 | | | | *e*S | Sn | 13 30 47.0 | -11 |
| PB05 | | | | IAML | | 13 31 15.6 | |
| | comp=Z,110nm,0.5s | | | | | | |
| **YJA** | **Yavi** | **4.17** | **122** | *e*P | **Pn** | **13 30 40.4** | **+0.4** |
| YJA | | | | *e*S | **Sn** | **13 31 26.9** | **-0.8** |

*ATH **15** 13:48:56.2, 40°.50N×20°.06E, h8km±2km, ML2.6/7, Manual Solution by M.Charalampakis This location: 2020/07/01 18:10:13 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 1 km; Longitude uncertainty: 0 km*
*TIR **15** 13:48:56.6, 40°.44N×20°.08E, h14km, Md2.9, Ml2.8*
*THE **15** 13:48:57.6, 40°.44N×20°.05E, h0km±3km, ML2.4/5, Error ellipse: s-maj=3.4km s-min=0.8km az=352.0*
*BEO **15** 13:48:58.6±1.3, 40°.42N×20°.07E, h5km±6km, ML2.3/4*
*SKO **15** 13:48:58.2, 40°.41N×19°.99E, h0km, ML2.3*
**ISC 15 13:48:57.5±1.2, 40°.42N±0°.02×20°.08E±0°.02, h3km±10km, n34, σ0°.77/59, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VLO** | **Vlora** | **0.45** | **276** | P | **Pg** | **13 49 05.0** | **-1.2** |
| | baz=274 | | | | | | |
| VLO | | | | S | **Sg** | **13 49 12.4** | **+0.4** |
| | baz=274 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=E,12nm,0.3s,baz=274 | | | | | | |
| **VLO** | **Vlora** | **0.45** | **276** | P | **Pg** | **13 49 05.6** | **-0.6** |
| VLO | | | | S | **Sg** | **13 49 12.7** | **+0.7** |
| | comp=E,3μm,0.3s | | | | | | |
| **KBN** | **Korca** | **0.57** | **69** | P | **Pg** | **13 49 08.2** | **-0.3** |
| | baz=71 | | | | | | |
| KBN | | | | S | **Sg** | **13 49 17.4** | **+1.4** |
| | baz=71 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,1.9nm,0.5s,baz=71 | | | | | | |
| **KBN** | **Korca** | **0.57** | **69** | P | **Pg** | **13 49 07.9** | **-0.6** |
| KBN | | | | S | **Sb** | **13 49 18.2** | **-0.6** |
| | comp=N,428nm,0.4s | | | | | | |
| **NEST** | **Nestorio** | **0.74** | **90** | P | **Pg** | **13 49 12.0** | **+0.4** |
| NEST | | | | S | **Sb** | **13 49 23.7** | **+0.2** |
| | comp=N,218nm,0.6s | | | | | | |
| **NEST** | **Nestorio** | **0.74** | **90** | P | **Pg** | **13 49 12.0** | **+0.4** |
| NEST | | | | S | **Sg** | **13 49 21.1** | **-0.1** |
| **KEK** | **Kerkira** | **0.74** | **197** | P | **Pg** | **13 49 11.3** | **-0.4** |
| KEK | | | | S | **Sg** | **13 49 22.7** | **+1.4** |
| | comp=N,488nm,0.3s | | | | | | |
| **KEK** | **Kerkira** | **0.74** | **197** | P | **Pg** | **13 49 10.9** | **-0.8** |
| KEK | | | | S | **Sg** | **13 49 22.6** | **+1.4** |
| **PENT** | **Pentalofos** | **0.84** | **105** | P | **Pg** | **13 49 13.5** | **-0.1** |
| **PENT** | **Pentalofos** | **0.84** | **105** | P | **Pg** | **13 49 13.2** | **-0.4** |
| **OHR** | **Ohrid** | **0.88** | **38** | *i* Pg | **Pg** | **13 49 14.2** | **-0.1** |
| OHR | | | | *i* Sg | **Sn** | **13 49 28.7** | **-1.3** |
| OHR | | | | *e*Lg | Lg | 13 49 28.9 | |
| | comp=E,55nm,0.5s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.91** | **168** | P | **Pg** | **13 49 15.1** | **+0.2** |
| | baz=167 | | | | | | |
| IGT | | | | S | **Sb** | **13 49 29.9** | **+1.6** |
| | baz=167 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=E,1.6nm,0.7s,baz=167 | | | | | | |
| **IGT** | **Igoumenitsa** | **0.91** | **168** | P | **Pg** | **13 49 15.0** | **+0.1** |
| IGT | | | | S | **Sb** | **13 49 29.5** | **+1.2** |
| | comp=E,335nm,0.5s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.91** | **168** | *i* Pg | **Pg** | **13 49 15.1** | **+0.2** |
| IGT | | | | *i* Sg | **Sn** | **13 49 30.1** | **-0.5** |
| **IGT** | **Igoumenitsa** | **0.91** | **168** | P | **Pg** | **13 49 14.8** | **-0.1** |
| IGT | | | | S | **Sb** | **13 49 28.4** | **+0.1** |
| **TIR** | **Tirane** | **0.94** | **350** | P | **Pg** | **13 49 15.4** | **-0.1** |
| | baz=351 | | | | | | |
| TIR | | | | S | **Sb** | **13 49 29.4** | **+0.1** |
| | baz=351 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,1.0nm,0.6s,baz=351 | | | | | | |
| **TIR** | **Tirane** | **0.94** | **350** | *e*Pg | **Pg** | **13 49 15.4** | **-0.1** |
| **JAN** | **Janina** | **0.96** | **142** | P | **Pg** | **13 49 15.2** | **-0.8** |
| JAN | | | | S | **Sb** | **13 49 30.2** | **+0.2** |
| **FNA** | **Florina** | **1.05** | **69** | P | **Pg** | **13 49 17.3** | **-0.3** |
| | baz=70 | | | | | | |
| FNA | | | | S | **Sg** | **13 49 31.2** | **-0.1** |
| | baz=70 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.5nm,0.3s,baz=70 | | | | | | |
| **FNA** | **Florina** | **1.05** | **69** | P | **Pg** | **13 49 17.1** | **-0.5** |
| **FNA** | **Florina** | **1.05** | **69** | *e*Pg | **Pg** | **13 49 16.9** | **-0.7** |
| FNA | | | | *e*Sg | **Sb** | **13 49 33.3** | **+0.9** |
| **FNA** | **Florina** | **1.05** | **69** | *i* Pg | **Pg** | **13 49 17.4** | **-0.3** |
| FNA | | | | *i* Sg | **Sn** | **13 49 33.8** | **-0.5** |
| **FNA** | **Florina** | **1.05** | **69** | P | **Pg** | **13 49 16.5** | **-1.1** |
| FNA | | | | S | **Sg** | **13 49 30.4** | **-0.8** |
| **SCTE** | **Santa Cesarea** | **1.28** | **255** | P | **Pg** | **13 49 20.5** | **-1.6** |
| SCTE | | | | S | **Sg** | **13 49 37.9** | **-0.9** |
| **KZN** | **Kozani** | **1.29** | **95** | P | **Pn** | **13 49 22.4** | **-0.1** |
| **KZN** | **Kozani** | **1.29** | **95** | P | **Pn** | **13 49 21.4** | **-1.1** |
| KZN | | | | S | **Sg** | **13 49 38.4** | **-0.6** |
| **LKD2** | **Lefkada island** | **1.69** | **165** | P | **Pn** | **13 49 27.9** | **0.0** |
| **LKD2** | **Lefkada island** | **1.69** | **165** | P | **Pn** | **13 49 27.5** | **-0.3** |
| LKD2 | | | | S | **Sn** | **13 49 49.2** | **-0.8** |
| **THL** | **Klokotos Trika** | **1.71** | **119** | P | **Pn** | **13 49 29.0** | **+0.8** |
| **THL** | **Klokotos Trika** | **1.71** | **119** | P | **Pn** | **13 49 28.0** | **-0.1** |
| THL | | | | S | **Sn** | **13 49 49.6** | **-0.9** |
| **EVGI** | **Lefkada island** | **1.85** | **166** | P | **Pn** | **13 49 29.2** | **-0.8** |
| **NOCI** | **Noci** | **2.33** | **280** | P | **Pn** | **13 49 37.4** | **+0.8** |
| | baz=280 | | | | | | |
| **BARS** | **Barje** | **2.72** | **28** | *e*Pn | **Pn** | **13 49 42.0** | **-0.1** |
| BARS | | | | *e*Sn | **Sn** | **13 50 16.4** | **+0.9** |
| **SJES** | **Sjenica** | **2.84** | **358** | *e*Pn | **Pn** | **13 49 45.1** | **+1.3** |
| SJES | | | | *e*Sn | **Sn** | **13 50 19.1** | **+0.6** |

**NDI 15 13:51:25.1±2.8, 21°.28N×84°.91E, h10km, ML3.6, MW3.3, Southern India**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHSG** | **JHARSUGUGA** | **1.16** | **295** | *e*P | Pg | 13 51 47.6 | +0.2 |
| JHSG | | | | *e*S | Sn | 13 52 04.2 | +0.8 |
| JHSG | | | | IAML | | 13 52 06.7 | |
| | comp=N,3μm,0.2s | | | | | | |
| JHSG | | | | IAML | | 13 52 07.6 | |
| | comp=E,2μm,0.2s | | | | | | |
| **KNTI** | **KHUNTI** | **1.81** | **11** | *e*P | Pn | 13 51 54.5 | -1.9 |
| KNTI | | | | *e*S | Sn | 13 52 18.5 | -0.9 |
| KNTI | | | | *e*S | Sb | 13 52 19.3 | -1.7 |
| KNTI | | | | IAML | | 13 52 20.6 | |
| | comp=N,2μm,0.2s | | | | | | |
| KNTI | | | | IAML | | 13 52 21.1 | |
| | comp=E,1μm,0.1s | | | | | | |
| **BOK** | **Bokaro** | **2.66** | **20** | *e*P | Pn | 13 52 10.1 | +2.0 |
| BOK | | | | *e*S | Sn | 13 52 41.2 | +0.7 |
| BOK | | | | IAML | | 13 52 49.8 | |
| | comp=N,96nm,0.4s | | | | | | |
| BOK | | | | IAML | | 13 52 52.1 | |
| | comp=E,86nm,0.4s | | | | | | |
| **BLSP** | **Bilaspur** | **2.72** | **289** | *e*P | Pn | 13 52 08.6 | -0.3 |
| BLSP | | | | *ex* | Sn | 13 52 46.5 | +4.7 |
| BLSP | | | | IAML | | 13 52 52.0 | |
| | comp=E,236nm,0.3s | | | | | | |
| **NGP** | **Nagpur** | **5.47** | **270** | *e*P | Pn | 13 52 47.2 | +0.6 |
| NGP | | | | *e*S | Sn | 13 53 44.5 | -5.2 |
| NGP | | | | *e*S | Sn | 13 53 44.8 | -4.9 |

**NEIC 15 13:57:50.3±1.3, 41°.42N±0°.04×100°.14W±0°.03, h5km±3km, mb_Lg2.7/72, ML3.2/6, Error ellipse: s-maj=5.4km s-min=2.6km az=160.0, Nebraska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **K30B** | **Basset** | **1.31** | **17** | Pg | Pn | 13 58 14.5 | -0.8 |
| K30B | | | | IAML | | 13 58 38.2 | |
| | comp=N,314nm,0.4s | | | | | | |
| K30B | | | | IAML | | 13 58 38.7 | |
| | comp=E,311nm,0.3s | | | | | | |
| **BGNE** | **Belgrade** | **1.49** | **90** | | Pn | 13 58 16.3 | -1.5 |
| **OGNE** | **Ogallala** | **1.51** | **252** | | Pn | 13 58 16.8 | -1.3 |
| OGNE | | | | | Sn | 13 58 36.5 | -1.7 |
| **CBKS** | **Cedar Bluff** | **2.62** | **173** | Pn | Pn | 13 58 32.5 | -0.8 |
| CBKS | | | | | Sb | 13 59 08.9 | -1.3 |
| **L34A** | **Svendsen Farm,** | **2.87** | **78** | Pn | Pn | 13 58 35.9 | -0.9 |
| **KSCO** | **Kaye Shedlock'** | **3.07** | **219** | Pn | Pn | 13 58 38.8 | -0.8 |
| **SUSD** | **Miller** | **3.14** | **16** | Pn | Pn | 13 58 40.3 | -0.2 |
| SUSD | | | | IAmb_Lg | | 13 59 28.5 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **R32A** | **Long Quarter,** | **3.19** | **159** | Pn | Pn | 13 58 40.6 | -0.5 |
| **N35A** | **Tabor** | **3.44** | **98** | IAmb_Lg | | 13 59 46.8 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.56** | **129** | Pn | Pn | 13 58 45.8 | -0.4 |
| KSU1 | | | | IAmb_Lg | | 13 59 48.9 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **RSSD** | **Black Hills** | **3.94** | **315** | Pn | Pn | 13 58 51.8 | +0.1 |
| **PHWY** | **Pilot Hill** | **4.01** | **270** | Pn | Pn | 13 58 52.0 | -0.6 |
| **N23A** | **Red Feather La** | **4.42** | **265** | Pn | Pn | 13 58 58.2 | -0.1 |
| **ISCO** | **Idaho Springs** | **4.47** | **251** | Pn | Pn | 13 58 58.9 | -0.1 |
| **Q24A** | **Divide** | **4.55** | **239** | Pn | Pn | 13 58 59.2 | -1.0 |
| **KAN09** | **Caldwell North** | **4.70** | **155** | IAmb_Lg | | 14 00 16.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **KAN14** | **Manchester OK** | **4.77** | **159** | Pn | Pn | 13 59 01.0 | -1.8 |
| KAN14 | | | | IAmb_Lg | | 14 00 29.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **KAN13** | **South Haven SW** | **4.86** | **154** | Pn | Pn | 13 59 03.3 | -0.8 |
| KAN13 | | | | IAmb_Lg | | 14 00 27.9 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **NOKA** | **Waynoka** | **4.87** | **169** | IAmb_Lg | | 14 00 31.5 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **K22A** | **Casper** | **4.91** | **287** | Pn | Pn | 13 59 04.2 | -0.7 |
| K22A | | | | IAmb_Lg | | 14 00 34.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **BLOK** | **Blackwell** | **5.18** | **153** | IAmb_Lg | | 14 00 40.7 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **CROK** | **Carrier** | **5.19** | **160** | IAmb_Lg | | 14 00 34.0 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **SCIA** | **State Center** | **5.21** | **82** | IAmb_Lg | | 14 00 38.5 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **5.22** | **31** | IAmb_Lg | | 14 00 32.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **N38A** | **Joes South For** | **5.25** | **95** | IAmb_Lg | | 14 00 36.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **RWWY** | **Rawlins** | **5.32** | **275** | Pn | Pn | 13 59 08.1 | -2.5 |
| **P38A** | **Dawn** | **5.34** | **107** | IAmb_Lg | | 14 00 48.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **5.37** | **203** | Pn | Pn | 13 59 11.1 | -0.1 |
| **ELIS** | **Ellis County** | **5.38** | **174** | IAmb_Lg | | 14 00 48.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.41** | **219** | Pn | Pn | 13 59 10.1 | -1.7 |
| T25A | | | | IAmb_Lg | | 14 00 39.3 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **SMCO** | **Snowmass** | **5.69** | **249** | IAmb_Lg | | 14 00 53.0 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **SMWD** | **Samnorwood** | **6.31** | **181** | IAmb_Lg | | 14 01 12.7 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **6.45** | **123** | Pn | Pn | 13 59 24.2 | -1.6 |
| **P40A** | **Paris** | **6.45** | **104** | IAmb_Lg | | 14 01 17.8 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **TUL3** | **Leonard** | **6.46** | **147** | IAmb_Lg | | 14 01 14.3 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **SPMN** | **Marine on St.** | **6.56** | **52** | IAmb_Lg | | 14 01 16.2 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **W35A** | **Tecumseh** | **6.76** | **157** | IAmb_Lg | | 14 01 35.0 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **LAO** | **LASA Array** | **6.85** | **322** | IAmb_Lg | | 14 01 39.7 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **N41A** | **Harden Midland** | **7.05** | **93** | IAmb_Lg | | 14 01 33.4 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **I40A** | **Norwalk** | **7.44** | **67** | IAmb_Lg | | 14 01 57.4 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **JFWS** | **Jewell Farm** | **7.50** | **75** | IAmb_Lg | | 14 02 02.8 | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **7.72** | **197** | IAmb_Lg | | 14 02 08.4 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| **DKNS** | **Dickens** | **7.76** | **185** | IAmb_Lg | | 14 02 09.3 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **X37A** | **Clayton** | **7.79** | **150** | IAmb_Lg | | 14 02 17.0 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **POST** | **Post** | **8.41** | **188** | IAmb_Lg | | 14 02 26.2 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **9.01** | **138** | IAmb_Lg | | 14 02 46.2 | |
| | comp=Z,5.3nm,1.1s | | | | | | |

**HEL 15 14:09:39.9±0.3, 64°.92N×20°.65E, h0km, ML1.2, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UMAU** | **Umeaa** | **1.04** | **179** | PG | Pg | 14 09 58.3 | -1.5 |
| | baz=3.0 | | | | | | |
| UMAU | | | | SB | Sg | 14 10 12.8 | -0.5 |
| **OBF8** | **Ulkokalla** | **1.34** | **115** | PB | Pg | 14 10 04.3 | -1.3 |
| | baz=294 | | | | | | |
| OBF8 | | | | MSG | | 14 10 20.3 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| OBF8 | | | | SN | Sn | 14 10 25.0 | +0.7 |
| **KALU** | **Kalix** | **1.48** | **49** | PN | Pn | 14 10 07.6 | 0.0 |
| KALU | | | | SN | Sg | 14 10 26.9 | -0.4 |
| **OBF0** | **Syolatti, Pyha** | **1.60** | **104** | PG | Pn | 14 10 08.9 | -0.5 |
| OBF0 | | | | MSG | | 14 10 27.9 | |
| | comp=Z,1.5nm,0.2s | | | | | | |
| OBF0 | | | | SN | Sg | 14 10 31.2 | 0.0 |
| **HUSU** | **Husum** | **1.71** | **202** | PG | Pn | 14 10 10.5 | -0.3 |
| HUSU | | | | SN | Sn | 14 10 33.3 | +0.1 |
| **OUF** | **Merijarvi** | **1.84** | **106** | PB | Pn | 14 10 11.9 | -0.8 |
| | baz=289 | | | | | | |
| OUF | | | | MSG | | 14 10 34.9 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| OUF | | | | SG | Sb | 14 10 38.0 | +0.1 |
| **OBF4** | **Vikkela, Lumij** | **1.91** | **91** | PG | Pn | 14 10 13.7 | +0.1 |
| OBF4 | | | | MSG | | 14 10 36.7 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| OBF4 | | | | SG | Sb | 14 10 40.0 | +0.3 |
| **TOF** | **Tornio** | **1.93** | **51** | PG | Pn | 14 10 14.4 | +0.6 |
| | baz=235 | | | | | | |
| TOF | | | | MSG | | 14 10 37.2 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| TOF | | | | SG | Sb | 14 10 40.1 | -0.2 |
| **VAF** | **Ylistaro** | **2.09** | **154** | PG | Pn | 14 10 16.7 | +0.6 |
| | baz=337 | | | | | | |
| VAF | | | | MSG | | 14 10 41.6 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| VAF | | | | SG | Sb | 14 10 44.7 | -0.2 |
| **OUL** | **Oulu** | **2.23** | **83** | PG | Pn | 14 10 19.1 | +1.0 |
| **PAJU** | **Pajala** | **2.34** | **24** | PB | Pn | 14 10 19.1 | -0.5 |
| PAJU | | | | SG | Sb | 14 10 51.8 | -0.6 |
| **HEMU** | **Hemsoen** | **2.53** | **208** | PN | Pn | 14 10 22.2 | 0.0 |
| | baz=21 | | | | | | |
| HEMU | | | | SG | Sb | 14 10 57.1 | -0.7 |
| **KLF** | **Kolari** | **2.69** | **29** | PB | Pn | 14 10 24.8 | +0.4 |
| KLF | | | | MSG | | 14 10 59.2 | |
| | comp=Z,0.5nm,0.2s | | | | | | |
| **RANF** | **Ranua** | **2.79** | **64** | PB | Pn | 14 10 26.6 | +0.9 |
| | baz=254 | | | | | | |
| **NIF** | **Nilsia** | **3.49** | **113** | SG | Sb | 14 11 25.2 | -0.2 |
| **TRO** | **Tromso** | **4.78** | **353** | PB | Pn | 14 10 58.5 | +5.4 |

**HEL 15 14:11:13.5±0.3, 67°.19N×20°.59E, h0km, ML1.1, Suspected explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAJU** | **Pajala** | **1.00** | **98** | PG | Pg | 14 11 31.7 | -0.9 |
| | baz=282 | | | | | | |
| P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TOF | | | | | MSG | | 14 12 09.0 | |
| | comp=Z,1.4nm,0.2s | | | | | | | |
| TOF | | | | | SG | Sn | 14 12 11.2 | +0.5 |
| **KTK1** | **Kautokeino** | **2.08** | **27** | | SG | Pb | 14 11 51.1 | -1.1 |
| **KTK1** | **Kautokeino** | **2.08** | **27** | | PG | Pb | 14 11 51.1 | -1.1 |
| KTK1 | | | | | SG | Sb | 14 12 18.1 | -0.5 |
| **RNF** | **Rovaniemi** | **2.22** | **103** | | PN | Pn | 14 11 49.7 | -1.8 |
| RNF | | | | | SG | Sb | 14 12 21.8 | -0.6 |
| **SGF** | **Sodankyl** | **2.32** | **81** | | PB | Pn | 14 11 52.7 | -0.1 |
| | baz=265 | | | | | | | |
| SGF | | | | | SN | Sn | 14 12 19.6 | -2.4 |
| **RANF** | **Ranua** | **2.74** | **113** | | PG | Pb | 14 12 03.5 | +0.2 |
| | baz=303 | | | | | | | |
| RANF | | | | | SG | Sb | 14 12 36.3 | -1.1 |
| **ARA0** | **ARCESS Array S** | **2.98** | **35** | | PB | Pn | 14 12 04.4 | +2.4 |
| ARA0 | | | | | SB | Sb | 14 12 41.7 | -2.6 |
| **KEV** | **Kevo** | **3.50** | **40** | | SN | Sn | 14 12 50.4 | -0.7 |
| **HEMU** | **Hemsoen** | **4.66** | **195** | | PN | Pn | 14 12 25.1 | +0.2 |

*SKHL* ***15*** *14:16:04.0±0.7, 44.˚20N×149.˚80E, h40km±3km, mb4.2/3*
*NIED* ***15*** *14:16:04.4, 44.˚57N×149.˚57E, h30km, MW3.4, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; $M_{rr}$0.60; $M_{\theta\theta}$-0.04; $M_{\phi\phi}$-0.56; $M_{r\theta}$0.50; $M_{\theta\phi}$-0.78; $M_{\phi r}$1.02; Fault plane solution: $M_0$1.44000×10¹⁴ NP1:φ₀23.00000°, δ72.00000°, λ77.00000°. NP2:φ₀240.00000°, δ22.00000°, λ125.00000°.*
*JMA* ***15*** *14:16:04.4±0.9, 45˚N±4˚×15˚0E±˚, h30km, MW3.7/14, SE OFF ETOROFU*

**ISC 15 14:16:01.5±4.0, 44˚05N±0˚10×149˚9E±0˚2, h51km, n14, σ2s44/23, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **KUR** | **Kuril'sk** | **1.88** | **310** | *eP* | | **Pn** | **14** | **16** | **30.8** | **-0.3** |
| KUR | | | | | | AMB | AMB | 14 | 16 | 32.6 | |
| | 130nm,0.4s | | | | | | | | | |
| KUR | | | | *eS* | | **Sn** | **14** | **16** | **51.1** | **-2.5** |
| KUR | | | | | A | A | 14 | 16 | 54.6 | |
| | 310nm,0.6s | | | | | | | | | |
| KUR | | | | | A | A | 14 | 16 | 54.6 | |
| | 340nm,0.6s | | | | | | | | | |
| **SHO** | **Shikotan** | **2.23** | **266** | *eP* | | **Pn** | **14** | **16** | **36.8** | **+0.9** |
| SHO | | | | | | AMB | AMB | 14 | 16 | 38.8 | |
| | 30nm,0.4s | | | | | | | | | |
| SHO | | | | *eS* | | **Sn** | **14** | **17** | **00.8** | **-1.5** |
| SHO | | | | | A | A | 14 | 17 | 03.9 | |
| | 90nm,0.3s | | | | | | | | | |
| SHO | | | | | A | A | 14 | 17 | 03.9 | |
| | 90nm,0.3s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.92** | **271** | *eP* | | **Pn** | **14** | **16** | **46.5** | **+1.1** |
| YUK | | | | | | AMB | AMB | 14 | 16 | 48.2 | |
| | 40nm,0.3s | | | | | | | | | |
| YUK | | | | *eS* | | **Sn** | **14** | **17** | **18.7** | **-0.5** |
| YUK | | | | | A | A | 14 | 17 | 25.5 | |
| | 90nm,0.3s | | | | | | | | | |
| YUK | | | | | A | A | 14 | 17 | 25.5 | |
| | 50nm,0.3s | | | | | | | | | |
| **NEM2** | **Nemuro 2** | **3.10** | **259** | | P | **Pn** | **14** | **16** | **48.8** | **+1.0** |
| NEM2 | | | | | S | **Sn** | **14** | **17** | **21.6** | **-2.0** |
| **JRA** | **Rausu** | **3.46** | **270** | | P | **Pn** | **14** | **16** | **55.1** | **+2.4** |
| **JNK** | **Nakash** | **3.79** | **265** | *i* | P | **Pn** | **14** | **16** | **58.9** | **+1.7** |
| JNK | | | | *eS* | | **Sn** | **14** | **17** | **39.7** | **-0.9** |
| **JAK** | **Akkeshi** | **3.94** | **256** | | P | **Pn** | **14** | **17** | **00.8** | **+1.5** |
| JAK | | | | *eS* | | **Sn** | **14** | **17** | **43.5** | **-0.7** |
| **JTKR** | **Abashiri--Toko** | **4.33** | **271** | *eP* | | **Pn** | **14** | **17** | **07.2** | **+2.5** |
| **JAR** | **Ashorobuto** | **4.52** | **263** | | P | **Pn** | **14** | **17** | **09.8** | **+2.5** |
| JAR | | | | | S | **Sn** | **14** | **18** | **00.7** | **+2.1** |
| **JOB** | **Onbets** | **4.57** | **258** | | P | **Pn** | **14** | **17** | **10.6** | **+2.6** |
| **JCH** | **Churui** | **4.99** | **256** | *eP* | | **Pn** | **14** | **17** | **15.9** | **+2.2** |
| JCH | | | | | S | **Sn** | **14** | **18** | **09.6** | **-0.5** |
| **JNBK** | **Urakawa-nobuka** | **5.53** | **254** | *eP* | | **Pn** | **14** | **17** | **23.6** | **+2.5** |
| JNBK | | | | *eS* | | **Sn** | **14** | **18** | **22.2** | **-1.2** |
| **JANG** | **Nango** | **7.24** | **242** | S | | **Sn** | **14** | **19** | **00.1** | **-5.2** |
| **JTH** | **Tanohata** | **7.27** | **238** | S | | **Sn** | **14** | **19** | **00.8** | **-5.3** |

*CATAC* ***15*** *14:19:33.9±0.0, 13˚.26N×87˚.72W, h196km±2km, ML4.1*
*IDC* ***15*** *14:19:34.1±0.8, 13˚.31N×87˚.64W, h180km±7km, mb3.9/10, mbtmp4.4/13, Error ellipse: s-maj=18.4km s-min=7.9km az=45.0*
*SNET* ***15*** *14:19:34.5±0.6, 13˚.17N×87˚.76W, h186km±5km, ML4.2*
*UCR* ***15*** *14:19:35.3±0.9, 13˚.32N×87˚.59W, h184km±11km, MW4.0*
*NEIC* ***15*** *14:19:36.2±1.7, 13˚.3N±0˚.1×87˚.73W±0˚.09, h176km±6km, mb4.7/16, Error ellipse: s-maj=21.2km s-min=7.0km az=211.0*
*GCG* ***15*** *14:19:40.9±0.6, 13˚.03N×87˚.94W, h47km±547km, MD4.3*

**ISC 15 14:19:35.1±0.6, 13˚24N±0˚.05×87˚73W±0˚.04, h187km±4km, n223, σ0s89/254, mb4.7/17, 1D, Honduras**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **CNCH** | **Conchagua** | **0.11** | **288** | *i* | P | **Pn** | **14** | **19** | **59.5** | **-0.4** |
| **CNCH** | **Conchagua** | **0.11** | **288** | *i* | P | **Pn** | **14** | **19** | **59.5** | **-0.4** |
| CNCH | | | | | | IAML | 14 | 20 | 00.0 | |
| | comp=Z,5μm,1.0s | | | | | | | | | |
| **LCND** | **La Caada** | **0.17** | **292** | *eP* | | **Pn** | **14** | **19** | **59.4** | **-0.5** |
| **LCND** | **La Caada** | **0.17** | **292** | *i* | P | **Pn** | **14** | **19** | **59.5** | **-0.4** |
| LCND | | | | *i* | P | | 14 | 19 | 59.9 | |
| LCND | | | | | | IAML | 14 | 19 | 59.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| LCND | | | | | | IAML | 14 | 20 | 30.5 | |
| | comp=Z,8μm,1.0s | | | | | | | | | |
| **CNRM** | **Centro Naciona** | **0.49** | **298** | *i* | P | **Pn** | **14** | **20** | **00.7** | **0.0** |
| CNRM | | | | | | IAML | 14 | 20 | 00.9 | |
| | comp=Z,17μm,1.0s | | | | | | | | | |
| **JUCU** | **Jucuarn** | **0.51** | **271** | *i* | P | **Pn** | **14** | **20** | **00.2** | **-0.7** |
| JUCU | | | | | | IAML | 14 | 20 | 00.9 | |
| | comp=Z,3μm,1.0s | | | | | | | | | |
| **RANC** | **El Ranchito** | **0.58** | **289** | *i* | P | **Pn** | **14** | **20** | **00.9** | **-0.4** |
| RANC | | | | | | IAML | 14 | 20 | 01.8 | |
| | comp=Z,6μm,1.0s | | | | | | | | | |
| **PACA** | **Pacayal** | **0.62** | **291** | *eP* | | **Pn** | **14** | **20** | **01.6** | **+0.2** |
| **PACA** | **Pacayal** | **0.62** | **291** | *i* | P | **Pn** | **14** | **20** | **01.1** | **-0.4** |
| PACA | | | | | | IAML | 14 | 20 | 08.3 | |
| | comp=Z,17μm,1.0s | | | | | | | | | |
| **CAHU** | **Cacacuatique** | **0.71** | **318** | *eP* | | **Pn** | **14** | **20** | **02.1** | **+0.1** |
| CAHU | | | | | | IAML | 14 | 20 | 02.7 | |
| | comp=Z,3μm,0.3s | | | | | | | | | |
| **TECA** | **Tecapa** | **0.80** | **288** | *eP* | | **Pn** | **14** | **20** | **02.3** | **-0.2** |
| **CRIN** | **San Cristobal** | **0.85** | **129** | | | **Pn** | **14** | **20** | **02.6** | **-0.1** |
| **CRIN** | **San Cristobal** | **0.85** | **129** | *i* | P | **Pn** | **14** | **20** | **02.7** | **0.0** |
| CRIN | | | | | | IAML | 14 | 20 | 03.3 | |
| | comp=Z,15μm,1.0s | | | | | | | | | |
| CRIN | | | | *i* | S | **Sn** | **14** | **20** | **24.2** | **+0.3** |
| **PQSS** | **Presa 15 de Se** | **0.90** | **295** | *i* | P | **Pn** | **14** | **20** | **02.2** | **-0.6** |
| PQSS | | | | | | IAML | 14 | 20 | 03.0 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **0.92** | **29** | | | **Pn** | **14** | **20** | **03.5** | **+0.3** |
| **TGUH** | **Tegucigalpa,Un** | **0.92** | **29** | *i* | P | **Pn** | **14** | **20** | **03.4** | **+0.3** |
| TGUH | | | | | | IAML | 14 | 20 | 04.1 | |
| | comp=Z,7μm,1.0s | | | | | | | | | |
| TGUH | | | | *i* | S | **Sn** | **14** | **20** | **25.8** | **+0.8** |
| **MARCA** | **Marcala la Paz** | **0.96** | **342** | *i* | P | **Pn** | **14** | **20** | **03.8** | **+0.4** |
| MARCA | | | | *i* | S | **Sn** | **14** | **20** | **26.3** | **+0.8** |
| **TECO** | **Alcaldia de Te** | **1.07** | **286** | *i* | P | **Pn** | **14** | **20** | **03.5** | **-0.6** |
| TECO | | | | | | IAML | 14 | 20 | 04.2 | |
| | comp=Z,4μm,1.0s | | | | | | | | | |
| **QUEN** | **Al S del Volca** | **1.07** | **127** | *i* | P | **Pn** | **14** | **20** | **04.0** | **-0.2** |
| QUEN | | | | | | IAML | 14 | 20 | 36.0 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.08** | **295** | *i* | P | **Pn** | **14** | **20** | **04.4** | **+0.2** |
| **SCLA** | **Alcaldia de Sa** | **1.08** | **295** | *i* | P | **Pn** | **14** | **20** | **04.1** | **-0.1** |
| SCLA | | | | | | IAML | 14 | 20 | 04.8 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| SCLA | | | | *i* | S | **Sn** | **14** | **20** | **26.7** | **0.0** |
| **TEL3** | **Telica 3** | **1.09** | **128** | *i* | P | **Pn** | **14** | **20** | **04.1** | **-0.2** |
| TEL3 | | | | | | IAML | 14 | 20 | 39.6 | |
| | comp=Z,4μm,1.0s | | | | | | | | | |
| **SOMN** | **Somoto** | **1.10** | **81** | *i* | P | **Pn** | **14** | **20** | **05.0** | **+0.6** |
| SOMN | | | | | | IAML | 14 | 20 | 05.9 | |
| | comp=Z,5μm,1.0s | | | | | | | | | |
| **UESV** | **Universidad de** | **1.10** | **291** | *i* | P | **Pn** | **14** | **20** | **04.2** | **-0.2** |
| UESV | | | | | | IAML | 14 | 20 | 48.2 | |
| | comp=Z,22μm,1.0s | | | | | | | | | |
| **YUSH** | **Yuscaran** | **1.11** | **50** | *i* | P | **Pn** | **14** | **20** | **04.9** | **+0.4** |
| YUSH | | | | *i* | S | **Sn** | **14** | **20** | **27.1** | **-0.2** |
| **COEG** | **Centro de Oper** | **1.18** | **289** | *eP* | | **Pn** | **14** | **20** | **04.9** | **-0.1** |
| COEG | | | | | | IAML | 14 | 20 | 06.4 | |
| | comp=Z,2μm,0.4s | | | | | | | | | |
| COEG | | | | *eS* | | **Sn** | **14** | **20** | **28.5** | **+0.3** |
| **COEG** | **Centro de Oper** | **1.18** | **289** | *i* | P | **Pn** | **14** | **20** | **04.9** | **-0.1** |
| COEG | | | | | | IAML | 14 | 20 | 05.6 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **ROCN** | **Rota Cerro Neg** | **1.20** | **127** | *i* | P | **Pn** | **14** | **20** | **05.1** | **0.0** |
| ROCN | | | | *i* | S | **Sn** | **14** | **20** | **30.1** | **+1.8** |
| ROCN | | | | | | IAML | 14 | 20 | 38.1 | |
| | comp=Z,1μm,1.0s | | | | | | | | | |
| **ILCN** | **San Idelfonso** | **1.20** | **123** | *i* | P | **Pn** | **14** | **20** | **04.7** | **-0.4** |
| ILCN | | | | *i* | S | **Sn** | **14** | **20** | **29.4** | **+1.1** |
| ILCN | | | | | | IAML | 14 | 20 | 35.7 | |
| | comp=Z,490nm,1.0s | | | | | | | | | |
| **COMHN** | **El Horno** | **1.20** | **8** | *i* | P | **Pn** | **14** | **20** | **04.9** | **-0.5** |
| COMHN | | | | *i* | S | **Sn** | **14** | **20** | **28.4** | **-0.6** |
| **CNGN** | **Cerro Negro** | **1.25** | **126** | | | **Pn** | **14** | **20** | **04.9** | **-0.6** |
| **CNGN** | **Cerro Negro** | **1.25** | **126** | *i* | P | **Pn** | **14** | **20** | **05.3** | **-0.2** |
| CNGN | | | | | | IAML | 14 | 20 | 41.1 | |
| | comp=Z,3μm,1.0s | | | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.25** | **126** | *eP* | | **Pn** | **14** | **20** | **05.3** | **-0.2** |
| **CNGA** | **Al SSO del Vol** | **1.25** | **127** | *i* | P | **Pn** | **14** | **20** | **03.8** | **-1.7** |
| CNGA | | | | *i* | S | **Sn** | **14** | **20** | **29.3** | **+0.2** |
| CNGA | | | | | | IAML | 14 | 20 | 35.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **MACN** | **El Madrono** | **1.28** | **127** | *i* | P | **Pn** | **14** | **20** | **05.8** | **-0.1** |
| MACN | | | | | | IAML | 14 | 20 | 37.8 | |
| | comp=Z,980nm,1.0s | | | | | | | | | |
| **LIMN** | **Finca el Limon** | **1.34** | **98** | *i* | P | **Pn** | **14** | **20** | **06.1** | **-0.2** |
| LIMN | | | | | | IAML | 14 | 20 | 07.0 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **LFRS** | **El Faro** | **1.35** | **286** | *i* | P | **Pn** | **14** | **20** | **06.2** | **-0.3** |
| **LEVN** | **Ruinas Leon Vi** | **1.37** | **128** | *i* | P | **Pn** | **14** | **20** | **06.5** | **0.0** |
| LEVN | | | | *i* | S | **Sn** | **14** | **20** | **30.0** | **-0.8** |
| LEVN | | | | | | IAML | 14 | 20 | 39.4 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **BC84** | **Volcan Momotom** | **1.43** | **126** | *i* | P | **Pn** | **14** | **20** | **06.3** | **-0.8** |
| BC84 | | | | *i* | S | **Sn** | **14** | **20** | **31.7** | **-0.1** |
| BC84 | | | | | | IAML | 14 | 20 | 50.5 | |
| | comp=Z,5μm,1.0s | | | | | | | | | |
| **MOM2** | **El Cardon** | **1.45** | **123** | *i* | P | **Pn** | **14** | **20** | **07.5** | **+0.2** |
| MOM2 | | | | *i* | S | **Sn** | **14** | **20** | **33.5** | **+1.3** |
| MOM2 | | | | | | IAML | 14 | 20 | 37.2 | |
| | comp=Z,1μm,1.0s | | | | | | | | | |
| **PANCS** | **Alcalda de** | **1.46** | **285** | *i* | P | **Pn** | **14** | **20** | **07.0** | **-0.4** |
| PANCS | | | | | | IAML | 14 | 20 | 07.1 | |
| | comp=Z,6μm,1.0s | | | | | | | | | |
| PANCS | | | | *i* | S | **Sn** | **14** | **20** | **34.4** | **+2.0** |
| **LOMA** | **Loma Larga** | **1.46** | **286** | *i* | P | **Pn** | **14** | **20** | **07.4** | **-0.2** |
| **LOMA** | **Loma Larga** | **1.46** | **286** | *i* | P | **Pn** | **14** | **20** | **07.3** | **-0.2** |
| LOMA | | | | | | IAML | 14 | 20 | 07.9 | |
| | comp=Z,3μm,1.0s | | | | | | | | | |
| LOMA | | | | *i* | S | **Sn** | **14** | **20** | **34.1** | **+1.5** |
| **UDBS** | **Universidad Do** | **1.47** | **289** | *i* | P | **Pn** | **14** | **20** | **07.8** | **+0.3** |
| UDBS | | | | | | IAML | 14 | 20 | 09.8 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **IGN** | **Direccin Gen** | **1.48** | **289** | *i* | P | **Pn** | **14** | **20** | **07.5** | **-0.1** |
| IGN | | | | | | IAML | 14 | 20 | 08.6 | |
| | comp=Z,9μm,1.0s | | | | | | | | | |
| **BC86** | **Nagarote** | **1.49** | **131** | *i* | P | **Pn** | **14** | **20** | **07.6** | **-0.1** |
| BC86 | | | | *i* | S | **Sn** | **14** | **20** | **32.0** | **-0.9** |
| BC86 | | | | | | IAML | 14 | 20 | 37.8 | |
| | comp=Z,6μm,1.0s | | | | | | | | | |
| **LLGN** | **La Laguna** | **1.50** | **308** | *i* | P | **Pn** | **14** | **20** | **08.2** | **+0.4** |
| LLGN | | | | | | IAML | 14 | 20 | 08.5 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **UTEC** | **Universidad Te** | **1.51** | **288** | *i* | P | **Pn** | **14** | **20** | **08.0** | **+0.2** |
| UTEC | | | | | | IAML | 14 | 20 | 08.2 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| **COPN** | **Copaltepe** | **1.53** | **134** | *i* | P | **Pn** | **14** | **20** | **08.2** | **+0.2** |
| COPN | | | | | | IAML | 14 | 20 | 38.0 | |
| | comp=Z,1μm,1.0s | | | | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.53** | **287** | | | **Pn** | **14** | **20** | **07.3** | **-0.8** |
| **SNET** | **Serv Nac Est T** | **1.53** | **287** | *i* | P | **Pn** | **14** | **20** | **08.0** | **-0.1** |
| SNET | | | | *i* | S | **Sn** | **14** | **20** | **34.1** | **+0.5** |
| SNET | | | | | | IAML | 14 | 20 | 39.1 | |
| | comp=Z,5μm,1.0s | | | | | | | | | |
| **UEES** | **Universidad Ev** | **1.54** | **288** | *i* | P | **Pn** | **14** | **20** | **08.3** | **+0.1** |
| UEES | | | | | | IAML | 14 | 20 | 08.7 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| UEES | | | | *i* | S | **Sn** | **14** | **20** | **36.4** | **+2.5** |
| **ITCA** | **Escuela Especi** | **1.57** | **286** | *i* | P | **Pn** | **14** | **20** | **08.4** | **-0.1** |
| ITCA | | | | | | IAML | 14 | 20 | 08.7 | |
| | comp=Z,11μm,1.0s | | | | | | | | | |
| ITCA | | | | *i* | S | **Sn** | **14** | **20** | **37.5** | **+3.2** |
| **LALI** | **Alcalda de L** | **1.57** | **279** | *i* | P | **Pn** | **14** | **20** | **07.8** | **-0.5** |
| **LALI** | **Alcalda de L** | **1.57** | **279** | *i* | P | **Pn** | **14** | **20** | **07.9** | **-0.4** |
| LALI | | | | | | IAML | 14 | 20 | 08.2 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| LALI | | | | *i* | S | **Sn** | **14** | **20** | **32.5** | **-1.6** |
| **PMON** | **Piamonte** | **1.61** | **287** | *i* | P | **Pn** | **14** | **20** | **08.9** | **0.0** |
| PMON | | | | | | IAML | 14 | 20 | 41.1 | |
| | comp=Z,3μm,1.0s | | | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **1.61** | **292** | *i* | P | **Pn** | **14** | **20** | **08.8** | **0.0** |
| QUEZ | | | | | | IAML | 14 | 20 | 09.5 | |
| | comp=Z,8μm,1.0s | | | | | | | | | |
| **SAPS** | **Ciudad Sandino** | **1.67** | **129** | *i* | P | **Pn** | **14** | **20** | **10.5** | **+1.1** |
| SAPS | | | | *i* | S | **Sn** | **14** | **20** | **36.8** | **+0.8** |
| SAPS | | | | | | IAML | 14 | 20 | 41.6 | |
| | comp=Z,3μm,1.0s | | | | | | | | | |
| **APYN** | **Apoyeque** | **1.68** | **127** | *i* | P | **Pn** | **14** | **20** | **09.8** | **+0.4** |
| APYN | | | | *i* | S | **Sn** | **14** | **20** | **36.6** | **+0.6** |
| APYN | | | | | | IAML | 14 | 20 | 43.8 | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.73** | **284** | *i* | P | **Pn** | **14** | **20** | **09.7** | **-0.4** |
| **JAYA** | **Jayaque - finc** | **1.73** | **284** | *i* | P | **Pn** | **14** | **20** | **09.5** | **-0.5** |
| JAYA | | | | *i* | S | **Sn** | **14** | **20** | **36.5** | **-0.6** |
| JAYA | | | | | | IAML | 14 | 20 | 39.8 | |
| | comp=Z,9μm,1.0s | | | | | | | | | |
| **HUEN** | | **1.76** | **121** | *i* | P | **Pn** | **14** | **20** | **10.7** | **+0.5** |
| HUEN | | | | *i* | S | **Sn** | **14** | **20** | **38.2** | **+0.7** |
| HUEN | | | | | | IAML | 14 | 20 | 46.8 | |
| | comp=Z,480nm,1.0s | | | | | | | | | |
| **SNJE** | **San Jose** | **1.93** | **289** | *eP* | | **Pn** | **14** | **20** | **12.2** | **0.0** |
| **CEVE** | **Cerro Verde** | **1.94** | **288** | *eP* | | **Pn** | **14** | **20** | **12.1** | **-0.1** |
| **SBLS** | **San Blas** | **1.94** | **288** | *eP* | | **Pn** | **14** | **20** | **12.8** | **+0.5** |
| **MTO3** | **Montecristo** | **1.96** | **306** | | | **Pn** | **14** | **20** | **12.7** | **+0.1** |
| **MTO3** | **Montecristo** | **1.96** | **306** | *eP* | | **Pn** | **14** | **20** | **13.1** | **+0.6** |
| **MTO3** | **Montecristo** | **1.96** | **306** | *i* | P | **Pn** | **14** | **20** | **13.1** | **+0.6** |
| MTO3 | | | | | | IAML | 14 | 20 | 13.2 | |
| | comp=Z,580nm,1.0s | | | | | | | | | |
| **RTR** | **El Retiro** | **1.98** | **289** | *eP* | | **Pn** | **14** | **20** | **13.0** | **+0.4** |
| **NUBE** | **Las Nubes** | **2.10** | **288** | *eP* | | **Pn** | **14** | **20** | **13.9** | **-0.1** |
| **NUBE** | **Las Nubes** | **2.10** | **288** | *i* | P | **Pn** | **14** | **20** | **13.8** | **-0.1** |
| NUBE | | | | | | IAML | 14 | 20 | 14.2 | |
| | comp=Z,2μm,1.0s | | | | | | | | | |
| NUBE | | | | *i* | S | **Sn** | **14** | **20** | **46.1** | **+2.0** |
| **SLOZ** | **Alcaldia de Sa** | **2.15** | **292** | *eP* | | **Pn** | **14** | **20** | **14.6** | **+0.3** |
| SLOZ | | | | | | IAML | 14 | 20 | 19.6 | |
| | comp=Z,603nm,0.5s | | | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.16** | **111** | | | **Pn** | **14** | **20** | **14.3** | **-0.1** |
| **MRL** | **Marmol** | **2.63** | **314** | *eP* | | **Pn** | **14** | **20** | **22.2** | **+2.1** |
| **ACON** | **Acoyapa** | **2.79** | **117** | | | **Pn** | **14** | **20** | **21.6** | **0.0** |
| **ACON** | **Acoyapa** | **2.79** | **117** | *eP* | | **Pn** | **14** | **20** | **21.9** | **+0.2** |
| ACON | | | | *eS* | | **Sn** | **14** | **20** | **58.0** | **0.0** |
| **NBG** | **Las Nubes** | **2.87** | **298** | *eP* | | **Pn** | **14** | **20** | **24.9** | **+2.0** |
| **PCG** | **Pacaya** | **3.02** | **293** | *eP* | | **Pn** | **14** | **20** | **26.1** | **+1.5** |
| **APG** | **El Apazote** | **3.18** | **304** | P | | **Pn** | **14** | **20** | **27.5** | **+0.9** |
| | comp=Z,8.6nm,0.6s,baz=117,slow=6.5,SNR=143 | | | | | | | | | |
| APG | | | | | S | **Sn** | **14** | **21** | **05.0** | **-1.7** |
| | comp=Z,10nm,0.7s,baz=335,slow=22,SNR=6.7 | | | | | | | | | |
| **FUG** | **Fuego 3** | **3.25** | **292** | *eP* | | **Pn** | **14** | **20** | **28.5** | **+1.1** |
| **VRLE** | **La Escondida,** | **3.36** | **136** | *eP* | | **Pn** | **14** | **20** | **29.5** | **+0.9** |
| **ESPN** | **Las Esperanzas** | **3.50** | **107** | | | **Pn** | **14** | **20** | **31.0** | **+0.8** |
| **ESPN** | **Las Esperanzas** | **3.50** | **107** | *eP* | | **Pn** | **14** | **20** | **30.5** | **+0.3** |
| **NICO** | **Nicoya** | **3.81** | **144** | *eP* | | **Pn** | **14** | **20** | **34.9** | **+0.7** |
| **SULM** | **Suchitepequez,** | **3.88** | **286** | *eP* | | **Pn** | **14** | **20** | **36.7** | **+1.8** |
| **JTS** | **Las Juntas de** | **4.00** | **137** | Pn | | **Pn** | **14** | **20** | **37.9** | **+1.4** |
| **JTS** | **Las Juntas de** | **4.00** | **137** | P | | **Pn** | **14** | **20** | **36.8** | **+0.3** |
| | comp=Z,11nm,0.4s,baz=25,slow=2.5,SNR=18 | | | | | | | | | |
| JTS | | | | | S | **Sn** | **14** | **21** | **22.4** | **-2.2** |
| | comp=Z,53nm,0.3s,baz=311,slow=23,SNR=12 | | | | | | | | | |
| **JTS** | **Las Juntas de** | **4.00** | **137** | *eP* | | **Pn** | **14** | **20** | **37.2** | **+0.7** |
| **STG3** | **Santiaguito 3,** | **4.01** | **292** | *eP* | | **Pn** | **14** | **20** | **39.5** | **+2.8** |
| STG3 | | | | *eS* | | **Sn** | **14** | **21** | **25.2** | **+0.2** |
| **SOCE** | **Pocosol** | **4.16** | **133** | Pn | | **Pn** | **14** | **20** | **40.5** | **+1.9** |
| **CBL1** | **Cabuya** | **4.46** | **144** | *eP* | | **Pn** | **14** | **20** | **43.0** | **+0.7** |
| **ABE2** | **San Pablo** | **5.03** | **134** | *eP* | | **Pn** | **14** | **20** | **51.4** | **+1.5** |
| **LCR2** | **La Lucha 2** | **5.04** | **133** | Pn | | **Pn** | **14** | **20** | **51.0** | **+1.0** |
| **LCR2** | **La Lucha 2** | **5.04** | **133** | *eP* | | **Pn** | **14** | **20** | **51.5** | **+1.5** |
| **LLNJ** | **Naranjito** | **5.16** | **136** | *eP* | | **Pn** | **14** | **20** | **54.2** | **+2.8** |
| **BUS1** | **Rivas** | **5.35** | **133** | *eP* | | **Pn** | **14** | **20** | **56.0** | **+1.8** |
| **ZELE** | **Perez Zeledon** | **5.51** | **134** | *eP* | | **Pn** | **14** | **20** | **57.8** | **+1.9** |
| **DRK0** | **Durika** | **5.91** | **132** | *eP* | | **Pn** | **14** | **21** | **02.4** | **+1.1** |
| **BRU2** | **Volcan** | **6.63** | **131** | Pn | | **Pn** | **14** | **21** | **13.1** | **+2.4** |
| **CMIG** | **Matias Romero** | **7.90** | **300** | P | | **Pn** | **14** | **21** | **26.3** | **-0.8** |
| | comp=Z,3.1nm,0.3s,baz=143,slow=7.9,SNR=22 | | | | | | | | | |
| CMIG | | | | | S | Sn | 14 | 22 | 46.7 | -9.2 |
| | comp=Z,6.0nm,0.4s,baz=357,slow=10,SNR=8.0 | | | | | | | | | |
| **061Z** | **Ochoppi** | **14.10** | **26** | | P | **P** | **14** | **22** | **50.8** | **+2.0** |
| **NMDO** | **Nuevo Mundo** | **14.19** | **57** | | P | **P** | **14** | **22** | **51.9** | **+2.0** |
| **SDDR** | **Presa de Saban** | **16.79** | **68** | | P | **Pn** | **14** | **23** | **20.1** | **+0.5** |
| **HBVL** | **Hebbronville** | **17.15** | **325** | | P | **Pn** | **14** | **23** | **24.3** | **+0.5** |
| **SDV** | **Santo Domingo** | **17.32** | **103** | | P | **Pn** | **14** | **23** | **26.3** | **+0.1** |
| **SDV** | **Santo Domingo** | **17.32** | **103** | | P | **P** | **14** | **23** | **23.8** | **-0.9** |
| | comp=Z,13nm,0.4s,baz=288,slow=6.8,SNR=6.3 | | | | | | | | | |
| **BRAL** | **Brewton** | **17.85** | **2** | | P | **Pn** | **14** | **23** | **32.3** | **+0.3** |
| **BRAL** | **Brewton** | **17.85** | **2** | | P | **Pn** | **14** | **23** | **32.0** | **-0.1** |
| | baz=182 | | | | | | | | | |
| **346A** | **Big Creek Wild** | **18.13** | **355** | | P | **Pn** | **14** | **23** | **34.4** | **-0.9** |
| **HKT** | **Hockley** | **18.24** | **337** | | P | **Pn** | **14** | **23** | **36.0** | **-0.5** |
| **352A** | **Blakely** | **18.33** | **8** | | P | **Pn** | **14** | **23** | **37.0** | **-0.6** |
| **TIGA** | **Tifton** | **18.51** | **11** | | P | **Pn** | **14** | **23** | **38.9** | **-0.8** |
| | baz=193 | | | | | | | | | |
| **833A** | **Chaparral WMA,** | **18.53** | **326** | | P | **P** | **14** | **23** | **38.4** | **+0.8** |
| **833A** | **Chaparral WMA,** | **18.53** | **326** | | P | **P** | **14** | **23** | **38.2** | **+0.7** |
| | baz=142,SNR=5.7 | | | | | | | | | |
| **VBMS** | **Vicksburg** | **19.06** | **353** | | P | **Pn** | **14** | **23** | **45.3** | **-0.9** |
| | baz=172 | | | | | | | | | |
| **255A** | **Hazlehurst** | **19.21** | **14** | | P | **P** | **14** | **23** | **45.4** | **+0.6** |
| **152A** | **Waverly Hall** | **19.53** | **8** | | P | **Pn** | **14** | **23** | **50.5** | **-1.3** |
| **LRAL** | **Lakeview Retre** | **19.71** | **2** | | | **P** | **14** | **23** | **51.5** | **+1.3** |
| **LRAL** | **Lakeview Retre** | **19.71** | **2** | | P | **P** | **14** | **23** | **51.7** | **+1.5** |
| | baz=182,SNR=12 | | | | | | | | | |
| **154A** | **Montrose** | **19.74** | **12** | | P | **P** | **14** | **23** | **52.2** | **+1.7** |
| **DRIO** | **Del Rio** | **20.06** | **325** | | | **P** | **14** | **23** | **56.0** | **+2.0** |
| **GOGA** | **Godfrey** | **20.45** | **10** | | P | **P** | **14** | **23** | **59.1** | **+1.0** |
| **GOGA** | **Godfrey** | **20.45** | **10** | | P | **P** | **14** | **23** | **59.4** | **+1.3** |
| | baz=192,SNR=30 | | | | | | | | | |
| **JCT** | **Junction City** | **20.46** | **329** | | P | **P** | **14** | **24** | **00.3** | **+1.9** |
| | baz=144 | | | | | | | | | |
| **Y49A** | **Blount Mountai** | **20.56** | **3** | | P | **P** | **14** | **24** | **00.1** | **+0.8** |
| **WHTX** | **Lake Whitney,** | **20.69** | **336** | | P | **P** | **14** | **24** | **01.9** | **+1.2** |
| | baz=152 | | | | | | | | | |
| **OXF** | **Oxford** | **21.23** | **356** | | P | **P** | **14** | **24** | **06.5** | **+0.1** |
| | baz=176 | | | | | | | | | |
| **FPAL** | **Fort Paine** | **21.29** | **5** | | | **P** | **14** | **24** | **07.7** | **+0.6** |
| **HODGE** | **Hodges** | **21.48** | **12** | | P | **P** | **14** | **24** | **09.7** | **+0.7** |
| **X40A** | **Basin Creek Fa** | **21.65** | **349** | | P | **P** | **14** | **24** | **11.4** | **+0.6** |
| **JSC** | **Jenkinsville** | **21.75** | **15** | | P | **P** | **14** | **24** | **12.6** | **+0.8** |
| **TXAR** | **Lajitas Array** | **21.

| | | | | | | |
|---|---|---|---|---|---|---|
| | baz=151 | | | | | |
| **DUG** | **Dugway, Tooele** | **34.73 325** | P | **P** | **14 26 08.1** | **+0.6** |
| | baz=134 | | | | | |
| **EYMN** | **Ely** | **34.74 356** | P | **P** | **14 26 06.0** | **-1.3** |
| | baz=174 | | | | | |
| **TPNV** | **Topopah Spring** | **34.75 318** | P | **P** | **14 26 08.4** | **+0.6** |
| | baz=125 | | | | | |
| **BW06** | **Boulder Array** | **34.95 331** | P | **P** | **14 26 09.9** | **+0.4** |
| | baz=141 | | | | | |
| **PDAR** | **Pinedale Array** | **34.95 331** | P | **P** | **14 26 09.3** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=129,slow=9.4,SNR=17 | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | |
| **MPMC** | **Manual Prospec** | **35.08 316** | P | **P** | **14 26 11.0** | **+0.3** |
| | baz=123 | | | | | |
| **LPAZ** | **La Paz** | **35.16 146** | P | **P** | **14 26 11.8** | **-0.1** |
| | comp=Z,1.9nm,0.5s,baz=323,slow=6.2,SNR=6.5 | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | |
| **GRAC** | **Grapevine Rang** | **35.51 317** | P | **P** | **14 26 14.9** | **+0.8** |
| | baz=124 | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **35.56 23** | P | **P** | **14 26 14.5** | **+0.2** |
| | baz=212 | | | | | |
| **AGMN** | **Agassiz Nation** | **35.60 351** | P | **P** | **14 26 14.0** | **-0.6** |
| | baz=166,SNR=5.5 | | | | | |
| **MDND** | **Maddock** | **35.90 346** | P | **P** | **14 26 16.9** | **-0.2** |
| | baz=160,SNR=11 | | | | | |
| **RLMT** | **Red Lodge** | **36.68 334** | P | **P** | **14 26 24.3** | **+0.2** |
| | baz=143 | | | | | |
| **H17A** | **Grant Village** | **36.68 332** | P | **P** | **14 26 24.7** | **+0.5** |
| | baz=141 | | | | | |
| **LAO** | **LASA Array** | **36.79 339** | P | **P** | **14 26 25.2** | **+0.4** |
| | baz=149 | | | | | |
| **NVAR** | **Mina Array Bea** | **36.93 318** | P | **P** | **14 26 27.4** | **+1.1** |
| | comp=Z,1.0nm,0.7s,baz=132,slow=7.8,SNR=7.8 | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | |
| **ULM** | **Lac du Bonnet** | **37.50 351** | P | **P** | **14 26 28.9** | **-1.8** |
| | comp=Z,7.3nm,0.4s,baz=170,slow=9.1,SNR=23 | | | | | |
| | comp=Z,7.3nm,0.4s | | | | | |
| **DGMT** | **Dagmar** | **37.69 342** | P | **P** | **14 26 32.6** | **+0.3** |
| | baz=153,SNR=6.8 | | | | | |
| **HLID** | **Hailey** | **37.93 328** | P | **P** | **14 26 34.9** | **+0.3** |
| | baz=135 | | | | | |
| **BOZ** | **Bozeman (W)** | **38.08 333** | P | **P** | **14 26 36.4** | **+0.5** |
| | baz=140,SNR=6.1 | | | | | |
| **EGMT** | **Eagleton** | **39.23 337** | P | **P** | **14 26 45.5** | **+0.3** |
| | baz=145 | | | | | |
| **MSO** | **Missoula** | **40.06 332** | P | **P** | **14 26 52.0** | **-0.2** |
| | baz=138 | | | | | |
| **SCHQ** | **Schefferville** | **44.60 17** | P | **P** | **14 27 27.4** | **-1.2** |
| | comp=Z,9.3nm,0.6s,baz=217,slow=6.7,SNR=12 | | | | | |
| | comp=Z,9.3nm,0.6s | | | | | |
| **DLBC** | **Dease Lake** | **55.08 334** | P | **P** | **14 28 47.1** | **-0.4** |
| | baz=127 | | | | | |
| **KLU** | **Klutina** | **63.52 333** | P | **P** | **14 29 44.5** | **-0.7** |
| | baz=112 | | | | | |
| **E28M** | **Babbage River** | **64.36 341** | P | **P** | **14 29 49.6** | **-0.9** |
| | baz=122 | | | | | |
| **ESDC** | **Sonseca Array** | **76.92 52** | P | **P** | **14 31 04.9** | **-2.1** |
| | comp=Z,0.5nm,0.6s,baz=289,slow=5.0,SNR=5.2 | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | |
| **ARCES** | **ARCESS Array B** | **85.53 19** | P | **P** | **14 31 51.6** | **-0.1** |
| | comp=Z,2.4nm,1.0s,baz=296,slow=4.7,SNR=2.2 | | | | | |
| | comp=Z,2.4nm,1.0s | | | | | |
| **STKA** | **Stephens Creek** | **131.27 239** | PKP | **PKPdf** | **14 38 25.1** | **-0.3** |
| | comp=Z,2.9nm,0.6s,baz=86,slow=4.5,SNR=9.0 | | | | | |
| **WRA** | **Warramunga Arr** | **139.22 255** | PKhKP | PKPpre | 14 38 33.2 | |
| | comp=Z,0.3nm,0.4s,baz=91,slow=3.2,SNR=13 | | | | | |
| WRA | | | PKP | **PKPdf** | **14 38 40.7** | **+0.1** |
| | comp=Z,2.7nm,0.4s,baz=90,slow=2.5,SNR=16 | | | | | |
| WRA | | | SKPbc | **SKPbc** | **14 41 58.1** | **-0.3** |
| | comp=Z,0.5nm,0.9s,baz=92,slow=3.3,SNR=5.5 | | | | | |
| **ASAR** | **Alice Springs** | **139.31 249** | PKhKP | PKPpre | 14 38 33.8 | |
| | comp=Z,0.4nm,0.5s,baz=102,slow=2.7,SNR=10 | | | | | |
| ASAR | | | PKP | **PKPdf** | **14 38 41.0** | **+0.2** |
| | comp=Z,2.7nm,0.6s,baz=92,slow=1.7,SNR=45 | | | | | |
| ASAR | | | SKPbc | **SKPbc** | **14 41 58.1** | **-0.4** |
| | comp=Z,0.5nm,0.9s,baz=100,slow=3.3,SNR=4.4 | | | | | |

*TAP* ***15*** *14:22:59.3,24.95N×122.33E,h18km,ML3.2,C*
*JMA* ***15*** *14:22:59.8±0.2,25.N±1.×122.3E±0.5,h11km,MV2.8/10,*
*TAIWAN REGION*
**ISC 15 14:22:59.0±1.0,24.93N±0.02×122.35E±0.02,h17km±7km,**
**n117,σ0ϕ77/202,1C,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.34** | **284** | *eP* | | **Pg** | **14 23 05.8** | **-0.3** |
| | baz=281 | | | | | | | |
| TWB1 | | | | *i* S | | **Sg** | **14 23 10.9** | **0.0** |
| | baz=281 | | | | | | | |
| **EGS** | | **0.39** | **258** | *eP* | | **Pb** | **14 23 07.9** | **+0.5** |
| | baz=250 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.46** | **291** | *i* P | | **Pg** | **14 23 08.7** | **+0.3** |
| | baz=289 | | | | | | | |
| SXI1 | | | | S | | **Sb** | **14 23 15.4** | **+0.1** |
| | baz=289 | | | | | | | |
| **NTC** | **Toucheng** | **0.48** | **261** | *i* P | | **Pb** | **14 23 09.1** | **+0.1** |
| | baz=259 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.48** | **276** | P | | **Pg** | **14 23 08.7** | **+0.1** |
| | baz=273 | | | | | | | |
| TIPB | | | | *i* S | | **Sg** | **14 23 15.3** | **+0.2** |
| | baz=273 | | | | | | | |
| **EOS2** | **EOS2** | **0.52** | **192** | P | | **Pb** | **14 23 10.0** | **+0.5** |
| | baz=198 | | | | | | | |
| EOS2 | | | | *e*S | | **Sb** | **14 23 18.0** | **+1.2** |
| | baz=198 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.54** | **286** | P | | **Pb** | **14 23 10.1** | **+0.1** |
| | baz=283 | | | | | | | |
| NWF | | | | S | | **Sb** | **14 23 17.4** | **-0.1** |
| | baz=283 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.54** | **286** | *e*P | | **Pb** | **14 23 10.1** | **+0.2** |
| | baz=283 | | | | | | | |
| WFSB | | | | *i* S | | **Sb** | **14 23 17.4** | **0.0** |
| | baz=283 | | | | | | | |
| **TWC** | **Suao** | **0.55** | **235** | *e*P | | **Pg** | **14 23 09.4** | **-0.6** |
| | baz=233 | | | | | | | |
| TWC | | | | *e*S | | **Sg** | **14 23 16.6** | **-0.8** |
| | baz=233 | | | | | | | |
| **TNOU** | **National Taiwa** | **0.57** | **293** | P | | **Pb** | **14 23 10.7** | **+0.1** |
| | baz=291 | | | | | | | |
| **ILA** | **Ilan** | **0.57** | **254** | *e*P | | **Pb** | **14 23 11.2** | **+0.7** |
| | baz=251 | | | | | | | |
| **ESAO** | **Su ao** | **0.58** | **233** | *i* P | | **Pg** | **14 23 10.4** | **0.0** |
| | baz=230 | | | | | | | |
| ESAO | | | | *e*S | | **Sb** | **14 23 20.0** | **+1.4** |
| | baz=230 | | | | | | | |
| **EOS3** | **EOS3** | **0.64** | **183** | P | | **Pb** | **14 23 12.4** | **+0.8** |
| | baz=187 | | | | | | | |
| EOS3 | | | | *e*S | | **Sn** | **14 23 22.4** | **-0.4** |
| | baz=187 | | | | | | | |
| **NDS** | **Dongshan** | **0.65** | **243** | *e*P | | **Pg** | **14 23 11.8** | **+0.1** |
| | baz=235 | | | | | | | |
| NDS | | | | S | | **Sb** | **14 23 20.6** | **0.0** |
| | baz=235 | | | | | | | |
| **TWE** | **Neicheng** | **0.65** | **252** | *e*P | | **Pg** | **14 23 11.5** | **-0.4** |
| | baz=240 | | | | | | | |
| TWE | | | | *e*S | | **Sb** | **14 23 21.7** | **+0.9** |
| | baz=240 | | | | | | | |
| **TWA** | **Mucha** | **0.70** | **275** | P | | **Pb** | **14 23 13.4** | **+0.6** |
| | baz=272 | | | | | | | |
| TWA | | | | S | | **Sb** | **14 23 22.7** | **+0.6** |
| | baz=272 | | | | | | | |
| **EWUT** | **Wuta** | **0.71** | **227** | *e*P | | **Pb** | **14 23 13.2** | **+0.3** |
| | baz=210 | | | | | | | |
| EWUT | | | | S | | **Sg** | **14 23 22.1** | **-0.2** |
| | baz=210 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.71** | **257** | *e*P | | **Pg** | **14 23 13.0** | **0.0** |
| | baz=255 | | | | | | | |
| FUSB | | | | *e*S | | **Sb** | **14 23 23.9** | **+1.4** |
| | baz=255 | | | | | | | |
| **NHY** | **Taipei** | **0.72** | **279** | *e*P | | **Pn** | **14 23 14.2** | **-0.2** |
| | baz=277 | | | | | | | |
| NHY | | | | *i* S | | **Sb** | **14 23 23.3** | **+0.6** |
| | baz=277 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.72** | **131** | P | | **Pb** | **14 23 13.4** | **+0.3** |
| JYNG | | | | S | | **Sb** | **14 23 22.9** | **+0.2** |
| **YM08** | **YM08** | **0.74** | **291** | P | | **Pb** | **14 23 13.7** | **+0.3** |
| | baz=289 | | | | | | | |
| YM08 | | | | S | | **Sb** | **14 23 23.5** | **+0.2** |
| | baz=289 | | | | | | | |
| **YM01** | **YM01** | **0.74** | **287** | P | | **Pb** | **14 23 14.1** | **+0.6** |
| | baz=285 | | | | | | | |
| YM01 | | | | *i* S | | **Sb** | **14 23 23.7** | **+0.4** |
| | baz=285 | | | | | | | |
| **ENA** | **Nanau** | **0.74** | **228** | P | | **Pg** | **14 23 13.3** | **-0.2** |
| | baz=210 | | | | | | | |
| ENA | | | | S | | **Sg** | **14 23 22.6** | **-0.8** |
| | baz=210 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.74** | **340** | *e*P | | **Pb** | **14 23 14.1** | **+0.5** |
| | baz=339 | | | | | | | |
| PCYT | | | | *e*S | | **Sn** | **14 23 25.1** | **-0.6** |
| | baz=339 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.75** | **273** | P | | **Pb** | **14 23 14.4** | **+0.8** |
| | baz=271 | | | | | | | |
| NHDH | | | | *i* S | | **Sb** | **14 23 24.1** | **+0.6** |
| | baz=271 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.76** | **127** | P | | **Pb** | **14 23 14.4** | **+0.6** |
| **YOJ** | **Yonaguni jima** | **0.76** | **127** | *e*P | | **Pb** | **14 23 14.2** | **+0.4** |
| | baz=119 | | | | | | | |
| YOJ | | | | S | | **Sb** | **14 23 24.5** | **+0.7** |
| | baz=119 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.76** | **127** | *e*P | | **Pg** | **14 23 13.7** | **-0.1** |
| YOJ | | | | *e*S | | **Sg** | **14 23 23.9** | **0.0** |
| **TWY** | **Chenhua** | **0.76** | **297** | *e*P | | **Pn** | **14 23 14.8** | **-0.3** |
| | baz=284 | | | | | | | |
| TWY | | | | S | | **Sb** | **14 23 24.7** | **+0.7** |
| | baz=284 | | | | | | | |
| **ENTT** | **Nioudou** | **0.77** | **248** | P | | **Pg** | **14 23 14.0** | **0.0** |
| | baz=258 | | | | | | | |
| ENTT | | | | S | | **Sb** | **14 23 25.2** | **+1.1** |
| | baz=258 | | | | | | | |
| **TATO** | **Taipei** | **0.78** | **274** | P | | **Pg** | **14 23 14.8** | **+0.5** |
| **ANP** | **Anpu** | **0.80** | **289** | *e*P | | **Pg** | **14 23 15.0** | **+0.4** |
| | baz=276 | | | | | | | |
| ANP | | | | *e*S | | **Sb** | **14 23 25.6** | **+0.6** |
| | baz=276 | | | | | | | |
| **EOS4** | **EOS4** | **0.80** | **182** | P | | **Pg** | **14 23 14.9** | **+0.3** |
| | baz=168 | | | | | | | |
| EOS4 | | | | S | | **Sn** | **14 23 26.6** | **0.0** |
| | baz=168 | | | | | | | |
| **EAHA** | **Aohua** | **0.81** | **223** | *i* P | | **Pg** | **14 23 15.0** | **+0.1** |
| | baz=223 | | | | | | | |
| EAHA | | | | *e*S | | **Sg** | **14 23 26.3** | **+0.7** |
| | baz=223 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.83** | **247** | P | | **Pg** | **14 23 15.4** | **+0.3** |
| | baz=256 | | | | | | | |
| NDT | | | | *i* S | | **Sg** | **14 23 26.6** | **+0.5** |
| | baz=256 | | | | | | | |
| **LATG** | **Datong** | **0.84** | **243** | P | | **Pg** | **14 23 15.6** | **+0.2** |
| | baz=242 | | | | | | | |
| LATG | | | | *i* S | | **Sg** | **14 23 27.3** | **+0.7** |
| | baz=242 | | | | | | | |
| **NTST** | **Danshui** | **0.85** | **286** | *e*P | | **Pn** | **14 23 16.6** | **+0.4** |
| | baz=285 | | | | | | | |
| NTST | | | | *e*S | | **Sn** | **14 23 28.0** | **-0.3** |
| | baz=285 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.86** | **282** | P | | **Pb** | **14 23 15.7** | **+0.1** |
| | baz=280 | | | | | | | |
| TWS1 | | | | S | | **Sb** | **14 23 27.1** | **+0.2** |
| | baz=280 | | | | | | | |
| **YHNB** | **Yeheng** | **0.92** | **254** | P | | **Pg** | **14 23 16.9** | **0.0** |
| **YHNB** | **Yeheng** | **0.92** | **254** | *e*P | | **Pb** | **14 23 16.7** | **+0.1** |
| | baz=266 | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | **14 23 29.9** | **-0.3** |
| | baz=266 | | | | | | | |
| **NSK** | **Sanguang** | **0.93** | **255** | *e*P | | **Pb** | **14 23 16.9** | **0.0** |
| | baz=267 | | | | | | | |
| NSK | | | | *e*S | | **Sg** | **14 23 29.9** | **+0.4** |
| | baz=267 | | | | | | | |
| **NNSB** | **Datong** | **1.01** | **241** | P | | **Pb** | **14 23 18.2** | **0.0** |
| | baz=226 | | | | | | | |
| NNSB | | | | S | | **Sg** | **14 23 31.8** | **-0.1** |
| | baz=226 | | | | | | | |
| **ETL** | **Fush Village** | **1.01** | **221** | *e*P | | **Pb** | **14 23 18.3** | **+0.2** |
| | baz=221 | | | | | | | |
| ETL | | | | S | | **Sn** | **14 23 32.3** | **-0.1** |
| | baz=221 | | | | | | | |
| **NNS** | **Nan Shan** | **1.01** | **242** | P | | **Pb** | **14 23 18.5** | **+0.3** |
| | baz=226 | | | | | | | |
| NNS | | | | S | | **Sb** | **14 23 31.4** | **+0.1** |
| | baz=226 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.02** | **223** | P | | **Pb** | **14 23 18.1** | **-0.1** |
| **NACB** | **Ninganchiao** | **1.02** | **223** | *i* P | | **Pb** | **14 23 18.0** | **-0.2** |
| | baz=223 | | | | | | | |
| NACB | | | | *e*S | | **Sb** | **14 23 30.6** | **-0.6** |
| | baz=223 | | | | | | | |
| **NCUH** | **Zhongli** | **1.06** | **272** | *e*P | | **Pg** | **14 23 21.4** | **+1.9** |
| | baz=271 | | | | | | | |
| NCUH | | | | *e*S | | **Sg** | **14 23 33.4** | **0.0** |
| | baz=271 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.07** | **228** | *e*P | | **Pn** | **14 23 19.5** | **+0.2** |
| | baz=218 | | | | | | | |
| ETLH | | | | S | | **Sb** | **14 23 33.0** | **+0.2** |
| | baz=218 | | | | | | | |
| **TWD** | **Chiawan** | **1.09** | **219** | *i* P | | **Pn** | **14 23 19.6** | **+0.1** |
| | baz=226 | | | | | | | |
| TWD | | | | S | | **Sb** | **14 23 33.8** | **+0.5** |
| | baz=226 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.16** | **256** | P | | **Pb** | **14 23 20.8** | **+0.2** |
| | baz=266 | | | | | | | |
| NFF | | | | *e*S | | **Sb** | **14 23 35.2** | **-0.2** |
| | baz=266 | | | | | | | |
| **HWA** | **Hwalien** | **1.16** | **216** | P | | **Pg** | **14 23 21.9** | **+0.4** |
| | baz=193 | | | | | | | |
| HWA | | | | *e*S | | **Sb** | **14 23 35.5** | **0.0** |
| | baz=193 | | | | | | | |
| **FUSS** | **Fushou** | **1.21** | **236** | *e*P | | **Pb** | **14 23 21.8** | **+0.1** |
| | baz=236 | | | | | | | |
| FUSS | | | | S | | **Sg** | **14 23 38.1** | **-0.3** |
| | baz=236 | | | | | | | |
| **ETM** | **Tongmen** | **1.23** | **219** | P | | **Pg** | **14 23 22.9** | **0.0** |
| | baz=220 | | | | | | | |
| ETM | | | | *i* S | | **Sg** | **14 23 39.4** | **+0.4** |
| | baz=220 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.24** | **224** | *i* P | | **Pb** | **14 23 22.3** | **+0.2** |
| | baz=224 | | | | | | | |
| LXIB | | | | *e*S | | **Sn** | **14 23 38.6** | **+0.4** |
| | baz=224 | | | | | | | |
| **LIOB** | **Emei** | **1.24** | **257** | P | | **Pn** | **14 23 21.9** | **+0.3** |
| | baz=256 | | | | | | | |
| LIOB | | | | *e*S | | **Sg** | **14 23 39.4** | **+0.1** |
| | baz=256 | | | | | | | |
| **SBCB** | **Hsinchu** | **1.25** | **264** | *e*P | | **Pn** | **14 23 22.0** | **+0.3** |
| | baz=278 | | | | | | | |
| SBCB | | | | *e*S | | **Sb** | **14 23 38.1** | **+0.3** |
| | baz=278 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.26** | **213** | *e*P | | **Pg** | **14 23 23.5** | **+0.2** |
| | baz=194 | | | | | | | |
| TEYL | | | | *e*S | | **Sg** | **14 23 40.9** | **+1.2** |
| | baz=194 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.26** | **232** | *i* P | | **Pb** | **14 23 22.7** | **+0.1** |
| | baz=232 | | | | | | | |
| WHF | | | | S | | **Sn** | **14 23 39.2** | **+0.3** |
| | baz=232 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.26** | **257** | *i* P | | **Pn** | **14 23 22.2** | **+0.3** |
| | baz=255 | | | | | | | |
| NSTT | | | | *e*S | | **Sg** | **14 23 39.9** | **+0.1** |
| | baz=255 | | | | | | | |
| **TWT** | **Tachien** | **1.26** | **238** | *e*P | | **Pg** | **14 23 23.1** | **-0.3** |
| | baz=238 | | | | | | | |
| TWT | | | | *e*S | | **Sg** | **14 23 39.9** | **0.0** |
| | baz=238 | | | | | | | |
| **TDCB** | **Techi** | **1.27** | **239** | *i* P | | **Pb** | **14 23 23.1** | **+0.4** |
| | baz=226 | | | | | | | |
| TDCB | | | | *e*S | | **Sg** | **14 23 40.8** | **+0.5** |
| | baz=226 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.34** | **212** | *e*P | | **Pb** | **14 23 24.0** | **+0.2** |
| | baz=193 | | | | | | | |
| SHUL | | | | *e*S | | **Sg** | **14 23 42.8** | **+0.4** |
| | baz=193 | | | | | | | |
| **CHGB** | **Renai** | **1.37** | **231** | *e*P | | **Pb** | **14 23 25.0** | **+0.5** |
| | baz=232 | | | | | | | |
| CHGB | | | | *e*S | | **Sg** | **14 23 43.5** | **0.0** |
| | baz=232 | | | | | | | |
| **ESL** | **Shilin** | **1.39** | **217** | P | | **Pb** | **14 23 24.7** | **+0.2** |
| | baz=217 | | | | | | | |
| ESL | | | | *e*S | | **Sn** | **14 23 41.3** | **-0.3** |
| | baz=217 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.39** | **115** | *e*P | | **Pg** | **14 23 25.9** | **+0.1** |
| **WHP** | **Taichung City** | **1.43** | **243** | *e*P | | **Pg** | **14 23 26.5** | **-0.1** |
| | baz=256 | | | | | | | |
| WHP | | | | *e*S | | **Sb** | **14 23 44.0** | **+0.7** |
| | baz=256 | | | | | | | |
| **OWD** | **Renai** | **1.44** | **228** | *e*P | | **Pb** | **14 23 26.1** | **+0.5** |
| | baz=228 | | | | | | | |
| OWD | | | | *e*S | | **Sb** | **14 23 44.0** | **+0.4** |
| | baz=228 | | | | | | | |
| **WUSB** | **Renai** | **1.46** | **231** | *e*P | | **Pg** | **14 23 26.6** | **-0.5** |
| | baz=231 | | | | | | | |
| WUSB | | | | *e*S | | **Sg** | **14 23 45.5** | **-0.7** |
| | baz=231 | | | | | | | |
| **NMLH** | **Miaoli** | **1.47** | **255** | *e*P | | **Pg** | **14 23 26.8** | **-0.5** |
| | baz=254 | | | | | | | |
| NMLH | | | | *e*S | | **Sg** | **14 23 47.9** | **+1.5** |
| | baz=254 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.49** | **216** | *i* P | | **Pn** | **14 23 25.5** | **+0.4** |
| | baz=217 | | | | | | | |
| WARBT | | | | *e*S | | **Sb** | **14 23 45.3** | **+0.4** |
| | baz=217 | | | | | | | |
| **EGFH** | **Guangfu** | **1.51** | **214** | *i* P | | **Pn** | **14 23 25.7** | **+0.4** |
| | baz=195 | | | | | | | |
| **NSY** | **Sanyi** | **1.53** | **251** | *e*P | | **Pg** | **14 23 28.8** | **+0.3** |
| | baz=265 | | | | | | | |
| NSY | | | | *e*S | | **Sg** | **14 23 49.0** | **+0.5** |
| | baz=265 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.54** | **248** | *e*P | | **Pg** | **14 23 29.6** | **+0.8** |
| | baz=262 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.57** | **237** | *e*P | | **Pg** | **14 23 29.0** | **-0.2** |
| | baz=226 | | | | | | | |
| WCS | | | | *e*S | | **Sg** | **14 23 50.3** | **+0.6** |
| | baz=226 | | | | | | | |
| **VWDT** | **VWDT** | **1.60** | **224** | *e*P | | **Pb** | **14 23 28.6** | **+0.3** |
| | baz=224 | | | | | | | |
| VWDT | | | | *e*S | | **Sg** | **14 23 50.2** | **-0.6** |
| | baz=224 | | | | | | | |
| **HGSD** | **Ruisui** | **1.66** | **211** | *i* P | | **Pn** | **14 23 28.1** | **+0.7** |
| | baz=194 | | | | | | | |
| HGSD | | | | *e*S | | **Sg** | **14 23 52.2** | **-0.3** |
| | baz=194 | | | | | | | |
| **EHYH** | **Wanrong** | **1.69** | **213** | *e*P | | **Pb** | **14 23 29.8** | **0.0** |
| | baz=213 | | | | | | | |
| **EHY** | **Hungye** | **1.70** | **214** | *e*P | | **Pn** | **14 23 27.9** | **0.0** |
| | baz=213 | | | | | | | |
| **TYC** | **Yuchr** | **1.70** | **234** | *e*P | | **Pg** | **14 23 31.3** | **-0.4** |
| | baz=233 | | | | | | | |
| **SSLB** | **Suanglung** | **1.70** | **229** | P | | **Pb** | **14 23 30.0** | **0.0** |
| **SSLB** | **Suanglung** | **1.70** | **229** | *e*P | | **Pb** | **14 23 30.0** | **0.0** |
| | baz=228 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.73** | **109** | *e*P | | **Pb** | **14 23 30.2** | **-0.1** |
| **YULB** | **Yu-li** | **1.80** | **212** | P | | **Pn** | **14 23 29.5** | **+0.1** |
| **YULB** | **Yu-li** | **1.80** | **212** | *i* P | | **Pn** | **14 23 28.9** | **-0.5** |
| | baz=213 | | | | | | | |
| YULB | | | | *e*S | | **Sb** | **14 23 54.7** | **+0.7** |
| | baz=213 | | | | | | | |
| **EYUL** | **Yuli** | **1.83** | **211** | *i* P | | **Pn** | **14 23 30.4** | **+0.6** |
| | baz=227 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.83** | **228** | *e*P | | **Pb** | **14 23 32.4** | **+0.3** |
| | baz=217 | | | | | | | |
| WHYT | | | | *e*S | | **Sg** | **14 23 58.7** | **+0.6** |
| | baz=217 | | | | | | | |
| **TWF1** | **Yuli** | **1.84** | **212** | *e*P | | **Pn** | **14 23 29.4** | **-0.4** |
| | baz=212 | | | | | | | |
| **WNT** | **Mingjian** | **1.84** | **236** | *e*P | | **Pb** | **14 23 33.0** | **+0.7** |
| | baz=235 | | | | | | | |
| **CHKH** | **Chenggong** | **1.93** | **207** | P | | **Pn** | **14 23 31.6** | **+0.4** |
| | baz=191 | | | | | | | |
| CHKH | | | | *e*S | | **Sb** | **14 23 57.6** | **-0.1** |
| | baz=191 | | | | | | | |
| **FULB** | **Fuli** | **1.97** | **209** | *e*P | | **Pb** | **14 23 33.5** | **-1.0** |
| | baz=225 | | | | | | | |
| FULB | | | | *e*S | | **Sb** | **14 24 00.6** | **+1.8** |
| | baz=225 | | | | | | | |
| **WDLH** | **Douliu** | **2.06** | **234** | *e*P | | **Pb** | **14 23 35.7** | **-0.3** |
| | baz=233 | | | | | | | |
| WDLH | | | | *i* S | | **Sb** | **14 24 02.2** | **+0.8** |
| | baz=233 | | | | | | | |
| **ELDTW** | **Lidau** | **2.12** | **215** | *e*P | | **Pn** | **14 23 33.4** | **-0.4** |
| | baz=200 | | | | | | | |
| ELDTW | | | | *e*S | | **Sb** | **14 24 02.1** | **-0.9** |
| | baz=200 | | | | | | | |
| **EDH** | **Donghe** | **2.17** | **206** | P | | **Pn** | **14 23 34.0** | **-0.4** |
| | baz=191 | | | | | | | |
| EDH | | | | *e*S | | **Sn** | **14 24 00.2** | **-0.6** |
| | baz=191 | | | | | | | |
| **WTK** | **Tuku** | **2.17** | **236** | *e*P | | **Pb** | **14 23 36.6** | **-1.3** |
| | baz=235 | | | | | | | |
| **WCKO** | **Fanlu** | **2.17** | **227** | *e*P | | **Pb** | **14 23 37.4** | **-0.6** |
| | baz=228 | | | | | | | |
| WCKO | | | | *e*S | | **Sg** | **14 24 08.1** | **-0.9** |
| | baz=228 | | | | | | | |
| **TPUB** | **Ta-pu** | **2.25** | **225** | P | | **Pb** | **14 23 38.9** | **-0.4** |
| **TPUB** | **Ta-pu** | **2.25** | **225** | *e*P | | **Pb** | **14 23 38.4** | **-0.9** |
| | baz=207 | | | | | | | |
| TPUB | | | | *e*S | | **Sb** | **14 24 08.6** | **+1.6** |
| | baz=207 | | | | | | | |
| **LONT** | **Longtian** | **2.30** | **209** | *e*P | | **Pb** | **14 23 38.5** | **-1.6** |
| | baz=210 | | | | | | | |
| **WTP** | **Ta-pu** | **2.31** | **224** | P | | **Pb** | **14 23 39.0** | **-1.2** |
| | baz=207 | | | | | | | |
| **TWK** | **Hsinying** | **2.37** | **226** | *e*P | | **Pb** | **14 23 40.3** | **-1.1** |
| | baz=226 | | | | | | | |
| **LDUT** | **Ludao** | **2.38** | **200** | *e*P | | **Pn** | **14 23 37.9** | **+0.5** |
| | baz=199 | | | | | | | |
| LDUT | | | | *e*S | | **Sn** | **14 24 06.2** | **+0.1** |
| | baz=199 | | | | | | | |
| **SNST** | **Tainan City** | **2.40** | **225** | *e*P | | **Pb** | **14 23 40.5** | **-1.3** |
| | baz=207 | | | | | | | |
| SNST | | | | *e*S | | **Sb** | **14 24 12.9** | **+1.8** |
| | baz=207 | | | | | | | |
| **TWGBT** | **Beinan** | **2.40** | **209** | *e*P | | **Pn** | **14 23 38.0** | **+0.4** |
| | baz=210 | | | | | | | |
| TWGBT | | | | *e*S | | **Sn** | **14 24 07.4** | **+0.8** |
| | baz=210 | | | | | | | |
| **TWG** | **Pinlang** | **2.40** | **209** | *i* P | | **Pn** | **14 23 37.9** | **+0.3** |
| | baz=210 | | | | | | | |
| TWG | | | | *e*S | | **Sn** | **14 24 07.5** | **+0.9** |
| | baz=210 | | | | | | | |
| **CHN1** | **Nanshi** | **2.40** | **224** | *e*P | | **Pb** | **14 23 41.1** | **-0.8** |
| | baz=207 | | | | | | | |
| CHN1 | | | | *e*S | | **Sb** | **14 24 12.4** | **+1.2** |
| | baz=207 | | | | | | | |
| **ICHU** | **Yijhu** | **2.45** | **231** | P | | **Pn** | **14 23 39.7** | **+1.5** |
| | baz=230 | | | | | | | |
| **SLGT** | **Liugui** | **2.48** | **219** | *i* P | | **Pb** | **14 23 41.3** | **-1.8** |
| | baz=220 | | | | | | | |
| SLGT | | | | *e*S | | **Sb** | **14 24 13.2** | **-0.1** |
| | baz=220 | | | | | | | |
| **MATB** | **Ma-tsu** | **2.49** | **300** | *e*P | | **Pn** | **14 23 38.1** | **-0.7** |
| | baz=296 | | | | | | | |
| MATB | | | | *e*S | | **Sn** | **14 24 07.4** | **-1.5** |
| | baz=296 | | | | | | | |
| **SCST** | **Cishan** | **2.65** | **220** | *e*P | | **Pb** | **14 23 45.0** | **-1.1** |
| | baz=220 | | | | | | | |
| **TSMG** | **Majia** | **2.71** | **216** | *e*P | | **Pb** | **14 23 44.6** | **-2.4** |
| | baz=200 | | | | | | | |
| TSMG | | | | *e*S | | **Sb** | **14 24 17.9** | **-2.1** |
| | baz=200 | | | | | | | |
| **TSCK** | **Chigu Township** | **2.72** | **230** | *e*P | | **Pb** | **14 23 45.2** | **-2.1** |
| | baz=229 | | | | | | | |
| **XPSS** | **Dashiqiu** | **2.79** | **316** | *e*P | | **Pn** | **14 23 43.0** | **+0.2** |
| | baz=311 | | | | | | | |
| XPSS | | | | *e*S | | **Sn** | **14 24 14.6** | **-1.5** |
| | baz=311 | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.79** | **215** | *i* P | | **Pn** | **14 23 45.5** | **+2.5** |
| | baz=200 | | | | | | | |
| MASBT | | | | *e*S | | **Sb** | **14 24 19.4** | **-2.9** |
| | baz=200 | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.84** | **305** | *e*P | | **Pn** | **14 23 43.3** | **-0.4** |
| | baz=301 | | | | | | | |
| LYJJ | | | | *e*S | | **Sn** | **14 24 15.7** | **-1.7** |
| | baz=301 | | | | | | | |
| **SLIU** | **Shizi** | **3.05** | **208** | *e*P | | **Pb** | **14 23 50.0** | **-2.9** |
| | baz=196 | | | | | | | |
| **KNM** | **Kinmen** | **3.60** | **263** | *e*P | | **Pn** | **14 23 55.3** | **+1.3** |
| | baz=262 | | | | | | | |
| **ZPLA** | **Ao Xicun** | **4.31** | **258** | *e*P | | **Pn** | **14 24 03.3** | **-0.5** |
| | baz=257 | | | | | | | |

*NEIC* ***15*** *14:25:17.6±2.1,69.54N±0.03×144.67W±0.05,h4km±7km,*
*Error ellipse: s-maj=4.5km s-min=2.2km az=157.0*
**AEIC 15 14:25:14.1±1.2,69.65N±0.05×144.63W±0.06,h10km±5km,**
**ML3.0,ML2.8/46(NEIC),Error ellipse: s-maj=7.8km**
**s-min=2.9km az=169.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| D24K | | | | IAML | | 14 26 39.8 | | |
| | comp=N,126nm,0.3s | | | | | | | |
| **D24K** | **Happy Valley** | **1.57 254** | | | Sg | 14 26 06.2 | +1.8 | |
| **E27K** | **Coleen River** | **1.83 142** | | Pn | Pg | 14 25 48.5 | -0.7 | |
| E27K | | | | IAML | | 14 26 48.3 | | |
| | comp=N,48nm,0.4s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.97 175** | | | Pg | 14 25 51.0 | -0.8 | |
| F26K | | | | IAML | | 14 27 02.5 | | |
| | comp=E,30nm,0.5s | | | | | | | |
| F26K | | | | IAML | | 14 27 03.1 | | |
| | comp=N,60nm,0.5s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04 243** | | | Pg | 14 25 52.9 | -0.3 | |
| TOLK | | | | IAML | | 14 27 07.2 | | |
| | comp=N,136nm,0.8s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04 243** | | | Sg | 14 26 19.4 | -0.2 | |
| **C23K** | **Itkillik River** | **2.09 278** | | Pn | Pg | 14 25 54.2 | 0.0 | |
| **F25K** | **Christian Rive** | **2.10 191** | | Pn | Pg | 14 25 53.3 | -0.9 | |
| F25K | | | | IAML | | 14 26 45.9 | | |
| | comp=N,51nm,0.6s | | | | | | | |
| F25K | | | | IAML | | 14 27 06.8 | | |
| | comp=E,32nm,0.5s | | | | | | | |
| **E28M** | **Babbage River** | **2.10 117** | | Pn | Pg | 14 25 53.5 | -0.8 | |
| E28M | | | | IAML | | 14 27 01.4 | | |
| | comp=E,38nm,0.7s | | | | | | | |
| E28M | | | | IAML | | 14 27 08.2 | | |
| | comp=N,31nm,0.4s | | | | | | | |
| **E24K** | **Your Creek** | **2.11 223** | | Pn | Pg | 14 25 53.8 | -0.7 | |
| E24K | | | | IAML | | 14 27 10.1 | | |
| | comp=E,121nm,0.7s | | | | | | | |
| E24K | | | | IAML | | 14 27 10.5 | | |
| | comp=N,108nm,0.9s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.26 255** | | Pn | Pg | 14 25 57.3 | 0.0 | |
| D23K | | | | IAML | | 14 27 15.3 | | |
| | comp=N,112nm,0.8s | | | | | | | |
| **E23K** | **Chandalar** | **2.41 231** | | Pn | Pb | 14 25 58.5 | +0.9 | |
| **F24K** | **Squaw Lake** | **2.45 211** | | | Pb | 14 25 56.8 | -1.4 | |
| **F28M** | **Old Crow** | **2.68 137** | | Pn | Pb | 14 26 00.3 | -1.9 | |
| **G26K** | **Porcupine Rive** | **2.73 173** | | | Pb | 14 26 01.0 | -1.9 | |
| **E29M** | **Blow River** | **2.73 114** | | Pn | Pb | 14 26 01.9 | -1.1 | |
| **G27K** | **Doyon Strip** | **3.06 157** | | Pn | Pn | 14 26 05.4 | +2.9 | |
| **FYU** | **Fort Yukon** | **3.10 184** | | Pn | Pb | 14 26 06.4 | -2.9 | |
| **G24K** | **Hadweenzic Riv** | **3.15 201** | | Pn | Pn | 14 26 06.7 | +3.1 | |
| **G29M** | **Pine Creek** | **3.68 135** | | Pn | Pn | 14 26 14.3 | +3.3 | |
| **H29M** | **Whitestone** | **4.17 143** | | Pn | Pn | 14 26 20.6 | +2.8 | |
| **I28M** | **Miner Creek** | **4.58 155** | | Pn | Pn | 14 26 26.6 | +3.1 | |

*NEIC* ***15*** *14:26:08.1±1.5, 69.˚68N±0.˚06×145.˚40W±0.˚07, h10km±2km, Error ellipse: s-maj=9.5km s-min=4.4km az=3.0*

**AEIC 15 14:26:06.5±1.4, 69.˚62N±0.˚06×145.˚44W±0.˚06, h10km±6km, ML3.1, ML3.2/110(NEIC), Error ellipse: s-maj=9.4km s-min=2.9km az=186.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.35** | **31** | | Pg | 14 26 13.8 | +0.3 |
| C26K | | | | | Sg | 14 26 19.1 | +1.0 |
| **C26K** | **Camden Bay** | **0.35** | **31** | IAML | | 14 26 20.0 | |
| | comp=E,4μm,0.3s | | | | | | |
| C26K | | | | IAML | | 14 26 20.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.44 229** | | Pg | Pg | 14 26 15.1 | 0.0 |
| D25K | | | | Sg | Sg | 14 26 21.9 | +1.0 |
| D25K | | | | IAML | | 14 26 22.6 | |
| | comp=N,2μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.61** | **88** | Pg | Pg | 14 26 17.2 | -0.9 |
| C27K | | | | Sg | Sg | 14 26 26.2 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.14 277** | | | Pn | 14 26 29.0 | +0.5 |
| C24K | | | | IAML | | 14 26 48.0 | |
| | comp=N,597nm,1.2s | | | | | | |
| C24K | | | | IAML | | 14 26 50.9 | |
| | comp=E,483nm,1.0s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.14 277** | | | Sg | 14 26 43.3 | 0.0 |
| **D24K** | **Happy Valley** | **1.28 250** | | Pn | Pg | 14 26 31.8 | +0.7 |
| D24K | | | | IAML | | 14 26 57.0 | |
| | comp=N,500nm,0.5s | | | | | | |
| **D27M** | **Malcolm River** | **1.62 101** | | Pn | Pn | 14 26 35.3 | +0.1 |
| D27M | | | | IAML | | 14 27 02.5 | |
| | comp=E,305nm,0.4s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.77 238** | | Pn | Pg | 14 26 40.4 | 0.0 |
| **TOLK** | **Toolik Lake Re** | **1.77 238** | | | Sg | 14 27 05.3 | +1.9 |
| **TOLK** | **Toolik Lake Re** | **1.77 238** | | IAML | | 14 27 11.8 | |
| | comp=E,254nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 14 27 14.5 | |
| | comp=N,230nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **1.82 279** | | Pn | Pb | 14 26 40.4 | +0.7 |
| C23K | | | | IAML | | 14 27 08.8 | |
| | comp=E,310nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **1.90 217** | | | Pg | 14 26 42.6 | -0.3 |
| **E24K** | **Your Creek** | **1.90 217** | | | Sg | 14 27 08.9 | +1.4 |
| **D23K** | **Nanushuk River** | **1.98 253** | | Pn | Pg | 14 26 44.8 | +0.5 |
| **F26K** | **Sheenjek River** | **1.99 166** | | Pn | Pb | 14 26 42.2 | -0.5 |
| F26K | | | | IAML | | 14 27 12.5 | |
| | comp=E,177nm,0.5s | | | | | | |
| F26K | | | | IAML | | 14 27 13.6 | |
| | comp=N,164nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **2.00 134** | | | Pb | 14 26 43.2 | +0.3 |
| E27K | | | | IAML | | 14 27 13.9 | |
| | comp=E,214nm,0.7s | | | | | | |
| E27K | | | | IAML | | 14 27 14.1 | |
| | comp=N,176nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **2.03 182** | | | Pb | 14 26 43.3 | -0.2 |
| F25K | | | | IAML | | 14 27 14.8 | |
| | comp=N,152nm,0.6s | | | | | | |
| F25K | | | | IAML | | 14 27 16.6 | |
| | comp=E,194nm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **2.03 182** | | | Sb | 14 27 09.9 | +1.1 |
| **E23K** | **Chandalar** | **2.18 226** | | Pn | Pb | 14 26 46.1 | +0.2 |
| E23K | | | | IAML | | 14 27 21.6 | |
| | comp=E,135nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.29 204** | | Pn | Pb | 14 26 47.7 | -0.2 |
| F24K | | | | IAML | | 14 27 23.1 | |
| | comp=E,122nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.35 113** | | | Pb | 14 26 47.2 | -1.6 |
| E28M | | | | IAML | | 14 27 24.1 | |
| | comp=E,148nm,0.7s | | | | | | |
| E28M | | | | IAML | | 14 27 26.2 | |
| | comp=N,151nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **2.38** | **94** | | Pb | 14 26 47.6 | -1.8 |
| **D22K** | **Ayikyak River** | **2.68 257** | | Pn | Pn | 14 26 51.6 | +1.9 |
| **G26K** | **Porcupine Rive** | **2.75 166** | | | Pn | 14 26 53.0 | +2.5 |
| **B22K** | **Teshekpuk Lake** | **2.84 289** | | | Pn | 14 26 53.6 | +1.8 |
| **F28M** | **Old Crow** | **2.87 132** | | Pn | Pn | 14 26 54.5 | +2.3 |
| **F28M** | **Old Crow** | **2.87 132** | | | Sn | 14 27 28.8 | +2.1 |
| **G25K** | **Bearman Lake** | **2.88 185** | | | Pn | 14 26 54.3 | +2.1 |
| **COLD** | **Coldfoot** | **2.98 218** | | | Pn | 14 26 56.1 | +2.4 |
| **E29M** | **Blow River** | **2.98 111** | | | Pn | 14 26 56.2 | +2.4 |
| **E29M** | **Blow River** | **2.98 111** | | IAML | | 14 27 48.4 | |
| | comp=E,100nm,0.7s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.03 196** | | Pn | Pn | 14 26 56.4 | +2.0 |
| G24K | | | | IAML | | 14 27 46.4 | |
| | comp=N,81nm,1.2s | | | | | | |
| G24K | | | | IAML | | 14 27 52.3 | |
| | comp=E,92nm,0.7s | | | | | | |
| **FYU** | **Fort Yukon** | **3.07 178** | | Pn | Pn | 14 26 57.6 | +2.8 |
| FYU | | | | IAML | | 14 27 51.0 | |
| | comp=N,72nm,0.6s | | | | | | |
| FYU | | | | IAML | | 14 28 04.4 | |
| | comp=E,56nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **3.15 152** | | Pn | Pn | 14 26 58.2 | +2.0 |
| **B21K** | **Ikpikpuk River** | **3.21 274** | | Pn | Pb | 14 27 00.2 | -3.3 |
| B21K | | | | IAML | | 14 28 06.8 | |
| | comp=N,64nm,0.9s | | | | | | |
| B21K | | | | IAML | | 14 28 08.3 | |
| | comp=E,58nm,1.0s | | | | | | |
| **E21K** | **Killik River** | **3.29 253** | | | Pn | 14 26 59.1 | +1.2 |
| E21K | | | | IAML | | 14 28 02.7 | |
| | comp=E,62nm,1.1s | | | | | | |
| E21K | | | | IAML | | 14 28 03.4 | |
| | comp=N,58nm,0.7s | | | | | | |
| **H25L** | **Birch Creek** | **3.37 183** | | | Pn | 14 27 01.6 | +2.6 |
| **A22K** | **Sinclair Lake** | **3.52 298** | | | Pn | 14 27 04.2 | +3.2 |
| **F21K** | **Alatna River** | **3.82 235** | | Pn | Pn | 14 27 07.0 | +1.7 |
| F21K | | | | IAML | | 14 28 13.4 | |
| | comp=E,35nm,0.8s | | | | | | |
| F21K | | | | IAML | | 14 28 17.4 | |
| | comp=N,36nm,1.0s | | | | | | |
| **G29M** | **Pine Creek** | **3.87 131** | | Pn | Pn | 14 27 07.5 | +1.5 |
| **F30M** | **Barrier River** | **4.07 115** | | | Pn | 14 27 11.2 | +2.6 |
| **B20K** | **Meade River** | **4.08 281** | | Pn | Pn | 14 27 11.0 | +2.2 |
| **D20K** | **Etivluk River** | **4.09 262** | | | Pn | 14 27 11.2 | +2.2 |
| **E20K** | **Nigu River** | **4.11 256** | | | Pn | 14 27 12.4 | +3.0 |
| **H23K** | **Yukon River** | **4.12 204** | | | Pn | 14 27 11.1 | +1.8 |
| H23K | | | | IAML | | 14 28 21.9 | |
| | comp=E,37nm,0.9s | | | | | | |
| H23K | | | | IAML | | 14 28 25.4 | |
| | comp=N,26nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.29 158** | | | Pn | 14 27 13.5 | +1.7 |
| **G30M** | **tAoh Zraii Nji** | **4.33 123** | | Pn | Pn | 14 27 14.8 | +2.6 |
| G30M | | | | IAML | | 14 28 32.9 | |
| | comp=N,29nm,1.0s | | | | | | |
| G30M | | | | IAML | | 14 28 33.9 | |
| | comp=E,26nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **4.33 139** | | Pn | Pn | 14 27 14.5 | +2.2 |
| **G21K** | **Allakaket** | **4.34 228** | | | Pn | 14 27 14.5 | +2.1 |
| G21K | | | | IAML | | 14 28 38.0 | |
| | comp=N,28nm,0.9s | | | | | | |
| G21K | | | | IAML | | 14 28 44.3 | |
| | comp=E,31nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.42 167** | | Pn | Pn | 14 27 15.6 | +2.2 |
| I26K | | | | IAML | | 14 28 39.8 | |
| | comp=E,30nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58 191** | | | Pn | 14 27 18.1 | +2.3 |
| **POKR** | **Poker Plat Res** | **4.58 191** | | IAML | | 14 28 14.7 | |
| | comp=E,20nm,0.7s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.60 241** | | Pn | Pn | 14 27 18.8 | +2.9 |
| F20K | | | | IAML | | 14 28 52.3 | |
| | comp=N,18nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **4.69 262** | | | Pn | 14 27 19.3 | +2.2 |
| **I28M** | **Miner Creek** | **4.69 151** | | Pn | Pn | 14 27 19.3 | +2.0 |
| I28M | | | | IAML | | 14 28 48.3 | |
| | comp=E,25nm,1.8s | | | | | | |
| I28M | | | | IAML | | 14 28 56.1 | |
| | comp=N,19nm,0.6s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.74 200** | | | Pn | 14 27 20.0 | +2.2 |
| I23K | | | | IAML | | 14 28 46.1 | |
| | comp=E,21nm,1.7s | | | | | | |
| I23K | | | | IAML | | 14 28 47.9 | |
| | comp=N,26nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **4.80 194** | | | Pn | 14 27 20.4 | +1.6 |
| MDM | | | | IAML | | 14 28 40.4 | |
| | comp=E,19nm,1.0s | | | | | | |
| MDM | | | | IAML | | 14 28 41.0 | |
| | comp=N,18nm,0.8s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.82 111** | | | Pn | 14 27 20.0 | +1.0 |
| **F31M** | **Tsiigehtchic** | **4.82 111** | | IAML | | 14 28 45.3 | |
| | comp=N,24nm,1.8s | | | | | | |
| **E19K** | **Redstone River** | **4.84 249** | | | Pn | 14 27 21.9 | +2.6 |
| E19K | | | | IAML | | 14 28 59.0 | |
| | comp=E,18nm,0.7s | | | | | | |
| **COLA** | **College** | **4.86 192** | | | Pn | 14 27 21.7 | +2.3 |
| **COLA** | **College** | **4.86 192** | | Pn | Pn | 14 27 21.2 | +1.7 |
| **H21K** | **Melozitna River** | **4.87 219** | | Pn | Pn | 14 27 22.0 | +2.3 |
| H21K | | | | IAML | | 14 28 52.0 | |
| | comp=N,15nm,1.8s | | | | | | |
| H21K | | | | IAML | | 14 29 01.9 | |
| | comp=E,14nm,1.2s | | | | | | |
| **IL31** | | **4.90 187** | | Pn | Pn | 14 27 22.0 | +1.9 |
| **J25K** | **Salcha River,** | **5.03 180** | | Pn | Pn | 14 27 23.9 | +2.0 |
| **C19K** | **Lookout Ridge** | **5.03 271** | | Pn | Pn | 14 27 23.2 | +1.3 |
| C19K | | | | IAML | | 14 29 10.5 | |
| | comp=E,20nm,1.4s | | | | | | |
| C19K | | | | IAML | | 14 30 22.6 | |
| | comp=N,21nm,2.4s | | | | | | |
| **MLY** | **Manley** | **5.04 206** | | Pn | Pn | 14 27 24.2 | +2.2 |
| **I29M** | **Ogilvie Camp,** | **5.08 144** | | Pn | Pn | 14 27 24.6 | +2.1 |
| **CCB** | **Clear Creek Bu** | **5.08 192** | | Pn | Pn | 14 27 24.0 | +1.5 |
| **EGAK** | **Eagle** | **5.14 159** | | Pn | Pn | 14 27 25.3 | +2.0 |
| EGAK | | | | IAML | | 14 28 28.7 | |
| | comp=N,19nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.19 171** | | Pn | Pn | 14 27 27.2 | +3.0 |
| **NEA2** | **Nenana** | **5.24 197** | | | Pn | 14 27 26.7 | +2.0 |
| **HDA** | **Harding Lake** | **5.26 187** | | | Pn | 14 27 27.6 | +2.6 |
| HDA | | | | IAML | | 14 28 30.9 | |
| | comp=E,15nm,0.9s | | | | | | |
| HDA | | | | IAML | | 14 29 06.2 | |
| | comp=N,15nm,1.0s | | | | | | |
| **WRH** | **Wood River Hil** | **5.27 193** | | | Pn | 14 27 27.4 | +2.2 |
| **F19K** | **Shaleruckik Mo** | **5.37 245** | | Pn | Pn | 14 27 28.7 | +2.2 |
| F19K | | | | IAML | | 14 29 15.3 | |
| | comp=E,13nm,2.4s | | | | | | |
| F19K | | | | IAML | | 14 29 16.3 | |
| | comp=N,13nm,1.0s | | | | | | |
| **H20K** | **Anotleneega Mo** | **5.49 226** | | | Pn | 14 27 29.9 | +1.6 |
| **G19K** | **Purcell Mounta** | **5.61 237** | | Pn | Pn | 14 27 31.5 | +1.7 |
| **SCRK** | **Sand Creek** | **5.69 174** | | Pn | Pn | 14 27 34.1 | +3.0 |
| **C18K** | **Utukok River** | **5.71 268** | | | Pn | 14 27 33.4 | +2.1 |
| **K27K** | **Chicken** | **5.77 165** | | | Pn | 14 27 34.5 | +2.5 |
| **K24K** | **Donnelly Dome** | **5.84 181** | | | Pn | 14 27 35.5 | +2.4 |
| **H19K** | **Roundabout Mou** | **5.88 231** | | | Pn | 14 27 34.9 | +1.4 |
| **BPAW** | **Bear Paw Mtn.** | **5.95 204** | | | Pn | 14 27 37.3 | +2.7 |
| **E18K** | **Tukpahlearik C** | **5.99 256** | | Pn | Pn | 14 27 36.5 | +1.5 |
| **DOT** | **Dot Lake** | **6.02 174** | | | Pn | 14 27 38.4 | +2.9 |
| **DAWY** | **Dawson** | **6.06 154** | | | Pn | 14 27 38.8 | +2.8 |
| **MCK** | **McKinley** | **6.07 195** | | | Pn | 14 27 38.4 | +2.3 |
| **F18K** | **Selawik** | **6.11 247** | | | Pn | 14 27 38.3 | +1.7 |
| **J30M** | **Hart River** | **6.18 141** | | Pn | Pn | 14 27 39.7 | +1.9 |
| **G18K** | **Tagagawik** | **6.25 240** | | Pn | Pn | 14 27 40.5 | +1.9 |
| **J20K** | **Nowinta River** | **6.44 216** | | | Pn | 14 27 42.9 | +1.7 |
| **K29M** | **Barlow Dome** | **6.59 148** | | Pn | Pn | 14 27 45.8 | +2.4 |
| **DHY** | **Denali Highway** | **6.62 188** | | Pn | Pn | 14 27 47.0 | +3.2 |
| **L26K** | **Log Cabin Wild** | **6.67 172** | | | Pn | 14 27 47.1 | +2.7 |
| **H18K** | **Honhosa River** | **6.69 234** | | | Pn | 14 27 47.0 | +2.3 |
| **F17K** | **Baldwin Pennin** | **6.72 249** | | | Pn | 14 27 46.7 | +1.7 |
| **L27K** | **Beaver Creek,** | **6.74 166** | | Pn | Pn | 14 27 48.0 | +2.6 |
| **J19K** | **Poorman** | **6.92 220** | | | Pn | 14 27 50.2 | +2.4 |
| **G17K** | **Kiwalik Mounta** | **7.12 242** | | | Pn | 14 27 52.5 | +2.0 |
| **L29M** | **L29M** | **7.16 152** | | Pn | Pn | 14 27 53.9 | +2.8 |
| **H17K** | **Granite Mounta** | **7.30 237** | | | Pn | 14 27 55.6 | +2.6 |
| **M26K** | **Nabesna, AK** | **7.31 171** | | Pn | Pn | 14 27 56.4 | +3.1 |
| **M27K** | **Edge Creek, AK** | **7.43 167** | | Pn | Pn | 14 27 57.9 | +2.9 |
| **M29M** | **Somme Creek** | **7.74 155** | | Pn | Pn | 14 28 02.0 | +2.9 |
| **YUK2** | **White River** | **8.09 164** | | | Pn | 14 28 07.7 | +3.8 |

*SKHL* ***15*** *14:38:59.7±0.5, 45.˚20N×151.˚80E, h42km±4km, mb4.4/3*
*IDC* ***15*** *14:39:01.0±2.4, 46.˚88N×150.˚44E, h178km±23km, mb3.2/10, mbtmp3.7/13, Error ellipse: s-maj=23.6km s-min=15.8km az=135.0*
*JMA* ***15*** *14:39:00.8±1.1, 46˚N.8˚×15˚1E±1˚0, h178km, MV3.6/11, KURILE ISLANDS REGION*

**ISC 15 14:39:01.8±0.8, 46.˚7N±0.˚1×150.˚3E±0.˚1, h200km, n31, σ1ᵍ94/24, mb3.2/9, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.27** | **230** | *e*P | **Pn** | **14 39 41.8** | **-1.3** |
| KUR | | | | AMB | AMB | 14 39 42.4 | |
| | 50nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **14 40 13.8** | **-1.5** |
| KUR | | | | A | A | 14 40 19.8 | |
| | 140nm,0.6s | | | | | | |
| KUR | | | | A | A | 14 40 19.8 | |
| | 130nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **3.77** | **222** | *e*P | Pn | 14 39 56.4 | -4.3 |
| SHO | | | | AMB | AMB | 14 39 57.7 | |
| | 20nm,0.2s | | | | | | |
| SHO | | | | *e*S | Sn | 14 40 38.6 | -8.3 |
| SHO | | | | A | A | 14 40 43.1 | |
| | 60nm,0.3s | | | | | | |
| SHO | | | | A | A | 14 40 43.1 | |
| | 50nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **4.14** | **231** | *e*P | **Pn** | **14 40 04.1** | **-1.1** |
| YUK | | | | AMB | AMB | 14 40 05.2 | |
| | 40nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **14 40 52.4** | **-2.6** |
| YUK | | | | A | A | 14 40 57.0 | |
| | 90nm,0.4s | | | | | | |
| YUK | | | | A | A | 14 40 57.0 | |
| | 60nm,0.4s | | | | | | |
| **JRA** | **Rausu** | **4.61** | **235** | *e*P | **Pn** | **14 40 09.6** | **-1.6** |
| **NEM2** | **Nemuro 2** | **4.67** | **226** | P | Pn | 14 40 07.5 | -4.4 |
| NEM2 | | | | *e*S | Sn | 14 40 59.4 | -7.8 |
| **JNK** | **Nakash** | **5.06** | **234** | *e*P | **Pn** | **14 40 15.8** | **-1.0** |
| **JAK** | **Akkeshi** | **5.47** | **229** | *e*P | Pn | 14 40 18.4 | -3.7 |
| JAK | | | | *e*S | Sn | 14 41 17.9 | -7.6 |
| **JAR** | **Ashorobuto** | **5.78** | **236** | *e*P | **Pn** | **14 40 25.3** | **-0.8** |
| JAR | | | | *e*S | **Sn** | **14 41 30.6** | **-2.1** |
| **ASAJ** | **Asahikawa** | **6.03** | **247** | P | **Pn** | **14 40 30.9** | **+1.5** |
| | 9.4nm,0.9s,baz=51,slow=14,SNR=3.4 | | | | | | |
| **JKK2** | **Kamakawa 2** | **6.06** | **245** | *e*P | **Pn** | **14 40 30.0** | **+0.2** |
| **JCH** | **Churui** | **6.44** | **233** | *e*P | **Pn** | **14 40 31.8** | **-3.0** |
| JCH | | | | *e*S | Sn | 14 41 41.3 | -7.1 |
| **JNBK** | **Urakawa-nobuka** | **7.00** | **233** | *e*P | **Pn** | **14 40 40.9** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **7.96** | **34** | P | **Pn** | **14 40 49.9** | **-4.5** |
| | 2.7nm,0.6s,baz=193,slow=14,SNR=4.2 | | | | | | |
| **JANG** | **Nango** | **9.01** | **228** | *e*S | Sn | 14 42 37.8 | -11 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **USRK** | **Ussuriysk Ar.** | **13.12** | **266** | P | | **P** | **14 42 02.5** | **-1.2** |
| | 1.0nm,0.4s,baz=71,slow=11,SNR=6.8 | | | | | | | |
| **JNU** | **Nakatsue** | **20.10** | **234** | P | | **P** | **14 43 22.6** | **+2.4** |
| | 4.1nm,0.7s,baz=102,slow=18,SNR=1.7 | | | | | | | |
| | 4.1nm,0.7s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.15** | **148** | T | | T | 15 16 23.9 | |
| | baz=337,slow=76,SNR=6.4 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.16** | **148** | T | | T | 15 16 23.7 | |
| | baz=337,slow=76,SNR=4.2 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.16** | **148** | T | | T | 15 16 32.3 | |
| | baz=337,slow=76,SNR=6.3 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.20** | **149** | T | | T | 15 17 46.3 | |
| | baz=338,slow=76,SNR=10 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.21** | **149** | T | | T | 15 17 46.1 | |
| | baz=338,slow=76,SNR=8.2 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.22** | **149** | T | | T | 15 17 47.1 | |
| | baz=338,slow=76,SNR=5.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **37.76** | **38** | P | | **P** | **14 45 58.4** | **+0.3** |
| | 0.3nm,0.7s,baz=260,slow=8.3,SNR=4.9 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.24** | **296** | P | | **P** | **14 47 00.5** | **+1.6** |
| | 0.6nm,0.6s,baz=61,slow=7.9,SNR=4.7 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.87** | **303** | P | | **P** | **14 47 04.7** | **+0.9** |
| | 2.1nm,0.2s,baz=67,slow=7.5,SNR=1.8 | | | | | | | |
| | 2.1nm,0.2s | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.39** | **308** | P | | **P** | **14 47 31.4** | **+0.6** |
| | 0.4nm,0.5s,baz=74,slow=6.4,SNR=2.5 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **63.23** | **334** | P | | **P** | **14 49 09.1** | **+0.8** |
| | 1.1nm,0.9s,baz=39,slow=6.8,SNR=2.3 | | | | | | | |
| | 1.1nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **67.79** | **338** | P | | **P** | **14 49 37.9** | **+0.4** |
| | 1.9nm,0.8s,baz=58,slow=8.7,SNR=2.5 | | | | | | | |
| | 1.9nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **67.91** | **196** | P | | **P** | **14 49 40.5** | **+1.8** |
| | 0.3nm,0.8s,baz=13,slow=7.0,SNR=1.7 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **71.62** | **196** | P | | **P** | **14 50 04.0** | **+2.7** |
| | 0.4nm,0.8s,baz=10,slow=5.7,SNR=2.9 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **79.16** | **59** | P | | **P** | **14 50 46.2** | **+1.8** |
| | 0.2nm,0.5s,baz=293,slow=4.7,SNR=2.6 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |

*NEIC* ***15*** *14:52:25.8±1.1, 69.˚57N±0.˚03×144.˚27W±0.˚09, h10km±2km, Error ellipse: s-maj=7.5km s-min=3.1km az=318.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr0.14; Mθθ-6.03; Mφφ5.89; Mrθ0.25; Mθφ-0.58; Mφr-0.07; Fault plane solution: M₀6.00000×10¹⁴ NP1: φ222.19000°, δ87.78000°, λ-1.00000°. NP2:φ312.23000°, δ89.00000°, λ-177.78000°. Principal axes: T 5.9220, Plg1.0000°, Azm87.0000°; N 0.1495, Plg88.0000°, Azm336.000°; P -6.0715, Plg2.000°, Azm177.0000°;*

*NEIC* ***15*** *14:52:25.6, 69.˚56N×144.˚21W, h9km*

**AEIC 15 14:52:24.6±1.3, 69.˚49N±0.˚06×144.˚3W±0.˚1, h12km±6km, ML3.8, ML3.8/104(NEIC), Mwr3.8/23(NEIC), Error ellipse: s-maj=8.5km s-min=5.5km az=185.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **57** | Pg | Pg | 14 52 29.9 | 0.0 |
| C27K | | | | | Sg | 14 52 33.4 | -0.1 |
| C27K | | | | IAML | | 14 52 33.8 | |
| | comp=N,14μm,0.5s | | | | | | |
| C27K | | | | IAML | | 14 52 34.0 | |
| | comp=E,15μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.74 258** | | | Pg | 14 52 38.6 | -0.4 |
| **D27M** | **Malcolm River** | **1.22 100** | | Pn | Pn | 14 52 46.6 | -0.9 |
| D27M | | | | IAML | | 14 53 09.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.55 281** | | | Pb | 14 52 53.5 | +0.4 |
| C24K | | | | | Sg | 14 53 15.9 | +1.5 |
| C24K | | | | IAML | | 14 53 20.6 | |
| | comp=E,1μm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **1.63 260** | | Pn | Pb | 14 52 54.9 | +0.4 |
| D24K | | | | | Sg | 14 53 18.4 | +1.5 |
| D24K | | | | IAML | | 14 53 21.8 | |
| | comp=E,1μm,1.0s | | | | | | |
| D24K | | | | IAML | | 14 53 23.9 | |
| | comp=N,1μm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.64 142** | | | Pb | 14 52 55.1 | +0.3 |
| E27K | | | | | Sg | 14 53 17.6 | +0.2 |
| E27K | | | | IAML | | 14 53 19.6 | |
| | comp=N,1μm,0.7s | | | | | | |
| E27K | | | | IAML | | 14 53 22.2 | |
| | comp=E,2μm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81 178** | | | Pb | 14 52 57.8 | +0.3 |
| F26K | | | | IAML | | 14 53 25.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81 178** | | | Sg | 14 53 23.3 | +0.7 |
| **E28M** | **Babbage River** | **1.94 115** | | | Pb | 14 52 58.9 | -0.9 |
| E28M | | | | | Sb | 14 53 24.9 | +1.0 |
| **F25K** | **Christian Rive** | **1.97 195** | | | Pb | 14 53 00.5 | +0.2 |
| F25K | | | | IAML | | 14 53 30.3 | |
| | comp=E,719nm,0.7s | | | | | | |
| F25K | | | | IAML | | 14 53 30.9 | |
| | comp=N,840nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **92** | | Pb | 14 53 00.1 | -0.5 |
| D28M | | | | | Sb | 14 53 26.6 | +1.5 |
| **TOLK** | **Toolik Lake Re** | **2.07 248** | | | Pb | 14 53 01.1 | -1.0 |
| TOLK | | | | | Sg | 14 53 32.4 | +1.4 |
| TOLK | | | | IAML | | 14 53 34.9 | |
| | comp=E,574nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.07 183** | | | Pb | 14 53 01.5 | -0.6 |
| **E24K** | **Your Creek** | **2.08 229** | | Pg | Pb | 14 53 01.9 | -0.3 |
| E24K | | | | | Sg | 14 53 30.8 | -0.4 |
| E24K | | | | IAML | | 14 53 35.4 | |
| | comp=E,718nm,0.8s | | | | | | |
| E24K | | | | IAML | | 14 53 37.2 | |
| | comp=N,806nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.22 282** | | | Pn | 14 53 02.7 | +1.5 |
| C23K | | | | IAML | | 14 53 41.3 | |
| | comp=N,653nm,0.5s | | | | | | |
| C23K | | | | IAML | | 14 53 46.1 | |
| | comp=E,593nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.33 260** | | | Pb | 14 53 04.7 | -1.7 |
| **F24K** | **Squaw Lake** | **2.37 215** | | | Pb | 14 53 05.4 | -1.8 |
| F24K | | | | IAML | | 14 53 43.9 | |
| | comp=E,652nm,0.5s | | | | | | |
| F24K | | | | IAML | | 14 53 47.0 | |
| | comp=N,423nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **

| | | | | | | |
|---|---|---|---|---|---|---|
| E21K | | | IAML | | 14 54 32.4 | |
| | comp=E,177nm,0.8s | | | | | |
| E21K | | | IAML | | 14 54 32.6 | |
| | comp=N,192nm,0.8s | | | | | |
| **F30M** | **Barrier River** | **3.66 117** | | Pn | 14 53 23.6 | +2.6 |
| **H24K** | **Noodor Dome** | **3.91 202** | Pn | Pn | 14 53 26.2 | +1.7 |
| **A22K** | **Sinclair Lake** | **3.92 298** | | Pn | 14 53 26.0 | +1.6 |
| **G30M** | **tAoh Zraii Nji** | **3.93 126** | Pn | Pn | 14 53 26.7 | +1.9 |
| G30M | | | IAML | | 14 54 45.3 | |
| | comp=N,156nm,1.0s | | | | | |
| **H29M** | **Whitestone** | **3.98 143** | Pn | Pn | 14 53 27.6 | +2.1 |
| **PRP** | **Porcupine Dome** | **4.02 187** | | Pn | 14 53 28.2 | +2.2 |
| PRP | | | IAML | | 14 54 19.8 | |
| | comp=E,110nm,0.4s | | | | | |
| PRP | | | IAML | | 14 54 33.3 | |
| | comp=N,124nm,0.6s | | | | | |
| **I27K** | **Kandik River** | **4.04 164** | | Pn | 14 53 28.8 | +2.5 |
| **F21K** | **Alatna River** | **4.08 240** | Pn | Pn | 14 53 28.7 | +2.0 |
| F21K | | | IAML | | 14 54 41.2 | |
| | comp=N,100nm,1.2s | | | | | |
| **H23K** | **Yukon River** | **4.18 211** | Pn | Pn | 14 53 30.3 | +2.1 |
| H23K | | | IAML | | 14 54 48.0 | |
| | comp=N,143nm,1.1s | | | | | |
| **I26K** | **Coal Creek Min** | **4.23 173** | | Pn | 14 53 30.9 | +2.1 |
| **I28M** | **Miner Creek** | **4.40 155** | Pn | Pn | 14 53 33.6 | +2.4 |
| I28M | | | IAML | | 14 55 00.4 | |
| | comp=N,93nm,1.2s | | | | | |
| **E20K** | **Nigu River** | **4.47 260** | | Pn | 14 53 34.2 | +2.1 |
| **D20K** | **Etivluk River** | **4.47 266** | | Pn | 14 53 34.4 | +2.4 |
| **B20K** | **Meade River** | **4.49 283** | Pn | Pn | 14 53 33.9 | +1.6 |
| B20K | | | IAML | | 14 55 06.6 | |
| | comp=E,116nm,1.3s | | | | | |
| B20K | | | IAML | | 14 55 08.8 | |
| | comp=N,116nm,1.9s | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.50 220** | | Pn | 14 53 34.0 | +1.5 |
| **G31M** | **Satah River** | **4.55 120** | Pn | Pn | 14 53 34.4 | +1.3 |
| G31M | | | IAML | | 14 54 55.8 | |
| | comp=E,123nm,1.7s | | | | | |
| **POKR** | **Poker Plat Res** | **4.55 197** | Pn | Pn | 14 53 36.1 | +2.9 |
| **G21K** | **Allakaket** | **4.56 233** | Pn | Pn | 14 53 34.9 | +1.5 |
| **I23K** | **Minto, Yukon-K** | **4.78 206** | | Pn | 14 53 38.1 | +1.9 |
| I23K | | | IAML | | 14 55 18.8 | |
| | comp=E,89nm,1.2s | | | | | |
| **MDM** | **Murphy Dome** | **4.80 200** | | Pn | 14 53 38.5 | +2.0 |
| MDM | | | IAML | | 14 54 58.8 | |
| | comp=E,60nm,1.0s | | | | | |
| MDM | | | IAML | | 14 55 08.0 | |
| | comp=N,68nm,0.9s | | | | | |
| **COLA** | **College** | **4.83 198** | | Pn | 14 53 40.0 | +3.0 |
| **IL31** | | **4.84 193** | | Pn | 14 53 39.7 | +2.6 |
| **F20K** | **Avaraart Lake** | **4.89 245** | Pn | Pn | 14 53 40.2 | +2.4 |
| F20K | | | IAML | | 14 55 12.9 | |
| | comp=N,63nm,0.9s | | | | | |
| **EGAK** | **Eagle** | **4.89 164** | Pn | Pn | 14 53 40.1 | +2.2 |
| EGAK | | | IAML | | 14 55 21.2 | |
| | comp=N,74nm,1.0s | | | | | |
| **J25K** | **Salcha River,** | **4.92 185** | Pn | Pn | 14 53 40.6 | +2.3 |
| **J26L** | **Joseph Creek** | **5.02 176** | Pn | Pn | 14 53 42.1 | +2.4 |
| J26L | | | IAML | | 14 55 11.4 | |
| | comp=E,64nm,0.7s | | | | | |
| **H21K** | **Melozitna Rive** | **5.03 224** | Pn | Pn | 14 53 41.9 | +2.1 |
| H21K | | | IAML | | 14 55 14.8 | |
| | comp=N,65nm,1.2s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05 197** | Pn | Pn | 14 53 42.2 | +2.2 |
| **MLY** | **Manley** | **5.12 212** | Pn | Pn | 14 53 43.2 | +2.2 |
| **E19K** | **Redstone River** | **5.17 253** | | Pn | 14 53 43.1 | +1.5 |
| E19K | | | IAML | | 14 55 20.5 | |
| | comp=N,56nm,0.9s | | | | | |
| **WRH** | **Wood River Hil** | **5.25 198** | | Pn | 14 53 45.3 | +2.5 |
| WRH | | | IAML | | 14 55 15.2 | |
| | comp=N,50nm,0.9s | | | | | |
| WRH | | | IAML | | 14 55 21.7 | |
| | comp=E,51nm,1.1s | | | | | |
| **I30M** | **Mount Dempster** | **5.27 141** | Pn | Pn | 14 53 45.0 | +1.9 |
| I30M | | | IAML | | 14 55 13.6 | |
| | comp=N,72nm,0.8s | | | | | |
| **C19K** | **Lookout Ridge** | **5.42 273** | Pn | Pn | 14 53 47.0 | +1.8 |
| **SCRK** | **Sand Creek** | **5.54 178** | Pn | Pn | 14 53 49.6 | +2.7 |
| **K27K** | **Chicken** | **5.56 170** | | Pn | 14 53 49.2 | +2.2 |
| **H20K** | **Anotleneega Mo** | **5.70 230** | | Pn | 14 53 50.6 | +1.6 |
| **K24K** | **Donnelly Dome** | **5.74 186** | | Pn | 14 53 52.4 | +2.9 |
| **DAWY** | **Dawson** | **5.79 158** | | Pn | 14 53 52.7 | +2.6 |
| **A19K** | **Wainwright** | **5.83 285** | | Pn | 14 53 52.2 | +1.6 |
| **DOT** | **Dot Lake** | **5.87 179** | | Pn | 14 53 53.9 | +2.6 |
| **BPAW** | **Bear Paw Mtn.** | **6.01 209** | Pn | Pn | 14 53 55.5 | +2.2 |
| **MCK** | **McKinley** | **6.07 200** | | Pn | 14 53 57.0 | +3.0 |
| **H19K** | **Roundabout Mou** | **6.11 235** | Pn | Pn | 14 53 56.8 | +2.3 |
| **I20K** | **Naaghedeneel** | **6.14 225** | | Pn | 14 53 57.5 | +2.5 |
| **B18K** | **Kokolik River** | **6.16 277** | | Pn | 14 53 56.7 | +1.5 |
| **K29M** | **Barlow Dome** | **6.28 151** | Pn | Pn | 14 53 59.7 | +2.7 |
| **E18K** | **Tukpahlearik C** | **6.34 259** | Pn | Pn | 14 53 59.1 | +1.4 |
| **F18K** | **Selawik** | **6.43 251** | | Pn | 14 54 00.8 | +2.0 |
| **L26K** | **Log Cabin Wild** | **6.50 176** | | Pn | 14 54 02.6 | +2.6 |
| **G18K** | **Tagagawik** | **6.53 243** | | Pn | 14 54 02.9 | +2.5 |
| **BCAR** | **Beaver Creek A** | **6.53 170** | Pn | Pn | 14 54 02.9 | +2.5 |
| **PAX** | **Paxson** | **6.56 185** | | Pn | 14 54 04.0 | +3.0 |
| **MENT** | **Mentasta** | **6.59 178** | | Pn | 14 54 04.0 | +2.9 |
| **A36M** | **Sachs Harbour** | **6.78 60** | Pn | Pn | 14 54 03.5 | -0.2 |
| **WAT1** | **Susitna Watana** | **6.90 196** | | Pn | 14 54 08.8 | +3.3 |
| **WAT7** | **Susitna Watana** | **6.93 197** | | Pn | 14 54 09.2 | +3.3 |
| **H18K** | **Honhosa River** | **6.94 238** | | Pn | 14 54 08.0 | +2.0 |
| **F17K** | **Baldwin Pennin** | **7.05 252** | Pn | Pn | 14 54 08.4 | +1.0 |
| **WAT6** | **Susitna Watana** | **7.08 193** | | Pn | 14 54 11.2 | +3.2 |
| **J19K** | **Poorman** | **7.09 224** | | Pn | 14 54 09.5 | +1.5 |
| **HARP** | **HAARP** | **7.13 183** | | Pn | 14 54 11.9 | +3.3 |
| **C36M** | **Paulatuk** | **7.13 82** | Pn | Pn | 14 54 08.2 | -0.3 |
| **G17K** | **Kiwalik Mounta** | **7.42 245** | | Pn | 14 54 14.2 | +1.7 |
| **WAZA** | **Wrangell Mount** | **7.45 179** | | Pn | 14 54 16.2 | +3.1 |
| **WACK** | **Wrangell Chich** | **7.54 180** | | Pn | 14 54 16.9 | +2.5 |
| **WASW** | **Wrangell South** | **7.59 179** | | Pn | 14 54 18.1 | +3.0 |
| **YUK2** | **White River** | **7.87 168** | | Pn | 14 54 22.0 | +3.2 |
| **YUK3** | **Moose Creek** | **7.91 167** | | Pn | 14 54 22.6 | +3.1 |
| **L20K** | **Farewell, AK** | **8.03 213** | | Pn | 14 54 23.0 | +2.0 |
| **G16K** | **Koyuk River** | **8.04 248** | | Pn | 14 54 22.6 | +1.6 |
| **SKT** | **Skwentna** | **8.10 205** | | Pn | 14 54 23.9 | +2.1 |
| **YUK8** | **Steele Glacier** | **8.45 165** | | Pn | 14 54 30.8 | +3.9 |
| **J17K** | **VABM Dome** | **8.48 231** | | Pn | 14 54 28.3 | +1.3 |
| **H16K** | **Elim** | **8.49 244** | | Pn | 14 54 29.1 | +1.8 |
| **L19K** | **White Mountain** | **8.50 215** | | Pn | 14 54 29.4 | +2.1 |
| **BALM** | **Baldy** | **8.53 173** | | Pn | 14 54 30.7 | +2.8 |
| **STLK** | **Strandline Lak** | **8.60 205** | | Pn | 14 54 31.2 | +2.4 |
| **F15K** | **North Star Dit** | **8.61 254** | | Pn | 14 54 30.0 | +1.2 |
| **KIAG** | **Kiagna River** | **8.64 174** | | Pn | 14 54 33.8 | +4.3 |
| **YUK5** | **Granite Creek** | **8.81 159** | | Pn | 14 54 35.0 | +3.3 |
| **L18K** | **Granite Mounta** | **8.86 221** | | Pn | 14 54 34.1 | +1.8 |
| **YUK6** | **Outpost Mounta** | **8.93 161** | | Pn | 14 54 36.8 | +3.3 |
| **BARK** | **Barkley Ridge** | **9.16 174** | | Pn | 14 54 41.3 | +4.8 |
| **L17K** | **Donlin** | **9.32 224** | | Pn | 14 54 40.7 | +2.2 |
| **YUK7** | **Dusty Glacier** | **9.36 161** | | Pn | 14 54 43.2 | +3.9 |

*SJA **15** 14:58:52.1±0.6,22.°54S×66.°15W,h285km±5km, ML4.3, MW4.0*

*NEIC **15** 14:58:53.8±1.5,22.°56S±0.°09×66.°1W±0.°1,h254km±10km, mb4.2/5, Error ellipse: s-maj=17.3km s-min=12.2km az=109.0*

*IDC **15** 14:58:53.4±0.9,22.°51S×66.°09W,h251km±10km,mb3.3/5, mbtmp4.1/10, Error ellipse: s-maj=16.0km s-min=14.6km az=137.0*

*VAO **15** 14:58:54.7±0.4,22.°47S×66.°22W,h277km, mb4.2*

**ISC 15 14:58:53.8**±0.6,**22.°55S**±0.°05×**66.°24W**±0.°05,**h262**km±6km, **n112**,σ1**°01**/127,**mb3.8**/9,**5C, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **YJA** | **Yavi** | **0.77** | **61** | *eP* | | **Pn** | **14 59 30.5** | **+0.9** |
| YJA | | | | *eS* | | **S** | **14 59 57.6** | **-0.1** |
| **AF01** | **San Pedro de A** | **1.84** | **257** | | | **Pn** | **14 59 38.1** | **+2.0** |
| **AF01** | **San Pedro de A** | **1.84** | **257** | *eP* | | **Pn** | **14 59 38.4** | **+2.2** |
| **AZAP** | **Zapla** | **1.98** | **147** | *eP* | | **Pn** | **14 59 37.5** | **+0.1** |
| AZAP | | | | *eS* | | **S** | **15 00 11.6** | **-0.3** |
| **ASTB** | **Santa Barbara** | **2.15** | **131** | *eP* | | Pn | 14 59 24.4 | -14 |
| **SLA** | **San Lorenzo** | **2.26** | **163** | *eP* | | **Pn** | **14 59 40.8** | **+1.0** |
| **ALOL** | **LOMAS DE OLMED** | **2.43** | **122** | *eP* | | **Pn** | **14 59 41.1** | **-0.1** |
| **LVC** | **Limon Verde** | **2.47** | **268** | | | **Pn** | **14 59 42.9** | **+0.8** |
| **LVC** | **Limon Verde** | **2.47** | **268** | *eP* | | **Pn** | **14 59 43.4** | **+1.4** |
| LVC | | | | *eS* | | **S** | **15 00 18.9** | **-1.2** |
| **LVC** | **Limon Verde** | **2.47** | **268** | P | | **Pn** | **14 59 43.3** | **+1.4** |
| | 204nm,0.3s,baz=85,slow=5.7,SNR=750 | | | | | | | |
| LVC | | | | S | | **S** | **15 00 20.5** | **+0.4** |
| | 138nm,0.4s,baz=331,slow=23,SNR=37 | | | | | | | |
| **LVC** | **Limon Verde** | **2.47** | **268** | *eP* | | **Pn** | **14 59 43.4** | **+1.4** |
| **PB09** | **IPOC Station P** | **2.88** | **285** | | | **Pn** | **14 59 47.6** | **+1.6** |
| **PB09** | **IPOC Station P** | **2.88** | **285** | *eP* | | **Pn** | **14 59 46.5** | **+0.5** |
| PB09 | | | | *eS* | | **S** | **15 00 27.4** | **0.0** |
| PB09 | | | | IAML | | | 15 00 35.2 | |
| | comp=Z,231nm,0.6s | | | | | | | |
| **PB01** | **IPOC Station P** | **3.37** | **296** | | | **Pn** | **14 59 51.7** | **+0.6** |
| **FSA** | **Cafayete** | **3.55** | **176** | *eP* | | **Pn** | **14 59 53.2** | **0.0** |
| **PB04** | **IPOC Station P** | **3.62** | **273** | | | **Pn** | **14 59 55.2** | **+1.1** |
| **PB04** | **IPOC Station P** | **3.62** | **273** | *eP* | | **Pn** | **14 59 55.0** | **+0.9** |
| PB04 | | | | *eS* | | **S** | **15 00 41.4** | **-0.5** |
| PB04 | | | | IAML | | | 15 00 43.5 | |
| | comp=Z,839nm,0.2s | | | | | | | |
| **PB05** | **IPOC Station P** | **3.67** | **265** | | | **Pn** | **14 59 55.1** | **+0.6** |
| **PB05** | **IPOC Station P** | **3.67** | **265** | *eP* | | **Pn** | **14 59 55.3** | **+0.8** |
| PB05 | | | | *eS* | | **S** | **15 00 42.0** | **-0.8** |
| PB05 | | | | IAML | | | 15 00 46.4 | |
| | comp=Z,310nm,0.3s | | | | | | | |
| **GO01** | **Chusmiza** | **3.98** | **316** | Pn | | **Pn** | **14 59 59.2** | **+0.7** |
| **GO01** | **Chusmiza** | **3.98** | **316** | *eP* | | **Pn** | **14 59 59.1** | **+0.7** |
| GO01 | | | | *eS* | | **S** | **15 00 48.4** | **-1.5** |
| **GO02** | **Mina Guanaco** | **4.02** | **229** | | | **Pn** | **14 59 59.2** | **+0.5** |
| **GO02** | **Mina Guanaco** | **4.02** | **229** | *eP* | | **Pn** | **14 59 59.7** | **+1.0** |
| GO02 | | | | *eS* | | **S** | **15 00 49.1** | **-1.2** |
| **PATCX** | **Punta Patache** | **4.03** | **295** | | | **Pn** | **14 59 59.0** | **+0.4** |
| **PATCX** | **Punta Patache** | **4.03** | **295** | *eP* | | **Pn** | **14 59 59.1** | **+0.6** |
| PATCX | | | | *eS* | | **S** | **15 00 48.9** | **-1.2** |
| PATCX | | | | IAML | | | 15 00 50.9 | |
| | comp=Z,266nm,0.4s | | | | | | | |
| **HMBC** | **Humberstone** | **4.08** | **303** | | | **Pn** | **14 59 59.3** | **+0.1** |
| **HMBC** | **Humberstone** | **4.08** | **303** | *eP* | | **Pn** | **14 59 59.4** | **+0.1** |
| HMBC | | | | *eS* | | **S** | **15 00 50.5** | **-0.9** |
| HMBC | | | | IAML | | | 15 00 54.5 | |
| | comp=Z,369nm,0.4s | | | | | | | |
| **TA01** | **Diego Aracena** | **4.17** | **298** | Pn | | **Pn** | **15 00 00.3** | **+0.2** |
| **TA01** | **Diego Aracena** | **4.17** | **298** | *eP* | | **Pn** | **15 00 00.5** | **+0.4** |
| TA01 | | | | *eS* | | **S** | **15 00 51.4** | **-1.6** |
| TA01 | | | | IAML | | | 15 00 54.4 | |
| | comp=Z,130nm,0.3s | | | | | | | |
| **TA02** | **Huaiquique** | **4.28** | **301** | | | **Pn** | **15 00 01.6** | **+0.2** |
| **TA02** | **Huaiquique** | **4.28** | **301** | *eP* | | **Pn** | **15 00 01.9** | **+0.5** |
| TA02 | | | | *eS* | | **S** | **15 00 53.0** | **-2.2** |
| TA02 | | | | IAML | | | 15 00 54.1 | |
| | comp=Z,173nm,0.2s | | | | | | | |
| **PB14** | **IPOC Station P** | **4.34** | **241** | | | **Pn** | **15 00 02.7** | **+0.3** |
| **AC01** | **Pan de Azucar** | **5.35** | **227** | | | **Pn** | **15 00 14.1** | **-0.1** |
| **AC01** | **Pan de Azucar** | **5.35** | **227** | *eP* | | **Pn** | **15 00 13.7** | **-0.5** |
| AC01 | | | | *eS* | | **S** | **15 01 14.1** | **-4.5** |
| AC01 | | | | IAML | | | 15 01 17.8 | |
| | comp=Z,95nm,0.3s | | | | | | | |
| **PB18** | **Visviri** | **5.80** | **328** | Pn | | **Pn** | **15 00 22.2** | **+1.9** |
| **AC06** | **Mina Casimiro** | **6.07** | **217** | | | **Pn** | **15 00 22.7** | **-0.4** |
| **LPAZ** | **La Paz** | **6.48** | **344** | P | | **Pn** | **15 00 29.3** | **+0.5** |
| | comp=Z,8.8nm,0.4s,baz=153,slow=8.3,SNR=34 | | | | | | | |
| LPAZ | | | | S | | **S** | **15 01 44.4** | **-0.6** |
| | comp=Z,21nm,0.9s,baz=330,slow=15,SNR=11 | | | | | | | |
| **LPAZ** | **La Paz** | **6.48** | **344** | *eP* | | **Pn** | **15 00 29.6** | **+0.8** |
| LPAZ | | | | *eS* | | **S** | **15 01 45.0** | **0.0** |
| **AC04** | **Llanos de Chal** | **7.13** | **217** | Pn | | **Pn** | **15 00 35.0** | **-1.2** |
| **AC05** | **El Transito** | **7.24** | **209** | Pn | | **Pn** | **15 00 37.5** | **-0.2** |
| **BBSD** | **Serra de San D** | **7.52** | **46** | *eP* | | **Pn** | **15 00 39.9** | **-1.3** |
| **LCO** | **Las Campanas** | **7.59** | **211** | Pn | | **Pn** | **15 00 40.9** | **-1.3** |
| **MURT** | **Porto Murtinho** | **8.05** | **85** | *eP* | | **Pn** | **15 00 47.6** | **-0.2** |
| **SIV** | **San Ignacio** | **8.15** | **38** | P | | **Pn** | **15 00 47.4** | **-1.7** |
| | comp=Z,26nm,0.8s,baz=228,slow=11,SNR=25 | | | | | | | |
| **CO01** | **Juntas del Tor** | **8.16** | **204** | Pn | | **Pn** | **15 00 49.8** | **+0.5** |
| **CPUP** | **Villa Florida** | **8.95** | **117** | P | | **Pn** | **15 00 57.4** | **-1.6** |
| | comp=Z,0.9nm,0.5s,baz=296,slow=12,SNR=1.6 | | | | | | | |
| **CPUP** | **Villa Florida** | **8.95** | **117** | *eP* | | **Pn** | **15 01 00.0** | **+1.1** |
| **CO02** | **Combarbal** | **9.61** | **205** | Pn | | **Pn** | **15 01 07.4** | **0.0** |
| **PTLB** | **Pontes e Lacer** | **9.74** | **45** | | | **Pn** | **15 01 08.0** | **-1.2** |
| **PTLB** | **Pontes e Lacer** | **9.74** | **45** | *eP* | | **Pn** | **15 01 07.8** | **-1.3** |
| **MT13** | **San Alfonso** | **11.71** | **197** | | | **Pn** | **15 01 34.7** | **+1.2** |
| **SALV** | **Santo Antonio** | **11.95** | **58** | *eP* | | **Pn** | **15 01 36.9** | **+0.3** |
| **CRSM** | **Crissiumal (Br** | **12.10** | **116** | *eP* | | **Pn** | **15 01 38.4** | **+0.1** |
| **MT01** | **Popeta** | **12.10** | **200** | | | **Pn** | **15 01 38.0** | **-0.3** |
| **RODS** | **Rosario do Sul** | **12.57** | **130** | *eP* | | **P** | **15 01 46.3** | **+0.3** |
| **TBOT** | **Tacuaremb** | **12.91** | **137** | *eP* | | **P** | **15 01 50.3** | **+0.6** |
| **PTGB** | **Pitanga** | **13.17** | **102** | *eP* | | **Pn** | **15 01 51.7** | **+0.1** |
| **ALGR** | **Alto Alegre (B** | **13.43** | **120** | *eP* | | **P** | **15 01 56.6** | **+0.5** |
| **ITAB** | **Concordia** | **13.62** | **113** | P | | **Pn** | **15 01 56.5** | **-0.5** |
| **ITAB** | **Concordia** | **13.62** | **113** | *eP* | | **P** | **15 01 57.7** | **0.0** |
| **CPSB** | **Cacapava Do Su** | **13.87** | **127** | *eP* | | **P** | **15 02 00.3** | **-0.1** |
| **PCMB** | **Pacaembu** | **13.92** | **89** | *eP* | | **P** | **15 02 01.6** | **+0.6** |
| **LDASE** | **Londrina, Braz** | **13.95** | **96** | *eP* | | **P** | **15 02 02.1** | **+0.6** |
| **PDRB** | **Porto dos Gac** | **14.17** | **41** | *eP* | | **P** | **15 02 04.8** | **+1.0** |
| **PLTB** | **Pedras Altas** | **14.50** | **132** | P | | **P** | **15 02 07.2** | **-0.2** |
| **PLTB** | **Pedras Altas** | **14.50** | **132** | *eP* | | **P** | **15 02 06.8** | **-0.6** |
| **ITRB** | **Iturama** | **15.09** | **82** | *eP* | | **P** | **15 02 14.1** | **+0.1** |
| **ARAG** | **Araguaiana, MT** | **15.23** | **66** | *eP* | | **Pn** | **15 02 15.8** | **-0.6** |
| **FRTB** | **Fartura** | **15.38** | **96** | *eP* | | **P** | **15 02 17.4** | **+0.2** |
| **CNLB** | **Canela** | **15.38** | **119** | *eP* | | **P** | **15 02 16.8** | **-0.4** |
| **BB19B** | **Bebedouro** | **16.52** | **88** | *eP* | | **P** | **15 02 29.8** | **+0.2** |
| **RCLB** | **Rio Claro- Sao** | **17.29** | **93** | *eP* | | **P** | **15 02 37.8** | **-0.3** |
| **SPB** | **Sao Paulo** | **17.34** | **97** | *eP* | | **P** | **15 02 38.3** | **-0.2** |
| **PET01** | **Itanhaem-SP** | **17.49** | **99** | *eP* | | **P** | **15 02 40.2** | **0.0** |
| **IPMB** | **Ipameri, GO** | **17.51** | **78** | *eP* | | **P** | **15 02 40.2** | **-0.4** |
| **SNDB** | **Serra Nova Dou** | **17.71** | **56** | *eP* | | **P** | **15 02 42.0** | **-0.7** |
| **VAO** | **Valinhos** | **17.78** | **95** | | | **P** | **15 02 42.4** | **-1.1** |
| **VAO** | **Valinhos** | **17.78** | **95** | *eP* | | **P** | **15 02 43.0** | **-0.5** |
| **BDFB** | **Brasilia** | **18.53** | **71** | | | **P** | **15 02 51.5** | **-0.2** |
| BDFB | | | | IAmb | | IAmb | 15 02 52.8 | |
| | comp=Z,21nm,1.0s | | | | | | | |
| **BDFB** | **Brasilia** | **18.53** | **71** | P | | **P** | **15 02 51.4** | **-0.3** |
| | comp=Z,13nm,0.7s,baz=236,slow=12,SNR=15 | | | | | | | |
| **PMNB** | **Patos De Minas** | **18.96** | **81** | *eP* | | **P** | **15 02 56.0** | **-0.3** |
| **TEFE** | **Tefe** | **18.99** | **5** | *eP* | | **P** | **15 02 55.2** | **-1.2** |
| **PARB** | **Paraibuna** | **19.00** | **96** | *eP* | | **P** | **15 02 56.4** | **-0.2** |
| **BSCB** | **Bom Sucesso** | **19.99** | **90** | *eP* | | **P** | **15 03 07.6** | **+0.4** |
| **VAS01** | **Vassouras-RJ** | **21.07** | **94** | *eP* | | **P** | **15 03 18.3** | **-0.1** |
| **DIAM** | **Diamantina, MG** | **21.56** | **83** | *eP* | | **P** | **15 03 22.6** | **-0.5** |
| **JANB** | **Januaria** | **22.04** | **74** | *eP* | | **P** | **15 03 26.4** | **-1.9** |
| **DUB01** | **Fribugo-RJ** | **22.08** | **93** | *eP* | | **P** | **15 03 27.0** | **-0.7** |
| **SMTB** | **Santa Maria do** | **22.49** | **56** | *eP* | | **P** | **15 03 30.8** | **-0.6** |
| **SDBA** | **SAO DESIDERIO** | **22.68** | **67** | *eP* | | **P** | **15 03 31.9** | **-1.4** |
| **PRPB** | **Parauapebas** | **22.72** | **47** | *eP* | | **P** | **15 03 32.4** | **-1.1** |
| **SJMB** | **Sao Joao De Ma** | **23.75** | **85** | *eP* | | **P** | **15 03 41.6** | **-1.2** |
| **RIB01** | **Linhares ES** | **24.34** | **87** | *eP* | | **P** | **15 03 47.1** | **-1.2** |
| **GUA01** | **Guaratinga, BA** | **25.58** | **81** | *eP* | | **P** | **15 03 58.7** | **-0.7** |
| **MCPB** | **Macapa, AP** | **26.02** | **34** | *eP* | | **P** | **15 04 02.5** | **-0.8** |
| **NBLA** | **Lagarto - SE** | **29.50** | **72** | *eP* | | **P** | **15 04 32.3** | **-1.9** |
| **VNA3** | **Neumayer Olymp** | **58.29** | **161** | ⇑P | | **P** | **15 08 21.7** | **+0.8** |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **58.47** | **161** | ⇑P | | **P** | **15 08 22.5** | **+0.4** |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **58.85** | **161** | ⇑P | | **P** | **15 08 26.0** | **+1.2** |
| | comp=Z,1.6nm,0.4s,baz=300,slow=5.2 | | | | | | | |
| **SNAA** | **Sanae** | **60.48** | **161** | P | | **P** | **15 08 36.8** | **+0.8** |
| **SNAA** | **Sanae** | **60.48** | **161** | ⇑P | | **P** | **15 08 37.2** | **+1.2** |
| | comp=Z,25nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **60.48** | **161** | P | | **P** | **15 08 37.1** | **+1.2** |
| | comp=Z,0.5nm,0.4s,baz=202,slow=20,SNR=7.2 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **62.20** | **161** | ⇑P | | **P** | **15 08 49.0** | **+1.6** |
| | comp=Z,101nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.65** | **180** | P | | **P** | **15 09 24.5** | **+1.9** |
| QSPA | | | | IAmb | | IAmb | 15 09 25.1 | |
| | comp=Z,5.5nm,1.4s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.40** | **69** | P | | **P** | **15 10 08.0** | **-1.3** |
| TORD | | | | IAmb | | IAmb | 15 10 09.0 | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.40** | **69** | P | | **P** | **15 10 08.2** | **-1.1** |
| | comp=Z,2.0nm,0.5s,baz=262,slow=6.1,SNR=21 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **76.27** | **329** | P | | **P** | **15 10 15.0** | **+1.1** |
| | comp=Z,0.3nm,0.6s,baz=140,slow=7.2,SNR=4.2 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.86** | **321** | P | | **P** | **15 10 24.8** | **+2.0** |
| | comp=Z,0.4nm,0.6s,baz=142,slow=4.5,SNR=2.7 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **ESDC** | **Sonseca Array** | **84.87** | **43** | P | | **P** | **15 10 59.3** | **0.0** |
| | comp=Z,1.5nm,1.0s,baz=241,slow=4.5,SNR=6.8 | | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | | |
| **ASAR** | **Alice Springs** | **130.06** | **204** | PKP | | **PKPdf** | **15 17 33.5** | **+0.3** |
| | comp=Z,0.3nm,0.6s,baz=138,slow=1.7,SNR=4.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **133.23** | **207** | PKP | | **PKiKP** | **15 17 40.2** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=152,slow=1.9,SNR=6.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.96** | **39** | PKP | | **PKPab** | **15 18 00.5** | **+0.6** |
| | comp=Z,0.9nm,0.7s,baz=300,slow=4.2,SNR=4.8 | | | | | | | |

**DJA 15 15:01:26.5**±1.2,**1°N**±19°×**12°2E**±°,**h153**km±13km,**M2.2**/6,

**MLv2.2**/6,**Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MRSI** | **Marisa** | **0.10** | **115** | P | | Pn | 15 01 46.1 | -0.9 |
| **GTOI** | **Gorontalo** | **1.17** | **84** | P | | Pn | 15 01 51.0 | -2.0 |
| GTOI | | | | S | | Sn | 15 02 13.4 | +0.2 |
| **MPSI** | **Mapaga** | **1.96** | **265** | P | | Pn | 15 02 02.7 | +1.4 |
| **KMSI** | **Cibinong** | **2.13** | **89** | P | | Pn | 15 02 04.3 | +1.0 |

*IDC **15** 15:01:37.2±0.5,0.°81S×131.°13E,h0km,mb4.2/16, mbtmp4.2/18,ML4.1/1,MS3.3/15,Error ellipse: s-maj=30.7km s-min=10.9km az=76.0*

*DJA **15** 15:01:38.0±0.4,1.°S±4.°×13.°2E±.°,h10km,M4.7/12,mb4.6/6, mB5.1/1,MLv4.7/12,Mw(mB)4.4/1*

*NEIC **15** 15:01:42.3±2.4,0.°67S±0.°09×131.°5E±0.°1,h37km±6km, mb4.4/34,Error ellipse: s-maj=18.5km s-min=9.3km az=52.0*

**ISC 15 15:01:38.8**±0.4,**0.°68S**±0.°05×**131.°53E**±0.°06,**h10**km,**n90**, σ1**°76**/82,**mb4.4**/32,**MS3.4**/15,**Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SWI** | **Sorong** | **0.33** | **235** | P | | **Pg** | **15 01 45.8** | **+0.4** |
| **FAKI** | **Fak Fak** | **2.34** | **162** | Pn | | **Pn** | **15 02 17.0** | **-0.4** |
| **FAKI** | **Fak Fak** | **2.34** | **162** | P | | **Pn** | **15 02 17.3** | **-0.1** |
| FAKI | | | | S | | **Sb** | **15 02 52.2** | **+2.0** |
| **KMPI** | **Kaimana, Papua** | **3.68** | **144** | P | | **Pn** | **15 02 37.5** | **+1.7** |
| **MSAI** | **Masohi** | **3.71** | **224** | P | | **Pn** | **15 02 37.4** | **+1.1** |
| MSAI | | | | S | | **Sn** | **15 03 24.4** | **+4.3** |
| **BNDI** | **Bandanaira** | **4.15** | **203** | P | | **Pn** | **15 02 42.9** | **+0.6** |
| **TNTI** | **Ternate** | **4.40** | **289** | Pn | | **Pn** | **15 02 44.7** | **-1.1** |
| **TNTI** | **Ternate** | **4.40** | **289** | P | | **Pn** | **15 02 44.2** | **-1.6** |
| **TNTI** | **Ternate** | **4.40** | **289** | P | | **Pn** | **15 02 44.8** | **-1.0** |
| **NLAI** | **Namlea** | **5.11** | **240** | P | | **Pn** | **15 02 56.3** | **+0.9** |
| **SAUI** | **Saumlaki** | **7.26** | **182** | Pn | | **Pn** | **15 03 24.1** | **-1.0** |
| **GTOI** | **Gorontalo** | **8.62** | **279** | P | | **Pn** | **15 03 46.2** | **+2.5** |
| | 17nm,0.7s | | | | | | | |
| **TOLI2** | **Tolitoli** | **10.89** | **279** | Pn | | **Pn** | **15 04 15.0** | **+0.1** |
| **MPSI** | **Mapaga** | **11.67** | **275** | P | | **Pn** | **15 04 25.5** | **-0.1** |
| | 27nm,0.8s | | | | | | | |
| **MTN** | **Manton Dam** | **12.10** | **182** | Pn | | **Pn** | **15 04 28.1** | **-3.3** |
| **BKSI** | **Bulukumba** | **12.29** | **248** | P | | Pn | 15 04 41.5 | +7.5 |
| **KAPI** | **Kappang** | **12.52** | **250** | Pn | | **Pn** | **15 04 41.0** | **+3.7** |
| **KAPI** | **Kappang** | **12.52** | **250** | Pn | | **Pn** | **15 04 40.2** | **+3.0** |
| | 2.1nm,0.3s,baz=71,slow=5.8,SNR=8.1 | | | | | | | |
| KAPI | | | | LR | | LR | 15 10 12.4 | |
| | comp=Z,121nm,19.7s,baz=80,slow=43 | | | | | | | |
| **KNRA** | **Kununurra** | **15.15** | **190** | Pn | | **Pn** | **15 05 07.1** | **-6.0** |
| KNRA | | | | IAmb | | IAmb | 15 05

| | | | | | | |
|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **66.68 332** | P | **P** | **15 12 28.4** | **-1.4** |
| ZAA0 | | | IAmb | IAmb | 15 12 39.3 | |
| | comp=Z,6.0nm,1.4s | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.68 332** | P | **P** | **15 12 27.6** | **-2.2** |
| **ZALV** | **Zalesovo Beam** | **66.68 332** | P | **P** | **15 12 28.5** | **-1.3** |
| | comp=Z,0.8nm,0.6s,baz=132,slow=6.3,SNR=4.0 | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | |
| **ARSB** | **Arslanbob** | **67.34 316** | P | **P** | **15 12 33.8** | **-0.7** |
| **DRK** | **Karamyk** | **67.50 314** | P | **P** | **15 12 35.4** | **-0.4** |
| **KURK** | **Kurchatov** | **68.02 327** | P | **P** | **15 12 36.2** | **-2.1** |
| **KURBB** | **Kurchatov Arra** | **68.02 327** | P | **P** | **15 12 37.3** | **-1.0** |
| | comp=Z,2.6nm,0.7s,baz=123,slow=5.9,SNR=20 | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | |
| **BTK** | **Batken** | **68.41 314** | P | **P** | **15 12 40.4** | **-0.8** |
| BTK | | | IAmb | IAmb | 15 12 54.1 | |
| | comp=Z,5.4nm,1.1s | | | | | |
| **GAR** | **Garm** | **68.42 313** | P | **P** | **15 12 40.0** | **-1.3** |
| **SIMJ** | **Simiganj** | **69.27 312** | P | **P** | **15 12 44.9** | **-1.8** |
| SIMJ | | | IAmb | IAmb | 15 12 48.0 | |
| | comp=Z,7.9nm,1.4s | | | | | |
| **KK31** | **Karatay Array** | **69.70 317** | P | **P** | **15 12 48.0** | **-1.0** |
| KK31 | | | IAmb | IAmb | 15 12 49.2 | |
| | comp=Z,3.2nm,1.0s | | | | | |
| **KKAR** | **Karatay Array** | **69.70 317** | P | **P** | **15 12 47.7** | **-1.4** |
| KKAR | | | IAmb | IAmb | 15 12 49.2 | |
| | comp=Z,3.2nm,1.0s | | | | | |
| **TIXI** | **Tiksi** | **72.23 359** | LR | LR | 15 44 15.0 | |
| | comp=Z,34nm,19.4s,baz=189,slow=35 | | | | | |
| **BVAR** | **Borovoye Array** | **73.61 327** | P | **P** | **15 13 11.8** | **-0.6** |
| | comp=Z,3.3nm,0.9s,baz=120,slow=6.0,SNR=8.8 | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | |
| **BRVK** | **Borovoye** | **73.68 327** | P | **P** | **15 13 10.4** | **-2.4** |
| BRVK | | | IAmb | IAmb | 15 13 13.0 | |
| | comp=Z,3.6nm,0.9s | | | | | |
| **VNDA** | **Vanda** | **78.51 174** | P | **P** | **15 13 39.1** | **-0.7** |
| VNDA | | | IAmb | IAmb | 15 13 41.0 | |
| | comp=Z,3.2nm,1.1s | | | | | |
| **VNDA** | **Vanda** | **78.51 174** | P | **P** | **15 13 39.5** | **-0.3** |
| | comp=Z,1.6nm,0.8s,baz=317,slow=6.6,SNR=13 | | | | | |
| VNDA | | | LR | LR | 15 48 09.0 | |
| | comp=Z,54nm,19.4s,baz=338,slow=36 | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | |
| **ABKAR** | **Akbulak array** | **78.57 321** | P | **P** | **15 13 38.7** | **-2.0** |
| **SBA** | **Scott Base** | **79.37 173** | P | **P** | **15 13 44.7** | **+0.2** |
| SBA | | | IAmb | IAmb | 15 14 02.1 | |
| | comp=Z,5.2nm,1.4s | | | | | |
| **ARU** | **Arti** | **81.20 327** | P | **P** | **15 13 53.1** | **-1.7** |
| | comp=Z,1.7nm,0.3s,baz=90,slow=20,SNR=2.2 | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | |
| **KDAK** | **Kodiak Island** | **83.07 32** | LR | LR | 15 52 01.9 | |
| | comp=Z,25nm,18.4s,baz=211,slow=36 | | | | | |
| **ILAR** | **Eielson Array** | **87.01 25** | P | **P** | **15 14 25.5** | **+1.2** |
| | comp=Z,1.0nm,1.1s,baz=280,slow=5.3,SNR=3.1 | | | | | |
| | comp=Z,1.0nm,1.1s | | | | | |
| **QSPA** | **South Pole Qui** | **89.26 180** | P | **P** | **15 14 35.4** | **+0.4** |
| | comp=Z,3.2nm,0.7s,baz=304,slow=1.5,SNR=21 | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | |
| **ARCES** | **ARCESS Array B** | **96.20 340** | LR | LR | 16 01 51.0 | |
| | comp=Z,19nm,20.9s,baz=122,slow=38 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.80 286** | PKP | **PKPdf** | **15 20 46.6** | **-1.1** |
| | comp=Z,0.4nm,0.7s,baz=11,slow=3.2,SNR=2.0 | | | | | |
| **CPUP** | **Villa Florida** | **151.82 163** | PKPbc | **PKiKP** | **15 21 34.6** | **-0.6** |
| | comp=Z,2.3nm,0.5s,baz=250,slow=2.9,SNR=6.1 | | | | | |

**IDC 15 15:11:03.4±478.0, 57°.18N×95°.07E, h0km, Error ellipse: s-maj=179.7km s-min=105.1km az=36.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **6.65** | **245** | I | I | 15 50 30.0 | |
| | baz=58,slow=320,SNR=1.4 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **11.65** | **139** | I | I | 16 21 40.0 | |
| | baz=330,slow=325,SNR=0.6 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **22.67** | **269** | I | I | 17 28 30.0 | |
| | baz=58,slow=319,SNR=1.1 | | | | | | |

**IDC 15 15:15:43.0±2.2, 6°.59S×118°.43E, h0km, mb3.2/4, mbtmp3.3/4, Error ellipse: s-maj=79.2km s-min=24.8km az=63.0, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.36** | **132** | P | Pn | 15 20 23.2 | -0.1 |
| | 0.7nm,0.8s,baz=299,slow=12,SNR=11 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.57** | **140** | P | P | 15 20 43.7 | -1.4 |
| | 0.2nm,0.5s,baz=313,slow=9.4,SNR=6.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **46.74** | **22** | P | P | 15 24 13.4 | -0.6 |
| | 0.8nm,0.3s,baz=213,slow=7.8,SNR=11 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.07** | **333** | P | P | 15 26 06.1 | +0.6 |
| | 0.1nm,0.4s,baz=136,slow=6.6,SNR=1.3 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

**IDC 15 15:28:37.7±407.0, 58°.77N×54°.93E, h0km, Error ellipse: s-maj=162.7km s-min=139.5km az=52.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **8.57** | **167** | I | I | 16 20 00.0 | |
| | baz=349,slow=316,SNR=1.0 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **9.69** | **265** | I | I | 16 26 00.0 | |
| | baz=70,slow=322,SNR=1.3 | | | | | | |
| **I37NO** | **I37NO** | **18.67** | **318** | I | I | 17 20 50.0 | |
| | baz=105,slow=320,SNR=2.1 | | | | | | |

**IDC 15 15:44:08.9±2.2, 6°.89S×128°.61E, h0km, mb3.4/1, mbtmp3.7/3, ML3.7/2, Error ellipse: s-maj=109.2km s-min=33.0km az=66.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.12** | **157** | Pn | Pn | 15 47 29.5 | -0.8 |
| | 0.3nm,0.3s,baz=336,slow=13,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 15 49 53.4 | -15 |
| | 0.8nm,0.3s,baz=337,slow=22,SNR=9.9 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **17.44** | **164** | P | Pn | 15 48 14.3 | +0.5 |
| | 0.6nm,0.3s,baz=342,slow=11,SNR=122 | | | | | | |
| ASAR | | | | S | Sn | 15 51 16.3 | -12 |
| | 0.3nm,0.4s,baz=352,slow=37,SNR=2.6 | | | | | | |
| | 3.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.38** | **327** | P | P | 15 55 06.2 | 0.0 |
| | 0.2nm,0.6s,baz=146,slow=8.0,SNR=1.8 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*GCG **15** 15:59:25.9±0.3, 14°.45N×91°.03W, h87km±26km, MD3.6*
*SNET **15** 15:59:25.3±0.4, 14°.11N×91°.16W, h18km±999km, ML3.3*
**ISC 15 15:59:24.8±1.7, 14°.2N±0°.2×91°.2W±0°.1, h10km, n9, σ0°.92/13, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SULM** | **Suchitepequez,** | **0.40** | **289** | *eP* | **Pn** | **15 59 40.6** | **+0.7** |
| **FUG** | **Fuego 3** | **0.42** | **50** | *eP* | **Pn** | **15 59 39.1** | **-1.2** |
| **PCG** | **Pacaya** | **0.59** | **68** | *eP* | **Pn** | **15 59 40.6** | **-0.9** |
| **STG3** | **Santiaguito 3,** | **0.66** | **324** | *eP* | **Pn** | **15 59 41.7** | **-0.4** |
| **NBG** | **Las Nubes** | **0.90** | **63** | *eP* | **Pn** | **15 59 45.9** | **+1.5** |
| **NUBE** | **Las Nubes** | **1.38** | **101** | *eP* | **Pn** | **15 59 49.2** | **-0.5** |
| NUBE | | | | *eS* | **Sn** | **16 00 07.4** | **-1.2** |
| NUBE | | | | IAML | | 16 00 08.8 | |
| | comp=Z,186nm,0.3s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.54** | **103** | *eP* | **Pn** | **15 59 52.1** | **+0.3** |
| CEVE | | | | *eS* | **Sn** | **16 00 13.2** | **+0.9** |
| CEVE | | | | IAML | | 16 00 18.5 | |
| | comp=Z,764nm,0.3s | | | | | | |
| **SNJE** | **San Jose** | **1.55** | **101** | *eP* | **Pn** | **15 59 52.3** | **+0.5** |
| SNJE | | | | *eS* | **Sn** | **16 00 13.1** | **+0.7** |
| **JAYA** | **Jayaque - finc** | **1.75** | **107** | *eP* | **Pn** | **15 59 54.0** | **-0.4** |
| JAYA | | | | *eS* | **Sn** | **16 00 16.7** | **-0.1** |
| JAYA | | | | IAML | | 16 00 21.0 | |
| | comp=Z,564nm,0.2s | | | | | | |

**IDC 15 16:00:03.5±4.5, 47°.41N×93°.26W, h0km, mbtmp2.4/1, ML0.8/1, Error ellipse: s-maj=69.9km s-min=31.0km az=60.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.33** | **330** | Pn | Pn | 16 00 55.6 | -1.2 |
| | 0.1nm,0.3s,baz=153,slow=9.0,SNR=1.5 | | | | | | |
| ULM | | | | Pg | Pb | 16 01 02.5 | -0.8 |
| | 0.4nm,0.3s,baz=152,slow=16,SNR=1.9 | | | | | | |
| ULM | | | | Sn | Sn | 16 01 34.8 | -2.2 |
| | 0.4nm,0.3s,baz=259,slow=3.3,SNR=2.7 | | | | | | |
| ULM | | | | Lg | Lg | 16 01 46.3 | |
| | 0.7nm,0.3s,baz=243,slow=22,SNR=3.0 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.34** | **328** | I | I | 16 20 35.0 | |
| | 0.1nm,1.0s,baz=145,slow=329,SNR=13 | | | | | | |
| **PDAR** | **Pinedale Array** | **12.41** | **254** | Lg | Lg | 16 06 26.6 | |
| | 0.1nm,0.3s,baz=71,slow=34,SNR=1.4 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **16.04** | **282** | I | I | 17 33 50.0 | |
| | baz=86,slow=314,SNR=2.7 | | | | | | |

*JSN **15** 16:03:08.2±0.3, 17°.93N×76°.28W, h15km±2km, MD3.3*
*SSNC **15** 16:03:10.4±1.1, 18°.00N×76°.43W, h8km±11km, MD2.9, ML2.2*
**ISC 15 16:03:07.5±2.4, 17°.9N±0°.1×76°.38W±0°.08, h10km, n10, σ2°.21/17, 2C-2D, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOJ** | **Hope** | **0.36** | **280** | *iP* | **Pg** | **16 03 16.7** | **+2.1** |
| **STH** | **Stony Hill** | **0.43** | **288** | *iP* | **Pg** | **16 03 17.8** | **+1.8** |
| **MTDJ** | **Mount Denham** | **1.14** | **285** | *iP* | **Pg** | **16 03 29.4** | **0.0** |
| MTDJ | | | | *iS* | **Sg** | **16 03 45.3** | **+1.2** |
| **MTDJ** | **Mount Denham** | **1.14** | **285** | *eP* | **Pg** | **16 03 29.2** | **-0.1** |
| MTDJ | | | | *eS* | **Sg** | **16 03 45.1** | **+1.0** |
| MTDJ | | | | IAML | | 16 03 47.7 | |
| | 400nm,0.4s | | | | | | |
| MTDJ | | | | IAML | | 16 03 48.1 | |
| | comp=Z,211nm,0.3s | | | | | | |
| **CHIV** | **Chivirico** | **2.02** | **359** | *eP* | **Pn** | **16 03 41.1** | **-0.5** |
| CHIV | | | | IAML | | 16 04 11.4 | |
| | comp=E,4.1nm,0.2s | | | | | | |
| CHIV | | | | IAML | | 16 04 11.9 | |
| | comp=N,4.1nm,0.2s | | | | | | |
| **MARVS** | **Santiago de Cu** | **2.10** | **12** | *eP* | **Pn** | **16 03 41.9** | **-0.8** |
| MARVS | | | | *eS* | **Sn** | **16 04 06.4** | **-2.5** |
| MARVS | | | | IAML | | 16 04 10.2 | |
| | comp=N,14nm,0.2s | | | | | | |
| MARVS | | | | IAML | | 16 04 10.2 | |
| | comp=E,10nm,0.2s | | | | | | |
| **RCC** | **Rio Carpintero** | **2.14** | **17** | *eP* | **Pn** | **16 03 43.1** | **-0.3** |
| RCC | | | | *eS* | **Sn** | **16 04 08.6** | **-1.4** |
| RCC | | | | *eSg* | **Sb** | **16 04 10.7** | **-2.4** |
| **LMGC** | **Las Mercedes** | **2.19** | **344** | *eP* | **Pn** | **16 03 43.3** | **-0.7** |
| LMGC | | | | *eS* | **Sn** | **16 04 07.8** | **-3.4** |
| **GTBY** | **Guantanamo Bay** | **2.31** | **31** | *eP* | **Pn** | **16 03 46.0** | **+0.3** |
| GTBY | | | | *eS* | **Sn** | **16 04 13.6** | **-0.6** |
| **YAR** | **Yar** | **2.42** | **0** | *eP* | Pg | 16 04 04.3 | +10 |
| YAR | | | | *eS* | **Sg** | **16 04 30.8** | **+5.5** |

*RSNC **15** 16:14:40.2±0.0, 13°.N±4°.×7°.1W±°, h-1km±4km, M4.5, mb4.7, mB5.1, ML4.0, Mw(mB)4.5*
*FUNV **15** 16:14:42.6, 12°.80N×71°.17W, h69km, MW4.2*
**ISC 15 16:14:39.3±1.2, 12°.65N±0°.07×71°.12W±0°.04, h10km, n39, σ2°.09/61, 6C-3D, Near north coast of Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUA1** | **Aruba** | **1.09** | **97** | P | **Pn** | **16 15 02.4** | **+1.8** |
| AUA1 | | | | S | **Sn** | **16 15 20.0** | **+4.3** |
| **CRJC** | **Cerrejon, Guaj** | **2.37** | **227** | P | **Pn** | **16 15 17.4** | **-0.9** |
| CRJC | | | | S | **Sn** | **16 15 48.6** | **+1.1** |
| **JACV** | **Jacura** | **2.72** | **124** | *eP* | **Pn** | **16 15 25.0** | **+1.9** |
| JACV | | | | *eS* | **Sn** | **16 15 56.5** | **+0.3** |
| **MCQV** | **Machiques** | **2.93** | **208** | *eP* | **Pn** | **16 15 26.2** | **+0.2** |
| MCQV | | | | *eS* | **Sn** | **16 16 00.7** | **-0.6** |
| **TEPV** | **Terepaima** | **3.27** | **145** | *eP* | **Pn** | **16 15 32.7** | **+2.1** |
| TEPV | | | | *eS* | **Sn** | **16 16 10.0** | **+0.4** |
| **SMRC** | **Santa Marta, M** | **3.38** | **244** | P | **Pn** | **16 15 32.3** | **+0.1** |
| SMRC | | | | S | **Sn** | **16 16 09.0** | **-3.4** |
| **SDV** | **Santo Domingo** | **3.77** | **173** | P | **Pn** | **16 15 40.3** | **+2.6** |
| SDV | | | | S | **Sn** | **16 16 25.3** | **+3.1** |
| **MAPV** | **Macapo** | **3.83** | **137** | *eP* | **Pn** | **16 15 39.9** | **+1.5** |
| MAPV | | | | *eS* | **Sn** | **16 16 23.3** | **-0.2** |
| **TURV** | **Turiamo** | **3.88** | **124** | *eP* | **Pn** | **16 15 39.6** | **+0.5** |
| TURV | | | | *eS* | **Sn** | **16 16 23.5** | **-1.3** |
| **ARGC** | **Ariguani, Magd** | **4.14** | **228** | P | **Pn** | **16 15 42.8** | **+0.2** |
| ARGC | | | | S | **Sn** | **16 16 33.6** | **+2.5** |
| **SOCV** | **Socops** | **4.34** | **177** | *eP* | **Pn** | **16 15 47.4** | **+1.9** |
| SOCV | | | | *eS* | **Sn** | **16 16 34.6** | **-1.6** |
| **BENV** | **Beln** | **4.36** | **127** | *eP* | **Pn** | **16 15 48.5** | **+2.8** |
| BENV | | | | *eS* | **Sn** | **16 16 33.8** | **-2.9** |
| **FUNV** | **FUNVISIS** | **4.74** | **117** | *eP* | **Pn** | **16 15 51.8** | **+0.8** |
| FUNV | | | | *eS* | **Sn** | **16 16 42.6** | **-3.5** |
| **BAUV** | **El Baul** | **4.76** | **140** | *eP* | **Pn** | **16 15 53.0** | **+1.9** |
| BAUV | | | | *eS* | **Sn** | **16 16 44.1** | **-2.4** |
| **SJCC** | **San Jacinto, C** | **4.83** | **236** | P | **Pn** | **16 15 55.0** | **+2.8** |
| SJCC | | | | S | **Sn** | **16 16 52.7** | **+4.3** |
| **OCAC** | **Ocana** | **4.89** | **207** | P | **Pn** | **16 15 52.8** | **-0.3** |
| OCAC | | | | S | **Sn** | **16 16 48.0** | **-1.8** |
| **CAPV** | **Capacho** | **4.90** | **194** | *eP* | **Pn** | **16 15 54.1** | **+0.9** |
| CAPV | | | | *eS* | **Sn** | **16 16 47.2** | **-2.9** |
| **PAMC** | **Pamplona, Colo** | **5.50** | **197** | P | **Pn** | **16 16 01.9** | **+0.1** |
| PAMC | | | | S | **Sn** | **16 17 04.9** | **-0.5** |
| **MERV** | **Las Mercedes** | **5.81** | **125** | *eP* | **Pn** | **16 16 06.4** | **+0.8** |
| MERV | | | | *eS* | **Sn** | **16 17 08.2** | **-4.2** |
| **BRJC** | **Barrancabermej** | **6.21** | **205** | P | **Pn** | **16 16 11.8** | **+0.8** |
| | 109nm,0.5s,3μm | | | | | | |
| BRJC | | | | S | **Sn** | **16 17 20.4** | **-1.7** |
| | 109nm,0.5s,3μm | | | | | | |
| **SDDR** | **Presa de Saban** | **6.30** | **359** | P | **Pn** | **16 16 13.5** | **+1.1** |
| | 27nm,0.6s | | | | | | |
| SDDR | | | | S | **Sn** | **16 17 20.4** | **-4.1** |
| | 27nm,0.6s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **6.31** | **216** | P | **Pn** | **16 16 12.7** | **+0.2** |
| | 23nm,0.6s,684nm | | | | | | |
| **BARC** | **Barichara** | **6.35** | **199** | P | **Pn** | **16 16 14.0** | **+0.7** |
| **URCC** | **San Jos de Ur** | **6.53** | **222** | P | **Pn** | **16 16 14.0** | **-1.4** |
| **CACV** | **CAICARA DEL OR** | **6.77** | **138** | *eP* | Pn | 16 16 24.6 | +5.8 |
| CACV | | | | *eS* | **Sn** | **16 17 39.9** | **+3.9** |
| **PCRV** | **Puerto La Cruz** | **6.81** | **110** | *eP* | **Pn** | **16 16 20.0** | **+0.6** |
| PCRV | | | | *eS* | **Sn** | **16 17 31.6** | **-5.5** |
| **PTBC** | **PUERTO BERRIO,** | **6.91** | **209** | P | **Pn** | **16 16 18.9** | **-1.8** |
| | 18nm,0.5s | | | | | | |
| **RUSC** | **La Rusia** | **6.99** | **196** | P | **Pn** | **16 16 22.4** | **+0.2** |
| | 49nm,0.7s,790nm | | | | | | |
| **SPBC** | **San Pablo de B** | **7.54** | **203** | P | **Pn** | **16 16 29.4** | **0.0** |
| **NORC** | **Norcasia** | **7.96** | **208** | P | **Pn** | **16 16 35.7** | **+0.6** |
| | 16nm,0.4s | | | | | | |
| **CHIC** | **Chingaza** | **8.38** | **198** | P | **Pn** | **16 16 41.6** | **+0.4** |
| | 38nm,0.6s,571nm | | | | | | |
| **VILC** | **Villavicencio,** | **8.86** | **197** | P | **Pn** | **16 16 46.9** | **-0.7** |
| | 111nm,2.1s | | | | | | |
| **ANIL** | **Santa Ana** | **9.15** | **208** | P | **Pn** | **16 16 54.0** | **+2.3** |
| **PLMC** | **San Jos del P** | **9.23** | **214** | P | **Pn** | **16 16 52.9** | **+0.2** |
| | 19nm,0.6s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **9.60** | **206** | P | **Pn** | **16 16 58.4** | **+0.8** |
| | 40nm,0.8s | | | | | | |
| **PRAC** | **Prado** | **9.63** | **203** | P | **Pn** | **16 16 57.7** | **-0.4** |
| **URMC** | **La Uribe, Meta** | **9.88** | **199** | P | **Pn** | **16 17 01.8** | **+0.2** |
| | 52nm,0.7s,791nm | | | | | | |
| **JAMC** | **Jamundi, Valle** | **10.87** | **211** | P | **Pn** | **16 17 14.4** | **-0.8** |
| | 5.4nm,0.9s | | | | | | |
| **GARC** | **Garzon, Huila** | **11.26** | **203** | P | **Pn** | **16 17 21.0** | **+0.3** |

*AEIC **15** 16:16:18.5±2.3, 69°.58N±0°.06×144°.60W±0°.06, h10km±5km, ML3.4, ML3.5/116(NEIC), Error ellipse: s-maj=8.8km s-min=3.0km az=187.0*
*NEIC **15** 16:16:18.7±1.7, 69°.58N±0°.06×144°.41W±0°.07, h3km±8km, Error ellipse: s-maj=8.9km s-min=3.1km az=192.0*
*IDC **15** 16:16:19.2±1.8, 69°.66N×144°.47W, h0km, mb3.5/2, mbtmp3.5/5, ML3.2/3, MS2.7/5, Error ellipse: s-maj=25.5km s-min=19.2km az=112.0*
**ISC 15 16:16:19.5±0.7, 69°.57N±0°.04×144°.42W±0°.03, h14km, n127, σ1s24/130, MS3.0/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **76** | Pg | **Pg** | **16 16 23.1** | **-1.9** |
| C27K | | | | | **Sg** | **16 16 26.9** | **-1.7** |
| **C26K** | **Camden Bay** | **0.39** | **334** | | **Pg** | **16 16 27.0** | **-0.4** |
| C26K | | | | | **Sg** | **16 16 32.6** | **0.0** |
| **D25K** | **Kavik River** | **0.73** | **251** | Pg | **Pg** | **16 16 31.1** | **-2.6** |
| D25K | | | | Sg | **Sg** | **16 16 40.8** | **-2.5** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **D27M** | **Malcolm River** | **1.27** | **103** | | **Pn** | **16 16 41.5** | **-1.3** |
| D27M | | | | Sg | **Sb** | **16 16 59.2** | **-0.1** |
| D27M | | | | IAML | | 16 17 03.7 | |
| | comp=N,675nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.50** | **278** | | **Pn** | **16 16 46.6** | **+0.6** |
| C24K | | | | IAML | | 16 17 09.6 | |
| | comp=N,694nm,1.2s | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **257** | Pn | **Pn** | **16 16 47.0** | **-0.4** |
| **E27K** | **Coleen River** | **1.72** | **142** | Pn | **Pn** | **16 16 49.5** | **+0.5** |
| **F26K** | **Sheenjek River** | **1.88** | **177** | Pn | **Pn** | **16 16 52.0** | **+0.8** |
| F26K | | | | IAML | | 16 17 22.1 | |
| | comp=E,541nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.00** | **117** | Pn | **Pn** | **16 16 53.5** | **+0.7** |
| **D28M** | **Stokes Point** | **2.02** | **94** | | **Pn** | **16 16 54.5** | **+1.5** |
| **F25K** | **Christian Rive** | **2.03** | **193** | Pn | **Pn** | **16 16 54.7** | **+1.4** |
| F25K | | | | IAML | | 16 17 27.0 | |
| | comp=E,324nm,1.4s | | | | | | |
| F25K | | | | IAML | | 16 17 29.3 | |
| | comp=N,296nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.07** | **246** | Pn | **Pn** | **16 16 55.2** | **+1.4** |
| **E24K** | **Your Creek** | **2.10** | **226** | Pn | **Pn** | **16 16 55.4** | **+1.1** |
| E24K | | | | IAML | | 16 17 30.2 | |
| | comp=E,386nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.15** | **182** | Pn | **Pn** | **16 16 55.3** | **+0.4** |
| **C23K** | **Itkillik River** | **2.18** | **280** | Pn | **Pb** | **16 16 58.5** | **-0.1** |
| C23K | | | | IAML | | 16 17 38.6 | |
| | comp=N,286nm,1.2s | | | | | | |
| C23K | | | | IAML | | 16 17 41.9 | |
| | comp=E,343nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.31** | **258** | Pn | **Pn** | **16 16 56.6** | **-0.4** |
| D23K | | | | IAML | | 16 17 43.1 | |
| | comp=N,228nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.42** | **234** | Pn | **Pn** | **16 16 58.8** | **+0.2** |
| **F24K** | **Squaw Lake** | **2.42** | **213** | Pn | **Pn** | **16 16 59.1** | **+0.5** |
| **F28M** | **Old Crow** | **2.58** | **137** | Pn | **Pn** | **16 17 01.0** | **+0.3** |
| F28M | | | | IAML | | 16 17 45.5 | |
| | comp=N,172nm,0.8s | | | | | | |
| F28M | | | | IAML | | 16 17 47.8 | |
| | comp=E,194nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.63** | **114** | Pn | **Pn** | **16 17 01.9** | **+0.5** |
| E29M | | | | IAML | | 16 17 44.7 | |
| | comp=N,173nm,0.8s | | | | | | |
| E29M | | | | IAML | | 16 17 51.5 | |
| | comp=E,148nm,0.9s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.64** | **175** | | **Pn** | **16 17 03.4** | **+1.8** |
| **G25K** | **Bearman Lake** | **2.88** | **193** | | **Pn** | **16 17 06.7** | **+1.8** |
| **G27K** | **Doyon Strip** | **2.96** | **158** | Pn | **Pn** | **16 17 05.1** | **-0.8** |
| **D22K** | **Ayikyak River** | **3.02** | **261** | Pn | **Pn** | **16 17 06.9** | **0.0** |
| D22K | | | | IAML | | 16 18 04.3 | |
| | comp=E,196nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.03** | **186** | Pn | **Pn** | **16 17 06.9** | **0.0** |
| FYU | | | | IAML | | 16 18 00.3 | |
| | comp=E,178nm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.10** | **203** | Pn | **Pn** | **16 17 07.1** | **-0.8** |
| G24K | | | | IAML | | 16 18 03.9 | |
| | comp=E,165nm,1.0s | | | | | | |
| **COLD** | **Coldfoot** | **3.18** | **225** | Pn | **Pn** | **16 17 09.8** | **+0.9** |
| **B22K** | **Teshekpuk Lake** | **3.19** | **288** | Pn | **Pn** | **16 17 08.9** | **-0.2** |
| B22K | | | | IAML | | 16 18 08.7 | |
| | comp=N,152nm,0.8s | | | | | | |
| B22K | | | | IAML | | 16 18 23.6 | |
| | comp=E,149nm,0.9s | | | | | | |
| **H25L** | **Birch Creek** | **3.36** | **190** | | **Pn** | **16 17 13.9** | **+2.5** |
| **F22K** | **John River** | **3.52** | **238** | | **Pn** | **16 17 16.4** | **+2.7** |
| **H27K** | **Steamboat Moun** | **3.53** | **161** | | **Pn** | **16 17 15.4** | **+1.6** |
| **G23K** | **Bananza Creek** | **3.55** | **219** | Pn | **Pn** | **16 17 13.5** | **-0.6** |
| G23K | | | | IAML | | 16 18 17.1 | |
| | comp=N,85nm,0.9s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.57** | **276** | Pn | **Pn** | **16 17 15.6** | **+1.3** |
| B21K | | | | IAML | | 16 18 36.8 | |
| | comp=E,116nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **3.58** | **135** | Pn | **Pn** | **16 17 15.0** | **+0.6** |
| **E21K** | **Killik River** | **3.62** | **256** | Pn | **Pn** | **16 17 15.1** | **+0.1** |
| E21K | | | | IAML | | 16 18 23.5 | |
| | comp=N,120nm,1.0s | | | | | | |
| **F30M** | **Barrier River** | **3.73** | **118** | | **Pn** | **16 17 19.7** | **+3.2** |
| **H24K** | **Noodor Dome** | **3.97** | **201** | Pn | **Pn** | **16 17 20.3** | **+0.4** |
| H24K | | | | IAML | | 16 18 36.3 | |
| | comp=N,72nm,1.1s | | | | | | |
| H24K | | | | IAML | | 16 18 37.1 | |
| | comp=E,59nm,1.2s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.00** | **127** | Pn | **Pn** | **16 17 20.1** | **-0.3** |
| G30M | | | | IAML | | 16 18 43.5 | |
| | comp=E,53nm,0.9s | | | | | | |
| G30M | | | | IAML | | 16 18 45.0 | |
| | comp=N,56nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.07** | **143** | Pn | **Pn** | **16 17 21.3** | **+0.1** |
| H29M | | | | IAML | | 16 18 35.2 | |
| | comp=N,66nm,1.1s | | | | | | |
| H29M | | | | IAML | | 16 18 41.5 | |
| | comp=E,78nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **186** | Pn | **Pn** | **16 17 23.1** | **+1.5** |
| PRP | | | | IAML | | 16 18 15.3 | |
| | comp=E,80nm,0.7s | | | | | | |
| **F21K** | **Alatna River** | **4.09** | **239** | Pn | **Pn** | **16 17 23.2** | **+1.6** |
| F21K | | | | IAML | | 16 18 32.0 | |
| | comp=N,54nm,0.8s | | | | | | |
| F21K | | | | IAML | | 16 18 32.5 | |
| | comp=E,67nm,1.1s | | | | | | |
| **I27K** | **Kandik River** | **4.12** | **164** | | **Pn** | **16 17 23.6** | **+1.6** |
| **INK** | **Inuvik** | **4.13** | **103** | Pn | **Pn** | **16 17 24.7** | **+2.7** |
| | comp=E,1.6nm,0.3s,baz=294,slow=6.6,SNR=4.8 | | | | | | |
| INK | | | | Sn | **Sn** | **16 18 11.3** | **+1.3** |
| | comp=E,1.1nm,0.3s,baz=106,slow=11,SNR=3.9 | | | | | | |
| INK | | | | LR | LR | 16 19 28.0 | |
| | comp=E,59nm,19.8s,baz=266,slow=45 | | | | | | |
| | comp=E,4.6nm,0.4s | | | | | | |
| **H23K** | **Yukon River** | **4.23** | **210** | Pn | **Pn** | **16 17 23.2** | **-0.3** |
| **I26K** | **Coal Creek Min** | **4.31** | **173** | Pn | **Pn** | **16 17 25.4** | **+0.9** |
| **EPYK** | **Eagle Plains** | **4.33** | **134** | Pn | **Pn** | **16 17 25.5** | **+0.7** |
| **B20K** | **Meade River** | **4.44** | **282** | Pn | **Pn** | **16 17 27.8** | **+1.5** |
| **D20K** | **Etivluk River** | **4.44** | **265** | | **Pn** | **16 17 27.8** | **+1.5** |
| **E20K** | **Nigu River** | **4.45** | **258** | | **Pn** | **16 17 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J25K** | **Salcha River,** | **4.99** | **185** | Pn | **Pn** | **16 17 33.5** | **-0.4** |
| J25K | | | | IAML | | 16 18 38.7 | |
| | comp=N,26nm,0.9s | | | | | | |
| J25K | | | | IAML | | 16 19 11.3 | |
| | comp=E,40nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **5.03** | **264** | Pn | **Pn** | **16 17 35.5** | **+1.1** |
| D19K | | | | IAML | | 16 19 23.7 | |
| | comp=E,39nm,1.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.07** | **223** | Pn | **Pn** | **16 17 35.6** | **+0.7** |
| **J26L** | **Joseph Creek** | **5.10** | **176** | Pn | **Pn** | **16 17 36.1** | **+0.7** |
| J26L | | | | IAML | | 16 18 44.3 | |
| | comp=N,25nm,0.6s | | | | | | |
| J26L | | | | IAML | | 16 19 02.7 | |
| | comp=E,26nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.12** | **197** | Pn | **Pn** | **16 17 36.2** | **+0.6** |
| **E19K** | **Redstone River** | **5.16** | **252** | Pn | **Pn** | **16 17 36.8** | **+0.6** |
| E19K | | | | IAML | | 16 19 10.8 | |
| | comp=N,36nm,0.7s | | | | | | |
| E19K | | | | IAML | | 16 19 17.9 | |
| | comp=E,33nm,0.9s | | | | | | |
| **MLY** | **Manley** | **5.17** | **211** | Pn | **Pn** | **16 17 36.8** | **+0.4** |
| MLY | | | | IAML | | 16 19 13.9 | |
| | comp=E,23nm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **5.28** | **192** | Pn | **Pn** | **16 17 38.7** | **+1.0** |
| HDA | | | | IAML | | 16 19 12.9 | |
| | comp=E,34nm,1.1s | | | | | | |
| HDA | | | | IAML | | 16 19 23.6 | |
| | comp=N,34nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.32** | **202** | Pn | **Pn** | **16 17 38.1** | **-0.2** |
| **WRH** | **Wood River Hil** | **5.32** | **197** | Pn | **Pn** | **16 17 39.0** | **+0.7** |
| WRH | | | | IAML | | 16 19 16.1 | |
| | comp=E,33nm,0.9s | | | | | | |
| WRH | | | | IAML | | 16 19 19.3 | |
| | comp=N,21nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.35** | **141** | Pn | **Pn** | **16 17 39.5** | **+0.6** |
| **C19K** | **Lookout Ridge** | **5.39** | **272** | Pn | **Pn** | **16 17 40.0** | **+0.6** |
| C19K | | | | IAML | | 16 19 42.6 | |
| | comp=N,28nm,1.2s | | | | | | |
| **SCRK** | **Sand Creek** | **5.62** | **178** | Pn | **Pn** | **16 17 43.5** | **+0.9** |
| **K27K** | **Chicken** | **5.64** | **169** | Pn | **Pn** | **16 17 44.1** | **+1.3** |
| **F19K** | **Shaleruckik Mo** | **5.68** | **247** | Pn | **Pn** | **16 17 42.6** | **-0.7** |
| **BWN** | **Browne** | **5.77** | **203** | Pn | **Pn** | **16 17 43.3** | **-1.2** |
| **DAWY** | **Dawson** | **5.87** | **158** | Pn | **Pn** | **16 17 47.4** | **+1.4** |
| **G19K** | **Purcell Mounta** | **5.89** | **240** | Pn | **Pn** | **16 17 46.9** | **+0.7** |
| **J30M** | **Hart River** | **5.92** | **144** | Pn | **Pn** | **16 17 46.7** | **-0.1** |
| **C18K** | **Utukok River** | **6.07** | **269** | Pn | **Pn** | **16 17 48.0** | **-0.6** |
| **BPAW** | **Bear Paw Mtn.** | **6.07** | **208** | Pn | **Pn** | **16 17 49.2** | **+0.5** |
| **B18K** | **Kokolik River** | **6.12** | **276** | | **Pn** | **16 17 50.5** | **+1.2** |
| **H19K** | **Roundabout Mou** | **6.13** | **234** | Pn | **Pn** | **16 17 50.7** | **+1.2** |
| **I20K** | **Naaghedeneel** | **6.18** | **224** | Pn | **Pn** | **16 17 51.6** | **+1.5** |
| **E18K** | **Tukpahlearik C** | **6.32** | **258** | Pn | **Pn** | **16 17 52.3** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.36** | **151** | Pn | **Pn** | **16 17 53.4** | **+0.6** |
| **F18K** | **Selawik** | **6.42** | **250** | | **Pn** | **16 17 54.6** | **+1.2** |
| **RND** | **Reindeer** | **6.43** | **198** | Pn | **Pn** | **16 17 53.1** | **-0.7** |
| **G18K** | **Tagagawik** | **6.54** | **243** | Pn | **Pn** | **16 17 56.1** | **+1.0** |
| **BCAR** | **Beaver Creek A** | **6.62** | **170** | Pn | **Pn** | **16 17 56.4** | **+0.2** |
| **L27K** | **Beaver Creek,** | **6.62** | **170** | Pn | **Pn** | **16 17 55.8** | **-0.4** |
| **J20K** | **Nowinta River** | **6.62** | **220** | Pn | **Pn** | **16 17 56.4** | **+0.2** |
| **DHY** | **Denali Highway** | **6.63** | **192** | Pn | **Pn** | **16 17 56.0** | **-0.4** |
| **PAX** | **Paxson** | **6.64** | **184** | | **Pn** | **16 17 58.9** | **+2.4** |
| **A36M** | **Sachs Harbour** | **6.76** | **60** | Pn | **Pn** | **16 17 57.9** | **-0.2** |
| **E17K** | **Hotham Inlet** | **6.90** | **257** | Pn | **Pn** | **16 18 00.6** | **+1.6** |
| **H18K** | **Honhosa River** | **6.96** | **237** | Pn | **Pn** | **16 18 01.8** | **+1.0** |
| **L29M** | **L29M** | **6.96** | **156** | Pn | **Pn** | **16 18 00.5** | **-0.3** |
| **WAT7** | **Susitna Watana** | **6.99** | **197** | | **Pn** | **16 18 02.8** | **+1.3** |
| **F17K** | **Baldwin Pennin** | **7.04** | **252** | Pn | **Pn** | **16 18 04.0** | **+2.1** |
| **J19K** | **Poorman** | **7.12** | **224** | Pn | **Pn** | **16 18 03.0** | **0.0** |
| **M26K** | **Nabesna, AK** | **7.22** | **175** | Pn | **Pn** | **16 18 05.9** | **+1.4** |
| **M27K** | **Edge Creek, AK** | **7.31** | **171** | Pn | **Pn** | **16 18 07.8** | **+1.9** |
| **K20K** | **Telida** | **7.33** | **216** | Pn | **Pn** | **16 18 05.2** | **-0.7** |
| **G17K** | **Kiwalik Mounta** | **7.42** | **244** | | **Pn** | **16 18 08.5** | **+1.4** |
| **M29M** | **Somme Creek** | **7.55** | **158** | Pn | **Pn** | **16 18 10.3** | **+1.3** |
| **H17K** | **Granite Mounta** | **7.58** | **240** | Pn | **Pn** | **16 18 07.4** | **-1.9** |
| **C16K** | **Lisburne Hills** | **7.64** | **270** | Pn | **Pn** | **16 18 10.2** | **0.0** |
| **YUK2** | **White River** | **7.95** | **168** | | **Pn** | **16 18 17.2** | **+2.7** |
| **YUK3** | **Moose Creek** | **7.99** | **166** | | **Pn** | **16 18 18.0** | **+2.8** |
| **L20K** | **Farewell, AK** | **8.08** | **213** | | **Pn** | **16 18 17.3** | **+1.1** |
| **SKT** | **Skwentna** | **8.15** | **204** | Pn | **Pn** | **16 18 16.2** | **+1.0** |
| **M20K** | **Styx River** | **8.50** | **209** | Pn | **Pn** | **16 18 23.0** | **+0.9** |
| **L19K** | **White Mountain** | **8.54** | **215** | Pn | **Pn** | **16 18 22.8** | **+0.2** |
| **N30M** | **Aishikik Lake** | **8.68** | **156** | Pn | **Pn** | **16 18 25.7** | **+1.2** |
| **M19K** | **Big River Lodg** | **8.71** | **213** | Pn | **Pn** | **16 18 25.3** | **+0.5** |
| **L18K** | **Granite Mounta** | **8.90** | **220** | Pn | **Pn** | **16 18 28.2** | **+0.8** |
| **M17K** | **Holitna River** | **9.79** | **220** | Pn | **Pn** | **16 18 41.1** | **+1.5** |
| **YKA** | **Yellowknife Ar** | **13.89** | **106** | Pn | **Pn** | **16 19 33.0** | **-2.6** |
| | comp=N,0.1nm,0.3s,baz=315,slow=13,SNR=1.9 | | | | | | |
| YKA | | | | Sn | Sn | 16 21 59.8 | -10 |
| | comp=N,0.2nm,0.3s,baz=310,slow=24,SNR=1.5 | | | | | | |
| | comp=N,1.2nm,0.9s | | | | | | |
| **TIXI** | **Tiksi** | **26.56** | **315** | LR | LR | 16 33 26.4 | |
| | comp=N,20nm,18.8s,baz=236,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.26** | **128** | P | **P** | **16 22 50.7** | **+3.3** |
| | comp=N,0.6nm,0.9s,baz=8.9,slow=6.4,SNR=3.8 | | | | | | |
| | comp=N,0.6nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **33.12** | **301** | LR | LR | 16 37 08.2 | |
| | comp=N,35nm,18.3s,baz=175,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **49.10** | **6** | P | **P** | **16 25 06.0** | **+0.3** |
| | comp=N,0.2nm,0.3s,baz=18,slow=6.6,SNR=3.6 | | | | | | |
| | comp=N,0.2nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.91** | **273** | LR | LR | 16 53 06.2 | |
| | comp=N,15nm,18.8s,baz=206,slow=42 | | | | | | |

*IDC **15** 16:18:54.3±6.0,8°.23S×116°.53E, h0km, mb3.1/3, mbtmp3.2/3, Error ellipse: s-maj=274.9km s-min=28.7km az=57.0*

*DJA **15** 16:18:55.5±0.3,8°.5±5°×11°.6E±°, h10km, M3.5/8, mb3.5/1, MLv3.5/8*

**ISC 15 16:18:55.5**±0.9,**8°.17S**±0°.09×**116°.46E**±0°.05,**h10**km,**n12,** σ0s**64**/13,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.70** | **143** | P | **Pg** | **16 19 09.5** | **+0.4** |
| **SRBI** | **Singaraja** | **1.23** | **274** | P | **Pn** | **16 19 18.3** | **-0.5** |
| SRBI | | | | S | **Sn** | **16 19 35.6** | **+0.1** |
| **DNP** | **Denpasar** | **1.33** | **248** | P | **Pn** | **16 19 20.1** | **0.0** |
| **PLAI** | **Plampang** | **1.46** | **117** | P | **Pb** | **16 19 22.7** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.30** | **262** | P | **Pn** | **16 19 33.1** | **-0.4** |
| **WBSI** | **Waikabubak, Su** | **3.25** | **117** | P | **Pn** | **16 19 45.8** | **-0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.48** | **64** | P | **Pn** | **16 20 03.1** | **-0.4** |
| **BKSI** | **Bulukumba** | **4.61** | **52** | P | **Pn** | **16 20 04.7** | **-0.6** |
| **EDFI** | **Ende, Flores** | **5.21** | **97** | P | **Pn** | **16 20 14.4** | **+0.8** |
| **WRA** | **Warramunga Arr** | **20.90** | **126** | P | **P** | **16 23 37.6** | **-0.6** |
| | 0.4nm,0.4s,baz=299,slow=12,SNR=8.1 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.74** | **135** | P | **P** | **16 23 57.1** | **-0.9** |
| | 0.2nm,0.4s,baz=313,slow=9.3,SNR=9.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **56.47** | **352** | P | **P** | **16 28 38.5** | **+0.9** |
| | 0.4nm,0.7s,baz=187,slow=5.7,SNR=3.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*IDC **15** 16:22:36.8±1.4,35°.75N×28°.24E, h0km, mb3.4/3, mbtmp3.3/5, ML3.1/2, Error ellipse: s-maj=35.3km s-min=20.3km az=165.0*

*ATH **15** 16:22:36.8,35°.76N×28°.43E, h13km±4km, ML3.1/9, Error ellipse: s-maj=5.4km s-min=1.3km az=346.0*

*NIC **15** 16:22:37.7,35°.84N×28°.32E, h0km±1km, Ml3.0/8*

*ISK **15** 16:22:37.9,35°.79N×28°.22E, h8km, ML3.2/17*

*THE **15** 16:22:39.5,35°.84N×28°.15E, h0km±2km, ML2.9/1, Error ellipse: s-maj=7.2km s-min=1.3km az=125.0*

*AFAD **15** 16:22:46.4±0.0,36°.40N×28°.30E, h7km±5km, ML2.6*

**ISC 15 16:22:38.2**±1.2,**35°.86N**±0°.03×**28°.23E**±0°.02,**h8**km,9km, **n55,** σ1s**55**/77,**mb3.4**/3,**Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARG** | **Arkhangelos** | **0.36** | **346** | Pg | **Pb** | **16 22 46.8** | **-0.1** |
| ARG | | | | Sg | **Sb** | **16 22 53.6** | **+0.9** |
| **ARG** | **Arkhangelos** | **0.36** | **346** | P | **Pb** | **16 22 46.8** | **-0.1** |
| ARG | | | | S | **Sb** | **16 22 53.6** | **+0.9** |
| | 3μm,0.5s | | | | | | |
| **ARG** | **Arkhangelos** | **0.36** | **346** | P | **Pb** | **16 22 46.8** | **-0.1** |
| ARG | | | | S | **Sb** | **16 22 53.6** | **+0.9** |
| ARG | | | | AML | AML | 16 22 57.8 | |
| | 5.7nm,0.3s | | | | | | |
| ARG | | | | AML | AML | 16 22 57.9 | |
| | 4.8nm,0.6s | | | | | | |
| **ARG** | **Arkhangelos** | **0.36** | **346** | P | **Pb** | **16 22 46.7** | **-0.1** |
| ARG | | | | S | **Sb** | **16 22 53.8** | **+1.0** |
| ARG | | | | AML | AML | 16 22 54.9 | |
| | comp=E,5091μm,0.3s | | | | | | |
| ARG | | | | AML | AML | 16 22 58.2 | |
| | comp=N,4785μm,0.6s | | | | | | |
| **MRSB** | **Marmaris-Mugla** | **0.85** | **358** | Pg | **Pn** | **16 22 56.2** | **-0.3** |
| **KARP** | **Karpathos** | **0.93** | **250** | Pg | **Pg** | **16 22 55.6** | **-0.4** |
| **KARP** | **Karpathos** | **0.93** | **250** | P | **Pg** | **16 22 55.8** | **-0.2** |
| **KARP** | **Karpathos** | **0.93** | **250** | P | **Pg** | **16 22 56.2** | **+0.1** |
| KARP | | | | S | **Sn** | **16 23 11.0** | **-0.1** |
| KARP | | | | AML | AML | 16 23 14.0 | |
| | comp=E,1520μm,0.2s | | | | | | |
| KARP | | | | AML | AML | 16 23 19.0 | |
| | comp=N,2654μm,0.3s | | | | | | |
| **DALY** | **Dalyan (Mula)** | **1.01** | **19** | Pn | **Pn** | **16 22 58.9** | **+0.3** |
| **DAT** | **Datca** | **1.01** | **329** | Pg | **Pb** | **16 22 58.9** | **+0.8** |
| **DAT** | **Datca** | **1.01** | **329** | P | **Pn** | **16 22 59.3** | **+0.5** |
| DAT | | | | S | **Sg** | **16 23 10.1** | **-0.8** |
| **DAT** | **Datca** | **1.01** | **329** | P | **Pb** | **16 22 58.9** | **+0.8** |
| DAT | | | | S | **Sn** | **16 23 14.6** | **+1.3** |
| **FETY** | **Fethiye** | **1.03** | **41** | Pn | **Pn** | **16 22 59.3** | **+0.3** |
| **FETY** | **Fethiye** | **1.03** | **41** | P | **Pn** | **16 23 00.1** | **+1.1** |
| FETY | | | | S | **Sg** | **16 23 09.5** | **-1.9** |
| **YAZI** | **Mula-Dat§a-** | **1.03** | **323** | P | **Pn** | **16 22 59.7** | **+0.8** |
| YAZI | | | | S | **Sg** | **16 23 11.5** | **+0.1** |
| YAZI | | | | *i* AML | AML | 16 23 16.0 | |
| | comp=N,250nm,0.6s | | | | | | |
| **NISR** | **Nisiros** | **1.17** | **310** | P | **Pb** | **16 23 00.5** | **0.0** |
| NISR | | | | AML | AML | 16 23 21.9 | |
| | comp=N,1575μm,0.6s | | | | | | |
| NISR | | | | AML | AML | 16 23 27.8 | |
| | comp=E,2869μm,0.5s | | | | | | |
| **AKAS** | **Kas** | **1.17** | **71** | Pn | **Pn** | **16 23 01.5** | **+0.5** |
| **YER** | **Yerkesik** | **1.27** | **2** | Pn | **Pg** | **16 23 03.6** | **+1.1** |
| **YER** | **Yerkesik** | **1.27** | **2** | P | **Pg** | **16 23 03.8** | **+1.3** |
| YER | | | | S | **Sn** | **16 23 22.1** | **+2.5** |
| **CAME** | **Cameli-Denizli** | **1.38** | **38** | Pn | **Pg** | **16 23 05.1** | **+0.4** |
| **MULA** | **Mugla, Merkez-** | **1.39** | **3** | P | **Pg** | **16 23 06.9** | **+2.0** |
| MULA | | | | S | **Sb** | **16 23 15.1** | **-7.3** |
| **BODT** | **Bodrum** | **1.41** | **328** | Pn | **Pb** | **16 23 05.4** | **+0.7** |
| **BODT** | **Bodrum** | **1.41** | **328** | P | **Pb** | **16 23 05.1** | **+0.4** |
| BODT | | | | S | **Sg** | **16 23 24.5** | **+1.0** |
| **YKAV** | **Yalikavak-Bodr** | **1.48** | **329** | Pn | **Pb** | **16 23 06.3** | **+0.5** |
| **MLSB** | **Milas** | **1.48** | **346** | Pn | **Pb** | **16 23 06.5** | **+0.6** |
| **ELL** | **Elmali** | **1.61** | **56** | Pn | **Pg** | **16 23 08.1** | **-1.1** |
| **TAVA** | **DENIZLI_Tavas** | **1.69** | **19** | P | **Pg** | **16 23 11.6** | **+1.0** |
| TAVA | | | | S | **Sn** | **16 23 28.8** | **-1.2** |
| **DDIM** | **Aydin, Didim** | **1.78** | **334** | P | **Pb** | **16 23 11.0** | **0.0** |
| DDIM | | | | S | **Sn** | **16 23 26.9** | **-5.1** |
| DDIM | | | | *i* AML | AML | 16 23 49.0 | |
| | comp=E,213nm,0.6s | | | | | | |
| **ZKR** | **Zakros** | **1.81** | **246** | P | **Pn** | **16 23 10.3** | **+0.7** |
| **ZKR** | **Zakros** | **1.81** | **246** | P | **Pn** | **16 23 10.5** | **+0.9** |
| ZKR | | | | S | **Sg** | **16 23 37.0** | **+0.7** |
| ZKR | | | | AML | AML | 16 23 43.4 | |
| | comp=E,0.2nm,0.7s | | | | | | |
| ZKR | | | | AML | AML | 16 23 44.0 | |
| | comp=E,0.5nm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **1.81** | **246** | P | **Pn** | **16 23 08.4** | **-1.2** |
| ZKR | | | | S | **Sn** | **16 23 31.2** | **-1.5** |
| ZKR | | | | AML | AML | 16 23 45.2 | |
| | comp=E,560μm,0.4s | | | | | | |
| ZKR | | | | AML | AML | 16 23 53.2 | |
| | comp=N,327μm,0.6s | | | | | | |
| **APMY** | **Acipayam-Deniz** | **1.82** | **28** | Pn | **Pb** | **16 23 11.4** | **-0.4** |
| **ESEN** | **Aydn-Nazilli** | **1.93** | **3** | P | **Pg** | **16 23 14.8** | **-0.4** |
| ESEN | | | | S | **Sn** | **16 23 31.2** | **-4.6** |
| ESEN | | | | *i* AML | AML | 16 23 46.0 | |
| | comp=N,96nm,0.4s | | | | | | |
| **GCAM** | **G?zelcaml?** | **2.00** | **337** | Pn | **Pb** | **16 23 14.1** | **-0.7** |
| **NAZL** | **Nazilli-Aydin** | **2.10** | **1** | Pn | **Pb** | **16 23 15.5** | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.10** | **353** | Pn | **Pb** | **16 23 15.5** | **-1.0** |
| **SANT** | **Santorini** | **2.30** | **284** | P | **Pn** | **16 23 17.4** | **+0.9** |
| SANT | | | | AML | AML | 16 23 55.6 | |
| | comp=E,368μm,0.4s | | | | | | |
| SANT | | | | AML | AML | 16 23 56.9 | |
| | comp=N,188μm,0.5s | | | | | | |
| **APE** | **Apeiranthos** | **2.49** | **300** | P | **Pn** | **16 23 19.5** | **+0.5** |
| **IDI** | **Anoyia** | **2.79** | **259** | P | **Pn** | **16 23 23.3** | **+0.2** |
| IDI | | | | AML | AML | 16 24 16.9 | |
| | comp=E,144μm,0.5s | | | | | | |
| IDI | | | | AML | AML | 16 24 20.6 | |
| | comp=N,106μm,0.5s | | | | | | |
| **AKMS** | **Akamas** | **3.45** | **103** | P | **Pn** | **16 23 32.5** | **+0.3** |
| AKMS | | | | AML | AML | 16 24 14.6 | |
| | comp=N,0.2nm,0.7s | | | | | | |
| AKMS | | | | S | **Sn** | **16 24 14.8** | **+1.4** |
| AKMS | | | | AML | AML | 16 24 19.4 | |
| | comp=N,0.1nm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **3.49** | **265** | P | **Pn** | **16 23 32.4** | **-0.3** |
| IMMV | | | | AML | AML | 16 24 26.2 | |
| | comp=N,147μm,0.6s | | | | | | |
| IMMV | | | | AML | AML | 16 24 37.9 | |
| | comp=E,198μm,1.1s | | | | | | |
| **GVD** | **Gavdhos** | **3.54** | **254** | P | **Pn** | **16 23 34.1** | **+0.7** |
| GVD | | | | AML | AML | 16 24 26.4 | |
| | comp=E,117μm,0.4s | | | | | | |
| GVD | | | | AML | AML | 16 24 45.0 | |
| | comp=N,122μm,0.6s | | | | | | |
| **ALFC** | **Alefka** | **3.63** | **100** | P | **Pn** | **16 23 35.0** | **+0.2** |
| ALFC | | | | AML | AML | 16 24 21.7 | |
| | comp=N,0.1nm,0.4s | | | | | | |
| ALFC | | | | AML | AML | 16 24 24.5 | |
| | comp=N,0.1nm,0.5s | | | | | | |
| **NATA** | **Nata** | **3.71** | **106** | P | **Pn** | **16 23 36.0** | **+0.3** |
| NATA | | | | AML | AML | 16 24 25.8 | |
| | comp=N,0.4nm,0.4s | | | | | | |
| NATA | | | | AML | AML | 16 24 30.1 | |
| | comp=N,0.3nm,0.5s | | | | | | |
| **TROD** | **Troodos** | **3.89** | **102** | P | **Pn** | **16 23 38.1** | **-0.3** |
| TROD | | | | S | **Sn** | **16 24 26.0** | **+1.5** |
| TROD | | | | AML | AML | 16 24 29.6 | |
| | comp=N,0.1nm,0.5s | | | | | | |
| TROD | | | | AML | AML | 16 24 37.1 | |
| | comp=N,0.1nm,0.6s | | | | | | |
| **APOL** | **The Sanctuary** | **3.97** | **106** | P | **Pn** | **16 23 39.1** | **-0.2** |
| **ASGA** | **Asgata** | **4.24** | **103** | P | **Pn** | **16 23 43.0** | **0.0** |
| ASGA | | | | S | **Sn** | **16 24 34.1** | **+1.4** |
| ASGA | | | | AML | AML | 16 24 37.2 | |
| | comp=N,0.1nm,0.9s | | | | | | |
| ASGA | | | | AML | AML | 16 24 39.2 | |
| | comp=N,0.1nm,0.5s | | | | | | |
| **CSS** | **Mathiatis** | **4.26** | **101** | P | **Pn** | **16 23 43.0** | **-0.3** |
| CSS | | | | AML | AML | 16 24 35.8 | |
| | comp=N,0.1nm,0.8s | | | | | | |
| CSS | | | | AML | AML | 16 24 42.9 | |
| | comp=N,0.1nm,0.6s | | | | | | |
| **VLI** | **Veliai** | **4.36** | **283** | P | **Pn** | **16 23 46.2** | **+1.4** |
| VLI | | | | AML | AML | 16 24 37.3 | |
| | comp=E,76μm,0.6s | | | | | | |
| VLI | | | | AML | AML | 16 24 39.9 | |
| | comp=N,69μm,0.5s | | | | | | |
| **MVOU** | **Mavrovouni** | **4.49** | **99** | P | **Pn** | **16 23 46.8** | **+0.3** |
| **BRTR** | **Keskin Array B** | **5.76** | **46** | Pn | **Pn** | **16 24 05.7** | **+1.6** |
| | comp=N,0.1nm,0.3s,baz=259,slow=26,SNR=3.0 | | | | | | |
| BRTR | | | | Sn | **Sn** | **16 25 14.2** | **+3.8** |
| | comp=N,0.1nm,0.3s,baz=20,slow=5.4,SNR=2.2 | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **6.57** | **114** | Pn | **Pn** | **16 24 13.8** | **-1.4** |
| | comp=N,2.2nm,0.3s,baz=304,slow=8.5,SNR=9.0 | | | | | | |
| MMAI | | | | Sn | **Sn** | **16 25 29.4** | **-0.9** |
| | comp=N,2.6nm,0.3s,baz=296,slow=18,SNR=2.2 | | | | | | |
| | comp=N,2.1nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **25.66** | **288** | P | **P** | **16 28 08.3** | **-0.2** |
| | comp=N,0.7nm,0.8s,baz=85,slow=9.5,SNR=6.1 | | | | | | |
| | comp=N,0.7nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.89** | **233** | P | **P** | **16 29 12.4** | **-0.5** |
| | comp=N,0.3nm,0.4s,baz=34,slow=10,SNR=2.6 | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **41.29** | **57** | P | **P** | **16 30 25.2** | **+1.2** |
| | comp=N,0.1nm,0.4s,baz=260,slow=7.2,SNR=1.9 | | | | | | |
| | comp=N,0.1nm,0.4s | | | | | | |

*IDC **15** 16:25:32.2±1.0, 17°.89N×59°.58W, h0km, mb3.8/7, mbtmp3.8/7, MS2.9/3, Error ellipse: s-maj=25.9km s-min=24.2km az=138.0*

*TRN **15** 16:25:37.0, 17°.83N×59°.76W, h43km, MD4.0, Far East of Barbuda.*

**ISC 15 16:25:37.5**±0.8,**17°.85N**±0°.05×**59°.69W**±0°.07,**h35**km,**n41,** σ1s**00**/54,**mb3.8**/8,**1D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANWB** | **Willy Bob** | **2.01** | **265** | *e*P | **Pn** | **16 26 08.6** | **-0.2** |
| ANWB | | | | *e*S | **Sn** | **16 26 33.1** | **+0.4** |
| **H05N1** | **Guadeloupe/Mar** | **2.01** | **221** | Pn | **Pn** | **16 26 08.3** | **-0.6** |
| H05N1 | | | | Sn | **Sn** | **16 26 32.0** | **-0.9** |
| H05N1 | | | | T | T | 16 28 41.2 | |
| **ANBD** | **Bethesda, Anti** | **2.14** | **248** | *e*P | **Pn** | **16 26 10.6** | **0.0** |
| ANBD | | | | *e*S | **Sn** | **16 26 34.9** | **-1.1** |
| **MAGL** | **Barre de l'ile** | **2.43** | **219** | *e*P | **Pn** | **16 26 14.9** | **+0.2** |
| **MBWH** | | **2.63** | **246** | *e*P | **Pn** | **16 26 18.9** | **+1.4** |
| MBWH | | | | *e*S | **Sn** | **16 26 48.9** | **+0.7** |
| **MBFL** | **Flemmings, Mon** | **2.65** | **246** | *e*P | **Pn** | **16 26 18.0** | **+0.3** |
| MBFL | | | | *e*S | **Sn** | **16 26 47.5** | **-1.1** |
| **TBG** | **Guadaloupe-3** | **2.73** | **224** | *e*P | **Pn** | **16 26 20.4** | **+1.6** |
| TBG | | | | *e*S | **Sn** | **16 26 50.3** | **-0.3** |
| **SMRT** | **St. Maarten** | **3.23** | **274** | *e*P | **Pn** | **16 26 26.0** | **+0.3** |
| **ILAM** | **Ilet Lapin Mar** | **3.26** | **201** | *e*P | **Pn** | **16 26 26.8** | **+0.7** |
| ILAM | | | | *e*S | **Sn** | **16 27 03.9** | **+0.2** |
| **SVN** | **Savane Anatole** | **3.31** | **206** | *e*P | **Pn** | **16 26 28.2** | **+1.3** |
| SVN | | | | *e*S | **Sn** | **16 27 03.7** | **-1.3** |
| **GBMF** | **Grand Be** | **3.35** | **205** | *e*P | **Pn** | **16 26 28.0** | **+0.5** |
| **PCM** | **Pelee Case Pet** | **3.35** | **206** | *e*P | **Pn** | **16 26 27.6** | **+0.2** |
| **PML** | **Morne Lenard** | **3.37** | **205** | *e*P | **Pn** | **16 26 28.1** | **+0.4** |
| **SABA** | **Saba** | **3.40** | **267** | *e*P | **Pn** | **16 26 28.3** | **+0.3** |
| **FDF** | **Fort de France** | **3.40** | **205** | *e*P | **Pn** | **16 26 28.6** | **+0.5** |
| **MVM** | **Montagne Vaucl** | **3.48** | **200** | *e*P | **Pn** | **16 26 29.6** | **+0.4** |
| **BIM** | **Bigot** | **3.57** | **202** | *e*P | **Pn** | **16 26 31.0** | **+0.6** |
| BIM | | | | *e*S | **Sn** | **16 27 11.5** | **+0.1** |
| **H05S1** | **Guadeloupe/Mar** | **3.58** | **198** | Pn | **Pn** | **16 26 30.0** | **-0.5** |
| H05S1 | | | | Sn | **Sn** | **16 27 10.4** | **-1.2** |
| **SLW** | **Petit Monier** | **3.99** | **198** | *e*P | **Pn** | **16 26 37.9** | **+1.7** |
| SLW | | | | *e*S | **Sn** | **16 27 21.7** | **-0.1** |
| **SLBI** | **Saint Lucia, B** | **4.00** | **198** | *e*P | **Pn** | **16 26 37.3** | **+1.0** |
| SLBI | | | | *e*S | **Sn** | **16 27 20.2** | **-1.7** |
| **SLAC** | **Saint Lucia, A** | **4.10** | **197** | *e*P | **Pn** | **16 26 37.9** | **+0.2** |
| SLAC | | | | *e*S | **Sn** | **16 27 22.6** | **-1.8** |
| **SSV** | **Crater Summit** | **4.72** | **198** | *e*P | **Pn** | **16 26 47.7** | **+1.4** |
| **SVB** | **Belmont** | **4.79** | **199** | *e*P | **Pn** | **16 26 48.5** | **+1.3** |
| SVB | | | | *e*S | **Sn** | **16 27 41.2** | **-0.4** |
| **SVT** | **Saint Vincent** | **4.89** | **198** | *e*P | **Pn** | **16 26 50.2** | **+1.7** |
| SVT | | | | *e*S | **Sn** | **16 27 42.5** | **-1.4** |
| **SVOC** | **Richmond Hill,** | **4.90** | **198** | *e*P | **Pn** | **16 26 50.4** | **+1.8** |
| **GCMP** | **Grenada, Carri** | **5.59** | **198** | *e*P | **Pn** | **16 26 59.8** | **+1.6** |
| GCMP | | | | *e*S | **Sn** | **16 27 59.9** | **-1.3** |
| **GRW** | **Mount Saint Ca** | **5.97** | **199** | *e*P | **Pn** | **16 27 03.8** | **+0.3** |
| GRW | | | | *e*S | **Sn** | **16 28 08.9** | **-1.8** |
| **AOPR** | **Arecibo Observ** | **6.74** | **275** | *e*P | **Pn** | **16 27 13.8** | **-0.2** |
| **SDV** | **Santo Domingo** | **13.88** | **231** | LR | LR | 16 35 54.5 | |
| | comp=Z,45nm,18.2s,baz=71,slow=44 | | | | | | |
| **APG** | **El Apazote** | **29.64** | **269** | LR | LR | 16 44 54.7 | |
| | comp=Z,20nm,21.1s,baz=8.5,slow=39 | | | | | | |
| **NNA** | **Nana** | **34.14** | **211** | LR | LR | 16 49 35.6 | |
| | comp=Z,22nm,20.6s,baz=304,slow=42 | | | | | | |
| **LPAZ** | **La Paz** | **34.93** | **194** | P | P | 16 32 31.4 | +4.6 |
| | 1.2nm,1.0s,baz=27,slow=10.0,SNR=2.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **41.67** | **294** | P | **P** | **16 33 24.0** | **+1.0** |
| | 0.2nm,0.5s,baz=94,slow=9.1,SNR=3.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **48.84** | **312** | P | **P** | **16 34 20.5** | **+0.7** |
| | 0.3nm,0.2s,baz=99,slow=11,SNR=2.4 | | | | | | |
| | 0.3nm,0.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **54.68** | **305** | P | **P** | **16 35 04.5** | **+1.0** |
| | 0.6nm,0.7s,baz=103,slow=6.8,SNR=5.5 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **58.40** | **334** | P | **P** | **16 35 27.6** | **-1.7** |
| | 1.6nm,0.7s,baz=120,slow=6.6,SNR=3.1 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **59.12** | **85** | P | **P** | **16 35 34.7** | **-0.4** |
| | 0.8nm,0.9s,baz=300,slow=5.1,SNR=4.3 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **72.83** | **333** | P | **P** | **16 37 02.8** | **+0.4** |
| | 2.0nm,0.7s,baz=102,slow=3.8,SNR=28 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **81.30** | **51** | P | **P** | **16 37 50.5** | **-0.2** |
| | 0.5nm,0.5s,baz=277,slow=2.0,SNR=4.2 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **166.03** | **243** | PKP | **PKPdf** | **16 45 39.7** | **+0.1** |
| | 0.5nm

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NWAO | **Narrogin (SRO)** | **4.98** | **111** | Pn | | **Pn** | **16 46 50.5** | **+1.1** | |
| | 40nm,0.3s,baz=278,slow=7.9,SNR=591 | | | | | | | | |
| NWAO | | | | Sn | | **Sn** | **16 47 44.8** | **-2.2** | |
| | 52nm,0.3s,baz=16,slow=17,SNR=12 | | | | | | | | |
| | 92nm,0.3s | | | | | | | | |
| **KLBR** | **Kellerberrin** | **5.17** | **96** | P | | **Pn** | **16 46 53.9** | **+1.9** | |
| **RKGY** | **Rocky Gully** | **5.56** | **129** | P | | **Pn** | **16 46 58.0** | **+0.7** | |
| **MEEK** | **Meekatharra** | **7.58** | **55** | P | | **Pn** | **16 47 25.1** | **+0.1** | |
| **KMBL** | **Kambalda** | **8.70** | **94** | P | | **Pn** | **16 47 40.6** | **+0.2** | |
| **GIRL** | **Giralia** | **8.84** | **15** | P | | **Pn** | **16 47 42.0** | **-0.3** | |
| **GIRL** | **Giralia** | **8.84** | **15** | Pn | | **Pn** | **16 47 41.6** | **-0.8** | |
| GIRL | | | | Sn | | **Sn** | **16 49 15.4** | **-6.6** | |
| **PSA00** | **Pilbara Seismi** | **12.06** | **39** | P | | **Pn** | **16 48 25.4** | **-1.0** | |
| **PSA00** | **Pilbara Seismi** | **12.06** | **39** | Pn | | **Pn** | **16 48 25.0** | **-1.4** | |
| **MBWA** | **Marble Bar** | **12.33** | **38** | P | | **Pn** | **16 48 28.0** | **-2.2** | |
| **MBWA** | **Marble Bar** | **12.33** | **38** | Pn | | **Pn** | **16 48 27.6** | **-2.6** | |
| **FORT** | **Forrest** | **14.03** | **92** | P | | **Pn** | **16 48 51.9** | **-1.4** | |
| **FORT** | **Forrest** | **14.03** | **92** | Pn | | **Pn** | **16 48 51.7** | **-1.6** | |
| **WRKA** | **Warakurna** | **15.86** | **71** | P | | **Pn** | **16 49 16.0** | **-2.0** | |
| **FITZ** | **Fitzroy Crossi** | **18.17** | **47** | P | | **Pn** | **16 49 45.4** | **-1.5** | |
| **FITZ** | **Fitzroy Crossi** | **18.17** | **47** | Pn | | **Pn** | **16 49 44.8** | **-2.1** | |
| **MULG** | **Mulgathing** | **19.22** | **93** | P | | **P** | **16 49 59.4** | **+0.6** | |
| **BBOO** | **Buckleboo** | **20.69** | **101** | P | | **P** | **16 50 18.0** | **+3.2** | |
| **BBOO** | **Buckleboo** | **20.69** | **101** | P | | **P** | **16 50 17.2** | **+2.4** | |
| **ASAR** | **Alice Springs** | **21.06** | **74** | P | | **P** | **16 50 21.1** | **+2.2** | |
| | 4.2nm,0.6s,baz=240,slow=10,SNR=112 | | | | | | | | |
| ASAR | | | | S | | S | 16 53 59.9 | -13 | |
| | 8.1nm,0.7s,baz=246,slow=24,SNR=14 | | | | | | | | |
| | 4.2nm,0.6s | | | | | | | | |
| **AS31** | **Alice Springs** | **21.06** | **74** | P | | **P** | **16 50 20.4** | **+1.5** | |
| **AS01** | **Alice Springs** | **21.10** | **75** | P | | **P** | **16 50 21.7** | **+2.4** | |
| **OOD** | **Oodnadatta** | **21.13** | **87** | P | | **P** | **16 50 22.0** | **+2.5** | |
| **KNRA** | **Kununurra** | **21.95** | **49** | P | | **P** | **16 50 31.3** | **+2.9** | |
| KNRA | | | | IAmb | | IAmb | 16 50 37.5 | | |
| | comp=Z,9.5nm,0.8s | | | | | | | | |
| **LCRK** | **Leigh Creek** | **22.75** | **95** | P | | **P** | **16 50 39.0** | **+2.1** | |
| **HTT** | **Hallett** | **23.07** | **103** | P | | **P** | **16 50 42.3** | **+2.0** | |
| **WRA** | **Warramunga Arr** | **23.24** | **66** | P | | **P** | **16 50 44.2** | **+2.0** | |
| | comp=Z,1.0nm,0.6s,baz=238,slow=11,SNR=9.5 | | | | | | | | |
| WRA | | | | S | | **S** | **16 54 50.1** | **-4.3** | |
| | comp=Z,3.6nm,0.6s,baz=241,slow=21,SNR=8.7 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **23.25** | **66** | P | | **P** | **16 50 42.9** | **+0.7** | |
| WB2 | | | | IAmb | | IAmb | 16 50 55.4 | | |
| | comp=Z,8.7nm,1.2s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.26** | **66** | P | | **P** | **16 50 44.2** | **+1.9** | |
| **WB0** | **Warramunga Arr** | **23.38** | **66** | P | | **P** | **16 50 45.3** | **+1.7** | |
| WB0 | | | | IAmb | | IAmb | 16 51 12.7 | | |
| | comp=Z,11nm,1.5s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **23.39** | **67** | P | | **P** | **16 50 45.6** | **+2.0** | |
| WR0 | | | | IAmb | | IAmb | 16 51 15.6 | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **MTN** | **Manton Dam** | **25.59** | **49** | P | | **P** | **16 51 05.4** | **+1.5** | |
| MTN | | | | IAmb | | IAmb | 16 51 31.2 | | |
| | comp=Z,25nm,1.3s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **58.88** | **180** | P | | **P** | **16 55 34.0** | **+0.7** | |
| QSPA | | | | IAmb | | IAmb | 16 56 13.1 | | |
| | comp=Z,4.8nm,1.4s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **58.88** | **180** | P | | **P** | **16 55 31.6** | **-1.8** | |
| | comp=Z,1.4nm,1.0s,baz=263,slow=5.6,SNR=2.8 | | | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | | | |
| **SONM** | **Songino Array** | **78.84** | **356** | P | | **P** | **16 57 39.4** | **+1.8** | |
| | comp=Z,0.6nm,0.5s,baz=160,slow=4.7,SNR=3.9 | | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **82.08** | **340** | P | | **P** | **16 57 55.4** | **+0.5** | |
| | comp=Z,0.2nm,0.5s,baz=145,slow=5.3,SNR=2.1 | | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **86.62** | **340** | P | | **P** | **16 58 18.3** | **+0.6** | |
| | comp=Z,0.3nm,0.7s,baz=161,slow=4.2,SNR=4.4 | | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **145.40** | **59** | PKPbc | | **PKPbc** | **17 05 14.7** | **+1.9** | |
| | comp=Z,2.3nm,0.6s,baz=202,slow=2.2,SNR=16 | | | | | | | | |

*ATH **15** 16:45:50.9, 35˚.36N×22˚.81E, h17$^{km}_{\pm}$4$^{km}$, ML3.0/15, Error ellipse: s-maj=4.8km s-min=1.2km az=217.0*
*THE **15** 16:45:51.6, 35˚.43N×22˚.84E, h20$^{km}_{\pm}$1$^{km}$, ML3.1/4, Error ellipse: s-maj=1.3km s-min=0.4km az=50.0*
*IDC **15** 16:45:54.5±4.8, 35˚.67N×22˚.50E, h72$^{km}_{\pm}$49$^{km}$, mb3.1/3, mbtmp3.4/5, ML3.4/2, Error ellipse: s-maj=90.6km s-min=26.1km az=138.0*

**ISC 15 16:45:48.6±1.6, 35˚.33N±0˚.05×22˚.76E±0˚.05, h15$^{km}_{\pm}$9$^{km}$, n31, σ1§08/47, mb3.4/3, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ANKY** | **Antikythira Is** | **0.69** | **39** | P | | **Pb** | **16 46 02.8** | **+0.3** |
| ANKY | | | | S | | **Sg** | **16 46 11.4** | **0.0** |
| | 2µm,0.4s | | | | | | | |
| **ANKY** | **Antikythira Is** | **0.69** | **39** | P | | **Pb** | **16 46 02.8** | **+0.3** |
| ANKY | | | | S | | **Sb** | **16 46 12.3** | **+0.4** |
| ANKY | | | | AML | AML | | 16 46 15.4 | |
| | comp=E,4690µm,0.6s | | | | | | | |
| ANKY | | | | AML | AML | | 16 46 16.6 | |
| | comp=N,4507µm,0.4s | | | | | | | |
| **KNDR** | **Palaiochora Ch** | **0.76** | **97** | P | | **Pb** | **16 46 03.3** | **-0.2** |
| KNDR | | | | S | | **Sb** | **16 46 13.1** | **-0.6** |
| KNDR | | | | AML | AML | | 16 46 24.8 | |
| | comp=N,5467µm,0.5s | | | | | | | |
| KNDR | | | | AML | AML | | 16 46 25.8 | |
| | comp=E,8066µm,1.0s | | | | | | | |
| **RODP** | **Rodopos** | **0.84** | **74** | P | | **Pn** | **16 46 05.9** | **-0.1** |
| RODP | | | | S | | **Sb** | **16 46 16.7** | **+0.5** |
| **KTHA** | **Kythira Island** | **0.96** | **15** | P | | **Pg** | **16 46 07.1** | **-0.1** |
| KTHA | | | | S | | **Sg** | **16 46 19.2** | **-0.6** |
| | comp=E,2µm,0.5s | | | | | | | |
| **KTHA** | **Kythira Island** | **0.96** | **15** | P | | **Pg** | **16 46 07.1** | **-0.1** |
| KTHA | | | | S | | **Sb** | **16 46 20.7** | **+1.2** |
| KTHA | | | | AML | AML | | 16 46 29.5 | |
| | comp=E,6992µm,0.6s | | | | | | | |
| KTHA | | | | AML | AML | | 16 46 33.7 | |
| | comp=N,1593µm,0.5s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.00** | **82** | P | | **Pn** | **16 46 08.5** | **+0.3** |
| IMMV | | | | S | | **Sn** | **16 46 21.7** | **-0.4** |
| | comp=N,2µm,0.6s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.00** | **82** | P | | **Pn** | **16 46 08.2** | **0.0** |
| IMMV | | | | S | | **Sn** | **16 46 21.7** | **-0.4** |
| IMMV | | | | AML | AML | | 16 46 31.3 | |
| | comp=N,2863µm,0.5s | | | | | | | |
| IMMV | | | | AML | AML | | 16 46 31.9 | |
| | comp=E,4060µm,0.6s | | | | | | | |
| **CHAN** | **Chania** | **1.06** | **79** | P | | **Pn** | **16 46 10.0** | **+1.0** |
| CHAN | | | | S | | **Sn** | **16 46 23.6** | **+0.1** |
| CHAN | | | | AML | AML | | 16 46 27.8 | |
| | comp=N,2848µm,0.5s | | | | | | | |
| CHAN | | | | AML | AML | | 16 46 32.7 | |
| | comp=E,3712µm,0.8s | | | | | | | |
| **GVD** | **Gavdhos** | **1.19** | **114** | P | | **Pg** | **16 46 11.9** | **+0.4** |
| GVD | | | | S | | **Sn** | **16 46 28.5** | **+1.8** |
| **GVD** | **Gavdhos** | **1.19** | **114** | P | | **Pg** | **16 46 11.4** | **-0.1** |
| GVD | | | | AML | AML | | 16 46 37.4 | |
| | comp=N,1827µm,0.4s | | | | | | | |
| GVD | | | | AML | AML | | 16 46 38.9 | |
| | comp=E,1805µm,0.4s | | | | | | | |
| **VLI** | **Velíai** | **1.40** | **6** | P | | **Pn** | **16 46 13.7** | **+0.1** |
| VLI | | | | S | | **Sn** | **16 46 30.9** | **-0.9** |
| | comp=E,448nm,0.5s | | | | | | | |
| **VLI** | **Velíai** | **1.40** | **6** | P | | **Pg** | **16 46 15.2** | **-0.3** |
| VLI | | | | S | | **Sn** | **16 46 30.6** | **-1.2** |
| VLI | | | | AML | AML | | 16 46 45.4 | |
| | comp=N,1021µm,0.7s | | | | | | | |
| VLI | | | | AML | AML | | 16 46 51.3 | |
| | comp=E,1001µm,0.6s | | | | | | | |
| **IDI** | **Anoyia** | **1.74** | **91** | P | | **Pb** | **16 46 19.3** | **-1.0** |
| IDI | | | | S | | **Sn** | **16 46 40.8** | **+0.4** |
| **IDI** | **Anoyia** | **1.74** | **91** | P | | **Pb** | **16 46 19.8** | **-0.5** |
| IDI | | | | S | | **Sn** | **16 46 39.2** | **-1.1** |
| IDI | | | | AML | AML | | 16 46 56.8 | |
| | comp=N,559µm,0.6s | | | | | | | |
| IDI | | | | AML | AML | | 16 47 02.9 | |
| | comp=E,451µm,0.6s | | | | | | | |
| **PYL** | **PYLOS** | **1.77** | **332** | P | | **Pn** | **16 46 19.8** | **+1.0** |
| PYL | | | | S | | **Sn** | **16 46 41.3** | **+0.3** |
| **PYL** | **PYLOS** | **1.77** | **332** | P | | **Pn** | **16 46 19.6** | **+0.9** |
| PYL | | | | AML | AML | | 16 47 04.2 | |
| | comp=E,294µm,0.8s | | | | | | | |
| PYL | | | | AML | AML | | 16 47 07.4 | |
| | comp=N,282µm,0.9s | | | | | | | |
| **ITM** | **Ithomi** | **1.97** | **340** | P | | **Pn** | **16 46 22.3** | **+0.8** |
| ITM | | | | S | | **Sn** | **16 46 45.3** | **-0.7** |
| **ITM** | **Ithomi** | **1.97** | **340** | P | | **Pn** | **16 46 23.0** | **+1.5** |
| ITM | | | | AML | AML | | 16 47 05.6 | |
| | comp=N,192µm,0.4s | | | | | | | |
| ITM | | | | AML | AML | | 16 47 14.7 | |
| | comp=E,387µm,0.6s | | | | | | | |
| **KRND** | **KRANIDI** | **2.08** | **9** | P | | **Pn** | **16 46 23.0** | **+0.1** |
| KRND | | | | AML | AML | | 16 47 11.7 | |
| | comp=N,324µm,0.5s | | | | | | | |
| KRND | | | | AML | AML | | 16 47 14.6 | |
| | comp=E,328µm,0.8s | | | | | | | |
| **GUR** | **Goura** | **2.63** | **353** | P | | **Pn** | **16 46 32.4** | **+1.8** |
| GUR | | | | AML | AML | | 16 47 25.7 | |
| | comp=E,246µm,0.4s | | | | | | | |
| GUR | | | | AML | AML | | 16 47 26.6 | |
| | comp=N,333µm,0.5s | | | | | | | |
| **VLY** | **Voula,Athens** | **2.65** | **18** | P | | **Pn** | **16 46 32.3** | **+1.4** |
| VLY | | | | AML | AML | | 16 47 25.1 | |
| | comp=N,216µm,0.6s | | | | | | | |
| VLY | | | | AML | AML | | 16 47 31.7 | |
| | comp=E,246µm,0.6s | | | | | | | |
| **KLV** | **Kalavryta, Ach** | **2.76** | **350** | P | | **Pn** | **16 46 34.2** | **+1.8** |
| KLV | | | | AML | AML | | 16 47 34.8 | |
| | comp=E,123µm,1.0s | | | | | | | |
| KLV | | | | AML | AML | | 16 47 37.2 | |
| | comp=N,89µm,0.8s | | | | | | | |
| **VIL2** | **Platees** | **2.91** | **8** | P | | **Pn** | **16 46 35.1** | **+0.7** |
| VIL2 | | | | AML | AML | | 16 47 26.1 | |
| | comp=N,119µm,0.7s | | | | | | | |
| VIL2 | | | | AML | AML | | 16 47 38.6 | |
| | comp=E,328µm,0.8s | | | | | | | |
| **EFP** | **Efpalio** | **3.17** | **348** | P | | **Pn** | **16 46 40.1** | **+2.1** |
| **ANX** | **Ano Chora** | **3.33** | **349** | P | | **Pn** | **16 46 41.4** | **+1.1** |
| **BRTR** | **Keskin Array B** | **9.69** | **60** | P | | **Pn** | **16 48 11.4** | **+3.8** |
| | comp=E,0.1nm,0.3s,baz=256,slow=12,SNR=6.4 | | | | | | | |
| | comp=E,0.8nm,0.9s | | | | | | | |
| AKASG | **Malin Array Be** | **16.07** | **15** | P | | **Pn** | **16 49 32.9** | **-1.0** |
| | comp=E,0.7nm,0.3s,baz=208,slow=12,SNR=2.1 | | | | | | | |
| | comp=E,0.4nm,0.3s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.14** | **226** | P | | **P** | **16 51 49.6** | **+0.4** |
| | comp=E,0.4nm,0.6s,baz=26,slow=9.8,SNR=3.6 | | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | | |
| KURBB | **Kurchatov Arra** | **42.54** | **51** | P | | **P** | **16 53 42.3** | **-1.2** |
| | comp=E,0.2nm,0.4s,baz=274,slow=8.7,SNR=3.2 | | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.32** | **56** | P | | **P** | **16 54 05.1** | **-0.8** |
| | comp=E,0.4nm,0.7s,baz=284,slow=8.3,SNR=2.6 | | | | | | | |
| | comp=E,0.4nm,0.7s | | | | | | | |

*IDC **15** 16:55:09.5±2.2, 22˚.18N×143˚.42E, h212$^{km}_{\pm}$20$^{km}$, mb3.2/9, mbtmp3.8/11, Error ellipse: s-maj=40.7km s-min=14.3km az=80.0*

**ISC 15 16:55:08.3±1.2, 22˚.1N±0˚.1×143˚.4E±0˚.3, h200$^{km}$, n11, σ0§93/12, mb3.5/8, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **5.08** | **348** | P | | **Pn** | **16 56 24.9** | **+1.2** |
| | 39nm,0.6s,baz=68,slow=22,SNR=1.5 | | | | | | | |
| JCJ | | | | S | | **Sn** | **16 57 22.7** | **-0.5** |
| | 32nm,0.5s,baz=294,slow=22,SNR=1.5 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.07** | **344** | P | | **P** | **16 58 32.1** | **+0.2** |
| | 0.8nm,0.5s,baz=168,slow=11,SNR=13 | | | | | | | |
| **KSRS** | **Korea Array** | **20.31** | **322** | P | | **P** | **16 59 30.5** | **+1.7** |
| | 0.8nm,0.7s,baz=146,slow=9.0,SNR=5.3 | | | | | | | |
| | 0.8nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **39.15** | **320** | P | | **P** | **17 02 16.4** | **-0.2** |
| | 0.2nm,0.4s,baz=110,slow=8.4,SNR=2.2 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **WRA** | **Warmunga Arr** | **42.73** | **193** | P | | **P** | **17 02 46.5** | **+0.6** |
| | 0.9nm,0.7s,baz=9.5,slow=8.1,SNR=10 | | | | | | | |
| | 0.9nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **46.44** | **192** | P | | **P** | **17 03 15.3** | **+0.2** |
| | 0.4nm,0.7s,baz=17,slow=9.6,SNR=5.7 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.57** | **312** | P | | **P** | **17 04 14.7** | **-1.2** |
| | 0.4nm,0.7s,baz=94,slow=8.1,SNR=2.3 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| KURBB | **Kurchatov Arra** | **57.36** | **317** | P | | **P** | **17 04 34.5** | **-1.0** |
| | 0.5nm,0.4s,baz=95,slow=7.8,SNR=5.8 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.49** | **319** | P | | **P** | **17 05 09.9** | **-0.5** |
| | 2.0nm,0.3s,baz=94,slow=7.4,SNR=20 | | | | | | | |
| | 2.0nm,0.3s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.99** | **28** | P | | **P** | **17 06 32.9** | **-0.1** |
| | 1.4nm,0.7s,baz=288,slow=6.5,SNR=2.9 | | | | | | | |
| | 1.4nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **82.89** | **335** | P | | **P** | **17 07 09.8** | **-0.5** |
| | 0.8nm,0.5s,baz=64,slow=3.2,SNR=4.4 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |

*IDC **15** 16:56:18.2±1.4, 62˚.22N×149˚.99W, h56$^{km}_{\pm}$13$^{km}$, mb3.8/21, mbtmp4.0/26, MS3.2/24, Error ellipse: s-maj=12.3km s-min=8.7km az=107.0*
*AEIC **15** 16:56:18.2±1.5, 62˚.14N±0˚.03×149˚.71W±0˚.06, h55$^{km}_{\pm}$4$^{km}$, ML4.2, mb4.4/84(NEIC), ML4.4/220(NEIC), Mwr4.2/96(NEIC), Error ellipse: s-maj=4.3km s-min=3.7km az=114.0*
*NEIC **15** 16:56:19.3±1.4, 62˚.14N±0˚.03×149˚.73W±0˚.06, h54$^{km}_{\pm}$3$^{km}$, Error ellipse: s-maj=4.2km s-min=3.8km az=122.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=1.00; $M_{\theta\theta}$=0.21; $M_{\phi\phi}$=1.21; $M_{r\theta}$=1.77; $M_{r\phi}$=0.63; $M_{\theta\phi}$=1.20; Fault plane solution: $M_o$=2.50000×$10^{15}$ NP1: $\phi_s$=230.57000°, $\delta$=77.53000°, $\lambda$=-70.23000°. NP2: $\phi_s$=351.57000°, $\delta$=23.24000°, $\lambda$=-146.82000°. Principal axes: T 2.4848, Plg30.0000°, Azm305.0000°; N 0.0231, Plg19.0000°, Azm46.0000°; P -2.5080, Plg53.0000°, Azm164.0000°;*
*NEIC **15** 16:56:20, 62˚.13N×149˚.71W, h48$^{km}$*

**ISC 15 16:56:18.7±0.7, 62˚.14N±0˚.03×149˚.72W±0˚.03, h58$^{km}_{\pm}$6$^{km}$, n447, σ1§10/450, mb4.3/64, MS3.0/21, 1D, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CUT** | **Chulitna** | **0.37** | **316** | | | **Pn** | **16 56 29.4** | **+0.2** |
| CUT | | | | | | **Sn** | **16 56 37.3** | **+0.6** |
| CUT | | | | | IAML | | 16 56 40.2 | |
| | comp=N,26µm,0.3s | | | | | | | |
| **M22K** | **Willow** | **0.43** | **206** | | | **Pn** | **16 56 29.6** | **-0.2** |
| M22K | | | | | Sn | **Sn** | **16 56 37.8** | **-0.1** |
| **GHO** | **Glory Hole Cre** | **0.53** | **134** | | | **Pn** | **16 56 30.9** | **0.0** |
| GHO | | | | | Sn | **Sn** | **16 56 39.7** | **-0.1** |
| GHO | | | | | IAML | | 16 56 41.9 | |
| | comp=E,23µm,0.5s | | | | | | | |
| GHO | | | | | IAML | | 16 56 42.2 | |
| | comp=N,20µm,0.6s | | | | | | | |
| **PMR** | **Palmer** | **0.62** | **153** | P | | **Pn** | **16 56 31.6** | **-0.3** |
| **PMR** | **Palmer** | **0.62** | **153** | | | **Pn** | **16 56 31.5** | **-0.3** |
| PMR | | | | | Sn | **Sn** | **16 56 40.5** | **-0.9** |
| PMR | | | | | IAML | | 16 56 41.8 | |
| | comp=E,16µm,0.5s | | | | | | | |
| PMR | | | | | IAML | | 16 56 41.8 | |
| | comp=N,12µm,0.4s | | | | | | | |
| **SML** | **Sawmill** | **0.74** | **117** | | | **Pn** | **16 56 33.2** | **-0.1** |
| SML | | | | | IAML | | 16 56 47.6 | |
| | comp=N,22µm,0.4s | | | | | | | |
| **WAT7** | **Susitna Watana** | **0.80** | **30** | | | **Pn** | **16 56 34.4** | **+0.2** |
| WAT7 | | | | | | **Sn** | **16 56 46.2** | **+0.6** |
| **SUA** | **Susitna One** | **0.84** | **216** | | | **Pn** | **16 56 35.0** | **+0.3** |
| SUA | | | | | IAML | | 16 56 48.1 | |
| | comp=N,11µm,0.7s | | | | | | | |
| SUA | | | | | IAML | | 16 56 48.7 | |
| | comp=E,6µm,0.5s | | | | | | | |
| **SKT** | **Skwentna** | **0.87** | **260** | | | **Pn** | **16 56 34.9** | **-0.1** |
| **WAT1** | **Susitna Watana** | **0.88** | **38** | | | **Pn** | **16 56 35.2** | **+0.1** |
| WAT1 | | | | | | **Sn** | **16 56 47.8** | **+0.6** |
| **KNK** | **Knik Glacier** | **0.95** | **140** | | | **Pn** | **16 56 36.2** | **+0.3** |
| **M23K** | **Glacier View** | **1.00** | **110** | | | **Pn** | **16 56 36.9** | **+0.1** |
| **WAT6** | **Susitna Watana** | **1.02** | **64** | | | **Pn** | **16 56 37.1** | **+0.1** |
| WAT6 | | | | | | **Sn** | **16 56 50.9** | **+0.2** |
| **FIS** | **Fire Island** | **1.03** | **194** | | | **Pn** | **16 56 38.0** | **+1.0** |
| **RC01** | **Rabbit Creek A** | **1.06** | **180** | | | **Pn** | **16 56 37.6** | **+0.2** |
| RC01 | | | | | Sn | **Sn** | **16 56 52.2** | **+1.0** |
| **SCM** | **Sheep Creek Mo** | **1.17** | **104** | | | **Pn** | **16 56 39.3** | **+0.4** |
| SCM | | | | | IAML | | 16 56 58.3 | |
| | comp=N,13µm,0.8s | | | | | | | |
| **STLK** | **Strandline Lak** | **1.19** | **238** | | | **Pn** | **16 56 39.4** | **+0.2** |
| STLK | | | | | | **Sn** | **16 56 54.9** | **+0.3** |
| **RND** | **Reindeer** | **1.33** | **17** | | | **Pn** | **16 56 41.6** | **+0.5** |
| **SPCG** | **Spurr Capps Gl** | **1.39** | **233** | | | **Pn** | **16 56 42.2** | **+0.3** |
| **DHY** | **Denali Highway** | **1.43** | **48** | | | **Pn** | **16 56 42.8** | **+0.3** |
| **PWL** | **Port Wells** | **1.45** | **152** | | | **Pn** | **16 56 42.8** | **+0.1** |
| PWL | | | | | | **Sn** | **16 57 01.4** | **+0.8** |
| **CRP** | **Crater Peak** | **1.46** | **234** | | | **Pn** | **16 56 43.3** | **+0.4** |
| **SPCP** | **Crater Peak Br** | **1.46** | **234** | | | **Pn** | **16 56 43.2** | **+0.3** |
| **SPU** | **Mount Spurr** | **1.47** | **230** | | | **Pn** | **16 56 43.4** | **+0.4** |
| SPU | | | | | Sn | **Sn** | **16 57 02.3** | **+1.0** |
| SPU | | | | | IAML | | 16 57 04.5 | |
| | comp=N,5µm,0.4s | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **1.52** | **233** | | | **Pn** | **16 56 44.1** | **+0.5** |
| **CAPN** | **Captain Cook N** | **1.54** | **207** | | | **Pn** | **16 56 45.9** | **+2.0** |
| **SPBG** | **Spurr Blockage** | **1.54** | **236** | | | **Pn** | **16 56 45.4** | **+1.4** |
| **M20K** | **Styx River** | **1.63** | **262** | Pn | | **Pn** | **16 56 45.5** | **+0.3** |
| M20K | | | | Sn | | **Sn** | **16 57 05.7** | **+0.6** |
| M20K | | | | IAML | | | 16 57 07.7 | |
| | comp=E,7µm,0.4s | | | | | | | |
| **MCK** | **McKinley** | **1.64** | **12** | Pn | | **Pn** | **16 56 46.0** | **+0.8** |
| **SLKM** | **Skilak Lake** | **1.66** | **189** | | | **Pn** | **16 56 45.3** | **-0.2** |
| **M24K** | **Tolsona, Glenn** | **1.67** | **90** | | | **Pn** | **16 56 47.1** | **+1.5** |
| **O22K** | **Cooper Landing** | **1.67** | **180** | | | **Pn** | **16 56 45.4** | **-0.2** |
| **GLI** | **Glacier Island** | **1.79** | **134** | | | **Pn** | **16 56 47.5** | **+0.3** |
| **KLU** | **Klutina** | **1.92** | **108** | Pn | | **Pn** | **16 56 49.0** | **0.0** |
| KLU | | | | Sn | | **Sn** | **16 57 11.7** | **-0.4** |
| KLU | | | | IAML | | | 16 57 21.4 | |
| | comp=E,4µm,0.7s | | | | | | | |
| KLU | | | | IAML | | | 16 57 23.8 | |
| | comp=N,4µm,0.4s | | | | | | | |
| **L20K** | **Farewell, AK** | **1.97** | **282** | | | **Pn** | **16 56 50.2** | **+0.5** |
| **RDT** | **Redoubt** | **2.04** | **221** | | | **Pn** | **16 56 51.2** | **+0.5** |
| RDT | | | | | | **Sn** | **16 57 16.8** | **+1.8** |
| **BWN** | **Browne** | **2.04** | **3** | | | **Pn** | **16 56 51.6** | **+1.0** |
| BWN | | | | | IAML | | 16 57 17.9 | |
| | comp=N,3µm,1.1s | | | | | | | |
| BWN | | | | | IAML | | 16 57 39.1 | |
| | comp=E,3µm,0.9s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **2.05** | **344** | Pn | | **Pn** | **16 56 50.8** | **+0.1** |
| BPAW | | | | | IAML | | 16 57 19.0 | |
| | comp=E,2µm,0.5s | | | | | | | |
| **SEW** | **Seward** | **2.05** | **176** | Pn | | **Pn** | **16 56 51.5** | **+0.8** |
| **PAX** | **Paxson** | **2.13** | **65** | Pn | | **Pn** | **16 56 53.4** | **+1.4** |
| **DIV** | **Divide** | **2.14** | **117** | Pn | | **Pn** | **16 56 51.8** | **-0.3** |
| **DIV** | **Divide** | **2.14** | **117** | | | **Sn** | **16 57 17.4** | **-0.1** |
| **HARP** | **HAARP** | **2.15** | **81** | | | **Pn** | **16 56 53.8** | **+1.7** |
| **RDJH** | **Redoubt Jeurge** | **2.15** | **225** | | | **Pn** | **16 56 53.1** | **+0.8** |
| RDJH | | | | | | **Sn** | **16 57 19.7** | **+1.9** |
| **M19K** | **Big River Lodg** | **2.22** | **266** | | | **Pn** | **16 56 53.4** | **+0.4** |
| M19K | | | | | IAML | | 16 57 26.3 | |
| | comp=E,1µm,0.3s | | | | | | | |
| **RSO** | **Redoubt South** | **2.23** | **222** | | | **Pn** | **16 56 54.1** | **+0.7** |
| **RDWB** | **Redoubt West** | **2.24** | **224** | | | **Pn** | **16 56 54.3** | **+0.8** |
| **RED** | **Redoubt Volcan** | **2.27** | **222** | | | **Pn** | **16 56 54.6** | **+0.7** |
| RED | | | | | | **Sn** | **16 57 22.1** | **+1.4** |
| **HIN** | **Hinchinbrook I** | **2.34** | **137** | Pn | | **Pn** | **16 56 54.9** | **+0.1** |
| **K20K** | **Telida** | **2.34** | **303** | Pn | | **Pn** | **16 56 54.7** | **-0.1** |
| K20K | | | | | IAML | | 16 57 23.3 | |
| | comp=N,2µm,0.7s | | | | | | | |
| K20K | | | | | IAML | | 16 57 31.0 | |
| | comp=E,2µm,0.6s | | | | | | | |
| **L19K** | **White Mountain** | **2.41** | **273** | Pn | | **Pn** | **16 56 55.8** | **+0.1** |
| L19K | | | | | IAML | | 16 57 26.2 | |
| | comp=N,2µm,0.4s | | | | | | | |
| L19K | | | | | IAML | | 16 57 26.4 | |
| | comp=E,3µm,0.6s | | | | | | | |
| **P23K** | **Montague Islan** | **2.43** | **151** | | | **Pn** | **16 56 55.3** | **-0.6** |
| **WRH** | **Wood River Hil** | **2.45** | **17** | Pn | | **Pn** | **16 56 56.7** | **+0.6** |
| **K24K** | **Donnelly Dome** | **2.45** | **45** | | | **Pn** | **16 56 57.6** | **+1.3** |
| **BRLK** | **Bradley Lake** | **2.45** | **194** | Pn | | **Pn** | **16 56 56.4** | **+0.1** |
| BRLK | | | | | IAML | | 16 57 33.8 | |
| | comp=E,2µm,0.5s | | | | | | | |
| BRLK | | | | | IAML | | 16 57 36.2 | |
| | comp=N,1µm,0.5s | | | | | | | |
| **BRSE** | **Bradley Lake S** | **2.46** | **192** | | | **Pn** | **16 56 56.8** | **+0.4** |
| BRSE | | | | | | **Sn** | **16 57 26.7** | **+1.5** |
| **NEA2** | **Nenana** | **2.48** | **6** | | | **Pn** | **16 56 57.0** | **+0.4** |
| **N25K** | **Chitina, Valde** | **2.48** | **100** | Pn | | **Pn** | **16 56 57.2** | **+0.5** |
| N25K | | | | | IAML | | 16 57 35.3 | |
| | comp=E,1µm,0.6s | | | | | | | |
| N25K | | | | | IAML | | 16 57 37.8 | |
| | comp=N,2µm,0.7s | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **2.49** | **128** | P | | **Pn** | **16 56 57.2** | **+0.4** |
| **EYAK** | **Cordova Ski Ar** | **2.49** | **128** | Pn | | **Pn** | **16 56 56.6** | **-0.2** |
| **O20K** | **Slope Mountain** | **2.50** | **216** | | | **Pn** | **16 56 58.0** | **+1.0** |
| **WACK** | **Wrangell Chich** | **2.54** | **91** | | | **Pn** | **16 56 58.6** | **+1.0** |
| **HDA** | **Harding Lake** | **2.60** | **28** | Pn | | **Pn** | **16 56 58.9** | **+0.7** |
| HDA | | | | | IAML | | 16 57 35.8 | |
| | comp=E,1µm,0.3s | | | | | | | |
| HDA | | | | | IAML | | 16 57 47.1 | |
| | comp=N,2µm,0.6s | | | | | | | |
| **N19K** | **Bonanza Creek** | **2.65** | **242** | Pn | | **Pn** | **16 56 59.6** | **+0.6** |
| **CCB** | **Clear Creek Bu** | **2.66** | **18** | Pn | | **Pn** | **16 56 59.1** | **+0.1** |
| **HOM** | **Homer** | **2.67** | **202** | Pn | | **Pn** | **16 57 00.5** | **+1.3** |
| **IVE** | **Iliamna Volcan** | **

comp=N,970nm,0.7s
MID IAML 16 58 19.6

comp=E,940nm,0.9s
**SCRK Sand Creek 3.19 52 Pn Pn 16 57 07.2 +0.8**
**HMT Hamilton 3.20 122 Pn 16 57 06.2 -0.3**
**J19K Poorman 3.27 307 Pn Pn 16 57 07.8 +0.5**
J19K IAML 16 57 46.3

comp=E,1µm,0.4s
J19K IAML 16 57 46.3

comp=N,1µm,0.5s
**L18K Granite Mounta 3.27 274 Pn Pn 16 57 07.6 +0.2**
**MCARA McCarthy VSAT 3.27 101 Pn 16 57 07.5 +0.1**
**AU22 Augustine Moun 3.31 214 Pn 16 57 08.8 +0.9**
**N18K Kilae Creek 3.31 246 Pn Pn 16 57 08.2 +0.3**
N18K IAML 16 57 46.1

comp=N,644nm,0.6s
**AUL Augustine Lava 3.32 215 Pn 16 57 09.6 +1.5**
**AUCH Augustine Cone 3.34 215 Pn 16 57 09.5 +1.1**
**NICHA Nichawak Mount 3.38 122 Pn 16 57 08.9 0.0**
**KAIM Kayak Island 3.40 128 Pn 16 57 08.8 -0.5**
KAIM IAML 16 58 07.5

comp=N,841nm,0.6s
KAIM IAML 16 58 13.4

comp=E,724nm,0.6s
**I20K Naaghedeneel 3.41 323 Pn 16 57 10.2 +0.8**
**CRQM Cirque 3.45 111 Pn 16 57 10.2 +0.2**
**J18K Innoko River 3.48 296 Pn Pn 16 57 10.5 +0.3**
J18K IAML 16 57 50.8

comp=N,777nm,0.3s
J18K IAML 16 57 51.3

comp=E,673nm,0.6s
**O18K Koktuh Hills 3.52 232 Pn Pn 16 57 10.9 0.0**
**SUCK Suckling Hills 3.55 123 Pn 16 57 11.1 -0.2**
SUCK IAML 16 58 06.2

comp=E,815nm,0.4s
**KHIT Khitrov Hills 3.56 116 Pn 16 57 11.3 -0.1**
**TGL Tana Glacier 3.59 110 Pn Pn 16 57 11.5 -0.3**
**PTPK Patty Peak 3.59 102 Pn 16 57 12.5 +0.6**
**GRIN Grindle Hills 3.62 118 Pn 16 57 12.5 +0.3**
**J26L Joseph Creek 3.65 47 Pn Pn 16 57 14.2 +1.6**
J26L IAML 16 57 59.6

comp=N,616nm,0.6s
J26L IAML 16 58 01.0

comp=E,855nm,0.5s
**M27K Edge Creek, AK 3.67 83 Pn 16 57 14.5 +1.5**
**BALM Baldy 3.69 104 Pn 16 57 13.1 -0.2**
**H23K Yukon River 3.70 1 Pn Pn 16 57 13.7 +0.5**
H23K IAML 16 57 57.4

comp=E,390nm,1.0s
H23K IAML 16 57 58.5

comp=N,420nm,1.2s
**BGLC Bering Glacier 3.72 120 Pn 16 57 14.5 +1.0**
**WAX Waxell Ridge 3.72 114 Pn Pn 16 57 13.7 +0.1**
**KIAG Kiagna River 3.73 106 Pn 16 57 13.5 -0.4**
**M17K Holitna River 3.74 262 Pn Pn 16 57 13.5 -0.4**
**L27K Beaver Creek, 3.76 72 Pn 16 57 14.6 +0.4**
L27K IAML 16 58 16.4

comp=N,400nm,1.3s
**Q19K Cape Douglas, 3.76 213 Pn 16 57 14.7 +0.6**
Q19K IAML 16 58 47.0

comp=N,1µm,0.9s
**BCAR Beaver Creek A 3.78 72 Pn 16 57 14.8 +0.4**
**H21K Melozitna Rive 3.78 340 Pn Pn 16 57 14.9 +0.5**
**SYI Shuyak Island 3.79 202 Pn Pn 16 57 14.7 +0.3**
**H22K Ishtalitna Cre 3.84 350 Pn 16 57 15.9 +0.8**
**P18K Big Mountain, 3.86 227 Pn 16 57 15.4 -0.1**
**PRP Porcupine Dome 3.86 27 Pn 16 57 16.5 +0.9**
PRP IAML 16 58 04.2

comp=E,338nm,0.6s
PRP IAML 16 58 34.4

comp=N,332nm,0.6s
**SNH Sunshine Point 3.87 118 Pn Pn 16 57 16.3 +0.7**
SNH IAML 16 58 21.0

comp=N,510nm,0.7s
SNH IAML 16 58 28.2

comp=E,613nm,0.7s
**ISLE Juniper Island 3.87 110 Pn Pn 16 57 14.8 -0.9**
**BARK Barkley Ridge 3.90 113 Pn 16 57 16.3 +0.2**
**N17K Nushagak Hills 3.95 249 Pn Pn 16 57 16.1 -0.6**
N17K IAML 16 58 22.5

comp=N,354nm,0.7s
N17K IAML 16 58 29.3

comp=E,355nm,0.9s
**K27K Chicken 3.96 58 Pn Pn 16 57 18.2 +1.5**
**L17K Donlin 4.03 274 Pn 16 57 17.9 +0.1**
**K17K Iditarod 4.03 282 Pn Pn 16 57 17.8 0.0**
K17K IAML 16 58 24.3

comp=N,544nm,0.9s
K17K IAML 16 58 32.7

comp=E,507nm,0.9s
**BAGL Bagley Icefiel 4.03 111 Pn 16 57 17.8 0.0**
**H20K Anotleneega Mo 4.07 328 Pn 16 57 18.9 +0.6**
**GRNC Granite Creek 4.08 107 Pn 16 57 18.4 -0.3**
GRNC IAML 16 58 27.3

comp=N,708nm,0.8s
GRNC IAML 16 58 29.5

comp=E,374nm,1.0s
**GCSA Galena City Sc 4.14 312 Pn 16 57 20.1 +0.8**
**CTGM Chitina Glacie 4.18 103 Pn Pn 16 57 20.3 +0.3**
CTGM IAML 16 58 23.9

comp=E,300nm,0.6s
CTGM IAML 16 58 27.5

comp=N,456nm,0.6s
**YUK2 White River 4.21 91 Pn 16 57 20.8 +0.6**
**MESA MESA 4.25 114 Pn Pn 16 57 21.4 +0.4**
**O17K Koliganek Bris 4.31 240 Pn 16 57 22.4 +0.8**
**I26K Coal Creek Min 4.31 40 Pn Pn 16 57 22.8 +1.2**
I26K IAML 16 58 46.3

comp=E,474nm,0.9s
I26K IAML 16 58 48.4

comp=N,395nm,0.7s
**KAHG Katmai Hook Gl 4.38 215 Pn 16 57 23.3 +0.7**
**KAHC Katmai Hardscr 4.38 219 Pn 16 57 22.8 +0.1**
**LOGN Logan Glacier 4.38 104 Pn Pn 16 57 23.0 +0.2**
LOGN IAML 16 58 32.9

comp=N,402nm,1.0s
LOGN IAML 16 58 41.5

comp=E,378nm,0.9s
**YUK3 Moose Creek 4.39 91 Pn 16 57 23.5 +0.6**
**P17K Kvichak River 4.43 231 Pn 16 57 24.2 +0.9**
**RKAV Rock Avalanche 4.45 111 Pn 16 57 24.1 +0.4**
**TABL Table Mountain 4.47 109 Pn Pn 16 57 24.2 +0.1**
TABL IAML 16 58 34.2

comp=E,429nm,0.8s
TABL IAML 16 58 40.0

comp=N,415nm,1.0s
**H25L Birch Creek 4.48 21 Pn 16 57 25.4 +1.5**
**J17K VABM Dome 4.48 290 Pn Pn 16 57 24.2 +0.3**
J17K IAML 16 58 52.2

comp=N,286nm,0.8s
J17K IAML 16 58 56.2

comp=E,253nm,0.9s
**H19K Roundabout Mou 4.52 322 Pn Pn 16 57 24.7 +0.3**
H19K IAML 16 58 17.5

comp=N,558nm,0.4s
H19K IAML 16 58 18.1

comp=E,423nm,0.4s
**M16K Timber Creek 4.56 260 Pn Pn 16 57 25.0 0.0**
M16K IAML 16 58 16.5

comp=N,260nm,0.8s
M16K IAML 16 58 18.5

comp=E,276nm,0.8s
**G23K Bananza Creek 4.59 358 Pn Pn 16 57 25.9 +0.5**
**KDAK Kodiak Island 4.61 199 Pn Pn 16 57 24.6 -1.0**
**KDAK Kodiak Island 4.61 199 P Pn 16 57 25.1 -0.6**
comp=E,37nm,0.3s,baz=65,slow=6.6,SNR=262
KDAK S Sn 16 58 17.4 -0.3

comp=E,48nm,0.4s,baz=314,slow=17,SNR=1.4
KDAK LR LR 16 59 35.3

comp=E,227nm,21.7s,baz=59,slow=42
**L16K Owhat River 4.63 269 Pn Pn 16 57 26.0 0.0**
L16K IAML 16 58 50.4

comp=E,206nm,0.8s
**EGAK Eagle 4.66 52 Pn Pn 16 57 27.2 +0.9**
EGAK IAML 16 58 58.0

comp=E,517nm,0.8s
**N16K Nishlik Lake 4.67 253 Pn 16 57 26.9 +0.3**
**G24K Hadweenzic Riv 4.68 11 Pn Pn 16 57 27.6 +0.9**
G24K IAML 16 58 34.4

comp=N,248nm,0.9s
**G21K Allakaket 4.69 341 Pn Pn 16 57 27.5 +0.7**
G21K IAML 16 58 21.9

comp=N,306nm,0.9s
G21K IAML 16 58 22.6

comp=E,393nm,0.7s
**O28M Mount Upton 4.77 103 Pn 16 57 28.6 +0.4**
**KABU Katmai Buttres 4.77 218 Pn 16 57 28.6 +0.6**
**SAMH Samovar Hills 4.78 111 Pn 16 57 29.1 +1.0**
**YUK8 Steele Glacier 4.81 96 Pn 16 57 29.8 +1.1**
**O16K Kokwok River B 4.83 242 Pn Pn 16 57 28.1 -0.5**
O16K IAML 16 59 07.3

comp=N,168nm,1.2s
**ACHA Angle Creek He 4.84 218 Pn Pn 16 57 28.9 0.0**
**FYU Fort Yukon 4.85 22 Pn 16 57 29.6 +0.7**
FYU IAML 16 59 03.9

comp=N,293nm,1.3s
FYU IAML 16 59 04.2

comp=E,287nm,1.3s
**G22K Bettles 4.86 352 Pn 16 57 30.5 +1.4**
**H18K Honhosa River 4.89 312 Pn Pn 16 57 30.1 +0.5**
H18K IAML 16 58 26.9

comp=E,353nm,0.6s
H18K IAML 16 58 26.9

comp=N,265nm,0.3s
**ANCK Angle Creek 4.89 219 Pn 16 57 30.1 +0.4**
**G25K Bearman Lake 4.90 17 Pn 16 57 30.9 +1.3**
**CNTC Contact Creek 4.96 221 Pn 16 57 30.8 +0.2**
**I27K Kandik River 4.99 42 Pn 16 57 31.8 +0.9**
**COLD Coldfoot 5.11 358 Pn 16 57 33.7 +1.2**
**P16K Nushagak River 5.13 236 Pn 16 57 34.1 +1.2**
**J16K Anvik River 5.14 288 Pn Pn 16 57 33.0 0.0**
J16K IAML 16 58 58.7

comp=N,149nm,0.8s
**G19K Purcell Mounta 5.15 324 Pn Pn 16 57 33.2 +0.1**
G19K IAML 16 59 08.2

comp=E,144nm,0.9s
**R18K Karluk 5.17 210 Pn 16 57 32.8 -0.6**
R18K IAML 16 58 31.8

comp=N,283nm,0.5s
R18K IAML 16 58 41.0

comp=E,244nm,0.5s
**OHAK Old Harbor 5.26 202 P Pn 16 57 33.1 -1.4**
**OHAK Old Harbor 5.26 202 Pn Pn 16 57 32.2 -2.3**
**M29M Somme Creek 5.26 82 Pn Pn 16 57 35.3 +0.5**
**I17K Unalakleet 5.30 294 Pn Pn 16 57 35.9 +0.8**
I17K IAML 16 58 37.1

comp=N,167nm,0.5s
I17K IAML 16 58 37.1

comp=E,180nm,0.4s
**H17K Granite Mounta 5.35 306 Pn Pn 16 57 36.2 +0.4**
H17K IAML 16 58 34.8

comp=N,215nm,0.7s
H17K IAML 16 58 38.3

comp=E,236nm,0.8s
**BCPM Bancas Point 5.37 110 Pn Pn 16 57 35.5 -0.6**
BCPM IAML 16 58 57.9

comp=E,198nm,0.5s
BCPM IAML 16 59 06.5

comp=N,276nm,0.9s
**N15K Kwethluk River 5.40 253 Pn Pn 16 57 36.6 0.0**
**L29M L29M 5.44 75 Pn Pn 16 57 37.8 +0.7**
**G18K Tagagawik 5.44 318 Pn Pn 16 57 37.3 +0.3**
**H27K Steamboat Moun 5.44 38 Pn 16 57 38.3 +1.2**
**F24K Squaw Lake 5.45 7 Pn Pn 16 57 38.4 +1.1**
**I28M Miner Creek 5.46 48 Pn Pn 16 57 38.5 +1.1**
**G26K Porcupine Rive 5.46 25 Pn 16 57 38.5 +1.2**
**M15K Kasigluk River 5.46 259 Pn 16 57 37.5 +0.1**
**F22K John River 5.49 350 Pn 16 57 38.6 +0.8**
**PLK5 Peulik 5 5.49 224 Pn 16 57 39.1 +1.4**
**PLK2 Peulik 2 5.50 220 Pn 16 57 38.9 +0.9**
**K15K Wolf Creek Mou 5.53 277 Pn Pn 16 57 38.2 -0.1**
**PLK3 Peulik 3 5.55 219 Pn 16 57 39.4 +0.8**
**F20K Avaraart Lake 5.56 335 Pn Pn 16 57 39.3 +0.6**
**PLK1 Peulik 1 5.56 222 Pn 16 57 39.2 +0.5**
**YUK6 Outpost Mounta 5.56 97 Pn 16 57 39.1 +0.1**
**L15K Ungalak Mounta 5.58 270 Pn 16 57 39.1 +0.1**
**PNL Peninsula 5.61 112 P Pn 16 57 40.2 +0.7**
**PNL Peninsula 5.61 112 Pn 16 57 39.4 -0.1**
**PLK4 Peulik 4 5.62 219 Pn LR 16 57 39.8 +0.1**
**J29N Klondike Camp 5.68 61 Pn Pn 16 57 42.4 +2.0**
**O29M Mount Kennedy 5.69 104 Pn Pn 16 57 39.9 -0.7**
**PLBL Peulik Blue Cr 5.71 222 Pn 16 57 41.7 +0.9**
**F25K Christian Rive 5.74 16 Pn Pn 16 57 42.1 +0.9**
**BMAR Burnt Mountain 5.74 20 Pn Pn 16 57 42.6 +1.3**
**O15K Ungalikthiuk R 5.79 244 Pn 16 57 42.8 +1.0**
**YUK7 Dusty Glacier 5.80 101 Pn 16 57 42.9 +0.6**
**K29M Barlow Dome 5.81 68 Pn Pn 16 57 44.2 +2.0**
**F19K Shaleruckik Mo 5.85 327 Pn Pn 16 57 42.8 +0.2**
**G17K Kiwalik Mounta 5.89 310 Pn 16 57 44.2 +1.0**
**E23K Chandalar 5.94 0 Pn Pn 16 57 44.8 +0.8**
**E24K Your Creek 5.98 4 Pn Pn 16 57 45.7 +1.2**
**I29M Ogilvie Camp, 6.00 52 Pn Pn 16 57 46.9 +2.1**
**N30M Aishikik Lake 6.03 91 Pn Pn 16 57 44.3 -0.8**
**M14K Bethel 6.04 262 Pn Pn 16 57 45.3 +0.1**
**SII Sitkinak Islan 6.05 204 P 16 57 44.5 -0.9**
**SII Sitkinak Islan 6.05 204 Pn Pn 16 57 42.7 -2.8**
**F26K Sheenjek River 6.05 21 Pn Pn 16 57 45.9 +0.4**
**H16K Elim 6.16 299 Pn 16 57 48.2 +1.4**
**F18K Selawik 6.21 320 Pn 16 57 48.6 +1.1**
**L14K Kuka Creek 6.21 268 Pn Pn 16 57 48.0 +0.5**
**E19K Redstone River 6.22 332 Pn Pn 16 57 48.5 +0.7**
**N14K Kuskokwak Cree 6.23 254 Pn 16 57 48.5 +0.7**
**O14K Tigyukauivet M 6.37 248 Pn Pn 16 57 51.7 +2.0**
**P29M Windy Craggy 6.37 108 Pn Pn 16 57 49.5 -0.3**
**H29M Whitestone 6.42 46 Pn Pn 16 57 52.4 +1.9**
**J14K Nanvaranak Lak 6.45 282 Pn Pn 16 57 51.4 +0.5**
**G16K Koyuk River 6.48 306 Pn Pn 16 57 51.5 +0.3**
**J30M Hart River 6.50 62 Pn Pn 16 57 54.2 +2.5**
**P30M Million Dollar 6.50 102 Pn Pn 16 57 51.4 -0.3**
**TOLK Toolik Lake Re 6.53 0 Pn Pn 16 57 53.6 +1.7**
**F17K Baldwin Pennin 6.61 316 Pn Pn 16 57 54.1 +1.0**
**N31M Braeburn, Yuko 6.64 90 Pn Pn 16 57 53.2 -0.2**
**O30N Mendenhall 6.67 96 Pn Pn 16 57 54.2 +0.1**
**I30M Mount Dempster 6.68 57 Pn Pn 16 57 55.7 +1.5**
**E20K Nigu River 6.71 339 Pn 16 57 56.5 +2.1**
**ANNE Aniakchak Nort 6.74 223 Pn 16 57 55.1 +0.2**
**M13K Dall Lake 6.80 261 Pn Pn 16 57 57.0 +1.4**
**D23K Nanushuk River 6.86 357 Pn Pn 16 57 58.5 +2.0**
**D22K Ayikyak River 6.88 351 Pn Pn 16 57 59.1 +2.4**
**F28M Old Crow 6.90 33 Pn Pn 16 57 57.9 +0.8**
**G29M Pine Creek 6.95 41 Pn Pn 16 58 00.7 +3.0**
**E27K Coleen River 6.96 26 Pn Pn 16 57 58.5 +0.7**
**G15K Niukluk 7.00 300 Pn 16 57 59.5 +1.1**
**CHIR Chirikof Islan 7.03 208 Pn Pn 16 57 56.5 -2.4**
**E18K Tukpahlearik C 7.04 323 Pn Pn 16 58 00.4 +1.5**
**D24K Happy Valley 7.05 3 Pn Pn 16 58 01.6 +2.6**
**PLBC Pleasant Camp 7.07 106 Pn 16 57 59.4 +0.1**
**EPYK Eagle Plains 7.07 47 Pn Pn 16 58 01.1 +1.7**
**M31M Drury Creek, Y 7.18 83 Pn Pn 16 58 01.2 +0.4**
**E17K Hotham Inlet 7.18 319 Pn 16 58 02.2 +1.4**
**D20K Etivluk River 7.19 339 Pn 16 58 02.4 +1.4**
**D19K Kuna River 7.27 335 Pn Pn 16 58 02.5 +0.3**
**WHY Whitehorse 7.28 95 Pn Pn 16 58 01.8 -0.5**
**D25K Kavik River 7.34 9 Pn Pn 16 58 04.6 +1.6**
**CHGN Chignik 7.36 221 Pn Pn 16 58 01.2 -2.1**
**ANM Nome 7.44 296 Pn Pn 16 58 05.3 +0.8**
**F15K North Star Dit 7.48 305 Pn Pn 16 58 05.8 +0.8**
**SKAG Skagway 7.53 105 P Pn 16 58 06.2 +0.5**
**SKAG Skagway 7.53 105 Pn Pn 16 58 05.3 -0.3**
**G30M tAoh Zraii Nji 7.56 44 Pn Pn 16 58 07.2 +1.1**
**FARO Faro, Yukon 7.66 82 Pn Pn 16 58 07.5 +0.1**
**C23K Itkillik River 7.74 358 Pn Pn 16 58 09.9 +1.5**
**VNFG Fog Glacier, M 7.74 225 Pn Pn 16 58 09.5 +0.9**
**E28M Babbage River 7.75 29 Pn Pn 16 58 10.1 +1.6**
**B21K Ikpikpuk River 7.77 347 Pn Pn 16 58 10.2 +1.4**
**S31K Pelican 7.94 116 Pn Pn 16 58 10.7 -0.5**
**D17K Noatak River 7.94 320 Pn 16 58 12.9 +1.7**
**E29M Slow River 7.98 33 Pn Pn 16 58 13.2 +1.4**
**D27M Malcolm River 7.98 23 Pn Pn 16 58 12.0 +0.2**
**C26K Camden Bay 8.05 12 Pn Pn 16 58 13.5 +0.9**
**F14K Arctic Creek 8.06 302 Pn 16 58 14.0 +1.1**
**C19K Lookout Ridge 8.08 334 Pn Pn 16 58 14.4 +1.2**
**C18K Utukok River 8.08 329 Pn Pn 16 58 13.7 +0.5**
**RDOG Red Dog Mine 8.12 323 Pn Pn 16 58 13.9 +0.2**
**M11K Mekoryuk 8.13 265 Pn 16 58 14.8 +1.0**
**G31M Satah River 8.19 47 Pn Pn 16 58 15.8 +1.2**
**P32M Atlin 8.21 101 Pn Pn 16 58 14.4 -0.7**
**P33M Teslin, Yukon 8.39 96 Pn Pn 16 58 16.4 -1.1**
**B20K Meade River 8.45 342 Pn Pn 16 58 18.7 +0.6**
**D28M Stokes Point 8.50 27 Pn Pn 16 58 20.5 +1.7**
**R32K Eaglecrest 8.50 110 Pn Pn 16 58 18.6 -0.2**
**JIS Juneau Island 8.56 110 P Pn 16 58 20.9 +1.3**
**MMPY Sheldon Lake, 8.59 79 Pn Pn 16 58 21.1 +0.9**
**F31M Tsiigehtchic 8.62 45 Pn Pn 16 58 21.8 +1.2**
**TNA Tin City 8.73 301 Pn Pn 16 58 23.0 +1.0**

**SDPT Sand Point 8.80 224 P Pn 16 58 22.5 -0.6**
**SDPT Sand Point 8.80 224 Pn Pn 16 58 22.8 -0.3**
**SIT Sitka 8.89 119 P Pn 16 58 23.5 -0.8**
**SIT Sitka 8.89 119 Pn Pn 16 58 23.0 -1.3**
**S32K Killisnoo 8.94 115 Pn Pn 16 58 24.9 -0.1**
**CNBA Chernabura Isl 8.97 220 Pn Pn 16 58 23.3 -2.1**
**C16K Lisburne Hills 8.97 320 Pn Pn 16 58 27.4 +2.1**
**S12K Black Hills 9.07 230 Pn Pn 16 58 28.1 +1.4**
**Q32M Nakina River 9.16 103 Pn Pn 16 58 27.2 -0.9**
**INK Inuvik 9.16 41 P Pn 16 58 29.8 +1.9**
comp=N,5.1nm,0.5s,baz=240,slow=16,SNR=6.9
INK S Sn 17 00 10.9 +1.7

comp=N,6.5nm,0.4s,baz=39,slow=26,SNR=2.2
**R33M Jennings River 9.57 98 Pn Pn 16 58 33.2 -0.4**
**S34M Telegraph Cree 10.21 106 Pn Pn 16 58 41.6 -0.6**
**U33K Whale Pass 10.43 118 Pn Pn 16 58 45.2 0.0**
**DLBC Dease Lake 10.44 102 Pn Pn 16 58 43.3 -2.2**
**DLBC Dease Lake 10.44 102 P Pn 16 58 45.4 -0.1**
comp=N,1.8nm,0.4s,baz=276,slow=5.5,SNR=7.3
DLBC S Sn 17 00 44.0 +3.2

comp=N,4.1nm,0.7s,baz=249,slow=11,SNR=1.7
DLBC LR LR 17 02 59.3

comp=N,151nm,20.9s,baz=323,slow=38
**WRAK Wrangell Islan 10.56 115 Pn Pn 16 58 46.7 -0.3**
**CRAG Craig 10.88 120 P Pn 16 58 52.4 +1.1**
**CRAG Craig 10.88 120 Pn Pn 16 58 50.2 -1.1**
**T35M Bob Quinn 11.12 109 Pn Pn 16 58 53.6 -1.2**
**DIB Dawson Inlet, 12.82 127 Pn Pn 16 59 17.2 -0.6**
**BBB Bella Bella 15.30 121 LR LR 17 05 00.6**
comp=N,68nm,19.9s,baz=305,slow=34
**YKA Yellowknife Ar 16.20 73 P P 17 00 04.0 -0.4**
comp=N,2.5nm,0.9s,baz=291,slow=11,SNR=3.4
**SHEM Shemya Is, Ala 21.35 260 LR LR 17 10 14.4**
comp=N,53nm,18.3s,baz=296,slow=39
**LTY Liberty 22.17 119 P P 17 01 11.4 +1.8**
**HEBO Mount Hebo 22.63 126 P P 17 01 15.5 +1.0**
**MXC Moxie City 22.87 119 P P 17 01 17.5 +0.5**
MXC IAmb IAmb 17 01 19.4

comp=Z,12nm,0.7s
**NEW Newport 22.89 112 LR LR 17 10 49.5**
comp=Z,49nm,18.8s,baz=326,slow=38
**E07A Sunnyside 23.07 119 P P 17 01 19.8 +0.8**
E07A IAmb IAmb 17 01 21.1

comp=Z,8.8nm,0.7s
**HOOD Mount Hood Mea 23.35 123 P P 17 01 23.2 +1.4**
HOOD IAmb IAmb 17 01 24.1

comp=Z,14nm,0.9s
**H04A Detroit Lake 23.68 125 P P 17 01 26.0 +1.3**
H04A IAmb IAmb 17 01 26.4

comp=Z,7.6nm,0.8s
**BUCK Buck Mountain 23.79 127 P P 17 01 28.1 +2.3**
BUCK IAmb IAmb 17 01 32.4

comp=Z,20nm,1.2s
**I04A Tendick Farm, 24.35 126 P P 17 01 32.1 +1.3**
I04A IAmb IAmb 17 01 34.4

comp=Z,28nm,1.5s
**G08A Pilot Rock 24.46 119 P P 17 01 32.6 +0.7**
**DBO Dodson Butte 24.61 128 P P 17 01 35.1 +1.8**
DBO IAmb IAmb 17 01 36.5

comp=Z,15nm,1.1s
**K02D Willamette Mer 24.83 130 P P 17 01 37.0 +1.8**
K02D IAmb IAmb 17 01 38.2

comp=Z,12nm,1.1s
**PINE Pine Mountain 24.91 124 P P 17 01 38.6 +2.5**
**HUMO Hull Mountain 25.16 129 P P 17 01 40.2 +2.0**
**I07A Izee 25.24 122 P P 17 01 40.3 +1.4**
**MSO Missoula 25.38 111 P P 17 01 41.0 +0.7**
**BMO Blue Mountains 25.50 118 P P 17 01 42.3 +1.0**
**KSXB Camp Six Broad 25.51 131 P P 17 01 42.4 +0.9**
**QVMT Ovando 25.62 109 P P 17 01 42.4 0.0**
**KRMB Red Mountain 25.77 131 P P 17 01 45.5 +1.7**
**BPMT Black Pine Rid 25.90 110 P P 17 01 45.2 +0.1**
**LYMT Lyon Mountain 26.00 108 P P 17 01 46.5 +0.4**
**YBH Yreka Blue Hor 26.02 129 P P 17 01 48.1 +2.1**
**YBH Yreka Blue Hor 26.02 129 LR LR 17 11 09.9**
comp=Z,19nm,20.3s,baz=329,slow=34
**EGMT Eagleton 26.36 104 P P 17 01 49.6 +0.5**
**KMRM Mail Ridge 26.99 132 P P 17 01 56.7 +1.9**
KMRM IAmb IAmb 17 01 58.0

comp=Z,8.1nm,0.9s
**BOZ Bozeman (W) 27.35 109 P P 17 01 59.0 +0.9**
**KCPM Cahto Peak 27.51 133 P P 17 02 01.1 +1.6**
KCPM IAmb IAmb 17 02 02.2

comp=Z,5.4nm,0.8s
**HLID Hailey 27.76 116 P P 17 02 03.6 +1.8**
**MA2 Magadan 28.21 292 LR LR 17 14 03.9**
comp=Z,35nm,18.6s,baz=80,slow=38
**RLMT Red Lodge 28.77 107 P P 17 02 12.7 +1.8**
**PETK Petropavlovsk- 28.79 276 P P 17 02 09.3 -1.3**
comp=Z,1.5nm,0.9s,baz=76,slow=12,SNR=1.7
PETK LR LR 17 14 42.9

comp=Z,32nm,18.2s,baz=76,slow=39
comp=Z,1.5nm,0.9s
**IMW Indian Meadow 28.99 111 P P 17 02 13.8 +0.9**
IMW IAmb IAmb 17 02 16.1

comp=Z,6.3nm,1.0s
**TPAW Teton Pass 29.31 111 P P 17 02 17.4 +1.7**
TPAW IAmb IAmb 17 02 17.6

comp=Z,5.5nm,0.9s
**HVU Hansel Valley 29.91 116 P P 17 02 23.4 +2.6**
**WAKR Walker 30.05 128 P P 17 02 21.5 -0.6**
WAKR IAmb IAmb 17 02 24.8

comp=Z,7.5nm,1.1s
**PDAR Pinedale Array 30.50 111 P P 17 02 26.9 +0.8**
**PDAR Pinedale Array 30.50 111 P P 17 02 27.5 +1.3**
comp=Z,2.4nm,1.0s,baz=316,slow=6.2,SNR=9.3
PDAR LR LR 17 14 44.5

comp=Z,36nm,21.7s,baz=334,slow=36
comp=Z,2.4nm,1.0s
**NVAR Mina Array Bea 30.54 126 P P 17 02 27.9 +1.5**
**NVAR Mina Array Bea 30.54 126 P P 17 02 28.0 +1.6**
comp=Z,4.5nm,0.7s,baz=313,slow=9.0,SNR=33
NVAR LR LR 17 14 00.3

comp=Z,32nm,19.3s,baz=300,slow=35
comp=Z,4.5nm,0.7s
**NV11 Mina Array Sit 30.59 126 P P 17 02 28.6 +1.7**
NV11 IAmb IAmb 17 02 29.6

comp=Z,5.6nm,0.8s
**OMMB Old Mammoth Mi 31.00 128 P P 17 02 31.1 +0.5**
**DUG Dugway, Tooele 31.21 117 P P 17 02 32.1 -0.2**
**TPH Tonopah 31.26 125 P P 17 02 33.6 +0.8**
**ULM Lac du Bonnet 31.26 87 LR LR 17 15 48.2**
comp=Z,31nm,20.9s,baz=138,slow=37
**DSP Deep Springs 31.59 127 P P 17 02 37.7 +2.2**
DSP IAmb IAmb 17 02 38.7

comp=Z,4.5nm,0.9s
**R11B Troy Canyon, C 31.66 123 P P 17 02 37.7 +1.4**
**NLU North Lily Min 31.72 117 P P 17 02 37.7 +0.8**
NLU IAmb IAmb 17 02 39.0

comp=Z,4.0nm,0.9s
**RSSD Black Hills 31.92 103 P P 17 02 39.2 +0.6**
RSSD IAmb IAmb 17 02 40.7

comp=Z,8.4nm,0.9s
**S11A Rachel 32.21 124 P P 17 02 42.4 +1.3**
S11A IAmb IAmb 17 02 45.6

comp=Z,7.4nm,1.0s
**RDMU Red Mountain 32.28 113 P P 17 02 42.7 +1.0**
RDMU IAmb IAmb 17 02 44.8

comp=Z,5.9nm,0.8s
**MVU Marysvale 32.89 118 P P 17 02 48.2 +1.1**
**MSU Marysvale 32.90 118 P P 17 02 47.5 +0.3**
**Q16A Castle Valley 32.97 117 P P 17 02 47.6 -0.3**
**SRU San Rafael Swe 33.09 116 P P 17 02 49.5 +0.7**
**CCUT Cedar City 33.23 121 P P 17 02 50.7 +0.5**
CCUT IAmb IAmb 17 02 52.6

comp=Z,4.5nm,0.8s
**MTPU Mount Pierson 33.30 119 P P 17 02 51.9 +1.1**
**SZCU Shurtz Canyon 33.31 120 P P 17 02 51.2 +0.4**
SZCU IAmb IAmb 17 02 53.2

comp=Z,4.8nm,0.8s
**LCMT Little Creek M 33.75 121 P P 17 02 56.0 +1.5**
LCMT IAmb IAmb 17 02 57.1

comp=Z,5.2nm,1.0s
**GSC Goldstone, Bar 33.86 127 P P 17 02 56.2 +0.8**
GSC IAmb IAmb 17 02 58.0

comp=Z,5.8nm,1.1s
**KNB Kanab 33.91 121 P P 17 02 57.5 +1.6**
**V12A Nelson 34.23 124 P P 17 03 00.0 +1.4**
V12A IAmb IAmb 17 03 01.1

comp=Z,5.1nm,1.0s
**U15A North Rim 34.63 120 P P 17 03 02.6 +0.2**
U15A IAmb IAmb 17 03 04.3

comp=Z,3.0nm,0.9s
**W13A Hualapai Mount 35.16 124 P P 17 03 07.9 +1.1**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| YAK | Yakutsk | 35.44 | 307 | P | P | 17 03 06.7 | -1.9 |
| YAK | Yakutsk | 35.44 | 307 | LR | LR | 17 18 59.7 | |
| | comp=Z,79nm,18.3s,baz=70,slow=39 | | | | | | |
| PFO | Pinyon Flats O | 35.49 | 128 | LR | LR | 17 17 05.5 | |
| | comp=Z,44nm,18.2s,baz=201,slow=35 | | | | | | |
| WUAZ | Wupatki | 35.80 | 120 | P | P | 17 03 13.2 | +1.0 |
| S22A | 4UR Ranch, Cre | 35.81 | 113 | P | P | 17 03 13.8 | +1.3 |
| S22A | | | | IAmb | IAmb | 17 03 38.7 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| X16A | Lo Mia Camp, P | 36.72 | 121 | P | P | 17 03 20.4 | +0.3 |
| X16A | | | | IAmb | IAmb | 17 03 22.8 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| X18A | Snowflake | 37.23 | 119 | P | P | 17 03 25.9 | +1.4 |
| X18A | | | | IAmb | IAmb | 17 03 27.0 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| SPITS | Spitsbergen Ar | 39.66 | 4 | P | P | 17 03 43.3 | -0.8 |
| | comp=Z,0.8nm,0.3s,baz=3.8,slow=5.0,SNR=6.0 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| MSTX | Muleshoe | 40.76 | 112 | P | P | 17 03 54.5 | +0.7 |
| WMOK | Wichita Mounta | 41.88 | 107 | P | P | 17 04 02.6 | -0.3 |
| WMOK | | | | IAmb | IAmb | 17 04 04.4 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| POST | Post | 42.08 | 111 | P | P | 17 04 04.8 | +0.2 |
| VHRN | Van Horn | 42.54 | 116 | P | P | 17 04 09.6 | +1.1 |
| VHRN | | | | IAmb | IAmb | 17 04 11.2 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| MGMO | Mountain Grove | 42.88 | 98 | P | P | 17 04 09.5 | -1.5 |
| SGCY | Sterling City | 43.23 | 111 | P | P | 17 04 13.6 | -0.3 |
| KLR | Kul'dur | 43.29 | 290 | LR | LR | 17 23 23.7 | |
| | comp=Z,32nm,19.4s,baz=99,slow=38 | | | | | | |
| ALPN | Alpine | 43.47 | 115 | P | P | 17 04 16.2 | +0.3 |
| ALPN | | | | IAmb | IAmb | 17 04 18.7 | |
| | comp=Z,3.8nm,0.5s | | | | | | |
| PBMO | Poplar Bluff | 44.04 | 97 | P | P | 17 04 19.5 | -0.7 |
| OZNA | Ozona | 44.08 | 112 | P | P | 17 04 20.5 | -0.2 |
| OZNA | | | | IAmb | IAmb | 17 04 22.0 | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| TX31 | Lajitas Ar. Si | 44.36 | 116 | P | P | 17 04 23.9 | +0.9 |
| TXAR | Lajitas Array | 44.36 | 116 | P | P | 17 04 23.8 | +0.7 |
| TXAR | Lajitas Array | 44.36 | 116 | P | P | 17 04 24.3 | +1.2 |
| | comp=Z,2.6nm,0.6s,baz=328,slow=6.6,SNR=41 | | | | | | |
| TXAR | | | | LR | LR | 17 24 39.7 | |
| | comp=Z,11nm,20.5s,baz=280,slow=38 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| HEH | HeiHe | 44.41 | 294 | *eP* | P | 17 04 21.4 | -1.7 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| JMIC | Jan Mayen | 44.43 | 17 | LR | LR | 17 25 41.5 | |
| | comp=Z,16nm,18.0s,baz=86,slow=40 | | | | | | |
| SAND | Sanderson | 44.48 | 114 | P | P | 17 04 24.3 | +0.4 |
| SAND | | | | IAmb | IAmb | 17 04 25.7 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| BRDY | Brady | 44.70 | 110 | P | P | 17 04 25.8 | +0.2 |
| BRDY | | | | IAmb | IAmb | 17 04 26.8 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| DRIO | Del Rio | 45.59 | 113 | P | P | 17 04 32.6 | 0.0 |
| ARCES | ARCESS Array B | 48.56 | 2 | P | P | 17 04 54.8 | -0.6 |
| | comp=Z,1.5nm,0.7s,baz=347,slow=10,SNR=4.2 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| HODGE | Hodges | 49.95 | 91 | P | P | 17 05 08.4 | +2.1 |
| MJAR | Matsushiro Arr | 50.22 | 274 | P | P | 17 05 07.6 | -0.9 |
| | comp=Z,1.1nm,0.8s,baz=36,slow=7.2,SNR=7.8 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| KSRS | Korea Array | 54.25 | 284 | P | P | 17 05 38.0 | -0.2 |
| | comp=Z,2.7nm,0.7s,baz=28,slow=7.0,SNR=15 | | | | | | |
| KSRS | | | | LR | LR | 17 28 37.4 | |
| | comp=Z,14nm,22.0s,baz=10.0,slow=36 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| ULN | Ulaanbaatar | 54.53 | 306 | P | P | 17 05 40.1 | -0.2 |
| ULN | | | | IAmb | IAmb | 17 05 41.1 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| SONM | Songino Array | 54.80 | 307 | P | P | 17 05 42.0 | -0.2 |
| SONM | | | | IAmb | IAmb | 17 05 43.5 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| SONM | Songino Array | 54.80 | 307 | P | P | 17 05 42.2 | -0.1 |
| | comp=Z,2.2nm,0.8s,baz=33,slow=7.9,SNR=15 | | | | | | |
| SONM | | | | LR | LR | 17 32 42.8 | |
| | comp=Z,36nm,18.7s,baz=54,slow=40 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| NOA | NORSAR Array B | 56.28 | 11 | LR | LR | 17 31 43.1 | |
| | comp=Z,5.3nm,18.4s,baz=100,slow=38 | | | | | | |
| ZALV | Zalesovo Beam | 56.56 | 325 | P | P | 17 05 52.6 | -2.0 |
| ZALV | Zalesovo Beam | 56.56 | 325 | P | P | 17 05 52.8 | -1.8 |
| | comp=Z,2.5nm,0.6s,baz=17,slow=7.6,SNR=12 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| FINES | FINESS Array B | 56.69 | 2 | P | P | 17 05 53.7 | -1.7 |
| | comp=Z,0.5nm,0.6s,baz=3.4,slow=9.5,SNR=5.8 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| HFS | Hagfors | 57.39 | 10 | P | P | 17 05 58.5 | -1.8 |
| | comp=Z,2.3nm,0.9s,baz=343,slow=9.2,SNR=2.7 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| HHC | Hu-ho-hao-te | 58.59 | 299 | *eP* | P | 17 06 13.1 | +3.9 |
| HHC | | | | sP | sP | 17 06 30.3 | -1.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,100nm,5.4s | | | | | | |
| ARU | Arti | 59.72 | 342 | LR | LR | 17 33 48.6 | |
| | comp=Z,18nm,20.3s,baz=6.5,slow=38 | | | | | | |
| EKA | Eskdalemuir Ar | 59.96 | 21 | P | P | 17 06 17.5 | -0.8 |
| | comp=Z,0.9nm,0.5s,baz=330,slow=5.8,SNR=4.8 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 60.89 | 334 | P | P | 17 06 23.4 | -1.2 |
| | comp=Z,2.4nm,0.6s,baz=35,slow=7.9,SNR=12 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 61.23 | 327 | P | P | 17 06 25.4 | -1.6 |
| | comp=Z,1.3nm,0.5s,baz=24,slow=6.7,SNR=8.0 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| LYN | LuoYang | 63.53 | 294 | P | P | 17 06 48.5 | +5.9 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,23nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 63.72 | 323 | P | P | 17 06 41.3 | -2.4 |
| MKAR | Makanchi Array | 63.72 | 323 | P | P | 17 06 41.9 | -1.8 |
| | comp=Z,0.9nm,0.6s,baz=36,slow=6.4,SNR=11 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| GTA | Gaotai | 64.47 | 306 | *eP* | P | 17 06 53.3 | +4.4 |
| GTA | | | | pP | pP | 17 06 58.3 | -6.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 65.62 | 341 | LR | LR | 17 37 17.9 | |
| | comp=Z,15nm,18.9s,baz=172,slow=38 | | | | | | |
| LZH | Lanzhou | 65.79 | 302 | ⇓P | P | 17 07 05.0 | +7.5 |
| LZH | | | | pP | sP | 17 07 19.6 | -0.4 |
| LZH | | | | sP | PcP | 17 07 23.3 | -4.9 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | |
| ABKAR | Akbulak array | 66.45 | 339 | P | P | 17 07 00.3 | -1.1 |
| ABKAR | | | | IAmb | IAmb | 17 07 06.6 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 67.50 | 1 | P | P | 17 07 06.4 | -1.5 |
| | comp=Z,0.8nm,0.3s,baz=0.4,slow=6.3,SNR=5.1 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| GERES | GERESS Array B | 68.57 | 12 | P | P | 17 07 13.9 | -0.9 |
| | comp=Z,0.3nm,0.4s,baz=0.0,slow=5.8,SNR=2.5 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| JTS | Las Juntas de | 69.28 | 108 | LR | LR | 17 44 20.3 | |
| | comp=Z,65nm,20.2s,baz=266,slow=42 | | | | | | |
| AAK | Ala-Archa | 69.67 | 327 | LR | LR | 17 42 07.9 | |
| | comp=Z,36nm,18.3s,baz=159,slow=40 | | | | | | |
| KK31 | Karatay Array | 70.22 | 330 | P | P | 17 07 23.0 | -2.0 |
| KKAR | Karatay Array | 70.22 | 330 | P | P | 17 07 23.2 | -1.7 |
| KSH | Kashi | 72.20 | 324 | P | P | 17 07 39.4 | +2.3 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| CHGR | Chuyangaron | 74.76 | 329 | P | P | 17 07 50.9 | -1.2 |
| ESDC | Sonseca Array | 74.83 | 27 | P | P | 17 07 52.8 | +0.3 |
| | comp=Z,0.7nm,0.8s,baz=337,slow=6.8,SNR=5.8 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| PZH | PanZhiHua | 75.05 | 298 | P | P | 17 07 57.5 | +3.5 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,180nm,5.7s | | | | | | |
| SDV | Santo Domingo | 77.09 | 95 | LR | LR | 17 43 06.8 | |
| | comp=Z,35nm,19.8s,baz=266,slow=36 | | | | | | |
| BRTR | Keskin Array B | 78.44 | 357 | P | P | 17 08 12.6 | -0.4 |
| | comp=Z,0.4nm,0.5s,baz=25,slow=4.8,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| CMAR | Chiang Mai Arr | 83.36 | 297 | P | P | 17 08 38.7 | -0.6 |
| | comp=Z,0.7nm,0.5s,baz=2.9,slow=5.1,SNR=5.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |

**IDC 15 17:06:06.2±483.0, 57.46N×94.54E, h0km, Error ellipse: s-maj=181.0km s-min=104.3km az=34.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 6.52 | 241 | I | I | 17 47 00.0 | |
| | baz=56,slow=318,SNR=2.1 | | | | | | |
| I34MN | SONGINO INFRAS | 12.04 | 138 | I | I | 18 19 10.0 | |
| | baz=331,slow=325,SNR=0.5 | | | | | | |
| I31KZ | AKTYUBINSK INF | 22.40 | 267 | I | I | 19 19 20.0 | |
| | baz=57,slow=319,SNR=1.8 | | | | | | |

*NEIC **15** 17:23:16.9±1.1, 33.1°N±0.08°×139.7°E±0.1, h182km±7km, mb4.1/12, Error ellipse: s-maj=15.8km s-min=11.9km az=105.0*
*IDC **15** 17:23:17.1±0.4, 33.2°N×139.56°E, h181km±6km, mb3.5/10, mbtmp3.9/15, Error ellipse: s-maj=35.4km s-min=9.0km az=70.0*
*JMA **15** 17:23:17.4±0.2, 33.2°N±0.6°×140°E±°, h175km±2km, MV3.5/33, NEAR HACHIJOJIMA ISLAND*
**ISC 15 17:23:16.8±0.7, 33.16N±0.06°×139.61E±0.08, h177km±6km, n68, σ1§29/70, mb3.8/16, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHJ | Hachijo jima 2 | 0.15 | 106 | P | Pn | 17 23 40.8 | +0.4 |
| | 162nm,0.2s,baz=331,slow=20,SNR=160 | | | | | | |
| JHJ | | | | S | Sn | 17 24 00.6 | +2.3 |
| | 372nm,0.3s,baz=84,slow=23,SNR=25 | | | | | | |
| JHCJ | Hachijojimakas | 0.18 | 119 | *eP* | Pn | 17 23 40.8 | +0.4 |
| JHCJ | | | | *eS* | Sn | 17 23 58.0 | -0.4 |
| JHJ2 | Mitsune | 0.18 | 106 | P | Pn | 17 23 40.5 | +0.2 |
| JHJ2 | Mitsune | 0.18 | 106 | | Pn | 17 23 40.6 | +0.2 |
| JHJ2 | Mitsune | 0.18 | 106 | P | Pn | 17 23 40.9 | +0.5 |
| JAOM | Aogashimamukai | 0.70 | 170 | P | Pn | 17 23 43.0 | +0.6 |
| JMKN | Mikurajimanish | 0.73 | 359 | P | Pn | 17 23 42.7 | +0.3 |
| JMYK | Miyake Tsubota | 0.90 | 357 | P | Pn | 17 23 44.0 | +0.5 |
| JKO | Kozu shima | 1.10 | 339 | P | Pn | 17 23 45.4 | +0.5 |
| JKO | | | | S | Sn | 17 24 07.6 | +0.7 |
| JIM2 | Oshima 2 | 1.56 | 354 | P | Pn | 17 23 50.2 | +1.1 |
| JIZS | Izushimoda | 1.67 | 339 | P | Pn | 17 23 50.9 | +0.7 |
| BSO3 | Boso 3 | 1.80 | 24 | P | Pn | 17 23 52.5 | +1.3 |
| BSO1 | Boso 1 | 1.87 | 37 | *i* P | Pn | 17 23 53.0 | +1.3 |
| BSO1 | | | | S | Sn | 17 24 22.2 | +3.2 |
| JSG | Sagara | 1.92 | 322 | P | Pn | 17 23 53.5 | +0.7 |
| JSG | Sagara | 1.92 | 322 | Pn | Pn | 17 23 53.4 | +0.7 |
| JOD2 | Odawara 2 | 2.14 | 348 | *i* P | Pn | 17 23 56.2 | +1.0 |
| JFN | Fujinakano | 2.17 | 340 | P | Pn | 17 23 56.7 | +1.1 |
| SHZ3 | Shizuoka 3 | 2.23 | 329 | P | Pn | 17 23 57.1 | +0.9 |
| SHZ3 | | | | S | Sn | 17 24 27.6 | +0.5 |
| JYN | Shimob | 2.49 | 340 | *i* P | Pn | 17 24 00.6 | +1.2 |
| INU | Inuyama | 3.06 | 316 | P | Pn | 17 24 06.5 | +0.4 |
| INU | Inuyama | 3.06 | 316 | | Pn | 17 24 06.4 | +0.4 |
| JGF | Kuroka | 3.07 | 323 | P | Pn | 17 24 06.9 | +0.7 |
| JGF | Kuroka | 3.07 | 323 | | Pn | 17 24 06.4 | +0.3 |
| MJAR | Matsushiro Arr | 3.57 | 342 | P | Pn | 17 24 12.7 | +0.3 |
| | 2.7nm,0.4s,baz=124,slow=12,SNR=32 | | | | | | |
| MJAR | | | | S | Sn | 17 24 56.5 | +0.7 |
| | 2.2nm,0.3s,baz=149,slow=15,SNR=4.7 | | | | | | |
| MAJO | Matsushiro | 3.57 | 341 | P | Pn | 17 24 13.1 | +0.8 |
| MAJO | Matsushiro | 3.57 | 341 | | Pn | 17 24 12.9 | +0.5 |
| MJB9 | Matsu-Tunnel | 3.57 | 341 | | Pn | 17 24 12.9 | +0.5 |
| JMM | Marumori | 4.79 | 11 | P | Pn | 17 24 27.8 | -0.2 |
| JMM | Marumori | 4.79 | 11 | Pn | Pn | 17 24 27.6 | -0.4 |
| JCJ | Chichijima | 6.44 | 159 | P | Pn | 17 24 46.5 | -3.1 |
| | 114nm,1.0s | | | | | | |
| JCJ | Chichijima | 6.44 | 159 | P | Pn | 17 24 41.3 | -8.3 |
| | 80nm,0.9s,baz=358,slow=21,SNR=9.5 | | | | | | |
| JCJ | | | | S | Sn | 17 25 51.0 | -12 |
| | 70nm,0.3s,baz=123,slow=23,SNR=8.9 | | | | | | |
| JTM | Tenmabayashi | 7.70 | 8 | P | Pn | 17 25 06.6 | +0.5 |
| JTM | Tenmabayashi | 7.70 | 8 | Pn | Pn | 17 25 05.6 | -0.5 |
| ERM | Erimo | 9.28 | 17 | Pn | Pn | 17 25 25.6 | -1.2 |
| JEM | Erimo | 9.28 | 17 | P | Pn | 17 25 27.4 | +0.6 |
| KSRS | Korea Array | 10.47 | 297 | P | Pn | 17 25 42.3 | -0.1 |
| | 1.2nm,0.9s,baz=113,slow=13,SNR=4.3 | | | | | | |
| ASAJ | Asahikawa | 11.19 | 11 | P | Pn | 17 25 51.3 | -0.4 |
| | 2.3nm,0.3s,baz=222,slow=12,SNR=11 | | | | | | |
| ASAJ | | | | S | Sn | 17 27 49.3 | -6.5 |
| | 5.3nm,0.9s,baz=314,slow=32,SNR=1.8 | | | | | | |
| JKA | Kamikawa-asahi | 11.19 | 11 | Pn | Pn | 17 25 49.6 | -2.1 |
| USRK | Ussuriysk Ar. | 12.52 | 334 | P | Pn | 17 26 09.1 | +0.3 |
| | 1.4nm,0.6s,baz=137,slow=12,SNR=5.1 | | | | | | |
| YSS | Yuzh-Sakhalins | 13.98 | 9 | Pn | Pn | 17 26 26.4 | -0.8 |
| KLR | Kul'dur | 17.09 | 342 | P | P | 17 27 03.8 | -0.2 |
| | 4.3nm,0.6s,baz=149,slow=9.2,SNR=13 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.75 | 112 | T | T | 17 58 06.4 | |
| | baz=306,slow=75,SNR=5.9 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 27.76 | 112 | T | T | 17 58 09.6 | |
| | baz=306,slow=75,SNR=5.9 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 27.77 | 112 | T | T | 17 58 07.0 | |
| | baz=306,slow=75,SNR=5.1 | | | | | | |
| SONM | Songino Array | 28.94 | 310 | P | P | 17 29 00.4 | +0.9 |
| | 0.4nm,0.7s,baz=109,slow=9.2,SNR=2.5 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 43.53 | 315 | P | P | 17 31 02.9 | +0.3 |
| | 0.5nm,0.4s,baz=106,slow=9.8,SNR=2.5 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| MK31 | Makanchi Array | 45.03 | 305 | P | P | 17 31 14.7 | +0.1 |
| MKAR | Makanchi Array | 45.03 | 305 | P | P | 17 31 14.9 | +0.2 |
| MKAR | Makanchi Array | 45.03 | 305 | P | P | 17 31 14.1 | -0.6 |
| | 0.4nm,0.4s,baz=86,slow=9.0,SNR=9.4 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| MAKZ | Makanchi | 45.24 | 305 | P | P | 17 31 16.3 | 0.0 |
| MAKZ | | | | IAmb | IAmb | 17 31 37.0 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| MTN | Manton Dam | 46.45 | 191 | P | P | 17 31 26.3 | +0.3 |
| MTN | | | | IAmb | IAmb | 17 31 45.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| KURK | Kurchatov | 47.25 | 311 | P | P | 17 31 31.8 | 0.0 |
| KURBB | Kurchatov Arra | 47.31 | 311 | P | P | 17 31 31.9 | -0.5 |
| | comp=Z,1.0nm,0.4s,baz=91,slow=7.6,SNR=13 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| KNRA | Kununurra | 49.66 | 194 | P | P | 17 31 48.9 | -1.6 |
| KNRA | | | | IAmb | IAmb | 17 32 29.1 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| KDAK | Kodiak Island | 50.99 | 40 | P | P | 17 32 02.8 | +2.7 |
| BVAR | Borovoye Array | 52.15 | 314 | P | P | 17 32 09.5 | +0.6 |
| | comp=Z,1.4nm,0.5s,baz=98,slow=7.3,SNR=10 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| BRVK | Borovoye | 52.21 | 314 | P | P | 17 32 10.0 | +0.8 |
| BRVK | | | | IAmb | IAmb | 17 32 10.4 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| FITZ | Fitzroy Crossi | 52.69 | 197 | P | P | 17 32 12.0 | -1.1 |
| WB0 | Warramunga Arr | 52.86 | 186 | P | P | 17 32 13.1 | -1.3 |
| WB0 | | | | IAmb | IAmb | 17 32 34.5 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 53.04 | 186 | P | P | 17 32 14.3 | -1.4 |
| | comp=Z,0.9nm,0.3s,baz=0.3,slow=7.5,SNR=65 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| KKAR | Karatay Array | 53.86 | 302 | P | P | 17 32 21.1 | -0.4 |
| CRQM | Cirque | 55.59 | 35 | P | P | 17 32 28.1 | -5.7 |
| AS31 | Alice Springs | 56.77 | 186 | P | P | 17 32 42.3 | -0.1 |
| ASAR | Alice Springs | 56.77 | 186 | P | P | 17 32 41.3 | -1.1 |
| | comp=Z,0.5nm,0.3s,baz=355,slow=5.8,SNR=56 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| ABKAR | Akbulak array | 59.35 | 311 | P | P | 17 32 59.9 | -0.1 |
| ABKAR | | | | IAmb | IAmb | 17 33 00.8 | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| STKA | Stephens Creek | 64.72 | 178 | P | P | 17 33 36.4 | +0.6 |
| | comp=Z,2.9nm,0.7s,baz=348,slow=9.8,SNR=4.3 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| FINES | FINESS Array B | 71.55 | 332 | P | P | 17 34 18.5 | +0.4 |
| | comp=Z,0.9nm,0.6s,baz=56,slow=4.8,SNR=8.7 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| HFS | Hagfors | 77.00 | 335 | P | P | 17 34 50.2 | +0.6 |
| | comp=Z,1.5nm,0.9s,baz=59,slow=5.6,SNR=1.5 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |

**IDC 15 17:23:57.7±4.1, 47.51N×92.98W, h0km, mbtmp2.6/1, ML1.1/1, Error ellipse: s-maj=65.5km s-min=26.9km az=56.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULM | Lac du Bonnet | 3.34 | 326 | Pn | Pn | 17 24 49.5 | -1.6 |
| | 0.3nm,0.3s,baz=145,slow=16,SNR=1.3 | | | | | | |
| ULM | | | | Pg | Pb | 17 24 57.5 | -0.3 |
| | 0.4nm,0.3s,baz=148,slow=16,SNR=5.0 | | | | | | |
| ULM | | | | Sn | Sn | 17 25 29.0 | -2.5 |
| | 0.6nm,0.3s,baz=149,slow=15,SNR=3.1 | | | | | | |
| ULM | | | | Lg | Lg | 17 25 40.9 | |
| | 2.9nm,0.3s,baz=229,slow=18,SNR=18 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| I10CA | LAC DU BONNET | 3.36 | 324 | I | I | 17 44 20.0 | |
| | 0.1nm,0.8s,baz=140,slow=326,SNR=7.4 | | | | | | |
| PDAR | Pinedale Array | 12.62 | 254 | Lg | Lg | 17 30 28.1 | |
| | baz=64,slow=36,SNR=2.3 | | | | | | |
| I56US | NEWPORT INFRAS | 16.20 | 282 | I | I | 18 56 00.0 | |
| | baz=85,slow=318,SNR=2.9 | | | | | | |

*IDC **15** 17:50:53.9±4.2, 13.35°S×166.84E, h63km±35km, mb3.9/14, mbtmp4.1/15, ML3.9/1, MS3.5/18, Error ellipse: s-maj=26.0km s-min=16.5km az=77.0*
*NEIC **15** 17:50:54.1±1.9, 13.4°S±0.1°×166.8°E±0.2, h60km±8km, mb4.5/24, Error ellipse: s-maj=23.6km s-min=14.9km az=95.0*
**ISC 15 17:50:52.8±0.6, 13.38S±0.06°×166.70E±0.10, h50km, n66, σ1§33/59, mb4.4/23, MS3.5/14, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LIFNC | LIFOU | 7.37 | 176 | Pn | Pn | 17 52 37.7 | -0.1 |
| KOUNC | Koumac, New Ca | 7.49 | 198 | | Pn | 17 52 41.0 | +1.4 |
| KOUNC | | | | Sn | Sn | 17 53 57.8 | -5.4 |
| HNR | Honiara | 7.70 | 300 | Pn | Pn | 17 52 44.3 | +1.8 |
| HNR | | | | Sn | Sn | 17 54 06.2 | -2.2 |
| HNR | Honiara | 7.70 | 300 | LR | LR | 17 55 28.3 | |
| | comp=Z,4μm,21.9s,baz=102,slow=35 | | | | | | |
| DZM | Mont Dzumac | 8.64 | 182 | | Pn | 17 52 56.0 | +0.6 |
| DZM | Mont Dzumac | 8.64 | 182 | P | Pn | 17 52 57.2 | +1.7 |
| | 1.4nm,0.3s,baz=5.0,slow=21,SNR=15 | | | | | | |
| DZM | | | | S | Sn | 17 54 33.6 | +2.0 |
| | 4.9nm,0.5s,baz=78,slow=16,SNR=1.6 | | | | | | |
| DZM | | | | LR | LR | 17 56 07.1 | |
| | comp=Z,201nm,19.4s,baz=16,slow=36 | | | | | | |
| | 2.7nm,0.3s | | | | | | |
| ONTNC | Ouen Toro | 8.88 | 181 | Pn | Pn | 17 52 59.2 | +0.6 |
| PINNC | Pines Island, | 9.21 | 176 | | Pn | 17 53 04.5 | +1.5 |
| MSVF | Nonsavu | 11.76 | 113 | LR | LR | 17 57 25.8 | |
| | comp=Z,278nm,18.2s,baz=250,slow=34 | | | | | | |
| EIDS | Eidsvold | 18.93 | 229 | P | P | 17 55 10.1 | +0.3 |
| PMG | Port Moresby | 19.56 | 280 | LR | LR | 18 01 18.7 | |
| | comp=Z,107nm,19.0s,baz=96,slow=32 | | | | | | |
| CTA | Charters Tower | 20.68 | 248 | P | P | 17 55 32.3 | +3.5 |
| | 0.2nm,0.6s,baz=22,slow=22,SNR=1.6 | | | | | | |
| CTA | | | | LR | LR | 18 02 19.6 | |
| | comp=Z,16nm,19.7s,baz=77,slow=33 | | | | | | |
| CTAO | Charters Tower | 20.68 | 248 | P | P | 17 55 29.4 | +0.6 |
| CTAO | | | | IAmb | IAmb | 17 55 47.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| ARMA | Armidale | 21.93 | 217 | P | P | 17 55 44.5 | +2.2 |
| ARMA | | | | IAmb | IAmb | 17 56 21.2 | |
| | comp=Z,15nm,1.2s | | | | | | |
| URZ | Urewera | 26.45 | 161 | LR | LR | 18 04 49.6 | |
| | comp=Z,84nm,20.4s,baz=28,slow=32 | | | | | | |
| CAN | Canberra | 27.06 | 213 | | P | 17 56 31.5 | +0.7 |
| CAN | | | | IAmb | IAmb | 17 56 46.6 | |
| | comp=Z,36nm,1.5s | | | | | | |
| STKA | Stephens Creek | 29.47 | 227 | P | P | 17 56 52.4 | +0.2 |
| STKA | Stephens Creek | 29.47 | 227 | P | P | 17 56 53.8 | +1.5 |
| | comp=Z,2.1nm,0.6s,baz=43,slow=8.8,SNR=4.6 | | | | | | |
| STKA | | | | LR | LR | 18 09 13.4 | |
| | comp=Z,111nm,19.1s,baz=30,slow=37 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| TOO | Toolangi | 30.62 | 214 | P | P | 17 57 00.1 | -2.3 |
| WB0 | Warramunga Arr | 31.57 | 254 | P | P | 17 57 10.8 | -0.1 |
| WB0 | | | | IAmb | IAmb | 17 57 11.6 | |
| | comp=Z,4.6nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 31.65 | 254 | P | P | 17 57 11.0 | -0.6 |
| WRA | Warramunga Arr | 31.65 | 254 | P | P | 17 57 11.0 | -0.6 |
| | comp=Z,2.1nm,0.6s,baz=85,slow=9.3,SNR=47 | | | | | | |
| WRA | | | | PcP | PcP | 18 00 01.7 | -1.2 |
| | comp=Z,0.7nm,0.9s,baz=95,slow=4.3,SNR=4.6 | | | | | | |
| WRA | | | | LR | LR | 18 08 50.0 | |
| | comp=Z,134nm,19.3s,baz=37,slow=34 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| AS31 | Alice Springs | 32.66 | 247 | P | P | 17 57 19.6 | -0.8 |
| ASAR | Alice Springs | 32.66 | 247 | P | P | 17 57 19.8 | -0.7 |
| ASAR | Alice Springs | 32.66 | 247 | P | P | 17 57 20.1 | -0.4 |
| | comp=Z,2.1nm,0.6s,baz=75,slow=9.3,SNR=51 | | | | | | |
| ASAR | | | | PcP | PcP | 18 00 04.8 | -0.9 |
| | comp=Z,1.1nm,0.8s,baz=65,slow=2.1,SNR=8.6 | | | | | | |
| ASAR | | | | LR | LR | 18 10 19.0 | |
| | comp=Z,144nm,18.5s,baz=115,slow=36 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| KNRA | Kununurra | 36.77 | 262 | P | P | 17 57 56.1 | +0.2 |
| FORT | Forrest | 39.53 | 238 | P | P | 17 58 19.2 | +0.1 |
| FITZ | Fitzroy Crossi | 39.74 | 258 | P | P | 17 58 22.0 | +1.1 |
| PPT | Papeete | 42.27 | 101 | LR | LR | 18 12 59.2 | |
| | comp=Z,64nm,19.2s,baz=208,slow=31 | | | | | | |
| PSA00 | Pilbara Seismi | 45.29 | 253 | P | P | 17 59 06.5 | +0.4 |
| PSA00 | | | | IAmb | IAmb | 17 59 09.6 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| TOLI2 | Tolitoli | 47.74 | 284 | P | P | 17 59 24.7 | -0.6 |
| TOLI2 | | | | IAmb | IAmb | 17 59 47.4 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| NWAO | Narrogin (SRO) | 48.98 | 238 | P | P | 17 59 33.3 | -1.3 |
| MORW | Morawa | 49.37 | 243 | P | P | 17 59 38.3 | +0.6 |
| MJAR | Matsushiro Arr | 56.46 | 333 | P | P | 18 00 28.8 | -1.0 |
| | comp=Z,1.1nm,0.8s,baz=175,slow=9.0,SNR=5.2 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| JNU | Nakatsue | 57.51 | 324 | LR | LR | 18 24 31.7 | |
| | comp=Z,68nm,18.0s,baz=131,slow=35 | | | | | | |
| KSRS | Korea Array | 62.32 | 326 | P | P | 18 01 10.4 | +0.3 |
| | comp=Z,0.8nm,0.8s,baz=158,slow=7.7,SNR=2.9 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| VNDA | Vanda | 64.19 | 181 | P | P | 18 01 21.5 | -0.4 |
| VNDA | | | | IAmb | IAmb | 18 01 58.8 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| VNDA | Vanda | 64.19 | 181 | P | P | 18 01 21.9 | 0.0 |
| | comp=Z,0.6nm,0.6s,baz=350,slow=6.5,SNR

comp=Z,2.1nm,0.9s,baz=11,slow=0.7,SNR=5.5
**BNI Bardonecchia 144.15 336 PKPdf PKPab 18 10 20.8 -0.3**
**CEL Celeste 144.16 319 PKPdf PKPab 18 10 21.4 +0.2**
**ESDC Sonseca Array 152.55 344 PKPbc PKPbc 18 10 42.9 -1.2**
comp=Z,0.3nm,0.7s,baz=350,slow=4.5,SNR=4.4
**TORD Torodi Ar. Bea 165.40 271 PKPab PKPab 18 11 50.8 -0.2**
comp=Z,0.5nm,0.6s,baz=93,slow=7.5,SNR=4.3

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*NEIC* ***15*** *17:58:46.6±2.5, 45°.88N±0°.06×106°.81W±0°.06, h0km±1km, ML2.7/26, Error ellipse: s-maj=11.2km s-min=6.4km az=12.0*
*IDC* ***15*** *17:58:48.2±1.8, 45°.83N×106°.66W, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=63.7km s-min=9.9km az=134.0*
**ISC 15 17:58:45.4±1.0, 45°.84N±0°.05×106°.58W±0°.05, h0km, n23, σ1§10/22, Montana**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAO** | **LASA Array** | **0.88** | **16** | Pg | **Pn** | **17 59 05.4** | **+0.2** |
| **RLMT** | **Red Lodge** | **2.02** | **250** | Pg | **Pg** | **17 59 24.9** | **+0.7** |
| RLMT | | | | IAML | | 17 59 54.1 | |
| | 47nm,0.5s | | | | | | |
| RLMT | | | | IAML | | 18 00 00.8 | |
| | 59nm,0.5s | | | | | | |
| **RSSD** | **Black Hills** | **2.49** | **133** | | **Pb** | **17 59 30.1** | **-1.2** |
| RSSD | | | | IAML | | 18 00 11.8 | |
| | 44nm,0.5s | | | | | | |
| RSSD | | | | IAML | | 18 00 16.5 | |
| | 45nm,0.5s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **2.75** | **248** | Pg | **Pb** | **17 59 35.1** | **-0.7** |
| **EGMT** | **Eagleton** | **3.08** | **316** | | **Pn** | **17 59 35.0** | **-0.5** |
| EGMT | | | | IAML | | 18 00 35.6 | |
| | 32nm,0.5s | | | | | | |
| **DGMT** | **Dagmar** | **3.09** | **31** | Pg | **Pg** | **17 59 44.5** | **-0.2** |
| **K22A** | **Casper** | **3.19** | **179** | | **Pb** | **17 59 42.3** | **-0.8** |
| K22A | | | | IAML | | 18 00 28.6 | |
| | comp=E,35nm,0.4s | | | | | | |
| **YHH** | **Holmes Hill** | **3.19** | **252** | Pn | **Pn** | **17 59 38.0** | **+0.9** |
| **YHL** | **Hebgen Lake** | **3.40** | **255** | Pn | **Pn** | **17 59 41.5** | **+1.6** |
| YHL | | | | IAML | | 18 00 42.6 | |
| | comp=N,18nm,1.4s | | | | | | |
| YHL | | | | IAML | | 18 00 47.8 | |
| | comp=E,22nm,0.6s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.41** | **240** | | **Pn** | **17 59 41.1** | **+1.0** |
| FLWY | | | | IAML | | 18 00 44.2 | |
| | comp=E,19nm,0.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **3.55** | **268** | Pn | **Pn** | **17 59 41.3** | **-0.6** |
| BOZ | | | | IAML | | 18 00 48.4 | |
| | comp=E,14nm,0.6s | | | | | | |
| **LOHW** | **Long Hollow** | **3.63** | **234** | | **Pn** | **17 59 43.2** | **+0.1** |
| **IMW** | **Indian Meadow** | **3.66** | **239** | | **Pn** | **17 59 44.3** | **+0.7** |
| IMW | | | | IAML | | 18 00 49.5 | |
| | comp=E,18nm,0.5s | | | | | | |
| IMW | | | | IAML | | 18 00 56.4 | |
| | comp=E,19nm,0.6s | | | | | | |
| **PD31** | **Pinedale Array** | **3.75** | **216** | | **Pn** | **17 59 45.9** | **+1.2** |
| **PDAR** | **Pinedale Array** | **3.75** | **216** | | **Pg** | **17 59 57.0** | **-0.2** |
| **PDAR** | **Pinedale Array** | **3.75** | **216** | Pn | **Pb** | **17 59 50.0** | **-2.6** |
| | comp=E,0.2nm,0.3s,baz=48,slow=13,SNR=6.3 | | | | | | |
| PDAR | | | | Pg | **Pg** | **17 59 57.4** | **+0.2** |
| | comp=E,1.3nm,0.3s,baz=43,slow=17,SNR=21 | | | | | | |
| PDAR | | | | Lg | Lg | 18 00 42.8 | |
| | comp=E,1.7nm,0.3s,baz=36,slow=30,SNR=11 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **LYMT** | **Lyon Mountain** | **4.11** | **288** | Pn | **Pn** | **17 59 50.5** | **+0.8** |
| **DLMT** | **Dillon** | **4.25** | **266** | Pn | **Pn** | **17 59 50.7** | **-0.9** |
| DLMT | | | | IAML | | 18 01 24.0 | |
| | comp=E,9.7nm,3.5s | | | | | | |
| DLMT | | | | IAML | | 18 02 03.5 | |
| | comp=E,7.4nm,3.6s | | | | | | |
| **OVMT** | **Ovando** | **4.60** | **288** | Pn | **Pn** | **17 59 57.7** | **+1.3** |
| **BPMT** | **Black Pine Rid** | **4.81** | **280** | Pn | **Pn** | **18 00 00.0** | **+0.6** |
| **NEW** | **Newport** | **7.60** | **292** | Lg | Lg | 18 02 41.8 | |
| | comp=E,0.2nm,0.3s,baz=100,slow=18,SNR=1.6 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **7.60** | **292** | I | I | 18 43 40.0 | |
| | baz=106,slow=312,SNR=5.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **8.42** | **55** | Pn | **Pn** | **18 00 50.3** | **+1.8** |
| | comp=E,0.3nm,0.3s,baz=246,slow=12,SNR=2.2 | | | | | | |
| ULM | | | | Lg | Lg | 18 03 09.0 | |
| | comp=E,0.3nm,0.3s,baz=147,slow=21,SNR=1.9 | | | | | | |
| | comp=E,2.4nm,0.8s | | | | | | |

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*IDC* ***15*** *18:35:12.0±3.8, 55°.60N×148°.73W, h0km, mb3.6/2, mbtmp3.5/4, ML3.2/2, MS2.7/1, Error ellipse: s-maj=77.1km s-min=41.2km az=155.0*
*NEIC* ***15*** *18:35:14.9±1.3, 55°.99N±0°.07×149°.24W±0°.09, h11km±7km, ML3.4/54, ML3.3(AEIC), Error ellipse: s-maj=10.9km s-min=7.5km az=180.0*
*AEIC* ***15*** *18:35:20.5±1.3, 56°.09N±0°.09×149°.4W±0°.1, h5km±7km, Error ellipse: s-maj=13.9km s-min=9.5km az=164.0*
**ISC 15 18:35:15.4±1.1, 56°.11N±0°.09×149°.24W±0°.06, h10km, n160, σ1§43/154, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDAK** | **Kodiak Island** | **2.48** | **314** | Pn | **Pn** | **18 35 56.4** | **+0.5** |
| **KDAK** | **Kodiak Island** | **2.48** | **314** | LR | LR | 18 37 20.4 | |
| | comp=Z,120nm,18.5s,baz=191,slow=42 | | | | | | |
| **OHAK** | **Old Harbor** | **2.50** | **298** | P | **Pn** | **18 35 56.0** | **-0.1** |
| **OHAK** | **Old Harbor** | **2.50** | **298** | Pn | **Pn** | **18 35 55.8** | **-0.3** |
| **OHAK** | **Old Harbor** | **2.50** | **298** | | **Sn** | **18 36 24.1** | **-2.5** |
| **SII** | **Sitkinak Islan** | **2.79** | **281** | P | **Pn** | **18 35 59.8** | **-0.3** |
| **SII** | **Sitkinak Islan** | **2.79** | **281** | | **Pn** | **18 35 59.6** | **-0.5** |
| SII | | | | IAML | | 18 36 32.6 | |
| | comp=E,221nm,0.8s | | | | | | |
| SII | | | | IAML | | 18 36 35.6 | |
| | comp=N,133nm,0.8s | | | | | | |
| **SII** | **Sitkinak Islan** | **2.79** | **281** | | **Sn** | **18 36 31.3** | **-2.5** |
| **SYI** | **Shuyak Island** | **3.03** | **327** | | **Pn** | **18 36 04.1** | **+0.7** |
| **SYI** | **Shuyak Island** | **3.03** | **327** | | **Sn** | **18 36 39.2** | **-0.5** |
| **R18K** | **Karluk** | **3.21** | **299** | | **Pn** | **18 36 06.8** | **+0.9** |
| **R18K** | **Karluk** | **3.21** | **299** | IAML | | 18 36 49.9 | |
| | comp=N,73nm,0.5s | | | | | | |
| R18K | | | | IAML | | 18 36 54.0 | |
| | comp=E,66nm,0.5s | | | | | | |
| **CNPM** | **China Poot** | **3.59** | **343** | | **Pn** | **18 36 11.6** | **+0.5** |
| **CNPM** | **China Poot** | **3.59** | **343** | | **Sn** | **18 36 53.1** | **-0.4** |
| **CHIR** | **Chirikof Islan** | **3.60** | **268** | Pn | **Pn** | **18 36 10.7** | **-0.5** |
| CHIR | | | | IAML | | 18 36 50.5 | |
| | comp=N,94nm,0.5s | | | | | | |
| CHIR | | | | IAML | | 18 36 50.6 | |
| | comp=E,106nm,0.8s | | | | | | |
| **CHIR** | **Chirikof Islan** | **3.60** | **268** | | **Sn** | **18 36 50.1** | **-3.6** |
| **Q23K** | **Middleton Isla** | **3.67** | **24** | Pn | **Pn** | **18 36 13.0** | **+0.8** |
| Q23K | | | | IAML | | 18 37 49.4 | |
| | comp=E,84nm,1.1s | | | | | | |
| **MID** | **Middleton Isla** | **3.67** | **24** | P | **Pn** | **18 36 15.0** | **+2.8** |
| **MID** | **Middleton Isla** | **3.67** | **24** | Pn | **Pn** | **18 36 13.0** | **+0.9** |
| MID | | | | IAML | | 18 38 37.2 | |
| | comp=N,79nm,1.2s | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.69** | **322** | | **Pn** | **18 36 14.5** | **+2.0** |
| **BRSE** | **Bradley Lake S** | **3.73** | **348** | | **Pn** | **18 36 13.5** | **+0.5** |
| BRSE | | | | | **Sn** | **18 36 55.9** | **-1.1** |
| **KAHG** | **Katmai Hook Gl** | **3.74** | **312** | | **Pn** | **18 36 14.9** | **+1.7** |
| **BRLK** | **Bradley Lake** | **3.77** | **347** | | **Pn** | **18 36 13.9** | **+0.4** |
| **KCE** | **Katmai Mt Cerb** | **3.88** | **306** | | **Pn** | **18 36 15.1** | **0.0** |
| **ACHA** | **Angle Creek He** | **3.93** | **305** | Pn | **Pn** | **18 36 17.6** | **+1.8** |
| **KABU** | **Katmai Buttres** | **3.94** | **306** | | **Pn** | **18 36 17.7** | **+1.8** |
| **AUCH** | **Augustine Cone** | **3.96** | **327** | | **Pn** | **18 36 18.1** | **+1.8** |
| **ANCK** | **Angle Creek** | **4.00** | **304** | | **Pn** | **18 36 18.4** | **+1.6** |
| **P23K** | **Montague Islan** | **4.02** | **13** | | **Pn** | **18 36 17.7** | **+0.7** |
| **KAHC** | **Katmai Hardscr** | **4.03** | **312** | | **Pn** | **18 36 18.4** | **+1.2** |
| **P19K** | **Oil Pt** | **4.14** | **331** | Pn | **Pn** | **18 36 19.7** | **+1.0** |
| P19K | | | | IAML | | 18 37 13.0 | |
| | comp=E,58nm,0.6s | | | | | | |
| P19K | | | | IAML | | 18 37 19.9 | |
| | comp=N,63nm,0.6s | | | | | | |
| **PLK4** | **Peulik 4** | **4.19** | **294** | | **Pn** | **18 36 20.5** | **+1.0** |
| PLK4 | | | | IAML | | 18 37 10.3 | |
| | comp=E,46nm,0.6s | | | | | | |
| PLK4 | | | | IAML | | 18 37 25.2 | |
| | comp=N,32nm,0.7s | | | | | | |
| **CNTC** | **Contact Creek** | **4.21** | **304** | | **Pn** | **18 36 20.8** | **+1.1** |
| **O20K** | **Slope Mountain** | **4.37** | **337** | | **Pn** | **18 36 22.7** | **+0.9** |
| **PLK1** | **Peulik 1** | **4.38** | **296** | | **Pn** | **18 36 23.1** | **+1.3** |
| **O22K** | **Cooper Landing** | **4.39** | **357** | Pn | **Pn** | **18 36 23.0** | **+0.9** |
| **IVE** | **Iliamna Volcan** | **4.40** | **334** | | **Pn** | **18 36 22.8** | **+0.5** |
| **ILSW** | **Iliamna Southw** | **4.40** | **334** | Pn | **Pn** | **18 36 22.9** | **+0.5** |
| ILSW | | | | IAML | | 18 37 16.3 | |
| | comp=E,26nm,0.9s | | | | | | |
| ILSW | | | | IAML | | 18 37 26.8 | |
| | comp=N,27nm,0.6s | | | | | | |
| **PLBL** | **Peulik Blue Cr** | **4.45** | **294** | | **Pn** | **18 36 24.4** | **+1.5** |
| **HIN** | **Hinchinbrook I** | **4.53** | **17** | Pn | **Pn** | **18 36 25.3** | **+1.2** |
| HIN | | | | IAML | | 18 37 16.0 | |
| | comp=N,53nm,0.4s | | | | | | |
| HIN | | | | IAML | | 18 37 16.9 | |
| | comp=E,50nm,1.0s | | | | | | |
| **PLK5** | **Peulik 5** | **4.58** | **298** | | **Pn** | **18 36 25.8** | **+1.1** |
| **P18K** | **Big Mountain,** | **4.59** | **318** | | **Pn** | **18 36 25.7** | **+0.8** |
| **KAIM** | **Kayak Island** | **4.60** | **32** | Pn | **Pn** | **18 36 25.9** | **+0.9** |
| KAIM | | | | IAML | | 18 37 18.7 | |
| | comp=N,46nm,1.2s | | | | | | |
| KAIM | | | | IAML | | 18 37 39.6 | |
| | comp=E,43nm,1.1s | | | | | | |
| **RED** | **Redoubt Volcan** | **4.71** | **338** | | **Pn** | **18 36 26.3** | **-0.2** |
| **RDSO** | **Redoubt South** | **4.73** | **338** | | **Pn** | **18 36 27.3** | **+0.4** |
| **RSO** | **Redoubt South** | **4.74** | **338** | Pn | **Pn** | **18 36 27.4** | **+0.4** |
| **RDWB** | **Redoubt West** | **4.78** | **338** | | **Pn** | **18 36 28.3** | **+0.7** |
| **PWL** | **Port Wells** | **4.79** | **5** | Pn | **Pn** | **18 36 28.3** | **+0.8** |
| PWL | | | | IAML | | 18 37 26.2 | |
| | comp=N,22nm,0.5s | | | | | | |
| PWL | | | | IAML | | 18 37 30.6 | |
| | comp=E,21nm,0.4s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **4.81** | **21** | P | **Pn** | **18 36 29.5** | **+1.6** |
| **EYAK** | **Cordova Ski Ar** | **4.81** | **21** | | **Pn** | **18 36 29.4** | **+1.6** |
| **GLI** | **Glacier Island** | **4.91** | **12** | Pn | **Pn** | **18 36 30.7** | **+1.5** |
| GLI | | | | IAML | | 18 37 16.4 | |
| | comp=N,24nm,1.1s | | | | | | |
| GLI | | | | IAML | | 18 37 41.9 | |
| | comp=E,29nm,1.1s | | | | | | |
| **O18K** | **Koktuh Hills** | **4.92** | **322** | | **Pn** | **18 36 30.1** | **+0.8** |
| O18K | | | | IAML | | 18 37 34.8 | |
| | comp=N,13nm,0.8s | | | | | | |
| **SUCK** | **Suckling Hills** | **4.92** | **34** | Pn | **Pn** | **18 36 29.8** | **+0.5** |
| SUCK | | | | IAML | | 18 37 27.8 | |
| | comp=E,33nm,1.1s | | | | | | |
| SUCK | | | | IAML | | 18 37 28.8 | |
| | comp=N,43nm,0.9s | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.92** | **27** | Pn | **Pn** | **18 36 30.4** | **+1.0** |
| **HMT** | **Hamilton** | **4.99** | **30** | | **Pn** | **18 36 31.5** | **+1.3** |
| **RC01** | **Rabbit Creek A** | **5.00** | **357** | Pn | **Pn** | **18 36 30.4** | **-0.1** |
| RC01 | | | | IAML | | 18 37 30.4 | |
| | comp=N,14nm,0.6s | | | | | | |
| RC01 | | | | IAML | | 18 37 32.1 | |
| | comp=E,19nm,0.5s | | | | | | |
| **ANPB** | **Aniakchak Plen** | **5.06** | **282** | | **Pn** | **18 36 32.3** | **+1.0** |
| **GOAT** | **Goat Mountain** | **5.07** | **26** | | **Pn** | **18 36 34.1** | **+2.6** |
| **BGLC** | **Bering Glacier** | **5.11** | **36** | | **Pn** | **18 36 34.4** | **+2.5** |
| **CHGN** | **Chignik** | **5.13** | **276** | Pn | **Pn** | **18 36 31.4** | **-0.8** |
| CHGN | | | | IAML | | 18 37 31.6 | |
| | comp=N,31nm,0.5s | | | | | | |
| **GRIN** | **Grindle Hills** | **5.22** | **34** | | **Pn** | **18 36 34.9** | **+1.4** |
| **SNH** | **Sunshine Point** | **5.30** | **37** | Pn | **Pn** | **18 36 35.4** | **+0.8** |
| **KHIT** | **Khitrov Hills** | **5.37** | **34** | | **Pn** | **18 36 36.6** | **+1.0** |
| **CRP** | **Crater Peak** | **5.39** | **345** | | **Pn** | **18 36 36.9** | **+1.0** |
| **SPCG** | **Spurr Capps Gl** | **5.39** | **346** | | **Pn** | **18 36 36.9** | **+0.7** |
| **SUA** | **Susitna One** | **5.43** | **352** | Pn | **Pn** | **18 36 37.7** | **+1.3** |
| **BMRM** | **Bremner River** | **5.44** | **25** | | **Pn** | **18 36 37.8** | **+1.3** |
| **N19K** | **Bonanza Creek** | **5.46** | **332** | Pn | **Pn** | **18 36 37.0** | **+0.2** |
| **WAX** | **Waxell Ridge** | **5.50** | **35** | | **Pn** | **18 36 39.1** | **+1.7** |
| **P16K** | **Nushagak River** | **5.54** | **305** | | **Pn** | **18 36 39.3** | **+1.4** |
| **O17K** | **Koliganek Bris** | **5.57** | **315** | | **Pn** | **18 36 39.3** | **+1.1** |
| **BARK** | **Barkley Ridge** | **5.58** | **37** | | **Pn** | **18 36 39.8** | **+1.3** |
| **MESA** | **MESA** | **5.61** | **40** | | **Pn** | **18 36 41.4** | **+2.4** |
| **CRQM** | **Cirque** | **5.65** | **32** | | **Pn** | **18 36 38.4** | **-1.2** |
| **KLU** | **Klutina** | **5.67** | **16** | | **Pn** | **18 36 41.1** | **+1.5** |
| **GHO** | **Glory Hole Cre** | **5.68** | **2** | | **Pn** | **18 36 41.0** | **+1.2** |
| **SML** | **Sawmill** | **5.73** | **4** | | **Pn** | **18 36 42.2** | **+1.7** |
| **TGL** | **Tana Glacier** | **5.75** | **33** | Pn | **Pn** | **18 36 41.8** | **+1.0** |
| **N18K** | **Kilae Creek** | **5.76** | **325** | Pn | **Pn** | **18 36 41.2** | **+0.3** |
| **ISLE** | **Juniper Island** | **5.78** | **36** | Pn | **Pn** | **18 36 43.1** | **+1.8** |
| **SKT** | **Skwentna** | **6.00** | **350** | | **Pn** | **18 36 46.2** | **+2.0** |
| **N25K** | **Chitina, Valde** | **6.01** | **22** | Pn | **Pn** | **18 36 45.9** | **+1.5** |
| **KIAG** | **Kiagna River** | **6.02** | **34** | | **Pn** | **18 36 45.9** | **+1.3** |
| **SAMH** | **Samovar Hills** | **6.02** | **45** | | **Pn** | **18 36 46.6** | **+2.0** |
| **CNBA** | **Chernabura Isl** | **6.03** | **262** | Pn | **Pn** | **18 36 43.4** | **-1.1** |
| **GLB** | **Gilahina Butte** | **6.04** | **26** | Pn | **Pn** | **18 36 45.6** | **+0.8** |
| **GRNC** | **Granite Creek** | **6.08** | **37** | | **Pn** | **18 36 46.9** | **+1.5** |
| **TABL** | **Table Mountain** | **6.09** | **41** | Pn | **Pn** | **18 36 46.3** | **+0.7** |
| **N17K** | **Nushagak Hills** | **6.09** | **320** | Pn | **Pn** | **18 36 45.7** | **+0.2** |
| **BALM** | **Baldy** | **6.11** | **33** | | **Pn** | **18 36 47.1** | **+1.3** |
| **M20K** | **Styx River** | **6.13** | **342** | | **Pn** | **18 36 47.5** | **+1.5** |
| **PTPK** | **Patty Peak** | **6.20** | **32** | | **Pn** | **18 36 48.3** | **+1.3** |
| **M24K** | **Tolsona, Glenn** | **6.22** | **13** | | **Pn** | **18 36 49.1** | **+1.9** |
| **PNL** | **Peninsula** | **6.34** | **52** | P | **Pn** | **18 36 50.2** | **+1.3** |
| **PNL** | **Peninsula** | **6.34** | **52** | | **Pn** | **18 36 49.8** | **+0.9** |
| **CTGM** | **Chitina Glacie** | **6.39** | **37** | Pn | **Pn** | **18 36 49.7** | **+0.1** |
| **BCPM** | **Bancas Point** | **6.39** | **49** | Pn | **Pn** | **18 36 50.7** | **+1.2** |
| **M19K** | **Big River Lodg** | **6.39** | **338** | Pn | **Pn** | **18 36 49.8** | **+0.3** |
| **LOGN** | **Logan Glacier** | **6.40** | **39** | Pn | **Pn** | **18 36 50.5** | **+0.7** |
| **WACK** | **Wrangell Chich** | **6.41** | **21** | | **Pn** | **18 36 51.8** | **+1.7** |
| **O15K** | **Unnglikthiuk R** | **6.46** | **303** | | **Pn** | **18 36 51.8** | **+1.4** |
| **WAZA** | **Wrangell Mount** | **6.53** | **22** | | **Pn** | **18 36 53.9** | **+2.2** |
| **WAT6** | **Susitna Watana** | **6.54** | **6** | | **Pn** | **18 36 53.6** | **+1.9** |
| **N16K** | **Nishlik Lake** | **6.66** | **315** | | **Pn** | **18 36 54.2** | **+1.0** |
| **O28M** | **Mount Upton** | **6.66** | **42** | | **Pn** | **18 36 55.5** | **+2.0** |
| **L19K** | **White Mountain** | **6.74** | **337** | | **Pn** | **18 36 54.7** | **+0.4** |
| **WAT7** | **Susitna Watana** | **6.75** | **2** | | **Pn** | **18 36 56.5** | **+2.0** |
| **DHY** | **Denali Highway** | **7.05** | **7** | | **Pn** | **18 37 01.0** | **+2.3** |
| **P29M** | **Windy Craggy** | **7.07** | **55** | Pn | **Pn** | **18 36 59.2** | **+0.3** |
| **M16K** | **Timber Creek** | **7.07** | **318** | Pn | **Pn** | **18 37 01.2** | **+2.3** |
| **PS1A** | **Pavlof South-1** | **7.09** | **270** | | **Pn** | **18 36 59.5** | **+0.4** |
| **PS4A** | **Pavlof South-4** | **7.17** | **269** | | **Pn** | **18 37 00.3** | **+0.1** |
| **HAG** | **Hague Volcano** | **7.20** | **269** | | **Pn** | **18 37 00.9** | **+0.2** |
| **L18K** | **Granite Mounta** | **7.22** | **331** | | **Pn** | **18 37 01.0** | **+0.1** |
| **S12K** | **Black Hills** | **7.22** | **272** | | **Pn** | **18 37 00.6** | **-0.3** |
| **PN7A** | **Pavlof North-7** | **7.23** | **270** | | **Pn** | **18 37 01.6** | **+0.4** |
| **M27K** | **Edge Creek, AK** | **7.31** | **28** | | **Pn** | **18 37 04.9** | **+2.7** |
| **RND** | **Reindeer** | **7.32** | **1** | Pn | **Pn** | **18 37 04.2** | **+1.8** |
| **S31K** | **Pelican** | **7.33** | **70** | Pn | **Pn** | **18 37 02.1** | **-0.4** |
| **YUK6** | **Outpost Mounta** | **7.47** | **45** | | **Pn** | **18 37 06.6** | **+2.1** |
| **M15K** | **Kasigluk River** | **7.56** | **312** | | **Pn** | **18 37 06.5** | **+0.9** |
| **L17K** | **Donlin** | **7.62** | **326** | | **Pn** | **18 37 07.2** | **+0.8** |
| **N14K** | **Kuskokwak Cree** | **7.63** | **305** | | **Pn** | **18 37 07.7** | **+1.2** |
| **P30M** | **Million Dollar** | **7.64** | **53** | | **Pn** | **18 37 09.2** | **+2.5** |
| **K20K** | **Telida** | **7.67** | **343** | | **Pn** | **18 37 09.1** | **+2.1** |
| **L16K** | **Owhat River** | **7.71** | **321** | Pn | **Pn** | **18 37 08.6** | **+1.0** |
| **BCAR** | **Beaver Creek A** | **7.93** | **25** | Pn | **Pn** | **18 37 10.9** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **8.06** | **355** | Pn | **Pn** | **18 37 12.9** | **+0.4** |
| **K17K** | **Iditarod** | **8.07** | **329** | Pn | **Pn** | **18 37 12.8** | **+0.3** |
| **S32K** | **Killisnoo** | **8.16** | **74** | Pn | **Pn** | **18 37 12.4** | **-1.5** |
| **N30M** | **Aishikik Lake** | **8.27** | **45** | Pn | **Pn** | **18 37 16.3** | **+0.9** |
| **R32K** | **Eaglecrest** | **8.28** | **69** | Pn | **Pn** | **18 37 14.7** | **-0.8** |
| **ISLZ** | **Isanotski Laza** | **8.35** | **266** | | **Pn** | **18 37 16.6** | **+0.2** |
| **M29M** | **Somme Creek** | **8.40** | **37** | Pn | **Pn** | **18 37 18.9** | **+1.7** |
| **L15K** | **Ungalak Mounta** | **8.41** | **353** | | **Pn** | **18 37 18.7** | **+1.2** |
| **J20K** | **Nowinta River** | **8.45** | **345** | Pn | **Pn** | **18 37 17.8** | **0.0** |
| **J19K** | **Poorman** | **8.52** | **341** | Pn | **Pn** | **18 37 18.1** | **-0.6** |
| **L14K** | **Kuka Creek** | **8.73** | **312** | Pn | **Pn** | **18 37 23.0** | **+1.4** |
| **ILAR** | **Eielson Array** | **8.77** | **7** | Pn | **Pn** | **18 37 24.6** | **+2.5** |
| | comp=N,0.2nm,0.3s,baz=189,slow=13,SNR=5.0 | | | | | | |
| ILAR | | | | Sn | **Sn** | **18 38 54.6** | **-6.2** |
| | baz=196,slow=9.4 | | | | | | |
| | comp=N,0.4nm,0.3s | | | | | | |
| **WHY** | **Whitehorse** | **8.80** | **53** | Pn | **Pn** | **18 37 24.2** | **+1.4** |
| **COLA** | **College** | **8.82** | **4** | P | **Pn** | **18 37 21.3** | **-1.5** |
| **J17K** | **VABM Dome** | **8.82** | **330** | Pn | **Pn** | **18 37 22.7** | **-0.1** |
| **MLY** | **Manley** | **8.98** | **356** | Pn | **Pn** | **18 37 26.1** | **+1.0** |
| **U33K** | **Whale Pass** | **9.01** | **83** | Pn | **Pn** | **18 37 23.3** | **-2.1** |
| **J16K** | **Anvik River** | **9.19** | **326** | Pn | **Pn** | **18 37 27.9** | **0.0** |
| **H21K** | **Melozitna Rive** | **9.73** | **351** | | **Pn** | **18 37 35.1** | **-0.2** |
| **R33M** | **Jennings River** | **10.29** | **64** | Pn | **Pn** | **18 37 43.2** | **+0.1** |
| **G21K** | **Allakaket** | **10.64** | **351** | Pn | **Pn** | **18 37 48.1** | **+0.5** |
| **G23K** | **Bananza Creek** | **10.64** | **358** | Pn | **Pn** | **18 37 48.3** | **+0.5** |
| **F21K** | **Alatna River** | **11.33** | **352** | Pn | **Pn** | **18 37 58.8** | **+1.6** |
| **E19K** | **Redstone River** | **11.98** | **345** | Pn | **Pn** | **18 38 07.7** | **+1.6** |
| **YKA** | **Yellowknife Ar** | **18.62** | **56** | P | **P** | **18 39 31.0** | **-1.6** |
| | comp=N,0.1nm,0.3s,baz=268,slow=11,SNR=2.0 | | | | | | |
| | comp=N,0.7nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **48.82** | **240** | T | T | 19 36 30.6 | |
| | baz=31,slow=76,SNR=5.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **48.82** | **240** | T | T | 19 36 41.2 | |
| | baz=31,slow=76,SNR=6.2 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **48.84** | **240** | T | T | 19 36 57.5 | |
| | baz=31,slow=76,SNR=4.0 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **49.96** | **240** | T | T | 19 38 36.6 | |
| | baz=28,slow=76,SNR=6.8 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **49.97** | **240** | T | T | 19 38 42.5 | |
| | baz=28,slow=76,SNR=5.6 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **49.98** | **240** | T | T | 19 38 39.6 | |
| | baz=28,slow=76,SNR=6.8 | | | | | | |
| **SONM** | **Songino Array** | **58.77** | **310** | P | **P** | **18 45 15.5** | **+2.1** |
| | comp=N,0.4nm,0.5s,baz=29,slow=6.6,SNR=3.9 | | | | | | |
| | comp=N,0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.75** | **325** | P | **P** | **18 46 20.8** | **+1.7** |
| | comp=N,0.3nm,0.5s,baz=32,slow=5.6,SNR=4.9 | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | |

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**NAM 15 19:23:59.5±4.4, 19°.75S×14°.49E, h23km±13km, ML2.1, 6C-4D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.01** | **25** | ⇓*i*P | Pb | 19 24 05.3 | +1.7 |
| ST3N | | | | *i* S | Sb | 19 24 07.0 | +0.6 |
| ST3N | | | | IAML | | 19 24 07.2 | |
| | comp=Z,135nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **132** | ⇑*i*P | Pb | 19 24 04.2 | +0.4 |
| ST9N | | | | *i* S | Sb | 19 24 05.2 | -1.6 |
| ST9N | | | | IAML | | 19 24 05.4 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **132** | *i* P | Pb | 19 24 04.2 | +0.4 |
| ST9N | | | | *i* S | Sb | 19 24 05.2 | -1.6 |
| ST9N | | | | IAML | | 19 24 05.6 | |
| | comp=Z,4μm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **242** | ⇑*i*P | Pn | 19 24 06.4 | +0.5 |
| ST6N | | | | *i* S | Sb | 19 24 08.7 | +1.6 |
| ST6N | | | | IAML | | 19 24 08.9 | |
| | comp=Z,299nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **242** | *i* P | Pn | 19 24 06.3 | +0.5 |
| ST6N | | | | *i* S | Sb | 19 24 08.8 | +1.7 |
| ST6N | | | | IAML | | 19 24 09.0 | |
| | comp=Z,317nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.11** | **82** | ⇓*i*P | Pb | 19 24 04.9 | +0.7 |
| ST1N | | | | *i* S | Sb | 19 24 06.3 | -1.0 |
| ST1N | | | | IAML | | 19 24 06.6 | |
| | comp=Z,248nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.11** | **82** | *i* P | Pb | 19 24 04.9 | +0.8 |
| ST1N | | | | *i* S | Sb | 19 24 06.3 | -1.0 |
| ST1N | | | | IAML | | 19 24 06.5 | |
| | comp=Z,839nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.18** | **291** | ⇓*i*P | Pn | 19 24 08.4 | +1.5 |
| ST8N | | | | *i* S | Sb | 19 24 12.1 | +3.7 |
| ST8N | | | | IAML | | 19 24 14.0 | |
| | comp=Z,32nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.20** | **150** | ⇑*i*P | Pb | 19 24 05.1 | 0.0 |
| ST2N | | | | *i* S | Sb | 19 24 06.7 | -2.1 |
| ST2N | | | | IAML | | 19 24 07.5 | |
| | comp=Z,714nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.20** | **150** | *i* P | Pb | 19 24 05.0 | -0.1 |
| ST2N | | | | *i* S | Sb | 19 24 06.4 | -2.5 |
| ST2N | | | | IAML | | 19 24 07.3 | |
| | comp=Z,448nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.25** | **99** | ⇑*i*P | Pb | 19 24 06.2 | +0.5 |
| ST5N | | | | IAML | | 19 24 08.6 | |
| | comp=Z,698nm,0.1s | | | | | | |
| ST5N | | | | *i* S | Sb | 19 24 08.6 | -1.4 |
| **ST5N** | **ST5** | **0.25** | **99** | *i* P | Pb | 19 24 06.2 | +0.4 |
| ST5N | | | | *i* S | Sb | 19 24 08.5 | -1.5 |
| ST5N | | | | IAML | | 19 24 08.7 | |
| | comp=Z,527nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **202** | ⇑*i*P | Pn | 19 24 07.7 | -0.3 |
| ST10N | | | | *i* S | Sb | 19 24 11.2 | +1.0 |
| ST10N | | | | IAML | | 19 24 12.0 | |
| | comp=Z,286nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **202** | *i* P | Pn | 19 24 07.7 | -0.4 |
| ST10N | | | | *i* S | Sb | 19 24 10.9 | +0.6 |
| ST10N | | | | IAML | | 19 24 12.4 | |
| | comp=Z,586nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **74** | ⇑*i*P | Pn | 19 24 08.9 | -0.3 |
| ST11N | | | | IAML | | 19 24 12.6 | |
| | comp=Z,20nm,0.1s | | | | | | |
| ST11N | | | | *i* S | Sb | 19 24 12.9 | +0.5 |
| **ST11N** | **ST11

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MBWA** | **Marble Bar** | **33.6** | **7** | **240** | P | | **P** | | **19 33 47.7** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **36.4** | **0** | **264** | P | | **P** | | **19 34 10.6** | **-0.5** |
| **MEEK** | **Meekatharra** | **36.9** | **3** | **232** | P | | **P** | | **19 34 16.6** | **+1.2** |
| **UGM** | **Wanagama** | **39.9** | **8** | **265** | P | | **P** | | **19 34 42.6** | **+1.4** |
| **KLBR** | **Kellerberrin** | **40.0** | **8** | **226** | P | | **P** | | **19 34 42.6** | **+0.8** |
| **YULB** | **Yu-li** | **40.9** | **3** | **316** | P | | **P** | | **19 34 51.0** | **+2.1** |
| YULB | | | | | IAmb | IAmb | | | 19 34 51.5 | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| **JMN** | **Monobe** | **42.5** | **3** | **339** | P | | **P** | | **19 35 02.9** | **+1.0** |
| **JNU** | **Nakatsue** | **43.1** | **5** | **335** | P | | **P** | | **19 35 08.4** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **43.8** | **2** | **345** | P | | **P** | | **19 35 12.8** | **+0.5** |
| | comp=Z,1.6nm,0.8s,baz=164,slow=6.4,SNR=4.9 | | | | | | | | | |
| MJAR | | | | | LR | | LR | | 19 51 05.5 | |
| | comp=Z,108nm,22.0s,baz=170,slow=33 | | | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | | | |
| **KSRS** | **Korea Array** | **48.1** | **0** | **335** | P | | **P** | | **19 35 47.4** | **+1.5** |
| | comp=Z,4.4nm,0.9s,baz=155,slow=8.6,SNR=11 | | | | | | | | | |
| KSRS | | | | | LR | | LR | | 19 55 16.3 | |
| | comp=Z,29nm,19.6s,baz=135,slow=35 | | | | | | | | | |
| | comp=Z,4.4nm,0.9s | | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **50.3** | **2** | **352** | P | | **P** | | **19 36 02.5** | **-0.3** |
| **KULM** | **Kulim** | **51.2** | **4** | **282** | P | | **P** | | **19 36 10.2** | **-0.1** |
| KULM | | | | | IAmb | IAmb | | | 19 36 36.6 | |
| | comp=Z,11nm,1.2s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.6** | **6** | **343** | P | | **P** | | **19 36 20.1** | **-0.2** |
| | comp=Z,1.5nm,0.7s,baz=138,slow=12,SNR=2.7 | | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.5** | **2** | **297** | P | | **P** | | **19 36 48.7** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=133,slow=6.3,SNR=2.3 | | | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.0** | **7** | **5** | P | | **P** | | **19 37 07.1** | **+1.0** |
| | comp=Z,4.6nm,0.7s,baz=156,slow=7.3,SNR=9.2 | | | | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | | | | |
| **SONM** | **Songino Array** | **66.1** | **8** | **329** | P | | **P** | | **19 37 54.3** | **+0.5** |
| **SONM** | **Songino Array** | **66.1** | **8** | **329** | P | | **P** | | **19 37 54.8** | **+1.0** |
| | comp=Z,2.3nm,0.9s,baz=148,slow=4.3,SNR=11 | | | | | | | | | |
| SONM | | | | | LR | | LR | | 20 09 22.5 | |
| | comp=Z,36nm,18.4s,baz=138,slow=38 | | | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | | | |
| **VNDA** | **Vanda** | **71.8** | **3** | **177** | P | | **P** | | **19 38 28.6** | **+0.4** |
| | comp=Z,0.5nm,0.6s,baz=14,slow=5.1,SNR=4.0 | | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | | |
| **PLK4** | **Peulik 4** | **76.3** | **0** | **26** | P | | **P** | | **19 38 53.9** | **-0.8** |
| PLK4 | | | | | IAmb | IAmb | | | 19 39 17.5 | |
| | comp=Z,8.4nm,0.9s | | | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **77.1** | **3** | **21** | P | | **P** | | **19 38 58.4** | **-0.8** |
| **OHAK** | **Old Harbor** | **77.4** | **5** | **28** | P | | **P** | | **19 39 01.6** | **+0.6** |
| OHAK | | | | | IAmb | IAmb | | | 19 39 08.2 | |
| | comp=Z,6.1nm,1.2s | | | | | | | | | |
| **L16K** | **Owhat River** | **77.5** | **0** | **22** | P | | **P** | | **19 39 01.7** | **+0.5** |
| L16K | | | | | IAmb | IAmb | | | 19 39 12.8 | |
| | comp=Z,12nm,1.4s | | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **78.2** | **1** | **26** | P | | **P** | | **19 39 04.0** | **-1.3** |
| **P19K** | **Oil Pt** | **78.7** | **8** | **25** | P | | **P** | | **19 39 07.5** | **-0.9** |
| **L18K** | **Granite Mounta** | **78.8** | **6** | **22** | P | | **P** | | **19 39 08.1** | **-0.7** |
| L18K | | | | | IAmb | IAmb | | | 19 39 26.4 | |
| | comp=Z,11nm,1.4s | | | | | | | | | |
| **L19K** | **White Mountain** | **79.5** | **3** | **23** | P | | **P** | | **19 39 11.6** | **-1.0** |
| L19K | | | | | IAmb | IAmb | | | 19 39 34.6 | |
| | comp=Z,9.2nm,1.4s | | | | | | | | | |
| **CNPM** | **China Poot** | **79.5** | **8** | **26** | P | | **P** | | **19 39 11.3** | **-1.5** |
| **MKAR** | **Makanchi Array** | **79.8** | **2** | **320** | P | | **P** | | **19 39 14.1** | **-0.4** |
| | comp=Z,0.9nm,0.8s,baz=99,slow=4.5,SNR=4.7 | | | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | | |
| **G18K** | **Tagagawik** | **80.4** | **2** | **19** | P | | **P** | | **19 39 17.1** | **-0.1** |
| G18K | | | | | IAmb | IAmb | | | 19 39 37.3 | |
| | comp=Z,12nm,1.5s | | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **80.9** | **4** | **327** | P | | **P** | | **19 39 18.3** | **-1.9** |
| **ZALV** | **Zalesovo Beam** | **80.9** | **4** | **327** | P | | **P** | | **19 39 18.3** | **-1.9** |
| **ZALV** | **Zalesovo Beam** | **80.9** | **4** | **327** | P | | **P** | | **19 39 19.0** | **-1.2** |
| | comp=Z,1.3nm,0.6s,baz=118,slow=5.7,SNR=6.6 | | | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | | | |
| **PWL** | **Port Wells** | **81.5** | **0** | **26** | P | | **P** | | **19 39 22.4** | **-0.7** |
| PWL | | | | | IAmb | IAmb | | | 19 39 29.6 | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| **IMAR** | **Indian Mountai** | **82.0** | **9** | **20** | P | | **P** | | **19 39 25.0** | **-1.1** |
| **RND** | **Reindeer** | **82.5** | **2** | **23** | P | | **P** | | **19 39 26.7** | **-1.7** |
| RND | | | | | IAmb | IAmb | | | 19 39 30.5 | |
| | comp=Z,3.2nm,0.7s | | | | | | | | | |
| **MLY** | **Manley** | **82.6** | **3** | **21** | P | | **P** | | **19 39 27.7** | **-1.3** |
| **KURBB** | **Kurchatov Arra** | **83.4** | **1** | **322** | P | | **P** | | **19 39 32.0** | **-1.2** |
| | comp=Z,1.1nm,0.9s,baz=110,slow=4.0,SNR=5.1 | | | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.5** | **3** | **22** | P | | **P** | | **19 39 31.6** | **-1.9** |
| **GLB** | **Gilahina Butte** | **83.7** | **2** | **26** | P | | **P** | | **19 39 33.9** | **-0.9** |
| GLB | | | | | IAmb | IAmb | | | 19 40 06.2 | |
| | comp=Z,6.0nm,1.3s | | | | | | | | | |
| **G23K** | **Bananza Creek** | **83.7** | **5** | **20** | P | | **P** | | **19 39 35.4** | **+0.7** |
| G23K | | | | | IAmb | IAmb | | | 19 39 38.4 | |
| | comp=Z,4.1nm,0.9s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.9** | **4** | **22** | P | | **P** | | **19 39 32.9** | **-2.8** |
| **ILAR** | **Eielson Array** | **83.9** | **4** | **22** | P | | **P** | | **19 39 33.4** | **-2.3** |
| | comp=Z,1.5nm,0.7s,baz=246,slow=5.6,SNR=12 | | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.0** | **7** | **180** | P | | **P** | | **19 39 37.3** | **+0.7** |
| QSPA | | | | | IAmb | IAmb | | | 19 40 13.9 | |
| | comp=Z,6.4nm,1.3s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.0** | **7** | **180** | P | | **P** | | **19 39 35.0** | **-1.5** |
| | comp=Z,1.4nm,0.6s,baz=41,slow=7.4,SNR=18 | | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | | |
| **J25K** | **Salcha River,** | **84.4** | **4** | **23** | P | | **P** | | **19 39 37.4** | **-0.9** |
| J25K | | | | | IAmb | IAmb | | | 19 39 40.6 | |
| | comp=Z,4.3nm,0.7s | | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **84.9** | **3** | **26** | P | | **P** | | **19 39 40.6** | **-0.3** |
| M27K | | | | | IAmb | IAmb | | | 19 39 41.9 | |
| | comp=Z,4.3nm,0.7s | | | | | | | | | |
| **EGAK** | **Eagle** | **86.1** | **6** | **23** | P | | **P** | | **19 39 45.5** | **-1.3** |
| **M29M** | **Somme Creek** | **86.4** | **4** | **26** | P | | **P** | | **19 39 48.0** | **-0.4** |
| **KKAR** | **Karatay Array** | **86.9** | **0** | **314** | P | | **P** | | **19 39 49.6** | **-1.4** |
| **K29M** | **Barlow Dome** | **87.3** | **1** | **25** | P | | **P** | | **19 39 52.5** | **-0.1** |
| K29M | | | | | IAmb | IAmb | | | 19 39 56.8 | |
| | comp=Z,4.6nm,0.8s | | | | | | | | | |
| **E27K** | **Coleen River** | **87.3** | **2** | **20** | P | | **P** | | **19 39 52.3** | **-0.1** |
| E27K | | | | | IAmb | IAmb | | | 19 39 55.7 | |
| | comp=Z,2.7nm,0.8s | | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **87.3** | **4** | **27** | P | | **P** | | **19 39 53.0** | **+0.3** |
| N31M | | | | | IAmb | IAmb | | | 19 40 25.8 | |
| | comp=Z,5.3nm,1.1s | | | | | | | | | |
| **J30M** | **Hart River** | **88.0** | **4** | **24** | P | | **P** | | **19 39 56.6** | **+0.5** |
| J30M | | | | | IAmb | IAmb | | | 19 39 59.7 | |
| | comp=Z,3.1nm,0.8s | | | | | | | | | |
| **I30M** | **Mount Dempster** | **88.2** | **2** | **24** | P | | **P** | | **19 39 55.4** | **-1.6** |
| I30M | | | | | IAmb | IAmb | | | 19 40 18.5 | |
| | comp=Z,5.0nm,1.4s | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **88.9** | **0** | **323** | P | | **P** | | **19 39 58.7** | **-1.5** |
| | comp=Z,0.4nm,0.5s,baz=115,slow=6.8,SNR=4.0 | | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.3** | **6** | **52** | P | | **P** | | **19 40 26.7** | **+0.5** |
| | comp=Z,0.9nm,0.6s,baz=248,slow=6.6,SNR=8.8 | | | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | | | |
| **ABD** | **La Joyeuse, An** | **146.7** | **2** | **69** | PKPdf | | **PKPdf** | | **19 46 43.8** | **-3.2** |
| **TORD** | **Torodi Ar. Bea** | **148.6** | **7** | **286** | PKPbc | | **PKPbc** | | **19 46 53.9** | **-0.3** |
| | comp=Z,6.9nm,0.8s,baz=67,slow=5.5,SNR=43 | | | | | | | | | |
| **BDFB** | **Brasilia** | **151.6** | **6** | **139** | PKPbc | | **PKPbc** | | **19 47 01.4** | **0.0** |
| | comp=Z,1.9nm,0.4s,baz=169,slow=16,SNR=4.1 | | | | | | | | | |

*NEIC **15** 19:28:02.4±1.9,6.1°S±0.2°×151.1°E±0.2°,2,h10km±2km, mb4.6/12, Error ellipse: s-maj=44.0km s-min=11.5km az=128.0*
*IDC **15** 19:28:04.0±3.8,5.98°S×151.23°E,h24km±22km,mb3.9/12, mbtmp4.1/13,ML2.3/2,MS3.6/4, Error ellipse: s-maj=39.2km s-min=16.5km az=108.0*
**ISC 15 19:28:01.4±0.7,6.07°S±0.09°×151.3°E±0.1°,h10km,n35, σ1°36°/37,mb4.2/17,MS3.5/3,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.06** | **25** | Pn | **Pn** | **19 28 37.3** | **+1.1** |
| **PMG** | **Port Moresby** | **5.27** | **231** | Pn | **Pn** | **19 29 18.3** | **-2.0** |
| **PMG** | **Port Moresby** | **5.27** | **231** | Pn | **Pn** | **19 29 21.9** | **+1.7** |
| | 12nm,0.3s,baz=86,slow=15,SNR=10 | | | | | | |
| PMG | | | | Sn | **Sn** | **19 30 20.1** | **-1.0** |
| | 11nm,0.3s,baz=348,slow=10,SNR=1.3 | | | | | | |
| PMG | | | | LR | LR | 19 31 11.1 | |
| | comp=Z,427nm,19.0s,baz=352,slow=35 | | | | | | |
| | 163nm,0.8s | | | | | | |
| **MANU** | **Manus Island** | **5.60** | **315** | Pn | **Pn** | **19 29 27.4** | **+2.5** |
| **COEN** | **Coen** | **11.19** | **225** | Pn | **Pn** | **19 30 42.8** | **+1.2** |
| **CTA** | **Charters Tower** | **14.77** | **199** | Pn | **Pn** | **19 31 33.1** | **+2.6** |
| | baz=17,slow=14,SNR=1.9 | | | | | | |
| CTA | | | | LR | LR | 19 36 39.6 | |
| | comp=Z,27nm,19.8s,baz=22,slow=35 | | | | | | |
| **MTN** | **Manton Dam** | **20.98** | **250** | P | **P** | **19 32 43.1** | **-2.0** |
| MTN | | | | IAmb | IAmb | 19 32 55.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.34** | **229** | P | **P** | **19 32 49.6** | **+0.7** |
| WB0 | | | | IAmb | IAmb | 19 32 50.1 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.47** | **229** | P | **P** | **19 32 50.4** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 19 33 01.9 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.47** | **228** | P | **P** | **19 32 50.9** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 19 33 02.1 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.48** | **229** | P | **P** | **19 32 49.0** | **-1.5** |
| **WRA** | **Warramunga Arr** | **21.48** | **229** | P | **P** | **19 32 50.3** | **-0.2** |
| | comp=Z,11nm,0.5s,baz=55,slow=10,SNR=10 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 36 54.5** | **+0.9** |
| | comp=Z,0.8nm,0.8s,baz=42,slow=2.1,SNR=3.1 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 40 29.2** | **-1.7** |
| | comp=Z,0.4nm,0.7s,baz=44,slow=2.6,SNR=1.9 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.62** | **139** | LR | LR | 19 39 55.5 | |
| | comp=Z,217nm,20.9s,baz=337,slow=33 | | | | | | |
| **KNRA** | **Kununurra** | **24.07** | **245** | P | **P** | **19 33 16.8** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 19 33 25.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **24.20** | **222** | P | **P** | **19 33 16.8** | **-1.7** |
| **ASAR** | **Alice Springs** | **24.20** | **222** | P | **P** | **19 33 17.1** | **-1.3** |
| **ASAR** | **Alice Springs** | **24.20** | **222** | P | **P** | **19 33 19.6** | **+1.1** |
| | comp=Z,3.8nm,0.6s,baz=52,slow=8.6,SNR=6.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 36 58.4** | **-0.8** |
| | comp=Z,0.2nm,0.5s,baz=46,slow=4.0,SNR=1.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 40 36.5** | **-1.6** |
| | comp=Z,0.4nm,0.8s,baz=260,slow=37,SNR=2.6 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **27.23** | **198** | P | **P** | **19 33 47.2** | **+1.5** |
| | comp=Z,2.9nm,0.7s,baz=14,slow=19,SNR=1.2 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.74** | **242** | P | **P** | **19 33 49.5** | **-1.0** |
| **BBOO** | **Buckleboo** | **30.15** | **206** | P | **P** | **19 34 11.2** | **-0.5** |
| **FORT** | **Forrest** | **32.86** | **219** | P | **P** | **19 34 34.8** | **-0.8** |
| **MBWA** | **Marble Bar** | **34.04** | **241** | P | **P** | **19 34 44.9** | **-1.2** |
| MBWA | | | | IAmb | IAmb | 19 34 51.3 | |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **JCJ** | **Chichijima** | **34.13** | **345** | LR | LR | 19 48 00.3 | |
| | comp=Z,89nm,19.2s,baz=106,slow=35 | | | | | | |
| **GIRL** | **Giralia** | **39.34** | **241** | P | **P** | **19 35 33.5** | **+2.2** |
| **JHJ** | **Hachijo jima 2** | **40.48** | **345** | LR | LR | 19 49 50.2 | |
| | comp=Z,94nm,18.4s,baz=74,slow=32 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.13** | **345** | P | **P** | **19 36 09.9** | **-0.4** |
| | comp=Z,1.4nm,0.9s,baz=156,slow=9.2,SNR=2.8 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **48.48** | **335** | P | **P** | **19 36 44.5** | **+0.1** |
| | comp=Z,3.7nm,1.0s,baz=151,slow=8.3,SNR=6.7 | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **66.61** | **329** | P | **P** | **19 38 52.1** | **-0.2** |
| | comp=Z,1.8nm,1.0s,baz=140,slow=4.5,SNR=4.5 | | | | | | |
| | comp=Z,1.8nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **80.30** | **319** | P | **P** | **19 40 12.7** | **-0.1** |
| | comp=Z,0.6nm,0.8s,baz=98,slow=7.7,SNR=2.7 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.38** | **327** | P | **P** | **19 40 19.6** | **+1.2** |
| | comp=Z,0.3nm,0.3s,baz=146,slow=8.4,SNR=1.7 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.88** | **322** | P | **P** | **19 40 29.3** | **-2.1** |
| | comp=Z,1.4nm,1.0s,baz=117,slow=4.3,SNR=3.3 | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **83.90** | **22** | P | **P** | **19 40 30.3** | **-1.0** |
| | comp=Z,1.2nm,0.8s,baz=254,slow=5.0,SNR=5.9 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **89.36** | **323** | P | **P** | **19 40 56.9** | **-1.3** |
| | comp=Z,0.7nm,0.8s,baz=87,slow=5.1,SNR=3.8 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.05** | **52** | P | **P** | **19 41 20.9** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=265,slow=5.3,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.24** | **285** | PKPbc | **PKPbc** | **19 47 50.9** | **-0.6** |
| | comp=Z,1.1nm,0.3s,baz=36,slow=1.3,SNR=9.4 | | | | | | |

*UCR **15** 19:34:38.8±0.8,9.45°N×84.50°W,h18km±5km,MW4.2*
*UPA **15** 19:34:38.5±0.5,9.38°N×84.55°W,h31km±9km,MW3.8*
*CATAC **15** 19:34:39.5±0.4,9.46°N×84.47°W,h10km,ML3.7*
**ISC 15 19:34:37.6±1.3,9.40°N±0.04°×84.50°W±0.03°,h10km±10km, n46,σ0°77/61,6C-3D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVQ2** | **Quepos** | **0.33** | **85** | *eP* | **Pb** | **19 34 45.0** | **-0.5** |
| SVQ2 | | | | *eS* | **Sb** | **19 34 50.6** | **-0.2** |
| **LLNJ** | **Naranjito** | **0.40** | **80** | *eP* | **Pb** | **19 34 46.4** | **-0.3** |
| LLNJ | | | | *eS* | **Sb** | **19 34 53.0** | **+0.1** |
| **ACOS** | **Acosta** | **0.51** | **40** | *eP* | **Pg** | **19 34 47.6** | **0.0** |
| ACOS | | | | *eS* | **Sg** | **19 34 55.0** | **+0.6** |
| **TRB2** | **Turrubares** | **0.51** | **5** | *eP* | **Pg** | **19 34 47.0** | **-0.5** |
| **ABE2** | **San Pablo** | **0.53** | **55** | *eP* | **Pg** | **19 34 48.2** | **+0.2** |
| **LCR2** | **La Lucha 2** | **0.59** | **55** | *i P* | **Pg** | **19 34 48.8** | **-0.3** |
| LCR2 | | | | IAML | | 19 35 04.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **0.59** | **55** | *eP* | **Pg** | **19 34 49.2** | **+0.1** |
| LCR2 | | | | *eS* | **Sg** | **19 34 57.5** | **+0.6** |
| **CBL1** | **Cabuya** | **0.61** | **288** | *eP* | **Pb** | **19 34 50.4** | **-0.1** |
| CBL1 | | | | *eS* | **Sn** | **19 35 02.8** | **+0.4** |
| **BELE** | **Belen** | **0.65** | **28** | *eP* | **Pg** | **19 34 50.4** | **+0.2** |
| **TCS1** | **Tacares** | **0.67** | **17** | *i P* | **Pg** | **19 34 50.7** | **+0.2** |
| TCS1 | | | | IAML | | 19 35 05.9 | |
| | comp=Z,10μm,1.0s | | | | | | |
| **SRA1** | **San Ramn** | **0.68** | **1** | *eP* | **Pg** | **19 34 50.5** | **-0.2** |
| **SJS** | **Escuela Geolog** | **0.69** | **39** | *eP* | **Pg** | **19 34 51.0** | **0.0** |
| **HDC** | **Heredia** | **0.70** | **32** | *i P* | **Pb** | **19 34 52.1** | **0.0** |
| HDC | | | | IAML | | 19 35 13.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **HDC** | **Heredia** | **0.70** | **32** | *eP* | **Pg** | **19 34 51.4** | **+0.2** |
| **HDC3** | **Heredia 3** | **0.71** | **33** | *i P* | **Pg** | **19 34 51.6** | **+0.3** |
| HDC3 | | | | IAML | | 19 35 13.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **BUS1** | **Rivas** | **0.76** | **78** | *eP* | **Pg** | **19 34 52.2** | **0.0** |
| BUS1 | | | | *eS* | **Sb** | **19 35 03.6** | **0.0** |
| **VICA** | **Volcano Irazu** | **0.86** | **48** | *eP* | **Pg** | **19 34 54.2** | **-0.2** |
| **RAFA** | **San Farael, Vo** | **0.87** | **51** | *i P* | **Pg** | **19 34 54.8** | **+0.3** |
| RAFA | | | | IAML | | 19 35 13.2 | |
| | comp=Z,13μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.87** | **51** | *eP* | **Pg** | **19 34 54.3** | **-0.2** |
| **OCHAL** | **Ojochal** | **0.89** | **110** | *i P* | **Pg** | **19 34 54.1** | **-0.7** |
| OCHAL | | | | IAML | | 19 35 11.6 | |
| | comp=Z,700nm,1.0s | | | | | | |
| **CVTV** | **Tajo** | **0.95** | **51** | *eP* | **Pg** | **19 34 56.0** | **+0.1** |
| **VTCV** | **VTCV, Calle Va** | **0.95** | **53** | *eP* | **Pg** | **19 34 55.7** | **-0.3** |
| **VERB** | **Verbena** | **0.96** | **56** | *eP* | **Pg** | **19 34 56.0** | **0.0** |
| **SOCE** | **Pocosol** | **0.98** | **353** | *i P* | **Pb** | **19 34 55.4** | **-1.3** |
| SOCE | | | | *i S* | **Sn** | **19 35 12.7** | **+1.2** |
| SOCE | | | | IAML | | 19 35 16.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **0.98** | **353** | *eP* | **Pb** | **19 34 56.0** | **-0.7** |
| **JTS** | **Las Juntas de** | **0.99** | **333** | *iP* | **Pb** | **19 34 55.7** | **-1.2** |
| JTS | | | | *eS* | **Sg** | **19 35 08.7** | **-0.9** |
| **JTS** | **Las Juntas de** | **0.99** | **333** | *eP* | **Pb** | **19 34 55.6** | **-1.3** |
| **ARE1** | **Arenal 1** | **1.07** | **348** | *eP* | **Pb** | **19 34 57.8** | **-0.6** |
| **INDI** | **Punta indio, G** | **1.09** | **295** | *i P* | **Pb** | **19 34 57.7** | **-0.9** |
| INDI | | | | *i S* | **Sn** | **19 35 16.3** | **+2.1** |
| INDI | | | | IAML | | 19 35 20.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **LCOCO** | **El Coco** | **1.15** | **54** | *eP* | **Pb** | **19 34 59.3** | **-0.2** |
| **DRK0** | **Durika** | **1.24** | **96** | *i P* | **Pn** | **19 35 00.3** | **-0.9** |
| DRK0 | | | | *i S* | **Sb** | **19 35 17.3** | **-0.1** |
| DRK0 | | | | IAML | | 19 35 20.9 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **1.24** | **96** | *eP* | **Pn** | **19 35 00.3** | **-0.9** |
| DRK0 | | | | *eS* | **Sb** | **19 35 16.7** | **-0.8** |
| **DRK0** | **Durika** | **1.24** | **96** | *eP* | **Pn** | **19 35 00.5** | **-0.8** |
| **COVE** | **Coope Vega, Sa** | **1.31** | **4** | *i P* | **Pb** | **19 35 02.5** | **+0.1** |
| COVE | | | | *i S* | **Sg** | **19 35 22.0** | **+2.1** |
| COVE | | | | IAML | | 19 35 53.8 | |
| | comp=Z,680nm,1.0s | | | | | | |
| **TENO** | **El Achiote** | **1.38** | **340** | *eP* | **Pn** | **19 35 02.0** | **-0.9** |
| **CUI** | **Cuipilapa** | **1.41** | **332** | *eP* | **Pn** | **19 35 03.0** | **-0.4** |
| **ALIBA** | **Liberia Airpor** | **1.57** | **319** | *eP* | **Pb** | **19 35 07.0** | **+0.3** |
| **VRLE** | **La Escondida,** | **1.62** | **328** | *eP* | **Pn** | **19 35 06.3** | **0.0** |
| **VORI** | **VORI** | **1.64** | **329** | *eP* | **Pn** | **19 35 06.6** | **0.0** |
| **CDITO** | **Canoas** | **1.80** | **117** | *i P* | **Pg** | **19 35 12.9** | **+0.7** |
| CDITO | | | | IAML | | 19 35 57.6 | |
| | comp=Z,710nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.88** | **109** | *i P* | **Pg** | **19 35 15.9** | **+2.2** |
| BRU2 | | | | *i S* | **Sg** | **19 35 39.1** | **+0.9** |
| BRU2 | | | | IAML | | 19 36 06.2 | |
| | comp=Z,550nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.88** | **109** | *eP* | **Pn** | **19 35 09.5** | **-0.5** |
| BRU2 | | | | *eS* | **Sn** | **19 35 33.3** | **-0.6** |
| **BCO2** | **Palmira** | **2.06** | **109** | *eP* | **Pn** | **19 35 12.5** | **+0.1** |
| BCO2 | | | | *eS* | **Sg** | **19 35 43.9** | **+0.1** |
| **LNBQ3** | **Los Naranjos,** | **2.12** | **106** | *eP* | **Pn** | **19 35 12.9** | **-0.4** |
| **DVD** | **David** | **2.24** | **115** | *eP* | **Pn** | **19 35 13.4** | **-1.4** |
| **NANC3** | **Nancito, Chiri** | **2.97** | **113** | *eP* | **Pn** | **19 35 23.9** | **-0.9** |

*IDC **15** 19:34:49.0±0.7,11.82°N×143.55°E,h0km,mb4.2/16, mbtmp4.2/17,ML4.0/1,MS3.7/15, Error ellipse: s-maj=23.5km s-min=14.8km az=97.0*
*NEIC **15** 19:34:52.7±1.3,11.82°N±0.09°×143.6°E±0.1°,h20km±6km, mb4.7/42, Error ellipse: s-maj=17.4km s-min=12.4km az=102.0*
**ISC 15 19:34:52.8±0.5,11.80°N±0.06°×143.67°E±0.08°,h25km,n92, σ1°03/79,mb4.6/48,MS3.8/14,1D,South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **2.13** | **33** | Pn | **Pn** | **19 35 26.5** | **-0.3** |
| **GUMO** | **Guam** | **2.13** | **33** | Pn | **Pn** | **19 35 28.6** | **+1.7** |
| | 43nm,0.3s,baz=184,slow=12,SNR=18 | | | | | | |
| GUMO | | | | Sn | **Sb** | **19 35 55.8** | **-1.0** |
| | 92nm,0.3s,baz=180,slow=20,SNR=8.9 | | | | | | |
| GUMO | | | | LR | LR | 19 36 30.4 | |
| | comp=Z,687nm,21.1s,baz=174,slow=46 | | | | | | |
| | 296nm,0.6s | | | | | | |
| **PATS** | **Pohnpei** | **15.27** | **108** | Pn | **Pn** | **19 38 25.4** | **-1.6** |
| **PMG** | **Port Moresby** | **21.35** | **170** | LR | LR | 19 47 13.7 | |
| | comp=Z,84nm,18.8s,baz=334,slow=35 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **23.18** | **71** | T | T | 20 04 29.4 | |
| | baz=254 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **23.20** | **70** | T | T | 20 04 44.5 | |
| | baz=254 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **23.20** | **71** | T | T | 20 04 24.9 | |
| | baz=254 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.68** | **68** | T | T | 20 05 07.9 | |
| | baz=255 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.68** | **68** | T | T | 20 04 51.6 | |
| | baz=255 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.69** | **68** | T | T | 20 04 56.1 | |
| | baz=255 | | | | | | |
| **JNU** | **Nakatsue** | **24.24** | **333** | P | **P** | **19 40 07.5** | **-0.4** |
| JNU | | | | IAmb | IAmb | 19 40 46.5 | |
| | comp=Z,37nm,1.4s | | | | | | |
| **SSLB** | **Suanglung** | **24.65** | **302** | P | **P** | **19 40 09.7** | **-2.0** |
| SSLB | | | | IAmb | IAmb | 19 40 46.7 | |
| | comp=Z,38nm,1.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **25.12** | **350** | P | **P** | **19 40 13.5** | **-2.3** |
| | comp=Z,1.6nm,0.6s,baz=178,slow=8.5,SNR=5.0 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **COEN** | **Coen** | **25.60** | **181** | P | **P** | **19 40 20.2** | **-0.1** |
| COEN | | | | IAmb | IAmb | 19 40 33.2 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **SOEI** | **Soe** | **28.82** | **223** | P | **P** | **19 40 48.7** | **-0.7** |
| SOEI | | | | IAmb | IAmb | 19 41 16.4 | |
| | comp=Z,40nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **29.19** | **334** | P | **P** | **19 40 51.6** | **-0.7** |
| | comp=Z,0.7nm,0.7s,baz=138,slow=9.6,SNR=2.4 | | | | | | |
| | comp

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **62.40** | **325** | P | | **P** | **19 45 12.1** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **62.40** | **325** | P | | **P** | **19 45 11.9** | **-1.6** |
| **ZALV** | **Zalesovo Beam** | **62.40** | **325** | P | | **P** | **19 45 12.6** | **-0.9** |
| | comp=Z,2.2nm,0.6s,baz=105,slow=8.0,SNR=9.5 | | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **KURK** | **Kurchatov** | **65.20** | **321** | P | | **P** | **19 45 31.4** | **-0.6** |
| KURK | | | | IAmb | | IAmb | 19 45 32.6 | | |
| | comp=Z,9.6nm,0.9s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.23** | **320** | P | | **P** | **19 45 31.9** | **-0.4** |
| | comp=Z,5.3nm,0.7s,baz=105,slow=6.3,SNR=42 | | | | | | | | |
| | comp=Z,5.3nm,0.7s | | | | | | | | |
| **KSH** | **Kashi** | **65.40** | **308** | P | | **P** | **19 45 36.3** | **+2.6** |
| KSH | | | | sP | | pwP | 19 45 45.1 | -1.5 | |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **H18K** | **Honhosa River** | **66.20** | **23** | P | | **P** | **19 45 38.2** | **0.0** |
| **F19K** | **Shaleruckik Mo** | **67.13** | **21** | P | | **P** | **19 45 44.2** | **+0.1** |
| F19K | | | | IAmb | | IAmb | 19 46 01.1 | | |
| | comp=Z,5.5nm,1.2s | | | | | | | | |
| **J20K** | **Nowinta River** | **67.50** | **25** | P | | **P** | **19 45 46.6** | **+0.1** |
| J20K | | | | IAmb | | IAmb | 19 45 48.8 | | |
| | comp=Z,8.4nm,1.2s | | | | | | | | |
| **D19K** | **Kuna River** | **67.73** | **20** | P | | **P** | **19 45 47.6** | **-0.4** |
| **MLY** | **Manley** | **69.16** | **24** | P | | **P** | **19 45 57.0** | **0.0** |
| MLY | | | | IAmb | | IAmb | 19 45 59.3 | | |
| | comp=Z,8.9nm,1.3s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **69.76** | **24** | P | | **P** | **19 46 01.4** | **+0.9** |
| I23K | | | | IAmb | | IAmb | 19 46 02.5 | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **G23K** | **Bananza Creek** | **69.95** | **23** | P | | **P** | **19 46 02.5** | **+0.7** |
| G23K | | | | IAmb | | IAmb | 19 46 04.0 | | |
| | comp=Z,4.3nm,0.8s | | | | | | | | |
| **E23K** | **Chandalar** | **70.50** | **21** | P | | **P** | **19 46 06.3** | **+1.0** |
| **H24K** | **Noodor Dome** | **70.54** | **24** | P | | **P** | **19 46 06.0** | **+0.6** |
| H24K | | | | IAmb | | IAmb | 19 46 07.4 | | |
| | comp=Z,9.1nm,1.1s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **70.60** | **322** | P | | **P** | **19 46 05.9** | **-0.1** |
| | comp=Z,5.1nm,0.5s,baz=103,slow=7.3,SNR=32 | | | | | | | | |
| BVAR | | | | LR | | LR | 20 18 28.9 | | |
| | comp=Z,38nm,18.8s,baz=90,slow=37 | | | | | | | | |
| | comp=Z,5.1nm,0.5s | | | | | | | | |
| **BRVK** | **Borovoye** | **70.67** | **322** | P | | **P** | **19 46 05.9** | **-0.5** |
| BRVK | | | | IAmb | | IAmb | 19 46 09.5 | | |
| | comp=Z,4.9nm,0.7s | | | | | | | | |
| **IL31** | | **70.67** | **25** | P | | **P** | **19 46 05.1** | **-1.1** |
| IL31 | | | | IAmb | | IAmb | 19 46 12.5 | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **70.67** | **25** | P | | **P** | **19 46 05.1** | **-1.1** |
| **ILAR** | **Eielson Array** | **70.67** | **25** | P | | **P** | **19 46 05.2** | **-1.0** |
| | comp=Z,1.8nm,0.8s,baz=253,slow=5.6,SNR=12 | | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **70.69** | **21** | P | | **P** | **19 46 07.2** | **+0.8** |
| **F24K** | **Squaw Lake** | **70.98** | **22** | P | | **P** | **19 46 09.3** | **+1.2** |
| F24K | | | | IAmb | | IAmb | 19 46 10.6 | | |
| | comp=Z,5.4nm,0.9s | | | | | | | | |
| **D24K** | **Happy Valley** | **71.11** | **20** | P | | **P** | **19 46 10.0** | **+1.2** |
| **VRDI** | **Verde Repeater** | **71.50** | **29** | P | | **P** | **19 46 12.1** | **+0.5** |
| VRDI | | | | IAmb | | IAmb | 19 46 19.0 | | |
| | comp=Z,10.0nm,1.4s | | | | | | | | |
| **J26L** | **Joseph Creek** | **72.02** | **26** | P | | **P** | **19 46 14.4** | **-0.1** |
| J26L | | | | IAmb | | IAmb | 19 46 19.6 | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **I28M** | **Miner Creek** | **73.69** | **25** | P | | **P** | **19 46 25.1** | **+0.7** |
| I28M | | | | IAmb | | IAmb | 19 46 28.6 | | |
| | comp=Z,3.4nm,0.7s | | | | | | | | |
| **M29M** | **Somme Creek** | **74.00** | **28** | P | | **P** | **19 46 27.2** | **+0.9** |
| **L29M** | **L29M** | **74.22** | **28** | P | | **P** | **19 46 28.7** | **+1.2** |
| L29M | | | | IAmb | | IAmb | 19 46 59.6 | | |
| | comp=Z,9.5nm,1.1s | | | | | | | | |
| **I30M** | **Mount Dempster** | **75.15** | **25** | P | | **P** | **19 46 33.4** | **+0.5** |
| **G31M** | **Satah River** | **76.11** | **24** | P | | **P** | **19 46 38.7** | **+0.5** |
| **ABKAR** | **Akbulak array** | **77.08** | **318** | P | | **P** | **19 46 43.3** | **-0.7** |
| **KIRV** | **Kirov** | **82.24** | **328** | LR | | LR | 20 27 24.0 | | |
| | comp=Z,38nm,19.1s,baz=64,slow=38 | | | | | | | | |
| **BELG** | **Belogornoye** | **84.41** | **322** | LR | | LR | 20 26 00.9 | | |
| | comp=Z,39nm,21.9s,baz=73,slow=36 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **85.61** | **351** | LR | | LR | 20 27 43.7 | | |
| | comp=Z,40nm,18.7s,baz=356,slow=37 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.41** | **342** | P | | **P** | **19 47 42.4** | **-0.1** |
| | comp=Z,2.0nm,0.9s,baz=64,slow=5.1,SNR=5.3 | | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.95** | **51** | P | | **P** | **19 47 47.6** | **+1.7** |
| | comp=Z,2.5nm,0.9s,baz=270,slow=5.4,SNR=9.9 | | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| **GNI** | **Garni** | **89.19** | **311** | LR | | LR | 20 30 50.6 | | |
| | comp=Z,14nm,20.9s,baz=104,slow=38 | | | | | | | | |
| **VNDA** | **Vanda** | **89.77** | **176** | P | | **P** | **19 47 49.3** | **+0.8** |
| | comp=Z,0.3nm,0.8s,baz=337,slow=6.0,SNR=3.7 | | | | | | | | |
| VNDA | | | | LR | | LR | 20 27 59.1 | | |
| | comp=Z,45nm,18.0s,baz=336,slow=36 | | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | | |
| **OBN** | **Obninsk** | **89.95** | **327** | LR | | LR | 20 31 46.7 | | |
| | comp=Z,54nm,19.6s,baz=8.0,slow=38 | | | | | | | | |
| **FINES** | **FINESS Array B** | **92.27** | **335** | P | | **P** | **19 47 59.6** | **-0.9** |
| | comp=Z,1.2nm,0.8s,baz=76,slow=5.9,SNR=5.1 | | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **95.78** | **324** | LR | | LR | 20 34 44.7 | | |
| | comp=Z,32nm,18.9s,baz=65,slow=38 | | | | | | | | |

*IDC **15** 19:46:21.1±1.7,5.°90S×154.°18E,h0km,mb3.5/5,*
*mbtmp3.5/6,ML1.6/1,Error ellipse: s-maj=67.8km*
*s-min=26.4km az=123.0*

**ISC 15 19:46:28.4±1.6,5.°9S±0.°3×154.°0E±0.°3,h48km,n10,**
**σ0°74/9,mb3.4/5,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **7.61** | **243** | Pn | | **Pn** | **Pn** | **19 48 16.5** | **-0.2** |
| | 0.5nm,0.3s,baz=62,slow=13,SNR=1.4 | | | | | | | | |
| | 3.6nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.65** | **232** | P | | | **P** | **19 51 35.8** | **+0.2** |
| | 0.8nm,1.0s,baz=57,slow=9.7,SNR=3.8 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **19 55 19.6** | **+0.2** |
| | 0.2nm,0.5s,baz=52,slow=2.1,SNR=1.6 | | | | | | | | |
| | 0.8nm,1.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.17** | **226** | P | | | **P** | **19 51 59.3** | **+0.7** |
| | 0.8nm,0.8s,baz=61,slow=9.6,SNR=7.6 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **19 55 24.7** | **-0.2** |
| | 0.2nm,0.6s,baz=48,slow=2.8,SNR=1.9 | | | | | | | | |
| | 0.8nm,0.8s | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 27.31** | **27** | | T | | | T | 20 20 24.2 | |
| | baz=208,slow=76,SNR=7.5 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 27.31** | **27** | | T | | | T | 20 20 22.9 | |
| | baz=208,slow=76,SNR=7.9 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 27.32** | **27** | | T | | | T | 20 20 26.8 | |
| | baz=208,slow=76,SNR=9.0 | | | | | | | | |
| **SONM** | **Songino Array** | **67.92** | **328** | P | | | **P** | **19 57 22.0** | **-0.2** |
| | 0.3nm,0.4s,baz=146,slow=5.0,SNR=1.8 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **81.96** | **319** | P | | | **P** | **19 58 43.9** | **+0.7** |
| | 0.2nm,0.5s,baz=97,slow=6.1,SNR=1.1 | | | | | | | | |
| | 0.2nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.76** | **22** | P | | | **P** | **19 58 47.1** | **+0.2** |
| | 0.3nm,0.7s,baz=251,slow=5.4,SNR=2.8 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.78** | **287** | PKPbc | | | **PKPbc** | **20 06 17.5** | **-1.4** |
| | 0.3nm,0.7s,baz=64,slow=5.0,SNR=2.2 | | | | | | | | |

*SKHL **15** 19:57:38.1±0.4,43.°00N×149.°00E,h76km±5km,mb3.9/3*
*JMA **15** 19:57:39.7±1.2,43.°N±6.°×14.°9E±.°,h30km,MV3.3/12,SE*
*OFF ETOROFU*

**ISC 15 19:57:38.0±3.4,43.°0N±0.°1×149.°0E±0.°2,h35km,n13,**
**σ1°09/21,Off southeast coast of Hokkaido**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **1.83** | **300** | eP | | **Pn** | **Pn** | **19 58 06.8** | **-0.2** |
| SHO | | | | | AMB | | AMB | 19 58 09.5 | |
| | 30nm,0.4s | | | | | | | | |
| SHO | | | | eS | | | **Sn** | **19 58 28.3** | **-0.6** |
| SHO | | | | A | | | A | 19 58 29.3 | |
| | 60nm,0.3s | | | | | | | | |
| SHO | | | | A | | | A | 19 58 29.3 | |
| | 40nm,0.3s | | | | | | | | |
| **KUR** | **Kuril'sk** | **2.42** | **340** | eP | | | **Pn** | **19 58 15.0** | **0.0** |
| KUR | | | | | AMB | | AMB | 19 58 15.6 | |
| | 20nm,0.5s | | | | | | | | |
| KUR | | | | eS | | | **Sn** | **19 58 42.9** | **-0.4** |
| KUR | | | | A | | | A | 19 58 45.6 | |
| | 30nm,0.4s | | | | | | | | |
| KUR | | | | A | | | A | 19 58 45.6 | |
| | 40nm,0.4s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.43** | **281** | eP | | | **Pn** | **19 58 15.9** | **+0.8** |
| NEM2 | | | | eS | | | **Sn** | **19 58 43.2** | **-0.3** |
| **YUK** | **Yuzh-Kuril'sk** | **2.53** | **296** | eP | | | **Pn** | **19 58 16.9** | **+0.3** |
| YUK | | | | | AMB | | AMB | 19 58 18.1 | |
| | 50nm,0.5s | | | | | | | | |
| YUK | | | | eS | | | **Sn** | **19 58 45.7** | **-0.5** |
| YUK | | | | A | | | A | 19 58 50.5 | |
| | 100nm,0.5s | | | | | | | | |
| YUK | | | | A | | | A | 19 58 50.5 | |
| | 70nm,0.5s | | | | | | | | |
| **JRA** | **Rausu** | **3.00** | **290** | eP | | | **Pn** | **19 58 23.8** | **+0.9** |
| JRA | | | | eS | | | **Sn** | **19 58 57.4** | **-0.3** |
| **JAK** | **Akkeshi** | **3.17** | **272** | eP | | | **Pn** | **19 58 26.5** | **+1.2** |
| JAK | | | | eS | | | **Sn** | **19 59 01.0** | **-0.8** |
| **JNK** | **Nakash** | **3.20** | **283** | eP | | | **Pn** | **19 58 26.3** | **+0.6** |
| JNK | | | | eS | | | **Sn** | **19 59 01.4** | **-1.2** |
| **JOB** | **Onbets** | **3.80** | **271** | eS | | | **Sn** | **19 59 16.7** | **-0.8** |
| **JTKR** | **Abashiri--Toko** | **3.85** | **287** | eP | | | **Pn** | **19 58 36.3** | **+1.6** |
| **JAR** | **Ashorobuto** | **3.85** | **277** | eP | | | **Pn** | **19 58 36.4** | **+1.6** |
| JAR | | | | eS | | | **Sn** | **19 59 18.4** | **-0.4** |
| **JCH** | **Churui** | **4.17** | **267** | eS | | | **Sn** | **19 59 25.8** | **-0.9** |
| **JNBK** | **Urakawa-nobuka** | **4.67** | **264** | eS | | | **Sn** | **19 59 38.9** | **0.0** |
| **JANG** | **Nango** | **6.18** | **248** | eS | | | **Sn** | **20 00 13.3** | **-2.9** |

**IDC 15 20:00:50.7±3.0,32.°44S×177.°44W,h0km,mb3.6/2,**
**mbtmp3.7/3,ML3.2/1,Error ellipse: s-maj=74.5km**
**s-min=36.6km az=122.0,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **7.31** | **216** | Pn | | | Pn | 20 02 39.3 | +0.6 |
| | 0.4nm,0.3s,baz=39,slow=11,SNR=2.0 | | | | | | | | |
| URZ | | | | Sn | | | Sn | 20 04 01.0 | -1.4 |
| | 1.0nm,0.3s,baz=332,slow=21,SNR=9.6 | | | | | | | | |
| | 10nm,1.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **43.51** | **269** | P | | | P | 20 08 56.4 | +0.2 |
| | 0.4nm,0.7s,baz=109,slow=7.3,SNR=6.0 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.68** | **274** | P | | | P | 20 09 05.4 | -0.2 |
| | 0.8nm,0.7s,baz=115,slow=7.9,SNR=15 | | | | | | | | |
| | 0.8nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **147.22** | **339** | PKPbc | | | PKPbc | 20 20 34.1 | -1.0 |
| | 1.0nm,0.6s,baz=46,slow=4.0,SNR=8.5 | | | | | | | | |

*TIR **15** 20:06:26.7,44.°13N×17.°75E,h12km±4km,Ml3.9*
*LDG **15** 20:06:28.8±0.1,44.°22N×17.°70E,h5km,Ml3.5/21,Error*
*ellipse: s-maj=3.8km s-min=2.0km az=21.0*
*PDG **15** 20:06:29.8±1.2,44.°24N×17.°83E,h4km±2km,MD3.7/4,*
*ML3.6/11,Error ellipse: s-maj=1.2km s-min=1.3km az=0.0*
*IDC **15** 20:06:29.7±1.0,44.°26N×17.°86E,h0km,mb3.3/2,*
*mbtmp3.6/12,ML3.3/9,MS2.7/4,Error ellipse:*
*s-maj=14.0km s-min=10.0km az=30.0*
*BEO **15** 20:06:30.0±0.3,44.°26N×17.°84E,h11km±2km,ML3.5/17*
*RHSSO **15** 20:06:30.2±0.2,44.°19N×17.°87E,h5km±1km,ML3.7/20*
*PRU **15** 20:06:30.5,44.°03N×18.°08E,h33km*
*NEIC **15** 20:06:31.2±2.2,44.°27N±0.°06×17.°86E±0.°05,h10km±1km,*
*ML3.5/48,Error ellipse: s-maj=9.9km s-min=6.7km az=0.0*

**ISC 15 20:06:30.0±1.0,44.°23N±0.°01×17.°87E±0.°01,h8km±8km,**
**n261,σ1s40/375,28C-26D,Northwestern Balkan**
**Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| **DOB** | **Doboj** | **0.53** | **18** | ⇑iPg | | | **Pg** | **20 06 39.4** | **-0.9** |
| DOB | | | | | eSg | | **Sb** | **20 06 48.8** | **-0.6** |
| **BLY** | **Banja Luka** | **0.71** | **317** | ePg | | | **Pb** | **20 06 44.0** | **-0.7** |
| BLY | | | | | eSg | | **Sb** | **20 06 54.0** | **-0.7** |
| **BLY** | **Banja Luka** | **0.71** | **317** | ⇓iPg | | | **Pg** | **20 06 43.7** | **-0.1** |
| BLY | | | | | eSg | | **Sb** | **20 06 54.3** | **-0.4** |
| **HAPS** | **Han Pijesak,Bl** | **0.79** | **100** | ePg | | | **Pg** | **20 06 45.6** | **+0.3** |
| HAPS | | | | | eSg | | **Sg** | **20 06 56.1** | **+0.5** |
| **HAPS** | **Han Pijesak,Bl** | **0.79** | **100** | ⇑iPg | | | **Pg** | **20 06 44.8** | **-0.5** |
| HAPS | | | | | eSg | | **Sg** | **20 06 56.3** | **+0.7** |
| **RICI** | **Ricice** | **0.91** | **216** | iPg | | | **Pg** | **20 06 46.9** | **-0.5** |
| RICI | | | | | Sg | | **Sb** | **20 07 00.4** | **+0.2** |
| **A050A** | **Klekovaca** | **0.99** | **285** | ⇑iPg | | | **Pg** | **20 06 47.8** | **-1.3** |
| A050A | | | | | eSg | | **Sg** | **20 07 01.6** | **-0.4** |
| **A051A** | **Mrakovica** | **1.04** | **319** | ⇓iPg | | | **Pg** | **20 06 49.5** | **-0.6** |
| A051A | | | | | eSg | | **Sn** | **20 07 04.4** | **-1.4** |
| **KIJV** | **Kijevo** | **1.08** | **259** | iPg | | | **Pg** | **20 06 50.3** | **-0.4** |
| KIJV | | | | | Sg | | **Sb** | **20 07 05.2** | **+0.1** |
| **PRIJ** | **Prijedor** | **1.11** | **313** | ePg | | | **Pb** | **20 06 51.1** | **-0.4** |
| PRIJ | | | | | eSg | | **Sb** | **20 07 06.0** | **-0.1** |
| **MAKA** | **Makarska** | **1.12** | **213** | iPg | | | **Pb** | **20 06 50.5** | **-1.1** |
| MAKA | | | | | Sg | | **Sn** | **20 07 07.0** | **-0.6** |
| **BBLS** | **Lazi&#263i** | **1.17** | **108** | ePg | | | **Pb** | **20 06 51.7** | **-0.8** |
| BBLS | | | | | eSg | | **Sn** | **20 07 09.8** | **+0.9** |
| **BBLS** | **Lazi&#263i** | **1.17** | **108** | ⇑iPg | | | **Pb** | **20 06 51.1** | **-1.4** |
| BBLS | | | | | eSg | | **Sb** | **20 07 07.1** | **-0.7** |
| **KLINJ** | **Klinje** | **1.18** | **154** | ePg | | | **Pb** | **20 06 50.7** | **-2.0** |
| KLINJ | | | | | eSg | | **Sb** | **20 07 06.8** | **-1.4** |
| **TEKS** | **Tekeris** | **1.23** | **74** | ePg | | | **Pn** | **20 06 52.8** | **-0.1** |
| TEKS | | | | | eSg | | **Sb** | **20 07 09.4** | **-0.3** |
| **TEKS** | **Tekeris** | **1.23** | **74** | ⇑iPg | | | **Pn** | **20 06 53.0** | **-0.6** |
| TEKS | | | | | eSg | | **Sb** | **20 07 09.2** | **-0.5** |
| **RUDO** | **Rudo** | **1.25** | **119** | ⇓iPg | | | **Pn** | **20 06 51.5** | **-2.2** |
| RUDO | | | | | eSg | | **Sb** | **20 07 08.9** | **-1.1** |
| **UPM** | **Unac-Piva** | **1.27** | **143** | ⇓iPg | | | **Pn** | **20 06 52.7** | **-1.6** |
| UPM | | | | | eSg | | **Sb** | **20 07 08.9** | **-2.0** |
| **UPM** | **Unac-Piva** | **1.27** | **143** | ⇑iPg | | | **Pn** | **20 06 52.5** | **-1.8** |
| UPM | | | | | i Sg | | **Sn** | **20 07 12.6** | **+1.0** |
| **STON** | **Ston** | **1.36** | **185** | ePg | | | **Pn** | **20 06 54.4** | **-0.9** |
| STON | | | | | eSg | | **Sg** | **20 07 14.5** | **+0.7** |
| **STON** | **Ston** | **1.36** | **185** | ePn | | | **Pn** | **20 06 54.3** | **-0.9** |
| STON | | | | | Sn | | **Sg** | **20 07 15.4** | **+1.7** |
| **STON** | **Ston** | **1.36** | **185** | ⇓iPg | | | **Pn** | **20 06 54.0** | **-1.3** |
| STON | | | | | eSg | | **Sb** | **20 07 12.4** | **-0.9** |
| **BRY** | **Bratogost** | **1.41** | **160** | ⇑iPg | | | **Pn** | **20 06 55.0** | **-1.2** |
| BRY | | | | | eSg | | **Sn** | **20 07 14.5** | **-0.5** |
| **BRY** | **Bratogost** | **1.41** | **160** | ⇓iPg | | | **Pn** | **20 06 54.8** | **-1.4** |
| BRY | | | | | i Sg | | **Sg** | **20 07 15.7** | **+0.2** |
| **PLE** | **Pljevlja** | **1.42** | **129** | ⇓iPg | | | **Pn** | **20 06 55.5** | **-0.8** |
| PLE | | | | | i Sg | | **Sg** | **20 07 18.0** | **+2.3** |
| **HVAR** | **Hvar** | **1.47** | **225** | iPn | | | **Pn** | **20 06 56.7** | **-0.1** |
| HVAR | | | | | Sn | | **Sg** | **20 07 18.4** | **+1.2** |
| **DIVS** | **Divibare** | **1.54** | **94** | ePg | | | **Pn** | **20 06 57.9** | **+0.1** |
| DIVS | | | | | eSn | | **Sg** | **20 07 19.0** | **-0.4** |
| **UDBI** | **Udbina** | **1.54** | **282** | ePn | | | **Pn** | **20 06 57.6** | **-0.2** |
| UDBI | | | | | Sn | | **Sg** | **20 07 20.4** | **+1.0** |
| **TREB** | **Trebinje** | **1.55** | **167** | ePg | | | **Pn** | **20 06 57.5** | **-0.5** |
| TREB | | | | | eSg | | **Sg** | **20 07 19.8** | **-0.1** |
| **TREB** | **Trebinje** | **1.55** | **167** | ⇑iPn | | | **Pn** | **20 06 57.4** | **-0.5** |
| TREB | | | | | eSn | | **Sb** | **20 07 18.7** | **-0.1** |
| **DBRK** | **Dubrovnik** | **1.57** | **172** | iPn | | | **Pb** | **20 06 58.8** | **-0.5** |
| DBRK | | | | | Sn | | **Sb** | **20 07 20.0** | **+0.7** |
| **MOSL** | **Moslavina** | **1.59** | **331** | iPn | | | **Pb** | **20 06 58.0** | **-0.8** |
| MOSL | | | | | Sg | | **Sg** | **20 07 21.2** | **-0.1** |
| **MORI** | **Morici** | **1.60** | **258** | iPn | | | **Pn** | **20 06 59.9** | **+0.2** |
| MORI | | | | | Sn | | **Sg** | **20 07 22.9** | **+1.5** |
| **LSTV** | **Lastovo** | **1.62** | **206** | iPn | | | **Pn** | **20 06 58.8** | **-0.1** |
| LSTV | | | | | Sn | | **Sg** | **20 07 21.7** | **-0.4** |
| **NKME** | **Niksic** | **1.66** | **151** | ⇑iPn | | | **Pn** | **20 06 59.2** | **-0.3** |
| NKME | | | | | i Sn | | **Sg** | **20 07 24.8** | **+1.4** |
| **FRGS** | **Fruska Gora** | **1.67** | **55** | ePg | | | **Pn** | **20 06 58.7** | **-0.9** |
| FRGS | | | | | eSg | | **Sb** | **20 07 21.7** | **-0.5** |
| **FRGS** | **Fruska Gora** | **1.67** | **55** | ePn | | | **Pn** | **20 06 59.6** | **0.0** |
| FRGS | | | | | eSn | | **Sb** | **20 07 21.9** | **-0.3** |
| **FRGS** | **Fruska Gora** | **1.67** | **55** | ⇓P | | | **Pn** | **20 06 59.6** | **0.0** |
| **ZIRJ** | **Zirje** | **1.71** | **251** | ePn | | | **Pb** | **20 07 01.4** | **-0.2** |
| ZIRJ | | | | | Sn | | **Sg** | **20 07 25.4** | **+0.6** |
| **PLIT** | **Plitvice** | **1.73** | **293** | iPn | | | **Pb** | **20 07 01.2** | **-0.9** |
| PLIT | | | | | Sn | | **Sg** | **20 07 25.4** | **-0.2** |
| **SJES** | **Sjenica** | **1.81** | **122** | ePn | | | **Pn** | **20 07 02.0** | **+0.4** |
| SJES | | | | | eSn | | **Sn** | **20 07 25.8** | **+0.7** |
| **SJES** | **Sjenica** | **1.81** | **122** | ⇑iPn | | | **Pn** | **20 07 01.7** | **+0.1** |
| SJES | | | | | eSn | | **Sn** | **20 07 25.4** | **+0.7** |
| **KOME** | **Kolasin** | **1.83** | **138** | ⇑iPn | | | **Pn** | **20 07 02.6** | **+0.8** |
| KOME | | | | | i Sn | | **Sg** | **20 07 29.2** | **+0.5** |
| **TRUS** | **Trudelj** | **1.83** | **89** | ePn | | | **Pn** | **20 07 01.5** | **-0.2** |
| TRUS | | | | | eSn | | **Sb** | **20 07 26.7** | **0.0** |
| **CEME** | **Cevo** | **1.85** | **155** | ⇓iPn | | | **Pn** | **20 07 02.6** | **+0.5** |
| CEME | | | | | i Sn | | **Sg** | **20 07 29.1** | **-0.3** |
| **AVAS** | **Avala Beograd** | **1.95** | **75** | ePn | | | **Pn** | **20 07 03.0** | **-0.5** |
| AVAS | | | | | eSn | | **Sn** | **20 07 28.5** | **+0.3** |
| **IVA** | **Berane** | **2.00** | **132** | ePn | | | **Pn** | **20 07 04.8** | **+0.6** |
| IVA | | | | | i Sn | | **Sg** | **20 07 33.3** | **-1.0** |
| **VIRC** | **Vir** | **2.02** | **273** | iPn | | | **Pb** | **20 07 06.5** | **-0.5** |
| VIRC | | | | | Sn | | **Sg** | **20 07 34.0** | **-1.0** |
| **DUGI** | **Dugi Otok** | **2.04** | **264** | iPn | | | **Pb** | **20 07 07.2** | **0.0** |
| DUGI | | | | | Sn | | **Sg** | **20 07 33.9** | **-1.5** |
| **MORH** | **Mrgy, Hungar** | **2.06** | **15** | eSn | | | **Sb** | **20 07 32.2** | **-1.2** |
| **MORH** | **Mrgy, Hungar** | **2.06** | **15** | ⇑P | | | **Pn** | **20 07 05.0** | **+0.1** |
| **PDG** | **Podgorica** | **2.06** | **150** | Pn | | | **Pn** | **20 07 05.9** | **+0.9** |
| PDG | | | | | IAML | | | 20 07 38.0 | |
| | comp=E,318nm,0.7s | | | | | | | | |
| PDG | | | | | IAML | | | 20 07 40.5 | |
| | comp=N,408nm,0.5s | | | | | | | | |
| **PDG** | **Podgorica** | **2.06** | **150** | ePn | | | **Pn** | **20 07 04.6** | **-0.3** |
| PDG | | | | eSn | | | **Sn** | **20 07 31.4** | **+0.6** |
| **PDG** | **Podgorica** | **2.06** | **150** | ⇓P | | | **Pn** | **20 07 06.6** | **-1.1** |
| **PDG** | **Podgorica** | **2.06** | **150** | ⇑iPn | | | **Pn** | **20 07 05.8** | **+0.9** |
| PDG | | | | i Sn | | | **Sb** | **20 07 35.0** | **+1.5** |
| **BUM** | **Brajici-Budva** | **2.07** | **158** | ⇑iPn | | | **Pb** | **20 07 07.5** | **-0.3** |
| BUM | | | | i Sn | | | **Sb** | **20 07 34.6** | **+0.9** |
| **GRUS** | **Gruza** | **2.08** | **98** | ePn | | | **Pn** | **20 07 05.3** | **+0.1** |
| GRUS | | | | eSn | | | **Sn** | **20 07 30.3** | **-1.0** |
| **ZAG** | **Zagreb** | **2.08** | **321** | ePn | | | **Pn** | **20 07 05.8** | **+0.6** |
| ZAG | | | | Sn | | | **Sb** | **20 07 33.3** | **-0.7** |
| **KALN** | **Kalnik** | **2.15** | **333** | iPn | | | **Pn** | **20 07 06.3** | **+0.1** |
| KALN | | | | Sg | | | **Sg** | **20 07 39.3** | **+0.3** |
| **PTJ** | **Puntijarka** | **2.15** | **322** | iPn | | | **Pn** | **20 07 06.6** | **+0.4** |
| PTJ | | | | Sn | | | **Sb** | **20 07 35.5** | **-0.6** |
| **NVLJ** | **Novalja** | **2.17** | **280** | iPn | | | **Pb** | **20 07 08.3** | **-1.3** |
| NVLJ | | | | Sn | | | **Sb** | **20 07 37.7** | **+1.0** |
| **OZLJ** | **Ozalj** | **2.20** | **310** | iPn | | | **Pn** | **20 07 07.6** | **+0.8** |
| OZLJ | | | | Sn | | | **Sb** | **20 07 37.3** | **-0.1** |
| **PVY** | **Plav** | **2.23** | **136** | ⇑iPn | | | **Pn** | **20 07 08.2** | **+0.8** |
| PVY | | | | i Sn | | | **Sb** | **20 07 39.1** | **+0.6** |
| **BOJS** | **Bojanci** | **2.25** | **305** | ⇓iPn | | | **Pn** | **20 07 08.3** | **+0.7** |
| BOJS | | | | eSn | | | **Sb** | **20 07 36.9** | **-2.1** |
| **DRME** | **Dracevica, Mon** | **2.26** | **154** | ePn | | | **Pn** | **20 07 08.0** | **+0.4** |
| DRME | | | | eSn | | | **Sn** | **20 07 35.1** | **-0.5** |
| **DRME** | **Dracevica, Mon** | **2.26** | **154** | ⇓iPn | | | **Pb** | **20 07 10.2** | **-0.8** |
| DRME | | | | i Sn | | | **Sb** | **20 07 39.3** | **+0.2** |
| **RABC** | **Rab** | **2.27** | **284** | ePg | | | **Pg** | **20 07 12.4** | **-1.1** |
| RABC | | | | Sn | | | **Sb** | **20 07 37.9** | **-1.4** |
| **LOBO** | **Lobor** | **2.31** | **327** | iPn | | | **Pn** | **20 07 08.7** | **+0.4** |
| LOBO | | | | Sn | | | **Sb** | **20 07 38.4** | **-2.2** |
| **BEHE** | **Becsehely** | **2.37** | **341** | ⇑iPn | | | **Pn** | **20 07 10.1** | **+0.9** |
| BEHE | | | | eSn | | | **Sb** | **20 07 39.8** | **-2.6** |
| **SVIS** | **Svilajnac** | **2.41** | **88** | ePn | | | **Pn** | **20 07 10.0** | **+0.3** |
| SVIS | | | | eSn | | | **Sn** | **20 07 39.3** | **0.0** |
| **BCI** | **Bajram Curri** | **2.46** | **138** | P | | | **Pn** | **20 07 11.9** | **+1.5** |
| | baz=135 | | | | | | | | |
| BCI | | | | S | | | **Sb** | **20 07 46.5** | **+1.6** |
| | baz=135 | | | | | | | | |
| BCI | | | | | AMP | | | | |
| | comp=N,2.6nm,0.5s,baz=135 | | | | | | | | |
| **GBRS** | **Gornja Briga** | **2.53** | **302** | iSn | | | **Sb** | **20 07 44.9** | **-2.2** |
| GBRS | | | | | IAML | | | 20 07 59.9 | |
| | comp=Z,177nm,0.6s | | | | | | | | |
| **SELS** | **Selova** | **2.56** | **112** | ePn | | | **Pn** | **20 07 12.1** | **+0.2** |
| SELS | | | | eSn | | | **Sn** | **20 07 43.0** | **-0.3** |
| **BANR** | **Banloc** | **2.60** | **62** | ⇑P | | | **Pn** | **20 07 13.9** | **+1.6** |
| **VRSS** | **Vrsac** | **2.62** | **69** | ePn | | | **Pn** | **20 07 11.9** | **-0.8** |
| **PUK** | **Puka** | **2.64** | **145** | Pn | | | **Pn** | **20 07 15.1** | **+2.1** |
| PUK | | | | | IAML | | | 20 07 57.5 | |
| | comp=N,230nm,0.6s | | | | | | | | |
| PUK | | | | | IAML | | | 20 08 00.6 | |
| | comp=E,180nm,0.5s | | | | | | | | |
| **PUK** | **Puka** | **2.64** | **145** | P | | | **Pb** | **20 07

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NRCA | | | | IAML | | | 20 08 52.2 |
| | comp=E,66nm,0.9s | | | | | | |
| **PRED** | **Cave del Predi** | **3.76** | **308** | Pn | **Pn** | **20 07 27.3** | **-1.0** |
| **OHR** | **Ohrid** | **3.79** | **144** | *i* Pn | **Pn** | **20 07 32.2** | **+3.4** |
| **MYKA** | **Terra Mystica** | **3.82** | **310** | *i* Pn | **Pn** | **20 07 31.3** | **+2.1** |
| | comp=E,5.0nm,0.2s,SNR=6.8 | | | | | | |
| MYKA | | | | *i* Pg | **Pg** | **20 07 42.6** | **-0.6** |
| | comp=E,8.3nm,0.4s | | | | | | |
| MYKA | | | | *e*Sg | **Sg** | **20 08 30.5** | **-2.3** |
| | comp=E,16nm,0.5s | | | | | | |
| **SRE** | **Strehaia** | **3.85** | **82** | ⇓P | **Pn** | **20 07 30.9** | **+1.4** |
| **PSZ** | **Piszkesteto** | **3.95** | **20** | Pn | **Pn** | **20 07 30.4** | **-0.6** |
| PSZ | | | | IAML | | 20 08 46.0 | |
| | comp=N,57nm,0.9s | | | | | | |
| **PSZ** | **Piszkesteto** | **3.95** | **20** | ⇑P | **Pn** | **20 07 30.8** | **-0.2** |
| **CONA** | **Conrad Observa** | **3.96** | **340** | *i* Pn | **Pn** | **20 07 31.7** | **+0.7** |
| | comp=N,11nm,0.3s,SNR=59 | | | | | | |
| CONA | | | | *e*Sn | **Sn** | **20 08 17.6** | **-0.1** |
| | comp=N,70nm,0.6s | | | | | | |
| **ZST** | **Bratislava** | **4.00** | **353** | *e*PN | **Pn** | **20 07 32.0** | **+0.4** |
| ZST | | | | *e*SN | **Sn** | **20 08 16.7** | **-2.0** |
| ZST | | | | *e*LG | Lg | 20 08 21.8 | |
| **PAOL** | **Paolisi** | **4.02** | **218** | Pn | **Pn** | **20 07 32.7** | **+0.8** |
| PAOL | | | | IAML | | 20 08 26.0 | |
| | comp=N,52nm,0.5s | | | | | | |
| **STAL** | **STALIGIAL** | **4.17** | **301** | Pn | **Pn** | **20 07 34.5** | **+0.5** |
| **CESX** | **Cesi** | **4.18** | **249** | Pn | **Pn** | **20 07 35.5** | **+1.4** |
| CESX | | | | IAML | | 20 08 30.8 | |
| | comp=N,61nm,0.4s | | | | | | |
| CESX | | | | IAML | | 20 09 13.8 | |
| | comp=E,56nm,1.1s | | | | | | |
| **SCTE** | **Santa Cesarea** | **4.18** | **174** | Pn | **Pn** | **20 07 33.5** | **-0.5** |
| SCTE | | | | IAML | | 20 08 55.7 | |
| | comp=N,60nm,1.0s | | | | | | |
| SCTE | | | | IAML | | 20 09 12.8 | |
| | comp=E,46nm,1.0s | | | | | | |
| **SCTE** | **Santa Cesarea** | **4.18** | **174** | P | **Pn** | **20 07 33.8** | **-0.2** |
| | baz=172 | | | | | | |
| **KBN** | **Korca** | **4.20** | **148** | Pn | **Pn** | **20 07 37.2** | **+2.7** |
| KBN | | | | IAML | | 20 08 51.2 | |
| | comp=E,44nm,1.0s | | | | | | |
| KBN | | | | IAML | | 20 08 56.8 | |
| | comp=N,47nm,1.0s | | | | | | |
| **KBN** | **Korca** | **4.20** | **148** | P | **Pn** | **20 07 37.0** | **+2.6** |
| | baz=146 | | | | | | |
| **KBN** | **Korca** | **4.20** | **148** | P | **Pn** | **20 07 37.4** | **+3.0** |
| **DRGR** | | **4.26** | **51** | ⇑P | **Pn** | **20 07 36.6** | **+1.3** |
| **KBA** | **Koelnbreinsper** | **4.26** | **314** | *i* Pn | **Pn** | **20 07 36.9** | **+1.5** |
| | comp=N,2.2nm,0.2s,SNR=17 | | | | | | |
| KBA | | | | *e*Sn | **Sn** | **20 08 25.4** | **0.0** |
| | comp=N,5.9nm,0.3s | | | | | | |
| **FNA** | **Florina** | **4.31** | **142** | Pn | **Pn** | **20 07 38.4** | **+2.5** |
| FNA | | | | IAML | | 20 08 57.4 | |
| | comp=E,46nm,0.7s | | | | | | |
| FNA | | | | IAML | | 20 08 57.8 | |
| | comp=N,44nm,0.7s | | | | | | |
| **FNA** | **Florina** | **4.31** | **142** | P | **Pn** | **20 07 38.9** | **+3.0** |
| | baz=140 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.1nm,0.5s,baz=140 | | | | | | |
| **FNA** | **Florina** | **4.31** | **142** | P | **Pn** | **20 07 38.9** | **+3.0** |
| **VYHS** | **Vyhne** | **4.32** | **9** | *e*PN | **Pn** | **20 07 36.4** | **+0.4** |
| VYHS | | | | *e*SN | **Sn** | **20 08 27.5** | **+1.0** |
| **LOT** | **Lotru** | **4.37** | **72** | ⇓P | **Pn** | **20 07 38.0** | **+1.1** |
| **MOA** | **Molln** | **4.41** | **327** | Pn | **Pn** | **20 07 38.6** | **+1.4** |
| | comp=E,5.8nm,0.1s,SNR=86 | | | | | | |
| MOA | | | | *e*Sn | **Sn** | **20 08 31.0** | **+2.3** |
| | comp=E,52nm,0.4s | | | | | | |
| **MARR** | **Marisel-Cluj** | **4.43** | **55** | ⇓P | **Pn** | **20 07 39.4** | **+1.8** |
| **NEST** | **Nestorio** | **4.48** | **147** | P | **Pn** | **20 07 40.9** | **+2.6** |
| **VAY** | **Valandovo** | **4.52** | **128** | *i* Pn | **Pn** | **20 07 41.7** | **+3.0** |
| **ABTA** | **Abfaltersbach** | **4.53** | **306** | *i* Pn | **Pn** | **20 07 40.9** | **+2.0** |
| | SNR=36 | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **4.55** | **321** | *i* Pn | **Pn** | **20 07 40.8** | **+1.6** |
| | comp=E,23nm,0.3s,SNR=53 | | | | | | |
| BIOA | | | | *e*Sn | **Sn** | **20 08 33.5** | **+1.3** |
| | comp=E,20nm,0.3s | | | | | | |
| **TEOL** | **Teolo** | **4.55** | **287** | Pn | **Pn** | **20 07 39.5** | **+0.3** |
| **KECS** | **Kecovo** | **4.63** | **22** | *e*PN | **Pn** | **20 07 40.4** | **+0.2** |
| KECS | | | | *e*SN | **Sn** | **20 08 32.0** | **-2.1** |
| KECS | | | | *e*LG | Lg | 20 08 42.7 | |
| **SRN** | **Sarande** | **4.63** | **159** | P | **Pn** | **20 07 40.4** | **+0.2** |
| | baz=157 | | | | | | |
| **JAVC** | **Velka Javorina** | **4.63** | **358** | *e*PN | **Pn** | **20 07 41.0** | **+0.6** |
| JAVC | | | | *e*SN | **Sn** | **20 08 36.2** | **+1.8** |
| **KEK** | **Kerkira** | **4.74** | **162** | Pn | **Pn** | **20 07 41.9** | **+0.2** |
| KEK | | | | IAML | | 20 08 43.4 | |
| | comp=E,32nm,0.5s | | | | | | |
| **KEK** | **Kerkira** | **4.74** | **162** | P | **Pn** | **20 07 42.3** | **+0.6** |
| **CTI** | **Castel Tesino** | **4.76** | **295** | Pn | **Pn** | **20 07 42.7** | **+0.6** |
| **TNR** | **Turnu Rosu** | **4.77** | **70** | ⇑P | **Pn** | **20 07 43.0** | **+0.9** |
| **LESA** | **Schwarzleotal** | **4.83** | **313** | *i* Pn | **Pn** | **20 07 44.8** | **+1.7** |
| | comp=E,12nm,0.2s | | | | | | |
| LESA | | | | *e*Sn | **Sn** | **20 08 41.3** | **+1.9** |
| | comp=E,27nm,0.5s | | | | | | |
| **KZN** | **Kozani** | **4.87** | **142** | P | **Pn** | **20 07 46.5** | **+2.8** |
| **KRUC** | **Moravsky** | **4.94** | **349** | *e*PN | **Pn** | **20 07 43.9** | **-0.6** |
| KRUC | | | | *e*SN | **Sn** | **20 08 42.8** | **+1.0** |
| **ZCCA** | **Zocca** | **4.95** | **274** | Pn | **Pn** | **20 07 46.3** | **+1.6** |
| ZCCA | | | | IAML | | 20 09 46.4 | |
| | comp=E,36nm,2.1s | | | | | | |
| ZCCA | | | | IAML | | 20 10 08.8 | |
| | comp=N,36nm,1.9s | | | | | | |
| **KTI** | **Kastanea** | **4.96** | **139** | P | **Pn** | **20 07 46.6** | **+1.7** |
| **IGT** | **Igoumenitsa** | **5.04** | **158** | P | **Pn** | **20 07 46.6** | **+0.7** |
| | baz=156 | | | | | | |
| **IGT** | **Igoumenitsa** | **5.04** | **158** | P | **Pn** | **20 07 46.4** | **+0.5** |
| **LANS** | **Liptovska Anna** | **5.05** | **12** | *e*PN | **Pn** | **20 07 47.2** | **+1.2** |
| LANS | | | | *e*PG | **Pg** | **20 08 06.4** | **-0.2** |
| LANS | | | | *e*SN | **Sn** | **20 08 45.1** | **+0.6** |
| LANS | | | | *e*LG | Lg | 20 08 49.8 | |
| **JAN** | **Janina** | **5.08** | **153** | P | **Pn** | **20 07 48.3** | **+1.8** |
| **TIP** | **Timpagrande** | **5.11** | **190** | Pn | **Pn** | **20 07 47.9** | **+0.9** |
| **TIP** | **Timpagrande** | **5.11** | **190** | ⇑P | **Pn** | **20 07 47.9** | **+0.9** |
| **MAUC** | **Maruska** | **5.14** | **360** | *e*PN | **Pn** | **20 07 47.8** | **+0.5** |
| MAUC | | | | *e*SN | **Sn** | **20 08 46.0** | **-0.8** |
| **VRAC** | **Vranov** | **5.16** | **351** | *e*PN | **Pn** | **20 07 47.4** | **-0.1** |
| VRAC | | | | *e*SN | **Sn** | **20 08 48.1** | **+0.9** |
| **VRAC** | **Vranov** | **5.16** | **351** | Pn | **Pn** | **20 07 47.7** | **+0.2** |
| | comp=N,0.6nm,0.3s,baz=181,slow=16,SNR=2.3 | | | | | | |
| VRAC | | | | Sn | **Sn** | **20 08 46.6** | **-0.5** |
| | comp=N,3.3nm,0.3s,baz=89,slow=15,SNR=9.6 | | | | | | |
| | comp=N,2.7nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **5.16** | **351** | ⇑P | **Pn** | **20 07 48.8** | **+1.3** |
| **CKRC** | **Cesky Krumlov** | **5.21** | **333** | *e*PN | **Pn** | **20 07 48.9** | **+0.7** |
| **SRS** | **Serrai** | **5.24** | **124** | P | **Pn** | **20 07 49.4** | **+0.7** |
| **VOIR** | | **5.25** | **74** | ⇓P | **Pn** | **20 07 48.8** | **-0.1** |
| **CASP** | **Castiglione de** | **5.29** | **257** | Pn | **Pn** | **20 07 49.5** | **+0.1** |
| **CRVS** | **Cervenica-Dubn** | **5.29** | **27** | *e*PN | **Pn** | **20 07 49.6** | **+0.3** |
| CRVS | | | | *e*PG | **Pg** | **20 08 14.4** | **+3.1** |
| CRVS | | | | *e*SN | **Sn** | **20 08 49.0** | **-1.5** |
| CRVS | | | | *e*LG | Lg | 20 08 50.8 | |
| **WTTA** | **Wattenberg** | **5.31** | **307** | *i* Pn | **Pn** | **20 07 52.3** | **+2.5** |
| | comp=N,4.9nm,0.2s,SNR=53 | | | | | | |
| WTTA | | | | *e*Sn | **Sn** | **20 08 53.6** | **+2.3** |
| | comp=N,24nm,0.8s | | | | | | |
| **TREC** | **Trest** | **5.33** | **343** | *e*SN | **Sn** | **20 08 51.9** | **+0.6** |
| **LIT** | **Litokhoron** | **5.37** | **139** | Pn | **Pn** | **20 07 52.0** | **+1.6** |
| **LIT** | **Litokhoron** | **5.37** | **139** | P | **Pn** | **20 07 53.0** | **+2.6** |
| **WATA** | **Walderalm** | **5.39** | **307** | *i* Pn | **Pn** | **20 07 53.3** | **+2.6** |
| | comp=N,5.4nm,0.2s,SNR=29 | | | | | | |
| WATA | | | | *e*Sn | **Sn** | **20 08 57.6** | **+4.6** |
| | comp=N,10.0nm,0.5s | | | | | | |
| **PRMA** | **PARMA** | **5.43** | **278** | Pn | **Pn** | **20 07 52.7** | **+1.5** |
| **GEC2** | **GERESS Array S** | **5.44** | **330** | Pn | **Pn** | **20 07 52.3** | **+0.8** |
| **GERES** | **GERESS Array B** | **5.44** | **330** | Pn | **Pn** | **20 07 52.3** | **+0.8** |
| **GERES** | **GERESS Array B** | **5.44** | **330** | Pn | **Pn** | **20 07 52.4** | **+1.0** |
| | comp=N,1.9nm,0.3s,baz=150,slow=13,SNR=43 | | | | | | |
| GERES | | | | Sn | **Sn** | **20 08 52.1** | **-2.1** |
| | comp=N,1.6nm,0.3s,baz=158,slow=29,SNR=1.6 | | | | | | |
| | comp=N,5.2nm,0.6s | | | | | | |
| **SQTA** | **Sankt Quirin** | **5.54** | **305** | *i* Pn | **Pn** | **20 07 55.7** | **+2.9** |
| | comp=N,12nm,0.4s,SNR=21 | | | | | | |
| **MORC** | **Moravsky Berou** | **5.56** | **358** | Pn | **Pn** | **20 07 53.5** | **+0.5** |
| **MORC** | **Moravsky Berou** | **5.56** | **358** | *e*PN | **Pn** | **20 07 53.5** | **+0.5** |
| **MORC** | **Moravsky Berou** | **5.56** | **358** | ⇑P | **Pn** | **20 07 53.5** | **+0.5** |
| **THL** | **Klokotos Trika** | **5.59** | **145** | P | **Pn** | **20 07 55.0** | **+1.5** |
| **KOLS** | **Kolonicke sedl** | **5.60** | **31** | *e*PN | **Pn** | **20 07 54.6** | **+1.0** |
| KOLS | | | | *e*PG | Pg | 20 08 22.3 | +5.0 |
| KOLS | | | | *e*SN | **Sn** | **20 08 55.7** | **-2.4** |
| KOLS | | | | *e*LG | Lg | 20 10 02.0 | |
| **OKC** | **Ostrava-Krasne** | **5.62** | **2** | *e*SN | **Sn** | **20 08 57.2** | **-1.2** |
| **MOTA** | **Moosalm** | **5.66** | **306** | *i* Pn | **Pn** | **20 07 57.0** | **+2.4** |
| | comp=N,26nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **5.72** | **330** | Pn | **Pn** | **20 07 57.0** | **+1.7** |
| **KHC** | **Kasperske Hory** | **5.72** | **330** | *e*PN | **Pn** | **20 07 56.7** | **+1.4** |
| KHC | | | | *e*SN | **Sn** | **20 09 00.4** | **-0.7** |
| **FETA** | **Feichten** | **5.73** | **302** | *i* Pn | **Pn** | **20 07 58.4** | **+2.9** |
| | comp=N,3.2nm,0.2s | | | | | | |
| FETA | | | | *e*Sg | **Sg** | **20 09 34.2** | **+0.2** |
| | comp=N,6.4nm,0.5s | | | | | | |
| **ZVC** | **Zvikov** | **5.79** | **335** | *e*PN | **Pn** | **20 07 57.6** | **+1.4** |
| **FUORN** | **Ofenpass-Fuorn** | **5.86** | **297** | Pn | **Pn** | **20 07 59.3** | **+1.9** |
| **MLR** | **Muntele Rosu** | **5.88** | **75** | Pn | **Pn** | **20 07 59.4** | **+1.9** |
| **MLR** | **Muntele Rosu** | **5.88** | **75** | Pn | **Pn** | **20 07 59.9** | **+2.4** |
| | comp=N,0.3nm,0.3s,baz=252,slow=20,SNR=6.6 | | | | | | |
| MLR | | | | Sn | **Sn** | **20 09 05.7** | **+0.5** |
| | comp=N,0.4nm,0.3s,baz=120,slow=20,SNR=1.9 | | | | | | |
| MLR | | | | Lg | Lg | 20 09 37.3 | |
| | comp=N,0.1nm,0.3s,baz=190,slow=23,SNR=1.8 | | | | | | |
| MLR | | | | LR | LR | 20 10 45.9 | |
| | comp=N,55nm,19.2s,baz=310,slow=44 | | | | | | |
| | comp=N,1.0nm,0.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **5.88** | **75** | ⇓P | **Pn** | **20 07 59.0** | **+1.5** |
| **KRLC** | **Kraliky** | **5.90** | **353** | *e*PN | **Pn** | **20 07 58.9** | **+1.2** |
| **RETA** | **Reutte** | **5.94** | **306** | *i* Pn | **Pn** | **20 08 00.3** | **+2.0** |
| | comp=N,1.9nm,0.3s,SNR=9.0 | | | | | | |
| RETA | | | | *e*Sn | **Sn** | **20 09 10.4** | **+3.9** |
| | comp=N,6.4nm,0.3s | | | | | | |
| **ELND** | **Elena** | **5.96** | **100** | ⇓P | **Pn** | **20 07 59.9** | **+1.3** |
| **MSSA** | **Maissana** | **6.00** | **274** | Pn | **Pn** | **20 07 59.9** | **+0.8** |
| **OJC** | **Ojcow** | **6.14** | **12** | Pn | **Pn** | **20 07 59.9** | **-1.1** |
| **BURAR** | **Bucovina Array** | **6.14** | **54** | Pn | **Pn** | **20 08 02.7** | **+1.6** |
| **CEL** | **Celeste** | **6.15** | **195** | Pn | **Pn** | **20 08 01.5** | **+0.4** |
| **DAVOX** | **Davos/Dischmat** | **6.17** | **297** | Pn | **Pn** | **20 08 03.2** | **+1.7** |
| | comp=N,4.5nm,0.3s,baz=99,slow=14,SNR=44 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **20 09 16.5** | **+4.2** |
| | comp=N,0.7nm,0.3s,baz=313,slow=20,SNR=1.1 | | | | | | |
| | comp=N,13nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **6.19** | **340** | *e*PN | **Pn** | **20 08 02.3** | **+0.6** |
| **DPC** | **Dobruska-Polom** | **6.21** | **351** | *e*PN | **Pn** | **20 08 02.5** | **+0.5** |
| **KWP** | **Kalwaria Pacla** | **6.34** | **30** | Pn | **Pn** | **20 08 03.4** | **-0.4** |
| **DAVA** | **Damuels** | **6.37** | **301** | *i* Pn | **Pn** | **20 08 06.8** | **+2.5** |
| | comp=N,1.4nm,0.2s,SNR=5.8 | | | | | | |
| **OSTC** | **Ostas** | **6.43** | **351** | *e*PN | **Pn** | **20 08 04.8** | **-0.2** |
| **PGF** | **Pioggiola** | **6.67** | **259** | *e*P | **Pn** | **20 08 08.9** | **+0.5** |
| PGF | | | | *e*Sn | Sn | 20 09 15.5 | -9.2 |
| | comp=N,0.1nm,0.1s | | | | | | |
| **ALN** | **Alexandroupoli** | **6.89** | **116** | Pn | **Pn** | **20 08 11.7** | **+0.4** |
| **GRA1** | **Grafenberg Arr** | **7.11** | **323** | Pn | **Pn** | **20 08 13.7** | **-0.6** |
| **GRFO** | **Grafenberg** | **7.11** | **323** | Pn | **Pn** | **20 08 13.4** | **-0.9** |
| **SBF** | **Sospel** | **7.53** | **271** | *e*P | **Pn** | **20 08 20.2** | **+0.1** |
| SBF | | | | *e*Sn | Sn | 20 09 35.6 | -10 |
| | comp=N,6.2nm,0.4s | | | | | | |
| **ITM** | **Ithomi** | **7.69** | **155** | Pn | **Pn** | **20 08 22.5** | **+0.3** |
| **SENIN** | **Lac Senin/Sane** | **7.75** | **290** | Pn | **Pn** | **20 08 21.9** | **-1.4** |
| **BFO** | **Black Forest** | **7.78** | **305** | Pn | **Pn** | **20 08 23.8** | **+0.4** |
| **CLL** | **Collm** | **7.80** | **337** | *i* Pn | **Pn** | **20 08 25.8** | **+2.0** |
| CLL | | | | *e*Sn | Sn | 20 09 37.0 | -15 |
| CLL | | | | *i* Sb | **Sb** | **20 10 16.4** | **-2.1** |
| | comp=E,18nm,1.0s | | | | | | |
| CLL | | | | *e*Sg | **Sg** | **20 10 41.0** | **+0.7** |
| **VSL** | **Villasalto** | **7.90** | **236** | Pn | **Pn** | **20 08 26.4** | **+1.2** |
| **MBDF** | **Montbardon** | **7.95** | **277** | *e*P | **Pn** | **20 08 25.1** | **-0.9** |
| MBDF | | | | *e*Sn | Sn | 20 09 44.7 | -12 |
| | comp=E,5.1nm,0.4s | | | | | | |
| **LPG** | **La Plagne** | **8.00** | **283** | *e*P | **Pn** | **20 08 27.5** | **+0.7** |
| LPG | | | | *e*Sn | Sn | 20 09 47.6 | -10 |
| | comp=E,16nm,0.6s | | | | | | |
| **LPL** | **La Plagne** | **8.02** | **283** | *e*P | **Pn** | **20 08 28.2** | **+1.3** |
| LPL | | | | *e*Sn | Sn | 20 09 47.7 | -10 |
| | comp=E,15nm,0.5s | | | | | | |
| **BNI** | **Bardonecchia** | **8.02** | **280** | Pn | **Pn** | **20 08 25.9** | **-1.1** |
| **LMR** | **La Mourre** | **8.27** | **268** | *e*P | **Pn** | **20 08 30.6** | **+0.4** |
| LMR | | | | *e*Sn | Sn | 20 09 53.7 | -10 |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **ECH** | **Echery** | **8.43** | **302** | Pn | **Pn** | **20 08 32.6** | **+0.2** |
| **CDF** | **Champ du Feu** | **8.44** | **303** | *e*P | **Pn** | **20 08 33.2** | **+0.6** |
| CDF | | | | *e*Sg | Sg | 20 10 49.0 | -12 |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **HINF** | **Hinteralfeld** | **8.46** | **299** | *e*P | **Pn** | **20 08 32.9** | **0.0** |
| HINF | | | | *e*Sn | Sn | 20 09 57.1 | -11 |
| | comp=Z,3.5nm,0.5s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **8.59** | **279** | *e*P | **Pn** | **20 08 35.1** | **+0.4** |
| ORIF | | | | *e*Sn | Sn | 20 10 02.0 | -10 |
| | comp=Z,14nm,0.5s | | | | | | |
| **CABF** | **La Chapelle** | **8.62** | **290** | *e*P | **Pn** | **20 08 36.4** | **+1.3** |
| CABF | | | | *e*Sn | Sn | 20 10 00.3 | -12 |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **HAU** | **Haudompre** | **8.85** | **299** | *e*P | **Pn** | **20 08 38.2** | **+0.1** |
| **SMRF** | **Simiane la Rot** | **8.85** | **273** | *e*P | **Pn** | **20 08 38.7** | **+0.5** |
| SMRF | | | | *e*Sn | Sn | 20 10 05.1 | -13 |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **9.45** | **278** | *e*P | **Pn** | **20 08 45.6** | **-0.8** |
| VIVF | | | | *e*Sn | Sn | 20 10 20.4 | -12 |
| | comp=Z,6.6nm,0.6s | | | | | | |
| **SSB** | **Saint Sauveur** | **9.54** | **281** | Pn | **Pn** | **20 08 46.0** | **-1.7** |
| **SFTF** | **Sexfontaines** | **9.74** | **299** | *e*Pn | **Pn** | **20 08 46.4** | **-4.0** |
| SFTF | | | | *e*Sn | Sn | 20 10 24.3 | -16 |
| | comp=Z,5.9nm,0.3s | | | | | | |
| **AKASG** | **Malin Array Be** | **10.05** | **46** | LR | LR | 20 13 13.8 | |
| | comp=Z,23nm,19.4s,baz=197,slow=40 | | | | | | |
| **SMF** | **Signal de Mont** | **10.15** | **289** | *e*P | **Pn** | **20 08 55.7** | **-0.3** |
| SMF | | | | *e*Sn | Sn | 20 10 40.0 | -10 |
| | comp=Z,14nm,1.0s | | | | | | |
| **LOR** | **Lormes** | **10.25** | **292** | *e*P | **Pn** | **20 08 58.1** | **+0.7** |
| | baz=113 | | | | | | |
| LOR | | | | *e*Sn | Sn | 20 10 40.2 | -12 |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **10.43** | **146** | Pn | **Pn** | **20 08 58.8** | **-1.1** |
| **IDI** | **Anoyia** | **10.43** | **146** | Pn | **Pn** | **20 09 00.2** | **+0.2** |
| | comp=Z,6.9nm,0.9s,baz=325,slow=12,SNR=1.9 | | | | | | |
| IDI | | | | Sn | **Sn** | **20 10 49.0** | **-8.1** |
| | comp=Z,0.3nm,0.3s,baz=189,slow=18,SNR=1.9 | | | | | | |
| **SSF** | **Saint Saulge** | **10.45** | **291** | *e*P | **Pn** | **20 09 01.3** | **+1.2** |
| SSF | | | | *e*Sn | Sn | 20 10 44.1 | -13 |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **AVF** | **Avril sur Loir** | **10.51** | **289** | *e*P | **Pn** | **20 09 01.0** | **+0.2** |
| AVF | | | | *e*Sn | Sn | 20 10 45.9 | -13 |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **GIVF** | **Givet** | **10.64** | **308** | *e*P | **Pn** | **20 09 04.4** | **+1.7** |
| **KEST** | **Kesra** | **10.71** | **220** | Pn | **Pn** | **20 09 05.9** | **+2.2** |
| **KEST** | **Kesra** | **10.71** | **220** | Pn | **Pn** | **20 09 05.2** | **+1.5** |
| | comp=Z,0.1nm,0.3s,baz=339,slow=17,SNR=2.2 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **BGF** | **Bois d'Agland** | **10.82** | **288** | *e*P | **Pn** | **20 09 05.8** | **+0.7** |
| BGF | | | | *e*Sn | Sn | 20 10 54.8 | -12 |
| | comp=Z,13nm,0.7s | | | | | | |
| **BAIF** | **Baives** | **10.97** | **307** | *e*P | **Pn** | **20 09 08.9** | **+1.7** |
| **HYF** | **Humbligny** | **11.07** | **291** | *e*P | **Pn** | **20 09 10.2** | **+1.7** |
| **TCF** | **Toulx Ste Croi** | **11.23** | **286** | *e*P | **Pn** | **20 09 10.6** | **-0.2** |
| TCF | | | | *e*Sn | Sn | 20 11 02.2 | -14 |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **CAF** | **Calviac** | **11.30** | **279** | *e*P | **Pn** | **20 09 11.6** | **-0.1** |
| CAF | | | | *e*Sn | Sn | 20 11 04.5 | -14 |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **MTLF** | **Montolieu** | **11.35** | **271** | *e*P | **Pn** | **20 09 12.4** | **0.0** |
| **HFS** | **Hagfors** | **16.13** | **352** | Pn | **Pn** | **20 10 16.6** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=157,slow=15,SNR=4.1 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **16.85** | **262** | Pn | **P** | **20 10 28.7** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=70,slow=11,SNR=6.2 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **17.30** | **349** | LR | LR | 20 17 53.6 | |
| | comp=Z,8.8nm,21.4s,baz=105,slow=40 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **17.47** | **317** | P | **P** | **20 10 35.8** | **+0.8** |
| | baz=121,slow=13 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **17.92** | **13** | | **P** | **20 10 40.0** | **+0.1** |
| **FINES** | **FINESS Array B** | **17.92** | **13** | P | **P** | **20 10 41.0** | **+1.1** |
| | baz=186,slow=9.8,SNR=2.0 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.93** | **209** | P | **P** | **20 13 13.7** | **0.0** |
| | comp=Z,0.1nm,0.4s,baz=19,slow=9.2,SNR=1.9 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.09** | **63** | P | **P** | **20 14 38.7** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=296,slow=5.9,SNR=2.1 | | | | | | |
| MKAR | | | | PcP | **PcP** | **20 16 22.5** | **-1.0** |
| | comp=Z,0.3nm,0.5s,baz=304,slow=2.6,SNR=1.8 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **SCHQ** | **Schefferville** | **52.74** | **314** | LR | LR | 20 35 57.7 | |
| | comp=Z,43nm,19.3s,baz=120,slow=34 | | | | | | |

*IDC **15** 20:18:57.1±1.1,35.°69N×29.°47E,h0km,mb3.6/4,*
*mbtmp3.6/9,ML3.6/4,Error ellipse: s-maj=24.8km*
*s-min=16.6km az=156.0*
*AFAD **15** 20:18:57.2±0.0,35.°56N×29.°40E,h26km±1km,ML3.1*

*ISK **15** 20:18:57.4,35.°64N×29.°42E,h6km,ML3.2/13*
*NIC **15** 20:19:01.0,35.°70N×29.°51E,h27km±1km,Ml2.7/11*
*THE **15** 20:19:04.0,35.°60N×29.°22E,h82km±18km,ML2.7/1,Error*
*ellipse: s-maj=18.7km s-min=3.5km az=271.0*

**ISC 15 20:18:58.8±1.2,35.°67N±0.°03×29.°46E±0.°02,h14km±8km,**
**n54,σt 15/82,mb3.6/5,Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKAS** | **Kas** | **0.57** | **12** | Pg | **Pg** | **20 19 09.4** | **-0.7** |
| **AKAS** | **Kas** | **0.57** | **12** | P | **Pg** | **20 19 09.6** | **-0.5** |
| AKAS | | | | S | **Sn** | **20 19 23.5** | **+1.6** |
| AKAS | | | | *i* AML | AML | 20 19 25.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| AKAS | | | | *i* AML | AML | 20 19 26.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| **DEMR** | **Demre-Antalya** | **0.67** | **32** | Pg | **Pg** | **20 19 11.0** | **-0.8** |
| **IZZE** | **Mula-Seydike** | **0.79** | **346** | P | **Pb** | **20 19 14.6** | **+0.4** |
| IZZE | | | | S | **Sn** | **20 19 27.0** | **0.0** |
| IZZE | | | | *i* AML | AML | 20 19 29.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| IZZE | | | | *i* AML | AML | 20 19 34.0 | |
| | comp=N,2μm,0.4s | | | | | | |
| **AKUM** | **Antalya-Kumluc** | **0.97** | **47** | P | **Pn** | **20 19 18.2** | **+0.3** |
| AKUM | | | | S | **Sn** | **20 19 33.5** | **+2.1** |
| AKUM | | | | *i* AML | AML | 20 19 44.0 | |
| | comp=E,410nm,0.6s | | | | | | |
| AKUM | | | | *i* AML | AML | 20 19 47.0 | |
| | comp=N,368nm,0.6s | | | | | | |
| **FETY** | **Fethiye** | **1.01** | **342** | Pg | **Pb** | **20 19 17.7** | **-0.3** |
| FETY | | | | Sg | **Sn** | **20 19 32.1** | **-0.5** |
| **FETY** | **Fethiye** | **1.01** | **342** | P | **Pn** | **20 19 18.9** | **+0.4** |
| FETY | | | | S | **Sn** | **20 19 34.3** | **+1.8** |
| **ELL** | **Elmali** | **1.13** | **18** | Pn | **Pn** | **20 19 20.5** | **+0.2** |
| **ELL** | **Elmali** | **1.13** | **18** | P | **Pb** | **20 19 20.3** | **+0.1** |
| ELL | | | | AML | AML | 20 19 43.4 | |
| | 4.3nm,0.7s | | | | | | |
| ELL | | | | AML | AML | 20 19 45.7 | |
| | 3.3nm,0.9s | | | | | | |
| **KNIK** | **Mula-Seydike** | **1.18** | **4** | P | **Pg** | **20 19 21.4** | **-0.1** |
| KNIK | | | | S | **Sn** | **20 19 39.2** | **+2.4** |
| KNIK | | | | *i* AML | AML | 20 19 41.0 | |
| | comp=N,438nm,0.5s | | | | | | |
| KNIK | | | | *i* AML | AML | 20 19 41.0 | |
| | comp=E,367nm,0.9s | | | | | | |
| **ARG** | **Arkhangelos** | **1.21** | **297** | Pn | **Pn** | **20 19 20.6** | **-0.7** |
| **ARG** | **Arkhangelos** | **1.21** | **297** | P | **Pg** | **20 19 22.2** | **+0.1** |
| ARG | | | | S | **Sg** | **20 19 38.1** | **+0.2** |
| | 252nm,0.6s | | | | | | |
| **ARG** | **Arkhangelos** | **1.21** | **297** | P | **Pn** | **20 19 21.4** | **+0.1** |
| ARG | | | | AML | AML | 20 19 52.9 | |
| | 1.1nm,0.9s | | | | | | |
| ARG | | | | AML | AML | 20 19 55.0 | |
| | 0.5nm,0.8s | | | | | | |
| **SABU** | **Mula-Dalaman** | **1.22** | **341** | P | **Pn** | **20 19 21.4** | **+0.1** |
| SABU | | | | S | **Sg** | **20 19 40.9** | **+2.8** |
| SABU | | | | *i* AML | AML | 20 19 44.0 | |
| | comp=N,491nm,0.4s | | | | | | |
| SABU | | | | *i* AML | AML | 20 19 45.0 | |
| | comp=E,322nm,0.5s | | | | | | |
| **CAME** | **Cameli-Denizli** | **1.28** | **354** | Pn | **Pn** | **20 19 22.5** | **+0.2** |
| **KEMT** | **Kemer-ANTALYA** | **1.28** | **43** | Pn | **Pn** | **20 19 22.4** | **+0.1** |
| **DALY** | **Dalyan (Mula)** | **1.32** | **330** | Pn | **Pn** | **20 19 22.9** | **+0.2** |
| **CAEL** | **Denizli, Camel** | **1.45** | **356** | P | **Pb** | **20 19 26.0** | **+0.3** |
| CAEL | | | | S | **Sg** | **20 19 46.2** | **+0.5** |
| CAEL | | | | *i* AML | AML | 20 20 11.0 | |
| | comp=E,506nm,0.7s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BRTR | | | | Sn | | **Sn** | **20 21 17.6** | **+0.8** |
| | 1.2nm,0.3s,baz=214,slow=26,SNR=26 | | | | | | | | |
| | 1.6nm,0.3s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **5.58** | **117** | Pn | | **Pn** | **20 20 22.3** | **+0.8** |
| | 3.4nm,0.3s,baz=311,slow=12,SNR=21 | | | | | | | | |
| MMAI | | | | Sn | | **Sn** | **20 21 22.9** | **-2.5** |
| | 3.0nm,0.3s,baz=316,slow=26,SNR=3.7 | | | | | | | | |
| | 2.6nm,0.4s | | | | | | | | |
| **EIL** | **Elat** | **7.56** | **141** | Pn | | **Pn** | **20 20 49.6** | **+1.0** |
| | 0.5nm,0.3s,baz=335,slow=17,SNR=2.2 | | | | | | | | |
| EIL | | | | Sn | | **Sn** | **20 22 10.2** | **-3.9** |
| | 0.2nm,0.3s,baz=325,slow=23,SNR=1.3 | | | | | | | | |
| | 1.2nm,0.3s | | | | | | | | |
| **KEST** | **Kesra** | **16.34** | **276** | Pn | | **Pn** | **20 22 44.0** | **-3.8** |
| | 0.7nm,0.3s,baz=82,slow=10,SNR=12 | | | | | | | | |
| **GERES** | **GERESS Array B** | **17.54** | **323** | P | | **P** | **20 23 03.7** | **-0.2** |
| | 0.2nm,0.3s,baz=128,slow=13,SNR=2.1 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **BELG** | **Belogornoye** | **21.11** | **32** | P | | **P** | **20 23 44.0** | **+1.2** |
| | 6.2nm,0.9s,baz=206,slow=7.4,SNR=3.8 | | | | | | | | |
| | 6.2nm,0.9s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **26.67** | **289** | P | | **P** | **20 24 37.2** | **0.0** |
| | 0.7nm,0.7s,baz=84,slow=9.1,SNR=7.0 | | | | | | | | |
| | 0.7nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.59** | **235** | P | | **P** | **20 25 38.6** | **0.0** |
| | 0.6nm,0.6s,baz=38,slow=9.7,SNR=6.8 | | | | | | | | |
| | 0.6nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.06** | **51** | P | | **P** | **20 26 18.1** | **+1.5** |
| | 0.3nm,0.3s,baz=278,slow=9.2,SNR=1.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.55** | **57** | P | | **P** | **20 26 36.2** | **-1.3** |
| | 0.3nm,0.7s,baz=280,slow=8.6,SNR=1.7 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |

*LDG* ***15*** *20:21:43.6±0.8, 36°.56N×5°.32E, h2km, Ml2.7/5, Error ellipse: s-maj=16.2km s-min=8.1km az=172.0*
*MDD* ***15*** *20:21:50.0±0.9, 36°.68N×5°.32E, h27km±19km, Mb4.1/9, M_mb3.5/9, Error ellipse: s-maj=16.5km s-min=5.6km az=177.0*
*CRAAG* ***15*** *20:21:53.0, 36°.58N×5°.11E, Ml3.0, Algerie 10km SW Tichy*

**ISC 15 20:21:49.7±0.9, 36°.86N±0°.04×5°.29E±0°.04, h18km, n23, σ1§89/29, 5C, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SET** | **Setif** | **0.66** | **172** | P | | **Pn** | **20 22 04.0** | **-0.3** |
| **CTCHA** | **Tamokra** | **0.67** | **230** | P | | **Pb** | **20 22 01.9** | **-0.9** |
| **CAZD** | **Ain Tagrout** | **0.69** | **189** | P | | **Pb** | **20 22 02.5** | **-0.7** |
| **CKHR** | **Kef el Ahmar** | **0.86** | **168** | P | | **Pn** | **20 22 06.1** | **-0.9** |
| **ATKJ** | **Tikjda** | **1.03** | **247** | P | | **Pn** | **20 22 09.2** | **-0.1** |
| **CASM** | **Ain Smara** | **1.14** | **121** | P | | Pg | 20 22 16.3 | +4.6 |
| **CKFL** | **Kef-Lekhel** | **1.24** | **111** | P | | **Pg** | **20 22 16.6** | **+3.0** |
| **CAEH** | **'Ain El Ouahch** | **1.25** | **93** | P | | **Pg** | **20 22 15.8** | **+1.9** |
| **ATAF** | **Djebel Tarf** | **1.28** | **220** | P | | **Pn** | **20 22 12.5** | **-0.2** |
| **AKED** | **El Kharrouba** | **1.52** | **263** | P | | **Pb** | **20 22 16.8** | **-0.5** |
| **ADJB** | **Djebel Djouab** | **1.65** | **245** | P | | **Pb** | **20 22 19.5** | **-0.1** |
| **CMAH** | **Djebel Manchou** | **1.73** | **97** | P | | Pg | 20 22 26.2 | +3.3 |
| **ETOS** | **Mallorca** | **3.50** | **327** | P | | **Pn** | **20 22 43.9** | **+0.7** |
| ETOS | | | | ⇑*i*Vmb_V | | | 20 22 45.9 | |
| | 327nm,SNR=1.3 | | | | | | | |
| ETOS | | | | S | | **Sn** | **20 23 21.8** | **-2.3** |
| **EIBI** | **Ibiza** | **3.80** | **306** | P | | **Pn** | **20 22 47.9** | **+0.6** |
| EIBI | | | | ⇑*i*Vmb_V | | | 20 22 49.6 | |
| | 362nm,SNR=1.7 | | | | | | | |
| EIBI | | | | S | | **Sn** | **20 23 29.2** | **-2.2** |
| **VSL** | **Villasalto** | **4.16** | **49** | P | | **Pn** | **20 22 53.3** | **+1.1** |
| VSL | | | | S | | **Sn** | **20 23 38.3** | **-2.1** |
| **EPOB** | **Poblet** | **5.55** | **325** | P | | **Pn** | **20 23 11.8** | **+0.3** |
| EPOB | | | | ⇑*i*Vmb_V | | | 20 23 15.5 | |
| | 65nm,SNR=1.0 | | | | | | | |
| EPOB | | | | S | | **Sn** | **20 24 12.5** | **-2.4** |
| **ECHE** | **Chera** | **5.63** | **301** | P | | **Pn** | **20 23 12.9** | **+0.4** |
| ECHE | | | | ⇑*i*Vmb_V | | | 20 23 15.5 | |
| | 176nm,SNR=0.6 | | | | | | | |
| **EZAR** | **Zarzadilla de** | **5.66** | **282** | ⇑*i*Vmb_V | | | 20 23 15.7 | |
| | 110nm,SNR=0.9 | | | | | | | |
| EZAR | | | | S | | **Sn** | **20 24 18.5** | **+1.0** |
| **PGF** | **Pioggiola** | **6.36** | **26** | *e*P | | **Pn** | **20 23 23.0** | **+0.4** |
| PGF | | | | *e*Sn | | **Sn** | **20 24 30.5** | **-4.3** |
| | 1.7nm,0.3s | | | | | | | |
| **LMR** | **La Mourre** | **6.53** | **8** | *e*Pn | | **Pn** | **20 23 24.3** | **-0.5** |
| LMR | | | | *e*Sn | | **Sn** | **20 24 35.6** | **-3.3** |
| | 0.5nm,0.1s | | | | | | | |
| **MTLF** | **Montolieu** | **6.89** | **341** | *e*P | | **Pn** | **20 23 30.3** | **+0.6** |
| MTLF | | | | *e*Sn | | **Sn** | **20 24 45.4** | **-2.2** |
| | 0.5nm,0.3s | | | | | | | |
| **EPF** | **Esparros** | **7.24** | **330** | *e*P | | **Pn** | **20 23 36.7** | **+2.1** |
| EPF | | | | *e*Sn | | **Sn** | **20 24 54.4** | **-2.0** |
| | 0.1nm,0.1s | | | | | | | |
| **SJPF** | **Ste Jean** | **8.00** | **323** | *e*P | | **Pn** | **20 23 48.3** | **+3.3** |

*IDC* ***15*** *20:40:39.0±1.2, 22°.23N×121°.14E, h0km, mb3.5/5, mbtmp3.5/5, MS2.9/1, Error ellipse: s-maj=51.7km s-min=22.6km az=76.0*
*JMA* ***15*** *20:40:40.8±0.1, 23°.N±2°×12°1E±°, h31km±2km, MV3.7/14, TAIWAN REGION*
*TAP* ***15*** *20:40:41.4, 22°.65N×120°.68E, h29km, ML3.8, B*
*ASIES* ***15*** *20:40:41.4, 22°.65N×120°.68E, h29km, ML3.8, Mw3.6, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; Mrr0.51; Mθθ-0.19; Mφφ-0.32; Mrθ0.14; Mrφ-0.57; Mθr-2.75; Fault plane solution: M0 2.84392×$10^{21}$ NP1: φs179.24000°, δ85.72000°, λ78.23000°. NP2: φs69.54000°, δ12.51000°, λ159.85000°. Principal axes: T Plg47.9950°, Azm76.8060°; N Plg11.7330°, Azm180.1390°; P Plg39.6100°, Azm280.0360°;*

**ISC 15 20:40:41.8±0.8, 22°.65N±0°.02×120°.67E±0°.02, h33km±4km, n139, σ1§46/227, mb3.4/4, 5C-8D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MASBT** | **Mashibuluo** | **0.05** | **223** | ⇑*i*P | | **Pb** | **20 40 46.4** | **-0.9** |
| | baz=235 | | | | | | | |
| MASBT | | | | *i* S | | **Sb** | **20 40 49.8** | **-1.2** |
| | baz=235 | | | | | | | |
| **TSMG** | **Majia** | **0.06** | **341** | ⇑*i*P | | **Pb** | **20 40 46.5** | **-0.9** |
| | baz=330 | | | | | | | |
| TSMG | | | | *i* S | | **Sb** | **20 40 49.8** | **-1.4** |
| | baz=330 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.16** | **281** | ⇑*i*P | | **Pn** | **20 40 48.0** | **+0.3** |
| | baz=280 | | | | | | | |
| TSPT | | | | *i* S | | **Sb** | **20 40 53.8** | **+1.6** |
| | baz=280 | | | | | | | |
| **SGLT** | **Jiouru** | **0.18** | **296** | *i* P | | **Pn** | **20 40 48.3** | **+0.3** |
| | baz=295 | | | | | | | |
| SGLT | | | | *i* S | | **Sb** | **20 40 54.4** | **+2.0** |
| | baz=295 | | | | | | | |
| **ECL** | **Taimali** | **0.27** | **100** | ⇓*i*P | | **Pb** | **20 40 48.7** | **-0.4** |
| | baz=100 | | | | | | | |
| ECL | | | | *i* S | | **Sn** | **20 40 53.9** | **-0.3** |
| | baz=100 | | | | | | | |
| **SCZT** | **Fangliau** | **0.28** | **189** | ⇑*i*P | | **Pb** | **20 40 48.7** | **-0.4** |
| | baz=191 | | | | | | | |
| SCZT | | | | *i* S | | **Sb** | **20 40 53.7** | **-0.5** |
| | baz=191 | | | | | | | |
| **TWM1** | **Shoushan** | **0.29** | **308** | ⇑*i*P | | **Pn** | **20 40 50.1** | **+0.4** |
| | baz=312 | | | | | | | |
| TWM1 | | | | *i* S | | **Sn** | **20 40 58.5** | **+3.7** |
| | baz=312 | | | | | | | |
| **SCST** | **Cishan** | **0.29** | **326** | *i* P | | **Pn** | **20 40 49.9** | **+0.2** |
| | baz=328 | | | | | | | |
| SCST | | | | *i* S | | **Sn** | **20 40 56.6** | **+1.9** |
| | baz=328 | | | | | | | |
| **EAST** | **Anshuo** | **0.31** | **147** | ⇓*i*P | | **Pb** | **20 40 49.4** | **-0.2** |
| | baz=144 | | | | | | | |
| EAST | | | | *i* S | | **Sn** | **20 40 55.0** | **-0.4** |
| | baz=144 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.33** | **289** | *e*P | | **Pn** | **20 40 51.2** | **+1.0** |
| | baz=289 | | | | | | | |
| SNJT | | | | *i* S | | **Sn** | **20 40 58.5** | **+2.8** |
| | baz=289 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.34** | **257** | *i* P | | **Pn** | **20 40 51.5** | **+1.0** |
| | baz=257 | | | | | | | |
| KAU | | | | S | | **Sn** | **20 40 59.5** | **+3.4** |
| | baz=257 | | | | | | | |
| **SLGT** | **Liugui** | **0.35** | **357** | *i* P | | **Pb** | **20 40 50.0** | **-0.2** |
| | baz=359 | | | | | | | |
| SLGT | | | | *i* S | | **Sn** | **20 40 55.9** | **-0.5** |
| | baz=359 | | | | | | | |
| **TAW** | **Tawu** | **0.36** | **143** | ⇓*i*P | | **Pb** | **20 40 50.0** | **-0.2** |
| | baz=141 | | | | | | | |
| TAW | | | | *i* S | | **Sb** | **20 40 55.6** | **-0.3** |
| | baz=141 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.37** | **146** | ⇓*i*P | | **Pb** | **20 40 50.1** | **-0.3** |
| | baz=144 | | | | | | | |
| TAWH | | | | *i* S | | **Sn** | **20 40 56.1** | **-0.7** |
| | baz=144 | | | | | | | |
| **WSSB** | **Gushan** | **0.37** | **270** | P | | **Pn** | **20 40 51.6** | **+0.6** |
| | baz=270 | | | | | | | |
| WSSB | | | | S | | **Sn** | **20 40 59.5** | **+2.5** |
| | baz=270 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.41** | **223** | P | | **Pn** | **20 40 53.6** | **+2.2** |
| | baz=227 | | | | | | | |
| TWP | | | | *i* S | | **Sn** | **20 41 02.2** | **+4.3** |
| | baz=227 | | | | | | | |
| **TWG** | **Pinlang** | **0.41** | **65** | ⇓*i*P | | **Pn** | **20 40 51.2** | **-0.3** |
| | baz=57 | | | | | | | |
| TWG | | | | *i* S | | **Sn** | **20 40 57.6** | **-0.4** |
| | baz=57 | | | | | | | |
| **TWGBT** | **Beinan** | **0.42** | **66** | P | | **Pn** | **20 40 51.1** | **-0.4** |
| **TWGBT** | **Beinan** | **0.42** | **66** | ⇓*i*P | | **Pn** | **20 40 51.1** | **-0.4** |
| | baz=57 | | | | | | | |
| TWGBT | | | | *i* S | | **Sn** | **20 40 57.5** | **-0.6** |
| | baz=57 | | | | | | | |
| **SGST** | **Jiashian** | **0.44** | **350** | *i* P | | **Pb** | **20 40 51.1** | **-0.4** |
| | baz=348 | | | | | | | |
| SGST | | | | *i* S | | **Sn** | **20 40 58.4** | **-0.3** |
| | baz=348 | | | | | | | |
| **SLIU** | **Shizi** | **0.44** | **164** | *i* P | | **Pb** | **20 40 51.3** | **-0.2** |
| | baz=163 | | | | | | | |
| SLIU | | | | *i* S | | **Sn** | **20 40 58.5** | **-0.3** |
| | baz=163 | | | | | | | |
| **TTN** | **Taitung** | **0.46** | **76** | ⇓*i*P | | **Pn** | **20 40 52.7** | **+0.7** |
| | baz=70 | | | | | | | |
| TTN | | | | *i* S | | **Sn** | **20 41 01.3** | **+2.2** |
| | baz=70 | | | | | | | |
| **SHHT** | **Tainan City** | **0.48** | **322** | P | | **Pn** | **20 40 53.8** | **+1.5** |
| | baz=320 | | | | | | | |
| SHHT | | | | S | | **Sn** | **20 41 03.3** | **+3.7** |
| | baz=320 | | | | | | | |
| **LONT** | **Longtian** | **0.50** | **59** | *i* P | | **Pn** | **20 40 52.5** | **-0.2** |
| | baz=51 | | | | | | | |
| LONT | | | | S | | **Sn** | **20 41 00.2** | **+0.1** |
| | baz=51 | | | | | | | |
| **CHN3** | **Shinhua** | **0.51** | **327** | ⇓*i*P | | **Pn** | **20 40 54.0** | **+1.2** |
| | baz=326 | | | | | | | |
| CHN3 | | | | *i* S | | **Sn** | **20 41 04.4** | **+4.0** |
| | baz=326 | | | | | | | |
| **CHN1** | **Nanshi** | **0.55** | **347** | *i* P | | **Pn** | **20 40 53.8** | **+0.4** |
| | baz=345 | | | | | | | |
| CHN1 | | | | *i* S | | **Sn** | **20 41 03.1** | **+1.6** |
| | baz=345 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.56** | **314** | *i* S | | **Sn** | **20 41 04.2** | **+2.6** |
| | baz=314 | | | | | | | |
| **SNST** | **Tainan City** | **0.59** | **345** | *i* P | | **Pn** | **20 40 54.3** | **+0.4** |
| | baz=342 | | | | | | | |
| SNST | | | | *i* S | | **Sn** | **20 41 04.4** | **+2.0** |
| | baz=342 | | | | | | | |
| **WTP** | **Ta-pu** | **0.60** | **355** | *i* P | | **Pn** | **20 40 54.4** | **+0.3** |
| | baz=354 | | | | | | | |
| WTP | | | | *i* S | | **Sn** | **20 41 04.1** | **+1.4** |
| | baz=354 | | | | | | | |
| **ELDTW** | **Lidau** | **0.63** | **31** | *i* P | | **Pn** | **20 40 54.7** | **+0.2** |
| | baz=29 | | | | | | | |
| ELDTW | | | | *i* S | | **Sn** | **20 41 04.0** | **+0.5** |
| | baz=29 | | | | | | | |
| **HEN** | **Hengchun** | **0.64** | **174** | *i* P | | **Pn** | **20 40 55.3** | **+0.7** |
| | baz=163 | | | | | | | |
| HEN | | | | *i* S | | **Sn** | **20 41 05.8** | **+2.2** |
| | baz=163 | | | | | | | |
| **TWK** | **Hsinying** | **0.64** | **345** | *i* P | | **Pn** | **20 40 55.0** | **+0.4** |
| | baz=344 | | | | | | | |
| TWK | | | | *i* S | | **Sn** | **20 41 05.0** | **+1.3** |
| | baz=344 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.65** | **357** | P | | **Pn** | **20 40 55.6** | **+0.8** |
| **TPUB** | **Ta-pu** | **0.65** | **357** | P | | **Pn** | **20 40 55.3** | **+0.6** |
| | baz=341 | | | | | | | |
| TPUB | | | | *i* S | | **Sn** | **20 41 05.2** | **+1.2** |
| | baz=341 | | | | | | | |
| **EDH** | **Donghe** | **0.67** | **61** | P | | **Pn** | **20 40 55.5** | **+0.6** |
| | baz=75 | | | | | | | |
| EDH | | | | S | | **Sn** | **20 41 05.8** | **+1.4** |
| | baz=75 | | | | | | | |
| **ECS** | **Chishang** | **0.68** | **49** | P | | **Pn** | **20 40 55.6** | **+0.5** |
| | baz=47 | | | | | | | |
| ECS | | | | S | | **Sn** | **20 41 06.3** | **+1.7** |
| | baz=47 | | | | | | | |
| **SCLT** | **Jiali** | **0.68** | **320** | *i* P | | **Pn** | **20 40 55.7** | **+0.6** |
| | baz=320 | | | | | | | |
| SCLT | | | | *i* S | | **Sn** | **20 41 06.8** | **+2.1** |
| | baz=320 | | | | | | | |
| **EHD** | **Haiduan** | **0.71** | **45** | P | | **Pn** | **20 40 55.8** | **+0.3** |
| | baz=43 | | | | | | | |
| EHD | | | | S | | **Sn** | **20 41 05.6** | **+0.4** |
| | baz=43 | | | | | | | |
| **TWK1** | **Hengchun** | **0.71** | **170** | P | | **Pn** | **20 40 56.1** | **+0.5** |
| | baz=171 | | | | | | | |
| TWK1 | | | | *i* S | | **Sn** | **20 41 07.4** | **+2.1** |
| | baz=171 | | | | | | | |
| **TWKBT** | **Hengchun** | **0.71** | **169** | P | | **Pn** | **20 40 55.8** | **+0.2** |
| | baz=171 | | | | | | | |
| **TSCK** | **Chigu Township** | **0.73** | **313** | *i* P | | **Pn** | **20 40 56.1** | **+0.2** |
| | baz=297 | | | | | | | |
| TSCK | | | | S | | **Sn** | **20 41 08.0** | **+2.1** |
| | baz=297 | | | | | | | |
| **LDUT** | **Ludao** | **0.74** | **88** | P | | **Pb** | **20 40 55.6** | **-0.7** |
| | baz=87 | | | | | | | |
| LDUT | | | | *i* S | | **Sn** | **20 41 06.6** | **+0.5** |
| | baz=87 | | | | | | | |
| **CHKT** | **Chengkung** | **0.79** | **55** | P | | **Pn** | **20 40 56.8** | **+0.2** |
| | baz=67 | | | | | | | |
| CHKT | | | | *i* S | | **Sn** | **20 41 09.2** | **+2.0** |
| | baz=67 | | | | | | | |
| **WCKO** | **Fanlu** | **0.79** | **356** | P | | **Pn** | **20 40 57.6** | **+1.0** |
| | baz=336 | | | | | | | |
| WCKO | | | | S | | **Sn** | **20 41 09.4** | **+2.0** |
| | baz=336 | | | | | | | |
| **ICHU** | **Yijhu** | **0.80** | **333** | P | | **Pn** | **20 40 56.8** | **+0.1** |
| | baz=331 | | | | | | | |
| ICHU | | | | S | | **Sn** | **20 41 09.1** | **+1.7** |
| | baz=331 | | | | | | | |
| **FULB** | **Fuli** | **0.80** | **46** | P | | **Pn** | **20 40 58.1** | **+1.3** |
| | baz=38 | | | | | | | |
| FULB | | | | S | | **Sn** | **20 41 10.9** | **+3.4** |
| | baz=38 | | | | | | | |
| **CHN8** | **Yiju** | **0.81** | **329** | *i* P | | **Pn** | **20 40 57.0** | **0.0** |
| | baz=328 | | | | | | | |
| CHN8 | | | | *i* S | | **Sn** | **20 41 10.0** | **+2.1** |
| | baz=328 | | | | | | | |
| **CHKH** | **Chenggong** | **0.86** | **51** | P | | **Pb** | **20 40 59.3** | **+1.0** |
| | baz=63 | | | | | | | |
| CHKH | | | | *e*S | | **Sn** | **20 41 11.2** | **+2.1** |
| | baz=63 | | | | | | | |
| **CHY** | **Chiayi** | **0.88** | **345** | P | | **Pb** | **20 40 59.2** | **+0.6** |
| | baz=329 | | | | | | | |
| CHY | | | | S | | **Sn** | **20 41 11.4** | **+1.9** |
| | baz=329 | | | | | | | |
| **CHN2** | **Minshiung** | **0.90** | **349** | P | | **Pb** | **20 40 58.8** | **-0.2** |
| | baz=332 | | | | | | | |
| CHN2 | | | | S | | **Sn** | **20 41 11.9** | **+1.9** |
| | baz=332 | | | | | | | |
| **TWF1** | **Yuli** | **0.91** | **39** | *i* P | | **Pb** | **20 40 59.4** | **+0.2** |
| | baz=38 | | | | | | | |
| TWF1 | | | | *i* S | | **Sn** | **20 41 11.5** | **+1.1** |
| | baz=38 | | | | | | | |
| **EYUL** | **Yuli** | **0.92** | **41** | P | | **Pb** | **20 40 59.7** | **+0.4** |
| | baz=34 | | | | | | | |
| EYUL | | | | S | | **Sn** | **20 41 12.0** | **+1.5** |
| | baz=34 | | | | | | | |
| **YULB** | **Yu-li** | **0.94** | **38** | P | | **Pb** | **20 41 00.0** | **+0.3** |
| **YULB** | **Yu-li** | **0.94** | **38** | *i* P | | **Pb** | **20 40 59.8** | **+0.1** |
| | baz=35 | | | | | | | |
| YULB | | | | S | | **Sb** | **20 41 11.9** | **0.0** |
| | baz=35 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.96** | **335** | P | | **Pn** | **20 40 59.0** | **0.0** |
| | baz=333 | | | | | | | |
| WSL | | | | S | | **Sb** | **20 41 12.6** | **+0.2** |
| | baz=333 | | | | | | | |
| **ECBN** | **Changbin** | **0.98** | **47** | P | | **Pb** | **20 41 00.9** | **+0.6** |
| | baz=58 | | | | | | | |
| **WDLH** | **Douliu** | **1.04** | **354** | *e*P | | **Pb** | **20 41 01.1** | **-0.3** |
| | baz=338 | | | | | | | |
| WDLH | | | | *e*S | | **Sb** | **20 41 15.4** | **+0.7** |
| | baz=338 | | | | | | | |
| **EHY** | **Hungye** | **1.05** | **35** | *i* P | | **Pb** | **20 41 02.0** | **+0.5** |
| | baz=32 | | | | | | | |
| EHY | | | | *i* S | | **Sb** | **20 41 15.1** | **+0.3** |
| | baz=32 | | | | | | | |
| **EHYH** | **Wanrong** | **1.05** | **36** | *e*P | | **Pb** | **20 41 02.8** | **+1.4** |
| | baz=33 | | | | | | | |
| EHYH | | | | S | | **Sb** | **20 41 15.9** | **+0.9** |
| | baz=33 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.06** | **9** | *i* P | | **Pb** | **20 41 01.0** | **-0.7** |
| | baz=353 | | | | | | | |
| WHYT | | | | S | | **Sb** | **20 41 16.0** | **+0.7** |
| | baz=353 | | | | | | | |
| **WSF** | **Szhu** | **1.07** | **338** | *i* P | | **Pn** | **20 41 00.3** | **-0.2** |
| | baz=335 | | | | | | | |
| WSF | | | | *i* S | | **Sn** | **20 41 14.8** | **+0.6** |
| | baz=335 | | | | | | | |
| **WTK** | **Tuku** | **1.07** | **346** | P | | **Pn** | **20 40 59.2** | **-1.2** |
| | baz=343 | | | | | | | |
| WTK | | | | S | | **Sb** | **20 41 16.1** | **+0.7** |
| | baz=343 | | | | | | | |
| **HGSD** | **Ruisui** | **1.09** | **39** | P | | **Pb** | **20 41 02.5** | **+0.3** |
| | baz=22 | | | | | | | |
| HGSD | | | | S | | **Sb** | **20 41 18.8** | **+2.6** |
| | baz=22 | | | | | | | |
| **WDGT** | **Dungji** | **1.11** | **304** | P | | **Pn** | **20 41 00.6** | **-0.5** |
| | baz=304 | | | | | | | |
| **SSLB** | **Suanglung** | **1.17** | **13** | P | | **Pb** | **20 41 02.9** | **-0.5** |
| **SSLB** | **Suanglung** | **1.17** | **13** | P | | **Pb** | **20 41 03.5** | **0.0** |
| | baz=10.0 | | | | | | | |
| SSLB | | | | S | | **Sb** | **20 41 18.1** | **-0.2** |
| | baz=10.0 | | | | | | | |
| **WJS** | **Zhushan** | **1.17** | **3** | *e*P | | **Pb** | **20 41 04.8** | **+1.3** |
| | baz=346 | | | | | | | |
| WJS | | | | *e*S | | **Sb** | **20 41 18.8** | **+0.4** |
| | baz=346 | | | | | | | |
| **VWDT** | **VWDT** | **1.19** | **21** | *e*P | | **Pb** | **20 41 03.5** | **-0.2** |
| | baz=18 | | | | | | | |
| VWDT | | | | S | | **Sb** | **20 41 19.9** | **+1.1** |
| | baz=18 | | | | | | | |
| **WNT** | **Mingjian** | **1.23** | **1** | *i* P | | **Pb** | **20 41 03.6** | **-0.8** |
| | baz=358 | | | | | | | |
| WNT | | | | *i* S | | **Sb** | **20 41 19.7** | **-0.3** |
| | baz=358 | | | | | | | |
| **EGFH** | **Guangfu** | **1.24** | **34** | *e*P | | **Pb** | **20 41 04.0** | **-0.6** |
| | baz=31 | | | | | | | |
| EGFH | | | | *e*S | | **Sb** | **20 41 20.2** | **0.0** |
| | baz=31 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.26** | **32** | P | | **Pb** | **20 41 04.5** | **-0.4** |
| | baz=28 | | | | | | | |
| WARBT | | | | S | | **Sb** | **20 41 21.9** | **+1.1** |
| | baz=28 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.26** | **344** | S | | **Sb** | **20 41 20.9** | **-0.1** |
| | baz=341 | | | | | | | |
| **TYC** | **Yuchr** | **1.27** | **8** | *e*P | | **Pb** | **20 41 04.5** | **-0.6** |
| | baz=5.0 | | | | | | | |
| TYC | | | | *e*S | | **Sb** | **20 41 20.0** | **-1.0** |
| | baz=5.0 | | | | | | | |
| **VCHM** | **Qimei** | **1.27** | **296** | P | | **Pn** | **20 41 02.6** | **-0.6** |
| | baz=297 | | | | | | | |
| VCHM | | | | S | | **Sn** | **20 41 17.8** | **-1.4** |
| | baz=297 | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.33** | **311** | P | | **Pn** | **20 41 03.0** | **-1.0** |
| | baz=310 | | | | | | | |
| PHUB | | | | S | | **Sn** | **20 41 19.2** | **-1.4** |
| | baz=310 | | | | | | | |
| **ESL** | **Shilin** | **1.36** | **31** | P | | **Pb** | **20 41 06.3** | **-0.3** |
| | baz=28 | | | | | | | |
| ESL | | | | S | | **Sb** | **20 41 24.2** | **+0.5** |
| | baz=28 | | | | | | | |
| **PNG** | **Penghu** | **1.38** | **312** | *i* P | | **Pn** | **20 41 04.0** | **-0.7** |
| | baz=311 | | | | | | | |
| PNG | | | | *i* S | | **Sn** | **20 41 20.4** | **-1.4** |
| | baz=311 | | | | | | | |
| **OWD** | **Renai** | **1.38** | **20** | *e*P | | **Pb** | **20 41 06.5** | **-0.7** |
| | baz=4.0 | | | | | | | |
| OWD | | | | S | | **Sb** | **20 41 25.1** | **+0.6** |
| | baz=4.0 | | | | | | | |
| **WUSB** | **Renai** | **1.40** | **17** | P | | **Pb** | **20 41 06.4** | **-1.0** |
| | baz=14 | | | | | | | |
| WUSB | | | | *e*S | | **Sb** | **20 41 23.7** | **-1.4** |
| | baz=14 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.40** | **36** | *e*P | | **Pb** | **20 41 07.2** | **-0.2** |
| | baz=32 | | | | | | | |
| SHUL | | | | S | | **Sb** | **20 41 27.2** | **+2.3** |
| | baz=32 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.42** | **9** | *e*P | | **Pn** | **20 41 06.3** | **+0.9** |
| | baz=6.0 | | | | | | | |
| WCS | | | | S | | **Sb** | **20 41 25.2** | **-0.3** |
| | baz=6.0 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.43** | **356** | *e*P | | **Pn** | **20 41 06.2** | **+0.7** |
| | baz=353 | | | | | | | |
| WCHH | | | | *e*S | | **Sn** | **20 41 24.1** | **+0.9** |
| | baz=353 | | | | | | | |
| **CHGB** | **Renai** | **1.48** | **18** | P | | **Pb** | **20 41 07.8** | **-1.0** |
| | baz=360 | | | | | | | |
| CHGB | | | | S | | **Sb** | **20 41 27.0** | **-0.5** |
| | baz=360 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.49** | **35** | *e*P | | **Pb** | **20 41 07.4** | **-1.4** |
| | baz=31 | | | | | | | |
| **ETM** | **Tongmen** | **1.52** | **30** | *e*P | | **Pn** | **20 41 07.5** | **+0.9** |
| | baz=26 | | | | | | | |
| ETM | | | | *i* S | | **Sb** | **20 41 27.6** | **-0.6** |
| | baz=26 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.53** | **26** | P | | **Pb** | **20 41 09.1** | **-0.6** |
| | baz=23 | | | | | | | |
| LXIB | | | | *i* S | | **Sb** | **20 41 28.3** | **-0.5** |
| | baz=23 | | | | | | | |
| **HWA** | **Hwalien** | **1.58** | **33** | *e*P | | **Pb** | **20 41 08.7** | **-1.7** |
| | baz=30 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.59** | **20** | *e*P | | **Pb** | **20 41 10.6** | **-0.2** |
| | baz=17 | | | | | | | |
| WHF | | | | S | | **Sb** | **20 41 31.1** | **+0.3** |
| | baz=17 | | | | | | | |
| **WHP** | **Taichung City** | **1.65** | **9** | *e*P | | **Pn** | **20 41 09.5** | **+1.0** |
| | baz=6.0 | | | | | | | |
| **TDCB** | **Techi** | **1.66** | **16** | *e*P | | **Pn** | **20 41 10.0** | **+1.3** |
| | baz=12 | | | | | | | |
| TDCB | | | | *e*S | | **Sn** | **20 41 30.2** | **+1.1** |
| | baz=12 | | | | | | | |
| **TWD** | **Chiawan** | **1.66** | **31** | *e*P | | **Pb** | **20 41 10.7** | **-1.1** |
| | baz=27 | | | | | | | |
| **TWT** | **Tachien** | **1.67** | **16** | P | | **Pn** | **20 41 09.6** | **+0.7** |
| | baz=12 | | | | | | | |
| TWT | | | | S | | **Sb** | **20 41 31.1** | **-1.6** |
| | baz=12 | | | | | | | |
| **FUSS** | **Fushou** | **1.68** | **18** | *e*P | | **Pb** | **20 41 11.1** | **-1.1** |
| | baz=15 | | | | | | | |
| FUSS | | | | *e*S | | **Sb** | **20 41 33.4** | **+0.3** |
| | baz=15 | | | | | | | |
| **WDJ** | **Dajia District** | **1.69** | **359** | *e*S | | **Sb** | **20 41 32.2** | **-1.1** |
| | baz=356 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.70** | **3** | *e*P | | **Pb** | **20 41 11.8** | **-0.6** |
| | baz=344 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sb** | **20 41 31.5** | **-1.9** |
| | baz=344 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.73** | **26** | *e*P | | **Pb** | **20 41 11.6** | **-1.4** |
| | baz=22 | | | | | | | |
| ETLH | | | | *e*S | | **Sb** | **20 41 33.7** | **-0.5** |
| | baz=22 | | | | | | | |
| **ETL** | **Fush Village** | **1.74** | **30** | *e*P | | **Pn** | **20 41 10.7** | **+0.9** |
| | baz=26 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.74** | **29** | P | | **Pn** | **20 41 10.7** | **+0.9** |
| **NACB** | **Ninganchiao** | **1.74** | **29** | *e*P | | **Pb** | **20 41 11.7** | **-1.5** |
| | baz=25 | | | | | | | |
| NACB | | | | *e*S | | **Sb** | **20 41 33.6** | **-1.1** |
| | baz=25 | | | | | | | |
| **NSY** | **Sanyi** | **1.77** | **3** | *e*P | | **Pb** | **20 41 10.9** | **+0.9** |
| | baz=344 | | | | | | | |
| NSY | | | | *e*S | | **Sb** | **20 41 34.2** | **-1.1** |
| | baz=344 | | | | | | | |
| **NMLH** | **Miaoli** | **1.89** | **3** | *e*P | | **Pn** | **20 41 13.2** | **+1.5** |
| | baz=346 | | | | | | | |
| **NNSB** | **Datong** | **1.89** | **20** | *e*P | | **Pb** | **20 41 14.0** | **-1.8** |
| | baz

baz=42
YHNB Yeheng 2.12 18 P Pn 20 41 17.0 +2.0
YHNB Yeheng 2.12 18 eP Pn 20 41 16.6 +1.6
baz=15
NSK Sanguang 2.12 17 eP Pb 20 41 17.9 -1.6
baz=360
ENTT Nioudou 2.15 22 eP Pn 20 41 16.8 +1.4
baz=33
NDS Dongshan 2.20 26 eP Pb 20 41 19.0 -1.9
baz=35
TWC Suao 2.23 29 eP Pb 20 41 19.4 -2.1
baz=26
TWE Neicheng 2.26 24 eP Pb 20 41 19.4 -2.5
baz=33
FUSB Fushanzhiwuyua 2.27 22 eP Pn 20 41 19.1 +2.1
baz=3.0
TATO Taipei 2.44 18 P Pn 20 41 20.3 +1.0
VWUC VWUC 2.59 335 eP Pn 20 41 20.9 -0.4
baz=331
SXI1 Grass Mountain 2.68 24 eP Pb 20 41 26.1 -2.9
baz=6.0
JYNG Yonagunijimaku 2.76 49 eP Pn 20 41 26.5 +2.8
JYNG eS Sn 20 41 59.3 +3.4
KNMB Chin-men Tao 2.77 311 eP Pn 20 41 23.3 -0.5
baz=311
YOJ Yonaguni jima 2.81 49 P Pn 20 41 27.0 +2.6
YOJ Yonaguni jima 2.81 49 P Pn 20 41 27.1 +2.6
baz=45
YOJ Yonaguni jima 2.81 49 P Pn 20 41 26.9 +2.5
YOJ S Sn 20 42 00.7 +3.5
HATJ Hateruma jima 3.21 63 S Sn 20 42 09.6 +2.6
IRIF Iriomote-Funau 3.28 59 P Pn 20 41 33.1 +2.3
IRIF eS Sn 20 42 12.1 +3.5
JKRS Kuro-shima 3.45 62 eS Sn 20 42 15.9 +2.8
JIJ Ishigaki jima 3.62 61 P Pn 20 41 37.4 +1.8
JIJ S Sn 20 42 19.3 +2.1
JISG Ishigakijimahi 3.86 59 P Pn 20 41 40.5 +1.7
JISG S Sn 20 42 24.8 +1.7
JTJ Tarama 4.20 61 eP Pn 20 41 45.2 +1.7
JTJ eS Sn 20 42 34.1 +2.6
MJAR Matsushiro Arr 20.55 44 P Pn 20 45 19.3 -0.7
1.4nm,0.8s,baz=237,slow=8.0,SNR=4.7
1.4nm,0.8s
CMAR Chiang Mai Arr 20.76 262 LR LR 20 54 34.2
comp=Z,31nm,18.8s,baz=200,slow=40
SONM Songino Array 27.61 339 P P 20 46 33.8 +7.6
0.6nm,1.0s,baz=168,slow=7.4,SNR=2.9
0.6nm,1.0s
ZALV Zalesovo Beam 41.29 328 P P 20 48 29.9 +6.0
0.4nm,0.5s,baz=111,slow=7.9,SNR=1.9
0.4nm,0.5s
WRA Warramunga Arr 44.38 161 P P 20 48 47.2 -2.2
0.7nm,0.6s,baz=344,slow=8.6,SNR=6.6
0.7nm,0.6s
ASAR Alice Springs 47.80 164 P P 20 49 14.1 -2.1
0.2nm,0.6s,baz=343,slow=7.2,SNR=4.6
0.2nm,0.6s

*TIR* ***15*** *20:46:44.9, 41°.56N×20°.13E, h26km±1km, Md2.6, Ml2.3*
*RHSSO* ***15*** *20:46:45.9±0.8, 41°.51N×20°.13E, h4km±3km, ML2.1/7*
*BEO* ***15*** *20:46:46.4±0.3, 41°.56N×20°.21E, h7km±4km, ML1.9/8*
**ISC 15 20:46:45.7±1.2,41°.56N±0°.02×20°.14E±0°.03,h5km±10km,**
**n25,σ0s80/49,2C,Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TIR | Tirane | 0.30 | 224 | P | Pg | 20 46 51.5 | -0.1 |
| | baz=223 | | | | | | |
| TIR | | | | S | Sb | 20 46 57.6 | -1.2 |
| | baz=223 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=N,0.2nm,0.1s,baz=223 | | | | | | |
| TIR | Tirane | 0.30 | 224 | ePg | Pg | 20 46 52.0 | +0.4 |
| TIR | | | | eSg | Sb | 20 46 58.7 | -0.1 |
| PUK | Puka | 0.51 | 339 | P | Pg | 20 46 55.8 | +0.1 |
| | baz=340 | | | | | | |
| PUK | | | | S | Sb | 20 47 03.8 | -1.3 |
| | baz=340 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=E,1.2nm,0.2s,baz=340 | | | | | | |
| OHR | Ohrid | 0.67 | 132 | *i* Pg | Pb | 20 46 59.5 | -0.4 |
| OHR | | | | *i* Sg | Sb | 20 47 10.2 | +0.7 |
| BCI | Bajram Curri | 0.81 | 356 | P | Pg | 20 47 01.7 | +0.5 |
| | baz=357 | | | | | | |
| BCI | | | | S | Sg | 20 47 12.6 | +0.9 |
| | baz=357 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=E,0.4nm,0.4s,baz=357 | | | | | | |
| DRME | Dracevica, Mon | 0.95 | 311 | ⇑ *i* Pg | Pg | 20 47 03.3 | -0.7 |
| DRME | | | | eSg | Sb | 20 47 16.8 | -0.8 |
| KBN | Korca | 1.06 | 152 | P | Pg | 20 47 06.0 | 0.0 |
| | baz=151 | | | | | | |
| PDG | Podgorica | 1.09 | 323 | ePg | Pg | 20 47 05.1 | -1.6 |
| PDG | | | | eSg | Sn | 20 47 22.4 | -0.7 |
| PDG | Podgorica | 1.09 | 323 | ePg | Pg | 20 47 05.7 | -1.0 |
| PDG | | | | eSg | Sn | 20 47 22.3 | -0.8 |
| FNA | Florina | 1.21 | 130 | P | Pg | 20 47 08.5 | -0.5 |
| | baz=129 | | | | | | |
| FNA | | | | S | Sb | 20 47 25.6 | +0.4 |
| | baz=129 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=N,0.1nm,0.3s,baz=129 | | | | | | |
| FNA | Florina | 1.21 | 130 | ePg | Pg | 20 47 08.1 | -0.9 |
| FNA | | | | eSg | Sg | 20 47 24.3 | -0.4 |
| FNA | Florina | 1.21 | 130 | *i* Pg | Pg | 20 47 08.3 | -0.7 |
| FNA | | | | *i* Sg | Sn | 20 47 26.4 | +0.1 |
| SJES | Sjenica | 1.70 | 356 | ePg | Pb | 20 47 17.9 | +0.3 |
| SJES | | | | eSg | Sg | 20 47 40.6 | +0.2 |
| SJES | Sjenica | 1.70 | 356 | ePn | Pn | 20 47 16.8 | +0.6 |
| SJES | | | | eSn | Sb | 20 47 39.4 | +0.1 |
| TREB | Trebinje | 1.76 | 311 | ePn | Pn | 20 47 17.5 | +0.6 |
| TREB | | | | eSn | Sb | 20 47 41.0 | 0.0 |
| BRY | Bratogost | 1.79 | 319 | ePn | Pn | 20 47 17.6 | +0.2 |
| BRY | | | | eSn | Sb | 20 47 42.1 | +0.2 |
| SELS | Selova | 1.81 | 23 | ePn | Pn | 20 47 17.0 | -0.6 |
| SELS | | | | eSn | Sn | 20 47 40.3 | -0.6 |
| UPM | Unac-Piva | 1.88 | 331 | ePn | Pn | 20 47 19.1 | +0.4 |
| UPM | | | | eSn | Sb | 20 47 44.1 | -0.4 |
| KLINJ | Klinje | 1.98 | 325 | ePn | Pn | 20 47 20.8 | +0.8 |
| KLINJ | | | | eSn | Sb | 20 47 46.3 | -0.9 |
| IGT | Igoumenitsa | 2.03 | 176 | P | Pn | 20 47 21.5 | +0.8 |
| | baz=175 | | | | | | |
| IGT | | | | S | Sb | 20 47 47.9 | -0.8 |
| | baz=175 | | | | | | |
| RUDO | Rudo | 2.13 | 345 | ⇑ *i* Pn | Pn | 20 47 23.1 | +1.1 |
| RUDO | | | | eSn | Sb | 20 47 50.8 | -0.8 |
| STON | Ston | 2.24 | 307 | ePn | Pn | 20 47 24.1 | +0.7 |
| STON | | | | eSn | Sn | 20 47 51.4 | 0.0 |
| BBLS | Lazi&#263i | 2.37 | 347 | ePn | Pn | 20 47 26.4 | +1.1 |
| BBLS | | | | eSn | Sb | 20 47 57.0 | -1.4 |
| BBLS | Lazi&#263i | 2.37 | 347 | ePn | Pn | 20 47 26.8 | +1.5 |
| BBLS | | | | eSn | Sn | 20 47 56.0 | +1.3 |
| HAPS | Han Pijesak,Bl | 2.67 | 341 | ePn | Pn | 20 47 30.5 | +1.0 |
| HAPS | | | | eSn | Sn | 20 48 03.3 | +1.0 |

*IDC* ***15*** *21:06:53.5±4.1, 17°.14N×146°.96E, h59km±35km, mb3.3/12,*
*mbtmp3.7/13, ML3.7/1, MS3.2/3, Error ellipse:*
*s-maj=39.3km s-min=16.7km az=89.0*
**ISC 15 21:06:52.3±1.1,17°.17N±0°.10×147°.1E±0°.2,h48km,n16,**
**σ0s80/16,mb3.8/11,MS3.3/3,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 4.14 | 211 | P | Pn | 21 07 54.1 | +1.1 |
| | 4.9nm,0.3s,baz=191,slow=17,SNR=2.3 | | | | | | |
| GUMO | | | | S | Sn | 21 08 39.3 | -0.9 |
| | 161nm,1.0s,baz=95,slow=24,SNR=2.5 | | | | | | |
| | 100nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 20.83 | 340 | P | P | 21 11 30.7 | +0.8 |
| | 0.8nm,0.6s,baz=164,slow=8.5,SNR=5.1 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| PMG | Port Moresby | 26.40 | 180 | LR | LR | 21 22 58.3 | |
| | comp=Z,76nm,18.2s,baz=304,slow=37 | | | | | | |
| ASAJ | Asahikawa | 27.13 | 353 | LR | LR | 21 23 05.7 | |
| | comp=Z,12nm,19.4s,baz=234,slow=36 | | | | | | |
| WRA | Warramunga Arr | 38.94 | 199 | P | P | 21 14 13.4 | -0.4 |
| | 1.2nm,0.8s,baz=19,slow=9.1,SNR=5.2 | | | | | | |
| WRA | | | | PcP | PcP | 21 16 23.3 | -0.4 |
| | 0.2nm,0.6s,baz=19,slow=3.3,SNR=1.5 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| ASAR | Alice Springs | 42.57 | 198 | P | P | 21 14 43.8 | +0.1 |
| | 0.3nm,0.7s,baz=17,slow=9.7,SNR=2.2 | | | | | | |
| ASAR | | | | PcP | PcP | 21 16 35.2 | -0.3 |
| | 0.3nm,0.7s,baz=34,slow=1.7,SNR=4.2 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| SONM | Songino Array | 45.15 | 322 | P | P | 21 15 03.8 | -0.4 |
| | 0.4nm,0.5s,baz=145,slow=4.8,SNR=3.8 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| CMAR | Chiang Mai Arr | 45.73 | 279 | P | P | 21 15 10.1 | +0.9 |
| | 0.5nm,0.7s,baz=70,slow=7.8,SNR=2.3 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 60.02 | 323 | P | P | 21 16 53.7 | -0.2 |
| | 0.4nm,0.4s,baz=79,slow=9.0,SNR=1.9 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 60.46 | 314 | P | P | 21 16 57.0 | -0.2 |
| | 0.3nm,0.6s,baz=87,slow=7.4,SNR=1.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| URZ | Urewera | 61.93 | 153 | LR | LR | 21 42 22.5 | |
| | comp=Z,55nm,18.0s,baz=30,slow=34 | | | | | | |
| KURBB | Kurchatov Arra | 63.32 | 318 | P | P | 21 17 15.9 | -0.4 |
| | 0.3nm,0.3s,baz=98,slow=7.4,SNR=4.1 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| ILAR | Eielson Array | 64.44 | 26 | P | P | 21 17 24.2 | +0.8 |
| | 0.5nm,0.9s,baz=262,slow=6.1,SNR=4.2 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| BVAR | Borovoye Array | 68.48 | 321 | P | P | 21 17 48.4 | -1.0 |
| | 0.7nm,0.6s,baz=91,slow=7.8,SNR=4.5 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| ARCES | ARCESS Array B | 84.34 | 342 | P | P | 21 19 18.8 | -0.1 |
| | 0.5nm,0.5s,baz=56,slow=5.5,SNR=6.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| FINES | FINESS Array B | 88.81 | 336 | P | P | 21 19 39.3 | -1.5 |
| | 0.9nm,0.7s,baz=76,slow=7.4,SNR=7.5 | | | | | | |
| | 0.9nm,0.7s | | | | | | |

*IDC* ***15*** *21:07:30.2±1.1, 34°.25N×26°.07E, h0km, mb3.9/11,*
*mbtmp3.8/16, ML3.6/5, MS3.7/1, Error ellipse:*
*s-maj=23.5km s-min=16.7km az=177.0*
*AFAD* ***15*** *21:07:34.8±0.0, 34°.45N×26°.35E, h7km±4km, ML2.6*
*GII* ***15*** *21:07:36.4±0.7, 34°.195N±0°.004×26°.462E±0°.002, h60km,*
*Md3.0/1, confirmed*
*THE* ***15*** *21:07:36.9, 34°.37N×26°.17E, h0km±1km, ML2.9/6, Error*
*ellipse: s-maj=3.4km s-min=1.2km az=160.0*
*ATH* ***15*** *21:07:37.7, 34°.41N×26°.18E, h9km±3km, ML2.8/2, Error*
*ellipse: s-maj=7.8km s-min=2.3km az=352.0*
**ISC 15 21:07:30.8±1.4,34°.11N±0°.04×26°.25E±0°.03,h10km±9km,**
**n88,σ2s17/113,mb3.8/11,2D,Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZKR | Zakros | 1.01 | 358 | P | Pn | 21 07 50.8 | -0.2 |
| ZKR | | | | S | Sn | 21 08 02.9 | -2.3 |
| | 788nm,0.7s | | | | | | |
| ZKR | Zakros | 1.01 | 358 | P | Pn | 21 07 50.7 | -0.2 |
| ZKR | | | | S | Sg | 21 07 58.7 | -4.6 |
| ZKR | | | | AML | AML | 21 08 11.2 | |
| | comp=N,1110μm,0.4s | | | | | | |
| ZKR | | | | AML | AML | 21 08 12.1 | |
| | comp=E,1900μm,0.6s | | | | | | |
| KSTL | Kastelli Herak | 1.54 | 321 | P | Pn | 21 07 58.0 | -0.3 |
| KSTL | | | | S | Sn | 21 08 13.5 | -4.9 |
| | comp=E,145nm,0.6s | | | | | | |
| KSTL | Kastelli Herak | 1.54 | 321 | P | Pn | 21 07 58.3 | 0.0 |
| KSTL | | | | S | Sn | 21 08 12.2 | -6.1 |
| KARP | Karpathos | 1.62 | 27 | P | Pg | 21 08 03.0 | +1.1 |
| KARP | | | | S | Sg | 21 08 22.8 | -0.1 |
| | comp=E,608nm,0.9s | | | | | | |
| KARP | Karpathos | 1.62 | 27 | P | Pn | 21 07 59.0 | -0.4 |
| KARP | Karpathos | 1.62 | 27 | P | Pg | 21 08 02.8 | +0.9 |
| IDI | Anoyia | 1.63 | 317 | P | Pg | 21 08 02.3 | +0.3 |
| IDI | | | | S | Sg | 21 08 21.2 | -2.0 |
| | comp=E,190nm,0.6s | | | | | | |
| IDI | Anoyia | 1.63 | 317 | Pn | Pg | 21 08 02.0 | 0.0 |
| | comp=E,6.4nm,0.3s,baz=148,slow=12,SNR=59 | | | | | | |
| IDI | | | | Sn | Sg | 21 08 22.8 | -0.4 |
| | comp=E,7.8nm,0.3s,baz=315,slow=23,SNR=10 | | | | | | |
| IDI | Anoyia | 1.63 | 317 | P | Pg | 21 08 02.0 | 0.0 |
| GVD | Gavdhos | 1.93 | 293 | P | Pb | 21 08 06.5 | +0.4 |
| GVD | | | | S | Sg | 21 08 31.6 | -1.3 |
| IMMV | Iera Moni Meta | 2.31 | 306 | P | Pb | 21 08 11.8 | -0.7 |
| IMMV | | | | S | Sb | 21 08 39.9 | -1.1 |
| | comp=E,248nm,1.1s | | | | | | |
| IMMV | Iera Moni Meta | 2.31 | 306 | P | Pb | 21 08 11.5 | -1.0 |
| IMMV | | | | S | Sn | 21 08 38.2 | +0.9 |
| IMMV | | | | AML | AML | 21 08 43.3 | |
| | comp=E,480μm,0.7s | | | | | | |
| IMMV | | | | AML | AML | 21 09 04.8 | |
| | comp=N,340μm,0.8s | | | | | | |
| SANT | Santorini | 2.35 | 344 | ⇓P | Pg | 21 08 20.4 | +4.6 |
| RODP | Rodopos | 2.51 | 306 | P | Pb | 21 08 15.1 | -0.9 |
| ARG | Arkhangelos | 2.60 | 36 | P | Pb | 21 08 16.7 | -0.9 |
| ARG | | | | S | Sb | 21 08 47.7 | -1.9 |
| | comp=N,152nm,1.5s | | | | | | |
| ARG | Arkhangelos | 2.60 | 36 | P | Pb | 21 08 16.6 | -0.9 |
| ARG | | | | S | Sn | 21 08 44.7 | 0.0 |
| YAZI | Mula-Dat§a- | 2.75 | 21 | P | Pn | 21 08 16.7 | +1.8 |
| YAZI | | | | S | Sn | 21 08 49.0 | +0.8 |
| YAZI | | | | *i* AML | AML | 21 08 50.0 | |
| | comp=N,21nm,0.7s | | | | | | |
| YAZI | | | | *i* AML | AML | 21 09 09.0 | |
| | comp=N,23nm,1.4s | | | | | | |
| DAT | Datca | 2.83 | 22 | P | Pn | 21 08 18.2 | +2.1 |
| DAT | | | | S | Sn | 21 08 52.0 | +1.6 |
| DAT | | | | *i* AML | AML | 21 09 25.0 | |
| | comp=N,34nm,1.5s | | | | | | |
| DAT | | | | *i* AML | AML | 21 09 28.0 | |
| | comp=N,27nm,1.2s | | | | | | |
| DAT | Datca | 2.83 | 22 | P | Pn | 21 08 18.1 | +1.9 |
| MHLO | Agia Marina, M | 2.99 | 330 | P | Pn | 21 08 19.8 | +1.6 |
| ANKY | Antikythira Is | 2.99 | 307 | P | Pn | 21 08 21.2 | +2.9 |
| APE | Apeiranthos | 3.01 | 349 | ⇓P | Pn | 21 08 18.3 | -0.3 |
| APE | Apeiranthos | 3.01 | 349 | P | Pn | 21 08 19.7 | +1.1 |
| BDRM | Kayabasi | 3.11 | 18 | P | Pn | 21 08 22.5 | +2.6 |
| BDRM | | | | S | Sn | 21 08 57.6 | +0.5 |
| BDRM | | | | *i* AML | AML | 21 09 13.0 | |
| | comp=N,38nm,0.3s | | | | | | |
| BDRM | | | | *i* AML | AML | 21 09 20.0 | |
| | comp=N,18nm,0.8s | | | | | | |
| IZZE | Mula-Seydike | 3.37 | 45 | P | Pn | 21 08 26.0 | +2.6 |
| IZZE | | | | S | Sn | 21 09 03.5 | +0.1 |
| IZZE | | | | *i* AML | AML | 21 09 10.0 | |
| | comp=N,58nm,0.6s | | | | | | |
| IZZE | | | | *i* AML | AML | 21 09 18.0 | |
| | comp=N,40nm,0.4s | | | | | | |
| FETY | Fethiye | 3.42 | 42 | P | Pb | 21 08 29.0 | -2.5 |
| SABU | Mula-Dalaman | 3.50 | 38 | P | Pn | 21 08 28.0 | +2.7 |
| SABU | | | | S | Sn | 21 09 07.7 | +0.9 |
| SABU | | | | *i* AML | AML | 21 09 23.0 | |
| | comp=N,17nm,0.7s | | | | | | |
| SABU | | | | *i* AML | AML | 21 09 52.0 | |
| | comp=N,38nm,1.4s | | | | | | |
| DNZT | Denizli-Tavas- | 3.89 | 35 | P | Pn | 21 08 33.5 | +2.8 |
| DNZT | | | | S | Sn | 21 09 18.3 | +1.9 |
| DNZT | | | | *i* AML | AML | 21 09 26.0 | |
| | comp=N,16nm,1.1s | | | | | | |
| DNZT | | | | *i* AML | AML | 21 09 59.0 | |
| | comp=N,21nm,1.2s | | | | | | |
| CAEL | Denizli, Camel | 3.91 | 39 | P | Pn | 21 08 34.7 | +3.7 |
| CAEL | | | | S | Sn | 21 09 21.6 | +4.5 |
| CAEL | | | | *i* AML | AML | 21 09 24.0 | |
| | comp=N,76nm,0.6s | | | | | | |
| CAEL | | | | *i* AML | AML | 21 10 07.0 | |
| | comp=N,69nm,1.8s | | | | | | |
| TAVA | DENIZLI_Tavas | 3.99 | 32 | P | Pn | 21 08 35.1 | +3.0 |
| TAVA | | | | S | Sn | 21 09 18.9 | 0.0 |
| TAVA | | | | *i* AML | AML | 21 09 22.0 | |
| | comp=N,14nm,0.9s | | | | | | |
| TAVA | | | | *i* AML | AML | 21 09 24.0 | |
| | comp=N,20nm,0.6s | | | | | | |
| ESEN | Aydn-Nazilli | 4.06 | 24 | P | Pn | 21 08 35.3 | +2.4 |
| ESEN | | | | S | Sn | 21 09 21.8 | +1.4 |
| ESEN | | | | *i* AML | AML | 21 09 22.0 | |
| | comp=N,9.9nm,0.7s | | | | | | |
| ESEN | | | | *i* AML | AML | 21 09 26.0 | |
| | comp=N,13nm,0.9s | | | | | | |
| DNIZ | Denizli-Tavas- | 4.18 | 32 | P | Pn | 21 08 37.9 | +3.3 |
| DNIZ | | | | S | Sn | 21 09 27.2 | +3.7 |
| DNIZ | | | | *i* AML | AML | 21 09 30.0 | |
| | comp=N,38nm,0.2s | | | | | | |
| DNIZ | | | | *i* AML | AML | 21 09 32.0 | |
| | comp=N,50nm,0.3s | | | | | | |
| CSS | Mathiatis | 5.90 | 80 | P | Pn | 21 09 02.4 | +4.1 |
| CSS | | | | S | Sn | 21 10 02.2 | -3.8 |
| CSS | Mathiatis | 5.90 | 80 | P | Pn | 21 08 59.3 | +1.0 |
| CSS | Mathiatis | 5.90 | 80 | S | Sn | 21 10 04.2 | -1.9 |
| KZIT | Kziot | 7.58 | 113 | P | Pn | 21 09 22.8 | +1.4 |
| KZIT | Kziot | 7.58 | 113 | P | Pn | 21 09 22.4 | +1.1 |
| KZIT | Kziot | 7.58 | 113 | S | Sn | 21 10 44.9 | -2.4 |
| MMAI | Mount Meron Ar | 7.71 | 96 | P | Pn | 21 09 24.4 | +1.2 |
| | comp=N,1.6nm,0.3s,baz=290,slow=11,SNR=14 | | | | | | |
| MMAI | | | | Sn | Sn | 21 10 49.3 | -1.4 |
| | comp=N,3.4nm,0.3s,baz=262,slow=22,SNR=3.7 | | | | | | |
| | comp=N,0.8nm,0.3s | | | | | | |
| AMAZ | Amatzia | 7.73 | 107 | P | Pn | 21 09 26.3 | +2.9 |
| AMAZ | Amatzia | 7.73 | 107 | P | Pn | 21 09 25.6 | +2.2 |
| AMAZ | Amatzia | 7.73 | 107 | S | Sn | 21 10 48.4 | -2.6 |
| SALP | Salfit | 7.77 | 103 | P | Pn | 21 09 25.4 | +1.4 |
| SALP | Salfit | 7.77 | 103 | S | Sn | 21 10 50.2 | -1.9 |
| MMLI | Mount Malkishu | 7.86 | 100 | P | Pn | 21 09 25.1 | 0.0 |
| MMLI | Mount Malkishu | 7.86 | 100 | S | Sn | 21 10 51.7 | -2.4 |
| GEM | Giv'at Ha'Em | 7.90 | 94 | P | Pn | 21 09 26.3 | +0.6 |
| GEM | Giv'at Ha'Em | 7.90 | 94 | S | Sn | 21 10 53.5 | -1.6 |
| NATI | Neve Ativ | 7.95 | 93 | P | Pn | 21 09 27.9 | +1.5 |
| NATI | Neve Ativ | 7.95 | 93 | P | Pn | 21 09 27.7 | +1.3 |
| HMDT | Nahal Hemdat | 7.99 | 101 | P | Pn | 21 09 28.3 | +1.4 |
| UJAP | Al Uja | 8.03 | 103 | P | Pn | 21 09 29.0 | +1.6 |
| UJAP | Al Uja | 8.03 | 103 | P | Pn | 21 09 28.5 | +1.1 |
| DSI | Dead Sea | 8.09 | 106 | P | Pn | 21 09 26.9 | -1.4 |
| DSI | Dead Sea | 8.09 | 106 | P | Pn | 21 09 29.6 | +1.4 |
| DSI | Dead Sea | 8.09 | 106 | S | Sn | 21 10 58.2 | -1.5 |
| BRTR | Keskin Array B | 8.15 | 44 | Pn | Pn | 21 09 30.9 | +1.7 |
| | comp=N,0.1nm,0.3s,baz=239,slow=12,SNR=5.6 | | | | | | |
| BRTR | | | | Sn | Sn | 21 10 58.1 | -3.3 |
| | comp=N,0.1nm,0.3s,baz=227,slow=46,SNR=1.2 | | | | | | |
| | comp=N,1.0nm,0.7s | | | | | | |
| MSBI | Mazada | 8.16 | 107 | P | Pn | 21 09 32.3 | +3.0 |
| KRMI | Paran Flat | 8.21 | 117 | P | Pn | 21 09 30.7 | +0.7 |
| KRMI | Paran Flat | 8.21 | 117 | S | Sn | 21 10 58.5 | -4.4 |
| LISJ | El Lisan | 8.29 | 108 | P | Pn | 21 09 33.0 | +2.0 |
| PRNI | Paran | 8.30 | 114 | P | Pn | 21 09 33.1 | +1.8 |
| PRNI | Paran | 8.30 | 114 | P | Pn | 21 09 32.9 | +1.6 |
| PRNI | Paran | 8.30 | 114 | S | Sn | 21 11 03.0 | -2.2 |
| HRFI | Mount Harif | 8.48 | 116 | P | Pn | 21 09 36.1 | +2.4 |
| HRFI | Mount Harif | 8.48 | 116 | S | Sn | 21 11 07.7 | -1.9 |
| MBRI | Mt Berech | 8.52 | 118 | P | Pn | 21 09 37.0 | +2.7 |
| MBRI | Mt Berech | 8.52 | 118 | P | Pn | 21 09 36.9 | +2.4 |
| EIL | Elat | 8.62 | 119 | Pn | Pn | 21 09 36.9 | +1.4 |
| | comp=N,1.3nm,0.3s,baz=327,slow=5.0,SNR=13 | | | | | | |
| EIL | | | | Sn | Sn | 21 11 08.6 | -4.2 |
| | comp=N,2.3nm,0.3s,baz=359,slow=5.1,SNR=7.1 | | | | | | |
| | comp=N,3.5nm,0.5s | | | | | | |
| EIL | Elat | 8.62 | 119 | S | Sn | 21 11 11.2 | -1.6 |
| EIL | Elat | 8.62 | 119 | P | Pn | 21 09 37.9 | +2.3 |
| AQBJ | Aqaba | 8.66 | 118 | P | Pn | 21 09 39.4 | +3.3 |
| ASF | Jabal al Asfar | 9.13 | 99 | P | Pn | 21 09 43.0 | +0.3 |
| AKASG | Malin Array Be | 16.73 | 7 | Pn | Pn | 21 11 25.6 | +0.5 |
| | comp=N,1.1nm,0.3s,baz=196,slow=10,SNR=4.9 | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | |
| DAVOX | Davos/Dischmat | 17.72 | 320 | P | Pn | 21 11 37.8 | +0.1 |
| | comp=N,0.1nm,0.3s,baz=168,slow=17,SNR=3.6 | | | | | | |
| | comp=N,1.1nm,0.4s | | | | | | |
| ESDC | Sonseca Array | 24.73 | 292 | P | P | 21 12 50.8 | -1.5 |
| | comp=N,0.7nm,0.8s,baz=81,slow=9.2,SNR=11 | | | | | | |
| | comp=N,0.7nm,0.8s | | | | | | |
| HFS | Hagfors | 27.31 | 346 | P | P | 21 13 13.1 | -2.2 |
| | comp=N,1.2nm,0.6s,baz=113,slow=11,SNR=5.0 | | | | | | |
| | comp=N,1.2nm,0.6s | | | | | | |
| FINES | FINESS Array B | 27.35 | 360 | P | P | 21 13 14.2 | -1.5 |
| | comp=N,0.9nm,0.7s,baz=165,slow=7.9,SNR=5.7 | | | | | | |
| | comp=N,0.9nm,0.7s | | | | | | |
| EKA | Eskdalemuir Ar | 29.42 | 325 | P | P | 21 13 33.9 | -0.3 |
| | comp=N,8.4nm,1.3s,baz=114,slow=12,SNR=1.9 | | | | | | |
| | comp=N,8.4nm,1.3s | | | | | | |
| TORD | Torodi Ar. Bea | 30.54 | 233 | P | P | 21 13 46.1 | +1.6 |
| | comp=N,0.8nm,0.9s,baz=55,slow=7.6,SNR=6.0 | | | | | | |
| | comp=N,0.8nm,0.9s | | | | | | |
| ARCES | ARCESS Array B | 35.48 | 360 | P | P | 21 14 26.1 | -1.1 |
| | comp=N,1.5nm,1.0s,baz=173,slow=8.2,SNR=5.8 | | | | | | |
| | comp=N,1.5nm,1.0s | | | | | | |
| BVAR | Borovoye Array | 36.44 | 45 | P | P | 21 14 37.3 | +1.8 |
| | comp=N,1.7nm,0.8s,baz=259,slow=6.9,SNR=11 | | | | | | |
| | comp=N,1.7nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 41.09 | 50 | P | P | 21 15 16.6 | +2.1 |
| | comp=N,2.3nm,0.6s,baz=276,slow=8.7,SNR=23 | | | | | | |
| | comp=N,2.3nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 43.61 | 56 | P | P | 21 15 37.0 | +1.8 |
| | comp=N,1.6nm,0.6s,baz=273,slow=6.4,SNR=12 | | | | | | |
| | comp=N,1.6nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 45.09 | 45 | P | P | 21 15 48.1 | +1.3 |
| | comp=N,1.2nm,0.4s,baz=267,slow=8.6,SNR=6.7 | | | | | | |
| | comp=N,1.2nm,0.4s | | | | | | |
| MATP | Matopo | 54.27 | 177 | LR | LR | 21 41 49.7 | |
| | comp=N,61nm,18.2s,baz=236,slow=38 | | | | | | |
| SONM | Songino Array | 59.46 | 50 | P | P | 21 17 34.4 | +0.5 |
| | comp=N,0.4nm,0.7s,baz=289,slow=9.0,SNR=1.8 | | | | | | |
| | comp=N,0.4nm,0.7s | | | | | | |

*NEIC* ***15*** *21:18:01.1±1.2, 69°.48N±0°.04×144°.0W±0°.1, h2km±6km,*
*Error ellipse: s-maj=6.5km s-min=4.5km az=125.0*
**AEIC 15 21:18:01.7±1.7,69°.35N±0°.04×143°.9W±0°.1,h7km±7km,**
**ML2.5,Error ellipse: s-maj=6.5km s-min=6.0km**
**az=152.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.29 | 14 | Pg | Pg | 21 18 03.8 | -3.5 |
| C27K | | | | Sg | Sg | 21 18 06.8 | -4.3 |
| D25K | Kavik River | 0.88 | 269 | Pg | Pg | 21 18 14.6 | -3.9 |
| D27M | Malcolm River | 1.05 | 94 | Pg | Pg | 21 18 21.9 | 0.0 |
| E27K | Coleen River | 1.44 | 143 | Pn | Pg | 21 18 29.9 | +0.7 |
| F26K | Sheenjek River | 1.66 | 183 | Pn | Pb | 21 18 32.9 | +0.3 |
| C24K | Franklin Bluff | 1.73 | 285 | Pn | Pn | 21 18 31.6 | -0.5 |
| E28M | Babbage River | 1.75 | 113 | | Pn | 21 18 33.0 | +0.6 |
| D24K | Happy Valley | 1.76 | 266 | Pn | Pn | 21 18 32.3 | -0.3 |
| D28M | Stokes Point | 1.83 | 88 | | Pb | 21 18 35.4 | -0.1 |
| F25K | Christian Rive | 1.88 | 201 | | Pb | 21 18 35.6 | -0.7 |
| BMAR | Burnt Mountain | 1.94 | 188 | Pn | Pb | 21 18 37.0 | -0.5 |
| E24K | Your Creek | 2.10 | 235 | | Pn | 21 18 38.7 | +1.3 |
| TOLK | Toolik Lake Re | 2.16 | 253 | Pn | Pn | 21 18 39.0 | +0.8 |
| F28M | Old Crow | 2.29 | 138 | | Pn | 21 18 41.5 | +1.6 |
| F24K | Squaw Lake | 2.35 | 221 | | Pn | 21 18 40.9 | +0.1 |
| E29M | Blow River | 2.38 | 111 | | Pn | 21 18 42.8 | +1.7 |
| C23K | Itkillik River | 2.40 | 285 | | Pn | 21 18 41.0 | -0.3 |
| G26K | Porcupine Rive | 2.41 | 179 | | Pb | 21 18 43.4 | -1.9 |
| D23K | Nanushuk River | 2.45 | 264 | | Pn | 21 18 43.4 | +1.3 |
| E23K | Chandalar | 2.46 | 241 | Pn | Pn | 21 18 44.0 | +1.7 |
| G27K | Doyon Strip | 2.69 | 161 | | Pn | 21 18 47.1 | +1.7 |
| E22K | Anaktuvuk Pass | 3.13 | 251 | | Pn | 21 18 50.4 | -1.0 |
| G29M | Pine Creek | 3.29 | 135 | Pn | Pn | 21 18 55.0 | +1.4 |
| B22K | Teshekpuk Lake | 3.44 | 291 | Pn | Pn | 21 18 53.6 | -2.0 |
| H29M | Whitestone | 3.78 | 144 | Pn | Pn | 21 19 02.4 | +2.1 |
| H24K | Noodor Dome | 3.84 | 205 | | Pn | 21 19 02.2 | +0.9 |
| I26K | Coal Creek Min | 4.07 | 176 | | Pn | 21 19 06.8 | +2.5 |
| F21K | Alatna River | 4.15 | 244 | | Pn | 21 19 05.5 | +0.1 |
| I28M | Miner Creek | 4.21 | 157 | | Pn | 21 19 08.7 | +2.4 |
| I29M | Ogilvie Camp, | 4.55 | 149 | Pn | P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| F25K | | | | IAML | | | 21 19 17.6 | |
| | comp=N,65nm,1.0s | | | | | | | |
| **E24K** | **Your Creek** | **2.03 227** | Pn | Pg | | | 21 18 50.1 | +0.2 |
| **BMAR** | **Burnt Mountain** | **2.08 181** | Pn | Pb | | | 21 18 50.0 | +0.6 |
| **C23K** | **Itkillik River** | **2.16 282** | Pn | Pb | | | 21 18 50.4 | -0.3 |
| C23K | | | | IAML | | | 21 19 25.1 | |
| | comp=E,77nm,0.4s | | | | | | | |
| C23K | | | | IAML | | | 21 19 26.6 | |
| | comp=N,74nm,0.7s | | | | | | | |
| **F28M** | **Old Crow** | **2.55 136** | Pn | Pn | | | 21 18 54.4 | +1.1 |
| F28M | | | | IAML | | | 21 19 37.7 | |
| | comp=E,32nm,1.0s | | | | | | | |
| F28M | | | | IAML | | | 21 19 40.0 | |
| | comp=N,23nm,0.7s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19 290** | Pn | Pn | | | 21 19 02.9 | +0.9 |
| B22K | | | | IAML | | | 21 19 35.0 | |
| | comp=N,64nm,2.9s | | | | | | | |
| B22K | | | | IAML | | | 21 19 59.1 | |
| | comp=E,60nm,2.6s | | | | | | | |
| **G29M** | **Pine Creek** | **3.55 134** | Pn | Pn | | | 21 19 08.9 | +1.9 |
| G29M | | | | IAML | | | 21 20 10.1 | |
| | comp=N,18nm,0.9s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.89 201** | Pn | Pn | | | 21 19 13.6 | +1.9 |
| H24K | | | | IAML | | | 21 20 18.5 | |
| | comp=N,11nm,0.9s | | | | | | | |
| H24K | | | | IAML | | | 21 20 21.9 | |
| | comp=E,8.8nm,1.1s | | | | | | | |
| **H29M** | **Whitestone** | **4.03 142** | Pn | Pn | | | 21 19 15.8 | +2.1 |
| H29M | | | | IAML | | | 21 20 13.0 | |
| | comp=E,11nm,0.6s | | | | | | | |
| H29M | | | | IAML | | | 21 20 29.6 | |
| | comp=N,13nm,1.3s | | | | | | | |
| **I28M** | **Miner Creek** | **4.43 154** | Pn | Pn | | | 21 19 21.5 | +2.3 |
| I28M | | | | IAML | | | 21 20 40.8 | |
| | comp=N,6.6nm,2.5s | | | | | | | |
| I28M | | | | IAML | | | 21 20 54.8 | |
| | comp=E,6.5nm,2.8s | | | | | | | |
| **G31M** | **Satah River** | **4.61 119** | Pn | Pn | | | 21 19 22.8 | +1.2 |
| **MDM** | **Murphy Dome** | **4.78 199** | Pn | Pn | | | 21 19 25.6 | +1.6 |
| MDM | | | | IAML | | | 21 20 47.4 | |
| | comp=N,5.7nm,0.7s | | | | | | | |
| MDM | | | | IAML | | | 21 20 51.2 | |
| | comp=E,5.9nm,0.9s | | | | | | | |
| **J25K** | **Salcha River,** | **4.92 184** | Pn | Pn | | | 21 19 28.6 | +2.7 |
| J25K | | | | IAML | | | 21 20 14.1 | |
| | comp=N,4.8nm,3.6s | | | | | | | |
| J25K | | | | IAML | | | 21 20 27.7 | |
| | comp=E,5.9nm,3.6s | | | | | | | |
| **D19K** | **Kuna River** | **4.99 265** | Pn | Pn | | | 21 19 27.9 | +1.1 |
| D19K | | | | IAML | | | 21 20 16.0 | |
| | comp=N,0.1nm,0.6s | | | | | | | |
| D19K | | | | IAML | | | 21 21 31.4 | |
| | comp=E,9.0nm,3.4s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.32 140** | Pn | Pn | | | 21 19 33.0 | +1.6 |
| I30M | | | | IAML | | | 21 21 10.9 | |
| | comp=N,4.4nm,3.6s | | | | | | | |
| **SCRK** | **Sand Creek** | **5.55 178** | Pn | Pn | | | 21 19 37.6 | +3.0 |
| **J30M** | **Hart River** | **5.89 143** | Pn | Pn | | | 21 19 40.7 | +1.5 |

*LDG **15** 21:35:38.7±0.1, 48°90N×6°87E, h5km, Md1.8/1, Ml1.8/7, Error ellipse: s-maj=2.3km s-min=1.3km az=156.0*

**STR 15 21:35:39.0±0.4, 49°N±2°×±°, h5km, MLv1.4/17, Error ellipse: s-maj=0.0km s-min=0.0km az=3.8, preliminary, France**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **VOEL** | **Voellerdingen** | **0.14** | **71** | Pg | | Pg | 21 | 35 | 42.6 | +0.7 |
| VOEL | | | | Sg | | Sg | 21 | 35 | 45.3 | +1.6 |
| **CIEL** | **Dossenheim-sur** | **0.30** | **107** | Pg | | Pg | 21 | 35 | 45.3 | +0.3 |
| CIEL | | | | Sg | | Sg | 21 | 35 | 49.1 | +0.2 |
| **HOHE** | **HOHENGOEFT** | **0.46** | **125** | Pg | | Pg | 21 | 35 | 47.6 | -0.2 |
| HOHE | | | | Sg | | Sg | 21 | 35 | 53.7 | 0.0 |
| **XAFF** | **Xaffevillers** | **0.55** | **202** | Pg | | Pg | 21 | 35 | 49.2 | -0.4 |
| XAFF | | | | Sg | | Sg | 21 | 35 | 56.9 | +0.1 |
| **CDF** | **Champ du Feu** | **0.56** | **155** | *e*Pg | | Pg | 21 | 35 | 49.2 | -0.6 |
| CDF | | | | *e*Sg | | Sg | 21 | 35 | 56.3 | -0.8 |
| | 5.8nm,0.2s | | | | | | | | | |
| **LEMB** | **Lembach** | **0.56** | **78** | Pg | | Pg | 21 | 35 | 49.1 | -0.7 |
| LEMB | | | | Sg | | Sg | 21 | 35 | 56.1 | -1.0 |
| **WLS** | **Welschbruch** | **0.58** | **151** | Pg | | Pg | 21 | 35 | 49.8 | -0.4 |
| WLS | | | | Sg | | Sg | 21 | 35 | 58.6 | +0.8 |
| **SUBF** | **Surbourg** | **0.61** | **90** | Pg | | Pg | 21 | 35 | 50.6 | -0.1 |
| **SZBH** | **soultz borehol** | **0.62** | **89** | Pg | | Pg | 21 | 35 | 50.9 | 0.0 |
| SZBH | | | | Sg | | Sg | 21 | 35 | 59.1 | +0.1 |
| **MANO** | **Manonville** | **0.67** | **262** | Pg | | Pg | 21 | 35 | 51.9 | +0.1 |
| MANO | | | | Sg | | Sg | 21 | 36 | 00.9 | +0.4 |
| **ECH** | **Echery** | **0.72** | **167** | Pg | | Pg | 21 | 35 | 52.3 | -0.6 |
| ECH | | | | Sg | | Sg | 21 | 36 | 02.1 | -0.2 |
| **KTD** | **Kalmit** | **0.86** | **62** | Pg | | Pg | 21 | 35 | 54.5 | -1.0 |
| **PAGF** | **Fort de Pagny** | **0.88** | **246** | *e*Pg | | Pg | 21 | 35 | 54.6 | -1.2 |
| PAGF | | | | *e*Sg | | Sg | 21 | 36 | 04.9 | -2.2 |
| | 1.2nm,0.2s | | | | | | | | | |
| **WLF** | **Walferdange** | **0.90** | **326** | Pg | | Pg | 21 | 35 | 56.1 | -0.2 |
| **WLF** | **Walferdange** | **0.90** | **326** | Sg | | Sg | 21 | 36 | 07.8 | -0.1 |
| **OPP** | **Oppenau** | **0.94** | **117** | Pg | | Pg | 21 | 35 | 56.9 | -0.1 |
| **HAU** | **Haudompre** | **0.99** | **203** | *e*Pg | | Pg | 21 | 35 | 56.1 | -2.0 |
| HAU | | | | *e*Sg | | Sg | 21 | 36 | 09.0 | -1.9 |
| | 3.3nm,0.2s | | | | | | | | | |
| **ABH** | **Alteburg** | **1.04** | **23** | Pg | | Pg | 21 | 35 | 57.8 | -1.2 |
| **MOF** | **Molkenrain** | **1.08** | **173** | Pg | | Pg | 21 | 35 | 59.2 | -0.5 |
| MOF | | | | Sg | | Sg | 21 | 36 | 11.1 | -2.6 |
| **HINF** | **Hinteralfeld** | **1.11** | **182** | *e*Pg | | Pg | 21 | 35 | 58.9 | -1.3 |
| HINF | | | | *e*Sg | | Sg | 21 | 36 | 12.8 | -1.8 |
| | 2.5nm,0.2s | | | | | | | | | |
| **KIZ** | **Kirchzarten** | **1.17** | **145** | Pg | | Pg | 21 | 36 | 00.4 | -1.1 |
| **KIZ** | **Kirchzarten** | **1.17** | **145** | Sg | | Sg | 21 | 36 | 15.9 | -0.8 |
| **SAVF** | **Savonnieres en** | **1.23** | **256** | *e*Sg | | Sg | 21 | 36 | 16.3 | -2.2 |
| | 2.5nm,0.3s | | | | | | | | | |
| **FELD** | **Feldberg im Sc** | **1.27** | **145** | Pg | | Pg | 21 | 36 | 02.6 | -0.8 |
| **FELD** | **Feldberg im Sc** | **1.27** | **145** | Sg | | Sg | 21 | 36 | 18.8 | -1.0 |
| **MEZF** | **Maizieres J'vi** | **1.31** | **252** | *e*Pg | | Pn | 21 | 36 | 01.6 | -2.3 |
| MEZF | | | | *e*Sg | | Sg | 21 | 36 | 17.8 | -3.3 |
| | 1.8nm,0.4s | | | | | | | | | |
| **SFTF** | **Sexfontaines** | **1.44** | **241** | *e*Sg | | Sb | 21 | 36 | 22.9 | -2.1 |
| | 0.7nm,0.2s,baz=56 | | | | | | | | | |
| **SLE** | **Schleitheim** | **1.56** | **137** | Pg | | Pb | 21 | 36 | 08.1 | -0.3 |
| **SULZ** | **Cheisacher** | **1.61** | **150** | Pg | | Pb | 21 | 36 | 09.1 | -0.1 |
| **CHMF** | **Charmoille** | **1.69** | **186** | Pg | | Pb | 21 | 36 | 10.9 | -0.4 |
| **GUT** | **Gutenstein** | **1.69** | **120** | Pg | | Pb | 21 | 36 | 10.6 | +0.1 |
| **CABF** | **La Chapelle** | **2.38** | **194** | *e*Sg | | Sb | 21 | 36 | 51.4 | -0.7 |
| | 0.8nm,0.2s | | | | | | | | | |
| **LOR** | **Lormes** | **2.64** | **232** | *e*Sg | | Sb | 21 | 36 | 59.5 | +0.1 |
| | 0.6nm,0.3s | | | | | | | | | |

*NEIC **15** 21:38:05.4±1.6, 18°0S±0°1×178°2W±0°1, h564km±7km, mb4.5/40, Error ellipse: s-maj=20.0km s-min=15.6km az=146.0*

*IDC **15** 21:38:07.4±0.9, 18°07S×178°09W, h602km±10km, mb3.6/16, mbtmp4.5/19, Error ellipse: s-maj=15.8km s-min=11.5km az=162.0*

**ISC 15 21:38:07.0±0.4, 18°00S±0°09×178°19W±0°07, h600km, n187, σ0°93/194, mb4.4/34, 31C-13D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **MSVF** | **Nonsavu** | **3.59** | **274** | P | | **P** | **21** | **39** | **31.7** | **+1.8** |
| **MSVF** | **Nonsavu** | **3.59** | **274** | P | | **P** | **21** | **39** | **32.0** | **+2.1** |
| | 358nm,0.8s,baz=125,slow=6.2,SNR=157 | | | | | | | | | |
| MSVF | | | | S | | **S** | **21** | **40** | **40.0** | **+2.6** |
| | 11nm,0.8s,baz=2.3,slow=22,SNR=0.5 | | | | | | | | | |
| **LIFNC** | **LIFOU** | **14.03** | **256** | P | | **P** | **21** | **41** | **05.2** | **-1.0** |
| **PINNC** | **Pines Island,** | **14.24** | **249** | P | | **P** | **21** | **41** | **07.9** | **-0.3** |
| **DZM** | **Mont Dzumac** | **15.00** | **252** | P | | **P** | **21** | **41** | **16.0** | **+0.7** |
| DZM | | | | IAmb | | IAmb | 21 | 41 | 30.9 | |
| | comp=Z,31nm,1.4s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.00** | **252** | P | | **P** | **21** | **41** | **15.8** | **+0.4** |
| | comp=Z,11nm,0.9s,baz=177,slow=13,SNR=7.4 | | | | | | | | | |
| **RAR** | **Rarotonga** | **17.64** | **103** | P | | **P** | **21** | **41** | **38.3** | **-1.1** |
| | comp=Z,21nm,0.9s,baz=244,slow=8.3,SNR=7.5 | | | | | | | | | |
| **PPT** | **Papeete** | **27.24** | **94** | P | | **P** | **21** | **43** | **03.3** | **-1.7** |
| | comp=Z,25nm,0.6s,baz=97,slow=5.7,SNR=4.4 | | | | | | | | | |
| | comp=Z,25nm,0.6s | | | | | | | | | |
| **ARMA** | **Armidale** | **30.08** | **240** | P | | **P** | **21** | **43** | **29.3** | **-0.3** |
| ARMA | | | | IAmb | | IAmb | 21 | 43 | 33.7 | |
| | comp=Z,13nm,1.4s | | | | | | | | | |
| **CTA** | **Charters Tower** | **33.64** | **261** | P | | **P** | **21** | **44** | **00.1** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=119,slow=9.6,SNR=3.0 | | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.64** | **261** | P | | **P** | **21** | **43** | **59.8** | **0.0** |
| CTAO | | | | IAmb | | IAmb | 21 | 44 | 12.5 | |
| | comp=Z,20nm,1.4s | | | | | | | | | |
| **CAN** | **Canberra** | **33.82** | **233** | P | | **P** | **21** | **44** | **01.5** | **+0.4** |
| **TOO** | **Toolangi** | **37.28** | **231** | P | | **P** | **21** | **44** | **30.1** | **+0.5** |
| TOO | | | | IAmb | | IAmb | 21 | 44 | 35.0 | |
| | comp=Z,26nm,1.2s | | | | | | | | | |
| **COEN** | **Coen** | **37.32** | **270** | P | | **P** | **21** | **44** | **30.8** | **+0.6** |
| **TAOE** | **Nuku Hiva Isla** | **38.03** | **81** | P | | **P** | **21** | **44** | **35.7** | **-0.4** |
| **STKA** | **Stephens Creek** | **38.77** | **241** | P | | **P** | **21** | **44** | **42.4** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.77** | **241** | P | | **P** | **21** | **44** | **42.4** | **+0.6** |
| | comp=Z,3.3nm,0.5s,baz=86,slow=9.8,SNR=9.6 | | | | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | | | | |
| **WAKE** | **Wake Island** | **39.93** | **337** | P | | **P** | **21** | **44** | **50.1** | **-0.9** |
| **BBOO** | **Buckleboo** | **43.55** | **241** | P | | **P** | **21** | **45** | **19.9** | **+0.6** |
| **WB0** | **Warramunga Arr** | **44.79** | **260** | P | | **P** | **21** | **45** | **29.0** | **-0.1** |
| WB0 | | | | IAmb | | IAmb | 21 | 45 | 29.9 | |
| | comp=Z,8.2nm,0.7s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | | **P** | **21** | **45** | **29.3** | **-0.1** |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | | **P** | **21** | **45** | **29.4** | **+0.1** |
| | comp=Z,5.5nm,0.7s,baz=95,slow=7.2,SNR=134 | | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **21** | **46** | **58.1** | **+0.1** |
| | comp=Z,1.6nm,0.8s,baz=89,slow=3.6,SNR=7.0 | | | | | | | | | |
| WRA | | | | S | | **S** | **21** | **51** | **19.3** | **-5.2** |
| | comp=Z,1.7nm,0.8s,baz=99,slow=13,SNR=6.1 | | | | | | | | | |
| | comp=Z,5.5nm,0.7s | | | | | | | | | |
| **AS31** | **Alice Springs** | **44.97** | **254** | P | | **P** | **21** | **45** | **30.9** | **+0.4** |
| AS31 | | | | IAmb | | IAmb | 21 | 45 | 32.1 | |
| | comp=Z,4.9nm,0.6s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.97** | **254** | P | | **P** | **21** | **45** | **30.7** | **+0.3** |
| **ASAR** | **Alice Springs** | **44.97** | **254** | P | | **P** | **21** | **45** | **31.1** | **+0.6** |
| | comp=Z,14nm,0.6s,baz=86,slow=8.8,SNR=142 | | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **21** | **46** | **58.7** | **+0.1** |
| | comp=Z,2.3nm,0.6s,baz=100,slow=4.1,SNR=11 | | | | | | | | | |
| ASAR | | | | S | | **S** | **21** | **51** | **24.3** | **-2.2** |
| | comp=Z,5.3nm,1.0s,baz=89,slow=15,SNR=25 | | | | | | | | | |
| | comp=Z,14nm,0.6s | | | | | | | | | |
| **MTN** | **Manton Dam** | **49.01** | **268** | P | | **P** | **21** | **46** | **00.6** | **-0.2** |
| MTN | | | | IAmb | | IAmb | 21 | 46 | 01.8 | |
| | comp=Z,9.9nm,0.8s | | | | | | | | | |
| **FORT** | **Forrest** | **50.16** | **245** | P | | **P** | **21** | **46** | **08.8** | **-0.2** |
| **KNRA** | **Kununurra** | **50.69** | **264** | P | | **P** | **21** | **46** | **12.8** | **-0.2** |
| **MBWA** | **Marble Bar** | **58.26** | **256** | P | | **P** | **21** | **47** | **05.6** | **-0.3** |
| **SBA** | **Scott Base** | **60.34** | **184** | P | | **P** | **21** | **47** | **20.6** | **+1.9** |
| **TOLI2** | **Tolitoli** | **62.94** | **261** | P | | **P** | **21** | **47** | **37.5** | **+0.9** |
| **CASY** | **Casey** | **66.15** | **105** | P | | **P** | **21** | **47** | **56.2** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **66.25** | **269** | P | | **P** | **21** | **47** | **56.7** | **-0.7** |
| **JGF** | **Kuroka** | **67.94** | **322** | P | | **P** | **21** | **48** | **07.5** | **+0.2** |
| JGF | | | | IAmb | | IAmb | 21 | 48 | 16.8 | |
| | comp=Z,13nm,1.1s | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.10** | **323** | P | | **P** | **21** | **48** | **08.6** | **+0.3** |
| | comp=Z,10nm,0.8s,baz=156,slow=5.5,SNR=23 | | | | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **68.11** | **323** | P | | **P** | **21** | **48** | **08.4** | **+0.1** |
| MAJO | | | | IAmb | | IAmb | 21 | 48 | 09.6 | |
| | comp=Z,15nm,1.0s | | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.11** | **323** | P | | **P** | **21** | **48** | **08.5** | **+0.1** |
| MJB9 | | | | IAmb | | IAmb | 21 | 48 | 09.6 | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| **AMKA** | **Amchitka** | **69.11** | **358** | P | | **P** | **21** | **48** | **13.8** | **-0.2** |
| **KIWB** | **Kanaga Island** | **69.56** | **1** | P | | **P** | **21** | **48** | **16.7** | **+0.1** |
| **ADK** | **Adak** | **69.59** | **1** | P | | **P** | **21** | **48** | **16.9** | **0.0** |
| ADK | | | | IAmb | | IAmb | 21 | 48 | 17.1 | |
| | comp=Z,16nm,0.8s | | | | | | | | | |
| **UGM** | **Wanagama** | **69.86** | **268** | P | | **P** | **21** | **48** | **19.1** | **-0.2** |
| **JKA** | **Kamikawa-asahi** | **71.45** | **331** | P | | **P** | **21** | **48** | **28.2** | **+0.2** |
| JKA | | | | IAmb | | IAmb | 21 | 48 | 48.6 | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | | **P** | **21** | **48** | **31.7** | **+0.4** |
| | comp=Z,1.3nm,0.7s,baz=5.7,slow=0.6,SNR=4.2 | | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | | |
| **TPUB** | **Ta-pu** | **72.48** | **302** | P | | **P** | **21** | **48** | **33.9** | **-0.6** |
| **KSM** | **Kuching** | **72.91** | **277** | P | | **P** | **21** | **48** | **37.2** | **+0.1** |
| KSM | | | | IAmb | | IAmb | 21 | 48 | 39.2 | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.82** | **345** | P | | **P** | **21** | **48** | **41.8** | **+0.5** |
| PEA0B | | | | IAmb | | IAmb | 21 | 48 | 42.7 | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.82** | **345** | P | | **P** | **21** | **48** | **41.3** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **73.82** | **345** | P | | **P** | **21** | **48** | **41.4** | **+0.1** |
| | comp=Z,11nm,0.7s,baz=128,slow=8.0,SNR=16 | | | | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| **KSRS** | **Korea Array** | **74.91** | **318** | P | | **P** | **21** | **48** | **49.0** | **+1.3** |
| | comp=Z,1.8nm,0.7s,baz=130,slow=6.6,SNR=4.8 | | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **76.81** | **326** | P | | **P** | **21** | **48** | **59.3** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **76.81** | **326** | P | | **P** | **21** | **48** | **59.1** | **+1.1** |
| **USRK** | **Ussuriysk Ar.** | **76.81** | **326** | P | | **P** | **21** | **48** | **59.9** | **+1.8** |
| | comp=Z,4.4nm,0.7s,baz=120,slow=6.0,SNR=6.7 | | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | | |
| **OHAK** | **Old Harbor** | **77.77** | **14** | P | | **P** | **21** | **49** | **03.0** | **+0.1** |
| **MDJ** | **Mudanjiang** | **78.38** | **325** | P | | **P** | **21** | **49** | **07.5** | **+1.0** |
| MDJ | | | | IAmb | | IAmb | 21 | 49 | 09.3 | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.44** | **14** | P | | **P** | **21** | **49** | **06.7** | **+0.2** |
| KDAK | | | | IAmb | | IAmb | 21 | 49 | 14.9 | |
| | comp=Z,22nm,1.3s | | | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.44** | **14** | P | | **P** | **21** | **49** | **06.9** | **+0.4** |
| | comp=Z,3.0nm,0.7s,baz=194,slow=4.9,SNR=6.4 | | | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.34** | **44** | P | | **P** | **21** | **49** | **12.7** | **+0.6** |
| | comp=Z,1.1nm,0.8s,baz=227,slow=9.2,SNR=6.5 | | | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | | | |
| **P18K** | **Big Mountain,** | **79.36** | **12** | P | | **P** | **21** | **49** | **11.2** | **-0.2** |
| P18K | | | | IAmb | | IAmb | 21 | 49 | 11.8 | |
| | comp=Z,9.2nm,0.7s | | | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.80** | **12** | P | | **P** | **21** | **49** | **13.9** | **+0.2** |
| O18K | | | | IAmb | | IAmb | 21 | 49 | 14.8 | |
| | comp=Z,20nm,0.9s | | | | | | | | | |
| **M16K** | **Timber Creek** | **80.25** | **9** | P | | **P** | **21** | **49** | **16.9** | **+0.9** |
| M16K | | | | IAmb | | IAmb | 21 | 49 | 18.5 | |
| | comp=Z,15nm,1.1s | | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.26** | **38** | P | | **P** | **21** | **49** | **18.5** | **+1.9** |
| **J18K** | **Innoko River** | **82.91** | **10** | P | | **P** | **21** | **49** | **30.0** | **+0.5** |
| J18K | | | | IAmb | | IAmb | 21 | 49 | 31.0 | |
| | comp=Z,8.0nm,0.8s | | | | | | | | | |
| **ENH** | **Enshi** | **84.50** | **304** | P | | **P** | **21** | **49** | **38.7** | **+0.6** |
| **TXAR** | **Lajitas Array** | **85.86** | **58** | P | | **P** | **21** | **49** | **46.5** | **+1.7** |
| **TXAR** | **Lajitas Array** | **85.86** | **58** | P | | **P** | **21** | **49** | **46.8** | **+2.0** |
| | comp=Z,1.7nm,0.7s,baz=222,slow=6.3,SNR=24 | | | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | | **P** | **21** | **49** | **43.6** | **-0.5** |
| | comp=Z,1.9nm,0.5s,baz=218,slow=5.0,SNR=4.8 | | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.11** | **290** | P | | **P** | **21** | **50** | **01.5** | **+1.4** |
| | comp=Z,2.3nm,0.3s,baz=106,slow=2.9,SNR=15 | | | | | | | | | |
| | comp=Z,2.3nm,0.3s | | | | | | | | | |
| **SNAA** | **Sanae** | **90.50** | **179** | P | | **P** | **21** | **50** | **05.1** | **-0.5** |
| | comp=Z,0.8nm,1.0s,baz=198,slow=1.6,SNR=2.0 | | | | | | | | | |
| | comp=Z,0.8nm,1.0s | | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.64** | **176** | ⇑P | | **P** | **21** | **50** | **05.8** | **-0.4** |
| **VNA2** | **Neumayer--Watz** | **91.08** | **177** | ⇑P | | **P** | **21** | **50** | **08.0** | **-0.2** |
| | baz=204,slow=1.8 | | | | | | | | | |
| **SONM** | **Songino Array** | **93.75** | **319** | P | | **P** | **21** | **50** | **21.7** | **+0.7** |
| | comp=Z,0.4nm,0.5s,baz=126,slow=4.0,SNR=3.7 | | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.35** | **314** | PKiKP | | **PKiKP** | **21** | **55** | **28.6** | **-1.4** |
| | comp=Z,0.5nm,0.6s,baz=110,slow=0.9,SNR=6.6 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **112.09** | **318** | PKiKP | | **PKiKP** | **21** | **55** | **34.0** | **-1.0** |
| | comp=Z,1.0nm,0.8s,baz=99,slow=1.7,SNR=9.5 | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.05** | **321** | PKP | | **PKPdf** | **21** | **55** | **43.8** | **-0.8** |
| | comp=Z,1.4nm,0.5s,baz=57,slow=1.8,SNR=4.0 | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.44** | **350** | PKP | | **PKPdf** | **21** | **56** | **01.5** | **-0.6** |
| | comp=Z,1.5nm,0.7s,baz=346,slow=1.9,SNR=5.9 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **133.33** | **344** | PKP | | **PKPdf** | **21** | **56** | **14.1** | **-1.2** |
| | comp=Z,1.3nm,0.8s,baz=5.7,slow=2.8,SNR=5.0 | | | | | | | | | |
| FINES | | | | SKPbc | | **SKPbc** | **21** | **58** | **47.9** | **-0.4** |
| | comp=Z,0.8nm,0.8s,baz=62,slow=3.9,SNR=2.3 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **136.49** | **353** | PKP | | **PKPdf** | **21** | **56** | **21.0** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=15,slow=3.8,SNR=2.1 | | | | | | | | | |
| **HFS** | **Hagfors** | **137.05** | **351** | PKhKP | | PKPpre | 21 | 56 | 10.0 | |
| | comp=Z,1.7nm,0.8s,baz=45,slow=0.4,SNR=2.8 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **140.74** | **332** | PKhKP | | PKPpre | 21 | 56 | 23.2 | |
| | comp=Z,0.4nm,0.4s,baz=45,slow=2.4,SNR=1.9 | | | | | | | | | |
| AKASG | | | | PKP | | **PKiKP** | **21** | **56** | **30.9** | **-1.3** |
| | comp=Z,0.3nm,0.3s,baz=45,slow=2.6,SNR=2.1 | | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.54** | **5** | PKhKP | | PKPpre | 21 | 56 | 26.3 | |
| | comp=Z,0.9nm,0.6s,baz=308,slow=1.7,SNR=2.0 | | | | | | | | | |
| **SORM** | **Soroca** | **142.97** | **330** | ⇑P | | **PKPdf** | **21** | **56** | **31.4** | **-2.0** |
| **GAZ** | **Gaziantep** | **143.55** | **309** | PKPbc | | **PKPdf** | **21** | **56** | **34.3** | **-0.5** |
| **MILM** | **Milestii Mici** | **143.59** | **328** | ⇓P | | **PKPdf** | **21** | **56** | **33.4** | **-1.1** |
| **BNN** | **Bunyan** | **143.87** | **312** | PKPbc | | **PKPdf** | **21** | **56** | **35.1** | **-0.3** |
| **KWP** | **Kalwaria Pacla** | **144.24** | **337** | PKPbc | | **PKPab** | **21** | **56** | **35.6** | **-0.3** |
| **VLDR** | **Vladesti** | **144.70** | **328** | ⇑P | | **PKPab** | **21** | **56** | **38.3** | **+0.6** |
| **OJC** | **Ojcow** | **144.77** | **340** | PKPdf | | **PKPab** | **21** | **56** | **37.5** | **-0.4** |
| **BUR08** | **Bucovina Ar. S** | **144.78** | **332** | PKPdf | | **PKPab** | **21** | **56** | **38.1** | **-0.1** |
| **VARL** | **Varlezi** | **144.78** | **328** | ⇓P | | **PKPab** | **21** | **56** | **38.4** | **+0.3** |
| **BURAR** | **Bucovina Array** | **144.79** | **332** | PKPdf | | **PKPab** | **21** | **56** | **37.2** | **-1.0** |
| **BURAR** | **Bucovina Array** | **144.79** | **332** | ⇓P | | **PKPab** | **21** | **56** | **38.7** | **+0.5** |
| **SCTR** | **Scanteiesti** | **144.86** | **327** | ⇑P | | **PKPab** | **21** | **56** | **38.4** | **+0.1** |
| **TESR** | **Tescani** | **144.94** | **330** | ⇓P | | **PKPab** | **21** | **56** | **37.9** | **-0.8** |
| **KOLS** | **Kolonicke sedl** | **144.97** | **336** | *e* | | **PKPab** | **21** | **56** | **38.5** | **-0.2** |
| **BR131** | **Keskin Array S** | **144.99** | **315** | | | **PKPab** | **21** | **56** | **38.5** | **-0.9** |
| **BRTR** | **Keskin Array B** | **144.99** | **315** | | | **PKPab** | **21** | **56** | **38.2** | **-1.1** |
| **BRTR** | **Keskin Array B** | **144.99** | **315** | PKPbc | | **PKPab** | **21** | **56** | **38.5** | **-0.9** |
| | comp=Z,5.2nm,0.7s,baz=142,slow=4.9,SNR=28 | | | | | | | | | |
| **SLCR** | **Slobozia Conac** | **145.03** | **328** | ⇑P | | **PKPab** | **21** | **56** | **39.3** | **+0.3** |
| **IZVR** | **Izvoarele** | **145.07** | **328** | ⇑P | | **PKiKP** | **21** | **56** | **40.6** | **-0.5** |
| **KIRS** | **Kirsehir-Merke** | **145.09** | **314** | ⇑P | | **PKPab** | **21** | **56** | **39.3** | **-0.3** |
| **ONER** | **Baraj Valea Uz** | **145.19** | **330** | ⇑P | | **PKPab** | **21** | **56** | **39.9** | **+0.2** |
| **ODBI** | **Odobesti** | **145.27** | **328** | ⇑P | | **PKiKP** | **21** | **56** | **40.5** | **-1.2** |
| **CRVS** | **Cervenica-Dubn** | **145.30** | **337** | *e* | | **PKPab** | **21** | **56** | **39.4** | **-0.6** |
| **VRI** | **Vrincioaia** | **145.36** | **329** | ⇑P | | **PKPab** | **21** | **56** | **39.7** | **-0.7** |
| **PLOR** | **Plostina** | **145.41** | **329** | ⇓P | | **PKPab** | **21** | **56** | **40.0** | **-0.6** |
| **BMR** | **Baia Mare** | **145.49** | **334** | ⇑P | | **PKPab** | **21** | **56** | **39.9** | **-0.9** |
| **ANTO** | **Ankara** | **145.49** | **316** | | | **PKPab** | **21** | **56** | **40.5** | **-0.7** |
| **OSTC** | **Ostas** | **145.53** | **344** | *e*PKP | | **PKPab** | **21** | **56** | **40.6** | **-0.3** |
| **CHVC** | **Chvalec** | **145.55** | **344** | *e*PKP | | **PKPab** | **21** | **56** | **40.2** | **-0.8** |
| **ARCR** | **ARCALIA** | **145.57** | **332** | ⇑P | | **PKPab** | **21** | **56** | **40.9** | **-0.2** |
| **TURR** | **Turia** | **145.57** | **330** | ⇑P | | **PKPab** | **21** | **56** | **40.8** | **-0.4** |
| **CLL** | **Collm** | **145.59** | **348** | PKPbc | | **PKPbc** | **21** | **56** | **39.6** | **+0.2** |
| **CLL** | **Collm** | **145.59** | **348** | *i* PKPbc | | **PKPab** | **21** | **56** | **39.8** | **-1.2** |
| | comp=Z,23nm,0.9s | | | | | | | | | |
| **COVR** | **Voineasa-Covas** | **145.63** | **329** | ⇑P | | **PKPab** | **21** | **56** | **40.3** | **-1.2** |
| **DPC** | **Dobruska-Polom** | **145.69** | **343** | *e*PKP | | **PKPab** | **21** | **56** | **40.8** | **-0.8** |
| **BOSR** | **Bodos** | **145.73** | **330** | ⇓P | | **PKPab** | **21** | **56** | **41.4** | **-0.5** |
| **LANS** | **Liptovska Anna** | **145.80** | **339** | *e* | | **PKPab** | **21** | **56** | **41.5** | **-0.5** |
| **BR

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ST2N** | **ST2** | **0.19** | **149** | *i* S | Sb | 21 40 16.1 | -2.1 |
| ST2N | | | | *i* S | | 21 40 16.3 | |
| **ST2N** | **ST2** | **0.19** | **149** | *i* P | Pb | 21 40 14.6 | 0.0 |
| ST2N | | | | *i* S | Sb | 21 40 16.4 | -1.9 |
| ST2N | | | | IAML | | 21 40 16.6 | |
| | comp=Z,8.7nm,0.3s | | | | | | |
| **ST10N** | **ST10** | **0.25** | **203** ⇓ | *i* P | Pn | 21 40 17.2 | -0.3 |
| ST10N | | | | *i* S | Sb | 21 40 20.6 | +1.0 |
| ST10N | | | | IAML | | 21 40 21.7 | |
| | comp=Z,16nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.25** | **203** | *i* P | Pn | 21 40 17.2 | -0.3 |
| ST10N | | | | *i* S | Sb | 21 40 20.5 | +0.9 |
| ST10N | | | | IAML | | 21 40 21.6 | |
| | comp=Z,9.3nm,0.3s | | | | | | |
| **ST5N** | **ST5** | **0.25** | **96** ⇑ | *i* P | Pb | 21 40 15.8 | +0.4 |
| ST5N | | | | IAML | | 21 40 18.1 | |
| | comp=Z,63nm,0.0s | | | | | | |
| ST5N | | | | *i* S | Sb | 21 40 18.2 | -1.4 |
| **ST5N** | **ST5** | **0.25** | **96** | *i* P | Pb | 21 40 15.8 | +0.5 |
| ST5N | | | | *i* S | Sb | 21 40 18.1 | -1.5 |
| ST5N | | | | IAML | | 21 40 18.6 | |
| | comp=Z,10nm,0.3s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **72** ⇑ | *i* P | Pn | 21 40 18.5 | -0.4 |
| ST11N | | | | *i* S | Sb | 21 40 23.1 | +1.0 |
| ST11N | | | | IAML | | 21 40 23.2 | |
| | comp=Z,3.6nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.47** | **106** ⇓ | *i* P | Pb | 21 40 19.6 | +0.7 |
| ST4N | | | | *i* S | Sb | 21 40 24.4 | -1.0 |
| ST4N | | | | IAML | | 21 40 24.6 | |
| | comp=Z,5.9nm,0.1s | | | | | | |

*BJI* ***15*** *21:56:50.3±0.0, 51°.43N×178°.03W, h10km, mb6.2/86, mB6.6/84, Ms6.7/99, Ms7 6.5/98*

*MOS* ***15*** *21:56:51.2±1.0, 51°.43N×177°.99W, h15km, mb6.1/124, MS6.4/117, Error ellipse: s-maj=6.0km s-min=4.1km az=106.7*

*AEIC* ***15*** *21:56:54.9±2.4, 51°.17N±0°.05×177°.92W±0°.07, h7km±3km, Error ellipse: s-maj=7.8km s-min=5.4km az=143.0*

*IDC* ***15*** *21:56:55.2±1.1, 51°.46N×177°.96W, h26km±6km, mb5.5/39, mbtmp5.6/44, ML5.6/4, MS6.4/90, Error ellipse: s-maj=9.5km s-min=6.7km az=7.0*

*BGR* ***15*** *21:56:55.2, 51°.66N×176°.80W, h33km, mb5.9, mB_BB6.7, Ms6.4*

*IPGP* ***15*** *21:56:56.0, 51°.51N×178°.08W, h26km, Mw6.7, Fault plane solution: NP1:φs59.00000°, δ67.00000°, λ74.00000°. NP2:φs276.00000°, δ28.00000°, λ123.00000°.*

*NEIC* ***15*** *21:56:56.3±1.4, 51°.42N±0°.07×178°.03W±0°.04, h34km±2km, mb6.1/421, Ms_20 6.5/932, Mwb6.4/121, Mww6.5/88, ML6.0(AEIC), Error ellipse: s-maj=10.0km s-min=3.8km az=171.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr3.73; Mθθ-3.15; Mϕϕ-0.58; Mrθ2.87; Mθϕ-0.88; Mrϕ1.98; Fault plane solution: M₀5.00000×10¹⁸ NP1:φs261.40000°, δ24.04000°, λ108.53000°. NP2: φs61.25000°, δ67.28000°, λ81.93000°. Principal axes: T 5.2089, Plg67.0000°, Azm317.0000°; N -0.4462, Plg7.0000°, Azm64.0000°; P -4.7627, Plg22.0000°, Azm157.0000°;*

*NEIC* ***15*** *21:56:56.8, 50°.93N×177°.88W, h40km, Moment Tensor Solution. Duration: 9s3 Moment tensor: Scale 10¹⁸Nm; Mrr6.13; Mθθ-6.10; Mϕϕ-0.03; Mrθ4.07; Mθϕ-2.08; Mrϕ3.33; Fault plane solution: M₀8.33000×10¹⁸ NP1:φs58.74000°, δ64.98000°, λ76.96000°. NP2:φs267.44000°, δ28.02000°, λ115.80000°. Principal axes: T 8.2262, Plg67.0000°, Azm304.0000°; N 0.1999, Plg12.0000°, Azm64.0000°; P -8.4261, Plg19.0000°, Azm158.0000°;*

*NEIC* ***15*** *21:56:56.4, 51°.49N×178°.05W, h32km*

*NEIC* ***15*** *21:56:56.8, 51°.43N×178°.04W, h40km*

*GCMT* ***15*** *21:56:58.8±0.0, 51°.25N×177°.81W, h36km, MW6.6/170, Moment Tensor Solution. s170,c456; s167,c770; Duration: 4s7 Moment tensor: Scale 10¹⁹Nm; Mrr0.65±.00; Mθθ-0.59±.00; Mϕϕ-0.05±.00; Mrθ0.44±.00; Mθϕ-0.25±.00; Mrϕ0.41±.00; Best double couple: M₀0.90000×10¹⁹ NP1:φs55.00000°, δ66.00000°, λ78.00000°. NP2:φs262.00000°, δ26.00000°, λ115.00000°. Principal axes: T 0.9020, Plg67.0000°, Azm303.0000°; N -0.0020, Plg11.0000°, Azm60.0000°; P -0.8990, Plg20.0000°, Azm154.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 15 21:56:55.5±0.2, 51°.36N±0°.02×178°.01W±0°.02, h31km±1km, h31km:pP-P, n3004, σ1s73/3309, mb6.0/479, MS6.5/663, 402C-72D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **GAEA** | **Gareloi East** | **0.63** | **313** | | | **Pn** | **21 57 10.0** | **+1.7** |
| **GASW** | **Gareloi Southw** | **0.67** | **308** | | | **Pn** | **21 57 10.5** | **+1.5** |
| **GANO** | **Gareloi North** | **0.68** | **313** | | | **Pn** | **21 57 10.4** | **+1.4** |
| **KIWB** | **Kanaga Island** | **0.72** | **47** | | | **Pb** | **21 57 10.1** | **+0.4** |
| **KIKV** | **Kanaga Island** | **0.73** | **45** | | | **Pb** | **21 57 10.4** | **+0.6** |
| **KICM** | **Kanaga Island** | **0.75** | **42** | | | **Pb** | **21 57 11.1** | **+1.0** |
| **KIRH** | **Kanaga Island** | **0.78** | **46** | | | **Pb** | **21 57 11.3** | **+0.7** |
| **ADK** | **Adak** | **0.97** | **57** | P | | **Pb** | **21 57 15.2** | **+1.4** |
| **ADK** | **Adak** | **0.97** | **57** | | | **Pn** | **21 57 13.1** | **0.0** |
| ADK | | | | Sn | | **Sb** | **21 57 27.6** | **+1.3** |
| **ADK** | **Adak** | **0.97** | **57** | ⇑P | | **Pn** | **21 57 12.9** | **-0.2** |
| **GSCK** | **Great Sitkin C** | **1.32** | **60** | | | **Pn** | **21 57 18.4** | **+0.5** |
| **GSTD** | **Great Sitkin T** | **1.35** | **58** | | | **Pn** | **21 57 19.1** | **+0.8** |
| **GSMY** | **Great Sitkin M** | **1.39** | **60** | | | **Pn** | **21 57 19.5** | **+0.7** |
| **GSTR** | **Great Sitkin T** | **1.42** | **58** | | | **Pn** | **21 57 19.8** | **+0.6** |
| **AMKA** | **Amchitka** | **1.69** | **272** | Pn | | **Pn** | **21 57 22.6** | **-0.3** |
| AMKA | | | | Sn | | **Sb** | **21 57 45.5** | **-1.2** |
| **KOKL** | **Mount Kliuchef** | **2.55** | **66** | | | **Pn** | **21 57 35.8** | **+1.1** |
| **KOFP** | **Korovin Flat P** | **2.59** | **68** | | | **Pn** | **21 57 36.4** | **+1.1** |
| **SHEM** | **Shemya Is, Ala** | **5.06** | **289** | Pn | | **Pn** | **21 58 10.9** | **+1.7** |
| | 116nm,0.3s,baz=63,slow=2.9,SNR=49 | | | | | | | |
| SHEM | | | | Sn | | **Sn** | **21 59 08.9** | **+2.4** |
| | 197nm,0.3s,baz=81,slow=23,SNR=1.4 | | | | | | | |
| | 758nm,0.5s | | | | | | | |
| **CLES** | **Cleveland East** | **5.21** | **71** | Pn | | **Pn** | **21 58 12.7** | **+1.5** |
| **CLCO** | **Concord Point,** | **5.30** | **71** | | | **Pn** | **21 58 15.8** | **+3.3** |
| **NIKH** | **Nikolski High** | **5.86** | **70** | P | | **Pn** | **21 58 23.8** | **+3.7** |
| **NIKH** | **Nikolski High** | **5.86** | **70** | | | **Pn** | **21 58 22.1** | **+1.9** |
| **NIKH** | **Nikolski High** | **5.86** | **70** | P | | **Pn** | **21 58 21.7** | **+1.5** |
| | baz=256,SNR=116 | | | | | | | |
| NIKH | | | | S | | **Sn** | **21 59 24.4** | **-1.7** |
| | baz=256 | | | | | | | |
| **P08K** | **Saint George I** | **7.24** | **40** | P | | **Pn** | **21 58 39.6** | **+0.6** |
| | baz=226 | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **7.38** | **35** | P | | **Pn** | **21 58 45.5** | **+4.5** |
| **SPIA** | **Saint Paul Isl** | **7.38** | **35** | P | | **Pn** | **21 58 42.0** | **+0.9** |
| | baz=220,SNR=131 | | | | | | | |
| SPIA | | | | S | | **Sn** | **22 00 03.8** | **+0.2** |
| | baz=220 | | | | | | | |
| **UNV** | **Unalaska Valle** | **7.43** | **66** | P | | **Pn** | **21 58 45.2** | **+3.5** |
| **UNV** | **Unalaska Valle** | **7.43** | **66** | P | | **Pn** | **21 58 43.9** | **+2.2** |
| | baz=254,SNR=124 | | | | | | | |
| UNV | | | | S | | **Sn** | **22 00 00.8** | **-4.1** |
| | baz=254 | | | | | | | |
| **LVA** | **Lava Point** | **7.78** | **64** | | | **Pn** | **21 58 49.5** | **+3.0** |
| **FALS** | **False Pass** | **9.44** | **63** | P | | **Pn** | **21 59 11.9** | **+2.7** |
| | baz=253 | | | | | | | |
| FALS | | | | S | | **Sn** | **22 00 57.3** | **+3.1** |
| | baz=253 | | | | | | | |
| **S12K** | **Black Hills** | **10.43** | **59** | Pn | | **Pn** | **21 59 24.5** | **+1.6** |
| **S12K** | **Black Hills** | **10.43** | **59** | P | | **Pn** | **21 59 25.5** | **+2.7** |
| | baz=251,SNR=43 | | | | | | | |
| S12K | | | | S | | **Sn** | **22 01 18.4** | **-0.1** |
| | baz=251 | | | | | | | |
| **M11K** | **Mekoryuk** | **11.19** | **32** | P | | **Pn** | **21 59 37.1** | **+3.9** |
| | baz=221,SNR=84 | | | | | | | |
| M11K | | | | S | | **Sn** | **22 01 32.6** | **-4.4** |
| | baz=221 | | | | | | | |
| **SDPT** | **Sand Point** | **11.20** | **62** | P | | **Pn** | **21 59 35.9** | **+2.6** |
| **SDPT** | **Sand Point** | **11.20** | **62** | | | **Pn** | **21 59 33.4** | **+0.1** |
| **SDPT** | **Sand Point** | **11.20** | **62** | P | | **Pn** | **21 59 33.8** | **+0.4** |
| | baz=255,SNR=54 | | | | | | | |
| SDPT | | | | S | | **Sn** | **22 01 38.8** | **+1.5** |
| | baz=255 | | | | | | | |
| **CNBA** | **Chernabura Isl** | **11.60** | **65** | | | **Pn** | **21 59 38.0** | **-0.7** |
| **CHNA** | **Chernabura Isl** | **11.60** | **65** | P | | **Pn** | **21 59 39.1** | **+0.4** |
| | baz=259,SNR=93 | | | | | | | |
| CHNA | | | | S | | **Sn** | **22 01 47.8** | **+0.8** |
| | baz=259 | | | | | | | |
| **S14K** | **Fog Glacier** | **11.95** | **58** | P | | **Pn** | **21 59 46.3** | **+2.6** |
| | baz=252 | | | | | | | |
| S14K | | | | S | | **Sn** | **22 02 02.3** | **+6.5** |
| | baz=252 | | | | | | | |
| **M13K** | **Dall Lake** | **12.21** | **36** | P | | **Pn** | **21 59 48.6** | **+1.5** |
| | baz=228 | | | | | | | |
| M13K | | | | S | | **Sn** | **22 02 08.6** | **+6.6** |
| | baz=228 | | | | | | | |
| **O14K** | **Tigyukauivet M** | **12.36** | **44** | P | | **Pn** | **21 59 50.7** | **+1.6** |
| | baz=237 | | | | | | | |
| O14K | | | | S | | **Sn** | **22 02 11.4** | **+5.9** |
| | baz=237 | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **12.56** | **41** | P | | **Pn** | **21 59 53.5** | **+1.7** |
| | baz=233 | | | | | | | |
| N14K | | | | S | | **Sn** | **22 02 14.7** | **+4.3** |
| | baz=233 | | | | | | | |
| **CHGN** | **Chignik** | **12.57** | **59** | P | | **Pn** | **21 59 52.6** | **+0.6** |
| | baz=254 | | | | | | | |
| CHGN | | | | S | | **Sn** | **22 02 14.6** | **+3.9** |
| | baz=254 | | | | | | | |
| **GAMB** | **Gambell** | **12.89** | **13** | ⇓P | | **Pn** | **21 59 59.2** | **+3.0** |
| **GAMB** | **Gambell** | **12.89** | **13** | P | | **Pn** | **21 59 58.2** | **+1.9** |
| | baz=198,SNR=31 | | | | | | | |
| GAMB | | | | S | | **Sn** | **22 02 19.6** | **+1.2** |
| | baz=198 | | | | | | | |
| **O15K** | **Ungalikthiuk R** | **12.95** | **46** | P | | **Pn** | **22 00 00.0** | **+2.8** |
| | baz=240 | | | | | | | |
| O15K | | | | S | | **Sn** | **22 02 22.9** | **+2.8** |
| | baz=240 | | | | | | | |
| **M14K** | **Bethel** | **12.96** | **37** | Pn | | **Pn** | **21 59 59.3** | **+2.1** |
| **M14K** | **Bethel** | **12.96** | **37** | P | | **Pn** | **21 59 59.3** | **+2.1** |
| | baz=230,SNR=184 | | | | | | | |
| M14K | | | | S | | **Sn** | **22 02 22.7** | **+2.6** |
| | baz=230 | | | | | | | |
| **L14K** | **Kuka Creek** | **13.08** | **34** | Pn | | **Pn** | **21 59 59.7** | **+0.8** |
| **L14K** | **Kuka Creek** | **13.08** | **34** | P | | **Pn** | **22 00 03.6** | **+4.6** |
| | baz=226 | | | | | | | |
| **N15K** | **Kwethluk River** | **13.35** | **42** | P | | **Pn** | **22 00 05.4** | **+2.7** |
| | baz=236 | | | | | | | |
| N15K | | | | S | | **Sn** | **22 02 31.6** | **+1.7** |
| | baz=236 | | | | | | | |
| **R16K** | **Pilot Point** | **13.38** | **54** | P | | **Pn** | **22 00 05.8** | **+2.8** |
| | baz=250 | | | | | | | |
| R16K | | | | S | | **Sn** | **22 02 35.7** | **+5.2** |
| | baz=250 | | | | | | | |
| R16K | | | | S | | **Sn** | **22 02 35.7** | **+5.2** |
| | baz=250 | | | | | | | |
| **M15K** | **Kasigluk River** | **13.41** | **39** | P | | **Pn** | **22 00 05.7** | **+2.2** |
| | baz=233 | | | | | | | |
| M15K | | | | S | | **Sn** | **22 02 35.1** | **+3.8** |
| | baz=233 | | | | | | | |
| **P16K** | **Nushagak River** | **13.73** | **48** | P | | **Pn** | **22 00 10.5** | **+2.7** |
| | baz=244,SNR=160 | | | | | | | |
| P16K | | | | S | | **Sn** | **22 02 41.6** | **+2.6** |
| | baz=244 | | | | | | | |
| P16K | | | | S | | **Sn** | **22 02 41.6** | **+2.6** |
| | baz=244 | | | | | | | |
| **L15K** | **Ungalak Mounta** | **13.73** | **35** | P | | **Pn** | **22 00 11.5** | **+3.7** |
| | baz=228 | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **13.81** | **29** | P | | **Pn** | **22 00 12.2** | **+3.3** |
| | baz=220 | | | | | | | |
| **O16K** | **Kokwok River B** | **13.93** | **46** | P | | **Pn** | **22 00 13.4** | **+2.8** |
| | baz=242 | | | | | | | |
| O16K | | | | S | | **Sn** | **22 02 46.3** | **+2.4** |
| | baz=242 | | | | | | | |
| **CHIR** | **Chirikof Islan** | **14.00** | **63** | | | **Pn** | **22 00 10.0** | **-1.5** |
| **CHIR** | **Chirikof Islan** | **14.00** | **63** | P | | **Pn** | **22 00 11.8** | **+0.3** |
| | baz=260 | | | | | | | |
| CHIR | | | | S | | **Sn** | **22 02 45.7** | **+0.1** |
| | baz=260 | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **14.02** | **55** | P | | **Pn** | **22 00 12.6** | **+0.8** |
| | baz=252 | | | | | | | |
| R17L | | | | S | | **Sn** | **22 02 50.5** | **+4.3** |
| | baz=252 | | | | | | | |
| **PLK4** | **Peulik 4** | **14.02** | **55** | Pn | | **Pn** | **22 00 12.4** | **+0.5** |
| **N16K** | **Nishlik Lake** | **14.07** | **42** | P | | **Pn** | **22 00 14.6** | **+2.1** |
| | baz=237 | | | | | | | |
| N16K | | | | S | | **Sn** | **22 02 54.9** | **+7.4** |
| | baz=237 | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **14.13** | **33** | P | | **P** | **22 00 17.2** | **-3.3** |
| | baz=226 | | | | | | | |
| K15K | | | | S | | **Sn** | **22 02 56.1** | **+7.3** |
| | baz=226 | | | | | | | |
| **Q16K** | **King Salmon** | **14.22** | **51** | P | | **Pn** | **22 00 17.2** | **+2.6** |
| | baz=248 | | | | | | | |
| Q16K | | | | S | | **Sn** | **22 02 57.8** | **+6.8** |
| | baz=248 | | | | | | | |
| **M16K** | **Timber Creek** | **14.29** | **40** | P | | **Pn** | **22 00 17.6** | **+2.0** |
| | baz=235 | | | | | | | |
| M16K | | | | S | | **Sn** | **22 02 54.5** | **+1.6** |
| | baz=235 | | | | | | | |
| **PET** | **Petropavlovsk** | **14.40** | **286** | P | | **P** | **22 00 21.0** | **-2.5** |
| **PET** | **Petropavlovsk** | **14.40** | **286** | Pn | | **Pn** | **22 00 16.8** | **-0.2** |
| **PET** | **Petropavlovsk** | **14.40** | **286** | ⇑P | | **Pn** | **22 00 17.0** | **0.0** |
| **PET** | **Petropavlovsk** | **14.40** | **286** | *c i*P | | **Pn** | **22 00 17.2** | **+0.2** |
| PET | | | | *e*S | | **Sn** | **22 02 50.5** | **-4.9** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,11μm,7.6s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,308nm,1.7s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,205μm,20.0s | | | | | | | |
| **Q17K** | **Contact Creek** | **14.46** | **53** | P | | **Pn** | **22 00 17.5** | **-0.4** |
| | baz=250,SNR=434 | | | | | | | |
| Q17K | | | | S | | **Sn** | **22 03 02.6** | **+5.7** |
| | baz=250 | | | | | | | |
| **O17K** | **Koliganek Bris** | **14.46** | **46** | P | | **Pn** | **22 00 20.6** | **+2.8** |
| | baz=243 | | | | | | | |
| O17K | | | | S | | **Sn** | **22 03 00.2** | **+3.3** |
| | baz=243 | | | | | | | |
| **L16K** | **Owhat River** | **14.50** | **37** | | | **Pn** | **22 00 18.6** | **+0.3** |
| **L16K** | **Owhat River** | **14.50** | **37** | P | | **Pn** | **22 00 19.8** | **+1.5** |
| | baz=232,SNR=221 | | | | | | | |
| L16K | | | | S | | **Sn** | **22 03 01.5** | **+3.9** |
| | baz=232 | | | | | | | |
| **P17K** | **Kvichak River** | **14.53** | **49** | P | | **Pn** | **22 00 20.8** | **+2.2** |
| | baz=246 | | | | | | | |
| P17K | | | | S | | **Sn** | **22 03 01.7** | **+3.3** |
| | baz=246 | | | | | | | |
| P17K | | | | S | | **Sn** | **22 03 01.7** | **+3.3** |
| | baz=246 | | | | | | | |
| **ACHA** | **Angle Creek He** | **14.72** | **53** | | | **Pn** | **22 00 21.6** | **+0.2** |
| **N17K** | **Nushagak Hills** | **14.78** | **44** | P | | **Pn** | **22 00 24.3** | **+2.3** |
| | baz=240 | | | | | | | |
| N17K | | | | S | | **Sn** | **22 03 09.2** | **+4.6** |
| | baz=240 | | | | | | | |
| **ANM** | **Nome** | **14.79** | **22** | Pn | | **Pn** | **22 00 23.6** | **+1.4** |
| **ANM** | **Nome** | **14.79** | **22** | P | | **P** | **22 00 25.1** | **-2.7** |
| | baz=212,SNR=50 | | | | | | | |
| ANM | | | | S | | **Sn** | **22 03 13.3** | **+8.4** |
| | baz=212 | | | | | | | |
| **ANM** | **Nome** | **14.79** | **22** | P | | **Pn** | **22 00 23.6** | **+1.4** |
| **SII** | **Sitkinak Islan** | **14.92** | **60** | P | | **Pn** | **22 00 26.0** | **+2.0** |
| **SII** | **Sitkinak Islan** | **14.92** | **60** | Pn | | **Pn** | **22 00 22.8** | **-1.2** |
| **SII** | **Sitkinak Islan** | **14.92** | **60** | P | | **Pn** | **22 00 23.0** | **-0.9** |
| | baz=259,SNR=32 | | | | | | | |
| SII | | | | S | | **Sn** | **22 03 07.9** | **-0.1** |
| | baz=259 | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **14.97** | **286** | | | **Pn** | **22 00 24.1** | **-0.6** |
| **PEA0B** | **Petropavlovsk-** | **14.97** | **286** | *c i*P | | **Pn** | **22 00 24.8** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **14.97** | **286** | | | **Pn** | **22 00 24.8** | **0.0** |
| **PETK** | **Petropavlovsk-** | **14.97** | **286** | Pn | | **Pn** | **22 00 25.8** | **+1.1** |
| | comp=Z,108nm,1.2s,baz=91,slow=14,SNR=42 | | | | | | | |
| PETK | | | | | Sn | **Sn** | **22 03 11.2** | **+1.8** |
| | baz=79,slow=16 | | | | | | | |
| PETK | | | | | LR | LR | 22 06 00.2 | |
| | comp=Z,309μm,21.8s,baz=90,slow=36 | | | | | | | |
| PETK | | | | | ScP | **ScP** | **22 09 03.2** | **-0.4** |
| | comp=Z,24nm,0.9s,baz=64,slow=3.4,SNR=1.5 | | | | | | | |
| PETK | | | | | ScS | **ScS** | **22 12 40.8** | **-0.5** |
| | comp=Z,2.5nm,0.9s,baz=58,slow=20,SNR=0.8 | | | | | | | |
| **R18K** | **Karluk** | **14.99** | **56** | P | | **Pn** | **22 00 24.2** | **-0.7** |
| | baz=255 | | | | | | | |
| R18K | | | | S | | **Sn** | **22 03 13.8** | **+4.1** |
| | baz=255 | | | | | | | |
| R18K | | | | S | | **Sn** | **22 03 13.8** | **+4.1** |
| | baz=255 | | | | | | | |
| **Q18K** | **Katmai Hardscr** | **15.02** | **52** | P | | **Pn** | **22 00 25.9** | **+0.5** |
| | baz=250,SNR=201 | | | | | | | |
| **M17K** | **Holitna River** | **15.12** | **40** | P | | **Pn** | **22 00 28.8** | **+2.2** |
| | baz=237 | | | | | | | |
| **J16K** | **Anvik River** | **15.13** | **31** | Pn | | **Pn** | **22 00 27.6** | **+0.9** |
| **J16K** | **Anvik River** | **15.13** | **31** | P | | **P** | **22 00 30.1** | **-1.5** |
| | baz=225 | | | | | | | |
| **TNA** | **Tin City** | **15.15** | **16** | P | | **P** | **22 00 30.6** | **-1.1** |
| | baz=204,SNR=36 | | | | | | | |
| **P18K** | **Big Mountain,** | **15.17** | **49** | P | | **Pn** | **22 00 29.5** | **+2.1** |
| | baz=247,SNR=359 | | | | | | | |
| **L17K** | **Donlin** | **15.20** | **37** | P | | **Pn** | **22 00 29.6** | **+2.0** |
| | baz=233 | | | | | | | |
| **O18K** | **Koktuh Hills** | **15.36** | **48** | P | | **P** | **22 00 32.2** | **-2.1** |
| | baz=246,SNR=220 | | | | | | | |
| **F14K** | **Arctic Creek** | **15.37** | **19** | P | | **P** | **22 00 32.7** | **-1.5** |
| | baz=208 | | | | | | | |
| **N18K** | **Kilae Creek** | **15.41** | **44** | P | | **Pn** | **22 00 32.3** | **+1.8** |
| | baz=242 | | | | | | | |
| **G15K** | **Niukluk** | **15.47** | **23** | P | | **P** | **22 00 34.1** | **-1.1** |
| | baz=214 | | | | | | | |
| **I17K** | **Unalakleet** | **15.53** | **29** | P | | **P** | **22 00 35.5** | **-0.4** |
| | baz=224,SNR=34 | | | | | | | |
| **OHAK** | **Old Harbor** | **15.53** | **58** | P | | **P** | **22 00 34.3** | **-1.7** |
| **OHAK** | **Old Harbor** | **15.53** | **58** | Pn | | **Pn** | **22 00 30.3** | **-1.7** |
| **OHAK** | **Old Harbor** | **15.53** | **58** | P | | **Pn** | **22 00 30.2** | **-1.7** |
| | baz=258,SNR=193 | | | | | | | |
| **K17K** | **Iditarod** | **15.55** | **35** | P | | **P** | **22 00 34.9** | **-1.3** |
| | baz=232 | | | | | | | |
| **H16K** | **Elim** | **15.64** | **26** | P | | **P** | **22 00 35.9** | **-1.3** |
| | baz=219,SNR=145 | | | | | | | |
| **J17K** | **VABM Dome** | **15.71** | **33** | P | | **P** | **22 00 36.8** | **-1.2** |
| **J17K** | **VABM Dome** | **15.71** | **33** | P | | **P** | **22 00 36.8** | **-1.2** |
| | baz=228,SNR=370 | | | | | | | |
| J17K | | | | S | | **Sn** | **22 03 31.8** | **+4.6** |
| | baz=228 | | | | | | | |
| J17K | | | | S | | **Sn** | **22 03 31.8** | **+4.6** |
| | baz=228 | | | | | | | |
| **SVW2** | **Sparrevohn** | **15.74** | **43** | P | | **P** | **22 00 38.2** | **-0.2** |
| **SVW2** | **Sparrevohn** | **15.74** | **43** | | | **Pn** | **22 00 36.0** | **+1.3** |
| **Q19K** | **Cape Douglas,** | **15.78** | **52** | | | **Pn** | **22 00 35.2** | **-0.1** |
| Q19K | | | | | lAmb | lAmb | 22 00 43.8 | |
| | comp=Z,492nm,0.5s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **15.78** | **52** | P | | **Pn** | **22 00 35.7** | **+0.4** |
| | baz=251,SNR=54 | | | | | | | |
| Q19K | | | | S | | **Sn** | **22 03 34.3** | **+5.2** |
| | baz=251 | | | | | | | |
| Q19K | | | | S | | **Sn** | **22 03 34.3** | **+5.2** |
| | baz=251 | | | | | | | |
| **M18K** | **Stony River** | **15.83** | **42** | P | | **P** | **22 00 38.4** | **-1.0** |
| | baz=240 | | | | | | | |
| **L18K** | **Granite Mounta** | **15.87** | **39** | P | | **P** | **22 00 39.1** | **-0.7** |
| | baz=236 | | | | | | | |
| L18K | | | | S | | **S** | **22 03 38.8** | **-5.8** |
| | baz=236 | | | | | | | |
| L18K | | | | S | | **S** | **22 03 38.8** | **-5.8** |
| | baz=236 | | | | | | | |
| **F15K** | **North Star Dit** | **15.93** | **20** | P | | **P** | **22 00 40.0** | **-0.4** |
| | baz=211 | | | | | | | |
| **KDAK** | **Kodiak Island** | **16.02** | **56** | Pn | | **Pn** | **22 00 35.9** | **-2.3** |
| KDAK | | | | | lAmb | lAmb | 22 00 46.4 | |
| | comp=Z,2μm,1.4s | | | | | | | |
| **KDAK** | **Kodiak Island** | **16.02** | **56** | ⇑P | | **Pn** | **22 00 35.5** | **-2.7** |
| **KDAK** | **Kodiak Island** | **16.02** | **56** | Pn | | **Pn** | **22 00 36.2** | **-2.1** |
| | comp=Z,22nm,0.3s,baz=270,slow=7.1,SNR=94 | | | | | | | |
| KDAK | | | | | Sn | **Sn** | **22 03 28.7** | **-5.9** |
| | comp=Z,4.6nm,0.3s,baz=262,slow=19,SNR=2.3 | | | | | | | |
| KDAK | | | | | ScP | **ScP** | **22 09 04.8** | **-0.6** |
| | comp=Z,14nm,0.7s,baz=187,slow=4.1,SNR=4.2 | | | | | | | |
| | comp=Z,109nm,0.4s | | | | | | | |
| **KDAK** | **Kodiak Island** | **16.02** | **56** | P | | **Pn** | **22 00 37.4** | **-0.8** |
| | baz=257 | | | | | | | |
| KDAK | | | | S | | **Sn** | **22 03 36.4** | **+1.7** |
| | baz=257 | | | | | | | |
| **N19K** | **Bonanza Creek** | **16.09** | **45** | P | | **P** | **22 00 41.7** | **-0.7** |
| | baz=244 | | | | | | | |
| **G16K** | **Koyuk River** | **16.21** | **24** | P | | **P** | **22 00 43.6** | **+0.1** |
| | baz=217 | | | | | | | |
| **P19K** | **Oil Pt** | **16.22** | **50** | P | | **Pn** | **22 00 41.7** | **+0.8** |
| | baz=250 | | | | | | | |
| **SKR** | **Severo-Kuril's** | **16.27** | **278** | *e*P | | **Pn** | **22 00 42.1** | **+0.5** |
| SKR | | | | *e*S | | **Sn** | **22 03 43.2** | **+2.3** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,386nm,1.2s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,34μm,17.4s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=N,18μm,9.2s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=E,19μm,12.2s | | | | | | | |
| SKR | | | | | MLR | MLR | | |
| | comp=Z,89μm,19.0s | | | | | | | |
| **Q20K** | **Shuyak Island** | **16.31** | **54** | P | | **Pn** | **22 00 40.8** | **-1.2** |
| | baz=254,SNR=21 | | | | | | | |
| Q20K | | | | S | | **S** | **22 03 48.9** | **-4.8** |
| | baz=254 | | | | | | | |
| **H17K** | **Granite Mounta** | **16.52** | **28** | P | | **P** | **22 00 48.4** | **+1.4** |
| | baz=223 | | | | | | | |
| H17K | | | | S | | **S** | **22 03 59.0** | **+1.0** |
| | baz=223 | | | | | | | |
| **L19K** | **White Mountain** | **16.57** | **40** | P | | **P** | **22 00 48.0** | **+0.3** |
| | baz=239 | | | | | | | |
| **J18K** | **Innoko River** | **16.58** | **35** | P | | **P** | **22 00 47.6** | **-0.1** |
| | baz=232 | | | | | | | |
| J18K | | | | S | | **S** | **22 03 55.8** | **-3.3** |
| | baz=232 | | | | | | | |
| **M19K** | **Big River Lodg** | **16.63** | **42** | P | | **P** | **22 00 48.5** | **+0.3** |
| | baz=241,SNR=613 | | | | | | | |
| M19K | | | | S | | **Sn** | **22 03 54.3** | **+4.9** |
| | baz=241 | | | | | | | |
| M19K | | | | S | | **Sn** | **22 03 54.3** | **+4.9** |
| | baz=241 | | | | | | | |
| **O20K** | **Slope Mountain** | **16.65** | **49** | P | | **Pn** | **22 00 46.7** | **+0.2** |
| | baz=249,SNR=109 | | | | | | | |
| O20K | | | | S | | **S** | **22 03 59.1** | **-1.7** |
| | baz=249 | | | | | | | |
| O20K | | | | S | | **S** | **22 03 59.1** | **-1.7** |
| | baz=249 | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **16.74** | **26** | P | | **P** | **22 00 50.2** | **+0.8** |
| | baz=220 | | | | | | | |
| **HOM** | **Homer** | **16.98** | **51** | | | **Pn** | **22 00 50.2** | **-0.3** |
| HOM | | | | | lAmb | lAmb | 22 00 58.4 | |
| | comp=Z,971nm,1.0s | | | | | | | |
| **HOM** | **Homer** | **16.98** | **51** | P | | **Pn** | **22 00 48.6** | **-1.9** |
| | baz=252 | | | | | | | |
| HOM | | | | S | | **Sn** | **22 04 02.2** | **+4.1** |
| | baz=252 | | | | | | | |
| **L20K** | **Farewell, AK** | **17.12** | **40** | P | | **P** | **22 00 54.9** | **+1.3** |
| | baz=240 | | | | | | | |
| **H18K** | **Honhosa River** | **17.14** | **29** | P | | **P** | **22 00 56.4** | **+2.6** |
| | baz=225 | | | | | | | |
| **CNPM** | **China Poot** | **17.14** | **51** | | | **Pn** | **22 00 52.3** | **-0.2** |
| CNPM | | | | | lAmb | lAmb | 22 01 00.9 | |
| | comp=Z,447nm,0.4s | | | | | | | |
| **M20K** | **Styx River** | **17.15** | **43** | P | | **P** | **22 00 56.1** | **+2.0** |
| | baz=243 | | | | | | | |
| **N20K** | **Mount Spurr** | **17.26** | **45** | P | | **P** | **22 00 55.9** | **+0.7** |
| | baz=246 | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **17.26** | **45** | P | | Pn | 22 00 36.3 | -18 |
| | baz=246 | | | | | | | |
| SPCR | | | | S | | Sn | 22 03 52.8 | -12 |
| | baz=246 | | | | | | | |
| **J19K** | **Poorman** | **17.29** | **34** | P | | **P** | **22 00 56.7** | **+1.3** |
| | baz=233 | | | | | | | |
| **F17K** | **Baldwin Pennin** | **17.32** | **23** | P | | **P** | **22 00 58.4** | **+2.6** |
| |

**C16K Lisburne Hills** 18.05 15 P P 22 01 06.4 +2.6
baz=206
**O22K Cooper Landing** 18.15 49 P Pn 22 01 03.4 -1.5
baz=252,SNR=38
**I20K Naaghedeneel** 18.16 33 P P 22 01 07.2 +2.1
baz=233
**SEW Seward** 18.17 50 P Pn 22 01 02.9 -2.2
baz=253,SNR=128
**G19K Purcell Mounta** 18.21 28 P P 22 01 08.0 +2.4
baz=225
**E18K Tukpahlearik C** 18.26 22 P Pn 22 01 09.1 +2.9
baz=216
**RDOG Red Dog Mine** 18.29 18 P Pn 22 01 07.4 +0.8
**RDOG Red Dog Mine** 18.29 18 P Pn 22 01 09.2 +2.6
baz=211,SNR=38
**RC01 Rabbit Creek A** 18.34 47 P P 22 01 05.2 -1.8
baz=250,SNR=49
**M22K Willow** 18.40 45 P P 22 01 07.0 -0.7
baz=248,SNR=78
**BILL Bilibino** 18.41 341 P Pn 22 01 08.7 +0.7
**BILL Bilibino** 18.41 341 *c i* P Pn 22 01 09.1 +1.1
BILL *e* S S 22 04 36.0 0.0
BILL pmax pmax
comp=Z,668nm,1.0s
**H20K Anotleneega Mo** 18.46 31 P Pn 22 01 10.1 +1.5
baz=231
**F19K Shaleruckik Mo** 18.52 26 Pn 22 01 10.2 +0.9
F19K IAmb IAmb 22 01 17.2
comp=Z,2µm,1.3s
**F19K Shaleruckik Mo** 18.52 26 P Pn 22 01 11.1 +1.8
baz=223
**CUT Chulitna** 18.59 43 P Pn 22 01 10.0 -0.2
**CUT Chulitna** 18.59 43 P P 22 01 09.3 -0.5
baz=246,SNR=20
**C17K DeLong Mountai** 18.61 17 P Pn 22 01 12.5 +2.1
baz=210
**PMR Palmer** 18.78 46 P Pn 22 01 14.6 +2.1
**PMR Palmer** 18.78 46 P Pn 22 01 12.3 -0.2
**PMR Palmer** 18.78 46 P P 22 01 09.2 -2.7
baz=250,SNR=27
**PMR Palmer** 18.78 46 P Pn 22 01 12.3 -0.2
PMR pmax pmax
comp=Z,118nm,0.8s
**PWL Port Wells** 18.92 48 P P 22 01 13.6 +0.2
**PWL Port Wells** 18.92 48 P P 22 01 10.9 -2.6
baz=253,SNR=46
**GHO Glory Hole Cre** 18.94 45 P P 22 01 14.1 +0.3
**KNK Knik Glacier** 19.03 47 P Pn 22 01 15.3 -0.3
KNK IAmb IAmb 22 01 22.9
comp=Z,801nm,0.8s
**KNK Knik Glacier** 19.03 47 P P 22 01 12.3 -2.3
baz=251,SNR=231
**BPAW Bear Paw Mtn.** 19.05 38 P Pn 22 01 16.4 +0.5
baz=240,SNR=468
**E19K Redstone River** 19.12 25 P Pn 22 01 17.7 +1.1
baz=222
**IMAR Indian Mountai** 19.13 31 P P 22 01 15.8 0.0
**C18K Utukok River** 19.14 19 P Pn 22 01 17.8 +0.9
baz=213
**P23K Montague Islan** 19.14 51 P P 22 01 13.5 -2.3
baz=256,SNR=73
**SML Sawmill** 19.21 46 P P 22 01 16.9 +0.2
**SML Sawmill** 19.21 46 P P 22 01 14.5 -2.3
baz=250,SNR=191
**F20K Avaraart Lake** 19.24 27 P Pn 22 01 18.8 +0.9
baz=226
**H21K Melozitna River** 19.24 32 P Pn 22 01 19.2 +1.0
baz=234
**I21K Tanana** 19.25 34 P Pn 22 01 18.9 +0.7
baz=236
**MA2 Magadan** 19.36 307 P Pn 22 01 22.1 +2.6
**MA2 Magadan** 19.36 307 P Pn 22 01 19.1 -0.3
**MA2 Magadan** 19.36 307 ⇑P Pn 22 01 19.0 -0.6
**MA2 Magadan** 19.36 307 P Pn 22 01 19.2 -0.3
comp=Z,5.0nm,0.3s,baz=94,slow=11,SNR=20
MA2 S S 22 04 55.3 0.0
comp=Z,29nm,1.0s,baz=262,slow=9.0,SNR=1.5
MA2 LR LR 22 08 11.3
comp=Z,213µm,20.5s,baz=104,slow=35
MA2 ScP ScP 22 09 11.8 -0.7
comp=Z,18nm,0.8s,baz=108,slow=7.8,SNR=4.8
MA2 ScS ScS 22 12 53.2 -0.8
comp=Z,2.4nm,0.3s,baz=183,slow=24,SNR=1.3
comp=Z,105nm,1.2s
**MA2 Magadan** 19.36 307 *c i* P Pn 22 01 18.9 -0.6
MA2 pmax pmax
comp=Z,176nm,1.0s
**M23K Glacier View** 19.48 46 P P 22 01 17.9 -1.7
baz=251,SNR=256
**WAT1 Susitna Watana** 19.48 43 P P 22 01 18.9 -0.7
baz=247
**GLI Glacier Island** 19.50 49 P P 22 01 20.0 +0.2
GLI IAmb IAmb 22 01 27.8
comp=Z,495nm,0.7s
**GLI Glacier Island** 19.50 49 P P 22 01 16.9 -3.0
baz=254,SNR=63
**G21K Allakaket** 19.54 30 P Pn 22 01 22.4 +0.7
baz=231
**Q23K Middleton Isla** 19.54 53 P P 22 01 19.0 -1.3
baz=259,SNR=15
**MID Middleton Isla** 19.55 53 P Pn 22 01 23.2 +1.4
**MID Middleton Isla** 19.55 53 P P 22 01 20.7 +0.4
MID IAmb IAmb 22 01 27.9
comp=Z,2µm,1.4s
**MID Middleton Isla** 19.55 53 P P 22 01 20.7 +0.4
MID pmax pmax
comp=Z,2µm,1.4s
**SEY Seymchan** 19.59 318 P Pn 22 01 22.3 0.0
comp=Z,2.2nm,0.3s,baz=119,slow=12,SNR=39
SEY S S 22 04 59.6 -0.3
comp=Z,12nm,0.8s,baz=107,slow=18,SNR=0.9
SEY LR LR 22 08 22.3
comp=Z,237µm,21.4s,baz=119,slow=35
SEY ScP ScP 22 09 11.8 -1.1
comp=Z,32nm,0.7s,baz=57,slow=3.2,SNR=8.1
SEY ScS ScS 22 12 54.1 -0.4
comp=Z,2.1nm,0.5s,baz=20,slow=23,SNR=6.2
comp=Z,151nm,0.7s
**SEY Seymchan** 19.59 318 *e* P P 22 01 21.1 +0.3
SEY pmax pmax
comp=Z,803nm,1.6s
**MLY Manley** 19.62 35 P Pn 22 01 22.9 +0.3
baz=238,SNR=904
**B18K Kokolik River** 19.63 17 P Pn 22 01 23.7 +1.0
baz=211
**HIN Hinchinbrook I** 19.67 50 P P 22 01 22.0 +0.3
HIN IAmb IAmb 22 01 29.4
comp=Z,954nm,1.2s
**SCM Sheep Creek Mo** 19.67 46 P P 22 01 21.4 -0.4
SCM IAmb IAmb 22 01 35.5
comp=Z,614nm,0.6s
**SCM Sheep Creek Mo** 19.67 46 P P 22 01 19.6 -2.2
baz=251,SNR=103
**SCM Sheep Creek Mo** 19.67 46 P P 22 01 21.4 -0.4
SCM pmax pmax
comp=Z,614nm,0.6s
**D19K Kuna River** 19.69 22 P Pn 22 01 23.8 +0.4
baz=219
**MCK McKinley** 19.69 40 P P 22 01 21.7 -0.2
baz=244,SNR=130
**WAT6 Susitna Watana** 19.74 44 P P 22 01 20.8 -1.8
baz=249,SNR=258
**C19K Lookout Ridge** 19.85 20 P Pn 22 01 25.7 +0.4
baz=215
**H22K Ishtalitna Cre** 19.86 33 P Pn 22 01 25.9 +0.4
baz=235
**E20K Nigu River** 19.98 24 P Pn 22 01 27.3 +0.4
baz=223
**F21K Alatna River** 20.00 28 P Pn 22 01 27.0 -0.1
baz=229
**NEA2 Nenana** 20.02 38 P P 22 01 25.6 +0.1
NEA2 IAmb IAmb 22 01 36.0
comp=Z,1µm,1.1s
**NEA2 Nenana** 20.02 38 P P 22 01 25.5 0.0
baz=242,SNR=755
**EYAK Cordova Ski Ar** 20.07 50 P Pn 22 01 29.5 +1.6
**EYAK Cordova Ski Ar** 20.07 50 P P 22 01 24.2 -1.8
baz=257,SNR=40
**DHY Denali Highway** 20.07 43 P P 22 01 26.3 0.0
**DHY Denali Highway** 20.07 43 P P 22 01 25.9 -0.4
baz=248,SNR=683
**I23K Minto, Yukon-K** 20.18 36 P P 22 01 27.7 +0.5
baz=240,SNR=533
**D20K Etivluk River** 20.21 23 P Pn 22 01 28.9 -0.6
baz=221
**KLU Klutina** 20.22 48 P Pn 22 01 29.1 -0.7
KLU IAmb IAmb 22 01 39.2
comp=Z,527nm,0.8s
**KLU Klutina** 20.22 48 P P 22 01 25.6 -2.1
baz=254,SNR=227
**M24K Tolsona, Glenn** 20.27 46 P P 22 01 28.0 -0.3
M24K IAmb IAmb 22 01 40.0
comp=Z,2µm,1.2s
**M24K Tolsona, Glenn** 20.27 46 P P 22 01 27.6 -0.7
baz=252,SNR=211
**WRH Wood River Hil** 20.35 38 P P 22 01 29.0 0.0
**G22K Bettles** 20.42 30 P Pn 22 01 31.0 -1.0
baz=233
**H23K Yukon River** 20.46 34 P P 22 01 31.4 +1.1
baz=238
**A19K Wainwright** 20.48 16 P Pn 22 01 31.9 -0.7
baz=211
**MDM Murphy Dome** 20.51 37 P P 22 01 31.5 +0.6
MDM IAmb IAmb 22 01 41.2
comp=Z,1µm,1.0s
**RAGM Ragged Mountai** 20.55 51 IAMs_20 IAMs_20 22 10 30.5
comp=Z,235µm,19.0s
**F22K John River** 20.57 28 P Pn 22 01 33.1 -0.7
baz=231
**KAIM Kayak Island** 20.60 52 P P 22 01 32.5 +0.7
KAIM IAmb IAmb 22 01 42.6
comp=Z,474nm,0.8s
KAIM IAMs_20 IAMs_20 22 10 48.7
comp=Z,174µm,20.0s
**KAIM Kayak Island** 20.60 52 P P 22 01 31.0 -0.7
baz=260,SNR=35
**COLA College** 20.62 38 P Pn 22 01 34.4 +0.1
**COLA College** 20.62 38 ⇑P P 22 01 30.8 -1.1
**COLA College** 20.62 38 P P 22 01 31.6 -0.3
baz=243
**COLA College** 20.62 38 *c i* P P 22 01 31.6 -0.3
COLA pmax pmax
comp=Z,499nm,0.9s
COLA MLR MLR
comp=Z,112µm,16.0s
**E21K Killik River** 20.69 25 P P 22 01 32.7 0.0
E21K IAmb IAmb 22 01 40.8
comp=Z,680nm,0.8s
E21K IAMs_20 IAMs_20 22 09 46.4
comp=Z,187µm,20.0s
**E21K Killik River** 20.69 25 P Pn 22 01 33.9 -1.2
baz=226
**BMRM Bremner River** 20.71 49 P P 22 01 30.7 -2.2
baz=257,SNR=91
**HDA Harding Lake** 20.77 39 P P 22 01 33.3 -0.3
HDA IAMs_20 IAMs_20 22 10 39.5
comp=Z,220µm,19.0s
**HDA Harding Lake** 20.77 39 P P 22 01 32.0 -1.6
baz=245,SNR=247
**G23K Bananza Creek** 20.78 32 P P 22 01 34.1 +0.4
G23K IAmb IAmb 22 01 45.6
comp=Z,560nm,0.8s
G23K IAMs_20 IAMs_20 22 09 46.8
comp=Z,153µm,20.0s
**G23K Bananza Creek** 20.78 32 P Pn 22 01 35.3 -0.9
baz=236
**HARP HAARP** 20.82 45 P P 22 01 33.5 -0.6
baz=253,SNR=90
**PAX Paxson** 20.86 44 P P 22 01 34.0 -0.6
baz=251,SNR=146
**N25K Chitina, Valde** 20.86 48 P P 22 01 33.7 -1.0
baz=255,SNR=147
**POKR Poker Plat Res** 20.89 37 P P 22 01 35.6 +0.8
POKR IAmb IAmb 22 01 51.6
comp=Z,879nm,1.0s
**POKR Poker Plat Res** 20.89 37 P P 22 01 34.0 -0.9
baz=243,SNR=130
**SUCK Suckling Hills** 20.94 52 IAMs_20 IAMs_20 22 10 50.7
comp=Z,142µm,20.0s
**ILAR Eielson Array** 20.95 38 P P 22 01 34.4 -1.1
comp=Z,47nm,0.8s,baz=238,slow=8.2,SNR=101
ILAR S S 22 05 25.3 -1.7
comp=Z,5.8nm,0.5s,baz=220,slow=9.9,SNR=2.2
ILAR PcP PcP 22 05 41.9 0.0
comp=Z,36nm,0.7s,baz=252,slow=3.0,SNR=8.5
ILAR ScP ScP 22 09 14.0 -2.0
comp=Z,15nm,0.8s,baz=317,slow=3.1,SNR=10
ILAR LR LR 22 10 47.3
comp=Z,132µm,20.4s,baz=231,slow=40
ILAR ScS ScS 22 12 56.7 -2.5
comp=Z,6.9nm,0.9s,baz=295,slow=2.8,SNR=5.0
ILAR P3KPbc 22 35 30.8
comp=Z,0.3nm,0.6s,baz=49,slow=3.7,SNR=1.5
comp=Z,47nm,0.8s
**K24K Donnelly Dome** 21.01 41 P P 22 01 35.9 -0.3
baz=248,SNR=89
**COLD Coldfoot** 21.01 30 P P 22 01 37.4 +1.2
baz=234,SNR=235
**H24K Noodor Dome** 21.06 35 P P 22 01 37.3 +0.5
baz=241
**B20K Meade River** 21.09 20 P P 22 01 36.3 -0.6
B20K IAmb IAmb 22 01 43.8
comp=Z,858nm,0.7s
**B20K Meade River** 21.09 20 P P 22 01 37.0 +0.1
baz=218
**BGLC Bering Glacier** 21.19 52 P P 22 01 36.3 -1.8
baz=261
**VRDI Verde Repeater** 21.31 49 IAMs_20 IAMs_20 22 10 27.3
comp=Z,155µm,22.0s
**D22K Ayikyak River** 21.33 25 P P 22 01 41.0 +1.4
baz=227
**B21K Ikpikpuk River** 21.37 22 P P 22 01 39.9 0.0
B21K IAmb IAmb 22 01 51.0
comp=Z,916nm,0.8s
B21K IAMs_20 IAMs_20 22 10 40.2
comp=Z,220µm,19.0s
**B21K Ikpikpuk River** 21.37 22 P P 22 01 40.9 +1.0
baz=223
**CRQM Cirque** 21.37 50 IAMs_20 IAMs_20 22 10 57.6
comp=Z,144µm,20.0s
**CRQE Cirque** 21.39 50 P P 22 01 38.6 -1.8
baz=259,SNR=74
**SNH Sunshine Point** 21.42 52 P P 22 01 41.5 +0.9
SNH IAmb IAmb 22 01 51.0
comp=Z,473nm,0.8s
**WAX Waxell Ridge** 21.45 51 IAMs_20 IAMs_20 22 11 09.3
comp=Z,203µm,20.0s
**J25K Salcha River,** 21.48 39 P P 22 01 39.2 -2.1
baz=247
**TGL Tana Glacier** 21.52 50 IAMs_20 IAMs_20 22 11 01.9
comp=Z,153µm,20.0s
**MCARA McCarthy VSAT** 21.54 49 IAMs_20 IAMs_20 22 10 35.5
comp=Z,171µm,22.0s
**MCARA McCarthy VSAT** 21.54 49 P P 22 01 39.5 -2.4
baz=258,SNR=29
**G24K Hadweenzic Riv** 21.63 33 P P 22 01 43.9 +1.1
baz=239
**E23K Chandalar** 21.68 29 P P 22 01 43.3 -0.2
E23K IAmb IAmb 22 02 02.9
comp=Z,2µm,1.6s
E23K IAMs_20 IAMs_20 22 10 17.6
comp=Z,214µm,19.0s
**E23K Chandalar** 21.68 29 P P 22 01 44.7 +1.3
baz=233
**ISLE Juniper Island** 21.73 51 P P 22 01 44.0 -0.1
ISLE IAmb IAmb 22 02 03.6
comp=Z,1µm,1.7s
ISLE IAMs_20 IAMs_20 22 11 18.9
comp=Z,193µm,20.0s
**PRP Porcupine Dome** 21.78 37 P P 22 01 44.3 -0.3
**PRP Porcupine Dome** 21.78 37 P P 22 01 43.3 -1.3
baz=245,SNR=64
**M26K Nabesna, AK** 21.79 46 IAMs_20 IAMs_20 22 11 34.6
comp=Z,228µm,22.0s
**M26K Nabesna, AK** 21.79 46 P P 22 01 43.5 -1.1
baz=255
**L26K Log Cabin Wild** 21.80 44 P P 22 01 44.2 -0.5
baz=253,SNR=437
**SCRK Sand Creek** 21.81 42 IAMs_20 IAMs_20 22 11 35.6
comp=Z,176µm,20.0s
**SCRK Sand Creek** 21.81 42 P P 22 01 44.0 -0.9
baz=250,SNR=395
**MESA MESA** 21.86 52 P P 22 01 44.5 -1.0
baz=262,SNR=27
**F24K Squaw Lake** 21.92 31 IAMs_20 IAMs_20 22 10 23.1
comp=Z,153µm,20.0s
**F24K Squaw Lake** 21.92 31 P P 22 01 47.3 +1.3
baz=237
**D23K Nanushuk River** 21.93 26 P P 22 01 46.1 +0.1
D23K IAmb IAmb 22 01 55.0
comp=Z,813nm,0.7s
**D23K Nanushuk River** 21.93 26 P P 22 01 47.2 +1.2
baz=230
**H25L Birch Creek** 22.00 35 P P 22 01 46.2 -0.6
baz=243,SNR=224
**GRNC Granite Creek** 22.03 51 IAMs_20 IAMs_20 22 11 27.0
comp=Z,192µm,20.0s
**E24K Your Creek** 22.04 30 IAMs_20 IAMs_20 22 10 19.2
comp=Z,207µm,20.0s
**E24K Your Creek** 22.04 30 P P 22 01 48.5 +1.3
baz=235
**TOLK Toolik Lake Re** 22.05 28 P P 22 01 48.1 +0.8
baz=252,SNR=316
**G25K Bearman Lake** 22.14 34 P P 22 01 49.0 +0.8
baz=241
**J26L Joseph Creek** 22.16 40 P P 22 01 46.8 -1.8
baz=250
**B22K Teshekpuk Lake** 22.17 22 IAMs_20 IAMs_20 22 11 07.6
comp=Z,197µm,19.0s
**B22K Teshekpuk Lake** 22.17 22 P P 22 01 48.5 -0.1
baz=223
**A21K Barrow** 22.24 18 P P 22 01 48.4 -0.8
baz=217
**CTG Chitna Glacier** 22.27 50 P P 22 01 47.9 -2.0
baz=261,SNR=89
**CTGM Chitina Glacie** 22.27 50 IAMs_20 IAMs_20 22 11 37.2
comp=Z,136µm,20.0s
**M27K Edge Creek, AK** 22.28 46 P P 22 01 50.5 +0.5
M27K IAmb IAmb 22 01 55.1
comp=Z,506nm,0.8s
M27K IAMs_20 IAMs_20 22 11 32.9
comp=Z,186µm,22.0s
**M27K Edge Creek, AK** 22.28 46 P P 22 01 49.1 -0.9
baz=257
**A22K Sinclair Lake** 22.32 20 P P 22 01 50.1 -0.1
baz=220
**LOGN Logan Glacier** 22.41 51 IAMs_20 IAMs_20 22 11 49.0
comp=Z,148µm,20.0s
**L27K Beaver Creek,** 22.47 45 P P 22 01 51.6 -0.3
baz=255
**BCAR Beaver Creek A** 22.49 45 P P 22 01 51.3 -0.8
**C23K Itkillik River** 22.52 25 P P 22 01 52.5 +0.2
C23K IAMs_20 IAMs_20 22 11 26.7
comp=Z,172µm,19.0s
**C23K Itkillik River** 22.52 25 P P 22 01 52.8 +0.5
baz=228
**D24K Happy Valley** 22.57 27 P P 22 01 53.7 +0.8
baz=232,SNR=159
**I26K Coal Creek Min** 22.61 39 IAMs_20 IAMs_20 22 11 45.5
comp=Z,208µm,20.0s
**I26K Coal Creek Min** 22.61 39 P P 22 01 51.5 -1.8
baz=248
**K27K Chicken** 22.63 42 P P 22 01 53.5 0.0
baz=252
**F25K Christian Rive** 22.70 32 IAMs_20 IAMs_20 22 10 56.6
comp=Z,130µm,20.0s
**F25K Christian Rive** 22.70 32 P P 22 01 54.8 +0.5
baz=240
**O28M Mount Upton** 22.80 51 P P 22 01 53.6 -2.0
baz=262
**YUK3 Moose Creek** 22.82 48 P P 22 01 54.3 -1.5
baz=260,SNR=150
**YKU2 Yakutat** 22.94 54 IAMs_20 IAMs_20 22 11 24.1
comp=Z,159µm,20.0s
**C24K Franklin Bluff** 22.96 26 P P 22 01 56.6 -0.3
C24K IAMs_20 IAMs_20 22 11 50.4
comp=Z,200µm,18.0s
**C24K Franklin Bluff** 22.96 26 P P 22 01 56.8 0.0
baz=232
**BMAR Burnt Mountain** 22.98 33 P P 22 01 56.9 -0.2
**BCPM Bancas Point** 22.99 53 IAMs_20 IAMs_20 22 11 31.3
comp=Z,236µm,22.0s
**G26K Porcupine Rive** 23.04 34 P P 22 01 57.5 -0.2
baz=244
**YUK8 Steele Glacier** 23.07 50 P P 22 01 56.2 -2.2
baz=262,SNR=145
**PNL Peninsula** 23.09 54 P P 22 02 00.9 +2.6
**PNL Peninsula** 23.09 54 P P 22 01 55.6 -2.7
baz=266,SNR=18
**MIDW Midway** 23.12 179 P P 22 02 01.8 +2.9
**MIDW Midway** 23.12 179 P P 22 01 58.3 -0.5
MIDW IAmb IAmb 22 02 06.2
comp=Z,526nm,1.1s
**EGAK Eagle** 23.23 41 ⇑P P 22 01 58.6 -1.1
**EGAK Eagle** 23.23 41 P P 22 01 58.9 -0.8
baz=252,SNR=353
**F26K Sheenjek River** 23.25 33 IAMs_20 IAMs_20 22 11 24.2
comp=Z,132µm,19.0s
**F26K Sheenjek River** 23.25 33 P P 22 02 00.7 +0.8
baz=242
**I27K Kandik River** 23.32 38 P P 22 01 59.1 -1.5
baz=250
**KUR Kuril'sk** 23.37 268 *c i* P P 22 02 01.3 +0.1
KUR *e* 22 02 24.8
KUR *i* S S 22 06 11.3 -0.5
KUR pmax pmax
comp=Z,45µm,4.6s
KUR pmax pmax
comp=Z,3µm,1.8s
KUR pmax pmax
comp=E,2µm,2.3s
KUR pmax pmax
comp=N,473nm,1.3s
KUR MLR MLR
comp=Z,32µm,15.0s
**D25K Kavik River** 23.38 28 IAMs_20 IAMs_20 22 11 23.5
comp=Z,160µm,20.0s
**D25K Kavik River** 23.38 28 P P 22 02 01.3 +0.1
baz=236
**O29M Mount Kennedy** 23.55 52 IAMs_20 IAMs_20 22 12 11.6
comp=Z,200µm,20.0s
**O29M Mount Kennedy** 23.55 52 P P 22 02 01.5 -1.5
baz=265
**H27K Steamboat Moun** 23.58 37 P P 22 02 01.3 -1.8
baz=248
**YUK4 Talbot Arm** 23.62 50 P P 22 02 03.2 -0.6
baz=262,SNR=92
**YUK6 Outpost Mounta** 23.71 51 P P 22 02 02.4 -2.2
baz=264,SNR=59
**G27K Doyon Strip** 23.75 36 IAMs_20 IAMs_20 22 12 43.9
comp=Z,126µm,18.0s
**G27K Doyon Strip** 23.75 36 P P 22 02 03.2 -1.6
baz=247
**DAWY Dawson** 23.78 43 P P 22 02 04.3 -0.7
baz=256,SNR=193
**M29M Somme Creek** 23.86 47 IAMs_20 IAMs_20 22 11 58.9
comp=Z,142µm,20.0s
**M29M Somme Creek** 23.86 47 P P 22 02 05.0 -0.9
baz=260
**P29M Windy Craggy** 23.93 54 IAMs_20 IAMs_20 22 11 54.8
comp=Z,175µm,20.0s
**P29M Windy Craggy** 23.93 54 P P 22 02 04.6 -1.9
baz=267
**I28M Miner Creek** 23.93 39 P P 22 02 04.6 -1.9
I28M IAmb IAmb 22 02 09.3
comp=Z,541nm,0.9s
**I28M Miner Creek** 23.93 39 P P 22 02 05.7 -0.9
baz=252
**L29M L29M** 24.13 45 IAMs_20 IAMs_20 22 13 04.9
comp=Z,133µm,22.0s
**L29M L29M** 24.13 45 P P 22 02 08.3 -0.1
baz=259
**C26K Camden Bay** 24.14 27 P P 22 02 09.1 +0.8
baz=236
**E27K Coleen River** 24.33 33 IAMs_20 IAMs_20 22 12 16.8
comp=Z,148µm,20.0s
**E27K Coleen River** 24.33 33 P P 22 02 10.9 +0.8
baz=244
**C27K Jago River** 24.34 29 P P 22 02 10.6 +0.5
baz=239
**P30M Million Dollar** 24.34 53 P P 22 02 09.2 -1.1
baz=267
**J29N Klondike Camp** 24.37 42 IAMs_20 IAMs_20 22 12 12.2
comp=Z,137µm,20.0s
**J29N Klondike Camp** 24.37 42 P P 22 02 09.8 -0.7
baz=256,SNR=16
**N30M Aishikik Lake** 24.38 50 P P 22 02 10.4 -0.3
N30M IAMs_20 IAMs_20 22 12 53.4
comp=Z,144µm,20.0s
**N30M Aishikik Lake** 24.38 50 P P 22 02 09.6 -1.1
baz=264
**TYV Tymovskoe** 24.50 284 *e* P P 22 02 14.2 +2.4
TYV pmax pmax
comp=Z,15µm,5.7s
TYV pmax pmax
comp=Z,304nm,1.5s
**K29M Barlow Dome** 24.54 44 P P 22 02 11.0 -1.2
K29M IAmb IAmb 22 02 19.5
comp=Z,627nm,0.9s
K29M IAMs_20 IAMs_20 22 12 35.3
comp=Z,163µm,22.0s
**K29M Barlow Dome** 24.54 44 P P 22 02 11.9 -0.2
baz=258

**I29M Ogilvie Camp, 24.56 40 P P 22 02 10.8 -1.5**
I29M IAmb IAmb 22 02 20.0
comp=Z,522nm,0.7s
**I29M Ogilvie Camp, 24.56 40 P P 22 02 10.8 -1.5**
baz=254,SNR=567
**PLBC Pleasant Camp 24.62 55 P P 22 02 11.1 -1.7**
baz=269,SNR=12
**F28M Old Crow 24.70 34 IAms_20 IAms_20 22 13 17.5**
comp=Z,132µm,18.0s
**F28M Old Crow 24.70 34 P P 22 02 13.7 +0.2**
baz=248
**S31K Pelican 24.72 58 P P 22 02 11.7 -1.9**
baz=272
**H29M Whitestone 24.78 38 IAms_20 IAms_20 22 13 22.7**
comp=Z,125µm,20.0s
**H29M Whitestone 24.78 38 P P 22 02 13.5 -0.7**
baz=252
**O30N Mendenhall 24.80 51 IAms_20 IAms_20 22 12 44.2**
comp=Z,195µm,21.0s
**O30N Mendenhall 24.80 51 P P 22 02 13.4 -1.1**
baz=266,SNR=37
**R31K City Hall, Gus 24.96 57 P P 22 02 15.2 -0.6**
baz=272
**N31M Braeburn, Yuko 25.00 50 IAms_20 IAms_20 22 13 21.4**
comp=Z,122µm,19.0s
**N31M Braeburn, Yuko 25.00 50 P P 22 02 15.2 -1.1**
baz=265,SNR=45
**D27M Malcolm River 25.00 31 P P 22 02 16.1 -0.1**
D27M IAmb IAmb 22 02 22.8
comp=Z,335nm,0.9s
D27M IAMs_20 IAMs_20 22 12 35.5
comp=Z,185µm,20.0s
**D27M Malcolm River 25.00 31 P P 22 02 16.7 +0.4**
baz=243
**NKL Nikolayevsk 25.11 290 eP P 22 02 14.9 -2.3**
NKL eS S 22 06 39.2 -0.4
NKL pmax pmax
comp=N,934nm,1.0s
NKL pmax pmax
comp=E,196nm,1.0s
NKL pmax pmax
comp=Z,800nm,1.3s
NKL smax smax
comp=E,3µm,6.4s
NKL smax smax
comp=N,5µm,7.0s
NKL MLR MLR
comp=E,152µm,23.0s
NKL MLR MLR
comp=N,252µm,22.0s
NKL MLR MLR
comp=Z,399µm,22.0s
**G29M Pine Creek 25.13 37 P P 22 02 16.8 -0.5**
G29M IAMs_20 IAMs_20 22 13 15.9
comp=Z,124µm,19.0s
**G29M Pine Creek 25.13 37 P P 22 02 16.6 -0.7**
baz=251
**SKAG Skagway 25.15 55 P P 22 02 20.5 +3.0**
**SKAG Skagway 25.15 55 IAMs_20 IAMs_20 22 13 19.6**
comp=Z,114µm,19.0s
**SKAG Skagway 25.15 55 ⇑P P 22 02 16.8 -0.7**
**SKAG Skagway 25.15 55 P P 22 02 16.6 -0.9**
baz=270,SNR=6.4
**J30M Hart River 25.19 42 IAMs_20 IAMs_20 22 12 47.7**
comp=Z,178µm,21.0s
**J30M Hart River 25.19 42 P P 22 02 18.2 +0.1**
baz=258
**YUK Yuzh-Kuril'sk 25.20 267 eP P 22 02 18.6 +0.5**
YUK e 22 02 53.8
YUK ePPP PPP 22 03 02.5
YUK eS S 22 06 41.9 +0.7
YUK eSS SnSn 22 07 35.8 +3.1
YUK eSSS SSS 22 07 50.3
YUK pmax pmax
comp=Z,1µm,0.7s
YUK pmax pmax
comp=N,717nm,0.6s
YUK pmax pmax
comp=E,995nm,0.6s
YUK pmax pmax
comp=Z,1µm,1.0s
YUK MLR MLR
comp=Z,33µm,17.0s
YUK MLR MLR
comp=N,10µm,12.0s
YUK MLR MLR
comp=E,19µm,14.0s
**E28M Babbage River 25.20 32 P P 22 02 18.4 +0.5**
E28M IAmb IAmb 22 02 26.6
comp=Z,621nm,0.8s
E28M IAMs_20 IAMs_20 22 12 44.1
comp=Z,119µm,20.0s
**E28M Babbage River 25.20 32 P P 22 02 18.2 +0.2**
baz=246
**SIT Sitka 25.27 60 P P 22 02 21.3 +2.7**
**SIT Sitka 25.27 60 P P 22 02 19.1 +0.5**
SIT IAmb IAmb 22 02 52.7
comp=Z,372nm,0.9s
**SIT Sitka 25.27 60 P P 22 02 18.7 0.0**
baz=275,SNR=9.1
**SIT Sitka 25.27 60 P P 22 02 19.1 +0.5**
SIT pmax pmax
comp=Z,372nm,0.9s
SIT MLR MLR
comp=Z,64µm,22.0s
**I30M Mount Dempster 25.31 41 IAMs_20 IAMs_20 22 14 00.8**
comp=Z,170µm,20.0s
**I30M Mount Dempster 25.31 41 P P 22 02 18.6 -0.5**
baz=256
**WHY Whitehorse 25.39 52 IAMs_20 IAMs_20 22 13 09.8**
comp=Z,189µm,20.0s
**WHY Whitehorse 25.39 52 P P 22 02 18.8 -1.1**
baz=268,SNR=29
**UGL Uglegorsk 25.43 281 eP P 22 02 21.9 +1.7**
UGL e 22 03 05.3
UGL eS S 22 06 40.9 -4.0
UGL pmax pmax
comp=Z,24µm,8.3s
UGL pmax pmax
comp=Z,900nm,1.2s
UGL MLR MLR
comp=E,25µm,11.0s
UGL MLR MLR
comp=N,58µm,15.0s
**EPYK Eagle Plains 25.46 38 IAMs_20 IAMs_20 22 13 53.9**
comp=Z,111µm,19.0s
**EPYK Eagle Plains 25.46 38 P P 22 02 19.5 -0.9**
baz=254,SNR=135
**R32K Eaglecrest 25.61 57 P P 22 02 21.7 -0.1**
baz=273,SNR=7.5
**S32K Killisnoo 25.64 59 P P 22 02 21.7 -0.3**
**S32K Killisnoo 25.64 59 P P 22 02 22.5 +0.5**
baz=275,SNR=19
**E29M Blow River 25.68 33 P P 22 02 22.8 +0.5**
E29M IAmb IAmb 22 02 31.1
comp=Z,401nm,0.8s
E29M IAMs_20 IAMs_20 22 13 59.3
comp=Z,138µm,20.0s
**E29M Blow River 25.68 33 P P 22 02 23.1 +0.8**
baz=248
**JIS Juneau Island 25.68 57 P P 22 02 24.6 +2.3**
**M31M Drury Creek, Y 25.72 48 IAMs_20 IAMs_20 22 14 00.2**
comp=Z,151µm,21.0s
**M31M Drury Creek, Y 25.72 48 P P 22 02 22.4 -0.3**
baz=265,SNR=72
**D28M Stokes Point 25.76 31 P P 22 02 23.7 +0.7**
baz=246
**YSS Yuzh-Sakhalins 25.82 276 P P 22 02 25.9 +2.2**
**YSS Yuzh-Sakhalins 25.82 276 P P 22 02 23.9 +0.1**
**YSS Yuzh-Sakhalins 25.82 276 ⇑P P 22 02 24.9 +1.2**
**YSS Yuzh-Sakhalins 25.82 276 αeP P 22 02 25.3 +1.6**
YSS eS S 22 06 48.6 -2.4
YSS pmax pmax
comp=N,300nm,0.9s
YSS pmax pmax
comp=Z,800nm,0.9s
YSS pmax pmax
comp=E,600nm,1.1s
YSS pmax pmax
comp=Z,12µm,9.0s
YSS pmax pmax
comp=N,5µm,8.5s
YSS smax smax
comp=N,6µm,13.4s
YSS smax smax
comp=E,12µm,11.7s
**G30M tAoh Zraii Nji 25.82 37 P P 22 02 22.1 -1.5**
baz=253
**P32M Atlin 25.97 54 P P 22 02 24.8 -0.2**
baz=271,SNR=22
**F30M Barrier River 26.17 36 P P 22 02 26.8 +0.1**
baz=252
**FARO Faro, Yukon 26.21 48 IAMs_20 IAMs_20 22 13 41.2**
comp=Z,153µm,21.0s
**FARO Faro, Yukon 26.21 48 P P 22 02 26.9 -0.3**
baz=266,SNR=22
**N32M Quiet Lake 26.29 51 P P 22 02 27.6 -0.3**
baz=268
**P33M Teslin, Yukon 26.41 53 IAMs_20 IAMs_20 22 13 24.8**
comp=Z,118µm,20.0s
**P33M Teslin, Yukon 26.41 53 P P 22 02 28.8 -0.3**
baz=270,SNR=72
**G31M Satah River 26.55 38 P P 22 02 29.4 -0.7**
**G31M Satah River 26.55 38 P P 22 02 29.6 -0.6**
baz=256
**T33K Petersburg 26.59 60 P P 22 02 31.1 +0.5**
baz=277
**U33K Whale Pass 26.59 62 P P 22 02 31.3 +0.7**
**U33K Whale Pass 26.59 62 P P 22 02 31.5 +0.8**
baz=278,SNR=12
U33K S S 22 07 03.9 +0.8
baz=278
U33K S S 22 07 03.9 +0.8
baz=278
**CRAG Craig 26.70 63 P P 22 02 34.4 +2.8**
**CRAG Craig 26.70 63 P P 22 02 32.2 +0.6**
CRAG IAmb IAmb 22 03 12.4
comp=Z,367nm,1.1s
**CRAG Craig 26.70 63 ⇑P P 22 02 33.7 +2.1**
**CRAG Craig 26.70 63 P P 22 02 32.2 +0.6**
baz=280,SNR=13
CRAG S S 22 07 06.9 +2.1
baz=280
**Q32M Nakina River 26.74 56 P P 22 02 32.1 -0.1**
Q32M IAMs_20 IAMs_20 22 14 12.7
comp=Z,116µm,20.0s
**Q32M Nakina River 26.74 56 P P 22 02 31.5 -0.7**
baz=273,SNR=27
Q32M S S 22 07 09.1 +3.3
baz=273
**JMP Maruseppu 26.78 269 eP P 22 02 32.5 0.0**
**F31M Tsiigehtchic 26.88 37 IAMs_20 IAMs_20 22 14 31.2**
comp=Z,109µm,19.0s
**F31M Tsiigehtchic 26.88 37 P P 22 02 32.4 -0.7**
baz=255,SNR=31
F31M S S 22 07 04.5 -2.8
baz=255
**WRAK Wrangell Islan 26.98 61 P P 22 02 35.5 +1.5**
baz=278
WRAK S S 22 07 13.3 +4.2
baz=278
**JWK2 Keihoku 27.07 273 eP P 22 02 37.5 +2.4**
**INK Inuvik 27.19 35 ⇑P P 22 02 35.1 -0.7**
**INK Inuvik 27.19 35 LR LR 22 14 45.6**
comp=Z,79µm,20.2s,baz=234,slow=40
**INK Inuvik 27.19 35 P P 22 02 35.9 +0.1**
baz=254,SNR=50
INK S S 22 07 09.3 -2.9
baz=254
**MMPY Sheldon Lake, 27.20 47 IAMs_20 IAMs_20 22 14 46.3**
comp=Z,159µm,20.0s
**MMPY Sheldon Lake, 27.20 47 P P 22 02 35.8 -0.3**
baz=267,SNR=107
MMPY S S 22 07 11.0 -1.7
baz=267
**JKA Kamikawa-asahi 27.20 270 P P 22 02 36.2 -0.1**
**ASAJ Asahikawa 27.20 270 ScP ScP 22 09 34.5 +1.0**
comp=Z,24nm,0.8s,baz=170,slow=2.7,SNR=6.0
ASAJ LR LR 22 12 05.3
comp=Z,49µm,22.0s,baz=70,slow=33
ASAJ ScS ScS 22 13 26.3 +1.5
comp=Z,7.2nm,1.0s,baz=265,slow=34,SNR=1.6
**ASAJ Asahikawa 27.20 270 P P 22 02 36.2 -0.1**
ASAJ pmax pmax
comp=Z,1µm,1.3s
ASAJ MLR MLR
comp=Z,48µm,20.0s
**ASAJ Asahikawa 27.20 270 P P 22 02 37.1 +0.9**
**R33M Jennings River 27.38 55 IAMs_20 IAMs_20 22 14 37.0**
comp=Z,100µm,18.0s
**R33M Jennings River 27.38 55 P P 22 02 38.5 +0.7**
baz=274
R33M S S 22 07 18.1 +2.4
baz=274
**S34M Telegraph Cree 27.43 58 P P 22 02 38.9 +0.7**
**S34M Telegraph Cree 27.43 58 P P 22 02 38.8 +0.7**
baz=276
S34M S S 22 07 19.3 +3.0
baz=276
**DIB Dawson Inlet, 27.56 68 P P 22 02 40.6 +1.3**
DIB IAmb IAmb 22 03 14.0
comp=Z,629nm,1.1s
**V35K Ketchikan 27.57 63 P P 22 02 40.2 +0.8**
baz=281,SNR=21
V35K S S 22 07 21.4 +2.9
baz=281
V35K S S 22 07 21.4 +2.9
baz=281
**JEM Erimo 27.94 266 P P 22 02 45.7 +2.8**
**JEM Erimo 27.94 266 eP P 22 02 44.6 +1.7**
**ERM Erimo 27.94 266 P P 22 02 45.7 +2.8**
**ERM Erimo 27.94 266 P P 22 02 43.8 +0.9**
ERM IAmb IAmb 22 02 46.9
comp=Z,751nm,1.4s
**ERM Erimo 27.94 266 ⇑P P 22 02 43.6 +0.8**
**ERM Erimo 27.94 266 c iP P 22 02 43.3 +0.4**
ERM pmax pmax
comp=Z,543nm,1.3s
ERM MLR MLR
comp=Z,53µm,22.0s
**DLBC Dease Lake 27.95 56 IAMs_20 IAMs_20 22 14 39.8**
comp=Z,84µm,19.0s
**DLBC Dease Lake 27.95 56 LR LR 22 15 00.2**
comp=Z,79µm,18.8s,baz=280,slow=39
**DLBC Dease Lake 27.95 56 P P 22 02 42.7 -0.3**
baz=276,SNR=25
DLBC S S 22 07 28.7 +4.0
baz=276
**T35M Bob Quinn 28.03 60 P P 22 02 44.2 +0.6**
baz=279,SNR=28
T35M S S 22 07 29.4 +3.6
baz=279
**GRNR Gornyy 28.30 287 ⇑ iP P 22 02 46.4 +0.4**
GRNR pmax pmax
comp=E,60nm,0.9s
GRNR pmax pmax
comp=Z,130nm,0.9s
**U35K Hyder 28.34 62 P P 22 02 47.6 +1.3**
baz=281
U35K S S 22 07 34.9 +4.4
baz=281
**WTLY Watson Lake, Y 28.42 53 P P 22 02 47.6 +0.5**
baz=274
WTLY S S 22 07 30.8 -1.2
baz=274
**HG4B Hotspring 28.55 70 P P 22 02 49.2 +1.0**
HG4B IAmb IAmb 22 02 53.3
comp=Z,211nm,0.8s
**JEW Eniwo 28.57 269 P P 22 02 49.9 +1.4**
**TGTN Hyland Airport 28.60 50 P P 22 02 48.8 +0.1**
baz=272,SNR=14
TGTN S S 22 07 36.3 +1.5
baz=272
**GRNB Grenville Isla 28.85 66 P P 22 02 52.3 +1.5**
GRNB IAmb IAmb 22 03 30.6
comp=Z,283nm,1.0s
**JSH Shimam 29.55 269 P P 22 02 58.5 +1.3**
**JOT Ohata 29.61 267 eP P 22 02 59.3 +1.6**
**YAK Yakutsk 29.80 311 P P 22 02 58.2 -1.0**
**YAK Yakutsk 29.80 311 P P 22 02 58.5 -0.6**
comp=Z,62nm,0.8s,baz=90,slow=2.2,SNR=11
YAK PcP PcP 22 06 00.9 -0.9
comp=Z,110nm,0.7s,baz=75,slow=1.8,SNR=6.8
YAK S S 22 07 56.1 +2.6
comp=Z,15nm,0.6s,baz=327,slow=23,SNR=1.6
YAK ScP ScP 22 09 40.5 -0.8
comp=Z,196nm,0.9s,baz=16,slow=4.2,SNR=11
YAK LR LR 22 15 18.4
comp=Z,144µm,19.1s,baz=84,slow=37
comp=Z,62nm,0.8s
**YAK Yakutsk 29.80 311 c iP P 22 02 57.6 -1.6**
YAK e 22 03 59.4
YAK e 22 06 03.0
YAK eS S 22 07 51.9 -1.5
YAK eSSS SSS 22 09 36.2
YAK e 22 13 33.9
YAK pmax pmax
comp=Z,71nm,0.9s
YAK pmax pmax
comp=N,10.0nm,0.9s
YAK pmax pmax
comp=E,26nm,0.9s
YAK pmax pmax
comp=Z,4µm,4.6s
YAK pmax pmax
comp=N,652nm,4.4s
YAK pmax pmax
comp=E,1µm,4.4s
YAK smax smax
comp=N,846nm,2.8s
YAK smax smax
comp=E,802nm,2.9s
YAK MLR MLR
comp=Z,161µm,24.0s
YAK MLR MLR
comp=N,65µm,21.0s
YAK MLR MLR
comp=E,99µm,20.0s
**LIRD Liard River Hi 29.86 54 P P 22 03 00.2 +0.5**
baz=277
LIRD S S 22 07 54.9 +0.4
baz=277
**JTM Tenmabayashi 29.93 266 P P 22 03 03.2 +2.7**
**JTM Tenmabayashi 29.93 266 P P 22 03 00.9 +0.4**
**JTM Tenmabayashi 29.93 266 ⇑P P 22 03 01.0 +0.4**
**JTM Tenmabayashi 29.93 266 eP P 22 03 02.1 +1.6**
**TOAD Toad River Com 30.38 55 P P 22 03 04.9 +0.5**
baz=279,SNR=14
TOAD S S 22 08 02.9 +0.2
baz=279
**BBB Bella Bella 30.39 69 P P 22 03 05.6 +1.1**
BBB IAmb IAmb 22 03 10.1
comp=Z,308nm,0.9s
**BBB Bella Bella 30.39 69 ⇑P P 22 03 05.8 +1.3**
**BBB Bella Bella 30.39 69 LR LR 22 13 09.0**
comp=Z,48µm,21.6s,baz=290,slow=32
**TEY Ternei 30.51 276 eP P 22 03 04.6 -1.0**
**JOM Ohasama 30.55 263 P P 22 03 08.0 +2.0**
**C36M Paulatuk 30.76 34 P P 22 03 06.9 -0.7**
baz=262
C36M S S 22 08 05.1 -3.2
baz=262
**WRGLY Wrigley 30.76 46 IAMs_20 IAMs_20 22 17 00.5**
comp=Z,85µm,19.0s
**WRGLY Wrigley 30.76 46 P P 22 03 07.5 -0.2**
baz=273,SNR=65
WRGLY S S 22 08 07.4 -1.1
baz=273
**KOTAN Kotaneelee Air 30.78 52 P P 22 03 08.1 +0.2**
baz=278,SNR=13
KOTAN S S 22 08 09.7 +0.8
baz=278
**A36M Sachs Harbour 30.86 29 P P 22 03 08.3 -0.1**
**A36M Sachs Harbour 30.86 29 P P 22 03 08.3 -0.1**
baz=256,SNR=35
A36M S S 22 08 07.9 -1.9
baz=256
**TIXI Tiksi 30.90 330 P P 22 03 07.8 -0.9**
**TIXI Tiksi 30.90 330 IAMs_20 IAMs_20 22 16 14.0**
comp=Z,132µm,20.0s
**TIXI Tiksi 30.90 330 PcP PcP 22 06 04.0 -0.5**
comp=Z,82nm,0.7s,baz=108,slow=4.7,SNR=14
TIXI ScP ScP 22 09 43.6 -1.1
comp=Z,167nm,1.0s,baz=106,slow=1.9,SNR=13
TIXI ScS ScS 22 13 37.8 -3.2
comp=Z,7.8nm,0.8s,baz=244,slow=22,SNR=4.1
TIXI LR LR 22 16 25.4
comp=Z,128µm,19.2s,baz=142,slow=38
**TIXI Tiksi 30.90 330 c iP P 22 03 08.3 -0.4**
TIXI pmax pmax
comp=Z,205nm,1.6s
TIXI MLR MLR
comp=Z,84µm,16.0s
**TIXI Tiksi 30.90 330 P P 22 03 09.0 +0.3**
TIXI pP sP 22 03 20.9 -0.2
TIXI PcP PcP 22 06 05.2 +0.7
TIXI ScP ScP 22 09 43.5 -1.3
**HOLB Holberg 30.91 71 P P 22 03 09.9 +0.8**
HOLB IAmb IAmb 22 03 39.8
comp=Z,237nm,0.8s
**KLR Kul'dur 31.66 286 S S 22 08 22.6 -0.3**
comp=Z,6.5nm,0.9s,baz=218,slow=16,SNR=1.6
KLR ScP ScP 22 09 49.9 +2.2
comp=Z,7.9nm,0.9s,baz=335,slow=8.0,SNR=3.6
KLR ScS ScS 22 13 45.1 -0.5
comp=Z,2.0nm,0.8s,baz=326,slow=19,SNR=2.0
KLR LR LR 22 15 58.5
comp=Z,130µm,21.5s,baz=66,slow=36
**KLR Kul'dur 31.66 286 c iP P 22 03 15.7 -0.1**
KLR pmax pmax
comp=Z,586nm,0.8s
KLR MLR MLR
comp=Z,39µm,16.0s
**JMM Marumori 31.84 261 P P 22 03 19.9 +2.5**
**JMM Marumori 31.84 261 P P 22 03 17.4 0.0**
**JMM Marumori 31.84 261 ⇑P P 22 03 17.6 +0.3**
**JMM Marumori 31.84 261 eP P 22 03 16.6 -0.8**
**JYA Atsumi 32.06 263 eP P 22 03 21.2 +1.9**
**KEKH Kekaha 32.60 147 IAMs_20 IAMs_20 22 13 50.9**
comp=Z,111µm,19.0s
**ZEA Zeya 32.68 296 ceP P 22 03 22.8 -1.8**
ZEA e 22 03 22.8
ZEA pmax pmax
comp=E,60nm,0.7s
ZEA pmax pmax
comp=Z,130nm,0.6s
ZEA pmax pmax
comp=E,3µm,8.2s
ZEA pmax pmax
comp=N,2µm,11.2s
ZEA pmax pmax
comp=Z,4µm,11.1s
**CBB Campbell River 32.78 71 P P 22 03 26.2 +0.7**
CBB IAmb IAmb 22 03 32.9
comp=Z,500nm,1.5s
**OZB Mount Ozzard 33.13 73 P P 22 03 30.7 +2.0**
OZB IAmb IAmb 22 03 38.2
comp=Z,285nm,0.8s
**JYT Yasato 33.25 259 P P 22 03 30.9 +1.2**
**JSD Sado 33.31 264 P P 22 03 33.3 +3.0**
**JSD Sado 33.31 264 P P 22 03 30.3 +0.1**
JSD IAmb IAmb 22 03 33.8
comp=Z,343nm,1.3s
**JSD Sado 33.31 264 ⇑P P 22 03 30.9 +0.7**
**JSD Sado 33.31 264 eP P 22 03 30.6 +0.4**
**KIP Kipapa 33.71 145 P P 22 03 36.6 +2.7**
**KIP Kipapa 33.71 145 P P 22 03 34.4 +0.5**
KIP IAmb IAmb 22 04 08.7
comp=Z,350nm,1.2s
**KIP Kipapa 33.71 145 IAMs_20 IAMs_20 22 14 30.9**
comp=Z,102µm,19.0s
**KIP Kipapa 33.71 145 P P 22 03 34.4 +0.5**
KIP pmax pmax
comp=Z,350nm,1.2s
KIP MLR MLR
comp=Z,102µm,19.0s
**H11N2 WAKE ISLAND Hy 33.73 206 T T 22 40 12.6**
baz=18,slow=76,SNR=9106
**H11N3 WAKE ISLAND Hy 33.74 206 T T 22 40 13.2**
baz=18,slow=76
**H11N1 WAKE ISLAND Hy 33.75 206 T T 22 40 12.8**
baz=18,slow=76,SNR=9607
**USA0B Ussuriysk Arra 33.79 278 P P 22 03 34.0 -0.4**
USA0B IAmb IAmb 22 03 37.2
comp=Z,187nm,0.7s
**USA0B Ussuriysk Arra 33.79 278 c iP P 22 03 33.8 -0.6**
**USRK Ussuriysk Ar. 33.79 278 P P 22 03 33.8 -0.6**
**USRK Ussuriysk Ar. 33.79 278 P P 22 03 34.1 -0.2**
comp=Z,207nm,0.6s,baz=57,slow=8.6,SNR=354
USRK S S 22 08 58.2 +2.2
comp=Z,2.3nm,0.8s,baz=6.0,slow=2.3,SNR=1.2
USRK ScP ScP 22 09 56.6 +1.5
comp=Z,4.7nm,0.8s,baz=9.7,slow=12,SNR=2.9
USRK ScS ScS 22 13 57.5 +0.8
comp=Z,1.0nm,0.8s,baz=80,slow=26,SNR=1.7
USRK LR LR 22 18 56.8
comp=Z,40µm,19.0s,baz=52,slow=39
comp=Z,207nm,0.6s
**HON Honolulu 33.81 145 P P 22 03 35.5 +0.8**
HON IAMs_20 IAMs_20 22 14 34.0

comp=Z,102µm,20.0s
**HON Honolulu 33.81 145** P **P** **22 03 35.5 +0.8**
HON pmax pmax
comp=Z,470nm,1.2s
HON MLR MLR
comp=Z,102µm,20.0s
**HEH HeiHe 33.84 290** P **P** **22 03 33.4 -1.4**
HEH pP **pP** **22 03 40.3 -3.0**
HEH PP **PP** **22 04 50.1 -1.3**
HEH S **S** **22 08 52.5 -4.2**
HEH sS **pS** **22 09 07.6 +1.1**
HEH pmax pmax
comp=Z,310nm,1.0s
HEH pmax pmax
comp=Z,9µm,8.8s
HEH LR LR
comp=Z,46µm,22.4s
HEH LR LR
comp=Z,31µm,22.7s
HEH LR LR
comp=Z,97µm,22.0s
**CLRS Cowichan Lake 34.01 73** P **P** **22 03 37.4 +1.1**
CLRS IAms_20 IAms_20 22 14 30.2
comp=Z,72µm,22.0s
**C03A Quillayute Air 34.13 74** P **P** **22 03 38.6 +1.4**
C03A IAms_20 IAms_20 22 14 40.4
comp=Z,76µm,20.0s
**JRY Ryogami san 34.18 260** P **P** **22 03 38.8 +0.9**
**MAJO Matsushiro 34.27 262** P **P** **22 03 41.2 +2.5**
**MAJO Matsushiro 34.27 262** P **P** **22 03 39.2 +0.5**
**MAJO Matsushiro 34.27 262** IAms_20 IAms_20 22 15 10.9
comp=Z,82µm,22.0s
**MAJO Matsushiro 34.27 262** ⇑P **P** **22 03 39.5 +0.8**
**MAJO Matsushiro 34.27 262***c i* P **P** **22 03 39.3 +0.5**
MAJO pmax pmax
comp=Z,609nm,1.2s
MAJO MLR MLR
comp=Z,22µm,19.0s
**MAJO Matsushiro 34.27 262** P **P** **22 03 39.2 +0.5**
MAJO pP **sP** **22 03 51.3 +0.2**
MAJO PcP **PcP** **22 06 15.7 +1.2**
**MAT Matsushiro 34.27 262** P **P** **22 03 39.2 +0.5**
**MJAR Matsushiro Arr 34.27 262** P **P** **22 03 38.4 -0.3**
comp=Z,83nm,0.9s,baz=49,slow=6.8,SNR=135
MJAR PcP **PcP** **22 06 16.4 +1.9**
comp=Z,5.6nm,0.5s,baz=48,slow=1.6,SNR=6.6
MJAR S **S** **22 09 04.8 +1.1**
comp=Z,0.5nm,0.5s,baz=133,slow=47,SNR=1.6
MJAR ScS **ScS** **22 13 59.7 +0.2**
comp=Z,2.4nm,1.0s,baz=357,slow=30,SNR=1.8
MJAR LR LR 22 15 55.6
comp=Z,72µm,21.4s,baz=54,slow=33
comp=Z,83nm,0.9s
**MJB9 Matsu-Tunnel 34.27 262** P **P** **22 03 39.0 +0.3**
**KPA Kalaupapa 34.30 144** P **P** **22 03 39.4 +0.4**
**KPA Kalaupapa 34.30 144** P **P** **22 03 39.4 +0.4**
**PGC Sidney 34.49 73** P **P** **22 03 41.8 +1.5**
PGC IAmb IAmb 22 04 16.4
comp=Z,408nm,1.5s
**JOD2 Odawara 2 34.56 259***eP* **P** **22 03 41.6 +0.4**
**NLWA Neilton Lookou 34.80 75** P **P** **22 03 44.0 +0.8**
NLWA IAmb IAmb 22 03 48.9
comp=Z,287nm,1.0s
NLWA IAms_20 IAms_20 22 14 50.1
comp=Z,103µm,22.0s
**NLWA Neilton Lookou 34.80 75** ⇑P **P** **22 03 44.9 +1.8**
**YKA Yellowknife Ar 34.88 47** P **P** **22 03 42.7 -0.9**
comp=Z,105nm,0.9s,baz=285,slow=8.6,SNR=106
YKA PcP **PcP** **22 06 17.4 +1.7**
comp=Z,64nm,0.8s,baz=300,slow=2.7,SNR=13
YKA S **S** **22 09 09.2 -3.2**
comp=Z,1.2nm,0.6s,baz=234,slow=40,SNR=1.3
YKA ScP **ScP** **22 09 58.3 -0.4**
comp=Z,14nm,0.8s,baz=296,slow=3.6,SNR=5.1
YKA ScS **ScS** **22 14 00.9 -0.9**
comp=Z,1.4nm,0.8s,baz=272,slow=31,SNR=1.6
YKA LR LR 22 20 00.1
comp=Z,93µm,18.4s,baz=274,slow=40
YKA P3KPbc 22 34 37.7
comp=Z,1.2nm,0.7s,baz=93,slow=5.0,SNR=4.3
comp=Z,105nm,0.9s
**H11S1 WAKE ISLAND Hy 34.95 206** T T 22 40 58.9
baz=17,slow=76
**H11S2 WAKE ISLAND Hy 34.96 206** T T 22 40 56.8
baz=17,slow=76
**H11S3 WAKE ISLAND Hy 34.97 206** T T 22 40 56.9
baz=17,slow=76
**HLK Haleakala 34.97 143** IAms_20 IAms_20 22 14 38.6
comp=Z,113µm,21.0s
**WISH Wishkah 34.98 75** P **P** **22 03 46.2 +1.6**
WISH IAms_20 IAms_20 22 14 56.1
comp=Z,85µm,22.0s
**JGN Niukaw 35.03 262** P **P** **22 03 46.0 +0.7**
**MDJ Mudanjiang 35.07 280** P **P** **22 03 44.5 -0.9**
MDJ PP **PP** **22 05 06.3 +1.2**
MDJ PcP **PcP** **22 06 14.4 -2.2**
MDJ S **S** **22 09 14.8 -0.9**
MDJ SS **SnSn** **22 11 30.0 -2.8**
MDJ pmax pmax
comp=Z,9µm,11.9s
MDJ LR LR
comp=Z,36µm,19.9s
MDJ LR LR
comp=Z,44µm,19.9s
MDJ LR LR
comp=Z,59µm,20.6s
**MDJ Mudanjiang 35.07 280** P **P** **22 03 45.2 -0.3**
MDJ IAmb IAmb 22 03 48.7
comp=Z,168nm,1.0s
**MDJ Mudanjiang 35.07 280** P **P** **22 03 45.1 -0.3**
**MSHR Mys Shultsa 35.15 276***c i* P **P** **22 03 46.8 +0.6**
MSHR pmax pmax
comp=Z,511nm,0.8s
MSHR MLR MLR
comp=Z,15µm,15.0s
**JOHN Johnston Islan 35.20 166** P **P** **22 03 49.6 +2.8**
**JOHN Johnston Islan 35.20 166** P **P** **22 03 48.5 +1.7**
**RADR Rader Ridge 35.29 76** IAms_20 IAms_20 22 14 52.3
comp=Z,83µm,22.0s
**PSTR Posyet 35.33 276***c i* P **P** **22 03 48.5 +0.8**
**GNW Green Mountain 35.35 74** IAms_20 IAms_20 22 14 57.7
comp=Z,84µm,22.0s
**E03A Lebam 35.38 76** IAms_20 IAms_20 22 14 55.5
comp=Z,89µm,22.0s
**JGF Kuroka 35.41 261** P **P** **22 03 50.8 +2.3**
**JGF Kuroka 35.41 261** P **P** **22 03 48.5 0.0**
**JGF Kuroka 35.41 261** ⇑P **P** **22 03 49.2 +0.7**
**JGF Kuroka 35.41 261** P **P** **22 03 49.1 +0.6**
**JHJ2 Mitsune 35.56 256** P **P** **22 03 52.4 +2.6**
**JHJ2 Mitsune 35.56 256** P **P** **22 03 49.4 -0.3**
**JHJ2 Mitsune 35.56 256** ⇑P **P** **22 03 50.9 +1.1**
**JHJ Hachijo jima 2 35.58 256** LR LR 22 16 23.0
comp=Z,31µm,21.6s,baz=48,slow=33
**F03A Seaside 35.67 77** P **P** **22 03 52.0 +1.3**
F03A IAms_20 IAms_20 22 15 13.5
comp=Z,88µm,21.0s
**INU Inuyama 35.78 261** P **P** **22 03 54.2 +2.5**
**INU Inuyama 35.78 261** P **P** **22 03 51.1 -0.6**
INU IAmb IAmb 22 03 54.9
comp=Z,289nm,1.3s
**INU Inuyama 35.78 261** ⇑P **P** **22 03 51.7 0.0**
**HPAH Hawaii Prepara 35.84 142** **P** **22 03 52.6 +0.3**
HPAH IAmb IAmb 22 04 21.5
comp=Z,208nm,0.9s
HPAH IAms_20 IAms_20 22 15 34.7
comp=Z,91µm,20.0s
**BNX BinXian 35.85 283** ⇑P **P** **22 03 51.0 -1.2**
BNX pP **pP** **22 04 00.1 -0.7**
BNX sP **sP** **22 04 04.3 -0.1**
BNX PP **PP** **22 05 18.0 +4.2**
BNX S **S** **22 09 26.4 -1.3**
BNX pmax pmax
comp=Z,490nm,0.9s
BNX LR LR
comp=Z,44µm,19.8s
BNX LR LR
comp=Z,86µm,19.5s
BNX LR LR
comp=Z,100µm,20.7s
**F04D Rainier, OR 35.93 76** P **P** **22 03 53.8 +1.0**
F04D IAms_20 IAms_20 22 15 11.3
comp=Z,91µm,22.0s
**HUH Hualalai 36.10 143** IAms_20 IAms_20 22 15 41.6
comp=Z,107µm,20.0s
**POHA Pohakuloa 36.15 142** P **P** **22 03 56.7 +1.5**
**POHA Pohakuloa 36.15 142** IAmb IAmb **22 03 55.1 -0.1**
POHA 22 04 26.7
comp=Z,237nm,0.8s
**POHA Pohakuloa 36.15 142** IAMs_20 IAMs_20 22 15 21.9
comp=Z,93µm,21.0s
**POHA Pohakuloa 36.15 142** ⇓P **P** **22 03 55.9 +0.7**
**G03D McMinnville, O 36.21 78** IAMs_20 IAMs_20 22 15 16.7
comp=Z,96µm,22.0s
**HMH Humu'ula Sheep 36.31 142** IAMs_20 IAMs_20 22 15 47.1
comp=Z,97µm,20.0s
**LON Longmire 36.34 75** IAMs_20 IAMs_20 22 15 51.0
comp=Z,72µm,22.0s
**MWH Moku'aweowe 36.38 143** IAMs_20 IAMs_20 22 15 38.8
comp=Z,104µm,21.0s
**MLH Mauna Loa 36.45 142** IAMs_20 IAMs_20 22 15 50.8
comp=Z,96µm,20.0s
**COR Corvallis 36.50 79** P **P** **22 03 59.0 +1.3**
**COR Corvallis 36.50 79** IAMs_20 IAMs_20 22 15 13.4
comp=Z,88µm,22.0s
**COR Corvallis 36.50 79** ⇑P **P** **22 04 00.3 +2.6**
**COR Corvallis 36.50 79** P **P** **22 03 59.0 +1.3**
COR pmax pmax
comp=Z,1µm,1.5s
COR MLR MLR
comp=Z,88µm,22.0s
**COR Corvallis 36.50 79** P **P** **22 03 59.7 +2.0**
**RSD Rainshed 36.52 142** P **P** **22 03 58.7 +0.4**
**UWE Uwekahuna 36.55 142** IAMs_20 IAMs_20 22 15 53.5
comp=Z,92µm,20.0s
**HATHI Halema'uma'u T 36.56 142** IAMs_20 IAMs_20 22 15 53.7
comp=Z,90µm,20.0s
**BYL Byron's Ledge 36.57 142** IAMs_20 IAMs_20 22 15 55.0
comp=Z,94µm,20.0s
**KHU Kahuku 36.59 143** IAMs_20 IAMs_20 22 15 44.4
comp=Z,101µm,20.0s
**JIE Ise 36.60 260***eP* **P** **22 03 59.7 +1.0**
**PUH Pauahi 36.62 142** IAMs_20 IAMs_20 22 15 45.4
comp=Z,88µm,21.0s
**STCH Steam Cracks 36.65 142** IAMs_20 IAMs_20 22 15 56.0
comp=Z,82µm,20.0s
**JOKA Jonika Flow 36.65 142** IAMs_20 IAMs_20 22 15 46.1
comp=Z,80µm,20.0s
**HLP Hilina Pali 36.66 142** IAMs_20 IAMs_20 22 15 36.3
comp=Z,96µm,21.0s
**LTY Liberty 36.79 73** IAMs_20 IAMs_20 22 16 07.8
comp=Z,78µm,22.0s
**J01E Myrtle Point 36.85 81** IAMs_20 IAMs_20 22 16 01.9
comp=Z,77µm,20.0s
**H04D Lebanon 36.88 78** P **P** **22 04 01.2 +0.2**
H04D IAmb IAmb 22 04 06.8
comp=Z,328nm,0.8s
**B08A Colville Reser 37.07 71** IAMs_20 IAMs_20 22 16 27.0
comp=Z,61µm,22.0s
**HOOD Mount Hood Mea 37.14 77** IAMs_20 IAMs_20 22 16 00.2
comp=Z,68µm,22.0s
**KBO Bosley Butte 37.18 83** P **P** **22 04 04.9 +1.2**
KBO IAmb IAmb 22 04 25.4
comp=Z,618nm,1.4s
**G05A Wamic 37.38 77** IAMs_20 IAMs_20 22 16 08.6
comp=Z,66µm,22.0s
**KSXB Camp Six Broad 37.61 83** P **P** **22 04 07.8 +0.5**
**E07A Sunnyside 37.61 74** IAMs_20 IAMs_20 22 16 31.6
comp=Z,67µm,22.0s
**L02F Cave Junction 37.64 82** IAMs_20 IAMs_20 22 16 03.8
comp=Z,73µm,21.0s
**HUMO Hull Mountain 37.75 81** P **P** **22 04 09.5 +1.0**
HUMO IAMs_20 IAMs_20 22 15 47.8
comp=Z,93µm,22.0s
**HUMO Hull Mountain 37.75 81** ⇑P **P** **22 04 09.9 +1.4**
**JAD Aida 37.82 263** P **P** **22 04 09.0 0.0**
**I05D Terrebonne, OR 37.83 78** IAMs_20 IAMs_20 22 16 18.6
comp=Z,70µm,22.0s
**HAWA Hanford 37.89 74** P **P** **22 04 10.0 +0.5**
HAWA IAMs_20 IAMs_20 22 16 40.9
comp=Z,68µm,22.0s
**HAWA Hanford 37.89 74** ⇑P **P** **22 04 10.6 +1.1**
**F07A Phinny Hill Vi 37.90 75** IAMs_20 IAMs_20 22 16 29.2
comp=Z,75µm,22.0s
**CN2 Changchun 38.04 281***eP* **P** **22 04 10.0 -0.8**
CN2 *ePP* **PnPn** **22 05 40.1 +0.7**
CN2 *eS* **S** **22 09 57.3 -3.8**
CN2 *es*S sS 22 10 17.8 +1.9
CN2 pmax pmax
comp=Z,120nm,1.5s
CN2 pmax pmax
comp=Z,8µm,3.5s
CN2 LR LR
comp=Z,16µm,17.0s
CN2 LR LR
comp=Z,10µm,17.0s
CN2 LR LR
comp=Z,21µm,20.0s
**JCC Jacoby Creek, 38.08 84** P **P** **22 04 12.4 +1.3**
JCC IAmb IAmb 22 04 32.9
comp=Z,567nm,1.6s
**E08A Dider Farm, El 38.12 73** IAMs_20 IAMs_20 22 17 00.1
comp=Z,63µm,22.0s
**PINE Pine Mountain 38.36 78** IAMs_20 IAMs_20 22 16 46.7
comp=Z,58µm,21.0s
**BOD Bodaibo 38.39 307***eP* **P** **22 04 12.7 -0.8**
BOD pmax pmax
comp=Z,192nm,1.7s
**YBH Yreka Blue Hor 38.39 82** P **P** **22 04 14.8 +0.9**
YBH IAmb IAmb 22 04 39.3
comp=Z,205nm,0.9s
YBH IAMs_20 IAMs_20 22 16 17.7
comp=Z,71µm,22.0s
**YBH Yreka Blue Hor 38.39 82** LR LR 22 17 02.0
comp=Z,53µm,21.6s,baz=306,slow=32
**YBH Yreka Blue Hor 38.39 82** P **P** **22 04 14.8 +0.9**
YBH pmax pmax
comp=Z,205nm,1.0s
YBH MLR MLR
comp=Z,71µm,22.0s
**NEW Newport 38.42 70** P **P** **22 04 14.1 +0.1**
**NEW Newport 38.42 70** IAMs_20 IAMs_20 22 17 11.6
comp=Z,63µm,22.0s
**NEW Newport 38.42 70** LR LR 22 17 44.6
comp=Z,56µm,21.8s,baz=294,slow=33
**NEW Newport 38.42 70** P **P** **22 04 14.6 +0.6**
baz=298,SNR=666
NEW S **S** **22 10 05.7 -1.2**
baz=298
**NEW Newport 38.42 70** P **P** **22 04 14.1 +0.1**
NEW pmax pmax
comp=Z,780nm,0.9s
NEW MLR MLR
comp=Z,63µm,22.0s
**JHS Saijyo 38.43 264***eP* **P** **22 04 14.8 +0.5**
**J05D Fort Rock, OR 38.45 79** IAMs_20 IAMs_20 22 16 37.2
comp=Z,57µm,21.0s
**K04D Chiloquin, OR 38.49 80** IAMs_20 IAMs_20 22 16 23.2
comp=Z,78µm,22.0s
**CBIJ Chichi jima 38.53 246** P **P** **22 04 15.3 +0.3**
**JCJ Chichijima 38.53 246** P **P** **22 04 16.3 +1.2**
**JCJ Chichijima 38.53 246** P **P** **22 04 15.1 0.0**
**JCJ Chichijima 38.53 246** ⇑P **P** **22 04 15.4 +0.3**
**JCJ Chichijima 38.53 246** LR LR 22 17 24.4
comp=Z,28µm,22.0s,baz=32,slow=32
**E09A Wood Farm, Sta 38.66 73** IAMs_20 IAMs_20 22 17 14.3
comp=Z,65µm,22.0s
**HIA Hailar 38.75 292** P **P** **22 04 16.2 -0.6**
HIA IAmb IAmb 22 04 19.4
comp=Z,685nm,1.6s
**HIA Hailar 38.75 292** P **P** **22 04 16.2 -0.6**
HIA pmax pmax
comp=Z,685nm,1.6s
HIA MLR MLR
comp=Z,116µm,20.0s
**HIA Hailar 38.75 292** P **P** **22 04 16.6 -0.2**
HIA PcP **PcP** **22 06 29.4 +1.6**
**G08A Pilot Rock 38.79 75** IAMs_20 IAMs_20 22 17 05.8
comp=Z,69µm,22.0s
**JMN Monobe 38.80 262** P **P** **22 04 20.2 +2.9**
**JMN Monobe 38.80 262** P **P** **22 04 17.5 +0.3**
JMN IAmb IAmb 22 04 21.7
comp=Z,597nm,1.3s
**JMN Monobe 38.80 262** ⇑P **P** **22 04 18.3 +1.0**
**JMN Monobe 38.80 262***eP* **P** **22 04 18.2 +0.9**
**I07A Izee 39.09 77** IAMs_20 IAMs_20 22 17 00.9
comp=Z,69µm,22.0s
**O02D Mt. Diablo Mer 39.23 84** P **P** **22 04 21.9 +1.0**
O02D IAmb IAmb 22 04 46.3
comp=Z,206nm,0.9s
**F10A Beach Ranch, E 39.48 73** IAMs_20 IAMs_20 22 17 41.0
comp=Z,71µm,22.0s
**F10A Beach Ranch, E 39.48 73** ⇑P **P** **22 04 23.5 +0.5**
**HOPS Hopland Field 39.74 86** IAMs_20 IAMs_20 22 16 41.7
comp=Z,68µm,22.0s
**BMO Blue Mountains 40.02 75** P **P** **22 04 27.8 +0.3**
BMO IAMs_20 IAMs_20 22 17 56.3
comp=Z,70µm,21.0s
**BMO Blue Mountains 40.02 75** ⇑P **P** **22 04 28.1 +0.6**
**BMO Blue Mountains 40.02 75** P **P** **22 04 27.8 +0.3**
BMO pmax pmax
comp=Z,153nm,1.0s
BMO MLR MLR
comp=Z,70µm,21.0s
**GDXM Geysers 40.03 86** IAMs_20 IAMs_20 22 16 50.2
comp=Z,75µm,22.0s
**KSRS Korea Array 40.14 271** P **P** **22 04 29.4 +1.1**
comp=Z,70nm,0.7s,baz=57,slow=7.9,SNR=94
KSRS PcP **PcP** **22 06 34.0 +1.7**
comp=Z,14nm,0.8s,baz=53,slow=3.5,SNR=1.7
KSRS ScP **ScP** **22 10 20.8 +2.0**
comp=Z,3.9nm,0.7s,baz=60,slow=3.9,SNR=4.3
KSRS S **S** **22 10 34.7 +2.0**
comp=Z,2.8nm,0.8s,baz=47,slow=4.3,SNR=4.2
KSRS LR LR 22 20 03.7
comp=Z,18µm,21.7s,baz=55,slow=34
comp=Z,70nm,0.7s
**KS19 Wonju Array Si 40.14 272** P **P** **22 04 28.4 -0.1**
KS19 IAmb IAmb 22 04 31.6
comp=Z,380nm,1.6s
**KSAR Wonju Array Be 40.17 271** P **P** **22 04 28.2 -0.4**
**KSAR Wonju Array Be 40.17 271** P **P** **22 04 28.2 -0.4**
**SNY Shenyang 40.27 280** ⇑P **P** **22 04 29.9 +0.5**
SNY S **S** **22 10 33.3 -1.3**
SNY pmax pmax
comp=Z,11µm,9.0s
SNY LR LR
comp=Z,32µm,18.6s
SNY LR LR
comp=Z,28µm,19.6s
SNY LR LR
comp=Z,53µm,21.1s
**MCCM Marconi Confer 40.37 87** IAMs_20 IAMs_20 22 21 02.4
comp=Z,47µm,18.0s
**MCCM Marconi Confer 40.37 87** ⇑P **P** **22 04 31.8 +1.5**
**WVOR Wild Horse Val 40.52 79** P **P** **22 04 32.2 +0.6**
WVOR IAmb IAmb 22 04 36.9
comp=Z,438nm,0.9s
WVOR IAMs_20 IAMs_20 22 17 54.8
comp=Z,62µm,21.0s
**WVOR Wild Horse Val 40.52 79** ⇑P **P** **22 04 32.6 +1.0**
**WVOR Wild Horse Val 40.52 79** P **P** **22 04 32.2 +0.6**
WVOR pmax pmax
comp=Z,438nm,0.9s
WVOR MLR MLR
comp=Z,62µm,21.0s
**PYAG Pyongyang 40.52 275** P **P** **22 04 32.1 +0.6**
PYAG S **S** **22 10 37.8 -0.6**
PYAG AmB
comp=Z,8µm,3.4s
PYAG AMS AMS
comp=Z,21µm,19.4s
**SUJ Sinuiju 40.69 277** P **P** **22 04 33.5 +0.6**
SUJ S **S** **22 10 41.0 +0.1**
SUJ AmB
comp=Z,6µm,1.9s
SUJ AMS AMS
comp=Z,36µm,19.9s
**INCN Inchon 40.93 272** P **P** **22 04 37.4 +2.5**
**INCN Inchon 40.93 272** P **P** **22 04 35.3 +0.4**
INCN IAmb IAmb 22 04 38.6
comp=Z,301nm,0.9s
**INCN Inchon 40.93 272** ⇑P **P** **22 04 35.5 +0.5**
**INCN Inchon 40.93 272** P **P** **22 04 36.6 +1.7**
INCN P **P** **22 04 36.6 +1.7**
INCN S **S** **22 10 45.0 +0.5**
INCN S **S** **22 10 45.0 +0.5**
**INCN Inchon 40.93 272** P **P** **22 04 35.3 +0.4**
INCN pmax pmax
comp=Z,301nm,1.0s
INCN MLR MLR
comp=Z,20µm,21.0s
**INCN Inchon 40.93 272** P **P** **22 04 36.0 +1.1**
**CIT Chita 40.99 299***eP* **P** **22 04 35.0 -0.3**
CIT *e* 22 06 10.2
CIT *e* 22 06 36.2
CIT *e* 22 06 47.2
CIT *e* 22 10 55.4
CIT pmax pmax
comp=Z,877nm,3.5s
**MSO Missoula 41.00 70** P **P** **22 04 35.5 -0.1**
MSO IAmb IAmb 22 04 41.9
comp=Z,550nm,1.1s
**MSO Missoula 41.00 70** ⇑P **P** **22 04 35.6 +0.1**
**MSO Missoula 41.00 70** P **P** **22 04 35.8 +0.1**
baz=300,SNR=377
MSO S **S** **22 10 43.3 -2.4**
baz=300
**JNU Nakatsue 41.07 264** P **P** **22 04 38.8 +2.7**
**JNU Nakatsue 41.07 264** P **P** **22 04 36.3 +0.1**
JNU IAmb IAmb 22 04 43.3
comp=Z,552nm,1.0s
**JNU Nakatsue 41.07 264** ⇑P **P** **22 04 37.0 +0.9**
**JNU Nakatsue 41.07 264** LR LR 22 20 23.9
comp=Z,66µm,22.0s,baz=51,slow=34
**JNU Nakatsue 41.07 264***eP* **P** **22 04 36.7 +0.6**
**HJU Haeju 41.15 274** P **P** **22 04 37.2 +0.4**
HJU S **S** **22 10 47.5 -0.2**
HJU AmB
comp=Z,5µm,3.0s
HJU AMS AMS
comp=Z,14µm,37.0s
**TJN Taejon 41.16 271** P **P** **22 04 39.0 +2.2**
**TJN Taejon 41.16 271** P **P** **22 04 37.0 +0.2**
**TJN Taejon 41.16 271** P **P** **22 04 37.0 +0.2**
TJN pmax pmax
comp=Z,1µm,0.7s
TJN MLR MLR
comp=Z,153µm,21.0s
**OVMT Ovando 41.44 69** P **P** **22 04 38.9 -0.3**
**MPK Martis Peak 41.46 84** P **P** **22 04 40.5 +0.8**
MPK IAmb IAmb 22 05 02.3
comp=Z,312nm,1.0s
**BPMT Black Pine Rid 41.50 70** P **P** **22 04 39.8 0.0**
**MFID Camas Ranch 41.69 76** P **P** **22 04 41.2 -0.1**
MFID IAMs_20 IAMs_20 22 18 46.6
comp=Z,50µm,22.0s
**CMB Columbia Colle 42.00 85** IAMs_20 IAMs_20 22 18 04.4
comp=Z,56µm,22.0s
**SAO San Andreas Ge 42.12 88** ⇑P **P** **22 04 46.1 +1.4**
**JSU Suzuyama 42.42 263***eP* **P** **22 04 48.0 +0.7**
**HLID Hailey 42.47 75** P **P** **22 04 47.8 +0.1**
HLID IAmb IAmb 22 04 52.2
comp=Z,234nm,0.9s
HLID IAMs_20 IAMs_20 22 19 24.0
comp=Z,73µm,22.0s
**HLID Hailey 42.47 75** ⇑P **P** **22 04 48.2 +0.5**
**HLID Hailey 42.47 75** P **P** **22 04 48.3 +0.7**
baz=304,SNR=472
HLID S **S** **22 11 06.8 -0.7**
baz=304
**BMN Battle Mountai 42.53 80** IAMs_20 IAMs_20 22 20 37.3
comp=Z,55µm,20.0s
**ALE Alert 42.55 10** P **P** **22 04 47.3 -0.4**
ALE PcP **PcP** **22 06 40.5 +1.0**
ALE ScP **ScP** **22 10 28.5 +0.7**
**EGMT Eagleton 42.83 67** P **P** **22 04 49.8 -0.7**
EGMT IAmb IAmb 22 04 54.3
comp=Z,479nm,0.8s
**EGMT Eagleton 42.83 67** ⇑P **P** **22 04 50.1 -0.3**
**EGMT Eagleton 42.83 67** P **P** **22 04 50.3 -0.1**
baz=301,SNR=267
EGMT S **S** **22 11 10.1 -2.5**
baz=301
**BOZ Bozeman (W) 43.02 71** P **P** **22 04 51.8 -0.3**
BOZ IAmb IAmb 22 04 56.5
comp=Z,372nm,0.8s
**BOZ Bozeman (W) 43.02 71** ⇑P **P** **22 04 52.1 +0.1**
**BOZ Bozeman (W) 43.02 71** P **P** **22 04 52.2 +0.1**
baz=302,SNR=671
BOZ S **S** **22 11 14.5 -1.0**
baz=302
**BOZ Bozeman (W) 43.02 71** P **P** **22 04 51.8 -0.3**
BOZ pmax pmax
comp=Z,372nm,0.8s
BOZ MLR MLR
comp=Z,28µm,22.0s

NVAR **Mina Array Bea** 43.06 83 P **P** 22 04 52.5 0.0
NVAR **Mina Array Bea** 43.06 83 P **P** 22 04 53.4 +0.8
comp=Z,103nm,0.8s,baz=291,slow=7.2,SNR=67
NVAR PcP **PcP** 22 06 43.0 +0.8
comp=Z,29nm,0.8s,baz=17,slow=0.9,SNR=2.3
NVAR ScP **ScP** 22 10 33.4 +2.5
comp=Z,7.3nm,0.8s,baz=302,slow=4.1,SNR=4.6
NVAR S **S** 22 11 18.1 +1.7
comp=Z,2.3nm,0.7s,baz=265,slow=4.9,SNR=0.8
NVAR ScS **ScS** 22 14 52.0 +1.3
comp=Z,0.2nm,0.3s,baz=126,slow=39,SNR=1.2
NVAR LR LR 22 20 22.0
comp=Z,21µm,21.1s,baz=296,slow=33
NVAR P3KP 22 35 54.1
comp=Z,0.4nm,0.4s,baz=93,slow=4.6,SNR=1.5
comp=Z,103nm,0.8s
**NV11 Mina Array Sit** 43.15 83 P **P** 22 04 53.3 +0.1
**DL2 Dalian** 43.18 278 P **P** 22 04 53.4 +0.1
DL2 PP **PP** 22 06 34.8 +1.1
DL2 S **S** 22 11 14.6 -3.2
DL2 ScS **ScS** 22 14 48.3 -2.6
DL2 pmax pmax
comp=Z,330nm,1.3s
DL2 pmax pmax
comp=Z,10µm,8.6s
DL2 LR LR
comp=Z,27µm,22.9s
DL2 LR LR
comp=Z,23µm,20.0s
DL2 LR LR
comp=Z,55µm,19.7s
**Q09A Carvers** 43.51 82 IAms_20 IAms_20 22 19 12.2
comp=Z,66µm,22.0s
**ELK Elko** 43.57 79 P **P** 22 04 57.1 +0.4
ELK IAmb IAmb 22 05 01.7
comp=Z,268nm,0.8s
ELK IAms_20 IAms_20 22 19 43.6
comp=Z,52µm,21.0s
**ELK Elko** 43.57 79 ⇑P **P** 22 04 57.5 +0.7
**ELK Elko** 43.57 79 LR LR 22 22 02.6
comp=Z,42µm,18.8s,baz=311,slow=35
**ELK Elko** 43.57 79 P **P** 22 04 57.1 +0.4
ELK pmax pmax
comp=Z,268nm,0.9s
ELK MLR MLR
comp=Z,52µm,21.0s
**XLT XiLinHaoTe** 43.67 287 *e*P **P** 22 04 58.3 +1.0
XLT PP **PP** 22 06 35.8 -3.2
XLT S **S** 22 11 23.6 -1.5
XLT pmax pmax
comp=Z,660nm,1.0s
XLT pmax pmax
comp=Z,12µm,4.8s
XLT LR LR
comp=Z,73µm,20.9s
XLT LR LR
comp=Z,90µm,22.8s
**YHL Hebgen Lake** 43.69 71 P **P** 22 04 57.7 0.0
**FFC Flin Flon** 43.75 54 P **P** 22 04 57.6 -0.1
**FFC Flin Flon** 43.75 54 IAms_20 IAms_20 22 25 12.3
comp=Z,56µm,18.0s
**FFC Flin Flon** 43.75 54 P **P** 22 04 57.6 -0.1
FFC pmax pmax
comp=Z,47nm,1.0s
FFC MLR MLR
comp=Z,56µm,18.0s
**FFC Flin Flon** 43.75 54 P **P** 22 04 56.6 -1.0
FFC PcP **PcP** 22 06 45.4 +1.5
FFC ScP **ScP** 22 10 33.5 +0.5
**DSP Deep Springs** 43.92 84 IAms_20 IAms_20 22 19 21.1
comp=Z,56µm,22.0s
**H17A Grant Village** 44.30 71 P **P** 22 05 03.8 +1.3
baz=304,SNR=210
H17A S **S** 22 11 38.3 +3.7
baz=304
**LKWY Lake** 44.31 71 ⇑P **P** 22 05 04.2 +1.6
**HVU Hansel Valley** 44.47 76 P **P** 22 05 04.0 +0.2
HVU IAmb IAmb 22 05 09.2
comp=Z,334nm,0.8s
**HVU Hansel Valley** 44.47 76 P **P** 22 05 04.1 +0.2
HVU pmax pmax
comp=Z,334nm,0.8s
HVU MLR MLR
comp=Z,36µm,20.0s
**GRAC Grapevine Rang** 44.53 84 IAms_20 IAms_20 22 19 39.3
comp=Z,48µm,22.0s
**TPAW Teton Pass** 44.59 73 IAms_20 IAms_20 22 20 58.0
comp=Z,48µm,21.0s
**RLMT Red Lodge** 44.67 70 P **P** 22 05 05.5 0.0
**RLMT Red Lodge** 44.67 70 ⇑P **P** 22 05 05.8 +0.4
**RLMT Red Lodge** 44.67 70 P **P** 22 05 06.0 +0.5
baz=304,SNR=754
RLMT S **S** 22 11 39.7 -0.1
baz=304
**ISA Isabella, Lake** 44.68 87 P **P** 22 05 05.2 -0.2
**ISA Isabella, Lake** 44.68 87 P **P** 22 05 05.2 -0.2
ISA pmax pmax
comp=Z,118nm,0.9s
ISA MLR MLR
comp=Z,31µm,18.0s
**REDW Red Top Meadow** 44.72 73 P **P** 22 05 06.2 +0.3
REDW IAmb IAmb 22 05 19.5
comp=Z,328nm,1.3s
**SNOW Snow King Moun** 44.72 73 IAms_20 IAms_20 22 20 50.6
comp=Z,54µm,22.0s
**R11B Troy Canyon, C** 44.80 82 P **P** 22 05 06.5 0.0
R11B IAmb IAmb 22 05 10.7
comp=Z,168nm,0.9s
R11B IAms_20 IAms_20 22 20 16.2
comp=Z,50µm,22.0s
**R11B Troy Canyon, C** 44.80 82 P **P** 22 05 06.9 +0.4
baz=308,SNR=379
R11B S **S** 22 11 42.6 +0.9
baz=308
**BGU Big Grassy Mou** 44.82 77 IAms_20 IAms_20 22 20 12.6
comp=Z,55µm,22.0s
**TULEG Thule** 44.84 18 P **P** 22 05 06.0 -0.1
TULEG IAmb IAmb 22 06 49.5
comp=Z,189nm,0.8s
**TULEG Thule** 44.84 18 ⇑P **P** 22 05 05.0 -1.1
**TULEG Thule** 44.84 18 *i*P **P** 22 05 06.1 +0.1
TULEG IAmb IAmb 22 05 12.0
comp=Z,25nm,0.7s
**Q12A Willow Creek R** 44.84 80 P **P** 22 05 07.6 +0.8
Q12A IAms_20 IAms_20 22 21 01.4
comp=Z,42µm,20.0s
**AHID Auburn Hatcher** 44.91 74 P **P** 22 05 07.4 0.0
AHID IAmb IAmb 22 05 34.5
comp=Z,269nm,1.1s
AHID IAms_20 IAms_20 22 20 54.7
comp=Z,79µm,22.0s
**WCT Wildcat Mounta** 45.12 84 IAms_20 IAms_20 22 24 16.8
comp=Z,45µm,18.0s
**S11A Rachel** 45.13 82 IAms_20 IAms_20 22 20 24.1
comp=Z,54µm,22.0s
**TPNV Topopah Spring** 45.25 84 P **P** 22 05 11.6 +1.5
baz=309,SNR=522
TPNV S **S** 22 11 50.6 +2.3
baz=309
**HWUT Hardware Ranch** 45.31 75 ⇑P **P** 22 05 11.0 +0.5
**DUG Dugway, Tooele** 45.39 78 IAms_20 IAms_20 22 20 40.6
comp=Z,51µm,22.0s
**DUG Dugway, Tooele** 45.39 78 ⇑P **P** 22 05 11.8 +0.7
**DUG Dugway, Tooele** 45.39 78 P **P** 22 05 11.9 +0.9
baz=307,SNR=641
DUG S **S** 22 11 52.6 +2.5
baz=307
**LAO LASA Array** 45.57 66 P **P** 22 05 12.6 +0.2
LAO IAms_20 IAms_20 22 21 59.6
comp=Z,51µm,22.0s
**LAO LASA Array** 45.57 66 ⇑P **P** 22 05 12.8 +0.4
**LAO LASA Array** 45.57 66 P **P** 22 05 12.9 +0.6
baz=303,SNR=286
LAO S **S** 22 11 51.6 -0.9
baz=303
**FCC Fort Churchill** 45.61 46 P **P** 22 05 12.3 -0.1
FCC IAmb IAmb 22 05 18.7
comp=Z,113nm,0.7s
FCC IAms_20 IAms_20 22 24 54.0
comp=Z,59µm,21.0s
**FCC Fort Churchill** 45.61 46 P **P** 22 05 12.3 -0.1
FCC pmax pmax
comp=Z,113nm,0.7s
FCC MLR MLR
comp=Z,59µm,21.0s
**CTU Camp Tracy** 45.74 76 IAms_20 IAms_20 22 20 52.8
comp=Z,43µm,22.0s
**DGMT Dagmar** 45.75 63 P **P** 22 05 13.7 -0.1
DGMT IAmb IAmb 22 05 44.3
comp=Z,293nm,1.1s
**DGMT Dagmar** 45.75 63 IAMs_20 IAMs_20 22 25 12.9
comp=Z,53µm,19.0s
**DGMT Dagmar** 45.75 63 ⇑P **P** 22 05 13.2 -0.5
**DGMT Dagmar** 45.75 63 P **P** 22 05 13.4 -0.3
baz=303,SNR=34
**BW06 Boulder Array** 45.84 73 ⇑P **P** 22 05 15.0 +0.2
**BW06 Boulder Array** 45.84 73 P **P** 22 05 15.1 +0.3
baz=305,SNR=109
BW06 S **S** 22 11 56.8 0.0
baz=305
**PD31 Pinedale Array** 45.84 73 P **P** 22 05 14.6 -0.1
PD31 IAmb IAmb 22 05 21.2
comp=Z,380nm,1.0s
**PDAR Pinedale Array** 45.84 73 P **P** 22 05 14.8 +0.1
comp=Z,235nm,0.7s,baz=305,slow=3.5,SNR=122
PDAR ScP **ScP** 22 10 43.8 +1.6
comp=Z,7.2nm,1.0s,baz=74,slow=1.9,SNR=3.5
PDAR S **S** 22 11 56.5 -0.3
comp=Z,8.9nm,1.1s,baz=309,slow=9.4,SNR=6.2
PDAR ScS **ScS** 22 15 08.1 -0.2
comp=Z,0.8nm,0.6s,baz=186,slow=39,SNR=0.8
PDAR LR LR 22 21 48.9
comp=Z,36µm,21.9s,baz=298,slow=33
PDAR P3KP 22 35 45.8
comp=Z,0.3nm,0.8s,baz=131,slow=2.5,SNR=1.6
comp=Z,235nm,0.7s
**BJI Beijing** 45.86 283 P **P** 22 05 15.4 +0.7
BJI pP **pP** 22 05 20.3 -3.1
BJI sP **sP** 22 05 22.4 -4.6
BJI PP **PP** 22 07 04.8 +2.6
BJI PcS **PcS** 22 10 47.3 +1.6
BJI S **S** 22 11 55.0 -1.6
BJI pmax pmax
comp=Z,110nm,1.3s
BJI pmax pmax
comp=Z,6µm,8.6s
BJI LR LR
comp=Z,20µm,21.8s
BJI LR LR
comp=Z,17µm,23.1s
BJI LR LR
comp=Z,34µm,23.9s
**IRK Irkutsk** 45.87 303 *e*P **P** 22 05 14.5 -0.1
IRK *e* 22 06 52.9
IRK *e* 22 15 06.0
**BJT Baijiatuau** 45.88 283 P **P** 22 05 14.4 -0.4
BJT IAmb IAmb 22 05 18.4
comp=Z,160nm,0.7s
**BJT Baijiatuau** 45.88 283 IAMs_20 IAMs_20 22 27 40.6
comp=Z,49µm,18.0s
**BJT Baijiatuau** 45.88 283 P **P** 22 05 14.4 -0.4
BJT pmax pmax
comp=Z,160nm,0.7s
BJT MLR MLR
comp=Z,49µm,18.0s
**JLU Jordanelle** 45.98 76 IAMs_20 IAMs_20 22 21 01.0
comp=Z,46µm,22.0s
**NLU North Lily Min** 45.98 77 IAMs_20 IAMs_20 22 20 58.3
comp=Z,59µm,22.0s
**MPU Maple Canyon** 46.22 77 IAMs_20 IAMs_20 22 21 18.5
comp=Z,49µm,21.0s
**CCUT Cedar City** 46.67 81 IAMs_20 IAMs_20 22 21 39.8
comp=Z,47µm,22.0s
**ULN Ulaanbaatar** 46.71 297 P **P** 22 05 21.1 -0.3
ULN IAmb IAmb 22 05 25.0
comp=Z,259nm,1.4s
**ULN Ulaanbaatar** 46.71 297 ⇑P **P** 22 05 21.1 -0.3
**ULN Ulaanbaatar** 46.71 297 P **P** 22 05 22.9 +1.4
ULN P **P** 22 05 22.9 +1.4
ULN S **S** 22 12 07.9 -1.1
ULN S **S** 22 12 07.9 -1.1
**ULN Ulaanbaatar** 46.71 297 *c i*P **P** 22 05 21.4 -0.1
ULN pmax pmax
comp=Z,111nm,1.2s
ULN MLR MLR
comp=Z,47µm,16.0s
**ULN Ulaanbaatar** 46.71 297 P **P** 22 05 21.6 +0.2
ULN PcP **PcP** 22 06 57.6 +3.1
ULN ScP **ScP** 22 10 46.1 +0.5
**MVU Marysvale** 46.79 79 P **P** 22 05 22.4 +0.1
**NOR Nord** 46.90 4 *i* P **P** 22 05 21.5 -0.8
NOR IAmb IAmb 22 05 28.8
comp=Z,15nm,0.8s
**JOW Kunigami** 47.06 260 P **P** 22 05 27.0 +2.8
**JOW Kunigami** 47.06 260 P **P** 22 05 24.7 +0.5
JOW IAmb IAmb 22 05 27.5
comp=Z,278nm,1.1s
**JOW Kunigami** 47.06 260 LR LR 22 24 46.7
comp=Z,11µm,20.2s,baz=54,slow=36
**LCMT Little Creek M** 47.08 81 IAMs_20 IAMs_20 22 21 50.7
comp=Z,58µm,22.0s
**MTPU Mount Pierson** 47.09 80 IAMs_20 IAMs_20 22 23 36.8
comp=Z,39µm,20.0s
**P17A Butcher Ranch,** 47.09 77 IAMs_20 IAMs_20 22 21 46.7
comp=Z,47µm,22.0s
**SONM Songino Array** 47.10 297 P **P** 22 05 24.9 +0.5
SONM IAmb IAmb 22 05 28.3
comp=Z,327nm,1.5s
**SONM Songino Array** 47.10 297 P **P** 22 05 26.0 +1.5
comp=Z,25nm,0.5s,baz=66,slow=5.7,SNR=128
SONM PcP **PcP** 22 06 57.4 +1.6
comp=Z,48nm,0.6s,baz=101,slow=1.9,SNR=7.6
SONM ScP **ScP** 22 10 48.3 +1.0
comp=Z,60nm,1.0s,baz=48,slow=3.4,SNR=15
SONM S **S** 22 12 14.5 +0.1
comp=Z,0.8nm,0.7s,baz=191,slow=15,SNR=0.7
SONM ScS **ScS** 22 15 14.1 -2.0
comp=Z,1.1nm,1.0s,baz=330,slow=1.2,SNR=1.5
SONM LR LR 22 26 00.6
comp=Z,148µm,20.2s,baz=62,slow=37
SONM PKPPKP P'P'df 22 36 31.4 -16
comp=Z,1.0nm,0.9s,baz=222,slow=1.9,SNR=3.6
SONM P4KPbc 22 43 07.9
comp=Z,1.1nm,0.6s,baz=66,slow=3.9,SNR=9.4
comp=Z,25nm,0.5s
**SONM Songino Array** 47.10 297 P **P** 22 05 25.0 +0.5
SONM pmax pmax
comp=Z,327nm,1.5s
**Q16A Castle Valley** 47.17 78 IAMs_20 IAMs_20 22 21 48.6
comp=Z,52µm,22.0s
**PFO Pinyon Flats O** 47.27 87 P **P** 22 05 25.8 -0.1
**PFO Pinyon Flats O** 47.27 87 LR LR 22 20 54.2
comp=Z,29µm,21.3s,baz=298,slow=30
**PFO Pinyon Flats O** 47.27 87 P **P** 22 05 25.5 -0.4
baz=311,SNR=32
PFO S **S** 22 12 18.1 +0.8
baz=311
**PFO Pinyon Flats O** 47.27 87 P **P** 22 05 25.8 -0.1
PFO pmax pmax
comp=Z,131nm,1.2s
PFO MLR MLR
comp=Z,28µm,20.0s
**TPFO Pinon Flats** 47.28 87 P **P** 22 05 25.3 -0.7
baz=311,SNR=34
TPFO S **S** 22 12 18.1 +0.8
baz=311
**P18A Preston Nutter** 47.30 77 IAMs_20 IAMs_20 22 23 08.0
comp=Z,48µm,21.0s
**NEEM North Greenlan** 47.33 14 ⇑P **P** 22 05 25.1 -0.9
**NEEM North Greenlan** 47.33 14 *i* P **P** 22 05 25.4 -0.6
NEEM IAmb IAmb 22 05 28.5
comp=Z,144nm,0.7s
**KNB Kanab** 47.34 81 IAMs_20 IAMs_20 22 21 48.4
comp=Z,58µm,22.0s
**109C Camp Elliot, M** 47.34 88 P **P** 22 05 27.2 +0.9
baz=312,SNR=8.0
109C S **S** 22 12 20.7 +2.7
baz=312
**ZAK Zakamensk** 47.39 301 *e*P **P** 22 05 27.1 +0.5
ZAK pmax pmax
comp=Z,138nm,1.1s
**SRU San Rafael Swe** 47.45 77 IAMs_20 IAMs_20 22 21 57.9
comp=Z,50µm,22.0s
**TJX Tijuana** 47.63 89 P **P** 22 05 29.0 +0.4
**TIA Tai'an** 47.66 278 P **P** 22 05 29.0 +0.2
TIA PcP **PcP** 22 07 00.8 +2.9
TIA ScP **ScP** 22 10 52.8 +3.2
TIA S **S** 22 12 21.8 -0.6
TIA pmax pmax
comp=Z,360nm,0.7s
TIA pmax pmax
comp=Z,12µm,6.7s
TIA LR LR
comp=Z,34µm,19.4s
TIA LR LR
comp=Z,33µm,18.7s
TIA LR LR
comp=Z,52µm,16.5s
**MONP2 Monument Peak** 47.77 88 P **P** 22 05 30.5 +0.6
baz=312,SNR=55
MONP2 S **S** 22 12 25.4 +0.9
baz=312
**TKX Tecate** 47.87 88 P **P** 22 05 30.8 +0.2
TKX IAmb IAmb 22 05 50.0
comp=Z,447nm,1.9s
**RWWY Rawlins** 47.88 72 IAMs_20 IAMs_20 22 22 55.0
comp=Z,71µm,22.0s
**MOY Mondy** 47.89 304 *e*P **P** 22 05 30.6 +0.1
MOY pmax pmax
comp=Z,321nm,1.8s
**W13A Hualapai Mount** 47.91 84 P **P** 22 05 30.8 -0.2
**U15A North Rim** 48.04 81 IAMs_20 IAMs_20 22 22 20.0
comp=Z,59µm,22.0s
**HMU Henry Mountain** 48.04 79 IAMs_20 IAMs_20 22 22 26.8
comp=Z,49µm,22.0s
**GUMO Guam** 48.09 232 LR LR 22 21 31.3
comp=Z,9µm,21.4s,baz=32,slow=31
**HHC Hu-ho-hao-te** 48.17 286 ⇑*i*P **P** 22 05 34.0 +1.2
HHC pP sP 22 05 44.8 -0.4
HHC PP **PP** 22 07 27.3 +2.3
HHC S **S** 22 12 27.5 -2.3
HHC sS sS 22 12 43.1 -1.8
HHC ScS **ScS** 22 15 22.9 -0.5
HHC pmax pmax
comp=Z,510nm,1.5s
HHC pmax pmax
comp=Z,4µm,4.0s
HHC LR LR
comp=Z,45µm,18.6s
HHC LR LR
comp=Z,69µm,20.0s
HHC LR LR
comp=Z,104µm,20.0s
**RSSD Black Hills** 48.30 68 P **P** 22 05 33.3 -0.6
**RSSD Black Hills** 48.30 68 IAMs_20 IAMs_20 22 22 54.8
comp=Z,39µm,22.0s
**RSSD Black Hills** 48.30 68 ⇑P **P** 22 05 33.3 -0.6
**RSSD Black Hills** 48.30 68 P **P** 22 05 33.5 -0.4
baz=306
RSSD S **S** 22 12 29.5 -2.3
baz=306
**RSSD Black Hills** 48.30 68 P **P** 22 05 33.3 -0.6
RSSD pmax pmax
comp=Z,276nm,0.9s
RSSD MLR MLR
comp=Z,40µm,22.0s
**RSSD Black Hills** 48.30 68 P **P** 22 05 33.4 -0.5
RSSD pP **pwP** 22 05 45.2 +0.2
RSSD PcP **PcP** 22 07 01.7 +1.4
RSSD ScP **ScP** 22 10 54.1 +1.6
**KULLO Kullorsuaq** 48.33 18 ⇑P **P** 22 05 32.8 -0.7
**HNS HongShan** 48.40 281 ⇑P **P** 22 05 35.1 +0.7
HNS PP **PP** 22 07 29.3 +2.4
HNS ScP **ScP** 22 10 56.5 +3.8
HNS S **S** 22 12 33.1 +0.3
HNS ScS **ScS** 22 15 22.9 -1.8
HNS pmax pmax
comp=Z,520nm,1.2s
HNS pmax pmax
comp=Z,14µm,9.6s
HNS LR LR
comp=Z,26µm,17.5s
HNS LR LR
comp=Z,48µm,18.3s
HNS LR LR
comp=Z,58µm,24.7s
**SSE Sheshan** 48.49 270 P **P** 22 05 35.4 +0.1
SSE S **S** 22 12 36.6 +2.3
SSE pmax pmax
comp=Z,200nm,1.2s
SSE pmax pmax
comp=Z,5µm,4.5s
SSE LR LR
comp=Z,7µm,19.2s
SSE LR LR
comp=Z,4µm,18.9s
**PATS Pohnpei** 48.53 212 P **P** 22 05 38.7 +3.1
**PATS Pohnpei** 48.53 212 P **P** 22 05 35.9 +0.3
**PATS Pohnpei** 48.53 212 P **P** 22 05 36.2 +0.6
comp=Z,0.0nmcomp=Z,219nm,1.7s
**E28A Huff** 48.78 63 IAMs_20 IAMs_20 22 26 58.0
comp=Z,50µm,20.0s
**N23A Red Feather La** 49.12 73 IAMs_20 IAMs_20 22 23 45.9
comp=Z,61µm,22.0s
**N23A Red Feather La** 49.12 73 P **P** 22 05 40.8 +0.4
baz=308,SNR=187
N23A S **S** 22 12 44.8 +1.3
baz=308
**WUAZ Wupatki** 49.20 82 P **P** 22 05 40.8 -0.1
WUAZ IAMs_20 IAMs_20 22 22 54.6
comp=Z,46µm,22.0s
**WUAZ Wupatki** 49.20 82 ⇑P **P** 22 05 41.3 +0.4
**WUAZ Wupatki** 49.20 82 P **P** 22 05 41.5 +0.6
baz=310,SNR=258
WUAZ S **S** 22 12 46.9 +2.5
baz=310
**BTO Baotou** 49.25 287 ⇑*i*P **P** 22 05 42.6 +1.5
BTO S **S** 22 12 44.1 -0.8
BTO SS **SS** 22 16 08.4 -7.7
BTO pmax pmax
comp=Z,800nm,1.5s
BTO pmax pmax
comp=Z,37µm,7.6s
BTO LR LR
comp=Z,86µm,19.8s
BTO LR LR
comp=Z,141µm,22.8s
BTO LR LR
comp=Z,199µm,22.0s
**ULM Lac du Bonnet** 49.27 57 P **P** 22 05 39.6 -1.4
ULM IAmb IAmb 22 05 42.9
comp=Z,55nm,0.8s
**ULM Lac du Bonnet** 49.27 57 ⇑P **P** 22 05 40.1 -1.0
**ULM Lac du Bonnet** 49.27 57 P **P** 22 05 40.0 -1.0
comp=Z,58nm,0.9s,baz=296,slow=7.7,SNR=39
ULM PcP **PcP** 22 07 05.0 +1.5
comp=Z,51nm,0.8s,baz=289,slow=4.4,SNR=4.1
ULM S **S** 22 12 42.0 -2.8
comp=Z,5.4nm,0.7s,baz=145,slow=18,SNR=1.5
ULM ScS **ScS** 22 15 28.1 -2.1
comp=Z,5.1nm,0.9s,baz=96,slow=19,SNR=2.3
ULM LR LR 22 26 31.2
comp=Z,43µm,20.8s,baz=308,slow=36
comp=Z,58nm,0.9s
**ULM Lac du Bonnet** 49.27 57 P **P** 22 05 39.6 -1.4
ULM pmax pmax
comp=Z,55nm,0.8s
**NJ2 Nanjing** 49.31 272 ⇑P **P** 22 05 41.3 -0.2
NJ2 sP **sP** 22 05 56.0 +2.0
NJ2 PcP **PcP** 22 07 05.8 +1.9
NJ2 S **S** 22 12 44.9 -0.8
NJ2 pmax pmax
comp=Z,210nm,1.3s
NJ2 pmax pmax
comp=Z,6µm,9.0s
NJ2 LR LR
comp=Z,18µm,24.3s
NJ2 LR LR
comp=Z,17µm,23.5s
NJ2 LR LR
comp=Z,40µm,24.5s
**KRAR Krasnoyarsk** 49.46 312 ‖*e*P **P** 22 05 43.5 +1.2
**SMCO Snowmass** 49.57 75 IAMs_20 IAMs_20 22 23 57.8
comp=Z,42µm,22.0s
**SMCO Snowmass** 49.57 75 ⇑P **P** 22 05 42.4 -1.5
**TIY Taiyuan** 49.59 283 ⇑P **P** 22 05 44.9 +1.2
TIY PP **PP** 22 07 40.6 +2.6
TIY PcS **PcS** 22 11 06.0 +4.3
TIY S **S** 22 12 53.3 +3.5
TIY pmax pmax
comp=Z,270nm,0.6s
TIY pmax pmax
comp=Z,11µm,5.0s
TIY LR LR
comp=Z,36µm,18.2s
TIY LR LR
comp=Z,15µm,18.4s
TIY LR LR

comp=Z,39µm,27.1s
**UPNV Upernavik 49.82 19** *i* P **P** **22 05 45.0 +0.1**
UPNV IAmb IAmb 22 05 49.3
comp=Z,118nm,0.6s
**KBS Kingsbay 49.84 357** P **P** **22 05 44.9 0.0**
KBS IAmb IAmb 22 05 48.7
comp=Z,120nm,0.8s
**KBS Kingsbay 49.84 357** ⇑*i* P **P** **22 05 45.9 +1.0**
KBS IVmB_BB 22 05 48.6
comp=Z,3µm,6.6s
KBS *e*PP **PP** **22 07 42.0 +2.7**
KBS *e*S **S** **22 12 53.7 +1.7**
KBS *e*SS **SS** **22 16 29.6 +5.6**
KBS IVMs_BB IVMs_BB 22 22 57.4
comp=Z,12µm,24.4s
**KBS Kingsbay 49.84 357** ⇑P **P** **22 05 45.0 0.0**
**KBS Kingsbay 49.84 357** P **P** **22 05 44.9 0.0**
KBS pmax pmax
comp=Z,120nm,0.8s
KBS MLR MLR
comp=Z,29µm,19.0s
**KBS Kingsbay 49.84 357** *i* P **P** **22 05 45.4 +0.5**
**KBS Kingsbay 49.84 357** P **P** **22 05 45.3 +0.4**
KBS pP **sP** **22 05 57.0 -0.4**
KBS sP pP 22 06 02.2 +8.3
KBS PcP **PcP** **22 07 05.5 +0.5**
KBS ScP **ScP** **22 10 57.7 -0.4**
**MVCO Mesa Verde 49.88 78** P **P** **22 05 45.1 -1.0**
MVCO IAmb IAmb 22 06 06.4
comp=Z,296nm,1.0s
MVCO IAMs_20 IAMs_20 22 23 46.7
comp=Z,57µm,22.0s
**MVCO Mesa Verde 49.88 78** ⇑P **P** **22 05 46.0 -0.1**
**MVCO Mesa Verde 49.88 78** P **P** **22 05 46.2 +0.1**
baz=310,SNR=156
MVCO S **S** **22 12 54.6 +0.5**
baz=310
**ISCO Idaho Springs 50.00 73** P **P** **22 05 45.9 -1.2**
ISCO IAmb IAmb 22 05 52.0
comp=Z,167nm,1.0s
**ISCO Idaho Springs 50.00 73** ⇑P **P** **22 05 47.3 +0.3**
**ISCO Idaho Springs 50.00 73** P **P** **22 05 47.5 +0.4**
baz=309,SNR=100
ISCO S **S** **22 12 57.2 +1.4**
baz=309
**ISCO Idaho Springs 50.00 73** P **P** **22 05 45.9 -1.2**
ISCO pmax pmax
comp=Z,167nm,1.0s
ISCO MLR MLR
comp=Z,71µm,22.0s
**TARA Tarawa 50.41 192** P **P** **22 05 49.9 -0.1**
**AGMN Agassiz Nation 50.42 59** P **P** **22 05 48.8 -0.9**
AGMN IAmb IAmb 22 06 29.9
comp=Z,378nm,1.6s
AGMN IAMs_20 IAMs_20 22 30 39.1
comp=Z,49µm,19.0s
**AGMN Agassiz Nation 50.42 59** ⇑P **P** **22 05 47.6 -2.2**
**AGMN Agassiz Nation 50.42 59** P **P** **22 05 48.5 -1.2**
baz=306,SNR=17
AGMN S **S** **22 12 57.0 -3.9**
baz=306
**SPA0 Spitsbergen Ar 50.42 356** *e*P **P** **22 05 50.0 +0.5**
SPA0 IVmBBB 22 05 51.6
comp=Z,3µm,2.0s
SPA0 *e*PP **PP** **22 07 47.4 +2.7**
SPA0 *e*ScP **ScP** **22 11 03.5 +2.8**
SPA0 *e*S **S** **22 12 59.0 -1.3**
SPA0 IVMs_BB IVMs_BB 22 32 00.6
comp=Z,16µm,15.9s
**SPITS Spitsbergen Ar 50.42 356** P **P** **22 05 48.6 -0.8**
comp=Z,125nm,0.6s,baz=52,slow=5.4,SNR=95
SPITS PcP **PcP** **22 07 08.4 +1.2**
comp=Z,74nm,0.7s,baz=84,slow=3.4,SNR=6.4
SPITS ScP **ScP** **22 11 00.2 -0.5**
comp=Z,19nm,0.9s,baz=72,slow=5.4,SNR=3.5
SPITS S **S** **22 12 58.7 -1.6**
comp=Z,5.7nm,0.9s,baz=120,slow=3.0,SNR=1.7
SPITS LR LR 22 29 41.1
comp=Z,24µm,18.0s,baz=339,slow=39
comp=Z,125nm,0.6s
**SPB2 Spitsbergen Ar 50.43 356** P **P** **22 05 48.9 -0.5**
SPB2 IAmb IAmb 22 06 07.2
comp=Z,171nm,0.8s
**W18A Petrified Fore 50.47 81** IAMs_20 IAMs_20 22 23 37.3
comp=Z,55µm,22.0s
**W18A Petrified Fore 50.47 81** P **P** **22 05 51.5 +0.9**
baz=311,SNR=86
W18A S **S** **22 13 04.6 +2.3**
baz=311
**S22A 4UR Ranch, Cre 50.56 76** P **P** **22 05 52.0 +0.7**
baz=310
S22A S **S** **22 13 06.5 +2.8**
baz=310
**214A Organ Pipe Nat 50.66 86** P **P** **22 05 52.2 +0.4**
baz=312,SNR=71
214A S **S** **22 13 06.5 +1.9**
baz=312
**X18A Snowflake 50.73 82** IAMs_20 IAMs_20 22 28 05.1
comp=Z,32µm,18.0s
**Q24A Divide 50.80 74** IAMs_20 IAMs_20 22 24 41.0
comp=Z,60µm,22.0s
**Q24A Divide 50.80 74** P **P** **22 05 53.7 +0.6**
baz=309
Q24A S **S** **22 13 08.5 +1.4**
baz=309
**NUUG Nuugaatsiaq 51.36 20** ⇑P **P** **22 05 55.9 -0.6**
**NUUG Nuugaatsiaq 51.36 20** *i* P **P** **22 05 55.6 -0.9**
NUUG IAmb IAmb 22 06 01.7
comp=Z,48nm,0.6s
**SDCO Great Sand Dun 51.37 75** P **P** **22 05 57.2 -0.2**
SDCO IAmb IAmb 22 06 01.8
comp=Z,248nm,1.0s
SDCO IAMs_20 IAMs_20 22 24 45.5
comp=Z,41µm,22.0s
**SDCO Great Sand Dun 51.37 75** ⇑P **P** **22 05 57.7 +0.3**
**SDCO Great Sand Dun 51.37 75** P **P** **22 05 57.9 +0.5**
baz=310,SNR=447
SDCO S **S** **22 13 15.1 +0.2**
baz=310
**OGNE Ogallala 51.41 70** P **P** **22 05 57.9 +0.4**
**OGNE Ogallala 51.41 70** ⇑P **P** **22 05 57.7 +0.2**
**OGNE Ogallala 51.41 70** P **P** **22 05 57.5 +0.1**
baz=309,SNR=81
OGNE S **S** **22 13 15.2 +0.2**
baz=309
**DAG Danmarks Havn 51.46 6** P **P** **22 05 55.2 -2.0**
**DAG Danmarks Havn 51.46 6** ⇑P **P** **22 05 55.9 -1.3**
**DAG Danmarks Havn 51.46 6** *i* P **P** **22 05 56.3 -0.9**
**HOPEN Hopen 51.55 353** *e*P **P** **22 05 58.1 +0.2**
HOPEN IVmB_BB 22 05 59.2
comp=Z,5µm,4.2s
HOPEN *e*PP **PP** **22 07 56.7 +1.9**
HOPEN *e*S **S** **22 13 14.6 -1.2**
HOPEN IVMs_BB IVMs_BB 22 34 32.8
comp=Z,10µm,17.3s
**HSPB Hornsund (broa 51.62 356** *e*P **P** **22 05 58.6 +0.3**
**LYN LuoYang 51.62 279** ⇑P **P** **22 05 59.6 +0.6**
LYN PP **PP** **22 07 54.5 -1.9**
LYN S **S** **22 13 17.4 -0.5**
LYN pmax pmax
comp=Z,580nm,1.2s
LYN pmax pmax
comp=Z,16µm,7.9s
LYN LR LR
comp=Z,34µm,22.7s
LYN LR LR
comp=Z,35µm,22.0s
LYN LR LR
comp=Z,60µm,27.5s
**F33A 5 Mile Ranch, 51.67 62** IAMs_20 IAMs_20 22 26 10.3
comp=Z,48µm,22.0s
**TUC Tucson 51.69 84** P **P** **22 05 59.5 -0.1**
TUC IAmb IAmb 22 06 04.0
comp=Z,139nm,0.8s
**TUC Tucson 51.69 84** ⇑P **P** **22 05 59.6 0.0**
**TUC Tucson 51.69 84** P **P** **22 06 00.5 +0.9**
baz=312
TUC S **S** **22 13 21.0 +2.1**
baz=312
**TUC Tucson 51.69 84** P **P** **22 05 59.5 -0.1**
TUC pmax pmax
comp=Z,139nm,0.9s
TUC MLR MLR
comp=Z,21µm,18.0s
**TUC Tucson 51.69 84** P **P** **22 05 59.3 -0.3**
TUC pP **pwP** **22 06 10.8 +0.3**
TUC sP **sP** **22 06 16.0 +4.1**
**K30B Basset 51.74 67** IAMs_20 IAMs_20 22 25 28.9
comp=Z,37µm,22.0s
**YOJ Yonaguni jima 52.03 262** P **P** **22 06 04.6 +2.5**
**YOJ Yonaguni jima 52.03 262** P **P** **22 06 01.2 -0.9**
**YOJ Yonaguni jima 52.03 262** ⇑P **P** **22 06 01.7 -0.4**
**YOJ Yonaguni jima 52.03 262** P **P** **22 06 01.2 -0.9**
YOJ pmax pmax
comp=Z,803nm,1.7s
**XMAS Kiritimati 52.10 154** P **P** **22 06 04.8 +2.2**
**XMAS Kiritimati 52.10 154** P **P** **22 06 02.4 -0.2**
XMAS IAmb IAmb 22 06 28.0
comp=Z,167nm,0.9s
**XMAS Kiritimati 52.10 154** IAMs_20 IAMs_20 22 22 41.7
comp=Z,48µm,22.0s
**T25A Trinidad 52.42 75** P **P** **22 06 05.0 -0.2**
**T25A Trinidad 52.42 75** P **P** **22 06 05.7 +0.5**
baz=310,SNR=690
T25A S **S** **22 13 31.8 +2.6**
baz=310
**DUN6 Lazy B Ranch 52.58 83** IAMs_20 IAMs_20 22 25 41.2
comp=Z,38µm,20.0s
**ANMO Albuquerque 52.61 79** P **P** **22 06 06.6 0.0**
**ANMO Albuquerque 52.61 79** IAMs_20 IAMs_20 22 25 37.9
comp=Z,40µm,22.0s
**ANMO Albuquerque 52.61 79** LR LR 22 26 00.3
comp=Z,41µm,21.4s,baz=44,slow=33
**ANMO Albuquerque 52.61 79** P **P** **22 06 07.1 +0.5**
baz=311
ANMO S **S** **22 13 33.6 +1.8**
baz=311
**ANMO Albuquerque 52.61 79***c* *i*P **P** **22 06 07.5 +0.9**
ANMO pmax pmax
comp=Z,62nm,0.9s
**ANMO Albuquerque 52.61 79** P **P** **22 06 06.6 0.0**
**TATO Taipei 52.61 264** IAMs_20 IAMs_20 22 26 43.2
comp=Z,58µm,22.0s
**TATO Taipei 52.61 264** P **P** **22 06 06.0 -0.4**
**FRB Frobisher Bay 52.78 32** ⇑P **P** **22 06 05.8 -1.2**
**FRB Frobisher Bay 52.78 32** LR LR 22 31 50.4
comp=Z,102µm,18.5s,baz=304,slow=40
**ECSD EROS Data Cent 52.79 64** P **P** **22 06 06.2 -1.4**
ECSD IAmb IAmb 22 06 09.8
comp=Z,129nm,0.8s
**ECSD EROS Data Cent 52.79 64** IAMs_20 IAMs_20 22 26 30.3
comp=Z,49µm,22.0s
**ECSD EROS Data Cent 52.79 64** ⇑P **P** **22 06 06.0 -1.6**
**ECSD EROS Data Cent 52.79 64** P **P** **22 06 06.2 -1.4**
baz=309,SNR=148
ECSD S **S** **22 13 29.5 -4.2**
baz=309
**YHNB Yeheng 52.90 264** P **P** **22 06 10.9 +2.3**
**YHNB Yeheng 52.90 264** P **P** **22 06 08.6 -0.1**
YHNB IAMs_20 IAMs_20 22 26 53.1
comp=Z,46µm,21.0s
**Y22D IRIS PASSCAL I 52.90 80** P **P** **22 06 08.9 +0.2**
baz=312,SNR=13
Y22D S **S** **22 13 40.1 +4.4**
baz=312
**EYMN Ely 52.96 57** P **P** **22 06 08.0 -0.7**
**EYMN Ely 52.96 57** IAMs_20 IAMs_20 22 30 59.1
comp=Z,44µm,18.0s
**EYMN Ely 52.96 57** ⇑P **P** **22 06 07.5 -1.2**
**EYMN Ely 52.96 57** P **P** **22 06 07.7 -1.0**
baz=308,SNR=33
EYMN S **S** **22 13 31.3 -4.6**
baz=308
**NACB Ninganchiao 53.12 263** P **P** **22 06 11.7 +1.5**
**NACB Ninganchiao 53.12 263** P **P** **22 06 09.8 -0.4**
NACB IAMs_20 IAMs_20 22 26 54.1
comp=Z,38µm,22.0s
**WHN Wuhan 53.15 274** ⇑P **P** **22 06 10.3 0.0**
WHN pP **pP** **22 06 14.8 -4.5**
WHN PcP **PcP** **22 07 14.6 -3.6**
WHN PP **PP** **22 08 14.6 +4.3**
WHN ScP **ScP** **22 11 13.9 +0.7**
WHN PcS **PcS** **22 11 16.1 -1.0**
WHN S **S** **22 13 39.0 +0.2**
WHN sS **pS** **22 13 46.8 -2.8**
WHN ScS **ScS** **22 15 58.3 +0.8**
WHN pmax pmax
comp=Z,2µm,1.2s
WHN pmax pmax
comp=Z,22µm,10.2s
WHN LR LR
comp=Z,38µm,15.5s
WHN LR LR
comp=Z,26µm,15.6s
WHN LR LR
comp=Z,92µm,20.4s
**SUMG Summit 53.19 14** P **P** **22 06 09.9 -0.7**
SUMG IAmb IAmb 22 06 15.0
comp=Z,152nm,1.0s
SUMG IAMs_20 IAMs_20 22 31 12.5
comp=Z,42µm,20.0s
**SUMG Summit 53.19 14** P **P** **22 06 09.9 -0.7**
SUMG pmax pmax
comp=Z,152nm,1.0s
SUMG MLR MLR
comp=Z,42µm,20.0s
**SUMG Summit 53.19 14** *i* P **P** **22 06 10.3 -0.2**
SUMG IAmb IAmb 22 06 14.9
comp=Z,90nm,0.9s
**319A Douglas 53.26 84** IAMs_20 IAMs_20 22 31 41.0
comp=Z,29µm,18.0s
**121A Cookes Peak, D 53.40 82** P **P** **22 06 12.8 +0.4**
baz=313,SNR=136
121A S **S** **22 13 41.3 -1.3**
baz=313
**DBG Daneborg 53.72 7** ⇑P **P** **22 06 12.7 -1.2**
**DBG Daneborg 53.72 7** *i* P **P** **22 06 12.8 -1.1**
DBG IAmb IAmb 22 06 17.3
comp=Z,18nm,0.6s
**E38A The Farm, Brul 53.77 59** IAMs_20 IAMs_20 22 27 49.6
comp=Z,44µm,22.0s
**SSLB Suanglung 53.80 263** P **P** **22 06 17.4 +2.1**
**SSLB Suanglung 53.80 263** P **P** **22 06 14.3 -1.0**
SSLB IAMs_20 IAMs_20 22 27 36.1
comp=Z,35µm,20.0s
**YULB Yu-li 53.88 263** P **P** **22 06 17.5 +1.7**
**YULB Yu-li 53.88 263** P **P** **22 06 14.8 -1.0**
YULB IAmb IAmb 22 06 29.3
comp=Z,154nm,0.9s
**L34A Svendsen Farm, 54.05 66** IAMs_20 IAMs_20 22 32 47.7
comp=Z,32µm,18.0s
**CBKS Cedar Bluff 54.13 71** ⇑P **P** **22 06 17.6 +0.1**
**CBKS Cedar Bluff 54.13 71** P **P** **22 06 17.8 +0.3**
baz=311,SNR=93
CBKS S **S** **22 13 53.3 +1.2**
baz=311
**XAN Xi'an 54.15 281** ⇑P **P** **22 06 17.4 -0.3**
XAN pP pP 22 06 25.3 -1.4
XAN sP sP 22 06 27.9 -2.3
XAN PP **PP** **22 08 18.4 -0.8**
XAN S **S** **22 13 50.9 -1.5**
XAN SS **SS** **22 17 37.6 +3.7**
XAN pmax pmax
comp=Z,540nm,1.1s
XAN pmax pmax
comp=Z,12µm,11.2s
XAN LR LR
comp=Z,36µm,23.4s
XAN LR LR
comp=Z,40µm,22.7s
XAN LR LR
comp=Z,49µm,22.0s
**SRIG Santa Rosalia 54.22 90** P **P** **22 06 17.8 -0.4**
**TPUB Ta-pu 54.36 263** P **P** **22 06 20.9 +1.6**
**TPUB Ta-pu 54.36 263** P **P** **22 06 19.3 0.0**
TPUB IAmb IAmb 22 06 25.1
comp=Z,253nm,1.0s
TPUB IAMs_20 IAMs_20 22 27 43.9
comp=Z,53µm,22.0s
**ZAA0 Zalesovo Array 54.40 314** P **P** **22 06 18.2 -0.9**
**ZALV Zalesovo Beam 54.40 314** P **P** **22 06 17.9 -1.2**
**ZALV Zalesovo Beam 54.40 314** P **P** **22 06 18.6 -0.6**
comp=Z,13nm,0.4s,baz=61,slow=6.3,SNR=52
ZALV PcP **PcP** **22 07 24.2 +1.7**
comp=Z,76nm,0.7s,baz=38,slow=3.7,SNR=19
ZALV ScP **ScP** **22 11 17.6 -0.7**
comp=Z,10.0nm,0.8s,baz=37,slow=7.7,SNR=4.9
ZALV LR LR 22 31 53.9
comp=Z,42µm,18.2s,baz=47,slow=39
ZALV P4KPbc 22 43 38.0
comp=Z,1.6nm,0.7s,baz=50,slow=2.5,SNR=5.9
comp=Z,13nm,0.4s
**I37A Lemond, Waseca 54.41 62** IAMs_20 IAMs_20 22 27 44.9
comp=Z,43µm,22.0s
**TWGBT Beinan 54.44 262** P **P** **22 06 21.3 +1.5**
**QZH Quanzhou 54.44 266** ⇑*i*P **P** **22 06 19.9 +0.1**
QZH PP **PP** **22 08 20.3 -1.6**
QZH S **S** **22 13 58.9 +2.5**
QZH ScS **ScS** **22 16 07.4 +0.7**
QZH SS **SS** **22 17 40.4 +1.7**
QZH pmax pmax
comp=Z,450nm,1.4s
QZH pmax pmax
comp=Z,12µm,8.6s
QZH LR LR
comp=Z,22µm,22.0s
QZH LR LR
comp=Z,7µm,24.0s
QZH LR LR
comp=Z,28µm,22.0s
**EPT El Paso 54.71 82** P **P** **22 06 21.8 -0.1**
**R32A Long Quarter, 55.00 70** P **P** **22 06 23.1 -0.7**
**N35A Tabor 55.19 66** IAMs_20 IAMs_20 22 32 40.8
comp=Z,36µm,19.0s
**G40A Rib Lake 55.35 59** IAMs_20 IAMs_20 22 30 33.5
comp=Z,40µm,19.0s
**COWI Conover 55.38 58** P **P** **22 06 25.2 -1.1**
COWI IAMs_20 IAMs_20 22 32 34.2
comp=Z,45µm,18.0s
**COWI Conover 55.38 58** ⇑P **P** **22 06 24.9 -1.4**
**MNTX Cornudas Mount 55.46 81** ⇑P **P** **22 06 27.2 0.0**
**MNTX Cornudas Mount 55.46 81** P **P** **22 06 27.4 +0.3**
baz=313,SNR=680
MNTX S **S** **22 14 09.7 -0.3**
baz=313
**SFJD Kangerlussuaq 55.48 22** P **P** **22 06 26.5 -0.2**
SFJD IAmb IAmb 22 07 28.3
comp=Z,123nm,0.8s
**SFJD Kangerlussuaq 55.48 22** IAMs_20 IAMs_20 22 34 30.2
comp=Z,47µm,20.0s
**SFJD Kangerlussuaq 55.48 22** ⇑P **P** **22 06 26.4 -0.2**
**SFJD Kangerlussuaq 55.48 22** LR LR 22 32 08.2
comp=Z,43µm,21.3s,baz=318,slow=38
**SFJD Kangerlussuaq 55.48 22** P **P** **22 06 26.5 -0.2**
SFJD pmax pmax
comp=Z,123nm,0.8s
SFJD MLR MLR
comp=Z,47µm,20.0s
**SFJD Kangerlussuaq 55.48 22** *i* P **P** **22 06 25.3 -1.4**
**SFJD Kangerlussuaq 55.48 22** P **P** **22 06 26.2 -0.5**
SFJD PcP **PcP** **22 07 27.0 +0.6**
SFJD ScP **ScP** **22 11 22.3 -0.4**
**AMTX Amarillo 55.57 76** IAMs_20 IAMs_20 22 27 20.8
comp=Z,40µm,22.0s
**AMTX Amarillo 55.57 76** ⇑P **P** **22 06 28.0 0.0**
**AMTX Amarillo 55.57 76** P **P** **22 06 27.8 -0.2**
baz=312
AMTX S **S** **22 14 13.1 +1.5**
baz=312
**CNSH ChangSha 55.68 273** P **P** **22 06 27.5 -1.3**
CNSH S **S** **22 14 14.8 +1.8**
CNSH pmax pmax
comp=Z,140nm,0.6s
CNSH LR LR
comp=Z,17µm,23.8s
CNSH LR LR
comp=Z,10µm,27.9s
CNSH LR LR
comp=Z,28µm,27.5s
**KSU1 Kansas State U 55.78 68** IAMs_20 IAMs_20 22 33 34.8
comp=Z,38µm,18.0s
**KSU1 Kansas State U 55.78 68** ⇑P **P** **22 06 28.6 -0.8**
**KSU1 Kansas State U 55.78 68** P **P** **22 06 28.8 -0.6**
baz=311,SNR=94
KSU1 S **S** **22 14 11.7 -2.4**
baz=311
**LZH Lanzhou 55.87 287** ⇑P **P** **22 06 31.3 +1.1**
LZH pP pP 22 06 38.3 -0.9
LZH PP **PP** **22 08 39.1 +4.4**
LZH S **S** **22 14 16.6 +1.0**
LZH pmax pmax
comp=Z,1µm,1.5s
LZH pmax pmax
comp=Z,4µm,5.5s
LZH LR LR
comp=Z,63µm,15.8s
LZH LR LR
comp=Z,66µm,16.5s
LZH LR LR
comp=Z,123µm,16.8s
**SCIA State Center 55.88 64** IAMs_20 IAMs_20 22 28 28.0
comp=Z,48µm,22.0s
**SCIA State Center 55.88 64** ⇑P **P** **22 06 29.4 -0.7**
**SCIA State Center 55.88 64** P **P** **22 06 29.2 -0.8**
baz=311,SNR=34
SCIA S **S** **22 14 12.5 -2.8**
baz=311
**DGZ Jazzator, Alta 55.94 309***c* *i*P **P** **22 06 29.2 -1.3**
DGZ pmax pmax
comp=Z,151nm,1.7s
DGZ MLR MLR
comp=Z,66µm,17.0s
**ICESG Greenland Ices 56.02 17** ⇓P **P** **22 06 29.6 -1.4**
**ICESG Greenland Ices 56.02 17** *i* P **P** **22 06 30.1 -1.0**
ICESG IAmb IAmb 22 06 34.7
comp=Z,70nm,0.9s
**GTA Gaotai 56.03 292** P **P** **22 06 31.8 +0.5**
GTA PP **PP** **22 08 38.9 +2.8**
GTA ScP **ScP** **22 11 29.8 +3.8**
GTA S **S** **22 14 15.3 -2.4**
GTA sS pS 22 14 30.3 +1.5
GTA pmax pmax
comp=Z,37nm,0.9s
GTA pmax pmax
comp=Z,9µm,10.0s
GTA LR LR
comp=Z,58µm,19.5s
GTA LR LR
comp=Z,56µm,19.1s
GTA LR LR
comp=Z,93µm,21.1s
**NOKA Waynoka 56.05 72** P **P** **22 06 30.6 -0.7**
NOKA IAMs_20 IAMs_20 22 27 56.2
comp=Z,32µm,21.0s
**F42A Maple Grove Fa 56.13 57** IAMs_20 IAMs_20 22 29 23.1
comp=Z,43µm,22.0s
**OK038 West end E0370 56.27 72** IAMs_20 IAMs_20 22 28 37.0
comp=Z,32µm,21.0s
**ENH Enshi 56.37 278** P **P** **22 06 32.5 -1.2**
ENH IAmb IAmb 22 06 36.2
comp=Z,203nm,1.0s
**KAN01 Argonia South 56.40 71** P **P** **22 06 32.8 -1.0**
KAN01 IAmb IAmb 22 06 40.4
comp=Z,217nm,0.9s
**N38A Joes South For 56.60 65** IAMs_20 IAMs_20 22 28 48.2
comp=Z,33µm,22.0s
**CROK Carrier 56.70 72** IAMs_20 IAMs_20 22 28 50.5
comp=Z,35µm,22.0s
**JFWS Jewell Farm 56.87 61** P **P** **22 06 35.5 -1.5**
JFWS IAmb IAmb 22 06 39.2
comp=Z,230nm,0.8s
**JFWS Jewell Farm 56.87 61** ⇑P **P** **22 06 35.5 -1.5**
**JFWS Jewell Farm 56.87 61** P **P** **22 06 35.7 -1.3**
baz=311,SNR=92
JFWS S **S** **22 14 23.7 -4.7**
baz=311
**JFWS Jewell Farm 56.87 61** P **P** **22 06 35.5 -1.5**
JFWS pmax pmax
comp=Z,230nm,0.9s
JFWS MLR MLR
comp=Z,51µm,19.0s
**L40A Anamosa 56.89 63** IAMs_20 IAMs_20 22 32 08.7
comp=Z,36µm,20.0s
**I42A Draeger Farm, 56.95 60** IAMs_20 IAMs_20 22 30 00.8
comp=Z,45µm,22.0s
**H43A Windswept, Lux 57.18 58** IAMs_20 IAMs_20 22 33 31.8
comp=Z,39µm,18.0s
**VADS Vadso 57.21 349** *e*P **P** **22 06 38.5 -0.5**
VADS IVmB_BB 22 06 39.7
comp=Z,4µm,3.7s
VADS *e*PP **PP** **22 08 46.8 +1.2**
VADS *e*S **S** **22 14 30.3 -1.8**
VADS IVMs_BB IVMs_BB 22 31 31.2
comp=Z,12µm,22.2s
**P38A Dawn 57.21 66** IAMs_20 IAMs_20 22 35 53.5
comp=Z,37µm,19.0s
**SCO Scoresbysund 57.24 9** P **P** **22 06 39.8 +0.6**
SCO IAmb IAmb 22 07 44.7

comp=Z,283nm,1.8s
**SCO Scoresbysund 57.24 9** P **P** **22 06 39.8 +0.6**
SCO pmax pmax
comp=Z,283nm,1.8s
SCO MLR MLR
comp=Z,54µm,20.0s
**SCO Scoresbysund 57.24 9** *i* P **P** **22 06 38.5 -0.7**
SCO IAmb IAmb 22 06 49.3
comp=Z,20nm,0.8s
**HAMF Hammerfest 57.30 352** *e*P **P** **22 06 38.0 -1.7**
HAMF IVmB_BB 22 06 40.0
comp=Z,4µm,4.6s
HAMF *e*PP **PP** **22 08 48.9 +2.4**
HAMF *e*S **S** **22 14 30.5 -2.8**
HAMF IVMs_BB IVMs_BB 22 32 20.3
comp=Z,12µm,20.5s
**WMOK Wichita Mounta 57.42 74** IAMs_20 IAMs_20 22 28 42.7
comp=Z,48µm,22.0s
**WMOK Wichita Mounta 57.42 74** ⇑P **P** **22 06 41.0 0.0**
**WMOK Wichita Mounta 57.42 74** P **P** **22 06 41.1 0.0**
baz=313,SNR=265
WMOK S **S** **22 14 37.3 +1.4**
baz=313
**NUUK Nuuk 57.46 25** ⇑P **P** **22 06 40.6 -0.2**
**NUUK Nuuk 57.46 25** *i* P **P** **22 06 39.9 -0.9**
NUUK IAmb IAmb 22 06 46.7
comp=Z,19nm,0.6s
**APMT Aspermont 57.58 76** P **P** **22 06 41.8 -0.4**
APMT IAmb IAmb 22 06 51.8
comp=Z,204nm,0.8s
**ADOK Arcadia Dam 57.65 72** P **P** **22 06 42.6 0.0**
**QUOK Quay 57.69 71** IAMs_20 IAMs_20 22 29 30.5
comp=Z,29µm,22.0s
**JMIC Jan Mayen 57.72 4** *e*P **P** **22 06 43.8 +1.1**
JMIC IVmB_BB 22 06 44.6
comp=Z,5µm,3.7s
JMIC *e*S **S** **22 14 41.0 +2.2**
JMIC IVMs_BB IVMs_BB 22 27 25.1
comp=Z,11µm,29.7s
**JMIC Jan Mayen 57.72 4** LR LR 22 30 46.4
comp=Z,15µm,21.3s,baz=350,slow=35
**LPIG La Paz 57.74 91** LR LR 22 25 55.5
comp=Z,12µm,21.5s,baz=310,slow=30
**OK052 Battle Ridge R 57.75 71** IAMs_20 IAMs_20 22 29 32.2
comp=Z,30µm,22.0s
**JMI Jan Mayen 57.77 4** *e*P **P** **22 06 43.7 +0.8**
JMI IVmB_BB 22 06 44.9
comp=Z,5µm,4.4s
JMI *e*S **S** **22 14 42.8 +3.3**
JMI IVMs_BB IVMs_BB 22 27 25.1
comp=Z,12µm,29.3s
**OKCSW OKLAHOMA CITY 57.77 72** IAMs_20 IAMs_20 22 29 01.8
comp=Z,46µm,21.0s
**L42A Oliver, Polo 57.80 62** IAMs_20 IAMs_20 22 35 34.4
comp=Z,35µm,19.0s
**KEV Kevo 57.82 350** P **P** **22 06 43.6 +0.3**
KEV IAMs_20 IAMs_20 22 32 33.3
comp=Z,37µm,21.0s
**KEV Kevo 57.82 350** ⇑P **P** **22 06 42.4 -0.9**
**KEV Kevo 57.82 350** P **P** **22 06 43.6 +0.3**
KEV pmax pmax
comp=Z,56nm,0.9s
KEV MLR MLR
comp=Z,37µm,21.0s
**KEV Kevo 57.82 350** P **P** **22 06 43.0 -0.3**
KEV PcP **PcP** **22 07 35.7 +0.1**
KEV ScP **ScP** **22 11 32.1 -1.0**
**P40A Paris 58.12 65** IAMs_20 IAMs_20 22 29 45.5
comp=Z,33µm,21.0s
**TX31 Lajitas Ar. Si 58.16 82** P **P** **22 06 46.0 -0.5**
TX31 IAmb IAmb 22 06 50.0
comp=Z,153nm,0.9s
**TXAR Lajitas Array 58.16 82** P **P** **22 06 45.9 -0.5**
comp=Z,120nm,0.8s,baz=302,slow=5.0,SNR=105
TXAR ScP **ScP** **22 11 38.1 +2.6**
comp=Z,2.1nm,0.7s,baz=316,slow=3.8,SNR=1.9
TXAR S **S** **22 14 44.8 -1.1**
comp=Z,0.8nm,0.7s,baz=165,slow=5.2,SNR=1.6
TXAR ScS **ScS** **22 16 33.9 +0.1**
comp=Z,0.1nm,0.4s,baz=14,slow=34,SNR=0.8
TXAR LR LR 22 31 21.0
comp=Z,8µm,19.2s,baz=318,slow=36
TXAR PKPPKP 22 36 24.2
comp=Z,0.8nm,0.9s,baz=140,slow=4.3,SNR=4.4
TXAR PKP2bc 22 36 36.6
comp=Z,1.8nm,0.9s,baz=148,slow=7.4,SNR=6.4
TXAR P4KPbc 22 43 56.9
comp=Z,0.9nm,0.9s,baz=248,slow=1.5,SNR=7.2
comp=Z,120nm,0.8s
**SOEG Soedalen 58.19 14** *i* P **P** **22 06 45.4 -0.5**
**ARCES ARCESS Array B 58.19 350** P **P** **22 06 45.0 -1.0**
ARCES IAmb IAmb 22 07 39.0
comp=Z,122nm,0.8s
**ARCES ARCESS Array B 58.19 350** P **P** **22 06 45.1 -0.8**
comp=Z,42nm,0.5s,baz=25,slow=7.6,SNR=115
ARCES PcP **PcP** **22 07 38.0 +0.9**
comp=Z,86nm,0.7s,baz=12,slow=6.2,SNR=9.4
ARCES ScP **ScP** **22 11 33.2 -1.6**
comp=Z,9.6nm,0.7s,baz=19,slow=7.7,SNR=6.0
ARCES S **S** **22 14 43.6 -1.4**
comp=Z,1.8nm,0.7s,baz=349,slow=2.6,SNR=2.1
ARCES ScS **ScS** **22 16 31.1 -1.6**
comp=Z,1.6nm,0.8s,baz=6.2,slow=13,SNR=1.5
ARCES LR LR 22 32 54.9
comp=Z,21µm,20.6s,baz=19,slow=37
ARCES PKPPKP **P'P'df** **22 36 30.7 -3.1**
comp=Z,6.5nm,0.9s,baz=222,slow=1.6,SNR=9.3
ARCES P4KPbc 22 43 52.8
comp=Z,2.2nm,1.0s,baz=19,slow=5.7,SNR=8.0
comp=Z,42nm,0.5s
**ARCES ARCESS Array B 58.19 350** P **P** **22 06 45.0 -1.0**
ARCES pmax pmax
comp=Z,122nm,0.8s
**SLBS Sierra La Lagu 58.27 91** P **P** **22 06 47.3 +0.1**
SLBS IAmb IAmb 22 07 07.5
comp=Z,96nm,0.8s
**SLBS Sierra La Lagu 58.27 91** IAMs_20 IAMs_20 22 25 36.6
comp=Z,29µm,22.0s
**SLBS Sierra La Lagu 58.27 91** ⇑P **P** **22 06 47.9 +0.6**
**SLBS Sierra La Lagu 58.27 91** P **P** **22 06 48.5 +1.2**
**I45A Fountain 58.29 58** IAMs_20 IAMs_20 22 30 39.0
comp=Z,36µm,22.0s
**LVZ Lovozero 58.58 346** P **P** **22 06 48.4 -0.3**
LVZ IAmb IAmb 22 06 51.2
comp=Z,119nm,1.0s
**LVZ Lovozero 58.58 346** ⇑P **P** **22 06 47.8 -0.9**
**LVZ Lovozero 58.58 346** *c i*P **P** **22 06 47.5 -1.2**
LVZ pmax pmax
comp=Z,144nm,1.0s
LVZ MLR MLR
comp=Z,58µm,21.0s
**LVZ Lovozero 58.58 346** P **P** **22 06 49.3 +0.6**
**LVZ Lovozero 58.58 346** P **P** **22 06 48.2 -0.5**
LVZ PcP **PcP** **22 07 39.0 +0.3**
**GLMI Grayling 58.60 56** P **P** **22 06 49.9 +0.6**
GLMI IAMs_20 IAMs_20 22 33 54.4
comp=Z,32µm,20.0s
**GLMI Grayling 58.60 56** P **P** **22 06 48.7 -0.5**
baz=313,SNR=7.5
GLMI S **S** **22 14 48.6 -2.5**
baz=313
**HPIG 58.61 85** P **P** **22 06 49.3 -0.5**
HPIG IAmb IAmb 22 07 10.2
comp=Z,132nm,1.0s
**HPIG 58.61 85** ⇑P **P** **22 06 50.1 +0.4**
**S39A Bolivar 58.64 68** IAMs_20 IAMs_20 22 29 20.3
comp=Z,32µm,22.0s
**L44A Lake County Fo 58.64 61** P **P** **22 06 48.6 -0.9**
**L44A Lake County Fo 58.64 61** P **P** **22 06 48.7 -0.8**
baz=313,SNR=20
L44A S **S** **22 14 47.9 -3.7**
baz=313
**TRO Tromso 58.68 353** *e*P **P** **22 06 48.8 -0.6**
TRO IVmBBB 22 06 52.2
comp=Z,3µm,1.4s
TRO *e*PP **PP** **22 09 00.2 +1.5**
TRO *e*S **S** **22 14 51.0 -0.3**
TRO *e*SS **SS** **22 18 47.0 +3.5**
TRO IVMs_BB IVMs_BB 22 41 46.2
comp=Z,7µm,17.8s
**ZSN Zaisan 58.71 308** *e*P **P** **22 06 49.1 -0.9**
comp=Z,61nm,0.9s,baz=308
ZSN *e*S **S** **22 14 53.5 +1.1**
baz=308
**ZSN Zaisan 58.71 308** *e*P **P** **22 06 49.0 -0.9**
ZSN *e*S **S** **22 14 53.5 +1.1**
ZSN pmax pmax
comp=Z,61nm,0.9s
**SZP Santa 58.77 259** ⇑P **P** **22 06 51.7 +1.1**
**R40A Maddies Statio 58.84 66** IAMs_20 IAMs_20 22 30 13.5
comp=Z,30µm,20.0s
**SEM Semipalatinsk 58.87 313** *e*P **P** **22 06 50.1 -1.2**
baz=313
SEM *e*S **S** **22 14 55.6 +0.8**
SEM LR LR 22 34 43.7
comp=Z,16µm,17.0s,baz=313
**SEM Semipalatinsk 58.87 313** *e*P **P** **22 06 50.0 -1.2**
SEM *e*S **S** **22 14 55.5 +0.8**
SEM MLR MLR
comp=Z,16µm,17.0s
**U38A Gravette 58.87 69** IAMs_20 IAMs_20 22 35 23.7
comp=Z,38µm,19.0s
**LOOK Love County 58.90 73** IAMs_20 IAMs_20 22 34 16.6
comp=Z,26µm,20.0s
**KTK1 Kautokeino 58.92 351** *e*P **P** **22 06 51.1 +0.1**
KTK1 IVmB_BB 22 06 51.7
comp=Z,4µm,4.3s
KTK1 *e*S **S** **22 14 53.0 -1.5**
KTK1 IVMs_BB IVMs_BB 22 33 59.9
comp=Z,13µm,19.7s
**HDIL Hopedale 58.98 63** P **P** **22 06 50.9 -1.0**
HDIL IAMs_20 IAMs_20 22 30 24.9
comp=Z,43µm,22.0s
**HDIL Hopedale 58.98 63** ⇑P **P** **22 06 51.0 -0.8**
**HDIL Hopedale 58.98 63** P **P** **22 06 51.1 -0.8**
baz=313,SNR=91
HDIL S **S** **22 14 52.6 -3.5**
baz=313
**FW03 Perrin-Whitt E 59.02 75** IAMs_20 IAMs_20 22 29 48.1
comp=Z,42µm,22.0s
**APA Apatity 59.06 347** ⇓*i*P **P** **22 06 47.4 -4.6**
APA *i* 22 07 41.0
APA *i* 22 09 08.0
APA *i* PPP PPP 22 10 36.0
APA *i* S **S** **22 14 48.0 -8.4**
APA *i* 22 16 35.0
APA *i* SS **SS** **22 18 49.0 -0.6**
APA pmax pmax
comp=Z,17nm,1.1s
**HKC Hong Kong Obse 59.13 268** ⇑P **P** **22 06 55.0 +1.9**
**HKPS Hong Kong Po S 59.17 268** P **P** **22 06 55.9 +2.5**
**HHAR Hobbs 59.24 69** P **P** **22 06 52.4 -1.4**
**ISOG Isortoq, Green 59.25 19** ⇑P **P** **22 06 52.6 -0.7**
**ISOG Isortoq, Green 59.25 19** *i* P **P** **22 06 52.6 -0.7**
ISOG IAmb IAmb 22 06 56.5
comp=Z,38nm,0.6s
**GULI GuiLin 59.34 273** P **P** **22 06 58.1 +3.5**
GULI S **S** **22 15 00.9 -0.2**
GULI pmax pmax
comp=Z,230nm,1.4s
GULI LR LR
comp=Z,18µm,22.4s
GULI LR LR
comp=Z,11µm,19.5s
GULI LR LR
comp=Z,28µm,22.8s
**KURK Kurchatov 59.39 314** P **P** **22 06 53.0 -1.5**
KURK IAmb IAmb 22 07 52.1
comp=Z,94nm,0.9s
**KURK Kurchatov 59.39 314** ⇑P **P** **22 06 53.0 -1.5**
**KURK Kurchatov 59.39 314** P **P** **22 06 53.5 -1.1**
**KURK Kurchatov 59.39 314** *c i*P **P** **22 06 53.1 -1.4**
KURK pmax pmax
comp=Z,129nm,1.9s
**ANGG Ammassalik, Gr 59.45 18** P **P** **22 06 53.2 -1.5**
ANGG IAmb IAmb 22 07 43.7
comp=Z,87nm,0.9s
ANGG IAMs_20 IAMs_20 22 37 30.5
comp=Z,26µm,19.0s
**ANGG Ammassalik, Gr 59.45 18** ⇑P **P** **22 06 54.0 -0.7**
**CD2 Chengdu 59.46 282** P **P** **22 06 55.4 0.0**
CD2 PP **PP** **22 09 07.3 +0.7**
CD2 PcS **PcS** **22 11 42.1 -3.0**
CD2 S **S** **22 15 01.3 -1.4**
CD2 pmax pmax
comp=Z,320nm,1.6s
CD2 pmax pmax
comp=Z,11µm,5.5s
CD2 LR LR
comp=Z,30µm,17.1s
CD2 LR LR
comp=Z,22µm,17.8s
CD2 LR LR
comp=Z,42µm,18.4s
**P43A Skaggs, Pawnee 59.48 64** P **P** **22 06 54.4 -1.0**
P43A IAMs_20 IAMs_20 22 30 26.8
comp=Z,46µm,22.0s
**KURBB Kurchatov Arra 59.50 314** P **P** **22 06 54.0 -1.3**
comp=Z,22nm,0.5s,baz=42,slow=6.6,SNR=109
KURBB PcP **PcP** **22 07 43.6 +1.0**
comp=Z,30nm,0.6s,baz=40,slow=3.4,SNR=13
KURBB ScP **ScP** **22 11 38.1 -2.7**
comp=Z,8.0nm,1.0s,baz=50,slow=4.0,SNR=3.6
KURBB S **S** **22 15 02.6 +0.2**
comp=Z,0.8nm,0.6s,baz=256,slow=0.7,SNR=2.8
KURBB LR LR 22 33 53.4
comp=Z,62µm,19.0s,baz=48,slow=37
KURBB PKPPKP 22 36 24.7
comp=Z,0.9nm,0.2s,baz=252,slow=3.1,SNR=5.0
KURBB P4KPbc 22 43 59.6
comp=Z,2.0nm,0.9s,baz=46,slow=3.3,SNR=10
comp=Z,22nm,0.5s
**X37A Clayton 59.56 72** IAMs_20 IAMs_20 22 37 21.2
comp=Z,26µm,20.0s
**J47A Sunmer 59.58 58** IAMs_20 IAMs_20 22 31 17.3
comp=Z,32µm,21.0s
**CCM Cathedral Cave 59.59 66** P **P** **22 06 54.9 -1.2**
CCM IAmb IAmb 22 06 57.9
comp=Z,148nm,0.7s
CCM IAMs_20 IAMs_20 22 30 48.3
comp=Z,26µm,20.0s
**CCM Cathedral Cave 59.59 66** P **P** **22 06 54.9 -1.2**
baz=313
CCM S **S** **22 14 59.8 -4.2**
baz=313
**CCM Cathedral Cave 59.59 66** P **P** **22 06 54.9 -1.2**
CCM pmax pmax
comp=Z,148nm,0.7s
CCM MLR MLR
comp=Z,26µm,20.0s
**CCM Cathedral Cave 59.59 66** P **P** **22 06 54.6 -1.6**
CCM pP **pwP** **22 07 06.7 -0.5**
**MGMO Mountain Grove 59.62 67** P **P** **22 06 54.6 -1.8**
MGMO IAMs_20 IAMs_20 22 33 25.2
comp=Z,29µm,20.0s
**L46A Eue Claire 59.63 60** IAMs_20 IAMs_20 22 31 20.8
comp=Z,46µm,22.0s
**SCHQ Schefferville 59.71 39** P **P** **22 06 55.7 -1.0**
**SCHQ Schefferville 59.71 39** P **P** **22 06 55.0 -1.7**
comp=Z,47nm,0.9s,baz=330,slow=7.7,SNR=21
SCHQ LR LR 22 34 41.2
comp=Z,77µm,18.7s,baz=322,slow=38
SCHQ PKPPKP P'P'df 22 36 22.8 -7.9
comp=Z,5.0nm,0.9s,baz=54,slow=10,SNR=2.5
comp=Z,47nm,0.9s
**JCT Junction City 59.74 78** P **P** **22 06 56.1 -1.3**
JCT IAmb IAmb 22 07 03.0
comp=Z,166nm,0.9s
**JCT Junction City 59.74 78** ⇑P **P** **22 06 56.1 -1.3**
**JCT Junction City 59.74 78** P **P** **22 06 56.8 -0.6**
baz=315,SNR=56
JCT S **S** **22 15 04.6 -1.7**
baz=315
**JCT Junction City 59.74 78** P **P** **22 06 56.1 -1.3**
JCT pmax pmax
comp=Z,166nm,0.9s
JCT MLR MLR
comp=Z,54µm,21.0s
**SLM Saint Louis 59.77 65** P **P** **22 06 55.9 -1.4**
SLM IAMs_20 IAMs_20 22 33 07.9
comp=Z,34µm,20.0s
**SLM Saint Louis 59.77 65** P **P** **22 06 55.9 -1.4**
SLM pmax pmax
comp=Z,350nm,1.0s
SLM MLR MLR
comp=Z,34µm,20.0s
**WMQ Urumqi 59.77 303** ⇑P **P** **22 06 57.4 0.0**
WMQ PcP **PcP** **22 07 46.1 +2.2**
WMQ PP **PP** **22 09 11.8 +2.8**
WMQ PcS **PcS** **22 11 46.8 +0.7**
WMQ S **S** **22 15 03.3 -3.0**
WMQ ScS **ScS** **22 16 44.0 -1.2**
WMQ SS **SS** **22 19 06.8 +5.0**
WMQ pmax pmax
comp=Z,120nm,0.9s
WMQ pmax pmax
comp=Z,7µm,7.3s
WMQ LR LR
comp=Z,43µm,18.1s
WMQ LR LR
comp=Z,59µm,24.1s
WMQ LR LR
comp=Z,77µm,20.1s
**VLDQ Val d'Or 59.91 50** IAMs_20 IAMs_20 22 33 01.1
comp=Z,45µm,21.0s
**KAVG Kavieng 59.94 217** P **P** **22 07 01.0 +2.3**
**FVM French Village 60.11 66** IAMs_20 IAMs_20 22 30 33.0
comp=Z,31µm,22.0s
**Q44A Meyer Farm, Va 60.27 64** IAMs_20 IAMs_20 22 31 03.1
comp=Z,41µm,22.0s
**T42A Van Buren 60.38 67** IAMs_20 IAMs_20 22 30 15.4
comp=Z,33µm,22.0s
**MK31 Makanchi Array 60.43 309** P **P** **22 07 00.8 -1.0**
**MK31 Makanchi Array 60.43 309** *c i*P **P** **22 07 01.2 -0.6**
**MKAR Makanchi Array 60.43 309** P **P** **22 07 00.4 -1.4**
**MKAR Makanchi Array 60.43 309** P **P** **22 07 00.8 -1.1**
comp=Z,28nm,0.6s,baz=45,slow=6.6,SNR=290
MKAR PcP **PcP** **22 07 47.3 +0.9**
comp=Z,29nm,0.7s,baz=50,slow=5.2,SNR=4.2
MKAR S **S** **22 15 13.4 -1.2**
comp=Z,1.4nm,0.8s,baz=42,slow=3.9,SNR=1.6
MKAR ScS **ScS** **22 16 50.6 +0.5**
comp=Z,0.3nm,0.6s,baz=270,slow=0.2,SNR=0.6
MKAR LR LR 22 33 37.6
comp=Z,75µm,21.8s,baz=46,slow=36
MKAR PKPPKP **P'P'df** **22 36 21.1 -7.7**
comp=Z,1.1nm,0.8s,baz=225,slow=0.9,SNR=4.0
comp=Z,28nm,0.6s
**LOF Lofoten 60.52 355** *e*P **P** **22 07 01.5 -0.5**
LOF IVmBBB 22 07 04.9
comp=Z,3µm,4.5s
LOF *e*PP **PP** **22 09 17.8 +2.9**
LOF *e*S **S** **22 15 19.4 +4.4**
LOF *e*SS **SS** **22 19 15.2 +3.0**
**MAKZ Makanchi 60.58 309** P **P** **22 07 02.2 -0.6**
**MAKZ Makanchi 60.58 309** ⇑P **P** **22 07 00.2 -2.6**
**MAKZ Makanchi 60.58 309** P **P** **22 07 02.2 -0.6**
MAKZ pmax pmax
comp=Z,47nm,0.8s
MAKZ MLR MLR
comp=Z,57µm,21.0s
**FCAR Ozark Folk Cen 60.58 68** IAMs_20 IAMs_20 22 36 16.7
comp=Z,26µm,18.0s
**STEI Steigen 60.62 354** *e*P **P** **22 07 01.8 -0.8**
STEI IVmB_BB 22 07 03.7
comp=Z,3µm,4.2s
STEI *e*PP **PP** **22 09 17.9 +2.1**
STEI *e*S **S** **22 15 15.1 -1.2**
STEI *e*SS **SS** **22 19 20.1 +6.3**
STEI IVMs_BB IVMs_BB 22 32 08.7
comp=Z,7µm,21.8s
**MIAR Mount Ida 60.66 70** P **P** **22 07 02.6 -0.9**
MIAR IAMs_20 IAMs_20 22 36 45.1
comp=Z,32µm,18.0s
**MIAR Mount Ida 60.66 70** ⇑P **P** **22 07 03.0 -0.5**
**MIAR Mount Ida 60.66 70** P **P** **22 07 03.2 -0.3**
baz=314,SNR=280
MIAR S **S** **22 15 17.0 -0.8**
baz=314
**MIAR Mount Ida 60.66 70** P **P** **22 07 02.6 -0.9**
MIAR pmax pmax
comp=Z,306nm,0.8s
MIAR MLR MLR
comp=Z,32µm,18.0s
**Z38A Mt. Pleasant 60.72 72** IAMs_20 IAMs_20 22 38 02.8
comp=Z,28µm,20.0s
**MANU Manus Island 60.79 221** P **P** **22 07 04.1 -0.5**
MANU IAmb IAmb 22 07 07.3
comp=Z,157nm,1.1s
**GYA Guiyang 60.82 277** ⇓P **P** **22 07 05.1 +0.3**
GYA PP **PP** **22 09 19.1 +0.3**
GYA S **S** **22 15 18.1 -2.2**
GYA pmax pmax
comp=Z,220nm,1.6s
GYA LR LR
comp=Z,8µm,20.4s
GYA LR LR
comp=Z,14µm,19.2s
GYA LR LR
comp=Z,22µm,23.7s
**IVI Ivigtut 60.84 25** P **P** **22 07 03.5 -0.8**
IVI IAmb IAmb 22 07 06.6
comp=Z,143nm,1.3s
**IVI Ivigtut 60.84 25** ⇑P **P** **22 07 03.6 -0.7**
**IVI Ivigtut 60.84 25** *i* P **P** **22 07 03.1 -1.2**
IVI IAmb IAmb 22 07 06.6
comp=Z,40nm,0.6s
**IVI Ivigtut 60.84 25** P **P** **22 07 03.4 -0.8**
**AAM Ann Arbor 60.85 58** P **P** **22 07 04.3 -0.3**
AAM IAMs_20 IAMs_20 22 33 13.8
comp=Z,37µm,20.0s
**AAM Ann Arbor 60.85 58** ⇑P **P** **22 07 04.1 -0.5**
**AAM Ann Arbor 60.85 58** P **P** **22 07 04.8 +0.1**
baz=314,SNR=16
AAM S **S** **22 15 16.7 -3.3**
baz=314
**AAM Ann Arbor 60.85 58** P **P** **22 07 04.3 -0.3**
AAM pmax pmax
comp=Z,184nm,0.7s
AAM MLR MLR
comp=Z,37µm,20.0s
**435B Jarrell 60.89 76** IAMs_20 IAMs_20 22 34 06.7
comp=Z,24µm,19.0s
**435B Jarrell 60.89 76** P **P** **22 07 05.3 +0.2**
baz=315
435B S **S** **22 15 21.7 +0.9**
baz=315
**WHAR Wooly Hollow 60.90 69** IAMs_20 IAMs_20 22 36 31.2
comp=Z,34µm,19.0s
**OLIL Olney 60.90 64** IAMs_20 IAMs_20 22 31 22.9
comp=Z,38µm,22.0s
**RABL Rabaul 60.93 215** P **P** **22 07 05.4 0.0**
RABL IAmb IAmb 22 07 27.6
comp=Z,214nm,1.4s
**PBMO Poplar Bluff 60.94 67** IAMs_20 IAMs_20 22 31 06.1
comp=Z,29µm,22.0s
**S44A Carbondale 60.98 65** IAMs_20 IAMs_20 22 31 12.9
comp=Z,35µm,22.0s
**SIUC Southern Illin 60.98 65** IAMs_20 IAMs_20 22 31 12.1
comp=Z,36µm,22.0s
**LCAR Lake Charles 61.02 68** IAMs_20 IAMs_20 22 37 10.2
comp=Z,25µm,18.0s
**CGM3 Cape Girardeau 61.02 66** IAMs_20 IAMs_20 22 33 36.2
comp=Z,24µm,20.0s
**GOMU GeErMu 61.12 293** P **P** **22 07 06.6 -0.5**
GOMU pP pP 22 07 17.0 +0.9
GOMU PP **PP** **22 09 21.3 -0.2**
GOMU S **S** **22 15 19.5 -4.9**
GOMU pmax pmax
comp=Z,700nm,0.8s
GOMU LR LR
comp=Z,101µm,17.0s
GOMU LR LR
comp=Z,52µm,18.6s
GOMU LR LR
comp=Z,139µm,19.3s
**X40A Basin Creek Fa 61.14 70** IAMs_20 IAMs_20 22 37 04.7
comp=Z,29µm,18.0s
**FAUS Fauske 61.16 354** *e*P **P** **22 07 06.1 -0.2**
FAUS IVmBBB 22 07 09.2
comp=Z,4µm,3.5s
FAUS *e*PP **PP** **22 09 22.7 +2.2**
FAUS *e*S **S** **22 15 20.4 -2.7**
FAUS *e*SS **SS** **22 19 27.2 +4.9**
FAUS IVMs_BB IVMs_BB 22 32 35.0
comp=Z,10µm,20.6s
**BVAR Borovoye Array 61.22 320** P **P** **22 07 07.2 +0.1**
comp=Z,48nm,0.3s,baz=53,slow=7.3,SNR=247
BVAR PcP **PcP** **22 07 50.2 +0.8**
comp=Z,60nm,0.5s,baz=54,slow=3.8,SNR=8.8
BVAR ScP **ScP** **22 11 46.9 -1.6**
comp=Z,20nm,0.9s,baz=66,slow=5.0,SNR=3.9
BVAR S **S** **22 15 22.3 -2.2**
comp=Z,1.7nm,0.7s,baz=105,slow=5.2,SNR=1.4
BVAR ScS **SKKSac** **22 16 53.4 -2.2**
comp=Z,0.6nm,0.5s,baz=248,slow=35,SNR=2.3
BVAR LR LR 22 36 04.2

comp=Z,87µm,19.0s,baz=44,slow=38
BVAR PKPPKP 22 36 17.4
comp=Z,2.4nm,0.9s,baz=197,slow=4.6,SNR=5.8
BVAR P4KPbc 22 44 07.0
comp=Z,3.1nm,0.9s,baz=46,slow=4.2,SNR=13
comp=Z,48nm,0.3s
**MSF Maaselka 61.23 348** P **P** **22 07 06.1 -0.8**
**BRVK Borovoye 61.24 320** P **P** **22 07 06.1 -1.0**
**BRVK Borovoye 61.24 320** ⇑P **P** **22 07 06.2 -0.9**
**BRVK Borovoye 61.24 320** P **P** **22 07 07.6 +0.5**
BRVK S **S** **22 15 22.1 -2.5**
**BRVK Borovoye 61.24 320** *c iP* **P** **22 07 06.4 -0.8**
BRVK pmax pmax
comp=Z,139nm,1.4s
BRVK MLR MLR
comp=Z,78µm,18.0s
**BRVK Borovoye 61.24 320** P **P** **22 07 07.2 +0.1**
BRVK PcP **PcP** **22 07 50.4 +0.8**
BRVK ScP **ScP** **22 11 49.3 +0.8**
**SADO Sadowa 61.45 53** P **P** **22 07 07.8 -0.9**
SADO IAmb IAmb 22 07 39.6
comp=Z,151nm,1.1s
SADO IAMs_20 IAMs_20 22 33 55.2
comp=Z,30µm,21.0s
**SADO Sadowa 61.45 53** ⇑P **P** **22 07 07.4 -1.3**
**SADO Sadowa 61.45 53** LR LR 22 34 17.4
comp=Z,30µm,20.9s,baz=332,slow=36
SADO PKPPKP 22 36 21.9
comp=Z,1.6nm,0.3s,baz=197,slow=1.4,SNR=1.8
**833A Chaparral WMA, 61.52 79** IAMs_20 IAMs_20 22 33 40.8
comp=Z,25µm,19.0s
**833A Chaparral WMA, 61.52 79** P **P** **22 07 09.8 +0.4**
baz=316,SNR=28
833A S **S** **22 15 28.2 -0.7**
baz=316
**N49A Columbus Grove 61.53 59** IAMs_20 IAMs_20 22 32 30.1
comp=Z,38µm,22.0s
**WLAR White Oak Lake 61.53 71** IAMs_20 IAMs_20 22 37 25.3
comp=Z,32µm,18.0s
**ADZR Andozero 61.60 343** *i*P **P** **22 07 09.5 +0.1**
ADZR *i* S **S** **22 15 28.1 -0.8**
ADZR pmax pmax
comp=Z,126nm,0.9s
**PVMO Portageville 61.61 66** IAMs_20 IAMs_20 22 31 04.0
comp=Z,31µm,22.0s
**HBAR Harrisburg 61.66 68** P **P** **22 07 10.2 -0.1**
HBAR IAMs_20 IAMs_20 22 38 37.4
comp=Z,26µm,18.0s
**USIN University of 61.68 64** IAMs_20 IAMs_20 22 34 57.6
comp=Z,36µm,21.0s
**T45A Paducah 61.79 65** IAMs_20 IAMs_20 22 34 19.6
comp=Z,27µm,20.0s
**M50A Fremont 61.80 58** P **P** **22 07 11.3 +0.2**
M50A IAMs_20 IAMs_20 22 32 48.2
comp=Z,37µm,22.0s
**SVE Sverdlovsk 61.87 328** *d iP* **P** **22 07 11.5 +0.1**
SVE *e*S **S** **22 15 33.5 +0.9**
SVE pmax pmax
comp=Z,298nm,2.2s
SVE MLR MLR
comp=N,47µm,21.0s
SVE MLR MLR
comp=E,74µm,20.0s
SVE MLR MLR
comp=Z,106µm,20.0s
**GLAT Glass 61.95 66** IAMs_20 IAMs_20 22 31 59.9
comp=Z,30µm,21.0s
**NATX Nacogdoches 61.97 73** ⇑P **P** **22 07 12.4 +0.1**
**NATX Nacogdoches 61.97 73** P **P** **22 07 12.3 -0.1**
baz=315,SNR=20
NATX S **S** **22 15 34.6 +0.1**
baz=315
**UTMT University of 62.14 66** IAMs_20 IAMs_20 22 36 56.8
comp=Z,24µm,20.0s
**KONS Konsvik 62.16 355** *e*P **P** **22 07 13.7 +0.6**
**HALT Halls 62.17 67** IAMs_20 IAMs_20 22 32 04.8
comp=Z,25µm,21.0s
**P49A Miami Univ. Ec 62.22 61** P **P** **22 07 13.0 -0.9**
baz=315,SNR=225
P49A S **S** **22 15 33.5 -4.0**
baz=315
**WCI Wyandotte Cave 62.27 63** P **P** **22 07 13.8 -0.5**
**WCI Wyandotte Cave 62.27 63** IAMs_20 IAMs_20 22 38 33.9
comp=Z,36µm,18.0s
**WCI Wyandotte Cave 62.27 63** ⇑P **P** **22 07 13.8 -0.5**
**WCI Wyandotte Cave 62.27 63** P **P** **22 07 14.1 -0.2**
baz=315
WCI S **S** **22 15 36.2 -1.9**
baz=315
**WCI Wyandotte Cave 62.27 63** P **P** **22 07 13.8 -0.5**
WCI pmax pmax
comp=Z,575nm,0.9s
WCI MLR MLR
comp=Z,36µm,18.0s
**WCI Wyandotte Cave 62.27 63** P **P** **22 07 13.8 -0.5**
WCI pP **pwP** **22 07 25.2 -0.2**
**STOK Stokkvaagen 62.33 355** *e*P **P** **22 07 14.0 -0.2**
STOK IVmB_BB 22 07 15.1
comp=Z,3µm,5.2s
STOK *e*PP **PP** **22 09 33.5 +2.6**
STOK *e*S **S** **22 15 38.3 +0.2**
STOK IVMs_BB IVMs_BB 22 32 37.3
comp=Z,12µm,20.8s
**DELO Deloro Mine 62.39 53** P **P** **22 07 14.6 -0.4**
DELO IAmb IAmb 22 07 44.1
comp=Z,120nm,1.1s
DELO IAMs_20 IAMs_20 22 34 32.1
comp=Z,30µm,20.0s
**MET Memphis--Engin 62.39 68** IAMs_20 IAMs_20 22 39 06.5
comp=Z,27µm,18.0s
**MOR8 Moi Rana 62.41 354** *e*P **P** **22 07 13.3 -1.5**
MOR8 IVmB_BB 22 07 14.4
comp=Z,3µm,4.7s
MOR8 *e*S **S** **22 15 36.9 -2.3**
MOR8 IVMs_BB IVMs_BB 22 33 04.4
comp=Z,11µm,22.1s
**OUL Oulu 62.42 349** P **P** **22 07 15.0 +0.1**
**HKT Hockley 62.54 76** P **P** **22 07 16.3 +0.1**
HKT IAmb IAmb 22 07 26.5
comp=Z,171nm,1.1s
**HKT Hockley 62.54 76** IAMs_20 IAMs_20 22 31 42.1
comp=Z,40µm,22.0s
**HKT Hockley 62.54 76** ⇑P **P** **22 07 15.9 -0.2**
**HKT Hockley 62.54 76** *c iP* **P** **22 07 16.1 -0.1**
HKT pmax pmax
comp=Z,201nm,1.2s
**TRQ Mont Tremblant 62.65 49** P **P** **22 07 15.7 -1.1**
TRQ IAMs_20 IAMs_20 22 35 00.8
comp=Z,41µm,20.0s
**ACSO Alum Creek Sta 62.66 59** P **P** **22 07 16.1 -0.8**
ACSO IAMs_20 IAMs_20 22 33 15.1
comp=Z,44µm,22.0s
**ACSO Alum Creek Sta 62.66 59** ⇑P **P** **22 07 15.5 -1.4**
**ACSO Alum Creek Sta 62.66 59** P **P** **22 07 16.3 -0.6**
baz=315,SNR=78
ACSO S **S** **22 15 40.4 -2.7**
baz=315
**BORG Borgarnes 62.82 11** P **P** **22 07 18.4 +0.8**
**BORG Borgarnes 62.82 11** ⇓P **P** **22 07 19.5 +2.0**
**BORG Borgarnes 62.82 11** LR LR 22 37 08.6
comp=Z,22µm,18.8s,baz=335,slow=38
**BORG Borgarnes 62.82 11** P **P** **22 07 18.4 +0.8**
BORG pmax pmax
comp=Z,106nm,1.2s
**BORG Borgarnes 62.82 11** P **P** **22 07 18.7 +1.1**
BORG sP **sP** **22 07 35.7 +5.5**
**ARU Arti 62.88 329** P **P** **22 07 17.4 -0.7**
ARU IAmb IAmb 22 07 22.0
comp=Z,121nm,0.7s
**ARU Arti 62.88 329** ⇑P **P** **22 07 17.5 -0.5**
**ARU Arti 62.88 329** LR LR 22 38 21.7
comp=Z,35µm,18.3s,baz=35,slow=40
**ARU Arti 62.88 329** *c iP* **P** **22 07 18.0 -0.1**
ARU 22 07 55.2
ARU 22 09 31.2
ARU S **S** **22 15 46.3 +1.1**
ARU 22 17 03.2
ARU SS **SS** **22 19 53.1 +3.5**
ARU pmax pmax
comp=Z,115nm,0.6s
ARU pmax pmax
comp=Z,5µm,12.4s
ARU MLR MLR
comp=Z,35µm,18.0s
**ARU Arti 62.88 329** P **P** **22 07 17.7 -0.4**
**ARU Arti 62.88 329** P **P** **22 07 17.6 -0.5**

**WVT Waverly 62.88 65** P **P** **22 07 18.5 0.0**
**WVT Waverly 62.88 65** IAMs_20 IAMs_20 22 34 53.5
comp=Z,32µm,21.0s
**WVT Waverly 62.88 65** ⇑P **P** **22 07 17.9 -0.5**
**WVT Waverly 62.88 65** P **P** **22 07 18.3 -0.1**
baz=315
WVT S **S** **22 15 44.1 -1.8**
baz=315
**WVT Waverly 62.88 65** P **P** **22 07 18.5 0.0**
WVT pmax pmax
comp=Z,224nm,0.9s
WVT MLR MLR
comp=Z,32µm,21.0s
**WVT Waverly 62.88 65** P **P** **22 07 18.0 -0.5**
WVT PcP **PcP** **22 07 57.1 +0.6**
**ERPA Erie 62.90 56** ⇑P **P** **22 07 18.2 -0.3**
**ERPA Erie 62.90 56** P **P** **22 07 18.3 -0.2**
baz=316,SNR=16
ERPA S **S** **22 15 43.3 -2.7**
baz=316
**LDAQ Lac Daran 62.91 46** P **P** **22 07 17.5 -1.0**
**KVTX Kingsville 63.00 79** P **P** **22 07 19.4 0.0**
KVTX IAmb IAmb 22 07 23.9
comp=Z,197nm,0.9s
KVTX IAMs_20 IAMs_20 22 36 23.9
comp=Z,25µm,19.0s
**M53A WI Miller and 63.03 57** P **P** **22 07 19.5 +0.1**
baz=316,SNR=91
M53A S **S** **22 15 45.0 -2.6**
baz=316
**PECO Prince Edward 63.12 53** IAMs_20 IAMs_20 22 35 26.4
comp=Z,26µm,21.0s
**OXF Oxford 63.12 68** ⇑P **P** **22 07 19.5 -0.6**
**OXF Oxford 63.12 68** P **P** **22 07 19.6 -0.4**
baz=315,SNR=65
OXF S **S** **22 15 46.9 -2.0**
baz=315
**OXF Oxford 63.12 68** P **P** **22 07 19.5 -0.6**
**P51A Williamsport 63.16 60** IAMs_20 IAMs_20 22 33 41.1
comp=Z,42µm,22.0s
**J55A Hilton 63.19 54** IAMs_20 IAMs_20 22 35 00.4
comp=Z,35µm,20.0s
**WBO Williamsburg 63.19 51** P **P** **22 07 19.1 -1.2**
**143A Socs Landing, 63.24 70** IAMs_20 IAMs_20 22 38 13.4
comp=Z,32µm,19.0s
**HNR Honiara 63.48 204** LR LR 22 29 22.0
comp=Z,206µm,21.9s,baz=18,slow=31
**ICQ Pointe Anglais 63.49 43** P **P** **22 07 22.1 -0.2**
**Y45A Yeager Farm, C 63.51 68** IAMs_20 IAMs_20 22 39 55.2
comp=Z,29µm,18.0s
**P52A Corning 63.55 59** IAMs_20 IAMs_20 22 33 53.4
comp=Z,45µm,22.0s
**P52A Corning 63.55 59** P **P** **22 07 22.3 -0.5**
baz=316,SNR=80
P52A S **S** **22 15 50.8 -3.3**
baz=316
**ZAIG Zacatecas 63.56 86** P **P** **22 07 22.7 -0.8**
ZAIG IAmb IAmb 22 07 43.6
comp=Z,121nm,1.0s
**ZAIG Zacatecas 63.56 86** ⇑P **P** **22 07 23.9 +0.5**
**PLAL Pickwick Lake 63.56 66** IAMs_20 IAMs_20 22 32 36.4
comp=Z,28µm,22.0s
**O53A New Philadelph 63.60 58** IAMs_20 IAMs_20 22 37 16.7
comp=Z,37µm,20.0s
**O53A New Philadelph 63.60 58** P **P** **22 07 22.8 -0.4**
baz=316,SNR=86
O53A S **S** **22 15 51.7 -3.1**
baz=316
**TDK Taldyqorghan 63.61 310** *e*P **P** **22 07 22.1 -1.0**
baz=310
TDK LR LR 22 37 31.2
comp=Z,40µm,17.4s,baz=310
**TDK Taldyqorghan 63.61 310** *e*P **P** **22 07 22.1 -1.0**
TDK MLR MLR
comp=Z,40µm,17.0s
**J56A Wolcott 63.66 53** IAMs_20 IAMs_20 22 35 23.9
comp=Z,28µm,21.0s
**V48A Smith Brothers 63.74 65** IAMs_20 IAMs_20 22 35 30.0
comp=Z,34µm,21.0s
**JOF Joensuu 63.74 346** *e*P **P** **22 07 23.5 -0.2**
**CLTN Cedars of Leba 63.76 65** IAMs_20 IAMs_20 22 33 10.7
comp=Z,40µm,21.0s
**KIRV Kirov 63.80 335** LR LR 22 37 29.8
comp=Z,98µm,21.5s,baz=25,slow=38
**KIRV Kirov 63.80 335** *c iP* **P** **22 07 23.8 -0.3**
**LONY Lake Ozonia 63.80 51** ⇑P **P** **22 07 22.9 -1.6**
**LONY Lake Ozonia 63.80 51** P **P** **22 07 23.1 -1.4**
baz=317,SNR=22
LONY S **S** **22 15 52.5 -4.7**
baz=317
**PZH PanZhiHua 63.84 280** P **P** **22 07 24.5 -0.6**
PZH PP **PP** **22 09 50.3 +4.9**
PZH PcS 22 12 01.3
PZH S **S** **22 15 59.0 +0.7**
PZH ScS **SKKSac** **22 17 16.4 -0.1**
PZH pmax pmax
comp=Z,380nm,0.8s
PZH pmax pmax
comp=Z,10µm,5.9s
PZH LR LR
comp=Z,12µm,17.2s
PZH LR LR
comp=Z,16µm,17.7s
PZH LR LR
comp=Z,13µm,18.9s
**DAV Davao City (W) 63.93 247** P **P** **22 07 25.4 -0.2**
**DAV Davao City (W) 63.93 247** IAMs_20 IAMs_20 22 30 42.7
comp=Z,26µm,21.0s
**DAV Davao City (W) 63.93 247** S **S** **22 16 00.8 +1.4**
comp=Z,81nm,0.3s,baz=81,slow=13,SNR=1.6
DAV LR LR 22 31 05.3
comp=Z,24µm,21.4s,baz=42,slow=32
**DAV Davao City (W) 63.93 247** P **P** **22 07 25.2 -0.4**
**DAV Davao City (W) 63.93 247** P **P** **22 07 26.0 +0.4**
**DAV Davao City (W) 63.93 247** S **S** **22 16 02.0 +2.6**
**Q52A Bidwell 63.96 60** IAMs_20 IAMs_20 22 34 16.3
comp=Z,37µm,22.0s
**J57A Williamstown 64.00 52** IAMs_20 IAMs_20 22 38 21.6
comp=Z,30µm,18.0s
**VBMS Vicksburg 64.11 70** IAMs_20 IAMs_20 22 38 47.4
comp=Z,32µm,19.0s
**VBMS Vicksburg 64.11 70** P **P** **22 07 26.7 +0.1**
baz=316,SNR=9.9
VBMS S **S** **22 16 01.0 -0.2**
baz=316
**L56A Greenwood 64.14 54** IAMs_20 IAMs_20 22 35 19.6
comp=Z,37µm,22.0s
**NSS Namsos 64.18 355** *e*P **P** **22 07 25.6 -1.0**
NSS IVmB_BB 22 07 27.5
comp=Z,3µm,4.4s
NSS *e*PP **PP** **22 09 48.5 +1.3**
NSS *e*S **S** **22 15 59.1 -2.1**
NSS *e*SS **SS** **22 20 17.7 +8.1**
NSS IVMs_BB IVMs_BB 22 33 08.6
comp=Z,12µm,21.3s
**KMI Kunming 64.22 278** ⇑P **P** **22 07 27.8 +0.1**
KMI pP pP 22 07 37.3 +0.4
KMI PP **PP** **22 09 48.3 -0.6**
KMI S **S** **22 16 00.1 -3.2**
KMI SS **SS** **22 20 15.8 +3.3**
KMI pmax pmax
comp=Z,200nm,0.8s
KMI pmax pmax
comp=Z,8µm,4.7s
KMI LR LR
comp=Z,20µm,23.5s
KMI LR LR
comp=Z,13µm,23.1s
KMI LR LR
comp=Z,28µm,33.0s
**K57A Scipio Center 64.23 53** IAMs_20 IAMs_20 22 35 51.0
comp=Z,32µm,20.0s
**QIZ Qiongzhong 64.26 269** P **P** **22 07 28.6 +0.9**
QIZ PP **PP** **22 09 50.3 +1.2**
QIZ S **S** **22 16 02.8 -0.6**
QIZ ScS **SKSac** **22 17 19.4 -0.2**
QIZ SS **SS** **22 20 12.6 -0.3**
QIZ pmax pmax
comp=Z,160nm,2.6s
QIZ pmax pmax
comp=Z,8µm,5.9s
QIZ LR LR
comp=Z,16µm,15.1s
QIZ LR LR
comp=Z,9µm,21.9s
QIZ LR LR
comp=Z,16µm,20.2s
**QIZ Qiongzhong 64.26 269** P **P** **22 07 28.2 +0.4**
**GENI Genyem 64.42 228** P **P** **22 07 30.7 +1.9**
**SHLS Shalkode 64.44 308** *e*P **P** **22 07 26.1 -2.8**
comp=Z,38nm,0.7s,baz=307
**SHLS Shalkode 64.44 308** *e*P **P** **22 07 26.0 -2.8**
SHLS pmax pmax
comp=Z,38nm,0.7s
**ARXS Arharly 64.47 309** *e*P **P** **22 07 27.6 -1.3**
**X48A Hartselle 64.53 66** IAMs_20 IAMs_20 22 38 21.1
comp=Z,26µm,21.0s
**KPKS Kokpek 64.60 308** *e*P **P** **22 07 28.5 -1.4**
baz=308
KPKS *e*S **S** **22 16 08.0 +0.8**
baz=308
**KPKS Kokpek 64.60 308** *e*P **P** **22 07 28.4 -1.4**
KPKS *e*S **S** **22 16 08.0 +0.8**
**SWET Sewanee 64.62 65** P **P** **22 07 29.5 -0.4**
SWET IAMs_20 IAMs_20 22 36 06.3
comp=Z,39µm,20.0s
**146A Union 64.67 69** IAMs_20 IAMs_20 22 40 29.0
comp=Z,32µm,19.0s
**UZB Uzynbulak 64.67 308** *e*P **P** **22 07 28.8 -1.6**
baz=308
**UZB Uzynbulak 64.67 308** *e*P **P** **22 07 28.7 -1.6**
**MCWV Mont Chateau 64.75 58** P **P** **22 07 31.1 +0.4**
MCWV IAmb IAmb 22 08 09.1
comp=Z,214nm,0.9s
**MCWV Mont Chateau 64.75 58** ⇑P **P** **22 07 30.4 -0.3**
**MCWV Mont Chateau 64.75 58** P **P** **22 07 30.6 -0.1**
baz=317,SNR=22
MCWV S **S** **22 16 07.0 -2.1**
baz=317
**VAF Ylistaro 64.78 350** *e*P **P** **22 07 30.9 +0.5**
**VAF Ylistaro 64.78 350** P **P** **22 07 30.7 +0.2**
**Z47A Carrollton 64.84 68** IAMs_20 IAMs_20 22 36 45.5
comp=Z,25µm,20.0s
**BINY Binghamton 64.89 53** IAMs_20 IAMs_20 22 36 02.4
comp=Z,30µm,21.0s
**BINY Binghamton 64.89 53** ⇑P **P** **22 07 31.4 -0.1**
**BINY Binghamton 64.89 53** P **P** **22 07 31.3 -0.3**
baz=317,SNR=46
BINY S **S** **22 16 08.3 -2.4**
baz=317
**VT1 Waterbury 64.90 50** P **P** **22 07 30.8 -0.8**
**ZHN Zhinishke 64.94 308** *e*P **P** **22 07 30.9 -1.2**
baz=308
**ZHN Zhinishke 64.94 308** *e*P **P** **22 07 30.8 -1.2**
**TZTN Tazewell 65.00 62** P **P** **22 07 32.2 -0.2**
**TZTN Tazewell 65.00 62** ⇑P **P** **22 07 32.4 0.0**
**TZTN Tazewell 65.00 62** P **P** **22 07 32.6 +0.2**
baz=316,SNR=190
TZTN S **S** **22 16 11.6 -0.6**
baz=316
**SATY Saty 65.04 308** *e*P **P** **22 07 31.4 -1.3**
baz=308
SATY *e*S **S** **22 16 13.3 +0.6**
baz=308
**SATY Saty 65.04 308** *e*P **P** **22 07 31.4 -1.3**
SATY *e*S **S** **22 16 13.3 +0.6**
**SSPA Standing Stone 65.06 56** P **P** **22 07 32.4 -0.3**
SSPA IAmb IAmb 22 08 15.4
comp=Z,106nm,0.8s
**SSPA Standing Stone 65.06 56** ⇑P **P** **22 07 31.9 -0.8**
**SSPA Standing Stone 65.06 56** P **P** **22 07 31.8 -0.9**
baz=317
SSPA S **S** **22 16 11.5 -1.3**
baz=317
**CPCT Cooper Cave 65.25 64** IAMs_20 IAMs_20 22 36 56.8
comp=Z,38µm,21.0s
**VALR Valaam 65.28 345** *c iP* **P** **22 07 32.2 -1.5**
VALR pmax pmax
comp=Z,146nm,1.1s
VALR MLR MLR
comp=Z,14µm,16.0s
**FPAL Fort Paine 65.29 65** IAMs_20 IAMs_20 22 36 27.1
comp=Z,36µm,20.0s
**S54A Dingess, Beckl 65.32 60** IAMs_20 IAMs_20 22 34 58.3
comp=Z,35µm,22.0s
**Y49A Blount Mountai 65.32 66** IAMs_20 IAMs_20 22 38 55.1
comp=Z,29µm,20.0s
**346A Big Creek Wild 65.33 70** IAMs_20 IAMs_20 22 40 30.7
comp=Z,24µm,18.0s
**LBNH Lisbon 65.36 49** P **P** **22 07 33.6 -1.0**
**LBNH Lisbon 65.36 49** ⇑P **P** **22 07 33.4 -1.2**
**LBNH Lisbon 65.36 49** P **P** **22 07 33.2 -1.4**
baz=318,SNR=15
LBNH S **S** **22 16 11.5 -4.9**
baz=318
**LBNH Lisbon 65.36 49** P **P** **22 07 33.6 -1.0**
LBNH pmax pmax
comp=Z,51nm,0.9s
LBNH MLR MLR
comp=Z,46µm,20.0s
**KEF Keuruu 65.37 348** *e*P **P** **22 07 34.2 -0.1**
**L59A Walton 65.37 53** IAMs_20 IAMs_20 22 37 51.0
comp=Z,32µm,20.0s
**KUU Kurty 65.42 310** *e*P **P** **22 07 33.7 -1.3**
baz=310
KUU LR LR 22 38 37.7
comp=Z,20µm,17.1s,baz=310
**KUU Kurty 65.42 310** *e*P **P** **22 07 33.7 -1.3**
KUU MLR MLR
comp=Z,20µm,17.0s
**PRZ Przheval'sk 65.47 308** P **P** **22 07 35.5 -0.1**
PRZ IAmb IAmb 22 08 27.5
comp=Z,211nm,1.5s
**PRZ Przheval'sk 65.47 308** P **P** **22 07 35.5 -0.1**
PRZ pmax pmax
comp=Z,211nm,1.5s
PRZ MLR MLR
comp=Z,48µm,21.0s
**KSPA Keystone Colle 65.47 54** IAMs_20 IAMs_20 22 36 20.8
comp=Z,33µm,21.0s
**TKL Tuckaleechee C 65.51 63** P **P** **22 07 35.5 -0.3**
**TKL Tuckaleechee C 65.51 63** LR LR 22 34 41.7
comp=Z,33µm,21.9s,baz=328,slow=35
**TKL Tuckaleechee C 65.51 63** P **P** **22 07 35.5 -0.3**
TKL pmax pmax
comp=Z,713nm,0.9s
**TBLU Trondheim 65.54 356** *i* P **P** **22 07 33.8 -1.6**
TBLU IVmB_BB 22 07 35.6
comp=Z,4µm,4.2s
TBLU *e*PP **PP** **22 09 58.4 -0.8**
TBLU *e*S **S** **22 16 14.6 -3.4**
TBLU *e*SS **SS** **22 20 30.9 +0.2**
TBLU IVMs_BB IVMs_BB 22 32 30.5
comp=Z,10µm,24.6s
**F63A Nahmakanta, Br 65.58 47** IAMs_20 IAMs_20 22 37 58.0
comp=Z,28µm,20.0s
**LRAL Lakeview Retre 65.58 67** IAMs_20 IAMs_20 22 33 57.9
comp=Z,25µm,22.0s
**LRAL Lakeview Retre 65.58 67** ⇑P **P** **22 07 35.0 -1.2**
**LRAL Lakeview Retre 65.58 67** P **P** **22 07 35.1 -1.0**
baz=316,SNR=130
LRAL S **S** **22 16 16.1 -3.2**
baz=316
**MDOK Medeo 65.62 309** *e*P **P** **22 07 35.1 -1.4**
baz=309
MDOK *e*S **S** **22 16 20.3 +0.3**
baz=309
MDOK LR LR 22 38 44.9
comp=Z,14µm,19.6s,baz=309
**MDOK Medeo 65.62 309** *e*P **P** **22 07 35.1 -1.4**
MDOK *e*S **S** **22 16 20.2 +0.3**
MDOK MLR MLR
comp=Z,14µm,20.0s
**BTLS Baital 65.64 312** *e*P **P** **22 07 35.1 -1.4**
baz=312
**BTLS Baital 65.64 312** *e*P **P** **22 07 35.0 -1.4**
**AAA Alma-Ata 65.66 309** *e*P **P** **22 07 35.6 -1.1**
comp=Z,69nm,1.0s,baz=309
AAA LR LR 22 38 47.2
comp=Z,37µm,18.7s,baz=309
**AAA Alma-Ata 65.66 309** *e*P **P** **22 07 35.5 -1.1**
AAA pmax pmax
comp=Z,69nm,1.0s
AAA MLR MLR
comp=Z,37µm,19.0s
**X51A Calhoun 65.70 65** IAMs_20 IAMs_20 22 36 50.9
comp=Z,37µm,20.0s
**BATG Bathurst New B 65.73 44** P **P** **22 07 36.4 -0.5**
BATG IAmb IAmb 22 08 10.8
comp=Z,120nm,0.9s
**TNSS Tian-Shan 65.77 309** *e*P **P** **22 07 36.4 -1.4**
baz=309

**TNSS Tian-Shan 65.77 309** *e*P **P** **22 07 36.3 -1.4**
**PKME Peaks-Kenny Pk 65.83 47** P **P** **22 07 37.7 +0.2**
**PKME Peaks-Kenny Pk 65.83 47** ⇑P **P** **22 07 36.5 -1.1**
**PKME Peaks-Kenny Pk 65.83 47** P **P** **22 07 36.4 -1.1**
baz=319,SNR=10
PKME S **S** **22 16 17.0 -5.0**
baz=319
**FIA1 FINESS Array S 65.91 348** P **P** **22 07 37.0 -0.8**
**FINES FINESS Array B 65.91 348** P **P** **22 07 36.9 -0.9**
**FINES FINESS Array B 65.91 348** P **P** **22 07 37.8 0.0**
comp=Z,40nm,0.5s,baz=12,slow=5.1,SNR=105
FINES S **S** **22 16 20.8 -1.7**
comp=Z,0.6nm,0.5s,baz=157,slow=35,SNR=1.2
FINES ScS **SKSac** **22 17 27.6 -3.3**
comp=Z,2.0nm,0.8s,baz=24,slow=5.2,SNR=2.7
FINES PKPPKP 22 36 12.6
comp=Z,3.4nm,0.8s,baz=160,slow=4.4,SNR=8.0
FINES LR LR 22 36 55.5
comp=Z,21μm,21.9s,baz=19,slow=36
FINES P4KPbc 22 44 26.7
comp=Z,1.8nm,0.9s,baz=37,slow=4.3,SNR=5.3
comp=Z,40nm,0.5s
**FINES FINESS Array B 65.91 348** *i*P **P** **22 07 37.7 -0.1**
FINES pmax pmax
comp=Z,39nm,0.5s
**V53A Saluda 66.04 63** IAMs_20 IAMs_20 22 40 31.8
comp=Z,37μm,19.0s
**BLA Blacksburg 66.23 60** IAMs_20 IAMs_20 22 35 26.5
comp=Z,39μm,22.0s
**BLA Blacksburg 66.23 60** ⇑P **P** **22 07 40.1 -0.3**
**BLA Blacksburg 66.23 60** P **P** **22 07 40.6 +0.2**
baz=317,SNR=47
BLA S **S** **22 16 27.2 -0.1**
baz=317
**BLA Blacksburg 66.23 60** P **P** **22 07 40.1 -0.3**
**SLVN Son La 66.27 275** P **P** **22 07 40.6 -0.2**
SLVN IAmb IAmb 22 07 44.3
comp=Z,118nm,1.1s
SLVN IAMs_20 IAMs_20 22 36 55.7
comp=Z,37μm,22.0s
**TABU Tabubil 66.31 225** P **P** **22 07 42.3 +1.2**
**MOL Molde 66.33 357** *e*P **P** **22 07 40.6 +0.1**
MOL IVmB_BB 22 07 41.7
comp=Z,3μm,3.2s
MOL *e*S **S** **22 16 28.3 +0.8**
MOL *e*SS **SS** **22 20 48.8 +5.9**
MOL IVMs_BB IVMs_BB 22 31 28.6
comp=Z,10μm,26.9s
**MVL Millersville 66.33 55** P **P** **22 07 40.4 -0.5**
**L61B Northampton 66.34 51** P **P** **22 07 39.6 -1.3**
baz=319,SNR=14
L61B S **S** **22 16 25.6 -2.8**
baz=319
**JRQG Juriquilla Cam 66.41 86** P **P** **22 07 41.6 -0.3**
**ODNJ Ogdensburg 66.41 53** IAMs_20 IAMs_20 22 37 36.6
comp=Z,24μm,19.0s
**BG3 Lake Jocassee 66.47 63** P **P** **22 07 41.6 -0.3**
**TKM2 Tokmak 2 66.51 310** P **P** **22 07 42.6 +0.3**
SNR=66
**TKM2 Tokmak 2 66.51 310** *i*P **P** **22 07 41.1 -1.2**
TKM2 pmax pmax
comp=Z,76nm,1.1s
**SDMD Soldier's Deli 66.51 56** IAMs_20 IAMs_20 22 38 20.5
comp=Z,20μm,18.0s
**TRNY Table Rock, Ra 66.56 53** IAMs_20 IAMs_20 22 38 46.4
comp=Z,31μm,20.0s
**BOOM Boomskoye usch 66.67 309** P **P** **22 07 42.6 -0.7**
**BOOM Boomskoye usch 66.67 309** P **P** **22 07 42.6 -0.7**
BOOM pmax pmax
comp=Z,52nm,0.8s
**MOIG Morelia 66.70 87** P **P** **22 07 43.5 -0.3**
MOIG IAmb IAmb 22 08 04.1
comp=Z,261nm,1.1s
**ULHL Ulahol 66.71 309** P **P** **22 07 44.7 +1.1**
SNR=57
**WUPA West Chester U 66.76 55** IAMs_20 IAMs_20 22 36 28.0
comp=Z,34μm,22.0s
**250A Grady 66.77 68** IAMs_20 IAMs_20 22 34 10.2
comp=Z,26μm,22.0s
**USP Ospenovka 66.77 311** P **P** **22 07 44.1 +0.4**
SNR=32
**DOMB Dombas 66.80 356** *e*P **P** **22 07 44.4 +0.8**
DOMB IVmB_BB 22 07 44.5
comp=Z,3μm,4.0s
DOMB *e*PP **PP** **22 10 10.0 -0.2**
DOMB *e*S **S** **22 16 32.5 -0.9**
DOMB *e*SS **SS** **22 20 55.8 +5.4**
DOMB IVMs_BB IVMs_BB 22 33 57.0
comp=Z,11μm,22.4s
**PAL Palisades 66.82 53** IAMs_20 IAMs_20 22 38 54.4
comp=Z,31μm,20.0s
**PAL Palisades 66.82 53** P **P** **22 07 43.3 -0.7**
baz=318,SNR=22
PAL S **S** **22 16 31.0 -3.2**
baz=318
**LKP Lekhapani 66.84 285** *e*P **P** **22 07 45.9 +1.6**
LKP IAmb IAmb 22 07 51.5
comp=Z,379nm,0.8s
**HRV Adam Dziewonsk 66.84 50** P **P** **22 07 43.8 -0.4**
**HRV Adam Dziewonsk 66.84 50** ⇑P **P** **22 07 43.1 -1.0**
**HRV Adam Dziewonsk 66.84 50** P **P** **22 07 43.9 -0.3**
baz=319
HRV S **S** **22 16 30.8 -3.7**
baz=319
**HRV Adam Dziewonsk 66.84 50** P **P** **22 07 43.8 -0.3**
HRV pmax pmax
comp=Z,95nm,1.2s
HRV MLR MLR
comp=Z,38μm,19.0s
**HRV Adam Dziewonsk 66.84 50** P **P** **22 07 43.9 -0.3**
HRV pP **sP** **22 07 55.3 -1.6**
HRV PcP **PcP** **22 08 12.3 -0.4**
**RAF Rauma 66.85 350** *e*P **P** **22 07 43.7 -0.1**
**CHMS Chumysh 66.86 310** P **P** **22 07 44.7 +0.4**
SNR=34
**PUL Pulkovo 66.87 345**⇓ *e*P **P** **22 07 44.7 +0.7**
PUL pmax pmax
comp=Z,73nm,0.9s
PUL MLR MLR
comp=Z,49μm,19.0s
**TNCH TengChong 66.89 282** ⇑P **P** **22 07 45.5 +0.6**
TNCH pP pP 22 07 51.8 -2.3
TNCH sP sP 22 07 55.0 -2.6
TNCH PcP **PcP** **22 08 14.5 +1.1**
TNCH PP **PP** **22 10 13.9 +1.7**
TNCH S **S** **22 16 33.6 -2.3**
TNCH sS pS 22 16 45.8 -1.3
TNCH pmax pmax
comp=Z,470nm,3.1s
TNCH pmax pmax
comp=Z,9μm,4.9s
TNCH LR LR
comp=Z,8μm,22.1s
TNCH LR LR
comp=Z,11μm,25.1s
TNCH LR LR
comp=Z,18μm,27.0s
**BRAL Brewton 66.90 69** IAMs_20 IAMs_20 22 37 42.2
comp=Z,21μm,20.0s
**BRAL Brewton 66.90 69** ⇑P **P** **22 07 44.9 +0.2**
**BRAL Brewton 66.90 69** P **P** **22 07 44.7 +0.1**
baz=317,SNR=24
BRAL S **S** **22 16 35.0 -0.4**
baz=317
**CPNY Central Park 66.95 53** IAMs_20 IAMs_20 22 39 48.0
comp=Z,28μm,19.0s
**KBK Karagaybulak 67.02 310** P **P** **22 07 45.9 +0.4**
SNR=36
**GGN Saint George 67.05 46** P **P** **22 07 45.1 -0.3**
**FRU1 Bishkek 67.06 310** P **P** **22 07 44.9 -0.7**
FRU1 IAmb IAmb 22 07 51.0
comp=Z,149nm,1.2s
**FRU1 Bishkek 67.06 310** P **P** **22 07 44.9 -0.7**
FRU1 pmax pmax
comp=Z,149nm,1.2s
**CBN Corbin Frederi 67.13 57** P **P** **22 07 45.4 -0.6**
baz=318
CBN S **S** **22 16 36.8 -1.1**
baz=318
**152A Waverly Hall 67.16 66** IAMs_20 IAMs_20 22 39 50.7
comp=Z,32μm,19.0s
**BCX Boston College 67.16 50** IAMs_20 IAMs_20 22 36 42.2
comp=Z,38μm,22.0s
**AAK Ala-Archa 67.25 310** P **P** **22 07 48.1 +1.1**
SNR=21
**AAK Ala-Archa 67.25 310** P **P** **22 07 46.4 -0.5**
SNR=22
**AAK Ala-Archa 67.25 310** ⇑P **P** **22 07 46.5 -0.5**
**AAK Ala-Archa 67.25 310** LR LR 22 40 11.1
comp=Z,35μm,18.9s,baz=24,slow=39
**AAK Ala-Archa 67.25 310** P **P** **22 07 47.6 +0.7**
AAK P **P** **22 07 47.6 +0.7**
AAK S **S** **22 16 37.5 -2.2**
AAK S **S** **22 16 37.5 -2.2**
**AAK Ala-Archa 67.25 310***c i*P **P** **22 07 46.7 -0.3**
AAK pmax pmax
comp=Z,48nm,0.6s
AAK MLR MLR
comp=Z,35μm,18.0s
**AAK Ala-Archa 67.25 310** P **P** **22 07 47.0 +0.1**
**MEF Metsahovi 67.31 348** *e*P **P** **22 07 47.4 +0.6**
**GOGA Godfrey 67.33 65** P **P** **22 07 46.3 -1.0**
**GOGA Godfrey 67.33 65** ⇑P **P** **22 07 46.5 -0.8**
**GOGA Godfrey 67.33 65** P **P** **22 07 46.6 -0.7**
baz=317,SNR=377
GOGA S **S** **22 16 37.2 -3.2**
baz=317
**GOGA Godfrey 67.33 65** P **P** **22 07 46.3 -1.0**
GOGA pmax pmax
comp=Z,552nm,0.9s
GOGA MLR MLR
comp=Z,41μm,20.0s
**FOO Floro 67.36 358** *e*P **P** **22 07 45.8 -1.2**
FOO IVmBBB 22 07 51.5
comp=Z,3μm,7.8s
FOO *e*PP **PP** **22 10 14.5 -0.4**
FOO *e*S **S** **22 16 40.2 +0.2**
FOO *e*SS **SS** **22 21 03.4 +4.5**
FOO IVMs_BB IVMs_BB 22 31 00.1
comp=Z,6μm,28.8s
**NRN Naryn 67.44 308** P **P** **22 07 48.4 +0.1**
NRN IAmb IAmb 22 09 08.7
comp=Z,200nm,1.6s
**NRN Naryn 67.44 308** P **P** **22 07 48.4 +0.1**
NRN pmax pmax
comp=Z,201nm,1.6s
**NC204 NORSAR Array S 67.49 355** P **P** **22 07 47.8 -0.2**
NC204 IAmb IAmb 22 07 50.9
comp=Z,245nm,1.4s
**EKS2 Erkin-Say 67.58 311** P **P** **22 07 50.2 +1.2**
SNR=19
**PMG Port Moresby 67.59 218** P **P** **22 07 50.9 +1.9**
**PMG Port Moresby 67.59 218** P **P** **22 07 49.2 +0.2**
PMG IAmb IAmb 22 08 13.0
comp=Z,260nm,1.5s
**PMG Port Moresby 67.59 218** ⇑P **P** **22 07 49.0 0.0**
**PMG Port Moresby 67.59 218** LR LR 22 34 33.4
comp=Z,18μm,19.9s,baz=42,slow=33
**PMG Port Moresby 67.59 218** P **P** **22 07 49.2 +0.2**
PMG pmax pmax
comp=Z,260nm,1.5s
PMG MLR MLR
comp=Z,19μm,20.0s
**PMG Port Moresby 67.59 218** P **P** **22 07 49.5 +0.5**
**L64A Middleborough 67.63 50** IAMs_20 IAMs_20 22 36 55.1
comp=Z,39μm,21.0s
**DRLN Deer Lake 67.66 38** P **P** **22 07 48.7 -0.5**
DRLN IAmb IAmb 22 08 24.0
comp=Z,116nm,1.0s
**DRLN Deer Lake 67.66 38** ⇑P **P** **22 07 48.4 -0.8**
**NB2 NORSAR Subarra 67.70 355** P **P** **22 07 49.2 -0.1**
comp=Z,398nm,1.7s,baz=7.3,slow=6.5
NB2 P'P' 22 36 05.0
comp=Z,7.2nm,1.2s,baz=202,slow=2.7
**NB2 NORSAR Subarra 67.70 355** P **P** **22 07 49.2 -0.1**
baz=7.3,slow=6.5
**NB2 NORSAR Subarra 67.70 355** P **P** **22 07 45.2 -4.1**
**NOA NORSAR Array B 67.70 355** P **P** **22 07 48.2 -1.1**
comp=Z,19nm,0.5s,baz=12,slow=6.6,SNR=151
NOA PcP **PcP** **22 08 16.9 +0.9**
comp=Z,25nm,0.7s,baz=359,slow=3.1,SNR=7.6
NOA LR LR 22 35 50.5
comp=Z,25μm,21.9s,baz=5.0,slow=34
NOA PKPPKP P'P'df 22 36 05.4 -13
comp=Z,3.4nm,1.0s,baz=173,slow=3.8,SNR=5.8
comp=Z,19nm,0.5s
**HYA Hoyanger 67.77 358** *e*P **P** **22 07 49.6 -0.1**
HYA IVmB_BB 22 07 50.7
comp=Z,3μm,3.8s
HYA *e*PP **PP** **22 10 18.3 -0.2**
HYA *e*S **S** **22 16 45.4 +0.4**
HYA *e*SS **SS** **22 21 10.4 +5.2**
HYA IVMs_BB IVMs_BB 22 32 22.8
comp=Z,10μm,26.8s
**ARBE Arbavere 67.86 347** *e*P **P** **22 07 48.8 -1.4**
**AAL Aland 67.87 350** *e*P **P** **22 07 50.6 +0.4**
**ZIRO ZIRO 67.90 287** *e*P **P** **22 07 52.8 +1.5**
ZIRO IAmb IAmb 22 07 56.2
comp=Z,843nm,0.9s
**352A Blakely 67.91 67** IAMs_20 IAMs_20 22 35 31.4
comp=Z,28μm,22.0s
**SUE Sulen 67.91 359** *e*P **P** **22 07 49.6 -0.9**
SUE IVmBBB 22 07 54.0
comp=Z,3μm,4.5s
SUE *e*S **S** **22 16 47.0 +0.4**
SUE IVMs_BB IVMs_BB 22 30 25.4
comp=Z,6μm,35.0s
**LSA Lhasa 67.91 290** P **P** **22 07 54.0 +2.3**
LSA S **S** **22 16 47.8 -0.8**
LSA pmax pmax
comp=Z,1μm,0.7s
LSA LR LR
comp=Z,21μm,19.8s
LSA LR LR
comp=Z,19μm,20.5s
LSA LR LR
comp=Z,30μm,18.7s
**LSA Lhasa 67.91 290** P **P** **22 07 52.3 +0.6**
LSA IAMs_20 IAMs_20 22 39 41.2
comp=Z,33μm,20.0s
**LSA Lhasa 67.91 290** *i*P **P** **22 07 53.0 +1.3**
SNR=204
**LSA Lhasa 67.91 290** P **P** **22 07 53.9 +2.2**
LSA P **P** **22 07 53.9 +2.2**
LSA S **S** **22 16 47.6 -1.0**
LSA S **S** **22 16 47.6 -1.0**
**LSA Lhasa 67.91 290** P **P** **22 07 52.3 +0.6**
LSA MLR MLR
comp=Z,33μm,20.0s
**LSA Lhasa 67.91 290** P **P** **22 07 53.3 +1.6**
**AKTO Aktyubinsk 67.98 325** LR LR 22 39 43.4
comp=Z,70μm,21.4s,baz=35,slow=38
**V58A Windy Hill, Pi 67.98 60** IAMs_20 IAMs_20 22 39 31.6
comp=Z,25μm,20.0s
**NC602 NORSAR Array S 67.99 355** *e*P **P** **22 07 49.6 -1.4**
NC602 IVmBBB 22 07 54.0
comp=Z,3μm,4.1s
NC602 *e*S **S** **22 16 46.7 -0.9**
NC602 *e*SS **SS** **22 21 12.0 +3.3**
NC602 IVMs_BB IVMs_BB 22 32 37.6
comp=Z,10μm,26.2s
**M65A Busby, Falmout 68.00 51** P **P** **22 07 49.4 -2.1**
baz=320
M65A S **S** **22 16 45.0 -3.4**
baz=320
**AML Almayashu 68.02 310** P **P** **22 07 54.0 +2.0**
SNR=12
**451A Vernon 68.07 68** IAMs_20 IAMs_20 22 35 35.7
comp=Z,23μm,22.0s
**TNTI Ternate 68.08 242** P **P** **22 07 54.6 +2.4**
**TNTI Ternate 68.08 242** P **P** **22 07 52.1 -0.1**
TNTI IAmb IAmb 22 08 03.8
comp=Z,209nm,1.5s
**154A Montrose 68.12 65** IAMs_20 IAMs_20 22 35 44.7
comp=Z,36μm,21.0s
**SKAR Skarsla 68.19 357** *e*P **P** **22 07 51.4 -1.0**
SKAR IVmBBB 22 07 55.4
comp=Z,2μm,1.6s
SKAR *e*PP **PP** **22 10 22.4 +0.1**
SKAR *e*S **S** **22 16 50.9 +0.7**
SKAR *e*SS **SS** **22 21 15.7 +3.7**
SKAR IVMs_BB IVMs_BB 22 32 23.1
comp=Z,8μm,24.9s
**ABKAR Akbulak array 68.25 323** P **P** **22 07 52.5 -0.4**
ABKAR IAmb IAmb 22 08 23.7
comp=Z,127nm,1.1s
**ABKAR Akbulak array 68.25 323** P **P** **22 07 52.3 -0.5**
**ABKAR Akbulak array 68.25 323** ⇑P **P** **22 07 52.2 -0.7**
**TAOE Nuku Hiva Isla 68.28 139** *e*P **P** **22 07 53.5 0.0**
comp=Z,3μm,30.8s
TAOE *e*S **S** **22 16 56.6 +4.3**
comp=Z,14μm,31.2s
TAOE *e*SS **SS** **22 21 11.9 -4.2**
comp=Z,14μm,38.1s
TAOE *e*LQ LQ 22 25 01.3
comp=Z,17μm,38.3s
TAOE *e*LR LR 22 28 26.6
comp=Z,100μm,23.7s
**S61A Accomac 68.41 56** IAMs_20 IAMs_20 22 36 44.5
comp=Z,36μm,22.0s
**UPP Uppsala 68.42 352** *e*P **P** **22 07 54.2 +0.5**
**HFS Hagfors 68.46 354** P **P** **22 07 53.0 -1.0**
comp=Z,24nm,0.4s,baz=26,slow=3.8,SNR=176
HFS LR LR 22 36 00.7
comp=Z,29μm,21.9s,baz=4.5,slow=34
comp=Z,24nm,0.4s
**ASK Askoy 68.48 358** *e*P **P** **22 07 54.6 +0.5**
**BER Bergen 68.57 358** *e*P **P** **22 07 54.3 -0.4**
BER IVmB_BB 22 07 56.2
comp=Z,3μm,4.0s
BER *e*S **S** **22 16 54.9 +0.4**
BER *e*SS **SS** **22 21 21.8 +4.1**
BER IVMs_BB IVMs_BB 22 32 17.9
comp=Z,6μm,28.3s
**FAKI Fak Fak 68.58 235** P **P** **22 07 56.9 +1.5**
**FAKI Fak Fak 68.58 235** P **P** **22 07 54.5 -0.8**
FAKI IAmb IAmb 22 07 58.0
comp=Z,236nm,1.0s
**FAKI Fak Fak 68.58 235** ⇑P **P** **22 07 55.1 -0.3**
**VSU Vasula 68.69 346** ⇑P **P** **22 07 54.4 -1.0**
**VSU Vasula 68.69 346***c i*P **P** **22 07 54.1 -1.3**
VSU pmax pmax
comp=Z,123nm,0.8s
VSU MLR MLR
comp=Z,26μm,17.0s
**KK31 Karatay Array 68.76 313** P **P** **22 07 55.4 -0.8**
**KK31 Karatay Array 68.76 313** P **P** **22 07 55.4 -0.8**
KK31 pmax pmax
comp=Z,49nm,0.7s
**KKAR Karatay Array 68.76 313** P **P** **22 07 55.2 -1.0**
**KKAR Karatay Array 68.76 313** ⇑P **P** **22 07 55.2 -1.0**
**LRW Lerwick 68.83 2** *e*P **P** **22 07 55.3 -0.9**
LRW IAMs_20 IAMs_20 22 39 40.5
comp=Z,22μm,19.7s
**LRW Lerwick 68.83 2** ⇑P **P** **22 07 56.1 -0.1**
**OSL Oslo 68.83 355** *e*P **P** **22 07 56.2 -0.1**
OSL IVmB_BB 22 07 57.5
comp=Z,4μm,3.4s
OSL *e*PP **PP** **22 10 28.3 +0.6**
OSL *e*S **S** **22 16 58.6 +1.1**
OSL *e*SS **SS** **22 21 28.1 +6.4**
OSL IVMs_BB IVMs_BB 22 34 51.1
comp=Z,10μm,21.6s
**MTSE Matsula 68.85 348** *e*P **P** **22 07 57.3 +0.9**
**HAL Halifax 68.87 44** P **P** **22 07 55.9 -0.9**
**HAL Halifax 68.87 44** P **P** **22 07 55.9 -0.9**
HAL pmax pmax
comp=Z,63nm,0.9s
HAL MLR MLR
comp=Z,50μm,20.0s
**MSVF Nonsavu 68.88 184** P **P** **22 07 57.3 +0.2**
MSVF IAmb IAmb 22 08 22.1
comp=Z,282nm,1.7s
**MSVF Nonsavu 68.88 184** ⇓P **P** **22 07 58.8 +1.7**
**MSVF Nonsavu 68.88 184** P **P** **22 07 57.3 +0.2**
MSVF pmax pmax
comp=Z,282nm,1.7s
**KSH Kashi 68.91 307** P **P** **22 07 59.9 +2.6**
KSH pP pP 22 08 07.8 +1.1
KSH ScP 22 12 23.8
KSH S **S** **22 17 06.0 +6.5**
KSH pmax pmax
comp=Z,130nm,1.1s
KSH LR LR
comp=Z,52μm,22.0s
KSH LR LR
comp=Z,39μm,22.7s
KSH LR LR
comp=Z,78μm,22.7s
**ARSB Arslanbob 68.98 310** P **P** **22 07 57.5 -0.3**
**ARSB Arslanbob 68.98 310** P **P** **22 07 57.5 -0.3**
ARSB pmax pmax
comp=Z,52nm,1.6s
**255A Hazlehurst 68.98 65** IAMs_20 IAMs_20 22 35 48.6
comp=Z,33μm,22.0s
**ODD1 Odda 69.02 358** *e*P **P** **22 07 57.7 +0.1**
ODD1 IVmB_BB 22 07 58.7
comp=Z,3μm,4.2s
ODD1 *e*S **S** **22 17 02.1 +2.2**
ODD1 *e*SS **SS** **22 21 29.4 +4.7**
ODD1 IVMs_BB IVMs_BB 22 33 13.1
comp=Z,10μm,25.8s
**CNNC Cliffs of the 69.06 60** P **P** **22 07 58.2 +0.1**
baz=319,SNR=9.1
CNNC S **S** **22 17 00.8 -0.3**
baz=319
**KOHI KOHIMA 69.08 285** *e*P **P** **22 07 59.1 +0.5**
KOHI IAmb IAmb 22 08 06.2
comp=Z,1μm,1.1s
**BRLS Borolday 69.13 313** *e*P **P** **22 07 58.8 +0.3**
baz=313
**BRLS Borolday 69.13 313** *e*P **P** **22 07 58.8 +0.3**
**553A Crawfordville 69.15 68** IAMs_20 IAMs_20 22 36 44.2
comp=Z,22μm,21.0s
**GBN Guysborough 69.15 42** P **P** **22 07 58.4 -0.1**
GBN IAmb IAmb 22 08 25.1
comp=Z,116nm,0.8s
**KONO Kongsberg 69.17 356** P **P** **22 07 58.5 +0.1**
**KONO Kongsberg 69.17 356** IAMs_20 IAMs_20 22 41 35.3
comp=Z,26μm,21.0s
**KONO Kongsberg 69.17 356** *e*P **P** **22 07 58.6 +0.2**
KONO IVmB_BB 22 07 59.8
comp=Z,4μm,4.2s
KONO *e*PP **PP** **22 10 31.0 +0.3**
KONO *e*S **S** **22 17 01.8 +0.1**
KONO *e*SS **SS** **22 21 31.6 +4.7**
KONO IVMs_BB IVMs_BB 22 35 44.5
comp=Z,8μm,23.1s
**KONO Kongsberg 69.17 356** ⇑P **P** **22 07 58.1 -0.3**
**KONO Kongsberg 69.17 356** P **P** **22 07 58.5 +0.1**
KONO pmax pmax
comp=Z,164nm,1.5s
KONO MLR MLR
comp=Z,26μm,21.0s
**KONO Kongsberg 69.17 356** P **P** **22 07 58.8 +0.3**
KONO sP **sP** **22 08 15.7 +4.5**
KONO PcP **PcP** **22 08 23.3 +1.2**
**MOS Moscow 69.25 339** *e*P **P** **22 07 56.6 -2.4**
MOS *e* 22 08 20.4
MOS *e* 22 10 27.3
MOS *e*PPP PPP 22 12 11.3
MOS *e*S **S** **22 16 59.2 -3.5**
MOS *e* 22 17 52.9
MOS *e*SS **SS** **22 21 27.4 -0.9**
MOS pmax pmax
comp=Z,4μm,3.9s
MOS pmax pmax
comp=N,3μm,4.2s
MOS pmax pmax
comp=E,1μm,4.0s
MOS pmax pmax
comp=Z,140nm,0.6s
MOS smax smax
comp=E,3μm,6.7s
MOS smax smax
comp=N,4μm,9.6s
MOS MLR MLR
comp=N,22μm,19.0s
MOS MLR MLR
comp=Z,47μm,19.0s
MOS MLR MLR
comp=E,34μm,18.0s
**CRAI Chiangrai 69.29 277** P **P** **22 07 59.5 -0.3**
CRAI IAmb IAmb 22 08 04.1
comp=Z,233nm,1.0s
**NHSC New Hope 69.40 63** P **P** **22 08 00.3 0.0**
**NHSC New Hope 69.40 63** ⇑P **P** **22 08 01.0 +0.7**
**NHSC New Hope 69.40 63** P **P** **22 08 01.1 +0.9**
baz=318,SNR=127
NHSC S **S** **22 17 04.7 -0.4**
baz=318
**BLS5 Blasjo 69.51 358** *e*P **P** **22 08 00.4 -0.2**
BLS5 IVmB_BB 22 08 01.8
comp=Z,3μm,6.4s
BLS5 *e*PP **PP** **22 10 34.0 +0.3**

BLS5 eS S 22 17 06.2 +0.5
BLS5 eSS SS 22 21 37.8 +5.5
BLS5 IVMs_BB IVMs_BB 22 33 39.1
comp=Z,11µm,27.4s
MYLDM **Lahad Datu** 69.60 252 P P 22 08 01.7 0.0
MYLDM **Lahad Datu** 69.60 252 ⇑P P 22 08 02.9 +1.1
**BELG Belogornoye** 69.70 332 LR LR 22 41 15.2
comp=Z,77µm,20.6s,baz=30,slow=38
**BELG Belogornoye** 69.70 332*c* *i*P P 22 08 01.1 -0.7
BELG pmax pmax
comp=Z,66nm,1.5s
BELG MLR MLR
comp=Z,12µm,21.0s
**KMY Karmoy** 69.75 358 *e*P P 22 08 02.3 +0.3
KMY IVmB_BB 22 08 03.2
comp=Z,3µm,4.2s
KMY *e*PP PP 22 10 34.3 -1.3
KMY *e*S S 22 17 10.4 +2.0
KMY *e*SS SS 22 21 41.4 +5.5
KMY IVMs_BB IVMs_BB 22 33 06.0
comp=Z,6µm,24.0s
**UBPT Khong Chiam** 69.82 269 P P 22 08 02.8 -0.3
**IMP Imphal** 69.83 285 *e*P P 22 08 03.8 +0.6
IMP IAmb IAmb 22 08 06.1
comp=Z,292nm,0.9s
**VIKU Vikbolandet** 69.84 352 *e*P P 22 08 02.2 -0.3
**TLIG Tlapa** 69.92 87 P P 22 08 04.0 +0.1
TLIG IAmb IAmb 22 08 24.5
comp=Z,346nm,1.8s
TLIG IAMs_20 IAMs_20 22 32 04.8
comp=Z,21µm,22.0s
**OBN Obninsk** 70.06 340 P P 22 08 03.2 -0.7
OBN IAmb IAmb 22 08 33.3
comp=Z,140nm,0.9s
**OBN Obninsk** 70.06 340 LR LR 22 44 07.1
comp=Z,30µm,18.1s,baz=26,slow=40
**OBN Obninsk** 70.06 340 ⇑P P 22 08 03.5 -0.4
**OBN Obninsk** 70.06 340*c* *i*P P 22 08 03.2 -0.7
OBN *e**PP pP 22 08 10.0 -3.2
OBN *e**SP sP 22 08 12.5 -4.2
OBN *e* 22 08 24.4
OBN *e* 22 10 36.6
OBN *e*PPP PPP 22 12 19.1
OBN *e*S S 22 17 10.4 -1.8
OBN *e*SS SS 22 21 44.3 +3.6
OBN pmax pmax
comp=Z,443nm,2.1s
OBN MLR MLR
comp=Z,35µm,17.0s
**OBN Obninsk** 70.06 340 P P 22 08 03.3 -0.7
**OBN Obninsk** 70.06 340 P P 22 08 03.7 -0.2
**SLIT Slitere, Latvi** 70.10 349 ⇑P P 22 08 02.0 -2.2
**SLIT Slitere, Latvi** 70.10 349 *e*P P 22 08 03.8 -0.4
**456A Hilliard** 70.14 66 IAMs_20 IAMs_20 22 41 31.2
comp=Z,29µm,18.0s
**KKM Kota Kinabalu** 70.29 254 P P 22 08 08.0 +1.9
**KKM Kota Kinabalu** 70.29 254 P P 22 08 05.8 -0.3
KKM IAmb IAmb 22 08 09.5
comp=Z,333nm,1.4s
**KKM Kota Kinabalu** 70.29 254 ⇑P P 22 08 06.2 +0.1
**BIGH Upper Bighouse** 70.40 3 *e*P P 22 08 04.2 -1.8
BIGH IAMs_20 IAMs_20 22 34 30.6
comp=Z,21µm,24.8s
**SHL Shillong** 70.53 287 P P 22 08 06.9 -0.7
**SHL Shillong** 70.53 287 *e*P P 22 08 07.4 -0.2
SHL IAmb IAmb 22 08 10.3
comp=Z,749nm,0.7s
**SHL Shillong** 70.53 287 P P 22 08 08.2 +0.6
SNR=239
SHL S S 22 17 16.6 -2.5
**SHL Shillong** 70.53 287 P P 22 08 06.9 -0.7
SHL MLR MLR
comp=Z,46µm,20.0s
**SNART Snartemo** 70.58 357 *e*P P 22 08 07.7 +0.6
SNART IVmB_BB 22 08 08.4
comp=Z,7µm,4.5s
SNART *e*S S 22 17 18.9 +0.7
**HOMB Homborsund** 70.60 356 *e*P P 22 08 07.2 0.0
HOMB IVmB_BB 22 08 08.8
comp=Z,3µm,4.2s
HOMB *e*PP PP 22 10 41.0 -1.9
HOMB *e*S S 22 17 18.7 +0.3
HOMB *e*SS SS 22 21 50.8 +2.0
HOMB IVMs_BB IVMs_BB 22 36 13.6
comp=Z,9µm,23.5s
**LEWI Lewis, Hebride** 70.61 5 *e*P P 22 08 06.4 -0.9
LEWI IAMs_20 IAMs_20 22 40 37.5
comp=Z,33µm,19.3s
**PHRA Phrae** 70.68 276 P P 22 08 07.9 -0.4
**LINV Loch Inver, As** 70.69 4 *e*P P 22 08 06.2 -1.5
LINV IAMs_20 IAMs_20 22 39 34.3
comp=Z,29µm,20.9s
**656A Willeton** 70.86 67 IAMs_20 IAMs_20 22 42 27.4
comp=Z,24µm,20.0s
**DRK Karamyk** 70.98 310 P P 22 08 10.4 +0.1
**DRK Karamyk** 70.98 310 P P 22 08 10.4 +0.1
**BTK Batken** 71.00 311 P P 22 08 09.9 -0.2
**BTK Batken** 71.00 311 P P 22 08 09.9 -0.2
BTK pmax pmax
comp=Z,110nm,1.1s
**PMOR Pomariorio Ree** 71.11 149 *e*P P 22 08 11.4 +0.6
comp=Z,227nm,1.2s
PMOR *e*S S 22 17 26.2 +1.0
comp=Z,18µm,25.6s
PMOR *e*SS SS 22 22 04.6 +5.1
comp=Z,5µm,27.6s
PMOR *e*LR LR 22 29 53.5
comp=Z,56µm,21.0s
**GTK Tadong** 71.18 290 *e*P P 22 08 12.3 +0.8
GTK IAmb IAmb 22 08 16.2
comp=Z,906nm,0.9s
**SANI Sanana** 71.18 241 P P 22 08 08.9 -2.4
**MCD Coleburn Disti** 71.33 3 *e*P P 22 08 10.7 -1.0
MCD IAmb IAmb 22 08 14.8
comp=Z,172nm,1.3s
**IZAR Zarasai** 71.37 346 *e*P P 22 08 11.8 -0.2
**VAH Vaihoa** 71.42 149 *e*P P 22 08 12.4 -0.2
comp=Z,232nm,1.1s
VAH *e*S S 22 17 29.0 +0.3
comp=Z,22µm,25.5s
VAH *e*SS SS 22 22 07.9 +3.7
comp=Z,11µm,35.6s
VAH *e*LQ LQ 22 26 57.5
comp=Z,6µm,23.4s
VAH *e*LR LR 22 30 01.6
comp=Z,62µm,20.8s
**OVD Ostervraa, Den** 71.47 355 *i*P P 22 08 12.7 +0.1
OVD IAmb IAmb 22 08 21.2
comp=Z,45nm,0.6s
**KPL Plockton** 71.48 4 *e*P P 22 08 11.4 -1.2
KPL IAMs_20 IAMs_20 22 39 58.4
comp=Z,30µm,19.6s
**VSVD Vaisvydziai** 71.49 347 *e*P P 22 08 12.4 -0.2
**CM31 Chiang Mai Arr** 71.51 277 P P 22 08 13.3 0.0
CM31 IAmb IAmb 22 08 18.6
comp=Z,468nm,1.9s
**CMAR Chiang Mai Arr** 71.51 277 P P 22 08 13.1 -0.3
**CMAR Chiang Mai Arr** 71.51 277 P P 22 08 13.4 0.0
comp=Z,44nm,0.8s,baz=25,slow=5.9,SNR=106
CMAR S S 22 17 29.2 -0.9
comp=Z,0.4nm,0.3s,baz=314,slow=38,SNR=1.1
CMAR PKPPKP 22 36 02.9
comp=Z,0.6nm,0.5s,baz=251,slow=2.9,SNR=5.2
CMAR LR LR 22 43 31.6
comp=Z,14µm,18.6s,baz=40,slow=39
CMAR P4KPbc 22 44 50.0
comp=Z,0.6nm,0.3s,baz=22,slow=5.0,SNR=1.3
comp=Z,44nm,0.8s
**CMAR Chiang Mai Arr** 71.51 277 *i*P P 22 08 13.3 -0.1
CMAR pmax pmax
comp=Z,46nm,0.7s
**TOLI2 Tolitoli** 71.53 247 P P 22 08 14.1 +0.6
**TOLI2 Tolitoli** 71.53 247 P P 22 08 12.8 -0.6
TOLI2 IAmb IAmb 22 08 15.4
comp=Z,134nm,1.0s
**ISAL Salakas** 71.56 346 *e*P P 22 08 13.0 -0.1
**PBUR Paburge** 71.71 348 *e*P P 22 08 13.9 -0.1
**IIGN Ignalina** 71.76 346 *e*P P 22 08 14.1 -0.2
**LPSR Galich'ya Gora** 71.84 337 *e*P P 22 08 12.5 -2.3
LPSR *e* 22 08 13.6
LPSR pmax pmax
comp=Z,150nm,0.9s
LPSR MLR MLR
comp=Z,47µm,23.0s
**PABE Paberze** 71.94 347 P P 22 08 14.8 -0.6
PABE IAMs_20 IAMs_20 22 40 08.7
comp=Z,35µm,21.0s
**PABE Paberze** 71.94 347 *e*P P 22 08 15.2 -0.1
**DRUM Mains of Drumt** 72.03 3 *e*P P 22 08 14.7 -1.2
DRUM IAMs_20 IAMs_20 22 35 03.1
comp=Z,21µm,25.7s
**GAR Garm** 72.07 310 P P 22 08 16.1 -0.6
**DEL Delary** 72.08 353 *e*P P 22 08 16.7 +0.5
**NACGM Naroch** 72.11 345 ⇓*i*P P 22 08 17.1 +0.7
comp=Z,3µm,1.0s,baz=16
**LUWI Luwuk** 72.14 244 P P 22 08 16.6 -0.5
**LUWI Luwuk** 72.14 244 P P 22 08 14.0 -3.1
**AGT Agartala** 72.17 286 *e*P P 22 08 19.5 +2.2
AGT IAmb IAmb 22 08 22.6
comp=Z,1µm,0.7s
**MNK Minsk** 72.31 344 *i*P P 22 08 15.8 -1.8
comp=E,66nm,0.9s
MNK *i*P P 22 08 15.8 -1.8
comp=N,38nm,0.9s
MNK *i*P P 22 08 15.8 -1.8
comp=Z,83nm,0.8s,baz=17
MNK *i*PP PP 22 10 57.0 -0.7
MNK *i*PPP PPP 22 12 41.7
MNK *i*S S 22 17 35.1 -3.3
MNK *i*SS SS 22 22 28.1 +13
MNK *i*SSS SSS 22 25 34.8
MNK *i*LQ LQ 22 34 44.5
MNK *i*LR LR 22 38 40.0
MNK *i*LRM MLR 22 40 43.0
comp=Z,47µm,23.2s
MNK *i*LRM MLR 22 41 39.2
comp=N,31µm,20.4s
MNK *i*LRM MLR 22 42 23.8
comp=E,26µm,19.8s
**MNK Minsk** 72.31 344 *i*P P 22 08 15.8 -1.8
MNK *i* 22 10 57.0
MNK *i*PPP PPP 22 12 41.6
MNK *i*S S 22 17 35.0 -3.3
MNK *i*SSS SSS 22 25 34.7
MNK pmax pmax
comp=Z,83nm,0.8s
MNK pmax pmax
comp=E,66nm,0.9s
MNK pmax pmax
comp=N,38nm,0.9s
MNK MLR MLR
comp=Z,47µm,23.0s
MNK MLR MLR
comp=N,31µm,20.0s
MNK MLR MLR
comp=E,26µm,20.0s
**MUD Monsted U'grnd** 72.38 356 ⇑P P 22 08 17.8 -0.2
**MUD Monsted U'grnd** 72.38 356 *i*P P 22 08 18.1 +0.2
MUD IAmb IAmb 22 08 21.1
comp=Z,21nm,0.6s
**VRH Novokhopyorsk** 72.41 335 *e*P P 22 08 15.4 -2.8
VRH *e* 22 08 17.1
VRH pmax pmax
comp=Z,180nm,0.6s
VRH MLR MLR
comp=Z,44µm,19.0s
**DWPF Disney Wildern** 72.44 67 P P 22 08 18.6 -0.2
**DWPF Disney Wildern** 72.44 67 IAMs_20 IAMs_20 22 43 17.3
comp=Z,22µm,19.0s
**DWPF Disney Wildern** 72.44 67 ⇑P P 22 08 19.1 +0.3
**DWPF Disney Wildern** 72.44 67 P P 22 08 19.2 +0.3
baz=319
DWPF S S 22 17 40.7 +0.1
baz=319
**INVG Invergeldie, C** 72.46 4 *e*P P 22 08 18.5 +0.1
INVG IAmb IAmb 22 08 19.4
comp=Z,225nm,2.4s
INVG IAMs_20 IAMs_20 22 36 53.7
comp=Z,11µm,25.0s
**HNLY HANLEY** 72.50 301 *e*P P 22 08 20.4 +0.6
**LAWE Loch Awe, Argy** 72.57 4 *e*P P 22 08 18.2 -0.9
LAWE IAmb IAmb 22 08 22.0
comp=Z,147nm,0.7s
LAWE IAMs_20 IAMs_20 22 40 40.7
comp=Z,33µm,19.5s
**CMIG Matias Romero** 72.58 84 LR LR 22 35 22.8
comp=Z,18µm,21.9s,baz=306,slow=32
**CHGR Chuyangaron** 72.89 311 P P 22 08 21.0 -0.5
CHGR IAmb IAmb 22 08 32.4
comp=Z,184nm,0.8s
**CHGR Chuyangaron** 72.89 311 P P 22 08 21.0 -0.5
CHGR pmax pmax
comp=Z,184nm,0.8s
**SIMJ Simiganj** 72.96 311 P P 22 08 21.4 -0.6
SIMJ IAmb IAmb 22 08 27.6
comp=Z,140nm,1.0s
**COP Copenhagen** 72.97 354 *i*P P 22 08 21.4 0.0
COP IAmb IAmb 22 08 24.2
comp=Z,48nm,0.7s
**LIFNC LIFOU** 72.99 194 P P 22 08 22.0 +0.1
**EDI Edinburgh** 72.99 3 *e*P P 22 08 20.2 -1.5
EDI IAMs_20 IAMs_20 22 35 43.6
comp=Z,22µm,25.9s
**PPT Papeete** 73.01 152 P P 22 08 22.5 +0.4
comp=Z,20nm,0.9s,baz=225,slow=23,SNR=2.0
PPT LR LR 22 33 29.4
comp=Z,19µm,21.5s,baz=314,slow=30
comp=Z,20nm,0.9s
**PPT2 Papeete2** 73.03 152 *e*P P 22 08 19.9 -2.4
comp=Z,128nm,1.6s
**PPT2 Papeete2** 73.03 152 *e*P P 22 08 23.2 +0.9
comp=Z,4µm,30.8s
**PPT2 Papeete2** 73.03 152 *e*PP PP 22 10 58.9 -6.5
comp=Z,1µm,27.0s
**PPT2 Papeete2** 73.03 152 *e*PP PP 22 11 00.2 -5.2
comp=Z,332nm,22.1s
PPT2 *e*S S 22 17 47.7 +0.4
comp=Z,26µm,30.0s
PPT2 *e*S SKiKP 22 17 50.4 -2.0
comp=Z,5µm,26.7s
PPT2 *e*SS SS 22 22 31.4 +2.4
comp=Z,16µm,26.8s
PPT2 *e*SS SS 22 22 33.6 +4.6
comp=Z,3µm,23.2s
PPT2 *e*LQ LQ 22 27 37.2
comp=Z,4µm,24.6s
PPT2 *e*LQ LQ 22 27 41.6
comp=Z,9µm,24.2s
PPT2 *e*LR LR 22 30 37.7
comp=Z,52µm,29.5s
PPT2 *e*LR LR 22 30 44.5
comp=Z,79µm,28.2s
PPT2 *e*LR LR 22 30 48.2
comp=Z,11µm,21.6s
**PPTF Pamatai, Papee** 73.03 152 P P 22 08 22.4 +0.1
PPTF IAmb IAmb 22 09 00.3
comp=Z,329nm,1.6s
**VSR Storozhevoye** 73.05 337 *e*P P 22 08 19.5 -2.6
VSR *e* 22 08 21.2
VSR pmax pmax
comp=Z,390nm,1.6s
VSR MLR MLR
comp=Z,70nm,19.0s
**PGBU Glenifferbraes** 73.06 4 *e*P P 22 08 20.7 -1.3
PGBU IAmb IAmb 22 08 24.4
comp=Z,105nm,0.9s
PGBU IAMs_20 IAMs_20 22 39 05.6
comp=Z,26µm,22.4s
**PAE Paea** 73.10 152 *e*P P 22 08 22.8 +0.2
comp=Z,39nm,1.3s
**PAE Paea** 73.10 152 *e*PP PP 22 11 01.1 -4.8
comp=Z,155nm,22.7s
PAE *e*S S 22 17 50.1 +2.2
comp=Z,3µm,26.7s
PAE *e*SS SS 22 22 34.7 +4.8
comp=Z,2µm,24.0s
PAE *e*LQ LQ 22 27 45.5
comp=Z,2µm,24.3s
PAE *e*LR LR 22 30 49.5
comp=Z,9µm,24.4s
**NAYO Nakonayok** 73.15 272 P P 22 08 24.6 +1.4
**VORD Divnogorie** 73.25 336 *e*P P 22 08 21.3 -1.9
VORD *e* 22 08 23.0
VORD pmax pmax
comp=Z,90nm,0.5s
VORD MLR MLR
comp=Z,31µm,18.0s
KOUNC **Koumac, New Ca** 73.27 197 P P 22 08 25.8 +2.2
KOUNC **Koumac, New Ca** 73.27 197 P P 22 08 23.9 +0.4
KOUNC IAmb IAmb 22 09 03.0
comp=Z,427nm,2.0s
KOUNC **Koumac, New Ca** 73.27 197 ⇓P P 22 08 25.6 +2.0
**COEN Coen** 73.29 219 P P 22 08 24.8 +0.9
**COEN Coen** 73.29 219 P P 22 08 23.9 0.0
COEN IAmb IAmb 22 08 26.6
comp=Z,176nm,1.1s
**COEN Coen** 73.29 219 ⇑P P 22 08 23.8 0.0
**TVO Taravao** 73.31 151 *e*P P 22 08 27.3 +3.4
comp=Z,0.1nm,0.7s
**SSRD Sdr. Stenderup** 73.34 355 *i*P P 22 08 22.9 -0.7
SSRD IAmb IAmb 22 08 27.3
comp=Z,47nm,0.8s
**BSD Bornholm Skovb** 73.35 352 ⇑P P 22 08 22.9 -0.8
**BSD Bornholm Skovb** 73.35 352 *e*P P 22 08 23.2 -0.5
**BSD Bornholm Skovb** 73.35 352 *i*P P 22 08 22.9 -0.8
BSD IAML 22 08 28.8
comp=Z,447nm,0.4s
**SUW Suwalki** 73.51 347 *e*P P 22 08 23.7 -1.0
**SUW Suwalki** 73.51 347 P P 22 08 23.7 -1.0
SUW IAmb IAmb 22 08 36.4
comp=Z,312nm,1.2s
SUW IAMs_20 IAMs_20 22 45 15.0
comp=Z,27µm,20.0s
**SUW Suwalki** 73.51 347 ⇑P P 22 08 23.2 -1.5
**SUW Suwalki** 73.51 347 *e*P P 22 08 23.4 -1.3
**SUW Suwalki** 73.51 347 P P 22 08 23.7 -1.0
SUW pmax pmax
comp=Z,312nm,1.2s
SUW MLR MLR
comp=Z,27µm,20.0s
**EKA Eskdalemuir Ar** 73.59 3 P P 22 08 25.0 -0.1
comp=Z,28nm,0.5s,baz=4.1,slow=5.3,SNR=76
comp=Z,28nm,0.5s
**ESK Eskdalemuir** 73.60 3 P P 22 08 25.3 +0.1
**ESK Eskdalemuir** 73.60 3 *e*P P 22 08 24.8 -0.5
ESK IAMs_20 IAMs_20 22 36 02.4
comp=Z,21µm,25.7s
**ESK Eskdalemuir** 73.60 3 P P 22 08 25.3 +0.1
ESK pmax pmax
comp=Z,64nm,0.9s
**IDGL Inch Island, C** 73.64 6 P P 22 08 25.0 -0.4
**IDGL Inch Island, C** 73.64 6 *e*P P 22 08 24.9 -0.6
**CLGH Cloghs, Cushen** 73.71 5 *e*P P 22 08 24.7 -1.1
CLGH IAMs_20 IAMs_20 22 41 25.4
comp=Z,29µm,19.2s
**NEWG New Galloway** 73.76 4 *e*P P 22 08 24.9 -1.2
NEWG IAmb IAmb 22 08 29.1
comp=Z,149nm,1.4s
NEWG IAMs_20 IAMs_20 22 39 26.6
comp=Z,25µm,22.2s
**KLP Kalpa** 73.84 300 *e*P P 22 08 28.1 +0.6
KLP IAmb IAmb 22 08 37.6
comp=Z,500nm,1.4s
**060A Indiantown** 73.87 67 IAMs_20 IAMs_20 22 45 17.2
comp=Z,28µm,19.0s
**VLK Valmikinagar** 73.93 294 *e*P P 22 08 29.2 +1.6
**GAL1 Galloway** 73.99 4 *e*P P 22 08 26.6 -0.9
GAL1 IAmb IAmb 22 08 29.7
comp=Z,74nm,0.9s
GAL1 IAMs_20 IAMs_20 22 39 43.8
comp=Z,30µm,23.3s
**RAR Rarotonga** 74.02 162 P P 22 08 27.6 -0.3
comp=Z,5.6nm,0.6s,baz=354,slow=22,SNR=2.7
RAR LR LR 22 34 23.9
comp=Z,43µm,20.8s,baz=314,slow=30
**RGN Rugen** 74.04 353 P P 22 08 28.2 +0.4
RGN IAmb IAmb 22 09 07.6
comp=Z,150nm,0.8s
RGN IAMs_20 IAMs_20 22 39 20.0
comp=Z,28µm,22.0s
**RGN Rugen** 74.04 353 ⇑P P 22 08 27.8 0.0
**RGN Rugen** 74.04 353 *e*P P 22 08 27.7 0.0
**RGN Rugen** 74.04 353 *e*P P 22 08 29.1 +1.3
comp=Z,99nm,0.8s,baz=5.2,slow=5.6
**PTH Pithoragarh** 74.29 298 *e*P P 22 08 30.9 +0.9
YATNC **Mamie plateau,** 74.30 195 P P 22 08 32.1 +2.5
**KESW Keswick, Cumbr** 74.33 3 *e*P P 22 08 29.3 -0.2
KESW IAmb IAmb 22 08 33.3
comp=Z,292nm,1.4s
KESW IAMs_20 IAMs_20 22 36 23.3
comp=Z,25µm,24.3s
**DHRM DHARAMSHALA** 74.33 302 *e*P P 22 08 30.0 -0.2
DHRM IAmb IAmb 22 08 35.9
comp=Z,270nm,0.7s
**LGTI Lohaghat** 74.35 298 *e*P P 22 08 31.9 +1.8
**DZM Mont Dzumac** 74.38 195 P P 22 08 32.5 +2.3
**DZM Mont Dzumac** 74.38 195 *e*P P 22 08 31.6 +1.4
comp=Z,365nm,1.6s
**DZM Mont Dzumac** 74.38 195 *e*PP PP 22 11 13.9 -3.1
comp=Z,2µm,27.9s
DZM *e*S S 22 18 02.5 0.0
comp=Z,14µm,26.1s
DZM *e*SS SS 22 22 52.8 +3.1
comp=Z,13µm,30.1s
DZM *e*LQ LQ 22 27 56.2
comp=Z,27µm,27.4s
DZM *e*LR LR 22 31 28.2
comp=Z,51µm,24.7s
**DZM Mont Dzumac** 74.38 195 P P 22 08 31.0 +0.8
DZM IAmb IAmb 22 08 56.5
comp=Z,242nm,1.4s
**DZM Mont Dzumac** 74.38 195 ⇑P P 22 08 31.9 +1.7
**DZM Mont Dzumac** 74.38 195 LR LR 22 34 35.8
comp=Z,17µm,21.6s,baz=20,slow=30
**NOUC Port Laguerre** 74.44 195 P P 22 08 33.0 +2.6
**061Z Ochoppi** 74.44 68 IAMs_20 IAMs_20 22 42 36.5
comp=Z,19µm,20.0s
**SRDT SRDT** 74.50 274 P P 22 08 31.9 +0.8
**THN Thein Dam** 74.50 303 *e*P P 22 08 31.5 +0.6
**GDLE Glaisdale, N Y** 74.56 2 *e*P P 22 08 31.0 +0.2
**IOMK Kirk Michael** 74.60 4 *e*P P 22 08 30.6 -0.5
IOMK IAmb IAmb 22 08 33.3
comp=Z,220nm,0.9s
IOMK IAMs_20 IAMs_20 22 40 01.6
comp=Z,52µm,22.3s
**JMU Jammu** 74.71 303 *e*P P 22 08 33.7 +1.6
**WIM Isle of Man** 74.71 4 *e*P P 22 08 32.6 +0.8
**SMLA Simla** 74.74 301 *e*P P 22 08 32.0 -0.3
**ILTH Belurgan, Co L** 74.75 5 P P 22 08 32.8 +0.9
**ILTH Belurgan, Co L** 74.75 5 *e*P P 22 08 31.4 -0.5
**PINNC Pines Island,** 74.76 194 P P 22 08 34.9 +2.7
**PINNC Pines Island,** 74.76 194 P P 22 08 33.0 +0.8
PINNC IAmb IAmb 22 08 58.3
comp=Z,642nm,2.0s
PINNC IAMs_20 IAMs_20 22 47 07.7
comp=Z,15µm,18.0s
**NIL Nilore** 74.83 305 P P 22 08 32.5 -0.4
NIL IAmb IAmb 22 08 36.9
comp=Z,108nm,0.7s
**NIL Nilore** 74.83 305 P P 22 08 33.6 +0.7
NIL S S 22 18 05.7 -1.9
**NIL Nilore** 74.83 305 P P 22 08 32.5 -0.4
NIL pmax pmax
comp=Z,108nm,0.7s
**BSEG Bad Segeberg** 74.84 355 *e*P P 22 08 33.0 +0.6
comp=Z,62nm,0.8s,baz=5.2,slow=5.6
**DDI Dehra Dun** 74.88 300 *e*P P 22 08 34.0 +0.7
**CCIG Comitan** 74.90 83 P P 22 08 34.2 +0.6
**BHK Bhakra** 74.92 301 *e*P P 22 08 35.3 +1.9
BHK IAmb IAmb 22 08 37.0
comp=Z,273nm,0.6s
**GKP Gorka Klasztor** 74.96 351 *e*P P 22 08 31.0 -2.1
**GKP Gorka Klasztor** 74.96 351 *e*P P 22 08 33.7 +0.6
**HPK Haverah Park** 75.01 2 *e*P P 22 08 33.3 -0.1
**IGLA Glengowla, Co** 75.15 7 P P 22 08 34.3 0.0
**BOK Bokaro** 75.44 290 *e*P P 22 08 37.3 +0.8
BOK IAmb IAmb 22 08 40.9
comp=Z,392nm,0.8s
**WPS Cemaes, Angles** 75.47 4 *e*P P 22 08 35.3 -0.8
WPS IAmb IAmb 22 08 37.1
comp=Z,162nm,1.5s
**WME Myndd Eilian** 75.48 4 *e*P P 22 08 36.7 +0.5
WME IAmb IAmb 22 08 38.5
comp=Z,70nm,0.7s
**DSB Dublin** 75.53 5 P P 22 08 36.4 0.0
**DSB Dublin** 75.53 5 P P 22 08 36.4 0.0
DSB IAmb IAmb 22 08 39.4
comp=Z,109nm,0.7s
DSB IAMs_20 IAMs_20 22 41 47.7
comp=Z,23µm,21.0s
**DSB Dublin** 75.53 5 P P 22 08 35.0 -1.4
**DSB Dublin** 75.53 5 ⇓P P 22 08 36.6 +0.1
**LMK Market Rasen** 75.53 1 *e*P P 22 08 35.7 -0.8
**SBUM Sibu** 75.55 255 P P 22 08 36.8 -0.3
**LBWR Ladybower, Pea** 75.56 2 *e*P P 22 08 36.3 -0.3
LBWR IAmb IAmb 22 08 40.2

comp=Z,120nm,1.1s
LBWR IAMs_20 IAMs_20 22 48 36.1

comp=Z,21µm,20.2s
**WLF1 Llynfaes 75.58 4** *e*P **P** **22 08 36.4 -0.4**
WLF1 IAmb IAmb 22 08 39.5

comp=Z,409nm,1.5s
WLF1 IAMs_20 IAMs_20 22 40 41.1

comp=Z,46µm,23.0s
**BKB Balikpapan 75.71 249** P **P** **22 08 39.7 +1.7**
**BKB Balikpapan 75.71 249** P **P** **22 08 37.5 -0.4**
**AKASG Malin Array Be 75.72 343** P **P** **22 08 36.6 -1.0**
AKASG IAmb IAmb 22 08 39.7

comp=Z,141nm,0.9s
**AKASG Malin Array Be 75.72 343** P **P** **22 08 36.5 -1.1**
comp=Z,47nm,0.5s,baz=18,slow=5.6,SNR=91
AKASG S **S** **22 18 12.1 -4.6**

comp=Z,0.3nm,0.4s,baz=36,slow=17,SNR=1.4
AKASG LR LR 22 45 08.2

comp=Z,28µm,21.2s,baz=16,slow=38
comp=Z,47nm,0.5s
**AKASG Malin Array Be 75.72 343** P **P** **22 08 36.6 -1.0**
AKASG pmax pmax

comp=Z,141nm,0.9s
**AKBB Malin Array Si 75.72 343** P **P** **22 08 36.5 -1.1**
AKBB IAmb IAmb 22 08 39.6

comp=Z,132nm,0.8s
**AKBB Malin Array Si 75.72 343** P **P** **22 08 36.5 -1.1**
AKBB pmax pmax

comp=Z,132nm,0.8s
**KIEV Kiev 75.72 343** IAMs_20 IAMs_20 22 44 47.5

comp=Z,33µm,21.0s
**KIEV Kiev 75.72 343** *i* P **P** **22 08 35.6 -2.0**
SNR=103
**KIEV Kiev 75.72 343** ⇑P **P** **22 08 36.4 -1.2**
**KIEV Kiev 75.72 343** ⇑P **P** **22 08 37.9 +0.3**
**KIEV Kiev 75.72 343** ⇑P **P** **22 08 37.9 +0.3**
**KIEV Kiev 75.72 343** P **P** **22 08 36.6 -1.0**
**GORT1 Trebel 75.72 354** *e*P **P** **22 08 38.1 +0.6**
comp=Z,3µm,3.4s,baz=5.2,slow=5.6
**STNC Stoke 75.86 3** *e*P **P** **22 08 35.9 -2.4**
STNC IAMs_20 IAMs_20 22 37 09.1

comp=Z,20µm,24.0s
**BEL Belsk 75.95 348** *e*P **P** **22 08 39.4 +0.5**
**FOEL Foel Wylfa 76.03 3** *e*P **P** **22 08 39.4 +0.1**
FOEL IAmb IAmb 22 08 41.7

comp=Z,77nm,0.8s
FOEL IAMs_20 IAMs_20 22 40 46.1

comp=Z,28µm,22.3s
**LLW Llanuwychllyn 76.05 4** *e*P **P** **22 08 39.1 -0.3**
**RUE Ruedersdorf 76.05 353** *e*P **P** **22 08 39.4 0.0**
**RUE Ruedersdorf 76.05 353** *e*P **P** **22 08 39.3 -0.1**
comp=Z,57nm,0.8s,baz=5.2,slow=5.6
**RETH Rethem/Aller, 76.09 355** *e*P **P** **22 08 39.8 +0.2**
comp=Z,2µm,3.3s,baz=5.2,slow=5.6
**KBL Kabul 76.24 308** P **P** **22 08 39.8 -1.3**
**KBL Kabul 76.24 308** P **P** **22 08 40.5 -0.7**
SNR=55
**KBL Kabul 76.24 308** P **P** **22 08 39.8 -1.3**
KBL pmax pmax

comp=Z,110nm,0.9s
**WACR West Acre 76.28 1** *e*P **P** **22 08 39.9 -0.8**
WACR IAmb IAmb 22 08 43.6

comp=Z,179nm,0.9s
**NRDL Niedersach Rie 76.29 355** *e*P **P** **22 08 39.1 -1.7**
comp=Z,300nm,2.1s,baz=5.2,slow=5.6
**IWEX Carrickbyrne, 76.37 6** P **P** **22 08 40.0 -1.2**
**IWEX Carrickbyrne, 76.37 6** *e*P **P** **22 08 40.0 -1.2**
**FLTG Flechtingen 76.39 354** ⇑P **P** **22 08 40.4 -1.0**
**FLTG Flechtingen 76.39 354** *e*P **P** **22 08 40.7 -0.6**
comp=Z,46nm,1.0s,baz=5.2,slow=5.6
**HLM1 Long Mynd 76.41 3** *e*P **P** **22 08 40.9 -0.6**
HLM1 IAMs_20 IAMs_20 22 40 59.0

comp=Z,28µm,22.3s
**RTAL Retalhuleu 76.51 84** P **P** **22 08 42.4 -0.2**
**VAL Valentia 76.55 8** P **P** **22 08 42.7 +0.4**
**VAL Valentia 76.55 8** P **P** **22 08 41.3 -1.0**
**IBBN Ibbenburen 76.59 356** ⇑P **P** **22 08 42.4 -0.1**
**IBBN Ibbenburen 76.59 356** *e*P **P** **22 08 42.6 +0.1**
comp=Z,116nm,1.0s,baz=5.2,slow=5.6
**ALBI Allahabad 76.65 294** *e*P **P** **22 08 42.8 -0.5**
ALBI IAmb IAmb 22 08 47.9

comp=Z,568nm,0.6s
**MTSU Mount Surprise 76.65 217** P **P** **22 08 44.2 +1.0**
**KDU Kakadu 76.87 230** P **P** **22 08 45.1 +0.6**
**RSBS Rosebush, Pemb 76.90 4** *e*P **P** **22 08 44.6 +0.3**
RSBS IAmb IAmb 22 08 47.3

comp=Z,312nm,1.5s
**APG El Apazote 76.91 82** P **P** **22 08 46.6 +1.5**
comp=Z,5.1nm,0.9s,baz=324,slow=9.1,SNR=21
APG S **S** **22 18 29.9 -1.4**

comp=Z,0.1nm,0.3s,baz=60,slow=22,SNR=1.3
**CLZ Clausthal 76.93 355** *e*P **P** **22 08 45.4 +0.9**
comp=Z,77nm,1.0s,baz=5.2,slow=5.6
**MONM Monmouth 77.09 3** *e*P **P** **22 08 44.9 -0.5**
MONM IAmb IAmb 22 08 47.5

comp=Z,103nm,1.0s
**KAPI Kappang 77.10 245** P **P** **22 08 45.9 0.0**
KAPI IAmb IAmb 22 09 00.4

comp=Z,307nm,1.6s
**KAPI Kappang 77.10 245** P **P** **22 08 46.8 +0.9**
comp=Z,61nm,1.0s,baz=21,slow=3.6,SNR=12
KAPI S **S** **22 18 32.7 0.0**

comp=Z,3.3nm,0.3s,baz=40,slow=20,SNR=1.0
KAPI LR LR 22 40 40.5

comp=Z,4µm,20.7s,baz=32,slow=34
comp=Z,61nm,1.0s
**KAPI Kappang 77.10 245** P **P** **22 08 47.8 +1.9**
**KAPI Kappang 77.10 245** P **P** **22 08 45.9 0.0**
KAPI pmax pmax

comp=Z,307nm,1.6s
**STRD Stroud 77.18 3** *e*P **P** **22 08 44.0 -1.9**
**GTTG Gottingen 77.25 355** *e*P **P** **22 08 46.3 +0.1**
comp=Z,97nm,1.2s,baz=5.2,slow=5.6
**OLDB Oldbury-Upon-S 77.28 3** *e*P **P** **22 08 43.7 -2.7**
**CLL Collm 77.28 353** P **P** **22 08 45.4 -1.0**
CLL IAMs_20 IAMs_20 22 45 57.8

comp=Z,25µm,21.0s
**CLL Collm 77.28 353** *i* P **P** **22 08 45.1 -1.3**
comp=Z,271nm,2.0s
CLL *e*Pmax 22 08 46.0
CLL *e*Plp 22 08 47.0

comp=Z,6µm,14.8s
CLL *i* pP **pP** **22 08 55.6 -0.2**

comp=Z,58nm,1.1s
CLL *i* sP **sP** **22 08 59.9 +0.6**
CLL *i* x x 22 09 20.6

comp=Z,91nm,1.2s
CLL *e*PP **PP** **22 11 42.0 +2.2**
CLL *e*PPP PPP 22 13 33.0
CLL *e*x x 22 15 21.0
CLL *e*S **S** **22 18 31.0 -2.8**

comp=N,2µm,10.9s
CLL *e*S **S** **22 18 31.0 -2.8**

comp=E,2µm,10.2s
CLL *e*PS **PnS** **22 19 16.0 +1.0**
CLL *e*SS **SS** **22 23 24.0 -6.7**
CLL *e*SSS SSS 22 27 00.0
CLL *e*PKPPKPdf 22 35 52.0
CLL *e*SKPPKPbc 22 39 23.0
CLL AMS AMS 22 45 00.0

comp=Z,26µm,21.7s
CLL R2 00 10 00.0
CLL R2 00 27 00.0

comp=Z,1µm,20.3s
**CLL Collm 77.28 353** *i* P **P** **22 08 45.1 -1.3**
CLL *e*S **S** **22 18 31.0 -2.8**
CLL pmax pmax

comp=Z,271nm,2.0s
**CLL Collm 77.28 353** P **P** **22 08 45.4 -1.0**
**CLL Collm 77.28 353** *e*P **P** **22 08 45.4 -1.0**
comp=Z,43nm,1.1s,baz=5.2,slow=5.6
**DRS Darwin Rock St 77.41 231** P **P** **22 08 48.7 +1.2**
**KUDL Kundal 77.44 299** *e*P **P** **22 08 48.3 +0.7**
KUDL IAmb IAmb 22 08 52.6

comp=Z,172nm,0.6s
**SRGN SRI GANGA NAGA 77.44 302** *e*P **P** **22 08 48.5 +0.8**
SRGN IAmb IAmb 22 08 54.8

comp=Z,226nm,0.7s
**KSP Ksiaz 77.45 351** *e*P **P** **22 08 47.9 +0.5**
**KSP Ksiaz 77.45 351** ⇑P **P** **22 08 46.2 -1.2**
**KSP Ksiaz 77.45 351** P **P** **22 08 46.5 -0.9**
**SWN1 Swindon 77.45 2** *e*P **P** **22 08 47.4 +0.1**
**LVV L'vov 77.46 346** *e*P **P** **22 08 47.6 +0.1**
LVV *e* 22 13 31.3
LVV *e*S **S** **22 18 33.0 -2.8**

**NEUB Neuenburg 77.47 354** *e*P **P** **22 08 47.9 +0.4**
comp=Z,230nm,1.6s,baz=5.2,slow=5.6
**BUG Bochum--Univer 77.47 357** *e*P **P** **22 08 48.1 +0.7**
comp=Z,250nm,1.8s,baz=5.2,slow=5.6
**KSM Kuching 77.48 256** P **P** **22 08 50.4 +2.4**
**KSM Kuching 77.48 256** P **P** **22 08 47.4 -0.7**
KSM IAmb IAmb 22 08 51.3

comp=Z,322nm,1.3s
**GOF Gofitskoye 77.61 332***c i*P **P** **22 08 48.3 -0.1**
GOF *e*S **S** **22 18 37.8 +0.1**
**BRG Berggiesshubel 77.64 352** *i* P **P** **22 08 48.8 +0.4**
BRG Amp 22 08 50.6

comp=Z,37nm,1.0s
**BRG Berggiesshubel 77.64 352** S **S** **22 18 36.0 -1.7**
**BRG Berggiesshubel 77.64 352** Amp 22 19 23.9
comp=Z,5.0nm,1.1s
BRG P **PnS** **22 19 22.8 +3.2**
**BRG Berggiesshubel 77.64 352** SS SS 22 23 40.0 +3.9
**BRG Berggiesshubel 77.64 352** *e*P **P** **22 08 47.7 -0.7**
comp=Z,37nm,1.0s,baz=5.2,slow=5.6
**BRG Berggiesshubel 77.64 352** P **S** **22 18 32.7 -5.0**
**MTN Manton Dam 77.65 231** P **P** **22 08 49.7 +0.8**
**MTN Manton Dam 77.65 231** P **P** **22 08 48.2 -0.7**
**MTN Manton Dam 77.65 231** ⇑P **P** **22 08 48.4 -0.5**
**WOL Wolverton 77.66 2** *e*P **P** **22 08 44.6 -4.0**
**KASTN Kahler Asten 77.67 356** *e*P **P** **22 08 49.3 +0.7**
comp=Z,212nm,1.8s,baz=5.2,slow=5.6
**OJC Ojcow 77.67 348** *e*P **P** **22 08 48.2 -0.4**
**OJC Ojcow 77.67 348** P **P** **22 08 48.0 -0.6**
**OJC Ojcow 77.67 348** ⇑P **P** **22 08 47.8 -0.9**
**OJC Ojcow 77.67 348** P **P** **22 08 48.0 -0.6**
OJC pmax pmax

comp=Z,187nm,1.7s
**OJC Ojcow 77.67 348** P **P** **22 08 48.0 -0.6**
**CHVC Chvalec 77.72 351** *e*P **P** **22 08 48.9 -0.1**
CHVC *e*S **S** **22 18 35.7 -3.1**
CHVC AMS AMS 22 43 30.0

comp=Z,28µm,21.3s
**CHVC Chvalec 77.72 351** *e*P **P** **22 08 48.9 -0.1**
CHVC *e*S **S** **22 18 35.7 -3.1**
CHVC MLR MLR

comp=Z,28µm,21.3s
**OSTC Ostas 77.74 351** *e*P **P** **22 08 49.0 -0.1**
OSTC AMS AMS 22 43 30.0

comp=Z,27µm,20.8s
**OSTC Ostas 77.74 351** *e*P **P** **22 08 49.0 -0.1**
OSTC MLR MLR

comp=Z,27µm,20.8s
**CTA Charters Tower 77.74 214** LR LR 22 39 19.5
comp=Z,946nm,20.6s,baz=21,slow=33
**CTAO Charters Tower 77.74 214** P **P** **22 08 49.3 0.0**
CTAO IAmb IAmb 22 08 52.3

comp=Z,128nm,1.0s
**CTAO Charters Tower 77.74 214** ⇑P **P** **22 08 48.8 -0.5**
**CTAO Charters Tower 77.74 214** P **P** **22 08 49.3 0.0**
CTAO pmax pmax

comp=Z,128nm,1.0s
**ERBR Yeremizino-Bor 77.76 334** *e*P **P** **22 08 46.2 -3.0**
ERBR *e**PP **pP** **22 08 51.3 -7.3**
ERBR *e*S **S** **22 18 37.7 -1.5**
ERBR pmax pmax

comp=Z,366nm,1.0s
ERBR MLR MLR

comp=E,37µm,19.0s
ERBR MLR MLR

comp=Z,85µm,18.0s
ERBR MLR MLR

comp=N,106µm,18.0s
**UPC Upice 77.81 351** *e*P **P** **22 08 49.6 +0.2**
UPC *e*S **S** **22 18 34.9 -4.7**
UPC AMS AMS 22 43 30.0

comp=N,29µm,21.3s
**UPC Upice 77.81 351** *e*P **P** **22 08 49.6 +0.2**
UPC *e*S **S** **22 18 34.9 -4.7**
UPC MLR MLR

comp=Z,29µm,21.3s
**KWP Kalwaria Pacla 77.84 346** *e*P **P** **22 08 50.6 +1.0**
**KWP Kalwaria Pacla 77.84 346** P **P** **22 08 49.2 -0.4**
**KWP Kalwaria Pacla 77.84 346** P **P** **22 08 49.2 -0.4**
KWP pmax pmax

comp=Z,248nm,0.7s
**KWP Kalwaria Pacla 77.84 346** P **P** **22 08 49.4 -0.2**
**ELSH Elham, Standar 77.86 1** *e*P **P** **22 08 49.4 -0.3**
ELSH IAMs_20 IAMs_20 22 49 12.0

comp=Z,19µm,22.9s
**HTL Hartland 77.87 4** *e*P **P** **22 08 49.5 -0.1**
HTL IAMs_20 IAMs_20 22 43 52.0

comp=Z,24µm,19.8s
**PVCC Panska Ves 77.92 352** *e*P **P** **22 08 49.8 -0.2**
PVCC AMS AMS 22 45 30.0

comp=Z,30µm,20.8s
**PVCC Panska Ves 77.92 352** *e*P **P** **22 08 49.8 -0.2**
PVCC MLR MLR

comp=Z,30µm,20.8s
**DPC Dobruska-Polom 77.93 351** *e*P **P** **22 08 50.0 -0.2**
DPC *e*S **S** **22 18 36.9 -4.2**
DPC AMS AMS 22 43 40.0

comp=Z,25µm,20.2s
**DPC Dobruska-Polom 77.93 351** *e*P **P** **22 08 50.0 -0.2**
DPC *e*S **S** **22 18 36.9 -4.2**
DPC MLR MLR

comp=Z,25µm,20.2s
**DPC Dobruska-Polom 77.93 351** P **P** **22 08 49.8 -0.4**
**HSKC Hora Svate Kat 77.94 353** *e*P **P** **22 08 51.0 +0.8**
HSKC *e*S **S** **22 18 34.9 -6.2**
HSKC AMS AMS 22 46 10.0

comp=Z,27µm,20.4s
**RICC Richard 77.95 352** *e*P **P** **22 08 50.5 +0.3**
RICC AMS AMS 22 45 20.0

comp=Z,26µm,20.5s
**UBBA Unterbreizbach 77.97 355** *e*P **P** **22 08 49.5 -0.6**
comp=Z,1µm,3.3s,baz=5.2,slow=5.6
**MOX Moxa 78.04 354** *e*P **P** **22 08 49.3 -1.4**
comp=Z,140nm,1.7s,baz=5.2,slow=5.6
MOX *e*S **PnS** **22 19 23.4 -1.4**
MOX *e*SS SS 22 23 56.4 +14
MOX *e*L L 22 47 22.8

comp=Z,19µm,21.1s
**MTO3 Montecristo 78.06 82** P **P** **22 08 50.9 -0.6**
**MAK Makhachkala 78.08 328** *e*P **P** **22 08 49.6 -1.4**
MAK *e*S **S** **22 18 41.8 -0.9**
MAK *e*SS **SS** **22 23 53.0 +10**
MAK pmax pmax

comp=Z,325nm,0.9s
MAK pmax pmax

comp=Z,4µm,3.6s
MAK smax smax

comp=N,2µm,3.8s
MAK smax smax

comp=E,3µm,6.8s
**HMNX Herstmonceux 78.14 1** *e*P **P** **22 08 50.6 -0.6**
**KRLC Kraliky 78.16 350** *e*P **P** **22 08 51.2 -0.2**
KRLC AMS AMS 22 48 20.0

comp=E,21µm,19.5s
**KRLC Kraliky 78.16 350** *e*P **P** **22 08 51.2 -0.2**
KRLC MLR MLR

comp=Z,21µm,19.5s
**BBSR BB Station 78.16 53** P **P** **22 08 51.4 -0.3**
BBSR IAmb IAmb 22 08 54.6

comp=Z,179nm,0.9s
**BBSR BB Station 78.16 53** IAMs_20 IAMs_20 22 45 24.6
comp=Z,19µm,19.0s
**BBSR BB Station 78.16 53** ⇑P **P** **22 08 51.4 -0.3**
**PLN Plauen 78.16 353** *e*P **P** **22 08 51.2 -0.2**
comp=Z,2µm,3.7s,baz=5.2,slow=5.6
**BEBN Eben Emael 78.17 358** *d*P **P** **22 08 50.9 -0.5**
**TANN Tannenbergstha 78.21 353** *e*P **P** **22 08 52.3 +0.6**
comp=Z,228nm,1.9s,baz=5.2,slow=5.6
**JHSG JHARSUGUGA 78.24 290** *e*P **P** **22 08 53.8 +1.6**
JHSG IAmb IAmb 22 08 59.1

comp=Z,573nm,0.5s
**OKC Ostrava-Krasne 78.24 349** *e*P **P** **22 08 51.7 -0.1**
OKC AMS AMS 22 45 10.0

comp=Z,33µm,19.8s
**OKC Ostrava-Krasne 78.24 349** *e*P **P** **22 08 51.7 -0.1**
OKC MLR MLR

comp=Z,33µm,19.8s
**SBD Saint Breward 78.29 4** *e*P **P** **22 08 51.1 -1.0**
**SORM Soroca 78.34 342** ⇑P **P** **22 08 52.0 -0.3**
**SORM Soroca 78.34 342** ⇑P **P** **22 08 52.0 -0.3**
**SORM Soroca 78.34 342** P **P** **22 08 51.5 -0.8**
**MEM Membach 78.35 357** *d*P **P** **22 08 52.0 -0.4**
comp=Z,53nm,1.1s
**BTNL Ternell 78.37 357** *d*P **P** **22 08 52.0 -0.6**

**MORC Moravsky Berou 78.37 350** P **P** **22 08 52.4 -0.2**
**MORC Moravsky Berou 78.37 350**⇑ *i*P **P** **22 08 51.7 -0.9**
MORC *e*S **S** **22 18 43.8 -2.0**
**MORC Moravsky Berou 78.37 350** ⇑P **P** **22 08 51.6 -0.9**
**MORC Moravsky Berou 78.37 350** ⇑P **P** **22 08 52.3 -0.2**
**MORC Moravsky Berou 78.37 350** P **P** **22 08 52.4 -0.2**
MORC pmax pmax

comp=Z,168nm,2.0s
**AHRW Bad Neuenahr-A 78.38 357** *e*P **P** **22 08 52.3 -0.2**
comp=Z,116nm,1.2s,baz=5.2,slow=5.6
**BSTI Sart Tilman 78.39 358** *d*P **P** **22 08 52.5 -0.1**
comp=Z,13nm,0.6s
**NIE Niedzica 78.39 348** *e*P **P** **22 08 54.1 +1.5**
**NIE Niedzica 78.39 348** P **P** **22 08 52.7 0.0**
**JHNI Jhansi 78.39 296** *e*P **P** **22 08 51.7 -1.3**
JHNI IAmb IAmb 22 08 56.0

comp=Z,201nm,0.5s
**PRA Prague 78.39 352** *e*P **P** **22 08 52.6 0.0**
PRA *e*S **S** **22 18 40.8 -5.0**
PRA AMS AMS 22 46 00.0

comp=Z,30µm,21.0s
**PRA Prague 78.39 352** *e*P **P** **22 08 52.6 0.0**
PRA *e*S **S** **22 18 40.8 -5.0**
PRA MLR MLR

comp=Z,30µm,21.0s
**DYA Yadsworthy 78.45 4** *e*P **P** **22 08 51.3 -1.7**
**PRU Pruhonice 78.46 352** *e*P **P** **22 08 53.0 0.0**
PRU *e*S **S** **22 18 41.6 -5.0**
PRU AMS AMS 22 45 50.0

comp=Z,30µm,20.5s
**PRU Pruhonice 78.46 352** *e*P **P** **22 08 53.0 0.0**
PRU *e*S **S** **22 18 41.6 -5.0**
PRU MLR MLR

comp=Z,30µm,20.5s
PRU MLR MLR

comp=E,26µm,18.5s
**GOPC GO Pecny, Ondr 78.51 352** *e*P **P** **22 08 53.4 +0.1**
GOPC AMS AMS 22 46 00.0

comp=E,32µm,20.9s
**GOPC GO Pecny, Ondr 78.51 352** *e*P **P** **22 08 53.4 +0.1**
GOPC MLR MLR

comp=Z,32µm,20.9s
**TBI Tubuai 78.51 153** *e*P **P** **22 08 53.1 -0.3**
comp=Z,13µm,30.8s
**TBI Tubuai 78.51 153** *e*P **P** **22 08 54.6 +1.2**
comp=Z,180nm,1.1s
**TBI Tubuai 78.51 153** *e*PP **PP** **22 11 47.6 -4.0**
comp=Z,10µm,31.2s
**TBI Tubuai 78.51 153** *e*PP **PP** **22 11 50.9 -0.7**
comp=Z,3µm,27.0s
TBI *e*S **S** **22 18 45.9 -1.6**

comp=Z,6µm,24.0s
TBI *e*S **S** **22 18 47.5 0.0**

comp=Z,72µm,39.8s
TBI *e*SS **SS** **22 23 50.9 -1.1**

comp=Z,8µm,22.5s
TBI *e*SS SS 22 23 53.3 +1.3

comp=Z,43µm,26.5s
TBI *e*LQ LQ 22 30 02.5

comp=Z,26µm,26.8s
TBI *e*LR LR 22 33 10.2

comp=Z,65µm,29.8s
TBI *e*LR LR 22 33 14.1

comp=Z,327µm,30.8s
TBI *e*LR LR 22 33 20.5

comp=Z,49µm,22.0s
**SOEI Soe 78.53 238** P **P** **22 08 55.2 +1.2**
**SOEI Soe 78.53 238** P **P** **22 08 53.5 -0.4**
SOEI IAmb IAmb 22 09 22.7

comp=Z,172nm,0.9s
**SOEI Soe 78.53 238** P **P** **22 08 51.5 -2.4**
**SOEI Soe 78.53 238** ⇑P **P** **22 08 52.7 -1.2**
**BCLA Clavier 78.56 358** *d*P **P** **22 08 52.0 -1.5**
**KOLS Kolonicke sedl 78.59 347** *e*P **P** **22 08 55.3 +1.5**
KOLS pmax pmax

comp=Z,92nm,0.7s
**KOLS Kolonicke sedl 78.59 347** *e*P **P** **22 08 55.3 +1.5**
**DRBR Darabani 78.59 343** ⇑P **P** **22 08 55.2 +1.4**
**SRIT Nakonsritamara 78.59 269** P **P** **22 08 54.3 0.0**
SRIT IAmb IAmb 22 08 57.4

comp=Z,166nm,1.1s
**BGES Gesves 78.60 358** *d*P **P** **22 08 54.4 +0.7**
comp=Z,35nm,1.0s
**BHOU Houvegnez 78.60 357** *d*P **P** **22 08 54.2 +0.4**
**CCA1 Carnmenellis 78.64 5** *e*P **P** **22 08 53.7 -0.3**
CCA1 IAMs_20 IAMs_20 22 43 17.1

comp=Z,26µm,20.7s
**TNS Taunus Mts 78.64 356** *e*P **P** **22 08 52.3 -1.8**
comp=Z,210nm,1.8s,baz=5.2,slow=5.6
**MANZ Manzenberg 78.66 353** *e*P **P** **22 08 54.0 -0.2**
comp=Z,51nm,2.0s,baz=5.2,slow=5.6
**LABN Labinsk 78.67 333** *e*P **P** **22 08 51.2 -3.1**
LABN *e**PP **PcP** **22 08 56.4 -6.8**
LABN *e*S **S** **22 18 47.4 -1.7**
LABN pmax pmax

comp=Z,283nm,1.4s
LABN MLR MLR

comp=Z,80µm,19.0s
LABN MLR MLR

comp=E,68µm,17.0s
LABN MLR MLR

comp=N,15µm,15.0s
**BMRD Maredsous 78.68 358** *d*P **P** **22 08 53.9 -0.3**
**MMRI Maumere 78.70 241** P **P** **22 08 56.2 +1.5**
**MMRI Maumere 78.70 241** P **P** **22 08 54.4 -0.3**
MMRI IAmb IAmb 22 08 56.4

comp=Z,213nm,1.1s
**KVAR Kislovodsk Arr 78.72 331** LR LR 22 47 14.9
comp=Z,48µm,21.2s,baz=276,slow=38
**KIV Kislovodsk 78.72 331** P **P** **22 08 54.3 -0.4**
KIV IAmb IAmb 22 09 01.4

comp=Z,166nm,0.8s
**KIV Kislovodsk 78.72 331** *i* P **P** **22 08 54.1 -0.6**
SNR=70
**KIV Kislovodsk 78.72 331** P **P** **22 08 55.4 +0.7**
KIV S **S** **22 18 48.4 -1.5**
**KIV Kislovodsk 78.72 331** ⇑P **P** **22 08 54.8 +0.1**
**KIV Kislovodsk 78.72 331** *e*P **P** **22 08 53.6 -1.1**
KIV *e* 22 11 51.6
KIV *e*PPP PPP 22 13 38.1
KIV *e*S **S** **22 18 49.9 +0.1**
KIV *e*SS **SS** **22 23 55.4 +2.4**
KIV *e*SSS SSS 22 27 21.5
KIV pmax pmax

comp=Z,155nm,1.0s
KIV pmax pmax

comp=Z,861nm,3.5s
KIV MLR MLR

comp=Z,36µm,19.0s
**KIV Kislovodsk 78.72 331** P **P** **22 08 54.7 0.0**
**CRVS Cervenica-Dubn 78.73 347** *e*P **P** **22 08 56.0 +1.4**
CRVS pmax pmax

comp=Z,529nm,2.1s
**CRVS Cervenica-Dubn 78.73 347** *e*P **P** **22 08 56.0 +1.4**
**MAUC Maruska 78.74 350** *e*P **P** **22 08 55.1 +0.5**
**LANS Liptovska Anna 78.76 348** *e*P **P** **22 08 56.7 +2.0**
LANS pmax pmax

comp=Z,39nm,0.8s
**LANS Liptovska Anna 78.76 348** *e*P **P** **22 08 56.7 +2.0**
**RCHB Rochefort 78.82 358** *d*P **P** **22 08 54.4 -0.6**
comp=Z,30nm,1.4s
**NCK Nalchik 78.86 330***c i*P **P** **22 08 55.7 +0.3**
NCK pmax pmax

comp=Z,667nm,1.4s
**KBZ Khabaz 78.87 331** P **P** **22 08 55.4 0.0**
comp=Z,77nm,0.8s,baz=24,slow=4.1,SNR=106
KBZ PP **PP** **22 11 53.4 +0.1**

comp=Z,16nm,0.9s,baz=267,slow=2.6,SNR=2.0
KBZ S **S** **22 18 52.6 +1.5**

comp=Z,1.9nm,0.9s,baz=197,slow=21,SNR=1.6
KBZ PKPPKP 22 35 53.8

comp=Z,0.6nm,0.5s,baz=296,slow=6.3,SNR=5.5
KBZ LR LR 22 48 49.2

comp=Z,72µm,20.5s,baz=26,slow=40
comp=Z,77nm,0.8s
**KBZ Khabaz 78.87 331***c i*P **P** **22 08 55.3 0.0**
KBZ pmax pmax

comp=Z,163nm,1.0s
KBZ MLR MLR

comp=Z,70µm,21.0s
**ROTZ Rotzenmuhle 78.87 353** *e*P **P** **22 08 55.8 +0.5**
comp=Z,481nm,3.9s,baz=5.2,slow=5.6
**GIVF Givet 78.88 358** *e*P **P** **22 08 56.2 +0.9**
**DOU Dourbes 78.89 358** *d*P **P** **22 08 54.9 -0.5**
comp=Z,41nm,1.3s

**BLSP Bilaspur 78.92 291** *e*P **P** **22 08 55.7 -0.3**
BLSP IAmb IAmb 22 08 58.4
comp=Z,693nm,1.2s
**SHA1 Shidzhatmaz 78.93 331***c i*P **P** **22 08 55.9 -0.1**
**VRAC Vranov 78.94 350**⇑*i*P **P** **22 08 55.3 -0.4**
VRAC *e*S **S** **22 18 49.6 -2.1**
**VRAC Vranov 78.94 350** LR LR 22 43 02.3
comp=Z,20µm,21.5s,baz=11,slow=35
**VRAC Vranov 78.94 350**⇑P **P** **22 08 55.4 -0.3**
**VRAC Vranov 78.94 350**⇑P **P** **22 08 55.4 -0.3**
**BAIF Baives 78.94 359** *e*P **P** **22 08 56.7 +1.1**
**GRA1 Grafenberg Arr 79.02 354** P **P** **22 08 56.4 +0.3**
GRA1 IAms_20 IAms_20 22 48 03.7
comp=Z,22µm,21.0s
**GRF Grafenberg Arr 79.02 354** P **P** **22 08 56.4 +0.3**
GRF pmax pmax
comp=Z,103nm,1.0s
GRF MLR MLR
comp=Z,22µm,21.0s
**GRF Grafenberg Arr 79.02 354** *e*P **P** **22 08 57.5 +1.3**
comp=Z,345nm,1.8s,baz=5.2,slow=5.6
GRF *e*S **ScS** **22 19 17.4 +1.6**
GRF *e*SS SS 22 24 09.5 +13
GRF *e*L L 22 48 03.0
comp=Z,23µm,21.1s
**GRFO Grafenberg 79.02 354** P **P** **22 08 56.4 +0.3**
GRFO IAms_20 IAms_20 22 48 02.7
comp=Z,22µm,21.0s
**GRFO Grafenberg 79.02 354** P **P** **22 08 56.4 +0.3**
GRFO pmax pmax
comp=Z,130nm,1.1s
GRFO MLR MLR
comp=Z,22µm,21.0s
**ZVC Zvikov 79.04 352** *e*P **P** **22 08 56.5 +0.3**
ZVC *e*S **S** **22 18 48.3 -4.5**
ZVC AMS AMS 22 46 10.0
comp=Z,28µm,20.2s
**TREC Trest 79.06 351** *e*P **P** **22 08 56.3 -0.1**
TREC AMS AMS 22 44 00.0
comp=Z,30µm,21.0s
**TREC Trest 79.06 351** *e*P **P** **22 08 56.3 -0.1**
TREC MLR MLR
comp=Z,30µm,21.0s
**KRUC Moravsky 79.20 350***i*P **P** **22 08 56.5 -0.6**
KRUC *e*S **S** **22 18 52.8 -1.7**
**JAVC Velka Javorina 79.26 350**⇑*i*P **P** **22 08 57.5 0.0**
JAVC *e*S **S** **22 18 55.8 +0.5**
**KECS Kecovo 79.28 348** *e*P **P** **22 08 59.0 +1.5**
**KECS Kecovo 79.28 348** *e*P **P** **22 08 59.0 +1.5**
**WLF Walferdange 79.29 357** P **P** **22 08 58.1 +0.6**
WLF IAms_20 IAms_20 22 49 43.9
comp=Z,28µm,22.0s
**WLF Walferdange 79.29 357** P **P** **22 08 55.5 -2.1**
**WLF Walferdange 79.29 357**⇑P **P** **22 08 57.1 -0.4**
**WLF Walferdange 79.29 357** *d*P **P** **22 08 58.0 +0.4**
**WLF Walferdange 79.29 357** P **P** **22 08 58.1 +0.6**
WLF pmax pmax
comp=Z,103nm,1.3s
WLF MLR MLR
comp=Z,28µm,22.0s
**WLF Walferdange 79.29 357** *e*P **P** **22 08 56.1 -1.5**
comp=Z,136nm,1.4s,baz=5.2,slow=5.6
**KIS Kishinev 79.34 342**⇑*i*P **P** **22 08 57.0 -0.9**
comp=Z,3µm,7.0s
**KIS Kishinev 79.34 342** *e*PP PP 22 11 57.0 -0.1
**KIS Kishinev 79.34 342**⇑P **P** **22 08 58.3 +0.4**
**KIS Kishinev 79.34 342***c i*P **P** **22 08 57.0 -0.9**
KIS *e* 22 11 57.0
KIS *e*S **S** **22 18 57.0 +1.0**
KIS *e*PS 22 19 56.0
KIS pmax pmax
comp=Z,3µm,7.0s
**BUR08 Bucovina Ar. S 79.38 344** P **P** **22 08 57.9 -0.4**
BUR08 IAmb IAmb 22 09 01.1
comp=Z,108nm,0.8s
**IAS Iasi 79.39 343**⇑P **P** **22 08 58.1 -0.1**
**IAS Iasi 79.39 343**⇑P **P** **22 08 58.1 -0.1**
**KHC Kasperske Hory 79.40 352** P **P** **22 08 57.7 -0.5**
KHC IAmb IAmb 22 09 09.4
comp=Z,58nm,1.0s
**KHC Kasperske Hory 79.40 352** *e*P **P** **22 08 57.7 -0.5**
KHC *e*PCP **PcP** **22 09 04.5 -1.8**
KHC *e*S S 22 18 44.4 -12
**KHC Kasperske Hory 79.40 352***c i*P **P** **22 08 57.8 -0.4**
KHC pmax pmax
comp=Z,421nm,2.8s
KHC MLR MLR
comp=Z,49µm,20.0s
**KHC Kasperske Hory 79.40 352** P **P** **22 08 58.0 -0.2**
**BURAR Bucovina Array 79.41 344** P **P** **22 08 58.1 -0.3**
BURAR IAmb IAmb 22 09 01.5
comp=Z,163nm,0.7s
**BURAR Bucovina Array 79.41 344**⇑P **P** **22 08 58.2 -0.2**
**BURAR Bucovina Array 79.41 344**⇑P **P** **22 08 58.2 -0.2**
**MILM Milestii Mici 79.42 342**⇑*i*P **P** **22 08 57.0 -1.3**
comp=Z,8µm,7.1s
**MILM Milestii Mici 79.42 342** *e*PP PP 22 11 54.0 -3.7
MILM *e*S **S** **22 18 54.0 -2.8**
**MILM Milestii Mici 79.42 342** ⇓P **P** **22 09 00.6 +2.3**
**MILM Milestii Mici 79.42 342** *i* P **P** **22 08 57.0 -1.3**
MILM *e* 22 11 54.0
MILM *e*S **S** **22 18 54.0 -2.8**
MILM *e*PS **PnS** **22 19 54.0 +12**
MILM pmax pmax
comp=Z,8µm,7.1s
**ANN Anapa 79.43 335** *e*P **P** **22 08 54.8 -3.6**
ANN *e**PP **PcP** **22 08 59.2 -7.2**
ANN *e*S **S** **22 18 54.0 -3.0**
ANN pmax pmax
comp=Z,69nm,0.9s
**WET Wettzell 79.44 353** *e*P **P** **22 08 57.2 -1.2**
comp=Z,221nm,1.9s,baz=5.2,slow=5.6
**PRAR RASCA 79.47 344**⇑P **P** **22 08 57.8 -0.8**
**VYHS Vyhne 79.48 349** *e*P **P** **22 08 59.9 +1.2**
VYHS pmax pmax
comp=Z,325nm,2.3s
**VYHS Vyhne 79.48 349** *e*P **P** **22 08 59.9 +1.2**
**PURM Purcari 79.57 341**⇑P **P** **22 08 59.3 +0.2**
**HRA Herat 79.59 313** P **P** **22 08 59.0 -0.7**
**TGUH Tegucigalpa,Un 79.61 81** P **P** **22 09 00.1 +0.1**
**TGUH Tegucigalpa,Un 79.61 81**⇑P **P** **22 09 00.9 +0.9**
**SMOL Smolenice 79.63 350** *e*P **P** **22 09 01.0 +1.5**
SMOL pmax pmax
comp=Z,161nm,2.2s
**BMR Baia Mare 79.63 345**⇑P **P** **22 09 00.3 +0.8**
**BMR Baia Mare 79.63 345**⇑P **P** **22 09 00.3 +0.8**
**CKRC Cesky Krumlov 79.64 352** *e*P **P** **22 08 59.9 +0.4**
CKRC *e*S **S** **22 18 56.3 -3.0**
CKRC AMS AMS 22 46 30.0
comp=Z,23µm,20.2s
**CKRC Cesky Krumlov 79.64 352** *e*P **P** **22 08 59.9 +0.4**
CKRC *e*S **S** **22 18 56.3 -3.0**
CKRC MLR MLR
comp=Z,23µm,20.2s
**GEC2 GERESS Array S 79.67 352** P **P** **22 08 59.8 0.0**
**GEC2 GERESS Array S 79.67 352** *e*P **P** **22 08 59.8 0.0**
comp=Z,219nm,1.9s,baz=5.2,slow=5.6
**GERES GERESS Array B 79.67 352** P **P** **22 08 59.5 -0.3**
**GERES GERESS Array B 79.67 352** P **P** **22 08 59.8 0.0**
comp=Z,12nm,0.7s,baz=148,slow=7.8,SNR=80
GERES S **S** **22 18 58.9 -0.9**
comp=Z,0.2nm,0.3s,baz=250,slow=43,SNR=1.0
GERES PKKPbc **PKKPbc** **22 27 46.0 +1.1**
comp=Z,0.9nm,0.7s,baz=174,slow=13,SNR=5.0
GERES PKPPKP P'P'df 22 35 45.6 -11
comp=Z,0.8nm,0.8s,baz=179,slow=8.0,SNR=3.5
GERES LR LR 22 46 41.6
comp=Z,13µm,19.7s,baz=8.5,slow=38
comp=Z,12nm,0.7s
**GERES GERESS Array B 79.67 352** P **P** **22 08 59.5 -0.3**
**JLP Les Platons 79.71 3** *e*P **P** **22 09 00.7 +0.8**
**AJM Ajmer 79.75 300** *e*P **P** **22 09 01.5 +1.0**
AJM IAmb IAmb 22 09 10.3
comp=Z,154nm,1.1s
**JQE Queens East 79.76 3** *e*P **P** **22 09 01.2 +1.1**
**JSA Saint Aubin 79.76 3** *e*P **P** **22 08 59.8 -0.3**
JSA IAmb IAmb 22 09 02.1
comp=Z,243nm,1.0s
JSA IAMs_20 IAMs_20 22 43 13.0
comp=Z,21µm,21.5s
**CEI Carei 79.78 346**⇑P **P** **22 09 02.5 +2.3**
**CEI Carei 79.78 346**⇑P **P** **22 09 02.5 +2.3**
**BIZ Bicaz 79.90 343** ⇓P P 22 09 08.9 +7.9
**PSZ Piszkesteto 79.91 348** P **P** **22 09 01.6 +0.5**
**PSZ Piszkesteto 79.91 348**⇑P **P** **22 09 00.9 -0.1**
**PSZ Piszkesteto 79.91 348**⇑P **P** **22 09 01.2 +0.1**
**PSZ Piszkesteto 79.91 348** P **P** **22 09 01.6 +0.5**
PSZ pmax pmax
comp=Z,169nm,1.5s
PSZ MLR MLR
comp=Z,30µm,19.0s
**SOC Sochi 79.93 333** *e*P **P** **22 08 59.8 -1.4**
SOC *e**PP **PcP** **22 09 06.0 -2.6**
SOC *e**SP **pP** **22 09 08.6 -1.9**
SOC *e* 22 12 00.9
SOC *e*PPP PPP 22 13 52.4
SOC *e*S **S** **22 19 03.0 +0.6**
SOC *e**SS **pS** **22 19 14.2 -0.2**
SOC *e*SSS SSS 22 27 37.4
SOC pmax pmax
comp=Z,82nm,1.0s
SOC MLR MLR
comp=Z,65µm,19.0s
**ZST Bratislava 79.98 350** *e*P **P** **22 09 02.9 +1.6**
**ZST Bratislava 79.98 350** *e*P **P** **22 09 02.9 +1.6**
**STU Stuttgart 80.05 355** P **P** **22 09 01.9 +0.1**
STU IAMs_20 IAMs_20 22 42 32.1
comp=Z,19µm,22.0s
**STU Stuttgart 80.05 355** P **P** **22 09 01.9 +0.1**
STU pmax pmax
comp=Z,65nm,1.2s
STU MLR MLR
comp=Z,19µm,22.0s
**STU Stuttgart 80.05 355** *e*P **P** **22 09 01.6 -0.1**
comp=Z,323nm,1.6s,baz=5.2,slow=5.6
**ARCR ARCALIA 80.06 345** ⇓P **P** **22 09 02.9 +1.1**
**SIM Simferopol' 80.13 337***c i*P **P** **22 09 03.2 +1.0**
SIM *e* 22 09 11.0
SIM *e* 22 12 08.0
SIM *e*PPP PPP 22 13 52.0
SIM *e*S **S** **22 19 01.0 -3.5**
SIM pmax pmax
comp=Z,152nm,1.1s
**LTVH Ltavrtes, Hu 80.16 346**⇑P **P** **22 09 03.2 +1.0**
**LTVH Ltavrtes, Hu 80.16 346** ⇓P **P** **22 09 03.4 +1.1**
**SRO Srobarova 80.22 349** *e*P **P** **22 09 04.3 +1.7**
SRO pmax pmax
comp=Z,44nm,0.9s
**SRO Srobarova 80.22 349** *e*P **P** **22 09 04.3 +1.7**
**TESR Tescani 80.22 343** ⇓P **P** **22 09 02.6 -0.1**
**TESR Tescani 80.22 343** P **P** **22 09 02.2 -0.5**
**MESR Meseseni 80.23 346**⇑P **P** **22 09 03.6 +0.9**
**FLN La Foliniere 80.23 2** *e*P **P** **22 09 01.5 -1.2**
**RAO Raoul Island 80.26 180** IAMs_20 IAMs_20 22 36 35.6
comp=Z,30µm,22.0s
**RAO Raoul Island 80.26 180** LR LR 22 38 21.7
comp=Z,28µm,20.8s,baz=14,slow=31
**BIR Birlad 80.27 342** ⇓P **P** **22 09 05.6 +2.7**
**BIR Birlad 80.27 342** ⇓P **P** **22 09 05.6 +2.7**
**CONA Conrad Observa 80.38 351** *e*P **P** **22 09 03.3 -0.3**
comp=Z,44nm,0.8s,SNR=41
CONA *e*PP **PP** **22 12 00.6 -5.2**
comp=Z,718nm,5.1s
CONA *e*S **S** **22 19 07.1 -0.1**
comp=Z,4µm,13.3s
**LDF La Druitiere 80.41 1** *e*P **P** **22 09 03.9 +0.3**
**ONER Baraj Valea Uz 80.44 343** ⇓P **P** **22 09 05.9 +2.0**
**BORR Bors 80.46 346**⇑P **P** **22 09 06.5 +2.6**
**BSZH Besenyszg 80.47 348**⇑P **P** **22 09 04.9 +1.0**
**KULM Kulim 80.48 267** P **P** **22 09 04.3 -0.2**
**CBBR Cluj-Babes-Bol 80.50 345**⇑P **P** **22 09 00.7 -3.5**
**GHRR 80.51 342**⇑P **P** **22 09 05.3 +1.1**
**FUR Furstenfeldbru 80.53 354** *e*P **P** **22 09 06.5 +2.2**
comp=Z,202nm,1.6s,baz=5.2,slow=5.6
**BFO Black Forest 80.54 356** P **P** **22 09 04.8 +0.4**
**BFO Black Forest 80.54 356** P **P** **22 09 04.8 +0.4**
BFO pmax pmax
comp=Z,175nm,1.7s
**BFO Black Forest 80.54 356** *e*P **P** **22 09 04.0 -0.4**
comp=Z,174nm,1.7s,baz=5.2,slow=5.6
**PBA Port Blair 80.54 277** P **P** **22 09 05.0 +0.2**
PBA IAMs_20 IAMs_20 22 45 06.0
comp=Z,26µm,22.0s
**PBA Port Blair 80.54 277**⇑P **P** **22 09 04.8 0.0**
**PBA Port Blair 80.54 277** P **P** **22 09 06.2 +1.4**
**SOP Sopron 80.54 350** *e*P **P** **22 09 04.6 +0.2**
**CJR Cluj-Napoca 80.55 345**⇑P **P** **22 09 04.8 +0.3**
**CJR Cluj-Napoca 80.55 345**⇑P **P** **22 09 04.8 +0.3**
**RONA Rosalia, Austr 80.56 350** *i* P **P** **22 09 04.4 -0.1**
comp=Z,76nm,1.1s,SNR=40
RONA *e*PP **PP** **22 12 08.6 +1.4**
comp=Z,428nm,3.9s
RONA *e*S **S** **22 19 09.6 +0.6**
comp=Z,1µm,4.5s
RONA *e*PKKP **PKKPbc** **22 27 45.7 +2.9**
comp=Z,0.4nm,0.2s
**TGMR Targu Mures 80.58 344**⇑P **P** **22 09 07.8 +3.2**
**ROSF Rostrenen 80.58 4**⇑P **P** **22 09 04.3 -0.2**
**ROSF Rostrenen 80.58 4** *e*P **P** **22 09 04.3 -0.2**
**VARL Varlezi 80.58 342**⇑P **P** **22 09 06.5 +1.9**
**VLDR Vladesti 80.59 342** ⇓P **P** **22 09 05.2 +0.5**
**MOA Molln 80.61 352** *i* P **P** **22 09 04.8 0.0**
comp=Z,33nm,0.9s,SNR=20
**DRGR 80.61 346** *e*P **P** **22 09 04.8 -0.1**
**DRGR 80.61 346**⇑P **P** **22 09 05.0 +0.1**
**DRGR 80.61 346**⇑P **P** **22 09 05.0 +0.1**
**MARR Marisel-Cluj 80.66 345**⇑P **P** **22 09 05.6 +0.4**
**SGMF Saint Gilles 80.69 3** *e*P **P** **22 09 04.9 -0.2**
**ECH Echery 80.70 357** P **P** **22 09 05.5 +0.2**
ECH IAMs_20 IAMs_20 22 46 33.2
comp=Z,22µm,22.0s
**ECH Echery 80.70 357**⇑P **P** **22 09 04.3 -0.9**
**ECH Echery 80.70 357** P **P** **22 09 05.5 +0.2**
ECH pmax pmax
comp=Z,69nm,1.2s
ECH MLR MLR
comp=Z,22µm,22.0s
**COSR Cosmesti PH 80.73 342**⇑P **P** **22 09 07.3 +1.9**
**PANC Panciu 80.74 342**⇑P **P** **22 09 06.6 +1.1**
**BHPL Bhopal 80.76 296** *e*P **P** **22 09 05.3 -0.7**
BHPL IAmb IAmb 22 09 08.8
comp=Z,340nm,0.9s
**SCTR Scanteiesti 80.77 342**⇑P **P** **22 09 06.4 +0.8**
**TURR Turia 80.77 343**⇑P **P** **22 09 06.7 +1.0**
**OZUR 80.78 343** ⇓P **P** **22 09 06.9 +1.2**
**AKH Akhalkalaki 80.78 330** *e*P **P** **22 09 06.9 +0.9**
**CRIN San Cristobal 80.79 81** P **P** **22 09 06.8 +0.5**
**BOSR Bodos 80.82 344**⇑P **P** **22 09 07.4 +1.4**
**BIOA Bad Ischl, Aus 80.82 352** *i* P **P** **22 09 06.8 +0.9**
comp=Z,79nm,1.4s,SNR=40
**VRI Vrincioaia 80.83 343** *e*P **P** **22 09 08.2 +2.2**
**VRI Vrincioaia 80.83 343** ⇓P **P** **22 09 06.4 +0.4**
**VRI Vrincioaia 80.83 343** ⇓P **P** **22 09 06.4 +0.4**
**VRI Vrincioaia 80.83 343** P **P** **22 09 06.7 +0.7**
**TATR Tatarca 80.83 342** ⇓P **P** **22 09 02.0 -4.0**
**RJOB Jochberg 80.84 353** *e*P **P** **22 09 06.3 +0.2**
comp=Z,167nm,1.9s,baz=5.2,slow=5.6
**PLOR3 Plostina Array 80.85 343** P **P** **22 09 06.2 0.0**
**PLOR Plostina 80.86 343**⇑P **P** **22 09 06.5 +0.4**
**PLOR Plostina 80.86 343**⇑P **P** **22 09 06.5 +0.4**
**PLOR5 Plostina Array 80.86 343** P **P** **22 09 06.6 +0.4**
**ODBI Odobesti 80.86 343** ⇓P **P** **22 09 09.1 +3.0**
**PETR Petresti 80.87 342**⇑P **P** **22 09 06.6 +0.4**
**IPM Ipoh 80.88 266** P **P** **22 09 05.9 -0.8**
**SLCR Slobozia Conac 80.89 342** ⇓P **P** **22 09 06.8 +0.5**
**GIUM Giurgiulesti 80.91 342**⇑P **P** **22 09 08.7 +2.3**
**TUDR 80.91 342**⇑P **P** **22 09 06.9 +0.6**
**NEGRR Negrea 80.92 342** ⇓P **P** **22 09 06.9 +0.5**
**IZVR Izvoarele 80.94 342**⇑P **P** **22 09 08.0 +1.5**
**MPLH Magyarpolny 80.94 349** P **P** **22 09 06.8 +0.3**
**COVR Voineasa-Covas 80.94 343** ⇓P **P** **22 09 09.2 +2.6**
**SCHL Schela 80.97 342** ⇓P **P** **22 09 07.4 +0.7**
**DOPR Dopca 80.97 344** ⇓P **P** **22 09 08.2 +1.5**
**MDB Medias 80.97 344** ⇓P **P** **22 09 09.8 +3.1**
**MDB Medias 80.97 344** ⇓P **P** **22 09 09.8 +3.1**
**GISR Galati 80.98 342** ⇓P **P** **22 09 09.5 +2.7**
**CLF Chambon-Foret 80.99 360** P **P** **22 09 07.2 +0.4**
CLF IAmb IAmb 22 09 09.8
comp=Z,331nm,1.1s
**CLF Chambon-Foret 80.99 360**⇑P **P** **22 09 06.8 +0.1**
**SCHLR Schela 81.00 342**⇑P **P** **22 09 07.6 +0.8**
**QUIF Quistinic 81.00 4** *e*P **P** **22 09 07.4 +0.6**
**TLCR 81.08 341** ⇓P **P** **22 09 07.5 +0.3**
**TLCR 81.08 341** ⇓P **P** **22 09 07.5 +0.3**
**ARSA Arzberg 81.08 351** *i* P **P** **22 09 08.0 +0.7**
comp=Z,34nm,0.8s,SNR=34
ARSA *e*PKKP **PKKPbc** **22 27 44.6 +3.0**
comp=Z,1.8nm,0.6s
**UBR Ueberruh 81.09 354** *e*P **P** **22 09 08.2 +0.7**
comp=Z,150nm,1.7s,baz=5.2,slow=5.6
**EIDS Eidsvold 81.10 208** P **P** **22 09 08.5 +1.0**
**HINF Hinteralfeld 81.11 357** *e*P **P** **22 09 06.8 -0.7**
**BISRR Bisoca 81.14 343**⇑P **P** **22 09 09.0 +1.3**
**CNGN Cerro Negro 81.17 81** P **P** **22 09 08.3 0.0**
CNGN IAMs_20 IAMs_20 22 45 34.2
comp=Z,21µm,19.0s
**LESA Schwarzleotal 81.17 353** *e*P **P** **22 09 08.0 +0.2**
comp=Z,48nm,0.9s
LESA *e*P'P' 22 35 48.7
comp=Z,8.6nm,1.9s
**BATM Batumi 81.17 331** *e*P **P** **22 09 07.6 -0.2**
**MYKOM Kota Tinggi 81.20 262** P **P** **22 09 08.8 +0.4**
**CFR Carcaliu 81.22 342**⇑P **P** **22 09 08.1 +0.1**
**CFR Carcaliu 81.22 342**⇑P **P** **22 09 08.1 +0.1**
**KNRA Kununurra 81.24 231** P **P** **22 09 07.7 -0.6**
KNRA IAmb IAmb 22 09 11.0
comp=Z,184nm,1.1s
**RETA Reutte 81.24 354** *e*P **P** **22 09 07.4 -0.8**
comp=Z,38nm,1.4s,SNR=22
RETA *e*PP **PP** **22 12 15.0 +2.0**
comp=Z,1µm,5.8s
RETA *e*SKS **SKSac** **22 19 20.0 -5.0**
comp=Z,5µm,13.4s
RETA SKKP 22 31 08.3
comp=Z,2µm,12.8s
**GRER 81.25 342**⇑P **P** **22 09 09.7 +1.5**
**SIRR Siria 81.28 346**⇑P **P** **22 09 08.7 +0.3**
**NRDN NARMADA NAGAR 81.31 295** *e*P **P** **22 09 12.0 +3.1**
NRDN IAmb IAmb 22 09 15.6
comp=Z,480nm,1.0s
**NEHR Nehoiu 81.33 343** ⇓P **P** **22 09 09.8 +1.1**
**MLR Muntele Rosu 81.33 343** *e*P **P** **22 09 09.2 +0.4**
**MLR Muntele Rosu 81.33 343** P **P** **22 09 09.1 +0.4**
MLR IAmb IAmb 22 09 12.8
comp=Z,160nm,0.8s
**MLR Muntele Rosu 81.33 343** LR LR 22 50 58.7
comp=Z,38µm,18.3s,baz=26,slow=40
**MLR Muntele Rosu 81.33 343**⇑P **P** **22 09 09.4 +0.6**
**MLR Muntele Rosu 81.33 343** P **P** **22 09 09.1 +0.3**
MLR pmax pmax
comp=Z,160nm,0.8s
MLR MLR MLR
comp=Z,41µm,20.0s
**MLR Muntele Rosu 81.33 343** P **P** **22 09 09.1 +0.3**
**WATA Walderalm 81.34 353** *e*P **P** **22 09 08.4 -0.4**
comp=Z,80nm,1.0s,SNR=46
WATA *e*P'P' 22 35 52.1
comp=Z,9.2nm,1.6s
**MOTA Moosalm 81.36 354** *i* P **P** **22 09 08.4 -0.6**
comp=Z,101nm,1.3s
MOTA *e*PKKP **PKKPbc** **22 27 43.4 +2.3**
comp=Z,0.6nm,0.3s
**WTTA Wattenberg 81.40 353** *i* P **P** **22 09 08.9 -0.3**
comp=Z,82nm,0.8s,SNR=42
WTTA *e*PP **PP** **22 12 15.6 +1.2**
comp=Z,998nm,5.0s
WTTA *e*S **S** **22 19 17.0 -1.1**
comp=Z,630nm,5.3s
WTTA *e*PKKP **PKKPbc** **22 27 43.0 +1.9**
comp=Z,4.3nm,0.8s
**KBA Koelnbreinsper 81.45 352** *i* P **P** **22 09 09.6 +0.1**
comp=Z,181nm,0.8s,SNR=88
**JURR Jurilovca 81.46 341**⇑P **P** **22 09 09.6 +0.3**
**DEV Deva 81.47 345**⇑P **P** **22 09 11.6 +2.2**
**DEV Deva 81.47 345**⇑P **P** **22 09 11.6 +2.2**
**NGP Nagpur 81.47 293** *e*P **P** **22 09 08.0 -1.8**
**TNR Turnu Rosu 81.47 344** ⇓P **P** **22 09 10.7 +1.3**
**TNR Turnu Rosu 81.47 344** ⇓P **P** **22 09 10.7 +1.3**
**TPGR Topolog 81.47 341**⇑P **P** **22 09 09.7 +0.3**
**SQTA Sankt Quirin 81.48 354** *e*P **P** **22 09 08.6 -0.9**
SNR=40
SQTA *e*PKKP **PKKPbc** **22 27 42.4 +1.6**
comp=Z,1.5nm,0.3s
SQTA *e*P'P' 22 35 48.5
comp=Z,8.6nm,1.3s
**DAVA Damuels 81.50 355** *i* P **P** **22 09 10.3 +0.7**
comp=Z,52nm,1.3s,SNR=24
DAVA *e*PKKP **PKKPbc** **22 27 43.0 +2.1**
comp=Z,1.3nm,0.3s
DAVA *e*P'P' 22 35 50.1
comp=Z,13nm,1.2s
**GNI Garni 81.52 328** P **P** **22 09 10.0 +0.1**
GNI IAmb IAmb 22 09 29.1
comp=Z,182nm,1.0s
**GNI Garni 81.52 328**⇑P **P** **22 09 10.7 +0.7**
**GNI Garni 81.52 328** LR LR 22 50 37.2
comp=Z,48µm,18.7s,baz=24,slow=40
**GNI Garni 81.52 328** P **P** **22 09 11.2 +1.2**
**GNI Garni 81.52 328***c i*P **P** **22 09 10.6 +0.7**
GNI pmax pmax
comp=Z,309nm,1.4s
**GNI Garni 81.52 328** P **P** **22 09 10.9 +0.9**
**VOIR 81.54 344**⇑P **P** **22 09 11.6 +1.7**
**VOIR 81.54 344**⇑P **P** **22 09 11.6 +1.7**
**VOIR 81.54 344** P **P** **22 09 10.2 +0.3**
**ISR Istrita 81.58 343**⇑P **P** **22 09 10.8 +0.8**
**ISR Istrita 81.58 343**⇑P **P** **22 09 10.8 +0.8**
**ISR Istrita 81.58 343** P **P** **22 09 10.4 +0.4**
**KARS Kars 81.62 330** *e*P **P** **22 09 11.2 +0.7**
**ARR Arges 81.68 344**⇑P **P** **22 09 11.7 +1.1**
**SOKA Soboth 81.69 351** *i* P **P** **22 09 11.6 +0.9**
comp=Z,130nm,0.9s,SNR=39
SOKA *e*PKKP **PKKPbc** **22 27 42.5 +2.2**
comp=Z,0.6nm,0.6s
**PGOR Pogoanele 81.70 342**⇑P **P** **22 09 13.0 +2.4**
**FETA Feichten 81.71 354** *i* P **P** **22 09 11.7 +0.8**
comp=Z,65nm,1.0s,SNR=36
FETA *e*PKKP **PKKPbc** **22 27 42.8 +2.4**
comp=Z,1.6nm,0.7s
FETA *e*P'P' 22 35 43.9
comp=Z,6.7nm,1.4s
**SURR Surduc 81.71 346**⇑P **P** **22 09 11.0 +0.3**
**HARR Harsova 81.73 342**⇑P **P** **22 09 12.3 +1.6**
**HARR Harsova 81.73 342**⇑P **P** **22 09 12.3 +1.6**
**LOR Lormes 81.74 359** *e*P **P** **22 09 10.4 -0.4**
**MTUR Matau 81.75 344** ⇓P **P** **22 09 13.9 +3.0**
**MTUR Matau 81.75 344** ⇓P **P** **22 09 13.9 +3.0**
**MORH Mrgy, Hungar 81.75 348**⇑P **P** **22 09 10.6 -0.2**
**MORH Mrgy, Hungar 81.75 348** P **P** **22 09 10.0 -0.8**
**LOT Lotru 81.75 345** *e*P **P** **22 09 09.9 -1.1**
**LOT Lotru 81.75 345**⇑P **P** **22 09 10.8 -0.2**
**KOGS Kog 81.80 350** *i* P **P** **22 09 10.2 -0.9**
**TASB TASBURUN-IGDIR 81.83 329** *e*P **P** **22 09 12.1 +0.6**
**BOAB BOACO BROADBAND 81.84 80** P **P** **22 09 11.4 -0.3**
BOAB IAmb IAmb 22 09 30.6
comp=Z,325nm,1.2s
**BOAB BOACO BROADBAND 81.84 80** P **P** **22 09 10.2 -1.5**
**BOAB BOACO BROADBAND 81.84 80**⇑P **P** **22 09 11.4 -0.3**
**TLBR Topalu 81.84 342**⇑P **P** **22 09 12.2 +0.8**
**ABTA Abfaltersbach 81.85 353** *e*P **P** **22 09 11.1 -0.4**
comp=Z,94nm,1.1s,SNR=39
ABTA *e*PP **PP** **22 12 15.0 -2.9**
comp=Z,1µm,6.5s
ABTA *e*S **S** **22 19 22.0 -0.5**
comp=Z,1µm,6.3s
ABTA *e*PKKP **PKKPbc** **22 27 42.5 +2.6**
comp=Z,1.9nm,0.8s
**TIRR Tirgusor 81.85 341** *e*P **P** **22 09 11.0 -0.4**
**TIM Timisoara 81.87 347** ⇓P **P** **22 09 13.8 +2.4**
**TIM Timisoara 81.87 347** ⇓P **P** **22 09 13.8 +2.4**
**MYKA Terra Mystica 81.87 352** *i* P **P** **22 09 11.3 -0.3**
comp=Z,58nm,1.5s,SNR=18
MYKA *e*PKKP **PKKPbc** **22 27 41.8 +1.9**
comp=Z,1.5nm,0.5s
**PLAR PLOIESTI 81.87 343**⇑P **P** **22 09 14.2 +2.7**
**OBKA Obir 81.91 351** *i* P **P** **22 09 12.7 +0.9**
comp=Z,74nm,1.0s,SNR=24
OBKA *e*PKKP **PKKPbc** **22 27 42.6 +2.8**
comp=Z,1.4nm,0.6s
**OBKA Obir 81.91 351***i*P **P** **22 09 11.4 -0.4**
**CHOM Cayeli-Rize 81.91 331** *e*P **P** **22 09 12.2 +0.4**
**SENK Senkaya-Erzuru 81.92 330** *e*P **P** **22 09 12.6 +0.5**
**AMRR Amara 81.92 342**⇑P **P** **22 09 13.2 +1.5**
**AMRR Amara 81.92 342**⇑P **P** **22 09 13.2 +1.5**
**BZS Buzias 81.92 346** *e*P **P** **22 09 11.2 -0.6**
**BZS Buzias 81.92 346**⇑P **P** **22 09 10.9 -0.8**
**BZS Buzias 81.92 346**⇑P **P** **22 09 11.6 -0.2**
**BZS Buzias 81.92 346**⇑P **P** **22 09 11.6 -0.2**
**KOVH Kovagotottos 81.94 349**⇑P **P** **22 09 10.8 -1.0**
**SSF Saint Saulge 81.95 359** *e*P **P** **22 09 11.7 -0.2**
**GZR Gura Zlata 81.96 345**⇑P **P** **22 09 12.3 +0.2**

GZR Gura Zlata 81.96 345 ⇑P P 22 09 12.3 +0.2
DAVOX Davos/Dischmat 82.00 355 LR LR 22 44 41.3
comp=Z,20µm,21.8s,baz=4.5,slow=35
CVDA Cernavoda 82.05 341 ⇑P P 22 09 16.0 +3.6
SULR 82.06 343 ⇓P P 22 09 13.0 +0.6
PRED Cave del Predi 82.06 352 P P 22 09 13.1 +0.5
PRED IAmb IAmb 22 09 16.2
comp=Z,113nm,0.7s
STFAR Stefanesti-Arg 82.11 344 ⇑P P 22 09 14.1 +1.3
MFTR Murfatlar 82.12 341 ⇓P P 22 09 13.3 +0.5
PTCC Patocco-Chiusa 82.12 352 ⇑P P 22 09 11.1 -1.8
FUORN Ofenpass-Fuorn 82.14 354 P P 22 09 12.9 -0.3
LEHL Lehliu 82.15 342 ⇑P P 22 09 13.1 +0.2
WB0 Warramunga Arr 82.17 225 P P 22 09 12.5 -0.8
WB0 IAmb IAmb 22 09 15.5
comp=Z,371nm,1.7s
EFOR EFORIE 82.17 341 ⇑P P 22 09 15.6 +2.6
AVF Avril sur Loir 82.22 359 eP P 22 09 12.0 -1.3
BANR Banloc 82.22 347 ⇓P P 22 09 14.5 +1.2
WR0 Warramunga Arr 82.28 224 P P 22 09 13.0 -0.8
ICOR Ion Corvin 82.30 342 ⇑P P 22 09 14.9 +1.2
MTDJ Mount Denham 82.31 71 P P 22 09 14.9 +0.6
MTDJ IAMs_20 IAMs_20 22 48 40.2
comp=Z,15µm,20.0s
MTDJ Mount Denham 82.31 71 ⇑P P 22 09 14.9 +0.6
WRAB Tennant Creek 82.34 225 ⇑iP P 22 09 13.4 -0.7
WRAB pmax pmax
comp=Z,199nm,1.6s
WRAB MLR MLR
comp=Z,7µm,19.0s
WRA Warramunga Arr 82.35 225 P P 22 09 12.9 -1.3
WRA Warramunga Arr 82.35 225 P P 22 09 13.2 -1.0
comp=Z,46nm,0.9s,baz=37,slow=6.1,SNR=173
WRA PKiKP PKiKP 22 14 34.2 -1.3
comp=Z,1.5nm,0.7s,baz=5.7,slow=1.7,SNR=1.4
WRA S S 22 19 23.2 -4.7
comp=Z,0.8nm,0.9s,baz=315,slow=6.5,SNR=3.4
WRA PKKPbc PKKPbc 22 27 41.4 +1.4
comp=Z,1.3nm,0.6s,baz=188,slow=20,SNR=20
WRA PKPPKP P'P'df 22 35 44.8 +2.5
comp=Z,0.7nm,0.8s,baz=190,slow=2.7,SNR=5.0
WRA LR LR 22 43 10.5
comp=Z,11µm,21.1s,baz=18,slow=34
comp=Z,46nm,0.9s
WRA Warramunga Arr 82.35 225 iP P 22 09 13.1 -1.0
WRA pmax pmax
comp=Z,49nm,0.9s
LJU Ljubljana 82.37 351 iP P 22 09 13.1 -1.0
LJU ePP PP 22 12 21.2 -1.0
LJU e 22 14 28.0
LJU eS S 22 19 24.0 -3.8
GTBY Guantanamo Bay 82.40 68 P P 22 09 14.9 +0.3
GTBY IAmb IAmb 22 09 19.5
comp=Z,203nm,0.8s
GTBY Guantanamo Bay 82.40 68 ⇑iP P 22 09 14.9 +0.3
GTBY Guantanamo Bay 82.40 68 ⇑P P 22 09 14.7 +0.1
BUC1 Bucharest 82.42 343 ⇓P P 22 09 15.7 +1.3
BUC1 Bucharest 82.42 343 ⇓P P 22 09 15.7 +1.3
HUMR Humele 82.44 344 ⇑P P 22 09 14.7 +0.2
HERR Herculane 82.52 346 ⇑P P 22 09 14.9 0.0
SGRR Singureni 82.55 343 ⇑P P 22 09 14.6 -0.4
KOPR Koprukoy-ERZUR 82.59 330 eP P 22 09 16.6 +1.0
SRE Strehaia 82.61 345 ⇑P P 22 09 15.0 -0.4
SRE Strehaia 82.61 345 ⇑P P 22 09 15.0 -0.4
AGRB Hanur-Agry 82.61 329 eP P 22 09 16.5 +0.8
FRGS Fruska Gora 82.63 347 ⇑iP P 22 09 15.0 -0.5
FRGS Fruska Gora 82.63 347 ⇑P P 22 09 15.9 +0.4
FRGS Fruska Gora 82.63 347 P P 22 09 15.1 -0.5
ESPY Espiye-Giresun 82.67 333 eP P 22 09 15.1 -0.7
CEY Cerknica 82.68 351 eP P 22 09 15.0 -0.8
CEY iPKiKP PKiKP 22 14 36.5 +1.0
CEY Cerknica 82.68 351 ⇑iP P 22 09 15.0 -0.8
RMGR Halanga-Turnu 82.69 345 ⇑P P 22 09 17.6 +1.9
PSN Preselentsi 82.70 341 iP P 22 09 15.9 +0.1
CLDR Cldiran 82.70 328 eP P 22 09 12.4 -3.8
DJES Djerdap 82.71 345 ⇓P P 22 09 18.2 +2.3
MDVR Moldovita 82.73 346 ⇑P P 22 09 16.9 +0.9
COPA Copaceanca 82.78 343 ⇑P P 22 09 16.3 +0.1
BOJS Bojanci 82.83 351 iP P 22 09 15.8 -0.8
BOJS iPKiKP PKiKP 22 14 37.1 +1.4
BOJS Bojanci 82.83 351 ⇑iP P 22 09 16.0 -0.5
STH Stony Hill 82.85 70 ⇑iP P 22 09 19.8 +2.7
LHMI Lhok Sumawe 82.85 269 P P 22 09 17.0 0.0
LHMI Lhok Sumawe 82.85 269 ⇑P P 22 09 17.6 +0.5
DIKM Dikmen 82.94 336 eP P 22 09 17.8 +0.7
DIKM Dikmen 82.94 336 ⇑P P 22 09 17.9 +0.7
HOJ Hope 82.94 70 ⇓iP P 22 09 20.8 +3.3
BZK Bozkurt 82.97 337 eP P 22 09 17.6 +0.4
AKL Akola 82.99 294 eP P 22 09 17.5 -0.2
AKL IAmb IAmb 22 09 21.1
comp=Z,340nm,0.5s
PUNG Punghina 83.03 345 ⇑P P 22 09 17.0 -0.5
VLAD Vladila 83.05 344 ⇓P P 22 09 18.1 +0.5
A051A Mrakovica 83.14 349 ⇑iP P 22 09 17.3 -0.9
MLAZ Malazgirt-MUS 83.15 329 eP P 22 09 19.3 +0.8
PRIJ Prijedor 83.20 350 eP P 22 09 20.9 +2.5
BAIL Bailesti 83.21 345 ⇓P P 22 09 18.6 +0.1
ZIMR 83.21 343 ⇓P P 22 09 18.6 +0.2
ZIMR 83.21 343 ⇓P P 22 09 18.6 +0.2
NEF NEVSHA 83.23 342 iP P 22 09 19.9 +1.3
RKT Rikitea 83.24 141 ePP PP 22 12 25.9 -4.9
comp=Z,4µm,30.2s
RKT eS S 22 19 42.7 +6.0
comp=Z,128µm,31.0s
RKT eSS SS 22 25 02.8 +0.3
comp=Z,55µm,27.2s
RKT eLQ LQ 22 31 31.9
comp=Z,21µm,34.0s
RKT eLR LR 22 35 29.6
comp=Z,341µm,29.8s
RKT eLR LR 22 35 29.7
comp=Z,875nm,32.2s
KVT Kavak 83.26 335 eP P 22 09 19.4 +0.5
TEKS Tekeris 83.27 347 eP P 22 09 18.4 -0.4
TEOL Teolo 83.30 353 P P 22 09 18.4 -0.5
CIDE Kastamonu/Cide 83.30 337 ⇑P P 22 09 19.6 +0.6
PRD Provadia 83.30 342 iP P 22 09 19.3 +0.3
BLY Banja Luka 83.37 349 ⇑iP P 22 09 18.7 -0.6
VANB Van 83.37 329 eP P 22 09 20.5 +0.9
KURC Kurucasile-Bar 83.38 337 eP P 22 09 19.2 -0.2
LPL La Plagne 83.41 357 eP P 22 09 20.2 +0.4
GRTK Grand Turk 83.42 64 ⇑P P 22 09 20.5 +0.6
LPG La Plagne 83.43 357 eP P 22 09 20.5 +0.5
VRTB Varto-Mus 83.47 330 eP P 22 09 20.6 +0.5
SZH Strazhitsa 83.48 343 iP P 22 09 19.2 -0.7
PSI Prapat 83.49 266 P P 22 09 20.0 -0.5
PSI pmax pmax
comp=Z,553nm,1.3s
PSI MLR MLR
comp=Z,8µm,22.0s
VALD Valchedram 83.52 345 iP P 22 09 19.9 -0.1
RSDY Resadiye-TOKAT 83.55 334 eP P 22 09 21.0 +0.6
RPSI Rantau Prapat 83.57 266 P P 22 09 20.0 -0.8
ERZN Erzincan 83.61 332 eP P 22 09 21.4 +0.6
A050A Klekovaca 83.71 350 ⇑iP P 22 09 20.6 -0.5
SSB Saint Sauveur 83.71 358 ⇑P P 22 09 20.7 -0.4
AKDM Akdamar-Van 83.75 329 eP P 22 09 21.9 +0.3
PVL Pavlikeni 83.76 343 iP P 22 09 20.8 -0.5
MPEP Malo Peshtene 83.79 344 iP P 22 09 21.2 -0.3
HAPS Han Pijesak,BI 83.80 348 ⇑iP P 22 09 21.8 +0.1
ELND Elena 83.82 343 ⇑P P 22 09 21.7 0.0
TOKT Tokat 83.84 334 eP P 22 09 22.2 +0.3
BOVS Bovan 83.85 346 ⇑P P 22 09 21.6 -0.2
BNGB Bingl 83.87 331 eP P 22 09 23.6 +1.5
BNI Bardonecchia 83.88 357 P P 22 09 22.0 -0.1
BNI IAmb IAmb 22 09 25.8
comp=Z,196nm,1.4s
BNI IAMs_20 IAMs_20 22 52 50.3
comp=Z,20µm,20.0s
BNI Bardonecchia 83.88 357 ⇑P P 22 09 22.6 +0.5
BNI Bardonecchia 83.88 357 P P 22 09 22.0 -0.1
BNI pmax pmax
comp=Z,196nm,1.4s
BNI MLR MLR
comp=Z,20µm,20.0s
JTS Las Juntas de 83.95 81 P P 22 09 22.7 0.0
JTS Las Juntas de 83.95 81 IAMs_20 IAMs_20 22 45 51.8
comp=Z,20µm,21.0s
JTS Las Juntas de 83.95 81 P P 22 09 21.7 -1.0
comp=Z,7.6nm,0.3s,baz=334,slow=6.6,SNR=9.2
JTS LR LR 22 47 25.2
comp=Z,7µm,21.6s,baz=308,slow=36
comp=Z,7.6nm,0.3s
JTS Las Juntas de 83.95 81 P P 22 09 22.7 0.0
JTS pmax pmax
comp=Z,51nm,1.1s
JTS MLR MLR
comp=Z,20µm,21.0s
BBLS Lazi&#263i 83.96 347 ⇑iP P 22 09 22.6 +0.2
ORIF Oris-en-Rattie 84.04 357 eP P 22 09 24.3 +1.4
LFF La Frestale 84.07 1 eP P 22 09 22.9 0.0
ILIC ilic-Erzincan 84.08 332 eP P 22 09 27.2 +4.0
BKNI Bangkinang 84.09 263 P P 22 09 23.2 -0.2
BKNI Bangkinang 84.09 263 P P 22 09 22.5 -0.9
SVSK Karacayir 84.09 334 eP P 22 09 22.8 -0.2
JMB Yambol 84.12 342 iP P 22 09 22.9 -0.3
VIVF Saint-Julien-I 84.13 358 eP P 22 09 24.3 +1.0
SMRI Semarang 84.15 251 P P 22 09 23.5 -0.2
SMRI IAmb IAmb 22 09 25.4
comp=Z,227nm,1.1s
SMRI Semarang 84.15 251 ⇓P P 22 09 25.2 +1.6
MBDF Montbardon 84.20 357 eP P 22 09 23.9 +0.1
RUDO Rudo 84.20 347 eP P 22 09 23.1 -0.5
PMBI Palembang 84.32 258 P P 22 09 24.8 +0.3
CANT Cankiri 84.34 336 eP P 22 09 25.2 +0.8
PTK Pertek 84.35 332 eP P 22 09 25.5 +0.8
SJES Sjenica 84.47 347 ⇑iP P 22 09 25.2 +0.1
ARPR Arapgir-MALATY 84.47 332 eP P 22 09 25.9 +0.6
ARPR Arapgir-MALATY 84.47 332 P P 22 09 25.6 +0.3
SVAN Sivan-Diyarba 84.48 330 eP P 22 09 23.8 -1.3
CORM Corum 84.48 335 eP P 22 09 25.9 +0.7
PLE Pljevlja 84.48 347 ⇑iP P 22 09 25.3 +0.1
CUKT Cukurca 84.52 328 eP P 22 09 25.3 -0.2
PGB Panagyurishte 84.53 344 iP P 22 09 25.3 0.0
VLC Villacollemand 84.58 354 P P 22 09 24.7 -0.8
VLC Villacollemand 84.58 354 ⇑P P 22 09 24.7 -0.8
VTS Vitosha 84.59 344 iP P 22 09 25.6 -0.2
UPM Unac-Piva 84.67 348 ⇑iP P 22 09 26.7 +0.5
UPM Unac-Piva 84.67 348 ⇑iP P 22 09 26.2 0.0
HYB Hyderabad 84.69 291 eP P 22 09 26.4 -0.1
HYB IVmB_BB 22 09 27.9
comp=Z,10µm,3.2s
HYB ePP PP 22 12 42.7 +0.5
HYB eSKSac SKSac 22 19 47.0 -1.5
HYB e 22 19 51.5
HYB IVMs_BB IVMs_BB 22 50 06.3
comp=Z,11µm,16.2s
EDRB Edirne 84.70 342 eP P 22 09 26.0 -0.1
EDRB Edirne 84.70 342 P P 22 09 24.5 -1.6
DIM Dimitrovgrad 84.73 343 iP P 22 09 27.7 +1.4
CTYL Yalikoy Yolu 84.74 340 eP P 22 09 25.3 -1.0
PLD Plovdiv 84.78 343 eP P 22 09 26.5 0.0
PLD Plovdiv 84.78 343 iP P 22 09 26.6 0.0
KLYT Kilyos 84.79 340 eP P 22 09 26.3 -0.3
YOZ Yozgat 84.81 335 eP P 22 09 26.8 -0.1
FITZ Fitzroy Crossi 84.85 233 P P 22 09 27.0 0.0
SVRC Sivrice-ELAZID 84.85 331 eP P 22 09 28.1 +0.9
IVA Berane 84.86 347 ⇑iP P 22 09 27.7 +0.7
BHV Bhavnagar 84.89 299 eP P 22 09 28.6 +1.3
BHV IAmb IAmb 22 09 29.7
comp=Z,777nm,1.4s
BGKT Bogazkoy 84.92 340 eP P 22 09 27.3 +0.1
CTKS Kestanelik-??a 84.92 340 eP P 22 09 27.1 -0.1
KOME Kolasin 84.94 347 ⇑iP P 22 09 27.5 +0.1
LCR2 La Lucha 2 84.96 81 P P 22 09 28.9 +0.8
LCR2 IAmb IAmb 22 09 55.0
comp=Z,181nm,1.7s
ISK Istanbul-Kandi 84.97 340 eP P 22 09 27.1 -0.4
ISK Istanbul-Kandi 84.97 340 P P 22 09 26.5 -1.0
KAVV Kandilli-Istan 84.97 340 eP P 22 09 26.5 -1.0
DYBB Diyarbakir 84.99 331 eP P 22 09 28.3 +0.6
SLVT Silivri 84.99 340 eP P 22 09 27.1 -0.5
SAUV Serdivan-Sakar 85.00 339 eP P 22 09 27.5 -0.1
YUVA Yuva-Kibriscik 85.02 338 eP P 22 09 29.4 +1.5
BRY Bratogost 85.02 348 eP P 22 09 27.7 -0.2
BRY Bratogost 85.02 348 ⇑iP P 22 09 27.2 -0.7
BHUJ Bhuj 85.03 301 eP P 22 09 29.1 +1.1
SBF Sospel 85.04 356 eP P 22 09 28.2 +0.3
LATR Latur 85.05 293 eP P 22 09 27.8 -0.4
LATR IAmb IAmb 22 09 31.5
comp=Z,397nm,1.0s
MDUB Mudurnu 85.06 338 eP P 22 09 28.1 0.0
HRT Hereke 85.07 339 eP P 22 09 27.9 -0.2
NKME Niksic 85.10 348 ⇑iP P 22 09 28.0 -0.2
PVY Plav 85.13 347 ⇑iP P 22 09 29.3 +0.9
STON Ston 85.16 348 ⇑iP P 22 09 27.2 -1.2
BR106 Keskin Array S 85.16 336 P P 22 09 28.3 -0.4
BR131 Keskin Array S 85.16 336 eP P 22 09 28.1 -0.6
BR131 Keskin Array S 85.16 336 P P 22 09 28.0 -0.7
BR131 IAmb IAmb 22 09 33.9
comp=Z,198nm,1.1s
BR131 Keskin Array S 85.16 336 c iP P 22 09 27.9 -0.8
BRTR Keskin Array B 85.17 336 P P 22 09 27.9 -0.8
BRTR Keskin Array B 85.17 336 P P 22 09 28.2 -0.5
comp=Z,108nm,0.9s,baz=40,slow=2.3,SNR=170
BRTR PKiKP PKiKP 22 14 40.0 +0.1
comp=Z,4.5nm,1.1s,baz=91,slow=0.2,SNR=1.3
BRTR S SKSac 22 19 48.4 -2.8
comp=Z,0.2nm,0.4s,baz=50,slow=31,SNR=1.3
BRTR PKPPKP P'P'df 22 35 42.2 -4.1
comp=Z,1.3nm,0.9s,baz=160,slow=6.6,SNR=4.1
BRTR LR LR 22 52 54.3
comp=Z,15µm,19.6s,baz=38,slow=40
comp=Z,108nm,0.9s
BRTR Keskin Array B 85.17 336 iP P 22 09 28.2 -0.5
BRTR pmax pmax
comp=Z,111nm,0.9s
BR105 Keskin Array S 85.18 336 P P 22 09 28.5 -0.3
KDZ Kurdzhali 85.18 343 eP P 22 09 28.6 +0.1
KDZ Kurdzhali 85.18 343 iP P 22 09 28.7 +0.2
CRLT Corlu 85.18 341 eP P 22 09 29.1 +0.5
DARE Darende-Malaty 85.20 333 eP P 22 09 29.6 +0.7
RZN Rozhen 85.23 343 iP P 22 09 28.7 -0.3
TREB Trebinje 85.23 348 eP P 22 09 28.6 -0.2
ANTO Ankara 85.24 337 P P 22 09 28.6 -0.4
ANTO Ankara 85.24 337 ⇑P P 22 09 28.9 -0.1
ANTO Ankara 85.24 337 P P 22 09 28.8 -0.1
ANTO S SKSac 22 19 52.1 +0.5
ANTO Ankara 85.24 337 ⇑P P 22 09 29.1 +0.1
ANTO Ankara 85.24 337 P P 22 09 28.6 -0.4
ANTO pmax pmax
comp=Z,268nm,1.2s
ANTO MLR MLR
comp=Z,34µm,21.0s
ANTO Ankara 85.24 337 P P 22 09 29.1 +0.1
GULT Gulveren 85.25 339 eP P 22 09 28.0 -1.0
BR231 Keskin MP Arra 85.27 337 P P 22 09 28.7 -0.5
CEME Cevo 85.32 348 ⇑iP P 22 09 28.6 -0.7
SDDR Presa de Saban 85.34 65 P P 22 09 29.9 +0.2
SDDR IAmb IAmb 22 09 33.1
comp=Z,133nm,0.7s
SDDR IAMs_20 IAMs_20 22 48 42.8
comp=Z,18µm,21.0s
SDDR Presa de Saban 85.34 65 ⇑iP P 22 09 29.8 0.0
SDDR Presa de Saban 85.34 65 eP P 22 09 30.0 +0.2
MAZI Mazidag 85.35 330 eP P 22 09 30.3 +0.7
KKB Krupnik 85.36 344 iP P 22 09 29.4 -0.1
YLV Yalova 85.38 339 eP P 22 09 29.3 -0.3
YLV Yalova 85.38 339 P P 22 09 30.8 +1.2
PDG Podgorica 85.39 347 eP P 22 09 28.9 -0.6
PDG Podgorica 85.39 347 IAMs_20 IAMs_20 22 47 07.3
comp=Z,22µm,22.0s
PDG Podgorica 85.39 347 ⇑iP P 22 09 28.9 -0.6
PDG Podgorica 85.39 347 ⇑P P 22 09 29.4 -0.2
PDG Podgorica 85.39 347 ⇑iP P 22 09 29.7 +0.2
BNN Bunyan 85.40 334 eP P 22 09 29.8 -0.1
UKOP Uzunkopru-Edir 85.41 342 eP P 22 09 31.5 +1.8
ADVT Abdulvahap 85.42 339 eP P 22 09 28.7 -1.1
KAMT Kaman 85.48 336 eP P 22 09 29.3 -0.9
ARMT Armutlu 85.49 340 eP P 22 09 30.1 0.0
GSI Gunungsitoli 85.49 266 P P 22 09 29.9 -0.5
GEMT Gemlik 85.55 340 eP P 22 09 30.1 -0.3
MMB Musomishta 85.55 344 iP P 22 09 30.7 +0.3
BUM Brajici-Budva 85.56 348 ⇑iP P 22 09 31.0 +0.5
AFSR Afar-Bala (An 85.57 336 eP P 22 09 30.6 -0.1
RDO Rodhopi 85.61 342 eP P 22 09 30.5 -0.2
RDO Rodhopi 85.61 342 P P 22 09 30.9 +0.3
RDO IAmb IAmb 22 09 35.2
comp=Z,286nm,1.5s
RDO Rodhopi 85.61 342 P P 22 09 29.1 -1.6
CAVI Cavuskoy 85.62 339 eP P 22 09 30.3 -0.5
DRME Dracevica, Mon 85.64 347 ⇑iP P 22 09 30.3 -0.5
DRME Dracevica, Mon 85.64 347 ⇑iP P 22 09 31.1 +0.3
KIRS Kirsehir-Merke 85.65 336 ⇑P P 22 09 31.3 +0.2
SARI SarD1z-Kayseri 85.66 334 eP P 22 09 31.5 +0.3
MDNY Mudanya-Bursa 85.67 340 eP P 22 09 29.9 -1.1
PUK Puka 85.68 347 P P 22 09 31.9 +0.7
PUK IAmb IAmb 22 09 34.8
comp=Z,88nm,0.8s
ARMA Armidale 85.71 206 P P 22 09 32.0 +0.8
ARMA IAmb IAmb 22 09 34.7
comp=Z,122nm,1.1s
NVR Nevrokopi 85.72 344 P P 22 09 31.7 +0.4
MRMT Marmara Adasi 85.72 341 eP P 22 09 31.3 -0.1
RKY Sarkoy-Tekirda 85.73 341 eP P 22 09 30.9 -0.5
ALN Alexandroupoli 85.75 342 eP P 22 09 30.5 -0.9
ALN Alexandroupoli 85.75 342 P P 22 09 29.4 -2.0
AS31 Alice Springs 85.81 223 P P 22 09 31.3 -0.4
ASAR Alice Springs 85.81 223 P P 22 09 31.4 -0.4
comp=Z,90nm,0.9s,baz=29,slow=4.6,SNR=224
ASAR PKiKP PKiKP 22 14 41.0 +0.1
comp=Z,1.8nm,0.7s,baz=35,slow=1.9,SNR=2.1
ASAR S SKSac 22 19 56.8 +1.8
comp=Z,0.7nm,0.7s,baz=67,slow=1.6,SNR=4.2
ASAR PKKPbc PKKPbc 22 27 32.6 +0.7
comp=Z,1.6nm,0.7s,baz=196,slow=1.6,SNR=3.3
ASAR PKPPKP 22 35 40.7
comp=Z,1.8nm,0.9s,baz=208,slow=1.7,SNR=6.0
ASAR LR LR 22 45 04.3
comp=Z,12µm,20.6s,baz=30,slow=34
comp=Z,90nm,0.9s
BAND Balkesir-Ban 85.86 340 ⇑P P 22 09 32.1 +0.2
URFA Urfa 85.86 331 eP P 22 09 33.1 +1.0
YAYX Yaylak 85.86 336 eP P 22 09 31.0 -1.1
ERIK Erikli-Kesan 85.88 342 eP P 22 09 31.5 -0.5
ENEZ Enez 85.89 342 eP P 22 09 30.5 -1.5
ENEZ Enez 85.89 342 P P 22 09 31.6 -0.4
KCTX Karacabey (Bur 85.89 340 eP P 22 09 31.7 -0.4
EDC Edincik 85.91 340 eP P 22 09 32.1 -0.1
SERE Sereflikochisa 85.92 336 eP P 22 09 33.2 +0.8
KAVA Kavala 85.94 343 P P 22 09 31.5 -0.8
SVRH Sivrihisar-ESK 85.95 338 eP P 22 09 31.9 -0.6
KULU Kulu 85.97 336 eP P 22 09 32.8 +0.1
KRBG Karabiga-Canak 85.99 341 eP P 22 09 32.3 -0.2
SRS Serrai 85.99 344 eP P 22 09 32.1 -0.5
SRS Serrai 85.99 344 P P 22 09 31.7 -0.9
KNT Kendrikon 86.07 344 eP P 22 09 32.8 -0.2
KNT Kendrikon 86.07 344 P P 22 09 32.2 -0.8
LPK Lapseki 86.11 341 eP P 22 09 33.3 +0.1
CIFT Cifteler, Eski 86.14 338 eP P 22 09 32.9 -0.6
GELI Tayfur-Gelibol 86.15 342 eP P 22 09 31.7 -1.7
KOKK Kokkinochori, 86.21 343 P P 22 09 32.5 -1.2
SRBC Serra Branca 86.22 23 eP P 22 09 33.5 -0.2
comp=Z,657nm,0.7s
SRBC Serra Branca 86.22 23 ePP PP 22 12 55.5 +1.8
SRBC eS SKSac 22 19 58.9 +1.4
SUSR Susurluk-Balik 86.24 340 eP P 22 09 34.4 +0.6
PGRA Graciosa 86.24 23 eP P 22 09 35.2 +1.4
comp=Z,248nm,1.6s
SMTH Samothraki Isl 86.26 342 P P 22 09 32.5 -1.4
PGF Pioggiola 86.27 355 eP P 22 09 33.6 -0.5
THAS Thassos island 86.28 343 P P 22 09 33.4 -0.6
SOH Sokhos 86.32 344 P P 22 09 34.0 -0.3
TIR Tirane 86.36 347 P P 22 09 33.8 -0.6
TIR Tirane 86.36 347 P P 22 09 35.6 +1.2
KMRS Kahramanmaras 86.36 333 eP P 22 09 34.1 -0.4
KIZT Kizilcal 86.40 337 eP P 22 09 34.1 -0.7
CEST Esterri de Car 86.42 1 P P 22 09 35.1 +0.3
CEST IAmb IAmb 22 09 37.6
comp=Z,126nm,1.2s
CHBY Cihanbeyli 86.43 336 eP P 22 09 34.1 -0.8
PCED Cedros 86.44 24 eP P 22 09 36.0 +1.2
comp=Z,263nm,0.8s
PCED Cedros 86.44 24 ePP PP 22 12 57.4 +1.9
PCED eS SKSac 22 20 00.3 +1.4
OHR Ohrid 86.45 346 iP P 22 09 34.4 -0.6
GADA Gvkgeada 86.46 342 eP P 22 09 34.9 0.0
ROSA Rosais 86.47 23 eP P 22 09 36.3 +1.3
comp=Z,162nm,0.8s
ROSA Rosais 86.47 23 eS SKSac 22 20 01.2 +2.1
ROSA Rosais 86.47 23 eLQ LQ 22 32 43.2
CALA Caldeira 86.48 24 eP P 22 09 36.4 +1.2
comp=Z,390nm,0.8s
CALA Caldeira 86.48 24 eS SKSac 22 19 55.7 -3.7
CALA Caldeira 86.48 24 eLQ LQ 22 32 57.1
POO Poona 86.51 295 eP P 22 09 35.1 -0.4
POO IAmb IAmb 22 09 38.7
comp=Z,636nm,0.7s
OUZ Omahuta 86.53 187 IAMs_20 IAMs_20 22 44 05.6
comp=Z,19µm,20.0s
OUZ Omahuta 86.53 187 ⇓P P 22 09 36.5 +1.6
EJON La Jonquera 86.56 359 P P 22 09 34.4 -1.1
THE Thessaloniki 86.57 344 P P 22 09 34.9 -0.5
HORT Hortiatis 86.58 344 eP P 22 09 33.5 -2.1
HORT Hortiatis 86.58 344 P P 22 09 34.6 -1.0
GAZ Gaziantep 86.58 333 eP P 22 09 36.5 +0.8
PMAN Manadas 86.59 23 eP P 22 09 36.4 +0.8
comp=Z,242nm,1.2s
PMAN Manadas 86.59 23 eS SKSac 22 20 00.3 +0.5
PGAV Gavieira, Arco 86.62 8 ⇑iP P 22 09 35.4 -0.4
comp=Z,67nm,2.8s
PGAV Gavieira, Arco 86.62 8 ePP PP 22 12 57.8 +0.9
PGAV eS S 22 20 10.0 -0.5
PGAV eSS SS 22 26 03.4 +13
PGAV eLQ LQ 22 33 09.0
PGAV eLR LR 22 38 12.3
comp=Z,17µm,20.0s
PICO Pico 86.63 23 eP P 22 09 37.0 +1.1
comp=Z,215nm,1.6s
PICO Pico 86.63 23 eS SKSac 22 19 54.3 -6.0
PICO Pico 86.63 23 eLQ LQ 22 32 51.1
SULT Sultanhani-AKS 86.64 336 eP P 22 09 35.7 -0.2
PSBA Serra de Santa 86.65 23 eP P 22 09 37.1 +1.2
comp=Z,382nm,0.8s
PSBA Serra de Santa 86.65 23 eS SKSac 22 19 59.4 -0.9
PCAN Candelaria 86.65 24 eP P 22 09 36.9 +1.0
comp=Z,136nm,1.3s
PCAN Candelaria 86.65 24 eS SKSac 22 19 56.1 -4.2
PAGU Agualva, Azore 86.68 22 eP P 22 09 37.2 +1.2
comp=Z,167nm,0.8s
PAGU Agualva, Azore 86.68 22 eS SKSac 22 19 59.8 -0.6
PAGU Agualva, Azore 86.68 22 eLQ LQ 22 32 51.1
OUR Ouranopolis 86.68 343 eP P 22 09 35.1 -0.9
OUR Ouranopolis 86.68 343 P P 22 09 34.0 -2.0
FNA Florina 86.68 345 eP P 22 09 35.0 -1.1
FNA Florina 86.68 345 P P 22 09 34.6 -1.5
KOZT Kozan 86.69 334 eP P 22 09 35.8 -0.3
PPNO Prainha do Nor 86.70 23 eP P 22 09 37.5 +1.3
comp=Z,355nm,0.9s
PPNO Prainha do Nor 86.70 23 ePP PP 22 12 59.5 +1.9
PPNO eS S 22 20 09.1 -2.1
EZN Ezine 86.73 341 eP P 22 09 36.1 -0.1
EZN Ezine 86.73 341 P P 22 09 35.3 -0.9
EZN Ezine 86.73 341 P P 22 09 36.9 +0.7
CMRD Camardi-Nigde 86.75 334 eP P 22 09 37.7 +1.2
PSCM Serra do Cume 86.76 22 eP P 22 09 37.6 +1.2
comp=Z,143nm,1.2s
PSCM Serra do Cume 86.76 22 eS S 22 20 05.8 -5.9
PID Ribeirinha 86.76 23 eP P 22 09 37.7 +1.2
comp=Z,294nm,0.8s
ECAL Calabor 86.76 7 P P 22 09 34.7 -1.8
BOM Bombay 86.80 296 eP P 22 09 37.4 +0.5
BOM IAmb IAmb 22 09 39.8
comp=Z,358nm,0.8s
GEDZ Gediz 86.83 339 eP P 22 09 35.9 -0.9
LIA Limnos Island 86.88 342 eP P 22 09 36.1 -0.9
LIA Limnos Island 86.88 342 P P 22 09 35.6 -1.4
SIMA Simav-Kutahya 86.88 339 eP P 22 09 36.1 -1.0
PCAB Cabril 86.89 7 ⇑eP P 22 09 37.4 +0.3
comp=Z,88nm,0.8s
PCAB Cabril 86.89 7 ePP PP 22 13 03.4 +4.3
PBRG Braganca 86.90 7 ⇑iP P 22 09 35.9 -1.2
comp=Z,83nm,2.6s
PBRG Braganca 86.90 7 ePP PP 22 13 02.8 +3.7
PBRG eS S 22 20 12.9 -0.1
PBRG eSS SS 22 25 59.3 +5.4
LADK Ladik-KONYA 86.93 336 eP P 22 09 36.9 -0.5
KBN Korca 86.93 346 P P 22 09 37.2 -0.1
KBN Korca 86.93 346 P P 22 09 36.5 -0.8
KBN Korca 86.93 346 P P 22 09 37.2 -0.1
KBN pmax pmax
comp=Z,42nm,0.7s
YESY Yesilyurt 86.97 335 eP P 22 09 36.5 -1.1
SHUT Suhut-Afyon 87.03 338 eP P 22 09 37.6 -0.3
KZN Kozani 87.09 345 P P 22 09 37.4 -0.7
NEST Nestorio 87.10 346 P P 22 09 36.1 -2.0
MDRS Chennai 87.10 287 eP P 22 09 40.2 +1.9
MDRS IAmb IAmb 22 09 44.0

comp=Z,99nm,0.8s
**KARA Karaisali** 87.11 334 *e*P P 22 09 38.2 0.0
**CEYT Ceyhan** 87.15 334 *e*P P 22 09 38.8 +0.5
**LIT Litokhoron** 87.17 344 *e*P P 22 09 37.2 -1.2
**LIT Litokhoron** 87.17 344 P P 22 09 36.1 -2.3
**GORD Gordes-Manisa** 87.23 340 *e*P P 22 09 39.6 +0.8
**POLO Lamas de Olo** 87.25 7⇑*i*P P 22 09 38.3 -0.6
comp=Z,49nm,0.9s
**POLO Lamas de Olo** 87.25 7 *e*PP PP 22 13 05.1 +3.1
POLO *e*S S 22 20 17.5 +1.0
POLO *e*SS SS 22 26 08.5 +9.4
**PENT Pentalofos** 87.30 345 P P 22 09 39.7 +0.6
**KAD Karad** 87.30 294 *e*P P 22 09 39.6 +0.2
KAD IAmb IAmb 22 09 42.0
comp=Z,318nm,0.8s
**PRK Paraskevi** 87.30 341 P P 22 09 38.1 -0.9
**DKL Dikili** 87.34 341 *e*P P 22 09 36.9 -2.3
**PVRL Vila Real** 87.35 7⇑*e*P P 22 09 39.6 +0.3
comp=Z,119nm,0.8s
**PVRL Vila Real** 87.35 7 *e*PP PP 22 13 07.4 +4.6
**PCDR Punta Cana, DR** 87.36 63 IAMs_20 IAMs_20 22 46 34.1
comp=Z,23µm,22.0s
**SIGR SIGRI** 87.42 342 *e*P P 22 09 37.9 -1.7
**SIGR SIGRI** 87.42 342 P P 22 09 38.3 -1.3
**MATE Matera** 87.47 349 *e*P P 22 09 39.5 -0.2
**MATE Matera** 87.47 349 ⇑P P 22 09 39.5 -0.2
**KULA Kula-Manisa** 87.50 339 *e*P P 22 09 38.3 -1.8
**KULA Kula-Manisa** 87.50 339 P P 22 09 36.9 -3.2
**MVO Moncorvo** 87.52 7⇑*i*P P 22 09 39.2 -0.9
comp=Z,127nm,1.0s
**MVO Moncorvo** 87.52 7 *e*S S 22 20 19.3 +0.3
MVO *e*SS SS 22 26 08.8 +5.9
MVO *e*LQ LQ 22 33 01.8
MVO *e*LR LR 22 38 32.5
comp=Z,14µm,22.0s
**TYRN Tyrnavos** 87.59 345 P P 22 09 38.2 -2.2
**TAHT Tahtakopru-Hat** 87.62 333 *e*P P 22 09 41.0 +0.4
**NGCH Negor - Chabah** 87.66 309 P P 22 09 42.1 +1.2
NGCH S SKSac 22 20 02.8 -3.9
**THL Klokotos Trika** 87.77 345 P P 22 09 37.4 -3.9
**SRN Sarande** 87.78 346 P P 22 09 40.1 -1.2
**SEYD Seydisehir-KON** 87.81 337 *e*P P 22 09 42.2 +0.5
**NEO Neokhori** 87.81 344 P P 22 09 37.7 -3.8
**ODEM Odemis-Izmir** 87.86 340 *e*P P 22 09 42.6 +0.8
**JAN Janina** 87.87 346 P P 22 09 40.9 -0.9
**PVIS Viseu** 87.89 8⇑*i*P P 22 09 40.8 -1.1
comp=Z,145nm,0.8s
**PVIS Viseu** 87.89 8 *e*PP PP 22 13 08.6 +1.5
**PSET Sete Cidades** 87.92 22 *e*P P 22 09 42.9 +0.8
comp=Z,292nm,1.6s
**PSET Sete Cidades** 87.92 22 *e*PP PP 22 13 09.6 +2.1
PSET *e*S SKSac 22 20 09.5 +1.4
**PSET Sete Cidades** 87.92 22 *e*LQ LQ 22 33 17.1
**KEK Kerkira** 87.97 346 *e*P P 22 09 41.3 -0.9
**KEK Kerkira** 87.97 346 P P 22 09 40.6 -1.6
**PDA Ponta Delgada** 88.01 22 *e*P P 22 09 42.5 +0.1
comp=Z,393nm,1.1s
**CMLA Cha da Macela** 88.03 21 P P 22 09 43.0 +0.4
**CMLA Cha da Macela** 88.03 21 *e*P P 22 09 43.9 +1.4
comp=Z,319nm,1.1s
**CMLA Cha da Macela** 88.03 21 *e*PP PP 22 13 09.2 +0.9
CMLA *e*S SKSac 22 20 11.4 +2.7
**CMLA Cha da Macela** 88.03 21 P P 22 09 43.0 +0.4
CMLA pmax pmax
comp=Z,163nm,0.7s
**PGRON Lagoa das Cont** 88.05 21 *e*P P 22 09 43.6 +0.9
comp=Z,174nm,1.8s
**PGRON Lagoa das Cont** 88.05 21 *e*PP PP 22 13 09.8 +1.3
PGRON *e*S SKSac 22 20 13.6 +4.7
**BCK Bucak** 88.06 338 *e*P P 22 09 41.3 -1.5
**HDMB Hadim** 88.07 336 *e*P P 22 09 42.5 -0.5
**IGT Igoumenitsa** 88.07 346 P P 22 09 41.4 -1.3
**KIZK Mersin** 88.09 335 *e*P P 22 09 42.8 0.0
**URLA Izmir** 88.09 341 *e*P P 22 09 42.2 -0.7
**BART Pico Bartolome** 88.09 21 *e*P P 22 09 43.7 +0.7
comp=Z,214nm,1.4s
**BART Pico Bartolome** 88.09 21 *e*PP PP 22 13 10.9 +2.0
BART *e*S S 22 20 25.2 +0.5
**BART Pico Bartolome** 88.09 21 *e*LQ LQ 22 33 37.0
**AGPR Aguadilla, PR** 88.11 63 P P 22 09 43.8 +0.6
**NAZL Nazilli-Aydin** 88.11 339 *e*P P 22 09 43.6 +0.6
**CHOS Chios island** 88.17 341 *e*P P 22 09 41.9 -1.4
**CHOS Chios island** 88.17 341 P P 22 09 42.3 -1.0
**AYDB Zeytinkoy-Aydi** 88.21 340 *e*P P 22 09 42.4 -1.2
**KEBE Keben-Mersin** 88.23 335 *e*P P 22 09 43.1 -0.5
**MTE Manteigas** 88.24 7 P P 22 09 42.7 -0.9
MTE IAmb IAmb 22 09 45.1
comp=Z,120nm,0.8s
MTE IAMs_20 IAMs_20 22 53 53.6
comp=Z,13µm,19.0s
**MTE Manteigas** 88.24 7⇑*i*P P 22 09 42.9 -0.7
comp=Z,156nm,0.9s
**MTE Manteigas** 88.24 7 *e*PP PP 22 13 11.8 +1.9
MTE *e*S S 22 20 25.4 -0.5
MTE *e*SS SS 22 26 16.7 +3.2
MTE *e*LQ LQ 22 33 14.5
MTE *e*LR LR 22 38 44.9
comp=Z,13µm,22.0s
**SILI Silifke-Mersin** 88.25 335 *e*P P 22 09 42.5 -1.1
**KYMI Kymi, Euboea I** 88.31 343 P P 22 09 42.5 -1.4
**TEVE Tevekalti-Mers** 88.32 335 *e*P P 22 09 42.3 -1.7
**APMY Acipayam-Deniz** 88.35 339 *e*P P 22 09 43.1 -1.1
**COI Coimbra** 88.35 8 IAMs_20 IAMs_20 22 47 58.8
comp=Z,18µm,21.0s
**COI Coimbra** 88.35 8⇑*i*P P 22 09 43.6 -0.4
comp=Z,211nm,1.0s
**COI Coimbra** 88.35 8 *e*PP PP 22 13 13.6 +2.9
COI *e*S S 22 20 27.5 +0.6
COI *e*SS SS 22 26 23.5 +8.5
**AOPR Arecibo Observ** 88.40 62 P P 22 09 45.1 +0.5
**AOPR Arecibo Observ** 88.40 62 *e*P P 22 09 44.4 -0.2
**EMPR Esperanza - Ma** 88.42 62 IAMs_20 IAMs_20 22 50 10.0
comp=Z,14µm,22.0s
**EVR Evrytania** 88.44 345 P P 22 09 44.0 -0.6
**IKL Isikli** 88.44 335 *e*P P 22 09 43.4 -1.1
**AXAR Agios Charalam** 88.44 344 P P 22 09 42.1 -2.4
**CRPR Cabo Rojo, PR** 88.48 63 IAMs_20 IAMs_20 22 47 32.6
comp=Z,16µm,22.0s
**PCAS Casmilo, Conde** 88.50 8⇑*i*P P 22 09 44.4 -0.3
comp=Z,148nm,0.8s
**PCAS Casmilo, Conde** 88.50 8 *e*PP PP 22 13 14.1 +2.1
PCAS *e*S S 22 20 28.6 +0.3
PCAS *e*SS SS 22 26 24.2 +7.0
**AKKU Akkuyu-Mersin** 88.55 335 *e*P P 22 09 42.9 -2.1
**KORT Korkueli** 88.56 338 *e*P P 22 09 43.9 -1.3
**ANTB Antalya** 88.58 337 *e*P P 22 09 43.5 -1.6
**GCAM G?zelcaml?** 88.59 340 *e*P P 22 09 42.7 -2.5
**UCM Universidad Co** 88.59 4 P P 22 09 43.2 -2.0
**TSLK Tsoukalades, L** 88.71 346 P P 22 09 46.0 +0.3
**CELP Cerrillos** 88.72 62 P P 22 09 45.6 -0.5
CELP IAmb IAmb 22 09 50.7
comp=Z,158nm,1.1s
**OBIP Obispado Ponce** 88.73 62 P P 22 09 45.9 -0.2
OBIP IAMs_20 IAMs_20 22 56 15.2
comp=Z,12µm,19.0s
**ANX Ano Chora** 88.73 345 P P 22 09 44.3 -1.7
**LKD2 Lefkada island** 88.75 346 *e*P P 22 09 44.8 -1.2
**LKD2 Lefkada island** 88.75 346 P P 22 09 44.6 -1.4
**PVO Paravola** 88.78 345 P P 22 09 45.0 -1.0
**JASK Jask - Hormozg** 88.79 312 P P 22 09 46.4 +0.1
SNR=7.0
JASK S SKSac 22 20 12.5 -1.1
**PCBR Castelo Branco** 88.80 7⇑*i*P P 22 09 46.1 0.0
comp=Z,103nm,0.8s
**PCBR Castelo Branco** 88.80 7 *e*PP PP 22 13 17.5 +3.2
**GAZI Gazipasa** 88.80 336 *e*P P 22 09 42.9 -3.3
**GCPR Guaynabo City** 88.80 62 IAMs_20 IAMs_20 22 47 16.1
comp=Z,21µm,20.0s
**NYDR Nydri-Lefkada** 88.81 345 P P 22 09 46.0 -0.2
**PSMA Santa Maria** 88.85 21 *e*P P 22 09 46.7 +0.3
comp=Z,129nm,1.3s
**PSMA Santa Maria** 88.85 21 *e*PP PP 22 13 15.4 +0.5
PSMA *e*S S 22 20 30.0 -1.7
**PSMN Pico do Norte,** 88.86 21 *e*P P 22 09 46.7 +0.2
comp=Z,123nm,1.9s
**PSMN Pico do Norte,** 88.86 21 *e*PP PP 22 13 14.8 -0.1
PSMN *e*S S 22 20 28.5 -3.3
**PSMN Pico do Norte,** 88.86 21 *e*LQ LQ 22 33 41.0
**CAME Cameli-Denizli** 88.86 338 *e*P P 22 09 46.5 -0.2
**MLSB Milas** 88.86 340 *e*P P 22 09 47.3 +0.8
**DION Dionisos Attik** 88.88 343 P P 22 09 45.8 -0.8
**EFP Efpalio** 88.90 344 P P 22 09 46.5 -0.1
**TOZ Tahuroa Road** 88.90 185 P P 22 09 46.3 0.0
TOZ IAMs_20 IAMs_20 22 45 20.5
comp=Z,22µm,20.0s
**ELL Elmali** 88.90 338 *e*P P 22 09 46.2 -0.7
**YER Yerkesik** 88.91 339 *e*P P 22 09 45.2 -1.6
**YER Yerkesik** 88.91 339 P P 22 09 45.8 -1.0
**VILL Villia** 88.91 343 P P 22 09 45.1 -1.7
**TIP Timpagrande** 88.91 349 IAMs_20 IAMs_20 22 56 12.6
comp=Z,17µm,20.0s
**TIP Timpagrande** 88.91 349 ⇑P P 22 09 46.7 -0.1
**TIP Timpagrande** 88.91 349 P P 22 09 47.7 +0.9
**PTL Pentelli** 88.92 343 P P 22 09 45.0 -1.8
**GOA Goa** 88.95 294 *e*P P 22 09 47.8 +0.6
**EREN Erenkoy** 88.97 334 *e*P P 22 09 45.6 -1.4
**PSBE So Bento** 89.01 8⇑*i*P P 22 09 46.2 -1.0
comp=Z,116nm,1.4s
**PSBE So Bento** 89.01 8 *e*PP PP 22 13 18.2 +2.2
PSBE *e*S S 22 20 33.0 -0.2
PSBE *e*SS SS 22 26 30.1 +5.5
**ATHU Athens Univers** 89.02 343 P P 22 09 44.5 -2.7
**ATH Athens Observa** 89.02 343 P P 22 09 46.2 -1.0
**HUMP Col San Antoni** 89.07 62 IAMs_20 IAMs_20 22 52 10.2
comp=Z,23µm,20.0s
**IGPR InterUniversit** 89.07 62 IAMs_20 IAMs_20 22 52 22.2
comp=Z,23µm,21.0s
**FSK Fiskardo** 89.08 346 P P 22 09 46.7 -0.8
**PAYG Puerto Ayora** 89.09 92 P P 22 09 47.4 -0.5
**PAYG Puerto Ayora** 89.09 92 IAMs_20 IAMs_20 22 44 44.3
comp=Z,13µm,20.0s
**VLY Voula,Athens** 89.13 343 P P 22 09 45.0 -2.7
**DALY Dalyan (Mula)** 89.13 339 *e*P P 22 09 46.4 -1.3
**BODT Bodrum** 89.19 340 *e*P P 22 09 46.2 -1.8
**BODT Bodrum** 89.19 340 P P 22 09 46.4 -1.6
**ESBB Sonseca Array** 89.19 5 P P 22 09 46.9 -1.2
ESBB IAmb IAmb 22 09 49.5
comp=Z,62nm,0.8s
**ESDC Sonseca Array** 89.19 5 P P 22 09 46.7 -1.4
ESDC IAmb IAmb 22 09 49.5
comp=Z,64nm,0.8s
**ESDC Sonseca Array** 89.19 5 P P 22 09 46.4 -1.7
comp=Z,56nm,0.8s,baz=350,slow=3.8,SNR=221
ESDC PKKPbc **PKKPbc** 22 27 23.4 +0.7
comp=Z,1.7nm,0.9s,baz=185,slow=2.1,SNR=8.4
ESDC PKPPKP **P'P'df** 22 35 31.7 -7.1
comp=Z,0.6nm,0.8s,baz=132,slow=1.6,SNR=5.9
ESDC LR LR 22 51 12.9
comp=Z,13µm,20.1s,baz=352,slow=37
comp=Z,56nm,0.8s
**FETY Fethiye** 89.20 339 *e*P P 22 09 46.9 -1.2
**PMRV Marv??o** 89.21 7⇑*i*P P 22 09 46.9 -1.2
comp=Z,82nm,0.9s
**PMRV Marv??o** 89.21 7 *e*PP PP 22 13 19.0 +1.3
PMRV *e*S S 22 20 34.0 -1.1
PMRV *e*SS SS 22 26 32.1 +4.5
PMRV *e*LQ LQ 22 33 35.3
PMRV *e*LR LR 22 39 26.9
comp=Z,13µm,24.0s
**KLV Kalavryta, Ach** 89.23 344 P P 22 09 46.6 -1.7
**ETOS Mallorca** 89.24 359 P P 22 09 47.2 -1.1
**VSL Villasalto** 89.29 354 IAMs_20 IAMs_20 22 57 07.5
comp=Z,17µm,20.0s
**PAB San Pablo** 89.30 5 P P 22 09 47.5 -1.0
**PAB San Pablo** 89.30 5 IAMs_20 IAMs_20 22 51 24.7
comp=Z,21µm,20.0s
**PAB San Pablo** 89.30 5 P P 22 09 47.6 -1.0
PAB pmax pmax
comp=Z,40nm,0.8s
PAB MLR MLR
comp=Z,21µm,20.0s
**GUR Goura** 89.30 344 P P 22 09 46.7 -2.0
**DMLN Damoulianata-K** 89.33 346 P P 22 09 48.8 +0.1
**RLS Riolos of Patr** 89.33 345 P P 22 09 50.8 +2.2
**URZ Urewera** 89.35 184 LR LR 22 44 02.6
comp=Z,18µm,20.9s,baz=138,slow=32
**VLS Valsamata** 89.36 345 P P 22 09 49.0 +0.2
**ECHE Chera** 89.39 2 P P 22 09 47.2 -1.8
**RTZL Ratzakli, Kefa** 89.43 345 P P 22 09 49.0 -0.1
**SHME Shamm** 89.43 313 *i*P P 22 09 47.7 -1.6
SNR=19
**SHME Shamm** 89.43 313 P P 22 09 49.1 -0.2
SNR=7.5
SHME S SKSac 22 20 14.2 -3.1
**SALM Salem** 89.44 288 *e*P P 22 09 50.2 +0.8
**DAT Datca** 89.45 340 *e*P P 22 09 47.2 -2.2
**DAT Datca** 89.45 340 P P 22 09 46.8 -2.6
**AKAS Kas** 89.47 338 *e*P P 22 09 47.4 -2.1
**PMTG Montargil** 89.50 8⇑*i*P P 22 09 48.1 -1.3
comp=Z,52nm,0.9s
**PMTG Montargil** 89.50 8 *e*PP PP 22 13 21.2 +1.3
PMTG *e*S S 22 20 36.6 -1.1
PMTG *e*SS SS 22 26 36.2 +4.5
**APE Apeiranthos** 89.55 341 *e*P P 22 09 45.2 -4.6
**APE Apeiranthos** 89.55 341 P P 22 09 46.7 -3.1
**KRND KRANIDI** 89.70 343 P P 22 09 47.8 -2.6
**LEF Lefka** 89.70 335 *e*P P 22 09 48.6 -1.9
**RTZ Ruatahuna** 89.71 184 P P 22 09 49.4 -0.8
RTZ IAMs_20 IAMs_20 22 49 14.9
comp=Z,19µm,20.0s
**HIZ Hauiti** 89.72 186 IAMs_20 IAMs_20 22 45 47.1
comp=Z,17µm,21.0s
**CSS Mathiatis** 89.74 335 *e*P P 22 09 46.8 -3.9
**CSS Mathiatis** 89.74 335 P P 22 09 50.1 -0.6
CSS IAmb IAmb 22 10 03.8
comp=Z,109nm,1.0s
**CSS Mathiatis** 89.74 335 P P 22 09 50.9 +0.2
**PESTR Estremoz** 89.75 7 P P 22 09 49.3 -1.3
PESTR IAmb IAmb 22 09 51.8
comp=Z,108nm,0.9s
**PESTR Estremoz** 89.75 7⇑*i*P P 22 09 49.4 -1.3
comp=Z,120nm,0.9s
**PESTR Estremoz** 89.75 7 *e*PP PP 22 13 23.2 +1.2
PESTR *e*S S 22 20 40.1 0.0
PESTR *e*SS SS 22 26 39.2 +3.8
**PESTR Estremoz** 89.75 7 P P 22 09 47.7 -2.9
**LIS Lisbon** 89.77 9 *e*P P 22 09 49.1 -1.5
LIS *e*PP PP 22 13 21.7 -0.4
LIS IAMs_20 IAMs_20 22 44 24.9
comp=Z,36µm,27.2s
**LIS Lisbon** 89.77 9 *e*P P 22 09 49.1 -1.5
LIS *e* 22 13 21.7
**LTHK Lithakia** 89.78 345 P P 22 09 50.3 -0.4
**ARG Arkhangelos** 89.82 339 *e*P P 22 09 49.8 -1.2
**ARG Arkhangelos** 89.82 339 P P 22 09 50.0 -1.0
**EBAD Badajoz** 89.91 7 P P 22 09 47.7 -3.6
**CEL Celeste** 89.92 349 IAMs_20 IAMs_20 22 56 00.4
comp=Z,14µm,20.0s
**CEL Celeste** 89.92 349 P P 22 09 50.2 -1.3
**EIBI Ibiza** 89.98 1 P P 22 09 51.1 -0.6
**MDH Madha** 90.00 313 *i*P P 22 09 50.2 -1.8
SNR=8.4
**MDH Madha** 90.00 313 P P 22 09 51.2 -0.8
MDH S SKSac 22 20 15.0 -5.7
**MASF Masafi** 90.00 313 P P 22 09 51.1 -0.9
MASF S SKSac 22 20 16.3 -4.5
**MSFE Esma-Masafi** 90.01 313 *i*P P 22 09 49.7 -2.4
SNR=9.3
**EVO Evora** 90.05 8⇑*i*P P 22 09 50.9 -1.1
comp=Z,62nm,1.0s
**EVO Evora** 90.05 8 *e*PP PP 22 13 25.8 +1.5
**EVO Evora** 90.05 8 P P 22 09 49.4 -2.6
**UMQ Umm Al-Quwin** 90.10 313 P P 22 09 52.2 -0.3
UMQ S SKSac 22 20 20.5 -0.7
**ITM Ithomi** 90.11 344 *e*P P 22 09 50.7 -1.7
**ITM Ithomi** 90.11 344 P P 22 09 51.7 -0.7
**MHLO Agia Marina, M** 90.14 342 P P 22 09 50.5 -2.0
**STKA Stephens Creek** 90.19 213 P P 22 09 52.4 0.0
**STKA Stephens Creek** 90.19 213 P P 22 09 52.7 +0.3
comp=Z,88nm,0.8s,baz=350,slow=6.1,SNR=73
STKA PKKPbc **PKKPbc** 22 27 21.2 -0.3
comp=Z,4.6nm,0.8s,baz=231,slow=0.8,SNR=5.3
STKA LR LR 22 46 55.3
comp=Z,23µm,20.6s,baz=15,slow=33
comp=Z,88nm,0.8s
**STKA Stephens Creek** 90.19 213 P P 22 09 52.4 0.0
STKA pmax pmax
comp=Z,25nm,1.0s
**BKZ Black Stump Fm** 90.28 184 IAMs_20 IAMs_20 22 44 24.0
comp=Z,24µm,21.0s
**KBD Kabd** 90.29 321 P P 22 09 53.6 +0.3
KBD S SKSac 22 20 17.4 -4.9
**ETOB Tobarra** 90.31 3 P P 22 09 51.4 -1.9
**UOSS Minazif** 90.35 313 P P 22 09 52.0 -1.7
UOSS IAMs_20 IAMs_20 22 09 46.7
comp=Z,49nm,0.7s
**UOSS Minazif** 90.35 313 *i*P P 22 09 50.7 -2.9
SNR=17
**UOSS Minazif** 90.35 313 P P 22 09 52.0 -1.7
UOSS S SKSac 22 20 19.1 -3.6
**VLI Veliai** 90.38 343 P P 22 09 51.5 -2.1
**MBWA Marble Bar** 90.41 236 P P 22 09 52.9 -0.8
MBWA IAmb IAmb 22 09 56.0
comp=Z,147nm,1.2s
**MBWA Marble Bar** 90.41 236 P P 22 09 53.5 -0.2
**PYL PYLOS** 90.42 344 P P 22 09 51.9 -1.9
**PNCL Nicolau / Gran** 90.42 8⇑*i*P P 22 09 51.9 -1.8
comp=Z,55nm,2.4s
**PNCL Nicolau / Gran** 90.42 8 *e*PP PP 22 13 28.5 +1.2
PNCL *e*S S 22 20 47.7 +1.4
PNCL *e*SS SS 22 26 49.5 +4.4
**HATD Hatta, Dubai** 90.48 313 *i*P P 22 09 52.6 -1.7
SNR=13
**HATD Hatta, Dubai** 90.48 313 P P 22 09 53.2 -1.1
HATD S SKSac 22 20 20.4 -3.1
**PBAR Barrancos** 90.49 7⇑*i*P P 22 09 53.2 -0.9
comp=Z,140nm,1.1s
**PBAR Barrancos** 90.49 7 *e*PP PP 22 13 28.8 +1.0
PBAR *e*S S 22 20 46.9 0.0
PBAR *e*SS SS 22 26 50.8 +4.8
**NAZ Nazwa, Dubai** 90.56 313 *i*P P 22 09 53.0 -1.6
SNR=9.5
**NAZ Nazwa, Dubai** 90.56 313 P P 22 09 53.2 -1.4
NAZ S SKSac 22 20 19.5 -4.4
**PBEJ Beja** 90.57 8⇑*e*P P 22 09 53.6 -0.8
comp=Z,79nm,1.1s
**PBEJ Beja** 90.57 8 *e*PP PP 22 13 29.6 +1.2
**MALK Mahakanadarawa** 90.58 284 P P 22 09 53.1 -1.7
**ASHO Ashiyiah** 90.64 313 *i*P P 22 09 53.5 -1.5
SNR=15
**ASHO Ashiyiah** 90.64 313 P P 22 09 54.0 -1.0
ASHO P PcP 22 09 57.2 +1.1
SNR=7.3
ASHO S SKSac 22 20 20.5 -4.0
**SMRT St. Maarten** 90.66 60 IAMs_20 IAMs_20 22 49 23.1
comp=Z,16µm,22.0s
**WSAR Wadi Sarin** 90.66 310 LR LR 22 54 45.4
comp=Z,22µm,20.5s,baz=88,slow=38
**BIDO Bidbid** 90.66 310 P P 22 09 54.6 -0.6
SNR=5.0
BIDO S SKSac 22 20 22.6 -2.0
**KARP Karpathos** 90.68 340 P P 22 09 53.5 -1.5
KARP IAMs_20 IAMs_20 22 58 42.6
comp=Z,21µm,22.0s
**KARP Karpathos** 90.68 340 P P 22 09 53.9 -1.1
**PSA00 Pilbara Seismi** 90.70 235 P P 22 09 54.8 -0.3
PSA00 IAmb IAmb 22 09 57.4
comp=Z,115nm,1.2s
**PSA00 Pilbara Seismi** 90.70 235 P P 22 09 54.5 -0.6
PSA00 IAmb IAmb 22 09 57.3
comp=Z,102nm,1.3s
**MESJ Messejana** 90.72 8⇑*i*P P 22 09 53.8 -1.4
comp=Z,29nm,1.8s
**MESJ Messejana** 90.72 8 *e*PP PP 22 13 30.8 +1.1
**MESJ Messejana** 90.72 8 *e*P P 22 09 53.5 -1.6
MESJ *e*PP PP 22 13 29.4 -0.2
MESJ *e*SKSac SKSac 22 20 23.0 -1.5
MESJ IAMs_20 IAMs_20 22 45 18.2
comp=Z,31µm,19.6s
**MESJ Messejana** 90.72 8 *e*P P 22 09 53.5 -1.6
MESJ *e* 22 13 29.4
MESJ *e* 22 20 23.0
**FAQ Al Faqa, Dubai** 90.80 313 *i*P P 22 09 53.7 -2.1
SNR=13
**FAQ Al Faqa, Dubai** 90.80 313 P P 22 09 54.0 -1.8
SNR=7.0
FAQ S SKSac 22 20 21.3 -4.1
**KTHA Kythira Island** 90.81 343 *e*P P 22 09 54.6 -1.0
**KTHA Kythira Island** 90.81 343 P P 22 09 53.2 -2.4
**SOHO SOHO** 90.89 312 *i*P P 22 09 54.2 -1.9
SNR=15
**SOHO SOHO** 90.89 312 P P 22 09 55.3 -0.8
SOHO S SKSac 22 20 22.3 -3.5
**SABA Saba** 90.92 60 IAMs_20 IAMs_20 22 48 36.0
comp=Z,16µm,22.0s
**PCVE Castro Verde** 90.94 8⇑*i*P P 22 09 54.9 -1.3
comp=Z,52nm,1.2s
**PCVE Castro Verde** 90.94 8 *e*PP PP 22 13 32.5 +1.1
PCVE *e*S S 22 20 52.5 +1.4
PCVE *e*SS SS 22 26 56.2 +3.6
**PCVE Castro Verde** 90.94 8 P P 22 09 54.5 -1.7
**PTEO Sao Teotonio** 90.97 9⇑*e*P P 22 09 55.4 -0.9
comp=Z,64nm,0.9s
**MMAI Mount Meron Ar** 90.99 332 P P 22 09 55.9 -0.7
comp=Z,39nm,0.9s,baz=15,slow=4.8,SNR=32
MMAI PP PP 22 13 30.4 -1.6
comp=Z,1.8nm,0.8s,baz=30,slow=12,SNR=1.9
MMAI S SKSac 22 20 25.1 -1.3
comp=Z,1.0nm,0.6s,baz=298,slow=20,SNR=1.3
MMAI LR LR 22 57 14.9
comp=Z,16µm,18.0s,baz=326,slow=40
comp=Z,39nm,0.9s
**HOQ Hoqain** 91.00 311 P P 22 09 56.1 -0.6
SNR=9.0
HOQ S SKSac 22 20 24.7 -1.8
**ASUD Al Ashush, Dub** 91.03 313 *i*P P 22 09 55.0 -1.8
SNR=17
**ASUD Al Ashush, Dub** 91.03 313 P P 22 09 56.1 -0.7
SNR=7.3
ASUD S SKSac 22 20 25.4 -1.2
**WBK Wadi Bani Khal** 91.03 309 P P 22 09 57.6 +0.7
WBK S SKSac 22 20 25.5 -1.2
**SMDO Samad** 91.09 310 P P 22 09 57.1 -0.2
SNR=6.3
SMDO S SKSac 22 20 25.6 -1.6
**ANKY Antikythira Is** 91.14 343 P P 22 09 55.2 -1.9
**SEUS St. Eustatius** 91.17 60 IAMs_20 IAMs_20 22 53 13.5
comp=Z,13µm,21.0s
**PVAQ Vaqueiros** 91.20 8 P P 22 09 56.4 -0.9
**PVAQ Vaqueiros** 91.20 8⇑*i*P P 22 09 56.5 -0.9
comp=Z,75nm,0.9s
**PVAQ Vaqueiros** 91.20 8 *e*PP PP 22 13 34.8 +1.4
PVAQ *e*S S 22 20 54.7 +1.3
PVAQ *e*SS SS 22 26 59.5 +3.2
PVAQ *e*LQ LQ 22 33 44.9
PVAQ *e*LR LR 22 40 28.2
comp=Z,17µm,20.0s
**JLN Jalan Bani Buh** 91.20 309 P P 22 09 56.2 -1.4
SNR=7.0
JLN S SKSac 22 20 26.0 -1.6
**MORF Marmelete** 91.21 8 P P 22 09 56.2 -1.3
**MORF Marmelete** 91.21 8⇑*i*P P 22 09 56.2 -1.3
**MORF Marmelete** 91.21 8 *e*PP PP 22 13 34.3 +0.7
MORF *e*S S 22 20 52.2 -1.4
MORF *e*SS SS 22 26 59.1 +2.5
**MORF Marmelete** 91.21 8 *e*P P 22 09 56.0 -1.5
MORF *e*PP PP 22 13 33.3 -0.3
MORF *e*SKSac SKSac 22 20 25.9 -1.5
MORF IAMs_20 IAMs_20 22 45 21.2
comp=Z,35µm,20.8s
**MORF Marmelete** 91.21 8 *e*P P 22 09 56.0 -1.5
MORF *e* 22 13 33.3
MORF *e* 22 20 25.9
**AJN Ajban** 91.24 313 *i*P P 22 09 56.2 -1.6
SNR=7.2
**AJN Ajban** 91.24 313 P P 22 09 57.2 -0.5
AJN S SKSac 22 20 25.0 -2.7
**ZKR Zakros** 91.30 340 *e*P P 22 09 57.0 -0.9
**ZKR Zakros** 91.30 340 P P 22 09 56.3 -1.6
**ALNE Al Ain** 91.32 312 *i*P P 22 09 56.7 -1.4
SNR=20
**ALNE Al Ain** 91.32 312 P P 22 09 57.0 -1.2
SNR=13
ALNE S SKSac 22 20 24.0 -4.4
**ASF Jabal al Asfar** 91.33 331 LR LR 22 57 57.7
comp=Z,30µm,18.6s,baz=331,slow=40
**PBDV Barranco-do-Ve** 91.34 8⇑*i*P P 22 09 57.3 -0.8
**PBDV Barranco-do-Ve** 91.34 8 *e*PP PP 22 13 35.3 +0.7
PBDV *e*S S 22 20 55.5 +0.8
PBDV *e*SS SS 22 27 01.8 +3.4
**PALK Pallekele** 91.36 283 P P 22 09 58.8 +0.3
**PALK Pallekele** 91.36 283 LR LR 22 54 44.8
comp=Z,9µm,20.3s,baz=118,slow=38
**PALK Pallekele** 91.36 283 P P 22 10 00.2 +1.7
PALK S SKSac 22 20 29.2 +0.4
**PALK Pallekele** 91.36 283 P P 22 09 58.8 +0.3
PALK pmax pmax
comp=Z,244nm,1.5s
PALK MLR MLR
comp=Z,11µm,21.0s

**PFVI Vila Bisbo 91.37 9** P **P** **22 09 57.2 -0.9**
PFVI IAmb IAmb 22 09 59.5
comp=Z,59nm,0.8s
**PFVI Vila Bisbo 91.37 9**⇑ *i* P **P** **22 09 57.0 -1.2**
**PFVI Vila Bisbo 91.37 9** *e*PP **PP** **22 13 35.2 +0.4**
PFVI *e*S **S** **22 20 54.5 -0.4**
PFVI *e*SS **SS** **22 27 03.4 +4.7**
**CART Cartagena 91.39 2** P **P** **22 09 57.3 -0.9**
CART IAmb IAmb 22 09 59.0
comp=Z,61nm,0.8s
CART IAMs_20 IAMs_20 22 51 02.9
comp=Z,24µm,21.0s
**CART Cartagena 91.39 2** P **P** **22 09 56.0 -2.3**
**IDI Anoyia 91.40 341** *e*P **P** **22 09 55.6 -2.8**
**IDI Anoyia 91.40 341** P **P** **22 09 55.1 -3.3**
**IDI Anoyia 91.40 341** P **P** **22 09 55.7 -2.8**
**IDI Anoyia 91.40 341** LR LR 22 57 01.6
comp=Z,20µm,18.4s,baz=14,slow=40
**IMMV Iera Moni Meta 91.41 342** *e*P **P** **22 09 57.0 -1.4**
**IMMV Iera Moni Meta 91.41 342** P **P** **22 09 56.6 -1.8**
**MMLI Mount Malkishu 91.52 332** *e*P **P** **22 09 58.0 -1.0**
**ARQ Araqi 91.58 312** P **P** **22 09 58.6 -0.8**
SNR=14
ARQ S **SKSac** **22 20 26.2 -3.6**
**JMDO Jabal Madar 91.65 310** P **P** **22 09 58.5 -1.3**
SNR=5.2
JMDO S **SKSac** **22 20 28.6 -1.7**
**ANWB Willy Bob 91.67 59** IAMs_20 IAMs_20 22 49 34.7
comp=Z,20µm,22.0s
**ANWB Willy Bob 91.67 59** *e*P **P** **22 09 59.3 -0.5**
**KNDR Palaiochora Ch 91.69 342** *e*P **P** **22 09 57.8 -1.9**
**BSY Bisya 91.76 311** P **P** **22 09 59.0 -1.3**
SNR=11
BSY S **SKSac** **22 20 29.1 -1.8**
**BFZ Birch Farm 91.80 184** IAMs_20 IAMs_20 22 45 16.2
comp=Z,18µm,20.0s
**MRZ Mangatainoka R 91.82 185** IAMs_20 IAMs_20 22 44 17.6
comp=Z,24µm,22.0s
**LIJA Lijar 91.86 6** P **P** **22 10 00.2 -0.4**
**JRN Qarnain Island 91.87 315** P **P** **22 10 00.2 -0.5**
JRN S **SKSac** **22 20 28.4 -2.9**
**SHMA Al-Shehemyia 91.89 317** P **P** **22 10 00.8 +0.1**
SNR=6.0
SHMA S **SKSac** **22 20 26.5 -4.9**
**SAKB Bahrain 91.96 318** P **P** **22 09 59.9 -1.1**
SAKB S **SKSac** **22 20 27.8 -4.0**
**GVD Gavdhos 91.99 342** *e*P **P** **22 09 59.2 -1.9**
**GVD Gavdhos 91.99 342** P **P** **22 09 59.8 -1.3**
**EMAL Malaga-Limoner 92.07 5** P **P** **22 10 00.2 -1.2**
**HATO Hato, Curacao 92.11 68** IAMs_20 IAMs_20 22 55 32.4
comp=Z,14µm,19.0s
**MBFL Flemmings, Mon 92.19 60** *e*P **P** **22 10 04.0 +1.7**
**MBWH 92.21 60** *e*P **P** **22 10 02.0 -0.4**
**MLYT Lee's Yard 92.22 60** *e*P **P** **22 10 04.3 +1.9**
**SFS San Fernando 92.25 7** P **P** **22 09 59.6 -2.6**
**MZWR Madinat Zayed 92.43 314** P **P** **22 10 03.3 0.0**
MZWR S **SKSac** **22 20 30.1 -4.4**
**WDD Wied Dalam 92.47 350** IAMs_20 IAMs_20 22 57 26.9
comp=Z,14µm,20.0s
**GHAJ Ghor Haditha 92.54 332** P **P** **22 10 02.1 -1.5**
GHAJ IAmb IAmb 22 10 19.8
comp=Z,75nm,1.2s
**BHW Baring Head 92.60 185** IAMs_20 IAMs_20 22 44 34.4
comp=Z,19µm,22.0s
**GHWR Ruwais 92.71 315** P **P** **22 10 04.2 -0.3**
GHWR S **SKSac** **22 20 33.3 -2.7**
**UMZA Um Al Zommool 92.75 312** P **P** **22 10 03.3 -1.4**
UMZA S **SKSac** **22 20 32.1 -4.2**
**TRNA Turayna 92.76 316** P **P** **22 10 04.6 -0.2**
TRNA S **SKSac** **22 20 31.6 -4.8**
**ABD La Joyeuse, An 92.81 59** IAMs_20 IAMs_20 22 54 27.0
comp=Z,16µm,21.0s
**CEU Ceuta 92.87 6** P **P** **22 10 03.1 -2.0**
**MHTO MHTO 92.89 309** P **P** **22 10 04.7 -0.8**
SNR=5.7
MHTO S **SKSac** **22 20 33.9 -3.2**
**SMRA Abu-Samra 92.92 317** P **P** **22 10 03.9 -1.6**
SNR=7.2
SMRA S **SKSac** **22 20 32.3 -4.9**
**KEST Kesra 93.03 354** P **P** **22 10 04.9 -1.1**
KEST IAmb IAmb 22 10 07.9
comp=Z,68nm,1.1s
**KEST Kesra 93.03 354** P **P** **22 10 05.3 -0.7**
comp=Z,35nm,0.9s,baz=318,slow=2.0,SNR=20
KEST PKiKP **PKiKP** **22 14 54.7 +1.7**
comp=Z,2.0nm,0.6s,baz=291,slow=6.3,SNR=0.9
KEST S **SKSac** **22 20 36.9 -0.9**
comp=Z,2.8nm,0.9s,baz=324,slow=13,SNR=1.5
KEST LR LR 22 55 17.9
comp=Z,10µm,20.1s,baz=319,slow=38
comp=Z,35nm,0.9s
**BBOO Buckleboo 93.04 217** IAMs_20 IAMs_20 22 48 23.2
comp=Z,18µm,21.0s
**CBE Ff, Capester 93.08 60** IAMs_20 IAMs_20 22 50 54.1
comp=Z,20µm,21.0s
**SLWR Sila 93.14 316** P **P** **22 10 05.8 -0.7**
SLWR S **SKSac** **22 20 35.3 -3.2**
**TBG Guadaloupe-3 93.23 60** *e*P **P** **22 10 08.4 +1.3**
**TDBA Terre de Bas, 93.24 60** *e*P **P** **22 10 06.7 -0.4**
**MZR Muzera 93.27 314** *i* P **P** **22 10 05.9 -1.3**
SNR=8.8
**MZR Muzera 93.27 314** P **P** **22 10 06.0 -1.2**
SNR=11
MZR S **SKSac** **22 20 37.9 -1.3**
**MAGL Barre de l'ile 93.35 59** IAMs_20 IAMs_20 22 54 33.4
comp=Z,18µm,21.0s
**KHZ Kahutara 93.69 186** IAMs_20 IAMs_20 22 45 04.1
comp=Z,22µm,22.0s
**CHAS Isla Isabel II 93.73 4** P **P** **22 10 05.3 -3.8**
**SDV Santo Domingo 93.75 71** P **P** **22 10 08.8 -1.0**
SDV IAmb IAmb 22 10 15.0
comp=Z,78nm,1.1s
SDV IAMs_20 IAMs_20 22 58 41.4
comp=Z,16µm,19.0s
**SDV Santo Domingo 93.75 71** P **P** **22 10 10.5 +0.8**
comp=Z,38nm,0.6s,baz=326,slow=7.0,SNR=10
SDV LR LR 22 53 28.9
comp=Z,8µm,21.4s,baz=352,slow=36
comp=Z,38nm,0.6s
**SDV Santo Domingo 93.75 71** *e*P **P** **22 10 12.1 +2.3**
**HRFI Mount Harif 93.88 332** *e*P **P** **22 10 09.0 -0.9**
**DQM DQM 94.00 309** P **P** **22 10 07.5 -3.1**
DQM P **PcP** **22 10 08.4 -2.6**
DQM S **SKSac** **22 20 40.9 -2.3**
DQM S **SKSac** **22 20 41.9 -1.4**
**TOO Toolangi 94.16 208** IAMs_20 IAMs_20 22 49 53.3
comp=Z,16µm,21.0s
**EIL Elat 94.25 332** *e*P **P** **22 10 10.2 -1.4**
**EIL Elat 94.25 332** LR LR 23 00 43.8
comp=Z,30µm,18.0s,baz=45,slow=41
**SVN Savane Anatole 94.33 60** *e*P **P** **22 10 14.8 +2.6**
**PMPST Porto Santo, M 94.39 15**⇑ *e*P **P** **22 10 11.8 -0.4**
**PMPST Porto Santo, M 94.39 15** *e*PP **PP** **22 13 59.5 +0.9**
**PMPS Porto Santo 94.41 15** *e*P **P** **22 10 12.2 0.0**
**FDF Fort de France 94.42 60** IAMs_20 IAMs_20 22 51 37.9
comp=Z,19µm,22.0s
**FDF Fort de France 94.42 60** P **P** **22 10 14.7 +2.1**
**PMOZ Porto Moniz, M 94.49 16**⇑ *i* P **P** **22 10 12.9 +0.1**
**PMOZ Porto Moniz, M 94.49 16** *e*PP **PP** **22 14 00.5 +1.0**
PMOZ *e*S **S** **22 21 25.1 +2.1**
**PMOZ Porto Moniz, M 94.49 16** *e*LR LR 22 43 41.6
comp=Z,12µm,22.0s
**FORT Forrest 94.53 224** P **P** **22 10 11.9 -0.7**
FORT IAmb IAmb 22 10 15.3
comp=Z,96nm,1.0s
FORT IAMs_20 IAMs_20 22 53 06.6
comp=Z,12µm,20.0s
**ILAM Ilet Lapin Mar 94.54 60** IAMs_20 IAMs_20 22 51 28.9
comp=Z,15µm,22.0s
**ILAM Ilet Lapin Mar 94.54 60** *e*P **P** **22 10 13.3 +0.3**
**PMAR Madeira 94.64 16**⇑ *e*P **P** **22 10 13.4 -0.1**
**PMAR Madeira 94.64 16** *e*PP **PP** **22 14 02.0 +1.3**
**BIM Bigot 94.64 60** *e*P **P** **22 10 11.4 -2.2**
**RTC Rabat Centre 94.66 7** P **P** **22 10 11.0 -2.4**
**FUL Funchal 94.71 16** *e*P **P** **22 10 14.5 +0.9**
**CTZ Chatham Island 94.73 179** IAMs_20 IAMs_20 22 48 29.7
comp=Z,16µm,20.0s
**ROSC El Rosal 94.73 76** P **P** **22 10 14.3 -0.1**
**ROSC El Rosal 94.73 76** P **P** **22 10 15.6 +1.1**
comp=Z,24nm,0.8s,baz=226,slow=22,SNR=7.1
ROSC LR LR 22 54 12.4
comp=Z,4µm,21.0s,baz=347,slow=36
comp=Z,24nm,0.8s
**ROSC El Rosal 94.73 76** P **P** **22 10 14.4 -0.1**
ROSC pmax pmax
comp=Z,35nm,0.8s
**MQZ McQueen's Vall 95.04 187** IAMs_20 IAMs_20 22 45 30.8
comp=Z,13µm,21.0s
**FOZ Fox Glacier 95.11 189** IAMs_20 IAMs_20 22 46 44.6
comp=Z,21µm,21.0s
**RPZ Rata Peaks 95.17 188** LR LR 22 50 28.5
comp=Z,22µm,19.0s,baz=34,slow=34
**BAUV El Baul 95.23 69** P **P** **22 10 15.8 -0.5**
**BAUV El Baul 95.23 69** *e*P **P** **22 10 15.7 -0.6**
**SLAC Saint Lucia, A 95.25 60** *e*P **P** **22 10 18.2 +1.9**
**IFR Ifrane 95.25 6** P **P** **22 10 13.3 -3.1**
**AVE Averroes 95.30 8** IAMs_20 IAMs_20 22 55 09.6
comp=Z,19µm,20.0s
**AVE Averroes 95.30 8** P **P** **22 10 13.3 -3.0**
**SVV Soufriere Volc 95.55 61** *e*P **P** **22 10 18.7 +1.0**
**SVB Belmont 95.57 61** *e*P **P** **22 10 17.1 -0.7**
**SVT Saint Vincent 95.66 61** *e*P **P** **22 10 19.6 +1.4**
**MDT Midelt 95.98 6** LR LR 22 54 29.7
comp=Z,9µm,20.4s,baz=9.5,slow=36
**GCMP Grenada, Carri 96.12 61** *e*P **P** **22 10 18.8 -1.5**
**PCRV Puerto La Cruz 96.20 65** P **P** **22 10 21.2 +0.5**
comp=Z,22nm,0.8s,baz=280,slow=1.4,SNR=7.4
PCRV PP **PP** **22 14 14.2 +0.6**
comp=Z,9.7nm,0.9s,baz=328,slow=6.6,SNR=3.3
PCRV LR LR 22 53 56.2
comp=Z,8µm,20.9s,slow=36
comp=Z,22nm,0.8s
**PCRV Puerto La Cruz 96.20 65** *e*P **P** **22 10 22.0 +1.3**
**RAYN Ar Rayn 96.21 321** P **P** **22 10 19.6 -1.1**
RAYN IAmb IAmb 22 10 23.4
comp=Z,95nm,1.1s
**RAYN Ar Rayn 96.21 321** *i* P **P** **22 10 19.4 -1.3**
SNR=71
**RAYN Ar Rayn 96.21 321** P **P** **22 10 19.9 -0.9**
RAYN S **SKSac** **22 20 53.2 -2.0**
**RAYN Ar Rayn 96.21 321** P **P** **22 10 19.6 -1.1**
RAYN pmax pmax
comp=Z,95nm,1.1s
**GRHS Sauteurs 96.22 62** *e*P **P** **22 10 19.1 -1.7**
**GRGR Grenville 96.28 62** IAMs_20 IAMs_20 22 58 56.4
comp=Z,19µm,19.0s
**GRGR Grenville 96.28 62** *e*P **P** **22 10 18.9 -2.2**
**BBGH Gun Hill 96.60 60** *e*P **P** **22 10 26.8 +4.3**
**DOK Doka 96.76 311** P **P** **22 10 21.6 -1.5**
DOK S **SKSac** **22 20 54.5 -3.5**
**MLZ Mavora Lakes 97.09 190** IAMs_20 IAMs_20 22 53 00.2
comp=Z,13µm,20.0s
**DCZ Deep Cove 97.30 190** IAMs_20 IAMs_20 22 52 31.5
comp=Z,13µm,21.0s
**WHFO Wadi Hawf 97.53 311** P **P** **22 10 26.0 -0.7**
**WHZ Wether Hill Ro 97.63 190** IAMs_20 IAMs_20 22 49 51.4
comp=Z,14µm,22.0s
**TRN Trinidad (W) 97.64 62** *e*P **P** **22 10 25.4 -1.8**
**TIO Tiouine 97.66 8** P **P** **22 10 24.4 -2.9**
**RBK Rabkut 97.69 310** P Pdif 22 10 29.2 +1.7
RBK S **SKSac** **22 21 01.1 -1.7**
**TBH Brigand Hill 97.96 62** *e*P **P** **22 10 28.4 -0.2**
**PYZ Puysegur Point 98.04 191** IAMs_20 IAMs_20 22 53 05.3
comp=Z,17µm,21.0s
**ABTO Aybut 98.25 311** P **P** **22 10 29.8 -0.2**
ABTO S **SKSac** **22 21 03.6 -2.1**
**VA02 Isla de Pascua 98.61 123** IAMs_20 IAMs_20 22 44 26.4
comp=Z,16µm,22.0s
**RPN Rapa Nui 98.63 123** IAMs_20 IAMs_20 22 43 39.1
comp=Z,14µm,21.0s
**ATAH Atuaipa 101.54 87** P **Pdif** **22 10 47.5 +2.4**
comp=Z,2.5nm,0.8s,baz=283,slow=21,SNR=1.6
**DGAR Diego Garcia 107.93 281** IAMs_20 IAMs_20 23 04 46.2
comp=Z,12µm,22.0s
**MACA Manacapuru-AM 109.27 70** IAMs_20 IAMs_20 23 00 04.3
comp=Z,18µm,22.0s
**ETMB Extrema 111.18 79** IAMs_20 IAMs_20 23 09 13.1
comp=Z,9µm,20.0s
**SAML Samuel 112.36 76** IAMs_20 IAMs_20 23 08 23.9
comp=Z,10µm,21.0s
**LPAZ La Paz 114.95 85** PKP PKPdf 22 15 32.9 -1.1
comp=Z,2.6nm,0.8s,baz=22,slow=9.0,SNR=6.2
LPAZ PKKPab **PKKPab** **22 26 16.5 +0.8**
comp=Z,2.3nm,0.6s,baz=95,slow=6.1,SNR=6.1
**TOA0 Torodi Ar. Sit 115.76 0** **PKiKP** **22 15 33.6 -1.4**
**TORD Torodi Ar. Bea 115.76 0** **PKiKP** **22 15 33.8 -1.2**
**TORD Torodi Ar. Bea 115.76 0** Pdiff **Pdif** **22 11 48.2 +0.3**
comp=Z,0.7nm,0.6s,baz=31,slow=4.8,SNR=5.8
TORD PKP **PKiKP** **22 15 33.6 -1.4**
comp=Z,17nm,0.6s,baz=34,slow=2.3,SNR=133
TORD SKiKP **SKiKP** **22 19 08.4 +0.3**
comp=Z,2.1nm,0.7s,baz=40,slow=2.3,SNR=4.2
TORD PKKPbc **PKKPbc** **22 26 04.7 -0.2**
comp=Z,5.4nm,1.1s,baz=182,slow=3.5,SNR=12
**VILB Vilhena 117.30 76** **PKPdf** **22 15 36.9 -0.9**
VILB IAMs_20 IAMs_20 23 10 30.8
comp=Z,14µm,20.0s
**PB09 IPOC Station P 118.36 90** IAMs_20 IAMs_20 22 55 01.4
comp=Z,10µm,22.0s
**LODK Lodwar 118.46 321** **PKPdf** **22 15 39.7 -0.6**
**SIV San Ignacio 119.11 79** PKP **PKPdf** **22 15 40.1 -1.2**
comp=Z,6.1nm,0.7s,baz=326,slow=0.9,SNR=14
SIV PP **PP** **22 17 00.5 -1.1**
comp=Z,5.5nm,0.7s,baz=330,slow=5.6,SNR=3.6
SIV PKKPbc **PKKPbc** **22 25 53.0 +0.1**
comp=Z,4.0nm,0.9s,baz=114,slow=5.3,SNR=7.7
**PB14 IPOC Station P 119.69 93** IAMs_20 IAMs_20 22 55 04.0
comp=Z,11µm,22.0s
**PTLB Pontes e Lacer 119.88 77** **PKPdf** **22 15 42.1 -0.6**
PTLB IAMs_20 IAMs_20 23 15 23.2
comp=Z,12µm,19.0s
**GO02 Mina Guanaco 120.59 93** **PKPdf** **22 15 44.0 -0.2**
GO02 IAMs_20 IAMs_20 22 56 34.7
comp=Z,13µm,21.0s
**H03N2 Juan Fernandez 120.66 106** T T 00 28 02.6
baz=317,slow=77,SNR=5283
**AC01 Pan de Azucar 120.67 94** IAMs_20 IAMs_20 22 57 28.9
comp=Z,14µm,20.0s
**H03N1 Juan Fernandez 120.67 106** T T 00 28 03.9
baz=317,slow=77,SNR=6019
**H03N3 Juan Fernandez 120.68 106** T T 00 27 46.0
baz=317,slow=77,SNR=6530
**VA04 Juan Fernndez 120.86 106** IAMs_20 IAMs_20 22 55 23.0
comp=Z,12µm,20.0s
**KMBO Kilima Mbogo 121.81 317** *i* P **PKPdf** **22 15 46.8 -0.1**
**AC04 Llanos de Chal 121.83 96** IAMs_20 IAMs_20 22 56 02.9
comp=Z,11µm,22.0s
**DBIC Dimbokro 121.90 8** **PKPdf** **22 15 45.6 -1.2**
**DBIC Dimbokro 121.90 8** *e*P **PKPdf** **22 15 45.6 -1.2**
**DBIC Dimbokro 121.90 8** PKP **PKPdf** **22 15 45.8 -1.0**
comp=Z,54nm,0.4s,baz=356,slow=2.2,SNR=150
DBIC PP **PP** **22 17 16.9 -2.6**
comp=Z,5.5nm,0.7s,baz=106,slow=10.0,SNR=0.8
**DBIC Dimbokro 121.90 8** PKiKP **PKPdf** **22 15 45.6 -1.2**
**TIC Toumodi 121.91 8** *e*PKiKP **PKPdf** **22 15 46.6 -0.3**
comp=Z,15nm,0.3s
**KIC Kosan Boka 122.22 8** *e*PKiKP **PKPdf** **22 15 46.3 -1.1**
comp=Z,40nm,0.4s
**LIC Lamto 122.32 8** *e*PKiKP **PKPdf** **22 15 46.5 -1.1**
comp=Z,51nm,0.4s
**KIBK Kibwezi 122.55 316** **PKiKP** **22 15 48.4 +0.1**
**LCO Las Campanas 122.63 97** IAMs_20 IAMs_20 22 56 25.1
comp=Z,14µm,22.0s
**AC05 El Transito 122.78 96** **PKiKP** **22 15 48.4 +0.1**
AC05 IAMs_20 IAMs_20 22 56 41.9
comp=Z,10µm,21.0s
**CO06 Fray Jorge 123.21 99** IAMs_20 IAMs_20 22 56 34.8
comp=Z,15µm,22.0s
**GO04 Tololo Observa 123.38 98** IAMs_20 IAMs_20 22 57 24.0
comp=Z,9µm,22.0s
**MBAR Mbarara 123.90 325** *e*P **PKPdf** **22 15 50.5 -0.4**
MBAR IAMs_20 IAMs_20 23 17 04.6
comp=Z,39nm,17.9s
**MBAR Mbarara 123.90 325** *i* P **PKiKP** **22 15 53.2 +2.0**
**VA06 Catapilco 124.72 100** IAMs_20 IAMs_20 22 59 41.7
comp=Z,11µm,20.0s
**RCBR Riachuelo 124.81 48** PKP **PKPdf** **22 15 52.4 0.0**
comp=Z,6.5nm,0.9s,baz=63,slow=24,SNR=3.7
RCBR PP **PP** **22 17 36.9 -2.9**
comp=Z,2.1nm,0.7s,baz=63,slow=18,SNR=1.3
**VA01 Torpederas 124.81 101** IAMs_20 IAMs_20 22 59 42.5
comp=Z,9µm,20.0s
**VA05 Santo Domingo 125.26 101** IAMs_20 IAMs_20 22 58 55.3
comp=Z,11µm,20.0s
**MT02 Curacav 125.29 101** **PKPdf** **22 15 52.2 -0.4**
MT02 IAMs_20 IAMs_20 22 59 07.9
comp=Z,10µm,20.0s
**VA03 San Esteban 125.31 100** **PKiKP** **22 15 53.2 0.0**
VA03 IAMs_20 IAMs_20 23 00 22.6
comp=Z,11µm,21.0s
**PEL Peldehue 125.49 100** IAMs_20 IAMs_20 23 00 15.4
comp=Z,8µm,20.0s
**MT01 Popeta 125.62 101** IAMs_20 IAMs_20 22 58 44.9
comp=Z,12µm,21.0s
**ZON Zonda 125.64 98** **PKPdf** **22 15 53.0 -0.5**
ZON IAMs_20 IAMs_20 22 58 50.1
comp=Z,13µm,21.0s
**ZON Zonda 125.64 98** PKiKP **PKPdf** **22 15 53.0 -0.5**
ZON MLR MLR
comp=Z,13µm,21.0s
**MT09 Talagante 125.73 101** IAMs_20 IAMs_20 22 58 48.6
comp=Z,11µm,21.0s
**MT03 Universidad Ad 125.83 101** IAMs_20 IAMs_20 22 59 55.3
comp=Z,8µm,20.0s
**GO05 Huala 125.98 103** IAMs_20 IAMs_20 22 58 24.2
comp=Z,15µm,22.0s
**BO01 Tunca 126.08 102** IAMs_20 IAMs_20 23 01 24.0
comp=Z,11µm,20.0s
**MT08 Bocatoma Ro 126.10 100** IAMs_20 IAMs_20 23 05 26.5
comp=Z,11µm,18.0s
**BO04 La Punta 126.10 101** IAMs_20 IAMs_20 22 59 22.5
comp=Z,9µm,20.0s
**MT13 San Alfonso 126.14 101** IAMs_20 IAMs_20 23 00 14.4
comp=Z,9µm,20.0s
**LMEL Las Melosas 126.26 101** IAMs_20 IAMs_20 23 00 29.6
comp=Z,10µm,20.0s
**BO02 Sierra Bellavi 126.53 102** **PKPdf** **22 15 55.3 +0.2**
BO02 IAMs_20 IAMs_20 23 02 25.0
comp=Z,9µm,20.0s
**BDFB Brasilia 126.65 67** **PKPdf** **22 15 55.4 -0.6**
**BDFB Brasilia 126.65 67** PKP **PKPdf** **22 15 55.5 -0.4**
comp=Z,12nm,0.8s,baz=235,slow=3.0,SNR=19
BDFB PP **PP** **22 17 51.7 -0.8**
comp=Z,14nm,0.9s,baz=29,slow=2.8,SNR=3.1
**ML02 Panimavida 126.79 103** IAMs_20 IAMs_20 22 57 54.7
comp=Z,11µm,22.0s
**BI02 San Fabin de 127.47 104** IAMs_20 IAMs_20 23 00 45.7
comp=Z,9µm,20.0s
**CPUP Villa Florida 129.10 84** **PKiKP** **22 16 00.8 0.0**
**CPUP Villa Florida 129.10 84** PKP **PKiKP** **22 16 00.9 +0.1**
comp=Z,13nm,0.9s,baz=326,slow=3.4,SNR=21
CPUP SKPbc SKPab 22 19 17.0 -0.9
comp=Z,2.6nm,0.8s,baz=328,slow=4.5,SNR=1.9
**CPUP Villa Florida 129.10 84** PKiKP **PKiKP** **22 16 00.8 0.0**
**CASY Casey 129.18 210** PKPdf **PKPdf** **22 15 59.4 +0.4**
**CASY Casey 129.18 210** IAMs_20 IAMs_20 23 03 45.5
comp=Z,8µm,22.0s
**GO06 Curarrehue 129.22 107** **PKiKP** **22 16 00.7 -0.1**
**VNDA Vanda 129.22 186** **PKiKP** **22 16 00.3 +0.7**
**VNDA Vanda 129.22 186** PKP **PKiKP** **22 16 00.7 +1.1**
comp=Z,4.5nm,0.9s,baz=337,slow=3.7,SNR=15
VNDA SKPbc SKPab 22 19 17.0 +0.2
comp=Z,9.1nm,1.0s,baz=340,slow=6.3,SNR=7.8
VNDA PKKP **PKKPdf** **22 26 06.7 +1.2**
comp=Z,1.7nm,0.7s,baz=298,slow=2.9,SNR=5.3
**VNDA Vanda 129.22 186** PKiKP **PKiKP** **22 16 00.3 +0.7**
**SBA Scott Base 129.29 184** **PKiKP** **22 15 59.9 +0.2**
**SBA Scott Base 129.29 184** PKiKP **PKiKP** **22 15 59.9 +0.2**
SBA MLR MLR
comp=Z,7µm,20.0s
**LR05 Currie 129.31 108** **PKPdf** **22 16 00.3 +0.2**
**LL03 Petrohue 129.64 109** IAMs_20 IAMs_20 22 58 53.6
comp=Z,14µm,22.0s
**LL01 San Ignacio de 130.40 110** **PKiKP** **22 16 02.9 0.0**
**PLCA Paso Flores 130.49 108** **PKiKP** **22 16 03.4 +0.1**
**PLCA Paso Flores 130.49 108** PKhKP PKPpre 22 15 55.8
comp=Z,1.6nm,0.7s,baz=269,slow=3.6,SNR=4.7
PLCA PKP **PKiKP** **22 16 04.0 +0.7**
comp=Z,16nm,0.9s,baz=292,slow=2.7,SNR=22
PLCA SKPbc **SKPbc** **22 19 23.7 +0.2**
comp=Z,5.2nm,0.9s,baz=322,slow=5.9,SNR=2.7
PLCA SKP 22 19 31.6
comp=Z,21nm,1.0s,baz=297,slow=4.0,SNR=5.8
**ITQB Itaqui 131.90 87** **PKiKP** **22 16 06.1 -0.2**
ITQB IAMs_20 IAMs_20 23 22 28.6
comp=Z,12µm,22.0s
**ABPO Ambohimpanom 132.07 295** *e*P **SKPbc** **22 19 31.2 +1.2**
**ABPO Ambohimpanom 132.07 295** *i* P PKPpre 22 16 01.3
**KSMZ Kasama 132.48 319** *i* P **PKPdf** **22 16 04.0 -3.1**
KSMZ *i* 22 16 06.6
baz=102,slow=8.6
KSMZ *i* S SKiKP 22 18 29.5 -72
**SPB Sao Paulo 133.17 73** IAMs_20 IAMs_20 23 19 42.1
comp=Z,12µm,20.0s
**TRQA Tornquist 134.06 99** IAMs_20 IAMs_20 23 08 36.1
comp=Z,8µm,21.0s
**VOI Vohitsoka 134.60 293** **PKPdf** **22 16 11.2 +0.3**
**VOI Vohitsoka 134.60 293** *e*P **PKiKP** **22 16 13.6 +1.4**
**PLTB Pedras Altas 135.22 86** **PKiKP** **22 16 12.6 -0.5**
**LSZ Lusaka 138.32 320** **PKPdf** **22 16 18.1 +0.2**
**LSZ Lusaka 138.32 320** PKiKP **PKPdf** **22 16 18.1 +0.2**
LSZ MLR MLR
comp=Z,14µm,22.0s
**LSZ Lusaka 138.32 320** *i* P **PKPdf** **22 16 18.9 +1.0**
**KRI Karoi 139.13 317** *e*P PKPpre 22 16 11.7
**KRI Karoi 139.13 317** *i* P PKPpre 22 16 12.9
**KRI Karoi 139.13 317** *i* P **PKPdf** **22 16 17.4 -2.0**
**USHA Ushuaia 139.19 123** SKPbc **SKPbc** **22 19 48.0 -2.8**
comp=Z,11nm,0.4s,baz=266,slow=3.1,SNR=3.3
**CHIPN CHIPINGE 140.74 311** *e*P PKPpre 22 16 15.4
**CHIPN CHIPINGE 140.74 311** *i* P PKPpre 22 16 18.2
**CHIPN CHIPINGE 140.74 311** *i* P PKPpre 22 16 19.0
**QSPA South Pole Qui 141.12 180** **PKiKP** **22 16 22.8 -1.3**
**QSPA South Pole Qui 141.12 180** IAMs_20 IAMs_20 23 16 20.0
comp=Z,8µm,20.0s
**QSPA South Pole Qui 141.12 180** PKhKP PKPpre 22 16 14.8
comp=Z,8.0nm,0.6s,baz=153,slow=1.2,SNR=45
QSPA PP **PP** **22 19 25.6 +1.5**
comp=Z,4.8nm,0.7s,baz=355,slow=12,SNR=1.1
QSPA SKPbc **SKPbc** **22 19 55.1 -0.5**
comp=Z,22nm,1.0s,baz=60,slow=3.1,SNR=5.2
QSPA SKKPbc **SKKPab** **22 28 19.8 -1.5**
comp=Z,4.3nm,0.7s,baz=248,slow=1.8,SNR=3.1
**KSANE Kasane 141.80 323** *i* P PKPpre 22 16 16.9
**MATP Matopo 142.80 316** *i* P **PKPdf** **22 16 25.1 -0.8**
**MATP Matopo 142.80 316** *i* P **PKPdf** **22 16 23.6 -2.3**
**MUSN Musina, Limpop 143.81 313** *e*P PKPpre 22 16 25.9 +0.7
**MUSN Musina, Limpop 143.81 313** *i* P **PKPdf** **22 16 26.9 -0.6**
**MUSN Musina, Limpop 143.81 313** *i* P **PKPdf** **22 16 26.9 -0.6**
**SOOWA Sowa 143.88 319** *i* P PKPbc 22 16 26.0 +0.5
**SHEL Horse Pasture 144.14 13** PKPbc 22 16 27.2 +0.9
**SHEL Horse Pasture 144.14 13** PKiKP **PKPdf** **22 16 27.3 -0.9**
**MOPA Mopani 144.14 310** *e*P PKPbc 22 16 26.5 +0.3
MOPA IAMs_20 IAMs_20 23 23 19.4
comp=Z,59µm,22.6s
**MOPA Mopani 144.14 310** *i* P **PKPdf** **22 16 27.9 -0.1**
**MOPA Mopani 144.14 310** *i* P **PKPdf** **22 16 27.9 -0.1**
**MPHEP Siloam, Limpop 144.20 312** *e*P PKPbc 22 16 26.4 0.0
**PHDHD Phuduhudu 144.22 322** *i* P PKPbc 22 16 27.0 +0.4
**PMSA Palmer Station 144.39 138** PKPbc 22 16 26.3 +0.7
**PMSA Palmer Station 144.39 138** IAMs_20 IAMs_20 23 10 08.6
comp=Z,10µm,20.0s
**PMSA Palmer Station 144.39 138** PKP **PKPab** **22 16 25.3 0.0**
comp=Z,68nm,0.8s,baz=264,slow=1.8,SNR=12
PMSA PP **PP** **22 19 45.5 +1.7**
comp=Z,13nm,1.0s,baz=294,slow=12,SNR=1.3
**CRAIL Swartwater, Li 144.99 315** *e*P PKPbc 22 16 27.9 -1.0
**HOED Hoedspruit, Li 145.12 310** *e*P **PKPbc** **22 16 29.2 0.0**
**TSUM Tsumeb 145.63 333** **PKPdf** **22 16 30.1 -0.8**
**TSUM Tsumeb 145.63 333** *e*P **PKPdf** **22 16 30.3 -0.6**
**TSUM Tsumeb 145.63 333** *i* P **PKPab** **22 16 32.9 +1.5**
**PILG Pilgrimsrest, 145.67 309** *e*P **PKPdf** **22 16 30.9 0.0**
PILG IAMs_20 IAMs_20 23 24 24.3
comp=Z,20µm,22.2s
**WTBG Waterberg Wild 145.92 313**⇑ *i* P **PKPdf** **22 16 31.5 +0.2**
**LEPH Lephalale, Lim 146.11 314**⇑ *i* P **PKPbc** **22 16 32.2 -0.2**
LEPH IAMs_20 IAMs_20 23 27 15.5
comp=Z,31µm,23.0s
**DULL Dullstroom, Mp 146.29 310** *e*P **PKPbc** **22 16 33.3 +0.2**
**MTLB Matlabas, Limp 146.40 315**⇑ *i* P **PKPbc** **22 16 33.7 +0.4**
**GRTLG Ghanzi 146.51 326** *i* P **PKPbc** **22 16 33.5 -0.3**
**TEMBE Tembe Elephant 146.56 305** *e*P **PKPbc** **22 16 33.7 +0.2**
TEMBE IAMs_20 IAMs_20 23 30 56.3
comp=Z,23µm,20.8s
**MAW Mawson 146.78 218** PKPbc **PKPbc** **22 16 32.2 -0.7**
comp=Z,152nm,0.9s,baz=79,slow=2.3,SNR=63
MAW PP **PP** **22 19 56.1 -1.8**
comp=Z,16nm,1.1s,baz=100,slow=13,SNR=1.9
**CRLN Carolina, Mapu 146.90 309** *e*P **PKPbc** **22 16 35.4 +0.6**
**RUST Rust De Winter 146.97 312** *e*P **PKPdf** **22 16 33.6 +0.7**
**POGA Pongola 147.18 306** **PKPbc** **22 16 35.1 -0.2**
**POGA Pongola 147.18 306** *e*P **PKPbc** **22 16 35.1 -0.2**
POGA IAMs_20 IAMs_20 23 32 04.9
comp=Z,24µm,20.6s
**NHAM Northam, North 147.24 314** *e*P **PKPbc** **22 16 35.6 -0.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TSWA** | **Tswaing Meteor** | **147.33** | 313 | *e*P | **PKPbc** | 22 16 35.2 | -0.8 | |
| **CRZF** | **Crozet Islands** | **147.37** | 259 | IAMs_20 | IAMs_20 | 23 22 02.7 | | |
| | comp=Z,6μm,20.0s | | | | | | | |
| **NYAT** | **Nyati, Northwe** | **147.52** | 313 | *e*P | **PKPdf** | 22 16 35.1 | +1.3 | |
| **HRAO** | **HartRAO** | **147.91** | 313⇑ | *i*P | **PKPbc** | 22 16 37.3 | -0.2 | |
| **LBTB** | **Lobatse** | **148.09** | 317 | | **PKPbc** | 22 16 37.2 | -0.8 | |
| **LBTB** | **Lobatse** | **148.09** | 317 | *e*P | **PKPdf** | 22 16 35.1 | +0.3 | |
| LBTB | | | | IAMs_20 | IAMs_20 | 23 29 34.5 | | |
| | comp=Z,19μm,20.8s | | | | | | | |
| **LBTB** | **Lobatse** | **148.09** | 317 | *i* P | **PKiKP** | 22 16 39.1 | -0.7 | |
| **LBTB** | **Lobatse** | **148.09** | 317 | PKP2 | **PKPbc** | 22 16 37.2 | -0.8 | |
| **LBTB** | **Lobatse** | **148.09** | 317 | *i* P | **PKPdf** | 22 16 35.3 | +0.5 | |
| **SKOMA** | **Sekoma** | **148.34** | 320 | *i* P | **PKPbc** | 22 16 38.5 | -0.2 | |
| **NWCL** | **Newcastle** | **148.41** | 308 | *e*P | **PKPbc** | 22 16 37.6 | -1.2 | |
| **PRYS** | **Parys** | **148.95** | 312 | *e*P | **PKPdf** | 22 16 37.5 | +1.3 | |
| **WIN** | **Windhoek** | **148.95** | 332 | *e*P | **PKPdf** | 22 16 38.2 | +1.8 | |
| **PMBG** | **Pietermaritzbu** | **149.54** | 305 | *e*P | **PKPbc** | 22 16 41.3 | -0.2 | |
| PMBG | | | | IAMs_20 | IAMs_20 | 23 32 56.2 | | |
| | comp=Z,20μm,21.1s | | | | | | | |
| **SNKL** | **Senekal, Frees** | **149.89** | 310 | *e*P | **PKPbc** | 22 16 42.4 | -0.2 | |
| **SWZ** | **Schweizer** | **150.09** | 315 | *e*P | **PKPdf** | 22 16 39.0 | +1.0 | |
| **BELA** | **Belgrano 2** | **150.21** | 165 | | **PKPdf** | 22 16 37.2 | +0.7 | |
| **KSTD** | **Kokstad** | **151.05** | 305 | *e*P | **PKiKP** | 22 16 46.5 | +0.7 | |
| KSTD | | | | IAMs_20 | IAMs_20 | 23 33 43.0 | | |
| | comp=Z,26μm,21.4s | | | | | | | |
| **BOSA** | **Boshof** | **151.35** | 314 | *e*P | **PKPdf** | 22 16 40.9 | +1.1 | |
| BOSA | | | | IAMs_20 | IAMs_20 | 23 30 22.6 | | |
| | comp=Z,17μm,22.2s | | | | | | | |
| **BOSA** | **Boshof** | **151.35** | 314 | PKP | **PKPdf** | 22 16 41.0 | +1.1 | |
| | comp=Z,18nm,0.6s,baz=18,slow=1.3,SNR=16 | | | | | | | |
| BOSA | | | | PKPbc | **PKPbc** | 22 16 46.0 | 0.0 | |
| | comp=Z,141nm,0.6s,baz=29,slow=2.1,SNR=96 | | | | | | | |
| BOSA | | | | PP | **PP** | 22 20 24.4 | -0.3 | |
| | comp=Z,8.0nm,0.9s,baz=67,slow=10,SNR=1.1 | | | | | | | |
| **BOSA** | **Boshof** | **151.35** | 314 | *i* P | **PKiKP** | 22 16 47.6 | +1.2 | |
| **BOSA** | **Boshof** | **151.35** | 314 | *i* P | **PKPdf** | 22 16 41.5 | +1.6 | |
| **UPI** | **Upington** | **152.84** | 320 | *e*P | **PKPdf** | 22 16 42.3 | +0.3 | |
| UPI | | | | IAMs_20 | IAMs_20 | 23 28 54.1 | | |
| | comp=Z,27μm,22.4s | | | | | | | |
| **HVD** | **Gariep Dam** | **152.92** | 311 | *e*P | **PKiKP** | 22 16 50.4 | +0.8 | |
| **AUSN** | **Aus** | **153.06** | 331 | *e*P | **PKPdf** | 22 16 41.0 | -1.5 | |
| **ARMS** | **Ukamas** | **153.14** | 323 | *e*P | **PKPdf** | 22 16 42.7 | +0.2 | |
| **KEIM** | **Keimoes** | **153.26** | 321 | *e*P | **PKPdf** | 22 16 43.8 | +1.2 | |
| **AUGR** | **Augrabies** | **153.41** | 322 | *e*P | **PKiKP** | 22 16 51.4 | +0.8 | |
| **SOE** | **Somerset East** | **154.62** | 308 | *e*P | **PKPdf** | 22 16 47.6 | +3.1 | |
| **GRHM** | **Grahamstown, E** | **154.66** | 306 | *e*P | **PKiKP** | 22 16 55.1 | +2.0 | |
| **BFON** | **Badsfontein, M** | **154.76** | 312 | *e*P | **PKiKP** | 22 16 55.1 | +1.7 | |
| **GRAF** | **Camdeboo Natio** | **154.78** | 310 | *e*P | **PKiKP** | 22 16 55.0 | +1.7 | |
| GRAF | | | | IAMs_20 | IAMs_20 | 23 24 54.7 | | |
| | comp=Z,19μm,26.0s | | | | | | | |
| **BRAK** | **Brakfontein** | **155.11** | 314 | *e*P | **PKPdf** | 22 16 46.8 | +1.6 | |
| **ROOI** | **Rooidraai Farm** | **155.41** | 312 | *e*P | PKPdf | 22 16 55.7 | +10 | |
| ROOI | | | | IAMs_20 | IAMs_20 | 23 32 58.0 | | |
| | comp=Z,22μm,26.0s | | | | | | | |
| **KOMG** | **Komaggas** | **155.55** | 326 | *e*P | **PKPdf** | 22 16 48.6 | +2.9 | |
| **NMMU** | **Nelson Mandela** | **155.60** | 306 | *e*P | **PKPdf** | 22 16 52.0 | +6.4 | |
| **GRAN** | **Grantham** | **155.88** | 314 | *e*P | **PKPdf** | 22 16 47.3 | +1.1 | |
| **FRAZ** | **Fraserburg** | **155.90** | 316 | *e*P | **PKPdf** | 22 16 46.8 | +0.5 | |
| **BUFB** | **Buffelsbos** | **156.18** | 307 | *e*P | PKPab | 22 17 01.0 | -13 | |
| **CVNA** | **Calvinia** | **156.20** | 320 | *e*P | **PKPdf** | 22 16 48.0 | +1.4 | |
| **MERW** | **Merweville** | **156.48** | 315 | *e*P | **PKPdf** | 22 16 48.8 | +1.8 | |
| MERW | | | | IAMs_20 | IAMs_20 | 23 33 51.7 | | |
| | comp=Z,18μm,23.0s | | | | | | | |
| **SUR** | **Sutherland** | **156.54** | 317 | *e*P | **PKPdf** | 22 16 49.8 | +2.6 | |
| **SUR** | **Sutherland** | **156.54** | 317 | *i* P | **PKPdf** | 22 16 49.8 | +2.6 | |
| **ELIB** | **Princess Elisa** | **157.26** | 197 | *d*PKPdf | **PKPdf** | 22 16 45.5 | -1.3 | |
| ELIB | | | | *d*PKP | **PKPab** | 22 17 17.9 | -0.2 | |
| ELIB | | | | *d*PP | **PP** | 22 20 58.5 | +1.0 | |
| ELIB | | | | *d*SKKSac | SKKSac | 22 27 38.8 | -4.6 | |
| **MATJ** | **Matjiesfontein** | **157.40** | 316 | *e*P | **PKPdf** | 22 16 49.6 | +1.4 | |
| **PRTV** | **Porterville,We** | **157.86** | 319 | *e*P | **PKPdf** | 22 16 53.3 | +4.7 | |
| PRTV | | | | IAMs_20 | IAMs_20 | 23 31 39.2 | | |
| | comp=Z,21μm,22.7s | | | | | | | |
| **CER** | **Ceres** | **158.03** | 318 | *e*P | **PKPdf** | 22 16 50.5 | +1.6 | |
| **ELIM** | **Elim** | **158.89** | 316 | *e*P | **PKPab** | 22 17 27.0 | +1.0 | |
| **TROLL** | **Troll, Antarti** | **159.28** | 180 | ⇑PKPdf | **PKPdf** | 22 16 48.3 | -0.9 | |
| | comp=Z,582nm,0.9s | | | | | | | |
| TROLL | | | | ⇑PP | **PP** | 22 21 06.1 | -2.3 | |
| | comp=Z,0.1nm,0.1s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **159.36** | 169 | ⇑PKPdf | **PKPdf** | 22 16 47.3 | -1.9 | |
| | comp=Z,7.9nm,0.7s | | | | | | | |
| VNA3 | | | | ⇑PP | **PP** | 22 21 06.7 | -2.0 | |
| | comp=Z,67μm,0.0s | | | | | | | |
| **SNAA** | **Sanae** | **159.50** | 176 | PP | PP | 22 21 07.6 | -2.0 | |
| **SNAA** | **Sanae** | **159.50** | 176 | | **PKPdf** | 22 16 48.8 | -0.6 | |
| SNAA | | | | IAMs_20 | IAMs_20 | 23 23 07.8 | | |
| | comp=Z,12μm,20.0s | | | | | | | |
| **SNAA** | **Sanae** | **159.50** | 176 | ⇑*i*P | **PKPdf** | 22 16 47.6 | -1.8 | |
| **SNAA** | **Sanae** | **159.50** | 176 | ⇑PKPdf | **PKPdf** | 22 16 48.0 | -1.4 | |
| | comp=Z,122nm,0.7s | | | | | | | |
| SNAA | | | | ⇑PP | **PP** | 22 21 07.6 | -2.0 | |
| | comp=Z,54nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **159.50** | 176 | PKP | **PKPdf** | 22 16 47.2 | -2.2 | |
| | comp=Z,7.4nm,0.8s,baz=173,slow=1.2,SNR=20 | | | | | | | |
| SNAA | | | | PP | **PP** | 22 21 11.6 | +2.0 | |
| | comp=Z,5.2nm,0.9s,baz=201,slow=13,SNR=2.4 | | | | | | | |
| **SNAA** | **Sanae** | **159.50** | 176 | PKIKP | **PKPdf** | 22 16 48.8 | -0.6 | |
| SNAA | | | | MLR | MLR | | | |
| | comp=Z,12μm,20.0s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **159.90** | 171 | ⇑PKPdf | **PKPdf** | 22 16 48.4 | -1.4 | |
| | comp=Z,13nm,0.6s,baz=273,slow=1.5 | | | | | | | |
| VNA2 | | | | ⇑PP | **PP** | 22 21 12.9 | +1.1 | |
| | comp=Z,0.1nm,0.4s,baz=153,slow=10 | | | | | | | |
| **NVL** | **N'lazarevskaya** | **160.01** | 190 | *e*PKIKP | **PKPdf** | 22 16 51.9 | +2.0 | |
| NVL | | | | *e* | | 22 21 09.5 | | |
| NVL | | | | *e* | | 22 23 50.5 | | |
| NVL | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **160.08** | 170 | ⇑PKPdf | **PKPdf** | 22 16 48.6 | -1.3 | |
| | comp=Z,6.4nm,1.0s | | | | | | | |

**JMA 15 22:03:45.8**±0.0, **34°9N**±0°.1×**135°6E**±0°.1, **h11**km, **MV0.8**/27,
**KYOTO OSAKA BORDER REG, Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHE** | **Heguri** | **0.23** | **171** | P | Pg | 22 03 50.6 | +0.1 |
| JHE | | | | *e*S | Sg | 22 03 53.8 | +0.1 |
| **JWT** | **Wachi** | **0.45** | **334** | P | Pg | 22 03 54.8 | +0.1 |
| **TSUJ** | **Tsu 2** | **0.66** | **104** | *e*P | Pg | 22 03 58.3 | -0.3 |
| TSUJ | | | | *e*S | Sg | 22 04 07.3 | 0.0 |
| **JKS** | **Kasai** | **0.66** | **279** | P | Pg | 22 03 58.4 | -0.2 |
| JKS | | | | *e*S | Sg | 22 04 07.2 | -0.2 |
| **JKN2** | **Miekihoku** | **0.82** | **140** | *e*P | Pg | 22 04 01.2 | -0.4 |
| JKN2 | | | | S | Sg | 22 04 11.8 | -0.6 |
| **JKY** | **Yasaka** | **0.87** | **330** | *e*P | Pg | 22 04 02.5 | -0.1 |

**IDC 15 22:07:36.4**±5.9, **17°70S**×**171°14W**, **h0**km, **mb3.8**/3,
**mbtmp3.8**/3, **Error ellipse: s-maj=419.9km s-min=34.6km az=150.0, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **51.47** | **258** | P | P | 22 16 43.6 | -0.4 |
| | 0.5nm,0.9s,baz=97,slow=6.9,SNR=1.3 0.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **51.51** | **254** | P | P | 22 16 44.4 | +0.1 |
| | 2.2nm,0.6s,baz=90,slow=8.1,SNR=15 2.2nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.61** | **40** | P | P | 22 19 17.9 | 0.0 |
| | 0.3nm,0.4s,baz=224,slow=5.0,SNR=1.5 0.3nm,0.4s | | | | | | |

*IDC **15** 22:09:47.8±1.3, 51°.45N×178°.09W, h0km, mb3.9/9, mbtmp3.9/9, Error ellipse: s-maj=43.2km s-min=21.9km az=1.0*
*AEIC **15** 22:09:51.9±1.2, 51°.13N±0°.06×177°.87W±0°.05, h28km±6km, Error ellipse: s-maj=9.5km s-min=3.7km az=158.0*
*NEIC **15** 22:09:51.4±1.4, 51°.06N±0°.04×177°.88W±0°.05, h31km±6km, mb4.2/15, ML3.6(AEIC), Error ellipse: s-maj=7.0km s-min=3.5km az=151.0*
**ISC 15 22:09:50.9**±1.8, **51°.11N**±0°.09×**177°.89W**±0°.04,
**h25**km±12km, **n43**, σ1**00**/49, **mb3.9**/12, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TASE** | **Tanaga Southea** | **0.73** | **353** | | **Pn** | **22 10 05.7** | **0.0** |
| **KIMD** | **Kanaga Island** | **0.77** | **32** | | **Pn** | **22 10 06.0** | **-0.1** |
| KIMD | | | | | **Sn** | **22 10 16.6** | **-0.3** |
| **TANO** | **Tanaga North** | **0.82** | **350** | | **Pn** | **22 10 07.1** | **+0.2** |
| TANO | | | | | **Sn** | **22 10 18.6** | **+0.5** |
| **GAEA** | **Gareloi East** | **0.86** | **322** | | **Pn** | **22 10 07.4** | **0.0** |
| **KIWB** | **Kanaga Island** | **0.88** | **31** | Pn | **Pn** | **22 10 07.5** | **0.0** |
| KIWB | | | | Sn | **Sn** | **22 10 19.2** | **-0.3** |
| **GASW** | **Gareloi Southw** | **0.90** | **318** | | **Pb** | **22 10 08.2** | **+0.3** |
| **GANO** | **Gareloi North** | **0.91** | **321** | | **Pn** | **22 10 08.1** | **-0.1** |
| **KICM** | **Kanaga Island** | **0.92** | **28** | | **Pb** | **22 10 08.6** | **+0.4** |
| KICM | | | | | **Sn** | **22 10 21.8** | **+1.2** |
| **KIRH** | **Kanaga Island** | **0.93** | **32** | | **Pb** | **22 10 09.0** | **+0.6** |
| **KINC** | **Kanaga Island** | **0.95** | **30** | | **Pb** | **22 10 08.9** | **+0.2** |
| **ADK** | **Adak** | **1.08** | **44** | | **Pn** | **22 10 10.4** | **0.0** |
| ADK | | | | Sn | **Sn** | **22 10 24.1** | **-0.4** |
| **GSCK** | **Great Sitkin C** | **1.41** | **49** | | **Pb** | **22 10 15.9** | **-0.6** |
| **GSTD** | **Great Sitkin T** | **1.44** | **48** | | **Pn** | **22 10 16.3** | **+0.8** |
| GSTD | | | | | **Sb** | **22 10 34.2** | **-0.9** |
| **GSTR** | **Great Sitkin T** | **1.51** | **48** | Pn | **Pn** | **22 10 16.3** | **0.0** |
| **AMKA** | **Amchitka** | **1.79** | **280** | | **Pn** | **22 10 19.8** | **-0.4** |
| AMKA | | | | Sn | **Sn** | **22 10 43.2** | **+1.3** |
| **CNBA** | **Chernabura Isl** | **11.63** | **64** | Pn | **Pn** | **22 12 34.8** | **-0.4** |
| **KDAK** | **Kodiak Island** | **16.10** | **56** | Pn | **Pn** | **22 13 35.3** | **+0.1** |
| KDAK | | | | IAmb | IAmb | 22 13 43.7 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **M19K** | **Big River Lodg** | **16.77** | **41** | | **P** | **22 13 47.0** | **+1.2** |
| M19K | | | | IAmb | IAmb | 22 14 09.0 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **CNPM** | **China Poot** | **17.25** | **50** | | **P** | **22 13 50.5** | **-0.6** |
| CNPM | | | | IAmb | IAmb | 22 14 02.9 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **18.71** | **25** | P | **Pn** | **22 14 08.5** | **+0.8** |
| **MLY** | **Manley** | **19.78** | **35** | | **P** | **22 14 18.9** | **0.0** |
| MLY | | | | IAmb | IAmb | 22 14 23.7 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **19.89** | **22** | P | **P** | **22 14 20.6** | **+0.5** |
| D19K | | | | IAmb | IAmb | 22 14 43.5 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **F21K** | **Alatna River** | **20.19** | **28** | P | **P** | **22 14 24.2** | **+0.9** |
| **DHY** | **Denali Highway** | **20.21** | **42** | | **P** | **22 14 23.7** | **-0.1** |
| DHY | | | | IAmb | IAmb | 22 14 27.8 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **20.67** | **37** | P | Pn | 22 14 30.1 | -0.9 |
| **ILAR** | **Eielson Array** | **21.10** | **38** | P | **P** | **22 14 29.5** | **-3.7** |
| | comp=Z,2.1nm,1.2s,baz=242,slow=11,SNR=0.8 comp=Z,2.1nm,1.2s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **21.80** | **33** | P | **P** | **22 14 42.2** | **+1.5** |
| **E24K** | **Your Creek** | **22.22** | **29** | P | **P** | **22 14 47.2** | **+2.0** |
| E24K | | | | IAmb | IAmb | 22 15 10.4 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **C23K** | **Itkillik River** | **22.72** | **24** | P | **P** | **22 14 50.2** | **-0.2** |
| **BMAR** | **Burnt Mountain** | **23.15** | **33** | P | **P** | **22 14 55.8** | **+0.8** |
| **I30M** | **Mount Dempster** | **25.45** | **41** | P | **P** | **22 15 16.8** | **+0.2** |
| I30M | | | | IAmb | IAmb | 22 15 39.7 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **KLR** | **Kul'dur** | **31.81** | **287** | P | **P** | **22 16 12.7** | **-0.4** |
| | comp=Z,5.4nm,0.4s,baz=72,slow=7.7,SNR=19 comp=Z,5.4nm,0.4s | | | | | | |
| **YPP** | **Pitchstone Pla** | **44.24** | **72** | P | **P** | **22 17 58.2** | **0.0** |
| **PDAR** | **Pinedale Array** | **45.84** | **73** | P | **P** | **22 18 11.3** | **+0.4** |
| **PDAR** | **Pinedale Array** | **45.84** | **73** | P | **P** | **22 18 12.8** | **+1.8** |
| | comp=Z,0.4nm,0.5s,baz=333,slow=3.4,SNR=4.4 comp=Z,0.4nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **58.13** | **82** | P | **P** | **22 19 43.9** | **+1.5** |
| | comp=Z,0.2nm,0.6s,baz=311,slow=7.0,SNR=1.8 comp=Z,0.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.73** | **314** | P | **P** | **22 19 51.1** | **-1.9** |
| | comp=Z,2.8nm,0.3s,baz=41,slow=6.9,SNR=5.2 comp=Z,2.8nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.65** | **309** | P | **P** | **22 19 58.2** | **-1.3** |
| | comp=Z,0.4nm,0.8s,baz=35,slow=7.5,SNR=1.6 comp=Z,0.4nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.46** | **320** | P | **P** | **22 20 03.5** | **-1.4** |
| | comp=Z,0.4nm,0.3s,baz=52,slow=5.7,SNR=5.0 comp=Z,0.4nm,0.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.50** | **323** | P | **P** | **22 20 50.3** | **-0.3** |
| **ABKAR** | **Akbulak array** | **68.50** | **323** | P | **P** | **22 20 50.3** | **-0.3** |
| ABKAR | | | | IAmb | IAmb | 22 21 09.7 | |
| | comp=Z,4.9nm,1.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **85.43** | **336** | P | **P** | **22 22 25.2** | **-1.0** |
| | comp=Z,1.0nm,0.8s,baz=29,slow=1.5,SNR=4.2 comp=Z,1.0nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **85.68** | **223** | P | **P** | **22 22 27.8** | **+0.5** |
| | comp=Z,0.5nm,0.7s,baz=30,slow=4.8,SNR=2.2 comp=Z,0.5nm,0.7s | | | | | | |

*SOME **15** 22:10:53.8, 39°.70N×72°.67E, h10km*
*NNC **15** 22:10:55.7±3.1, 39°.77N×72°.71E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=23.9km s-min=17.8km az=154.0*
*KRNET **15** 22:10:55.2±0.1, 39°.49N×73°.17E, h15km, mb3.3*
**ISC 15 22:10:56.9**±1.0, **39°56N**±0°.05×**73°10E**±0°.03, **h10**km, **n34**,
σ1**93**/63, **34C-20D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.55** | **34** | ⇑*i*P | **Pg** | **22 11 06.5** | **-1.2** |
| SFK | baz=26 | | | ⇑*i*S | **Sg** | **22 11 14.4** | **-0.6** |
| | baz=26 | | | | | | |
| **OHH** | **Osh** | **0.99** | **346** | ⇓*i*P | **Pg** | **22 11 15.6** | **-0.4** |
| OHH | baz=44 | | | ⇓*i*S | **Sb** | **22 11 30.4** | **+0.9** |
| | baz=44 | | | | | | |
| **DRK** | **Karamyk** | **1.01** | **266** | ⇑*i*P | **Pg** | **22 11 15.3** | **-1.0** |
| DRK | baz=70 | | | ⇑*i*S | **Sb** | **22 11 29.9** | **-0.1** |
| | baz=70 | | | | | | |
| **ARSB** | **Arslanbob** | **1.77** | **357** | ⇓*i*P | **Pb** | **22 11 28.9** | **-0.6** |
| ARSB | baz=56 | | | ⇓*i*S | **Sg** | **22 11 53.9** | **+0.2** |
| | baz=56 | | | | | | |
| **BTK** | **Batken** | **1.82** | **287** | ⇓*i*P | **Pb** | **22 11 29.9** | **-0.5** |
| BTK | baz=88 | | | ⇓*i*S | **Sg** | **22 11 55.5** | **0.0** |
| | baz=88 | | | | | | |
| **GAR** | **Garm** | **2.23** | **256** | ⇓*i*P | **Pb** | **22 11 35.1** | **-2.2** |
| GAR | baz=58 | | | ⇓*i*S | **Sb** | **22 12 04.4** | **-0.6** |
| | baz=58 | | | | | | |
| **ARK** | **Arkit** | **2.40** | **339** | ⇑*i*P | **Pb** | **22 11 38.3** | **-1.9** |
| ARK | baz=39 | | | ⇑*i*S | **Sb** | **22 12 09.8** | **-0.1** |
| | baz=39 | | | | | | |
| **TRKS** | **Terek-Say** | **2.47** | **324** | ⇓*i*P | **Pn** | **22 11 38.4** | **+1.0** |
| TRKS | baz=23 | | | ⇓*i*S | **Sn** | **22 12 10.0** | **+2.3** |
| | baz=23 | | | | | | |
| **ARLS** | **Aral** | **2.48** | **22** | ⇑*i*P | **Pb** | **22 11 38.9** | **-2.8** |
| ARLS | baz=20 | | | ⇑*i*S | **Sb** | **22 12 10.7** | **-1.7** |
| | baz=20 | | | | | | |
| **AML** | **Almayashu** | **2.61** | **10** | ⇑*i*P | **Pn** | **22 11 40.8** | **+1.3** |
| AML | baz=8.0 | | | ⇑*i*S | **Sb** | **22 12 14.4** | **-1.9** |
| | baz=8.0 | | | | | | |
| **NRN** | **Naryn** | **2.90** | **49** | ⇓*i*P | **Pn** | **22 11 43.8** | **+0.4** |
| NRN | baz=47 | | | ⇓*i*S | **Sn** | **22 12 19.2** | **+0.7** |
| | baz=47 | | | | | | |
| **MNAS** | **Manas** | **2.96** | **351** | ⇓*i*P | **Pn** | **22 11 46.1** | **+2.0** |
| MNAS | baz=51 | | | ⇓*i*S | **Sn** | **22 12 23.2** | **+3.5** |
| | baz=51 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.14** | **9** | ⇑*i*P | **Pn** | **22 11 48.2** | **+1.6** |
| EKS2 | baz=8.0 | | | ⇑*i*S | **Sn** | **22 12 26.8** | **+2.6** |
| | baz=8.0 | | | | | | |
| **MRKS** | **Merke** | **3.19** | **2** | *e*P | **Pb** | **22 11 51.1** | **-2.5** |
| MRKS | 8.7nm,0.5s | | | *e*S | **Sb** | **22 12 32.6** | **0.0** |
| | 12nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **3.19** | **2** | Pg | **Pb** | **22 11 50.8** | **-2.8** |
| MRKS | 7.4nm,0.3s | | | Lg | Lg | 22 12 34.1 | |
| | 12nm,0.4s | | | | | | |
| **CHGR** | **Chuyangaron** | **3.19** | **255** | ⇓*i*P | **Pn** | **22 11 48.6** | **+1.4** |
| CHGR | baz=56 | | | ⇓*i*S | **Sn** | **22 12 27.4** | **+2.0** |
| | baz=56 | | | | | | |
| **AAK** | **Ala-Archa** | **3.25** | **18** | ⇑Pg | **Pb** | **22 11 52.1** | **-2.7** |
| AAK | 9.9nm,0.5s,baz=155,slow=26 | | | ⇑Lg | Lg | 22 12 35.1 | |
| | 16nm,0.8s,baz=155,slow=26 | | | | | | |
| **AAK** | **Ala-Archa** | **3.25** | **18** | ⇑*i*P | **Pn** | **22 11 49.5** | **+1.4** |
| AAK | baz=17 | | | ⇑*i*S | **Sn** | **22 12 29.4** | **+2.4** |
| | baz=17 | | | | | | |
| **KBK** | **Karagaybulak** | **3.40** | **24** | ⇓*i*P | **Pn** | **22 11 51.3** | **+1.2** |
| KBK | baz=22 | | | ⇓*i*S | **Sn** | **22 12 32.4** | **+1.9** |
| | baz=22 | | | | | | |
| **FRU1** | **Bishkek** | **3.45** | **19** | ⇑*i*P | **Pn** | **22 11 52.4** | **+1.7** |
| FRU1 | baz=18 | | | ⇑*i*S | **Sn** | **22 12 34.2** | **+2.5** |
| | baz=18 | | | | | | |
| **ULHL** | **Ulahol** | **3.59** | **41** | ⇑*i*P | **Pn** | **22 11 53.9** | **+1.1** |
| ULHL | baz=39 | | | ⇑*i*S | **Sn** | **22 12 36.6** | **+1.2** |
| | baz=39 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.63** | **35** | ⇑*i*P | **Pn** | **22 11 54.7** | **+1.3** |
| BOOM | baz=34 | | | ⇑*i*S | **Sn** | **22 12 38.0** | **+1.6** |
| | baz=34 | | | | | | |
| **CHMS** | **Chumysh** | **3.66** | **19** | ⇑*i*P | **Pn** | **22 11 55.1** | **+1.6** |
| CHMS | baz=18 | | | ⇑*i*S | **Sn** | **22 12 38.8** | **+2.1** |
| | baz=18 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.85** | **28** | ⇑Pn | **Pn** | **22 11 57.2** | **+0.8** |
| TKM2 | 1.6nm,0.6s 5.4nm,0.7s | | | ⇑Sn | **Sn** | **22 12 41.9** | **0.0** |
| **TKM2** | **Tokmak 2** | **3.85** | **28** | ⇑*i*P | **Pn** | **22 11 57.8** | **+1.4** |
| TKM2 | baz=27 | | | ⇑*i*S | **Sn** | **22 12 43.5** | **+1.7** |
| | baz=27 | | | | | | |
| **USP** | **Ospenovka** | **3.85** | **15** | ⇑*i*P | **Pn** | **22 11 57.9** | **+1.7** |
| USP | baz=14 | | | ⇑*i*S | **Sn** | **22 12 43.5** | **+1.9** |
| | baz=14 | | | | | | |
| **KDJ** | **Kajisay** | **4.02** | **49** | ⇑*i*P | **Pn** | **22 11 59.9** | **+1.2** |
| KDJ | baz=48 | | | ⇑*i*S | **Sn** | **22 12 47.0** | **+1.0** |
| | baz=48 | | | | | | |
| **KK31** | **Karatay Array** | **4.04** | **332** | ⇓Pg | **Pb** | **22 12 03.6** | **-4.6** |
| KK31 | 0.4nm,0.2s,baz=153,slow=14,SNR=4.1 3.1nm,0.3s,baz=155,slow=26,SNR=3.5 | | | ⇓Lg | Lg | 22 12 52.2 | |
| **KKAR** | **Karatay Array** | **4.04** | **332** | ⇑*i*P | **Pn** | **22 12 01.0** | **+2.2** |
| KKAR | baz=32 | | | ⇑*i*S | **Sn** | **22 12 48.9** | **+2.7** |
| | baz=32 | | | | | | |
| **KST** | **Kastek** | **4.10** | **31** | *e*P | **Pb** | **22 12 10.7** | **+1.5** |
| KST | 11nm,0.9s 10.0nm,0.7s | | | *e*S | **Sg** | **22 13 06.0** | **-2.4** |
| **DGS** | **Degeres** | **4.20** | **28** | *e*P | **Pb** | **22 12 12.0** | **+1.2** |
| DGS | 6.0nm,0.7s 14nm,0.8s | | | *e*S | **Sg** | **22 13 09.1** | **-2.5** |
| **DGS** | **Degeres** | **4.20** | **28** | Pg | **Pb** | **22 12 12.7** | **+1.9** |
| DGS | 6.0nm,0.7s 11nm,0.7s | | | Lg | Lg | 22 13 07.1 | |
| **CHKK** | **Chushkaly** | **5.19** | **33** | *e*P | **Pb** | **22 12 30.1** | **+2.4** |
| CHKK | 3.9nm,0.6s 3.2nm,0.5s | | | *e*S | **Sg** | **22 13 39.1** | **-4.3** |
| **CHKK** | **Chushkaly** | **5.19** | **33** | Pg | **Pb** | **22 12 30.4** | **+2.7** |
| CHKK | 1.4nm,0.2s 3.9nm,0.5s | | | Lg | Lg | 22 13 39.0 | |

*IDC **15** 22:12:11.6±2.6, 8°.23S×116°.79E, h0km, mb3.9/3, mbtmp4.0/4, ML3.5/1, Error ellipse: s-maj=48.8km s-min=21.7km az=116.0*
*DJA **15** 22:12:12.7±0.4, 8°.5S×11°.7E±°, h10km, M4.3/7, MLv4.3/7*
**ISC 15 22:12:11.9**±0.9, **8°.23S**±0°.07×**116°.67E**±0°.04, **h10**km, **n18**,
σ1**50**/21, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.55** | **157** | P | **Pg** | **22 12 22.6** | **+0.1** |
| TWSI | | | | S | **Sb** | **22 12 30.3** | **-1.2** |
| **PLAI** | **Plampang** | **1.25** | **118** | P | **Pn** | **22 12 36.0** | **+0.6** |
| **PLAI** | **Plampang** | **1.25** | **118** | S | **Sn** | **22 12 53.3** | **+1.1** |
| **SRBI** | **Singaraja** | **1.45** | **276** | P | **Pn** | **22 12 38.9** | **+0.7** |
| SRBI | | | | S | **Sb** | **22 12 58.1** | **+0.6** |
| **DNP** | **Denpasar** | **1.51** | **253** | P | **Pn** | **22 12 38.9** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.50** | **264** | P | **Pn** | **22 12 52.6** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.50** | **264** | P | **Pn** | **22 12 52.3** | **-0.4** |
| **WBSI** | **Waikabubak, Su** | **3.03** | **118** | P | **Pn** | **22 13 00.9** | **+0.9** |
| **BSSI** | **Bau Bau, Buton** | **4.32** | **62** | P | **Pn** | **22 13 18.7** | **+1.0** |
| **KAPI** | **Kappang** | **4.43** | **44** | Pn | **Pn** | **22 13 20.0** | **+0.8** |
| KAPI | 2.8nm,0.3s,baz=175,slow=3.5,SNR=12 7.7nm,0.3s,baz=126,slow=23,SNR=9.3 | | | Sn | **Sn** | **22 14 09.1** | **-1.7** |
| KAPI | 2.6nm,0.3s,baz=25,slow=23,SNR=1.6 7.9nm,0.3s | | | Lg | Lg | 22 14 29.4 | |
| **UGM** | **Wanagama** | **6.09** | **273** | P | **Pn** | **22 13 46.0** | **+3.9** |
| **MBWA** | **Marble Bar** | **13.19** | **167** | P | **Pn** | **22 15 16.7** | **-2.6** |
| **PSA00** | **Pilbara Seismi** | **13.61** | **167** | P | **Pn** | **22 15 24.7** | **-0.4** |
| **GIRL** | **Giralia** | **14.52** | **189** | P | **Pn** | **22 15 35.1** | **-2.4** |
| **WRA** | **Warramunga Arr** | **20.69** | **126** | P | **P** | **22 16 52.2** | **-0.2** |
| | 1.8nm,0.4s,baz=301,slow=12,SNR=31 1.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.54** | **135** | P | **P** | **22 17 11.8** | **-0.5** |
| |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SDPT** | **Sand Point** | **11.16** | **62** | Pn | | **Pn** | **22 18 44.2** | **-1.3** | |
| **CNBA** | **Chernabura Isl** | **11.55** | **65** | Pn | | **Pn** | **22 18 49.8** | **-1.0** | |
| **CHGN** | **Chignik** | **12.53** | **59** | Pn | | **Pn** | **22 19 02.1** | **-2.1** | |
| **O16K** | **Kokwok River B** | **13.91** | **46** | Pn | | **Pn** | **22 19 22.9** | **-0.1** | |
| **PLK4** | **Peulik 4** | **13.99** | **55** | Pn | | **Pn** | **22 19 22.5** | **-1.6** | |
| **L16K** | **Owhat River** | **14.49** | **37** | Pn | | **Pn** | **22 19 30.8** | **+0.1** | |
| **ACHA** | **Angle Creek He** | **14.69** | **53** | | | **Pn** | **22 19 33.2** | **-0.2** | |
| **SII** | **Sitkinak Islan** | **14.88** | **60** | Pn | | **Pn** | **22 19 35.0** | **-0.8** | |
| **PETK** | **Petropavlovsk-** | **15.05** | **286** | P | | **Pn** | **22 19 39.2** | **+1.2** | |
| | 2.4nm,0.7s,baz=81,slow=18,SNR=2.6 | | | | | | | | |
| **P18K** | **Big Mountain,** | **15.15** | **49** | Pn | | **Pn** | **22 19 40.2** | **+0.8** | |
| **O18K** | **Koktuh Hills** | **15.34** | **47** | Pn | | **Pn** | **22 19 42.3** | **+0.5** | |
| O18K | | | | IAmb | IAmb | | 22 19 50.6 | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **OHAK** | **Old Harbor** | **15.49** | **58** | P | | **Pn** | **22 19 40.2** | **-3.4** | |
| **OHAK** | **Old Harbor** | **15.49** | **58** | Pn | | **Pn** | **22 19 42.4** | **-1.3** | |
| OHAK | | | | IAmb | IAmb | | 22 20 01.3 | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **J17K** | **VABM Dome** | **15.71** | **32** | Pn | | **Pn** | **22 19 46.5** | **0.0** | |
| J17K | | | | IAmb | IAmb | | 22 20 15.4 | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **15.76** | **52** | Pn | | **Pn** | **22 19 46.8** | **-0.3** | |
| **KDAK** | **Kodiak Island** | **15.98** | **56** | Pn | | **Pn** | **22 19 47.7** | **-2.2** | |
| KDAK | | | | IAmb | IAmb | | 22 20 07.8 | | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **15.98** | **56** | P | | **Pn** | **22 19 47.9** | **-2.0** | |
| | comp=Z,5.5nm,0.4s,baz=282,slow=1.8,SNR=25 | | | | | | | | |
| KDAK | | | | S | | **Sn** | **22 22 45.6** | **-0.3** | |
| | comp=Z,4.2nm,0.9s,baz=92,slow=6.5,SNR=1.8 | | | | | | | | |
| **SYI** | **Shuyak Island** | **16.29** | **53** | Pn | | **Pn** | **22 19 53.2** | **-0.6** | |
| SYI | | | | IAmb | IAmb | | 22 19 59.7 | | |
| | comp=Z,32nm,1.2s | | | | | | | | |
| **M19K** | **Big River Lodg** | **16.62** | **41** | | | **Pn** | **22 19 58.9** | **+1.0** | |
| M19K | | | | IAmb | IAmb | | 22 20 05.8 | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **RSO** | **Redoubt South** | **16.71** | **47** | | | **Pn** | **22 19 59.5** | **+0.2** | |
| **CNPM** | **China Poot** | **17.12** | **51** | | | **Pn** | **22 20 04.4** | **+0.2** | |
| CNPM | | | | IAmb | IAmb | | 22 20 12.1 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **K20K** | **Telida** | **17.49** | **37** | P | | **P** | **22 20 09.6** | **+0.3** | |
| **SKT** | **Skwentna** | **17.86** | **43** | | | **Pn** | **22 20 12.5** | **-0.7** | |
| **SUA** | **Susitna One** | **18.00** | **45** | | | **P** | **22 20 14.7** | **-0.3** | |
| **RC01** | **Rabbit Creek A** | **18.32** | **47** | P | | **Pn** | **22 20 19.1** | **+0.3** | |
| **F19K** | **Shaleruckik Mo** | **18.53** | **25** | | | **P** | **22 20 20.9** | **+0.3** | |
| **PWL** | **Port Wells** | **18.89** | **48** | P | | **P** | **22 20 23.9** | **-0.9** | |
| PWL | | | | IAmb | IAmb | | 22 20 41.8 | | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **KNK** | **Knik Glacier** | **19.01** | **47** | P | | **P** | **22 20 26.4** | **+0.4** | |
| **BPAW** | **Bear Paw Mtn.** | **19.05** | **38** | P | | **P** | **22 20 26.6** | **+0.2** | |
| **IMAR** | **Indian Mountai** | **19.14** | **31** | P | | **P** | **22 20 26.9** | **-0.5** | |
| **SML** | **Sawmill** | **19.20** | **45** | P | | **P** | **22 20 28.0** | **-0.1** | |
| SML | | | | IAmb | IAmb | | 22 20 51.2 | | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| **MA2** | **Magadan** | **19.44** | **307** | P | | **P** | **22 20 30.7** | **0.0** | |
| | comp=Z,3.3nm,0.3s,baz=80,slow=14,SNR=4.7 | | | | | | | | |
| **G21K** | **Allakaket** | **19.55** | **30** | P | | **P** | **22 20 32.3** | **+0.4** | |
| **RND** | **Reindeer** | **19.58** | **41** | P | | **P** | **22 20 31.9** | **-0.3** | |
| RND | | | | IAmb | IAmb | | 22 20 48.7 | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **MLY** | **Manley** | **19.62** | **35** | P | | **P** | **22 20 33.5** | **+0.8** | |
| MLY | | | | IAmb | IAmb | | 22 20 38.6 | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **SEY** | **Seymchan** | **19.68** | **318** | P | | **P** | **22 20 33.6** | **+0.4** | |
| | comp=Z,7.4nm,0.9s,baz=116,slow=12,SNR=9.1 | | | | | | | | |
| **NEA2** | **Nenana** | **20.02** | **37** | P | | Pn | 22 20 38.4 | -0.7 | |
| NEA2 | | | | IAmb | IAmb | | 22 20 47.1 | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **DHY** | **Denali Highway** | **20.06** | **42** | P | | **P** | **22 20 37.5** | **-0.1** | |
| DHY | | | | IAmb | IAmb | | 22 20 54.6 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **20.18** | **36** | P | | **P** | **22 20 39.4** | **+0.8** | |
| I23K | | | | IAmb | IAmb | | 22 20 47.5 | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **KLU** | **Klutina** | **20.20** | **47** | P | | **P** | **22 20 40.1** | **+1.1** | |
| KLU | | | | IAmb | IAmb | | 22 20 56.5 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **MDM** | **Murphy Dome** | **20.51** | **37** | P | | **P** | **22 20 41.5** | **-0.8** | |
| **CCB** | **Clear Creek Bu** | **20.53** | **38** | P | | **P** | **22 20 42.6** | **+0.2** | |
| **N25K** | **Chitina, Valde** | **20.84** | **48** | P | | **P** | **22 20 46.9** | **+1.0** | |
| N25K | | | | IAmb | IAmb | | 22 20 56.0 | | |
| | comp=Z,7.9nm,0.7s | | | | | | | | |
| **IL31** | | **20.94** | **38** | P | | **P** | **22 20 46.3** | **-0.5** | |
| **ILAR** | **Eielson Array** | **20.94** | **38** | P | | **P** | **22 20 47.2** | **+0.3** | |
| | comp=Z,2.3nm,1.0s,baz=244,slow=12,SNR=11 | | | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | | | |
| **GLB** | **Gilahina Butte** | **21.16** | **48** | | | **P** | **22 20 49.9** | **+0.4** | |
| GLB | | | | IAmb | IAmb | | 22 20 56.9 | | |
| | comp=Z,8.2nm,0.6s | | | | | | | | |
| **J25K** | **Salcha River,** | **21.47** | **39** | P | | **P** | **22 20 51.8** | **-0.9** | |
| **SCRK** | **Sand Creek** | **21.80** | **41** | | | **P** | **22 20 54.6** | **-1.7** | |
| **J26L** | **Joseph Creek** | **22.15** | **40** | P | | **P** | **22 20 59.1** | **-1.0** | |
| J26L | | | | IAmb | IAmb | | 22 21 22.3 | | |
| | comp=Z,8.1nm,0.8s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **22.26** | **46** | P | | **P** | **22 21 01.0** | **-0.3** | |
| M27K | | | | IAmb | IAmb | | 22 21 08.1 | | |
| | comp=Z,7.7nm,0.8s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **22.48** | **45** | P | | **P** | **22 21 03.6** | **+0.2** | |
| **BMAR** | **Burnt Mountain** | **22.98** | **33** | P | | **P** | **22 21 09.2** | **+0.6** | |
| **EGAK** | **Eagle** | **23.22** | **41** | | | **P** | **22 21 10.5** | **-0.5** | |
| **M29M** | **Somme Creek** | **23.84** | **47** | P | | **P** | **22 21 15.6** | **-1.4** | |
| M29M | | | | IAmb | IAmb | | 22 21 22.0 | | |
| | comp=Z,7.3nm,1.0s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **24.55** | **40** | P | | **P** | **22 21 22.0** | **-1.3** | |
| I29M | | | | IAmb | IAmb | | 22 21 28.6 | | |
| | comp=Z,8.3nm,0.8s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **27.28** | **270** | P | | **P** | **22 21 48.9** | **+0.8** | |
| | comp=Z,4.6nm,0.7s,baz=0.2,slow=33,SNR=1.3 | | | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.72** | **206** | T | | T | 22 59 04.5 | | |
| | baz=17,slow=75,SNR=8.3 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.73** | **206** | T | | T | 22 59 02.9 | | |
| | baz=17,slow=75,SNR=9.9 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.74** | **206** | T | | T | 22 59 05.2 | | |
| | baz=17,slow=75,SNR=6.4 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.87** | **278** | P | | **P** | **22 22 45.9** | **-0.3** | |
| | comp=Z,3.8nm,0.7s,baz=62,slow=9.8,SNR=13 | | | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.34** | **262** | P | | **P** | **22 22 50.8** | **+0.4** | |
| | comp=Z,2.7nm,0.9s,baz=42,slow=8.8,SNR=4.6 | | | | | | | | |
| MJAR | | | | PcP | | **PcP** | **22 25 25.0** | **-0.3** | |
| | comp=Z,1.0nm,0.5s,baz=36,slow=3.7,SNR=3.5 | | | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **34.86** | **47** | P | | **P** | **22 22 54.5** | **-0.1** | |
| | comp=Z,1.6nm,0.7s,baz=285,slow=9.3,SNR=2.7 | | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.94** | **206** | T | | T | 23 00 23.5 | | |
| | baz=17 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.95** | **206** | T | | T | 23 00 19.5 | | |
| | baz=17 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.95** | **206** | T | | T | 23 00 25.2 | | |
| | baz=17 | | | | | | | | |
| **BNX** | **BinXian** | **35.94** | **283** | ⇓P | | **P** | **22 23 03.3** | **-0.7** | |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **B08A** | **Colville Reser** | **37.02** | **71** | P | | **P** | **22 23 14.5** | **+1.2** | |
| **HAWA** | **Hanford** | **37.83** | **74** | P | | **P** | **22 23 20.5** | **+0.3** | |
| **NEW** | **Newport** | **38.37** | **70** | P | | **P** | **22 23 25.7** | **+1.0** | |
| **I07A** | **Izee** | **39.03** | **77** | P | | **P** | **22 23 31.5** | **+1.2** | |
| I07A | | | | IAmb | IAmb | | 22 23 39.4 | | |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **39.16** | **84** | P | | **P** | **22 23 32.5** | **+1.1** | |
| **KSRS** | **Korea Array** | **40.21** | **272** | P | | **P** | **22 23 40.6** | **+0.6** | |
| | comp=Z,3.1nm,0.8s,baz=55,slow=7.9,SNR=7.2 | | | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | | | |
| **MSO** | **Missoula** | **40.95** | **70** | P | | **P** | **22 23 47.4** | **+1.1** | |
| **LYMT** | **Lyon Mountain** | **41.85** | **69** | P | | **P** | **22 23 54.2** | **+0.4** | |
| **EGMT** | **Eagleton** | **42.78** | **67** | P | | **P** | **22 24 02.2** | **+1.1** | |
| EGMT | | | | IAmb | IAmb | | 22 24 03.8 | | |
| | comp=Z,9.2nm,1.1s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **42.96** | **71** | P | | **P** | **22 24 02.9** | **+0.2** | |
| BOZ | | | | IAmb | IAmb | | 22 24 23.6 | | |
| | comp=Z,7.7nm,1.1s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **42.99** | **83** | P | | **P** | **22 24 05.4** | **+2.3** | |
| | comp=Z,1.2nm,0.8s,baz=290,slow=8.5,SNR=2.5 | | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | | |
| **YHH** | **Holmes Hill** | **43.87** | **71** | P | | **P** | **22 24 11.5** | **+1.4** | |
| **HVU** | **Hansel Valley** | **44.41** | **76** | P | | **P** | **22 24 15.2** | **+0.7** | |
| HVU | | | | IAmb | IAmb | | 22 24 24.0 | | |
| | comp=Z,3.2nm,0.7s | | | | | | | | |
| **RLMT** | **Red Lodge** | **44.62** | **70** | P | | **P** | **22 24 17.4** | **+1.3** | |
| **R11B** | **Troy Canyon, C** | **44.73** | **82** | P | | **P** | **22 24 17.5** | **+0.5** | |
| **BGU** | **Big Grassy Mou** | **44.76** | **77** | P | | **P** | **22 24 17.4** | **+0.3** | |
| BGU | | | | IAmb | IAmb | | 22 24 31.0 | | |
| | comp=Z,5.5nm,1.2s | | | | | | | | |
| **PD31** | **Pinedale Array** | **45.78** | **73** | P | | **P** | **22 24 26.1** | **+0.7** | |
| **PDAR** | **Pinedale Array** | **45.78** | **73** | P | | **P** | **22 24 26.4** | **+1.0** | |
| | comp=Z,3.7nm,0.8s,baz=303,slow=3.8,SNR=29 | | | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **46.80** | **297** | P | | **P** | **22 24 32.3** | **-0.8** | |
| ULN | | | | IAmb | IAmb | | 22 24 34.8 | | |
| | comp=Z,3.2nm,0.7s | | | | | | | | |
| **RDMU** | **Red Mountain** | **47.08** | **75** | P | | **P** | **22 24 35.9** | **+0.4** | |
| **SONM** | **Songino Array** | **47.18** | **297** | P | | **P** | **22 24 36.3** | **+0.1** | |
| **SONM** | **Songino Array** | **47.18** | **297** | P | | **P** | **22 24 36.4** | **+0.3** | |
| | comp=Z,1.8nm,0.6s,baz=62,slow=7.4,SNR=10 | | | | | | | | |
| SONM | | | | PcP | | **PcP** | **22 26 08.2** | **+1.3** | |
| | comp=Z,0.4nm,0.5s,baz=68,slow=4.7,SNR=1.7 | | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **48.26** | **287** | *e*P | | **P** | **22 24 45.6** | **+1.1** | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.48** | **356** | P | | **P** | **22 24 59.9** | **-0.9** | |
| | comp=Z,4.0nm,0.8s,baz=55,slow=6.3,SNR=2.9 | | | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.49** | **314** | P | | **P** | **22 25 30.8** | **+0.1** | |
| | comp=Z,0.7nm,0.7s,baz=19,slow=6.1,SNR=2.8 | | | | | | | | |
| ZALV | | | | PcP | | **PcP** | **22 26 34.1** | **+0.6** | |
| | comp=Z,3.8nm,0.8s,baz=24,slow=4.0,SNR=13 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |
| **LZH** | **Lanzhou** | **55.95** | **287** | *e*P | | **P** | **22 25 42.4** | **+0.7** | |
| LZH | | | | pP | | pP | 22 25 49.3 | -6.2 | |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **GTA** | **Gaotai** | **56.12** | **292** | *e*P | | **P** | **22 25 43.5** | **+0.6** | |
| GTA | | | | pP | | pP | 22 25 49.5 | -7.1 | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **P40A** | **Paris** | **58.08** | **65** | P | | **P** | **22 25 56.0** | **-0.5** | |
| **TXAR** | **Lajitas Array** | **58.10** | **82** | P | | **P** | **22 25 57.6** | **+0.7** | |
| **TXAR** | **Lajitas Array** | **58.10** | **82** | P | | **P** | **22 25 58.2** | **+1.3** | |
| | comp=Z,0.5nm,0.7s,baz=308,slow=6.2,SNR=5.7 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.25** | **351** | P | | **P** | **22 25 56.4** | **-0.9** | |
| | comp=Z,1.0nm,0.5s,baz=30,slow=8.3,SNR=13 | | | | | | | | |
| ARCES | | | | PcP | | **PcP** | **22 26 47.6** | **-0.4** | |
| | comp=Z,0.7nm,0.6s,baz=29,slow=2.8,SNR=4.0 | | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.58** | **314** | P | | **P** | **22 26 05.5** | **-1.3** | |
| | comp=Z,1.2nm,0.6s,baz=43,slow=6.6,SNR=5.7 | | | | | | | | |
| KURBB | | | | PcP | | **PcP** | **22 26 53.6** | **+0.1** | |
| | comp=Z,0.8nm,0.7s,baz=46,slow=3.9,SNR=6.2 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| **MK31** | **Makanchi Array** | **60.52** | **309** | P | | **P** | **22 26 12.5** | **-0.8** | |
| MK31 | | | | IAmb | IAmb | | 22 26 21.2 | | |
| | comp=Z,4.1nm,1.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.52** | **309** | P | | **P** | **22 26 12.4** | **-0.9** | |
| **MKAR** | **Makanchi Array** | **60.52** | **309** | P | | **P** | **22 26 11.9** | **-1.4** | |
| | comp=Z,1.2nm,0.6s,baz=49,slow=5.5,SNR=11 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| **OLIL** | **Olney** | **60.86** | **64** | P | | **P** | **22 26 15.8** | **+0.1** | |
| **BVAR** | **Borovoye Array** | **61.30** | **320** | P | | **P** | **22 26 17.9** | **-0.6** | |
| | comp=Z,1.9nm,0.5s,baz=56,slow=6.4,SNR=14 | | | | | | | | |
| BVAR | | | | PcP | | **PcP** | **22 27 00.8** | **+0.3** | |
| | comp=Z,1.4nm,0.7s,baz=77,slow=3.2,SNR=4.8 | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| **BRVK** | **Borovoye** | **61.32** | **320** | P | | **P** | **22 26 18.8** | **+0.2** | |
| BRVK | | | | IAmb | IAmb | | 22 26 20.0 | | |
| | comp=Z,1.6nm,0.7s | | | | | | | | |
| **T50A** | **Nancy** | **63.90** | **63** | P | | **P** | **22 26 36.6** | **+0.6** | |
| **PZH** | **PanZhiHua** | **63.92** | **280** | P | | **P** | **22 26 36.8** | **+0.3** | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.97** | **348** | P | | **P** | **22 26 47.6** | **-1.4** | |
| | comp=Z,1.4nm,0.8s,baz=28,slow=8.6,SNR=3.2 | | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.76** | **355** | P | | **P** | **22 26 59.9** | **-0.6** | |
| | comp=Z,0.3nm,0.4s,baz=42,slow=17,SNR=4.7 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.33** | **323** | P | | **P** | **22 27 03.3** | **-1.0** | |
| **ABKAR** | **Akbulak array** | **68.33** | **323** | P | | **P** | **22 27 03.3** | **-1.0** | |
| ABKAR | | | | IAmb | IAmb | | 22 27 05.9 | | |
| | comp=Z,3.7nm,1.0s | | | | | | | | |
| **HFS** | **Hagfors** | **68.51** | **354** | P | | **P** | **22 27 03.9** | **-1.3** | |
| | comp=Z,0.9nm,0.5s,baz=300,slow=1.2,SNR=7.7 | | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | | |
| **KKAR** | **Karatay Array** | **68.85** | **313** | P | | **P** | **22 27 07.0** | **-0.6** | |
| **KSH** | **Kashi** | **68.99** | **307** | P | | **P** | **22 27 11.5** | **+2.8** | |
| KSH | | | | pP | | sP | 22 27 26.8 | -2.0 | |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **71.59** | **277** | P | | **P** | **22 27 25.1** | **+0.4** | |
| | comp=Z,1.0nm,0.3s,baz=29,slow=6.1,SNR=7.8 | | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.78** | **343** | P | | **P** | **22 27 47.6** | **-1.1** | |
| | comp=Z,2.6nm,0.7s,baz=22,slow=5.4,SNR=9.0 | | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | | |
| **SORM** | **Soroca** | **78.41** | **342** | ⇑P | | **P** | **22 28 04.4** | **+0.9** | |
| **KIV** | **Kislovodsk** | **78.80** | **331** | ⇓P | | **P** | **22 28 07.0** | **+1.1** | |
| **KBZ** | **Khabaz** | **78.94** | **331** | P | | **P** | **22 28 07.2** | **+0.7** | |
| | comp=Z,4.8nm,0.8s,baz=124,slow=2.3,SNR=11 | | | | | | | | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **79.47** | **344** | ⇓P | | **P** | **22 28 10.3** | **+0.8** | |
| **ARCR** | **ARCALIA** | **80.13** | **345** | ⇓P | | **P** | **22 28 15.1** | **+2.2** | |
| **TESR** | **Tescani** | **80.28** | **343** | ⇑P | | **P** | **22 28 14.7** | **+0.9** | |
| **TURR** | **Turia** | **80.84** | **343** | ⇑P | | **P** | **22 28 18.5** | **+1.6** | |
| **SPBR** | **Spulber** | **81.00** | **343** | ⇓P | | **P** | **22 28 18.9** | **+1.2** | |
| **COVR** | **Voineasa-Covas** | **81.01** | **343** | ⇑P | | **P** | **22 28 19.8** | **+2.0** | |
| **CFR** | **Carcaliu** | **81.29** | **342** | ⇑P | | **P** | **22 28 20.2** | **+1.0** | |
| **MLR** | **Muntele Rosu** | **81.40** | **343** | ⇑P | | **P** | **22 28 20.5** | **+0.5** | |
| **TPGR** | **Topolog** | **81.54** | **341** | ⇑P | | **P** | **22 28 21.8** | **+1.3** | |
| **VOIR** | | **81.61** | **344** | ⇑P | | **P** | **22 28 22.8** | **+1.9** | |
| **SURR** | **Surduc** | **81.78** | **346** | ⇑P | | **P** | **22 28 23.0** | **+1.3** | |
| **HARR** | **Harsova** | **81.80** | **342** | ⇑P | | **P** | **22 28 22.4** | **+0.6** | |
| **GZR** | **Gura Zlata** | **82.03** | **345** | ⇑P | | **P** | **22 28 24.4** | **+1.3** | |
| **HERR** | **Herculane** | **82.58** | **346** | ⇑P | | **P** | **22 28 26.8** | **+0.9** | |
| **BRTR** | **Keskin Array B** | **85.24** | **336** | P | | **P** | **22 28 39.9** | **+0.1** | |
| | comp=Z,5.1nm,0.8s,baz=54,slow=2.5,SNR=16 | | | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| **PDG** | **Podgorica** | **85.45** | **347** | ⇑P | | **P** | **22 28 41.3** | **+0.7** | |
| **ASAR** | **Alice Springs** | **85.83** | **223** | P | | **P** | **22 28 42.6** | **+0.1** | |
| | comp=Z,1.2nm,0.7s,baz=27,slow=5.5,SNR=6.2 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **89.23** | **5** | P | | **P** | **22 28 58.0** | **-1.0** | |
| | comp=Z,1.4nm,0.8s,baz=343,slow=2.7,SNR=7.9 | | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **90.19** | **214** | P | | **P** | **22 29 03.6** | **+0.4** | |
| | comp=Z,2.2nm,0.7s,baz=45,slow=7.1,SNR=2.0 | | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.81** | **0** | PKP | | **PKiKP** | **22 34 44.5** | **-1.2** | |
| | comp=Z,0.3nm,0.5s,baz=75,slow=1.5,SNR=4.3 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **120.58** | **106** | T | | T | 00 46 59.9 | | |
| | baz=317,slow=77,SNR=7.3 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **120.59** | **106** | T | | T | 00 47 01.2 | | |
| | baz=317,slow=77,SNR=8.5 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **120.59** | **106** | T | | T | 00 46 58.8 | | |
| | baz=317,slow=77,SNR=8.7 | | | | | | | | |
| **DBIC** | **Dimbokro** | **121.94** | **8** | PKP | | **PKPdf** | **22 34 56.5** | **-1.0** | |
| | comp=Z,2.7nm,0.9s,baz=61,slow=3.3,SNR=4.2 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **141.07** | **180** | PKP | | **PKiKP** | **22 35 33.2** | **-1.3** | |
| | comp=Z,0.7nm,0.7s,baz=7.5,slow=4.5,SNR=3.5 | | | | | | | | |
| **BOSA** | **Boshof** | **151.44** | **314** | PKPbc | | **PKiKP** | **22 35 57.2** | **0.0** | |
| | comp=Z,3.3nm,0.7s,baz=64,slow=1.9,SNR=11 | | | | | | | | |

*TAP* ***15*** *22:43:10.3,25˚.65N×122˚.25E,h204km,ML2.9,D*
*JMA* ***15*** *22:43:12.7±0.3,25˚.3N±.3˚×122˚.3E±0˚.6,h202km±3km, MV2.6/10,TAIWAN REGION*

**ISC 15 22:43:09.9±3.0,25˚.5N±0˚.1×122˚.24E±0˚.05,h210km±17km, n43,σ1°04/75,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PCYT** | **Pengchaiyu** | **0.22** | **316** | *e*P | | **Pn** | **22 43 36.6** | **-0.8** |
| | baz=272 | | | | | | | |
| PCYT | | | | *e*S | | **S** | **22 43 56.5** | **-2.6** |
| | baz=272 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.50** | **221** | *e*P | | **Pn** | **22 43 39.2** | **+0.9** |
| | baz=218 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.51** | **206** | *e*P | | **Pn** | **22 43 39.8** | **+1.5** |
| | baz=197 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.62** | **217** | P | | **Pn** | **22 43 40.4** | **+1.6** |
| | baz=217 | | | | | | | |
| TIPB | | | | *e*S | | **S** | **22 44 00.8** | **-0.3** |
| | baz=217 | | | | | | | |
| **TWE** | **Neicheng** | **0.91** | **215** | *e*P | | **Pn** | **22 43 42.0** | **+1.8** |
| | baz=204 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.92** | **220** | P | | **Pn** | **22 43 41.6** | **+1.2** |
| | baz=219 | | | | | | | |
| FUSB | | | | *e*S | | **S** | **22 44 03.9** | **0.0** |
| | baz=219 | | | | | | | |
| **TWC** | **Suao** | **0.93** | **202** | *e*P | | **Pn** | **22 43 41.4** | **+1.1** |
| | baz=191 | | | | | | | |
| TWC | | | | *e*S | | **S** | **22 44 03.3** | **-0.6** |
| | baz=191 | | | | | | | |
| **NDS** | **Dongshan** | **0.96** | **210** | *e*P | | **Pn** | **22 43 42.8** | **+2.2** |
| | baz=206 | | | | | | | |
| NDS | | | | *e*S | | **S** | **22 44 04.3** | **+0.1** |
| | baz=206 | | | | | | | |
| **ENTT** | **Nioudou** | **1.03** | **217** | P | | **Pn** | **22 43 42.0** | **+1.0** |
| | baz=212 | | | | | | | |
| ENTT | | | | S | | **S** | **22 44 05.1** | **+0.1** |
| | baz=212 | | | | | | | |
| **EOS2** | **EOS2** | **1.05** | **180** | *e*P | | **Pn** | **22 43 42.4** | **+1.4** |
| | baz=186 | | | | | | | |
| EOS2 | | | | *e*S | | **S** | **22 44 04.2** | **-0.7** |
| | baz=186 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.09** | **217** | P | | **Pn** | **22 43 42.6** | **+1.2** |
| | baz=217 | | | | | | | |
| NDT | | | | *e*S | | **S** | **22 44 04.9** | **-0.7** |
| | baz=217 | | | | | | | |
| **EWUT** | **Wuta** | **1.10** | **202** | *e*P | | **Pn** | **22 43 43.7** | **+2.3** |
| | baz=192 | | | | | | | |
| **YHNB** | **Yeheng** | **1.12** | **225** | P | | **Pn** | **22 43 42.5** | **+0.8** |
| | baz=211 | | | | | | | |
| YHNB | | | | S | | **S** | **22 44 05.4** | **-0.7** |
| | baz=211 | | | | | | | |
| **NSK** | **Sanguang** | **1.12** | **225** | P | | **Pn** | **22 43 42.4** | **+0.6** |
| | baz=227 | | | | | | | |
| NSK | | | | S | | **S** | **22 44 05.4** | **-0.8** |
| | baz=227 | | | | | | | |
| **ENA** | **Nanau** | **1.13** | **204** | *e*P | | **Pn** | **22 43 43.0** | **+1.3** |
| | baz=201 | | | | | | | |
| ENA | | | | *e*S | | **S** | **22 44 06.0** | **-0.2** |
| | baz=201 | | | | | | | |
| **LATG** | **Datong** | **1.14** | **215** | *i* P | | **Pn** | **22 43 43.0** | **+1.1** |
| | baz=219 | | | | | | | |
| LATG | | | | *i* S | | **S** | **22 44 06.6** | **+0.2** |
| | baz=219 | | | | | | | |
| **EOS3** | **EOS3** | **1.18** | **177** | *e*P | | **Pn** | **22 43 42.7** | **+0.8** |
| | baz=188 | | | | | | | |
| EOS3 | | | | *e*S | | **S** | **22 44 05.7** | **-0.8** |
| | baz=188 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.23** | **145** | *e*P | | **Pn** | **22 43 43.0** | **+0.7** |
| **NNS** | **Nan Shan** | **1.29** | **218** | P | | **Pn** | **22 43 44.0** | **+1.0** |
| | baz=219 | | | | | | | |
| NNS | | | | *e*S | | **S** | **22 44 08.9** | **+0.4** |
| | baz=219 | | | | | | | |
| **NNSB** | **Datong** | **1.30** | **217** | P | | **Pn** | **22 43 44.1** | **+1.0** |
| | baz=219 | | | | | | | |
| NNSB | | | | S | | **S** | **22 44 07.9** | **-0.7** |
| | baz=219 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.32** | **231** | *e*P | | **Pn** | **22 43 43.6** | **+0.4** |
| | baz=232 | | | | | | | |
| NFF | | | | *e*S | | **S** | **22 44 07.5** | **-1.1** |
| | baz=232 | | | | | | | |
| **LIOB** | **Emei** | **1.38** | **234** | *e*P | | **Pn** | **22 43 44.5** | **+0.9** |
| | baz=229 | | | | | | | |
| LIOB | | | | *e*S | | **S** | **22 44 09.5** | **0.0** |
| | baz=229 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.40** | **234** | P | | **Pn** | **22 43 44.5** | **+0.8** |
| | baz=228 | | | | | | | |
| NSTT | | | | *e*S | | **S** | **22 44 09.6** | **-0.1** |
| | baz=228 |

**CNGA Al SSO del Vol 1.65 47** *i* P **Pn 22 44 23.1 -1.6**
CNGA IAML 22 44 49.0
comp=Z,24µm,1.0s
**LEVN Ruinas Leon Vi 1.66 51** *i* P **Pn 22 44 25.5 +0.8**
LEVN IAML 22 44 55.9
comp=Z,55µm,1.0s
**CNGN Cerro Negro 1.66 47 Pn 22 44 25.4 +0.6**
CNGN Sn **Sb 22 44 46.6 -1.1**
**CNGN Cerro Negro 1.66 47** P **Pn 22 44 25.8 +1.0**
**CNGN Cerro Negro 1.66 47** *i* P **Pn 22 44 25.4 +0.6**
CNGN IAML 22 44 50.5
comp=Z,37µm,1.0s
**CNGN Cerro Negro 1.66 47** *e*P **Pn 22 44 25.4 +0.6**
**SAPS Ciudad Sandino 1.70 62** *i* P **Pn 22 44 26.1 +0.8**
SAPS IAML 22 44 54.2
comp=Z,22µm,1.0s
**BC84 Volcan Momotom 1.71 53** *i* P **Pn 22 44 26.7 +1.2**
BC84 IAML 22 44 53.4
comp=Z,35µm,1.0s
**ILCN San Idelfonso 1.71 45** *i* P **Pn 22 44 25.9 +0.4**
ILCN IAML 22 44 59.0
comp=Z,8µm,1.0s
**RA5A7 El Crucero 1.71 68** *i* P **Pb 22 44 28.1 0.0**
RA5A7 IAML 22 45 01.8
comp=Z,73µm,1.0s
**RE6B4 Centro civico 1.78 64** *i* P **Pn 22 44 27.8 +1.4**
RE6B4 IAML 22 44 56.0
comp=Z,16µm,1.0s
**MOM2 El Cardon 1.78 53** *i* P **Pn 22 44 27.0 +0.6**
MOM2 IAML 22 44 54.8
comp=Z,21µm,1.0s
**APYN Apoyeque 1.78 61** *i* P **Pb 22 44 29.2 -0.1**
APYN *i* S **Sb 22 44 51.9 +0.7**
APYN 22 44 56.8
comp=Z,280nm,1.0s
**APQ3 Volcan Apoyequ 1.79 59** *i* P **Pn 22 44 27.4 +0.9**
APQ3 IAML 22 44 58.5
comp=Z,23µm,1.0s
**APQ2 Apoyeque 1.79 62** *i* P **Pn 22 44 27.6 +1.1**
APQ2 IAML 22 44 57.8
comp=Z,29µm,1.0s
**RB28C Hialeah 1.79 65** *i* P **Pb 22 44 28.6 -0.9**
RB28C IAML 22 45 09.8
comp=Z,15µm,1.0s
**UNAN Cigeo UNAN 1.80 65** *i* P **Pn 22 44 27.4 +0.8**
UNAN IAML 22 45 00.5
comp=Z,90µm,1.0s
**ENAN Enatrel Managu 1.81 65** *i* P **Pb 22 44 29.1 -0.6**
ENAN IAML 22 44 58.4
comp=Z,22µm,1.0s
**TISN Laguna Tiscapa 1.81 64** *i* P **Pn 22 44 26.6 -0.2**
TISN IAML 22 44 54.0
comp=Z,1µm,1.0s
**R0529 La Mascota 1.83 65** *i* P **Pn 22 44 28.1 +1.0**
R0529 IAML 22 44 57.9
comp=Z,14µm,1.0s
**R4DEC Barrio San Lui 1.83 65** *i* P **Pb 22 44 28.0 -2.1**
R4DEC *i* P **Pn 22 44 27.8 +0.7**
R4DEC IAML 22 44 56.6
comp=Z,16µm,1.0s
R4DEC IAML 22 44 56.7
comp=Z,15µm,1.0s
**RB213 Mirador 2 Volc 1.84 70** *i* P **Pn 22 44 28.2 +0.9**
RB213 IAML 22 44 55.2
comp=Z,14µm,1.0s
**MASN Masaya 1.86 70** *i* P **Pb 22 44 29.4 -1.2**
MASN IAML 22 45 06.6
comp=Z,3µm,1.0s
**JUCU Jucuarın 1.91 351** *e*P **Pn 22 44 28.6 +0.4**
**JUCU Jucuarın 1.91 351** *i* P **Pn 22 44 28.6 +0.4**
JUCU IAML 22 44 55.3
comp=Z,9µm,1.0s
**CNCH Conchagua 1.91 3** *e*P **Pn 22 44 29.0 +0.7**
**CNCH Conchagua 1.91 3** *i* P **Pn 22 44 28.9 +0.7**
CNCH IAML 22 45 02.2
comp=Z,44µm,1.0s
**NADN Granada 1.91 78** *i* P **Pn 22 44 28.2 0.0**
NADN IAML 22 44 54.6
comp=Z,29µm,1.0s
**LCND La Caada 1.94 1** *e*P **Pn 22 44 29.4 +0.8**
**LCND La Caada 1.94 1** *i* P **Pn 22 44 29.2 +0.6**
LCND IAML 22 44 55.9
comp=Z,12µm,1.0s
**HUEN 1.98 61** *i* P **Pn 22 44 30.0 +0.8**
HUEN IAML 22 44 57.7
comp=Z,14µm,1.0s
**ALJI Alcalda de J 2.05 343** *e*S **Pn 22 44 26.7 -3.4**
**SBEN San Benito 2.07 63** *i* P **Pn 22 44 31.6 +1.2**
SBEN IAML 22 45 02.5
comp=Z,17µm,1.0s
**PACA Pacayal 2.13 350** *i* P **Pn 22 44 32.2 +0.9**
PACA IAML 22 45 07.4
comp=Z,73µm,1.0s
**TECA Tecapa 2.19 346** *e*P **Pn 22 44 32.8 +0.6**
**JAPN Al SSO del Vol 2.22 86** *i* P **Pn 22 44 34.3 +1.8**
JAPN IAML 22 45 10.8
comp=Z,6µm,1.0s
**MORN Al O del Volca 2.25 85** *i* P **Pn 22 44 34.3 +1.4**
MORN IAML 22 45 08.0
comp=Z,21µm,1.0s
**LCRUZ La Cruz 2.28 97** *e*P **Pn 22 44 34.6 +1.3**
**LIMN Finca el Limon 2.29 42** *i* P **Pn 22 44 34.3 +0.8**
LIMN IAML 22 45 05.5
comp=Z,12µm,1.0s
**TECO Alcaldia de Te 2.31 339** *i* P **Pn 22 44 34.5 +0.7**
TECO IAML 22 45 11.5
comp=Z,4µm,1.0s
**CAHU Cacacuatique 2.41 354** *e*P **Pn 22 44 36.7 +1.4**
**COEG Centro de Oper 2.43 338** *e*P **Pn 22 44 35.6 +0.2**
**COEG Centro de Oper 2.43 338** *i* P **Pn 22 44 35.6 +0.2**
COEG IAML 22 45 10.6
comp=Z,6µm,1.0s
**ELI1 Hacienda Flor 2.45 107** *e*P **Pn 22 44 36.8 +1.2**
**SCLA Alcaldia de Sa 2.45 342** *e*P **Pn 22 44 36.5 +0.9**
**SCLA Alcaldia de Sa 2.45 342** *i* P **Pn 22 44 36.4 +0.7**
SCLA IAML 22 45 13.4
comp=Z,7µm,1.0s
**ALIBA Liberia Airpor 2.47 108** *e*P **Pn 22 44 38.0 +2.1**
**BOAB BOACO BROADBAN 2.47 64 Pn 22 44 36.4 +0.4**
**BOAB BOACO BROADBAN 2.47 64** *i* P **Pn 22 44 36.5 +0.6**
BOAB IAML 22 45 23.8
comp=Z,5µm,1.0s
**LALI Alcalda de L 2.51 328** *e*P **Pn 22 44 36.3 -0.1**
**LALI Alcalda de L 2.51 328** *i* P **Pn 22 44 36.1 -0.3**
LALI IAML 22 45 07.4
comp=Z,2µm,1.0s
**DELF Filadelfia 2.51 111** *e*P **Pn 22 44 37.9 +1.4**
**ERIA Liberia 2.56 106** *e*P **Pn 22 44 39.1 +2.0**
**LOMA Loma Larga 2.57 332** *e*P **Pn 22 44 37.6 +0.3**
**LOMA Loma Larga 2.57 332** *i* P **Pn 22 44 37.7 +0.3**
LOMA IAML 22 45 14.9
comp=Z,5µm,1.0s
**VRLE La Escondida, 2.59 102** *e*P **Pn 22 44 38.4 +0.8**
**VORI VORI 2.60 102** *e*P **Pn 22 44 39.3 +1.4**
**GPS2 Hotel Rincn d 2.61 103** *e*P **Pn 22 44 38.6 +0.7**
**SNET Serv Nac Est T 2.63 332 Pn 22 44 37.6 -0.6**
**LFU La Fuente 2.64 334** *e*P **Pn 22 44 39.1 +0.9**
**PMON Piamonte 2.70 330** *i* P **Pn 22 44 39.1 0.0**
PMON IAML 22 45 18.2
comp=Z,11µm,1.0s
**JAYA Jayaque - finc 2.71 327** *e*P **Pn 22 44 39.2 -0.2**
**JAYA Jayaque - finc 2.71 327** *i* P **Pn 22 44 39.2 -0.2**
JAYA IAML 22 45 12.6
comp=Z,11µm,1.0s
**NICO Nicoya 2.73 116** *e*P **Pn 22 44 39.1 -0.4**
**TGUH Tegucigalpa,Un 2.76 14 Pn 22 44 40.3 +0.3**
**TGUH Tegucigalpa,Un 2.76 14** P **Pn 22 44 41.5 +1.5**
**TGUH Tegucigalpa,Un 2.76 14** *i* P **Pn 22 44 41.3 +1.3**
TGUH IAML 22 45 22.6
comp=Z,8µm,1.0s
**COLC Colonia 2.77 104** *e*P **Pn 22 44 41.4 +1.3**
**ACON Acoyapa 2.77 77 Pn 22 44 40.0 -0.1**
**ACON Acoyapa 2.77 77** P **Pn 22 44 41.1 +1.0**
**ACON Acoyapa 2.77 77** *i* P **Pn 22 44 40.8 +0.7**
ACON IAML 22 45 22.8
comp=Z,3µm,1.0s
**ACON Acoyapa 2.77 77** *e*P **Pn 22 44 40.2 +0.2**
**CEDA San Andres 2.81 330** *e*P **Pn 22 44 41.0 +0.3**
**CEDA San Andres 2.81 330** *i* P **Pn 22 44 40.9 +0.3**
CEDA IAML 22 45 19.7
comp=Z,21µm,1.0s
**CUI Cuipilapa 2.81 104** *e*P **Pn 22 44 41.7 +1.0**
**INDI Punta índio, G 2.82 122** *i* P **Pn 22 44 40.1 -0.6**
INDI IAML 22 45 34.4
comp=Z,3µm,1.0s
**CEVE Cerro Verde 2.95 326** *e*P **Pn 22 44 43.1 +0.3**
**CEVE Cerro Verde 2.95 326** *i* P **Pn 22 44 43.1 +0.3**
CEVE IAML 22 45 25.7
comp=Z,5µm,1.0s
**LLGN La Laguna 2.95 341** *i* P **Pn 22 44 44.0 +1.4**
LLGN IAML 22 45 22.0
comp=Z,4µm,1.0s
**SNJE San Jose 2.98 327** *e*P **Pn 22 44 43.1 +0.1**
**RTR El Retiro 3.02 327** *e*P **Pn 22 44 44.3 +0.7**
**UNIC Universidad Ca 3.04 329** *i* P **Pn 22 44 44.7 +0.9**
UNIC IAML 22 45 21.7
comp=Z,2µm,1.0s
**VERA Finca Concepci 3.06 99** *e*P **Pn 22 44 45.2 +1.3**
**NUBE Las Nubes 3.10 325** *e*P **Pn 22 44 45.0 +0.2**
**NUBE Las Nubes 3.10 325** *i* P **Pn 22 44 44.7 0.0**
NUBE IAML 22 45 26.9
comp=Z,6µm,1.0s
**JUNT Juntas 3.12 110** *e*P **Pn 22 44 45.7 +0.9**
**JTS Las Juntas de 3.12 110 Pn 22 44 45.1 +0.2**
**JTS Las Juntas de 3.12 110** Pn **Pn 22 44 45.2 +0.4**
comp=Z,77nm,0.3s,baz=286,slow=23,SNR=142
JTS Sn **Sn 22 45 18.0 -3.4**
comp=Z,58nm,0.3s,baz=298,slow=21,SNR=2.8
comp=Z,276nm,0.5s
**JTS Las Juntas de 3.12 110** *d* P **Pn 22 44 45.5 +0.7**
**JTS Las Juntas de 3.12 110** *e*P **Pn 22 44 45.5 +0.7**
**LOAL Lomas de Alarc 3.18 326** *i* P **Pn 22 44 47.1 +1.4**
LOAL IAML 22 45 45.2
comp=Z,8µm,1.0s
**LCHIL Los Chiles 3.18 96** *e*P **Pn 22 44 47.0 +1.3**
**SLOZ Alcaldia de Sa 3.20 326** *e*P **Pn 22 44 47.2 +1.2**
**MTEVE Monteverde 3.23 108** *e*P **Pn 22 44 48.8 +2.4**
**ARE1 Arenal 1 3.29 105** *e*P **Pn 22 44 48.9 +1.7**
**CBL1 Cabuya 3.31 122** *e*P **Pn 22 44 47.5 +0.1**
**VACR Volcan Arenal 3.32 105** *e*P **Pn 22 44 49.1 +1.4**
**MTO3 Montecristo 3.32 336** Pn **Pn 22 44 48.1 +0.3**
**MTO3 Montecristo 3.32 336** *e*P **Pn 22 44 48.9 +1.1**
**MTO3 Montecristo 3.32 336** *i* P **Pn 22 44 48.9 +1.1**
MTO3 IAML 22 45 37.1
comp=Z,2µm,1.0s
**TUNA La Fortuna 3.35 105** *e*P **Pn 22 44 50.6 +2.5**
**SOCE Pocosol 3.40 106 Pn 22 44 49.6 +0.8**
**SOCE Pocosol 3.40 106** *i* P **Pn 22 44 50.0 +1.2**
SOCE IAML 22 45 39.8
comp=Z,2µm,1.0s
**ARZA Esparza 3.49 113** *e*P **Pn 22 44 50.1 +0.1**
**SRA1 San Ramn 3.63 110** *e*P **Pn 22 44 53.7 +1.8**
**RAMO San Ramon 3.64 110** *e*P **Pn 22 44 55.2 +3.1**
**ESPN Las Esperanzas 3.66 77 Pn 22 44 53.0 +0.8**
**ESPN Las Esperanzas 3.66 77** *e*P **Pn 22 44 54.6 +2.3**
**ITAL Pital 3.71 104** *e*P **Pn 22 44 53.6 +0.6**
**TRB2 Turrubares 3.72 112** *e*P **Pn 22 44 54.9 +1.8**
**TCS1 Tacares 3.81 110** *i* P **Pn 22 44 56.4 +2.0**
TCS1 IAML 22 45 46.5
comp=Z,31µm,1.0s
**TCS1 Tacares 3.81 110** *e*P **Pn 22 44 56.1 +1.7**
**VPS6 Volcano Poas 3.82 107** *e*P **Pn 22 44 56.3 +1.5**
**BELE Belen 3.94 110** *e*P **Pn 22 44 57.9 +1.8**
**SANTA Santa Ana 3.95 111** *e*P **Pn 22 44 58.1 +1.7**
**NBG Las Nubes 3.97 324** *e*P **Pn 22 44 59.4 +2.6**
**PCG Pacaya 3.98 319** *e*P **Pn 22 44 60.0 +3.0**
**HDC Heredia 4.00 109 Pn 22 44 58.3 +1.3**
**HDC Heredia 4.00 109** *e*P **Pn 22 44 59.1 +2.1**
**HDC Heredia 4.00 109** *e*P **Pn 22 44 58.8 +1.8**
**HDC3 Heredia 3 4.00 109** *i* P **Pn 22 44 59.2 +2.2**
HDC3 IAML 22 46 06.5
comp=Z,4µm,1.0s
**ACOS Acosta 4.02 112** *e*P **Pn 22 44 59.9 +2.5**
**LUJA Lujan 4.06 110** *e*P **Pn 22 45 00.7 +2.8**
**LUPE Guadalupe 4.07 110** *e*P **Pn 22 45 01.0 +3.0**
**FUG Fuego 3 4.17 318** *e*P **Pn 22 45 01.1 +1.6**
**LCR2 La Lucha 2 4.19 112** Pn **Pn 22 45 01.1 +1.4**
**LCR2 La Lucha 2 4.19 112** *i* P **Pn 22 45 01.6 +1.9**
LCR2 IAML 22 45 52.6
comp=Z,4µm,1.0s
**RAFA San Farael, Vo 4.29 109** *i* P **Pn 22 45 04.8 +3.6**
RAFA IAML 22 45 08.3
comp=Z,12µm,1.0s
**APG El Apazote 4.38 326** Pn **Pn 22 45 03.8 +1.5**
comp=Z,0.5nm,0.3s,baz=133,slow=4.1,SNR=25
**SOKI Kika Raxquin 4.82 316** *i* P **Pn 22 45 10.9 +2.3**
SOKI IAML 22 46 10.7
comp=Z,820nm,1.0s
**RTAL Retalhuleu 4.83 311** Pn **Pn 22 45 07.8 -0.6**
**STG3 Santiaguito 3, 4.86 314** *e*P **Pn 22 45 10.0 +1.1**
STG3 *e*S **Sn 22 46 01.7 -2.8**
**DRK0 Durika 5.07 114** *i* P **Pn 22 45 13.7 +1.9**
DRK0 IAmb IAmb 22 45 17.2
comp=Z,3µm,0.6s
DRK0 IAML 22 46 12.5
comp=Z,20µm,1.0s
DRK0 IVmB_BB 22 46 12.5
comp=Z,140µm,1.0s
**CDITO Canoas 5.71 119** *i* P **Pn 22 45 22.8 +2.4**
CDITO IAmb IAmb 22 45 23.8
comp=Z,570nm,0.6s
CDITO IVmB_BB 22 45 27.2
comp=Z,10µm,1.0s
CDITO IAML 22 46 49.4
comp=Z,3µm,1.0s
**BRU2 Volcan 5.76 116 Pn 22 45 22.9 +1.5**
**BRU2 Volcan 5.76 116** *i* P **Pn 22 45 23.9 +2.6**
BRU2 IVmB_BB 22 45 30.0
comp=Z,6µm,1.0s
BRU2 IAmb IAmb 22 45 40.5
comp=Z,600nm,0.6s
BRU2 IAML 22 46 43.9
comp=Z,2µm,1.0s
**CCIG Comitan 6.37 321** Pn **Pn 22 45 30.5 +0.9**
**PRVC Isla de Provid 6.73 72** P **Pn 22 45 36.0 +1.5**
comp=Z,147nm,0.9s
**PRVC Isla de Provid 6.73 72** *i* P **Pn 22 45 37.0 +2.5**
PRVC IAmb IAmb 22 45 57.9
comp=Z,46nm,0.9s
PRVC IAML 22 46 37.2
comp=Z,83nm,1.0s
**GMAL Guarumal, Vera 7.52 118** P **Pn 22 45 47.4 +2.1**
comp=Z,157nm,0.7s
**CACAO El Cacao, Vera 8.04 119** P **Pn 22 45 55.3 +2.8**
comp=Z,108nm,0.8s
**BCIP Isla Barro Col 8.27 105 Pn 22 45 56.2 +0.6**
**BCIP Isla Barro Col 8.27 105** P **Pn 22 45 56.8 +1.2**
comp=Z,150nm,1.0s
**BCIP Isla Barro Col 8.27 105** *i* P **Pn 22 45 56.9 +1.3**
**BCIP Isla Barro Col 8.27 105** P **Pn 22 45 56.2 +0.6**
**AZU Azuero 8.35 114** P **Pn 22 46 01.0 +4.3**
comp=Z,85nm,0.9s
**CMIG Matias Romero 8.82 311** Pn **Pn 22 46 04.1 +1.0**
comp=Z,4.6nm,0.3s,baz=104,slow=9.7,SNR=50
CMIG Sn **Sn 22 47 39.9 -1.9**
comp=Z,1.1nm,0.3s,baz=280,slow=23,SNR=1.0
comp=Z,33nm,0.7s
**CAPC Capurgana 10.77 104** P **Pn 22 46 33.0 +3.0**
comp=Z,71nm,1.5s
**LCBC Los crdobas, 11.66 101** P **Pn 22 46 44.4 +2.3**
comp=Z,148nm,0.8s
**TLIG Tlapa 11.99 302** Pn **Pn 22 46 47.4 +0.6**
**MTDJ Mount Denham 12.15 55 Pn 22 46 49.7 +0.7**
**MTDJ Mount Denham 12.15 55** P **Pn 22 46 52.1 +3.1**
comp=Z,103nm,2.2s
**PAYG Puerto Ayora 12.18 191** Pn **Pn 22 46 50.2 +0.9**
**PAYG Puerto Ayora 12.18 191** P **Pn 22 46 48.0 -1.3**
comp=Z,211nm,1.1s
**DBBC Dabeiba 12.36 109** P **Pn 22 46 55.4 +3.7**
comp=Z,72nm,1.1s
**UREC San Jos de Ur 12.75 105** P **Pn 22 46 59.2 +2.2**
comp=Z,50nm,0.7s
**PLMC San Jos del P 13.20 118** P **Pn 22 47 03.7 +0.5**
comp=Z,35nm,1.2s
**UNM Universidad Na 13.42 308** Pn **Pn 22 47 08.2 +1.8**
**UNM Universidad Na 13.42 308** P **Pn 22 47 08.2 +1.8**
**ZARC Zaragoza, Cauc 13.46 105** P **Pn 22 47 09.5 +2.7**
comp=Z,48nm,0.8s
**YOTC Yotoco, Valle 13.62 122** P **Pn 22 47 10.6 +1.5**
comp=Z,41nm,1.5s
**JAMC Jamundi, Valle 13.79 125** P **Pn 22 47 14.7 +3.2**
comp=Z,76nm,1.2s
**CHIV Chivirico 14.01 51** Pn **Pn 22 47 13.4 -0.8**
**BBAC Balboa, Cauca 14.09 130** P **Pn 22 47 17.1 +1.5**
comp=Z,93nm,1.1s
**NORC Norcasia 14.15 113** P **P 22 47 20.9 -2.6**
comp=Z,67nm,1.0s
**PTBC PUERTO BERRIO, 14.15 109** P **Pn 22 47 17.5 +1.3**
comp=Z,135nm,1.0s
**POPC Popayan, Colom 14.20 127** P **Pn 22 47 20.0 +3.0**
comp=Z,170nm,1.3s
**OTAV Otavalo 14.52 139** Pn **Pn 22 47 21.6 -0.1**
**OTAV Otavalo 14.52 139** P **Pn 22 47 21.6 -0.1**
**GCUF Volcan Galeras 14.56 133** P **P 22 47 27.2 -1.4**
comp=Z,105nm,1.2s
**ORTC Ortega, Tolima 14.59 120** P **P 22 47 26.5 -1.9**
comp=Z,108nm,0.9s
**TULM Tulcn-Chalpat 14.61 136 Pn 22 47 22.5 -0.4**
**TULM Tulcn-Chalpat 14.61 136** P **P 22 47 30.3 +1.2**
comp=Z,105nm,1.2s
**PULU Pululahua 14.66 140** Pn **Pn 22 47 24.0 +0.6**
**IMBA Imbabura, San 14.66 138** Pn **Pn 22 47 23.6 0.0**
**CRJC Cerrejon, Guaj 14.78 90** P **P 22 47 29.6 -0.9**
comp=Z,78nm,1.4s
**SPBC San Pablo de B 14.84 111** P **P 22 47 33.3 +2.1**
**ROSC El Rosal 14.95 115 Pn 22 47 28.5 +1.1**
**ROSC El Rosal 14.95 115** Pn **Pn 22 47 29.4 +1.9**
comp=Z,1.3nm,0.3s,baz=272,slow=24,SNR=1.7
**ROSC El Rosal 14.95 115** P **P 22 47 31.6 -1.2**
comp=Z,167nm,1.4s
**ROSC El Rosal 14.95 115** P **Pn 22 47 28.5 +1.1**
**BONI La Bonita 14.98 136** P **P 22 47 33.4 +0.4**
comp=Z,181nm,0.9s,comp=Z,3µm
**GTBY Guantanamo Bay 15.00 54 Pn 22 47 27.8 +0.1**
**GTBY Guantanamo Bay 15.00 54** P **P 22 47 30.8 -2.0**
comp=Z,59nm,1.1s
**PRAC Prado 15.00 119** P **Pn 22 47 29.2 +1.5**
comp=Z,118nm,1.1s
**BETC Betania 15.10 124** P **P 22 47 32.1 -2.0**
**JRQG Juriquilla Cam 15.18 309 Pn 22 47 30.8 +0.4**
**MOIG Morelia 15.20 305 Pn 22 47 32.3 +1.7**
MOIG IAmb IAmb 22 47 37.1
comp=Z,110nm,0.8s
**ANTS Antisana-Sarah 15.27 140** Pn **Pn 22 47 32.6 +0.8**
**GARC Garzon, Huila 15.35 126** P **P 22 47 37.8 +0.8**
comp=Z,39nm,0.9s
**NMDO Nuevo Mundo 15.45 52 Pn 22 47 34.2 +0.7**
NMDO IAmb IAmb 22 47 39.8
comp=Z,97nm,1.4s
**PAMC Pamplona, Colo 15.56 104** P **Pn 22 47 37.2 +1.7**
**CHIC Chingaza 15.57 114** P **P 22 47 38.1 -1.6**
comp=Z,131nm,1.1s
**FLOC Florencia 15.59 128** P **P 22 47 37.9 -1.6**
comp=Z,274nm,1.4s
**PIAT Ana Tenorio 15.60 141** P **Pn 22 47 37.9 +2.0**
comp=Z,9.4nm,1.2s
**RUSC La Rusia 15.66 109** P **Pn 22 47 38.4 +1.6**
comp=Z,129nm,1.2s
**URMC La Uribe, Meta 15.67 120** P **P 22 47 40.3 -0.2**
comp=Z,119nm,0.9s
**VILC Villavicencio, 15.84 116** P **P 22 47 41.9 -0.5**
**TAMC Tame, Arauca 16.68 106** P **P 22 47 53.8 +2.1**
comp=Z,221nm,1.3s
**060A Indiantown 17.15 24 Pn 22 47 54.4 -0.8**
060A IAmb IAmb 22 48 03.6
comp=Z,261nm,0.9s
**PTGC Puerto Gaitan, 17.19 113** P **P 22 48 00.0 +2.7**
comp=Z,427nm,1.5s,comp=Z,7µm
**SDV Santo Domingo 17.21 97 Pn 22 47 56.1 -0.2**
SDV IAmb IAmb 22 48 03.3
comp=Z,211nm,1.4s
**SDV Santo Domingo 17.21 97** Pn **P 22 47 58.1 +0.4**
comp=Z,2.1nm,0.3s,baz=292,slow=8.2,SNR=27
SDV Sn **Sn 22 51 08.3 +1.0**
comp=Z,1.6nm,0.3s,baz=29,slow=15,SNR=1.6
**SDV Santo Domingo 17.21 97** *e*P **P 22 47 57.7 0.0**
**DWPF Disney Wildern 17.75 19 Pn 22 48 01.5 -1.1**
DWPF IAmb IAmb 22 48 11.0
comp=Z,423nm,2.0s
**DWPF Disney Wildern 17.75 19** P **P 22 48 04.5 +1.2**
baz=201
**SDDR Presa de Saban 17.76 63 Pn 22 48 02.8 -0.1**
**SDDR Presa de Saban 17.76 63** P P 22 48 12.3 +8.7
comp=Z,40nm,1.1s
**ZAIG Zacatecas 17.99 311 Pn 22 48 05.0 -1.0**
**HBVL Hebbronville 18.60 329 P 22 48 12.6 -0.1**
**656A Willston 18.61 15** P **P 22 48 12.9 +0.1**
656A IAmb IAmb 22 48 19.8
comp=Z,136nm,1.2s
**KVTX Kingsville 18.62 331** P **P 22 48 12.5 -0.4**
KVTX IAmb IAmb 22 48 24.1
comp=Z,105nm,0.8s
**GRTK Grand Turk 19.00 56** P **P 22 48 16.7 -0.4**
GRTK IAmb IAmb 22 48 29.7
comp=Z,173nm,1.1s
**553A Crawfordville 19.02 9 Pn 22 48 18.2 +0.1**
**451A Vernon 19.27 6** P **P 22 48 20.2 +0.2**
451A IAmb IAmb 22 48 33.1
comp=Z,155nm,0.8s
**735A Kenedy 19.70 334** P **P 22 48 24.1 -0.6**
735A IAmb IAmb 22 48 34.7
comp=Z,175nm,1.3s
**BRAL Brewton 19.73 2** P **P 22 48 24.9 -0.1**
**BRAL Brewton 19.73 2** P **Pn 22 48 26.6 0.0**
baz=182
**BAUV El Baul 19.73 95** P **P 22 48 24.8 -0.4**
BAUV IAmb IAmb 22 48 33.6
comp=Z,115nm,0.9s
**441A DeRidder 19.90 347** P **Pn 22 48 28.2 -0.5**
**HKT Hockley 19.90 340** P **P 22 48 27.6 +0.7**
HKT IAmb IAmb 22 48 34.0
comp=Z,167nm,1.2s
**HKT Hockley 19.90 340** ⇑ *i* P **Pn 22 48 28.1 -0.5**
HKT pmax pmax
comp=Z,164nm,1.3s
**346A Big Creek Wild 19.98 356 P 22 48 27.5 -0.3**
346A IAmb IAmb 22 48 42.0
comp=Z,124nm,0.9s
**833A Chaparral WMA, 20.00 329** P **Pn 22 48 29.1 -0.7**
baz=145
**ATAH Atahualpa 20.68 152** P Pn 22 48 37.8 -0.6
comp=Z,32nm,0.9s,baz=334,slow=9.1,SNR=17
ATAH PcP **PcP 22 52 47.1 +1.3**
comp=Z,4.5nm,0.8s,baz=270,slow=5.1,SNR=2.9
comp=Z,32nm,0.9s
**VBMS Vicksburg 20.89 354** P **P 22 48 38.0 +0.3**
VBMS IAmb IAmb 22 48 49.8
comp=Z,162nm,0.9s
**VBMS Vicksburg 20.89 354** P Pn 22 48 39.5 -0.8
baz=173
**CRPR Cabo Rojo, PR 21.19 69** P **P 22 48 40.2 -0.8**
**146A Union 21.20 357** P **P 22 48 40.3 -0.7**
146A IAmb IAmb 22 48 54.8
comp=Z,152nm,1.0s
**PRSN Puerto Rico Se 21.22 69** P **P 22 48 40.5 -0.8**
**NATX Nacogdoches 21.23 344** P **P 22 48 40.7 -0.6**
**NATX Nacogdoches 21.23 344** P **P 22 48 42.4 +1.1**
baz=162
**MLPR Magueyes Islan 21.24 70** P **P 22 48 41.5 0.0**
MLPR IAmb IAmb 22 48 51.2
comp=Z,61nm,0.8s
**435B Jarrell 21.30 337** P **P 22 48 43.0 +0.9**
baz=153
**LRAL Lakeview Retre 21.59 2** P **P 22 48 46.0 +0.8**
**LRAL Lakeview Retre 21.59 2** P **P 22 48 46.4 +1.2**
baz=182
**AOPR Arecibo Observ 21.61 69** P **P 22 48 45.1 -0.4**
AOPR IAmb IAmb 22 48 49.2
comp=Z,278nm,1.6s
**UUPR Utuado, UPR, P 21.62 69** P **P 22 48 45.5 -0.1**
UUPR IAmb IAmb 22 48 49.6
comp=Z,108nm,0.9s
**JCT Junction City 21.98 332** P **P 22 48 48.6 -0.9**
**JCT Junction City 21.98 332** P **P 22 48 49.4 -0.1**
baz=148
**JCT Junction City 21.98 332** P **P 22 48 48.6 -0.9**
JCT pmax pmax
comp=Z,44nm,0.8s
**GOGA Godfrey 22.33 10** P **P 22 48 52.9 -0.2**
GOGA IAmb IAmb 22 49 00.5
comp=Z,72nm,0.8s
**GOGA Godfrey 22.33 10** P **P 22 48 53.9 +0.8**
baz=192
**GOGA Godfrey 22.33 10** P **P 22 48 52.9 -0.2**
GOGA pmax pmax
comp=Z,72nm,0.9s
**HUMP Col San Antoni 22.39 70** P **P 22 48 54.3 +0.4**
HUMP IAmb IAmb 22 49 00.3
comp=Z,142nm,1.4s
**TREL Terrell 22.55 342** P **P 22 48 55.5 0.0**
**WLAR White Oak Lake 22.72 349** P **P 22 48 57.4 +0.1**
**CCAR Cane Creek 22.73 352** P **P 22 48 58.1 +0.8**
CCAR IAmb IAmb 22 49 01.0
comp=Z,88nm,0.8s

**HPIG** 22.77 315 P **P** 22 48 58.0 0.0
**NHSC New Hope** 22.79 17 P **P** 22 48 57.8 -0.2
**NHSC New Hope** 22.79 17 P **P** 22 48 58.5 +0.5
baz=200
**PCRV Puerto La Cruz** 22.92 91 P **P** 22 49 00.1 +0.4
comp=Z,41nm,0.7s,baz=219,slow=5.8,SNR=17
comp=Z,41nm,0.7s
**OXF Oxford** 23.09 357 P **P** 22 49 00.4 -0.6
OXF IAmb IAmb 22 49 16.0
comp=Z,145nm,1.1s
**OXF Oxford** 23.09 357 P **P** 22 49 00.5 -0.5
baz=176
**OXF Oxford** 23.09 357 P **P** 22 49 00.4 -0.6
OXF pmax pmax
comp=Z,145nm,1.1s
**TXAR Lajitas Array** 23.13 323 P **P** 22 49 01.8 +0.1
**TXAR Lajitas Array** 23.13 323 P **P** 22 49 02.3 +0.6
comp=Z,22nm,0.8s,baz=138,slow=8.9,SNR=161
TXAR PcP **PcP** 22 52 51.2 +1.1
comp=Z,4.5nm,1.0s,baz=144,slow=4.7,SNR=4.1
comp=Z,22nm,0.8s
**FPAL Fort Paine** 23.17 5 P **P** 22 49 01.4 -0.6
**PLAL Pickwick Lake** 23.52 360 P **P** 22 49 04.3 -1.0
**MIAR Mount Ida** 23.64 348 P **P** 22 49 06.4 -0.2
**MIAR Mount Ida** 23.64 348 P **P** 22 49 07.2 +0.6
baz=166
**MIAR Mount Ida** 23.64 348 P **P** 22 49 06.4 -0.2
MIAR pmax pmax
comp=Z,271nm,0.9s
**TBTG Tabatinga, AM** 23.67 130 P **P** 22 49 06.7 -0.3
TBTG IAmb IAmb 22 49 08.8
comp=Z,75nm,0.9s
**TBTG Tabatinga, AM** 23.67 130 *e*P **P** 22 49 07.6 +0.6
**X37A Clayton** 24.10 345 **P** 22 49 11.1 +0.2
**SLBS Sierra La Lagu** 24.26 303 P **P** 22 49 13.0 +0.5
**CZSB Cruzeiro do Su** 24.28 141 P **P** 22 49 13.2 +0.5
**CZSB Cruzeiro do Su** 24.28 141 P **P** 22 49 14.9 +2.2
comp=Z,44nm,1.6s
**CZSB Cruzeiro do Su** 24.28 141 *e*P **P** 22 49 13.4 +0.7
**TKL Tuckaleechee C** 24.48 8 P **P** 22 49 14.4 0.0
TKL IAmb IAmb 22 49 21.4
comp=Z,126nm,1.1s
**TKL Tuckaleechee C** 24.48 8 P **P** 22 49 14.4 0.0
TKL pmax pmax
comp=Z,126nm,1.1s
**WVT Waverly** 24.66 0 P **P** 22 49 14.8 -1.2
**WVT Waverly** 24.66 0 P **P** 22 49 15.2 -0.7
baz=180
**WVT Waverly** 24.66 0 P **P** 22 49 14.8 -1.2
WVT pmax pmax
comp=Z,13nm,0.9s
**WMOK Wichita Mounta** 25.28 339 P **P** 22 49 21.6 0.0
baz=154
**TZTN Tazewell** 25.39 8 P **P** 22 49 22.9 +0.4
baz=190
**CNNC Cliffs of the** 25.47 19 P **P** 22 49 23.0 -0.3
**CNNC Cliffs of the** 25.47 19 P **P** 22 49 24.8 +1.5
baz=203
**NNA Nana** 25.68 154 P **P** 22 49 25.7 +0.2
comp=Z,7.1nm,0.4s,baz=354,slow=7.1,SNR=4.7
comp=Z,7.1nm,0.4s
**NNA Nana** 25.68 154⇓ *i*P **P** 22 49 26.6 +1.1
NNA pmax pmax
comp=Z,92nm,1.3s
**GRGR Grenville** 25.74 86 P **P** 22 49 27.3 +1.2
comp=Z,111nm,1.2s,comp=Z,6µm
**MNTX Cornudas Mount** 25.87 324 P **P** 22 49 27.8 +0.8
baz=138
**GDHS Morne Mazeau,** 25.87 76 P **P** 22 49 26.7 -0.5
**FDF Fort de France** 26.30 80 P **P** 22 49 30.7 -0.5
FDF IAmb IAmb 22 49 34.6
comp=Z,72nm,0.9s
**FDF Fort de France** 26.30 80 P **P** 22 49 30.7 -0.5
FDF pmax pmax
comp=Z,73nm,0.9s
**BIM Bigot** 26.37 80 P **P** 22 49 31.3 -0.4
BIM IAmb IAmb 22 49 33.2
comp=Z,96nm,1.0s
**GDSD La Dsirade Is** 26.54 76 P **P** 22 49 31.6 -1.7
GDSD IAmb IAmb 22 49 34.8
comp=Z,97nm,1.0s
**AMTX Amarillo** 26.55 334 P **P** 22 49 33.3 +0.1
**AMTX Amarillo** 26.55 334 P **P** 22 49 33.6 +0.4
baz=149
**BLA Blacksburg** 26.61 13 P **P** 22 49 34.4 +0.6
baz=197
**CCM Cathedral Cave** 26.75 354 P **P** 22 49 33.9 -1.0
CCM IAmb IAmb 22 49 36.0
comp=Z,45nm,0.8s
**CCM Cathedral Cave** 26.75 354 P **P** 22 49 33.8 -1.0
baz=173
**CCM Cathedral Cave** 26.75 354 P **P** 22 49 33.9 -1.0
CCM pmax pmax
comp=Z,45nm,0.8s
**WCI Wyandotte Cave** 26.80 3 P **P** 22 49 34.5 -0.8
WCI IAmb IAmb 22 49 48.6
comp=Z,40nm,0.8s
**WCI Wyandotte Cave** 26.80 3 P **P** 22 49 35.1 -0.2
baz=184
**WCI Wyandotte Cave** 26.80 3 P **P** 22 49 34.5 -0.8
WCI pmax pmax
comp=Z,40nm,0.9s
**TEFE Tefe** 27.49 121 *e*P **P** 22 49 42.7 +0.9
**121A Cookes Peak, D** 27.88 322 P **P** 22 49 46.1 +0.8
**121A Cookes Peak, D** 27.88 322 P **P** 22 49 47.1 +1.8
baz=135
**319A Douglas** 28.04 319 P **P** 22 49 47.1 +0.4
319A IAmb IAmb 22 49 50.4
comp=Z,64nm,1.3s
**P49A Miami Univ. Ec** 28.20 5 P **P** 22 49 46.8 -1.2
baz=187
**CBN Corbin Frederi** 28.36 18 P **P** 22 49 49.6 +0.3
**CBN Corbin Frederi** 28.36 18 P **P** 22 49 50.0 +0.8
baz=202
**Y22D IRIS PASSCAL I** 28.49 326 P **P** 22 49 51.1 +0.3
baz=138
**BOAV Boa Vista** 28.61 106 P **P** 22 49 51.7 -0.1
BOAV IAmb IAmb 22 49 53.9
comp=Z,37nm,0.9s
**BOAV Boa Vista** 28.61 106 *e*P **P** 22 49 52.6 +0.7
**P52A Corning** 28.63 9 P **P** 22 49 51.4 -0.3
baz=192
**KSU1 Kansas State U** 28.68 346 P **P** 22 49 51.3 -0.9
KSU1 IAmb IAmb 22 49 53.9
comp=Z,63nm,0.8s
**KSU1 Kansas State U** 28.68 346 P **P** 22 49 52.5 +0.3
baz=162
**DUN6 Lazy B Ranch** 28.69 321 P **P** 22 49 53.7 +1.2
DUN6 IAmb IAmb 22 49 56.5
comp=Z,88nm,1.3s
**ANMO Albuquerque** 28.90 327 P **P** 22 49 54.5 +0.2
**ANMO Albuquerque** 28.90 327 P **P** 22 49 55.8 +1.4
baz=140
**ANMO Albuquerque** 28.90 327⇓ *e*P **P** 22 49 56.1 +1.7
ANMO pmax pmax
comp=Z,4.0nm,1.1s
**MCWV Mont Chateau** 29.08 13 P **P** 22 49 55.5 -0.2
baz=196
**ACSO Alum Creek Sta** 29.09 8 P **P** 22 49 54.6 -1.1
ACSO IAmb IAmb 22 50 07.4
comp=Z,22nm,0.7s
**ACSO Alum Creek Sta** 29.09 8 P **P** 22 49 55.9 +0.1
baz=190
**HDIL Hopedale** 29.10 358 P **P** 22 49 54.5 -1.3
HDIL IAmb IAmb 22 50 10.6
comp=Z,30nm,0.9s
**HDIL Hopedale** 29.10 358 P **P** 22 49 55.3 -0.6
baz=177
**CBKS Cedar Bluff** 29.30 341 P **P** 22 49 57.2 -0.5
baz=156
**O53A New Philadelph** 29.38 11 P **P** 22 49 58.6 +0.2
baz=194
**TUC Tucson** 29.61 318 P **P** 22 50 01.8 +1.1
**TUC Tucson** 29.61 318 P **P** 22 50 02.5 +1.9
baz=130
**TUC Tucson** 29.61 318 P **P** 22 50 01.8 +1.1
TUC pmax pmax
comp=Z,12nm,1.0s
**SDMD Soldier's Deli** 29.63 18 P **P** 22 50 00.6 +0.1
**T25A Trinidad** 29.64 333 P **P** 22 50 02.8 +1.8
baz=146
**BBSR BB Station** 29.91 42 P **P** 22 50 03.2 +0.1
BBSR IAmb IAmb 22 50 07.6
comp=Z,71nm,1.1s
**ETMB Extrema** 30.15 133 P **P** 22 50 05.1 -0.4
ETMB IAmb IAmb 22 50 14.0
comp=Z,45nm,0.9s
**ETMB Extrema** 30.15 133 *e*P **P** 22 50 05.4 -0.1
**SSPA Standing Stone** 30.48 15 P **P** 22 50 07.8 -0.2
SSPA IAmb IAmb 22 50 13.1
comp=Z,61nm,1.7s
**SSPA Standing Stone** 30.48 15 P **P** 22 50 08.3 +0.2
baz=200
**SDCO Great Sand Dun** 30.63 332 P **P** 22 50 10.4 +0.6
**SDCO Great Sand Dun** 30.63 332 P **P** 22 50 11.1 +1.3
baz=145
**M53A WI Miller and** 30.63 11 P **P** 22 50 09.3 -0.2
baz=194
**L44A Lake County Fo** 30.70 0 P **P** 22 50 09.5 -0.5
baz=180
**MACA Manacapuru-AM** 30.71 116 P **P** 22 50 10.9 +0.4
**MACA Manacapuru-AM** 30.71 116 *e*P **P** 22 50 11.7 +1.3
**214A Organ Pipe Nat** 30.75 316 P **P** 22 50 12.5 +1.9
baz=126
**SCIA State Center** 30.78 352 P **P** 22 50 09.7 -1.1
**SCIA State Center** 30.78 352 P **P** 22 50 11.0 +0.3
baz=170
**W18A Petrified Fore** 30.85 324 P **P** 22 50 13.4 +1.7
baz=135
**AAM Ann Arbor** 31.05 6 P **P** 22 50 14.6 +1.5
baz=188
**S22A 4UR Ranch, Cre** 31.26 330 P **P** 22 50 16.5 +1.1
baz=142
**ERPA Erie** 31.42 11 P **P** 22 50 17.4 +1.1
baz=195
**Q24A Divide** 31.48 334 P **P** 22 50 18.5 +1.2
baz=146
**JFWS Jewell Farm** 31.50 357 P **P** 22 50 15.7 -1.4
**JFWS Jewell Farm** 31.50 357 P **P** 22 50 16.4 -0.6
baz=176
**JFWS Jewell Farm** 31.50 357 P **P** 22 50 15.7 -1.4
JFWS pmax pmax
comp=Z,15nm,0.7s
**MVCO Mesa Verde** 31.69 328 P **P** 22 50 19.0 -0.1
**MVCO Mesa Verde** 31.69 328 P **P** 22 50 20.5 +1.4
baz=139
**SAML Samuel** 31.83 128 P **P** 22 50 19.8 -0.5
**SAML Samuel** 31.83 128 P **P** 22 50 19.8 -0.5
SAML pmax pmax
comp=Z,79nm,0.8s
**SAML Samuel** 31.83 128 *e*P **P** 22 50 19.6 -0.7
**OGNE Ogallala** 31.98 340 P **P** 22 50 22.2 +0.8
baz=153
**PAL Palisades** 32.01 20 P **P** 22 50 22.1 +0.5
baz=207
**WUAZ Wupatki** 32.09 322 P **P** 22 50 25.2 +2.6
baz=133
**ISCO Idaho Springs** 32.37 334 P **P** 22 50 26.1 +0.9
baz=146
**BINY Binghamton** 32.45 17 P **P** 22 50 26.0 +0.5
baz=202
**SMCO Snowmass** 32.47 332 P **P** 22 50 26.4 +0.3
**GLA Glamis** 32.77 315 P **P** 22 50 29.2 +0.7
GLA IAmb IAmb 22 50 39.7
comp=Z,56nm,1.2s
**GLA Glamis** 32.77 315 P **P** 22 50 29.2 +0.7
GLA pmax pmax
comp=Z,56nm,1.3s
**ECSD EROS Data Cent** 33.12 348 P **P** 22 50 29.9 -1.3
ECSD IAmb IAmb 22 50 31.3
comp=Z,50nm,1.0s
**ECSD EROS Data Cent** 33.12 348 P **P** 22 50 30.6 -0.7
baz=164
**N23A Red Feather La** 33.42 335 P **P** 22 50 34.8 +0.5
baz=147
**HMU Henry Mountain** 33.42 326 P **P** 22 50 34.1 -0.3
HMU IAmb IAmb 22 50 38.4
comp=Z,26nm,1.1s
**L61B Northampton** 33.71 21 P **P** 22 50 35.9 -0.5
L61B IAmb IAmb 22 50 37.5
comp=Z,45nm,0.9s
**L61B Northampton** 33.71 21 P **P** 22 50 36.8 +0.3
baz=208
**LPAZ La Paz** 33.74 144 P **P** 22 50 37.0 -0.7
**LPAZ La Paz** 33.74 144 P **P** 22 50 37.2 -0.4
comp=Z,3.1nm,0.9s,baz=334,slow=8.7,SNR=9.5
LPAZ PcP **PcP** 22 53 16.9 -0.2
comp=Z,3.0nm,0.9s,baz=72,slow=0.7,SNR=3.8
comp=Z,3.1nm,0.9s
**LPAZ La Paz** 33.74 144 P **P** 22 50 37.0 -0.7
LPAZ pmax pmax
comp=Z,10.0nm,1.4s
**LPAZ La Paz** 33.74 144 *e*P **P** 22 50 38.1 +0.4
**MONP2 Monument Peak** 33.80 314 P **P** 22 50 39.6 +2.0
baz=123
**PKCU Pink Cliffs** 33.96 324 P **P** 22 50 39.8 +0.8
PKCU IAmb IAmb 22 50 43.7
comp=Z,63nm,1.2s
**PB18 Visviri** 34.06 147 P **P** 22 50 40.9 +0.6
**WES Weston** 34.14 22 P **P** 22 50 40.6 +0.4
WES IAmb IAmb 22 50 41.2
comp=Z,35nm,1.1s
**WES Weston** 34.14 22 P **P** 22 50 40.6 +0.4
WES pmax pmax
comp=Z,35nm,1.1s
**HRV Adam Dziewonsk** 34.16 22 P **P** 22 50 40.2 -0.1
baz=209
**TPFO Pinon Flats** 34.21 315 P **P** 22 50 42.4 +1.3
baz=124
**DELO Deloro Mine** 34.21 13 P **P** 22 50 40.4 -0.3
**PFO Pinyon Flats O** 34.22 315 P **P** 22 50 41.6 +0.5
**PFO Pinyon Flats O** 34.22 315⇓ *e*P **P** 22 50 43.2 +2.1
PFO pmax pmax
comp=Z,38nm,1.5s
**RWWY Rawlins** 34.61 334 P **P** 22 50 44.7 +0.1
RWWY IAmb IAmb 22 50 47.1
comp=Z,59nm,1.1s
**COWI Conover** 34.64 359 P **P** 22 50 42.8 -1.7
COWI IAmb IAmb 22 50 43.9
comp=Z,25nm,0.8s
**MVU Marysvale** 34.64 325 P **P** 22 50 45.4 +0.6
MVU IAmb IAmb 22 50 56.6
comp=Z,49nm,1.1s
**TCRU Three Creeks R** 34.84 325 P **P** 22 50 46.8 +0.1
TCRU IAmb IAmb 22 50 58.2
comp=Z,18nm,0.9s
**LONY Lake Ozonia** 35.08 17 P **P** 22 50 47.5 -0.7
LONY IAmb IAmb 22 50 48.9
comp=Z,32nm,0.9s
**LONY Lake Ozonia** 35.08 17 P **P** 22 50 47.9 -0.3
baz=203
**WBO Williamsburg** 35.24 16 P **P** 22 50 48.9 -0.7
WBO IAmb IAmb 22 50 49.9
comp=Z,20nm,0.9s
**RSSD Black Hills** 35.48 340 P **P** 22 50 52.6 +0.6
RSSD IAmb IAmb 22 50 54.8
comp=Z,40nm,0.8s
**RSSD Black Hills** 35.48 340 P **P** 22 50 53.3 +1.3
baz=152
**RSSD Black Hills** 35.48 340 P **P** 22 50 52.6 +0.6
RSSD pmax pmax
comp=Z,40nm,0.8s
**LBNH Lisbon** 35.55 20 P **P** 22 50 52.2 -0.1
**LBNH Lisbon** 35.55 20 P **P** 22 50 52.7 +0.3
baz=208
**LBNH Lisbon** 35.55 20 P **P** 22 50 52.2 -0.1
LBNH pmax pmax
comp=Z,111nm,1.8s
**TPNV Topopah Spring** 36.02 320 P **P** 22 50 59.7 +3.0
baz=128
**MAL2 Monte Alegre,** 36.10 110 P **P** 22 50 57.8 +0.3
MAL2 IAmb IAmb 22 50 59.2
comp=Z,65nm,1.3s
**MNTQ Montreal, Queb** 36.16 17 P **P** 22 50 57.3 -0.2
**DUG Dugway, Tooele** 36.17 327 P **P** 22 50 58.1 +0.2
**DUG Dugway, Tooele** 36.17 327 P **P** 22 50 59.6 +1.7
baz=136
**DUG Dugway, Tooele** 36.17 327 P **P** 22 50 58.1 +0.2
DUG pmax pmax
comp=Z,11nm,1.0s
**R11B Troy Canyon, C** 36.49 322 P **P** 22 51 03.0 +2.3
baz=130
**BW06 Boulder Array** 36.51 333 P **P** 22 51 01.1 +0.3
baz=143
**PD31 Pinedale Array** 36.51 333 P **P** 22 51 00.6 -0.3
**PDAR Pinedale Array** 36.51 333 P **P** 22 51 00.7 -0.2
**PDAR Pinedale Array** 36.51 333 P **P** 22 51 01.1 +0.3
comp=Z,2.8nm,0.7s,baz=128,slow=9.6,SNR=34
PDAR PcP **PcP** 22 53 24.0 -0.3
comp=Z,2.8nm,0.7s,baz=180,slow=4.3,SNR=5.1
comp=Z,2.8nm,0.7s
**TRQ Mont Tremblant** 36.56 16 P **P** 22 51 00.2 -0.8
**EYMN Ely** 36.59 356 P **P** 22 50 59.6 -1.6
baz=174
**VILB Vilhena** 36.62 130 P **P** 22 51 01.2 -0.6
**VILB Vilhena** 36.62 130 *e*P **P** 22 51 01.9 +0.1
**BCW Bitter Crk WRg** 36.99 315 P **P** 22 51 05.7 +0.7
BCW IAmb IAmb 22 51 12.2
comp=Z,108nm,1.7s
**NPGB Novo Progresso** 37.22 118 *e*P **P** 22 51 06.6 -0.3
**PKME Peaks-Kenny Pk** 37.37 22 P **P** 22 51 07.8 +0.1
PKME IAmb IAmb 22 51 09.2
comp=Z,49nm,0.8s
**PKME Peaks-Kenny Pk** 37.37 22 P **P** 22 51 08.4 +0.6
baz=211
**AGMN Agassiz Nation** 37.41 351 P **P** 22 51 07.4 -0.7
baz=167
**MCPB Macapa, AP** 37.50 106 *e*P **P** 22 51 09.9 +0.6
**REDW Red Top Meadow** 37.56 332 P **P** 22 51 10.1 +0.3
**VLDQ Val d'Or** 37.68 12 P **P** 22 51 09.3 -1.0
**PB09 IPOC Station P** 37.72 151 P **P** 22 51 11.8 +0.6
PB09 IAmb IAmb 22 51 13.3
comp=Z,34nm,1.1s
**ELK Elko** 37.88 325 P **P** 22 51 13.2 +0.7
**ELK Elko** 37.88 325 P **P** 22 51 13.2 +0.7
ELK pmax pmax
comp=Z,11nm,0.9s
**SIV San Ignacio** 38.02 135 P **P** 22 51 13.7 0.0
comp=Z,30nm,1.0s,baz=313,slow=8.6,SNR=59
SIV PcP **PcP** 22 53 29.0 -0.1
comp=Z,7.3nm,0.9s,baz=318,slow=5.2,SNR=3.5
comp=Z,30nm,1.0s
**NV11 Mina Array Sit** 38.12 320 P **P** 22 51 16.4 +1.9
**GGN Saint George** 38.19 24 P **P** 22 51 15.1 +0.4
GGN IAmb IAmb 22 51 18.0
comp=Z,29nm,1.0s
**NVAR Mina Array Bea** 38.21 320 P **P** 22 51 17.2 +1.9
**NVAR Mina Array Bea** 38.21 320 P **P** 22 51 17.9 +2.6
comp=Z,61nm,0.8s,baz=137,slow=7.4,SNR=204
NVAR PcP **PcP** 22 53 30.1 +0.5
comp=Z,5.3nm,0.7s,baz=126,slow=4.3,SNR=5.2
**LHV Little Huntoon** 38.23 320 P **P** 22 51 16.4 +1.2
**H17A Grant Village** 38.25 334 P **P** 22 51 17.3 +1.7
baz=142
**YPP Pitchstone Pla** 38.25 333 P **P** 22 51 16.1 +0.5
**RLMT Red Lodge** 38.28 335 P **P** 22 51 16.2 +0.3
RLMT IAmb IAmb 22 51 17.6
comp=Z,57nm,0.8s
**RLMT Red Lodge** 38.28 335 P **P** 22 51 16.8 +1.0
baz=145
**LAO LASA Array** 38.47 340 P **P** 22 51 17.1 -0.1
LAO IAmb IAmb 22 51 18.8
comp=Z,69nm,1.1s
**LAO LASA Array** 38.47 340 P **P** 22 51 17.8 +0.7
baz=150
**PDRB Porto dos Gac** 38.50 125 *e*P **P** 22 51 16.9 -0.8
**LVC Limon Verde** 38.57 151 P **P** 22 51 19.4 +0.8
**LVC Limon Verde** 38.57 151 P **P** 22 51 18.9 +0.3
comp=Z,17nm,1.1s,baz=334,slow=7.0,SNR=7.5
LVC PcP **PcP** 22 53 31.4 +0.3
comp=Z,9.3nm,1.0s,baz=285,slow=4.7,SNR=5.1
comp=Z,17nm,1.1s
**LVC Limon Verde** 38.57 151 P **P** 22 51 19.4 +0.8
LVC pmax pmax
comp=Z,22nm,1.2s
**LVC Limon Verde** 38.57 151 *e*P **P** 22 51 18.2 -0.4
**CLDB Colider** 38.84 124 *e*P **P** 22 51 19.6 -1.0
**LMQ La Malbaie** 39.00 19 P **P** 22 51 21.1 -0.5
LMQ IAmb IAmb 22 51 33.6
comp=Z,62nm,1.2s
**PTLB Pontes e Lacer** 39.02 132 P **P** 22 51 21.5 -0.6
PTLB IAmb IAmb 22 51 23.0
comp=Z,48nm,1.0s
**PTLB Pontes e Lacer** 39.02 132 *e*P **P** 22 51 21.6 -0.4
**BBSD Serra de San D** 39.17 136 *e*P **P** 22 51 22.8 -0.6
**AF01 San Pedro de A** 39.21 150 P **P** 22 51 24.8 +0.9
AF01 IAmb IAmb 22 51 27.0
comp=Z,61nm,0.9s
**ULM Lac du Bonnet** 39.32 352 P **P** 22 51 22.4 -1.8
ULM IAmb IAmb 22 51 23.6
comp=Z,50nm,0.8s
**ULM Lac du Bonnet** 39.32 352 P **P** 22 51 22.3 -1.8
comp=Z,56nm,0.9s,baz=166,slow=8.8,SNR=52
ULM PcP **PcP** 22 53 33.2 +0.7
comp=Z,14nm,0.9s,baz=196,slow=1.7,SNR=5.2
comp=Z,56nm,0.9s
**ULM Lac du Bonnet** 39.32 352 *d* *i*P **P** 22 51 22.5 -1.7
**DGMT Dagmar** 39.41 343 P **P** 22 51 25.2 +0.2
**DGMT Dagmar** 39.41 343 P **P** 22 51 25.9 +0.9
baz=154
**HLID Hailey** 39.42 329 P **P** 22 51 27.0 +1.7
baz=137
**PB14 IPOC Station P** 39.65 155 P **P** 22 51 27.2 -0.4
PB14 IAmb IAmb 22 51 29.0
comp=Z,40nm,1.1s
**BOZ Bozeman (W)** 39.66 334 P **P** 22 51 28.4 +1.1
baz=142
**AFDM Forest Hills D** 40.22 319 P **P** 22 51 32.4 +0.5
**BATG Bathurst New B** 40.27 23 P **P** 22 51 31.7 -0.4
BATG IAmb IAmb 22 51 33.3
comp=Z,33nm,0.8s
**GO02 Mina Guanaco** 40.47 154 P **P** 22 51 34.4 0.0
GO02 IAmb IAmb 22 51 36.1
comp=Z,32nm,1.0s
**GBN Guysborough** 40.75 29 P **P** 22 51 36.4 +0.3
GBN IAmb IAmb 22 52 21.7
comp=Z,89nm,1.7s
**EGMT Eagleton** 40.87 338 P **P** 22 51 37.7 +0.5
**EGMT Eagleton** 40.87 338 P **P** 22 51 38.2 +1.0
baz=146
**ORV Oroville** 40.90 319 P **P** 22 51 38.3 +0.9
ORV IAmb IAmb 22 51 41.4
comp=Z,70nm,1.2s
**ORV Oroville** 40.90 319 P **P** 22 51 38.3 +0.9
ORV pmax pmax
comp=Z,70nm,1.3s
**WVOR Wild Horse Val** 40.90 325 P **P** 22 51 38.5 +0.9
**WVOR Wild Horse Val** 40.90 325 P **P** 22 51 38.5 +0.9
WVOR pmax pmax
comp=Z,27nm,1.1s
**LYMT Lyon Mountain** 41.02 335 P **P** 22 51 39.2 +0.6
**MSO Missoula** 41.63 333 P **P** 22 51 43.7 +0.2
MSO IAmb IAmb 22 51 46.1
comp=Z,94nm,1.2s
**MSO Missoula** 41.63 333 P **P** 22 51 44.9 +1.5
baz=140
**PRPB Parauapebas** 41.74 113 *e*P **P** 22 51 44.7 0.0
**SALV Santo Antonio** 41.86 130 *e*P **P** 22 51 44.7 -0.9
**TMAB Tom-Au,PA,Br** 41.90 107 *e*P **P** 22 51 47.6 +1.6
**O02D Mt. Diablo Mer** 42.06 319 P **P** 22 51 47.5 +0.4
**AC06 Mina Casimiro** 42.10 156 P **P** 22 51 47.1 -0.3
**AC04 Llanos de Chal** 42.59 158 P **P** 22 51 51.1 -0.2
**YBH Yreka Blue Hor** 42.88 321 P **P** 22 51 53.4 -0.4
**YBH Yreka Blue Hor** 42.88 321 P **P** 22 51 53.4 -0.4
YBH pmax pmax
comp=Z,13nm,0.9s
**J05D Fort Rock, OR** 42.92 324 P **P** 22 51 55.1 +1.0
**PINE Pine Mountain** 43.07 325 P **P** 22 51 55.6 +0.2
**SNDB Serra Nova Dou** 43.15 121 *e*P **P** 22 51 56.2 +0.1
**LCO Las Campanas** 43.45 158 P **P** 22 51 58.4 -0.3
**LCO Las Campanas** 43.45 158 P **P** 22 51 58.4 -0.3
LCO pmax pmax
comp=Z,21nm,1.0s
**AC05 El Transito** 43.45 157 P **P** 22 51 58.3 -0.2
**HAWA Hanford** 43.99 329 P **P** 22 52 02.4 -0.2
**NEW Newport** 44.14 332 P **P** 22 52 03.5 -0.2
baz=137
**D08A Wollman Farm,** 44.14 330 P **P** 22 52 03.7 0.0
D08A IAmb IAmb 22 52 06.4
comp=Z,26nm,0.8s
**MURT Porto Murtinho** 44.31 138 *e*P **P** 22 52 04.4 -0.9
**CO06 Fray Jorge** 44.63 160 P **P** 22 52 07.6 -0.2
CO06 IAmb IAmb 22 53 51.0
comp=Z,74nm,1.5s
**FFC Flin Flon** 44.66 348 P **P** 22 52 07.4 -0.3
FFC IAmb IAmb 22 52 08.5
comp=Z,106nm,1.9s
**FFC Flin Flon** 44.66 348 P **P** 22 52 07.4 -0.3
FFC pmax pmax
comp=Z,106nm,1.9s
**ARAG Araguaiana, MT** 44.75 126 *e*P **P** 22 52 07.8 -1.1
**AQDB Aquidauana** 44.79 135 P **P** 22 52 08.4 -0.8
AQDB IAmb IAmb 22 52 09.9
comp=Z,44nm,1.1s
**AQDB Aquidauana** 44.79 135 *e*P **P** 22 52 08.7 -0.5
**SMTB Santa Maria do** 44.88 115 *e*P **P** 22 52 09.8 -0.2
**CO03 El Pedregal** 45.11 159 P **P** 22 52 11.4 -0.3

CO03 IAmb IAmb 22 52 12.6
comp=Z,36nm,1.0s
**CO02 Combarbal 45.34 159** P **P** **22 52 13.4 -0.1**
CO02 IAmb IAmb 22 52 14.5
comp=Z,50nm,0.9s
**H03N2 Juan Fernandez 45.37 169** T T 23 40 22.2
baz=347,slow=76,SNR=7.6
**H03N1 Juan Fernandez 45.37 169** T T 23 40 22.8
baz=347,slow=76,SNR=7.7
**H03N3 Juan Fernandez 45.39 169** T T 23 40 21.2
baz=347,slow=76,SNR=6.7
**PAPY Pozo Azul 45.65 141** *e*P **P** **22 52 16.0 +0.1**
**SCHQ Schefferville 46.45 17** P **P** **22 52 20.1 -1.8**
comp=Z,18nm,0.7s,baz=207,slow=5.7,SNR=11
SCHQ PcP **PcP** **22 53 56.1 -0.2**
comp=Z,17nm,0.9s,baz=186,slow=3.4,SNR=4.6
comp=Z,18nm,0.7s
**VA06 Catapilco 46.48 161** P **P** **22 52 21.9 -0.4**
VA06 IAmb IAmb 22 52 23.0
comp=Z,42nm,1.0s
**ZON Zonda 46.49 157** P **P** **22 52 22.4 -0.1**
ZON IAmb IAmb 22 52 24.0
comp=Z,64nm,1.4s
**ZON Zonda 46.49 157** P **P** **22 52 22.4 -0.1**
ZON pmax pmax
comp=Z,64nm,1.4s
**VA03 San Esteban 46.91 160** P **P** **22 52 25.3 -0.6**
**BDFB Brasilia 47.77 123** P **P** **22 52 32.3 -0.6**
BDFB IAmb IAmb 22 52 33.5
comp=Z,27nm,0.9s
**BDFB Brasilia 47.77 123** P **P** **22 52 31.9 -1.0**
comp=Z,20nm,0.8s,baz=289,slow=8.2,SNR=36
comp=Z,20nm,0.8s
**BDFB Brasilia 47.77 123** P **P** **22 52 32.3 -0.6**
BDFB pmax pmax
comp=Z,27nm,0.9s
**CPUP Villa Florida 47.85 142** P **P** **22 52 32.0 -1.1**
CPUP IAmb IAmb 22 52 33.2
comp=Z,58nm,1.8s
**CPUP Villa Florida 47.85 142** P **P** **22 52 31.5 -1.7**
comp=Z,8.9nm,0.9s,baz=333,slow=8.6,SNR=17
CPUP PcP **PcP** **22 54 01.1 -0.5**
comp=Z,4.3nm,0.7s,baz=350,slow=2.3,SNR=4.4
comp=Z,8.9nm,0.9s
**CPUP Villa Florida 47.85 142** P **P** **22 52 32.0 -1.1**
CPUP pmax pmax
comp=Z,58nm,1.8s
**CPUP Villa Florida 47.85 142** *e*P **P** **22 52 31.8 -1.3**
**MT13 San Alfonso 47.90 160** P **P** **22 52 33.2 -0.4**
**BO04 La Punta 48.02 161** P **P** **22 52 34.0 -0.3**
BO04 IAmb IAmb 22 52 35.1
comp=Z,23nm,0.9s
**ITRB Iturama 48.19 130** *e*P **P** **22 52 35.5 -0.5**
**BO01 Tunca 48.23 161** P **P** **22 52 35.7 -0.3**
BO01 IAmb IAmb 22 52 36.9
comp=Z,44nm,1.1s
**GO05 Huala 48.55 162** P **P** **22 52 37.6 -0.8**
**BO02 Sierra Bellavi 48.70 161** P **P** **22 52 39.4 -0.3**
BO02 IAmb IAmb 22 52 40.4
comp=Z,33nm,1.0s
**SDBA SAO DESIDERIO 48.82 118** *e*P **P** **22 52 40.0 -0.9**
**IPMB Ipameri, GO 48.87 126** *e*P **P** **22 52 40.0 -1.3**
**ML02 Panimavida 49.40 162** P **P** **22 52 44.3 -0.6**
**LDASE Londrina, Braz 49.91 134** *e*P **P** **22 52 47.8 -1.3**
**PTGB Pitanga 50.11 136** *e*P **P** **22 52 48.9 -1.8**
**BI02 San Fabin de 50.28 163** P **P** **22 52 51.5 -0.2**
BI02 IAmb IAmb 22 52 52.6
comp=Z,36nm,1.2s
**BB19B Bebedouro 50.38 130** *e*P **P** **22 52 52.0 -0.7**
**JANB Januaria 50.56 120** *e*P **P** **22 52 53.1 -1.0**
**PMNB Patos De Minas 50.58 126** *e*P **P** **22 52 53.4 -0.9**
**CRSM Crissiumal (Br 50.71 140** *e*P **P** **22 52 53.6 -1.4**
**ITQB Itaqui 50.75 144** P **P** **22 52 54.6 -0.7**
ITQB IAmb IAmb 22 52 55.7
comp=Z,34nm,1.0s
**ITQB Itaqui 50.75 144** *e*P **P** **22 52 54.7 -0.5**
**PSAL Palomas, Salto 51.27 146** *e*P **P** **22 52 59.0 -0.1**
**ITAB Concordia 51.76 138** P **P** **22 53 01.9 -0.9**
**ITAB Concordia 51.76 138** *e*P **P** **22 53 01.9 -0.9**
**RODS Rosario do Sul 52.07 144** *e*P **P** **22 53 04.6 -0.6**
**ALGR Alto Alegre (B 52.26 141** *e*P **P** **22 53 05.9 -0.9**
**TBOT Tacuaremb 52.65 145** *e*P **P** **22 53 08.9 -0.5**
**VAO Valinhos 52.69 131** P **P** **22 53 08.8 -1.1**
VAO IAmb IAmb 22 53 10.2
comp=Z,22nm,0.8s
**VAO Valinhos 52.69 131** *e*P **P** **22 53 09.2 -0.8**
**SPB Sao Paulo 52.69 131** *e*P **P** **22 53 09.5 -0.3**
**DIAM Diamantina, MG 52.69 124** *e*P **P** **22 53 09.3 -0.8**
**GO06 Curarrehue 52.95 164** P **P** **22 53 11.1 -0.6**
GO06 IAmb IAmb 22 53 12.3
comp=Z,32nm,1.4s
**CPSB Cacapava Do Su 53.15 142** *e*P **P** **22 53 12.3 -0.8**
**PET01 Itanhaem-SP 53.22 132** *e*P **P** **22 53 13.6 -0.2**
**BSCB Bom Sucesso 53.23 127** *e*P **P** **22 53 13.5 -0.5**
**LR05 Currie 53.41 165** P **P** **22 53 14.3 -0.6**
LR05 IAmb IAmb 22 53 15.5
comp=Z,53nm,1.2s
**PARB Paraibuna 53.88 130** *e*P **P** **22 53 18.9 +0.1**
**LL04 Puerto Octay 53.95 165** P **P** **22 53 18.0 -0.8**
LL04 IAmb IAmb 22 53 26.7
comp=Z,19nm,1.1s
**CNLB Canela 53.99 139** *e*P **P** **22 53 18.4 -1.1**
**PLTB Pedras Altas 54.04 144** P **P** **22 53 18.5 -1.2**
**PLTB Pedras Altas 54.04 144** *e*P **P** **22 53 18.8 -0.9**
**PLCA Paso Flores 54.27 164** P **P** **22 53 20.8 -0.5**
PLCA IAmb IAmb 22 53 22.0
comp=Z,42nm,1.1s
**PLCA Paso Flores 54.27 164** P **P** **22 53 20.9 -0.3**
comp=Z,22nm,0.9s,baz=337,slow=8.8,SNR=33
comp=Z,22nm,0.9s
**PLCA Paso Flores 54.27 164** P **P** **22 53 20.8 -0.5**
PLCA pmax pmax
comp=Z,42nm,1.1s
**PLCA Paso Flores 54.27 164** *e*P **P** **22 53 20.9 -0.5**
**RCBR Riachuelo 54.52 106** P **P** **22 53 24.0 +0.4**
RCBR IAmb IAmb 22 53 26.6
comp=Z,24nm,1.0s
**RCBR Riachuelo 54.52 106** P **P** **22 53 24.0 +0.4**
RCBR pmax pmax
comp=Z,24nm,1.0s
**RCBR Riachuelo 54.52 106** *e*P **P** **22 53 25.9 +2.3**
**YKA Yellowknife Ar 54.53 345** P **P** **22 53 22.2 -0.6**
**YKA Yellowknife Ar 54.53 345** P **P** **22 53 22.6 -0.3**
comp=Z,15nm,0.8s,baz=140,slow=7.3,SNR=56
YKA PcP **PcP** **22 54 26.8 +0.9**
comp=Z,6.0nm,0.8s,baz=145,slow=3.6,SNR=9.3
comp=Z,15nm,0.8s
**TRQA Tornquist 54.84 155** P **P** **22 53 24.0 -1.4**
TRQA IAmb IAmb 22 53 25.7
comp=Z,24nm,1.3s
**TRQA Tornquist 54.84 155** P **P** **22 53 24.0 -1.4**
TRQA pmax pmax
comp=Z,24nm,1.3s
**SJMB Sao Joao De Ma 54.94 122** *e*P **P** **22 53 25.9 -0.5**
**VAS01 Vassouras-RJ 54.96 128** *e*P **P** **22 53 26.7 +0.1**
**TOAD Toad River Com 55.06 337** P **P** **22 53 26.6 -0.1**
baz=134
**GUA01 Guaratinga, BA 55.10 119** *e*P **P** **22 53 28.0 +0.3**
**NBCA Caruaru-PE 55.19 108** *e*P **P** **22 53 28.9 +0.4**
**NBAN Anadia - AL 55.45 110** *e*P **P** **22 53 29.6 -0.6**
**KOTAN Kotaneelee Air 55.53 339** P **P** **22 53 30.7 +0.6**
baz=136
**V35K Ketchikan 55.53 331** P **P** **22 53 31.9 +1.8**
baz=125
**DUB01 Friburgo-RJ 55.69 127** *e*P **P** **22 53 31.6 -0.2**
**RIB01 Linhares ES 55.89 123** *e*P **P** **22 53 32.6 -0.6**
**T35M Bob Quinn 55.89 334** P **P** **22 53 34.7 +2.0**
baz=127
**LL02 Futaleuf 56.24 166** P **P** **22 53 34.9 -0.5**
LL02 IAmb IAmb 22 53 39.1
comp=Z,47nm,1.2s
**ALF01 Guarapari-ES 56.26 124** *e*P **P** **22 53 35.3 -0.5**
**CRAG Craig 56.33 331** P **P** **22 53 37.0 +1.2**
**CRAG Craig 56.33 331** P **P** **22 53 36.8 +1.0**
baz=123
**WRAK Wrangell Islan 56.49 332** P **P** **22 53 38.5 +1.5**
baz=125
**ABR01 Abrolhos, BA 56.67 120** *e*P **P** **22 53 38.3 -0.6**
**U33K Whale Pass 56.68 332** P **P** **22 53 40.3 +2.0**
baz=124
**DLBC Dease Lake 56.69 335** P **P** **22 53 39.2 +0.7**
DLBC IAmb IAmb 22 53 41.4
comp=Z,40nm,0.9s
**DLBC Dease Lake 56.69 335** P **P** **22 53 40.3 +1.8**
comp=Z,27nm,0.8s,baz=139,slow=5.6,SNR=62
comp=Z,27nm,0.8s
**DLBC Dease Lake 56.69 335** P **P** **22 53 40.6 +2.2**
baz=128
**S34M Telegraph Cree 56.83 334** P **P** **22 53 41.1 +1.7**
baz=127
**WTLY Watson Lake, Y 57.26 337** P **P** **22 53 42.1 -0.3**
WTLY IAmb IAmb 22 53 44.4
comp=Z,26nm,1.0s
**WTLY Watson Lake, Y 57.26 337** P **P** **22 53 43.2 +0.8**
baz=130
**IVI Ivigtut 57.58 22** *e*P **P** **22 53 42.1 -2.5**
**WRGLY Wrigley 57.59 342** P **P** **22 53 45.1 +0.5**
baz=138
**R33M Jennings River 57.66 336** P **P** **22 53 45.9 +0.5**
**R33M Jennings River 57.66 336** P **P** **22 53 46.8 +1.3**
baz=128,SNR=12
**Q32M Nakina River 57.94 335** P **P** **22 53 49.2 +1.8**
baz=126,SNR=11
**TGTN Hyland Airport 57.99 339** P **P** **22 53 49.4 +1.8**
baz=132
**S32K Killisnoo 58.09 332** P **P** **22 53 49.8 +1.6**
baz=123
**COYC Coyhaique 58.45 167** P **P** **22 53 50.5 -0.4**
**JIS Juneau Island 58.45 333** P **P** **22 53 52.3 +1.6**
**NUUK Nuuk 58.50 18** *e*P **P** **22 53 48.5 -2.5**
NUUK IAmb IAmb 22 53 51.5
comp=Z,25nm,1.0s
**R32K Eaglecrest 58.51 333** P **P** **22 53 52.2 +1.0**
baz=122
**P33M Teslin, Yukon 58.90 336** P **P** **22 53 54.9 +0.9**
baz=126,SNR=7.1
**P32M Atlin 58.91 335** P **P** **22 53 55.1 +1.1**
baz=125
**S31K Pelican 59.11 332** P **P** **22 53 56.8 +1.4**
baz=122
**SKAG Skagway 59.52 334** P **P** **22 53 59.7 +1.6**
**SKAG Skagway 59.52 334** P **P** **22 53 59.9 +1.8**
baz=123
**N32M Quiet Lake 59.56 336** P **P** **22 53 59.7 +1.2**
baz=126
**MMPY Sheldon Lake, 59.78 338** P **P** **22 54 01.2 +1.2**
baz=129,SNR=17
**AY03 Cochrane 59.94 168** P **P** **22 54 00.9 -0.2**
AY03 IAmb IAmb 22 54 03.4
comp=Z,45nm,1.3s
**PLBC Pleasant Camp 59.96 334** P **P** **22 54 02.6 +1.4**
baz=122
**WHY Whitehorse 59.99 335** P **P** **22 54 02.2 +0.6**
baz=124
**FARO Faro, Yukon 60.30 337** P **P** **22 54 03.2 -0.4**
**FARO Faro, Yukon 60.30 337** P **P** **22 54 04.3 +0.7**
baz=126
**O30N Mendenhall 60.55 335** P **P** **22 54 06.7 +1.3**
baz=123,SNR=17
**P30M Million Dollar 60.57 334** P **P** **22 54 07.5 +2.0**
baz=122
**P29M Windy Craggy 60.65 334** P **P** **22 54 07.6 +1.7**
baz=121,SNR=19
**M31M Drury Creek, Y 60.69 337** P **P** **22 54 07.1 +0.9**
baz=125
**N31M Braeburn, Yuko 60.82 336** P **P** **22 54 08.5 +1.4**
baz=124,SNR=7.0
**SFJD Kangerlussuaq 60.89 16** *e*P **P** **22 54 06.7 -0.7**
**N30M Aishikik Lake 61.33 336** P **P** **22 54 12.1 +1.4**
baz=122,SNR=12
**O29M Mount Kennedy 61.35 334** P **P** **22 54 12.0 +1.1**
baz=120
**PNL Pensula 61.40 333** P **P** **22 54 12.6 +1.6**
baz=119
**YUK6 Outpost Mounta 61.59 335** P **P** **22 54 14.2 +1.7**
baz=121,SNR=9.0
**DY2G Dye2 61.75 18** *e*P **P** **22 54 11.9 -1.6**
DY2G IAmb IAmb 22 54 16.4
comp=Z,36nm,1.4s
**YUK4 Talbot Arm 61.91 335** P **P** **22 54 16.6 +1.9**
baz=121,SNR=5.5
**O28M Mount Upton 62.28 334** P **P** **22 54 19.0 +1.7**
baz=122
**YUK8 Steele Glacier 62.35 335** P **P** **22 54 19.3 +1.6**
baz=120,SNR=11
**M29M Somme Creek 62.41 336** P **P** **22 54 18.4 +0.5**
**M29M Somme Creek 62.41 336** P **P** **22 54 19.1 +1.2**
baz=121,SNR=35
**L29M L29M 62.62 337** P **P** **22 54 20.0 +0.7**
baz=122,SNR=16
**J30M Hart River 62.77 339** P **P** **22 54 21.1 +0.8**
baz=124,SNR=9.0
**MESA MESA 62.77 333** P **P** **22 54 22.7 +2.2**
baz=117
**K29M Barlow Dome 62.79 338** P **P** **22 54 21.1 +0.7**
baz=123,SNR=8.7
**CTGM Chitina Glacie 62.86 334** P **P** **22 54 21.8 +0.8**
CTGM IAmb IAmb 22 54 23.9
comp=Z,23nm,0.9s
**CTG Chitna Glacier 62.87 334** P **P** **22 54 22.9 +1.8**
baz=118,SNR=8.8
**YUK3 Moose Creek 62.88 335** P **P** **22 54 22.7 +1.5**
baz=119,SNR=16
**I30M Mount Dempster 63.15 339** P **P** **22 54 23.6 +0.8**
baz=125,SNR=19
**J29N Klondike Camp 63.38 338** P **P** **22 54 25.7 +1.4**
baz=122
**RES Resolute Bay 63.42 358** P **P** **22 54 23.8 -0.5**
RES IAmb IAmb 22 54 25.0
comp=Z,20nm,0.7s
**RES Resolute Bay 63.42 358** P **P** **22 54 23.7 -0.5**
comp=Z,21nm,0.7s,baz=189,slow=9.2,SNR=6.7
comp=Z,21nm,0.7s
**RES Resolute Bay 63.42 358** P **P** **22 54 23.8 -0.5**
RES pmax pmax
comp=Z,20nm,0.7s
**G31M Satah River 63.46 341** P **P** **22 54 25.4 +0.7**
baz=128,SNR=15
**ISOG Isortoq, Green 63.52 21** *e*P **P** **22 54 21.6 -3.4**
ISOG IAmb IAmb 22 54 24.5
comp=Z,26nm,0.9s
**CRQE Cirque 63.53 333** P **P** **22 54 27.1 +1.6**
baz=116,SNR=13
**DAWY Dawson 63.61 337** P **P** **22 54 25.8 0.0**
DAWY IAmb IAmb 22 54 26.4
comp=Z,20nm,1.3s
**DAWY Dawson 63.61 337** P **P** **22 54 26.2 +0.4**
baz=121,SNR=5.5
**F31M Tsiigehtchic 63.62 342** P **P** **22 54 26.1 +0.4**
baz=128,SNR=5.4
**M27K Edge Creek, AK 63.75 335** P **P** **22 54 28.3 +1.5**
baz=118,SNR=12
**KAIM Kayak Island 63.78 332** P **P** **22 54 29.0 +2.1**
baz=114
**MCARA McCarthy VSAT 63.78 334** P **P** **22 54 29.3 +2.4**
baz=116,SNR=13
**I29M Ogilvie Camp, 63.90 339** P **P** **22 54 27.9 +0.3**
baz=123,SNR=6.7
**EPYK Eagle Plains 63.92 340** P **P** **22 54 28.5 +0.7**
baz=125
**ANGG Ammassalik, Gr 64.02 21** P **P** **22 54 26.7 -1.6**
**ANGG Ammassalik, Gr 64.02 21** *i* P **P** **22 54 26.0 -2.3**
ANGG IAmb IAmb 22 54 27.6
comp=Z,23nm,0.8s
**BCAR Beaver Creek A 64.04 336** P **P** **22 54 29.4 +0.8**
**L27K Beaver Creek, 64.06 336** P **P** **22 54 30.0 +1.2**
baz=118,SNR=36
**INK Inuvik 64.10 343** P **P** **22 54 29.5 +0.7**
comp=Z,28nm,1.0s,baz=131,slow=7.7,SNR=16
comp=Z,28nm,1.0s
**INK Inuvik 64.10 343** P **P** **22 54 30.0 +1.2**
baz=129,SNR=11
**G30M tAoh Zrail Nji 64.11 341** P **P** **22 54 29.6 +0.6**
baz=126
**M26K Nabesna, AK 64.23 335** P **P** **22 54 31.4 +1.5**
baz=117,SNR=12
**BMRM Bremner River 64.30 333** P **P** **22 54 32.2 +1.9**
baz=115,SNR=11
**F30M Barrier River 64.35 342** P **P** **22 54 31.6 +1.1**
baz=126,SNR=17
**H29M Whitestone 64.39 340** P **P** **22 54 31.8 +0.9**
baz=123,SNR=13
**I28M Miner Creek 64.53 339** P **P** **22 54 32.3 +0.5**
baz=121,SNR=7.6
**N25K Chitina, Valde 64.56 334** P **P** **22 54 34.0 +1.8**
baz=115,SNR=24
**K27K Chicken 64.62 337** P **P** **22 54 33.6 +1.3**
baz=118
**A36M Sachs Harbour 64.62 348** P **P** **22 54 32.4 +0.2**
baz=139
**EGAK Eagle 64.63 338** P **P** **22 54 33.0 +0.6**
EGAK IAmb IAmb 22 54 33.9
comp=Z,35nm,1.4s
**EGAK Eagle 64.63 338** P **P** **22 54 33.1 +0.7**
baz=120,SNR=16
**EYAK Cordova Ski Ar 64.64 332** P **P** **22 54 34.1 +1.6**
**EYAK Cordova Ski Ar 64.64 332** P **P** **22 54 34.5 +2.0**
baz=113,SNR=20
**L26K Log Cabin Wild 64.66 335** P **P** **22 54 34.0 +1.4**
baz=117,SNR=8.9
**G29M Pine Creek 64.66 340** P **P** **22 54 33.3 +0.7**
baz=124,SNR=26
**KLU Klutina 65.09 333** P **P** **22 54 36.8 +1.2**
**KLU Klutina 65.09 333** P **P** **22 54 37.5 +1.9**
baz=114,SNR=28
**HARP HAARP 65.13 334** P **P** **22 54 37.5 +1.8**
baz=115
**P23K Montague Islan 65.19 332** P **P** **22 54 37.9 +1.8**
baz=112,SNR=5.7
**I27K Kandik River 65.21 338** P **P** **22 54 37.7 +1.4**
baz=120,SNR=28
**SCRK Sand Creek 65.34 336** P **P** **22 54 37.8 +0.6**
SCRK IAmb IAmb 22 54 39.8
comp=Z,48nm,1.4s
**SCRK Sand Creek 65.34 336** P **P** **22 54 38.0 +0.8**
baz=116,SNR=29
**ICESG Greenland Ices 65.36 17** *i* P **P** **22 54 35.1 -2.4**
ICESG IAmb IAmb 22 54 37.0
comp=Z,16nm,0.8s
**GLI Glacier Island 65.38 332** P **P** **22 54 38.6 +1.2**
**GLI Glacier Island 65.38 332** P **P** **22 54 38.7 +1.4**
baz=112
**J26L Joseph Creek 65.41 337** P **P** **22 54 38.8 +1.1**
baz=117,SNR=38
**E29M Blow River 65.45 342** P **P** **22 54 38.9 +1.2**
baz=124,SNR=15
**M24K Tolsona, Glenn 65.45 334** P **P** **22 54 39.7 +1.8**
baz=114,SNR=10
**H27K Steamboat Moun 65.49 339** P **P** **22 54 39.2 +1.2**
baz=120,SNR=48
**PAX Paxson 65.50 335** P **P** **22 54 39.2 +1.0**
baz=115,SNR=18
**I26K Coal Creek Min 65.63 338** P **P** **22 54 39.7 +0.8**
baz=118
**F28M Old Crow 65.64 341** P **P** **22 54 40.2 +1.2**
baz=122,SNR=22
**G27K Doyon Strip 65.82 340** P **P** **22 54 41.0 +0.9**
baz=120,SNR=22
**SCM Sheep Creek Mo 65.84 333** P **P** **22 54 41.1 +0.7**
**SCM Sheep Creek Mo 65.84 333** P **P** **22 54 41.7 +1.2**
baz=112,SNR=14
**SCM Sheep Creek Mo 65.84 333** P **P** **22 54 41.1 +0.7**
SCM pmax pmax
comp=Z,58nm,1.0s
**PWL Port Wells 65.93 332** P **P** **22 54 41.2 +0.2**
baz=111
**TULEG Thule 65.96 5** P **P** **22 54 40.2 -0.6**
TULEG IAmb IAmb 22 55 13.4
comp=Z,18nm,1.1s
**TULEG Thule 65.96 5** *i* P **P** **22 54 38.6 -2.2**
TULEG IAmb IAmb 22 54 42.3
comp=Z,9.9nm,0.8s
**K24K Donnelly Dome 65.98 336** P **P** **22 54 42.5 +1.2**
baz=115,SNR=13
**M23K Glacier View 66.00 333** P **P** **22 54 42.5 +1.1**
baz=112,SNR=24
**E28M Babbage River 66.07 342** P **P** **22 54 42.4 +0.7**
baz=123,SNR=12
**J25K Salcha River, 66.16 337** P **P** **22 54 43.6 +1.2**
baz=115,SNR=32
**KNK Knik Glacier 66.19 333** P **P** **22 54 44.0 +1.4**
baz=111,SNR=27
**SEW Seward 66.19 331** P **P** **22 54 43.5 +1.0**
baz=110,SNR=6.8
**SML Sawmill 66.28 333** P **P** **22 54 44.1 +0.9**
baz=111,SNR=23
**WAT6 Susitna Watana 66.31 334** P **P** **22 54 44.0 +0.5**
baz=112,SNR=48
**DHY Denali Highway 66.34 335** P **P** **22 54 44.1 +0.4**
baz=113,SNR=9.0
**O22K Cooper Landing 66.44 332** P **P** **22 54 45.6 +1.4**
baz=110,SNR=6.4
**E27K Coleen River 66.50 341** P **P** **22 54 45.6 +1.1**
baz=120,SNR=19
**PMR Palmer 66.56 333** P **P** **22 54 45.6 +0.7**
**PMR Palmer 66.56 333** P **P** **22 54 45.5 +0.7**
**PMR Palmer 66.56 333** P **P** **22 54 45.6 +0.7**
baz=110,SNR=6.9
**PMR Palmer 66.56 333** P **P** **22 54 45.5 +0.7**
PMR pmax pmax
comp=Z,33nm,0.8s
**PRP Porcupine Dome 66.61 337** P **P** **22 54 46.7 +1.3**
baz=116,SNR=5.6
**G26K Porcupine Rive 66.63 339** P **P** **22 54 46.3 +1.1**
baz=118,SNR=14
**RC01 Rabbit Creek A 66.66 332** P **P** **22 54 46.9 +1.4**
baz=110,SNR=24
**BRSE Bradley Lake S 66.69 331** P **P** **22 54 46.9 +1.1**
baz=106,SNR=18
**HDA Harding Lake 66.70 336** P **P** **22 54 46.5 +0.7**
baz=114,SNR=46
**WAT1 Susitna Watana 66.75 334** P **P** **22 54 47.1 +0.9**
baz=112
**ILAR Eielson Array 66.82 336** P **P** **22 54 46.9 +0.4**
**ILAR Eielson Array 66.82 336** P **P** **22 54 47.1 +0.6**
comp=Z,49nm,1.1s,baz=116,slow=4.6,SNR=121
comp=Z,49nm,1.1s
**D27M Malcolm River 66.85 342** P **P** **22 54 47.9 +1.2**
baz=122,SNR=18
**KDAK Kodiak Island 67.03 328** P **P** **22 54 48.7 +0.7**
KDAK IAmb IAmb 22 54 50.3
comp=Z,31nm,0.9s
**KDAK Kodiak Island 67.03 328** P **P** **22 54 49.1 +1.1**
comp=Z,19nm,0.8s,baz=106,slow=3.7,SNR=22
comp=Z,19nm,0.8s
**KDAK Kodiak Island 67.03 328** P **P** **22 54 49.3 +1.3**
baz=106
**KDAK Kodiak Island 67.03 328** *i* P **P** **22 54 48.2 +0.2**
**H25L Birch Creek 67.05 338** P **P** **22 54 49.2 +1.3**
baz=116,SNR=8.2
**M22K Willow 67.05 333** P **P** **22 54 49.5 +1.5**
baz=110,SNR=5.6
**RND Reindeer 67.09 335** P **P** **22 54 49.2 +0.8**
**RND Reindeer 67.09 335** P **P** **22 54 49.2 +0.8**
RND pmax pmax
comp=Z,186nm,0.9s
**HOM Homer 67.10 330** P **P** **22 54 49.8 +1.4**
baz=107
**F26K Sheenjek River 67.10 340** P **P** **22 54 49.4 +1.1**
baz=118,SNR=16
**BMAR Burnt Mountain 67.13 340** P **P** **22 54 49.4 +0.9**
**Q20K Shuyak Island 67.16 329** P **P** **22 54 50.4 +1.6**
baz=106
**POKR Poker Plat Res 67.17 337** P **P** **22 54 49.6 +0.9**
baz=114,SNR=6.7
**COLA College 67.24 336** P **P** **22 54 49.8 +0.7**
**COLA College 67.24 336** P **P** **22 54 49.9 +0.7**
baz=113
**SUA Susitna One 67.24 332** P **P** **22 54 50.4 +1.0**
**SUA Susitna One 67.24 332** P **P** **22 54 50.8 +1.4**
baz=109,SNR=23
**MCK McKinley 67.24 335** P **P** **22 54 50.4 +1.1**
baz=112,SNR=28
**OHAK Old Harbor 67.25 328** P **P** **22 54 50.9 +1.5**
**OHAK Old Harbor 67.25 328** P **P** **22 54 51.0 +1.7**
baz=105,SNR=11
**CUT Chulitna 67.34 333** P **P** **22 54 51.4 +1.5**
baz=110
**G25K Bearman Lake 67.36 339** P **P** **22 54 51.6 +1.7**
baz=116,SNR=10
**SII Sitkinak Islan 67.56 327** P **P** **22 54 53.0 +1.6**
baz=104
**F25K Christian Rive 67.56 339** P **P** **22 54 53.0 +1.7**
baz=116,SNR=27
**NEA2 Nenana 67.61 336** P **P** **22 54 52.1 +0.5**
baz=112,SNR=31
**BWN Browne 67.62 335** P **P** **22 54 52.0 +0.4**
**H24K Noodor Dome 67.63 337** P **P** **22 54 52.8 +1.1**
baz=113,SNR=27
**O20K Slope Mountain 67.69 331** P **P** **22 54 53.3 +1.0**
baz=107,SNR=7.6
**SUMG Summit 67.76 14** P **P** **22 54 52.0 -0.8**
SUMG IAmb IAmb 22 55 21.2
comp=Z,17nm,0.9s
**SUMG Summit 67.76 14** P **P** **22 54 52.0 -0.8**
SUMG pmax pmax
comp=Z,17nm,0.9s
**SUMG Summit 67.76 14** *i* P **P** **22 54 51.0 -1.8**
SUMG IAmb IAmb 22 54 54.4

comp=Z,20nm,1.1s
SKT **Skwentna** 67.76 333 P P 22 54 53.6 +1.1
baz=108,SNR=55
N20K **Mount Spurr** 67.83 332 P P 22 54 53.9 +0.8
baz=108
G24K **Hadweenzic Riv** 67.83 338 P P 22 54 54.6 +1.6
baz=114,SNR=9.0
P19K **Oil Pt** 67.87 330 P P 22 54 54.6 +1.3
baz=106
Q19K **Cape Douglas,** 67.88 329 P P 22 54 55.0 +1.6
baz=105,SNR=7.8
C27K **Jago River** 67.88 342 P P 22 54 54.6 +1.5
baz=119,SNR=6.0
I23K **Minto, Yukon-K** 67.94 336 P P 22 54 54.7 +1.2
baz=112,SNR=64
R18K **Karluk** 67.95 328 P P 22 54 54.8 +1.1
baz=104
CHIR **Chirikof Islan** 68.18 326 P P 22 54 57.4 +2.2
baz=102
BPAW **Bear Paw Mtn.** 68.22 335 P P 22 54 56.0 +0.6
BPAW **Bear Paw Mtn.** 68.22 335 P P 22 54 56.2 +0.7
baz=110,SNR=56
H23K **Yukon River** 68.26 337 P P 22 54 56.5 +0.9
baz=112,SNR=13
F24K **Squaw Lake** 68.31 339 P P 22 54 57.8 +1.8
baz=114,SNR=9.9
C26K **Camden Bay** 68.39 342 P P 22 54 57.5 +1.2
baz=118
MLY **Manley** 68.44 336 P P 22 54 57.6 +0.7
baz=110,SNR=54
M20K **Styx River** 68.45 332 P P 22 54 57.8 +0.8
baz=107,SNR=41
Q18K **Katmai Hardscr** 68.49 329 P P 22 54 58.3 +0.9
baz=104,SNR=19
D25K **Kavik River** 68.58 341 P P 22 54 59.0 +1.4
baz=116,SNR=17
NEEM **North Greenlan** 68.74 8 *i* P P 22 54 58.1 -0.7
NEEM IAmb IAmb 22 55 00.6
comp=Z,33nm,1.0s
E24K **Your Creek** 68.75 339 P P 22 55 00.1 +1.4
baz=114,SNR=6.7
G23K **Bananza Creek** 68.77 338 P P 22 55 00.4 +1.5
baz=112,SNR=34
N19K **Bonanza Creek** 68.78 331 P P 22 54 59.9 +0.8
baz=105,SNR=42
P18K **Big Mountain,** 68.78 330 P P 22 54 59.6 +0.6
baz=104,SNR=12
Q17K **Contact Creek** 68.85 328 P P 22 55 00.6 +1.0
baz=103,SNR=23
O18K **Koktuh Hills** 68.89 330 P P 22 55 00.5 +0.8
baz=104,SNR=26
L20K **Farewell, AK** 68.96 333 P P 22 55 00.7 +0.6
baz=106,SNR=74
R17L **Mt. Peulik Vol** 68.96 328 P P 22 55 01.4 +1.2
baz=102
I21K **Tanana** 68.99 336 P P 22 55 00.9 +0.7
baz=109
H22K **Ishtalitna Cre** 68.99 337 P P 22 55 00.8 +0.6
baz=110,SNR=35
COLD **Coldfoot** 69.03 338 P P 22 55 02.4 +2.0
baz=112
M19K **Big River Lodg** 69.03 332 P P 22 55 01.5 +1.0
baz=106,SNR=36
E23K **Chandalar** 69.13 339 P P 22 55 02.5 +1.3
baz=112,SNR=22
K20K **Telida** 69.29 334 P P 22 55 02.6 +0.5
baz=106,SNR=52
D24K **Happy Valley** 69.30 340 P P 22 55 03.0 +1.0
baz=114
L19K **White Mountain** 69.31 333 P P 22 55 02.9 +0.6
baz=105,SNR=22
Q16K **King Salmon** 69.34 329 P P 22 55 03.7 +1.3
baz=102
TOLK **Toolik Lake Re** 69.34 340 P P 22 55 03.5 +1.1
baz=113,SNR=9.8
P17K **Kvichak River** 69.34 329 P P 22 55 03.5 +1.1
baz=103
SVW2 **Sparrevohn** 69.37 331 P P 22 55 03.2 +0.6
G22K **Bettles** 69.39 338 P P 22 55 04.5 +1.9
baz=110
N18K **Kilae Creek** 69.42 331 P P 22 55 03.7 +0.7
baz=104,SNR=26
H21K **Melozitna Rive** 69.47 336 P P 22 55 03.6 +0.5
baz=108,SNR=29
C24K **Franklin Bluff** 69.49 341 P P 22 55 04.4 +1.3
baz=114
J20K **Nowinta River** 69.56 335 P P 22 55 04.3 +0.6
baz=107,SNR=36
M18K **Stony River** 69.58 332 P P 22 55 04.6 +0.7
baz=104,SNR=45
O17K **Koliganek Bris** 69.80 330 P P 22 55 06.7 +1.4
baz=102
CHGN **Chignik** 69.81 326 P P 22 55 05.9 +0.5
CHGN **Chignik** 69.81 326 P P 22 55 06.5 +1.2
baz=100,SNR=12
D23K **Nanushuk River** 69.84 340 P P 22 55 06.8 +1.4
baz=112
F22K **John River** 69.84 338 P P 22 55 07.0 +1.6
baz=110
I20K **Naaghedeneel** 69.88 335 P P 22 55 06.9 +1.3
baz=107,SNR=13
IMAR **Indian Mountai** 69.94 337 P P 22 55 06.6 +0.5
N17K **Nushagak Hills** 70.00 331 P P 22 55 07.6 +1.1
baz=103,SNR=22
G21K **Allakaket** 70.01 337 P P 22 55 07.8 +1.4
baz=108,SNR=41
J19K **Poorman** 70.13 334 P P 22 55 07.7 +0.4
baz=105,SNR=51
C23K **Itkillik River** 70.14 341 P P 22 55 08.9 +1.7
baz=112
L18K **Granite Mounta** 70.16 332 P P 22 55 08.1 +0.7
baz=104,SNR=22
F21K **Alatna River** 70.22 338 P P 22 55 09.7 +1.9
baz=108,SNR=78
H20K **Anotleneega Mo** 70.24 336 P P 22 55 08.5 +0.6
baz=106,SNR=22
O16K **Kokwok River B** 70.25 329 P P 22 55 09.2 +1.1
baz=102,SNR=9.1
M17K **Holitna River** 70.32 331 P P 22 55 09.2 +0.8
baz=103,SNR=16
J18K **Innoko River** 70.47 334 P P 22 55 10.2 +0.9
baz=104
D22K **Ayikyak River** 70.48 340 P P 22 55 10.6 +1.3
baz=110
N16K **Nishlik Lake** 70.76 330 P P 22 55 12.7 +1.5
baz=101,SNR=12
E21K **Killik River** 70.79 339 P P 22 55 12.4 +1.1
baz=108
SDPT **Sand Point** 70.81 325 P P 22 55 12.6 +1.1
baz=98
GCSA **Galena City Sc** 70.86 335 P P 22 55 12.3 +0.7
baz=104
L17K **Donlin** 70.87 332 P P 22 55 12.5 +0.7
baz=102,SNR=17
H19K **Roundabout Mou** 70.88 336 P P 22 55 12.7 +0.9
baz=105,SNR=91
M16K **Timber Creek** 70.96 331 P P 22 55 13.7 +1.4
baz=101
K17K **Iditarod** 71.00 333 P P 22 55 13.2 +0.7
baz=102,SNR=16
F20K **Avaraart Lake** 71.01 337 P P 22 55 14.0 +1.5
baz=106,SNR=29
G19K **Purcell Mounta** 71.29 336 P P 22 55 15.6 +1.3
baz=105,SNR=51
L16K **Owhat River** 71.33 332 P P 22 55 16.1 +1.5
baz=101,SNR=24
N15K **Kwethluk River** 71.35 330 P P 22 55 16.0 +1.2
baz=100
B21K **Ikpikpuk River** 71.38 340 P P 22 55 15.8 +1.1
baz=108,SNR=5.2
J17K **VABM Dome** 71.49 333 P P 22 55 16.6 +1.1
baz=102,SNR=14
E20K **Nigu River** 71.52 339 P P 22 55 17.2 +1.6
baz=106,SNR=28
H18K **Honhosa River** 71.57 335 P P 22 55 17.6 +1.7
baz=103,SNR=34
E19K **Redstone River** 71.68 338 P P 22 55 17.7 +1.1
baz=105,SNR=19
F19K **Shaleruckik Mo** 71.73 337 P P 22 55 18.0 +1.1
baz=104,SNR=40
M15K **Kasigluk River** 71.73 330 P P 22 55 18.6 +1.6
baz=100,SNR=7.7
S12K **Black Hills** 71.75 325 P P 22 55 18.4 +1.2
baz=97
D20K **Etivluk River** 71.79 339 P P 22 55 18.8 +1.5
baz=106,SNR=20
G18K **Tagagawik** 71.85 336 P P 22 55 19.5 +1.8
baz=103,SNR=49

N14K **Kuskokwak Cree** 72.10 329 P P 22 55 20.6 +1.4
baz=98
J16K **Anvik River** 72.14 333 P P 22 55 21.6 +2.1
baz=100,SNR=28
H17K **Granite Mounta** 72.16 335 P P 22 55 21.2 +1.7
baz=102,SNR=23
D19K **Kuna River** 72.27 339 P P 22 55 21.4 +1.3
baz=104,SNR=10
L15K **Ungalak Mounta** 72.27 331 P P 22 55 21.9 +1.7
baz=99,SNR=22
I17K **Unalakleet** 72.29 334 P P 22 55 22.1 +1.8
baz=100,SNR=8.8
B20K **Meade River** 72.34 340 P P 22 55 21.6 +1.2
baz=106
M14K **Bethel** 72.36 330 P P 22 55 22.4 +1.7
baz=98,SNR=23
K15K **Wolf Creek Mou** 72.39 332 P P 22 55 23.1 +2.1
baz=99,SNR=25
F18K **Selawik** 72.40 337 P P 22 55 22.1 +1.2
baz=102,SNR=18
FALS **False Pass** 72.43 324 P P 22 55 22.3 +1.1
baz=95
A21K **Barrow** 72.53 342 P P 22 55 23.5 +1.9
baz=107
G17K **Kiwalik Mounta** 72.58 335 P P 22 55 23.8 +1.8
baz=101,SNR=22
L14K **Kuka Creek** 72.79 331 P P 22 55 24.5 +1.2
baz=98,SNR=8.5
C19K **Lookout Ridge** 72.94 339 P P 22 55 26.0 +1.9
baz=103
E18K **Tukpahlearik C** 72.94 337 P P 22 55 25.4 +1.3
baz=102,SNR=10
M13K **Dall Lake** 72.99 330 P P 22 55 26.5 +2.0
baz=97,SNR=5.7
F17K **Baldwin Pennin** 73.00 336 P P 22 55 25.7 +1.3
baz=101,SNR=6.1
H16K **Elim** 73.09 334 P P 22 55 27.1 +2.1
baz=99,SNR=13
DBG **Daneborg** 73.17 15 *eP* P 22 55 24.1 -1.3
G16K **Koyuk River** 73.26 335 P P 22 55 27.9 +1.8
baz=99,SNR=16
E17K **Hotham Inlet** 73.34 337 P P 22 55 27.5 +1.0
baz=100
J14K **Nanvaranak Lak** 73.39 332 P P 22 55 29.1 +2.3
baz=98,SNR=25
C18K **Utukok River** 73.41 339 P P 22 55 28.0 +1.0
baz=102
B18K **Kokolik River** 73.76 339 P P 22 55 30.5 +1.6
baz=101,SNR=5.5
G15K **Niukluk** 73.90 335 P P 22 55 31.1 +1.3
baz=98,SNR=9.9
RDOG **Red Dog Mine** 73.92 338 P P 22 55 30.9 +1.0
baz=100,SNR=5.1
D17K **Noatak River** 73.93 337 P P 22 55 31.4 +1.5
baz=99
C17K **DeLong Mountai** 74.09 338 P P 22 55 32.3 +1.4
baz=100
UNV **Unalaska Valle** 74.17 323 P P 22 55 32.9 +1.4
baz=92
F15K **North Star Dit** 74.25 335 P P 22 55 34.0 +2.2
baz=97,SNR=42
DAG **Danmarks Havn** 74.32 13 *i* P P 22 55 31.5 -0.5
DAG IAmb IAmb 22 55 32.5
comp=Z,14nm,0.7s
ANM **Nome** 74.42 334 P P 22 55 34.1 +1.3
baz=96
MORF **Marmelete** 74.72 54 P P 22 55 35.1 -0.1
MORF IAmb IAmb 22 55 43.3
comp=Z,24nm,1.3s
MORF **Marmelete** 74.72 54 *eP* P 22 55 35.1 -0.1
MORF **Marmelete** 74.72 54 P P 22 55 35.1 -0.1
MORF pmax pmax
comp=Z,24nm,1.3s
PCAS **Casmilo, Conde** 74.73 51 *eP* P 22 55 34.6 -0.6
C16K **Lisburne Hills** 74.86 338 P P 22 55 36.4 +1.1
baz=98,SNR=7.5
F14K **Arctic Creek** 74.92 335 P P 22 55 37.5 +1.8
baz=96,SNR=17
PVIS **Viseu** 75.17 51 *eP* P 22 55 36.8 -0.9
EVO **Evora** 75.17 53 *eP* P 22 55 37.2 -0.5
MTE **Manteigas** 75.44 51 *eP* P 22 55 40.3 +0.9
PVAQ **Vaqueiros** 75.46 54 *eP* P 22 55 43.5 +4.1
PESTR **Estremoz** 75.48 53 P P 22 55 38.7 -0.9
PESTR IAmb IAmb 22 56 20.7
comp=Z,30nm,1.7s
PESTR **Estremoz** 75.48 53 *eP* P 22 55 38.9 -0.6
PCBR **Castelo Branco** 75.52 52 *eP* P 22 55 39.0 -0.7
NIKH **Nikolski High** 75.55 322 P P 22 55 40.7 +1.1
baz=90
TNA **Tin City** 75.59 335 P P 22 55 41.2 +1.6
baz=94,SNR=7.5
PMRV **Marv??o** 75.61 52 *eP* P 22 55 39.6 -0.7
MVO **Moncorvo** 75.80 50 *eP* P 22 55 40.5 -0.9
PBAR **Barrancos** 75.95 53 *eP* P 22 55 41.6 -0.6
PBRG **Braganca** 75.99 50 *eP* P 22 55 42.5 +0.1
NOR **Nord** 76.12 8 *i* P P 22 55 42.0 -0.4
GAMB **Gambell** 77.14 333 P P 22 55 50.2 +1.9
baz=90
EKB **Eskdalemuir** 77.77 36 P P 22 55 50.3 -1.8
EKB IAmb IAmb 22 58 35.6
comp=Z,54nm,1.5s
EKA **Eskdalemuir Ar** 77.78 36 P P 22 55 50.5 -1.7
comp=Z,7.2nm,0.8s,baz=262,slow=6.2,SNR=13
comp=Z,7.2nm,0.8s
PAB **San Pablo** 77.95 52 P P 22 55 53.2 -0.3
PAB **San Pablo** 77.95 52 P P 22 55 53.3 -0.3
PAB pmax pmax
comp=Z,9.0nm,1.3s
ESDC **Sonseca Array** 78.24 52 P P 22 55 54.1 -1.0
ESDC **Sonseca Array** 78.24 52 P P 22 55 54.3 -0.8
comp=Z,4.8nm,0.7s,baz=286,slow=5.4,SNR=36
comp=Z,4.8nm,0.7s
ESBB **Sonseca Array** 78.24 52 P P 22 55 54.4 -0.7
ADK **Adak** 80.39 321 P P 22 56 08.0 +1.5
KBS **Kingsbay** 80.82 11 P P 22 56 09.0 +0.7
KBS IAmb IAmb 22 56 11.6
comp=Z,21nm,0.8s
KBS **Kingsbay** 80.82 11 *ce* P P 22 56 11.4 +3.1
KBS pmax pmax
comp=Z,32nm,1.7s
KBS **Kingsbay** 80.82 11 *i* P P 22 56 10.4 +2.0
TIC **Toumodi** 81.80 85⇑ *eP* P 22 56 14.7 -0.1
comp=Z,60nm,0.9s
CEST **Esterri de Car** 81.83 48 P P 22 56 13.6 -0.9
CEST IAmb IAmb 22 56 17.5
comp=Z,14nm,1.2s
SPITS **Spitsbergen Ar** 81.86 12 P P 22 56 15.1 +1.2
comp=Z,24nm,0.9s,baz=197,slow=2.6,SNR=17
comp=Z,24nm,0.9s
SPITS **Spitsbergen Ar** 81.86 12 P P 22 56 14.6 +0.7
SPITS pmax pmax
comp=Z,27nm,1.0s
SPB2 **Spitsbergen Ar** 81.87 12 P P 22 56 14.7 +0.8
SPB2 IAmb IAmb 22 56 16.1
comp=Z,20nm,0.8s
LIC **Lamto** 81.87 85⇑ *eP* P 22 56 15.0 -0.1
comp=Z,151nm,0.9s
DBIC **Dimbokro** 81.96 85 P P 22 56 15.6 0.0
DBIC **Dimbokro** 81.96 85 P P 22 56 15.8 +0.2
comp=Z,25nm,0.9s,baz=274,slow=2.8,SNR=16
comp=Z,25nm,0.9s
DBIC **Dimbokro** 81.96 85 P P 22 56 15.6 0.0
DBIC pmax pmax
comp=Z,69nm,1.4s
KIC **Kosan Boka** 82.13 85⇑ *eP* P 22 56 16.5 0.0
comp=Z,56nm,0.8s
DOU **Dourbes** 83.00 40 *dP* P 22 56 20.9 +0.6
BMRD **Maredsous** 83.08 40 *dPcP* PcP 22 56 26.3 +0.9
BGES **Gesves** 83.27 40 *dP* P 22 56 22.4 +0.7
BCLA **Clavier** 83.40 40 *dP* P 22 56 23.1 +0.7
comp=Z,5.0nm,0.9s
MEM **Membach** 83.81 40 *dP* P 22 56 26.2 +1.7
BTNL **Ternell** 83.89 40 *dP* P 22 56 26.6 +1.6
WLF **Walferdange** 84.07 41 P P 22 56 25.3 -0.6
WLF IAmb IAmb 22 56 26.7
comp=Z,25nm,1.6s
WLF **Walferdange** 84.07 41 *dP* P 22 56 27.2 +1.3
WLF **Walferdange** 84.07 41 P P 22 56 25.3 -0.6
WLF pmax pmax
comp=Z,25nm,1.6s
NB2 **NORSAR Subarra** 84.55 29 P P 22 56 27.5 -0.6
comp=Z,5.4nm,1.1s,baz=284,slow=4.8
NOA **NORSAR Array B** 84.55 29 P P 22 56 27.5 -0.6
comp=Z,2.5nm,0.7s,baz=289,slow=5.0,SNR=9.5
comp=Z,2.5nm,0.7s
BILL **Bilibino** 85.36 339 P P 22 56 32.2 +0.3

BILL **Bilibino** 85.36 339 *de* P P 22 56 32.7 +0.7
BILL *e* 22 56 35.3
BILL *e* 22 56 38.6
BILL *e* 22 59 47.3
BILL *e* PPP PPP 23 01 44.4
BILL *e* S SKSac 23 06 52.3 -2.8
BILL *e* SS SS 23 12 39.9 +4.6
BILL pmax pmax
comp=Z,37nm,1.0s
BILL MLR MLR
comp=Z,3µm,18.0s
SENIN **Lac Senin/Sane** 85.46 44 P P 22 56 32.2 -1.0
HFS **Hagfors** 85.96 29 P P 22 56 34.1 -1.0
comp=Z,1.8nm,0.6s,baz=282,slow=1.4,SNR=10
comp=Z,1.8nm,0.6s
DAVA **Damuels** 86.99 42 *eP* P 22 56 40.6 -0.1
comp=Z,6.5nm,0.9s
TORD **Torodi Ar. Bea** 87.11 77 P P 22 56 41.2 -0.4
TORD **Torodi Ar. Bea** 87.11 77 P P 22 56 41.0 -0.7
comp=Z,4.1nm,0.8s,baz=288,slow=2.1,SNR=25
comp=Z,4.1nm,0.8s
ARCES **ARCESS Array B** 87.36 19 P P 22 56 41.4 -0.4
comp=Z,1.4nm,0.5s,baz=282,slow=4.3,SNR=25
comp=Z,1.4nm,0.5s
FUORN **Ofenpass-Fuorn** 87.40 43 P P 22 56 42.4 -0.4
RETA **Reutte** 87.52 42 *eP* P 22 56 44.2 +1.1
comp=Z,2.4nm,0.6s
FETA **Feichten** 87.61 43 *eP* P 22 56 43.0 -0.7
comp=Z,0.1nm,0.2s
MOTA **Moosalm** 87.78 42 *ePcP* PcP 22 56 45.8 -0.5
comp=Z,2.2nm,0.8s
CLL **Collm** 87.97 38 P P 22 56 44.2 -0.8
CLL **Collm** 87.97 38 *i* P P 22 56 44.7 -0.3
comp=Z,7.0nm,1.2s
CLL **Collm** 87.97 38 P P 22 56 44.2 -0.8
CLL pmax pmax
comp=Z,7.0nm,1.2s
WTTA **Wattenberg** 88.16 42 *ePcP* PcP 22 56 48.1 +0.1
comp=Z,1.8nm,0.6s
BRG **Berggiesshubel** 88.65 38 *eP* P 22 56 47.8 -0.5
BRG Amp 22 56 49.3
comp=Z,2.9nm,0.9s
TAM **Tamanrasset** 88.81 67 P P 22 56 50.4 +0.6
TAM IAmb IAmb 22 56 52.6
comp=Z,14nm,1.0s
TAM **Tamanrasset** 88.81 67 P P 22 56 50.4 +0.6
TAM pmax pmax
comp=Z,14nm,1.0s
ABTA **Abfaltersbach** 88.87 43 *ePcP* PcP 22 56 51.2 +0.1
comp=Z,3.9nm,0.9s
KHC **Kasperske Hory** 88.91 40 P P 22 56 49.2 -0.5
KHC **Kasperske Hory** 88.91 40 *eP* P 22 56 49.4 -0.2
KHC **Kasperske Hory** 88.91 40 *ce* P P 22 56 51.8 +2.2
KHC pmax pmax
comp=Z,13nm,1.0s
GERES **GERESS Array B** 89.07 40 P P 22 56 49.8 -0.7
GERES **GERESS Array B** 89.07 40 P P 22 56 49.6 -0.8
comp=Z,1.7nm,0.8s,baz=186,slow=11,SNR=12
comp=Z,1.7nm,0.8s
GERES **GERESS Array B** 89.07 40 P P 22 56 49.8 -0.7
ZVC **Zvikov** 89.21 40 *eP* P 22 56 50.8 -0.2
KEST **Kesra** 89.28 54 P P 22 56 52.5 +0.8
comp=Z,4.4nm,0.9s,baz=343,slow=7.6,SNR=2.9
comp=Z,4.4nm,0.9s
KBA **Koelnbreinsper** 89.33 42 *ePcP* PcP 22 56 52.9 -0.3
comp=Z,1.8nm,0.6s
BIOA **Bad Ischl, Aus** 89.35 41 *ePcP* PcP 22 56 53.2 +0.1
comp=Z,2.0nm,0.7s
MYKA **Terra Mystica** 89.65 42 *ePcP* PcP 22 56 54.9 +0.3
comp=Z,1.3nm,0.4s
PRED **Cave del Predi** 89.65 43 P P 22 56 53.0 -0.1
MOA **Molln** 89.71 41 *ePcP* PcP 22 56 54.2 -0.5
comp=Z,1.7nm,0.6s
OSTC **Ostas** 90.13 38 *eP* P 22 56 54.6 -0.7
OSTC **Ostas** 90.13 38 *eP* P 22 56 54.6 -0.7
DPC **Dobruska-Polom** 90.26 38 *eP* P 22 56 55.9 0.0
DPC **Dobruska-Polom** 90.26 38 *eP* P 22 56 55.9 0.0
SOKA **Soboth** 90.55 42 *eP* P 22 56 57.4 0.0
comp=Z,0.8nm,0.4s
ARSA **Arzberg** 90.70 41 *ePcP* PcP 22 56 58.9 -0.2
comp=Z,0.9nm,0.5s
CONA **Conrad Observa** 90.72 41 *ePcP* PcP 22 56 59.7 +0.5
comp=Z,2.0nm,0.4s
RONA **Rosalia, Austr** 91.06 41 *ePcP* PcP 22 57 00.8 +0.1
comp=Z,0.2nm,0.2s
FINES **FINESS Array B** 91.15 26 P P 22 56 59.2 -0.5
comp=Z,2.1nm,0.7s,baz=5.2,slow=2.1,SNR=12
comp=Z,2.1nm,0.7s
SEY **Seymchan** 92.76 337 *ce* P P 22 57 08.9 +1.8
SEY pmax pmax
comp=Z,15nm,1.3s
TIXI **Tiksi** 93.62 349 P P 22 57 11.1 +0.2
TIXI **Tiksi** 93.62 349 *ce* P P 22 57 11.4 +0.5
TIXI pmax pmax
comp=Z,37nm,0.8s
BELA **Belgrano 2** 93.87 170 P P 22 57 10.6 -1.2
BELA IAmb IAmb 22 57 11.9
comp=Z,9.9nm,1.3s
PETK **Petropavlovsk-** 95.03 327 P P 22 57 18.6 +0.8
comp=Z,4.0nm,0.9s,baz=82,slow=11,SNR=4.8
comp=Z,4.0nm,0.9s
MA2 **Magadan** 95.21 334 *ce* P P 22 57 20.0 +1.5
MA2 pmax pmax
comp=Z,15nm,1.3s
VNA3 **Neumayer Olymp** 96.93 161 ⇑P P 22 57 24.9 -1.1
comp=Z,4.7nm,0.8s
VNA1 **Neumayer--Stat** 97.23 161 ⇑P P 22 57 25.8 -1.5
comp=Z,4.3nm,1.0s
VNA2 **Neumayer--Watz** 97.58 161 ⇑P P 22 57 26.2 -2.7
comp=Z,2.2nm,0.7s,baz=294,slow=5.0
OBN **Obninsk** 99.15 29 *eP* Pdif 22 57 36.2 -0.1
OBN *e* 23 01 39.4
OBN *e* PPP PPP 23 03 45.8
OBN *e* S SKSac 23 08 11.3 -1.7
OBN pmax pmax
comp=Z,4.0nm,0.7s
OBN MLR MLR
comp=Z,1µm,18.0s
SNAA **Sanae** 99.16 161 ⇑Pdiff Pdif 22 57 34.1 -2.0
comp=Z,18µm,7.6s
SNAA **Sanae** 99.16 161 P Pdif 22 57 34.5 -1.6
comp=Z,1.5nm,0.9s,baz=255,slow=4.7,SNR=5.6
comp=Z,1.5nm,0.9s
SNAA **Sanae** 99.16 161 ⇑ *eP* Pdif 22 57 35.0 -1.1
SNAA pmax pmax
comp=Z,14nm,2.7s
TROLL **Troll, Antarti** 100.87 162 ⇑Pdiff Pdif 22 57 43.2 -0.5
comp=Z,151nm,1.1s
QSPA **South Pole Qui** 101.33 180 P Pdif 22 57 44.9 -1.0
comp=Z,1.7nm,1.1s,baz=136,slow=6.4,SNR=3.3
BRTR **Keskin Array B** 105.75 43 PKiKP PKiKP 23 02 19.9 +0.7
comp=Z,0.5nm,0.6s,baz=141,slow=0.9,SNR=3.5
BVAR **Borovoye Array** 113.24 14 PKiKP PKiKP 23 02 32.6 0.0
comp=Z,1.0nm,0.7s,baz=336,slow=3.2,SNR=3.6
ZALV **Zalesovo Beam** 114.66 5 PKP PKiKP 23 02 34.7 -0.6
comp=Z,1.4nm,0.5s,baz=267,slow=2.6,SNR=7.4
BOSA **Boshof** 115.65 116 PKP PKPdf 23 02 37.9 -0.2
comp=Z,4.3nm,0.7s,baz=302,slow=1.5,SNR=11
KURK **Kurchatov** 117.08 10 *i* PKiKP PKiKP 23 02 40.1 0.0
KURBB **Kurchatov Arra** 117.16 10 PKP PKPdf 23 02 40.0 -0.2
comp=Z,2.1nm,0.2s,baz=338,slow=2.2,SNR=7.8
SEM **Semipalatinsk** 117.63 9 *e*PKP PKiKP 23 02 41.9 +0.3
baz=8.5
SEM **Semipalatinsk** 117.63 9 *e*PKiKP PKiKP 23 02 41.8 +0.3
DGZ **Jazzator, Alta** 119.07 3 ‖ *i* PKiKP PKPdf 23 02 43.9 -0.3
ULN **Ulaanbaatar** 119.55 348 ⇑ *i* PKiKP PKiKP 23 02 45.9 +0.7
SONM **Songino Array** 119.70 349 PKP PKPdf 23 02 45.4 0.0
comp=Z,3.7nm,0.8s,baz=346,slow=1.6,SNR=21
KSRS **Korea Array** 120.93 327 PKP PKiKP 23 02 48.4 +0.4
comp=Z,3.9nm,0.7s,baz=354,slow=1.5,SNR=10
ZSN **Zaisan** 121.10 6 *e*PKP PKiKP 23 02 48.9 +0.8
baz=5.7
ZSN **Zaisan** 121.10 6 *e*PKiKP PKiKP 23 02 48.9 +0.8
MKAR **Makanchi Array** 121.45 8 PKiKP PKPdf 23 02 48.0 -0.7
comp=Z,1.4nm,0.8s,baz=284,slow=3.0,SNR=9.3
MKAR **Makanchi Array** 121.45 8 PKiKP PKPdf 23 02 48.0 -0.7
BTLS **Baital** 121.54 15 *e*PKP PKPdf 23 02 48.8 -0.1
baz=15
BTLS **Baital** 121.54 15 *e*PKiKP PKPdf 23 02 48.8 -0.1
BRLS **Borolday** 122.18 19 *e*PKP PKiKP 23 02 50.6 +0.3
baz=19
BRLS *e* PP PP 23 04 27.7 +3.6
baz=19
BRLS **Borolday** 122.18 19 *e*PKiKP PKiKP 23 02 50.6 +0.3
BRLS *e* 23 04 27.7
TDK **Taldyqorghan** 122.56 11 *e*PKP PKPdf 23 02 50.1 -0.7

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=11 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **122.56** | **11** | *e*PKIKP | **PKPdf** | **23 02 50.9** | **+0.1** |
| **CHM** | **Chimkent** | **122.74** | **20** | *e*PKIKP | **PKiKP** | **23 02 51.6** | **+0.1** |
| | baz=20 | | | | | | | | |
| **CHM** | **Chimkent** | **122.74** | **20** | *e*PKIKP | **PKiKP** | **23 02 51.6** | **+0.1** |
| **KUU** | **Kurty** | **123.18** | **14** | *e*PKP | **PKPdf** | **23 02 52.2** | **+0.1** |
| | baz=14 | | | | | | | | |
| **KUU** | **Kurty** | **123.18** | **14** | *e*PKIKP | **PKPdf** | **23 02 52.1** | **+0.1** |
| **SGDS** | **Sogindy** | **123.18** | **15** | *e*PKP | **PKiKP** | **23 02 52.3** | **-0.1** |
| | baz=15 | | | | | | | | |
| SGDS | | | | *e*PP | **PP** | **23 04 33.0** | **+2.1** |
| | baz=15 | | | | | | | | |
| **SGDS** | **Sogindy** | **123.18** | **15** | *e*PKIKP | **PKiKP** | **23 02 52.2** | **-0.1** |
| SGDS | | | | *e* | | 23 04 32.9 | | | |
| **USP** | **Ospenovka** | **123.32** | **15** | P | **PKiKP** | **23 02 53.1** | **+0.5** |
| | SNR=8.7 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **123.69** | **16** | P | **PKiKP** | **23 02 54.3** | **+0.8** |
| | SNR=6.5 | | | | | | | | |
| **AAK** | **Ala-Archa** | **123.91** | **16** | ⇑*e*PKIKP | **PKiKP** | **23 02 54.8** | **+0.8** |
| **TKM2** | **Tokmak 2** | **123.92** | **15** | P | **PKiKP** | **23 02 54.2** | **+0.1** |
| | SNR=6.4 | | | | | | | | |
| **MDOK** | **Medeo** | **124.03** | **13** | *e*PKP | **PKPdf** | **23 02 53.8** | **-0.2** |
| | baz=13 | | | | | | | | |
| **MDOK** | **Medeo** | **124.03** | **13** | *e*PKIKP | **PKPdf** | **23 02 53.7** | **-0.2** |
| **KPKS** | **Kokpek** | **124.09** | **12** | *e*PKP | **PKPdf** | **23 02 53.1** | **-0.8** |
| | baz=12 | | | | | | | | |
| **KPKS** | **Kokpek** | **124.09** | **12** | *e*PKIKP | **PKPdf** | **23 02 53.9** | **0.0** |
| **TNSS** | **Tian-Shan** | **124.13** | **13** | *e*PKP | **PKPdf** | **23 02 54.1** | **-0.3** |
| | baz=13 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **124.13** | **13** | *e*PKIKP | **PKPdf** | **23 02 54.1** | **-0.3** |
| **AML** | **Almayashu** | **124.16** | **16** | P | **PKiKP** | **23 02 55.6** | **+0.8** |
| | SNR=6.5 | | | | | | | | |
| **SATY** | **Saty** | **124.42** | **12** | *e*PKP | **PKPdf** | **23 02 54.5** | **-0.1** |
| | baz=12 | | | | | | | | |
| **SATY** | **Saty** | **124.42** | **12** | *e*PKIKP | **PKPdf** | **23 02 54.5** | **-0.1** |
| **UZB** | **Uzynbulak** | **124.46** | **12** | *e*PKP | **PKPdf** | **23 02 54.8** | **0.0** |
| | baz=12 | | | | | | | | |
| **UZB** | **Uzynbulak** | **124.46** | **12** | *e*PKIKP | **PKPdf** | **23 02 54.7** | **0.0** |
| **SHLS** | **Shalkode** | **124.54** | **11** | *e*PKP | **PKiKP** | **23 02 55.2** | **0.0** |
| | baz=11 | | | | | | | | |
| **SHLS** | **Shalkode** | **124.54** | **11** | *e*PKIKP | **PKiKP** | **23 02 55.1** | **0.0** |
| **ULHL** | **Ulahol** | **124.71** | **14** | P | **PKiKP** | **23 02 56.5** | **+0.8** |
| | SNR=8.1 | | | | | | | | |
| **WMQ** | **Urumqi** | **124.94** | **4** | *e*PKP | **PKiKP** | **23 02 55.8** | **-0.1** |
| WMQ | | | | sPKP | | 23 03 09.4 | | | |
| **PRZ** | **Przheval'sk** | **124.97** | **12** | PKPdf | **PKiKP** | **23 02 56.3** | **+0.2** |
| **PRZ** | **Przheval'sk** | **124.97** | **12** | PKIKP | **PKiKP** | **23 02 56.3** | **+0.2** |
| **HHC** | **Hu-ho-hao-te** | **125.01** | **342** | *e*P | **PKPdf** | **23 02 52.6** | **-3.2** |
| **BTO** | **Baotou** | **125.69** | **343** | *e*PKP | **PKPdf** | **23 02 54.8** | **-2.3** |
| BTO | | | | PP | **PP** | **23 04 49.4** | **+1.6** |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,2μm,9.5s | | | | | | | | |
| **SIMJ** | **Simiganj** | **125.78** | **22** | PKPdf | **PKPdf** | **23 02 57.4** | **+0.1** |
| **CHGR** | **Chuyangaron** | **125.84** | **22** | PKPdf | **PKPdf** | **23 02 57.6** | **+0.2** |
| **CHGR** | **Chuyangaron** | **125.84** | **22** | PKIKP | **PKPdf** | **23 02 57.6** | **+0.2** |
| **GAR** | **Garm** | **125.95** | **21** | | **PKiKP** | **23 02 58.1** | **+0.1** |
| **HNS** | **HongShan** | **127.04** | **337** | ⇓PKP | **PKiKP** | **23 03 00.1** | **0.0** |
| **KSH** | **Kashi** | **127.22** | **16** | PKP | **PKiKP** | **23 03 01.8** | **+1.2** |
| **CTA** | **Charters Tower** | **127.31** | **253** | PKP | **PKPdf** | **23 03 00.3** | **-0.2** |
| | comp=Z,0.8nm,1.2s,baz=90,slow=7.1,SNR=2.7 | | | | | | | | |
| **GTA** | **Gaotai** | **128.98** | **352** | PKP | **PKiKP** | **23 03 03.8** | **-0.3** |
| GTA | | | | pPKP | sPKPdf | 23 03 12.3 | -0.4 | | |
| **KBL** | **Kabul** | **129.39** | **25** | PKPdf | **PKPdf** | **23 03 03.8** | **-0.7** |
| **KBL** | **Kabul** | **129.39** | **25** | PKIKP | **PKPdf** | **23 03 03.8** | **-0.7** |
| **STKA** | **Stephens Creek** | **130.12** | **238** | PKP | **PKPdf** | **23 03 04.7** | **-0.9** |
| | comp=Z,6.0nm,0.9s,baz=79,slow=7.2,SNR=5.7 | | | | | | | | |
| **LZH** | **Lanzhou** | **131.52** | **347** | ⇓PKP | **PKiKP** | **23 03 10.5** | **+1.1** |
| LZH | | | | pPKP | sPKPdf | 23 03 21.4 | +3.7 | | |
| **XAN** | **Xi'an** | **132.09** | **341** | ⇑PKP | **PKiKP** | **23 03 10.0** | **-0.4** |
| **PTPS** | **Port Pirie** | **132.74** | **235** | P | **PKiKP** | **23 03 13.0** | **+1.4** |
| **ENH** | **Enshi** | **135.34** | **338** | | **PKPdf** | **23 03 15.4** | **-0.1** |
| **AS01** | **Alice Springs** | **138.37** | **247** | P | **PKiKP** | **23 03 22.9** | **-0.5** |
| **AS01** | **Alice Springs** | **138.37** | **247** | P | **PKiKP** | **23 03 22.4** | **-1.0** |
| **ASAR** | **Alice Springs** | **138.41** | **247** | PKPdf | **PKPdf** | **23 03 20.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **138.41** | **247** | PKhKP | PKPpre | 23 03 08.9 | | | |
| | comp=Z,0.8nm,0.6s,baz=113,slow=3.5,SNR=6.8 | | | | | | | | |
| ASAR | | | | PKP | **PKPdf** | **23 03 21.1** | **-0.3** | | |
| | comp=Z,2.8nm,0.7s,baz=110,slow=2.1,SNR=11 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **138.49** | **253** | PKPdf | **PKPdf** | **23 03 21.2** | **-0.4** |
| **WRAB** | **Tennant Creek** | **138.49** | **253** | | **PKPdf** | **23 03 21.4** | **-0.2** |
| **WRAB** | **Tennant Creek** | **138.49** | **253** | PKIKP | **PKPdf** | **23 03 21.4** | **-0.2** |
| **WRA** | **Warramunga Arr** | **138.50** | **253** | PKhKP | PKPpre | 23 03 10.4 | | | |
| | comp=Z,0.9nm,0.7s,baz=90,slow=3.0,SNR=6.9 | | | | | | | | |
| WRA | | | | PKP | **PKPdf** | **23 03 21.6** | **-0.1** | | |
| | comp=Z,5.8nm,0.8s,baz=90,slow=2.2,SNR=9.7 | | | | | | | | |
| **PZH** | **PanZhiHua** | **141.21** | **346** | PKP | **PKPdf** | **23 03 26.1** | **-0.5** |
| **KMI** | **Kunming** | **142.27** | **344** | ⇓PKP | **PKPdf** | **23 03 25.3** | **-3.3** |
| **WRKA** | **Warakurna** | **143.12** | **243** | P | **PKiKP** | **23 03 30.2** | **+0.3** |
| **WRKA** | **Warakurna** | **143.12** | **243** | P | **PKPdf** | **23 03 30.1** | **+0.2** |
| **KMBL** | **Kambalda** | **146.01** | **230** | P | **PKPbc** | **23 03 35.3** | **-0.1** |
| **KMBL** | **Kambalda** | **146.01** | **230** | P | **PKPbc** | **23 03 35.1** | **-0.3** |
| **CRAI** | **Chiangrai** | **147.56** | **345** | PKPdf | **PKPdf** | **23 03 37.0** | **-0.6** |
| **SOEI** | **Soe** | **148.31** | **270** | P | **PKiKP** | **23 03 44.4** | **+0.3** |
| **SOEI** | **Soe** | **148.31** | **270** | P | **PKiKP** | **23 03 44.0** | **-0.1** |
| **SOEI** | **Soe** | **148.31** | **270** | PKPab | **PKPbc** | **23 03 43.1** | **+0.7** |
| **HYB** | **Hyderabad** | **148.44** | **25** | *e*PKiKP | **PKPbc** | **23 03 42.8** | **+0.2** |
| **TOLI2** | **Tolitoli** | **148.88** | **292** | P | **PKiKP** | **23 03 44.7** | **-0.5** |
| **MYLDM** | **Lahad Datu** | **148.98** | **301** | PKPab | **PKiKP** | **23 03 45.9** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **149.60** | **347** | PKP | **PKPdf** | **23 03 41.5** | **+0.5** |
| | comp=Z,31nm,0.8s,baz=316,slow=2.3,SNR=26 | | | | | | | | |
| CMAR | | | | PKPbc | **PKiKP** | **23 03 46.2** | **-0.3** | | |
| | comp=Z,31nm,0.8s,baz=338,slow=3.0,SNR=42 | | | | | | | | |
| **MUN** | **Mundaring** | **149.73** | **224** | P | **PKiKP** | **23 03 46.6** | **+0.2** |
| **MUN** | **Mundaring** | **149.73** | **224** | P | **PKPbc** | **23 03 45.9** | **+0.5** |
| **BLDU** | **Ballidu** | **150.18** | **226** | P | **PKPbc** | **23 03 46.8** | **+0.2** |
| **BLDU** | **Ballidu** | **150.18** | **226** | P | **PKPbc** | **23 03 46.6** | **0.0** |
| **MEEK** | **Meekatharra** | **150.74** | **235** | P | **PKPbc** | **23 03 48.4** | **+0.3** |
| **MEEK** | **Meekatharra** | **150.74** | **235** | P | **PKPbc** | **23 03 48.0** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **151.53** | **246** | P | **PKPbc** | **23 03 49.7** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **151.53** | **246** | P | **PKPbc** | **23 03 49.5** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **151.53** | **246** | | **PKPbc** | **23 03 48.4** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **151.53** | **246** | | **PKPbc** | **23 03 47.1** | **-2.9** |
| **MBWA** | **Marble Bar** | **151.75** | **246** | P | **PKPbc** | **23 03 50.2** | **-0.3** |
| **MBWA** | **Marble Bar** | **151.75** | **246** | P | **PKPbc** | **23 03 50.1** | **-0.4** |
| **MBWA** | **Marble Bar** | **151.75** | **246** | | **PKPbc** | **23 03 49.0** | **-1.5** |

*IDC **15** 22:47:58.5±1.4, 3.°84S×133.°30E, h0km, mb3.3/3, mbtmp3.5/4, ML4.2/1, Error ellipse: s-maj=73.1km s-min=27.7km az=70.0*
*NEIC **15** 22:48:01.2±1.4, 3.°80S±0.°09×133.°29E±0.°09, h23km±8km, mb4.0/6, Error ellipse: s-maj=17.7km s-min=5.3km az=47.0*
**ISC 15 22:48:02.1±0.8, 3.°90S±0.°09×133.°4E±0.°1, h35km, n19, σ1s66/20, mb3.8/3, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **1.47** | **311** | | **Pn** | **22 48 25.2** | **-0.9** |
| FAKI | | | | Sg | **Sn** | **22 48 42.8** | **-1.3** |
| **MTN** | **Manton Dam** | **9.16** | **194** | | **Pn** | **22 50 12.7** | **+0.9** |
| **SOEI** | **Soe** | **10.73** | **237** | Pn | **Pn** | **22 50 33.9** | **+0.3** |
| **KNRA** | **Kununurra** | **12.55** | **201** | | **Pn** | **22 50 57.3** | **-0.9** |
| **COEN** | **Coen** | **13.93** | **136** | Pn | **Pn** | **22 51 15.1** | **-2.1** |
| **WB0** | **Warramunga Arr** | **15.81** | **176** | Pn | **Pn** | **22 51 40.0** | **-2.2** |
| WB0 | | | | IAmb | IAmb | 22 51 54.3 | | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **15.98** | **177** | Pn | **Pn** | **22 51 41.1** | **-3.3** |
| **WRA** | **Warramunga Arr** | **15.98** | **177** | Pn | **Pn** | **22 51 41.9** | **-2.5** |
| | comp=Z,0.5nm,0.3s,baz=355,slow=14,SNR=21 | | | | | | | |
| WRA | | | | Sn | Sn | 22 54 31.5 | -9.1 | |
| | comp=Z,0.9nm,0.3s,baz=360,slow=23,SNR=8.4 | | | | | | | |
| **AS31** | **Alice Springs** | **19.66** | **178** | P | **P** | **22 52 29.4** | **+1.2** |
| AS31 | | | | IAmb | IAmb | 22 52 37.9 | | |
| | comp=Z,5.9nm,1.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **19.66** | **178** | P | **P** | **22 52 28.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **19.66** | **178** | P | **P** | **22 52 29.4** | **+1.1** |
| | comp=Z,0.7nm,0.3s,baz=3.7,slow=13,SNR=16 | | | | | | | |
| ASAR | | | | S | S | 22 55 59.6 | -8.6 | |
| | comp=Z,0.5nm,0.7s,baz=109,slow=32,SNR=1.6 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **CTA** | **Charters Tower** | **20.43** | **143** | P | **P** | **22 52 38.9** | **+2.3** |
| | comp=Z,0.2nm,0.6s,baz=337,slow=7.7,SNR=1.7 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **CTAO** | **Charters Tower** | **20.43** | **143** | P | **P** | **22 52 38.1** | **+1.5** |
| CTAO | | | | IAmb | IAmb | 22 52 49.9 | | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **MBWA** | **Marble Bar** | **21.67** | **217** | P | **P** | **22 52 51.0** | **+1.1** |
| MBWA | | | | IAmb | IAmb | 22 52 53.0 | | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **67.55** | **325** | P | **P** | **22 58 54.6** | **-0.5** |
| **MKAR** | **Makanchi Array** | **67.55** | **325** | P | **P** | **22 58 54.6** | **-0.4** |
| **MKAR** | **Makanchi Array** | **67.55** | **325** | P | **P** | **22 58 56.5** | **+1.5** |
| | comp=Z,0.4nm,0.6s,baz=127,slow=6.6,SNR=5.9 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **ABKAR** | **Akbulak array** | **82.20** | **321** | P | **P** | **23 00 19.8** | **+0.1** |
| **ILAR** | **Eielson Array** | **89.14** | **25** | P | **P** | **23 00 55.1** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=272,slow=4.8,SNR=2.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |

**IDC 15 23:02:05.9±5.6, 4.°06S×132.°62E, h0km, mb3.5/1, mbtmp3.4/3, ML3.5/2, Error ellipse: s-maj=353.1km s-min=33.0km az=75.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.88** | **174** | Pn | Pn | 23 05 49.0 | -1.9 |
| | 0.1nm,0.3s,baz=352,slow=14,SNR=8.7 | | | | | | | |
| WRA | | | | Sn | Sn | 23 08 40.5 | -7.2 | |
| | 0.3nm,0.3s,baz=351,slow=25,SNR=6.6 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **19.53** | **176** | P | Pn | 23 06 36.1 | -0.3 | |
| | 0.2nm,0.3s,baz=0.0,slow=12,SNR=4.6 | | | | | | | |
| ASAR | | | | S | Sn | 23 10 03.0 | -13 | |
| | 0.3nm,0.8s,baz=346,slow=26,SNR=2.6 | | | | | | | |
| | 0.8nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.27** | **325** | P | P | 23 13 02.4 | 0.0 | |
| | 0.3nm,0.7s,baz=116,slow=6.6,SNR=1.4 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |

**NOU 15 23:09:42.7, 14.°98S×167.°53E, h122km, MLv4.4/7, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **2.80** | **167** | P | Pn | 23 10 26.7 | +0.2 |
| **YATNC** | **Mamie plateau,** | **7.07** | **185** | P | Pn | 23 11 23.1 | -0.5 |
| **DZM** | **Mont Dzumac** | **7.13** | **188** | P | Pn | 23 11 24.8 | +0.3 |
| **NOUC** | **Port Laguerre** | **7.18** | **189** | P | Pn | 23 11 25.3 | +0.2 |

*IDC **15** 23:18:04.0±1.5, 39.°46N×13.°70E, h456km±42km, mb2.9/5, mbtmp3.5/8, Error ellipse: s-maj=40.4km s-min=23.5km az=61.0*
**ISC 15 23:18:04.1±1.2, 39.°4N±0.°1×13.°8E±0.°2, h450km, n11, σ0s97/12, mb3.4/4, Tyrrhenian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KEST** | **Kesra** | **5.11** | **225** | P | **P** | **23 19 30.6** | **+0.9** |
| | 4.1nm,0.9s,baz=287,slow=3.3,SNR=6.9 | | | | | | | |
| KEST | | | | S | **S** | **23 20 38.5** | **-0.8** |
| | 4.7nm,1.1s,baz=64,slow=4.3,SNR=2.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **9.41** | **360** | P | **P** | **23 20 14.9** | **+0.3** |
| | 0.9nm,0.4s,baz=172,slow=15,SNR=12 | | | | | | | |
| **KHC** | **Kaspersky Hory** | **9.70** | **359** | *e*P | **P** | **23 20 18.1** | **+0.4** |
| **TREC** | **Trest** | **9.93** | **6** | *e*P | **P** | **23 20 21.8** | **+1.6** |
| **ZVC** | **Zvikov** | **10.01** | **2** | *e*P | **P** | **23 20 22.3** | **+1.3** |
| **EKA** | **Eskdalemuir Ar** | **19.52** | **330** | P | **P** | **23 21 59.8** | **-1.0** |
| | 0.7nm,0.6s,baz=140,slow=11,SNR=1.9 | | | | | | | |
| **HFS** | **Hagfors** | **20.72** | **360** | P | **P** | **23 22 10.7** | **-0.9** |
| | 2.2nm,1.0s,baz=170,slow=8.8,SNR=12 | | | | | | | |
| | 2.2nm,1.0s | | | | | | | |
| **NOA** | **NORSAR Array B** | **21.69** | **357** | P | **P** | **23 22 20.5** | **+0.1** |
| | 1.3nm,1.1s,baz=186,slow=8.9,SNR=1.4 | | | | | | | |
| | 1.3nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **23.30** | **15** | P | **P** | **23 22 34.2** | **-0.8** |
| | 0.7nm,0.8s,baz=178,slow=7.0,SNR=1.3 | | | | | | | |
| | 0.7nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.72** | **54** | P | **P** | **23 25 42.7** | **-0.4** |
| | 0.4nm,0.2s,baz=280,slow=8.1,SNR=0.9 | | | | | | | |
| | 0.4nm,0.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **49.11** | **58** | P | **P** | **23 26 08.6** | **-0.3** |
| | 0.7nm,0.3s,baz=268,slow=6.6,SNR=15 | | | | | | | |
| | 0.7nm,0.3s | | | | | | | |

**ROM 15 23:18:41.7±0.2, 40.°505N±0.°009×15.°82E±0.°01, h23km±2km, ML1.3/10, 2C, Error ellipse: s-maj=1.4km s-min=0.4km az=305.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCEL** | **Monticello** | **0.18** | **184** | ⇑P | Pb | 23 18 47.8 | +0.8 |
| MCEL | | | | S | Sb | 23 18 51.6 | +1.0 |
| MCEL | | | | AML | AML | | | |
| | comp=E,104μm,0.9s | | | | | | | |
| MCEL | | | | AML | AML | | | |
| | comp=E,104μm,1.1s | | | | | | | |
| MCEL | | | | AML | AML | | | |
| | comp=N,71μm,1.0s | | | | | | | |
| **SLCN** | **Sala Consilina** | **0.18** | **231** | ⇑P | Pb | 23 18 46.8 | -0.2 |
| SLCN | | | | S | Sb | 23 18 50.2 | -0.4 | |
| SLCN | | | | AML | AML | | | |
| | comp=N,83μm,0.2s | | | | | | | |
| SLCN | | | | AML | AML | | | |
| | comp=E,112μm,1.3s | | | | | | | |
| **MTSN** | **Montesano sull** | **0.24** | **192** | P | Pb | 23 18 47.4 | -0.4 |
| MTSN | | | | S | Sb | 23 18 52.3 | +0.3 | |
| MTSN | | | | AML | AML | | | |
| | comp=N,34μm,1.0s | | | | | | | |
| MTSN | | | | AML | AML | | | |
| | comp=E,48μm,0.2s | | | | | | | |
| **ACER** | **Acerenza** | **0.30** | **19** | P | Pb | 23 18 48.5 | -0.1 |
| ACER | | | | S | Sb | 23 18 54.1 | +0.8 |
| ACER | | | | AML | AML | | | |
| | comp=E,57μm,1.1s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=N,63μm,0.6s | | | | | | | |
| ACER | | | | AML | AML | | | |
| | comp=E,57μm,0.9s | | | | | | | |
| **MRLC** | **Muro Lucano** | **0.35** | **315** | P | Pb | 23 18 50.3 | +0.8 |
| **MGR** | **Morigerati** | **0.42** | **209** | P | Pb | 23 18 50.4 | 0.0 |
| MGR | | | | S | Sb | 23 18 57.2 | +0.8 |
| **CMPR** | **Campora** | **0.43** | **245** | P | Pb | 23 18 50.7 | -0.1 |
| CMPR | | | | S | Sb | 23 18 57.6 | +0.7 |
| **PALZ** | **Palazzo San Ge** | **0.45** | **14** | P | Pb | 23 18 51.0 | 0.0 |
| **MIGL** | **Miglionico** | **0.48** | **78** | P | Pb | 23 18 51.4 | -0.2 |
| MIGL | | | | S | Sb | 23 18 58.9 | +0.6 |
| MIGL | | | | AML | AML | | | |
| | comp=E,238μm,0.2s | | | | | | | |
| MIGL | | | | AML | AML | | | |
| | comp=N,296μm,0.2s | | | | | | | |
| **AMUR** | **Altamura** | **0.72** | **56** | P | Pb | 23 18 55.6 | +0.1 |

*IDC **15** 23:21:17.0±0.8, 6.°25S×143.°12E, h0km, mb4.4/11, mbtmp4.5/13, ML2.2/2, Error ellipse: s-maj=37.5km s-min=14.8km az=75.0*
*NEIC **15** 23:21:18.9±1.7, 6.°26S±0.°09×143.°01E±0.°09, h10km±1km, mb4.7/34, Error ellipse: s-maj=15.8km s-min=13.5km az=45.0*
*DJA **15** 23:21:20.3±1.5, 6.°5S±4.°×14.°3E±.°, h20km±11km, M5.0/17, mB6.7/1, mb4.7/17, MLv5.2/5, Mw(mB)6.5/1*
**ISC 15 23:21:22.0±0.4, 6.°38S±0.°05×143.°04E±0.°07, h35km, n102, σ1s88/103, mb4.7/37, 1C-2D, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TABU** | **Tabubil** | **2.12** | **301** | P | **Pn** | **23 21 54.9** | **-0.1** |
| **MMPI** | **Merauke** | **3.36** | **232** | P | Pn | 23 22 17.0 | +5.0 |
| **JAY** | **Jayapura** | **4.49** | **329** | P | **Pn** | **23 22 25.5** | **-2.1** |
| **GENI** | **Genyem** | **4.72** | **323** | P | **Pn** | **23 22 30.7** | **-0.1** |
| **GENI** | **Genyem** | **4.72** | **323** | P | **Pn** | **23 22 30.0** | **-0.8** |
| **PMG** | **Port Moresby** | **5.07** | **127** | P | **Pn** | **23 22 36.6** | **+1.0** |
| **PMG** | **Port Moresby** | **5.07** | **127** | Pn | **Pn** | **23 22 35.5** | **-0.1** |
| **PMG** | **Port Moresby** | **5.07** | **127** | Pn | **Pn** | **23 22 36.4** | **+0.8** |
| | 5.8nm,0.3s,baz=50,slow=2.0,SNR=8.1 | | | | | | | |
| PMG | | | | Sn | **Sn** | **23 23 29.6** | **-3.4** |
| | 5.9nm,0.3s,baz=0.1,slow=15,SNR=3.9 | | | | | | | |
| | 18nm,0.3s | | | | | | | |
| **COEN** | **Coen** | **7.54** | **179** | P | **Pn** | **23 23 11.2** | **+1.7** |
| **COEN** | **Coen** | **7.54** | **179** | | **Pn** | **23 23 11.5** | **+2.0** |
| **FAKI** | **Fak Fak** | **11.29** | **287** | Pn | **Pn** | **23 23 58.4** | **-2.6** |
| **MTSU** | **Mount Surprise** | **11.75** | **174** | P | **Pn** | **23 24 08.2** | **+0.9** |
| **KDU** | **Kakadu** | **12.16** | **238** | P | **Pn** | **23 24 11.8** | **-1.1** |
| **MTN** | **Manton Dam** | **13.38** | **240** | P | **Pn** | **23 24 27.7** | **-1.9** |
| **MTN** | **Manton Dam** | **13.38** | **240** | Pn | **Pn** | **23 24 27.1** | **-2.5** |
| **DRS** | **Darwin Rock St** | **13.40** | **242** | P | **Pn** | **23 24 29.4** | **-0.4** |
| **CTA** | **Charters Tower** | **13.98** | **167** | Pn | **Pn** | **23 24 38.0** | **+0.2** |
| | baz=342,slow=7.8,SNR=4.8 | | | | | | | |
| CTA | | | | Lg | Lg | 23 28 47.2 | | |
| | baz=142,slow=17,SNR=8.7 | | | | | | | |
| **CTAO** | **Charters Tower** | **13.98** | **167** | P | **Pn** | **23 24 38.9** | **+1.1** |
| **CTAO** | **Charters Tower** | **13.98** | **167** | | **Pn** | **23 24 38.3** | **+0.5** |
| **QIS** | **Mount Isa** | **14.49** | **193** | P | **Pn** | **23 24 45.7** | **+1.0** |
| **WB0** | **Warramunga Arr** | **15.74** | **211** | | **Pn** | **23 25 01.1** | **-0.2** |
| **WRA** | **Warramunga Arr** | **15.92** | **211** | | **Pn** | **23 25 00.7** | **-2.8** |
| **WRA** | **Warramunga Arr** | **15.92** | **211** | Pn | **Pn** | **23 25 00.8** | **-2.8** |
| | 1.1nm,0.3s,baz=30,slow=13,SNR=53 | | | | | | | |
| WRA | | | | Sn | Sn | 23 27 47.0 | -12 | |
| | 1.0nm,0.3s,baz=28,slow=22,SNR=4.7 | | | | | | | |
| WRA | | | | Lg | Lg | 23 29 40.5 | | |
| | 0.3nm,0.3s,baz=27,slow=26,SNR=2.4 | | | | | | | |
| **KNRA** | **Kununurra** | **16.78** | **235** | Pn | **Pn** | **23 25 09.3** | **-5.1** |
| KNRA | | | | IAmb | IAmb | 23 25 19.9 | | |
| | comp=Z,34nm,0.8s | | | | | | | |
| **SOEI** | **Soe** | **18.89** | **259** | P | **Pn** | **23 25 41.8** | **+1.2** |
| **SOEI** | **Soe** | **18.89** | **259** | | **P** | **23 25 39.4** | **-0.4** |
| SOEI | | | | IAmb | IAmb | 23 25 51.8 | | |
| | comp=Z,68nm,0.8s | | | | | | | |
| **SOEI** | **Soe** | **18.89** | **259** | P | **Pn** | **23 25 41.8** | **+1.2** |
| | comp=Z,99nm,0.9s | | | | | | | |
| **AS01** | **Alice Springs** | **19.29** | **206** | P | **Pn** | **23 25 46.5** | **+1.3** |
| **AS31** | **Alice Springs** | **19.31** | **206** | P | **Pn** | **23 25 45.8** | **+0.3** |
| **ASAR** | **Alice Springs** | **19.31** | **206** | P | **Pn** | **23 25 45.6** | **+0.1** |
| **ASAR** | **Alice Springs** | **19.31** | **206** | P | **Pn** | **23 25 46.7** | **+1.2** |
| | comp=Z,49nm,0.6s,baz=30,slow=12,SNR=237 | | | | | | | |
| ASAR | | | | S | **S** | **23 29 13.7** | **-7.3** | |
| | comp=Z,4.5nm,0.9s,baz=20,slow=27,SNR=1.4 | | | | | | | |
| ASAR | | | | Lg | Lg | 23 31 27.8 | | |
| | comp=Z,0.3nm,0.3s,baz=20,slow=26,SNR=1.8 | | | | | | | |
| **PATS** | **Pohnpei** | **20.11** | **50** | P | **P** | **23 25 51.7** | **-1.3** |
| **QLP** | **Quilpie** | **20.13** | **177** | P | Pn | 23 25 55.8 | +0.7 |
| **EIDS** | **Eidsvold** | **20.39** | **159** | P | Pn | 23 25 59.3 | +1.0 |
| **EIDS** | **Eidsvold** | **20.39** | **159** | P | **P** | **23 25 55.7** | **-0.3** |
| **LUWI** | **Luwuk** | **20.90** | **284** | P | **P** | **23 26 00.7** | **-0.9** |
| LUWI | | | | IAmb | IAmb | 23 26 07.5 | | |
| | comp=Z,51nm,0.9s | | | | | | | |
| **GTOI** | **Gorontalo** | **21.17** | **288** | P | **P** | **23 26 06.5** | **+2.0** |
| | comp=Z,33nm,1.2s | | | | | | | |
| **INKA** | **Innaminka** | **21.36** | **186** | P | **P** | **23 26 09.4** | **+3.0** |
| **OOD** | **Oodnadatta** | **22.42** | **197** | P | **P** | **23 26 20.5** | **+2.7** |
| **BNSI** | **Bone** | **22.92** | **274** | P | **P** | **23 26 25.6** | **+2.4** |
| | comp=Z,62nm,1.2s | | | | | | | |
| **KAPI** | **Kappang** | **23.21** | **272** | P | **P** | **23 26 27.5** | **+1.3** |
| **KAPI** | **Kappang** | **23.21** | **272** | P | **P** | **23 26 26.1** | **-0.1** |
| KAPI | | | | IAmb | IAmb | 23 26 28.7 | | |
| | comp=Z,33nm,0.9s | | | | | | | |
| **WRKA** | **Warakurna** | **23.32** | **216** | P | **P** | **23 26 28.6** | **+1.4** |
| **TOLI2** | **Tolitoli** | **23.43** | **288** | P | **P** | **23 26 28.7** | **+0.4** |
| **TOLI2** | **Tolitoli** | **23.43** | **288** | P | **P** | **23 26 26.6** | **-1.8** |
| TOLI2 | | | | IAmb | IAmb | 23 26 29.8 | | |
| | comp=Z,35nm,1.0s | | | | | | | |
| **LCRK** | **Leigh Creek** | **24.37** | **190** | P | **P** | **23 26 38.9** | **+1.9** |
| **CMSA** | **Cobar Meteorol** | **25.16** | **175** | P | **P** | **23 26 46.8** | **+2.7** |
| **MULG** | **Mulgathing** | **25.24** | **198** | P | **P** | **23 26 46.9** | **+2.1** |
| **ARMA** | **Armidale** | **25.24** | **162** | P | **P** | **23 26 46.6** | **+1.6** |
| ARMA | | | | IAmb | IAmb | 23 27 12.3 | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **STKA** | **Stephens Creek** | **25.41** | **183** | P | **P** | **23 26 48.1** | **+1.8** |
| **STKA** | **Stephens Creek** | **25.41** | **183** | P | **P** | **23 26 45.6** | **-0.8** |
| **STKA** | **Stephens Creek** | **25.41** | **183** | P | **P** | **23 26 46.8** | **+0.4** |
| | comp=Z,6.5nm,0.8s,baz=343,slow=7.6,SNR=6.4 | | | | | | | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **26.93** | **235** | P | **P** | **23 26 59.4** | **-0.9** |
| MBWA | | | | IAmb | IAmb | 23 27 13.4 | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.05** | **234** | P | **P** | **23 27 00.9** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 23 27 04.2 | | |
| | comp=Z,36nm,1.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **27.09** | **193** | P | **P** | **23 27 02.7** | **+1.1** |
| BBOO | | | | IAm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **81.75** | **315** | P | **P** | **23 33 37.0** | **-0.4** |
| **KKAR** | **Karatay Array** | **81.75** | **315** | P | **P** | **23 33 36.7** | **-0.7** |
| **G16K** | **Koyuk River** | **81.90** | **20** | P | **P** | **23 33 38.4** | **+0.8** |
| **QSPA** | **South Pole Qui** | **83.59** | **180** | P | **P** | **23 33 47.2** | **+0.6** |
| QSPA | | | | IAmb | IAmb | 23 33 48.4 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.59** | **180** | P | **P** | **23 33 47.5** | **+0.8** |
| | comp=Z,3.9nm,0.6s,baz=256,slow=0.7,SNR=38 | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **84.77** | **325** | P | **P** | **23 33 53.2** | **+0.6** |
| | comp=Z,27nm,0.8s,baz=112,slow=6.6,SNR=82 | | | | | | |
| | comp=Z,27nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **84.84** | **325** | P | **P** | **23 33 53.4** | **+0.4** |
| **ABKAR** | **Akbulak array** | **90.29** | **319** | P | **P** | **23 34 18.9** | **-0.4** |
| ABKAR | | | | IAmb | IAmb | 23 34 19.2 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **90.29** | **319** | P | **P** | **23 34 18.4** | **-0.9** |
| **ELIB** | **Princess Elisa** | **92.79** | **196** | *dP* | **P** | **23 34 32.0** | **+1.3** |
| | comp=Z,1.6nm,1.1s | | | | | | |
| **DBIC** | **Dimbokro** | **148.11** | **272** | PKPbc | **PKPbc** | **23 41 04.6** | **-0.6** |
| | comp=Z,11nm,1.0s,baz=137,slow=2.2,SNR=6.1 | | | | | | |

*TEH* ***15*** *23:22:03.6,34.˚61N×46.˚26E,h6*$^{km}_{\pm}$*16km,ML3.4*
*ISN* ***15*** *23:22:04.5±0.4,34.˚63N×46.˚26E,h9*$^{km}_{\pm}$*4km,ML3.6*
**ISC 15 23:22:05.3±1.1,34.˚57N±0.˚03×46.˚29E±0.˚03,h8**$^{km}_{\pm}$**9km,**
**n40,σ1=47/48,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **31** | Pg | **Pg** | **23 22 08.2** | **-0.4** |
| **IGHG** | **Ghaleghazi** | **0.33** | **136** | Pg | **Pb** | **23 22 12.5** | **-1.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **215** | Pg | **Pg** | **23 22 15.4** | **-0.6** |
| GLG1 | | | | Sg | **Sg** | **23 22 24.3** | **+1.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.58** | **264** | Pg | **Pg** | **23 22 15.5** | **-1.1** |
| **ILIN** | **Lien** | **0.65** | **58** | Pg | **Pg** | **23 22 17.2** | **-0.7** |
| ILIN | | | | Sg | **Sb** | **23 22 27.3** | **-1.2** |
| **KCHF** | **Cheshme Sefid,** | **0.69** | **115** | Pg | **Pg** | **23 22 18.5** | **-0.1** |
| KCHF | | | | Sg | **Sb** | **23 22 30.1** | **+0.7** |
| **ILBA** | **Ilam Banvizeh** | **0.94** | **184** | Pg | **Pb** | **23 22 23.7** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.14** | **75** | Pg | **Pg** | **23 22 26.7** | **-0.5** |
| SNQR | | | | Sg | **Sn** | **23 22 43.8** | **0.0** |
| **IBZA** | **Bozab** | **1.30** | **94** | Pg | **Pg** | **23 22 30.5** | **+0.2** |
| **IBDR** | **Badra** | **1.49** | **192** | *e*Pn | **Pg** | **23 22 33.7** | **-0.1** |
| IBDR | | | | *e*Sn | **Sg** | **23 22 55.4** | **+2.3** |
| IBDR | | | | AML | AML | 23 22 59.1 | |
| | comp=N,751nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 23 22 59.7 | |
| | comp=E,2μm,0.4s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.66** | **128** | Pg | **Pg** | **23 22 36.2** | **-0.9** |
| **SDS1** | **Sardasht. Az.** | **1.71** | **338** | Pg | **Pn** | **23 22 35.0** | **-0.6** |
| **IKRK** | **Kirkuk** | **1.80** | **298** | *e*Pn | **Pn** | **23 22 37.0** | **+0.2** |
| IKRK | | | | *e*Sn | **Sn** | **23 23 00.5** | **+0.6** |
| IKRK | | | | AML | AML | 23 23 04.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 23 23 04.8 | |
| | comp=E,684nm,0.6s | | | | | | |
| **HSAM** | **Samen** | **1.94** | **100** | Pn | **Pb** | **23 22 40.5** | **-0.6** |
| **BHD** | **Baghdad** | **2.05** | **231** | *e*Pn | **Pn** | **23 22 41.0** | **+0.9** |
| BHD | | | | *e*Sn | **Sb** | **23 23 08.0** | **-0.5** |
| BHD | | | | AML | AML | 23 23 28.8 | |
| | comp=E,471nm,0.4s | | | | | | |
| **MAHB** | **Mahabad** | **2.24** | **348** | Pn | **Pn** | **23 22 43.5** | **+0.5** |
| **HAGD** | **Aghdareh** | **2.36** | **83** | Pn | **Pb** | **23 22 46.7** | **-1.6** |
| **RAFI** | **Al-Rafai** | **2.84** | **183** | *e*Pn | **Pn** | **23 22 53.0** | **+2.0** |
| RAFI | | | | *e*Sn | **Sn** | **23 23 28.0** | **+2.5** |
| RAFI | | | | AML | AML | 23 23 50.4 | |
| | comp=E,183nm,0.6s | | | | | | |
| RAFI | | | | AML | AML | 23 23 56.9 | |
| | comp=N,199nm,0.4s | | | | | | |
| **IAZR** | **Azarshahr** | **3.11** | **355** | Pn | **Pn** | **23 22 56.2** | **+1.2** |
| **ISRB** | **Sarab** | **3.43** | **18** | Pn | **Pn** | **23 23 00.6** | **+1.3** |
| **ISHB** | **Shabestar** | **3.75** | **352** | Pn | **Pn** | **23 23 04.3** | **+0.6** |
| **IHRS** | **Heris** | **3.79** | **9** | Pn | **Pn** | **23 23 05.5** | **+1.2** |
| **IPIR** | **Pirpir** | **4.27** | **115** | Pn | **Pn** | **23 23 12.2** | **+1.2** |
| **QAMS** | **Qamsar** | **4.31** | **100** | Pn | **Pn** | **23 23 13.2** | **+1.7** |
| **JHBN** | **Jahan bin** | **4.34** | **121** | Pn | **Pn** | **23 23 13.6** | **+1.7** |
| **GRMI** | **Germi** | **4.42** | **16** | Pn | **Pn** | **23 23 14.5** | **+1.6** |
| **IVRN** | **Varamin** | **4.49** | **83** | Pn | **Pn** | **23 23 16.1** | **+2.2** |
| **ISFB** | **Sefidab** | **4.92** | **91** | Pn | **Pn** | **23 23 20.9** | **+1.2** |
| **IBRJ** | **Brojen** | **4.94** | **121** | Pn | **Pn** | **23 23 22.1** | **+2.0** |
| **KLNJ** | **Kolanjah** | **5.70** | **127** | Pn | **Pn** | **23 23 32.4** | **+1.6** |
| **GNI** | **Garni** | **5.71** | **348** | Pb | **Pb** | **23 23 47.9** | **+2.7** |
| **IRAM** | **Ramesheh** | **5.80** | **117** | Pn | **Pn** | **23 23 33.4** | **+1.5** |
| **RAYN** | **Ar Rayn** | **11.03** | **184** | Pn | **Pn** | **23 24 40.4** | **-3.1** |
| **NAZ** | **Nazwa, Dubai** | **12.54** | **137** | Pn | **Pn** | **23 25 03.2** | **-0.9** |
| **MSFE** | **Esma-Masafi** | **12.54** | **134** | Pn | **Pn** | **23 25 03.0** | **-1.1** |
| **UOSS** | **Minazif** | **12.88** | **135** | Pn | **Pn** | **23 25 06.4** | **-2.4** |
| **HATD** | **Hatta, Dubai** | **12.93** | **136** | Pn | **Pn** | **23 25 07.8** | **-1.7** |
| **ASHO** | **Ashiyiah** | **13.00** | **137** | Pn | **Pn** | **23 25 08.9** | **-1.5** |
| **MZR** | **Muzera** | **13.13** | **149** | Pn | **Pn** | **23 25 10.3** | **-1.9** |
| MZR | | | | Sn | Sn | 23 27 28.2 | -10 |
| **ALNE** | **Al Ain** | **13.33** | **139** | Pn | **Pn** | **23 25 13.2** | **-1.7** |

*AEIC* ***15*** *23:31:43.3±1.8,69.˚52N±0.˚05×144.˚87W±0.˚08,h8*$^{km}_{\pm}$*6km,*
*ML3.6,ML3.7/90(NEIC),Error ellipse: s-maj=7.9km*
*s-min=4.2km az=184.0*
*NEIC* ***15*** *23:31:44.0±1.4,69.˚65N±0.˚06×144.˚81W±0.˚08,h10*$^{km}_{\pm}$*2km,*
*Error ellipse: s-maj=10.1km s-min=4.5km az=8.0*
*IDC* ***15*** *23:31:44.5±0.8,69.˚69N×144.˚45W,h0*$^{km}$*,mb3.7/11,*
*mbtmp3.7/15,ML3.7/4,Error ellipse: s-maj=18.9km*
*s-min=12.4km az=51.0*
**ISC 15 23:31:44.0±1.2,69.˚56N±0.˚03×144.˚84W±0.˚03,h2**$^{km}_{\pm}$**9km,**
**n85,σ1=100/94,mb3.8/11,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.36** | **356** | | **Pg** | **23 31 51.1** | **+0.2** |
| C26K | | | | | **Sg** | **23 31 56.3** | **+0.8** |
| **C27K** | **Jago River** | **0.40** | **80** | | **Pg** | **23 31 51.8** | **+0.1** |
| C27K | | | | | **Sg** | **23 31 57.5** | **+0.6** |
| C27K | | | | IAML | | 23 31 59.5 | |
| | comp=E,7μm,0.3s | | | | | | |
| C27K | | | | IAML | | 23 32 00.4 | |
| | comp=N,6μm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.59** | **247** | | **Pg** | **23 31 54.2** | **-1.2** |
| D25K | | | | | **Sg** | **23 32 02.3** | **-0.8** |
| **C24K** | **Franklin Bluff** | **1.36** | **278** | | **Pn** | **23 32 09.2** | **-0.9** |
| C24K | | | | | **Sg** | **23 32 28.2** | **+0.5** |
| C24K | | | | IAML | | 23 32 29.8 | |
| | comp=N,1μm,0.9s | | | | | | |
| C24K | | | | IAML | | 23 32 31.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.41** | **101** | | **Pn** | **23 32 08.8** | **-2.0** |
| D27M | | | | | **Sb** | **23 32 29.7** | **+0.3** |
| D27M | | | | IAML | | 23 32 34.7 | |
| | comp=E,1μm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.47** | **256** | | **Pn** | **23 32 10.3** | **-1.2** |
| D24K | | | | | **Sg** | **23 32 31.8** | **+0.5** |
| D24K | | | | IAML | | 23 32 43.5 | |
| | comp=N,1μm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.81** | **138** | | **Pn** | **23 32 16.4** | **+0.1** |
| E27K | | | | | **Sb** | **23 32 41.1** | **0.0** |
| E27K | | | | IAML | | 23 32 47.8 | |
| | comp=N,890nm,0.8s | | | | | | |
| E27K | | | | IAML | | 23 32 50.0 | |
| | comp=E,820nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.89** | **172** | | **Pn** | **23 32 17.9** | **+0.5** |
| F26K | | | | | **Sb** | **23 32 43.8** | **+0.3** |
| F26K | | | | IAML | | 23 32 45.9 | |
| | comp=N,495nm,0.6s | | | | | | |
| F26K | | | | IAML | | 23 32 50.2 | |
| | comp=E,783nm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.94** | **244** | Pn | **Pn** | **23 32 17.6** | **-0.3** |
| TOLK | | | | IAML | | 23 32 48.3 | |
| | comp=E,530nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.00** | **223** | | **Pn** | **23 32 19.2** | **+0.4** |
| **F25K** | **Christian Rive** | **2.00** | **189** | | **Pn** | **23 32 18.9** | **0.0** |
| F25K | | | | | **Sb** | **23 32 46.8** | **+0.3** |
| F25K | | | | IAML | | 23 32 49.9 | |
| | comp=N,454nm,0.8s | | | | | | |
| F25K | | | | IAML | | 23 32 53.0 | |
| | comp=E,642nm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **2.13** | **114** | | **Pn** | **23 32 20.7** | **+0.1** |
| E28M | | | | IAML | | 23 32 56.2 | |
| | comp=N,601nm,0.7s | | | | | | |
| E28M | | | | IAML | | 23 32 58.9 | |
| | comp=E,449nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.15** | **177** | | **Pn** | **23 32 21.1** | **+0.2** |
| **D23K** | **Nanushuk River** | **2.17** | **257** | | **Pn** | **23 32 21.0** | **-0.1** |
| D23K | | | | IAML | | 23 33 05.6 | |
| | comp=N,367nm,1.3s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **D28M** | **Stokes Point** | **2.17** | **93** | | **Pn** | **23 32 20.9** | **-0.2** |
| **E23K** | **Chandalar** | **2.30** | **231** | | **Pn** | **23 32 23.4** | **+0.3** |
| **F24K** | **Squaw Lake** | **2.34** | **210** | | **Pn** | **23 32 23.8** | **+0.2** |
| **G26K** | **Porcupine Rive** | **2.66** | **171** | | **Pn** | **23 32 28.2** | **+0.4** |
| **F28M** | **Old Crow** | **2.67** | **135** | | **Pn** | **23 32 27.9** | **-0.2** |
| F28M | | | | IAML | | 23 33 16.1 | |
| | comp=E,389nm,1.2s | | | | | | |
| **E29M** | **Blow River** | **2.77** | **112** | Pn | **Pn** | **23 32 30.2** | **+0.9** |
| **G25K** | **Bearman Lake** | **2.85** | **190** | | **Pn** | **23 32 30.6** | **+0.1** |
| **D22K** | **Ayikyak River** | **2.88** | **260** | | **Pn** | **23 32 31.2** | **+0.3** |
| **G27K** | **Doyon Strip** | **3.01** | **155** | | **Pn** | **23 32 32.2** | **-0.6** |
| **FYU** | **Fort Yukon** | **3.02** | **183** | | **Pn** | **23 32 32.7** | **-0.1** |
| FYU | | | | IAML | | 23 33 29.4 | |
| | comp=E,313nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.04** | **200** | Pn | **Pn** | **23 32 32.4** | **-0.7** |
| **COLD** | **Coldfoot** | **3.07** | **223** | | **Pn** | **23 32 32.9** | **-0.7** |
| **H25L** | **Birch Creek** | **3.33** | **187** | | **Pn** | **23 32 37.2** | **+0.1** |
| **F22K** | **John River** | **3.40** | **236** | | **Pn** | **23 32 38.0** | **0.0** |
| **B21K** | **Ikpikpuk River** | **3.43** | **276** | Pn | **Pn** | **23 32 37.5** | **-0.9** |
| B21K | | | | IAML | | 23 33 46.6 | |
| | comp=E,181nm,1.2s | | | | | | |
| **G29M** | **Pine Creek** | **3.68** | **133** | Pn | **Pn** | **23 32 41.6** | **-0.3** |
| **F30M** | **Barrier River** | **3.85** | **116** | | **Pn** | **23 32 45.0** | **+0.7** |
| **H24K** | **Noodor Dome** | **3.92** | **199** | | **Pn** | **23 32 44.6** | **-0.6** |
| H24K | | | | IAML | | 23 33 59.7 | |
| | comp=N,88nm,0.7s | | | | | | |
| H24K | | | | IAML | | 23 34 01.7 | |
| | comp=E,112nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **3.97** | **238** | Pn | **Pn** | **23 32 45.2** | **-0.7** |
| F21K | | | | IAML | | 23 33 57.3 | |
| | comp=N,79nm,0.7s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.12** | **125** | Pn | **Pn** | **23 32 46.9** | **-1.1** |
| G30M | | | | IAML | | 23 34 05.3 | |
| | comp=E,118nm,1.0s | | | | | | |
| G30M | | | | IAML | | 23 34 12.2 | |
| | comp=N,115nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.15** | **141** | Pn | **Pn** | **23 32 48.6** | **+0.2** |
| **H23K** | **Yukon River** | **4.16** | **208** | Pn | **Pn** | **23 32 48.5** | **0.0** |
| H23K | | | | IAML | | 23 33 58.2 | |
| | comp=N,104nm,0.7s | | | | | | |
| H23K | | | | IAML | | 23 34 02.1 | |
| | comp=E,96nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **4.27** | **102** | Pn | **Pn** | **23 32 48.8** | **-1.2** |
| | comp=E,3.0nm,0.3s,baz=306,slow=8.7,SNR=9.9 | | | | | | |
| INK | | | | Sn | **Sn** | **23 33 36.5** | **-3.8** |
| | comp=E,4.1nm,0.3s,baz=280,slow=14,SNR=4.8 | | | | | | |
| INK | | | | Lg | Lg | 23 33 58.1 | |
| | comp=E,4.9nm,0.3s,baz=324,slow=12,SNR=4.2 | | | | | | |
| | comp=E,5.9nm,0.3s | | | | | | |
| **B20K** | **Meade River** | **4.30** | **282** | Pn | **Pn** | **23 32 49.6** | **-0.8** |
| **H22K** | **Ishtalitna Cre** | **4.45** | **217** | | **Pn** | **23 32 52.7** | **+0.3** |
| **G21K** | **Allakaket** | **4.47** | **231** | | **Pn** | **23 32 52.0** | **-0.6** |
| G21K | | | | IAML | | 23 34 20.1 | |
| | comp=N,66nm,0.6s | | | | | | |
| G21K | | | | IAML | | 23 34 20.1 | |
| | comp=E,72nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **4.54** | **153** | Pn | **Pn** | **23 32 54.0** | **+0.2** |
| I28M | | | | IAML | | 23 34 15.4 | |
| | comp=E,89nm,1.3s | | | | | | |
| I28M | | | | IAML | | 23 34 18.4 | |
| | comp=N,90nm,0.6s | | | | | | |
| **POKR** | **Poker Flat Res** | **4.58** | **194** | | **Pn** | **23 32 54.1** | **-0.1** |
| POKR | | | | IAML | | 23 34 14.6 | |
| | comp=N,56nm,0.9s | | | | | | |
| POKR | | | | IAML | | 23 34 19.9 | |
| | comp=E,65nm,1.1s | | | | | | |
| **G31M** | **Satah River** | **4.74** | **119** | Pn | **Pn** | **23 32 56.1** | **-0.3** |
| **F20K** | **Avaraart Lake** | **4.76** | **243** | | **Pn** | **23 32 57.2** | **+0.4** |
| **I23K** | **Minto, Yukon-K** | **4.77** | **204** | | **Pn** | **23 32 56.7** | **-0.1** |
| I23K | | | | IAML | | 23 34 20.8 | |
| | comp=N,55nm,1.3s | | | | | | |
| I23K | | | | IAML | | 23 34 33.6 | |
| | comp=E,67nm,1.5s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **197** | | **Pn** | **23 32 57.2** | **-0.2** |
| MDM | | | | IAML | | 23 34 20.4 | |
| | comp=E,63nm,0.7s | | | | | | |
| MDM | | | | IAML | | 23 34 27.1 | |
| | comp=N,51nm,0.8s | | | | | | |
| **IL31** | | **4.88** | **190** | | **Pn** | **23 32 57.1** | **-1.2** |
| **ILAR** | **Eielson Array** | **4.88** | **190** | | **Pn** | **23 32 57.5** | **-0.9** |
| **ILAR** | **Eielson Array** | **4.88** | **190** | Pn | **Pn** | **23 32 58.4** | **0.0** |
| | comp=N,1.2nm,0.3s,baz=5.1,slow=14,SNR=37 | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 33 54.3** | **-1.0** |
| | comp=N,2.8nm,0.3s,baz=9.4,slow=23,SNR=8.0 | | | | | | |
| ILAR | | | | Lg | Lg | 23 34 15.3 | |
| | comp=N,2.3nm,0.3s,baz=7.2,slow=27,SNR=4.5 | | | | | | |
| | comp=N,4.3nm,0.6s | | | | | | |
| **D19K** | **Kuna River** | **4.89** | **264** | | **Pn** | **23 32 58.0** | **-0.5** |
| D19K | | | | IAML | | 23 34 35.4 | |
| | comp=E,49nm,1.6s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.93** | **228** | | **Pn** | **23 32 58.2** | **-0.9** |
| **H21K** | **Melozitna Rive** | **4.96** | **222** | Pn | **Pn** | **23 32 59.4** | **-0.2** |
| H21K | | | | IAML | | 23 34 26.9 | |
| | comp=E,48nm,1.0s | | | | | | |
| H21K | | | | IAML | | 23 34 26.9 | |
| | comp=N,42nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **4.98** | **183** | | **Pn** | **23 33 00.1** | **+0.3** |
| J25K | | | | IAML | | 23 34 31.3 | |
| | comp=E,57nm,0.7s | | | | | | |
| **EGAK** | **Eagle** | **5.01** | **162** | Pn | **Pn** | **23 33 00.0** | **-0.2** |
| EGAK | | | | IAML | | 23 34 47.1 | |
| | comp=E,66nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **5.02** | **251** | Pn | **Pn** | **23 32 59.4** | **-0.9** |
| E19K | | | | IAML | | 23 34 46.8 | |
| | comp=N,53nm,1.1s | | | | | | |
| E19K | | | | IAML | | 23 34 52.0 | |
| | comp=E,47nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **195** | | **Pn** | **23 33 00.4** | **-0.6** |
| **MLY** | **Manley** | **5.09** | **209** | | **Pn** | **23 33 01.1** | **-0.2** |
| MLY | | | | IAML | | 23 34 38.7 | |
| | comp=E,38nm,1.7s | | | | | | |
| **HDA** | **Harding Lake** | **5.24** | **190** | | **Pn** | **23 33 02.1** | **-1.3** |
| HDA | | | | IAML | | 23 34 36.5 | |
| | comp=N,49nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.24** | **272** | Pn | **Pn** | **23 33 02.4** | **-1.0** |
| C19K | | | | IAML | | 23 34 53.2 | |
| | comp=E,49nm,2.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.44** | **139** | Pn | **Pn** | **23 33 05.6** | **-0.6** |
| **F19K** | **Shaleruckik Mo** | **5.54** | **247** | Pn | **Pn** | **23 33 06.9** | **-0.5** |
| **H20K** | **Anotleneega Mo** | **5.61** | **228** | | **Pn** | **23 33 08.1** | **-0.4** |
| **SCRK** | **Sand Creek** | **5.62** | **176** | | **Pn** | **23 33 08.8** | **+0.1** |
| **G19K** | **Purcell Mounta** | **5.76** | **239** | Pn | **Pn** | **23 33 08.8** | **-1.7** |
| **K24K** | **Donnelly Dome** | **5.80** | **184** | | **Pn** | **23 33 10.5** | **-0.5** |
| **DOT** | **Dot Lake** | **5.95** | **177** | | **Pn** | **23 33 12.5** | **-0.6** |
| **B18K** | **Kokolik River** | **5.97** | **276** | | **Pn** | **23 33 12.9** | **-0.4** |
| **F18K** | **Selawik** | **6.29** | **249** | | **Pn** | **23 33 17.2** | **-0.4** |
| **A36M** | **Sachs Harbour** | **6.89** | **60** | Pn | **Pn** | **23 33 24.2** | **-1.8** |
| **C36M** | **Paulatuk** | **7.30** | **82** | Pn | **Pn** | **23 33 28.4** | **-3.0** |
| **MMPY** | **Sheldon Lake,** | **8.86** | **135** | Pn | **Pn** | **23 33 52.9** | **-0.1** |
| **DLBC** | **Dease Lake** | **12.86** | **143** | Pn | **Pn** | **23 34 45.1** | **-2.5** |
| | comp=E,0.2nm,0.3s,baz=31,slow=17,SNR=4.2 | | | | | | |
| DLBC | | | | Sn | Sn | 23 36 60.0 | -11 |
| | comp=E,0.1nm,0.3s,baz=121,slow=15,SNR=1.5 | | | | | | |
| | comp=E,0.7nm,0.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.03** | **105** | Pn | Pn | 23 34 58.0 | -5.6 |
| **YKA** | **Yellowknife Ar** | **14.03** | **105** | Pn | Pn | 23 34 57.5 | -6.1 |
| | comp=E,0.7nm,0.3s,baz=26,slow=11,SNR=14 | | | | | | |
| YKA | | | | Sn | Sn | 23 37 20.0 | -20 |
| | comp=E,0.1nm,0.3s,baz=158,slow=9.9,SNR=2.9 | | | | | | |
| | comp=E,3.0nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.37** | **127** | P | **P** | **23 38 15.9** | **+1.1** |
| | comp=E,1.2nm,0.6s,baz=8.2,slow=5.3,SNR=12 | | | | | | |
| | comp=E,1.2nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.27** | **141** | P | **P** | **23 38 34.0** | **+2.5** |
| | comp=E,0.3nm,0.3s,baz=314,slow=9.6,SNR=4.1 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.00** | **5** | P | **P** | **23 39 28.4** | **+0.6** |
| | comp=E,2.6nm,0.8s,baz=343,slow=5.9,SNR=3.0 | | | | | | |
| | comp=E,2.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.59** | **128** | P | **P** | **23 40 13.1** | **-0.1** |
| | comp=E,0.4nm,0.8s,baz=320,slow=5.7,SNR=4.4 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **49.12** | **6** | P | **P** | **23 40 30.4** | **-1.9** |
| | comp=E,0.6nm,0.7s,baz=359,slow=7.8,SNR=5.3 | | | | | | |
| | comp=E,0.6nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **49.69** | **14** | P | **P** | **23 40 34.8** | **-1.9** |
| | comp=E,0.7nm,0.4s,baz=319,slow=4.3,SNR=11 | | | | | | |
| | comp=E,0.7nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.76** | **273** | P | **P** | **23 40 54.1** | **+1.4** |
| | comp=E,1.1nm,0.7s,baz=30,slow=5.7,SNR=2.8 | | | | | | |
| | comp=E,1.1nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **51.99** | **306** | P | **P** | **23 40 55.6** | **+1.2** |
| | comp=E,0.7nm,0.9s,baz=36,slow=6.1,SNR=3.9 | | | | | | |
| | comp=E,0.7nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.34** | **27** | P | **P** | **23 40 55.4** | **-1.3** |
| | comp=E,0.8nm,0.7s,baz=348,slow=7.4,SNR=1.9 | | | | | | |
| | comp=E,0.8nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **55.05** | **335** | P | **P** | **23 41 18.6** | **+2.0** |
| | comp=E,0.3nm,0.4s,baz=29,slow=3.3,SNR=2.9 | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.01** | **328** | P | **P** | **23 41 24.5** | **+1.1** |
| | comp=E,0.6nm,0.6s,baz=11,slow=6.5,SNR=5.0 | | | | | | |
| | comp=E,0.6nm,0.6s | | | | | | |

*IDC* ***15*** *23:40:53.3±3.8,1.˚31N×127.˚30E,h146*$^{km}_{\pm}$*36km,mb3.2/6,*
*mbtmp3.6/6,Error ellipse: s-maj=125.3km s-min=14.9km*
*az=67.0*
**ISC 15 23:40:51.4±1.2,1.˚4N±0.˚1×127.˚4E±0.˚1,h128**$^{km}_{\pm}$**,n7,**
**σ0=66/8,mb3.5/6,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **9.91** | **230** | S | **Sn** | **23 45 00.1** | **-0.1** |
| | 7.7nm,0.4s,baz=59,slow=22,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.23** | **163** | P | **P** | **23 45 37.9** | **+0.1** |
| | 0.7nm,0.3s,baz=344,slow=11,SNR=37 | | | | | | |
| WRA | | | | S | **S** | **23 49 33.1** | **-0.7** |
| | 0.3nm,0.6s,baz=326,slow=20,SNR=5.2 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **25.66** | **166** | P | **P** | **23 46 09.8** | **+0.3** |
| | 0.3nm,0.5s,baz=347,slow=7.0,SNR=6.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.69** | **159** | P | **P** | **23 47 37.0** | **-0.5** |
| | 2.7nm,1.0s,baz=329,slow=18,SNR=1.5 | | | | | | |
| | 2.7nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.88** | **326** | P | **P** | **23 50 43.7** | **0.0** |
| | 0.4nm,0.4s,baz=119,slow=6.7,SNR=6.0 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.09** | **328** | P | **P** | **23 51 11.2** | **-0.5** |
| | 0.3nm,0.4s,baz=121,slow=5.1,SNR=2.3 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **VNDA** | **Vanda** | **81.00** | **173** | P | **P** | **23 52 52.4** | **+1.0** |
| | 0.1nm,0.4s,baz=318,slow=4.1,SNR=1.3 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*NEIC* ***15*** *23:52:05.8±1.3,51.˚20N±0.˚07×177.˚87W±0.˚03,*
*h30*$^{km}_{\pm}$*12km,mb3.8/12,ML3.5(AEIC),Error ellipse:*
*s-maj=10.5km s-min=2.9km az=180.0*
*AEIC* ***15*** *23:52:05.2±1.5,51.˚15N±0.˚05×177.˚90W±0.˚05,h26*$^{km}_{\pm}$*7km,*
*Error ellipse: s-maj=7.0km s-min=4.3km az=168.0*
**ISC 15 23:52:04.8±1.9,51.˚14N±0.˚09×177.˚89W±0.˚04,**
**h25**$^{km}_{\pm}$**13km,n32,σ0=70/39,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAPA** | **Tanaga Point A** | **0.68** | **4** | | **Pb** | **23 52 18.4** | **+0.4** |
| **TASE** | **Tanaga Southea** | **0.70** | **353** | | **Pb** | **23 52 18.9** | **+0.5** |
| **KIMD** | **Kanaga Island** | **0.74** | **33** | | **Pb** | **23 52 19.2** | **+0.1** |
| KIMD | | | | | **Sn** | **23 52 29.6** | **-0.6** |
| **TAFP** | **Tanaga Falls P** | **0.76** | **356** | | **Pb** | **23 52 19.6** | **+0.2** |
| TAFP | | | | | **Sb** | **23 52 29.2** | **-0.1** |
| **TANO** | **Tanaga North** | **0.79** | **350** | | **Pn** | **23 52 20.3** | **0.0** |
| TANO | | | | | **Sn** | **23 52 31.2** | **-0.1** |
| **GAEA** | **Gareloi East** | **0.83** | **321** | | **Pb** | **23 52 20.9** | **+0.3** |
| **KIWB** | **Kanaga Island** | **0.85** | **33** | | **Pb** | **23 52 20.5** | **-0.4** |
| KIWB | | | | Sn | **Sb** | **23 52 31.5** | **-0.3** |
| **GASW** | **Gareloi Southw** | **0.88** | **317** | | **Pn** | **23 52 21.4** | **-0.1** |
| **GANO** | **Gareloi North** | **0.89** | **320** | | **Pn** | **23 52 21.4** | **-0.3** |
| GANO | | | | | **Sb** | **23 52 32.8** | **-0.1** |
| **KICM** | **Kanaga Island** | **0.89** | **29** | | **Pn** | **23 52 21.7** | **0.0** |
| **KIRH** | **Kanaga Island** | **0.91** | **33** | | **Pn** | **23 52 21.9** | **-0.1** |
| **ADK** | **Adak** | **1.06** | **45** | | **Pn** | **23 52 23.1** | **-0.9** |
| **ADK** | **Adak** | **1.06** | **45** | | **Sn** | **23 52 36.8** | **-1.1** |
| **GSCK** | **Great Sitkin C** | **1.39** | **50** | | **Pn** | **23 52 28.6** | **+0.1** |
| **GSTD** | **Great Sitkin T** | **1.42** | **49** | | **Pn** | **23 52 29.4** | **+0.3** |
| GSTD | | | | | **Sn** | **23 52 46.5** | **-0.5** |
| **GSTR** | **Great Sitkin T** | **1.49** | **49** | | **Pn** | **23 52 29.8** | **-0.1** |
| **AMKA** | **Amchitka** | **1.78** | **279** | | **Pn** | **23 52 32.9** | **-1.0** |
| AMKA | | | | | **Sn** | **23 52 56.2** | **+0.5** |
| **KOKL** | **Mount Kliuchef** | **2.58** | **61** | | **Pn** | **23 52 46.4** | **+1.4** |
| **KOFP** | **Korovin Flat P** | **2.62** | **63** | | **Pn** | **23 52 46.3** | **+0.8** |
| **CNBA** | **Chernabura Isl** | **11.62** | **64** | Pn | **Pn** | **23 54 47.9** | **-1.0** |
| **OHAK** | **Old Harbor** | **15.58** | **57** | Pn | **Pn** | **23 55 43.2** | **+0.7** |
| OHAK | | | | IAmb

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BRGM** | **Braggadocio** | **0.66** | **35** | | | Pb | 23 54 27.4 | +0.1 |
| **EDIT** | **Edith** | **0.66** | **72** | | | Pb | 23 54 27.4 | 0.0 |
| **CWPT** | **Cottonwood Poi** | **0.67** | **59** | | | Pb | 23 54 27.3 | -0.1 |
| **LCAR** | **Lake Charles** | **0.78** | **301** | | | Pb | 23 54 28.6 | -0.8 |
| LCAR | | | | | | Sb | 23 54 39.0 | -0.6 |
| **LNXT** | **Lenox** | **0.81** | **57** | | | Pb | 23 54 29.7 | -0.1 |
| LNXT | | | | | | Sb | 23 54 40.8 | +0.5 |
| LNXT | | | | | IAML | | 23 54 46.7 | |
| | comp=E,76nm,0.7s | | | | | | | |
| **HALT** | **Halls** | **0.84** | **73** | | | Pb | 23 54 29.7 | -0.7 |
| HALT | | | | | | Sn | 23 54 42.0 | -0.4 |
| HALT | | | | | IAML | | 23 54 50.9 | |
| | comp=N,30nm,0.5s | | | | | | | |
| HALT | | | | | IAML | | 23 55 00.6 | |
| | comp=E,30nm,0.5s | | | | | | | |
| **HICK** | **Hickman** | **1.25** | **45** | Pn | Pn | | 23 54 35.4 | -1.0 |
| **FCAR** | **Ozark Folk Cen** | **1.48** | **279** | | | Pn | 23 54 39.5 | 0.0 |
| **T42A** | **Van Buren** | **1.50** | **336** | Pn | Pn | | 23 54 39.5 | -0.3 |
| **PLAL** | **Pickwick Lake** | **1.96** | **110** | Pn | Pn | | 23 54 46.1 | -0.1 |

*AEIC **16** 00:04:07.5±0.8, 63°.10N±0°.03×148°.63W±0°.08, h77km±4km, ML3.3, ML3.4/230(NEIC), Error ellipse: s-maj=5.0km s-min=4.3km az=77.0*
*NEIC **16** 00:04:07.5±0.7, 63°.10N±0°.03×148°.61W±0°.07, h79km±4km, Error ellipse: s-maj=4.6km s-min=4.2km az=100.0*
*IDC **16** 00:04:10.4±3.9, 63°.36N×148°.52W, h103km±26km, mb3.3/3, mbtmp3.6/4, MS4.2/1, Error ellipse: s-maj=39.6km s-min=22.6km az=25.0*
**ISC 16 00:04:07.2**±0.8, **63°.11N**±0°.03×**148°.64W**±0°.03, **h80**km±6km, **n205**, σ0°.65/204, **mb3.9/3**, **Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WAT1** | **Susitna Watana** | **0.28** | **172** | | **Pn** | | **00 04 19.3** | **-0.2** |
| WAT1 | | | | | **Sn** | | **00 04 28.4** | **-0.1** |
| **WAT7** | **Susitna Watana** | **0.29** | **199** | | **Pn** | | **00 04 19.5** | **-0.1** |
| WAT7 | | | | | **Sn** | | **00 04 28.5** | **-0.2** |
| **RND** | **Reindeer** | **0.31** | **342** | Pn | **Pn** | | **00 04 20.1** | **+0.4** |
| RND | | | | Sn | **Sn** | | **00 04 28.4** | **-0.6** |
| RND | | | | IAML | | | 00 04 29.8 | |
| | comp=E,3μm,0.5s | | | | | | | |
| RND | | | | IAML | | | 00 04 31.7 | |
| | comp=N,2μm,0.2s | | | | | | | |
| **DHY** | **Denali Highway** | **0.57** | **93** | Pn | **Pn** | | **00 04 21.9** | **+0.1** |
| DHY | | | | Sn | **Sn** | | **00 04 32.7** | **+0.1** |
| DHY | | | | IAML | | | 00 04 33.4 | |
| | comp=N,2μm,0.2s | | | | | | | |
| DHY | | | | IAML | | | 00 04 34.9 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **MCK** | **McKinley** | **0.64** | **348** | | **Pn** | | **00 04 22.8** | **+0.5** |
| **MCK** | **McKinley** | **0.64** | **348** | | **Sn** | | **00 04 34.2** | **+0.7** |
| **WAT6** | **Susitna Watana** | **0.67** | **142** | | **Pn** | | **00 04 22.6** | **-0.2** |
| **CUT** | **Chulitna** | **1.03** | **227** | | **Pn** | | **00 04 26.7** | **+0.1** |
| CUT | | | | Sn | **Sn** | | **00 04 41.7** | **+0.6** |
| **BWN** | **Browne** | **1.13** | **341** | | **Pn** | | **00 04 28.1** | **+0.3** |
| BWN | | | | IAML | | | 00 04 44.6 | |
| | comp=N,1μm,0.5s | | | | | | | |
| BWN | | | | IAML | | | 00 04 46.4 | |
| | comp=E,828nm,0.3s | | | | | | | |
| **SML** | **Sawmill** | **1.31** | **174** | | **Pn** | | **00 04 30.3** | **+0.1** |
| SML | | | | | **Sn** | | **00 04 47.9** | **+0.4** |
| **GHO** | **Glory Hole Cre** | **1.35** | **186** | | **Pn** | | **00 04 30.9** | **+0.2** |
| **M23K** | **Glacier View** | **1.39** | **162** | | **Pn** | | **00 04 31.1** | **+0.1** |
| **WRH** | **Wood River Hil** | **1.39** | **10** | | **Pn** | | **00 04 31.2** | **+0.2** |
| WRH | | | | | **Sn** | | **00 04 48.5** | **-0.5** |
| WRH | | | | IAML | | | 00 04 52.0 | |
| | comp=E,370nm,0.4s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.42** | **154** | | **Pn** | | **00 04 31.7** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **1.45** | **314** | Pn | **Pn** | | **00 04 32.0** | **+0.2** |
| BPAW | | | | IAML | | | 00 04 50.5 | |
| | comp=N,403nm,0.5s | | | | | | | |
| BPAW | | | | IAML | | | 00 04 50.9 | |
| | comp=E,406nm,0.4s | | | | | | | |
| **PAX** | **Paxson** | **1.45** | **94** | | **Pn** | | **00 04 32.5** | **+0.6** |
| **PAX** | **Paxson** | **1.45** | **94** | | **Sn** | | **00 04 51.6** | **+1.0** |
| **K24K** | **Donnelly Dome** | **1.46** | **60** | | **Pn** | | **00 04 33.4** | **+1.3** |
| **NEA2** | **Nenana** | **1.50** | **353** | | **Pn** | | **00 04 32.6** | **+0.1** |
| NEA2 | | | | IAML | | | 00 04 52.0 | |
| | comp=N,615nm,0.5s | | | | | | | |
| **HDA** | **Harding Lake** | **1.50** | **29** | Pn | **Pn** | | **00 04 32.9** | **+0.4** |
| HDA | | | | | **Sn** | | **00 04 51.2** | **-0.5** |
| HDA | | | | IAML | | | 00 04 52.4 | |
| | comp=E,817nm,0.3s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **1.52** | **130** | Pn | **Pn** | | **00 04 33.8** | **+1.0** |
| **M22K** | **Willow** | **1.53** | **208** | Pn | **Pn** | | **00 04 32.9** | **+0.1** |
| **PMR** | **Palmer** | **1.54** | **189** | P | **Pn** | | **00 04 33.7** | **+0.7** |
| **PMR** | **Palmer** | **1.54** | **189** | Pn | **Pn** | | **00 04 33.3** | **+0.3** |
| PMR | | | | IAML | | | 00 04 54.6 | |
| | comp=E,639nm,0.8s | | | | | | | |
| PMR | | | | IAML | | | 00 04 55.4 | |
| | comp=N,511nm,0.5s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **1.59** | **13** | Pn | **Pn** | | **00 04 33.7** | **+0.1** |
| CCB | | | | IAML | | | 00 04 55.7 | |
| | comp=E,345nm,0.3s | | | | | | | |
| **KNK** | **Knik Glacier** | **1.71** | **177** | | **Pn** | | **00 04 35.8** | **+0.6** |
| **SKT** | **Skwentna** | **1.76** | **231** | Pn | **Pn** | | **00 04 36.1** | **+0.3** |
| SKT | | | | IAML | | | 00 05 03.9 | |
| | comp=E,501nm,0.3s | | | | | | | |
| **COLA** | **College** | **1.81** | **11** | P | **Pn** | | **00 04 36.7** | **+0.3** |
| **COLA** | **College** | **1.81** | **11** | | **Pn** | | **00 04 36.8** | **+0.3** |
| **IL31** | | **1.84** | **24** | | **Pn** | | **00 04 37.2** | **+0.3** |
| **ILAR** | **Eielson Array** | **1.84** | **24** | | **Pn** | | **00 04 37.1** | **+0.2** |
| **ILAR** | **Eielson Array** | **1.84** | **24** | P | **Pn** | | **00 04 36.6** | **-0.3** |
| | comp=E,108nm,0.3s,baz=204,slow=14,SNR=1412 | | | | | | | |
| ILAR | | | | S | **Sn** | | **00 04 58.9** | **-0.6** |
| | comp=E,44nm,0.3s,baz=210,slow=22,SNR=49 | | | | | | | |
| **MDM** | **Murphy Dome** | **1.86** | **5** | | **Pn** | | **00 04 37.7** | **+0.4** |
| MDM | | | | IAML | | | 00 05 00.4 | |
| | comp=E,265nm,0.9s | | | | | | | |
| MDM | | | | IAML | | | 00 05 00.9 | |
| | comp=N,241nm,0.9s | | | | | | | |
| **SUA** | **Susitna One** | **1.93** | **212** | Pn | **Pn** | | **00 04 39.0** | **+0.9** |
| SUA | | | | IAML | | | 00 05 09.8 | |
| | comp=E,321nm,0.6s | | | | | | | |
| SUA | | | | IAML | | | 00 05 09.9 | |
| | comp=N,320nm,0.8s | | | | | | | |
| **KLU** | **Klutina** | **2.06** | **141** | | **Pn** | | **00 04 39.7** | **-0.2** |
| KLU | | | | IAML | | | 00 05 11.3 | |
| | comp=N,508nm,0.4s | | | | | | | |
| KLU | | | | IAML | | | 00 05 14.1 | |
| | comp=E,301nm,0.4s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **2.07** | **351** | | **Pn** | | **00 04 40.3** | **+0.4** |
| **POKR** | **Poker Plat Res** | **2.08** | **14** | | **Pn** | | **00 04 40.5** | **+0.4** |
| POKR | | | | IAML | | | 00 05 05.6 | |
| | comp=E,231nm,0.9s | | | | | | | |
| POKR | | | | IAML | | | 00 05 05.9 | |
| | comp=N,199nm,0.6s | | | | | | | |
| **J25K** | **Salcha River,** | **2.09** | **42** | | **Pn** | | **00 04 40.7** | **+0.4** |
| J25K | | | | IAML | | | 00 05 08.2 | |
| | comp=E,315nm,0.5s | | | | | | | |
| J25K | | | | IAML | | | 00 05 08.3 | |
| | comp=N,205nm,0.2s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.09** | **195** | | **Pn** | | **00 04 40.6** | **+0.3** |
| **FIS** | **Fire Island** | **2.11** | **201** | | **Pn** | | **00 04 42.1** | **+1.6** |
| **MLY** | **Manley** | **2.14** | **335** | Pn | **Pn** | | **00 04 41.4** | **+0.5** |
| MLY | | | | IAML | | | 00 05 06.3 | |
| | comp=E,391nm,0.5s | | | | | | | |
| MLY | | | | IAML | | | 00 05 06.6 | |
| | comp=N,373nm,0.6s | | | | | | | |
| **MENT** | **Mentasta** | **2.25** | **92** | | **Pn** | | **00 04 42.6** | **+0.2** |
| **SCRK** | **Sand Creek** | **2.26** | **65** | Pn | **Pn** | | **00 04 42.6** | **+0.1** |
| SCRK | | | | IAML | | | 00 05 13.6 | |
| | comp=N,225nm,0.4s | | | | | | | |
| SCRK | | | | IAML | | | 00 05 17.2 | |
| | comp=E,196nm,0.4s | | | | | | | |
| **PWL** | **Port Wells** | **2.26** | **176** | | **Pn** | | **00 04 42.7** | **+0.1** |
| **WACK** | **Wrangell Chich** | **2.29** | **118** | | **Pn** | | **00 04 43.6** | **+0.4** |
| **GLI** | **Glacier Island** | **2.35** | **161** | | **Pn** | | **00 04 43.3** | **-0.5** |
| **WASW** | **Wrangell South** | **2.38** | **118** | | **Pn** | | **00 04 44.5** | **+0.1** |
| **DIV** | **Divide** | **2.40** | **145** | | **Pn** | | **00 04 43.7** | **-0.8** |
| **L26K** | **Log Cabin Wild** | **2.41** | **90** | Pn | **Pn** | | **00 04 45.1** | **+0.6** |
| **N25K** | **Chitina, Valde** | **2.41** | **127** | Pn | **Pn** | | **00 04 44.6** | **0.0** |
| N25K | | | | IAML | | | 00 05 28.3 | |
| | comp=E,148nm,0.6s | | | | | | | |
| **SPCG** | **Spurr Capps Gl** | **2.42** | **223** | | **Pn** | | **00 04 45.6** | **+0.9** |
| **M20K** | **Styx River** | **2.42** | **241** | | **Pn** | | **00 04 44.9** | **+0.1** |
| M20K | | | | IAML | | | 00 05 17.6 | |
| | comp=N,316nm,0.5s | | | | | | | |
| M20K | | | | IAML | | | 00 05 19.4 | |
| | comp=E,208nm,0.5s | | | | | | | |
| **K20K** | **Telida** | **2.47** | **278** | | **Pn** | | **00 04 45.6** | **+0.2** |
| K20K | | | | IAML | | | 00 05 14.3 | |
| | comp=E,165nm,0.4s | | | | | | | |
| K20K | | | | IAML | | | 00 05 14.8 | |
| | comp=N,206nm,0.5s | | | | | | | |
| **SPCP** | **Crater Peak Br** | **2.48** | **223** | | **Pn** | | **00 04 46.6** | **+1.0** |
| **SPU** | **Mount Spurr** | **2.51** | **221** | | **Pn** | | **00 04 47.1** | **+1.1** |
| SPU | | | | IAML | | | 00 05 23.1 | |
| | comp=N,109nm,0.5s | | | | | | | |
| **I21K** | **Tanana** | **2.54** | **326** | | **Pn** | | **00 04 46.8** | **+0.5** |
| **J26L** | **Joseph Creek** | **2.65** | **56** | | **Pn** | | **00 04 48.5** | **+0.6** |
| **J20K** | **Nowinta River** | **2.68** | **296** | | **Pn** | | **00 04 48.5** | **+0.3** |
| J20K | | | | IAML | | | 00 05 22.6 | |
| | comp=E,103nm,0.6s | | | | | | | |
| J20K | | | | IAML | | | 00 05 22.8 | |
| | comp=N,94nm,0.6s | | | | | | | |
| **M26K** | **Nabesna, AK** | **2.69** | **103** | | **Pn** | | **00 04 48.6** | **+0.3** |
| M26K | | | | IAML | | | 00 05 36.0 | |
| | comp=E,185nm,0.4s | | | | | | | |
| M26K | | | | IAML | | | 00 05 38.1 | |
| | comp=N,184nm,0.5s | | | | | | | |
| **H23K** | **Yukon River** | **2.75** | **352** | | **Pn** | | **00 04 49.8** | **+0.6** |
| **H24K** | **Noodor Dome** | **2.76** | **6** | | **Pn** | | **00 04 49.7** | **+0.5** |
| **PRP** | **Porcupine Dome** | **2.77** | **28** | Pn | **Pn** | | **00 04 50.1** | **+0.6** |
| PRP | | | | IAML | | | 00 05 23.4 | |
| | comp=E,94nm,0.5s | | | | | | | |
| PRP | | | | IAML | | | 00 05 26.3 | |
| | comp=N,111nm,0.5s | | | | | | | |
| **GLB** | **Gilahina Butte** | **2.81** | **124** | Pn | **Pn** | | **00 04 50.0** | **0.0** |
| GLB | | | | IAML | | | 00 05 44.8 | |
| | comp=N,82nm,0.7s | | | | | | | |
| **HIN** | **Hinchinbrook I** | **2.91** | **159** | | **Pn** | | **00 04 50.7** | **-0.5** |
| **EYAK** | **Cordova Ski Ar** | **2.91** | **151** | P | **Pn** | | **00 04 51.0** | **-0.3** |
| **M19K** | **Big River Lodg** | **2.93** | **248** | Pn | **Pn** | | **00 04 51.5** | **-0.1** |
| M19K | | | | IAML | | | 00 05 30.2 | |
| | comp=N,105nm,0.4s | | | | | | | |
| M19K | | | | IAML | | | 00 05 30.7 | |
| | comp=E,75nm,0.3s | | | | | | | |
| **L19K** | **White Mountain** | **3.02** | **255** | | **Pn** | | **00 04 52.6** | **-0.2** |
| L19K | | | | IAML | | | 00 05 32.0 | |
| | comp=E,113nm,0.5s | | | | | | | |
| L19K | | | | IAML | | | 00 05 32.2 | |
| | comp=N,66nm,0.8s | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **3.04** | **338** | | **Pn** | | **00 04 53.6** | **+0.6** |
| **K27K** | **Chicken** | **3.08** | **70** | | **Pn** | | **00 04 54.0** | **+0.6** |
| **K27K** | **Chicken** | **3.08** | **70** | IAML | | | 00 05 31.0 | |
| | comp=N,99nm,0.4s | | | | | | | |
| K27K | | | | IAML | | | 00 05 32.2 | |
| | comp=E,88nm,0.4s | | | | | | | |
| **VRDI** | **Verde Repeater** | **3.08** | **126** | Pn | **Pn** | | **00 04 53.2** | **-0.5** |
| VRDI | | | | IAML | | | 00 05 42.9 | |
| | comp=N,65nm,0.8s | | | | | | | |
| **I20K** | **Naaghedeneel** | **3.08** | **306** | | **Pn** | | **00 04 54.0** | **+0.4** |
| I20K | | | | IAML | | | 00 05 50.3 | |
| | comp=N,193nm,0.7s | | | | | | | |
| **L27K** | **Beaver Creek,** | **3.10** | **88** | | **Pn** | | **00 04 53.6** | **-0.2** |
| L27K | | | | IAML | | | 00 05 45.6 | |
| | comp=N,128nm,1.2s | | | | | | | |
| L27K | | | | IAML | | | 00 05 45.7 | |
| | comp=E,66nm,0.8s | | | | | | | |
| **RDT** | **Redoubt** | **3.11** | **217** | | **Pn** | | **00 04 54.9** | **+0.9** |
| **BCAR** | **Beaver Creek A** | **3.12** | **88** | Pn | **Pn** | | **00 04 53.4** | **-0.7** |
| **H21K** | **Melozitna Rive** | **3.13** | **327** | | **Pn** | | **00 04 54.3** | **0.0** |
| **MCARA** | **McCarthy VSAT** | **3.15** | **121** | | **Pn** | | **00 04 55.2** | **+0.8** |
| MCARA | | | | IAML | | | 00 05 54.1 | |
| | comp=E,124nm,1.0s | | | | | | | |
| MCARA | | | | IAML | | | 00 05 58.0 | |
| | comp=N,118nm,0.7s | | | | | | | |
| **P23K** | **Montague Islan** | **3.18** | **169** | | **Pn** | | **00 04 54.9** | **0.0** |
| **M27K** | **Edge Creek, AK** | **3.20** | **101** | | **Pn** | | **00 04 56.5** | **+1.2** |
| M27K | | | | IAML | | | 00 05 54.1 | |
| | comp=E,101nm,0.9s | | | | | | | |
| M27K | | | | IAML | | | 00 05 54.2 | |
| | comp=N,133nm,0.9s | | | | | | | |
| **RDJH** | **Redoubt Jeurge** | **3.21** | **220** | | **Pn** | | **00 04 56.4** | **+1.0** |
| **J19K** | **Poorman** | **3.25** | **289** | | **Pn** | | **00 04 56.4** | **+0.5** |
| J19K | | | | IAML | | | 00 05 33.8 | |
| | comp=N,88nm,0.5s | | | | | | | |
| J19K | | | | IAML | | | 00 05 46.2 | |
| | comp=E,57nm,0.7s | | | | | | | |
| **I26K** | **Coal Creek Min** | **3.26** | **45** | | **Pn** | | **00 04 56.7** | **+0.8** |
| **I26K** | **Coal Creek Min** | **3.26** | **45** | IAML | | | 00 05 37.1 | |
| | comp=N,88nm,0.2s | | | | | | | |
| I26K | | | | IAML | | | 00 05 37.7 | |
| | comp=E,88nm,0.4s | | | | | | | |
| **NCT** | **North Crescent** | **3.27** | **220** | | **Pn** | | **00 04 57.2** | **+0.9** |
| **RSO** | **Redoubt South** | **3.30** | **218** | | **Pn** | | **00 04 57.9** | **+1.1** |
| **RDSO** | **Redoubt South** | **3.30** | **218** | | **Pn** | | **00 04 57.6** | **+0.9** |
| **RAGM** | **Ragged Mountai** | **3.32** | **144** | | **Pn** | | **00 04 56.3** | **-0.5** |
| **RED** | **Redoubt Volcan** | **3.34** | **218** | | **Pn** | | **00 04 57.9** | **+0.7** |
| **H25L** | **Birch Creek** | **3.39** | **20** | | **Pn** | | **00 04 59.0** | **+1.2** |
| **HMT** | **Hamilton** | **3.48** | **141** | | **Pn** | | **00 04 58.1** | **-0.9** |
| **CRQM** | **Cirque** | **3.51** | **130** | | **Pn** | | **00 04 58.7** | **-0.8** |
| CRQM | | | | IAML | | | 00 06 03.4 | |
| | comp=E,141nm,1.0s | | | | | | | |
| CRQM | | | | IAML | | | 00 06 05.5 | |
| | comp=N,116nm,0.6s | | | | | | | |
| **BRLK** | **Bradley Lake** | **3.53** | **199** | | **Pn** | | **00 05 00.1** | **+0.5** |
| BRLK | | | | IAML | | | 00 05 52.6 | |
| | comp=N,122nm,0.6s | | | | | | | |
| BRLK | | | | IAML | | | 00 05 54.9 | |
| | comp=E,139nm,0.6s | | | | | | | |
| **O20K** | **Slope Mountain** | **3.59** | **214** | | **Pn** | | **00 05 01.8** | **+1.3** |
| **N19K** | **Bonanza Creek** | **3.60** | **233** | | **Pn** | | **00 05 01.1** | **+0.5** |
| **TGL** | **Tana Glacier** | **3.62** | **128** | | **Pn** | | **00 04 60.0** | **-1.0** |
| TGL | | | | IAML | | | 00 05 57.5 | |
| | comp=E,71nm,0.7s | | | | | | | |
| TGL | | | | IAML | | | 00 06 07.2 | |
| | comp=N,81nm,0.9s | | | | | | | |
| **IMAR** | **Indian Mountai** | **3.63** | **325** | | **Pn** | | **00 05 01.5** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.64** | **7** | | **Pn** | | **00 05 01.9** | **+0.8** |
| **NICHA** | **Nichawak Mount** | **3.64** | **140** | | **Pn** | | **00 05 00.6** | **-0.6** |
| **G23K** | **Bananza Creek** | **3.66** | **351** | | **Pn** | | **00 05 02.6** | **+1.1** |
| G23K | | | | IAML | | | 00 05 42.9 | |
| | comp=E,41nm,0.6s | | | | | | | |
| **J18K** | **Innoko River** | **3.67** | **279** | | **Pn** | | **00 05 01.9** | **+0.4** |
| **EGAK** | **Eagle** | **3.70** | **60** | Pn | **Pn** | | **00 05 02.5** | **+0.6** |
| EGAK | | | | IAML | | | 00 05 58.3 | |
| | comp=E,80nm,0.9s | | | | | | | |
| EGAK | | | | IAML | | | 00 05 58.5 | |
| | comp=E,96nm,0.9s | | | | | | | |
| **IVE** | **Iliamna Volcan** | **3.74** | **216** | | **Pn** | | **00 05 03.2** | **+0.6** |
| **HOM** | **Homer** | **3.75** | **204** | Pn | **Pn** | | **00 05 03.6** | **+0.9** |
| **FYU** | **Fort Yukon** | **3.76** | **21** | Pn | **Pn** | | **00 05 03.2** | **+0.4** |
| FYU | | | | IAML | | | 00 05 48.3 | |
| | comp=E,84nm,0.8s | | | | | | | |
| FYU | | | | IAML | | | 00 05 59.2 | |
| | comp=N,59nm,1.3s | | | | | | | |
| **KAIM** | **Kayak Island** | **3.78** | **146** | Pn | **Pn** | | **00 05 01.7** | **-1.3** |
| KAIM | | | | IAML | | | 00 06 04.3 | |
| | comp=N,79nm,1.3s | | | | | | | |
| KAIM | | | | IAML | | | 00 06 08.8 | |
| | comp=E,73nm,1.3s | | | | | | | |
| **ILSW** | **Iliamna Southw** | **3.81** | **217** | | **Pn** | | **00 05 04.2** | **+0.7** |
| **ILSW** | **Iliamna Southw** | **3.81** | **217** | IAML | | | 00 06 12.0 | |
| | comp=N,36nm,0.8s | | | | | | | |
| ILSW | | | | IAML | | | 00 07 11.8 | |
| | comp=E,51nm,0.7s | | | | | | | |
| **CNPM** | **China Poot** | **3.81** | **200** | Pn | **Pn** | | **00 05 03.9** | **+0.4** |
| **L18K** | **Granite Mounta** | **3.82** | **260** | | **Pn** | | **00 05 03.5** | **-0.1** |
| **WAX** | **Waxell Ridge** | **3.83** | **132** | | **Pn** | | **00 05 02.9** | **-0.9** |
| **SUCK** | **Suckling Hills** | **3.83** | **141** | | **Pn** | | **00 05 03.6** | **-0.2** |
| **SUCK** | **Suckling Hills** | **3.83** | **141** | IAML | | | 00 06 04.0 | |
| | comp=E,114nm,0.6s | | | | | | | |
| **SVW2** | **Sparrevohn** | **3.84** | **241** | P | **Pn** | | **00 05 04.3** | **+0.4** |
| **SVW2** | **Sparrevohn** | **3.84** | **241** | | **Pn** | | **00 05 03.3** | **-0.6** |
| **YUK2** | **White River** | **3.86** | **107** | | **Pn** | | **00 05 04.4** | **+0.2** |
| **MID** | **Middleton Isla** | **3.86** | **162** | P | **Pn** | | **00 05 05.0** | **+0.9** |
| **ISLE** | **Juniper Island** | **3.90** | **127** | | **Pn** | | **00 05 03.6** | **-1.2** |
| ISLE | | | | IAML | | | 00 06 05.6 | |
| | comp=N,53nm,0.5s | | | | | | | |
| ISLE | | | | IAML | | | 00 06 06.0 | |
| | comp=E,61nm,0.6s | | | | | | | |
| **G21K** | **Allakaket** | **4.00** | **331** | | **Pn** | | **00 05 06.6** | **+0.6** |
| G21K | | | | IAML | | | 00 06 07.1 | |
| | comp=E,32nm,0.8s | | | | | | | |
| G21K | | | | IAML | | | 00 06 07.7 | |
| | comp=N,30nm,0.7s | | | | | | | |
| **YUK3** | **Moose Creek** | **4.03** | **106** | | **Pn** | | **00 05 07.1** | **+0.4** |
| **GRNC** | **Granite Creek** | **4.03** | **123** | | **Pn** | | **00 05 05.7** | **-1.0** |
| GRNC | | | | IAML | | | 00 06 25.6 | |
| | comp=N,56nm,0.1s | | | | | | | |
| **SNH** | **Sunshine Point** | **4.04** | **134** | Pn | **Pn** | | **00 05 06.3** | **-0.2** |
| SNH | | | | IAML | | | 00 06 14.2 | |
| | comp=N,48nm,0.5s | | | | | | | |
| SNH | | | | IAML | | | 00 06 14.7 | |
| | comp=E,59nm,1.2s | | | | | | | |
| **CTGM** | **Chitina Glacie** | **4.06** | **119** | | **Pn** | | **00 05 05.0** | **-1.9** |
| **BAGL** | **Bagley Icefiel** | **4.07** | **127** | | **Pn** | | **00 05 05.9** | **-1.0** |
| **P19K** | **Oil Pt** | **4.11** | **215** | | **Pn** | | **00 05 08.7** | **+1.1** |
| **P19K** | **Oil Pt** | **4.11** | **215** | IAML | | | 00 06 21.8 | |
| | comp=N,91nm,0.7s | | | | | | | |
| P19K | | | | IAML | | | 00 06 24.5 | |
| | comp=E,91nm,0.6s | | | | | | | |
| **H19K** | **Roundabout Mou** | **4.18** | **309** | | **Pn** | | **00 05 08.8** | **+0.4** |
| **N18K** | **Kilae Creek** | **4.21** | **238** | | **Pn** | | **00 05 08.7** | **-0.2** |
| **DAWY** | **Dawson** | **4.24** | **73** | Pn | **Pn** | | **00 05 09.8** | **+0.1** |
| **LOGN** | **Logan Glacier** | **4.27** | **119** | | **Pn** | | **00 05 09.8** | **-0.1** |
| **LOGN** | **Logan Glacier** | **4.27** | **119** | IAML | | | 00 06 21.6 | |
| | comp=N,24nm,0.5s | | | | | | | |
| **MESA** | **MESA** | **4.34** | **130** | | **Pn** | | **00 05 10.2** | **-0.7** |
| **H27K** | **Steamboat Moun** | **4.37** | **41** | | **Pn** | | **00 05 11.6** | **+0.5** |
| **AUL** | **Augustine Lava** | **4.40** | **214** | | **Pn** | | **00 05 12.4** | **+0.9** |
| **AUCH** | **Augustine Cone** | **4.42** | **214** | | **Pn** | | **00 05 12.7** | **+0.8** |
| **K17K** | **Iditarod** | **4.44** | **269** | | **Pn** | | **00 05 12.5** | **+0.5** |
| K17K | | | | IAML | | | 00 06 01.5 | |
| | comp=N,25nm,1.3s | | | | | | | |
| K17K | | | | IAML | | | 00 06 03.1 | |
| | comp=E,35nm,0.6s | | | | | | | |
| **F24K** | **Squaw Lake** | **4.44** | **4** | | **Pn** | | **00 05 13.0** | **+1.0** |
| F24K | | | | IAML | | | 00 06 03.1 | |
| | comp=N,21nm,1.1s | | | | | | | |
| **TABL** | **Table Mountain** | **4.45** | **124** | | **Pn** | | **00 05 11.4** | **-1.0** |
| **TABL** | **Table Mountain** | **4.45** | **124** | IAML | | | 00 06 37.2 | |
| | comp=E,24nm,1.1s | | | | | | | |
| **I28M** | **Miner Creek** | **4.46** | **54** | | **Pn** | | **00 05 13.3** | **+0.9** |
| I28M | | | | IAML | | | 00 06 05.5 | |
| | comp=E,38nm,0.7s | | | | | | | |
| I28M | | | | IAML | | | 00 06 06.2 | |
| | comp=N,40nm,0.5s | | | | | | | |
| **M17K** | **Holitna River** | **4.46** | **251** | | **Pn** | | **00 05 12.2** | **-0.1** |
| M17K | | | | IAML | | | 00 06 03.1 | |
| | comp=N,46nm,0.6s | | | | | | | |
| M17K | | | | IAML | | | 00 06 23.7 | |
| | comp=E,42nm,0.9s | | | | | | | |
| **O18K** | **Koktuh Hills** | **4.54** | **227** | Pn | **Pn** | | **00 05 13.9** | **+0.5** |
| O18K | | | | IAML | | | 00 06 34.0 | |
| | comp=N,26nm,0.9s | | | | | | | |
| **F21K** | **Alatna River** | **4.61** | **336** | | **Pn** | | **00 05 15.3** | **+1.0** |
| F21K | | | | IAML | | | 00 06 08.2 | |
| | comp=N,47nm,0.6s | | | | | | | |
| **O28M** | **Mount Upton** | **4.63** | **117** | | **Pn** | | **00 05 15.0** | **+0.1** |
| **BMAR** | **Burnt Mountain** | **4.66** | **20** | Pn | **Pn** | | **00 05 15.7** | **+0.7** |
| **F22K** | **John River** | **4.66** | **343** | | **Pn** | | **00 05 16.3** | **+1.3** |
| **M29M** | **Somme Creek** | **4.72** | **94** | | **Pn** | | **00 05 15.9** | **0.0** |
| M29M | | | | IAML | | | 00 06 37.4 | |
| | comp=N,22nm,0.9s | | | | | | | |
| M29M | | | | IAML | | | 00 06 41.8 | |
| | comp=E,23nm,0.8s | | | | | | | |
| **J17K** | **VABM Dome** | **4.73** | **278** | Pn | **Pn** | | **00 05 16.0** | **+0.1** |
| J17K | | | | IAML | | | 00 06 10.0 | |
| | comp=N,19nm,0.8s | | | | | | | |
| **H18K** | **Honhosa River** | **4.73** | **300** | | **Pn** | | **00 05 16.6** | **+0.6** |
| **G19K** | **Purcell Mounta** | **4.74** | **314** | | **Pn** | | **00 05 16.6** | **+0.5** |
| **G27K** | **Doyon Strip** | **4.75** | **36** | | **Pn** | | **00 05 16.7** | **+0.4** |
| **L29M** | **L29M** | **4.77** | **85** | | **Pn** | | **00 05 16.5** | **-0.1** |
| **SAMH** | **Samovar Hills** | **4.79** | **125** | | **Pn** | | **00 05 16.8** | **-0.1** |
| **N17K** | **Nushagak Hills** | **4.81** | **241** | | **Pn** | | **00 05 17.1** | **+0.1** |
| N17K | | | | IAML | | | 00 06 43.0 | |
| | comp=E,20nm,0.9s | | | | | | | |
| N17K | | | | IAML | | | 00 06 46.9 | |
| | comp=N,19nm,1.0s | | | | | | | |
| **J29N** | **Klondike Camp** | **4.81** | **69** | Pn | **Pn** | | **00 05 18.6** | **+1.4** |
| **Q19K** | **Cape Douglas,** | **4.85** | **212** | | **Pn** | | **00 05 17.8** | **+0.2** |
| **SYI** | **Shuyak Island** | **4.87** | **204** | Pn | **Pn** | | **00 05 17.9** | **0.0** |
| SYI | | | | IAML | | | 00 06 12.0 | |
| | comp=N,48nm,0.3s | | | | | | | |
| **P18K** | **Big Mountain,** | **4.90** | **223** | | **Pn** | | **00 05 18.6** | **+0.2** |
| **F20K** | **Avaraart Lake** | **4.96** | **326** | | **Pn** | | **00 05 20.1** | **+1.0** |
| **F26K** | **Sheenjek River** | **4.97** | **20** | | **Pn** | | **00 05 20.0** | **+0.8** |
| F26K | | | | IAML | | | 00 06 16.6 | |
| | comp=E,31nm,0.6s | | | | | | | |
| **E23K** | **Chandalar** | **4.99** | **356** | | **Pn** | | **00 05 20.7** | **+1.2** |
| E23K | | | | IAML | | | 00 06 18.0 | |
| | comp=N,21nm,1.1s | | | | | | | |
| E23K | | | | IAML | | | 00 06 18.7 | |
| | comp=E,21nm,0.6s | | | | | | | |
| **E24K** | **Your Creek** | **4.99** | **1** | | **Pn** | | **00 05 20.4** | **+0.9** |
| **E24K** | **Your Creek** | **4.99** | **1** | IAML | | | 00 06 17.7 | |
| | comp=N,17nm,1.0s | | | | | | | |
| **K29M** | **Barlow Dome** | **5.04** | **77** | | **Pn** | | **00 05 20.1** | **-0.2** |
| K29M | | | | IAML | | | 00 06 48.5 | |
| | comp=E,24nm,1.0s | | | | | | | |
| K29M | | | | IAML | | | 00 06 52.9 | |
| | comp=N,34nm,0.7s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.04** | **59** | Pn | **Pn** | | **00 05 19.9** | **-0.2** |
| I29M | | | | IAML | | | 00 06 19.1 | |
| | comp=N,41nm,0.3s | | | | | | | |
| I29M | | | | IAML | | | 00 06 19.2 | |
| | comp=E,40nm,0.6s | | | | | | | |
| **G18K** | **Tagagawik** | **5.15** | **307** | | **Pn** | | **00 05 22.6** | **+0.9** |
| **L16K** | **Owhat River** | **5.23** | **259** | Pn | **Pn** | | **00 05 22.7** | **-0.1** |
| L16K | | | | IAML | | | 00 06 23.6 | |
| | comp=N,15nm,1.5s | | | | | | | |
| **O17K** | **Koliganek Bris** | **5.26** | **234** | | **Pn** | | **00 05 23.4** | **+0.3** |
| **H17K** | **Granite Mounta** | **5.29** | **295** | | **Pn** | | **00 05 23.9** | **+0.4** |
| H17K | | | | IAML | | | 00 06 25.6 | |
| | comp=E,26nm,1.1s | | | | | | | |
| **M16K** | **Timber Creek** | **5.29** | **251** | Pn | **Pn** | | **00 05 23.5** | **-0

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.71** | **106** | P | **Pb** | **00 09 40.5** | **+0.4** |
| **SRBI** | **Singaraja** | **1.07** | **295** | P | **Pg** | **00 09 45.9** | **-0.3** |
| SRBI | | | | S | **Sg** | **00 10 00.7** | **+0.6** |
| **PLAI** | **Plampang** | **1.59** | **100** | P | **Pn** | **00 09 53.5** | **-0.4** |
| PLAI | | | | S | **Sn** | **00 10 14.6** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.02** | **272** | P | **Pn** | **00 09 59.5** | **-0.2** |
| **WRA** | **Warramunga Arr** | **20.90** | **125** | Pn | **P** | **00 14 08.2** | **-0.2** |
| | 0.1nm,0.3s,baz=300,slow=12,SNR=18 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.67** | **134** | P | **P** | **00 14 27.6** | **+0.2** |
| | 0.1nm,0.3s,baz=303,slow=12,SNR=5.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **33.11** | **138** | P | P | 00 16 13.5 | +12 |
| | 1.0nm,0.3s,baz=336,slow=10.0,SNR=8.6 | | | | | | |
| | 1.0nm,0.3s | | | | | | |

*JMA **16** 00:26:01.9±0.4,44˚N±2˚×14˚8E±˚, h12km, MV3.6/27, E OFF HOKKAIDO*
*SKHL **16** 00:26:02.8±0.2, 43˚.70N×148˚.00E, h54km±2km, mb4.1/3*
**ISC 16 00:26:01.4±3.0, 43˚.67N±0˚.10×148˚.0E±0˚.1, h34km±3km, n14,σ1§23/22, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.85** | **284** | *eP* | **Pb** | **00 26 17.7** | **-0.2** |
| SHO | | | | AMB | AMB | 00 26 18.1 | |
| | 160nm,0.3s | | | | | | |
| SHO | | | | *eS* | **Sb** | **00 26 28.8** | **-0.2** |
| SHO | | | | A | A | 00 26 30.5 | |
| | 890nm,0.6s | | | | | | |
| SHO | | | | A | A | 00 26 30.5 | |
| | 860nm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.56** | **357** | *eP* | **Pn** | **00 26 27.1** | **+0.3** |
| KUR | | | | AMB | AMB | 00 26 28.8 | |
| | 30nm,0.2s | | | | | | |
| KUR | | | | *i* S | **Sn** | **00 26 45.0** | **-0.8** |
| KUR | | | | A | A | 00 26 46.6 | |
| | 170nm,0.3s | | | | | | |
| KUR | | | | A | A | 00 26 46.6 | |
| | 100nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.57** | **284** | *eP* | **Pn** | **00 26 27.2** | **+0.3** |
| YUK | | | | AMB | AMB | 00 26 29.5 | |
| | 150nm,0.6s | | | | | | |
| YUK | | | | *eS* | **Sn** | **00 26 45.6** | **-0.4** |
| YUK | | | | A | A | 00 26 46.9 | |
| | 190nm,0.3s | | | | | | |
| YUK | | | | A | A | 00 26 46.9 | |
| | 160nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.65** | **260** | P | **Pn** | **00 26 27.9** | **-0.1** |
| NEM2 | | | | S | **Sn** | **00 26 46.6** | **-1.4** |
| **JRA** | **Rausu** | **2.08** | **278** | P | **Pn** | **00 26 34.4** | **+0.5** |
| JRA | | | | S | **Sn** | **00 26 58.5** | **-0.1** |
| **JNSB** | **Nemuroshibetsu** | **2.16** | **274** | *eP* | **Pn** | **00 26 35.7** | **+0.8** |
| JNSB | | | | *eS* | **Sn** | **00 26 60.0** | **-0.5** |
| **JNK** | **Nakash** | **2.37** | **269** | P | **Pn** | **00 26 37.9** | **+0.1** |
| **JAK** | **Akkeshi** | **2.49** | **255** | P | **Pn** | **00 26 39.9** | **+0.4** |
| JAK | | | | S | **Sn** | **00 27 06.3** | **-2.2** |
| **JTKR** | **Abashiri--Toko** | **2.96** | **277** | S | **Sn** | **00 27 22.4** | **+2.2** |
| **JAR** | **Ashorobuto** | **3.08** | **264** | S | **Sn** | **00 27 23.3** | **0.0** |
| **JOB** | **Onbets** | **3.12** | **257** | S | **Sn** | **00 27 22.7** | **-1.4** |
| **JCH** | **Churui** | **3.54** | **254** | P | **Pn** | **00 26 54.7** | **+0.8** |
| JCH | | | | S | **Sn** | **00 27 32.1** | **-2.4** |
| **JEM** | **Erimo** | **3.91** | **247** | S | **Sn** | **00 27 45.2** | **+1.6** |
| **JNBK** | **Urakawa-nobuka** | **4.08** | **252** | S | **Sn** | **00 27 49.2** | **+1.4** |

*IDC **16** 01:03:30.7±1.5,55˚.96N×162˚.16E, h0km, mb3.4/3, mbtmp3.4/4, ML2.8/1, Error ellipse: s-maj=41.6km s-min=27.5km az=146.0*
*KRSC **16** 01:03:32.6±0.8,55˚.28N×162˚.48E, h33km±22km, Ml3.9*
**ISC 16 01:03:34.9±1.1,55˚.38N±0˚.04×162˚.51E±0˚.04, h59km±16km, n35,σ1§87/48, mb3.5/3, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.85** | **12** | *eP* | **Pn** | **01 03 50.6** | **-0.3** |
| KBTR | | | | *eS* | **Sn** | **01 04 04.8** | **+2.1** |
| **KBG** | **Krutoberegovo** | **0.88** | **7** | *eP* | **Pn** | **01 03 51.1** | **-0.2** |
| KBG | | | | *eS* | **Sn** | **01 04 06.1** | **+2.7** |
| **ZLN** | **Zelenaya** | **1.16** | **304** | *eP* | **Pn** | **01 03 54.2** | **-0.8** |
| ZLN | | | | *eS* | **Sn** | **01 04 11.2** | **+1.2** |
| **BZGR** | **Bezymyannyi-Gr** | **1.17** | **299** | *eP* | **Pn** | **01 03 53.9** | **-1.4** |
| BZGR | | | | *eS* | **Sn** | **01 04 09.8** | **-0.5** |
| **TUMD** | **Tumrok D** | **1.22** | **262** | *eP* | **Pn** | **01 03 54.1** | **-1.7** |
| TUMD | | | | *eS* | **Sn** | **01 04 09.1** | **-2.3** |
| **LGNR** | **Loginova** | **1.25** | **305** | *eP* | **Pn** | **01 03 55.7** | **-0.7** |
| **BZMR** | **Bezymyannaya** | **1.27** | **297** | *eP* | **Pn** | **01 03 55.4** | **-1.3** |
| **BZWR** | **Bezymyannyi-We** | **1.28** | **298** | *eP* | **Pn** | **01 03 55.6** | **-1.2** |
| BZWR | | | | *eS* | **Sn** | **01 04 13.1** | **+0.1** |
| **KMNR** | **Kamenistaya** | **1.34** | **287** | *eP* | **Pn** | **01 03 56.5** | **-1.1** |
| KMNR | | | | *eS* | **Sn** | **01 04 14.5** | **0.0** |
| **KIRR** | **Kirishev** | **1.35** | **296** | *eP* | **Pn** | **01 03 56.8** | **-1.0** |
| KIRR | | | | *eS* | **Sn** | **01 04 15.1** | **+0.3** |
| **KRSR** | **Krestovskiy** | **1.38** | **308** | *eP* | **Pn** | **01 03 57.7** | **-0.4** |
| **KPT** | **Kopyto** | **1.42** | **295** | *eP* | **Pn** | **01 03 58.3** | **-0.3** |
| KPT | | | | *eS* | **Sn** | **01 04 17.5** | **+1.1** |
| **SRKR** | **Sorokina** | **1.48** | **330** | *eS* | **Sn** | **01 04 20.3** | **+2.5** |
| **KOZ** | **Kozyrevsk** | **1.64** | **296** | *eP* | **Pn** | **01 04 01.3** | **-0.1** |
| **SRDR** | **Sredinnyy** | **1.83** | **302** | *eP* | **Pn** | **01 04 04.0** | **-0.1** |
| SRDR | | | | *eS* | **Sn** | **01 04 28.3** | **+2.1** |
| **BKI** | **Bering** | **1.99** | **94** | *eP* | **Pn** | **01 04 05.9** | **-0.3** |
| BKI | | | | *eS* | **Sn** | **01 04 29.3** | **-0.6** |
| **ESO** | **Esso** | **2.23** | **286** | *eP* | **Pn** | **01 04 08.6** | **-0.8** |
| **SPN** | **Mys Shipunski** | **2.71** | **214** | *eP* | **Pn** | **01 04 14.2** | **-1.9** |
| SPN | | | | *eS* | **Sn** | **01 04 44.7** | **-2.9** |
| **NLC** | **Nalytchevo** | **2.89** | **221** | *eS* | **Sn** | **01 04 51.1** | **-0.9** |
| **SMAR** | **Somma** | **3.04** | **227** | *eP* | **Pn** | **01 04 20.4** | **-0.3** |
| **AVH** | **Avacha** | **3.06** | **228** | *eP* | **Pn** | **01 04 22.5** | **+1.6** |
| **UGLR** | **Uglovaya** | **3.07** | **226** | *eP* | **Pn** | **01 04 20.9** | **-0.1** |
| **KOK** | **Koryaka** | **3.09** | **229** | *eP* | **Pn** | **01 04 22.3** | **+1.1** |
| **GNL** | **Ganaly** | **3.15** | **239** | *eP* | **Pn** | **01 04 21.8** | **-0.4** |
| **DALK** | **Dalny** | **3.23** | **225** | *eP* | **Pn** | **01 04 23.1** | **+0.1** |
| DALK | | | | *eS* | **Sn** | **01 04 59.5** | **-0.7** |
| **PET** | **Petropavlovsk** | **3.27** | **225** | *eP* | **Pn** | **01 04 26.0** | **+2.3** |
| **PETK** | **Petropavlovsk-** | **3.63** | **233** | Pn | **Pn** | **01 04 32.3** | **+3.8** |
| | 3.6nm,0.3s,baz=67,slow=18,SNR=10 | | | | | | |
| PETK | | | | Sn | **Sn** | **01 05 17.4** | **+7.3** |
| | 1.3nm,0.3s,baz=84,slow=18,SNR=1.9 | | | | | | |
| | 2.8nm,0.3s | | | | | | |
| **GRL** | **Gorelyy** | **3.86** | **225** | *eP* | **Pn** | **01 04 32.9** | **+1.1** |
| **MTVR** | **Mutnovka** | **3.87** | **223** | *eP* | **Pn** | **01 04 32.4** | **+0.4** |
| **APC** | **Apacha** | **3.99** | **234** | *eP* | **Pn** | **01 04 36.0** | **+2.4** |
| **ASAK** | **Asacha** | **4.06** | **224** | *eP* | **Pn** | **01 04 36.3** | **+1.8** |
| **KDTR** | **Khodutka, Kamc** | **4.45** | **218** | *eP* | **Pn** | **01 04 40.5** | **+0.8** |
| KDTR | | | | *eS* | **Sn** | **01 05 32.7** | **+2.5** |
| **KURBB** | **Kurchatov Arra** | **47.84** | **301** | P | **P** | **01 12 04.6** | **-1.7** |
| | 0.1nm,0.4s,baz=53,slow=8.7,SNR=2.0 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **58.57** | **337** | P | P | 01 13 25.1 | +0.3 |
| | 0.4nm,0.4s,baz=40,slow=9.1,SNR=5.6 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **68.47** | **69** | P | P | 01 14 34.2 | +3.4 |
| | 0.3nm,0.5s,baz=296,slow=4.7,SNR=6.5 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*IDC **16** 01:09:57.4±1.7,6˚.24S×142˚.88E, h0km, mb4.1/4, mbtmp4.1/6, ML4.1/2, Error ellipse: s-maj=69.7km s-min=26.9km az=86.0*
*NEIC **16** 01:09:57.7±1.4,6˚.22S±0˚.10×143˚.0E±0˚.2, h10km±1km, mb4.2/14, Error ellipse: s-maj=32.5km s-min=16.8km az=270.0*
**ISC 16 01:10:01.9±0.8,6˚.42S±0˚.10×142˚.8E±0˚.2, h35km, n22, σ1§88/24, mb4.2/8, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WB0** | **Warramunga Arr** | **15.56** | **211** | | **Pn** | **01 13 40.2** | **+1.4** |
| WB0 | | | | IAmb | IAmb | 01 13 46.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.65** | **210** | Pn | **Pn** | **01 13 39.8** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 01 13 55.0 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.73** | **211** | Pn | **Pn** | **01 13 42.3** | **+1.4** |
| **WB2** | **Warramunga Arr** | **15.73** | **211** | Pn | **Pn** | **01 13 41.6** | **+0.6** |
| **WRA** | **Warramunga Arr** | **15.74** | **211** | Pn | **Pn** | **01 13 41.0** | **0.0** |
| **WRA** | **Warramunga Arr** | **15.74** | **211** | Pn | **Pn** | **01 13 42.2** | **+1.1** |
| | comp=Z,0.4nm,0.3s,baz=31,slow=11,SNR=14 | | | | | | |
| WRA | | | | Sn | **Sn** | **01 16 31.1** | **-3.4** |
| | comp=Z,0.2nm,0.3s,baz=19,slow=21,SNR=4.7 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **16.53** | **235** | Pn | **Pn** | **01 13 52.7** | **+1.6** |
| KNRA | | | | IAmb | IAmb | 01 13 57.5 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **AS31** | **Alice Springs** | **19.15** | **206** | | **Pn** | **01 14 24.3** | **+0.9** |
| AS31 | | | | IAmb | IAmb | 01 14 28.5 | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **19.15** | **206** | Pn | **Pn** | **01 14 24.9** | **+1.5** |
| **ASAR** | **Alice Springs** | **19.15** | **206** | P | **Pn** | **01 14 26.6** | **+3.1** |
| | comp=Z,1.9nm,0.3s,baz=31,slow=11,SNR=129 | | | | | | |
| ASAR | | | | S | **Sn** | **01 17 52.6** | **-4.5** |
| | comp=Z,0.9nm,0.9s,baz=18,slow=28,SNR=4.1 | | | | | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.34** | **234** | P | **P** | **01 14 37.0** | **+1.6** |
| **CAN** | **Canberra** | **29.33** | **170** | P | **P** | **01 16 02.7** | **+1.3** |
| CAN | | | | IAmb | IAmb | 01 16 17.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **SNZO** | **South Karori** | **44.90** | **146** | P | **P** | **01 18 12.3** | **-0.8** |
| **SONM** | **Songino Array** | **62.80** | **333** | P | **P** | **01 20 23.1** | **-0.9** |
| SONM | | | | IAmb | IAmb | 01 20 34.5 | |
| | comp=Z,1.7nm,1.4s | | | | | | |
| **CASY** | **Casey** | **63.79** | **194** | P | **P** | **01 20 30.9** | **+0.8** |
| CASY | | | | IAmb | IAmb | 01 20 33.4 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **75.18** | **322** | P | **P** | **01 21 41.8** | **+1.0** |
| | comp=Z,0.5nm,0.6s,baz=110,slow=7.1,SNR=2.8 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **79.08** | **324** | P | **P** | **01 22 02.7** | **+0.1** |
| | comp=Z,0.4nm,0.3s,baz=99,slow=3.9,SNR=2.4 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **H18K** | **Honhosa River** | **83.31** | **21** | P | **P** | **01 22 22.6** | **-2.2** |
| H18K | | | | IAmb | IAmb | 01 22 32.9 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.55** | **180** | P | **P** | **01 22 27.5** | **+1.3** |
| **QSPA** | **South Pole Qui** | **83.55** | **180** | P | **P** | **01 22 27.1** | **+0.9** |
| | comp=Z,1.5nm,0.9s,baz=30,slow=4.0,SNR=6.5 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **84.65** | **325** | P | **P** | **01 22 33.2** | **+1.3** |
| | comp=Z,2.3nm,0.7s,baz=116,slow=6.7,SNR=13 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **CTGM** | **Chitina Glacie** | **88.79** | **28** | P | **P** | **01 22 49.8** | **-2.3** |

*IDC **16** 01:32:59.9±1.5,30˚.69N×48˚.26E, h0km, mb3.7/8, mbtmp3.7/11, ML3.4/3, MS3.9/1, Error ellipse: s-maj=30.8km s-min=19.2km az=172.0*
*TEH **16** 01:33:01.5,30˚.74N×48˚.26E, h8km±44km, ML3.7*
**ISC 16 01:33:01.2±0.7, 30˚.68N±0˚.07×48˚.27E±0˚.05, h10km, n47, σ2§13/48, mb3.6/7, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AHWZ** | **Ahwaz** | **0.73** | **26** | Pg | **Pb** | **01 33 15.1** | **-0.8** |
| **ABEH** | **Behbahan** | **1.72** | **92** | Pg | **Pb** | **01 33 33.7** | **+0.9** |
| **JHBN** | **Jahan bin** | **2.57** | **52** | Pn | **Pb** | **01 33 45.4** | **-2.2** |
| **ZNGN** | **Zangian** | **2.64** | **56** | Pn | **Pn** | **01 33 46.1** | **+1.9** |
| **IBRJ** | **Brojen** | **2.84** | **64** | Pn | **Pn** | **01 33 49.3** | **+2.4** |
| **IKFM** | **Kafar-mosalman** | **2.86** | **353** | Pn | **Pn** | **01 33 48.6** | **+1.8** |
| **KLNJ** | **Kolanjah** | **2.88** | **83** | Pn | **Pn** | **01 33 49.6** | **+2.1** |
| **IPIR** | **Pirpir** | **3.00** | **48** | Pn | **Pn** | **01 33 51.4** | **+2.2** |
| **KAZ2** | **Kazeron-Fars-I** | **3.13** | **109** | Pn | **Pn** | **01 33 54.2** | **+3.5** |
| **AHBU** | **AHRAM** | **3.19** | **124** | Pn | **Pn** | **01 33 55.1** | **+3.7** |
| **ILBA** | **Ilam Banvizeh** | **3.42** | **330** | Pn | **Pn** | **01 33 56.2** | **+1.6** |
| **HSAM** | **Samen** | **3.54** | **5** | Pn | **Pn** | **01 33 58.4** | **+2.0** |
| **IGAR** | **Gharneh** | **3.66** | **61** | Pn | **Pn** | **01 34 00.8** | **+2.8** |
| **IRAM** | **Ramesheh** | **3.70** | **71** | Pn | **Pn** | **01 34 01.2** | **+2.5** |
| **IBZA** | **Bozab** | **3.80** | **355** | Pn | **Pn** | **01 34 02.5** | **+2.4** |
| **IKLH** | **Kolahrood** | **3.85** | **46** | Pn | **Pn** | **01 34 02.9** | **+2.1** |
| **IGHG** | **Ghaleghazi** | **3.91** | **339** | Pn | **Pn** | **01 34 03.5** | **+1.9** |
| **GLG1** | **Gilan-e-Gharb** | **3.96** | **330** | Pn | **Pn** | **01 34 03.4** | **+1.3** |
| **QAMS** | **Qamsar** | **4.04** | **40** | Pn | **Pn** | **01 34 05.6** | **+2.2** |
| **IZEF** | **Zefreh** | **4.11** | **56** | Pn | **Pn** | **01 34 06.5** | **+2.2** |
| **HAGD** | **Aghdareh** | **4.20** | **10** | Pn | **Pn** | **01 34 07.7** | **+2.2** |
| **SNQR** | **Sonqor, Kerman** | **4.20** | **353** | Pn | **Pn** | **01 34 07.2** | **+1.6** |
| **IDHR** | **Dehrash** | **4.31** | **339** | Pn | **Pn** | **01 34 08.0** | **+1.0** |
| **ILIN** | **Lien** | **4.37** | **346** | Pn | **Pn** | **01 34 08.6** | **+0.8** |
| **KGS1** | **Ghasr-e-Shirin** | **4.44** | **330** | Pn | **Pn** | **01 34 09.9** | **+1.4** |
| **KRSH** | **Karshahi** | **4.64** | **44** | Pn | **Pn** | **01 34 13.6** | **+2.1** |
| **IQOM** | **Qom** | **4.78** | **29** | Pn | **Pn** | **01 34 14.8** | **+1.3** |
| **ISAD** | **Sadrabad** | **4.80** | **74** | Pn | **Pn** | **01 34 15.9** | **+2.1** |
| **IRAZ** | **Razeghan** | **4.92** | **16** | Pn | **Pn** | **01 34 17.4** | **+2.0** |
| **ISFB** | **Sefidab** | **4.97** | **41** | Pn | **Pn** | **01 34 17.3** | **+1.4** |
| **QABG** | **Abgarm-Qazvin** | **5.14** | **12** | Pn | **Pn** | **01 34 20.5** | **+2.0** |
| **ANAR** | **Anarak** | **5.28** | **60** | Pn | **Pn** | **01 34 21.8** | **+1.6** |
| **ICHK** | **Chekchek** | **5.48** | **72** | Pn | **Pn** | **01 34 24.7** | **+1.6** |
| **IMEH** | **Mehriz** | **5.50** | **81** | Pn | **Pn** | **01 34 24.9** | **+1.6** |
| **NGRK** | **Negar Kerman** | **7.40** | **96** | Pn | **Pn** | **01 34 52.1** | **+2.4** |
| **ASF** | **Jabal al Asfar** | **9.83** | **282** | Pn | **Pn** | **01 35 22.2** | **-0.5** |
| | 0.5nm,0.3s,baz=90,slow=0.1,SNR=6.6 | | | | | | |
| ASF | | | | Sn | **Sn** | **01 37 10.8** | **-2.3** |
| | 0.4nm,0.3s,baz=82,slow=0.2,SNR=7.0 | | | | | | |
| ASF | | | | Lg | Lg | 01 38 14.2 | |
| | 0.4nm,0.3s,baz=276,slow=0.1,SNR=6.0 | | | | | | |
| | 1.6nm,0.4s | | | | | | |
| **WSAR** | **Wadi Sarin** | **11.84** | **126** | Pn | **Pn** | **01 35 50.0** | **-0.2** |
| | 0.4nm,0.3s,baz=306,slow=4.1,SNR=4.5 | | | | | | |
| WSAR | | | | Sn | **Sn** | **01 37 55.3** | **-7.2** |
| | 0.1nm,0.3s,baz=96,slow=18,SNR=1.4 | | | | | | |
| | 3.9nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **14.96** | **311** | Pn | **Pn** | **01 36 34.0** | **+1.1** |
| | baz=120,slow=7.3,SNR=4.6 | | | | | | |
| | 0.7nm,1.0s | | | | | | |
| **IDI** | **Anoyia** | **20.13** | **289** | P | **P** | **01 37 36.0** | **+0.6** |
| | 3.8nm,0.6s,baz=84,slow=14,SNR=4.7 | | | | | | |
| | 3.8nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **21.05** | **18** | P | **P** | **01 37 44.6** | **-0.5** |
| | 1.6nm,0.5s,baz=177,slow=7.9,SNR=5.8 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **27.54** | **29** | P | **P** | **01 38 48.2** | **+0.2** |
| | 0.5nm,0.6s,baz=224,slow=8.3,SNR=3.9 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **30.74** | **49** | P | **P** | **01 39 17.3** | **+0.7** |
| | 0.6nm,0.6s,baz=243,slow=8.0,SNR=4.6 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **34.05** | **341** | P | **P** | **01 39 45.5** | **+0.2** |
| | 1.4nm,0.9s,baz=146,slow=8.2,SNR=5.9 | | | | | | |
| | 1.4nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **37.38** | **332** | P | **P** | **01 40 13.8** | **-0.1** |
| | 0.8nm,0.5s,baz=128,slow=12,SNR=7.1 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **PALK** | **Pallekele** | **38.26** | **121** | LR | LR | 01 55 54.3 | |
| | comp=Z,200nm,21.1s,baz=128,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.01** | **348** | P | **P** | **01 40 44.4** | **+0.3** |
| | 0.4nm,0.5s,baz=152,slow=8.2,SNR=5.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.23** | **258** | P | **P** | **01 41 26.9** | **+0.1** |
| | 0.6nm,0.7s,baz=61,slow=9.0,SNR=5.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |

*NEIC **16** 02:05:23.7±1.1,18˚.78N±0˚.03×67˚.35W±0˚.03, h32km±9km, ML2.4/30, Md2.7/15(RSPR), Error ellipse: s-maj=4.9km s-min=3.2km az=214.0*
*SDD **16** 02:05:23.2±1.4,18˚.77N×67˚.47W, h20km±50km, MD2.6, ML2.4, MW2.8*
*RSPR **16** 02:05:24.7,18˚.79N×67˚.35W, h10km±1km, MD2.7/15*
**ISC 16 02:05:23.7±1.2, 18˚.76N±0˚.06×67˚.35W±0˚.03, h32km±8km, n65,σ0§70/71, 15C-7D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AGPR** | **Aguadilla, PR** | **0.37** | **142** | *eP* | **Pb** | **02 05 32.4** | **0.0** |
| **AGPR** | **Aguadilla, PR** | **0.37** | **142** | *eS* | **Sb** | **02 05 38.3** | **+0.1** |
| **AGPR** | **Aguadilla, PR** | **0.37** | **142** | | **Pb** | **02 05 32.4** | **0.0** |
| AGPR | | | | | **Sb** | **02 05 38.3** | **+0.1** |
| **AGPR** | **Aguadilla, PR** | **0.37** | **142** | IAML | | 02 05 40.2 | |
| | comp=E,432nm,0.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.37** | **142** | *i*ePg | **Pb** | **02 05 32.3** | **0.0** |
| AGPR | | | | *i*eSg | **Sb** | **02 05 37.6** | **-0.6** |
| AGPR | | | | IAML | | 02 05 38.5 | |
| | comp=N,876nm,0.2s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **0.58** | **160** | *eP* | **Pb** | **02 05 35.5** | **0.0** |
| **PRSN** | **Puerto Rico Se** | **0.58** | **160** | *eS* | **Sb** | **02 05 44.0** | **+0.4** |
| **PRSN** | **Puerto Rico Se** | **0.58** | **160** | | **Pb** | **02 05 35.5** | **0.0** |
| PRSN | | | | | **Sb** | **02 05 44.0** | **+0.4** |
| **LSP** | **Las Mesas** | **0.64** | **157** | *eP* | **Pb** | **02 05 36.6** | **+0.1** |
| **LSP** | **Las Mesas** | **0.64** | **157** | *eS* | **Sn** | **02 05 46.1** | **+0.4** |
| **LSP** | **Las Mesas** | **0.64** | **157** | | **Pb** | **02 05 36.6** | **+0.1** |
| LSP | | | | | **Sn** | **02 05 46.1** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **0.70** | **126** | *eP* | **Pb** | **02 05 37.1** | **-0.5** |
| **AOPR** | **Arecibo Observ** | **0.70** | **126** | *eS* | **Sb** | **02 05 46.9** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **0.70** | **126** | | **Pb** | **02 05 37.1** | **-0.5** |
| AOPR | | | | | **Sb** | **02 05 46.9** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **0.70** | **126** | IAML | | 02 05 54.8 | |
| | comp=N,192nm,0.3s | | | | | | |
| AOPR | | | | IAML | | 02 05 55.5 | |
| | comp=E,270nm,0.4s | | | | | | |
| **AOPR** | **Arecibo Observ** | **0.70** | **126** | *i*ePg | **Pb** | **02 05 37.0** | **-0.5** |
| AOPR | | | | *e*Sg | **Sn** | **02 05 47.8** | **+0.5** |
| AOPR | | | | IAML | | 02 05 54.8 | |
| | comp=N,183nm,0.2s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **0.79** | **130** | *i*eP | **Pb** | **02 05 38.7** | **-0.3** |
| **UUPR** | **Utuado, UPR, P** | **0.79** | **130** | *e*S | **Sb** | **02 05 49.3** | **-0.1** |
| **UUPR** | **Utuado, UPR, P** | **0.79** | **130** | | **Pb** | **02 05 38.4** | **-0.6** |
| **UUPR** | **Utuado, UPR, P** | **0.79** | **130** | | **Sb** | **02 05 49.3** | **-0.1** |
| **UUPR** | **Utuado, UPR, P** | **0.79** | **130** | IAML | | 02 05 55.0 | |
| | comp=E,525nm,0.3s | | | | | | |
| UUPR | | | | IAML | | 02 05 57.2 | |
| | comp=N,510nm,0.3s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **0.79** | **163** | *i*eP | **Pb** | **02 05 38.8** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **0.79** | **163** | *e*S | **Sn** | **02 05 49.8** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **0.79** | **163** | | **Pb** | **02 05 38.7** | **-0.3** |
| **CRPR** | **Cabo Rojo, PR** | **0.79** | **163** | | **Sn** | **02 05 49.8** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **0.79** | **163** | IAML | | 02 05 50.6 | |
| | comp=N,56nm,0.1s | | | | | | |
| CRPR | | | | IAML | | 02 05 50.9 | |
| | comp=E,63nm,0.2s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **0.79** | **163** | *i*ePg | **Pb** | **02 05 38.7** | **-0.3** |
| CRPR | | | | *e*Sg | **Sb** | **02 05 49.5** | **+0.1** |
| CRPR | | | | IAML | | 02 05 56.1 | |
| | comp=N,70nm,0.1s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **0.83** | **110** | *i*eP | **Pb** | **02 05 39.3** | **-0.4** |
| **EMPR** | **Esperanza - Ma** | **0.83** | **110** | *e*S | **Sb** | **02 05 50.5** | **0.0** |
| **EMPR** | **Esperanza - Ma** | **0.83** | **110** | | **Pb** | **02 05 39.1** | **-0.6** |
| EMPR | | | | IAML | | 02 05 52.9 | |
| | comp=N,166nm,1.4s | | | | | | |
| EMPR | | | | IAML | | 02 06 02.3 | |
| | comp=E,147nm,0.5s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **0.83** | **110** | | **Sb** | **02 05 50.5** | **0.0** |
| **MLPR** | **Magueyes Islan** | **0.84** | **160** | *i*eP | **Pb** | **02 05 38.5** | **-1.4** |
| **MLPR** | **Magueyes Islan** | **0.84** | **160** | *e*S | **Sb** | **02 05 49.8** | **-1.2** |
| **MLPR** | **Magueyes Islan** | **0.84** | **160** | | **Sb** | **02 05 49.8** | **-1.2** |
| **MLPR** | **Magueyes Islan** | **0.84** | **160** | | **Pb** | **02 05 38.5** | **-1.4** |
| **MLPR** | **Magueyes Islan** | **0.84** | **160** | IAML | | 02 05 50.7 | |
| | comp=E,138nm,0.2s | | | | | | |
| MLPR | | | | IAML | | 02 05 51.4 | |
| | comp=N,55nm,0.1s | | | | | | |
| **MLPR** | **Magueyes Islan** | **0.84** | **160** | *i*ePg | **Pb** | **02 05 38.5** | **-1.4** |
| MLPR | | | | *i*eSg | **Sb** | **02 05 49.7** | **-1.2** |
| MLPR | | | | IAML | | 02 05 51.3 | |
| | comp=N,55nm,0.1s | | | | | | |
| **GBPR** | **Guanica, Bosqu** | **0.91** | **150** | *i*eP | **Pn** | **02 05 40.7** | **+0.4** |
| **GBPR** | **Guanica, Bosqu** | **0.91** | **150** | *e*S | **Sn** | **02 05 53.3** | **+1.1** |
| **GBPR** | **Guanica, Bosqu** | **0.91** | **150** | | **Pn** | **02 05 40.7** | **+0.4** |
| GBPR | | | | | **Sn** | **02 05 53.3** | **+1.1** |
| **CELP** | **Cerrillos** | **1.00** | **133** | *i*eP | **Pn** | **02 05 41.9** | **+0.2** |
| **CELP** | **Cerrillos** | **1.00** | **133** | *e*S | **Sb** | **02 05 55.5** | **0.0** |
| **CELP** | **Cerrillos** | **1.00** | **133** | | **Pn** | **02 05 41.8** | **+0.2** |
| CELP | | | | IAML | | 02 06 02.2 | |
| | comp=N,75nm,0.2s | | | | | | |
| CELP | | | | IAML | | 02 06 02.8 | |
| | comp=E,60nm,0.5s | | | | | | |
| **CELP** | **Cerrillos** | **1.00** | **133** | | **Sb** | **02 05 55.5** | **0.0** |
| **CELP** | **Cerrillos** | **1.00** | **133** | *i*ePg | **Pn** | **02 05 41.8** | **+0.2** |
| CELP | | | | *e*Sg | **Sn** | **02 05 57.0** | **+2.3** |
| CELP | | | | IAML | | 02 06 02.2 | |
| | comp=N,78nm,0.2s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.01** | **256** | *i*eP | **Pn** | **02 05 41.8** | **+0.1** |
| **PCDR** | **Punta Cana, DR** | **1.01** | **256** | *e*S | **Sn** | **02 05 55.5** | **+0.8** |
| **PCDR** | **Punta Cana, DR** | **1.01** | **256** | | **Pn** | **02 05 41.8** | **+0.1** |
| PCDR | | | | | **Sn** | **02 05 55.5**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TORD | **Torodi Ar. Bea** | 21.43 | 46 | P | | **P** | 02 15 19.6 | 0.0 | |
| | 4.2nm,0.8s,baz=235,slow=9.9,SNR=13 | | | | | | | | |
| | 4.2nm,0.8s | | | | | | | | |
| BOSA | **Boshof** | 45.92 | 129 | P | | **P** | 02 18 56.1 | +1.7 | |
| | 3.8nm,1.1s,baz=304,slow=8.3,SNR=7.1 | | | | | | | | |
| | 3.8nm,1.1s | | | | | | | | |
| EIL | **Elat** | 56.14 | 52 | LR | | LR | 02 44 06.1 | | |
| | comp=Z,48nm,20.6s,baz=250,slow=36 | | | | | | | | |
| WRA | **Warramunga Arr** | 142.14 | 126 | PKP | | **PKPdf** | 02 30 05.4 | +1.0 | |
| | 0.1nm,0.5s,baz=241,slow=2.8,SNR=5.0 | | | | | | | | |

*IDC* ***16*** *02:36:00.9±2.0,31°.16N×49°.60E,h0km, mb3.7/5, mbtmp3.7/5, Error ellipse: s-maj=46.8km s-min=30.3km az=139.0*
*TEH* ***16*** *02:36:00.4,30°.92N×50°.25E,h8km±23km, ML3.6*
*DSN* ***16*** *02:36:02.7±1.8,30°.70N×50°.17E,h22km, ML3.6/11, Error ellipse: s-maj=19.1km s-min=12.6km az=149.0*
*OMAN* ***16*** *02:36:04.1±0.0,30°.68N×50°.43E, h22km, mb3.6/21, Mwp5.6/3, Error ellipse: s-maj=1.1km s-min=0.7km az=14.0*

**ISC 16 02:35:59.5±0.6,30°.89N±0°.03×50°.29E±0°.04,h10km,n98,**
**σ2§13/127,mb3.7/5,Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ABEH | **Behbahan** | 0.29 | 186 | Pg | **Pg** | 02 36 07.3 | +2.0 |
| KLNJ | **Kolanjah** | 1.12 | 84 | Pg | **Pg** | 02 36 22.5 | +1.4 |
| IBRJ | **Brojen** | 1.31 | 39 | Pg | **Pg** | 02 36 25.6 | +0.9 |
| ZNGN | **Zangian** | 1.31 | 21 | Pg | **Pg** | 02 36 25.1 | +0.7 |
| JHBN | **Jahan bin** | 1.38 | 13 | Pg | **Pb** | 02 36 25.9 | +0.5 |
| AHWZ | **Ahwaz** | 1.48 | 288 | Pg | **Pg** | 02 36 28.0 | +0.2 |
| KAZ2 | **Kazeron-Fars-I** | 1.74 | 137 | Pg | **Pb** | 02 36 33.2 | +1.7 |
| IPIR | **Pirpir** | 1.86 | 16 | Pn | **Pb** | 02 36 34.3 | +0.5 |
| IRAM | **Ramesheh** | 2.01 | 62 | Pn | **Pb** | 02 36 37.4 | +1.1 |
| IGAR | **Gharneh** | 2.12 | 44 | Pn | **Pb** | 02 36 38.9 | +0.7 |
| AHBU | **AHRAM** | 2.20 | 156 | Pn | **Pb** | 02 36 39.5 | +0.2 |
| SHI | **Shiraz** | 2.29 | 122 | Pn | **Pb** | 02 36 41.4 | +0.4 |
| IZEF | **Zefreh** | 2.65 | 40 | Pn | **Pn** | 02 36 45.5 | +3.1 |
| DSBU | **Dashti - Bushe** | 2.66 | 161 | Pn | **Pn** | 02 36 45.7 | +3.3 |
| IKLH | **Kolahrood** | 2.66 | 24 | Pn | **Pb** | 02 36 46.1 | -1.2 |
| KBD | **Kabd** | 2.83 | 233 | P | **Pn** | 02 36 46.8 | +2.2 |
| KBD | | | | S | **Sn** | 02 37 21.9 | +3.1 |
| QAMS | **Qamsar** | 2.99 | 18 | Pn | **Pn** | 02 36 50.2 | +3.0 |
| ISAD | **Sadrabad** | 3.08 | 70 | Pn | **Pn** | 02 36 52.2 | +3.8 |
| IKFM | **Kafar-mosalman** | 3.34 | 322 | Pn | **Pn** | 02 36 54.8 | +3.0 |
| HSAM | **Samen** | 3.61 | 337 | Pn | **Pn** | 02 36 57.7 | +2.0 |
| ANAR | **Anarak** | 3.71 | 51 | Pn | **Pn** | 02 37 00.4 | +3.4 |
| IMEH | **Mehriz** | 3.74 | 81 | Pn | **Pn** | 02 37 01.6 | +4.2 |
| ICHK | **Chekchek** | 3.77 | 68 | Pn | **Pn** | 02 37 01.5 | +3.7 |
| ISFB | **Sefidab** | 3.82 | 25 | Pn | **Pn** | 02 37 01.2 | +2.7 |
| IQOM | **Qom** | 4.00 | 9 | Pn | **Pn** | 02 37 03.4 | +2.4 |
| HAGD | **Aghdareh** | 4.04 | 346 | Pn | **Pn** | 02 37 04.4 | +2.9 |
| IBZA | **Bozab** | 4.12 | 331 | Pn | **Pn** | 02 37 05.1 | +2.4 |
| IVRN | **Varamin** | 4.27 | 16 | Pn | **Pn** | 02 37 07.0 | +2.4 |
| IRAZ | **Razeghan** | 4.51 | 356 | Pn | **Pn** | 02 37 10.5 | +2.5 |
| SNQR | **Sonqor, Kerman** | 4.55 | 331 | Pn | **Pn** | 02 37 11.0 | +2.4 |
| IBAF | **Bafgh** | 4.57 | 80 | Pn | **Pn** | 02 37 12.4 | +3.6 |
| QABG | **Abgarm-Qazvin** | 4.84 | 353 | Pn | **Pn** | 02 37 15.0 | +2.3 |
| IDMV | **Damavand** | 4.90 | 17 | Pn | **Pn** | 02 37 15.9 | +2.5 |
| SAKB | **Bahrain** | 4.90 | 177 | P | **Pn** | 02 37 14.6 | +1.4 |
| SAKB | | | | S | **Sn** | 02 38 08.9 | -1.0 |
| SHMA | **Al-Shehemyia** SNR=14 | 5.05 | 173 | P | **Pn** | 02 37 15.9 | +0.6 |
| SHMA | | | | S | **Sn** | 02 38 12.9 | -0.8 |
| IFIR | **Firoozkooh** | 5.17 | 23 | Pn | **Pn** | 02 37 20.1 | +3.0 |
| KHGB | **Koh Gabri** | 5.36 | 94 | Pn | **Pn** | 02 37 22.8 | +3.1 |
| KLST | **Kelardasht - M** | 5.65 | 6 | Pn | **Pn** | 02 37 26.7 | +2.9 |
| NGRK | **Negar Kerman** | 5.71 | 101 | Pn | **Pn** | 02 37 28.5 | +3.8 |
| TPRV | **Parvadeh(Tabas** | 5.84 | 67 | Pn | **Pn** | 02 37 29.8 | +3.6 |
| SMRA | **Abu-Samra** | 6.14 | 175 | P | **Pn** | 02 37 31.5 | +1.2 |
| SMRA | | | | S | **Sn** | 02 38 40.0 | -0.6 |
| TRNA | **Turayna** SNR=15 | 6.18 | 172 | S | **Sn** | 02 38 42.0 | +0.3 |
| GENO | **Geno** | 6.21 | 123 | Pn | **Pn** | 02 37 35.2 | +3.9 |
| JRN | **Qarnain Island** | 6.34 | 158 | P | **Pn** | 02 37 33.5 | +0.4 |
| CHMN | **Cheshme madani** | 6.35 | 97 | Pn | **Pn** | 02 37 36.7 | +3.3 |
| TKDS | **Koohdasht(Taba** | 6.39 | 63 | Pn | **Pn** | 02 37 37.8 | +4.0 |
| SLWR | **Sila** | 6.91 | 169 | P | **Pn** | 02 37 42.6 | +1.8 |
| SLWR | | | | S | **Sn** | 02 38 59.1 | -0.3 |
| TAPT | **Tabas- Tapeh t** | 7.02 | 54 | Pn | **Pn** | 02 37 45.3 | +2.9 |
| SHME | **Shamm** | 7.05 | 132 | P | **Pn** | 02 37 43.8 | +1.0 |
| SHME | **Shamm** | 7.05 | 132 | P | **Pn** | 02 37 44.2 | +1.4 |
| SHME | | | | S | **Sn** | 02 39 02.1 | -1.0 |
| BANOM | **Banah** | 7.24 | 132 | P | **Pn** | 02 37 46.7 | +1.3 |
| BANOM | **Banah** | 7.24 | 132 | P | **Pn** | 02 37 46.8 | +1.3 |
| BANOM | | | | S | **Sn** | 02 39 06.3 | -1.6 |
| KBAM | **BAM** | 7.29 | 102 | Pn | **Pn** | 02 37 49.2 | +3.0 |
| AJN | **Ajban** | 7.55 | 145 | P | **Pn** | 02 37 49.5 | -0.1 |
| AJN | | | | S | **Sn** | 02 39 14.3 | -1.0 |
| MASF | **Masafi** | 7.55 | 135 | P | **Pn** | 02 37 50.7 | +1.0 |
| MASF | | | | P | **Pn** | 02 37 50.7 | +1.0 |
| MASF | | | | S | **Sn** | 02 39 13.7 | -1.7 |
| MASF | | | | S | **Sn** | 02 39 13.7 | -1.7 |
| NAZ | **Nazwa, Dubai** | 7.56 | 140 | P | **Pn** | 02 37 52.7 | +3.0 |
| NAZ | **Nazwa, Dubai** SNR=10 | 7.56 | 140 | P | **Pn** | 02 37 50.2 | +0.5 |
| NAZ | | | | S | **Sn** | 02 39 14.1 | -1.3 |
| MSFE | **Esma-Masafi** | 7.56 | 135 | P | **Pn** | 02 37 50.6 | +0.8 |
| ASUD | **Al Ashush, Dub** | 7.67 | 143 | P | **Pn** | 02 37 53.5 | +2.2 |
| ASUD | **Al Ashush, Dub** SNR=13 | 7.67 | 143 | P | **Pn** | 02 37 53.4 | +2.2 |
| ASUD | | | | S | **Sn** | 02 39 16.8 | -1.4 |
| MDH | **Madha** | 7.69 | 135 | P | **Pn** | 02 37 52.2 | +0.6 |
| MDH | **Madha** | 7.69 | 135 | P | **Pn** | 02 37 52.4 | +0.8 |
| MDH | | | | S | **Sn** | 02 39 15.2 | -3.6 |
| FAQ | **Al Faqa, Dubai** | 7.71 | 141 | P | **Pn** | 02 37 53.5 | +1.6 |
| FAQ | **Al Faqa, Dubai** | 7.71 | 141 | P | **Pn** | 02 37 53.3 | +1.5 |
| FAQ | | | | S | **Sn** | 02 39 15.9 | -3.4 |
| UOSS | **Minazif** | 7.90 | 137 | P | **Pn** | 02 37 54.4 | 0.0 |
| UOSS | **Minazif** | 7.90 | 137 | P | **Pn** | 02 37 54.4 | 0.0 |
| UOSS | | | | P | **Pn** | 02 37 54.4 | 0.0 |
| UOSS | | | | S | **Sn** | 02 39 20.6 | -3.3 |
| UOSS | | | | S | **Sn** | 02 39 20.6 | -3.3 |
| HATD | **Hatta, Dubai** | 7.95 | 138 | P | **Pn** | 02 37 56.4 | +1.3 |
| HATD | **Hatta, Dubai** | 7.95 | 138 | P | **Pn** | 02 37 56.5 | +1.3 |
| HATD | | | | S | **Sn** | 02 39 22.7 | -2.4 |
| ASHO | **Ashiyiah** SNR=7.9 | 8.02 | 139 | P | **Pn** | 02 37 56.4 | +0.3 |
| ASHO | | | | S | **Sn** | 02 39 23.6 | -3.3 |
| JASK | **Jask - Hormozg** | 8.34 | 125 | P | **Pn** | 02 38 01.6 | +1.2 |
| JASK | | | | S | **Sn** | 02 39 31.5 | -3.3 |
| MZR | **Muzera** | 8.36 | 159 | P | **Pn** | 02 38 01.4 | +0.8 |
| MZR | **Muzera** | 8.36 | 159 | S | **Sn** | 02 39 31.9 | -3.3 |
| ALNE | **Al Ain** | 8.36 | 143 | P | **Pn** | 02 38 01.2 | +0.5 |
| ALNE | | | | S | **Sn** | 02 39 32.3 | -2.8 |
| RAYN | **Ar Rayn** | 8.48 | 211 | P | **Pn** | 02 38 01.1 | -1.4 |
| RAYN | **Ar Rayn** | 8.48 | 211 | P | **Pn** | 02 38 01.8 | -0.7 |
| SOHO | **SOHO** | 8.72 | 139 | P | **Pn** | 02 38 04.2 | -1.4 |
| SOHO | **SOHO** | 8.72 | 139 | P | **Pn** | 02 38 05.2 | -0.4 |
| SOHO | | | | S | **Sn** | 02 39 42.0 | -2.0 |
| ARQ | **Araqi** | 9.35 | 142 | P | **Pn** | 02 38 14.7 | +0.4 |
| ARQ | | | | S | **Sn** | 02 39 56.5 | -3.1 |
| HOQ | **Hoqain** | 9.59 | 138 | P | **Pn** | 02 38 18.0 | +0.4 |
| HOQ | | | | S | **Sn** | 02 40 02.5 | -3.0 |
| BSY | **Bisya** | 10.19 | 141 | P | **Pn** | 02 38 26.0 | +0.1 |
| BSY | | | | S | **Sn** | 02 40 17.4 | -2.8 |
| SMDO | **Samad** | 10.42 | 137 | P | **Pn** | 02 38 29.2 | +0.1 |
| SMDO | | | | S | **Sn** | 02 40 22.7 | -3.4 |
| JMDO | **Jabal Madar** SNR=6.9 | 10.99 | 139 | P | **Pn** | 02 38 38.1 | +1.3 |
| JMDO | | | | S | **Sn** | 02 40 38.0 | -1.9 |
| NGCH | **Negor - Chabah** | 11.04 | 117 | P | **Pn** | 02 38 37.8 | +0.3 |
| WBK | **Wadi Bani Khal** SNR=10 | 11.32 | 135 | P | **Pn** | 02 38 40.5 | -0.8 |
| JLN | **Jalan Bani Buh** | 11.93 | 135 | P | **Pn** | 02 38 48.1 | -1.6 |
| MHTO | **MHTO** | 12.04 | 143 | P | **Pn** | 02 38 51.7 | +0.6 |
| DOK | **Doka** | 12.70 | 163 | P | **Pn** | 02 39 00.8 | +0.5 |
| DOK | | | | S | **Sn** | 02 41 16.7 | -5.1 |
| DQM | **DQM** | 12.72 | 147 | P | **Pn** | 02 39 00.8 | +0.3 |
| WHFO | **Wadi Hawf** SNR=30 | 13.30 | 165 | P | **Pn** | 02 39 07.4 | -1.0 |
| ABTO | **Aybut** | 13.75 | 168 | P | **Pn** | 02 39 14.6 | 0.0 |
| DMTO | **DMTO** | 13.78 | 161 | P | **Pn** | 02 39 14.3 | -0.7 |
| RBK | **Rabkut** | 13.79 | 164 | P | **Pn** | 02 39 14.5 | -0.7 |
| BRTR | **Keskin Array B** baz=124,slow=13,SNR=3.0 | 16.18 | 308 | Pn | **Pn** | 02 39 48.0 | +1.0 |
| AKASG | **Malin Array Be** | 25.26 | 328 | P | **P** | 02 41 23.5 | -2.1 |
| | 0.6nm,0.4s,baz=138,slow=8.9,SNR=2.6 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| MKAR | **Makanchi Array** | 29.30 | 48 | P | | **P** | 02 42 07.7 | +5.6 | |
| | 0.3nm,0.4s,baz=232,slow=8.2,SNR=4.0 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| FINES | **FINESS Array B** | 34.44 | 340 | P | | **P** | 02 42 45.9 | -0.9 | |
| | 0.7nm,0.4s,baz=146,slow=9.7,SNR=10 | | | | | | | | |
| | 0.7nm,0.4s | | | | | | | | |
| HFS | **Hagfors** | 38.03 | 331 | P | | **P** | 02 43 16.1 | -1.5 | |
| | 0.6nm,0.4s,baz=142,slow=7.3,SNR=1.8 | | | | | | | | |
| | 0.6nm,0.4s | | | | | | | | |
| TORD | **Torodi Ar. Bea** | 47.99 | 260 | P | | **P** | 02 44 38.0 | -0.8 | |
| | 0.5nm,0.3s,baz=50,slow=7.2,SNR=11 | | | | | | | | |
| TORD | | | | PcP | | **PcP** | 02 46 07.1 | +0.1 | |
| | 0.1nm,0.3s,baz=52,slow=5.4,SNR=2.1 | | | | | | | | |
| | 0.5nm,0.3s | | | | | | | | |

**IDC 16 02:52:24.4±2.4,15°.51S×173°.59W,h0km,mb3.7/3,**
**mbtmp3.7/3,Error ellipse: s-maj=68.3km s-min=52.6km az=28.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | 49.64 | 257 | P | P | 03 01 18.8 | +0.6 |
| | 0.3nm,0.8s,baz=96,slow=6.2,SNR=1.7 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | 49.90 | 252 | P | P | 03 01 19.4 | -0.7 |
| | 0.4nm,0.3s,baz=91,slow=7.5,SNR=9.1 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| QSPA | **South Pole Qui** | 74.53 | 180 | P | P | 03 04 05.2 | +0.3 |
| | 2.5nm,1.1s,baz=66,slow=4.0,SNR=3.5 | | | | | | |
| | 2.5nm,1.1s | | | | | | |
| BRTR | **Keskin Array B** | 146.12 | 321 | PKPbc | PKPdf | 03 12 06.0 | -0.1 |
| | 0.7nm,0.7s,baz=38,slow=2.2,SNR=4.1 | | | | | | |

*IDC* ***16*** *03:10:18.8±0.4,0°.56N×98°.47E, h0km, mb4.6/32, mbtmp4.6/34, ML4.5/2, MS4.0/35, Error ellipse: s-maj=15.8km s-min=10.8km az=61.0*
*BJI* ***16*** *03:10:18.5±0.0,0°.01S×98°.44E, h29km, mb4.9/68, mB5.4/31, Ms4.9/57, Ms7.4/6/57*
*DJA* ***16*** *03:10:21.5±0.5,0°N±2°×98°E±°, h23km±5km, M5.1/29, mb5.0/29, mB5.5/14, MLv5.5/17, Mw5.2/23, Mw(mB)5.0/14*
*MOS* ***16*** *03:10:22.1±1.0,0°.58N×98°.45E, h33km, mb5.2/48, Error ellipse: s-maj=8.6km s-min=4.7km az=106.5*
*GCMT* ***16*** *03:10:23.1±0.4,0°.67N±0°.03×98°.51E±0°.04, h20km±1km, MW5.0/78, Moment Tensor Solution. s26,c30; s78,c106; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr3.48±.33; Mθθ-2.87±.21; Mϕϕ-0.60±.19; Mrθ-2.28±.41; Mϕθ-0.90±.11; Mϕr2.17±.52; Best double couple: Mo4.39100×10^16 NP1:ϕ283.00000°,δ65.00000°,λ115.00000°. NP2: ϕ56.00000°,δ35.00000°,λ48.00000°. Principal axes: T 5.1630, Plg62.0000°, Azm232.0000°; N -1.5420, Plg23.0000°, Azm92.0000°; P -3.6190, Plg16.0000°, Azm355.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC* ***16*** *03:10:25.3±1.7,0°.65N±0°.07×98°.36E±0°.07, h35km±1km, mb5.1/66, Mww4.9/9 Error ellipse: s-maj=14.9km s-min=8.0km az=43.0*

**ISC 16 03:10:23.8±0.4,0°.41N±0°.03×98°.34E±0°.04,h34km±1km,**
**h35km:pP-P,n417,σ1§66/423,mb4.9/153,MS4.2/60,**
**20C-30D,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PBSI | **Pulau Batu** | 0.47 | 187 | P | **Pb** | 03 10 33.6 | -0.3 |
| GSI | **Gunungsitoli** | 1.17 | 319 | P | **Pn** | 03 10 41.3 | -2.4 |
| GSI | **Gunungsitoli** | 1.17 | 319 | | **Pn** | 03 10 40.8 | -3.0 |
| GSI | | | | | **Sn** | 03 10 55.2 | -3.3 |
| GSI | **Gunungsitoli** | 1.17 | 319 | P | **Pn** | 03 10 41.0 | -2.7 |
| SISI | **Saibi** | 1.88 | 156 | P | **Pn** | 03 10 54.6 | +1.1 |
| RPSI | **Rantau Prapat** | 2.34 | 15 | Pn | **Pn** | 03 10 58.1 | -1.8 |
| PSI | **Prapat** | 2.45 | 14 | P | **Pn** | 03 10 59.2 | -2.2 |
| PSI | **Prapat** | 2.45 | 14 | P | **Pn** | 03 10 58.1 | -3.3 |
| PDSI | **Padang** | 2.50 | 122 | P | **Pn** | 03 11 01.5 | -0.6 |
| BKNI | **Bangkinang** | 2.70 | 92 | P | **Pb** | 03 11 10.1 | -1.4 |
| BKNI | **Bangkinang** | 2.70 | 92 | Pn | **Pn** | 03 11 06.0 | +1.2 |
| BKNI | **Bangkinang** | 2.70 | 92 | P | **Pn** | 03 11 05.4 | +0.5 |
| SNSI | **Sinabang, Aceh** | 2.83 | 315 | P | **Pn** | 03 11 04.9 | -1.6 |
| KCSI | **Kotacane, Aceh** | 3.14 | 350 | P | **Pn** | 03 11 08.6 | -2.3 |
| PPSI | **Pulau Pagai** | 3.57 | 152 | P | **Pn** | 03 11 17.1 | +0.3 |
| MLSI | **Meulaboh, Aceh** | 4.29 | 333 | P | **Pn** | 03 11 24.5 | -2.2 |
| IPM | **Ipoh** | 4.85 | 34 | P | **Pn** | 03 11 34.4 | -0.1 |
| IPM | **Ipoh** | 4.85 | 34 | Pn | **Pn** | 03 11 34.1 | -0.3 |
| LHMI | **Lhok Sumawe** | 4.98 | 344 | Pn | **Pn** | 03 11 34.4 | -1.8 |
| LHMI | **Lhok Sumawe** | 4.98 | 344 | P | **Pn** | 03 11 33.7 | -2.5 |
| KULM | **Kulim** | 5.37 | 25 | Pn | **Pn** | 03 11 40.4 | -1.1 |
| BTDF | **Bukit Timah Da** | 5.52 | 80 | P | **Pn** | 03 11 46.3 | +2.7 |
| MYKOM | **Kota Tinggi** | 5.68 | 76 | | **Pn** | 03 11 45.0 | -0.8 |
| LWLI | **Liwa** | 7.86 | 133 | P | **Pn** | 03 12 16.3 | +0.5 |
| SRIT | **Nakonsritamara** | 8.23 | 9 | P | **Pn** | 03 12 20.6 | -0.2 |
| SRIT | **Nakonsritamara** | 8.23 | 9 | | **Pn** | 03 12 19.0 | -1.8 |
| KASI | **Kota Agung** 166nm,0.7s | 8.52 | 134 | P | **Pn** | 03 12 24.8 | 0.0 |
| SURA | **Surathani** | 8.79 | 8 | P | **Pn** | 03 12 28.2 | -0.4 |
| DBJI | **Dramaga** 95nm,0.8s | 10.88 | 130 | P | **Pn** | 03 12 57.0 | -0.2 |
| CNJI | **Cibinong** 65nm,1.4s,2μm | 11.65 | 131 | P | **Pn** | 03 13 04.2 | -3.5 |
| KSM | **Kuching** | 12.02 | 85 | Pn | **Pn** | 03 13 11.7 | -1.1 |
| BBJI | **Bungbulang** | 12.14 | 130 | P | Pn | 03 13 19.5 | +5.0 |
| CMJI | **Cimerak** 84nm,0.8s | 12.96 | 129 | P | **Pn** | 03 13 21.5 | -4.1 |
| KPJI | **Karang Pucung** 50nm,0.7s | 13.07 | 126 | P | **Pn** | 03 13 26.8 | -0.4 |
| SBUM | **Sibu** | 14.03 | 82 | | **Pn** | 03 13 41.0 | +0.8 |
| NAYO | **Nakonayok** | 14.13 | 12 | P | **Pn** | 03 13 40.6 | -1.0 |
| SMRI | **Semarang** | 14.17 | 122 | P | **P** | 03 13 47.4 | -1.8 |
| SMRI | **Semarang** | 14.17 | 122 | | **Pn** | 03 13 41.3 | -0.9 |
| UGM | **Wanagama** | 14.70 | 124 | P | **P** | 03 13 53.2 | -1.9 |
| UGM | **Wanagama** | 14.70 | 124 | Pn | **Pn** | 03 13 49.2 | -0.1 |
| UGM | **Wanagama** 146nm,1.0s | 14.70 | 124 | P | **Pn** | 03 13 46.4 | -3.0 |
| PWJI | **Pagerwojo** 38nm,0.8s | 15.82 | 122 | P | **Pn** | 03 14 04.4 | +0.2 |
| UBPT | **Khong Chiam** | 16.37 | 25 | P | **Pn** | 03 14 11.4 | +0.3 |
| UBPT | **Khong Chiam** | 16.37 | 25 | | **Pn** | 03 14 10.1 | -1.0 |
| CM31 | **Chiang Mai Arr** | 17.95 | 2 | P | **Pn** | 03 14 28.4 | -2.4 |
| CMAR | **Chiang Mai Arr** | 17.95 | 2 | P | **Pn** | 03 14 28.9 | -1.9 |
| CMAR | **Chiang Mai Arr** 1.3nm,0.3s,baz=192,slow=11,SNR=22 | 17.95 | 2 | P | **Pn** | 03 14 29.6 | -1.2 |
| CMAR | | | | PcP | **PcP** | 03 19 06.7 | +1.0 |
| | 0.8nm,0.3s,baz=201,slow=3.1,SNR=4.2 | | | | | | |
| CMAR | | | | LR | LR | 03 21 10.7 | |
| | comp=Z,692nm,19.0s,baz=180,slow=37 9.0nm,0.7s | | | | | | |
| PHRA | **Phrae** | 18.07 | 6 | | **Pn** | 03 14 30.7 | -1.7 |
| PHRA | | | | IAmb | IAmb | 03 14 34.4 | |
| | comp=Z,146nm,1.1s | | | | | | |
| KKM | **Kota Kinabalu** | 18.70 | 72 | P | **Pn** | 03 14 42.6 | +2.5 |
| KKM | **Kota Kinabalu** | 18.70 | 72 | | **Pn** | 03 14 40.0 | -0.1 |
| KKM | | | | IAmb | IAmb | 03 14 47.8 | |
| | comp=Z,146nm,1.5s | | | | | | |
| PALK | **Pallekele** | 18.86 | 292 | P | **Pn** | 03 14 42.4 | +0.4 |
| | comp=Z,0.5nm,0.3s,baz=188,slow=13,SNR=2.0 | | | | | | |
| PALK | | | | S | Sn | 03 17 58.1 | -14 |
| | comp=Z,16nm,0.9s,baz=326,slow=7.8,SNR=3.4 | | | | | | |
| PALK | | | | LR | LR | 03 20 43.0 | |
| | comp=Z,467nm,20.3s,baz=219,slow=33 comp=Z,12nm,0.9s | | | | | | |
| CRAI | **Chiangrai** | 19.80 | 6 | P | **P** | 03 14 50.6 | -0.8 |
| TWSI | **Taliwang, Sumb** | 20.59 | 117 | P | **P** | 03 14 59.0 | -1.1 |
| MYLDM | **Lahad Datu** | 20.68 | 76 | P | **P** | 03 15 01.2 | +0.1 |
| MYLDM | | | | IAmb | IAmb | 03 15 16.0 | |
| | comp=Z,109nm,1.1s | | | | | | |
| SLVN | **Son La** | 21.50 | 14 | | **P** | 03 15 06.8 | -3.0 |
| SLVN | | | | IAmb | IAmb | 03 15 13.7 | |
| | comp=Z,77nm,1.5s | | | | | | |
| MPSI | **Mapaga** comp=Z,51nm,0.9s | 21.56 | 90 | P | **P** | 03 15 10.5 | -0.1 |
| QIZ | **Qiongzhong** | 21.68 | 31 | P | **P** | 03 15 11.6 | -0.1 |
| QIZ | | | | S | **S** | 03 19 12.5 | +2.5 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,60nm,2.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,1μm,13.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,1μm,15.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,770nm,11.0s | | | | | | |
| KAPI | **Kappang** | 22.06 | 104 | P | **P** | 03 15 18.8 | +2.9 |
| KAPI | **Kappang** | 22.06 | 104 | P | **P** | 03 15 14.8 | -1.1 |
| KAPI | **Kappang** | 22.06 | 104 | P | **P** | 03 15 14.9 | -1.0 |
| | comp=Z,5.1nm,0.4s,baz=264,slow=10,SNR=1.9 | | | | | | |
| | comp=Z,5.1nm,0.4s | | | | | | |
| KAPI | **Kappang** | 22.06 | 104 | i P | **P** | 03 15 16.2 | +0.3 |
| TOLI2 | **Tolitoli** | 22.45 | 88 | P | **P** | 03 15 23.1 | +2.9 |
| TOLI2 | **Tolitoli** | 22.45 | 88 | P | **P** | 03 15 18.4 | -1.8 |
| TOLI2 | | | | IAmb | IAmb | 03 15 26.4 | |
| | comp=Z,50nm,0.9s | | | | | | |
| BSSI | **Bau Bau, Buton** | 23.05 | 107 | P | **P** | 03 15 25.3 | -1.1 |
| | comp=Z,75nm,0.9s | | | | | | |
| TNCH | **TengChong** | 24.48 | 0 | ⇑P | **P** | 03 15 40.8 | +0.8 |
| TNCH | | | | sP | sP | 03 15 54.1 | +0.1 |
| TNCH | | | | PP | **PnPn** | 03 16 15.4 | +3.7 |
| TNCH | | | | S | **S** | 03 19 57.8 | -0.5 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,96nm,0.4s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,310nm,2.7s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,1μm,9.1s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,900nm,8.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,2μm,11.7s | | | | | | |
| LUWI | **Luwuk** | 24.48 | 93 | P | **P** | 03 15 39.0 | -1.0 |
| IMP | **Imphal** | 24.65 | 350 | eP | **P** | 03 15 42.9 | +1.4 |
| IMP | | | | IAmb | IAmb | 03 16 03.4 | |
| | comp=Z,33nm,0.8s | | | | | | |
| GTOI | **Gorontalo** comp=Z,22nm,1.0s | 24.67 | 89 | P | **P** | 03 15 39.9 | -1.9 |
| KMI | **Kunming** | 24.93 | 10 | ⇓P | **P** | 03 15 47.4 | +3.2 |
| KMI | | | | S | **S** | 03 20 02.3 | -3.5 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,250nm,4.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,1μm,13.6s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,940nm,10.1s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,1μm,14.7s | | | | | | |
| EDFI | **Ende, Flores** comp=Z,24nm,0.9s | 24.98 | 112 | P | **P** | 03 15 43.7 | -1.0 |
| KOHI | **KOHIMA** | 25.49 | 351 | eP | **P** | 03 15 48.0 | -1.1 |
| KOHI | | | | IAmb | IAmb | 03 16 02.7 | |
| | comp=Z,118nm,0.8s | | | | | | |
| SHL | **Shillong** | 25.77 | 346 | P | **P** | 03 15 50.3 | -1.5 |
| SHL | **Shillong** | 25.77 | 346 | eP | **P** | 03 15 50.5 | -1.3 |
| SHL | | | | IAmb | IAmb | 03 15 54.4 | |
| | comp=Z,96nm,1.1s | | | | | | |
| SHL | **Shillong** | 25.77 | 346 | P | **P** | 03 15 50.3 | -1.5 |
| SHL | | | | pmax | pmax | | |
| | comp=Z,102nm,1.0s | | | | | | |
| MOKO | **MOKOCHONG** | 26.02 | 352 | eP | **P** | 03 15 53.4 | -0.6 |
| MOKO | | | | IAmb | IAmb | 03 16 00.9 | |
| | comp=Z,138nm,0.8s | | | | | | |
| PZH | **PanZhiHua** | 26.15 | 7 | P | **P** | 03 15 57.1 | +2.0 |
| PZH | | | | S | **S** | 03 20 28.8 | +4.0 |
| PZH | | | | SS | **SnSn** | 03 21 38.4 | +13 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,210nm,5.3s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,13.3s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,15.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,13.7s | | | | | | |
| BOK | **Bokaro** | 26.20 | 333 | eP | **P** | 03 15 55.6 | +0.2 |
| BOK | | | | IAmb | IAmb | 03 16 00.7 | |
| | comp=Z,44nm,0.9s | | | | | | |
| ITAN | **ITANAGAR** | 26.95 | 351 | eP | **P** | 03 16 01.2 | -1.0 |
| ITAN | | | | IAmb | IAmb | 03 16 06.8 | |
| | comp=Z,173nm,0.8s | | | | | | |
| H08S2 | **Diego Garcia H** baz=73,slow=75,SNR=497 | 26.98 | 252 | T | T | 03 43 27.5 | |
| H08S3 | **Diego Garcia H** baz=73,slow=75 | 26.99 | 252 | T | T | 03 43 27.9 | |
| H08S1 | **Diego Garcia H** baz=73,slow=75,SNR=576 | 27.00 | 252 | T | T | 03 43 28.9 | |
| ZIRO | **ZIRO** | 27.30 | 351 | eP | **P** | 03 16 04.1 | -1.5 |
| ZIRO | | | | IAmb | IAmb | 03 16 12.4 | |
| | comp=Z,92nm,0.8s | | | | | | |
| PASG | **PASIGHAT** | 27.78 | 348 | eP | **P** | 03 16 08.1 | -1.6 |
| DAV | **Davao City (W)** | 27.96 | 76 | LR | LR | 03 27 59.1 | |
| | comp=Z,378nm,18.6s,baz=300,slow=38 | | | | | | |
| GTK | **Tadong** | 28.34 | 342 | eP | **P** | 03 16 15.4 | +0.6 |
| LSA | **Lhasa** | 29.92 | 347 | P | **P** | 03 16 31.8 | +2.6 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,32nm,0.9s | | | | | | |
| LSA | **Lhasa** | 29.92 | 347 | P | **P** | 03 16 27.8 | -1.4 |
| LSA | | | | IAmb | IAmb | 03 16 32.5 | |
| | comp=Z,32nm,1.0s | | | | | | |
| LSA | **Lhasa** | 29.92 | 347 | P | **P** | 03 16 27.8 | -1.4 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,32nm,1.0s | | | | | | |
| CD2 | **Chengdu** | 30.77 | 9 | P | **P** | 03 16 36.0 | -0.2 |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,1μm,11.4s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp

DHRM IAmb IAmb 03 17 43.1
comp=Z,29nm,0.5s
**H01W3 Cape Leeuwin H 38.09 159** T T 03 58 00.7
baz=334,slow=76,SNR=4.6
**H01W2 Cape Leeuwin H 38.11 159** T T 03 58 01.8
baz=334,slow=76,SNR=6.5
**H01W1 Cape Leeuwin H 38.11 159** T T 03 58 03.0
baz=334,slow=76,SNR=4.6
**GTA Gaotai 38.84 2** *e*P **P 03 17 47.6 +1.8**
GTA pmax pmax
comp=Z,14nm,1.0s
GTA LR LR
comp=Z,380nm,12.4s
GTA LR LR
comp=Z,450nm,13.1s
GTA LR LR
comp=Z,410nm,12.4s
**TIA Tai'an 39.66 24** P **P 03 17 51.8 -0.8**
TIA pmax pmax
comp=Z,14nm,1.0s
TIA pmax pmax
comp=Z,270nm,3.7s
TIA LR LR
comp=Z,700nm,14.4s
TIA LR LR
comp=Z,1μm,15.7s
TIA LR LR
comp=Z,860nm,13.0s
**HNS HongShan 39.79 21** ⇓P **P 03 17 53.8 +0.2**
HNS sP **sP 03 18 07.4 -0.3**
HNS *e*S **S 03 23 55.3 -0.3**
HNS pmax pmax
comp=Z,24nm,0.7s
HNS LR LR
comp=Z,540nm,14.3s
HNS LR LR
comp=Z,520nm,13.5s
HNS LR LR
comp=Z,450nm,16.3s
**WB0 Warramunga Arr 40.63 122** P **P 03 17 58.9 -2.0**
**WRA Warramunga Arr 40.66 122** P **P 03 17 59.0 -2.2**
comp=Z,11nm,0.8s,baz=299,slow=9.3,SNR=51
WRA PcP **PcP 03 20 03.1 +0.5**
comp=Z,3.8nm,0.5s,baz=314,slow=2.5,SNR=17
WRA LR LR 03 34 21.1
comp=Z,294nm,21.9s,baz=339,slow=36
comp=Z,11nm,0.8s
**WRAB Tennant Creek 40.66 122** P **P 03 17 59.7 -1.4**
**WRAB Tennant Creek 40.66 122***ce*P **P 03 17 59.0 -2.1**
WRAB pmax pmax
comp=Z,18nm,0.9s
**WB2 Warramunga Arr 40.67 122** P **P 03 17 59.6 -1.6**
**WR0 Warramunga Arr 40.83 122** P **P 03 18 00.8 -1.8**
**BTO Baotou 41.39 13** *e*P **P 03 18 10.6 +3.6**
BTO pP **sP 03 18 20.5 -0.5**
BTO sP pP 03 18 24.4 +7.4
BTO S **S 03 24 25.9 +6.2**
BTO sS **sS 03 24 40.8 +4.6**
BTO SS **SS 03 27 26.3 +1.7**
BTO pmax pmax
comp=Z,37nm,0.9s
BTO pmax pmax
comp=Z,420nm,6.6s
BTO LR LR
comp=Z,880nm,14.0s
BTO LR LR
comp=Z,1μm,13.4s
BTO LR LR
comp=Z,1μm,11.8s
**FORT Forrest 41.95 140** P **P 03 18 12.2 +0.7**
**HHC Hu-ho-hao-te 42.01 15**⇑*i*P **P 03 18 14.6 +2.6**
HHC pP sP 03 18 23.6 -2.4
HHC S **S 03 24 34.1 +5.4**
HHC pmax pmax
comp=Z,28nm,0.5s
HHC LR LR
comp=Z,620nm,13.9s
HHC LR LR
comp=Z,490nm,12.9s
HHC LR LR
comp=Z,740nm,14.6s
**ASAR Alice Springs 42.02 127** P **P 03 18 10.7 -1.5**
**ASAR Alice Springs 42.02 127** P **P 03 18 11.0 -1.3**
comp=Z,7.6nm,0.6s,baz=305,slow=7.9,SNR=76
ASAR PcP **PcP 03 20 08.0 +0.9**
comp=Z,7.6nm,0.9s,baz=306,slow=2.7,SNR=14
ASAR ScP **ScP 03 23 58.0 +2.8**
comp=Z,0.3nm,0.7s,baz=297,slow=4.1,SNR=2.1
ASAR S **S 03 24 24.6 -4.7**
comp=Z,0.8nm,0.8s,baz=300,slow=17,SNR=5.8
ASAR LR LR 03 38 22.2
comp=Z,203nm,19.2s,baz=304,slow=40
comp=Z,7.6nm,0.6s
**AS31 Alice Springs 42.02 127** P **P 03 18 10.9 -1.4**
**BJT Baijiatuan 42.64 20** P **P 03 18 15.8 -1.1**
BJT IAmb IAmb 03 18 21.2
comp=Z,27nm,0.7s
**BJT Baijiatuan 42.64 20** P **P 03 18 15.9 -1.1**
BJT pmax pmax
comp=Z,27nm,0.7s
**BJT Baijiatuan 42.64 20** P **P 03 18 17.6 +0.5**
BJT pP **sP 03 18 27.9 -3.2**
**BJI Beijing 42.66 20** P **P 03 18 17.5 +0.3**
BJI pmax pmax
comp=Z,9.0nm,1.0s
**DL2 Dalian 43.86 26** P **P 03 18 25.4 -1.4**
DL2 S **S 03 24 56.3 +0.6**
DL2 pmax pmax
comp=Z,110nm,1.0s
DL2 pmax pmax
comp=Z,480nm,3.5s
DL2 LR LR
comp=Z,880nm,15.9s
DL2 LR LR
comp=Z,760nm,13.3s
DL2 LR LR
comp=Z,750nm,18.9s
**KSH Kashi 43.96 335** P **P 03 18 26.3 -1.5**
KSH pP pP 03 18 36.3 -1.6
KSH pmax pmax
comp=Z,5.0nm,0.8s
**WMQ Urumqi 44.25 349** *e*P **P 03 18 31.9 +1.8**
WMQ pP pP 03 18 39.3 -0.8
WMQ pmax pmax
comp=Z,31nm,1.1s
WMQ LR LR
comp=Z,200nm,24.2s
**JNU Nakatsue 44.66 40** P **P 03 18 30.8 -2.7**
JNU IAmb IAmb 03 18 52.8
comp=Z,50nm,1.3s
**JNU Nakatsue 44.66 40** LR LR 03 39 16.9
comp=Z,128nm,19.0s,baz=226,slow=39
**NRN Naryn 45.56 336** P **P 03 18 39.8 -1.0**
NRN IAmb IAmb 03 19 03.1
comp=Z,20nm,1.0s
**NRN Naryn 45.56 336** P **P 03 18 39.8 -1.0**
NRN pmax pmax
comp=Z,20nm,1.0s
**SHLS Shalkode 45.79 341** *e*P **P 03 18 40.2 -2.2**
comp=Z,17nm,0.9s,baz=341
**SHLS Shalkode 45.79 341** *e*P **P 03 18 40.2 -2.2**
SHLS pmax pmax
comp=Z,17nm,0.9s
**KSAR Wonju Array Be 45.84 33** P **P 03 18 41.6 -1.0**
**KSAR Wonju Array Be 45.84 33** P **P 03 18 41.6 -1.0**
**KSRS Korea Array 45.87 33** P **P 03 18 41.6 -1.3**
comp=Z,8.7nm,0.7s,baz=220,slow=8.7,SNR=15
KSRS PcP **PcP 03 20 19.8 0.0**
comp=Z,3.5nm,1.0s,baz=212,slow=4.7,SNR=1.6
KSRS ScP **ScP 03 24 11.5 +1.1**
comp=Z,1.0nm,0.4s,baz=217,slow=5.9,SNR=3.3
KSRS LR LR 03 38 47.7
comp=Z,168nm,18.4s,baz=225,slow=37
comp=Z,8.7nm,0.7s
**UZB Uzynbulak 45.93 340** *e*P **P 03 18 42.8 -0.8**
comp=Z,6.2nm,0.7s,baz=340
**UZB Uzynbulak 45.93 340** *e*P **P 03 18 42.7 -0.8**
UZB pmax pmax
comp=Z,6.0nm,0.7s
**SATY Saty 46.06 340** *e*P **P 03 18 43.9 -0.6**
comp=Z,15nm,1.2s,baz=340
**SATY Saty 46.06 340** *e*P **P 03 18 43.8 -0.7**
SATY pmax pmax
comp=Z,15nm,1.2s
**XLT XiLinHaoTe 46.10 18** *e*P **P 03 18 47.3 +2.5**
XLT pmax pmax
comp=Z,27nm,1.2s
**GAR Garm 46.19 330** P **P 03 18 43.7 -1.8**
GAR IAmb IAmb 03 19 03.8
comp=Z,25nm,1.1s
**KPKS Kokpek 46.33 340** *e*P **P 03 18 45.7 -0.9**
baz=340
**KPKS Kokpek 46.33 340** *e*P **P 03 18 45.6 -0.9**
**BOOM Boomskoye usch 46.48 337** P **P 03 18 46.8 -1.1**
**BOOM Boomskoye usch 46.48 337** P **P 03 18 46.8 -1.1**
BOOM pmax pmax
comp=Z,17nm,1.4s
**CHGR Chuyangaron 46.53 328** P **P 03 18 46.3 -1.9**
**CHGR Chuyangaron 46.53 328** P **P 03 18 46.3 -1.9**
CHGR pmax pmax
comp=Z,64nm,1.3s
**SIMJ Simiganj 46.61 328** P **P 03 18 47.3 -1.6**
SIMJ IAmb IAmb 03 18 51.4
comp=Z,20nm,1.1s
**SIMJ Simiganj 46.61 328** P **P 03 18 48.8 -0.1**
SIMJ pP **pP 03 18 59.5 +0.5**
**MDOK Medeo 46.64 339** *e*P **P 03 18 48.3 -0.8**
baz=339
**MDOK Medeo 46.64 339** *e*P **P 03 18 48.2 -0.8**
**SNY Shenyang 47.10 26** ⇑P P 03 18 44.5 -8.0
SNY pmax pmax
comp=Z,14nm,1.0s
**AAK Ala-Archa 47.18 336** LR LR 03 41 51.0
comp=Z,249nm,18.9s,baz=154,slow=40
**AAK Ala-Archa 47.18 336**⇓*e*P **P 03 18 53.1 -0.2**
AAK pmax pmax
comp=Z,23nm,1.9s
**ARXS Arharly 47.28 340** *e*P **P 03 18 54.1 +0.1**
**KUU Kurty 47.53 338** *e*P **P 03 18 55.1 -0.7**
baz=338
**KUU Kurty 47.53 338** *e*P **P 03 18 55.1 -0.7**
**SONM Songino Array 47.75 7** P **P 03 18 57.0 -0.6**
SONM IAmb IAmb 03 19 02.9
comp=Z,19nm,1.0s
**SONM Songino Array 47.75 7** P **P 03 18 57.6 -0.1**
comp=Z,8.7nm,0.5s,baz=190,slow=9.5,SNR=20
SONM PcP **PcP 03 20 26.6 +0.1**
comp=Z,1.8nm,0.4s,baz=191,slow=4.9,SNR=4.1
SONM LR LR 03 41 44.0
comp=Z,336nm,19.0s,baz=194,slow=40
comp=Z,8.7nm,0.5s
**SONM Songino Array 47.75 7** P **P 03 18 57.0 -0.6**
SONM pmax pmax
comp=Z,19nm,1.0s
**TDK Taldyqorghan 47.78 341** *e*P **P 03 18 57.2 -0.7**
baz=341
**TDK Taldyqorghan 47.78 341** *e*P **P 03 18 57.1 -0.7**
**ULN Ulaanbaatar 47.87 8** P **P 03 18 58.4 -0.2**
ULN IAmb IAmb 03 19 03.8
comp=Z,11nm,0.9s
**ULN Ulaanbaatar 47.87 8***d i*P **P 03 18 58.7 +0.1**
ULN pmax pmax
comp=Z,23nm,1.5s
**ULN Ulaanbaatar 47.87 8** P **P 03 18 58.4 -0.2**
**MK31 Makanchi Array 48.28 345** P **P 03 19 01.1 -0.5**
MK31 IAmb IAmb 03 19 06.8
comp=Z,13nm,0.8s
**MK31 Makanchi Array 48.28 345***de*P **P 03 19 01.4 -0.2**
**MKAR Makanchi Array 48.28 345** P **P 03 19 01.0 -0.6**
**MKAR Makanchi Array 48.28 345** P **P 03 19 01.2 -0.5**
comp=Z,19nm,0.8s,baz=156,slow=7.6,SNR=38
MKAR LR LR 03 42 53.1
comp=Z,110nm,19.2s,baz=166,slow=41
comp=Z,19nm,0.8s
**MKAR Makanchi Array 48.28 345** P **P 03 19 01.0 -0.6**
**ZSN Zaisan 48.30 348** *e*P **P 03 19 01.1 -0.6**
comp=Z,16nm,1.1s,baz=348
**ZSN Zaisan 48.30 348** *e*P **P 03 19 01.1 -0.6**
ZSN pmax pmax
comp=Z,16nm,1.1s
**KK31 Karatay Array 49.27 333** P **P 03 19 08.7 -0.6**
KK31 IAmb IAmb 03 19 12.9
comp=Z,39nm,1.9s
**KK31 Karatay Array 49.27 333** P **P 03 19 08.7 -0.6**
KK31 pmax pmax
comp=Z,39nm,2.0s
**KKAR Karatay Array 49.27 333** P **P 03 19 08.1 -1.1**
KKAR IAmb IAmb 03 19 12.9
comp=Z,39nm,1.9s
**KKAR Karatay Array 49.27 333** P **P 03 19 07.9 -1.4**
**KKAR Karatay Array 49.27 333** P **P 03 19 08.1 -1.1**
KKAR pmax pmax
comp=Z,39nm,2.0s
**BTLS Baital 49.37 337** *e*P **P 03 19 09.2 -0.8**
baz=338
**BTLS Baital 49.37 337** *e*P **P 03 19 09.2 -0.8**
**CN2 Changchun 49.51 26** ⇓P **P 03 19 10.3 -0.7**
CN2 *ep*P pP 03 19 19.3 -1.9
CN2 *e*S **S 03 26 14.3 -2.1**
CN2 pmax pmax
comp=Z,20nm,0.5s
CN2 pmax pmax
comp=Z,300nm,3.0s
CN2 LR LR
comp=Z,300nm,13.0s
CN2 LR LR
comp=Z,400nm,13.0s
CN2 LR LR
comp=Z,300nm,12.0s
**BRLS Borolday 49.52 333** *e*P **P 03 19 09.3 -1.9**
baz=332
**BRLS Borolday 49.52 333** *e*P **P 03 19 09.3 -1.9**
**PMG Port Moresby 49.57 103**⇓*e*P **P 03 19 11.1 -0.9**
PMG pmax pmax
comp=Z,33nm,1.6s
**ZAK Zakamensk 49.96 4** *e*P **P 03 19 13.8 -0.7**
ZAK pmax pmax
comp=Z,9.0nm,1.7s
**DGZ Jazzator, Alta 49.99 351**⇓*i*P **P 03 19 15.4 +0.6**
DGZ pmax pmax
comp=Z,41nm,1.7s
**CTA Charters Tower 51.14 116** LR LR 03 42 18.9
comp=Z,15nm,22.0s,baz=280,slow=38
**CTAO Charters Tower 51.14 116** P **P 03 19 22.9 -0.9**
**CTAO Charters Tower 51.14 116** P **P 03 19 22.9 -0.9**
CTAO pmax pmax
comp=Z,10.0nm,0.9s
**CTAO Charters Tower 51.14 116** P **P 03 19 22.8 -1.0**
CTAO pP **pP 03 19 32.6 -1.4**
**MJAR Matsushiro Arr 51.52 41** P **P 03 19 24.8 -1.6**
comp=Z,1.6nm,0.7s,baz=234,slow=6.7,SNR=5.1
comp=Z,1.6nm,0.7s
**BNX BinXian 51.89 26** ⇓P **P 03 19 28.0 -1.0**
BNX pmax pmax
comp=Z,20nm,0.7s
**STKA Stephens Creek 51.99 132** P **P 03 19 29.6 -0.3**
**STKA Stephens Creek 51.99 132** P **P 03 19 30.0 0.0**
comp=Z,4.3nm,0.4s,baz=315,slow=7.0,SNR=16
STKA LR LR 03 43 48.1
comp=Z,165nm,20.4s,baz=253,slow=39
comp=Z,4.3nm,0.4s
**STKA Stephens Creek 51.99 132** P **P 03 19 29.6 -0.3**
STKA pmax pmax
comp=Z,3.0nm,1.0s
**MDJ Mudanjiang 52.01 28** P **P 03 19 31.3 +1.4**
MDJ PcP **PcP 03 20 43.3 +1.4**
MDJ PcS **PcS 03 24 36.9 -3.1**
MDJ S **S 03 26 54.6 +3.5**
MDJ pmax pmax
comp=Z,18nm,1.4s
MDJ LR LR
comp=Z,470nm,17.2s
MDJ LR LR
comp=Z,320nm,11.8s
MDJ LR LR
comp=Z,690nm,13.1s
**HIA Hailar 52.03 18**⇓*e*P **P 03 19 29.5 -0.5**
HIA pmax pmax
comp=Z,27nm,1.1s
**SEM Semipalatinsk 52.14 345** *e*P **P 03 19 30.4 -0.6**
comp=Z,13nm,1.0s,baz=346
**SEM Semipalatinsk 52.14 345** *e*P **P 03 19 30.4 -0.6**
SEM pmax pmax
comp=Z,13nm,1.0s
**KURBB Kurchatov Arra 52.79 344** P **P 03 19 35.0 -0.5**
comp=Z,9.5nm,0.8s,baz=166,slow=7.4,SNR=38
KURBB LR LR 03 44 36.3
comp=Z,226nm,22.0s,baz=186,slow=39
comp=Z,9.5nm,0.8s
**KURK Kurchatov 52.85 344** P **P 03 19 35.8 -0.2**
KURK IAmb IAmb 03 19 40.6
comp=Z,26nm,1.0s
**KURK Kurchatov 52.85 344***d i*P **P 03 19 36.0 0.0**
KURK pmax pmax
comp=Z,36nm,1.2s
**KURK Kurchatov 52.85 344** P **P 03 19 35.5 -0.5**
**USA0B Ussuriysk Arra 52.87 30***ce*P **P 03 19 35.4 -0.9**
**USRK Ussuriysk Ar. 52.87 30** P **P 03 19 35.6 -0.7**
**USRK Ussuriysk Ar. 52.87 30** P **P 03 19 35.7 -0.6**
comp=Z,18nm,0.9s,baz=230,slow=5.0,SNR=21
comp=Z,18nm,0.9s
**OPO Ambohidratompo 53.65 247** LR LR 03 39 19.6
comp=Z,41nm,20.0s,baz=206,slow=32
**ZAA0 Zalesovo Array 54.52 350** P **P 03 19 47.5 -0.6**
**ZALV Zalesovo Beam 54.52 350** P **P 03 19 47.5 -0.7**
**ZALV Zalesovo Beam 54.52 350** P **P 03 19 47.7 -0.4**
comp=Z,26nm,0.7s,baz=177,slow=6.2,SNR=38
ZALV LR LR 03 49 07.4
comp=Z,135nm,18.4s,baz=187,slow=43
comp=Z,26nm,0.7s
**ZALV Zalesovo Beam 54.52 350** P **P 03 19 47.5 -0.7**
**HEH HeiHe 55.50 22** *e*P **P 03 19 53.8 -1.5**
HEH pmax pmax
comp=Z,7.0nm,0.9s
HEH pmax pmax
comp=Z,200nm,3.5s
HEH LR LR
comp=Z,220nm,11.2s
HEH LR LR
comp=Z,430nm,11.0s
HEH LR LR
comp=Z,520nm,12.8s
**RAYN Ar Rayn 56.13 298** P **P 03 20 00.3 -0.1**
RAYN sP **sP 03 20 14.6 -0.2**
**KLR Kul'dur 56.46 26***c i*P **P 03 20 01.7 -0.5**
KLR pmax pmax
comp=Z,20nm,0.8s
**EIDS Eidsvold 57.00 121** P **P 03 20 06.4 -0.1**
EIDS IAmb IAmb 03 20 18.1
comp=Z,30nm,1.5s
**BVAR Borovoye Array 57.37 340** P **P 03 20 08.0 -0.6**
comp=Z,13nm,0.7s,baz=134,slow=8.4,SNR=26
BVAR LR LR 03 48 20.2
comp=Z,247nm,20.3s,baz=144,slow=40
comp=Z,13nm,0.7s
**BVAR Borovoye Array 57.37 340** P **P 03 20 08.0 -0.6**
**BRVK Borovoye 57.43 340** P **P 03 20 08.5 -0.6**
BRVK IAmb IAmb 03 20 29.6
comp=Z,9.9nm,0.8s
**BRVK Borovoye 57.43 340**⇓*i*P **P 03 20 07.2 -1.8**
BRVK pmax pmax
comp=Z,22nm,1.7s
**BRVK Borovoye 57.43 340** P **P 03 20 08.9 -0.1**
**ZEA Zeya 58.28 20** *e*P **P 03 20 15.3 +0.3**
ZEA pmax pmax
comp=Z,20nm,0.8s
ZEA MLR MLR
comp=E,200nm,15.0s
ZEA MLR MLR
comp=Z,200nm,13.0s
**BOD Bodaibo 58.58 10** *e*P **P 03 20 16.6 -0.4**
BOD pmax pmax
comp=Z,45nm,1.3s
**ABKAR Akbulak array 58.74 332** P **P 03 20 17.8 -0.4**
**ABKAR Akbulak array 58.74 332** P **P 03 20 17.7 -0.6**
ABKAR IAmb IAmb 03 20 29.5
comp=Z,31nm,1.4s
**GRNR Gornyy 59.65 27**⇑*i*P **P 03 20 23.8 -0.8**
GRNR pmax pmax
comp=Z,8.0nm,0.9s
GRNR MLR MLR
comp=E,160nm,12.0s
GRNR MLR MLR
comp=N,180nm,13.0s
GRNR MLR MLR
comp=Z,290nm,15.0s
**FURI Furi 59.98 280** LR LR 03 42 38.1
comp=Z,97nm,20.2s,baz=122,slow=32
**YSS Yuzh-Sakhalins 60.37 33***ce*P **P 03 20 30.1 +0.6**
YSS pmax pmax
comp=Z,46nm,1.3s
**AKTO Aktyubinsk 60.46 332** LR LR 03 49 44.5
comp=Z,87nm,18.5s,baz=183,slow=39
**KMBO Kilima Mbogo 61.10 268** P **P 03 20 37.6 +2.1**
**H04N2 CROZET ISLANDS 61.77 215** T T 04 27 12.0
baz=55,slow=75,SNR=1938
**H04N1 CROZET ISLANDS 61.78 215** T T 04 27 12.5
baz=55,slow=75,SNR=1756
**H04N3 CROZET ISLANDS 61.79 215** T T 04 27 11.1
baz=55,slow=75,SNR=2183
**H04S1 CROZET ISLANDS 62.09 214** T T 04 27 40.0
baz=54,slow=75,SNR=136
**H04S3 CROZET ISLANDS 62.11 214** T T 04 27 39.7
baz=54,slow=75,SNR=167
**H04S2 CROZET ISLANDS 62.11 214** T T 04 27 41.0
baz=54,slow=75,SNR=108
**GNI Garni 62.65 316** LR LR 03 51 11.3
comp=Z,52nm,19.1s,baz=106,slow=39
**SVE Sverdlovsk 63.84 338** *e*P **P 03 20 52.4 -0.2**
SVE pmax pmax
comp=Z,25nm,1.1s
**ARU Arti 64.35 337** P **P 03 20 55.2 -0.7**
ARU IAmb IAmb 03 21 00.7
comp=Z,21nm,1.5s
**ARU Arti 64.35 337** LR LR 03 52 08.2
comp=Z,158nm,19.4s,baz=127,slow=39
**ARU Arti 64.35 337***c i*P **P 03 20 55.1 -0.9**
ARU S **S 03 29 34.4 +2.6**
ARU SS **SS 03 33 43.7 +1.6**
ARU pmax pmax
comp=Z,13nm,1.4s
**ARU Arti 64.35 337** P **P 03 20 55.3 -0.7**
comp=Z,8.8nm,1.2s
**KBZ Khabaz 65.41 319** P **P 03 21 03.1 0.0**
comp=Z,4.4nm,0.9s,baz=96,slow=4.9,SNR=11
comp=Z,4.4nm,0.9s
**KBZ Khabaz 65.41 319***ce*P **P 03 21 03.4 +0.3**
**SHA1 Shidzhatmaz 65.57 319**⇓*e*P **P 03 21 03.5 -1.0**
**KIV Kislovodsk 65.64 319** P **P 03 21 04.4 -0.4**
KIV IAmb IAmb 03 21 23.8
comp=Z,24nm,1.1s
**KIV Kislovodsk 65.64 319** *e*P **P 03 21 04.7 -0.1**
KIV pmax pmax
comp=Z,9.0nm,1.0s
**KIV Kislovodsk 65.64 319** P **P 03 21 04.9 +0.1**
comp=Z,16nm,1.0s
**KIV Kislovodsk 65.64 319** P **P 03 21 07.0 +2.2**
KIV pP **sP 03 21 18.5 -0.8**
**YAK Yakutsk 65.86 16** *e*P **P 03 21 04.5 -1.2**
YAK *e**PP **pP 03 21 10.0 -6.2**
YAK *e* 03 21 34.4
YAK *e* 03 23 29.4
YAK *e*S **S 03 29 50.5 +0.4**
YAK *e* 03 30 56.1
YAK *e*SS **SS 03 34 09.6 +4.2**
YAK *e*SSS SSS 03 36 57.9
YAK pmax pmax
comp=Z,23nm,0.9s
YAK pmax pmax
comp=N,4.0nm,1.0s
YAK pmax pmax
comp=E,2.0nm,1.1s
YAK pmax pmax
comp=Z,114nm,3.9s
YAK pmax pmax
comp=N,71nm,3.8s
YAK pmax pmax
comp=E,38nm,3.8s
YAK smax smax
comp=E,76nm,3.2s
YAK smax smax
comp=N,71nm,3.5s
YAK MLR MLR
comp=Z,526nm,14.0s
YAK MLR MLR
comp=N,293nm,15.0s
YAK MLR MLR
comp=E,247nm,14.0s
**BELG Belogornoye 66.82 329** LR LR 03 54 48.8
comp=E,85nm,19.3s,baz=97,slow=40
**BELG Belogornoye 66.82 329**⇑*e*P **P 03 21 11.9 -0.1**
BELG pmax pmax
comp=Z,2.0nm,0.8s
**EIL Elat 66.83 302** LR LR 03 50 18.0
comp=Z,160nm,18.7s,baz=70,slow=36
**CASY Casey 67.11 175** P **P 03 21 16.1 +2.5**
CASY IAmb IAmb 03 21 17.2
comp=Z,12nm,1.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CASY** | **Casey** | **67.11** | **175** | P | **P** | **03 21 15.9** | **+2.3** |
| CASY | | | | sP | **sP** | **03 21 31.3** | **+3.2** |
| **MMAI** | **Mount Meron Ar** | **67.28** | **306** | P | **P** | **03 21 15.0** | **-0.5** |
| | comp=Z,0.5nm,0.3s,baz=124,slow=2.6,SNR=5.0 | | | | | | |
| MMAI | | | | LR | LR | 03 52 37.1 | |
| | comp=Z,57nm,19.1s,baz=56,slow=38 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **MBAR** | **Mbarara** | **67.61** | **269** | *e*P | **P** | **03 21 16.2** | **-1.8** |
| MBAR | | | | pmax | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | |
| **MBAR** | **Mbarara** | **67.61** | **269** | P | **P** | **03 21 19.8** | **+1.8** |
| MBAR | | | | sP | **sP** | **03 21 36.3** | **+3.8** |
| **BNN** | **Bunyan** | **68.59** | **312** | P | **P** | **03 21 23.7** | **0.0** |
| **VRH** | **Novokhopyorsk** | **69.41** | **326** | *e*P | **P** | **03 21 26.1** | **-2.2** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **KIRV** | **Kirov** | **69.50** | **335** | LR | LR | 03 55 06.0 | |
| | comp=Z,109nm,19.3s,baz=151,slow=39 | | | | | | |
| **KIRV** | **Kirov** | **69.50** | **335**c | *i*P | **P** | **03 21 27.7** | **-1.0** |
| **DZM** | **Mont Dzumac** | **69.93** | **114** | LR | LR | 03 52 30.6 | |
| | comp=Z,112nm,22.0s,baz=254,slow=36 | | | | | | |
| **BR131** | **Keskin Array S** | **70.48** | **312**⇑ | *e*P | **P** | **03 21 33.8** | **-1.5** |
| **BRTR** | **Keskin Array B** | **70.48** | **312** | P | **P** | **03 21 34.6** | **-0.7** |
| **BRTR** | **Keskin Array B** | **70.48** | **312** | P | **P** | **03 21 33.9** | **-1.4** |
| | comp=Z,1.7nm,0.8s,baz=138,slow=7.1,SNR=9.9 | | | | | | |
| BRTR | | | | LR | LR | 03 53 30.2 | |
| | comp=Z,43nm,21.5s,baz=114,slow=37 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **VORD** | **Divnogorie** | **70.69** | **325** | *e*P | **P** | **03 21 33.8** | **-2.3** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **VSR** | **Storozhevoye** | **70.86** | **325** | *e*P | **P** | **03 21 33.6** | **-3.6** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **LSZ** | **Lusaka** | **70.98** | **254** | P | **P** | **03 21 39.1** | **+0.4** |
| LSZ | | | | IAmb | IAmb | 03 21 41.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **LSZ** | **Lusaka** | **70.98** | **254** | P | **P** | **03 21 39.2** | **+0.4** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **LSZ** | **Lusaka** | **70.98** | **254** | P | **P** | **03 21 45.4** | **+1.7** |
| **MA2** | **Magadan** | **71.55** | **25** | P | **P** | **03 21 40.6** | **-0.6** |
| MA2 | | | | IAmb | IAmb | 03 21 46.3 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **MA2** | **Magadan** | **71.55** | **25**⇑ | *i*P | **P** | **03 21 40.7** | **-0.5** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **71.55** | **25** | P | **P** | **03 21 40.9** | **-0.3** |
| | comp=Z,21nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **71.77** | **33** | P | **P** | **03 21 41.1** | **-1.6** |
| | comp=Z,2.1nm,0.6s,baz=233,slow=6.5,SNR=4.5 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **72.21** | **194** | P | **P** | **03 21 47.9** | **+2.9** |
| | comp=Z,5.3nm,0.8s,baz=22,slow=13,SNR=3.8 | | | | | | |
| MAW | | | | LR | LR | 03 46 59.5 | |
| | comp=Z,152nm,19.8s,baz=36,slow=30 | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **MOS** | **Moscow** | **73.59** | **329** | *e*P | **P** | **03 21 49.0** | **-4.4** |
| MOS | | | | pmax | pmax | | |
| | comp=Z,28nm,0.8s | | | | | | |
| **TIXI** | **Tiksi** | **73.77** | **10**⇓ | *i*P | **P** | **03 21 53.0** | **-1.1** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| **OBN** | **Obninsk** | **73.88** | **328** | *e*P | **P** | **03 21 54.0** | **-1.1** |
| OBN | | | | *e* | | 03 22 09.2 | |
| OBN | | | | *e* | | 03 24 38.5 | |
| OBN | | | | *e*PPP | PPP | 03 26 20.9 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,63nm,19.0s | | | | | | |
| **SEY** | **Seymchan** | **74.04** | **23**⇓ | *i*P | **P** | **03 21 55.6** | **-0.3** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **74.56** | **244** | P | **P** | **03 22 00.8** | **+0.9** |
| LBTB | | | | IAmb | IAmb | 03 22 02.9 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **LBTB** | **Lobatse** | **74.56** | **244** | P | **P** | **03 22 00.8** | **+0.9** |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| **BOSA** | **Boshof** | **75.38** | **240** | P | **P** | **03 22 05.7** | **+1.1** |
| | comp=Z,6.5nm,0.9s,baz=107,slow=9.1,SNR=6.3 | | | | | | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **SORM** | **Soroca** | **76.44** | **320** | ⇓P | **P** | **03 22 09.7** | **-0.3** |
| **SORM** | **Soroca** | **76.44** | **320** | ⇓P | **P** | **03 22 09.7** | **-0.3** |
| **SORM** | **Soroca** | **76.44** | **320** | P | **P** | **03 22 09.6** | **-0.4** |
| | comp=Z,13nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **76.57** | **322** | P | **P** | **03 22 08.5** | **-2.2** |
| | comp=Z,1.5nm,0.6s,baz=87,slow=5.1,SNR=5.1 | | | | | | |
| AKASG | | | | LR | LR | 04 00 36.9 | |
| | comp=Z,56nm,19.2s,baz=104,slow=39 | | | | | | |
| **AKBB** | **Malin Array Si** | **76.57** | **322** | P | **P** | **03 22 11.2** | **+0.5** |
| **TESR** | **Tescani** | **77.17** | **318** | ⇓P | **P** | **03 22 13.9** | **-0.3** |
| **LUBAR** | **Lubar, Ukraine** | **77.27** | **321** | P | **P** | **03 22 13.3** | **-1.4** |
| **MLR** | **Muntele Rosu** | **77.42** | **317** | P | **P** | **03 22 15.7** | **-0.1** |
| MLR | | | | IAmb | IAmb | 03 22 36.8 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **MLR** | **Muntele Rosu** | **77.42** | **317** | ⇓P | **P** | **03 22 15.8** | **0.0** |
| **MLR** | **Muntele Rosu** | **77.42** | **317** | P | **P** | **03 22 15.7** | **-0.1** |
| MLR | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **MLR** | **Muntele Rosu** | **77.42** | **317** | P | **P** | **03 22 16.0** | **+0.2** |
| **KMPD** | **K-Podol'skiy** | **77.76** | **320** | P | **P** | **03 22 16.4** | **-1.0** |
| KMPD | | | | P | **P** | **03 22 16.1** | **-1.3** |
| **VOIR** | | **78.02** | **316** | ⇓P | **P** | **03 22 18.7** | **-0.4** |
| **VOIR** | | **78.02** | **316** | ⇓P | **P** | **03 22 18.7** | **-0.4** |
| **BURAR** | **Bucovina Array** | **78.36** | **319** | P | **P** | **03 22 21.2** | **+0.2** |
| BURAR | | | | IAmb | IAmb | 03 22 44.4 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **BURAR** | **Bucovina Array** | **78.36** | **319** | ⇓P | **P** | **03 22 21.3** | **+0.3** |
| **BURAR** | **Bucovina Array** | **78.36** | **319** | ⇓P | **P** | **03 22 21.3** | **+0.3** |
| **BUR08** | **Bucovina Ar. S** | **78.38** | **319** | P | **P** | **03 22 21.4** | **+0.3** |
| **MNK** | **Minsk** | **78.41** | **326** | *i*P | **P** | **03 22 17.7** | **-3.2** |
| MNK | | | | *i* | | 03 22 26.5 | |
| MNK | | | | *i* | | 03 25 15.1 | |
| MNK | | | | *i*PPP | PPP | 03 27 03.4 | |
| MNK | | | | *i*S | **S** | **03 32 12.0** | **-2.3** |
| MNK | | | | *i* | | 03 32 35.6 | |
| MNK | | | | *i*SS | **SS** | **03 37 19.6** | **+1.9** |
| MNK | | | | *i*SSS | SSS | 03 40 36.6 | |
| MNK | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.9s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.7s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,73nm,18.0s | | | | | | |
| **RNPP5** | **Staryi Chortor** | **78.75** | **322** | P | **P** | **03 22 23.6** | **+0.8** |
| **RNPP9** | **Sopachiv** | **78.79** | **323** | P | **P** | **03 22 22.3** | **-0.8** |
| **MARR** | **Marisel-Cluj** | **79.58** | **317** | ⇓P | **P** | **03 22 28.3** | **+0.6** |
| **DRGR** | | **79.88** | **317** | ⇓P | **P** | **03 22 29.6** | **+0.4** |
| **DRGR** | | **79.88** | **317** | ⇓P | **P** | **03 22 29.6** | **+0.4** |
| **SURR** | **Surduc** | **80.10** | **316** | ⇓P | **P** | **03 22 30.7** | **+0.4** |
| **SIRR** | **Siria** | **80.50** | **317** | ⇓P | **P** | **03 22 32.9** | **+0.3** |
| **KOLS** | **Kolonicke sedl** | **80.55** | **320** | *e*P | **P** | **03 22 33.3** | **+0.6** |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **80.55** | **320** | *e*P | **P** | **03 22 33.3** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **81.08** | **130** | P | **P** | **03 22 36.4** | **+0.5** |
| **FINES** | **FINESS Array B** | **81.22** | **332** | P | **P** | **03 22 35.1** | **-0.9** |
| | comp=Z,3.4nm,0.8s,baz=102,slow=5.5,SNR=18 | | | | | | |
| FINES | | | | LR | LR | 04 03 13.0 | |
| | comp=Z,89nm,20.9s,baz=112,slow=39 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **RTZ** | **Ruatahuna** | **81.38** | **129** | P | **P** | **03 22 37.4** | **-0.1** |
| **TSUM** | **Tsumeb** | **81.40** | **251** | P | **P** | **03 22 38.5** | **+0.5** |
| TSUM | | | | IAmb | IAmb | 03 22 41.2 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **81.44** | **129** | P | **P** | **03 22 36.8** | **-0.9** |
| | comp=Z,7.1nm,0.5s,baz=304,slow=7.6,SNR=6.1 | | | | | | |
| URZ | | | | LR | LR | 04 01 48.6 | |
| | comp=Z,132nm,18.2s,baz=334,slow=38 | | | | | | |
| | comp=Z,7.1nm,0.5s | | | | | | |
| **BILL** | **Bilibino** | **81.50** | **21** | *e*P | **P** | **03 22 35.1** | **-2.2** |
| BILL | | | | *e*PPP | PPP | 03 27 34.3 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,94nm,16.0s | | | | | | |
| **MORH** | **Mrgy, Hungar** | **82.57** | **316** | ⇓P | **P** | **03 22 43.2** | **-0.2** |
| **MORH** | **Mrgy, Hungar** | **82.57** | **316** | P | **P** | **03 22 43.6** | **+0.2** |
| | comp=Z,4.9nm,1.6s,comp=Z,167nm | | | | | | |
| **VYHS** | **Vyhne** | **82.73** | **319** | *e*P | **P** | **03 22 43.5** | **-0.8** |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **VYHS** | **Vyhne** | **82.73** | **319** | *e*P | **P** | **03 22 43.5** | **-0.8** |
| **MPLH** | **Magyarpolny** | **83.44** | **317** | P | **P** | **03 22 48.2** | **+0.3** |
| | comp=Z,24nm,1.1s | | | | | | |
| **JAVC** | **Velka Javorina** | **83.54** | **319** | *e*P | **P** | **03 22 48.4** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **83.66** | **340** | P | **P** | **03 22 48.6** | **0.0** |
| **ARCES** | **ARCESS Array B** | **83.66** | **340** | P | **P** | **03 22 48.1** | **-0.5** |
| | comp=Z,3.5nm,0.7s,baz=104,slow=4.8,SNR=16 | | | | | | |
| ARCES | | | | LR | LR | 04 03 31.1 | |
| | comp=Z,126nm,21.3s,baz=105,slow=38 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.66** | **340** | P | **P** | **03 22 48.6** | **0.0** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,44nm,1.8s | | | | | | |
| **MORC** | **Moravsky Berou** | **83.73** | **320** | *e*P | **P** | **03 22 48.8** | **-0.7** |
| **KRLC** | **Kraliky** | **84.26** | **320** | *e*P | **P** | **03 22 52.6** | **+0.5** |
| **KRLC** | **Kraliky** | **84.26** | **320** | *e*P | **P** | **03 22 52.6** | **+0.5** |
| **DPC** | **Dobruska-Polom** | **84.58** | **320** | *e*P | **P** | **03 22 54.7** | **+1.0** |
| **DPC** | **Dobruska-Polom** | **84.58** | **320** | *e*P | **P** | **03 22 54.7** | **+1.0** |
| **DPC** | **Dobruska-Polom** | **84.58** | **320** | P | **P** | **03 22 54.8** | **+1.0** |
| | comp=Z,3.4nm,1.1s | | | | | | |
| **CONA** | **Conrad Observa** | **84.64** | **318** | *i*P | **P** | **03 22 53.4** | **-0.8** |
| | comp=Z,3.1nm,1.4s | | | | | | |
| **KSP** | **Ksiaz** | **84.65** | **321** | P | **P** | **03 22 53.8** | **-0.2** |
| | comp=Z,5.1nm,2.2s | | | | | | |
| **ARSA** | **Arzberg** | **84.81** | **317** | *i*PcP | **P** | **03 22 55.1** | **+0.2** |
| | comp=Z,8.7nm,1.5s | | | | | | |
| **VNDA** | **Vanda** | **84.83** | **169** | P | **P** | **03 22 56.2** | **+1.8** |
| **VNDA** | **Vanda** | **84.83** | **169** | P | **P** | **03 22 55.9** | **+1.5** |
| | comp=Z,3.0nm,0.9s,baz=307,slow=5.4,SNR=16 | | | | | | |
| VNDA | | | | LR | LR | 03 57 44.3 | |
| | comp=Z,64nm,20.6s,baz=299,slow=34 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **84.83** | **169** | P | **P** | **03 22 56.2** | **+1.8** |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **SOKA** | **Soboth** | **85.10** | **317** | *i*PcP | **P** | **03 22 56.5** | **0.0** |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **OBKA** | **Obir** | **85.42** | **316** | *e*PcP | **P** | **03 22 58.6** | **+0.5** |
| | comp=Z,10nm,1.4s | | | | | | |
| **MOA** | **Molln** | **85.71** | **318** | *i*P | **P** | **03 22 56.1** | **-3.3** |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **85.75** | **319** | *e*P | **P** | **03 23 00.4** | **+0.8** |
| **CKRC** | **Cesky Krumlov** | **85.75** | **319** | *e*P | **P** | **03 23 00.4** | **+0.8** |
| **ELIB** | **Princess Elisa** | **85.76** | **198** | *d*P | **P** | **03 22 56.1** | **-3.2** |
| | comp=Z,5.7nm,1.2s | | | | | | |
| ELIB | | | | *d*PP | **PP** | **03 26 17.1** | **-1.6** |
| **MYKA** | **Terra Mystica** | **86.05** | **317** | *e*P | **P** | **03 23 00.6** | **-0.6** |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **86.12** | **318** | *e*P | **P** | **03 23 00.5** | **-1.0** |
| | comp=Z,5.3nm,1.6s | | | | | | |
| **GEC2** | **GERESS Array S** | **86.15** | **319** | P | **P** | **03 23 01.2** | **-0.4** |
| **GERES** | **GERESS Array B** | **86.15** | **319** | P | **P** | **03 23 02.2** | **+0.5** |
| | comp=Z,1.5nm,0.8s,baz=103,slow=3.1,SNR=9.0 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **86.25** | **319** | *e*P | **P** | **03 23 04.1** | **+2.0** |
| **KHC** | **Kasperske Hory** | **86.25** | **319** | *e*P | **P** | **03 23 04.1** | **+2.0** |
| **LESA** | **Schwarzleotal** | **86.75** | **317** | *i*PcP | **P** | **03 23 04.3** | **-0.3** |
| | comp=Z,4.5nm,1.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **86.83** | **317** | *e*PcP | **P** | **03 23 04.9** | **-0.2** |
| | comp=Z,5.1nm,1.3s | | | | | | |
| **HFS** | **Hagfors** | **86.97** | **330** | P | **P** | **03 23 05.4** | **+0.1** |
| | comp=Z,4.7nm,0.8s,baz=112,slow=4.0,SNR=14 | | | | | | |
| HFS | | | | LR | LR | 04 05 26.2 | |
| | comp=Z,39nm,19.5s,baz=71,slow=38 | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **CTI** | **Castel Tesino** | **87.40** | **316** | P | **P** | **03 23 07.3** | **-0.6** |
| **CTI** | **Castel Tesino** | **87.40** | **316** | P | **P** | **03 23 07.3** | **-0.6** |
| CTI | | | | pmax | pmax | | |
| | comp=Z,34nm,1.7s | | | | | | |
| **WTTA** | **Wattenberg** | **87.45** | **317** | *e*PcP | **P** | **03 23 07.4** | **-0.8** |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **WATA** | **Walderalm** | **87.50** | **317** | *e*P | **P** | **03 23 06.1** | **-2.3** |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **SQTA** | **Sankt Quirin** | **87.74** | **317** | *e*PcP | **P** | **03 23 09.0** | **-0.5** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **87.82** | **317** | P | **P** | **03 23 07.5** | **-2.4** |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **RETA** | **Reutte** | **88.06** | **317** | *e*PcP | **P** | **03 23 10.7** | **-0.3** |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **FETA** | **Feichten** | **88.07** | **317** | *e*PcP | **P** | **03 23 10.9** | **-0.2** |
| | comp=Z,4.1nm,1.4s | | | | | | |
| **NB2** | **NORSAR Subarra** | **88.24** | **331** | P | **P** | **03 23 11.3** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=97,slow=4.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **88.24** | **331** | P | **P** | **03 23 10.5** | **-1.0** |
| | comp=Z,1.7nm,0.9s,baz=96,slow=4.8,SNR=5.1 | | | | | | |
| NOA | | | | LR | LR | 04 07 10.9 | |
| | comp=Z,56nm,20.2s,baz=70,slow=39 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **88.64** | **317** | LR | LR | 04 10 16.1 | |
| | comp=Z,22nm,18.1s,baz=80,slow=41 | | | | | | |
| **DAVA** | **Damuels** | **88.65** | **317** | *e*P | **P** | **03 23 12.5** | **-1.4** |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **KEST** | **Kesra** | **88.94** | **306** | P | **P** | **03 23 15.0** | **-0.4** |
| | comp=Z,4.3nm,0.8s,baz=298,slow=3.2,SNR=4.7 | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **NVL** | **N'lazarevskaya** | **89.23** | **199** | *e*P | **P** | **03 23 18.4** | **+2.6** |
| NVL | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **90.36** | **180** | P | **P** | **03 23 23.4** | **+2.1** |
| **QSPA** | **South Pole Qui** | **90.36** | **180** | P | **P** | **03 23 23.5** | **+2.1** |
| | comp=Z,5.6nm,0.8s,baz=38,slow=0.1,SNR=28 | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **90.42** | **316** | P | **P** | **03 23 22.1** | **-0.2** |
| **LPG** | **La Plagne** | **90.83** | **315** | *e*P | **P** | **03 23 24.3** | **+0.1** |
| **LPL** | **La Plagne** | **90.84** | **315** | *e*P | **P** | **03 23 24.3** | **+0.1** |
| **TROLL** | **Troll, Antarti** | **92.19** | **198** | ⇑P | **P** | **03 23 32.4** | **+2.6** |
| | comp=Z,97nm,1.0s | | | | | | |
| **AVF** | **Avril sur Loir** | **93.13** | **317** | *e*P | **P** | **03 23 34.4** | **-0.1** |
| **SNAA** | **Sanae** | **93.90** | **198** | ⇑P | **P** | **03 23 39.8** | **+2.2** |
| | comp=Z,25nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **93.90** | **198** | P | **P** | **03 23 39.6** | **+2.0** |
| | comp=Z,1.0nm,0.8s,baz=65,slow=6.3,SNR=3.5 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **J16K** | **Anvik River** | **94.61** | **26** | P | **P** | **03 23 40.1** | **-0.8** |
| **VNA2** | **Neumayer--Watz** | **95.50** | **199** | ⇑P | **P** | **03 23 47.0** | **+2.2** |
| | comp=Z,0.5nm,0.5s,baz=118,slow=3.8 | | | | | | |
| **EPF** | **Esparros** | **95.58** | **313** | *e*P | **P** | **03 23 43.7** | **-2.2** |
| **H19K** | **Roundabout Mou** | **95.90** | **24** | P | **P** | **03 23 47.3** | **+0.5** |
| **EKA** | **Eskdalemuir Ar** | **96.20** | **326** | P | **P** | **03 23 48.2** | **-0.2** |
| | comp=Z,2.1nm,0.8s,baz=75,slow=3.8,SNR=2.6 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **96.38** | **283** | P | **P** | **03 23 50.0** | **0.0** |
| | comp=Z,0.9nm,1.0s,baz=64,slow=6.8,SNR=5.5 | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | |
| **J19K** | **Poorman** | **96.63** | **25** | P | **P** | **03 23 50.6** | **+0.5** |
| J19K | | | | IAmb | IAmb | 03 23 51.8 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **J20K** | **Nowinta River** | **97.21** | **25** | P | Pdif | 03 23 53.7 | +0.9 |
| **H21K** | **Melozitna Rive** | **97.33** | **23** | P | Pdif | 03 23 53.3 | 0.0 |
| **BPAW** | **Bear Paw Mtn.** | **98.55** | **25** | P | Pdif | 03 23 58.7 | -0.1 |
| BPAW | | | | IAmb | IAmb | 03 24 04.3 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **99.74** | **31** | P | **Pdif** | **03 24 03.3** | **-0.9** |
| | comp=Z,1.3nm,0.7s,baz=259,slow=10,SNR=4.6 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **99.97** | **23** | P | **Pdif** | **03 24 04.3** | **-0.8** |
| | comp=Z,0.3nm,0.6s,baz=309,slow=5.7,SNR=2.3 | | | | | | |
| ILAR | | | | PP | **PP** | **03 28 12.7** | **+2.6** |
| | comp=Z,0.9nm,1.1s,baz=289,slow=5.6,SNR=5.4 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **TBI** | **Tubuai** | **110.49** | **115** | *e*LR | LR | 04 01 40.8 | |
| | comp=Z,443nm,27.0s | | | | | | |
| **PPT2** | **Papeete2** | **111.15** | **109** | *e*LR | LR | 04 01 51.9 | |
| | comp=Z,117nm,26.2s | | | | | | |
| **H04D** | **Lebanon** | **122.29** | **34** | PKPdf | **PKPdf** | **03 29 15.4** | **-0.1** |
| **NEW** | **Newport** | **122.61** | **27** | PKPdf | **PKiKP** | **03 29 16.3** | **0.0** |
| **NEW** | **Newport** | **122.61** | **27** | PKP | **PKPdf** | **03 29 14.4** | **-1.8** |
| | comp=Z,2.4nm,0.7s,baz=20,slow=3.6,SNR=4.9 | | | | | | |
| **NEW** | **Newport** | **122.61** | **27** | PKIKP | **PKiKP** | **03 29 16.3** | **0.0** |
| **RKT** | **Rikitea** | **123.56** | **118** | *e*LR | LR | 04 07 34.0 | |
| | comp=Z,336nm,23.0s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **124.04** | **36** | PKP | **PKPdf** | **03 29 19.0** | **-0.1** |
| | comp=Z,1.2nm,0.8s,baz=352,slow=8.9,SNR=4.2 | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **124.93** | **38** | PKPdf | **PKiKP** | **03 29 21.3** | **+0.1** |
| **ULM** | **Lac du Bonnet** | **128.09** | **12** | PKP | **PKPdf** | **03 29 25.9** | **-0.5** |
| | comp=Z,6.6nm,0.5s,baz=290,slow=1.5,SNR=4.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **128.74** | **37** | PKPdf | **PKPdf** | **03 29 28.7** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **128.74** | **37** | PKP | **PKiKP** | **03 29 29.5** | **+0.5** |
| | comp=Z,4.3nm,0.9s,baz=261,slow=2.0,SNR=21 | | | | | | |
| **ELK** | **Elko** | **128.93** | **33** | PKP | **PKiKP** | **03 29 30.3** | **+0.9** |
| | comp=Z,2.9nm,0.9s,baz=316,slow=5.7,SNR=10 | | | | | | |
| **PDAR** | **Pinedale Array** | **130.24** | **27** | PKPdf | **PKPdf** | **03 29 31.0** | **-0.1** |
| **PDAR** | **Pinedale Array** | **130.24** | **27** | PKP | **PKiKP** | **03 29 31.6** | **-0.3** |
| | comp=Z,1.4nm,0.8s,baz=0.0,slow=1.5,SNR=16 | | | | | | |
| PDAR | | | | SKPab | **SKPbc** | **03 32 52.5** | **+0.7** |
| | comp=Z,1.3nm,1.1s,baz=227,slow=3.6,SNR=4.6 | | | | | | |
| **WVT** | **Waverly** | **143.20** | **8** | PKPdf | PKPbc | 03 29 52.0 | +0.2 |
| **WVT** | **Waverly** | **143.20** | **8** | PKIKP | PKPbc | 03 29 52.0 | +0.2 |
| **BDFB** | **Brasilia** | **143.50** | **244** | PKhKP | PKPpre | 03 29 53.2 | |
| | comp=Z,3.0nm,0.8s,baz=273,slow=2.1,SNR=5.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.72** | **34** | PKPdf | PKPbc | 03 29 53.8 | +0.1 |
| **TXAR** | **Lajitas Array** | **143.72** | **34** | PKP | PKPbc | 03 29 53.9 | +0.3 |
| | comp=Z,1.2nm,0.4s,baz=226,slow=0.5,SNR=54 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.72** | **34** | PKIKP | PKPbc | 03 29 53.8 | +0.1 |
| **BO01** | **Tunca** | **144.77** | **195** | PKPdf | **PKPdf** | **03 29 57.5** | **-0.2** |
| **MT13** | **San Alfonso** | **145.16** | **197** | | **PKPdf** | **03 29 58.9** | **+0.3** |
| **CPUP** | **Villa Florida** | **145.17** | **220** | | **PKPdf** | **03 29 59.0** | **+0.4** |
| **CPUP** | **Villa Florida** | **145.17** | **220** | PKPbc | **PKPdf** | **03 29 59.4** | **+0.8** |
| | comp=Z,25nm,1.1s,baz=112,slow=3.5,SNR=23 | | | | | | |
| **CPUP** | **Villa Florida** | **145.17** | **220** | PKIKP | **PKPdf** | **03 29 59.0** | **+0.4** |
| **MT08** | **Bocatoma Ro** | **145.36** | **197** | PKPab | **PKPab** | **03 30 00.0** | **+1.0** |
| **HKT** | **Hockley** | **146.92** | **23** | PKPbc | **PKPbc** | **03 30 02.7** | **-0.6** |
| **HKT** | **Hockley** | **146.92** | **23** | PKP2 | **PKPbc** | **03 30 02.7** | **-0.6** |
| **AQDB** | **Aquidauana** | **147.72** | **230** | PKPbc | **PKPbc** | **03 30 06.4** | **+0.5** |
| **PTLB** | **Pontes e Lacer** | **153.20** | **235** | PKPdf | **PKPdf** | **03 30 11.3** | **-0.4** |
| **LPAZ** | **La Paz** | **159.34** | **220** | PKP | **PKPdf** | **03 30 21.4** | **+0.9** |
| | comp=Z,2.2nm,1.0s,baz=1.7,slow=2.2,SNR=6.9 | | | | | | |
| LPAZ | | | | PKPab | **PKPab** | **03 30 59.9** | **+2.1** |
| | comp=Z,1.6nm,0.9s,baz=162,slow=3.2,SNR=5.1 | | | | | | |
| **SAML** | **Samuel** | **159.74** | **245** | PKPdf | **PKPdf** | **03 30 20.2** | **-0.1** |
| SAML | | | | PKPab | **PKPab** | **03 30 59.0** | **-0.1** |
| **SAML** | **Samuel** | **159.74** | **245** | PKP2 | **PKPab** | **03 30 59.0** | **-0.1** |
| SAML | | | | | | 04 30 20.2 | |

*AEIC **16** 03:17:32.0±2.5, 69.46N±0.05×144.40W±0.08, h6km±6km, ML3.3, ML3.4/112(NEIC), Error ellipse: s-maj=7.6km s-min=3.8km az=187.0*

*IDC **16** 03:17:32.2±1.6, 69.74N×144.68W, h0km, mb3.3/3, mbtmp3.3/5, ML2.9/2, MS4.1/1, Error ellipse: s-maj=27.6km s-min=20.8km az=21.0*

*NEIC **16** 03:17:33.1±1.5, 69.50N±0.05×144.44W±0.06, h1km±6km, Error ellipse: s-maj=7.8km s-min=2.2km az=194.0*

**ISC 16 03:17:33.4±0.7, 69.50N±0.04×144.41W±0.02, h10km, n137, σ1.921/121, mb3.4/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **63** | | **Pg** | **03 17 37.9** | **-1.1** |
| C27K | | | | | **Sg** | **03 17 42.1** | **-0.5** |
| **C26K** | **Camden Bay** | **0.45** | **337** | | **Pg** | **03 17 41.8** | **-0.4** |
| **C26K** | **Camden Bay** | **0.45** | **337** | IAML | | 03 17 49.8 | |
| | comp=N,958nm,1.0s | | | | | | |
| C26K | | | | IAML | | 03 17 54.0 | |
| | comp=E,784nm,0.8s | | | | | | |
| **D25K** | **Kavik River** | **0.72** | **256** | | **Pg** | **03 17 45.5** | **-1.7** |
| D25K | | | | | **Sg** | **03 17 55.7** | **-0.9** |
| **D27M** | **Malcolm River** | **1.25** | **100** | | **Pn** | **03 17 55.3** | **-1.6** |
| D27M | | | | | **Sn** | **03 18 13.5** | **-0.3** |
| **C24K** | **Franklin Bluff** | **1.52** | **280** | | **Pg** | **03 18 01.4** | **-1.1** |
| C24K | | | | | **Sg** | **03 18 21.7** | **-0.5** |
| **C24K** | **Franklin Bluff** | **1.52** | **280** | IAML | | 03 18 23.2 | |
| | comp=E,661nm,0.8s | | | | | | |
| C24K | | | | IAML | | 03 18 23.3 | |
| | comp=N,546nm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **259** | | **Pg** | **03 18 02.9** | **-1.3** |
| **E27K** | **Coleen River** | **1.67** | **141** | | **Pb** | **03 18 03.4** | **-0.8** |
| E27K | | | | | **Sg** | **03 18 27.0** | **0.0** |
| **F26K** | **Sheenjek River** | **1.82** | **177** | | **Pb** | **03 18 06.0** | **-0.7** |
| **F26K** | **Sheenjek River** | **1.82** | **177** | IAML | | 03 18 36.7 | |
| | comp=E,318nm,0.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H22K** | **Ishtalitna Cre** | **4.49 220** | | | **Pn** | **03 18 42.2** | **+0.8** |
| **G21K** | **Allakaket** | **4.55 233** | | | **Pn** | **03 18 42.6** | **+0.4** |
| **POKR** | **Poker Plat Res** | **4.56 196** | | | **Pn** | **03 18 43.5** | **+1.2** |
| **POKR** | **Poker Plat Res** | **4.56 196** | IAML | | | 03 19 38.6 | |
| | comp=N,32nm,0.4s | | | | | | |
| POKR | | | IAML | | | 03 19 40.0 | |
| | comp=E,37nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.58 120** | | | **Pn** | **03 18 43.4** | **+0.9** |
| **I23K** | **Minto, Yukon-K** | **4.77 206** | | | **Pn** | **03 18 46.1** | **+0.8** |
| **I23K** | **Minto, Yukon-K** | **4.77 206** | IAML | | | 03 20 17.2 | |
| | comp=E,40nm,1.1s | | | | | | |
| I23K | | | IAML | | | 03 20 23.0 | |
| | comp=N,38nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.78 148** | Pn | | **Pn** | **03 18 46.2** | **+0.9** |
| I29M | | | IAML | | | 03 19 51.2 | |
| | comp=N,26nm,0.6s | | | | | | |
| I29M | | | IAML | | | 03 21 46.1 | |
| | comp=E,23nm,0.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.80 200** | | | **Pn** | **03 18 46.6** | **+0.9** |
| **MDM** | **Murphy Dome** | **4.80 200** | IAML | | | 03 20 07.5 | |
| | comp=E,36nm,0.8s | | | | | | |
| MDM | | | IAML | | | 03 20 08.7 | |
| | comp=N,26nm,0.9s | | | | | | |
| **IL31** | | **4.85 193** | | | **Pn** | **03 18 45.6** | **-0.6** |
| **ILAR** | **Eielson Array** | **4.85 193** | | | **Pn** | **03 18 44.0** | **-2.3** |
| **ILAR** | **Eielson Array** | **4.85 193** | Pn | | **Pn** | **03 18 47.9** | **+1.6** |
| | comp=N,0.7nm,0.3s,baz=7.0,slow=14,SNR=31 | | | | | | |
| ILAR | | | Sn | | **Sn** | **03 19 45.5** | **+3.1** |
| | comp=N,2.0nm,0.3s,baz=8.9,slow=26,SNR=10 comp=N,3.9nm,0.7s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.87 245** | | | **Pn** | **03 18 47.8** | **+1.2** |
| **F20K** | **Avaraart Lake** | **4.87 245** | IAML | | | 03 20 16.4 | |
| | comp=E,20nm,0.9s | | | | | | |
| F20K | | | IAML | | | 03 20 21.6 | |
| | comp=N,33nm,1.4s | | | | | | |
| **EGAK** | **Eagle** | **4.91 164** | Pn | | **Pn** | **03 18 46.1** | **-1.1** |
| EGAK | | | IAML | | | 03 19 48.2 | |
| | comp=N,23nm,1.4s | | | | | | |
| EGAK | | | IAML | | | 03 19 51.9 | |
| | comp=N,24nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **4.92 185** | | | **Pn** | **03 18 48.5** | **+1.1** |
| **J25K** | **Salcha River,** | **4.92 185** | IAML | | | 03 19 49.6 | |
| | comp=N,22nm,0.8s | | | | | | |
| J25K | | | IAML | | | 03 20 19.8 | |
| | comp=E,23nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.01 230** | | | **Pn** | **03 18 48.5** | **+0.1** |
| **H21K** | **Melozitna River** | **5.02 224** | | | **Pn** | **03 18 50.1** | **+1.4** |
| **D19K** | **Kuna River** | **5.03 265** | | | **Pn** | **03 18 49.7** | **+0.8** |
| **D19K** | **Kuna River** | **5.03 265** | IAML | | | 03 19 49.6 | |
| | comp=E,28nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.03 176** | | | **Pn** | **03 18 47.9** | **-1.0** |
| J26L | | | IAML | | | 03 20 13.6 | |
| | comp=E,18nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05 197** | Pn | | **Pn** | **03 18 47.2** | **-1.9** |
| CCB | | | IAML | | | 03 20 16.2 | |
| | comp=E,18nm,1.2s | | | | | | |
| **MLY** | **Manley** | **5.12 212** | | | **Pn** | **03 18 50.9** | **+0.9** |
| **MLY** | **Manley** | **5.12 212** | IAML | | | 03 20 30.7 | |
| | comp=N,17nm,1.7s | | | | | | |
| MLY | | | IAML | | | 03 20 31.5 | |
| | comp=E,18nm,1.5s | | | | | | |
| **E19K** | **Redstone River** | **5.15 253** | | | **Pn** | **03 18 51.3** | **+0.9** |
| **HDA** | **Harding Lake** | **5.21 192** | Pn | | **Pn** | **03 18 49.1** | **-2.2** |
| HDA | | | IAML | | | 03 20 16.3 | |
| | comp=N,18nm,1.1s | | | | | | |
| HDA | | | IAML | | | 03 20 35.1 | |
| | comp=E,25nm,1.3s | | | | | | |
| **WRH** | **Wood River Hil** | **5.25 198** | | | **Pn** | **03 18 53.2** | **+1.4** |
| **WRH** | **Wood River Hil** | **5.25 198** | IAML | | | 03 20 26.9 | |
| | comp=N,16nm,1.3s | | | | | | |
| WRH | | | IAML | | | 03 20 29.8 | |
| | comp=E,22nm,1.0s | | | | | | |
| **NEA2** | **Nenana** | **5.26 203** | | | **Pn** | **03 18 52.5** | **+0.6** |
| **NEA2** | **Nenana** | **5.26 203** | IAML | | | 03 20 24.2 | |
| | comp=E,18nm,1.4s | | | | | | |
| **I30M** | **Mount Dempster** | **5.30 140** | | | **Pn** | **03 18 53.3** | **+0.8** |
| **I30M** | **Mount Dempster** | **5.30 140** | IAML | | | 03 19 56.4 | |
| | comp=E,22nm,0.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.40 273** | | | **Pn** | **03 18 54.6** | **+0.8** |
| **SCRK** | **Sand Creek** | **5.55 178** | | | **Pn** | **03 18 57.3** | **+1.3** |
| **K27K** | **Chicken** | **5.57 169** | | | **Pn** | **03 18 55.4** | **-0.8** |
| **F19K** | **Shaleruckik Mo** | **5.66 248** | | | **Pn** | **03 18 57.9** | **+0.6** |
| **H20K** | **Anotleneega Mo** | **5.69 230** | | | **Pn** | **03 18 58.6** | **+0.9** |
| **BWN** | **Browne** | **5.71 203** | | | **Pn** | **03 18 57.7** | **-0.4** |
| **K24K** | **Donnelly Dome** | **5.75 186** | | | **Pn** | **03 19 00.3** | **+1.6** |
| **A19K** | **Wainwright** | **5.80 285** | | | **Pn** | **03 19 00.0** | **+0.7** |
| **DAWY** | **Dawson** | **5.81 158** | Pn | | **Pn** | **03 18 59.2** | **-0.3** |
| **G19K** | **Purcell Mounta** | **5.86 241** | | | **Pn** | **03 19 00.7** | **+0.5** |
| **J30M** | **Hart River** | **5.87 144** | | | **Pn** | **03 19 01.4** | **+1.0** |
| **DOT** | **Dot Lake** | **5.88 178** | | | **Pn** | **03 19 01.9** | **+1.4** |
| **BPAW** | **Bear Paw Mtn.** | **6.01 209** | | | **Pn** | **03 19 02.7** | **+0.4** |
| **MCK** | **McKinley** | **6.07 199** | | | **Pn** | **03 19 04.3** | **+1.3** |
| **C18K** | **Utukok River** | **6.07 270** | Pn | | **Pn** | **03 19 03.2** | **+0.1** |
| **H19K** | **Roundabout Mou** | **6.10 235** | | | **Pn** | **03 19 04.1** | **+0.8** |
| **K29M** | **Barlow Dome** | **6.30 151** | | | **Pn** | **03 19 08.1** | **+1.7** |
| **E18K** | **Tukpahlearik C** | **6.31 258** | | | **Pn** | **03 19 06.8** | **+0.4** |
| **RND** | **Reindeer** | **6.37 198** | Pn | | **Pn** | **03 19 07.4** | **+0.1** |
| **F18K** | **Selawik** | **6.41 250** | | | **Pn** | **03 19 08.2** | **+0.5** |
| **G18K** | **Tagagawik** | **6.51 243** | | | **Pn** | **03 19 09.7** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **6.55 169** | | | **Pn** | **03 19 10.7** | **+1.0** |
| **L27K** | **Beaver Creek,** | **6.55 170** | Pn | | **Pn** | **03 19 10.5** | **+0.8** |
| **DHY** | **Denali Highway** | **6.56 192** | | | **Pn** | **03 19 12.2** | **+2.3** |
| **J20K** | **Nowinta River** | **6.58 220** | | | **Pn** | **03 19 11.1** | **+1.1** |
| **PAX** | **Paxson** | **6.58 184** | | | **Pn** | **03 19 11.2** | **+1.1** |
| **A36M** | **Sachs Harbour** | **6.79 60** | | | **Pn** | **03 19 12.4** | **-0.5** |
| **C17K** | **DeLong Mountai** | **6.82 270** | | | **Pn** | **03 19 13.1** | **-0.3** |
| **RDOG** | **Red Dog Mine** | **6.86 267** | Pn | | **Pn** | **03 19 12.1** | **-1.8** |
| **E17K** | **Hotham Inlet** | **6.89 258** | | | **Pn** | **03 19 14.4** | **+0.1** |
| **L29M** | **L29M** | **6.90 156** | | | **Pn** | **03 19 15.6** | **+1.2** |
| **H18K** | **Honhosa River** | **6.93 238** | | | **Pn** | **03 19 15.2** | **+0.4** |
| **F17K** | **Baldwin Pennin** | **7.03 252** | | | **Pn** | **03 19 16.2** | **+0.1** |
| **D17K** | **Noatak River** | **7.06 264** | | | **Pn** | **03 19 16.2** | **-0.3** |
| **M26K** | **Nabesna, AK** | **7.16 175** | Pn | | **Pn** | **03 19 16.9** | **-1.1** |
| **C36M** | **Paulatuk** | **7.16 82** | | | **Pn** | **03 19 17.4** | **-0.5** |
| **M27K** | **Edge Creek, AK** | **7.25 171** | | | **Pn** | **03 19 19.8** | **+0.5** |
| **G17K** | **Kiwalik Mounta** | **7.40 245** | | | **Pn** | **03 19 21.9** | **+0.6** |
| **M29M** | **Somme Creek** | **7.49 158** | | | **Pn** | **03 19 23.7** | **+1.1** |
| **H17K** | **Granite Mounta** | **7.55 240** | | | **Pn** | **03 19 24.4** | **+1.1** |
| **L20K** | **Farewell, AK** | **8.03 213** | | | **Pn** | **03 19 30.4** | **+0.4** |
| **M20K** | **Styx River** | **8.44 209** | | | **Pn** | **03 19 35.0** | **-0.6** |
| **M19K** | **Big River Lodg** | **8.65 213** | Pn | | **Pn** | **03 19 37.8** | **-0.6** |
| **PDAR** | **Pinedale Array** | **32.21 128** | P | | **P** | **03 24 03.9** | **+2.3** |
| | comp=E,0.3nm,0.6s,baz=19,slow=5.8,SNR=4.4 comp=E,0.3nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **42.98 287** | LR | | LR | 03 45 45.4 | |
| | comp=E,240nm,19.0s,baz=217,slow=40 | | | | | | |
| **TXAR** | **Lajitas Array** | **46.43 128** | P | | **P** | **03 26 01.8** | **+1.8** |
| | comp=E,0.2nm,0.7s,baz=348,slow=7.4,SNR=3.5 comp=E,0.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.07 324** | P | | **P** | **03 27 32.0** | **-1.1** |
| | comp=E,0.5nm,0.8s,baz=32,slow=8.5,SNR=2.6 comp=E,0.5nm,0.8s | | | | | | |

*IDC* ***16*** *03:32:01.7±0.8,54°.11S×133°.44W, h0km, mb4.1/8, mbtmp4.1/8,MS4.0/18, Error ellipse: s-maj=27.9km s-min=21.9km az=174.0*

*NEIC* ***16*** *03:32:03.9±1.1,54°.1S±0°.1×133°.2W±0°.2, h10km±1km, mb4.7/24, Error ellipse: s-maj=25.8km s-min=18.1km az=332.0*

**ISC 16 03:32:03.5**±0.5,**54°.1S±0°.1×133°.26W±0°.10,h10km,n75,** σ1§**00**/41**, mb4.5**/22**,MS4.0**/18**,5C, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RKT** | **Rikitea** | **30.97** | **357** | *e*LR | LR | 03 46 41.3 | |
| | 1μm,23.2s | | | | | | |
| **VA02** | **Isla de Pascua** | **32.12** | **43** | P | **P** | **03 38 31.0** | **+0.2** |
| **VNDA** | **Vanda** | **32.52** | **201** | P | **P** | **03 38 34.8** | **+1.0** |
| **VNDA** | **Vanda** | **32.52** | **201** | P | P | 03 38 39.0 | +5.1 |
| | 0.7nm,0.9s,baz=21,slow=1.2,SNR=3.9 | | | | | | |
| **TBI** | **Tubuai** | **33.05** | **332** | *e*LR | LR | 03 47 24.2 | |
| | 2μm,26.0s | | | | | | |
| **PMSA** | **Palmer Station** | **34.93** | **136** | LR | LR | 03 49 00.6 | |
| | comp=Z,247nm,19.2s,baz=244,slow=29 | | | | | | |
| **GO09** | **Cerro Castillo** | **36.04** | **111** | P | **P** | **03 39 04.7** | **+0.1** |
| GO09 | | | | IAmb | IAmb | 03 39 09.3 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **36.07** | **180** | | **P** | **03 39 06.3** | **+1.4** |
| QSPA | | | | IAmb | IAmb | 03 39 07.9 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **36.07** | **180** | P | **P** | **03 39 05.7** | **+0.8** |
| | comp=Z,6.6nm,1.0s,baz=88,slow=3.1,SNR=11 | | | | | | |
| QSPA | | | | LR | LR | 03 50 54.8 | |
| | comp=Z,126nm,21.8s,baz=73,slow=31 comp=Z,6.6nm,1.0s | | | | | | |
| **SNZO** | **South Karori** | **36.44** | **269** | P | **P** | **03 39 08.0** | **-0.2** |
| **URZ** | **Urewera** | **36.99** | **275** | LR | LR | 03 51 26.6 | |
| | comp=Z,190nm,20.9s,baz=328,slow=32 | | | | | | |
| **PPT2** | **Papeete2** | **38.57** | **335** | *e*LR | LR | 03 49 58.0 | |
| | comp=Z,300nm,24.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 03 50 03.5 | |
| | comp=Z,413nm,23.8s | | | | | | |
| **PPT** | **Papeete** | **38.59** | **335** | LR | LR | 03 51 11.1 | |
| | comp=Z,256nm,19.6s,baz=134,slow=30 | | | | | | |
| **LR04** | **Corral** | **41.94** | **95** | P | **P** | **03 39 53.8** | **-0.3** |
| **H03S2** | **Juan Fernandez** | **42.80** | **84** | T | T | 04 25 37.7 | |
| | baz=222,slow=74,SNR=48 | | | | | | |
| **H03S1** | **Juan Fernandez** | **42.81** | **84** | T | T | 04 25 35.0 | |
| | baz=222,slow=74,SNR=45 | | | | | | |
| **H03S3** | **Juan Fernandez** | **42.82** | **84** | T | T | 04 25 37.8 | |
| | baz=222,slow=74,SNR=48 | | | | | | |
| **PLCA** | **Paso Flores** | **43.07** | **99** | P | **P** | **03 40 03.6** | **+0.2** |
| | comp=Z,2.4nm,1.1s,baz=228,slow=8.6,SNR=3.0 | | | | | | |
| PLCA | | | | LR | LR | 03 53 42.0 | |
| | comp=Z,98nm,19.3s,baz=229,slow=30 comp=Z,2.4nm,1.1s | | | | | | |
| **H03N3** | **Juan Fernandez** | **43.07** | **84** | T | T | 04 25 53.3 | |
| | baz=226,slow=72,SNR=104 | | | | | | |
| **H03N2** | **Juan Fernandez** | **43.08** | **84** | T | T | 04 25 51.8 | |
| | baz=226,slow=72,SNR=126 | | | | | | |
| **H03N1** | **Juan Fernandez** | **43.09** | **84** | T | T | 04 25 48.7 | |
| | baz=226,slow=72,SNR=90 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **45.47** | **350** | *e*LR | LR | 03 53 23.7 | |
| | comp=Z,252nm,22.1s | | | | | | |
| **BO02** | **Sierra Bellavi** | **46.92** | **92** | P | **P** | **03 40 33.9** | **-0.2** |
| BO02 | | | | IAmb | IAmb | 03 40 42.6 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.75** | **159** | ⇑P | **P** | **03 40 46.8** | **-0.9** |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **CO02** | **Combarbal** | **49.34** | **89** | P | **P** | **03 40 52.7** | **-0.2** |
| CO02 | | | | IAmb | IAmb | 03 41 03.6 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **49.47** | **159** | ⇑P | **P** | **03 40 52.2** | **-1.1** |
| | comp=Z,2.1nm,0.6s,baz=217,slow=9.2 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **49.50** | **159** | ⇑P | **P** | **03 40 52.3** | **-1.1** |
| | comp=Z,4.7nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **49.77** | **162** | P | **P** | **03 40 54.5** | **-1.0** |
| **SNAA** | **Sanae** | **49.77** | **162** | ⇑P | **P** | **03 40 54.4** | **-1.2** |
| | comp=Z,14nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **49.77** | **162** | P | **P** | **03 40 54.7** | **-0.8** |
| | comp=Z,1.5nm,0.9s,baz=234,slow=8.5,SNR=11 comp=Z,1.5nm,0.9s | | | | | | |
| **TRQA** | **Tornquist** | **49.81** | **102** | P | **P** | **03 40 54.5** | **-1.8** |
| TRQA | | | | IAmb | IAmb | 03 41 05.6 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **50.43** | **164** | ⇑P | **P** | **03 41 00.0** | **-0.7** |
| | comp=Z,13nm,0.5s | | | | | | |
| **CASY** | **Casey** | **50.66** | **208** | P | **P** | **03 41 02.5** | **+0.2** |
| **AC04** | **Llanos de Chal** | **51.50** | **86** | P | **P** | **03 41 10.4** | **+1.3** |
| AC04 | | | | IAmb | IAmb | 03 41 11.9 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **55.06** | **281** | *e*LR | LR | 03 57 48.3 | |
| | comp=Z,140nm,29.2s | | | | | | |
| **LVC** | **Limon Verde** | **57.01** | **83** | P | **P** | **03 41 50.0** | **+0.2** |
| LVC | | | | IAmb | IAmb | 03 41 56.4 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **LVC** | **Limon Verde** | **57.01** | **83** | LR | LR | 04 02 02.5 | |
| | comp=Z,44nm,18.4s,baz=213,slow=32 | | | | | | |
| **NNA** | **Nana** | **60.96** | **69** | LR | LR | 04 02 16.1 | |
| | comp=Z,217nm,19.1s,baz=206,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **60.99** | **95** | LR | LR | 04 04 26.6 | |
| | comp=Z,133nm,19.6s,baz=200,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **62.15** | **253** | P | **P** | **03 42 25.6** | **+1.0** |
| **STKA** | **Stephens Creek** | **62.15** | **253** | P | **P** | **03 42 23.9** | **-0.7** |
| | comp=Z,2.6nm,0.8s,baz=121,slow=12,SNR=2.9 | | | | | | |
| STKA | | | | LR | LR | 04 05 15.2 | |
| | comp=Z,113nm,19.1s,baz=184,slow=32 comp=Z,2.6nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **62.41** | **79** | P | **P** | **03 42 26.0** | **-1.3** |
| LPAZ | | | | IAmb | IAmb | 03 42 45.8 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **LPAZ** | **La Paz** | **62.41** | **79** | P | **P** | **03 42 27.2** | **-0.1** |
| | comp=Z,2.0nm,1.1s,baz=284,slow=1.2,SNR=4.8 comp=Z,2.0nm,1.1s | | | | | | |
| **ATAH** | **Atahualpa** | **64.15** | **64** | LR | LR | 04 04 43.3 | |
| | comp=Z,75nm,19.3s,baz=250,slow=30 | | | | | | |
| **BBOO** | **Buckleboo** | **64.53** | **249** | P | **P** | **03 42 40.8** | **+0.3** |
| **ETMB** | **Extrema** | **68.70** | **77** | P | **P** | **03 43 06.9** | **-0.3** |
| **OTAV** | **Otavalo** | **70.37** | **60** | P | **P** | **03 43 17.9** | **-0.1** |
| OTAV | | | | IAmb | IAmb | 03 43 44.2 | |
| | comp=Z,5.9nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **70.42** | **245** | P | **P** | **03 43 18.2** | **+0.5** |
| **SAML** | **Samuel** | **71.15** | **79** | P | **P** | **03 43 21.9** | **-0.4** |
| **ASAR** | **Alice Springs** | **72.79** | **253** | P | **P** | **03 43 29.3** | **-2.8** |
| **ASAR** | **Alice Springs** | **72.79** | **253** | P | **P** | **03 43 31.3** | **-0.8** |
| | comp=Z,1.2nm,0.8s,baz=140,slow=6.0,SNR=10 | | | | | | |
| ASAR | | | | LR | LR | 04 10 47.5 | |
| | comp=Z,131nm,19.9s,baz=156,slow=32 comp=Z,1.2nm,0.8s | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **74.08** | **232** | T | T | 05 05 33.8 | |
| | baz=144,slow=76,SNR=35 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **74.08** | **232** | T | T | 05 05 32.5 | |
| | baz=144,slow=76,SNR=27 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **74.09** | **232** | T | T | 05 05 37.0 | |
| | baz=144,slow=76,SNR=17 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **74.22** | **235** | P | **P** | **03 43 41.5** | **+1.1** |
| **WRA** | **Warramunga Arr** | **75.47** | **256** | P | **P** | **03 43 46.9** | **-0.9** |
| | comp=Z,1.0nm,0.9s,baz=142,slow=5.2,SNR=6.4 | | | | | | |
| WRA | | | | LR | LR | 04 14 26.2 | |
| | comp=Z,105nm,18.3s,baz=28,slow=34 comp=Z,1.0nm,0.9s | | | | | | |
| **ROSC** | **El Rosal** | **76.41** | **61** | LR | LR | 04 11 49.6 | |
| | comp=Z,100nm,18.5s,baz=238,slow=31 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **86.02** | **67** | LR | LR | 04 18 19.9 | |
| | comp=Z,136nm,18.0s,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.95** | **26** | P | **P** | **03 44 49.5** | **+1.1** |
| | comp=Z,1.2nm,1.1s,baz=190,slow=6.2,SNR=6.9 comp=Z,1.2nm,1.1s | | | | | | |
| **DRIO** | **Del Rio** | **87.85** | **28** | P | **P** | **03 44 53.5** | **+0.9** |
| DRIO | | | | IAmb | IAmb | 03 44 55.4 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **SAND** | **Sanderson** | **87.94** | **27** | P | **P** | **03 44 53.5** | **+0.4** |
| SAND | | | | IAmb | IAmb | 03 44 57.5 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **88.60** | **305** | T | T | 05 23 03.3 | |
| | baz=148,slow=75,SNR=33 | | | | | | |
| **MDP** | **Montagnes des** | **88.61** | **79** | LR | LR | 04 20 29.3 | |
| | comp=Z,40nm,19.3s,baz=342,slow=33 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **88.62** | **305** | T | T | 05 23 07.6 | |
| | baz=148,slow=75,SNR=20 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **88.62** | **305** | T | T | 05 23 05.5 | |
| | baz=148,slow=75,SNR=16 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **89.56** | **305** | T | T | 05 24 13.8 | |
| | baz=148,slow=76,SNR=19 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **89.56** | **305** | T | T | 05 24 14.2 | |
| | baz=148,slow=76,SNR=20 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **89.57** | **305** | T | T | 05 24 15.2 | |
| | baz=148,slow=76,SNR=17 | | | | | | |
| **SUR** | **Sutherland** | **91.00** | **158** | LR | LR | 04 20 08.5 | |
| | comp=Z,71nm,19.6s,baz=157,slow=32 | | | | | | |
| **U15A** | **North Rim** | **91.97** | **17** | P | **P** | **03 45 12.9** | **+0.8** |
| U15A | | | | IAmb | IAmb | 03 45 30.6 | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **BOSA** | **Boshof** | **95.55** | **161** | LR | LR | 04 23 57.1 | |
| | comp=Z,50nm,18.5s,baz=178,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **99.12** | **161** | LR | LR | 04 25 10.2 | |
| | comp=Z,69nm,18.8s,baz=170,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **119.01** | **353** | PKP | **PKiKP** | **03 50 50.8** | **-0.1** |
| | comp=Z,1.2nm,0.8s,baz=210,slow=2.8,SNR=8.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **156.41** | **267** | PKPab | **PKPab** | **03 52 24.0** | **-2.2** |
| | comp=Z,0.6nm,0.7s,baz=134,slow=6.2,SNR=4.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **163.10** | **143** | PKPab | **PKPab** | **03 52 55.5** | **-0.1** |
| | comp=Z,1.0nm,1.0s,baz=194,slow=4.3,SNR=5.2 | | | | | | |

*NEIC* ***16*** *03:36:11.4±0.6,4°.6N±0°.2×125°.0E±0°.1, h472km±16km, mb4.1/9, Error ellipse: s-maj=24.1km s-min=17.8km az=214.0*

*IDC* ***16*** *03:36:15.1±1.9,4°.61N×125°.29E, h534km±23km, mb3.1/6, mbtmp4.1/6, Error ellipse: s-maj=43.8km s-min=12.6km az=69.0*

**ISC 16 03:36:11.8**±0.7,**4°.6N±0°.1×125°.1E±0°.3,h500km,n17,** σ1§**82**/20**, mb4.0**/11**,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **18.35** | **161** | P | **P** | **03 39 56.1** | **+0.6** |
| **WRA** | **Warramunga Arr** | **26.04** | **160** | P | **P** | **03 41 05.2** | **+0.6** |
| | 2.1nm,0.3s,baz=338,slow=9.4,SNR=56 | | | | | | |
| WRA | | | | ScP | **ScP** | **03 47 04.4** | **-4.1** |
| | 0.3nm,0.5s,baz=344,slow=3.1,SNR=5.1 2.1nm,0.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **26.04** | **160** | P | **P** | **03 41 05.5** | **+0.8** |
| WB2 | | | | IAmb | IAmb | 03 41 05.9 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **26.13** | **159** | P | **P** | **03 41 06.2** | **+0.8** |
| WR0 | | | | IAmb | IAmb | 03 41 26.0 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **26.52** | **191** | P | **P** | **03 41 08.9** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 03 41 14.9 | |
| | comp=Z,6.2nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **29.39** | **163** | P | **P** | **03 41 33.8** | **-0.2** |
| | comp=Z,1.4nm,0.5s,baz=338,slow=7.3,SNR=28 | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 47 14.8** | **-4.2** |
| | comp=Z,0.4nm,0.6s,baz=333,slow=2.6,SNR=4.5 comp=Z,1.4nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **38.65** | **165** | P | **P** | **03 42 51.2** | **-0.6** |
| **EIDS** | **Eidsvold** | **39.06** | **141** | P | **P** | **03 42 55.4** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 03 43 14.2 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **39.55** | **158** | P | **P** | **03 43 00.6** | **+1.6** |
| **STKA** | **Stephens Creek** | **39.55** | **158** | P | **P** | **03 43 01.2** | **+2.2** |
| | comp=Z,1.5nm,0.4s,baz=321,slow=9.0,SNR=4.7 comp=Z,1.5nm,0.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **55.26** | **23** | P | **P** | **03 44 56.6** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=202,slow=7.4,SNR=4.7 comp=Z,0.5nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **55.91** | **326** | P | **P** | **03 45 03.1** | **+1.4** |
| **MKAR** | **Makanchi Array** | **55.91** | **326** | P | **P** | **03 45 02.8** | **+1.1** |
| **MKAR** | **Makanchi Array** | **55.91** | **326** | P | **P** | **03 45 03.0** | **+1.3** |
| | comp=Z,0.9nm,0.5s,baz=126,slow=8.3,SNR=9.9 | | | | | | |
| MKAR | | | | PcP | **PcP** | **03 45 53.7** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=119,slow=4.3,SNR=4.6 comp=Z,0.9nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **56.09** | **326** | P | **P** | **03 45 04.8** | **+1.8** |
| MAKZ | | | | IAmb | IAmb | 03 45 10.7 | |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.12** | **328** | P | **P** | **03 45 31.7** | **+1.4** |
| | comp=Z,0.5nm,0.3s,baz=135,slow=6.7,SNR=8.5 comp=Z,0.5nm,0.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **70.44** | **321** | P | **P** | **03 46 34.0** | **-1.1** |

*AFAD* ***16*** *03:42:04.7±0.0,37°.16N×36°.37E, h7km±3km, ML2.6*
*ISK* ***16*** *03:42:04.7,37°.18N×36°.35E, h6km, ML2.5/16*

**ISC 16 03:42:05.1**±1.0,**37°.17N**±0°.03×**36°.37E**±0°.02,**h7km**±9km, **n28,**σ0§**53**/42**,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAMA** | **Osmaniye** | **0.24** | **87** | P | **Pg** | **03 42 09.8** | **-0.1** |
| KAMA | | | | S | **Sg** | **03 42 13.0** | **-0.1** |
| KAMA | | | | *i* AML | AML | 03 42 14.0 | |
| | comp=N,1μm,0.2s | | | | | | |
| KAMA | | | | *i* AML | AML | 03 42 14.0 | |
| | comp=E,1μm,0.1s | | | | | | |
| **ANDN** | **Andirin** | **0.41** | **357** | P | **Pg** | **03 42 13.1** | **0.0** |
| ANDN | | | | S | **Sg** | **03 42 19.5** | **+1.0** |
| ANDN | | | | *i* AML | AML | 03 42 20.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| ANDN | | | | *i* AML | AML | 03 42 20.0 | |
| | comp=E,902nm,0.3s | | | | | | |
| **HASA** | **Hatay-Hassa-Ha** | **0.43** | **167** | P | **Pg** | **03 42 13.3** | **-0.2** |
| HASA | | | | S | **Sg** | **03 42 18.8** | **-0.4** |
| HASA | | | | *i* AML | AML | 03 42 20.0 | |
| | comp=N,1μm,0.2s | | | | | | |
| HASA | | | | *i* AML | AML | 03 42 20.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **HCB** | **Kahramanmara** | **0.46** | **68** | P | **Pg** | **03 42 13.9** | **-0.2** |
| HCB | | | | *i* AML | AML | 03 42 21.0 | |
| | comp=N,239nm,0.5s | | | | | | |
| HCB | | | | S | **Sb** | **03 42 21.3** | **-1.4** |
| HCB | | | | *i* AML | AML | 03 42 25.0 | |
| | comp=E,287nm,0.2s | | | | | | |
| **KHMR** | **Kahramanmara** | **0.46** | **68** | P | **Pg** | **03 42 14.0** | **-0.1** |
| KHMR | | | | S | **Sg** | **03 42 20.5** | **+0.3** |
| KHMR | | | | *i* AML | AML | 03 42 21.0 | |
| | comp=N,148nm,0.6s | | | | | | |
| KHMR | | | | *i* AML | AML | 03 42 22.0 | |
| | comp=E,147nm,0.4s | | | | | | |
| **CEYT** | **Ceyhan** | **0.52** | **252** | Pg | **Pg** | **03 42 15.2** | **0.0** |
| **KOZT** | **Kozan** | **0.53** | **305** | Pg | **Pg** | **03 42 14.9** | **-0.5** |
| KOZT | | | | Sg | **Sg** | **03 42 22.8** | **+0.4** |
| **KMRS** | **Kahramanmaras** | **0.54** | **52** | Pg | **Pg** | **03 42 15.1** | **-0.4** |
| **KAHM** | **Kahramanmaras,** | **0.60** | **55** | P | **Pg** | **03 42 16.6** | **-0.1** |
| KAHM | | | | S | **Sg** | **03 42 25.1** | **+0.5** |
| KAHM | | | | *i* AML | AML | 03 42 26.0 | |
| | comp=E,218nm,0.5s | | | | | | |
| KAHM | | | | *i* AML | AML | 03 42 30.0 | |
| | comp=N,343nm,0.4s | | | | | | |
| **KHMN** | **Narli-Kahraman** | **0.66** | **71** | Pg

**ISC 16 03:53:01.0±0.4,44°20N±0°04×149°63E±0°03,h29km,2km, h29km:pP-P,n902,σ1§19/833,mb4.9/251,MS4.4/66, 30C-72D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.63** | **310** | *i* | P | | **Pn** | **03 53 27.9** | **+0.2** |
| KUR | | | | | | AMB | AMB | 03 53 29.8 | |
| | 1μm,0.5s | | | | | | | | |
| KUR | | | | | *e* | S | **Sb** | **03 53 49.6** | **-1.0** |
| KUR | | | | | | A | A | 03 53 55.9 | |
| | 2μm,0.4s | | | | | | | | |
| KUR | | | | | | A | A | 03 53 55.9 | |
| | 2μm,0.4s | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.63** | **310** | *c i* | PN | | **Pn** | **03 53 27.5** | **-0.2** |
| KUR | | | | | | pmax | pmax | | |
| | comp=Z,1μm,0.9s | | | | | | | | |
| KUR | | | | | | pmax | pmax | | |
| | comp=E,421nm,1.1s | | | | | | | | |
| **SHO** | **Shikotan** | **2.05** | **262** | *e* | P | | **Pn** | **03 53 31.9** | **-1.6** |
| SHO | | | | | | AMB | AMB | 03 53 34.9 | |
| | comp=E,160nm,0.4s | | | | | | | | |
| SHO | | | | | *e* | S | **Sn** | **03 53 56.1** | **-1.9** |
| SHO | | | | | | A | A | 03 54 03.2 | |
| | comp=E,2μm,0.7s | | | | | | | | |
| SHO | | | | | | A | A | 03 54 03.2 | |
| | comp=E,970nm,0.7s | | | | | | | | |
| **SHO** | **Shikotan** | **2.05** | **262** | *e* | PN | | **Pn** | **03 53 32.1** | **-1.4** |
| SHO | | | | | *e* | S | **Sn** | **03 53 55.7** | **-2.3** |
| SHO | | | | | | pmax | pmax | | |
| | comp=Z,148nm,0.4s | | | | | | | | |
| SHO | | | | | | pmax | pmax | | |
| | comp=N,38nm,0.2s | | | | | | | | |
| SHO | | | | | | pmax | pmax | | |
| | comp=E,97nm,0.3s | | | | | | | | |
| SHO | | | | | | smax | smax | | |
| | comp=N,292nm,0.2s | | | | | | | | |
| SHO | | | | | | smax | smax | | |
| | comp=E,706nm,0.4s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.72** | **268** | *e* | P | | **Pn** | **03 53 42.5** | **-0.2** |
| YUK | | | | | | AMB | AMB | 03 53 44.4 | |
| | comp=E,420nm,0.5s | | | | | | | | |
| YUK | | | | | *e* | S | **Sn** | **03 54 14.3** | **-0.3** |
| YUK | | | | | | A | A | 03 54 23.3 | |
| | comp=E,1μm,0.6s | | | | | | | | |
| YUK | | | | | | A | A | 03 54 23.3 | |
| | comp=E,1μm,0.6s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.72** | **268** | | PN | | **Pn** | **03 53 42.5** | **-0.2** |
| YUK | | | | | *e* | S | **Sn** | **03 54 13.8** | **-0.8** |
| YUK | | | | | | pmax | pmax | | |
| | comp=Z,414nm,0.3s | | | | | | | | |
| YUK | | | | | | pmax | pmax | | |
| | comp=N,231nm,0.4s | | | | | | | | |
| YUK | | | | | | pmax | pmax | | |
| | comp=E,340nm,0.4s | | | | | | | | |
| YUK | | | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | | | |
| YUK | | | | | | smax | smax | | |
| | comp=E,1μm,0.5s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.94** | **255** | *e* | P | | **Pn** | **03 53 43.8** | **-1.9** |
| NEM2 | | | | | *e* | S | **Sn** | **03 54 17.8** | **-2.1** |
| **JRA** | **Rausu** | **3.26** | **267** | *e* | P | | **Pn** | **03 53 49.8** | **-0.4** |
| **JNK** | **Nakash** | **3.60** | **262** | | P | | **Pn** | **03 53 53.8** | **-1.1** |
| **JAK** | **Akkeshi** | **3.78** | **253** | *e* | P | | **Pn** | **03 53 55.5** | **-1.8** |
| JAK | | | | | *e* | S | **Sn** | **03 54 37.7** | **-3.1** |
| **JTKR** | **Abashiri--Toko** | **4.13** | **269** | *e* | P | | **Pn** | **03 54 02.0** | **-0.1** |
| **JAR** | **Ashorobuto** | **4.34** | **260** | | P | | **Pn** | **03 54 04.5** | **-0.5** |
| **JOB** | **Onbets** | **4.41** | **255** | *e* | P | | **Pn** | **03 54 05.2** | **-0.7** |
| **JCH** | **Churui** | **4.83** | **253** | *e* | P | | **Pn** | **03 54 10.9** | **-0.8** |
| JCH | | | | | *e* | S | **Sn** | **03 55 04.5** | **-2.2** |
| **JKK2** | **Kamakawa 2** | **4.97** | **269** | *e* | P | | **Pn** | **03 54 14.7** | **+1.0** |
| **JKA** | **Kamikawa-asahi** | **5.06** | **272** | | | | **Pn** | **03 54 14.1** | **-0.8** |
| **JKA** | **Kamikawa-asahi** | **5.06** | **272** | *e* | P | | **Pn** | **03 54 16.5** | **+1.6** |
| **ASAJ** | **Asahikawa** | **5.06** | **272** | | Pn | | **Pn** | **03 54 16.5** | **+1.6** |
| | comp=E,3.3nm,0.3s,baz=88,slow=13,SNR=10 | | | | | | | | |
| ASAJ | | | | | | LR | LR | 03 56 47.7 | |
| | comp=E,2μm,18.2s,baz=150,slow=45 comp=E,19nm,0.5s | | | | | | | | |
| **ERM** | **Erimo** | **5.22** | **248** | | Pn | | **Pn** | **03 54 17.0** | **0.0** |
| **ERM** | **Erimo** | **5.22** | **248** | *de* | PN | | **Pn** | **03 54 17.0** | **0.0** |
| ERM | | | | | | pmax | pmax | | |
| | comp=Z,144nm,0.8s | | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.38** | **252** | *e* | P | | **Pn** | **03 54 17.6** | **-1.7** |
| **JAB** | **Ashibetsu** | **5.40** | **265** | *e* | P | | **Pn** | **03 54 21.3** | **+1.7** |
| **YSS** | **Yuzh-Sakhalins** | **5.56** | **302** | *e* | P | | **Pn** | **03 54 23.5** | **+1.8** |
| YSS | | | | | | AMB | AMB | 03 54 29.2 | |
| | comp=Z,200nm,5.0s | | | | | | | | |
| YSS | | | | | | AMB | AMB | 03 54 30.2 | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| YSS | | | | | *e* | S | **Sn** | **03 55 27.8** | **+3.2** |
| YSS | | | | | | A | A | 03 55 37.6 | |
| | comp=Z,50nm,0.5s | | | | | | | | |
| YSS | | | | | | A | A | 03 55 37.6 | |
| | comp=Z,40nm,0.5s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.56** | **302** | ⇑*e* | PN | | **Pn** | **03 54 23.5** | **+1.8** |
| **JWK2** | **Keihoku** | **5.62** | **284** | *e* | P | | **Pn** | **03 54 22.7** | **+0.1** |
| **JANG** | **Nango** | **7.13** | **240** | *e* | P | | **Pn** | **03 54 40.2** | **-3.1** |
| JANG | | | | | *e* | S | Sn | 03 55 53.5 | -10 |
| **UGL** | **Uglegorsk** | **7.14** | **316** | *e* | P | | **Pn** | **03 54 46.6** | **+3.2** |
| UGL | | | | | | AMB | AMB | 03 54 48.7 | |
| | comp=Z,40nm,0.5s | | | | | | | | |
| **JTH** | **Tanohata** | **7.17** | **236** | *e* | P | | **Pn** | **03 54 40.0** | **-4.0** |
| JTH | | | | | *e* | S | Sn | 03 55 53.9 | -11 |
| **JTM** | **Tenmabayashi** | **7.19** | **245** | | Pn | | **Pn** | **03 54 42.6** | **-1.5** |
| **SKR** | **Severo-Kuril's** | **7.84** | **32** | *e* | P | | **Pn** | **03 54 53.9** | **+1.0** |
| SKR | | | | | | AMB | AMB | 03 54 55.4 | |
| | comp=Z,50nm,0.7s | | | | | | | | |
| SKR | | | | | *e* | S | **Sn** | **03 56 19.7** | **-0.9** |
| SKR | | | | | | A | A | 03 56 24.7 | |
| | comp=Z,70nm,0.5s | | | | | | | | |
| SKR | | | | | | A | A | 03 56 24.7 | |
| | comp=Z,60nm,0.5s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.84** | **32** | *e* | PN | | **Pn** | **03 54 52.1** | **-0.8** |
| SKR | | | | | | pmax | pmax | | |
| | comp=Z,87nm,0.8s | | | | | | | | |
| SKR | | | | | | MLR | MLR | | |
| | comp=Z,1μm,13.0s | | | | | | | | |
| **TYV** | **Tymovskoe** | **8.17** | **327** | *e* | P | | **Pn** | **03 55 01.0** | **+3.5** |
| TYV | | | | | | AMB | AMB | 03 55 01.5 | |
| | comp=Z,100nm,3.0s | | | | | | | | |
| TYV | | | | | | AMB | AMB | 03 55 04.0 | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| TYV | | | | | *e* | S | **Sn** | **03 56 31.8** | **+3.0** |
| TYV | | | | | | A | A | 03 56 34.9 | |
| | comp=Z,100nm,3.0s | | | | | | | | |
| TYV | | | | | | A | A | 03 56 34.9 | |
| | comp=Z,100nm,3.0s | | | | | | | | |
| TYV | | | | | | A | A | 03 56 39.6 | |
| | comp=Z,20nm,0.4s | | | | | | | | |
| TYV | | | | | | A | A | 03 56 39.6 | |
| | comp=Z,10.0nm,0.4s | | | | | | | | |
| **TYV** | **Tymovskoe** | **8.17** | **327** | *e* | PN | | **Pn** | **03 55 01.0** | **+3.5** |
| TYV | | | | | *e* | S | **Sn** | **03 56 31.8** | **+3.0** |
| TYV | | | | | | pmax | pmax | | |
| | comp=Z,100nm,3.0s | | | | | | | | |
| TYV | | | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| TYV | | | | | | smax | smax | | |
| | comp=N,12nm,0.9s | | | | | | | | |
| TYV | | | | | | smax | smax | | |
| | comp=E,13nm,0.9s | | | | | | | | |
| TYV | | | | | | smax | smax | | |
| | comp=N,100nm,3.4s | | | | | | | | |
| TYV | | | | | | smax | smax | | |
| | comp=E,100nm,3.4s | | | | | | | | |
| TYV | | | | | | MLR | MLR | | |
| | comp=Z,1μm,13.0s | | | | | | | | |
| TYV | | | | | | MLR | MLR | | |
| | comp=N,800nm,14.0s | | | | | | | | |
| **JMM** | **Marumori** | **9.19** | **230** | | Pn | | Pn | 03 55 06.5 | -5.1 |
| **TEY** | **Ternei** | **9.33** | **280** | ⇑*e* | PN | | Pn | 03 55 02.6 | -11 |
| TEY | | | | | *e* | | | 03 57 10.8 | |
| TEY | | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **9.48** | **34** | *e* | P | | **Pn** | **03 55 13.6** | **-1.9** |
| KDTR | | | | | | AMB | AMB | 03 55 17.4 | |
| | comp=Z,20nm,0.5s | | | | | | | | |
| **OKH** | **Okha** | **10.35** | **337** | *e* | P | | **Pn** | **03 55 29.3** | **+2.0** |
| OKH | | | | | | AMB | AMB | 03 55 31.4 | |
| | comp=Z,160nm,0.6s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **10.39** | **28** | | Pn | | **Pn** | **03 55 26.9** | **-1.0** |
| **PEA0B** | **Petropavlovsk-** | **10.39** | **28** | ⇑*e* | PN | | **Pn** | **03 55 27.4** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **10.39** | **28** | | | | **Pn** | **03 55 28.4** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **10.39** | **28** | | Pn | | **Pn** | **03 55 27.4** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=202,slow=11,SNR=12 comp=Z,6.6nm,0.7s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **10.39** | **28** | | PN | | **Pn** | **03 55 28.4** | **+0.5** |
| **NKL** | **Nikolayevsk** | **10.73** | **330** | *e* | P | | **Pn** | **03 55 31.8** | **-0.8** |
| NKL | | | | | | AMB | AMB | 03 55 49.4 | |
| | comp=Z,210nm,1.0s | | | | | | | | |
| NKL | | | | | *e* | S | **Sn** | **03 57 31.2** | **-0.3** |
| NKL | | | | | | A | A | 03 57 39.4 | |
| | comp=Z,300nm,5.0s | | | | | | | | |
| NKL | | | | | | A | A | 03 57 39.4 | |
| | comp=Z,500nm,5.0s | | | | | | | | |
| **NKL** | **Nikolayevsk** | **10.73** | **330** | *e* | PN | | **Pn** | **03 55 31.8** | **-0.8** |
| NKL | | | | | *e* | S | **Sn** | **03 57 31.3** | **-0.3** |
| NKL | | | | | | pmax | pmax | | |
| | comp=E,147nm,1.1s | | | | | | | | |
| NKL | | | | | | pmax | pmax | | |
| | comp=N,57nm,1.2s | | | | | | | | |
| NKL | | | | | | pmax | pmax | | |
| | comp=Z,206nm,1.2s | | | | | | | | |
| NKL | | | | | | smax | smax | | |
| | comp=E,451nm,4.0s | | | | | | | | |
| NKL | | | | | | smax | smax | | |
| | comp=N,288nm,4.7s | | | | | | | | |
| **GRNR** | **Gornyy** | **11.09** | **311** | *e* | P | | **Pn** | **03 55 39.5** | **+2.0** |
| **GRNR** | **Gornyy** | **11.09** | **311** | *e* | PN | | **Pn** | **03 55 39.5** | **+2.0** |
| GRNR | | | | | | MLR | MLR | | |
| | comp=Z,960nm,15.0s | | | | | | | | |
| **MAJO** | **Matsushiro** | **11.58** | **233** | | | | **Pn** | **03 55 42.0** | **-2.4** |
| **MAJO** | **Matsushiro** | **11.58** | **233** | *ce* | PN | | **Pn** | **03 55 41.9** | **-2.4** |
| **MJAR** | **Matsushiro Arr** | **11.58** | **233** | | Pn | | **Pn** | **03 55 41.8** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=28,slow=14,SNR=13 | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **11.58** | **233** | | | | **Pn** | **03 55 42.1** | **-2.3** |
| **USA0B** | **Ussuriysk Arra** | **12.67** | **276** | | | | **Pn** | **03 55 57.5** | **-1.6** |
| **USA0B** | **Ussuriysk Arra** | **12.67** | **276** | *de* | PN | | **Pn** | **03 55 58.6** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** | **12.67** | **276** | | Pn | | **Pn** | **03 55 59.4** | **+0.3** |
| | comp=Z,0.7nm,0.3s,baz=87,slow=13,SNR=17 | | | | | | | | |
| USRK | | | | | | LR | LR | 04 01 21.4 | |
| | comp=Z,662nm,18.7s,baz=97,slow=40 comp=Z,17nm,0.9s | | | | | | | | |
| **JGF** | **Kuroka** | **12.74** | **232** | | Pn | | **Pn** | **03 55 58.0** | **-2.1** |
| **INU** | **Inuyama** | **13.11** | **232** | | Pn | | **Pn** | **03 56 02.3** | **-2.9** |
| **KLR** | **Kul'dur** | **13.26** | **299** | | Pn | | **Pn** | **03 56 07.4** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=108,slow=13,SNR=8.8 | | | | | | | | |
| KLR | | | | | | LR | LR | 04 02 22.9 | |
| | comp=Z,1μm,18.5s,baz=108,slow=42 comp=Z,4.5nm,0.9s | | | | | | | | |
| **KLR** | **Kul'dur** | **13.26** | **299** | *e* | P | | **Pn** | **03 56 07.6** | **+0.5** |
| **KLR** | **Kul'dur** | **13.26** | **299** | ⇓*e* | PN | | **Pn** | **03 56 07.6** | **+0.5** |
| KLR | | | | | | MLR | MLR | | |
| | comp=Z,1μm,17.0s | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **13.54** | **270** | ⇓*e* | PN | | **Pn** | **03 56 10.0** | **-1.0** |
| **MDJ** | **Mudanjiang** | **14.34** | **279** | | P | | **Pn** | **03 56 20.3** | **-1.6** |
| MDJ | | | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| MDJ | | | | | | pmax | pmax | | |
| | comp=Z,200nm,5.4s | | | | | | | | |
| **MA2** | **Magadan** | **15.42** | **2** | | | | **Pn** | **03 56 35.0** | **-1.3** |
| **MA2** | **Magadan** | **15.42** | **2** | | Pn | | **Pn** | **03 56 35.4** | **-0.8** |
| | comp=Z,12nm,0.8s,baz=208,slow=11,SNR=5.9 | | | | | | | | |
| MA2 | | | | | | LR | LR | 04 03 32.7 | |
| | comp=Z,897nm,18.0s,baz=192,slow=41 | | | | | | | | |
| **MA2** | **Magadan** | **15.42** | **2** | *e* | P | | **Pn** | **03 56 35.1** | **-1.2** |
| **MA2** | **Magadan** | **15.42** | **2** | ⇓*e* | P | | **Pn** | **03 56 35.1** | **-1.2** |
| MA2 | | | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **BNX** | **BinXian** | **15.80** | **283** | ⇓ | P | | **Pn** | **03 56 40.5** | **-0.8** |
| BNX | | | | | | pmax | pmax | | |
| | comp=Z,33nm,0.9s | | | | | | | | |
| **HEH** | **HeiHe** | **16.24** | **300** | *e* | P | | **Pn** | **03 56 46.1** | **-0.7** |
| HEH | | | | | | S | **Sn** | **03 59 47.8** | **+1.9** |
| HEH | | | | | | SS | **SnSn** | **04 00 01.9** | **+3.2** |
| HEH | | | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| HEH | | | | | | pmax | pmax | | |
| | comp=Z,210nm,6.6s | | | | | | | | |
| HEH | | | | | | LR | LR | | |
| | comp=Z,230nm,16.3s | | | | | | | | |
| HEH | | | | | | LR | LR | | |
| | comp=Z,1μm,16.5s | | | | | | | | |
| HEH | | | | | | LR | LR | | |
| | comp=Z,2μm,16.8s | | | | | | | | |
| **ZEA** | **Zeya** | **17.46** | **311** | *e* | P | | **Pn** | **03 57 02.2** | **+0.1** |
| ZEA | | | | | | AMB | AMB | 03 57 05.3 | |
| | comp=Z,60nm,0.7s | | | | | | | | |
| **ZEA** | **Zeya** | **17.46** | **311** | *e* | P | | **P** | **03 57 02.4** | **-0.7** |
| ZEA | | | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | | | |
| ZEA | | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| ZEA | | | | | | MLR | MLR | | |
| | comp=E,600nm,15.0s | | | | | | | | |
| **KSRS** | **Korea Array** | **17.73** | **255** | | P | | **Pn** | **03 57 04.4** | **-1.2** |
| | comp=E,0.2nm,0.3s,baz=67,slow=9.1,SNR=6.9 comp=E,2.6nm,0.7s | | | | | | | | |
| **JNU** | **Nakatsue** | **18.31** | **239** | | P | | **P** | **03 57 12.3** | **-0.4** |
| | comp=E,0.1nm,0.3s,baz=48,slow=13,SNR=5.0 | | | | | | | | |
| JNU | | | | | | LR | LR | 04 05 25.3 | |
| | comp=E,935nm,18.5s,baz=29,slow=41 comp=E,23nm,1.1s | | | | | | | | |
| **SEY** | **Seymchan** | **18.84** | **4** | | P | | **P** | **03 57 16.8** | **-1.5** |
| | comp=E,0.5nm,0.3s,baz=177,slow=9.0,SNR=58 comp=E,40nm,1.0s | | | | | | | | |
| **SEY** | **Seymchan** | **18.84** | **4** | *de* | P | | **P** | **03 57 17.3** | **-1.0** |
| SEY | | | | | | pmax | pmax | | |
| | comp=Z,58nm,1.3s | | | | | | | | |
| SEY | | | | | | MLR | MLR | | |
| | comp=Z,1μm,16.0s | | | | | | | | |
| **SNY** | **Shenyang** | **19.18** | **272** | ⇓ | P | | **P** | **03 57 22.4** | **+0.3** |
| SNY | | | | | | S | **S** | **04 00 57.6** | **0.0** |
| SNY | | | | | | pmax | pmax | | |
| | comp=Z,48nm,1.0s | | | | | | | | |
| SNY | | | | | | pmax | pmax | | |
| | comp=Z,250nm,3.6s | | | | | | | | |
| SNY | | | | | | LR | LR | | |
| | comp=Z,360nm,11.2s | | | | | | | | |
| SNY | | | | | | LR | LR | | |
| | comp=Z,510nm,13.9s | | | | | | | | |
| SNY | | | | | | LR | LR | | |
| | comp=Z,640nm,12.0s | | | | | | | | |
| **YAK** | **Yakutsk** | **21.34** | **334** | | P | | **P** | **03 57 42.7** | **-2.8** |
| **YAK** | **Yakutsk** | **21.34** | **334** | | P | | **P** | **03 57 43.5** | **-1.9** |
| | comp=Z,58nm,0.7s,baz=118,slow=3.1,SNR=10 | | | | | | | | |
| YAK | | | | | | LR | LR | 04 07 15.6 | |
| | comp=Z,743nm,18.3s,baz=132,slow=40 comp=Z,58nm,0.7s | | | | | | | | |
| **YAK** | **Yakutsk** | **21.34** | **334** | *e* | P | | **P** | **03 57 42.4** | **-3.1** |
| YAK | | | | | *e* | | | 03 58 03.7 | |
| YAK | | | | | *e* | S | **S** | **04 01 39.9** | **-0.8** |
| YAK | | | | | *e* | | | 04 01 46.5 | |
| YAK | | | | | *e* | SS | **SnSn** | **04 02 01.5** | **-2.5** |
| YAK | | | | | *e* | | | 04 09 10.6 | |
| YAK | | | | | | pmax | pmax | | |
| | comp=Z,61nm,0.9s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.4s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=N,17nm,1.2s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=Z,150nm,1.0s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=N,116nm,1.3s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=E,72nm,1.3s | | | | | | | | |
| YAK | | | | | | smax | smax | | |
| | comp=N,79nm,2.3s | | | | | | | | |
| YAK | | | | | | smax | smax | | |
| | comp=E,49nm,2.2s | | | | | | | | |
| YAK | | | | | | MLR | MLR | | |
| | comp=Z,746nm,17.0s | | | | | | | | |
| YAK | | | | | | MLR | MLR | | |
| | comp=E,329nm,16.0s | | | | | | | | |
| YAK | | | | | | MLR | MLR | | |
| | comp=N,462nm,17.0s | | | | | | | | |
| **DL2** | **Dalian** | **21.56** | **266** | | P | | **P** | **03 57 50.6** | **+2.6** |
| DL2 | | | | | | pmax | pmax | | |
| | comp=N,44nm,0.8s | | | | | | | | |
| DL2 | | | | | | LR | LR | | |
| | comp=N,770nm,13.5s | | | | | | | | |
| DL2 | | | | | | LR | LR | | |
| | comp=N,1μm,14.1s | | | | | | | | |
| DL2 | | | | | | LR | LR | | |
| | comp=N,920nm,15.0s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **24.03** | **281** | *e* | P | | **P** | **03 58 12.1** | **-1.3** |
| XLT | | | | | | S | **S** | **04 02 29.3** | **+0.6** |
| XLT | | | | | | pmax | pmax | | |
| | comp=N,38nm,0.9s | | | | | | | | |
| XLT | | | | | | pmax | pmax | | |
| | comp=N,330nm,4.0s | | | | | | | | |
| XLT | | | | | | LR | LR | | |
| | comp=N,590nm,13.9s | | | | | | | | |
| XLT | | | | | | LR | LR | | |
| | comp=N,720nm,12.6s | | | | | | | | |
| **BJI** | **Beijing** | **25.06** | **272** | | P | | **P** | **03 58 22.4** | **-0.3** |
| BJI | | | | | | pmax | pmax | | |
| | comp=N,9.0nm,1.2s | | | | | | | | |
| **BILL** | **Bilibino** | **25.46** | **15** | *e* | P | | **P** | **03 58 24.9** | **-1.1** |
| **BILL** | **Bilibino** | **25.46** | **15** | ¶*e* | P | | **P** | **03 58 24.9** | **-1.1** |
| BILL | | | | | *e* | | | 03 59 02.0 | |
| BILL | | | | | *e* | PPP | PPP | 03 59 10.8 | |
| BILL | | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| BILL | | | | | | MLR | MLR | | |
| | comp=Z,856nm,15.0s | | | | | | | | |
| **NJ2** | **Nanjing** | **26.92** | **254** | *e* | P | | **P** | **03 58 42.6** | **+3.0** |
| NJ2 | | | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| NJ2 | | | | | | pmax | pmax | | |
| | comp=Z,330nm,3.6s | | | | | | | | |
| NJ2 | | | | | | LR | LR | | |
| | comp=Z,1μm,13.3s | | | | | | | | |
| NJ2 | | | | | | LR | LR | | |
| | comp=Z,950nm,13.3s | | | | | | | | |
| NJ2 | | | | | | LR | LR | | |
| | comp=Z,2μm,15.6s | | | | | | | | |
| **HNS** | **HongShan** | **27.15** | **268** | ⇑ | P | | **P** | **03 58 41.6** | **0.0** |
| HNS | | | | | *e* | S | **S** | **04 03 21.5** | **+3.3** |
| HNS | | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| HNS | | | | | | LR | LR | | |
| | comp=Z,460nm,13.9s | | | | | | | | |
| HNS | | | | | | LR | LR | | |
| | comp=Z,380nm,11.9s | | | | | | | | |
| HNS | | | | | | LR | LR | | |
| | comp=Z,460nm,15.1s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **28.09** | **277** | ⇑ | P | | **P** | **03 58 49.8** | **-0.3** |
| HHC | | | | | | pP | pP | 03 58 54.6 | -2.4 |
| HHC | | | | | | sP | sP | 03 58 57.5 | -2.5 |
| HHC | | | | | | S | **S** | **04 03 29.5** | **-3.7** |
| HHC | | | | | | sS | pS | 04 03 39.6 | -1.2 |
| HHC | | | | | | pmax | pmax | | |
| | comp=Z,39nm,0.9s | | | | | | | | |
| HHC | | | | | | pmax | pmax | | |
| | comp=Z,170nm,3.6s | | | | | | | | |
| HHC | | | | | | LR | LR | | |
| | comp=Z,390nm,14.5s | | | | | | | | |
| HHC | | | | | | LR | LR | | |
| | comp=Z,400nm,12.3s | | | | | | | | |
| HHC | | | | | | LR | LR | | |
| | comp=Z,590nm,14.1s | | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **28.09** | **48** | | P | | **P** | **03 58 50.4** | **+0.6** |
| | baz=260 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.33** | **144** | | T | | T | 04 30 03.4 | |
| | baz=334,slow=75,SNR=34 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.35** | **144** | | T | | T | 04 30 01.8 | |
| | baz=334,slow=75,SNR=20 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.35** | **144** | | T | | T | 04 29 57.8 | |
| | baz=334,slow=75,SNR=27 | | | | | | | | |
| **P08K** | **Saint George I** | **28.38** | **50** | | P | | **P** | **03 58 53.3** | **+1.0** |
| | baz=262 | | | | | | | | |
| **NIKH** | **Nikolski High** | **28.48** | **57** | | P | | **P** | **03 58 54.7** | **+1.4** |
| | baz=269 | | | | | | | | |
| **BTO** | **Baotou** | **29.27** | **277** | *e* | P | | **P** | **03 59 02.8** | **+2.1** |
| BTO | | | | | | sP | **sP** | **03 59 09.1** | **-1.4** |
| BTO | | | | | | PP | **PnPn** | **03 59 56.5** | **+2.2** |
| BTO | | | | | | S | **S** | **04 03 56.9** | **+5.1** |
| BTO | | | | | | sS | **sS** | **04 04 04.3** | **+0.9** |
| BTO | | | | | | SS | **SnSn** | **04 05 24.9** | **+6.6** |
| BTO | | | | | | pmax | pmax | | |
| | comp=Z,38nm,0.8s | | | | | | | | |
| BTO | | | | | | pmax | pmax | | |
| | comp=Z,320nm,4.2s | | | | | | | | |
| BTO | | | | | | LR | LR | | |
| | comp=Z,1μm,13.5s | | | | | | | | |
| BTO | | | | | | LR | LR | | |
| | comp=Z,1μm,17.9s | | | | | | | | |
| BTO | | | | | | LR | LR | | |
| | comp=Z,1μm,14.3s | | | | | | | | |
| **TIXI** | **Tiksi** | **29.31** | **347** | | P | | **P** | **03 58 58.0** | **-2.6** |
| TIXI | | | | | | lAmb | lAmb | 03 58 58.4 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **TIXI** | **Tiksi** | **29.31** | **347** | | LR | | LR | 04 12 10.4 | |
| | comp=Z,279nm,18.4s,baz=172,slow=39 | | | | | | | | |
| **TIXI** | **Tiksi** | **29.31** | **347** | ⇓*e* | P | | **P** | **03 58 57.4** | **-3.1** |
| TIXI | | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| TIXI | | | | | | MLR | MLR | | |
| | comp=Z,520nm,13.0s | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.34** | **145** | | T | | T | 04 31 14.7 | |
| | baz=335,slow=76,SNR=63 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.35** | **145** | | T | | T | 04 31 16.3 | |
| | baz=335,slow=76,SNR=48 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.36** | **145** | | T | | T | 04 31 10.9 | |
| | baz=335,slow=76,SNR=43 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.51** | **292** | | P | | **P** | **03 59 02.2** | **-0.6** |
| ULN | | | | | | lAmb | lAmb | 03 59 03.8 | |
| | comp=Z,29nm,0.9s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.51** | **292** | *e* | P | | **P** | **03 59 02.8** | **0.0** |
| **ULN** | **Ulaanbaatar** | **29.51** | **292** | *c i* | P | | **P** | **03 59 02.8** | **0.0** |
| ULN | | | | | | pmax | pmax | | |
| | comp=Z,33nm,0.9s | | | | | | | | |
| **SONM** | **Songino Array** | **29.96** | **292** | | P | | **P** | **03 59 06.3** | **-0.4** |
| SONM | | | | | | lAmb | lAmb | 03 59 07.8 | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **SONM** | **Songino Array** | **29.96** | **292** | | P | | **P** | **03 59 06.8** | **+0.1** |
| | comp=Z,19nm,0.9s,baz=82,slow=8.8,SNR=72 | | | | | | | | |
| SONM | | | | | | LR | LR | 04 12 45.7 | |
| | comp=Z,730nm,18.2s,baz=84,slow=40 comp=Z,19nm,0.9s | | | | | | | | |
| **SONM** | **Songino Array** | **29.96** | **292** | | P | | **P** | **03 59 06.3** | **-0.4** |
| SONM | | | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **LYN** | **LuoYang** | **30.08** | **264** | *e* | P | | **P** | **03 59 08.3** | **+0.6** |
| LYN | | | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| LYN | | | | | | pmax | pmax | | |
| | comp=Z,210nm,3.9s | | | | | | | | |
| LYN | | | | | | LR | LR | | |
| | comp=Z,450nm,9.3s | | | | | | | | |
| LYN | | | | | | LR | LR | | |
| | comp=Z,470nm,13.7s | | | | | | | | |
| LYN | | | | | | LR | LR | | |
| | comp=Z,910nm,12.7s | | | | | | | | |
| **GUMO** | **Guam** | **30.77** | **189** | | LR | | LR | 04 11 51.3 | |
| | comp=Z,252nm,19.6s,baz=18,slow=37 | | | | | | | | |
| **ZAK** | **Zakamensk** | **31.62** | **298** | *e* | P | | **P** | **03 59 20.3** | **-1.0** |
| ZAK | | | | | *e* | | | 03 59 32.3 | |
| ZAK | | | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **M13K** | **Dall Lake** | **32.17** | **43** | | P | | **P** | **03 59 26.0** | **+0.2** |
| | baz=261 | | | | | | | | |
| **ANM** | **Nome** | **32.19** | **35** | | P | | **P** | **03 59 26.5** | **+0.4** |
| | baz=253 | | | | | | | | |
| **S12K** | **Black Hills** | **32.49** | **52** | | P | | **P** | **03 59 29.9** | **+1.2** |
| | baz=270 | | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **32.51** | **39** | | P | | **P** | **03 59 29.6** | **+0.8** |
| | baz=258 | | | | | | | | |
| **L14K** | **Kuka Creek** | **32.64** | **41** | | P | | **P** | **03 59 30.4** | **+0.5** |
| | baz=261 | | | | | | | | |
| **G15K** | **Niukluk** | **32.87** | **35** | | P | | **P** | **03 59 32.1** | **+0.2** |
| | baz=254 | | | | | | | | |
| **XAN** | **Xi'an** | **32.88** | **266** | ⇓ | P | | **P** | **03 59 32.3** | **-0.1** |
| XAN | | | | | | PcS | **PcS** | **04 06 03.9** | **+2.0** |
| XAN | | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| XAN | | | | | | LR | LR | | |
| | comp=Z,440nm,14.4s | | | | | | | | |
| XAN | | | | | | LR | LR | | |
| | comp=Z,470nm,13.7s | | | | | | | | |
| XAN | | | | | | LR | LR | | |
| | comp=Z,370nm,15.1s |

baz=267
S14K **Fog Glacier** 33.89 51 P P 03 59 41.6 +0.6
baz=271
CHNA **Chernabura Isl** 33.92 53 P P 03 59 41.5 +0.3
baz=273
J16K **Anvik River** 33.93 38 P P 03 59 41.8 +0.6
baz=260
I17K **Unalakleet** 34.01 37 P P 03 59 42.0 +0.2
baz=259
D17K **Noatak River** 34.07 30 P P 03 59 42.5 +0.2
baz=251
L16K **Owhat River** 34.21 41 P P 03 59 44.1 +0.4
baz=263
RDOG **Red Dog Mine** 34.25 29 P P 03 59 44.4 +0.4
baz=250
C17K **DeLong Mountai** 34.30 29 P P 03 59 45.0 +0.6
baz=250
E17K **Hotham Inlet** 34.34 31 P P 03 59 44.5 -0.2
baz=253
G17K **Kiwalik Mounta** 34.38 34 P P 03 59 45.5 +0.4
baz=257
F17K **Baldwin Pennin** 34.38 33 P P 03 59 46.7 +1.7
F17K **Baldwin Pennin** 34.38 33 P P 03 59 45.3 +0.3
baz=255
M16K **Timber Creek** 34.39 42 P P 03 59 45.1 -0.1
M16K IAmb IAmb 03 59 47.4
comp=Z,18nm,1.1s
M16K **Timber Creek** 34.39 42 P P 03 59 45.2 0.0
baz=265,SNR=5.7
N16K **Nishlik Lake** 34.43 43 P P 03 59 46.6 +1.0
baz=266
H17K **Granite Mounta** 34.55 35 P P 03 59 47.1 +0.5
baz=258
J17K **VABM Dome** 34.63 38 P P 03 59 48.2 +1.0
J17K IAmb IAmb 04 00 05.9
comp=Z,23nm,1.4s
J17K **VABM Dome** 34.63 38 P P 03 59 48.2 +1.0
baz=261
L17K **Donlin** 34.82 40 P P 03 59 49.1 +0.2
baz=264
K17K **Iditarod** 34.88 39 P P 03 59 51.1 +1.6
K17K IAmb IAmb 04 00 21.6
comp=Z,18nm,1.1s
K17K **Iditarod** 34.88 39 P P 03 59 50.2 +0.7
baz=263
E18K **Tukpahlearik C** 34.89 31 P P 03 59 49.6 +0.1
baz=254
F18K **Selawik** 35.04 33 P P 03 59 50.9 +0.2
baz=256
C18K **Utukok River** 35.05 29 P P 03 59 51.4 +0.5
C18K IAmb IAmb 03 59 52.3
comp=Z,23nm,0.8s
C18K **Utukok River** 35.05 29 P P 03 59 50.8 -0.1
baz=252
B18K **Kokolik River** 35.08 28 P P 03 59 51.8 +0.7
baz=250
M17K **Holitna River** 35.15 42 P P 03 59 53.5 +1.7
M17K IAmb IAmb 04 00 19.3
comp=Z,26nm,1.0s
M17K **Holitna River** 35.15 42 P P 03 59 52.4 +0.6
baz=266,SNR=5.8
N17K **Nushagak Hills** 35.22 43 P P 03 59 52.6 +0.2
baz=267
O17K **Koliganek Bris** 35.23 45 P P 03 59 53.2 +0.7
baz=268
H18K **Honhosa River** 35.24 35 P P 03 59 53.5 +0.9
H18K IAmb IAmb 04 00 15.1
comp=Z,22nm,1.1s
H18K **Honhosa River** 35.24 35 P P 03 59 52.8 +0.3
baz=259
G18K **Tagagawik** 35.27 34 IAmb IAmb 04 00 07.1
comp=Z,22nm,1.1s
G18K **Tagagawik** 35.27 34 P P 03 59 52.7 -0.1
baz=258,SNR=9.8
LZH **Lanzhou** 35.55 273 ⇑P P 03 59 56.4 +0.8
LZH sP pwP 04 00 08.5 -0.9
LZH pmax pmax
comp=Z,96nm,1.6s
LZH LR LR
comp=Z,450nm,14.8s
LZH LR LR
comp=Z,270nm,14.1s
LZH LR LR
comp=Z,340nm,13.4s
P17K **Kvichak River** 35.55 46 P P 03 59 55.0 -0.2
baz=270
L18K **Granite Mounta** 35.58 40 P P 03 59 55.8 +0.4
baz=265
R17L **Mt. Peulik Vol** 35.61 48 P P 03 59 56.3 +0.5
baz=272
J18K **Innoko River** 35.69 38 IAmb IAmb 04 00 23.8
comp=Z,20nm,1.1s
J18K **Innoko River** 35.69 38 P P 03 59 56.4 -0.1
baz=263
C19K **Lookout Ridge** 35.75 28 P P 03 59 58.1 +1.3
C19K **Lookout Ridge** 35.75 28 P P 03 59 57.0 +0.1
baz=253
GCSA **Galena City Sc** 35.80 36 P P 03 59 57.4 +0.2
baz=262
F19K **Shaleruckik Mo** 35.82 32 IAmb IAmb 04 00 05.1
comp=Z,18nm,1.1s
F19K **Shaleruckik Mo** 35.82 32 P P 03 59 57.4 0.0
baz=258,SNR=9.7
Q17K **Contact Creek** 35.84 47 P P 03 59 58.3 +0.4
baz=271
N18K **Kilae Creek** 35.86 43 IAmb IAmb 04 00 19.8
comp=Z,18nm,1.1s
N18K **Kilae Creek** 35.86 43 P P 03 59 58.3 +0.4
baz=268
M18K **Stony River** 35.93 42 P P 03 59 59.0 +0.6
baz=267
G19K **Purcell Mounta** 35.95 34 P P 03 59 58.3 -0.2
baz=259
D19K **Kuna River** 36.09 30 P P 03 59 59.9 +0.1
baz=255
H19K **Roundabout Mou** 36.10 35 P P 03 59 60.0 +0.2
baz=261,SNR=15
CHIR **Chirikof Islan** 36.12 51 P P 04 00 00.3 +0.2
baz=275
E19K **Redstone River** 36.16 32 IAmb IAmb 04 00 15.7
comp=Z,27nm,0.9s
E19K **Redstone River** 36.16 32 P P 04 00 00.7 +0.3
baz=257,SNR=9.6
P18K **Big Mountain,** 36.17 45 P P 04 00 01.4 +0.7
baz=270
O18K **Koktuh Hills** 36.18 45 IAmb IAmb 04 00 20.9
comp=Z,21nm,1.2s
O18K **Koktuh Hills** 36.18 45 P P 04 00 01.1 +0.4
baz=270
J19K **Poorman** 36.24 38 IAmb IAmb 04 00 09.0
comp=Z,17nm,0.9s
J19K **Poorman** 36.24 38 P P 04 00 01.2 +0.1
baz=264,SNR=16
Q18K **Katmai Hardscr** 36.30 47 P P 04 00 01.1 -0.7
baz=272
L19K **White Mountain** 36.43 41 P P 04 00 03.0 +0.2
baz=267
N19K **Bonanza Creek** 36.56 43 IAmb IAmb 04 00 23.6
comp=Z,22nm,1.2s
N19K **Bonanza Creek** 36.56 43 P P 04 00 04.3 +0.4
baz=269
M19K **Big River Lodg** 36.63 41 P P 04 00 04.4 -0.1
baz=268
F20K **Avaraart Lake** 36.65 32 P P 04 00 04.4 -0.1
baz=260
D20K **Etivluk River** 36.68 30 P P 04 00 04.8 0.0
baz=256,SNR=14
E20K **Nigu River** 36.72 30 P P 04 00 05.1 -0.1
baz=257,SNR=17
H20K **Anotlenegga Mo** 36.74 35 P P 04 00 05.3 0.0
baz=262,SNR=7.7
I20K **Naaghedeneel** 36.82 36 P P 04 00 06.7 +0.7
baz=264
B20K **Meade River** 36.82 27 P P 04 00 05.8 -0.2
baz=254
SII **Sitkinak Islan** 36.86 50 P P 04 00 07.0 +0.6
baz=275
K20K **Telida** 36.87 39 P P 04 00 06.7 +0.2
baz=266
J20K **Nowinta River** 36.90 37 IAmb IAmb 04 00 34.3
comp=Z,38nm,1.4s
J20K **Nowinta River** 36.90 37 P P 04 00 07.7 +1.0
baz=265,SNR=9.1
L20K **Farewell, AK** 36.90 40 P P 04 00 07.3 +0.6
baz=267,SNR=5.7
GTA **Gaotai** 36.98 280 *e*P P 04 00 08.3 +0.4
GTA sP pwP 04 00 20.5 -1.3
GTA pmax pmax
comp=Z,22nm,0.8s
GTA LR LR
comp=Z,250nm,15.3s
GTA LR LR
comp=Z,300nm,16.0s
GTA LR LR
comp=Z,380nm,15.6s
Q19K **Cape Douglas,** 37.00 46 P P 04 00 07.9 +0.3
baz=272
P19K **Oil Pt** 37.19 45 P P 04 00 09.1 -0.1
baz=272
M20K **Styx River** 37.23 41 P P 04 00 09.7 0.0
baz=269
IMAR **Indian Mountai** 37.27 34 P P 04 00 10.2 +0.4
OHAK **Old Harbor** 37.29 49 P P 04 00 10.6 +0.5
baz=275
G21K **Allakaket** 37.43 34 IAmb IAmb 04 00 33.7
comp=Z,21nm,0.9s
G21K **Allakaket** 37.43 34 P P 04 00 11.7 +0.5
baz=262,SNR=10
F21K **Alatna River** 37.54 32 P P 04 00 12.5 +0.4
baz=262,SNR=10
E21K **Killik River** 37.57 30 P P 04 00 13.1 +0.7
baz=260
B21K **Ikpikpuk River** 37.58 28 P P 04 00 12.7 +0.3
baz=257
H21K **Melozitna Rive** 37.62 35 P P 04 00 13.2 +0.4
baz=264
KDAK **Kodiak Island** 37.62 48 P P 04 00 13.0 +0.1
KDAK **Kodiak Island** 37.62 48 P P 04 00 13.2 +0.3
baz=275
KDAK **Kodiak Island** 37.62 48 P P 04 00 13.0 +0.1
KDAK pmax pmax
comp=Z,15nm,1.0s
Q20K **Shuyak Island** 37.66 47 P P 04 00 12.8 -0.5
baz=274
N20K **Mount Spurr** 37.67 42 P P 04 00 12.9 -0.4
baz=271
SPCR **Spurr Chakacha** 37.67 42 P P 04 00 12.9 -0.4
baz=271
SYI **Shuyak Island** 37.67 47 IAmb IAmb 04 00 39.5
comp=Z,15nm,0.9s
SKT **Skwentna** 37.99 41 P P 04 00 15.5 -0.4
baz=270
HOM **Homer** 37.99 45 P P 04 00 15.8 -0.2
baz=273
F22K **John River** 38.09 32 P P 04 00 16.8 +0.1
baz=262
D22K **Ayikyak River** 38.11 30 IAmb IAmb 04 00 22.4
comp=Z,24nm,0.8s
D22K **Ayikyak River** 38.11 30 P P 04 00 17.0 +0.1
baz=260
H22K **Ishtalitna Cre** 38.22 35 P P 04 00 17.8 -0.1
baz=265,SNR=5.3
CD2 **Chengdu** 38.23 266 P P 04 00 18.4 0.0
CD2 pmax pmax
comp=Z,30nm,0.6s
CD2 LR LR
comp=Z,350nm,9.7s
CD2 LR LR
comp=Z,260nm,9.2s
CD2 LR LR
comp=Z,330nm,12.1s
G22K **Bettles** 38.27 33 P P 04 00 18.5 +0.3
baz=264
BPAW **Bear Paw Mtn.** 38.28 38 P P 04 00 18.7 +0.3
baz=268
SUA **Susitna One** 38.37 42 P P 04 00 19.9 +0.7
baz=272
MLY **Manley** 38.43 36 P P 04 00 21.1 +1.4
MLY IAmb IAmb 04 00 47.3
comp=Z,28nm,1.5s
MLY **Manley** 38.43 36 P P 04 00 19.9 +0.2
baz=277
BRSE **Bradley Lake S** 38.44 45 P P 04 00 20.4 +0.6
baz=274
COLD **Coldfoot** 38.81 33 P P 04 00 23.3 +0.5
baz=265
G23K **Bananza Creek** 38.84 33 P P 04 00 23.4 +0.3
baz=266,SNR=10
D23K **Nanushuk River** 38.84 30 IAmb IAmb 04 00 37.7
comp=Z,20nm,1.0s
D23K **Nanushuk River** 38.84 30 P P 04 00 23.6 +0.5
baz=262,SNR=6.6
H23K **Yukon River** 38.97 35 P P 04 00 24.4 +0.2
baz=267,SNR=7.1
C23K **Itkillik River** 38.99 28 IAmb IAmb 04 00 26.2
comp=Z,34nm,0.9s
C23K **Itkillik River** 38.99 28 P P 04 00 24.7 +0.5
baz=261,SNR=6.0
I23K **Minto, Yukon-K** 39.02 36 P P 04 00 25.3 +0.8
baz=268
SEW **Seward** 39.07 44 P P 04 00 25.6 +0.6
baz=274
E23K **Chandalar** 39.12 31 IAmb IAmb 04 00 34.0
comp=Z,26nm,0.8s
E23K **Chandalar** 39.12 31 P P 04 00 25.8 +0.3
baz=264,SNR=17
NEA2 **Nenana** 39.13 37 P P 04 00 25.9 +0.4
baz=269
PMR **Palmer** 39.14 42 P P 04 00 26.5 +1.0
PMR **Palmer** 39.14 42 P P 04 00 25.9 +0.4
baz=273,SNR=5.7
PMR **Palmer** 39.14 42 P P 04 00 26.5 +1.0
PMR pmax pmax
comp=Z,10.0nm,0.8s
MCK **McKinley** 39.18 38 P P 04 00 26.2 +0.2
baz=270
TOLK **Toolik Lake Re** 39.20 30 IAmb IAmb 04 00 31.7
comp=Z,16nm,0.8s
TOLK **Toolik Lake Re** 39.20 30 P P 04 00 26.3 +0.3
baz=264
RND **Reindeer** 39.22 39 IAmb IAmb 04 00 53.1
comp=Z,27nm,1.2s
GHO **Glory Hole Cre** 39.23 41 IAmb IAmb 04 00 47.1
comp=Z,20nm,1.0s
WAT1 **Susitna Watana** 39.37 40 P P 04 00 27.8 +0.2
baz=272
KNK **Knik Glacier** 39.47 42 IAmb IAmb 04 00 59.0
comp=Z,24nm,1.0s
KNK **Knik Glacier** 39.47 42 P P 04 00 28.3 -0.1
baz=274
SML **Sawmill** 39.51 41 P P 04 00 28.8 0.0
baz=273,SNR=11
D24K **Happy Valley** 39.52 30 IAmb IAmb 04 00 34.4
comp=Z,35nm,0.8s
D24K **Happy Valley** 39.52 30 P P 04 00 28.8 +0.1
baz=264,SNR=7.1
E24K **Your Creek** 39.54 31 P P 04 00 29.7 +0.7
baz=265
PWL **Port Wells** 39.56 43 P P 04 00 29.1 0.0
baz=274
C24K **Franklin Bluff** 39.63 29 P P 04 00 29.9 +0.3
baz=263
COLA **College** 39.65 36 *ce*P P 04 00 30.5 +0.7
COLA pmax pmax
comp=Z,15nm,0.9s
H24K **Noodor Dome** 39.66 35 P P 04 00 30.4 +0.5
baz=269
F24K **Squaw Lake** 39.73 32 PcP PcP 04 02 37.8 +1.3
F24K **Squaw Lake** 39.73 32 P P 04 00 30.9 +0.4
baz=267,SNR=8.1
WAT6 **Susitna Watana** 39.75 40 P P 04 00 31.1 +0.2
baz=273,SNR=6.2
M23K **Glacier View** 39.80 41 P P 04 00 31.3 +0.2
baz=274
POKR **Poker Plat Res** 39.83 36 IAmb IAmb 04 00 58.5
comp=Z,26nm,0.8s
POKR **Poker Plat Res** 39.83 36 P P 04 00 31.3 0.0
baz=270,SNR=5.2
G24K **Hadweenzic Riv** 39.85 34 IAmb IAmb 04 00 59.3
comp=Z,44nm,1.4s
G24K **Hadweenzic Riv** 39.85 34 P P 04 00 31.8 +0.3
baz=268,SNR=9.2
DHY **Denali Highway** 39.89 39 P P 04 00 32.5 +0.4
DHY IAmb IAmb 04 00 59.0
comp=Z,30nm,1.4s
DHY **Denali Highway** 39.89 39 P P 04 00 32.2 +0.1
baz=272,SNR=11
SCM **Sheep Creek Mo** 39.98 41 P P 04 00 33.4 +0.7
SCM IAmb IAmb 04 01 02.7
comp=Z,20nm,0.9s
SCM **Sheep Creek Mo** 39.98 41 P P 04 00 32.6 -0.2
baz=274
SCM **Sheep Creek Mo** 39.98 41 P P 04 00 33.4 +0.7
SCM pmax pmax
comp=Z,20nm,0.9s
HDA **Harding Lake** 40.05 37 P P 04 00 33.8 +0.7
HDA **Harding Lake** 40.05 37 P P 04 00 33.2 +0.1
baz=271,SNR=5.4
ILAR **Eielson Array** 40.07 37 P P 04 00 33.8 +0.5
comp=Z,2.4nm,0.8s,baz=259,slow=7.7,SNR=23
comp=Z,2.4nm,0.8s
P23K **Montague Islan** 40.10 44 P P 04 00 33.7 +0.1
baz=276
G25K **Bearmuse Lake** 40.40 33 P P 04 00 36.2 +0.2
baz=269
D25K **Kavik River** 40.41 30 P P 04 00 36.2 +0.1
baz=266
H25L **Birch Creek** 40.50 34 P P 04 00 37.1 +0.2
baz=270
M24K **Tolsona, Glenn** 40.51 41 IAmb IAmb 04 01 04.3
comp=Z,24nm,0.8s
M24K **Tolsona, Glenn** 40.51 41 P P 04 00 37.2 +0.2
baz=275
K24K **Donnelly Dome** 40.58 38 P P 04 00 38.0 +0.4
baz=273
F25K **Christian Rive** 40.59 32 P P 04 00 37.8 +0.1
baz=269
PRP **Porcupine Dome** 40.63 35 P P 04 00 38.2 0.0
baz=271
KLU **Klutina** 40.68 42 P P 04 00 39.8 +1.3
KLU IAmb IAmb 04 00 46.8
comp=Z,20nm,0.9s
KLU **Klutina** 40.68 42 P P 04 00 38.5 +0.1
baz=276,SNR=9.3
J25K **Salcha River,** 40.72 37 P P 04 00 38.8 0.0
baz=272
PAX **Paxson** 40.77 39 P P 04 00 39.6 +0.4
baz=274
EYAK **Cordova Ski Ar** 40.86 43 P P 04 00 40.4 +0.6
baz=277
C26K **Camden Bay** 40.96 29 P P 04 00 40.5 -0.1
baz=267
BMAR **Burnt Mountain** 41.00 32 P P 04 00 42.9 +1.9
F26K **Sheenjek River** 41.17 32 P P 04 00 42.6 +0.2
baz=270
N25K **Chitina, Valde** 41.30 41 P P 04 00 44.2 +0.6
baz=276
G26K **Porcupine Rive** 41.31 33 P P 04 00 43.6 +0.1
baz=271
SCRK **Sand Creek** 41.36 38 P P 04 00 44.4 +0.3
baz=274
C27K **Jago River** 41.37 29 P P 04 00 44.3 +0.4
baz=268
BMRM **Bremner River** 41.37 42 P P 04 00 44.8 +0.6
baz=277,SNR=7.2
J26L **Joseph Creek** 41.51 37 P P 04 00 45.7 +0.4
baz=274
QIZ **Qiongzhong** 41.58 246 P P 04 00 46.0 -0.3
QIZ S S 04 07 03.4 +2.9
QIZ pmax pmax
comp=Z,58nm,2.5s
QIZ LR LR
comp=Z,700nm,17.7s
QIZ LR LR
comp=Z,640nm,16.8s
QIZ LR LR
comp=Z,550nm,11.8s
KAIM **Kayak Island** 41.60 44 P P 04 00 46.3 +0.4
baz=279
I26K **Coal Creek Min** 41.63 36 P P 04 00 46.2 +0.1
baz=274
L26K **Log Cabin Wild** 41.73 39 P P 04 00 47.5 +0.5
baz=276
DGZ **Jazzator, Alta** 41.74 300 *de*P P 04 00 48.5 +1.0
DGZ pmax pmax
comp=Z,12nm,0.9s
VRDI **Verde Repeater** 41.89 42 P P 04 00 49.7 +1.2
VRDI IAmb IAmb 04 01 09.2
comp=Z,20nm,1.1s
GOMU **GeErMu** 41.95 279 P P 04 00 50.3 +0.7
GOMU pmax pmax
comp=Z,39nm,0.8s
GOMU LR LR
comp=Z,690nm,12.6s
GOMU LR LR
comp=Z,500nm,12.9s
GOMU LR LR
comp=Z,780nm,12.9s
M26K **Nabesna, AK** 41.96 40 IAmb IAmb 04 01 10.9
comp=Z,32nm,1.0s
M26K **Nabesna, AK** 41.96 40 P P 04 00 49.4 +0.5
baz=277,SNR=22
MCARA **McCarthy VSAT** 42.07 42 P P 04 00 50.4 +0.6
baz=278
E27K **Coleen River** 42.12 31 P P 04 00 50.8 +0.5
baz=272
CRQE **Cirque** 42.13 42 P P 04 00 51.0 +0.5
baz=279,SNR=7.9
G27K **Doyon Strip** 42.16 33 P P 04 00 50.8 +0.3
baz=273
ZALV **Zalesovo Beam** 42.16 307 P 04 00 49.1 -1.5
ZALV **Zalesovo Beam** 42.16 307 P P 04 00 49.4 -1.2
comp=Z,3.4nm,0.7s,baz=78,slow=7.9,SNR=11
ZALV PcP PcP 04 02 44.8 +0.3
comp=Z,5.5nm,0.8s,baz=104,slow=2.4,SNR=9.6
ZALV LR LR 04 19 46.0
comp=Z,280nm,18.1s,baz=56,slow=38
comp=Z,3.4nm,0.7s
K27K **Chicken** 42.19 38 P P 04 00 51.1 +0.3
baz=276
PZH **PanZhiHua** 42.22 262 P P 04 00 52.5 +0.9
PZH S S 04 07 14.3 +4.1
PZH pmax pmax
comp=Z,20nm,1.2s
PZH pmax pmax
comp=Z,180nm,4.4s
PZH LR LR
comp=Z,290nm,15.3s
PZH LR LR
comp=Z,330nm,16.9s
PZH LR LR
comp=Z,320nm,15.9s
H27K **Steamboat Moun** 42.24 34 P P 04 00 51.5 +0.3
baz=274,SNR=6.1
I27K **Kandik River** 42.25 35 P P 04 00 51.6 +0.3
baz=275
WAX **Waxell Ridge** 42.29 43 IAmb IAmb 04 00 59.5
comp=Z,29nm,1.0s
D27M **Malcolm River** 42.33 30 P P 04 00 52.3 +0.4
baz=271
KMI **Kunming** 42.36 259 ⇑P P 04 00 53.9 +1.0
KMI S S 04 07 11.4 -1.1
KMI pmax pmax
comp=Z,16nm,0.4s
KMI LR LR
comp=Z,460nm,14.0s
KMI LR LR
comp=Z,310nm,16.1s
KMI LR LR
comp=Z,300nm,15.9s
L27K **Beaver Creek,** 42.41 39 IAmb IAmb 04 01 20.3
comp=Z,16nm,0.9s
L27K **Beaver Creek,** 42.41 39 P P 04 00 53.0 +0.4
baz=277,SNR=12
BCAR **Beaver Creek A** 42.43 39 P P 04 00 54.0 +1.2
M27K **Edge Creek, AK** 42.48 40 IAmb IAmb 04 01 21.7
comp=Z,18nm,1.0s
M27K **Edge Creek, AK** 42.48 40 P P 04 00 53.6 +0.3
baz=278,SNR=9.8
EGAK **Eagle** 42.52 36 IAmb IAmb 04 01 20.2
comp=Z,25nm,1.2s
EGAK **Eagle** 42.52 36 P P 04 00 53.2 -0.2
baz=276,SNR=7.1
ISLE **Juniper Island** 42.52 43 IAmb IAmb 04 01 10.3
comp=Z,17nm,0.8s
MESA **MESA** 42.78 43 P P 04 00 55.7 -0.1
baz=280
GRNC **Granite Creek** 42.78 42 IAmb IAmb 04 00 58.2
comp=Z,26nm,0.8s
F28M **Old Crow** 42.80 32 P P 04 00 55.7 0.0
baz=274
E28M **Babbage River** 42.87 31 IAmb IAmb 04 01 23.2
comp=Z,24nm,1.2s
E28M **Babbage River** 42.87 31 P P 04 00 56.8 +0.5
baz=273
CTG **Chitna Glacier** 42.94 42 P P 04 00 57.5 +0.4
baz=280,SNR=13
CTGM **Chitina Glacie** 42.95 42 IAmb IAmb 04 01 12.1
comp=Z,24nm,0.8s
I28M **Miner Creek** 42.96 35 IAmb IAmb 04 01 24.2
comp=Z,18nm,0.8s
I28M **Miner Creek** 42.96 35 P P 04 00 57.3 +0.1
baz=276,SNR=15
LOGN **Logan Glacier** 43.13 42 IAmb IAmb 04 01 11.6

comp=Z,23nm,1.0s
**TABL Table Mountain 43.13 43** IAmb IAmb 04 01 20.9
comp=Z,27nm,1.0s
**YUK3 Moose Creek 43.23 41** P **P** **04 00 59.6 +0.2**
baz=280,SNR=6.5
**DAWY Dawson 43.36 37** P **P** **04 01 01.1 +0.8**
baz=278
**E29M Blow River 43.49 31** IAmb IAmb 04 01 40.7
comp=Z,26nm,1.1s
**E29M Blow River 43.49 31** P **P** **04 01 01.6 +0.4**
baz=275,SNR=9.7
**H29M Whitestone 43.52 34** P **P** **04 01 01.3 -0.2**
baz=277
**O28M Mount Upton 43.53 42** P **P** **04 01 02.2 +0.2**
baz=281,SNR=6.5
**G29M Pine Creek 43.58 33** IAmb IAmb 04 01 29.7
comp=Z,19nm,0.9s
**G29M Pine Creek 43.58 33** P **P** **04 01 01.8 -0.1**
baz=276,SNR=6.2
**WMQ Urumqi 43.59 292** *e*P **P** **04 01 02.9 +0.4**
WMQ PP **PP** **04 02 44.5 +0.6**
WMQ pmax pmax
comp=Z,43nm,1.1s
WMQ pmax pmax
comp=Z,130nm,3.6s
WMQ LR LR
comp=Z,720nm,16.3s
WMQ LR LR
comp=Z,610nm,17.1s
WMQ LR LR
comp=Z,470nm,18.1s
**I29M Ogilvie Camp, 43.65 35** P **P** **04 01 02.8 +0.2**
baz=278,SNR=9.8
**M29M Somme Creek 44.04 39** P **P** **04 01 05.7 -0.1**
baz=281
**L29M L29M 44.07 39** IAmb IAmb 04 01 37.3
comp=Z,17nm,1.1s
**L29M L29M 44.07 39** P **P** **04 01 06.2 +0.2**
baz=280,SNR=5.5
**ZSN Zaisan 44.09 298** *e*P **P** **04 01 05.6 -0.8**
comp=Z,12nm,0.7s,baz=298
**ZSN Zaisan 44.09 298** *e*P **P** **04 01 05.5 -0.8**
ZSN pmax pmax
comp=Z,12nm,0.7s
**YUK4 Talbot Arm 44.16 41** P **P** **04 01 06.4 -0.5**
baz=282
**EPYK Eagle Plains 44.16 34** IAmb IAmb 04 01 34.5
comp=Z,23nm,1.1s
**EPYK Eagle Plains 44.16 34** P **P** **04 01 07.1 +0.4**
baz=278,SNR=7.6
**K29M Barlow Dome 44.21 37** IAmb IAmb 04 01 35.3
comp=Z,15nm,1.1s
**K29M Barlow Dome 44.21 37** P **P** **04 01 06.3 -0.9**
baz=280,SNR=7.5
**G30M tAoh Zraii Nji 44.27 33** P **P** **04 01 07.5 -0.1**
baz=278
**F30M Barrier River 44.36 32** P **P** **04 01 08.4 +0.2**
baz=278
**YUK6 Outpost Mounta 44.38 42** P **P** **04 01 08.5 -0.2**
baz=282
**O29M Mount Kennedy 44.41 43** P **P** **04 01 08.8 -0.1**
baz=283
**I30M Mount Dempster 44.47 35** P **P** **04 01 09.1 -0.2**
baz=279,SNR=25
**J30M Hart River 44.60 36** P **P** **04 01 10.4 +0.1**
baz=280,SNR=5.2
**N30M Aishikik Lake 44.87 41** P **P** **04 01 13.2 +0.8**
baz=283
**P29M Windy Craggy 44.97 43** P **P** **04 01 13.9 +0.7**
baz=284,SNR=12
**G31M Satah River 45.04 33** P **P** **04 01 14.8 +1.1**
G31M IAmb IAmb 04 01 31.4
comp=Z,11nm,0.8s
**G31M Satah River 45.04 33** P **P** **04 01 13.9 +0.2**
baz=280
**INK Inuvik 45.11 31** IAmb IAmb 04 01 49.3
comp=Z,21nm,1.1s
**INK Inuvik 45.11 31** P **P** **04 01 14.7 +0.6**
baz=279
**F31M Tsiigehtchic 45.16 32** P **P** **04 01 14.8 +0.2**
baz=280
**P30M Million Dollar 45.24 43** P **P** **04 01 15.9 +0.6**
baz=284
**N31M Braeburn, Yuko 45.48 40** P **P** **04 01 18.2 +1.0**
baz=284,SNR=7.4
**O30N Mendenhall 45.50 41** IAmb IAmb 04 01 45.7
comp=Z,15nm,1.3s
**O30N Mendenhall 45.50 41** P **P** **04 01 17.6 +0.2**
baz=284
**PLBC Pleasant Camp 45.69 43** P **P** **04 01 19.4 +0.5**
baz=285
**SEM Semipalatinsk 45.90 303** *e*P **P** **04 01 20.2 -0.7**
comp=Z,7.2nm,0.7s,baz=304
**SEM Semipalatinsk 45.90 303** *e*P **P** **04 01 20.2 -0.7**
SEM pmax pmax
comp=Z,7.0nm,0.7s
**M31M Drury Creek, Y 45.95 39** IAmb IAmb 04 01 48.7
comp=Z,14nm,1.0s
**M31M Drury Creek, Y 45.95 39** P **P** **04 01 21.4 +0.5**
baz=284,SNR=7.0
**MK31 Makanchi Array 45.96 298***c i*P **P** **04 01 21.2 0.0**
**MKAR Makanchi Array 45.96 298** P **P** **04 01 20.9 -0.3**
**MKAR Makanchi Array 45.96 298** P **P** **04 01 21.0 -0.3**
comp=Z,39nm,0.8s,baz=73,slow=8.1,SNR=210
MKAR pP **pwP** **04 01 33.3 -1.2**
comp=Z,18nm,0.9s,baz=76,slow=10,SNR=9.1
MKAR LR LR 04 22 05.3
comp=Z,749nm,18.1s,baz=66,slow=38
comp=Z,39nm,0.8s
**WHY Whitehorse 46.10 41** P **P** **04 01 22.8 +0.6**
baz=285
**MAKZ Makanchi 46.16 298** P **P** **04 01 23.2 +0.5**
**MAKZ Makanchi 46.16 298** P **P** **04 01 23.2 +0.5**
MAKZ pmax pmax
comp=Z,45nm,0.9s
**SKAG Skagway 46.20 43** P **P** **04 01 23.7 +0.8**
baz=286
**FARO Faro, Yukon 46.41 39** IAmb IAmb 04 01 46.1
comp=Z,8.5nm,1.0s
**FARO Faro, Yukon 46.41 39** P **P** **04 01 25.3 +0.8**
baz=285,SNR=7.9
**KURK Kurchatov 46.76 304** P **P** **04 01 26.3 -1.1**
KURK IAmb IAmb 04 01 44.5
comp=Z,12nm,0.9s
**KURK Kurchatov 46.76 304** *e*P **P** **04 01 26.2 -1.2**
**KURK Kurchatov 46.76 304**‖ *e*P **P** **04 01 26.2 -1.2**
KURK pmax pmax
comp=Z,11nm,0.8s
KURK MLR MLR
comp=Z,281nm,15.0s
**KURBB Kurchatov Arra 46.85 304** P **P** **04 01 27.2 -0.9**
comp=Z,8.4nm,0.8s,baz=70,slow=8.4,SNR=46
KURBB LR LR 04 22 25.5
comp=Z,211nm,18.5s,baz=163,slow=38
comp=Z,8.4nm,0.8s
**R32K Eaglecrest 46.94 45** P **P** **04 01 29.3 +0.5**
baz=288
**P32M Atlin 46.96 43** P **P** **04 01 29.4 +0.5**
baz=287
**CRAI Chiangrai 47.19 256** P **P** **04 01 32.6 +1.5**
**P33M Teslin, Yukon 47.21 42** IAmb IAmb 04 01 52.3
comp=Z,19nm,1.1s
**P33M Teslin, Yukon 47.21 42** P **P** **04 01 31.3 +0.4**
baz=287,SNR=9.3
**A36M Sachs Harbour 47.22 25** P **P** **04 01 30.8 +0.1**
baz=283
**Q32M Nakina River 47.85 43** P **P** **04 01 35.9 -0.1**
baz=288
**R33M Jennings River 48.35 42** P **P** **04 01 42.0 +2.2**
R33M IAmb IAmb 04 02 01.7
comp=Z,22nm,1.3s
**R33M Jennings River 48.35 42** P **P** **04 01 40.1 +0.3**
baz=289,SNR=9.8
**U33K Whale Pass 48.36 47** P **P** **04 01 40.4 +0.7**
baz=290
**PHRA Phrae 48.45 254** **P** **04 01 42.0 +1.2**
**CRAG Craig 48.59 48** P **P** **04 01 42.0 +0.5**
baz=291
**WRAK Wrangell Islan 48.66 46** P **P** **04 01 42.7 +0.7**
baz=291
**S34M Telegraph Cree 48.76 44** P **P** **04 01 43.7 +0.8**
baz=290
**TGTN Hyland Airport 48.92 39** P **P** **04 01 44.4 +0.3**
baz=289
**DLBC Dease Lake 49.13 43** P **P** **04 01 45.8 0.0**
baz=290
**TDK Taldyqorghan 49.17 297** *e*P **P** **04 01 45.8 -0.4**
comp=Z,9.5nm,0.5s,baz=297
**TDK Taldyqorghan 49.17 297** *e*P **P** **04 01 45.8 -0.4**
TDK pmax pmax
comp=Z,10.0nm,0.5s
**SHLS Shalkode 49.31 295** *e*P **P** **04 01 44.7 -2.6**
comp=Z,6.5nm,0.5s,baz=295
**SHLS Shalkode 49.31 295** *e*P **P** **04 01 44.7 -2.6**
SHLS pmax pmax
comp=Z,7.0nm,0.5s
**CMAR Chiang Mai Arr 49.37 255** P **P** **04 01 49.0 +1.1**
comp=Z,1.3nm,0.3s,baz=46,slow=7.6,SNR=10
comp=Z,1.3nm,0.3s
**CMAR Chiang Mai Arr 49.37 255** *i* P **P** **04 01 48.9 +0.9**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**V35K Ketchikan 49.44 48** P **P** **04 01 47.4 -0.6**
baz=292
**T35M Bob Quinn 49.54 45** IAmb IAmb 04 02 09.6
comp=Z,21nm,1.2s
**T35M Bob Quinn 49.54 45** P **P** **04 01 48.6 -0.2**
baz=292
**UZB Uzynbulak 49.60 295** *e*P **P** **04 01 48.9 -0.7**
comp=Z,9.7nm,0.8s,baz=295
**UZB Uzynbulak 49.60 295** *e*P **P** **04 01 48.9 -0.7**
UZB pmax pmax
comp=Z,10.0nm,0.8s
**KPKS Kokpek 49.67 295** *e*P **P** **04 01 49.6 -0.6**
comp=Z,12nm,1.0s,baz=296
**KPKS Kokpek 49.67 295** *e*P **P** **04 01 49.5 -0.6**
KPKS pmax pmax
comp=Z,12nm,1.0s
**SHL Shillong 49.85 268** **P** **04 01 51.5 -0.3**
SHL IAmb IAmb 04 01 52.0
comp=Z,17nm,0.9s
**SHL Shillong 49.85 268** P **P** **04 01 51.5 -0.3**
SHL pmax pmax
comp=Z,17nm,0.9s
**ARXS Arharly 49.89 297** *e*P **P** **04 01 50.7 -1.0**
**ZHN Zhinishke 49.97 295** *e*P **P** **04 01 51.8 -0.7**
comp=Z,14nm,1.0s,baz=295
**ZHN Zhinishke 49.97 295** *e*P **P** **04 01 51.7 -0.7**
ZHN pmax pmax
comp=Z,14nm,1.0s
**SATY Saty 50.04 295** *e*P **P** **04 01 52.2 -0.7**
baz=295
**SATY Saty 50.04 295** *e*P **P** **04 01 52.2 -0.7**
**WRGLY Wrigley 50.44 36** P **P** **04 01 55.6 +0.2**
baz=292
**CHKK Chushkaly 50.59 297** *e*P **P** **04 01 56.6 -0.4**
baz=297
**CHKK Chushkaly 50.59 297** *e*P **P** **04 01 56.5 -0.4**
**BVAR Borovoye Array 50.60 310** P **P** **04 01 57.2 +0.3**
comp=Z,4.9nm,0.7s,baz=59,slow=9.3,SNR=16
comp=Z,4.9nm,0.7s
**BRVK Borovoye 50.65 310** **P** **04 01 57.6 +0.4**
**BRVK Borovoye 50.65 310** *e*P **P** **04 01 56.6 -0.6**
**BRVK Borovoye 50.65 310***de*P **P** **04 01 56.6 -0.6**
BRVK pmax pmax
comp=Z,6.0nm,0.7s
**MDOK Medeo 50.87 296** *e*P **P** **04 01 58.4 -0.9**
baz=296
**MDOK Medeo 50.87 296** *e*P **P** **04 01 58.3 -0.9**
**AAA Alma-Ata 50.94 296** *e*P **P** **04 01 59.2 -0.5**
baz=296
**AAA Alma-Ata 50.94 296** *e*P **P** **04 01 59.2 -0.5**
**AAA Alma-Ata 50.94 296** *e*P **P** **04 01 59.2 -0.5**
**KUU Kurty 50.99 297** *e*P **P** **04 01 59.0 -1.0**
comp=Z,10nm,1.0s,baz=297
**KUU Kurty 50.99 297** *e*P **P** **04 01 59.0 -1.0**
KUU pmax pmax
comp=Z,10.0nm,1.0s
**TNSS Tian-Shan 51.00 296** *e*P **P** **04 01 59.8 -0.8**
baz=296
**TNSS Tian-Shan 51.00 296** *e*P **P** **04 01 59.7 -0.8**
**TOAD Toad River Com 51.30 42** P **P** **04 02 02.2 0.0**
baz=294,SNR=7.6
**KOTAN Kotaneelee Air 51.35 40** P **P** **04 02 02.7 +0.3**
baz=293
**ULHL Ulahol 51.83 295** P **P** **04 02 07.1 +0.6**
SNR=11
**BTLS Baital 51.91 299** *e*P **P** **04 02 05.9 -0.9**
comp=Z,7.6nm,0.9s,baz=299
**BTLS Baital 51.91 299** *e*P **P** **04 02 05.9 -0.9**
BTLS pmax pmax
comp=Z,8.0nm,0.9s
**TKM2 Tokmak 2 51.92 296** P **P** **04 02 07.7 +0.5**
SNR=24
**EUNU Eureka 52.10 11** IAmb IAmb 04 02 32.7
comp=Z,16nm,1.1s
**USP Ospenovka 52.47 297** P **P** **04 02 11.5 +0.5**
SNR=19
**BBB Bella Bella 52.62 50** LR LR 04 23 09.0
comp=Z,56nm,21.6s,baz=337,slow=34
**AAK Ala-Archa 52.77 296** **P** **04 02 13.9 +0.5**
AAK IAmb IAmb 04 02 14.9
comp=Z,20nm,1.1s
**AAK Ala-Archa 52.77 296** LR LR 04 26 26.0
comp=Z,254nm,18.4s,baz=51,slow=38
**AAK Ala-Archa 52.77 296** *e*P **P** **04 02 13.8 +0.3**
**AAK Ala-Archa 52.77 296***c i*P **P** **04 02 13.8 +0.3**
AAK pmax pmax
comp=Z,22nm,1.1s
**EKS2 Erkin-Say 53.22 297** P **P** **04 02 17.2 +0.5**
SNR=18
**KSH Kashi 53.36 292** P **P** **04 02 21.6 +3.8**
KSH pmax pmax
comp=Z,7.0nm,1.0s
KSH LR LR
comp=Z,590nm,15.8s
KSH LR LR
comp=Z,430nm,21.3s
KSH LR LR
comp=Z,490nm,16.1s
**AML Almayashu 53.54 296** P **P** **04 02 20.3 +0.9**
SNR=20
**SVE Sverdlovsk 54.04 317** *e*P **P** **04 02 22.4 +0.1**
**SVE Sverdlovsk 54.04 317** *e*P **P** **04 02 22.4 +0.1**
SVE pmax pmax
comp=Z,33nm,0.9s
SVE MLR MLR
comp=Z,790nm,20.0s
**YKA Yellowknife Ar 54.43 35** P **P** **04 02 25.5 +0.5**
comp=Z,4.3nm,0.8s,baz=303,slow=7.5,SNR=8.7
YKA LR LR 04 27 21.9
comp=Z,143nm,19.7s,baz=326,slow=38
comp=Z,4.3nm,0.8s
**YKA Yellowknife Ar 54.43 35** *i* P **P** **04 02 25.7 +0.7**
YKA pmax pmax
comp=Z,5.0nm,0.8s
**KKAR Karatay Array 55.08 299** **P** **04 02 29.8 -0.3**
**KKAR Karatay Array 55.08 299** IAmb IAmb 04 02 31.1
comp=Z,17nm,0.8s
**KKAR Karatay Array 55.08 299** P **P** **04 02 29.8 -0.3**
**ARU Arti 55.24 317** **P** **04 02 30.7 -0.4**
**ARU Arti 55.24 317** LR LR 04 28 50.1
comp=Z,544nm,18.2s,baz=54,slow=39
**ARU Arti 55.24 317***c i*P **P** **04 02 29.9 -1.1**
ARU *PP **sP** **04 02 42.0 +0.8**
ARU 04 03 29.6
ARU 04 04 31.0
ARU S **S** **04 10 13.6 +1.2**
ARU SS **SS** **04 13 54.3 -1.8**
ARU pmax pmax
comp=Z,20nm,0.8s
ARU MLR MLR
comp=Z,568nm,16.0s
**BRLS Borolday 55.54 299** *e*P **P** **04 02 34.3 +0.8**
baz=299
**BRLS Borolday 55.54 299** *e*P **P** **04 02 34.2 +0.8**
**BTK Batken 56.47 295** IAmb IAmb 04 03 27.5
comp=Z,14nm,0.9s
**NEEM North Greenlan 57.95 5** *i* P **P** **04 02 48.5 -1.8**
NEEM IAmb IAmb 04 02 50.8
comp=Z,26nm,0.9s
**VADS Vadso 58.08 340** *e*P **P** **04 02 50.6 -0.4**
**ABKAR Akbulak array 58.17 310** P **P** **04 02 51.6 -0.3**
**ABKAR Akbulak array 58.17 310** IAmb IAmb 04 02 53.0
comp=Z,38nm,0.8s
**KIRV Kirov 58.34 323** LR LR 04 30 42.1
comp=Z,222nm,18.3s,baz=49,slow=39
**KIRV Kirov 58.34 323***ce*P **P** **04 02 52.5 -0.4**
**NIL Nilore 58.37 288** P **P** **04 02 54.4 +0.8**
**NIL Nilore 58.37 288** P **P** **04 02 54.4 +0.8**
**SIMJ Simiganj 58.41 295** **P** **04 02 53.7 -0.2**
**AKTO Aktyubinsk 58.59 311** LR LR 04 31 33.1
comp=Z,307nm,18.1s,baz=62,slow=40
**ARA0 ARCESS Array S 59.44 340** *e*P **P** **04 03 00.4 -0.1**
**ARCES ARCESS Array B 59.44 340** P **P** **04 03 00.1 -0.4**
ARCES IAmb IAmb 04 03 01.3
comp=Z,9.8nm,1.1s
**ARCES ARCESS Array B 59.44 340** P **P** **04 02 59.0 -1.5**
comp=Z,7.8nm,1.0s,baz=54,slow=8.2,SNR=11
ARCES LR LR 04 31 13.9
comp=Z,74nm,20.8s,baz=44,slow=39
comp=Z,7.8nm,1.0s
**ARCES ARCESS Array B 59.44 340** P **P** **04 03 00.1 -0.4**
ARCES pmax pmax
comp=Z,10.0nm,1.1s
**KULLO Kullorsuaq 60.15 8** *i* P **P** **04 03 04.8 -0.5**
KULLO IAmb IAmb 04 03 06.0
comp=Z,16nm,1.0s
**KTK1 Kautokeino 60.38 341** *e*P **P** **04 03 06.1 -0.8**
**NEW Newport 60.68 50** P **P** **04 03 10.2 +0.8**
NEW IAmb IAmb 04 03 40.5
comp=Z,10nm,1.1s
**NEW Newport 60.68 50** LR LR 04 32 34.7
comp=Z,52nm,18.1s,baz=324,slow=39
**NEW Newport 60.68 50** P **P** **04 03 09.5 +0.1**
baz=305
**NEW Newport 60.68 50** P **P** **04 03 10.2 +0.8**
NEW pmax pmax
comp=Z,10.0nm,1.2s
**KBL Kabul 60.71 291** **P** **04 03 09.5 -0.5**
**KBL Kabul 60.71 291** P **P** **04 03 09.5 -0.5**
KBL pmax pmax
comp=Z,14nm,0.8s
**TRO Tromso 60.89 342** *e*P **P** **04 03 09.5 -0.8**
**YBH Yreka Blue Hor 61.14 59** P **P** **04 03 14.7 +2.1**
**YBH Yreka Blue Hor 61.14 59** P **P** **04 03 14.7 +2.1**
YBH pmax pmax
comp=Z,6.0nm,1.0s
**UPNV Upernavik 61.95 8** *i* P **P** **04 03 16.4 -1.0**
UPNV IAmb IAmb 04 03 18.3
comp=Z,13nm,1.0s
**O02D Mt. Diablo Mer 61.98 60** P **P** **04 03 21.0 +2.7**
O02D IAmb IAmb 04 03 50.7
comp=Z,11nm,1.1s
**JOF Joensuu 62.52 333** *e*P **P** **04 03 20.1 -1.3**
**J08A Circle Bar Ran 62.75 55** IAmb IAmb 04 03 55.6
comp=Z,11nm,1.1s
**BELG Belogornoye 62.79 318***c i*P **P** **04 03 23.4 0.0**
BELG pmax pmax
comp=Z,13nm,0.8s
BELG MLR MLR
comp=Z,60nm,17.0s
**STEI Steigen 63.06 342** *e*P **P** **04 03 23.5 -1.4**
**LOF Lofoten 63.26 343** *e*P **P** **04 03 25.9 -0.3**
**MSO Missoula 63.27 50** IAmb IAmb 04 03 57.6
comp=Z,14nm,1.1s
**MSO Missoula 63.27 50** P **P** **04 03 26.5 -0.3**
baz=307
**SUMG Summit 63.39 3** P **P** **04 03 26.7 -0.9**
**SUMG Summit 63.39 3** P **P** **04 03 26.7 -0.9**
SUMG pmax pmax
comp=Z,35nm,1.0s
**SUMG Summit 63.39 3** *i* P **P** **04 03 27.3 -0.3**
SUMG IAmb IAmb 04 03 29.5
comp=Z,35nm,1.0s
**FAUS Fauske 63.50 342** *e*P **P** **04 03 26.9 -1.0**
**VALR Valaam 63.77 332**‖ *e*P **P** **04 03 28.0 -1.7**
VALR pmax pmax
comp=Z,82nm,0.9s
**CTA Charters Tower 64.04 184** LR LR 04 33 11.7
comp=Z,5.4nm,18.9s,baz=319,slow=38
**FFC Flin Flon 64.26 38** P **P** **04 03 33.9 +0.8**
FFC IAmb IAmb 04 03 47.1
comp=Z,9.3nm,0.8s
**FFC Flin Flon 64.26 38** P **P** **04 03 33.9 +0.8**
FFC pmax pmax
comp=Z,9.0nm,0.8s
**MOR8 Moi Rana 64.69 342** *e*P **P** **04 03 33.8 -2.0**
**EGMT Eagleton 64.79 47** P **P** **04 03 36.4 -0.3**
baz=309
**YERR Yerington 64.90 59** IAmb IAmb 04 03 57.2
comp=Z,10.0nm,1.0s
**HLID Hailey 64.99 53** P **P** **04 03 38.0 -0.2**
baz=308
**VAF Ylistaro 65.09 336** *e*P **P** **04 03 38.4 +0.1**
**PUL Pulkovo 65.10 331** *e*P **P** **04 03 38.7 +0.3**
**PUL Pulkovo 65.10 331**‖ *e*P **P** **04 03 38.7 +0.3**
PUL pmax pmax
comp=Z,42nm,0.4s
**KEF Keuruu 65.11 335** *e*P **P** **04 03 36.9 -1.5**
**MOS Moscow 65.14 325** *e*P **P** **04 03 37.5 -1.2**
MOS pmax pmax
comp=Z,44nm,1.1s
**WB0 Warramunga Arr 65.16 196** IAmb IAmb 04 03 52.7
comp=Z,12nm,0.9s
**BMN Battle Mountai 65.25 57** IAmb IAmb 04 04 12.2
comp=Z,7.0nm,1.1s
**FINES FINESS Array B 65.28 334** P **P** **04 03 38.7 -0.9**
**FINES FINESS Array B 65.28 334** P **P** **04 03 39.0 -0.6**
comp=Z,34nm,0.7s,baz=46,slow=8.2,SNR=140
FINES pP **sP** **04 03 51.1 +1.2**
comp=Z,22nm,0.6s,baz=38,slow=6.1,SNR=14
comp=Z,34nm,0.7s
**FINES FINESS Array B 65.28 334** *i* P **P** **04 03 38.7 -0.9**
FINES pmax pmax
comp=Z,34nm,0.7s
**BOZ Bozeman (W) 65.29 50** IAmb IAmb 04 04 13.6
comp=Z,7.3nm,0.9s
**BOZ Bozeman (W) 65.29 50** P **P** **04 03 40.5 +0.3**
baz=309
**WR0 Warramunga Arr 65.32 196** IAmb IAmb 04 04 24.5
comp=Z,15nm,1.3s
**WRAB Tennant Creek 65.33 196** P **P** **04 03 44.9 +4.5**
WRAB IAmb IAmb 04 03 53.9
comp=Z,10.0nm,0.9s
**WRAB Tennant Creek 65.33 196** P **P** **04 03 44.9 +4.5**
WRAB pmax pmax
comp=Z,10.0nm,0.9s
**WB2 Warramunga Ar 65.34 196** P **P** **04 03 44.8 +4.4**
**WRA Warramunga Arr 65.34 196** P **P** **04 03 39.8 -0.7**
comp=Z,7.3nm,0.9s,baz=15,slow=6.6,SNR=8.6
WRA pP **sP** **04 03 51.6 +1.5**
comp=Z,9.2nm,0.9s,baz=16,slow=6.7,SNR=14
comp=Z,7.3nm,0.9s
**RYN Ryan 65.56 59** IAmb IAmb 04 04 13.7
comp=Z,7.1nm,1.0s
**KVN Kaiserville 65.56 59** IAmb IAmb 04 04 01.4
comp=Z,8.9nm,0.9s
**NVAR Mina Array Bea 65.82 59** P **P** **04 03 44.9 +1.1**
comp=Z,1.9nm,0.7s,baz=287,slow=6.1,SNR=16
NVAR pP **pwP** **04 03 57.3 -2.1**
comp=Z,2.7nm,0.7s,baz=293,slow=6.4,SNR=8.3
comp=Z,1.9nm,0.7s
**OBN Obninsk 66.00 325** P **P** **04 03 43.9 -0.5**
**OBN Obninsk 66.00 325** LR LR 04 35 20.5
comp=Z,138nm,18.9s,baz=2.5,slow=38
**OBN Obninsk 66.00 325** *e*P **P** **04 03 43.7 -0.6**
**OBN Obninsk 66.00 325***ce*P **P** **04 03 43.7 -0.6**
OBN *i* 04 03 56.3
OBN *e* 04 06 07.1
OBN *e*PPP PPP 04 07 42.3
OBN pmax pmax
comp=Z,81nm,1.3s
OBN MLR MLR
comp=Z,197nm,16.0s
**VRH Novokhopyorsk 66.37 319** *e*P **P** **04 03 45.5 -1.3**
VRH *e*SP **sP** **04 03 58.2 +1.1**
VRH pmax pmax
comp=Z,70nm,0.9s
**H17A Grant Village 66.63 50** IAmb IAmb 04 04 21.6
comp=Z,16nm,1.2s
**H17A Grant Village 66.63 50** P **P** **04 03 49.0 +0.1**
baz=310
**NSS Namsos 66.64 342** *e*P **P** **04 03 48.1 -0.2**
**DSP Deep Springs 66.68 60** IAmb IAmb 04 04 21.2
comp=Z,9.1nm,1.2s
**LPSR Galich'ya Gora 66.71 322** *e*P **P** **04 03 48.5 -0.4**
LPSR *e*SP **pwP** **04 04 01.1 -1.8**
LPSR pmax pmax
comp=Z,80nm,1.0s
**IMW Indian Meadow 66.75 51** IAmb IAmb 04 04 21.4
comp=Z,16nm,1.3s
**MEF Metsahovi 66.75 334** *e*P **P** **04 03 49.0 -0.1**
**ICESG Greenland Ices 66.83 4** *i* P **P** **04 03 49.7 -0.1**
ICESG IAmb IAmb 04 03 52.7
comp=Z,26nm,1.1s
**ARBE Arbavere 66.83 332** *e*P **P** **04 03 48.6 -0.9**
**FXWY Fox Creek 66.86 51** IAmb IAmb 04 04 22.0
comp=Z,11nm,1.4s
**RLMT Red Lodge 66.89 49** P **P** **04 03 50.4 -0.1**

baz=310
**RAF Rauma 66.94 335** *e*P **P** 04 03 50.2 0.0
**TPAW Teton Pass 67.00 51** IAmb IAmb 04 04 22.1
comp=Z,10nm,0.9s
**VSU Vasula 67.32 331***c i*P **P** 04 03 52.5 -0.2
VSU pmax pmax
comp=Z,52nm,1.0s
**DGMT Dagmar 67.34 44** P **P** 04 03 53.6 +0.5
baz=312
**LAO LASA Array 67.49 46** IAmb IAmb 04 04 08.2
comp=Z,12nm,0.9s
**LAO LASA Array 67.49 46** P **P** 04 03 54.1 0.0
baz=311
**R11B Troy Canyon, C 67.54 58** IAmb IAmb 04 04 13.8
comp=Z,5.8nm,0.9s
**R11B Troy Canyon, C 67.54 58** P **P** 04 03 54.8 +0.1
baz=309
**VSR Storozhevoye 67.55 320** *e*P **P** 04 03 53.1 -1.2
VSR *e**SP **sP** 04 04 05.5 +0.8
VSR pmax pmax
comp=Z,40nm,0.9s
**VORD Divnogorie 67.66 320** *e*P **P** 04 03 54.4 -0.6
VORD *e**SP **sP** 04 04 06.5 +1.1
VORD pmax pmax
comp=Z,40nm,0.8s
**DZM Mont Dzumac 67.72 163** *e*LR LR 04 24 21.2
comp=Z,169nm,21.9s
**DZM Mont Dzumac 67.72 163** LR LR 04 31 55.9
comp=Z,156nm,18.4s,baz=354,slow=34
**SPR3 Spring Creek 3 67.89 57** IAmb IAmb 04 04 18.6
comp=Z,16nm,1.6s
**TPNV Topopah Spring 68.01 60** P **P** 04 03 58.0 +0.3
baz=310
**DUG Dugway, Tooele 68.03 55** IAmb IAmb 04 04 19.9
comp=Z,5.3nm,0.9s
**DUG Dugway, Tooele 68.03 55** P **P** 04 03 58.5 +0.8
baz=310
**SFJD Kangerlussuaq 68.06 8** LR LR 04 37 36.2
comp=Z,134nm,18.2s,baz=336,slow=39
**MTSE Matsula 68.10 333** *e*P **P** 04 03 57.8 +0.2
**TBLU Trondheim 68.13 341** *e*P **P** 04 03 56.6 -1.2
**AAL Aland 68.14 335** *e*P **P** 04 03 57.5 -0.4
**GWY Greenwater Val 68.23 60** IAmb IAmb 04 04 22.0
comp=Z,8.8nm,1.1s
**BW06 Boulder Array 68.24 51** P **P** 04 03 59.0 -0.1
baz=311
**PD31 Pinedale Array 68.24 51** IAmb IAmb 04 04 29.9
comp=Z,8.4nm,1.1s
**PDAR Pinedale Array 68.24 51** P **P** 04 03 59.0 -0.1
**PDAR Pinedale Array 68.24 51** P **P** 04 03 59.5 +0.4
comp=Z,1.4nm,0.8s,baz=272,slow=1.9,SNR=16
PDAR pP **sP** 04 04 11.4 +2.5
comp=Z,1.9nm,0.8s,baz=278,slow=1.0,SNR=8.0
comp=Z,1.4nm,0.8s
**MAK Makhachkala 68.85 310** *e*P **P** 04 03 59.6 -3.0
MAK *e* 04 06 31.6
MAK *e*S **S** 04 13 00.7 -3.8
MAK *e*SS **SS** 04 17 32.3 +3.2
MAK pmax pmax
comp=Z,27nm,0.3s
**DY2G Dye2 68.99 7** *i*P **P** 04 04 02.6 -0.7
DY2G IAmb IAmb 04 04 03.9
comp=Z,17nm,0.9s
**ASAR Alice Springs 69.05 195** P **P** 04 04 08.3 +4.3
**ASAR Alice Springs 69.05 195** P **P** 04 04 03.9 -0.1
comp=Z,1.1nm,0.6s,baz=13,slow=6.1,SNR=10
ASAR pP **sP** 04 04 16.1 +2.5
comp=Z,4.3nm,0.8s,baz=15,slow=5.9,SNR=11
comp=Z,1.1nm,0.6s
**UPP Uppsala 69.10 336** *e*P **P** 04 04 03.9 +0.1
**MOL Molde 69.33 342** *e*P **P** 04 04 05.6 +0.4
**SLIT Slitere, Latvi 69.46 333** *e*P **P** 04 04 06.0 0.0
**DOMB Dombas 69.46 341** *e*P **P** 04 04 06.1 0.0
**MVU Marysvale 69.47 56** IAmb IAmb 04 04 30.6
comp=Z,14nm,1.0s
**IZAR Zarasai 69.56 330** *e*P **P** 04 04 06.9 +0.2
**P17A Butcher Ranch, 69.71 54** IAmb IAmb 04 04 28.1
comp=Z,7.9nm,1.1s
**ISAL Salakas 69.74 330** *e*P **P** 04 04 08.1 +0.2
**LCMT Little Creek M 69.82 58** IAmb IAmb 04 04 23.2
comp=Z,7.0nm,0.9s
**NB2 NORSAR Subarra 69.82 340** P **P** 04 04 08.3 0.0
comp=Z,37nm,0.8s,baz=30,slow=6.5
**NB2 NORSAR Subarra 69.82 340** P **P** 04 04 08.3 0.0
baz=30,slow=6.5
**NB2 NORSAR Subarra 69.82 340** P **P** 04 04 08.3 0.0
**NOA NORSAR Array B 69.82 340** P **P** 04 04 08.1 -0.2
comp=Z,300nm,0.8s,baz=31,slow=6.2,SNR=109
NOA pP **pwP** 04 04 20.6 -2.1
comp=Z,22nm,0.7s,baz=30,slow=6.4,SNR=12
comp=Z,30nm,0.8s
**IIGN Ignalina 69.88 329** *e*P **P** 04 04 08.7 -0.1
**P18A Preston Nutter 69.90 54** IAmb IAmb 04 04 53.6
comp=Z,7.0nm,1.0s
**MNK Minsk 69.91 328** *i*P **P** 04 04 08.0 -0.9
MNK *i* *PP **sP** 04 04 19.9 +0.6
MNK *i* 04 04 29.7
MNK *i* 04 06 43.0
MNK *i* PPP PPP 04 08 25.3
MNK *i*S **S** 04 13 16.2 -0.4
MNK *i* *SS sS 04 13 36.6 +7.3
MNK *i* 04 14 06.7
MNK *i*SS **SS** 04 17 47.0 +2.2
MNK pmax pmax
comp=N,22nm,0.9s
MNK pmax pmax
comp=Z,81nm,0.9s
MNK pmax pmax
comp=E,45nm,1.0s
MNK MLR MLR
comp=E,174nm,17.0s
MNK MLR MLR
comp=Z,235nm,19.0s
MNK MLR MLR
comp=N,180nm,17.0s
**HFS Hagfors 69.96 338** P **P** 04 04 08.9 -0.3
comp=N,35nm,0.7s,baz=63,slow=6.8,SNR=67
HFS pP **pwP** 04 04 21.8 -1.7
comp=N,27nm,0.7s,baz=36,slow=5.5,SNR=11
HFS LR LR 04 38 45.7
comp=N,136nm,19.8s,baz=34,slow=39
comp=N,35nm,0.7s
**NC602 NORSAR Array S 70.00 340** *e*P **P** 04 04 08.9 -0.5
**PFO Pinyon Flats O 70.01 62** LR LR 04 30 56.5
comp=N,59nm,21.6s,baz=278,slow=32
**PFO Pinyon Flats O 70.01 62** P **P** 04 04 10.1 0.0
baz=310
**TPFO Pinon Flats 70.02 62** P **P** 04 04 09.9 -0.2
baz=310
**KNB Kanab 70.07 58** IAmb IAmb 04 04 32.0
comp=Z,15nm,1.1s
**SRU San Rafael Swe 70.08 55** IAmb IAmb 04 04 24.2
comp=Z,8.1nm,0.9s
**SEKA Sheki 70.18 308** P **P** 04 04 11.7 +0.8
**RSSD Black Hills 70.35 47** P **P** 04 04 12.5 +0.4
RSSD IAmb IAmb 04 04 44.7
comp=Z,9.5nm,1.1s
**RSSD Black Hills 70.35 47** P **P** 04 04 11.9 -0.3
baz=313
**RSSD Black Hills 70.35 47** P **P** 04 04 12.5 +0.4
RSSD pmax pmax
comp=Z,10.0nm,1.1s
**VIKU Vikbolandet 70.49 336** *e*P **P** 04 04 12.4 0.0
**MONP2 Monument Peak 70.50 63** P **P** 04 04 13.1 -0.1
baz=311
**PABE Paberze 70.57 331** *e*P **P** 04 04 13.1 +0.2
**NCK Nalchik 70.62 312**⇑ *e*P **P** 04 04 15.0 +1.5
NCK pmax pmax
comp=Z,9.0nm,0.4s
**NUUK Nuuk 70.66 10** *i*P **P** 04 04 13.0 -0.3
NUUK IAmb IAmb 04 04 14.9
comp=Z,21nm,0.9s
**KIV Kislovodsk 70.79 313** P **P** 04 04 15.7 +1.1
**KIV Kislovodsk 70.79 313** ⇓P **P** 04 04 15.8 +1.1
**KIV Kislovodsk 70.79 313** *e*P **P** 04 04 15.7 +1.1
**KIV Kislovodsk 70.79 313** *e*P **P** 04 04 15.7 +1.1
KIV *e*S **S** 04 13 28.2 +0.7
KIV pmax pmax
comp=Z,39nm,1.1s
KIV MLR MLR
comp=Z,458nm,18.0s
**KBZ Khabaz 70.83 313** P **P** 04 04 15.8 +1.0
comp=Z,25nm,0.9s,baz=46,slow=3.2,SNR=55
KBZ LR LR 04 40 45.5
comp=Z,759nm,18.1s,baz=40,slow=40
comp=Z,25nm,0.9s
**SKAR Skarslia 70.83 341** *e*P **P** 04 04 15.2 +0.7
**PBUR Paburge 70.86 332** *e*P **P** 04 04 14.8 +0.1
**HYA Hoyanger 70.88 342** *e*P **P** 04 04 15.5 +0.8
**OSL Oslo 70.90 340** *e*P **P** 04 04 15.5 +0.7
**SHA1 Shidzhatmaz 70.95 313***c i*P **P** 04 04 16.6 +0.8
**GANJ Ganja 71.05 308** P **P** 04 04 17.3 +1.1
**SUE Sulen 71.29 343** *e*P **P** 04 04 17.8 +0.6
**KONO Kongsberg 71.43 340** *e*P **P** 04 04 18.4 +0.3
**N23A Red Feather La 71.50 51** IAmb IAmb 04 04 53.8
comp=Z,12nm,1.1s
**N23A Red Feather La 71.50 51** P **P** 04 04 19.2 0.0
baz=313
**STRU Stroemstad 71.56 339** *i*P **P** 04 04 18.6 -0.3
**ASK Askoy 71.71 342** *e*P **P** 04 04 20.0 +0.3
**BER Bergen 71.77 342** *e*P **P** 04 04 21.1 +0.9
**ODD1 Odda 71.91 341** *e*P **P** 04 04 21.9 +0.8
**WUAZ Wupatki 71.94 58** IAmb IAmb 04 04 57.0
comp=Z,9.4nm,1.2s
**WUAZ Wupatki 71.94 58** P **P** 04 04 22.1 +0.3
baz=312
**SUW Suwalki 72.03 330** *e*P **P** 04 04 22.0 +0.2
**AKASG Malin Array Be 72.27 325** P **P** 04 04 22.6 -0.6
comp=Z,7.3nm,0.7s,baz=38,slow=6.3,SNR=29
AKASG LR LR 04 38 49.8
comp=Z,106nm,18.3s,baz=38,slow=38
comp=Z,7.3nm,0.7s
**AKASG Malin Array Be 72.27 325** *i*P **P** 04 04 22.8 -0.5
AKASG pmax pmax
comp=Z,7.0nm,0.7s
**AKBB Malin Array Si 72.27 325***c i*P **P** 04 04 23.0 -0.3
AKBB pmax pmax
comp=Z,43nm,1.6s
**GNI Garni 72.27 309** LR LR 04 40 16.5
comp=Z,198nm,18.1s,baz=48,slow=39
**GNI Garni 72.27 309**⇓ *e*P **P** 04 04 26.6 +2.9
GNI pmax pmax
comp=Z,13nm,0.9s
**KIEV Kiev 72.28 325** P **P** 04 04 23.0 -0.3
**KIEV Kiev 72.28 325** ⇓P **P** 04 04 23.0 -0.3
**KIEV Kiev 72.28 325** P **P** 04 04 23.0 -0.3
KIEV pmax pmax
comp=Z,19nm,1.0s
**BORU Boraas 72.34 337** *i*P **P** 04 04 20.4 -3.2
**BLS5 Blasjo 72.38 341** *e*P **P** 04 04 24.6 +0.7
**ISCO Idaho Springs 72.44 51** P **P** 04 04 25.7 +0.7
baz=313
**MVCO Mesa Verde 72.53 55** P **P** 04 04 26.4 +1.0
baz=313
**SOC Sochi 72.59 314** *e*P **P** 04 04 26.6 +1.2
SOC *e* 04 07 04.0
SOC *e*PPP PPP 04 08 48.6
SOC *e*S **S** 04 13 51.9 +3.9
SOC *e*SS **SS** 04 18 25.2 -1.2
**DEL Delary 73.03 336** *i*P **P** 04 04 26.0 -1.7
**SNART Snartemo 73.17 340** *e*P **P** 04 04 29.4 +0.8
**W18A Petrified Fore 73.20 57** P **P** 04 04 29.4 0.0
baz=313
**Q24A Divide 73.27 52** P **P** 04 04 29.5 -0.4
baz=314
**214A Organ Pipe Nat 73.41 62** P **P** 04 04 30.3 -0.1
baz=312
**BJUU Bjuv 73.61 336** *i*P **P** 04 04 30.4 -0.7
**OGNE Ogallala 73.61 49** P **P** 04 04 32.1 +0.6
baz=315
**EYMN Ely 73.69 38** P **P** 04 04 32.1 +0.2
baz=319
**LUNU Lund 73.87 336** *i*P **P** 04 04 32.1 -0.6
**BSD Bornholm Skovb 73.87 335** *e*P **P** 04 04 32.4 -0.3
**BSD Bornholm Skovb 73.87 335** *i*P **P** 04 04 31.8 -0.9
BSD IAmb IAmb 04 04 33.9
comp=Z,35nm,0.9s
**SDCO Great Sand Dun 73.91 53** P **P** 04 04 34.0 +0.4
baz=314
**IVI Ivigtut 73.96 9** *i*P **P** 04 04 33.4 +0.3
**COP Copenhagen 74.12 336** *i*P **P** 04 04 34.3 +0.2
**MUD Monsted U'grnd 74.35 338** *i*P **P** 04 04 35.8 +0.4
MUD IAmb IAmb 04 04 37.2
comp=Z,20nm,0.9s
**SIM Simferopol' 74.39 318** *e*P **P** 04 04 38.2 +2.3
SIM pmax pmax
comp=Z,30nm,1.0s
**ECSD EROS Data Cent 74.42 44** IAmb IAmb 04 05 08.5
comp=Z,12nm,1.1s
**ECSD EROS Data Cent 74.42 44** P **P** 04 04 36.5 +0.3
baz=317
**TUC Tucson 74.45 60** P **P** 04 04 37.0 +0.5
baz=313
**SORM Soroca 74.60 324** ⇓P **P** 04 04 37.1 +0.1
**SORM Soroca 74.60 324** ⇓P **P** 04 04 37.1 +0.1
**GURO Guroymak-BITLI 74.89 309** IAmb IAmb 04 04 44.9
comp=Z,8.6nm,0.8s
**T25A Trinidad 74.95 53** P **P** 04 04 39.9 +0.3
baz=314
**LVV L'vov 75.05 327** *e*P **P** 04 04 36.2 -3.4
**ANMO Albuquerque 75.28 56** P **P** 04 04 42.7 +1.2
**ANMO Albuquerque 75.28 56** P **P** 04 04 42.0 +0.4
baz=314
**KWP Kalwaria Pacla 75.71 328** *e*P **P** 04 04 44.3 +0.8
**KSV Kosov 75.83 325** P **P** 04 04 41.0 -3.2
**STKA Stephens Creek 76.06 187** LR LR 04 36 12.3
comp=Z,82nm,21.9s,baz=19,slow=34
**121A Cookes Peak, D 76.15 58** IAmb IAmb 04 05 06.7
comp=Z,10nm,1.1s
**121A Cookes Peak, D 76.15 58** P **P** 04 04 47.0 +0.5
baz=314
**BSEG Bad Segeberg 76.25 337** *e*P **P** 04 04 48.1 +1.8
comp=Z,15nm,0.8s,baz=30,slow=5.4
**DIKM Dikmen 76.26 315** ⇓P **P** 04 04 47.1 +0.3
**BUR08 Bucovina Ar. S 76.31 325** IAmb IAmb 04 05 04.4
comp=Z,13nm,0.8s
**BURAR Bucovina Array 76.32 325** P **P** 04 04 47.2 +0.1
BURAR IAmb IAmb 04 05 04.8
comp=Z,13nm,0.8s
**BURAR Bucovina Array 76.32 325** ⇓P **P** 04 04 47.6 +0.5
**BURAR Bucovina Array 76.32 325** ⇓P **P** 04 04 47.6 +0.5
**OJC Ojcow 76.33 329** *e*P **P** 04 04 47.8 +0.8
**CBKS Cedar Bluff 76.37 49** P **P** 04 04 47.5 0.0
baz=316
**KOLS Kolonicke sedl 76.44 327** *e*P **P** 04 04 48.6 +0.9
KOLS pmax pmax
comp=Z,17nm,0.9s
**KOLS Kolonicke sedl 76.44 327** *e*P **P** 04 04 48.6 +0.9
**TESR Tescani 76.59 323**⇑ P **P** 04 04 48.3 -0.2
**SCHQ Schefferville 76.59 21** P **P** 04 04 48.5 +0.2
comp=Z,3.8nm,0.8s,baz=355,slow=11,SNR=3.0
comp=Z,3.8nm,0.8s
**TLCR 76.67 321** ⇓P **P** 04 04 48.9 0.0
**TLCR 76.67 321** ⇓P **P** 04 04 48.9 0.0
**CRVS Cervenica-Dubn 76.78 328** *e*P **P** 04 04 49.9 +0.3
CRVS pmax pmax
comp=Z,8.0nm,0.9s
**CRVS Cervenica-Dubn 76.78 328** *e*P **P** 04 04 49.9 +0.3
**GORT1 Trebel 76.79 336** *e*P **P** 04 04 51.6 +2.2
comp=Z,12nm,0.9s,baz=30,slow=5.4
**NIE Niedzica 76.80 329** *e*P **P** 04 04 51.1 +1.4
**ONER Baraj Valea Uz 76.84 323** ⇓P **P** 04 04 52.1 +2.2
**CFR Carcaliu 76.98 322** ⇓P **P** 04 04 50.2 -0.5
**CFR Carcaliu 76.98 322** ⇓P **P** 04 04 50.2 -0.5
**KSP Ksiaz 77.04 332** *e*P **P** 04 04 51.7 +0.7
**TPGR Topolog 77.10 321** ⇓P **P** 04 04 52.2 +0.8
**PLOR Plostina 77.11 323** ⇓P **P** 04 04 52.9 +1.4
**PLOR Plostina 77.11 323** ⇓P **P** 04 04 52.9 +1.4
**TURR Turia 77.22 324** ⇓P **P** 04 04 53.1 +1.0
**OKC Ostrava-Krasne 77.24 330** AMS AMS 04 42 10.0
comp=Z,200nm,16.8s
**OZUR 77.28 324** ⇓P **P** 04 04 53.9 +1.5
**COVR Voineasa-Covas 77.30 323** ⇓P **P** 04 04 54.1 +1.5
**OSTC Ostas 77.31 332** *e*P **P** 04 04 53.0 +0.5
OSTC AMS AMS 04 47 30.0
comp=Z,200nm,16.1s
**OSTC Ostas 77.31 332** *e*P **P** 04 04 53.0 +0.5
OSTC MLR MLR
comp=Z,200nm,16.1s
**LANS Liptovska Anna 77.33 329** *e*P **P** 04 04 53.7 +1.0
LANS pmax pmax
comp=Z,10.0nm,0.9s
**LANS Liptovska Anna 77.33 329** *e*P **P** 04 04 53.7 +1.0
**CHVC Chvalec 77.34 332** *e*P **P** 04 04 53.5 +0.8
CHVC AMS AMS 04 47 20.0
comp=Z,200nm,22.1s
**CHVC Chvalec 77.34 332** *e*P **P** 04 04 53.5 +0.8
CHVC MLR MLR
comp=Z,200nm,22.1s
**FLTG Flechtingen 77.38 335** *e*P **P** 04 04 53.1 +0.2
comp=Z,22nm,0.8s,baz=30,slow=5.4
**UPC Upice 77.42 332** *e*P **P** 04 04 54.0 +0.9
UPC AMS AMS 04 47 40.0
comp=Z,300nm,18.3s
**UPC Upice 77.42 332** *e*P **P** 04 04 54.0 +0.9
UPC MLR MLR
comp=Z,300nm,18.3s
**DPC Dobruska-Polom 77.45 331** *e*P **P** 04 04 54.4 +1.1
DPC AMS AMS 04 47 30.0
comp=Z,200nm,18.8s
**DPC Dobruska-Polom 77.45 331** *e*P **P** 04 04 54.4 +1.1
DPC MLR MLR
comp=Z,200nm,18.8s
**KECS Kecovo 77.50 328** *e*P **P** 04 04 55.4 +1.8
**KECS Kecovo 77.50 328** *e*P **P** 04 04 55.4 +1.8
**MORC Moravsky Berou 77.50 330** *e*P **P** 04 04 53.9 +0.2
**MORC Moravsky Berou 77.50 330** ⇓P **P** 04 04 54.4 +0.8
**MORC Moravsky Berou 77.50 330** ⇓P **P** 04 04 54.4 +0.8
**KRLC Kraliky 77.52 331** *e*P **P** 04 04 54.2 +0.5
KRLC AMS AMS 04 46 40.0
comp=Z,200nm,17.0s
**KRLC Kraliky 77.52 331** *e*P **P** 04 04 54.2 +0.5
KRLC MLR MLR
comp=Z,200nm,17.0s
**NRDL Niedersach Rie 77.58 336** *e*P **P** 04 04 55.0 +1.2
comp=Z,12nm,0.9s,baz=30,slow=5.4
**RETH Rethem/Aller, 77.58 337** *e*P **P** 04 04 55.5 +1.6
comp=Z,15nm,0.9s,baz=30,slow=5.4
**MLR Muntele Rosu 77.69 323** ⇓P **P** 04 04 55.3 +0.4
**MLR Muntele Rosu 77.69 323** ⇓P **P** 04 04 55.3 +0.4
**CLL Collm 77.73 334** *i*P **P** 04 04 54.6 -0.2
comp=Z,36nm,0.9s
CLL *i* x x 04 05 07.3
comp=Z,27nm,1.0s
CLL AMS AMS 04 37 00.0
comp=N,100nm,20.6s
CLL AMS AMS 04 37 00.0
comp=E,200nm,21.3s
CLL AMS AMS 04 42 00.0
comp=Z,100nm,18.3s
**CLL Collm 77.73 334** *i*P **P** 04 04 54.6 -0.2
CLL *i* *PP **pwP** 04 05 07.3 -1.5
CLL pmax pmax
comp=Z,36nm,0.9s
CLL MLR MLR
comp=Z,100nm,18.3s
**CLL Collm 77.73 334** *e*P **P** 04 04 54.8 0.0
comp=Z,31nm,0.8s,baz=30,slow=5.4
**MAUC Maruska 77.75 330** *e*P **P** 04 04 56.0 +1.0
**BRG Berggiesshubel 77.80 333** *e*P **P** 04 04 55.5 +0.4
BRG Amp 04 04 57.8
comp=Z,10nm,1.0s
**BRG Berggiesshubel 77.80 333** *e*P **P** 04 04 55.6 +0.4
comp=Z,10nm,1.0s,baz=30,slow=5.4
**KSU1 Kansas State U 77.83 47** P **P** 04 04 55.4 -0.2
baz=318
**MARR Marisel-Cluj 77.93 326** ⇓P **P** 04 04 56.1 0.0
**DRGR 78.00 326** ⇓P **P** 04 04 56.5 0.0
**DRGR 78.00 326** ⇓P **P** 04 04 56.5 0.0
**RICC Richard 78.03 333** *e*P **P** 04 04 57.7 +1.2
**CLZ Clausthal 78.07 336** *e*P **P** 04 04 57.7 +0.9
comp=Z,29nm,1.1s,baz=30,slow=5.4
**JFWS Jewell Farm 78.10 40** P **P** 04 04 56.4 -0.6
baz=321
**VYHS Vyhne 78.11 329** *e*P **P** 04 04 57.3 +0.3
VYHS pmax pmax
comp=Z,7.0nm,0.9s
**VYHS Vyhne 78.11 329** *e*P **P** 04 04 57.2 +0.3
**AMTX Amarillo 78.11 53** IAmb IAmb 04 05 25.6
comp=Z,8.5nm,0.8s
**AMTX Amarillo 78.11 53** P **P** 04 04 57.3 0.0
baz=316
**MNTX Cornudas Mount 78.19 57** P **P** 04 04 57.8 +0.1
baz=315
**PSZ Piszkesteto 78.19 328** IAmb IAmb 04 05 00.3
comp=Z,14nm,1.1s
**PSZ Piszkesteto 78.19 328** ⇓P **P** 04 04 58.5 +1.0
**PSZ Piszkesteto 78.19 328** ⇓P **P** 04 04 58.5 +1.0
**HSKC Hora Svate Kat 78.19 333** *e*P **P** 04 04 57.9 +0.4
HSKC *ex* x 04 05 09.8
**EKA Eskdalemuir Ar 78.19 345** P **P** 04 04 57.6 +0.3
comp=Z,6.3nm,0.8s,baz=22,slow=4.0,SNR=13
comp=Z,6.3nm,0.8s
**JAVC Velka Javorina 78.23 330** *e*P **P** 04 04 59.1 +1.4
**VRAC Vranov 78.23 331** *e*P **P** 04 04 58.0 +0.3
**VRAC Vranov 78.23 331** LR LR 04 43 39.2
comp=Z,128nm,18.4s,baz=32,slow=39
**VRAC Vranov 78.23 331** ⇓P **P** 04 04 58.6 +0.9
**VRAC Vranov 78.23 331** ⇓P **P** 04 04 58.6 +0.9
**PRA Prague 78.33 332** AMS AMS 04 43 30.0
comp=Z,200nm,16.6s
**GOPC GO Pecny, Ondr 78.34 332** *e*P **P** 04 04 58.8 +0.5
GOPC AMS AMS 04 43 30.0
comp=Z,200nm,18.2s
**GOPC GO Pecny, Ondr 78.34 332** *e*P **P** 04 04 58.8 +0.5
GOPC MLR MLR
comp=Z,200nm,18.2s
**ARR Arges 78.35 324** ⇓P **P** 04 05 00.2 +1.7
**PRU Pruhonice 78.36 332** *e*P **P** 04 04 59.2 +0.9
PRU AMS AMS 04 43 20.0
comp=Z,200nm,16.6s
**PRU Pruhonice 78.36 332** *e*P **P** 04 04 59.2 +0.9
PRU MLR MLR
comp=Z,200nm,16.6s
**GTTG Gottingen 78.45 336** *e*P **P** 04 04 59.8 +1.0
comp=Z,29nm,1.2s,baz=30,slow=5.4
**KRUC Moravsky 78.51 331** *e*P **P** 04 04 59.4 +0.2
**BR131 Keskin Array S 78.52 315** IAmb IAmb 04 05 17.4
comp=Z,7.7nm,1.1s
**BR131 Keskin Array S 78.52 315***c e*P **P** 04 05 00.0 +0.4
**BRTR Keskin Array B 78.52 315** P **P** 04 04 59.9 +0.4
**BRTR Keskin Array B 78.52 315** P **P** 04 05 00.1 +0.4
comp=Z,2.5nm,0.7s,baz=90,slow=3.7,SNR=19
comp=Z,2.5nm,0.7s
**TREC Trest 78.63 331** AMS AMS 04 48 20.0
comp=Z,200nm,18.7s
**TANN Tannenbergstha 78.67 334** *e*P **P** 04 05 00.8 +0.6
comp=Z,3.7nm,0.8s,baz=30,slow=5.4
**PLN Plauen 78.71 334** *e*P **P** 04 05 00.7 +0.4
baz=30,slow=5.4
**MOX Moxa 78.74 334** *e*P **P** 04 05 00.6 +0.2
comp=Z,13nm,1.0s,baz=30,slow=5.4
MOX *e*L L 04 45 01.3
comp=Z,109nm,18.0s
**SMWD Samnorwood 78.77 52** IAmb IAmb 04 05 19.7
comp=Z,7.8nm,0.9s
**KIRS Kirsehir-Merke 78.82 314** ⇓P **P** 04 05 00.2 -1.0
**ANTO Ankara 78.84 316** P **P** 04 05 02.5 +1.3
**ANTO Ankara 78.84 316** ⇓P **P** 04 04 59.6 -1.6
**ANTO Ankara 78.84 316** P **P** 04 05 02.5 +1.3
ANTO pmax pmax
comp=Z,17nm,0.7s
**SIRR Siria 78.85 326** ⇓P **P** 04 05 02.0 +0.9
**ZVC Zvikov 78.95 332** *e*P **P** 04 05 02.4 +0.8
**P38A Dawn 79.02 45** IAmb IAmb 04 05 21.8
comp=Z,8.8nm,0.8s
**SURR Surduc 79.08 326** ⇓P **P** 04 05 03.1 +0.7
**COPA Copaceanca 79.09 323** ⇓P **P** 04 05 01.6 -0.8
**GZR Gura Zlata 79.11 325** ⇓P **P** 04 05 02.3 -0.3
**GZR Gura Zlata 79.11 325** ⇓P **P** 04 05 02.3 -0.3
**MANZ Manzenberg 79.16 334** *e*P **P** 04 05 03.3 +0.5
comp=Z,2.6nm,1.0s,baz=30,slow=5.4
**KASTN Kahler Asten 79.21 336** *e*P **P** 04 05 03.3 +0.3
comp=Z,12nm,1.0s,baz=30,slow=5.4
**ROTZ Rotzenmuhle 79.32 333** *e*P **P** 04 05 04.4 +0.8
comp=Z,3.3nm,1.1s,baz=30,slow=5.4
**BZS Buzias 79.40 326** ⇓P **P** 04 05 04.6 +0.5
**BZS Buzias 79.40 326** ⇓P **P** 04 05 04.6 +0.5
**KHC Kasperske Hory 79.42 332** IAmb IAmb 04 05 07.4
comp=Z,21nm,1.0s
**KHC Kasperske Hory 79.42 332** *e*P **P** 04 05 05.0 +0.8
KHC *ex* x 04 05 17.5
KHC AMS AMS 04 44 10.0
comp=Z,300nm,18.7s
**KHC Kasperske Hory 79.42 332***c i*P **P** 04 05 04.4 +0.2
KHC pmax pmax
comp=Z,47nm,0.9s
**CKRC Cesky Krumlov 79.44 332** *e*P **P** 04 05 04.6 +0.3
CKRC AMS AMS 04 43 30.0
comp=Z,200nm,22.2s
**CKRC Cesky Krumlov 79.44 332** *e*P **P** 04 05 02.4 -1.9
**GEC2 GERESS Array S 79.62 332** *e*P **P** 04 05 05.9 +0.5
comp=Z,5.4nm,0.9s,baz=30,slow=5.4
**GERES GERESS Array B 79.62 332** P **P** 04 05 05.4 0.0
**GERES GERESS Array B 79.62 332** P **P** 04 05 06.0 +0.5

comp=Z,2.0nm,0.5s,baz=151,slow=6.1,SNR=15
comp=Z,2.0nm,0.5s
**GERES GERESS Array B 79.62 332** P **P** **04 05 05.4 0.0**
**OK051 E0350 and S346 79.62 49** IAmb IAmb 04 05 12.3
comp=Z,16nm,1.3s
**WET Wettzell 79.64 333** *e*P **P** **04 05 06.1 +0.7**
comp=Z,23nm,1.0s,baz=30,slow=5.4
**CONA Conrad Observa 79.66 330** *i* pP **P** **04 05 06.6 +1.0**
comp=Z,16nm,1.1s,SNR=10
**HERR Herculane 79.67 325** ⇓P **P** **04 05 04.8 -0.8**
**GRF Grafenberg Arr 79.70 334** *e*P **P** **04 05 06.5 +0.9**
comp=Z,28nm,0.9s,baz=30,slow=5.4
GRF *e*L L 04 51 42.5
comp=Z,116nm,19.5s
**GRFO Grafenberg 79.70 334** P **P** **04 05 07.0 +1.4**
**GRFO Grafenberg 79.70 334** P **P** **04 05 07.1 +1.4**
GRFO pmax pmax
comp=Z,29nm,0.9s
**RONA Rosalia, Austr 79.70 330** *i* pP **P** **04 05 06.8 +1.0**
comp=Z,19nm,1.5s,SNR=8.1
**RAR Rarotonga 79.85 133** LR LR 04 37 09.1
comp=Z,51nm,19.4s,baz=278,slow=33
**WMOK Wichita Mounta 79.86 51** P **P** **04 05 07.0 +0.1**
baz=317
**MDVR Moldovita 80.05 325** ⇓P **P** **04 05 07.7 0.0**
**MORH Mrgy, Hungar 80.08 328** ⇓P **P** **04 05 07.6 -0.1**
**MOA Molln 80.29 331** *i* pP **P** **04 05 09.4 +0.5**
comp=Z,4.6nm,0.8s
**ARSA Arzberg 80.36 330** *i* pP **P** **04 05 10.6 +1.2**
comp=Z,8.9nm,1.0s
**HDIL Hopedale 80.38 41** P **P** **04 05 09.3 -0.3**
baz=322
**BTNL Ternell 80.41 337** *d*P **P** **04 05 09.4 -0.1**
comp=Z,12nm,1.1s
BTNL *d*x x 04 05 23.8
**MEM Membach 80.42 337** *d*P **P** **04 05 09.7 +0.2**
comp=Z,18nm,1.0s
**FRGS Fruska Gora 80.50 327** ⇓P **P** **04 05 09.8 -0.4**
**BSTI Sart Tilman 80.56 338** *d*P **P** **04 05 11.9 +1.5**
comp=Z,4.5nm,1.0s
**BIOA Bad Ischl, Aus 80.64 332** *e*pP **P** **04 05 11.8 +0.9**
comp=Z,14nm,1.3s,SNR=6.4
**BCLA Clavier 80.78 338** *d*P **P** **04 05 12.1 +0.6**
comp=Z,10nm,1.0s
**BGES Gesves 80.88 338** *d*P **P** **04 05 12.5 +0.5**
comp=Z,10nm,1.0s
**TXAR Lajitas Array 80.90 58** P **P** **04 05 13.5 +0.8**
**TXAR Lajitas Array 80.90 58** P **P** **04 05 13.3 +0.7**
comp=Z,3.4nm,0.8s,baz=300,slow=4.0,SNR=43
comp=Z,3.4nm,0.8s
**BOVS Bovan 80.99 325** ⇓P **P** **04 05 10.3 -2.4**
**SOKA Soboth 81.02 330** *e*pP **P** **04 05 13.3 +0.4**
comp=Z,17nm,1.1s
**BMRD Maredsous 81.04 338** *d*P **P** **04 05 12.9 +0.1**
comp=Z,14nm,1.0s
**RCHB Rochefort 81.04 338** *d*P **P** **04 05 13.2 +0.3**
**LESA Schwarzleotal 81.20 332** *i* pP **P** **04 05 14.7 +0.8**
comp=Z,13nm,0.8s
**DOU Dourbes 81.27 338** *d*P **P** **04 05 15.5 +1.4**
comp=Z,6.3nm,1.0s
**KBA Koelnbreinsper 81.27 331** *e*pP **P** **04 05 15.2 +0.9**
comp=Z,13nm,0.8s,SNR=8.3
**OZNA Ozona 81.28 55** IAmb IAmb 04 05 35.1
comp=Z,10.0nm,0.9s
**RDO Rodhopi 81.33 321** IAmb IAmb 04 05 21.7
comp=Z,10.0nm,1.1s
**OBKA Obir 81.34 330** *e*pP **P** **04 05 16.0 +1.3**
comp=Z,17nm,1.7s
**CCM Cathedral Cave 81.37 44** P **P** **04 05 15.0 +0.2**
**CCM Cathedral Cave 81.37 44** P **P** **04 05 14.4 -0.4**
baz=321
**CCM Cathedral Cave 81.37 44** P **P** **04 05 15.0 +0.2**
**SAND Sanderson 81.39 56** IAmb IAmb 04 05 34.5
comp=Z,9.1nm,0.9s
**BAIF Baives 81.41 338** P **P** **04 05 15.7 +0.9**
**MYKA Terra Mystica 81.56 331** *i* pP **P** **04 05 17.3 +1.5**
comp=Z,5.1nm,1.0s
**WATA Walderalm 81.64 333** *i* pP **P** **04 05 16.6 +0.3**
comp=Z,17nm,1.1s
**WTTA Wattenberg 81.69 333** *e*pP **P** **04 05 17.4 +0.8**
comp=Z,22nm,1.3s
**RETA Reutte 81.78 333** *i* pP **P** **04 05 17.4 +0.5**
comp=Z,10nm,1.1s
**MOTA Moosalm 81.79 333** *e*pP **P** **04 05 17.7 +0.6**
comp=Z,23nm,1.2s
**BFO Black Forest 81.79 335** P **P** **04 05 17.3 +0.4**
**BFO Black Forest 81.79 335** P **P** **04 05 17.3 +0.4**
**ABTA Abfaltersbach 81.84 332** *e*pP **P** **04 05 19.4 +2.1**
comp=Z,6.8nm,1.5s
**SQTA Sankt Quirin 81.86 333** *i* pP **P** **04 05 18.2 +0.8**
comp=Z,18nm,1.3s,SNR=7.7
**FETA Feichten 82.20 333** *i* pP **P** **04 05 20.0 +0.7**
comp=Z,9.2nm,1.2s
**DAVA Damuels 82.24 334** *e*pP **P** **04 05 20.1 +0.6**
comp=Z,8.9nm,0.8s
**ECH Echery 82.25 336** IAmb IAmb 04 05 45.4
comp=Z,13nm,1.1s
**TAOE Nuku Hiva Isla 82.28 110** *e*LR LR 04 31 04.5
comp=Z,102nm,23.0s
**JCT Junction City 82.39 55** P **P** **04 05 20.0 -0.4**
baz=317
**FCAR Ozark Folk Cen 82.58 46** IAmb IAmb 04 05 39.8
comp=Z,10nm,1.2s
**MMAI Mount Meron Ar 82.61 309** P **P** **04 05 22.6 +1.1**
comp=Z,4.3nm,0.5s,baz=58,slow=5.0,SNR=6.9
MMAI LR LR 04 48 23.4
comp=Z,107nm,18.1s,baz=319,slow=40
comp=Z,4.3nm,0.5s
**PPT Papeete 82.74 123** LR LR 04 38 13.1
comp=Z,215nm,19.1s,baz=304,slow=33
**PPT2 Papeete2 82.75 123** *e*LR LR 04 31 13.7
comp=Z,153nm,24.0s
PPT2 *e*LR LR 04 31 22.9
comp=Z,147nm,20.5s
**MIAR Mount Ida 82.85 48** P **P** **04 05 22.3 -0.3**
baz=320
**PDG Podgorica 82.99 325** ⇓P **P** **04 05 21.4 -1.8**
**RAYN Ar Rayn 83.42 296** P **P** **04 05 26.5 +0.7**
**RAYN Ar Rayn 83.42 296** ⇓P **P** **04 05 26.6 +0.7**
**WCI Wyandotte Cave 83.64 41** P **P** **04 05 27.1 +0.4**
baz=323
**FLN La Foliniere 83.79 341** P **P** **04 05 28.5 +1.3**
**LDF La Druitiere 83.86 340** *e*P **P** **04 05 27.2 -0.4**
**LOR Lormes 84.05 337** *e*P **P** **04 05 27.5 -1.1**
**O53A New Philadelph 84.29 37** P **P** **04 05 29.8 -0.1**
baz=326
**WVT Waverly 84.57 43** P **P** **04 05 32.0 +0.6**
**WVT Waverly 84.57 43** P **P** **04 05 31.8 +0.4**
baz=323
**WVT Waverly 84.57 43** P **P** **04 05 32.0 +0.6**
**AVF Avril sur Loir 84.63 337** *e*P **P** **04 05 31.5 0.0**
**SSFO Shawnee State 84.70 39** P **P** **04 05 32.9 +0.9**
**LPL La Plagne 84.80 335** *e*P **P** **04 05 32.8 +0.1**
**LPG La Plagne 84.81 335** *e*P **P** **04 05 33.1 +0.2**
**ROSF Rostrenen 84.83 342** *e*P **P** **04 05 34.5 +2.0**
**QUIF Quistinic 85.20 342** *e*P **P** **04 05 36.1 +1.7**
**VIVF Saint-Julien-l 86.02 336** *e*P **P** **04 05 39.8 +1.2**
**LMR La Mourre 86.84 334** *e*P **P** **04 05 42.3 -0.3**
**LFF La Frestale 87.04 338** *e*P **P** **04 05 44.2 +0.7**
**TBI Tubuai 87.27 126** *e*LR LR 04 33 29.0
comp=Z,1µm,38.2s
**ESDC Sonseca Array 93.18 340** P **P** **04 06 12.0 -0.5**
comp=Z,0.8nm,0.8s,baz=20,slow=6.1,SNR=4.5
ESDC LR LR 04 54 26.8
comp=Z,171nm,19.3s,baz=39,slow=40
comp=Z,0.8nm,0.8s
**RKT Rikitea 95.98 116** *e*LR LR 04 37 27.4
comp=Z,477nm,27.2s
**TORD Torodi Ar. Bea 115.90 325** PKP **PKiKP** **04 11 39.7 -1.5**
comp=Z,0.4nm,0.8s,baz=17,slow=2.9,SNR=2.5
TORD PP **PP** **04 12 37.0 -7.2**
comp=Z,1.5nm,0.9s,baz=31,slow=10,SNR=6.5
**VNDA Vanda 121.68 177** PKP **PKiKP** **04 11 51.2 +0.7**
comp=Z,0.3nm,0.4s,baz=321,slow=5.0,SNR=5.1
**MAW Mawson 128.76 209** PKP **PKiKP** **04 12 05.2 +0.4**
comp=Z,3.6nm,0.6s,baz=222,slow=14,SNR=5.2
**QSPA South Pole Qui 133.93 180** PKP **PKiKP** **04 12 15.8 +0.4**
comp=Z,1.4nm,0.8s,baz=259,slow=0.5,SNR=6.6
**LPAZ La Paz 137.71 61** PKP **PKPdf** **04 12 24.3 +0.9**
comp=Z,0.7nm,0.7s,baz=27,slow=6.8,SNR=3.4
**ELIB Princess Elisa 142.45 204** *d*PKPdf **PKPdf** **04 12 30.4 +0.7**
**BDFB Brasilia 147.84 33** PKPbc **PKPbc** **04 12 43.4 -0.2**
comp=Z,3.1nm,0.6s,baz=263,slow=4.2,SNR=9.3
**TROLL Troll, Antarti 147.99 199** ⇑PKPdf **PKPbc** **04 12 43.0 +0.6**
comp=Z,150nm,0.8s
**SNAA Sanae 149.41 197** ⇑PKPdf **PKPbc** **04 12 45.8 -0.1**
comp=Z,22nm,0.8s
**SNAA Sanae 149.41 197** PKPbc **PKPbc** **04 12 46.4 +0.6**
comp=Z,2.8nm,1.0s,baz=205,slow=4.9,SNR=6.3
**PLCA Paso Flores 150.36 97** PKPbc **PKPbc** **04 12 49.6 +0.5**
comp=Z,2.5nm,0.8s,baz=233,slow=10,SNR=6.3
**VNA2 Neumayer--Watz 150.90 195** ⇑P **PKPdf** **04 12 42.7 -1.1**
comp=Z,1.3nm,0.3s,baz=330,slow=14
**VNA3 Neumayer Olymp 151.05 194** ⇑P **PKPdf** **04 12 39.2 -4.7**
comp=Z,0.9nm,0.3s
**VNA1 Neumayer--Stat 151.29 195** ⇑P **PKPdf** **04 12 37.7 -6.5**
comp=Z,1.7nm,0.3s
**CPUP Villa Florida 151.86 60** PKPbc **PKPbc** **04 12 51.8 -1.2**
comp=Z,1.6nm,0.9s,baz=326,slow=3.6,SNR=2.4
CPUP PKPab **sPKPbc** **04 13 04.4 +1.2**
comp=Z,1.6nm,0.9s,baz=354,slow=9.2,SNR=2.8

**IDC 16 04:12:35.0±3.9, 49.95S×111.14E, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=156.5km s-min=28.2km az=113.0, Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W2** | **Cape Leeuwin H** | **15.20** | **9** | T | T | 04 31 48.2 | |
| | baz=186,slow=74,SNR=8.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **15.21** | **9** | T | T | 04 31 51.9 | |
| | baz=186,slow=74,SNR=8.6 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **15.22** | **9** | T | T | 04 31 48.9 | |
| | baz=186,slow=74,SNR=7.2 | | | | | | |
| **STKA** | **Stephens Creek** | **28.96** | **63** | P | P | 04 18 36.2 | +0.2 |
| | 0.8nm,0.4s,baz=211,slow=14,SNR=2.8 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **31.70** | **42** | P | P | 04 18 59.9 | -0.4 |
| | 0.5nm,0.7s,baz=209,slow=7.8,SNR=4.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.18** | **40** | P | P | 04 19 30.4 | -0.2 |
| | 0.7nm,0.5s,baz=203,slow=11,SNR=11 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **40.18** | **180** | P | P | 04 20 12.0 | -0.7 |
| | 0.5nm,0.5s,baz=313,slow=11,SNR=1.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **146.63** | **115** | PKPbc | PKPbc | 04 32 18.8 | +0.3 |
| | 0.1nm,0.6s,baz=191,slow=4.2,SNR=2.6 | | | | | | |

*IDC 16 04:57:12.1±1.3, 29.33N×95.02E, h0km, mb3.5/7, mbtmp3.6/7, MS3.8/48, Error ellipse: s-maj=56.6km s-min=19.5km az=60.0*
**ISC 16 04:57:17.3±1.4, 29.4N±0.2×95.0E±0.3, h35km, n49, σ1°35/7, mb3.6/5, MS3.8/47, Eastern Xizang-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **11.43** | **161** | LR | LR | 05 05 16.8 | |
| | comp=Z,235nm,19.9s,baz=340,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **20.04** | **334** | P | **P** | **05 01 47.8** | **+0.6** |
| | 0.6nm,0.7s,baz=129,slow=11,SNR=3.3 | | | | | | |
| MKAR | | | | LR | LR | 05 10 29.9 | |
| | comp=Z,316nm,20.9s,baz=160,slow=40 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **20.42** | **22** | P | **P** | **05 01 51.6** | **+0.1** |
| | 1.5nm,0.9s,baz=207,slow=11,SNR=7.5 | | | | | | |
| SONM | | | | LR | LR | 05 10 38.7 | |
| | comp=Z,454nm,19.1s,baz=210,slow=39 | | | | | | |
| | 1.5nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **21.18** | **314** | P | **P** | **05 01 59.5** | **-0.3** |
| | 1.9nm,0.3s,baz=145,slow=12,SNR=1.9 | | | | | | |
| AAK | | | | LR | LR | 05 11 16.9 | |
| | comp=Z,277nm,20.1s,baz=119,slow=40 | | | | | | |
| | 1.9nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.60** | **334** | P | **P** | **05 02 33.5** | **-0.5** |
| | 1.0nm,0.7s,baz=146,slow=10,SNR=7.7 | | | | | | |
| KURBB | | | | LR | LR | 05 13 15.7 | |
| | comp=Z,176nm,21.0s,baz=170,slow=39 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.67** | **346** | P | **P** | **05 02 43.6** | **0.0** |
| | 0.9nm,0.5s,baz=155,slow=7.2,SNR=2.5 | | | | | | |
| ZALV | | | | LR | LR | 05 14 07.1 | |
| | comp=Z,31nm,21.5s,baz=168,slow=40 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **PALK** | **Pallekele** | **25.80** | **214** | LR | LR | 05 13 49.1 | |
| | comp=Z,205nm,21.2s,baz=129,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **28.50** | **65** | LR | LR | 05 15 40.4 | |
| | comp=Z,93nm,19.3s,baz=260,slow=39 | | | | | | |
| **BVAR** | **Borovoye Array** | **29.77** | **330** | LR | LR | 05 16 22.0 | |
| | comp=Z,237nm,21.0s,baz=130,slow=39 | | | | | | |
| **JNU** | **Nakatsue** | **30.77** | **74** | LR | LR | 05 17 58.9 | |
| | comp=Z,271nm,18.2s,baz=282,slow=40 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **32.78** | **53** | LR | LR | 05 17 47.0 | |
| | comp=Z,166nm,19.5s,baz=243,slow=38 | | | | | | |
| **WSAR** | **Wadi Sarin** | **33.11** | **268** | LR | LR | 05 19 11.9 | |
| | comp=Z,185nm,18.9s,baz=103,slow=40 | | | | | | |
| **KLR** | **Kul'dur** | **34.19** | **44** | LR | LR | 05 18 36.4 | |
| | comp=Z,124nm,21.8s,baz=232,slow=38 | | | | | | |
| **AKTO** | **Aktyubinsk** | **34.84** | **318** | LR | LR | 05 19 45.7 | |
| | comp=Z,202nm,19.6s,baz=44,slow=39 | | | | | | |
| **DAV** | **Davao City (W)** | **36.31** | **122** | LR | LR | 05 20 34.4 | |
| | comp=Z,196nm,18.8s,baz=326,slow=39 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.68** | **67** | LR | LR | 05 18 29.4 | |
| | comp=Z,75nm,21.3s,baz=260,slow=35 | | | | | | |
| **ARU** | **Arti** | **37.29** | **327** | LR | LR | 05 21 01.4 | |
| | comp=Z,213nm,20.5s,baz=118,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **39.75** | **25** | LR | LR | 05 22 48.9 | |
| | comp=Z,222nm,18.2s,baz=233,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **40.29** | **55** | LR | LR | 05 22 13.0 | |
| | comp=Z,109nm,19.4s,baz=282,slow=37 | | | | | | |
| **KAPI** | **Kappang** | **41.62** | **141** | LR | LR | 05 24 07.9 | |
| | comp=Z,128nm,19.8s,baz=331,slow=39 | | | | | | |
| **BELG** | **Belogornoye** | **41.62** | **317** | LR | LR | 05 24 24.2 | |
| | comp=Z,152nm,19.0s,baz=92,slow=39 | | | | | | |
| **GNI** | **Garni** | **42.21** | **299** | LR | LR | 05 25 56.6 | |
| | comp=Z,61nm,21.2s,baz=88,slow=41 | | | | | | |
| **KIRV** | **Kirov** | **42.66** | **326** | LR | LR | 05 25 15.0 | |
| | comp=Z,231nm,18.6s,baz=101,slow=39 | | | | | | |
| **KBZ** | **Khabaz** | **43.58** | **304** | LR | LR | 05 26 49.5 | |
| | comp=Z,151nm,18.0s,baz=70,slow=41 | | | | | | |
| **MA2** | **Magadan** | **47.92** | **35** | LR | LR | 05 28 55.9 | |
| | comp=Z,97nm,18.0s,baz=260,slow=40 | | | | | | |
| **OBN** | **Obninsk** | **48.58** | **319** | LR | LR | 05 28 08.9 | |
| | comp=Z,202nm,19.7s,baz=182,slow=38 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **50.56** | **290** | LR | LR | 05 32 42.8 | |
| | comp=Z,80nm,19.0s,baz=22,slow=42 | | | | | | |
| **PETK** | **Petropavlovsk-** | **50.88** | **44** | LR | LR | 05 31 18.4 | |
| | comp=Z,82nm,18.2s,baz=267,slow=40 | | | | | | |
| **EIL** | **Elat** | **51.75** | **286** | LR | LR | 05 31 28.1 | |
| | comp=Z,84nm,21.0s,baz=68,slow=40 | | | | | | |
| **AKASG** | **Malin Array Be** | **52.85** | **313** | LR | LR | 05 33 39.3 | |
| | comp=Z,96nm,20.2s,baz=34,slow=41 | | | | | | |
| **FINES** | **FINESS Array B** | **54.66** | **327** | LR | LR | 05 31 21.2 | |
| | comp=Z,88nm,18.5s,baz=76,slow=38 | | | | | | |
| **MLR** | **Muntele Rosu** | **55.54** | **307** | LR | LR | 05 35 29.7 | |
| | comp=Z,111nm,18.9s,baz=74,slow=41 | | | | | | |
| **ARCES** | **ARCESS Array B** | **55.66** | **336** | LR | LR | 05 33 29.6 | |
| | comp=Z,104nm,18.2s,baz=58,slow=39 | | | | | | |
| **FURI** | **Furi** | **56.45** | **261** | LR | LR | 05 31 44.7 | |
| | comp=Z,81nm,19.3s,baz=60,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **60.78** | **325** | LR | LR | 05 36 04.2 | |
| | comp=Z,136nm,18.4s,baz=78,slow=38 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **60.78** | **43** | LR | LR | 05 35 10.4 | |
| | comp=Z,55nm,19.8s,baz=278,slow=38 | | | | | | |
| **VRAC** | **Vranov** | **61.10** | **313** | LR | LR | 05 36 46.5 | |
| | comp=Z,67nm,18.5s,baz=78,slow=39 | | | | | | |
| **NOA** | **NORSAR Array B** | **61.84** | **327** | LR | LR | 05 36 56.7 | |
| | comp=Z,140nm,18.4s,baz=85,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **61.96** | **138** | P | **P** | **05 07 32.1** | **-1.8** |
| | 0.4nm,0.9s,baz=326,slow=7.5,SNR=5.7 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **64.63** | **140** | P | **P** | **05 07 53.5** | **+1.9** |
| | 0.5nm,0.6s,baz=325,slow=6.7,SNR=4.8 | | | | | | |
| ASAR | | | | LR | LR | 05 38 30.8 | |
| | comp=Z,103nm,18.1s,baz=324,slow=38 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **65.43** | **160** | LR | LR | 05 39 54.2 | |
| | comp=Z,39nm,19.1s,baz=302,slow=39 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **66.11** | **311** | LR | LR | 05 39 23.2 | |
| | comp=Z,41nm,18.2s,baz=78,slow=38 | | | | | | |
| **MBAR** | **Mbarara** | **68.08** | **256** | LR | LR | 05 37 52.2 | |
| | comp=Z,115nm,18.6s,baz=48,slow=36 | | | | | | |
| **KEST** | **Kesra** | **70.31** | **300** | LR | LR | 05 45 22.7 | |
| | comp=Z,35nm,18.2s,baz=302,slow=41 | | | | | | |
| **ILAR** | **Eielson Array** | **74.64** | **23** | LR | LR | 05 45 12.7 | |
| | comp=Z,52nm,18.2s,baz=226,slow=39 | | | | | | |
| **STKA** | **Stephens Creek** | **75.27** | **140** | LR | LR | 05 48 22.5 | |
| | comp=Z,82nm,19.9s,baz=221,slow=41 | | | | | | |
| **KDAK** | **Kodiak Island** | **76.47** | **31** | LR | LR | 05 46 03.3 | |
| | comp=Z,96nm,21.1s,baz=273,slow=38 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.18** | **309** | LR | LR | 05 48 34.5 | |
| | comp=Z,42nm,18.4s,baz=69,slow=39 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **80.48** | **347** | LR | LR | 05 48 37.5 | |
| | comp=Z,38nm,19.5s,baz=9.0,slow=38 | | | | | | |

*CATAC 16 04:59:30.9±0.7, 10.58N×86.33W, h20km, ML3.4*
*UCR 16 04:59:32.1±1.1, 10.75N×86.37W, h16km±8km, MW3.9*
**ISC 16 04:59:31.9±1.8, 10.73N±0.05×86.33W±0.07, h11km±10km, n39, σ0°67/59, 6C-2D, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ELI1** | **Hacienda Flor** | **0.76** | **96** | *e*P | **Pn** | **04 59 48.1** | **-0.6** |
| ELI1 | | | | *e*S | **Sn** | **05 00 00.2** | **0.0** |
| **LCRUZ** | **La Cruz** | **0.77** | **63** | ⇓*i*P | **Pb** | **04 59 47.9** | **+0.6** |
| LCRUZ | | | | *e*S | **Sn** | **05 00 00.7** | **+0.4** |
| **ALIBA** | **Liberia Airpor** | **0.78** | **100** | ⇑*i*P | **Pn** | **04 59 49.2** | **+0.3** |
| ALIBA | | | | *e*S | **Sn** | **05 00 01.8** | **+1.2** |
| **DELF** | **Filadelfia** | **0.81** | **110** | *e*P | **Pn** | **04 59 49.2** | **-0.1** |
| DELF | | | | *e*S | **Sn** | **05 00 00.7** | **-0.6** |
| **GPS3** | **Bodega del ICE** | **0.94** | **88** | ⇑*i*P | **Pn** | **04 59 52.9** | **+1.7** |
| GPS3 | | | | *e*S | **Sn** | **05 00 07.1** | **+2.3** |
| **VRLE** | **La Escondida,** | **0.95** | **86** | *e*P | **Pg** | **04 59 49.9** | **-0.2** |
| **GPS2** | **Hotel Rincn d** | **0.96** | **88** | ⇓*i*P | **Pb** | **04 59 50.6** | **0.0** |
| GPS2 | | | | *e*S | **Sn** | **05 00 05.3** | **+0.2** |
| **VORI** | **VORI** | **0.97** | **85** | ⇑*i*P | **Pg** | **04 59 50.6** | **+0.1** |
| VORI | | | | *e*S | **Sn** | **05 00 05.1** | **-0.4** |
| **JAPN** | **Al SSO del Vol** | **1.02** | **39** | *i* P | **Pn** | **04 59 52.1** | **-0.1** |
| JAPN | | | | IAML | | 04 59 52.9 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **MORN** | **Al O del Volca** | **1.05** | **39** | *i* P | **Pb** | **04 59 52.1** | **-0.1** |
| MORN | | | | IAML | | 05 00 48.2 | |
| | comp=Z,4µm,1.0s | | | | | | |
| **COLC** | **Colonia** | **1.10** | **93** | ⇑*e*P | **Pb** | **04 59 52.6** | **-0.4** |
| COLC | | | | *e*S | **Sg** | **05 00 08.0** | **+0.4** |
| **CUI** | **Cuipilapa** | **1.14** | **93** | ⇑*i*P | **Pb** | **04 59 53.4** | **-0.4** |
| CUI | | | | *e*S | **Sb** | **05 00 08.1** | **-0.6** |
| **TENO** | **El Achiote** | **1.33** | **91** | *e*P | **Pn** | **04 59 55.8** | **-0.6** |
| TENO | | | | *e*S | **Sb** | **05 00 12.9** | **-1.0** |
| **UNAN** | **Cigeo UNAN** | **1.38** | **2** | *i* P | **Pn** | **04 59 57.1** | **0.0** |
| UNAN | | | | *i* S | **Sg** | **05 00 17.1** | **+0.9** |
| UNAN | | | | IAML | | 05 00 26.3 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **RB28C** | **Hialeah** | **1.39** | **2** | *i* P | **Pn** | **04 59 57.5** | **+0.2** |
| RB28C | | | | IAML | | 04 59 58.5 | |
| | comp=Z,570nm,1.0s | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.41** | **2** | *i* P | **Pn** | **04 59 56.7** | **-0.8** |
| TISN | | | | IAML | | 04 59 57.4 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **R4DEC** | **Barrio San Lui** | **1.41** | **3** | *i* P | **Pn** | **04 59 57.5** | **-0.1** |
| R4DEC | | | | *i* P | **Pn** | **04 59 57.6** | **-0.1** |
| R4DEC | | | | *i* S | **Sb** | **05 00 17.1** | **+0.7** |
| R4DEC | | | | IAML | | 05 00 25.9 | |
| | comp=Z,550nm,1.0s | | | | | | |
| R4DEC | | | | IAML | | 05 00 44.9 | |
| | comp=Z,530nm,1.0s | | | | | | |
| **JUNT** | **Juntas** | **1.42** | **108** | *e*P | **Pn** | **04 59 57.6** | **-0.1** |
| **JTS** | **Las Juntas de** | **1.42** | **108** | *e*P | **Pn** | **04 59 57.5** | **-0.2** |
| **SAPS** | **Ciudad Sandino** | **1.43** | **357** | *i* P | **Pn** | **04 59 57.9** | **0.0** |
| SAPS | | | | IAML | | 05 00 02.6 | |
| | comp=Z,450nm,1.0s | | | | | | |
| SAPS | | | | *i* S | **Sg** | **05 00 18.3** | **+0.2** |
| **VERA** | **Finca Concepci** | **1.44** | **85** | *e*P | **Pn** | **04 59 58.1** | **+0.1** |
| **APQ2** | **Apoyeque** | **1.46** | **0** | *i* P | **Pn** | **04 59 58.8** | **+0.5** |
| APQ2 | | | | *i* S | **Sg** | **05 00 19.3** | **+0.4** |
| APQ2 | | | | IAML | | 05 00 20.7 | |
| | comp=Z,560nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **1.47** | **350** | *i* P | **Pn** | **04 59 58.1** | **-0.3** |
| COPN | | | | IAML | | 05 00 20.2 | |
| | comp=Z,300nm,1.0s | | | | | | |
| **MTEVE** | **Monteverde** | **1.53** | **105** | *e*P | **Pb** | **05 00 00.5** | **+0.1** |
| **ARE1** | **Arenal 1** | **1.60** | **99** | *e*P | **Pn** | **05 00 00.5** | **+0.2** |
| **HUEN** | | **1.61** | **5** | *i* P | **Pn** | **05 00 00.2** | **-0.1** |
| HUEN | | | | *i* S | **Sg** | **05 00 23.1** | **-0.5** |
| HUEN | | | | IAML | | 05 00 28.9 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **VACR** | **Volcan Arenal** | **1.64** | **99** | *e*P | **Pb** | **05 00 02.8** | **+0.6** |
| **ACON** | **Acoyapa** | **1.67** | **42** | *i* P | **Pn** | **05 00 00.8** | **-0.4** |
| ACON | | | | *i* S | **Sb** | **05 00 23.8** | **0.0** |
| ACON | | | | IAML | | 05 00 31.2 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **1.67** | **42** | ⇑*i*P | **Pn** | **05 00 00.9** | **-0.3** |
| ACON | | | | *e*S | **Sn** | **05 00 22.8** | **+0.1** |
| **CNGN** | **Cerro Negro** | **1.80** | **348** | *e*P | **Pn** | **05 00 02.8** | **-0.2** |
| **BOAB** | **BOACO BROADBAN** | **1.83** | **21** | *i* P | **Pn** | **05 00 02.9** | **-0.4** |
| BOAB | | | | *i* S | **Sb** | **05 00 27.8** | **-0.6** |
| BOAB | | | | IAML | | 05 00 31.4 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **TRB2** | **Turrubares** | **2.02** | **113** | *e*P | **Pn** | **05 00 06.2** | **+0.3** |
| **LIMN** | **Finca el Limon** | **2.32** | **359** | *i* P | **Pn** | **05 00 10.0** | **-0.2** |
| LIMN | | | | IAML | | 05 00 57.9 | |
| | comp=Z,78nm,1.0s | | | | | | |
| **ABE2** | **San Pablo** | **2.46** | **114** | *e*P | **Pb** | **05 00 16.5** | **+0.2** |
| **ESPN** | **Las Esperanzas** | **2.46** | **54** | *e*P | **Pn** | **05 00 12.4** | **+0.3** |
| **LCR2** | **La Lucha 2** | **2.49** | **113** | *e*P | **Pb** | **05 00 15.1** | **-1.7** |
| **VICA** | **Volcano Irazu** | **2.55** | **107** | *e*P | **Pb** | **05 00 17.3** | **-0.7** |
| **BUS1** | **Rivas** | **2.79** | **114** | *e*P | **Pn** | **05 00 18.4** | **+1.4** |
| **BLUN** | **Bluefields** | **2.81** | **63** | *i* P | **Pn** | **05 00 15.5** | **-1.3** |
| BLUN | | | | IAML | | 05 00 25.0 | |
| | comp=Z,76nm,1.0s | | | | | | |
| BLUN | | | | *i* S | **Sn** | **05 00 50.4** | **-0.3** |

**NOU 16 05:01:29.2, 19.75S×169.39E, h6km, MLv3.6/8, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.14** | **216** | P | Pn | 05 02 04.2 | -1.3 |
| **LIFNC** | **LIFOU** | **2.26** | **243** | P | Pn | 05 02 06.4 | -0.8 |
| **YATNC** | **Mamie plateau,** | **3.28** | **225** | P | Pn | 05 02 21.9 | +0.8 |
| **DZM** | **Mont Dzumac** | **3.59** | **230** | P | Pn | 05 02 25.9 | +0.3 |
| **NOUC** | **Port Laguerre** | **3.71** | **230** | P | Pn | 05 02 28.1 | +1.0 |

**IDC 16 05:03:55.0±12.0, 50.02S×111.55E, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=621.2km s-min=26.5km az=111.0, Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W2** | **Cape Leeuwin H** | **15.23** | **8** | T | T | 05 23 07.4 | |
| | baz=186,slow=74,SNR=22 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **15.24** | **8** | T | T | 05 23 07.2 | |
| | baz=186,slow=74,SNR=16 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **15.24** | **8** | T | T | 05 23 06.6 | |
| | baz=186,slow=74,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **31.57** | **42**

0.4nm,0.8s

*NEIC* ***16*** *05:10:50.3±0.6, 13.85S±0.03×167.5E±0.2, h142km±11km, mb4.2/22, Error ellipse: s-maj=23.9km s-min=3.7km az=97.0*

*IDC* ***16*** *05:10:55.0±4.2, 14.28S×167.29E, h163km±36km, mb3.6/9, mbtmp4.0/10, Error ellipse: s-maj=25.4km s-min=21.3km az=11.0*

**ISC 16 05:10:58.9±0.7, 14.43S±0.08×167.2E±0.1, h200km, n44, σ1°16/45, mb4.0/21, 4C, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LIFNC** | **LIFOU** | **6.31** | **180** | Pn | **Pn** | **05 12 29.0** | **-1.2** |
| KOUNC | **Koumac, New Ca** | **6.70** | **204** | Pn | **Pn** | **05 12 34.4** | **-0.8** |
| **DZM** | **Mont Dzumac** | **7.63** | **185** | Pn | **Pn** | **05 12 46.5** | **-1.0** |
| **DZM** | **Mont Dzumac** | **7.63** | **185** | P | **Pn** | **05 12 47.3** | **-0.2** |
| | 3.3nm,0.4s,baz=165,slow=20,SNR=12 | | | | | | |
| DZM | | | | S | **Sn** | **05 14 11.8** | **-2.1** |
| | 2.5nm,0.5s,baz=321,slow=21,SNR=3.1 | | | | | | |
| **PINNC** | **Pines Island,** | **8.14** | **178** | Pn | **Pn** | **05 12 53.4** | **-0.6** |
| **EIDS** | **Eidsvold** | **18.65** | **232** | P | **Pn** | **05 15 03.5** | **-1.1** |
| EIDS | | | | IAmb | IAmb | 05 15 05.0 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **20.79** | **251** | P | **P** | **05 15 25.9** | **+1.1** |
| | comp=Z,0.3nm,0.6s,baz=78,slow=13,SNR=5.4 | | | | | | |
| **ARMA** | **Armidale** | **21.42** | **219** | P | **P** | **05 15 33.2** | **+1.7** |
| ARMA | | | | IAmb | IAmb | 05 15 34.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **COEN** | **Coen** | **23.31** | **268** | P | **P** | **05 15 48.7** | **-0.6** |
| COEN | | | | IAmb | IAmb | 05 15 51.2 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **BKZ** | **Black Stump Fm** | **25.96** | **163** | P | **P** | **05 16 13.3** | **+0.2** |
| BKZ | | | | IAmb | IAmb | 05 16 22.2 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **29.15** | **229** | P | **P** | **05 16 43.0** | **+1.5** |
| STKA | | | | IAmb | IAmb | 05 16 44.0 | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **29.15** | **229** | P | **P** | **05 16 43.3** | **+1.8** |
| | comp=Z,8.1nm,0.5s,baz=53,slow=8.8,SNR=25 | | | | | | |
| | comp=Z,8.1nm,0.5s | | | | | | |
| **TOO** | **Toolangi** | **30.06** | **216** | P | **P** | **05 16 50.6** | **+1.2** |
| TOO | | | | IAmb | IAmb | 05 16 54.4 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **31.66** | **255** | P | **P** | **05 17 02.9** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 05 17 28.5 | |
| | comp=Z,3.4nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.78** | **256** | P | **P** | **05 17 03.9** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 05 17 04.7 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **31.84** | **255** | P | **P** | **05 17 04.7** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 05 17 05.3 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **31.84** | **255** | P | **P** | **05 17 04.6** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 05 17 05.3 | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.85** | **255** | P | **P** | **05 17 05.1** | **-0.3** |
| **WRA** | **Warramunga Arr** | **31.85** | **255** | P | **P** | **05 17 04.5** | **-0.9** |
| | comp=Z,1.2nm,0.5s,baz=85,slow=9.3,SNR=27 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **32.73** | **249** | P | **P** | **05 17 12.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **32.73** | **249** | P | **P** | **05 17 12.6** | **-0.4** |
| **ASAR** | **Alice Springs** | **32.73** | **249** | P | **P** | **05 17 12.3** | **-0.7** |
| | comp=Z,1.7nm,0.5s,baz=78,slow=9.3,SNR=27 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **33.72** | **232** | P | **P** | **05 17 22.7** | **+1.3** |
| **MTN** | **Manton Dam** | **35.08** | **268** | P | **P** | **05 17 31.8** | **-1.5** |
| MTN | | | | IAmb | IAmb | 05 17 49.4 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **37.12** | **263** | P | **P** | **05 17 50.7** | **+0.1** |
| **FORT** | **Forrest** | **39.41** | **239** | P | **P** | **05 18 10.1** | **+0.6** |
| **SOEI** | **Soe** | **42.21** | **271** | P | **P** | **05 18 30.9** | **-1.8** |
| **MMRI** | **Maumere** | **44.39** | **272** | P | **P** | **05 18 48.0** | **-2.0** |
| **MORW** | **Morawa** | **49.35** | **244** | P | **P** | **05 19 28.6** | **+0.3** |
| MORW | | | | IAmb | IAmb | 05 19 28.9 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **63.16** | **181** | P | **P** | **05 21 06.3** | **+1.3** |
| **VNDA** | **Vanda** | **63.16** | **181** | P | **P** | **05 21 06.0** | **+1.0** |
| | comp=Z,0.3nm,0.6s,baz=357,slow=6.5,SNR=2.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **CASY** | **Casey** | **63.78** | **202** | P | **P** | **05 21 10.9** | **+1.7** |
| **CMAR** | **Chiang Mai Arr** | **74.78** | **294** | P | **P** | **05 22 18.2** | **+0.7** |
| | comp=Z,1.5nm,0.3s,baz=90,slow=1.4,SNR=4.6 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.59** | **180** | P | **P** | **05 22 22.9** | **+1.3** |
| **QSPA** | **South Pole Qui** | **75.59** | **180** | P | **P** | **05 22 22.0** | **+0.5** |
| | comp=Z,0.6nm,0.6s,baz=293,slow=0.5,SNR=8.1 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.26** | **18** | P | **P** | **05 23 15.3** | **-2.2** |
| | comp=Z,0.5nm,0.7s,baz=232,slow=5.4,SNR=6.4 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.12** | **49** | P | **P** | **05 23 22.5** | **-0.1** |
| | comp=Z,0.3nm,0.8s,baz=238,slow=4.9,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **93.15** | **185** | ⇑P | **P** | **05 23 48.3** | **-1.8** |
| | comp=Z,60nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **93.84** | **183** | ⇑P | **P** | **05 23 52.3** | **-0.8** |
| | comp=Z,9.6nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **94.51** | **181** | ⇑P | **P** | **05 23 55.4** | **-0.8** |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **94.78** | **182** | ⇑P | **P** | **05 23 57.1** | **-0.2** |
| | comp=Z,2.0nm,0.5s,baz=183,slow=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **96.95** | **316** | P | **P** | **05 24 08.4** | **+0.8** |
| | comp=Z,0.4nm,0.7s,baz=93,slow=5.8,SNR=2.7 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **119.95** | **345** | PKP | **PKiKP** | **05 29 25.2** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=77,slow=1.4,SNR=5.6 | | | | | | |
| **KEST** | **Kesra** | **150.95** | **321** | PKPbc | **PKiKP** | **05 30 30.4** | **+1.4** |
| | comp=Z,3.1nm,0.6s,baz=56,slow=7.3,SNR=4.4 | | | | | | |

*IDC* ***16*** *05:30:55.7±2.3, 19.28S×177.63W, h564km±25km, mb3.3/10, mbtmp4.3/13, Error ellipse: s-maj=16.2km s-min=13.9km az=167.0*

*NEIC* ***16*** *05:30:55.2±1.3, 19.3S±0.1×177.4W±0.2, h558km±9km, mb4.3/27, Error ellipse: s-maj=22.4km s-min=18.3km az=129.0*

**ISC 16 05:30:54.3±0.5, 19.19S±0.10×177.58W±0.09, h550km, n69, σ0°91/71, mb4.2/26, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **7.65** | **47** | P | **P** | **05 32 49.6** | **+0.9** |
| **PINNC** | **Pines Island,** | **14.40** | **254** | P | **P** | **05 33 59.4** | **+1.7** |
| **DZM** | **Mont Dzumac** | **15.23** | **256** | P | **P** | **05 34 06.6** | **+0.3** |
| | 2.8nm,0.8s,baz=69,slow=18,SNR=1.5 | | | | | | |
| **RAR** | **Rarotonga** | **16.83** | **100** | P | **P** | **05 34 21.4** | **-0.2** |
| | 12nm,0.8s,baz=235,slow=4.5,SNR=5.7 | | | | | | |
| **URZ** | **Urewera** | **19.56** | **193** | P | **P** | **05 34 44.2** | **-2.0** |
| | 8.3nm,0.3s,baz=356,slow=2.5,SNR=23 | | | | | | |
| **RTZ** | **Ruatahuna** | **19.93** | **193** | P | **P** | **05 34 48.9** | **-0.8** |
| RTZ | | | | IAmb | IAmb | 05 34 52.5 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **MRZ** | **Mangatainoka R** | **22.19** | **194** | P | **P** | **05 35 08.5** | **-1.4** |
| **TOO** | **Toolangi** | **37.00** | **233** | P | **P** | **05 37 19.0** | **+1.3** |
| TOO | | | | IAmb | IAmb | 05 37 44.0 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **TAU** | **Tasmania Unive** | **37.84** | **224** | P | **P** | **05 37 25.3** | **+0.9** |
| **COEN** | **Coen** | **37.92** | **272** | P | **P** | **05 37 27.1** | **+1.6** |
| COEN | | | | IAmb | IAmb | 05 37 35.3 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.73** | **243** | P | **P** | **05 37 32.9** | **+1.1** |
| **STKA** | **Stephens Creek** | **38.73** | **243** | P | **P** | **05 37 31.2** | **-0.6** |
| | comp=Z,6.2nm,0.8s,baz=98,slow=8.6,SNR=8.7 | | | | | | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.50** | **242** | P | **P** | **05 38 10.4** | **+0.9** |
| **WR0** | **Warramunga Arr** | **45.00** | **261** | P | **P** | **05 38 21.6** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 05 38 23.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.16** | **261** | P | **P** | **05 38 22.9** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 05 38 23.6 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.18** | **261** | P | **P** | **05 38 23.2** | **+0.5** |
| WB2 | | | | IAmb | IAmb | 05 38 23.8 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.18** | **261** | P | **P** | **05 38 23.0** | **+0.3** |
| WRAB | | | | IAmb | IAmb | 05 38 39.7 | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.19** | **261** | P | **P** | **05 38 23.3** | **+0.5** |
| **WRA** | **Warramunga Arr** | **45.19** | **261** | P | **P** | **05 38 23.1** | **+0.3** |
| | comp=Z,1.2nm,0.3s,baz=98,slow=7.4,SNR=78 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 39 51.5** | **+0.1** |
| | comp=Z,1.4nm,0.8s,baz=91,slow=4.0,SNR=6.2 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AS31** | **Alice Springs** | **45.22** | **255** | P | **P** | **05 38 23.7** | **+0.7** |
| **ASAR** | **Alice Springs** | **45.22** | **255** | P | **P** | **05 38 23.4** | **+0.4** |
| | comp=Z,6.2nm,0.7s,baz=87,slow=8.2,SNR=46 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 39 51.5** | **0.0** |
| | comp=Z,1.4nm,0.5s,baz=106,slow=3.7,SNR=9.6 | | | | | | |
| ASAR | | | | S | **S** | **05 44 20.4** | **-3.0** |
| | comp=Z,1.3nm,0.8s,baz=90,slow=15,SNR=13 | | | | | | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **49.56** | **269** | P | **P** | **05 38 56.1** | **+0.5** |
| MTN | | | | IAmb | IAmb | 05 38 56.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **50.19** | **246** | P | **P** | **05 39 00.3** | **+0.3** |
| **KNRA** | **Kununurra** | **51.16** | **265** | P | **P** | **05 39 08.1** | **+0.8** |
| KNRA | | | | IAmb | IAmb | 05 39 08.5 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **51.61** | **282** | P | **P** | **05 39 09.1** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **53.61** | **261** | P | **P** | **05 39 25.7** | **+0.9** |
| **SOEI** | **Soe** | **56.87** | **271** | P | **P** | **05 39 46.1** | **-1.6** |
| SOEI | | | | IAmb | IAmb | 05 39 46.6 | |
| | comp=Z,21nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.36** | **256** | P | **P** | **05 39 58.1** | **+0.5** |
| PSA00 | | | | IAmb | IAmb | 05 39 58.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **58.54** | **256** | P | **P** | **05 39 59.0** | **+0.2** |
| MBWA | | | | IAmb | IAmb | 05 39 59.5 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **59.24** | **185** | P | **P** | **05 40 03.2** | **+0.7** |
| **VNDA** | **Vanda** | **59.24** | **185** | P | **P** | **05 40 02.5** | **0.0** |
| | comp=Z,0.9nm,0.7s,baz=346,slow=6.5,SNR=9.5 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **MORW** | **Morawa** | **60.70** | **247** | P | **P** | **05 40 13.2** | **+0.1** |
| MORW | | | | IAmb | IAmb | 05 40 17.3 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **CASY** | **Casey** | **65.31** | **205** | P | **P** | **05 40 42.2** | **+0.3** |
| CASY | | | | IAmb | IAmb | 05 40 43.4 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.40** | **323** | P | **P** | **05 41 06.7** | **-0.8** |
| | comp=Z,1.9nm,0.8s,baz=166,slow=7.6,SNR=4.1 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.87** | **180** | P | **P** | **05 41 16.4** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 05 41 17.4 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.87** | **180** | P | **P** | **05 41 16.6** | **+0.7** |
| | comp=Z,4.6nm,0.7s,baz=9.0,slow=1.3,SNR=27 | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.80** | **43** | P | **P** | **05 42 07.0** | **+0.9** |
| | comp=Z,0.3nm,0.7s,baz=212,slow=6.4,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **80.80** | **173** | P | **P** | **05 42 10.3** | **-0.1** |
| **CCB** | **Clear Creek Bu** | **86.66** | **12** | P | **P** | **05 42 38.8** | **-0.5** |
| **BCAR** | **Beaver Creek A** | **86.66** | **15** | P | **P** | **05 42 39.4** | **-0.1** |
| **IMAR** | **Indian Mountai** | **86.81** | **10** | P | **P** | **05 42 40.4** | **+0.4** |
| **ILAR** | **Eielson Array** | **86.95** | **13** | P | **P** | **05 42 40.0** | **-0.8** |
| | comp=Z,0.2nm,0.4s,baz=235,slow=4.9,SNR=4.3 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.03** | **180** | ⇑P | **P** | **05 42 50.4** | **-0.3** |
| | comp=Z,151nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **89.30** | **178** | ⇑P | **P** | **05 42 50.6** | **-1.2** |
| | comp=Z,30nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **89.30** | **178** | P | **P** | **05 42 51.3** | **-0.6** |
| | comp=Z,1.9nm,0.8s,baz=205,slow=8.3,SNR=11 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **89.42** | **176** | ⇑P | **P** | **05 42 51.9** | **-0.4** |
| | comp=Z,4.3nm,0.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **89.86** | **177** | ⇑P | **P** | **05 42 54.1** | **-0.3** |
| | comp=Z,3.8nm,0.6s,baz=184,slow=4.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.06** | **289** | P | **P** | **05 42 57.6** | **+1.4** |
| | comp=Z,1.7nm,0.3s,baz=130,slow=2.8,SNR=6.3 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.09** | **176** | ⇑P | **P** | **05 42 55.2** | **-0.2** |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **110.59** | **314** | PKiKP | **PKiKP** | **05 48 22.6** | **-2.1** |
| | comp=Z,0.3nm,0.4s,baz=195,slow=0.8,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **113.36** | **318** | PKiKP | **PKiKP** | **05 48 28.2** | **-1.5** |
| | comp=Z,0.2nm,0.4s,baz=100,slow=1.4,SNR=4.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **118.33** | **320** | PKP | **PKPdf** | **05 48 37.7** | **-1.5** |
| | comp=Z,1.3nm,0.4s,baz=125,slow=1.7,SNR=4.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.71** | **350** | PKP | **PKPdf** | **05 48 56.5** | **-0.3** |
| | comp=Z,0.7nm,0.4s,baz=36,slow=2.3,SNR=11 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **143.67** | **5** | PKP | PKPab | 05 49 24.9 | -0.5 |
| | comp=Z,1.1nm,0.5s,baz=318,slow=3.8,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.24** | **314** | PKPbc | **PKPbc** | **05 49 33.8** | **-0.2** |
| | comp=Z,1.4nm,0.5s,baz=140,slow=6.1,SNR=7.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.49** | **302** | PKPbc | **PKPbc** | **05 49 37.8** | **+0.4** |
| | comp=Z,3.2nm,0.5s,baz=74,slow=6.2,SNR=5.8 | | | | | | |
| **KHC** | **Kasperske Hory** | **148.81** | **346** | ePKP | **PKPbc** | **05 49 39.5** | **-0.6** |
| **GERES** | **GERESS Array B** | **149.05** | **345** | PKPbc | **PKPbc** | **05 49 40.8** | **+0.1** |
| | comp=Z,0.6nm,0.4s,baz=181,slow=6.3,SNR=5.1 | | | | | | |
| **CONA** | **Conrad Observa** | **149.32** | **342** | *i* PKP | **PKPbc** | **05 49 41.9** | **+0.5** |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **RONA** | **Rosalia, Austr** | **149.40** | **341** | *i* PKP | **PKPbc** | **05 49 42.0** | **+0.4** |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **LESA** | **Schwarzleotal** | **150.62** | **346** | *i* PKP | **PKPbc** | **05 49 44.3** | **-0.1** |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **150.78** | **345** | *i* PKP | **PKPbc** | **05 49 44.7** | **-0.3** |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **151.00** | **347** | *i* PKP | **PKPbc** | **05 49 44.8** | **-0.7** |
| | comp=Z,5.8nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **151.03** | **348** | *i* PKP | **PKPbc** | **05 49 44.6** | **-0.9** |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **MYKA** | **Terra Mystica** | **151.12** | **344** | *i* PKP | **PKPbc** | **05 49 44.8** | **-0.8** |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **151.13** | **348** | *i* PKP | **PKPbc** | **05 49 45.4** | **-0.4** |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **ABTA** | **Abfaltersbach** | **151.29** | **345** | *i* PKP | **PKPbc** | **05 49 45.2** | **-0.9** |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **FETA** | **Feichten** | **151.42** | **348** | *i* PKP | **PKPbc** | **05 49 46.2** | **-0.3** |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **MSSA** | **Maissana** | **154.25** | **348** | | **PKiKP** | **05 49 53.2** | **+0.6** |

**IDC 16 05:34:22.5±3.5, 55.71N×86.20E, h0km, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=29.8km s-min=28.1km az=110.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.94** | **205** | I | I | 05 46 20.0 | |
| | baz=24,slow=323,SNR=31 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.94** | **205** | Pn | Pn | 05 34 55.1 | -1.6 |
| | 4.4nm,0.3s,baz=30,slow=17,SNR=38 | | | | | | |
| ZALV | | | | Lg | Lg | 05 35 23.7 | |
| | 3.4nm,0.3s,baz=20,slow=26,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.87** | **225** | Pn | Pn | 05 36 04.6 | +0.2 |
| | 0.1nm,0.3s,baz=44,slow=14,SNR=2.1 | | | | | | |
| KURBB | | | | Lg | Lg | 05 38 02.4 | |
| | 0.1nm,0.3s,baz=50,slow=30,SNR=6.9 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **9.26** | **197** | Pn | Pn | 05 36 37.5 | +0.3 |
| | 0.1nm,0.3s,baz=20,slow=14,SNR=1.6 | | | | | | |
| MKAR | | | | Lg | Lg | 05 39 17.1 | |
| | baz=16,slow=23,SNR=3.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*AEIC* ***16*** *05:46:11.0±0.6, 51.2N±0.1×177.99W±0.07, h43km±28km, Error ellipse: s-maj=18.0km s-min=4.4km az=171.0*

**NEIC 16 05:46:11.6±0.7, 51.3N±0.1×177.99W±0.07, h43km±28km, ML3.5**(AEIC)**, Error ellipse: s-maj=19.6km s-min=5.7km az=174.0, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAPA** | **Tanaga Point A** | **0.57** | **11** | | Pn | 05 46 23.1 | -0.3 |
| **TASE** | **Tanaga Southea** | **0.58** | **357** | | Pn | 05 46 23.4 | -0.1 |
| **TANO** | **Tanaga North** | **0.67** | **353** | | Pn | 05 46 24.7 | +0.1 |
| **KIMD** | **Kanaga Island** | **0.69** | **42** | | Pn | 05 46 24.6 | -0.4 |
| KIMD | | | | | Sn | 05 46 34.7 | +0.2 |
| **GALAA** | **Gareloi Lava P** | **0.71** | **316** | | Pn | 05 46 25.1 | -0.1 |
| **GAEA** | **Gareloi East** | **0.71** | **318** | | Pn | 05 46 25.2 | 0.0 |
| **GANO** | **Gareloi North** | **0.76** | **318** | | Pn | 05 46 25.5 | -0.4 |
| **KIWB** | **Kanaga Island** | **0.80** | **41** | | Pn | 05 46 26.1 | -0.2 |
| **KIKV** | **Kanaga Island** | **0.81** | **39** | | Pn | 05 46 26.3 | -0.2 |
| **KICM** | **Kanaga Island** | **0.83** | **36** | | Pn | 05 46 26.8 | 0.0 |
| **KIRH** | **Kanaga Island** | **0.85** | **40** | | Pn | 05 46 27.1 | -0.1 |
| **KINC** | **Kanaga Island** | **0.86** | **38** | | Pn | 05 46 27.2 | 0.0 |
| **ADK** | **Adak** | **1.03** | **52** | Pn | Pn | 05 46 29.2 | -0.3 |
| ADK | | | | | Sn | 05 46 42.7 | 0.0 |
| **GSTD** | **Great Sitkin T** | **1.40** | **54** | | Pn | 05 46 54.0 | +2.0 |
| **GSSP** | **Great Sitkin S** | **1.41** | **53** | | Pn | 05 46 35.1 | +0.5 |
| **GSMY** | **Great Sitkin M** | **1.44** | **56** | | Pn | 05 46 35.5 | +0.4 |
| **GSTR** | **Great Sitkin T** | **1.47** | **54** | | Pn | 05 46 36.1 | +0.6 |
| **AMKA** | **Amchitka** | **1.71** | **275** | | Pn | 05 46 37.2 | -1.5 |
| AMKA | | | | | Sn | 05 46 59.6 | +0.3 |
| **KOKL** | **Mount Kliuchef** | **2.58** | **64** | | Pn | 05 46 52.2 | +1.3 |
| KOKL | | | | | Sn | 05 47 25.5 | +4.5 |
| **KOFP** | **Korovin Flat P** | **2.62** | **66** | | Pn | 05 46 52.9 | +1.5 |
| **NIKH** | **Nikolski High** | **5.88** | **69** | Pn | Pn | 05 47 37.5 | +1.5 |
| **CNBA** | **Chernabura Isl** | **11.63** | **65** | Pn | Pn | 05 48 53.8 | -0.9 |

**IDC 16 05:52:30.9±2.0, 0.14N×124.77E, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=206.2km s-min=27.9km az=63.0, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.05** | **155** | P | P | 05 57 26.2 | -1.2 |
| | 0.6nm,0.6s,baz=333,slow=10,SNR=8.8 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **25.27** | **160** | P | P | 05 57 59.9 | +0.8 |
| | 1.2nm,0.8s,baz=351,slow=11,SNR=11 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.44** | **327** | P | P | 06 02 35.4 | -0.2 |
| | 0.1nm,0.4s,baz=112,slow=8.4,SNR=1.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*TEH* ***16*** *06:03:07.7, 34.65N×46.33E, h6km±21km, ML3.2*

*ISN* ***16*** *06:03:07.8±0.8, 34.62N×46.33E, h5km±8km, ML3.5*

**ISC 16 06:03:08.9±0.9, 34.65N±0.03×46.32E±0.03, h8km±7km, n21, σ1°34/28, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.07** | **47** | Pg | **Pg** | **06 03 10.9** | **-0.2** |
| IDHR | | | | Sg | **Sg** | **06 03 12.9** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.38** | **147** | Pg | **Pg** | **06 03 16.2** | **-0.2** |
| **ILIN** | **Lien** | **0.59** | **63** | Pg | **Pb** | **06 03 20.4** | **-1.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.62** | **257** | Pg | **Pg** | **06 03 20.7** | **-0.2** |
| KGS1 | | | | Sg | **Sb** | **06 03 30.7** | **-0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.63** | **213** | Pg | **Pg** | **06 03 20.5** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.70** | **122** | Pg | **Pg** | **06 03 21.9** | **-0.6** |
| KCHF | | | | Sg | **Sn** | **06 03 33.6** | **-2.8** |
| **ILBA** | **Ilam Banvizeh** | **1.03** | **185** | Pg | **Pb** | **06 03 28.3** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.10** | **79** | Pg | **Pg** | **06 03 29.9** | **0.0** |
| **IBZA** | **Bozab** | **1.28** | **98** | Pg | **Pg** | **06 03 33.3** | **-0.3** |
| **IBDR** | **Badra** | **1.57** | **192** | *e*Pn | **Pb** | **06 03 37.0** | **-1.1** |
| IBDR | | | | *e*Sn | **Sg** | **06 03 59.5** | **+0.2** |
| **SDS1** | **Sardasht. Az.** | **1.65** | **336** | Pg | **Pb** | **06 03 39.4** | **-0.2** |
| **IKFM** | **Kafar-mosalman** | **1.69** | **131** | Pg | **Pg** | **06 03 41.6** | **+0.3** |
| **IKRK** | **Kirkuk** | **1.79** | **295** | *e*Pn | **Pb** | **06 03 41.5** | **-0.4** |
| IKRK | | | | *e*Sn | **Sg** | **06 04 06.0** | **-0.4** |
| IKRK | | | | AML | AML | 06 04 09.5 | |
| | comp=N,722nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 06 04 12.6 | |
| | comp=E,439nm,0.5s | | | | | | |
| **HSAM** | **Samen** | **1.94** | **102** | Pn | **Pg** | **06 03 44.7** | **-1.3** |
| **BHD** | **Baghdad** | **2.12** | **230** | *e*Pn | **Pn** | **06 03 45.5** | **+0.9** |
| BHD | | | | *e*Sn | **Sb** | **06 04 13.0** | **-1.0** |
| BHD | | | | AML | AML | 06 04 23.3 | |
| | comp=E,434nm,0.5s | | | | | | |
| **MAHB** | **Mahabad** | **2.17** | **347** | Pn | **Pb** | **06 03 47.4** | **-1.2** |
| **HAGD** | **Aghdareh** | **2.33** | **85** | Pn | **Pb** | **06 03 50.1** | **-1.2** |
| **RAFI** | **Al-Rafai** | **2.92** | **183** | *e*Pn | **Pn** | **06 03 57.0** | **+1.3** |
| RAFI | | | | *e*Sn | **Sn** | **06 04 32.0** | **+1.0** |
| **IPIR** | **Pirpir** | **4.29** | **116** | Pn | **Pn** | **06 04 16.9** | **+2.2** |
| **JHBN** | **Jahan bin** | **4.36** | **122** | Pn | **Pn** | **06 04 19.0** | **+3.3** |
| **KLNJ** | **Kolanjah** | **5.73** | **128** | Pn | **Pn** | **06 04 37.1** | **+2.4** |

**IDC 16 06:05:12.0±2.8, 54.11N×86.41E, h0km, mbtmp2.9/2, ML2.7/2, Error ellipse: s-maj=23.0km s-min=13.8km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.95** | **261** | I | I | 06 11 50.0 | |
| | baz=79,slow=314,SNR=3.2 | | | | | | |
| **

*$\phi_E$135.79000°,$\delta$57.88000°,$\lambda$-103.83000°. NP2: $\phi_E$340.64000°,$\delta$34.68000°,$\lambda$-69.15000°. Principal axes: T 3.5672, Plg12.0000°, Azm236.0000°; N 0.2447, Plg12.0000°, Azm143.0000°; P -3.8118, Plg73.0000°, Azm10.0000°;*

*AEIC **16** 06:32:30.1±1.5,69°.49N±0°.05×144°.43W±0°.09,h6km±5km, ML4.3,mb4.5/160(NEIC),ML4.3/118(NEIC), Mwr4.3/40(NEIC) Error ellipse: s-maj=7.6km s-min=4.6km az=186.0*

*NEIC **16** 06:32:30.3,69°.60N×144°.37W,h0km*

**ISC 16 06:32:30.3±1.3,69°.55N±0°.04×144°.36W±0°.03,h2km±8km, n630,σ1§05/572,mb4.5/114,MS3.4/18,1C,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **70** | Pg | **Pg** | **06 32 35.5** | **+0.6** |
| **C27K** | **Jago River** baz=242,SNR=1000 | **0.24** | **70** | P | **Pg** | **06 32 35.5** | **+0.6** |
| **C26K** | **Camden Bay** baz=158 | **0.42** | **333** | P | **Pg** | **06 32 39.3** | **+0.9** |
| **D25K** | **Kavik River** | **0.75** | **253** | | **Pg** | **06 32 43.1** | **-1.5** |
| **D25K** | **Kavik River** baz=75,SNR=1000 | **0.75** | **253** | P | **Pg** | **06 32 43.0** | **-1.5** |
| **D27M** | **Malcolm River** | **1.24** | **103** | Pn | **Pn** | **06 32 52.9** | **-1.8** |
| **D27M** | **Malcolm River** baz=283 | **1.24** | **103** | P | **Pn** | **06 32 52.6** | **-2.0** |
| **C24K** | **Franklin Bluff** | **1.53** | **279** | | **Pn** | **06 32 58.6** | **+0.1** |
| **C24K** | **Franklin Bluff** baz=97 | **1.53** | **279** | P | **Pn** | **06 32 58.5** | **-0.1** |
| **D24K** | **Happy Valley** | **1.63** | **258** | Pn | **Pn** | **06 33 00.3** | **+0.3** |
| D24K | | | | | **Sg** | **06 33 23.1** | **+0.4** |
| **D24K** | **Happy Valley** baz=76,SNR=836 | **1.63** | **258** | P | **Pn** | **06 32 59.8** | **-0.2** |
| **E27K** | **Coleen River** | **1.69** | **142** | Pn | **Pn** | **06 33 01.5** | **+0.7** |
| E27K | | | | Sn | **Sn** | **06 33 23.3** | **+0.2** |
| **E27K** | **Coleen River** baz=323,SNR=677 | **1.69** | **142** | P | **Pn** | **06 33 01.3** | **+0.5** |
| **F26K** | **Sheenjek River** | **1.86** | **178** | | **Pn** | **06 33 04.1** | **+1.0** |
| F26K | | | | Sn | **Sb** | **06 33 28.4** | **-0.3** |
| **F26K** | **Sheenjek River** baz=357,SNR=454 | **1.86** | **178** | P | **Pn** | **06 33 04.0** | **+0.9** |
| **E28M** | **Babbage River** | **1.97** | **116** | Pn | **Pn** | **06 33 05.3** | **+0.7** |
| E28M | | | | Sn | **Sb** | **06 33 32.0** | **+0.2** |
| **E28M** | **Babbage River** baz=299,SNR=214 | **1.97** | **116** | P | **Pn** | **06 33 05.4** | **+0.7** |
| **D28M** | **Stokes Point** | **2.00** | **94** | | **Pn** | **06 33 06.4** | **+1.4** |
| **D28M** | **Stokes Point** baz=277,SNR=379 | **2.00** | **94** | P | **Pn** | **06 33 06.3** | **+1.4** |
| **F25K** | **Christian Rive** | **2.02** | **194** | | **Pn** | **06 33 06.0** | **+0.6** |
| F25K | | | | Sn | **Sb** | **06 33 33.2** | **+0.1** |
| F25K | comp=N,2μm,0.9s | | | IAML | | 06 33 41.6 | |
| **F25K** | **Christian Rive** baz=13,SNR=427 | **2.02** | **194** | P | **Pn** | **06 33 06.0** | **+0.6** |
| **TOLK** | **Toolik Lake Re** | **2.08** | **247** | Pn | **Pn** | **06 33 06.2** | **0.0** |
| TOLK | | | | Sn | **Sb** | **06 33 34.3** | **-0.6** |
| TOLK | comp=N,3μm,1.0s | | | IAML | | 06 33 48.8 | |
| **TOLK** | **Toolik Lake Re** baz=63,SNR=378 | **2.08** | **247** | P | **Pn** | **06 33 06.1** | **0.0** |
| **E24K** | **Your Creek** | **2.11** | **227** | | **Pn** | **06 33 07.5** | **+1.0** |
| **E24K** | **Your Creek** comp=E,2μm,0.9s | **2.11** | **227** | IAML | | 06 33 41.4 | |
| E24K | comp=N,2μm,0.8s | | | IAML | | 06 33 46.5 | |
| **E24K** | **Your Creek** baz=44 | **2.11** | **227** | P | **Pn** | **06 33 06.7** | **+0.2** |
| **BMAR** | **Burnt Mountain** | **2.13** | **182** | Pn | **Pn** | **06 33 07.4** | **+0.6** |
| **C23K** | **Itkillik River** | **2.20** | **281** | Pn | **Pn** | **06 33 07.7** | **-0.1** |
| **C23K** | **Itkillik River** baz=96,SNR=297 | **2.20** | **281** | P | **Pn** | **06 33 07.4** | **-0.4** |
| **D23K** | **Nanushuk River** | **2.33** | **258** | | **Pn** | **06 33 10.2** | **+0.7** |
| D23K | comp=N,2μm,0.9s | | | IAML | | 06 33 47.8 | |
| D23K | comp=E,2μm,1.1s | | | IAML | | 06 34 07.9 | |
| **D23K** | **Nanushuk River** baz=74 | **2.33** | **258** | P | **Pn** | **06 33 09.7** | **+0.2** |
| **F24K** | **Squaw Lake** | **2.42** | **214** | Pn | **Pn** | **06 33 11.5** | **+0.7** |
| F24K | comp=N,1μm,0.6s | | | IAML | | 06 33 51.7 | |
| **F24K** | **Squaw Lake** baz=31,SNR=614 | **2.42** | **214** | P | **Pn** | **06 33 11.6** | **+0.7** |
| **E23K** | **Chandalar** | **2.43** | **234** | | **Pn** | **06 33 11.7** | **+0.7** |
| E23K | comp=N,2μm,0.8s | | | IAML | | 06 33 51.8 | |
| E23K | comp=E,2μm,0.7s | | | IAML | | 06 33 56.3 | |
| **E23K** | **Chandalar** baz=50,SNR=705 | **2.43** | **234** | P | **Pn** | **06 33 11.2** | **+0.2** |
| **F28M** | **Old Crow** | **2.54** | **138** | Pn | **Pn** | **06 33 13.2** | **+0.7** |
| **F28M** | **Old Crow** baz=320,SNR=274 | **2.54** | **138** | P | **Pn** | **06 33 13.1** | **+0.5** |
| **E29M** | **Blow River** | **2.60** | **113** | Pn | **Pn** | **06 33 13.7** | **+0.4** |
| E29M | | | | | **Sb** | **06 33 48.6** | **-1.4** |
| E29M | comp=N,1μm,0.7s | | | IAML | | 06 33 55.1 | |
| E29M | comp=E,1μm,0.8s | | | IAML | | 06 34 00.3 | |
| **E29M** | **Blow River** baz=298,SNR=43 | **2.60** | **113** | P | **Pn** | **06 33 14.2** | **+0.9** |
| **G26K** | **Porcupine Rive** | **2.62** | **175** | | **Pn** | **06 33 14.1** | **+0.6** |
| **G26K** | **Porcupine Rive** baz=355,SNR=122 | **2.62** | **175** | P | **Pn** | **06 33 13.9** | **+0.4** |
| **G25K** | **Bearman Lake** | **2.87** | **194** | | **Pn** | **06 33 17.8** | **+0.9** |
| **G25K** | **Bearman Lake** baz=12,SNR=47 | **2.87** | **194** | P | **Pn** | **06 33 17.4** | **+0.5** |
| **G27K** | **Doyon Strip** | **2.93** | **159** | | **Pn** | **06 33 17.7** | **-0.1** |
| **G27K** | **Doyon Strip** baz=340,SNR=105 | **2.93** | **159** | P | **Pn** | **06 33 17.9** | **0.0** |
| **FYU** | **Fort Yukon** | **3.01** | **187** | Pn | **Pn** | **06 33 19.6** | **+0.7** |
| FYU | | | | Sn | **Sn** | **06 33 55.2** | **-0.3** |
| FYU | comp=E,787nm,1.0s | | | IAML | | 06 34 11.2 | |
| FYU | comp=N,983nm,1.2s | | | IAML | | 06 34 15.1 | |
| **D22K** | **Ayikyak River** | **3.04** | **261** | Pn | **Pn** | **06 33 19.6** | **+0.2** |
| D22K | | | | Sn | **Sn** | **06 33 55.3** | **-1.0** |
| **D22K** | **Ayikyak River** baz=74,SNR=54 | **3.04** | **261** | P | **Pn** | **06 33 19.1** | **-0.2** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **204** | Pn | **Pn** | **06 33 20.1** | **+0.1** |
| G24K | comp=E,898nm,0.9s | | | IAML | | 06 34 08.1 | |
| G24K | comp=N,1μm,1.0s | | | IAML | | 06 34 24.8 | |
| **G24K** | **Hadweenzic Riv** baz=21,SNR=96 | **3.09** | **204** | P | **Pn** | **06 33 20.0** | **+0.1** |
| **COLD** | **Coldfoot** baz=41 | **3.18** | **226** | P | **Pn** | **06 33 21.3** | **+0.1** |
| **B22K** | **Teshekpuk Lake** | **3.22** | **289** | Pn | **Pn** | **06 33 22.3** | **+0.5** |
| **B22K** | **Teshekpuk Lake** baz=101,SNR=16 | **3.22** | **289** | P | **Pn** | **06 33 21.4** | **-0.3** |
| **H25L** | **Birch Creek** baz=8.6,SNR=51 | **3.34** | **190** | P | **Pn** | **06 33 23.7** | **+0.3** |
| **H27K** | **Steamboat Moun** | **3.50** | **161** | | **Pn** | **06 33 26.3** | **+0.7** |
| **H27K** | **Steamboat Moun** baz=343,SNR=23 | **3.50** | **161** | P | **Pn** | **06 33 25.9** | **+0.2** |
| **F22K** | **John River** baz=52 | **3.53** | **238** | P | **Pn** | **06 33 26.3** | **+0.3** |
| **G29M** | **Pine Creek** | **3.54** | **135** | | **Pn** | **06 33 26.9** | **+0.6** |
| G29M | comp=N,619nm,0.9s | | | IAML | | 06 34 34.2 | |
| G29M | comp=E,942nm,1.1s | | | IAML | | 06 34 41.5 | |
| **G29M** | **Pine Creek** baz=320,SNR=118 | **3.54** | **135** | P | **Pn** | **06 33 26.9** | **+0.6** |
| **G23K** | **Bananza Creek** | **3.55** | **219** | Pn | **Pn** | **06 33 27.0** | **+0.7** |
| G23K | comp=N,544nm,0.8s | | | IAML | | 06 34 27.9 | |
| **G23K** | **Bananza Creek** baz=34,SNR=35 | **3.55** | **219** | P | **Pn** | **06 33 25.9** | **-0.5** |
| **B21K** | **Ikpikpuk River** | **3.59** | **276** | Pn | **Pn** | **06 33 27.3** | **+0.4** |
| **B21K** | **Ikpikpuk River** baz=87,SNR=31 | **3.59** | **276** | P | **Pn** | **06 33 26.6** | **-0.3** |
| **E21K** | **Killik River** baz=69 | **3.63** | **257** | P | **Pn** | **06 33 27.2** | **-0.3** |
| **F30M** | **Barrier River** | **3.70** | **118** | | **Pn** | **06 33 30.2** | **+1.9** |
| **F30M** | **Barrier River** baz=305,SNR=100 | **3.70** | **118** | P | **Pn** | **06 33 28.4** | **+0.1** |
| **G22K** | **Bettles** baz=42 | **3.75** | **229** | P | **Pn** | **06 33 29.0** | **0.0** |
| **A22K** | **Sinclair Lake** baz=108 | **3.88** | **297** | P | **Pn** | **06 33 31.0** | **+0.1** |
| **H24K** | **Noodor Dome** | **3.96** | **201** | | **Pn** | **06 33 32.4** | **+0.4** |
| H24K | comp=E,417nm,1.0s | | | IAML | | 06 34 40.3 | |
| H24K | comp=N,463nm,0.9s | | | IAML | | 06 34 44.9 | |
| **H24K** | **Noodor Dome** baz=18,SNR=83 | **3.96** | **201** | P | **Pn** | **06 33 32.1** | **+0.1** |
| **G30M** | **tAoh Zraii Nji** | **3.97** | **127** | Pn | **Pn** | **06 33 33.2** | **+1.1** |
| G30M | comp=N,392nm,1.2s | | | IAML | | 06 34 58.4 | |
| **G30M** | **tAoh Zraii Nji** baz=313 | **3.97** | **127** | P | **Pn** | **06 33 32.3** | **+0.2** |
| **H29M** | **Whitestone** | **4.04** | **143** | Pn | **Pn** | **06 33 34.0** | **+1.0** |
| H29M | comp=N,401nm,1.2s | | | IAML | | 06 34 50.4 | |
| H29M | comp=E,433nm,1.0s | | | IAML | | 06 34 56.3 | |
| **H29M** | **Whitestone** baz=328,SNR=305 | **4.04** | **143** | P | **Pn** | **06 33 33.6** | **+0.6** |
| **PRP** | **Porcupine Dome** | **4.07** | **187** | Pn | **Pn** | **06 33 34.3** | **+0.7** |
| PRP | comp=E,315nm,0.8s | | | IAML | | 06 34 23.9 | |
| PRP | comp=N,445nm,0.8s | | | IAML | | 06 34 25.4 | |
| **PRP** | **Porcupine Dome** baz=5.5,SNR=102 | **4.07** | **187** | P | **Pn** | **06 33 34.3** | **+0.7** |
| **I27K** | **Kandik River** | **4.10** | **164** | | **Pn** | **06 33 35.4** | **+1.5** |
| **I27K** | **Kandik River** baz=346,SNR=105 | **4.10** | **164** | P | **Pn** | **06 33 34.3** | **+0.5** |
| **F21K** | **Alatna River** | **4.10** | **240** | Pn | **Pn** | **06 33 34.6** | **+0.7** |
| F21K | comp=N,623nm,0.7s | | | IAML | | 06 34 42.7 | |
| **F21K** | **Alatna River** baz=52,SNR=62 | **4.10** | **240** | P | **Pn** | **06 33 34.5** | **+0.7** |
| **INK** | **Inuvik** | **4.11** | **103** | Pn | **Pn** | **06 33 34.4** | **+0.6** |
| **INK** | **Inuvik** comp=N,2.7nm,0.3s,baz=296,slow=9.9,SNR=36 | **4.11** | **103** | Pn | **Pn** | **06 33 35.4** | **+1.5** |
| INK | comp=N,7.8nm,0.3s,baz=41,slow=32,SNR=3.8 | | | Sn | **Sn** | **06 34 19.6** | **-2.7** |
| INK | comp=N,5.3nm,0.3s,baz=13,slow=20,SNR=5.1 | | | Lg | Lg | 06 34 42.1 | |
| INK | comp=N,407nm,21.9s,baz=281,slow=46 comp=N,30nm,0.6s | | | LR | LR | 06 35 40.0 | |
| **INK** | **Inuvik** baz=292,SNR=55 | **4.11** | **103** | P | **Pn** | **06 33 34.5** | **+0.6** |
| **H23K** | **Yukon River** | **4.23** | **210** | | **Pn** | **06 33 36.1** | **+0.5** |
| **H23K** | **Yukon River** baz=26,SNR=124 | **4.23** | **210** | P | **Pn** | **06 33 36.1** | **+0.5** |
| **I26K** | **Coal Creek Min** | **4.28** | **173** | | **Pn** | **06 33 36.7** | **+0.3** |
| I26K | comp=N,505nm,1.1s | | | IAML | | 06 34 49.1 | |
| I26K | comp=E,343nm,0.9s | | | IAML | | 06 34 53.8 | |
| **I26K** | **Coal Creek Min** baz=354 | **4.28** | **173** | P | **Pn** | **06 33 36.8** | **+0.4** |
| **EPYK** | **Eagle Plains** | **4.29** | **134** | Pn | **Pn** | **06 33 37.3** | **+0.7** |
| EPYK | comp=E,492nm,0.8s | | | IAML | | 06 34 59.7 | |
| EPYK | comp=N,389nm,1.0s | | | IAML | | 06 35 09.7 | |
| **EPYK** | **Eagle Plains** baz=321,SNR=27 | **4.29** | **134** | P | **Pn** | **06 33 36.6** | **0.0** |
| **F31M** | **Tsiigehtchic** | **4.44** | **113** | Pn | **Pn** | **06 33 39.6** | **+1.1** |
| F31M | comp=N,247nm,1.1s | | | IAML | | 06 34 52.0 | |
| **F31M** | **Tsiigehtchic** baz=302,SNR=23 | **4.44** | **113** | P | **Pn** | **06 33 38.9** | **+0.4** |
| **I28M** | **Miner Creek** | **4.45** | **155** | Pn | **Pn** | **06 33 39.6** | **+0.8** |
| I28M | comp=N,247nm,0.7s | | | IAML | | 06 34 37.3 | |
| I28M | comp=E,235nm,1.2s | | | IAML | | 06 35 06.5 | |
| **I28M** | **Miner Creek** baz=339,SNR=187 | **4.45** | **155** | P | **Pn** | **06 33 39.5** | **+0.7** |
| **D20K** | **Etivluk River** baz=74,SNR=118 | **4.46** | **265** | P | **Pn** | **06 33 39.8** | **+1.0** |
| **B20K** | **Meade River** | **4.47** | **282** | | **Pn** | **06 33 39.2** | **+0.3** |
| **B20K** | **Meade River** baz=91 | **4.47** | **282** | P | **Pn** | **06 33 39.1** | **+0.3** |
| **E20K** | **Nigu River** baz=68 | **4.47** | **259** | P | **Pn** | **06 33 39.8** | **+0.9** |
| **A21K** | **Barrow** baz=108 | **4.49** | **299** | P | **Pn** | **06 33 39.8** | **+0.6** |
| **H22K** | **Ishtalitna Cre** | **4.54** | **219** | | **Pn** | **06 33 40.0** | **+0.2** |
| **H22K** | **Ishtalitna Cre** baz=33,SNR=27 | **4.54** | **219** | P | **Pn** | **06 33 40.2** | **+0.3** |
| **G31M** | **Satah River** | **4.58** | **120** | Pn | **Pn** | **06 33 40.8** | **+0.3** |
| G31M | comp=N,242nm,1.2s | | | IAML | | 06 34 58.3 | |
| G31M | comp=E,340nm,1.0s | | | IAML | | 06 35 04.8 | |
| **G31M** | **Satah River** baz=309,SNR=92 | **4.58** | **120** | P | **Pn** | **06 33 41.4** | **+1.0** |
| **G21K** | **Allakaket** | **4.59** | **233** | | **Pn** | **06 33 40.8** | **+0.2** |
| **G21K** | **Allakaket** baz=45,SNR=24 | **4.59** | **233** | P | **Pn** | **06 33 40.5** | **-0.1** |
| **POKR** | **Poker Plat Res** | **4.61** | **196** | | **Pn** | **06 33 41.5** | **+0.7** |
| POKR | comp=E,364nm,0.9s | | | IAML | | 06 34 39.9 | |
| POKR | comp=N,205nm,1.1s | | | IAML | | 06 35 08.1 | |
| **POKR** | **Poker Plat Res** baz=14,SNR=23 | **4.61** | **196** | P | **Pn** | **06 33 41.5** | **+0.7** |
| **I29M** | **Ogilvie Camp,** | **4.80** | **148** | Pn | **Pn** | **06 33 43.7** | **+0.2** |
| I29M | comp=N,181nm,0.6s | | | IAML | | 06 34 43.8 | |
| I29M | comp=E,224nm,0.9s | | | IAML | | 06 35 17.9 | |
| **I29M** | **Ogilvie Camp,** baz=333,SNR=32 | **4.80** | **148** | P | **Pn** | **06 33 43.8** | **+0.2** |
| **I23K** | **Minto, Yukon-K** | **4.82** | **206** | | **Pn** | **06 33 43.9** | **+0.2** |
| I23K | comp=E,317nm,1.1s | | | IAML | | 06 35 15.4 | |
| I23K | comp=N,298nm,1.2s | | | IAML | | 06 35 27.2 | |
| **I23K** | **Minto, Yukon-K** baz=21,SNR=88 | **4.82** | **206** | P | **Pn** | **06 33 43.9** | **+0.2** |
| **MDM** | **Murphy Dome** | **4.85** | **200** | | **Pn** | **06 33 44.3** | **+0.2** |
| MDM | comp=E,253nm,0.9s | | | IAML | | 06 35 05.8 | |
| MDM | comp=N,199nm,1.0s | | | IAML | | 06 35 07.9 | |
| **COLA** | **College** | **4.88** | **198** | | **Pn** | **06 33 46.4** | **+1.8** |
| COLA | comp=N,305nm,0.6s | | | IAML | | 06 34 47.6 | |
| **COLA** | **College** baz=14 | **4.88** | **198** | P | **Pn** | **06 33 45.2** | **+0.6** |
| **IL31** | | **4.90** | **193** | | **Pn** | **06 33 46.0** | **+1.2** |
| **ILAR** | **Eielson Array** | **4.90** | **193** | | **Pn** | **06 33 45.1** | **+0.3** |
| **ILAR** | **Eielson Array** comp=N,5.9nm,0.3s,baz=6.5,slow=14,SNR=75 | **4.90** | **193** | Pn | **Pn** | **06 33 45.5** | **+0.7** |
| ILAR | comp=N,5.9nm,0.3s,baz=1.8,slow=16,SNR=4.3 | | | Sn | **Sn** | **06 34 43.0** | **+1.1** |
| ILAR | comp=N,617nm,19.2s,baz=21,slow=40 comp=N,36nm,0.7s | | | LR | LR | 06 35 50.2 | |
| **F20K** | **Avaraart Lake** | **4.91** | **245** | | **Pn** | **06 33 46.0** | **+1.1** |
| F20K | comp=E,228nm,0.9s | | | IAML | | 06 35 20.0 | |
| **F20K** | **Avaraart Lake** baz=55 | **4.91** | **245** | P | **Pn** | **06 33 45.7** | **+0.8** |
| **EGAK** | **Eagle** | **4.95** | **164** | Pn | **Pn** | **06 33 46.0** | **+0.5** |
| EGAK | comp=E,205nm,1.1s | | | IAML | | 06 35 24.3 | |
| EGAK | comp=E,162nm,0.9s | | | IAML | | 06 35 28.8 | |
| **EGAK** | **Eagle** baz=346,SNR=52 | **4.95** | **164** | P | **Pn** | **06 33 46.0** | **+0.5** |
| **J25K** | **Salcha River,** | **4.97** | **185** | | **Pn** | **06 33 47.0** | **+1.1** |
| J25K | comp=E,150nm,1.0s | | | IAML | | 06 35 12.1 | |
| **J25K** | **Salcha River,** baz=3.9,SNR=85 | **4.97** | **185** | P | **Pn** | **06 33 46.5** | **+0.7** |
| **IMAR** | **Indian Mountai** | **5.05** | **229** | | **Pn** | **06 33 47.4** | **+0.6** |
| **D19K** | **Kuna River** | **5.05** | **264** | | **Pn** | **06 33 46.9** | **-0.1** |
| D19K | comp=E,254nm,1.0s | | | IAML | | 06 35 22.1 | |
| **D19K** | **Kuna River** baz=72 | **5.05** | **264** | P | **Pn** | **06 33 47.4** | **+0.4** |
| **H21K** | **Melozitna Rive** | **5.07** | **224** | Pn | **Pn** | **06 33 47.9** | **+0.8** |
| **H21K** | **Melozitna Rive** baz=36,SNR=78 | **5.07** | **224** | P | **Pn** | **06 33 47.7** | **+0.6** |
| **J26L** | **Joseph Creek** | **5.08** | **176** | | **Pn** | **06 33 48.3** | **+1.0** |
| J26L | comp=N,156nm,0.8s | | | IAML | | 06 34 51.4 | |
| **J26L** | **Joseph Creek** baz=356,SNR=82 | **5.08** | **176** | P | **Pn** | **06 33 48.0** | **+0.7** |
| **CCB** | **Clear Creek Bu** | **5.10** | **197** | Pn | **Pn** | **06 33 48.2** | **+0.7** |
| **MLY** | **Manley** | **5.16** | **212** | Pn | **Pn** | **06 33 49.0** | **+0.5** |
| MLY | comp=E,167nm,1.2s | | | IAML | | 06 35 28.6 | |
| **MLY** | **Manley** baz=26,SNR=71 | **5.16** | **212** | P | **Pn** | **06 33 49.0** | **+0.5** |
| **E19K** | **Redstone River** | **5.18** | **252** | Pn | **Pn** | **06 33 49.0** | **+0.3** |
| **E19K** | **Redstone River** baz=61 | **5.18** | **252** | P | **Pn** | **06 33 48.8** | **+0.2** |
| **HDA** | **Harding Lake** | **5.26** | **192** | Pn | **Pn** | **06 33 50.7** | **+0.9** |
| HDA | comp=N,128nm,0.9s | | | IAML | | 06 35 18.7 | |
| HDA | comp=E,236nm,1.0s | | | IAML | | 06 35 22.5 | |
| **HDA** | **Harding Lake** baz=9.8,SNR=91 | **5.26** | **192** | P | **Pn** | **06 33 50.1** | **+0.3** |
| **WRH** | **Wood River Hil** | **5.30** | **198** | | **Pn** | **06 33 51.1** | **+0.8** |
| WRH | comp=E,183nm,1.1s | | | IAML | | 06 35 27.4 | |
| WRH | comp=N,125nm,1.1s | | | IAML | | 06 35 27.8 | |
| **NEA2** | **Nenana** | **5.30** | **203** | | **Pn** | **06 33 50.9** | **+0.5** |
| NEA2 | comp=E,117nm,0.9s | | | IAML | | 06 35 26.0 | |
| **NEA2** | **Nenana** baz=18,SNR=48 | **5.30** | **203** | P | **Pn** | **06 33 50.5** | **+0.1** |
| **I30M** | **Mount Dempster** | **5.32** | **141** | Pn | **Pn** | **06 33 51.2** | **+0.5** |
| I30M | comp=E,147nm,0.6s | | | IAML | | 06 34 54.7 | |
| I30M | comp=N,123nm,1.1s | | | IAML | | 06 35 27.7 | |
| **I30M** | **Mount Dempster** baz=328,SNR=472 | **5.32** | **141** | P | **Pn** | **06 33 51.0** | **+0.2** |
| **C19K** | **Lookout Ridge** | **5.41** | **272** | Pn | **Pn** | **06 33 52.2** | **+0.3** |
| C19K | comp=E,226nm,1.2s | | | IAML | | 06 35 55.8 | |
| C19K | comp=N,224nm,1.1s | | | IAML | | 06 36 03.8 | |
| **C19K** | **Lookout Ridge** baz=79,SNR=26 | **5.41** | **272** | P | **Pn** | **06 33 52.3** | **+0.3** |
| **SCRK** | **Sand Creek** | **5.60** | **178** | Pn | **Pn** | **06 33 55.9** | **+1.4** |
| **SCRK** | **Sand Creek** baz=358,SNR=173 | **5.60** | **178** | P | **Pn** | **06 33 55.5** | **+1.0** |
| **K27K** | **Chicken** | **5.61** | **170** | | **Pn** | **06 33 55.9** | **+1.2** |
| **K27K** | **Chicken** baz=351 | **5.61** | **170** | P | **Pn** | **06 33 55.5** | **+0.9** |
| **J29N** | **Klondike Camp** | **5.65** | **152** | Pn | **Pn** | **06 33 56.4** | **+1.2** |
| **J29N** | **Klondike Camp** baz=337 | **5.65** | **152** | P | **Pn** | **06 33 56.0** | **+0.8** |
| **F19K** | **Shaleruckik Mo** | **5.69** | **248** | Pn | **Pn** | **06 33 55.8** | **+0.1** |
| **F19K** | **Shaleruckik Mo** baz=56,SNR=124 | **5.69** | **248** | P | **Pn** | **06 33 56.5** | **+0.9** |
| **H20K** | **Anotleneega Mo** | **5.73** | **230** | | **Pn** | **06 33 57.4** | **+1.2** |
| **H20K** | **Anotleneega Mo** baz=40,SNR=19 | **5.73** | **230** | P | **Pn** | **06 33 56.4** | **+0.2** |
| **BWN** | **Browne** | **5.76** | **203** | | **Pn** | **06 33 57.8** | **+1.1** |
| **K24K** | **Donnelly Dome** | **5.80** | **186** | | **Pn** | **06 33 58.6** | **+1.4** |
| **K24K** | **Donnelly Dome** baz=4.8,SNR=113 | **5.80** | **186** | P | **Pn** | **06 33 57.9** | **+0.8** |
| **A19K** | **Wainwright** baz=89 | **5.80** | **284** | P | **Pn** | **06 33 57.4** | **+0.2** |
| **DAWY** | **Dawson** | **5.84** | **158** | Pn | **Pn** | **06 33 58.8** | **+1.0** |
| **DAWY** | **Dawson** baz=342,SNR=111 | **5.84** | **158** | P | **Pn** | **06 33 58.4** | **+0.6** |
| **J30M** | **Hart River** | **5.89** | **144** | Pn | **Pn** | **06 33 59.2** | **+0.7** |
| **J30M** | **Hart River** baz=331,SNR=179 | **5.89** | **144** | P | **Pn** | **06 33 58.9** | **+0.3** |
| **G19K** | **Purcell Mounta** | **5.90** | **241** | Pn | **Pn** | **06 33 58.0** | **-0.5** |
| **G19K** | **Purcell Mounta** baz=49,SNR=26 | **5.90** | **241** | P | **Pn** | **06 33 58.5** | **0.0** |
| **DOT** | **Dot Lake** | **5.92** | **179** | | **Pn** | **06 33 59.9** | **+1.0** |
| **BPAW** | **Bear Paw Mtn.** | **6.06** | **209** | Pn | **Pn** | **06 34 01.4** | **+0.6** |
| **BPAW** | **Bear Paw Mtn.** baz=23,SNR=33 | **6.06** | **209** | P | **Pn** | **06 34 01.3** | **+0.6** |
| **C18K** | **Utukok River** | **6.09** | **269** | | **Pn** | **06 34 01.1** | **-0.1** |
| **C18K** | **Utukok River** baz=74 | **6.09** | **269** | P | **Pn** | **06 34 01.2** | **0.0** |
| **MCK** | **McKinley** | **6.11** | **199** | | **Pn** | **06 34 02.3** | **+0.8** |
| **MCK** | **McKinley** baz=15,SNR=78 | **6.11** | **199** | P | **Pn** | **06 34 02.5** | **+0.9** |
| **H19K** | **Roundabout Mou** | **6.14** | **235** | Pn | **Pn** | **06 34 01.7** | **-0.1** |
| **H19K** | **Roundabout Mou** baz=44,SNR=20 | **6.14** | **235** | P | **Pn** | **06 34 01.9** | **+0.1** |
| **B18K** | **Kokolik River** baz=81 | **6.14** | **276** | P | **Pn** | **06 34 01.9** | **0.0** |
| **I20K** | **Naaghedeneel** | **6.18** | **224** | Pn | **Pn** | **06 34 03.9** | **+1.5** |
| **I20K** | **Naaghedeneel** baz=35,SNR=11 | **6.18** | **224** | P | **Pn** | **06 34 03.3** | **+0.9** |
| **K29M** | **Barlow Dome** | **6.33** | **151** | Pn | **Pn** | **06 34 05.5** | **+0.8** |
| **K29M** | **Barlow Dome** baz=337,SNR=85 | **6.33** | **151** | P | **Pn** | **06 34 05.4** | **+0.8** |
| **E18K** | **Tukpahlearik C** | **6.34** | **258** | Pn | **Pn** | **06 34 04.9** | **+0.4** |
| **E18K** | **Tukpahlearik C** baz=63,SNR=147 | **6.34** | **258** | P | **Pn** | **06 34 04.8** | **+0.2** |
| **RND** | **Reindeer** | **6.42** | **198** | Pn | **Pn** | **06 34 06.7** | **+0.9** |
| **F18K** | **Selawik** baz=56 | **6.44** | **250** | P | **Pn** | **06 34 06.1** | **+0.3** |
| **G18K** | **Tagagawik** | **6.55** | **243** | | **Pn** | **06 34 07.7** | **+0.3** |
| **G18K** | **Tagagawik** baz=50,SNR=49 | **6.55** | **243** | P | **Pn** | **06 34 08.1** | **+0.7** |
| **L26K** | **Log Cabin Wild** | **6.56** | **176** | Pn | **Pn** | **06 34 09.0** | **+1.3** |
| **L26K** | **Log Cabin Wild** baz=357,SNR=27 | **6.56** | **176** | P | **Pn** | **06 34 08.9** | **+1.2** |
| **BCAR** | **Beaver Creek A** | **6.59** | **170** | Pn | **Pn** | **06 34 09.0** | **+0.9** |
| **L27K** | **Beaver Creek,** baz=352,SNR=36 | **6.59** | **170** | P | **Pn** | **06 34 09.3** | **+1.2** |
| **DHY** | **Denali Highway** | **6.61** | **192** | Pn | **Pn** | **06 34 10.4** | **+2.0** |
| **DHY** | **Denali Highway** baz=9.1,SNR=80 | **6.61** | **192** | P | **Pn** | **06 34 09.6** | **+1.2** |
| **J20K** | **Nowinta River** | **6.62** | **220** | Pn | **Pn** | **06 34 08.6** | **+0.2** |
| **J20K** | **Nowinta River** baz=31,SNR=20 | **6.62** | **220** | P | **Pn** | **06 34 08.7** | **+0.2** |
| **PAX** | **Paxson** | **6.62** | **184** | | **Pn** | **06 34 10.0** | **+1.4** |
| **PAX** | **Paxson** baz=3.2,SNR=189 | **6.62** | **184** | P | **Pn** | **06 34 09.6** | **+1.1** |
| **A36M** | **Sachs Harbour** | **6.76** | **60** | Pn | **Pn** | **06 34 09.9** | **-0.4** |
| **A36M** | **Sachs Harbour** baz=258,SNR=19 | **6.76** | **60** | P | **Pn** | **06 34 09.8** | **-0.4** |
| **C17K** | **DeLong Mountai** | **6.84** | **270** | | **Pn** | **06 34 11.4** | **0.0** |
| **C17K** | **DeLong Mountai** baz=73,SNR=11 | **6.84** | **270** | P | **Pn** | **06 34 10.7** | **-0.8** |
| **GCSA** | **Galena City Sc** baz=40 | **6.84** | **231** | P | **Pn** | **06 34 11.2** | **-0.3** |
| **RDOG** | **Red Dog Mine** | **6.88** | **266** | Pn | **Pn** | **06 34 11.6** | **-0.5** |
| **RDOG** | **Red Dog Mine** baz=69,SNR=30 | **6.88** | **266** | P | **Pn** | **06 34 11.3** | **-0.7** |
| **E17K** | **Hotham Inlet** baz=62 | **6.92** | **257** | P | **Pn** | **06 34 12.0** | **-0.5** |
| **WAT1** | **Susitna Watana** | **6.95** | **196** | | **Pn** | **06 34 14.1** | **+1.0** |
| **WAT1** | **Susitna Watana** baz=12 | **6.95** | **196** | P | **Pn** | **06 34 13.9** | **+0.9** |
| **H18K** | **Honhosa River** | **6.97** | **237** | Pn | **Pn** | **06 34 13.4** | **+0.3** |
| **H18K** | **Honhosa River** baz=45,SNR=21 | **6.97** | **237** | P | **Pn** | **06 34 12.9** | **-0.3** |
| **WAT7** | **Susitna Watana** | **6.98** | **197** | | **Pn** | **06 34 14.8** | **+1.3** |
| **F17K** | **Baldwin Pennin** | **7.06** | **252** | Pn | **Pn** | **06 34 14.2** | **-0.2** |
| **F17K** | **Baldwin Pennin** baz=57,SNR=10 | **7.06** | **252** | P | **Pn** | **06 34 14.3** | **-0.1** |
| **D17K** | **Noatak River** baz=67 | **7.08** | **264** | P | **Pn** | **06 34 14.1** | **-0.6** |
| **J19K** | **Poorman** | **7.12** | **224** | Pn | **Pn** | **06 34 15.5** | **+0.1** |
| **J19K** | **Poorman** baz=34,SNR=11 | **7.12** | **224** | P | **Pn** | **06 34 16.3** | **+0.9** |
| **WAT6** | **Susitna Watana** | **7.13** | **193** | | **Pn** | **06 34 16.8** | **+1.2** |
| **WAT6** | **Susitna Watana** baz=9.5,SNR=17 | **7.13** | **193** | P | **Pn** | **06 34 16.3** | **+0.7** |
| **C36M** | **Paulatuk** | **7.13** | **82** | Pn | **Pn** | **06 34 14.5** | **-0.9** |
| **C36M** | **Paulatuk** baz=281 | **7.13** | **82** | P | **Pn** | **06 34 14.3** | **-1.2** |
| **HARP** | **HAARP** | **7.19** | **183** | | **Pn** | **06 34 17.5** | **+1.3** |
| **HARP** | **HAARP** baz=2.1,SNR=51 | **7.19** | **183** | P | **Pn** | **06 34 17.7** | **+1.5** |
| **M26K**

M29M **Somme Creek** 7.52 159 Pn Pn 06 34 22.1 +1.2
M29M **Somme Creek** 7.52 159 P Pn 06 34 21.7 +0.8
baz=344,SNR=72
CUT **Chulitna** 7.56 201 P Pn 06 34 22.2 +0.9
baz=16,SNR=5.6
H17K **Granite Mounta** 7.58 240 Pn 06 34 22.3 +0.6
H17K **Granite Mounta** 7.58 240 P Pn 06 34 22.1 +0.5
baz=46,SNR=30
WACK **Wrangell Chich** 7.59 180 Pn 06 34 24.2 +2.2
C16K **Lisburne Hills** 7.66 270 Pn Pn 06 34 21.4 -1.2
C16K **Lisburne Hills** 7.66 270 P Pn 06 34 22.1 -0.6
baz=71
J18K **Innoko River** 7.83 225 Pn Pn 06 34 25.2 +0.1
J18K **Innoko River** 7.83 225 P Pn 06 34 25.8 +0.7
baz=34,SNR=6.7
SCM **Sheep Creek Mo** 7.84 190 Pn 06 34 27.4 +2.1
SCM **Sheep Creek Mo** 7.84 190 P Pn 06 34 26.9 +1.7
baz=7.6,SNR=28
M23K **Glacier View** 7.91 192 P Pn 06 34 27.6 +1.5
baz=8.5,SNR=26
YUK2 **White River** 7.92 168 Pn 06 34 28.1 +1.7
SML **Sawmill** 7.94 194 Pn 06 34 28.6 +2.0
SML **Sawmill** 7.94 194 P Pn 06 34 27.6 +1.0
baz=10,SNR=15
YUK3 **Moose Creek** 7.97 167 Pn 06 34 29.2 +2.2
YUK3 **Moose Creek** 7.97 167 P Pn 06 34 28.1 +1.0
baz=350,SNR=34
N25K **Chitina, Valde** 7.97 181 P Pn 06 34 28.1 +1.0
baz=0.4,SNR=12
G16K **Koyuk River** 8.05 248 Pn 06 34 27.6 -0.4
G16K **Koyuk River** 8.05 248 P Pn 06 34 28.0 0.0
baz=51,SNR=7.5
L20K **Farewell, AK** 8.07 213 Pn 06 34 28.8 +0.4
L20K **Farewell, AK** 8.07 213 P Pn 06 34 28.6 +0.2
baz=24,SNR=26
KLU **Klutina** 8.11 185 Pn 06 34 31.3 +2.3
KLU **Klutina** 8.11 185 P Pn 06 34 29.8 +0.8
baz=3.8,SNR=8.6
GLB **Gilahina Butte** 8.14 178 Pn Pn 06 34 31.6 +2.3
SKT **Skwentna** 8.14 205 Pn Pn 06 34 30.5 +1.2
SKT **Skwentna** 8.14 205 P Pn 06 34 30.2 +0.9
baz=18,SNR=10
M22K **Willow** 8.18 200 Pn 06 34 31.8 +2.1
M22K **Willow** 8.18 200 P Pn 06 34 30.9 +1.2
baz=14,SNR=13
MCARA **McCarthy VSAT** 8.22 176 Pn 06 34 32.4 +2.0
MCARA **McCarthy VSAT** 8.22 176 P Pn 06 34 31.6 +1.3
baz=356
PMR **Palmer** 8.22 196 Pn Pn 06 34 32.9 +2.5
PMR **Palmer** 8.22 196 P Pn 06 34 32.3 +1.9
baz=12,SNR=13
KNK **Knik Glacier** 8.34 194 Pn 06 34 35.1 +3.1
KNK **Knik Glacier** 8.34 194 P Pn 06 34 33.4 +1.3
baz=9.9,SNR=13
M31M **Drury Creek, Y** 8.41 146 P Pn 06 34 33.5 +0.4
baz=335
M20K **Styx River** 8.49 209 Pn 06 34 35.3 +1.1
M20K **Styx River** 8.49 209 P Pn 06 34 34.7 +0.6
baz=21
J17K **VABM Dome** 8.51 231 Pn Pn 06 34 34.2 -0.1
J17K **VABM Dome** 8.51 231 P Pn 06 34 34.2 -0.1
baz=37,SNR=11
H16K **Elim** 8.51 243 P Pn 06 34 33.7 -0.7
baz=47,SNR=6.4
YUK8 **Steele Glacier** 8.51 165 P Pn 06 34 35.1 +0.5
baz=349
SUA **Susitna One** 8.53 201 Pn Pn 06 34 37.6 +2.9
SUA **Susitna One** 8.53 201 P Pn 06 34 36.1 +1.4
baz=15,SNR=27
L19K **White Mountain** 8.54 215 Pn Pn 06 34 35.0 +0.3
L19K **White Mountain** 8.54 215 P Pn 06 34 34.8 +0.1
baz=26,SNR=16
YUK4 **Talbot Arm** 8.57 161 P Pn 06 34 33.0 -2.3
baz=346,SNR=66
I17K **Unalakleet** 8.58 237 Pn 06 34 35.5 +0.2
I17K **Unalakleet** 8.58 237 P Pn 06 34 35.6 +0.2
baz=42
FARO **Faro, Yukon** 8.60 143 Pn 06 34 35.7 0.0
FARO **Faro, Yukon** 8.60 143 P Pn 06 34 35.6 0.0
baz=333
BMRM **Bremner River** 8.62 181 P Pn 06 34 38.5 +2.7
baz=0.4,SNR=37
F15K **North Star Dit** 8.62 253 Pn Pn 06 34 35.1 -0.7
F15K **North Star Dit** 8.62 253 P Pn 06 34 34.9 -0.9
baz=55
N30M **Aishikik Lake** 8.65 156 Pn 06 34 37.3 +0.9
N30M **Aishikik Lake** 8.65 156 P Pn 06 34 37.1 +0.7
baz=342,SNR=29
M19K **Big River Lodg** 8.70 213 Pn Pn 06 34 38.3 +1.4
M19K **Big River Lodg** 8.70 213 P Pn 06 34 37.9 +0.9
baz=24,SNR=58
CTG **Chitna Glacier** 8.71 170 P Pn 06 34 39.2 +2.0
baz=353,SNR=17
CTGM **Chitina Glacie** 8.71 170 Pn 06 34 39.3 +2.1
RC01 **Rabbit Creek A** 8.78 197 P Pn 06 34 39.2 +1.2
baz=12
N31M **Braeburn, Yuko** 8.83 152 Pn Pn 06 34 39.9 +1.2
N31M **Braeburn, Yuko** 8.83 152 P Pn 06 34 40.1 +1.3
baz=340,SNR=7.8
CRQM **Cirque** 8.84 176 Pn 06 34 42.2 +3.2
CRQE **Cirque** 8.85 176 P Pn 06 34 41.5 +2.4
baz=357,SNR=32
TGL **Tana Glacier** 8.85 175 Pn 06 34 41.4 +2.2
G15K **Niukluk** 8.85 248 P Pn 06 34 39.5 +0.5
baz=50
K17K **Iditarod** 8.86 226 Pn 06 34 40.1 +1.0
K17K **Iditarod** 8.86 226 P Pn 06 34 40.5 +1.4
baz=34
LOGN **Logan Glacier** 8.87 169 Pn 06 34 41.2 +1.8
PWL **Port Wells** 8.88 193 P Pn 06 34 39.8 +0.3
baz=9.0
L18K **Granite Mounta** 8.90 220 Pn Pn 06 34 39.9 +0.2
L18K **Granite Mounta** 8.90 220 P Pn 06 34 39.8 +0.1
baz=29,SNR=13
SPCP **Crater Peak Br** 8.92 205 Pn 06 34 40.5 +0.5
O28M **Mount Upton** 8.98 167 Pn 06 34 42.7 +1.6
O28M **Mount Upton** 8.98 167 P Pn 06 34 42.7 +1.6
baz=350
SPU **Mount Spurr** 8.98 205 Pn 06 34 42.6 +1.7
N20K **Mount Spurr** 8.99 205 P Pn 06 34 41.1 +0.1
baz=18
YUK6 **Outpost Mounta** 8.99 161 P Pn 06 34 42.4 +1.3
baz=346,SNR=54
GOAT **Goat Mountain** 9.01 181 Pn 06 34 41.7 +0.5
J16K **Anvik River** 9.02 234 Pn Pn 06 34 42.4 +1.1
J16K **Anvik River** 9.02 234 P Pn 06 34 41.0 -0.3
baz=39
EYAK **Cordova Ski Ar** 9.05 184 P Pn 06 34 43.1 +1.3
baz=3.0,SNR=5.9
F14K **Arctic Creek** 9.32 255 P Pn 06 34 44.1 -1.3
baz=54,SNR=6.0
L17K **Donlin** 9.35 224 P Pn 06 34 46.3 +0.4
baz=32,SNR=9.9
M18K **Stony River** 9.36 216 P Pn 06 34 45.7 -0.3
baz=26,SNR=20
O30N **Mendenhall** 9.46 155 Pn Pn 06 34 48.5 +1.1
O30N **Mendenhall** 9.46 155 P Pn 06 34 47.6 +0.2
baz=342
ANM **Nome** 9.57 249 P Pn 06 34 49.5 +0.7
baz=50
N32M **Quiet Lake** 9.63 145 P Pn 06 34 49.1 -0.7
baz=336
SEW **Seward** 9.72 195 P Pn 06 34 52.5 +1.6
baz=11
N19K **Bonanza Creek** 9.73 211 Pn 06 34 51.8 +0.7
N19K **Bonanza Creek** 9.73 211 P Pn 06 34 52.3 +1.2
baz=22,SNR=15
WHY **Whitehorse** 9.76 151 P Pn 06 34 51.8 +0.3
baz=340
M17K **Holitna River** 9.79 220 Pn 06 34 51.9 +0.1
M17K **Holitna River** 9.79 220 P Pn 06 34 52.2 +0.3
baz=28
TNA **Tin City** 9.81 257 P Pn 06 34 51.9 -0.2
baz=56
P30M **Million Dollar** 9.96 158 P Pn 06 34 55.1 +0.8
baz=345
L16K **Owhat River** 10.01 226 P Pn 06 34 55.5 +0.7
baz=32
K15K **Wolf Creek Mou** 10.07 232 P Pn 06 34 56.5 +0.8
baz=36
N18K **Kilae Creek** 10.12 214 Pn Pn 06 34 58.0 +1.7
N18K **Kilae Creek** 10.12 214 P Pn 06 34 58.0 +1.7
baz=24,SNR=8.5
PNL **Peninsula** 10.14 166 P Pn 06 34 58.2 +1.5
baz=350
BRSE **Bradley Lake S** 10.21 199 P Pn 06 34 59.1 +1.4
baz=13
J14K **Nanvaranak Lak** 10.29 238 Pn Pn 06 34 59.1 +0.5
J14K **Nanvaranak Lak** 10.29 238 P Pn 06 34 58.9 +0.2
baz=40,SNR=7.2
P29M **Windy Craggy** 10.34 161 P Pn 06 35 00.5 +1.0
baz=347
WRGLY **Wrigley** 10.46 117 Pn Pn 06 35 00.7 -0.3
WRGLY **Wrigley** 10.46 117 P Pn 06 35 00.8 -0.1
baz=316
M16K **Timber Creek** 10.48 222 Pn Pn 06 35 01.7 +0.5
M16K **Timber Creek** 10.48 222 P Pn 06 35 02.2 +0.9
baz=29
N17K **Nushagak Hills** 10.52 217 Pn Pn 06 35 02.5 +0.7
N17K **Nushagak Hills** 10.52 217 P Pn 06 35 02.3 +0.5
baz=25
P33M **Teslin, Yukon** 10.55 147 Pn Pn 06 35 02.6 +0.2
P33M **Teslin, Yukon** 10.55 147 P Pn 06 35 02.7 +0.4
baz=337
L15K **Ungalak Mounta** 10.56 230 P Pn 06 35 03.1 +0.8
baz=34
P19K **Oil Pt** 10.62 205 P Pn 06 35 04.7 +1.4
baz=17
PLBC **Pleasant Camp** 10.69 157 P Pn 06 35 05.4 +1.3
baz=344
O18K **Koktuh Hills** 10.75 211 Pn Pn 06 35 06.5 +1.4
O18K **Koktuh Hills** 10.75 211 P Pn 06 35 05.9 +0.9
baz=21
SKAG **Skagway** 10.83 155 P Pn 06 35 08.0 +2.0
baz=343
N16K **Nishlik Lake** 10.92 221 P Pn 06 35 08.3 +1.0
baz=28,SNR=6.0
P32M **Atlin** 10.97 150 P Pn 06 35 08.8 +0.8
baz=340
L14K **Kuka Creek** 11.16 232 P Pn 06 35 11.8 +1.3
baz=35
M15K **Kasigluk River** 11.18 225 P Pn 06 35 11.0 +0.1
baz=31
O17K **Koliganek Bris** 11.19 215 P Pn 06 35 12.2 +1.2
baz=24
P18K **Big Mountain,** 11.19 210 Pn Pn 06 35 12.7 +1.6
P18K **Big Mountain,** 11.19 210 P Pn 06 35 12.3 +1.2
baz=20
Q19K **Cape Douglas,** 11.38 205 P Pn 06 35 14.5 +0.9
baz=17
M14K **Bethel** 11.46 228 P Pn 06 35 16.2 +1.5
baz=32
N15K **Kwethluk River** 11.50 223 P Pn 06 35 17.1 +1.9
baz=29
Q20K **Shuyak Island** 11.51 202 P Pn 06 35 17.4 +2.0
baz=14
O16K **Kokwok River B** 11.56 217 P Pn 06 35 17.5 +1.4
baz=25
P17K **Kvichak River** 11.60 212 P Pn 06 35 18.5 +1.9
baz=22
R33M **Jennings River** 11.67 144 P Pn 06 35 19.2 +1.5
baz=336
Q32M **Nakina River** 11.82 148 P Pn 06 35 21.3 +1.5
baz=339
Q18K **Katmai Hardscr** 11.86 208 P Pn 06 35 22.1 +1.9
baz=18
P16K **Nushagak River** 12.05 216 P Pn 06 35 24.6 +1.8
baz=23
R32K **Eaglecrest** 12.09 154 P Pn 06 35 24.4 +1.1
baz=343
M13K **Dall Lake** 12.12 230 P Pn 06 35 25.3 +1.7
baz=33
S31K **Pelican** 12.15 159 P Pn 06 35 25.6 +1.5
baz=346
O15K **Ungalikthiuk R** 12.32 220 P Pn 06 35 27.9 +1.4
baz=26
KDAK **Kodiak Island** 12.34 201 Pn Pn 06 35 28.8 +2.1
comp=N,0.1nm,0.3s,baz=315,slow=7.1,SNR=1.8
KDAK LR LR 06 40 32.8
comp=N,433nm,20.0s,baz=39,slow=39
KDAK **Kodiak Island** 12.34 201 P Pn 06 35 28.0 +1.3
baz=14
Q17K **Contact Creek** 12.37 210 P Pn 06 35 30.3 +3.1
baz=19
O14K **Tigyukauivet M** 12.59 223 P Pn 06 35 32.8 +2.7
baz=28
DLBC **Dease Lake** 12.75 144 Pn Pn 06 35 33.1 +0.8
comp=N,0.4nm,0.3s,baz=350,slow=7.3,SNR=7.9
DLBC Sn Sn 06 37 54.0 -0.6
comp=N,0.1nm,0.3s,baz=251,slow=18,SNR=1.8
comp=N,3.4nm,0.5s
DLBC **Dease Lake** 12.75 144 P Pn 06 35 33.8 +1.5
baz=337
LIRD **Liard River Hi** 12.78 134 P Pn 06 35 34.3 +1.6
baz=330
R18K **Karluk** 12.81 205 P Pn 06 35 35.7 +2.7
baz=16
OHAK **Old Harbor** 12.98 202 P Pn 06 35 38.2 +2.8
baz=14
S34M **Telegraph Cree** 13.01 147 P Pn 06 35 37.7 +1.8
baz=339
R17L **Mt. Peulik Vol** 13.06 210 P Pn 06 35 39.3 +2.8
baz=19
SIT **Sitka** 13.15 158 P Pn 06 35 40.2 +2.5
baz=346
TOAD **Toad River Com** 13.49 133 P Pn 06 35 43.3 +0.8
baz=330
YKA **Yellowknife Ar** 13.87 106 Pn Pn 06 35 43.4 -4.1
comp=N,1.0nm,0.3s,baz=293,slow=11,SNR=18
YKA Sn Sn 06 38 07.6 -14
comp=N,0.9nm,0.3s,baz=318,slow=20,SNR=5.2
YKA LR LR 06 41 26.1
comp=N,191nm,19.2s,baz=314,slow=38
comp=N,1.9nm,0.5s
T35M **Bob Quinn** 14.06 147 P Pn 06 35 50.6 +0.5
baz=339
WRAK **Wrgnell Islan** 14.21 152 P Pn 06 35 52.5 +0.2
baz=342
S12K **Black Hills** 15.99 219 P Pn 06 36 16.3 +0.3
baz=23
CHNA **Chernabura Isl** 16.30 213 P Pn 06 36 21.1 +1.2
baz=19
SPIA **Saint Paul Isl** 16.79 235 P Pn 06 36 26.9 +0.8
baz=32
EUNU **Eureka** 17.38 30 P Pn 06 36 31.6 -1.8
BILL **Bilibino** 17.54 289 P Pn 06 36 34.3 -1.2
BILL IAmb IAmb 06 37 00.3
comp=Z,18nm,0.5s
UNV **Unalaska Valle** 18.73 224 P Pn 06 36 50.6 +0.5
baz=24
BBB **Bella Bella** 19.00 148 LR LR 06 44 39.0
comp=Z,67nm,20.0s,baz=351,slow=38
TULEG **Thule** 21.46 38 P P 06 37 17.9 -1.4
TULEG IAmb IAmb 06 37 34.4
comp=Z,20nm,1.2s
KIWB **Kanaga Island** 23.42 238 P P 06 37 38.1 -2.1
FFC **Flin Flon** 24.05 106 P P 06 37 45.3 -1.0
B08A **Colville Reser** 24.50 137 P P 06 37 50.5 0.0
D05A **Enumclaw** 24.99 142 P P 06 37 55.2 +0.2
D05A IAmb IAmb 06 38 00.0
comp=Z,9.5nm,0.8s
NEW **Newport** 25.13 134 P P 06 37 55.9 -0.3
NEW **Newport** 25.13 134 P P 06 37 58.1 +1.8
comp=Z,3.5nm,0.8s,baz=357,slow=6.7,SNR=5.5
NEW LR LR 06 48 48.1
comp=Z,116nm,18.8s,baz=341,slow=39
comp=Z,3.5nm,0.8s
NEW **Newport** 25.13 134 P P 06 37 57.4 +1.1
baz=338,SNR=5.6
LTY **Liberty** 25.22 140 P P 06 37 57.3 +0.2
LTY IAmb IAmb 06 38 00.2
comp=Z,13nm,1.1s
SHEM **Shemya Is, Ala** 25.42 250 LR LR 06 48 31.3
comp=Z,69nm,19.5s,baz=24,slow=38
LON **Longmire** 25.45 142 IAmb IAmb 06 38 02.0
comp=Z,7.9nm,0.8s
D08A **Wollman Farm,** 25.81 138 P P 06 38 02.5 +0.1
MXC **Moxie City** 25.95 140 IAmb IAmb 06 38 05.8
comp=Z,6.5nm,0.8s
E07A **Sunnyside** 26.07 139 P P 06 38 05.1 +0.4
E07A IAmb IAmb 06 38 07.2
comp=Z,5.4nm,0.7s
E09A **Wood Farm, Sta** 26.51 137 IAmb IAmb 06 38 10.7
comp=Z,6.0nm,0.9s
TIXI **Tiksi** 26.59 315 P P 06 38 08.0 -1.1
TIXI IAmb IAmb 06 38 13.0
comp=Z,7.6nm,0.9s
TIXI **Tiksi** 26.59 315 LR LR 06 50 03.1
comp=Z,39nm,20.0s,baz=151,slow=40
HOOD **Mount Hood Mea** 26.84 143 IAmb IAmb 06 38 15.1
comp=Z,12nm,0.8s
MSO **Missoula** 27.28 131 IAmb IAmb 06 38 18.1
comp=Z,13nm,1.2s
MSO **Missoula** 27.28 131 P P 06 38 16.4 +0.6
baz=337,SNR=8.2
EGMT **Eagleton** 27.36 124 IAmb IAmb 06 38 18.2
comp=Z,9.4nm,1.0s
EGMT **Eagleton** 27.36 124 P P 06 38 15.6 -0.9
baz=334,SNR=6.2
MA2 **Magadan** 28.14 282 LR LR 06 51 08.8
comp=Z,162nm,18.5s,baz=54,slow=40
I07A **Izee** 28.49 141 IAmb IAmb 06 38 29.5
comp=Z,4.9nm,0.9s
FRB **Frobisher Bay** 28.74 64 LR LR 06 51 34.7
comp=Z,149nm,19.6s,baz=353,slow=40
J05D **Fort Rock, OR** 28.88 144 IAmb IAmb 06 38 33.2
comp=Z,5.7nm,0.9s
HUMO **Hull Mountain** 29.18 146 IAmb IAmb 06 38 36.4
comp=Z,7.5nm,1.1s
ULM **Lac du Bonnet** 29.84 105 P P 06 38 39.4 +1.0
comp=Z,1.7nm,0.6s,baz=299,slow=12,SNR=2.5
comp=Z,1.7nm,0.6s
RLMT **Red Lodge** 30.14 126 P P 06 38 41.3 0.0
baz=336
HLID **Hailey** 30.20 134 P P 06 38 40.8 -1.0
baz=340
PETK **Petropavlovsk-** 30.75 268 P P 06 38 47.5 +1.1
comp=Z,1.4nm,0.4s,baz=51,slow=10.0,SNR=2.3
PETK LR LR 06 51 58.3
comp=Z,78nm,20.1s,baz=54,slow=38
comp=Z,1.4nm,0.4s
IMW **Indian Meadow** 30.80 129 IAmb IAmb 06 38 51.4
comp=Z,6.4nm,1.1s
TPAW **Teton Pass** 31.18 129 IAmb IAmb 06 38 53.3
comp=Z,4.6nm,1.1s
SNOW **Snow King Moun** 31.25 129 IAmb IAmb 06 38 55.0
comp=Z,7.3nm,1.2s
AGMN **Agassiz Nation** 31.52 107 P P 06 38 51.7 -1.6
baz=330
SFJD **Kangerlussuaq** 31.59 48 LR LR 06 54 21.3
comp=Z,44nm,18.6s,baz=326,slow=42
SPITS **Spitsbergen Ar** 32.04 7 P P 06 38 57.8 +0.2
comp=Z,6.7nm,0.7s,baz=148,slow=8.5,SNR=6.2
comp=Z,6.7nm,0.7s
BW06 **Boulder Array** 32.23 128 P P 06 38 60.0 +0.2
baz=338,SNR=8.2
PD31 **Pinedale Array** 32.23 128 IAmb IAmb 06 39 02.5
comp=Z,4.9nm,0.9s
PDAR **Pinedale Array** 32.23 128 P P 06 39 00.7 +0.9
PDAR **Pinedale Array** 32.23 128 P P 06 39 01.6 +1.8
comp=Z,2.6nm,0.8s,baz=6.0,slow=5.4,SNR=28
PDAR PcP PcP 06 41 48.1 +0.1
comp=Z,0.5nm,0.6s,baz=57,slow=1.6,SNR=4.1
PDAR LR LR 06 53 16.3
comp=Z,37nm,21.6s,baz=340,slow=38
comp=Z,2.6nm,0.8s
HVU **Hansel Valley** 32.29 133 IAmb IAmb 06 39 03.0
comp=Z,11nm,1.5s
RSSD **Black Hills** 32.59 120 P P 06 39 02.9 -0.1
baz=335
ELK **Elko** 32.65 137 IAmb IAmb 06 39 07.0
comp=Z,5.5nm,1.2s
ELK **Elko** 32.65 137 LR LR 06 53 44.2
comp=Z,37nm,18.5s,baz=348,slow=39
PAHR **Pah Rah Range** 32.70 143 IAmb IAmb 06 39 07.0
comp=Z,6.5nm,1.2s
HWUT **Hardware Ranch** 32.76 131 IAmb IAmb 06 39 10.1
comp=Z,4.8nm,0.7s
YAK **Yakutsk** 33.15 301 LR LR 06 54 08.7
comp=Z,38nm,19.4s,baz=48,slow=39
PNTR **Pine Nut** 33.25 144 IAmb IAmb 06 39 23.8
comp=Z,3.3nm,0.8s
EYMN **Ely** 33.31 103 P P 06 39 08.2 -0.8
baz=329
KVN **Kaiserville** 33.60 142 IAmb IAmb 06 39 15.1
comp=Z,8.5nm,1.5s
DUG **Dugway, Tooele** 33.77 134 IAmb IAmb 06 39 16.4
comp=Z,8.6nm,1.0s
DUG **Dugway, Tooele** 33.77 134 P P 06 39 15.2 +2.1
baz=341,SNR=11
WAKR **Walker** 33.84 144 IAmb IAmb 06 39 18.3
comp=Z,3.3nm,0.8s
RWWY **Rawlins** 33.88 126 IAmb IAmb 06 39 16.8
comp=Z,7.8nm,0.8s
NVAR **Mina Array Bea** 34.16 142 P P 06 39 16.4 -0.2
NVAR **Mina Array Bea** 34.16 142 P P 06 39 19.2 +2.6
comp=Z,3.3nm,0.9s,baz=333,slow=6.9,SNR=24
NVAR PcP PcP 06 41 54.9 +1.4
comp=Z,1.5nm,0.9s,baz=44,slow=0.3,SNR=5.2
comp=Z,3.3nm,0.9s
NLU **North Lily Min** 34.18 133 IAmb IAmb 06 39 19.6
comp=Z,4.1nm,0.9s
MPU **Maple Canyon** 34.24 132 IAmb IAmb 06 39 20.4
comp=Z,9.0nm,1.2s
RDMU **Red Mountain** 34.27 129 IAmb IAmb 06 39 20.2
comp=Z,5.0nm,0.8s
LHV **Little Huntoon** 34.28 142 IAmb IAmb 06 39 21.3
comp=Z,7.6nm,1.2s
R11B **Troy Canyon, C** 34.84 139 P P 06 39 24.0 +1.5
baz=343
P18A **Preston Nutter** 34.97 131 IAmb IAmb 06 39 29.9
comp=Z,6.1nm,0.7s
P17A **Butcher Ranch,** 34.98 132 IAmb IAmb 06 39 27.1
comp=Z,6.6nm,0.9s
PSUT **Pine Spring** 35.08 136 IAmb IAmb 06 39 28.5
comp=Z,8.4nm,1.2s
ECSD **EROS Data Cent** 35.29 112 P P 06 39 25.8 -0.3
baz=333
SRU **San Rafael Swe** 35.38 132 IAmb IAmb 06 39 35.7
comp=Z,5.1nm,0.7s
MTPU **Mount Pierson** 35.96 134 IAmb IAmb 06 39 36.2
comp=Z,5.7nm,1.0s
TPNV **Topopah Spring** 36.03 140 P P 06 39 34.2 +1.5
baz=344,SNR=7.9
ISCO **Idaho Springs** 36.09 125 P P 06 39 32.4 -1.0
baz=338
CCUT **Cedar City** 36.13 136 IAmb IAmb 06 39 37.0
comp=Z,6.9nm,1.0s
SCHQ **Schefferville** 36.15 73 P P 06 39 33.5 +0.2
comp=Z,6.2nm,0.8s,baz=332,slow=9.1,SNR=5.9
SCHQ LR LR 06 56 52.7
comp=Z,74nm,19.0s,baz=289,slow=40
comp=Z,6.2nm,0.8s
PKCU **Pink Cliffs** 36.49 135 IAmb IAmb 06 39 46.5
comp=Z,7.5nm,1.2s
Q24A **Divide** 37.00 125 P P 06 39 41.3 +0.2
baz=338
MVCO **Mesa Verde** 37.70 130 P P 06 39 45.3 -1.8
baz=340
SDCO **Great Sand Dun** 38.03 126 P P 06 39 49.4 -0.5
baz=339,SNR=6.7
JFWS **Jewell Farm** 38.14 105 P P 06 39 49.5 -0.8
baz=332
GLMI **Grayling** 38.39 98 P P 06 39 50.5 -2.0
baz=331
WUAZ **Wupatki** 38.56 135 P P 06 39 54.9 +0.8
baz=342
CBKS **Cedar Bluff** 38.75 119 P P 06 39 55.1 -0.5
baz=337
T25A **Trinidad** 38.91 125 P P 06 39 57.4 +0.2
baz=339
PFO **Pinyon Flats O** 39.19 142 P P 06 40 00.4 +1.0
baz=345
TPFO **Pinon Flats** 39.20 142 P P 06 40 00.4 +1.0
baz=345
W18A **Petrified Fore** 39.35 133 IAmb IAmb 06 40 04.3
comp=Z,14nm,1.1s
W18A **Petrified Fore** 39.35 133 P P 06 40 01.8 +1.0
baz=342
MONP2 **Monument Peak** 39.89 142 P P 06 40 06.9 +1.5
baz=345
BORG **Borgarnes** 40.23 34 LR LR 06 59 51.7
comp=Z,45nm,18.3s,baz=332,slow=41
SADO **Sadowa** 40.36 93 IAmb IAmb 06 40 10.9
comp=Z,6.6nm,0.8s
SADO **Sadowa** 40.36 93 LR LR 06 56 16.9
comp=Z,54nm,18.8s,baz=247,slow=35
ANMO **Albuquerque** 40.39 129 P P 06 40 11.0 +1.6
ANMO **Albuquerque** 40.39 129 LR LR 06 59 12.4
comp=Z,32nm,21.8s,baz=61,slow=40
ANMO **Albuquerque** 40.39 129 P P 06 40 10.6 +1.1
baz=340
CBX **Cerro Bola** 40.40 143 IAmb IAmb 06 40 12.6
comp=Z,12nm,0.9s
HDIL **Hopedale** 40.56 106 IAmb IAmb 06 40 12.6
comp=Z,9.2nm,0.8s
HDIL **Hopedale** 40.56 106 P P 06 40 09.6 -1.0
baz=334
TRQ **Mont Tremblant** 40.71 87 IAmb IAmb 06 40 14.3
comp=Z,5.3nm,0.8s
ARCES **ARCESS Array B** 41.00 5 P P 06 40 12.9 -1.0
comp=Z,4.0nm,0.8s,baz=354,slow=8.5,SNR=8.2
ARCES PcP PcP 06 42 13.9 +0.2

comp=Z,1.6nm,0.8s,baz=353,slow=3.8,SNR=3.7
comp=Z,4.0nm,0.8s
**AMTX Amarillo 41.80 123** IAmb IAmb 06 40 24.0
comp=Z,8.1nm,0.7s
**AMTX Amarillo 41.80 123** P **P** **06 40 21.1 +0.2**
baz=339
**S39A Bolivar 41.81 112** IAmb IAmb 06 40 23.5
comp=Z,5.3nm,0.8s
**LONY Lake Ozonia 42.09 89** P **P** **06 40 21.7 -1.4**
baz=330
**CCM Cathedral Cave 42.16 110** P **P** **06 40 23.6 -0.2**
baz=335
**121A Cookes Peak, D 42.31 132** IAmb IAmb 06 40 28.7
comp=Z,5.8nm,0.8s
**121A Cookes Peak, D 42.31 132** P **P** **06 40 26.4 +1.2**
baz=342,SNR=7.5
**ERPA Erie 42.38 96** P **P** **06 40 24.5 -1.1**
baz=332
**MGMO Mountain Grove 42.65 111** IAmb IAmb 06 40 29.6
comp=Z,9.7nm,0.9s
**M53A WI Miller and 42.74 97** P **P** **06 40 28.4 -0.1**
baz=332
**WMOK Wichita Mounta 42.80 120** P **P** **06 40 29.3 +0.2**
baz=338
**ACSO Alum Creek Sta 43.01 100** P **P** **06 40 30.1 -0.6**
baz=333
**P49A Miami Univ. Ec 43.04 102** P **P** **06 40 30.6 -0.2**
baz=334
**J59A Piesco 43.12 89** IAmb IAmb 06 40 34.4
comp=Z,9.7nm,0.8s
**S44A Carbondale 43.15 108** IAmb IAmb 06 40 32.8
comp=Z,6.0nm,0.8s
**LBNH Lisbon 43.35 87** P **P** **06 40 31.7 -1.7**
baz=331
**PKME Peaks-Kenny Pk 43.38 83** P **P** **06 40 31.4 -2.2**
baz=330
**O53A New Philadelph 43.61 98** P **P** **06 40 34.7 -0.8**
baz=333
**P51A Williamsport 43.65 100** IAmb IAmb 06 40 38.0
comp=Z,6.6nm,0.6s
**WCI Wyandotte Cave 43.67 105** P **P** **06 40 35.6 -0.4**
baz=334
**ASAJ Asahikawa 43.67 274** LR LR 06 59 32.5
comp=Z,64nm,18.8s,baz=206,slow=37
**BINY Binghamton 43.71 92** IAmb IAmb 06 40 39.3
comp=Z,8.7nm,0.7s
**BINY Binghamton 43.71 92** P **P** **06 40 35.5 -0.8**
baz=332
**MNTX Cornudas Mount 43.74 129** P **P** **06 40 36.2 -0.4**
baz=341,SNR=7.7
**P52A Corning 43.84 99** P **P** **06 40 36.2 -1.1**
baz=333
**FCAR Ozark Folk Cen 43.85 112** IAmb IAmb 06 40 38.0
comp=Z,8.3nm,1.2s
**LCAR Lake Charles 44.00 111** IAmb IAmb 06 40 39.8
comp=Z,7.6nm,1.1s
**P53A Whipple 44.23 99** IAmb IAmb 06 40 42.8
comp=Z,7.5nm,0.8s
**WHAR Wooly Hollow 44.34 113** IAmb IAmb 06 40 44.3
comp=Z,5.2nm,0.8s
**SSPA Standing Stone 44.43 95** P **P** **06 40 41.2 -0.8**
baz=333
**MIAR Mount Ida 44.61 114** IAmb IAmb 06 40 44.8
comp=Z,7.1nm,0.8s
**MIAR Mount Ida 44.61 114** P **P** **06 40 43.2 -0.4**
baz=337,SNR=6.4
**VHRN Van Horn 44.71 129** IAmb IAmb 06 40 48.9
comp=Z,3.2nm,0.7s
**UALR University of 44.80 113** IAmb IAmb 06 40 46.0
comp=Z,6.1nm,0.8s
**Q54A Coxs Mills 44.87 99** IAmb IAmb 06 40 49.2
comp=Z,3.9nm,0.7s
**X40A Basin Creek Fa 44.90 114** IAmb IAmb 06 40 48.2
comp=Z,3.4nm,0.8s
**WVT Waverly 45.05 107** P **P** **06 40 47.7 +0.7**
**WVT Waverly 45.05 107** P **P** **06 40 47.3 +0.3**
baz=336
**S51A Beattyville 45.12 102** P **P** **06 40 47.4 -0.2**
S51A IAmb IAmb 06 41 19.6
comp=Z,4.3nm,0.9s
**ODNJ Ogdensburg 45.19 91** P **P** **06 40 48.1 0.0**
ODNJ IAmb IAmb 06 40 59.9
comp=Z,12nm,1.3s
**U49A Red Boiling Sp 45.39 105** P **P** **06 40 50.3 +0.5**
U49A IAmb IAmb 06 40 53.9
comp=Z,5.7nm,0.7s
**ALPN Alpine 45.47 128** IAmb IAmb 06 40 54.0
comp=Z,4.6nm,0.7s
**PAL Palisades 45.50 91** P **P** **06 40 48.8 -1.7**
baz=332
**V48A Smith Brothers 45.74 107** IAmb IAmb 06 40 55.2
comp=Z,6.4nm,0.9s
**BRDY Brady 45.95 122** P **P** **06 40 54.4 +0.1**
BRDY IAmb IAmb 06 40 58.1
comp=Z,2.7nm,0.7s
**OXF Oxford 46.00 110** P **P** **06 40 54.8 +0.3**
baz=336
**PLAL Pickwick Lake 46.01 108** IAmb IAmb 06 40 57.5
comp=Z,5.8nm,0.7s
**TZTN Tazewell 46.12 103** P **P** **06 40 55.8 +0.2**
TZTN IAmb IAmb 06 40 59.1
comp=Z,5.6nm,0.7s
**TZTN Tazewell 46.12 103** P **P** **06 40 55.3 -0.3**
baz=335
**TX31 Lajitas Ar. Si 46.45 128** P **P** **06 40 59.1 +0.8**
TX31 IAmb IAmb 06 41 01.9
comp=Z,2.7nm,0.8s
**TXAR Lajitas Array 46.45 128** P **P** **06 40 59.5 +1.2**
comp=Z,2.1nm,0.8s,baz=354,slow=7.4,SNR=24
comp=Z,2.1nm,0.8s
**JCT Junction City 46.47 123** P **P** **06 40 58.4 0.0**
baz=340
**TKL Tuckaleechee C 46.85 104** LR LR 07 01 12.0
comp=Z,93nm,20.4s,baz=348,slow=37
**V53A Saluda 47.17 103** P **P** **06 41 04.0 +0.1**
V53A IAmb IAmb 06 41 07.2
comp=Z,3.0nm,0.7s
**FPAL Fort Paine 47.24 106** P **P** **06 41 04.2 -0.2**
**USRK Ussuriysk Ar. 47.28 283** P **P** **06 41 04.2 -0.3**
comp=Z,6.2nm,0.9s,baz=27,slow=9.7,SNR=7.2
comp=Z,6.2nm,0.9s
**BNX BinXian 47.48 288** ⇑P **P** **06 41 05.6 -0.5**
BNX pmax pmax
comp=Z,6.0nm,0.9s
**LRAL Lakeview Retre 48.15 108** P **P** **06 41 11.2 -0.2**
baz=337,SNR=6.4
**Y52A Lilburn 48.38 105** IAmb IAmb 06 41 15.8
comp=Z,5.6nm,0.8s
**NOA NORSAR Array B 48.54 16** P **P** **06 41 13.1 -1.1**
comp=Z,0.9nm,0.7s,baz=347,slow=7.9,SNR=3.5
comp=Z,0.9nm,0.7s
**HODGE Hodges 48.66 103** IAmb IAmb 06 41 17.8
comp=Z,4.6nm,0.8s
**GOGA Godfrey 48.99 104** P **P** **06 41 16.5 -1.4**
baz=336
**FINES FINESS Array B 49.12 6** P **P** **06 41 18.3 -0.2**
comp=Z,2.5nm,0.7s,baz=359,slow=7.1,SNR=11
FINES PcP **PcP** **06 42 41.5 -0.3**
comp=Z,1.4nm,0.7s,baz=336,slow=3.0,SNR=4.3
comp=Z,2.5nm,0.7s
**HFS Hagfors 49.66 14** P **P** **06 41 22.3 -0.3**
comp=Z,10.0nm,0.8s,baz=356,slow=1.9,SNR=15
HFS PcP **PcP** **06 42 42.9 -0.9**
comp=Z,1.9nm,0.8s,baz=270,slow=1.4,SNR=2.0
comp=Z,10.0nm,0.8s
**HBVL Hebbronville 50.01 124** P **P** **06 41 27.9 +2.2**
**352A Blakely 50.27 107** P **P** **06 41 28.3 +0.7**
**ZALV Zalesovo Beam 51.74 325** P **P** **06 41 36.7 -1.7**
**ZALV Zalesovo Beam 51.74 325** P **P** **06 41 38.1 -0.3**
comp=Z,2.0nm,0.6s,baz=27,slow=7.0,SNR=9.6
comp=Z,2.0nm,0.6s
**MJAR Matsushiro Arr 51.93 273** P **P** **06 41 41.0 +0.9**
comp=Z,4.6nm,0.8s,baz=9.3,slow=7.7,SNR=11
comp=Z,4.6nm,0.8s
**SONM Songino Array 52.14 306** P **P** **06 41 42.5 +0.8**
**SONM Songino Array 52.14 306** P **P** **06 41 42.7 +1.1**
comp=Z,3.2nm,0.9s,baz=35,slow=5.4,SNR=11
SONM PcP **PcP** **06 42 55.2 +1.8**
comp=Z,1.3nm,0.8s,baz=30,slow=2.4,SNR=4.1
comp=Z,3.2nm,0.9s
**EKA Eskdalemuir Ar 52.28 27** P **P** **06 41 42.7 +0.3**
comp=Z,6.8nm,0.7s,baz=330,slow=7.2,SNR=14
comp=Z,6.8nm,0.7s
**KSRS Korea Array 54.69 283** P **P** **06 42 00.9 +0.6**
comp=Z,4.6nm,0.9s,baz=14,slow=7.2,SNR=7.2
comp=Z,4.6nm,0.9s
**BVAR Borovoye Array 55.14 335** P **P** **06 42 03.9 +0.5**
comp=Z,1.7nm,0.7s,baz=32,slow=5.8,SNR=7.2
comp=Z,1.7nm,0.7s
**KURK Kurchatov 56.00 328** P **P** **06 42 08.1 -1.5**
**KURBB Kurchatov Arra 56.11 329** P **P** **06 42 10.6 +0.3**
comp=Z,5.7nm,0.7s,baz=12,slow=7.0,SNR=37
comp=Z,5.7nm,0.7s
**HHC Hu-ho-hao-te 56.97 299** *eP* **P** **06 42 16.3 -0.5**
HHC pP sP 06 42 20.6 +2.6
HHC sP pP 06 42 23.8 +6.1
HHC pmax pmax
comp=Z,15nm,0.5s
HHC pmax pmax
comp=Z,80nm,5.9s
**BELG Belogornoye 58.06 351** P **P** **06 42 24.9 +0.9**
comp=Z,12nm,0.6s,baz=323,slow=3.7,SNR=4.3
comp=Z,12nm,0.6s
**CLL Collm 58.32 16** *eP* **P** **06 42 24.0 -2.0**
**MK31 Makanchi Array 59.04 324** P **P** **06 42 30.3 -0.8**
**MKAR Makanchi Array 59.04 324** P **P** **06 42 30.4 -0.7**
**MKAR Makanchi Array 59.04 324** P **P** **06 42 30.6 -0.5**
comp=Z,2.5nm,0.7s,baz=42,slow=6.8,SNR=18
comp=Z,2.5nm,0.7s
**MAKZ Makanchi 59.09 325** P **P** **06 42 30.5 -1.0**
**AKTO Aktyubinsk 59.21 344** P **P** **06 42 32.3 +0.1**
comp=Z,0.9nm,0.4s,baz=11,slow=7.3,SNR=4.2
comp=Z,0.9nm,0.4s
**DPC Dobruska-Polom 59.58 14** P **P** **06 42 35.9 +1.1**
comp=Z,6.2nm,0.8s
**MI28 MI28,Pidlybu 59.70 6** P **P** **06 42 36.0 +0.5**
**AK21 Malin Array Si 59.90 5** P **P** **06 42 36.7 -0.2**
**AK22 Malin Array Si 59.91 5** P **P** **06 42 36.8 -0.2**
**AK20 Malin Array Si 59.93 5** P **P** **06 42 37.0 -0.1**
**AK19 Malin Array Si 59.95 5** P **P** **06 42 37.2 -0.1**
**AK03 Malin Array Si 59.95 5** P **P** **06 42 37.2 -0.1**
**AK04 Malin Array Si 59.95 5** P **P** **06 42 37.2 -0.1**
**AKASG Malin Array Be 59.98 5** P **P** **06 42 37.5 0.0**
comp=Z,10nm,0.7s,baz=358,slow=6.7,SNR=20
comp=Z,10nm,0.7s
**AKBB Malin Array Si 59.98 5** P **P** **06 42 37.5 0.0**
**AKBB Malin Array Si 59.98 5** P **P** **06 42 37.4 0.0**
**KIEV Kiev 59.98 5** P **P** **06 42 37.4 -0.1**
**KIEV Kiev 59.98 5** P **P** **06 42 37.4 -0.1**
comp=Z,54nm,0.8s
**AK01 Malin Array Si 59.98 5** P **P** **06 42 37.4 -0.1**
**AK11 Malin Array Si 60.00 5** P **P** **06 42 37.5 -0.1**
**AK02 Malin Array Si 60.02 5** P **P** **06 42 37.6 -0.1**
**AK12 Malin Array Si 60.03 5** P **P** **06 42 37.8 0.0**
**AK14 Malin Array Si 60.04 5** P **P** **06 42 37.6 -0.3**
**AK08 Malin Array Si 60.04 5** P **P** **06 42 37.8 -0.1**
**AK05 Malin Array Si 60.06 5** P **P** **06 42 37.9 -0.1**
**AK05 Malin Array Si 60.06 5** P **P** **06 42 37.7 -0.3**
**AK13 Malin Array Si 60.06 5** P **P** **06 42 38.0 0.0**
**AK09 Malin Array Si 60.06 5** P **P** **06 42 37.9 -0.1**
**AK10 Malin Array Si 60.08 5** P **P** **06 42 38.1 0.0**
**ABKAR Akbulak array 60.18 342** P **P** **06 42 38.6 -0.2**
**LUBAR Lubar, Ukraine 60.71 6** P **P** **06 42 42.0 -0.5**
**GERES GERESS Array B 60.83 16** P **P** **06 42 43.7 +0.2**
**GERES GERESS Array B 60.83 16** P **P** **06 42 44.5 +1.0**
comp=Z,1.0nm,0.6s,baz=184,slow=6.4,SNR=5.2
comp=Z,1.0nm,0.6s
**LANS Liptovska Anna 61.02 12** *eP* **P** **06 42 46.6 +1.9**
**VYHS Vyhne 61.63 13** *eP* **P** **06 42 50.2 +1.4**
**STNU Starunia 61.78 8** P **P** **06 42 50.5 +0.8**
**KMPD K-Podol'skiy 62.02 7** P **P** **06 42 51.6 +0.3**
**NSLU Nyzhne Selyshc 62.29 8** P **P** **06 42 53.7 +0.5**
**NJ2 Nanjing 62.67 288** *eP* **P** **06 42 55.8 -0.1**
NJ2 pmax pmax
comp=Z,11nm,0.5s
**BUR08 Bucovina Ar. S 62.88 8** P **P** **06 42 59.1 +1.8**
BUR08 IAmb IAmb 06 43 00.1
comp=Z,3.5nm,0.7s
**BURAR Bucovina Array 62.91 8** P **P** **06 42 57.8 +0.4**
BURAR IAmb IAmb 06 43 00.4
comp=Z,3.1nm,0.8s
**BOOM Boomskoye usch 64.42 328** P **P** **06 43 08.1 +0.4**
**KK31 Karatay Array 64.78 332** P **P** **06 43 09.3 -0.4**
KK31 IAmb IAmb 06 43 12.3
comp=Z,3.4nm,0.8s
**KKAR Karatay Array 64.78 332** P **P** **06 43 09.7 0.0**
**KVAR Kislovodsk Arr 66.70 354** P **P** **06 43 24.8 +2.5**
comp=Z,3.8nm,0.5s,baz=350,slow=11,SNR=2.0
**KBZ Khabaz 66.92 354** P **P** **06 43 24.9 +1.4**
comp=Z,2.8nm,0.8s,baz=249,slow=3.9,SNR=6.3
comp=Z,2.8nm,0.8s
**ESDC Sonseca Array 67.28 32** P **P** **06 43 26.3 +0.4**
comp=Z,1.8nm,0.8s,baz=347,slow=7.3,SNR=11
comp=Z,1.8nm,0.8s
**KSH Kashi 67.29 327** P **P** **06 43 29.3 +3.2**
KSH pmax pmax
comp=Z,5.0nm,0.7s
**GAR Garm 68.81 332** P **P** **06 43 36.0 +0.4**
**CHGR Chuyangaron 69.33 332** P **P** **06 43 39.6 +0.7**
**SIMJ Simiganj 69.36 333** P **P** **06 43 39.3 +0.3**
**BRTR Keskin Array B 71.03 2** P **P** **06 43 48.1 -1.2**
**BRTR Keskin Array B 71.03 2** P **P** **06 43 50.3 +1.0**
comp=Z,1.9nm,0.7s,baz=355,slow=3.4,SNR=8.6
comp=Z,1.9nm,0.7s
**PZH PanZhiHua 73.27 301** P **P** **06 44 02.3 -0.5**
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,280nm,5.7s
**SDV Santo Domingo 76.05 102** LR LR 07 20 25.1
comp=Z,30nm,18.9s,baz=247,slow=38
**ASF Jabal al Asfar 78.58 359** P **P** **06 44 34.5 +1.5**
comp=Z,3.7nm,0.4s,baz=274,slow=0.1,SNR=6.4
comp=Z,3.7nm,0.4s
**EIL Elat 81.08 1** P **P** **06 44 45.8 -0.7**
comp=Z,5.6nm,0.8s,baz=336,slow=10,SNR=3.8
comp=Z,5.6nm,0.8s
**CMAR Chiang Mai Arr 81.68 301** P **P** **06 44 49.8 0.0**
comp=Z,2.4nm,0.3s,baz=2.4,slow=6.6,SNR=16
comp=Z,2.4nm,0.3s
**MDP Montagnes des 85.86 87** LR LR 07 23 25.8
comp=Z,31nm,19.9s,baz=113,slow=36
**TORD Torodi Ar. Bea 94.16 33** P **P** **06 45 49.6 -0.7**
comp=Z,0.3nm,0.7s,baz=357,slow=5.7,SNR=2.1
comp=Z,0.3nm,0.7s
**VNDA Vanda 150.29 201** PKPbc **PKiKP** **06 52 20.8 -0.7**
comp=Z,0.8nm,0.9s,baz=93,slow=1.2,SNR=3.7
**QSPA South Pole Qui 159.40 180** PKPab **PKPab** **06 53 06.6 +0.2**
comp=Z,2.8nm,0.9s,baz=141,slow=0.4,SNR=11

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*IDC **16** 06:41:49.7±0.9, 36°.68N×55°.19E, h0km, mb4.0/16, mbtmp4.1/21, ML3.9/5, MS3.6/15, Error ellipse: s-maj=18.8km s-min=12.7km az=12.0*
*TEH **16** 06:41:49.5, 36°.82N×55°.22E, h6km±16km, ML4.5*
*MOS **16** 06:41:49.4±1.9, 36°.86N×55°.30E, h10km, mb4.6/15, Error ellipse: s-maj=5.6km s-min=4.9km az=131.3*
*NEIC **16** 06:41:51.6±1.9, 36°.9N±0°.1×55°.39E±0°.09, h10km±2km, mb4.3/31, Error ellipse: s-maj=20.4km s-min=11.5km az=181.0*
**ISC 16 06:41:50.9**±0.4, **36°.90N**±0°.04×**55°.28E**±0°.03, **h10**km, **n253**, **s27**/252, **mb4.2**/45, **MS3.4**/10, **4C-3D, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h | m | s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IMND** | **Minoodasht** | **0.37** | **16** | Pg | **Pb** | **06** | **41** | **59.2** | **-0.5** |
| **MRVT** | **Maraveh tapeh** | **1.00** | **40** | Pg | **Pn** | **06** | **42** | **11.0** | **-0.1** |
| MRVT | | | | Sg | **Sn** | **06** | **42** | **27.1** | **+1.9** |
| **IGLO** | **Ghaloghah** | **1.23** | **252** | Pg | **Pn** | **06** | **42** | **12.5** | **-1.9** |
| **SBZV** | **Sabzevar** | **1.94** | **105** | Pn | **Pg** | **06** | **42** | **26.6** | **-1.6** |
| **IALA** | **Alasht** | **2.15** | **248** | Pn | **Pb** | **06** | **42** | **28.3** | **-1.9** |
| **ISFR** | **Sfrayin** | **2.19** | **85** | Pn | **Pb** | **06** | **42** | **30.1** | **-0.7** |
| **IFIR** | **Firoozkooh** | **2.40** | **239** | Pn | **Pb** | **06** | **42** | **31.7** | **-2.6** |
| **IPRN** | **Peran** | **2.46** | **255** | Pn | **Pb** | **06** | **42** | **32.3** | **-3.0** |
| **TAPT** | **Tabas- Tapeh t** | **2.53** | **142** | Pn | **Pb** | **06** | **42** | **33.1** | **-3.3** |
| **IEMG** | **Emamgholi** | **2.75** | **78** | Pn | **Pb** | **06** | **42** | **37.9** | **-2.4** |
| **IAKL** | **Akhelmad** | **2.81** | **95** | Pn | **Pb** | **06** | **42** | **38.5** | **-2.9** |
| **IDMV** | **Damavand** | **2.94** | **244** | Pn | **Pb** | **06** | **42** | **39.0** | **-4.6** |
| **MZPU** | **Pul - Mazandar** | **3.02** | **262** | Pn | Pb | 06 | 42 | 39.8 | -5.1 |
| **IPAY** | **Payeh** | **3.02** | **97** | Pn | **Pb** | **06** | **42** | **41.2** | **-3.8** |
| **TNSJ** | **Nastanj** | **3.13** | **159** | Pn | Pb | 06 | 42 | 41.3 | -5.4 |
| **IMOG** | **Moghan** | **3.37** | **102** | Pn | **Pb** | **06** | **42** | **46.5** | **-4.4** |
| **IKRD** | **Kardeh** | **3.40** | **91** | Pn | **Pn** | **06** | **42** | **46.9** | **+2.6** |
| **KLST** | **Kelardasht - M** | **3.41** | **265** | Pn | Pb | 06 | 42 | 45.9 | -5.8 |
| **IVRN** | **Varamin** | **3.45** | **238** | Pn | **Pn** | **06** | **42** | **45.8** | **+0.9** |
| **TBHD** | **Torbat heydari** | **3.53** | **114** | Pn | **Pn** | **06** | **42** | **48.1** | **+2.0** |
| **ISFB** | **Sefidab** | **3.55** | **225** | Pn | **Pn** | **06** | **42** | **46.3** | **+0.1** |
| **IHSB** | **Hasanabad** | **3.55** | **247** | Pn | **Pn** | **06** | **42** | **47.1** | **+0.8** |
| **TKDS** | **Koohdasht(Taba** | **3.61** | **155** | Pn | **Pn** | **06** | **42** | **48.1** | **+1.0** |
| **KRSH** | **Karshahi** | **3.89** | **222** | Pn | **Pn** | **06** | **42** | **51.6** | **+0.7** |

**ANAR Anarak 3.91 199** Pn **Pn** **06 42 51.4 +0.2**
**IMYA Miami 3.92 97** Pn **Pn** **06 42 53.5 +2.2**
**IQOM Qom 3.99 240** Pn **Pn** **06 42 53.2 +0.9**
**TPRV Parvadeh(Tabas 4.03 163** Pn **Pn** **06 42 54.0 +1.2**
**IGZV Ghazvin 4.10 264** Pn **Pn** **06 42 55.3 +1.4**
**LHJ2 Lahijan - Gila 4.18 275** Pn **Pn** **06 42 55.9 +1.2**
**JRKH Jarkhoshk 4.21 102** Pn **Pn** **06 42 57.4 +2.1**
**JIR1 Jirandeh 4.40 269** Pn **Pn** **06 42 58.9 +1.0**
**TBJM Torbat-e-JAM 4.40 110** Pn **Pn** **06 43 00.2 +2.2**
**QAMS Qamsar 4.48 226** Pn **Pn** **06 42 59.4 +0.3**
**IRAZ Razeghan 4.58 253** Pn **Pn** **06 43 02.2 +1.7**
**AFRZ Afriz 4.62 137** Pn **Pn** **06 43 02.8 +1.7**
**IZEF Zefreh 4.67 212** Pn **Pn** **06 43 02.2 +0.5**
**IKLH Kolahrood 4.69 221** Pn **Pn** **06 43 02.5 +0.6**
**ICHK Chekchek 4.70 189** Pn **Pn** **06 43 02.8 +0.7**
**QABG Abgarm-Qazvin 4.75 257** Pn **Pn** **06 43 04.2 +1.3**
**ITEG Tejag 4.91 143** Pn **Pn** **06 43 06.9 +1.9**
**ISAD Sadrabad 5.14 195** Pn **Pn** **06 43 09.0 +0.6**
**IGAR Gharneh 5.22 212** Pn **Pn** **06 43 10.2 +0.9**
**SHRT Shahrakht 5.23 127** Pn **Pn** **06 43 10.3 +1.0**
**IBAF Bafgh 5.30 177** Pn **Pn** **06 43 11.1 +0.8**
**IKOO Kooshah 5.42 144** Pn **Pn** **06 43 13.2 +1.1**
**LKRN Lenkeran, Azer 5.45 291** P **Pn** **06 43 10.5 -1.7**
**IMEH Mehriz 5.52 186** Pn **Pn** **06 43 14.1 +0.6**
**IDAH Dahanechah 5.61 136** Pn **Pn** **06 43 15.2 +0.5**
**IRAM Ramesheh 5.62 206** Pn **Pn** **06 43 15.6 +0.9**
**BSRN Basiran 5.86 146** Pn **Pn** **06 43 18.7 +0.7**
**ZNGN Zangian 6.01 219** Pn **Pn** **06 43 22.0 +1.8**
**JHBN Jahan bin 6.01 221** Pn **Pn** **06 43 22.2 +2.0**
**HSAM Samen 6.07 246** Pn **Pn** **06 43 23.1 +2.2**
**HRA Herat 6.20 112** Pn **Pn** **06 43 22.1 -0.7**
**IHSH Hashtrud 6.42 276** Pn **Pn** **06 43 27.0 +1.2**
**SNQR Sonqor, Kerman 6.54 254** Pn **Pn** **06 43 28.9 +1.5**
**KHGB Koh Gabri 6.58 171** Pn **Pn** **06 43 29.2 +1.2**
**KLNJ Kolanjah 6.63 209** Pn **Pn** **06 43 30.8 +2.0**
**NHDN Nehbandan 6.77 143** Pn **Pn** **06 43 31.9 +1.4**
**CHMN Cheshme madani 7.27 164** Pn **Pn** **06 43 38.8 +1.3**
**NGRK Negar Kerman 7.34 170** Pn **Pn** **06 43 38.9 +0.3**
**IDHR Dehrash 7.55 256** Pn **Pn** **06 43 42.8 +1.5**
**SEKA Sheki 7.62 307** P **Pn** **06 43 42.5 +0.5**
**GANJ Ganja 7.93 301** P **Pn** **06 43 46.1 -0.2**
**ILBA Ilam Banvizeh 8.11 249** Pn **Pn** **06 43 49.9 +1.2**
**KBAM BAM 8.19 160** Pn **Pn** **06 43 51.1 +1.2**
**GNI Garni 8.87 295** Pn **Pn** **06 44 00.3 +1.0**
**GNI Garni 8.87 295** Pn **Pn** **06 44 02.3 +3.0**
2.7nm,0.3s,baz=177,slow=7.0,SNR=6.0
GNI LR LR 06 48 42.1
comp=Z,499nm,19.6s,baz=95,slow=46
9.8nm,0.4s
**GNI Garni 8.87 295** *i* P **Pn** **06 43 59.9 +0.6**
**DSBU Dashti - Bushe 9.16 203** Pn **Pn** **06 44 03.6 +0.4**
**GEVA Gevas 9.80 282** Pn **Pn** **06 44 12.8 +0.7**
**KARS Kars 10.23 295** Pn **Pn** **06 44 18.8 +0.9**
**KARS Kars 10.23 295** P **Pn** **06 44 18.8 +0.9**
**GURO Guroymak-BITLI 10.62 283** Pn **Pn** **06 44 24.1 +0.8**
**SIMJ Simiganj 11.01 77** Pn **Pn** **06 44 27.7 -0.9**
**CHGR Chuyangaron 11.13 77** Pn **Pn** **06 44 28.7 -1.5**
**CHGR Chuyangaron 11.13 77** P **Pn** **06 44 28.7 -1.5**
**KBL Kabul 11.44 98** Pn **Pn** **06 44 32.3 -2.2**
**KBL Kabul 11.44 98** P **Pn** **06 44 32.3 -2.2**
**MARD Mardin 11.59 276** Pn **Pn** **06 44 38.5 +2.1**
**KBZ Khabaz 11.65 310** Pn **Pn** **06 44 38.2 +1.1**
0.9nm,0.3s,baz=177,slow=5.6,SNR=8.5
KBZ Sn **Sn** **06 46 42.0 -5.2**
0.5nm,0.3s,baz=208,slow=17,SNR=2.4
4.0nm,0.6s
**KBZ Khabaz 11.65 310** *eP* **Pn** **06 44 37.9 +0.8**
**KIV Kislovodsk 11.90 310** Pn **Pn** **06 44 41.1 +0.4**
**KIV Kislovodsk 11.90 310** *eP* **Pn** **06 44 40.8 +0.1**
KIV *eS* **Sn** **06 46 54.5 +1.0**
KIV pmax pmax
comp=Z,15nm,1.0s
**KOPT Kop Dagi 12.00 290** Pn **Pn** **06 44 42.1 -0.1**
**GAR Garm 12.06 75** Pn **Pn** **06 44 41.7 -1.2**
**AB31 Akbulak array 12.81 14** ⇓Pn **Pn** **06 44 54.6 +1.6**
comp=Z,3.5nm,0.6s,baz=203,slow=14,SNR=9.3
AB31 ⇓Sn **Sn** **06 47 09.2 -6.4**
comp=Z,9.0nm,0.8s,baz=207,slow=21,SNR=7.5
**AB31 Akbulak array 12.81 14** P **Pn** **06 44 55.6 +2.6**
AB31 SN **Sn** **06 47 09.2 -6.4**
**ABKAR Akbulak array 12.81 14** Pn **Pn** **06 44 51.0 -2.0**
**ABKAR Akbulak array 12.81 14** Pn **Pn** **06 44 51.5 -1.5**
**KK31 Karatay Array 13.21 57** Pn **Pn** **06 44 57.9 -0.7**
**KK31 Karatay Array 13.21 57** ⇑Pn **Pn** **06 44 57.2 -1.4**
comp=Z,2.2nm,0.5s,baz=248,slow=15,SNR=28
KK31 ⇑Sn **Sn** **06 47 18.5 -7.1**
comp=Z,4.7nm,0.8s,baz=170,slow=12,SNR=11
**KK31 Karatay Array 13.21 57** P **Pn** **06 44 57.9 -0.7**
**KKAR Karatay Array 13.21 57** **Pn** **06 44 57.7 -0.9**
**KKAR Karatay Array 13.21 57** Pn **Pn** **06 44 57.6 -1.0**
**KKAR Karatay Array 13.21 57** P **Pn** **06 44 57.6 -1.0**
**DRK Karamyk 13.25 74** Pn **Pn** **06 44 57.5 -1.9**
**DRK Karamyk 13.25 74** P **Pn** **06 44 57.5 -1.9**
**ARPR Arapgir-MALATY 13.54 284** Pn **Pn** **06 45 02.7 -0.5**
**SOC Sochi 13.62 304** *eP* **Pn** **06 45 03.4 -0.7**
SOC *e* 06 47 35.5
SOC MLR MLR
comp=Z,48nm,15.0s
**AKTO Aktyubinsk 13.67 7** Pn **Pn** **06 45 03.5 -1.3**
comp=Z,0.8nm,0.3s,baz=182,slow=13,SNR=12
AKTO Sn **Sn** **06 47 31.1 -5.5**
comp=Z,0.9nm,0.3s,baz=66,slow=20,SNR=3.5
AKTO LR LR 06 51 37.4
comp=Z,240nm,18.8s,baz=262,slow=42
comp=Z,10.0nm,0.6s
**ARSB Arslanbob 14.44 67** Pn **Pn** **06 45 15.7 +0.3**
**ARSB Arslanbob 14.44 67** P **Pn** **06 45 15.7 +0.3**
**NIL Nilore 15.04 97** Pn **Pn** **06 45 22.4 -1.1**
**NIL Nilore 15.04 97** P **Pn** **06 45 22.4 -1.1**
**BNN Bunyan 15.47 283** Pn **P** **06 45 30.7 -3.1**
BNN IAmb IAmb 06 45 48.5
comp=Z,27nm,1.1s
**RAYN Ar Rayn 15.77 215** Pn **Pn** **06 45 30.3 -2.9**
RAYN IAmb IAmb 06 45 41.7
comp=Z,37nm,1.1s
**RAYN Ar Rayn 15.77 215** P **Pn** **06 45 30.3 -2.9**
RAYN pmax pmax
comp=Z,37nm,1.1s
**AAK Ala-Archa 15.84 63** Pn **Pn** **06 45 33.6 -0.5**
**AAK Ala-Archa 15.84 63** Pn **Pn** **06 45 34.1 0.0**
comp=Z,0.3nm,0.3s,baz=235,slow=19,SNR=4.5
AAK LR LR 06 52 31.7
comp=Z,272nm,21.3s,baz=266,slow=40
comp=Z,3.9nm,0.5s
**AAK Ala-Archa 15.84 63** P **Pn** **06 45 33.6 -0.5**
AAK pmax pmax
comp=Z,8.0nm,1.0s
**BTLS Baital 16.32 54** *eP* **Pn** **06 45 41.0 +0.9**
**BELG Belogornoye 16.40 343** Pn **Pn** **06 45 41.2 +0.1**
comp=Z,1.0nm,0.3s,baz=47,slow=1.8,SNR=5.2
BELG Sn **Sn** 06 48 29.1 -14
comp=Z,0.5nm,0.3s,baz=114,slow=18,SNR=2.0
**BELG Belogornoye 16.40 343** *c i* P **Pn** **06 45 40.6 -0.5**
**KSH Kashi 16.47 75** P **Pn** **06 45 38.3 -4.0**
KSH pP P 06 45 42.3 -2.7
KSH sP pP 06 45 44.6 -3.6
KSH pmax pmax
comp=Z,4.0nm,0.8s
**NRN Naryn 16.69 68** **Pn** **06 45 43.1 -2.1**
**NRN Naryn 16.69 68** P **Pn** **06 45 43.1 -2.1**
NRN pmax pmax
comp=Z,10.0nm,0.9s
**MMAI Mount Meron Ar 16.74 262** LR LR 06 53 02.0
comp=Z,194nm,18.9s,baz=18,slow=40
**BOOM Boomskoye usch 16.84 64** Pn **Pn** **06 45 46.4 -0.5**
**BOOM Boomskoye usch 16.84 64** P **Pn** **06 45 46.4 -0.5**
BOOM pmax pmax
comp=Z,10.0nm,1.1s
**BR131 Keskin Array S 17.21 286** P **P** **06 45 53.6 +0.5**
**BR131 Keskin Array S 17.21 286** P **P** **06 45 53.6 +0.5**
BR131 pmax pmax
comp=Z,7.0nm,1.2s
**BRTR Keskin Array B 17.21 286** Pn **P** **06 45 51.5 -1.6**
**BRTR Keskin Array B 17.21 286** P **P** **06 45 56.9 +3.7**
comp=Z,2.9nm,0.9s,baz=96,slow=10,SNR=13
BRTR LR LR 06 53 47.8
comp=Z,88nm,18.3s,baz=84,slow=42
**BRTR Keskin Array B 17.21 286** P **P** **06 45 51.5 -1.6**
**BR105 Keskin Array S 17.23 286** P **P** **06 45 58.1 +4.8**
comp=Z,5.2nm,1.1s
**BR106 Keskin Array S 17.23 286** P **P** **06 45 58.3 +5.0**
comp=Z,4.5nm,1.2s,comp=Z,45nm
**VRH Novokhopyorsk 17.26 330** *eP* **Pn** **06 45 50.6 -1.3**

VRH pmax pmax
comp=Z,10.0nm,1.0s
**SIM Simferopol' 17.86 303** *e*P **P 06 46 03.3 +3.1**
SIM pmax pmax
comp=Z,38nm,1.1s
**ANTO Ankara 17.87 286** P **P 06 46 01.4 +1.1**
ANTO IAmb IAmb 06 46 07.5
comp=Z,14nm,0.8s
**ANTO Ankara 17.87 286** P **P 06 46 01.4 +1.1**
ANTO pmax pmax
comp=Z,14nm,0.8s
**CSS Mathiatis 17.88 270** P **P 06 46 00.2 -0.2**
**VORD Divnogorie 18.11 326** *e*P **Pn 06 45 57.9 -4.6**
VORD pmax pmax
comp=Z,10.0nm,1.0s
**VSR Storozhevoye 18.35 326** *e*P **Pn 06 46 03.1 -2.3**
VSR pmax pmax
comp=Z,20nm,1.0s
**EIL Elat 18.44 253** LR LR 06 54 31.6
comp=Z,482nm,18.2s,baz=68,slow=42
**ARXS Arharly 18.59 60** *e*P **Pn 06 46 10.1 +1.6**
**VORR Voronezh 18.66 327** *e*P **P 06 46 06.9 -1.9**
VORR pmax pmax
comp=Z,20nm,0.9s
**KPKS Kokpek 19.02 63** *e*P **Pn 06 46 16.1 +2.4**
**MDUB Mudurnu 19.12 288** P **Pn 06 46 15.0 +0.1**
**UZB Uzynbulak 19.19 64** *e*P **Pn 06 46 18.8 +2.9**
**BRVK Borovoye 19.27 28** **P 06 46 15.3 -0.2**
**BRVK Borovoye 19.27 28** *e*P **P 06 46 15.5 0.0**
BRVK pmax pmax
comp=Z,4.0nm,0.8s
**BVAR Borovoye Array 19.28 28** P **Pn 06 46 17.5 +0.9**
comp=Z,0.1nm,0.3s,baz=207,slow=9.9,SNR=4.3
comp=Z,5.7nm,0.7s
**LPSR Galich'ya Gora 19.45 329** *e*P **P 06 46 17.0 -0.5**
LPSR pmax pmax
comp=Z,30nm,0.8s
**ARU Arti 19.66 5** P **P 06 46 19.5 -0.2**
ARU IAmb IAmb 06 46 47.7
comp=Z,9.8nm,0.8s
**ARU Arti 19.66 5** LR LR 06 55 17.4
comp=Z,146nm,19.5s,baz=189,slow=41
**ARU Arti 19.66 5***c* *i*P **Pn 06 46 20.8 -0.4**
ARU S **Sn 06 50 03.0 +1.2**
ARU pmax pmax
comp=Z,6.0nm,1.3s
ARU MLR MLR
comp=Z,126nm,15.0s
**YLV Yalova 20.51 288** P Pn 06 46 34.1 +2.7
comp=Z,21nm,1.1s
**MANT Manisa 21.18 282** P **P 06 46 37.0 +0.3**
MANT IAmb IAmb 06 47 05.2
comp=Z,15nm,1.0s
**KURBB Kurchatov Arra 21.57 43** P **P 06 46 42.0 +1.6**
comp=Z,1.2nm,0.7s,baz=246,slow=10,SNR=6.0
KURBB LR LR 06 55 58.6
comp=Z,234nm,19.1s,baz=160,slow=39
comp=Z,1.2nm,0.7s
**KURK Kurchatov 21.66 43** P **P 06 46 41.6 +0.1**
KURK IAmb IAmb 06 46 57.6
comp=Z,7.5nm,0.9s
**KURK Kurchatov 21.66 43** *e*P **P 06 46 43.4 +1.9**
KURK pmax pmax
comp=Z,2.0nm,0.8s
**KIRV Kirov 22.04 352** P **P 06 46 49.5 +4.2**
comp=Z,23nm,0.6s,baz=184,slow=8.2,SNR=6.8
comp=Z,23nm,0.6s
**MAKZ Makanchi 22.12 55** P **P 06 46 46.3 -0.2**
**MAKZ Makanchi 22.12 55** P **P 06 46 46.3 -0.2**
MAKZ pmax pmax
comp=Z,15nm,0.6s
**OBN Obninsk 22.25 331** P **P 06 46 49.0 +1.3**
**OBN Obninsk 22.25 331** *e*P **P 06 46 49.5 +1.8**
OBN *e*PPP PPP 06 47 18.5
OBN pmax pmax
comp=Z,26nm,1.1s
**MK31 Makanchi Array 22.32 55** P **P 06 46 49.4 +0.8**
MK31 IAmb IAmb 06 46 59.4
comp=Z,8.2nm,1.1s
**MK31 Makanchi Array 22.32 55***d* *i*P **P 06 46 51.1 +2.4**
**MKAR Makanchi Array 22.32 55** P **P 06 46 49.0 +0.3**
**MKAR Makanchi Array 22.32 55** P **P 06 46 51.4 +2.7**
comp=Z,3.0nm,0.7s,baz=248,slow=11,SNR=19
MKAR LR LR 06 57 00.4
comp=Z,173nm,18.9s,baz=256,slow=40
comp=Z,3.0nm,0.7s
**MKAR Makanchi Array 22.32 55** P **P 06 46 49.0 +0.3**
**MOS Moscow 22.32 333** *e*P **P 06 46 50.1 +1.6**
MOS pmax pmax
comp=Z,34nm,1.0s
**SORM Soroca 22.68 308** P **P 06 46 54.9 +2.5**
comp=Z,19nm,1.1s,comp=Z,1µm
**ALN Alexandroupoli 23.05 289** P **P 06 46 56.8 +0.5**
ALN IAmb IAmb 06 47 13.1
comp=Z,8.9nm,1.1s
**ALN Alexandroupoli 23.05 289** P **P 06 46 56.8 +0.5**
ALN pmax pmax
comp=Z,9.0nm,1.1s
**AK09 Malin Array Si 23.10 315** P **P 06 46 59.1 +2.4**
**AK10 Malin Array Si 23.11 315** P **P 06 47 00.1 +3.3**
**AK07 Malin Array Si 23.11 314** P **P 06 46 59.0 +2.1**
**AK05 Malin Array Si 23.14 315** P **P 06 46 58.6 +1.4**
AK05 IAmb IAmb 06 47 02.1
comp=Z,22nm,1.1s
**AK02 Malin Array Si 23.16 315** P **P 06 47 00.5 +3.1**
**AKASG Malin Array Be 23.17 315** P **P 06 46 58.7 +1.3**
comp=Z,3.2nm,0.5s,baz=122,slow=9.1,SNR=15
AKASG LR LR 06 58 41.9
comp=Z,68nm,19.7s,baz=110,slow=44
comp=Z,3.2nm,0.5s
**AKASG Malin Array Be 23.17 315** *i*P **P 06 47 00.7 +3.2**
AKASG pmax pmax
comp=Z,3.0nm,0.5s
**AKBB Malin Array Si 23.17 315** P **P 06 46 56.9 -0.5**
**AKBB Malin Array Si 23.17 315** *e*P **P 06 46 59.0 +1.5**
AKBB pmax pmax
comp=Z,18nm,1.0s
**AKBB Malin Array Si 23.17 315** P **P 06 46 59.9 +2.4**
**AK01 Malin Array Si 23.17 315** P **P 06 47 00.1 +2.6**
**PLOR3 Plostina Array 23.17 302** P **P 06 47 00.1 +2.5**
comp=Z,12nm,1.6s
**KIEV Kiev 23.18 315** P **P 06 46 56.7 -0.8**
**KIEV Kiev 23.18 315** P **P 06 46 56.7 -0.8**
KIEV pmax pmax
comp=Z,26nm,1.0s
**KIEV Kiev 23.18 315** P **P 06 46 59.9 +2.4**
comp=Z,90nm,0.8s,comp=Z,1µm
**AK12 Malin Array Si 23.18 315** P **P 06 47 00.8 +3.2**
**AK11 Malin Array Si 23.19 315** P **P 06 47 00.9 +3.2**
**AK04 Malin Array Si 23.21 315** P **P 06 47 00.5 +2.6**
**AK22 Malin Array Si 23.28 315** P **P 06 47 00.8 +2.2**
**AK19 Malin Array Si 23.30 315** P **P 06 47 01.3 +2.5**
**AK20 Malin Array Si 23.31 315** P **P 06 47 01.0 +2.1**
**TESR Tescani 23.32 303** P **P 06 47 03.9 +4.8**
comp=Z,11nm,1.1s
**RDO Rodhopi 23.43 290** P **P 06 47 02.1 +1.9**
RDO IAmb IAmb 06 47 12.5
comp=Z,8.2nm,1.0s
**MLR Muntele Rosu 23.58 301** P **P 06 47 03.4 +1.6**
MLR IAmb IAmb 06 47 11.4
comp=Z,18nm,1.1s
**MLR Muntele Rosu 23.58 301** P **P 06 47 06.2 +4.3**
comp=Z,22nm,1.2s,baz=153,slow=2.1,SNR=10
**MLR Muntele Rosu 23.58 301** P **P 06 47 03.4 +1.6**
MLR pmax pmax
comp=Z,18nm,1.1s
**MLR Muntele Rosu 23.58 301** P **P 06 47 06.1 +4.3**
comp=Z,13nm,0.9s,comp=Z,362nm
**LUBAR Lubar, Ukraine 23.70 312** P **P 06 47 04.4 +1.7**
**MI30 MI30,Zelenitsa 23.78 314** P **P 06 47 06.4 +2.9**
**MI29 MI29, Kamyanyy 23.84 313** P **P 06 47 08.0 +3.9**
**KMPD K-Podol'skiy 24.02 308** P **sP 06 47 09.5 -0.9**
KMPD P **P 06 47 09.3 +3.5**
**VOIR 24.19 300** P **P 06 47 11.6 +4.0**
comp=Z,20nm,1.0s
**BURAR Bucovina Array 24.54 305** P **P 06 47 12.8 +2.0**
BURAR IAmb IAmb 06 47 23.4
comp=Z,3.5nm,0.7s
**BUR08 Bucovina Ar. S 24.56 305** P **P 06 47 12.3 +1.3**
BUR08 IAmb IAmb 06 47 18.2
comp=Z,4.4nm,0.9s
**STNU Starunia 25.30 308** P **P 06 47 22.3 +4.8**
**RNPP5 Staryi Chortor 25.31 314** P **P 06 47 20.7 +3.2**
**RNPP8 Varash 25.37 314** P **P 06 47 21.2 +3.2**
**RNPP9 Sopachiv 25.38 314** P **P 06 47 22.1 +4.0**

**WMQ Urumqi 25.54 64** *e*P **P 06 47 20.0 +0.2**
WMQ sP sP 06 47 27.9 +3.4
WMQ pmax pmax
comp=Z,16nm,0.7s
WMQ LR LR
comp=N,350nm,15.1s
WMQ LR LR
comp=E,240nm,15.1s
WMQ LR LR
comp=Z,140nm,21.7s
**MNK Minsk 25.75 322** *i*P **P 06 47 20.7 -0.8**
comp=E,15nm,0.9s,baz=122
MNK *i*P **P 06 47 20.7 -0.8**
comp=N,14nm,0.7s,baz=122
MNK *i*P **P 06 47 20.7 -0.8**
comp=Z,10.0nm,0.6s,baz=122
MNK *i*PP **PnPn 06 47 57.0 -0.9**
baz=122
MNK *i*PPP PPP 06 48 05.0
baz=122
MNK *i*S **S 06 51 50.4 +0.2**
baz=122
MNK *i*SS **SnSn 06 52 46.4 +1.4**
baz=122
MNK *i*SSS SSS 06 53 00.2
baz=122
MNK *i*LQ LQ 06 55 27.1
baz=122
MNK *i*LR LR 06 57 24.5
baz=122
MNK *i*LRM MLR 06 58 16.9
comp=N,71nm,20.1s,baz=122
MNK *i*LRM MLR 06 58 42.8
comp=E,86nm,19.5s,baz=122
MNK *i*LRM MLR 06 59 09.6
comp=Z,46nm,15.9s,baz=122
**MNK Minsk 25.75 322** *i*P **P 06 47 20.6 -0.8**
MNK *i*PPP PPP 06 48 05.0
MNK *i*
MNK *i*S **S 06 51 50.4 +0.2**
MNK *i*SSS SSS 06 53 00.1
MNK pmax pmax
comp=E,15nm,0.9s
MNK pmax pmax
comp=N,14nm,0.7s
MNK pmax pmax
comp=Z,10.0nm,0.6s
MNK MLR MLR
comp=N,71nm,20.0s
MNK MLR MLR
comp=E,86nm,20.0s
MNK MLR MLR
comp=Z,46nm,16.0s
**MORS Morshin 25.80 308** P **P 06 47 26.2 +4.2**
**LVV L'vov 25.92 310** *e*P **P 06 47 28.1 +5.0**
**BRIU Brid 26.15 306** P **P 06 47 30.9 +5.7**
**BERU Beregovo 26.37 306** P **P 06 47 32.7 +5.5**
**ZALV Zalesovo Beam 26.56 41** P **P 06 47 32.5 +3.6**
comp=Z,0.6nm,0.3s,baz=250,slow=12,SNR=2.3
ZALV LR LR 06 59 07.7
comp=Z,102nm,19.6s,baz=248,slow=39
comp=Z,0.6nm,0.3s
**HOLU Holmets 26.61 306** P **P 06 47 34.6 +5.3**
**CRVS Cervenica-Dubn 27.29 307** *e*P **P 06 47 40.7 +5.2**
CRVS pmax pmax
comp=Z,21nm,1.3s
**CRVS Cervenica-Dubn 27.29 307** *e*P **P 06 47 40.7 +5.2**
**PUK Puka 27.66 292** P **P 06 47 40.6 +1.6**
PUK IAmb IAmb 06 48 04.1
comp=Z,4.5nm,1.1s
**KECS Kecovo 27.83 306** *e*P **P 06 47 41.4 +1.1**
**KECS Kecovo 27.83 306** *e*P **P 06 47 41.4 +1.1**
**OJC Ojcow 28.66 309** P **P 06 47 49.5 +1.8**
OJC IAmb IAmb 06 47 52.9
comp=Z,6.9nm,0.9s
**OJC Ojcow 28.66 309** P **P 06 47 49.5 +1.8**
OJC pmax pmax
comp=Z,7.0nm,0.9s
**OJC Ojcow 28.66 309** P **P** 06 47 52.3 +4.6
**VRAC Vranov 30.51 306** LR LR 07 02 39.1
comp=Z,28nm,21.4s,baz=95,slow=41
**FINES FINESS Array B 30.62 333** P **P 06 48 07.2 +2.2**
comp=Z,2.0nm,0.8s,baz=142,slow=7.2,SNR=6.6
comp=Z,2.0nm,0.8s
**FINES FINESS Array B 30.62 333** *i*P P 06 48 09.6 +4.7
FINES pmax pmax
comp=Z,2.0nm,0.8s
**DPC Dobruska-Polom 30.86 308** P P 06 48 12.1 +4.8
DPC pP sP 06 48 14.5 +2.6
**FURI Furi 31.69 213** LR LR 07 02 00.3
comp=Z,94nm,18.6s,baz=30,slow=38
**INTR Introdacqua 32.12 292** P **P 06 48 20.6 +2.1**
INTR IAmb IAmb 06 48 43.3
comp=Z,8.0nm,1.1s
**GERES GERESS Array B 32.33 305** **P 06 48 22.1 +1.9**
**GERES GERESS Array B 32.33 305** P **P 06 48 21.7 +1.4**
comp=Z,0.4nm,0.4s,baz=134,slow=8.5,SNR=4.1
comp=Z,0.4nm,0.4s
**BRG Berggiesshubel 32.45 309** *e*P P 06 48 26.9 +5.8
BRG Amp 06 48 28.6
comp=Z,4.3nm,0.8s
**CLL Collm 33.10 309** *i*P P 06 48 31.7 +4.9
**CLL Collm 33.10 309** *i*P P 06 48 31.7 +4.9
**HFS Hagfors 35.15 325** P **P 06 48 46.6 +2.1**
comp=Z,4.1nm,0.7s,baz=119,slow=9.0,SNR=7.6
comp=Z,4.1nm,0.7s
**NC405 NORSAR Array S 36.42 326** P **P 06 48 57.0 +1.6**
NC405 IAmb IAmb 06 49 01.8
comp=Z,8.6nm,1.0s
**SENIN Lac Senin/Sane 36.59 300** P **P 06 48 59.1 +1.8**
**NB2 NORSAR Subarra 36.62 325** P **P 06 49 00.8 +3.6**
comp=Z,6.4nm,1.1s,baz=114,slow=8.6
**NOA NORSAR Array B 36.62 325** P **P 06 48 59.8 +2.6**
comp=Z,1.8nm,0.8s,baz=113,slow=8.2,SNR=4.1
comp=Z,1.8nm,0.8s
**ULN Ulaanbaatar 39.11 57** *e*P **P 06 49 20.7 +2.2**
ULN pmax pmax
comp=Z,1.0nm,0.7s
**PZH PanZhiHua 40.52 91** P **P 06 49 30.1 -0.4**
PZH pmax pmax
comp=Z,20nm,1.6s
PZH pmax pmax
comp=Z,210nm,4.5s
**CMAR Chiang Mai Arr 42.39 104** P **P 06 49 47.0 +1.2**
comp=Z,2.7nm,0.3s,baz=300,slow=8.4,SNR=7.9
comp=Z,2.7nm,0.3s
**CMAR Chiang Mai Arr 42.39 104** *i*P **P 06 49 46.7 +1.0**
CMAR pmax pmax
comp=Z,3.0nm,0.3s
**EKA Eskdalemuir Ar 43.08 315** P **P 06 49 50.9 +0.1**
comp=Z,1.0nm,0.6s,baz=96,slow=7.2,SNR=2.3
comp=Z,1.0nm,0.6s
**HHC Hu-ho-hao-te 43.36 67** *e*P **P 06 49 52.9 -0.6**
HHC pP sP 06 49 57.1 -1.7
HHC sP pP 06 49 59.5 +2.2
HHC pmax pmax
comp=Z,9.0nm,0.6s
HHC pmax pmax
comp=Z,110nm,4.5s
**ESDC Sonseca Array 45.85 292** P **P 06 50 15.4 +2.1**
**ESDC Sonseca Array 45.85 292** P **P 06 50 14.0 +0.7**
comp=Z,1.7nm,0.7s,baz=61,slow=8.2,SNR=6.6
ESDC LR LR 07 12 13.8
comp=Z,39nm,19.6s,baz=352,slow=40
comp=Z,1.7nm,0.7s
**TORD Torodi Ar. Bea 53.22 258** P **P 06 51 08.3 -1.5**
comp=Z,0.5nm,0.5s,baz=52,slow=9.3,SNR=2.6
comp=Z,0.5nm,0.5s
**KSRS Korea Array 56.48 66** P **P 06 51 33.3 +0.3**
comp=Z,1.9nm,0.8s,baz=293,slow=6.4,SNR=4.3
comp=Z,1.9nm,0.8s
**DBIC Dimbokro 62.26 257** LR LR 07 22 23.1
comp=Z,96nm,18.9s,baz=7.5,slow=39
**BILL Bilibino 63.52 23** *e*P **P 06 52 23.6 +2.7**
BILL *e* 06 53 01.2
BILL *e*PPP PPP 06 56 12.8
BILL pmax pmax
comp=Z,2.0nm,1.1s
**WRA Warramunga Arr 93.42 112** P **P 06 55 05.9 -0.9**
comp=Z,0.3nm,0.7s,baz=320,slow=4.3,SNR=5.0
comp=Z,0.3nm,0.7s
**WRA Warramunga Arr 93.42 112** *i*P **P 06 55 07.8 +1.0**
**ASAR Alice Springs 95.38 115** P **P 06 55 15.1 -0.6**
comp=Z,0.8nm,0.9s,baz=310,slow=7.2,SNR=2.3
comp=Z,0.8nm,0.9s

*AEIC* **16** *06:48:36.1±3.9,69°48N±0°06×144°4W±0°1,h19km±7km, Error ellipse: s-maj=8.3km s-min=5.8km az=189.0*
**NEIC 16 06:48:39.0±2.5,69°58N±0°05×144°36W±0°10,h10km±2km, ML2.6**/82,**ML2.4**(AEIC)**, Error ellipse: s-maj=9.4km s-min=5.2km az=16.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **79** | Pg | Pg | 06 48 42.2 | -1.6 |
| C27K | | | | | Sg | 06 48 46.3 | -0.7 |
| **C26K** | **Camden Bay** | **0.39** | **330** | | Pg | 06 48 45.9 | -0.7 |
| C26K | | | | | Sb | 06 48 53.2 | -0.8 |
| **D25K** | **Kavik River** | **0.76** | **251** | | Pg | 06 48 50.6 | -3.1 |
| **D27M** | **Malcolm River** | **1.25** | **104** | | Pn | 06 49 00.3 | -2.3 |
| **C24K** | **Franklin Bluff** | **1.52** | **277** | | Pn | 06 49 05.6 | -0.6 |
| C24K | | | | IAML | | 06 49 28.1 | |
| | comp=E,88nm,0.6s | | | | | | |
| C24K | | | | IAML | | 06 49 29.6 | |
| | comp=N,101nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **257** | | Pn | 06 49 07.8 | -0.1 |
| **E27K** | **Coleen River** | **1.72** | **143** | | Pn | 06 49 08.5 | -0.6 |
| **F26K** | **Sheenjek River** | **1.90** | **178** | | Pn | 06 49 11.0 | -0.5 |
| F26K | | | | IAML | | 06 49 38.1 | |
| | comp=N,36nm,0.5s | | | | | | |
| F26K | | | | IAML | | 06 49 40.8 | |
| | comp=E,66nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.99** | **117** | | Pn | 06 49 12.7 | 0.0 |
| **D28M** | **Stokes Point** | **2.00** | **95** | | Pb | 06 49 14.9 | -0.5 |
| **F25K** | **Christian Rive** | **2.05** | **194** | | Pn | 06 49 13.6 | 0.0 |
| F25K | | | | IAML | | 06 49 44.1 | |
| | comp=E,38nm,0.5s | | | | | | |
| F25K | | | | IAML | | 06 49 48.0 | |
| | comp=N,38nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.10** | **246** | | Pb | 06 49 16.6 | -0.5 |
| TOLK | | | | IAML | | 06 49 49.6 | |
| | comp=N,40nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **227** | | Pn | 06 49 15.3 | +0.6 |
| E24K | | | | IAML | | 06 49 44.6 | |
| | comp=N,29nm,0.7s | | | | | | |
| E24K | | | | IAML | | 06 49 49.4 | |
| | comp=E,33nm,0.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.17** | **182** | | Pn | 06 49 16.1 | +0.9 |
| **C23K** | **Itkillik River** | **2.19** | **280** | | Pn | 06 49 17.0 | +1.5 |
| C23K | | | | IAML | | 06 52 52.0 | |
| | comp=E,44nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.33** | **258** | | Pb | 06 49 19.3 | -1.8 |
| D23K | | | | IAML | | 06 50 06.9 | |
| | comp=E,25nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.45** | **214** | | Pn | 06 49 18.4 | -0.6 |
| **E23K** | **Chandalar** | **2.45** | **234** | | Pb | 06 49 21.7 | -1.4 |
| E23K | | | | IAML | | 06 49 57.4 | |
| | comp=E,21nm,0.5s | | | | | | |
| E23K | | | | IAML | | 06 49 58.3 | |
| | comp=N,38nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.57** | **138** | Pn | Pn | 06 49 20.3 | -0.4 |
| F28M | | | | IAML | | 06 50 03.5 | |
| | comp=N,19nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.62** | **114** | | Pb | 06 49 24.3 | -1.7 |
| E29M | | | | IAML | | 06 50 01.6 | |
| | comp=N,20nm,0.6s | | | | | | |
| E29M | | | | IAML | | 06 50 07.2 | |
| | comp=E,19nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **2.96** | **159** | Pn | Pn | 06 49 26.9 | +0.8 |
| **FYU** | **Fort Yukon** | **3.05** | **187** | Pn | Pn | 06 49 24.0 | -3.2 |
| FYU | | | | IAML | | 06 50 23.6 | |
| | comp=N,22nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.12** | **203** | Pn | Pn | 06 49 25.1 | -3.1 |
| G24K | | | | IAML | | 06 50 21.6 | |
| | comp=E,16nm,0.6s | | | | | | |
| G24K | | | | IAML | | 06 50 31.3 | |
| | comp=N,17nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **4.00** | **201** | Pn | Pn | 06 49 38.7 | -1.5 |
| H24K | | | | IAML | | 06 50 30.5 | |
| | comp=N,6.1nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.07** | **143** | | Pn | 06 49 42.5 | +1.3 |
| H29M | | | | IAML | | 06 50 37.1 | |
| | comp=N,6.6nm,0.9s | | | | | | |
| H29M | | | | IAML | | 06 50 50.8 | |
| | comp=E,9.5nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **4.12** | **239** | Pn | Pn | 06 49 41.4 | -0.6 |
| F21K | | | | IAML | | 06 50 47.9 | |
| | comp=E,8.1nm,0.7s | | | | | | |
| F21K | | | | IAML | | 06 50 49.0 | |
| | comp=N,8.4nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.26** | **210** | | Pn | 06 49 42.9 | -1.0 |
| **EPYK** | **Eagle Plains** | **4.32** | **135** | Pn | Pn | 06 49 45.6 | +0.9 |
| **I26K** | **Coal Creek Min** | **4.32** | **173** | | Pn | 06 49 45.3 | +0.6 |
| I26K | | | | IAML | | 06 51 07.1 | |
| | comp=E,7.4nm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **4.49** | **156** | | Pn | 06 49 47.7 | +0.6 |
| I28M | | | | IAML | | 06 51 38.5 | |
| | comp=N,4.2nm,0.5s | | | | | | |
| **G31M** | **Satah River** | **4.60** | **121** | Pn | Pn | 06 49 48.8 | +0.3 |
| G31M | | | | IAML | | 06 52 36.8 | |
| | comp=N,6.5nm,1.0s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.84** | **148** | Pn | Pn | 06 49 52.0 | +0.3 |
| **I23K** | **Minto, Yukon-K** | **4.86** | **206** | | Pn | 06 49 51.0 | -1.0 |
| I23K | | | | IAML | | 06 52 56.3 | |
| | comp=N,3.5nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.88** | **200** | | Pn | 06 49 51.8 | -0.6 |
| MDM | | | | IAML | | 06 51 12.2 | |
| | comp=E,4.8nm,0.7s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92** | **244** | Pn | Pn | 06 49 53.7 | +0.8 |
| F20K | | | | IAML | | 06 50 52.5 | |
| | comp=N,3.5nm,0.7s | | | | | | |
| F20K | | | | IAML | | 06 51 26.2 | |
| | comp=E,3.4nm,0.8s | | | | | | |
| **IL31** | | **4.93** | **193** | | Pn | 06 49 54.1 | +1.1 |
| **ILAR** | **Eielson Array** | **4.93** | **193** | Pn | Pn | 06 49 53.7 | +0.6 |
| **EGAK** | **Eagle** | **4.99** | **164** | Pn | Pn | 06 49 52.0 | -1.8 |
| EGAK | | | | IAML | | 06 50 54.4 | |
| | comp=E,4.4nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 06 50 54.8 | |
| | comp=E,2.9nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **5.01** | **185** | | Pn | 06 49 55.2 | +1.0 |
| J25K | | | | IAML | | 06 50 56.4 | |
| | comp=N,3.5nm,0.8s | | | | | | |
| J25K | | | | IAML | | 06 51 32.1 | |
| | comp=E,3.7nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.06** | **264** | Pn | Pn | 06 49 54.0 | -0.8 |
| D19K | | | | IAML | | 06 51 44.5 | |
| | comp=E,4.4nm,1.2s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.07** | **229** | Pn | Pn | 06 49 52.0 | -2.9 |
| **J26L** | **Joseph Creek** | **5.12** | **176** | Pn | Pn | 06 49 53.5 | -2.2 |
| J26L | | | | IAML | | 06 52 47.8 | |
| | comp=N,3.2nm,0.6s | | | | | | |
| J26L | | | | IAML | | 06 53 13.6 | |
| | comp=E,3.0nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.14** | **197** | | Pn | 06 49 55.2 | -0.6 |
| CCB | | | | IAML | | 06 51 46.4 | |
| | comp=N,2.6nm,0.3s | | | | | | |
| **E19K** | **Redstone River** | **5.19** | **252** | Pn | Pn | 06 49 57.3 | +0.7 |
| **I30M** | **Mount Dempster** | **5.35** | **141** | | Pn | 06 49 58.9 | 0.0 |
| **C19K** | **Lookout Ridge** | **5.41** | **272** | | Pn | 06 49 59.8 | +0.1 |
| **DAWY** | **Dawson** | **5.88** | **158** | Pn | Pn | 06 50 06.8 | +0.7 |
| **G19K** | **Purcell Mounta** | **5.92** | **240** | Pn | Pn | 06 50 05.9 | -0.6 |
| **J30M** | **Hart River** | **5.92** | **144** | Pn | Pn | 06 50 06.8 | 0.0 |
| **E18K** | **Tukpahlearik C** | **6.35** | **258** | | Pn | 06 50 11.4 | -1.0 |
| **DHY** | **Denali Highway** | **6.65** | **192** | Pn | Pn | 06 50 18.4 | +1.6 |
| **J20K** | **Nowinta River** | **6.65** | **220** | Pn | Pn | 06 50 16.1 | -0.5 |
| **PAX** | **Paxson** | **6.66** | **184** | Pn | Pn | 06 50 17.7 | +0.8 |
| **H18K** | **Honhosa River** | **6.99** | **237** | Pn | Pn | 06 50 18.4 | -2.9 |
| **M24K** | **Tolsona, Glenn** | **7.55** | **187** | Pn | Pn | 06 50 23.4 | -5.5 |
| **H17K** | **Granite Mounta** | **7.60** | **240** | Pn | Pn | 06 50 25.5 | -4.2 |

*NDI* **16** *06:50:04.7±2.3, 15°43N×95°81E,h10km,ML4.1, mb4.3(NEIC)*
*IDC* **16** *06:50:10.3±0.9, 16°11N×96°40E,h0km,mb4.0/13, mbtmp4.0/14,ML4.4/1,MS3.8/27,Error ellipse: s-maj=18.2km s-min=17.0km az=44.0*
*BJI* **16** *06:50:11.0±0.0, 15°76N×96°49E,h24km,mb4.4/27, mB5.0/6,Ms4.5/18,Ms7 4.2/19*
*NEIC* **16** *06:50:11.9±1.3, 16°10N±0°07×96°51E±0°09,h10km±1km, mb4.3/18, Error ellipse: s-maj=16.1km s-min=10.2km az=246.0*
**ISC 16 06:50:11.5±0.7,16°02N±0°07×96°39E±0°06,h10km,n78,** σ1§**93**/59,**mb4.2**/29,**MS3.9**/32,**2D, Near south coast of Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CM31** | **Chiang Mai Arr** | **3.44** | **45** | | | **Pn** | **06 51 03.8** | **-1.5** |
| **CMAR** | **Chiang Mai Arr** | **3.44** | **45** | | | **Pn** | **06 51 04.1** | **-1.2** |
| **CMAR** | **Chiang Mai Arr** | **3.44** | **45** | Pn | | **Pn** | **06 51 03.8** | **-1.5** |
| | 8.9nm,0.3s,baz=234,slow=16,SNR=25 | | | | | | | |
| CMAR | | | | Pg | | **Pb** | **06 51 13.1** | **+0.4** |
| | 22nm,0.3s,baz=234,slow=18,SNR=25 | | | | | | | |
| CMAR | | | | Lg | | Lg | 06 51 59.0 | |
| | 48nm,0.3s,baz=227,slow=32,SNR=5.1 | | | | | | | |
| | 14nm,0.4s | | | | | | | |
| **PHRA** | **Phrae** | **4.42** | **56** | | | **Pn** | **06 51 17.2** | **-1.5** |
| **CRAI** | **Chiangrai** | **5.65** | **42** | | | **Pn** | **06 51 34.1** | **-1.5** |
| **SRIT** | **Nakonsritamara** | **8.02** | **157** | Pn | | Pn | 06 52 06.3 | -1.8 |
| **IMP** | **Imphal** | **9.06** | **346** | *eP* | | **Pn** | **06 52 20.9** | **-1.6** |
| IMP | | | | *ex* | | x | 06 54 10.4 | |
| IMP | | | | IAML | | | 06 54 12.6 | |
| | comp=E,31nm,0.9s | | | | | | | |
| **TNCH** | **TengChong** | **9.19** | **12** | *eP* | | **Pn** | **06 52 28.6** | **+4.3** |
| TNCH | | | | S | | **Sn** | **06 54 09.1** | **+1.2** |
| TNCH | | | | pmax | pmax | | | |
| | comp=E,96nm,3.4s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=E,3μm,5.4s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=E,3μm,6.0s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=E,2μm,10.2s | | | | | | | |
| **KOHI** | **KOHIMA** | **9.89** | **348** | *eP* | | **Pn** | **06 52 32.8** | **-1.1** |
| KOHI | | | | *eS* | | **Sn** | **06 54 21.2** | **-3.9** |
| KOHI | | | | IAML | | | 06 54 31.1 | |
| | comp=N,72nm,1.1s | | | | | | | |
| KOHI | | | | IAML | | | 06 54 42.9 | |
| | comp=E,78nm,0.8s | | | | | | | |
| **SHL** | **Shillong** | **10.39** | **337** | Pn | | Pn | 06 52 37.7 | -3.1 |
| **SHL** | **Shillong** | **10.39** | **337** | *eP* | | Pn | 06 52 37.0 | -3.8 |
| SHL | | | | *eS* | | Sn | 06 54 27.4 | -10 |
| **MOKO** | **MOKOCHONG** | **10.40** | **351** | *eP* | | **Pn** | **06 52 40.2** | **-0.7** |
| MOKO | | | | *eS* | | **Sn** | **06 54 34.4** | **-3.2** |
| MOKO | | | | IAML | | | 06 54 36.8 | |
| | comp=E,40nm,0.4s | | | | | | | |
| MOKO | | | | IAML | | | 06 54 39.2 | |
| | comp=N,50nm,0.6s | | | | | | | |
| **PZH** | **PanZhiHua** | **11.56** | **25** | P | | **Pn** | **06 52 58.5** | **+1.6** |
| PZH | | | | S | | **Sn** | **06 55 12.3** | **+6.1** |
| PZH | | | | pmax | pmax | | | |
| | comp=N,20nm,0.9s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=N,170nm,4.5s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=N,850nm,14.2s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=N,1μm,13.2s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=N,730nm,9.3s | | | | | | | |
| **QIZ** | **Qiongzhong** | **13.18** | **75** | P | | Pn | 06 53 16.3 | -2.6 |
| QIZ | | | | S | | **Sn** | **06 55 42.6** | **-3.1** |
| QIZ | | | | LR | LR | | | |
| | comp=N,1μm,9.4s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=N,1μm,13.3s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=N,1μm,12.3s | | | | | | | |
| **GTK** | **Tadong** | **13.37** | **329** | *eP* | | Pn | 06 53 17.7 | -3.8 |
| GTK | | | | *eS* | | Sn | 06 55 38.0 | -12 |
| GTK | | | | IAML | | | 06 55 52.9 | |
| | comp=N,40nm,1.3s | | | | | | | |
| GTK | | | | IAML | | | 06 55 57.1 | |
| | comp=E,34nm,1.5s | | | | | | | |
| **PALK** | **Pallekele** | **17.64** | **242** | P | | **Pn** | **06 54 19.3** | **+1.7** |
| PALK | | | | IAmb | | IAmb | 06 54 21.1 | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **PALK** | **Pallekele** | **17.64** | **242** | LR | | LR | 07 00 28.2 | |
| | comp=Z,206nm,20.5s,baz=147,slow=35 | | | | | | | |
| **ENH** | **Enshi** | **18.59** | **38** | P | | **P** | **06 54 27.2** | **-1.7** |
| ENH | | | | IAmb | | IAmb | 06 54 40.1 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **LZH** | **Lanzhou** | **21.07** | **17** | *eP* | | **P** | **06 54 58.5** | **+2.5** |
| LZH | | | | sP | | sP | 06 55 05.5 | +5.3 |
| LZH | | | | S | | Sn | 06 58 56.5 | -0.4 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.5s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,1μm,12.0s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,490nm,11.0s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,2μm,12.0s | | | | | | | |
| **XAN** | **Xi'an** | **21.20** | **30** | ‖P | | **P** | **06 55 00.0** | **+2.6** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,990nm,13.4s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,1μm,12.0s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,580nm,17.2s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **21.82** | **115** | P | | **P** | **06 55 03.4** | **-0.9** |
| KKM | | | | IAmb | | IAmb | 06 55 16.5 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **LYN** | **LuoYang** | **23.44** | **35** | *eP* | | **P** | **06 55 21.8** | **+0.8** |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.5s | | | | | | | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,200nm,3.5s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,1μm,11.3s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,860nm,11.0s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,810nm,9.3s | | | | | | | |
| **GTA** | **Gaotai** | **23.50** | **7** | P | | **P** | **06 55 24.8** | **+3.1** |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,320nm,12.7s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,390nm,13.4s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,580nm,13.8s | | | | | | | |
| **HNS** | **HongShan** | **26.76** | **34** | ‖P | | **P** | **06 55 56.3** | **+4.8** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,700nm,14.3s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,790nm,15.9s | | | | | | | |
| **NIL** | **Nilore** | **27.26** | **314** | P | | **P** | **06 55 56.2** | **+0.1** |
| **HHC** | **Hu-ho-hao-te** | **28.02** | **25** | *eP* | | **P** | **06 56 03.3** | **+0.3** |
| HHC | | | | pP | | pP | 06 56 07.6 | +1.6 |
| HHC | | | | sP | | sP | 06 56 10.9 | +3.6 |
| HHC | | | | *eS* | | **S** | **07 00 46.6** | **-0.9** |
| HHC | | | | sS | | sS | 07 00 57.9 | +5.4 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,400nm,10.8s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,300nm,12.9s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,400nm,11.1s | | | | | | | |
| **TOLI2** | **Tolitoli** | **28.25** | **119** | P | | **P** | **06 56 04.5** | **-0.6** |
| **WMQ** | **Urumqi** | **28.68** | **347** | *eP* | | **P** | **06 56 10.8** | **+2.1** |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.3s | | | | | | | |
| **KSH** | **Kashi** | **29.43** | **327** | P | | **P** | **06 56 16.9** | **+1.4** |
| KSH | | | | sP | | sP | 06 56 23.6 | +3.8 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **DAV** | **Davao City (W)** | **29.92** | **104** | LR | | LR | 07 08 47.1 | |
| | comp=Z,77nm,18.9s,baz=322,slow=37 | | | | | | | |
| **KAPI** | **Kappang** | **31.17** | **130** | LR | | LR | 07 11 07.6 | |
| | comp=Z,153nm,18.3s,baz=292,slow=40 | | | | | | | |
| **AAK** | **Ala-Archa** | **32.48** | **329** | P | | **P** | **06 56 42.2** | **-0.3** |
| **AAK** | **Ala-Archa** | **32.48** | **329** | P | | **P** | **06 56 42.1** | **-0.3** |
| | comp=Z,1.8nm,0.3s,baz=82,slow=17,SNR=5.2 | | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **32.79** | **12** | P | | **P** | **06 56 44.6** | **-0.4** |
| **SONM** | **Songino Array** | **32.79** | **12** | P | | **P** | **06 56 45.8** | **+0.9** |
| | comp=Z,1.5nm,0.7s,baz=195,slow=10,SNR=6.8 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **32.85** | **342** | P | | **P** | **06 56 43.6** | **-1.9** |
| MK31 | | | | IAmb | | IAmb | 06 56 52.6 | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **32.85** | **342** | P | | **P** | **06 56 44.5** | **-0.9** |
| **MKAR** | **Makanchi Array** | **32.85** | **342** | P | | **P** | **06 56 44.3** | **-1.1** |
| | comp=Z,0.8nm,0.4s,baz=164,slow=9.2,SNR=14 | | | | | | | |
| MKAR | | | | LR | | LR | 07 13 46.5 | |
| | comp=Z,63nm,20.5s,baz=159,slow=43 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **SIMJ** | **Simiganj** | **32.95** | **319** | P | | **P** | **06 56 46.2** | **-0.4** |
| SIMJ | | | | IAmb | | IAmb | 06 56 49.9 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **32.96** | **342** | P | | **P** | **06 56 45.7** | **-0.6** |
| MAKZ | | | | IAmb | | IAmb | 06 56 53.5 | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **34.87** | **326** | P | | **P** | **06 57 02.5** | **-0.5** |
| **KKAR** | **Karatay Array** | **34.87** | **326** | P | | **P** | **06 57 02.4** | **-0.7** |
| **KSRS** | **Korea Array** | **35.08** | **46** | LR | | LR | 07 13 03.0 | |
| | comp=Z,259nm,18.9s,baz=245,slow=39 | | | | | | | |
| **JNU** | **Nakatsue** | **35.48** | **55** | LR | | LR | 07 13 26.8 | |
| | comp=Z,204nm,18.5s,baz=278,slow=39 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **37.40** | **341** | P | | **P** | **06 57 23.1** | **-1.4** |
| | comp=Z,1.3nm,0.5s,baz=151,slow=8.5,SNR=6.7 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | **37.45** | **341** | P | | **P** | **06 57 23.8** | **-1.2** |
| KURK | | | | IAmb | | IAmb | 06 57 41.2 | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| **HIA** | **Hailar** | **38.23** | **25** | P | | **P** | **06 57 29.9** | **-1.7** |
| HIA | | | | IAmb | | IAmb | 06 57 37.3 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **38.91** | **349** | P | | **P** | **06 57 35.8** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **38.91** | **349** | P | | **P** | **06 57 35.7** | **-1.6** |
| **ZALV** | **Zalesovo Beam** | **38.91** | **349** | P | | **P** | **06 57 36.2** | **-1.0** |
| | comp=Z,2.8nm,0.6s,baz=173,slow=8.9,SNR=7.9 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **42.21** | **337** | LR | | LR | 07 17 21.0 | |
| | comp=Z,103nm,18.3s,baz=138,slow=39 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.30** | **53** | LR | | LR | 07 17 17.7 | |
| | comp=Z,161nm,18.5s,baz=256,slow=38 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **46.13** | **327** | P | | **P** | **06 58 35.0** | **-1.1** |
| | comp=Z,1.0nm,0.4s,baz=75,slow=6.0,SNR=2.7 | | | | | | | |
| AKTO | | | | LR | | LR | 07 21 09.4 | |
| | comp=Z,139nm,20.8s,baz=210,slow=40 | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **ARU** | **Arti** | **49.46** | **333** | LR | | LR | 07 22 26.3 | |
| | comp=Z,119nm,21.1s,baz=160,slow=39 | | | | | | | |
| **GNI** | **Garni** | **50.69** | **309** | LR | | LR | 07 24 34.9 | |
| | comp=Z,16nm,18.7s,baz=118,slow=41 | | | | | | | |
| **WB0** | **Warramunga Arr** | **51.58** | **132** | P | | **P** | **06 59 17.7** | **-0.6** |
| WB0 | | | | IAmb | | IAmb | 06 59 45.3 | |
| | comp=Z,2.6nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **51.66** | **132** | P | | **P** | **06 59 19.7** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=303,slow=11,SNR=13 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **51.66** | **132** | P | | **P** | **06 59 18.8** | **-0.1** |
| WB2 | | | | IAmb | | IAmb | 06 59 24.4 | |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| **WR0** | **Warramunga Arr** | **51.81** | **132** | P | | **P** | **06 59 19.9** | **-0.1** |
| **NWAO** | **Narrogin (SRO)** | **52.59** | **158** | LR | | LR | 07 21 11.8 | |
| | comp=Z,107nm,21.1s,baz=266,slow=35 | | | | | | | |
| **BELG** | **Belogornoye** | **52.76** | **325** | P | | **P** | **06 59 28.0** | **+1.4** |
| | comp=Z,7.5nm,0.7s,baz=23,slow=4.6,SNR=3.9 | | | | | | | |
| | comp=Z,7.5nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **52.87** | **313** | P | | **P** | **06 59 27.3** | **-0.2** |
| | comp=Z,2.2nm,0.8s,baz=114,slow=8.0,SNR=5.7 | | | | | | | |
| KBZ | | | | LR | | LR | 07 28 23.9 | |
| | comp=Z,48nm,18.3s,baz=48,slow=43 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **53.85** | **136** | P | | **P** | **06 59 35.1** | **+0.1** |
| | comp=Z,0.3nm,0.5s,baz=316,slow=7.4,SNR=5.9 | | | | | | | |
| ASAR | | | | LR | | LR | 07 26 01.5 | |
| | comp=Z,79nm,21.1s,baz=340,slow=40 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **KIRV** | **Kirov** | **54.74** | **332** | LR | | LR | 07 28 15.9 | |
| | comp=Z,71nm,19.1s,baz=120,slow=42 | | | | | | | |
| **BRTR** | **Keskin Array B** | **59.06** | **307** | P | | **P** | **07 00 13.8** | **+1.6** |
| | comp=Z,0.6nm,0.8s,baz=117,slow=4.9,SNR=3.6 | | | | | | | |
| BRTR | | | | LR | | LR | 07 32 21.8 | |
| | comp=Z,17nm,18.6s,baz=126,slow=43 | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | |
| **OBN** | **Obninsk** | **59.85** | **325** | LR | | LR | 07 31 39.2 | |
| | comp=Z,73nm,18.8s,baz=172,slow=42 | | | | | | | |
| **AKASG** | **Malin Array Be** | **63.32** | **319** | LR | | LR | 07 34 50.8 | |
| | comp=Z,89nm,18.2s,baz=94,slow=42 | | | | | | | |
| **STKA** | **Stephens Creek** | **64.39** | **138** | LR | | LR | 07 31 40.7 | |
| | comp=Z,117nm,18.8s,baz=241,slow=39 | | | | | | | |
| **MLR** | **Muntele Rosu** | **65.08** | **313** | LR | | LR | 07 36 09.8 | |
| | comp=Z,37nm,18.3s,baz=60,slow=42 | | | | | | | |
| **FINES** | **FINESS Array B** | **66.66** | **330** | P | | **P** | **07 01 00.9** | **-1.3** |
| | comp=Z,1.3nm,0.7s,baz=128,slow=5.8,SNR=3.4 | | | | | | | |
| FINES | | | | LR | | LR | 07 33 30.6 | |
| | comp=Z,80nm,20.9s,baz=95,slow=39 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **72.62** | **329** | LR | | LR | 07 37 50.2 | |
| | comp=Z,124nm,18.6s,baz=74,slow=39 | | | | | | | |
| **NOA** | **NORSAR Array B** | **73.80** | **330** | LR | | LR | 07 37 42.2 | |
| | comp=Z,86nm,20.8s,baz=340,slow=39 | | | | | | | |
| **DAVOX** | **Davos/Dischma** | **76.14** | **315** | LR | | LR | 07 42 39.6 | |
| | comp=Z,53nm,20.4s,baz=42,slow=41 | | | | | | | |
| **LBTB** | **Lobatse** | **80.11** | **240** | LR | | LR | 07 35 38.6 | |
| | comp=Z,66nm,18.6s,baz=33,slow=34 | | | | | | | |
| **BOSA** | **Boshof** | **81.79** | **237** | LR | | LR | 07 33 27.9 | |
| | comp=Z,60nm,18.1s,baz=17,slow=32 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.42** | **23** | P | | **P** | **07 02 52.4** | **-1.7** |
| | comp=Z,0.4nm,0.7s,baz=304,slow=3.8,SNR=4.9 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **SUR** | **Sutherland** | **86.76** | **235** | LR | | LR | 07 40 46.8 | |
| | comp=Z,66nm,19.0s,baz=88,slow=35 | | | | | | | |
| **BDFB** | **Brasilia** | **145.77** | **266** | PKPbc | | **PKPdf** | **07 09 54.1** | **+2.6** |
| | comp=Z,0.9nm,0.5s,baz=18,slow=3.2,SNR=3.3 | | | | | | | |

*IDC* ***16*** *06:53:06.9±0.8, 16.07°S×174.76°W, h0km, mb3.7/8, mbtmp3.7/8, Error ellipse: s-maj=38.8km s-min=21.9km az=138.0*

**ISC 16 06:53:38.6±0.9, 16.1°S±0.2×175.1°W±0.2, h278km, n8, σ0 64/8, mb3.3/8, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **48.11** | **257** | P | | **P** | **07 01 51.4** | **+0.2** |
| | 0.2nm,0.4s,baz=92,slow=7.6,SNR=9.7 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.36** | **252** | P | | **P** | **07 01 53.4** | **+0.3** |
| | 1.4nm,0.7s,baz=89,slow=8.1,SNR=18 | | | | | | | |
| | 1.4nm,0.7s | | | | | | | |
| **VNDA** | **Vanda** | **62.56** | **186** | P | | **P** | **07 03 33.0** | **+0.2** |
| | 0.5nm,0.7s,baz=350,slow=6.4,SNR=4.4 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **73.98** | **180** | P | | **P** | **07 04 43.1** | **-0.6** |
| | 1.5nm,0.7s,baz=32,slow=0.9,SNR=4.9 | | | | | | | |
| | 1.5nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.91** | **43** | P | | **P** | **07 04 55.9** | **+0.6** |
| | 0.4nm,0.7s,baz=224,slow=8.3,SNR=5.0 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **82.33** | **57** | P | | **P** | **07 05 30.4** | **+0.5** |
| | 0.2nm,0.8s,baz=205,slow=5.8,SNR=3.2 | | | | | | | |
| | 0.2nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.42** | **12** | P | | **P** | **07 05 33.6** | **-0.9** |
| | 0.5nm,1.0s,baz=202,slow=6.8,SNR=3.2 | | | | | | | |
| | 0.5nm,1.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **83.85** | **42** | P | | **P** | **07 05 37.4** | **-0.1** |
| | 0.4nm,0.7s,baz=219,slow=3.8,SNR=4.7 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |

**IDC 16 07:00:14.8±1.7, 54.70N×83.78E, h0km, mbtmp3.3/2, ML2.9/2, Error ellipse: s-maj=16.4km s-min=10.6km az=19.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.97** | **141** | I | | I | 07 05 40.0 | |
| | baz=318,slow=316,SNR=6.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.97** | **141** | Pg | | Pg | 07 00 32.7 | -0.7 |
| | 3.7nm,0.3s,baz=324,slow=18,SNR=30 | | | | | | | |
| ZALV | | | | Lg | | Lg | 07 00 48.1 | |
| | 14nm,0.3s,baz=326,slow=28,SNR=35 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.18** | **220** | Lg | | Lg | 07 03 00.7 | |
| | 0.2nm,0.3s,baz=41,slow=30,SNR=5.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.97** | **187** | Pn | | Pn | 07 02 11.4 | -0.5 |
| | 0.2nm,0.3s,baz=11,slow=12,SNR=7.1 | | | | | | | |
| MKAR | | | | Lg | | Lg | 07 04 28.5 | |
| | 0.1nm,0.3s,baz=18,slow=29,SNR=5.2 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **8.09** | **264** | Pn | | Pn | 07 02 13.1 | -0.4 |
| | 0.1nm,0.3s,baz=68,slow=15,SNR=6.5 | | | | | | | |
| | 1.4nm,0.4s | | | | | | | |

**IDC 16 07:10:10.4±2.7, 54.18N×86.34E, h0km, mbtmp3.3/2, ML2.9/2, Error ellipse: s-maj=20.6km s-min=12.0km az=59.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.92** | **256** | I | | I | 07 16 40.0 | |
| | baz=73,slow=305,SNR=2.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.92** | **256** | Pg | | Pg | 07 10 27.4 | -0.7 |
| | 4.7nm,0.3s,baz=74,slow=17,SNR=30 | | | | | | | |
| ZALV | | | | Lg | | Lg | 07 10 41.1 | |
| | 4.9nm,0.3s,baz=76,slow=30,SNR=20 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.96** | **236** | Pn | | Pn | 07 11 41.3 | +1.6 |
| | 0.2nm,0.3s,baz=54,slow=13,SNR=2.9 | | | | | | | |
| | 2.7nm,0.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.83** | **201** | Pn | | Pn | 07 12 06.2 | +0.8 |
| | 0.3nm,0.3s,baz=17,slow=14,SNR=6.8 | | | | | | | |
| MKAR | | | | Lg | | Lg | 07 14 16.3 | |
| | 0.1nm,0.3s,baz=22,slow=28,SNR=5.0 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |

*AEIC* ***16*** *07:22:39.1±1.9, 69.53N±0.05×144.23W±0.09, h11km±3km, ML4.5, mb4.4/31(NEIC), ML4.5/116(NEIC), Mwr4.5/26(NEIC), Error ellipse: s-maj=6.7km s-min=4.7km az=182.0*

*IDC* ***16*** *07:22:40.1±0.5, 69.66N×144.30W, h0km, mb4.2/25, mbtmp4.2/29, ML4.1/4, MS3.7/49, Error ellipse: s-maj=15.3km s-min=10.0km az=47.0*

*NEIC* ***16*** *07:22:40.3±1.7, 69.59N±0.04×144.25W±0.08, h6km±1km, Error ellipse: s-maj=7.6km s-min=4.2km az=21.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=1.69; $M_{\theta\theta}$=2.33; $M_{\phi\phi}$=4.02; $M_{r\theta}$=1.31; $M_{\theta\phi}$=-4.86; $M_{\phi r}$=0.18; Fault plane solution: $M_0$=6.13000×$10^{15}$ NP1: $\phi_s$=288.24000°, $\delta$=79.28000°, $\lambda$=-164.27000°. NP2: $\phi_s$=195.24000°, $\delta$=74.55000°, $\lambda$=-11.13000°. Principal axes: T 6.6735, Plg3.0000°, Azm61.0000°; N -1.2969, Plg71.0000°, Azm322.0000°; P -5.3766, Plg19.0000°, Azm152.0000°;*

*NEIC* ***16*** *07:22:40, 69.64N×144.22W, h0km*

**ISC 16 07:22:40.8±0.3, 69.51N±0.03×144.23W±0.02, h10km, n606, σ1 9 21/580, mb4.4/48, MS3.7/48, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.21** | **58** | Pg | | **Pg** | **07 22 43.8** | **-1.4** |
| **C27K** | **Jago River** | **0.21** | **58** | P | | **Pg** | **07 22 43.8** | **-1.4** |
| | baz=243,SNR=1000 | | | | | | | |
| **C26K** | **Camden Bay** | **0.47** | **330** | P | | **Pb** | **07 22 49.4** | **-1.7** |
| | baz=148 | | | | | | | |
| **D25K** | **Kavik River** | **0.78** | **257** | | | **Pg** | **07 22 53.7** | **-2.1** |
| **D25K** | **Kavik River** | **0.78** | **257** | P | | **Pg** | **07 22 53.4** | **-2.4** |
| | baz=73,SNR=228 | | | | | | | |
| **D27M** | **Malcolm River** | **1.19** | **102** | | | **Pb** | **07 23 01.1** | **-2.2** |
| D27M | | | | IAML | | | 07 23 26.3 | |
| | comp=N,9μm,0.8s | | | | | | | |
| **D27M** | **Malcolm River** | **1.19** | **102** | P | | **Pb** | **07 23 00.8** | **-2.6** |
| | baz=286,SNR=410 | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **280** | | | **Pb** | **07 23 08.7** | **-1.2** |
| C24K | | | | | | **Sg** | **07 23 29.8** | **-1.6** |
| C24K | | | | IAML | | | 07 23 35.5 | |
| | comp=E,9μm,2.2s | | | | | | | |
| C24K | | | | IAML | | | 07 23 40.7 | |
| | comp=N,6μm,1.1s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **280** | P | | **Pb** | **07 23 08.1** | **-1.9** |
| | baz=95,SNR=133 | | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **143** | | | **Pn** | **07 23 09.3** | **-0.4** |
| E27K | | | | Sn | | **Sg** | **07 23 32.5** | **-0.9** |
| E27K | | | | IAML | | | 07 23 35.4 | |
| | comp=N,5μm,1.1s | | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **143** | P | | **Pb** | **07 23 09.5** | **-1.6** |
| | baz=326,SNR=609 | | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **260** | Pn | | **Pb** | **07 23 09.6** | **-1.9** |
| D24K | | | | | | **Sg** | **07 23 33.9** | **-0.5** |
| D24K | | | | IAML | | | 07 23 38.2 | |
| | comp=N,7μm,0.8s | | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **260** | P | | **Pb** | **07 23 10.0** | **-1.5** |
| | baz=75,SNR=434 | | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **179** | | | **Pb** | **07 23 12.8** | **-1.5** |
| F26K | | | | Sn | | **Sb** | **07 23 37.1** | **-0.1** |
| F26K | | | | IAML | | | 07 23 44.2 | |
| | comp=N,4μm,0.8s | | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **179** | P | | **Pb** | **07 23 13.0** | **-1.3** |
| | baz=359,SNR=533 | | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **116** | | | **Pb** | **07 23 13.8** | **-1.9** |
| E28M | | | | Sn | | **Sb** | **07 23 39.0** | **-0.7** |
| E28M | | | | IAML | | | 07 23 50.1 | |
| | comp=N,3μm,1.0s | | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **116** | P | | **Pb** | **07 23 13.9** | **-1.9** |
| | baz=301,SNR=148 | | | | | | | |
| **D28M** | **Stokes Point** | **1.95** | **93** | | | **Pb** | **07 23 14.3** | **-2.0** |
| D28M | | | | Sg | | **Sg** | **07 23 43.2** | **-0.1** |
| **D28M** | **Stokes Point** | **1.95** | **93** | P | | **Pn** | **07 23 13.6** | **-0.2** |
| | baz=279,SNR=427 | | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **196** | | | **Pb** | **07 23 15.2** | **-2.0** |
| F25K | | | | IAML | | | 07 23 46.2 | |
| | comp=N,4μm,0.7s | | | | | | | |
| F25K | | | | IAML | | | 07 23 46.5 | |
| | comp=E,4μm,0.8s | | | | | | | |
| **F25K** | **Christian Rive** | **2.00** | **196** | P | | **Pb** | **07 23 15.3** | **-1.9** |
| | baz=14,SNR=236 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.10** | **184** | Pn | | **Pb** | **07 23 16.7** | **-2.2** |
| **TOLK** | **Toolik Lake Re** | **2.11** | **248** | Pn | | **Pn** | **07 23 15.9** | **-0.2** |
| **TOLK** | **Toolik Lake Re** | **2.11** | **248** | P | | **Pn** | **07 23 16.1** | **0.0** |
| | baz=62,SNR=214 | | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **229** | | | **Pb** | **07 23 16.9** | **-2.3** |
| **E24K** | **Your Creek** | **2.12** | **229** | P | | **Pb** | **07 23 16.9** | **-2.3** |
| | baz=45 | | | | | | | |
| **C23K** | **Itkillik River** | **2.25** | **281** | | | **Pn** | **07 23 17.4** | **-0.6** |
| C23K | | | | IAML | | | 07 23 58.8 | |
| | comp=E,3μm,1.1s | | | | | | | |
| C23K | | | | IAML | | | 07 24 03.5 | |
| | comp=N,3μm,1.0s | | | | | | | |
| **C23K** | **Itkillik River** | **2.25** | **281** | P | | **Pn** | **07 23 17.4** | **-0.6** |
| | baz=95,SNR=75 | | | | | | | |
| **D23K** | **Nanushuk River** | **2.36** | **260** | | | **Pn** | **07 23 20.0** | **+0.4** |
| D23K | | | | IAML | | | 07 24 03.8 | |
| | comp=E,2μm,1.6s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.36** | **260** | P | | **Pn** | **07 23 19.8** | **+0.2** |
| | baz=73 | | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **216** | Pn | | **Pn** | **07 23 20.6** | **+0.3** |
| **F24K** | **Squaw Lake** | **2.42** | **216** | P | | **Pn** | **07 23 20.8** | **+0.5** |
| | baz=32,SNR=127 | | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **236** | | | **Pn** | **07 23 21.1** | **+0.3** |
| **E23K** | **Chandalar** | **2.44** | **236** | P | | **Pn** | **07 23 21.2** | **+0.

**H27K Steamboat Moun 3.45 161 P Pn 07 23 35.1 +0.5**
baz=344,SNR=35
**G29M Pine Creek 3.49 136 Pn 07 23 35.6 +0.5**
G29M IAML 07 24 40.1
comp=N,1µm,1.2s
**G29M Pine Creek 3.49 136 P Pn 07 23 35.7 +0.7**
baz=322,SNR=81
**F22K John River 3.55 239 Pn 07 23 36.8 +0.9**
**F22K John River 3.55 239 P Pn 07 23 35.8 -0.1**
baz=52
**G23K Bananza Creek 3.55 220 Pn Pn 07 23 35.6 -0.3**
G23K IAML 07 24 36.9
comp=E,908nm,1.7s
G23K IAML 07 24 37.5
comp=N,887nm,1.0s
**G23K Bananza Creek 3.55 220 P Pn 07 23 35.8 -0.2**
baz=35,SNR=12
**F30M Barrier River 3.64 118 Pn 07 23 38.1 +1.0**
**F30M Barrier River 3.64 118 P Pn 07 23 38.9 +1.8**
baz=306,SNR=43
**B21K Ikpikpuk River 3.64 277 Pn 07 23 37.5 +0.4**
**B21K Ikpikpuk River 3.64 277 P Pn 07 23 36.8 -0.3**
baz=86,SNR=22
**E21K Killik River 3.67 258 Pn 07 23 37.9 +0.4**
**E21K Killik River 3.67 258 IAML 07 24 46.2**
comp=N,1µm,0.7s
**E21K Killik River 3.67 258 P Pn 07 23 37.3 -0.2**
baz=68
**G22K Bettles 3.76 230 P Pn 07 23 39.6 +0.9**
baz=43
**G30M tAoh Zraii Nji 3.92 127 Pn Pn 07 23 41.1 +0.1**
G30M IAML 07 25 02.6
comp=E,620nm,1.5s
**G30M tAoh Zraii Nji 3.92 127 P Pn 07 23 41.5 +0.6**
baz=314
**A22K Sinclair Lake 3.94 297 Pn 07 23 41.6 +0.4**
**A22K Sinclair Lake 3.94 297 P Pn 07 23 40.9 -0.2**
baz=107
**H24K Noodor Dome 3.95 202 Pn 07 23 41.3 0.0**
H24K IAML 07 24 51.9
comp=E,693nm,0.9s
H24K IAML 07 24 59.2
comp=N,587nm,0.8s
**H24K Noodor Dome 3.95 202 P Pn 07 23 41.4 0.0**
baz=19,SNR=66
**H29M Whitestone 3.98 143 Pn Pn 07 23 42.6 +0.8**
H29M IAML 07 24 58.5
comp=E,933nm,1.4s
H29M IAML 07 25 06.0
comp=N,758nm,1.9s
**H29M Whitestone 3.98 143 P Pn 07 23 42.6 +0.8**
baz=329,SNR=206
**PRP Porcupine Dome 4.05 188 Pn Pn 07 23 43.8 +1.0**
PRP IAML 07 24 48.4
comp=E,665nm,1.5s
PRP IAML 07 24 51.2
comp=N,598nm,0.7s
**PRP Porcupine Dome 4.05 188 P Pn 07 23 43.5 +0.7**
baz=6.4,SNR=61
**INK Inuvik 4.05 102 Pn Pn 07 23 43.0 +0.3**
INK IAML 07 24 58.7
comp=N,509nm,1.6s
**INK Inuvik 4.05 102 Pn Pn 07 23 42.8 +0.1**
comp=N,2.8nm,0.3s,baz=311,slow=8.8,SNR=31
INK Sn Sn **07 24 28.6 -1.5**
comp=N,14nm,0.3s,baz=287,slow=20,SNR=6.2
INK Lg Lg 07 24 44.6
comp=N,17nm,0.3s,baz=242,slow=25,SNR=5.1
INK LR LR 07 25 52.3
comp=N,544nm,19.2s,baz=288,slow=47
comp=N,24nm,0.4s
**INK Inuvik 4.05 102 P Pn 07 23 42.8 +0.1**
baz=293,SNR=29
**I27K Kandik River 4.05 164 Pn 07 23 43.5 +0.7**
**I27K Kandik River 4.05 164 P Pn 07 23 43.3 +0.5**
baz=347,SNR=126
**F21K Alatna River 4.13 240 Pn Pn 07 23 44.2 +0.5**
F21K IAML 07 24 56.5
comp=E,491nm,1.4s
F21K IAML 07 24 59.8
comp=N,584nm,2.5s
**F21K Alatna River 4.13 240 P Pn 07 23 44.0 +0.3**
baz=52,SNR=71
**H23K Yukon River 4.22 211 Pn 07 23 45.4 +0.3**
H23K IAML 07 24 57.8
comp=E,779nm,1.9s
H23K IAML 07 25 01.8
comp=N,576nm,1.2s
**H23K Yukon River 4.22 211 P Pn 07 23 45.6 +0.5**
baz=26,SNR=81
**EPYK Eagle Plains 4.24 135 P Pn 07 23 45.7 +0.4**
baz=322,SNR=50
**I26K Coal Creek Min 4.25 174 Pn 07 23 46.0 +0.6**
**I26K Coal Creek Min 4.25 174 P Pn 07 23 46.1 +0.7**
baz=355
**F31M Tsiigehtchic 4.39 113 Pn Pn 07 23 48.1 +0.8**
F31M IAML 07 25 03.3
comp=N,662nm,1.4s
**F31M Tsiigehtchic 4.39 113 P Pn 07 23 48.3 +1.0**
baz=303,SNR=20
**I28M Miner Creek 4.41 156 Pn Pn 07 23 48.3 +0.7**
I28M IAML 07 25 18.9
comp=E,598nm,1.2s
**I28M Miner Creek 4.41 156 P Pn 07 23 48.7 +1.0**
baz=340,SNR=312
**D20K Etivluk River 4.50 266 Pn 07 23 50.0 +1.0**
**D20K Etivluk River 4.50 266 P Pn 07 23 49.9 +0.9**
baz=74,SNR=56
**E20K Nigu River 4.50 259 Pn 07 23 49.9 +0.9**
**E20K Nigu River 4.50 259 P Pn 07 23 49.1 +0.1**
baz=68,SNR=90
**B20K Meade River 4.52 282 Pn 07 23 49.4 +0.4**
**B20K Meade River 4.52 282 P Pn 07 23 49.5 +0.4**
baz=90
**G31M Satah River 4.53 120 Pn Pn 07 23 49.7 +0.5**
**G31M Satah River 4.53 120 P Pn 07 23 50.3 +1.0**
baz=310,SNR=132
**H22K Ishtalitna Cre 4.54 220 Pn 07 23 49.4 -0.1**
**H22K Ishtalitna Cre 4.54 220 P Pn 07 23 49.3 -0.1**
baz=33,SNR=39
**A21K Barrow 4.54 299 Pn 07 23 49.7 +0.3**
**A21K Barrow 4.54 299 P Pn 07 23 49.8 +0.3**
baz=107
**POKR Poker Plat Res 4.59 197 Pn 07 23 51.1 +1.0**
POKR IAML 07 24 46.9
comp=N,517nm,0.4s
**POKR Poker Plat Res 4.59 197 P Pn 07 23 50.9 +0.8**
baz=14,SNR=38
**G21K Allakaket 4.60 234 Pn 07 23 50.1 -0.2**
G21K IAML 07 25 19.5
comp=E,435nm,0.8s
G21K IAML 07 25 25.8
comp=N,508nm,2.4s
**G21K Allakaket 4.60 234 P Pn 07 23 49.9 -0.4**
baz=45,SNR=20
**I29M Ogilvie Camp, 4.75 149 Pn Pn 07 23 52.6 +0.3**
I29M IAML 07 25 00.4
comp=N,392nm,0.4s
I29M IAML 07 25 15.0
comp=E,475nm,0.6s
**I29M Ogilvie Camp, 4.75 149 P Pn 07 23 52.8 +0.4**
baz=334,SNR=78
**I23K Minto, Yukon-K 4.81 207 Pn 07 23 53.5 +0.3**
I23K IAML 07 25 20.4
comp=E,364nm,0.9s
I23K IAML 07 25 46.5
comp=N,435nm,1.4s
**I23K Minto, Yukon-K 4.81 207 P Pn 07 23 53.5 +0.3**
baz=22,SNR=97
**COLA College 4.87 199 Pn 07 23 54.8 +0.9**
**COLA College 4.87 199 P Pn 07 23 55.0 +1.1**
baz=15
**IL31 4.88 194 Pn 07 23 54.3 +0.3**
**ILAR Eielson Array 4.88 194 Pn 07 23 54.3 +0.3**
**ILAR Eielson Array 4.88 194 Pn Pn 07 23 54.5 +0.5**
comp=N,13nm,0.3s,baz=5.1,slow=13,SNR=315
ILAR Sn Sn **07 24 49.2 -1.3**
comp=N,16nm,0.3s,baz=2.0,slow=17,SNR=4.2
ILAR Lg Lg 07 25 09.2
comp=N,38nm,0.3s,baz=3.9,slow=30,SNR=8.9
comp=N,34nm,0.5s
**EGAK Eagle 4.91 164 Pn Pn 07 23 54.8 +0.4**
EGAK IAML 07 25 01.6
comp=N,335nm,0.8s
EGAK IAML 07 25 23.0
comp=N,345nm,0.8s
**EGAK Eagle 4.91 164 P Pn 07 23 55.1 +0.6**
baz=347,SNR=124
**F20K Avaraart Lake 4.93 245 Pn 07 23 55.4 +0.6**
**F20K Avaraart Lake 4.93 245 IAML 07 25 28.6**
comp=N,286nm,1.3s
**F20K Avaraart Lake 4.93 245 P Pn 07 23 55.7 +0.9**
baz=54
**J25K Salcha River, 4.94 186 Pn 07 23 55.6 +0.5**
J25K IAML 07 25 25.9
comp=E,413nm,1.9s
J25K IAML 07 25 27.8
comp=N,265nm,1.4s
**J25K Salcha River, 4.94 186 P Pn 07 23 55.7 +0.7**
baz=4.6,SNR=128
**J26L Joseph Creek 5.04 177 Pn 07 23 57.3 +0.9**
J26L IAML 07 25 25.7
comp=N,294nm,0.6s
J26L IAML 07 25 27.3
comp=E,342nm,2.1s
**J26L Joseph Creek 5.04 177 P Pn 07 23 57.3 +0.9**
baz=357,SNR=134
**IMAR Indian Mountai 5.06 230 Pn 07 23 56.4 -0.2**
**H21K Melozitna Rive 5.07 224 Pn Pn 07 23 56.8 0.0**
H21K IAML 07 25 26.3
comp=E,360nm,1.8s
H21K IAML 07 25 39.6
comp=N,395nm,2.2s
**H21K Melozitna Rive 5.07 224 P Pn 07 23 57.1 +0.3**
baz=36,SNR=80
**CCB Clear Creek Bu 5.08 198 Pn Pn 07 23 57.3 +0.4**
**D19K Kuna River 5.10 265 Pn Pn 07 23 57.4 +0.3**
D19K IAML 07 25 38.4
comp=E,346nm,1.2s
**D19K Kuna River 5.10 265 P Pn 07 23 57.4 +0.3**
baz=72,SNR=173
**MLY Manley 5.16 212 Pn Pn 07 23 58.4 +0.4**
MLY IAML 07 25 36.7
comp=N,256nm,1.6s
**MLY Manley 5.16 212 P Pn 07 23 58.4 +0.4**
baz=26,SNR=60
**E19K Redstone River 5.21 253 Pn Pn 07 23 59.0 +0.4**
E19K IAML 07 25 34.8
comp=E,298nm,1.1s
E19K IAML 07 25 35.1
comp=N,298nm,2.0s
**E19K Redstone River 5.21 253 P Pn 07 23 58.8 +0.2**
baz=60,SNR=47
**HDA Harding Lake 5.24 193 Pn Pn 07 23 59.9 +0.9**
**HDA Harding Lake 5.24 193 P Pn 07 24 00.1 +1.1**
baz=10,SNR=124
**I30M Mount Dempster 5.27 141 Pn Pn 07 23 59.7 +0.2**
I30M IAML 07 25 03.6
comp=N,263nm,0.5s
**I30M Mount Dempster 5.27 141 P Pn 07 23 59.7 +0.2**
baz=329,SNR=232
**WRH Wood River Hil 5.29 198 Pn 07 24 00.4 +0.8**
WRH IAML 07 25 35.1
comp=N,250nm,0.7s
WRH IAML 07 25 37.5
comp=E,304nm,1.2s
**NEA2 Nenana 5.29 203 Pn 07 24 00.1 +0.3**
NEA2 IAML 07 25 37.3
comp=E,210nm,1.0s
**NEA2 Nenana 5.29 203 P Pn 07 23 59.9 +0.1**
baz=19,SNR=72
**C19K Lookout Ridge 5.46 273 Pn Pn 07 24 02.5 +0.4**
**C19K Lookout Ridge 5.46 273 P Pn 07 24 02.6 +0.6**
baz=78,SNR=22
**SCRK Sand Creek 5.56 179 Pn Pn 07 24 04.6 +1.0**
**SCRK Sand Creek 5.56 179 P Pn 07 24 04.8 +1.2**
baz=359,SNR=208
**K27K Chicken 5.58 170 Pn 07 24 04.8 +1.2**
**K27K Chicken 5.58 170 P Pn 07 24 04.8 +1.2**
baz=352
**J29N Klondike Camp 5.60 152 Pn Pn 07 24 04.5 +0.5**
**J29N Klondike Camp 5.60 152 P Pn 07 24 04.8 +0.7**
baz=338
**F19K Shaleruckik Mo 5.72 248 Pn Pn 07 24 06.0 +0.4**
**F19K Shaleruckik Mo 5.72 248 P Pn 07 24 05.6 0.0**
baz=56,SNR=150
**H20K Anotleneega Mo 5.74 230 Pn 07 24 06.0 +0.1**
**H20K Anotleneega Mo 5.74 230 P Pn 07 24 05.7 -0.2**
baz=40,SNR=16
**BWN Browne 5.75 204 Pn 07 24 06.5 +0.5**
**K24K Donnelly Dome 5.77 187 Pn 07 24 07.0 +0.7**
**K24K Donnelly Dome 5.77 187 P Pn 07 24 07.4 +1.1**
baz=5.4,SNR=143
**DAWY Dawson 5.80 158 Pn Pn 07 24 07.4 +0.7**
**DAWY Dawson 5.80 158 P Pn 07 24 07.5 +0.8**
baz=343,SNR=319
**J30M Hart River 5.84 144 Pn Pn 07 24 07.6 +0.3**
**J30M Hart River 5.84 144 P Pn 07 24 07.7 +0.3**
baz=332,SNR=170
**A19K Wainwright 5.86 285 Pn 07 24 07.5 +0.1**
**A19K Wainwright 5.86 285 P Pn 07 24 07.9 +0.5**
baz=89
**DOT Dot Lake 5.89 179 Pn 07 24 08.7 +0.7**
**G19K Purcell Mounta 5.92 241 Pn Pn 07 24 07.7 -0.7**
**G19K Purcell Mounta 5.92 241 P Pn 07 24 08.2 -0.2**
baz=49,SNR=46
**BPAW Bear Paw Mtn. 6.05 209 Pn Pn 07 24 10.3 +0.1**
**BPAW Bear Paw Mtn. 6.05 209 P Pn 07 24 10.5 +0.3**
baz=23,SNR=118
**MCK McKinley 6.10 200 Pn 07 24 11.7 +0.8**
**MCK McKinley 6.10 200 P Pn 07 24 11.6 +0.8**
baz=16,SNR=43
**C18K Utukok River 6.13 270 Pn Pn 07 24 10.6 -0.8**
**C18K Utukok River 6.13 270 P Pn 07 24 10.4 -0.9**
baz=74
**H19K Roundabout Mou 6.16 235 Pn Pn 07 24 11.7 +0.2**
**H19K Roundabout Mou 6.16 235 P Pn 07 24 11.1 -0.4**
baz=44,SNR=19
**I20K Naaghedeneel 6.19 225 Pn 07 24 12.7 +0.7**
**I20K Naaghedeneel 6.19 225 P Pn 07 24 12.2 +0.3**
baz=35,SNR=14
**B18K Kokolik River 6.19 277 Pn 07 24 12.1 +0.1**
**B18K Kokolik River 6.19 277 P Pn 07 24 11.7 -0.3**
baz=80
**K29M Barlow Dome 6.28 152 Pn Pn 07 24 14.0 +0.5**
**K29M Barlow Dome 6.28 152 P Pn 07 24 14.3 +0.8**
baz=338,SNR=128
**E18K Tukpahlearik C 6.38 259 Pn Pn 07 24 14.5 -0.1**
**E18K Tukpahlearik C 6.38 259 P Pn 07 24 14.6 0.0**
baz=63,SNR=100
**RND Reindeer 6.41 199 Pn Pn 07 24 16.0 +0.9**
**F18K Selawik 6.47 250 Pn 07 24 15.9 +0.1**
**F18K Selawik 6.47 250 P Pn 07 24 16.0 +0.1**
baz=56,SNR=70
**L26K Log Cabin Wild 6.53 176 Pn Pn 07 24 17.7 +1.0**
**L26K Log Cabin Wild 6.53 176 P Pn 07 24 18.0 +1.3**
baz=357,SNR=106
**BCAR Beaver Creek A 6.55 170 Pn Pn 07 24 17.7 +0.6**
**L27K Beaver Creek, 6.55 170 Pn Pn 07 24 18.1 +1.0**
**L27K Beaver Creek, 6.55 170 P Pn 07 24 18.1 +1.0**
baz=353,SNR=70
**G18K Tagagawik 6.57 243 Pn 07 24 18.1 +0.8**
**G18K Tagagawik 6.57 243 P Pn 07 24 18.1 +0.8**
baz=50,SNR=60
**DHY Denali Highway 6.59 193 Pn Pn 07 24 19.9 +2.2**
**DHY Denali Highway 6.59 193 P Pn 07 24 19.9 +2.2**
baz=9.7,SNR=83
**PAX Paxson 6.59 185 Pn 07 24 19.1 +1.4**
**PAX Paxson 6.59 185 P Pn 07 24 19.2 +1.5**
baz=3.8,SNR=296
**J20K Nowinta River 6.63 221 Pn Pn 07 24 17.7 -0.3**
**J20K Nowinta River 6.63 221 P Pn 07 24 17.9 -0.2**
baz=32,SNR=34
**A36M Sachs Harbour 6.73 60 Pn Pn 07 24 18.4 -1.1**
**A36M Sachs Harbour 6.73 60 P Pn 07 24 18.2 -1.2**
baz=258,SNR=64
**GCSA Galena City Sc 6.86 232 P Pn 07 24 22.3 +1.1**
baz=40
**C17K DeLong Mountai 6.88 270 Pn 07 24 20.8 -0.7**
**C17K DeLong Mountai 6.88 270 P Pn 07 24 21.0 -0.5**
baz=72
**RDOG Red Dog Mine 6.93 267 Pn Pn 07 24 21.5 -0.6**
**RDOG Red Dog Mine 6.93 267 P Pn 07 24 21.6 -0.6**
baz=69,SNR=26
**WAT1 Susitna Watana 6.94 197 Pn 07 24 22.5 +0.2**
**WAT1 Susitna Watana 6.94 197 P Pn 07 24 22.7 +0.3**
baz=13
**E17K Hotham Inlet 6.96 258 Pn 07 24 22.1 -0.4**
**E17K Hotham Inlet 6.96 258 P Pn 07 24 22.1 -0.4**
baz=61
**WAT7 Susitna Watana 6.96 198 Pn 07 24 24.6 +1.8**
**H18K Honhosa River 6.99 238 Pn Pn 07 24 23.0 0.0**
**H18K Honhosa River 6.99 238 P Pn 07 24 22.9 -0.1**
baz=45,SNR=18
**F17K Baldwin Pennin 7.09 252 Pn Pn 07 24 24.1 -0.3**
**F17K Baldwin Pennin 7.09 252 P Pn 07 24 23.9 -0.5**
baz=56,SNR=8.8
**C36M Paulatuk 7.09 82 Pn Pn 07 24 22.6 -1.8**
**C36M Paulatuk 7.09 82 P Pn 07 24 22.7 -1.7**
baz=281,SNR=13
**WAT6 Susitna Watana 7.11 193 Pn 07 24 26.6 +1.8**
**WAT6 Susitna Watana 7.11 193 P Pn 07 24 26.3 +1.5**
baz=10.0,SNR=42
**D17K Noatak River 7.12 264 Pn 07 24 23.9 -0.9**
**D17K Noatak River 7.12 264 P Pn 07 24 23.7 -1.1**
baz=66
**J19K Poorman 7.13 225 Pn Pn 07 24 24.8 -0.2**
**J19K Poorman 7.13 225 P Pn 07 24 24.8 -0.2**
baz=34,SNR=22
**HARP HAARP 7.16 183 Pn 07 24 25.8 +0.4**
**HARP HAARP 7.16 183 P Pn 07 24 27.3 +2.0**
baz=2.6,SNR=48
**M26K Nabesna, AK 7.16 175 Pn Pn 07 24 26.6 +1.2**
**M26K Nabesna, AK 7.16 175 P Pn 07 24 27.2 +1.7**
baz=356,SNR=37
**M27K Edge Creek, AK 7.25 171 Pn 07 24 28.0 +1.2**
**M27K Edge Creek, AK 7.25 171 P Pn 07 24 27.8 +1.1**
baz=354,SNR=293
**K20K Telida 7.32 217 Pn 07 24 27.0 -0.6**
**K20K Telida 7.32 217 P Pn 07 24 27.3 -0.4**
baz=28
**G17K Kiwalik Mounta 7.46 245 Pn Pn 07 24 29.1 -0.3**
**G17K Kiwalik Mounta 7.46 245 P Pn 07 24 29.2 -0.3**
baz=50,SNR=48
**M29M Somme Creek 7.48 159 Pn 07 24 30.5 +0.6**
**M29M Somme Creek 7.48 159 P Pn 07 24 30.8 +1.0**
baz=344,SNR=130
**M24K Tolsona, Glenn 7.48 187 Pn Pn 07 24 30.9 +1.1**
**M24K Tolsona, Glenn 7.48 187 P Pn 07 24 31.1 +1.3**
baz=5.2,SNR=23
**CUT Chulitna 7.55 202 P Pn 07 24 31.8 +1.2**
baz=16
**WACK Wrangell Chich 7.56 180 Pn 07 24 32.5 +1.4**
**H17K Granite Mounta 7.61 240 Pn 07 24 31.8 +0.3**
**H17K Granite Mounta 7.61 240 P Pn 07 24 31.7 +0.3**
baz=46
**C16K Lisburne Hills 7.71 271 Pn 07 24 32.3 -0.5**
**C16K Lisburne Hills 7.71 271 P Pn 07 24 32.5 -0.3**
baz=71
**SCM Sheep Creek Mo 7.82 191 P Pn 07 24 36.3 +1.8**
baz=8.0,SNR=18
**J18K Innoko River 7.84 225 Pn 07 24 34.4 -0.3**
**J18K Innoko River 7.84 225 P Pn 07 24 34.8 +0.1**
baz=34
**YUK2 White River 7.88 168 Pn 07 24 36.7 +1.3**
**M23K Glacier View 7.89 192 P Pn 07 24 37.2 +1.9**
baz=9.0,SNR=27
**SML Sawmill 7.92 194 Pn 07 24 37.1 +1.2**
**SML Sawmill 7.92 194 P Pn 07 24 37.1 +1.2**
baz=10,SNR=19
**YUK3 Moose Creek 7.92 167 Pn 07 24 37.3 +1.3**
**YUK3 Moose Creek 7.92 167 P Pn 07 24 37.4 +1.3**
baz=350,SNR=134
**N25K Chitina, Valde 7.95 181 Pn Pn 07 24 37.8 +1.6**
**N25K Chitina, Valde 7.95 181 P Pn 07 24 37.5 +1.3**
baz=0.9
**GHO Glory Hole Cre 8.01 196 Pn 07 24 38.5 +1.4**
**L20K Farewell, AK 8.07 214 Pn 07 24 37.8 -0.2**
**L20K Farewell, AK 8.07 214 P Pn 07 24 38.3 +0.4**
baz=25
**G16K Koyuk River 8.08 248 Pn 07 24 37.1 -0.8**
**G16K Koyuk River 8.08 248 P Pn 07 24 37.5 -0.4**
baz=51,SNR=16
**KLU Klutina 8.09 186 Pn 07 24 40.2 +2.0**
**KLU Klutina 8.09 186 P Pn 07 24 40.4 +2.2**
baz=4.2,SNR=11
**GLB Gilahina Butte 8.11 179 Pn 07 24 40.6 +2.2**
**SKT Skwentna 8.13 205 Pn Pn 07 24 39.8 +1.1**
**SKT Skwentna 8.13 205 P Pn 07 24 39.9 +1.1**
baz=18,SNR=16
**M22K Willow 8.16 200 Pn 07 24 39.4 +0.4**
**M22K Willow 8.16 200 P Pn 07 24 41.0 +1.9**
baz=15,SNR=5.4
**MCARA McCarthy VSAT 8.18 176 Pn 07 24 41.3 +1.9**
**MCARA McCarthy VSAT 8.18 176 P Pn 07 24 40.9 +1.5**
baz=357,SNR=14
**PMR Palmer 8.21 197 Pn Pn 07 24 41.3 +1.6**
**PMR Palmer 8.21 197 P Pn 07 24 41.6 +1.9**
baz=12,SNR=17
**KNK Knik Glacier 8.32 194 Pn 07 24 44.6 +3.3**
**KNK Knik Glacier 8.32 194 P Pn 07 24 42.1 +0.8**
baz=10,SNR=14
**VRDI Verde Repeater 8.33 177 Pn Pn 07 24 44.4 +2.9**
**M31M Drury Creek, Y 8.36 147 Pn Pn 07 24 41.9 +0.1**
**M31M Drury Creek, Y 8.36 147 P Pn 07 24 42.1 +0.2**
baz=336
**PTPK Patty Peak 8.39 174 Pn 07 24 44.4 +1.9**
**DIV Divide 8.45 185 Pn 07 24 44.8 +1.8**
**YUK8 Steele Glacier 8.47 165 Pn 07 24 45.4 +1.8**
**YUK8 Steele Glacier 8.47 165 P Pn 07 24 45.2 +1.6**
baz=349,SNR=32
**M20K Styx River 8.48 210 Pn 07 24 44.7 +1.1**
**M20K Styx River 8.48 210 P Pn 07 24 44.0 +0.4**
baz=22
**SUA Susitna One 8.52 202 Pn Pn 07 24 46.1 +2.0**
**SUA Susitna One 8.52 202 P Pn 07 24 46.3 +2.2**
baz=16,SNR=11
**J17K VABM Dome 8.52 231 Pn 07 24 43.4 -0.6**
**J17K VABM Dome 8.52 231 P Pn 07 24 44.2 +0.2**
baz=37,SNR=8.1
**YUK4 Talbot Arm 8.52 162 P Pn 07 24 44.5 +0.3**
baz=346,SNR=103
**H16K Elim 8.54 244 Pn 07 24 43.8 -0.5**
**H16K Elim 8.54 244 P Pn 07 24 43.5 -0.8**
baz=47,SNR=9.1
**L19K White Mountain 8.54 216 Pn Pn 07 24 44.1 -0.2**
**L19K White Mountain 8.54 216 P Pn 07 24 44.0 -0.2**
baz=26,SNR=14
**FARO Faro, Yukon 8.55 143 Pn 07 24 44.2 -0.2**
**FARO Faro, Yukon 8.55 143 P Pn 07 24 44.5 +0.1**
baz=334
**BMRM Bremner River 8.59 181 Pn 07 24 45.3 +0.4**
**BMRM Bremner River 8.59 181 P Pn 07 24 46.5 +1.6**
baz=0.9,SNR=45
**I17K Unalakleet 8.60 237 Pn 07 24 45.8 +0.6**
**I17K Unalakleet 8.60 237 P Pn 07 24 45.2 +0.1**
baz=42
**N30M Aishikik Lake 8.61 156 Pn 07 24 46.5 +1.2**
**N30M Aishikik Lake 8.61 156 P Pn 07 24 46.1 +0.8**
baz=343,SNR=56
**STLK Strandline Lak 8.64 205 Pn 07 24 46.8 +1.1**
**F15K North Star Dit 8.65 254 Pn Pn 07 24 44.8 -1.0**
**F15K North Star Dit 8.65 254 P Pn 07 24 45.1 -0.7**
baz=55
**KIAG Kiagna River 8.66 174 Pn 07 24 48.1 +2.0**
**CTG Chitna Glacier 8.67 171 P Pn 07 24 47.3 +1.1**
baz=353,SNR=68
**CTGM Chitina Glacie 8.67 171 Pn 07 24 47.9 +1.6**
**M19K Big River Lodg 8.70 214 Pn Pn 07 24 46.9 +0.4**
**M19K Big River Lodg 8.70 214 P Pn 07 24 47.3 +0.8**
baz=24,SNR=45
**RC01 Rabbit Creek A 8.76 198 Pn 07 24 48.6 +1.3**
**RC01 Rabbit Creek A 8.76 198 P Pn 07 24 49.2 +1.8**
baz=13,SNR=5.5
**N31M Braeburn, Yuko 8.78 152 Pn Pn 07 24 49.2 +1.6**
**N31M Braeburn, Yuko 8.78 152 P Pn 07 24 48.8 +1.2**
baz=340
**CRQM Cirque 8.81 176 Pn 07 24 51.7 +3.6**
**CRQE Cirque 8.81 176 P Pn 07 24 50.7 +2.5**
baz=357,SNR=34
**TGL Tana Glacier 8.82 176 Pn 07 24 50.8 +2.7**
**LOGN Logan Glacier 8.83 170 Pn 07 24 51.5 +3.1**
**PWL Port Wells 8.86 193 Pn 07 24 50.6 +2.0**
**PWL Port Wells 8.86 193 P Pn 07 24 50.2 +1.5**
baz=9.4,SNR=6.8
**K17K Iditarod 8.87 227 Pn 07 24 48.3 -0.5**
**K17K Iditarod 8.87 227 P Pn 07 24 49.3 +0.5**
baz=34
**GRNC Granite Creek 8.88 172 Pn 07 24 52.9 +3.8**
**G15K Niukluk 8.88 249 Pn 07 24 48.4 -0.6**
**G15K Niukluk 8.88 249 P Pn 07 24 49.4 +0.5**
baz=50
**L18K Granite Mounta 8.90 221 Pn Pn 07 24 48.7 -0.5**
**L18K Granite Mounta 8.90 221 P Pn 07 24 49.1 -0.1**
baz=29,SNR=14
**SPCP Crater Peak Br 8.91 205 Pn 07 24 50.4 +0.9**
**O28M Mount Upton 8.94 167 Pn 07 24 51.9 +1.8**
**O28M Mount Upton 8.94 167 P Pn 07 24 52.3 +2.3**

baz=351,SNR=24
YUK6 Outpost Mounta 8.95 161 Pn 07 24 51.7 +1.7
YUK6 Outpost Mounta 8.95 161 P Pn 07 24 51.4 +1.3
baz=347,SNR=202
N20K Mount Spurr 8.98 206 P Pn 07 24 51.6 +1.2
baz=18
ISLE Juniper Island 8.98 174 Pn 07 24 51.8 +1.3
EYAK Cordova Ski Ar 9.03 185 P Pn 07 24 52.8 +1.9
baz=3.4,SNR=6.1
J16K Anvik River 9.04 234 Pn Pn 07 24 51.4 +0.3
J16K Anvik River 9.04 234 P Pn 07 24 51.7 +0.7
baz=39,SNR=7.3
BAGL Bagley Icefiel 9.11 173 Pn 07 24 54.9 +2.9
KHIT Khitrov Hills 9.12 177 Pn 07 24 53.8 +1.4
RAGM Ragged Mountai 9.17 181 Pn 07 24 55.7 +2.7
BARK Barkley Ridge 9.18 175 Pn 07 24 56.4 +3.2
TABL Table Mountain 9.20 170 Pn 07 24 56.5 +2.9
HMT Hamilton 9.22 180 Pn 07 24 57.5 +3.9
GRIN Grindle Hills 9.28 177 Pn 07 24 56.6 +2.1
RKAV Rock Avalanche 9.33 171 Pn 07 24 56.4 +1.1
F14K Arctic Creek 9.36 255 Pn 07 24 54.3 -1.1
F14K Arctic Creek 9.36 255 P Pn 07 24 55.1 -0.3
baz=54
O22K Cooper Landing 9.36 197 Pn 07 24 57.6 +2.1
O22K Cooper Landing 9.36 197 P Pn 07 24 55.9 +0.4
baz=12
L17K Donlin 9.36 225 Pn 07 24 55.2 -0.3
L17K Donlin 9.36 225 P Pn 07 24 55.7 +0.2
baz=32
M18K Stony River 9.36 216 Pn 07 24 55.0 -0.6
M18K Stony River 9.36 216 P Pn 07 24 55.6 +0.1
baz=26,SNR=16
O30N Mendenhall 9.41 155 Pn 07 24 56.3 0.0
O30N Mendenhall 9.41 155 P Pn 07 24 57.4 +1.2
baz=342,SNR=28
MESA MESA 9.43 173 P Pn 07 24 57.2 +0.6
baz=355,SNR=7.7
SAMH Samovar Hills 9.54 170 Pn 07 24 58.0 0.0
O29M Mount Kennedy 9.55 163 Pn 07 25 01.4 +3.1
O29M Mount Kennedy 9.55 163 P Pn 07 24 59.8 +1.6
baz=348,SNR=22
N32M Quiet Lake 9.58 146 Pn 07 24 59.2 +0.6
N32M Quiet Lake 9.58 146 P Pn 07 24 59.1 +0.6
baz=336
ANM Nome 9.60 249 Pn 07 24 58.6 -0.1
KAIM Kayak Island 9.63 181 P Pn 07 24 60.0 +0.8
baz=0.4
SEW Seward 9.70 196 P Pn 07 25 01.1 +0.9
baz=11
WHY Whitehorse 9.71 152 Pn 07 25 00.8 +0.4
WHY Whitehorse 9.71 152 P Pn 07 25 01.0 +0.6
baz=340,SNR=10
N19K Bonanza Creek 9.72 211 Pn 07 25 01.2 +0.6
N19K Bonanza Creek 9.72 211 P Pn 07 25 01.8 +1.3
baz=22
RSO Redoubt South 9.77 206 Pn 07 25 03.7 +2.5
M17K Holitna River 9.79 220 Pn 07 25 01.3 -0.2
M17K Holitna River 9.79 220 P Pn 07 25 01.6 +0.1
baz=28
TNA Tin City 9.85 258 P Pn 07 25 02.7 +0.5
baz=56
P30M Million Dollar 9.92 158 P Pn 07 25 04.0 +0.8
baz=345
L16K Owhat River 10.02 226 P Pn 07 25 05.0 +0.6
baz=32
K15K Wolf Creek Mou 10.08 233 P Pn 07 25 05.9 +0.5
baz=37
PNL Peninsula 10.10 166 P Pn 07 25 06.6 +1.0
baz=350
N18K Kilae Creek 10.11 214 Pn Pn 07 25 06.9 +1.1
N18K Kilae Creek 10.11 214 P Pn 07 25 07.2 +1.3
baz=24
BRSE Bradley Lake S 10.19 199 P Pn 07 25 08.4 +1.5
baz=13
P29M Windy Craggy 10.30 161 P Pn 07 25 10.1 +1.7
baz=347
J14K Nanvaranak Lak 10.31 238 P Pn 07 25 08.5 0.0
baz=40
TGTN Hyland Airport 10.36 133 P Pn 07 25 08.7 -0.5
baz=328
WRGLY Wrigley 10.40 117 P Pn 07 25 08.9 -0.8
baz=316
CNPM China Poot 10.46 200 Pn 07 25 11.2 +0.6
M16K Timber Creek 10.48 223 Pn Pn 07 25 10.7 -0.1
M16K Timber Creek 10.48 223 P Pn 07 25 11.1 +0.2
baz=29
P33M Teslin, Yukon 10.50 147 Pn Pn 07 25 11.2 +0.1
P33M Teslin, Yukon 10.50 147 P Pn 07 25 11.4 +0.3
baz=338,SNR=10
N17K Nushagak Hills 10.52 217 Pn Pn 07 25 11.2 -0.1
N17K Nushagak Hills 10.52 217 P Pn 07 25 11.5 +0.1
baz=26
L15K Ungalak Mounta 10.57 230 P Pn 07 25 12.7 +0.6
baz=35
P19K Oil Pt 10.61 206 P Pn 07 25 14.0 +1.3
baz=17
PLBC Pleasant Camp 10.64 158 Pn 07 25 15.1 +2.2
PLBC Pleasant Camp 10.64 158 P Pn 07 25 14.1 +1.1
baz=345
O18K Koktuh Hills 10.75 211 Pn 07 25 16.8 +2.2
O18K Koktuh Hills 10.75 211 P Pn 07 25 15.1 +0.5
baz=21
SKAG Skagway 10.78 155 Pn 07 25 15.7 +0.8
SKAG Skagway 10.78 155 P Pn 07 25 15.4 +0.5
baz=343
P32M Atlin 10.92 151 P Pn 07 25 17.6 +0.7
baz=340
N16K Nishlik Lake 10.92 221 Pn 07 25 17.8 +0.9
N16K Nishlik Lake 10.92 221 P Pn 07 25 17.6 +0.7
baz=28
L14K Kuka Creek 11.18 232 P Pn 07 25 20.9 +0.6
baz=35
P18K Big Mountain, 11.19 210 Pn 07 25 22.6 +2.1
P18K Big Mountain, 11.19 210 P Pn 07 25 21.5 +1.0
baz=20
O17K Koliganek Bris 11.19 215 P Pn 07 25 21.6 +1.1
baz=24
M15K Kasigluk River 11.19 226 P Pn 07 25 20.5 -0.1
baz=31
Q19K Cape Douglas, 11.37 205 P Pn 07 25 24.4 +1.4
baz=17
WTLY Watson Lake, Y 11.45 138 P Pn 07 25 24.4 +0.3
baz=332
M14K Bethel 11.47 229 P Pn 07 25 24.9 +0.5
baz=32
Q20K Shuyak Island 11.50 202 P Pn 07 25 25.8 +1.1
baz=14
O16K Kokwok River B 11.56 217 P Pn 07 25 26.2 +0.6
baz=25
P17K Kvichak River 11.60 213 P Pn 07 25 26.9 +0.9
baz=22
R33M Jennings River 11.62 144 Pn 07 25 26.4 -0.1
R33M Jennings River 11.62 144 P Pn 07 25 27.0 +0.5
baz=336
BESE Bessie Mountai 11.70 155 Pn 07 25 30.5 +3.0
Q32M Nakina River 11.77 148 Pn Pn 07 25 28.6 0.0
Q32M Nakina River 11.77 148 P Pn 07 25 29.8 +1.2
baz=339
Q18K Katmai Hardscr 11.85 208 P Pn 07 25 30.7 +1.0
baz=19
KAHG Katmai Hook Gl 11.93 207 Pn 07 25 32.7 +2.1
R32K Eaglecrest 12.04 155 P Pn 07 25 33.3 +1.1
baz=344
P16K Nushagak River 12.05 216 P Pn 07 25 33.3 +1.0
baz=24
S31K Pelican 12.11 159 Pn 07 25 35.3 +2.2
S31K Pelican 12.11 159 P Pn 07 25 34.8 +1.8
baz=347
GAMB Gambell 12.23 255 P Pn 07 25 35.2 +0.5
baz=50
KABU Katmai Buttres 12.26 208 Pn 07 25 37.3 +2.1
ACHA Angle Creek He 12.32 209 Pn 07 25 38.0 +1.9
O15K Ungalikthiuk R 12.32 220 P Pn 07 25 37.2 +1.2
baz=26
KDAK Kodiak Island 12.33 201 Pn Pn 07 25 37.9 +1.9
comp=E,0.1nm,0.3s,baz=39,slow=14,SNR=1.7
KDAK LR LR 07 30 44.5
comp=E,698nm,18.8s,baz=42,slow=39
KDAK Kodiak Island 12.33 201 P Pn 07 25 38.0 +1.9
baz=14
Q17K Contact Creek 12.37 210 P Pn 07 25 38.8 +2.0
baz=19
O14K Tigyukauivet M 12.59 224 P Pn 07 25 40.1 +0.5
baz=28
KOTAN Kotaneelee Air 12.66 128 P Pn 07 25 40.7 +0.1
baz=326

DLBC Dease Lake 12.70 144 Pn Pn 07 25 41.4 +0.2
DLBC Dease Lake 12.70 144 Pn Pn 07 25 41.5 +0.4
comp=E,0.8nm,0.3s,baz=328,slow=11,SNR=17
DLBC Sn Sn 07 28 00.9 -1.5
comp=E,0.4nm,0.3s,baz=74,slow=19,SNR=2.3
DLBC Lg Lg 07 29 22.4
comp=E,0.3nm,0.3s,baz=61,slow=27,SNR=5.7
DLBC LR LR 07 31 12.9
comp=E,464nm,18.1s,baz=336,slow=40
comp=E,7.2nm,0.6s
DLBC Dease Lake 12.70 144 P Pn 07 25 42.2 +1.1
baz=337
LIRD Liard River Hi 12.73 134 P Pn 07 25 42.9 +1.3
baz=330
R18K Karluk 12.80 206 P Pn 07 25 44.5 +2.0
baz=16
S32K Killisnoo 12.81 156 P Pn 07 25 44.1 +1.4
baz=345
S34M Telegraph Cree 12.96 147 Pn 07 25 45.5 +0.8
S34M Telegraph Cree 12.96 147 P Pn 07 25 45.7 +0.9
baz=339,SNR=5.7
OHAK Old Harbor 12.96 202 P Pn 07 25 46.1 +1.4
baz=14
TOAD Toad River Com 13.44 133 P Pn 07 25 52.0 +0.7
baz=331
YKA Yellowknife Ar 13.82 106 Pn Pn 07 25 52.5 -3.9
comp=E,1.1nm,0.3s,baz=314,slow=13,SNR=23
YKA Sn Sn 07 28 18.5 -11
comp=E,1.8nm,0.3s,baz=318,slow=22,SNR=7.5
comp=E,2.6nm,0.6s
U33K Whale Pass 14.33 154 P Pn 07 26 03.9 +0.4
baz=344
SPIA Saint Paul Isl 16.80 236 P Pn 07 26 35.5 -0.2
baz=32
EUNU Eureka 17.38 30 P Pn 07 26 42.0 -1.0
BILL Bilibino 17.59 289 P P 07 26 44.9 -1.6
TULEG Thule 21.45 38 P P 07 27 27.9 -0.7
TULEG IAmb IAmb 07 27 38.0
comp=Z,14nm,0.8s
B08A Colville Reser 24.44 137 P P 07 28 01.8 +2.5
NEW Newport 25.07 134 LR LR 07 38 29.1
comp=Z,570nm,18.7s,baz=338,slow=38
NEW Newport 25.07 134 P P 07 28 06.3 +1.3
baz=338
LTY Liberty 25.17 140 P P 07 28 08.5 +2.6
LTY IAmb IAmb 07 28 12.0
comp=Z,12nm,1.2s
LON Longmire 25.40 142 P P 07 28 10.8 +2.8
LON IAmb IAmb 07 28 12.1
comp=Z,6.3nm,0.8s
SHEM Shemya Is, Ala 25.45 250 LR LR 07 39 02.3
comp=Z,145nm,18.2s,baz=52,slow=38
TIXI Tiksi 26.64 315 P P 07 28 18.6 -0.4
comp=Z,4.9nm,0.3s,baz=32,slow=6.0,SNR=3.4
TIXI LR LR 07 40 56.3
comp=Z,95nm,21.4s,baz=66,slow=41
comp=Z,4.9nm,0.3s
F10A Beach Ranch, E 27.18 136 P P 07 28 25.9 +1.7
F10A IAmb IAmb 07 28 30.1
comp=Z,4.1nm,0.8s
MSO Missoula 27.23 131 P P 07 28 27.0 +2.4
baz=337
EGMT Eagleton 27.31 124 P P 07 28 26.3 +1.0
baz=334,SNR=6.3
G08A Pilot Rock 27.41 139 P P 07 28 28.7 +2.4
LYMT Lyon Mountain 27.55 128 P P 07 28 28.9 +1.3
BPMT Black Pine Rid 27.72 130 P P 07 28 31.2 +2.0
MA2 Magadan 28.19 282 LR LR 07 40 15.8
comp=Z,157nm,18.8s,baz=43,slow=38
FRB Frobisher Bay 28.71 64 LR LR 07 41 54.4
comp=Z,331nm,20.4s,baz=310,slow=40
BOZ Bozeman (W) 28.99 129 P P 07 28 41.2 +0.8
baz=337
HUMO Hull Mountain 29.13 147 P P 07 28 45.0 +3.5
HUMO IAmb IAmb 07 28 48.8
comp=Z,4.9nm,1.0s
LAO LASA Array 29.56 121 P P 07 28 46.9 +1.6
baz=334
ULM Lac du Bonnet 29.79 105 P P 07 28 48.2 +1.0
comp=Z,1.8nm,0.8s,baz=289,slow=11,SNR=1.4
comp=Z,1.8nm,0.8s
YBH Yreka Blue Hor 30.02 147 LR LR 07 42 17.8
comp=Z,110nm,21.7s,baz=342,slow=39
RLMT Red Lodge 30.09 126 P P 07 28 51.0 +0.8
baz=336
HLID Hailey 30.14 134 P P 07 28 52.3 +1.7
HLID Hailey 30.14 134 P P 07 28 52.8 +2.2
baz=340
PETK Petropavlovsk- 30.80 268 LR LR 07 41 47.8
comp=Z,231nm,21.4s,baz=39,slow=37
SFJD Kangerlussuaq 31.57 49 LR LR 07 43 58.8
comp=Z,134nm,19.1s,baz=324,slow=41
SPITS Spitsbergen Ar 32.07 7 P P 07 29 07.0 -0.1
comp=Z,12nm,1.1s,baz=356,slow=5.2,SNR=5.5
comp=Z,12nm,1.1s
BW06 Boulder Array 32.17 128 P P 07 29 10.5 +2.0
baz=338,SNR=5.7
PDAR Pinedale Array 32.17 128 P P 07 29 10.7 +2.1
comp=Z,2.4nm,0.7s,baz=2.2,slow=5.8,SNR=25
PDAR LR LR 07 44 19.4
comp=Z,24nm,21.6s,baz=338,slow=40
comp=Z,2.4nm,0.7s
RSSD Black Hills 32.54 120 P P 07 29 11.7 -0.1
baz=335
ELK Elko 32.59 137 P P 07 29 14.8 +2.5
ELK IAmb IAmb 07 29 17.1
comp=Z,2.6nm,0.6s
PAHR Pah Rah Range 32.65 143 P P 07 29 15.4 +2.7
PAHR IAmb IAmb 07 29 19.4
comp=Z,4.3nm,1.0s
TCUT Toone Canyon 33.21 132 P P 07 29 19.5 +1.9
EYMN Ely 33.26 103 P P 07 29 19.5 +1.7
baz=329
DUG Dugway, Tooele 33.71 134 P P 07 29 24.5 +2.5
DUG IAmb IAmb 07 29 26.5
comp=Z,5.8nm,0.8s
DUG Dugway, Tooele 33.71 134 P P 07 29 24.9 +2.9
baz=341,SNR=10
RYN Ryan 33.87 142 P P 07 29 25.9 +2.6
RYN IAmb IAmb 07 29 28.0
comp=Z,3.4nm,0.7s
NVAR Mina Array Bea 34.10 142 P P 07 29 28.2 +2.8
comp=Z,3.3nm,0.9s,baz=337,slow=7.1,SNR=21
NVAR LR LR 07 44 15.6
comp=Z,311nm,21.7s,baz=346,slow=38
comp=Z,3.3nm,0.9s
R11B Troy Canyon, C 34.79 139 P P 07 29 33.5 +2.2
R11B Troy Canyon, C 34.79 139 P P 07 29 32.8 +1.5
baz=343
P18A Preston Nutter 34.91 131 P P 07 29 35.3 +2.7
P18A IAmb IAmb 07 29 37.9
comp=Z,5.7nm,0.6s
TMUT Trail Mountain 34.97 132 P P 07 29 35.5 +2.5
ECSD EROS Data Cent 35.23 112 P P 07 29 34.9 0.0
ECSD EROS Data Cent 35.23 112 P P 07 29 36.1 +1.2
baz=333
SRU San Rafael Swe 35.32 132 P P 07 29 38.0 +2.1
SRU IAmb IAmb 07 29 42.5
comp=Z,6.1nm,0.7s
MSU Marysvale 35.46 134 P P 07 29 39.4 +2.2
TPNV Topopah Spring 35.98 140 P P 07 29 43.6 +2.1
baz=344,SNR=10
OGNE Ogallala 36.04 120 P P 07 29 43.3 +1.3
baz=336
SCHQ Schefferville 36.11 73 P P 07 29 43.0 +0.6
comp=Z,6.9nm,0.9s,baz=310,slow=7.9,SNR=4.8
SCHQ LR LR 07 47 00.9
comp=Z,145nm,19.1s,baz=291,slow=40
comp=Z,6.9nm,0.9s
MVCO Mesa Verde 37.65 130 P P 07 29 57.7 +1.9
baz=340
SDCO Great Sand Dun 37.98 126 P P 07 29 57.9 -0.8
baz=339
JFWS Jewell Farm 38.09 106 P P 07 29 58.9 -0.3
baz=333
WUAZ Wupatki 38.50 135 P P 07 30 02.5 -0.5
baz=342
PFO Pinyon Flats O 39.14 142 LR LR 07 46 43.3
comp=Z,195nm,20.6s,baz=340,slow=37
PFO Pinyon Flats O 39.14 142 P P 07 30 09.3 +1.1
baz=345
MONP2 Monument Peak 39.84 142 P P 07 30 16.6 +2.4
baz=345
BORG Borgarnes 40.23 34 LR LR 07 50 36.4
comp=Z,86nm,18.3s,baz=332,slow=42
SADO Sadowa 40.31 93 P P 07 30 18.1 +0.3
comp=Z,2.2nm,0.4s,baz=0.1,slow=7.5,SNR=4.3

SADO LR LR 07 45 54.7
comp=Z,68nm,19.0s,baz=273,slow=35
comp=Z,2.2nm,0.4s
ANMO Albuquerque 40.33 129 LR LR 07 48 30.0
comp=Z,288nm,18.2s,baz=65,slow=38
ANMO Albuquerque 40.33 129 P P 07 30 20.4 +2.1
baz=341
HDIL Hopedale 40.51 106 P P 07 30 20.2 +0.8
baz=334
ARCES ARCESS Array B 41.03 5 P P 07 30 22.8 -0.7
comp=Z,1.8nm,0.8s,baz=355,slow=10.0,SNR=2.9
comp=Z,1.8nm,0.8s
TUC Tucson 41.70 135 P P 07 30 30.8 +1.4
baz=343
121A Cookes Peak, D 42.26 132 P P 07 30 34.9 +0.9
baz=342
M53A WI Miller and 42.69 97 P P 07 30 38.6 +1.2
baz=332
WMOK Wichita Mounta 42.75 120 P P 07 30 39.5 +1.6
baz=338
ACSO Alum Creek Sta 42.96 100 P P 07 30 39.2 -0.3
baz=333
P49A Miami Univ. Ec 42.99 102 P P 07 30 38.5 -1.2
baz=334
KLR Kul'dur 43.04 287 P P 07 30 39.4 -0.7
comp=Z,2.0nm,0.8s,baz=351,slow=13,SNR=3.6
KLR LR LR 07 50 48.6
comp=Z,104nm,19.5s,baz=36,slow=39
comp=Z,2.0nm,0.8s
LBNH Lisbon 43.31 87 P P 07 30 40.3 -2.0
baz=331
O53A New Philadelph 43.56 98 P P 07 30 43.2 -1.1
baz=333
BINY Binghamton 43.67 92 P P 07 30 43.3 -1.9
baz=332
MNTX Cornudas Mount 43.69 129 P P 07 30 46.0 +0.6
baz=342
ASAJ Asahikawa 43.72 274 LR LR 07 49 33.6
comp=Z,204nm,19.6s,baz=139,slow=37
P52A Corning 43.79 100 P P 07 30 45.5 -0.7
baz=333
SSPA Standing Stone 44.38 95 P P 07 30 49.2 -1.8
baz=333
MIAR Mount Ida 44.55 115 P P 07 30 52.7 +0.3
baz=337
N58A Sunbury 44.61 93 P P 07 30 52.7 -0.1
N58A IAmb IAmb 07 30 59.4
comp=Z,6.1nm,0.8s
WVT Waverly 44.99 108 P P 07 30 55.3 -0.6
baz=336
ALPN Alpine 45.42 128 P P 07 31 00.3 +0.8
ALPN IAmb IAmb 07 31 04.0
comp=Z,2.8nm,0.8s
PAL Palisades 45.45 91 P P 07 30 59.1 -0.3
baz=332
OXF Oxford 45.94 110 P P 07 31 02.8 -0.6
baz=336
TXAR Lajitas Array 46.39 128 P P 07 31 08.8 +1.7
comp=Z,1.2nm,0.5s,baz=336,slow=4.0,SNR=34
TXAR LR LR 07 52 16.5
comp=Z,164nm,18.3s,baz=328,slow=38
comp=Z,1.2nm,0.5s
JCT Junction City 46.42 123 P P 07 31 08.5 +1.3
baz=340
NATX Nacogdoches 46.78 117 P P 07 31 09.8 -0.3
baz=339
USRK Ussuriysk Ar. 47.34 283 P P 07 31 14.9 +0.7
comp=Z,4.6nm,0.7s,baz=42,slow=9.1,SNR=5.0
USRK LR LR 07 52 54.2
comp=Z,82nm,18.2s,baz=32,slow=38
comp=Z,4.6nm,0.7s
LRAL Lakeview Retre 48.10 108 P P 07 31 20.2 0.0
baz=337
GOGA Godfrey 48.94 105 P P 07 31 26.6 -0.1
baz=336
FINES FINESS Array B 49.15 6 P P 07 31 27.6 -0.4
comp=Z,3.1nm,1.0s,baz=6.2,slow=7.9,SNR=6.3
comp=Z,3.1nm,1.0s
HFS Hagfors 49.68 14 P P 07 31 31.6 -0.4
comp=Z,3.2nm,0.7s,baz=2.3,slow=3.7,SNR=6.4
comp=Z,3.2nm,0.7s
LPIG La Paz 49.68 138 LR LR 07 52 06.6
comp=Z,84nm,21.4s,baz=12,slow=36
ZALV Zalesovo Beam 51.79 325 P P 07 31 46.8 -1.2
comp=Z,1.3nm,0.4s,baz=15,slow=6.2,SNR=6.5
ZALV LR LR 07 56 00.5
comp=Z,64nm,19.5s,baz=19,slow=39
comp=Z,1.3nm,0.4s
MJAR Matsushiro Arr 51.98 273 P P 07 31 52.8 +3.1
comp=Z,1.6nm,0.8s,baz=9.4,slow=8.1,SNR=5.8
MJAR LR LR 07 56 03.1
comp=Z,111nm,18.4s,baz=39,slow=39
SONM Songino Array 52.20 306 P P 07 31 51.8 +0.5
comp=Z,1.8nm,1.0s,baz=23,slow=6.6,SNR=6.5
SONM LR LR 07 58 14.9
comp=Z,185nm,18.8s,baz=22,slow=41
comp=Z,1.8nm,1.0s
EKA Eskdalemuir Ar 52.29 27 P P 07 31 51.9 +0.2
comp=Z,1.8nm,0.7s,baz=332,slow=6.5,SNR=7.2
comp=Z,1.8nm,0.7s
XLT XiLinHaoTe 52.85 297 eP P 07 31 58.4 +2.3
XLT pmax pmax
comp=Z,9.0nm,1.0s
ARU Arti 53.28 344 LR LR 07 54 41.4
comp=Z,69nm,21.9s,baz=326,slow=36
JHJ Hachijo Jima 2 54.51 270 LR LR 07 57 39.1
comp=Z,31nm,18.8s,baz=16,slow=38
KSRS Korea Array 54.74 283 P P 07 32 11.0 +1.1
comp=Z,2.6nm,0.8s,baz=27,slow=6.8,SNR=4.4
KSRS LR LR 07 58 29.3
comp=Z,95nm,18.4s,baz=20,slow=39
comp=Z,2.6nm,0.8s
BVAR Borovoye Array 55.18 335 P P 07 32 13.3 +0.4
comp=Z,0.4nm,0.4s,baz=23,slow=8.0,SNR=6.8
comp=Z,0.4nm,0.4s
KURK Kurchatov 56.05 329 P P 07 32 19.1 -0.1
KURBB Kurchatov Arra 56.16 329 P P 07 32 20.1 +0.2
comp=Z,4.8nm,0.8s,baz=13,slow=6.9,SNR=21
KURBB LR LR 07 57 59.7
comp=Z,87nm,21.0s,baz=180,slow=38
comp=Z,4.8nm,0.8s
HHC Hu-ho-hao-te 57.02 299 eP P 07 32 24.3 -2.1
HHC pmax pmax
comp=Z,6.0nm,0.6s
HHC pmax pmax
comp=Z,72nm,4.1s
JNU Nakatsue 57.63 278 LR LR 07 59 11.9
comp=Z,60nm,19.1s,baz=35,slow=38
BELG Belogornoye 58.09 351 LR LR 07 58 39.9
comp=Z,51nm,20.0s,baz=37,slow=37
MKAR Makanchi Array 59.09 324 P P 07 32 39.9 -0.8
MKAR Makanchi Array 59.09 324 P P 07 32 40.2 -0.4
comp=Z,0.6nm,0.4s,baz=51,slow=7.9,SNR=6.9
MKAR LR LR 08 01 19.4
comp=Z,74nm,18.6s,baz=16,slow=39
comp=Z,0.6nm,0.4s
MAKZ Makanchi 59.14 325 P P 07 32 40.4 -0.7
AKTO Aktyubinsk 59.26 344 LR LR 07 58 07.2
comp=Z,68nm,21.8s,baz=31,slow=36
DPC Dobruska-Polom 59.60 14 P P 07 32 45.4 +1.2
comp=Z,4.2nm,1.4s
AK20 Malin Array Si 59.95 5 P P 07 32 46.4 -0.1
AK19 Malin Array Si 59.98 5 P P 07 32 46.6 -0.1
AK03 Malin Array Si 59.98 5 P P 07 32 46.4 -0.3
AKASG Malin Array Be 60.00 5 P P 07 32 46.7 -0.1
comp=Z,3.1nm,0.6s,baz=357,slow=6.7,SNR=10
AKASG LR LR 07 58 43.8
comp=Z,56nm,19.5s,baz=359,slow=36
comp=Z,3.1nm,0.6s
AKBB Malin Array Si 60.00 5 P P 07 32 46.0 -0.8
AKBB Malin Array Si 60.00 5 P P 07 32 46.6 -0.2
KIEV Kiev 60.01 5 P P 07 32 46.1 -0.7
KIEV Kiev 60.01 5 P P 07 32 46.6 -0.3
comp=Z,30nm,0.9s
AK01 Malin Array Si 60.01 5 P P 07 32 46.7 -0.2
AK11 Malin Array Si 60.02 5 P P 07 32 46.8 -0.2
AK02 Malin Array Si 60.05 5 P P 07 32 47.0 -0.1
AK12 Malin Array Si 60.06 5 P P 07 32 47.0 -0.2
AK14 Malin Array Si 60.07 5 P P 07 32 47.4 +0.1
AK13 Malin Array Si 60.09 5 P P 07 32 47.3 -0.1
AK10 Malin Array Si 60.11 5 P P 07 32 47.5 -0.1
ABKAR Akbulak array 60.22 342 P P 07 32 48.2 -0.1
WMQ Urumqi 60.75 319 eP P 07 32 54.3 +2.2
WMQ LR LR
comp=Z,140nm,24.3s
GERES GERESS Array B 60.85 17 P P 07 32 53.1 +0.4
CCIG Comitan 62.06 121 P P 07 33 02.4 +1.0
NJ2 Nanjing 62.72 288 eP P 07 33 05.6 +0.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **62.90** | **8** | P | | **P** | **07 33 06.0** | **-0.6** |
| BUR08 | | | | IAmb | | IAmb | 07 33 16.4 | |
| | comp=Z,5.6nm,1.2s | | | | | | | |
| **BURAR** | **Bucovina Array** | **62.93** | **8** | P | | **P** | **07 33 06.4** | **-0.5** |
| BURAR | | | | IAmb | | IAmb | 07 33 16.8 | |
| | comp=Z,3.5nm,1.3s | | | | | | | |
| **APG** | **El Apazote** | **63.78** | **120** | LR | | LR | 08 07 24.7 | |
| | comp=Z,11nm,19.3s,baz=192,slow=42 | | | | | | | |
| **JOW** | **Kunigami** | **64.28** | **278** | LR | | LR | 08 01 55.9 | |
| | comp=Z,139nm,21.2s,baz=350,slow=37 | | | | | | | |
| **AAK** | **Ala-Archa** | **64.59** | **329** | LR | | LR | 08 04 27.0 | |
| | comp=Z,59nm,19.2s,baz=24,slow=39 | | | | | | | |
| **KKAR** | **Karatay Array** | **64.82** | **333** | P | | **P** | **07 33 19.2** | **-0.1** |
| **MLR** | **Muntele Rosu** | **65.08** | **8** | LR | | LR | 08 02 10.8 | |
| | comp=Z,42nm,18.4s,baz=24,slow=36 | | | | | | | |
| **TIRR** | **Tirgusor** | **66.22** | **6** | P | | **P** | **07 33 28.6** | **+0.4** |
| **KBZ** | **Khabaz** | **66.95** | **354** | P | | **P** | **07 33 32.5** | **-0.4** |
| | comp=Z,1.7nm,0.7s,baz=327,slow=4.1,SNR=4.1 | | | | | | | |
| KBZ | | | | LR | | LR | 08 07 37.7 | |
| | comp=Z,18nm,20.3s,baz=18,slow=40 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.28** | **32** | P | | **P** | **07 33 35.0** | **-0.1** |
| | comp=Z,0.4nm,0.4s,baz=344,slow=6.7,SNR=2.2 | | | | | | | |
| ESDC | | | | LR | | LR | 08 05 01.2 | |
| | comp=Z,39nm,20.3s,baz=316,slow=38 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **KSH** | **Kashi** | **67.34** | **327** | P | | P | 07 33 39.6 | +4.0 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **CHGR** | **Chuyangaron** | **69.38** | **333** | P | | **P** | **07 33 49.0** | **+0.6** |
| **GNI** | **Garni** | **70.45** | **353** | LR | | LR | 08 09 32.4 | |
| | comp=Z,30nm,19.2s,baz=12,slow=40 | | | | | | | |
| **GUMO** | **Guam** | **70.70** | **257** | LR | | LR | 08 02 02.0 | |
| | comp=Z,24nm,21.7s,baz=221,slow=33 | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.06** | **2** | P | | **P** | **07 33 59.6** | **+0.9** |
| | comp=Z,0.9nm,0.7s,baz=114,slow=1.5,SNR=5.6 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **73.32** | **301** | P | | **P** | **07 34 12.4** | **+0.1** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,180nm,4.7s | | | | | | | |
| **MDT** | **Midelt** | **73.80** | **35** | LR | | LR | 08 10 17.3 | |
| | comp=Z,21nm,18.0s,baz=356,slow=39 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.73** | **301** | P | | **P** | **07 34 59.5** | **+0.2** |
| | comp=Z,0.9nm,0.3s,baz=358,slow=7.6,SNR=7.7 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **MDP** | **Montagnes des** | **85.82** | **87** | LR | | LR | 08 12 08.4 | |
| | comp=Z,53nm,21.4s,baz=314,slow=35 | | | | | | | |
| **HNR** | **Honiara** | **87.55** | **235** | LR | | LR | 08 10 47.4 | |
| | comp=Z,831nm,19.5s,baz=8.5,slow=33 | | | | | | | |
| **ATAH** | **Atahualpa** | **88.42** | **115** | LR | | LR | 08 17 09.9 | |
| | comp=Z,33nm,19.4s,baz=0.6,slow=37 | | | | | | | |
| **BBTS** | **Babate** | **88.45** | **50** | LR | | LR | 08 14 15.5 | |
| | comp=Z,25nm,19.4s,baz=296,slow=35 | | | | | | | |
| **PMG** | **Port Moresby** | **91.45** | **247** | LR | | LR | 08 12 31.0 | |
| | comp=Z,53nm,21.1s,baz=14,slow=33 | | | | | | | |
| **DBIC** | **Dimbokro** | **99.06** | **41** | LR | | LR | 08 20 39.5 | |
| | comp=Z,51nm,20.4s,baz=310,slow=35 | | | | | | | |
| **VNDA** | **Vanda** | **150.28** | **201** | PKPbc | | **PKiKP** | **07 42 30.0** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=329,slow=3.6,SNR=4.4 | | | | | | | |

*JMA **16** 07:25:15.3±0.1,38°.9N±0°.3×142°.1E±0°.7, h46km±1km, MV3.8/36, KINKAZAN REGION*
*JMA Felt II J1 at KINKAZAN REGION .*
*IDC **16** 07:25:18.6±4.8, 38°.98N×141°.89E, h67km±25km, mb3.8/4, mbtmp3.9/7, MS2.9/2, Error ellipse: s-maj=80.6km s-min=30.5km az=115.0*
**ISC 16 07:25:15.1±1.9, 38°.83N±0°.08×142°.1E±0°.1, h45km±12km, n25, σ0$89/22, mb4.0/4, 9D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OFUJ** | **Ofunato** | **0.40** | **309** | ⇓P | **Pn** | **07 25 24.9** | **+0.1** |
| OFUJ | | | | ⇓*e*S | **Sn** | **07 25 31.8** | **0.0** |
| **JKMT** | **Kesennumamotoy** | **0.46** | **268** | P | **Pn** | **07 25 25.8** | **+0.2** |
| JKMT | | | | *e*S | **Sn** | **07 25 32.8** | **-0.2** |
| **JMK** | **Ichinoseki** | **0.67** | **281** | ⇓P | **Pn** | **07 25 28.4** | **+0.1** |
| JMK | | | | ⇓*e*S | **Sn** | **07 25 37.5** | **-0.3** |
| **JIO** | **Ouri** | **0.67** | **236** | ⇓P | **Pn** | **07 25 28.4** | **+0.1** |
| JIO | | | | ⇓*e*S | **Sn** | **07 25 37.3** | **-0.5** |
| **JOM** | **Ohasama** | **0.88** | **317** | ⇓P | **Pn** | **07 25 31.1** | **0.0** |
| JOM | | | | ⇓*e*S | **Sn** | **07 25 42.5** | **-0.3** |
| **JTH** | **Tanohata** | **1.12** | **352** | *e*P | **Pn** | **07 25 34.0** | **-0.3** |
| **JOU** | **Okura** | **1.19** | **247** | *e*P | **Pn** | **07 25 35.8** | **+0.5** |
| **JRG** | **Rokugo** | **1.25** | **297** | *e*P | **Pn** | **07 25 36.3** | **+0.2** |
| **JYK** | **Kaneyama** | **1.33** | **274** | ⇓P | **Pn** | **07 25 37.6** | **+0.3** |
| **JMM** | **Marumori** | **1.39** | **226** | *e*P | **Pn** | **07 25 37.9** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **3.82** | **234** | P | **Pn** | **07 26 13.9** | **+2.5** |
| | 2.9nm,0.5s,baz=34,slow=13,SNR=19 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.30** | **4** | P | **Pn** | **07 26 32.8** | **+1.1** |
| | 5.1nm,0.5s,baz=198,slow=14,SNR=9.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.26** | **309** | P | **Pn** | **07 27 28.1** | **+2.0** |
| | 3.5nm,0.7s,baz=115,slow=15,SNR=5.2 | | | | | | |
| **KLR** | **Kul'dur** | **12.76** | **328** | LR | LR | 07 32 15.7 | |
| | comp=Z,36nm,19.9s,baz=210,slow=33 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.68** | **124** | T | T | 08 01 31.4 | |
| | baz=317,slow=76,SNR=174 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.69** | **125** | T | T | 08 01 31.6 | |
| | baz=317,slow=76,SNR=206 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.70** | **124** | T | T | 08 01 32.8 | |
| | baz=317,slow=76,SNR=233 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.46** | **126** | T | T | 08 02 29.5 | |
| | baz=318,slow=76,SNR=86 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.46** | **126** | T | T | 08 02 26.1 | |
| | baz=318,slow=76,SNR=99 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.47** | **126** | T | T | 08 02 26.1 | |
| | baz=318,slow=76,SNR=116 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.11** | **311** | P | **P** | **07 32 54.1** | **-0.2** |
| | 1.2nm,0.6s,baz=69,slow=7.9,SNR=1.9 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.62** | **301** | P | **P** | **07 33 13.9** | **-1.1** |
| | 0.9nm,0.6s,baz=82,slow=9.0,SNR=4.8 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.32** | **307** | P | **P** | **07 33 28.1** | **-0.3** |
| | 1.8nm,0.4s,baz=77,slow=8.5,SNR=5.7 | | | | | | |
| | 1.8nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **49.76** | **311** | P | **P** | **07 34 02.6** | **-0.2** |
| | 1.1nm,0.4s,baz=60,slow=8.5,SNR=5.5 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| **BBB** | **Bella Bella** | **60.43** | **45** | LR | LR | 08 02 46.0 | |
| | comp=Z,17nm,19.6s,baz=336,slow=37 | | | | | | |

**IDC 16 07:27:02.3±6.0, 4°.29S×152°.25E, h106km±51km, mb3.2/2, mbtmp3.8/3, MS2.8/1, Error ellipse: s-maj=194.2km s-min=38.0km az=131.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **7.16** | **225** | P | Pn | 07 28 45.8 | +1.3 |
| | 12nm,0.3s,baz=51,slow=8.1,SNR=5.6 | | | | | | |
| PMG | | | | S | Sn | 07 30 03.7 | -0.7 |
| | 10.0nm,0.6s,baz=230,slow=16,SNR=2.0 | | | | | | |
| PMG | | | | LR | LR | 07 31 05.1 | |
| | comp=Z,82nm,20.7s,baz=348,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.38** | **227** | P | P | 07 32 01.9 | +0.1 |
| | 1.1nm,0.4s,baz=52,slow=9.8,SNR=6.8 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **81.90** | **22** | P | P | 07 39 08.5 | -1.3 |
| | 0.2nm,0.6s,baz=248,slow=4.8,SNR=2.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.63** | **289** | PKPbc | PKPbc | 07 46 40.9 | +0.2 |
| | 0.5nm,0.4s,baz=72,slow=2.5,SNR=13 | | | | | | |

*DJA **16** 07:28:20.1±1.0, 5°.S±10°×12°.9E±°, h253km±8km, M3.9/6, MLv3.9/6*
*IDC **16** 07:28:22.4±4.4, 5°.52S×128°.93E, h332km±49km, mb3.2/1, mbtmp4.5/3, Error ellipse: s-maj=104.3km s-min=14.8km az=70.0*
**ISC 16 07:28:16.8±0.8, 5°.26S±0°.09×129°.1E±0°.1, h300km, n16, σ2$52/19, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **1.90** | **356** | P | **Pn** | **07 28 59.0** | **-3.8** |
| MSAI | | | | S | S | 07 29 30.0 | -10 |
| **NLAI** | **Namlea** | **2.79** | **316** | P | **Pn** | **07 29 10.8** | **+0.2** |
| NLAI | | | | S | **S** | **07 29 52.1** | **-1.4** |
| **FAKI** | **Fak Fak** | **3.94** | **54** | P | **Pn** | **07 29 21.1** | **-1.3** |
| **SANI** | **Sanana** | **4.42** | **316** | P | **Pn** | **07 29 24.4** | **-3.3** |
| **DRS** | **Darwin Rock St** | **7.36** | **166** | P | **Pn** | **07 30 01.4** | **-1.2** |
| **KDU** | **Kakadu** | **8.12** | **156** | P | **Pn** | **07 30 10.0** | **-1.9** |
| **WRA** | **Warramunga Arr** | **15.48** | **161** | P | **Pn** | **07 31 40.9** | **0.0** |
| | 8.5nm,0.3s,baz=339,slow=12,SNR=134 | | | | | | |
| WRA | | | | S | **S** | **07 34 22.6** | **-4.6** |
| | 1.1nm,0.8s,baz=339,slow=23,SNR=3.7 | | | | | | |
| **COEN** | **Coen** | **16.38** | **123** | P | **Pn** | **07 31 52.6** | **+1.1** |
| **QIS** | **Mount Isa** | **18.34** | **147** | P | **P** | **07 32 12.5** | **+2.3** |
| **ASAR** | **Alice Springs** | **18.89** | **166** | P | **P** | **07 32 17.9** | **+1.9** |
| | 14nm,0.5s,baz=346,slow=12,SNR=240 | | | | | | |
| ASAR | | | | S | **S** | **07 35 33.2** | **-1.5** |
| | 0.9nm,0.8s,baz=349,slow=19,SNR=4.4 | | | | | | |
| **AS01** | **Alice Springs** | **18.90** | **166** | P | **P** | **07 32 17.6** | **+1.4** |
| | 30nm,0.8s | | | | | | |
| **WRKA** | **Warakurna** | **19.68** | **182** | P | **P** | **07 32 25.9** | **+1.4** |
| **OOD** | **Oodnadatta** | **23.29** | **165** | P | **P** | **07 33 00.8** | **+2.3** |
| **MULG** | **Mulgathing** | **25.34** | **170** | P | **P** | **07 33 18.7** | **+1.7** |
| **LCRK** | **Leigh Creek** | **26.50** | **162** | P | **P** | **07 33 30.6** | **+3.2** |
| **MKAR** | **Makanchi Array** | **66.26** | **327** | P | **P** | **07 38 36.6** | **+3.4** |
| | 0.5nm,0.4s,baz=115,slow=7.7,SNR=9.2 | | | | | | |
| | 0.5nm,0.4s | | | | | | |

*DNK **16** 07:30:03.8±2.4, 82°.69N×6°.00W, h36km±99km, ML1.7*
*BER **16** 07:30:06.0±2.7, 82°.47N×5°.86W, h26km±65km, mb(Pn)3.5, Confirmed Earthquake*
**ISC 16 07:30:02.5±2.0, 82°.2N±0°.2×6°.16W±0°.05, h10km, n12, σ2$41/17, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NOR** | **Nord** | **1.60** | **254** | *e*P | **Pg** | **07 30 32.9** | **-0.1** |
| NOR | | | | *e*S | **Sg** | **07 30 52.1** | **-1.7** |
| **NOR** | **Nord** | **1.60** | **254** | *i*P | **Pg** | **07 30 33.0** | **-0.1** |
| NOR | | | | *i*S | **Sb** | **07 30 51.2** | **-1.0** |
| NOR | | | | IAML | | 07 30 53.4 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **KBS** | **Kingsbay** | **4.39** | **128** | *e*P | **Pn** | **07 31 11.2** | **+2.2** |
| KBS | | | | *e*S | **Sn** | **07 31 57.9** | **-2.3** |
| KBS | | | | IAML | | 07 32 08.9 | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **KBS** | **Kingsbay** | **4.39** | **128** | *i*P | **Pn** | **07 31 10.5** | **+1.4** |
| **BRBB** | **Barentsburg B** | **5.34** | **129** | *e*P | **Pn** | **07 31 24.5** | **+2.4** |
| **BRBA** | **Barentsburg A** | **5.37** | **129** | *e*P | **Pn** | **07 31 24.6** | **+2.1** |
| **SPA0** | **Spitsbergen Ar** | **5.51** | **125** | *e*P | **Pn** | **07 31 26.1** | **+1.7** |
| SPA0 | | | | *e*S | **Sn** | **07 32 26.0** | **-1.6** |
| SPA0 | | | | IAML | | 07 32 35.1 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **DAG** | **Danmarks Havn** | **5.87** | **209** | *e*S | **Sn** | **07 32 38.4** | **+1.9** |
| **DAG** | **Danmarks Havn** | **5.87** | **209** | *i*S | **Sn** | **07 32 39.5** | **+3.0** |
| **HSPB** | **Hornsund (broa** | **6.44** | **132** | *e*P | **Pn** | **07 31 40.6** | **+3.4** |
| **HOPEN** | **Hopen** | **7.94** | **118** | *e*P | **Pn** | **07 31 59.9** | **+2.2** |
| HOPEN | | | | IAML | | 07 33 23.5 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| HOPEN | | | | *e*S | **Sn** | **07 33 24.0** | **-3.3** |
| **DBG** | **Daneborg** | **8.37** | **207** | *e*S | **Sn** | **07 33 34.6** | **-3.2** |

*IDC **16** 07:58:01.9±0.9, 23°.16S×174°.61W, h0km, mb4.0/8, mbtmp4.0/8, Error ellipse: s-maj=45.6km s-min=23.1km az=152.0*
*NEIC **16** 07:58:02.0±2.5, 22°.95S±0°.06×174°.2W±0°.1, h10km±1km, mb4.5/7, Error ellipse: s-maj=17.4km s-min=10.1km az=98.0*
**ISC 16 07:58:08.0±0.7, 23°.0S±0°.1×174°.7W±0°.1, h36km, n29, σ0$82/25, mb4.2/15, 4C, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **5.93** | **50** | Pn | Pn | 07 59 23.6 | -10 |
| **RAO** | **Raoul Island** | **6.86** | **204** | Pn | **Pn** | **07 59 45.6** | **-0.4** |
| **MSVF** | **Nonsavu** | **8.57** | **306** | Pn | **Pn** | **08 00 10.6** | **+1.0** |
| **AFI** | **Afiamalu** | **9.46** | **18** | Pn | Pn | 08 00 16.4 | -5.4 |
| **RAR** | **Rarotonga** | **13.96** | **86** | Pn | Pn | 08 01 13.0 | -10 |
| **RAR** | **Rarotonga** | **13.96** | **86** | Pn | Pn | 08 01 13.8 | -10 |
| | 2.2nm,0.3s,baz=265,slow=8.5,SNR=23 | | | | | | |
| RAR | | | | Sn | Sn | 08 03 32.4 | -25 |
| | 1.5nm,0.3s,baz=204,slow=20,SNR=3.5 | | | | | | |
| **CTAO** | **Charters Tower** | **36.35** | **267** | P | **P** | **08 05 08.4** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 08 05 09.7 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **46.97** | **259** | P | **P** | **08 06 36.2** | **+0.4** |
| AS31 | | | | IAmb | IAmb | 08 07 08.1 | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **46.97** | **259** | P | **P** | **08 06 35.8** | **0.0** |
| | comp=Z,2.6nm,0.8s,baz=91,slow=8.4,SNR=20 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **47.13** | **264** | P | **P** | **08 06 35.8** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 08 06 45.9 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.32** | **264** | P | **P** | **08 06 37.2** | **-1.3** |
| **WRA** | **Warramunga Arr** | **47.32** | **264** | P | **P** | **08 06 37.7** | **-0.8** |
| | comp=Z,1.6nm,0.6s,baz=96,slow=8.3,SNR=23 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **CASY** | **Casey** | **63.04** | **206** | P | **P** | **08 08 31.0** | **-0.1** |
| CASY | | | | IAmb | IAmb | 08 08 54.5 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.08** | **180** | P | **P** | **08 08 57.7** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 08 09 01.5 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.08** | **180** | P | **P** | **08 08 59.2** | **+1.7** |
| | comp=Z,1.5nm,1.0s,baz=86,slow=1.2,SNR=5.1 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **79.49** | **344** | P | **P** | **08 10 10.3** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **79.49** | **344** | P | **P** | **08 10 10.3** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **79.49** | **344** | P | **P** | **08 10 11.2** | **+0.7** |
| | comp=Z,1.7nm,0.7s,baz=152,slow=6.5,SNR=2.6 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.80** | **42** | P | **P** | **08 10 18.3** | **+0.1** |
| | comp=Z,0.8nm,0.8s,baz=221,slow=8.3,SNR=8.0 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.23** | **179** | ⇑P | **P** | **08 10 41.3** | **+0.8** |
| | comp=Z,88nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **85.42** | **177** | ⇑P | **P** | **08 10 41.7** | **+0.3** |
| | comp=Z,33nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **85.42** | **177** | P | **P** | **08 10 40.0** | **-1.4** |
| | comp=Z,1.3nm,0.9s,baz=104,slow=1.9,SNR=4.9 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **85.43** | **175** | ⇑P | **P** | **08 10 42.0** | **+0.6** |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.87** | **56** | P | **P** | **08 10 44.6** | **+0.2** |
| | comp=Z,1.0nm,0.9s,baz=198,slow=7.8,SNR=8.0 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **85.91** | **176** | ⇑P | **P** | **08 10 44.8** | **+1.0** |
| | comp=Z,1.9nm,0.7s,baz=174,slow=3.4 | | | | | | |
| **PDAR** | **Pinedale Array** | **88.72** | **42** | P | **P** | **08 10 56.8** | **-1.3** |
| | comp=Z,0.3nm,0.8s,baz=247,slow=1.9,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **90.10** | **12** | P | **P** | **08 11 03.1** | **-0.5** |
| | comp=Z,0.7nm,0.9s,baz=217,slow=6.4,SNR=5.6 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **146.66** | **332** | PKPbc | **PKPbc** | **08 17 45.5** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=38,slow=3.5,SNR=4.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **150.77** | **311** | PKPbc | **PKPbc** | **08 17 57.1** | **+0.3** |
| | comp=Z,0.7nm,0.7s,baz=111,slow=6.8,SNR=4.3 | | | | | | |

*MOS **16** 08:00:36.8±0.9, 43°.08N×147°.08E, h65km, mb4.3/6, Error ellipse: s-maj=12.3km s-min=8.2km az=119.3*
*NEIC **16** 08:00:37.8±2.3, 43°.2N±0°.1×147°.0E±0°.2, h44km±12km, mb4.2/10, Error ellipse: s-maj=20.5km s-min=13.4km az=143.0*
*SKHL **16** 08:00:38.7±0.2, 43°.10N×147°.00E, h75km±3km, mb5.1/3*
*NIED **16** 08:00:39.0, 43°.12N×146°.89E, h65km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale 10^14 Nm; Mrr3.73; Mθθ-1.47; Mφφ-2.25; Mrθ5.13; Mθφ-1.48; Mφr0.01; Fault plane solution: M0 6.07000×10^14 NP1:θs76.00000°, δ74.00000°, λ107.00000°. NP2:θs208.00000°, δ23.00000°, λ44.00000°.*
*JMA **16** 08:00:39.0±0.2, 43°.1N±0°.8×14°.7E±°, h65km±3km, MV3.8/35, E OFF HOKKAIDO*
*IDC **16** 08:00:41.2±4.0, 43°.62N×147°.01E, h65km±28km, mb3.6/12, mbtmp3.8/14, ML2.9/2, MS2.7/2, Error ellipse: s-maj=62.1km s-min=17.4km az=176.0*
**ISC 16 08:00:36.6±1.3, 43°.04N±0°.06×147°.11E±0°.06, h44km±11km, n88, σ1$37/106, mb4.0/25, 2C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHO** | **Shikotan** | **0.85** | **347** | *e*P | **Pn** | **08 00 53.4** | **+1.2** |
| SHO | | | | AMB | AMB | 08 00 53.8 | |
| | 2μm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **08 01 04.4** | **+0.9** |
| SHO | | | | A | A | 08 01 05.2 | |
| | 14μm,0.5s | | | | | | |
| SHO | | | | A | A | 08 01 05.2 | |
| | 7μm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **0.85** | **347** | *e*PN | **Pn** | **08 00 53.4** | **+1.2** |
| SHO | | | | *e*S | **Sn** | **08 01 04.4** | **+0.9** |
| SHO | | | | pmax | pmax | | |
| | comp=E,1μm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,638nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,797nm,0.1s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,904nm,0.1s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,8μm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.05** | **288** | *i*P | **Pn** | **08 00 55.7** | **+0.9** |
| NEM2 | | | | S | **Sn** | **08 01 07.9** | **-0.4** |
| **NMR** | **Nemuro--Hokkai** | **1.06** | **288** | *e*P | **Pn** | **08 00 55.7** | **+0.7** |
| NMR | | | | *e*S | **Sn** | **08 01 08.4** | **-0.1** |
| **NMR** | **Nemuro--Hokkai** | **1.06** | **288** | *e*PN | **Pn** | **08 00 55.7** | **+0.7** |
| NMR | | | | *e*S | **Sn** | **08 01 08.4** | **-0.1** |
| **YUK** | **Yuzh-Kuril'sk** | **1.34** | **318** | *e*P | **Pn** | **08 00 59.1** | **+0.2** |
| YUK | | | | AMB | AMB | 08 01 00.7 | |
| | comp=E,960nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **08 01 14.6** | **-0.9** |
| YUK | | | | A | A | 08 01 18.6 | |
| | comp=E,4μm,0.4s | | | | | | |
| YUK | | | | A | A | 08 01 18.6 | |
| | comp=E,4μm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.34** | **318** | *e*PN | **Pn** | **08 00 59.1** | **+0.2** |
| YUK | | | | *e*S | **Sn** | **08 01 14.6** | **-0.9** |
| YUK | | | | pmax | pmax | | |
| | comp=N,617nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,470nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,1μm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,3μm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,4μm,0.2s | | | | | | |
| **JKHN** | **Kushirohamanak** | **1.43** | **272** | P | **Pn** | **08 01 01.5** | **+1.5** |
| JKHN | | | | S | **Sn** | **08 01 17.7** | **+0.2** |
| **AKK** | **Akkeshi** | **1.66** | **270** | *e*P | **Pn** | **08 01 04.1** | **+0.9** |
| AKK | | | | *e*S | **Sn** | **08 01 22.8** | **-0.5** |
| **JNSB** | **Nemuroshibetsu** | **1.70** | **296** | P | **Pn** | **08 01 04.6** | **+0.9** |
| JNSB | | | | S | **Sn** | **08 01 23.9** | **-0.3** |
| **JRA** | **Rausu** | **1.70** | **303** | *i*P | **Pn** | **08 01 04.5** | **+0.8** |
| JRA | | | | S | **Sn** | **08 01 23.6** | **-0.7** |
| **RUSJ** | **Misakicho** | **1.72** | **309** | *e*PN | **Pn** | **08 01 04.9** | **+0.9** |
| RUSJ | | | | *e*S | **Sn** | **08 01 24.4** | **-0.3** |
| **JAK** | **Akkeshi** | **1.77** | **269** | P | **Pn** | **08 01 05.6** | **+0.9** |
| JAK | | | | S | **Sn** | **08 01 25.4** | **-0.5** |
| **JNK** | **Nakash** | **1.82** | **288** | *i*P | **Pn** | **08 01 05.8** | **+0.3** |
| JNK | | | | S | **Sn** | **08 01 26.0** | **-1.4** |
| **KUR** | **Kuril'sk** | **2.26** | **14** | *i*P | **Pn** | **08 01 12.9** | **+1.5** |
| KUR | | | | AMB | AMB | 08 01 14.4 | |
| | comp=E,170nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **08 01 38.1** | **+0.1** |
| KUR | | | | A | A | 08 01 41.5 | |
| | comp=E,270nm,0.2s | | | | | | |
| KUR | | | | A | A | 08 01 41.5 | |
| | comp=E,230nm,0.2s | | | | | | |
| **KUR** | **Kuril'sk** | **2.26** | **14** | *e*PN | **Pn** | **08 01 13.0** | **+1.5** |
| KUR | | | | *e*S | **Sn** | **08 01 37.9** | **-0.1** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,124nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,80nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,429nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,315nm,0.3s | | | | | | |
| **JOB** | **Onbets** | **2.40** | **268** | P | **Pn** | **08 01 14.6** | **+1.2** |
| JOB | | | | S | **Sn** | **08 01 41.6** | **0.0** |
| **JAR** | **Ashorobuto** | **2.45** | **277** | P | **Pn** | **08 01 15.3** | **+1.2** |
| JAR | | | | *e*S | **Sn** | **08 01 42.5** | **-0.3** |
| **JTKR** | **Abashiri--Toko** | **2.50** | **293** | P | **Pn** | **08 01 16.1** | **+1.3** |
| JTKR | | | | *e*S | **Sn** | **08 01 44.0** | **0.0** |
| **JCH** | **Churui** | **2.79** | **262** | P | **Pn** | **08 01 19.8** | **+1.1** |
| JCH | | | | *e*S | **Sn** | **08 01 49.8** | **-1.2** |
| **JMP** | **Maruseppu** | **2.89** | **291** | *e*P | **Pn** | **08 01 21.7** | **+1.6** |
| JMP | | | | *e*S | **Sn** | **08 01 54.0** | **+0.4** |
| **JEM** | **Erimo** | **3.09** | **252** | P | **Pn** | **08 01 25.0** | **+2.2** |
| **ERM** | **Erimo** | **3.09** | **252** | Pn | **Pn** | **08 01 25.6** | **+2.7** |
| **ERM** | **Erimo** | **3.09** | **252** | *e*PN | **Pn** | **08 01 25.0** | **+2.1** |
| **JNBK** | **Urakawa-nobuka** | **3.30** | **258** | P | **Pn** | **08 01 26.8** | **+1.1** |
| JNBK | | | | *e*S | **Sn** | **08 02 02.8** | **-0.9** |
| **JFR** | **Furan** | **3.31** | **274** | P | **Pn** | **08 01 27.6** | **+1.8** |
| **JKA** | **Kamikawa-asahi** | **3.44** | **290** | Pn | **Pn** | **08 01 29.1** | **+1.4** |
| **JKA** | **Kamikawa-asahi** | **3.44** | **290** | *e*P | **Pn** | **08 01 30.0** | **+2.3** |
| **ASAJ** | **Asahikawa** | **3.45** | **290** | P | **Pn** | **08 01 30.0** | **+2.3** |
| | comp=N,1.5nm,0.3s,baz=112,slow=7.8,SNR=10 | | | | | | |
| ASAJ | | | | S | **Sn** | **08 02 12.4** | **+5.1** |
| | comp=N,22nm,0.7s,baz=23,slow=30,SNR=7.3 | | | | | | |
| | comp=N,21nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.98** | **323** | *e*P | **Pn** | **08 01 50.6** | **+1.8** |
| YSS | | | | AMB | AMB | 08 01 51.1 | |
| | comp=N,30nm,0.4s | | | | | | |
| YSS | |

BPAW IAmb IAmb 08 08 31.1
comp=Z,4.8nm,1.5s
**DGZ Jazzator, Alta 40.75 301** *e*P **P 08 08 14.5 +1.3**
DGZ pmax pmax
comp=Z,5.0nm,2.2s
**ILAR Eielson Array 42.08 36** P **P 08 08 22.9 -0.8**
comp=Z,0.6nm,0.7s,baz=269,slow=4.2,SNR=3.8
comp=Z,0.6nm,0.7s
**ILAR Eielson Array 42.08 36** *e*P **P 08 08 27.5 +3.8**
ILAR pmax pmax
comp=Z,1.0nm,0.8s
**MK31 Makanchi Array 44.89 298** P **P 08 08 45.7 -0.9**
MK31 IAmb IAmb 08 08 58.4
comp=Z,5.0nm,1.5s
**MK31 Makanchi Array 44.89 298***c i*P **P 08 08 45.9 -0.7**
**MKAR Makanchi Array 44.89 298** P **P 08 08 46.0 -0.6**
**MKAR Makanchi Array 44.89 298** P **P 08 08 46.2 -0.4**
comp=Z,0.8nm,0.5s,baz=80,slow=8.9,SNR=7.4
comp=Z,0.8nm,0.5s
**E29M Blow River 45.41 30** P **P 08 08 52.1 +1.7**
E29M IAmb IAmb 08 08 53.0
comp=Z,4.3nm,0.9s
**KURK Kurchatov 45.90 305** *e*P **P 08 08 54.4 -0.1**
**KURK Kurchatov 45.90 305** P **P 08 08 54.4 -0.1**
**KURBB Kurchatov Arra 45.98 304** P **P 08 08 54.4 -0.8**
comp=Z,1.4nm,0.5s,baz=68,slow=8.8,SNR=8.6
comp=Z,1.4nm,0.5s
**I30M Mount Dempster 46.47 34** P **P 08 08 59.4 +0.5**
I30M IAmb IAmb 08 09 00.8
comp=Z,1.5nm,0.7s
**BVAR Borovoye Array 49.93 310** P **P 08 09 24.7 -0.9**
comp=Z,0.6nm,0.4s,baz=83,slow=6.4,SNR=3.8
comp=Z,0.6nm,0.4s
**BRVK Borovoye 49.98 310** *e*P **P 08 09 26.4 +0.4**
**BRVK Borovoye 49.98 310**⇑*e*P **P 08 09 26.4 +0.4**
BRVK pmax pmax
comp=Z,1.0nm,0.9s
**ABKAR Akbulak array 57.48 309** P **P 08 10 20.0 -0.9**
ABKAR IAmb IAmb 08 10 20.6
comp=Z,1.5nm,0.6s
**BELG Belogornoye 62.39 317** *i*P **P 08 10 53.8 -0.7**
BELG pmax pmax
comp=Z,2.0nm,1.0s
**FINES FINESS Array B 65.49 333** P **P 08 11 13.5 -1.2**
comp=Z,2.1nm,0.7s,baz=46,slow=8.2,SNR=9.6
comp=Z,2.1nm,0.7s
**OBN Obninsk 65.87 324** *e*P **P 08 11 15.7 -1.5**
**OBN Obninsk 65.87 324** *e*P **P 08 11 15.7 -1.5**
OBN *e* 08 11 47.8
OBN *e* 08 13 42.0
OBN *e*PPP PPP 08 15 15.7
OBN pmax pmax
comp=Z,6.0nm,0.8s
OBN MLR MLR
comp=Z,22nm,15.0s
**NVAR Mina Array Bea 67.98 58** P **P 08 11 32.9 +1.6**
comp=Z,0.8nm,0.7s,baz=291,slow=6.5,SNR=7.2
comp=Z,0.8nm,0.7s
**NOA NORSAR Array B 70.25 339** P **P 08 11 44.2 -0.5**
comp=Z,0.5nm,0.5s,baz=35,slow=6.2,SNR=2.4
comp=Z,0.5nm,0.5s
**HFS Hagfors 70.33 337** P **P 08 11 44.3 -0.8**
comp=Z,1.6nm,0.6s,baz=81,slow=9.8,SNR=5.8
comp=Z,1.6nm,0.6s
**PDAR Pinedale Array 70.39 50** P **P 08 11 46.5 +0.3**
comp=Z,0.4nm,0.6s,baz=226,slow=0.9,SNR=5.5
comp=Z,0.4nm,0.6s
**AKASG Malin Array Be 72.13 324** P **P 08 11 55.0 -1.2**
comp=Z,0.5nm,0.4s,baz=41,slow=6.3,SNR=1.8
comp=Z,0.5nm,0.4s
**AKBB Malin Array Si 72.13 324** *i*P **P 08 11 57.2 +1.0**
AKBB pmax pmax
comp=Z,3.0nm,0.9s
**TXAR Lajitas Array 83.07 56** P **P 08 12 57.7 0.0**
comp=Z,0.5nm,0.9s,baz=279,slow=2.4,SNR=5.7
comp=Z,0.5nm,0.9s

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*IDC* ***16*** *08:11:59.5±0.6,6˚.78N×92˚.65E,h0km,mb4.2/20, mbtmp4.2/21,ML4.2/1,MS4.1/52,Error ellipse: s-maj=30.0km s-min=12.7km az=52.0*

*MOS* ***16*** *08:11:59.7±0.9,6˚.62N×92˚.58E,h21km,mb5.0/24,Error ellipse: s-maj=11.4km s-min=5.6km az=112.4*

*BJI* ***16*** *08:12:01.2±0.0,6˚.85N×92˚.71E,h11km,mb4.5/41, mB5.1/17,Ms4.7/33,Ms7 4.4/31*

*NEIC* ***16*** *08:12:03.2±2.0,6˚.76N±0˚.09×92˚.59E±0˚.09,h22km±5km, mb4.9/44,Error ellipse: s-maj=15.0km s-min=10.4km az=218.0*

*NDI* ***16*** *08:12:06.0±1.5,7˚.41N×92˚.86E,h15km±34km,mb4.7, mb4.9(NEIC)*

*DJA* ***16*** *08:12:17.4±1.9,7˚N±8˚×9˚3E±1˚1,h135km±16km,M4.9/18, mB5.5/5,mb4.7/18,MLv5.0/1,Mw(mB)4.9/5*

**ISC 16 08:12:03.3**±0.6,**6.72N**±0˚.05×**92˚.56E**±0˚.05,**h24**km±3km, **h25**km**:pP-P,n267,**σ1$**60**/226,**mb4.8**/70,**MS4.2**/67,**14C-4D, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMBY** | **CAMPBELL BAY** | **1.39** | **78** | *e*P | **Pb** | **08 12 26.4** | **-2.3** |
| CMBY | | | | *ex* | x | 08 13 01.0 | |
| **LHMI** | **Lhok Sumawe** | **4.61** | **108** | Pn | **Pn** | **08 13 13.3** | **+1.8** |
| **SRIT** | **Nakonsritamara** | **7.23** | **75** | P | **Pn** | **08 13 49.1** | **+1.6** |
| **SRIT** | **Nakonsritamara** | **7.23** | **75** | | **Pn** | **08 13 45.8** | **-1.8** |
| **GSI** | **Gunungsitoli** | **7.34** | **137** | Pn | **Pn** | **08 13 48.0** | **-1.1** |
| **SURA** | **Surathani** | **7.42** | **70** | P | **Pn** | **08 13 52.2** | **+2.1** |
| **PSI** | **Prapat** | **7.44** | **121** | P | **Pn** | **08 13 51.9** | **+1.4** |
| **PSI** | **Prapat** | **7.44** | **121** | P | **Pn** | **08 13 47.3** | **-3.2** |
| **RPSI** | **Rantau Prapat** | **7.50** | **122** | Pn | **Pn** | **08 13 47.3** | **-3.9** |
| **KULM** | **Kulim** | **8.17** | **100** | Pn | **Pn** | **08 13 59.6** | **-0.8** |
| **IPM** | **Ipoh** | **8.72** | **104** | Pn | **Pn** | **08 14 06.0** | **-1.9** |
| **PALK** | **Pallekele** | **11.78** | **273** | Pn | **Pn** | **08 14 50.0** | **0.0** |
| **PALK** | **Pallekele** | **11.78** | **273** | Pn | **Pn** | **08 14 52.2** | **+2.2** |
| | 1.3nm,0.3s,baz=195,slow=14,SNR=5.5 | | | | | | |
| PALK | | | | Sn | Sn | 08 16 49.4 | -11 |
| | 0.2nm,0.3s,baz=157,slow=15,SNR=2.2 | | | | | | |
| PALK | | | | LR | LR | 08 18 42.8 | |
| | comp=Z,2μm,20.9s,baz=195,slow=34 | | | | | | |
| | 5.7nm,0.6s | | | | | | |
| **PALK** | **Pallekele** | **11.78** | **273** | P | **Pn** | **08 14 50.0** | **0.0** |
| **CM31** | **Chiang Mai Arr** | **13.23** | **27** | Pn | **Pn** | **08 15 09.3** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **13.23** | **27** | Pn | **Pn** | **08 15 09.5** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **13.23** | **27** | Pn | P | 08 15 13.3 | -6.0 |
| | 0.7nm,0.3s,baz=230,slow=14,SNR=44 | | | | | | |
| CMAR | | | | LR | LR | 08 20 29.1 | |
| | comp=Z,463nm,19.5s,baz=210,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **13.23** | **27** | P | **Pn** | **08 15 09.5** | **-0.2** |
| **MDRS** | **Chennai** | **13.67** | **298** | *e*P | **Pn** | **08 15 17.9** | **+2.2** |
| MDRS | | | | IAmb | IAmb | 08 15 31.3 | |
| | comp=Z,36nm,0.7s | | | | | | |
| MDRS | | | | *e*S | Sn | 08 17 38.1 | -8.8 |
| **PHRA** | **Phrae** | **13.89** | **32** | Pn | **Pn** | **08 15 19.8** | **+1.0** |
| **UBPT** | **Khong Chiam** | **15.26** | **55** | P | **P** | **08 15 40.1** | **-1.9** |
| **UBPT** | **Khong Chiam** | **15.26** | **55** | P | **P** | **08 15 40.6** | **-1.4** |
| UBPT | | | | IAmb | IAmb | 08 15 43.1 | |
| | comp=Z,234nm,1.9s | | | | | | |
| **CRAI** | **Chiangrai** | **15.43** | **29** | P | **P** | **08 15 42.9** | **-1.0** |
| **HYB** | **Hyderabad** | **17.32** | **309** | *e*P | **Pn** | **08 16 02.6** | **-1.1** |
| HYB | | | | *e*Sn | **Sn** | **08 19 16.4** | **+0.5** |
| **IMP** | **Imphal** | **18.06** | **4** | *e*P | **Pn** | **08 16 09.1** | **-3.7** |
| IMP | | | | IAmb | IAmb | 08 16 19.7 | |
| | comp=Z,70nm,1.4s | | | | | | |
| **SLVN** | **Son La** | **18.21** | **36** | P | **P** | **08 16 15.6** | **+0.8** |
| SLVN | | | | IAmb | IAmb | 08 16 19.7 | |
| | comp=Z,240nm,2.0s | | | | | | |
| **KSM** | **Kuching** | **18.45** | **106** | P | **Pn** | **08 16 18.9** | **+1.3** |
| **KSM** | **Kuching** | **18.45** | **106** | | **Pn** | **08 16 16.9** | **-0.6** |
| KSM | | | | IAmb | IAmb | 08 16 27.4 | |
| | comp=Z,59nm,1.0s | | | | | | |
| **SHL** | **Shillong** | **18.76** | **358** | | **P** | **08 16 17.3** | **-3.6** |
| **SHL** | **Shillong** | **18.76** | **358** | *e*P | **P** | **08 16 18.7** | **-2.1** |
| SHL | | | | IAmb | IAmb | 08 16 41.4 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **18.76** | **358** | P | **P** | **08 16 17.3** | **-3.6** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,47nm,1.4s | | | | | | |
| **KOHI** | **KOHIMA** | **18.96** | **4** | *e*P | **P** | **08 16 18.9** | **-4.1** |
| KOHI | | | | IAmb | IAmb | 08 16 22.9 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **TNCH** | **TengChong** | **19.08** | **17** | ⇑P | **P** | **08 16 23.0** | **-1.5** |
| TNCH | | | | pP | pwP | 08 16 32.9 | -2.1 |
| TNCH | | | | sP | sP | 08 16 37.6 | +4.8 |
| TNCH | | | | PP | **PnPn** | **08 16 44.8** | **+6.5** |
| TNCH | | | | S | **S** | **08 19 57.5** | **-2.1** |
| TNCH | | | | sS | sS | 08 20 05.5 | -3.4 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,47nm,0.4s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,260nm,3.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,990nm,11.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,730nm,13.1s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,800nm,15.8s | | | | | | |
| **MOKO** | **MOKOCHONG** | **19.59** | **5** | *e*P | **P** | **08 16 26.8** | **-3.1** |
| MOKO | | | | IAmb | IAmb | 08 16 42.1 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **SBUM** | **Sibu** | **20.05** | **101** | P | **P** | **08 16 33.1** | **-1.8** |
| SBUM | | | | IAmb | IAmb | 08 16 37.2 | |
| | comp=Z,46nm,1.8s | | | | | | |
| **ITAN** | **ITANAGAR** | **20.35** | **3** | *e*P | **P** | **08 16 37.6** | **-0.4** |
| **KMI** | **Kunming** | **20.74** | **27** | ⇑P | Pn | 08 16 43.0 | -2.0 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,810nm,11.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,1μm,13.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,900nm,12.1s | | | | | | |
| **QIZ** | **Qiongzhong** | **20.80** | **52** | P | Pn | 08 16 46.1 | +0.6 |
| **QIZ** | **Qiongzhong** | **20.80** | **52** | P | Pn | 08 16 43.8 | -1.7 |
| QIZ | | | | S | Sn | 08 20 34.0 | -5.8 |
| QIZ | | | | LR | LR | | |
| | comp=Z,1μm,10.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,970nm,11.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,2μm,11.3s | | | | | | |
| **PZH** | **PanZhiHua** | **21.54** | **23** | P | **P** | **08 16 53.1** | **+2.1** |
| PZH | | | | S | Sn | 08 20 51.3 | -6.3 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,390nm,4.8s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,910nm,13.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,710nm,12.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,13.7s | | | | | | |
| **LSA** | **Lhasa** | **22.90** | **357** | P | **P** | **08 17 07.3** | **+1.4** |
| **KKM** | **Kota Kinabalu** | **23.52** | **90** | P | **P** | **08 17 14.1** | **+2.2** |
| **KKM** | **Kota Kinabalu** | **23.52** | **90** | P | **P** | **08 17 10.2** | **-1.8** |
| KKM | | | | IAmb | IAmb | 08 17 23.5 | |
| | comp=Z,154nm,1.7s | | | | | | |
| **GYA** | **Guiyang** | **23.79** | **33** | P | **P** | **08 17 13.3** | **-1.2** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,28nm,1.5s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,740nm,4.2s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,1μm,13.4s | | | | | | |
| **H08S3** | **Diego Garcia H** | **24.57** | **235** | T | T | 08 43 05.6 | |
| | baz=54,slow=75,SNR=1469 | | | | | | |
| **H08S2** | **Diego Garcia H** | **24.57** | **235** | T | T | 08 43 05.9 | |
| | baz=54,slow=75,SNR=554 | | | | | | |
| **H08S1** | **Diego Garcia H** | **24.59** | **235** | T | T | 08 43 10.3 | |
| | baz=54,slow=75,SNR=281 | | | | | | |
| **MYLDM** | **Lahad Datu** | **25.85** | **92** | P | **P** | **08 17 31.7** | **-1.5** |
| **CD2** | **Chengdu** | **26.26** | **22** | P | **P** | **08 17 35.1** | **-1.7** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.3s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,1μm,9.8s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,2μm,12.1s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,1μm,12.2s | | | | | | |
| **SRBI** | **Singaraja** | **26.95** | **123** | P | **P** | **08 17 46.4** | **+3.2** |
| **MPSI** | **Mapaga** | **28.00** | **102** | P | **P** | **08 17 52.9** | **+0.3** |
| | comp=Z,25nm,1.4s | | | | | | |
| **KAPI** | **Kappang** | **29.54** | **113** | P | **P** | **08 18 05.5** | **-0.8** |
| KAPI | | | | IAmb | IAmb | 08 18 07.2 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **KAPI** | **Kappang** | **29.54** | **113** | P | **P** | **08 18 05.5** | **-0.8** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,33nm,1.3s | | | | | | |
| **LZH** | **Lanzhou** | **31.01** | **18** | *e*P | **P** | **08 18 19.4** | **+0.2** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,26nm,1.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,390nm,12.4s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,590nm,10.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,450nm,13.4s | | | | | | |
| **XAN** | **Xi'an** | **31.12** | **27** | ⇑P | P | 08 18 24.3 | +4.2 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,13nm,1.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,2μm,13.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,14.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,2μm,11.7s | | | | | | |
| **SSLB** | **Suanglung** | **32.12** | **55** | P | **P** | **08 18 27.8** | **-1.2** |
| SSLB | | | | IAmb | IAmb | 08 18 33.0 | |
| | comp=Z,45nm,1.5s | | | | | | |
| **GTA** | **Gaotai** | **33.20** | **10** | P | **P** | **08 18 39.1** | **+0.7** |
| GTA | | | | LR | LR | | |
| | comp=Z,300nm,15.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,290nm,14.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,320nm,14.9s | | | | | | |
| **LYN** | **LuoYang** | **33.24** | **31** | *e*P | **P** | **08 18 39.3** | **+0.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,28nm,1.0s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,240nm,4.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,990nm,14.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,1μm,16.8s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,1μm,14.1s | | | | | | |
| **NJ2** | **Nanjing** | **35.17** | **41** | *e*P | **P** | **08 18 56.8** | **+1.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,22nm,0.5s | | | | | | |
| **KSH** | **Kashi** | **35.91** | **338** | P | **P** | **08 19 01.1** | **-0.7** |
| KSH | | | | sP | sP | 08 19 09.3 | -1.3 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **WSAR** | **Wadi Sarin** | **36.52** | **300** | LR | LR | 08 34 10.7 | |
| | comp=Z,188nm,19.2s,baz=122,slow=36 | | | | | | |
| **HNS** | **HongShan** | **36.59** | **30** | ⇑P | **P** | **08 19 07.3** | **-0.2** |
| HNS | | | | sP | **pwP** | **08 19 21.1** | **+2.6** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,330nm,13.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,670nm,13.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,620nm,14.3s | | | | | | |
| **BTO** | **Baotou** | **37.19** | **22** | *e*P | **P** | **08 19 15.8** | **+3.1** |
| BTO | | | | pP | **pwP** | **08 19 21.9** | **-1.8** |
| BTO | | | | sP | **sP** | **08 19 24.9** | **+3.4** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,13nm,0.4s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,140nm,7.7s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,1μm,12.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,1μm,12.1s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,820nm,12.7s | | | | | | |
| **GAR** | **Garm** | **37.89** | **331** | P | **P** | **08 19 18.7** | **0.0** |
| GAR | | | | IAmb | IAmb | 08 20 42.9 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **37.99** | **24** | ⇑*i*P | **P** | **08 19 21.5** | **+2.0** |
| HHC | | | | pP | pwP | 08 19 27.4 | -3.1 |
| HHC | | | | sP | sP | 08 19 30.6 | +2.2 |
| HHC | | | | PP | **PnPn** | **08 20 53.1** | **+5.1** |
| HHC | | | | *e*S | **S** | **08 25 15.6** | **+5.2** |
| HHC | | | | sS | ScP | 08 25 21.3 | +0.1 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,300nm,12.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,470nm,10.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,250nm,14.4s | | | | | | |
| **SHLS** | **Shalkode 38.09 344** | | | *e*P | **P** | **08 19 19.4** | **-0.9** |
| | baz=345 | | | | | | |
| **SHLS** | **Shalkode 38.09 344** | | | *e*P | **P** | **08 19 19.4** | **-0.9** |
| **CHGR** | **Chuyangaron 38.19 330** | | | P | **P** | **08 19 19.6** | **-1.5** |
| CHGR | | | | IAmb | IAmb | 08 20 04.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **CHGR** | **Chuyangaron 38.19 330** | | | P | **P** | **08 19 19.7** | **-1.5** |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **UZB** | **Uzynbulak 38.20 344** | | | *e*P | **P** | **08 19 21.5** | **+0.3** |
| | baz=344 | | | | | | |
| **UZB** | **Uzynbulak 38.20 344** | | | *e*P | **P** | **08 19 21.5** | **+0.3** |
| **SIMJ** | **Simiganj 38.27 330** | | | P | **P** | **08 19 20.3** | **-1.6** |
| **SATY** | **Saty 38.29 343** | | | *e*P | **P** | **08 19 22.2** | **+0.2** |
| | comp=Z,8.7nm,0.9s,baz=343 | | | | | | |
| **SATY** | **Saty 38.29 343** | | | *e*P | **P** | **08 19 22.2** | **+0.2** |
| SATY | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **ZHN** | **Zhinishke 38.38 343** | | | *e*P | **P** | **08 19 22.7** | **-0.1** |
| | baz=343 | | | | | | |
| **ZHN** | **Zhinishke 38.38 343** | | | *e*P | **P** | **08 19 22.6** | **-0.1** |
| **KPKS** | **Kokpek 38.58 344** | | | *e*P | **P** | **08 19 24.2** | **-0.3** |
| | baz=344 | | | | | | |
| **KPKS** | **Kokpek 38.58 344** | | | *e*P | **P** | **08 19 24.1** | **-0.3** |
| **ARSB** | **Arslanbob 38.62 336** | | | P | **P** | **08 19 25.3** | **+0.4** |
| **ARSB** | **Arslanbob 38.62 336** | | | P | **P** | **08 19 25.3** | **+0.4** |
| ARSB | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **TNSS** | **Tian-Shan 38.71 342** | | | *e*P | **P** | **08 19 25.7** | **-0.2** |
| | baz=342 | | | | | | |
| **TNSS** | **Tian-Shan 38.71 342** | | | *e*P | **P** | **08 19 25.6** | **-0.2** |
| **MDOK** | **Medeo 38.79 342** | | | *e*P | **P** | **08 19 26.1** | **-0.1** |
| | baz=342 | | | | | | |
| **MDOK** | **Medeo 38.79 342** | | | *e*P | **P** | **08 19 26.1** | **-0.1** |
| **AAA** | **Alma-Ata 38.87 342** | | | *e*P | **P** | **08 19 27.2** | **+0.3** |
| | comp=Z,8.7nm,0.3s,baz=342 | | | | | | |
| **AAA** | **Alma-Ata 38.87 342** | | | *e*P | **P** | **08 19 30.7** | **+3.9** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,9μm,0.3s | | | | | | |
| **AAK** | **Ala-Archa 39.18 339** | | | P | **P** | **08 19 30.1** | **+0.6** |
| AAK | | | | IAmb | IAmb | 08 19 54.4 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa 39.18 339** | | | P | **P** | **08 19 30.5** | **+1.0** |
| | comp=Z,3.2nm,0.6s,baz=161,slow=9.1,SNR=9.4 | | | | | | |
| AAK | | | | LR | LR | 08 38 22.6 | |
| | comp=Z,305nm,18.2s,baz=154,slow=40 | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa 39.18 339** | | | P | **P** | **08 19 30.1** | **+0.6** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **CHKK** | **Chushkaly 39.43 342** | | | *e*P | **P** | **08 19 31.2** | **-0.2** |
| | baz=342 | | | | | | |
| **CHKK** | **Chushkaly 39.43 342** | | | *e*P | **P** | **08 19 31.2** | **-0.2** |
| **ARXS** | **Arharly 39.51 343** | | | *e*P | **P** | **08 19 31.6** | **-0.6** |
| **KUU** | **Kurty 39.67 342** | | | *e*P | **P** | **08 19 33.5** | **0.0** |
| | comp=Z,8.6nm,0.5s,baz=342 | | | | | | |
| **KUU** | **Kurty 39.67 342** | | | *e*P | **P** | **08 19 33.4** | **0.0** |
| KUU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **TDK** | **Taldyqorghan 40.08 344** | | | *e*P | **P** | **08 19 36.8** | **-0.1** |
| | comp=Z,6.1nm,0.5s,baz=344 | | | | | | |
| **TDK** | **Taldyqorghan 40.08 344** | | | *e*P | **P** | **08 19 36.7** | **-0.1** |
| TDK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **CHM** | **Chimkent 40.87 334** | | | *e*P | **P** | **08 19 43.8** | **+0.4** |
| | baz=334 | | | | | | |
| **CHM** | **Chimkent 40.87 334** | | | *e*P | **P** | **08 19 43.8** | **+0.4** |
| **MK31** | **Makanchi Array 40.90 349** | | | P | **P** | **08 19 42.4** | **-1.2** |
| **MK31** | **Makanchi Array 40.90 349** | | | P | **P** | **08 19 42.4** | **-1.2** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array 40.90 349** | | | P | **P** | **08 19 41.9** | **-1.6** |
| **MKAR** | **Makanchi Array 40.90 349** | | | P | **P** | **08 19 42.9** | **-0.6** |
| | comp=Z,1.8nm,0.8s,baz=170,slow=8.1,SNR=10 | | | | | | |
| MKAR | | | | LR | LR | 08 40 50.9 | |
| | comp=Z,213nm,18.4s,baz=182,slow=42 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array 40.90 349** | | | *ce*P | **P** | **08 19 43.2** | **-0.3** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KK31** | **Karatay Array 41.12 335** | | | P | **P** | **08 19 44.5** | **-0.9** |
| **KK31** | **Karatay Array 41.12 335** | | | P | **P** | **08 19 44.5** | **-0.9** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array 41.12 335** | | | P | **P** | **08 19 45.2** | **-0.2** |
| **KKAR** | **Karatay Array 41.12 335** | | | P | **P** | **08 19 45.2** | **-0.2** |
| **ZSN** | **Zaisan 41.12 352** | | | *e*P | **P** | **08 19 45.8** | **+0.5** |
| | baz=352 | | | | | | |
| **ZSN** | **Zaisan 41.12 352** | | | *e*P | **P** | **08 19 45.8** | **+0.5** |
| **BRLS** | **Boroldey 41.34 335** | | | *e*P | **P** | **08 19 46.2** | **-1.1** |
| | baz=334 | | | | | | |
| **BRLS** | **Boroldey 41.34 335** | | | *e*P | **P** | **08 19 46.1** | **-1.1** |
| **BTLS** | **Baital 41.44 340** | | | *e*P | **P** | **08 19 47.9** | **-0.2** |
| | baz=340 | | | | | | |
| **BTLS** | **Baital 41.44 340** | | | *e*P | **P** | **08 19 47.8** | **-0.2** |
| **SONM** | **Songino Array 42.64 14** | | | P | **P** | **08 19 57.5** | **-0.4** |
| | comp=Z,1.1nm,0.7s,baz=199,slow=9.6,SNR=6.9 | | | | | | |
| SONM | | | | LR | LR | 08 39 49.1 | |
| | comp=Z,275nm,18.4s,baz=198,slow=39 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar 42.83 14***c i*P | | | | **P** | **08 20 00.5** | **+1.0** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **SEM** | **Semipalatinsk 44.75 349** | | | *e*P | **P** | **08 20 14.7** | **-0.3** |
| | baz=349 | | | | | | |
| **SEM** | **Semipalatinsk 44.75 349** | | | *e*P | **P** | **08 20 14.7** | **-0.3** |
| **KURBB** | **Kurchatov Arra 45.30 347** | | | P | **P** | **08 20 19.2** | **+0.2** |
| | comp=Z,1.8nm,0.6s,baz=164,slow=7.6,SNR=14 | | | | | | |
| KURBB | | | | LR | LR | 08 42 36.8 | |
| | comp=Z,254nm,20.5s,baz=158,slow=41 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **KURK** | **Kurchatov 45.37 348** | | | P | **P** | **08 20 19.5** | **-0.1** |
| KURK | | | | IAmb | IAmb | 08 20 52.3 | |
| | comp=Z,24nm,1.6s | | | | | | |
| **KURK** | **Kurchatov 45.37 348***c i*P | | | | **P** | **08 20 18.9** | **-0.7** |
| KURK | | | | *i* *PP | **sP** | **08 20 26.3** | **-2.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.4s | | | | | | |
| **H01W2** | **Cape Leeuwin H 46.13 155** | | | T | T | 09 09 52.9 | |
| | baz=173,slow=74,SNR=5.1 | | | | | | |
| **H01W1** | **Cape Leeuwin H 46.13 155** | | | T | T | 09 09 52.5 | |
| | baz=330,slow=74,SNR=6.5 | | | | | | |
| **WRKA** | **Warakurna 46.97 134** | | | P | **P** | **08 20 34.1** | **+1.5** |
| **ZAA0** | **Zalesovo Array 47.51 354** | | | P | **P** | **08 20 36.9** | **+0.6** |
| ZAA0 | | | | IAmb | IAmb | 08 20 56.8 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam 47.51 354** | | | P | **P** | **08 20 36.2** | **-0.1** |
| **ZALV** | **Zalesovo Beam 47.51 354** | | | P | **P** | **08 20 36.7** | **+0.4** |
| | comp=Z,1.2nm,0.3s,baz=168,slow=7.6,SNR=8.6 | | | | | | |
| ZALV | | | | LR | LR | 08 43 54.5 | |
| | comp=Z,154nm,20.4s,baz=174,slow=40 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam 47.51 354** | | | P | **P** | **08 20 36.2** | **-0.1** |
| **WB0** | **Warramunga Arr 48.86 123** | | | P | **P** | **08 20 46.7** | **-0.7** |
| **WRA** | **Warramunga Arr 48.90 124** | | | P | **P** | **08 20 47.0** | **-0.6** |
| **WRA** | **Warramunga Arr 48.90 124** | | | P | **P** | **08 20 47.4** | **-0.3** |
| | comp=Z,9.6nm,1.0s,baz=306,slow=9.1,SNR=62 | | | | | | |
| WRA | | | | LR | LR | 08 44 18.1 | |
| | comp=Z,229nm,19.0s,baz=1.0,slow=40 | | | | | | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr 48.90 124***ce*P | | | | **P** | **08 20 47.4** | **-0.3** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek 48.90 124** | | | P | **P** | **08 20 46.2** | **-1.5** |
| **WRAB** | **Tennant Creek 48.90 124** | | | P | **P** | **08 20 46.2** | **-1.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,52nm,1.6s | | | | | | |
| **WB2** | **Warramunga Arr 48.91 124** | | | P | **P** | **08 20 46.4** | **-1.3** |
| **WR0** | **Warramunga Arr 49.08 124** | | | P | **P** | **08 20 48.3** | **-0.7** |
| **BNX** | **BinXian 49.17 32** | | | ⇑P | **P** | **08 20 48.3** | **-1.0** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **ATD** |

comp=Z,18nm,1.8s
MDJ pmax pmax
comp=Z,310nm,4.4s
**BRVK Borovoye 49.66 343** P **P** **08 20 52.1 -0.8**
**BRVK Borovoye 49.66 343** *d* iP **P** **08 20 53.1 +0.2**
BRVK pmax pmax
comp=Z,4.0nm,1.0s
**ASAR Alice Springs 50.41 128** P **P** **08 20 58.1 -1.0**
**ASAR Alice Springs 50.41 128** P **P** **08 20 59.1 0.0**
comp=Z,6.3nm,0.7s,baz=300,slow=7.1,SNR=60
ASAR PcP **PcP** **08 22 15.9 -1.5**
comp=Z,2.7nm,0.8s,baz=310,slow=4.0,SNR=7.1
ASAR LR LR 08 44 23.5
comp=Z,78nm,18.9s,baz=307,slow=39
comp=Z,6.3nm,0.7s
**ASAR Alice Springs 50.41 128** P **P** **08 20 58.1 -1.0**
**AS31 Alice Springs 50.41 128** P **P** **08 20 57.9 -1.3**
**AS01 Alice Springs 50.45 128** P **P** **08 21 00.8 +1.4**
**FORT Forrest 50.45 140** P **P** **08 21 00.9 +1.6**
**FORT Forrest 50.45 140** P **P** **08 20 59.7 +0.4**
**ABKAR Akbulak array 50.51 333** P **P** **08 20 58.3 -1.2**
**ABKAR Akbulak array 50.51 333** P **P** **08 20 59.2 -0.3**
ABKAR IAmb IAmb 08 21 21.2
comp=Z,20nm,1.4s
**USRK Ussuriysk Ar. 50.77 36** LR LR 08 44 18.1
comp=Z,122nm,18.1s,baz=238,slow=38
**JHJ Hachijo jima 2 51.01 52** LR LR 08 43 29.6
comp=Z,162nm,19.8s,baz=40,slow=37
**MAJO Matsushiro 51.10 48** ⇓ *i* P **P** **08 21 02.3 -1.8**
MAJO pmax pmax
comp=Z,30nm,2.1s
**MJAR Matsushiro Arr 51.10 48** LR LR 08 44 17.1
comp=Z,182nm,18.2s,baz=244,slow=38
**GUMO Guam 51.86 78** LR LR 08 40 27.3
comp=Z,55nm,21.9s,baz=250,slow=33
**AKTO Aktyubinsk 52.23 333** P **P** **08 21 12.4 0.0**
comp=Z,1.1nm,0.6s,baz=122,slow=8.8,SNR=4.3
comp=Z,1.1nm,0.6s
**HEH HeiHe 52.25 28** *e*P **P** **08 21 12.3 -0.1**
HEH pmax pmax
comp=Z,9.0nm,0.9s
HEH LR LR
comp=Z,330nm,14.9s
HEH LR LR
comp=Z,420nm,14.8s
HEH LR LR
comp=Z,480nm,14.4s
**FURI Furi 53.39 276** LR LR 08 41 35.4
comp=Z,368nm,19.1s,baz=120,slow=33
**QIS Mount Isa 53.58 122** P **P** **08 21 24.1 +1.3**
**KLR Kul'dur 53.68 31** LR LR 08 47 12.5
comp=Z,153nm,18.7s,baz=225,slow=39
**KLR Kul'dur 53.68 31** *e*P **P** **08 21 20.3 -2.7**
KLR pmax pmax
comp=Z,8.0nm,1.5s
**OOD Oodnadatta 53.97 131** P **P** **08 21 27.6 +2.1**
**MULG Mulgathing 54.18 135** P **P** **08 21 29.1 +2.1**
**ZEA Zeya 54.65 24** *e*P **P** **08 21 30.6 +0.6**
ZEA pmax pmax
comp=Z,10.0nm,0.3s
ZEA MLR MLR
comp=N,300nm,13.0s
ZEA MLR MLR
comp=Z,300nm,13.0s
**SVE Sverdlovsk 55.91 339** *e*P **P** **08 21 39.7 +0.6**
**ARU Arti 56.35 338** P **P** **08 21 41.8 -0.4**
ARU IAmb IAmb 08 22 03.0
comp=Z,16nm,1.3s
**ARU Arti 56.35 338** P **P** **08 21 40.9 -1.3**
comp=Z,2.5nm,0.4s,baz=168,slow=3.9,SNR=6.4
ARU LR LR 08 47 36.5
comp=Z,206nm,19.2s,baz=160,slow=38
comp=Z,2.5nm,0.4s
**ARU Arti 56.35 338** *c i*P **P** **08 21 42.0 -0.2**
ARU 08 22 38.0
ARU 08 23 45.9
ARU S **S** **08 29 34.0 +2.9**
ARU SS **SS** **08 33 16.4 -1.9**
ARU pmax pmax
comp=Z,16nm,1.8s
**PMG Port Moresby 56.71 106** LR LR 08 52 48.4
comp=Z,105nm,18.0s,baz=239,slow=43
**PMG Port Moresby 56.71 106** *d* iP **P** **08 21 44.2 -1.3**
PMG pmax pmax
comp=Z,22nm,1.2s
**MTSU Mount Surprise 56.72 117** P **P** **08 21 47.4 +1.8**
**KIV Kislovodsk 57.13 319** *e*P **P** **08 21 45.6 -2.6**
KIV pmax pmax
comp=Z,11nm,1.1s
**INKA Innaminka 57.78 129** P **P** **08 21 54.7 +1.9**
**BELG Belogornoye 58.49 329** *e*P **P** **08 21 56.4 -0.9**
BELG pmax pmax
comp=Z,1.0nm,0.9s
**EIL Elat 58.65 301** LR LR 08 48 20.5
comp=Z,103nm,18.3s,baz=70,slow=37
**SOC Sochi 58.95 317** *e*P P 08 21 56.1 -4.7
SOC *e*PPP PPP 08 25 36.3
SOC *e*S **S** **08 30 03.1 -2.6**
SOC pmax pmax
comp=Z,8.0nm,0.4s
**MMAI Mount Meron Ar 58.96 305** LR LR 08 49 47.2
comp=Z,96nm,18.7s,baz=40,slow=38
**CTA Charters Tower 59.13 118** P **P** **08 22 04.3 +1.9**
**CTA Charters Tower 59.13 118** P **P** **08 22 01.4 -1.1**
comp=Z,1.0nm,1.0s,baz=307,slow=5.5,SNR=7.2
CTA LR LR 08 48 55.5
comp=Z,9.7nm,21.9s,baz=286,slow=38
comp=Z,1.0nm,1.0s
**CTAO Charters Tower 59.13 118** P **P** **08 22 04.4 +2.0**
**CTAO Charters Tower 59.13 118** P **P** **08 22 02.3 -0.1**
CTAO IAmb IAmb 08 22 04.6
comp=Z,27nm,1.2s
**CTAO Charters Tower 59.13 118** P **P** **08 22 02.3 -0.1**
CTAO pmax pmax
comp=Z,27nm,1.2s
**HTT Hallett 59.37 135** P **P** **08 22 06.0 +2.1**
**QLP Quilpie 60.01 126** P **P** **08 22 09.9 +1.5**
**STKA Stephens Creek 60.47 132** P **P** **08 22 13.0 +1.6**
**STKA Stephens Creek 60.47 132** P **P** **08 22 11.4 0.0**
STKA IAmb IAmb 08 22 22.1
comp=Z,4.6nm,1.1s
**STKA Stephens Creek 60.47 132** P **P** **08 22 11.2 -0.2**
comp=Z,5.8nm,0.8s,baz=323,slow=4.5,SNR=6.4
STKA LR LR 08 49 28.8
comp=Z,128nm,21.9s,baz=1.7,slow=37
comp=Z,5.8nm,0.8s
**STKA Stephens Creek 60.47 132** P **P** **08 22 11.4 0.0**
STKA pmax pmax
comp=Z,5.0nm,1.1s
**KIRV Kirov 61.41 336** P **P** **08 22 15.3 -1.9**
comp=Z,13nm,0.5s,baz=123,slow=5.2,SNR=2.7
KIRV LR LR 08 52 02.9
comp=Z,96nm,18.3s,baz=133,slow=39
comp=Z,13nm,0.5s
**YAK Yakutsk 61.59 19** LR LR 08 51 47.8
comp=Z,218nm,19.2s,baz=208,slow=39
**YAK Yakutsk 61.59 19** *e*P **P** **08 22 17.9 -0.5**
YAK *e**PP **pP** **08 22 22.9 -2.1**
YAK *e* 08 23 01.3
YAK *e* 08 24 34.5
YAK *e*S **S** **08 30 39.2 +0.4**
YAK *e**SS **sS** **08 30 51.1 +1.6**
YAK *e* 08 32 08.3
YAK *e*SS **SS** **08 34 37.7 -2.5**
YAK pmax pmax
comp=Z,26nm,1.1s
YAK pmax pmax
comp=E,12nm,1.5s
YAK pmax pmax
comp=N,12nm,1.3s
YAK pmax pmax
comp=Z,117nm,3.4s
YAK smax smax
comp=N,74nm,3.0s
YAK smax smax
comp=E,68nm,3.5s
YAK MLR MLR
comp=Z,347nm,13.0s
YAK MLR MLR
comp=E,162nm,12.0s
YAK MLR MLR
comp=N,349nm,14.0s
**BRTR Keskin Array B 62.00 312** P **P** **08 22 20.6 -1.3**
comp=N,0.7nm,0.6s,baz=89,slow=4.2,SNR=4.5
BRTR LR LR 08 51 14.2
comp=N,62nm,19.4s,baz=120,slow=38
comp=N,0.7nm,0.6s
**MBAR Mbarara 62.11 266** LR LR 08 45 30.7
comp=N,347nm,21.3s,baz=68,slow=32
**CMSA Cobar Meteorol 63.36 130** P **P** **08 22 32.6 +1.7**
**H04N2 CROZET ISLANDS 63.94 210** T T 09 32 18.9
baz=292,slow=74,SNR=252
**H04N1 CROZET ISLANDS 63.94 210** T T 09 32 19.7
baz=66,slow=74,SNR=207
**H04N3 CROZET ISLANDS 63.95 210** T T 09 33 01.1
SNR=185
**H04S1 CROZET ISLANDS 64.35 210** T T 09 33 28.7
baz=46,slow=76,SNR=14
**H04S3 CROZET ISLANDS 64.36 210** T T 09 33 22.5
baz=46,slow=76,SNR=45
**H04S2 CROZET ISLANDS 64.37 210** T T 09 33 24.1
baz=46,slow=76,SNR=30
**AUMAG Moama Anglican 64.85 135** P **P** **08 22 42.8 +2.2**
**EIDS Eidsvold 65.19 122** P **P** **08 22 44.9 +1.9**
**EIDS Eidsvold 65.19 122** P **P** **08 22 43.2 +0.2**
EIDS IAmb IAmb 08 22 45.1
comp=Z,22nm,1.3s
**MOS Moscow 65.26 329** *e*P **P** **08 22 40.4 -2.4**
**OBN Obninsk 65.53 328** *e*P **P** **08 22 44.8 +0.2**
OBN *e* 08 23 15.8
OBN *e* 08 25 08.0
OBN *e*PPP PPP 08 26 42.2
OBN pmax pmax
comp=Z,7.0nm,0.8s
**AUDCS Dubbo College 65.91 130** P **P** **08 22 49.3 +1.8**
**ARMA Armidale 67.52 127** P **P** **08 23 00.0 +2.1**
**AUWSH Wavell State H 67.55 123** P **P** **08 23 00.3 +2.3**
**AKASG Malin Array Be 68.09 322** LR LR 08 57 16.2
comp=Z,86nm,19.2s,baz=98,slow=40
**MA2 Magadan 68.51 28** P **P** **08 23 07.0 +3.5**
**MA2 Magadan 68.51 28** P **P** **08 23 02.0 -1.6**
**MA2 Magadan 68.51 28** LR LR 08 54 46.9
comp=Z,76nm,18.6s,baz=242,slow=38
**MA2 Magadan 68.51 28** ⇓ *i*P **P** **08 23 02.6 -0.9**
MA2 pmax pmax
comp=Z,38nm,1.9s
**TIXI Tiksi 68.67 12** P **P** **08 23 03.0 -1.3**
**TIXI Tiksi 68.67 12** LR LR 08 55 33.7
comp=Z,120nm,18.4s,baz=198,slow=38
**TIXI Tiksi 68.67 12** ⇓ *i*P **P** **08 23 03.5 -0.8**
TIXI pmax pmax
comp=Z,17nm,0.9s
**MLR Muntele Rosu 68.91 316** P **P** **08 23 06.7 +0.3**
**MLR Muntele Rosu 68.91 316** P **P** **08 23 06.7 +0.3**
MLR pmax pmax
comp=Z,54nm,1.8s
**HNR Honiara 69.03 103** LR LR 08 57 19.3
comp=Z,702nm,18.9s,baz=224,slow=39
**BURAR Bucovina Array 69.85 318** P **P** **08 23 12.9 +0.7**
**PETK Petropavlovsk- 69.86 36** LR LR 08 55 35.5
comp=Z,108nm,19.6s,baz=247,slow=38
**MNK Minsk 69.99 326** *i*P **P** **08 23 10.8 -2.0**
MNK *i* 08 23 32.6
MNK *i* 08 25 45.7
MNK *i*PPP PPP 08 27 27.5
MNK *i*S **S** **08 32 21.3 -0.3**
MNK *i* 08 33 11.9
MNK *i*SS **SS** **08 36 52.0 +0.9**
MNK pmax pmax
comp=N,18nm,0.6s
MNK pmax pmax
comp=E,8.0nm,0.6s
MNK pmax pmax
comp=Z,20nm,0.6s
MNK MLR MLR
comp=Z,80nm,19.0s
MNK MLR MLR
comp=E,127nm,24.0s
MNK MLR MLR
comp=N,114nm,21.0s
**SEY Seymchan 70.63 25** ⇓ *i*P **P** **08 23 16.4 -0.1**
SEY pmax pmax
comp=Z,12nm,1.4s
**LBTB Lobatse 72.31 241** LR LR 08 51 08.9
comp=Z,292nm,20.6s,baz=70,slow=32
**FINES FINESS Array B 73.00 333** P **P** **08 23 30.1 -0.7**
comp=Z,2.4nm,0.8s,baz=134,slow=8.2,SNR=8.8
comp=Z,2.4nm,0.8s
**BOSA Boshof 73.64 238** LR LR 08 51 12.4
comp=Z,153nm,20.4s,baz=33,slow=32
**VRAC Vranov 75.79 319** LR LR 09 01 00.9
comp=Z,29nm,19.9s,baz=75,slow=39
**ARCES ARCESS Array B 75.82 340** LR LR 09 01 10.6
comp=Z,173nm,19.2s,baz=108,slow=39
**MAW Mawson 77.09 191** LR LR 08 51 53.8
comp=Z,87nm,18.1s,baz=52,slow=31
**BRG Berggiesshubel 77.64 321** *e*P **P** **08 23 59.8 +2.1**
BRG Amp 08 24 00.5
comp=Z,3.5nm,0.9s
**BRG Berggiesshubel 77.64 321** P P 08 24 05.6 +7.9
BRG Amp 08 24 05.9
comp=Z,4.7nm,1.0s
**GEC2 GERESS Array S 77.64 318** P **P** **08 23 57.8 -0.1**
GEC2 IAmb IAmb 08 24 00.1
comp=Z,33nm,1.9s
**GERES GERESS Array B 77.64 318** P **P** **08 23 57.0 -0.9**
**GERES GERESS Array B 77.64 318** P **P** **08 23 58.3 +0.4**
comp=Z,1.5nm,0.7s,baz=142,slow=9.9,SNR=6.4
comp=Z,1.5nm,0.7s
**GERES GERESS Array B 77.64 318** P **P** **08 23 57.0 -0.9**
**BILL Bilibino 77.74 22** *e*P **P** **08 23 58.6 +0.7**
BILL pmax pmax
comp=Z,3.0nm,1.4s
**DZM Mont Dzumac 77.74 114** *e*LR LR 08 48 02.3
comp=Z,140nm,22.9s
**TSUM Tsumeb 78.15 249** LR LR 08 55 05.5
comp=Z,207nm,19.5s,baz=143,slow=33
**CLL Collm 78.26 321** *i*P P 08 23 55.7 -5.4
CLL pmax pmax
comp=Z,5.0nm,0.6s
**SUR Sutherland 78.39 235** LR LR 08 52 44.7
comp=Z,136nm,21.8s,baz=84,slow=31
**HFS Hagfors 78.66 330** LR LR 09 02 55.7
comp=Z,140nm,19.8s,baz=93,slow=39
**SHEM Shemya Is, Ala 79.57 38** LR LR 09 03 48.7
comp=Z,30nm,18.3s,baz=100,slow=39
**NOA NORSAR Array B 79.97 331** P **P** **08 24 09.3 -1.0**
comp=Z,2.0nm,1.0s,baz=93,slow=5.9,SNR=2.6
NOA LR LR 09 03 37.4
comp=Z,128nm,19.9s,baz=90,slow=39
comp=Z,2.0nm,1.0s
**DAVOX Davos/Dischmat 80.13 316** LR LR 09 07 09.7
comp=Z,45nm,18.8s,baz=80,slow=41
**SPITS Spitsbergen Ar 80.64 348** LR LR 09 08 12.2
comp=Z,95nm,18.3s,baz=82,slow=42
**EKA Eskdalemuir Ar 87.78 325** P **P** **08 24 49.4 -0.9**
comp=Z,1.7nm,0.6s,baz=109,slow=3.9,SNR=5.9
comp=Z,1.7nm,0.6s
**TORD Torodi Ar. Bu 89.33 283** P **P** **08 24 59.2 +0.7**
comp=Z,0.5nm,0.7s,baz=78,slow=5.3,SNR=3.4
TORD LR LR 09 03 15.6
comp=Z,117nm,19.8s,baz=110,slow=34
comp=Z,0.5nm,0.7s
**URZ Urewera 89.85 128** LR LR 09 08 23.0
comp=Z,78nm,18.1s,baz=23,slow=38
**ELIB Princess Elisa 90.03 197** *d*P **P** **08 25 04.1 +3.5**
comp=Z,3.5nm,1.1s
**ESDC Sonseca Array 90.75 310** P **P** **08 25 05.6 +0.8**
**ESDC Sonseca Array 90.75 310** P **P** **08 25 05.8 +1.1**
comp=Z,1.1nm,0.7s,baz=56,slow=3.9,SNR=6.3
comp=Z,1.1nm,0.7s
**J16K Anvik River 91.52 26** P **P** **08 25 08.5 +0.8**
**VNDA Vanda 92.12 168** LR LR 09 04 48.9
comp=Z,71nm,18.6s,baz=321,slow=34
**RAO Raoul Island 92.83 119** LR LR 09 09 57.2
comp=Z,76nm,18.6s,baz=293,slow=38
**J18K Innoko River 93.10 25** P **P** **08 25 15.9 +0.9**
J18K IAmb IAmb 08 26 49.6
comp=Z,10nm,0.9s
**BORG Borgarnes 93.87 337** LR LR 09 10 08.4
comp=Z,50nm,19.1s,baz=77,slow=37
**ILAR Eielson Array 96.40 22** LR LR 09 11 38.2
comp=Z,75nm,20.6s,baz=268,slow=37
**DBIC Dimbokro 96.54 277** LR LR 09 08 30.0
comp=Z,139nm,19.1s,baz=60,slow=35
**QSPA South Pole Qui 96.63 180** LR LR 09 05 25.2
comp=Z,54nm,19.7s,baz=315,slow=33
**KDAK Kodiak Island 97.22 29** LR LR 09 10 57.3
comp=Z,53nm,21.8s,baz=293,slow=36
**SNAA Sanae 98.03 199** LR LR 09 04 13.5
comp=Z,50nm,18.8s,baz=108,slow=32
**PPT2 Papeete2 118.54 106** *e*LR LR 09 06 50.9
comp=Z,64nm,24.8s
**NVAR Mina Array Bea 126.71 30** PKP **PKiKP** **08 31 07.2 +1.2**
comp=Z,0.7nm,0.7s,baz=314,slow=1.7,SNR=7.2
**PDAR Pinedale Array 126.80 20** PKP **PKPdf** **08 31 05.1 -0.5**
comp=Z,0.4nm,0.7s,baz=253,slow=2.7,SNR=5.7
**TAOE Nuku Hiva Isla 127.77 96** *e*LR LR 09 11 17.2
comp=Z,47nm,24.5s
**TXAR Lajitas Array 140.91 23** PKhKP PKPpre 08 31 27.7
comp=Z,0.1nm,0.5s,baz=336,slow=2.0,SNR=2.6
TXAR PKP **PKPdf** **08 31 33.4 +1.2**
comp=Z,0.3nm,0.6s,baz=328,slow=1.6,SNR=4.5
**CPUP Villa Florida 145.31 232** PKPbc **PKPbc** **08 31 40.7 +1.1**
comp=Z,1.5nm,0.9s,baz=40,slow=2.0,SNR=3.9

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*AEIC* **16** *08:22:15.8±2.3,69.43N±0.05×144.21W±0.08,h16km±6km, Error ellipse: s-maj=6.9km s-min=3.7km az=193.0*
*IDC* **16** *08:22:18.8±2.7,69.61N×144.02W,h0km,mb3.4/3, mbtmp3.6/8,ML3.4/4, Error ellipse: s-maj=38.3km s-min=21.9km az=152.0*
*NEIC* **16** *08:22:18.1±1.3,69.53N±0.06×144.16W±0.06,h3km±7km, ML3.6/96,ML3.4(AEIC), Error ellipse: s-maj=9.9km s-min=1.2km az=197.0*

**ISC 16 08:22:17.8±0.7, 69.53N±0.04×144.23W±0.02, h10km, n98, σ1s 48/100, mb 3.5/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.21** | **61** | | **Pg** | **08 22 21.6** | **-0.5** |
| C27K | | | | | **Sg** | **08 22 24.4** | **-0.6** |
| **C27K** | **Jago River** | **0.21** | **61** | IAML | | 08 22 25.3 | |
| | comp=N,5μm,0.6s | | | | | | |
| C27K | | | | IAML | | 08 22 25.5 | |
| | comp=E,5μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.46** | **329** | | **Pg** | **08 22 27.1** | **+0.4** |
| C26K | | | | | **Sb** | **08 22 35.1** | **+0.3** |
| **D25K** | **Kavik River** | **0.79** | **256** | | **Pg** | **08 22 30.9** | **-2.0** |
| D25K | | | | Sg | **Sb** | **08 22 43.7** | **-0.6** |
| **D27M** | **Malcolm River** | **1.19** | **102** | Pg | **Pb** | **08 22 38.2** | **-2.2** |
| **D27M** | **Malcolm River** | **1.19** | **102** | | **Sn** | **08 22 55.7** | **-1.0** |
| **D27M** | **Malcolm River** | **1.19** | **102** | IAML | | 08 23 01.7 | |
| | comp=N,949nm,0.5s | | | | | | |
| D27M | | | | IAML | | 08 23 03.6 | |
| | comp=E,507nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **279** | | **Pn** | **08 22 46.3** | **+0.5** |
| C24K | | | | | **Sg** | **08 23 08.5** | **0.0** |
| **C24K** | **Franklin Bluff** | **1.58** | **279** | IAML | | 08 23 09.9 | |
| | comp=N,891nm,0.5s | | | | | | |
| C24K | | | | IAML | | 08 23 12.9 | |
| | comp=E,858nm,1.2s | | | | | | |
| **E27K** | **Coleen River** | **1.65** | **143** | | **Pb** | **08 22 47.8** | **-0.5** |
| E27K | | | | | **Sg** | **08 23 09.9** | **-0.9** |
| E27K | | | | IAML | | 08 23 12.9 | |
| | comp=E,654nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **259** | Pn | **Pb** | **08 22 48.6** | **-0.1** |
| **F26K** | **Sheenjek River** | **1.84** | **179** | | **Pb** | **08 22 50.5** | **-1.1** |
| F26K | | | | IAML | | 08 23 17.6 | |
| | comp=N,397nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **117** | | **Pb** | **08 22 52.7** | **-0.2** |
| **F25K** | **Christian Rive** | **2.01** | **196** | | **Pn** | **08 22 52.1** | **+0.3** |
| **BMAR** | **Burnt Mountain** | **2.11** | **184** | Pn | **Pb** | **08 22 54.1** | **-2.1** |
| **TOLK** | **Toolik Lake Re** | **2.12** | **248** | | **Pb** | **08 22 56.0** | **-0.3** |
| TOLK | | | | IAML | | 08 23 28.0 | |
| | comp=E,297nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 08 23 35.5 | |
| | comp=N,376nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **229** | Pn | **Pb** | **08 22 55.0** | **-1.5** |
| **C23K** | **Itkillik River** | **2.25** | **281** | | **Pb** | **08 22 56.7** | **-1.8** |
| C23K | | | | IAML | | 08 23 32.2 | |
| | comp=E,364nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **215** | Pn | **Pn** | **08 22 58.0** | **+0.5** |
| F24K | | | | IAML | | 08 23 41.8 | |
| | comp=E,221nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **138** | | **Pn** | **08 22 59.3** | **+0.8** |
| F28M | | | | IAML | | 08 23 40.0 | |
| | comp=N,287nm,0.5s | | | | | | |
| F28M | | | | IAML | | 08 23 42.9 | |
| | comp=E,228nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **2.55** | **114** | | **Pn** | **08 22 58.4** | **-0.8** |
| **E29M** | **Blow River** | **2.55** | **114** | IAML | | 08 23 43.4 | |
| | comp=N,288nm,0.7s | | | | | | |
| E29M | | | | IAML | | 08 23 45.1 | |
| | comp=E,287nm,0.6s | | | | | | |
| **G25K** | **Bearman Lake** | **2.86** | **195** | | **Pn** | **08 23 02.2** | **-1.2** |
| **G27K** | **Doyon Strip** | **2.90** | **159** | | **Pn** | **08 23 04.6** | **+0.7** |
| **FYU** | **Fort Yukon** | **3.00** | **188** | | **Pn** | **08 23 06.3** | **+1.0** |
| **D22K** | **Ayikyak River** | **3.09** | **262** | | **Pn** | **08 23 07.9** | **+1.4** |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **247** | | **Pn** | **08 23 05.6** | **-1.0** |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **247** | IAML | | 08 23 57.0 | |
| | comp=N,120nm,0.7s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.09** | **205** | | **Pn** | **08 23 07.4** | **+0.8** |
| G24K | | | | IAML | | 08 23 58.4 | |
| | comp=N,215nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.20** | **227** | | **Pn** | **08 23 06.7** | **-1.4** |
| **G29M** | **Pine Creek** | **3.50** | **136** | | **Pn** | **08 23 10.8** | **-1.5** |
| **G23K** | **Bananza Creek** | **3.57** | **220** | | **Pn** | **08 23 13.3** | **+0.2** |
| G23K | | | | IAML | | 08 24 14.7 | |
| | comp=E,128nm,0.9s | | | | | | |
| G23K | | | | IAML | | 08 24 14.7 | |
| | comp=N,96nm,1.4s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.64** | **276** | | **Pn** | **08 23 15.8** | **+1.7** |
| **F30M** | **Barrier River** | **3.65** | **118** | | **Pn** | **08 23 13.4** | **-0.8** |
| **G30M** | **tAoh Zraii Nji** | **3.92** | **127** | | **Pn** | **08 23 19.3** | **+1.2** |
| G30M | | | | IAML | | 08 24 35.6 | |
| | comp=N,77nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **3.99** | **144** | | **Pn** | **08 23 20.2** | **+1.3** |
| H29M | | | | IAML | | 08 24 16.1 | |
| | comp=E,104nm,0.7s | | | | | | |
| H29M | | | | IAML | | 08 24 30.6 | |
| | comp=N,93nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.05** | **103** | | **Pn** | **08 23 21.7** | **+1.9** |
| **INK** | **Inuvik** | **4.05** | **103** | Pn | **Pn** | **08 23 20.5** | **+0.7** |
| | comp=N,1.5nm,0.3s,baz=315,slow=8.6,SNR=17 | | | | | | |
| INK | | | | Sn | **Sn** | **08 24 05.0** | **-2.3** |
| | comp=N,1.6nm,0.3s,baz=243,slow=30,SNR=4.2 | | | | | | |
| INK | | | | Lg | Lg | 08 24 24.8 | |
| | comp=N,2.4nm,0.3s,baz=220,slow=30,SNR=4.7 | | | | | | |
| | comp=N,5.3nm,0.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **188** | | **Pn** | **08 23 19.4** | **-0.6** |
| PRP | | | | IAML | | 08 24 28.4 | |
| | comp=N,101nm,1.0s | | | | | | |
| PRP | | | | IAML | | 08 24 31.6 | |
| | comp=E,72nm,1.0s | | | | | | |
| **I27K** | **Kandik River** | **4.07** | **165** | | **Pn** | **08 23 19.0** | **-1.1** |
| **F21K** | **Alatna River** | **4.13** | **240** | | **Pn** | **08 23 22.0** | **+1.1** |
| F21K | | | | IAML | | 08 24 32.8 | |
| | comp=N,62nm,0.7s | | | | | | |
| F21K | | | | IAML | | 08 24 33.9 | |
| | comp=E,54nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.24** | **211** | | **Pn** | **08 23 23.8** | **+1.5** |
| H23K | | | | IAML | | 08 24 36.1 | |
| | comp=N,81nm,0.7s | | | | | | |
| **D20K** | **Etivluk River** | **4.51** | **265** | | **Pn** | **08 23 26.1** | **0.0** |
| **E20K** | **Nigu River** | **4.51** | **259** | | **Pn** | **08 23 26.3** | **+0.2** |
| **G31M** | **Satah River** | **4.54** | **120** | | **Pn** | **08 23 27.3** | **+0.9** |
| G31M | | | | IAML | | 08 24 46.2 | |
| | comp=N,73nm,0.9s | | | | | | |
| G31M | | | | IAML | | 08 24 51.7 | |
| | comp=E,62nm,1.1s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.55** | **220** | | **Pn** | **08 23 24.9** | **-1.7** |
| **POKR** | **Poker Plat Res** | **4.60** | **197** | | **Pn** | **08 23 28.4** | **+1.1** |
| POKR | | | | IAML | | 08 24 23.8 | |
| | comp=N,46nm,0.5s | | | | | | |
| POKR | | | | IAML | | 08 25 00.2 | |
| | comp=E,63nm,1.2s | | | | | | |
| **G21K** | **Allakaket** | **4.61** | **233** | | **Pn** | **08 23 28.4** | **+0.9** |
| G21K | | | | IAML | | 08 24 56.3 | |
| | comp=E,58nm,0.9s | | | | | | |
| G21K | | | | IAML | | 08 25 01.0 | |
| | comp=N,50nm,1.2s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83** | **207** | | **Pn** | **08 23 31.3** | **+1.0** |
| I23K | | | | IAML | | 08 25 06.8 | |
| | comp=N,48nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **201** | | **Pn** | **08 23 31.7** | **+1.0** |
| MDM | | | | IAML | | 08 24 56.7 | |
| | comp=N,39nm,0.6s | | | | | | |
| MDM | | | | IAML | | 08 24 59.6 | |
| | comp=E,46nm,1.0s | | | | | | |
| **COLA** | **College** | **4.88** | **198** | | **Pn** | **08 23 33.0** | **+1.8** |
| **IL31** | | **4.89** | **194** | | **Pn** | **08 23 33.0** | **+1.8** |
| **ILAR** | **Eielson Array** | **4.89** | **194** | Pn | **Pn** | **08 23 33.1** | **+1.8** |
| | comp=E,1.8nm,0.3s,baz=6.2,slow=14,SNR=32 | | | | | | |
| ILAR | | | | Sn | **Sn** | **08 24 27.3** | **-0.5** |
| | comp=E,2.4nm,0.3s,baz=8.2,slow=20,SNR=4.9 | | | | | | |
| ILAR | | | | Lg | Lg | 08 24 51.2 | |

comp=E,4.2nm,0.3s,baz=14,slow=31,SNR=7.1
comp=E,3.3nm,0.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EGAK** | **Eagle** | **4.92** | **164** | Pn | **Pn** | **08 23 32.8** | **+1.1** |
| EGAK | | | | IAML | | 08 24 31.8 | | |
| | comp=E,42nm,0.9s | | | | | | | |
| EGAK | | | | IAML | | 08 25 02.8 | | |
| | comp=E,43nm,1.1s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.94** | **245** | | **Pn** | **08 23 33.7** | **+1.7** |
| F20K | | | | IAML | | 08 25 11.3 | | |
| | comp=N,33nm,1.2s | | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **186** | | **Pn** | **08 23 33.8** | **+1.5** |
| **J26L** | **Joseph Creek** | **5.06** | **177** | | **Pn** | **08 23 35.3** | **+1.6** |
| J26L | | | | IAML | | 08 24 56.7 | | |
| | comp=E,36nm,0.9s | | | | | | | |
| J26L | | | | IAML | | 08 25 05.3 | | |
| | comp=N,43nm,0.9s | | | | | | | |
| **IMAR** | **Indian Mountai** | **5.07** | **230** | | **Pn** | **08 23 35.0** | **+1.2** |
| **H21K** | **Melozitna Rive** | **5.08** | **224** | | **Pn** | **08 23 35.3** | **+1.3** |
| H21K | | | | IAML | | 08 25 08.9 | | |
| | comp=N,35nm,1.6s | | | | | | | |
| H21K | | | | IAML | | 08 25 11.8 | | |
| | comp=E,40nm,0.9s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10** | **198** | | **Pn** | **08 23 35.8** | **+1.7** |
| CCB | | | | IAML | | 08 24 35.0 | | |
| | comp=E,24nm,0.8s | | | | | | | |
| **MLY** | **Manley** | **5.17** | **212** | | **Pn** | **08 23 36.5** | **+1.3** |
| MLY | | | | IAML | | 08 25 14.4 | | |
| | comp=N,27nm,1.4s | | | | | | | |
| **E19K** | **Redstone River** | **5.21** | **253** | | **Pn** | **08 23 37.1** | **+1.4** |
| E19K | | | | IAML | | 08 25 21.8 | | |
| | comp=E,40nm,1.0s | | | | | | | |
| **HDA** | **Harding Lake** | **5.25** | **193** | | **Pn** | **08 23 38.0** | **+1.8** |
| **I30M** | **Mount Dempster** | **5.28** | **141** | | **Pn** | **08 23 37.8** | **+1.1** |
| I30M | | | | IAML | | 08 24 39.2 | | |
| | comp=N,34nm,0.5s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **198** | | **Pn** | **08 23 38.3** | **+1.4** |
| WRH | | | | IAML | | 08 24 39.3 | | |
| | comp=N,24nm,0.9s | | | | | | | |
| WRH | | | | IAML | | 08 25 15.6 | | |
| | comp=E,40nm,0.7s | | | | | | | |
| **NEA2** | **Nenana** | **5.30** | **203** | | **Pn** | **08 23 38.0** | **+1.0** |
| NEA2 | | | | IAML | | 08 25 10.1 | | |
| | comp=E,22nm,1.0s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.46** | **273** | | **Pn** | **08 23 40.4** | **+1.2** |
| **BWN** | **Browne** | **5.76** | **203** | | **Pn** | **08 23 44.3** | **+1.1** |
| **G19K** | **Purcell Mounta** | **5.93** | **241** | | **Pn** | **08 23 46.3** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **6.07** | **209** | | **Pn** | **08 23 48.1** | **+0.7** |
| **C18K** | **Utukok River** | **6.14** | **270** | | **Pn** | **08 23 49.6** | **+1.2** |
| **H19K** | **Roundabout Mou** | **6.16** | **235** | | **Pn** | **08 23 49.8** | **+1.1** |
| **K29M** | **Barlow Dome** | **6.29** | **152** | | **Pn** | **08 23 52.4** | **+1.7** |
| **RND** | **Reindeer** | **6.42** | **199** | | **Pn** | **08 23 54.0** | **+1.6** |
| **L26K** | **Log Cabin Wild** | **6.54** | **176** | | **Pn** | **08 23 55.9** | **+1.9** |
| **BCAR** | **Beaver Creek A** | **6.56** | **170** | | **Pn** | **08 23 56.6** | **+2.3** |
| **L27K** | **Beaver Creek,** | **6.57** | **170** | | **Pn** | **08 23 56.5** | **+2.1** |
| **G18K** | **Tagagawik** | **6.58** | **243** | | **Pn** | **08 23 56.1** | **+1.6** |
| **DHY** | **Denali Highway** | **6.60** | **193** | | **Pn** | **08 23 57.5** | **+2.6** |
| **J20K** | **Nowinta River** | **6.64** | **221** | | **Pn** | **08 23 55.9** | **+0.6** |
| **RDOG** | **Red Dog Mine** | **6.93** | **267** | | **Pn** | **08 23 59.0** | **-0.2** |
| **H18K** | **Honhosa River** | **7.00** | **238** | | **Pn** | **08 24 01.0** | **+0.9** |
| **M26K** | **Nabesna, AK** | **7.18** | **175** | | **Pn** | **08 24 04.5** | **+1.8** |
| **M27K** | **Edge Creek, AK** | **7.26** | **171** | | **Pn** | **08 24 06.1** | **+2.1** |
| **M29M** | **Somme Creek** | **7.49** | **159** | | **Pn** | **08 24 08.3** | **+1.3** |
| **H17K** | **Granite Mounta** | **7.62** | **240** | | **Pn** | **08 24 09.4** | **+0.8** |
| **M20K** | **Styx River** | **8.50** | **210** | | **Pn** | **08 24 22.4** | **+1.6** |
| **FARO** | **Faro, Yukon** | **8.56** | **144** | | **Pn** | **08 24 22.4** | **+0.8** |
| **N30M** | **Aishikik Lake** | **8.62** | **157** | | **Pn** | **08 24 23.9** | **+1.4** |
| **CTGM** | **Chitina Glacie** | **8.68** | **171** | | **Pn** | **08 24 26.2** | **+2.7** |
| **M19K** | **Big River Lodg** | **8.71** | **213** | | **Pn** | **08 24 24.7** | **+1.1** |
| **N31M** | **Braeburn, Yuko** | **8.79** | **153** | | **Pn** | **08 24 26.6** | **+1.8** |
| **DLBC** | **Dease Lake** | **12.70** | **144** | Pn | **Pn** | **08 25 16.7** | **-1.6** |
| | comp=E,0.1nm,0.3s,baz=303,slow=3.5,SNR=2.3 | | | | | | | |
| | comp=E,1.2nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.82** | **106** | Pn | **Pn** | **08 25 29.4** | **-4.0** |
| | comp=E,0.2nm,0.3s,baz=314,slow=14,SNR=2.5 | | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | | |
| **RES** | **Resolute Bay** | **15.56** | **49** | Pn | **Pn** | **08 25 56.5** | **-0.3** |
| | comp=E,5.2nm,0.8s,baz=258,slow=9.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.18** | **128** | P | **P** | **08 28 49.2** | **+3.6** |
| | comp=E,0.5nm,0.8s,baz=354,slow=4.5,SNR=4.9 | | | | | | | |
| | comp=E,0.5nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.11** | **142** | P | **P** | **08 29 06.0** | **+3.4** |
| | comp=E,0.6nm,0.8s,baz=336,slow=7.4,SNR=5.3 | | | | | | | |
| | comp=E,0.6nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.40** | **128** | P | **P** | **08 30 46.3** | **+2.1** |
| | comp=E,0.3nm,0.7s,baz=348,slow=7.7,SNR=5.3 | | | | | | | |
| | comp=E,0.3nm,0.7s | | | | | | | |

**IDC 16 08:30:19.5±3.1, 54°26N×87°14E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=26.7km s-min=19.2km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.40** | **258** | I | I | 08 39 00.0 | |
| | baz=76,slow=316,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.40** | **258** | Pg | Pn | 08 30 44.5 | -1.8 |
| | 1.0nm,0.3s,baz=74,slow=17,SNR=7.1 | | | | | | |
| ZALV | | | | Lg | Lg | 08 31 05.5 | |
| | 1.5nm,0.3s,baz=73,slow=28,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.40** | **239** | Pn | Pn | 08 31 55.4 | +0.4 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=5.3 | | | | | | |
| KURBB | | | | Lg | Lg | 08 33 39.6 | |
| | baz=58,slow=30 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.09** | **204** | Pn | Pn | 08 32 20.0 | +1.8 |
| | 0.1nm,0.3s,baz=25,slow=13,SNR=2.3 | | | | | | |
| MKAR | | | | Lg | Lg | 08 34 33.3 | |
| | baz=17,slow=26,SNR=1.4 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC 16 08:52:36.5±3.6, 15°97N×146°46E, h0km, mb3.7/6, mbtmp3.7/6, Error ellipse: s-maj=148.7km s-min=23.5km az=84.0*

**ISC 16 08:52:40.9±3.7, 16°0N±0°2×14°7E±°, h50km, n6, σ0s66/6, mb3.8/6, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **37.86** | **200** | P | **P** | **08 59 53.7** | **+0.5** |
| | 0.5nm,0.4s,baz=18,slow=8.4,SNR=14 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **41.48** | **199** | P | **P** | **09 00 22.7** | **-0.6** |
| | 0.4nm,0.6s,baz=17,slow=6.6,SNR=6.8 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.38** | **315** | P | **P** | **09 02 52.3** | **+0.3** |
| | 0.2nm,0.6s,baz=92,slow=7.8,SNR=2.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.30** | **319** | P | **P** | **09 03 10.5** | **-0.7** |
| | 0.8nm,0.9s,baz=90,slow=7.1,SNR=2.5 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.48** | **321** | P | **P** | **09 03 44.1** | **0.0** |
| | 0.8nm,0.6s,baz=81,slow=9.1,SNR=2.7 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **89.95** | **336** | P | **P** | **09 05 35.0** | **+0.3** |
| | 0.3nm,0.4s,baz=45,slow=2.2,SNR=3.4 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*AFAD 16 08:53:50.8±0.0, 36°30N×28°34E, h51km±5km, ML2.7*
*ISK 16 08:53:51.8, 36°35N×28°35E, h48km±1km, ML2.8/20*
*NIC 16 08:53:52.8, 36°10N×28°51E, h28km±6km, Ml2.9/9*
*THE 16 08:53:53.2, 36°31N×28°36E, h42km±2km, ML2.9/2, Error ellipse: s-maj=2.9km s-min=1.1km az=127.0*

**ISC 16 08:53:52.3±1.2, 36°30N±0°03×28°39E±0°02, h46km±8km, n50, σ0s99/82, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARG** | **Arkhangelos** | **0.23** | **250** | Pg | **Pn** | **08 54 00.4** | **-0.1** |
| **ARG** | **Arkhangelos** | **0.23** | **250** | P | **Pn** | **08 54 00.3** | **-0.1** |
| ARG | | | | S | **Sn** | **08 54 06.3** | **+0.2** |
| | 4μm,0.2s | | | | | | |
| **ARG** | **Arkhangelos** | **0.23** | **250** | P | Pn | 08 54 00.4 | -0.1 |
| ARG | | | | S | **Sn** | **08 54 06.4** | **+0.2** |
| ARG | | | | AML | AML | 08 54 06.5 | |
| | 7.3nm,0.2s | | | | | | |
| ARG | | | | AML | AML | 08 54 06.6 | |
| | 8.7nm,0.3s | | | | | | |
| **MRSB** | **Marmaris-Mugla** | **0.45** | **340** | Pg | **Pn** | **08 54 02.1** | **-0.7** |
| MRSB | | | | Sg | **Sn** | **08 54 09.6** | **-0.6** |
| **DALY** | **Dalyan (Mula)** | **0.56** | **22** | Pg | **Pn** | **08 54 03.7** | **-0.4** |
| **FETY** | **Fethiye** | **0.65** | **59** | Pg | **Pn** | **08 54 04.9** | **-0.5** |
| **IZZE** | **Mula-Seydike** | **0.69** | **78** | P | **Pn** | **08 54 05.1** | **-0.7** |
| IZZE | | | | S | **Sn** | **08 54 19.0** | **+3.5** |
| IZZE | | | | *i* AML | AML | 08 54 21.0 | |
| | comp=N,246nm,0.3s | | | | | | |
| IZZE | | | | *i* AML | AML | 08 54 27.0 | |
| | comp=E,186nm,0.3s | | | | | | |
| **SABU** | **Mula-Dalaman** | **0.70** | **41** | P | **Pn** | **08 54 05.5** | **-0.5** |
| SABU | | | | S | **Sn** | **08 54 16.4** | **+0.5** |
| SABU | | | | *i* AML | AML | 08 54 17.0 | |
| | comp=N,218nm,0.2s | | | | | | |
| SABU | | | | *i* AML | AML | 08 54 18.0 | |
| | comp=E,157nm,0.3s | | | | | | |
| **DAT** | **Datca** | **0.78** | **304** | Pg | **Pn** | **08 54 06.9** | **-0.3** |
| **DAT** | **Datca** | **0.78** | **304** | P | **Pn** | **08 54 06.9** | **-0.3** |
| DAT | | | | S | **Sn** | **08 54 18.8** | **+0.9** |
| DAT | | | | *i* AML | AML | 08 54 19.0 | |
| | comp=N,568nm,0.4s | | | | | | |
| DAT | | | | *i* AML | AML | 08 54 20.0 | |
| | comp=E,512nm,0.3s | | | | | | |
| **DAT** | **Datca** | **0.78** | **304** | P | **Pn** | **08 54 06.9** | **-0.3** |
| DAT | | | | S | **Sn** | **08 54 18.3** | **+0.4** |
| **YER** | **Yerkesik** | **0.84** | **354** | Pg | **Pn** | **08 54 07.4** | **-0.5** |
| YER | | | | Sg | **Sn** | **08 54 18.5** | **-0.7** |
| **YER** | **Yerkesik** | **0.84** | **354** | P | **Pn** | **08 54 07.8** | **-0.1** |
| YER | | | | S | **Sn** | **08 54 19.5** | **+0.3** |
| **YAZI** | **Mula-Dat§a-** | **0.85** | **297** | P | **Pn** | **08 54 07.4** | **-0.5** |
| YAZI | | | | S | **Sn** | **08 54 19.5** | **+0.3** |
| YAZI | | | | *i* AML | AML | 08 54 20.0 | |
| | comp=N,332nm,0.8s | | | | | | |
| YAZI | | | | *i* AML | AML | 08 54 20.0 | |
| | comp=E,321nm,0.4s | | | | | | |
| **MULA** | **Mugla, Merkez-** | **0.96** | **357** | P | **Pn** | **08 54 09.8** | **+0.3** |
| MULA | | | | S | **Sn** | **08 54 23.2** | **+1.1** |
| MULA | | | | *i* AML | AML | 08 54 25.0 | |
| | comp=E,287nm,0.7s | | | | | | |
| MULA | | | | *i* AML | AML | 08 54 26.0 | |
| | comp=N,142nm,0.3s | | | | | | |
| **CAME** | **Cameli-Denizli** | **0.98** | **48** | Pg | **Pn** | **08 54 09.9** | **+0.1** |
| CAME | | | | Sg | **Sn** | **08 54 23.0** | **+0.4** |
| **AKAS** | **Kas** | **0.98** | **93** | Pg | **Pn** | **08 54 10.3** | **+0.4** |
| **BDRM** | **Kayabasi** | **1.08** | **316** | P | **Pn** | **08 54 10.4** | **-0.7** |
| BDRM | | | | S | **Sn** | **08 54 24.8** | **-0.1** |
| BDRM | | | | *i* AML | AML | 08 54 27.0 | |
| | comp=E,141nm,0.3s | | | | | | |
| **KNIK** | **Mula-Seydike** | **1.10** | **60** | P | **Pn** | **08 54 11.9** | **+0.4** |
| KNIK | | | | S | **Sn** | **08 54 27.1** | **+1.5** |
| **DNZT** | **Denizli-Tavas-** | **1.11** | **27** | P | **Pn** | **08 54 11.6** | **+0.1** |
| DNZT | | | | S | **Sn** | **08 54 26.9** | **+1.2** |
| **MLSB** | **Milas** | **1.11** | **334** | Pg | **Pn** | **08 54 11.0** | **-0.5** |
| **BODT** | **Bodrum** | **1.16** | **312** | Pn | **Pn** | **08 54 11.6** | **-0.6** |
| **BODT** | **Bodrum** | **1.16** | **312** | P | **Pn** | **08 54 11.5** | **-0.6** |
| BODT | | | | S | **Sn** | **08 54 26.0** | **-0.8** |
| **YKAV** | **Yalikavak-Bodr** | **1.22** | **313** | Pn | **Pn** | **08 54 12.1** | **-0.8** |
| YKAV | | | | Sn | **Sn** | **08 54 27.3** | **-0.9** |
| **TAVA** | **DENIZLI_Tavas** | **1.24** | **20** | P | **Pn** | **08 54 13.2** | **-0.2** |
| TAVA | | | | S | **Sn** | **08 54 30.1** | **+1.1** |
| TAVA | | | | *i* AML | AML | 08 54 31.0 | |
| | comp=N,138nm,0.6s | | | | | | |
| TAVA | | | | *i* AML | AML | 08 54 32.0 | |
| | comp=E,104nm,0.3s | | | | | | |
| **KARP** | **Karpathos** | **1.25** | **234** | Pn | **Pn** | **08 54 13.9** | **+0.6** |
| **KARP** | **Karpathos** | **1.25** | **234** | P | **Pn** | **08 54 13.9** | **+0.6** |
| KARP | | | | S | **Sn** | **08 54 29.3** | **+0.3** |
| | 292nm,0.4s | | | | | | |
| **KARP** | **Karpathos** | **1.25** | **234** | P | **Pn** | **08 54 14.1** | **+0.8** |
| KARP | | | | S | **Sn** | **08 54 29.9** | **+0.9** |
| KARP | | | | AML | AML | 08 54 33.6 | |
| | 0.6nm,0.1s | | | | | | |
| KARP | | | | AML | AML | 08 54 35.6 | |
| | 0.5nm,0.1s | | | | | | |
| **GOLH** | **Golhisar** | **1.33** | **45** | P | **Pn** | **08 54 15.2** | **+0.7** |
| GOLH | | | | S | **Sn** | **08 54 33.7** | **+2.5** |
| GOLH | | | | *i* AML | AML | 08 54 34.0 | |
| | comp=E,69nm,0.5s | | | | | | |
| **APMY** | **Acipayam-Deniz** | **1.38** | **32** | Pn | **Pn** | **08 54 15.2** | **-0.1** |
| **DNIZ** | **Denizli-Tavas-** | **1.43** | **21** | P | **Pn** | **08 54 17.6** | **+1.8** |
| DNIZ | | | | S | **Sn** | **08 54 35.2** | **+1.7** |
| DNIZ | | | | *i* AML | AML | 08 54 38.0 | |
| | comp=E,477nm,0.5s | | | | | | |
| DNIZ | | | | *i* AML | AML | 08 54 39.0 | |
| | comp=N,297nm,0.4s | | | | | | |
| **DDIM** | **Aydin, Didim** | **1.48** | **322** | P | **Pn** | **08 54 15.6** | **-0.9** |
| DDIM | | | | S | **Sn** | **08 54 34.6** | **-0.1** |
| DDIM | | | | *i* AML | AML | 08 54 47.0 | |
| | comp=N,95nm,0.7s | | | | | | |
| DDIM | | | | *i* AML | AML | 08 54 51.0 | |
| | comp=E,99nm,0.6s | | | | | | |
| **ESEN** | **Aydn-Nazilli** | **1.50** | **359** | P | **Pn** | **08 54 17.8** | **+1.0** |
| ESEN | | | | S | **Sn** | **08 54 37.8** | **+2.6** |
| ESEN | | | | *i* AML | AML | 08 54 38.0 | |
| | comp=N,84nm,0.3s | | | | | | |
| ESEN | | | | *i* AML | AML | 08 54 40.0 | |
| | comp=E,85nm,0.4s | | | | | | |
| **NAZL** | **Nazilli-Aydin** | **1.67** | **357** | Pn | **Pn** | **08 54 18.8** | **-0.3** |
| **GCAM** | **G?zelcami?** | **1.68** | **327** | Pn | **Pn** | **08 54 18.6** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.70** | **347** | Pn | **Pn** | **08 54 18.4** | **-0.2** |
| **IZMR** | **zmir-demi** | **1.87** | **349** | P | **Pn** | **08 54 22.1** | **+0.3** |
| IZMR | | | | S | **Sn** | **08 54 44.1** | **-0.1** |
| **ODEM** | **Odemis-Izmir** | **1.99** | **353** | Pn | **Pn** | **08 54 23.2** | **-0.4** |
| **ZKR** | **Zakros** | **2.12** | **237** | P | **Pn** | **08 54 27.2** | **+1.8** |
| ZKR | | | | S | **Sn** | **08 54 52.4** | **+1.9** |
| ZKR | | | | AML | AML | 08 54 59.6 | |
| | 0.1nm,0.4s | | | | | | |
| ZKR | | | | AML | AML | 08 55 03.5 | |
| | 0.1nm,0.6s | | | | | | |
| **DGB** | **zmir** | **2.13** | **326** | P | **Pn** | **08 54 24.3** | **-1.1** |
| DGB | | | | S | **Sn** | **08 54 49.4** | **-1.2** |
| **APE** | **Apeiranthos** | **2.42** | **289** | Pn | **Pn** | **08 54 29.5** | **0.0** |
| **URLA** | **Izmir** | **2.51** | **326** | Pn | **Pn** | **08 54 30.3** | **-0.3** |
| **CHOS** | **Chios island** | **2.80** | **319** | Pn | **Pn** | **08 54 34.3** | **-0.3** |
| **SOMA** | **Soma-Manisa** | **2.94** | **347** | Pn | **Pn** | **08 54 35.9** | **-0.6** |
| **AKMS** | **Akamas** | **3.46** | **110** | P | **Pn** | **08 54 43.1** | **-0.6** |
| AKMS | | | | S | **Sn** | **08 55 21.8** | **-1.5** |
| AKMS | | | | AML | AML | 08 55 23.4 | |
| | 0.1nm,0.4s | | | | | | |
| AKMS | | | | AML | AML | 08 55 27.7 | |
| | 0.2nm,0.4s | | | | | | |
| **ALFC** | **Alefka** | **3.61** | **107** | P | **Pn** | **08 54 44.9** | **-0.8** |
| ALFC | | | | S | **Sn** | **08 55 26.1** | **-1.0** |
| ALFC | | | | AML | AML | 08 55 26.9 | |
| | 0.1nm,0.2s | | | | | | |
| ALFC | | | | AML | AML | 08 55 27.9 | |
| | 0.1nm,0.2s | | | | | | |
| **NATA** | **Nata** | **3.73** | **113** | P | **Pn** | **08 54 47.0** | **-0.4** |
| NATA | | | | AML | AML | 08 55 30.3 | |
| | 0.3nm,0.1s | | | | | | |
| NATA | | | | AML | AML | 08 55 35.6 | |
| | 0.3nm,0.5s | | | | | | |
| **TROD** | **Troodos** | **3.89** | **109** | P | **Pn** | **08 54 48.8** | **-0.9** |
| TROD | | | | S | **Sn** | **08 55 32.2** | **-2.0** |
| TROD | | | | AML | AML | 08 55 40.0 | |
| | 0.1nm,0.5s | | | | | | |
| TROD | | | | AML | AML | 08 55 40.3 | |
| | 0.1nm,0.4s | | | | | | |
| **APOL** | **The Sanctuary** | **3.99** | **113** | P | **Pn** | **08 54 50.4** | **-0.6** |
| APOL | | | | S | **Sn** | **08 55 34.6** | **-1.9** |
| APOL | | | | AML | AML | 08 55 37.6 | |
| | 0.1nm,0.2s | | | | | | |
| APOL | | | | AML | AML | 08 55 42.4 | |
| | 0.1nm,0.2s | | | | | | |
| **ASGA** | **Asgata** | **4.24** | **109** | P | **Pn** | **08 54 54.0** | **-0.3** |
| ASGA | | | | S | **Sn** | **08 55 41.5** | **-1.1** |
| ASGA | | | | AML | AML | 08 55 45.0 | |
| | 0.1nm,0.3s | | | | | | |
| ASGA | | | | AML | AML | 08 55 45.7 | |
| | 0.1nm,0.2s | | | | | | |

*IDC 16 09:21:51.9±1.0, 58°01S×25°42W, h0km, mb3.9/4, mbtmp4.0/5, ML4.4/1, Error ellipse: s-maj=38.3km s-min=23.5km az=87.0*

**ISC 16 09:21:53.3±1.1, 58°1S±0°2×25°3W±0°2, h10km, n11, σ0s79/11, mb3.9/4, 8C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **14.53** | **157** | ⇑P | **Pn** | **09 25 18.1** | **-0.6** |
| | comp=Z,1.6nm,0.2s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **14.74** | **160** | ⇑P | **Pn** | **09 25 20.3** | **-1.3** |
| | comp=Z,1.6nm,0.2s | | | | | | |
| VNA3 | | | | ⇑S | Sn | 09 27 49.6 | -15 |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **14.93** | **157** | ⇑P | **Pn** | **09 25 23.3** | **-0.8** |
| | comp=Z,2.7nm,0.3s,baz=327,slow=14 | | | | | | |
| VNA2 | | | | ⇑S | Sn | 09 27 53.6 | -16 |
| | comp=Z,0.4nm,0.5s,baz=353,slow=0.5 | | | | | | |
| **SNAA** | **Sanae** | **16.48** | **155** | ⇑P | **Pn** | **09 25 44.2** | **0.0** |
| | comp=Z,53nm,0.3s | | | | | | |
| SNAA | | | | ⇑S | Sn | 09 28 30.9 | -16 |
| | comp=Z,12nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **16.48** | **155** | Pn | **Pn** | **09 25 44.1** | **-0.2** |
| | comp=Z,1.4nm,0.3s,baz=326,slow=16,SNR=132 | | | | | | |
| SNAA | | | | Sn | Sn | 09 28 32.7 | -14 |
| | baz=54,slow=11 | | | | | | |
| | comp=Z,3.3nm,0.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **17.98** | **152** | ⇑P | **P** | **09 26 03.7** | **0.0** |
| | comp=Z,16nm,0.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **32.17** | **180** | P | **P** | **09 28 21.3** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=227,slow=1.2,SNR=11 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **PLCA** | **Paso Flores** | **33.38** | **281** | P | **P** | **09 28 31.2** | **-0.4** |
| | comp=Z,1.0nm,0.6s,baz=142,slow=5.5,SNR=5.6 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **VNDA** | **Vanda** | **44.59** | **182** | P | **P** | **09 30 06.2** | **+1.3** |
| | comp=Z,1.0nm,0.7s,baz=195,slow=6.7,SNR=10 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.35** | **27** | P | **P** | **09 33 31.1** | **+0.1** |
| | comp=Z,1.4nm,0.6s,baz=196,slow=5.9,SNR=17 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **152.20** | **308** | PKPbc | **PKiKP** | **09 41 47.2** | **-0.6** |
| | comp=Z,0.5nm,0.6s,baz=146,slow=5.5,SNR=7.8 | | | | | | |

**AFAD 16 09:29:23.1±0.0, 40°43N×29°94E, h8km±1km, ML1.2, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HISA** | **Bilecik-Osmane** | **0.04** | **337** | P | Pg | 09 29 24.8 | +0.1 |
| HISA | | | | *i* AML | AML | 09 29 28.0 | |
| | comp=N,365nm,0.3s | | | | | | |
| HISA | | | | *i* AML | AML | 09 29 31.0 | |
| | comp=E,195nm,0.4s | | | | | | |
| **BILE** | **Bilecik/Merkez** | **0.28** | **190** | P | Pg | 09 29 28.9 | +0.3 |
| BILE | | | | S | Sb | 09 29 33.8 | -1.4 |
| BILE | | | | *i* AML | AML | 09 29 34.0 | |
| | comp=E,28nm,0.4s | | | | | | |
| BILE | | | | *i* AML | AML | 09 29 39.0 | |
| | comp=N,27nm,0.5s | | | | | | |
| **GEYV** | **SAKARYA_Geyve** | **0.28** | **79** | P | Pg | 09 29 27.3 | -1.3 |
| GEYV | | | | S | Sg | 09 29 33.0 | +0.8 |
| GEYV | | | | *i* AML | AML | 09 29 36.0 | |
| | comp=E,27nm,0.3s | | | | | | |
| GEYV | | | | *i* AML | AML | 09 29 38.0 | |
| | comp=N,39nm,0.4s | | | | | | |

**ISK 16 09:30:13.7, 41°26N×28°87E, h0km, ML1.2/7, Suspected Mining explosion., Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KLYT** | **Kilyos** | **0.13** | **93** | Pg | Pg | 09 30 16.9 | +0.7 |
| KLYT | | | | Sg | Sg | 09 30 19.5 | +1.7 |
| **ISK** | **Istanbul-Kandi** | **0.24** | **144** | Pg | Pg | 09 30 18.9 | +0.6 |
| ISK | | | | Sg | Sg | 09 30 23.7 | +2.3 |
| **KAVV** | **Kandilli-Istan** | **0.24** | **144** | Pg | Pg | 09 30 19.6 | +1.3 |
| **CTKS** | **Kestanelik-??a** | **0.28** | **265** | Pg | Pg | 09 30 19.9 | +0.9 |
| CTKS | | | | Sg | Sg | 09 30 24.6 | +2.0 |
| **ARMT** | **Armutlu** | **0.69** | **181** | Pg | Pg | 09 30 27.5 | +0.5 |
| **MRMT** | **Marmara Adasi** | **1.17** | **236** | Pn | Pb | 09 30 36.9 | +0.1 |
| **RKY** | **Sarkoy-Tekirda** | **1.40** | **247** | Pn | Pg | 09 30 40.7 | +0.1 |

*MCSM 16 09:33:22.7±1.8, 34°N±8°×2°5E±°, h35km±14km, mb3.9, mB4.7, MLv4.3, Mw(mB)3.9*
*ISK 16 09:33:22.2, 34°46N×24°82E, h21km, ML3.9/31*
*NEIC 16 09:33:24.7±2.2, 34°50N±0°07×24°73E±0°08, h41km±10km, mb4.2/14, Error ellipse: s-maj=11.2km s-min=8.8km az=214.0*
*IDC 16 09:33:25.4±1.1, 34°60N×24°67E, h55km±8km, mb3.8/15, mbtmp4.1/19, MS3.2/16, Error ellipse: s-maj=16.5km s-min=12.8km az=114.0*
*THE 16 09:33:25.1, 34°50N×24°67E, h14km±1km, ML3.7/5, Error ellipse: s-maj=2.2km s-min=0.9km az=342.0*
*ATH 16 09:33:26.4, 34°60N×24°70E, h27km±2km, ML3.8/11, Error ellipse: s-maj=3.5km s-min=1.3km az=183.0*
*AFAD 16 09:33:27.4±0.0, 34°68N×25°49E, h5km±4km, MW3.8*
*GII 16 09:33:28.5±0.4, 34°302N±0°002×25°420E±0°001, h20km, mB4.2/9, Md4.0/3, Mws4.1, confirmed*
*NAO 16 09:34:22.8, 40°39N×21°48E, h33km, mb3.6*

**ISC 16 09:33:22.6±0.5, 34°42N±0°04×24°77E±0°03, h30km, n243, σ1s69/250, mb4.1/17, MS3.2/11, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TMBK** | **Timbaki Herakl** | **0.66** | **360** | P | **Pb** | **09 33 36.5** | **+1.0** |
| TMBK | | | | S | **Sn** | **09 33 45.6** | **+0.5** |
| **TMBK** | **Timbaki Herakl** | **0.66** | **360** | P | **Pb** | **09 33 36.3** | **+0.8** |
| TMBK | | | | S | **Sb** | **09 33 43.8** | **-0.6** |
| **GVD** | **Gavdhos** | **0.70** | **307** | Pg | **Pb** | **09 33 36.7** | **+0.4** |
| GVD | | | | Sg | **Sn** | **09 33 47.2** | **+0.9** |
| **GVD** | **Gavdhos** | **0.70** | **307** | P | **Pb** | **09 33 37.0** | **+0.7** |
| GVD | | | | S | **Sb** | **09 33 44.6** | **-1.1** |
| | 16μm,0.7s | | | | | | |
| **GVD** | **Gavdhos** | **0.70** | **307** | P | **Pb** | **09 33 36.8** | **+0.4** |
| GVD | | | | S | **Sb** | **09 33 44.4** | **-1.3** |
| GVD | | | | AML | AML | 09 33 54.7 | |
| | comp=E,28267μm,0.5s | | | | | | |
| GVD | | | | AML | AML | 09 33 55.3 | |
| | comp=N,23391μm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **0.88** | **7** | Pg | **Pn** | **09 33 39.4** | **+0.6** |
| IDI | | | | Sg | **Sb** | **09 33 51.1** | **+0.4** |
| **IDI** | **Anoyia** | **0.88** | **7** | P | **Pn** | **09 33 39.5** | **+0.6** |
| IDI | | | | S | **Sn** | **09 33 51.7** | **+1.0** |
| | comp=N,6μm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **0.88** | **7** | P | **Pn** | **09 33 39.5** | **+0.6** |
| | comp=N,710nm,0.3s,baz=193,slow=15,SNR=940 | | | | | | |
| IDI | | | | S | **Sn** | **09 33 51.6** | **+1.0** |
| | comp=N,2μm,0.4s,baz=288,slow=20,SNR=31 | | | | | | |
| IDI | | | | LR | LR | 09 34 11.0 | |
| | comp=N,764nm,19.6s,baz=210,slow=64 | | | | | | |
| **IDI** | **Anoyia** | **0.88** | **7** | P | **Pn** | **09 33 39.7** | **+0.7** |
| IDI | | | | S | **Sb** | **09 33 51.1** | **+0.4** |
| IDI | | | | AML | AML | 09 33 54.1 | |
| | com

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ZKR | | | | | S | | **Sb** | 09 34 08.5 | +3.5 |
| | comp=N,1µm,0.6s | | | | | | | | |
| **ZKR** | **Zakros** | **1.38** | **59** | P | | **Pn** | | 09 33 49.0 | +3.3 |
| ZKR | | | | S | | **Sn** | | 09 34 03.7 | +0.7 |
| ZKR | | | | AML | | AML | | 09 34 22.8 | |
| | comp=E,5937µm,1.0s | | | | | | | | |
| ZKR | | | | AML | | AML | | 09 34 22.9 | |
| | comp=N,2684µm,0.7s | | | | | | | | |
| **RODP** | **Rodopos** | **1.41** | **324** | Pn | | **Pn** | | 09 33 47.7 | +1.5 |
| **RODP** | **Rodopos** | **1.41** | **324** | P | | **Pn** | | 09 33 47.7 | +1.5 |
| **ANKY** | **Antikythira Is** | **1.88** | **321** | P | | **Pn** | | 09 33 54.1 | +1.4 |
| **ANKY** | **Antikythira Is** | **1.88** | **321** | P | | **Pn** | | 09 33 54.0 | +1.3 |
| **THR9** | **Santorini-Faro** | **2.00** | **14** | P | | **Pn** | | 09 33 55.6 | +1.4 |
| **THR6** | **Thira Island,** | **2.00** | **15** | P | | **Pn** | | 09 33 55.7 | +1.3 |
| **SANT** | **Santorini** | **2.03** | **16** | Pn | | **Pn** | | 09 33 55.9 | +1.1 |
| **SANT** | **Santorini** | **2.03** | **16** | | | **Pn** | | 09 33 56.5 | +1.8 |
| **SANT** | **Santorini** | **2.03** | **16** | P | | **Pn** | | 09 33 56.8 | +2.0 |
| **SANT** | **Santorini** | **2.03** | **16** | P | | **Pn** | | 09 33 56.7 | +1.9 |
| SANT | | | | S | | **Sn** | | 09 34 16.9 | -2.3 |
| SANT | | | | AML | | AML | | 09 34 31.8 | |
| | comp=E,5112µm,0.6s | | | | | | | | |
| SANT | | | | AML | | AML | | 09 34 32.4 | |
| | comp=N,1373µm,0.6s | | | | | | | | |
| **SNT5** | **Nea Kammeni, S** | **2.05** | **14** | P | | **Pn** | | 09 33 56.2 | +1.2 |
| **THR5** | **Thira Island,** | **2.05** | **13** | P | | **Pn** | | 09 33 56.2 | +1.2 |
| **THR3** | **Thira Island,** | **2.06** | **14** | P | | **Pn** | | 09 33 56.2 | +1.2 |
| **SAP3** | **Santorini-Thir** | **2.07** | **13** | P | | **Pn** | | 09 33 56.4 | +1.2 |
| **SAP3** | **Santorini-Thir** | **2.07** | **13** | P | | **Pn** | | 09 33 56.4 | +1.2 |
| **THR8** | **Santorini-Mono** | **2.07** | **16** | P | | **Pn** | | 09 33 56.0 | +0.8 |
| **THR2** | **Thira island,** | **2.10** | **15** | P | | **Pn** | | 09 33 56.9 | +1.2 |
| **CMBO** | **Columbo, Santo** | **2.12** | **14** | P | | **Pn** | | 09 33 57.2 | +1.3 |
| **KARP** | **Karpathos** | **2.27** | **59** | Pn | | **Pn** | | 09 33 58.7 | +0.7 |
| **KARP** | **Karpathos** | **2.27** | **59** | | | **Pn** | | 09 34 00.7 | +2.7 |
| **KARP** | **Karpathos** | **2.27** | **59** | P | | **Pn** | | 09 34 01.5 | +3.5 |
| **KARP** | **Karpathos** | **2.27** | **59** | P | | **Pn** | | 09 34 00.5 | +2.5 |
| **KARP** | **Karpathos** | **2.27** | **59** | P | | **Pn** | | 09 34 01.6 | +3.5 |
| KARP | | | | S | | **Sn** | | 09 34 26.6 | +1.7 |
| **KTHA** | **Kythira Island** | **2.31** | **323** | Pn | | **Pn** | | 09 33 59.9 | +1.4 |
| **KTHA** | **Kythira Island** | **2.31** | **323** | P | | **Pn** | | 09 33 59.9 | +1.4 |
| **KTHA** | **Kythira Island** | **2.31** | **323** | P | | **Pn** | | 09 33 59.4 | +0.9 |
| **APE** | **Apeiranthos** | **2.72** | **13** | Pn | | **Pn** | | 09 34 04.5 | +0.3 |
| **APE** | **Apeiranthos** | **2.72** | **13** | P | | **Pb** | | 09 34 09.5 | -1.0 |
| **APE** | **Apeiranthos** | **2.72** | **13** | P | | **Pn** | | 09 34 04.5 | +0.3 |
| **VLI** | **Veliai** | **2.74** | **328** | P | | **Pn** | | 09 34 05.2 | +0.7 |
| **VLI** | **Veliai** | **2.74** | **328** | P | | **Pn** | | 09 34 04.8 | +0.4 |
| VLI | | | | S | | **Sn** | | 09 34 33.8 | -2.8 |
| VLI | | | | AML | | AML | | 09 34 57.0 | |
| | comp=N,512µm,0.6s | | | | | | | | |
| VLI | | | | AML | | AML | | 09 35 00.8 | |
| | comp=E,606µm,0.7s | | | | | | | | |
| **KRND** | **KRANIDI** | **3.24** | **337** | P | | **Pn** | | 09 34 11.6 | +0.3 |
| **DAT** | **Datca** | **3.25** | **44** | Pn | | **Pn** | | 09 34 12.6 | +1.0 |
| **ARG** | **Arkhangelos** | **3.28** | **56** | Pn | | **Pn** | | 09 34 13.2 | +1.3 |
| **ARG** | **Arkhangelos** | **3.28** | **56** | | | **Pn** | | 09 34 14.4 | +2.4 |
| **ARG** | **Arkhangelos** | **3.28** | **56** | P | | **Pn** | | 09 34 14.3 | +2.4 |
| ARG | | | | S | | **Sn** | | 09 34 49.9 | 0.0 |
| ARG | | | | AML | | AML | | 09 34 58.7 | |
| | comp=E,676µm,0.3s | | | | | | | | |
| ARG | | | | AML | | AML | | 09 35 00.6 | |
| | comp=N,552µm,0.3s | | | | | | | | |
| **BODT** | **Bodrum** | **3.35** | **37** | Pn | | **Pn** | | 09 34 14.0 | +1.1 |
| **MRSB** | **Marmaris-Mugla** | **3.62** | **50** | Pn | | **Pn** | | 09 34 17.9 | +1.4 |
| **MLSB** | **Milas** | **3.77** | **40** | Pn | | **Pn** | | 09 34 19.9 | +1.2 |
| **GCAM** | **G?zelcaml?** | **3.84** | **31** | Pn | | **Pn** | | 09 34 20.9 | +1.4 |
| **YER** | **Yerkesik** | **3.94** | **45** | Pn | | **Pn** | | 09 34 22.8 | +1.8 |
| **DALY** | **Dalyan (Mula)** | **3.97** | **52** | Pn | | **Pn** | | 09 34 23.7 | +2.3 |
| **MULA** | **Mugla, Merkez-** | **4.04** | **44** | P | | **Pn** | | 09 34 25.0 | +2.5 |
| MULA | | | | S | | **Sn** | | 09 35 07.0 | -1.9 |
| MULA | | | | *i* AML | | AML | | 09 35 10.0 | |
| | comp=N,129nm,0.9s | | | | | | | | |
| **FETY** | **Fethiye** | **4.16** | **57** | Pn | | **Pn** | | 09 34 25.6 | +1.6 |
| **URLA** | **Izmir** | **4.20** | **20** | Pn | | **Pn** | | 09 34 25.8 | +1.2 |
| **AYDB** | **Zeytinkoy-Aydi** | **4.33** | **35** | Pn | | **Pn** | | 09 34 28.1 | +1.6 |
| **AKAS** | **Kas** | **4.35** | **64** | Pn | | **Pn** | | 09 34 28.3 | +1.6 |
| **ESEN** | **Aydn-Nazilli** | **4.45** | **40** | P | | **Pn** | | 09 34 29.7 | +1.7 |
| ESEN | | | | S | | **Sn** | | 09 35 15.5 | -3.2 |
| **DNZT** | **Denizli-Tavas-** | **4.49** | **49** | P | | **Pn** | | 09 34 31.2 | +2.7 |
| DNZT | | | | S | | **Sn** | | 09 35 15.5 | -4.2 |
| **TAVA** | **DENIZLI_Tavas** | **4.54** | **47** | P | | **Pn** | | 09 34 32.0 | +2.8 |
| TAVA | | | | S | | **Sn** | | 09 35 19.4 | -1.6 |
| TAVA | | | | *i* AML | | AML | | 09 35 26.0 | |
| | comp=N,61nm,0.5s | | | | | | | | |
| **NAZL** | **Nazilli-Aydin** | **4.54** | **38** | Pn | | **Pn** | | 09 34 31.0 | +1.7 |
| **KNIK** | **Mula-Seydike** | **4.60** | **57** | P | | **Pn** | | 09 34 31.2 | +1.0 |
| KNIK | | | | S | | **Sn** | | 09 35 20.2 | -2.5 |
| KNIK | | | | *i* AML | | AML | | 09 35 24.0 | |
| | comp=N,59nm,0.3s | | | | | | | | |
| KNIK | | | | *i* AML | | AML | | 09 35 31.0 | |
| | comp=N,65nm,0.4s | | | | | | | | |
| **DNIZ** | **Denizli-Tavas-** | **4.71** | **46** | P | | **Pn** | | 09 34 35.1 | +3.4 |
| DNIZ | | | | S | | **Sn** | | 09 35 23.3 | -2.1 |
| DNIZ | | | | *i* AML | | AML | | 09 35 31.0 | |
| | comp=N,136nm,0.3s | | | | | | | | |
| DNIZ | | | | *i* AML | | AML | | 09 35 39.0 | |
| | comp=N,82nm,0.6s | | | | | | | | |
| **APMY** | **Acipayam-Deniz** | **4.78** | **49** | Pn | | **Pn** | | 09 34 34.3 | +1.7 |
| **ELL** | **Elmali** | **4.79** | **59** | Pn | | **Pn** | | 09 34 34.5 | +1.7 |
| **ELL** | **Elmali** | **4.79** | **59** | Pn | | **Pn** | | 09 34 35.0 | +2.2 |
| **SIGR** | **SIGRI** | **4.87** | **10** | Pn | | **Pn** | | 09 34 35.9 | +2.2 |
| **AKUM** | **Antalya-Kumluc** | **4.94** | **66** | P | | **Pn** | | 09 34 35.9 | +1.2 |
| AKUM | | | | S | | **Sn** | | 09 35 28.0 | -2.8 |
| AKUM | | | | *i* AML | | AML | | 09 35 32.0 | |
| | comp=N,102nm,0.5s | | | | | | | | |
| AKUM | | | | *i* AML | | AML | | 09 35 34.0 | |
| | comp=N,84nm,0.4s | | | | | | | | |
| **INCE** | **Denizli-Bozkur** | **5.09** | **48** | P | | **Pn** | | 09 34 37.5 | +0.5 |
| INCE | | | | S | | **Sn** | | 09 35 33.4 | -1.4 |
| INCE | | | | *i* AML | | AML | | 09 35 55.0 | |
| | comp=N,50nm,1.0s | | | | | | | | |
| **KULA** | **Kula-Manisa** | **5.15** | **36** | Pn | | **Pn** | | 09 34 39.6 | +1.9 |
| **KORT** | **Korkueli** | **5.22** | **59** | Pn | | **Pn** | | 09 34 40.6 | +1.9 |
| **GORD** | **Gordes-Manisa** | **5.25** | **30** | Pn | | **Pn** | | 09 34 41.1 | +2.0 |
| **LIT** | **Litokhoron** | **5.96** | **343** | | | **Pn** | | 09 34 49.3 | +0.5 |
| **GELI** | **Tayfur-Gelibol** | **6.12** | **12** | Pn | | **Pn** | | 09 34 53.6 | +2.6 |
| **HORT** | **Hortiatis** | **6.31** | **348** | Pn | | **Pn** | | 09 34 56.7 | +3.1 |
| **ALN** | **Alexandroupoli** | **6.55** | **9** | Pn | | **Pn** | | 09 34 58.3 | +1.5 |
| **KEK** | **Kerkira** | **6.61** | **325** | Pn | | **Pn** | | 09 35 00.9 | +3.2 |
| **KEK** | **Kerkira** | **6.61** | **325** | Pn | | **Pn** | | 09 34 57.8 | +0.1 |
| **LEF** | **Lefka** | **6.72** | **82** | P | | **Pn** | | 09 34 58.4 | -0.8 |
| LEF | | | | S | | Sn | | 09 36 02.9 | -12 |
| **FNA** | **Florina** | **6.90** | **338** | Pn | | **Pn** | | 09 35 04.5 | +2.8 |
| **CSS** | **Mathiatis** | **7.07** | **83** | Pn | | **Pn** | | 09 35 04.3 | +0.2 |
| **CSS** | **Mathiatis** | **7.07** | **83** | P | | **Pn** | | 09 35 04.5 | +0.4 |
| **CSS** | **Mathiatis** | **7.07** | **83** | P | | **Pn** | | 09 35 03.4 | -0.6 |
| **CSS** | **Mathiatis** | **7.07** | **83** | S | | Sn | | 09 36 17.1 | -6.3 |
| **KKBE** | **Karaman, Kazim** | **7.20** | **65** | P | | **Pn** | | 09 35 08.5 | +2.6 |
| KKBE | | | | S | | **Sn** | | 09 36 23.9 | -2.8 |
| **GULN** | **MERSIN_Gulnar** | **7.39** | **74** | P | | **Pn** | | 09 35 07.0 | -1.4 |
| GULN | | | | S | | **Sn** | | 09 36 25.5 | -5.7 |
| **TIP** | **Timpagrande** | **7.99** | **309** | Pn | | **Pn** | | 09 35 16.6 | -0.1 |
| **CEL** | **Celeste** | **8.12** | **301** | | | **Pn** | | 09 35 18.8 | +0.4 |
| **PUK** | **Puka** | **8.52** | **335** | Pn | | **Pn** | | 09 35 23.5 | -0.4 |
| **OFRI** | **`Ofer** | **8.72** | **99** | S | | Sn | | 09 36 57.9 | -6.0 |
| **OFRI** | **`Ofer** | **8.72** | **99** | P | | **Pn** | | 09 35 26.7 | +0.1 |
| **BR105** | **Keskin Array S** | **8.83** | **51** | P | | **Pn** | | 09 35 28.6 | +0.3 |
| | comp=N,5.7nm,0.7s,comp=N,49nm | | | | | | | | |
| **KZIT** | **Kziot** | **8.84** | **111** | P | | **Pn** | | 09 35 27.7 | -0.6 |
| **KZIT** | **Kziot** | **8.84** | **111** | S | | Sn | | 09 37 01.4 | -5.4 |
| **KZIT** | **Kziot** | **8.84** | **111** | P | | **Pn** | | 09 35 28.0 | -0.3 |
| **BR104** | **Keskin Array S** | **8.84** | **51** | P | | **Pn** | | 09 35 30.6 | +2.2 |
| | comp=N,5.2nm,0.8s | | | | | | | | |
| **BR106** | **Keskin Array S** | **8.84** | **51** | P | | **Pn** | | 09 35 30.4 | +2.0 |
| | comp=N,5.6nm,0.8s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **8.85** | **51** | P | | **Pn** | | 09 35 30.1 | +1.7 |
| | comp=N,1.9nm,0.7s,baz=219,slow=14,SNR=7.9 | | | | | | | | |
| BRTR | | | | S | | **Sn** | | 09 37 03.0 | -4.3 |
| | comp=N,1.3nm,0.8s,baz=214,slow=23,SNR=2.3 | | | | | | | | |
| **SLTI** | **Sal'it** | **8.87** | **101** | P | | **Pn** | | 09 35 28.4 | -0.2 |
| **SLTI** | **Sal'it** | **8.87** | **101** | S | | Sn | | 09 37 01.9 | -5.6 |
| **MMC7** | **Mount Meron ar** | **8.96** | **96** | P | | **Pn** | | 09 35 29.9 | -0.1 |
| **MMA0** | **Mount Meron ar** | **8.97** | **96** | P | | **Pn** | | 09 35 34.5 | +4.4 |
| **MMA0** | **Mount Meron ar** | **8.97** | **96** | P | | **Pn** | | 09 35 30.4 | +0.3 |
| **MMA0B** | **Mount Meron ar** | **8.97** | **96** | S | | **Sn** | | 09 37 05.4 | -4.8 |
| **MMA0B** | **Mount Meron ar** | **8.97** | **96** | P | | **Pn** | | 09 35 30.4 | +0.3 |
| **MMAI** | **Mount Meron Ar** | **8.97** | **96** | P | | **Pn** | | 09 35 30.2 | +0.1 |
| | comp=N,2.3nm,0.3s,baz=281,slow=14,SNR=6.7 | | | | | | | | |
| MMAI | | | | S | | **Sn** | | 09 37 05.8 | -4.4 |
| | comp=N,3.3nm,0.3s,baz=280,slow=24,SNR=6.9 | | | | | | | | |
| **SALP** | **Salfit** | **9.04** | **102** | P | | **Pn** | | 09 35 32.4 | +1.4 |
| **SALP** | **Salfit** | **9.04** | **102** | P | | **Pn** | | 09 35 31.0 | -0.1 |
| **SALP** | **Salfit** | **9.04** | **102** | S | | Sn | | 09 37 06.2 | -5.6 |
| **MMLI** | **Mount Malkishu** | **9.12** | **100** | P | | **Pn** | | 09 35 32.2 | +0.1 |
| **MMLI** | **Mount Malkishu** | **9.12** | **100** | S | | Sn | | 09 37 08.1 | -5.7 |
| **GEM** | **Giv'at Ha'Em** | **9.14** | **95** | S | | Sn | | 09 37 08.9 | -5.5 |
| **GEM** | **Giv'at Ha'Em** | **9.14** | **95** | P | | **Pn** | | 09 35 32.4 | -0.1 |
| **NATI** | **Neve Ativ** | **9.20** | **94** | P | | **Pn** | | 09 35 33.6 | +0.5 |
| **NATI** | **Neve Ativ** | **9.20** | **94** | P | | Pn | | 09 35 31.6 | -1.5 |
| **NATI** | **Neve Ativ** | **9.20** | **94** | S | | Sn | | 09 37 08.3 | -7.3 |
| **YTIR** | **Yattir** | **9.22** | **106** | P | | **Pn** | | 09 35 33.6 | +0.1 |
| **YTIR** | **Yattir** | **9.22** | **106** | S | | Sn | | 09 37 10.8 | -5.5 |
| **YTIR** | **Yattir** | **9.22** | **106** | P | | **Pn** | | 09 35 33.5 | -0.1 |
| **HMDT** | **Nahal Hemdat** | **9.26** | **100** | P | | **Pn** | | 09 35 34.9 | +0.9 |
| **HMDT** | **Nahal Hemdat** | **9.26** | **100** | P | | **Pn** | | 09 35 33.5 | -0.5 |
| **HMDT** | **Nahal Hemdat** | **9.26** | **100** | S | | Sn | | 09 37 11.5 | -5.6 |
| **QRNJ** | **Al-Qirein** | **9.27** | **100** | P | | **Pn** | | 09 35 36.8 | +2.6 |
| **KSHT** | **Keshet** | **9.31** | **96** | S | | Sn | | 09 37 13.6 | -4.9 |
| **KSHT** | **Keshet** | **9.31** | **96** | P | | **Pn** | | 09 35 34.7 | -0.1 |
| **DSI** | **Dead Sea** | **9.35** | **105** | P | | **Pn** | | 09 35 35.6 | +0.3 |
| **DSI** | **Dead Sea** | **9.35** | **105** | P | | **Pn** | | 09 35 35.1 | -0.2 |
| **DSI** | **Dead Sea** | **9.35** | **105** | S | | Sn | | 09 37 14.4 | -5.1 |
| **MSBI** | **Mazada** | **9.43** | **106** | P | | **Pn** | | 09 35 37.2 | +0.9 |
| **MSBI** | **Mazada** | **9.43** | **106** | P | | **Pn** | | 09 35 36.4 | +0.1 |
| **MSBI** | **Mazada** | **9.43** | **106** | S | | Sn | | 09 37 15.9 | -5.4 |
| **KRMI** | **Paran Flat** | **9.46** | **114** | P | | **Pn** | | 09 35 36.8 | 0.0 |
| **KRMI** | **Paran Flat** | **9.46** | **114** | S | | Sn | | 09 37 16.7 | -5.4 |
| **KRMI** | **Paran Flat** | **9.46** | **114** | P | | **Pn** | | 09 35 36.8 | 0.0 |
| **LISJ** | **El Lisan** | **9.55** | **106** | P | | **Pn** | | 09 35 38.9 | +0.9 |
| **PRNI** | **Paran** | **9.55** | **112** | P | | **Pn** | | 09 35 38.4 | +0.3 |
| **PRNI** | **Paran** | **9.55** | **112** | S | | Sn | | 09 37 19.4 | -5.1 |
| **PRNI** | **Paran** | **9.55** | **112** | P | | **Pn** | | 09 35 38.0 | -0.1 |
| **ZFRI** | **Zfri** | **9.60** | **111** | P | | **Pn** | | 09 35 38.1 | -0.5 |
| **ZFRI** | **Zfri** | **9.60** | **111** | S | | Sn | | 09 37 19.6 | -5.9 |
| **HRFI** | **Mount Harif** | **9.73** | **114** | S | | Sn | | 09 37 23.4 | -5.4 |
| **HRFI** | **Mount Harif** | **9.73** | **114** | P | | **Pn** | | 09 35 40.1 | -0.5 |
| **MBRI** | **Mt Berech** | **9.76** | **115** | P | | **Pn** | | 09 35 41.2 | +0.2 |
| **MBRI** | **Mt Berech** | **9.76** | **115** | P | | **Pn** | | 09 35 41.2 | +0.2 |
| **MBRI** | **Mt Berech** | **9.76** | **115** | S | | Sn | | 09 37 24.5 | -5.1 |
| **EIL** | **Elat** | **9.85** | **116** | P | | **Pn** | | 09 35 41.8 | -0.4 |
| | comp=N,11nm,0.5s,baz=175,slow=0.4,SNR=38 | | | | | | | | |
| EIL | | | | S | | Sn | | 09 37 24.0 | -7.7 |
| | comp=N,5.6nm,0.5s,baz=22,slow=19,SNR=2.1 | | | | | | | | |
| **EIL** | **Elat** | **9.85** | **116** | S | | Sn | | 09 37 26.0 | -5.7 |
| **EIL** | **Elat** | **9.85** | **116** | P | | **Pn** | | 09 35 41.7 | -0.4 |
| **BNN** | **Bunyan** | **9.94** | **60** | Pn | | **Pn** | | 09 35 44.9 | +1.4 |
| **ASF** | **Jabal al Asfar** | **10.39** | **99** | P | | **Pn** | | 09 35 52.0 | +2.4 |
| | comp=N,5.3nm,0.8s,baz=50,slow=0.3,SNR=6.6 | | | | | | | | |
| ASF | | | | S | | **Sn** | | 09 37 42.1 | -3.1 |
| | comp=N,3.0nm,0.5s,baz=54,slow=0.0,SNR=6.6 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **11.10** | **4** | P | | **Pn** | | 09 36 01.9 | +2.6 |
| | comp=N,2.5nm,0.8s,baz=219,slow=12,SNR=2.1 | | | | | | | | |
| **SOKA** | **Soboth** | **14.29** | **332** | *e*Pn | | **Pn** | | 09 36 46.4 | +3.5 |
| **OBKA** | **Obir** | **14.35** | **330** | *i* Pn | | **Pn** | | 09 36 45.3 | +1.7 |
| | comp=N,7.1nm,1.0s | | | | | | | | |
| **ARSA** | **Arzberg** | **14.59** | **334** | *e*Pn | | **Pn** | | 09 36 47.2 | +0.4 |
| | comp=N,0.2nm,0.5s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **14.72** | **337** | *i* Pn | | **P** | | 09 36 53.8 | -0.6 |
| | comp=N,2.9nm,0.5s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **14.83** | **329** | *e*Pn | | **Pn** | | 09 36 52.8 | +2.7 |
| | comp=N,2.3nm,0.5s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **15.30** | **329** | *i* Pn | | **Pn** | | 09 36 58.6 | +2.1 |
| | comp=N,3.7nm,0.7s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **15.42** | **327** | *i* Pn | | **Pn** | | 09 36 58.1 | +0.2 |
| | comp=N,4.7nm,0.5s | | | | | | | | |
| **MOA** | **Molln** | **15.56** | **333** | *i* Pn | | **Pn** | | 09 37 02.7 | +3.0 |
| | comp=N,2.0nm,0.6s | | | | | | | | |
| **LUBAR** | **Lubar, Ukraine** | **15.65** | **7** | P | | **Pn** | | 09 37 01.3 | +0.5 |
| **LESA** | **Schwarzleotal** | **15.86** | **329** | *e*Pn | | **Pn** | | 09 37 01.5 | -2.2 |
| | comp=N,2.9nm,0.4s | | | | | | | | |
| **VRAC** | **Vranov** | **16.06** | **340** | P | | **Pn** | | 09 37 07.7 | +1.6 |
| | comp=N,1.7nm,0.4s,baz=148,slow=11,SNR=4.8 | | | | | | | | |
| VRAC | | | | | LR | LR | | 09 44 48.2 | |
| | comp=N,115nm,18.4s,baz=186,slow=43 | | | | | | | | |
| **WTTA** | **Wattenberg** | **16.20** | **326** | *i* Pn | | **P** | | 09 37 12.3 | +1.4 |
| | comp=N,13nm,1.3s | | | | | | | | |
| **WATA** | **Walderalm** | **16.28** | **326** | *e*Pn | | **Pn** | | 09 37 10.8 | +1.7 |
| | comp=N,4.1nm,0.6s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **16.37** | **325** | *i* Pn | | **Pn** | | 09 37 10.0 | -0.1 |
| | comp=N,5.1nm,0.8s | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **16.41** | **322** | | | **P** | | 09 37 15.3 | +1.9 |
| FUORN | | | | | IAmb | IAmb | | 09 37 34.4 | |
| | comp=Z,5.6nm,0.8s | | | | | | | | |
| **AK07** | **Malin Array Si** | **16.45** | **10** | P | | **Pn** | | 09 37 11.7 | +0.7 |
| **FETA** | **Feichten** | **16.45** | **324** | *i* Pn | | **P** | | 09 37 14.7 | +1.0 |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| **AK13** | **Malin Array Si** | **16.49** | **10** | P | | **Pn** | | 09 37 11.9 | +0.4 |
| **AK10** | **Malin Array Si** | **16.50** | **10** | P | | **Pn** | | 09 37 12.4 | +0.7 |
| **MOTA** | **Moosalm** | **16.51** | **326** | *e*Pn | | **Pn** | | 09 37 15.0 | +3.1 |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| **AK14** | **Malin Array Si** | **16.51** | **10** | P | | **Pn** | | 09 37 12.3 | +0.5 |
| **AK05** | **Malin Array Si** | **16.52** | **10** | P | | **Pn** | | 09 37 12.4 | +0.6 |
| **AK09** | **Malin Array Si** | **16.52** | **10** | P | | **Pn** | | 09 37 12.7 | +0.8 |
| **AK12** | **Malin Array Si** | **16.53** | **10** | P | | **Pn** | | 09 37 12.4 | +0.3 |
| **AK08** | **Malin Array Si** | **16.54** | **10** | P | | **Pn** | | 09 37 12.8 | +0.7 |
| **AK02** | **Malin Array Si** | **16.55** | **10** | P | | **Pn** | | 09 37 12.9 | +0.6 |
| **AK15** | **Malin Array Si** | **16.58** | **10** | P | | **Pn** | | 09 37 13.5 | +0.9 |
| **AK01** | **Malin Array Si** | **16.59** | **10** | P | | **Pn** | | 09 37 13.2 | +0.5 |
| **AK19** | **Malin Array Si** | **16.59** | **9** | P | | **Pn** | | 09 37 12.8 | 0.0 |
| **KIEV** | **Kiev** | **16.59** | **10** | Pn | | **Pn** | | 09 37 12.9 | +0.2 |
| KIEV | | | | | IAmb | IAmb | | 09 37 14.2 | |
| | comp=Z,39nm,0.7s | | | | | | | | |
| **KIEV** | **Kiev** | **16.59** | **10** | P | | **Pn** | | 09 37 13.1 | +0.3 |
| | comp=Z,288nm,0.8s,comp=Z,2µm | | | | | | | | |
| **GEC2** | **GERESS Array S** | **16.59** | **334** | | | **Pn** | | 09 37 15.2 | +2.2 |
| **GERES** | **GERESS Array B** | **16.59** | **334** | P | | **Pn** | | 09 37 15.0 | +2.0 |
| | comp=Z,3.0nm,0.6s,baz=160,slow=20,SNR=9.9 | | | | | | | | |
| GERES | | | | | LR | LR | | 09 45 21.8 | |
| | comp=Z,75nm,19.8s,baz=125,slow=44 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **16.60** | **10** | P | | **Pn** | | 09 37 13.3 | +0.4 |
| **AKASG** | **Malin Array Be** | **16.60** | **10** | P | | **Pn** | | 09 37 13.2 | +0.3 |
| | comp=Z,6.9nm,0.4s,baz=202,slow=11,SNR=64 | | | | | | | | |
| AKASG | | | | | LR | LR | | 09 43 54.9 | |
| | comp=Z,39nm,20.5s,baz=182,slow=38 | | | | | | | | |
| **AKBB** | **Malin Array Si** | **16.60** | **10** | Pn | | **Pn** | | 09 37 12.9 | +0.1 |
| **AKBB** | **Malin Array Si** | **16.60** | **10** | P | | **Pn** | | 09 37 13.4 | +0.5 |
| **AK03** | **Malin Array Si** | **16.62** | **10** | P | | **Pn** | | 09 37 13.2 | 0.0 |
| **AK21** | **Malin Array Si** | **16.65** | **10** | P | | **Pn** | | 09 37 13.4 | -0.1 |
| **DAVOX** | **Davos/Dischmat** | **16.71** | **322** | P | | **Pn** | | 09 37 17.6 | +3.1 |
| | comp=Z,1.3nm,0.4s,baz=147,slow=13,SNR=3.8 | | | | | | | | |
| DAVOX | | | | | LR | LR | | 09 44 50.4 | |
| | comp=Z,35nm,19.2s,baz=86,slow=42 | | | | | | | | |
| **KBZ** | **Khabaz** | **16.84** | **51** | P | | **Pn** | | 09 37 17.9 | +1.9 |
| | comp=Z,15nm,1.0s,baz=254,slow=7.8,SNR=20 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **16.88** | **334** | | | **Pn** | | 09 37 15.6 | -0.9 |
| **KHC** | **Kasperske Hory** | **16.88** | **334** | *e*P | | **Pn** | | 09 37 17.5 | +1.0 |
| **KHC** | **Kasperske Hory** | **16.88** | **334** | P | | **Pn** | | 09 37 17.2 | +0.7 |
| | comp=Z,4.4nm,1.0s | | | | | | | | |
| **GNI** | **Garni** | **16.88** | **64** | LR | | LR | | 09 45 08.9 | |
| | comp=Z,92nm,20.9s,baz=278,slow=42 | | | | | | | | |
| **RNPP9** | **Sopachiv** | **17.01** | **2** | P | | **Pn** | | 09 37 17.3 | -0.7 |
| **DAVA** | **Damuels** | **17.05** | **323** | *e*Pn | | **Pn** | | 09 37 19.1 | +0.2 |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| **CLL** | **Collm** | **18.92** | **337** | *i* P | | **P** | | 09 37 41.3 | +0.6 |
| | comp=Z,10.0nm,1.4s | | | | | | | | |
| **SUW** | **Suwalki** | **19.62** | **357** | P | | **P** | | 09 37 45.5 | -2.9 |
| **NACGM** | **Naroch** | **20.53** | **3** | *e*P | | **P** | | 09 37 56.6 | -1.7 |
| | comp=E,683nm,0.7s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **21.10** | **115** | P | | **P** | | 09 38 05.6 | +0.9 |
| RAYN | | | | | IAmb | IAmb | | 09 38 08.7 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **23.47** | **291** | P | | **P** | | 09 38 30.4 | +0.8 |
| | comp=Z,1.3nm,0.7s,baz=81,slow=9.4,SNR=7.8 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **HFS** | **Hagfors** | **26.73** | **348** | P | | **P** | | 09 38 57.2 | -1.9 |
| | comp=Z,1.6nm,0.4s,baz=155,slow=10,SNR=12 | | | | | | | | |
| HFS | | | | | LR | LR | | 09 49 57.8 | |
| | comp=Z,41nm,21.4s,baz=143,slow=37 | | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | | |
| **FINES** | **FINESS Array B** | **27.06** | **1** | P | | **P** | | 09 38 59.6 | -2.4 |
| | comp=Z,0.9nm,0.4s,baz=165,slow=11,SNR=8.7 | | | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **28.04** | **346** | P | | **P** | | 09 39 09.7 | -1.2 |
| | comp=Z,1.2nm,0.4s,baz=158,slow=11 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **28.04** | **346** | P | | **P** | | 09 39 09.1 | -1.8 |
| | comp=Z,0.6nm,0.3s,baz=146,slow=9.3,SNR=8.6 | | | | | | | | |
| NOA | | | | | LR | LR | | 09 52 13.2 | |
| | comp=Z,29nm,21.3s,baz=170,slow=40 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **FURI** | **Furi** | **28.43** | **150** | LR | | LR | | 09 53 02.3 | |
| | comp=Z,36nm,18.2s,baz=94,slow=41 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **28.47** | **326** | P | | **P** | | 09 39 13.1 | -1.6 |
| | comp=Z,1.2nm,0.5s,baz=120,slow=9.4,SNR=4.6 | | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **28.99** | **46** | P | | **P** | | 09 39 18.9 | -0.6 |
| | comp=Z,1.3nm,0.5s,baz=197,slow=5.3,SNR=2.3 | | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **29.77** | **230** | P | | **P** | | 09 39 27.5 | +0.9 |
| **TORD** | **Torodi Ar. Bea** | **29.77** | **230** | P | | **P** | | 09 39 27.5 | +0.9 |
| TORD | | | | | IAmb | IAmb | | 09 39 28.4 | |
| | comp=Z,2.2nm,0.9s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.77** | **230** | P | | **P** | | 09 39 27.4 | +0.9 |
| | comp=Z,3.8nm,0.4s,baz=32,slow=9.0,SNR=32 | | | | | | | | |
| | comp=Z,3.8nm,0.4s | | | | | | | | |
| **ARU** | **Arti** | **31.84** | **36** | LR | | LR | | 09 54 33.3 | |
| | comp=Z,35nm,21.0s,baz=192,slow=40 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **35.17** | **0** | P | | **P** | | 09 40 11.2 | -2.2 |
| ARCES | | | | | IAmb | IAmb | | 09 40 24.7 | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **35.17** | **0** | P | | **P** | | 09 40 11.7 | -1.7 |
| | comp=Z,0.7nm,0.5s,baz=176,slow=9.1,SNR=11 | | | | | | | | |
| ARCES | | | | | LR | LR | | 09 54 51.4 | |
| | comp=Z,46nm,21.4s,baz=196,slow=37 | | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | | |
| **KKAR** | **Karatay Array** | **36.33** | **62** | P | | **P** | | 09 40 24.9 | +1.2 |
| **DBIC** | **Dimbokro** | **38.85** | **232** | P | | **P** | | 09 40 44.8 | -0.4 |
| | comp=Z,3.8nm,0.6s,baz=23,slow=7.3,SNR=2.2 | | | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | | | |
| **BORG** | **Borgarnes** | **41.05** | **332** | LR | | LR | | 10 02 16.8 | |
| | comp=Z,23nm,18.2s,baz=105,slow=42 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F25K** | **Christian Rive** | **2.03 190** | | | **Pn** | 09 42 05.9 | **+0.1** |
| F25K | | | | IAML | | 09 42 38.6 | |
| | comp=N,241nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.04 223** | Pn | | **Pn** | 09 42 06.4 | **+0.6** |
| **C23K** | **Itkillik River** | **2.06 280** | Pn | | **Pn** | 09 42 06.0 | **0.0** |
| C23K | | | | IAML | | 09 42 44.5 | |
| | comp=E,253nm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **2.12 115** | | | **Pn** | 09 42 06.7 | **-0.2** |
| **D28M** | **Stokes Point** | **2.14 94** | | | **Pn** | 09 42 08.3 | **+1.2** |
| **BMAR** | **Burnt Mountain** | **2.17 178** | | | **Pn** | 09 42 07.7 | **0.0** |
| **D23K** | **Nanushuk River** | **2.20 256** | Pn | | **Pn** | 09 42 08.3 | **+0.4** |
| **E23K** | **Chandalar** | **2.34 231** | | | **Pn** | 09 42 09.1 | **-1.0** |
| E23K | | | | IAML | | 09 42 47.8 | |
| | comp=E,152nm,0.5s | | | | | | |
| E23K | | | | IAML | | 09 42 49.4 | |
| | comp=N,169nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38 210** | Pn | | **Pn** | 09 42 10.3 | **-0.1** |
| F24K | | | | IAML | | 09 42 47.5 | |
| | comp=N,150nm,0.9s | | | | | | |
| F24K | | | | IAML | | 09 42 47.8 | |
| | comp=E,147nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.67 136** | Pn | | **Pn** | 09 42 14.1 | **-0.4** |
| F28M | | | | IAML | | 09 42 59.0 | |
| | comp=E,118nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **2.75 113** | | | **Pn** | 09 42 15.8 | **+0.3** |
| E29M | | | | IAML | | 09 43 02.6 | |
| | comp=E,106nm,0.5s | | | | | | |
| E29M | | | | IAML | | 09 43 04.4 | |
| | comp=N,110nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **2.91 260** | Pn | | **Pn** | 09 42 16.7 | **-1.1** |
| D22K | | | | IAML | | 09 43 16.3 | |
| | comp=N,110nm,0.8s | | | | | | |
| **FYU** | **Fort Yukon** | **3.04 184** | | | **Pn** | 09 42 17.8 | **-1.8** |
| **G24K** | **Hadweenzic Riv** | **3.07 201** | | | **Pn** | 09 42 19.2 | **-0.8** |
| **B22K** | **Teshekpuk Lake** | **3.08 288** | Pn | | **Pn** | 09 42 18.9 | **-1.1** |
| B22K | | | | IAML | | 09 43 17.7 | |
| | comp=E,100nm,1.2s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.45 275** | Pn | | **Pn** | 09 42 25.8 | **+0.6** |
| B21K | | | | IAML | | 09 43 31.7 | |
| | comp=E,69nm,1.0s | | | | | | |
| B21K | | | | IAML | | 09 43 32.3 | |
| | comp=N,75nm,0.8s | | | | | | |
| **G23K** | **Bananza Creek** | **3.50 217** | Pn | | **Pn** | 09 42 26.5 | **+0.6** |
| G23K | | | | IAML | | 09 43 28.9 | |
| | comp=N,60nm,1.1s | | | | | | |
| **G29M** | **Pine Creek** | **3.68 134** | | | **Pn** | 09 42 28.0 | **-0.3** |
| G29M | | | | IAML | | 09 43 15.0 | |
| | comp=N,68nm,0.7s | | | | | | |
| **F30M** | **Barrier River** | **3.84 117** | | | **Pn** | 09 42 31.4 | **+0.8** |
| **H24K** | **Noodor Dome** | **3.95 199** | IAML | | | 09 43 37.2 | |
| | comp=N,46nm,0.7s | | | | | | |
| H24K | | | | IAML | | 09 43 44.4 | |
| | comp=E,48nm,0.7s | | | | | | |
| **F21K** | **Alatna River** | **4.00 238** | IAML | | | 09 43 39.1 | |
| | comp=N,39nm,0.6s | | | | | | |
| F21K | | | | IAML | | 09 43 40.6 | |
| | comp=E,44nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.10 184** | Pn | | **Pn** | 09 42 33.2 | **-1.0** |
| PRP | | | | IAML | | 09 43 27.3 | |
| | comp=E,46nm,0.4s | | | | | | |
| PRP | | | | IAML | | 09 43 47.3 | |
| | comp=N,49nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **4.16 141** | IAML | | | 09 43 48.1 | |
| | comp=N,36nm,0.8s | | | | | | |
| H29M | | | | IAML | | 09 43 51.6 | |
| | comp=E,46nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **4.25 102** | | | **Pn** | 09 42 35.1 | **-1.0** |
| **G21K** | **Allakaket** | **4.50 231** | | | **Pn** | 09 42 39.0 | **-0.6** |
| G21K | | | | IAML | | 09 43 57.0 | |
| | comp=E,33nm,1.1s | | | | | | |
| G21K | | | | IAML | | 09 44 09.7 | |
| | comp=N,38nm,1.2s | | | | | | |
| **I28M** | **Miner Creek** | **4.55 154** | IAML | | | 09 44 05.6 | |
| | comp=N,31nm,1.0s | | | | | | |
| I28M | | | | IAML | | 09 44 06.2 | |
| | comp=E,25nm,1.1s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.61 194** | IAML | | | 09 43 37.2 | |
| | comp=E,33nm,0.7s | | | | | | |
| POKR | | | | IAML | | 09 44 08.7 | |
| | comp=N,24nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.73 119** | Pn | | **Pn** | 09 42 43.0 | **+0.3** |
| G31M | | | | IAML | | 09 44 03.6 | |
| | comp=N,28nm,1.1s | | | | | | |
| G31M | | | | IAML | | 09 44 04.7 | |
| | comp=E,30nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.80 243** | IAML | | | 09 44 08.6 | |
| | comp=N,22nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.80 204** | IAML | | | 09 44 10.0 | |
| | comp=N,29nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.84 198** | IAML | | | 09 44 06.1 | |
| | comp=E,24nm,0.8s | | | | | | |
| **COLA** | **College** | **4.88 196** | | | **Pn** | 09 42 45.2 | **+0.4** |
| **ILAR** | **Eielson Array** | **4.91 191** | | | **Pn** | 09 42 46.1 | **+0.9** |
| **ILAR** | **Eielson Array** | **4.91 191** | Pn | | **Pn** | 09 42 45.1 | **-0.1** |
| | comp=E,1.1nm,0.3s,baz=4.0,slow=13,SNR=33 | | | | | | |
| ILAR | | | | Sn | **Sn** | 09 43 42.7 | **+0.7** |
| | comp=E,1.8nm,0.3s,baz=5.3,slow=20,SNR=5.6 | | | | | | |
| ILAR | | | | Lg | Lg | 09 44 04.3 | |
| | comp=E,2.3nm,0.3s,baz=1.8,slow=30,SNR=9.6 | | | | | | |
| | comp=E,2.0nm,0.4s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.92 147** | IAML | | | 09 43 52.9 | |
| | comp=N,23nm,0.4s | | | | | | |
| I29M | | | | IAML | | 09 44 11.6 | |
| | comp=E,23nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.97 228** | | | **Pn** | 09 42 45.1 | **-1.0** |
| **H21K** | **Melozitna Rive** | **5.00 222** | IAML | | | 09 44 16.4 | |
| | comp=E,22nm,1.4s | | | | | | |
| H21K | | | | IAML | | 09 44 19.2 | |
| | comp=N,25nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **5.00 183** | IAML | | | 09 44 23.5 | |
| | comp=E,18nm,1.2s | | | | | | |
| **EGAK** | **Eagle** | **5.03 162** | Pn | | **Pn** | 09 42 46.5 | **-0.4** |
| EGAK | | | | IAML | | 09 43 46.6 | |
| | comp=E,26nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 09 44 21.2 | |
| | comp=E,19nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **5.05 251** | | | **Pn** | 09 42 47.2 | **0.0** |
| E19K | | | | IAML | | 09 43 52.4 | |
| | comp=N,21nm,0.6s | | | | | | |
| E19K | | | | IAML | | 09 44 29.7 | |
| | comp=E,19nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10 195** | IAML | | | 09 43 48.7 | |
| | comp=N,19nm,0.4s | | | | | | |
| **MLY** | **Manley** | **5.13 210** | Pn | | **Pn** | 09 42 48.1 | **-0.2** |
| MLY | | | | IAML | | 09 43 50.3 | |
| | comp=E,24nm,0.4s | | | | | | |
| **J26L** | **Joseph Creek** | **5.13 174** | IAML | | | 09 43 51.9 | |
| | comp=N,24nm,0.7s | | | | | | |
| J26L | | | | IAML | | 09 44 18.4 | |
| | comp=E,19nm,1.4s | | | | | | |
| **HDA** | **Harding Lake** | **5.27 190** | Pn | | **Pn** | 09 42 50.2 | **0.0** |
| HDA | | | | IAML | | 09 44 25.4 | |
| | comp=N,22nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.29 201** | | | **Pn** | 09 42 50.0 | **-0.5** |
| NEA2 | | | | IAML | | 09 44 29.6 | |
| | comp=E,16nm,1.3s | | | | | | |
| **WRH** | **Wood River Hil** | **5.30 196** | | | **Pn** | 09 42 50.5 | **-0.1** |
| WRH | | | | IAML | | 09 44 23.8 | |
| | comp=E,18nm,1.2s | | | | | | |
| WRH | | | | IAML | | 09 44 25.0 | |
| | comp=N,15nm,0.8s | | | | | | |
| **K24K** | **Donnelly Dome** | **5.83 184** | | | **Pn** | 09 42 58.0 | **+0.1** |
| **DAWY** | **Dawson** | **5.94 157** | Pn | | **Pn** | 09 42 59.0 | **-0.3** |
| **BPAW** | **Bear Paw Mtn.** | **6.03 207** | Pn | | **Pn** | 09 43 01.7 | **+1.1** |
| **H19K** | **Roundabout Mou** | **6.05 233** | | | **Pn** | 09 43 00.4 | **-0.3** |
| **K29M** | **Barlow Dome** | **6.44 150** | Pn | | **Pn** | 09 43 06.8 | **+0.5** |
| **J20K** | **Nowinta River** | **6.56 219** | Pn | | **Pn** | 09 43 10.4 | **+2.5** |
| **DHY** | **Denali Highway** | **6.63 190** | Pn | | **Pn** | 09 43 10.5 | **+1.6** |
| **BCAR** | **Beaver Creek A** | **6.66 168** | Pn | | **Pn** | 09 43 08.8 | **-0.4** |
| **H18K** | **Honhosa River** | **6.87 236** | | | **Pn** | 09 43 10.9 | **-1.2** |
| **WAT7** | **Susitna Watana** | **6.98 196** | | | **Pn** | 09 43 14.4 | **+0.7** |
| **M27K** | **Edge Creek, AK** | **7.36 169** | | | **Pn** | 09 43 18.9 | **0.0** |
| **H17K** | **Granite Mounta** | **7.48 239** | Pn | | **Pn** | 09 43 20.2 | **-0.3** |
| **G16K** | **Koyuk River** | **7.94 246** | Pn | | **Pn** | 09 43 25.5 | **-1.2** |
| **J17K** | **VABM Dome** | **8.43 229** | Pn | | **Pn** | 09 43 32.6 | **-0.8** |
| **SUA** | **Susitna One** | **8.52 200** | Pn | | **Pn** | 09 43 34.1 | **-0.8** |
| **O28M** | **Mount Upton** | **9.06 166** | | | **Pn** | 09 43 43.9 | **+1.6** |
| **PDAR** | **Pinedale Array** | **32.37 128** | P | | **P** | 09 48 01.9 | **+1.0** |
| | comp=N,0.5nm,0.6s,baz=352,slow=6.6,SNR=7.0 | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.28 142** | P | | **P** | 09 48 20.0 | **+2.4** |
| | comp=N,0.2nm,0.4s,baz=328,slow=6.6,SNR=3.1 | | | | | | |
| | comp=N,0.2nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.58 128** | P | | **P** | 09 50 00.0 | **+0.7** |
| | comp=N,0.1nm,0.5s,baz=319,slow=5.0,SNR=2.0 | | | | | | |
| | comp=N,0.1nm,0.5s | | | | | | |

*IDC **16** 09:42:30.4±3.8, 53.82N×88.19E, h0km, mbtmp2.9/2, ML2.7/2, Error ellipse: s-maj=38.0km s-min=21.3km az=82.0*

**ISC 16 09:42:29.6±4.1, 53.9N±0.2×88.2E±0.2, h10km, n6, σ2s70/7, 3C, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **2.01 274** | | I | I | 09 55 00.0 | |
| | 0.2nm,0.9s,baz=91,slow=310,SNR=5.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.01 274** | | Pn | **Pb** | 09 43 05.7 | **-0.5** |
| | 2.4nm,0.3s,baz=88,slow=15,SNR=18 | | | | | | |
| ZALV | | | | Sn | **Sg** | 09 43 33.4 | **-0.8** |
| | 3.5nm,0.3s,baz=91,slow=24,SNR=17 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.78 245** | | Pn | **Pn** | 09 44 10.9 | **+1.8** |
| | 0.1nm,0.3s,baz=59,slow=13,SNR=4.4 | | | | | | |
| KURBB | | | | Lg | Lg | 09 46 03.2 | |
| | 0.1nm,0.3s,baz=60,slow=32,SNR=4.7 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **8.03 211** | | ⇑Pn | **Pn** | 09 44 27.4 | **+1.2** |
| | 0.1nm,0.3s,baz=199,slow=12,SNR=4.3 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 46 42.4 | |
| | 1.7nm,1.1s,baz=190,slow=29 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.03 211** | | Pn | **Pn** | 09 44 28.6 | **+2.3** |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=2.3 | | | | | | |
| MKAR | | | | Sn | **Sn** | 09 45 57.9 | **+0.8** |
| | 0.1nm,0.3s,baz=24,slow=27,SNR=2.8 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **8.11 212** | | Pn | **Pn** | 09 44 23.2 | **-4.2** |
| | 0.9nm,0.4s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 09 46 42.2 | |
| | 0.9nm,0.5s | | | | | | |

**IDC 16 09:56:15.7±2.2, 2.71N×126.17E, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=181.5km s-min=27.8km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.90 161** | | P | P | 10 01 31.3 | -0.1 |
| | 0.5nm,0.4s,baz=339,slow=11,SNR=12 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **27.28 164** | | P | P | 10 02 02.4 | +0.3 |
| | 0.3nm,0.5s,baz=347,slow=7.9,SNR=6.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.07 326** | | P | P | 10 06 10.5 | -0.4 |
| | 0.2nm,0.5s,baz=140,slow=9.2,SNR=1.9 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

**IDC 16 09:57:57.6±2.9, 53.59N×87.91E, h0km, mbtmp3.0/2, ML2.8/2, Error ellipse: s-maj=23.6km s-min=16.0km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.87 282** | | I | I | 10 10 00.0 | |
| | baz=98,slow=322,SNR=0.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.87 282** | | Pn | Pn | 09 58 31.6 | +0.8 |
| | 1.7nm,0.3s,baz=103,slow=14,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 09 58 56.0 | |
| | 5.4nm,0.3s,baz=97,slow=25,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.50 247** | | Pn | Pn | 09 59 35.6 | +1.3 |
| | 0.1nm,0.3s,baz=63,slow=14,SNR=4.1 | | | | | | |
| KURBB | | | | Sn | Sn | 10 00 48.0 | -1.1 |
| | baz=60,slow=24,SNR=1.7 | | | | | | |
| KURBB | | | | Lg | Lg | 10 01 25.2 | |
| | 0.2nm,0.3s,baz=61,slow=33,SNR=5.4 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.70 210** | | Pn | Pn | 09 59 51.2 | +0.4 |
| | 0.2nm,0.3s,baz=28,slow=13,SNR=5.7 | | | | | | |
| MKAR | | | | Sn | Sn | 10 01 19.1 | +0.4 |
| | 0.1nm,0.3s,baz=23,slow=22,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 10 02 00.3 | |
| | baz=24,slow=30,SNR=3.4 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*HEL **16** 10:00:16.3±0.2, 64.78N×30.79E, h0km, ML2.1, Explosion*
*BER **16** 10:00:16.0±1.2, 64.61N×31.07E, h0km, ML1.9, Suspected explosion*
*KOLA **16** 10:00:16.5, 64.69N×30.44E, h0km, ML2.5, Error ellipse: s-maj=21.3km s-min=19.7km az=130.0, Kostomuksha, Karelia*
*IDC **16** 10:00:17.7±2.5, 64.70N×30.79E, h0km, mbtmp3.1/3, ML2.2/3, Error ellipse: s-maj=37.5km s-min=8.7km az=103.0*

**ISC 16 10:00:16.2±0.9, 64.81N±0.02×30.77E±0.04, h0km, n44, σ1s72/74, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RMF** | **Romuvaara** | **0.70 212** | | PG | **Pg** | **10 00 28.9** | **-0.7** |
| | baz=32 | | | | | | |
| RMF | | | | MSG | | 10 00 37.6 | |
| | comp=E,31nm,0.2s | | | | | | |
| **KU6** | **Riekki** | **1.27 344** | | PG | **Pg** | **10 00 39.9** | **-0.7** |
| | baz=162 | | | | | | |
| KU6 | | | | MSG | | 10 00 55.7 | |
| | comp=Z,14nm,0.2s | | | | | | |
| KU6 | | | | SB | **Sg** | **10 00 57.2** | **+0.1** |
| **MSF** | **Maaselka** | **1.32 328** | | PG | **Pg** | **10 00 40.4** | **-1.1** |
| MSF | | | | SG | **Sg** | **10 00 58.3** | **-0.3** |
| **OLKF** | **Oulanka, Finla** | **1.62 340** | | PG | **Pn** | **10 00 45.9** | **-0.1** |
| OLKF | | | | MSG | | 10 01 05.5 | |
| | comp=Z,14nm,0.2s | | | | | | |
| OLKF | | | | SN | **Sg** | **10 01 08.3** | **+0.1** |
| **JOF** | **Joensuu** | **1.92 173** | | PG | **Pn** | **10 00 49.6** | **-0.4** |
| | baz=349 | | | | | | |
| JOF | | | | SG | **Sn** | **10 01 16.4** | **+1.7** |
| **NIF** | **Nilsia** | **1.93 224** | | PG | **Pn** | **10 00 50.7** | **+0.5** |
| NIF | | | | SG | **Sn** | **10 01 17.4** | **+2.3** |
| **RANF** | **Ranua** | **2.06 308** | | PG | **Pn** | **10 00 53.1** | **+1.1** |
| RANF | | | | SG | **Sn** | **10 01 19.7** | **+1.4** |
| **OUL** | **Oulu** | **2.09 280** | | PG | **Pn** | **10 00 53.4** | **+0.9** |
| | baz=97 | | | | | | |
| OUL | | | | SB | **Sn** | **10 01 19.8** | **+0.7** |
| **OBF4** | **Vikkela, Lumij** | **2.42 273** | | PN | **Pn** | **10 00 57.9** | **+0.9** |
| | baz=89 | | | | | | |
| OBF4 | | | | MSG | | 10 01 28.1 | |
| | comp=Z,12nm,0.2s | | | | | | |
| OBF4 | | | | SB | **Sb** | **10 01 30.4** | **-0.5** |
| **OUF** | **Merijarvi** | **2.64 263** | | PN | **Pn** | **10 01 00.9** | **+1.0** |
| | baz=80 | | | | | | |
| OUF | | | | MSG | | 10 01 34.3 | |
| | comp=Z,15nm,0.2s | | | | | | |
| OUF | | | | SB | **Sn** | **10 01 35.8** | **+3.2** |
| **RNF** | **Rovaniemi** | **2.67 315** | | PN | **Pn** | **10 01 01.5** | **+1.1** |
| | baz=130 | | | | | | |
| RNF | | | | SB | **Sb** | **10 01 37.3** | **-0.7** |
| **OBF0** | **Syolatti, Pyha** | **2.83 267** | | PN | **Pn** | **10 01 03.2** | **+0.7** |
| OBF0 | | | | MSG | | 10 01 39.7 | |
| | comp=Z,7.1nm,0.2s | | | | | | |
| OBF0 | | | | SB | **Sb** | **10 01 41.9** | **-0.7** |
| **SUF** | **Sumiainen** | **2.94 226** | | PB | **Pn** | **10 01 05.9** | **+1.9** |
| SUF | | | | MSG | | 10 01 42.3 | |
| | comp=Z,3.9nm,0.2s | | | | | | |
| **APA0** | **Apatity Array** | **2.95 17** | | P | **Pn** | **10 01 05.8** | **+1.5** |
| APA0 | | | | S | **Sn** | **10 01 42.4** | **+2.1** |
| **APA** | **Apatity** | **2.97 20** | | S | **Sb** | **10 01 44.8** | **-1.9** |
| **TOF** | **Tornio** | **2.98 298** | | PN | **Pn** | **10 01 06.2** | **+1.6** |
| TOF | | | | MSG | | 10 01 44.4 | |
| | comp=Z,3.3nm,0.2s | | | | | | |
| TOF | | | | SB | **Sb** | **10 01 44.6** | **-2.3** |
| **VRF** | **Varrio** | **2.99 351** | | PB | **Pn** | **10 01 06.2** | **+1.4** |
| VRF | | | | MSG | | 10 01 44.9 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| VRF | | | | SG | **Sb** | **10 01 47.9** | **+0.7** |
| **SGF** | **Sodankyl** | **3.16 329** | | PN | **Pn** | **10 01 06.5** | **-0.6** |
| SGF | | | | SB | **Sb** | **10 01 50.2** | **-1.9** |
| **OBF8** | **Ulkokalla** | **3.20 265** | | PN | **Pn** | **10 01 08.6** | **+1.0** |
| **KALU** | **Kalix** | **3.28 292** | | PN | **Pn** | **10 01 10.2** | **+1.4** |
| KALU | | | | SB | **Sb** | **10 01 55.7** | **0.0** |
| **KAF** | **Kangasniemi** | **3.37 219** | | PB | **Pn** | **10 01 12.5** | **+2.5** |
| KAF | | | | SB | **Sb** | **10 01 57.0** | **-1.1** |
| **RUF** | **Ruokolahti** | **3.50 194** | | PN | **Pn** | **10 01 12.8** | **+1.0** |
| **KLF** | **Kolari** | **3.69 314** | | PN | **Pn** | **10 01 15.4** | **+1.0** |
| KLF | | | | SG | **Sg** | **10 02 12.0** | **-2.7** |
| **KEF** | **Keuruu** | **3.75 228** | | PN | **Pn** | **10 01 17.1** | **+1.9** |
| **PAJU** | **Pajala** | **3.84 309** | | PN | **Pn** | **10 01 17.6** | **+1.0** |
| PAJU | | | | SG | **Sb** | **10 02 15.2** | **+3.3** |
| **VAF** | **Ylistaro** | **3.99 247** | | PN | **Pn** | **10 01 20.0** | **+1.5** |
| | baz=57 | | | | | | |
| **FIA0** | **FINESS Array S** | **3.99 214** | | PN | **Pn** | **10 01 20.6** | **+2.0** |
| FIA0 | | | | SN | **Sn** | **10 02 01.9** | **-4.1** |
| **FINES** | **FINESS Array B** | **3.99 214** | | Pn | **Pn** | **10 01 19.7** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=33,slow=13,SNR=8.5 | | | | | | |
| FINES | | | | Sn | **Sn** | **10 02 03.0** | **-3.0** |
| | comp=Z,0.4nm,0.3s,baz=36,slow=22,SNR=6.1 | | | | | | |
| FINES | | | | Lg | Lg | 10 02 18.3 | |
| | comp=Z,1.5nm,0.3s,baz=36,slow=33,SNR=14 | | | | | | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **UMAU** | **Umeaa** | **4.49 263** | | PN | **Pn** | **10 01 25.1** | **-0.2** |
| UMAU | | | | SG | **Sb** | **10 02 35.9** | **+5.7** |
| **VJF** | **Virojoki** | **4.54 201** | | SN | **Sn** | **10 02 18.6** | **-0.8** |
| **HEF** | **Hetta** | **4.59 325** | | *e*P | **Pn** | **10 01 27.9** | **+1.1** |
| **HEF** | **Hetta** | **4.59 325** | | PN | **Pn** | **10 01 26.9** | **+0.1** |
| HEF | | | | SG | **Sb** | **10 02 37.5** | **+4.3** |
| **TERR** | **Teriberka** | **4.73 19** | | S | **Sn** | **10 02 22.4** | **-1.6** |
| **PRVG** | **Vayda Guba** | **4.99 6** | | P | **Pn** | **10 01 33.7** | **+1.5** |
| PRVG | | | | S | **Sn** | **10 02 33.4** | **+2.9** |
| **KTK1** | **Kautokeino** | **5.15 328** | | *e*P | **Pn** | **10 01 34.8** | **+0.3** |
| KTK1 | | | | *e*S | **Sn** | **10 02 34.3** | **-0.3** |
| KTK1 | | | | IAML | | 10 02 57.3 | |
| | comp=Z,3.5nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **5.17 339** | | P | **Pn** | **10 01 34.8** | **+0.2** |
| ARCES | | | | S | **Sn** | **10 02 32.6** | **-2.3** |
| **ARCES** | **ARCESS Array B** | **5.17 339** | | Pn | **Pn** | **10 01 34.9** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=154,slow=13,SNR=52 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 02 33.2** | **-1.7** |
| | comp=Z,0.3nm,0.3s,baz=155,slow=26,SNR=4.4 | | | | | | |
| ARCES | | | | Lg | Lg | 10 02 52.0 | |
| | comp=Z,0.7nm,0.3s,baz=154,slow=28,SNR=10 | | | | | | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **KEV** | **Kevo** | **5.18 345** | | *e*P | **Pn** | **10 01 35.3** | **+0.5** |
| KEV | | | | *e*S | **Sn** | **10 02 33.1** | **-1.9** |
| **VADS** | **Vadso** | **5.36 355** | | P | **Pn** | **10 01 37.6** | **+0.3** |
| VADS | | | | S | **Sn** | **10 02 39.2** | **-0.5** |
| **VADS** | **Vadso** | **5.36 355** | | *e*P | **Pn** | **10 01 37.8** | **+0.5** |
| VADS | | | | *e*S | **Sn** | **10 02 39.2** | **-0.5** |
| VADS | | | | IAML | | 10 03 01.6 | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **SALU** | **Saltoluokta** | **5.61 303** | | *e*P | **Pn** | **10 01 41.4** | **+0.6** |
| SALU | | | | *e*S | **Sn** | **10 02 44.3** | **-1.5** |
| **I37NO** | **I37NO** | **6.41 317** | | I | I | 10 37 30.0 | |
| | baz=126,slow=318,SNR=3.0 | | | | | | |
| **FAUS** | **Fauske** | **6.79 299** | | *e*P | **Pn** | **10 01 57.0** | **0.0** |
| **HFS** | **Hagfors** | **9.18 247** | | Pn | **Pn** | **10 02 28.6** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=53,slow=13,SNR=5.0 | | | | | | |
| HFS | | | | Lg | Lg | 10 04 59.2 | |
| | comp=Z,0.5nm,0.3s,baz=56,slow=29,SNR=6.7 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |

*NIED **16** 10:00:17.8, 38.72N×142.18E, h40km, MW3.6, Moment Tensor Solution. s3 Moment tensor: Scale 10^14Nm; Mrr1.20; Mθθ0.08; Mϕϕ-1.28; Mrθ1.35; Mϕθ-0.32; Mrϕ2.53; Fault plane solution: Mo3.14000×10^14 NP1:ϕs27.00000°, δ78.00000°, λ97.00000°. NP2:ϕs177.00000°, δ13.00000°, λ61.00000°.*
*JMA **16** 10:00:17.8±0.1, 38.72N±0.2×142.2E±0.7, h40km±1km, MV3.8/40, E OFF MIYAGI PREF*
*JMA Felt I J1 at E OFF MIYAGI PREF .*
*IDC **16** 10:00:19.3±2.8, 38.72N×142.17E, h55km±25km, mb3.3/7, mbtmp3.6/10, ML3.1/3, MS2.5/4, Error ellipse: s-maj=30.5km s-min=18.8km az=90.0*

**ISC 16 10:00:17.5±1.2, 38.68N±0.05×142.2E±0.1, h39km±4km, n30, σ1s19/29, mb3.5/7, 14D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OFUJ** | **Ofunato** | **0.58 313** | | ⇓P | **Pn** | **10 00 29.1** | **-0.2** |
| OFUJ | | | | ⇓S | **Sn** | **10 00 36.8** | **-0.8** |
| **JKMT** | **Kesennumamotoy** | **0.59 283** | | ⇓P | **Pn** | **10 00 29.4** | **-0.1** |
| JKMT | | | | ⇓S | **Sn** | **10 00 37.1** | **-0.7** |
| **JIKH** | **Ishinomakikobu** | **0.69 238** | | ⇓P | **Pn** | **10 00 31.1** | **+0.2** |
| JIKH | | | | ⇓S | **Sn** | **10 00 40.2** | **-0.1** |
| **JIO** | **Ouri** | **0.71 252** | | ⇓*i*P | **Pn** | **10 00 31.2** | **+0.1** |
| JIO | | | | ⇓S | **Sn** | **10 00 40.3** | **-0.5** |
| **JMK** | **Ichinoseki** | **0.82 289** | | ⇓*i*P | **Pn** | **10 00 32.6** | **+0.1** |
| JMK | | | | ⇓S | **Sn** | **10 00 43.1** | **-0.4** |
| **JOM** | **Ohasama** | **1.06 318** | | ⇓*i*P | **Pn** | **10 00 36.0** | **+0.2** |
| JOM | | | | ⇓*e*S | **Sn** | **10 00 49.2** | **-0.2** |
| **JOU** | **Okura** | **1.25 256** | | P | **Pn** | **10 00 39.1** | **+0.6** |
| **JTH** | **Tanohata** | **1.28 348** | | P | **Pn** | **10 00 38.7** | **-0.1** |
| **JMM** | **Marumori** | **1.38 234** | | ⇓*i*P | **Pn** | **10 00 40.5** | **+0.3** |
| **JRG** | **Rokugo** | **1.42 301** | | P | **Pn** | **10 00 41.2** | **+0.5** |
| **JYK** | **Kaneyama** | **1.47 280** | | ⇓P | **Pn** | **10 00 41.9** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **3.83 237** | | P | **Pn** | **10 01 16.7** | **+2.8** |
| | 0.5nm,0.3s,baz=38,slow=12,SNR=26 | | | | | | |
| MJAR | | | | LR | LR | 10 03 05.9 | |
| | comp=Z,33nm,21.2s,baz=62,slow=44 | | | | | | |
| | 3.4nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **5.43 3** | | P | **Pn** | **10 01 35.8** | **-0.1** |
| | 0.5nm,0.3s,baz=330,slow=20,SNR=1.4 | | | | | | |
| | 4.6nm,0.6s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **5.89 200** | | P | **Pn** | **10 01 44.0** | **+1.8** |
| | 5.8nm,0.3s,baz=252,slow=20,SNR=1.9 | | | | | | |
| JHJ | | | | S | **Sn** | **10 02 46.9** | **-1.6** |
| | 55nm,0.6s,baz=139,slow=11,SNR=1.5 | | | | | | |
| | 92nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.45 309** | | P | **Pn** | **10 02 35.1** | **+4.2** |
| | 2.7nm,0.5s,baz=118,slow=14,SNR=5.6 | | | | | | |
| USRK | | | | LR | LR | 10 05 21.5 | |
| | comp=Z,47nm,22.0s,baz=201,slow=32 | | | | | | |
| **KSRS** | **Korea Array** | **11.33 268** | | P | Pn | 10 03 02.3 | +5.5 |
| | 1.6nm,0.7s,baz=71,slow=14,SNR=2.6 | | | | | | |
| KSRS | | | | LR | LR | 10 06 56.3 | |
| | comp=Z,20nm,20.2s,baz=235,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **12.94 328** | | LR | LR | 10 08 05.1 | |
| | comp=Z,31nm,18.3s,baz=184,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.50 124** | | T | T | 10 36 34.7 | |
| | baz=318,slow=75,SNR=114 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.51 125** | | T | T | 10 36 35.8 | |
| | baz=318,slow=75,SNR=133 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.52 124** | | T | T | 10 36 35.7 | |
| | baz=318,slow=75,SNR=133 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.28 126** | | T | T | 10 37 24.7 | |
| | baz=318,sl

| | | | | | | |
|---|---|---|---|---|---|---|
| **IKRK** | **Kirkuk** | **1.73 297** | *e*Pn | **Pb** | **10 06 24.1** | **+0.1** |
| IKRK | | | *e*Sn | **Sg** | **10 06 47.0** | **-1.1** |
| **BHD** | **Baghdad** | **2.04 229** | *e*Pn | **Pn** | **10 06 27.4** | **+1.1** |
| BHD | | | *e*Sn | **Sb** | **10 06 54.6** | **+0.2** |

*TAP **16** 10:05:53.0,24.84N×122.17E,h114km,ML3.2,B*
*JMA **16** 10:05:54.2±0.3,25.1N×122.1E±0.6,h103km±2km,*
*MV2.0/10,TAIWAN REGION*
**ISC 16 10:05:53.5**±1.7,**24.85N**±0.05×**122.14E**±0.04,**h112**km±9km,
**n75**,σ**0**°**63**/123,**Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EGS** | | **0.19** | **268** | *e*P | | **Pn** | **10 06 09.2** | **+0.2** |
| | baz=261 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.21** | **319** | *i* P | | **Pn** | **10 06 09.3** | **+0.1** |
| | baz=309 | | | | | | | |
| TWB1 | | | | *e*S | | **Sn** | **10 06 20.7** | **-0.2** |
| | baz=309 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.31** | **293** | *i* P | | **Pn** | **10 06 09.6** | **0.0** |
| | baz=284 | | | | | | | |
| TIPB | | | | *i* S | | **Sn** | **10 06 21.1** | **-0.5** |
| | baz=284 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.34** | **315** | *e*P | | **Pn** | **10 06 09.8** | **0.0** |
| | baz=305 | | | | | | | |
| SXI1 | | | | *e*S | | **Sn** | **10 06 22.2** | **+0.2** |
| | baz=305 | | | | | | | |
| **TWC** | **Suao** | **0.36** | **228** | *i* P | | **Pn** | **10 06 09.8** | **0.0** |
| | baz=229 | | | | | | | |
| TWC | | | | *e*S | | **Sn** | **10 06 21.5** | **-0.4** |
| | baz=229 | | | | | | | |
| **ESAO** | **Su ao** | **0.38** | **224** | *e*P | | **Pn** | **10 06 10.0** | **+0.2** |
| | baz=221 | | | | | | | |
| ESAO | | | | *e*S | | **Sn** | **10 06 22.0** | **-0.2** |
| | baz=221 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.39** | **304** | P | | **Pn** | **10 06 10.0** | **+0.1** |
| | baz=296 | | | | | | | |
| **EOS2** | **EOS2** | **0.44** | **169** | *e*P | | **Pn** | **10 06 11.0** | **+1.0** |
| | baz=178 | | | | | | | |
| **NDS** | **Dongshan** | **0.44** | **241** | *e*P | | **Pn** | **10 06 10.6** | **+0.4** |
| | baz=243 | | | | | | | |
| **TNOU** | **National Taiwa** | **0.45** | **312** | *e*P | | **Pn** | **10 06 10.2** | **0.0** |
| | baz=304 | | | | | | | |
| **TWE** | **Neicheng** | **0.45** | **253** | *e*P | | **Pn** | **10 06 10.3** | **+0.1** |
| | baz=258 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.51** | **260** | P | | **Pn** | **10 06 10.7** | **0.0** |
| | baz=264 | | | | | | | |
| **EWUT** | **Wuta** | **0.52** | **219** | *e*P | | **Pn** | **10 06 11.1** | **+0.3** |
| | baz=211 | | | | | | | |
| EWUT | | | | *e*S | | **Sn** | **10 06 24.1** | **+0.5** |
| | baz=211 | | | | | | | |
| **TWA** | **Mucha** | **0.52** | **284** | *e*P | | **Pn** | **10 06 10.5** | **-0.2** |
| | baz=286 | | | | | | | |
| TWA | | | | *e*S | | **Sn** | **10 06 22.9** | **-0.8** |
| | baz=286 | | | | | | | |
| **ENA** | **Nanau** | **0.56** | **221** | P | | **Pn** | **10 06 11.3** | **+0.4** |
| | baz=212 | | | | | | | |
| ENA | | | | *e*S | | **Sn** | **10 06 24.6** | **+0.6** |
| | baz=212 | | | | | | | |
| **ENTT** | **Nioudou** | **0.56** | **248** | P | | **Pn** | **10 06 11.4** | **+0.4** |
| | baz=252 | | | | | | | |
| **NWLT** | **Wulai** | **0.58** | **263** | *e*P | | **Pn** | **10 06 11.1** | **-0.1** |
| | baz=268 | | | | | | | |
| NWLT | | | | *e*S | | **Sn** | **10 06 24.8** | **+0.3** |
| | baz=268 | | | | | | | |
| **EOS3** | **EOS3** | **0.58** | **164** | *e*P | | **Pn** | **10 06 11.7** | **+0.7** |
| | baz=178 | | | | | | | |
| **YM01** | **YM01** | **0.59** | **300** | P | | **Pn** | **10 06 11.1** | **-0.1** |
| | baz=297 | | | | | | | |
| YM01 | | | | *e*S | | **Sn** | **10 06 23.6** | **-1.0** |
| | baz=297 | | | | | | | |
| **YM08** | **YM08** | **0.60** | **304** | *e*P | | **Pn** | **10 06 11.0** | **-0.3** |
| | baz=298 | | | | | | | |
| **TATO** | **Taipei** | **0.60** | **282** | *e*P | | **Pn** | **10 06 10.9** | **-0.4** |
| | baz=288 | | | | | | | |
| TATO | | | | *e*S | | **Sn** | **10 06 23.0** | **-1.6** |
| | baz=288 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.62** | **247** | *e*P | | **Pn** | **10 06 11.9** | **+0.5** |
| | baz=256 | | | | | | | |
| NDT | | | | *e*S | | **Sn** | **10 06 25.3** | **+0.4** |
| | baz=256 | | | | | | | |
| **EAHA** | **Aohua** | **0.63** | **215** | *e*P | | **Pn** | **10 06 11.0** | **-0.5** |
| | baz=208 | | | | | | | |
| EAHA | | | | *e*S | | **Sn** | **10 06 25.8** | **+0.8** |
| | baz=208 | | | | | | | |
| **LATG** | **Datong** | **0.64** | **241** | *i* P | | **Pn** | **10 06 12.3** | **+0.6** |
| | baz=250 | | | | | | | |
| LATG | | | | *e*S | | **Sn** | **10 06 26.4** | **+1.0** |
| | baz=250 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.70** | **291** | *e*P | | **Pn** | **10 06 11.5** | **-0.5** |
| | baz=292 | | | | | | | |
| **YHNB** | **Yeheng** | **0.72** | **256** | *i* P | | **Pn** | **10 06 12.4** | **+0.1** |
| | baz=256 | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | **10 06 26.2** | **-0.2** |
| | baz=256 | | | | | | | |
| **NSK** | **Sanguang** | **0.73** | **256** | *i* P | | **Pn** | **10 06 12.4** | **0.0** |
| | baz=256 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **10 06 26.5** | **0.0** |
| | baz=256 | | | | | | | |
| **EOS4** | **EOS4** | **0.74** | **167** | *e*P | | **Pn** | **10 06 12.4** | **+0.4** |
| | baz=170 | | | | | | | |
| EOS4 | | | | *e*S | | **Sn** | **10 06 26.2** | **+0.2** |
| | baz=170 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.78** | **356** | *e*P | | **Pn** | **10 06 13.2** | **+0.4** |
| | baz=351 | | | | | | | |
| **NNSB** | **Datong** | **0.81** | **239** | *i* P | | **Pn** | **10 06 13.4** | **+0.3** |
| | baz=244 | | | | | | | |
| NNSB | | | | *e*S | | **Sn** | **10 06 28.0** | **+0.1** |
| | baz=244 | | | | | | | |
| **NNS** | **Nan Shan** | **0.81** | **240** | *e*P | | **Pn** | **10 06 13.5** | **+0.3** |
| | baz=245 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **10 06 28.5** | **+0.6** |
| | baz=245 | | | | | | | |
| **ETL** | **Fush Village** | **0.83** | **214** | *e*P | | **Pn** | **10 06 13.3** | **0.0** |
| | baz=222 | | | | | | | |
| ETL | | | | *e*S | | **Sn** | **10 06 28.5** | **+0.3** |
| | baz=222 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.83** | **118** | S | | **Sn** | **10 06 27.1** | **-1.0** |
| **NACB** | **Ninganchiao** | **0.84** | **216** | *e*P | | **Pn** | **10 06 12.8** | **-0.4** |
| | baz=223 | | | | | | | |
| NACB | | | | *e*S | | **Sn** | **10 06 27.7** | **-0.5** |
| | baz=223 | | | | | | | |
| **NCUH** | **Zhongli** | **0.87** | **278** | *e*P | | **Pn** | **10 06 13.9** | **+0.3** |
| | baz=271 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.88** | **223** | *e*P | | **Pn** | **10 06 13.7** | **-0.1** |
| | baz=229 | | | | | | | |
| ETLH | | | | *e*S | | **Sn** | **10 06 29.2** | **+0.2** |
| | baz=229 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.88** | **116** | P | | **Pn** | **10 06 13.8** | **+0.1** |
| | baz=122 | | | | | | | |
| YOJ | | | | S | | **Sn** | **10 06 28.9** | **0.0** |
| | baz=122 | | | | | | | |
| **TWD** | **Chiawan** | **0.91** | **213** | P | | **Pn** | **10 06 13.8** | **-0.2** |
| | baz=223 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **10 06 28.8** | **-0.7** |
| | baz=223 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.95** | **257** | *e*P | | **Pn** | **10 06 14.2** | **-0.2** |
| | baz=257 | | | | | | | |
| NFF | | | | *e*S | | **Sn** | **10 06 29.8** | **-0.5** |
| | baz=257 | | | | | | | |
| **FUSS** | **Fushou** | **1.01** | **234** | P | | **Pn** | **10 06 15.8** | **+0.5** |
| | baz=225 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **10 06 31.6** | **0.0** |
| | baz=225 | | | | | | | |
| **LIOB** | **Emei** | **1.04** | **259** | *i* P | | **Pn** | **10 06 15.4** | **+0.1** |
| | baz=251 | | | | | | | |
| LIOB | | | | *i* S | | **Sn** | **10 06 31.5** | **-0.3** |
| | baz=251 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.06** | **258** | *e*P | | **Pn** | **10 06 15.3** | **-0.1** |
| | baz=259 | | | | | | | |
| NSTT | | | | S | | **Sn** | **10 06 31.7** | **-0.3** |
| | baz=259 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.06** | **219** | *i* P | | **Pn** | **10 06 15.1** | **-0.6** |
| | baz=208 | | | | | | | |
| LXIB | | | | *e*S | | **Sn** | **10 06 31.8** | **-0.6** |
| | baz=208 | | | | | | | |
| **ETM** | **Tongmen** | **1.06** | **214** | *e*P | | **Pn** | **10 06 14.9** | **-0.6** |
| | baz=222 | | | | | | | |
| **TWT** | **Tachien** | **1.06** | **236** | *e*P | | **Pn** | **10 06 16.6** | **+0.9** |
| | baz=228 | | | | | | | |
| TWT | | | | *e*S | | **Sn** | **10 06 33.1** | **+0.8** |
| | baz=228 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.06** | **229** | *i* P | | **Pn** | **10 06 16.3** | **+0.4** |
| | baz=225 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **10 06 32.7** | **-0.2** |
| | baz=225 | | | | | | | |
| **TDCB** | **Techi** | **1.07** | **237** | *e*P | | **Pn** | **10 06 16.6** | **+0.8** |
| | baz=237 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.10** | **207** | *e*P | | **Pn** | **10 06 16.0** | **+0.1** |
| | baz=207 | | | | | | | |
| **CHGB** | **Renai** | **1.18** | **228** | P | | **Pn** | **10 06 17.7** | **+0.7** |
| | baz=225 | | | | | | | |
| CHGB | | | | *e*S | | **Sn** | **10 06 35.4** | **+0.7** |
| | baz=225 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.18** | **207** | *e*P | | **Pn** | **10 06 16.9** | **+0.1** |
| | baz=198 | | | | | | | |
| SHUL | | | | *e*S | | **Sn** | **10 06 34.4** | **+0.1** |
| | baz=198 | | | | | | | |
| **ESL** | **Shilin** | **1.22** | **212** | *i* P | | **Pn** | **10 06 16.3** | **-0.9** |
| | baz=217 | | | | | | | |
| **WHP** | **Taichung City** | **1.23** | **243** | *i* P | | **Pn** | **10 06 18.0** | **+0.6** |
| | baz=248 | | | | | | | |
| WHP | | | | *e*S | | **Sn** | **10 06 35.6** | **+0.2** |
| | baz=248 | | | | | | | |
| **OWD** | **Renai** | **1.25** | **225** | *e*P | | **Pn** | **10 06 18.3** | **+0.6** |
| | baz=217 | | | | | | | |
| OWD | | | | *e*S | | **Sn** | **10 06 36.2** | **+0.2** |
| | baz=217 | | | | | | | |
| **WUSB** | **Renai** | **1.26** | **228** | P | | **Pn** | **10 06 18.5** | **+0.7** |
| | baz=224 | | | | | | | |
| WUSB | | | | *e*S | | **Sn** | **10 06 36.7** | **+0.4** |
| | baz=224 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.32** | **211** | *e*P | | **Pn** | **10 06 17.4** | **-1.0** |
| | baz=201 | | | | | | | |
| WARBT | | | | *e*S | | **Sn** | **10 06 35.6** | **-1.6** |
| | baz=201 | | | | | | | |
| **NSY** | **Sanyi** | **1.33** | **251** | *e*P | | **Pn** | **10 06 18.8** | **+0.4** |
| | baz=252 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.34** | **248** | *e*P | | **Pn** | **10 06 18.1** | **-0.5** |
| | baz=248 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sn** | **10 06 36.9** | **-0.7** |
| | baz=248 | | | | | | | |
| **EGFH** | **Guangfu** | **1.34** | **209** | *e*S | | **Sn** | **10 06 36.3** | **-1.4** |
| | baz=205 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.37** | **235** | *e*P | | **Pn** | **10 06 19.4** | **+0.5** |
| | baz=240 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **10 06 38.5** | **+0.3** |
| | baz=240 | | | | | | | |
| **VWDT** | **VWDT** | **1.42** | **220** | *e*P | | **Pn** | **10 06 20.0** | **+0.4** |
| | baz=211 | | | | | | | |
| VWDT | | | | *e*S | | **Sn** | **10 06 39.2** | **0.0** |
| | baz=211 | | | | | | | |
| **TYC** | **Yuchr** | **1.50** | **231** | *e*P | | **Pn** | **10 06 20.8** | **+0.4** |
| | baz=237 | | | | | | | |
| TYC | | | | *e*S | | **Sn** | **10 06 40.7** | **-0.2** |
| | baz=237 | | | | | | | |
| **HGSD** | **Ruisui** | **1.50** | **206** | *e*P | | **Pn** | **10 06 20.6** | **+0.1** |
| | baz=210 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **10 06 40.8** | **-0.1** |
| | baz=210 | | | | | | | |
| **SSLB** | **Suanglung** | **1.51** | **226** | P | | **Pn** | **10 06 21.2** | **+0.5** |
| | baz=225 | | | | | | | |
| SSLB | | | | *i* S | | **Sn** | **10 06 42.1** | **+0.9** |
| | baz=225 | | | | | | | |
| **EHY** | **Hungye** | **1.53** | **209** | *e*P | | **Pn** | **10 06 20.8** | **-0.1** |
| | baz=204 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **10 06 38.7** | **-2.9** |
| | baz=204 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.64** | **226** | *e*P | | **Pn** | **10 06 23.0** | **+0.8** |
| | baz=230 | | | | | | | |
| WHYT | | | | *e*S | | **Sn** | **10 06 45.0** | **+1.0** |
| | baz=230 | | | | | | | |
| **YULB** | **Yu-li** | **1.64** | **208** | *e*P | | **Pn** | **10 06 21.1** | **-1.2** |
| | baz=206 | | | | | | | |
| **TWF1** | **Yuli** | **1.68** | **207** | *e*P | | **Pn** | **10 06 23.0** | **+0.4** |
| | baz=210 | | | | | | | |
| **CHKH** | **Chenggong** | **1.79** | **203** | *e*P | | **Pn** | **10 06 23.2** | **-0.7** |
| | baz=208 | | | | | | | |
| **FULB** | **Fuli** | **1.82** | **205** | *e*P | | **Pn** | **10 06 24.4** | **+0.1** |
| | baz=209 | | | | | | | |
| FULB | | | | *e*S | | **Sn** | **10 06 47.4** | **-0.5** |
| | baz=209 | | | | | | | |
| **WDLH** | **Douliu** | **1.86** | **232** | *e*P | | **Pn** | **10 06 25.4** | **+0.6** |
| | baz=232 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.89** | **104** | *e*S | | **Sn** | **10 06 49.0** | **-0.4** |
| **WCKO** | **Fanlu** | **1.98** | **225** | *e*P | | **Pn** | **10 06 27.7** | **+1.3** |
| | baz=224 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.99** | **97** | *e*P | | **Pn** | **10 06 27.1** | **+0.6** |
| JISG | | | | S | | **Sn** | **10 06 51.8** | **+0.1** |
| **EDH** | **Donghe** | **2.02** | **202** | *e*P | | **Pn** | **10 06 26.4** | **-0.5** |
| | baz=204 | | | | | | | |
| EDH | | | | *e*S | | **Sn** | **10 06 51.1** | **-1.3** |
| | baz=204 | | | | | | | |
| **TPUB** | **Ta-pu** | **2.07** | **222** | *e*P | | **Pn** | **10 06 28.8** | **+1.3** |
| | baz=230 | | | | | | | |

*IDC **16** 10:06:07.7±1.2,1.26S×120.60E,h0km,mb3.5/5,*
*mbtmp3.6/6,ML3.5/1,Error ellipse: s-maj=54.1km*
*s-min=19.9km az=69.0*
*DJA **16** 10:06:12.1±0.2,1.2S×12.1E±*,h10km,M3.7/8,MLv3.7/8*
**ISC 16 10:06:13.1**±0.9,**1.21S**±0.04×**120.46E**±0.07,**h35**km,**n12**,
σ**2**°**48**/16,**mb3.7/5**,**Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MPSI** | **Mapaga** | **1.64** | **340** | P | | **Pn** | **10 06 36.9** | **-2.5** |
| MPSI | | | | S | | **Sn** | **10 07 03.7** | **+4.5** |
| **MRSI** | **Marisa** | **2.23** | **41** | P | | **Pn** | **10 06 46.3** | **-1.3** |
| MRSI | | | | S | | **Sn** | **10 07 16.5** | **+2.5** |
| **LUWI** | **Luwuk** | **2.32** | **86** | P | | Pn | 10 06 50.2 | +1.5 |
| LUWI | | | | S | | **Sn** | **10 07 18.8** | **+2.8** |
| **SPSI** | **Sidrap Palu** | **2.82** | **194** | P | | **Pn** | **10 06 57.6** | **+1.9** |
| **GTOI** | **Gorontalo** | **3.14** | **54** | P | | Pn | 10 07 01.9 | +1.8 |
| GTOI | | | | S | | **Sn** | **10 07 39.4** | **+3.0** |
| **BNSI** | **Bone** | **3.19** | **186** | P | | **Pn** | **10 07 00.3** | **-0.5** |
| BNSI | | | | S | | **Sn** | **10 07 41.2** | **+3.6** |
| **KAPI** | **Kappang** | **3.85** | **191** | Pn | | **Pn** | **10 07 07.9** | **-1.9** |
| | 3.5nm,0.3s,baz=328,slow=8.1,SNR=13 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **10 07 54.3** | **+0.5** |
| | 1.7nm,0.3s,baz=233,slow=20,SNR=1.7 | | | | | | | |
| | 16nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.04** | **145** | P | | **P** | **10 11 14.2** | **-1.3** |
| | 0.8nm,0.8s,baz=323,slow=11,SNR=4.1 | | | | | | | |
| | 0.8nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **25.85** | **151** | P | | **P** | **10 11 40.1** | **-1.4** |
| | 0.3nm,0.8s,baz=337,slow=12,SNR=1.8 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **36.45** | **149** | P | | **P** | **10 13 12.9** | **-1.9** |
| | 3.0nm,1.0s,baz=343,slow=14,SNR=3.0 | | | | | | | |
| | 3.0nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.34** | **330** | P | | **P** | **10 16 05.0** | **+0.3** |
| | 0.5nm,0.7s,baz=124,slow=7.2,SNR=4.8 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.77** | **331** | P | | **P** | **10 16 36.1** | **+1.2** |
| | 0.3nm,0.4s,baz=122,slow=5.2,SNR=2.1 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |

**KRSC 16 10:07:40.7**±1.1,**55.31N**×**166.46E**,**h35**km±5km,**MI3.7**,
**Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **0.30** | **250** | *i* P | | Pn | 10 07 48.8 | +0.2 |
| BKI | | | | *e*S | | Sn | 10 07 55.0 | +0.6 |
| **KBTR** | **Krutoberegovo** | **2.25** | **295** | *e*P | | Pn | 10 08 16.6 | +1.3 |
| KBTR | | | | *e*S | | Sn | 10 08 44.4 | +2.6 |
| **BZGR** | **Bezymyannyi-Gr** | **3.33** | **283** | *e*P | | Pn | 10 08 34.3 | +4.0 |
| **BZMR** | **Bezymyannaya** | **3.44** | **283** | *e*P | | Pn | 10 08 36.4 | +4.5 |
| **BZWR** | **Bezymyannyi-We** | **3.44** | **283** | *e*P | | Pn | 10 08 35.3 | +3.4 |
| **TUMD** | **Tumrok D** | **3.47** | **271** | *e*P | | Pn | 10 08 36.3 | +4.1 |
| TUMD | | | | *e*S | | Sn | 10 09 17.1 | +5.1 |
| **KIRR** | **Kirishev** | **3.53** | **283** | *e*P | | Pn | 10 08 37.2 | +4.1 |
| **KMNR** | **Kamenistaya** | **3.57** | **280** | *e*P | | Pn | 10 08 38.5 | +5.0 |
| **KPT** | **Kopyto** | **3.60** | **283** | *e*P | | Pn | 10 08 37.9 | +3.9 |
| **SRDR** | **Sredinnyy** | **3.94** | **288** | *e*P | | Pn | 10 08 44.1 | +5.5 |
| **SMAR** | **Somma** | **4.93** | **249** | *e*P | | Pn | 10 08 57.1 | +4.6 |
| **UGLR** | **Uglovaya** | **4.95** | **248** | *e*P | | Pn | 10 08 57.4 | +4.9 |
| **AVH** | **Avacha** | **4.96** | **249** | *e*P | | Pn | 10 08 57.7 | +4.9 |
| **KOK** | **Koryaka** | **5.01** | **249** | *e*P | | Pn | 10 08 58.1 | +4.7 |
| **GNL** | **Ganaly** | **5.22** | **255** | *e*P | | Pn | 10 09 01.0 | +4.7 |
| **KRMR** | **Karymshinskiy** | **5.50** | **247** | *e*P | | Pn | 10 09 05.5 | +5.6 |
| KRMR | | | | *e*S | | Sn | 10 10 07.1 | +5.3 |
| **MTVR** | **Mutnovka** | **5.65** | **243** | *e*P | | Pn | 10 09 06.8 | +4.6 |
| **GRL** | **Gorelyy** | **5.67** | **244** | *e*P | | Pn | 10 09 07.8 | +5.3 |
| **ASAK** | **Asacha** | **5.85** | **243** | *e*P | | Pn | 10 09 09.7 | +4.8 |
| **KDTR** | **Khodutka, Kamc** | **6.10** | **238** | *e*P | | Pn | 10 09 12.3 | +4.0 |

*BER **16** 10:08:46.0±2.1,82.67N×6.45W,h10km,mb(Pn)3.5,*
*ML1.8(DNK),Confirmed Earthquake*

*DNK **16** 10:08:47.2±2.8,82.73N×6.61W,h37km±45km,ML1.8*
**ISC 16 10:08:46.3**±1.8,**82.2N**±0.1×**6.15W**±0.06,**h10**km,**n15**,
σ**2**°**49**/22,**North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NOR** | **Nord** | **1.61** | **253** | *i* P | | **Pb** | **10 09 15.8** | **-0.3** |
| NOR | | | | *i* S | | **Sn** | **10 09 35.4** | **-0.1** |
| NOR | | | | IAML | | | 10 09 37.2 | |
| | comp=Z,8.0nm,0.4s | | | | | | | |
| **NOR** | **Nord** | **1.61** | **253** | *i* P | | **Pb** | **10 09 15.8** | **-0.3** |
| NOR | | | | *i* S | | **Sn** | **10 09 35.4** | **-0.1** |
| NOR | | | | IAML | | | 10 09 37.2 | |
| | comp=Z,8.0nm,0.4s | | | | | | | |
| **KBS** | **Kingsbay** | **4.42** | **129** | *e*P | | **Pn** | **10 09 55.0** | **+1.8** |
| KBS | | | | *e* | | | 10 10 42.2 | |
| KBS | | | | IAML | | | 10 10 45.0 | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **KBS** | **Kingsbay** | **4.42** | **129** | *i* P | | **Pn** | **10 09 54.8** | **+1.5** |
| **BRBB** | **Barentsburg B** | **5.37** | **129** | *e*P | | **Pn** | **10 10 08.4** | **+2.1** |
| **BRBA** | **Barentsburg A** | **5.40** | **130** | *e*P | | **Pn** | **10 10 09.7** | **+3.0** |
| **SPA0** | **Spitsbergen Ar** | **5.53** | **125** | *e*P | | **Pn** | **10 10 10.1** | **+1.5** |
| SPA0 | | | | *e*S | | **Sn** | **10 11 11.5** | **-0.6** |
| SPA0 | | | | IAML | | | 10 11 21.6 | |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| **DAG** | **Danmarks Havn** | **5.91** | **209** | *i* P | | **Pn** | **10 10 17.6** | **+3.9** |
| DAG | | | | *i* S | | **Sn** | **10 11 22.4** | **+1.1** |
| DAG | | | | IAML | | | 10 11 26.0 | |
| | comp=Z,2.3nm,0.2s | | | | | | | |
| **DAG** | **Danmarks Havn** | **5.91** | **209** | *i* P | | **Pn** | **10 10 17.6** | **+3.9** |
| DAG | | | | *i* S | | **Sn** | **10 11 22.4** | **+1.1** |
| DAG | | | | IAML | | | 10 11 26.0 | |
| | comp=Z,2.3nm,0.2s | | | | | | | |
| **HSPB** | **Hornsund (broa** | **6.47** | **132** | *e*P | | **Pn** | **10 10 24.5** | **+3.1** |
| **HOPEN** | **Hopen** | **7.96** | **119** | *e*S | | **Sn** | **10 12 06.5** | **-5.2** |
| **DBG** | **Daneborg** | **8.41** | **207** | *i* P | | **Pn** | **10 10 49.6** | **+1.7** |
| DBG | | | | *i* S | | **Sn** | **10 12 20.7** | **-1.9** |
| DBG | | | | IAML | | | 10 12 31.3 | |
| | comp=Z,3.4nm,1.4s | | | | | | | |
| **DBG** | **Daneborg** | **8.41** | **207** | *i* P | | **Pn** | **10 10 49.6** | **+1.7** |
| DBG | | | | *i* S | | **Sn** | **10 12 20.7** | **-1.9** |
| DBG | | | | IAML | | | 10 12 31.3 | |
| | comp=Z,3.4nm,1.4s | | | | | | | |
| **NEEM** | **North Greenlan** | **8.96** | **262** | *i* P | | **Pn** | **10 10 53.4** | **-2.5** |
| NEEM | | | | *i* S | | Sn | 10 12 21.9 | -15 |
| NEEM | | | | IAML | | | 10 13 05.6 | |
| | comp=Z,2.1nm,1.0s | | | | | | | |
| **NEEM** | **North Greenlan** | **8.96** | **262** | *i* P | | **Pn** | **10 10 53.4** | **-2.5** |
| NEEM | | | | *i* S | | Sn | 10 12 21.9 | -15 |
| NEEM | | | | IAML | | | 10 13 05.6 | |
| | comp=Z,2.1nm,1.0s | | | | | | | |

**HEL 16 10:29:25.4**±0.1,**61.51N**×**25.71E**,**h0**km,**ML1.2**,
**Explosion,Finland**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FIA0** | **FINESS Array S** | **0.19** | **110** | | PG | Pg | 10 29 28.3 | -0.7 |
| **KAF** | **Kangasniemi** | **0.67** | **25** | | PG | Pg | 10 29 37.5 | -0.7 |
| KAF | | | | | MSG | | 10 29 46.4 | |
| | comp=Z,3.0nm,0.2s | | | | | | | |
| KAF | | | | | SG | Sg | 10 29 46.5 | -0.4 |
| **KEF** | **Keuruu** | **0.77** | **329** | | PG | Pg | 10 29 38.9 | -1.3 |
| KEF | | | | | MSG | | 10 29 49.5 | |
| | comp=Z,1.6nm,0.2s | | | | | | | |
| KEF | | | | | SB | Sg | 10 29 50.8 | +0.6 |
| **PVF** | **Pernaja** | **0.97** | **176** | | PG | Pg | 10 29 43.0 | -1.0 |
| PVF | | | | | MSG | | 10 29 55.2 | |
| | comp=Z,1.2nm,0.2s | | | | | | | |
| **SUF** | **Sumiainen** | **1.23** | **9** | | PG | Pg | 10 29 47.4 | -1.6 |
| | baz=188 | | | | | | | |
| SUF | | | | | MSG | | 10 30 02.7 | |
| | comp=Z,0.7nm,0.2s | | | | | | | |
| SUF | | | | | SB | Sg | 10 30 03.8 | -1.2 |
| **MEF** | **Metsahovi** | **1.45** | **207** | | MSG | | 10 30 08.9 | |
| | comp=Z,2.7nm,0.2s | | | | | | | |
| MEF | | | | | SN | Sn | 10 30 13.8 | +1.4 |
| **RUF** | **Ruokolahti** | **1.56** | **92** | | PN | Pn | 10 29 54.1 | -0.2 |
| RUF | | | | | MSG | | 10 30 12.1 | |
| | comp=Z,1.5nm,0.2s | | | | | | | |
| RUF | | | | | SN | Sg | 10 30 16.7 | +1.4 |
| **KPF** | **Kankaanpaa** | **1.77** | **282** | | PG | Pn | 10 29 57.0 | -0.1 |
| KPF | | | | | SG | Sb | 10 30 20.8 | -0.5 |
| **RAF** | **Rauma** | **1.97** | **257** | | MSG | | 10 30 24.0 | |
| | comp=Z,1.1nm,0.2s | | | | | | | |
| RAF | | | | | SG | Sb | 10 30 26.6 | -0.5 |
| **VAF** | **Ylistaro** | **2.10** | **319** | | MSG | | 10 30 27.6 | |
| | comp=Z,1.1nm,0.2s | | | | | | | |
| VAF | | | | | SG | Sb | 10 30 30.4 | -0.4 |
| **JOF** | **Joensuu** | **2.98** | **59** | | SG | Sb | 10 30 55.3 | -0.9 |
| **OBF8** | **Ulkokalla** | **3.02** | **341** | | PG | Pb | 10 30 21.0 | +1.1 |
| OBF8 | | | | | MSG | | 10 30 54.0 | |
| | comp=Z,0.5nm,0.2s | | | | | | | |

*KOLA **16** 10:29:58.7,67.88N×25.26E,h0km,ML2.0,Error ellipse:*
*s-maj=16.7km s-min=11.5km az=70.0,Finland, Lapland*
*HEL **16** 10:29:59.5±0.1,67.93N×25.88E,h0km,ML1.5,Explosion*
**BER 16 10:29:59.6**±2.2,**67.92N**×**25.86E**,**h0**km,**ML1.3**,
**ML1.5**(HEL),**Suspected explosion,Finland**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGF** | **Sodankyl** | **0.55** | **152** | | PG | Pg | 10 30 08.7 | -1.3 |
| SGF | | | | | SG | Sg | 10 30 16.1 | -1.0 |
| **SGF** | **Sodankyl** | **0.55** | **152** | | PG | Pg | 10 30 08.7 | -1.3 |
| SGF | | | | | SG | Sg | 10 30 16.1 | -1.0 |
| **HEF** | **Hetta** | **0.95** | **302** | | PG | Pg | 10 30 16.4 | -1.4 |
| | baz=119 | | | | | | | |
| HEF | | | | | MSG | | 10 30 28.8 | |
| | comp=Z,4.6nm,0.2s | | | | | | | |
| HEF | | | | | SG | Sg | 10 30 29.3 | -0.9 |
| **HEF** | **Hetta** | **0.95** | **302** | | PG | Pg | 10 30 16.4 | -1.4 |
| | baz=119 | | | | | | | |
| HEF | | | | | MSG | | 10 30 28.8 | |
| | comp=Z,4.6nm,0.2s | | | | | | | |
| HEF | | | | | SG | Sg | 10 30 29.3 | -0.9 |
| **KLF** | **Kolari** | **1.00** | **227** | | PG | Pg | 10 30 17.4 | -1.4 |
| KLF | | | | | SG | Sg | 10 30 30.6 | -1.2 |
| KLF | | | | | MSG | | 10 30 30.6 | |
| | comp=Z,3.3nm,0.2s | | | | | | | |
| **KLF** | **Kolari** | **1.00** | **227** | | PG | Pg | 10 30 17.4 | -1.4 |
| KLF | | | | | SG | Sg | 10 30 30.6 | -1.2 |
| KLF | | | | | MSG | | 10 30 30.6 | |
| | comp=Z,3.3nm,0.2s | | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **1.07** | **58** | | PG | Pg | 10 30 18.9 | -1.2 |
| RAJF | | | | | SB | Sg | 10 30 32.6 | -1.4 |
| **RAJF** | **Raja-Jooseppi** | **1.07** | **58** | | PG | Pg | 10 30 18.9 | -1.2 |
| RAJF | | | | | SB | Sg | 10 30 32.6 | -1.4 |
| **RNF** | **Rovaniemi** | **1.32** | **177** | | PG | Pg | 10 30 23.5 | -1.4 |
| RNF | | | | | SG | Sg | 10 30 41.2 | -0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=178 | | | | | | | |
| ARA0 | | | | SN | Sn | 10 30 49.4 | -1.7 | |
| **ARCES** | **ARCESS Array B** | **1.62** | **356** | P | Pn | 10 30 28.8 | -0.6 | |
| ARCES | | | | S | Sn | 10 30 49.4 | -1.7 | |
| **KEV** | **Kevo** | **1.89** | **12** | PG | Pn | 10 30 33.1 | 0.0 | |
| KEV | | | | MSG | | 10 30 55.5 | | |
| | comp=Z,2.7nm,0.2s | | | | | | | |
| KEV | | | | SG | Sn | 10 30 56.9 | -0.6 | |
| **KEV** | **Kevo** | **1.89** | **12** | PG | Pn | 10 30 33.1 | 0.0 | |
| KEV | | | | MSG | | 10 30 55.5 | | |
| | comp=Z,2.7nm,0.2s | | | | | | | |
| KEV | | | | SG | Sn | 10 30 56.9 | -0.6 | |
| **TOF** | **Tornio** | **1.95** | **199** | PG | Pb | 10 30 34.9 | -1.0 | |
| TOF | | | | MSG | | 10 30 57.8 | | |
| | comp=Z,2.4nm,0.2s | | | | | | | |
| TOF | | | | SG | Sb | 10 31 00.4 | -0.3 | |
| **TOF** | **Tornio** | **1.95** | **199** | PN | Pb | 10 30 34.9 | -1.0 | |
| **TOF** | **Tornio** | **1.95** | **199** | PG | Pb | 10 30 34.9 | -1.0 | |
| TOF | | | | MSG | | 10 30 57.8 | | |
| | comp=Z,2.4nm,0.2s | | | | | | | |
| TOF | | | | SG | Sb | 10 31 00.4 | -0.3 | |
| **RANF** | **Ranua** | **1.95** | **169** | PG | Pn | 10 30 34.6 | +0.7 | |
| | baz=354 | | | | | | | |
| **RANF** | **Ranua** | **1.95** | **169** | PN | Pn | 10 30 34.6 | +0.7 | |
| **RANF** | **Ranua** | **1.95** | **169** | PG | Pn | 10 30 34.6 | +0.7 | |
| | baz=354 | | | | | | | |
| RANF | | | | SG | Sn | 10 30 59.8 | +0.8 | |
| **OLKF** | **Oulanka, Finla** | **2.12** | **138** | PG | Pn | 10 30 37.5 | +1.2 | |
| OLKF | | | | MSG | | 10 31 02.5 | | |
| | comp=Z,2.2nm,0.2s | | | | | | | |
| OLKF | | | | SG | Sb | 10 31 05.5 | -0.2 | |
| **OLKF** | **Oulanka, Finla** | **2.12** | **138** | PG | Pn | 10 30 37.5 | +1.2 | |
| OLKF | | | | MSG | | 10 31 02.5 | | |
| | comp=Z,2.2nm,0.2s | | | | | | | |
| OLKF | | | | SG | Sb | 10 31 05.5 | -0.2 | |
| **KALU** | **Kalix** | **2.29** | **207** | SG | Sb | 10 31 10.3 | -0.4 | |
| **KALU** | **Kalix** | **2.29** | **207** | SG | Sb | 10 31 10.3 | -0.4 | |
| **MSF** | **Maaselka** | **2.38** | **147** | PG | Pb | 10 30 41.8 | -1.4 | |
| | baz=326 | | | | | | | |
| MSF | | | | SG | Sb | 10 31 12.8 | -0.3 | |
| **MSF** | **Maaselka** | **2.38** | **147** | PG | Pb | 10 30 41.8 | -1.4 | |
| | baz=326 | | | | | | | |
| MSF | | | | SG | Sb | 10 31 12.8 | -0.3 | |
| **KU6** | **Riekki** | **2.48** | **138** | PG | Pb | 10 30 43.5 | -1.4 | |
| | baz=321 | | | | | | | |
| KU6 | | | | MSG | | 10 31 12.8 | | |
| | comp=Z,3.8nm,0.2s | | | | | | | |
| KU6 | | | | SG | Sb | 10 31 15.7 | -0.3 | |
| **KU6** | **Riekki** | **2.48** | **138** | PG | Pb | 10 30 43.5 | -1.4 | |
| | baz=321 | | | | | | | |
| KU6 | | | | MSG | | 10 31 12.8 | | |
| | comp=Z,3.8nm,0.2s | | | | | | | |
| KU6 | | | | SG | Sb | 10 31 15.7 | -0.3 | |
| **VADS** | **Vadso** | **2.54** | **28** | P | Pn | 10 30 42.1 | +0.1 | |
| VADS | | | | S | Sb | 10 31 15.9 | -1.8 | |
| **VADS** | **Vadso** | **2.54** | **28** | *eP* | Pn | 10 30 42.2 | +0.2 | |
| VADS | | | | IAML | | 10 31 16.6 | | |
| | comp=Z,3.4nm,0.3s | | | | | | | |
| **HAMF** | **Hammerfest** | **2.84** | **345** | *eS* | Sn | 10 31 17.2 | -3.7 | |
| **OUL** | **Oulu** | **2.85** | **180** | SG | Sb | 10 31 28.0 | +1.3 | |
| **OUL** | **Oulu** | **2.85** | **180** | SG | Sb | 10 31 28.0 | +1.3 | |
| **TRO** | **Tromso** | **3.05** | **307** | SG | Sb | 10 31 32.5 | +0.1 | |
| **TRO** | **Tromso** | **3.05** | **307** | SG | Sb | 10 31 32.5 | +0.1 | |
| **OBF4** | **Vikkela, Lumij** | **3.14** | **186** | PG | Pb | 10 30 55.9 | -0.2 | |
| **OBF4** | **Vikkela, Lumij** | **3.14** | **186** | SN | Pb | 10 30 55.9 | -0.2 | |
| **OBF4** | **Vikkela, Lumij** | **3.14** | **186** | PG | Pb | 10 30 55.9 | -0.2 | |
| **LVZ** | **Lovozero** | **3.32** | **86** | SN | Sn | 10 31 32.7 | -0.3 | |

*NOU **16** 10:33:34.6, 38˚.25S×176˚.21E, h198km, MLv3.5/8, North Island, New Zealand*
*WEL **16** 10:33:41.6, 38˚S±6˚×17˚6E±˚, h139km±12km, M2.9/54, MLv2.9/54, Error ellipse: s-maj=0.0km s-min=0.0km az=92.0*
**ISC 16 10:33:37.6**±1.8,**38˚41S**±0˚.05×**176˚07E**±0˚.05,
**h177**km±11km,**n107**,σ0**66**/106,**North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GRRZ** | **Galatos Road** | **0.06** | **28** | P | | **Pn** | **10 34 00.5** | **-0.6** |
| **WPRZ** | **Whakapapatarin** | **0.13** | **148** | P | | **Pn** | **10 34 00.4** | **-0.7** |
| **HSRZ** | **Hossack Road** | **0.17** | **55** | P | | **Pn** | **10 34 00.5** | **-0.6** |
| **HRRZ** | **Handcock Road** | **0.17** | **85** | P | | **Pn** | **10 34 00.4** | **-0.8** |
| **KUTZ** | **Kaahu Road** | **0.21** | **247** | P | | **Pn** | **10 34 00.6** | **-0.5** |
| **ALRZ** | **Allen Road** | **0.26** | **127** | P | | **Pn** | **10 34 00.7** | **-0.6** |
| **HLRZ** | **Highlands Stat** | **0.27** | **55** | P | | **Pn** | **10 34 01.2** | **-0.2** |
| **MRHZ** | **Matea Rd** | **0.51** | **148** | P | | **Pn** | **10 34 01.5** | **-0.6** |
| **RATZ** | **Rangitukua** | **0.52** | **207** | P | | **Pn** | **10 34 01.8** | **-0.3** |
| **MUGZ** | **Murupara** | **0.55** | **98** | P | | **Pn** | **10 34 01.4** | **-0.9** |
| **EDRZ** | **Edgecumbe** | **0.60** | **61** | P | | Pn | 10 34 07.2 | +4.6 |
| **KATZ** | **Kakaramea** | **0.64** | **207** | P | | **Pn** | **10 34 02.9** | **+0.1** |
| **OPRZ** | **Ohinepanea** | **0.68** | **34** | P | | **Pn** | **10 34 02.1** | **+0.8** |
| **MTHZ** | **Maungataniwha** | **0.75** | **127** | P | | **Pn** | **10 34 03.3** | **-0.1** |
| **NTVZ** | **North Tongarir** | **0.76** | **204** | P | | **Pn** | **10 34 03.7** | **+0.2** |
| **TMVZ** | **Te Maari** | **0.77** | **202** | P | | **Pn** | **10 34 03.6** | **+0.1** |
| **KRVZ** | **Karewarewa** | **0.77** | **206** | P | | **Pn** | **10 34 03.6** | **0.0** |
| **ETVZ** | **East Tongariro** | **0.78** | **201** | P | | **Pn** | **10 34 03.8** | **+0.2** |
| **WTVZ** | **West Tongariro** | **0.80** | **208** | P | | **Pn** | **10 34 03.8** | **+0.1** |
| **TOZ** | **Tahuroa Road** | **0.81** | **326** | P | | **Pn** | **10 34 03.5** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **0.83** | **157** | P | | **Pn** | **10 34 03.7** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **0.83** | **157** | P | | **Pn** | **10 34 03.7** | **-0.1** |
| **URZ** | **Urewera** | **0.83** | **80** | P | | **Pn** | **10 34 03.1** | **-0.7** |
| **URZ** | **Urewera** | **0.83** | **80** | P | | **Pn** | **10 34 02.9** | **-0.9** |
| **TWVZ** | **Taurewa** | **0.83** | **217** | P | | **Pn** | **10 34 04.0** | **+0.1** |
| **NMHZ** | **Naumai** | **0.90** | **141** | P | | **Pn** | **10 34 05.2** | **+0.9** |
| **FWVZ** | **Far West T-bar** | **0.94** | **205** | P | | **Pn** | **10 34 04.8** | **0.0** |
| **WHVZ** | **Whangaehu Hut** | **0.95** | **203** | P | | **Pn** | **10 34 05.2** | **+0.3** |
| **HIZ** | **Hauiti** | **0.96** | **263** | P | | **Pn** | **10 34 05.2** | **+0.5** |
| **HIZ** | **Hauiti** | **0.96** | **263** | P | | **Pn** | **10 34 05.1** | **+0.5** |
| **TRVZ** | **Turoa** | **0.98** | **204** | P | | **Pn** | **10 34 05.6** | **+0.5** |
| **WNVZ** | **Wahianoa** | **0.99** | **202** | P | | **Pn** | **10 34 05.5** | **+0.4** |
| **MOVZ** | **Moawhango** | **1.03** | **194** | P | | **Pn** | **10 34 05.3** | **0.0** |
| **KWHZ** | **Kaweka Forest** | **1.05** | **165** | P | | **Pn** | **10 34 05.9** | **+0.5** |
| **SNGZ** | **Shannon Statio** | **1.06** | **111** | P | | **Pn** | **10 34 06.0** | **+0.5** |
| **ARHZ** | **Aropaoanui** | **1.12** | **140** | P | | **Pn** | **10 34 06.8** | **+0.9** |
| **WHHZ** | **Waihua** | **1.13** | **127** | P | | **Pn** | **10 34 06.9** | **+0.9** |
| **MCHZ** | **McNeill Hill** | **1.15** | **155** | P | | **Pn** | **10 34 07.2** | **+1.1** |
| **MWZ** | **Matawai** | **1.15** | **87** | P | | **Pn** | **10 34 06.0** | **-0.2** |
| **VRZ** | **Vera Road** | **1.25** | **235** | P | | **Pn** | **10 34 08.1** | **+1.1** |
| **KRHZ** | **Kereru** | **1.26** | **169** | P | | **Pn** | **10 34 07.7** | **+0.6** |
| **RUGZ** | **Raukumara Rang** | **1.34** | **71** | P | | **Pn** | **10 34 07.0** | **-0.9** |
| **RIGZ** | **Rimuhau** | **1.36** | **103** | P | | **Pn** | **10 34 08.5** | **+0.6** |
| **TKGZ** | **Te Karaka** | **1.40** | **92** | P | | **Pn** | **10 34 09.1** | **+0.8** |
| **KNZ** | **Kokohu** | **1.40** | **117** | P | | **Pn** | **10 34 08.9** | **+0.6** |
| **CKHZ** | **Cape Kidnapper** | **1.48** | **148** | P | | **Pn** | **10 34 10.1** | **+1.1** |
| **MKAZ** | **Moumakai** | **1.49** | **331** | P | | **Pn** | **10 34 09.7** | **+0.5** |
| **HAZ** | **Te Kaha** | **1.50** | **65** | P | | **Pn** | **10 34 08.8** | **-0.4** |
| **PNHZ** | **Pukenui** | **1.51** | **176** | P | | **Pn** | **10 34 09.9** | **+0.5** |
| **TWGZ** | **Tauwhareparae** | **1.52** | **82** | P | | **Pn** | **10 34 10.3** | **+0.8** |
| **KAHZ** | **Kahuranaki** | **1.52** | **156** | P | | **Pn** | **10 34 10.6** | **+1.1** |
| **WAZ** | **Wanganui** | **1.59** | **212** | P | | **Pn** | **10 34 11.2** | **+1.1** |
| **MHGZ** | **Mahia Peninsul** | **1.62** | **118** | P | | **Pn** | **10 34 11.5** | **+1.1** |
| **PKGZ** | **Pakihiroa** | **1.67** | **72** | P | | **Pn** | **10 34 11.2** | **+0.2** |
| **LREZ** | **Lake Rotokare** | **1.68** | **231** | P | | **Pn** | **10 34 12.8** | **+1.8** |
| **CNGZ** | **Carnagh Statio** | **1.68** | **93** | P | | **Pn** | **10 34 12.2** | **+1.1** |
| **KUZ** | **Kuaotunu** | **1.68** | **350** | P | | **Pn** | **10 34 11.5** | **+0.4** |
| **WPHZ** | **Waipukurau** | **1.68** | **170** | P | | **Pn** | **10 34 11.8** | **+0.8** |
| **ETAZ** | **East Tamaki Re** | **1.71** | **328** | P | | **Pn** | **10 34 12.0** | **+0.7** |
| **PXZ** | **Pawanui** | **1.73** | **160** | P | | **Pn** | **10 34 12.5** | **+0.9** |
| **PUZ** | **Puketiti** | **1.75** | **80** | P | | **Pn** | **10 34 11.9** | **+0.1** |
| **AWAZ** | **Awhitu Peninsu** | **1.75** | **319** | P | | **Pn** | **10 34 12.6** | **+0.7** |
| **NEZ** | **North Egmont** | **1.77** | **240** | P | | **Pn** | **10 34 14.0** | **+1.9** |
| **MBAZ** | **Motutapu North** | **1.88** | **330** | P | | **Pn** | **10 34 14.0** | **+0.9** |
| **DVHZ** | **Dannevirke** | **1.89** | **178** | P | | **Pn** | **10 34 13.7** | **+0.5** |
| **PRHZ** | **Porangahau** | **1.91** | **167** | P | | **Pn** | **10 34 14.3** | **+0.9** |
| **WMGZ** | **Waiomatatini S** | **1.94** | **73** | P | | **Pn** | **10 34 14.1** | **+0.3** |
| **POWZ** | **Post Office Ro** | **2.00** | **187** | P | | **Pn** | **10 34 14.8** | **+0.5** |
| **ANWZ** | **Angora Road** | **2.08** | **171** | P | | **Pn** | **10 34 16.2** | **+1.0** |
| **PRWZ** | **Pori Road** | **2.15** | **182** | P | | **Pn** | **10 34 16.8** | **+0.8** |
| **BFZ** | **Birch Farm** | **2.28** | **177** | P | | **Pn** | **10 34 17.9** | **+0.5** |
| **BFZ** | **Birch Farm** | **2.28** | **177** | P | | **Pn** | **10 34 18.0** | **+0.5** |
| **MRZ** | **Mangatainoka R** | **2.29** | **189** | P | | **Pn** | **10 34 17.9** | **+0.3** |
| **TIWZ** | **Tintock** | **2.37** | **183** | P | | **Pn** | **10 34 19.1** | **+0.5** |
| **OGWZ** | **Otaki Gorge** | **2.51** | **196** | P | | **Pn** | **10 34 20.5** | **+0.4** |
| **HOWZ** | **Holdsworth Sta** | **2.53** | **190** | P | | **Pn** | **10 34 20.5** | **+0.1** |
| **KIW** | **Kapiti Island** | **2.61** | **200** | P | | **Pn** | **10 34 21.4** | **0.0** |
| **TMWZ** | **Te Maipa** | **2.70** | **183** | P | | **Pn** | **10 34 22.6** | **+0.1** |
| **MTW** | **Mount Morrison** | **2.78** | **189** | P | | **Pn** | **10 34 23.3** | **-0.2** |
| **CAW** | **Cannon Point** | **2.81** | **196** | P | | **Pn** | **10 34 23.8** | **+0.1** |
| **DUWZ** | **D'Urville Isla** | **2.91** | **214** | P | | **Pn** | **10 34 25.2** | **+0.2** |
| **TRWZ** | **Traveller** | **3.00** | **186** | P | | **Pn** | **10 34 26.1** | **0.0** |
| **PAWZ** | **Paruwai Farm** | **3.01** | **189** | P | | **Pn** | **10 34 25.2** | **-1.1** |
| **WEL** | **Wellington** | **3.05** | **199** | P | | **Pn** | **10 34 26.8** | **+0.2** |
| **MSWZ** | **Moikau Station** | **3.07** | **192** | P | | **Pn** | **10 34 26.6** | **-0.3** |
| **SNZO** | **South Karori** | **3.09** | **200** | P | | **Pn** | **10 34 27.1** | **+0.1** |
| **TCW** | **Tory Channel** | **3.12** | **206** | P | | **Pn** | **10 34 27.6** | **+0.1** |
| **BHW** | **Baring Head** | **3.14** | **197** | P | | **Pn** | **10 34 27.4** | **-0.3** |
| **PLWZ** | **Palliser** | **3.22** | **191** | P | | **Pn** | **10 34 28.3** | **-0.5** |
| **TUWZ** | **Tuamarina** | **3.44** | **208** | P | | **Pn** | **10 34 31.3** | **-0.1** |
| **NNZ** | **Nelson** | **3.49** | **216** | P | | **Pn** | **10 34 32.1** | **+0.1** |
| **TKNZ** | **Takaka Hill** | **3.56** | **221** | P | | **Pn** | **10 34 32.8** | **-0.1** |
| **QRZ** | **Quartz Range** | **3.65** | **227** | P | | **Pn** | **10 34 33.9** | **-0.2** |
| **QRZ** | **Quartz Range** | **3.65** | **227** | P | | **Pn** | **10 34 33.9** | **-0.2** |
| **BSWZ** | **Blackbirch Sta** | **3.71** | **206** | P | | **Pn** | **10 34 35.0** | **+0.1** |
| **MRNZ** | **Matariki Terra** | **3.93** | **219** | P | | **Pn** | **10 34 37.4** | **-0.3** |
| **THZ** | **Tophouse** | **4.14** | **215** | P | | **Pn** | **10 34 40.5** | **+0.1** |
| **KHZ** | **Kahutara** | **4.45** | **205** | P | | **Pn** | **10 34 44.1** | **-0.1** |
| **KHZ** | **Kahutara** | **4.45** | **205** | P | | **Pn** | **10 34 44.1** | **-0.1** |
| **GVZ** | **Greta Valley S** | **5.11** | **206** | P | | **Pn** | **10 34 52.4** | **-0.4** |
| **LTZ** | **Lake Taylor** | **5.24** | **212** | P | | **Pn** | **10 34 53.7** | **-0.9** |
| **OKCZ** | **Okains Bay** | **5.78** | **202** | P | | **Pn** | **10 35 01.0** | **-0.6** |
| **MQZ** | **McQueen's Vall** | **5.89** | **205** | P | | **Pn** | **10 35 01.2** | **-1.8** |
| **AKCZ** | **Akaroa Harbour** | **5.96** | **203** | P | | **Pn** | **10 35 02.8** | **-1.1** |
| **TMZ** | **Timaru** | **7.08** | **211** | P | | **Pn** | **10 35 18.0** | **-0.6** |
| **ODZ** | **Otahua Downs** | **7.78** | **210** | P | | **Pn** | **10 35 27.5** | **-0.3** |
| **ODZ** | **Otahua Downs** | **7.78** | **210** | P | | **Pn** | **10 35 27.2** | **-0.6** |

*CNRM **16** 10:34:09.8, 36˚.40N×7˚.63W, h61km, ML1.1*
*SFS **16** 10:34:09.8, 36˚.57N×7˚.66W, h22km, ML2.6/11, ML2.3/10, MLv2.3/11*
*MDD **16** 10:34:11.5±0.8, 36˚.60N×7˚.62W, h40km, mb_Lg2.5/6, Error ellipse: s-maj=7.6km s-min=3.7km az=14.0*
*INMG **16** 10:34:11.0±1.5, 36˚.60N×7˚.66W, h23km±5km, ML1.7, Error ellipse: s-maj=5.1km s-min=3.6km az=18.0*
**ISC 16 10:34:07.9**±1.2,**36˚50N**±0˚.03×**7˚61W**±0˚.03,**h27**km±13km,
**n43**,σ1**943/75**,**Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PBDV** | **Barranco-do-Ve** | **0.78** | **341** | *eP* | | **Pn** | **10 34 23.6** | **+0.3** |
| PBDV | | | | *eS* | | **Sb** | **10 34 32.7** | **-0.6** |
| PBDV | | | | A | | A | 10 34 38.0 | |
| | 11nm,0.3s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.78** | **341** | P | | **Pb** | **10 34 22.6** | **-0.4** |
| PBDV | | | | S | | **Sb** | **10 34 31.3** | **-2.0** |
| **PVAQ** | **Vaqueiros** | **0.91** | **355** | *eP* | | **Pn** | **10 34 25.4** | **+0.5** |
| PVAQ | | | | *eS* | | **Sb** | **10 34 36.3** | **-0.4** |
| PVAQ | | | | A | | A | 10 34 44.4 | |
| | 14nm,0.3s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.91** | **355** | P | | **Pn** | **10 34 27.7** | **+2.8** |
| **PVAQ** | **Vaqueiros** | **0.91** | **355** | S | | **Sn** | **10 34 41.9** | **+4.8** |
| **ARNO** | **Arenosillo** | **0.92** | **49** | S | | **Sn** | **10 34 39.5** | **+2.0** |
| **EGRO** | **El Granado** | **1.04** | **6** | P | | **Pn** | **10 34 27.3** | **+0.6** |
| EGRO | | | | S | | **Sb** | **10 34 39.6** | **-0.8** |
| **EGRO** | **El Granado** | **1.04** | **6** | P | | **Pb** | **10 34 27.8** | **+0.6** |
| EGRO | | | | S | | **Sb** | **10 34 39.7** | **-0.8** |
| **MORF** | **Marmelete** | **1.16** | **314** | *eP* | | **Pn** | **10 34 28.6** | **+0.1** |
| MORF | | | | *eS* | | **Sn** | **10 34 42.8** | **-0.6** |
| MORF | | | | A | | A | 10 34 48.0 | |
| | 16nm,0.2s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.16** | **303** | *eP* | | **Pn** | **10 34 29.0** | **+0.5** |
| PFVI | | | | *eS* | | **Sn** | **10 34 42.8** | **-0.7** |
| PFVI | | | | A | | A | 10 34 50.3 | |
| | 8.6nm,0.6s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.16** | **303** | P | | **Pn** | **10 34 28.4** | **-0.1** |
| PFVI | | | | S | | **Sn** | **10 34 42.0** | **-1.5** |
| **PFVI** | **Vila Bisbo** | **1.16** | **303** | P | | **Pb** | **10 34 29.9** | **+0.5** |
| **PFVI** | **Vila Bisbo** | **1.16** | **303** | S | | **Sb** | **10 34 46.9** | **+2.9** |
| **PCVE** | **Castro Verde** | **1.18** | **343** | *eP* | | **Pn** | **10 34 29.5** | **+0.8** |
| PCVE | | | | *eS* | | **Sn** | **10 34 43.0** | **-0.9** |
| PCVE | | | | A | | A | 10 34 50.6 | |
| | 13nm,0.4s | | | | | | | |
| **PCVE** | **Castro Verde** | **1.18** | **343** | P | | **Pn** | **10 34 29.4** | **+0.7** |
| PCVE | | | | S | | **Sn** | **10 34 43.1** | **-0.8** |
| **PTEO** | **Sao Teotonio** | **1.37** | **320** | *eP* | | **Pn** | **10 34 31.9** | **+0.6** |
| PTEO | | | | *eS* | | **Sn** | **10 34 47.3** | **-1.3** |
| PTEO | | | | A | | A | 10 35 01.4 | |
| | 6.8nm,0.6s | | | | | | | |
| **MESJ** | **Messejana** | **1.42** | **340** | *eP* | | **Pn** | **10 34 32.8** | **+0.8** |
| MESJ | | | | *eS* | | **Sn** | **10 34 48.8** | **-1.1** |
| MESJ | | | | A | | A | 10 34 59.9 | |
| | 8.9nm,0.3s | | | | | | | |
| **ESPR** | **Espera** | **1.46** | **75** | P | | **Pb** | **10 34 34.6** | **+0.2** |
| ESPR | | | | S | | **Sn** | **10 34 51.4** | **+0.7** |
| **ESPR** | **Espera** | **1.46** | **75** | P | | **Pb** | **10 34 34.4** | **+0.1** |
| ESPR | | | | S | | **Sn** | **10 34 51.1** | **+0.4** |
| **EMIN** | **Mina Concepcio** | **1.47** | **30** | S | | **Sn** | **10 34 49.6** | **-1.4** |
| EMIN | | | | P | | **Pn** | **10 34 34.0** | **+1.3** |
| **EMIN** | **Mina Concepcio** | **1.47** | **30** | P | | **Pb** | **10 34 36.0** | **+1.4** |
| EMIN | | | | S | | **Sn** | **10 34 50.4** | **-0.6** |
| **PBAR** | **Barrancos** | **1.73** | **15** | *eP* | | **Pn** | **10 34 37.5** | **+1.2** |
| PBAR | | | | *eS* | | **Sn** | **10 34 56.9** | **-0.6** |
| PBAR | | | | A | | A | 10 35 09.0 | |
| | 3.5nm,0.2s | | | | | | | |
| **PBAR** | **Barrancos** | **1.73** | **15** | P | | **Pb** | **10 34 38.2** | **-0.9** |
| PBAR | | | | S | | **Sn** | **10 34 58.3** | **+0.8** |
| **PNCL** | **Nicolau / Gran** | **1.77** | **336** | *eP* | | **Pn** | **10 34 37.8** | **+1.0** |
| PNCL | | | | *eS* | | **Sn** | **10 34 59.0** | **+0.6** |
| PNCL | | | | A | | A | 10 35 14.0 | |
| | 3.4nm,0.5s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.77** | **336** | P | | **Pn** | **10 34 36.4** | **-0.4** |
| PNCL | | | | S | | **Sn** | **10 34 58.2** | **-0.2** |
| **LIJA** | **Lijar** | **1.82** | **77** | P | | **Pn** | **10 34 39.4** | **+1.8** |
| LIJA | | | | S | | **Sn** | **10 35 00.5** | **+0.7** |
| **EVO** | **Evora** | **2.05** | **351** | *eS* | | **Sn** | **10 35 05.1** | **-0.3** |
| EVO | | | | A | | A | 10 35 25.6 | |
| | 4.9nm,0.1s | | | | | | | |
| **EBAD** | **Badajoz** | **2.30** | **12** | P | | **Pn** | **10 34 44.7** | **+0.6** |
| EBAD | | | | S | | **Sn** | **10 35 10.3** | **-1.2** |
| EBAD | | | | *i* | Vmb_Lg | | 10 35 26.4 | |
| **ECAB** | **El Cabril** | **2.35** | **47** | P | | **Pn** | **10 34 46.1** | **+1.3** |
| ECAB | | | | S | | **Sn** | **10 35 12.1** | **-0.7** |
| **ECAB** | **El Cabril** | **2.35** | **47** | P | | **Pn** | **10 34 46.4** | **+1.6** |
| ECAB | | | | S | | **Sn** | **10 35 11.0** | **-1.8** |
| ECAB | | | | *i* | Vmb_Lg | | 10 35 14.5 | |
| **PESTR** | **Estremoz** | **2.36** | **0** | *eS* | | **Sn** | **10 35 11.7** | **-1.4** |
| PESTR | | | | A | | A | 10 35 31.6 | |
| | 2.7nm,0.3s | | | | | | | |
| **PMTG** | **Montargil** | **2.61** | **349** | *eP* | | **Pn** | **10 34 49.9** | **+1.5** |
| PMTG | | | | *eS* | | **Sn** | **10 35 18.6** | **-0.6** |
| PMTG | | | | A | | A | 10 35 30.5 | |
| | 2.4nm,1.1s | | | | | | | |
| **EGOR** | **Sierra Gorda,** | **2.87** | **77** | P | | **Pb** | **10 34 55.8** | **-2.8** |
| EGOR | | | | S | | **Sn** | **10 35 24.5** | **-1.4** |
| EGOR | | | | *i* | Vmb_Lg | | 10 35 35.2 | |
| **PMRV** | **Marv??o** | **2.93** | **3** | *eP* | | **Pn** | **10 34 54.9** | **+2.1** |
| PMRV | | | | *eS* | | **Sn** | **10 35 26.1** | **-1.0** |
| **EADA** | **Adamuz** | **2.93** | **55** | P | | **Pn** | **10 34 54.3** | **+1.4** |
| EADA | | | | S | | **Sn** | **10 35 25.8** | **-1.4** |
| **EADA** | **Adamuz** | **2.93** | **55** | P | | **Pn** | **10 34 54.6** | **+1.7** |
| EADA | | | | S | | **Sn** | **10 35 25.8** | **-1.4** |
| EADA | | | | *i* | Vmb_Lg | | 10 35 28.9 | |
| **ELGU** | **Los Guajares,** | **3.22** | **82** | P | | **Pn** | **10 34 60.0** | **+3.1** |
| ELGU | | | | S | | **Sn** | **10 35 33.6** | **-0.8** |
| ELGU | | | | *i* | Vmb_Lg | | 10 35 49.2 | |
| **PAB** | **San Pablo** | **3.98** | **39** | P | | **Pn** | **10 35 08.2** | **+0.8** |
| PAB | | | | S | | **Sn** | **10 35 49.3** | **-3.9** |
| PAB | | | | *i* | Vmb_Lg | | 10 35 52.0 | |
| **MD31** | **MD31** | **4.32** | **146** | P | | **Pn** | **10 35 13.0** | **+1.0** |
| **MD31** | **MD31** | **4.32** | **146** | S | | **Sn** | **10 36 01.0** | **-0.5** |
| **MDT** | **Midelt** | **4.43** | **145** | P | | **Pn** | **10 35 14.0** | **+0.4** |
| **MDT** | **Midelt** | **4.43** | **145** | S | | **Sn** | **10 36 03.5** | **-0.8** |
| **ETOB** | **Tobarra** | **5.27** | **64** | P | | **Pn** | **10 35 25.2** | **+0.2** |
| ETOB | | | | S | | **Sn** | **10 36 23.2** | **-1.7** |

*IDC **16** 10:40:57.2±2.6, 48˚.12N×155˚.19E, h0km, mb3.4/2, mbtmp3.4/3, ML2.5/1, MS2.4/2, Error ellipse: s-maj=67.1km s-min=41.6km az=173.0*
*KRSC **16** 10:41:04.2±0.8, 48˚.53N×156˚.27E, h25km±12km, Ml3.9*
**ISC 16 10:41:06.2**±2.8,**48˚5N**±0˚.2×**155˚7E**±0˚.3,**h36**km,**n13**,
σ1**919/13**,**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.25** | **7** | *eP* | | **Pn** | **10 41 40.3** | **-0.4** |
| SKR | | | | *eS* | | **Sn** | **10 42 06.8** | **-0.4** |
| **KDTR** | **Khodutka, Kamc** | **3.69** | **24** | *eP* | | **Pn** | **10 42 00.6** | **+0.1** |
| KDTR | | | | *eS* | | **Sn** | **10 42 41.4** | **-1.2** |
| **ASAK** | **Asacha** | **4.17** | **19** | *eP* | | **Pn** | **10 42 08.3** | **+1.0** |
| **MTVR** | **Mutnovka** | **4.33** | **20** | *eP* | | **Pn** | **10 42 10.3** | **+0.8** |
| **GRL** | **Gorelyy** | **4.37** | **19** | *eP* | | **Pn** | **10 42 11.3** | **+1.2** |
| **KRMR** | **Karymshinskiy** | **4.64** | **18** | *eP* | | **Pn** | **10 42 14.8** | **+1.2** |
| **PETK** | **Petropavlovsk-** | **4.83** | **14** | Pn | | **Pn** | **10 42 16.9** | **+0.7** |
| | 0.9nm,0.3s,baz=176,slow=12,SNR=18 | | | | | | | |
| PETK | | | | LR | | LR | 10 44 31.8 | |
| | comp=Z,38nm,18.8s,baz=163,slow=41 | | | | | | | |
| | 4.2nm,0.6s | | | | | | | |
| **DALK** | **Dalny** | **4.97** | **22** | *eP* | | **Pn** | **10 42 19.0** | **+0.9** |
| **KOK** | **Koryaka** | **5.18** | **20** | *eP* | | **Pn** | **10 42 23.1** | **+1.9** |
| **GNL** | **Ganaly** | **5.43** | **14** | *eP* | | **Pn** | **10 42 26.2** | **+1.6** |
| **MKAR** | **Makanchi Array** | **47.72** | **297** | P | | P | 10 49 34.2 | -4.9 |
| | 0.4nm,0.7s,baz=68,slow=12,SNR=2.5 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **54.47** | **257** | LR | | LR | 11 12 58.9 | |
| | comp=Z,3.4nm,20.9s,baz=265,slow=36 | | | | | | | |
| **TXAR** | **Lajitas Array** | **75.14** | **63** | P | | **P** | **10 52 44.0** | **-0.7** |
| | 0.3nm,0.7s,baz=309,slow=5.7,SNR=4.4 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |

*IDC **16** 10:42:02.6±1.5, 3˚.02S×140˚.02E, h0km, mb3.7/4, mbtmp3.7/5, ML3.6/1, MS3.7/2, Error ellipse: s-maj=85.9km s-min=24.7km az=98.0*
**ISC 16 10:42:09.3**±1.1,**3˚1S**±0˚.1×**139˚9E**±0˚.1,**h54**km,**n12**,
σ0**582/7**,**mb3.9/4**,**Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GENI** | **Genyem** | **0.59** | **23** | P | | **Pn** | **10 42 21.3** | **-0.6** |
| **TABU** | **Tabubil** | **2.47** | **149** | P | | Pn | 10 42 55.6 | +8.4 |
| **FAKI** | **Fak Fak** | **7.68** | **271** | P | | **Pn** | **10 43 58.2** | **-0.4** |
| **MISM** | **Misima Island** | **14.83** | **121** | P | | Pn | 10 45 26.9 | -9.0 |
| **WRA** | **Warramunga Arr** | **17.57** | **198** | P | | **Pn** | **10 46 09.6** | **-1.0** |
| | 0.2nm,0.3s,baz=16,slow=12,SNR=11 | | | | | | | |
| | 0.8nm,0.6s | | | | | | | |
| **TOLI2** | **Tolitoli** | **19.61** | **282** | P | | P | 10 46 25.6 | -7.8 |
| **ASAR** | **Alice Springs** | **21.22** | **195** | P | | **P** | **10 46 51.8** | **+1.0** |
| | 1.0nm,0.9s,baz=19,slow=9.6,SNR=5.8 | | | | | | | |
| | 1.0nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **28.63** | **177** | LR | | LR | 11 01 11.5 | |
| | comp=Z,92nm,19.1s,baz=221,slow=40 | | | | | | | |
| **KLR** | **Kul'dur** | **52.64** | **353** | P | | **P** | **10 51 18.4** | **+0.5** |
| | 1.5nm,0.7s,baz=153,slow=9.0,SNR=4.6 | | | | | | | |
| | 1.5nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **58.63** | **334** | P | | **P** | **10 52 01.2** | **+0.1** |
| | 0.3nm,0.3s,baz=123,slow=5.3,SNR=2.2 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |
| **KDAK** | **Kodiak Island** | **80.86** | **30** | LR | | LR | 11 22 52.9 | |
| | comp=Z,67nm,21.9s,baz=230,slow=30 | | | | | | | |
| **ILAR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 7.6nm,0.5s | | | | | | | |
| **KDAK** | **Kodiak Island** | **45.68** | **43** | P | **P** | **10 52 23.6** | **-1.3** |
| KDAK | | | | IAmb | IAmb | 10 52 47.9 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **IL31** | | **47.98** | **33** | P | **P** | **10 52 43.3** | **+0.6** |
| IL31 | | | | IAmb | IAmb | 10 52 50.1 | |
| | comp=Z,2.7nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **47.98** | **33** | P | **P** | **10 52 42.7** | **-0.1** |
| | comp=Z,0.5nm,0.7s,baz=267,slow=5.9,SNR=8.4 | | | | | | |
| ILAR | | | | pP | **pP** | **10 52 56.6** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=270,slow=6.8,SNR=4.1 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **49.86** | **311** | P | **P** | **10 52 57.2** | **-0.2** |
| | comp=Z,1.6nm,0.5s,baz=84,slow=9.2,SNR=7.9 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.64** | **188** | P | **P** | **10 54 01.1** | **-0.4** |
| | comp=Z,0.7nm,0.7s,baz=5.2,slow=6.8,SNR=7.1 | | | | | | |
| WRA | | | | pP | **pP** | **10 54 14.9** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=6.0,slow=7.2,SNR=5.5 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **62.37** | **188** | P | **P** | **10 54 25.7** | **-1.1** |
| | comp=Z,0.4nm,0.8s,baz=4.5,slow=4.7,SNR=2.9 | | | | | | |
| ASAR | | | | pP | **pP** | **10 54 40.7** | **+0.1** |
| | comp=Z,0.7nm,0.6s,baz=15,slow=12,SNR=5.2 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **67.65** | **332** | P | **P** | **10 55 00.2** | **-0.5** |
| | comp=Z,1.4nm,0.7s,baz=5.7,slow=5.7,SNR=4.2 | | | | | | |
| FINES | | | | LR | LR | 11 25 59.7 | |
| | comp=Z,17nm,19.3s,baz=67,slow=37 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **70.22** | **310** | P | **P** | **10 55 17.7** | **+0.7** |
| | comp=Z,3.1nm,0.8s,baz=85,slow=3.1,SNR=5.0 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **72.86** | **336** | P | **P** | **10 55 32.7** | **+0.1** |
| | comp=Z,1.1nm,0.5s,baz=46,slow=6.4,SNR=7.1 | | | | | | |
| HFS | | | | LR | LR | 11 33 21.2 | |
| | comp=Z,18nm,18.3s,baz=172,slow=40 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **72.93** | **337** | P | **P** | **10 55 32.4** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=39,slow=6.0,SNR=3.4 | | | | | | |
| NOA | | | | LR | LR | 11 31 28.3 | |
| | comp=Z,3.7nm,18.4s,baz=70,slow=39 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **73.34** | **322** | P | **P** | **10 55 34.6** | **-1.0** |
| | comp=Z,0.8nm,0.5s,baz=46,slow=6.2,SNR=5.3 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **76.29** | **46** | P | **P** | **10 55 54.1** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=347,slow=1.9,SNR=2.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **RPZ** | **Rata Peaks** | **86.04** | **159** | LR | LR | 11 33 42.8 | |
| | comp=Z,85nm,18.8s,baz=114,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **88.85** | **53** | P | **P** | **10 56 58.6** | **+0.1** |
| | comp=Z,0.1nm,0.7s,baz=339,slow=10.0,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.7s | | | | | | |

**IDC 16 11:01:50.8±4.7, 49.73S×110.73E, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=190.9km s-min=22.8km az=108.0, Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W2** | **Cape Leeuwin H** | **15.03** | **11** | T | T | 11 21 05.2 | |
| | baz=186,slow=74,SNR=24 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **15.04** | **11** | T | T | 11 21 03.4 | |
| | baz=186,slow=74,SNR=32 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **15.04** | **11** | T | T | 11 21 05.8 | |
| | baz=186,slow=74,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **31.71** | **43** | P | P | 11 08 15.7 | -0.6 |
| | 0.7nm,0.8s,baz=208,slow=8.0,SNR=13 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **33.78** | **162** | P | P | 11 08 34.0 | +0.3 |
| | 0.4nm,0.6s,baz=291,slow=3.3,SNR=4.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.18** | **41** | P | P | 11 08 46.2 | -0.2 |
| | 1.3nm,0.8s,baz=204,slow=10,SNR=12 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **40.40** | **180** | P | P | 11 09 29.2 | -1.1 |
| | 1.0nm,0.9s,baz=257,slow=0.9,SNR=6.2 | | | | | | |
| | 1.0nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **146.97** | **115** | PKPbc | PKPab | 11 21 36.4 | -0.3 |
| | 0.1nm,0.7s,baz=198,slow=4.7,SNR=1.3 | | | | | | |

*IDC **16** 11:12:04.0±0.7, 51.37N×178.33W, h0km, mb3.8/14, mbtmp3.9/15, ML4.4/1, MS3.1/12, Error ellipse: s-maj=25.0km s-min=15.9km az=171.0*
*AEIC **16** 11:12:10.1±1.8, 51.29N±0.09×178.03W±0.06, h40km±8km, Error ellipse: s-maj=13.3km s-min=4.6km az=163.0*
*NEIC **16** 11:12:11.6±1.6, 51.4N±0.1×178.10W±0.06, h50km±10km, mb3.9/24, ML3.8(AEIC), Error ellipse: s-maj=16.3km s-min=4.9km az=170.0*
**ISC 16 11:12:10.2±0.6, 51.29N±0.09×178.11W±0.04, h45km, n94, σ1s11/77, mb3.9/15, MS3.0/9, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TASE** | **Tanaga Southea** | **0.55** | **4** | | **Pn** | **11 12 22.1** | **+0.3** |
| **TANO** | **Tanaga North** | **0.62** | **359** | | **Pn** | **11 12 23.3** | **+0.5** |
| **GAEA** | **Gareloi East** | **0.64** | **321** | | **Pn** | **11 12 23.6** | **+0.8** |
| **GANO** | **Gareloi North** | **0.69** | **321** | | **Pn** | **11 12 24.1** | **+0.5** |
| **KIMD** | **Kanaga Island** | **0.72** | **49** | | **Pn** | **11 12 23.7** | **-0.3** |
| KIMD | | | | | **Sn** | **11 12 33.6** | **-0.3** |
| **KIWB** | **Kanaga Island** | **0.82** | **46** | | **Pn** | **11 12 25.0** | **-0.4** |
| **KIWB** | **Kanaga Island** | **0.82** | **46** | | **Sn** | **11 12 36.4** | **0.0** |
| **KICM** | **Kanaga Island** | **0.85** | **42** | | **Pn** | **11 12 25.7** | **0.0** |
| **KIRH** | **Kanaga Island** | **0.88** | **46** | | **Pn** | **11 12 26.0** | **-0.1** |
| **ADK** | **Adak** | **1.07** | **56** | P | **Pn** | **11 12 28.7** | **+0.1** |
| **ADK** | **Adak** | **1.07** | **56** | | **Pn** | **11 12 28.5** | **-0.2** |
| ADK | | | | | **Sn** | **11 12 42.0** | **-0.3** |
| **GSCK** | **Great Sitkin C** | **1.41** | **58** | | **Pn** | **11 12 33.6** | **+0.2** |
| **GSTD** | **Great Sitkin T** | **1.44** | **57** | | **Sn** | **11 12 52.1** | **+0.5** |
| **GSMY** | **Great Sitkin M** | **1.48** | **59** | | **Pn** | **11 12 34.6** | **+0.2** |
| **GSTR** | **Great Sitkin T** | **1.51** | **57** | | **Pn** | **11 12 35.2** | **+0.5** |
| **AMKA** | **Amchitka** | **1.63** | **274** | Pn | **Pn** | **11 12 36.7** | **+0.4** |
| **AMKA** | **Amchitka** | **1.63** | **274** | | **Sn** | **11 12 58.1** | **+2.0** |
| **KOKL** | **Mount Kliuchef** | **2.63** | **65** | | **Pn** | **11 12 50.3** | **+0.1** |
| **SHEM** | **Shemya Is, Ala** | **5.03** | **290** | Pn | **Pn** | **11 13 23.8** | **+0.9** |
| | 4.8nm,0.3s,baz=108,slow=2.3,SNR=6.1 | | | | | | |
| SHEM | | | | Sn | **Sn** | **11 14 18.7** | **-1.0** |
| | 2.2nm,0.3s,baz=262,slow=15,SNR=1.0 | | | | | | |
| SHEM | | | | LR | LR | 11 15 10.9 | |
| | comp=Z,116nm,18.8s,baz=94,slow=38 | | | | | | |
| **CLES** | **Cleveland East** | **5.29** | **70** | Pn | **Pn** | **11 13 27.7** | **+1.1** |
| **NIKH** | **Nikolski High** | **5.94** | **70** | P | **Pn** | **11 13 38.1** | **+2.6** |
| **NIKH** | **Nikolski High** | **5.94** | **70** | | **Pn** | **11 13 36.5** | **+1.0** |
| **MAPS** | **Pakushin South** | **7.26** | **65** | | **Pn** | **11 13 55.4** | **+1.9** |
| **UNV** | **Unalaska Valle** | **7.52** | **66** | P | **Pn** | **11 13 58.7** | **+1.6** |
| | 20nm,1.2s | | | | | | |
| **UNV** | **Unalaska Valle** | **7.52** | **66** | | **Pn** | **11 13 59.4** | **+2.3** |
| **AKBBA** | **Akutan Broad B** | **7.91** | **64** | | **Pn** | **11 14 05.9** | **+3.4** |
| **CNBA** | **Chernabura Isl** | **11.68** | **65** | Pn | **Pn** | **11 14 54.6** | **+0.6** |
| **O14K** | **Tigyukauivet M** | **12.45** | **44** | Pn | **Pn** | **11 15 06.1** | **+1.6** |
| **CHGN** | **Chignik** | **12.66** | **59** | Pn | **Pn** | **11 15 06.4** | **-0.9** |
| **O16K** | **Kokwok River B** | **14.03** | **46** | Pn | **Pn** | **11 15 26.7** | **+0.7** |
| **PLK4** | **Peulik 4** | **14.11** | **55** | Pn | **Pn** | **11 15 28.0** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **14.93** | **286** | LR | LR | 11 22 17.8 | |
| | comp=Z,30nn,18.4s,baz=85,slow=42 | | | | | | |
| **SII** | **Sitkinak Islan** | **15.01** | **60** | P | **Pn** | **11 15 40.4** | **+1.4** |
| | 20nm,0.9s | | | | | | |
| **M17K** | **Holitna River** | **15.21** | **40** | P | **P** | **11 15 45.0** | **-0.9** |
| **O18K** | **Koktuh Hills** | **15.46** | **47** | P | **P** | **11 15 48.0** | **-0.7** |
| O18K | | | | IAmb | IAmb | 11 16 14.2 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **OHAK** | **Old Harbor** | **15.62** | **58** | | **Pn** | **11 15 43.6** | **-3.3** |
| OHAK | | | | IAmb | IAmb | 11 15 54.5 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **K17K** | **Iditarod** | **15.64** | **35** | P | **Pn** | **11 15 46.2** | **-1.0** |
| **J17K** | **VABM Dome** | **15.80** | **33** | P | **P** | **11 15 51.9** | **-0.5** |
| J17K | | | | IAmb | IAmb | 11 16 01.9 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **L18K** | **Granite Mounta** | **15.96** | **38** | P | **Pn** | **11 15 53.0** | **+1.7** |
| L18K | | | | IAmb | IAmb | 11 16 07.7 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **16.11** | **56** | P | **Pn** | **11 15 50.8** | **-2.4** |
| KDAK | | | | IAmb | IAmb | 11 16 13.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **16.11** | **56** | Pn | **Pn** | **11 15 51.3** | **-1.8** |
| | comp=Z,1.5nm,0.3s,baz=249,slow=6.3,SNR=22 | | | | | | |
| | comp=Z,3.5nm,0.3s | | | | | | |
| **SYI** | **Shuyak Island** | **16.41** | **54** | P | **Pn** | **11 15 57.3** | **+0.4** |
| **L19K** | **White Mountain** | **16.67** | **40** | P | **P** | **11 16 02.6** | **+0.5** |
| **J19K** | **Poorman** | **17.38** | **34** | P | **Pn** | **11 16 09.8** | **+0.8** |
| J19K | | | | IAmb | IAmb | 11 16 37.1 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **19.15** | **38** | P | **P** | **11 16 29.7** | **+0.4** |
| **H21K** | **Melozitna Rive** | **19.34** | **32** | | **P** | **11 16 32.0** | **+0.6** |
| H21K | | | | IAmb | IAmb | 11 16 37.4 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **I21K** | **Tanana** | **19.35** | **34** | IAmb | IAmb | 11 16 36.6 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **MA2** | **Magadan** | **19.35** | **307** | LR | LR | 11 23 19.8 | |
| | comp=Z,64nn,19.2s,baz=94,slow=35 | | | | | | |
| **SEY** | **Seymchan** | **19.60** | **318** | P | **Pn** | **11 16 35.9** | **0.0** |
| | comp=Z,1.1nm,0.6s,baz=139,slow=20,SNR=3.3 | | | | | | |
| **MLY** | **Manley** | **19.71** | **35** | P | **P** | **11 16 35.7** | **+0.2** |
| MLY | | | | IAmb | IAmb | 11 16 40.1 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **19.77** | **46** | P | **P** | **11 16 35.8** | **-0.3** |
| **F21K** | **Alatna River** | **20.09** | **28** | P | **P** | **11 16 40.9** | **+1.3** |
| F21K | | | | IAmb | IAmb | 11 16 41.9 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **DHY** | **Denali Highway** | **20.17** | **42** | P | **P** | **11 16 40.6** | **0.0** |
| **I23K** | **Minto, Yukon-K** | **20.28** | **36** | IAmb | IAmb | 11 17 00.1 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **20.61** | **37** | P | **P** | **11 16 45.2** | **0.0** |
| **CCB** | **Clear Creek Bu** | **20.63** | **38** | P | **P** | **11 16 45.1** | **-0.3** |
| **IL31** | | **21.04** | **38** | P | **P** | **11 16 49.2** | **-0.6** |
| **ILAR** | **Eielson Array** | **21.04** | **38** | P | **P** | **11 16 49.5** | **-0.4** |
| | comp=Z,0.7nm,0.7s,baz=237,slow=8.9,SNR=9.6 | | | | | | |
| ILAR | | | | PcP | **PcP** | **11 20 55.0** | **+0.1** |
| | comp=Z,0.4nm,0.5s,baz=282,slow=3.3,SNR=9.5 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **L26K** | **Log Cabin Wild** | **21.89** | **44** | P | **P** | **11 16 58.8** | **-0.2** |
| L26K | | | | IAmb | IAmb | 11 17 13.0 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **27.28** | **35** | LR | LR | 11 30 07.4 | |
| | comp=Z,23nm,18.6s,baz=282,slow=40 | | | | | | |
| **YAK** | **Yakutsk** | **29.80** | **311** | LR | LR | 11 29 47.8 | |
| | comp=Z,38nn,18.8s,baz=83,slow=36 | | | | | | |
| **BBB** | **Bella Bella** | **30.48** | **68** | LR | LR | 11 29 54.2 | |
| | comp=Z,34nn,18.0s,baz=358,slow=35 | | | | | | |
| **TIXI** | **Tiksi** | **30.93** | **331** | LR | LR | 11 31 13.8 | |
| | comp=Z,32nn,18.4s,baz=320,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **31.62** | **286** | LR | LR | 11 30 55.8 | |
| | comp=Z,30nn,20.7s,baz=112,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.64** | **206** | T | T | 11 54 35.9 | |
| | baz=17,slow=76,SNR=296 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.65** | **206** | T | T | 11 54 37.9 | |
| | baz=17,slow=76,SNR=394 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.66** | **206** | T | T | 11 54 38.4 | |
| | baz=17,slow=76,SNR=283 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.74** | **278** | P | **P** | **11 18 45.2** | **-1.9** |
| | comp=Z,2.6nm,0.6s,baz=60,slow=11,SNR=6.5 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.20** | **262** | LR | LR | 11 32 35.8 | |
| | comp=Z,19nm,19.3s,baz=108,slow=36 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.86** | **206** | T | T | 11 56 10.5 | |
| | baz=17,slow=76,SNR=856 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.87** | **206** | T | T | 11 56 11.8 | |
| | baz=17,slow=76,SNR=528 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.87** | **206** | T | T | 11 56 12.1 | |
| | baz=17,slow=76,SNR=519 | | | | | | |
| **NVAR** | **Mina Array Bea** | **43.13** | **83** | P | **P** | **11 20 07.7** | **+1.5** |
| | comp=Z,0.4nm,0.8s,baz=284,slow=7.4,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **45.92** | **73** | P | **P** | **11 20 29.6** | **+1.2** |
| | comp=Z,2.0nm,0.5s,baz=325,slow=2.8,SNR=38 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **47.08** | **297** | LR | LR | 11 40 59.3 | |
| | comp=Z,47nn,18.2s,baz=80,slow=37 | | | | | | |
| **ZALV** | **Zalvo Beam** | **54.41** | **314** | PcP | **PcP** | **11 22 36.4** | **+1.0** |
| | comp=Z,1.2nm,0.5s,baz=25,slow=2.2,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **58.24** | **82** | P | **P** | **11 22 00.4** | **+0.5** |
| | comp=Z,0.3nm,0.5s,baz=301,slow=5.9,SNR=4.8 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.25** | **350** | P | **P** | **11 21 59.5** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=31,slow=8.6,SNR=8.1 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.50** | **314** | P | **P** | **11 22 06.7** | **-1.6** |
| | comp=Z,0.3nm,0.4s,baz=44,slow=6.8,SNR=3.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.43** | **309** | P | **P** | **11 22 14.2** | **-0.6** |
| | comp=Z,0.3nm,0.4s,baz=55,slow=7.1,SNR=4.6 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.24** | **320** | P | **P** | **11 22 20.2** | **+0.1** |
| | comp=Z,1.5nm,0.4s,baz=51,slow=6.5,SNR=10 | | | | | | |
| BVAR | | | | PcP | **PcP** | **11 23 02.0** | **-0.4** |
| | comp=Z,0.8nm,0.5s,baz=72,slow=4.7,SNR=3.8 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **KIRV** | **Kirov** | **63.84** | **335** | LR | LR | 11 52 49.2 | |
| | comp=Z,40nn,18.5s,baz=46,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **65.96** | **348** | P | **P** | **11 22 50.6** | **-0.5** |
| | comp=Z,0.3nm,0.3s,baz=55,slow=5.3,SNR=1.5 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **67.77** | **355** | LR | LR | 11 54 53.2 | |
| | comp=Z,4.8nm,18.9s,baz=90,slow=38 | | | | | | |
| **HFS** | **Hagfors** | **68.52** | **354** | P | **P** | **11 23 06.2** | **-1.2** |
| | comp=Z,0.7nm,0.4s,baz=304,slow=3.3,SNR=6.4 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **71.45** | **276** | P | **P** | **11 23 25.5** | **-0.5** |
| | comp=Z,0.9nm,0.3s,baz=21,slow=7.4,SNR=5.1 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.25** | **224** | P | **P** | **11 24 26.4** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=31,slow=5.9,SNR=3.5 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **85.72** | **223** | P | **P** | **11 24 45.0** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=23,slow=5.7,SNR=11 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.83** | **0** | PKP | **PKiKP** | **11 30 47.7** | **-0.2** |
| | comp=Z,0.2nm,0.4s,baz=8.8,slow=2.3,SNR=2.3 | | | | | | |
| **H03N2** | **Juan Fernandez** | **120.70** | **106** | T | T | 13 43 26.1 | |
| | baz=317,slow=77,SNR=29 | | | | | | |
| **H03N1** | **Juan Fernandez** | **120.72** | **106** | T | T | 13 43 29.0 | |
| | baz=317,slow=77,SNR=37 | | | | | | |
| **H03N3** | **Juan Fernandez** | **120.72** | **106** | T | T | 13 43 29.0 | |
| | baz=317,slow=77,SNR=25 | | | | | | |
| **USHA** | **Ushuaia** | **139.21** | **123** | PKP | **PKPdf** | **11 31 31.2** | **+0.3** |
| | comp=Z,16nn,0.4s,baz=199,slow=1.4,SNR=3.2 | | | | | | |
| **BOSA** | **Boshof** | **151.35** | **313** | PKPbc | **PKPbc** | **11 31 59.4** | **+0.6** |
| | comp=Z,2.0nm,0.5s,baz=55,slow=1.8,SNR=7.6 | | | | | | |

*TAP **16** 11:15:43.8, 24.62N×122.88E, h75km, ML2.7, D*
*JMA **16** 11:15:43.5±0.1, 24.3N×122.9E±0.6, h80km±1km, MV1.9/10, NW OFF ISHIGAKIJIMA IS*
**ISC 16 11:15:44.2±1.4, 24.49N±0.04×122.92E±0.03, h78km±7km, n74, σ0s94/140, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.04** | **150** | *e*P | **Pn** | **11 15 54.8** | **-0.6** |
| JYNG | | | | S | **Sn** | **11 16 03.7** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.08** | **107** | *i* P | **Pn** | **11 15 55.2** | **-0.2** |
| | baz=149 | | | | | | |
| YOJ | | | | *i* S | **Sn** | **11 16 03.8** | **+0.1** |
| | baz=149 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.08** | **107** | P | **Pn** | **11 15 55.1** | **-0.2** |
| YOJ | | | | *e*S | **Sn** | **11 16 03.5** | **-0.2** |
| **EOS3** | **EOS3** | **0.59** | **250** | P | **Pn** | **11 15 58.8** | **+0.4** |
| | baz=236 | | | | | | |
| EOS3 | | | | S | **Sn** | **11 16 10.6** | **+1.7** |
| | baz=236 | | | | | | |
| **EOS2** | **EOS2** | **0.63** | **264** | P | **Pn** | **11 15 58.9** | **0.0** |
| | baz=260 | | | | | | |
| EOS2 | | | | S | **Sn** | **11 16 10.3** | **+0.5** |
| | baz=260 | | | | | | |
| **EOS4** | **EOS4** | **0.66** | **237** | *e*P | **Pn** | **11 16 00.3** | **+1.4** |
| | baz=226 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **11 16 12.1** | **+2.3** |
| | baz=226 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.75** | **101** | P | **Pn** | **11 16 00.2** | **-0.1** |
| IRIF | | | | S | **Sn** | **11 16 12.9** | **+0.7** |
| **TWC** | **Suao** | **0.99** | **277** | P | **Pn** | **11 16 01.9** | **-1.0** |
| | baz=276 | | | | | | |
| TWC | | | | *i* S | **Sn** | **11 16 14.6** | **-2.3** |
| | baz=276 | | | | | | |
| **EWUT** | **Wuta** | **1.04** | **268** | *e*P | **Pn** | **11 16 04.2** | **+0.5** |
| | baz=260 | | | | | | |
| EWUT | | | | S | **Sn** | **11 16 17.6** | **-0.6** |
| | baz=260 | | | | | | |
| **ENA** | **Nanau** | **1.08** | **267** | *i* P | **Pn** | **11 16 03.5** | **-0.6** |
| | baz=259 | | | | | | |
| ENA | | | | *e*S | **Sn** | **11 16 18.8** | **-0.2** |
| | baz=259 | | | | | | |
| **EAHA** | **Aohua** | **1.09** | **262** | *i* P | **Pn** | **11 16 04.0** | **-0.3** |
| | baz=254 | | | | | | |
| EAHA | | | | *e*S | **Sn** | **11 16 19.8** | **+0.5** |
| | baz=254 | | | | | | |
| **TIPB** | **Shuangxi** | **1.11** | **296** | *e*P | **Pn** | **11 16 03.7** | **-0.8** |
| | baz=284 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.12** | **96** | *e*P | **Pn** | **11 16 04.5** | **0.0** |
| JIJ | | | | *e*S | **Sn** | **11 16 19.8** | **0.0** |
| **SXI1** | **Grass Mountain** | **1.13** | **303** | *i* P | **Pn** | **11 16 04.0** | **-0.8** |
| | baz=296 | | | | | | |
| **TWE** | **Neicheng** | **1.17** | **282** | *e*P | **Pn** | **11 16 04.4** | **-0.7** |
| | baz=281 | | | | | | |
| TWE | | | | *e*S | **Sn** | **11 16 21.2** | **+0.3** |
| | baz=281 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.19** | **300** | P | **Pn** | **11 16 04.7** | **-0.8** |
| | baz=285 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.19** | **300** | *e*P | **Pn** | **11 16 05.2** | **-0.3** |
| | baz=286 | | | | | | |
| WFSB | | | | *e*S | **Sn** | **11 16 22.2** | **+0.7** |
| | baz=286 | | | | | | |
| **ETL** | **Fush Village** | **1.23** | **255** | *e*P | **Pn** | **11 16 05.0** | **-1.0** |
| | baz=248 | | | | | | |
| ETL | | | | *e*S | **Sn** | **11 16 21.8** | **-0.6** |
| | baz=248 | | | | | | |
| **ENTT** | **Nioudou** | **1.25** | **277** | P | **Pn** | **11 16 06.3** | **+0.1** |
| | baz=271 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **11 16 22.9** | **+0.2** |
| | baz=271 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.25** | **283** | P | **Pn** | **11 16 06.0** | **-0.2** |
| | baz=276 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **11 16 22.9** | **0.0** |
| | baz=276 | | | | | | |
| **NACB** | **Ninganchiao** | **1.25** | **256** | *i* P | **Pn** | **11 16 05.6** | **-0.7** |
| | baz=239 | | | | | | |
| NACB | | | | *e*S | **Sn** | **11 16 21.7** | **-1.1** |
| | baz=239 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.27** | **85** | P | **Pn** | **11 16 06.2** | **-0.3** |
| JISG | | | | S | **Sn** | **11 16 23.5** | **+0.4** |
| **LATG** | **Datong** | **1.27** | **273** | *i* P | **Pn** | **11 16 06.5** | **-0.1** |
| | baz=272 | | | | | | |
| LATG | | | | *e*S | **Sn** | **11 16 23.1** | **-0.4** |
| | baz=272 | | | | | | |
| **TWD** | **Chiawan** | **1.28** | **252** | P | **Pn** | **11 16 05.9** | **-0.6** |
| | baz=245 | | | | | | |
| TWD | | | | *e*S | **Sn** | **11 16 22.2** | **-1.1** |
| | baz=245 | | | | | | |
| **NDT** | **Datong Townshi** | **1.29** | **275** | *e*P | **Pn** | **11 16 06.9** | **+0.2** |
| | baz=269 | | | | | | |
| NDT | | | | *e*S | **Sn** | **11 16 24.2** | **+0.5** |
| | baz=269 | | | | | | |
| **NWLT** | **Wulai** | **1.32** | **283** | *e*P | **Pn** | **11 16 07.1** | **-0.2** |
| | baz=284 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **11 16 24.6** | **0.0** |
| | baz=284 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.34** | **258** | P | **Pn** | **11 16 07.0** | **-0.5** |
| | baz=244 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **11 16 23.3** | **-1.7** |
| | baz=244 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.36** | **291** | *e*P | **Pn** | **11 16 06.2** | **-1.3** |
| | baz=279 | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.38** | **326** | *e*P | **Pn** | **11 16 07.2** | **-0.7** |
| | baz=317 | | | | | | |
| **YM01** | **YM01** | **1.40** | **298** | *e*P | **Pn** | **11 16 07.7** | **-0.4** |
| | baz=286 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **11 16 25.6** | **-0.5** |
| | baz=286 | | | | | | |
| **ETM** | **Tongmen** | **1.41** | **249** | P | **Pn** | **11 16 07.9** | **-0.3** |
| | baz=237 | | | | | | |
| ETM | | | | *i* S | **Sn** | **11 16 25.6** | **-0.7** |
| | baz=237 | | | | | | |
| **NNSB** | **Datong** | **1.41** | **268** | *e*P | **Pn** | **11 16 08.1** | **-0.2** |
| | baz=252 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **11 16 24.1** | **-2.4** |
| | baz=252 | | | | | | |
| **NNS** | **Nan Shan** | **1.41** | **268** | *e*P | **Pn** | **11 16 08.0** | **-0.5** |
| | baz=253 | | | | | | |
| NNS | | | | *e*S | **Sn** | **11 16 26.6** | **-0.1** |
| | baz=253 | | | | | | |
| **YHNB** | **Yeheng** | **1.42** | **278** | *e*P | **Pn** | **11 16 08.5** | **0.0** |
| | baz=274 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **11 16 28.3** | **+1.5** |
| | baz=274 | | | | | | |
| **SHUL** | **Shoufeng** | **1.42** | **241** | *i* P | **Pn** | **11 16 08.2** | **-0.3** |
| | baz=229 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **11 16 26.1** | **-0.6** |
| | baz=229 | | | | | | |
| **NSK** | **Sanguang** | **1.44** | **278** | *e*P | **Pn** | **11 16 09.2** | **+0.5** |
| | baz=265 | | | | | | |
| NSK | | | | *e*S | **Sn** | **11 16 26.8** | **-0.3** |
| | baz=265 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.45** | **252** | P | **Pn** | **11 16 08.5** | **-0.5** |
| | baz=237 | | | | | | |
| LXIB | | | | *e*S | **Sn** | **11 16 26.4** | **-1.3** |
| | baz=237 | | | | | | |
| **ESL** | **Shilin** | **1.52** | **244** | *e*P | **Pn** | **11 16 08.9** | **-0.8** |
| | baz=238 | | | | | | |
| ESL | | | | *i* S | **Sn** | **11 16 28.2** | **-0.7** |
| | baz=238 | | | | | | |
| **FUSS** | **Fushou** | **1.55** | **262** | P | **Pn** | **11 16 10.4** | **0.0** |
| | baz=256 | | | | | | |
| FUSS | | | | S | **Sn** | **11 16 29.4** | **-0.7** |
| | baz=256 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.55** | **258** | *e*P | **Pn** | **11 16 10.0** | **-0.5** |
| | baz=270 | | | | | | |
| WHF | | | | S | **Sn** | **11 16 29.0** | **-1.4** |

baz=217
CHKH eS Sn 11 16 36.0 -1.9
baz=217
**SSLB Suanglung** 1.93 249 eP Pn 11 16 16.2 +1.1
baz=244
SSLB eS Sn 11 16 38.5 -0.2
baz=244
**FULB Fuli** 1.97 230 P Pn 11 16 15.5 -0.1
baz=218
FULB eS Sn 11 16 39.2 -0.4
baz=218
**WHYT Xinyi Township** 2.05 248 eP Pn 11 16 17.9 +1.2
baz=243
WHYT S Sn 11 16 42.0 +0.4
baz=243
**ECS Chishang** 2.09 229 eS Sn 11 16 42.9 +0.5
baz=219
**EDH Donghe** 2.11 225 P Pn 11 16 16.8 -0.8
baz=221
EDH S Sn 11 16 41.4 -1.7
baz=221
**ELDTW Lidau** 2.17 234 P Pn 11 16 18.0 -0.5
baz=224
ELDTW eS Sn 11 16 42.4 -2.2
baz=224
**LDUT Ludao** 2.24 217 eP Pn 11 16 18.9 -0.4
baz=219
LDUT eS Sn 11 16 43.9 -2.3
baz=219
**LONT Longtian** 2.27 227 P Pn 11 16 19.4 -0.4
baz=231
LONT S Sn 11 16 46.9 0.0
baz=231
**WCKO Fanlu** 2.36 244 i P Pn 11 16 22.2 +1.3
baz=240
WCKO eS Sn 11 16 50.8 +1.7
baz=240
**TWGBT Beinan** 2.37 226 i P Pn 11 16 20.6 -0.5
baz=229
TWGBT S Sn 11 16 48.5 -0.7
baz=229
**TPUB Ta-pu** 2.41 241 eP Pn 11 16 23.3 +1.7
baz=232
TPUB eS Sn 11 16 51.8 +1.6
baz=232
**WTP Ta-pu** 2.45 240 P Pn 11 16 23.3 +1.2
baz=236
WTP eS Sn 11 16 53.9 +2.8
baz=236
**TWK Hsinying** 2.54 242 P Pn 11 16 25.0 +1.6
baz=237
TWK eS Sn 11 16 56.0 +2.7
baz=237
**MASBT Mashibuluo** 2.81 229 eP Pn 11 16 27.0 +0.1
baz=221
MASBT eS Sn 11 17 00.5 +0.6
baz=221
**SLIU Shizi** 2.99 221 eP Pn 11 16 29.7 +0.4
baz=224

*JSN **16** 11:33:15.5±0.8, 16°.24N×76°.13W, h30km±999km, MD3.9*
**ISC 16 11:33:16.8**±4.3, **16°.4N**±0°.2×**76°.1W**±0°.1, **h35**km, **n8,**
σ1§**05**/13, **Caribbean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STH** | **Stony Hill** | **1.81** | **337** | *i* P | | **Pn** | **11 33 45.2** | **-0.3** |
| **MTDJ** | **Mount Denham** | **2.30** | **322** | *i* P | | **Pn** | **11 33 52.0** | **-0.3** |
| **MTDJ** | **Mount Denham** | **2.30** | **322** | *e*P | | **Pn** | **11 33 52.2** | **0.0** |
| MTDJ | | | | eS | | **Sn** | **11 34 20.4** | **+1.0** |
| MTDJ | | | | IAML | | | 11 34 22.7 | |
| | 107nm,0.5s | | | | | | | |
| MTDJ | | | | IAML | | | 11 34 22.9 | |
| | comp=Z,78nm,0.2s | | | | | | | |
| **CHIV** | **Chivirico** | **3.56** | **354** | *e*P | | **Pn** | **11 34 08.7** | **-0.9** |
| CHIV | | | | eS | | **Sn** | **11 34 51.2** | **+0.7** |
| CHIV | | | | IAML | | | 11 34 51.9 | |
| | comp=N,2.1nm,0.1s | | | | | | | |
| CHIV | | | | IAML | | | 11 34 52.0 | |
| | comp=E,1.5nm,0.1s | | | | | | | |
| **MARVS** | **Santiago de Cu** | **3.57** | **2** | *e*S | | **Sn** | **11 34 49.8** | **-1.0** |
| MARVS | | | | IAML | | | 11 34 51.0 | |
| | comp=N,2.6nm,0.1s | | | | | | | |
| MARVS | | | | IAML | | | 11 34 51.4 | |
| | comp=E,2.0nm,0.1s | | | | | | | |
| **RCC** | **Rio Carpintero** | **3.58** | **5** | *e*P | | **Pn** | **11 34 08.9** | **-1.0** |
| RCC | | | | eS | | **Sn** | **11 34 50.0** | **-1.0** |
| RCC | | | | IAML | | | 11 34 55.8 | |
| | comp=E,4.2nm,0.2s | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **3.61** | **14** | *e*P | | **Pn** | **11 34 10.4** | **+0.2** |
| GTBY | | | | eS | | **Sn** | **11 34 54.0** | **+2.3** |
| **QMBU** | **Quimbuelo** | **3.95** | **17** | *e*P | | **Pn** | **11 34 15.0** | **+0.1** |
| QMBU | | | | eS | | **Sn** | **11 35 00.4** | **+0.3** |

*BJI **16** 11:55:17.5±0.0, 23°.94N×94°.77E, h95km, mb4.5/31, mB4.8/7*
*NDI **16** 11:55:18.2±3.1, 23°.85N×94°.86E, h95km, ML4.3, MW4.3, mb4.9(NEIC)*
*NEIC **16** 11:55:19.4±1.7, 23°.99N±0°.04×94°.75E±0°.07, h95km±6km, mb4.9/23, Error ellipse: s-maj=9.6km s-min=6.2km az=97.0*
*IDC **16** 11:55:20.5±0.6, 23°.88N×94°.85E, h112km±4km, mb4.1/15, mbtmp4.4/16, MS2.9/3, Error ellipse: s-maj=21.4km s-min=9.9km az=61.0*
**ISC 16 11:55:19.4**±0.4, **23°.89N**±0°.05×**94°.74E**±0°.05, **h100**km, **n90,**
σ1§**42**/110, **mb4.7**/30, **1C-1D, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IMP** | **Imphal** | **1.18** | **323** | *e*P | | **Pn** | **11 55 41.4** | **-0.6** |
| IMP | | | | eS | | **Sn** | **11 55 56.9** | **-2.1** |
| IMP | | | | IAML | | | 11 56 00.8 | |
| | comp=E,1μm,0.2s | | | | | | | |
| IMP | | | | IAML | | | 11 56 04.5 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **KOHI** | **KOHIMA** | **1.91** | **343** | *e*P | | **Pn** | **11 55 50.1** | **-0.9** |
| KOHI | | | | eS | | **Sn** | **11 56 13.1** | **-1.9** |
| KOHI | | | | IAML | | | 11 56 15.9 | |
| | comp=E,4μm,0.7s | | | | | | | |
| KOHI | | | | IAML | | | 11 56 16.1 | |
| | comp=E,4μm,0.6s | | | | | | | |
| **JORH** | **JORHAT** | **2.88** | **351** | IAML | | | 11 56 37.0 | |
| | comp=E,3μm,0.3s | | | | | | | |
| JORH | | | | eS | | **Sn** | **11 56 38.3** | **+0.9** |
| JORH | | | | IAML | | | 11 56 40.8 | |
| | comp=E,3μm,0.3s | | | | | | | |
| **SHL** | **Shillong** | **3.08** | **303** | | | **Pn** | **11 56 05.1** | **-1.4** |
| **SHL** | **Shillong** | **3.08** | **303** | *e*P | | **Pn** | **11 56 05.1** | **-1.4** |
| SHL | | | | IAML | | | 11 56 40.7 | |
| | comp=E,6μm,0.1s | | | | | | | |
| SHL | | | | IAML | | | 11 56 42.1 | |
| | comp=E,6μm,0.1s | | | | | | | |
| **AGT** | **Agartala** | **3.19** | **271** | *e*S | | **Sn** | **11 56 43.7** | **-1.2** |
| **LKP** | **Lekhapani** | **3.57** | **16** | *e*P | | **Pn** | **11 56 12.8** | **0.0** |
| **TNCH** | **TengChong** | **3.63** | **71** | P | | **Pn** | **11 56 11.9** | **-1.9** |
| TNCH | | | | S | | **Sn** | **11 56 54.8** | **-1.0** |
| TNCH | | | | smax | | smax | | |
| | comp=E,140nm,1.1s | | | | | | | |
| TNCH | | | | smax | | smax | | |
| | comp=E,130nm,1.3s | | | | | | | |
| **ZIRO** | **ZIRO** | **3.71** | **348** | *e*P | | **Pn** | **11 56 14.1** | **-0.8** |
| ZIRO | | | | eS | | **Sn** | **11 56 54.0** | **-3.7** |
| ZIRO | | | | IAML | | | 11 56 59.2 | |
| | comp=E,5μm,0.5s | | | | | | | |
| ZIRO | | | | IAML | | | 11 56 59.5 | |
| | comp=E,7μm,0.3s | | | | | | | |
| **CRAI** | **Chiangrai** | **6.37** | **124** | | | **Pn** | **11 56 51.2** | **+0.4** |
| **GTK** | **Tadong** | **6.51** | **303** | *e*P | | **Pn** | **11 56 51.9** | **-0.8** |
| GTK | | | | eS | | **Sn** | **11 58 03.5** | **-2.1** |
| GTK | | | | IAML | | | 11 58 09.6 | |
| | comp=E,263nm,0.2s | | | | | | | |
| GTK | | | | IAML | | | 11 58 12.9 | |
| | comp=E,370nm,0.2s | | | | | | | |
| **LSA** | **Lhasa** | **6.62** | **332** | P | | **Pn** | **11 56 55.1** | **+0.6** |
| LSA | | | | S | | **Sn** | **11 58 06.8** | **-1.8** |
| LSA | | | | smax | | smax | | |
| | comp=E,130nm,0.9s | | | | | | | |
| LSA | | | | smax | | smax | | |
| | comp=E,190nm,0.4s | | | | | | | |
| **LSA** | **Lhasa** | **6.62** | **332** | Pn | | **Pn** | **11 56 53.9** | **-0.6** |
| LSA | | | | | | **Sn** | **11 58 06.1** | **-2.5** |
| **CMAR** | **Chiang Mai Arr** | **6.68** | **143** | Pn | | **Pn** | **11 56 55.7** | **+0.7** |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **VOI** | **Vohitsoka** | **65.16** | **229** | P | | **P** | **12 05 49.8** | **-0.5** |
| VOI | | | | IAmb | | IAmb | 12 05 51.9 | |
| | comp=Z,64nm,2.0s | | | | | | | |
| **HFS** | **Hagfors** | **65.17** | **327** | P | | **P** | **12 05 49.7** | **+0.1** |
| | comp=Z,0.7nm,0.4s,baz=73,slow=2.0,SNR=6.0 | | | | | | | |
| HFS | | | | pP | | **pP** | **12 06 16.8** | **+2.1** |
| | comp=Z,5.2nm,0.7s,baz=96,slow=6.0,SNR=5.9 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **66.29** | **328** | P | | pP | 12 06 23.9 | +1.9 |
| | comp=Z,2.5nm,0.7s,baz=83,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.29** | **328** | pP | | **pP** | **12 06 24.1** | **+2.1** |
| | comp=Z,2.0nm,0.7s,baz=84,slow=6.5,SNR=5.6 | | | | | | | |
| NOA | | | | LR | | LR | 12 38 56.7 | |
| | comp=Z,9.4nm,18.8s,baz=105,slow=39 | | | | | | | |
| **MBAR** | **Mbarara** | **66.61** | **258** | P | | **P** | **12 06 00.5** | **+0.7** |
| **STKA** | **Stephens Creek** | **71.28** | **139** | P | | **P** | **12 06 27.0** | **-1.1** |
| | comp=Z,1.0nm,0.3s,baz=331,slow=5.2,SNR=7.5 | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **75.01** | **324** | pP | | pP | 12 07 17.6 | +2.2 |
| | comp=Z,2.4nm,0.7s,baz=67,slow=6.4,SNR=4.4 | | | | | | | |
| **LSZ** | **Lusaka** | **75.75** | **246** | P | | **P** | **12 06 54.8** | **0.0** |
| LSZ | | | | IAmb | | IAmb | 12 06 55.9 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **BOSA** | **Boshof** | **84.82** | **236** | P | | **P** | **12 07 43.0** | **-0.2** |
| | comp=Z,4.2nm,0.5s,baz=70,slow=3.0,SNR=20 | | | | | | | |
| BOSA | | | | pP | | **pP** | **12 08 11.2** | **+1.8** |
| | comp=Z,4.3nm,0.7s,baz=22,slow=4.9,SNR=3.7 | | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | | |
| **SOE** | **Somerset East** | **86.69** | **232** | P | | **P** | **12 07 51.9** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **87.50** | **283** | P | | **P** | **12 07 56.7** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=52,slow=4.7,SNR=9.7 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **124.20** | **19** | PKP | | **PKPdf** | **12 14 05.5** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=280,slow=0.4,SNR=5.4 | | | | | | | |
| **ROSC** | **El Rosal** | **149.52** | **338** | PKPbc | | **PKPbc** | **12 14 58.9** | **+0.4** |
| | comp=Z,24nm,0.5s,baz=152,slow=9.1,SNR=7.7 | | | | | | | |

*IDC **16** 12:43:21.1±0.9, 41°.09S×91°.30W, h0km, mb3.8/8, mbtmp3.8/8, MS4.0/30, Error ellipse: s-maj=35.6km s-min=21.8km az=95.0*
*GCMT **16** 12:43:24.5±0.3, 41°.13S±0°.02×91°.62W±0°.02, h25km±1km, MW5.0/105, Moment Tensor Solution. s30,c33; s105,c141; Duration: 0 Moment tensor: Scale 10¹⁶Nm; $M_{rr}$-1.02±.20; $M_{\theta\theta}$0.89±.15; $M_{\phi\phi}$0.13±.15; $M_{r\theta}$-2.40±.34; $M_{\theta\phi}$-3.66±.10; $M_{\phi r}$-0.03±.28; Best double couple: $M_o$4.44800×10¹⁶ NP1:$\phi_s$91.00000°, δ82.00000°, λ-144.00000°. NP2:$\phi_s$355.00000°, δ55.00000°, λ-10.00000°. Principal axes: T 4.7600, Plg18.0000°, Azm218.0000°; N -0.6230, Plg54.0000°, Azm102.0000°; P -4.1360, Plg31.0000°, Azm319.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **16** 12:43:32.5±1.7, 40°.4S±0°.2×90°.5W±0°.2, h10km±2km, mb4.7/33 Error ellipse: s-maj=30.2km s-min=25.3km az=160.0*
**ISC 16 12:43:21.7**±0.7, **41°.05S**±0°.1×**91°.57W**±0°.09, **h10**km, **n98,**
σ1§**46**/57, **mb4.6**/22, **MS4.1**/31, **5C, West Chile Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **H03S2** | **Juan Fernandez** | **12.30** | **59** | T | | T | 12 59 01.0 | |
| | baz=229,slow=73,SNR=1587 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **12.31** | **59** | T | | T | 12 58 58.2 | |
| | baz=229,slow=73,SNR=2675 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **12.32** | **59** | T | | T | 12 58 58.4 | |
| | baz=229,slow=73,SNR=1594 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **12.54** | **57** | T | | T | 12 59 14.1 | |
| | baz=230,slow=71,SNR=1313 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **12.55** | **57** | T | | T | 12 59 09.2 | |
| | baz=230,slow=71,SNR=1910 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **12.56** | **57** | T | | T | 12 59 11.3 | |
| | baz=230,slow=71,SNR=1475 | | | | | | | |
| **AY02** | **Valle Explorad** | **14.38** | **119** | Pn | | **P** | **12 46 50.9** | **-1.4** |
| **LL01** | **San Ignacio de** | **14.39** | **102** | | | P | 12 46 47.4 | -5.1 |
| **LL03** | **Petrohue** | **14.47** | **97** | Pn | | **Pn** | **12 46 48.1** | **+1.6** |
| **LL04** | **Puerto Octay** | **14.49** | **96** | | | **Pn** | **12 46 46.9** | **+0.2** |
| **LL02** | **Futaleuf** | **14.82** | **105** | | | **P** | **12 46 54.3** | **-2.9** |
| **LR05** | **Currie** | **14.88** | **94** | Pn | | **Pn** | **12 46 52.5** | **+0.3** |
| **COYC** | **Coyhaique** | **14.92** | **115** | | | **P** | **12 46 56.7** | **-1.6** |
| **GO06** | **Currarrehue** | **15.40** | **91** | | | **P** | **12 47 00.2** | **-3.6** |
| **GO08** | **Villa O'Higgin** | **15.44** | **125** | | | **P** | **12 47 01.4** | **-2.6** |
| GO08 | | | | IAmb | | IAmb | 12 47 02.8 | |
| | comp=Z,64nm,1.5s | | | | | | | |
| **PLCA** | **Paso Flores** | **15.91** | **96** | Pn | | **Pn** | **12 47 06.1** | **+0.4** |
| **PLCA** | **Paso Flores** | **15.91** | **96** | Pn | | **P** | **12 47 07.4** | **-2.0** |
| | comp=Z,0.1nm,0.3s,baz=270,slow=13,SNR=8.4 | | | | | | | |
| **BI02** | **San Fabin de** | **16.38** | **81** | Pn | | **Pn** | **12 47 11.3** | **-0.5** |
| **GO05** | **Huala** | **16.57** | **75** | Pn | | **Pn** | **12 47 11.0** | **-3.2** |
| GO05 | | | | IAmb | | IAmb | 12 47 15.7 | |
| | comp=Z,75nm,1.4s | | | | | | | |
| **ML02** | **Panimavida** | **16.62** | **78** | Pn | | **Pn** | **12 47 12.9** | **-1.9** |
| **BO01** | **Tunca** | **17.47** | **75** | Pn | | **Pn** | **12 47 24.6** | **-0.8** |
| **MT09** | **Talagante** | **17.84** | **73** | | | **Pn** | **12 47 29.2** | **-0.9** |
| MT09 | | | | IAmb | | IAmb | 12 47 38.8 | |
| | comp=Z,62nm,1.5s | | | | | | | |
| **LMEL** | **Las Melosas** | **18.37** | **74** | P | | **P** | **12 47 36.4** | **-0.4** |
| **VA03** | **San Esteban** | **18.67** | **71** | P | | **P** | **12 47 38.2** | **-1.7** |
| **CO02** | **Combarbal** | **19.22** | **66** | P | | **Pn** | **12 47 47.2** | **+0.2** |
| **CO01** | **Juntas del Tor** | **20.58** | **65** | P | | **P** | **12 48 01.9** | **+0.9** |
| **ZON** | **Zonda** | **20.66** | **70** | IAmb | | IAmb | 12 48 06.4 | |
| | comp=Z,33nm,1.0s | | | | | | | |
| **LCO** | **Las Campanas** | **20.78** | **62** | P | | **P** | **12 48 02.5** | **-0.8** |
| LCO | | | | IAmb | | IAmb | 12 48 05.7 | |
| | comp=Z,49nm,1.4s | | | | | | | |
| **AC04** | **Llanos de Chal** | **21.07** | **59** | P | | **P** | **12 48 06.0** | **0.0** |
| AC04 | | | | IAmb | | IAmb | 12 48 16.5 | |
| | comp=Z,55nm,1.5s | | | | | | | |
| **AC05** | **El Transito** | **21.18** | **62** | | | **P** | **12 48 07.5** | **+0.2** |
| AC05 | | | | IAmb | | IAmb | 12 48 09.6 | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **GO03** | **Copiap** | **22.02** | **59** | P | | **P** | **12 48 16.3** | **-0.1** |
| GO03 | | | | IAmb | | IAmb | 12 48 19.7 | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **AC06** | **Mina Casimiro** | **22.11** | **59** | P | | **P** | **12 48 17.3** | **+0.1** |
| AC06 | | | | IAmb | | IAmb | 12 48 21.9 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **AC01** | **Pan de Azucar** | **22.80** | **56** | P | | **P** | **12 48 24.6** | **0.0** |
| **TRQA** | **Tornquist** | **22.96** | **92** | P | | **P** | **12 48 27.8** | **+1.6** |
| TRQA | | | | IAmb | | IAmb | 12 48 31.3 | |
| | comp=Z,37nm,1.4s | | | | | | | |
| **PB14** | **IPOC Station P** | **24.02** | **54** | IAmb | | IAmb | 12 48 38.7 | |
| | comp=Z,32nm,1.0s | | | | | | | |
| **LVC** | **Limon Verde** | **26.43** | **53** | P | | **P** | **12 48 59.8** | **+0.6** |
| LVC | | | | IAmb | | IAmb | 12 49 00.9 | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **LVC** | **Limon Verde** | **26.43** | **53** | LR | | LR | 12 56 51.9 | |
| | comp=Z,612nm,20.1s,baz=232,slow=31 | | | | | | | |
| **PMSA** | **Palmer Station** | **28.62** | **156** | LR | | LR | 12 57 45.2 | |
| | comp=Z,306nm,20.6s,baz=270,slow=30 | | | | | | | |
| **NNA** | **Nana** | **31.62** | **28** | LR | | LR | 12 59 07.4 | |
| | comp=Z,369nm,20.8s,baz=196,slow=30 | | | | | | | |
| **CPUP** | **Villa Florida** | **31.79** | **73** | P | | **P** | **12 49 44.3** | **-2.0** |
| | comp=Z,1.1nm,0.7s,baz=297,slow=9.9,SNR=3.1 | | | | | | | |
| CPUP | | | | LR | | LR | 13 01 08.1 | |
| | comp=Z,303nm,19.7s,baz=244,slow=34 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **LPAZ** | **La Paz** | **31.85** | **46** | P | | **P** | **12 49 48.9** | **+1.2** |
| LPAZ | | | | IAmb | | IAmb | 12 49 51.0 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **LPAZ** | **La Paz** | **31.85** | **46** | P | | **P** | **12 49 49.6** | **+2.0** |
| | comp=Z,4.0nm,1.0s,baz=197,slow=7.9,SNR=12 | | | | | | | |
| LPAZ | | | | LR | | LR | 12 59 55.3 | |
| | comp=Z,369nm,19.3s,baz=226,slow=31 | | | | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **LPAZ** | **La Paz** | **31.85** | **46** | *e*P | | **P** | **12 49 49.6** | **+2.0** |
| **ATAH** | **Atahualpa** | **35.66** | **23** | LR | | LR | 13 01 25.6 | |
| | comp=Z,533nm,21.3s,baz=213,slow=30 | | | | | | | |
| **SIV** | **San Ignacio** | **36.25** | **56** | LR | | LR | 13 03 45.0 | |
| | comp=Z,385nm,21.0s,baz=292,slow=34 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **37.88** | **57** | IAmb | | IAmb | 12 50 40.2 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **ETMB** | **Extrema** | **38.26** | **43** | *e*P | | **P** | **12 50 43.0** | **+0.8** |
| **SALV** | **Santo Antonio** | **39.79** | **62** | *e*P | | **P** | **12 50 55.6** | **+0.6** |
| **PET01** | **Itanhaem-SP** | **40.38** | **80** | *e*P | | **P** | **12 51 00.3** | **+0.5** |
| **RKT** | **Rikitea** | **40.40** | **283** | *e*LR | | LR | 13 02 01.6 | |
| | comp=Z,1μm,28.8s | | | | | | | |
| **SAML** | **Samuel** | **40.60** | **46** | P | | **P** | **12 51 01.7** | **0.0** |
| **SAML** | **Samuel** | **40.60** | **46** | *e*P | | **P** | **12 51 02.5** | **+0.8** |
| **PDRB** | **Porto dos Gac** | **42.29** | **56** | *e*P | | **P** | **12 51 16.1** | **+0.4** |
| **ARAG** | **Araguaiana, MT** | **42.57** | **66** | *e*P | | **P** | **12 51 17.9** | **+0.1** |
| **IPMB** | **Ipameri, GO** | **43.57** | **71** | *e*P | | **P** | **12 51 25.5** | **-0.6** |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **VOI** | **Vohitsoka** | **65.16** | **229** | P | | **P** | **12 05 49.8** | **-0.5** |
| VOI | | | | IAmb | | IAmb | 12 05 51.9 | |
| | comp=Z,64nm,2.0s | | | | | | | |
| **HFS** | **Hagfors** | **65.17** | **327** | P | | **P** | **12 05 49.7** | **+0.1** |
| | comp=Z,0.7nm,0.4s,baz=73,slow=2.0,SNR=6.0 | | | | | | | |
| HFS | | | | pP | | **pP** | **12 06 16.8** | **+2.1** |
| | comp=Z,5.2nm,0.7s,baz=96,slow=6.0,SNR=5.9 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **66.29** | **328** | P | | pP | 12 06 23.9 | +1.9 |
| | comp=Z,2.5nm,0.7s,baz=83,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.29** | **328** | pP | | **pP** | **12 06 24.1** | **+2.1** |
| | comp=Z,2.0nm,0.7s,baz=84,slow=6.5,SNR=5.6 | | | | | | | |
| NOA | | | | LR | | LR | 12 38 56.7 | |
| | comp=Z,9.4nm,18.8s,baz=105,slow=39 | | | | | | | |
| **MBAR** | **Mbarara** | **66.61** | **258** | P | | **P** | **12 06 00.5** | **+0.7** |
| **STKA** | **Stephens Creek** | **71.28** | **139** | P | | **P** | **12 06 27.0** | **-1.1** |
| | comp=Z,1.0nm,0.3s,baz=331,slow=5.2,SNR=7.5 | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **75.01** | **324** | pP | | pP | 12 07 17.6 | +2.2 |
| | comp=Z,2.4nm,0.7s,baz=67,slow=6.4,SNR=4.4 | | | | | | | |
| **LSZ** | **Lusaka** | **75.75** | **246** | P | | **P** | **12 06 54.8** | **0.0** |
| LSZ | | | | IAmb | | IAmb | 12 06 55.9 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **BOSA** | **Boshof** | **84.82** | **236** | P | | **P** | **12 07 43.0** | **-0.2** |
| | comp=Z,4.2nm,0.5s,baz=70,slow=3.0,SNR=20 | | | | | | | |
| BOSA | | | | pP | | **pP** | **12 08 11.2** | **+1.8** |
| | comp=Z,4.3nm,0.7s,baz=22,slow=4.9,SNR=3.7 | | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | | |
| **SOE** | **Somerset East** | **86.69** | **232** | P | | **P** | **12 07 51.9** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **87.50** | **283** | P | | **P** | **12 07 56.7** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=52,slow=4.7,SNR=9.7 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **124.20** | **19** | PKP | | **PKPdf** | **12 14 05.5** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=280,slow=0.4,SNR=5.4 | | | | | | | |
| **ROSC** | **El Rosal** | **149.52** | **338** | PKPbc | | **PKPbc** | **12 14 58.9** | **+0.4** |
| | comp=Z,24nm,0.5s,baz=152,slow=9.1,SNR=7.7 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **6.68** | **143** | P | | **Pn** | **11 56 55.6** | **+0.6** |
| | comp=E,4.9nm,0.6s,baz=316,slow=13,SNR=33 | | | | | | | |
| **PHRA** | **Phrae** | **7.42** | **135** | Pn | | **Pn** | **11 57 06.1** | **+1.1** |
| **BOK** | **Bokaro** | **8.10** | **271** | *e*P | | **Pn** | **11 57 14.5** | **+0.2** |
| BOK | | | | eS | | **Sn** | **11 58 39.3** | **-5.0** |
| BOK | | | | IAML | | | 11 58 40.0 | |
| | comp=N,66nm,0.3s | | | | | | | |
| BOK | | | | IAML | | | 11 58 46.1 | |
| | comp=E,52nm,0.7s | | | | | | | |
| **GOMU** | **GeErMu** | **12.27** | **0** | P | | **Pn** | **11 58 07.6** | **-3.3** |
| GOMU | | | | pmax | | pmax | | |
| | comp=E,19nm,0.8s | | | | | | | |
| **LZH** | **Lanzhou** | **14.48** | **31** | ⇑P | | Pn | 11 58 30.5 | -9.1 |
| LZH | | | | pP | | P | 11 58 42.6 | -0.9 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **ENH** | **Enshi** | **14.59** | **61** | Pn | | **Pn** | **11 58 40.6** | **-0.3** |
| **XAN** | **Xi'an** | **15.99** | **48** | ⇓P | | **P** | **11 59 00.1** | **-0.1** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **GTA** | **Gaotai** | **16.06** | **14** | P | | **Pn** | **11 58 59.8** | **+0.3** |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **LYN** | **LuoYang** | **18.74** | **51** | *e*P | | **Pn** | **11 59 32.8** | **+0.8** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,200nm,3.9s | | | | | | | |
| **KULM** | **Kulim** | **19.35** | **162** | P | | **P** | **11 59 37.6** | **+0.4** |
| **WMQ** | **Urumqi** | **20.71** | **345** | *e*P | | **P** | **11 59 52.3** | **+0.6** |
| WMQ | | | | sP | | sP | 12 00 28.8 | +4.9 |
| WMQ | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **PALK** | **Pallekele** | **21.31** | **221** | P | | **P** | **11 59 59.1** | **+0.7** |
| **HHC** | **Hu-ho-hao-te** | **22.02** | **36** | *e*P | | **P** | **12 00 07.3** | **+1.5** |
| HHC | | | | sP | | sP | 12 00 41.3 | +3.5 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,110nm,4.9s | | | | | | | |
| **KSH** | **Kashi** | **22.24** | **319** | P | | **P** | **12 00 07.9** | **-0.2** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **GSI** | **Gunungsitoli** | **22.62** | **173** | P | | **P** | **12 00 13.2** | **+1.1** |
| **BOOM** | **Boomskoye usch** | **24.23** | **324** | P | | **P** | **12 00 26.5** | **-0.5** |
| **DRK** | **Karamyk** | **24.85** | **314** | P | | **P** | **12 00 32.4** | **-0.5** |
| **MK31** | **Makanchi Array** | **24.94** | **339** | P | | **P** | **12 00 33.7** | **+0.4** |
| **MKAR** | **Makanchi Array** | **24.94** | **339** | P | | **P** | **12 00 33.3** | **-0.1** |
| **MKAR** | **Makanchi Array** | **24.94** | **339** | P | | **P** | **12 00 34.0** | **+0.7** |
| | comp=Z,26nm,0.5s,baz=144,slow=10,SNR=139 | | | | | | | |
| MKAR | | | | pP | | **pP** | **12 00 59.6** | **+4.1** |
| | comp=Z,9.2nm,0.6s,baz=148,slow=9.1,SNR=5.6 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **12 04 06.1** | **-0.1** |
| | comp=Z,0.7nm,0.7s,baz=129,slow=2.0,SNR=2.7 | | | | | | | |
| MKAR | | | | ScP | | **ScP** | **12 07 33.4** | **-2.8** |
| | comp=Z,0.4nm,0.4s,baz=108,slow=4.0,SNR=4.0 | | | | | | | |
| MKAR | | | | LR | | LR | 12 12 22.1 | |
| | comp=Z,14nm,19.9s,baz=187,slow=41 | | | | | | | |
| | comp=Z,26nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **25.06** | **339** | P | | **P** | **12 00 34.8** | **+0.5** |
| **AAK** | **Ala-Archa** | **25.11** | **323** | P | | **P** | **12 00 36.2** | **+1.1** |
| **GAR** | **Garm** | **25.60** | **312** | P | | **P** | **12 00 39.6** | **+0.1** |
| **SONM** | **Songino Array** | **25.64** | **18** | P | | **P** | **12 00 38.6** | **-1.1** |
| **SONM** | **Songino Array** | **25.64** | **18** | P | | **P** | **12 00 39.2** | **-0.5** |
| | comp=Z,2.1nm,0.7s,baz=210,slow=8.5,SNR=8.0 | | | | | | | |
| SONM | | | | pP | | **pP** | **12 01 03.7** | **+1.8** |
| | comp=Z,2.2nm,0.7s,baz=199,slow=9.7,SNR=5.9 | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **27.68** | **320** | P | | **P** | **12 00 58.5** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **29.50** | **339** | P | | **P** | **12 01 14.2** | **+0.1** |
| | comp=Z,2.4nm,0.4s,baz=150,slow=9.0,SNR=16 | | | | | | | |
| KURBB | | | | pP | | **pP** | **12 01 40.7** | **+4.1** |
| | comp=Z,3.1nm,0.7s,baz=146,slow=9.3,SNR=6.4 | | | | | | | |
| KURBB | | | | PcP | | **PcP** | **12 04 16.2** | **-0.7** |
| | comp=Z,1.9nm,0.2s,baz=160,slow=1.6,SNR=6.8 | | | | | | | |
| KURBB | | | | ScP | | **ScP** | **12 07 48.5** | **-1.3** |
| | comp=Z,1.6nm,0.6s,baz=154,slow=2.7,SNR=15 | | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **29.55** | **339** | P | | **P** | **12 01 14.4** | **-0.1** |
| **JOW** | **Kunigami** | **30.40** | **77** | P | | **P** | **12 01 21.0** | **-1.3** |
| | comp=Z,8.0nm,0.5s,baz=264,slow=18,SNR=1.9 | | | | | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **30.93** | **349** | P | | **P** | **12 01 26.8** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **30.93** | **349** | P | | **P** | **12 01 26.1** | **-0.4** |
| | comp=Z,1.2nm,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **45.27** | **69** | LR | LR | 13 10 02.1 | | |
| | comp=Z,404nm,18.4s,baz=209,slow=36 | | | | | | | |
| **SNDB** | **Serra Nova Dou** | **45.57** | **62** | *eP* | **P** | **12 51 42.0** | **0.0** | |
| **DIAM** | **Diamantina, MG** | **46.67** | **76** | *eP* | **P** | **12 51 50.7** | **-0.1** | |
| **NPGB** | **Novo Progresso** | **46.67** | **54** | *eP* | **P** | **12 51 50.9** | **+0.2** | |
| **ROSC** | **El Rosal** | **48.23** | **23** | LR | LR | 13 10 24.0 | | |
| | comp=Z,199nm,18.3s,baz=182,slow=34 | | | | | | | |
| **JANB** | **Januaria** | **48.30** | **72** | *eP* | **P** | **12 52 03.5** | **+0.1** | |
| **RIB01** | **Linhares ES** | **48.46** | **79** | *eP* | **P** | **12 52 03.2** | **-1.3** | |
| **QSPA** | **South Pole Qui** | **49.28** | **180** | P | P | **12 52 11.4** | **+0.9** | |
| | comp=Z,0.4nm,0.6s,baz=179,slow=13,SNR=1.7 | | | | | | | |
| QSPA | | | | LR | LR | 13 10 00.7 | | |
| | comp=Z,135nm,19.3s,baz=130,slow=32 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **49.28** | **155** | ⇑P | **P** | **12 52 10.3** | **+0.1** | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **49.67** | **69** | *eP* | **P** | **12 52 12.6** | **-1.3** | |
| **VNA1** | **Neumayer--Stat** | **49.83** | **154** | ⇑P | **P** | **12 52 13.6** | **-0.8** | |
| | comp=Z,7.7nm,1.0s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **50.07** | **155** | ⇑P | **P** | **12 52 14.3** | **-1.9** | |
| | comp=Z,1.5nm,0.9s,baz=307,slow=19 | | | | | | | |
| **TBI** | **Tubuai** | **51.15** | **272** | *e*LR | LR | 13 06 59.9 | | |
| | comp=Z,2μm,26.0s | | | | | | | |
| **SNAA** | **Sanae** | **51.34** | **156** | ⇑P | **P** | **12 52 25.0** | **-0.9** | |
| | comp=Z,44nm,1.0s | | | | | | | |
| **SNAA** | **Sanae** | **51.34** | **156** | P | **P** | **12 52 24.9** | **-0.9** | |
| | comp=Z,2.7nm,1.1s,baz=295,slow=5.2,SNR=4.7 | | | | | | | |
| SNAA | | | | LR | LR | 13 10 47.9 | | |
| | comp=Z,181nm,19.1s,baz=259,slow=32 | | | | | | | |
| | comp=Z,2.7nm,1.1s | | | | | | | |
| **JTS** | **Las Juntas de** | **51.35** | **8** | LR | LR | 13 08 56.4 | | |
| | comp=Z,182nm,18.8s,baz=180,slow=30 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **52.86** | **157** | ⇑P | **P** | **12 52 36.6** | **-0.6** | |
| | comp=Z,197nm,1.1s | | | | | | | |
| **SDV** | **Santo Domingo** | **53.21** | **26** | LR | LR | 13 13 43.5 | | |
| | comp=Z,251nm,19.7s,baz=121,slow=34 | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **53.48** | **293** | *e*S | **S** | **13 00 11.6** | **-3.8** | |
| | comp=Z,99nm,25.2s | | | | | | | |
| TAOE | | | | *e*LR | LR | 13 08 03.5 | | |
| | comp=Z,214nm,25.1s | | | | | | | |
| **VNDA** | **Vanda** | **53.83** | **195** | P | **P** | **12 52 44.1** | **0.0** | |
| | comp=Z,0.4nm,0.7s,baz=141,slow=10.0,SNR=1.0 | | | | | | | |
| VNDA | | | | LR | LR | 13 10 25.4 | | |
| | comp=Z,118nm,21.4s,baz=110,slow=30 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **PPT** | **Papeete** | **54.64** | **277** | LR | LR | 13 10 04.5 | | |
| | comp=Z,59nm,20.1s,baz=121,slow=29 | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **56.62** | **32** | LR | LR | 13 15 06.7 | | |
| | comp=Z,147nm,19.6s,slow=34 | | | | | | | |
| **MDP** | **Montagnes des** | **58.04** | **48** | LR | LR | 13 15 48.6 | | |
| | comp=Z,178nm,21.9s,baz=249,slow=34 | | | | | | | |
| **RAR** | **Rarotonga** | **60.18** | **267** | LR | LR | 13 12 24.5 | | |
| | comp=Z,77nm,21.4s,baz=125,slow=29 | | | | | | | |
| **RCBR** | **Riachuelo** | **60.60** | **71** | LR | LR | 13 19 12.0 | | |
| | comp=Z,104nm,18.9s,baz=156,slow=36 | | | | | | | |
| **URZ** | **Urewera** | **67.12** | **239** | LR | LR | 13 16 03.1 | | |
| | comp=Z,294nm,21.6s,baz=216,slow=29 | | | | | | | |
| **RAO** | **Raoul Island** | **68.93** | **249** | LR | LR | 13 16 44.6 | | |
| | comp=Z,136nm,21.3s,baz=88,slow=29 | | | | | | | |
| **TXAR** | **Lajitas Array** | **70.82** | **349** | P | **P** | **12 54 39.9** | **+1.4** | |
| | comp=Z,0.3nm,0.7s,baz=174,slow=9.5,SNR=4.9 | | | | | | | |
| TXAR | | | | LR | LR | 13 21 23.5 | | |
| | comp=Z,19nm,18.5s,baz=166,slow=32 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **HODGE** | **Hodges** | **75.30** | **8** | P | P | 12 55 11.5 | +6.7 | |
| HODGE | | | | IAmb | IAmb | 12 55 15.7 | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **BG3** | **Lake Jocassee** | **75.99** | **7** | P | P | 12 55 15.5 | +6.7 | |
| BG3 | | | | IAmb | IAmb | 12 55 19.1 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **76.57** | **7** | LR | LR | 13 24 15.7 | | |
| | comp=Z,31nm,19.3s,baz=184,slow=32 | | | | | | | |
| **ANMO** | **Albuquerque** | **76.76** | **347** | LR | LR | 13 22 49.4 | | |
| | comp=Z,63nm,20.7s,baz=256,slow=31 | | | | | | | |
| **U49A** | **Red Boiling Sp** | **77.27** | **5** | P | P | 12 55 23.4 | +7.5 | |
| U49A | | | | IAmb | IAmb | 12 55 24.3 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.69** | **339** | P | **P** | **12 55 48.0** | **+2.5** | |
| | comp=Z,0.2nm,0.5s,baz=164,slow=7.0,SNR=4.7 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **SUR** | **Sutherland** | **84.03** | **128** | LR | LR | 13 29 12.0 | | |
| | comp=Z,45nm,18.2s,baz=321,slow=33 | | | | | | | |
| **DZM** | **Mont Dzumac** | **84.38** | **246** | *e*LR | LR | 13 22 38.5 | | |
| | comp=Z,243nm,26.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **84.91** | **347** | P | **P** | **12 55 58.5** | **+1.8** | |
| | comp=Z,0.9nm,0.8s,baz=160,slow=6.0,SNR=7.5 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **SADO** | **Sadowa** | **86.06** | **9** | LR | LR | 13 29 57.2 | | |
| | comp=Z,72nm,19.4s,baz=146,slow=32 | | | | | | | |
| **BBTS** | **Babate** | **88.56** | **69** | LR | LR | 13 32 29.1 | | |
| | comp=Z,108nm,20.8s,baz=118,slow=33 | | | | | | | |
| **BOSA** | **Boshof** | **89.39** | **128** | LR | LR | 13 29 58.1 | | |
| | comp=Z,59nm,19.7s,baz=198,slow=31 | | | | | | | |
| **LBTB** | **Lobatse** | **92.25** | **126** | LR | LR | 13 33 17.5 | | |
| | comp=Z,34nm,18.8s,baz=192,slow=33 | | | | | | | |
| **STKA** | **Stephens Creek** | **92.48** | **223** | LR | LR | 13 32 17.7 | | |
| | comp=Z,89nm,18.2s,baz=194,slow=32 | | | | | | | |
| **CTA** | **Charters Tower** | **98.99** | **234** | LR | LR | 13 33 52.9 | | |
| | comp=Z,5.9nm,19.7s,baz=126,slow=31 | | | | | | | |

**TEH 16 12:56:58.1, 33°.54N×51°.06E, *h*8km±10km, ML3.5, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TKDS** | **Koohdasht(Taba** | **0.09** | **37** | Pg | Pg | 12 57 00.6 | +0.2 |
| **TNSJ** | **Nastanj** | **0.56** | **318** | Pg | Pg | 12 57 09.2 | +0.2 |
| **TPRV** | **Parvadeh(Tabas** | **0.60** | **211** | Pg | Pb | 12 57 10.7 | -0.3 |
| TPRV | | | | Sg | Sb | 12 57 19.6 | -0.1 |
| **TAPT** | **Tabas- Tapeh t** | **1.34** | **4** | Pg | Pg | 12 57 24.3 | +0.5 |
| **ITEG** | **Tejag** | **1.56** | **114** | Pg | Pg | 12 57 28.4 | +0.4 |
| **AFRZ** | **Afriz** | **1.64** | **94** | Pg | Pg | 12 57 30.0 | +0.4 |
| **IKOO** | **Kooshah** | **1.98** | **124** | Pn | Pb | 12 57 34.4 | -0.2 |
| **IBAF** | **Bafgh** | **2.32** | **213** | Pn | Pb | 12 57 39.2 | -1.1 |
| **BSRN** | **Basiran** | **2.35** | **132** | Pn | Pb | 12 57 39.9 | -0.9 |
| **IDAH** | **Dahanechah** | **2.49** | **108** | Pn | Pb | 12 57 41.3 | -2.0 |
| **ICHK** | **Chekchek** | **2.58** | **241** | Pn | Pb | 12 57 43.0 | -1.8 |
| **TBHD** | **Torbat heydari** | **2.59** | **43** | Pn | Pn | 12 57 42.7 | +2.1 |
| **SHRT** | **Shahrakht** | **2.70** | **87** | Pn | Pb | 12 57 44.8 | -1.9 |
| **ANAR** | **Anarak** | **2.81** | **264** | Pn | Pb | 12 57 46.1 | -2.5 |
| **SBZV** | **Sabzevar** | **2.88** | **9** | Pn | Pn | 12 57 46.7 | +2.2 |
| **IMEH** | **Mehriz** | **2.98** | **225** | Pn | Pn | 12 57 48.6 | +2.6 |
| **TBJM** | **Torbat-e-JAM** | **3.21** | **57** | Pn | Pn | 12 57 51.7 | +2.7 |
| **ISAD** | **Sadrabad** | **3.27** | **241** | Pn | Pn | 12 57 52.2 | +2.1 |
| **NHDN** | **Nehbandan** | **3.32** | **129** | Pn | Pn | 12 57 53.4 | +3.0 |
| **IAKL** | **Akhelmad** | **3.35** | **24** | Pn | Pn | 12 57 53.8 | +2.7 |
| **IMYA** | **Miami** | **3.75** | **41** | Pn | Pn | 12 57 58.5 | +2.0 |
| **IZEF** | **Zefreh** | **4.02** | **262** | Pn | Pn | 12 58 03.2 | +3.0 |
| **ISFB** | **Sefidab** | **4.08** | **283** | Pn | Pn | 12 58 02.8 | +1.8 |
| **KRSH** | **Karshahi** | **4.12** | **277** | Pn | Pn | 12 58 04.1 | +2.5 |
| **KBAM** | **BAM** | **4.55** | **164** | Pn | Pn | 12 58 09.2 | +1.8 |
| **IKLH** | **Kolahrood** | **4.59** | **269** | Pn | Pn | 12 58 10.7 | +2.6 |
| **IDMV** | **Damavand** | **4.62** | **297** | Pn | Pn | 12 58 11.0 | +2.5 |
| **IVRN** | **Varamin** | **4.65** | **290** | Pn | Pn | 12 58 11.3 | +2.6 |
| **IPIR** | **Pirpir** | **5.25** | **262** | Pn | Pn | 12 58 19.7 | +2.5 |

*AEIC **16** 13:27:58.6±2.3, 51°.17N±0°.08×177°.74W±0°.06, h27km±5km, Error ellipse: s-maj=11.9km s-min=5.7km az=170.0*
*NEIC **16** 13:28:00.2±1.9, 51°.30N±0°.08×177°.77W±0°.06, h39km±7km, mb4.5/121, ML4.3(AEIC), Error ellipse: s-maj=12.3km s-min=5.3km az=168.0*
*IDC **16** 13:28:03.2±2.5, 51°.42N×177°.81W, h70km±20km, mb4.0/29, mbtmp4.3/33, MS3.6/44, Error ellipse: s-maj=16.1km s-min=10.2km az=170.0*

**ISC 16 13:27:59.0±0.5, 51°.18N±0°.08×177°.77W±0°.04, h35km, n221, σ1.955/158, mb4.5/75, MS3.6/42, 1C, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIMD** | **Kanaga Island** | **0.67** | **30** | | **Pn** | **13 28 11.4** | **-0.6** |
| **TASE** | **Tanaga Southea** | **0.68** | **346** | | **Pn** | **13 28 12.1** | **0.0** |
| **TANO** | **Tanaga North** | **0.77** | **344** | | **Pn** | **13 28 13.5** | **+0.2** |
| **KIWB** | **Kanaga Island** | **0.78** | **30** | | **Pn** | **13 28 12.6** | **-0.8** |
| **KIKV** | **Kanaga Island** | **0.79** | **28** | | **Pn** | **13 28 13.3** | **-0.4** |
| **KICM** | **Kanaga Island** | **0.82** | **26** | | **Pn** | **13 28 13.9** | **-0.1** |
| KICM | | | | | **Sn** | **13 28 25.7** | **+0.7** |
| **KIRH** | **Kanaga Island** | **0.84** | **30** | | **Pn** | **13 28 14.1** | **-0.1** |
| **GALAA** | **Gareloi Lava P** | **0.85** | **313** | | **Pn** | **13 28 14.7** | **+0.2** |
| **GAEA** | **Gareloi East** | **0.86** | **315** | | **Pn** | **13 28 14.8** | **+0.3** |
| **GANE** | **Gareloi Northe** | **0.90** | **316** | | **Pn** | **13 28 15.3** | **+0.2** |
| **GASW** | **Gareloi Southw** | **0.91** | **312** | | **Pn** | **13 28 15.3** | **+0.1** |
| **GANO** | **Gareloi North** | **0.91** | **315** | | **Pn** | **13 28 15.3** | **0.0** |
| **ADK** | **Adak** | **0.98** | **43** | P | **Pn** | **13 28 15.5** | **-0.6** |
| **ADK** | **Adak** | **0.98** | **43** | | **Pn** | **13 28 15.6** | **-0.6** |
| **ADK** | **Adak** | **0.98** | **43** | | **Sn** | **13 28 28.4** | **-0.4** |
| **ADAG** | **Mount Adagdak** | **1.08** | **42** | | **Pn** | **13 28 17.8** | **+0.1** |
| **GSSP** | **Great Sitkin S** | **1.35** | **47** | | **Pn** | **13 28 21.5** | **+0.2** |
| **GSMY** | **Great Sitkin M** | **1.38** | **50** | | **Pn** | **13 28 21.8** | **+0.2** |
| **GSTR** | **Great Sitkin T** | **1.41** | **49** | | **Pn** | **13 28 22.0** | **-0.1** |
| **AMKA** | **Amchitka** | **1.85** | **277** | Pn | **Pn** | **13 28 27.6** | **-0.5** |
| **AMKA** | **Amchitka** | **1.85** | **277** | | **Sn** | **13 28 52.1** | **+1.9** |
| **KOKL** | **Mount Kliuchef** | **2.50** | **61** | | **Pn** | **13 28 38.0** | **+0.9** |
| **KOFP** | **Korovin Flat P** | **2.53** | **63** | | **Pn** | **13 28 38.4** | **+0.8** |
| **CLES** | **Cleveland East** | **5.14** | **68** | | **Pn** | **13 29 15.2** | **+2.0** |
| **CLCO** | **Concord Point,** | **5.23** | **69** | | **Pn** | **13 29 17.1** | **+2.6** |
| **SHEM** | **Shemya Is, Ala** | **5.26** | **290** | P | **Pn** | **13 29 15.9** | **+0.9** |
| | 34nm,0.3s,baz=60,slow=2.7,SNR=16 | | | | | | |
| SHEM | | | | S | **Sn** | **13 30 18.1** | **+3.8** |
| | 51nm,0.4s,baz=247,slow=18,SNR=7.8 | | | | | | |
| SHEM | | | | LR | LR | 13 31 23.9 | |
| | comp=Z,1μm,18.5s,baz=126,slow=39 | | | | | | |
| **NIKH** | **Nikolski High** | **5.78** | **68** | P | **Pn** | **13 29 24.1** | **+1.9** |
| **NIKH** | **Nikolski High** | **5.78** | **68** | | **Sn** | **13 30 29.9** | **+2.7** |
| **OKWE** | **Okmok W'ng Wal** | **6.28** | **65** | | **Pn** | **13 29 31.0** | **+2.0** |
| **OKCE** | **Okmok Cone E** | **6.31** | **65** | | **Pn** | **13 29 31.5** | **+2.1** |
| **MAPS** | **Pakushin South** | **7.12** | **64** | | **Pn** | **13 29 42.5** | **+2.1** |
| MAPS | | | | | **Sn** | **13 31 01.8** | **+1.8** |
| **MGOD** | **Makushin Gods** | **7.15** | **64** | | **Pn** | **13 29 42.8** | **+1.8** |
| **MSW** | **Makushin Switc** | **7.24** | **63** | | **Pn** | **13 29 44.6** | **+2.5** |
| **P08K** | **Saint George I** | **7.28** | **39** | | **Pn** | **13 29 44.8** | **+2.1** |
| P08K | | | | | **Sn** | **13 31 06.5** | **+2.4** |
| **UNV** | **Unalaska Valle** | **7.38** | **64** | P | **Pn** | **13 29 45.9** | **+1.9** |
| **UNV** | **Unalaska Valle** | **7.38** | **64** | | **Pn** | **13 29 45.9** | **+1.9** |
| **SPIA** | **Saint Paul Isl** | **7.45** | **33** | | **Pn** | **13 29 47.6** | **+2.6** |
| **AKMO** | **Akutan Morgan** | **7.73** | **63** | | **Pn** | **13 29 50.9** | **+2.1** |
| **LVA** | **Lava Point** | **7.73** | **63** | Pn | **Pn** | **13 29 49.8** | **+0.9** |
| **AKBBA** | **Akutan Broad B** | **7.77** | **63** | | **Pn** | **13 29 52.0** | **+2.6** |
| **WESE** | **West Dahl East** | **8.64** | **62** | | **Pn** | **13 30 04.5** | **+3.1** |
| **ISLZ** | **Isanotski Laza** | **9.20** | **62** | | **Pn** | **13 30 11.0** | **+1.9** |
| **FALS** | **False Pass** | **9.40** | **61** | P | **Pn** | **13 30 13.5** | **+1.8** |
| **FALS** | **False Pass** | **9.40** | **61** | | **Pn** | **13 30 14.8** | **+3.1** |
| **SDPT** | **Sand Point** | **11.16** | **61** | P | **Pn** | **13 30 37.0** | **+1.2** |
| **CNBA** | **Chernabura Isl** | **11.54** | **65** | | **Pn** | **13 30 40.0** | **-1.0** |
| **CHGN** | **Chignik** | **12.54** | **58** | Pn | **Pn** | **13 30 54.3** | **-0.3** |
| **M14K** | **Bethel** | **13.01** | **36** | Pn | **Pn** | **13 31 03.7** | **+2.6** |
| **N15K** | **Kwethluk River** | **13.39** | **41** | | **Pn** | **13 31 10.1** | **+3.8** |
| **CHIR** | **Chirikof Islan** | **13.95** | **62** | Pn | **Pn** | **13 31 11.2** | **-2.8** |
| **O16K** | **Kokwok River B** | **13.95** | **45** | | **Pn** | **13 31 17.4** | **+3.5** |
| **PLK4** | **Peulik 4** | **14.01** | **54** | Pn | **Pn** | **13 31 15.2** | **+0.4** |
| **K15K** | **Wolf Creek Mou** | **14.21** | **32** | Pn | **Pn** | **13 31 20.3** | **+2.9** |
| **M16K** | **Timber Creek** | **14.34** | **39** | | **Pn** | **13 31 21.3** | **+2.1** |
| **ACHA** | **Angle Creek He** | **14.71** | **53** | | **Pn** | **13 31 25.3** | **+1.0** |
| **N17K** | **Nushagak Hills** | **14.81** | **43** | | **P** | **13 31 30.5** | **-0.5** |
| **SII** | **Sitkinak Islan** | **14.88** | **60** | P | **Pn** | **13 31 26.5** | **0.0** |
| **SII** | **Sitkinak Islan** | **14.88** | **60** | Pn | **Pn** | **13 31 25.8** | **-0.7** |
| **PETK** | **Petropavlovsk-** | **15.16** | **287** | P | **Pn** | **13 31 31.8** | **+1.5** |
| | 1.7nm,0.5s,baz=100,slow=16,SNR=2.7 | | | | | | |
| PETK | | | | LR | LR | 13 37 12.6 | |
| | comp=Z,272nm,21.9s,baz=91,slow=36 | | | | | | |
| **M17K** | **Holitna River** | **15.16** | **40** | P | **Pn** | **13 31 33.2** | **+2.9** |
| M17K | | | | IAmb | IAmb | 13 31 55.1 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **P18K** | **Big Mountain,** | **15.18** | **48** | Pn | **Pn** | **13 31 30.1** | **-0.4** |
| **J16K** | **Anvik River** | **15.21** | **31** | | **P** | **13 31 35.6** | **+0.2** |
| J16K | | | | IAmb | IAmb | 13 31 54.0 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **OHAK** | **Old Harbor** | **15.50** | **58** | Pn | **Pn** | **13 31 31.3** | **-3.3** |
| OHAK | | | | IAmb | IAmb | 13 31 37.6 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **Q19K** | **Cape Douglas,** | **15.78** | **51** | IAmb | IAmb | 13 31 45.6 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **J17K** | **VABM Dome** | **15.79** | **32** | IAmb | IAmb | 13 31 46.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **16.00** | **56** | Pn | **Pn** | **13 31 37.5** | **-3.5** |
| **KDAK** | **Kodiak Island** | **16.00** | **56** | P | **Pn** | **13 31 38.4** | **-2.6** |
| | comp=Z,29nm,0.5s,baz=314,slow=5.9,SNR=66 | | | | | | |
| KDAK | | | | S | **Sn** | **13 34 39.3** | **+2.3** |
| | comp=Z,2.5nm,0.5s,baz=342,slow=20,SNR=2.9 | | | | | | |
| **P19K** | **Oil Pt** | **16.23** | **49** | IAmb | IAmb | 13 31 54.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **SYI** | **Shuyak Island** | **16.31** | **53** | IAmb | IAmb | 13 32 07.6 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **CNPM** | **China Poot** | **17.14** | **51** | IAmb | IAmb | 13 32 05.0 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **M20K** | **Styx River** | **17.18** | **42** | Pn | **Pn** | **13 31 55.5** | **-0.5** |
| **BRLK** | **Bradley Lake** | **17.39** | **50** | IAmb | IAmb | 13 32 05.4 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **SKT** | **Skwentna** | **17.91** | **43** | IAmb | IAmb | 13 32 09.6 | |
| | comp=Z,31nm,0.5s | | | | | | |
| **M22K** | **Willow** | **18.43** | **44** | IAmb | IAmb | 13 32 17.8 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **PMR** | **Palmer** | **18.80** | **45** | P | **P** | **13 32 15.1** | **0.0** |
| **PWL** | **Port Wells** | **18.93** | **48** | P | **P** | **13 32 15.9** | **-0.6** |
| PWL | | | | IAmb | IAmb | 13 32 23.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **19.11** | **37** | IAmb | IAmb | 13 32 33.3 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **MA2** | **Magadan** | **19.59** | **308** | P | **P** | **13 32 24.6** | **+1.0** |
| | comp=Z,5.5nm,0.6s,baz=114,slow=12,SNR=4.1 | | | | | | |
| MA2 | | | | LR | LR | 13 39 33.0 | |
| | comp=Z,204nm,19.6s,baz=107,slow=36 | | | | | | |
| **RND** | **Reindeer** | **19.63** | **40** | P | **P** | **13 32 23.6** | **-0.6** |
| **MLY** | **Manley** | **19.68** | **35** | P | **P** | **13 32 24.3** | **-0.4** |
| MLY | | | | IAmb | IAmb | 13 32 41.2 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **19.70** | **46** | P | **P** | **13 32 24.1** | **-0.8** |
| SCM | | | | IAmb | IAmb | 13 32 30.9 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **19.83** | **318** | P | **P** | **13 32 27.0** | **+0.8** |
| | comp=Z,12nm,0.8s,baz=111,slow=11,SNR=41 | | | | | | |
| SEY | | | | LR | LR | 13 38 39.6 | |
| | comp=Z,166nm,21.4s,baz=149,slow=32 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **20.07** | **50** | P | **P** | **13 32 30.2** | **+1.3** |
| **NEA2** | **Nenana** | **20.08** | **37** | IAmb | IAmb | 13 32 43.3 | |
| | comp=Z,9.6nm,0.6s | | | | | | |
| **DHY** | **Denali Highway** | **20.11** | **42** | P | **P** | **13 32 28.9** | **-0.6** |
| DHY | | | | IAmb | IAmb | 13 32 30.5 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **KLU** | **Klutina** | **20.23** | **47** | P | **P** | **13 32 31.9** | **+1.2** |
| KLU | | | | IAmb | IAmb | 13 32 37.9 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **20.25** | **36** | P | **P** | **13 32 31.1** | **+0.3** |
| I23K | | | | IAmb | IAmb | 13 32 35.5 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **20.59** | **38** | P | **P** | **13 32 33.2** | **-1.4** |
| **HDA** | **Harding Lake** | **20.82** | **39** | | **P** | **13 32 36.9** | **-0.1** |
| HDA | | | | IAmb | IAmb | 13 33 17.9 | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **IL31** | | **21.00** | **38** | P | **P** | **13 32 37.8** | **-1.1** |
| **ILAR** | **Eielson Array** | **21.00** | **38** | P | **P** | **13 32 36.7** | **-2.3** |
| | comp=Z,0.8nm,0.4s,baz=238,slow=9.6,SNR=12 | | | | | | |
| ILAR | | | | LR | LR | 13 41 55.6 | |
| | comp=Z,189nm,18.1s,baz=218,slow=40 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **J25K** | **Salcha River,** | **21.53** | **39** | P | **P** | **13 32 43.0** | **-1.7** |
| **SCRK** | **Sand Creek** | **21.85** | **41** | P | **P** | **13 32 46.8** | **-1.5** |
| SCRK | | | | IAmb | IAmb | 13 33 16.4 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **22.21** | **40** | P | **P** | **13 32 48.1** | **-4.0** |
| **L27K** | **Beaver Creek,** | **22.50** | **44** | P | **P** | **13 32 54.6** | **-0.5** |
| **C23K** | **Itkillik River** | **22.63** | **24** | P | **P** | **13 32 56.5** | **+0.2** |
| C23K | | | | IAmb | IAmb | 13 32 58.7 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **PNL** | **Peninsula** | **23.08** | **53** | P | **P** | **13 33 02.0** | **+0.9** |
| **EGAK** | **Eagle** | **23.28** | **40** | P | **P** | **13 33 01.4** | **-1.7** |
| EGAK | | | | IAmb | IAmb | 13 33 03.3 | |
| | comp=Z,7.2nm,0.6s | | | | | | |
| **M29M** | **Somme Creek** | **23.88** | **47** | P | **P** | **13 33 08.1** | **-0.9** |
| **K29M** | **Barlow Dome** | **24.57** | **44** | P | **P** | **13 33 14.2** | **-1.0** |
| **I29M** | **Ogilvie Camp,** | **24.61** | **40** | IAmb | IAmb | 13 33 17.7 | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **27.25** | **35** | P | **P** | **13 33 38.7** | **-0.6** |
| | comp=Z,2.0nm,0.4s,baz=225,slow=9.3,SNR=5.4 | | | | | | |
| INK | | | | PcP | **PcP** | **13 36 58.4** | **+0.3** |
| | comp=Z,1.7nm,0.4s,baz=17,slow=4.8,SNR=3.7 | | | | | | |
| INK | | | | LR | LR | 13 45 17.1 | |
| | comp=Z,104nm,18.6s,baz=238,slow=38 | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **27.35** | **271** | LR | LR | 13 44 48.3 | |
| | comp=Z,52nm,20.6s,baz=316,slow=37 | | | | | | |
| **YAK** | **Yakutsk** | **30.03** | **312** | LR | LR | 13 46 20.7 | |
| | comp=Z,168nm,19.3s,baz=84,slow=37 | | | | | | |
| **BBB** | **Bella Bella** | **30.32** | **68** | LR | LR | 13 45 10.3 | |
| | comp=Z,55nm,18.8s,baz=273,slow=34 | | | | | | |
| **TIXI** | **Tiksi** | **31.13** | **331** | LR | LR | 13 47 27.4 | |
| | comp=Z,131nm,19.2s,baz=140,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **31.86** | **287** | LR | LR | 13 47 20.8 | |
| | comp=Z,137nm,20.2s,baz=72,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.63** | **207** | T | T | 14 10 26.3 | |
| | baz=17,slow=76,SNR=346 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.64** | **207** | T | T | 14 10 23.5 | |
| | baz=17,slow=76,SNR=328 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.65** | **207** | T | T | 14 10 29.8 | |
| | baz=17,slow=76,SNR=327 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.96** | **278** | P | **P** | **13 34 38.6** | **-0.1** |
| | comp=Z,5.5nm,0.5s,baz=56,slow=9.6,SNR=26 | | | | | | |
| USRK | | | | LR | LR | 13 47 23.0 | |
| | comp=Z,55nm,21.8s,baz=51,slow=34 | | | | | | |
| | comp=Z,5.5nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Ar** | **34.39** | **262** | P | **P** | **13 34 43.4** | **+0.8** |
| | comp=Z,1.4nm,0.7s,baz=42,slow=4.9,SNR=5.2 | | | | | | |
| MJAR | | | | LR | LR | 13 46 56.0 | |
| | comp=Z,99nm,19.9s,baz=91,slow=33 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.85** | **206** | T | T | 14 12 01.1 | |
| | baz=18,SNR=600 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.87** | **206** | T | T | 14 12 02.4 | |
| | baz=18,SNR=323 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.87** | **206** | T | T | 14 12 01.6 | |
| | baz=18,SNR=308 | | | | | | |
| **YKA** | **Yellowknife Ar** | **34.90** | **46** | LR | LR | 13 50 50.2 | |
| | comp=Z,129nm,18.3s,baz=251,slow=39 | | | | | | |
| **GNW** | **Green Mountain** | **35.26** | **74** | IAmb | IAmb | 13 35 09.7 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **BNX** | **BinXian** | **36.04** | **283** | ⇑P | **P** | **13 34 55.0** | **-1.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **B08A** | **Colville Reser** | **36.99** | **71** | IAmb | IAmb | 13 35 23.2 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **H04A** | **Detroit Lake** | **37.03** | **78** | IAmb | IAmb | 13 35 08.0 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **D08A** | **Wollman Farm,** | **37.84** | **72** | IAmb | IAmb | 13 35 13.6 | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **PINE** | **Pine Mountain** | **38.26** | **78** | IAmb | IAmb | 13 35 34.5 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **38.27** | **82** | LR | LR | 13 48 12.1 | |
| | comp=Z,56nm,20.1s,baz=277,slow=32 | | | | | | |
| **J05D** | **Fort Rock, OR** | **38.34** | **79** | IAmb | IAmb | 13 35 19.3 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **NEW** | **Newport** | **38.35** | **70** | IAmb | IAmb | 13 35 18.3 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **NEW** | **Newport** | **38.35** | **70** | LR | LR | 13 48 20.9 | |
| | comp=Z,70nm,18.6s,baz=278,slow=32 | | | | | | |
| **JCJ** | **Chichijima** | **38.59** | **247** | LR | LR | 13 47 49.7 | |
| | comp=Z,52nm,21.6s,baz=118,slow=31 | | | | | | |
| **I07A** | **Izee** | **38.99** | **77** | IAmb | IAmb | 13 35 24.4 | |
| | comp=Z,6.9nm,0.6s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **39.10** | **84** | P | **P** | **13 35 25.3** | **+2.6** |
| O02D | | | | IAmb | IAmb | 13 35 38.6 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **HATC** | **Hat Creek Radi** | **39.56** | **83** | P | **P** | **13 35 27.9** | **+1.4** |
| **J08A** | **Circle Bar Ran** | **40.00** | **77** | IAmb | IAmb | 13 35 32.4 | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **40.29** | **272** | P | **P** | **13 35 33.8** | **+1.3** |
| | comp=Z,2.2nm,0

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,47nm,19.9s,baz=41,slow=37 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **58.04** | **82** | P | | **P** | | **13 37 49.1** | **+0.6** | |
| | comp=Z,1.2nm,0.6s,baz=302,slow=4.8,SNR=18 | | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.40** | **351** | P | | **P** | | **13 37 48.5** | **-1.8** | |
| | comp=Z,1.2nm,0.4s,baz=29,slow=8.8,SNR=15 | | | | | | | | | |
| ARCES | | | | PcP | | **PcP** | | **13 38 40.2** | **-0.5** | |
| | comp=Z,1.8nm,0.6s,baz=356,slow=4.9,SNR=4.9 | | | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | | | |
| **RLO** | **Rose Lookout** | **58.61** | **70** | IAmb | | IAmb | | 13 37 52.6 | | |
| | comp=Z,9.1nm,0.5s | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.73** | **314** | P | | **P** | | **13 37 58.1** | **-1.6** | |
| | comp=Z,1.3nm,0.3s,baz=47,slow=6.1,SNR=6.2 | | | | | | | | | |
| KURBB | | | | PcP | | **PcP** | | **13 38 46.1** | **-0.2** | |
| | comp=Z,1.6nm,0.2s,baz=45,slow=4.1,SNR=4.3 | | | | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | | | | |
| **SCHQ** | **Schefferville** | **59.76** | **39** | LR | | LR | | 14 04 56.4 | | |
| | comp=Z,96nm,19.6s,baz=310,slow=37 | | | | | | | | | |
| **WMQ** | **Urumqi** | **59.99** | **304** | *e*P | | **P** | | **13 38 00.8** | **-0.9** | |
| WMQ | | | | pP | | pwP | | 13 38 14.9 | +1.0 | |
| WMQ | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| WMQ | | | | LR | | LR | | | | |
| | comp=Z,110nm,18.9s | | | | | | | | | |
| **MIAR** | **Mount Ida** | **60.58** | **71** | P | | **P** | | **13 38 05.9** | **+0.1** | |
| **MKAR** | **Makanchi Array** | **60.66** | **309** | P | | **P** | | **13 38 04.3** | **-1.9** | |
| | comp=Z,0.7nm,0.3s,baz=43,slow=7.0,SNR=14 | | | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **60.83** | **69** | P | | **P** | | **13 38 06.6** | **-0.8** | |
| WHAR | | | | IAmb | | IAmb | | 13 38 08.4 | | |
| | comp=Z,4.3nm,0.7s | | | | | | | | | |
| **LCAR** | **Lake Charles** | **60.95** | **68** | P | | **P** | | **13 38 07.1** | **-1.2** | |
| LCAR | | | | IAmb | | IAmb | | 13 38 08.6 | | |
| | comp=Z,6.6nm,1.1s | | | | | | | | | |
| **X40A** | **Basin Creek Fa** | **61.06** | **70** | IAmb | | IAmb | | 13 38 11.0 | | |
| | comp=Z,4.1nm,0.7s | | | | | | | | | |
| **SADO** | **Sadowa** | **61.44** | **53** | LR | | LR | | 14 06 30.7 | | |
| | comp=Z,41nm,18.2s,baz=344,slow=38 | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.46** | **320** | P | | **P** | | **13 38 10.4** | **-1.1** | |
| | comp=Z,3.8nm,0.3s,baz=53,slow=7.5,SNR=25 | | | | | | | | | |
| BVAR | | | | PcP | | **PcP** | | **13 38 51.4** | **-1.8** | |
| | comp=Z,3.3nm,0.6s,baz=60,slow=6.0,SNR=7.1 | | | | | | | | | |
| | comp=Z,3.8nm,0.3s | | | | | | | | | |
| **BORG** | **Borgarnes** | **62.97** | **11** | LR | | LR | | 14 06 02.5 | | |
| | comp=Z,25nm,21.5s,baz=339,slow=36 | | | | | | | | | |
| **ARU** | **Arti** | **63.11** | **329** | P | | **P** | | **13 38 21.4** | **-1.0** | |
| **ARU** | **Arti** | **63.11** | **329** | P | | **P** | | **13 38 20.4** | **-2.1** | |
| | comp=Z,6.1nm,0.4s,baz=355,slow=3.2,SNR=6.7 | | | | | | | | | |
| ARU | | | | LR | | LR | | 14 09 12.4 | | |
| | comp=Z,95nm,19.0s,baz=228,slow=39 | | | | | | | | | |
| | comp=Z,6.1nm,0.4s | | | | | | | | | |
| **PZH** | **PanZhiHua** | **64.02** | **281** | P | | **P** | | **13 38 29.1** | **0.0** | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,240nm,4.8s | | | | | | | | | |
| **KIRV** | **Kirov** | **64.03** | **335** | LR | | LR | | 14 09 03.1 | | |
| | comp=Z,100nm,19.9s,baz=355,slow=38 | | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **65.47** | **63** | LR | | LR | | 14 08 01.4 | | |
| | comp=Z,35nm,18.9s,baz=176,slow=37 | | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **65.51** | **67** | IAmb | | IAmb | | 13 38 39.4 | | |
| | comp=Z,4.5nm,0.7s | | | | | | | | | |
| **FINES** | **FINESS Array B** | **66.12** | **348** | P | | **P** | | **13 38 40.7** | **-1.3** | |
| | comp=Z,0.7nm,0.4s,baz=6.0,slow=7.9,SNR=12 | | | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.90** | **355** | P | | **P** | | **13 38 51.7** | **-1.7** | |
| | comp=Z,0.6nm,0.4s,baz=336,slow=3.4,SNR=6.7 | | | | | | | | | |
| NOA | | | | LR | | LR | | 14 09 55.3 | | |
| | comp=Z,24nm,19.2s,baz=355,slow=37 | | | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | | | |
| **LSA** | **Lhasa** | **68.12** | **290** | P | | **P** | | **13 38 58.0** | **+2.2** | |
| LSA | | | | pmax | | pmax | | | | |
| | comp=Z,31nm,0.7s | | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **68.22** | **325** | LR | | LR | | 14 11 57.2 | | |
| | comp=Z,91nm,19.6s,baz=34,slow=39 | | | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.48** | **323** | P | | **P** | | **13 38 56.3** | **-0.9** | |
| **ABKAR** | **Akbulak array** | **68.48** | **323** | P | | **P** | | **13 38 56.6** | **-0.6** | |
| ABKAR | | | | IAmb | | IAmb | | 13 38 58.3 | | |
| | comp=Z,3.5nm,1.1s | | | | | | | | | |
| **HFS** | **Hagfors** | **68.66** | **354** | P | | **P** | | **13 38 56.4** | **-1.6** | |
| | comp=Z,1.4nm,0.4s,baz=11,slow=3.0,SNR=16 | | | | | | | | | |
| HFS | | | | PcP | | **PcP** | | **13 39 21.0** | **-1.8** | |
| | comp=Z,1.0nm,0.4s,baz=56,slow=3.7,SNR=4.4 | | | | | | | | | |
| HFS | | | | LR | | LR | | 14 07 45.1 | | |
| | comp=Z,34nm,21.9s,baz=322,slow=35 | | | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | | |
| **KSH** | **Kashi** | **69.14** | **307** | P | | **P** | | **13 39 04.5** | **+2.9** | |
| KSH | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | | |
| **BELG** | **Belogornoye** | **69.93** | **332** | LR | | LR | | 14 12 05.8 | | |
| | comp=Z,85nm,21.0s,baz=358,slow=38 | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **71.68** | **277** | P | | **P** | | **13 39 17.1** | **-0.2** | |
| | comp=Z,1.1nm,0.3s,baz=32,slow=7.6,SNR=8.1 | | | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | | | |
| **PPT** | **Papeete** | **72.78** | **152** | LR | | LR | | 14 04 57.9 | | |
| | comp=Z,36nm,19.9s,baz=332,slow=30 | | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **73.76** | **3** | P | | **P** | | **13 39 28.5** | **-0.5** | |
| | comp=Z,0.6nm,0.3s,baz=359,slow=4.1,SNR=7.0 | | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | | |
| **RAR** | **Rarotonga** | **73.80** | **163** | LR | | LR | | 14 04 07.5 | | |
| | comp=Z,80nm,19.9s,baz=324,slow=29 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.93** | **343** | P | | **P** | | **13 39 40.1** | **-1.6** | |
| | comp=Z,0.9nm,0.3s,baz=18,slow=5.7,SNR=5.0 | | | | | | | | | |
| AKASG | | | | LR | | LR | | 14 16 08.7 | | |
| | comp=Z,37nm,20.7s,baz=357,slow=38 | | | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | | | |
| **KAPI** | **Kappang** | **77.16** | **245** | LR | | LR | | 14 23 55.7 | | |
| | comp=Z,25nm,18.1s,baz=104,slow=43 | | | | | | | | | |
| **KBZ** | **Khabaz** | **79.10** | **331** | P | | **P** | | **13 39 59.2** | **-0.2** | |
| | comp=Z,2.2nm,0.7s,baz=28,slow=3.9,SNR=6.2 | | | | | | | | | |
| KBZ | | | | LR | | LR | | 14 20 00.5 | | |
| | comp=Z,83nm,19.8s,baz=21,slow=40 | | | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.32** | **225** | P | | **P** | | **13 40 16.6** | **-0.2** | |
| | comp=Z,1.3nm,0.8s,baz=32,slow=5.9,SNR=15 | | | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **85.39** | **336** | P | | **P** | | **13 40 32.1** | **-0.5** | |
| **BRTR** | **Keskin Array B** | **85.39** | **336** | P | | **P** | | **13 40 32.4** | **-0.2** | |
| | comp=Z,3.5nm,0.6s,baz=42,slow=2.7,SNR=18 | | | | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **85.78** | **223** | P | | **P** | | **13 40 35.0** | **+0.6** | |
| | comp=Z,2.4nm,0.7s,baz=25,slow=5.5,SNR=34 | | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **89.36** | **5** | P | | **P** | | **13 40 50.7** | **-1.0** | |
| | comp=Z,1.5nm,0.6s,baz=349,slow=3.8,SNR=12 | | | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | | | |
| **STKA** | **Stephens Creek** | **90.11** | **214** | P | | **P** | | **13 40 54.8** | **-0.1** | |
| | comp=Z,2.4nm,0.7s,baz=351,slow=6.7,SNR=5.7 | | | | | | | | | |
| STKA | | | | LR | | LR | | 14 18 34.8 | | |
| | comp=Z,52nm,20.8s,baz=25,slow=34 | | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.94** | **1** | PKP | | **PKiKP** | | **13 46 37.1** | **-1.0** | |
| | comp=Z,8nm,0.5s,baz=357,slow=2.6,SNR=8.8 | | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **120.47** | **107** | T | | T | | 15 58 46.1 | | |
| | baz=317,slow=77,SNR=42 | | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **120.48** | **107** | T | | T | | 15 58 40.9 | | |
| | baz=317,slow=77,SNR=72 | | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **120.48** | **107** | T | | T | | 15 58 40.3 | | |
| | baz=317,slow=77,SNR=58 | | | | | | | | | |
| **DBIC** | **Dimbokro** | **122.06** | **8** | PKP | | **PKPdf** | | **13 46 48.9** | **-1.0** | |
| | comp=Z,3.0nm,0.4s,baz=333,slow=1.2,SNR=11 | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **140.93** | **180** | PKhKP | | PKPpre | | 13 47 19.1 | | |
| | comp=Z,0.7nm,0.6s,baz=287,slow=0.5,SNR=11 | | | | | | | | | |
| **POGA** | **Pongola** | **147.40** | **306** | | | **PKPbc** | | **13 47 39.7** | **+1.0** | |
| **LBTB** | **Lobatse** | **148.32** | **317** | | | **PKPbc** | | **13 47 41.7** | **+0.3** | |
| **BOSA** | **Boshof** | **151.59** | **314** | PKPbc | | **PKPbc** | | **13 47 49.7** | **+0.4** | |
| | comp=Z,6.1nm,0.5s,baz=23,slow=2.3,SNR=28 | | | | | | | | | |

*ISK **16** 13:56:46.3,35˚.58N×32˚.21E,h25km,ML2.5/21*
*AFAD **16** 13:56:47.3±0.0,35˚.66N×32˚.37E,h44km±1km,ML2.1*
*NIC **16** 13:56:48.4,35˚.60N×32˚.41E,h23km±1km,Ml2.2/8*

**ISC 16 13:56:48.3±1.0,35˚.61N±0˚.02×32˚.35E±0˚.03,h29km±11km, n44,σ0˚.93/65,Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ALFC** | **Alefka** | **0.49** | **156** | S | **Sn** | **13 57 07.1** | **-0.1** |
| ALFC | | | | AML | AML | 13 57 07.9 | |
| | 0.7nm,0.1s | | | | | | |
| ALFC | | | | AML | AML | 13 57 12.6 | |
| | 0.9nm,0.1s | | | | | | |
| **AKMS** | **Akamas** | **0.59** | **181** | P | **Pb** | **13 57 00.1** | **-0.1** |
| AKMS | | | | S | **Sb** | **13 57 08.6** | **+0.3** |
| AKMS | | | | AML | AML | 13 57 12.7 | |
| | 2.3nm,0.4s | | | | | | |
| AKMS | | | | AML | AML | 13 57 12.9 | |
| | 1.6nm,0.3s | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AKDN** | **Akdeniz- Kıbrı** | **0.59** | **122** | Pg | | **Pn** | | **13 57 01.4** | **+0.6** | |
| **GAZI** | **Gazipasa** | **0.62** | **357** | Pg | | **Pb** | | **13 57 00.2** | **-0.6** | |
| GAZI | | | | Sg | | **Sb** | | **13 57 09.7** | **+0.4** | |
| **GAZI** | **Gazipasa** | **0.62** | **357** | P | | **Pb** | | **13 57 00.2** | **-0.6** | |
| GAZI | | | | *i* AML | | AML | | 13 57 09.0 | | |
| | comp=E,260nm,0.4s | | | | | | | | | |
| GAZI | | | | S | | **Sb** | | **13 57 09.5** | **+0.2** | |
| GAZI | | | | *i* AML | | AML | | 13 57 10.0 | | |
| | comp=N,152nm,0.4s | | | | | | | | | |
| **LEF** | **Lefka** | **0.66** | **138** | Pg | | **Pb** | | **13 57 00.9** | **-0.4** | |
| LEF | | | | Sg | | **Sn** | | **13 57 11.1** | **0.0** | |
| **LEF** | **Lefka** | **0.66** | **138** | P | | **Pn** | | **13 57 02.2** | **+0.5** | |
| LEF | | | | S | | **Sn** | | **13 57 11.9** | **+0.8** | |
| **BOZY** | **Bozyazi-Mersin** | **0.71** | **45** | Pg | | **Pn** | | **13 57 02.3** | **-0.1** | |
| BOZY | | | | Sg | | **Sn** | | **13 57 14.3** | **+1.9** | |
| **TROD** | **Troodos** | **0.78** | **147** | P | | **Pn** | | **13 57 03.1** | **-0.6** | |
| TROD | | | | S | | **Sn** | | **13 57 14.5** | **0.0** | |
| TROD | | | | AML | | AML | | 13 57 24.0 | | |
| | 0.2nm,0.6s | | | | | | | | | |
| TROD | | | | AML | | AML | | 13 57 24.3 | | |
| | 0.2nm,0.5s | | | | | | | | | |
| **TEKE** | **Tekeli-Mersin** | **0.82** | **49** | Pg | | **Pb** | | **13 57 04.1** | **+0.1** | |
| TEKE | | | | Sg | | **Sn** | | **13 57 16.9** | **+1.8** | |
| **NATA** | **Nata** | **0.85** | **168** | P | | **Pb** | | **13 57 05.0** | **+0.5** | |
| NATA | | | | S | | **Sn** | | **13 57 17.2** | **+1.4** | |
| NATA | | | | AML | | AML | | 13 57 26.3 | | |
| | 0.9nm,0.5s | | | | | | | | | |
| NATA | | | | AML | | AML | | 13 57 26.8 | | |
| | 0.9nm,0.4s | | | | | | | | | |
| **ATHAL** | **Athalassa** | **0.97** | **118** | P | | **Pn** | | **13 57 05.4** | **-0.6** | |
| ATHAL | | | | S | | **Sb** | | **13 57 19.6** | **+0.5** | |
| ATHAL | | | | AML | | AML | | 13 57 21.3 | | |
| | 0.2nm,0.4s | | | | | | | | | |
| ATHAL | | | | AML | | AML | | 13 57 27.1 | | |
| | 0.2nm,0.4s | | | | | | | | | |
| **ALAN** | **Alanya-ANTALYA** | **0.98** | **345** | Pg | | **Pn** | | **13 57 04.6** | **-1.6** | |
| **YORU** | **Yoruktepe-Mers** | **1.01** | **57** | Pn | | **Pb** | | **13 57 06.9** | **-0.4** | |
| YORU | | | | Sn | | **Sb** | | **13 57 22.1** | **+1.8** | |
| **CSS** | **Mathiatis** | **1.03** | **129** | Pn | | **Pn** | | **13 57 06.4** | **-0.4** | |
| **CSS** | **Mathiatis** | **1.03** | **129** | P | | **Pb** | | **13 57 07.1** | **-0.5** | |
| CSS | | | | S | | **Sb** | | **13 57 21.0** | **+0.4** | |
| CSS | | | | AML | | AML | | 13 57 31.4 | | |
| | 0.1nm,0.3s | | | | | | | | | |
| CSS | | | | AML | | AML | | 13 57 31.9 | | |
| | 0.1nm,0.6s | | | | | | | | | |
| **OREN** | **Orenkoy-Mersin** | **1.08** | **56** | Pn | | **Pb** | | **13 57 07.9** | **-0.5** | |
| **ASGA** | **Asgata** | **1.10** | **138** | P | | **Pb** | | **13 57 08.8** | **0.0** | |
| ASGA | | | | AML | | AML | | 13 57 29.0 | | |
| | 0.2nm,0.3s | | | | | | | | | |
| ASGA | | | | AML | | AML | | 13 57 30.4 | | |
| | 0.2nm,0.5s | | | | | | | | | |
| **AKK1** | **Akkuyu-Mersin** | **1.10** | **61** | Pn | | **Pb** | | **13 57 08.3** | **-0.5** | |
| **AKKU** | **Akkuyu-Mersin** | **1.12** | **60** | Pn | | **Pb** | | **13 57 08.4** | **-0.6** | |
| **GULN** | **MERSIN_Gulnar** | **1.12** | **59** | P | | **Pn** | | **13 57 08.0** | **-0.2** | |
| GULN | | | | S | | **Sb** | | **13 57 23.8** | **+0.4** | |
| GULN | | | | *i* AML | | AML | | 13 57 26.0 | | |
| | comp=N,26nm,0.4s | | | | | | | | | |
| GULN | | | | *i* AML | | AML | | 13 57 27.0 | | |
| | comp=E,34nm,0.3s | | | | | | | | | |
| **ERMK** | **Ermenek** | **1.13** | **24** | P | | **Pb** | | **13 57 09.9** | **+0.6** | |
| ERMK | | | | S | | **Sb** | | **13 57 24.8** | **+1.1** | |
| ERMK | | | | *i* AML | | AML | | 13 57 28.0 | | |
| | comp=N,104nm,0.4s | | | | | | | | | |
| ERMK | | | | *i* AML | | AML | | 13 57 30.0 | | |
| | comp=E,52nm,0.3s | | | | | | | | | |
| **YESI** | **Yesilovacik-Me** | **1.20** | **60** | Pn | | **Pb** | | **13 57 09.6** | **-0.8** | |
| **MVOU** | **Mavrovouni** | **1.20** | **119** | P | | **Pn** | | **13 57 08.5** | **-0.7** | |
| MVOU | | | | S | | **Sb** | | **13 57 24.2** | **-1.5** | |
| MVOU | | | | AML | | AML | | 13 57 33.9 | | |
| | 0.1nm,0.3s | | | | | | | | | |
| MVOU | | | | AML | | AML | | 13 57 34.6 | | |
| | 0.1nm,0.4s | | | | | | | | | |
| **TEVE** | **Tevekalti-Mers** | **1.21** | **47** | Pn | | **Pb** | | **13 57 09.7** | **-1.0** | |
| **TISA** | **Tisan-Mersin** | **1.21** | **62** | Pn | | **Pb** | | **13 57 09.8** | **-0.8** | |
| **IKL** | **Isikli** | **1.25** | **59** | Pn | | **Pb** | | **13 57 10.2** | **-1.1** | |
| **KARG** | **Kargicak-Mersi** | **1.25** | **61** | Pn | | **Pb** | | **13 57 10.6** | **-0.7** | |
| **HDMB** | **Hadim** | **1.36** | **5** | Pn | | **Pn** | | **13 57 11.3** | **-0.3** | |
| **KEBE** | **Keben-Mersin** | **1.38** | **52** | Pn | | **Pb** | | **13 57 12.2** | **-1.4** | |
| **SILI** | **Silifke-Mersin** | **1.48** | **59** | Pn | | **Pb** | | **13 57 13.6** | **-1.6** | |
| **EREN** | **Erenkoy** | **1.48** | **93** | Pn | | **Pb** | | **13 57 13.8** | **-1.4** | |
| **EREN** | **Erenkoy** | **1.48** | **93** | P | | **Pn** | | **13 57 12.9** | **-0.1** | |
| EREN | | | | S | | **Sb** | | **13 57 32.8** | **-0.9** | |
| EREN | | | | *i* AML | | AML | | 13 57 37.0 | | |
| | comp=N,25nm,0.3s | | | | | | | | | |
| EREN | | | | *i* AML | | AML | | 13 57 40.0 | | |
| | comp=E,42nm,1.3s | | | | | | | | | |
| **SLFK** | **Silifke-Mersin** | **1.51** | **58** | Pn | | **Pn** | | **13 57 14.0** | **+0.6** | |
| **KKBE** | **Karaman, Kazim** | **1.68** | **16** | P | | **Pn** | | **13 57 16.7** | **+0.8** | |
| KKBE | | | | S | | **Sb** | | **13 57 39.0** | **-0.4** | |
| KKBE | | | | *i* AML | | AML | | 13 57 43.0 | | |
| | comp=N,14nm,0.4s | | | | | | | | | |
| KKBE | | | | *i* AML | | AML | | 13 57 43.0 | | |
| | comp=E,18nm,0.3s | | | | | | | | | |
| **KIZK** | **Mersin** | **1.69** | **59** | Pn | | **Pn** | | **13 57 16.6** | **+0.6** | |
| **KIZK** | **Mersin** | **1.69** | **59** | P | | **Pn** | | **13 57 15.8** | **-0.1** | |
| KIZK | | | | S | | **Sb** | | **13 57 37.3** | **-2.4** | |
| KIZK | | | | *i* AML | | AML | | 13 57 40.0 | | |
| | comp=E,15nm,0.6s | | | | | | | | | |
| **KRMN** | **Karaman** | **1.73** | **25** | Pn | | **Pn** | | **13 57 16.3** | **-0.2** | |
| **AKUM** | **Antalya-Kumluc** | **1.78** | **294** | P | | **Pn** | | **13 57 16.7** | **-0.4** | |
| AKUM | | | | S | | **Sb** | | **13 57 42.0** | **-0.1** | |
| AKUM | | | | *i* AML | | AML | | 13 57 45.0 | | |
| | comp=N,28nm,0.7s | | | | | | | | | |
| AKUM | | | | *i* AML | | AML | | 13 57 45.0 | | |
| | comp=E,20nm,0.4s | | | | | | | | | |
| **SEYD** | **Seydisehir-KON** | **1.84** | **347** | Pn | | **Pn** | | **13 57 17.2** | **-0.9** | |
| **SEDI** | **Konya, Seydise** | **1.90** | **346** | P | | **Pn** | | **13 57 19.0** | **+0.1** | |
| SEDI | | | | S | | **Sn** | | **13 57 42.7** | **+0.7** | |
| SEDI | | | | *i* AML | | AML | | 13 57 45.0 | | |
| | comp=N,24nm,0.5s | | | | | | | | | |
| SEDI | | | | *i* AML | | AML | | 13 57 49.0 | | |
| | comp=E,18nm,0.6s | | | | | | | | | |
| **KERG** | **Konya-Eregli** | **2.30** | **38** | P | | **Pn** | | **13 57 26.4** | **+1.9** | |
| KERG | | | | S | | **Sb** | | **13 57 55.5** | **-1.8** | |
| KERG | | | | *i* AML | | AML | | 13 57 58.0 | | |
| | comp=N,15nm,0.7s | | | | | | | | | |
| KERG | | | | *i* AML | | AML | | 13 57 59.0 | | |
| | comp=E,13nm,0.5s | | | | | | | | | |
| **KONT** | **Konya--Tatoy** | **2.33** | **0** | Pn | | **Pn** | | **13 57 24.5** | **-0.3** | |
| **CMRD** | **Camardi-Nigde** | **2.95** | **45** | Pn | | **Pn** | | **13 57 34.5** | **+1.1** | |

*NEIC **16** 14:14:52.9±1.8,38˚.79N±0˚.02×122˚.789W±0˚.008, h5km±2km,Error ellipse: s-maj=3.1km s-min=2.8km az=192.0*

**NCEDC 16 14:14:52.9±1.1,38˚.80N±0˚.02×122˚.778W±0˚.009, h2km±6km,Mwr3.3/2,ML2.7/60(NEIC),Error ellipse: s-maj=2.4km s-min=0.9km az=194.0,Northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GDXM** | **Geysers** | **0.01** | **294** | | Pg | 14 14 53.6 | 0.0 |
| **GDXM** | **Geysers** | **0.01** | **294** | IAML | | 14 14 53.8 | |
| | comp=E,16μm,0.2s | | | | | | |
| GDXM | | | | IAML | | 14 14 54.0 | |
| | comp=N,13μm,0.1s | | | | | | |
| **GGPM** | **Geyser Peak** | **0.06** | **234** | | Pg | 14 14 54.6 | +0.3 |
| **GBGM** | **Boggs Mountain** | **0.08** | **81** | | Pg | 14 14 54.9 | +0.4 |
| **GSGM** | **Seigler Mounta** | **0.08** | **40** | | Pg | 14 14 55.2 | +0.6 |
| **GAXM** | **Alexander Vall** | **0.09** | **169** | | Pg | 14 14 56.5 | +1.8 |
| **GPMM** | **Pine Mountain** | **0.14** | **289** | | Pg | 14 14 56.1 | +0.4 |
| **GRTM** | **Round Top Moun** | **0.16** | **32** | | Pg | 14 14 56.3 | +0.2 |
| **GCVM** | **Cloverdale** | **0.19** | **260** | | Pg | 14 14 57.1 | +0.6 |
| **NHSM** | **Mount Saint He** | **0.19** | **139** | | Pg | 14 14 57.0 | +0.2 |
| **GSSM** | **Skaggs Springs** | **0.21** | **241** | | Pg | 14 14 57.7 | +0.7 |
| **NMTM** | **Middletown** | **0.26** | **89** | | Pg | 14 14 58.3 | +0.4 |
| **MNRC** | **McLaughlin Min** | **0.27** | **74** | | Pg | 14 14 59.1 | +0.9 |
| **HOPS** | **Hopland Field** | **0.30** | **310** | Pg | Pg | 14 14 59.3 | +0.6 |
| HOPS | | | | IAML | | 14 15 04.5 | |
| | comp=N,2μm,0.7s | | | | | | |
| **GHCM** | **House Creek** | **0.38** | **239** | | Pg | 14 15 01.0 | +0.7 |
| **CVS** | **Carmenet Viney** | **0.52** | **151** | | Pg | 14 15 03.3 | +0.4 |
| **NAPC** | **Atlas Peak** | **0.55** | **131** | | Pg | 14 15 03.8 | +0.4 |
| **GGUM** | **Gualala** | **0.56** | **276** | | Pg | 14 15 04.5 | +0.7 |
| **GWRM** | **Wonder Ranch** | **0.57** | **315** | | Pg | 14 15 04.3 | +0.4 |
| **MCCM** | **Marconi Confer** | **0.66** | **187** | Pg | Pb | 14 15 06.5 | -0.7 |
| MCCM | | | | IAML | | 14 15 23.2 | |
| | comp=N,413nm,0.7s | | | | | | |
| MCCM | | | | IAML | | 14 15 25.2 | |
| | comp=E,372nm,0.7s | | | | | | |
| **SNT** | **Sears Point** | **0.67** | **157** | | Pg | 14 15 05.8 | +0.1 |
| **NGVM** | | **0.68** | **140** | | Pg | 14 15 06.2 | +0.2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **NADM** | **Allendale** | **0.72** | **118** | | Pb | 14 15 08.6 | +0.4 | | | |
| **NOLM** | **Olema** | **0.76** | **181** | | Pg | 14 15 07.9 | +0.4 | | | |
| **DCMP** | **DeCamp, Califo** | **0.80** | **327** | | Pg | 14 15 08.7 | +0.5 | | | |
| **GTC** | **Three Chop Rid** | **0.85** | **315** | | Pg | 14 15 09.8 | +0.5 | | | |
| **OSUM** | **Sutter Buttes** | **0.86** | **57** | | Pg | 14 15 09.3 | -0.2 | | | |
| **SUTB** | **Sutter Butte** | **0.88** | **61** | | Pg | 14 15 09.2 | -0.7 | | | |
| **CPMM** | **Point Molate** | **0.90** | **161** | | Pg | 14 15 10.2 | 0.0 | | | |
| **CSPM** | **San Pablo Ridg** | **0.92** | **156** | | Pb | 14 15 11.4 | -0.2 | | | |
| **CPIM** | **Pinole Ridge** | **0.93** | **151** | | Pg | 14 15 10.8 | +0.2 | | | |
| **BL67** | **Building 67, L** | **1.01** | **156** | | Pg | 14 15 12.6 | +0.3 | | | |
| **BRK** | **Berkeley--Havi** | **1.01** | **156** | | Pg | 14 15 12.7 | +0.4 | | | |
| **VAK** | **Adit at Lawren** | **1.01** | **156** | | Pg | 14 15 12.3 | 0.0 | | | |
| **BKS** | **Berkeley--Byer** | **1.02** | **155** | | Pg | 14 15 12.5 | 0.0 | | | |
| **JPRM** | **Presidio of Sa** | **1.03** | **167** | | Pg | 14 15 12.7 | 0.0 | | | |
| **KCPM** | **Cahto Peak** | **1.08** | **325** | | Pb | 14 15 14.5 | 0.0 | | | |
| **GROM** | **Round Mountain** | **1.12** | **4** | | Pb | 14 15 14.9 | -0.2 | | | |
| **KBNM** | **Bluenose Ridge** | **1.14** | **344** | | Pn | 14 15 16.6 | +0.6 | | | |
| **KIPM** | **Iron Peak** | **1.14** | **332** | | Pg | 14 15 15.1 | +0.2 | | | |
| **JMGM** | **Milagra Ridge** | **1.19** | **168** | | Pg | 14 15 15.0 | -0.7 | | | |
| **ORV** | **Oroville** | **1.25** | **52** | | Pn | 14 15 20.8 | +3.4 | | | |
| **SAC** | **San Andreas** | **1.25** | **167** | | Pg | 14 15 15.9 | -1.0 | | | |
| **JCHM** | **Cahill Ridge** | **1.32** | **166** | | Pg | 14 15 16.5 | -1.8 | | | |
| **O02D** | **Mt. Diablo Mer** | **1.37** | **360** | | Pg | 14 15 19.3 | 0.0 | | | |
| **O02D** | **Mt. Diablo Mer** | **1.37** | **360** | | Pn | 14 15 19.1 | 0.0 | | | |
| **O02D** | **Mt. Diablo Mer** | **1.37** | **360** | IAML | | 14 15 24.2 | | | | |
| | comp=N,46nm,1.1s | | | | | | | | | |
| O02D | | | | IAML | | 14 15 45.4 | | | | |
| | comp=E,39nm,1.0s | | | | | | | | | |
| **KPK** | **Kanaka Peak** | **1.39** | **55** | | Pn | 14 15 17.1 | -2.3 | | | |
| **CVLM** | **Vallecito** | **1.39** | **147** | | Pn | 14 15 17.9 | -1.4 | | | |
| **AFDM** | **Forest Hills D** | **1.42** | **84** | | Pn | 14 15 17.4 | -2.4 | | | |
| **JRSC** | **Jasper Ridge** | **1.46** | **163** | | Pn | 14 15 18.8 | -1.4 | | | |
| **CSTL** | **Coral Hollow** | **1.54** | **139** | | Pn | 14 15 19.9 | -1.4 | | | |
| **JBMM** | **Black Mountain** | **1.56** | **161** | | Pn | 14 15 19.8 | -2.0 | | | |
| **KMRM** | **Mail Ridge** | **1.59** | **333** | | Pg | 14 15 24.1 | +0.7 | | | |
| KMRM | | | | IAML | | 14 15 59.6 | | | | |
| | comp=N,73nm,1.2s | | | | | | | | | |
| KMRM | | | | IAML | | 14 16 04.7 | | | | |
| | comp=E,76nm,0.9s | | | | | | | | | |
| **CMLM** | **Mount Lewis** | **1.59** | **146** | | Pn | 14 15 20.5 | -1.7 | | | |
| **O03E** | **Paynes Creek** | **1.67** | **27** | | Pn | 14 15 21.8 | -1.4 | | | |
| **CMMM** | **Mount Mocho** | **1.68** | **143** | | Pn | 14 15 21.9 | -1.5 | | | |
| **MHC** | **Mount Hamilton** | **1.71** | **148** | | Pn | 14 15 22.3 | -1.5 | | | |
| **MTOS** | **Mt Oso, Westle** | **1.73** | **138** | | Pn | 14 15 22.4 | -1.6 | | | |
| **ARN** | **Arnold Ranch** | **1.75** | **145** | | Pn | 14 15 23.2 | -1.1 | | | |
| **CCOB** | **Coe Ranch Numb** | **1.77** | **150** | | Pn | 14 15 23.3 | -1.3 | | | |
| **JLAB** | **Laurel Hill** | **1.84** | **153** | | Pn | 14 15 23.7 | -1.8 | | | |
| **DONR** | **Donner Summit** | **1.99** | **73** | | Pn | 14 15 27.2 | -0.6 | | | |
| **GHS** | **Gilroy Hot Spr** | **2.00** | **148** | | Pn | 14 15 26.1 | -1.7 | | | |
| **CMB** | **Columbia Colle** | **2.03** | **111** | Pn | Pn | 14 15 27.0 | -1.1 | | | |
| CMB | | | | IAML | | 14 16 07.5 | | | | |
| | comp=N,45nm,0.7s | | | | | | | | | |
| **EMB** | **Emerald Bay** | **2.10** | **84** | | Pn | 14 15 29.4 | +0.1 | | | |
| **HFEM** | **San Felipe** | **2.12** | **149** | | Pn | 14 15 27.9 | -1.4 | | | |
| **BEKR** | **Beckworth** | **2.16** | **

UGL eS S 14 25 06.1 +0.5
UGL A A 14 25 09.1
comp=N,700nm,3.0s
UGL A A 14 25 09.1
comp=N,2μm,3.0s
**UGL Uglegorsk 3.89 274⇑** *i*P **P 14 24 01.6 +2.0**
UGL eS S **14 25 06.0 +0.5**
UGL pmax pmax
comp=Z,2μm,1.1s
UGL pmax pmax
comp=Z,1μm,0.9s
UGL smax smax
comp=N,700nm,1.9s
UGL smax smax
comp=E,2μm,2.8s
**TYV Tymovskoe 3.94 301** *e*P **P 14 24 01.4 +1.5**
TYV AMB AMB 14 24 01.8
comp=E,400nm,2.0s
TYV AMB AMB 14 24 02.0
comp=E,280nm,0.7s
TYV eS S **14 25 06.9 +0.7**
TYV A A 14 25 07.5
comp=E,700nm,4.0s
TYV A A 14 25 07.5
comp=E,300nm,4.0s
TYV A A 14 25 09.0
comp=E,130nm,0.9s
TYV A A 14 25 09.0
comp=E,60nm,0.9s
**TYV Tymovskoe 3.94 301** *e*P **P 14 24 01.4 +1.5**
TYV eS S **14 25 06.9 +0.7**
TYV pmax pmax
comp=Z,400nm,2.1s
TYV pmax pmax
comp=Z,283nm,0.7s
TYV smax smax
comp=N,700nm,3.6s
TYV smax smax
comp=E,300nm,3.6s
TYV smax smax
comp=N,157nm,1.2s
TYV smax smax
comp=E,55nm,1.2s
**YSS Yuzh-Sakhalins 4.03 242** P **P 14 24 02.9 +2.1**
**YSS Yuzh-Sakhalins 4.03 242** P **P 14 24 02.8 +2.1**
**YSS Yuzh-Sakhalins 4.03 242** *e*P **P 14 24 02.9 +2.1**
YSS AMB AMB 14 24 03.9
comp=E,260nm,0.6s
YSS AMB AMB 14 24 05.2
comp=E,300nm,3.0s
YSS eS S **14 25 09.1 +1.5**
YSS A A 14 25 10.0
comp=E,900nm,6.0s
YSS A A 14 25 10.0
comp=E,400nm,6.0s
YSS A A 14 25 11.6
comp=E,100nm,0.8s
YSS A A 14 25 11.6
comp=E,80nm,0.8s
**YSS Yuzh-Sakhalins 4.03 242** *ce*P **P 14 24 03.0 +2.1**
YSS eS S **14 25 09.1 +1.5**
YSS pmax pmax
comp=Z,320nm,0.7s
YSS pmax pmax
comp=Z,300nm,3.6s
YSS pmax pmax
comp=E,300nm,2.3s
YSS smax smax
comp=N,900nm,5.4s
YSS smax smax
comp=E,400nm,7.4s
YSS smax smax
comp=N,180nm,1.1s
YSS smax smax
comp=E,170nm,1.0s
**YUK Yuzh-Kuril'sk 5.12 197** *e*P **P 14 24 09.9 +0.3**
YUK AMB AMB 14 24 15.3
comp=E,230nm,0.3s
YUK eS S **14 25 22.9 -0.8**
YUK A A 14 25 32.9
comp=E,420nm,0.7s
YUK A A 14 25 32.9
comp=E,360nm,0.7s
**YUK Yuzh-Kuril'sk 5.12 197** *e*P **P 14 24 09.8 +0.2**
YUK eS S **14 25 22.8 -0.9**
YUK pmax pmax
comp=Z,224nm,0.2s
YUK pmax pmax
comp=N,109nm,0.3s
YUK pmax pmax
comp=E,54nm,0.3s
YUK smax smax
comp=N,329nm,0.6s
YUK smax smax
comp=E,287nm,0.7s
**SHO Shikotan 5.13 189** *e*P **P 14 24 07.6 -2.2**
SHO AMB AMB 14 24 09.6
comp=E,250nm,0.3s
SHO eS S **14 25 18.8 -5.1**
SHO A A 14 25 20.1
comp=E,190nm,0.4s
SHO A A 14 25 20.1
comp=E,220nm,0.4s
**SHO Shikotan 5.13 189** *e*P **P 14 24 07.6 -2.2**
SHO eS S **14 25 18.8 -5.1**
SHO pmax pmax
comp=Z,213nm,0.3s
SHO pmax pmax
comp=N,91nm,0.2s
SHO pmax pmax
comp=E,89nm,0.3s
SHO smax smax
comp=E,162nm,0.3s
SHO smax smax
comp=N,283nm,0.5s
**RUSJ Misakicho 5.19 202** *e*P **P 14 24 10.6 +0.4**
RUSJ eS S **14 25 25.2 +0.4**
**JRA Rausu 5.38 203** *e*P **P 14 24 11.7 -0.2**
**JWK2 Keihoku 5.50 231** P **P 14 24 14.9 +2.0**
JWK2 eS S **14 25 32.8 +3.1**
**SKR Severo-Kuril's 5.55 69** AMB AMB 14 24 14.9
comp=N,180nm,0.7s
SKR eS S **14 25 29.4 -1.1**
SKR A A 14 25 34.4
comp=N,130nm,0.8s
SKR A A 14 25 34.4
comp=N,160nm,0.8s
SKR AMS AMS 14 26 24.5
comp=N,600nm,13.0s
**SKR Severo-Kuril's 5.55 69** *e*P **P 14 24 13.6 +0.4**
SKR eS S **14 25 30.6 +0.1**
SKR pmax pmax
comp=Z,179nm,0.7s
SKR smax smax
comp=E,143nm,0.6s
SKR smax smax
comp=N,184nm,0.7s
SKR MLR MLR
comp=Z,600nm,13.0s
**OKH Okha 5.59 327** *e*P **P 14 24 13.3 -0.1**
OKH AMB AMB 14 24 14.2
comp=Z,190nm,0.6s
OKH eS S **14 25 31.4 +0.4**
OKH A A 14 25 34.4
comp=Z,80nm,0.9s
OKH A A 14 25 34.4
comp=Z,170nm,0.9s
**JTKR Abashiri--Toko 5.71 211** P **P 14 24 14.9 +0.1**
JTKR eS S **14 25 32.6 -0.5**
**NMR Nemuro--Hokkai 5.79 196** *e*P **P 14 24 13.9 -1.6**
**NMR Nemuro--Hokkai 5.79 196** *e*P **P 14 24 13.6 -1.9**
NMR eS S **14 25 29.3 -5.1**
**NEM2 Nemuro 2 5.79 196** P **P 14 24 13.6 -1.9**
NEM2 eS S **14 25 29.0 -5.4**
**JNK Nakash 5.81 204** P **P 14 24 15.2 -0.6**
JNK eS S **14 25 33.0 -1.9**
**JRBN Rebuntou 5.88 236** *e*P **P 14 24 18.7 +2.4**
JRBN eS S **14 25 37.6 +1.8**
**JKA Kamikawa-asahi 6.08 219** P **P 14 24 19.1 +0.9**
**JKA Kamikawa-asahi 6.08 219** *e*P **P 14 24 19.1 +0.9**
**ASAJ Asahikawa 6.08 220** P **P 14 24 19.1 +0.9**
comp=Z,29nm,0.6s,baz=41,slow=2.1,SNR=16
ASAJ S **S 14 25 40.4 +1.0**
comp=Z,23nm,1.0s,baz=108,slow=19,SNR=2.1
**JKK2 Kamakawa 2 6.22 217** *e*P **P 14 24 20.2 +0.7**
JKK2 eS S **14 25 40.5 -1.2**

**NKL Nikolayevsk 6.23 315** *e*P **P 14 24 20.2 +0.9**
NKL AMB AMB 14 24 20.9
comp=Z,60nm,0.4s
NKL eS S **14 25 41.6 0.0**
NKL A A 14 25 42.9
comp=Z,90nm,0.8s
NKL A A 14 25 42.9
comp=Z,60nm,0.8s
NKL A A 14 25 43.4
comp=Z,1μm,2.0s
NKL A A 14 25 43.4
comp=Z,600nm,2.0s
**NKL Nikolayevsk 6.23 315** *e*P **P 14 24 18.2 -1.1**
NKL eS S **14 25 40.9 -0.7**
NKL pmax pmax
comp=N,44nm,0.5s
NKL pmax pmax
comp=E,110nm,0.6s
NKL pmax pmax
comp=Z,274nm,0.6s
NKL smax smax
comp=E,648nm,1.1s
NKL smax smax
comp=N,1μm,2.2s
**JAR Ashorobuto 6.36 209** P **P 14 24 20.7 0.0**
JAR S **S 14 25 42.9 -1.1**
**JAK Akkeshi 6.37 202** P **P 14 24 18.8 -2.0**
JAK S **S 14 25 38.8 -5.4**
**JOB Onbets 6.69 207** P **P 14 24 23.4 -0.5**
JOB eS S **14 25 46.8 -2.9**
**JAB Ashibetsu 6.74 218** *e*P **P 14 24 25.8 +1.5**
JAB eS S **14 25 51.0 +0.3**
**KDTR Khodutka, Kamc 7.07 62** *e*P **P 14 24 27.0 -0.2**
KDTR AMB AMB 14 24 29.8
comp=N,50nm,0.3s
KDTR eS S **14 25 51.8 -4.4**
KDTR A A 14 25 56.9
comp=N,100nm,0.8s
KDTR A A 14 25 56.9
comp=N,210nm,0.8s
**JCH Churui 7.10 209** P **P 14 24 26.2 -1.5**
JCH eS S **14 25 50.3 -6.6**
**PEA0B Petropavlovsk- 7.42 52** *di*P **P 14 24 31.0 +0.4**
**PETK Petropavlovsk- 7.42 52** P **P 14 24 30.4 -0.2**
comp=N,7.8nm,0.6s,baz=226,slow=6.0,SNR=4.7
PETK ScP **ScP 14 32 47.9 -0.3**
comp=N,2.7nm,0.8s,baz=160,slow=4.6,SNR=5.1
**JNBK Urakawa-nobuka 7.60 211** P **P 14 24 31.2 -1.5**
JNBK S **S 14 25 59.7 -6.1**
**GRNR Gornyy 7.69 288** *e*P **P 14 24 34.2 +0.9**
GRNR AMB AMB 14 24 35.0
comp=N,20nm,0.4s
**GRNR Gornyy 7.69 288⇑** *i*P **P 14 24 34.2 +0.9**
GRNR pmax pmax
comp=Z,20nm,0.4s
GRNR MLR MLR
comp=N,100nm,13.0s
GRNR MLR MLR
comp=E,360nm,13.0s
GRNR MLR MLR
comp=Z,170nm,13.0s
**JEM Erimo 7.71 208** P **P 14 24 33.6 -0.1**
**ERM Erimo 7.71 208** P **P 14 24 33.4 -0.3**
**ERM Erimo 7.71 208** S **P 14 24 33.7 0.0**
**ERM Erimo 7.71 208** *di*P **P 14 24 34.2 +0.5**
**PET Petropavlovsk 7.88 55** *e*P **P 14 24 35.5 +0.4**
PET AMB AMB 14 24 39.9
comp=Z,10.0nm,0.5s
PET eS S **14 26 09.0 -1.6**
PET A A 14 26 13.3
comp=Z,40nm,0.6s
PET A A 14 26 13.3
comp=Z,30nm,0.6s
**PET Petropavlovsk 7.88 55** *e*P **P 14 24 35.9 +0.8**
PET eS S **14 26 10.1 -0.5**
PET pmax pmax
comp=Z,26nm,1.6s
PET smax smax
comp=N,40nm,0.7s
PET smax smax
comp=E,58nm,0.8s
**JTM Tenmabayashi 9.51 214** P **P 14 24 51.1 -0.7**
**JANG Nango 9.72 211** *e*S **S 14 26 41.1 -3.8**
**JTH Tanohata 10.00 208** *e*P **P 14 24 57.8 +1.0**
JTH S **S 14 26 47.8 -2.4**
**KLR Kul'dur 10.65 278** P **P 14 25 04.2 +0.8**
comp=E,18nm,0.6s,baz=80,slow=8.6,SNR=61
**KLR Kul'dur 10.65 278** *e*P **P 14 25 04.1 +0.8**
KLR AMB AMB 14 25 04.8
comp=E,20nm,0.6s
**KLR Kul'dur 10.65 278** *di*P **P 14 25 04.1 +0.8**
KLR pmax pmax
comp=Z,17nm,0.6s
**MA2 Magadan 10.78 8** P **P 14 25 04.8 +0.3**
**MA2 Magadan 10.78 8** P **P 14 25 04.2 -0.3**
comp=Z,15nm,0.7s,baz=194,slow=8.2,SNR=11
**MA2 Magadan 10.78 8** *di*P **P 14 25 04.1 -0.3**
MA2 pmax pmax
comp=Z,32nm,1.7s
**MA2 Magadan 10.78 8** P **P 14 25 04.3 -0.2**
comp=Z,34nm,0.9s
**USA0B Ussuriysk Arra 11.97 253⇑** *i*P **P 14 25 17.4 +0.3**
**USRK Ussuriysk Ar. 11.97 253** P **P 14 25 16.5 -0.6**
comp=Z,2.3nm,0.4s,baz=55,slow=12,SNR=8.7
**JMM Marumori 12.23 208** P **P 14 25 21.6 +1.7**
**HEH HeiHe 13.40 283** *e*P **P 14 25 29.8 -1.9**
HEH pmax pmax
comp=Z,23nm,0.6s
HEH pmax pmax
comp=Z,170nm,4.1s
**ZEA Zeya 13.79 298** *e*P **P 14 25 34.5 -1.2**
ZEA AMB AMB 14 25 35.0
comp=Z,10.0nm,1.0s
**ZEA Zeya 13.79 298** *e*P **P 14 25 34.5 -1.2**
ZEA eS S **14 27 53.7 -7.6**
ZEA pmax pmax
comp=N,10.0nm,1.2s
ZEA pmax pmax
comp=Z,10.0nm,1.0s
ZEA smax smax
comp=E,100nm,8.4s
**SEY Seymchan 14.23 8** P **P 14 25 39.9 -0.2**
comp=E,16nm,0.9s,baz=186,slow=8.0,SNR=44
**SEY Seymchan 14.23 8** *e*P **P 14 25 39.8 -0.3**
**SEY Seymchan 14.23 8** *ce*P **P 14 25 39.8 -0.3**
SEY pmax pmax
comp=Z,32nm,1.1s
**MJB9 Matsu-Tunnel 14.30 214** **P 14 25 43.8 +2.6**
**BNX BinXian 14.30 265** ⇑P **P 14 25 39.4 -1.7**
BNX pmax pmax
comp=Z,6.0nm,0.7s
**MAJO Matsushiro 14.30 214** P **P 14 25 44.2 +2.9**
**MAJO Matsushiro 14.30 214** *di*P **P 14 25 43.7 +2.4**
MAJO pmax pmax
comp=Z,16nm,0.6s
**MJAR Matsushiro Arr 14.30 214** P **P 14 25 43.1 +1.8**
comp=Z,7.1nm,0.6s,baz=17,slow=9.5,SNR=39
MJAR ScP **ScP 14 32 57.8 0.0**
comp=Z,1.4nm,0.7s,baz=28,slow=2.2,SNR=5.6
**INU Inuyama 15.80 215** P **P 14 25 58.4 +1.8**
**YAK Yakutsk 16.62 329** P **P 14 26 02.2 -1.7**
**YAK Yakutsk 16.62 329** P **P 14 26 02.3 -1.7**
comp=Z,374nm,0.8s,baz=37,slow=0.9,SNR=104
**YAK Yakutsk 16.62 329** *e*P **P 14 26 01.9 -2.0**
**YAK Yakutsk 16.62 329** *ce*P **P 14 26 01.9 -2.0**
YAK pmax pmax
comp=Z,304nm,0.8s
**SHEM Shemya Is, Ala 16.90 67** P **P 14 26 07.1 +0.6**
comp=Z,63nm,0.7s,baz=277,slow=16,SNR=5.1
**KSRS Korea Array 18.52 239** P **P 14 26 23.3 +1.7**
comp=Z,1.3nm,0.6s,baz=45,slow=9.1,SNR=4.6
**AMKA Amchitka 20.14 71** **P 14 26 35.6 -0.5**
**JNU Nakatsue 20.32 225** P **P 14 26 39.4 +1.3**
comp=Z,7.6nm,0.9s,baz=31,slow=12,SNR=1.5
comp=Z,7.6nm,0.9s
**BILL Bilibino 21.24 19** *e*P **P 14 26 45.4 -0.4**
**BILL Bilibino 21.24 19** *ci*P **P 14 26 45.4 -0.4**
BILL *e**SP **sP 14 29 08.0 -0.6**
BILL *e* 14 30 27.6
BILL pmax pmax
comp=Z,9.0nm,1.5s
**XLT XiLinHaoTe 22.45 269** *e*P **P 14 26 58.0 +0.8**
XLT pmax pmax
comp=Z,31nm,1.0s
**TIXI Tiksi 24.43 345** P **P 14 27 12.7 -1.5**

**TIXI Tiksi 24.43 345** P **P 14 27 13.1 -1.0**
comp=Z,7.6nm,0.5s,baz=187,slow=6.2,SNR=12
TIXI ScP **ScP 14 33 19.6 -1.0**
comp=Z,4.6nm,0.6s,baz=77,slow=3.1,SNR=5.2
comp=Z,7.6nm,0.5s
**TIXI Tiksi 24.43 345** *e*P **P 14 27 12.9 -1.3**
**TIXI Tiksi 24.43 345** *di*P **P 14 27 12.9 -1.3**
TIXI pmax pmax
comp=Z,9.0nm,0.6s
**GAMB Gambell 26.25 41** P **P 14 27 30.3 0.0**
baz=255
**P08K Saint George I 26.45 57** P **P 14 27 32.3 +0.1**
baz=272
**HNS HongShan 26.65 257** ⇓P **P 14 27 35.6 +1.4**
HNS pmax pmax
comp=Z,13nm,0.9s
**HHC Hu-ho-hao-te 26.82 266** *e*P **P 14 27 36.0 +0.2**
HHC pmax pmax
comp=Z,20nm,0.9s
HHC pmax pmax
comp=Z,68nm,5.7s
**JOW Kunigami 26.84 222** P **P 14 27 37.6 +1.5**
**ULN Ulaanbaatar 26.96 283** *e*P **P 14 27 37.3 +0.3**
**ULN Ulaanbaatar 26.96 283** *ce*P **P 14 27 37.3 +0.3**
ULN pmax pmax
comp=Z,14nm,1.4s
**NIKH Nikolski High 27.18 65** P **P 14 27 39.2 +0.5**
baz=280
**SONM Songino Array 27.39 284** P **P 14 27 41.3 +0.5**
comp=Z,4.2nm,0.8s,baz=74,slow=8.6,SNR=25
SONM ScP **ScP 14 33 29.6 -0.4**
comp=Z,6.8nm,0.8s,baz=98,slow=2.2,SNR=30
comp=Z,4.2nm,0.8s
**BTO Baotou 27.96 267** *e*P **P 14 27 46.5 +0.7**
BTO pmax pmax
comp=Z,20nm,0.7s
BTO pmax pmax
comp=Z,190nm,3.6s
**M11K Mekoryuk 28.27 49** P **P 14 27 48.0 -0.1**
baz=267
**TNA Tin City 28.28 38** P **P 14 27 47.4 -0.6**
baz=256
**UNV Unalaska Valle 28.44 63** P **P 14 27 49.6 0.0**
baz=279
**F14K Arctic Creek 28.90 38** P **P 14 27 53.4 -0.1**
baz=258
**K13K Kusilvak Mount 29.12 46** P **P 14 27 55.9 +0.5**
baz=266
**ANM Nome 29.12 40** P **P 14 27 55.5 0.0**
baz=260
**F15K North Star Dit 29.64 38** P **P 14 27 59.1 -0.7**
baz=259
**M13K Dall Lake 29.68 49** P **P 14 28 00.1 -0.2**
baz=270
**J14K Nanvaranak Lak 29.70 44** P **P 14 28 00.6 +0.3**
baz=266
**MOY Mondy 29.73 293** *e*P **P 14 28 01.3 +0.3**
**MOY Mondy 29.73 293** *e*P **P 14 28 01.3 +0.3**
MOY pmax pmax
comp=Z,15nm,2.0s
**G15K Niukluk 29.76 40** P **P 14 28 00.1 -0.9**
baz=261
**C16K Lisburne Hills 29.98 33** P **P 14 28 02.2 -0.5**
baz=254
**L14K Kuka Creek 30.03 47** P **P 14 28 03.1 -0.2**
baz=269
**FALS False Pass 30.06 60** P **P 14 28 03.8 +0.1**
baz=280
**M14K Bethel 30.37 48** P **P 14 28 05.9 -0.4**
baz=270
**H16K Elim 30.47 40** P **P 14 28 06.8 -0.3**
baz=264
**N14K Kuskokwak Cree 30.52 50** P **P 14 28 07.5 -0.1**
baz=272
**G16K Koyuk River 30.52 39** P **P 14 28 07.2 -0.3**
baz=262
**K15K Wolf Creek Mou 30.61 45** P **P 14 28 07.8 -0.5**
baz=268
**L15K Ungalak Mounta 30.61 46** P **P 14 28 08.3 0.0**
baz=269
**D17K Noatak River 30.66 34** P **P 14 28 08.2 -0.4**
baz=258
**S12K Black Hills 30.70 58** P **P 14 28 09.5 +0.3**
baz=279
**O14K Tigyukauivet M 30.76 51** P **P 14 28 09.2 -0.4**
baz=274
**C17K DeLong Mountai 30.81 33** P **P 14 28 09.5 -0.4**
baz=256
**M15K Kasigluk River 31.00 48** P **P 14 28 11.7 +0.1**
baz=272,SNR=7.1
**E17K Hotham Inlet 31.01 36** P **P 14 28 11.3 -0.3**
baz=260
**I17K Unalakleet 31.07 42** P **P 14 28 12.1 -0.1**
baz=266
**J16K Anvik River 31.08 43** P **P 14 28 12.1 -0.2**
baz=267
**F17K Baldwin Pennin 31.13 37** P **P 14 28 12.3 -0.4**
baz=262
**G17K Kiwalik Mounta 31.24 39** P **P 14 28 13.2 -0.5**
baz=264
**N15K Kwethluk River 31.31 49** P **P 14 28 15.9 +1.5**
**N15K Kwethluk River 31.31 49** P **P 14 28 14.2 -0.2**
baz=273,SNR=11
**H17K Granite Mounta 31.50 40** P **P 14 28 15.4 -0.5**
baz=265
**O15K Ungalikthiuk R 31.51 51** P **P 14 28 15.9 -0.1**
baz=275
**B18K Kokolik River 31.51 31** P **P 14 28 15.4 -0.5**
baz=256
**E18K Tukpahlearik C 31.54 35** P **P 14 28 15.7 -0.5**
baz=261
**L16K Owhat River 31.57 46** P **P 14 28 17.1 +0.7**
L16K IAmb IAmb 14 28 17.8
comp=Z,6.7nm,0.6s
**L16K Owhat River 31.57 46** P **P 14 28 16.1 -0.4**
baz=271
**SDPT Sand Point 31.65 58** P **P 14 28 16.9 -0.4**
baz=281
**J17K VABM Dome 31.77 43** P **P 14 28 19.1 +1.0**
J17K IAmb IAmb 14 28 20.3
comp=Z,5.4nm,0.8s
**J17K VABM Dome 31.77 43** P **P 14 28 18.0 -0.2**
baz=269,SNR=5.1
**F18K Selawik 31.79 37** P **P 14 28 17.8 -0.4**
baz=263
**M16K Timber Creek 31.83 48** P **P 14 28 19.9 +1.2**
M16K IAmb IAmb 14 28 20.9
comp=Z,11nm,0.7s
**M16K Timber Creek 31.83 48** P **P 14 28 19.3 +0.5**
baz=273,SNR=6.3
**N16K Nishlik Lake 31.95 49** P **P 14 28 20.6 +0.8**
baz=274,SNR=7.1
**S14K Fog Glacier 32.00 57** P **P 14 28 21.4 +1.0**
baz=280
**G18K Tagagawik 32.11 38** P **P 14 28 21.4 +0.4**
G18K IAmb IAmb 14 28 22.2
comp=Z,10nm,0.8s
**G18K Tagagawik 32.11 38** P **P 14 28 21.1 0.0**
baz=265,SNR=7.7
**K17K Iditarod 32.11 44** P **P 14 28 22.1 +1.0**
K17K IAmb IAmb 14 28 23.2
comp=Z,11nm,0.8s
**K17K Iditarod 32.11 44** P **P 14 28 21.6 +0.5**
baz=270
**L17K Donlin 32.12 45** P **P 14 28 22.1 +0.9**
baz=271
**H18K Honhosa River 32.17 40** P **P 14 28 21.9 +0.3**
baz=266
**CHNA Chernabura Isl 32.25 59** P **P 14 28 23.0 +0.7**
baz=282
**O16K Kokwok River B 32.35 50** P **P 14 28 24.0 +0.8**
baz=276
**P16K Nushagak River 32.46 51** P **P 14 28 24.9 +0.8**
baz=277
**M17K Holitna River 32.55 47** P **P 14 28 26.4 +1.6**
**M17K Holitna River 32.55 47** P **P 14 28 25.5 +0.7**
baz=273,SNR=13
**F19K Shaleruckik Mo 32.55 37** P **P 14 28 24.9 +0.1**
F19K IAmb IAmb 14 28 25.7
comp=Z,4.9nm,0.8s
**F19K Shaleruckik Mo 32.55 37** P **P 14 28 25.2 +0.4**
baz=264
**CHGN Chignik 32.62 56** IAmb IAmb 14 28 26.5
comp=Z,7.6nm,0.6s
**CHGN Chignik 32.62 56** P **P 14 28 25.6 +0.1**
baz=280
**N17K Nushagak Hills 32.73 48** P **P 14 28 27.6 +1.2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N17K | | | | IAmb | IAmb | 14 28 28.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **N17K** | **Nushagak Hills** | **32.73** | **48** | P | **P** | **14 28 27.2** | **+0.8** |
| | baz=275 | | | | | | |
| **G19K** | **Purcell Mounta** | **32.77** | **38** | P | **P** | **14 28 26.2** | **-0.4** |
| | baz=266 | | | | | | |
| **E19K** | **Redstone River** | **32.83** | **36** | IAmb | IAmb | 14 28 28.1 | |
| | comp=Z,7.9nm,0.6s | | | | | | |
| **E19K** | **Redstone River** | **32.83** | **36** | P | **P** | **14 28 27.7** | **+0.6** |
| | baz=264 | | | | | | |
| **J18K** | **Innoko River** | **32.83** | **43** | P | **P** | **14 28 27.5** | **+0.3** |
| | baz=271,SNR=6.7 | | | | | | |
| **O17K** | **Koliganek Bris** | **32.84** | **50** | P | **P** | **14 28 28.2** | **+0.9** |
| | baz=276,SNR=8.9 | | | | | | |
| **L18K** | **Granite Mounta** | **32.87** | **45** | P | **P** | **14 28 29.0** | **+1.4** |
| L18K | | | | IAmb | IAmb | 14 28 29.8 | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **L18K** | **Granite Mounta** | **32.87** | **45** | P | **P** | **14 28 28.6** | **+1.1** |
| | baz=273,SNR=8.1 | | | | | | |
| **H19K** | **Roundabout Mou** | **32.99** | **39** | P | **P** | **14 28 29.2** | **+0.7** |
| **H19K** | **Roundabout Mou** | **32.99** | **39** | P | **P** | **14 28 28.9** | **+0.4** |
| | baz=268,SNR=10 | | | | | | |
| **D20K** | **Etivluk River** | **33.22** | **33** | P | **P** | **14 28 30.7** | **+0.3** |
| | baz=263 | | | | | | |
| **B20K** | **Meade River** | **33.23** | **31** | P | **P** | **14 28 30.7** | **+0.3** |
| | baz=260 | | | | | | |
| **P17K** | **Kvichak River** | **33.24** | **51** | P | **P** | **14 28 31.3** | **+0.6** |
| | baz=278 | | | | | | |
| **J19K** | **Poorman** | **33.31** | **42** | P | **P** | **14 28 31.6** | **+0.3** |
| J19K | | | | IAmb | IAmb | 14 28 32.2 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **J19K** | **Poorman** | **33.31** | **42** | P | **P** | **14 28 31.4** | **+0.2** |
| | baz=271,SNR=5.6 | | | | | | |
| **E20K** | **Nigu River** | **33.32** | **34** | P | **P** | **14 28 31.2** | **-0.1** |
| | baz=264 | | | | | | |
| **M18K** | **Stony River** | **33.32** | **47** | P | **P** | **14 28 31.9** | **+0.6** |
| | baz=274 | | | | | | |
| **N18K** | **Kilae Creek** | **33.35** | **48** | P | **P** | **14 28 33.3** | **+1.6** |
| **N18K** | **Kilae Creek** | **33.35** | **48** | P | **P** | **14 28 32.4** | **+0.7** |
| | baz=276,SNR=8.3 | | | | | | |
| **F20K** | **Avaraart Lake** | **33.38** | **36** | P | **P** | **14 28 32.0** | **+0.2** |
| | baz=266 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **33.51** | **54** | P | **P** | **14 28 33.7** | **+0.7** |
| | baz=280 | | | | | | |
| **PLK4** | **Peulik 4** | **33.51** | **54** | IAmb | IAmb | 14 28 35.5 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **H20K** | **Anotleneega Mo** | **33.64** | **39** | P | **P** | **14 28 34.2** | **+0.2** |
| | baz=269,SNR=11 | | | | | | |
| **Q17K** | **Contact Creek** | **33.66** | **52** | P | **P** | **14 28 35.0** | **+0.7** |
| | baz=279,SNR=8.8 | | | | | | |
| **A21K** | **Barrow** | **33.66** | **29** | P | **P** | **14 28 34.0** | **0.0** |
| | baz=259 | | | | | | |
| **L19K** | **White Mountain** | **33.73** | **45** | P | **P** | **14 28 35.3** | **+0.5** |
| | baz=274 | | | | | | |
| **O18K** | **Koktuh Hills** | **33.78** | **49** | P | **P** | **14 28 36.5** | **+1.3** |
| O18K | | | | IAmb | IAmb | 14 28 37.2 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **O18K** | **Koktuh Hills** | **33.78** | **49** | P | **P** | **14 28 36.6** | **+1.3** |
| | baz=277,SNR=5.2 | | | | | | |
| **I20K** | **Naaghedeneel** | **33.81** | **40** | P | **P** | **14 28 35.8** | **+0.4** |
| | baz=271 | | | | | | |
| **P18K** | **Big Mountain,** | **33.83** | **50** | IAmb | IAmb | 14 28 37.3 | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| **P18K** | **Big Mountain,** | **33.83** | **50** | P | **P** | **14 28 36.4** | **+0.7** |
| | baz=278 | | | | | | |
| **C21K** | **Knifeblade Rid** | **33.93** | **33** | P | **P** | **14 28 36.5** | **+0.1** |
| | baz=264 | | | | | | |
| **J20K** | **Nowinta River** | **33.96** | **42** | P | **P** | **14 28 37.6** | **+1.0** |
| | baz=272,SNR=16 | | | | | | |
| **M19K** | **Big River Lodg** | **33.97** | **46** | P | **P** | **14 28 37.6** | **+0.8** |
| | baz=275 | | | | | | |
| **K20K** | **Telida** | **34.02** | **43** | IAmb | IAmb | 14 28 38.6 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **K20K** | **Telida** | **34.02** | **43** | P | **P** | **14 28 37.9** | **+0.7** |
| | baz=273 | | | | | | |
| **N19K** | **Bonanza Creek** | **34.03** | **48** | IAmb | IAmb | 14 28 39.3 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **N19K** | **Bonanza Creek** | **34.03** | **48** | P | **P** | **14 28 38.4** | **+1.0** |
| | baz=277,SNR=6.0 | | | | | | |
| **B21K** | **Ikpikpuk River** | **34.05** | **32** | P | **P** | **14 28 37.6** | **+0.3** |
| | baz=263 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **34.05** | **52** | P | **P** | **14 28 38.2** | **+0.5** |
| | baz=279,SNR=13 | | | | | | |
| **IMAR** | **Indian Mountai** | **34.12** | **38** | P | **P** | **14 28 37.9** | **-0.1** |
| **E21K** | **Killik River** | **34.15** | **34** | P | **P** | **14 28 38.3** | **0.0** |
| | baz=266 | | | | | | |
| **L20K** | **Farewell, AK** | **34.16** | **45** | P | **P** | **14 28 39.0** | **+0.6** |
| | baz=275 | | | | | | |
| **G21K** | **Allakaket** | **34.23** | **37** | IAmb | IAmb | 14 28 40.8 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **G21K** | **Allakaket** | **34.23** | **37** | P | **P** | **14 28 39.0** | **+0.1** |
| | baz=269 | | | | | | |
| **CHIR** | **Chirikof Islan** | **34.25** | **57** | P | **P** | **14 28 40.1** | **+0.8** |
| | baz=283 | | | | | | |
| **F21K** | **Alatna River** | **34.26** | **36** | P | **P** | **14 28 39.3** | **+0.1** |
| | baz=268 | | | | | | |
| **LZH** | **Lanzhou** | **34.49** | **265** | *e*P | **P** | **14 28 43.4** | **+1.7** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,19nm,1.6s | | | | | | |
| **H21K** | **Melozitna Rive** | **34.51** | **39** | IAmb | IAmb | 14 28 42.1 | |
| | comp=Z,6.1nm,0.6s | | | | | | |
| **H21K** | **Melozitna Rive** | **34.51** | **39** | P | **P** | **14 28 41.4** | **+0.1** |
| | baz=271,SNR=9.2 | | | | | | |
| **R18K** | **Karluk** | **34.53** | **53** | P | **P** | **14 28 41.7** | **+0.2** |
| | baz=281 | | | | | | |
| **M20K** | **Styx River** | **34.57** | **46** | P | **P** | **14 28 43.2** | **+1.3** |
| M20K | | | | IAmb | IAmb | 14 28 44.3 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **M20K** | **Styx River** | **34.57** | **46** | P | **P** | **14 28 42.3** | **+0.5** |
| | baz=276,SNR=12 | | | | | | |
| **D22K** | **Ayikyak River** | **34.66** | **33** | P | **P** | **14 28 42.2** | **-0.3** |
| | baz=266 | | | | | | |
| **Q19K** | **Cape Douglas,** | **34.71** | **51** | P | **P** | **14 28 43.5** | **+0.5** |
| | baz=280,SNR=11 | | | | | | |
| **F22K** | **John River** | **34.78** | **36** | P | **P** | **14 28 43.6** | **+0.1** |
| | baz=269,SNR=11 | | | | | | |
| **P19K** | **Oil Pt** | **34.80** | **50** | P | **P** | **14 28 44.1** | **+0.3** |
| | baz=279 | | | | | | |
| **SII** | **Sitkinak Islan** | **34.88** | **55** | P | **P** | **14 28 44.7** | **+0.2** |
| | baz=283 | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **34.94** | **35** | P | **P** | **14 28 44.5** | **-0.4** |
| | baz=268 | | | | | | |
| **G22K** | **Bettles** | **35.03** | **37** | P | **P** | **14 28 45.8** | **+0.2** |
| | baz=270 | | | | | | |
| **N20K** | **Mount Spurr** | **35.08** | **47** | P | **P** | **14 28 46.6** | **+0.4** |
| | baz=278 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **35.09** | **39** | P | **P** | **14 28 46.5** | **+0.4** |
| | baz=272,SNR=12 | | | | | | |
| **OHAK** | **Old Harbor** | **35.22** | **54** | P | **P** | **14 28 47.6** | **+0.3** |
| | baz=283,SNR=8.2 | | | | | | |
| **GTA** | **Gaotai** | **35.30** | **273** | *e*P | **P** | **14 28 49.6** | **+1.2** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **SKT** | **Skwentna** | **35.31** | **45** | P | **P** | **14 28 48.3** | **+0.4** |
| | baz=277 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **35.35** | **42** | P | **P** | **14 28 49.1** | **+0.8** |
| **BPAW** | **Bear Paw Mtn.** | **35.35** | **42** | P | **P** | **14 28 48.4** | **+0.1** |
| | baz=275,SNR=5.0 | | | | | | |
| **D23K** | **Nanushuk River** | **35.39** | **33** | P | **P** | **14 28 48.5** | **0.0** |
| | baz=268 | | | | | | |
| **MLY** | **Manley** | **35.39** | **40** | P | **P** | **14 28 49.1** | **+0.4** |
| | baz=274 | | | | | | |
| **Q20K** | **Shuyak Island** | **35.41** | **51** | P | **P** | **14 28 49.3** | **+0.6** |
| | baz=281,SNR=6.3 | | | | | | |
| **SYI** | **Shuyak Island** | **35.41** | **51** | IAmb | IAmb | 14 28 49.8 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **35.45** | **32** | P | **P** | **14 28 49.4** | **+0.3** |
| | baz=267 | | | | | | |
| **KDAK** | **Kodiak Island** | **35.47** | **53** | P | **P** | **14 28 49.2** | **-0.1** |
| KDAK | | | | IAmb | IAmb | 14 28 50.1 | |
| | comp=Z,8.5nm,0.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **35.47** | **53** | P | **P** | **14 28 49.6** | **+0.3** |
| | baz=282 | | | | | | |
| **KDAK** | **Kodiak Island** | **35.47** | **53** | *i* P | **P** | **14 28 49.2** | **-0.1** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **COLD** | **Coldfoot** | **35.54** | **36** | P | **P** | **14 28 49.9** | **+0.1** |
| | baz=271 | | | | | | |
| **G23K** | **Bananza Creek** | **35.62** | **37** | IAmb | IAmb | 14 28 51.5 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **G23K** | **Bananza Creek** | **35.62** | **37** | P | **P** | **14 28 50.6** | **+0.1** |
| | baz=272,SNR=10 | | | | | | |
| **SUA** | **Susitna One** | **35.75** | **46** | P | **P** | **14 28 51.7** | **-0.1** |
| | baz=279 | | | | | | |
| **E23K** | **Chandalar** | **35.76** | **35** | P | **P** | **14 28 51.8** | **+0.1** |
| | baz=270,SNR=7.5 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **35.78** | **34** | P | **P** | **14 28 51.9** | **0.0** |
| | baz=270 | | | | | | |
| **CNPM** | **China Poot** | **35.82** | **49** | IAmb | IAmb | 14 28 54.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **CUT** | **Chulitna** | **35.84** | **44** | P | **P** | **14 28 52.5** | **+0.2** |
| | baz=278 | | | | | | |
| **H23K** | **Yukon River** | **35.85** | **39** | P | **P** | **14 28 52.7** | **+0.3** |
| | baz=274,SNR=13 | | | | | | |
| **BRLK** | **Bradley Lake** | **35.95** | **49** | P | **P** | **14 28 53.8** | **+0.4** |
| BRLK | | | | IAmb | IAmb | 14 28 54.2 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **35.97** | **40** | IAmb | IAmb | 14 28 54.5 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **35.97** | **40** | P | **P** | **14 28 53.7** | **+0.3** |
| | baz=275,SNR=11 | | | | | | |
| **BRSE** | **Bradley Lake S** | **36.03** | **49** | P | **P** | **14 28 53.9** | **-0.1** |
| | baz=281 | | | | | | |
| **D24K** | **Happy Valley** | **36.06** | **33** | P | **P** | **14 28 54.1** | **+0.1** |
| | baz=270,SNR=9.8 | | | | | | |
| **C24K** | **Franklin Bluff** | **36.11** | **32** | P | **P** | **14 28 54.5** | **0.0** |
| | baz=269 | | | | | | |
| **NEA2** | **Nenana** | **36.14** | **41** | P | **P** | **14 28 55.5** | **+0.7** |
| **NEA2** | **Nenana** | **36.14** | **41** | P | **P** | **14 28 55.1** | **+0.3** |
| | baz=276,SNR=9.8 | | | | | | |
| **E24K** | **Your Creek** | **36.18** | **35** | P | **P** | **14 28 55.0** | **-0.1** |
| E24K | | | | IAmb | IAmb | 14 29 35.1 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **36.18** | **35** | P | **P** | **14 28 55.5** | **+0.4** |
| | baz=271,SNR=9.7 | | | | | | |
| **MCK** | **McKinley** | **36.29** | **42** | P | **P** | **14 28 56.8** | **+0.8** |
| | baz=277,SNR=6.0 | | | | | | |
| **RC01** | **Rabbit Creek A** | **36.29** | **47** | P | **P** | **14 28 55.9** | **-0.1** |
| RC01 | | | | IAmb | IAmb | 14 28 57.2 | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **RC01** | **Rabbit Creek A** | **36.29** | **47** | P | **P** | **14 28 56.4** | **+0.4** |
| | baz=280 | | | | | | |
| **RND** | **Reindeer** | **36.36** | **43** | IAmb | IAmb | 14 28 57.8 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **O22K** | **Cooper Landing** | **36.40** | **48** | P | **P** | **14 28 56.6** | **-0.3** |
| | baz=281 | | | | | | |
| **F24K** | **Squaw Lake** | **36.43** | **36** | P | **P** | **14 28 57.4** | **+0.2** |
| **F24K** | **Squaw Lake** | **36.43** | **36** | P | **P** | **14 28 57.0** | **-0.2** |
| | baz=273,SNR=14 | | | | | | |
| **MDM** | **Murphy Dome** | **36.46** | **40** | P | **P** | **14 28 57.8** | **+0.3** |
| MDM | | | | IAmb | IAmb | 14 28 58.9 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **H24K** | **Noodor Dome** | **36.53** | **38** | IAmb | IAmb | 14 28 59.9 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **36.53** | **38** | P | **P** | **14 28 58.3** | **+0.2** |
| | baz=275,SNR=7.8 | | | | | | |
| **WAT1** | **Susitna Watana** | **36.57** | **44** | P | **P** | **14 28 58.8** | **+0.4** |
| | baz=278 | | | | | | |
| **SEW** | **Seward** | **36.60** | **48** | P | **P** | **14 28 58.4** | **-0.2** |
| | baz=281,SNR=5.0 | | | | | | |
| **COLA** | **College** | **36.63** | **40** | P | **P** | **14 28 59.0** | **+0.2** |
| | baz=276 | | | | | | |
| **COLA** | **College** | **36.63** | **40** | *c i* P | **P** | **14 28 59.5** | **+0.7** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **36.63** | **37** | P | **P** | **14 28 59.1** | **+0.3** |
| | baz=274 | | | | | | |
| **CCB** | **Clear Creek Bu** | **36.67** | **40** | IAmb | IAmb | 14 28 59.8 | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **POKR** | **Poker Plat Res** | **36.78** | **40** | P | **P** | **14 29 00.5** | **+0.4** |
| | baz=276,SNR=6.2 | | | | | | |
| **SML** | **Sawmill** | **36.83** | **45** | P | **P** | **14 29 01.0** | **+0.4** |
| **SML** | **Sawmill** | **36.83** | **45** | P | **P** | **14 29 00.7** | **+0.1** |
| | baz=280,SNR=8.9 | | | | | | |
| **KNK** | **Knik Glacier** | **36.84** | **46** | P | **P** | **14 29 01.1** | **+0.5** |
| | baz=280,SNR=6.1 | | | | | | |
| **D25K** | **Kavik River** | **36.93** | **33** | P | **P** | **14 29 01.2** | **-0.1** |
| | baz=272 | | | | | | |
| **WAT6** | **Susitna Watana** | **36.98** | **44** | P | **P** | **14 29 01.5** | **-0.4** |
| | baz=279,SNR=5.4 | | | | | | |
| **PWL** | **Port Wells** | **37.00** | **47** | P | **P** | **14 29 01.7** | **-0.2** |
| **PWL** | **Port Wells** | **37.00** | **47** | P | **P** | **14 29 01.6** | **-0.3** |
| | baz=281 | | | | | | |
| **ILAR** | **Eielson Array** | **37.05** | **40** | P | **P** | **14 29 02.1** | **-0.2** |
| | comp=Z,9.5nm,0.7s,baz=250,slow=5.8,SNR=65 | | | | | | |
| ILAR | | | | PcP | **PcP** | **14 31 06.9** | **-1.1** |
| | comp=Z,1.0nm,0.6s,baz=280,slow=3.3,SNR=6.4 | | | | | | |
| ILAR | | | | ScP | **ScP** | **14 34 02.4** | **-0.6** |
| | comp=Z,0.7nm,0.7s,baz=292,slow=2.8,SNR=5.2 | | | | | | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **DHY** | **Denali Highway** | **37.07** | **43** | P | **P** | **14 29 02.4** | **-0.2** |
| | baz=279,SNR=17 | | | | | | |
| **HDA** | **Harding Lake** | **37.07** | **41** | P | **P** | **14 29 02.2** | **-0.2** |
| | baz=278,SNR=12 | | | | | | |
| **M23K** | **Glacier View** | **37.12** | **45** | P | **P** | **14 29 02.7** | **-0.2** |
| | baz=280 | | | | | | |
| **G25K** | **Bearman Lake** | **37.17** | **37** | P | **P** | **14 29 03.1** | **-0.1** |
| | baz=275 | | | | | | |
| **F25K** | **Christian Rive** | **37.28** | **35** | P | **P** | **14 29 04.2** | **0.0** |
| | baz=274,SNR=6.6 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **37.30** | **45** | IAmb | IAmb | 14 29 07.1 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **37.30** | **45** | P | **P** | **14 29 04.7** | **+0.3** |
| | baz=281 | | | | | | |
| **H25L** | **Birch Creek** | **37.33** | **38** | P | **P** | **14 29 05.1** | **+0.6** |
| | baz=276,SNR=6.0 | | | | | | |
| **PRP** | **Porcupine Dome** | **37.53** | **39** | P | **P** | **14 29 07.0** | **+0.6** |
| | baz=277 | | | | | | |
| **GLI** | **Glacier Island** | **37.59** | **47** | P | **P** | **14 29 07.3** | **+0.6** |
| | baz=282 | | | | | | |
| **P23K** | **Montague Islan** | **37.63** | **48** | P | **P** | **14 29 07.4** | **+0.4** |
| | baz=283 | | | | | | |
| **K24K** | **Donnelly Dome** | **37.67** | **42** | P | **P** | **14 29 07.2** | **-0.1** |
| | baz=279,SNR=9.3 | | | | | | |
| **BMAR** | **Burnt Mountain** | **37.70** | **36** | P | **P** | **14 29 08.3** | **+0.6** |
| **J25K** | **Salcha River,** | **37.72** | **40** | IAmb | IAmb | 14 29 08.5 | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **J25K** | **Salcha River,** | **37.72** | **40** | P | **P** | **14 29 07.2** | **-0.6** |
| | baz=279,SNR=7.0 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **37.78** | **44** | P | **P** | **14 29 08.7** | **+0.4** |
| | baz=281 | | | | | | |
| **F26K** | **Sheenjek River** | **37.84** | **35** | IAmb | IAmb | 14 29 10.6 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **37.84** | **35** | P | **P** | **14 29 09.1** | **+0.4** |
| | baz=276,SNR=10 | | | | | | |
| **PAX** | **Paxson** | **37.94** | **43** | P | **P** | **14 29 10.4** | **+0.7** |
| | baz=281 | | | | | | |
| **KLU** | **Klutina** | **38.02** | **45** | P | **P** | **14 29 10.9** | **+0.6** |
| | baz=282,SNR=9.6 | | | | | | |
| **G26K** | **Porcupine Rive** | **38.06** | **36** | P | **P** | **14 29 10.9** | **+0.5** |
| | baz=277,SNR=15 | | | | | | |
| **HARP** | **HAARP** | **38.19** | **44** | P | **P** | **14 29 12.3** | **+0.7** |
| | baz=282 | | | | | | |
| **Q23K** | **Middleton Isla** | **38.28** | **49** | P | **P** | **14 29 12.6** | **+0.3** |
| | baz=284 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **38.31** | **47** | P | **P** | **14 29 12.7** | **+0.2** |
| | baz=284 | | | | | | |
| **SCRK** | **Sand Creek** | **38.42** | **41** | P | **P** | **14 29 13.0** | **-0.5** |
| | baz=281,SNR=25 | | | | | | |
| **J26L** | **Joseph Creek** | **38.51** | **40** | IAmb | IAmb | 14 29 15.3 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **J26L** | **Joseph Creek** | **38.51** | **40** | P | **P** | **14 29 14.3** | **+0.1** |
| | baz=280,SNR=6.0 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **38.51** | **302** | P | **P** | **14 29 13.8** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **38.51** | **302** | P | **P** | **14 29 13.5** | **-0.8** |
| **ZALV** | **Zalesovo Beam** | **38.51** | **302** | P | **P** | **14 29 13.8** | **-0.6** |
| | comp=Z,17nm,0.5s,baz=67,slow=6.9,SNR=70 | | | | | | |
| ZALV | | | | PcP | **PcP** | **14 31 13.2** | **+0.4** |
| | comp=Z,1.3nm,0.3s,baz=91,slow=3.2,SNR=5.4 | | | | | | |
| ZALV | | | | ScP | **ScP** | **14 34 07.0** | **-1.7** |
| | comp=Z,0.9nm,0.5s,baz=122,slow=5.2,SNR=5.3 | | | | | | |
| | comp=Z,17nm,0.5s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **38.52** | **295** | *d i* P | **P** | **14 29 15.4** | **+0.7** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **38.62** | **45** | P | **P** | **14 29 15.4** | **+0.2** |
| | baz=283 | | | | | | |
| **E27K** | **Coleen River** | **38.75** | **34** | P | **P** | **14 29 16.0** | **-0.1** |
| | baz=277 | | | | | | |
| **BMRM** | **Bremner River** | **38.76** | **46** | P | **P** | **14 29 17.0** | **+0.7** |
| | baz=284 | | | | | | |
| **L26K** | **Log Cabin Wild** | **38.88** | **43** | IAmb | IAmb | 14 29 19.1 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **L26K** | **Log Cabin Wild** | **38.88** | **43** | P | **P** | **14 29 18.2** | **+1.0** |
| | baz=282 | | | | | | |
| **G27K** | **Doyon Strip** | **38.91** | **36** | IAmb | IAmb | 14 29 21.1 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **G27K** | **Doyon Strip** | **38.91** | **36** | P | **P** | **14 29 18.4** | **+0.9** |
| | baz=279 | | | | | | |
| **GLB** | **Gilahina Butte** | **39.02** | **45** | IAmb | IAmb | 14 29 23.6 | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **H27K** | **Steamboat Moun** | **39.06** | **37** | P | **P** | **14 29 19.6** | **+0.9** |
| | baz=280 | | | | | | |
| **I27K** | **Kandik River** | **39.13** | **38** | P | **P** | **14 29 20.1** | **+0.8** |
| | baz=280,SNR=6.4 | | | | | | |
| **M26K** | **Nabesna, AK** | **39.18** | **44** | IAmb | IAmb | 14 29 22.1 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **M26K** | **Nabesna, AK** | **39.18** | **44** | P | **P** | **14 29 20.6** | **+1.0** |
| | baz=283,SNR=10 | | | | | | |
| **K27K** | **Chicken** | **39.23** | **41** | P | **P** | **14 29 20.6** | **+0.6** |
| | baz=282 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **39.40** | **45** | P | **P** | **14 29 22.2** | **+0.8** |
| | baz=284 | | | | | | |
| **E28M** | **Babbage River** | **39.45** | **33** | P | **P** | **14 29 21.7** | **0.0** |
| | baz=279 | | | | | | |
| **EGAK** | **Eagle** | **39.48** | **40** | P | **P** | **14 29 22.0** | **+0.1** |
| | baz=282,SNR=18 | | | | | | |
| **F28M** | **Old Crow** | **39.48** | **35** | P | **P** | **14 29 22.1** | **+0.2** |
| | baz=280 | | | | | | |
| **CRQE** | **Cirque** | **39.53** | **46** | P | **P** | **14 29 23.1** | **+0.6** |
| | baz=285 | | | | | | |
| **L27K** | **Beaver Creek,** | **39.55** | **42** | P | **P** | **14 29 23.9** | **+1.2** |
| | baz=283,SNR=25 | | | | | | |
| **BCAR** | **Beaver Creek A** | **39.57** | **42** | P | **P** | **14 29 23.6** | **+0.8** |
| **D28M** | **Stokes Point** | **39.63** | **32** | P | **P** | **14 29 23.4** | **+0.3** |
| | baz=278 | | | | | | |
| **M27K** | **Edge Creek, AK** | **39.69** | **43** | P | **P** | **14 29 24.7** | **+0.8** |
| | baz=284,SNR=16 | | | | | | |
| **I28M** | **Miner Creek** | **39.85** | **38** | IAmb | IAmb | 14 29 27.0 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **39.85** | **38** | P | **P** | **14 29 25.7** | **+0.7** |
| | baz=282,SNR=21 | | | | | | |
| **E29M** | **Blow River** | **40.08** | **34** | IAmb | IAmb | 14 29 28.7 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **40.08** | **34** | P | **P** | **14 29 27.2** | **+0.4** |
| | baz=280 | | | | | | |
| **GRNC** | **Granite Creek** | **40.17** | **46** | P | **P** | **14 29 28.5** | **+0.7** |
| GRNC | | | | IAmb | IAmb | 14 29 29.7 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **MESA** | **MESA** | **40.23** | **47** | P | **P** | **14 29 28.8** | **+0.6** |
| | baz=287 | | | | | | |
| **CTG** | **Chitna Glacier** | **40.30** | **45** | P | **P** | **14 29 29.6** | **+0.9** |
| | baz=286,SNR=10 | | | | | | |
| **G29M** | **Pine Creek** | **40.31** | **36** | P | **P** | **14 29 29.2** | **+0.6** |
| | baz=282 | | | | | | |
| **H29M** | **Whitestone** | **40.32** | **37** | P | **P** | **14 29 29.2** | **+0.6** |
| | baz=282,SNR=5.0 | | | | | | |
| **GOMU** | **GeErMu** | **40.37** | **272** | P | **P** | **14 29 31.1** | **+1.2** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,40nm,0.6s | | | | | | |
| **DAWY** | **Dawson** | **40.38** | **40** | P | **P** | **14 29 29.5** | **+0.3** |
| | baz=284 | | | | | | |
| **LOGN** | **Logan Glacier** | **40.50** | **46** | IAmb | IAmb | 14 29 31.7 | |
| | comp=Z,6.3nm,0.6s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **40.53** | **38** | IAmb | IAmb | 14 29 31.9 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **40.53** | **38** | P | **P** | **14 29 31.0** | **+0.6** |
| | baz=283,SNR=7.2 | | | | | | |
| **O28M** | **Mount Upton** | **40.89** | **45** | P | **P** | **14 29 34.4** | **+0.8** |
| | baz=287 | | | | | | |
| **EPYK** | **Eagle Plains** | **40.94** | **37** | P | **P** | **14 29 33.7** | **+0.1** |
| | baz=284,SNR=9.7 | | | | | | |
| **YUK8** | **Steele Glacier** | **40.94** | **45** | P | **P** | **14 29 34.7** | **+0.7** |
| | baz=287 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **40.99** | **36** | P | **P** | **14 29 34.8** | **+0.8** |
| | baz=283 | | | | | | |
| **F30M** | **Barrier River** | **41.01** | **35** | P | **P** | **14 29 35.0** | **+0.9** |
| | baz=283,SNR=5.4 | | | | | | |
| **M29M** | **Somme Creek** | **41.21** | **43** | P | **P** | **14 29 37.0** | **+1.1** |
| | baz=287,SNR=8.1 | | | | | | |
| **K29M** | **Barlow Dome** | **41.23** | **40** | P | **P** | **14 29 37.0** | **+0.9** |
| | baz=286,SNR=5.6 | | | | | | |
| **I30M** | **Mount Dempster** | **41.35** | **38** | P | **P** | **14 29 37.6** | **+0.6** |
| I30M | | | | IAmb | IAmb | 14 29 38.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **41.35** | **38** | P | **P** | **14 29 37.4** | **+0.3** |
| | baz=285,SNR=12 | | | | | | |
| **YUK4** | **Talbot Arm** | **41.44** | **44** | P | **P** | **14 29 38.5** | **+0.6** |
| | baz=288 | | | | | | |
| **J30M** | **Hart River** | **41.54** | **39** | P | **P** | **14 29 39.0** | **+0.5** |
| **J30M** | **Hart River** | **41.54** | **39** | P | **P** | **14 29 38.9** | **+0.4** |
| | baz=286 | | | | | | |
| **PNL** | **Peninsula** | **41.61** | **47** | P | **P** | **14 29 40.0** | **+1.0** |
| | baz=289 | | | | | | |
| **INK** | **Inuvik** | **41.69** | **33** | P | **P** | **14 29 39.3** | **-0.1** |
| **INK** | **Inuvik** | **41.69** | **33** | P | **P** | **14 29 39.6** | **+0.2** |
| | baz=284,SNR=5.9 | | | | | | |
| **INK** | **Inuvik** | **41.69** | **33** | P | **P** | **14 29 39.3** | **-0.1** |
| INK | | | | pmax | pmax | | |
| | comp=Z,14nm,0.4s | | | | | | |
| **YUK6** | **Outpost Mounta** | **41.70** | **45** | P | **P** | **14 29 40.6** | **+0.6** |
| | baz=288 | | | | | | |
| **G31M** | **Satah River** | **41.75** | **35** | P | **P** | **14 29 40.0** | **+0.1** |
| | baz=285,SNR=5.4 | | | | | | |
| **O29M** | **Mount Kennedy** | **41.80** | **46** | P | **P** | **14 29 41.4** | **+0.8** |
| | baz=289 | | | | | | |
| **F31M** | **Tsiigehtchic** | **41.82** | **35** | P | **P** | **14 29 40.5** | **0.0** |
| | baz=285 | | | | | | |
| **PZH** | **PanZhiHua** | **42.06** | **255** | P | **P** | **14 29 43.5** | **+0.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.3s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,250nm,3.9s | | | | | | |
| **N30M** | **Aishikik Lake** | **42.12** | **44** | P | **P** | **14 29 44.3** | **+1.2** |
| | baz=289 | | | | | | |
| **P29M** | **Windy Craggy** | **42.42** | **46** | P | **P** | **14 29 47.2** | **+1.8** |
| | baz=290,SNR=7.6 | | | | | | |
| **P30M** | **Million Dollar** | **42.62** | **46** | P | **P** | **14 29 48.6** | **+1.7** |
| | baz=290,SNR=6.3 | | | | | | |
| **N31M** | **Braeburn, Yuko** | **42.71** | **43** | IAmb | IAmb | 14 29 50.0 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **N31M** | **Braeburn, Yuko** | **42.71** | **43** | P | **P** | **14 29 49.0** | **+1.4** |
| | baz=290,SNR=7.0 | | | | | | |
| **O30N** | **Mendenhall** | **42.80** | **44** | P | **P** | **14 29 48.7** | **+0.3** |
| **O30N** | **Mendenhall** | **42.80** | **44** | P | **P** | **14 29 49.6** | **+1.1** |
| | baz=290 | | | | | | |
| **MK31** | **Makanchi Array** | **42.87** | **293** | P | **P** | **14 29 49.2** | **+0.1** |
| **MK31** | **Makanchi Array** | **42.87** | **293** | *d i* P | **P** | **14 29 49.2** | **+0.1** |
| **MKAR** | **Makanchi Array** | **42.87** | **293** | P | **P** | **

BVAR ScP **ScP** **14 34 41.2 -1.1**
comp=Z,2.1nm,0.7s,baz=44,slow=4.5,SNR=6.1
comp=Z,20nm,0.6s
**BRVK Borovoye 46.82 306** P **P** **14 30 19.3 +0.1**
**BRVK Borovoye 46.82 306** *eP* **P** **14 30 19.1 -0.1**
**BRVK Borovoye 46.82 306** *d iP* **P** **14 30 19.1 -0.1**
BRVK pmax pmax
comp=Z,26nm,0.6s
**ARXS Arharly 46.88 292** *eP* **P** **14 30 19.2 -0.8**
**T35M Bob Quinn 47.10 48** P **P** **14 30 23.6 +2.3**
baz=297
**LIRD Liard River Hi 47.93 43** P **P** **14 30 29.6 +2.1**
baz=298
**KOTAN Kotaneelee Air 48.51 42** P **P** **14 30 33.0 +1.3**
baz=299
**TOAD Toad River Com 48.59 44** P **P** **14 30 33.7 +1.3**
baz=299
**ULHL Ulahol 48.92 291** P **P** **14 30 36.1 +0.7**
SNR=11
**TKM2 Tokmak 2 48.94 292** P **P** **14 30 36.2 +0.7**
SNR=9.5
**USP Ospenovka 49.42 293** P **P** **14 30 39.6 +0.8**
SNR=22
**CMAR Chiang Mai Arr 49.69 250** P **P** **14 30 42.7 +1.7**
comp=Z,1.2nm,0.4s,baz=26,slow=6.7,SNR=9.8
CMAR PcP **PcP** **14 31 53.9 +1.8**
comp=Z,0.6nm,0.3s,baz=1.6,slow=3.5,SNR=4.3
CMAR ScP **ScP** **14 34 55.6 +0.3**
comp=Z,1.8nm,0.7s,baz=11,slow=3.7,SNR=9.7
comp=Z,1.2nm,0.4s
**KBS Kingsbay 49.76 350** *eP* **P** **14 30 40.2 -0.5**
**AAK Ala-Archa 49.77 292** P **P** **14 30 42.3 +0.7**
SNR=8.3
**AAK Ala-Archa 49.77 292** *eP* **P** **14 30 42.0 +0.4**
**AAK Ala-Archa 49.77 292** *d iP* **P** **14 30 42.0 +0.4**
AAK pmax pmax
comp=Z,18nm,0.8s
**SPA0 Spitsbergen Ar 49.80 348** *eP* **P** **14 30 40.8 -0.2**
**SPITS Spitsbergen Ar 49.80 348** P **P** **14 30 40.0 -1.1**
comp=Z,0.7nm,0.3s,baz=64,slow=9.4,SNR=13
comp=Z,0.7nm,0.3s
**SVE Sverdlovsk 49.84 314** *eP* **P** **14 30 41.7 +0.1**
**SVE Sverdlovsk 49.84 314** *ceP* **P** **14 30 41.7 +0.1**
SVE *eS* **S** **14 37 09.4 -1.1**
SVE pmax pmax
comp=Z,44nm,0.9s
**EKS2 Erkin-Say 50.20 293** P **P** **14 30 45.4 +0.8**
SNR=14
**KSH Kashi 50.64 288** P **P** **14 30 52.3 +4.4**
KSH pmax pmax
comp=Z,12nm,0.9s
**ARU Arti 51.03 314** P **P** **14 30 50.0 -0.3**
**ARU Arti 51.03 314** P **P** **14 30 50.0 -0.3**
comp=Z,24nm,0.2s,baz=62,slow=3.6,SNR=50
ARU ScP **ScP** **14 34 58.9 -1.5**
comp=Z,1.5nm,0.2s,baz=195,slow=3.8,SNR=3.8
comp=Z,24nm,0.2s
**ARU Arti 51.03 314** *d iP* **P** **14 30 49.9 -0.4**
ARU pmax pmax
comp=Z,34nm,0.7s
**ARU Arti 51.03 314** P **P** **14 30 50.0 -0.3**
comp=Z,62nm,0.8s,comp=Z,818nm
**YKA Yellowknife Ar 51.22 36** P **P** **14 30 51.7 +0.1**
comp=Z,3.5nm,0.6s,baz=306,slow=7.5,SNR=7.7
comp=Z,3.5nm,0.6s
**KK31 Karatay Array 51.92 295** IAmb IAmb 14 30 57.9
comp=Z,10nm,0.8s
**KKAR Karatay Array 51.92 295** P **P** **14 30 57.0 0.0**
**KKAR Karatay Array 51.92 295** IAmb IAmb 14 30 57.9
comp=Z,10.0nm,0.8s
**KKAR Karatay Array 51.92 295** P **P** **14 30 57.0 0.0**
**VADS Vadso 53.24 338** *eP* **P** **14 31 05.6 -0.3**
**DRK Karamyk 53.27 290** IAmb IAmb 14 31 08.6
comp=Z,12nm,0.8s
**LVZ Lovozero 53.33 334** *d iP* **P** **14 31 05.5 -1.2**
LVZ pmax pmax
comp=Z,11nm,0.7s
**KIRV Kirov 53.91 320** P **P** **14 31 10.6 -0.2**
comp=Z,17nm,0.6s,baz=112,slow=0.9,SNR=7.4
comp=Z,17nm,0.6s
**KIRV Kirov 53.91 320** *d iP* **P** **14 31 10.3 -0.5**
**ABKAR Akbulak array 54.35 306** P **P** **14 31 14.0 -0.1**
**ABKAR Akbulak array 54.35 306** IAmb IAmb 14 31 14.9
comp=Z,18nm,0.7s
**ARCES ARCESS Array B 54.59 339** P **P** **14 31 14.7 -0.8**
comp=Z,5.5nm,0.7s,baz=36,slow=7.9,SNR=14
comp=Z,5.5nm,0.7s
**AKTO Aktyubinsk 54.66 308** P **P** **14 31 15.9 -0.3**
comp=Z,5.1nm,0.5s,baz=72,slow=3.4,SNR=10
comp=Z,5.1nm,0.5s
**AKTO Aktyubinsk 54.66 308** P **P** **14 31 16.0 -0.3**
**SIMJ Simiganj 55.49 291** P **P** **14 31 22.4 0.0**
SIMJ IAmb IAmb 14 31 23.4
comp=Z,26nm,0.8s
**KTK1 Kautokeino 55.53 339** *eP* **P** **14 31 21.6 -0.4**
**NIL Nilore 55.97 284** P **P** **14 31 27.0 +1.3**
**TRO Tromso 56.02 341** *eP* **P** **14 31 24.9 -0.4**
**LTY Liberty 57.33 54** IAmb IAmb 14 31 36.3
comp=Z,6.3nm,0.5s
**JOF Joensuu 57.78 331** *eP* **P** **14 31 37.0 -0.5**
**OUL Oulu 57.81 335** P **P** **14 31 37.1 -0.5**
**KBL Kabul 58.07 287** P **P** **14 31 39.6 -0.6**
KBL IAmb IAmb 14 31 40.4
comp=Z,14nm,0.8s
**KBL Kabul 58.07 287** P **P** **14 31 39.6 -0.6**
KBL pmax pmax
comp=Z,15nm,0.8s
**H04A Detroit Lake 58.12 57** IAmb IAmb 14 31 42.9
comp=Z,18nm,0.9s
**STEI Steigen 58.19 341** *eP* **P** **14 31 39.2 -1.0**
**G05A Wamic 58.24 56** IAmb IAmb 14 31 49.2
comp=Z,15nm,0.8s
**LOF Lofoten 58.39 342** *eP* **P** **14 31 41.3 -0.2**
**I04A Tendick Farm, 58.55 58** IAmb IAmb 14 31 45.9
comp=Z,11nm,0.9s
**NEW Newport 58.55 51** P **P** **14 31 44.4 +1.3**
baz=310
**NEW Newport 58.55 51** P **P** **14 31 44.0 +0.9**
**BELG Belogornoye 58.56 315** P **P** **14 31 42.8 -0.2**
comp=Z,46nm,0.5s,baz=35,slow=0.5,SNR=20
comp=Z,46nm,0.5s
**BELG Belogornoye 58.56 315** *d iP* **P** **14 31 42.7 -0.2**
BELG pmax pmax
comp=Z,9.0nm,0.8s
**FAUS Fauske 58.64 341** *eP* **P** **14 31 42.7 -0.4**
**E09A Wood Farm, Sta 59.14 53** IAmb IAmb 14 31 49.2
comp=Z,12nm,1.0s
**PINE Pine Mountain 59.38 57** IAmb IAmb 14 31 52.1
comp=Z,18nm,0.8s
**J05D Fort Rock, OR 59.54 58** IAmb IAmb 14 31 53.1
comp=Z,14nm,0.9s
**L04D Klamath Falls 59.62 59** IAmb IAmb 14 31 53.3
comp=Z,21nm,0.8s
**KHMM Horse Mountain 59.67 61** IAmb IAmb 14 31 54.0
comp=Z,13nm,0.9s
**YBH Yreka Blue Hor 59.70 60** P **P** **14 31 53.4 +2.5**
**YBH Yreka Blue Hor 59.70 60** P **P** **14 31 53.4 +2.5**
YBH pmax pmax
comp=Z,7.0nm,0.7s
**MOR8 Moi Rana 59.83 340** *eP* **P** **14 31 49.4 -1.8**
**KONS Konsvik 59.85 341** *eP* **P** **14 31 51.5 +0.2**
**KMRM Mail Ridge 60.11 62** P **P** **14 31 56.0 +2.4**
KMRM IAmb IAmb 14 31 56.7
comp=Z,9.4nm,0.6s
**VAF Ylistaro 60.29 335** *eP* **P** **14 31 53.7 -0.5**
**KEF Keuruu 60.34 333** *eP* **P** **14 31 53.7 -0.9**
**FINES FINESS Array B 60.53 332** P **P** **14 31 55.2 -0.7**
comp=Z,20nm,0.7s,baz=39,slow=8.2,SNR=65
comp=Z,20nm,0.7s
**O02D Mt. Diablo Mer 60.67 61** IAmb IAmb 14 31 59.9
comp=Z,7.1nm,0.7s
**J08A Circle Bar Ran 61.02 56** IAmb IAmb 14 32 02.6
comp=Z,12nm,1.1s
**MSO Missoula 61.12 51** P **P** **14 32 01.5 +1.3**
baz=312
**OBN Obninsk 61.50 323** P **P** **14 32 01.8 -0.5**
comp=Z,16nm,0.4s,baz=199,slow=23,SNR=4.7
comp=Z,16nm,0.4s
**OBN Obninsk 61.50 323** *eP* **P** **14 32 01.1 -1.2**
**OBN Obninsk 61.50 323** ⇑*P* **P** **14 32 01.1 -1.2**
OBN *e* 14 32 38.5
OBN *e**PP **pP** **14 33 49.8 -0.8**
OBN *e* 14 34 26.7
OBN *e**SP **sP** **14 34 48.7 -0.1**
OBN pmax pmax
comp=Z,36nm,1.4s

**WVOR Wild Horse Val 61.54 57** IAmb IAmb 14 32 05.7
comp=Z,14nm,1.1s
**NSS Namsos 61.78 340** *eP* **P** **14 32 03.7 -0.3**
**MEF Metsahovi 62.00 332** *eP* **P** **14 32 04.7 -0.8**
**VRH Novokhopyorsk 62.07 317** *eP* **P** **14 32 05.4 -0.7**
VRH pmax pmax
comp=Z,29nm,0.7s
**ARBE Arbavere 62.11 331** *eP* **P** **14 32 04.7 -1.5**
**RAF Rauma 62.16 334** *eP* **P** **14 32 05.7 -0.8**
**EGMT Eagleton 62.41 48** IAmb IAmb 14 32 10.4
comp=Z,23nm,1.2s
**EGMT Eagleton 62.41 48** P **P** **14 32 09.1 +0.6**
baz=314
**VSU Vasula 62.62 330** *ceP* **P** **14 32 08.9 -0.6**
VSU pmax pmax
comp=Z,14nm,0.6s
**DLMT Dillon 62.80 51** IAmb IAmb 14 32 13.5
comp=Z,14nm,0.8s
**MPK Martis Peak 62.85 61** IAmb IAmb 14 32 15.4
comp=Z,12nm,0.7s
**VORR Voronezh 62.86 318** *eP* **P** **14 32 10.7 -0.5**
VORR pmax pmax
comp=Z,55nm,0.4s
**PAHR Pah Rah Range 62.94 60** IAmb IAmb 14 32 14.5
comp=Z,13nm,0.9s
**EMB Emerald Bay 63.02 61** IAmb IAmb 14 32 15.2
comp=Z,10nm,0.8s
**HLID Hailey 63.08 54** P **P** **14 32 14.2 +1.2**
baz=313
**BOZ Bozeman (W) 63.14 51** IAmb IAmb 14 32 15.5
comp=Z,8.6nm,0.8s
**BOZ Bozeman (W) 63.14 51** P **P** **14 32 14.3 +1.0**
baz=314
**PNTR Pine Nut 63.23 61** IAmb IAmb 14 32 16.8
comp=Z,9.0nm,0.8s
**TBLU Trondheim 63.27 340** *eP* **P** **14 32 12.6 -1.0**
**MTN Manton Dam 63.29 198** P **P** **14 32 15.9 +1.5**
**AAL Aland 63.36 334** *eP* **P** **14 32 13.5 -0.7**
**MTSE Matsula 63.37 331** *eP* **P** **14 32 13.9 -0.4**
**CMB Columbia Colle 63.49 62** IAmb IAmb 14 32 18.0
comp=Z,7.9nm,0.9s
**BMN Battle Mountai 63.67 58** IAmb IAmb 14 32 19.5
comp=Z,8.4nm,0.7s
**WAKR Walker 63.72 61** IAmb IAmb 14 32 20.0
comp=Z,7.9nm,0.7s
**YHL Hebgen Lake 63.88 51** IAmb IAmb 14 32 20.6
comp=Z,9.2nm,1.0s
**RYN Ryan 64.16 60** IAmb IAmb 14 32 22.5
comp=Z,7.2nm,0.8s
**NVAR Mina Array Bea 64.42 60** P **P** **14 32 23.4 +1.6**
comp=Z,7.8nm,0.7s,baz=298,slow=6.2,SNR=69
comp=Z,7.8nm,0.7s
**LHV Little Huntoon 64.43 61** IAmb IAmb 14 32 24.7
comp=Z,16nm,0.9s
**NV11 Mina Array Sit 64.51 60** IAmb IAmb 14 32 24.6
comp=Z,6.7nm,0.8s
**H17A Grant Village 64.51 51** IAmb IAmb 14 32 26.1
comp=Z,9.4nm,0.9s
**H17A Grant Village 64.51 51** P **P** **14 32 23.4 +1.1**
baz=315
**DOMB Dombas 64.60 340** *eP* **P** **14 32 21.6 -0.6**
**RLMT Red Lodge 64.67 50** IAmb IAmb 14 32 26.3
comp=Z,6.2nm,0.7s
**RLMT Red Lodge 64.67 50** P **P** **14 32 24.5 +1.3**
baz=315
**DGMT Dagmar 64.74 44** P **P** **14 32 24.4 +1.1**
baz=316
**FXWY Fox Creek 64.81 52** IAmb IAmb 14 32 26.8
comp=Z,1.1nm,0.7s
**TPAW Teton Pass 64.95 52** IAmb IAmb 14 32 27.0
comp=Z,8.4nm,0.8s
**NB2 NORSAR Subarra 64.97 338** P **P** **14 32 23.7 -0.9**
comp=Z,8.8nm,0.6s,baz=29,slow=6.5
**NB2 NORSAR Subarra 64.97 338** P **P** **14 32 23.7 -0.9**
baz=29,slow=6.5
**NB2 NORSAR Subarra 64.97 338** P **P** **14 32 21.1 -3.5**
**NOA NORSAR Array B 64.97 338** P **P** **14 32 23.9 -0.6**
comp=Z,7.7nm,0.5s,baz=26,slow=6.7,SNR=32
comp=Z,7.7nm,0.5s
**NOA NORSAR Array B 64.97 338** P **P** **14 32 24.0 -0.6**
**LAO LASA Array 65.06 47** IAmb IAmb 14 32 27.5
comp=Z,7.3nm,0.8s
**LAO LASA Array 65.06 47** P **P** **14 32 26.6 +1.2**
baz=316
**NBO00 NORSAR Array S 65.09 339** IAmb IAmb 14 32 26.2
comp=Z,16nm,1.1s
**HFS Hagfors 65.13 337** P **P** **14 32 24.7 -0.8**
comp=Z,8.0nm,0.5s,baz=49,slow=4.5,SNR=29
comp=Z,8.0nm,0.5s
**NC602 NORSAR Array S 65.16 338** *eP* **P** **14 32 24.6 -1.1**
**MNK Minsk 65.30 326** *i* P **P** **14 32 25.6 -1.0**
MNK *i* 14 32 52.3
MNK *i* *PP **pP** **14 34 16.3 -0.3**
MNK *i* 14 34 58.5
MNK *i* S **S** **14 40 26.8 -0.5**
MNK *i* 14 41 26.7
MNK *i* SS **SS** **14 44 54.3 +1.5**
MNK pmax pmax
comp=N,25nm,0.9s
MNK pmax pmax
comp=E,40nm,0.9s
MNK pmax pmax
comp=Z,33nm,0.8s
**DSP Deep Springs 65.34 61** IAmb IAmb 14 32 30.2
comp=Z,8.6nm,1.0s
**GRAC Grapevine Rang 65.95 61** IAmb IAmb 14 32 33.8
comp=Z,11nm,0.6s
**HWUT Hardware Ranch 65.95 54** IAmb IAmb 14 32 33.6
comp=Z,8.4nm,0.8s
**Q12A Willow Creek R 65.97 58** IAmb IAmb 14 32 33.9
comp=Z,11nm,0.7s
**R11B Troy Canyon, C 66.02 59** P **P** **14 32 33.0 +1.2**
baz=315
**BW06 Boulder Array 66.18 52** P **P** **14 32 33.5 +0.8**
baz=316
**PD31 Pinedale Array 66.18 52** IAmb IAmb 14 32 34.4
comp=Z,14nm,1.0s
**PDAR Pinedale Array 66.18 52** P **P** **14 32 33.6 +0.9**
comp=Z,7.8nm,0.5s,baz=302,slow=1.7,SNR=85
comp=Z,7.8nm,0.5s
**DUG Dugway, Tooele 66.27 56** IAmb IAmb 14 32 35.7
comp=Z,12nm,1.2s
**DUG Dugway, Tooele 66.27 56** P **P** **14 32 34.4 +1.2**
baz=315
**SPR3 Spring Creek 3 66.27 58** IAmb IAmb 14 32 36.4
comp=Z,18nm,1.4s
**TPNV Topopah Spring 66.62 60** P **P** **14 32 36.8 +1.3**
baz=315
**KIV Kislovodsk 66.76 311** *eP* **P** **14 32 36.2 +0.1**
**KIV Kislovodsk 66.76 311** *eP* **P** **14 32 36.2 +0.1**
KIV pmax pmax
comp=Z,19nm,1.1s
**KBZ Khabaz 66.82 310** P **P** **14 32 37.1 +0.8**
comp=Z,12nm,0.8s,baz=51,slow=4.4,SNR=22
comp=Z,12nm,0.8s
**KBZ Khabaz 66.82 310** *eP* **P** **14 32 36.9 +0.6**
**KBZ Khabaz 66.82 310** *d iP* **P** **14 32 36.9 +0.6**
KBZ pmax pmax
comp=Z,16nm,0.9s
**NLU North Lily Min 66.84 55** IAmb IAmb 14 32 39.1
comp=Z,6.3nm,0.8s
**PSUT Pine Spring 66.86 58** IAmb IAmb 14 32 39.2
comp=Z,5.5nm,0.7s
**GWY Greenwater Val 66.91 61** IAmb IAmb 14 32 39.4
comp=Z,7.4nm,0.7s
**SHA1 Shidzhatmaz 66.94 311** *c iP* **P** **14 32 38.1 +0.8**
**ULM Lac du Bonnet 67.05 39** P **P** **14 32 36.6 -1.0**
comp=Z,2.3nm,0.5s,baz=343,slow=5.2,SNR=4.9
comp=Z,2.3nm,0.5s
**AK03 Malin Array Si 67.73 323** P **P** **14 32 41.0 -0.8**
**AKASG Malin Array Be 67.75 323** P **P** **14 32 40.9 -0.9**
comp=Z,3.4nm,0.3s,baz=36,slow=6.2,SNR=27
comp=Z,3.4nm,0.3s
**AKASG Malin Array Be 67.75 323** *i* P **P** **14 32 41.0 -0.9**
AKASG pmax pmax
comp=Z,9.0nm,0.5s
**AKBB Malin Array Si 67.75 323** *d iP* **P** **14 32 41.0 -0.9**
AKBB pmax pmax
comp=Z,16nm,0.8s
**AKBB Malin Array Si 67.75 323** P **P** **14 32 41.2 -0.7**
**AK04 Malin Array Si 67.76 323** P **P** **14 32 41.1 -0.8**
**KIEV Kiev 67.76 323** P **P** **14 32 41.0 -0.9**
**KIEV Kiev 67.76 323** ⇑*P* **P** **14 32 41.0 -0.9**
**KIEV Kiev 67.76 323** P **P** **14 32 41.1 -0.9**
KIEV pmax pmax
comp=Z,13nm,0.7s
**KIEV Kiev 67.76 323** P **P** **14 32 41.2 -0.7**
comp=Z,85nm,0.8s
**AK01 Malin Array Si 67.76 323** P **P** **14 32 41.2 -0.7**
**TMUT Trail Mountain 67.78 55** IAmb IAmb 14 32 44.8
comp=Z,9.7nm,0.6s
**AK08 Malin Array Si 67.79 323** P **P** **14 32 41.4 -0.7**
**AK02 Malin Array Si 67.79 323** P **P** **14 32 41.4 -0.7**
**MVU Marysvale 67.79 57** IAmb IAmb 14 32 44.9
comp=Z,12nm,0.8s
**AK18 Malin Array Si 67.80 323** P **P** **14 32 41.4 -0.7**
**AK20 Malin Array Si 67.80 323** P **P** **14 32 41.5 -0.7**
**AK19 Malin Array Si 67.82 323** P **P** **14 32 41.5 -0.8**
**AK12 Malin Array Si 67.82 323** P **P** **14 32 41.6 -0.7**
**AK14 Malin Array Si 67.85 323** P **P** **14 32 41.7 -0.8**
**AK07 Malin Array Si 67.88 323** P **P** **14 32 42.0 -0.6**
**P17A Butcher Ranch, 67.91 55** IAmb IAmb 14 32 45.7
comp=Z,8.3nm,1.0s
**RSSD Black Hills 67.98 48** P **P** **14 32 44.0 +0.3**
RSSD IAmb IAmb 14 32 45.1
comp=Z,10nm,0.8s
**RSSD Black Hills 67.98 48** P **P** **14 32 44.2 +0.4**
baz=318
**RSSD Black Hills 67.98 48** P **P** **14 32 44.0 +0.3**
RSSD pmax pmax
comp=Z,10.0nm,0.8s
**P18A Preston Nutter 68.06 55** IAmb IAmb 14 32 46.7
comp=Z,5.7nm,0.7s
**RWWY Rawlins 68.17 51** IAmb IAmb 14 32 46.5
comp=Z,7.9nm,0.8s
**SRU San Rafael Swe 68.28 55** IAmb IAmb 14 32 48.1
comp=Z,14nm,0.9s
**RNPP9 Sopachiv 68.48 325** P **P** **14 32 45.8 -0.5**
**PKCU Pink Cliffs 68.50 57** IAmb IAmb 14 32 50.0
comp=Z,7.5nm,0.8s
**RNPP8 Varash 68.55 325** P **P** **14 32 46.5 -0.2**
**AGMN Agassiz Nation 68.56 40** P **P** **14 32 45.9 -0.9**
baz=321
**PFO Pinyon Flats O 68.85 63** P **P** **14 32 49.7 +0.7**
baz=316
**TPFO Pinon Flats 68.86 63** P **P** **14 32 49.6 +0.6**
baz=316
**LUBAR Lubar, Ukraine 68.95 323** P **P** **14 32 48.2 -0.9**
**U15A North Rim 69.23 58** IAmb IAmb 14 32 54.2
comp=Z,6.6nm,0.8s
**PHWY Pilot Hill 69.35 51** IAmb IAmb 14 32 56.9
comp=Z,11nm,1.5s
**MONP2 Monument Peak 69.38 63** P **P** **14 32 53.3 +1.0**
baz=316
**N23A Red Feather La 69.40 51** P **P** **14 32 52.8 +0.4**
baz=318
**WB0 Warramunga Arr 69.46 194** IAmb IAmb 14 32 54.7
comp=Z,13nm,1.0s
**WR0 Warramunga Arr 69.63 193** IAmb IAmb 14 32 55.3
comp=Z,6.4nm,0.8s
**WRAB Tennant Creek 69.63 194** P **P** **14 32 54.9 +1.4**
WRAB IAmb IAmb 14 32 55.8
comp=Z,13nm,1.1s
**WRAB Tennant Creek 69.63 194** P **P** **14 32 54.9 +1.4**
WRAB pmax pmax
comp=Z,13nm,1.1s
**WB2 Warramunga Arr 69.64 194** IAmb IAmb 14 32 55.9
comp=Z,16nm,1.1s
**WRA Warramunga Arr 69.64 194** P **P** **14 32 53.8 +0.2**
**WRA Warramunga Arr 69.64 194** P **P** **14 32 54.9 +1.2**
comp=Z,6.9nm,0.9s,baz=8.6,slow=6.5,SNR=58
comp=Z,6.9nm,0.9s
**YUH Yuha Desert 69.85 63** IAmb IAmb 14 32 56.8
comp=Z,12nm,1.2s
**BLYC Blythe 69.88 62** IAmb IAmb 14 32 57.4
comp=Z,12nm,0.7s
**SORM Soroca 70.12 322** ⇑*P* **P** **14 32 55.7 -0.5**
**SORM Soroca 70.12 322** ⇑*P* **P** **14 32 55.7 -0.5**
**SORM Soroca 70.12 322** P **P** **14 32 55.4 -0.8**
**SMCO Snowmass 70.13 53** IAmb IAmb 14 32 58.8
comp=Z,7.5nm,0.7s
**GLA Glamis 70.20 62** IAmb IAmb 14 32 59.4
comp=Z,12nm,0.8s
**F33A 5 Mile Ranch, 70.28 42** IAmb IAmb 14 32 57.6
comp=Z,6.6nm,0.6s
**ISCO Idaho Springs 70.38 52** P **P** **14 32 58.8 +0.5**
baz=318
**WUAZ Wupatki 70.41 58** P **P** **14 32 59.4 +1.1**
baz=317
**KMPD K-Podol'skiy 70.54 323** P **P** **14 32 58.0 -0.6**
KMPD P **P** **14 32 57.7 -0.9**
**EYMN Ely 70.65 38** P **P** **14 32 58.4 -1.0**
EYMN IAmb IAmb 14 32 59.8
comp=Z,6.6nm,0.7s
**EYMN Ely 70.65 38** P **P** **14 32 59.0 -0.3**
baz=323
**MVCO Mesa Verde 70.76 55** IAmb IAmb 14 33 02.5
comp=Z,9.5nm,0.7s
**MVCO Mesa Verde 70.76 55** P **P** **14 33 01.2 +0.8**
baz=318
**113A Mohawk Valley, 71.03 62** IAmb IAmb 14 33 03.9
comp=Z,8.9nm,1.1s
**X16A Lo Mia Camp, P 71.17 59** IAmb IAmb 14 33 05.5
comp=Z,8.1nm,1.0s
**Q24A Divide 71.24 52** P **P** **14 33 03.6 +0.2**
baz=319
**S22A 4UR Ranch, Cre 71.26 54** P **P** **14 33 04.4 +1.0**
baz=318
**KSV Kosov 71.29 324** P **P** **14 33 01.8 -1.3**
**OGNE Ogallala 71.34 49** P **P** **14 33 03.7 +0.1**
baz=320
**OJC Ojcow 71.67 328** IAmb IAmb 14 33 06.2
comp=Z,13nm,1.2s
**ECSD EROS Data Cent 71.77 44** IAmb IAmb 14 33 06.9
comp=Z,9.8nm,0.7s
**ECSD EROS Data Cent 71.77 44** P **P** **14 33 05.9 -0.1**
baz=322
**BUR08 Bucovina Ar. S 71.78 323** P **P** **14 33 06.1 0.0**
BUR08 IAmb IAmb 14 33 06.8
comp=Z,5.9nm,0.7s
**BURAR Bucovina Array 71.80 323** P **P** **14 33 06.0 -0.2**
**BURAR Bucovina Array 71.80 323** ⇑*P* **P** **14 33 06.0 -0.2**
**KOLS Kolonicke sedl 71.85 326** *eP* **P** **14 33 06.2 -0.1**
KOLS pmax pmax
comp=Z,6.0nm,0.8s
**KOLS Kolonicke sedl 71.85 326** *eP* **P** **14 33 06.2 -0.1**
**SDCO Great Sand Dun 71.96 53** P **P** **14 33 08.3 +0.7**
baz=319
**TESR Tescani 72.12 322** ⇑*P* **P** **14 33 07.2 -0.8**
**214A Organ Pipe Nat 72.17 62** P **P** **14 33 09.5 +1.0**
baz=317
**KSP Ksiaz 72.33 330** P **P** **14 33 09.0 -0.1**
comp=Z,8.8nm,0.9s
**SCHQ Schefferville 72.54 20** P **P** **14 33 09.8 -0.5**
comp=Z,2.3nm,0.6s,baz=216,slow=4.6,SNR=1.7
comp=Z,2.3nm,0.6s
**TPGR Topolog 72.71 320** ⇓*P* **P** **14 33 10.7 -0.7**
**TURR Turia 72.75 322** ⇓*P* **P** **14 33 12.3 +0.7**
**MORC Moravsky Berou 72.83 329** IAmb IAmb 14 33 13.1
comp=Z,10.0nm,0.9s
**MORC Moravsky Berou 72.83 329** *eP* **P** **14 33 12.1 +0.1**
**MORC Moravsky Berou 72.83 329** ⇓*P* **P** **14 33 12.1 +0.1**
**MORC Moravsky Berou 72.83 329** ⇓*P* **P** **14 33 12.1 +0.1**
**CLL Collm 72.97 332** *i* P **P** **14 33 12.1 -0.6**
CLL comp=Z,16nm,1.0s *ep*P **pP** **14 35 09.0 +3.1**
comp=Z,6.0nm,1.3s
**CLL Collm 72.97 332** *i* P **P** **14 33 12.1 -0.6**
CLL pmax pmax
comp=Z,16nm,1.0s
**CLL Collm 72.97 332** P **P** **14 33 12.3 -0.4**
comp=Z,17nm,0.8s
**T25A Trinidad 72.99 53** P **P** **14 33 14.0 +0.6**
baz=319
**TUC Tucson 73.08 60** P **P** **14 33 14.9 +1.1**
baz=318
**MLR Muntele Rosu 73.23 321** P **P** **14 33 15.2 +0.7**
comp=Z,4.8nm,0.6s,baz=163,slow=5.6,SNR=7.4
comp=Z,4.8nm,0.6s
**MLR Muntele Rosu 73.23 321** ⇓*P* **P** **14 33 15.1 +0.6**
**MLR Muntele Rosu 73.23 321** ⇓*P* **P** **14 33 15.1 +0.6**
**EKA Eskdalemuir Ar 73.31 343** P **P** **14 33 13.8 -0.8**
comp=Z,0.7nm,0.4s,baz=32,slow=6.7,SNR=4.7
comp=Z,0.7nm,0.4s
**ASAR Alice Springs 73.36 193** P **P** **14 33 17.3 +2.0**
**ASAR Alice Springs 73.36 193** P **P** **14 33 17.4 +2.2**
comp=Z,9.2nm,0.7s,baz=4.6,slow=5.1,SNR=95
comp=Z,9.2nm,0.7s
**ASAR Alice Springs 73.36 193** P **P** **14 33 17.3 +2.0**
**VYHS Vyhne 73.47 327** *eP* **P** **14 33 15.6 0.0**
VYHS pmax pmax
comp=Z,6.0nm,0.8s
**VYHS Vyhne 73.47 327** *eP* **P** **14 33 15.6 0.0**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ANMO** | **Albuquerque** | **73.54** | **56** | P | | **P** | **14 33 17.7** | **+1.2** |
| | baz=319 | | | | | | | |
| **VRAC** | **Vranov** | **73.55** | **329** | *e*P | | **P** | **14 33 16.4** | **+0.3** |
| **VRAC** | **Vranov** | **73.55** | **329** | P | | **P** | **14 33 15.4** | **-0.7** |
| | comp=Z,5.6nm,0.7s,baz=21,slow=5.3,SNR=8.0 | | | | | | | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **JAVC** | **Velka Javorina** | **73.56** | **328** | *e*P | | **P** | **14 33 17.0** | **+0.8** |
| **VOIR** | | **73.64** | **322** | ⇑P | | **P** | **14 33 17.4** | **+0.6** |
| **VOIR** | | **73.64** | **322** | ⇑P | | **P** | **14 33 17.4** | **+0.6** |
| **VOIR** | | **73.64** | **322** | P | | **P** | **14 33 17.0** | **+0.2** |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **KRUC** | **Moravsky** | **73.83** | **329** | *e*P | | **P** | **14 33 17.8** | **+0.2** |
| **CBKS** | **Cedar Bluff** | **74.10** | **49** | P | | **P** | **14 33 19.9** | **+0.5** |
| | baz=321 | | | | | | | |
| **SIRR** | **Siria** | **74.30** | **324** | ⇓P | | **P** | **14 33 20.8** | **+0.5** |
| **BRTR** | **Keskin Array B** | **74.39** | **313** | P | | **P** | **14 33 21.2** | **+0.1** |
| | comp=Z,2.4nm,0.8s,baz=59,slow=4.8,SNR=11 | | | | | | | |
| BRTR | | | | PP | | **PP** | **14 36 17.4** | **+0.9** |
| | comp=Z,0.8nm,0.9s,baz=79,slow=7.5,SNR=4.3 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.39** | **313** | *i* P | | **P** | **14 33 21.6** | **+0.4** |
| BRTR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **RTBA** | **Rita Blanca** | **74.40** | **52** | IAmb | | IAmb | 14 33 22.5 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **SURR** | **Surduc** | **74.54** | **324** | ⇓P | | **P** | **14 33 22.3** | **+0.6** |
| **121A** | **Cookes Peak, D** | **74.61** | **58** | P | | **P** | **14 33 23.4** | **+0.7** |
| | baz=319 | | | | | | | |
| **KHC** | **Kasperske Hory** | **74.69** | **331** | *d* iP | | **P** | **14 33 22.7** | **+0.1** |
| KHC | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **KHC** | **Kasperske Hory** | **74.69** | **331** | P | | **P** | **14 33 22.9** | **+0.3** |
| **KIRS** | **Kirsehir-Merke** | **74.72** | **313** | ⇑P | | **P** | **14 33 23.1** | **+0.1** |
| **BZS** | **Buzias** | **74.85** | **324** | ⇑P | | **P** | **14 33 23.5** | **0.0** |
| **BZS** | **Buzias** | **74.85** | **324** | ⇑P | | **P** | **14 33 23.5** | **0.0** |
| **GERES** | **GERESS Array B** | **74.91** | **331** | P | | **P** | **14 33 23.6** | **-0.2** |
| | comp=Z,1.6nm,0.6s,baz=145,slow=4.9,SNR=6.4 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **CONA** | **Conrad Observa** | **74.98** | **329** | *i* P | | **P** | **14 33 24.8** | **+0.5** |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **75.03** | **329** | *e*P | | **P** | **14 33 25.2** | **+0.7** |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **JFWS** | **Jewell Farm** | **75.23** | **40** | P | | **P** | **14 33 25.2** | **-0.4** |
| | baz=325 | | | | | | | |
| **KSU1** | **Kansas State U** | **75.40** | **47** | P | | **P** | **14 33 26.5** | **-0.2** |
| | baz=322 | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **75.93** | **330** | *e*P | | **P** | **14 33 29.8** | **+0.3** |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **AMTX** | **Amarillo** | **76.14** | **53** | P | | **P** | **14 33 31.5** | **+0.6** |
| | baz=321 | | | | | | | |
| **SOKA** | **Soboth** | **76.35** | **329** | *e*P | | **P** | **14 33 31.9** | **+0.1** |
| | comp=Z,8.9nm,1.3s | | | | | | | |
| **LESA** | **Schwarzleotal** | **76.48** | **331** | *e*P | | **P** | **14 33 33.0** | **+0.4** |
| | comp=Z,8.6nm,1.0s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **76.57** | **330** | *e*P | | **P** | **14 33 33.8** | **+0.6** |
| | comp=Z,10nm,0.9s | | | | | | | |
| **MNTX** | **Cornudas Mount** | **76.58** | **57** | P | | **P** | **14 33 34.6** | **+1.3** |
| | baz=320 | | | | | | | |
| **SMWD** | **Samnorwood** | **76.72** | **51** | IAmb | | IAmb | 14 33 35.9 | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **WATA** | **Walderalm** | **76.91** | **331** | *e*P | | **P** | **14 33 34.6** | **-0.4** |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| **WTTA** | **Wattenberg** | **76.96** | **331** | *e*P | | **P** | **14 33 35.7** | **+0.4** |
| | comp=Z,10nm,0.8s | | | | | | | |
| **RETA** | **Reutte** | **77.03** | **332** | *e*P | | **P** | **14 33 36.0** | **+0.4** |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| **MOTA** | **Moosalm** | **77.05** | **332** | *e*P | | **P** | **14 33 36.2** | **+0.4** |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **77.13** | **331** | *e*P | | **P** | **14 33 36.6** | **+0.5** |
| | comp=Z,6.1nm,0.9s | | | | | | | |
| **P40A** | **Paris** | **77.19** | **43** | IAmb | | IAmb | 14 33 37.5 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **FETA** | **Feichten** | **77.46** | **332** | *e*P | | **P** | **14 33 38.9** | **+0.8** |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **HDIL** | **Hopedale** | **77.57** | **41** | P | | **P** | **14 33 38.3** | **-0.2** |
| | baz=326 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **77.75** | **51** | P | | **P** | **14 33 40.2** | **+0.6** |
| | baz=322 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **77.94** | **332** | P | | **P** | **14 33 41.0** | **+0.4** |
| | comp=Z,1.7nm,0.4s,baz=43,slow=8.6,SNR=5.3 | | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | | |
| **R40A** | **Maddies Statio** | **78.09** | **44** | IAmb | | IAmb | 14 33 42.1 | |
| | comp=Z,7.3nm,0.6s | | | | | | | |
| **AAM** | **Ann Arbor** | **78.43** | **36** | P | | **P** | **14 33 43.6** | **+0.5** |
| | baz=328 | | | | | | | |
| **U38A** | **Gravette** | **78.58** | **47** | IAmb | | IAmb | 14 33 44.9 | |
| | comp=Z,6.5nm,0.7s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **78.75** | **308** | P | | **P** | **14 33 45.6** | **+0.6** |
| | comp=Z,3.7nm,0.6s,baz=34,slow=6.5,SNR=5.6 | | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | | |
| **CCM** | **Cathedral Cave** | **78.75** | **44** | P | | **P** | **14 33 45.3** | **+0.4** |
| | baz=325 | | | | | | | |
| **TXAR** | **Lajitas Array** | **79.33** | **57** | P | | **P** | **14 33 49.5** | **+1.2** |
| | comp=Z,5.3nm,0.7s,baz=293,slow=4.1,SNR=72 | | | | | | | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **LONY** | **Lake Ozonia** | **79.66** | **29** | P | | **P** | **14 33 50.1** | **+0.5** |
| | baz=333 | | | | | | | |
| **ERPA** | **Erie** | **79.99** | **34** | P | | **P** | **14 33 51.1** | **-0.3** |
| | baz=330 | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **80.10** | **46** | IAmb | | IAmb | 14 33 52.4 | |
| | comp=Z,7.1nm,0.5s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **80.16** | **44** | IAmb | | IAmb | 14 33 53.5 | |
| | comp=Z,19nm,1.3s | | | | | | | |
| **M53A** | **WI Miller and** | **80.32** | **35** | P | | **P** | **14 33 53.1** | **0.0** |
| | baz=330 | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **80.35** | **39** | P | | **P** | **14 33 53.4** | **+0.1** |
| | baz=328 | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **80.46** | **37** | P | | **P** | **14 33 54.1** | **+0.2** |
| | baz=329 | | | | | | | |
| **MIAR** | **Mount Ida** | **80.50** | **47** | P | | **P** | **14 33 54.7** | **+0.6** |
| | baz=324 | | | | | | | |
| **WHAR** | **Wooly Hollow** | **80.51** | **46** | IAmb | | IAmb | 14 33 55.3 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **JCT** | **Junction City** | **80.55** | **54** | P | | **P** | **14 33 55.4** | **+0.8** |
| | baz=322 | | | | | | | |
| **STKA** | **Stephens Creek** | **80.66** | **185** | P | | **P** | **14 33 56.4** | **+1.6** |
| | comp=Z,2.4nm,0.7s,baz=345,slow=14,SNR=5.5 | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **WCI** | **Wyandotte Cave** | **80.79** | **40** | P | | **P** | **14 33 55.8** | **+0.2** |
| | baz=328 | | | | | | | |
| **LBNH** | **Lisbon** | **80.84** | **28** | P | | **P** | **14 33 55.7** | **-0.1** |
| | baz=335 | | | | | | | |
| **O53A** | **New Philadelph** | **81.14** | **36** | P | | **P** | **14 33 57.7** | **+0.3** |
| | baz=330 | | | | | | | |
| **WVT** | **Waverly** | **81.88** | **43** | P | | **P** | **14 34 01.7** | **+0.5** |
| | baz=327 | | | | | | | |
| **SSPA** | **Standing Stone** | **82.05** | **33** | P | | **P** | **14 34 01.9** | **-0.1** |
| | baz=332 | | | | | | | |
| **NATX** | **Nacogdoches** | **82.21** | **50** | P | | **P** | **14 34 03.9** | **+0.9** |
| | baz=324 | | | | | | | |
| **L61B** | **Northampton** | **82.22** | **29** | P | | **P** | **14 34 02.5** | **-0.3** |
| | baz=335 | | | | | | | |
| **833A** | **Chaparral WMA,** | **82.47** | **55** | P | | **P** | **14 34 05.2** | **+0.9** |
| | baz=322 | | | | | | | |
| **TZTN** | **Tazewell** | **83.38** | **39** | P | | **P** | **14 34 09.3** | **+0.5** |
| | baz=329 | | | | | | | |
| **SWET** | **Sewanee** | **83.48** | **42** | IAmb | | IAmb | 14 34 09.9 | |
| | comp=Z,9.1nm,0.7s | | | | | | | |
| **X48A** | **Hartselle** | **83.63** | **43** | IAmb | | IAmb | 14 34 10.6 | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **LRAL** | **Lakeview Retre** | **84.84** | **44** | P | | **P** | **14 34 16.2** | **+0.2** |
| | baz=328 | | | | | | | |
| **GOGA** | **Godfrey** | **86.08** | **41** | P | | **P** | **14 34 22.6** | **+0.6** |
| | baz=329 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **111.36** | **324** | PP | | **PP** | **14 40 58.0** | **-3.2** |
| | comp=Z,0.6nm,0.9s,baz=1.9,slow=9.9,SNR=3.9 | | | | | | | |
| **VNDA** | **Vanda** | **126.48** | **176** | PKP | | **PKPdf** | **14 40 38.0** | **-0.3** |
| | comp=Z,0.6nm,0.6s,baz=284,slow=6.5,SNR=5.0 | | | | | | | |
| **LPAZ** | **La Paz** | **136.15** | **55** | PKP | | **PKPdf** | **14 40 59.9** | **+0.8** |
| | comp=Z,1.2nm,0.7s,baz=21,slow=16,SNR=6.0 | | | | | | | |
| **QSPA** | **South Pole Qui** | **138.68** | **180** | PKhKP | | PKPpre | 14 40 53.8 | |
| | comp=Z,1.5nm,0.7s,baz=272,slow=2.0,SNR=11 | | | | | | | |
| QSPA | | | | PKP | | **PKPdf** | **14 41 02.3** | **+0.8** |
| | comp=Z,1.4nm,0.6s,baz=249,slow=12,SNR=6.1 | | | | | | | |
| QSPA | | | | SKPbc | | **SKPbc** | **14 43 43.5** | **-1.2** |
| | comp=Z,1.5nm,0.8s,baz=299,slow=3.3,SNR=7.0 | | | | | | | |
| **BDFB** | **Brasilia** | **144.30** | **27** | PKP | | **PKPab** | **14 41 13.6** | **+0.3** |
| | comp=Z,10nm,0.8s,baz=257,slow=1.5,SNR=9.7 | | | | | | | |
| **AC05** | **El Transito** | **144.60** | **70** | PKPdf | | **PKPab** | **14 41 14.9** | **+0.7** |
| **ELIB** | **Princess Elisa** | **146.22** | **207** | *d*PKPdf | | **PKPbc** | **14 41 17.6** | **+0.6** |
| **MT13** | **San Alfonso** | **147.90** | **76** | | | **PKiKP** | **14 41 23.7** | **-0.2** |
| **BO02** | **Sierra Bellavi** | **148.24** | **78** | | | **PKiKP** | **14 41 24.0** | **-0.5** |
| **BI02** | **San Fabin de** | **149.05** | **81** | | | **PKiKP** | **14 41 25.8** | **-0.4** |
| **CPUP** | **Villa Florida** | **150.07** | **50** | PKPbc | | **PKiKP** | **14 41 28.3** | **-0.1** |
| | comp=Z,3.2nm,0.5s,baz=341,slow=4.2,SNR=9.3 | | | | | | | |
| **PLCA** | **Paso Flores** | **151.73** | **88** | PKPbc | | **PKiKP** | **14 41 32.3** | **+0.8** |
| | comp=Z,6.9nm,0.9s,baz=284,slow=1.4,SNR=17 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **152.05** | **202** | ⇓PKPab | | **PKPab** | **14 41 44.5** | **+0.9** |
| | comp=Z,175nm,0.6s | | | | | | | |
| TROLL | | | | ⇑PKPbc | | **PKiKP** | **14 41 31.6** | **+0.3** |
| | comp=Z,208nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **153.55** | **200** | ⇓PKPab | | **PKPab** | **14 41 45.5** | **-4.4** |
| | comp=Z,12nm,0.2s | | | | | | | |
| SNAA | | | | ⇑PKPbc | | **PKPbc** | **14 41 32.5** | **-1.8** |
| | comp=Z,12nm,0.3s | | | | | | | |
| **SNAA** | **Sanae** | **153.55** | **200** | PKPab | | **PKPab** | **14 41 49.4** | **-0.4** |
| | comp=Z,1.3nm,0.6s,baz=166,slow=8.3,SNR=4.8 | | | | | | | |

*IDC **16** 14:49:12.0±1.0,5°.92N×127°.33E,h0km,mb4.0/7, mbtmp4.0/8,ML3.9/1,MS2.6/1,Error ellipse: s-maj=56.9km s-min=16.1km az=61.0*

**ISC 16 14:49:18.7±1.1,5°.9N±0°.2×127°.3E±0°.3,h50km,n8, σ0°.89/10,mb4.0/7,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **2.04** | **306** | Pn | | **Pn** | | **14 49 49.4** | **-1.3** |
| | 42nm,0.3s,baz=169,slow=1.4,SNR=5.7 | | | | | | | | |
| DAV | | | | Sn | | **Sn** | | **14 50 16.2** | **+1.3** |
| | 99nm,0.3s,baz=229,slow=20,SNR=3.8 | | | | | | | | |
| DAV | | | | LR | | LR | | 14 50 39.5 | |
| | comp=Z,136nm,19.6s,baz=110,slow=42 | | | | | | | | |
| | 206nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.59** | **165** | P | | **P** | | **14 54 52.6** | **+0.1** |
| | 0.9nm,0.6s,baz=343,slow=10,SNR=18 | | | | | | | | |
| | 0.9nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **30.07** | **168** | P | | **P** | | **14 55 23.7** | **+0.2** |
| | 0.5nm,0.6s,baz=344,slow=7.1,SNR=16 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **14 58 24.8** | **+0.2** |
| | 0.4nm,0.5s,baz=355,slow=2.3,SNR=11 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.11** | **324** | P | | **P** | | **14 58 52.7** | **-0.4** |
| | 0.8nm,0.6s,baz=127,slow=8.6,SNR=9.4 | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.93** | **332** | P | | **P** | | **14 59 13.4** | **+0.6** |
| | 0.4nm,0.3s,baz=122,slow=11,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.23** | **327** | P | | **P** | | **14 59 21.7** | **-0.1** |
| | 1.3nm,0.6s,baz=124,slow=6.4,SNR=16 | | | | | | | | |
| | 1.3nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.82** | **326** | P | | **P** | | **15 00 00.1** | **+1.2** |
| | 1.0nm,0.6s,baz=97,slow=4.6,SNR=3.9 | | | | | | | | |
| | 1.0nm,0.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.62** | **340** | P | | **P** | | **15 02 05.8** | **-0.3** |
| | 2.6nm,1.1s,baz=70,slow=5.8,SNR=3.7 | | | | | | | | |
| | 2.6nm,1.1s | | | | | | | | |

**NEIC 16 15:00:58.9±1.9,29°.10N±0°.02×97°.57W±0°.03,h5km±1km, mb_Lg2.9/51,Error ellipse: s-maj=4.5km s-min=3.0km az=99.0,Central Texas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **735A** | **Kenedy** | **0.32** | **221** | Pg | | Pb | | 15 01 06.2 | -0.8 |
| 735A | | | | Sg | | Sg | | 15 01 10.4 | +1.2 |
| **MLDN** | **Muldoon** | **0.81** | **33** | | | Pb | | 15 01 15.4 | -0.2 |
| MLDN | | | | | | Sg | | 15 01 23.1 | -2.0 |
| MLDN | | | | IAmb_Lg | | | | 15 01 24.3 | |
| | comp=Z,165nm,0.7s | | | | | | | | |
| **HNDO** | **Hondo** | **1.55** | **287** | | | Pn | | 15 01 25.4 | -1.8 |
| HNDO | | | | Sg | | Sn | | 15 01 46.2 | -1.6 |
| **KVTX** | **Kingsville** | **1.57** | **190** | | | Pn | | 15 01 27.5 | +0.1 |
| KVTX | | | | | | Sn | | 15 01 46.1 | -2.0 |
| **435B** | **Jarrell** | **1.68** | **360** | | | Pn | | 15 01 27.9 | -1.1 |
| 435B | | | | | | Sn | | 15 01 50.8 | -0.2 |
| **HKT** | **Hockley** | **1.74** | **60** | Pn | | Pn | | 15 01 28.6 | -1.2 |
| **833A** | **Chaparral WMA,** | **1.77** | **245** | | | Pn | | 15 01 29.8 | -0.5 |
| 833A | | | | | | Sn | | 15 01 52.3 | -0.9 |
| **HBVL** | **Hebbronville** | **2.24** | **206** | | | Pn | | 15 01 36.1 | -0.6 |
| HBVL | | | | | | Sb | | 15 02 06.5 | -1.5 |
| **JCT** | **Junction City** | **2.38** | **306** | | | Pn | | 15 01 38.9 | +0.3 |
| **HNVL** | **Huntsville, TX** | **2.47** | **47** | Pn | | Pn | | 15 01 37.8 | -2.0 |
| **BRDY** | **Brady** | **2.51** | **331** | Pn | | Pn | | 15 01 40.0 | -0.4 |
| BRDY | | | | | | Sn | | 15 02 09.3 | -2.1 |
| BRDY | | | | IAmb_Lg | | | | 15 02 19.5 | |
| | comp=Z,49nm,0.8s | | | | | | | | |
| **DRIO** | **Del Rio** | **2.68** | **278** | Pn | | Pn | | 15 01 42.7 | -0.1 |
| DRIO | | | | | | Sn | | 15 02 14.2 | -1.5 |
| DRIO | | | | IAmb_Lg | | | | 15 02 29.8 | |
| | comp=Z,41nm,0.7s | | | | | | | | |
| **WHTX** | **Lake Whitney,** | **2.89** | **2** | Pn | | Pn | | 15 01 45.2 | -0.4 |
| **FW13** | **Cleburne** | **3.25** | **2** | | | Pn | | 15 01 49.2 | -1.3 |
| **237A** | **Washetta, Mont** | **3.27** | **27** | Pn | | Pn | | 15 01 50.5 | -0.4 |
| **FW14** | **Alvarado** | **3.31** | **6** | IAmb_Lg | | | | 15 02 49.4 | |
| | comp=Z,30nm,0.7s | | | | | | | | |
| **OZNA** | **Ozona** | **3.58** | **301** | Pn | | Pn | | 15 01 53.7 | -1.4 |
| OZNA | | | | IAmb_Lg | | | | 15 02 55.0 | |
| | comp=Z,35nm,0.8s | | | | | | | | |
| **FW07** | **Weatherford** | **3.60** | **357** | | | Pn | | 15 01 54.4 | -1.0 |
| FW07 | | | | IAmb_Lg | | | | 15 02 58.5 | |
| | comp=Z,29nm,0.8s | | | | | | | | |
| **PLPT** | **Palo Pinto** | **3.76** | **350** | Pn | | Pn | | 15 01 56.6 | -1.0 |
| PLPT | | | | IAmb_Lg | | | | 15 03 08.4 | |
| | comp=Z,26nm,0.9s | | | | | | | | |
| **FW06** | **Azle** | **3.87** | **0** | | | Pn | | 15 01 58.9 | -0.1 |
| FW06 | | | | IAmb_Lg | | | | 15 03 06.3 | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.94** | **334** | Pn | | Pn | | 15 01 58.4 | -1.7 |
| **FW03** | **Perrin-Whitt E** | **3.96** | **354** | | | Pn | | 15 01 58.6 | -1.6 |
| FW03 | | | | IAmb_Lg | | | | 15 03 10.4 | |
| | comp=Z,25nm,0.7s | | | | | | | | |
| **SAND** | **Sanderson** | **4.06** | **283** | | | Pn | | 15 02 00.8 | -1.0 |
| **SGCY** | **Sterling City** | **4.16** | **313** | | | Pn | | 15 02 01.8 | -1.3 |
| **Z35A** | **Perchaven, San** | **4.23** | **4** | Pn | | Pn | | 15 02 03.3 | -0.8 |
| Z35A | | | | IAmb_Lg | | | | 15 03 20.1 | |
| | comp=Z,25nm,0.8s | | | | | | | | |
| **WTFS** | **Witchita Falls** | **4.72** | **351** | Pn | | Pn | | 15 02 09.8 | -1.0 |
| **SN05** | **Snyder 5** | **4.72** | **324** | | | Pn | | 15 02 10.7 | -0.1 |
| **APMT** | **Aspermont** | **4.75** | **333** | | | Pn | | 15 02 10.6 | -0.6 |
| APMT | | | | IAmb_Lg | | | | 15 03 36.0 | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| **LOOK** | **Love County** | **4.89** | **4** | Pn | | Pn | | 15 02 13.0 | -0.2 |
| LOOK | | | | IAmb_Lg | | | | 15 03 44.4 | |
| | comp=Z,25nm,0.8s | | | | | | | | |
| **SN07** | **Snyder 07** | **4.89** | **325** | | | Pn | | 15 02 12.3 | -0.9 |
| **MNHN** | **Monahans** | **5.02** | **298** | Pn | | Pn | | 15 02 14.7 | -0.3 |
| MNHN | | | | IAmb_Lg | | | | 15 03 49.6 | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **POST** | **Post** | **5.20** | **321** | | | Pn | | 15 02 16.7 | -0.7 |
| POST | | | | IAmb_Lg | | | | 15 03 54.8 | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| **ODSA** | **Odessa** | **5.24** | **306** | Pn | | Pn | | 15 02 18.3 | +0.3 |
| **TXAR** | **Lajitas Array** | **5.33** | **274** | | | Pn | | 15 02 18.8 | -0.5 |
| **TX31** | **Lajitas Ar. Si** | **5.33** | **274** | | | Pn | | 15 02 18.4 | -0.9 |
| **DKNS** | **Dickens** | **5.38** | **329** | Pn | | Pn | | 15 02 19.7 | -0.2 |
| DKNS | | | | IAmb_Lg | | | | 15 03 49.3 | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **ALPN** | **Alpine** | **5.43** | **285** | Pn | | Pn | | 15 02 20.2 | -0.4 |
| ALPN | | | | IAmb_Lg | | | | 15 04 01.8 | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **X34A** | **Smith Ranch, M** | **5.49** | **358** | Pn | | Pn | | 15 02 20.9 | -0.5 |
| X34A | | | | IAmb_Lg | | | | 15 04 01.0 | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **5.72** | **350** | Pn | | Pn | | 15 02 23.6 | -1.0 |
| WMOK | | | | IAmb_Lg | | | | 15 04 04.8 | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **X37A** | **Clayton** | **5.79** | **18** | Pn | | Pn | | 15 02 23.5 | -1.9 |
| **PECS** | **Pecos** | **5.90** | **294** | Pn | | Pn | | 15 02 25.1 | -2.0 |
| PECS | | | | IAmb_Lg | | | | 15 04 12.9 | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **W35A** | **Tecumseh** | **6.07** | **5** | IAmb_Lg | | | | 15 04 27.8 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **GDL2** | **Guadalupe Moun** | **6.62** | **300** | Pn | | Pn | | 15 02 36.1 | -0.9 |
| **VHRN** | **Van Horn** | **6.65** | **287** | Pn | | Pn | | 15 02 35.1 | -2.4 |
| **OK029** | **Liberty Lake** | **6.68** | **1** | IAmb_Lg | | | | 15 04 43.6 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **AMTX** | **Amarillo** | **6.74** | **330** | Pn | | Pn | | 15 02 37.1 | -1.6 |
| **QUOK** | **Quay** | **7.09** | **6** | Pn | | Pn | | 15 02 42.2 | -1.2 |
| **ELIS** | **Ellis County** | **7.12** | **348** | IAmb_Lg | | | | 15 05 03.4 | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **KAN13** | **South Haven SW** | **7.90** | **1** | IAmb_Lg | | | | 15 05 13.1 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **KAN17** | **Caldwell West** | **7.93** | **359** | Pn | | Pn | | 15 02 53.8 | -1.1 |
| **MGMO** | **Mountain Grove** | **9.18** | **28** | Pn | | Pn | | 15 03 10.1 | -2.0 |

*SJA **16** 15:04:40.1±0.8,27°.80S×62°.68W,h666km±14km,ML3.9, MW3.9*
*IDC **16** 15:04:47.4±1.2,27°.44S×62°.59W,h625km±16km,mb3.2/4, mbtmp4.2/9,Error ellipse: s-maj=21.3km s-min=17.7km az=127.0*
*NEIC **16** 15:04:47.3±1.5,27°.5S±0°.1×62°.6W±0°.2,h626km±8km, mb4.1/5,Error ellipse: s-maj=22.6km s-min=17.5km az=107.0*

**ISC 16 15:04:47.0±0.6,27°.51S±0°.08×62°.63W±0°.08,h626km,n84, σ0°.88/89,mb3.6/4,Santiago del Estero Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CYA** | **Choya** | **2.95** | **251** | *e*P | | **P** | | **15 06 08.2** | **+0.1** |
| **FSA** | **Cafayete** | **3.30** | **294** | *e*P | | **P** | | **15 06 11.1** | **+0.8** |
| FSA | | | | *e*S | | **S** | | **15 07 18.6** | **+0.5** |
| **ACLC** | **CERRO LA CRUZ** | **4.25** | **242** | *e*P | | **P** | | **15 06 16.3** | **0.0** |
| ACLC | | | | *e*S | | **S** | | **15 07 26.9** | **-2.3** |
| ACLC | | | | IAML | | | | 15 07 31.0 | |
| | comp=Z,8.4nm,0.3s | | | | | | | | |
| **CPUP** | **Villa Florida** | **4.88** | **77** | P | | **P** | | **15 06 21.2** | **+0.6** |
| **CPUP** | **Villa Florida** | **4.88** | **77** | P | | **P** | | **15 06 21.1** | **+0.4** |
| | comp=Z,2.4nm,0.5s,baz=258,slow=8.1,SNR=6.3 | | | | | | | | |
| **ACHE** | **Chepes** | **5.06** | **223** | *e*P | | **P** | | **15 06 21.4** | **-0.6** |
| **VCA** | **Vinchina** | **5.07** | **255** | *e*P | | **P** | | **15 06 23.2** | **+1.0** |
| VCA | | | | *e*S | | **S** | | **15 07 39.1** | **-1.0** |
| VCA | | | | IAML | | | | 15 07 43.7 | |
| | comp=Z,22nm,0.6s | | | | | | | | |
| **AVFE** | **Valle Fertil** | **5.26** | **232** | *e*P | | **P** | | **15 06 24.1** | **+0.5** |
| **ITQB** | **Itaqui** | **5.71** | **114** | P | | **P** | | **15 06 28.0** | **+1.0** |
| **ACDV** | **Cuesta del Vie** | **6.28** | **243** | *e*P | | **P** | | **15 06 33.5** | **+1.5** |
| **RTLL** | **Cerro Villicun** | **6.36** | **232** | *e*P | | **P** | | **15 06 33.4** | **+0.9** |
| **ACCO** | **Cerro Coronel** | **6.41** | **240** | *e*P | | **P** | | **15 06 34.6** | **+1.2** |
| **AROD** | **Rodeo** | **6.56** | **245** | *e*P | | **P** | | **15 06 36.3** | **+1.7** |
| **ZON** | **Zonda** | **6.63** | **231** | P | | **P** | | **15 06 34.3** | **-0.6** |
| **GO02** | **Mina Guanaco** | **6.67** | **289** | P | | **P** | | **15 06 36.9** | **+1.3** |
| **GO03** | **Copiap** | **6.75** | **268** | | | **P** | | **15 06 36.2** | **+0.2** |
| **AF01** | **San Pedro de A** | **6.77** | **311** | P | | **P** | | **15 06 36.3** | **-0.3** |
| **AC06** | **Mina Casimiro** | **6.86** | **269** | | | **P** | | **15 06 37.5** | **+0.5** |
| **AC05** | **El Transito** | **6.87** | **257** | P | | **P** | | **15 06 37.9** | **+0.7** |
| **CO01** | **Juntas del Tor** | **7.00** | **248** | P | | **P** | | **15 06 40.2** | **+1.8** |
| **RTLS** | **Leoncito** | **7.20** | **232** | *e*P | | **P** | | **15 06 41.7** | **+1.5** |
| **AC01** | **Pan de Azucar** | **7.25** | **279** | | | **P** | | **15 06 41.4** | **+1.0** |
| **LCO** | **Las Campanas** | **7.27** | **256** | P | | **P** | | **15 06 41.5** | **+0.7** |
| **ASAL** | **Salagasta** | **7.38** | **225** | *e*P | | **P** | | **15 06 42.7** | **+1.1** |
| **LVC** | **Limon Verde** | **7.50** | **309** | | | **P** | | **15 06 44.0** | **+0.8** |
| **LVC** | **Limon Verde** | **7.50** | **309** | P | | **P** | | **15 06 44.1** | **+1.0** |
| | comp=Z,10nm,0.3s,baz=116,slow=5.7,SNR=46 | | | | | | | | |
| LVC | | | | S | | **S** | | **15 08 15.8** | **-2.2** |
| | comp=Z,4.6nm,0.3s,baz=261,slow=22,SNR=13 | | | | | | | | |
| **AC04** | **Llanos de Chal** | **7.50** | **263** | | | **P** | | **15 06 43.5** | **+0.9** |
| **AUSP** | **Uspallata** | **7.51** | **230** | *e*P | | **P** | | **15 06 44.4** | **+1.4** |
| **PB14** | **IPOC Station P** | **7.55** | **291** | P | | **P** | | **15 06 44.4** | **+0.8** |
| **ARCO** | **CERRO ARCO** | **7.61** | **224** | *e*P | | **P** | | **15 06 44.7** | **+0.9** |
| **GO04** | **Tololo Observa** | **7.64** | **248** | P | | **P** | | **15 06 44.8** | **+0.7** |
| **AAGR** | **Agrelo** | **7.72** | **222** | *e*P | | **P** | | **15 06 45.5** | **+0.8** |
| **CO03** | **El Pedregal** | **7.78** | **243** | P | | **P** | | **15 06 46.0** | **+0.7** |
| **CO05** | **La Serena** | **7.93** | **250** | P | | **P** | | **15 06 46.7** | **+0.2** |
| **CO02** | **Combarbal** | **8.18** | **241** | | | **P** | | **15 06 49.3** | **+0.3** |
| **PB09** | **IPOC Station P** | **8.27** | **312** | P | | **P** | | **15 06 50.2** | **0.0** |
| **PB05** | **IPOC Station P** | **8.28** | **302** | P | | **P** | | **15 06 50.3** | **+0.3** |
| **CO06** | **Fray Jorge** | **8.48** | **246** | P | | **P** | | **15 06 51.8** | **+0.1** |
| **PB04** | **IPOC Station P** | **8.55** | **305** | P | | **P** | | **15 06 54.1** | **+1.4** |
| **VA03** | **San Esteban** | **8.62** | **231** | P | | **P** | | **15 06 53.5** | **+0.4** |
| **MT08** | **Bocatoma Ro** | **8.69** | **225** | | | **P** | | **15 06 54.6** | **+0.8** |
| **PLTB** | **Pedras Altas** | **8.93** | **121** | P | | **P** | | **15 06 55.1** | **-0.8** |
| **PEL** | **Peldehue** | **8.94**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LUWI | **Luwuk** | **9.61** | **47** | P | | **Pn** | **15 16 39.1** | **0.0** |
| LUWI | **Luwuk** | **9.61** | **47** | Pn | | **Pn** | **15 16 38.7** | **-0.4** |
| KSM | **Kuching** | **10.57** | **329** | | | **S** | **15 18 55.4** | **+5.8** |
| SBUM | **Sibu** | **10.64** | **341** | P | | **P** | **15 16 55.9** | **+1.3** |
| KKM | **Kota Kinabalu** | **13.62** | **2** | P | | **P** | **15 17 27.3** | **-0.5** |
| FITZ | **Fitzroy Crossi** | **14.16** | **138** | P | | **P** | **15 17 32.9** | **-0.6** |
| PSA00 | **Pilbara Seismi** | **14.39** | **164** | | | **Pn** | **15 17 37.5** | **+0.7** |
| KNRA | **Kununurra** | **15.03** | **123** | P | | **Pn** | **15 17 45.6** | **+1.1** |
| KNRA | | | | IAmb | | IAmb | 15 17 47.8 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| MTN | **Manton Dam** | **15.99** | **110** | P | | **P** | **15 17 54.8** | **+1.1** |
| MTN | **Manton Dam** | **15.99** | **110** | P | | **P** | **15 17 54.6** | **+0.9** |
| KDU | **Kakadu** | **17.21** | **108** | P | | **P** | **15 18 08.0** | **+1.1** |
| GSI | **Gunungsitoli** | **20.19** | **295** | P | | **P** | **15 18 37.3** | **-1.4** |
| WRKA | **Warakurna** | **21.04** | **147** | P | | **P** | **15 18 47.3** | **+0.3** |
| | comp=Z,11nm,2.4s | | | | | | | |
| MORW | **Morawa** | **21.30** | **179** | P | | **P** | **15 18 50.2** | **+0.9** |
| MORW | | | | IAmb | | IAmb | 15 19 31.7 | |
| | comp=Z,9.2nm,1.1s | | | | | | | |
| WB0 | **Warramunga Arr** | **21.72** | **126** | P | | **P** | **15 18 53.8** | **+0.5** |
| WRA | **Warramunga Arr** | **21.77** | **126** | P | | **P** | **15 18 54.0** | **+0.2** |
| | comp=Z,1.9nm,0.6s,baz=298,slow=8.3,SNR=80 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **15 25 46.1** | **-4.8** |
| | comp=Z,0.4nm,0.7s,baz=300,slow=2.0,SNR=4.6 | | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| WB2 | **Warramunga Arr** | **21.78** | **126** | P | | **P** | **15 18 54.2** | **+0.4** |
| WB2 | | | | IAmb | | IAmb | 15 18 55.9 | |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| WR0 | **Warramunga Arr** | **21.94** | **126** | P | | **P** | **15 18 55.6** | **+0.3** |
| WR0 | | | | IAmb | | IAmb | 15 18 56.4 | |
| | comp=Z,5.3nm,0.6s | | | | | | | |
| AS31 | **Alice Springs** | **23.60** | **134** | P | | **P** | **15 19 10.7** | **+0.4** |
| ASAR | **Alice Springs** | **23.60** | **134** | P | | **P** | **15 19 10.6** | **+0.3** |
| ASAR | **Alice Springs** | **23.60** | **134** | P | | **P** | **15 19 11.0** | **+0.7** |
| | comp=Z,1.5nm,0.4s,baz=312,slow=8.5,SNR=95 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **15 25 52.0** | **-3.7** |
| | comp=Z,0.5nm,0.6s,baz=323,slow=2.4,SNR=9.7 | | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | | |
| AS01 | **Alice Springs** | **23.63** | **134** | P | | **P** | **15 19 10.5** | **-0.1** |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| FORT | **Forrest** | **25.73** | **155** | P | | **P** | **15 19 31.5** | **+2.2** |
| | comp=Z,23nm,1.0s | | | | | | | |
| FORT | **Forrest** | **25.73** | **155** | P | | **P** | **15 19 29.1** | **-0.2** |
| OOD | **Oodnadatta** | **27.52** | **139** | P | | **P** | **15 19 45.8** | **+0.5** |
| COEN | **Coen** | **27.65** | **105** | P | | **P** | **15 19 46.8** | **+0.2** |
| COEN | **Coen** | **27.65** | **105** | P | | **P** | **15 19 45.4** | **-1.2** |
| COEN | | | | IAmb | | IAmb | 15 20 27.6 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| MULG | **Mulgathing** | **28.31** | **145** | P | | **P** | **15 19 52.6** | **+0.3** |
| | comp=Z,11nm,2.4s | | | | | | | |
| CMAR | **Chiang Mai Arr** | **30.79** | **328** | P | | **P** | **15 20 12.3** | **-1.9** |
| | comp=Z,0.5nm,0.4s,baz=156,slow=7.7,SNR=2.9 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| BBOO | **Buckleboo** | **31.33** | **146** | P | | **P** | **15 20 19.2** | **+0.4** |
| CRAI | **Chiangrai** | **31.57** | **332** | P | | **P** | **15 20 20.3** | **-0.7** |
| CRAI | | | | IAmb | | IAmb | 15 20 56.5 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| CTAO | **Charters Tower** | **32.02** | **116** | P | | **P** | **15 20 25.7** | **+0.7** |
| CTAO | | | | IAmb | | IAmb | 15 20 39.7 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| STKA | **Stephens Creek** | **34.06** | **139** | P | | **P** | **15 20 43.4** | **+1.1** |
| STKA | **Stephens Creek** | **34.06** | **139** | P | | **P** | **15 20 43.3** | **+1.0** |
| | comp=Z,3.5nm,0.5s,baz=315,slow=9.3,SNR=11 | | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| TOO | **Toolangi** | **40.17** | **142** | P | | **P** | **15 21 35.5** | **+2.1** |
| TOO | | | | IAmb | | IAmb | 15 21 44.6 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| SONM | **Songino Array** | **55.87** | **352** | P | | **P** | **15 23 31.1** | **-1.6** |
| | comp=Z,0.8nm,0.5s,baz=173,slow=7.9,SNR=4.3 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| CASY | **Casey** | **58.64** | **182** | P | | **P** | **15 23 52.2** | **+0.7** |
| MKAR | **Makanchi Array** | **61.84** | **335** | P | | **P** | **15 24 11.9** | **-1.5** |
| | comp=Z,0.4nm,0.5s,baz=142,slow=7.2,SNR=5.7 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| ZALV | **Zalesovo Beam** | **66.68** | **341** | P | | **P** | **15 24 42.3** | **-2.2** |
| | comp=Z,0.6nm,0.4s,baz=145,slow=5.3,SNR=2.3 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| QSPA | **South Pole Qui** | **82.33** | **180** | P | | **P** | **15 26 13.8** | **-0.2** |
| QSPA | | | | IAmb | | IAmb | 15 26 36.7 | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| QSPA | **South Pole Qui** | **82.33** | **180** | P | | **P** | **15 26 13.0** | **-1.0** |
| | comp=Z,1.6nm,1.1s,baz=104,slow=4.2,SNR=2.5 | | | | | | | |
| | comp=Z,1.6nm,1.1s | | | | | | | |
| BILL | **Bilibino** | **83.44** | **17** | | | pP | 15 27 29.3 | -0.5 |

*SKHL **16** 15:34:13.9±0.2, 44.°40N×148.°10E, h79km±6km, mb4.6/3, msha5.3/3*
*JMA **16** 15:34:13.6±0.4, 44.°N±3.°×14.°8E±.°, h96km, MV3.4/21, SE OFF ETOROFU*
*IDC **16** 15:34:14.4±50.0, 44.°51N×148.°24E, h135km±89km, mb3.2/2, mbtmp3.5/3, MS3.9/1, Error ellipse: s-maj=1058.0km s-min=73.2km az=152.0*
**ISC 16 15:34:10.4±1.6, 44.°3N±0.°1×148.°3E±0.°1, h99km±10km, n24, σ1§44/28, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KUR** | **Kuril'sk** | **0.97** | **343** | *eP* | | **Pn** | **15 34 30.9** | **+0.5** |
| KUR | | | | AMB | | AMB | 15 34 31.4 | |
| | 270nm,0.4s | | | | | | | |
| KUR | | | | *eS* | | **Sn** | **15 34 43.8** | **-1.6** |
| KUR | | | | A | | A | 15 34 45.3 | |
| | 410nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 15 34 45.3 | |
| | 700nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **1.13** | **248** | *eP* | | **Pn** | **15 34 33.0** | **+0.9** |
| SHO | | | | AMB | | AMB | 15 34 33.4 | |
| | 170nm,0.4s | | | | | | | |
| SHO | | | | *eS* | | **Sn** | **15 34 47.3** | **-1.2** |
| SHO | | | | A | | A | 15 34 48.1 | |
| | 280nm,0.3s | | | | | | | |
| SHO | | | | A | | A | 15 34 48.1 | |
| | 600nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.76** | **262** | *eP* | | **Pn** | **15 34 40.6** | **+0.9** |
| YUK | | | | AMB | | AMB | 15 34 41.0 | |
| | 220nm,0.4s | | | | | | | |
| YUK | | | | *eS* | | **Sn** | **15 35 00.8** | **-1.3** |
| YUK | | | | A | | A | 15 35 02.6 | |
| | 340nm,0.5s | | | | | | | |
| YUK | | | | A | | A | 15 35 02.6 | |
| | 710nm,0.5s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.06** | **244** | P | | **Pn** | **15 34 44.6** | **+1.0** |
| NEM2 | | | | S | | **Sn** | **15 35 08.0** | **-1.0** |
| **NMR** | **Nemuro--Hokkai** | **2.07** | **244** | *eP* | | **Pn** | **15 34 44.6** | **+0.9** |
| NMR | | | | *eS* | | **Sn** | **15 35 07.6** | **-1.6** |
| **JRA** | **Rausu** | **2.30** | **262** | *eP* | | **Pn** | **15 34 48.4** | **+1.7** |
| JRA | | | | *eS* | | **Sn** | **15 35 15.1** | **+0.5** |
| **JNSB** | **Nemuroshibetsu** | **2.42** | **258** | P | | **Pn** | **15 34 50.2** | **+1.9** |
| **JKHN** | **Kushirohamanak** | **2.57** | **243** | P | | **Pn** | **15 34 51.8** | **+1.5** |
| **JNK** | **Nakash** | **2.67** | **256** | *eP* | | **Pn** | **15 34 53.0** | **+1.4** |
| JNK | | | | S | | **Sn** | **15 35 23.2** | **-0.1** |
| **AKK** | **Akkeshi** | **2.80** | **244** | *eP* | | **Pn** | **15 34 54.5** | **+1.1** |
| AKK | | | | *eS* | | **Sn** | **15 35 24.9** | **-1.7** |
| **JAK** | **Akkeshi** | **2.91** | **244** | P | | **Pn** | **15 34 55.8** | **+1.0** |
| JAK | | | | *eS* | | **Sn** | **15 35 27.0** | **-2.0** |
| **JAR** | **Ashorobuto** | **3.41** | **254** | *eP* | | **Pn** | **15 35 03.9** | **+2.3** |
| JAR | | | | S | | **Sn** | **15 35 41.6** | **+0.4** |
| **JCH** | **Churui** | **3.96** | **246** | *eP* | | **Pn** | **15 35 10.3** | **+1.4** |
| JCH | | | | *eS* | | **Sn** | **15 35 51.9** | **-2.3** |
| **JNBK** | **Urakawa-nobuka** | **4.51** | **245** | *eP* | | **Pn** | **15 35 17.1** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **10.78** | **32** | P | | **Pn** | **15 36 42.8** | **+1.3** |
| | 1.1nm,0.7s,baz=193,slow=9.8,SNR=1.8 | | | | | | | |
| **JOW** | **Kunigami** | **23.74** | **229** | LR | | LR | 15 49 02.4 | |
| | comp=Z,243nm,18.9s,baz=168,slow=37 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.01** | **142** | T | | T | 16 11 04.3 | |
| | baz=332,slow=76,SNR=11 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.02** | **142** | T | | T | 16 11 04.0 | |
| | baz=332,slow=76,SNR=12 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.03** | **142** | T | | T | 16 11 03.9 | |
| | baz=332,slow=76,SNR=11 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.00** | **143** | T | | T | 16 12 18.8 | |
| | baz=332,slow=76,SNR=25 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.01** | **143** | T | | T | 16 12 15.0 | |
| | baz=332,slow=76,SNR=14 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.02** | **143** | T | | T | 16 12 21.5 | |
| | baz=332,slow=76,SNR=16 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.05** | **298** | P | | **P** | **15 42 15.4** | **-0.6** |
| | 0.2nm,0.5s,baz=67,slow=9.7,SNR=2.3 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **64.75** | **333** | P | | **P** | **15 44 36.5** | **-1.1** |
| | 0.8nm,0.5s,baz=39,slow=9.0,SNR=7.1 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |

**IDC 16 16:05:15.1±4.9, 47.°49N×92.°55W, h0km, mbtmp2.5/1, ML0.5/1, Error ellipse: s-maj=80.8km s-min=31.7km az=53.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ULM** | **Lac du Bonnet** | **3.53** | **323** | Pn | | Pn | 16 06 10.2 | -1.0 |
| | 0.1nm,0.3s,baz=149,slow=12,SNR=0.9 | | | | | | | |
| ULM | | | | Sn | | Sn | 16 06 50.5 | -3.0 |
| | 0.2nm,0.3s,baz=156,slow=2.8,SNR=1.8 | | | | | | | |
| ULM | | | | Lg | | Lg | 16 07 04.5 | |
| | 0.3nm,0.3s,baz=344,slow=10.0,SNR=2.2 | | | | | | | |
| | 1.7nm,0.8s | | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.56** | **321** | I | | I | 16 27 13.2 | |
| | 0.1nm,1.3s,baz=138,slow=322,SNR=8.1 | | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **6.50** | **282** | I | | I | 17 45 55.7 | |
| | baz=85,slow=317,SNR=3.0 | | | | | | | |

*IDC **16** 16:08:46.9±0.6, 56.°43S×25.°02W, h0km, mb4.4/11, mbtmp4.3/12, ML3.6/1, MS3.8/12, Error ellipse: s-maj=22.5km s-min=16.7km az=52.0*
*NEIC **16** 16:08:49.5±1.4, 56.°63S±0.°06×25.°4W±0.°2, h10km±1km, mb4.9/46, Error ellipse: s-maj=16.4km s-min=8.7km az=75.0*
**ISC 16 16:08:49.6±0.5, 56.°61S±0.°08×25.°45W±0.°09, h10km, n86, σ1§31/72, mb4.8/29, MS3.8/11, 5C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **HOPE** | **Hope Point** | **6.70** | **286** | | | **Pn** | **16 10 30.0** | **+2.1** |
| HOPE | | | | Sn | | **Sn** | **16 11 40.1** | **-4.0** |
| **ORCD** | **Orcadas** | **10.84** | **240** | Pn | | Pn | 16 11 20.3 | -4.3 |
| **VNA1** | **Neumayer--Stat** | **15.91** | **159** | ⇑P | | **Pn** | **16 12 32.8** | **-0.4** |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.14** | **162** | ⇑P | | **Pn** | **16 12 35.3** | **-0.9** |
| | comp=Z,0.0nm,0.1s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **16.31** | **159** | ⇑P | | **Pn** | **16 12 37.1** | **-1.2** |
| | comp=Z,0.7nm,0.2s,baz=326,slow=15 | | | | | | | |
| **SNAA** | **Sanae** | **17.84** | **157** | P | | **Pn** | **16 12 56.1** | **-1.5** |
| **SNAA** | **Sanae** | **17.84** | **157** | ⇑P | | **Pn** | **16 12 58.2** | **+0.7** |
| | comp=Z,69nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **17.84** | **157** | P | | **Pn** | **16 12 56.3** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=328,slow=15,SNR=21 | | | | | | | |
| SNAA | | | | LR | | LR | 16 19 10.3 | |
| | comp=Z,250nm,18.4s,baz=308,slow=35 | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **19.31** | **154** | ⇑P | | **P** | **16 13 14.6** | **+0.1** |
| | comp=Z,123nm,0.8s | | | | | | | |
| **EFI** | **East Falkland** | **19.61** | **271** | | | **P** | **16 13 18.0** | **+0.2** |
| **PMSA** | **Palmer Station** | **20.28** | **230** | | | **P** | **16 13 25.7** | **+0.9** |
| PMSA | | | | | IAmb | IAmb | 16 13 39.2 | |
| | comp=Z,53nm,1.4s | | | | | | | |
| **PMSA** | **Palmer Station** | **20.28** | **230** | P | | **P** | **16 13 26.8** | **+2.0** |
| | comp=Z,18nm,0.8s,baz=82,slow=10,SNR=6.1 | | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **TRIS** | **Tristan da Cun** | **21.45** | **30** | P | | **P** | **16 13 36.8** | **-0.9** |
| **BELA** | **Belgrano 2** | **21.59** | **185** | P | | **P** | **16 13 38.3** | **-0.8** |
| BELA | | | | | IAmb | IAmb | 16 13 52.0 | |
| | comp=Z,15nm,0.5s | | | | | | | |
| **SMAI** | **San Martin Ant** | **21.98** | **222** | P | | **P** | **16 13 44.0** | **+0.8** |
| **GO10** | **Punta Arenas** | **26.08** | **258** | P | | **P** | **16 14 23.7** | **+0.7** |
| **MG04** | **Isla Riesco** | **26.50** | **258** | P | | **P** | **16 14 26.6** | **-0.1** |
| **TRQA** | **Tornquist** | **30.43** | **292** | P | | **P** | **16 15 01.2** | **-0.8** |
| TRQA | | | | | IAmb | IAmb | 16 15 22.9 | |
| | comp=Z,64nm,2.0s | | | | | | | |
| **PLTB** | **Pedras Altas** | **31.60** | **310** | P | | **P** | **16 15 13.7** | **+1.4** |
| PLTB | | | | | IAmb | IAmb | 16 15 26.2 | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| **PLCA** | **Paso Flores** | **33.05** | **279** | P | | **P** | **16 15 24.9** | **-0.1** |
| PLCA | | | | | IAmb | IAmb | 16 16 20.0 | |
| | comp=Z,33nm,1.8s | | | | | | | |
| **PLCA** | **Paso Flores** | **33.05** | **279** | P | | **P** | **16 15 24.3** | **-0.8** |
| | comp=Z,1.3nm,0.8s,baz=160,slow=8.2,SNR=4.1 | | | | | | | |
| PLCA | | | | | LR | LR | 16 29 04.9 | |
| | comp=Z,67nm,18.9s,baz=138,slow=37 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **33.64** | **180** | P | | **P** | **16 15 29.8** | **-0.2** |
| | comp=Z,8.0nm,0.7s,baz=223,slow=2.0,SNR=30 | | | | | | | |
| QSPA | | | | | LR | LR | 16 29 47.5 | |
| | comp=Z,168nm,18.8s,baz=196,slow=37 | | | | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **CPUP** | **Villa Florida** | **37.92** | **310** | P | | **P** | **16 16 06.7** | **-0.2** |
| **CPUP** | **Villa Florida** | **37.92** | **310** | P | | P | 16 16 05.3 | -1.5 |
| | comp=Z,6.8nm,0.9s,baz=145,slow=12,SNR=7.8 | | | | | | | |
| CPUP | | | | | LR | LR | 16 31 50.6 | |
| | comp=Z,88nm,18.8s,baz=164,slow=36 | | | | | | | |
| | comp=Z,6.8nm,0.9s | | | | | | | |
| **MT02** | **Curacav** | **38.88** | **287** | P | | P | 16 16 12.9 | -2.0 |
| MT02 | | | | | IAmb | IAmb | 16 16 25.9 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **VA03** | **San Esteban** | **38.96** | **288** | P | | P | 16 16 14.0 | -1.7 |
| VA03 | | | | | IAmb | IAmb | 16 16 34.9 | |
| | comp=Z,30nm,1.4s | | | | | | | |
| **MAW** | **Mawson** | **39.12** | **143** | P | | **P** | **16 16 14.9** | **-1.6** |
| | comp=Z,4.7nm,0.7s,baz=278,slow=10,SNR=4.8 | | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **SUR** | **Sutherland** | **39.87** | **72** | LR | | LR | 16 29 41.5 | |
| | comp=Z,305nm,18.6s,baz=179,slow=32 | | | | | | | |
| **CO02** | **Combarbal** | **40.42** | **289** | P | | **P** | **16 16 27.5** | **-0.4** |
| CO02 | | | | | IAmb | IAmb | 16 17 53.0 | |
| | comp=Z,44nm,1.6s | | | | | | | |
| **CO01** | **Juntas del Tor** | **40.93** | **291** | P | | **P** | **16 16 31.8** | **-0.5** |
| **CO06** | **Fray Jorge** | **41.17** | **289** | P | | **P** | **16 16 34.1** | **+0.2** |
| CO06 | | | | | IAmb | IAmb | 16 17 35.9 | |
| | comp=Z,64nm,1.8s | | | | | | | |
| **AC05** | **El Transito** | **41.94** | **292** | P | | **P** | **16 16 39.7** | **-0.7** |
| AC05 | | | | | IAmb | IAmb | 16 16 53.5 | |
| | comp=Z,24nm,1.1s | | | | | | | |
| **LCO** | **Las Campanas** | **42.02** | **292** | P | | **P** | **16 16 40.7** | **-0.5** |
| **AQDB** | **Aquidauana** | **42.48** | **316** | P | | **P** | **16 16 43.9** | **-0.8** |
| **AC04** | **Llanos de Chal** | **42.86** | **292** | P | | **P** | **16 16 47.3** | **-0.4** |
| AC04 | | | | | IAmb | IAmb | 16 17 00.3 | |
| | comp=Z,21nm,0.9s | | | | | | | |
| **AC06** | **Mina Casimiro** | **43.18** | **293** | P | | **P** | **16 16 49.9** | **-0.5** |
| **BOSA** | **Boshof** | **45.18** | **74** | P | | P | 16 17 02.4 | -4.1 |
| | comp=Z,3.8nm,1.0s,baz=243,slow=6.8,SNR=2.7 | | | | | | | |
| BOSA | | | | | LR | LR | 16 32 56.3 | |
| | comp=Z,277nm,18.4s,baz=196,slow=32 | | | | | | | |
| | comp=Z,3.8nm,1.0s | | | | | | | |
| **PB14** | **IPOC Station P** | **45.46** | **296** | P | | P | 16 17 07.8 | -1.2 |
| PB14 | | | | | IAmb | IAmb | 16 17 12.2 | |
| | comp=Z,55nm,2.0s | | | | | | | |
| **AF01** | **San Pedro de A** | **45.78** | **299** | P | | **P** | **16 17 11.6** | **+0.1** |
| **VNDA** | **Vanda** | **46.05** | **182** | P | | **P** | **16 17 13.0** | **+0.3** |
| **VNDA** | **Vanda** | **46.05** | **182** | P | | **P** | **16 17 13.6** | **+0.9** |
| | comp=Z,1.5nm,0.8s,baz=174,slow=9.4,SNR=5.8 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **LVC** | **Limon Verde** | **46.42** | **299** | P | | **P** | **16 17 16.1** | **-0.5** |
| **PB05** | **IPOC Station P** | **46.85** | **297** | P | | **P** | **16 17 19.3** | **-0.5** |
| PB05 | | | | | IAmb | IAmb | 16 17 20.7 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **PB04** | **IPOC Station P** | **47.26** | **298** | P | | **P** | **16 17 22.4** | **-0.6** |
| **PB09** | **IPOC Station P** | **47.27** | **299** | P | | **P** | **16 17 23.6** | **+0.4** |
| **LBTB** | **Lobatse** | **48.26** | **71** | LR | | LR | 16 34 45.9 | |
| | comp=Z,127nm,18.2s,baz=172,slow=32 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **48.38** | **314** | P | | **P** | **16 17 31.5** | **0.0** |
| PTLB | | | | | IAmb | IAmb | 16 17 32.8 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **SIV** | **San Ignacio** | **48.67** | **312** | LR | | LR | 16 38 09.3 | |
| | comp=Z,47nm,20.3s,baz=66,slow=36 | | | | | | | |
| **GO01** | **Chusmiza** | **49.07** | **300** | P | | **P** | **16 17 36.6** | **-0.8** |
| GO01 | | | | | IAmb | IAmb | 16 17 43.8 | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **TSUM** | **Tsumeb** | **49.13** | **59** | LR | | LR | 16 35 39.1 | |
| | comp=Z,57nm,18.0s,baz=174,slow=33 | | | | | | | |
| **PB18** | **Visviri** | **50.99** | **301** | P | | **P** | **16 17 51.3** | **-0.7** |
| **VILB** | **Vilhena** | **51.07** | **314** | P | | **P** | **16 17 51.6** | **-0.4** |
| VILB | | | | | IAmb | IAmb | 16 18 13.5 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **LPAZ** | **La Paz** | **51.50** | **304** | P | | **P** | **16 17 55.6** | **-0.3** |
| LPAZ | | | | | IAmb | IAmb | 16 18 10.2 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| **LPAZ** | **La Paz** | **51.50** | **304** | P | | **P** | **16 17 56.3** | **+0.4** |
| | comp=Z,14nm,0.7s,baz=185,slow=7.5,SNR=32 | | | | | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **SAML** | **Samuel** | **55.89** | **313** | P | | **P** | **16 18 26.8** | **-0.6** |
| SAML | | | | | IAmb | IAmb | 16 18 40.0 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **ETMB** | **Extrema** | **56.37** | **309** | P | | **P** | **16 18 30.2** | **-0.6** |
| **MAL2** | **Monte Alegre,** | **59.09** | **326** | P | | **P** | **16 18 51.0** | **+1.0** |
| **MACA** | **Manacapuru-AM** | **60.23** | **318** | P | | **P** | **16 18 58.0** | **+0.2** |
| **CZSB** | **Cruzeiro do Su** | **61.10** | **304** | P | | **P** | **16 19 03.2** | **-0.5** |
| CZSB | | | | | IAmb | IAmb | 16 19 08.9 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **ATAH** | **Atahualpa** | **64.32** | **299** | P | | **P** | **16 19 26.6** | **+0.9** |
| | comp=Z,3.0nm,0.7s,baz=156,slow=10.0,SNR=2.5 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **BOAV** | **Boa Vista** | **65.32** | **321** | P | | **P** | **16 19 31.3** | **-0.5** |
| BOAV | | | | | IAmb | IAmb | 16 19 37.6 | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **MDP** | **Montagnes des** | **65.40** | **330** | LR | | LR | 16 47 46.3 | |
| | comp=Z,68nm,18.7s,baz=178,slow=36 | | | | | | | |
| **MBAR** | **Mbarara** | **71.56** | **61** | LR | | LR | 16 48 15.5 | |
| | comp=Z,30nm,18.1s,baz=54,slow=33 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.09** | **28** | P | | P | 16 20 16.8 | -2.9 |
| TORD | | | | | IAmb | IAmb | 16 20 46.9 | |
| | comp=Z,12nm,1.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.09** | **28** | P | | P | 16 20 16.6 | -3.1 |
| | comp=Z,0.8nm,0.6s,baz=185,slow=7.0,SNR=5.0 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **RUSC** | **La Rusia** | **73.40** | **310** | P | | P | 16 20 20.0 | -2.3 |
| RUSC | | | | | IAmb | IAmb | 16 20 34.7 | |
| | comp=Z,9.1nm,1.0s | | | | | | | |
| **BAUV** | **El Baul** | **74.13** | **316** | P | | **P** | **16 20 25.7** | **-0.3** |
| BAUV | | | | | IAmb | IAmb | 16 20 43.0 | |
| | comp=Z,21nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **88.30** | **175** | P | | **P** | **16 21 41.1** | **0.0** |
| **PPT** | **Papeete** | **92.63** | **232** | LR | | LR | 16 57 59.2 | |
| | comp=Z,69nm,19.0s,baz=96,slow=32 | | | | | | | |
| **ASAR** | **Alice Springs** | **96.15** | **161** | P | | **P** | **16 22 27.7** | **+1.0** |
| | comp=Z,0.6nm,0.9s,baz=192,slow=4.1,SNR=5.2 | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **123.96** | **109** | PKP | | **PKPdf** | **16 27 46.1** | **-1.7** |
| | comp=Z,0.8nm,0.6s,baz=224,slow=4.3,SNR=6.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **134.27** | **57** | PKP | | **PKPdf** | **16 28 05.8** | **-0.4** |
| | comp=Z,0.8nm,0.7s,baz=236,slow=1.0,SNR=4.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **136.15** | **71** | PKP | | **PKPdf** | **16 28 10.5** | **+0.4** |
| | comp=Z,0.5nm,0.8s,baz=250,slow=2.9,SNR=2.9 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **136.57** | **64** | PKP | | **PKPdf** | **16 28 11.0** | **+0.2** |
| | comp=Z,0.3nm,0.7s,baz=250,slow=2.4,SNR=2.0 | | | | | | | |
| **N30M** | **Aishikik Lake** | **145.98** | **307** | | | **PKPdf** | **16 28 26.0** | **-1.2** |
| **INK** | **Inuvik** | **146.86** | **320** | PKPdf | | **PKPdf** | **16 28 28.8** | **+0.4** |
| **K29M** | **Barlow Dome** | **147.04** | **311** | PKPdf | | **PKPdf** | **16 28 29.0** | **0.0** |
| **DAWY** | **Dawson** | **147.89** | **311** | PKPdf | | **PKPdf** | **16 28 28.9** | **-1.5** |
| **BCAR** | **Beaver Creek A** | **148.60** | **308** | | | **PKPdf** | **16 28 30.8** | **-0.8** |
| **K27K** | **Chicken** | **149.01** | **310** | | | **PKPdf** | **16 28 31.2** | **-1.0** |
| **I26K** | **Coal Creek Min** | **149.79** | **312** | | | **PKPdf** | **16 28 32.2** | **-1.2** |
| I26K | | | | | PKPbc | **sPKPdf** | **16 28 38.2** | **+2.6** |
| **SONM** | **Songino Array** | **149.80** | **86** | PKPdf | | **PKPdf** | **16 28 33.2** | **-0.9** |
| **SONM** | **Songino Array** | **149.80** | **86** | PKPbc | | **PKPdf** | **16 28 36.3** | **+2.3** |
| | comp=Z,1.5nm,0.6s,baz=205,slow=2.4,SNR=5.0 | | | | | | | |
| **SCRK** | **Sand Creek** | **149.81** | **310** | PKPbc | | **PKPdf** | **16 28 38.8** | **+5.2** |
| **KLU** | **Klutina** | **149.96** | **304** | PKPdf | | **PKPdf** | **16 28 33.6** | **-0.2** |
| **ILAR** | **Eielson Array** | **151.22** | **311** | PKPbc | | **PKPdf** | **16 28 39.8** | **+4.2** |
| | comp=Z,1.9nm,0.9s,baz=133,slow=3.7,SNR=10 | | | | | | | |

**IDC 16 16:11:17.6±2.2, 1.°32S×127.°69E, h0km, mb3.3/2, mbtmp3.3/3, ML3.5/1, MS3.5/1, Error ellipse: s-maj=153.2km s-min=28.1km az=67.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **19.62** | **161** | P | | P | 16 15 47.4 | -0.5 |
| | 0.1nm,0.3s,baz=340,slow=12,SNR=10 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **23.02** | **165** | P | | P | 16 16 24.9 | +0.4 |
| | 0.4nm,0.3s,baz=346,slow=12,SNR=20 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |
| **PALK** | **Pallekele** | **47.65** | **281** | LR | | LR | 16 40 21.0 | |
| | comp=Z,46nm,18.6s,baz=349,slow=37 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.24** | **326** | P | | P | 16 21 41.3 | -0.1 |
| | 0.2nm,0.7s,baz=133,slow=8.5,SNR=1.9 | | | | | | | |
| | 0.2nm,0.7s | | | | | | | |

*IDC **16** 16:15:27.6±1.0, 16.°16N×98.°03W, h0km, mb4.0/8, mbtmp4.0/11, ML4.1/2, MS3.5/25, Error ellipse: s-maj=23.2km s-min=14.3km az=29.0*
*NEIC **16** 16:15:28.8±2.9, 16.°21N±0.°04×98.°10W±0.°03, h10km±1km, mb4.5/225, Md4.8/109(MEX), Error ellipse: s-maj=6.2km s-min=4.0km az=191.0*
*MEX **16** 16:15:31.0±0.8, 16.°19N×98.°10

ARIG Puente Sto Nin 3.00 314 eP Pn 16 16 16.9 +0.7
ARIG eS Sn 16 16 51.0 -0.9
MAVM Malinalco, Edo 3.06 334 eP Pn 16 16 05.7 -12
MPVM San Francisco 3.12 344 eP Pn 16 16 18.8 +0.8
TLVM San Miguel Top 3.17 342 eP Pn 16 16 19.1 +0.3
XCVM Xochimilco 3.20 342 eP Pn 16 16 16.8 -2.4
CMIG Matias Romero 3.20 73 Pn 16 16 18.4 -0.6
CMIG Sn 16 16 57.9 +0.8
CMIG Matias Romero 3.20 73 Pn Pn 16 16 18.3 -0.6
20nm,0.3s,baz=275,slow=12,SNR=166
CMIG Sn 16 16 55.6 -1.5
46nm,0.3s,baz=290,slow=6.1,SNR=6.9
CMIG Lg Lg 16 17 08.3
292nm,0.3s,baz=193,slow=23,SNR=16
50nm,0.2s
CMIG Matias Romero 3.20 73 eP Pn 16 16 18.4 -0.6
CMIG eS Sn 16 16 57.9 +0.8
THVM De Xico 3.21 345 eP Pn 16 16 20.1 +0.7
CNCY Coyoacan 3.27 342 eP Pb 16 16 24.7 -2.4
CNCY eS Sb 16 17 05.9 -1.1
UNM Universidad Na 3.29 342 Pn 16 16 20.0 -0.4
UNM Sn 16 16 53.8 -5.8
UNM Universidad Na 3.29 342 eP Pn 16 16 20.0 -0.4
UNM eS Sn 16 17 02.2 +2.6
INVM La Marquesa 3.32 338 eP Pn 16 16 21.1 +0.1
TXVM Universitario 3.32 346 eP Pn 16 16 21.4 +0.5
BJVM Benito Juarez 3.33 342 eP Pn 16 16 23.8 +2.8
CJVM Cuajimalpa 3.35 340 eP Pb 16 16 26.2 -2.2
PBVM Pinon 3.37 344 Pn 16 16 23.2 +1.9
PBVM Pinon 3.37 344 eP Pn 16 16 23.2 +1.9
MHVM Bosque de Chap 3.37 342 eP Pb 16 16 26.0 -2.7
JAUV Jalcomulco 3.39 21 eP Pn 16 16 21.5 -0.1
JAUV eS Sn 16 17 03.2 +1.5
TOVM TOLUCA 3.43 334 Pn 16 16 24.2 +1.8
TOVM TOLUCA 3.43 334 eP Pn 16 16 24.2 +1.8
APVM Azcapotzalco 3.45 342 Pn 16 16 25.9 +3.3
APVM Azcapotzalco 3.45 342 eP Pn 16 16 25.9 +3.3
ZIIG Zihuatanejo 3.52 294 Sn 16 16 59.7 -5.2
ZIIG Zihuatanejo 3.52 294 eS Sn 16 16 59.7 -5.2
VTVM Tizayuca 3.62 350 Pn 16 16 27.1 +2.2
VTVM Tizayuca 3.62 350 eP Pn 16 16 27.1 +2.2
PMUV Sontecomapan 3.68 50 eP Pn 16 16 23.4 -2.2
PMUV eS Sn 16 17 11.1 +2.2
LVIG Laguna Verde 3.86 24 eP Pn 16 16 26.9 -1.1
LVIG eS Sn 16 17 15.9 +2.7
UXUV UXUV 3.94 73 eP Pn 16 16 28.6 -0.6
UXUV eS Sn 16 17 16.0 +0.6
TUIG Tuzandepetl 3.96 62 eS Sn 16 17 13.7 -2.0
CXUV Coxquihui 3.99 7 eP Pb 16 16 37.1 -2.0
CXUV eS Sb 16 17 24.2 -3.2
ACIG Acambay 4.13 336 Pn 16 16 35.6 +3.6
ACIG Acambay 4.13 336 eP Pn 16 16 35.6 +3.6
DHIG Demacu 4.18 348 Pb 16 16 40.7 -1.9
DHIG Sb 16 17 29.1 -4.1
DEIG Demacu 4.19 348 eP Pb 16 16 40.7 -1.9
DEIG eS Sb 16 17 29.1 -4.1
MOIG Morelia 4.55 320 Pn 16 16 38.7 +0.9
MOIG Morelia 4.55 320 eS Sb 16 17 40.8 -2.9
PCIG 4.71 95 Pn 16 16 39.9 +0.1
PCIG Sn 16 17 33.7 -0.6
PCIG 4.71 95 eP Pn 16 16 39.9 +0.1
PCIG eS Sn 16 17 33.7 -0.6
TGIG 4.80 82 Sn 16 17 39.5 +2.8
TGIG 4.80 82 eS Sn 16 17 39.5 +2.8
JRQG Juriquilla Cam 5.01 334 Pn 16 16 45.3 +1.1
CTUV Llano Grande 5.26 357 eP Pb 16 17 01.1 +0.3
CTUV eS Sb 16 17 58.7 -5.1
MMIG Aquila 5.44 293 Pn 16 16 50.5 +0.8
MMIG Sn 16 17 51.8 -0.4
MMIG Aquila 5.44 293 eP Pn 16 16 50.5 +0.8
MMIG eS Sn 16 17 51.8 -0.4
CCIG Comitan 5.72 88 Pn 16 16 55.7 +1.9
CCIG Comitan 5.72 88 eP Pn 16 16 55.2 +1.5
CCIG eS Sn 16 18 01.2 +1.7
PAVE Pavencul 5.78 99 eP Pn 16 16 55.2 +0.6
PAVE eS Sn 16 17 59.9 -1.2
CHUJ Union Juarez 5.87 100 eP Pn 16 16 49.7 -6.2
CHUJ eS Sn 16 18 00.1 -3.0
RPIG Rio Verde 5.94 343 Sn 16 18 07.4 +2.6
RPIG Rio Verde 5.94 343 eS Sn 16 18 07.4 +2.6
COIG Colima 6.11 300 eP Pn 16 17 01.1 +2.1
JUBC Volcan de Coli 6.18 303 eP Pn 16 17 02.2 +2.1
MNGA Volcan de Coli 6.19 303 eP Pn 16 17 02.8 +2.5
INCO Volcan de Coli 6.21 303 eP Pn 16 17 04.4 +3.7
SOMAC Volcano de Col 6.23 303 eP Pn 16 17 03.0 +2.0
CDAR Ciudad de Arme 6.27 297 eP Pn 16 17 04.3 +3.1
CEGR Campo Tres 6.35 301 eP Pn 16 17 03.9 +1.5
R15V 6.35 299 Pn 16 17 04.5 +2.2
R15V 6.35 299 eP Pn 16 17 04.5 +2.2
HUEH Huehuetenango 6.40 97 Pn Pn 16 17 05.6 +2.4
GTIG Gomez Farias 6.92 352 Pn 16 17 11.6 +1.5
GTIG Sn 16 18 33.0 +4.3
GTIG Gomez Farias 6.92 352 eP Pn 16 17 11.6 +1.5
GTIG eS Sn 16 18 33.0 +4.3
SCIG Sabancuy 7.14 66 eS Sn 16 18 29.1 -5.1
APG El Apazote 7.44 98 Pn Pn 16 17 18.0 +0.5
0.1nm,0.3s,baz=301,slow=14,SNR=2.5
APG Sn 16 18 40.7 -1.3
0.2nm,0.3s,baz=324,slow=7.3,SNR=1.9
ZAIG Zacatecas 7.79 328 Pn Pn 16 17 22.4 +0.2
PETF Flores 7.92 84 Pn Pn 16 17 24.1 +0.3
MTO3 Montecristo 8.61 101 Pn Pn 16 17 35.0 +1.4
833A Chaparral WMA, 12.13 355 Pn Pn 16 18 19.6 -1.9
833A Chaparral WMA, 12.13 355 P Pn 16 18 24.3 +2.7
baz=171,SNR=6.1
HPIG 12.80 328 Pn Pn 16 18 30.4 -0.5
HNDO Hondo 13.32 355 Pn Pn 16 18 33.7 -4.1
DRIO Del Rio 13.38 350 Pn Pn 16 18 36.9 -1.6
TX31 Lajitas Ar. Si 14.05 340 Pn 16 18 46.5 -1.4
TXAR Lajitas Array 14.05 340 Pn Pn 16 18 47.2 -0.6
TXAR Lajitas Array 14.05 340 Pn Pn 16 18 50.5 +2.6
1.4nm,0.9s,baz=156,slow=13,SNR=9.4
TXAR Lg Lg 16 22 54.2
0.1nm,0.3s,baz=134,slow=25,SNR=2.0
TXAR LR LR 16 25 02.8
comp=Z,220nm,20.7s,baz=144,slow=41
JTS Las Juntas de 14.07 113 Pn Pn 16 18 48.9 +0.8
1.0nm,0.3s,baz=247,slow=15,SNR=2.0
2.2nm,0.3s
SAND Sanderson 14.19 346 Pn Pn 16 18 48.8 -1.0
JCT Junction City 14.31 354 Pn 16 18 50.4 -1.0
JCT Junction City 14.31 354 P Pn 16 18 52.0 +0.7
baz=171
435B Jarrell 14.53 2 Pn Pn 16 18 53.3 -1.1
OZNA Ozona 14.93 350 Pn Pn 16 18 58.3 -1.5
ALPN Alpine 15.01 341 Pn 16 18 59.4 -1.6
BRDY Brady 15.05 357 Pn Pn 16 18 59.0 -2.4
BRDY IAmb IAmb 16 19 08.6
comp=Z,19nm,0.9s
MNHN Monahans 15.67 345 Pn Pn 16 19 09.3 -0.3
MNHN IAmb IAmb 16 19 16.5
comp=Z,16nm,0.7s
NATX Nacogdoches 15.81 11 P Pn 16 19 11.2 -0.1
baz=192
VHRN Van Horn 15.84 338 Pn Pn 16 19 12.5 +0.7
SGCY Sterling City 15.90 351 Pn Pn 16 19 12.9 +0.4
PECS Pecos 16.00 342 Pn 16 19 13.2 -0.7
PECS IAmb IAmb 16 19 20.1
comp=Z,22nm,0.7s
ODSA Odessa 16.37 346 Pn 16 19 19.2 +0.6
FW07 Weatherford 16.44 1 Pn 16 19 19.4 0.0
FW07 IAmb IAmb 16 19 23.5
comp=Z,22nm,0.6s
PLPT Palo Pinto 16.55 359 Pn Pn 16 19 20.0 -0.8
PLPT IAmb IAmb 16 19 25.7
comp=Z,57nm,0.9s
FW06 Azle 16.72 2 Pn 16 19 22.6 -0.3
FW06 IAmb IAmb 16 19 26.5
comp=Z,40nm,0.6s
FW03 Perrin-Whitt E 16.78 0 Pn 16 19 22.4 -1.3
FW03 IAmb IAmb 16 19 27.5
comp=Z,24nm,0.7s
MNTX Cornudas Mount 16.80 338 P P 16 19 26.6 +0.4
baz=152,SNR=10
SN05 Snyder 5 16.81 352 Pn Pn 16 19 23.6 -0.5
SN05 IAmb IAmb 16 19 28.3
comp=Z,30nm,0.9s
SN07 Snyder 07 17.02 352 Pn 16 19 26.6 -0.2
SN07 IAmb IAmb 16 19 31.4
comp=Z,24nm,0.8s
POST Post 17.08 350 Pn 16 19 27.1 -0.5
POST IAmb IAmb 16 19 32.0
comp=Z,49nm,0.8s
APMT Aspermont 17.16 354 P Pn 16 19 28.4 -0.1
DKNS Dickens 17.59 352 P Pn 16 19 32.9 -1.0
DKNS IAmb IAmb 16 19 37.9
comp=Z,42nm,0.7s
319A Douglas 18.24 328 P Pn 16 19 41.2 -0.8
WMOK Wichita Mounta 18.48 358 P 16 19 43.2 -1.5
WMOK Wichita Mounta 18.48 358 P P 16 19 43.8 -0.9
baz=177,SNR=13
X37A Clayton 18.48 7 P 16 19 43.7 -1.0
X37A IAmb IAmb 16 20 05.9
comp=Z,26nm,1.1s
121A Cookes Peak, D 18.49 333 P P 16 19 43.5 -1.5
121A Cookes Peak, D 18.49 333 P Pn 16 19 47.9 +2.7
baz=146
MIAR Mount Ida 18.72 12 P 16 19 45.2 -2.1
MIAR Mount Ida 18.72 12 P P 16 19 45.8 -1.5
baz=194
AMTX Amarillo 18.89 351 P P 16 19 48.4 -0.9
AMTX IAmb IAmb 16 19 54.9
comp=Z,29nm,0.8s
AMTX Amarillo 18.89 351 P P 16 19 49.1 -0.2
baz=167
W35A Tecumseh 18.91 3 P P 16 19 47.4 -2.0
W35A IAmb IAmb 16 19 52.1
comp=Z,20nm,0.8s
SMWD Samnorwood 18.93 355 P 16 19 49.0 -0.7
SMWD IAmb IAmb 16 19 54.2
comp=Z,19nm,0.8s
DUN6 Lazy B Ranch 19.10 331 P P 16 19 49.8 -1.9
OKCSW OKLAHOMA CITY 19.14 2 P P 16 19 49.9 -2.0
OK029 Liberty Lake 19.54 2 P 16 19 54.6 -1.6
OK029 IAmb IAmb 16 20 04.2
comp=Z,30nm,1.1s
LRAL Lakeview Retre 19.54 29 P P 16 19 54.6 -1.7
LRAL Lakeview Retre 19.54 29 P P 16 19 55.3 -1.0
baz=215
DEOK Depew 19.62 4 P 16 19 55.2 -2.0
DEOK IAmb IAmb 16 20 04.9
comp=Z,29nm,1.0s
OK031 S. Brethren Rd 19.71 3 P P 16 19 56.4 -1.8
OK031 IAmb IAmb 16 19 59.8
comp=Z,31nm,0.8s
TUC Tucson 19.76 327 P P 16 19 58.1 -0.7
TUC Tucson 19.76 327 P Pn 16 20 02.4 +2.1
baz=138
OK052 Battle Ridge R 19.76 3 P P 16 19 57.3 -1.3
OK052 IAmb IAmb 16 20 00.2
comp=Z,39nm,1.0s
ELIS Ellis County 19.83 357 P P 16 19 57.2 -2.3
ELIS IAmb IAmb 16 20 02.0
comp=Z,13nm,0.7s
OXF Oxford 19.84 22 P P 16 19 57.6 -2.0
baz=206
QUOK Quay 19.94 3 P 16 19 58.7 -1.9
QUOK IAmb IAmb 16 20 15.1
comp=Z,21nm,1.1s
RLO Rose Lookout 20.08 7 P 16 20 00.2 -2.0
RLO IAmb IAmb 16 20 12.3
comp=Z,14nm,1.0s
ANMO Albuquerque 20.13 340 P P 16 20 03.9 +1.0
ANMO Albuquerque 20.13 340 P Pn 16 20 04.9 +0.2
comp=Z,11nm,1.0s,baz=239,slow=12,SNR=13
ANMO LR LR 16 28 29.5
comp=Z,396nm,20.1s,baz=249,slow=39
comp=Z,11nm,1.0s
ANMO Albuquerque 20.13 340 P P 16 20 03.7 +0.8
baz=153
OK048 Pawnee Station 20.17 3 P 16 20 02.1 -1.1
OK048 IAmb IAmb 16 20 05.5
comp=Z,40nm,1.2s
CROK Carrier 20.23 0 P 16 20 02.2 -1.7
CROK IAmb IAmb 16 20 06.2
comp=Z,36nm,1.1s
OK051 E0350 and S346 20.26 3 P P 16 20 02.3 -1.8
FCAR Ozark Folk Cen 20.33 14 P P 16 20 03.3 -1.5
HHAR Hobbs 20.35 10 P P 16 20 03.5 -1.6
NOKA Waynoka 20.38 358 P 16 20 03.5 -1.9
NOKA IAmb IAmb 16 20 06.8
comp=Z,19nm,0.9s
152A Waverly Hall 20.39 34 P P 16 20 04.2 -1.4
U38A Gravette 20.43 9 P P 16 20 04.0 -2.0
U38A IAmb IAmb 16 20 11.0
comp=Z,15nm,0.8s
Y49A Blount Mountai 20.50 29 P P 16 20 05.3 -1.4
Y49A IAmb IAmb 16 20 14.3
comp=Z,18nm,0.8s
BLOK Blackwell 20.50 2 P P 16 20 04.4 -2.4
BLOK IAmb IAmb 16 20 07.9
comp=Z,16nm,0.7s
RTBA Rita Blanca 20.59 349 P P 16 20 05.9 -1.9
RTBA IAmb IAmb 16 20 10.2
comp=Z,20nm,0.8s
214A Organ Pipe Nat 20.62 322 P Pn 16 20 12.0 +1.6
baz=132
KAN14 Manchester OK 20.68 0 P P 16 20 08.0 -0.7
KAN14 IAmb IAmb 16 20 17.7
comp=Z,22nm,1.2s
X48A Hartselle 20.72 27 P P 16 20 06.3 -2.7
X48A IAmb IAmb 16 20 17.1
comp=Z,12nm,0.7s
LCAR Lake Charles 20.74 16 P P 16 20 07.2 -2.1
PLAL Pickwick Lake 20.75 24 P P 16 20 07.1 -2.4
PLAL IAmb IAmb 16 20 16.2
comp=Z,17nm,0.8s
X18A Snowflake 21.14 332 P P 16 20 16.7 +2.8
X18A IAmb IAmb 16 20 18.2
comp=Z,22nm,1.0s
FPAL Fort Paine 21.43 29 P P 16 20 14.6 -2.3
MGMO Mountain Grove 21.51 13 P P 16 20 16.4 -1.3
MGMO IAmb IAmb 16 20 22.0
comp=Z,29nm,1.0s
W18A Petrified Fore 21.54 333 P P 16 20 19.8 +1.6
baz=145
T25A Trinidad 21.60 346 P P 16 20 18.1 -0.8
T25A Trinidad 21.60 346 P P 16 20 18.4 -0.5
baz=161,SNR=33
PBMO Poplar Bluff 21.61 17 P P 16 20 17.2 -1.5
PBMO IAmb IAmb 16 20 21.9
comp=Z,28nm,0.8s
GOGA Godfrey 21.64 35 P P 16 20 17.2 -1.8
GOGA IAmb IAmb 16 20 26.0
comp=Z,22nm,0.7s
GOGA Godfrey 21.64 35 P P 16 20 17.9 -1.1
baz=223,SNR=5.6
T42A Van Buren 21.66 15 P P 16 20 17.4 -1.8
T42A IAmb IAmb 16 20 30.0
comp=Z,15nm,0.8s
Y52A Lilburn 21.67 33 P P 16 20 18.0 -1.3
X16A Lo Mia Camp, P 21.75 329 P P 16 20 19.3 -1.2
X16A IAmb IAmb 16 20 25.2
comp=Z,16nm,0.8s
X51A Calhoun 21.82 31 P P 16 20 19.3 -1.6
X51A IAmb IAmb 16 20 27.8
comp=Z,10.0nm,0.7s
S39A Bolivar 21.83 10 P P 16 20 18.9 -2.1
S39A IAmb IAmb 16 20 32.6
comp=Z,23nm,1.1s
SWET Sewanee 21.85 28 P P 16 20 19.7 -1.7
WVT Waverly 21.86 23 P P 16 20 18.9 -2.5
WVT IAmb IAmb 16 20 31.3
comp=Z,18nm,0.8s
WVT Waverly 21.86 23 P P 16 20 19.2 -2.2
baz=208
V48A Smith Brothers 21.91 25 P P 16 20 20.0 -2.0
V48A IAmb IAmb 16 20 29.3
comp=Z,21nm,0.9s
W50A Signal Mountai 22.12 29 P P 16 20 22.5 -1.7
Y14A Wickenburg 22.20 326 P P 16 20 24.5 -0.6
CLTN Cedars of Leba 22.42 26 P P 16 20 26.1 -1.2
CLTN IAmb IAmb 16 20 37.5
comp=Z,9.4nm,0.7s
SDCO Great Sand Dun 22.45 344 P P 16 20 28.3 +0.3
SDCO Great Sand Dun 22.45 344 P P 16 20 27.5 -0.5
baz=159,SNR=17
CBKS Cedar Bluff 22.59 357 P P 16 20 28.1 -1.1
baz=175
CCM Cathedral Cave 22.60 14 P P 16 20 27.1 -2.2
CCM IAmb IAmb 16 20 45.0
comp=Z,11nm,0.7s
CCM Cathedral Cave 22.60 14 P P 16 20 27.3 -2.1
baz=198
GLA Glamis 22.60 321 P P 16 20 29.9 +0.5
GLA IAmb IAmb 16 20 34.6
comp=Z,14nm,0.9s
R40A Maddies Statio 22.61 12 P P 16 20 27.4 -2.0
R40A IAmb IAmb 16 20 31.2
comp=Z,16nm,0.9s
ESJX Sierra Juarez 22.61 317 P P 16 20 30.5 +0.8
WUAZ Wupatki 22.61 331 P P 16 20 29.2 -0.5
WUAZ IAmb IAmb 16 20 35.3
comp=Z,18nm,0.8s
WUAZ Wupatki 22.61 331 P P 16 20 32.4 +2.7
baz=142,SNR=16
CPCT Cooper Cave 22.69 30 P P 16 20 28.9 -1.5
CPCT IAmb IAmb 16 20 37.0
comp=Z,16nm,0.9s
W52A Murphy 22.70 31 P P 16 20 28.8 -1.6
FVM French Village 22.74 16 P P 16 20 28.9 -1.9
FVM IAmb IAmb 16 20 39.7
comp=Z,12nm,1.0s
S44A Carbondale 22.80 18 P P 16 20 29.5 -1.9
S22A 4UR Ranch, Cre 22.82 342 P P 16 20 31.2 -0.7
S22A IAmb IAmb 16 20 36.6
comp=Z,11nm,0.8s
S22A 4UR Ranch, Cre 22.82 342 P P 16 20 33.5 +1.5
baz=156
SIUC Southern Illin 22.83 18 P P 16 20 30.1 -1.7
KSU1 Kansas State U 22.86 3 P P 16 20 30.1 -2.0
KSU1 IAmb IAmb 16 20 34.9
comp=Z,16nm,0.8s
KSU1 Kansas State U 22.86 3 P P 16 20 30.3 -1.8
baz=183
MVCO Mesa Verde 22.88 338 P P 16 20 31.6 -0.9
MVCO IAmb IAmb 16 20 44.0
comp=Z,22nm,1.0s
MVCO Mesa Verde 22.88 338 P P 16 20 33.3 +0.8
baz=151,SNR=9.3
T47A Sharon Grove 22.89 23 P P 16 20 30.6 -1.8
T47A IAmb IAmb 16 20 44.3
comp=Z,16nm,0.9s
HODGE Hodges 22.92 35 P P 16 20 30.9 -1.8
U49A Red Boiling Sp 23.01 26 P P 16 20 31.7 -1.9
U49A IAmb IAmb 16 20 42.2
comp=Z,21nm,0.8s
TKL Tuckaleechee C 23.22 31 P P 16 20 33.7 -2.1
TKL IAmb IAmb 16 21 09.0
comp=Z,10.0nm,0.8s
TKL Tuckaleechee C 23.22 31 LR LR 16 33 39.1
comp=Z,37nm,18.1s,baz=237,slow=47
NHSC New Hope 23.36 41 P P 16 20 38.3 +1.1
baz=230
MONP2 Monument Peak 23.49 318 P P 16 20 43.1 +4.4
baz=127
Q24A Divide 23.52 346 P P 16 20 38.7 -0.4
Q24A IAmb IAmb 16 20 42.2
comp=Z,13nm,1.1s
Q24A Divide 23.52 346 P P 16 20 40.6 +1.5
baz=161
JSC Jenkinsville 23.52 37 P P 16 20 37.6 -1.2
JSC IAmb IAmb 16 20 47.3
comp=Z,8.2nm,0.7s
W13A Hualapai Mount 23.55 326 P P 16 20 38.7 -0.6
PAULI Pauline 23.60 35 P P 16 20 37.8 -1.8
PAULI IAmb IAmb 16 20 48.8
comp=Z,16nm,0.9s
P38A Dawn 23.68 9 P P 16 20 39.0 -1.4
P38A IAmb IAmb 16 20 41.1
comp=Z,24nm,1.1s
V53A Saluda 23.71 32 P P 16 20 38.8 -2.0
V53A IAmb IAmb 16 20 53.8
comp=Z,19nm,1.0s
U15A North Rim 23.78 331 P P 16 20 39.8 -1.9
U15A IAmb IAmb 16 20 54.3
comp=Z,11nm,1.0s
P40A Paris 23.85 12 P P 16 20 39.8 -2.1
TPFO Pinon Flats 23.98 320 P P 16 20 46.7 +3.4
baz=128
PFO Pinyon Flats O 23.98 320 P P 16 20 47.7 +4.3
baz=128
Q44A Meyer Farm, Va 23.99 18 P P 16 20 40.7 -2.5
TZTN Tazewell 24.04 30 P P 16 20 40.6 -3.2
TZTN Tazewell 24.04 30 P P 16 20 42.0 -1.8
baz=218
OLIL Olney 24.11 19 P 16 20 43.0 -1.3
SMCO Snowmass 24.19 343 P P 16 20 44.6 -1.0
SMCO IAmb IAmb 16 20 51.3
comp=Z,18nm,1.0s
BIRD Birdtown, Kers 24.25 37 P P 16 20 45.5 -0.2
BIRD IAmb IAmb 16 20 54.9
comp=Z,20nm,1.2s
HMU Henry Mountain 24.37 335 P P 16 20 47.6 +0.5
ISCO Idaho Springs 24.42 346 P P 16 20 48.7 +1.1
ISCO Idaho Springs 24.42 346 P P 16 20 47.9 +0.2
baz=160,SNR=11
KNB Kanab 24.51 331 P P 16 20 47.9 -0.4
KNB IAmb IAmb 16 21 01.8
comp=Z,9.6nm,1.0s
PKCU Pink Cliffs 24.62 332 P P 16 20 48.0 -1.5
PKCU IAmb IAmb 16 20 55.1
comp=Z,9.2nm,0.9s
V55A Taylorsville 24.69 34 P P 16 20 48.5 -1.3
N38A Joes South For 24.87 9 P P 16 20 51.0 -0.3
W57A Gilead 24.88 37 P P 16 20 50.8 -0.6
BRIGG Briggsdale 24.90 349 P P 16 20 51.4 -0.4
OGNE Ogallala 24.90 353 P P 16 20 50.1 -1.6
OGNE Ogallala 24.90 353 P P 16 20 51.5 -0.2
baz=170
MTPU Mount Pierson 25.06 333 P P 16 20 54.2 +0.8
SZCU Shurtz Canyon 25.10 331 P P 16 20 53.9 +0.2
SZCU IAmb IAmb 16 21 33.1
comp=Z,17nm,0.9s
CCUT Cedar City 25.19 331 P P 16 20 53.8 -0.7
P46A Rosedale 25.20 20 P P 16 20 54.0 -0.3
SRU San Rafael Swe 25.30 337 P 16 20 55.8 +0.4
SRU IAmb IAmb 16 20 60.0
comp=Z,12nm,0.9s
GSC Goldstone, Bar 25.34 322 P P 16 20 57.1 +1.4
Q16A Castle Valley 25.38 336 P P 16 20 55.6 -0.6
Q16A IAmb IAmb 16 21 08.1
comp=Z,14nm,0.9s
MSU Marysvale 25.45 334 P P 16 20 56.3 -0.5
HDIL Hopedale 25.45 16 P P 16 20 55.3 -1.3
baz=200
MVU Marysvale 25.46 334 P P 16 20 56.4 -0.6
N23A Red Feather La 25.54 346 P P 16 20 58.0 +0.2
N23A Red Feather La 25.54 346 P P 16 20 57.9 +0.2
baz=160,SNR=19
P18A Preston Nutter 25.65 338 P P 16 20 58.9 +0.1
P17A Butcher Ranch, 25.70 337 P P 16 20 58.3 -0.7
P17A IAmb IAmb 16 21 43.1
comp=Z,5.6nm,0.7s
TMUT Trail Mountain 25.72 336 P P 16 20 58.5 -0.9
L34A Svendsen Farm, 25.73 3 P P 16 20 58.9 -0.2
V58A Windy Hill, Pi 25.84 37 P P 16 20 59.8 -0.4
GWY Greenwater Val 25.88 324 P P 16 21 00.2 -0.5
PRN Pahroc Range 25.91 328 P P 16 21 00.9 -0.1
SCIA State Center 25.97 8 P P 16 21 01.2 0.0
P49A Miami Univ. Ec 26.03 24 P P 16 21 00.4 -1.4
P49A Miami Univ. Ec 26.03 24 P P 16 21 01.3 -0.5
baz=211
TPNV Topopah Spring 26.20 326 P P 16 21 07.3 +3.7
baz=134,SNR=7.8
PSUT Pine Spring 26.21 331 P P 16 21 03.7 -0.1
RDMU Red Mountain 26.26 340 P P 16 21 03.6 -0.5
RDMU IAmb IAmb 16 21 07.0
comp=Z,8.6nm,0.7s
WCT Wildcat Mounta 26.29 325 P P 16 21 04.6 +0.3
L40A Anamosa 26.45 12 P P 16 21 04.4 -1.2
T57A Hurt 26.61 35 P P 16 21 06.4 -0.7
NLU North Lily Min 26.63 336 P P 16 21 07.2 -0.3
NLU IAmb IAmb 16 21 10.9
comp=Z,7.9nm,0.9s
P51A Williamsport 26.66 27 P P 16 21 05.2 -2.4
L42A Oliver, Polo 26.73 14 P P 16 21 06.3 -1.8
O49A Covington 26.74 24 P P 16 21 06.8 -1.4
SPR3 Spring Creek 3 26.81 331 P P 16 21 08.0 -1.3
N47A Urbana 26.84 21 P P 16 21 07.9 -1.3
R11B Troy Canyon, C 26.91 329 P P 16 21 10.7 +0.7
R11B Troy Canyon, C 26.91 329 P P 16 21 12.8 +2.8
baz=138
GMN Gold Mountain 27.01 325 P P 16 21 11.8 +0.8
Q12A Willow Creek R 27.08 330 P P 16 21 11.6 +0.1
DUG Dugway, Tooele 27.13 335 P P 16 21 11.8 -0.2
DUG IAmb IAmb 16 21 15.6
comp=Z,7.6nm,0.9s
DUG Dugway, Tooele 27.13 335 P P 16 21 13.9 +2.0
baz=145,SNR=9.2
P52A Corning 27.20 28 P P 16 21 11.4 -0.9

baz=216
**S57A Dark Hollow, R 27.32 34 P P 16 21 13.7 +0.1**
S57A IAmb IAmb 16 21 17.3
comp=Z,11nm,0.7s
**JFWS Jewell Farm 27.47 13 P P 16 21 14.0 -0.8**
baz=196
**ECSD EROS Data Cent 27.48 2 P P 16 21 14.0 -0.9**
ECSD IAmb IAmb 16 21 15.6
comp=Z,5.2nm,0.8s
**ECSD EROS Data Cent 27.48 2 P P 16 21 14.0 -0.9**
baz=182,SNR=6.0
**T59A Double "B" Far 27.56 37 P P 16 21 15.4 -0.2**
T59A IAmb IAmb 16 21 24.7
comp=Z,15nm,1.1s
**BGU Big Grassy Mou 27.84 335 P P 16 21 19.5 +1.2**
**HWUT Hardware Ranch 27.87 338 P P 16 21 18.5 -0.1**
**Q56A Snyder Ridge, 28.15 32 P P 16 21 20.8 -0.1**
Q56A IAmb IAmb 16 21 32.3
comp=Z,12nm,0.8s
**PD31 Pinedale Array 28.25 342 P P 16 21 21.7 -0.3**
PD31 IAmb IAmb 16 21 35.9
comp=Z,5.9nm,1.0s
**PDAR Pinedale Array 28.25 342 P P 16 21 21.4 -0.6**
**PDAR Pinedale Array 28.25 342 P P 16 21 23.1 +1.1**
comp=Z,1.2nm,0.8s,baz=132,slow=10,SNR=9.5
PDAR LR LR 16 33 41.3
comp=Z,113nm,18.8s,baz=157,slow=39
comp=Z,1.2nm,0.8s
**BW06 Boulder Array 28.25 342 P P 16 21 23.1 +1.1**
baz=154
**RSSD Black Hills 28.29 351 P P 16 21 22.3 -0.1**
baz=167
**NV11 Mina Array Sit 28.32 325 P P 16 21 22.2 -0.4**
NV11 IAmb IAmb 16 21 26.8
comp=Z,5.9nm,1.0s
**LHV Little Huntoon 28.38 325 P P 16 21 24.3 +1.4**
**NVAR Mina Array Bea 28.39 325 P P 16 21 24.6 +1.2**
**NVAR Mina Array Bea 28.39 325 P P 16 21 25.9 +2.5**
comp=Z,3.4nm,0.9s,baz=150,slow=9.6,SNR=21
comp=Z,3.4nm,0.9s
**HVU Hansel Valley 28.46 337 P P 16 21 24.4 +0.5**
HVU IAmb IAmb 16 21 27.1
comp=Z,5.3nm,0.9s
**ELK Elko 28.63 332 P P 16 21 26.4 +0.9**
**ELK Elko 28.63 332 LR LR 16 32 40.2**
comp=Z,180nm,18.5s,baz=162,slow=36
**RYN Ryan 28.66 325 P P 16 21 27.1 +1.5**
RYN IAmb IAmb 16 21 36.4
comp=Z,9.1nm,1.4s
**KVN Kaiserville 28.73 326 P P 16 21 29.0 +2.6**
**REDW Red Top Meadow 29.19 341 P P 16 21 30.6 +0.2**
**BMN Battle Mountai 29.32 329 P P 16 21 30.7 -0.7**
**TPAW Teton Pass 29.33 341 P P 16 21 32.0 +0.3**
**LOHW Long Hollow 29.33 341 P P 16 21 31.4 -0.3**
**FXWY Fox Creek 29.49 341 P P 16 21 33.4 +0.3**
**IMW Indian Meadow 29.70 341 P P 16 21 35.3 +0.4**
**G40A Rib Lake 29.74 11 P P 16 21 34.4 -0.6**
G40A IAmb IAmb 16 21 43.2
comp=Z,11nm,0.8s
**YPP Pitchstone Pla 29.99 342 P P 16 21 37.3 -0.2**
**SSPA Standing Stone 30.00 32 P P 16 21 36.6 -0.7**
baz=223
**ATAH Atahualpa 30.29 138 LR LR 16 31 14.1**
comp=Z,65nm,21.4s,baz=317,slow=31
**RLMT Red Lodge 30.34 344 P P 16 21 41.0 +0.4**
RLMT IAmb IAmb 16 21 51.5
comp=Z,6.8nm,0.8s
**RLMT Red Lodge 30.34 344 P P 16 21 41.4 +0.8**
baz=157,SNR=6.5
**HLID Hailey 30.62 336 P P 16 21 42.6 -0.4**
**HLID Hailey 30.62 336 P P 16 21 44.6 +1.7**
baz=146
**LAO LASA Array 31.15 349 P P 16 21 47.8 +0.3**
baz=164
**BOZ Bozeman (W) 31.44 342 P P 16 21 51.3 +1.1**
baz=153
**WVOR Wild Horse Val 31.53 330 P P 16 21 53.0 +2.1**
WVOR IAmb IAmb 16 21 54.4
comp=Z,10nm,1.0s
**DLMT Dillon 31.53 340 P P 16 21 51.2 +0.2**
**EYMN Ely 32.13 8 P P 16 21 55.7 -0.4**
EYMN IAmb IAmb 16 22 04.2
comp=Z,6.3nm,0.9s
**EYMN Ely 32.13 8 P P 16 21 55.2 -0.8**
baz=192
**J08A Circle Bar Ran 32.17 331 P P 16 21 56.6 +0.1**
**PAL Palisades 32.38 35 P P 16 21 57.8 -0.5**
baz=229
**DGMT Dagmar 32.58 352 P P 16 21 59.3 -0.7**
baz=168
**LYMT Lyon Mountain 32.88 342 P P 16 22 02.6 -0.3**
**YBH Yreka Blue Hor 33.12 325 LR LR 16 34 39.2**
comp=Z,47nm,19.5s,baz=172,slow=35
**EGMT Eagleton 33.17 346 P P 16 22 05.0 -0.2**
baz=158
**OVMT Ovando 33.18 341 P P 16 22 05.3 -0.1**
**I07A Izee 33.20 331 P P 16 22 07.3 +1.7**
I07A IAmb IAmb 16 22 08.6
comp=Z,5.0nm,1.0s
**MSO Missoula 33.27 340 P P 16 22 06.7 +0.5**
baz=150
**PINE Pine Mountain 33.66 330 P P 16 22 11.1 +1.3**
PINE IAmb IAmb 16 22 12.9
comp=Z,4.4nm,0.9s
**F10A Beach Ranch, E 33.73 336 P 16 22 10.7 +0.5**
F10A IAmb IAmb 16 22 14.2
comp=Z,4.9nm,0.9s
**G08A Pilot Rock 33.90 333 P 16 22 12.1 +0.4**
**ULM Lac du Bonnet 34.02 3 P P 16 22 12.2 -0.2**
comp=Z,3.8nm,0.7s,baz=178,slow=8.5,SNR=4.8
ULM LR LR 16 35 49.9
comp=Z,45nm,19.3s,baz=174,slow=36
comp=Z,3.8nm,0.7s
**LONY Lake Ozonia 34.59 30 P P 16 22 17.2 -0.3**
baz=223
**HRV Adam Dziewonsk 34.69 35 P P 16 22 18.4 0.0**
baz=230
**H04A Detroit Lake 34.92 329 P P 16 22 21.3 +0.8**
**NNA Nana 35.01 142 LR LR 16 33 48.3**
comp=Z,54nm,20.8s,baz=314,slow=32
**NEW Newport 35.60 338 LR LR 16 39 03.5**
comp=Z,111nm,18.1s,baz=166,slow=40
**NEW Newport 35.60 338 P P 16 22 27.0 +0.7**
baz=146
**LON Longmire 36.28 332 P P 16 22 32.5 +0.4**
LON IAmb IAmb 16 22 43.6
comp=Z,11nm,1.4s
**PKME Peaks-Kenny Pk 37.74 34 P P 16 22 44.2 -0.3**
baz=230
**FFC Flin Flon 38.57 356 P P 16 22 50.2 -1.2**
FFC IAmb IAmb 16 23 00.5
comp=Z,10nm,0.9s
**ETMB Extrema 40.78 127 P P 16 23 10.2 0.0**
**LPAZ La Paz 43.76 136 P P 16 23 36.1 +0.9**
comp=Z,0.5nm,0.7s,baz=315,slow=2.9,SNR=1.5
LPAZ LR LR 16 39 41.8
comp=Z,54nm,20.5s,baz=212,slow=33
comp=Z,0.5nm,0.7s
**SCHQ Schefferville 45.47 25 P P 16 23 47.1 -0.6**
**V35K Ketchikan 46.75 334 P P 16 23 58.9 +1.2**
baz=132
**TOAD Toad River Com 47.06 341 P P 16 24 01.1 +0.9**
baz=142
**T35M Bob Quinn 47.37 337 P P 16 24 03.6 +0.9**
baz=135
**CRAG Craig 47.48 334 P P 16 24 05.1 +1.6**
baz=130
**WRAK Wrangell Islan 47.80 335 P P 16 24 07.0 +1.1**
baz=132
**U33K Whale Pass 47.91 334 P P 16 24 07.3 +0.5**
baz=131
**DLBC Dease Lake 48.35 338 P P 16 24 12.0 +1.8**
DLBC IAmb IAmb 16 24 22.3
comp=Z,5.9nm,1.1s
**DLBC Dease Lake 48.35 338 LR LR 16 46 30.3**
comp=Z,149nm,19.3s,baz=122,slow=38
**DLBC Dease Lake 48.35 338 P P 16 24 11.2 +1.0**
baz=136
**S34M Telegraph Cree 48.37 337 P P 16 24 11.7 +1.4**
baz=134
**WTLY Watson Lake, Y 49.19 340 P P 16 24 17.7 +1.1**
baz=138
**R33M Jennings River 49.38 339 P P 16 24 19.8 +1.5**
R33M IAmb IAmb 16 24 30.0
comp=Z,7.1nm,1.1s
**R33M Jennings River 49.38 339 P P 16 24 18.9 +0.6**
baz=135
**S32K Killisnoo 49.41 335 P P 16 24 19.2 +0.9**
baz=130
**SIT Sitka 49.45 334 P P 16 24 20.4 +1.8**
baz=129
**Q32M Nakina River 49.54 338 P P 16 24 19.7 +0.2**
baz=134
**R32K Eaglecrest 49.93 336 P P 16 24 23.2 +1.0**
baz=130
**WRGLY Wrigley 50.19 345 P P 16 24 23.9 -0.2**
baz=147
**S31K Pelican 50.41 335 P P 16 24 27.0 +1.2**
baz=128
**P32M Atlin 50.51 337 P P 16 24 27.5 +0.7**
baz=132
**P33M Teslin, Yukon 50.62 338 P P 16 24 28.3 +0.7**
baz=134
**SKAG Skagway 51.03 337 P P 16 24 31.9 +1.4**
baz=130
**PLBC Pleasant Camp 51.43 336 P P 16 24 34.7 +1.2**
baz=129
**WHY Whitehorse 51.67 338 P P 16 24 35.9 +0.4**
baz=132
**FRB Frobisher Bay 51.69 16 LR LR 16 47 52.0**
comp=Z,80nm,18.9s,baz=114,slow=38
**MMPY Sheldon Lake, 51.86 341 P P 16 24 37.9 +1.1**
MMPY IAmb IAmb 16 24 40.7
comp=Z,6.6nm,0.9s
**MMPY Sheldon Lake, 51.86 341 P P 16 24 36.9 +0.1**
baz=137,SNR=5.4
**P29M Windy Craggy 52.08 336 P P 16 24 39.6 +1.2**
baz=128
**P30M Million Dollar 52.09 337 P P 16 24 39.8 +1.3**
baz=129
**O30N Mendenhall 52.19 338 P P 16 24 39.9 +0.6**
baz=130
**FARO Faro, Yukon 52.24 340 P P 16 24 41.1 +1.5**
**FARO Faro, Yukon 52.24 340 P P 16 24 41.2 +1.6**
baz=134
**N31M Braeburn, Yuko 52.56 338 P P 16 24 43.3 +1.4**
baz=131
**M31M Drury Creek, Y 52.57 340 P P 16 24 43.0 +1.0**
baz=133
**H03N2 Juan Fernandez 52.63 160 T T 17 21 12.4**
baz=338,slow=77,SNR=718
**H03N1 Juan Fernandez 52.64 160 T T 17 21 14.6**
baz=338,slow=77,SNR=767
**H03N3 Juan Fernandez 52.65 160 T T 17 21 09.1**
baz=338,slow=77,SNR=605
**PNL Peninsula 52.77 335 P P 16 24 45.2 +1.7**
baz=126
**O29M Mount Kennedy 52.83 336 P P 16 24 45.5 +1.4**
baz=127
**N30M Aishikik Lake 53.01 338 P P 16 24 46.6 +1.3**
baz=130
**YUK6 Outpost Mounta 53.15 337 P P 16 24 47.6 +1.1**
baz=128
**YUK4 Talbot Arm 53.51 337 P P 16 24 50.9 +1.6**
baz=128
**O28M Mount Upton 53.75 336 P P 16 24 52.4 +1.3**
baz=126
**YUK8 Steele Glacier 53.90 337 P P 16 24 53.4 +1.3**
baz=126
**MESA MESA 54.11 335 P P 16 24 54.9 +1.3**
baz=124
**M29M Somme Creek 54.14 338 P P 16 24 55.5 +1.8**
M29M IAmb IAmb 16 24 57.3
comp=Z,5.0nm,0.9s
**M29M Somme Creek 54.14 338 P P 16 24 55.1 +1.4**
baz=129,SNR=7.4
**CTG Chitna Glacier 54.32 336 P P 16 24 56.4 +1.4**
baz=125
**YUK3 Moose Creek 54.46 337 P P 16 24 57.6 +1.4**
baz=126
**K29M Barlow Dome 54.74 340 P P 16 24 59.5 +1.4**
K29M IAmb IAmb 16 25 10.1
comp=Z,7.0nm,1.4s
**K29M Barlow Dome 54.74 340 P P 16 24 59.4 +1.3**
baz=130
**J30M Hart River 54.85 341 P P 16 24 59.3 +0.4**
baz=132
**CRQE Cirque 54.90 335 P P 16 25 00.4 +1.2**
baz=123
**KAIM Kak Island 55.00 334 P P 16 25 01.6 +1.7**
baz=121
**MCARA McCarthy VSAT 55.23 336 P P 16 25 02.7 +1.3**
baz=123
**I30M Mount Dempster 55.31 341 P P 16 25 02.8 +0.6**
baz=133
**M27K Edge Creek, AK 55.34 337 P P 16 25 04.0 +1.5**
baz=125
**DAWY Dawson 55.51 339 P P 16 25 04.6 +1.1**
baz=129
**C36M Paulatuk 55.56 349 P P 16 25 04.1 +0.4**
baz=148
**Q23K Middleton Isla 55.59 332 P P 16 25 05.9 +1.9**
baz=118
**BMRM Bremner River 55.64 335 P P 16 25 06.1 +1.6**
baz=121
**BCAR Beaver Creek A 55.73 338 P P 16 25 06.1 +1.0**
**L27K Beaver Creek, 55.74 338 P P 16 25 06.3 +1.1**
L27K IAmb IAmb 16 25 08.3
comp=Z,6.4nm,1.1s
**L27K Beaver Creek, 55.74 338 P P 16 25 06.4 +1.2**
baz=125,SNR=6.1
**M26K Nabesna, AK 55.79 337 P P 16 25 06.8 +1.2**
M26K IAmb IAmb 16 25 08.9
comp=Z,5.2nm,1.0s
**M26K Nabesna, AK 55.79 337 P P 16 25 06.9 +1.3**
baz=124
**EYAK Cordova Ski Ar 55.89 334 P P 16 25 08.2 +2.0**
baz=120
**G31M Satah River 55.92 344 P P 16 25 07.1 +0.9**
baz=136
**N25K Chitina, Valde 55.98 335 P P 16 25 08.6 +1.7**
baz=122
**F31M Tsiigehtchic 56.16 344 P P 16 25 08.6 +0.6**
baz=137
**EPYK Eagle Plains 56.21 342 P P 16 25 09.4 +0.9**
baz=133
**P23K Montague Islan 56.33 333 P P 16 25 11.1 +1.7**
baz=118
**K27K Chicken 56.41 338 P P 16 25 11.2 +1.3**
**K27K Chicken 56.41 338 P P 16 25 11.8 +1.9**
baz=126
**KLU Klutina 56.45 335 P P 16 25 11.7 +1.3**
KLU IAmb IAmb 16 25 14.7
comp=Z,6.2nm,1.0s
**KLU Klutina 56.45 335 P P 16 25 11.7 +1.3**
baz=120
**G30M tAoh Zraii Nji 56.49 343 P P 16 25 11.1 +0.6**
baz=134
**EGAK Eagle 56.55 339 P P 16 25 11.7 +0.8**
baz=127
**I28M Miner Creek 56.58 340 P P 16 25 12.2 +1.0**
baz=129
**H29M Whitestone 56.59 342 P P 16 25 11.9 +0.8**
baz=131
**HARP HAARP 56.63 336 P P 16 25 12.0 +0.5**
baz=121
**GLI Glacier Island 56.63 334 P P 16 25 13.0 +1.5**
baz=118
**INK Inuvik 56.75 345 P P 16 25 12.9 +0.7**
INK IAmb IAmb 16 25 14.0
comp=Z,6.7nm,0.8s
**INK Inuvik 56.75 345 LR LR 16 53 52.6**
comp=Z,42nm,18.3s,baz=38,slow=41
**INK Inuvik 56.75 345 P P 16 25 13.1 +0.9**
baz=137
**F30M Barrier River 56.82 344 P P 16 25 12.9 +0.1**
baz=134
**M24K Tolsona, Glenn 56.88 335 P P 16 25 14.7 +1.3**
baz=120
**G29M Pine Creek 56.96 342 P P 16 25 14.1 +0.3**
baz=132
**PAX Paxson 57.06 336 P P 16 25 15.8 +1.2**
baz=121
**SCRK Sand Creek 57.07 338 P P 16 25 16.5 +1.8**
SCRK IAmb IAmb 16 25 17.8
comp=Z,3.5nm,0.9s
**SCRK Sand Creek 57.07 338 P P 16 25 15.8 +1.1**
baz=124
**PWL Port Wells 57.15 333 P P 16 25 16.4 +1.2**
baz=117
**SCM Sheep Creek Mo 57.21 335 P P 16 25 16.7 +1.1**
baz=119
**J26L Joseph Creek 57.22 338 P P 16 25 16.7 +1.0**
baz=124
**I27K Kandik River 57.22 340 P P 16 25 16.8 +1.1**
baz=127
**SEW Seward 57.29 332 P P 16 25 17.9 +1.7**
baz=116
**KNK Knik Glacier 57.47 334 P P 16 25 19.1 +1.7**
baz=117
**H27K Steamboat Moun 57.58 341 P P 16 25 18.8 +0.6**
baz=128
**SML Sawmill 57.61 334 P P 16 25 19.9 +1.5**
baz=118
**K24K Donnelly Dome 57.63 337 P P 16 25 19.7 +1.1**
baz=122
**BRSE Bradley Lake S 57.71 332 P P 16 25 20.7 +1.5**
baz=114
**WAT6 Susitna Watana 57.75 335 P P 16 25 20.8 +1.2**
baz=119
**KDAK Kodiak Island 57.80 329 P P 16 25 21.7 +2.0**
baz=111
**DHY Denali Highway 57.86 336 P P 16 25 21.2 +0.8**
baz=120
**RC01 Rabbit Creek A 57.87 333 P P 16 25 22.0 +1.8**
baz=116
**J25K Salcha River, 57.92 338 P P 16 25 21.6 +1.0**
J25K IAmb IAmb 16 25 23.6
comp=Z,5.4nm,1.3s
**J25K Salcha River, 57.92 338 P P 16 25 21.6 +1.0**
baz=122
**E29M Blow River 57.94 344 P P 16 25 20.8 +0.2**
baz=132
**OHAK Old Harbor 57.94 328 P P 16 25 22.6 +1.9**
baz=110
**F28M Old Crow 57.97 342 P P 16 25 21.6 +0.7**
baz=130
**G27K Doyon Strip 57.98 341 P P 16 25 21.5 +0.5**
baz=128
**Q20K Shuyak Island 58.02 330 P P 16 25 23.3 +2.0**
baz=112
**SII Sitkinak Islan 58.16 327 P P 16 25 24.8 +2.4**
baz=109
**WAT1 Susitna Watana 58.20 335 P P 16 25 24.1 +1.5**
baz=118
**SUA Susitna One 58.47 333 P P 16 25 25.4 +0.8**
**SUA Susitna One 58.47 333 P P 16 25 26.1 +1.5**
baz=115
**E28M Babbage River 58.53 343 P P 16 25 25.6 +0.9**
baz=131
**ILAR Eielson Array 58.56 338 P P 16 25 25.2 +0.2**
**ILAR Eielson Array 58.56 338 P P 16 25 25.9 +0.9**
comp=Z,1.5nm,0.8s,baz=139,slow=4.7,SNR=18
comp=Z,1.5nm,0.8s
**RND Reindeer 58.60 336 P P 16 25 26.2 +0.8**
**CHIR Chirikof Islan 58.68 326 P P 16 25 28.5 +2.6**
baz=107
**BDFB Brasilia 58.68 120 P P 16 25 26.9 +0.2**
comp=Z,1.6nm,0.5s,baz=34,slow=3.6,SNR=3.0
comp=Z,1.6nm,0.5s
**O20K Slope Mountain 58.72 331 P P 16 25 27.4 +1.1**
baz=112
**G26K Porcupine Rive 58.73 341 P P 16 25 27.7 +1.5**
baz=125
**Q19K Cape Douglas, 58.75 330 P P 16 25 28.2 +1.7**
baz=111
**MCK McKinley 58.79 336 P P 16 25 28.4 +1.7**
baz=118
**D28M Stokes Point 58.81 344 P P 16 25 27.6 +1.0**
baz=132
**E27K Coleen River 58.84 343 P P 16 25 28.4 +1.4**
baz=128
**SPU Mount Spurr 58.92 333 P P 16 25 28.7 +1.0**
**RSO Redoubt South 58.93 332 P P 16 25 29.0 +1.1**
**POKR Poker Plat Res 58.94 338 P P 16 25 29.0 +1.3**
baz=121
**SKT Skwentna 59.03 334 P P 16 25 29.7 +1.3**
**SKT Skwentna 59.03 334 P P 16 25 29.9 +1.5**
baz=115
**NEA2 Nenana 59.27 337 P P 16 25 31.3 +1.3**
baz=119
**Q18K Katmai Hardscr 59.31 329 P P 16 25 31.9 +1.5**
baz=109
**SFJD Kangerlussuaq 59.33 20 LR LR 16 52 50.4**
comp=Z,50nm,21.2s,baz=229,slow=38
**D27M Malcolm River 59.34 344 P P 16 25 31.2 +0.7**
baz=130
**G25K Bearman Lake 59.38 340 P P 16 25 31.1 +0.5**
baz=123
**H24K Noodor Dome 59.48 339 P P 16 25 32.1 +0.6**
H24K IAmb IAmb 16 25 41.8
comp=Z,6.0nm,1.1s
**H24K Noodor Dome 59.48 339 P P 16 25 32.0 +0.6**
baz=120
**Q17K Contact Creek 59.61 329 P P 16 25 33.8 +1.3**
baz=108
**R17L Mt. Peulik Vol 59.64 328 P P 16 25 34.5 +1.8**
baz=107
**I23K Minto, Yukon-K 59.66 338 P P 16 25 33.4 +0.8**
I23K IAmb IAmb 16 25 35.2
comp=Z,6.3nm,1.0s
**I23K Minto, Yukon-K 59.66 338 P P 16 25 33.4 +0.8**
baz=119,SNR=5.2
**M20K Styx River 59.68 333 P P 16 25 33.8 +0.9**
**M20K Styx River 59.68 333 P P 16 25 35.1 +2.2**
baz=113
**P18K Big Mountain, 59.68 330 P P 16 25 34.8 +1.8**
baz=110
**F25K Christian Rive 59.70 341 P P 16 25 33.6 +0.6**
baz=124
**BPAW Bear Paw Mtn. 59.77 336 P P 16 25 34.5 +1.1**
baz=116
**G24K Hadweenzic Riv 59.80 340 P P 16 25 34.4 +0.8**
baz=121
**O18K Koktuh Hills 59.83 331 P P 16 25 35.3 +1.4**
baz=110
**N19K Bonanza Creek 59.85 332 P P 16 25 35.4 +1.2**
**N19K Bonanza Creek 59.85 332 P P 16 25 35.8 +1.6**
baz=111,SNR=5.2
**MLY Manley 60.11 337 P P 16 25 36.6 +0.8**
**MLY Manley 60.11 337 P P 16 25 37.0 +1.2**
baz=117
**P17K Kvichak River 60.19 330 P P 16 25 38.4 +2.0**
baz=108
**M19K Big River Lodg 60.23 333 P P 16 25 37.1 +0.5**
M19K IAmb IAmb 16 25 38.8
comp=Z,5.2nm,0.8s
**M19K Big River Lodg 60.23 333 P P 16 25 38.0 +1.4**
baz=112
**C27K Jago River 60.34 343 P P 16 25 38.3 +1.1**
baz=127
**N18K Kilae Creek 60.45 331 P P 16 25 39.7 +1.5**
baz=110
**L19K White Mountain 60.54 333 P P 16 25 40.2 +1.4**
baz=111
**CHNA Chernabura Isl 60.57 324 P P 16 25 41.5 +2.5**
baz=103
**G23K Bananza Creek 60.67 339 P P 16 25 40.2 +0.6**
baz=119
**K20K Telida 60.68 335 P P 16 25 39.8 +0.1**
K20K IAmb IAmb 16 25 41.7
comp=Z,5.0nm,0.9s
**K20K Telida 60.68 335 P P 16 25 40.9 +1.2**
baz=113
**O17K Koliganek Bris 60.70 330 P P 16 25 41.5 +1.6**
baz=108
**M18K Stony River 60.71 332 P P 16 25 41.1 +1.2**
baz=110
**H22K Ishtalitna Cre 60.75 338 P P 16 25 40.8 +0.6**
baz=117
**E24K Your Creek 60.87 341 P P 16 25 41.5 +0.5**
baz=121
**D25K Kavik River 60.91 342 P P 16 25 41.2 -0.1**
baz=124
**S14K Fog Glacier 60.92 326 P P 16 25 43.3 +1.8**
baz=104
**COLD Coldfoot 60.99 339 P P 16 25 42.9 +1.2**
baz=119
**N17K Nushagak Hills 60.99 331 P P 16 25 43.1 +1.3**
baz=108
**J20K Nowinta River 61.05 335 P P 16 25 42.4 +0.3**
J20K IAmb IAmb 16 25 44.1
comp=Z,5.7nm,0.9s
**J20K Nowinta River 61.05 335 P P 16 25 43.6 +1.4**
baz=113
**O16K Kokwok River B 61.12 330 P P 16 25 44.2 +1.5**
baz=107
**H21K Melozitna Rive 61.17 337 P P 16 25 43.8 +0.8**
baz=115
**SDPT Sand Point 61.20 325 P P 16 25 45.2 +2.0**
baz=102
**E23K Chandalar 61.22 340 P P 16 25 43.9 +0.5**

baz=120
L18K **Granite Mounta** 61.35 333 P P 16 25 45.1 +0.8
baz=110
M17K **Holitna River** 61.40 332 P P 16 25 45.8 +1.2
baz=108
I20K **Naaghedeneel** 61.43 336 P P 16 25 45.5 +0.8
baz=113
TOLK **Toolik Lake Re** 61.51 341 P P 16 25 45.7 +0.4
baz=120
D24K **Happy Valley** 61.55 342 P P 16 25 45.9 +0.4
baz=121
J19K **Poorman** 61.57 335 P P 16 25 45.8 +0.2
J19K **Poorman** 61.57 335 P P 16 25 46.5 +0.8
baz=112,SNR=6.8
N16K **Nishlik Lake** 61.72 331 P P 16 25 48.5 +1.7
baz=107
F22K **John River** 61.80 339 P P 16 25 47.9 +0.7
baz=117
G21K **Allakaket** 61.81 338 P P 16 25 48.0 +0.8
baz=115
C24K **Franklin Bluff** 61.81 342 P P 16 25 48.0 +0.8
baz=122
J18K **Innoko River** 61.82 334 P P 16 25 48.6 +1.2
baz=110
O15K **Ungalikthiuk R** 61.84 329 P P 16 25 49.3 +1.6
baz=105
H20K **Anotleneegа Mo** 61.88 337 P P 16 25 49.1 +1.3
baz=113
M16K **Timber Creek** 61.98 331 P P 16 25 50.1 +1.6
baz=107
D23K **Nanushuk River** 62.02 341 P P 16 25 49.6 +0.9
baz=119
L17K **Donlin** 62.03 333 P P 16 25 50.1 +1.2
baz=108
F21K **Alatna River** 62.11 339 P P 16 25 50.0 +0.7
F21K **Alatna River** 62.11 339 P P 16 25 50.1 +0.7
baz=116,SNR=5.2
PLCA **Paso Flores** 62.14 157 LR LR 16 47 14.6
comp=Z,51nm,19.7s,baz=315,slow=31
S12K **Black Hills** 62.15 325 P P 16 25 52.2 +2.4
baz=101
K17K **Iditarod** 62.23 333 P P 16 25 51.6 +1.4
baz=108
N15K **Kwethluk River** 62.26 330 P P 16 25 51.9 +1.5
baz=105
GCSA **Galena City Sc** 62.36 336 P P 16 25 52.5 +1.5
baz=111
L16K **Owhat River** 62.43 332 P P 16 25 52.4 +0.9
baz=107
C23K **Itkillik River** 62.44 342 P P 16 25 52.1 +0.7
baz=120
H19K **Roundabout Mou** 62.49 336 P P 16 25 53.0 +1.2
baz=112
D22K **Ayikyak River** 62.61 341 P P 16 25 52.8 +0.2
baz=117
M15K **Kasigluk River** 62.69 331 P P 16 25 54.8 +1.6
baz=105
FALS **False Pass** 62.74 324 P P 16 25 56.5 +2.8
baz=99
J17K **VABM Dome** 62.79 334 P P 16 25 55.2 +1.3
baz=108
E21K **Killik River** 62.83 340 P P 16 25 55.0 +0.9
baz=116
F20K **Avaraart Lake** 62.83 338 P P 16 25 54.9 +0.8
baz=113
G19K **Purcell Mounta** 62.97 337 P P 16 25 55.8 +0.7
G19K **Purcell Mounta** 62.97 337 P P 16 25 55.9 +0.9
baz=111
M14K **Bethel** 63.31 330 P P 16 25 58.9 +1.5
baz=104
L15K **Ungalak Mounta** 63.34 332 P P 16 25 59.2 +1.7
baz=105
J16K **Anvik River** 63.41 333 P P 16 25 59.4 +1.4
baz=106
C21K **Knifeblade Rid** 63.41 340 P P 16 25 58.6 +0.7
baz=115
G18K **Tagagawik** 63.47 336 P P 16 25 59.6 +1.2
baz=110
F19K **Shaleruckik Mo** 63.49 338 P P 16 25 59.3 +0.9
baz=111
E20K **Nigu River** 63.49 339 P P 16 25 59.4 +0.8
baz=113
K15K **Wolf Creek Mou** 63.53 332 P P 16 25 60.0 +1.2
baz=105
E19K **Redstone River** 63.53 338 P P 16 26 00.4 +1.6
baz=112
B21K **Ikpikpuk River** 63.56 341 P P 16 26 00.4 +1.5
baz=116
I17K **Unalakleet** 63.63 334 P P 16 26 01.1 +1.7
baz=107
H17K **Granite Mounta** 63.64 335 P P 16 26 00.7 +1.2
baz=108
L14K **Kuka Creek** 63.80 331 P P 16 26 02.5 +1.9
baz=104
D20K **Etivluk River** 63.82 340 P P 16 26 01.8 +1.1
baz=113
M13K **Dall Lake** 63.89 330 P P 16 26 02.9 +1.7
baz=102
F18K **Selawik** 64.10 337 P P 16 26 03.5 +1.1
baz=109
G17K **Kiwalik Mounta** 64.12 336 P P 16 26 03.2 +0.6
baz=108
H16K **Elim** 64.50 335 P P 16 26 06.5 +1.4
baz=106
B20K **Meade River** 64.53 341 P P 16 26 06.5 +1.3
baz=113
J14K **Nanvaranak Lak** 64.55 332 P P 16 26 07.4 +1.9
baz=103
F17K **Baldwin Pennin** 64.65 337 P P 16 26 06.5 +0.4
baz=107
E18K **Tukpahlearik C** 64.73 338 P P 16 26 06.9 +0.3
baz=108
C19K **Lookout Ridge** 64.97 340 P P 16 26 08.9 +0.7
baz=110
E17K **Hotham Inlet** 65.07 337 P P 16 26 09.6 +0.8
baz=107
C18K **Utukok River** 65.35 339 P P 16 26 10.6 -0.1
baz=108
NIKH **Nikolski High** 65.66 321 P P 16 26 15.4 +2.5
baz=94
F15K **North Star Dit** 65.77 335 P P 16 26 14.8 +1.4
baz=104
ANM **Nome** 65.78 334 P P 16 26 15.1 +1.6
baz=102
B18K **Kokolik River** 65.80 340 P P 16 26 13.8 +0.3
baz=108
A19K **Wainwright** 65.84 341 P P 16 26 14.6 +0.9
baz=109
F14K **Arctic Creek** 66.39 335 P P 16 26 18.9 +1.5
baz=102
SPIA **Saint Paul Isl** 66.87 326 P P 16 26 23.1 +2.6
baz=95
TNA **Tin City** 67.06 335 P P 16 26 23.2 +1.6
baz=100
GAMB **Gambell** 68.36 333 P P 16 26 31.1 +1.2
baz=96
SPITS **Spitsbergen Ar** 79.10 11 LR LR 17 04 03.7
comp=Z,42nm,19.5s,baz=264,slow=37
ESDC **Sonseca Array** 82.94 51 P P 16 27 53.9 -0.1
comp=Z,0.5nm,0.7s,baz=344,slow=4.3,SNR=4.3
ESDC LR LR 17 06 22.4
comp=Z,20nm,18.3s,baz=226,slow=37
comp=Z,0.5nm,0.7s
MDT **Midelt** 84.24 58 LR LR 17 01 24.9
comp=Z,37nm,19.6s,baz=347,slow=33
NOA **NORSAR Array B** 84.98 27 LR LR 17 04 45.9
comp=Z,6.8nm,21.8s,baz=90,slow=35
HFS **Hagfors** 86.48 28 LR LR 17 08 29.0
comp=Z,17nm,19.1s,baz=242,slow=37
TIXI **Tiksi** 86.84 347 LR LR 17 12 32.9
comp=Z,25nm,18.1s,baz=330,slow=39
DAVOX **Davos/Dischmat** 90.14 41 LR LR 17 09 34.3
comp=Z,27nm,19.8s,baz=268,slow=36
VRAC **Vranov** 93.05 37 LR LR 17 13 41.3
comp=Z,24nm,18.1s,baz=278,slow=38
AKASG **Malin Array Be** 99.01 31 LR LR 17 17 09.3
comp=Z,13nm,18.2s,baz=272,slow=37
WRA **Warramunga Arr** 130.17 257 PKP PKPdf 16 34 39.9 +0.2
comp=Z,0.2nm,0.5s,baz=87,slow=2.3,SNR=8.3
ASAR **Alice Springs** 130.77 253 PKP PKPdf 16 34 40.1 -0.6
comp=Z,0.5nm,0.9s,baz=65,slow=2.3,SNR=4.2

*REY **16** 16:24:09.9, 63.94N × 19.22W, h4km*
*NEIC **16** 16:24:10.5±2.6, 63.93N±0.10 × 19.6W±0.2, h10km±1km, mb4.4/34, Error ellipse: s-maj=20.7km s-min=9.3km az=223.0*

*IDC **16** 16:24:11.2±0.7, 63.85N × 19.41W, h0km, mb3.8/14, mbtmp3.8/16, ML3.9/2, MS3.4/38, Error ellipse: s-maj=21.3km s-min=14.1km az=25.0*
**ISC 16 16:24:10.3**±0.4, **63.95N**±0.02 × **19.27W**±0.01, **h10km, n153, s180/154, mb4.3/30, MS3.4/35, Iceland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| ISLY | **Slysaalda** | 0.14 | 153 | P | Pg | 16 24 12.1 | -1.5 |
| | baz=160 | | | | | | |
| IHES | **Hestalda** | 0.16 | 306 | P | Pg | 16 24 13.9 | +0.1 |
| | baz=305 | | | | | | |
| IHES | | | | S | Sg | 16 24 04.0 | -12 |
| | baz=305 | | | | | | |
| IMJO | **Mjoaskard** | 0.18 | 264 | P | Pg | 16 24 14.1 | -0.1 |
| | baz=268 | | | | | | |
| IFED | **Fedgar** | 0.20 | 292 | P | Pg | 16 24 14.6 | +0.1 |
| | baz=292 | | | | | | |
| IFED | | | | S | Sg | 16 24 12.2 | -5.2 |
| | baz=292 | | | | | | |
| IENT | **Enta** | 0.26 | 172 | P | Pg | 16 24 14.9 | -0.6 |
| | baz=176 | | | | | | |
| IENT | | | | S | Sb | 16 24 20.4 | -1.2 |
| | baz=176 | | | | | | |
| IVAT | **Vatnsfell** | 0.28 | 33 | P | Pg | 16 24 15.5 | -0.5 |
| | baz=28 | | | | | | |
| IAUS | **Austmannsbunga** | 0.29 | 164 | P | Pg | 16 24 15.3 | -0.9 |
| | baz=167 | | | | | | |
| IGOD | **Go??abunga** | 0.29 | 185 | P | Pg | 16 24 15.6 | -0.6 |
| | baz=190 | | | | | | |
| IGOD | | | | S | Sb | 16 24 21.2 | -1.4 |
| | baz=190 | | | | | | |
| ILOD | **Lodnugiljahaus** | 0.30 | 136 | P | Pg | 16 24 15.1 | -1.3 |
| | baz=138 | | | | | | |
| ILOD | | | | S | Sg | 16 24 20.7 | +0.2 |
| | baz=138 | | | | | | |
| IHAU | **Haukadalur** | 0.31 | 273 | P | Pb | 16 24 16.1 | -1.7 |
| | baz=275 | | | | | | |
| ISNB | **Snabyli** | 0.36 | 127 | P | Pg | 16 24 16.1 | -1.3 |
| | baz=128 | | | | | | |
| IMID | **Miomork** | 0.40 | 223 | P | Pg | 16 24 17.7 | -0.5 |
| | baz=227 | | | | | | |
| IMID | | | | S | Sb | 16 24 23.9 | -1.8 |
| | baz=227 | | | | | | |
| IRJU | **Rjupnafell** | 0.43 | 142 | P | Pg | 16 24 17.2 | -1.4 |
| | baz=143 | | | | | | |
| IRJU | | | | S | Sg | 16 24 23.5 | -0.8 |
| | baz=143 | | | | | | |
| IESK | **Eystri-Skogar** | 0.44 | 191 | P | Pg | 16 24 17.7 | -1.2 |
| | baz=194 | | | | | | |
| IESK | | | | S | Sg | 16 24 23.9 | -0.7 |
| | baz=194 | | | | | | |
| IHVO | **Lagu-Hvolar** | 0.47 | 156 | P | Pg | 16 24 18.1 | -1.2 |
| | baz=158 | | | | | | |
| IHVO | | | | S | Sg | 16 24 24.3 | -1.2 |
| | baz=158 | | | | | | |
| ISAU | **Saurbar** | 0.51 | 275 | P | Pb | 16 24 19.5 | -1.8 |
| | baz=276 | | | | | | |
| ISAU | | | | S | Sb | 16 24 27.2 | -1.5 |
| | baz=276 | | | | | | |
| IIEY | **Innrieyrar** | 0.52 | 74 | P | Pg | 16 24 19.0 | -1.5 |
| | baz=72 | | | | | | |
| IIEY | | | | S | Sg | 16 24 26.7 | -0.7 |
| | baz=72 | | | | | | |
| IGYG | **Gyngjarholskot** | 0.53 | 309 | P | Pb | 16 24 19.9 | -1.7 |
| | baz=308 | | | | | | |
| IGYG | | | | S | Sb | 16 24 28.3 | -1.1 |
| | baz=308 | | | | | | |
| IASM | **Asmuli** | 0.61 | 259 | P | Pg | 16 24 21.1 | -1.0 |
| | baz=261 | | | | | | |
| IASM | | | | S | Sb | 16 24 29.9 | -1.6 |
| | baz=261 | | | | | | |
| IBEY | **Bjarnarey** | 0.65 | 220 | P | Pg | 16 24 22.1 | -0.8 |
| | baz=222 | | | | | | |
| IVES | **Vestmannaeyjar** | 0.68 | 222 | P | Pg | 16 24 22.6 | -0.9 |
| | baz=224 | | | | | | |
| IKAL | **Kalfafell** | 0.70 | 90 | P | Pg | 16 24 21.8 | -2.0 |
| | baz=89 | | | | | | |
| IKAL | | | | S | Sg | 16 24 31.8 | -1.0 |
| | baz=89 | | | | | | |
| IVEY | **Vestmannaeyjar** | 0.70 | 220 | P | Pg | 16 24 22.9 | -0.9 |
| | baz=222 | | | | | | |
| IVEY | | | | S | Sb | 16 24 33.1 | -1.1 |
| | baz=222 | | | | | | |
| ISKR | **Skrokkalda** | 0.72 | 32 | P | Pg | 16 24 23.1 | -1.2 |
| | baz=30 | | | | | | |
| ISKR | | | | S | Sb | 16 24 33.4 | -1.6 |
| | baz=30 | | | | | | |
| ISOL | **Solvholt** | 0.74 | 269 | P | Pg | 16 24 23.2 | -1.4 |
| | baz=270 | | | | | | |
| ISOL | | | | S | Sb | 16 24 33.7 | -1.7 |
| | baz=270 | | | | | | |
| IKRO | **Krokur** | 0.83 | 281 | P | Pg | 16 24 24.8 | -1.5 |
| | baz=282 | | | | | | |
| IBJA | **Bjarnastaoir** | 0.90 | 271 | P | Pg | 16 24 26.0 | -1.6 |
| | baz=271 | | | | | | |
| IBJA | | | | S | Sn | 16 24 40.2 | -1.8 |
| | baz=271 | | | | | | |
| IHEI | **Heioarbar** | 0.90 | 287 | P | Pg | 16 24 25.9 | -1.7 |
| | baz=287 | | | | | | |
| ISTE | **Stelbrattur** | 0.92 | 350 | P | Pg | 16 24 26.3 | -1.7 |
| | baz=349 | | | | | | |
| IEDA | **Engidalur** | 0.94 | 279 | P | Pg | 16 24 26.7 | -1.8 |
| | baz=279 | | | | | | |
| IVON | **Vonarskard** | 0.98 | 42 | P | Pg | 16 24 26.8 | -2.3 |
| | baz=40 | | | | | | |
| IVON | | | | S | Sg | 16 24 40.3 | -1.5 |
| | baz=40 | | | | | | |
| IGRF | **Grimsfjall** | 0.99 | 62 | P | Pg | 16 24 27.2 | -2.1 |
| | baz=60 | | | | | | |
| IHAE | **Haedir** | 1.01 | 85 | P | Pg | 16 24 26.9 | -2.8 |
| | baz=84 | | | | | | |
| IHAE | | | | S | Sb | 16 24 42.7 | -0.4 |
| | baz=84 | | | | | | |
| ISAN | **Sandskeio** | 1.02 | 277 | P | Pg | 16 24 28.0 | -1.9 |
| | baz=277 | | | | | | |
| ISAN | | | | S | Sn | 16 24 45.2 | +0.2 |
| | baz=277 | | | | | | |
| IKIS | **Kista** | 1.04 | 45 | P | Pg | 16 24 28.1 | -2.2 |
| | baz=44 | | | | | | |
| IDJK | **Dyngjujokull** | 1.05 | 57 | P | Pg | 16 24 28.1 | -2.3 |
| | baz=56 | | | | | | |
| IFAL | **Falljokull** | 1.08 | 89 | P | Pb | 16 24 28.2 | -2.8 |
| | baz=88 | | | | | | |
| IFAL | | | | S | Sn | 16 24 45.0 | -1.4 |
| | baz=88 | | | | | | |
| IKAS | **Kald??rsel** | 1.14 | 275 | P | Pb | 16 24 29.9 | -2.1 |
| | baz=275 | | | | | | |
| IKAS | | | | S | Sn | 16 24 47.5 | -0.4 |
| | baz=275 | | | | | | |
| IMOR | **Morastadir** | 1.15 | 289 | P | Pb | 16 24 29.7 | -2.4 |
| | baz=289 | | | | | | |
| IMOR | | | | S | Sn | 16 24 46.7 | -1.3 |
| | baz=289 | | | | | | |
| IFAG | **Fagurholsmyri** | 1.16 | 93 | P | Pb | 16 24 29.7 | -2.6 |
| | baz=92 | | | | | | |
| IFAG | | | | S | Sg | 16 24 46.5 | -1.0 |
| | baz=92 | | | | | | |
| IASB | **`sbjarnarst** | 1.20 | 313 | P | Pb | 16 24 30.7 | -2.4 |
| | baz=312 | | | | | | |
| IASB | | | | S | Sn | 16 24 48.0 | -1.4 |
| | baz=312 | | | | | | |
| BORG | **Borgarnes** | 1.20 | 313 | Pn | Pb | 16 24 30.8 | -2.3 |
| BORG | | | | Sn | Sb | 16 24 47.3 | -1.3 |
| BORG | **Borgarnes** | 1.20 | 313 | Pg | Pb | 16 24 30.5 | -2.6 |
| | 99nm,0.3s,baz=136,slow=14,SNR=499 | | | | | | |
| BORG | | | | Lg | | 16 24 47.7 | |
| | 116nm,0.3s,baz=221,slow=22,SNR=6.2 | | | | | | |
| IBJK | **Bruarjokull** | 1.22 | 64 | P | Pb | 16 24 30.5 | -2.9 |
| | baz=63 | | | | | | |
| IBJK | | | | S | Sb | 16 24 48.0 | -1.3 |
| | baz=63 | | | | | | |
| IKRI | **Krysuvik** | 1.24 | 268 | P | Pn | 16 24 31.2 | -2.5 |
| | baz=268 | | | | | | |
| IKRI | | | | S | Sb | 16 24 48.6 | -1.3 |
| | baz=268 | | | | | | |
| IKSK | **Karasker** | 1.25 | 79 | P | Pn | 16 24 30.7 | -3.1 |
| | baz=78 | | | | | | |
| IKSK | | | | S | Sb | 16 24 48.2 | -1.9 |
| | baz=78 | | | | | | |
| IKVI | **Kvisker** | 1.25 | 87 | P | Pn | 16 24 31.0 | -2.8 |
| | baz=87 | | | | | | |
| IKVI | | | | S | Sb | 16 24 49.0 | -1.0 |
| | baz=87 | | | | | | |
| IURH | **Urdarhals** | 1.27 | 46 | P | Pn | 16 24 32.0 | -2.1 |
| | baz=45 | | | | | | |
| IVOG | **Vogar** | 1.38 | 272 | P | Pn | 16 24 33.0 | -2.6 |
| | baz=273 | | | | | | |
| IGRV | **Grindav??k** | 1.41 | 268 | P | Pn | 16 24 34.2 | -1.8 |
| | baz=268 | | | | | | |
| IGRV | | | | S | Sn | 16 24 53.4 | -1.3 |
| | baz=268 | | | | | | |
| IKRE | **Kreppuhraun** | 1.51 | 55 | P | Pn | 16 24 35.5 | -1.9 |
| | baz=54 | | | | | | |
| IKRE | | | | S | Sg | 16 24 58.7 | +0.1 |
| | baz=54 | | | | | | |
| IRNE | **Reykjanes** | 1.53 | 266 | P | Pn | 16 24 35.9 | -1.7 |
| | baz=267 | | | | | | |
| IRNE | | | | S | Sb | 16 24 57.0 | -1.0 |
| | baz=267 | | | | | | |
| INYL | **Nylenda** | 1.53 | 272 | P | Pn | 16 24 35.2 | -2.5 |
| | baz=273 | | | | | | |
| INYL | | | | S | Sg | 16 24 58.0 | -1.5 |
| | baz=273 | | | | | | |
| IASK | **Askja** | 1.58 | 45 | P | Pn | 16 24 36.8 | -1.6 |
| | baz=44 | | | | | | |
| IMKO | **Mokollar** | 1.63 | 50 | P | Pn | 16 24 37.6 | -1.5 |
| | baz=49 | | | | | | |
| SCO | **Scoresbysund** | 6.64 | 352 | Pn | Pn | 16 25 51.0 | +3.2 |
| JMIC | **Jan Mayen** | 8.17 | 26 | LR | LR | 16 28 20.0 | |
| | comp=Z,89nm,21.3s,baz=254,slow=30 | | | | | | |
| EKB | **Eskdalemuir** | 11.83 | 129 | Pn | Pn | 16 26 57.8 | -1.0 |
| ESK | **Eskdalemuir** | 11.84 | 130 | Pn | Pn | 16 26 57.8 | -1.1 |
| EKA | **Eskdalemuir Ar** | 11.84 | 129 | Pn | Pn | 16 26 58.9 | -0.1 |
| | baz=315,slow=12 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| DSB | **Dublin** | 12.63 | 142 | Pn | Pn | 16 27 06.5 | -3.3 |
| SFJD | **Kangerlussuaq** | 13.29 | 297 | Pn | Pn | 16 27 14.8 | -3.9 |
| IVI | **Ivigtut** | 13.54 | 271 | Pn | Pn | 16 27 17.8 | -4.2 |
| NC204 | **NORSAR Array S** | 14.01 | 87 | Pn | Pn | 16 27 27.8 | -0.7 |
| NBO00 | **NORSAR Array S** | 14.11 | 88 | Pn | Pn | 16 27 29.6 | -0.4 |
| NOA | **NORSAR Array B** | 14.30 | 88 | LR | LR | 16 32 55.6 | |
| | comp=Z,57nm,19.6s,baz=295,slow=36 | | | | | | |
| HFS | **Hagfors** | 15.80 | 89 | Pn | P | 16 27 57.6 | +1.2 |
| | 0.1nm,0.3s,baz=264,slow=13,SNR=2.9 | | | | | | |
| ARCES | **ARCESS Array B** | 18.16 | 53 | P | P | 16 28 27.7 | +5.2 |
| | 0.1nm,0.3s,baz=268,slow=16,SNR=3.9 | | | | | | |
| ARCES | | | | LR | LR | 16 33 40.5 | |
| | comp=Z,68nm,20.0s,baz=352,slow=31 | | | | | | |
| | 3.4nm,1.0s | | | | | | |
| KEV | **Kevo** | 18.67 | 52 | P | Pn | 16 28 27.7 | -0.6 |
| FINES | **FINESS Array B** | 20.61 | 76 | P | Pn | 16 28 50.2 | -1.3 |
| FINES | **FINESS Array B** | 20.61 | 76 | P | Pn | 16 28 51.4 | -0.1 |
| | 15nm,0.9s,baz=310,slow=9.2,SNR=22 | | | | | | |
| FINES | | | | LR | LR | 16 36 16.9 | |
| | comp=Z,66nm,20.1s,baz=264,slow=35 | | | | | | |
| | 15nm,0.9s | | | | | | |
| FIA1 | **FINESS Array S** | 20.61 | 76 | P | Pn | 16 28 49.8 | -1.6 |
| CLL | **Collm** | 21.12 | 112 | P | P | 16 28 54.6 | -0.2 |
| CLL | **Collm** | 21.12 | 112 | eP | P | 16 28 55.0 | +0.2 |
| CLL | | | | eS | Sn | 16 32 53.0 | -3.0 |
| ECH | **Echery** | 21.33 | 125 | P | P | 16 28 57.3 | +0.1 |
| BFO | **Black Forest** | 21.66 | 123 | P | P | 16 28 59.8 | -0.9 |
| SENIN | **Lac Senin/Sanе** | 22.96 | 127 | P | P | 16 29 13.2 | -1.5 |
| KHC | **Kasperske Hory** | 23.05 | 114 | | P | 16 29 15.1 | -0.3 |
| GERES | **GERESS Array B** | 23.32 | 115 | P | P | 16 29 21.4 | +3.1 |
| | 0.6nm,0.7s,baz=184,slow=13,SNR=4.0 | | | | | | |
| GERES | | | | LR | LR | 16 38 59.3 | |
| | comp=Z,119nm,19.3s,baz=332,slow=38 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| DAVOX | **Davos/Dischmat** | 23.54 | 123 | LR | LR | 16 38 25.1 | |
| | comp=Z,52nm,18.4s,baz=258,slow=36 | | | | | | |
| VRAC | **Vranov** | 24.14 | 110 | LR | LR | 16 38 27.9 | |
| | comp=Z,39nm,20.2s,baz=326,slow=36 | | | | | | |
| CTI | **Castel Tesino** | 24.82 | 122 | P | P | 16 29 32.2 | -0.2 |
| CTI | | | | IAmb | IAmb | 16 29 39.8 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| STAL | **STALIGIAL** | 25.04 | 120 | P | P | 16 29 33.7 | -0.6 |
| SCHQ | **Schefferville** | 25.29 | 271 | P | P | 16 29 38.8 | +2.3 |
| | comp=Z,3.2nm,0.7s,baz=98,slow=12,SNR=2.4 | | | | | | |
| SCHQ | | | | LR | LR | 16 37 56.5 | |
| | comp=Z,85nm,20.0s,baz=348,slow=33 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| ESDC | **Sonseca Array** | 25.95 | 152 | P | P | 16 29 46.1 | +3.5 |
| | comp=Z,1.1nm,0.9s,baz=353,slow=9.3,SNR=5.6 | | | | | | |
| ESDC | | | | LR | LR | 16 39 21.9 | |
| | comp=Z,114nm,19.8s,baz=340,slow=35 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| PSZ | **Piszkesteto** | 26.59 | 108 | P | P | 16 29 48.4 | 0.0 |
| PSZ | | | | IAmb | IAmb | 16 29 52.3 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| RES | **Resolute Bay** | 26.61 | 325 | LR | LR | 16 40 39.8 | |
| | comp=Z,77nm,18.7s,baz=5.5,slow=37 | | | | | | |
| AKASG | **Malin Array Be** | 28.53 | 94 | LR | LR | 16 41 42.1 | |
| | comp=Z,62nm,18.1s,baz=318,slow=37 | | | | | | |
| BURAR | **Bucovina Array** | 29.09 | 103 | P | P | 16 30 10.9 | +0.2 |
| ICQ | **Pointe Anglais** | 29.18 | 263 | P | P | 16 30 10.9 | -0.5 |
| KIRV | **Kirov** | 31.96 | 67 | LR | LR | 16 43 12.4 | |
| | comp=Z,99nm,19.4s,baz=333,slow=36 | | | | | | |
| MDT | **Midelt** | 32.48 | 157 | LR | LR | 16 42 49.7 | |
| | comp=Z,76nm,21.6s,baz=345,slow=34 | | | | | | |
| KEST | **Kesra** | 33.17 | 135 | P | P | 16 30 47.4 | +0.6 |
| KEST | **Kesra** | 33.17 | 135 | P | P | 16 30 49.2 | +2.5 |
| | comp=Z,3.4nm,0.7s,baz=5.9,slow=7.5,SNR=3.8 | | | | | | |
| KEST | | | | LR | LR | 16 44 18.6 | |
| | comp=Z,51nm,18.9s,baz=315,slow=36 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| VAE | **Valguarnera** | 33.29 | 127 | LR | LR | 16 44 51.0 | |
| | comp=Z,56nm,18.2s,baz=28,slow=37 | | | | | | |
| BELG | **Belogornoye** | 35.39 | 77 | LR | LR | 16 44 22.3 | |
| | comp=Z,45nm,20.3s,baz=306,slow=34 | | | | | | |
| ARU | **Arti** | 37.08 | 64 | LR | LR | 16 45 50.8 | |
| | comp=Z,82nm,19.4s,baz=263,slow=35 | | | | | | |
| SADO | **Sadowa** | 38.04 | 269 | LR | LR | 16 45 53.3 | |
| | comp=Z,79nm,18.5s,baz=118,slow=34 | | | | | | |
| BRTR | **Keskin Array B** | 39.06 | 102 | P | P | 16 31 36.2 | -0.9 |
| BRTR | **Keskin Array B** | 39.06 | 102 | P | P | 16 31 39.7 | +2.6 |
| | comp=Z,1.1nm,0.9s,baz=313,slow=8.5,SNR=5.5 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| YKA | **Yellowknife Ar** | 39.14 | 313 | P | P | 16 31 40.0 | +2.6 |
| | comp=Z,1.8nm,0.9s,baz=47,slow=9.1,SNR=2.6 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| IDI | **Anoyia** | 39.18 | 116 | LR | LR | 16 50 36.7 | |
| | comp=Z,54nm,18.7s,baz=310,slow=40 | | | | | | |
| KBZ | **Khabaz** | 39.87 | 90 | LR | LR | 16 48 39.9 | |
| | comp=Z,70nm,18.4s,baz=336,slow=37 | | | | | | |
| M57A | **Sunshine Farm,** | 39.89 | 264 | P | P | 16 31 42.3 | -1.6 |
| N58A | **Sunbury** | 40.12 | 263 | P | P | 16 31 43.3 | -2.5 |
| AKTO | **Aktyubinsk** | 41.24 | 71 | LR | LR | 16 49 00.9 | |
| | comp=Z,98nm,19.1s,baz=84,slow=36 | | | | | | |
| G31M | **Satah River** | 41.32 | 327 | P | P | 16 31 55.1 | -0.3 |
| G31M | | | | IAmb | IAmb | 16 31 58.9 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| E27K | **Coleen River** | 41.93 | 332 | P | P | 16 32 02.2 | +1.8 |
| E27K | | | | IAmb | IAmb | 16 32 04.8 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| TIXI | **Tiksi** | 42.92 | 14 | LR | LR | 16 49 26.4 | |
| | comp=Z,6.6nm,21.9s,baz=328,slow=35 | | | | | | |
| BMAR | **Burnt Mountain** | 43.18 | 333 | P | P | 16 32 12.2 | +1.5 |
| I29M | **Ogilvie Camp,** | 43.55 | 328 | P | P | 16 32 15.4 | +1.8 |
| I29M | | | | IAmb | IAmb | 16 32 17.6 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| GNI | **Garni** | 43.57 | 91 | LR | LR | 16 50 36.4 | |
| | comp=Z,38nm,19.9s,baz=342,slow=36 | | | | | | |
| BVAR | **Borovoye Array** | 44.22 | 60 | P | P | 16 32 22.2 | +3.1 |
| | comp=Z,1.1nm,0.8s,baz=308,slow=7.3,SNR=6.1 | | | | | | |
| BVAR | | | | LR | LR | 16 49 14.1 | |
| | comp=Z,29nm,20.2s,baz=294,slow=34 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| K29M | **Barlow Dome** | 44.63 | 326 | P | P | 16 32 23.4 | +1.0 |
| K29M | | | | IAmb | IAmb | 16 32 26.5 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| I26K | **Coal Creek Min** | 44.70 | 330 | P | P | 16 32 23.4 | +0.7 |
| I26K | | | | IAmb | IAmb | 16 32 27.4 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| EGAK | **Eagle** | 44.70 | 329 | P | P | 16 32 23.0 | +0.2 |
| EGAK | | | | IAmb | IAmb | 16 32 26.0 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| DAWY | **Dawson** | 44.89 | 327 | P | P | 16 32 23.7 | -0.7 |
| DAWY | | | | IAmb | IAmb | 16 32 29.2 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| F21K | **Alatna River** | 45.04 | 337 | P | P | 16 32 25.9 | +0.3 |
| F21K | | | | IAmb | IAmb | 16 32 31.1 | |
| | comp=Z,4.1nm,1.0s | | | | | | |
| K27K | **Chicken** | 45.55 | 329 | P | P | 16 32 29.9 | +0.4 |
| K27K | | | | IAmb | IAmb | 16 32 34.1 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| F20K | **Avaraart Lake** | 45.58 | 338 | P | P | 16 32 31.1 | +1.4 |
| F20K | | | | IAmb | IAmb | 16 32 34.8 | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| G21K | **Allakaket** | 45.68 | 336 | P | P | 16 32 30.3 | -0.3 |
| G21K | | | | IAmb | IAmb | 16 32 34.9 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| J25K | **Salcha River,** | 45.78 | 331 | P | P | 16 32 31.8 | +0.4 |
| J25K | | | | IAmb | IAmb | 16 32 36.1 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,5.4nm,0.8s | | | | | | |
| **C16K** | **Lisburne Hills** | **45.86** | **343** | P | **P** | **16 32 32.6** | **+0.7** |
| **IL31** | | **45.96** | **332** | P | **P** | **16 32 33.7** | **+1.0** |
| IL31 | | | | IAmb | IAmb | 16 32 37.8 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **45.96** | **332** | P | **P** | **16 32 33.5** | **+0.7** |
| **ILAR** | **Eielson Array** | **45.96** | **332** | P | **P** | **16 32 36.0** | **+3.2** |
| | comp=Z,2.6nm,0.9s,baz=24,slow=7.0,SNR=17 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **MDM** | **Murphy Dome** | **46.07** | **333** | P | **P** | **16 32 34.1** | **+0.5** |
| **IMAR** | **Indian Mountai** | **46.21** | **336** | P | **P** | **16 32 35.2** | **+0.5** |
| **BCAR** | **Beaver Creek A** | **46.31** | **328** | P | **P** | **16 32 36.2** | **+0.5** |
| **NEA2** | **Nenana** | **46.56** | **333** | P | **P** | **16 32 37.8** | **+0.3** |
| **TKL** | **Tuckaleechee C** | **47.51** | **265** | LR | LR | 16 51 01.3 | |
| | comp=Z,75nm,20.5s,baz=55,slow=34 | | | | | | |
| **K20K** | **Telida** | **48.65** | **335** | P | **P** | **16 32 56.1** | **+2.3** |
| K20K | | | | IAmb | IAmb | 16 32 57.9 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.68** | **50** | LR | LR | 16 53 11.1 | |
| | comp=Z,25nm,18.8s,baz=2.0,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.19** | **56** | P | **P** | **16 33 01.2** | **+3.2** |
| | comp=Z,0.9nm,0.7s,baz=321,slow=7.4,SNR=7.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **M20K** | **Styx River** | **49.82** | **333** | P | **P** | **16 33 04.3** | **+1.5** |
| M20K | | | | IAmb | IAmb | 16 33 05.8 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **52.20** | **18** | LR | LR | 16 55 06.6 | |
| | comp=Z,20nm,18.8s,baz=7.0,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **52.74** | **292** | P | **P** | **16 33 28.0** | **+2.8** |
| | comp=Z,0.9nm,0.9s,baz=72,slow=6.4,SNR=5.6 | | | | | | |
| PDAR | | | | LR | LR | 16 55 27.7 | |
| | comp=Z,42nm,18.2s,baz=349,slow=36 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **52.81** | **154** | P | **P** | **16 33 27.1** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** | **52.81** | **154** | P | **P** | **16 33 26.8** | **+1.2** |
| | comp=Z,2.0nm,1.0s,baz=356,slow=9.5,SNR=7.5 | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.76** | **57** | P | **P** | **16 33 32.3** | **0.0** |
| **MKAR** | **Makanchi Array** | **53.76** | **57** | P | **P** | **16 33 35.6** | **+3.3** |
| | comp=Z,0.9nm,0.9s,baz=319,slow=4.8,SNR=4.6 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **54.26** | **65** | LR | LR | 16 56 35.9 | |
| | comp=Z,46nm,19.9s,baz=266,slow=36 | | | | | | |
| **MA2** | **Magadan** | **56.56** | **6** | LR | LR | 16 57 43.5 | |
| | comp=Z,16nm,18.6s,baz=12,slow=36 | | | | | | |
| **ANMO** | **Albuquerque** | **58.03** | **285** | LR | LR | 16 57 25.7 | |
| | comp=Z,56nm,19.1s,baz=195,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **58.11** | **163** | LR | LR | 16 59 04.7 | |
| | comp=Z,45nm,18.1s,baz=58,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **59.94** | **296** | LR | LR | 16 59 02.2 | |
| | comp=Z,84nm,19.4s,baz=268,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **61.65** | **279** | P | **P** | **16 34 28.8** | **+0.8** |
| | comp=Z,0.1nm,0.4s,baz=41,slow=6.2,SNR=1.4 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **63.19** | **351** | LR | LR | 17 02 54.6 | |
| | comp=Z,28nm,19.2s,baz=312,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **64.89** | **21** | LR | LR | 17 04 16.7 | |
| | comp=Z,30nm,18.8s,baz=8.0,slow=37 | | | | | | |
| **LPIG** | **La Paz** | **69.08** | **282** | LR | LR | 17 05 31.5 | |
| | comp=Z,92nm,18.1s,baz=36,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **75.64** | **26** | LR | LR | 17 11 45.7 | |
| | comp=Z,15nm,18.1s,baz=225,slow=38 | | | | | | |
| **LBTB** | **Lobatse** | **95.36** | **140** | LR | LR | 17 21 56.9 | |
| | comp=Z,36nm,19.3s,baz=357,slow=36 | | | | | | |
| **PMG** | **Port Moresby** | **124.69** | **16** | PKP | **PKiKP** | | |
| | comp=Z,7.8nm,0.8s,baz=106,slow=7.4,SNR=2.3 | | | | | | |

**IDC 16 16:24:48.4±4.8, 47°.56N×92°.50W, h0km, mbtmp2.6/1, ML0.5/1, Error ellipse: s-maj=75.1km s-min=29.9km az=52.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.49** | **322** | Pn | Pn | 16 25 43.1 | -0.8 |
| | 0.1nm,0.3s,baz=145,slow=5.3,SNR=2.2 | | | | | | |
| ULM | | | | Sn | Sn | 16 26 22.0 | -3.9 |
| | 0.2nm,0.3s,baz=306,slow=3.2,SNR=1.7 | | | | | | |
| ULM | | | | Lg | Lg | 16 26 37.0 | |
| | 0.6nm,0.3s,baz=359,slow=6.3,SNR=8.3 | | | | | | |
| | 2.7nm,0.9s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.52** | **320** | I | I | 16 45 50.0 | |
| | baz=137,slow=330,SNR=7.3 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **16.51** | **282** | I | I | 18 06 10.0 | |
| | baz=85,slow=316,SNR=3.7 | | | | | | |

*DJA **16** 16:37:25.0±0.3, 7°.5S×123°.6E±°, h485km±5km, M4.2/18, mb4.4/18, mB4.7/11, MLv4.5/18, Mw(mB)3.9/11, MwMwp4.6/1, Mwp5.0/1*
*IDC **16** 16:37:26.9±2.1, 7°.04S×125°.61E, h494km±25km, mb3.3/11, mbtmp4.2/13, Error ellipse: s-maj=32.9km s-min=9.4km az=72.0*
*NEIC **16** 16:37:26.4±2.1, 7°.01S±0°.09×125°.6E±0°.1, h479km±9km, mb4.4/28, Error ellipse: s-maj=15.6km s-min=12.7km az=83.0*
**ISC 16 16:37:27.0±0.4, 7°.05S±0°.05×125°.54E±0°.07, h500km, n112, σ1s73/119, mb3.9/18, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **2.97** | **205** | P | **P** | **16 38 37.2** | **-0.7** |
| **SOEI** | **Soe** | **2.97** | **205** | P | **P** | **16 38 36.5** | **-1.4** |
| SOEI | | | | S | **S** | **16 39 28.5** | **-7.0** |
| **SOEI** | **Soe** | **2.97** | **205** | P | **P** | **16 38 36.8** | **-1.1** |
| SOEI | | | | S | **S** | **16 39 32.5** | **-3.0** |
| **BBSI** | **Bau Bau** | **3.34** | **298** | P | **P** | **16 38 39.9** | **-0.4** |
| **MMRI** | **Maumere** | **3.63** | **244** | P | **P** | **16 38 40.7** | **-1.8** |
| **MMRI** | **Maumere** | **3.63** | **244** | P | **P** | **16 38 40.6** | **-1.9** |
| MMRI | | | | S | **S** | **16 39 38.6** | **-5.3** |
| **MMRI** | **Maumere** | **3.63** | **244** | P | **P** | **16 38 40.1** | **-2.4** |
| **BATI** | **Baumata** | **3.65** | **210** | P | **P** | **16 38 42.0** | **-0.6** |
| **NLAI** | **Namlea** | **4.09** | **22** | P | **P** | **16 38 44.9** | **-1.3** |
| **EDFI** | **Ende, Flores** | **4.17** | **246** | P | **P** | **16 38 44.9** | **-2.0** |
| **SANI** | **Sanana** | **4.99** | **5** | P | **P** | **16 38 52.3** | **-1.6** |
| **SANI** | **Sanana** | **4.99** | **5** | P | **P** | **16 38 52.3** | **-1.6** |
| | 148nm,0.9s,2µm3µm0.6nm | | | | | | |
| **MSAI** | **Masohi** | **4.99** | **43** | P | P | 16 38 47.3 | -6.6 |
| **BSSI** | **Bau Bau, Buton** | **5.10** | **280** | P | **P** | **16 38 55.8** | **+0.9** |
| | 160nm,1.2s,2µm0.6nm | | | | | | |
| **SAUI** | **Saumlaki** | **5.79** | **100** | P | **P** | **16 38 57.4** | **-3.9** |
| SAUI | | | | S | **S** | **16 40 13.5** | **-4.7** |
| **BASI** | **Baing, Sumba** | **5.83** | **237** | P | **P** | **16 38 59.1** | **-2.6** |
| | 259nm,1.4s | | | | | | |
| **LUWI** | **Luwuk** | **6.58** | **335** | P | **P** | **16 39 09.3** | **+0.3** |
| **LUWI** | **Luwuk** | **6.58** | **335** | P | **P** | **16 39 09.4** | **+0.4** |
| **LUWI** | **Luwuk** | **6.58** | **335** | P | **P** | **16 39 07.5** | **-1.5** |
| | 150nm,0.9s,2µm0.5nm | | | | | | |
| **WBSI** | **Waikabubak, Su** | **6.61** | **247** | P | **P** | **16 39 05.5** | **-3.8** |
| | 44nm,0.7s,1µm0.2nm | | | | | | |
| **DRS** | **Darwin Rock St** | **7.51** | **136** | P | **P** | **16 39 18.1** | **-0.3** |
| **KMSI** | **Cibinong** | **7.73** | **348** | P | **P** | **16 39 19.5** | **-1.2** |
| **FAKI** | **Fak Fak** | **7.84** | **59** | P | **P** | **16 39 19.5** | **-2.3** |
| **FAKI** | **Fak Fak** | **7.84** | **59** | P | **P** | **16 39 19.2** | **-2.6** |
| **FAKI** | **Fak Fak** | **7.84** | **59** | P | **P** | **16 39 18.6** | **-3.2** |
| | 38nm,0.8s,0.2nm | | | | | | |
| **MTN** | **Manton Dam** | **7.97** | **137** | P | **P** | **16 39 22.4** | **-0.6** |
| **MTN** | **Manton Dam** | **7.97** | **137** | P | **P** | **16 39 22.3** | **-0.8** |
| **TNTI** | **Ternate** | **7.98** | **13** | P | **P** | **16 39 21.7** | **-1.6** |
| **TNTI** | **Ternate** | **7.98** | **13** | | **P** | **16 39 21.6** | **-1.6** |
| **TNTI** | **Ternate** | **7.98** | **13** | P | **P** | **16 39 20.2** | **-3.0** |
| | 51nm,0.7s,0.2nm | | | | | | |
| **GTOI** | **Gorontalo** | **8.04** | **342** | P | **P** | **16 39 25.5** | **+1.6** |
| | 63nm,0.7s | | | | | | |
| **MRSI** | **Marisa** | **8.29** | **334** | P | **P** | **16 39 25.9** | **-0.6** |
| | 108nm,0.6s,1µm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **8.74** | **258** | P | **P** | **16 39 27.5** | **-3.6** |
| **KDU** | **Kakadu** | **8.83** | **130** | P | **P** | **16 39 31.0** | **-1.0** |
| **KNRA** | **Kununurra** | **9.14** | **160** | P | **P** | **16 39 35.1** | **-0.1** |
| **MPSI** | **Mapaga** | **9.25** | **322** | P | **P** | **16 39 35.0** | **-1.5** |
| **TOLI2** | **Tolitoli** | **9.39** | **329** | P | **P** | **16 39 38.5** | **+0.5** |
| **TOLI2** | **Tolitoli** | **9.39** | **329** | P | **P** | **16 39 37.7** | **-0.3** |
| **BKB** | **Balikpapan** | **10.36** | **303** | P | **P** | **16 39 49.8** | **+1.6** |
| **FITZ** | **Fitzroy Crossi** | **10.98** | **180** | P | **P** | **16 39 55.0** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **10.98** | **180** | | **P** | **16 39 55.0** | **+0.3** |
| FITZ | | | | | **S** | **16 41 54.4** | **-2.0** |
| **JAGI** | **Jajag, Banyuwa** | **11.37** | **262** | P | **P** | **16 39 59.3** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **11.37** | **262** | P | **P** | **16 39 56.9** | **-2.1** |
| **MYLDM** | **Lahad Datu** | **14.03** | **330** | P | **P** | **16 40 26.0** | **-1.1** |
| **MBWA** | **Marble Bar** | **15.11** | **201** | P | **P** | **16 40 38.6** | **+0.3** |
| **MBWA** | **Marble Bar** | **15.11** | **201** | P | **P** | **16 40 37.6** | **-0.8** |
| MBWA | | | | IAmb | IAmb | 16 41 17.8 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **15.29** | **147** | P | **P** | **16 40 39.1** | **-1.1** |
| WB0 | | | | IAmb | IAmb | 16 40 43.3 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.40** | **147** | P | **P** | **16 40 40.0** | **-1.4** |
| WRAB | | | | IAmb | IAmb | 16 40 44.1 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.40** | **147** | P | **P** | **16 40 39.7** | **-1.7** |
| **WRA** | **Warramunga Arr** | **15.40** | **147** | P | **P** | **16 40 40.1** | **-1.2** |
| | comp=Z,8.7nm,1.1s,baz=322,slow=11,SNR=151 | | | | | | |
| WRA | | | | S | **S** | **16 43 18.5** | **-3.3** |
| | comp=Z,1.0nm,0.8s,baz=332,slow=16,SNR=3.5 | | | | | | |
| **WB2** | **Warramunga Arr** | **15.41** | **147** | P | **P** | **16 40 40.4** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 16 40 44.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **15.45** | **200** | P | **P** | **16 40 42.2** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **15.45** | **200** | P | **P** | **16 40 41.4** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **15.45** | **200** | P | **P** | **16 40 41.0** | **-0.8** |
| PSA00 | | | | IAmb | IAmb | 16 40 46.5 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.52** | **147** | P | **P** | **16 40 41.7** | **-1.0** |
| **WRKA** | **Warakurna** | **18.08** | **172** | P | **P** | **16 41 09.2** | **+1.1** |
| **AS31** | **Alice Springs** | **18.37** | **155** | P | **P** | **16 41 11.5** | **+0.7** |
| **ASAR** | **Alice Springs** | **18.37** | **155** | P | **P** | **16 41 11.4** | **+0.6** |
| | comp=Z,7.3nm,0.4s,baz=325,slow=7.8,SNR=410 | | | | | | |
| ASAR | | | | S | **S** | **16 44 12.9** | **-0.4** |
| | comp=Z,1.9nm,1.1s,baz=335,slow=19,SNR=6.5 | | | | | | |
| ASAR | | | | ScP | **ScP** | | |
| | comp=Z,0.3nm,0.4s,baz=352,slow=1.9,SNR=8.1 | | | | | | |
| **AS01** | **Alice Springs** | **18.39** | **155** | P | **P** | **16 41 11.9** | **+0.9** |
| **COEN** | **Coen** | **18.64** | **113** | P | **P** | **16 41 13.4** | **+0.1** |
| **COEN** | **Coen** | **18.64** | **113** | P | **P** | **16 41 13.3** | **0.0** |
| COEN | | | | IAmb | IAmb | 16 41 39.3 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **QIS** | **Mount Isa** | **19.13** | **136** | P | **P** | **16 41 18.3** | **+0.5** |
| **MEEK** | **Meekatharra** | **20.57** | **198** | P | **P** | **16 41 32.2** | **+1.4** |
| **OOD** | **Oodnadatta** | **22.77** | **156** | P | **P** | **16 41 51.5** | **+1.0** |
| **MORW** | **Morawa** | **23.66** | **201** | P | **P** | **16 41 59.7** | **+1.1** |
| MORW | | | | IAmb | IAmb | 16 42 35.3 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **23.73** | **175** | P | **P** | **16 42 01.0** | **+1.9** |
| **FORT** | **Forrest** | **23.73** | **175** | P | **P** | **16 41 59.9** | **+0.8** |
| **KMBL** | **Kambalda** | **24.43** | **188** | P | **P** | **16 42 06.9** | **+1.5** |
| **MULG** | **Mulgathing** | **24.46** | **162** | P | **P** | **16 42 07.2** | **+1.6** |
| **BLDU** | **Ballidu** | **24.86** | **198** | P | **P** | **16 42 10.3** | **+1.1** |
| **LCRK** | **Leigh Creek** | **26.14** | **155** | P | **P** | **16 42 22.2** | **+1.7** |
| **QLP** | **Quilpie** | **26.34** | **140** | P | **P** | **16 42 23.4** | **+1.1** |
| **NWAO** | **Narrogin (SRO)** | **26.88** | **196** | P | **P** | **16 42 28.2** | **+1.1** |
| **NWAO** | **Narrogin (SRO)** | **26.88** | **196** | P | **P** | **16 42 28.4** | **+1.4** |
| **NWAO** | **Narrogin (SRO)** | **26.88** | **196** | P | **P** | **16 42 28.1** | **+1.1** |
| **BBOO** | **Buckleboo** | **27.43** | **161** | P | **P** | **16 42 32.7** | **+0.8** |
| **BBOO** | **Buckleboo** | **27.43** | **161** | P | **P** | **16 42 32.7** | **+0.8** |
| BBOO | | | | IAmb | IAmb | 16 42 54.7 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **28.89** | **151** | P | **P** | **16 42 46.1** | **+1.4** |
| **STKA** | **Stephens Creek** | **28.89** | **151** | P | **P** | **16 42 45.6** | **+0.9** |
| **STKA** | **Stephens Creek** | **28.89** | **151** | P | **P** | **16 42 45.6** | **+0.9** |
| | comp=Z,4.7nm,0.7s,baz=339,slow=9.4,SNR=18 | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **HTT** | **Hallett** | **29.03** | **156** | P | **P** | **16 42 47.6** | **+1.6** |
| **QIZ** | **Qiongzhong** | **30.18** | **329** | P | **P** | **16 42 56.0** | **-0.1** |
| **CMSA** | **Comar Meteorol** | **30.79** | **145** | P | **P** | **16 43 02.4** | **+1.3** |
| **ARPS** | **Mount Arapiles** | **33.11** | **156** | P | **P** | **16 43 22.8** | **+1.9** |
| **GC1S** | **Gold Coast 1 S** | **33.78** | **132** | P | **P** | **16 43 27.9** | **+1.3** |
| **YNG** | **Young** | **34.35** | **145** | P | **P** | **16 43 33.9** | **+2.4** |
| **TOO** | **Toolangi** | **35.38** | **152** | P | **P** | **16 43 41.0** | **+1.0** |
| **TOO** | **Toolangi** | **35.38** | **152** | P | **P** | **16 43 42.1** | **+2.1** |
| TOO | | | | IAmb | IAmb | 16 44 20.7 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **35.44** | **146** | P | **P** | **16 43 42.6** | **+2.1** |
| CAN | | | | IAmb | IAmb | 16 43 52.6 | |
| | comp=Z,32nm,1.5s | | | | | | |
| **KSRS** | **Korea Array** | **44.33** | **3** | P | **P** | **16 44 51.2** | **-0.6** |
| | comp=Z,1.1nm,0.7s,baz=179,slow=9.1,SNR=2.2 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.96** | **14** | P | **P** | **16 44 56.5** | **-0.3** |
| | comp=Z,2.9nm,0.6s,baz=188,slow=8.8,SNR=14 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **44.96** | **14** | P | **P** | **16 44 56.1** | **-0.8** |
| MJB9 | | | | IAmb | IAmb | 16 45 23.1 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **JSD** | **Sado** | **46.40** | **14** | P | **P** | **16 45 08.1** | **+0.3** |
| **JMM** | **Marumori** | **46.89** | **17** | P | **P** | **16 45 13.0** | **+1.5** |
| **JTM** | **Tenmabayashi** | **49.70** | **15** | P | **P** | **16 45 33.1** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **51.34** | **6** | P | **P** | **16 45 45.1** | **+0.7** |
| | comp=Z,2.2nm,0.7s,baz=200,slow=7.2,SNR=8.2 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **57.20** | **345** | P | **P** | **16 46 27.0** | **+1.1** |
| | comp=Z,1.0nm,0.6s,baz=164,slow=9.9,SNR=4.7 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **CASY** | **Casey** | **60.04** | **187** | P | **P** | **16 46 46.0** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **65.84** | **21** | P | **P** | **16 47 22.6** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **65.84** | **21** | P | **P** | **16 47 22.8** | **+0.6** |
| | comp=Z,1.4nm,0.6s,baz=197,slow=3.0,SNR=5.5 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.91** | **329** | P | **P** | **16 47 24.0** | **+1.1** |
| **MKAR** | **Makanchi Array** | **65.91** | **329** | P | **P** | **16 47 23.5** | **+0.6** |
| | comp=Z,1.0nm,0.6s,baz=128,slow=8.3,SNR=9.3 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **66.08** | **329** | P | **P** | **16 47 24.8** | **+0.8** |
| MAKZ | | | | IAmb | IAmb | 16 47 47.7 | |
| | comp=Z,3.7nm,1.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.74** | **336** | P | **P** | **16 47 46.1** | **+0.1** |
| | comp=Z,1.2nm,0.4s,baz=116,slow=3.4,SNR=7.5 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.30** | **330** | P | **P** | **16 47 49.0** | **-0.4** |
| | comp=Z,1.3nm,0.2s,baz=134,slow=4.8,SNR=5.0 | | | | | | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| **VNDA** | **Vanda** | **72.96** | **172** | P | **P** | **16 48 06.7** | **+2.1** |
| **BVAR** | **Borovoye Array** | **75.79** | **329** | P | **P** | **16 48 22.1** | **+1.1** |
| | comp=Z,1.0nm,0.5s,baz=126,slow=7.6,SNR=6.8 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **TIXI** | **Tiksi** | **78.57** | **1** | P | **P** | **16 48 36.0** | **+0.3** |
| TIXI | | | | IAmb | IAmb | 16 49 12.7 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **79.83** | **323** | P | **P** | **16 48 43.4** | **+0.5** |
| **ABKAR** | **Akbulak array** | **79.83** | **323** | P | **P** | **16 48 43.7** | **+0.8** |
| ABKAR | | | | IAmb | IAmb | 16 48 57.3 | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.93** | **180** | P | **P** | **16 48 59.8** | **+1.1** |
| **QSPA** | **South Pole Qui** | **82.93** | **180** | P | **P** | **16 48 59.4** | **+0.7** |
| | comp=Z,0.5nm,0.6s,baz=251,slow=5.9,SNR=6.9 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |

**RSNC 16 16:50:34.4±0.0, 7°N±1°×77°W±°, h139km±3km, M3.5, mb3.6, ML3.5, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.27** | **187** | P | Pn | 16 50 52.8 | -1.1 |
| BARC | | | | S | Sn | 16 51 07.9 | -0.7 |
| **PAMC** | **Pamplona, Colo** | **0.65** | **43** | P | Pn | 16 50 55.4 | -0.6 |
| PAMC | | | | S | Sn | 16 51 12.2 | -0.1 |
| **RUSC** | **La Rusia** | **0.96** | **176** | P | Pn | 16 50 57.0 | -1.4 |
| RUSC | | | | S | Sn | 16 51 15.6 | -1.0 |
| **PTBC** | **PUERTO BERRIO,** | **1.34** | **256** | P | Pn | 16 50 59.3 | -2.1 |
| PTBC | | | | S | Sn | 16 51 20.0 | -2.0 |
| **OCAC** | **Ocana** | **1.38** | **353** | P | Pn | 16 51 00.5 | -1.5 |
| OCAC | | | | S | Sn | 16 51 21.9 | -1.3 |
| **TAMC** | **Tame, Arauca** | **1.41** | **107** | P | Pn | 16 51 01.3 | -1.0 |
| TAMC | | | | S | Sn | 16 51 22.9 | -0.6 |
| **SPBC** | **San Pablo de B** | **1.51** | **217** | P | Pn | 16 51 01.9 | -1.5 |
| SPBC | | | | S | Sn | 16 51 23.7 | -1.8 |
| **ZARC** | **Zaragoza, Cauc** | **1.81** | **290** | P | Pn | 16 51 05.4 | -1.2 |
| ZARC | | | | S | Sn | 16 51 29.9 | -1.4 |
| **NORC** | **Norcasia** | **2.14** | **233** | P | Pn | 16 51 08.7 | -1.9 |
| NORC | | | | S | Sn | 16 51 36.1 | -2.3 |
| **CHIC** | **Chingaza** | **2.29** | **195** | P | Pn | 16 51 11.3 | -1.5 |
| CHIC | | | | S | Sn | 16 51 40.7 | -1.6 |
| **ROSC** | **El Rosal** | **2.32** | **210** | P | Pn | 16 51 13.3 | +0.1 |
| ROSC | | | | S | Sn | 16 51 44.0 | +1.1 |
| **UREC** | **San Jos de Ur** | **2.52** | **291** | P | Pn | 16 51 16.7 | +1.4 |
| UREC | | | | S | Sn | 16 51 43.6 | -3.2 |
| **VILC** | **Villavicencio,** | **2.78** | **191** | P | Pn | 16 51 16.9 | -1.8 |
| VILC | | | | S | Sn | 16 51 51.1 | -1.8 |
| **PTGC** | **Puerto Gaitan,** | **2.83** | **159** | P | Pn | 16 51 16.3 | -2.9 |
| PTGC | | | | S | Sn | 16 51 49.8 | -4.0 |
| **CBOC** | **Ciudad Bolivar** | **3.01** | **251** | P | Pn | 16 51 21.1 | -0.6 |
| CBOC | | | | S | Sn | 16 51 56.8 | -1.3 |
| **DBBC** | **Dabeiba** | **3.04** | **273** | P | Pn | 16 51 20.6 | -1.4 |
| DBBC | | | | S | Sn | 16 51 54.8 | -3.9 |
| **ARGC** | **Ariguani, Magd** | **3.17** | **340** | P | Pn | 16 51 23.4 | -0.2 |
| ARGC | | | | S | Sn | 16 52 00.2 | -1.4 |
| **ANIL** | **Santa Ana** | **3.25** | **224** | P | Pn | 16 51 25.2 | +0.3 |
| ANIL | | | | S | Sn | 16 52 03.9 | 0.0 |
| **APAC** | **Apartado, Choc** | **3.56** | **287** | P | Pn | 16 51 26.4 | -2.2 |
| APAC | | | | S | Sn | 16 52 07.4 | -3.1 |
| **PRAC** | **Prado** | **3.57** | **209** | P | Pn | 16 51 26.4 | -2.4 |
| PRAC | | | | S | Sn | 16 52 09.3 | -1.7 |
| **ORTC** | **Ortega, Tolima** | **3.60** | **216** | P | Pn | 16 51 28.2 | -1.0 |
| ORTC | | | | P | | 16 51 28.5 | |
| ORTC | | | | S | Sn | 16 52 12.6 | +1.0 |
| **SJCC** | **San Jacinto, C** | **3.62** | **326** | P | Pn | 16 51 26.4 | -3.1 |
| SJCC | | | | S | Sn | 16 52 07.7 | -4.5 |
| **PLMC** | **San Jos del P** | **3.67** | **238** | P | Pn | 16 51 28.3 | -1.9 |
| PLMC | | | | S | Sn | 16 52 12.2 | -1.2 |
| **LCBC** | **Los crdobas,** | **3.75** | **302** | P | Pn | 16 51 31.0 | -0.2 |
| LCBC | | | | S | Sn | 16 52 13.9 | -1.3 |
| **URMC** | **La Uribe, Meta** | **3.79** | **199** | P | Pn | 16 51 30.3 | -1.5 |
| URMC | | | | S | Sn | 16 52 14.0 | -2.2 |
| **CRJC** | **Cerrejon, Guaj** | **4.14** | **4** | P | Pn | 16 51 32.9 | -3.5 |
| CRJC | | | | P | Pn | 16 51 33.1 | -3.3 |
| CRJC | | | | P | Pn | 16 51 33.2 | -3.2 |
| CRJC | | | | S | Sn | 16 52 20.0 | -4.5 |
| **SMRC** | **Santa Marta, M** | **4.41** | **346** | P | Pn | 16 51 38.1 | -1.7 |
| SMRC | | | | S | Sn | 16 52 25.0 | -5.6 |
| **CAPC** | **Capurgana** | **4.52** | **293** | P | Pn | 16 51 38.6 | -2.7 |
| CAPC | | | | S | Sn | 16 52 26.3 | -7.0 |
| **JAMC** | **Jamundi, Valle** | **5.04** | **224** | P | Pn | 16 51 45.8 | -2.7 |
| JAMC | | | | S | Sn | 16 52 46.0 | -0.1 |

*MEX **16** 17:02:11.4±1.1, 15°.25N×92°.12W, h163km±11km, MD4.0*
*CATAC **16** 17:02:21.0±0.5, 15°.30N×92°.01W, h0km, ML3.1*
**ISC 16 17:02:08.7±2.6, 15°.25N±0°.09×92°.03W±0°.08, h166km±16km, n13, σ1s29/24, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAVE** | **Pavencul** | **0.15** | **247** | *eP* | **Pn** | **17 02 31.6** | **+0.5** |
| PAVE | | | | *eS* | **Sn** | **17 02 47.5** | **-0.6** |
| **CHUJ** | **Union Juarez** | **0.17** | **205** | *eP* | **Pn** | **17 02 31.3** | **+0.1** |
| CHUJ | | | | *eS* | **Sn** | **17 02 48.6** | **+0.3** |
| **THIG** | | **0.41** | **213** | *eP* | **Pn** | **17 02 31.9** | **+0.4** |
| THIG | | | | *eS* | **Sn** | **17 02 48.5** | **-0.4** |
| **SOKI** | **Kika Raxquin** | **0.74** | **125** | *iP* | **Pn** | **17 02 34.4** | **+0.7** |
| SOKI | | | | IAML | | 17 02 35.1 | |
| | comp=Z,510nm,1.0s | | | | | | |
| SOKI | | | | *iS* | Sn | 17 02 43.3 | -10 |
| **RTAL** | **Retalhuleu** | **0.80** | **156** | *iP* | **Pn** | **17 02 34.3** | **+0.7** |
| RTAL | | | | IAML | | 17 02 35.0 | |
| | comp=Z,280nm,1.0s | | | | | | |
| RTAL | | | | *iS* | A | 17 02 53.2 | |
| **QUIS** | **Sacapulas** | **0.91** | **88** | *iP* | **Pn** | **17 02 34.7** | **+0.2** |
| QUIS | | | | IAML | | 17 02 35.4 | |
| | comp=Z,2µm,1.0s | | | | | | |
| QUIS | | | | *iS* | **Sn** | **17 02 52.5** | **-1.7** |
| **CCIG** | **Comitan** | **1.03** | **354** | *eP* | **Pn** | **17 02 36.9** | **+1.5** |
| CCIG | | | | *eS* | **Sn** | **17 02 55.5** | **-0.6** |
| **CCIG** | **Comitan** | **1.03** | **354** | *iP* | **Pn** | **17 02 37.5** | **+2.0** |
| CCIG | | | | *iS* | **Sn** | **17 02 56.3** | **+0.2** |
| CCIG | | | | IAML | | 17 02 58.3 | |
| | comp=Z,450nm,1.0s | | | | | | |
| **PCIG** | | **1.23** | **292** | *eP* | **Pn** | **17 02 37.8** | **+0.9** |
| PCIG | | | | *eS* | **Sn** | **17 02 58.1** | **-0.5** |
| **TGIG** | | **1.84** | **326** | *eP* | **Pn** | **17 02 43.1** | **-0.1** |
| TGIG | | | | *eS* | **Sn** | **17 03 08.6** | **-1.3** |
| **NILT** | **Santiago Nilte** | **2.81** | **298** | *iP* | **Pn** | **17 02 56.4** | **+2.1** |
| NILT | | | | *iS* | **Sn** | **17 03 29.0** | **-0.8** |
| **UXUV** | **UXUV** | **2.89** | **316** | *eP* | **Pn** | **17 02 56.2** | **+0.9** |
| UXUV | | | | *eS* | **Sn** | **17 03 29.0** | **-2.5** |
| **CMIG** | **Matias Romero** | **3.29** | **304** | *eP* | **Pn** | **17 03 01.4** | **+1.0** |
| CMIG | | | | *eS* | **Sn** | **17 03 38.2** | **-2.4** |

*SNET **16** 17:11:14.4±0.7, 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TGUH | Tegucigalpa,Un | 2.07 | 13 | *e*P | | Pn | 17 11 48.0 | +0.8 | |
| YUSH | Yuscaran | 2.11 | 24 | *e*P | | Pn | 17 11 48.9 | +1.2 | |
| JAYA | Jayaque - finc | 2.33 | 314 | IAML | | | 17 12 25.6 | | |
| | comp=Z,280nm,0.2s | | | | | | | | |
| NUBE | Las Nubes | 2.73 | 313 | *e*P | | Pn | 17 11 55.7 | -0.6 | |
| MTO3 | Montecristo | 2.84 | 326 | *i* P | | Pn | 17 11 58.9 | +1.0 | |
| MTO3 | | | | *i* S | | Sn | 17 12 31.0 | -0.4 | |
| MTO3 | | | | IAML | | | 17 12 40.1 | | |
| | comp=Z,62nm,1.0s | | | | | | | | |

*IDC* ***16*** *18:14:08.5±0.8,55°.52N×153°.93W,h0km,mb3.9/15, mbtmp3.9/18,ML4.0/3,MS3.1/4,Error ellipse: s-maj=21.4km s-min=15.2km az=10.0*
*NEIC* ***16*** *18:14:09.5±2.3,55°.40N±0°.06×153°.85W±0°.09,h15km±5km, mb4.4/28,ML4.0/44,ML3.9(AEIC),Error ellipse: s-maj=9.6km s-min=5.9km az=138.0*
*AEIC* ***16*** *18:14:12.2±2.7,55°.27N±0°.06×153°.83W±0°.09,h12km±5km, Error ellipse: s-maj=9.5km s-min=7.4km az=165.0*

**ISC 16 18:14:09.1±0.5,55°.50N±0°.06×153°.78W±0°.04,h10km, n251,σ1§26/251,mb4.2/26,1C,South of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **SII** | **Sitkinak Islan** | **1.08** | **348** | P | **Pn** | **18** | **14 30.8** | **+0.4** |
| **SII** | **Sitkinak Islan** | **1.08** | **348** | | **Pn** | **18** | **14 30.8** | **+0.4** |
| SII | | | | Sg | **Sn** | **18** | **14 44.5** | **-1.0** |
| SII | | | | IAML | | 18 | 14 46.5 | |
| | comp=N,3μm,0.9s | | | | | | | |
| SII | | | | IAML | | 18 | 14 52.6 | |
| | comp=E,2μm,0.8s | | | | | | | |
| **CHIR** | **Chirikof Islan** | **1.09** | **288** | | **Pb** | **18** | **14 28.6** | **-1.5** |
| CHIR | | | | Sg | **Sg** | **18** | **14 42.1** | **-2.1** |
| CHIR | | | | IAML | | 18 | 14 43.1 | |
| | comp=E,3μm,0.8s | | | | | | | |
| CHIR | | | | IAML | | 18 | 14 43.2 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **OHAK** | **Old Harbor** | **1.75** | **9** | P | **Pb** | **18** | **14 40.2** | **-1.0** |
| **OHAK** | **Old Harbor** | **1.75** | **9** | Pn | **Pb** | **18** | **14 40.1** | **-1.2** |
| OHAK | | | | Sn | **Sn** | **18** | **15 01.5** | **-0.2** |
| **R18K** | **Karluk** | **2.10** | **350** | | **Pb** | **18** | **14 45.4** | **-1.9** |
| **KDAK** | **Kodiak Island** | **2.38** | **16** | Pn | **Pn** | **18** | **14 48.9** | **+0.7** |
| KDAK | | | | Sn | **Sn** | **18** | **15 14.8** | **-2.6** |
| **KDAK** | **Kodiak Island** | **2.38** | **16** | Pn | **Pn** | **18** | **14 48.4** | **+0.2** |
| | comp=N,30nm,0.3s,baz=221,slow=4.4,SNR=826 | | | | | | | |
| KDAK | | | | Sn | **Sn** | **18** | **15 16.5** | **-0.8** |
| | comp=N,19nm,0.3s,baz=288,slow=20,SNR=13 | | | | | | | |
| KDAK | | | | LR | LR | 18 | 15 30.4 | |
| | comp=N,211nm,20.2s,baz=285,slow=34 | | | | | | | |
| | comp=N,178nm,0.5s | | | | | | | |
| **PLK4** | **Peulik 4** | **2.57** | **327** | | **Sn** | **18** | **15 22.9** | **+0.7** |
| **PLK4** | **Peulik 4** | **2.57** | **327** | Pn | **Pn** | **18** | **14 51.4** | **+0.6** |
| **PLK4** | **Peulik 4** | **2.57** | **327** | IAML | | 18 | 15 25.6 | |
| | comp=E,964nm,0.6s | | | | | | | |
| PLK4 | | | | IAML | | 18 | 15 32.4 | |
| | comp=N,872nm,0.7s | | | | | | | |
| **PLK3** | **Peulik 3** | **2.59** | **329** | | **Pn** | **18** | **14 52.0** | **+0.9** |
| PLK3 | | | | | **Sn** | **18** | **15 22.9** | **+0.3** |
| **PLK2** | **Peulik 2** | **2.67** | **329** | | **Pn** | **18** | **14 53.6** | **+1.5** |
| PLK2 | | | | | **Sn** | **18** | **15 25.2** | **+0.7** |
| **CHGN** | **Chignik** | **2.73** | **289** | Pn | **Pn** | **18** | **14 51.6** | **-1.3** |
| CHGN | | | | IAML | | 18 | 15 23.4 | |
| | comp=N,992nm,0.4s | | | | | | | |
| CHGN | | | | IAML | | 18 | 15 26.1 | |
| | comp=E,727nm,0.3s | | | | | | | |
| **ANNE** | **Aniakchak Nort** | **2.77** | **302** | | **Pn** | **18** | **14 53.4** | **-0.3** |
| **PLK1** | **Peulik 1** | **2.78** | **327** | | **Pn** | **18** | **14 55.0** | **+1.3** |
| PLK1 | | | | | **Sn** | **18** | **15 26.9** | **-0.4** |
| **ANON** | **Aniakchak** | **2.83** | **302** | | **Pn** | **18** | **14 54.7** | **+0.3** |
| **ANPB** | **Aniakchak Plen** | **2.83** | **299** | | **Pn** | **18** | **14 53.8** | **-0.7** |
| **ACHA** | **Angle Creek He** | **2.84** | **343** | | **Pn** | **18** | **14 55.3** | **+0.7** |
| **AZAC** | **Aniakchak** | **2.85** | **301** | | **Pn** | **18** | **14 54.7** | **0.0** |
| **ANCK** | **Angle Creek** | **2.86** | **342** | | **Pn** | **18** | **14 55.9** | **+1.1** |
| **KAKN** | **Katmai Knife C** | **2.89** | **346** | | **Pn** | **18** | **14 56.5** | **+1.2** |
| **KABU** | **Katmai Buttres** | **2.89** | **344** | | **Pn** | **18** | **14 56.7** | **+1.4** |
| **R16K** | **Pilot Point** | **2.95** | **316** | | **Pn** | **18** | **14 56.2** | **+0.2** |
| R16K | | | | IAML | | 18 | 15 45.9 | |
| | comp=N,406nm,1.0s | | | | | | | |
| R16K | | | | IAML | | 18 | 16 11.3 | |
| | comp=E,509nm,1.1s | | | | | | | |
| **CNTC** | **Contact Creek** | **3.00** | **338** | | **Pn** | **18** | **14 57.7** | **+0.9** |
| CNTC | | | | | **Sn** | **18** | **15 33.7** | **+0.9** |
| **PLK5** | **Peulik 5** | **3.03** | **327** | | **Pn** | **18** | **14 58.2** | **+1.2** |
| **KAHG** | **Katmai Hook Gl** | **3.03** | **352** | | **Pn** | **18** | **14 59.2** | **+2.0** |
| **SYI** | **Shuyak Island** | **3.21** | **13** | | **Pn** | **18** | **15 00.3** | **+0.8** |
| SYI | | | | IAML | | 18 | 15 42.4 | |
| | comp=N,123nm,1.1s | | | | | | | |
| **KAHC** | **Katmai Hardscr** | **3.22** | **349** | | **Pn** | **18** | **15 01.1** | **+1.3** |
| **VNFG** | **Fog Glacier, M** | **3.34** | **286** | | **Pn** | **18** | **15 01.0** | **-0.5** |
| **CNBA** | **Chernabura Isl** | **3.40** | **261** | | **Pn** | **18** | **14 59.0** | **-3.1** |
| CNBA | | | | IAML | | 18 | 15 36.8 | |
| | comp=N,345nm,0.6s | | | | | | | |
| CNBA | | | | IAML | | 18 | 15 45.8 | |
| | comp=E,204nm,0.6s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.44** | **1** | | **Pn** | **18** | **15 04.2** | **+1.5** |
| Q19K | | | | IAML | | 18 | 15 49.9 | |
| | comp=N,501nm,0.9s | | | | | | | |
| **SDPT** | **Sand Point** | **3.82** | **270** | P | **Pn** | **18** | **15 05.9** | **-2.0** |
| **SDPT** | **Sand Point** | **3.82** | **270** | | **Pn** | **18** | **15 05.3** | **-2.6** |
| **AUCH** | **Augustine Cone** | **3.88** | **3** | | **Pn** | **18** | **15 10.8** | **+2.0** |
| **AU22** | **Augustine Moun** | **3.88** | **3** | | **Pn** | **18** | **15 11.1** | **+2.3** |
| **AUL** | **Augustine Lava** | **3.90** | **3** | | **Pn** | **18** | **15 10.9** | **+1.9** |
| **P18K** | **Big Mountain,** | **3.98** | **349** | Pn | **Pn** | **18** | **15 10.8** | **+0.7** |
| **P19K** | **Oil Pt** | **4.17** | **4** | | **Pn** | **18** | **15 13.8** | **+1.0** |
| P19K | | | | IAML | | 18 | 16 10.7 | |
| | comp=E,223nm,0.5s | | | | | | | |
| P19K | | | | IAML | | 18 | 16 10.7 | |
| | comp=N,199nm,0.5s | | | | | | | |
| **P16K** | **Nushagak River** | **4.21** | **329** | | **Pn** | **18** | **15 13.6** | **+0.3** |
| **CNPM** | **China Poot** | **4.26** | **18** | Pn | **Pn** | **18** | **15 14.8** | **+0.8** |
| CNPM | | | | IAML | | 18 | 16 12.1 | |
| | comp=N,82nm,0.9s | | | | | | | |
| CNPM | | | | IAML | | 18 | 16 16.5 | |
| | comp=E,104nm,0.8s | | | | | | | |
| **HOM** | **Homer** | **4.32** | **15** | | **Pn** | **18** | **15 16.2** | **+1.4** |
| **O18K** | **Koktuh Hills** | **4.43** | **351** | Pn | **Pn** | **18** | **15 17.3** | **+1.0** |
| O18K | | | | IAML | | 18 | 16 09.9 | |
| | comp=N,158nm,1.0s | | | | | | | |
| O18K | | | | IAML | | 18 | 16 12.3 | |
| | comp=E,114nm,1.1s | | | | | | | |
| **BRLK** | **Bradley Lake** | **4.55** | **19** | | **Pn** | **18** | **15 18.1** | **+0.1** |
| BRLK | | | | IAML | | 18 | 16 21.7 | |
| | comp=N,66nm,1.0s | | | | | | | |
| BRLK | | | | IAML | | 18 | 16 25.4 | |
| | comp=E,65nm,0.8s | | | | | | | |
| **PVV** | **Pavlof Volcano** | **4.56** | **272** | | **Pn** | **18** | **15 16.2** | **-1.9** |
| **HAG** | **Hague Volcano** | **4.63** | **271** | | **Pn** | **18** | **15 16.1** | **-1.0** |
| **O17K** | **Koliganek Bris** | **4.64** | **339** | | **Pn** | **18** | **15 19.6** | **+0.5** |
| **S12K** | **Black Hills** | **4.70** | **276** | Pn | **Pn** | **18** | **15 18.2** | **-1.8** |
| **O16K** | **Kokwok River B** | **4.71** | **332** | Pn | **Pn** | **18** | **15 20.2** | **0.0** |
| **RSO** | **Redoubt South** | **5.00** | **6** | | **Pn** | **18** | **15 25.4** | **+1.1** |
| **N18K** | **Kilae Creek** | **5.31** | **349** | Pn | **Pn** | **18** | **15 29.2** | **+0.8** |
| **N19K** | **Bonanza Creek** | **5.34** | **356** | | **Pn** | **18** | **15 30.0** | **+1.1** |
| **N17K** | **Nushagak Hills** | **5.35** | **342** | Pn | **Pn** | **18** | **15 29.7** | **+0.7** |
| **O22K** | **Cooper Landing** | **5.44** | **22** | | **Pn** | **18** | **15 30.4** | **+0.3** |
| **O14K** | **Tigyukauivet M** | **5.52** | **316** | | **Pn** | **18** | **15 31.4** | **+0.1** |
| **FALS** | **False Pass** | **5.56** | **267** | P | **Pn** | **18** | **15 30.0** | **-1.8** |
| **Q23K** | **Middleton Isla** | **5.62** | **42** | Pn | **Pn** | **18** | **15 34.0** | **+1.4** |
| **MID** | **Middleton Isla** | **5.62** | **43** | Pn | **Pn** | **18** | **15 33.4** | **+0.7** |
| **P23K** | **Montague Islan** | **5.65** | **35** | | **Pn** | **18** | **15 32.8** | **-0.3** |
| **SVW2** | **Sparrevohn** | **5.69** | **351** | P | **Pn** | **18** | **15 35.2** | **+1.6** |
| **SVW2** | **Sparrevohn** | **5.69** | **351** | Pn | **Pn** | **18** | **15 33.8** | **+0.2** |
| **N15K** | **Kwethluk River** | **5.76** | **327** | Pn | **Pn** | **18** | **15 35.1** | **+0.5** |
| **SPU** | **Mount Spurr** | **5.77** | **8** | | **Pn** | **18** | **15 35.2** | **+0.4** |
| **SPCR** | **Spurr Chakacha** | **5.77** | **8** | | **Pn** | **18** | **15 36.1** | **+1.2** |
| **FIS** | **Fire Island** | **5.96** | **17** | Pn | **Pn** | **18** | **15 38.7** | **+1.4** |
| **RC01** | **Rabbit Creek A** | **5.99** | **19** | | **Pn** | **18** | **15 37.5** | **-0.3** |
| **PWL** | **Port Wells** | **6.09** | **26** | | **Pn** | **18** | **15 39.0** | **-0.1** |
| **M16K** | **Timber Creek** | **6.17** | **336** | Pn | **Pn** | **18** | **15 38.9** | **-1.3** |
| **SUA** | **Susitna One** | **6.19** | **14** | Pn | **Pn** | **18** | **15 40.8** | **+0.2** |
| **M17K** | **Holitna River** | **6.22** | **344** | | **Pn** | **18** | **15 41.0** | **+0.1** |
| **HIN** | **Hinchinbrook I** | **6.25** | **35** | Pn | **Pn** | **18** | **15 42.6** | **+1.2** |
| **WEBT** | **Westdahl Beart** | **6.37** | **266** | | **Pn** | **18** | **15 40.9** | **-2.2** |
| **WECS** | **Westdahl Cape** | **6.40** | **266** | | **Pn** | **18** | **15 41.5** | **-1.9** |
| **M20K** | **Styx River** | **6.41** | **3** | | **Pn** | **18** | **15 45.0** | **+1.4** |
| **M19K** | **Big River Lodg** | **6.43** | **357** | Pn | **Pn** | **18** | **15 44.7** | **+1.0** |
| **GLI** | **Glacier Island** | **6.44** | **30** | | **Pn** | **18** | **15 44.1** | **+0.2** |
| **M22K** | **Willow** | **6.55** | **15** | Pn | **Pn** | **18** | **15 45.7** | **+0.3** |
| **PMR** | **Palmer** | **6.57** | **20** | P | **Pn** | **18** | **15 47.6** | **+1.9** |
| **PMR** | **Palmer** | **6.57** | **20** | Pn | **Pn** | **18** | **15 46.8** | **+1.1** |
| **SKT** | **Skwentna** | **6.60** | **9** | Pn | **Pn** | **18** | **15 46.5** | **+0.4** |
| **EYAK** | **Cordova Ski Ar** | **6.62** | **37** | P | **Pn** | **18** | **15 48.3** | **+2.0** |
| **KAIM** | **Kayak Island** | **6.69** | **45** | Pn | **Pn** | **18** | **15 49.0** | **+1.6** |
| **L19K** | **White Mountain** | **6.72** | **356** | Pn | **Pn** | **18** | **15 48.6** | **+0.8** |
| **GHO** | **Glory Hole Cre** | **6.78** | **20** | | **Pn** | **18** | **15 48.6** | **0.0** |
| **M14K** | **Bethel** | **6.81** | **324** | Pn | **Pn** | **18** | **15 48.6** | **-0.3** |
| **RAGM** | **Ragged Mountai** | **6.89** | **41** | | **Pn** | **18** | **15 51.4** | **+1.3** |
| **L16K** | **Owhat River** | **6.90** | **337** | | **Pn** | **18** | **15 50.7** | **+0.6** |
| **L18K** | **Granite Mounta** | **6.90** | **349** | Pn | **Pn** | **18** | **15 51.4** | **+1.1** |
| **SML** | **Sawmill** | **6.93** | **22** | | **Pn** | **18** | **15 50.7** | **0.0** |
| **GOAT** | **Goat Mountain** | **7.00** | **40** | | **Pn** | **18** | **15 52.2** | **+0.6** |
| **HMT** | **Hamilton** | **7.01** | **42** | Pn | **Pn** | **18** | **15 53.3** | **+1.6** |
| **SUCK** | **Suckling Hills** | **7.04** | **45** | | **Pn** | **18** | **15 53.4** | **+1.3** |
| **DIV** | **Divide** | **7.04** | **33** | | **Pn** | **18** | **15 52.7** | **+0.5** |
| **NICHA** | **Nichawak Mount** | **7.06** | **44** | | **Pn** | **18** | **15 54.2** | **+1.8** |
| **M13K** | **Dall Lake** | **7.08** | **318** | Pn | **Pn** | **18** | **15 53.0** | **+0.4** |
| **CUT** | **Chulitna** | **7.16** | **13** | Pn | **Pn** | **18** | **15 53.9** | **+0.2** |
| **SCM** | **Sheep Creek Mo** | **7.18** | **25** | | **Pn** | **18** | **15 54.3** | **+0.1** |
| **KLU** | **Klutina** | **7.28** | **31** | | **Pn** | **18** | **15 56.2** | **+0.7** |
| **GRIN** | **Grindle Hills** | **7.35** | **45** | | **Pn** | **18** | **15 57.8** | **+1.4** |
| **SNH** | **Sunshine Point** | **7.49** | **47** | Pn | **Pn** | **18** | **16 00.0** | **+1.7** |
| **WAX** | **Waxell Ridge** | **7.63** | **45** | | **Pn** | **18** | **16 01.0** | **+0.6** |
| **M24K** | **Tolsona, Glenn** | **7.71** | **28** | | **Pn** | **18** | **16 02.6** | **+1.2** |
| **CRQM** | **Cirque** | **7.71** | **43** | | **Pn** | **18** | **16 02.5** | **+1.0** |
| **BARK** | **Barkley Ridge** | **7.75** | **46** | | **Pn** | **18** | **16 03.2** | **+1.2** |
| **N25K** | **Chitina, Valde** | **7.77** | **34** | Pn | **Pn** | **18** | **16 02.6** | **+0.4** |
| **MGOD** | **Makushin Gods** | **7.79** | **263** | | **Pn** | **18** | **15 59.3** | **-3.1** |
| **MAPS** | **Pakushin South** | **7.82** | **263** | | **Pn** | **18** | **15 59.6** | **-3.3** |
| **WAT1** | **Susitna Watana** | **7.82** | **18** | | **Pn** | **18** | **16 03.6** | **+0.7** |
| **TGL** | **Tana Glacier** | **7.83** | **43** | | **Pn** | **18** | **16 04.0** | **+1.0** |
| **MESA** | **MESA** | **7.86** | **49** | | **Pn** | **18** | **16 03.8** | **+0.3** |
| **K20K** | **Telida** | **7.88** | **359** | | **Pn** | **18** | **16 04.2** | **+0.6** |
| **VRDI** | **Verde Repeater** | **7.89** | **39** | Pn | **Pn** | **18** | **16 03.2** | **-0.9** |
| **K15K** | **Wolf Creek Mou** | **7.90** | **333** | Pn | **Pn** | **18** | **16 04.5** | **+0.6** |
| **GLB** | **Gilahina Butte** | **7.92** | **37** | | **Pn** | **18** | **16 03.6** | **-0.6** |
| **ISLE** | **Juniper Island** | **7.93** | **45** | | **Pn** | **18** | **16 04.5** | **0.0** |
| **BAGL** | **Bagley Icefiel** | **7.97** | **46** | | **Pn** | **18** | **16 06.1** | **+1.3** |
| **J18K** | **Innoko River** | **8.12** | **351** | | **Pn** | **18** | **16 08.0** | **+1.0** |
| **MCARA** | **McCarthy VSAT** | **8.15** | **39** | | **Pn** | **18** | **16 07.8** | **+0.4** |
| **RKAV** | **Rock Avalanche** | **8.18** | **49** | | **Pn** | **18** | **16 09.3** | **+1.4** |
| **HARP** | **HAARP** | **8.22** | **29** | | **Pn** | **18** | **16 10.2** | **+1.9** |
| **GRNC** | **Granite Creek** | **8.24** | **46** | | **Pn** | **18** | **16 08.9** | **+0.1** |
| **DHY** | **Denali Highway** | **8.27** | **21** | Pn | **Pn** | **18** | **16 09.7** | **+0.5** |
| **RND** | **Reindeer** | **8.31** | **16** | Pn | **Pn** | **18** | **16 10.1** | **+0.4** |
| **TABL** | **Table Mountain** | **8.34** | **48** | | **Pn** | **18** | **16 11.5** | **+1.3** |
| **SAMH** | **Samovar Hills** | **8.34** | **51** | | **Pn** | **18** | **16 11.4** | **+1.3** |
| **J17K** | **VABM Dome** | **8.36** | **343** | | **Pn** | **18** | **16 10.7** | **+0.5** |
| **J16K** | **Anvik River** | **8.54** | **339** | | **Pn** | **18** | **16 13.7** | **+1.0** |
| **CTGM** | **Chitina Glacie** | **8.54** | **45** | | **Pn** | **18** | **16 13.9** | **+1.0** |
| **J19K** | **Poorman** | **8.57** | **355** | Pn | **Pn** | **18** | **16 13.7** | **+0.6** |
| **LOGN** | **Logan Glacier** | **8.60** | **46** | | **Pn** | **18** | **16 14.2** | **+0.5** |
| **PAX** | **Paxson** | **8.61** | **26** | | **Pn** | **18** | **16 14.3** | **+0.6** |
| **MCK** | **McKinley** | **8.61** | **15** | | **Pn** | **18** | **16 15.0** | **+1.3** |
| **J20K** | **Nowinta River** | **8.70** | **359** | Pn | **Pn** | **18** | **16 15.6** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **8.74** | **8** | Pn | **Pn** | **18** | **16 15.8** | **+0.3** |
| **PNL** | **Peninsula** | **8.78** | **56** | P | **Pn** | **18** | **16 17.6** | **+1.6** |
| **PNL** | **Peninsula** | **8.78** | **56** | | **Pn** | **18** | **16 17.6** | **+1.6** |
| **BCPM** | **Bancas Point** | **8.78** | **54** | | **Pn** | **18** | **16 16.2** | **+0.3** |
| **M26K** | **Nabesna, AK** | **8.87** | **34** | Pn | **Pn** | **18** | **16 19.0** | **+1.7** |
| **I17K** | **Unalakleet** | **9.10** | **340** | Pn | **Pn** | **18** | **16 20.5** | **+0.2** |
| **M27K** | **Edge Creek, AK** | **9.21** | **37** | | **Pn** | **18** | **16 23.0** | **+0.9** |
| **I20K** | **Naaghedeneel** | **9.33** | **358** | Pn | **Pn** | **18** | **16 24.6** | **+1.1** |
| **YUK8** | **Steele Glacier** | **9.36** | **46** | | **Pn** | **18** | **16 26.5** | **+2.4** |
| **O29M** | **Mount Kennedy** | **9.41** | **53** | | **Pn** | **18** | **16 26.2** | **+1.5** |
| **NEA2** | **Nenana** | **9.41** | **13** | Pn | **Pn** | **18** | **16 25.4** | **+0.8** |
| **WRH** | **Wood River Hil** | **9.43** | **15** | | **Pn** | **18** | **16 25.3** | **+0.4** |
| **P29M** | **Windy Craggy** | **9.55** | **58** | | **Pn** | **18** | **16 27.4** | **+0.8** |
| **HDA** | **Harding Lake** | **9.56** | **18** | | **Pn** | **18** | **16 27.2** | **+0.6** |
| **CCB** | **Clear Creek Bu** | **9.64** | **16** | | **Pn** | **18** | **16 27.7** | **0.0** |
| **MLY** | **Manley** | **9.68** | **8** | | **Pn** | **18** | **16 29.0** | **+0.7** |
| **L27K** | **Beaver Creek,** | **9.72** | **34** | Pn | **Pn** | **18** | **16 30.1** | **+1.2** |
| **BCAR** | **Beaver Creek A** | **9.74** | **34** | | **Pn** | **18** | **16 29.6** | **+0.4** |
| **SCRK** | **Sand Creek** | **9.82** | **26** | Pn | **Pn** | **18** | **16 31.3** | **+0.9** |
| **CLES** | **Cleveland East** | **9.82** | **261** | Pn | **Pn** | **18** | **16 28.9** | **-1.4** |
| **COLA** | **College** | **9.85** | **15** | P | **Pn** | **18** | **16 32.5** | **+1.9** |
| **COLA** | **College** | **9.85** | **15** | | **Pn** | **18** | **16 30.1** | **-0.4** |
| **MDM** | **Murphy Dome** | **9.88** | **14** | | **Pn** | **18** | **16 30.4** | **-0.6** |
| **IL31** | | **9.90** | **17** | | **Pn** | **18** | **16 31.1** | **-0.2** |
| **ILAR** | **Eielson Array** | **9.90** | **17** | Pn | **Pn** | **18** | **16 31.6** | **+0.2** |
| | comp=E,4.7nm,0.3s,baz=208,slow=13,SNR=5.4 | | | | | | | |
| ILAR | | | | Sn | **Sn** | **18** | **18 19.6** | **-2.9** |
| | comp=E,0.4nm,0.3s,baz=208,slow=22,SNR=7.0 | | | | | | | |
| **IL03** | **Eielson Array** | **9.91** | **17** | Pn | **Pn** | **18** | **16 32.0** | **+0.6** |
| **I23K** | **Minto, Yukon-K** | **9.92** | **11** | | **Pn** | **18** | **16 31.7** | **+0.2** |
| **S31K** | **Pelican** | **9.95** | **68** | Pn | **Pn** | **18** | **16 32.4** | **+0.4** |
| **J25K** | **Salcha River,** | **10.05** | **21** | | **Pn** | **18** | **16 33.9** | **+0.5** |
| **POKR** | **Poker Plat Res** | **10.14** | **15** | | **Pn** | **18** | **16 34.6** | **+0.1** |
| **H19K** | **Roundabout Mou** | **10.14** | **354** | Pn | **Pn** | **18** | **16 35.4** | **+0.8** |
| **H21K** | **Melozitna Rive** | **10.20** | **2** | Pn | **Pn** | **18** | **16 35.7** | **+0.3** |
| **M29M** | **Somme Creek** | **10.51** | **42** | | **Pn** | **18** | **16 40.6** | **+0.8** |
| **IMAR** | **Indian Mountai** | **10.52** | **0** | | **Pn** | **18** | **16 40.6** | **+0.9** |
| **G18K** | **Tagagawik** | **10.69** | **349** | | **Pn** | **18** | **16 43.1** | **+1.0** |
| **O30N** | **Mendenhall** | **10.72** | **53** | | **Pn** | **18** | **16 44.0** | **+1.4** |
| **H24K** | **Noodor Dome** | **10.76** | **13** | | **Pn** | **18** | **16 43.0** | **-0.1** |
| **S32K** | **Killisnoo** | **10.80** | **72** | | **Pn** | **18** | **16 42.5** | **-1.0** |
| **R32K** | **Eaglecrest** | **10.89** | **67** | | **Pn** | **18** | **16 44.7** | **-0.1** |
| **JIS** | **Juneau Island** | **10.96** | **67** | P | **Pn** | **18** | **16 47.9** | **+2.1** |
| **G21K** | **Allakaket** | **11.05** | **1** | | **Pn** | **18** | **16 46.7** | **-0.3** |
| **G23K** | **Bananza Creek** | **11.39** | **8** | Pn | **Pn** | **18** | **16 51.0** | **-0.7** |
| **P32M** | **Atlin** | **11.52** | **61** | Pn | **Pn** | **18** | **16 54.9** | **+1.5** |
| **F19K** | **Shaleruckik Mo** | **11.53** | **352** | Pn | **Pn** | **18** | **16 54.2** | **+0.7** |
| **F20K** | **Avaarart Lake** | **11.62** | **356** | Pn | **Pn** | **18** | **16 54.8** | **0.0** |
| **U33K** | **Whale Pass** | **11.64** | **78** | Pn | **Pn** | **18** | **16 53.5** | **-1.6** |
| **CRAG** | **Craig** | **11.72** | **82** | Pn | **Pn** | **18** | **16 54.6** | **-1.5** |
| **M31M** | **Drury Creek, Y** | **12.04** | **48** | Pn | **Pn** | **18** | **17 02.4** | **+1.7** |
| **E19K** | **Redstone River** | **12.11** | **354** | Pn | **Pn** | **18** | **17 02.1** | **+0.7** |
| **I29M** | **Ogilvie Camp,** | **12.45** | **31** | Pn | **Pn** | **18** | **17 08.8** | **+2.6** |
| **FARO** | **Faro, Yukon** | **12.50** | **49** | | **Pn** | **18** | **17 08.6** | **+1.8** |
| **BMAR** | **Burnt Mountain** | **12.73** | **16** | | **Pn** | **18** | **17 10.1** | **+0.1** |
| **G27K** | **Doyon Strip** | **12.73** | **22** | | **Pn** | **18** | **17 10.4** | **+0.4** |
| **R33M** | **Jennings River** | **12.86** | **63** | Pn | **Pn** | **18** | **17 10.5** | **-1.4** |
| **I30M** | **Mount Dempster** | **12.95** | **34** | Pn | **Pn** | **18** | **17 14.1** | **+1.0** |
| **H29M** | **Whitestone** | **13.06** | **28** | Pn | **Pn** | **18** | **17 14.9** | **+0.4** |
| **DLBC** | **Dease Lake** | **13.26** | **67** | Pn | **Pn** | **18** | **17 15.8** | **-1.5** |
| **DLBC** | **Dease Lake** | **13.26** | **67** | Pn | **Pn** | **18** | **17 20.4** | **+3.0** |
| | comp=E,0.5nm,0.3s,baz=254,slow=14,SNR=7.8 | | | | | | | |
| DLBC | | | | LR | LR | 18 | 21 18.9 | |
| | comp=E,121nm,19.2s,baz=274,slow=32 | | | | | | | |
| | comp=E,3.9nm,0.6s | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **13.54** | **49** | Pn | **Pn** | **18** | **17 22.4** | **+1.3** |
| **EPYK** | **Eagle Plains** | **13.63** | **30** | Pn | **Pn** | **18** | **17 22.9** | **+0.7** |
| **E27K** | **Coleen River** | **13.92** | **19** | Pn | **Pn** | **18** | **17 26.4** | **+0.2** |
| **D25K** | **Kavik River** | **14.27** | **11** | | **Pn** | **18** | **17 30.8** | **-0.2** |
| **E28M** | **Babbage River** | **14.68** | **21** | | **Pn** | **18** | **17 37.8** | **+1.2** |
| **D27M** | **Malcolm River** | **14.96** | **18** | Pn | **Pn** | **18** | **17 41.6** | **+1.2** |
| **F31M** | **Tsiigehtchic** | **15.22** | **30** | IAmb | IAmb | 18 | 17 52.2 | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **BBB** | **Bella Bella** | **15.48** | **92** | LR | LR | 18 | 22 16.3 | |
| | comp=Z,141nm,19.8s,baz=266,slow=31 | | | | | | | |
| **INK** | **Inuvik** | **15.87** | **28** | IAmb | IAmb | 18 | 17 59.2 | |
| | comp=Z,40nm,1.1s | | | | | | | |
| **INK** | **Inuvik** | **15.87** | **28** | Pn | **P** | **18** | **17 53.4** | **-2.6** |
| | comp=Z,0.3nm,0.3s,baz=224,slow=12,SNR=15 | | | | | | | |
| INK | | | | LR | LR | 18 | 24 07.7 | |
| | comp=Z,45nm,20.6s,baz=286,slow=38 | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **WRGLY** | **Wrigley** | **17.14** | **51** | | **P** | **18** | **18 08.5** | **-1.5** |
| WRGLY | | | | IAmb | IAmb | 18 | 18 26.9 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| **C36M** | **Paulatuk** | **19.23** | **32** | P | **Pn** | **18** | **18 34.0** | **0.0** |
| **A36M** | **Sachs Harbour** | **20.43** | **25** | P | **P** | **18** | **18 45.9** | **-0.2** |
| **YKA** | **Yellowknife Ar** | **21.07** | **55** | P | **P** | **18** | **18 52.0** | **-1.1** |
| **YKA** | **Yellowknife Ar** | **21.07** | **55** | P | **P** | **18** | **18 54.8** | **+1.7** |
| | comp=Z,8.6nm,0.9s,baz=275,slow=10,SNR=16 | | | | | | | |
| | comp=Z,8.6nm,0.9s | | | | | | | |
| **F03A** | **Seaside** | **21.24** | **104** | P | **P** | **18** | **18 53.9** | **-1.2** |
| **B08A** | **Colville Reser** | **22.23** | **94** | P | **P** | **18** | **19 04.6** | **-1.2** |
| B08A | | | | IAmb | IAmb | 18 | 19 20.0 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **H04A** | **Detroit Lake** | **22.78** | **105** | P | **P** | **18** | **19 09.6** | **-2.0** |
| H04A | | | | IAmb | IAmb | 18 | 19 26.0 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **D08A** | **Wollman Farm,** | **23.17** | **97** | P | **P** | **18** | **19 15.8** | **+0.2** |
| D08A | | | | IAmb | IAmb | 18 | 19 28.9 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **G08A** | **Pilot Rock** | **24.19** | **100** | P | **P** | **18** | **19 25.6** | **0.0** |
| **KRPM** | **Rodgers** | **24.20** | **114** | P | **P** | **18** | **19 25.0** | **-0.7** |
| KRPM | | | | IAmb | IAmb | 18 | 19 41.5 | |
| | comp=Z,29nm,1.3s | | | | | | | |
| **I07A** | **Izee** | **24.64** | **103** | P | **P** | **18** | **19 29.4** | **-0.4** |
| **KMPM** | **Mount Pierce** | **24.69** | **115** | P | **P** | **18** | **19 28.5** | **-1.7** |
| KMPM | | | | IAmb | IAmb | 18 | 19 34.1 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **24.75** | **97** | P | **P** | **18** | **19 27.9** | **-2.8** |
| **J08A** | **Circle Bar Ran** | **25.68** | **103** | P | **P** | **18** | **19 39.3** | **+0.2** |
| **HATC** | **Hat Creek Radi** | **25.79** | **111** | P | **P** | **18** | **19 37.3** | **-2.9** |
| HATC | | | | IAmb | IAmb | 18 | 20 20.3 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **26.20** | **105** | P | **P** | **18** | **19 43.9** | **0.0** |
| WVOR | | | | IAmb | IAmb | 18 | 20 01.0 | |
| | comp=Z,8.4nm,1.0s | | | | | | | |
| **PAHR** | **Pah Rah Range** | **27.69** | **110** | P | **P** | **18** | **19 54.1** | **-3.3** |
| **HLID** | **Hailey** | **27.81** | **99** | P | **P** | **18** | **19 56.0** | **-2.4** |
| **PETK** | **Petropavlovsk-** | **27.95** | **286** | | **PcP** | **18** | **23 15.3** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **27.95** | **286** | P | **P** | **18** | **19 59.9** | **+0.5** |
| | comp=Z,1.8nm,0.5s,baz=82,slow=13,SNR=8.4 | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| **KVN** | **Kaiserville** | **28.86** | **110** | P | **P** | **18** | **20 05.0** | **-2.8** |
| KVN | | | | IAmb | IAmb | 18 | 20 28.1 | |
| | comp=Z,6.6nm,1.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **29.20** | **111** | P | **P** | **18** | **20 13.3** | **+2.5** |
| | comp=Z,0.5nm,0.7s,baz=322,slow=9.4,SNR=4.8 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,19nm,1.1s | | | | | | |
| **MQZ** | **McQueen's Vall** | **16.07 203** | P | **P** | **18 18 12.8** | **-2.8** |
| MQZ | | | IAmb | IAmb | 18 18 24.1 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **33.09 278** | P | **P** | **18 20 58.5** | **+1.2** |
| | comp=Z,0.2nm,0.8s,baz=102,slow=13,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **33.09 278** | P | **P** | **18 20 58.2** | **+0.9** |
| CTAO | | | IAmb | IAmb | 18 21 24.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **34.24 255** | P | **P** | **18 21 08.7** | **+1.5** |
| **ASAR** | **Alice Springs** | **42.65 266** | P | **P** | **18 22 16.7** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=98,slow=7.5,SNR=3.7 | | | | | | |
| **WB2** | **Warramunga Arr** | **43.51 271** | P | **P** | **18 22 24.7** | **+0.6** |
| WB2 | | | IAmb | IAmb | 18 23 06.0 | |
| | comp=Z,7.8nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.52 271** | P | **P** | **18 22 23.6** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=108,slow=7.8,SNR=20 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **FORT** | **Forrest** | **45.84 254** | P | **P** | **18 22 42.4** | **+0.1** |
| FORT | | | IAmb | IAmb | 18 22 42.7 | |
| | comp=Z,42nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **50.08 274** | P | **P** | **18 23 15.5** | **+0.6** |
| KNRA | | | IAmb | IAmb | 18 23 35.2 | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.83 269** | P | **P** | **18 23 29.0** | **+1.2** |
| **CASY** | **Casey** | **55.95 207** | P | **P** | **18 23 55.7** | **-1.1** |
| **QSPA** | **South Pole Qui** | **60.91 180** | P | **P** | **18 24 30.4** | **-0.8** |
| QSPA | | | IAmb | IAmb | 18 24 39.6 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **60.91 180** | P | **P** | **18 24 34.3** | **+3.0** |
| | comp=Z,1.0nm,0.7s,baz=49,slow=0.7,SNR=11 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **SMAI** | **San Martin Ant** | **70.74 158** | P | **P** | **18 25 34.1** | **+0.5** |
| **TROLL** | **Troll, Antarti** | **79.06 180** | ⇑Pdiff | **P** | **18 26 22.2** | **+0.9** |
| | comp=Z,49nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **79.36 179** | P | **P** | **18 26 21.5** | **-1.4** |
| **VNA3** | **Neumayer Olymp** | **79.53 176** | ⇑Pdiff | **P** | **18 26 24.1** | **+0.3** |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **79.96 177** | ⇑Pdiff | **P** | **18 26 26.7** | **+0.7** |
| | comp=Z,1.3nm,0.6s,baz=179,slow=4.8 | | | | | | |
| **H03S2** | **Juan Fernandez** | **81.58 124** | T | T | 19 57 10.0 | | |
| | baz=237 | | | | | | |
| **H03S1** | **Juan Fernandez** | **81.59 124** | T | T | 19 57 04.4 | | |
| | baz=237 | | | | | | |
| **H03S3** | **Juan Fernandez** | **81.59 124** | T | T | 19 57 08.5 | | |
| | baz=237 | | | | | | |
| **H03N3** | **Juan Fernandez** | **81.77 124** | T | T | 19 57 05.3 | | |
| | baz=236 | | | | | | |
| **H03N2** | **Juan Fernandez** | **81.77 124** | T | T | 19 57 06.9 | | |
| | baz=236 | | | | | | |
| **H03N1** | **Juan Fernandez** | **81.78 124** | T | T | 19 56 55.8 | | |
| | baz=236 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.73 43** | P | **P** | **18 27 04.4** | **-1.5** |
| | comp=Z,1.3nm,0.8s,baz=220,slow=8.3,SNR=7.5 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **GEVA** | **Gevas** | **144.43 296** | | **PKPab** | **18 33 50.8** | **-0.1** |
| **NC303** | **NORSAR Array S** | **147.29 351** | PKPdf | **PKPdf** | **18 33 56.0** | **+0.2** |
| **NOA** | **NORSAR Array B** | **147.49 351** | PKPbc | **PKPdf** | **18 33 56.8** | **+0.6** |
| | comp=Z,1.5nm,0.7s,baz=14,slow=4.3,SNR=3.9 | | | | | | |
| **HFS** | **Hagfors** | **147.97 348** | PKPbc | **PKPdf** | **18 33 57.4** | **+0.4** |
| | comp=Z,1.4nm,0.5s,baz=222,slow=2.0,SNR=7.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.02 324** | PKPbc | **PKPbc** | **18 34 03.9** | **-1.9** |
| | comp=Z,0.8nm,0.3s,baz=44,slow=3.2,SNR=6.4 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **150.70 286** | PKPbc | **PKiKP** | **18 34 08.4** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=104,slow=6.1,SNR=3.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **153.68 6** | PKPab | **PKPab** | **18 34 24.4** | **-3.1** |
| | comp=Z,2.1nm,0.8s,baz=317,slow=3.5,SNR=3.4 | | | | | | |

**NAM 16 18:15:32.6±4.4, 19°.71S×14°.46E, h19km±19km, ML0.1, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ST3N** | **ST3** | **0.05** | **136** | *i* P | | Pg | 18 15 35.4 | -0.9 |
| ST3N | | | | *i* S | | Sg | 18 15 39.0 | +0.3 |
| ST3N | | | | IAML | | | 18 15 40.3 | |
| | comp=Z,1.4nm,0.3s | | | | | | | |
| **ST3N** | **ST3** | **0.05** | **136** | *i* P | | Pg | 18 15 37.9 | +1.6 |
| ST3N | | | | *i* S | | Sg | 18 15 39.1 | +0.4 |
| ST3N | | | | IAML | | | 18 15 39.9 | |
| | comp=Z,2.9nm,0.0s | | | | | | | |
| **ST6N** | **ST6** | **0.11** | **214** | *i* P | | Pg | 18 15 39.4 | +2.7 |
| ST6N | | | | *i* S | | Sg | 18 15 42.0 | +2.4 |
| ST6N | | | | IAML | | | 18 15 42.5 | |
| | comp=Z,2.5nm,0.0s | | | | | | | |
| **ST9N** | **ST9** | **0.12** | **140** | *i* P | | Pb | 18 15 33.9 | -0.4 |
| ST9N | | | | IAML | | | 18 15 38.2 | |
| | comp=Z,16nm,0.4s | | | | | | | |
| **ST9N** | **ST9** | **0.12** | **140** | *i* P | | Pg | 18 15 37.1 | +0.3 |
| ST9N | | | | *i* S | | Sg | 18 15 37.6 | -2.0 |
| **ST8N** | **ST8** | **0.14** | **277** | *i* P | | Pg | 18 15 41.4 | +4.4 |
| ST8N | | | | IAML | | | 18 15 45.9 | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **ST8N** | **ST8** | **0.14** | **277** | *i* P | | Pg | 18 15 41.3 | +4.3 |
| ST8N | | | | *i* S | | Sg | 18 15 45.0 | +5.0 |
| ST8N | | | | IAML | | | 18 15 45.6 | |
| | comp=Z,0.5nm,0.0s | | | | | | | |
| **ST1N** | **ST1** | **0.14** | **102** | *i* P | | Pg | 18 15 37.5 | +0.5 |
| ST1N | | | | *i* S | | Sg | 18 15 38.9 | -1.1 |
| ST1N | | | | IAML | | | 18 15 40.6 | |
| | comp=Z,5.0nm,0.3s | | | | | | | |
| **ST1N** | **ST1** | **0.14** | **102** | *i* P | | Pg | 18 15 38.0 | +0.9 |
| ST1N | | | | *i* S | | Sg | 18 15 39.1 | -1.0 |
| ST1N | | | | IAML | | | 18 15 39.2 | |
| | comp=Z,6.6nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.25** | **150** | *i* P | | Pb | 18 15 29.6 | -8.8 |
| ST2N | | | | *i* S | | Sb | 18 15 40.6 | -1.7 |
| ST2N | | | | IAML | | | 18 15 41.5 | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **ST2N** | **ST2** | **0.25** | **150** | *i* P | | Pg | 18 15 38.8 | +0.2 |
| ST2N | | | | *i* S | | Sb | 18 15 41.3 | -1.0 |
| ST2N | | | | IAML | | | 18 15 43.1 | |
| | comp=Z,3.7nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.29** | **107** | *i* P | | Pg | 18 15 37.7 | -1.4 |
| ST5N | | | | IAML | | | 18 15 41.7 | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| ST5N | | | | *i* S | | Sb | 18 15 42.6 | -1.0 |
| **ST5N** | **ST5** | **0.29** | **107** | *i* P | | Pb | 18 15 40.0 | +0.8 |
| ST5N | | | | IAML | | | 18 15 40.1 | |
| | comp=Z,3.4nm,0.1s | | | | | | | |
| ST5N | | | | *i* S | | Sb | 18 15 42.7 | -0.9 |
| **ST4N** | **ST4** | **0.51** | **111** | *i* P | | Pb | 18 15 43.0 | -0.1 |
| ST4N | | | | *i* S | | Sg | 18 15 49.5 | -0.5 |
| ST4N | | | | IAML | | | 18 15 50.2 | |
| | comp=Z,0.5nm,0.3s | | | | | | | |

**WEL 16 18:17:13.7±0.6, 41°S±4°×17°.5E±°, h1km±3km, M2.1/9, ML2.3/12, MLv2.1/9, Error ellipse: s-maj=0.0km s-min=0.0km az=161.2, confirmed, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KIW** | **Kapiti Island** | **0.19** | **70** | P | | Pg | 18 17 17.3 | -0.1 |
| KIW | | | | S | | Sg | 18 17 20.0 | +0.2 |
| **CAW** | **Cannon Point** | **0.35** | **121** | P | | Pg | 18 17 20.3 | -0.1 |
| CAW | | | | S | | Sg | 18 17 25.0 | +0.1 |
| **OGWZ** | **Otaki Gorge** | **0.39** | **74** | P | | Pg | 18 17 21.0 | -0.2 |
| **TCW** | **Tory Channel** | **0.41** | **226** | P | | Pg | 18 17 21.8 | +0.2 |
| TCW | | | | S | | Sg | 18 17 27.3 | +0.3 |
| **BHW** | **Baring Head** | **0.51** | **163** | P | | Pg | 18 17 23.3 | -0.1 |
| BHW | | | | S | | Sg | 18 17 29.5 | -0.5 |
| **DUWZ** | **D'Urville Isla** | **0.58** | **282** | P | | Pg | 18 17 25.5 | +0.7 |
| **MSWZ** | **Moikau Station** | **0.66** | **139** | P | | Pg | 18 17 26.6 | +0.3 |
| MSWZ | | | | S | | Sg | 18 17 35.4 | +0.6 |
| **MTW** | **Mount Morrison** | **0.67** | **111** | P | | Pg | 18 17 26.7 | +0.1 |
| **PAWZ** | **Paruwai Farm** | **0.73** | **129** | P | | Pg | 18 17 27.8 | +0.1 |
| **MRZ** | **Mangatainoka R** | **0.74** | **69** | Pn | | Pg | 18 17 27.2 | -0.6 |
| **MRZ** | **Mangatainoka R** | **0.74** | **69** | P | | Pg | 18 17 27.6 | -0.2 |
| **TUWZ** | **Tuamarina** | **0.75** | **227** | P | | Pg | 18 17 27.6 | -0.4 |
| **PLWZ** | **Palliser** | **0.78** | **146** | P | | Pg | 18 17 29.1 | +0.5 |
| **TRWZ** | **Traveller** | **0.90** | **122** | P | | Pb | 18 17 31.7 | -0.4 |
| **TIWZ** | **Tintock** | **0.93** | **81** | P | | Pg | 18 17 31.7 | +0.1 |
| **TMWZ** | **Te Maipa** | **0.94** | **102** | P | | Pg | 18 17 31.9 | +0.2 |
| **NNZ** | **Nelson** | **1.02** | **253** | P | | Pg | 18 17 32.9 | -0.3 |
| **TKNZ** | **Takaka Hill** | **1.30** | **265** | P | | Pn | 18 17 39.4 | +0.4 |
| **MRNZ** | **Matariki Terra** | **1.52** | **251** | P | | Pn | 18 17 42.3 | +0.3 |
| **THZ** | **Tophouse** | **1.57** | **237** | P | | Pn | 18 17 43.1 | +0.3 |
| **QRZ** | **Quartz Range** | **1.63** | **273** | P | | Pb | 18 17 44.0 | -0.4 |

*TIR* ***16*** *18:18:53.7, 41°.82N×14°.20E, h2km, Ml5.8*

*MOS* ***16*** *18:19:04.3±1.0, 41°.95N×14°.76E, h11km, mb5.2/33, MS4.7/21, Error ellipse: s-maj=3.9km s-min=2.9km az=67.9*

*NEIC* ***16*** *18:19:04.5, 41°.77N×14°.74E, h20km, Moment Tensor Solution. Duration: 2s2 Moment tensor: Scale 10^17 Nm; Mrr=0.04; Mθθ=0.33; Mφφ=0.29; Mrθ=0.24; Mrφ=1.00; Mθφ=0.15; Fault plane solution: M0=1.08000×10^17 NP1: φs=278.00000°, δ=84.22000°, λ=166.03000°. NP2: φs=9.44000°, δ=76.10000°, λ=5.96000°. Principal axes: T 1.0923, Plg=14.0000°, Azm=233.0000°; N -0.0176, Plg=75.0000°, Azm=76.0000°; P -1.0747, Plg=6.0000°, Azm=324.0000°;*

*NEIC* ***16*** *18:19:04.5, 41°.87N×14°.87E, h20km*

*NEIC* ***16*** *18:19:04.5, 41°.87N×14°.87E, h4km*

*ROM* ***16*** *18:19:04.6±0.1, 41°.874N±0°.004×14°.865E±0°.005, h20km, ML5.2/470, Mw5.1, Mw5.1, Error ellipse: s-maj=0.4km s-min=0.2km az=36.0, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr=0.38; Mθθ=1.68; Mφφ=2.07; Mrθ=0.36; Mθφ=-5.33; Mφr=0.12; Fault plane solution: M0=5.66212×10^16 NP1: φs=10.00000°, δ=86.00000°, λ=-2.00000°. NP2: φs=100.00000°, δ=88.00000°, λ=-176.00000°.*

*BJI* ***16*** *18:19:04.0±0.0, 41°.90N×14°.80E, h10km, mb5.1/24, mB5.3/3*

*IDC* ***16*** *18:19:04.8±0.5, 42°.04N×14°.75E, h0km, mb4.5/21, mbtmp4.6/32, ML4.4/11, MS4.7/17, Error ellipse: s-maj=9.9km s-min=8.3km az=84.0*

*PDG* ***16*** *18:19:05.3±1.3, 41°.93N×14°.83E, h10km±8km, MD5.4/11, ML5.3/11, Error ellipse: s-maj=1.1km s-min=1.6km az=0.0*

*NEIC* ***16*** *18:19:05.4±2.3, 41°.88N±0°.04×14°.81E±0°.06, h12km±3km, mb5.3/129, Mwr5.2/44, Mww5.3/41, Error ellipse: s-maj=7.4km s-min=5.6km az=55.0, Moment Tensor Solution. Moment tensor: Scale 10^16 Nm; Mrr=0.66; Mθθ=2.77; Mφφ=2.10; Mrθ=0.09; Mθφ=-7.27; Mφr=2.99; Fault plane solution: M0=8.25000×10^16 NP1: φs=190.32000°, δ=84.78000°, λ=21.28000°. NP2: φs=98.29000°, δ=68.82000°, λ=174.40000°. Principal axes: T 8.1787, Plg=19.0000°, Azm=56.0000°; N 0.1490, Plg=68.0000°, Azm=203.0000°; P -8.3277, Plg=11.0000°, Azm=322.0000°;*

*MCSM* ***16*** *18:19:06.6±0.3, 42°.N±3°×1°.5E±°, h13km, mb5.1, mB5.5, MLv5.7, Mw(mB)5.0*

*MED_RC* ***16*** *18:19:06.0±0.1, 41°.88N×14°.93E, h14km±1km, MW5.3/32, Moment Tensor Solution. Body waves: s2,c2;Mantle waves: s32,c48; Duration: 1s7 Moment tensor: Scale 10^17 Nm; Mrr=0.09±.02; Mθθ=0.37±.02; Mφφ=0.46±.02; Mrθ=0.31±.05; Mθφ=-0.93±.02; Mφr=-0.01±.04; Best double couple: M0=1.07000×10^17 NP1: φs=283.00000°, δ=86.00000°, λ=-163.00000°. NP2: φs=191.00000°, δ=73.00000°, λ=-5.00000°. Principal axes: T 1.0900, Plg=9.0000°, Azm=56.0000°; N -0.0400, Plg=72.0000°, Azm=297.0000°; P -1.0500, Plg=15.0000°, Azm=148.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=40s.*

*CRAAG* ***16*** *18:19:06.2, 41°.88N×14°.82E, Mw5.3, Italie*

*BNS* ***16*** *18:19:06.3±0.7, 42°.00N×15°.05E, h10km, ML5.2*

*GCMT* ***16*** *18:19:07.4±0.2, 41°.83N±0°.01×14°.88E±0°.01, h15km±1km, MW5.3/93, Moment Tensor Solution. s39,c55; s93,c172; Duration: 1s1 Moment tensor: Scale 10^17 Nm; Mrr=0.04±.03; Mθθ=0.35±.02; Mφφ=0.38±.03; Mrθ=0.45±.08; Mθφ=0.98±.02; Mφr=0.19±.08; Best double couple: M0=1.15200×10^17 NP1: φs=100.00000°, δ=87.00000°, λ=156.00000°. NP2: φs=191.00000°, δ=66.00000°, λ=3.00000°. Principal axes: T 1.2040, Plg=19.0000°, Azm=53.0000°; N -0.1040, Plg=66.0000°, Azm=274.0000°; P -1.1000, Plg=15.0000°, Azm=148.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BEO* ***16*** *18:19:07.8±0.6, 41°.91N×14°.87E, h21km±6km, ML5.2/21*

*NAO* ***16*** *18:19:07.0, 41°.88N×14°.82E, h10km, mb4.7*

*BGS* ***16*** *18:19:07.9±4.3, 42°.00N×14°.98E, h10km, mb5.5*

*BGR* ***16*** *18:19:07.2±0.5, 41°.89N×14°.85E, h10km, ML5.6/13, Error ellipse: s-maj=8.9km s-min=7.8km az=22.0*

*PRU* ***16*** *18:19:08.2, 42°.05N×14°.36E, h0km, Ml5.3*

*LDG* ***16*** *18:19:09.9±0.3, 42°.01N×14°.54E, h10km, Ml4.9/46, Error ellipse: s-maj=5.1km s-min=4.5km az=1.0*

**ISC 16 18:19:05.0±0.6, 41°.86N±0°.02×14°.81E±0°.01, h11km±3km, n1365, σ2s36/1473, mb5.1/111, MS4.8/13, 111C-68D, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.15** | **319** | ⇓P | | **Pb** | **18 19 09.9** | **-0.1** |
| FRES | | | | S | | **Sg** | **18 19 14.0** | **+3.0** |
| FRES | | | | AML | AML | | | |
| FRES | | | | AML | AML | | | |
| FRES | | | | AML | AML | | | |
| FRES | | | | AML | AML | | | |
| **TRIV** | **Trivento** | **0.21** | **245** | ⇑P | | **Pb** | **18 19 10.9** | **0.0** |
| TRIV | | | | S | | **Sg** | **18 19 15.9** | **+3.4** |
| TRIV | | | | AML | AML | | | |
| TRIV | | | | AML | AML | | | |
| TRIV | | | | AML | AML | | | |
| TRIV | | | | AML | AML | | | |
| TRIV | | | | AML | AML | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.22** | **160** | ⇓P | | **Pb** | **18 19 10.2** | **-0.7** |
| CIGN | | | | S | | **Sg** | **18 19 14.2** | **+1.7** |
| CIGN | | | | AML | AML | | | |
| CIGN | | | | AML | AML | | | |
| CIGN | | | | AML | AML | | | |
| **MELA** | **Melanico ??? S** | **0.28** | **122** | ⇓P | | **Pg** | **18 19 10.9** | **+0.1** |
| MELA | | | | S | | **Sg** | **18 19 15.2** | **+0.6** |
| MELA | | | | AML | AML | | | |
| MELA | | | | AML | AML | | | |
| MELA | | | | AML | AML | | | |
| **BSSO** | **Busso** | **0.35** | **207** | ⇑P | | **Pb** | **18 19 13.0** | **-0.3** |
| BSSO | | | | S | | **Sb** | **18 19 19.5** | **+0.6** |
| BSSO | | | | AML | AML | | | |
| BSSO | | | | AML | AML | | | |
| BSSO | | | | AML | AML | | | |
| | comp=N,97350μm,0.7s | | | | | | | |
| BSSO | | | | AML | AML | | | |
| BSSO | | | | AML | AML | | | |
| **GATE** | **Gambatesa** | **0.35** | **167** | ⇓P | | **Pb** | **18 19 13.0** | **-0.3** |
| GATE | | | | S | | **Sb** | **18 19 18.6** | **-0.3** |
| GATE | | | | AML | AML | | | |
| GATE | | | | AML | AML | | | |
| GATE | | | | AML | AML | | | |
| GATE | | | | AML | AML | | | |
| GATE | | | | AML | AML | | | |
| GATE | | | | AML | AML | | | |
| GATE | | | | AML | AML | | | |
| GATE | | | | AML | AML | | | |
| **MIDA** | **Miranda** | **0.47** | **243** | ⇑P | | **Pg** | **18 19 14.6** | **+0.5** |
| MIDA | | | | S | | **Sb** | **18 19 22.8** | **+0.6** |
| MIDA | | | | AML | AML | | | |
| MIDA | | | | AML | AML | | | |
| MIDA | | | | AML | AML | | | |
| MIDA | | | | AML | AML | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **189** | P | | **Pg** | **18 19 14.4** | **+0.3** |
| SACR | | | | S | | **Sb** | **18 19 21.8** | **-0.4** |
| SACR | | | | AML | AML | | | |
| SACR | | | | AML | AML | | | |
| SACR | | | | AML | AML | | | |
| SACR | | | | AML | AML | | | |
| SACR | | | | AML | AML | | | |
| SACR | | | | AML | AML | | | |
| SACR | | | | AML | AML | | | |
| SACR | | | | AML | AML | | | |
| **LPEL** | **Lama dei Pelig** | **0.50** | **292** | P | | **Pg** | **18 19 15.4** | **+0.7** |
| LPEL | | | | S | | **Sb** | **18 19 25.0** | **+1.7** |
| LPEL | | | | AML | AML | | | |
| LPEL | | | | AML | AML | | | |
| LPEL | | | | AML | AML | | | |
| **RNI2** | **Rionero Sannit** | **0.51** | **253** | ⇑P | | **Pg** | **18 19 15.6** | **+0.6** |
| RNI2 | | | | S | | **Sb** | **18 19 24.4** | **+0.8** |
| RNI2 | | | | AML | AML | | | |
| RNI2 | | | | AML | AML | | | |
| RNI2 | | | | AML | AML | | | |
| RNI2 | | | | AML | AML | | | |
| **PTRJ** | **Pietraroja** | **0.54** | **203** | P | | **Pg** | **18 19 15.3** | **-0.1** |
| PTRJ | | | | S | | **Sb** | **18 19 23.6** | **-0.6** |
| PTRJ | | | | AML | AML | | | |
| PTRJ | | | | AML | AML | | | |
| PTRJ | | | | AML | AML | | | |
| | comp=E,958μm,0.6s | | | | | | | |
| PTRJ | | | | AML | AML | | | |
| PTRJ | | | | AML | AML | | | |
| PTRJ | | | | AML | AML | | | |
| | comp=E,958μm,1.4s | | | | | | | |
| PTRJ | | | | AML | AML | | | |
| **MOCO** | **Biccari - m.te** | **0.55** | **151** | ⇓P | | **Pg** | **18 19 15.8** | **0.0** |
| MOCO | | | | AML | AML | | | |
| MOCO | | | | AML | AML | | | |
| | comp=N,46700μm,1.6s | | | | | | | |
| MOCO | | | | AML | AML | | | |
| MOCO | | | | AML | AML | | | |
| | comp=N,50650μm,1.6s | | | | | | | |
| MOCO | | | | AML | AML | | | |
| MOCO | | | | AML | AML | | | |
| | comp=N,50650μm,0.4s | | | | | | | |
| MOCO | | | | AML | AML | | | |
| MOCO | | | | AML | AML | | | |
| | comp=N,48300μm,1.6s | | | | | | | |
| **APRC** | **Apricena** | **0.56** | **100** | P | | **Pg** | **18 19 14.8** | **-1.1** |
| APRC | | | | S | | **Sg** | **18 19 23.8** | **+0.5** |
| APRC | | | | AML | AML | | | |
| | comp=N,88550μm,1.6s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=N,88500μm,1.6s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=N,88500μm,0.4s | | | | | | | |
| APRC | | | | AML | AML | | | |
| APRC | | | | AML | AML | | | |
| APRC | | | | AML | AML | | | |
| **SGG** | **Gregorio Mates** | **0.57** | **214** | ⇑P | | **Pg** | **18 19 16.0** | **0.0** |
| SGG | | | | S | | **Sb** | **18 19 25.4** | **+0.2** |
| SGG | | | | AML | AML | | | |
| | comp=E,460nm,1.3s | | | | | | | |
| SGG | | | | AML | AML | | | |
| | comp=N,454nm,0.5s | | | | | | | |
| SGG | | | | AML | AML | | | |
| SGG | | | | AML | AML | | | |
| | comp=E,460nm,1.3s | | | | | | | |
| SGG | | | | AML | AML | | | |
| | comp=N,454nm,0.5s | | | | | | | |
| SGG | | | | AML | AML | | | |
| SGG | | | | AML | AML | | | |
| | comp=E,460nm,0.7s | | | | | | | |
| SGG | | | | AML | AML | | | |
| **VAGA** | **Valle Agricola** | **0.61** | **224** | P | | **Pg** | **18 19 16.9** | **0.0** |
| VAGA | | | | AML | AML | | | |
| VAGA | | | | AML | AML | | | |
| VAGA | | | | AML | AML | | | |
| VAGA | | | | AML | AML | | | |
| VAGA | | | | AML | AML | | | |
| **PSB1** | **Pescosannita** | **0.63** | **180** | ⇓P | | **Pg** | **18 19 16.9** | **-0.3** |
| PSB1 | | | | S | | **Sb** | **18 19 26.7** | **-0.3** |
| **CERA** | **Filignano** | **0.64** | **246** | ⇑P | | **Pg** | **18 19 17.2** | **-0.2** |
| CERA | | | | AML | AML | | | |
| CERA | | | | AML | AML | | | |
| CERA | | | | AML | AML | | | |
| CERA | | | | AML | AML | | | |
| CERA | | | | AML | AML | | | |
| CERA | | | | AML | AML | | | |
| CERA | | | | AML | AML | | | |
| CERA | | | | AML | AML | | | |
| **VITU** | **Vitulano (BN)** | **0.69** | **191** | P | | **Pg** | **18 19 17.7** | **-0.6** |
| VITU | | | | AML | AML | | | |
| VITU | | | | AML | AML | | | |
| VITU | | | | AML | AML | | | |
| VITU | | | | AML | AML | | | |
| **INTR** | **Introdacqua** | **0.69** | **283** | | | **Pg** | **18 19 18.2** | **-0.1** |
| INTR | | | | Sg | | **Sb** | **18 19 29.1** | **+0.4** |
| **INTR** | **Introdacqua** | **0.69** | **283** | ⇑P | | **Pg** | **18 19 18.2** | **-0.1** |
| INTR | | | | S | | **Sb** | **18 19 28.9** | **+0.2** |
| INTR | | | | AML | AML | | | |
| INTR | | | | AML | AML | | | |
| INTR | | | | AML | AML | | | |
| INTR | | | | AML | AML | | | |
| INTR | | | | AML | AML | | | |
| INTR | | | | AML | AML | | | |
| **BIOG** | **Biogem** | **0.70** | **159** | ⇓P | | **Pb** | **18 19 18.9** | **-0.4** |
| BIOG | | | | AML | AML | | | |
| BIOG | | | | AML | AML | | | |
| BIOG | | | | AML | AML | | | |
| BIOG | | | | AML | AML | | | |
| BIOG | | | | AML | AML | | | |
| BIOG | | | | AML | AML | | | |
| BIOG | | | | AML | AML | | | |
| **SGRT** | **San Giovanni R** | **0.71** | **98** | | | **Pg** | **18 19 17.0** | **-1.7** |
| SGRT | | | | Sg | | **Sg** | **18 19 27.9** | **-0.1** |
| **SGRT** | **San Giovanni R** | **0.71** | **98** | P | | **Pg** | **18 19 17.3** | **-1.4** |
| | baz=92 | | | | | | | |
| SGRT | | | | S | | **Sb** | **18 19 28.7** | **-0.6** |
| | baz=92 | | | | | | | |
| SGRT | | | | AMP | | | | |
| | comp=E,800nm,0.5s,baz=92 | | | | | | | |
| **SGRT** | **San Giovanni R** | **0.71** | **98** | ⇑P | | **Pg** | **18 19 17.1** | **-1.6** |
| **MRB1** | **Monte Rocchett** | **0.74** | **170** | ⇓P | | **Pg** | **18 19 18.9** | **-0.4** |
| MRB1 | | | | AML | AML | | | |
| MRB1 | | | | AML | AML | | | |
| MRB1 | | | | AML | AML | | | |
| MRB1 | | | | AML | AML | | | |
| **PIGN** | **Pignataro Magg** | **0.81** | **216** | ⇑P | | **Pg** | **18 19 19.9** | **-0.6** |
| PIGN | | | | AML | AML | | | |
| PIGN | | | | AML | AML | | | |
| PIGN | | | | AML | AML | | | |
| PIGN | | | | AML | AML | | | |
| PIGN | | | | AML | AML | | | |
| PIGN | | | | AML | AML | | | |
| PIGN | | | | AML | AML | | | |
| PIGN | | | | AML | AML | | | |
| **MCI** | **Monte Cassino** | **0.83** | **244** | P | | **Pg** | **18 19 20.6** | **-0.4** |
| **POFI** | **Posta Fibreno** | **0.83** | **261** | ⇑P | | **Pg** | **18 19 20.4** | **-0.6** |
| POFI | | | | AML | AML | | | |
| POFI | | | | AML | AML | | | |
| POFI | | | | AML | AML | | | |
| POFI | | | | AML | AML | | | |
| POFI | | | | AML | AML | | | |
| POFI | | | | AML | AML | | | |
| **SGTA** | **Sant Agata di** | **0.83** | **150** | ⇓P | | **Pg** | **18 19 19.9** | **-1.2** |
| SGTA | | | | AML | AML | | | |
| SGTA | | | | AML | AML | | | |
| SGTA | | | | AML | AML | | | |
| SGTA | | | | AML | AML | | | |
| SGTA | | | | AML | AML | | | |
| SGTA | | | | AML | AML | | | |
| **MSAG** | **Monte S. Angel** | **0.84** | **100** | P | | **Pg** | **18 19 20.1** | **-1.1** |
| MSAG | | | | AML | AML | | | |
| MSAG | | | | AML | AML | | | |
| | comp=E,92050μm,0.4s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| MSAG | | | | AML | AML | | | |
| **PAOL** | **Paolisi** | **0.84** | **192** | Pg | | **Pg** | **18 19 20.1** | **-1.2** |
| PAOL | | | | Sg | | **Sb** | **18 19 33.6** | **+0.4** |
| **PAOL** | **Paolisi** | **0.84** | **192** | P | | **Pg** | **18 19 20.5** | **-0.8** |
| PAOL | | | | AML | AML | | | |
| PAOL | | | | AML | AML | | | |
| PAOL | | | | AML | AML | | | |
| PAOL | | | | AML | AML | | | |
| **T0110** | **Collepietro** | **0.85** | **296** | P | | **Pg** | **18 19 21.7** | **+0.3** |
| T0110 | | | | AML | AML | | | |
| T0110 | | | | AML | AML | | | |
| T0110 | | | | AML | AML | | | |
| T0110 | | | | AML | AML | | | |
| **VVLD** | **Villa Vallelon** | **0.88** | **271** | ⇑P | | **Pg** | **18 19 21.2** | **-0.9** |
| **CAFE** | **Carife** | **0.89** | **158** | ⇓P | | **Pg** | **18 19 21.0** | **-1.1** |
| CAFE | | | | AML | AML | | | |
| CAFE | | | | AML | AML | | | |
| CAFE | | | | AML | AML | | | |
| CAFE | | | | AML | AML | | | |
| CAFE | | | | AML | AML | | | |
| CAFE | | | | AML | AML | | | |
| CAFE | | | | AML | AML | | | |
| **VCEL** | **Villa Celiera** | **0.90** | **307** | P | | **Pg** | **18 19 21.9** | **-0.4** |
| VCEL | | | | AML | AML | | | |
| VCEL | | | | AML | AML | | | |
| **LRP** | **Arpino** | **0.94** | **257** | ⇑P | | **Pg** | **18 19 22.1** | **-0.9** |
| LRP | | | | AML | AML | | | |
| LRP | | | | AML | AML | | | |
| LRP | | | | AML | AML | | | |
| **MTMR** | **Montemarano** | **0.95** | **171** | P | | **Pg** | **18 19 22.8** | **-0.5** |
| MTMR | | | | AML | AML | | | |

MTMR AML AML
comp=N,89950µm,0.5s
MTMR AML AML
MTMR AML AML
comp=N,90000µm,0.6s
MTMR AML AML
MTMR AML AML
MTMR AML AML
MTMR AML AML
**SNAL S. Angelo Dei 0.98 162** P **Pg 18 19 22.1 -1.7**
SNAL AML AML
SNAL AML AML
SNAL AML AML
SNAL AML AML
SNAL AML AML
SNAL AML AML
SNAL AML AML
SNAL AML AML
**FAGN Fagnano 1.00 295** P **Pg 18 19 24.0 -0.2**
FAGN AML AML
FAGN AML AML
**LIK San Giovanni I 1.00 250** P **Pg 18 19 23.7 -0.5**
LIK AML AML
LIK AML AML
LIK AML AML
**PTQR Pietraquaria 1.06 279** P **Pb 18 19 24.2 -1.2**
PTQR AML AML
PTQR AML AML
PTQR AML AML
PTQR AML AML
**CRTO Cratere Ovest, 1.07 196** P **Pn 18 19 26.4 +0.2**
CRTO AML AML
CRTO AML AML
CRTO AML AML
CRTO AML AML
**OVO Vesuviano 1.07 197** ⇑P **Pn 18 19 26.0 0.0**
OVO AML AML
OVO AML AML
OVO AML AML
**VCRE Vesuvio Crater 1.07 195** P **Pn 18 19 26.2 0.0**
VCRE AML AML
VCRE AML AML
VCRE AML AML
**VTIR Vesuvio Tirone 1.09 195** P **Pg 18 19 25.9 0.0**
VTIR AML AML
comp=E,86000µm,1.0s
VTIR AML AML
comp=N,69000µm,1.6s
VTIR AML AML
comp=E,86000µm,1.0s
VTIR AML AML
comp=N,69000µm,0.4s
**GIGS Gran Sasso 1.09 303** ⇓P **Pb 18 19 24.5 -1.5**
GIGS AML AML
comp=N,69750µm,0.9s
GIGS AML AML
comp=E,61850µm,0.9s
GIGS AML AML
comp=N,69750µm,1.1s
**MCRV Calabrutti - M 1.11 166** P **Pb 18 19 24.7 -1.5**
MCRV AML AML
MCRV AML AML
comp=N,90050µm,0.8s
**CMSN Campi Flegrei 1.12 205** P **Pn 18 19 26.9 +0.3**
**CSOB Campi Flegrei 1.14 206** ⇑P **Pn 18 19 27.0 0.0**
**CAAM Accademia Aero 1.15 206** ⇑P **Pg 18 19 27.1 0.0**
**TRTR Tortoreto Alta 1.16 325** P **Pn 18 19 27.4 +0.2**
TRTR AML AML
TRTR AML AML
**TERO Teramo 1.18 311** P **Pb 18 19 25.9 -1.4**
**MRLC Muro Lucano 1.22 155** P **Pn 18 19 25.9 -2.1**
MRLC AML AML
comp=E,20550µm,0.7s
MRLC AML AML
comp=N,24200µm,1.3s
MRLC AML AML
comp=E,45450µm,0.7s
MRLC AML AML
comp=N,47850µm,1.6s
MRLC AML AML
comp=E,20550µm,1.3s
MRLC AML AML
comp=N,24200µm,0.7s
MRLC AML AML
comp=E,45450µm,1.3s
**CAMP Campotosto 1.24 304** **Pn 18 19 26.9 -1.5**
**CAMP Campotosto 1.24 304** P **Pn 18 19 27.2 -1.2**
CAMP AML AML
CAMP AML AML
CAMP AML AML
**PALZ Palazzo San Ge 1.26 136** P **Pn 18 19 27.2 -1.4**
PALZ AML AML
PALZ AML AML
**IOCA Ischia Osserva 1.30 212** P **Pn 18 19 28.9 -0.2**
IOCA AML AML
IOCA AML AML
IOCA AML AML
**FIAM Fiamignano 1.32 289** P **Pn 18 19 29.2 -0.3**
FIAM AML AML
FIAM AML AML
FIAM AML AML
**SMA1 SAN MARTINO 1.34 306** P **Pn 18 19 29.0 -0.8**
SMA1 AML AML
SMA1 AML AML
SMA1 AML AML
**RM33 Pellescritta ( 1.35 299** P **Pn 18 19 29.8 -0.1**
RM33 AML AML
RM33 AML AML
RM33 AML AML
RM33 AML AML
RM33 AML AML
RM33 AML AML
**CERT Cerreto 1.36 274** P **Pn 18 19 28.9 -1.2**
CERT AML AML
comp=N,74950µm,0.7s
CERT AML AML
**ACER Acerenza 1.37 141** P **Pn 18 19 29.2 -0.9**
ACER AML AML
comp=N,52900µm,1.0s
ACER AML AML
comp=E,67450µm,0.5s
ACER AML AML
comp=N,55650µm,1.0s
ACER AML AML
comp=N,52900µm,1.0s
ACER AML AML
comp=E,64000µm,0.5s
ACER AML AML
comp=N,55650µm,1.0s
**MTRA Matera 1.38 311** P **Pg 18 19 31.9 +0.4**
**RCAV Rocca di Cave 1.39 270** P **Pn 18 19 29.7 -0.7**
RCAV AML AML
comp=E,63700µm,0.9s
RCAV AML AML
comp=N,80850µm,1.6s
RCAV AML AML
comp=E,63700µm,1.1s
RCAV AML AML
comp=N,80850µm,0.4s
**LATB Latina 1.43 256** P **Pn 18 19 30.0 -0.8**
**VENT Ventotene 1.49 225** P **Pn 18 19 31.3 -0.4**
VENT AML AML
comp=E,74850µm,1.1s
VENT AML AML
comp=N,82550µm,0.9s
**MF5 Montefalcone A 1.51 319** P **Pb 18 19 33.3 +0.3**
MF5 AML AML
MF5 AML AML
**LNSS Leonessa 1.51 300** P **Pg 18 19 34.5 +0.6**
LNSS AML AML
LNSS AML AML
**MMO1 Montemonaco 1.51 314** P **Pg 18 19 34.2 +0.2**
**VIVA Pratoni del Vi 1.52 267** P **Pn 18 19 32.2 0.0**
VIVA AML AML
VIVA AML AML
VIVA AML AML
**CADA Capodarco di F 1.54 330** P **Pg 18 19 34.9 +0.3**
**MTCE Montecelio 1.55 277** P **Pb 18 19 34.3 +0.6**
MTCE AML AML
comp=E,79450µm,1.1s
MTCE AML AML
comp=N,56650µm,0.9s
MTCE AML AML
comp=E,79450µm,0.9s
**RMP Rome, Mte Porz 1.57 269** P **Pb 18 19 34.1 0.0**
RMP AML AML
comp=N,77450µm,1.6s
RMP AML AML
comp=N,77450µm,0.4s
RMP AML AML
comp=E,66600µm,1.0s
**CMPR Campora 1.58 166** P **Pn 18 19 32.3 -0.8**
CMPR AML AML
comp=E,52650µm,1.3s
CMPR AML AML
comp=N,26900µm,0.9s
**NRCA Norcia 1.59 308** **Pn 18 19 32.5 -0.7**
**NRCA Norcia 1.59 308** P **Pn 18 19 33.6 +0.4**
NRCA AML AML
NRCA AML AML
NRCA AML AML
comp=N,99650µm,0.7s
NRCA AML AML
**SLCN Sala Consilina 1.59 157** P **Pn 18 19 32.7 -0.6**
SLCN AML AML
comp=E,50550µm,0.6s
SLCN AML AML
comp=E,58150µm,0.6s
SLCN AML AML
comp=N,51100µm,1.0s
SLCN AML AML
comp=E,58150µm,1.4s
SLCN AML AML
comp=N,55850µm,1.0s
SLCN AML AML
comp=E,50550µm,1.4s
**MA9 Marino 1.61 268** P **Pn 18 19 34.1 +0.8**
**MNTP Montappone 1.62 323** P **Pb 18 19 35.8 +0.9**
MNTP AML AML
MNTP AML AML
MNTP AML AML
**GUMA Gualdo di Mace 1.62 318** **Pb 18 19 35.4 +0.4**
**GUMA Gualdo di Mace 1.62 318** P **Pb 18 19 35.7 +0.7**
GUMA AML AML
GUMA AML AML
GUMA AML AML
GUMA AML AML
**AMUR Altamura 1.65 124** P **Pn 18 19 33.6 -0.4**
AMUR AML AML
comp=N,49250µm,1.2s
AMUR AML AML
comp=E,47000µm,0.4s
AMUR AML AML
comp=N,49250µm,0.8s
**MCEL Monticello 1.71 153** P **Pb 18 19 35.6 -0.8**
MCEL AML AML
comp=E,32350µm,1.4s
MCEL AML AML
comp=N,38450µm,1.0s
MCEL AML AML
comp=N,38450µm,1.0s
MCEL AML AML
comp=E,32350µm,0.6s
MCEL AML AML
comp=N,37450µm,1.0s
MCEL AML AML
comp=E,31750µm,1.4s
**CSP1 Cessapalombo 1.71 317** P **Pb 18 19 36.1 -0.5**
**FDMO Fiordimonte 1.73 313** Pn **Pn 18 19 35.1 0.0**
**FDMO Fiordimonte 1.73 313** P **Pn 18 19 35.2 +0.1**
FDMO AML AML
comp=E,69400µm,0.7s
FDMO AML AML
comp=N,77300µm,1.4s
**MTSN Montesano sull 1.74 155** P **Pn 18 19 35.0 -0.3**
MTSN AML AML
comp=N,23100µm,1.6s
MTSN AML AML
comp=N,23100µm,0.4s
MTSN AML AML
comp=E,33150µm,1.6s
**MIGL Miglionico 1.76 135** P **Pn 18 19 35.1 -0.3**
MIGL AML AML
MIGL AML AML
MIGL AML AML
**CESX Cesi 1.82 295** **Pn 18 19 37.5 +1.2**
**MATE Matera 1.87 130** ⇓P **Pn 18 19 36.7 -0.3**
MATE ⇑S **Sn 18 20 01.0 +0.4**
**NOCI Noci 2.01 121** P **Pn 18 19 38.6 -0.3**
baz=114
NOCI S **Sb 18 20 05.5 -1.0**
baz=114
NOCI AMP
comp=E,96nm,0.4s,baz=114
**STON Ston 2.37 64** *e*Pn **Pn 18 19 44.0 +0.1**
STON *e*Sn **Sn 18 20 12.6 -0.4**
**STON Ston 2.37 64** ⇑*i*Pn **Pn 18 19 43.6 -0.3**
**TREB Trebinje 2.77 71** ⇑*i*Pn **Pn 18 19 49.4 +0.1**
**A050A Klekovaca 2.91 25** ⇑*i*Pn **Pn 18 19 52.9 +1.5**
**ASQU Asqua 2.95 312** P **Pn 18 19 54.3 +2.5**
**BRY Bratogost 2.96 68** ⇑*i*Pn **Pn 18 19 52.0 0.0**
**BRY Bratogost 2.96 68** ⇑*i*Pn **Pn 18 19 52.0 0.0**
BRY *e*Sn **Sn 18 20 28.8 +1.2**
**BRY Bratogost 2.96 68** P **Pn 18 19 52.0 0.0**
BRY S **Sn 18 20 28.0 +0.4**
**TIP Timpagrande 3.06 150** Pn **Pn 18 19 54.1 +0.7**
**TIP Timpagrande 3.06 150** ⇓P **Pn 18 19 54.7 +1.2**
**TIP Timpagrande 3.06 150** P **Pn 18 19 54.9 +1.5**
**BUM Brajici-Budva 3.08 80** ⇑*i*Pn **Pn 18 19 54.2 +0.6**
BUM *i* Sn **Sn 18 20 30.9 +0.5**
**RUFI Rufina 3.13 310** P **Pn 18 19 56.6 +2.4**
**CEME Cevo 3.13 76** ⇑*i*Pn **Pn 18 19 55.0 +0.6**
CEME *i* Sn **Sn 18 20 33.1 +1.3**
**LMD Lutirano 3.18 315** P **Pn 18 19 57.5 +2.5**
**NKME Niksic 3.21 72** ⇑*i*Pn **Pn 18 19 56.1 +0.7**
NKME *i* Sn **Sn 18 20 34.7 +1.0**
**DRME Dracevica, Mon 3.28 83** ⇑*i*Pn **Pn 18 19 57.1 +0.8**
**DRME Dracevica, Mon 3.28 83** ⇑*i*Pn **Pn 18 19 57.2 +0.8**
DRME *i* Sn **Sn 18 20 36.7 +1.3**
**SCTE Santa Cesarea 3.30 122** Pn **Pn 18 19 56.4 -0.2**
**SCTE Santa Cesarea 3.30 122** P **Pn 18 19 56.8 +0.3**
baz=116
SCTE S **Sb 18 20 46.5 +2.9**
baz=116
SCTE AMP
comp=E,29nm,1.1s,baz=116
**UPM Unac-Piva 3.31 65** ⇑*i*Pn **Pn 18 19 57.8 +0.8**
**UPM Unac-Piva 3.31 65** ⇓*i*Pn **Pn 18 19 57.9 +0.9**
UPM *e*Sn **Sn 18 20 36.6 +0.1**
**SEI Scarperia 3.35 312** P **Pn 18 20 00.0 +2.6**
**PDG Podgorica 3.36 79** **Pn 18 19 57.8 +0.4**
**PDG Podgorica 3.36 79** *e*Pn **Pn 18 19 58.0 +0.6**
PDG *e*Sn **Sn 18 20 37.1 -0.2**
**PDG Podgorica 3.36 79** ⇑*i*Pn **Pn 18 19 58.3 +0.9**
**PDG Podgorica 3.36 79** ⇑P **Pn 18 19 58.8 +1.4**
**PDG Podgorica 3.36 79** ⇑*i*Pn **Pn 18 19 58.3 +0.9**
PDG *i* Sn **Sn 18 20 38.6 +1.3**
**IMOL Imola, Italy 3.36 319** P **Pn 18 20 00.6 +3.2**
**BLY Banja Luka 3.37 30** ⇑*i*Pn **Pn 18 19 59.1 +1.5**
**PRIJ Prijedor 3.41 23** *e*Pn **Pb 18 20 02.6 -2.9**
**A051A Mrakovica 3.50 25** ⇑*i*Pn **Pn 18 20 00.6 +1.1**
**MTRZ Monterenzio 3.51 317** P **Pn 18 20 02.5 +3.0**
**MTCR Monte La Croce 3.54 309** P **Pn 18 20 02.2 +2.2**
**KOME Kolasin 3.63 73** ⇓*i*Pn **Pn 18 20 02.2 +1.0**
KOME *i* Sn **Sn 18 20 45.3 +1.2**
**BOJS Bojanci 3.66 5** *i* Pn **Pn 18 20 02.3 +0.8**
**BOJS Bojanci 3.66 5** ⇓*i*Pn **Pn 18 20 02.2 +0.6**
**CEL Celeste 3.69 167** Pn **Pn 18 20 01.7 -0.4**
**CEL Celeste 3.69 167** P **Pn 18 20 02.9 +0.9**
**PLE Pljevlja 3.69 65** *e*Pn **Pn 18 20 03.2 +1.1**
PLE *i* Sn **Sn 18 20 46.0 +0.3**
**SKDS Skadanscina 3.73 351** *i* Pn **Pn 18 20 02.3 -0.3**
**SKDS Skadanscina 3.73 351** ⇓*i*Pn **Pn 18 20 02.3 -0.3**
**DOB Doboj 3.75 39** *e*Pn **Pn 18 20 04.8 +2.0**
**ZCCA Zocca 3.75 313** **Pn 18 20 05.9 +3.0**
**ZCCA Zocca 3.75 313** P **Pn 18 20 06.6 +3.7**
**HAPS Han Pijesak,Bl 3.77 52** ⇑*i*Pn **Pn 18 20 04.4 +1.2**
**MAIM Mastiano 3.78 304** P **Pn 18 20 05.5 +2.3**
**BDI Bagni Di Lucca 3.79 307** P **Pn 18 20 05.4 +1.9**
**RUDO Rudo 3.79 61** *e*Pn **Pn 18 20 05.4 +2.0**
**PUK Puka 3.80 86** **Pn 18 20 04.6 +1.0**
**PUK Puka 3.80 86** P **Pn 18 20 05.2 +1.6**
baz=85
PUK S **Sn 18 20 48.6 +0.3**
baz=85
PUK AMP
comp=E,52nm,0.4s,baz=85
**VLO Vlora 3.80 110** Pn **Pn 18 20 04.9 +1.3**
**VLO Vlora 3.80 110** P **Pn 18 20 04.8 +1.3**
baz=106
VLO S **Sg 18 21 04.0 -3.0**
baz=106
VLO AMP
comp=N,68nm,0.7s,baz=106
**VLO Vlora 3.80 110** P **Pn 18 20 05.7 +2.2**
**VLO Vlora 3.80 110** P **Pn 18 20 04.9 +1.3**
**TIR Tirane 3.83 96** **Pn 18 20 04.6 +0.7**
**TIR Tirane 3.83 96** P **Pn 18 20 05.0 +1.1**
baz=94
TIR S **Sg 18 21 11.1 +3.2**
baz=94
**TIR Tirane 3.83 96** ⇓P **Pn 18 20 04.6 +0.8**
**TIR Tirane 3.83 96** P **Pn 18 20 04.6 +0.7**
**TIR Tirane 3.83 96** P **Pn 18 20 05.1 +1.2**
**CARD Cardoso 3.84 306** P **Pn 18 20 06.5 +2.4**
**CEY Cerknica 3.89 356** ⇓*i*Pn **Pn 18 20 04.9 +0.1**
**PVY Plav 3.90 77** *e*Pn **Pn 18 20 06.9 +1.9**
PVY *e*Sn **Sn 18 20 51.5 +0.7**
**IVA Berane 3.90 73** *e*Pn **Pn 18 20 06.8 +1.8**
IVA *i* Sn **Sn 18 20 51.8 +0.9**
**BBLS Lazi&#263i 3.93 58** *e*Pn **Pn 18 20 06.6 +1.2**
BBLS *e*Sn **Sn 18 20 50.3 -1.3**
**BBLS Lazi&#263i 3.93 58** ⇑*i*Pn **Pn 18 20 06.3 +0.9**
**VISS Visnje 3.94 0** *i* Pn **Pn 18 20 06.0 +0.4**
**BCI Bajram Curri 3.95 81** P **Pn 18 20 07.3 +1.8**
baz=80
BCI S **Sg 18 21 10.0 -1.7**
baz=80
**RAVA Ravarino 3.95 318** P **Pn 18 20 08.8 +3.2**
**GSCL Gusciola 3.97 310** P **Pn 18 20 09.2 +3.3**
**VLC Villacollemand 3.97 307** S **Sn 18 20 55.3 +2.7**
VLC P **Pn 18 20 06.2 +0.3**
**VLC Villacollemand 3.97 307** P **Pn 18 20 07.8 +1.8**
**SARO Sassorosso 3.98 307** P **Pn 18 20 07.9 +1.9**
**GCIS Gornji Cirnik 4.05 8** *i* Pn **Pn 18 20 07.5 +0.5**
**SJES Sjenica 4.07 68** *e*Pn **Pn 18 20 09.4 +2.1**
SJES *e*Sn **Sn 18 20 53.4 -1.6**
**SJES Sjenica 4.07 68** ⇑*i*Pn **Pn 18 20 08.8 +1.5**
**TEOL Teolo 4.18 328** **Pn 18 20 08.5 -0.1**
**SABO M.te Sabotino 4.21 348** **Pn 18 20 08.8 -0.4**
**KEK Kerkira 4.35 118** **Pn 18 20 11.5 +0.4**
**KEK Kerkira 4.35 118** P **Pn 18 20 11.7 +0.6**
**PGF Pioggiola 4.37 281** *e*Pn **Pn 18 20 13.0 +1.6**
**PGF Pioggiola 4.37 281** *e*P **Pn 18 20 14.9 +3.5**
PGF *e*Sn **Sn 18 20 58.5 -3.9**
PGF *e*Sg **Sg 18 21 22.8 -2.4**
comp=N,557nm,0.8s
**PGF Pioggiola 4.37 281** P **Pn 18 20 13.6 +2.2**
**TEKS Tekeris 4.38 50** *e*Pn **Pn 18 20 11.4 -0.1**
TEKS *e*Sn **Sn 18 21 01.0 -1.5**
**TEKS Tekeris 4.38 50** *e*Pn **Pn 18 20 11.0 -0.5**
**PRMA PARMA 4.38 313** **Pn 18 20 13.6 +2.1**
**VAE Valguarnera 4.38 184** Pn **Pn 18 20 15.8 +4.2**
comp=N,461nm,0.9s,baz=43,slow=17,SNR=116
**SRN Sarande 4.41 115** P **Pn 18 20 12.5 +0.7**
baz=111
SRN S **Sb 18 21 11.5 -4.1**
baz=111
SRN AMP
comp=N,18nm,1.5s,baz=111
**SRN Sarande 4.41 115** P **Pn 18 20 13.1 +1.3**
**DIVS Divibare 4.42 58** *e*Pn **Pn 18 20 12.6 +0.6**
DIVS *e*Sn **Sn 18 21 01.8 -1.7**
**CLTB Caltabellotta 4.45 197** Pn **Pn 18 20 16.1 +3.6**
**OHR Ohrid 4.56 97** *i* Pn **Pn 18 20 16.2 +2.2**
OHR *i* Sn **Sn 18 21 07.6 +0.5**
**MSSA Maissana 4.59 304** Pn **Pn 18 20 16.8 +2.4**
**STAL STALIGIAL 4.65 342** **Pn 18 20 14.8 -0.5**
**OBKA Obir 4.65 358** *i* Pn **Pn 18 20 15.7 +0.4**
comp=N,3.0nm,0.2s,SNR=71
OBKA *e*Pg **Pg 18 20 35.4 +1.3**
comp=N,1µm,0.7s
**OBKA Obir 4.65 358** ⇓*i*Pn **Pn 18 20 15.4 +0.1**
**OBKA Obir 4.65 358** *e*Pn **Pn 18 20 16.1 +0.8**
**OBKA Obir 4.65 358** *e*Pn **Pn 18 20 16.1 +0.8**
**PRED Cave del Predi 4.67 349** **Pn 18 20 14.0 -1.5**
**KBN Korca 4.68 103** **Pn 18 20 16.8 +1.2**
**KBN Korca 4.68 103** P **Pn 18 20 17.8 +2.1**
baz=101
KBN AMP
comp=N,20nm,0.6s,baz=101
**KBN Korca 4.68 103** P **Pn 18 20 17.7 +2.1**
**KBN Korca 4.68 103** P **Pn 18 20 16.8 +1.2**
**TRUS Trudelj 4.74 58** *e*Pn **Pn 18 20 16.6 +0.2**
TRUS *e*Sn **Sn 18 21 08.3 -2.5**
**VSL Villasalto 4.75 242** Pn **Pn 18 20 16.3 -0.3**
**CTI Castel Tesino 4.77 333** Pn **Pn 18 20 16.8 -0.1**
**CTI Castel Tesino 4.77 333** P **Pn 18 20 16.8 -0.1**
**GRUS Gruza 4.79 63** *e*Pn **Pn 18 20 18.7 +1.5**
**IGT Igoumenitsa 4.80 117** P **Pn 18 20 18.0 +0.7**
**SOKA Soboth 4.82 2** *e*Pn **Pn 18 20 17.9 +0.3**
comp=N,39nm,0.4s,SNR=91
SOKA *e*Sg **Sg 18 21 45.0 +5.3**
comp=N,8µm,1.6s
**MYKA Terra Mystica 4.84 350** *i* Pn **Pn 18 20 18.5 +0.5**
comp=N,14nm,0.2s,SNR=62
MYKA *i* Sn **Sn 18 21 14.1 +0.1**
comp=N,413nm,0.3s
**SELS Selova 4.86 72** *e*Pn **Pn 18 20 19.3 +1.2**
SELS *e*Sn **Sn 18 21 11.5 -2.9**
**VARA Varagna 4.87 326** AML AML
comp=N,9730µm,1.4s
VARA AML AML
comp=E,9190µm,0.9s
VARA AML AML
comp=N,15150µm,0.4s
VARA AML AML
comp=E,15050µm,0.3s
VARA AML AML
comp=E,9190µm,1.1s
**BOB Bobbio (Coli) 4.87 308** AML AML
comp=E,4870µm,1.2s
BOB AML AML
comp=E,4965µm,0.5s
BOB AML AML
comp=E,4870µm,0.8s
BOB AML AML
comp=N,5725µm,0.8s
BOB AML AML
comp=N,5920µm,0.8s
BOB AML AML
comp=E,4965µm,1.5s
**GORR Gorreto 4.88 306** AML AML
comp=N,3880µm,1.6s
GORR AML AML
comp=E,5050µm,0.6s
GORR AML AML
comp=N,3880µm,0.4s
GORR AML AML
comp=E,5050µm,1.4s
**PANI Panarotta 4.88 330** AML AML
comp=E,4175µm,0.4s
PANI AML AML
comp=N,4995µm,0.4s
**FRGS Fruska Gora 4.91 46** *e*Pn **Pn 18 20 19.1 +0.3**
**FRGS Fruska Gora 4.91 46** ⇑*i*Pn **Pn 18 20 18.5 -0.3**
**NEST Nestorio 4.93 105** P **Pn 18 20 21.3 +2.2**
**FVI Forni Avoltri 4.96 344** AML AML
comp=E,2780µm,0.7s
FVI AML AML
comp=N,2675µm,0.7s
**LUSI Trento, Gardas 4.96 327** AML AML
comp=N,7950µm,0.4s
LUSI AML AML
comp=E,5530µm,0.6s
**ORZI Orzinuovi 5.01 317** AML AML
comp=E,9185µm,1.5s
ORZI AML AML
comp=E,9185µm,0.5s
ORZI AML AML
comp=N,8690µm,0.5s
**AVAS Avala Beograd 5.04 54** *e*Pn **Pn 18 20 20.4 -0.2**
AVAS *e*Sn **Sn 18 21 16.7 -2.1**
**FNA Florina 5.06 100** Pn **Pn 18 20 22.0 +1.1**
**FNA Florina 5.06 100** P **Pn 18 20 22.4 +1.5**
baz=98
**FNA Florina 5.06 100** P **Pn 18 20 22.0 +1.1**
**FNA Florina 5.06 100** P **Pn 18 20 22.0 +1.1**
**PENT Pentalofos 5.07 107** P **Pn 18 20 23.6 +2.5**
**JAN Janina 5.09 114** P **Pn 18 20 22.7 +1.4**

**ABTA Abfaltersbach 5.16 342** *i* Pn **Pn 18 20 22.5 +0.2**
comp=N,101nm,0.5s,SNR=113
ABTA *e*Sn **Sn 18 21 24.2 +2.4**
comp=N,2µm,1.0s
**MORH Mrgy, Hungar 5.16 31** ⇑P **Pn 18 20 24.4 +2.3**
**SVIS Svilajnac 5.28 61** *e*Pn **Pn 18 20 24.8 +1.0**
SVIS *e*Sn **Sn 18 21 22.0 -2.6**
**BARS Barje 5.28 77** *e*Pn **Pn 18 20 24.9 +1.0**
BARS *e*Sn **Sn 18 21 21.9 -2.9**
**KBA Koelnbreinsper 5.32 349** *e*Pn **Pn 18 20 24.9 +0.3**
comp=N,32nm,0.4s,SNR=90
**KBA Koelnbreinsper 5.32 349** *e*Pn **Pn 18 20 26.0 +1.4**
**KBA Koelnbreinsper 5.32 349** *e*Pn **Pn 18 20 26.0 +1.4**
**BOVS Bovan 5.38 68** *e*Pn **Pn 18 20 25.6 +0.4**
BOVS *e*Sn **Sn 18 21 24.6 -2.6**
**BOVS Bovan 5.38 68** ⇓P **Pn 18 20 26.3 +1.0**
**TSLK Tsoukalades, L 5.40 122** P **Pn 18 20 26.6 +1.1**
**ARSA Arzberg 5.42 5** *i* Pn **Pn 18 20 25.9 +0.1**
comp=N,3.7nm,0.3s,SNR=50
**ARSA Arzberg 5.42 5** *e*Pn **Pn 18 20 25.8 +0.1**
**ARSA Arzberg 5.42 5** *e*Pn **Pn 18 20 25.8 +0.1**
**LKD2 Lefkada island 5.42 122** P **Pn 18 20 26.8 +1.0**
**KZN Kozani 5.49 104** P **Pn 18 20 28.6 +1.8**
**NYDR Nydri-Lefkada 5.49 123** P **Pn 18 20 27.4 +0.7**
**EVGI Lefkada island 5.52 124** P **Pn 18 20 28.4 +1.2**
**STIP Stip 5.52 89** *i* Pn **Pn 18 20 30.1 +2.9**
STIP *i* Sn **Sn 18 21 32.1 +1.4**
**FSK Fiskardo 5.56 126** P **Pn 18 20 28.5 +0.8**
**DMLN Damoulianata-K 5.60 128** P **Pn 18 20 29.0 +0.8**
**KUBS Kucevo 5.64 61** *e*Pn **Pn 18 20 27.9 -0.9**
KUBS *e*Sn **Sn 18 21 29.2 -4.3**
**MPLH Magyarpolny 5.66 19** P **Pn 18 20 29.4 +0.4**
comp=N,790nm,1.1s,comp=N,13µmcomp=N,25nm
**VRSS Vrsac 5.76 53** *e*Pn **Pn 18 20 29.4 -1.0**
VRSS *e*Sn **Sn 18 21 33.7 -2.7**
**VLS Valsamata 5.76 128** P **Pn 18 20 31.1 +0.6**
**LESA Schwarzleotal 5.77 345** *i* Pn **Pn 18 20 31.3 +0.6**
comp=N,13nm,0.1s
LESA *i* Sn **Sn 18 21 39.3 +2.5**
comp=N,490nm,0.5s
**FUORN Ofenpass-Fuorn 5.77 327 Pn 18 20 31.9 +1.1**
**SBF Sospel 5.78 293** *e*Pn **Pn 18 20 32.7 +2.0**
**SBF Sospel 5.78 293** *e*P **Pn 18 20 35.1 +4.4**
**SBF Sospel 5.78 293** *e*Pg **Pg 18 20 51.8 -3.8**
SBF *e*Sn **Sn 18 21 32.0 -5.0**
SBF *e*Sg **Sg 18 22 04.3 -6.0**
comp=N,570nm,0.7s
**BANR Banloc 5.79 50** ⇑P **Pn 18 20 33.9 +3.1**
**ZAGS Zajecar 5.80 68** *e*Pn **Pn 18 20 31.3 +0.3**
ZAGS *e*Sn **Sn 18 21 34.3 -3.2**
**MDVR Moldovita 5.82 58** ⇑P **Pn 18 20 33.3 +1.9**
**WTTA Wattenberg 5.86 338** *i* Pn **Pn 18 20 33.1 +1.1**
comp=N,173nm,0.8s,SNR=82
WTTA *e*Sn **Sn 18 21 39.2 0.0**
comp=N,3µm,1.2s
**WTTA Wattenberg 5.86 338** *e*Pn **Pn 18 20 33.9 +2.0**
**WTTA Wattenberg 5.86 338** *e*Pn **Pn 18 20 33.9 +2.0**
**BIOA Bad Ischl, Aus 5.89 352** *i* Pn **Pn 18 20 33.2 +0.9**
comp=N,31nm,0.3s,SNR=112
BIOA *e*Sn **Sn 18 21 41.1 +1.3**
comp=N,468nm,0.4s
**FETA Feichten 5.93 332** *i* Pn **Pn 18 20 33.9 +1.0**
comp=N,183nm,0.7s,SNR=132
**RONA Rosalia, Austr 5.94 10** *e*Pn **Pn 18 20 33.3 +0.4**
comp=N,28nm,0.5s,SNR=77
RONA *e*Sg **Sg 18 22 21.5 +6.0**
comp=N,11µm,2.9s
**THL Klokotos Trika 5.94 110** P **Pn 18 20 34.3 +1.4**
**RTZL Ratzakli, Kefa 5.94 128** P **Pn 18 20 33.7 +0.8**
**WATA Walderalm 5.94 338** *i* Pn **Pn 18 20 34.5 +1.4**
comp=N,53nm,0.2s,SNR=80
WATA *i* Sn **Sn 18 21 44.6 +3.4**
comp=N,1µm,0.6s
**SQTA Sankt Quirin 5.95 336** *i* Pn **Pn 18 20 34.5 +1.4**
comp=N,441nm,0.4s,SNR=206
SQTA *i* Sn **Sn 18 21 42.9 +1.7**
comp=N,1µm,0.5s
**ZAPS Zavoj 5.95 74** *e*Pn **Pn 18 20 34.3 +1.2**
ZAPS *e*Sn **Sn 18 21 37.8 -3.5**
**MOA Molln 6.00 357** *e*Pn **Pn 18 20 34.7 +0.9**
comp=N,11nm,0.2s,SNR=102
MOA *e*Sn **Sn 18 21 41.9 -0.7**
comp=N,216nm,0.5s
**MOA Molln 6.00 357** *e*Pn **Pn 18 20 35.2 +1.4**
MOA *e*Sn **Sn 18 21 41.7 -0.9**
**MOA Molln 6.00 357** *e*Pn **Pn 18 20 35.2 +1.4**
MOA *e*Sn **Sn 18 21 41.7 -0.9**
**WDD Wied Dalam 6.02 182 Pn 18 20 34.1 +0.2**
**TYRN Tyrnavos 6.03 108** P **Pn 18 20 35.3 +1.1**
**RJOB Jochberg 6.05 347** *e*Pn **Pn 18 20 35.5 +1.0**
RJOB *e*Sn **Sn 18 21 44.1 +0.4**
**RJOB Jochberg 6.05 347** *e*Pn **Pn 18 20 35.5 +1.0**
RJOB *e*Sn **Sn 18 21 44.1 +0.4**
**DAVOX Davos/Dischmat 6.06 326** Pn **Pn 18 20 36.0 +1.4**
comp=N,30nm,0.3s,baz=148,slow=9.5,SNR=676
DAVOX Sn **Sn 18 21 42.0 -2.1**
comp=N,58nm,0.3s,baz=329,slow=23,SNR=3.1
DAVOX LR LR 18 23 56.2
comp=N,9µm,18.6s,baz=142,slow=50
**LIT Litokhoron 6.08 104 Pn 18 20 34.7 -0.1**
**LIT Litokhoron 6.08 104** P **Pn 18 20 35.8 +1.0**
**LIT Litokhoron 6.08 104** P **Pn 18 20 34.7 -0.1**
**PVO Paravola 6.08 120** P **Pn 18 20 36.0 +1.2**
**MOTA Moosalm 6.09 336** *i* Pn **Pn 18 20 36.7 +1.6**
comp=N,369nm,0.7s
MOTA *i* Sn **Sn 18 21 45.1 +0.3**
comp=N,2µm,1.1s
**EVR Evrytania 6.10 116** P **Pn 18 20 38.3 +3.1**
**KNT Kendrikon 6.12 94** P **Pn 18 20 36.0 +0.7**
**CONA Conrad Observa 6.12 7** *i* Pn **Pn 18 20 35.8 +0.4**
comp=N,112nm,0.4s,SNR=145
CONA *i* Sn **Sn 18 21 44.8 -0.6**
comp=N,184nm,0.4s
**BZS Buzias 6.20 50** ⇑P **Pn 18 20 38.6 +2.2**
**BZS Buzias 6.20 50** P **Pn 18 20 38.6 +2.1**
**KKB Krupnik 6.22 87** ⇑*i*P **Pn 18 20 38.1 +1.4**
**PART Garmisch-Parte 6.22 336** *e*Sn **Sn 18 21 49.4 +1.4**
**PART Garmisch-Parte 6.22 336** *e*Sn **Sn 18 21 49.4 +1.4**
**LTHK Lithakia 6.22 130** P **Pn 18 20 36.6 -0.2**
**MAKR Makrakomi, Fth 6.27 115** P **Pn 18 20 39.9 +2.4**
**THE Thessaloniki 6.27 99** P **Pn 18 20 37.7 +0.3**
**LMR La Mourre 6.30 286** *e*Pn **Pn 18 20 39.1 +1.3**
**LMR La Mourre 6.30 286** *e*P Pn 18 20 43.9 +6.1
**LMR La Mourre 6.30 286** *e*Pg **Pg 18 21 01.9 -3.6**
LMR *e*Sn **Sn 18 21 44.3 -5.5**
LMR *e*Sg **Sg 18 22 21.0 -6.1**
comp=N,199nm,0.9s
**VTS Vitosha 6.30 80** ⇑*i*P **Pn 18 20 39.2 +1.2**
VTS S **Sn 18 21 44.0 -6.1**
**HERR Herculane 6.32 59** ⇑P **Pn 18 20 39.8 +1.7**
**RETA Reutte 6.32 334** *e*Pn **Pn 18 20 39.7 +1.5**
comp=N,93nm,0.5s,SNR=105
RETA *i* Sn **Sn 18 21 53.5 +3.0**
comp=N,544nm,0.6s
**ANX Ano Chora 6.35 119** P **Pn 18 20 40.3 +1.7**
**RLS Riolos of Patr 6.37 124** P **Pn 18 20 40.6 +1.8**
**HORT Hortiatis 6.38 99** P **Pn 18 20 39.3 +0.3**
**RMGR Halanga-Turnu 6.40 61** ⇑P **Pn 18 20 42.0 +2.8**
**OBER Oberstdorf 6.41 331** *e*Pn **Pn 18 20 41.3 +1.8**
OBER *e*Sn **Sn 18 21 53.1 +0.4**
**OBER Oberstdorf 6.41 331** *e*Pn **Pn 18 20 41.3 +1.8**
OBER *e*Sn **Sn 18 21 53.1 +0.4**
**PUNG Punghina 6.42 65** ⇑P **Pn 18 20 41.7 +2.1**
**EFP Efpalio 6.43 120** P **Pn 18 20 41.4 +1.8**
**SRO Srobarova 6.46 22** *e*P **Pn 18 20 41.7 +1.8**
SRO *e* 18 21 51.7
SRO MLR MLR
comp=Z,800nm,0.8s
**SRO Srobarova 6.46 22** *e*Pn **Pn 18 20 41.7 +1.8**
SRO *e*PG Pg 18 21 16.1 +7.6
SRO *e*Sn **Sn 18 21 51.7 -1.9**
SRO *e*LG Lg 18 22 19.6
**DAVA Damuels 6.47 329** *i* Pn **Pn 18 20 41.6 +1.3**
comp=Z,140nm,0.4s,SNR=108
DAVA *i* Sn **Sn 18 21 55.4 +1.3**
comp=Z,1µm,0.5s
**DAVA Damuels 6.47 329** *e*Pn **Pn 18 20 42.0 +1.7**
DAVA *e*Sn **Sn 18 21 55.1 +0.9**
**DAVA Damuels 6.47 329** *e*Pn **Pn 18 20 42.0 +1.7**
DAVA *e*Sn **Sn 18 21 55.1 +0.9**
**PLONS Plons/SG 6.48 325** *e*Pn **Pn 18 20 42.7 +2.3**
PLONS *e*Sn **Sn 18 21 54.8 +0.4**
**PLONS Plons/SG 6.48 325** *e*Pn **Pn 18 20 42.7 +2.3**
PLONS *e*Sn **Sn 18 21 54.8 +0.4**
**SOH Sokhos 6.52 96** P **Pn 18 20 41.7 +0.8**
**MBDF Montbardon 6.53 299** *e*Pn **Pn 18 20 42.8 +1.7**
**MBDF Montbardon 6.53 299** *e*Pg **Pg 18 21 06.4 -3.5**
MBDF *e*Sn **Sn 18 21 48.8 -6.8**
MBDF *e*Sg **Sg 18 22 26.6 -7.8**
comp=Z,220nm,0.6s
**ZST Bratislava 6.54 14** *e*P **Pn 18 20 42.6 +1.4**
ZST *e* 18 21 52.3
ZST MLR MLR
comp=Z,11µm,2.4s
**ZST Bratislava 6.54 14** *e*PN **Pn 18 20 42.6 +1.4**
ZST *e*PG Pg 18 21 21.6 +11
ZST *e*SN **Sn 18 21 52.3 -3.5**
ZST *e*LG Lg 18 23 01.6
**SURR Surduc 6.57 51** ⇑P **Pn 18 20 43.4 +1.8**
**VALD Valchedram 6.61 71** *i* P **Pn 18 20 44.8 +2.7**
**SIRR Siria 6.62 46** ⇑P **Pn 18 20 44.5 +2.2**
**ALIK Aliki, Aigiali 6.66 120** P **Pn 18 20 44.5 +1.8**
**MMB Musomishta 6.70 90** ⇑*i*P **Pn 18 20 44.6 +1.2**
**UBR Ueberruh 6.71 332** *e*Pn **Pn 18 20 44.5 +0.9**
UBR *e*Sn **Sn 18 21 59.0 -1.0**
**UBR Ueberruh 6.71 332** *e*Pn **Pn 18 20 44.5 +0.9**
UBR *e*Sn **Sn 18 21 59.0 -1.0**
**BNI Bardonecchia 6.72 301 Pn 18 20 44.6 +0.9**
**BNI Bardonecchia 6.72 301** P **Pn 18 20 44.6 +0.9**
**SRE Strehaia 6.74 63** ⇑P **Pn 18 20 46.0 +2.1**
**SRE Strehaia 6.74 63** P **Pn 18 20 45.9 +2.0**
**AXAR Agios Charalam 6.75 115** P **Pn 18 20 45.8 +1.8**
**MPEP Malo Peshtene 6.76 74** ⇑*i*P **Pn 18 20 45.5 +1.3**
**GZR Gura Zlata 6.78 56** ⇑P **Pn 18 20 47.0 +2.5**
**FUR Furstenfeldbru 6.78 340** *e*Pn **Pn 18 20 47.1 +2.5**
**FUR Furstenfeldbru 6.78 340** *e*Pn **Pn 18 20 47.1 +2.5**
**KLV Kalavryta, Ach 6.81 122** P **Pn 18 20 46.2 +1.3**
**NVR Nevrokopi 6.81 91** P **Pn 18 20 47.0 +2.1**
**LPG La Plagne 6.88 305** *e*Pn **Pn 18 20 46.6 +0.5**
**LPG La Plagne 6.88 305** *e*Pg **Pg 18 21 12.6 -4.1**
LPG *e*Sn **Sn 18 21 57.0 -7.5**
LPG *e*Sg **Sg 18 22 37.8 -7.9**
comp=Z,361nm,0.7s
**LPG La Plagne 6.88 305** *e*P **Pn 18 20 46.1 0.0**
**NEO Neokhori 6.90 109** P **Pn 18 20 46.5 +0.4**
**LPL La Plagne 6.90 305** *e*Pn **Pn 18 20 46.7 +0.4**
**LPL La Plagne 6.90 305** *e*Pg Pg 18 21 12.0 -5.1
LPL *e*Sn **Sn 18 21 55.4 -9.5**
LPL *e*Sg Sg 18 22 38.1 -8.3
comp=Z,275nm,0.6s
**LPL La Plagne 6.90 305** *e*P **Pn 18 20 46.6 +0.3**
**SMOL Smolenice 6.91 15** *e*P **Pn 18 20 48.5 +2.3**
SMOL *e* 18 22 01.6
SMOL MLR MLR
comp=Z,300nm,1.1s
**WILA Wila 6.97 325** *e*Pn **Pn 18 20 48.8 +1.7**
WILA *e*Sn **Sn 18 22 05.0 -1.3**
**WILA Wila 6.97 325** *e*Pn **Pn 18 20 48.8 +1.7**
WILA *e*Sn **Sn 18 22 05.0 -1.3**
**CKRC Cesky Krumlov 6.97 357** *e*PN **Pn 18 20 47.1 0.0**
CKRC *e*SN **Sn 18 22 04.5 -1.9**
CKRC AMS AMS 18 24 00.0
comp=Z,9µm,10.4s
**CKRC Cesky Krumlov 6.97 357** *e*P **Pn 18 20 47.1 0.0**
CKRC *e* 18 22 04.5
CKRC MLR MLR
comp=Z,9µm,10.4s
**CKRC Cesky Krumlov 6.97 357** *e*Sn **Sn 18 22 04.4 -2.0**
**PGB Panagyurishte 6.99 81** ⇑*i*P **Pn 18 20 49.4 +2.0**
**GUR Goura 6.99 122** P **Pn 18 20 48.5 +1.0**
**KOKK Kokkinochori, 7.00 95** P **Pn 18 20 47.9 +0.5**
**GEC2 GERESS Array S 7.03 354** Pn **Pn 18 20 47.5 -0.4**
**GEC2 GERESS Array S 7.03 354** *e*Pn **Pn 18 20 47.6 -0.4**
GEC2 *e*Sn **Sn 18 22 05.0 -3.0**
**GEC2 GERESS Array S 7.03 354** *e*Pn **Pn 18 20 47.6 -0.4**
GEC2 *e*Sn **Sn 18 22 05.0 -3.0**
**GERES GERESS Array B 7.03 354** Pn **Pn 18 20 47.8 -0.2**
**GERES GERESS Array B 7.03 354** Pn **Pn 18 20 47.5 -0.4**
comp=Z,17nm,0.3s,baz=169,slow=8.2,SNR=117
GERES Sn **Sn 18 22 03.5 -4.4**
comp=Z,59nm,0.3s,baz=151,slow=26,SNR=14
GERES LR LR 18 24 07.7
comp=Z,5µm,18.8s,baz=176,slow=44
comp=Z,20nm,0.4s
**SENIN Lac Senin/Sane 7.03 312 Pn 18 20 48.5 +0.4**
**PSZ Piszkesteto 7.05 29** Pn **Pn 18 20 48.4 +0.1**
**PSZ Piszkesteto 7.05 29** P **Pn 18 20 48.4 +0.1**
**OUR Ouranopolis 7.10 99** P **Pn 18 20 48.7 -0.1**
**SMRF Simiane la Rot 7.10 290** *e*Pn **Pn 18 20 52.1 +3.2**
**SMRF Simiane la Rot 7.10 290** *e*Pg **Pg 18 21 17.1 -3.8**
SMRF *e*Sn **Sn 18 22 03.2 -6.4**
SMRF *e*Sg **Sg 18 22 45.9 -6.8**
comp=Z,94nm,0.6s
**WALHA Wallhausen, DE 7.14 328** *e*Pn **Pn 18 20 50.6 +1.1**
WALHA *e*Sn **Sn 18 22 09.2 -1.4**
**WALHA Wallhausen, DE 7.14 328** *e*Pn **Pn 18 20 50.6 +1.1**
WALHA *e*Sn **Sn 18 22 09.2 -1.4**
**ORIF Oris-en-Rattie 7.18 298** *e*Pn **Pn 18 20 53.1 +3.0**
**ORIF Oris-en-Rattie 7.18 298** *e*Pg Pg 18 21 18.2 -4.3
ORIF *e*Sn **Sn 18 22 05.6 -6.1**
ORIF *e*Sg **Sg 18 22 47.5 -8.0**
comp=Z,417nm,0.7s
**ORIF Oris-en-Rattie 7.18 298** *e*P **Pn 18 20 52.6 +2.5**
**ITM Ithomi 7.22 128 Pn 18 20 50.9 +0.4**
**ITM Ithomi 7.22 128** P **Pn 18 20 50.9 +0.4**
**VYHS Vyhne 7.22 22** *e*P **Pn 18 20 50.6 +0.1**
VYHS *e* 18 22 10.0
**VYHS Vyhne 7.22 22** *e*PN **Pn 18 20 50.6 +0.1**
VYHS *e*SN **Sn 18 22 10.0 -2.5**
**JAVC Velka Javorina 7.29 15** *e*PN **Pn 18 20 52.2 +0.8**
**JAVC Velka Javorina 7.29 15** *e*Pn **Pn 18 20 53.0 +1.6**
JAVC *e*Sn **Sn 18 22 12.5 -1.7**
**JAVC Velka Javorina 7.29 15** *e*Pn **Pn 18 20 53.0 +1.6**
JAVC *e*Sn **Sn 18 22 12.5 -1.7**
**KRUC Moravsky 7.29 8** *e*PN **Pn 18 20 51.9 +0.5**
KRUC *e*SN **Sn 18 22 11.2 -3.0**
**KRUC Moravsky 7.29 8** *e*Sn **Sn 18 22 09.4 -4.7**
**KRUC Moravsky 7.29 8** *e*Sn **Sn 18 22 09.4 -4.7**
**PYL PYLOS 7.31 130** P **Pn 18 20 51.5 -0.2**
**KHC Kasperske Hory 7.33 354** Pn **Pn 18 20 51.4 -0.5**
**KHC Kasperske Hory 7.33 354** *e*PN **Pn 18 20 51.8 -0.1**
KHC *e*SN **Sn 18 22 11.1 -4.0**
KHC AMS AMS 18 24 20.0
comp=Z,9µm,13.3s
**KHC Kasperske Hory 7.33 354** *e*Pn **Pn 18 20 51.5 -0.4**
KHC *e*Sn **Sn 18 22 12.2 -2.9**
**KHC Kasperske Hory 7.33 354** *i* P **Pn 18 20 51.4 -0.5**
KHC MLR MLR
comp=Z,14µm,12.0s
**KHC Kasperske Hory 7.33 354** P **Pn 18 20 51.6 -0.4**
comp=Z,323nm,1.3s,comp=Z,3µmcomp=Z,2.2nm
**KHC Kasperske Hory 7.33 354** *e*Pn **Pn 18 20 51.5 -0.4**
KHC *e*Sn **Sn 18 22 12.2 -2.9**
**KAVA Kavala 7.35 93** P **Pn 18 20 52.7 +0.5**
**VLAD Vladila 7.36 70** ⇑P **Pn 18 20 54.5 +2.1**
**EMING Emmingen-Lipti 7.37 327** *e*Pn **Pn 18 20 54.9 +2.3**
EMING *e*Sn **Sn 18 22 14.5 -1.6**
**EMING Emmingen-Lipti 7.37 327** *e*Pn **Pn 18 20 54.9 +2.3**
EMING *e*Sn **Sn 18 22 14.5 -1.6**
**LOUT Loutraki 7.37 119** P **Pn 18 20 53.6 +1.0**
**SULZ Cheisacher 7.41 322** *e*Pn **Pn 18 20 53.5 +0.4**
SULZ *e*Sn **Sn 18 22 13.6 -3.5**
**SULZ Cheisacher 7.41 322** *e*Pn **Pn 18 20 53.5 +0.4**
SULZ *e*Sn **Sn 18 22 13.6 -3.5**
**WET Wettzell 7.41 350** *e*Pn **Pn 18 20 52.2 -0.9**
WET *e*Sn **Sn 18 22 12.3 -4.9**
**WET Wettzell 7.41 350** *e*Pn **Pn 18 20 52.2 -0.9**
WET *e*Sn **Sn 18 22 12.3 -4.9**
**PLD Plovdiv 7.41 84** ⇑*i*P **Pn 18 20 54.3 +1.2**
**SLE Schleitheim 7.42 325** *e*Pn **Pn 18 20 53.2 0.0**
SLE *e*Sn **Sn 18 22 13.4 -3.9**
**SLE Schleitheim 7.42 325** *e*Pn **Pn 18 20 53.2 0.0**
SLE *e*Sn **Sn 18 22 13.4 -3.9**
**LOT Lotru 7.42 58** ⇑P **Pn 18 20 56.2 +2.8**
**RZN Rozhen 7.43 88** ⇑*i*P **Pn 18 20 54.8 +1.3**
RZN S **Sn 18 22 12.7 -5.2**
**TREC Trest 7.45 3** *e*PN **Pn 18 20 54.5 +0.8**
**TREC Trest 7.45 3** *e*P **Pn 18 20 54.5 +0.8**
**KEST Kesra 7.45 217** Pn **Pn 18 20 55.8 +2.0**
**KEST Kesra 7.45 217** Pn **Pn 18 20 57.1 +3.4**
comp=Z,7.9nm,0.3s,baz=324,slow=10,SNR=140
KEST LR LR 18 24 03.8
comp=Z,6µm,18.9s,baz=353,slow=39
comp=Z,139nm,0.7s
**NORI Noerdlinger Ri 7.47 338** *e*Pn **Pn 18 20 54.6 +0.7**
**NORI Noerdlinger Ri 7.47 338** *e*Pn **Pn 18 20 54.6 +0.7**
**METMA Mettma DE 7.48 324** *e*Pn **Pn 18 20 54.0 -0.1**
METMA *e*Sn **Sn 18 22 13.9 -5.0**
**METMA Mettma DE 7.48 324** *e*Pn **Pn 18 20 54.0 -0.1**
METMA *e*Sn **Sn 18 22 13.9 -5.0**
**VILL Villia 7.50 117** P **Pn 18 20 54.7 +0.3**
**DRGR 7.51 46** ⇑P **Pn 18 20 57.8 +3.2**
**DRGR 7.51 46** P **Pn 18 20 57.7 +3.2**
**MSS Messtetten 7.55 329** *e*Pn **Pn 18 20 56.4 +1.3**
**VRAC Vranov 7.56 9** *e*PN **Pn 18 20 54.9 -0.2**
**VRAC Vranov 7.56 9** Pn **Pn 18 20 54.8 -0.2**
comp=Z,2.1nm,0.3s,baz=196,slow=11,SNR=15
VRAC Sn **Sn 18 22 14.9 -5.8**
comp=Z,7.8nm,0.3s,baz=248,slow=19,SNR=1.5
comp=Z,17nm,0.7s
**VRAC Vranov 7.56 9** ⇑P **Pn 18 20 57.4 +2.4**
**VRAC Vranov 7.56 9** *e*Pn **Pn 18 20 57.1 +2.0**
**VRAC Vranov 7.56 9** *e*Pn **Pn 18 20 57.1 +2.0**
**THAS Thassos island 7.58 96** P **Pn 18 20 54.8 -0.6**
**ZVC Zvikov 7.59 357** *e*PN **Pn 18 20 55.8 +0.2**
ZVC *e*SN **Sn 18 22 18.5 -3.1**
**KECS Kecovo 7.74 29** *e*P **Pn 18 21 01.5 +3.9**
KECS *e* 18 22 20.8
KECS MLR MLR
comp=Z,100nm,0.8s
**KECS Kecovo 7.74 29** *e*PN **Pn 18 21 01.5 +3.9**
KECS *e*PG **Pg 18 21 37.4 +4.2**
KECS *e*SN **Sn 18 22 20.8 -4.5**
KECS *e*LG Lg 18 22 33.8
**CMAH Djebel Manchou 7.75 230** P **Pn 18 21 01.1 +3.2**
**MAUC Maruska 7.80 15** *e*PN **Pn 18 21 02.8 +4.3**
**KYMI Kymi, Euboea I 7.80 111** P **Pn 18 20 58.8 +0.3**
**TNR Turnu Rosu 7.83 58** ⇓P **Pn 18 21 02.1 +3.2**
**TNR Turnu Rosu 7.83 58** P **Pn 18 21 02.0 +3.1**
**KRND KRANIDI 7.84 122** P **Pn 18 20 59.5 +0.6**
**CABF La Chapelle 7.86 310** *e*Pn **Pn 18 20 59.1 -0.2**
**CABF La Chapelle 7.86 310** *e*Pg **Pg 18 21 31.3 -4.0**
CABF *e*Sn **Sn 18 22 21.7 -6.6**
CABF *e*Sg Sg 18 23 07.8 -9.2
comp=Z,743nm,0.8s
**MESR Meseseni 7.86 45** ⇑P **Pn 18 21 02.9 +3.6**
**ATH Athens Observa 7.87 117** P **Pn 18 21 00.1 +0.7**
**HUMR Humele 7.90 67** ⇑P **Pn 18 21 01.9 +2.2**
**ATHU Athens Univers 7.92 116** P **Pn 18 21 00.5 +0.4**
**BFO Black Forest 7.93 327** Pn **Pn 18 20 59.9 -0.3**
**BFO Black Forest 7.93 327** *e*Pn **Pn 18 21 00.2 0.0**
**BFO Black Forest 7.93 327** P **Pn 18 20 59.9 -0.3**
**BFO Black Forest 7.93 327** *e*Pn **Pn 18 21 00.2 0.0**
**PTL Penteli 7.93 116** P **Pn 18 21 00.8 +0.6**
**ARR Arges 7.95 61** ⇑P **Pn 18 21 03.5 +3.0**
**CJR Cluj-Napoca 7.96 49** ⇓P **Pn 18 21 02.7 +2.1**
**CJR Cluj-Napoca 7.96 49** P **Pn 18 21 02.7 +2.1**
**DION Dionisos Attik 7.96 115** P **Pn 18 21 01.7 +1.0**
**STU Stuttgart 7.96 332** Pn **Pn 18 20 59.5 -1.2**
**STU Stuttgart 7.96 332** *e*Pn **Pn 18 21 01.4 +0.7**
**STU Stuttgart 7.96 332** P **Pn 18 20 59.5 -1.2**
**STU Stuttgart 7.96 332** *e*Pn **Pn 18 21 01.4 +0.7**
**COPA Copaceanca 7.96 70** ⇓P **Pn 18 21 03.0 +2.3**
**VIVF Saint-Julien-l 7.97 295** *e*Pn **Pn 18 21 02.7 +1.9**
**VIVF Saint-Julien-l 7.97 295** *e*Pg Pg 18 21 32.3 -5.2
VIVF *e*Sn **Sn 18 22 22.9 -8.0**
VIVF *e*Sg **Sg 18 23 12.5 -8.1**
comp=Z,92nm,0.7s
**VIVF Saint-Julien-l 7.97 295** *e*P **Pn 18 21 03.2 +2.4**
**ABSA Djebel Ababsia 7.97 228** P **Pn 18 21 05.0 +4.1**
**ZIMR 7.98 73** ⇑P **Pn 18 21 02.9 +2.1**
**ZIMR 7.98 73** P **Pn 18 21 03.1 +2.3**
**CAEH 'Ain El Ouahch 7.98 233** P **Pn 18 21 04.0 +3.0**
**STFAR Stefanesti-Arg 7.99 64** ⇑P **Pn 18 21 03.8 +2.8**
**VLY Voula,Athens 7.99 117** P **Pn 18 21 01.4 +0.4**
**LANS Liptovska Anna 7.99 23** *e*P **Pn 18 21 02.8 +1.7**
LANS *e* 18 22 27.9
LANS MLR MLR
comp=Z,200nm,1.4s
**LANS Liptovska Anna 7.99 23** *e*PN **Pn 18 21 02.8 +1.7**
LANS *e*PG **Pg 18 21 39.2 +1.3**
LANS *e*SN **Sn 18 22 27.9 -3.6**
LANS *e*LG Lg 18 23 01.4
**RDO Rodhopi 8.09 91** Pn **Pn 18 21 01.1 -1.2**
**RDO Rodhopi 8.09 91** P **Pn 18 21 03.3 +0.9**
**LIA Limnos Island 8.10 101** P **Pn 18 21 02.4 -0.2**
**ROTZ Rotzenmuhle 8.12 348** *e*Pn **Pn 18 21 01.5 -1.2**
**ROTZ Rotzenmuhle 8.12 348** *e*Pn **Pn 18 21 01.5 -1.2**
**VLI Veliai 8.13 126** P **Pn 18 21 04.5 +1.6**
**PRU Pruhonice 8.13 359** *e*PN **Pn 18 21 03.2 +0.2**
**PRU Pruhonice 8.13 359** *e*Pn **Pn 18 21 03.0 0.0**
**PRU Pruhonice 8.13 359** *e*P **Pn 18 21 03.2 +0.2**
**PRU Pruhonice 8.13 359** *e*Pn **Pn 18 21 03.0 0.0**
**MORC Moravsky Berou 8.15 13** Pn **Pn 18 21 03.8 +0.6**
**MORC Moravsky Berou 8.15 13** *e*PN **Pn 18 21 04.2 +1.0**
MORC *e*SN **Sn 18 22 33.4 -1.9**
**MORC Moravsky Berou 8.15 13** ⇑P **Pn 18 21 05.4 +2.2**
**MORC Moravsky Berou 8.15 13** *e*Pn **Pn 18 21 05.0 +1.8**
**MORC Moravsky Berou 8.15 13** P **Pn 18 21 03.8 +0.6**
**MORC Moravsky Berou 8.15 13** *e*Pn **Pn 18 21 05.0 +1.8**
**MTUR Matau 8.18 62** ⇑P **Pn 18 21 06.4 +2.7**
**MTUR Matau 8.18 62** P **Pn 18 21 06.3 +2.6**
**HINF Hinteralfeld 8.21 319** *e*Pn **Pn 18 21 03.1 -1.0**
**HINF Hinteralfeld 8.21 319** *e*Pg Pg 18 21 36.4 -5.6
HINF *e*Sn **Sn 18 22 29.7 -7.1**
comp=Z,1µm,0.6s
HINF *e*Sg Sg 18 23 18.6 -10
comp=Z,203nm,0.6s
**HINF Hinteralfeld 8.21 319** *e*P **Pn 18 21 03.8 -0.3**
**PRA Prague 8.22 358** *e*PN **Pn 18 21 05.2 +1.1**
**PRA Prague 8.22 358** *e*P **Pn 18 21 05.2 +1.1**
**GRFO Grafenberg 8.22 344** Pn **Pn 18 21 02.6 -1.6**
**GRFO Grafenberg 8.22 344** *e*Pn **Pn 18 21 04.3 0.0**
**GRFO Grafenberg 8.22 344** P **Pn 18 21 02.6 -1.6**
**GRFO Grafenberg 8.22 344** *e*Pn **Pn 18 21 04.3 0.0**
**GRA1 Grafenberg Arr 8.22 344** Pn **Pn 18 21 02.5 -1.7**
**GRF Grafenberg Arr 8.22 344** *e*Pn **Pn 18 21 06.1 +1.9**
**GRF Grafenberg Arr 8.22 344** P **Pn 18 21 02.5 -1.7**
**GRF Grafenberg Arr 8.22 344** *e*Pn **Pn 18 21 06.1 +1.9**
**VOIR 8.24 61** ⇓P **Pn 18 21 07.4 +2.8**
**VOIR 8.24 61** P **Pn 18 21 07.0 +2.4**
**VOIR 8.24 61** P **Pn 18 21 07.4 +2.8**
comp=Z,292nm,1.4s,comp=Z,3µm
**ELND Elena 8.26 79** ⇓P **Pn 18 21 06.8 +2.0**
**OKC Ostrava-Krasne 8.31 15** *e*Pn **Pn 18 21 07.6 +2.1**
**OKC Ostrava-Krasne 8.31 15** *e*Pn **Pn 18 21 07.6 +2.1**
**CKFL Kef-Lekhel 8.31 232** P **Pn 18 21 09.8 +4.2**
**KRLC Kraliky 8.33 9** *e*PN **Pn 18 21 07.6 +1.8**
KRLC *e*SN **Sn 18 22 36.2 -3.7**
**KRLC Kraliky 8.33 9** *e*P **Pn 18 21 07.6 +1.8**
KRLC *e* 18 22 36.2
**MANZ Manzenberg 8.34 348** *e*Pn **Pn 18 21 04.9 -1.0**
**MANZ Manzenberg 8.34 348** *e*Pn **Pn 18 21 04.9 -1.0**
**ECH Echery 8.35 322** Pn **Pn 18 21 05.2 -0.7**
**ECH Echery 8.35 322** P **Pn 18 21 05.3 -0.7**
**SZH Strazhitsa 8.37 77** ⇑*i*P **Pn 18 21 07.2 +1.0**
**TGMR Targu Mures 8.40 53** ⇓P **Pn 18 21 09.3 +2.7**
**CDF Champ du Feu 8.44 323** *e*Pn **Pn 18 21 07.0 -0.3**
CDF *e*Sn **Sn 18 22 35.1 -7.5**
comp=Z,2µm,0.8s
CDF *e*Sg Sg 18 23 25.2 -10
comp=Z,264nm,0.7s
**BERU Beregovo 8.45 38** P **Pn 18 21 09.5 +2.2**
**CRVS Cervenica-Dubn 8.46 31** *e*P **Pn 18 21 10.5 +3.1**
CRVS MLR MLR
comp=Z,2µm,2.4s
**CRVS Cervenica-Dubn 8.46 31** *e*PN **Pn 18 21 10.5 +3.1**
CRVS *e*PG Pg 18 22 01.4 +15
CRVS *e*SN Sn 18 22 31.4 -11
CRVS *e*LG Lg 18 24 28.0
**NIE Niedzica 8.48 25** *e*P Pn 18 21 12.8 +5.0
**NIE Niedzica 8.48 25** P **Pn 18 21 11.0 +3.2**
comp=Z,45nm,1.0s,comp=Z,652nm
**BMR Baia Mare 8.48 44** ⇓P **Pn 18 21 11.0 +3.2**
**BMR Baia Mare 8.48 44** P **Pn 18 21 10.9 +3.1**
**

**DPC Dobruska-Polom 8.56 7 P Pn 18 21 11.8 +2.9**
comp=Z,52nm,1.0s,comp=Z,591nm
**DPC Dobruska-Polom 8.56 7** *e*Pn **Pn 18 21 13.0 +4.1**
**HAU Haudompre 8.59 319** *e*Pn **Pn 18 21 08.4 -0.8**
**HAU Haudompre 8.59 319** *e*Pg Pg 18 21 44.1 -5.2
HAU *e*Sn **Sn 18 22 38.9 -7.2**
comp=Z,182nm,0.2s
HAU *e*Sg Sg 18 23 30.2 -10
comp=Z,919nm,1.1s
**ARCR ARCALIA 8.60 49** ⇓P **Pn 18 21 12.2 +2.9**
**KORU Korolevo 8.63 40** P **Pn 18 21 13.4 +3.7**
**MUKU Mukachevo 8.63 37** P **Pn 18 21 13.0 +3.2**
**CAVK Edirne/Enez-Ca 8.64 94** ⇑P **Pn 18 21 10.6 +0.7**
**ROTT Steinweiler 8.64 330** *e*Pn **Pn 18 21 13.6 +3.7**
**ROTT Steinweiler 8.64 330** *e*Pn **Pn 18 21 13.6 +3.7**
**DOPR Dopca 8.67 58** ⇑P **Pn 18 21 13.1 +2.7**
**UPC Upice 8.69 5** *e*PN **Pn 18 21 11.3 +0.7**
UPC AMS AMS 18 25 10.0
comp=Z,9μm,9.9s
**UPC Upice 8.69 5** *e*P **Pn 18 21 11.3 +0.7**
UPC MLR MLR
comp=Z,9μm,9.9s
**BRIU Brid 8.70 39** P **Pn 18 21 14.1 +3.4**
**RICC Richard 8.70 357** *e*PN **Pn 18 21 10.5 -0.3**
**TANN Tannenbergstha 8.71 350** *e*Pn **Pn 18 21 12.3 +1.4**
**TANN Tannenbergstha 8.71 350** *e*Pn **Pn 18 21 12.3 +1.4**
**JMB Yambol 8.73 82**⇑ *i*P **Pn 18 21 11.9 +0.7**
**OSTC Ostas 8.76 6** *e*PN **Pn 18 21 14.1 +2.6**
**OSTC Ostas 8.76 6** *e*P **Pn 18 21 14.1 +2.6**
**HSKC Hora Svate Kat 8.80 354** *e*PN **Pn 18 21 11.7 -0.5**
HSKC AMS AMS 18 25 10.0
comp=Z,9μm,9.5s
**KOLS Kolonicke sedl 8.81 34** *e*P Pn 18 21 17.4 +5.1
KOLS MLR MLR
comp=Z,100nm,0.7s
**KOLS Kolonicke sedl 8.81 34** *e*PN Pn 18 21 17.4 +5.1
KOLS *e*PG **Pg 18 21 55.9 +2.4**
KOLS eLG Lg 18 23 03.9
**SULR 8.82 68** ⇓P **Pn 18 21 14.0 +1.7**
**SIGR SIGRI 8.82 104** P **Pn 18 21 12.6 +0.2**
**PLN Plauen 8.82 349** *e*Pn **Pn 18 21 13.4 +1.0**
**PLN Plauen 8.82 349** *e*Pn **Pn 18 21 13.4 +1.0**
**MLR Muntele Rosu 8.85 62** Pn **Pn 18 21 14.0 +1.0**
**MLR Muntele Rosu 8.85 62** Pn **Pn 18 21 14.8 +1.8**
comp=Z,2.7nm,0.3s,baz=218,slow=4.2,SNR=117
MLR LR LR 18 25 33.9
comp=Z,8μm,18.1s,baz=252,slow=44
**MLR Muntele Rosu 8.85 62** ⇑P **Pn 18 21 15.8 +2.8**
**MLR Muntele Rosu 8.85 62** P **Pn 18 21 15.7 +2.7**
**MLR Muntele Rosu 8.85 62** P **Pn 18 21 15.9 +2.9**
comp=Z,615nm,1.4s,comp=Z,6μm
**EJON La Jonquera 8.87 278** P **Pn 18 21 12.8 -0.4**
EJON S **Sn 18 22 51.1 -2.1**
**BOSR Bodos 8.89 58** ⇓P **Pn 18 21 16.3 +2.9**
**EDRB Edirne 8.91 86** P **Pn 18 21 14.6 +0.9**
**ANKY Antikythira Is 8.92 129** P **Pn 18 21 14.8 +0.9**
**EZN Ezine 8.96 99** P **Pn 18 21 15.1 +0.7**
**EZN Ezine 8.96 99** P **Pn 18 21 15.1 +0.7**
comp=Z,120nm,0.8s,comp=Z,1μm
**OZUR 8.98 58** ⇓P **Pn 18 21 17.2 +2.6**
**BRG Berggiesshubel 9.04 357** *e*P **Pn 18 21 15.7 +0.3**
BRG Amp 18 21 19.3
comp=Z,24nm,0.9s
BRG r 18 21 34.3
BRG r 18 21 60.0
BRG r 18 23 07.5
BRG r 18 24 05.3
BRG Amp 18 24 12.2
comp=Z,379nm,1.1s
BRG Amp 18 25 03.0
comp=N,6.3nm,13.4s
BRG Amp 18 25 06.0
comp=E,8.5nm,11.6s
BRG Amp 18 25 07.0
comp=Z,6.5nm,17.2s
**BRG Berggiesshubel 9.04 357** *e*Pn **Pn 18 21 15.9 +0.6**
**BRG Berggiesshubel 9.04 357** *e*Pn **Pn 18 21 15.9 +0.6**
**KSP Ksiaz 9.05 6** *e*P **Pn 18 21 18.8 +3.3**
**KSP Ksiaz 9.05 6** P **Pn 18 21 18.5 +3.0**
comp=Z,56nm,1.1s,comp=Z,645nm
**OJC Ojcow 9.05 21** *e*P **Pn 18 21 19.6 +4.0**
**OJC Ojcow 9.05 21** Pn **Pn 18 21 16.1 +0.5**
**OJC Ojcow 9.05 21** P **Pn 18 21 16.1 +0.5**
**MEZ Mezhgor'ye 9.06 40** P **Pn 18 21 18.6 +2.9**
**RAKU Rahkiv 9.06 44** P **Pn 18 21 18.2 +2.5**
**MOX Moxa 9.06 347** *e*Pn **Pn 18 21 14.1 -1.6**
**MOX Moxa 9.06 347** *e*Pn **Pn 18 21 14.1 -1.6**
**NEHR Nehoiu 9.06 63** ⇓P **Pn 18 21 18.7 +2.9**
**TURR Turia 9.11 59** ⇓P **Pn 18 21 19.4 +3.0**
**PRK Paraskevi 9.11 103** P **Pn 18 21 17.0 +0.6**
**ISR Istrita 9.13 65** ⇑P **Pn 18 21 19.6 +2.8**
**ISR Istrita 9.13 65** P **Pn 18 21 19.5 +2.7**
**ISR Istrita 9.13 65** P **Pn 18 21 19.0 +2.2**
comp=Z,197nm,0.9s,comp=Z,4μm
**COVR Voineasa-Covas 9.15 60** ⇑P **Pn 18 21 19.6 +2.7**
**SMF Signal de Mont 9.21 305** *e*Pn **Pn 18 21 17.4 -0.3**
**SMF Signal de Mont 9.21 305** *e*Pg Pn 18 21 55.4 +38
SMF *e*Sn **Sn 18 22 53.2 -8.1**
comp=Z,337nm,0.5s
SMF *e*Sg 18 23 49.4
comp=Z,239nm,0.8s
**PAGF Fort de Pagny 9.26 319** *e*Pn **Pn 18 21 18.3 -0.2**
baz=142
**PAGF Fort de Pagny 9.26 319** *e*Pg Pn 18 21 56.3 +38
PAGF *e*Sn **Sn 18 22 54.3 -8.4**
PAGF *e*Sg 18 23 51.3
comp=Z,817nm,1.1s
**ETOS Mallorca 9.33 261** P **Pn 18 21 20.0 +0.6**
**BISRR Bisoca 9.38 63** ⇑P **Pn 18 21 23.0 +2.9**
**BURAR Bucovina Array 9.38 49** Pn **Pn 18 21 20.2 0.0**
**BURAR Bucovina Array 9.38 49** ⇓P **Pn 18 21 23.4 +3.2**
**BURAR Bucovina Array 9.38 49** P **Pn 18 21 23.9 +3.8**
**SFTF Sexfontaines 9.38 316** *e*Pn **Pn 18 21 19.3 -0.8**
baz=126
**SFTF Sexfontaines 9.38 316** *e*Pg Pn 18 21 58.4 +38
SFTF *e*Sn **Sn 18 22 57.0 -8.6**
SFTF *e*Sg 18 23 54.1
comp=Z,692nm,1.0s
**BUR08 Bucovina Ar. S 9.38 48** Pn **Pn 18 21 20.3 +0.1**
**MTLF Montolieu 9.40 283** *e*Pn **Pn 18 21 20.9 +0.5**
**MTLF Montolieu 9.40 283** *e*Pg Pn 18 21 59.9 +39
MTLF *e*Sn **Sn 18 22 59.0 -7.1**
MTLF *e*Sg 18 23 57.7
comp=Z,36nm,0.9s
**RODP Rodopos 9.40 129** P **Pn 18 21 22.0 +1.6**
**PLOR3 Plostina Array 9.44 61** P **Pn 18 21 22.8 +1.9**
comp=Z,202nm,1.0s,comp=Z,2μm
**PLOR Plostina 9.44 61** ⇓P **Pn 18 21 22.8 +1.8**
**PLOR Plostina 9.44 61** P **Pn 18 21 22.7 +1.7**
**PLOR5 Plostina Array 9.45 61** P **Pn 18 21 23.1 +2.0**
comp=Z,137nm,0.8s,comp=Z,3μm
**TNS Taunus Mts 9.46 334** *e*Pn **Pn 18 21 22.0 +0.8**
**TNS Taunus Mts 9.46 334** *e*Pn **Pn 18 21 22.0 +0.8**
**ONER Baraj Valea Uz 9.46 58** ⇑P **Pn 18 21 24.2 +3.0**
**SPBR Spulber 9.47 62** ⇑P **Pn 18 21 23.3 +1.9**
**ABH Alteburg 9.48 330** *e*Pn **Pn 18 21 21.7 +0.2**
**ABH Alteburg 9.48 330** *e*Pn **Pn 18 21 21.7 +0.2**
**VRI Vrincioaia 9.50 61** ⇑P **Pn 18 21 23.8 +2.1**
**VRI Vrincioaia 9.50 61** P **Pn 18 21 23.8 +2.1**
**VRI Vrincioaia 9.50 61** P **Pn 18 21 23.8 +2.1**
comp=Z,99nm,0.9s,comp=Z,790nm
**LOR Lormes 9.50 308** *e*Pn **Pn 18 21 21.1 -0.6**
baz=122
**LOR Lormes 9.50 308** *e*Pg Pn 18 22 00.0 +38
LOR *e*Sn **Sn 18 23 00.5 -8.0**
comp=Z,374nm,0.5s
LOR *e*Sg 18 23 57.5
comp=Z,130nm,0.5s
**LOR Lormes 9.50 308** *e*P **Pn 18 21 20.5 -1.2**
**GRER 9.50 64** ⇓P **Pn 18 21 24.7 +2.9**
**KWP Kalwaria Pacla 9.53 33** *e*P **Pn 18 21 26.9 +4.7**
**KWP Kalwaria Pacla 9.53 33** Pn **Pn 18 21 23.7 +1.5**
**KWP Kalwaria Pacla 9.53 33** P **Pn 18 21 23.7 +1.5**
**CLL Collm 9.53 353** Pn **Pn 18 21 21.8 -0.4**
**CLL Collm 9.53 353** *i* Pn **Pn 18 21 22.9 +0.7**
comp=Z,107nm,1.2s
CLL *e*Sn Sn 18 22 58.0 -11
CLL *ex* x 18 23 15.0
CLL *e*Sb 18 23 36.0
CLL *e*Sg 18 24 08.0
CLL AMS AMS 18 24 24.0
comp=N,8μm,21.9s
CLL AMS AMS 18 24 24.0
comp=E,33μm,19.6s
CLL AMS AMS 18 24 42.0
**CLL Collm 9.53 353** *e*Pn **Pn 18 21 22.3 +0.1**
**CLL Collm 9.53 353** *i* P **Pn 18 21 22.9 +0.7**
CLL pmax pmax
comp=Z,107nm,1.2s
**CLL Collm 9.53 353** P **Pn 18 21 22.1 -0.1**
comp=Z,85nm,0.7s,comp=Z,979nm
**CLL Collm 9.53 353** *e*Pn **Pn 18 21 22.3 +0.1**
**AMRR Amara 9.55 69** ⇓P **Pn 18 21 24.4 +2.0**
**AMRR Amara 9.55 69** P **Pn 18 21 24.4 +2.0**
**UBBA Unterbreizbach 9.56 341** *e*Pn **Pn 18 21 23.9 +1.6**
**UBBA Unterbreizbach 9.56 341** *e*Pn **Pn 18 21 23.9 +1.6**
**MEZF Maizieres J'vi 9.56 317** *e*Pn **Pn 18 21 22.3 -0.3**
baz=135
**MEZF Maizieres J'vi 9.56 317** *e*Pg Pn 18 22 00.3 +38
MEZF *e*Sn **Sn 18 23 01.9 -8.1**
MEZF *e*Sg 18 24 00.8
comp=Z,266nm,0.8s
**APE Apeiranthos 9.57 116** ⇑P **Pn 18 21 23.8 +1.0**
**APE Apeiranthos 9.57 116***d* *i*P **Pn 18 21 22.2 -0.6**
APE MLR MLR
comp=Z,7μm,11.0s
**AVF Avril sur Loir 9.57 305** *e*Pn **Pn 18 21 22.1 -0.6**
**AVF Avril sur Loir 9.57 305** *e*Pg Pn 18 22 01.5 +39
AVF *e*Sn Sn 18 23 01.1 -9.1
comp=Z,224nm,0.8s
AVF *e*Sg 18 24 01.0
comp=Z,106nm,0.8s
**AVF Avril sur Loir 9.57 305** *e*P **Pn 18 21 21.7 -1.0**
**NEUB Neuenburg 9.58 348** *e*Pn **Pn 18 21 23.4 +0.6**
**NEUB Neuenburg 9.58 348** *e*Pn **Pn 18 21 23.4 +0.6**
**IMMV Iera Moni Meta 9.60 129** P **Pn 18 21 23.4 +0.2**
**SSF Saint Saulge 9.61 307** *e*Pn **Pn 18 21 22.2 -1.0**
**SSF Saint Saulge 9.61 307** *e*Pg Pn 18 22 02.0 +39
SSF *e*Sn Sn 18 23 02.1 -9.0
comp=Z,134nm,0.4s
SSF *e*Sg 18 24 02.0
comp=Z,189nm,0.9s
**SSF Saint Saulge 9.61 307** *e*P **Pn 18 21 22.1 -1.1**
**NAST IGS Nastaetten 9.63 332** *e*Pn **Pn 18 21 23.6 +0.1**
NAST *e*Sn **Sn 18 23 07.8 -3.9**
**RIVT Riveris 9.65 327** *e*Pn **Pn 18 21 24.9 +1.2**
**RIVT Riveris 9.65 327** *e*Pn **Pn 18 21 24.9 +1.2**
**ODBI Odobesti 9.68 62** ⇓P **Pn 18 21 27.2 +3.1**
**TESR Tescani 9.69 57** ⇑P **Pn 18 21 27.1 +2.8**
**TESR Tescani 9.69 57** P **Pn 18 21 27.1 +2.7**
comp=Z,119nm,1.6s,comp=Z,2μm
**KSV Kosov 9.71 45** P **Pn 18 21 27.6 +3.0**
**CAF Calviac 9.77 293** *e*P **Pn 18 21 29.7 +4.2**
**PANC Panciu 9.77 62** ⇑P **Pn 18 21 27.6 +2.1**
**BGF Bois d'Agland 9.79 303** *e*Pn **Pn 18 21 26.0 +0.4**
**BGF Bois d'Agland 9.79 303** *e*Pg Pn 18 22 05.3 +40
BGF *e*Sn Sn 18 23 05.7 -10
comp=Z,222nm,0.4s
**BGF Bois d'Agland 9.79 303** *e*P **Pn 18 21 25.1 -0.5**
**ICOR Ion Corvin 9.79 72** ⇑P **Pn 18 21 27.2 +1.6**
**BGG Burgeitz 9.83 331** *e*Pn **Pn 18 21 27.1 +0.9**
**TATN Tataouine 9.87 202** Pn **Pn 18 21 26.3 -0.5**
**WLF Walferdange 9.87 325** Pn **Pn 18 21 26.8 0.0**
**WLF Walferdange 9.87 325** P **Pn 18 21 26.7 0.0**
WLF S **Sn 18 23 16.3 -1.2**
**WLF Walferdange 9.87 325** *d*P **Pn 18 21 28.0 +1.2**
WLF *d*S **Sn 18 23 15.6 -1.9**
**WLF Walferdange 9.87 325** *e*Pn **Pn 18 21 28.5 +1.8**
**WLF Walferdange 9.87 325** P **Pn 18 21 26.8 0.0**
**WLF Walferdange 9.87 325** *e*Pn **Pn 18 21 28.5 +1.8**
**SANT Santorini 9.92 120** Pn **Pn 18 21 27.7 +0.1**
**HARR Harsova 9.98 69** ⇑P **Pn 18 21 29.9 +1.6**
**HARR Harsova 9.98 69** P **Pn 18 21 29.9 +1.6**
**TLBR Topalu 10.04 70** ⇓P **Pn 18 21 30.8 +1.7**
**CEST Esterri de Car 10.08 279** Pn **Pn 18 21 28.7 -1.2**
**TCF Toulx Ste Croi 10.09 300** *e*Pn **Pn 18 21 31.3 +1.5**
**TCF Toulx Ste Croi 10.09 300** *e*Pg Pn 18 22 11.0 +41
TCF *e*Sn Sn 18 23 12.5 -10
comp=Z,52nm,0.3s
**SCHLR Schela 10.11 65** ⇓P **Pn 18 21 31.5 +1.5**
**HILG Hillesheim 10.14 329** *e*Pn **Pn 18 21 31.4 +0.9**
**AHRW Bad Neuenahr-A 10.20 331** *e*Pn **Pn 18 21 32.9 +1.7**
**AHRW Bad Neuenahr-A 10.20 331** *e*Pn **Pn 18 21 32.9 +1.7**
**HYF Humbligny 10.22 306** *e*Pn **Pn 18 21 31.8 +0.1**
**HYF Humbligny 10.22 306** *e*Pg Pn 18 22 12.9 +41
HYF *e*Sn Sn 18 23 16.0 -10
comp=Z,970nm,0.5s
**LVV L'vov 10.23 36** *e*P **Pn 18 21 33.2 +1.5**
LVV *e*S **Sn 18 23 28.6 +2.2**
LVV MLR MLR
comp=Z,4μm,10.0s
**CFR Carcaliu 10.24 67** ⇓P **Pn 18 21 33.2 +1.4**
**CFR Carcaliu 10.24 67** P **Pn 18 21 35.2 +3.4**
**RJF Les Rejaudoux 10.24 294** *e*P **Pn 18 21 35.6 +3.7**
**MFTR Murfatlar 10.24 77** ⇑P **Pn 18 21 34.3 +2.4**
**GTTG Gottingen 10.24 343** *e*Pn **Pn 18 21 33.3 +1.4**
**GTTG Gottingen 10.24 343** *e*Pn **Pn 18 21 33.3 +1.4**
**IDI Anoyia 10.26 126** Pn **Pn 18 21 29.1 -3.1**
**IDI Anoyia 10.26 126** P **Pn 18 21 31.6 -0.6**
IDI S Sn 18 23 17.4 -10
**IDI Anoyia 10.26 126** Pn **Pn 18 21 31.6 -0.6**
comp=Z,9.5nm,0.3s,baz=303,slow=8.3,SNR=50
IDI Sn **Sn 18 23 19.5 -7.8**
comp=Z,20nm,0.3s,baz=218,slow=17,SNR=6.4
IDI LR LR 18 26 47.4
comp=Z,3μm,21.0s,baz=320,slow=44
**SCTR Scanteiesti 10.27 64** ⇑P **Pn 18 21 34.9 +2.6**
**TIRR Tirgusor 10.28 71** Pn **Pn 18 21 30.2 -2.2**
**TIRR Tirgusor 10.28 71** P **Pn 18 21 30.2 -2.2**
**KASTN Kahler Asten 10.33 337** *e*Pn **Pn 18 21 34.2 +1.1**
**KASTN Kahler Asten 10.33 337** *e*Pn **Pn 18 21 34.2 +1.1**
**TPGR Topolog 10.36 69** ⇑P **Pn 18 21 35.1 +1.6**
**BHOU Houvegnez 10.46 327** *d*P **Pn 18 21 36.5 +1.6**
**HOBG Hohbusch 10.48 333** *e*Pn **Pn 18 21 35.1 0.0**
**KLL Kalltalsperre 10.57 329** *e*Pn **Pn 18 21 36.8 +0.4**
**BTNL Ternell 10.59 328** *d*P **Pn 18 21 38.7 +2.0**
BTNL *d*S **Sn 18 23 31.1 -4.2**
**KMPD K-Podol'skiy 10.60 47** P 18 21 40.1
KMPD P **Pn 18 21 39.1 +2.3**
**DREG Dreilaegerbach 10.61 329** *e*Pn **Pn 18 21 36.0 -0.9**
**RCHB Rochefort 10.63 325** *d*P **Pn 18 21 38.0 +0.8**
RCHB *d*S **Sn 18 23 27.7 -8.5**
**EIBI Ibiza 10.64 259** P **Pn 18 21 39.6 +2.2**
EIBI S **Sn 18 23 33.3 -3.3**
**MEM Membach 10.66 328** *d*P **Pn 18 21 38.3 +0.8**
MEM *d*S **Sn 18 23 35.9 -0.9**
**JURR Jurilovca 10.66 69** ⇑P **Pn 18 21 38.8 +1.2**
**LFF La Frestale 10.69 291** *e*P Pn 18 21 43.3 +5.3
**TLCR 10.70 67** ⇑P **Pn 18 21 40.4 +2.2**
**TLCR 10.70 67** P **Pn 18 21 40.3 +2.1**
**EPF Esparros 10.76 281** *e*Pn **Pn 18 21 39.4 +0.4**
**EPF Esparros 10.76 281** *e*P Pn 18 21 45.4 +6.4
**EPF Esparros 10.76 281** *e*Pg Pn 18 22 24.6 +46
EPF *e*Sn **Sn 18 23 31.4 -8.0**
EPF *e*Sg 18 24 40.6
comp=Z,22nm,0.9s
**EPF Esparros 10.76 281** *e*P **Pn 18 21 40.6 +1.6**
**GIVF Givet 10.77 323** *e*Pn **Pn 18 21 39.8 +0.7**
**GIVF Givet 10.77 323** *e*P Pn 18 21 44.3 +5.2
GIVF *e*Sn Sn 18 23 30.5 -9.1
comp=Z,467nm,0.9s
GIVF *e*Sg 18 24 39.1
comp=Z,97nm,0.8s
**BEL Belsk 10.79 20** *e*P Pn 18 21 44.2 +4.9
**BCLA Clavier 10.80 326** *d*P **Pn 18 21 40.8 +1.3**
BCLA *d*S Sn 18 23 30.2 -10
**BSTI Sart Tilman 10.81 327** *d*P **Pn 18 21 41.2 +1.6**
BSTI *d*S **Sn 18 23 35.8 -4.8**
**CLF Chambon-Foret 10.81 309** Pn **Pn 18 21 38.3 -1.4**
**BGES Gesves 10.86 325** *d*P **Pn 18 21 42.1 +1.7**
BGES *d*S **Sn 18 23 35.2 -6.7**
**DOU Dourbes 10.87 323** *d*P **Pn 18 21 40.6 +0.2**
DOU *d*S **Sn 18 23 34.6 -7.4**
**BMRD Maredsous 10.94 324** *d*P **Pn 18 21 42.0 +0.5**
BMRD *d*S **Sn 18 23 38.3 -5.5**
**BAIF Baives 11.02 322** *e*Pn **Pn 18 21 42.8 +0.3**
**BAIF Baives 11.02 322** *e*Pg Pn 18 22 28.8 +46
BAIF *e*Sn Sn 18 23 36.1 -10
BAIF *e*Sg 18 24 45.4
comp=Z,296nm,1.4s
**MILM Milestii Mici 11.22 58**⇑ *i*P **Pn 18 21 46.0 +0.7**
comp=Z,1μm,2.0s
MILM *e*S **Sn 18 23 56.0 +5.3**
MILM *e*L L 18 25 40.0
MILM LRM MLR 18 27 50.0
comp=Z,4μm,11.0s
**MILM Milestii Mici 11.22 58** ⇑P **Pn 18 21 47.9 +2.6**
**MILM Milestii Mici 11.22 58***c* *i*P **Pn 18 21 46.0 +0.7**
MILM *e*S **Sn 18 23 56.0 +5.3**
MILM pmax pmax
comp=Z,1μm,2.0s
MILM MLR MLR
comp=Z,4μm,11.0s
**KIS Kishinev 11.26 58**⇑ *i*P **Pn 18 21 46.7 +0.9**
comp=Z,700nm,1.9s
KIS *e*S **Sn 18 23 58.0 +6.5**
KIS *e*L L 18 25 36.0
KIS LRM MLR 18 27 10.0
comp=Z,1μm,10.5s
**KIS Kishinev 11.26 58***c* *i*P **Pn 18 21 46.7 +0.9**
KIS *e*S **Sn 18 23 58.0 +6.5**
KIS pmax pmax
comp=Z,700nm,1.9s
KIS MLR MLR
comp=Z,1μm,10.5s
**ETSF Etsaut 11.42 280** *e*Pn **Pn 18 21 47.9 -0.1**
**ETSF Etsaut 11.42 280** *e*P Pn 18 21 54.2 +6.2
**ETSF Etsaut 11.42 280** *e*Pg Pn 18 22 36.9 +49
ETSF *e*Sn **Sn 18 23 47.2 -8.4**
ETSF *e*Sg 18 25 00.6
comp=Z,10nm,0.8s
**SORM Soroca 11.45 52** ⇑P **Pn 18 21 51.2 +2.8**
**SORM Soroca 11.45 52** P **Pn 18 21 50.5 +2.1**
**SORM Soroca 11.45 52** P **Pn 18 21 49.9 +1.5**
comp=Z,184nm,1.2s,comp=Z,2μm
**KARP Karpathos 11.52 119** Pn **Pn 18 21 46.5 -3.0**
**MFF Saint Martin d 11.72 299** *e*Pn **Pn 18 21 50.9 -1.3**
**MFF Saint Martin d 11.72 299** *e*P Pn 18 21 58.4 +6.2
MFF *e*Sn Sn 18 23 52.9 -10
comp=Z,64nm,1.0s
**ARG Arkhangelos 11.79 114** Pn **Pn 18 21 49.9 -3.2**
**ARG Arkhangelos 11.79 114** P **Pn 18 21 49.9 -3.2**
**SJPF Ste Jean 11.91 281** *e*P Pn 18 21 59.8 +5.1
**RNPP5 Staryi Chortor 12.07 35** P **Pn 18 21 59.0 +2.1**
**LUBAR Lubar, Ukraine 12.09 44** P **Pn 18 21 58.9 +1.8**
**RNPP8 Varash 12.14 35** P **Pn 18 21 59.9 +2.1**
**ECHE Chera 12.18 265** P **Pn 18 22 01.7 +3.2**
**RNPP9 Sopachiv 12.21 35** P **Pn 18 22 00.7 +2.0**
**MDUB Mudurnu 12.44 91** Pn **Pn 18 21 60.0 -2.0**
**MI29 MI29, Kamyanyy 12.44 42** P **Pn 18 22 04.3 +2.4**
**LDF La Druitiere 12.48 308** *e*Pn **Pn 18 22 04.7 +2.2**
LDF *e*Sn Sn 18 24 09.8 -12
comp=Z,57nm,0.5s
**MI28 MI28,Pidlybu 12.68 40** P **Pn 18 22 07.4 +2.2**
**FLN La Foliniere 12.77 308** *e*Pn **Pn 18 22 08.7 +2.2**
baz=118
FLN *e*Sn Sn 18 24 16.8 -12
comp=Z,66nm,0.5s
**MI30 MI30,Zelenitsa 12.81 42** P **Pn 18 22 08.9 +1.9**
**GRR Gorron 12.83 306** *e*Pn **Pn 18 22 07.8 +0.5**
GRR *e*Sn Sn 18 24 18.7 -11
comp=Z,0.9nm,0.1s
**CART Cartagena 12.89 256** Pn **Pn 18 22 05.3 -2.9**
**ETOB Tobarra 12.90 261** P **Pn 18 22 08.5 +0.2**
**EMUR La Murta 12.96 257** P **Pn 18 22 10.8 +1.6**
**AK14 Malin Array Si 13.21 44** P **Pn 18 22 12.7 +0.3**
**AK20 Malin Array Si 13.22 43** P **Pn 18 22 13.5 +0.9**
**AK12 Malin Array Si 13.24 44** P **Pn 18 22 13.9 +1.1**
**AK18 Malin Array Si 13.24 43** P **Pn 18 22 14.0 +1.2**
**AK05 Malin Array Si 13.25 44** P **Pn 18 22 14.0 +1.0**
**AK21 Malin Array Si 13.26 43** P **Pn 18 22 13.9 +0.8**
**AK22 Malin Array Si 13.27 43** P **Pn 18 22 14.0 +0.8**
**BSD Bornholm Skovb 13.27 0** *e*P **Pn 18 22 13.4 +0.2**
BSD IAML 18 26 35.8
comp=Z,14nm,0.9s
**KIEV Kiev 13.30 43** Pn **Pn 18 22 10.7 -2.9**
**KIEV Kiev 13.30 43** *i* P **Pn 18 22 13.2 -0.3**
SNR=24
**KIEV Kiev 13.30 43** P **Pn 18 22 10.7 -2.9**
**KIEV Kiev 13.30 43** P **Pn 18 22 14.7 +1.1**
comp=Z,206nm,1.4s,comp=Z,5μm
**AKASG Malin Array Be 13.31 43** **Pn 18 22 11.4 -2.4**
**AKASG Malin Array Be 13.31 43** Pn **Pn 18 22 14.6 +0.8**
comp=Z,1.2nm,0.3s,baz=234,slow=12,SNR=27
AKASG LR LR 18 27 56.3
comp=Z,5μm,19.5s,baz=230,slow=40
comp=Z,23nm,1.0s
**AKBB Malin Array Si 13.31 43** **Pn 18 22 10.1 -3.7**
**AKBB Malin Array Si 13.31 43***c* *i*P **Pn 18 22 13.7 -0.1**
AKBB MLR MLR
comp=Z,6μm,12.0s
**AKBB Malin Array Si 13.31 43** P **Pn 18 22 14.7 +0.9**
**SUW Suwalki 13.38 22** *e*P **Pn 18 22 17.7 +3.0**
**SUW Suwalki 13.38 22** Pn **Pn 18 22 12.7 -2.0**
**SUW Suwalki 13.38 22** *e*P **P 18 22 20.5 -3.8**
**SUW Suwalki 13.38 22** P **Pn 18 22 12.7 -2.0**
**BR231 Keskin MP Arra 13.76 92** Pn **Pn 18 22 16.3 -3.7**
**ANTO Ankara 13.76 92** Pn **Pn 18 22 16.0 -4.1**
**ANTO Ankara 13.76 92** P **Pn 18 22 16.0 -4.1**
**LUNU Lund 13.81 357** *e*P **Pn 18 22 22.2 +1.6**
**SGMF Saint Gilles 13.83 303** *e*Pn **Pn 18 22 19.7 -1.1**
SGMF *e*Sn Sn 18 24 42.9 -11
comp=Z,48nm,1.1s
**ENIJ Nijar 14.02 255** P **Pn 18 22 24.0 +0.4**
**QUIF Quistinic 14.09 302** *e*P **P 18 22 30.0 -2.3**
QUIF *e*Sn Sn 18 24 48.8 -12
comp=Z,14nm,0.5s
**BJUU Bjuv 14.28 356** *e*P **Pn 18 22 27.4 +0.5**
**BZK Bozkurt 14.30 83** Pn **Pn 18 22 26.2 -1.2**
**ROSF Rostrenen 14.30 303** *e*P **P 18 22 32.0 -2.6**
**SIM Simferopol' 14.37 71** *e*P **Pn 18 22 27.8 -0.6**
SIM pmax pmax
comp=Z,60nm,1.2s
**ESDC Sonseca Array 14.39 268** Pn **Pn 18 22 30.4 +1.7**
**ESDC Sonseca Array 14.39 268** Pn **Pn 18 22 26.4 -2.3**
comp=Z,0.1nm,0.3s,baz=74,slow=13,SNR=19
ESDC LR LR 18 27 51.3
comp=Z,3μm,19.5s,baz=79,slow=37
**BR106 Keskin Array S 14.41 92** P **Pn 18 22 31.8 +2.8**
comp=Z,33nm,1.1s,comp=Z,256nm
**BR131 Keskin Array S 14.43 92** Pn **Pn 18 22 26.6 -2.7**
**BR131 Keskin Array S 14.43 92***d* *i*P **Pn 18 22 31.4 +2.1**
**BRTR Keskin Array B 14.43 92** Pn **Pn 18 22 26.3 -3.0**
**BRTR Keskin Array B 14.43 92** Pn **Pn 18 22 30.8 +1.5**
comp=Z,0.2nm,0.3s,baz=278,slow=12,SNR=16
BRTR LR LR 18 28 00.9
comp=Z,2μm,18.3s,baz=297,slow=37
comp=Z,5.7nm,0.8s
**BRTR Keskin Array B 14.43 92** *i* P **Pn 18 22 31.7 +2.4**
BRTR pmax pmax
comp=Z,7.0nm,0.9s
**BR104 Keskin Array S 14.43 92** P **Pn 18 22 32.0 +2.6**
comp=Z,48nm,1.0s,comp=Z,358nm
**EBER Berja 14.55 256** P **Pn 18 22 32.8 +1.8**
**DEL Delary 14.64 358** *e*P **P 18 22 38.8 +0.6**
**DEL Delary 14.64 358** *e*P **Pn 18 22 31.8 -0.2**
**PAB San Pablo 14.71 267** Pn **Pn 18 22 29.9 -3.3**
**PAB San Pablo 14.71 267** P **Pn 18 22 34.3 +1.2**
**SWN1 Swindon 14.90 316** *e*P **Pn 18 22 34.6 -1.0**
SWN1 IAmb IAmb 18 22 35.5
comp=Z,557nm,1.5s
**PBUR Paburge 14.92 16** *e*P **P 18 22 41.8 +0.4**
**PABE Paberze 14.92 21** Pn **Pn 18 22 32.3 -3.3**
**PABE Paberze 14.92 21** *e*P **P 18 22 40.6 -0.7**
**SNOP Sinop 15.19 83** Pn **Pn 18 22 34.5 -4.9**
**FABU Falkenberg 15.22 356** *e*P **Pn 18 22 42.2 +2.5**
**NACGM Naroch 15.26 27** *e*P **Pn 18 22 38.9 -1.3**
**MNK Minsk 15.33 30** *i* P **Pn 18 22 37.6 -3.6**
comp=E,88nm,1.2s,baz=220
MNK *i* P **Pn 18 22 37.6 -3.6**
comp=N,50nm,1.3s,baz=220
MNK *i* P **Pn 18 22 37.6 -3.6**
comp=Z,62nm,1.1s,baz=220
MNK *i* PP **P 18 22 45.6 -0.3**
baz=220
MNK *i* PPP PPP 18 22 52.3
baz=220
MNK *i* S **Sn 18 25 25.1 -5.9**
baz=220
MNK *i* SS **SnSn 18 25 39.0 -4.6**
baz=220
MNK *i* SSS SSS 18 25 51.6
baz=220
MNK *i* LQ LQ 18 27 15.1
baz=220
MNK *i* LR LR 18 28 11.0
baz=220
MNK *i* LRM MLR 18 28 50.0
comp=N,4μm,13.1s,baz=220

MNK *i* LRM MLR 18 28 58.3
comp=E,5μm,16.9s,baz=220
MNK *i* LRM MLR 18 29 06.0
comp=Z,4μm,18.0s,baz=220
**MNK Minsk 15.33 30** *i* P **Pn 18 22 37.6 -3.6**
MNK *i* S **Sn 18 25 25.0 -5.9**
MNK pmax pmax
comp=Z,62nm,1.1s
MNK pmax pmax
comp=E,88nm,1.2s
MNK pmax pmax
comp=N,50nm,1.3s
MNK MLR MLR
comp=N,4μm,13.0s
MNK MLR MLR
comp=E,5μm,17.0s
MNK MLR MLR
comp=Z,4μm,18.0s
**VSVD Vaisvydziai 15.33 20** *e*P **P 18 22 47.1 +1.1**
**IIGN Ignalina 15.44 25** *e*P **P 18 22 47.4 +0.2**
**ISAL Salakas 15.59 25** *e*P **P 18 22 49.1 +0.3**
**IZAR Zarasai 15.78 24** *e*P **P 18 22 51.2 +0.3**
**BORU Boraas 15.85 356** *e*P **P 18 22 52.6 +0.9**
**LBWR Ladybower, Pea 16.00 322** *e*P **P 18 22 54.5 +1.1**
LBWR IAmb IAmb 18 22 59.2
comp=Z,281nm,1.3s
**HLM1 Long Mynd 16.02 318** *e*P **Pn 18 22 50.7 +0.4**
**STNC Stoke 16.03 320** *e*P **P 18 22 55.4 +1.6**
STNC IAmb IAmb 18 23 00.2
comp=Z,1μm,2.1s
**CSS Mathiatis 16.05 109** P **Pn 18 22 44.8 -5.9**
**PBRG Bragança 16.06 277** *e*P **P 18 22 56.6 +2.4**
comp=Z,76nm,1.3s
**HTL Hartland 16.10 311** *e*P **P 18 22 56.3 +1.8**
**BNN Bunyan 16.31 94 Pn 18 22 49.6 -4.5**
**HPK Haverah Park 16.32 323** *e*P **P 18 22 59.3 +2.4**
HPK IAmb IAmb 18 23 03.5
comp=Z,697nm,1.3s
**MVO Moncorvo 16.37 275** *e*P **P 18 23 00.7 +3.0**
comp=Z,67nm,1.8s
MVO *e*S **S 18 26 13.2 +4.3**
MVO *e*LR LR 18 28 21.6
comp=Z,4μm,16.0s
**SLIT Slitere, Latvi 16.49 14** *e*P **P 18 23 00.7 +1.9**
**VIKU Vikbolandet 16.71 3** *e*P **P 18 23 02.5 +1.3**
**ANN Anapa 16.72 72***c i*P **Pn 18 22 59.5 +0.4**
ANN *e*S **Sn 18 26 01.9 -2.7**
ANN pmax pmax
comp=Z,263nm,1.2s
**PVRL Vila Real 16.86 276** *e*P **P 18 23 05.1 +2.0**
**MTE Manteigas 16.90 273** P **Pn 18 23 02.6 +1.1**
**MTE Manteigas 16.90 273** *e*P **P 18 23 06.6 +3.1**
comp=Z,79nm,1.8s
MTE *e*S **S 18 26 23.3 +3.6**
MTE *e*LR LR 18 28 03.0
comp=Z,5μm,16.0s
**POLO Lamas de Olo 16.90 276** *e*P **Pn 18 23 02.8 +1.2**
comp=Z,37nm,1.5s
**HOMB Homborsund 16.91 348** *e*P **P 18 23 04.0 +0.7**
HOMB IAmb IAmb 18 23 09.0
comp=Z,106nm,1.4s
**PCBR Castelo Branco 16.98 271** *e*P **P 18 23 06.0 +1.7**
comp=Z,52nm,1.5s
**PMRV Marv??o 17.02 269** *e*P **Pn 18 23 04.0 +1.1**
comp=Z,59nm,1.5s
PMRV *e*S **S 18 26 27.9 +5.9**
PMRV *e*LR LR 18 27 45.7
comp=Z,2μm,18.0s
**PCAB Cabril 17.03 277** *e*P **P 18 23 05.9 +1.0**
comp=Z,102nm,1.4s
**EDMD Edmundbyers 17.05 325** *e*P **Pn 18 23 03.8 +0.6**
**PVIS Viseu 17.09 274** *e*P **P 18 23 08.3 +2.6**
comp=Z,97nm,1.7s
**PBAR Barrancos 17.12 265** *e*P **P 18 23 08.7 +2.7**
comp=Z,142nm,1.7s
**PGAV Gavieira, Arco 17.17 278** *e*P **P 18 23 10.5 +3.9**
comp=Z,131nm,1.7s
PGAV *e*S **S 18 26 30.9 +5.6**
PGAV *e*LR LR 18 28 18.4
comp=Z,4μm,18.0s
**WME Myndd Eilian 17.23 319** *e*P **P 18 23 09.1 +2.1**
**PESTR Estremoz 17.32 268 Pn 18 23 04.6 -2.1**
**PESTR Estremoz 17.32 268** *e*P **P 18 23 08.9 +0.8**
comp=Z,92nm,1.5s
**WPS Cemaes, Angles 17.33 318** *e*P **P 18 23 09.5 +1.4**
WPS IAmb IAmb 18 23 15.6
comp=Z,255nm,1.2s
**PCAS Casmilo, Conde 17.69 272** *e*P **P 18 23 15.3 +3.1**
comp=Z,104nm,1.5s
**EVO Evora 17.74 267** *e*P **P 18 23 15.7 +3.0**
comp=Z,40nm,1.7s
**PMTG Montargil 17.74 269** *e*P **P 18 23 13.6 +0.9**
comp=Z,88nm,1.2s
**MTSE Matsula 17.80 16** *e*P **P 18 23 15.3 +2.0**
**WIM Isle of Man 17.84 320** *e*P **P 18 23 15.7 +1.9**
**MDT Midelt 17.85 246** P **P 18 23 15.4 +1.2**
comp=Z,0.1nm,0.3s,baz=72,slow=14,SNR=25
MDT LR LR 18 29 22.2
comp=Z,2μm,18.9s,baz=54,slow=34
comp=Z,15nm,1.0s
**EKA Eskdalemuir Ar 17.90 325** P **P 18 23 14.7 +0.3**
baz=134,slow=13
EKA S **Sn 18 26 26.1 -6.9**
comp=Z,4.2nm,0.5s,baz=142,slow=24,SNR=5.5
comp=Z,22nm,0.7s
**PVAQ Vaqueiros 17.90 263** *e*P **P 18 23 16.0 +1.5**
comp=Z,102nm,1.7s
PVAQ *e*S **Sn 18 26 36.8 +3.5**
PVAQ *e*LR LR 18 28 22.0
comp=Z,2μm,20.0s
**ESK Eskdalemuir 17.91 325** P **P 18 23 14.9 +0.5**
**ESK Eskdalemuir 17.91 325** *e*P **P 18 23 16.1 +1.7**
**ESK Eskdalemuir 17.91 325** P **P 18 23 14.9 +0.5**
ESK pmax pmax
comp=E,85nm,1.3s
**IWEX Carrickbyrne, 18.00 313** P **P 18 23 17.8 +2.3**
**PSBE So Bento 18.04 270** *e*P **P 18 23 19.4 +3.3**
comp=Z,120nm,1.2s
**PCVE Castro Verde 18.05 264** *e*P **P 18 23 18.8 +2.6**
comp=Z,64nm,1.5s
**ESY Stoneypath 18.07 327** *e*P **P 18 23 19.1 +2.9**
**KONO Kongsberg 18.11 351** P **Pn 18 23 15.9 -0.4**
**KONO Kongsberg 18.11 351** *e*P **Pn 18 23 16.3 0.0**
KONO IAmb IAmb 18 23 21.5
comp=Z,117nm,1.4s
KONO *e*S **S 18 26 43.3 -0.5**
**KONO Kongsberg 18.11 351** P **Pn 18 23 15.9 -0.4**
KONO pmax pmax
comp=Z,96nm,1.4s
**UPP Uppsala 18.11 5** *e*P **P 18 23 18.6 +2.0**
**PBDV Barranco-do-Ve 18.11 263** *e*P **P 18 23 18.9 +2.0**
comp=Z,79nm,1.2s
**MESJ Messejana 18.12 265** *e*P **P 18 23 20.3 +3.4**
comp=Z,34nm,1.8s
**MESJ Messejana 18.12 265** *e*P **P 18 23 17.9 +1.0**
MESJ *e*S **Sn 18 26 41.1 +2.5**
MESJ IAMs_20 IAMs_20 18 30 56.6
comp=Z,7μm,12.6s
**MESJ Messejana 18.12 265** *e*P **P 18 23 17.9 +1.0**
MESJ *e*S **Sn 18 26 41.1 +2.5**
**DSB Dublin 18.20 316** P **P 18 23 20.0 +2.3**
**DSB Dublin 18.20 316** P **P 18 23 18.0 +0.3**
**NEWG New Galloway 18.23 323** *e*P **P 18 23 19.6 +1.6**
NEWG IAmb IAmb 18 23 25.4
comp=Z,204nm,1.4s
**VSU Vasula 18.25 20***d i*P **P 18 23 19.7 +1.6**
VSU MLR MLR
comp=Z,3μm,13.0s
**EDI Edinburgh 18.30 326** *e*P **P 18 23 22.2 +3.3**
EDI IAmb IAmb 18 23 27.1
comp=Z,677nm,1.7s
**HFS Hagfors 18.31 358** P **Pn 18 23 18.6 -0.3**
comp=Z,0.7nm,0.3s,baz=172,slow=12,SNR=19
comp=Z,9.7nm,0.8s
**BLS5 Blasjo 18.34 346** *e*P **P 18 23 20.2 +1.0**
BLS5 IAmb IAmb 18 23 40.4
comp=Z,75nm,1.2s
BLS5 *e*S **S 18 26 50.6 +2.0**
**SOC Sochi 18.37 76** *e*P **P 18 23 21.0 +1.3**
SOC *e* 18 26 48.3
SOC pmax pmax
comp=Z,37nm,0.8s
SOC MLR MLR
comp=Z,1μm,18.0s
**KMY Karmoy 18.37 344** *e*P **Pn 18 23 18.9 -0.6**
KMY IAmb IAmb 18 23 31.0
comp=Z,87nm,1.3s
KMY *e*S **S 18 26 49.3 +0.1**
**LIS Lisbon 18.53 268** *e*P **Pn 18 23 22.6 +0.9**
LIS *e*S **S 18 26 51.2 -1.5**
LIS IAMs_20 IAMs_20 18 30 26.9
comp=N,8μm,15.5s
**LIS Lisbon 18.53 268** *e*P **Pn 18 23 22.5 +0.9**
LIS *e*S **S 18 26 51.2 -1.5**
**MMAI Mount Meron Ar 18.55 112** P **P 18 23 19.1 -2.8**
comp=N,3.5nm,0.4s,baz=300,slow=12,SNR=9.0
MMAI S **Sn 18 26 40.9 -8.5**
comp=N,1.8nm,0.5s,baz=312,slow=17,SNR=2.2
**ILTH Belurgan, Co L 18.59 318** P **Pn 18 23 26.5 +4.3**
**AAL Aland 18.62 8** *e*P **P 18 23 21.9 -0.3**
**MORF Marmelete 18.63 264** *e*P **Pn 18 23 24.1 +1.2**
MORF *e*S **S 18 26 53.8 -1.0**
MORF IAMs_20 IAMs_20 18 30 19.1
comp=N,5μm,15.7s
**MORF Marmelete 18.63 264** *e*P **Pn 18 23 24.1 +1.2**
MORF *e*S **S 18 26 53.8 -1.0**
**ODD1 Odda 18.77 347** *e*P **P 18 23 24.0 0.0**
ODD1 IAmb IAmb 18 23 39.3
comp=Z,98nm,1.3s
ODD1 *e*S **S 18 26 59.9 +2.5**
**PGBU Glenifferbraes 18.78 325** *e*P **Pn 18 23 28.6 +4.0**
PGBU IAmb IAmb 18 23 32.2
comp=Z,257nm,1.6s
**ERBR Yeremizino-Bor 18.91 70** *e*P **P 18 23 25.7 +0.1**
ERBR *e*S **Sn 18 26 55.9 -1.8**
ERBR pmax pmax
comp=Z,193nm,1.4s
**ARBE Arbavere 18.93 18** *e*P **Pn 18 23 28.6 +2.3**
**NC602 NORSAR Array S 19.01 355** *e*P **P 18 23 26.1 -0.4**
NC602 IAmb IAmb 18 23 29.4
comp=Z,30nm,1.0s
NC602 *e*S **S 18 27 01.6 -0.5**
**LABN Labinsk 19.06 73** *e*P **Pn 18 23 28.9 +0.9**
LABN *e*S **Sn 18 27 00.7 -0.7**
LABN pmax pmax
comp=Z,245nm,1.9s
**VORD Divnogorie 19.11 53** *e*P **P 18 23 24.8 -2.9**
VORD *e*S **Sn 18 27 01.0 -1.5**
VORD pmax pmax
comp=Z,150nm,0.3s
VORD smax smax
comp=E,50nm,4.3s
**VSR Storozhevoye 19.12 52** *e*P **P 18 23 24.6 -3.2**
VSR *e*S **Sn 18 27 01.9 -0.8**
VSR pmax pmax
comp=Z,40nm,1.2s
VSR smax smax
comp=E,160nm,6.6s
VSR MLR MLR
comp=Z,3μm,13.0s
**NAO01 NORSAR Array S 19.16 354** P **P 18 23 24.9 -3.4**
NAO01 IAmb IAmb 18 23 34.5
comp=Z,117nm,1.1s
**SKAR Skarslia 19.27 350** *e*P **Pn 18 23 30.3 -0.1**
SKAR IAmb IAmb 18 23 43.4
comp=Z,80nm,1.3s
SKAR *e*S **S 18 27 07.9 +0.6**
**VORR Voronezh 19.30 51** *e*P **P 18 23 28.6 -1.2**
VORR *e*S **Sn 18 27 03.8 -3.3**
VORR pmax pmax
comp=Z,70nm,0.5s
VORR smax smax
comp=E,40nm,3.6s
VORR MLR MLR
comp=Z,1μm,8.0s
**MEF Metsahovi 19.31 15** *e*P **P 18 23 30.1 +0.3**
**NB2 NORSAR Subarra 19.33 355** P **P 18 23 30.8 +0.6**
comp=Z,50nm,1.2s,baz=172,slow=11
**NB2 NORSAR Subarra 19.33 355** P **P 18 23 30.8 +0.6**
baz=172,slow=11
**NOA NORSAR Array B 19.33 355** P **P 18 23 30.6 +0.4**
comp=Z,0.1nm,0.3s,baz=171,slow=11,SNR=28
NOA LR LR 18 31 26.2
comp=Z,3μm,18.4s,baz=175,slow=39
comp=Z,25nm,1.1s
**NC405 NORSAR Array S 19.38 355** IAmb IAmb 18 23 43.6
comp=Z,99nm,1.2s
**BER Bergen 19.44 346** *e*P **P 18 23 31.1 -0.1**
BER IAmb IAmb 18 23 34.5
comp=Z,63nm,1.2s
BER *e*S **S 18 27 13.7 +2.9**
**LAWE Loch Awe, Argy 19.46 325** *e*P **Pn 18 23 33.0 +0.3**
LAWE IAmb IAmb 18 23 39.0
comp=Z,88nm,1.3s
**OBN Obninsk 19.49 40** P **P 18 23 29.6 -2.2**
OBN IAmb IAmb 18 23 38.3
comp=Z,518nm,1.7s
**OBN Obninsk 19.49 40** P **P 18 23 30.6 -1.2**
comp=Z,11nm,0.3s,baz=221,slow=5.4,SNR=15
comp=Z,29nm,0.4s
**OBN Obninsk 19.49 40***c i*P **P 18 23 30.5 -1.3**
OBN pmax pmax
comp=Z,348nm,1.9s
OBN MLR MLR
comp=Z,3μm,17.0s
**LPSR Galich'ya Gora 19.50 48** *e*P **P 18 23 30.1 -1.8**
LPSR *e*S Sn 18 26 58.1 -14
LPSR pmax pmax
comp=Z,200nm,1.2s
LPSR smax smax
comp=E,210nm,7.6s
LPSR MLR MLR
comp=Z,2μm,15.0s
**AVE Averroes 19.53 251** IAmb IAmb 18 23 40.0
comp=Z,248nm,1.6s
**RAF Rauma 19.66 10** *e*P **Pn 18 23 35.0 +0.1**
**IDGL Inch Island, C 19.73 320** P **Pn 18 23 39.4 +3.5**
**HYA Hoyanger 20.03 348** *e*P **P 18 23 38.3 +0.6**
HYA IAmb IAmb 18 23 45.1
comp=Z,97nm,1.4s
HYA *e*S Sn 18 27 24.8 +0.3
**ASF Jabal al Asfar 20.07 112** P Pn 18 23 41.4 +1.2
comp=Z,31nm,1.3s,baz=37,slow=0.1,SNR=10
comp=Z,31nm,1.3s
**SUE Sulen 20.17 346** *e*P **P 18 23 39.2 -0.1**
SUE IAmb IAmb 18 23 45.1
comp=Z,90nm,1.4s
SUE *e*S **S 18 27 25.6 +0.2**
**KPL Plockton 20.27 327** *e*P Pn 18 23 41.8 -0.4
KPL IAmb IAmb 18 23 47.9
comp=Z,333nm,1.2s
**EIL Elat 20.32 120** P Pn 18 23 42.5 -0.6
comp=Z,9.3nm,0.6s,baz=357,slow=4.1,SNR=20
EIL S 18 27 13.9 -15
comp=Z,12nm,0.5s,baz=333,slow=10,SNR=6.0
EIL LR LR 18 34 20.2
comp=Z,2μm,21.4s,baz=311,slow=45
comp=Z,9.3nm,0.6s
**MOS Moscow 20.34 39** *e*P **P 18 23 39.7 -1.3**
MOS *e* 18 23 57.5
MOS *e*S **S 18 27 23.1 -5.6**
MOS pmax pmax
comp=N,600nm,3.2s
MOS pmax pmax
comp=E,1μm,3.2s
MOS pmax pmax
comp=Z,1μm,3.2s
MOS pmax pmax
comp=E,164nm,1.6s
MOS pmax pmax
comp=Z,238nm,1.6s
MOS smax smax
comp=N,800nm,3.6s
MOS smax smax
comp=E,2μm,4.0s
MOS MLR MLR
comp=Z,3μm,14.0s
MOS MLR MLR
comp=E,2μm,12.0s
MOS MLR MLR
comp=N,2μm,13.0s
**SHA1 Shidzhatmaz 20.49 75***d i*P Pn 18 23 45.7 +0.4
**KIV Kislovodsk 20.50 75** P **P 18 23 42.1 -1.0**
KIV IAmb IAmb 18 23 56.9
comp=Z,136nm,1.1s
**KIV Kislovodsk 20.50 75** *i* P **P 18 23 43.2 +0.2**
SNR=23
**KIV Kislovodsk 20.50 75** P Pn 18 23 46.9 +1.7
KIV S **S 18 27 33.5 +1.2**
**KIV Kislovodsk 20.50 75** *e*P **P 18 23 43.7 +0.7**
KIV *e*S **S 18 27 32.9 +0.6**
KIV pmax pmax
comp=Z,62nm,1.0s
KIV MLR MLR
comp=Z,2μm,14.0s
**KIV Kislovodsk 20.50 75** P Pn 18 23 45.4 +0.2
comp=Z,95nm,1.2s,comp=Z,1μm
**DOMB Dombas 20.51 352** *e*P **P 18 23 44.2 +1.3**
DOMB IAmb IAmb 18 23 53.0
comp=Z,36nm,0.9s
DOMB *e*S **S 18 27 33.7 +1.6**
**TAM Tamanrasset 20.54 205** P **P 18 23 42.8 -0.9**
TAM IAmb IAmb 18 23 57.8
comp=Z,134nm,1.4s
**TAM Tamanrasset 20.54 205** P **P 18 23 42.8 -0.9**
TAM pmax pmax
comp=Z,134nm,1.4s
**FOO Floro 20.63 347** *e*P **P 18 23 45.1 +0.9**
FOO IAmb IAmb 18 23 51.1
comp=Z,149nm,1.7s
FOO *e*S Sn 18 27 37.5 -1.4
**LINV Loch Inver, As 20.63 329** *e*P **P 18 23 45.5 +1.2**
LINV IAmb IAmb 18 23 49.2
comp=Z,395nm,1.2s
**VRH Novokhopyorsk 20.64 54** *e*P **P 18 23 43.4 -1.0**
VRH *e*S **S 18 27 32.3 -2.5**
VRH pmax pmax
comp=Z,31nm,0.6s
VRH smax smax
comp=N,800nm,4.3s
VRH MLR MLR
comp=Z,4μm,14.0s
**KBZ Khabaz 20.66 75** P **P 18 23 45.7 +1.0**
comp=Z,17nm,0.7s,baz=283,slow=9.7,SNR=33
KBZ LR LR 18 33 20.3
comp=Z,2μm,21.4s,baz=282,slow=41
comp=Z,17nm,0.7s
**KBZ Khabaz 20.66 75***c i*P Pn 18 23 46.8 -0.2
KBZ pmax pmax
comp=Z,41nm,1.0s
KBZ MLR MLR
comp=Z,2μm,21.0s
**GOF Gofitskoye 20.70 72***ce*P **P 18 23 38.3 -6.8**
**FINES FINESS Array B 20.77 15** P **P 18 23 44.7 -1.0**
**FINES FINESS Array B 20.77 15** P **P 18 23 45.7 +0.1**
comp=Z,48nm,0.9s,baz=199,slow=10,SNR=51
FINES PcP **PcP 18 27 54.8 +0.4**
comp=Z,3.7nm,0.8s,baz=160,slow=4.4,SNR=2.4
comp=Z,48nm,0.9s
**FIA1 FINESS Array S 20.77 15** P **P 18 23 45.0 -0.6**
FIA1 IAmb IAmb 18 23 53.2
comp=Z,282nm,0.8s
**GURO Guroymak-BITLI 21.02 90** IAmb IAmb 18 24 00.8
comp=Z,115nm,1.5s
**NCK Nalchik 21.19 76** *e*P **P 18 23 53.5 +3.1**
NCK pmax pmax
comp=Z,69nm,1.3s
**MOL Molde 21.19 351** *e*P **P 18 23 51.0 +0.8**
MOL IAmb IAmb 18 23 56.6
comp=Z,106nm,1.2s
MOL *e*S **S 18 27 47.9 +2.4**
**KEF Keuruu 21.21 13** *e*P **P 18 23 51.8 +1.4**
**LEWI Lewis, Hebride 21.29 327** IAmb IAmb 18 23 56.0
comp=Z,250nm,1.8s
**TBLU Trondheim 21.60 354** *e*P **P 18 23 56.8 +2.2**
TBLU IAmb IAmb 18 24 05.4
comp=Z,41nm,0.9s
TBLU *e*S **S 18 27 55.7 +2.2**
**VAF Ylistaro 21.72 10** *e*P **P 18 23 57.8 +1.9**
**VALR Valaam 21.82 21***c i*P **P 18 23 56.4 -0.5**
VALR pmax pmax
comp=Z,217nm,1.3s
**GNI Garni 22.61 84** P **P 18 24 06.4 +0.6**
GNI IAmb IAmb 18 24 26.8
comp=Z,101nm,1.1s
**GNI Garni 22.61 84** P **P 18 24 06.8 +1.0**
**GNI Garni 22.61 84** P **P 18 24 08.1 +2.3**
GNI S Sn 18 28 20.9 -6.0
**GNI Garni 22.61 84***c i*P **P 18 24 07.4 +1.6**
GNI pmax pmax
comp=Z,131nm,1.3s
**NSS Namsos 22.77 357** *e*P **P 18 24 07.9 +0.8**
NSS IAmb IAmb 18 24 13.1
comp=Z,24nm,1.0s
NSS *e*S **S 18 28 15.4 -0.3**
**JOF Joensuu 23.24 19** *e*P **P 18 24 13.9 +2.0**
**MAK Makhachkala 24.09 76***c i*P **P 18 24 17.6 -2.9**
MAK *e*S **S 18 28 33.1 -4.7**
MAK pmax pmax
comp=Z,269nm,1.7s
MAK MLR MLR
comp=Z,3μm,11.0s
**OUL Oulu 24.11 12** P **P 18 24 23.4 +3.0**
**SEKA Sheki 24.18 81** P **P 18 24 22.8 +1.3**
**MOR8 Moi Rana 24.36 360** *e*P **P 18 24 24.4 +1.7**
MOR8 IAmb IAmb 18 24 32.1
comp=Z,119nm,1.7s
MOR8 *e*S **S 18 28 48.0 +6.1**
**BELG Belogornoye 24.49 53** LR LR 18 33 40.1
comp=Z,2μm,20.8s,baz=255,slow=36
**BELG Belogornoye 24.49 53***c i*P **P 18 24 24.0 0.0**
BELG pmax pmax
comp=Z,107nm,1.4s
**STOK Stokkvaagen 24.55 358** *e*P **P 18 24 27.1 +2.8**
STOK IAmb IAmb 18 24 43.3
comp=Z,58nm,1.1s
STOK *e*S **S 18 28 49.2 +4.5**
**KONS Konsvik 24.71 358** *e*P **P 18 24 27.0 +1.1**
**FAUS Fauske 25.58 0** *e*P **P 18 24 33.6 -0.1**
FAUS IAmb IAmb 18 24 42.2
comp=Z,28nm,1.1s
FAUS *e*S **S 18 29 04.0 +2.8**
**LKRN Lenkeran, Azer 26.01 86** P P 18 24 28.8 -9.1
**STEI Steigen 26.13 0** *e*P **P 18 24 38.8 +0.1**
STEI IAmb IAmb 18 24 47.3
comp=Z,52nm,1.2s
STEI *e*S **S 18 29 14.2 +4.4**
**LOF Lofoten 26.34 359** *e*P **P 18 24 41.2 +0.6**
LOF IAmb IAmb 18 24 46.4
comp=Z,45nm,1.3s
LOF *e*S **S 18 29 15.7 +2.5**
**KIRV Kirov 27.33 40** LR LR 18 36 53.8
comp=Z,3μm,19.4s,baz=253,slow=39
**KIRV Kirov 27.33 40***c i*P **P 18 24 49.4 -0.2**
**KTK1 Kautokeino 27.58 7** *e*P **P 18 24 52.1 +0.3**
KTK1 IAmb IAmb 18 24 57.9
comp=Z,20nm,1.0s
KTK1 *e*S **S 18 29 35.8 +3.0**
**APA Apatity 27.68 15** *i*P **P 18 24 55.4 +2.8**
APA *i* S **S 18 29 37.0 +2.7**
APA pmax pmax
comp=Z,10.0nm,0.8s
**TRO Tromso 27.92 3** *e*P **P 18 24 55.5 +0.7**
**LVZ Lovozero 28.20 16** P **P 18 24 57.0 -0.4**
LVZ IAmb IAmb 18 25 02.9
comp=Z,39nm,1.1s
**LVZ Lovozero 28.20 16** *e*P **P 18 25 01.2 +3.8**
LVZ pmax pmax
comp=Z,41nm,1.1s
**ARA0 ARCESS Array S 28.30 8** *e*P **P 18 24 58.9 +0.7**
ARA0 *e*S **S 18 29 47.0 +2.8**
ARA0 *e* 18 32 41.1
**ARCES ARCESS Array B 28.30 8** P **P 18 24 56.8 -1.4**
ARCES IAmb IAmb 18 25 11.1
comp=Z,89nm,2.0s
**ARCES ARCESS Array B 28.30 8** P **P 18 24 58.3 +0.1**
comp=Z,9.0nm,0.9s,baz=188,slow=7.4,SNR=12
ARCES PcP **PcP 18 28 11.1 +0.3**
comp=Z,2.4nm,0.6s,baz=197,slow=2.8,SNR=4.0
ARCES LR LR 18 36 42.1
comp=Z,2μm,18.3s,baz=162,slow=38
comp=Z,9.0nm,0.9s
**ARCES ARCESS Array B 28.30 8** P **P 18 24 56.8 -1.4**
ARCES pmax pmax
comp=Z,89nm,2.0s
**VADS Vadso 29.30 10** *e*P **P 18 25 08.4 +1.3**
VADS *e*S **S 18 30 05.2 +5.3**
**KBD Kabd 29.42 105** P P 18 25 13.6 +5.0
**BORG Borgarnes 30.76 330** LR LR 18 39 35.1
comp=Z,2μm,18.6s,baz=23,slow=40
**BART Pico Bartolome 30.78 276** *e*LQ LQ 18 32 42.1
**TORD Torodi Ar. Bea 30.80 206** P **P 18 25 20.4 -0.4**
**TORD Torodi Ar. Bea 30.80 206** P **P 18 25 22.2 +1.5**
comp=Z,8.5nm,0.9s,baz=28,slow=9.3,SNR=27
comp=Z,8.5nm,0.9s
**PSMN Pico do Norte, 30.98 274** *e*LQ LQ 18 32 16.9

PSET Sete Cidades 31.17 276 eLQ LQ 18 32 45.3
RAYN Ar Rayn 31.41 116 P P 18 25 25.5 -0.8
RAYN IAmb IAmb 18 25 33.4
comp=Z,36nm,1.3s
RAYN Ar Rayn 31.41 116 i P P 18 25 28.4 +2.1
SNR=7.6
RAYN Ar Rayn 31.41 116 P P 18 25 29.0 +2.8
RAYN Ar Rayn 31.41 116 P P 18 25 25.5 -0.8
RAYN pmax pmax
comp=Z,36nm,1.3s
ARU Arti 31.51 47 P P 18 25 26.2 -0.6
ARU Arti 31.51 47 c iP P 18 25 26.6 -0.2
ARU 18 26 24.7
ARU 18 28 18.7
ARU S S 18 30 33.2 -1.5
ARU pmax pmax
comp=Z,93nm,0.9s
ARU MLR MLR
comp=Z,3µm,17.0s
ARU Arti 31.51 47 P P 18 25 26.8 0.0
comp=Z,140nm,1.1s,comp=Z,1µm
ABKAR Akbulak array 32.06 61 P P 18 25 30.0 -1.6
SVE Sverdlovsk 32.70 47 eP P 18 25 38.2 +1.0
SVE eS S 18 30 50.5 -2.8
SVE pmax pmax
comp=Z,103nm,1.1s
SHMA Al-Shehemyia 33.72 107 P P 18 25 47.7 +1.4
SNR=8.8
SMRA Abu-Samra 34.30 108 P P 18 25 53.1 +1.6
SNR=5.2
GHWR Ruwais 36.24 107 P P 18 26 09.7 +1.5
SPITS Spitsbergen Ar 36.44 1 P P 18 26 10.4 +1.1
comp=Z,1.5nm,0.4s,baz=142,slow=7.3,SNR=6.1
comp=Z,1.5nm,0.4s
MZWR Madinat Zayed 37.09 107 P P 18 26 16.6 +1.2
SHME Shamm 37.35 102 i P P 18 26 17.9 +0.3
SNR=6.8
SHME Shamm 37.35 102 P P 18 26 18.5 +0.9
AJN Ajban 37.39 105 P P 18 26 19.2 +1.3
BANOM Banah 37.54 102 P P 18 26 20.2 +0.9
ASUD Al Ashush, Dub 37.60 104 i P P 18 26 21.5 +1.7
SNR=7.0
ASUD Al Ashush, Dub 37.60 104 P P 18 26 20.8 +1.1
SNR=6.9
NAZ Nazwa, Dubai 37.62 103 P P 18 26 20.0 0.0
FAQ Al Faqa, Dubai 37.72 104 P P 18 26 21.9 +1.1
SNR=5.2
FAQ P P 18 26 21.9 +1.1
SNR=5.2
MASF Masafi 37.76 103 P P 18 26 22.0 +0.9
MASF S S 18 32 10.2 -1.6
DAG Danmarks Havn 37.77 348 i P P 18 26 21.0 +0.4
DAG IAmb IAmb 18 26 26.4
comp=Z,22nm,1.3s
MDH Madha 37.90 103 P P 18 26 23.3 +1.0
UOSS Minazif 38.05 103 P P 18 26 21.9 -1.6
UOSS IAmb IAmb 18 26 28.4
comp=Z,66nm,1.3s
UOSS Minazif 38.05 103 P P 18 26 24.6 +1.1
UOSS Minazif 38.05 103 P P 18 26 24.6 +1.1
UOSS P P 18 26 24.6 +1.1
UOSS S S 18 32 09.9 -6.1
UOSS S S 18 32 09.9 -6.1
HATD Hatta, Dubai 38.06 103 i P P 18 26 24.2 +0.6
SNR=5.3
HATD Hatta, Dubai 38.06 103 P P 18 26 24.6 +1.0
SNR=7.2
ASHO Ashiyiah 38.09 104 i P P 18 26 24.3 +0.4
SNR=7.0
ASHO Ashiyiah 38.09 104 P P 18 26 24.8 +0.9
BRVK Borovoye 38.23 53 P P 18 26 25.5 +0.8
BRVK IAmb IAmb 18 26 32.7
comp=Z,82nm,0.8s
BRVK Borovoye 38.23 53 P P 18 26 28.2 +3.4
BRVK Borovoye 38.23 53 c iP P 18 26 25.8 +1.1
BRVK pmax pmax
comp=Z,84nm,0.8s
ALNE Al Ain 38.25 105 i P P 18 26 25.8 +0.5
SNR=17
ALNE Al Ain 38.25 105 P P 18 26 26.4 +1.2
SNR=8.4
BVAR Borovoye Array 38.29 54 P P 18 26 26.2 +0.9
comp=Z,37nm,0.9s,baz=263,slow=5.8,SNR=40
comp=Z,37nm,0.9s
BBTS Babate 38.30 234 LR LR 18 43 06.5
comp=Z,1µm,18.0s,baz=322,slow=38
UMZA Um Al Zommool 38.66 107 P P 18 26 30.2 +1.5
SOHO SOHO 38.77 104 i P P 18 26 29.5 -0.1
SNR=7.2
SOHO SOHO 38.77 104 P P 18 26 30.8 +1.2
ICESG Greenland Ices 39.07 332 i P P 18 26 38.1 +6.1
ICESG IAmb IAmb 18 26 44.7
comp=Z,155nm,2.0s
DBIC Dimbokro 39.15 212 P P 18 26 34.7 +1.9
comp=Z,10nm,0.7s,baz=19,slow=8.1,SNR=11
comp=Z,10nm,0.7s
TIC Toumodi 39.24 212 ⇑ iP P 18 26 37.2 +3.6
comp=Z,2.0nm,0.2s
ARQ Araqi 39.25 105 P P 18 26 34.9 +1.2
SNR=5.1
ARQ P P 18 26 34.9 +1.2
SNR=5.1
KIC Kosan Boka 39.39 212 ⇑ iP P 18 26 37.3 +2.5
comp=Z,7.2nm,0.6s
LIC Lamto 39.62 212 ⇑ iP P 18 26 39.3 +2.5
comp=Z,29nm,0.6s
HOQ Hoqain 39.67 104 P P 18 26 38.3 +1.1
SUMG Summit 39.78 338 P P 18 26 37.6 -0.3
SUMG Summit 39.78 338 P P 18 26 37.6 -0.3
SUMG pmax pmax
comp=Z,38nm,1.4s
SUMG Summit 39.78 338 eP P 18 26 41.4 +3.5
BRLS Borolday 40.01 69 eP P 18 26 40.7 +0.9
baz=70
BRLS Borolday 40.01 69 eP P 18 26 40.6 +0.8
BSY Bisya 40.10 105 P P 18 26 42.4 +1.6
KK31 Karatay Array 40.46 69 IAmb IAmb 18 26 51.2
comp=Z,25nm,0.8s
KKAR Karatay Array 40.46 69 P P 18 26 43.9 +0.4
KKAR Karatay Array 40.46 69 IAmb IAmb 18 26 51.2
comp=Z,25nm,0.8s
KKAR Karatay Array 40.46 69 P P 18 26 43.9 +0.4
SMDO Samad 40.53 104 P P 18 26 45.5 +1.1
SNR=7.8
SMDO P P 18 26 45.5 +1.1
SNR=7.8
DOK Doka 40.63 113 P P 18 26 46.3 +1.2
WHFO Wadi Hawf 40.86 114 P P 18 26 50.3 +3.2
SIMJ Simiganj 40.92 76 P P 18 26 47.4 -0.1
ABTO Aybut 40.93 115 P P 18 26 49.9 +2.2
JMDO Jabal Madar 40.99 105 P P 18 26 49.6 +1.5
CHGR Chuyangaron 41.02 76 IAmb IAmb 18 26 54.5
comp=Z,62nm,0.8s
DY2G Dye2 41.07 328 eP P 18 26 51.4 +2.9
RBK Rabkut 41.45 114 P P 18 26 55.0 +3.1
WBK Wadi Bani Khal 41.47 104 P P 18 26 53.9 +1.8
BTK Batken 41.70 73 P P 18 26 53.2 -0.6
BTK Batken 41.70 73 P P 18 26 53.2 -0.6
MHTO MHTO 41.77 106 P P 18 26 56.3 +1.9
DMTO DMTO 41.81 113 P P 18 26 55.4 +0.6
JLN Jalan Bani Buh 42.07 104 P P 18 26 58.4 +1.4
DQM DQM 42.14 108 P P 18 26 58.5 +1.0
BTLS Baital 42.29 65 eP P 18 26 59.5 +1.0
baz=65
BTLS Baital 42.29 65 eP P 18 26 59.5 +1.0
LODK Lodwar 42.47 149 P P 18 27 00.2 0.0
KBL Kabul 42.64 81 P P 18 27 00.8 -0.9
KBL Kabul 42.64 81 P P 18 27 00.8 -0.9
KBL pmax pmax
comp=Z,16nm,0.8s
SFJD Kangerlussuaq 42.83 328 P P 18 27 01.5 -1.0
SFJD Kangerlussuaq 42.83 328 P P 18 27 01.5 -1.0
SFJD pmax pmax
comp=Z,25nm,1.0s
EKS2 Erkin-Say 42.87 68 P P 18 27 05.8 +2.4
SNR=5.7
AML Almayashu 42.99 69 P P 18 27 07.0 +2.3
SNR=5.8
USP Ospenovka 43.17 67 P P 18 27 07.8 +2.1
SNR=31
AAK Ala-Archa 43.38 68 P P 18 27 10.2 +2.6
SNR=7.3
AAK Ala-Archa 43.38 68 P P 18 27 07.4 -0.1
AAK IAmb IAmb 18 27 15.3
comp=Z,43nm,1.1s
AAK Ala-Archa 43.38 68 i P P 18 27 09.1 +1.6
SNR=7.5
AAK Ala-Archa 43.38 68 P P 18 27 10.1 +2.5
AAK P P 18 27 10.1 +2.5
AAK Ala-Archa 43.38 68 d iP P 18 27 10.3 +2.8
AAK pmax pmax
comp=Z,64nm,1.8s
CHMS Chumysh 43.43 67 P P 18 27 10.2 +2.4
SNR=9.3
KBK Karagaybulak 43.68 68 P P 18 27 13.5 +3.4
SNR=5.9
KURBB Kurchatov Arra 43.69 56 P P 18 27 10.0 +0.3
comp=Z,8.9nm,0.8s,baz=292,slow=9.8,SNR=24
KURBB PP PP 18 28 48.5 -2.7
comp=Z,9.0nm,1.2s,baz=289,slow=12,SNR=7.3
comp=Z,8.9nm,0.8s
KURK Kurchatov 43.72 56 P P 18 27 07.9 -2.1
KURK IAmb IAmb 18 27 15.9
comp=Z,44nm,1.2s
KURK Kurchatov 43.72 56 P P 18 27 13.0 +3.0
KURK P P 18 27 13.0 +3.0
KURK Kurchatov 43.72 56 i P P 18 27 10.1 +0.1
KURK pmax pmax
comp=Z,48nm,1.3s
TKM2 Tokmak 2 44.04 67 P P 18 27 17.0 +4.1
SNR=22
KUU Kurty 44.22 66 eP P 18 27 15.2 +1.0
comp=Z,26nm,1.1s,baz=66
KUU Kurty 44.22 66 eP P 18 27 15.1 +1.0
KUU pmax pmax
comp=Z,26nm,1.1s
NEEM North Greenlan 44.32 343 i P P 18 27 16.1 +1.3
NEEM IAmb IAmb 18 27 20.9
comp=Z,46nm,0.9s
BOOM Boomskoye usch 44.43 68 IAmb IAmb 18 27 31.0
comp=Z,32nm,1.1s
SEM Semipalatinsk 44.80 56 eP P 18 27 19.5 +0.5
comp=Z,19nm,1.2s,baz=56
SEM Semipalatinsk 44.80 56 eP P 18 27 19.4 +0.5
SEM pmax pmax
comp=Z,19nm,1.2s
AAA Alma-Ata 44.84 66 eP P 18 27 20.1 +0.8
comp=Z,15nm,0.6s,baz=67
AAA Alma-Ata 44.84 66 eP P 18 27 20.0 +0.8
AAA pmax pmax
comp=Z,15nm,0.6s
MDOK Medeo 44.95 66 eP P 18 27 20.8 +0.7
baz=67
MDOK Medeo 44.95 66 eP P 18 27 20.8 +0.7
KSH Kashi 45.57 72 P P 18 27 25.8 +0.7
KSH pP sP 18 27 30.3 +0.5
KSH pmax pmax
comp=Z,29nm,0.9s
ZHN Zhinishke 45.90 66 eP P 18 27 28.4 +0.7
baz=66
ZHN Zhinishke 45.90 66 eP P 18 27 28.3 +0.7
SATY Saty 45.92 66 eP P 18 27 28.6 +0.8
comp=Z,17nm,1.1s,baz=66
SATY Saty 45.92 66 eP P 18 27 28.5 +0.8
SATY pmax pmax
comp=Z,17nm,1.1s
KPKS Kokpek 45.96 65 eP P 18 27 29.0 +0.9
comp=Z,17nm,1.2s,baz=66
KPKS Kokpek 45.96 65 eP P 18 27 29.0 +0.9
KPKS pmax pmax
comp=Z,17nm,1.2s
NIL Nilore 46.15 80 P P 18 27 33.1 +3.5
NIL IAmb IAmb 18 27 36.5
comp=Z,99nm,1.1s
NIL Nilore 46.15 80 P P 18 27 33.1 +3.5
NIL pmax pmax
comp=Z,99nm,1.1s
UZB Uzynbulak 46.30 66 eP P 18 27 31.8 +1.0
comp=Z,18nm,1.2s,baz=66
UZB Uzynbulak 46.30 66 eP P 18 27 31.8 +1.0
UZB pmax pmax
comp=Z,18nm,1.2s
ZAA0 Zalesovo Array 46.59 50 IAmb IAmb 18 27 38.0
comp=Z,63nm,1.7s
ZALV Zalesovo Beam 46.59 50 P P 18 27 30.4 -2.4
ZALV Zalesovo Beam 46.59 50 P P 18 27 33.0 +0.3
comp=Z,8.7nm,0.8s,baz=290,slow=7.5,SNR=17
comp=Z,8.7nm,0.8s
ZALV Zalesovo Beam 46.59 50 i P P 18 27 34.0 +1.2
ZALV pmax pmax
comp=Z,9.0nm,0.8s
SHLS Shalkode 46.60 66 eP P 18 27 36.3 +3.1
comp=Z,13nm,0.9s,baz=66
SHLS Shalkode 46.60 66 eP P 18 27 36.2 +3.1
SHLS pmax pmax
comp=Z,13nm,0.9s
MAKZ Makanchi 46.98 60 P P 18 27 33.5 -2.4
MAKZ IAmb IAmb 18 27 41.7
comp=Z,28nm,1.2s
MAKZ Makanchi 46.98 60 P P 18 27 33.5 -2.4
MAKZ pmax pmax
comp=Z,28nm,1.3s
MK31 Makanchi Array 47.19 60 P P 18 27 36.0 -1.6
MK31 IAmb IAmb 18 27 43.8
comp=Z,21nm,1.1s
MK31 Makanchi Array 47.19 60 c iP P 18 27 38.3 +0.7
MKAR Makanchi Array 47.19 60 P P 18 27 35.4 -2.2
MKAR Makanchi Array 47.19 60 P P 18 27 38.5 +0.9
comp=Z,20nm,1.0s,baz=287,slow=6.5,SNR=27
comp=Z,20nm,1.0s
ZSN Zaisan 48.61 58 eP P 18 27 49.6 +0.9
comp=Z,21nm,1.2s,baz=58
ZSN Zaisan 48.61 58 eP P 18 27 49.5 +0.9
ZSN pmax pmax
comp=Z,21nm,1.2s
DGZ Jazzator, Alta 49.43 55 i P P 18 27 55.3 +0.3
DGZ pmax pmax
comp=Z,40nm,1.9s
WMQ Urumqi 51.85 62 eP P 18 28 18.8 +5.6
WMQ PcP PcP 18 29 27.0 +1.0
WMQ pmax pmax
comp=Z,25nm,1.9s
SCHQ Schefferville 52.77 314 P P 18 28 20.6 +0.8
SCHQ IAmb IAmb 18 28 35.3
comp=Z,78nm,1.9s
SCHQ Schefferville 52.77 314 P P 18 28 20.7 +0.8
comp=Z,2.4nm,0.5s,baz=74,slow=8.8,SNR=3.8
comp=Z,2.4nm,0.5s
PKME Peaks-Kenny Pk 58.34 304 P P 18 28 57.9 -2.1
baz=61
HYB Hyderabad 59.12 94 eP P 18 29 05.7 -0.2
LBNH Lisbon 60.47 304 P P 18 29 13.1 -1.6
baz=59
A36M Sachs Harbour 63.02 347 P P 18 29 30.3 -1.2
baz=32
MATP Matopo 63.25 166 P P 18 29 35.0 +1.3
comp=Z,2.0nm,1.0s,baz=3.6,slow=11,SNR=3.6
comp=Z,2.0nm,1.0s
SSPA Standing Stone 66.14 304 P P 18 29 52.8 +0.5
baz=55
A21K Barrow 66.96 357 P P 18 30 00.0 +3.0
baz=7.0
LBTB Lobatse 67.28 169 P P 18 30 02.6 +2.9
comp=Z,2.9nm,0.8s,baz=351,slow=11,SNR=2.7
comp=Z,2.9nm,0.8s
INK Inuvik 67.62 348 P P 18 30 02.2 +0.9
baz=25
C27K Jago River 67.71 352 P P 18 30 00.5 -1.4
baz=17,SNR=11
D27M Malcolm River 67.77 351 P P 18 30 03.8 +1.4
D27M Malcolm River 67.77 351 P P 18 30 03.0 +0.7
baz=19
C24K Franklin Bluff 68.08 354 P P 18 30 05.5 +1.4
baz=13
C23K Itkillik River 68.11 355 P P 18 30 07.8 +3.5
baz=12
E29M Blow River 68.19 349 P P 18 30 05.9 +1.0
E29M IAmb IAmb 18 30 12.4
comp=Z,40nm,0.9s
E29M Blow River 68.19 349 P P 18 30 07.8 +2.9
baz=22,SNR=21
E28M Babbage River 68.20 350 P P 18 30 06.1 +1.1
E28M Babbage River 68.20 350 P P 18 30 07.6 +2.6
baz=20
D25K Kavik River 68.27 353 P P 18 30 07.1 +1.6
baz=15
B20K Meade River 68.29 357 P P 18 30 05.8 +0.3
baz=6.4
BILL Bilibino 68.34 11 P P 18 30 06.1 +0.2
BILL Bilibino 68.34 11 eP P 18 30 05.8 0.0
BILL e 18 30 31.8
BILL pmax pmax
comp=Z,52nm,1.1s
BILL MLR MLR
comp=Z,6µm,17.0s
YKA Yellowknife Ar 68.37 337 P P 18 30 07.2 +1.1
comp=Z,5.0nm,0.9s,baz=50,slow=7.3,SNR=8.7
comp=Z,5.0nm,0.9s
O53A New Philadelph 68.41 305 P P 18 30 10.9 +4.1
baz=53
F31M Tsiigehtchic 68.44 347 P P 18 30 08.6 +2.1
baz=25
HHC Hu-ho-hao-te 68.50 54 ⇑ iP P 18 30 06.8 -0.7
HHC sP sP 18 30 14.0 +1.8
HHC pmax pmax
comp=Z,49nm,0.9s
B21K Ikpikpuk River 68.56 356 P P 18 30 12.9 +5.7
baz=8.5
D24K Happy Valley 68.64 354 P P 18 30 11.5 +3.8
baz=13,SNR=6.0
E27K Coleen River 68.85 351 P P 18 30 12.4 +3.3
baz=19,SNR=7.6
D23K Nanushuk River 68.97 354 P P 18 30 12.6 +2.9
baz=12
G31M Satah River 69.00 347 P P 18 30 12.0 +2.0
G31M Satah River 69.00 347 P P 18 30 13.9 +3.9
baz=24
C21K Knifeblade Rid 69.04 356 P P 18 30 12.3 +2.1
baz=8.3
B18K Kokolik River 69.07 359 P P 18 30 11.1 +0.7
baz=2.7
D22K Ayikyak River 69.19 355 P P 18 30 15.5 +4.3
baz=10.0
TOLK Toolik Lake Re 69.20 354 P P 18 30 11.9 +0.6
TOLK Toolik Lake Re 69.20 354 P P 18 30 14.2 +2.9
baz=12,SNR=6.8
TNCH TengChong 69.27 75 P P 18 30 13.0 +0.4
TNCH pP sP 18 30 17.5 +0.1
TNCH sP pP 18 30 18.8 +2.7
TNCH S S 18 39 18.9 -0.3
TNCH sS sS 18 39 29.1 +4.2
TNCH pmax pmax
comp=Z,35nm,1.4s
C19K Lookout Ridge 69.28 358 P P 18 30 15.6 +3.9
baz=4.5
P52A Corning 69.35 305 P P 18 30 16.2 +3.6
baz=52
EYMN Ely 69.44 316 P P 18 30 15.2 +2.1
baz=50
D20K Etivluk River 69.56 357 P P 18 30 16.1 +2.6
baz=6.8
G29M Pine Creek 69.59 349 P P 18 30 17.4 +3.7
baz=21
F26K Sheenjek River 69.62 352 P P 18 30 17.6 +3.7
baz=17,SNR=8.0
E24K Your Creek 69.67 353 P P 18 30 15.1 +0.9
E24K IAmb IAmb 18 32 00.4
comp=Z,60nm,1.0s
E24K Your Creek 69.67 353 P P 18 30 15.7 +1.5
baz=13
E21K Killik River 69.70 356 P P 18 30 18.9 +4.6
baz=8.9
C18K Utukok River 69.78 358 P P 18 30 18.1 +3.2
baz=3.2
E23K Chandalar 69.78 354 P P 18 30 18.6 +3.7
baz=12,SNR=10
D19K Kuna River 69.84 357 P P 18 30 16.6 +1.4
D19K Kuna River 69.84 357 P P 18 30 19.4 +4.1
baz=5.6,SNR=10
F25K Christian Rive 69.87 352 P P 18 30 16.2 +0.8
F25K Christian Rive 69.87 352 P P 18 30 17.8 +2.4
baz=15
EPYK Eagle Plains 69.90 348 P P 18 30 18.9 +3.3
baz=22
C17K DeLong Mountai 69.98 359 P P 18 30 20.2 +4.2
baz=1.6
E20K Nigu River 70.00 356 P P 18 30 19.0 +2.8
baz=7.1
ULM Lac du Bonnet 70.10 320 P P 18 30 18.9 +1.8
comp=Z,4.3nm,0.8s,baz=25,slow=3.6,SNR=2.8
comp=Z,4.3nm,0.8s
F24K Squaw Lake 70.16 353 P P 18 30 19.0 +1.8
F24K IAmb IAmb 18 32 06.0
comp=Z,66nm,1.3s
F24K Squaw Lake 70.16 353 P P 18 30 18.7 +1.5
baz=14,SNR=8.5
G27K Doyon Strip 70.17 350 IAmb IAmb 18 32 08.0
comp=Z,82nm,1.7s
G27K Doyon Strip 70.17 350 P P 18 30 17.2 -0.1
baz=18,SNR=5.6
C16K Lisburne Hills 70.19 0 P P 18 30 20.3 +3.0
baz=360
H29M Whitestone 70.28 349 P P 18 30 19.9 +2.0
baz=21,SNR=5.1
G26K Porcupine Rive 70.29 351 P P 18 30 20.8 +2.9
baz=17,SNR=8.4
RDOG Red Dog Mine 70.40 359 P P 18 30 21.5 +2.9
baz=1.8
F22K John River 70.51 355 P P 18 30 22.2 +2.9
baz=10,SNR=15
COLD Coldfoot 70.64 354 P P 18 30 23.0 +2.9
baz=12
PZH PanZhiHua 70.68 71 P P 18 30 21.4 +0.2
H27K Steamboat Moun 70.71 350 P P 18 30 24.7 +4.1
baz=18,SNR=7.0
G25K Bearman Lake 70.72 352 P P 18 30 22.6 +2.0
baz=15
D17K Noatak River 70.76 359 P P 18 30 23.7 +2.9
baz=1.7
BOSA Boshof 70.78 170 P P 18 30 20.8 -0.6
comp=Z,3.5nm,0.8s,baz=356,slow=7.9,SNR=6.6
E19K Redstone River 70.84 357 P P 18 30 24.8 +3.4
baz=6.3,SNR=12
F21K Alatna River 70.88 355 IAmb IAmb 18 32 53.3
comp=Z,61nm,1.1s
F21K Alatna River 70.88 355 P P 18 30 24.4 +2.8
baz=9.2,SNR=33
I30M Mount Dempster 70.91 348 IAmb IAmb 18 32 31.7
comp=Z,35nm,0.9s
I30M Mount Dempster 70.91 348 P P 18 30 25.5 +3.6
baz=22,SNR=8.0
E18K Tukpahlearik C 70.99 358 P P 18 30 25.5 +3.3
baz=3.6
G22K Bettles 71.05 354 P P 18 30 25.2 +2.6
baz=11
I29M Ogilvie Camp, 71.08 348 P P 18 30 25.7 +2.8
baz=21,SNR=5.6
G23K Bananza Creek 71.14 354 P P 18 30 24.8 +1.6
G23K IAmb IAmb 18 31 51.7
comp=Z,74nm,1.1s
G23K Bananza Creek 71.14 354 P P 18 30 26.9 +3.7
baz=12,SNR=14
F20K Avaraart Lake 71.18 356 P P 18 30 27.1 +3.8
baz=7.5,SNR=9.1
I28M Miner Creek 71.23 349 P P 18 30 25.3 +1.4
I28M IAmb IAmb 18 32 22.4
comp=Z,45nm,0.9s
I28M Miner Creek 71.23 349 P P 18 30 27.0 +3.2
baz=20,SNR=8.2
I27K Kandik River 71.31 350 P P 18 30 30.1 +5.8
baz=18,SNR=5.7
E17K Hotham Inlet 71.36 359 P P 18 30 29.0 +4.6
baz=2.6
F19K Shaleruckik Mo 71.49 357 P P 18 30 27.1 +1.8
F19K Shaleruckik Mo 71.49 357 P P 18 30 29.0 +3.8
baz=5.8
J30M Hart River 71.50 347 IAmb IAmb 18 32 55.4
comp=Z,33nm,0.9s
J30M Hart River 71.50 347 P P 18 30 29.1 +3.6
baz=22,SNR=14
G21K Allakaket 71.58 355 P P 18 30 29.4 +3.6
baz=9.2,SNR=16
F18K Selawik 71.79 358 P P 18 30 31.8 +4.8
baz=4.3
I26K Coal Creek Min 71.80 350 pP 18 30 31.0 +0.3
I26K Coal Creek Min 71.80 350 P P 18 30 30.0 +2.9
baz=17
H24K Noodor Dome 71.80 353 IAmb IAmb 18 33 05.7
comp=Z,66nm,0.9s
H24K Noodor Dome 71.80 353 P P 18 30 30.0 +2.8
baz=14,SNR=6.3
PRP Porcupine Dome 71.87 352 P P 18 30 32.3 +4.5
baz=15
H23K Yukon River 71.97 353 P P 18 30 31.5 +3.4
baz=12,SNR=8.7
EGAK Eagle 72.04 349 pP 18 30 34.1 +2.0
EGAK Eagle 72.04 349 P P 18 30 31.5 +2.9
baz=19,SNR=8.6

| | | | | | | |
|---|---|---|---|---|---|---|
| **H22K** | **Ishtalitna Cre** baz=11,SNR=19 | **72.05 354** | P | **P** | **18 30 33.2 +4.6** |
| **IMAR** | **Indian Mountai** | **72.13 355** | P | **P** | **18 30 30.9 +1.8** |
| **G19K** | **Purcell Mounta** baz=6.3 | **72.15 357** | P | **P** | **18 30 33.9 +4.7** |
| **MMPY** | **Sheldon Lake,** baz=26,SNR=5.7 | **72.37 344** | P | **P** | **18 30 34.3 +3.7** |
| **K29M** | **Barlow Dome** baz=21 | **72.38 348** | P | **P** | **18 30 34.5 +3.7** |
| **H21K** | **Melozitna Rive** baz=9.7,SNR=45 | **72.39 355** | P | **P** | **18 30 33.9 +3.3** |
| **POKR** | **Poker Flat Res** baz=14,SNR=6.1 | **72.46 352** | P | P | 18 30 37.2 +6.1 |
| **DAWY** | **Dawson** baz=20,SNR=8.4 | **72.46 348** | P | **P** | **18 30 34.9 +3.7** |
| **G18K** | **Tagagawik** baz=5.1 | **72.46 357** | P | **P** | **18 30 35.0 +3.9** |
| **HNS** HNS | **HongShan** comp=Z,100nm,1.2s | **72.56 55** | ⇓P pmax | **P** pmax | **18 30 32.8 +0.7** |
| **I23K** | **Minto, Yukon-K** baz=12,SNR=13 | **72.61 353** | P | **P** | **18 30 32.1 +0.1** |
| **J26L** | **Joseph Creek** baz=17,SNR=19 | **72.62 350** | P | **P** | **18 30 35.0 +2.8** |
| **H20K** | **Anotleneega Mo** baz=8.0 | **72.69 356** | P | **P** | **18 30 36.7 +4.2** |
| **MDM** | **Murphy Dome** | **72.69 353** | P | **P** | **18 30 34.6 +2.1** |
| **TGTN** | **Hyland Airport** baz=28 | **72.71 342** | P | P | 18 30 37.8 +5.1 |
| **J25K** | **Salcha River,** baz=15 | **72.73 351** | P | **P** | **18 30 36.5 +3.7** |
| **H19K** | **Roundabout Mou** baz=6.8 | **72.73 356** | P | P | 18 30 37.4 +4.7 |
| **ILAR** | **Eielson Array** comp=Z,9.7nm,0.4s,baz=359,slow=6.0,SNR=22 comp=Z,9.7nm,0.4s | **72.74 352** | P | **P** | **18 30 34.9 +2.2** |
| **F15K** | **North Star Dit** baz=0.4 | **72.77 360** | P | **P** | **18 30 34.4 +1.5** |
| **MLY** | **Manley** baz=11,SNR=11 | **72.85 354** | P | P | 18 30 38.6 +5.1 |
| **G17K** | **Kiwalik Mounta** baz=3.5 | **72.92 358** | P | P | 18 30 38.8 +5.0 |
| **G16K** | **Koyuk River** baz=2.2,SNR=5.9 | **73.06 359** | P | P | 18 30 39.7 +5.1 |
| **HDA** | **Harding Lake** comp=Z,68nm,0.9s | **73.10 352** | IAmb | IAmb | 18 33 16.1 |
| **HDA** | **Harding Lake** baz=14,SNR=6.1 | **73.10 352** | P | **P** | **18 30 37.7 +2.8** |
| **NEA2** | **Nenana** | **73.13 353** | P | **P** | **18 30 36.9 +1.8** |
| **NEA2** | **Nenana** baz=12,SNR=6.5 | **73.13 353** | P | **P** | **18 30 38.8 +3.7** |
| **FARO** | **Faro, Yukon** baz=24,SNR=6.4 | **73.13 345** | P | **P** | **18 30 38.0 +2.8** |
| **SCRK** | **Sand Creek** baz=16,SNR=7.4 | **73.18 350** | P | **P** | **18 30 37.8 +2.3** |
| **M31M** | **Drury Creek, Y** baz=24 | **73.36 345** | P | P | 18 30 41.4 +4.9 |
| **G15K** | **Niukluk** baz=0.9 | **73.48 359** | P | P | 18 30 42.6 +5.5 |
| **GCSA** | **Galena City Sc** baz=6.5 | **73.53 356** | P | P | 18 30 43.5 +6.1 |
| **K24K** | **Donnelly Dome** baz=15 | **73.56 351** | P | **P** | **18 30 41.3 +3.7** |
| **BCAR** | **Beaver Creek A** | **73.76 349** | P | **P** | **18 30 40.7 +1.8** |
| **L27K** | **Beaver Creek,** comp=Z,57nm,1.2s | **73.77 349** | IAmb | IAmb | 18 33 20.4 |
| **L27K** | **Beaver Creek,** baz=18,SNR=10 | **73.77 349** | P | **P** | **18 30 43.5 +4.5** |
| **BPAW** | **Bear Paw Mtn.** baz=11,SNR=16 | **73.79 354** | P | **P** | **18 30 42.5 +3.5** |
| **H16K** | **Elim** baz=2.3 | **73.82 359** | P | **P** | **18 30 43.7 +4.6** |
| **M29M** | **Somme Creek** comp=Z,37nm,0.9s | **73.84 347** | IAmb | IAmb | 18 32 31.4 |
| **M29M** | **Somme Creek** baz=20,SNR=14 | **73.84 347** | P | **P** | **18 30 43.9 +4.5** |
| **J20K** | **Nowinta River** | **73.95 355** | P | **P** | **18 30 41.4 +1.6** |
| **J20K** | **Nowinta River** baz=8.6 | **73.95 355** | P | P | 18 30 45.4 +5.6 |
| **MCK** | **McKinley** baz=13,SNR=11 | **73.96 353** | P | P | 18 30 45.8 +5.8 |
| **L26K** | **Log Cabin Wild** baz=17 | **74.01 350** | P | P | 18 30 45.4 +5.1 |
| **T47A** | **Sharon Grove** comp=Z,18nm,0.8s | **74.05 305** | IAmb | IAmb | 18 30 48.5 |
| **N32M** | **Quiet Lake** baz=24 | **74.07 344** | P | **P** | **18 30 45.3 +4.6** |
| **WTLY** | **Watson Lake, Y** baz=27 | **74.08 342** | P | P | 18 30 46.3 +5.5 |
| **J19K** | **Poorman** baz=7.4 | **74.22 356** | P | P | 18 30 47.5 +6.0 |
| **N31M** | **Braeburn, Yuko** baz=22,SNR=5.2 | **74.28 346** | P | **P** | **18 30 46.4 +4.5** |
| **PAX** | **Paxson** baz=15 | **74.33 351** | P | P | 18 30 47.7 +5.5 |
| **DHY** | **Denali Highway** comp=Z,73nm,1.0s | **74.45 352** | IAmb | IAmb | 18 33 22.2 |
| **DHY** | **Denali Highway** baz=14,SNR=46 | **74.45 352** | P | **P** | **18 30 45.1 +2.1** |
| **M27K** | **Edge Creek, AK** baz=18 | **74.45 349** | P | **P** | **18 30 46.5 +3.4** |
| **CN2** | **Changchun** | **74.46 45** | *eP* | **P** | **18 30 44.1 +0.9** |
| **N30M** | **Aishikik Lake** baz=21,SNR=7.0 | **74.53 346** | P | **P** | **18 30 47.5 +4.1** |
| **M26K** | **Nabesna, AK** baz=17,SNR=8.2 | **74.56 349** | P | **P** | **18 30 44.6 +1.0** |
| **K20K** | **Telida** | **74.76 355** | P | **P** | **18 30 46.7 +2.1** |
| **K20K** | **Telida** baz=8.6 | **74.76 355** | P | **P** | **18 30 49.3 +4.7** |
| **YUK3** | **Moose Creek** baz=19,SNR=10 | **74.79 348** | P | **P** | **18 30 48.1 +3.0** |
| **J18K** | **Innoko River** baz=6.5 | **74.81 356** | P | **P** | **18 30 49.6 +4.7** |
| **HARP** | **HAARP** baz=15 | **74.85 350** | P | P | 18 30 50.7 +5.5 |
| **P33M** | **Teslin, Yukon** baz=24,SNR=7.2 | **74.87 344** | P | P | 18 30 51.5 +6.0 |
| **WHY** | **Whitehorse** baz=23 | **74.87 345** | P | **P** | **18 30 47.7 +2.3** |
| **YUK4** | **Talbot Arm** baz=20 | **74.91 347** | P | **P** | **18 30 46.9 +1.1** |
| **ECSD** | **EROS Data Cent** | **74.92 316** | P | **P** | **18 30 45.1 -0.8** |
| **ECSD** | **EROS Data Cent** baz=46 | **74.92 316** | P | **P** | **18 30 46.3 +0.4** |
| **WAT6** | **Susitna Watana** baz=13 | **74.97 352** | P | **P** | **18 30 50.5 +4.5** |
| **J17K** | **VABM Dome** baz=4.7,SNR=11 | **74.98 357** | P | P | 18 30 52.6 +6.8 |
| **O30N** | **Mendenhall** baz=22,SNR=5.8 | **75.00 346** | P | **P** | **18 30 49.8 +3.7** |
| **YUK8** | **Steele Glacier** baz=19 | **75.15 348** | P | **P** | **18 30 51.1 +3.8** |
| **R33M** | **Jennings River** baz=26,SNR=9.6 | **75.22 343** | P | P | 18 30 53.2 +5.7 |
| **YUK6** | **Outpost Mounta** baz=20,SNR=7.3 | **75.24 347** | P | **P** | **18 30 52.3 +4.6** |
| **M24K** | **Tolsona, Glenn** baz=15 | **75.25 351** | P | P | 18 30 54.4 +6.8 |
| **N25K** | **Chitina, Valde** baz=16 | **75.54 350** | P | P | 18 30 55.2 +5.9 |
| **MCARA** | **McCarthy VSAT** baz=17 | **75.54 349** | P | P | 18 30 55.2 +6.0 |
| **P32M** | **Atlin** baz=24 | **75.63 344** | P | P | 18 30 55.7 +6.0 |
| **K17K** | **Iditarod** baz=5.3 | **75.63 357** | P | **P** | **18 30 53.8 +4.1** |
| **SCM** | **Sheep Creek Mo** baz=14,SNR=7.8 | **75.65 351** | P | P | 18 30 55.7 +5.8 |
| **X48A** | **Hartselle** | **75.67 303** | P | **P** | **18 30 49.5 -0.8** |
| **CTG** | **Chitna Glacier** baz=18 | **75.70 348** | P | P | 18 30 56.1 +5.8 |
| **O28M** | **Mount Upton** baz=19,SNR=5.5 | **75.70 348** | P | P | 18 30 55.6 +5.1 |
| **M23K** | **Glacier View** baz=13,SNR=6.3 | **75.74 352** | P | P | 18 30 56.6 +6.3 |
| **SML** | **Sawmill** | **75.79 352** | | pP | 18 30 54.3 +0.1 |
| **SML** | **Sawmill** baz=13 | **75.79 352** | P | P | 18 30 56.1 +5.5 |
| **CCM** | **Cathedral Cave** | **75.81 309** | P | **P** | **18 30 50.6 -0.6** |
| **CCM** | **Cathedral Cave** baz=48 | **75.81 309** | P | **P** | **18 30 52.1 +1.0** |
| **CCM** CCM | **Cathedral Cave** comp=Z,9.0nm,0.9s | **75.81 309** | P pmax | **P** pmax | **18 30 50.6 -0.6** |
| **KLU** | **Klutina** baz=15,SNR=7.6 | **75.82 351** | P | P | 18 30 57.5 +6.6 |
| **DLBC** | **Dease Lake** baz=26 | **75.87 342** | P | **P** | **18 30 55.7 +4.5** |
| **O29M** | **Mount Kennedy** baz=20 | **75.88 347** | P | P | 18 30 57.1 +5.8 |
| **Q32M** | **Nakina River** baz=25 | **75.90 343** | P | P | 18 30 57.3 +5.8 |
| **SKT** | **Skwentna** baz=10,SNR=6.7 | **75.92 353** | P | **P** | **18 30 52.9 +1.5** |
| **PLAL** | **Pickwick Lake** comp=Z,24nm,1.6s | **75.95 304** | IAmb | IAmb | 18 31 04.8 |
| **L19K** | **White Mountain** | **75.97 355** | P | **P** | **18 30 55.3 +3.7** |
| **L19K** | **White Mountain** baz=7.9 | **75.97 355** | P | P | 18 30 56.7 +5.1 |
| **M22K** | **Willow** baz=12 | **76.02 353** | P | **P** | **18 30 53.9 +2.1** |
| **L18K** | **Granite Mounta** baz=6.5,SNR=10 | **76.05 356** | P | **P** | **18 30 56.2 +4.1** |
| **P38A** | **Dawn** comp=Z,14nm,0.8s | **76.07 311** | IAmb | IAmb | 18 30 59.5 |
| **M20K** | **Styx River** baz=9.2 | **76.15 354** | P | **P** | **18 30 54.9 +2.2** |
| **BMRM** | **Bremner River** baz=16 | **76.16 350** | P | **P** | **18 30 54.3 +1.5** |
| **CRQE** | **Cirque** baz=17 | **76.16 349** | P | **P** | **18 30 55.5 +2.7** |
| **KNK** | **Knik Glacier** baz=13 | **76.19 352** | P | **P** | **18 30 55.9 +3.0** |
| **L17K** | **Donlin** baz=5.3 | **76.21 357** | P | **P** | **18 30 57.1 +4.1** |
| **M19K** | **Big River Lodg** baz=8.3 | **76.22 355** | P | **P** | **18 30 56.8 +3.8** |
| **R40A** | **Maddies Statio** comp=Z,13nm,0.8s | **76.25 309** | IAmb | IAmb | 18 31 00.5 |
| **PLBC** | **Pleasant Camp** baz=22 | **76.27 345** | P | **P** | **18 30 57.6 +4.3** |
| **P29M** | **Windy Craggy** baz=21,SNR=6.7 | **76.36 346** | P | **P** | **18 30 58.0 +4.1** |
| **SUA** | **Susitna One** baz=11,SNR=10 | **76.36 353** | P | **P** | **18 30 58.0 +4.0** |
| **T42A** | **Van Buren** | **76.42 308** | P | **P** | **18 30 54.0 -0.6** |
| **GLI** | **Glacier Island** baz=14 | **76.56 351** | P | **P** | **18 30 59.6 +4.7** |
| **LRAL** | **Lakeview Retre** baz=49 | **76.56 302** | P | **P** | **18 30 59.2 +3.7** |
| **S34M** | **Telegraph Cree** baz=25 | **76.59 342** | P | **P** | **18 30 59.5 +4.3** |
| **PNL** | **Peninsula** baz=23 | **76.62 347** | P | **P** | **18 31 00.0 +4.7** |
| **RC01** | **Rabbit Creek A** | **76.64 352** | P | **P** | **18 30 55.9 +0.5** |
| **RC01** | **Rabbit Creek A** baz=12 | **76.64 352** | P | **P** | **18 30 58.3 +2.9** |
| **PWL** | **Port Wells** baz=13 | **76.72 352** | P | **P** | **18 30 58.8 +2.9** |
| **M18K** | **Stony River** baz=7.2 | **76.72 355** | P | **P** | **18 30 58.7 +2.8** |
| **SPCR** | **Spurr Chakacha** baz=9.9 | **76.75 354** | P | **P** | **18 30 58.6 +2.4** |
| **R32K** | **Eaglecrest** baz=23 | **77.00 344** | P | P | 18 31 03.0 +5.5 |
| **S39A** | **Bolivar** comp=Z,8.4nm,0.7s | **77.27 309** | IAmb | IAmb | 18 31 05.0 |
| **N19K** | **Bonanza Creek** baz=8.2 | **77.31 355** | P | **P** | **18 31 02.0 +2.7** |
| **SEW** | **Seward** baz=12 | **77.57 352** | P | **P** | **18 31 02.2 +1.5** |
| **O20K** | **Slope Mountain** baz=9.6 | **77.89 354** | P | **P** | **18 31 05.7 +3.2** |
| **NJ2** NJ2 NJ2 | **Nanjing** comp=Z,28nm,0.9s | **78.63 57** | *eP* sP pmax | **P** **sP** pmax | **18 31 05.3 -1.7** **18 31 12.4 +0.5** |
| **BAUV** BAUV | **El Baul** comp=Z,37nm,1.2s | **78.78 272** | P IAmb | **P** IAmb | **18 31 06.9 -1.2** 18 31 30.4 |
| **MIAR** | **Mount Ida** baz=46 | **79.58 307** | P | **P** | **18 31 13.2 +1.0** |
| **OK048** OK048 | **Pawnee Station** comp=Z,21nm,0.8s | **80.23 311** | P IAmb | **P** IAmb | **18 31 15.7 0.0** 18 31 23.8 |
| **BOZ** | **Bozeman (W)** comp=Z,12nm,0.8s | **80.68 325** | IAmb | IAmb | 18 34 10.5 |
| **BOZ** | **Bozeman (W)** baz=37 | **80.68 325** | P | **P** | **18 31 21.4 +3.2** |
| **N23A** | **Red Feather La** baz=40 | **81.72 319** | P | **P** | **18 31 27.1 +3.1** |
| **P08K** | **Saint George I** baz=38.6 | **81.84 2** | P | **P** | **18 31 25.8 +1.9** |
| **BW06** | **Boulder Array** baz=38 | **82.00 322** | P | **P** | **18 31 26.2 +0.9** |
| **PDAR** | **Pinedale Array** comp=Z,0.6nm,0.6s,baz=70,slow=6.3,SNR=7.0 comp=Z,0.6nm,0.6s | **82.00 322** | P | **P** | **18 31 26.1 +0.8** |
| **WMOK** | **Wichita Mounta** baz=44 | **82.48 310** | P | **P** | **18 31 29.9 +2.2** |
| **HLID** | **Hailey** baz=36 | **83.50 325** | P | **P** | **18 31 35.8 +2.7** |
| **BMO** | **Blue Mountains** comp=Z,36nm,1.0s | **83.63 328** | IAmb | IAmb | 18 33 49.8 |
| **RDMU** | **Red Mountain** comp=Z,46nm,0.9s | **83.72 321** | IAmb | IAmb | 18 34 26.2 |
| **T25A** | **Trinidad** comp=Z,9.3nm,0.9s | **83.78 315** | IAmb | IAmb | 18 34 46.4 |
| **T25A** | **Trinidad** baz=41 | **83.78 315** | P | **P** | **18 31 35.6 +0.9** |
| **HWUT** | **Hardware Ranch** comp=Z,38nm,1.0s | **83.83 323** | IAmb | IAmb | 18 34 26.8 |
| **SDCO** | **Great Sand Dun** comp=Z,12nm,0.9s | **83.89 317** | IAmb | IAmb | 18 34 45.4 |
| **SDCO** | **Great Sand Dun** baz=40 | **83.89 317** | P | **P** | **18 31 37.1 +1.8** |
| **LVA** | **Lava Point** | **84.35 0** | P | **P** | **18 31 35.0 -1.9** |
| **S22A** | **4UR Ranch, Cre** comp=Z,34nm,1.6s | **84.57 317** | IAmb | IAmb | 18 34 46.7 |
| **S22A** | **4UR Ranch, Cre** baz=40 | **84.57 317** | P | **P** | **18 31 40.4 +1.7** |
| **UNV** | **Unalaska Valle** baz=359 | **84.67 1** | P | **P** | **18 31 35.6 -2.9** |
| **SRU** | **San Rafael Swe** comp=Z,36nm,0.9s | **85.32 320** | IAmb | IAmb | 18 34 41.5 |
| **HMU** | **Henry Mountain** comp=Z,28nm,0.9s | **86.35 320** | IAmb | IAmb | 18 34 37.5 |
| **SAML** | **Samuel** | **87.08 255** | P | **P** | **18 31 50.1 -1.0** |
| **SAML** SAML | **Samuel** comp=Z,9.0nm,1.3s | **87.08 255** | P pmax | **P** pmax | **18 31 50.1 -1.0** |
| **PSUT** | **Pine Spring** comp=Z,42nm,0.9s | **87.34 322** | IAmb | IAmb | 18 34 16.2 |
| **R11B** | **Troy Canyon, C** baz=35 | **88.27 323** | P | **P** | **18 31 59.5 +2.7** |
| **MNTX** | **Cornudas Mount** baz=40 | **88.43 313** | P | **P** | **18 31 58.2 +0.8** |
| **WUAZ** | **Wupatki** baz=37 | **88.58 319** | P | **P** | **18 31 59.6 +1.4** |
| **121A** | **Cookes Peak, D** baz=39 | **89.09 315** | P | **P** | **18 32 01.2 +0.5** |
| **TXAR** | **Lajitas Array** | **89.25 310** | P | **P** | **18 32 02.4 +0.9** |
| **TXAR** | **Lajitas Array** comp=Z,2.5nm,0.9s,baz=50,slow=3.9,SNR=15 comp=Z,2.5nm,0.9s | **89.25 310** | P | **P** | **18 32 03.7 +2.3** |
| **NVAR** | **Mina Array Bea** comp=Z,0.8nm,0.8s,baz=50,slow=5.2,SNR=5.6 comp=Z,0.8nm,0.8s | **89.40 325** | P | **P** | **18 32 04.0 +2.0** |
| **X16A** | **Lo Mia Camp, P** comp=Z,27nm,1.3s | **89.49 318** | IAmb | IAmb | 18 34 56.1 |
| **W13A** | **Hualapai Mount** comp=Z,36nm,1.5s | **90.14 320** | IAmb | IAmb | 18 34 28.3 |
| **TUC** TUC | **Tucson** comp=Z,32nm,1.4s | **90.83 316** | P IAmb | **P** IAmb | **18 32 09.9 +1.2** 18 35 02.9 |
| **TUC** | **Tucson** baz=37 | **90.83 316** | P | **P** | **18 32 09.8 +1.1** |
| **TUC** TUC | **Tucson** comp=Z,33nm,1.4s | **90.83 316** | P pmax | **P** pmax | **18 32 09.9 +1.2** |
| **PFO** | **Pinyon Flats O** baz=34 | **92.57 321** | P | **P** | **18 32 18.6 +1.8** |
| **TPFO** | **Pinon Flats** baz=34 | **92.57 321** | P | **P** | **18 32 20.0 +3.2** |
| **MONP2** | **Monument Peak** baz=34 | **93.15 321** | P | **P** | **18 32 21.7 +2.1** |

*IDC **16** 18:21:28.9±0.4,23°.36N×143°.47E, h0km,mb5.2/33, mbtmp5.1/37,ML4.2/4, Error ellipse: s-maj=15.8km s-min=9.4km az=76.0*

*MOS **16** 18:21:28.5±0.8,23°.33N×143°.40E, h9km,mb5.8/65, MS6.2/8, Error ellipse: s-maj=7.8km s-min=3.8km az=113.5*

*NEIC **16** 18:21:29.7,23°.34N×143°.38E, h1km*
*IPGP **16** 18:21:29.0,23°.34N×143°.39E, h11km,Mw6.0, Fault plane solution: NP1:φ=347.00000°,δ71.00000°,λ101.00000°. NP2:φ=137.00000°,δ22.00000°,λ62.00000°.*
*NEIC **16** 18:21:31.0±1.6,23°.35N±0°.06×143°.40E±0°.09, h11km±2km, mb6.0/475,Mwb5.8/84, Error ellipse: s-maj=12.8km s-min=8.7km az=73.0,Moment Tensor Solution. Moment tensor: Scale $10^{17}$Nm; $M_{rr}$3.95; $M_{\theta\theta}$-1.53; $M_{\phi\phi}$-2.43; $M_{r\theta}$-0.25; $M_{\theta\phi}$-0.35; $M_{\phi r}$4.79; Fault plane solution: $M_o$5.92000×$10^{17}$ NP1:φ=193.89000°,δ17.32000°, λ103.06000°. NP2:φ=0.23000°,δ73.14000°,λ85.97000°. Principal axes: T 6.5412, Plg62.0000°, Azm264.0000°; N -1.5343, Plg4.0000°, Azm1.0000°; P -5.0070, Plg28.0000°, Azm93.0000°;*
*BJI **16** 18:21:31.8±0.0,23°.48N×143°.30E, h10km,mb5.4/83, mB6.0/71,Ms6.3/79,Ms7 6.3/76*
*JMA **16** 18:21:31.3±0.6,23°.N±2°×14°.4E±°, h44km, MV6.3/18, IOTO ISLANDS REGION*

**ISC 16 18:21:31.7±0.4, 23°.39N±0°.03×143°.51E±0°.04, h17km±2km, h17km:pP-P,n1376,σ1s46/1394, mb5.9/396, MS6.2/41, 86C-39D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JHH2** | **Haha-jima-NKT2** | **3.45** | **340** | *eP* | **Pn** | **Pn** | **18 22 25.3** | **+0.5** |
| JHH2 | | | | *eS* | **Sn** | **Sn** | **18 23 06.2** | **+0.9** |
| **CBIJ** | **Chichi jima** | **3.88** | **342** | *eP* | **Pn** | **Pn** | **18 22 30.7** | **0.0** |
| CBIJ | | | | *eS* | **Sn** | **Sn** | **18 23 14.5** | **-1.5** |
| **JCJ** | **Chichijima** | **3.88** | **342** | P | **Pn** | **Pn** | **18 22 32.7** | **+2.0** |
| **JCJ** | **Chichijima** | **3.88** | **342** | | **Pn** | **Pn** | **18 22 29.9** | **-0.9** |
| **JCJ** | **Chichijima** | **3.88** | **342** | ⇑P | **Pn** | **Pn** | **18 22 30.4** | **-0.3** |
| **JCJ** | **Chichijima** 56nm,0.3s,baz=282,slow=23,SNR=32 | **3.88** | **342** | Pn | **Pn** | **Pn** | **18 22 26.0** | **-4.7** |
| JCJ | 997nm,0.3s,baz=101,slow=24,SNR=22 | | | Sn | **Sn** | **Sn** | **18 23 09.9** | **-6.1** |
| **GUMO** | **Guam** | **9.83** | **172** | P | **Pn** | **Pn** | **18 23 53.6** | **+1.2** |
| **GUMO** | **Guam** 2.7nm,0.3s,baz=90,slow=20,SNR=2.7 | **9.83** | **172** | Pn | **Pn** | **Pn** | **18 23 56.3** | **+3.9** |
| **JHJ2** | **Mitsune** | **10.22** | **342** | | **Pn** | **Pn** | **18 23 57.1** | **-0.6** |
| **JHJ2** | **Mitsune** | **10.22** | **342** | *eP* | **Pn** | **Pn** | **18 23 59.4** | **+1.7** |
| **JHJ** | **Hachijo jima 2** 14nm,0.3s,baz=264,slow=24,SNR=7.7 31nm,0.3s | **10.24** | **342** | Pn | **Pn** | **Pn** | **18 23 57.4** | **-0.5** |
| **JMZ** | **Minamidaito 2** | **11.44** | **285** | *eP* | Pn | Pn | 18 24 19.6 | +5.2 |
| **BSO1** | **Boso 1** | **11.44** | **349** | *eP* | **Pn** | **Pn** | **18 24 13.7** | **-0.3** |
| **JSG** | **Sagara** | **12.17** | **339** | | **Pn** | **Pn** | **18 24 21.9** | **-2.5** |
| **JOD2** | **Odawara 2** | **12.45** | **343** | *eP* | **Pn** | **Pn** | **18 24 27.1** | **-1.1** |
| **JTNC** | **Tanabenakahech** | **12.49** | **328** | *eP* | **Pn** | **Pn** | **18 24 31.0** | **+2.2** |
| **INU** | **Inuyama** | **13.19** | **336** | P | **Pn** | **Pn** | **18 24 38.4** | **+0.1** |
| **INU** | **Inuyama** | **13.19** | **336** | | **Pn** | **Pn** | **18 24 36.4** | **-1.9** |
| **INU** | **Inuyama** | **13.19** | **336** | ⇓P | **Pn** | **Pn** | **18 24 37.8** | **-0.5** |
| **JRY** | **Ryogami san** | **13.21** | **343** | *eP* | **Pn** | **Pn** | **18 24 36.3** | **-2.3** |
| **JGF** | **Kuroka** | **13.29** | **338** | P | **Pn** | **Pn** | **18 24 40.5** | **+0.7** |
| **JGF** | **Kuroka** | **13.29** | **338** | | **Pn** | **Pn** | **18 24 38.7** | **-1.1** |
| **JGF** | **Kuroka** | **13.29** | **338** | ⇓P | **Pn** | **Pn** | **18 24 40.3** | **+0.5** |
| **JMN** | **Monobe** | **13.32** | **323** | P | **Pn** | **Pn** | **18 24 41.8** | **+1.6** |
| **JMN** | **Monobe** | **13.32** | **323** | Pn | **Pn** | **Pn** | **18 24 39.1** | **-1.1** |
| **JMN** | **Monobe** | **13.32** | **323** | ⇑P | **Pn** | **Pn** | **18 24 41.8** | **+1.6** |
| **JTO** | **Tosashimizu** | **13.35** | **317** | *eP* | **Pn** | **Pn** | **18 24 43.0** | **+2.5** |
| **JAMN** | **Amaminishikomi** | **13.78** | **294** | *eP* | **P** | **Pn** | **18 24 51.2** | **-3.7** |
| **MJAR** | **Matsushiro Arr** 0.9nm,0.3s,baz=182,slow=4.9,SNR=46 13nm,0.6s | **13.89** | **342** | Pn | **Pn** | **Pn** | **18 24 44.9** | **-3.0** |
| **MAJO** | **Matsushiro** | **13.89** | **342** | P | **Pn** | **Pn** | **18 24 48.0** | **+0.1** |
| **MAJO** | **Matsushiro** | **13.89** | **342** | | **Pn** | **Pn** | **18 24 45.5** | **-2.4** |
| **MAJO** | **Matsushiro** | **13.89** | **342** | ⇑P | **Pn** | **Pn** | **18 24 46.9** | **-0.9** |
| **MAJO** | **Matsushiro** | **13.89** | **342** | *c iP* | **Pn** | **Pn** | **18 24 47.0** | **-0.9** |
| **MJB9** | **Matsu-Tunnel** | **13.89** | **342** | | **Pn** | **Pn** | **18 24 45.2** | **-2.8** |
| **JOW** | **Kunigami** | **14.22** | **287** | P | **P** | **Pn** | **18 24 56.6** | **-3.2** |
| **JOW** | **Kunigami** | **14.22** | **287** | ⇑P | **P** | **Pn** | **18 24 57.6** | **-2.1** |
| **JOW** | **Kunigami** 15nm,0.3s,baz=126,slow=11,SNR=28 | **14.22** | **287** | Pn | **P** | **Pn** | **18 24 56.8** | **-3.0** |
| **JOW** | **Kunigami** | **14.22** | **287** | *eP* | **P** | **Pn** | **18 24 57.7** | **-2.1** |
| **JIU3** | **Izumi3** | **14.45** | **312** | P | **Pn** | **Pn** | **18 24 58.6** | **+3.0** |
| **JMM** | **Marumori** | **14.62** | **351** | | **Pn** | **Pn** | **18 24 56.2** | **-1.7** |
| **JMM** | **Marumori** | **14.62** | **351** | ⇓P | **Pn** | **Pn** | **18 24 56.5** | **-1.4** |
| **JHS** | **Saijyo** | **14.69** | **324** | *eP* | **Pn** | **Pn** | **18 24 59.0** | **0.0** |
| **JNU** | **Nakatsue** | **14.75** | **314** | P | **Pn** | **Pn** | **18 25 01.0** | **+1.3** |
| **JNU** | **Nakatsue** | **14.75** | **314** | Pn | **Pn** | **Pn** | **18 24 56.9** | **-2.8** |
| **JNU** | **Nakatsue** | **14.75** | **314** | ⇑P | **Pn** | **Pn** | **18 25 02.3** | **+2.6** |
| **JNU** | **Nakatsue** 0.4nm,0.3s,baz=122,slow=3.8,SNR=9.7 30nm,0.9s | **14.75** | **314** | Pn | **Pn** | **Pn** | **18 24 58.8** | **-1.0** |
| **JSD** | **Sado** | **15.28** | **344** | Pn | **Pn** | **Pn** | **18 25 03.0** | **-3.7** |
| **JSD** | **Sado** | **15.28** | **344** | ⇑P | **Pn** | **Pn** | **18 25 03.7** | **-3.0** |
| **JTU** | **Tsushima** | **16.58** | **315** | ⇑P | **P** | **Pn** | **18 25 27.2** | **+1.3** |
| **JTM** | **Tenmabayashi** | **17.47** | **354** | | **Pn** | **Pn** | **18 25 34.3** | **-0.3** |
| **ERM** | **Erimo** | **18.58** | **359** | P | **P** | **Pn** | **18 25 47.7** | **-0.2** |
| **ERM** | **Erimo** | **18.58** | **359** | ⇑sP | sP | **Pn** | **18 25 53.7** | **+0.9** |
| **ERM** | **Erimo** | **18.58** | **359** | *i* P | **Pn** | **Pn** | **18 25 48.3** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **18.77** | **277** | | **P** | **Pn** | **18 25 46.6** | **-3.6** |
| **YOJ** | **Yonaguni jima** | **18.77** | **277** | ⇓P | **Pn** | **Pn** | **18 25 52.9** | **+2.2** |
| **YOJ** YOJ | **Yonaguni jima** comp=Z,402nm,0.8s | **18.77** | **277** | P pmax | **P** pmax | **Pn** pmax | **18 25 46.6** | **-3.6** |
| **TJN** | **Taejon** | **19.03** | **317** | P | **P** | **Pn** | **18 25 50.5** | **-2.5** |
| **TJN** | **Taejon** | **19.03** | **317** | *ceP* | **P** | **Pn** | **18 25 53.3** | **+0.3** |
| **KSRS** | **Korea Array** comp=Z,1.6nm,0.3s,baz=130,slow=11,SNR=66 comp=Z,59nm,0.9s | **19.39** | **320** | P | **P** | **Pn** | **18 25 57.1** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **19.40** | **320** | | **P** | **Pn** | **18 25 56.2** | **-0.8** |
| **KSAR** | **Wonju Array Be** | **19.40** | **320** | P | **P** | **Pn** | **18 25 56.2** | **-0.8** |
| **KS19** | **Wonju Array Si** | **19.45** | **320** | P | **P** | **Pn** | **18 25 56.2** | **-1.3** |
| **NACB** | **Ninganchiao** | **20.07** | **277** | P | **P** | **Pn** | **18 26 03.1** | **-1.3** |
| **INCN** | **Inchon** | **20.18** | **318** | | **P** | **Pn** | **18 26 05.2** | **-0.4** |
| **INCN** | **Inchon** | **20.18** | **318** | ⇓P | Pn | Pn | 18 26 08.7 | +1.2 |
| **INCN** INCN | **Inchon** comp=Z,146nm,1.0s | **20.18** | **318** | P pmax | **P** pmax | **P** pmax | **18 26 05.2** | **-0.4** |
| **YHNB** | **Yeheng** | **20.26** | **278** | P | **P** | **P** | **18 26 05.7** | **-0.9** |
| **YULB** | **Yu-li** | **20.39** | **274** | P | P | Pn | 18 26 09.3 | -0.7 |
| **YULB** | **Yu-li** | **20.39** | **274** | P | **P** | **P** | **18 26 05.8** | **-2.1** |
| **TWG** | **Pinlang** | **20.64** | **273** | P | **P** | **P** | **18 26 08.2** | **-2.5** |
| **SSLB** | **Suanglung** | **20.68** | **276** | P | P | Pn | 18 26 12.5 | -0.9 |
| **SSLB** | **Suanglung** | **20.68** | **276** | P | **P** | **P** | **18 26 09.8** | **-1.2** |
| SSLB | | | | IAmb | IAmb | IAmb | 18 26 26.4 | |
| **YUK** | **Yuzh-Kuril'sk** comp=Z,1μm,1.7s | **20.69** | **5** | *eP* | **P** | **P** | **18 26 08.9** | **-2.0** |
| YUK | | | | *e* | | | 18 26 26.7 | |
| YUK | | | | *eS* | **S** | **S** | **18 30 01.6** | **+0.2** |
| YUK | | | | *e*SS | **SnSn** | **SnSn** | **18 30 22.9** | **+1.6** |
| YUK | comp=Z,309nm,1.2s | | | pmax | pmax | | | |
| YUK | comp=N,428nm,0.9s | | | pmax | pmax | | | |
| YUK | comp=E,292nm,1.0s | | | pmax | pmax | | | |
| YUK | comp=Z,407nm,1.0s | | | MLR | MLR | | | |
| YUK | comp=Z,24μm,15.0s | | | MLR | MLR | | | |
| YUK | comp=E,18μm,17.0s | | | MLR | MLR | | | |
| YUK | comp=N,13μm,14.0s | | | MLR | MLR | | | |
| **JKA** | **Kamikawa-asahi** | **20.69** | **358** | P | P | Pn | 18 26 12.9 | -0.5 |
| **ASAJ** | **Asahikawa** comp=N,51nm,0.9s,baz=182,slow=9.3,SNR=12 comp=N,51nm,0.9s | **20.69** | **358** | P | P | Pn | 18 26 12.6 | -0.8 |
| **ASAJ** ASAJ | **Asahikawa** comp=Z,183nm,1.1s | **20.69** | **358** | P pmax | P pmax | Pn pmax | 18 26 12.9 | -0.5 |
| **TPUB** | **Ta-pu** | **21.01** | **274** | P | **P** | **18 26 14.7** | **+0.1** | |
| **HJU** | **Haeju** | **21.09** | **318** | P | **P** | **18 26 15.6** | **+0.2** | |
| HJU | | | | S | **S** | **18 30 10.3** | **+0.8** | |
| HJU | comp=Z,3μm,3.2s | | | AmB | | | | |
| HJU | comp=Z,59μm,20.7s | | | AMS | AMS | | | |
| **SSE** | **Sheshan** | **21.26** | **296** | P | **P** | **18 26 17.5** | **+0.3** | |
| SSE | comp=Z,160nm,0.8s | | | pm

comp=Z,1μm,2.6s
PYAG AMS AMS
comp=Z,48μm,17.1s
**MSHR Mys Shultsa 21.72 335 *e*P P 18 26 22.3 +0.2**
MSHR pmax pmax
comp=Z,88nm,0.8s
**PATS Pohnpei 21.76 137 P P 18 26 24.7 +2.0**
**PATS Pohnpei 21.76 137 P P 18 26 23.7 +1.0**
**PATS Pohnpei 21.76 137 P P 18 26 22.8 +0.1**
comp=Z,0.0nmcomp=Z,611nm,1.5s
**PSTR Posyet 21.92 334 *e*P P 18 26 24.1 -0.1**
**WAKE Wake Island 21.93 96 P P 18 26 24.6 0.0**
WAKE IAmb IAmb 18 26 47.1
comp=Z,520nm,1.2s
**H11N1 WAKE ISLAND Hy 22.05 95 P P** 18 26 35.2 +10
H11N1 T T 18 49 07.4
baz=282
**H11N2 WAKE ISLAND Hy 22.05 95 P P** 18 26 35.2 +10
H11N2 T T 18 49 08.4
baz=282
**H11N3 WAKE ISLAND Hy 22.06 95 P P** 18 26 35.3 +10
H11N3 T T 18 49 02.6
baz=282
**KUR Kuril'sk 22.08 8 P P 18 26 25.7 -0.2**
KUR S **S 18 30 28.8 0.0**
KUR pmax pmax
comp=Z,841nm,1.5s
**H11S3 WAKE ISLAND Hy 22.18 98 P P** 18 26 36.6 +10
**H11S1 WAKE ISLAND Hy 22.19 98 P P** 18 26 36.7 +10
**H11S2 WAKE ISLAND Hy 22.20 98 P P** 18 26 38.2 +11
SNR=3.9
**TEY Ternei 22.32 347 *e*P P 18 26 25.8 -2.7**
TEY *e* 18 26 30.3
TEY MLR MLR
comp=N,1μm,15.0s
**QZH Quanzhou 22.78 279⇑*i*P P 18 26 34.6 +1.0**
QZH pmax pmax
comp=N,5μm,10.1s
**USA0B Ussuriysk Arra 22.82 338 *e*P P 18 26 33.7 -0.1**
**USRK Ussuriysk Ar. 22.82 338 P P 18 26 33.0 -0.8**
**USRK Ussuriysk Ar. 22.82 338 P P 18 26 33.9 +0.1**
comp=N,109nm,0.8s,baz=159,slow=10,SNR=67
comp=N,109nm,0.8s
**USRK Ussuriysk Ar. 22.82 338 P P 18 26 33.0 -0.8**
**KNMB Chin-men Tao 22.98 278 P P 18 26 34.3 -1.4**
**SUJ Sinuiju 23.14 321 P P 18 26 38.9 +1.7**
SUJ S **S 18 30 48.6 +0.6**
SUJ AmB
comp=Z,2μm,2.8s
SUJ AMS AMS
comp=Z,87μm,21.0s
**NJ2 Nanjing 23.43 297⇑*i*P P 18 26 39.4 -0.8**
NJ2 S **S 18 30 51.5 -1.4**
NJ2 pmax pmax
comp=Z,25nm,1.0s
NJ2 pmax pmax
comp=Z,4μm,8.4s
NJ2 LR LR
comp=Z,46μm,23.7s
NJ2 LR LR
comp=Z,30μm,18.5s
NJ2 LR LR
comp=Z,53μm,20.8s
**YSS Yuzh-Sakhalins 23.52 359 P P 18 26 41.1 +0.2**
YSS IAmb IAmb 18 27 04.6
comp=Z,326nm,1.1s
**YSS Yuzh-Sakhalins 23.52 359 *e*P P 18 26 43.4 +2.5**
YSS *e*S **S 18 30 55.0 +0.9**
YSS pmax pmax
comp=Z,3μm,6.8s
YSS pmax pmax
comp=N,2μm,4.5s
YSS pmax pmax
comp=Z,250nm,1.1s
YSS smax smax
comp=E,10μm,11.3s
YSS MLR MLR
comp=N,26μm,15.0s
**DAV Davao City (W) 23.67 230 P P 18 26 44.0 +1.4**
**MDJ Mudanjiang 24.05 335 P P 18 26 48.2 +2.2**
**MDJ Mudanjiang 24.05 335 P P 18 26 46.6 +0.6**
MDJ pP pP 18 26 48.3 -1.2
MDJ sP sP 18 26 50.8 -0.1
MDJ PcP **PcP 18 30 29.4 +2.0**
MDJ S **S 18 31 06.6 +4.0**
MDJ sS sS 18 31 12.6 +4.2
MDJ PcS **PcS 18 34 06.9 -0.1**
MDJ pmax pmax
comp=N,150nm,1.5s
MDJ pmax pmax
comp=N,6μm,10.2s
MDJ LR LR
comp=N,54μm,20.9s
MDJ LR LR
comp=N,34μm,17.8s
MDJ LR LR
comp=N,101μm,21.2s
**DL2 Dalian 24.20 315 P P 18 26 44.3 -3.2**
DL2 S **S 18 31 00.3 -4.8**
DL2 pmax pmax
comp=N,130nm,2.2s
DL2 pmax pmax
comp=N,3μm,8.6s
DL2 LR LR
comp=N,46μm,15.1s
DL2 LR LR
comp=N,49μm,15.9s
DL2 LR LR
comp=N,55μm,14.6s
**SNY Shenyang 24.80 323 ⇓P P 18 26 52.6 -0.3**
SNY S **S 18 31 17.5 +2.9**
SNY pmax pmax
comp=N,68nm,1.4s
**CN2 Changchun 25.21 328 ⇓P P 18 26 57.1 +0.5**
CN2 *es*P sP 18 27 04.0 +2.5
CN2 *e*S **S 18 31 19.3 -2.0**
CN2 pmax pmax
comp=N,20nm,1.1s
CN2 pmax pmax
comp=N,2μm,3.0s
CN2 LR LR
comp=N,31μm,15.0s
CN2 LR LR
comp=N,32μm,15.0s
CN2 LR LR
comp=N,41μm,17.0s
**MANU Manus Island 25.55 171 P P 18 26 58.3 -1.6**
**UGL Uglegorsk 25.67 358 *e*P P 18 27 04.5 +3.9**
UGL *e*S **S 18 31 35.0 +6.7**
UGL pmax pmax
comp=Z,300nm,1.1s
UGL MLR MLR
comp=E,23μm,13.0s
UGL MLR MLR
comp=N,11μm,11.0s
**BNX BinXian 25.85 334 ⇓P P 18 27 02.9 +0.5**
BNX pP **pP 18 27 05.3 -0.6**
BNX S **S 18 31 34.8 +3.5**
BNX pmax pmax
comp=N,170nm,0.8s
BNX pmax pmax
comp=N,4μm,8.4s
BNX LR LR
comp=N,62μm,18.7s
BNX LR LR
comp=N,58μm,17.7s
BNX LR LR
comp=N,108μm,17.9s
**JAY Jayapura 25.89 186 P P 18 27 04.2 +1.2**
**GENI Genyem 26.02 188 P P 18 27 01.6 -2.6**
**TIA Tai'an 26.13 305 P P 18 27 04.5 -0.5**
TIA S **S 18 31 39.9 +3.9**
TIA pmax pmax
comp=N,270nm,1.0s
TIA pmax pmax
comp=N,4μm,9.0s
TIA LR LR
comp=N,44μm,23.3s
TIA LR LR
comp=N,23μm,18.2s
TIA LR LR
comp=N,43μm,24.5s
**SWI Sorong 26.89 208 P P 18 27 09.7 -2.3**
**WHN Wuhan 26.90 292 ⇑P P 18 27 14.0 +2.0**
WHN pP **sP 18 27 17.3 +0.3**
WHN pmax pmax
comp=N,320nm,1.1s
WHN pmax pmax
comp=N,7μm,9.4s
WHN LR LR
comp=N,95μm,17.2s
WHN LR LR
comp=N,154μm,20.4s
WHN LR LR
comp=N,230μm,20.0s
**TNTI Ternate 27.40 217 P P 18 27 17.5 +0.9**
**TNTI Ternate 27.40 217 P P 18 27 15.5 -1.1**
**TNTI Ternate 27.40 217 ⇑P P 18 27 16.4 -0.3**
**TNTI Ternate 27.40 217 P P 18 27 15.4 -1.2**
comp=N,106nm,0.8s,comp=N,2μmcomp=N,13μm
**KLR Kul'dur 27.41 343*c i*P P 18 27 16.9 +0.5**
KLR pmax pmax
comp=Z,141nm,0.8s
**TYV Tymovskoe 27.44 359 *e*P P 18 27 18.5 +1.9**
TYV *e*S **S 18 32 03.4 +7.1**
TYV pmax pmax
comp=Z,26nm,1.3s
TYV pmax pmax
comp=Z,300nm,4.7s
TYV smax smax
comp=E,17nm,1.9s
TYV smax smax
comp=N,900nm,6.9s
TYV smax smax
comp=E,1μm,6.9s
**GRNR Gornyy 27.89 350⇑*i*P P 18 27 21.9 +1.2**
GRNR pmax pmax
comp=Z,10.0nm,0.9s
**CNSH ChangSha 27.90 286 P P 18 27 22.1 +1.0**
CNSH S **S 18 32 06.0 +1.9**
CNSH pmax pmax
comp=Z,61nm,2.2s
CNSH LR LR
comp=Z,36μm,22.7s
CNSH LR LR
comp=Z,28μm,21.9s
CNSH LR LR
comp=Z,39μm,25.2s
**HNS HongShan 28.37 306 ⇑P P 18 27 24.4 -0.7**
HNS *e*S **S 18 32 10.4 -0.8**
HNS pmax pmax
comp=Z,100nm,0.9s
HNS pmax pmax
comp=Z,3μm,11.8s
HNS LR LR
comp=Z,43μm,21.5s
HNS LR LR
comp=Z,47μm,21.8s
**BJT Baijiatuan 28.41 312 P P 18 27 25.9 +0.5**
**BJI Beijing 28.41 312 P P 18 27 24.8 -0.7**
BJI pmax pmax
comp=Z,18nm,1.1s
BJI LR LR
comp=Z,17μm,21.4s
BJI LR LR
comp=Z,12μm,21.7s
BJI LR LR
comp=Z,29μm,21.3s
**LBMI Labuha 28.50 215 P P 18 27 26.5 0.0**
**SKR Severo-Kuril's 28.96 17 *e*P P 18 27 30.8 +0.6**
**LYN LuoYang 29.24 299 *e*P P 18 27 32.3 -0.6**
LYN pP pP 18 27 35.4 -1.0
LYN S **S 18 32 25.1 +0.1**
LYN SS **SnSn 18 33 48.9 -1.6**
LYN pmax pmax
comp=Z,100nm,0.9s
LYN pmax pmax
comp=Z,3μm,11.3s
LYN LR LR
comp=Z,62μm,17.5s
LYN LR LR
comp=Z,104μm,17.5s
LYN LR LR
comp=Z,163μm,18.5s
**KMSI Cibinong 29.56 223 P P 18 27 35.3 -0.5**
**HEH HeiHe 29.62 339 P P 18 27 36.6 +0.5**
HEH pP **pP 18 27 39.6 0.0**
HEH S **S 18 32 29.8 -0.9**
HEH pmax pmax
comp=Z,320nm,1.1s
HEH pmax pmax
comp=Z,2μm,4.3s
HEH LR LR
comp=Z,49μm,19.1s
HEH LR LR
comp=Z,44μm,19.2s
HEH LR LR
comp=Z,123μm,20.0s
**GTOI Gorontalo 30.12 224 P P 18 27 40.0 -0.9**
comp=Z,78nm,1.1s
**MSAI Masohi 30.13 210 P P 18 27 41.0 +0.1**
comp=Z,86nm,1.0s,comp=Z,11μm
**MYLDM Lahad Datu 30.15 237 P P 18 27 40.9 -0.2**
**MYLDM Lahad Datu 30.15 237 ⇑P P 18 27 43.4 +2.3**
**TIY Taiyuan 30.17 305 ⇑P P 18 27 40.1 -1.1**
TIY S **S 18 32 44.3 +4.5**
TIY pmax pmax
comp=Z,2μm,11.4s
TIY LR LR
comp=Z,20μm,17.2s
TIY LR LR
comp=Z,38μm,15.8s
TIY LR LR
comp=Z,48μm,15.1s
**GULI GuiLin 30.22 280 ⇓P P 18 27 44.8 +3.1**
**XLT XiLinHaoTe 30.43 319 *e*P P 18 27 43.6 +0.1**
XLT SS SS 18 34 16.3 -37
XLT pmax pmax
comp=Z,15nm,1.0s
XLT pmax pmax
comp=Z,1μm,11.0s
XLT LR LR
comp=Z,71μm,17.7s
XLT LR LR
comp=Z,93μm,17.5s
**SANI Sanana 30.50 216 P P 18 27 45.4 +1.2**
**SANI Sanana 30.50 216 P P 18 27 44.0 -0.2**
**SANI Sanana 30.50 216 ⇑P P 18 27 42.4 -1.8**
**SANI Sanana 30.50 216 P P 18 27 41.9 -2.3**
comp=Z,120nm,0.8s,comp=Z,1μmcomp=Z,17μm
**BNDI Bandanaira 30.75 207 P P 18 27 44.8 -1.6**
comp=Z,350nm,1.1s,comp=Z,15μm
**NLAI Namlea 30.92 213 P P 18 27 46.6 -1.3**
comp=Z,68nm,0.9s
**MRSI Marisa 30.94 226 P P 18 27 48.3 +0.2**
**ENH Enshi 31.04 290 P P 18 27 49.4 +0.4**
**TOLI2 Tolitoli 31.25 228 P P 18 27 53.0 +2.2**
**TOLI2 Tolitoli 31.25 228 P P 18 27 50.1 -0.7**
**KKM Kota Kinabalu 31.42 241 P P 18 27 53.1 +0.6**
**KKM Kota Kinabalu 31.42 241 P P 18 27 50.5 -2.0**
**KKM Kota Kinabalu 31.42 241 ⇑P P 18 27 53.4 +0.9**
**LUWI Luwuk 31.57 223 P P 18 27 54.8 +1.2**
**LUWI Luwuk 31.57 223 P P 18 27 51.4 -2.2**
LUWI IAmb IAmb 18 28 28.5
comp=Z,258nm,1.0s
**LUWI Luwuk 31.57 223 P P 18 27 52.3 -1.2**
**LUWI Luwuk 31.57 223 ⇑P P 18 27 52.0 -1.6**
**LUWI Luwuk 31.57 223 P P 18 27 51.7 -1.9**
comp=Z,233nm,1.2s,comp=Z,3μmcomp=Z,19μm
**PEA0B Petropavlovsk- 31.58 16 *e*P P 18 27 55.2 +1.9**
**PETK Petropavlovsk- 31.58 16 P P 18 27 54.0 +0.6**
**PETK Petropavlovsk- 31.58 16 P P 18 27 54.8 +1.5**
comp=Z,7.9nm,1.0s,baz=211,slow=8.2,SNR=2.6
comp=Z,7.9nm,1.0s
**QIZ Qiongzhong 31.64 269 P P 18 27 52.3 -2.0**
QIZ PP **PnPn 18 29 00.0 +1.9**
QIZ S **S 18 33 08.0 +5.0**
QIZ pmax pmax
comp=Z,2μm,12.0s
QIZ LR LR
comp=Z,16μm,20.2s
QIZ LR LR
comp=Z,38μm,19.3s
QIZ LR LR
comp=Z,52μm,19.3s
**PET Petropavlovsk 31.76 17 *e*P P 18 27 54.7 -0.2**
PET *e*S **S 18 33 04.8 +0.8**
**HIA Hailar 31.89 330 P P 18 27 58.8 +2.6**
**HIA Hailar 31.89 330 *i*P P 18 27 55.5 -0.7**
HIA pmax pmax
comp=Z,33nm,1.2s
**HHC Hu-ho-hao-te 31.94 311⇑*i*P P 18 27 56.3 -0.5**
HHC pP pP 18 27 59.3 -1.0
HHC sP sP 18 28 04.1 +2.3
HHC pmax pmax
comp=Z,66nm,0.8s
HHC pmax pmax
comp=Z,1μm,4.7s
HHC LR LR
comp=Z,26μm,18.0s
HHC LR LR
comp=Z,35μm,18.8s
HHC LR LR
comp=Z,76μm,19.2s
**XAN Xi'an 32.00 297 ⇑P P 18 27 57.4 0.0**
XAN pP pP 18 28 01.4 +0.5
XAN sP sP 18 28 04.6 +2.3
XAN PP **PP 18 29 08.5 -1.2**
XAN S **S 18 33 12.1 +3.6**
XAN ScS **ScS 18 38 28.3 -0.4**
XAN pmax pmax
comp=Z,29nm,1.3s
XAN pmax pmax
comp=Z,3μm,9.2s
XAN LR LR
comp=Z,62μm,20.6s
XAN LR LR
comp=Z,58μm,20.6s
XAN LR LR
comp=Z,75μm,22.7s
**MPSI Mapaga 32.41 228 P P 18 28 00.0 -1.0**
**ZEA Zeya 32.70 342 *e*P P 18 28 03.9 +0.7**
ZEA *e*S **S 18 33 16.4 -2.4**
ZEA pmax pmax
comp=E,50nm,0.7s
ZEA pmax pmax
comp=N,120nm,0.8s
ZEA pmax pmax
comp=Z,180nm,0.8s
ZEA smax smax
comp=E,2μm,8.4s
**PMG Port Moresby 32.78 173 P P 18 28 05.6 +1.4**
**PMG Port Moresby 32.78 173 P P 18 28 05.7 +1.5**
**PMG Port Moresby 32.78 173 P P 18 28 03.0 -1.2**
**PMG Port Moresby 32.78 173 P P 18 28 03.5 -0.7**
comp=E,76nm,0.9s,baz=12,slow=11,SNR=16
comp=E,76nm,0.9s
**PMG Port Moresby 32.78 173*c i*P P 18 28 03.0 -1.2**
PMG pmax pmax
comp=Z,97nm,0.9s
**BTO Baotou 32.93 309 *e*P P 18 28 07.6 +2.1**
BTO pP **sP 18 28 12.1 +1.6**
BTO sP **pwP 18 28 14.9 -0.9**
BTO PP **PP 18 29 18.1 -1.9**
BTO S **S 18 33 27.0 +4.1**
BTO sS **sS 18 33 32.8 +3.9**
BTO pmax pmax
comp=Z,49nm,1.3s
BTO pmax pmax
comp=Z,3μm,11.0s
BTO LR LR
comp=Z,140μm,17.5s
BTO LR LR
comp=Z,97μm,18.4s
BTO LR LR
comp=Z,180μm,18.8s
**SAUI Saumlaki 33.38 202 P P 18 28 09.6 +0.1**
comp=Z,286nm,1.1s,comp=Z,20μm
**GYA Guiyang 33.48 283 ⇓P P 18 28 11.6 +1.1**
GYA S **S 18 33 31.3 -0.5**
GYA pmax pmax
comp=Z,31nm,0.7s
GYA pmax pmax
comp=Z,2μm,10.0s
GYA LR LR
comp=Z,54μm,18.0s
GYA LR LR
comp=Z,97μm,21.5s
GYA LR LR
comp=Z,158μm,22.4s
**SMKI Samarinda 34.85 231 P P 18 28 23.8 +1.5**
comp=Z,241nm,1.3s,comp=Z,5μmcomp=Z,27μm
**BBSI Bau Bau 35.24 218 P P 18 28 26.5 +0.9**
comp=Z,292nm,1.0s,comp=Z,3μmcomp=Z,18μm
**BKB Balikpapan 35.64 230 P P 18 28 29.0 -0.1**
**BKB Balikpapan 35.64 230 P P 18 28 26.2 -2.9**
**BKB Balikpapan 35.64 230 P P 18 28 27.2 -1.9**
comp=Z,383nm,1.1s,comp=Z,6μmcomp=Z,21μm
**BNSI Bone 35.83 223 P P 18 28 31.1 +0.4**
**CD2 Chengdu 36.01 291 P P 18 28 31.8 -0.4**
CD2 pP pP 18 28 34.8 -1.0
CD2 S **S 18 34 14.3 +3.7**
CD2 pmax pmax
comp=Z,40nm,0.8s
CD2 pmax pmax
comp=Z,2μm,3.9s
**HNR Honiara 36.37 152 P P 18 28 35.6 +0.4**
**HNR Honiara 36.37 152 P P 18 28 35.6 +0.4**
HNR pmax pmax
comp=Z,166nm,1.1s
**LZH Lanzhou 36.45 300 ⇑P P 18 28 36.3 +0.2**
LZH pP pP 18 28 40.0 +0.4
LZH pmax pmax
comp=Z,27nm,1.4s
LZH pmax pmax
comp=Z,2μm,6.1s
**MA2 Magadan 36.52 6 P P 18 28 38.7 +2.5**
**MA2 Magadan 36.52 6 P P 18 28 36.0 -0.1**
**MA2 Magadan 36.52 6 *i*P P 18 28 35.9 -0.3**
MA2 pmax pmax
comp=Z,32nm,1.0s
**KAPI Kappang 36.53 222 P P 18 28 37.8 +1.1**
**KAPI Kappang 36.53 222 P P 18 28 35.4 -1.3**
KAPI IAmb IAmb 18 28 41.1
comp=Z,177nm,1.1s
**KAPI Kappang 36.53 222 P P 18 28 35.4 -1.3**
KAPI pmax pmax
comp=Z,177nm,1.1s
**SLVN Son La 36.61 275 P P 18 28 35.4 -2.0**
**CIT Chita 36.66 329 *e*P P 18 28 37.2 -0.3**
CIT *e* 18 30 00.4
CIT *e* 18 30 20.6
CIT *e* 18 30 55.7
CIT *e* 18 34 16.4
CIT pmax pmax
comp=Z,1μm,2.9s
**UBPT Khong Chiam 36.70 264 P P 18 28 39.5 +1.3**
**UBPT Khong Chiam 36.70 264 P P 18 28 36.2 -2.0**
**SBUM Sibu 36.75 240 P P 18 28 37.0 -1.6**
**MTKI Muara Teweh, K 36.86 233 P P 18 28 38.1 -1.5**
comp=Z,129nm,0.9s,comp=Z,3μmcomp=Z,14μm
**BSSI Bau Bau, Buton 36.97 220 P P 18 28 38.7 -1.8**
comp=Z,286nm,0.9s,comp=Z,3μmcomp=Z,15μm
**KMI Kunming 37.11 281 ⇑P P 18 28 43.1 +1.2**
KMI S **S 18 34 34.1 +6.3**
KMI pmax pmax
comp=Z,81nm,1.5s
KMI pmax pmax
comp=Z,2μm,9.5s
KMI LR LR
comp=Z,22μm,18.1s
KMI LR LR
comp=Z,36μm,23.8s
KMI LR LR
comp=Z,44μm,22.7s
**COEN Coen 37.11 181 P P 18 28 43.4 +1.8**
**COEN Coen 37.11 181 P P 18 28 40.2 -1.4**
**COEN Coen 37.11 181 P P 18 28 42.2 +0.6**
comp=Z,0.0nmcomp=Z,116nm,0.8s
**KDU Kakadu 37.44 198 P P 18 28 45.6 +1.2**
**KDU Kakadu 37.44 198 ⇓P P 18 28 44.1 -0.2**
**KDU Kakadu 37.44 198 P P 18 28 43.0 -1.3**
comp=Z,0.0nmcomp=Z,26nm,0.8s
**DRS Darwin Rock St 37.67 200 P P 18 28 47.1 +0.8**
**ULN Ulaanbaatar 37.87 319 P P 18 28 46.6 -1.4**
**ULN Ulaanbaatar 37.87 319*ce*P P 18 28 47.4 -0.6**
ULN pmax pmax
comp=Z,52nm,0.8s
**PZH PanZhiHua 37.88 284 P P 18 28 48.8 +0.5**
PZH pmax pmax
comp=Z,300nm,0.8s
PZH pmax pmax
comp=Z,2μm,9.0s
**SOEI Soe 37.94 212 P P 18 28 49.9 +1.1**
**SOEI Soe 37.94 212** IAmb IAmb 18 29 18.2

**SOEI Soe** 37.94 212 P P 18 28 46.7 -2.0
**SOEI Soe** 37.94 212 ⇓P P 18 28 47.6 -1.2
**SOEI Soe** 37.94 212 P P 18 28 46.2 -2.6
comp=Z,195nm,0.9s,comp=Z,3μmcomp=Z,13μm
**MTN Manton Dam** 37.99 200 P P 18 28 48.3 -0.7
**MTN Manton Dam** 37.99 200 P P 18 28 47.1 -1.9
MTN IAmb IAmb 18 30 11.4
comp=Z,378nm,2.0s
**MTN Manton Dam** 37.99 200 ⇑P P 18 28 46.9 -2.1
**MTN Manton Dam** 37.99 200 P P 18 28 48.1 -0.9
comp=Z,0.0nmcomp=Z,55nm,0.9s
**MMRI Maumere** 38.02 216 P P 18 28 50.4 +1.1
**MMRI Maumere** 38.02 216 P P 18 28 47.9 -1.4
comp=Z,359nm,1.1s,comp=Z,5μmcomp=Z,18μm
**SONM Songino Array** 38.25 319 P P 18 28 49.8 -1.4
**SONM Songino Array** 38.25 319 P P 18 28 50.9 -0.2
comp=Z,28nm,0.8s,baz=130,slow=8.2,SNR=71
comp=Z,28nm,0.8s
**SONM Songino Array** 38.25 319 P P 18 28 49.8 -1.4
SONM pmax pmax
comp=Z,91nm,0.8s
**EDFI Ende, Flores** 38.41 216 P P 18 28 51.5 -1.2
**BATI Baumata** 38.62 212 P P 18 28 52.1 -2.3
comp=Z,162nm,0.8s,comp=Z,2μmcomp=Z,12μm
**STKI Sintang** 38.80 238 P P 18 28 54.3 -1.6
comp=Z,118nm,1.3s,comp=Z,16μm
**KSM Kuching** 38.86 241 P P 18 28 57.5 +1.0
**KSM Kuching** 38.86 241 ⇓P P 18 28 58.8 +2.4
**YAK Yakutsk** 39.76 350 P P 18 29 02.7 -0.7
**YAK Yakutsk** 39.76 350 ⇑P P 18 29 03.1 -0.3
**YAK Yakutsk** 39.76 350 *c iP* P 18 29 03.1 -0.3
YAK *e*S S 18 35 08.0 +1.5
YAK *e*SS SS 18 37 52.3 -10
YAK pmax pmax
comp=Z,164nm,0.9s
YAK pmax pmax
comp=E,15nm,1.0s
YAK pmax pmax
comp=N,27nm,1.1s
YAK smax smax
comp=N,376nm,2.8s
YAK smax smax
comp=E,244nm,3.5s
**SEY Seymchan** 39.98 6*d iP* P 18 29 06.3 +1.1
SEY pmax pmax
comp=Z,11nm,0.9s
**CRAI Chiangrai** 40.06 274 P P 18 29 07.0 +0.5
CRAI IAmb IAmb 18 30 34.2
comp=Z,718nm,1.6s
**GTA Gaotai** 40.16 304 *e*P P 18 29 06.9 -0.3
GTA pmax pmax
comp=Z,23nm,0.9s
**BASI Baing, Sumba** 40.23 216 P P 18 29 05.1 -2.7
**BOD Bodaibo** 40.42 336 *e*P P 18 29 08.9 0.0
BOD pmax pmax
comp=Z,123nm,1.8s
**WBSI Waikabubak, Su** 40.42 218 P P 18 29 06.2 -3.3
comp=Z,115nm,0.7s,comp=Z,1μm
**PHRA Phrae** 40.60 272 P P 18 29 09.3 -1.6
**PLAI Plampang** 40.72 221 P P 18 29 09.2 -2.7
**NAYO Nakonayok** 40.81 265 P P 18 29 13.6 +0.9
**TNCH TengChong** 40.92 282 ⇑P P 18 29 14.5 +0.7
TNCH pP pP 18 29 16.5 -0.9
TNCH sP sP 18 29 20.8 +2.0
TNCH PP **PnPn** 18 30 54.6 +2.1
TNCH S S 18 35 30.0 +4.8
TNCH sS sS 18 35 38.3 +7.0
TNCH SS SS 18 38 21.8 -5.1
TNCH pmax pmax
comp=Z,100nm,1.8s
TNCH pmax pmax
comp=Z,1μm,6.2s
TNCH LR LR
comp=Z,16μm,15.9s
TNCH LR LR
comp=Z,13μm,18.3s
TNCH LR LR
comp=Z,27μm,23.6s
**TWSI Taliwang, Sumb** 41.20 222 P P 18 29 14.9 -0.9
comp=Z,129nm,1.0s,comp=Z,2μmcomp=Z,17μm
**ZAK Zakamensk** 41.21 321 *e*P P 18 29 15.1 -0.6
ZAK pmax pmax
comp=Z,51nm,0.9s
**MTSU Mount Surprise** 41.27 179 P P 18 29 17.9 +1.5
**KIWB Kanaga Island** 41.38 36 P P 18 29 17.3 +0.3
**KNRA Kununurra** 41.41 202 P P 18 29 16.2 -1.3
**KNRA Kununurra** 41.41 202 P P 18 29 17.0 -0.5
comp=Z,0.0nmcomp=Z,145nm,0.9s
**IRK Irkutsk** 41.51 324 *e*P P 18 29 17.3 -0.7
IRK pmax pmax
comp=Z,145nm,1.9s
**ADK Adak** 41.65 37 P P 18 29 22.1 +3.0
**ADK Adak** 41.65 37 P P 18 29 19.1 0.0
**ADK Adak** 41.65 37 ⇑P P 18 29 22.3 +3.1
**ADK Adak** 41.65 37 P P 18 29 19.1 0.0
ADK pmax pmax
comp=Z,154nm,1.1s
**SRBI Singaraja** 41.76 225 P P 18 29 18.3 -2.1
comp=Z,150nm,1.5s,comp=Z,5μmcomp=Z,22μm
**CM31 Chiang Mai Arr** 41.79 272 P P 18 29 20.0 -0.8
CM31 IAmb IAmb 18 30 49.6
comp=Z,603nm,1.8s
**CMAR Chiang Mai Arr** 41.79 272 P P 18 29 20.2 -0.6
**CMAR Chiang Mai Arr** 41.79 272 P P 18 29 21.6 +0.9
comp=Z,28nm,0.9s,baz=60,slow=8.2,SNR=85
comp=Z,28nm,0.9s
**CMAR Chiang Mai Arr** 41.79 272 P P 18 29 20.2 -0.6
**GSTR Great Sitkin T** 42.09 37 P P 18 29 23.8 +1.0
**TV1H Townsville Har** 42.51 175 P P 18 29 26.8 +0.4
**JAGI Jajag, Banywa** 42.74 226 P P 18 29 29.3 +0.9
**JAGI Jajag, Banyuwa** 42.74 226 P P 18 29 28.0 -0.4
**JAGI Jajag, Banyuwa** 42.74 226 ⇓P P 18 29 29.0 +0.5
**JAGI Jajag, Banyuwa** 42.74 226 P P 18 29 27.9 -0.5
comp=Z,221nm,0.9s,comp=Z,3μmcomp=Z,20μm
**SRDT SRDT** 42.81 266 P P 18 29 30.3 +1.2
**AUAYR Ayr State High** 42.87 175 P P 18 29 30.5 +1.1
**LKP Lekhapani** 43.05 286 *e*P P 18 29 31.6 +0.7
LKP IAmb IAmb 18 29 35.1
comp=Z,419nm,1.0s
**MOY Mondy** 43.06 322 *e*P P 18 29 30.6 -0.2
MOY pmax pmax
comp=Z,447nm,3.0s
**CTA Charters Tower** 43.29 176 P P 18 29 32.4 -0.4
comp=Z,2.6nm,0.9s,baz=360,slow=6.8,SNR=34
**CTAO Charters Tower** 43.29 176 P P 18 29 32.7 -0.1
**CTAO Charters Tower** 43.29 176 P P 18 29 31.6 -1.2
**CTAO Charters Tower** 43.29 176 ⇑P P 18 29 32.3 -0.4
**CTAO Charters Tower** 43.29 176 P P 18 29 31.6 -1.2
CTAO pmax pmax
comp=Z,244nm,1.1s
**GOMU GeErMu** 43.73 298 P P 18 29 38.9 +2.2
GOMU S S 18 36 05.8 -0.9
GOMU pmax pmax
comp=Z,200nm,0.9s
GOMU LR LR
comp=Z,43μm,18.2s
GOMU LR LR
comp=Z,18μm,18.7s
GOMU LR LR
comp=Z,16μm,19.1s
**QIS Mount Isa** 43.84 185 P P 18 29 38.4 +1.2
**QIS Mount Isa** 43.84 185 P P 18 29 36.7 -0.5
comp=Z,0.0nmcomp=Z,63nm,1.1s
**TPRI Tanjung Pinang** 43.91 245 P P 18 29 38.1 +0.2
comp=Z,75nm,1.4s,comp=Z,2μmcomp=Z,21μm
**WRAB Tennant Creek** 43.97 192 P P 18 29 36.6 -1.6
WRAB IAmb IAmb 18 31 09.4
comp=Z,441nm,1.6s
**WRAB Tennant Creek** 43.97 192 *i* P P 18 29 37.2 -1.1
WRAB pmax pmax
comp=Z,80nm,0.9s
**WB2 Warramunga Arr** 43.98 192 P P 18 29 36.5 -1.9
**WRA Warramunga Arr** 43.98 192 P P 18 29 37.4 -1.0
comp=Z,45nm,0.8s,baz=16,slow=8.9,SNR=134
WRA PKP2ab 19 02 39.0
comp=Z,2.2nm,1.0s,baz=172,slow=2.2,SNR=4.8
comp=Z,45nm,0.8s
**PWJI Pagerwojo** 43.99 229 P P 18 29 38.2 -0.3
comp=Z,191nm,0.9s
**SURA Surathani** 44.24 259 P P 18 29 42.2 +1.6
**SMRI Semarang** 44.26 231 P P 18 29 41.1 +0.3
comp=Z,70nm,1.4s
**PPBI Pangkal Pinang** 44.37 240 P P 18 29 41.8 +0.2
**JOHN Johnston Islan** 44.46 90 P P 18 29 45.1 +2.8
**JOHN Johnston Islan** 44.46 90 P P 18 29 43.1 +0.8
**SRIT Nakonsritamara** 44.50 258 P P 18 29 44.1 +1.4
**SRIT Nakonsritamara** 44.50 258 IAmb IAmb 18 31 12.8
comp=Z,140nm,0.9s
**JORH JORHAT** 44.53 285 *e*P P 18 29 43.0 +0.2
JORH IAmb IAmb 18 29 46.7
comp=Z,763nm,1.1s
**KOHI KOHIMA** 44.79 284 *e*P P 18 29 43.6 -1.4
KOHI IAmb IAmb 18 29 49.0
comp=Z,40nm,0.8s
**ZIRO ZIRO** 44.79 286 *e*P P 18 29 46.4 +1.3
ZIRO IAmb IAmb 18 29 49.3
comp=Z,227nm,1.0s
**UGM Wanagama** 44.80 230 P P 18 29 46.0 +0.9
**UGM Wanagama** 44.80 230 P P 18 29 46.2 +1.1
comp=Z,239nm,1.5s,comp=Z,22μm
**KULM Kulim** 45.02 253 ⇑P P 18 29 47.8 +0.9
**IMP Imphal** 45.06 282 *e*P P 18 29 46.2 -1.0
IMP IAmb IAmb 18 29 56.4
comp=Z,29nm,0.8s
**IPM Ipoh** 45.07 252 P P 18 29 48.3 +1.0
**IPM Ipoh** 45.07 252 ⇑P P 18 29 47.7 +0.4
**JCJI Jatiwangi** 45.46 234 P P 18 29 52.8 +2.5
**KPJI Karang Pucung** 45.54 232 P P 18 29 53.4 +2.5
comp=Z,149nm,1.2s
**CLES Cleveland East** 45.83 38 P P 18 29 53.4 +0.7
**NIKH Nikolski High** 46.47 38 P P 18 29 59.0 +1.2
**NIKH Nikolski High** 46.47 38 P P 18 29 58.0 +0.2
baz=250,SNR=9.3
**BBJI Bungbulang** 46.56 233 P P 18 30 00.1 +1.0
**DBJI Dramaga** 46.64 235 P P 18 29 56.3 -3.3
comp=Z,387nm,1.5s,comp=Z,6μmcomp=Z,17μm
**SHL Shillong** 46.80 284 *e*P P 18 30 01.1 +0.1
SHL IAmb IAmb 18 30 04.2
comp=Z,124nm,0.9s
**SHL Shillong** 46.80 284 P P 18 30 01.7 +0.7
SNR=6.9
**BILL Bilibino** 46.81 12 *e*P P 18 30 00.9 +0.6
BILL *e* 18 31 32.8
BILL *e* 18 31 48.2
BILL *e*PPP PPP 18 32 33.8
BILL pmax pmax
comp=Z,108nm,1.3s
BILL MLR MLR
comp=Z,19μm,19.0s
**SBJI Serang** 46.82 236 P P 18 30 01.1 +0.1
comp=Z,129nm,1.5s
**LSA Lhasa** 46.94 289 P P 18 30 05.0 +2.6
LSA S S 18 36 58.0 +4.6
LSA pmax pmax
comp=Z,110nm,0.9s
LSA LR LR
comp=Z,12μm,15.8s
LSA LR LR
comp=Z,22μm,16.5s
LSA LR LR
comp=Z,29μm,16.2s
**LSA Lhasa** 46.94 289 P P 18 30 03.9 +1.5
**LSA Lhasa** 46.94 289 P P 18 30 04.6 +2.2
LSA P P 18 30 04.6 +2.2
**SKJI Sukabumi** 47.08 235 P P 18 30 03.5 +0.5
comp=Z,308nm,1.0s,comp=Z,4μmcomp=Z,16μm
**BKNI Bangkinang** 47.16 247 P P 18 30 04.5 +0.8
**BKNI Bangkinang** 47.16 247 P P 18 30 02.8 -0.9
**BKNI Bangkinang** 47.16 247 P P 18 30 04.1 +0.4
comp=Z,120nm,0.9s
**SPIA Saint Paul Isl** 47.38 32 P P 18 30 05.3 +0.5
baz=244
**P08K Saint George I** 47.49 33 P P 18 30 06.3 +0.6
baz=246
**AS01 Alice Springs** 47.68 192 P P 18 30 07.6 0.0
**AS31 Alice Springs** 47.69 192 P P 18 30 07.6 0.0
**ASAR Alice Springs** 47.69 192 P P 18 30 07.7 +0.1
comp=Z,19nm,0.6s,baz=15,slow=10,SNR=50
comp=Z,19nm,0.6s
**PSI Prapat** 47.72 251 P P 18 30 09.6 +1.4
**PSI Prapat** 47.72 251 P P 18 30 06.3 -1.9
PSI pmax pmax
comp=Z,191nm,1.0s
**LWLI Liwa** 47.74 239 P P 18 30 07.7 -0.6
comp=Z,91nm,1.2s,comp=Z,2μmcomp=Z,20μm
**RPSI Rantau Prapat** 47.77 251 P P 18 30 06.3 -2.2
**UNV Unalaska Valle** 48.09 38 P P 18 30 13.9 +3.5
**UNV Unalaska Valle** 48.09 38 P P 18 30 10.9 +0.6
baz=251
**KOUNC Koumac, New Ca** 48.14 153 P P 18 30 12.4 +1.3
**KOUNC Koumac, New Ca** 48.14 153 P P 18 30 10.0 -1.1
KOUNC IAmb IAmb 18 31 41.6
comp=Z,216nm,1.5s
**KOUNC Koumac, New Ca** 48.14 153 ⇑P P 18 30 12.4 +1.3
**PDSI Padang** 48.31 246 P P 18 30 12.0 -0.6
**KCSI Kotacane, Aceh** 48.38 253 P P 18 30 15.1 +1.9
**TIXI Tiksi** 49.01 354 P P 18 30 17.2 0.0
**TIXI Tiksi** 49.01 354 *ce*P P 18 30 17.8 +0.6
TIXI pmax pmax
comp=Z,58nm,1.0s
**EIDS Eidsvold** 49.02 171 P P 18 30 19.3 +1.5
**EIDS Eidsvold** 49.02 171 P P 18 30 16.4 -1.4
comp=Z,0.0nmcomp=Z,32nm,1.4s
**GTK Tadong** 49.45 287 *e*P P 18 30 22.8 +1.3
GTK IAmb IAmb 18 30 25.6
comp=Z,139nm,1.0s
**LIFNC LIFOU** 49.62 150 P P 18 30 24.5 +2.1
**GSI Gunungsitoli** 49.62 251 P P 18 30 24.7 +2.0
**GSI Gunungsitoli** 49.62 251 P P 18 30 22.2 -0.5
comp=Z,132nm,1.2s
**QLP Quilpie** 49.68 179 P P 18 30 22.4 -0.4
**QLP Quilpie** 49.68 179 ⇓P P 18 30 21.6 -1.3
**QLP Quilpie** 49.68 179 P P 18 30 21.2 -1.7
comp=Z,62nm,0.8s
**SISI Saibi** 49.68 247 P P 18 30 22.0 -1.2
comp=Z,125nm,0.9s,comp=Z,22μm
**PBSI Pulau Batu** 49.70 249 P P 18 30 24.2 +0.9
comp=Z,102nm,0.9s,comp=Z,22μm
**WMQ Urumqi** 49.76 308 P P 18 30 23.3 -0.2
WMQ PcP PcP 18 31 45.8 +1.5
WMQ S S 18 37 30.9 -1.2
WMQ pmax pmax
comp=Z,180nm,1.5s
WMQ pmax pmax
comp=Z,2μm,4.7s
WMQ LR LR
comp=Z,23μm,16.5s
WMQ LR LR
comp=Z,29μm,22.7s
WMQ LR LR
comp=Z,35μm,22.7s
**GAMB Gambell** 49.96 24 P P 18 30 25.0 +0.5
baz=238
**MBWA Marble Bar** 49.97 209 P P 18 30 24.8 -0.3
**MBWA Marble Bar** 49.97 209 P P 18 30 23.4 -1.8
**MBWA Marble Bar** 49.97 209 P P 18 30 24.8 -0.3
comp=Z,0.0nmcomp=Z,189nm,1.0s
**FALS False Pass** 50.12 37 P P 18 30 26.6 +0.7
baz=253
**SNSI Sinabang, Aceh** 50.18 253 P P 18 30 27.8 +0.9
comp=Z,349nm,1.4s
**PSA00 Pilbara Seismi** 50.28 209 P P 18 30 28.6 +1.1
**PSA00 Pilbara Seismi** 50.28 209 P P 18 30 26.9 -0.6
comp=Z,207nm,0.9s
**WRKA Warakurna** 50.34 198 P P 18 30 27.7 -0.3
**WRKA Warakurna** 50.34 198 ⇑P P 18 30 26.9 -1.0
**WRKA Warakurna** 50.34 198 P P 18 30 27.3 -0.7
comp=Z,0.0nmcomp=Z,67nm,1.5s
**NOUC Port Laguerre** 50.36 152 P P 18 30 30.0 +1.9
**DZM Mont Dzumac** 50.40 152 P P 18 30 30.3 +1.8
**DZM Mont Dzumac** 50.40 152 P P 18 30 27.8 -0.7
**DZM Mont Dzumac** 50.40 152 ⇑P P 18 30 29.2 +0.8
**DZM Mont Dzumac** 50.40 152 P P 18 30 28.7 +0.3
comp=Z,29nm,1.0s,baz=333,slow=4.0,SNR=25
comp=Z,29nm,1.0s
**M11K Mekoryuk** 50.65 30 P P 18 30 30.6 +0.8
baz=246
**DGZ Jazzator, Alta** 50.72 316 *i* P P 18 30 30.7 -0.1
DGZ pmax pmax
comp=Z,269nm,1.3s
**INKA Innaminka** 50.90 183 P P 18 30 33.7 +1.7
**S12K Black Hills** 51.10 36 P P 18 30 32.8 -0.6
baz=254
**AUWSH Wavell State H** 51.32 169 P P 18 30 36.6 +1.4
**OOD Oodnadatta** 51.44 189 P P 18 30 35.8 -0.3
**SDPT Sand Point** 51.88 37 P P 18 30 41.2 +2.1
**SDPT Sand Point** 51.88 37 P P 18 30 40.3 +1.2
baz=256,SNR=5.5
**K13K Kusilvak Mount** 51.96 28 P P 18 30 40.2 +0.6
baz=247
**M13K Dall Lake** 51.97 30 P P 18 30 39.9 +0.2
baz=249
**ZSN Zaisan** 52.09 313 *e*P P 18 30 40.9 0.0
comp=Z,75nm,1.1s,baz=313
**ZSN Zaisan** 52.09 313 *e*P P 18 30 40.9 0.0
ZSN pmax pmax
comp=Z,75nm,1.1s
**CNBA Chernabura Isl** 52.25 38 P P 18 30 42.6 +0.7
**CHNA Chernabura Isl** 52.25 38 P P 18 30 41.7 -0.3
baz=257
**TNA Tin City** 52.28 23 P P 18 30 43.1 +1.1
baz=241
**BOK Bokaro** 52.48 283 *e*P P 18 30 45.0 +0.9
BOK IAmb IAmb 18 30 48.3
comp=Z,166nm,0.8s
**N14K Kuskokwak Cree** 52.58 31 P P 18 30 45.0 +0.7
baz=251
**L14K Kuka Creek** 52.60 29 P P 18 30 44.9 +0.4
baz=249
**S14K Fog Glacier** 52.62 36 P P 18 30 44.7 0.0
baz=256
**AULRC Lightning Ridg** 52.69 175 P P 18 30 45.2 -0.2
**M14K Bethel** 52.73 30 IAmb IAmb 18 32 14.6
comp=Z,240nm,1.1s
**M14K Bethel** 52.73 30 P P 18 30 46.0 +0.7
baz=250,SNR=14
**J14K Nanvaranak Lak** 52.75 27 IAmb IAmb 18 32 14.1
comp=Z,207nm,1.4s
**J14K Nanvaranak Lak** 52.75 27 P P 18 30 46.1 +0.6
baz=247
**ANM Nome** 52.77 25 P P 18 30 46.5 +0.9
baz=244
**F14K Arctic Creek** 52.82 24 P P 18 30 46.9 +0.9
baz=242
**MSVF Nonsavu** 53.00 137 P P 18 30 49.9 +1.9
**MSVF Nonsavu** 53.00 137 P P 18 30 48.1 +0.1
**MSVF Nonsavu** 53.00 137 ⇓P P 18 30 50.3 +2.3
**MSVF Nonsavu** 53.00 137 P P 18 30 48.1 +0.1
MSVF pmax pmax
comp=Z,123nm,1.0s
**ZAA0 Zalesovo Array** 53.09 321 P P 18 30 47.8 -0.3
**ZALV Zalesovo Beam** 53.09 321 P P 18 30 47.3 -0.8
**ZALV Zalesovo Beam** 53.09 321 P P 18 30 48.1 0.0
comp=Z,51nm,0.7s,baz=98,slow=6.8,SNR=55
comp=Z,51nm,0.7s
**CHGN Chignik** 53.24 36 IAmb IAmb 18 32 25.7
comp=Z,132nm,0.8s
**CHGN Chignik** 53.24 36 P P 18 30 50.6 +1.4
baz=257
**O15K Ungalikthiuk R** 53.25 32 P P 18 30 50.3 +1.0
baz=253
**L15K Ungalak Mounta** 53.26 29 P P 18 30 49.4 +0.1
baz=250
**M15K Kasigluk River** 53.30 30 P P 18 30 50.2 +0.7
baz=252,SNR=8.5
**N15K Kwethluk River** 53.41 31 IAmb IAmb 18 32 51.3
comp=Z,121nm,1.1s
**N15K Kwethluk River** 53.41 31 P P 18 30 51.1 +0.6
baz=252,SNR=9.0
**K15K Wolf Creek Mou** 53.45 28 P P 18 30 51.0 +0.3
baz=250,SNR=9.5
**G15K Niukluk** 53.47 25 P P 18 30 50.8 0.0
baz=245
**F15K North Star Dit** 53.55 24 P P 18 30 51.0 -0.4
baz=244
**LCRK Leigh Creek** 53.77 186 P P 18 30 54.2 +0.9
**KIP Kipapa** 53.78 80 P P 18 30 56.8 +3.1
**KIP Kipapa** 53.78 80 P P 18 30 54.4 +0.7
**KIP Kipapa** 53.78 80 P P 18 30 54.4 +0.7
KIP pmax pmax
comp=Z,269nm,1.2s
**MK31 Makanchi Array** 53.79 312 P P 18 30 53.2 -0.3
**MK31 Makanchi Array** 53.79 312 *c iP* P 18 30 53.7 +0.2
**MKAR Makanchi Array** 53.79 312 P P 18 30 53.8 +0.3
comp=Z,94nm,0.8s,baz=93,slow=8.7,SNR=112
comp=Z,94nm,0.8s
**R16K Pilot Point** 53.98 35 P P 18 30 54.3 -0.3
baz=257
**MAKZ Makanchi** 54.01 312 P P 18 30 55.0 -0.1
**MAKZ Makanchi** 54.01 312 ⇑P P 18 30 55.4 +0.3
**MAKZ Makanchi** 54.01 312 P P 18 30 55.0 -0.1
MAKZ pmax pmax
comp=Z,371nm,0.9s
**H16K Elim** 54.03 26 P P 18 30 55.0 +0.2
baz=247
**ARMA Armidale** 54.06 171 P P 18 30 57.4 +1.8
**ARMA Armidale** 54.06 171 IAmb IAmb 18 32 34.2
comp=Z,108nm,1.1s
**ARMA Armidale** 54.06 171 ⇑P P 18 30 55.6 0.0
**ARMA Armidale** 54.06 171 P P 18 30 53.8 -1.8
comp=Z,0.0nmcomp=Z,44nm,1.4s
**P16K Nushagak River** 54.12 33 P P 18 30 56.6 +1.0
baz=255,SNR=7.4
**MULG Mulgathing** 54.13 190 P P 18 30 56.0 +0.1
**N16K Nishlik Lake** 54.13 31 P P 18 30 56.4 +0.6
baz=254,SNR=25
**L16K Owhat River** 54.18 30 P P 18 30 55.9 -0.1
baz=252,SNR=9.8
**J16K Anvik River** 54.20 27 P P 18 30 52.3 -3.9
baz=250,SNR=7.0
**M16K Timber Creek** 54.20 30 P P 18 30 56.8 +0.6
M16K IAmb IAmb 18 32 25.2
comp=Z,148nm,1.1s
**M16K Timber Creek** 54.20 30 P P 18 30 56.5 +0.3
baz=253,SNR=19
**O16K Kokwok River B** 54.22 32 IAmb IAmb 18 32 37.5
comp=Z,273nm,1.6s
**O16K Kokwok River B** 54.22 32 P P 18 30 56.6 +0.3
baz=255,SNR=13
**G16K Koyuk River** 54.28 25 P P 18 30 57.6 +0.9
baz=247
**I17K Unalakleet** 54.37 27 IAmb IAmb 18 32 51.0
comp=Z,93nm,0.9s
**I17K Unalakleet** 54.37 27 P P 18 30 58.3 +0.9
baz=249
**C16K Lisburne Hills** 54.49 21 P P 18 30 58.3 +0.2
baz=242
**R17L Mt. Peulik Vol** 54.63 35 P P 18 30 60.0 +0.6
baz=258,SNR=6.3
**AUPHS Peel High Scho** 54.63 172 P P 18 31 01.4 +1.7
**CMSA Cobar Meteorol** 54.65 178 P P 18 31 00.9 +1.2
**CMSA Cobar Meteorol** 54.65 178 P P 18 30 58.9 -0.8
comp=Z,0.0nmcomp=Z,59nm,1.3s
**CHIR Chirikof Islan** 54.67 37 P P 18 31 00.4 +0.7
**CHIR Chirikof Islan** 54.67 37 P P 18 31 00.5 +0.7
baz=260,SNR=5.3
**O17K Koliganek Bris** 54.75 32 P P 18 31 01.0 +0.8
baz=256
**JHSG JHARSUGUGA** 54.83 281 *e*P P 18 31 02.6 +1.2
JHSG IAmb IAmb 18 31 08.2
comp=Z,121nm,0.9s
**J17K VABM Dome** 54.89 28 P P 18 31 02.3 +1.2
baz=251
**N17K Nushagak Hills** 54.90 31 P P 18 31 01.9 +0.6
baz=255,SNR=12
**P17K Kvichak River** 54.94 33 P P 18 31 01.8 +0.3
baz=257,SNR=12
**STKA Stephens Creek** 54.98 182 P P 18 31 02.0 -0.1
**STKA Stephens Creek** 54.98 182 P P 18 31 00.9 -1.2
comp=Z,0.0nmcomp=Z,12nm,1.0s
**STKA Stephens Creek** 54.98 182 P P 18 31 01.5 -0.6
comp=Z,29nm,0.8s,baz=355,slow=8.9,SNR=25
comp=Z,29nm,0.8s
**G17K Kiwalik Mounta** 54.98 25 P P 18 31 02.8 +1.0
baz=248
**D17K Noatak River** 54.98 22 P P 18 31 02.6 +0.9
baz=244
**K17K Iditarod** 55.01 29 P P 18 31 02.5 +0.5
baz=252
**Q17K Contact Creek** 55.01 34 P P 18 31 02.8 +0.5
baz=258
**M17K Holitna River** 55.02 30 IAmb IAmb 18 32 48.0
comp=Z,134nm,1.0s
**M17K Holitna River** 55.02 30 P P 18 31 02.4 +0.3
baz=254,SNR=12
**H17K Granite Mounta** 55.07 26 P P 18 31 03.0 +0.6
baz=249
**F17K Baldwin Pennin** 55.12 24 P P 18 31 03.2 +0.5
baz=247
**E17K Hotham Inlet** 55.16 23 P P 18 31 03.9 +0.9
baz=246
**RDOG Red Dog Mine** 55.20 22 P P 18 31 04.5 +1.2
baz=244
**MEEK Meekatharra** 55.25 207 P P 18 31 04.0 -0.2
**MEEK Meekatharra** 55.25 207 P P 18 31 03.1 -1.2
comp=Z,0.0nmcomp=Z,119nm,1.4s

**C17K DeLong Mountai** 55.29 21 P P 18 31 04.7 +0.6
baz=244
**KHLH Kahului Airpor** 55.34 80 P P 18 31 05.3 +0.3
**SEM Semipalatinsk** 55.40 316 eP P 18 31 05.3 0.0
comp=Z,108nm,0.9s,baz=316
**SEM Semipalatinsk** 55.40 316 eP P 18 31 05.3 0.0
SEM pmax pmax
comp=Z,108nm,0.9s
**AUDCS Dubbo College** 55.52 175 P P 18 31 07.9 +1.9
**Q18K Katmai Hardscr** 55.54 34 P P 18 31 06.4 +0.2
baz=258,SNR=23
**N18K Kilae Creek** 55.56 31 IAmb IAmb 18 32 48.6
comp=Z,138nm,1.2s
**N18K Kilae Creek** 55.56 31 P P 18 31 06.6 +0.6
baz=256,SNR=12
**L18K Granite Mounta** 55.58 29 P P 18 31 06.8 +0.6
baz=254
**P18K Big Mountain,** 55.59 33 P P 18 31 05.9 -0.4
**P18K Big Mountain,** 55.59 33 P P 18 31 05.9 -0.4
baz=258,SNR=7.4
**SII Sitkinak Islan** 55.59 36 P P 18 31 09.8 +3.4
**SII Sitkinak Islan** 55.59 36 IAmb IAmb 18 32 51.3
comp=Z,193nm,1.0s
**SII Sitkinak Islan** 55.59 36 P P 18 31 06.5 +0.2
baz=260,SNR=11
**R18K Karluk** 55.62 35 P P 18 31 06.6 +0.1
baz=260
**O18K Koktuh Hills** 55.70 32 P P 18 31 06.9 -0.2
**O18K Koktuh Hills** 55.70 32 P P 18 31 07.5 +0.4
baz=257,SNR=24
**SHLS Shalkode** 55.72 307 eP P 18 31 05.4 -2.3
comp=Z,48nm,0.7s,baz=307
SHLS eS S 18 38 50.7 -3.1
baz=307
**SHLS Shalkode** 55.72 307 eP P 18 31 05.4 -2.3
SHLS eS S 18 38 50.6 -3.1
SHLS pmax pmax
comp=Z,48nm,0.7s
**E18K Tukpahlearik C** 55.73 23 P P 18 31 08.4 +1.2
baz=247
**F18K Selawik** 55.77 24 P P 18 31 07.2 -0.2
baz=249,SNR=6.2
**M18K Stony River** 55.79 30 P P 18 31 08.3 +0.6
baz=256
**ALBI Allahabad** 55.80 286 eP P 18 31 08.4 0.0
ALBI IAmb IAmb 18 31 17.1
comp=Z,146nm,0.9s
**SVW2 Sparrevohn** 55.81 31 P P 18 31 10.1 +2.3
**FORT Forrest** 55.86 196 P P 18 31 08.4 0.0
**FORT Forrest** 55.86 196 ⇑P P 18 31 07.6 -0.8
**FORT Forrest** 55.86 196 P P 18 31 07.9 -0.5
comp=Z,0.0nmcomp=Z,189nm,0.8s
**G18K Tagagawik** 55.89 25 P P 18 31 08.4 0.0
baz=250
**J18K Innoko River** 55.92 28 P P 18 31 08.8 +0.2
baz=254,SNR=11
**C18K Utukok River** 56.03 21 P P 18 31 10.5 +1.1
baz=246
**UZB Uzynbulak** 56.04 307 eP P 18 31 09.8 -0.3
comp=Z,49nm,0.7s,baz=307
**UZB Uzynbulak** 56.04 307 eP P 18 31 09.7 -0.3
UZB pmax pmax
comp=Z,49nm,0.7s
**B18K Kokolik River** 56.13 20 P P 18 31 11.2 +1.2
baz=245
**OHAK Old Harbor** 56.19 36 P P 18 31 13.4 +2.8
**OHAK Old Harbor** 56.19 36 P P 18 31 10.8 +0.2
baz=261,SNR=13
**BLSP Bilaspur** 56.22 282 eP P 18 31 11.8 +0.4
BLSP IAmb IAmb 18 31 14.6
comp=Z,99nm,1.0s
**HPAH Hawaii Prepara** 56.23 81 P P 18 31 10.8 -0.7
**GCSA Galena City Sc** 56.23 26 P P 18 31 11.2 +0.5
baz=252
**N19K Bonanza Creek** 56.26 31 P P 18 31 11.3 +0.1
baz=257
**KPKS Kokpek** 56.28 308 eP P 18 31 11.6 0.0
comp=Z,64nm,1.0s,baz=308
KPKS eS S 18 39 02.5 +1.3
baz=308
**KPKS Kokpek** 56.28 308 eP P 18 31 11.6 0.0
KPKS eS S 18 39 02.4 +1.3
KPKS pmax pmax
comp=Z,64nm,1.0s
**Q19K Cape Douglas,** 56.30 34 IAmb IAmb 18 32 56.8
comp=Z,145nm,1.1s
**Q19K Cape Douglas,** 56.30 34 P P 18 31 12.1 +0.7
baz=259
**BBOO Buckleboo** 56.33 188 P P 18 31 13.3 +1.5
**BBOO Buckleboo** 56.33 188 P P 18 31 11.7 -0.1
comp=Z,83nm,1.4s
**LGTI Lohaghat** 56.38 291 eP P 18 31 14.3 +1.8
LGTI IAmb IAmb 18 31 17.4
comp=Z,87nm,0.8s
**WHYH Whyalla** 56.39 186 P P 18 31 13.7 +1.5
**PTH Pithoragarh** 56.39 291 eP P 18 31 13.4 +0.6
PTH IAmb IAmb 18 31 18.1
comp=Z,317nm,1.0s
**L19K White Mountain** 56.41 30 P P 18 31 12.7 +0.5
baz=256,SNR=12
**POHA Pohakuloa** 56.45 81 P P 18 31 16.7 +3.4
**KURK Kurchatov** 56.46 316 ⇑P P 18 31 12.5 -0.1
**KURK Kurchatov** 56.46 316 P P 18 31 13.2 +0.6
KURK P P 18 31 13.2 +0.6
**KURK Kurchatov** 56.46 316 ceP P 18 31 12.5 -0.1
KURK pmax pmax
comp=Z,402nm,1.2s
**ZHN Zhinishke** 56.47 307 eP P 18 31 12.9 -0.2
comp=Z,47nm,0.9s,baz=307
**ZHN Zhinishke** 56.47 307 eP P 18 31 12.8 -0.2
ZHN pmax pmax
comp=Z,47nm,0.9s
**SATY Saty** 56.49 307 eP P 18 31 13.1 -0.1
comp=Z,77nm,1.1s,baz=307
SATY eS S 18 39 04.9 +0.9
baz=307
**SATY Saty** 56.49 307 eP P 18 31 13.1 -0.1
SATY eS S 18 39 04.9 +0.9
SATY pmax pmax
comp=Z,77nm,1.1s
**KURBB Kurchatov Arra** 56.51 316 P P 18 31 12.9 -0.1
comp=Z,193nm,0.9s,baz=93,slow=7.7,SNR=195
KURBB PKPPKP P'P'df 19 01 05.6 -7.8
comp=Z,0.8nm,0.8s,baz=262,slow=3.5,SNR=5.3
comp=Z,193nm,0.9s
**HMH Humu'ula Sheep** 56.53 81 P P 18 31 13.4 -0.6
**J19K Poorman** 56.53 27 P P 18 31 13.2 +0.2
baz=254,SNR=9.6
**F19K Shaleruckik Mo** 56.55 24 P P 18 31 12.8 -0.2
baz=250,SNR=17
**M19K Big River Lodg** 56.55 30 P P 18 31 13.9 +0.7
baz=257,SNR=7.4
**G19K Purcell Mounta** 56.58 25 P P 18 31 14.1 +0.8
baz=251
**H19K Roundabout Mou** 56.64 26 P P 18 31 13.8 +0.1
baz=252,SNR=11
**P19K Oil Pt** 56.64 33 P P 18 31 13.6 -0.2
baz=259,SNR=10
**MLH Mauna Loa** 56.65 81 P P 18 31 14.9 +0.2
**KDAK Kodiak Island** 56.65 35 P P 18 31 13.6 -0.3
KDAK IAmb IAmb 18 32 55.3
comp=Z,169nm,1.1s
**KDAK Kodiak Island** 56.65 35 P P 18 31 13.9 0.0
baz=261
**KDAK Kodiak Island** 56.65 35 pmax pmax
comp=Z,169nm,1.2s
**KDAK Kodiak Island** 56.65 35 *i* P P 18 31 13.4 -0.5
KDAK pmax pmax
comp=Z,110nm,1.9s
**KDAK Kodiak Island** 56.65 35 P P 18 31 13.6 -0.3
**HTT Hallett** 56.67 185 P P 18 31 16.0 +1.7
**HTT Hallett** 56.67 185 ⇑P P 18 31 14.3 0.0
**HTT Hallett** 56.67 185 P P 18 31 14.6 +0.4
comp=Z,41nm,1.0s
**C19K Lookout Ridge** 56.74 21 IAmb IAmb 18 33 02.8
comp=Z,185nm,0.9s
**C19K Lookout Ridge** 56.74 21 P P 18 31 14.7 +0.2
baz=247
**PUH Pauahi** 56.84 81 P P 18 31 16.1 +0.2
**KNHH Kane Nui o Ham** 56.88 81 P P 18 31 16.5 +0.3
**Q20K Shuyak Island** 56.88 34 P P 18 31 14.8 -0.7
baz=261,SNR=22
**ARXS Arharly** 56.88 309 eP P 18 31 16.4 +0.5
**SYI Shuyak Island** 56.88 34 IAmb IAmb 18 32 56.5
comp=Z,243nm,1.2s
**HNLY HANLEY** 56.95 295 eP P 18 31 18.5 +1.4

**E19K Redstone River** 56.96 23 P P 18 31 16.7 +0.8
baz=250
**D19K Kuna River** 57.01 22 IAmb IAmb 18 33 02.5
comp=Z,126nm,0.9s
**D19K Kuna River** 57.01 22 P P 18 31 16.7 +0.4
baz=249
**O20K Slope Mountain** 57.02 32 P P 18 31 16.3 -0.3
baz=260
**K20K Telida** 57.04 28 P P 18 31 17.7 +1.1
baz=256
**M20K Styx River** 57.13 30 P P 18 31 17.2 -0.2
baz=258
**J20K Nowinta River** 57.21 27 P P 18 31 17.6 -0.1
baz=256,SNR=9.1
**I20K Naaghedeneel** 57.23 27 P P 18 31 17.8 -0.1
baz=255
**H20K Anotleneega Mo** 57.25 26 P P 18 31 18.1 0.0
baz=254,SNR=6.7
**F20K Avaraart Lake** 57.38 24 P P 18 31 19.7 +0.8
baz=252
**N20K Mount Spurr** 57.43 31 P P 18 31 20.2 +0.8
baz=259
**MDOK Medeo** 57.48 307 eP P 18 31 20.2 -0.1
baz=307
MDOK eS S 18 39 18.0 +0.8
baz=307
**MDOK Medeo** 57.48 307 eP P 18 31 20.1 -0.1
MDOK eS S 18 39 17.9 +0.8
**CHKK Chushkaly** 57.50 308 eP P 18 31 20.1 -0.1
baz=308
**CHKK Chushkaly** 57.50 308 eP P 18 31 20.1 -0.1
**YNG Young** 57.55 175 P P 18 31 22.2 +1.7
**YNG Young** 57.55 175 P P 18 31 20.3 -0.2
comp=Z,139nm,0.8s
**AAA Alma-Ata** 57.58 307 eP P 18 31 20.8 -0.1
comp=Z,89nm,0.7s,baz=307
**AAA Alma-Ata** 57.58 307 eP P 18 31 20.7 -0.1
AAA pmax pmax
comp=Z,89nm,0.7s
**E20K Nigu River** 57.60 23 P P 18 31 20.8 +0.2
baz=251
**D20K Etivluk River** 57.60 22 P P 18 31 21.0 +0.5
baz=250
**KLP Kalpa** 57.74 293 eP P 18 31 23.0 +0.6
KLP IAmb IAmb 18 31 31.7
comp=Z,128nm,0.8s
**BRLK Bradley Lake** 57.83 33 IAmb IAmb 18 33 03.3
comp=Z,181nm,1.5s
**CAPN Captain Cook N** 57.86 32 P P 18 31 23.3 +0.9
baz=260
**B20K Meade River** 57.88 20 P P 18 31 22.8 +0.5
baz=249
**SKT Skwentna** 57.89 30 P P 18 31 22.4 -0.2
baz=259
**BRSE Bradley Lake S** 57.90 33 P P 18 31 21.8 -0.9
baz=262
**KUU Kurly** 57.97 308 eP P 18 31 23.5 0.0
comp=Z,94nm,0.9s,baz=308
**KUU Kurly** 57.97 308 eP P 18 31 23.5 0.0
KUU pmax pmax
comp=Z,94nm,0.9s
**G21K Allakaket** 58.07 25 P P 18 31 24.4 +0.6
baz=255
**DDI Dehra Dun** 58.11 292 eP P 18 31 25.8 +1.1
DDI IAmb IAmb 18 31 28.7
comp=Z,208nm,1.1s
**ULHL Ulahol** 58.13 306 P P 18 31 26.2 +1.3
SNR=27
**H21K Melozitna Rive** 58.13 26 P P 18 31 25.1 +0.9
baz=256
**SUA Susitna One** 58.17 31 P P 18 31 24.0 -0.7
baz=260
**KMBL Kambalda** 58.25 202 P P 18 31 27.0 +1.6
**KMBL Kambalda** 58.25 202 P P 18 31 24.2 -1.2
comp=Z,0.0nmcomp=Z,88nm,1.1s
**F21K Alatna River** 58.27 24 P P 18 31 25.8 +0.5
baz=254
**C21K Knifeblade Rid** 58.37 22 P P 18 31 26.2 +0.3
baz=252
**E21K Killik River** 58.44 23 P P 18 31 26.0 -0.4
E21K IAmb IAmb 18 33 26.7
comp=Z,148nm,1.1s
**E21K Killik River** 58.44 23 P P 18 31 25.8 -0.5
baz=253
**MORW Morawa** 58.47 208 P P 18 31 26.8 -0.2
**MORW Morawa** 58.47 208 P P 18 31 25.7 -1.3
**MORW Morawa** 58.47 208 ⇑P P 18 31 26.1 -0.9
**MORW Morawa** 58.47 208 P P 18 31 26.4 -0.6
comp=Z,0.0nmcomp=Z,177nm,0.9s
**O22K Cooper Landing** 58.51 32 P P 18 31 26.7 -0.2
baz=262
**BPAW Bear Paw Mtn.** 58.54 28 P P 18 31 27.8 +0.7
baz=259,SNR=6.5
**CUT Chulitna** 58.55 30 P P 18 31 27.4 +0.2
baz=260
**KSH Kashi** 58.55 303 P P 18 31 31.9 +4.1
KSH S S 18 39 39.3 +8.1
KSH pmax pmax
comp=Z,310nm,0.8s
KSH pmax pmax
comp=Z,2µm,7.9s
KSH LR LR
comp=Z,18µm,17.5s
KSH LR LR
comp=Z,38µm,18.9s
KSH LR LR
comp=Z,31µm,20.6s
**TKM2 Tokmak 2** 58.56 307 P P 18 31 29.1 +1.3
SNR=82
**B21K Ikpikpuk River** 58.58 21 P P 18 31 25.9 -1.4
baz=252
**RC01 Rabbit Creek A** 58.59 32 P P 18 31 26.7 -0.7
baz=262
**SEW Seward** 58.59 33 P P 18 31 28.0 +0.6
baz=262
**UGON Onchagaon** 58.61 290 eP P 18 31 26.6 -1.6
UGON IAmb IAmb 18 31 29.8
comp=Z,576nm,1.1s
**CAN Canberra** 58.62 175 P P 18 31 30.0 +2.1
**CAN Canberra** 58.62 175 ⇑P P 18 31 29.1 +1.2
**CAN Canberra** 58.62 175 P P 18 31 28.3 +0.4
comp=Z,0.0nmcomp=Z,33nm,0.9s
**CNB Canberra Magne** 58.64 174 P P 18 31 29.7 +1.6
**CNB Canberra Magne** 58.64 174 P P 18 31 25.7 -2.4
**JHNI Jhansi** 58.66 286 eP P 18 31 27.9 -0.6
**SMLA Simla** 58.72 293 eP P 18 31 29.3 +0.5
SMLA IAmb IAmb 18 31 32.7
comp=Z,268nm,0.8s
**H22K Ishtalitna Cre** 58.76 26 P P 18 31 29.3 +0.7
baz=257
**F22K John River** 58.83 24 P P 18 31 29.8 +0.7
baz=256
**MLY Manley** 58.83 27 P P 18 31 29.8 +0.7
baz=258
**G22K Bettles** 58.94 25 P P 18 31 30.3 +0.4
baz=256
**PMR Palmer** 58.95 31 P P 18 31 33.1 +3.1
**PMR Palmer** 58.95 31 P P 18 31 30.0 0.0
baz=262,SNR=5.5
**BISR Bishrakh** 58.96 290 eP P 18 31 31.9 +1.3
**D22K Ayikyak River** 59.02 22 P P 18 31 31.4 +1.0
**D22K Ayikyak River** 59.02 22 P P 18 31 31.8 +1.5
baz=254
**KBK Karagaybulak** 59.06 307 P P 18 31 32.4 +1.1
SNR=79
**GHO Glory Hole Cre** 59.08 31 IAmb IAmb 18 33 23.2
comp=Z,154nm,0.9s
**NDI New Delhi** 59.13 290 eP P 18 31 32.2 +0.4
NDI IAmb IAmb 18 31 35.1
comp=Z,135nm,0.9s
**CHMS Chumysh** 59.17 307 P P 18 31 32.8 +0.9
SNR=48
**NPLP NPLP New Delhi** 59.18 290 eP P 18 31 32.6 +0.5
NPLP IAmb IAmb 18 31 35.2
comp=Z,69nm,0.8s
**KKR Kurukshetra** 59.23 292 eP P 18 31 33.7 +1.3
KKR IAmb IAmb 18 31 36.3
comp=Z,482nm,0.9s
**PWL Port Wells** 59.24 32 P P 18 31 33.2 +1.2
baz=263,SNR=5.7
**NGP Nagpur** 59.24 281 eP P 18 31 32.9 +0.2
NGP IAmb IAmb 18 31 36.1
comp=Z,58nm,0.7s
**KNK Knik Glacier** 59.25 31 P P 18 31 33.0 +0.9
KNK IAmb IAmb 18 33 16.4
comp=Z,147nm,0.8s
**KNK Knik Glacier** 59.25 31 P P 18 31 32.6 +0.5
baz=263,SNR=8.9
**DHRM DHARAMSHALA** 59.26 295 eP P 18 31 32.8 -0.1
DHRM IAmb IAmb 18 31 36.3
comp=Z,209nm,1.0s
**BHK Bhakra** 59.30 294 eP P 18 31 34.3 +1.3
BHK IAmb IAmb 18 31 37.0
comp=Z,747nm,1.1s
BHK IAML 18 33 12.1
comp=N,179nm,0.5s
BHK IAML 18 33 14.7
comp=E,299nm,1.0s
**SONA Sohna** 59.33 290 eP P 18 31 33.3 +0.2
SONA IAmb IAmb 18 31 36.4
comp=Z,139nm,0.8s
**USP Ospenovka** 59.34 308 P P 18 31 33.9 +0.9
SNR=37
**SML Sawmill** 59.36 31 P P 18 31 33.9 +1.0
baz=262
**MCK McKinley** 59.37 29 P P 18 31 33.0 +0.1
baz=261,SNR=7.5
**AAK Ala-Archa** 59.39 307 P P 18 31 34.5 +0.9
SNR=26
**AAK Ala-Archa** 59.39 307 P P 18 31 33.5 0.0
AAK IAmb IAmb 18 33 03.7
comp=Z,176nm,1.0s
**AAK Ala-Archa** 59.39 307 *i* P P 18 31 34.1 +0.5
SNR=20
**AAK Ala-Archa** 59.39 307 ⇑P P 18 31 34.4 +0.9
**AAK Ala-Archa** 59.39 307 P P 18 31 35.1 +1.5
AAK P P 18 31 35.1 +1.5
**AAK Ala-Archa** 59.39 307 ceP P 18 31 34.3 +0.7
AAK pmax pmax
comp=Z,117nm,1.2s
**WAT1 Susitna Watana** 59.40 30 P P 18 31 34.0 +0.8
baz=262
**UCH Uchtor** 59.41 306 P P 18 31 36.4 +2.3
SNR=23
**I23K Minto, Yukon-K** 59.43 27 P P 18 31 34.2 +0.9
baz=260,SNR=6.9
**NEA2 Nenana** 59.45 28 P P 18 31 33.6 +0.2
baz=260,SNR=6.7
**G23K Bananza Creek** 59.47 25 P P 18 31 33.0 -0.6
G23K IAmb IAmb 18 33 20.3
comp=Z,195nm,1.2s
**G23K Bananza Creek** 59.47 25 P P 18 31 34.1 +0.5
baz=258,SNR=8.1
**H23K Yukon River** 59.48 26 P P 18 31 34.7 +1.0
baz=259,SNR=6.9
**COLD Coldfoot** 59.51 24 P P 18 31 34.9 +1.1
baz=256
**BLDU Ballidu** 59.53 207 P P 18 31 34.0 -0.3
**BLDU Ballidu** 59.53 207 P P 18 31 33.8 -0.5
comp=Z,0.0nmcomp=Z,197nm,1.1s
**BTLS Baital** 59.55 310 eP P 18 31 34.3 -0.1
comp=Z,50nm,1.0s,baz=310
BTLS eS S 18 39 44.9 +1.3
baz=310
**BTLS Baital** 59.55 310 eP P 18 31 34.3 -0.1
BTLS eS S 18 39 44.8 +1.3
BTLS pmax pmax
comp=Z,50nm,1.0s
**P23K Montague Islan** 59.60 33 P P 18 31 34.3 -0.2
baz=264
**M23K Glacier View** 59.64 31 P P 18 31 34.9 +0.1
baz=263
**THN Thein Dam** 59.71 295 eP P 18 31 36.0 +0.3
THN IAmb IAmb 18 31 39.3
comp=Z,309nm,1.0s
**WAT6 Susitna Watana** 59.74 30 P P 18 31 35.4 -0.2
baz=263,SNR=9.7
**D23K Nanushuk River** 59.74 22 P P 18 31 35.3 0.0
**D23K Nanushuk River** 59.74 22 P P 18 31 36.4 +1.1
baz=256
**SCM Sheep Creek Mo** 59.84 31 P P 18 31 37.1 +0.9
baz=263
**GLI Glacier Island** 59.84 32 IAmb IAmb 18 33 16.9
comp=Z,160nm,1.0s
**GLI Glacier Island** 59.84 32 P P 18 31 36.8 +0.7
baz=264,SNR=12
**ARPS Mount Arapiles** 59.85 182 P P 18 31 37.9 +1.5
**ARPS Mount Arapiles** 59.85 182 P P 18 31 36.5 +0.1
comp=Z,154nm,0.8s
**WRH Wood River Hil** 59.85 28 P P 18 31 37.2 +1.0
WRH IAmb IAmb 18 33 16.3
comp=Z,264nm,1.7s
**KUDL Kundal** 59.87 290 eP P 18 31 37.0 +0.1
KUDL IAmb IAmb 18 31 40.1
comp=Z,101nm,0.8s
**E23K Chandalar** 59.91 24 P P 18 31 36.7 +0.1
baz=258,SNR=5.0
**EKS2 Erkin-Say** 59.92 307 P P 18 31 37.9 +0.7
SNR=39
**DHY Denali Highway** 59.97 29 P P 18 31 37.7 +0.5
baz=263
**KLBR Kellerberrin** 59.97 205 P P 18 31 36.8 -0.5
**KLBR Kellerberrin** 59.97 205 P P 18 31 36.7 -0.6
comp=Z,348nm,0.9s
**C23K Itkillik River** 59.98 21 P P 18 31 37.9 +0.9
baz=256,SNR=11
**COLA College** 60.02 27 P P 18 31 40.9 +3.7
**COLA College** 60.02 27 P P 18 31 38.1 +0.9
**COLA College** 60.02 27 P P 18 31 37.4 +0.2
baz=261
**COLA College** 60.02 27 *i* P P 18 31 37.7 +0.5
COLA MLR MLR
comp=Z,9µm,18.0s
**AML Almayashu** 60.02 306 P P 18 31 39.7 +1.5
SNR=68
**TOLK Toolik Lake Re** 60.05 23 IAmb IAmb 18 33 41.2
comp=Z,181nm,1.3s
**TOLK Toolik Lake Re** 60.05 23 P P 18 31 37.9 +0.3
baz=257
**Q23K Middleton Isla** 60.08 34 P P 18 31 37.6 -0.2
baz=266
**HIN Hinchinbrook I** 60.09 33 P P 18 31 37.8 -0.1
**H24K Noodor Dome** 60.16 26 IAmb IAmb 18 33 16.8
comp=Z,138nm,0.9s
**H24K Noodor Dome** 60.16 26 P P 18 31 39.1 +0.8
baz=261,SNR=14
**BHPL Bhopal** 60.17 284 eP P 18 31 38.8 -0.2
BHPL IAmb IAmb 18 31 42.1
comp=Z,38nm,0.8s
**POKR Poker Plat Res** 60.23 27 IAmb IAmb 18 33 16.3
comp=Z,95nm,0.9s
**POKR Poker Plat Res** 60.23 27 P P 18 31 38.5 -0.3
baz=261,SNR=6.4
**E24K Your Creek** 60.33 24 IAmb IAmb 18 33 26.2
comp=Z,123nm,0.9s
**E24K Your Creek** 60.33 24 P P 18 31 40.5 +1.0
baz=259,SNR=10
**HDA Harding Lake** 60.33 28 P P 18 31 39.6 +0.1
baz=262
**JMU Jammu** 60.34 295 ⇑eP P 18 31 41.4 +1.4
JMU IAmb IAmb 18 31 44.5
comp=Z,217nm,0.9s
**M24K Tolsona, Glenn** 60.41 31 P P 18 31 40.6 +0.5
M24K IAmb IAmb 18 33 52.1
comp=Z,172nm,1.0s
**M24K Tolsona, Glenn** 60.41 31 P P 18 31 40.5 +0.4
baz=264
**IL31** 60.41 28 IAmb IAmb 18 33 24.6
comp=Z,134nm,1.0s
**ILAR Eielson Array** 60.41 28 P P 18 31 39.5 -0.5
comp=Z,22nm,0.6s,baz=256,slow=5.0,SNR=11
ILAR PKPPKP P'P'df 19 01 04.0 -3.3
comp=Z,2.4nm,1.1s,baz=63,slow=2.4,SNR=5.4
comp=Z,22nm,0.6s
**D24K Happy Valley** 60.43 22 IAmb IAmb 18 33 24.6
comp=Z,172nm,1.1s
**D24K Happy Valley** 60.43 22 P P 18 31 40.6 +0.6
baz=258
**F24K Squaw Lake** 60.45 24 IAmb IAmb 18 33 24.3
comp=Z,93nm,1.0s
**F24K Squaw Lake** 60.45 24 P P 18 31 41.3 +1.0
baz=260
**G24K Hadweenzic Riv** 60.46 25 IAmb IAmb 18 33 13.5
comp=Z,174nm,1.0s
**G24K Hadweenzic Riv** 60.46 25 P P 18 31 40.0 -0.4
baz=260
**KLU Klutina** 60.47 31 P P 18 31 40.3 -0.3
baz=265,SNR=8.7
**EYAK Cordova Ski Ar** 60.47 32 P P 18 31 43.6 +3.2
**EYAK Cordova Ski Ar** 60.47 32 P P 18 31 40.4 0.0
baz=266
**C24K Franklin Bluff** 60.59 22 P P 18 31 41.5 +0.3
baz=258
**BRAT Ballarat** 60.61 180 P P 18 31 43.2 +1.7

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TOO | **Toolangi** | 60.66 | 178 | P | | P | | 18 31 43.7 | +1.8 |
| TOO | **Toolangi** | 60.66 | 178 | P | | P | | 18 31 41.4 | -0.6 |
| TOO | **Toolangi** | 60.66 | 178 | ⇓P | | P | | 18 31 43.8 | +1.8 |
| TOO | **Toolangi** | 60.66 | 178 | P | | P | | 18 31 43.0 | +1.0 |
| | comp=Z,39nm,0.8s | | | | | | | | |
| TOO | **Toolangi** | 60.66 | 178 | P | | P | | 18 31 41.4 | -0.6 |
| TOO | | | | pmax | | pmax | | | |
| | comp=Z,67nm,1.0s | | | | | | | | |
| HYB | **Hyderabad** | 60.74 | 277 | *e*P | | P | | 18 31 42.9 | -0.2 |
| HYB | | | | IVmB_BB | | | | 18 31 45.9 | |
| | comp=Z,2µm,2.9s | | | | | | | | |
| K24K | **Donnelly Dome** | 60.77 | 29 | P | | P | | 18 31 42.2 | -0.3 |
| | baz=264 | | | | | | | | |
| PAX | **Paxson** | 60.82 | 30 | P | | P | | 18 31 43.5 | +0.5 |
| | baz=264 | | | | | | | | |
| HARP | **HAARP** | 60.91 | 30 | P | | P | | 18 31 44.6 | +1.2 |
| | baz=265 | | | | | | | | |
| MUN | **Mundaring** | 60.93 | 206 | P | | P | | 18 31 44.0 | +0.1 |
| MUN | **Mundaring** | 60.93 | 206 | P | | P | | 18 31 43.3 | -0.6 |
| | comp=Z,0.0nmcomp=Z,85nm,1.1s | | | | | | | | |
| RAGM | **Ragged Mountai** | 60.99 | 33 | IAmb | | IAmb | | 18 33 30.2 | |
| | comp=Z,120nm,0.9s | | | | | | | | |
| G25K | **Bearman Lake** | 61.01 | 25 | P | | P | | 18 31 44.9 | +0.9 |
| | baz=262 | | | | | | | | |
| J25K | **Salcha River,** | 61.04 | 28 | P | | P | | 18 31 45.1 | +0.8 |
| | baz=264,SNR=11 | | | | | | | | |
| BMRM | **Bremner River** | 61.06 | 32 | P | | P | | 18 31 45.3 | +0.8 |
| | baz=266 | | | | | | | | |
| PRP | **Porcupine Dome** | 61.08 | 27 | P | | P | | 18 31 45.4 | +0.7 |
| | baz=263 | | | | | | | | |
| KAIM | **Kayak Island** | 61.09 | 33 | P | | P | | 18 31 45.9 | +1.1 |
| KAIM | **Kayak Island** | 61.09 | 33 | P | | P | | 18 31 45.2 | +0.5 |
| | baz=267,SNR=6.8 | | | | | | | | |
| N25K | **Chitina, Valde** | 61.11 | 31 | IAmb | | IAmb | | 18 33 51.7 | |
| | comp=Z,111nm,1.1s | | | | | | | | |
| N25K | **Chitina, Valde** | 61.11 | 31 | P | | P | | 18 31 45.6 | +0.7 |
| | baz=266 | | | | | | | | |
| F25K | **Christian Rive** | 61.31 | 24 | P | | P | | 18 31 46.4 | +0.3 |
| | baz=262,SNR=15 | | | | | | | | |
| D25K | **Kavik River** | 61.32 | 22 | P | | P | | 18 31 47.0 | +0.8 |
| | baz=260,SNR=12 | | | | | | | | |
| NWAO | **Narrogin (SRO)** | 61.35 | 205 | P | | P | | 18 31 47.0 | +0.3 |
| NWAO | **Narrogin (SRO)** | 61.35 | 205 | P | | P | | 18 31 45.7 | -1.0 |
| NWAO | **Narrogin (SRO)** | 61.35 | 205 | P | | P | | 18 31 46.0 | -0.7 |
| | comp=Z,72nm,0.9s,baz=37,slow=6.8,SNR=18 | | | | | | | | |
| | comp=Z,72nm,0.9s | | | | | | | | |
| NWAO | **Narrogin (SRO)** | 61.35 | 205 | P | | P | | 18 31 45.7 | -1.0 |
| NWAO | | | | pmax | | pmax | | | |
| | comp=Z,288nm,1.4s | | | | | | | | |
| GLB | **Gilahina Butte** | 61.48 | 31 | IAmb | | IAmb | | 18 33 48.0 | |
| | comp=Z,197nm,1.2s | | | | | | | | |
| NIL | **Nilore** | 61.54 | 297 | P | | P | | 18 31 47.1 | -1.1 |
| NIL | **Nilore** | 61.54 | 297 | P | | P | | 18 31 49.7 | +1.5 |
| NIL | | | | P | | P | | 18 31 49.7 | +1.5 |
| NIL | **Nilore** | 61.54 | 297 | P | | P | | 18 31 47.1 | -1.1 |
| NIL | | | | pmax | | pmax | | | |
| | comp=Z,965nm,1.1s | | | | | | | | |
| SCRK | **Sand Creek** | 61.57 | 29 | P | | P | | 18 31 49.1 | +1.0 |
| | baz=265,SNR=21 | | | | | | | | |
| BVAR | **Borovoye Array** | 61.60 | 319 | P | | P | | 18 31 48.5 | +0.2 |
| | comp=Z,287nm,0.8s,baz=90,slow=7.4,SNR=322 | | | | | | | | |
| MENT | **Mentasta** | 61.61 | 30 | P | | P | | 18 31 52.0 | +3.8 |
| MENT | **Mentasta** | 61.61 | 30 | IAmb | | IAmb | | 18 33 38.0 | |
| | comp=Z,88nm,1.0s | | | | | | | | |
| BRVK | **Borovoye** | 61.66 | 319 | P | | P | | 18 31 48.0 | -0.7 |
| BRVK | **Borovoye** | 61.66 | 319 | ⇑P | | P | | 18 31 49.0 | +0.3 |
| BRVK | **Borovoye** | 61.66 | 319 | *ce*P | | P | | 18 31 48.9 | +0.3 |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,273nm,0.9s | | | | | | | | |
| BMAR | **Burnt Mountain** | 61.69 | 25 | P | | P | | 18 31 50.1 | +1.4 |
| SRGN | **SRI GANGA NAGA** | 61.73 | 292 | *e*P | | P | | 18 31 49.9 | +0.4 |
| L26K | **Log Cabin Wild** | 61.79 | 30 | P | | P | | 18 31 50.2 | +0.8 |
| | baz=266 | | | | | | | | |
| CRQE | **Cirque** | 61.79 | 32 | P | | P | | 18 31 49.7 | +0.1 |
| | baz=268 | | | | | | | | |
| J26L | **Joseph Creek** | 61.80 | 28 | P | | P | | 18 31 49.2 | -0.4 |
| | baz=265,SNR=12 | | | | | | | | |
| AJM | **Ajmer** | 61.84 | 289 | *e*P | | P | | 18 31 50.5 | +0.1 |
| AJM | | | | IAmb | | IAmb | | 18 31 53.9 | |
| | comp=Z,249nm,1.4s | | | | | | | | |
| AJM | | | | IAML | | | | 18 33 28.9 | |
| | comp=E,89nm,1.1s | | | | | | | | |
| MCARA | **McCarthy VSAT** | 61.85 | 32 | P | | P | | 18 31 49.7 | -0.1 |
| | baz=268,SNR=8.7 | | | | | | | | |
| F26K | **Sheenjek River** | 61.89 | 24 | P | | P | | 18 31 50.5 | +0.5 |
| | baz=263,SNR=11 | | | | | | | | |
| WAX | **Waxell Ridge** | 61.90 | 33 | IAmb | | IAmb | | 18 33 28.4 | |
| | comp=Z,141nm,1.0s | | | | | | | | |
| M26K | **Nabesna, AK** | 61.91 | 30 | P | | P | | 18 31 50.1 | -0.2 |
| | baz=267 | | | | | | | | |
| TGL | **Tana Glacier** | 61.92 | 32 | IAmb | | IAmb | | 18 33 31.4 | |
| | comp=Z,104nm,1.0s | | | | | | | | |
| C26K | **Camden Bay** | 61.92 | 22 | P | | P | | 18 31 51.0 | +0.9 |
| | baz=261,SNR=5.9 | | | | | | | | |
| G26K | **Porcupine Rive** | 61.94 | 25 | P | | P | | 18 31 51.0 | +0.7 |
| | baz=264 | | | | | | | | |
| I26K | **Coal Creek Min** | 62.04 | 27 | P | | P | | 18 31 52.1 | +1.0 |
| | baz=265 | | | | | | | | |
| ISLE | **Juniper Island** | 62.16 | 32 | IAmb | | IAmb | | 18 33 52.3 | |
| | comp=Z,138nm,1.0s | | | | | | | | |
| PALK | **Pallekele** | 62.21 | 266 | P | | P | | 18 31 51.9 | -1.2 |
| PALK | **Pallekele** | 62.21 | 266 | P | | P | | 18 31 53.6 | +0.5 |
| PALK | | | | P | | P | | 18 31 53.6 | +0.5 |
| PALK | **Pallekele** | 62.21 | 266 | P | | P | | 18 31 51.9 | -1.2 |
| PALK | | | | pmax | | pmax | | | |
| | comp=Z,245nm,1.4s | | | | | | | | |
| KKAR | **Karatay Array** | 62.26 | 308 | P | | P | | 18 31 52.8 | -0.1 |
| KKAR | **Karatay Array** | 62.26 | 308 | ⇑P | | P | | 18 31 53.5 | +0.6 |
| KKAR | **Karatay Array** | 62.26 | 308 | P | | P | | 18 31 52.8 | -0.1 |
| C27K | **Jago River** | 62.29 | 22 | P | | P | | 18 31 53.5 | +0.9 |
| | baz=262 | | | | | | | | |
| MESA | **MESA** | 62.34 | 33 | P | | P | | 18 31 54.1 | +0.7 |
| | baz=269 | | | | | | | | |
| K27K | **Chicken** | 62.42 | 29 | P | | P | | 18 31 54.7 | +1.1 |
| | baz=267 | | | | | | | | |
| M27K | **Edge Creek, AK** | 62.43 | 30 | IAmb | | IAmb | | 18 33 35.9 | |
| | comp=Z,277nm,1.9s | | | | | | | | |
| M27K | **Edge Creek, AK** | 62.43 | 30 | P | | P | | 18 31 54.0 | +0.1 |
| | baz=268 | | | | | | | | |
| L27K | **Beaver Creek,** | 62.48 | 30 | P | | P | | 18 31 54.5 | +0.4 |
| | baz=268 | | | | | | | | |
| CTG | **Chitna Glacier** | 62.65 | 32 | P | | P | | 18 31 55.6 | +0.3 |
| | baz=269 | | | | | | | | |
| CTGM | **Chitina Glacie** | 62.66 | 32 | P | | P | | 18 31 56.4 | +1.0 |
| CTGM | | | | IAmb | | IAmb | | 18 33 33.4 | |
| | comp=Z,82nm,1.0s | | | | | | | | |
| I27K | **Kandik River** | 62.70 | 27 | P | | P | | 18 31 55.8 | +0.2 |
| | baz=267 | | | | | | | | |
| BRLS | **Boroldav** | 62.76 | 308 | *e*P | | P | | 18 31 57.2 | +0.9 |
| | baz=307 | | | | | | | | |
| BRLS | **Boroldav** | 62.76 | 308 | *e*P | | P | | 18 31 57.2 | +0.9 |
| G27K | **Doyon Strip** | 62.77 | 25 | P | | P | | 18 31 57.8 | +1.9 |
| G27K | **Doyon Strip** | 62.77 | 25 | P | | P | | 18 31 56.0 | +0.1 |
| | baz=266 | | | | | | | | |
| H27K | **Steamboat Moun** | 62.78 | 26 | P | | P | | 18 31 55.9 | -0.1 |
| | baz=266,SNR=14 | | | | | | | | |
| EGAK | **Eagle** | 62.85 | 28 | P | | P | | 18 31 56.4 | -0.1 |
| | baz=267 | | | | | | | | |
| E27K | **Coleen River** | 62.90 | 24 | IAmb | | IAmb | | 18 33 25.5 | |
| | comp=Z,82nm,1.1s | | | | | | | | |
| E27K | **Coleen River** | 62.90 | 24 | P | | P | | 18 31 57.4 | +0.6 |
| | baz=265,SNR=8.3 | | | | | | | | |
| RKGY | **Rocky Gully** | 62.94 | 204 | P | | P | | 18 31 58.2 | +0.9 |
| RKGY | **Rocky Gully** | 62.94 | 204 | P | | P | | 18 31 58.0 | +0.6 |
| | comp=Z,210nm,0.8s | | | | | | | | |
| YUK3 | **Moose Creek** | 63.09 | 31 | P | | P | | 18 31 57.8 | -0.6 |
| | baz=270 | | | | | | | | |
| O28M | **Mount Upton** | 63.21 | 32 | P | | P | | 18 31 59.5 | +0.2 |
| | baz=270,SNR=6.7 | | | | | | | | |
| D27M | **Malcolm River** | 63.22 | 23 | IAmb | | IAmb | | 18 33 37.1 | |
| | comp=Z,140nm,0.9s | | | | | | | | |
| D27M | **Malcolm River** | 63.22 | 23 | P | | P | | 18 31 59.7 | +0.8 |
| | baz=265,SNR=13 | | | | | | | | |
| I28M | **Miner Creek** | 63.40 | 27 | P | | P | | 18 31 60.0 | -0.2 |
| | baz=268,SNR=12 | | | | | | | | |
| YUK8 | **Steele Glacier** | 63.42 | 32 | P | | P | | 18 32 00.9 | +0.3 |
| | baz=270 | | | | | | | | |
| BCPM | **Bancas Point** | 63.50 | 33 | IAmb | | IAmb | | 18 33 47.1 | |
| | comp=Z,136nm,1.1s | | | | | | | | |
| F28M | **Old Crow** | 63.51 | 25 | IAmb | | IAmb | | 18 33 29.5 | |
| | comp=Z,152nm,1.1s | | | | | | | | |
| F28M | **Old Crow** | 63.51 | 25 | P | | P | | 18 32 01.8 | +1.0 |
| | baz=267 | | | | | | | | |
| DAWY | **Dawson** | 63.60 | 29 | P | | P | | 18 32 01.7 | +0.2 |
| DAWY | **Dawson** | 63.60 | 29 | P | | P | | 18 32 01.9 | +0.4 |
| | baz=269,SNR=6.1 | | | | | | | | |
| PNL | **Peninsula** | 63.63 | 34 | P | | P | | 18 32 04.6 | +2.9 |
| PNL | **Peninsula** | 63.63 | 34 | P | | P | | 18 32 00.5 | -1.3 |
| | baz=272 | | | | | | | | |
| E28M | **Babbage River** | 63.69 | 24 | P | | P | | 18 32 01.3 | -0.6 |
| | baz=267,SNR=16 | | | | | | | | |
| YUK4 | **Talbot Arm** | 63.96 | 32 | P | | P | | 18 32 04.7 | +0.6 |
| | baz=271 | | | | | | | | |
| D28M | **Stokes Point** | 64.02 | 23 | P | | P | | 18 32 05.1 | +1.1 |
| | baz=261 | | | | | | | | |
| O29M | **Mount Kennedy** | 64.02 | 33 | IAmb | | IAmb | | 18 33 43.4 | |
| | comp=Z,127nm,1.0s | | | | | | | | |
| O29M | **Mount Kennedy** | 64.02 | 33 | P | | P | | 18 32 04.0 | -0.5 |
| | baz=272,SNR=12 | | | | | | | | |
| M29M | **Somme Creek** | 64.02 | 30 | P | | P | | 18 32 04.5 | +0.1 |
| | baz=271,SNR=14 | | | | | | | | |
| SIMJ | **Simiganj** | 64.04 | 303 | P | | P | | 18 32 05.4 | +0.5 |
| H29M | **Whitestone** | 64.06 | 26 | P | | P | | 18 32 03.8 | -0.7 |
| | baz=269,SNR=8.4 | | | | | | | | |
| I29M | **Ogilvie Camp,** | 64.08 | 27 | IAmb | | IAmb | | 18 33 48.4 | |
| | comp=Z,127nm,1.1s | | | | | | | | |
| I29M | **Ogilvie Camp,** | 64.08 | 27 | P | | P | | 18 32 05.0 | +0.4 |
| | baz=270 | | | | | | | | |
| YUK6 | **Outpost Mounta** | 64.11 | 32 | P | | P | | 18 32 06.1 | +1.0 |
| | baz=272 | | | | | | | | |
| J29N | **Klondike Camp** | 64.11 | 28 | IAmb | | IAmb | | 18 33 49.1 | |
| | comp=Z,80nm,0.9s | | | | | | | | |
| J29N | **Klondike Camp** | 64.11 | 28 | P | | P | | 18 32 05.6 | +0.7 |
| | baz=270 | | | | | | | | |
| G29M | **Pine Creek** | 64.21 | 25 | P | | P | | 18 32 06.6 | +1.1 |
| | baz=269,SNR=13 | | | | | | | | |
| E29M | **Blow River** | 64.28 | 24 | IAmb | | IAmb | | 18 34 11.2 | |
| | comp=Z,159nm,1.1s | | | | | | | | |
| E29M | **Blow River** | 64.28 | 24 | P | | P | | 18 32 06.5 | +0.6 |
| | baz=269 | | | | | | | | |
| K29M | **Barlow Dome** | 64.42 | 29 | IAmb | | IAmb | | 18 33 51.3 | |
| | comp=Z,118nm,1.1s | | | | | | | | |
| K29M | **Barlow Dome** | 64.42 | 29 | P | | P | | 18 32 06.7 | -0.3 |
| | baz=271,SNR=11 | | | | | | | | |
| P29M | **Windy Craggy** | 64.47 | 34 | IAmb | | IAmb | | 18 34 08.1 | |
| | comp=Z,136nm,1.0s | | | | | | | | |
| P29M | **Windy Craggy** | 64.47 | 34 | P | | P | | 18 32 06.5 | -0.7 |
| | baz=273,SNR=8.0 | | | | | | | | |
| POO | **Poona** | 64.68 | 280 | *e*P | | P | | 18 32 09.3 | 0.0 |
| POO | | | | IAmb | | IAmb | | 18 32 12.4 | |
| | comp=Z,108nm,0.9s | | | | | | | | |
| N30M | **Aishikik Lake** | 64.70 | 31 | P | | P | | 18 32 09.3 | +0.5 |
| | baz=273,SNR=6.5 | | | | | | | | |
| EPYK | **Eagle Plains** | 64.73 | 26 | P | | P | | 18 32 08.9 | 0.0 |
| | baz=271,SNR=16 | | | | | | | | |
| KAD | **Karad** | 64.75 | 279 | *e*P | | P | | 18 32 09.5 | -0.3 |
| KAD | | | | IAmb | | IAmb | | 18 32 12.6 | |
| | comp=Z,103nm,0.9s | | | | | | | | |
| KBL | **Kabul** | 64.79 | 298 | P | | P | | 18 32 10.2 | +0.1 |
| KBL | **Kabul** | 64.79 | 298 | P | | P | | 18 32 10.2 | +0.1 |
| KBL | | | | pmax | | pmax | | | |
| | comp=Z,566nm,0.9s | | | | | | | | |
| P30M | **Million Dollar** | 64.84 | 33 | P | | P | | 18 32 10.6 | +0.9 |
| | baz=273 | | | | | | | | |
| I30M | **Mount Dempster** | 64.89 | 27 | IAmb | | IAmb | | 18 34 11.7 | |
| | comp=Z,80nm,1.1s | | | | | | | | |
| I30M | **Mount Dempster** | 64.89 | 27 | P | | P | | 18 32 10.5 | +0.4 |
| | baz=272,SNR=7.1 | | | | | | | | |
| OUZ | **Omahuta** | 64.89 | 153 | ⇓P | | P | | 18 32 12.1 | +2.0 |
| G30M | **tAoh Zraii Nji** | 64.92 | 25 | P | | P | | 18 32 10.6 | +0.6 |
| | baz=271 | | | | | | | | |
| J30M | **Hart River** | 64.93 | 28 | P | | P | | 18 32 10.9 | +0.6 |
| | baz=272,SNR=9.4 | | | | | | | | |
| JASL | **Jaisalmer** | 64.98 | 290 | *e*P | | P | | 18 32 11.9 | +0.8 |
| JASL | | | | IAmb | | IAmb | | 18 32 15.0 | |
| | comp=Z,108nm,0.9s | | | | | | | | |
| F30M | **Barrier River** | 65.08 | 25 | P | | P | | 18 32 11.7 | +0.6 |
| | baz=271,SNR=11 | | | | | | | | |
| PLBC | **Pleasant Camp** | 65.18 | 34 | P | | P | | 18 32 12.9 | +1.1 |
| | baz=274,SNR=15 | | | | | | | | |
| O30N | **Mendenhall** | 65.22 | 32 | IAmb | | IAmb | | 18 33 59.6 | |
| | comp=Z,206nm,1.8s | | | | | | | | |
| O30N | **Mendenhall** | 65.22 | 32 | P | | P | | 18 32 12.5 | +0.3 |
| | baz=274 | | | | | | | | |
| N31M | **Braeburn, Yuko** | 65.33 | 31 | IAmb | | IAmb | | 18 34 15.1 | |
| | comp=Z,106nm,1.0s | | | | | | | | |
| N31M | **Braeburn, Yuko** | 65.33 | 31 | P | | P | | 18 32 13.2 | +0.3 |
| | baz=274,SNR=8.3 | | | | | | | | |
| S31K | **Pelican** | 65.37 | 35 | P | | P | | 18 32 13.6 | +0.6 |
| | baz=275 | | | | | | | | |
| R31K | **City Hall, Gus** | 65.59 | 35 | P | | P | | 18 32 14.9 | +0.4 |
| | baz=275 | | | | | | | | |
| G31M | **Satah River** | 65.69 | 25 | P | | P | | 18 32 15.4 | +0.4 |
| G31M | **Satah River** | 65.69 | 25 | P | | P | | 18 32 15.2 | +0.3 |
| | baz=273,SNR=27 | | | | | | | | |
| SKAG | **Skagway** | 65.71 | 34 | P | | P | | 18 32 14.7 | -0.5 |
| | baz=275 | | | | | | | | |
| WCZ | **Waipu Caves** | 65.82 | 153 | P | | P | | 18 32 17.1 | +1.0 |
| WHY | **Whitehorse** | 65.83 | 32 | P | | P | | 18 32 16.7 | +0.6 |
| | baz=275,SNR=6.5 | | | | | | | | |
| F31M | **Tsiigehtchic** | 65.87 | 25 | P | | P | | 18 32 16.8 | +0.6 |
| | baz=273 | | | | | | | | |
| INK | **Inuvik** | 65.91 | 24 | IAmb | | IAmb | | 18 33 44.0 | |
| | comp=Z,189nm,1.3s | | | | | | | | |
| INK | **Inuvik** | 65.91 | 24 | ⇓P | | P | | 18 32 17.9 | +1.5 |
| INK | **Inuvik** | 65.91 | 24 | P | | P | | 18 32 16.5 | +0.1 |
| | baz=273,SNR=5.5 | | | | | | | | |
| M31M | **Drury Creek, Y** | 65.93 | 31 | IAmb | | IAmb | | 18 33 44.8 | |
| | comp=Z,80nm,1.1s | | | | | | | | |
| M31M | **Drury Creek, Y** | 65.93 | 31 | P | | P | | 18 32 16.7 | 0.0 |
| | baz=275,SNR=6.2 | | | | | | | | |
| SIT | **Sitka** | 65.94 | 36 | P | | P | | 18 32 16.6 | -0.1 |
| | baz=276 | | | | | | | | |
| R32K | **Eaglecrest** | 66.24 | 35 | IAmb | | IAmb | | 18 33 59.6 | |
| | comp=Z,97nm,1.1s | | | | | | | | |
| R32K | **Eaglecrest** | 66.24 | 35 | P | | P | | 18 32 19.1 | +0.3 |
| | baz=276,SNR=8.6 | | | | | | | | |
| S32K | **Killisnoo** | 66.30 | 36 | P | | P | | 18 32 18.7 | -0.3 |
| | baz=277 | | | | | | | | |
| JIS | **Juneau Island** | 66.31 | 35 | P | | P | | 18 32 22.8 | +3.7 |
| FARO | **Faro, Yukon** | 66.42 | 30 | P | | P | | 18 32 19.8 | 0.0 |
| | baz=276 | | | | | | | | |
| P32M | **Atlin** | 66.51 | 33 | P | | P | | 18 32 22.7 | +2.2 |
| P32M | **Atlin** | 66.51 | 33 | P | | P | | 18 32 21.1 | +0.6 |
| | baz=276,SNR=6.0 | | | | | | | | |
| N32M | **Quiet Lake** | 66.65 | 32 | IAmb | | IAmb | | 18 33 55.5 | |
| | comp=Z,93nm,1.0s | | | | | | | | |
| N32M | **Quiet Lake** | 66.65 | 32 | P | | P | | 18 32 22.3 | +0.9 |
| | baz=276 | | | | | | | | |
| P33M | **Teslin, Yukon** | 66.89 | 33 | P | | P | | 18 32 22.8 | -0.1 |
| | baz=277,SNR=5.6 | | | | | | | | |
| SVE | **Sverdlovsk** | 66.90 | 324 | *de*P | | P | | 18 32 23.4 | +0.5 |
| SVE | | | | *e*S | | S | | 18 41 15.5 | +0.5 |
| SVE | | | | pmax | | pmax | | | |
| | comp=Z,132nm,0.9s | | | | | | | | |
| BHUJ | **Bhuj** | 67.05 | 286 | *e*P | | P | | 18 32 25.5 | +1.1 |
| BHUJ | | | | IAmb | | IAmb | | 18 32 28.6 | |
| | comp=Z,124nm,1.0s | | | | | | | | |
| MKAZ | **Moumakai** | 67.16 | 153 | P | | P | | 18 32 25.9 | +1.2 |
| T33K | **Petersburg** | 67.26 | 36 | P | | P | | 18 32 25.8 | +0.5 |
| | baz=278 | | | | | | | | |
| U33K | **Whale Pass** | 67.27 | 37 | P | | P | | 18 32 26.0 | +0.7 |
| | baz=279 | | | | | | | | |
| Q32M | **Nakina River** | 67.33 | 34 | IAmb | | IAmb | | 18 34 15.1 | |
| | comp=Z,136nm,1.4s | | | | | | | | |
| Q32M | **Nakina River** | 67.33 | 34 | P | | P | | 18 32 25.2 | -0.7 |
| | baz=278 | | | | | | | | |
| MMPY | **Sheldon Lake,** | 67.34 | 30 | P | | P | | 18 32 25.6 | -0.1 |
| | baz=277 | | | | | | | | |
| CRAG | **Craig** | 67.37 | 38 | P | | P | | 18 32 26.4 | +0.5 |
| | baz=279 | | | | | | | | |
| WRAK | **Wrangell Islan** | 67.65 | 37 | P | | P | | 18 32 28.4 | +0.7 |
| | baz=279 | | | | | | | | |
| R33M | **Jennings River** | 67.93 | 33 | P | | P | | 18 32 29.7 | +0.1 |
| | baz=279 | | | | | | | | |
| S34M | **Telegraph Cree** | 68.07 | 35 | IAmb | | IAmb | | 18 34 09.2 | |
| | comp=Z,93nm,1.0s | | | | | | | | |
| S34M | **Telegraph Cree** | 68.07 | 35 | P | | P | | 18 32 30.5 | +0.1 |
| | baz=279,SNR=8.2 | | | | | | | | |
| ARU | **Arti** | 68.09 | 323 | P | | P | | 18 32 29.9 | -0.5 |
| ARU | **Arti** | 68.09 | 323 | *ce*P | | P | | 18 32 30.3 | -0.2 |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,162nm,0.9s | | | | | | | | |
| ARU | **Arti** | 68.09 | 323 | P | | P | | 18 32 30.4 | -0.1 |
| | comp=Z,213nm,0.9s,comp=Z,2µm | | | | | | | | |
| V35K | **Ketchikan** | 68.24 | 38 | P | | P | | 18 32 32.1 | +0.7 |
| | baz=280 | | | | | | | | |
| A36M | **Sachs Harbour** | 68.35 | 20 | P | | P | | 18 32 32.6 | +0.8 |
| | baz=279 | | | | | | | | |
| ABKAR | **Akbulak array** | 68.55 | 316 | P | | P | | 18 32 32.9 | -0.6 |
| ABKAR | **Akbulak array** | 68.55 | 316 | ⇑P | | P | | 18 32 33.1 | -0.4 |
| DLBC | **Dease Lake** | 68.56 | 34 | P | | P | | 18 32 34.8 | +1.3 |
| | baz=280,SNR=12 | | | | | | | | |
| T35M | **Bob Quinn** | 68.70 | 36 | IAmb | | IAmb | | 18 34 20.5 | |
| | comp=Z,146nm,1.4s | | | | | | | | |
| T35M | **Bob Quinn** | 68.70 | 36 | P | | P | | 18 32 35.1 | +0.8 |
| | baz=280,SNR=7.0 | | | | | | | | |
| VRZ | **Vera Road** | 68.72 | 154 | P | | P | | 18 32 36.0 | +1.5 |
| HAZ | **Te Kaha** | 68.83 | 151 | P | | P | | 18 32 37.0 | +1.8 |
| WTLY | **Watson Lake, Y** | 68.89 | 32 | IAmb | | IAmb | | 18 34 20.4 | |
| | comp=Z,80nm,0.9s | | | | | | | | |
| WTLY | **Watson Lake, Y** | 68.89 | 32 | P | | P | | 18 32 34.8 | -0.7 |
| | baz=280,SNR=8.7 | | | | | | | | |
| TGTN | **Hyland Airport** | 68.89 | 31 | P | | P | | 18 32 35.4 | -0.1 |
| | baz=280 | | | | | | | | |
| U35K | **Hyder** | 69.02 | 37 | P | | P | | 18 32 36.8 | +0.5 |
| | baz=281 | | | | | | | | |
| FWVZ | **Far West T-bar** | 69.15 | 154 | P | | P | | 18 32 36.3 | -1.2 |
| C36M | **Paulatuk** | 69.19 | 22 | P | | P | | 18 32 37.7 | +0.6 |
| | baz=281 | | | | | | | | |
| MWZ | **Matawai** | 69.20 | 152 | P | | P | | 18 32 37.3 | -0.3 |
| RTZ | **Ruatahuna** | 69.20 | 152 | P | | P | | 18 32 36.0 | -1.6 |
| MOVZ | **Moawhango** | 69.36 | 154 | P | | P | | 18 32 38.8 | +0.3 |
| BKZ | **Black Stump Fm** | 69.46 | 153 | P | | P | | 18 32 39.1 | -0.1 |
| BKZ | **Black Stump Fm** | 69.46 | 153 | P | | P | | 18 32 38.9 | -0.2 |
| GRNB | **Grenville Isla** | 69.46 | 39 | IAmb | | IAmb | | 18 34 12.1 | |
| | comp=Z,129nm,1.3s | | | | | | | | |
| KWHZ | **Kaweka Forest** | 69.65 | 153 | P | | P | | 18 32 40.8 | +0.5 |
| KRHZ | **Kereru** | 69.81 | 153 | P | | P | | 18 32 41.2 | -0.1 |
| KNZ | **Kokohu** | 69.83 | 152 | P | | P | | 18 32 41.0 | -0.4 |
| MRNZ | **Matariki Terra** | 69.93 | 157 | P | | P | | 18 32 41.6 | -0.4 |
| KAHZ | **Kahuranaki** | 70.15 | 153 | P | | P | | 18 32 43.6 | +0.2 |
| HRA | **Herat** | 70.29 | 300 | P | | P | | 18 32 44.4 | -0.4 |
| LIRD | **Liard River Hi** | 70.37 | 33 | P | | P | | 18 32 45.4 | +0.8 |
| | baz=283 | | | | | | | | |
| BSWZ | **Blackbirch Sta** | 70.62 | 156 | P | | P | | 18 32 45.5 | -0.7 |
| BFZ | **Birch Farm** | 70.64 | 154 | P | | P | | 18 32 48.8 | +2.5 |
| WRGLY | **Wrigley** | 70.74 | 29 | P | | P | | 18 32 46.9 | +0.1 |
| | baz=284 | | | | | | | | |
| RAR | **Rarotonga** | 70.82 | 124 | P | | P | | 18 32 50.7 | +2.9 |
| TOAD | **Toad River Com** | 70.93 | 33 | P | | P | | 18 32 48.8 | +0.7 |
| | baz=284 | | | | | | | | |
| LTZ | **Lake Taylor** | 70.98 | 158 | P | | P | | 18 32 47.4 | -1.0 |
| KHZ | **Kahutara** | 71.11 | 157 | ⇑P | | P | | 18 32 47.8 | -1.3 |
| KOTAN | **Kotaneelee Air** | 71.21 | 32 | P | | P | | 18 32 49.9 | +0.3 |
| | baz=284 | | | | | | | | |
| RPZ | **Rata Peaks** | 71.40 | 159 | P | | P | | 18 32 49.6 | -1.3 |
| ODZ | **Otahua Downs** | 72.46 | 160 | ⇓P | | P | | 18 32 57.6 | +0.4 |
| HOPEN | **Hopen** | 73.70 | 348 | *e*P | | P | | 18 33 05.2 | +1.0 |
| HOPEN | | | | IVmB_BB | | | | 18 33 08.0 | |
| | comp=Z,1µm,2.1s | | | | | | | | |
| HOPEN | | | | *e*S | | S | | 18 42 38.0 | +4.1 |
| NGCH | **Negor - Chabah** | 73.83 | 291 | P | | P | | 18 33 05.6 | -0.3 |
| SPA0 | **Spitsbergen Ar** | 74.23 | 350 | *e*P | | P | | 18 33 08.5 | +1.2 |
| SPA0 | | | | IVmBBB | | | | 18 33 12.0 | |
| | comp=Z,652nm,2.3s | | | | | | | | |
| SPA0 | | | | *e*S | | S | | 18 42 43.7 | +3.7 |
| SPITS | **Spitsbergen Ar** | 74.23 | 350 | P | | P | | 18 33 07.9 | +0.5 |
| | comp=Z,17nm,0.9s,baz=85,slow=8.0,SNR=12 | | | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| KBS | **Kingsbay** | 74.37 | 351 | P | | P | | 18 33 08.4 | +0.3 |
| KBS | **Kingsbay** | 74.37 | 351 | *e*P | | P | | 18 33 09.0 | +0.8 |
| KBS | | | | IVmB_BB | | | | 18 33 11.8 | |
| | comp=Z,766nm,2.3s | | | | | | | | |
| KBS | | | | *e*S | | S | | 18 42 48.0 | +6.5 |
| KBS | **Kingsbay** | 74.37 | 351 | ⇑P | | P | | 18 33 08.6 | +0.5 |
| KBS | **Kingsbay** | 74.37 | 351 | P | | P | | 18 33 08.4 | +0.3 |
| KBS | | | | pmax | | pmax | | | |
| | comp=Z,81nm,0.8s | | | | | | | | |
| KBS | **Kingsbay** | 74.37 | 351 | *i* P | | P | | 18 33 08.6 | +0.5 |
| YKA | **Yellowknife Ar** | 74.83 | 28 | P | | P | | 18 33 11.1 | +0.1 |
| YKA | **Yellowknife Ar** | 74.83 | 28 | P | | P | | 18 33 11.4 | +0.3 |
| | comp=Z,18nm,0.7s,baz=298,slow=5.8,SNR=24 | | | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | | | |
| YKA | **Yellowknife Ar** | 74.83 | 28 | P | | P | | 18 33 11.1 | +0.1 |
| HSPB | **Hornsund (broa** | 75.14 | 349 | *e*P | | P | | 18 33 13.6 | +1.0 |
| BELG | **Belogornoye** | 75.28 | 321 | *i* P | | P | | 18 33 13.4 | -0.4 |
| BELG | | | | pmax | | pmax | | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| LVZ | **Lovozero** | 75.35 | 338 | P | | P | | 18 33 14.1 | +0.1 |
| LVZ | | | | IAmb | | IAmb | | 18 34 54.9 | |
| | comp=Z,134nm,1.1s | | | | | | | | |
| LVZ | **Lovozero** | 75.35 | 338 | *ce*P | | P | | 18 33 13.7 | -0.3 |
| LVZ | | | | pmax | | pmax | | | |
| | comp=Z,62nm,1.2s | | | | | | | | |
| GNW | **Green Mountain** | 75.49 | 44 | IAmb | | IAmb | | 18 34 43.7 | |
| | comp=Z,136nm,1.2s | | | | | | | | |
| ADZR | **Andozero** | 75.67 | 334 | *e*P | | P | | 18 33 14.5 | -1.3 |
| ADZR | | | | pmax | | pmax | | | |
| | comp=Z,109nm,1.5s | | | | | | | | |
| APA | **Apatity** | 75.92 | 338 | ⇓*i*P | | P | | 18 33 14.9 | -2.3 |
| APA | | | | *i* | | | | 18 33 26.7 | |
| APA | | | | *i* | | | | 18 36 09.0 | |
| APA | | | | *i* PPP | | PPP | | 18 38 02.0 | |
| APA | | | | *i* S | | S | | 18 42 57.0 | -2.0 |
| APA | | | | pmax | | pmax | | | |
| | comp=Z,58nm,0.9s | | | | | | | | |
| VADS | **Vadso** | 75.98 | 341 | *e*P | | P | | 18 33 18.2 | +0.7 |
| VADS | | | | IVmB_BB | | | | 18 33 20.8 | |
| | comp=Z,1µm,2.8s | | | | | | | | |
| VADS | | | | *e*S | | S | | 18 43 01.5 | +2.0 |
| J01E | **Myrtle Point** | 76.17 | 49 | IAmb | | IAmb | | 18 35 07.0 | |
| | comp=Z,251nm,1.3

HOQ SNR=8.6 P P 18 33 29.0 +0.9

**SHME Shamm** 77.86 293 *i* P P 18 33 30.2 +1.3
SNR=8.6

**SHME Shamm** 77.86 293 P P 18 33 28.6 -0.4
SNR=15

SHME SNR=10.0 P P 18 33 28.6 -0.4

**MDH Madha** 77.98 292 *i* P P 18 33 32.3 +2.7
SNR=10.0

**MDH Madha** 77.98 292 P P 18 33 29.0 -0.7
SNR=7.1

MDH P P 18 33 29.0 -0.7

**J05D Fort Rock, OR** 77.99 48 IAmb IAmb 18 35 25.0
comp=Z,128nm,1.1s

**O02D Mt. Diablo Mer** 77.99 51 IAmb IAmb 18 35 17.5
comp=Z,189nm,1.4s

**HAWA Hanford** 78.01 45 IAmb IAmb 18 35 03.0
comp=Z,217nm,1.9s

**PINE Pine Mountain** 78.01 47 P P 18 33 30.3 +0.6

**MHTO MHTO** 78.04 288 P P 18 33 29.8 -0.2
SNR=8.2

MHTO SNR=8.2 P P 18 33 29.8 -0.2

**MASF Masafi** 78.08 293 P P 18 33 30.2 0.0
SNR=6.3

MASF SNR=6.3 P P 18 33 30.2 0.0

**MSFE Esma-Masafi** 78.08 293 *i* P P 18 33 31.1 +0.9
SNR=5.5

**BSY Bisya** 78.09 290 P P 18 33 30.5 +0.2
SNR=5.9

BSY SNR=5.9 P P 18 33 30.5 +0.2

**SOHO SOHO** 78.18 291 *i* P P 18 33 31.0 +0.2
SNR=36

**SOHO SOHO** 78.18 291 P P 18 33 30.0 -0.8

SOHO P P 18 33 30.0 -0.8

**UOSS Minazif** 78.18 292 P P 18 33 30.0 -0.8

**UOSS Minazif** 78.18 292 *i* P P 18 33 31.0 +0.2
SNR=16

**UOSS Minazif** 78.18 292 P P 18 33 30.1 -0.6

UOSS P P 18 33 30.1 -0.6

**HATD Hatta, Dubai** 78.29 292 *i* P P 18 33 31.6 +0.2
SNR=20

**HATD Hatta, Dubai** 78.29 292 P P 18 33 31.6 +0.2
SNR=7.6

HATD SNR=7.6 P P 18 33 31.6 +0.2

**TULEG Thule** 78.36 7 *i* P P 18 33 30.5 -0.3

TULEG IAmb IAmb 18 33 35.1
comp=Z,34nm,0.9s

**KTK1 Kautokeino** 78.39 341 *e*P P 18 33 31.6 +0.6

KTK1 IVmBBB 18 33 35.0
comp=Z,883nm,2.0s

KTK1 *e*S S 18 43 25.6 -0.2

**ASHO Ashiyiah** 78.40 292 *i* P P 18 33 31.8 -0.2
SNR=18

**ASHO Ashiyiah** 78.40 292 P P 18 33 32.1 +0.1
SNR=9.0

ASHO SNR=9.0 P P 18 33 32.1 +0.1

**ARQ Araqi** 78.47 290 P P 18 33 32.8 +0.4
SNR=5.2

**MAK Makhachkala** 78.61 312 *e*P P 18 33 29.4 -3.4

MAK *e* 18 36 27.6

MAK *e*PPP PPP 18 38 15.5

MAK *e*S S 18 43 24.9 -4.1

MAK *e*SS SS 18 48 28.0 -4.3

MAK pmax pmax
comp=Z,206nm,1.5s

MAK pmax pmax
comp=Z,3μm,11.1s

MAK smax smax
comp=N,1μm,3.9s

MAK smax smax
comp=E,2μm,7.1s

MAK MLR MLR
comp=E,58μm,18.0s

MAK MLR MLR
comp=N,38μm,16.0s

MAK MLR MLR
comp=Z,54μm,17.0s

**NAZ Nazwa, Dubai** 78.63 292 *i* P P 18 33 34.0 +0.7
SNR=12

**NAZ Nazwa, Dubai** 78.63 292 P P 18 33 33.1 -0.2
SNR=6.9

NAZ SNR=6.9 P P 18 33 33.1 -0.2

**FAQ Al Faqa, Dubai** 78.78 292 *i* P P 18 33 33.9 -0.1
SNR=12

**FAQ Al Faqa, Dubai** 78.78 292 P P 18 33 34.1 +0.1

FAQ P P 18 33 34.1 +0.1

**G08A Pilot Rock** 78.78 46 IAmb IAmb 18 35 06.2
comp=Z,202nm,1.7s

**DQM DQM** 78.78 287 P P 18 33 34.2 +0.1
SNR=6.2

DQM SNR=6.2 P P 18 33 34.2 +0.1

**NEW Newport** 78.83 42 P P 18 33 34.2 +0.2

**NEW Newport** 78.83 42 P P 18 33 34.1 +0.2
baz=293,SNR=9.6

**NEW Newport** 78.83 42 P P 18 33 34.2 +0.2

NEW pmax pmax
comp=Z,97nm,1.1s

**E09A Wood Farm, Sta** 78.85 44 IAmb IAmb 18 35 21.4
comp=Z,128nm,1.2s

**ALNE Al Ain** 78.88 291 *i* P P 18 33 34.7 0.0
SNR=30

**ALNE Al Ain** 78.88 291 P P 18 33 34.6 -0.1
SNR=7.5

ALNE SNR=7.5 P P 18 33 34.6 -0.1

**JOF Joensuu** 78.93 334 *e*P P 18 33 34.4 +0.3

**NEEM North Greenlan** 79.02 3 *i* P P 18 33 34.2 -0.6

NEEM IAmb IAmb 18 33 39.2
comp=Z,88nm,0.8s

**ASUD Al Ashush, Dub** 79.04 292 P P 18 33 35.7 +0.3

ASUD P P 18 33 35.7 +0.3

**VRH Novokhopyorsk** 79.12 321 *e*P P 18 33 34.9 -0.5

VRH pmax pmax
comp=Z,70nm,1.0s

**TRO Tromso** 79.22 343 *e*P P 18 33 35.6 +0.1

TRO IVmBBB 18 33 39.2
comp=Z,832nm,1.8s

TRO *e*S S 18 43 36.4 +1.9

**AJN Ajban** 79.36 292 *i* P P 18 33 37.7 +0.5
SNR=8.9

**AJN Ajban** 79.36 292 P P 18 33 37.3 +0.1
SNR=10.0

**MOS Moscow** 79.44 326 *e*P P 18 33 35.4 -1.6

**DAG Danmarks Havn** 79.48 356 P P 18 33 33.3 -3.6

**DAG Danmarks Havn** 79.48 356 *i* P P 18 33 36.2 -0.6

DAG IAmb IAmb 18 33 40.3
comp=Z,15nm,0.8s

**AFDM Forest Hills D** 79.74 52 IAmb IAmb 18 35 11.1
comp=Z,372nm,2.0s

**J08A Circle Bar Ran** 79.83 47 P P 18 33 40.2 +0.6

J08A IAmb IAmb 18 35 27.7
comp=Z,134nm,1.0s

**UMZA Um Al Zommool** 79.86 290 P P 18 33 39.8 -0.2

UMZA P P 18 33 39.8 -0.2

**VALR Valaam** 79.89 333 *i* P P 18 33 39.0 -0.4

VALR pmax pmax
comp=Z,43nm,0.9s

**LPSR Galich'ya Gora** 80.11 323 *e*P P 18 33 39.6 -1.2

LPSR pmax pmax
comp=Z,70nm,1.0s

**OBN Obninsk** 80.26 326 P P 18 33 41.8 +0.3
comp=Z,15nm,0.5s,baz=63,slow=11,SNR=6.0
comp=Z,15nm,0.5s

**OBN Obninsk** 80.26 326 *d* *i*P P 18 33 40.7 -0.8

OBN *e*PPP PPP 18 38 33.4

OBN pmax pmax
comp=Z,99nm,2.0s

OBN MLR MLR
comp=Z,13μm,26.0s

**VORR Voronezh** 80.36 322 *e*P P 18 33 41.1 -1.0

VORR pmax pmax
comp=Z,90nm,0.5s

**CMB Columbia Colle** 80.50 53 IAmb IAmb 18 35 15.2
comp=Z,122nm,1.1s

**BBGB Big Mountain B** 80.57 54 IAmb IAmb 18 35 18.0
comp=Z,188nm,1.0s

**VSR Storozhevoye** 80.58 322 *e*P P 18 33 42.4 -0.9

VSR pmax pmax
comp=Z,70nm,0.9s

**MZWR Madinat Zayed** 80.58 292 P P 18 33 43.9 +0.1

MZWR P P 18 33 43.9 +0.1

**PAHR Pah Rah Range** 80.59 51 P P 18 33 44.4 +0.6

PAHR IAmb IAmb 18 35 30.9
comp=Z,233nm,1.7s

**VORD Divnogorie** 80.61 322 *e*P P 18 33 42.2 -1.3

VORD pmax pmax
comp=Z,50nm,1.0s

**PNTR Pine Nut** 80.67 52 IAmb IAmb 18 35 31.8
comp=Z,118nm,1.0s

**PMPB Monarch Peak** 80.88 55 IAmb IAmb 18 35 37.7
comp=Z,108nm,1.0s

**YERR Yerington** 80.97 52 IAmb IAmb 18 35 33.1
comp=Z,136nm,1.2s

**WAKR Walker** 81.02 52 IAmb IAmb 18 35 43.9
comp=Z,147nm,1.4s

**JRN Qarnain Island** 81.03 293 P P 18 33 47.3 +1.0
SNR=6.0

JRN SNR=6.0 P P 18 33 47.3 +1.0

**MZR Muzera** 81.20 291 *i* P P 18 33 47.5 +0.3
SNR=42

**KULLO Kullorsuaq** 81.35 5 *i* P P 18 33 46.8 -0.2

**STEI Steigen** 81.35 343 *e*P P 18 33 47.5 +0.4

STEI IVmBBB 18 33 50.4
comp=Z,2μm,1.0s

STEI *e*S S 18 43 55.3 -1.7

**GHWR Ruwais** 81.37 292 P P 18 33 47.5 -0.5

GHWR P P 18 33 47.5 -0.5

**MSO Missoula** 81.38 43 P P 18 33 47.0 -0.9

**MSO Missoula** 81.38 43 P P 18 33 48.4 +0.6
baz=295

**KBZ Khabaz** 81.42 314 P P 18 33 48.3 +0.4
comp=Z,78nm,0.9s,baz=74,slow=2.9,SNR=49

**KBZ Khabaz** 81.42 314 *c* *i*P P 18 33 48.0 +0.1

KBZ pmax pmax
comp=Z,101nm,0.9s

**KIV Kislovodsk** 81.47 314 P P 18 33 48.2 -0.2

**KIV Kislovodsk** 81.47 314 *i* P P 18 33 49.2 +0.9
SNR=6.9

**KIV Kislovodsk** 81.47 314 P P 18 33 48.8 +0.5

KIV P P 18 33 48.8 +0.5

**KIV Kislovodsk** 81.47 314 ⇑P P 18 33 49.6 +1.3

**KIV Kislovodsk** 81.47 314 *e*P P 18 33 48.4 +0.1

KIV *e*S S 18 44 00.1 +0.8

KIV *e*SS SS 18 49 18.3 +3.1

KIV pmax pmax
comp=Z,56nm,1.1s

KIV pmax pmax
comp=Z,207nm,3.5s

**KIV Kislovodsk** 81.47 314 P P 18 33 49.4 +1.1
comp=Z,103nm,1.0s,comp=Z,2μm

**SHA1 Shirdzhatmaz** 81.58 314 ⇑*i*P P 18 33 48.8 -0.3

**MFID Camas Ranch** 81.58 46 IAmb IAmb 18 35 21.0
comp=Z,120nm,1.0s

**GNI Garni** 81.60 310 P P 18 33 48.6 -0.6

**GNI Garni** 81.60 310 P P 18 33 49.6 +0.4

**GNI Garni** 81.60 310 P P 18 33 51.9 +2.7

GNI P P 18 33 51.9 +2.7

**GNI Garni** 81.60 310 ⇑*i*P P 18 33 49.1 -0.1

GNI pmax pmax
comp=Z,14nm,0.7s

**RYN Ryan** 81.63 52 IAmb IAmb 18 35 36.6
comp=Z,235nm,1.7s

**LOF Lofoten** 81.67 343 *e*P P 18 33 49.7 +0.9

LOF IVmB_BB 18 33 55.3
comp=Z,1μm,2.5s

LOF *e*S S 18 44 02.8 +2.5

**FAUS Fauske** 81.72 342 *e*P P 18 33 48.9 -0.1

FAUS *e*S S 18 43 56.0 -4.9

**KVN Kaiserville** 81.77 51 IAmb IAmb 18 35 37.9
comp=Z,99nm,1.1s

**LHV Little Huntoon** 81.79 52 IAmb IAmb 18 35 44.8
comp=Z,111nm,1.1s

**FINES FINESS Array B** 81.79 334 P P 18 33 48.4 -1.1

**FINES FINESS Array B** 81.79 334 P P 18 33 49.0 -0.6
comp=Z,13nm,0.8s,baz=65,slow=4.4,SNR=13
comp=Z,13nm,0.8s

**BMN Battle Mountai** 81.84 50 IAmb IAmb 18 35 55.1
comp=Z,152nm,1.6s

**KEF Keuruu** 81.85 335 *e*P P 18 33 50.7 +0.9

**NVAR Mina Array Bea** 81.86 52 P P 18 33 51.1 +0.3

**NVAR Mina Array Bea** 81.86 52 P P 18 33 51.6 +0.9
comp=Z,11nm,0.7s,baz=264,slow=4.9,SNR=34
comp=Z,11nm,0.7s

**DMTO DMTO** 81.87 286 P P 18 33 52.2 +1.4

DMTO P P 18 33 52.2 +1.4

**DBG Daneborg** 81.97 356 *i* P P 18 33 49.4 -0.9

**NV11 Mina Array Sit** 81.97 52 IAmb IAmb 18 35 34.2
comp=Z,116nm,1.2s

**VAF Ylistaro** 82.15 337 *e*P P 18 33 51.8 +0.5

**ERBR Yeremizino-Bor** 82.15 316 *e*P P 18 33 51.9 +0.1

ERBR *e*S SKSac 18 44 10.0 -1.8

ERBR pmax pmax
comp=Z,209nm,1.6s

ERBR MLR MLR
comp=N,40μm,18.0s

ERBR MLR MLR
comp=Z,43μm,21.0s

ERBR MLR MLR
comp=E,43μm,20.0s

**SHMA Al-Shehemyia** 82.27 295 P P 18 33 53.3 +0.5
SNR=6.1

**SLWR Sila** 82.33 293 P P 18 33 53.0 -0.1

SLWR P P 18 33 53.0 -0.1

**HLID Hailey** 82.46 46 P P 18 33 53.4 -0.3
baz=295

**LABN Labinsk** 82.46 315 *e*P P 18 33 54.4 +1.0

LABN *e*S SKSac 18 44 13.2 -0.7

LABN pmax pmax
comp=Z,155nm,2.0s

**TRNA Turayna** 82.49 294 P P 18 33 53.3 -0.6
SNR=6.9

**DSP Deep Springs** 82.53 53 IAmb IAmb 18 35 41.5
comp=Z,166nm,1.5s

**RBK Rabkut** 82.61 286 P P 18 33 54.5 -0.3
SNR=7.1

RBK P P 18 33 54.5 -0.3
SNR=7.1

**MOR8 Moi Rana** 82.80 341 *e*P P 18 33 53.7 -1.1

MOR8 IVmBBB 18 33 56.4
comp=Z,456nm,0.7s

MOR8 *e*S S 18 44 09.8 -2.2

**SMRA Abu-Samra** 82.81 294 P P 18 33 55.1 -0.5
SNR=7.2

**ISA Isabella, Lake** 82.84 54 IAmb IAmb 18 35 42.7
comp=Z,100nm,1.3s

**WHFO Wadi Hawf** 82.84 286 P P 18 33 55.5 -0.4

WHFO P P 18 33 55.5 -0.4

**DLMT Dillon** 82.86 44 P P 18 33 55.7 0.0

**ARBE Arbavere** 82.98 333 *e*P P 18 33 55.6 -0.2

**ELK Elko** 83.09 49 IAmb IAmb 18 35 29.1
comp=Z,100nm,1.2s

**STOK Stokkvaagen** 83.09 342 *e*P P 18 33 56.2 0.0

**GRAC Grapevine Rang** 83.12 53 IAmb IAmb 18 35 44.4
comp=Z,147nm,1.4s

**MEF Metsahovi** 83.18 334 *e*P P 18 33 56.4 -0.4

**VSU Vasula** 83.21 332 *d* *i*P P 18 33 56.4 -0.6

VSU pmax pmax
comp=Z,62nm,0.9s

**BCA Borcka** 83.22 312 ⇑P P 18 33 57.6 +0.1

**BOZ Bozeman (W)** 83.36 43 P P 18 33 58.4 +0.1
baz=297

**CCAC Calif City Air** 83.38 55 P P 18 33 58.9 +0.4

CCAC IAmb IAmb 18 35 55.2
comp=Z,90nm,0.9s

**EGMT Eagleton** 83.40 40 P P 18 33 58.9 +0.5
baz=298

**ABTO Aybut** 83.47 286 P P 18 33 59.3 +0.1

ABTO P P 18 33 59.3 +0.1

**SOC Sochi** 83.57 315 *e*P P 18 33 58.5 -0.7

SOC *e* 18 37 11.2

SOC *e*PPP PPP 18 38 59.6

SOC *e*S S 18 44 19.3 -1.4

SOC *e*SSS SSS 18 53 14.8

SOC pmax pmax
comp=Z,33nm,0.8s

**KBD Kabd** 83.69 299 P P 18 33 59.9 -0.1

**RAF Rauma** 83.72 335 *e*P P 18 33 59.0 -0.6

**WCT Wildcat Mounta** 83.74 53 IAmb IAmb 18 35 48.3
comp=Z,220nm,1.8s

**R11B Troy Canyon, C** 83.85 51 P P 18 34 01.0 0.0
baz=295

**JMIC Jan Mayen** 83.86 351 *e*P P 18 34 01.0 +0.9

**JMI Jan Mayen** 83.95 351 *e*P P 18 34 01.4 +0.8

JMI *e*SKSac S 18 44 23.4 -0.1

**TPNV Topopah Spring** 83.95 52 P P 18 34 01.4 -0.1
baz=295

**GWY Greenwater Val** 83.96 53 P P 18 34 01.6 0.0

**YHL Hebgen Lake** 83.98 44 IAmb IAmb 18 35 34.1
comp=Z,117nm,1.0s

**S11A Rachel** 84.03 52 IAmb IAmb 18 36 21.2
comp=Z,189nm,1.3s

**GSC Goldstone, Bar** 84.23 54 IAmb IAmb 18 35 50.6
comp=Z,123nm,1.2s

**FFC Flin Flon** 84.24 32 P P 18 34 02.3 -0.1

**FFC Flin Flon** 84.24 32 P P 18 34 02.3 -0.1

FFC pmax pmax
comp=Z,271nm,1.2s

**SUMG Summit** 84.28 1 IAmb IAmb 18 35 27.5
comp=Z,83nm,0.9s

**SUMG Summit** 84.28 1 *i* P P 18 34 03.2 +0.5

SUMG IAmb IAmb 18 34 07.1
comp=Z,23nm,0.9s

**MTSE Matsula** 84.31 333 *e*P P 18 34 02.4 -0.2

**SPR3 Spring Creek 3** 84.46 50 P P 18 34 04.5 +0.2

**ANN Anapa** 84.49 317 *e*P P 18 34 05.2 +1.4

ANN *i*S S 18 44 29.5 -0.3

ANN pmax pmax
comp=Z,80nm,1.0s

ANN pmax pmax
comp=N,25nm,1.1s

ANN pmax pmax
comp=E,10.0nm,0.8s

**IMW Indian Meadow** 84.57 44 IAmb IAmb 18 35 36.5
comp=Z,96nm,1.2s

**H17A Grant Village** 84.58 44 P P 18 34 04.4 -0.3
baz=298

**PRN Pahroc Range** 84.63 52 IAmb IAmb 18 36 13.9
comp=Z,139nm,1.5s

**FXWY Fox Creek** 84.63 45 P P 18 34 05.7 +0.7

FXWY IAmb IAmb 18 35 37.4
comp=Z,120nm,1.3s

**FLWY Flagg Ranch** 84.64 44 IAmb IAmb 18 35 53.6
comp=Z,153nm,1.1s

**NSS Namsos** 84.70 341 *e*P P 18 34 03.9 -0.6

NSS *e*SKSac S 18 44 30.0 -1.2

**TPAW Teton Pass** 84.75 45 IAmb IAmb 18 35 51.8
comp=Z,220nm,1.6s

**REDW Red Top Meadow** 84.87 45 P P 18 34 05.5 -0.6

**MNK Minsk** 84.91 328 *i* P P 18 34 03.1 -2.6

MNK *i* 18 37 19.7

MNK *i* PPP PPP 18 39 12.6

MNK *i* S SKSac 18 44 26.9 -2.6

MNK *i* SS SS 18 50 06.9 +1.7

MNK *i* SSS SSS 18 53 37.6

MNK pmax pmax
comp=E,19nm,0.9s

MNK pmax pmax
comp=N,23nm,0.8s

MNK pmax pmax
comp=Z,96nm,0.8s

MNK MLR MLR
comp=Z,35μm,19.0s

MNK MLR MLR
comp=N,26μm,18.0s

**SHPR Sheep Range** 84.93 52 IAmb IAmb 18 35 40.1
comp=Z,129nm,1.8s

**AAL Aland** 84.94 335 *e*P P 18 34 05.4 -0.3

**IZAR Zarasai** 84.98 330 *e*P P 18 34 07.5 +1.5

**AHID Auburn Hatcher** 84.98 45 IAmb IAmb 18 36 07.3
comp=Z,87nm,1.2s

**DUG Dugway, Tooele** 84.99 48 P P 18 34 06.4 -0.3
baz=296

**109C Camp Elliot, M** 85.00 56 P P 18 34 06.4 -0.3
baz=295

**PSUT Pine Spring** 85.00 50 P P 18 34 06.5 -0.3

PSUT IAmb IAmb 18 36 04.8
comp=Z,68nm,0.9s

**RLMT Red Lodge** 85.06 43 P P 18 34 07.2 +0.1
baz=298

**ISAL Salakas** 85.14 330 *e*P P 18 34 08.3 +1.4

**PFO Pinyon Flats O** 85.19 56 P P 18 34 07.3 -0.5

PFO IAmb IAmb 18 35 50.4
comp=Z,122nm,1.3s

**PFO Pinyon Flats O** 85.19 56 P P 18 34 07.9 +0.1
baz=295

**PFO Pinyon Flats O** 85.19 56 *i* P P 18 34 08.0 +0.2

PFO pmax pmax
comp=Z,29nm,1.0s

**TPFO Pinon Flats** 85.19 56 P P 18 34 08.1 +0.3
baz=295

**HWUT Hardware Ranch** 85.20 47 IAmb IAmb 18 35 55.4
comp=Z,193nm,1.4s

**IIGN Ignalina** 85.22 329 *e*P P 18 34 08.5 +1.2

**V12A Nelson** 85.49 53 IAmb IAmb 18 36 06.9
comp=Z,212nm,1.5s

**MONP2 Monument Peak** 85.52 56 P P 18 34 09.7 +0.2
baz=295

**CCUT Cedar City** 85.78 51 P P 18 34 10.1 -0.7

CCUT IAmb IAmb 18 35 58.0
comp=Z,274nm,2.0s

**BW06 Boulder Array** 85.99 45 P P 18 34 11.8 +0.1
baz=298

**PDAR Pinedale Array** 85.99 45 P P 18 34 11.1 -0.6

**PDAR Pinedale Array** 85.99 45 P P 18 34 11.2 -0.5
comp=Z,5.8nm,0.8s,baz=272,slow=2.8,SNR=19
comp=Z,5.8nm,0.8s

**YUH Yuha Desert** 86.00 56 IAmb IAmb 18 35 54.3
comp=Z,96nm,1.4s

**UPP Uppsala** 86.05 336 *e*P P 18 34 10.7 -0.6

**LCMT Little Creek M** 86.10 51 IAmb IAmb 18 36 13.7
comp=Z,106nm,1.3s

**LAO LASA Array** 86.15 40 P P 18 34 12.9 +0.7
baz=300

**TBLU Trondheim** 86.15 341 *e*P P 18 34 11.2 -0.6

**PABE Paberze** 86.17 330 *e*P P 18 34 11.9 -0.1

**AKASG Malin Array Be** 86.31 324 P P 18 34 11.4 -1.4
comp=Z,9.3nm,0.7s,baz=53,slow=5.3,SNR=16
comp=Z,9.3nm,0.7s

**AKBB Malin Array Si** 86.31 324 *c* *e*P P 18 34 11.2 -1.6

AKBB pmax pmax
comp=Z,14nm,0.6s

**AKBB Malin Array Si** 86.31 324 P P 18 34 12.5 -0.3

**AK01 Malin Array Si** 86.33 324 P P 18 34 11.8 -1.1

**KIEV Kiev** 86.33 324 P P 18 34 10.3 -2.6

**KIEV Kiev** 86.33 324 *i* P P 18 34 11.4 -1.5
SNR=5.8

**KIEV Kiev** 86.33 324 P P 18 34 10.3 -2.6

KIEV pmax pmax
comp=Z,50nm,0.9s

**AK22 Malin Array Si** 86.36 325 P P 18 34 12.3 -0.8

**AK21 Malin Array Si** 86.37 325 P P 18 34 12.0 -1.1

**AK12 Malin Array Si** 86.38 324 P P 18 34 12.1 -1.1

**DGMT Dagmar** 86.41 38 P P 18 34 13.6 +0.2
baz=302

**W13A Hualapai Mount** 86.47 53 IAmb IAmb 18 35 57.1
comp=Z,115nm,1.7s

**SIM Simferopol'** 86.49 318 *e*P P 18 34 12.2 -1.6

SIM *e*S SKSac 18 44 37.0 -2.8

SIM pmax pmax
comp=Z,29nm,0.9s

SIM smax smax
comp=N,800nm,14.0s

**ARPR Arapgir-MALATY** 86.52 311 P P 18 34 12.5 -1.8

ARPR IAmb IAmb 18 36 11.3
comp=Z,169nm,1.1s

**PKCU Pink Cliffs** 86.57 51 P P 18 34 14.2 -0.6

**BLYC Blythe** 86.59 55 IAmb IAmb 18 35 46.6
comp=Z,180nm,1.6s

**GLA Glamis** 86.66 55 IAmb IAmb 18 35 57.9
comp=Z,184nm,1.4s

**P17A Butcher Ranch,** 86.74 48 IAmb IAmb 18 36 02.1
comp=Z,109nm,1.2s

**PBUR Paburge** 86.76 331 *e*P P 18 34 14.5 -0.4

**MI28 Mi28,Pidlybu** 87.01 325 P P 18 34 15.5 -0.7

**SRU San Rafael Swe** 87.06 49 IAmb IAmb 18 36 04.2
comp=Z,69nm,0.9s

**HFS Hagfors** 87.29 337 P P 18 34 15.4 -2.0
comp=Z,14nm,0.8s,baz=83,slow=4.6,SNR=13
comp=Z,14nm,0.8s

**NC303 NORSAR Array S** 87.30 339 P P 18 34 14.9 -2.6

**VIKU Vikbolandet** 87.31 335 *e*P P 18 34 16.2 -1.3

**DOMB Dombas** 87.43 340 *e*P P 18 34 17.7 -0.4

DOMB IVmB_BB 18 34 28.9
comp=Z,777nm,1.8s

DOMB *e*SKSac SKSac 18 44 47.5 +2.4

**SUW Suwalki** 87.43 329 *e*P P 18 34 17.4 -0.8

**SUW Suwalki** 87.43 329 P P 18 34 16.6 -1.6

**SUW Suwalki** 87.43 329 *e*P P 18 34 17.9 -0.3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SUW** | **Suwalki** | **87.43** | **329** | P | **P** | **18 34 16.6** | **-1.6** |
| SUW | | | | pmax | pmax | | |
| | comp=Z,370nm,1.1s | | | | | | |
| **HMU** | **Henry Mountain** | **87.45** | **50** | IAmb | IAmb | 18 36 02.0 | |
| | comp=Z,65nm,0.9s | | | | | | |
| **NB201** | **NORSAR Array S** | **87.45** | **339** | P | **P** | **18 34 16.0** | **-2.3** |
| NB201 | | | | IAmb | IAmb | 18 36 00.0 | |
| | comp=Z,158nm,1.3s | | | | | | |
| **NC204** | **NORSAR Array S** | **87.46** | **339** | P | **P** | **18 34 16.7** | **-1.6** |
| **MOL** | **Molde** | **87.48** | **341** | *e*P | **P** | **18 34 18.9** | **+0.7** |
| **NB2** | **NORSAR Subarra** | **87.49** | **339** | P | **P** | **18 34 16.7** | **-1.7** |
| | comp=Z,86nm,1.7s,baz=44,slow=5.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.49** | **339** | PKKP | | 18 53 28.8 | |
| | comp=Z,2.0nm,0.9s,baz=226,slow=2.8 | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.49** | **339** | P | **P** | **18 34 16.7** | **-1.7** |
| | baz=44,slow=5.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.49** | **339** | P | **P** | **18 34 16.8** | **-1.7** |
| **NOA** | **NORSAR Array B** | **87.49** | **339** | P | **P** | **18 34 16.9** | **-1.5** |
| | comp=Z,12nm,0.9s,baz=52,slow=4.4,SNR=23 | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **113A** | **Mohawk Valley,** | **87.59** | **55** | IAmb | IAmb | 18 36 16.9 | |
| | comp=Z,113nm,1.2s | | | | | | |
| **NC602** | **NORSAR Array S** | **87.60** | **339** | *e*P | **P** | **18 34 19.6** | **+0.7** |
| NC602 | | | | *e*SKSac | **SKSac** | **18 44 49.6** | **+3.5** |
| **NBO00** | **NORSAR Array S** | **87.64** | **339** | IAmb | IAmb | 18 36 12.1 | |
| | comp=Z,102nm,1.3s | | | | | | |
| **NAO01** | **NORSAR Array S** | **87.74** | **339** | P | **P** | **18 34 18.6** | **-1.0** |
| **RAYN** | **Ar Rayn** | **87.75** | **295** | P | **P** | **18 34 18.4** | **-2.1** |
| **RAYN** | **Ar Rayn** | **87.75** | **295** | *i* P | **P** | **18 34 20.2** | **-0.3** |
| | SNR=7.9 | | | | | | |
| **RAYN** | **Ar Rayn** | **87.75** | **295** | P | **P** | **18 34 18.4** | **-2.1** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,279nm,1.1s | | | | | | |
| **ICESG** | **Greenland Ices** | **87.77** | **1** | *i* P | **P** | **18 34 19.6** | **-0.3** |
| ICESG | | | | IAmb | IAmb | 18 34 26.5 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **WUAZ** | **Wupatki** | **88.12** | **52** | IAmb | IAmb | 18 36 19.9 | |
| | comp=Z,76nm,1.1s | | | | | | |
| **WUAZ** | **Wupatki** | **88.12** | **52** | P | **P** | **18 34 22.3** | **+0.1** |
| | baz=298 | | | | | | |
| **BNN** | **Bunyan** | **88.34** | **312** | P | **P** | **18 34 22.2** | **-0.9** |
| **OSL** | **Oslo** | **88.47** | **338** | *e*P | **P** | **18 34 23.5** | **+0.5** |
| OSL | | | | *e*SKSac | **SKSac** | **18 44 57.5** | **+6.3** |
| **X16A** | **Lo Mia Camp, P** | **88.58** | **53** | IAmb | IAmb | 18 35 56.9 | |
| | comp=Z,111nm,1.6s | | | | | | |
| **214A** | **Organ Pipe Nat** | **88.67** | **56** | IAmb | IAmb | 18 36 30.4 | |
| | comp=Z,97nm,1.1s | | | | | | |
| **214A** | **Organ Pipe Nat** | **88.67** | **56** | P | **P** | **18 34 25.0** | **+0.3** |
| | baz=297 | | | | | | |
| **RSSD** | **Black Hills** | **88.79** | **42** | P | **P** | **18 34 24.4** | **-0.8** |
| RSSD | | | | IAmb | IAmb | 18 35 56.9 | |
| | comp=Z,187nm,1.9s | | | | | | |
| **RSSD** | **Black Hills** | **88.79** | **42** | P | **P** | **18 34 25.2** | **0.0** |
| | baz=302 | | | | | | |
| **RSSD** | **Black Hills** | **88.79** | **42** | P | **P** | **18 34 24.4** | **-0.8** |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,187nm,1.9s | | | | | | |
| **N23A** | **Red Feather La** | **89.26** | **45** | P | **P** | **18 34 26.1** | **-1.5** |
| | baz=301 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **89.27** | **6** | P | **P** | **18 34 25.7** | **-0.9** |
| **SFJD** | **Kangerlussuaq** | **89.27** | **6** | P | **P** | **18 34 25.7** | **-0.9** |
| SFJD | | | | pmax | pmax | | |
| | comp=Z,45nm,1.1s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **89.27** | **6** | *i* P | **P** | **18 34 26.1** | **-0.5** |
| SFJD | | | | IAmb | IAmb | 18 34 31.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **MVCO** | **Mesa Verde** | **89.37** | **49** | P | **P** | **18 34 27.4** | **-0.7** |
| | baz=299 | | | | | | |
| **BRTR** | **Keskin Array B** | **89.41** | **314** | P | **P** | **18 34 25.7** | **-2.4** |
| **BRTR** | **Keskin Array B** | **89.41** | **314** | P | **P** | **18 34 26.9** | **-1.2** |
| | comp=Z,7.5nm,0.9s,baz=93,slow=3.2,SNR=24 | | | | | | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **W18A** | **Petrified Fore** | **89.49** | **52** | P | **P** | **18 34 28.7** | **+0.1** |
| | baz=298 | | | | | | |
| **KIRS** | **Kirsehir-Merke** | **89.52** | **313** | ⇓P | **P** | **18 34 27.5** | **-1.0** |
| **LVV** | **L'vov** | **89.55** | **326** | *e*P | **P** | **18 34 26.8** | **-1.5** |
| LVV | | | | *e*S | **S** | **18 45 13.0** | **-5.5** |
| LVV | | | | MLR | MLR | | |
| | comp=Z,30μm,19.0s | | | | | | |
| **TLCR** | | **89.56** | **320** | ⇑P | **P** | **18 34 27.5** | **-1.0** |
| **TLCR** | | **89.56** | **320** | ⇑P | **P** | **18 34 27.5** | **-1.0** |
| **ULM** | **Lac du Bonnet** | **89.88** | **34** | P | **P** | **18 34 29.6** | **-0.2** |
| | comp=Z,8.5nm,0.9s,baz=317,slow=5.4,SNR=7.0 | | | | | | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **CFR** | **Carcaliu** | **89.97** | **320** | ⇓P | **P** | **18 34 28.9** | **-1.5** |
| **CFR** | **Carcaliu** | **89.97** | **320** | ⇓P | **P** | **18 34 28.9** | **-1.5** |
| **TPGR** | **Topolog** | **89.98** | **320** | ⇓P | **P** | **18 34 29.8** | **-0.6** |
| **ISCO** | **Idaho Springs** | **90.04** | **46** | P | **P** | **18 34 29.7** | **-1.5** |
| | baz=301 | | | | | | |
| **TUC** | **Tucson** | **90.04** | **55** | P | **P** | **18 34 28.6** | **-2.5** |
| **TUC** | **Tucson** | **90.04** | **55** | P | **P** | **18 34 30.2** | **-0.9** |
| | baz=298 | | | | | | |
| **TUC** | **Tucson** | **90.04** | **55** | P | **P** | **18 34 28.6** | **-2.5** |
| TUC | | | | pmax | pmax | | |
| | comp=Z,183nm,1.9s | | | | | | |
| **DY2G** | **Dye2** | **90.11** | **4** | *i* P | **P** | **18 34 30.2** | **-0.8** |
| DY2G | | | | IAmb | IAmb | 18 34 33.7 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **90.22** | **323** | IAmb | IAmb | 18 36 26.9 | |
| | comp=Z,112nm,1.2s | | | | | | |
| **BURAR** | **Bucovina Array** | **90.23** | **323** | P | **P** | **18 34 27.6** | **-4.1** |
| **BURAR** | **Bucovina Array** | **90.23** | **323** | ⇑P | **P** | **18 34 31.0** | **-0.7** |
| **BURAR** | **Bucovina Array** | **90.23** | **323** | P | **P** | **18 34 31.4** | **-0.3** |
| **S22A** | **4UR Ranch, Cre** | **90.26** | **48** | P | **P** | **18 34 31.9** | **-0.4** |
| | baz=300 | | | | | | |
| **KWP** | **Kalwaria Pacla** | **90.35** | **326** | *e*P | **P** | **18 34 31.6** | **-0.5** |
| **KWP** | **Kalwaria Pacla** | **90.35** | **326** | P | **P** | **18 34 31.0** | **-1.1** |
| **KWP** | **Kalwaria Pacla** | **90.35** | **326** | P | **P** | **18 34 31.0** | **-1.1** |
| KWP | | | | pmax | pmax | | |
| | comp=Z,221nm,1.1s | | | | | | |
| **VRI** | **Vrincioaia** | **90.40** | **321** | ⇑P | **P** | **18 34 32.4** | **0.0** |
| **VRI** | **Vrincioaia** | **90.40** | **321** | ⇑P | **P** | **18 34 32.4** | **0.0** |
| **PLOR** | **Plostina** | **90.45** | **321** | ⇑P | P | 18 34 39.8 | +7.1 |
| **PLOR** | **Plostina** | **90.45** | **321** | ⇑P | P | 18 34 39.8 | +7.1 |
| **TURR** | **Turia** | **90.69** | **322** | ⇓P | **P** | **18 34 33.9** | **+0.1** |
| **Q24A** | **Divide** | **90.78** | **47** | IAmb | IAmb | 18 36 32.1 | |
| | comp=Z,140nm,1.7s | | | | | | |
| **Q24A** | **Divide** | **90.78** | **47** | P | **P** | **18 34 33.1** | **-1.6** |
| | baz=301 | | | | | | |
| **ASF** | **Jabal al Asfar** | **90.78** | **306** | P | **P** | **18 34 33.8** | **-0.8** |
| | comp=Z,6.4nm,0.9s,baz=59,slow=0.6,SNR=6.0 | | | | | | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **91.00** | **326** | *e*P | **P** | **18 34 34.4** | **-0.8** |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **91.00** | **326** | *e*P | **P** | **18 34 34.3** | **-0.9** |
| **MLR** | **Muntele Rosu** | **91.06** | **321** | ⇓P | **P** | **18 34 37.2** | **+1.5** |
| **MLR** | **Muntele Rosu** | **91.06** | **321** | ⇓P | **P** | **18 34 37.2** | **+1.5** |
| **AGMN** | **Agassiz Nation** | **91.08** | **35** | P | **P** | **18 34 34.1** | **-1.4** |
| | baz=308 | | | | | | |
| **DOPR** | **Dopca** | **91.10** | **322** | ⇓P | **P** | **18 34 35.5** | **-0.2** |
| **SDCO** | **Great Sand Dun** | **91.17** | **48** | P | **P** | **18 34 36.0** | **-0.5** |
| | baz=301 | | | | | | |
| **OJC** | **Ojcow** | **91.44** | **328** | *e*P | **P** | **18 34 36.4** | **-0.7** |
| **OJC** | **Ojcow** | **91.44** | **328** | P | **P** | **18 34 35.6** | **-1.6** |
| OJC | | | | IAmb | IAmb | 18 36 19.3 | |
| | comp=Z,86nm,1.2s | | | | | | |
| **OJC** | **Ojcow** | **91.44** | **328** | P | **P** | **18 34 35.6** | **-1.6** |
| OJC | | | | pmax | pmax | | |
| | comp=Z,86nm,1.2s | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **91.44** | **326** | *e*P | **P** | **18 34 36.9** | **-0.3** |
| CRVS | | | | pmax | pmax | | |
| | comp=Z,49nm,1.0s | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **91.44** | **326** | *e*P | **P** | **18 34 36.8** | **-0.4** |
| **MMAI** | **Mount Meron Ar** | **91.48** | **307** | P | **P** | **18 34 37.1** | **-0.7** |
| | comp=Z,6.7nm,0.8s,baz=51,slow=6.6,SNR=8.7 | | | | | | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **319A** | **Douglas** | **91.61** | **55** | IAmb | IAmb | 18 36 48.9 | |
| | comp=Z,51nm,1.0s | | | | | | |
| **NIE** | **Niedzica** | **91.70** | **327** | *e*P | **P** | **18 34 37.7** | **-0.7** |
| **OGNE** | **Ogallala** | **91.75** | **44** | P | **P** | **18 34 39.2** | **+0.3** |
| | baz=303 | | | | | | |
| **ANMO** | **Albuquerque** | **91.92** | **51** | P | **P** | **18 34 39.0** | **-1.0** |
| ANMO | | | | IAmb | IAmb | 18 36 25.3 | |
| | comp=Z,57nm,1.1s | | | | | | |
| **ANMO** | **Albuquerque** | **91.92** | **51** | P | **P** | **18 34 40.1** | **+0.2** |
| | baz=300 | | | | | | |
| **ANMO** | **Albuquerque** | **91.92** | **51** | P | **P** | **18 34 39.0** | **-1.0** |
| **121A** | **Cookes Peak, D** | **92.16** | **53** | IAmb | IAmb | 18 36 26.8 | |
| | comp=Z,78nm,1.2s | | | | | | |
| **121A** | **Cookes Peak, D** | **92.16** | **53** | P | **P** | **18 34 41.1** | **0.0** |
| | baz=300 | | | | | | |
| **KECS** | **Kecovo** | **92.21** | **326** | *e*P | **P** | **18 34 39.9** | **-0.8** |
| KECS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **KECS** | **Kecovo** | **92.21** | **326** | *e*P | **P** | **18 34 39.9** | **-0.8** |
| **T25A** | **Trinidad** | **92.22** | **48** | P | **P** | **18 34 41.6** | **+0.3** |
| | baz=302 | | | | | | |
| **LANS** | **Liptovska Anna** | **92.29** | **327** | *e*P | **P** | **18 34 43.8** | **+2.6** |
| LANS | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **LANS** | **Liptovska Anna** | **92.29** | **327** | *e*P | **P** | **18 34 43.8** | **+2.6** |
| **ELND** | **Elena** | **92.59** | **319** | ⇓P | **P** | **18 34 41.9** | **-0.7** |
| **KSP** | **Ksiaz** | **92.70** | **330** | *e*P | **P** | **18 34 42.5** | **-0.4** |
| **CASY** | **Casey** | **92.81** | **193** | P | **P** | **18 34 42.1** | **-0.7** |
| CASY | | | | IAmb | IAmb | 18 36 25.5 | |
| | comp=Z,144nm,1.8s | | | | | | |
| **MORC** | **Moravsky Berou** | **92.83** | **328** | P | **P** | **18 34 41.9** | **-1.7** |
| **MORC** | **Moravsky Berou** | **92.83** | **328** | *e*P | **P** | **18 34 42.9** | **-0.7** |
| **MORC** | **Moravsky Berou** | **92.83** | **328** | ⇑P | **P** | **18 34 39.9** | **-3.7** |
| **MORC** | **Moravsky Berou** | **92.83** | **328** | P | **P** | **18 34 41.9** | **-1.7** |
| MORC | | | | pmax | pmax | | |
| | comp=Z,53nm,1.6s | | | | | | |
| **PSZ** | **Piszkesteto** | **92.87** | **326** | IAmb | IAmb | 18 36 28.3 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **PSZ** | **Piszkesteto** | **92.87** | **326** | ⇑P | **P** | **18 34 44.0** | **+0.1** |
| **PSZ** | **Piszkesteto** | **92.87** | **326** | ⇑P | **P** | **18 34 44.0** | **+0.1** |
| **CHVC** | **Chvalec** | **92.98** | **330** | *e*P | **P** | **18 34 43.7** | **-0.6** |
| **CHVC** | **Chvalec** | **92.98** | **330** | *e*P | **P** | **18 34 43.7** | **-0.6** |
| **KRLC** | **Kraliky** | **92.99** | **329** | *e*P | **P** | **18 34 43.7** | **-0.7** |
| KRLC | | | | *e*pP | **pP** | **18 34 48.6** | **+0.3** |
| **KRLC** | **Kraliky** | **92.99** | **329** | *e*P | **P** | **18 34 43.7** | **-0.7** |
| KRLC | | | | *e* | | 18 34 48.6 | |
| **DPC** | **Dobruska-Polom** | **93.02** | **329** | *e*P | **P** | **18 34 44.1** | **-0.4** |
| **DPC** | **Dobruska-Polom** | **93.02** | **329** | *e*P | **P** | **18 34 44.1** | **-0.4** |
| **VYHS** | **Vyhne** | **93.04** | **327** | *e*P | **P** | **18 34 43.7** | **-0.9** |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **VYHS** | **Vyhne** | **93.04** | **327** | *e*P | **P** | **18 34 43.7** | **-0.9** |
| **UPC** | **Upice** | **93.06** | **330** | *e*P | **P** | **18 34 44.3** | **-0.3** |
| UPC | | | | *e*pP | **sP** | **18 34 51.1** | **+1.2** |
| **UPC** | **Upice** | **93.06** | **330** | *e*P | **P** | **18 34 44.3** | **-0.3** |
| UPC | | | | *e* | | 18 34 51.1 | |
| **JAVC** | **Velka Javorina** | **93.38** | **328** | *e*P | **P** | **18 34 46.4** | **+0.2** |
| **ECSD** | **EROS Data Cent** | **93.44** | **39** | IAmb | IAmb | 18 36 24.4 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **ECSD** | **EROS Data Cent** | **93.44** | **39** | P | **P** | **18 34 46.1** | **-0.4** |
| | baz=307 | | | | | | |
| **EIL** | **Elat** | **93.45** | **304** | P | **P** | **18 34 46.2** | **-0.6** |
| | comp=Z,5.6nm,0.7s,baz=54,slow=4.9,SNR=5.8 | | | | | | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **EYMN** | **Ely** | **93.56** | **33** | P | **P** | **18 34 47.3** | **+0.3** |
| | baz=311 | | | | | | |
| **VRAC** | **Vranov** | **93.60** | **328** | *e*P | **P** | **18 34 46.3** | **-0.9** |
| **VRAC** | **Vranov** | **93.60** | **328** | ⇓P | **P** | **18 34 45.4** | **-1.8** |
| **VRAC** | **Vranov** | **93.60** | **328** | ⇓P | **P** | **18 34 45.4** | **-1.8** |
| **BRG** | **Berggiesshubel** | **93.75** | **331** | *e*P | **P** | **18 34 49.3** | **+1.5** |
| BRG | | | | Amp | | 18 34 52.4 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **93.75** | **331** | P | **PKiKP** | **18 39 30.8** | **-2.1** |
| BRG | | | | Amp | | 18 39 36.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| BRG | | | | Amp | | 18 39 59.6 | |
| | comp=Z,79nm,1.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **93.75** | **331** | PP | **PP** | **18 38 34.0** | **+1.7** |
| **CLL** | **Collm** | **93.86** | **331** | *e*P | **P** | **18 34 47.0** | **-1.3** |
| | comp=Z,30nm,1.3s | | | | | | |
| CLL | | | | *e*PP | **PP** | **18 38 34.0** | **+0.9** |
| | comp=Z,57nm,1.6s | | | | | | |
| CLL | | | | *e*S | **S** | **18 46 00.0** | **+2.6** |
| CLL | | | | *e*SS | **SS** | **18 52 12.0** | **-3.0** |
| CLL | | | | *e*x | x | 18 56 24.0 | |
| **CLL** | **Collm** | **93.86** | **331** | *i* P | **P** | **18 34 46.6** | **-1.7** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| **KRUC** | **Moravsky** | **93.86** | **328** | *e*P | **P** | **18 34 47.4** | **-0.9** |
| **MNTX** | **Cornudas Mount** | **94.34** | **53** | P | **P** | **18 34 50.6** | **-0.4** |
| | baz=301 | | | | | | |
| **CBKS** | **Cedar Bluff** | **94.40** | **44** | P | **P** | **18 34 50.9** | **-0.2** |
| | baz=305 | | | | | | |
| **L34A** | **Svendsen Farm,** | **94.64** | **40** | IAmb | IAmb | 18 36 26.2 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **ZVC** | **Zvikov** | **94.65** | **330** | *e*P | **P** | **18 34 50.9** | **-1.0** |
| ZVC | | | | *e*pP | **sP** | **18 34 56.6** | **-0.6** |
| **RONA** | **Rosalia, Austr** | **94.84** | **327** | *e*PcP | **P** | **18 34 52.0** | **-0.9** |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **95.03** | **329** | *e*P | **P** | **18 34 51.2** | **-2.5** |
| CKRC | | | | *ex* | x | 18 34 58.3 | |
| **CKRC** | **Cesky Krumlov** | **95.03** | **329** | *e*P | **P** | **18 34 50.9** | **-2.8** |
| CKRC | | | | *e* | | 18 34 56.6 | |
| **ATD** | **Arta Tunnel** | **95.06** | **285** | *e*P | **P** | **18 34 56.8** | **+2.2** |
| ATD | | | | *e*S | SKSac | 18 45 11.2 | -19 |
| **KHC** | **Kasperske Hory** | **95.15** | **330** | *e*P | **P** | **18 34 53.5** | **-0.8** |
| KHC | | | | *e*pP | **pP** | **18 34 58.3** | **+0.1** |
| KHC | | | | *e*PP | **PP** | **18 38 41.5** | **-1.8** |
| KHC | | | | *ex* | x | 18 40 01.6 | |
| **KHC** | **Kasperske Hory** | **95.15** | **330** | ⇑*i*P | **P** | **18 34 52.6** | **-1.7** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,43nm,2.5s | | | | | | |
| **AMTX** | **Amarillo** | **95.30** | **49** | P | **P** | **18 34 55.5** | **+0.2** |
| | baz=303 | | | | | | |
| **GERES** | **GERESS Array B** | **95.30** | **329** | P | **P** | **18 34 52.7** | **-2.3** |
| **GERES** | **GERESS Array B** | **95.30** | **329** | P | **P** | **18 34 54.2** | **-0.9** |
| | comp=Z,1.9nm,0.8s,baz=153,slow=8.8,SNR=5.9 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **95.30** | **329** | P | **P** | **18 34 52.7** | **-2.3** |
| **ARSA** | **Arzberg** | **95.53** | **327** | *e*PcP | **PcP** | **18 34 57.2** | **+0.9** |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **MOA** | **Molln** | **95.73** | **328** | *e*PcP | **P** | **18 34 55.8** | **-1.2** |
| | comp=Z,3.5nm,0.9s | | | | | | |
| MOA | | | | *e*PP | **PP** | **18 38 47.3** | **-0.5** |
| | comp=Z,11nm,1.1s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **96.14** | **329** | *e*PcP | **PcP** | **18 35 00.3** | **+1.3** |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **KSU1** | **Kansas State U** | **96.22** | **43** | P | **P** | **18 34 57.7** | **-1.6** |
| **KSU1** | **Kansas State U** | **96.22** | **43** | P | **P** | **18 34 59.2** | **-0.1** |
| | baz=307 | | | | | | |
| **OBKA** | **Obir** | **96.52** | **327** | *e*PKKP | **PKKPbc** | **18 51 46.1** | **+0.6** |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **96.59** | **342** | P | **P** | **18 35 00.6** | **0.0** |
| | comp=Z,0.6nm,0.6s,baz=197,slow=26,SNR=2.0 | | | | | | |
| EKA | | | | PP | **PP** | **18 38 55.2** | **+1.1** |
| | comp=Z,7.9nm,0.8s,baz=31,slow=6.2,SNR=6.3 | | | | | | |
| EKA | | | | PKKP | **PKKPdf** | **18 51 43.4** | **-2.0** |
| | comp=Z,1.1nm,0.7s,baz=233,slow=3.6,SNR=3.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **LESA** | **Schwarzleotal** | **96.79** | **329** | *e*PKKP | **PKKPbc** | **18 51 44.8** | **0.0** |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **96.83** | **54** | P | **P** | **18 35 00.7** | **-1.7** |
| **TXAR** | **Lajitas Array** | **96.83** | **54** | P | **P** | **18 35 02.5** | **+0.1** |
| | comp=Z,0.8nm,0.8s,baz=39,slow=2.8,SNR=3.3 | | | | | | |
| TXAR | | | | PKKP | **PKKPbc** | **18 51 43.8** | **-0.4** |
| | comp=Z,2.4nm,0.8s,baz=131,slow=5.6,SNR=12 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **96.83** | **54** | P | **P** | **18 35 00.7** | **-1.7** |
| **ABTA** | **Abfaltersbach** | **97.35** | **328** | *e*PKKP | **PKKPbc** | **18 51 42.3** | **-0.9** |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **WMOK** | **Wichita Mounta** | **97.35** | **47** | P | **P** | **18 35 04.4** | **-0.2** |
| | baz=305 | | | | | | |
| **WTTA** | **Wattenberg** | **97.40** | **329** | *e*P | **P** | **18 35 03.1** | **-1.6** |
| | comp=Z,6.4nm,1.5s | | | | | | |
| WTTA | | | | *e*PP | **PP** | **18 38 58.5** | **-2.3** |
| WTTA | | | | *e*PKKP | **PKKPbc** | **18 51 42.2** | **-1.1** |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **97.55** | **37** | P | **P** | **18 35 05.1** | **-0.2** |
| | baz=312 | | | | | | |
| **RETA** | **Reutte** | **97.64** | **330** | *e*PKKP | **PKKPbc** | **18 51 41.4** | **-1.1** |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **98.00** | **330** | *e*PKKP | **PKKPbc** | **18 51 40.2** | **-1.4** |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **JCT** | **Junction City** | **99.04** | **51** | Pdiff | **Pdif** | **18 35 11.8** | **-0.5** |
| | baz=304 | | | | | | |
| **FURI** | **Furi** | **99.89** | **284** | *e*P | **Pdif** | **18 35 24.2** | **+7.6** |
| FURI | | | | *e*S | **SKSac** | **18 45 50.1** | **-5.5** |
| **VLC** | **Villacollemand** | **100.26** | **328** | PP | PKiKP | 18 39 27.6 | -17 |
| **VNDA** | **Vanda** | **101.27** | **176** | P | **Pdif** | **18 35 20.8** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=314,slow=5.8,SNR=4.9 | | | | | | |
| **CEL** | **Celeste** | **101.43** | **320** | Pdif | **Pdif** | **18 35 20.1** | **-2.7** |
| **ESDC** | **Sonseca Array** | **110.30** | **334** | PP | **PP** | **18 40 31.4** | **-5.4** |
| | comp=Z,5.3nm,1.0s,baz=22,slow=6.3,SNR=7.7 | | | | | | |
| ESDC | | | | PKKPbc | **PKKPbc** | **18 51 05.6** | **+1.1** |
| | comp=Z,0.9nm,0.9s,baz=236,slow=3.1,SNR=5.1 | | | | | | |
| ESDC | | | | PKKPab | **PKKPab** | **18 51 17.6** | **+0.2** |
| | comp=Z,4.4nm,0.9s,baz=218,slow=4.5,SNR=12 | | | | | | |
| **QSPA** | **South Pole Qui** | **113.17** | **180** | PP | **PP** | **18 40 58.1** | **+0.2** |
| | comp=Z,1.8nm,0.5s,baz=348,slow=4.1,SNR=3.1 | | | | | | |
| **LSZ** | **Lusaka** | **118.85** | **265** | PKPdf | **PKPdf** | **18 40 19.4** | **-0.9** |
| **ELIB** | **Princess Elisa** | **121.26** | **198** | *d*PKPdf | **PKPdf** | **18 40 22.8** | **-0.5** |
| ELIB | | | | *d*SKP | | 18 43 32.8 | |
| **LBTB** | **Lobatse** | **123.79** | **255** | PKPdf | **PKPdf** | **18 40 27.7** | **-1.8** |
| **LBTB** | **Lobatse** | **123.79** | **255** | PKIKP | **PKPdf** | **18 40 27.7** | **-1.8** |
| **BOSA** | **Boshof** | **124.78** | **251** | PKP | **PKPdf** | **18 40 30.4** | **-0.9** |
| | comp=Z,9.0nm,0.9s,baz=100,slow=3.8,SNR=8.0 | | | | | | |
| **NVL** | **N'lazarevskaya** | **125.09** | **198** | ⇑*e*PKIKP | **PKPdf** | **18 40 29.4** | **-1.0** |
| NVL | | | | *e*PPP | PPP | 18 45 03.9 | |
| NVL | | | | *e* | | 18 47 39.2 | |
| NVL | | | | *e*SP | SP | 18 52 16.5 | -0.3 |
| NVL | | | | *e*PS | **PS** | **18 52 17.3** | **-3.0** |
| NVL | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,5μm,19.0s | | | | | | |
| **TROLL** | **Troll, Antarti** | **126.65** | **194** | ⇑PKPdf | **PKPdf** | **18 40 32.9** | **-0.8** |
| | comp=Z,890nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.90** | **310** | PKPdf | **PKPdf** | **18 40 35.2** | **-2.3** |
| **TORD** | **Torodi Ar. Bea** | **127.90** | **310** | PKP | **PKPdf** | **18 40 36.8** | **-0.8** |
| | comp=Z,4.7nm,0.8s,baz=47,slow=3.3,SNR=15 | | | | | | |
| **SNAA** | **Sanae** | **128.05** | **193** | ⇑PKPdf | **PKPdf** | **18 40 35.3** | **-0.9** |
| | comp=Z,124nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **128.05** | **193** | PKP | **PKPdf** | **18 40 35.5** | **-0.8** |
| | comp=Z,6.2nm,0.8s,baz=183,slow=2.9,SNR=18 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **129.54** | **192** | ⇑PKPdf | **PKPdf** | **18 40 38.4** | **-0.6** |
| | comp=Z,30nm,1.0s,baz=159,slow=1.6 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **129.69** | **191** | ⇑PKPdf | **PKPdf** | **18 40 37.0** | **-2.2** |
| | comp=Z,17nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **129.94** | **192** | ⇑PKPdf | **PKPdf** | **18 40 38.8** | **-0.8** |
| | comp=Z,10nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **133.70** | **50** | PKPdf | **PKPdf** | **18 40 46.7** | **-2.1** |
| **DBIC** | **Dimbokro** | **137.01** | **310** | PKP | **PKPdf** | **18 40 55.1** | **+0.4** |
| | comp=Z,8.4nm,0.8s,baz=129,slow=1.4,SNR=6.2 | | | | | | |
| **TIC** | **Toumodi** | **137.15** | **310** | ⇑*i*PKIKP | **PKiKP** | **18 40 56.3** | **-0.6** |
| | comp=Z,3.2nm,0.2s | | | | | | |
| **KIC** | **Kosan Boka** | **137.15** | **310** | ⇑*i*PKIKP | **PKiKP** | **18 40 56.4** | **-0.5** |
| | comp=Z,9.6nm,0.6s | | | | | | |
| **LIC** | **Lamto** | **137.45** | **310** | ⇓*i*PKIKP | **PKiKP** | **18 40 56.7** | **-0.8** |
| | comp=Z,28nm,0.7s | | | | | | |
| **BOAV** | **Boa Vista** | **145.29** | **46** | | **PKPbc** | **18 41 08.1** | **-1.2** |
| **PLCA** | **Paso Flores** | **146.62** | **129** | PKPbc | **PKPbc** | **18 41 13.0** | **+0.3** |
| | comp=Z,36nm,0.8s,baz=229,slow=5.0,SNR=39 | | | | | | |
| **EFI** | **East Falkland** | **147.23** | **155** | PKPdf | **PKPdf** | **18 41 10.0** | **-1.7** |
| EFI | | | | PKPbc | **PKPbc** | **18 41 13.7** | **-0.2** |
| **EFI** | **East Falkland** | **147.23** | **155** | PKIKP | **PKPdf** | **18 41 10.0** | **-1.7** |
| EFI | | | | | | 18 41 13.7 | |
| **MDP** | **Montagnes des** | **147.59** | **31** | PKPbc | **PKPbc** | **18 41 15.8** | **-0.3** |
| | comp=Z,53nm,0.9s,baz=299,slow=3.1,SNR=18 | | | | | | |
| **MT01** | **Popeta** | **147.89** | **117** | PKPdf | **PKPdf** | **18 41 10.8** | **-2.6** |
| MT01 | | | | | **PKPbc** | **18 41 16.5** | **+0.1** |
| **BO01** | **Tunca** | **147.93** | **118** | | **PKPbc** | **18 41 15.7** | **-0.7** |
| **CO02** | **Combarbal** | **148.46** | **112** | | **PKPdf** | **18 41 15.4** | **+0.8** |
| **ETMB** | **Extrema** | **148.57** | **70** | PKPdf | **PKPdf** | **18 41 11.9** | **-3.2** |
| **PB18** | **Visviri** | **148.61** | **86** | PKPdf | **PKPdf** | **18 41 12.7** | **-3.0** |
| PB18 | | | | PKPbc | **PKPbc** | **18 41 18.2** | **-1.1** |
| **VA03** | **San Esteban** | **148.64** | **115** | | **PKPdf** | **18 41 13.1** | **-1.7** |
| VA03 | | | | PKPbc | **PKPbc** | **18 41 18.2** | **-0.3** |
| **TA02** | **Huaiquique** | **148.66** | **91** | | **PKPdf** | **18 41 12.0** | **-3.0** |
| **MT13** | **San Alfonso** | **148.70** | **117** | PKPdf | **PKPdf** | **18 41 12.4** | **-2.5** |
| MT13 | | | | PKPbc | **pPKPdf** | **18 41 18.8** | **0.0** |
| **LMEL** | **Las Melosas** | **148.75** | **117** | | **PKPbc** | **18 41 17.9** | **-0.

comp=N,135nm,0.9s
**JHCJ Hachijojimakas 10.22 342** A A 18 25 23.5
comp=E,42nm,9.8s,comp=N,61nm,12.1s
**JHJ2 Mitsune 10.25 342** Pn **Pn 18 25 16.9 -3.1**
**JHJ2 Mitsune 10.25 342** A A 18 25 24.0
comp=E,59nm,11.6s,comp=N,54nm,14.6s
**JHJ Hachijo jima 2 10.27 342** P **Pn 18 25 20.8 +0.5**
comp=N,19nm,0.3s,baz=64,slow=22,SNR=2.0
JHJ S **Sn 18 27 08.4 -6.2**
comp=N,191nm,0.5s,baz=243,slow=18,SNR=1.5
JHJ LR LR 18 28 34.7
comp=N,75µm,19.7s,baz=164,slow=33
comp=N,155nm,0.3s
**JMKN Mikurajimanish 11.05 343** A A 18 25 34.6
comp=E,70nm,12.3s,comp=N,43nm,14.1s
**JMYK Miyake Tsubota 11.22 343** A A 18 25 36.9
comp=E,66nm,13.2s,comp=N,59nm,11.3s
**JKDJ Kitadaitoujima 11.38 286** A A 18 25 40.2
comp=E,74nm,13.1s,comp=N,57nm,10.8s
**JMZ Minamidaito 2 11.42 285** P Pn 18 25 42.5 +6.5
**JMZ Minamidaito 2 11.42 285** Pn **Pn 18 25 31.6 -4.4**
**JMZ Minamidaito 2 11.42 285** *e*P **Pn 18 25 40.7 +4.6**
**JMZ Minamidaito 2 11.42 285** A A 18 25 40.7
comp=E,73nm,14.5s,comp=N,71nm,14.7s
**JKO Kozu shima 11.46 342** *e*P **Pn 18 25 36.9 +0.4**
**JKO Kozu shima 11.46 342** A A 18 25 36.9
comp=E,68nm,11.0s,comp=N,59nm,19.4s
**JSKK Shikinejimakit 11.57 342** A A 18 25 41.6
comp=E,49nm,9.8s,comp=N,30nm,13.8s
**JNIO Niijimaoohara 11.57 342** A A 18 25 41.6
comp=E,46nm,25.4s,comp=N,39nm,13.4s
**JTHY Toshimahigashi 11.73 343** A A 18 25 43.7
comp=E,45nm,12.6s,comp=N,57nm,13.3s
**TTO3 TONANKAI O.B.S 11.76 334** A A 18 25 43.9
comp=E,101nm,14.8s,comp=N,84nm,11.5s
**TTO2 TONANKAI O.B.S 11.80 333** A A 18 25 44.4
comp=E,108nm,15.1s,comp=N,133nm,13.4s
**TTO1 TONANKAI O.B.S 11.81 332** A A 18 25 44.5
comp=E,92nm,13.5s,comp=N,105nm,12.4s
**TTO4 TONANKAI O.B.S 11.83 335** A A 18 25 44.9
comp=E,67nm,11.9s,comp=N,65nm,12.9s
**JIM2 Oshima 3 11.87 344** A A 18 25 45.7
comp=E,48nm,12.8s,comp=N,44nm,13.4s
**TTO5 TONANKAI O.B.S 11.98 336** A A 18 25 46.9
comp=E,64nm,12.5s,comp=N,62nm,14.3s
**JIZS Izushimoda 12.03 342** A A 18 25 47.6
comp=E,39nm,12.1s,comp=N,39nm,12.9s
**TATJ Tateyama 2 12.06 346** A A 18 25 48.2
comp=E,94nm,12.6s,comp=N,100nm,13.4s
**JKUC kamogawauchiur 12.12 347** A A 18 25 49.0
comp=E,46nm,15.3s,comp=N,55nm,15.0s
**JWKM Wakayamakushim 12.14 328** A A 18 25 48.9
comp=E,14nm,14.9s,comp=N,19nm,15.0s
**JSG Sagara 12.20 339** P **Pn 18 25 49.1 +2.4**
**JSG Sagara 12.20 339** **Pn 18 25 42.2 -4.5**
**JSG Sagara 12.20 339** A A 18 25 49.9
comp=E,77nm,13.7s,comp=N,54nm,18.0s
**JHTM Izuhatsuma 12.21 342** A A 18 25 50.1
comp=E,48nm,11.5s,comp=N,46nm,13.4s
**JYO Yokosk 12.30 345** A A 18 25 51.3
comp=E,76nm,12.9s,comp=N,71nm,14.8s
**JMMH Miemihama 12.32 330** A A 18 25 51.2
comp=E,16nm,15.6s,comp=N,18nm,19.2s
**JKKS Kakegawashinom 12.34 338** A A 18 25 51.6
comp=E,75nm,13.8s,comp=N,59nm,14.2s
**JCN Nagara 12.37 347** A A 18 25 52.3
comp=E,130nm,11.6s,comp=N,110nm,15.2s
**JOD2 Odawara 2 12.48 343** A A 18 25 53.7
comp=E,36nm,15.3s,comp=N,50nm,14.1s
**JIE Ise 12.50 333** A A 18 25 53.8
comp=E,22nm,14.3s,comp=N,27nm,19.7s
**HMMJ Hamamatsu 2 12.52 338** A A 18 25 54.1
comp=E,44nm,13.5s,comp=N,32nm,12.6s
**JFNN Fujinakano 12.53 342** A A 18 25 54.2
comp=E,31nm,20.8s,comp=N,52nm,13.3s
**JAA Atsumi 12.54 335** A A 18 25 54.2
comp=E,15nm,13.7s,comp=N,20nm,13.5s
**JSMT Sammumatsuo 12.54 349** A A 18 25 54.6
comp=E,89nm,18.2s,comp=N,65nm,8.2s
**JKN2 Miekihoku 12.55 331** A A 18 25 54.4
comp=E,11nm,15.2s,comp=N,15nm,14.2s
**JSSY Shinshiroyabe 12.65 337** A A 18 25 55.7
comp=E,33nm,12.3s,comp=N,29nm,13.4s
**JWM Minabe 12.66 328** *e*P **Pn 18 25 53.9 +0.9**
**JWM Minabe 12.66 328** A A 18 25 53.9
comp=E,8.0nm,15.5s,comp=N,11nm,15.7s
**TOK Tokyo 12.72 346** A A 18 25 56.9
comp=E,87nm,10.8s,comp=N,71nm,11.8s
**JNTK Naratenkawa 12.76 330** A A 18 25 57.0
comp=E,11nm,10.1s,comp=N,21nm,17.4s
**JSGW Sagamiharawaka 12.77 344** A A 18 25 57.4
comp=E,18nm,15.5s,comp=N,34nm,15.9s
**TSUJ Tsu 2 12.89 338** A A 18 25 58.9
comp=E,23nm,13.2s,comp=N,33nm,16.7s
**JNY Yasuok 12.93 339** A A 18 25 59.5
comp=E,34nm,17.3s,comp=N,27nm,13.1s
**MRT2 Murotomisaki 2 12.94 323** A A 18 25 59.5
comp=E,10.0nm,15.0s,comp=N,15nm,16.4s
**JHU Hanno 12.99 345** A A 18 26 00.4
comp=E,21nm,15.5s,comp=N,24nm,14.3s
**JAO Obara 13.06 337** A A 18 26 01.1
comp=E,28nm,12.1s,comp=N,30nm,14.8s
**JAI Aioi 13.08 325** A A 18 26 01.3
comp=E,17nm,13.0s,comp=N,17nm,16.0s
**JZK Kikaishima 13.13 295** A A 18 26 02.8
comp=E,61nm,18.2s,comp=N,27nm,10.4s
**JHE Heguri 13.17 331** A A 18 26 02.4
comp=E,15nm,14.7s,comp=N,26nm,18.1s
**INU Inuyama 13.22 336** P **Pn 18 26 01.0 +0.4**
**INU Inuyama 13.22 336** Pn **Pn 18 25 58.0 -2.5**
**INU Inuyama 13.22 336** ⇑P **Pn 18 26 00.6 0.0**
**JMTN Minamitane 13.24 305** A A 18 26 03.7
comp=E,21nm,19.4s,comp=N,17nm,16.5s
**JRY Ryogami san 13.24 344** A A 18 26 03.6
comp=E,22nm,12.3s,comp=N,14nm,16.0s
**JEG Eigenji 13.27 334** A A 18 26 03.9
comp=E,12nm,14.2s,comp=N,37nm,16.9s
**JGF Kuroka 13.32 338** P **Pn 18 26 03.1 +1.0**
**JGF Kuroka 13.32 338** Pn **Pn 18 25 59.4 -2.7**
**JGF Kuroka 13.32 338** ⇓P **Pn 18 26 03.2 +1.2**
**JGF Kuroka 13.32 338** A A 18 26 04.6
comp=E,28nm,14.1s,comp=N,19nm,14.5s
**JMN Monobe 13.34 323** P **Pn 18 26 04.7 +2.4**
**JMN Monobe 13.34 323** Pn **Pn 18 25 59.0 -3.3**
**JMN Monobe 13.34 323** ⇑P **Pn 18 26 05.4 +3.1**
**JMN Monobe 13.34 323** A A 18 26 04.7
comp=E,11nm,16.8s,comp=N,17nm,12.9s
**JTO Tosashimizu 13.36 318** *e*P **Pn 18 26 05.2 +2.7**
**JTO Tosashimizu 13.36 318** A A 18 26 05.2
comp=E,11nm,13.3s,comp=N,22nm,11.2s
**JAM Amami Oshima 13.47 295** A A 18 26 07.2
comp=E,18nm,17.9s,comp=N,10.0nm,18.9s
**JMIK Miki 13.58 329** A A 18 26 07.9
comp=E,11nm,11.2s,comp=N,23nm,13.5s
**JTSR Tashiro 2 13.61 308** A A 18 26 08.5
comp=E,10.0nm,18.3s,comp=N,9.0nm,10.6s
**UWA2 Uwa jima 2 13.71 318** A A 18 26 09.5
comp=E,16nm,10.7s,comp=N,16nm,13.7s
**JNN Nakanoshima 13.78 301** A A 18 26 10.9
comp=E,15nm,12.2s,comp=N,13nm,14.1s
**JFM Mihama 13.78 333** A A 18 26 10.5
comp=E,16nm,13.6s,comp=N,31nm,17.7s
**JKC Kuchinoerabu 13.80 304** A A 18 26 11.1
comp=E,16nm,19.1s,comp=N,11nm,14.0s
**JTSN Tsumo 13.81 313** A A 18 26 10.9
comp=E,12nm,11.2s,comp=N,8.0nm,11.4s
**JGK Kuni 13.82 343** A A 18 26 11.2
comp=E,28nm,14.7s,comp=N,22nm,13.3s
**JNG Nsakai 13.83 342** *e*P **Pn 18 26 07.7 -1.3**
**JNG Nsakai 13.83 342** A A 18 26 07.7
comp=E,25nm,12.1s,comp=N,18nm,14.2s
**ONAJ Iwakimizuishiy 13.91 351** A A 18 26 12.6
comp=E,32nm,16.1s,comp=N,26nm,13.7s
**MJAR Matsushiro Arr 13.92 342** P **Pn 18 26 08.4 -1.8**
comp=N,93nm,0.8s,baz=177,slow=13,SNR=8.6
MJAR LR LR 18 30 52.4
comp=N,94µm,18.3s,baz=172,slow=34
MJAR ScP **ScP 18 35 03.0 -0.2**
comp=N,17nm,1.1s,baz=157,slow=3.1,SNR=7.2
**MAJO Matsushiro 13.92 342** P **Pn 18 26 13.5 +3.3**
**MAJO Matsushiro 13.92 342** Pn **Pn 18 26 07.2 -3.0**
**MAJO Matsushiro 13.92 342** *e*P **Pn 18 26 08.7 -1.5**
MAJO MLR MLR
comp=Z,114µm,15.0s
**MJB9 Matsu-Tunnel 13.93 342** Pn **Pn 18 26 07.1 -3.1**
**JFFD Fukushimafurud 13.93 350** A A 18 26 12.8
comp=E,20nm,11.6s,comp=N,17nm,12.0s

**JFK Kawauchi 14.16 351** A A 18 26 15.8
comp=E,31nm,13.3s,comp=N,26nm,14.6s
**JOW Kunigami 14.21 287** P **P 18 26 21.7 +0.4**
**JOW Kunigami 14.21 287** Pn **Pn 18 26 09.8 -4.3**
**JOW Kunigami 14.21 287** ⇓P **P 18 26 22.5 +1.2**
**JOW Kunigami 14.21 287** P **P 18 26 18.5 -2.8**
comp=N,76nm,1.0s,baz=110,slow=10,SNR=1.0
JOW LR LR 18 31 19.6
comp=N,277µm,19.6s,baz=100,slow=36
**JOW Kunigami 14.21 287** A A 18 26 17.2
comp=E,18nm,15.1s,comp=N,10.0nm,12.7s
**JKY Yasaka 14.24 331** A A 18 26 16.4
comp=E,12nm,17.7s,comp=N,23nm,12.4s
**JNTH Nagotoyohara 14.37 286** A A 18 26 19.4
comp=E,16nm,22.3s,comp=N,13nm,14.4s
**JJN Nakama 14.46 343** A A 18 26 19.4
comp=E,37nm,21.2s,comp=N,22nm,16.9s
**JMM Marumori 14.66 352** P **Pn 18 26 20.7 +0.5**
**JMM Marumori 14.66 352** Pn **Pn 18 26 16.9 -3.4**
**JJH Hakui 14.72 338** A A 18 26 22.6
comp=E,26nm,14.8s,comp=N,21nm,15.6s
**JNU Nakatsue 14.76 314** P **P 18 26 26.3 -1.1**
**JNU Nakatsue 14.76 314** **Pn 18 26 17.3 -4.4**
**JNU Nakatsue 14.76 314** ⇓P **P 18 26 31.5 +4.1**
**JNU Nakatsue 14.76 314** P **Pn 18 26 22.0 +0.3**
comp=N,1.2nm,0.3s,baz=116,slow=8.8,SNR=2.7
JNU LR LR 18 31 47.8
comp=N,76µm,18.8s,baz=130,slow=36
comp=N,110nm,0.8s
**JGT2 ShimaneMisato 15.09 323** A A 18 26 27.3
comp=E,15nm,17.2s,comp=N,13nm,14.6s
**JSD Sado 15.31 344** Pn **Pn 18 26 24.1 -4.9**
**JOM Ohasama 16.19 354** A A 18 26 41.9
comp=E,19nm,14.6s,comp=N,14nm,15.9s
**JTU Tsushima 16.59 315** P **P 18 26 49.7 +2.0**
**JTU Tsushima 16.59 315** ⇓P **P 18 26 50.0 +2.3**
**JMJ Miyako jima 2 16.67 279** P **P 18 26 51.8 +3.1**
**JTM Tenmabayashi 17.51 354** P **P 18 27 02.1 +4.3**
**JTM Tenmabayashi 17.51 354** P **Pn 18 26 54.9 -1.9**
**ERM Erimo 18.62 359** P **Pn 18 27 15.4 +4.9**
**ERM Erimo 18.62 359** P **P 18 27 08.0 -2.0**
**JEM Erimo 18.62 359** P **Pn 18 27 15.3 +4.8**
**YOJ Yonaguni jima 18.75 278** P **Pn 18 27 16.4 +4.3**
**YOJ Yonaguni jima 18.75 278** P **P 18 27 08.4 -3.2**
YOJ IAmb IAmb 18 27 21.1
comp=Z,1µm,1.0s
**YOJ Yonaguni jima 18.75 278** ⇓P Pn 18 27 19.7 +7.6
**YOJ Yonaguni jima 18.75 278** P **P 18 27 08.4 -3.2**
YOJ pmax pmax
comp=Z,1µm,1.0s
**TJN Taejon 19.05 317** P **Pn 18 27 16.3 +0.7**
**TJN Taejon 19.05 317** P **P 18 27 12.1 -2.6**
**TJN Taejon 19.05 317** ⇓P **P 18 27 14.9 +0.2**
**KSRS Korea Array 19.40 320** P **Pn 18 27 19.3 -0.6**
comp=Z,4.5nm,0.3s,baz=132,slow=12,SNR=16
KSRS LR LR 18 34 43.0
comp=Z,123µm,18.2s,baz=130,slow=36
KSRS ScP **ScP 18 35 14.5 +0.5**
comp=Z,25nm,1.1s,baz=138,slow=2.2,SNR=11
comp=Z,209nm,0.8s
**KSAR Wonju Array Be 19.41 320** P **P 18 27 17.0 -1.8**
**KSAR Wonju Array Be 19.41 320** P **P 18 27 17.0 -1.8**
**KS19 Wonju Array Si 19.46 320** P **P 18 27 17.6 -1.8**
**NACB Ninganchiao 20.05 277** P Pn 18 27 32.9 +5.2
**NACB Ninganchiao 20.05 277** P **P 18 27 24.0 -1.8**
**TATO Taipei 20.13 279** P Pn 18 27 31.9 +3.2
**TATO Taipei 20.13 279** P **P 18 27 23.7 -3.0**
**INCN Inchon 20.20 318** P Pn 18 27 30.1 +0.7
**INCN Inchon 20.20 318** P **P 18 27 24.4 -3.0**
**INCN Inchon 20.20 318** ⇓P Pn 18 27 31.0 +1.7
**INCN Inchon 20.20 318** P **P 18 27 24.4 -3.0**
INCN pmax pmax
comp=Z,358nm,1.1s
INCN MLR MLR
comp=Z,78µm,19.0s
**YHNB Yeheng 20.23 278** P Pn 18 27 34.5 +4.5
**YHNB Yeheng 20.23 278** P **P 18 27 25.2 -2.8**
**YULB Yu-li 20.36 275** P Pn 18 27 34.3 +2.9
**YULB Yu-li 20.36 275** P **P 18 27 26.4 -2.9**
YULB IAMs_20 IAMs_20 18 33 40.9
comp=Z,122µm,22.0s
**TWGBT Beinan 20.61 273** P Pn 18 27 36.9 +2.6
**TWG Pinlang 20.62 273** P **P 18 27 29.4 -2.6**
TWG IAMs_20 IAMs_20 18 33 33.6
comp=Z,155µm,22.0s
**SSLB Suanglung 20.65 276** P Pn 18 27 38.5 +3.7
**SSLB Suanglung 20.65 276** P **P 18 27 30.8 -1.6**
SSLB IAMs_20 IAMs_20 18 34 04.5
comp=Z,151µm,21.0s
**JKA Kamikawa-asahi 20.73 358** P **P 18 27 31.9 -1.2**
**ASAJ Asahikawa 20.73 358** P **P 18 27 34.2 +1.1**
comp=Z,117nm,0.9s,baz=222,slow=13,SNR=2.4
ASAJ LR LR 18 38 32.1
comp=Z,23µm,19.2s,baz=201,slow=45
comp=Z,117nm,0.9s
**ASAJ Asahikawa 20.73 358** P **P 18 27 31.9 -1.2**
ASAJ pmax pmax
comp=Z,2µm,1.8s
ASAJ MLR MLR
comp=Z,92µm,22.0s
**TPUB Ta-pu 20.98 274** P Pn 18 27 41.3 +2.6
**TPUB Ta-pu 20.98 274** P **P 18 27 33.2 -2.8**
TPUB IAmb IAmb 18 27 47.8
comp=Z,2µm,1.7s
TPUB IAMs_20 IAMs_20 18 34 10.3
comp=Z,122µm,21.0s
**HJU Haeju 21.11 318** P **P 18 27 37.6 +0.5**
HJU S **S 18 31 30.2 -0.6**
HJU AmB
comp=Z,4µm,2.7s
HJU AMS AMS
comp=Z,68µm,17.9s
**SSE Sheshan 21.25 296** P **P 18 27 38.8 0.0**
SSE S **S 18 31 34.5 +0.8**
SSE pmax pmax
comp=Z,290nm,0.7s
SSE pmax pmax
comp=Z,8µm,12.0s
**PYAG Pyongyang 21.73 320** P **P 18 27 44.2 +0.4**
PYAG S **S 18 31 42.9 -0.2**
PYAG AmB
comp=Z,1µm,1.2s
PYAG AMS AMS
comp=Z,68µm,17.9s
**PATS Pohnpei 21.75 137** P **P 18 27 48.1 +3.9**
**PATS Pohnpei 21.75 137** P **P 18 27 44.7 +0.5**
**PATS Pohnpei 21.75 137** P **P 18 27 45.6 +1.5**
comp=Z,0.0nmcomp=Z,1µm,1.2s
**MSHR Mys Shultsa 21.75 335** *e*P **P 18 27 42.6 -1.4**
MSHR pmax pmax
comp=Z,222nm,0.9s
MSHR MLR MLR
comp=Z,78µm,16.0s
**PSTR Posyet 21.95 334** *e*P **P 18 27 45.2 -0.9**
**WAKE Wake Island 21.96 96** P **P 18 27 45.5 -0.9**
WAKE IAmb IAmb 18 27 59.5
comp=Z,990nm,1.4s
**H11N1 WAKE ISLAND Hy 22.07 95** P **P 18 27 52.3 +4.8**
baz=268,slow=12,SNR=14
H11N1 T T 18 50 25.4
baz=283,slow=74
**H11N2 WAKE ISLAND Hy 22.07 95** P **P 18 27 52.4 +4.9**
baz=268,slow=12,SNR=11
H11N2 T T 18 50 36.7
baz=283,slow=74
**H11N3 WAKE ISLAND Hy 22.09 95** P **P 18 27 52.5 +4.8**
baz=268,slow=12,SNR=13
H11N3 T T 18 50 44.0
baz=283,slow=74
**KUR Kuril'sk 22.13 8** *e*P **P 18 27 46.1 -2.0**
KUR *e* 18 28 08.1
KUR *e*S **S 18 31 50.6 +0.1**
KUR pmax pmax
comp=Z,1µm,1.4s
KUR pmax pmax
comp=N,279nm,1.5s
KUR pmax pmax
comp=E,258nm,0.7s
KUR MLR MLR
comp=Z,38µm,17.0s
KUR MLR MLR
comp=E,15µm,11.0s
KUR MLR MLR
comp=N,3µm,8.0s
**H11S3 WAKE ISLAND Hy 22.20 98** P P 18 28 02.0 +13
baz=9.5,slow=74,SNR=4.2
H11S3 T T 18 51 05.5
baz=283,slow=75
**H11S1 WAKE ISLAND Hy 22.21 98** P P 18 27 59.2 +10
SNR=6.5
H11S1 T T 18 50 37.8
baz=283,slow=74
**H11S2 WAKE ISLAND Hy 22.22 98** P P 18 27 58.4 +9.3
baz=199,slow=74,SNR=4.9
H11S2 T T 18 50 33.6
baz=283,slow=74
**QZH Quanzhou 22.76 279** P **P 18 27 54.8 -0.2**
QZH S **S 18 31 58.8 -3.5**
QZH pmax pmax
comp=N,420nm,1.6s
QZH pmax pmax
comp=N,20µm,10.3s
QZH LR LR
comp=N,20µm,15.8s
QZH LR LR
comp=N,145µm,21.3s
QZH LR LR
comp=N,162µm,20.6s
**USA0B Ussuriysk Arra 22.85 338** P **P 18 27 55.0 -0.7**
USA0B IAmb IAmb 18 28 03.8
comp=Z,691nm,1.1s
**USA0B Ussuriysk Arra 22.85 338** *e*P **P 18 27 53.6 -2.1**
**USRK Ussuriysk Ar. 22.85 338** P **P 18 27 56.5 +0.7**
comp=Z,257nm,0.8s,baz=159,slow=10.0,SNR=18
USRK LR LR 18 36 21.0
comp=Z,94µm,20.2s,baz=152,slow=35
comp=Z,257nm,0.8s
**KNMB Chin-men Tao 22.96 278** P **P 18 27 56.3 -0.8**
KNMB IAMs_20 IAMs_20 18 35 40.6
comp=Z,102µm,21.0s
**SUJ Sinuiju 23.16 321** P **P 18 27 58.8 -0.2**
SUJ S **S 18 32 08.6 -0.3**
SUJ AmB
comp=Z,812nm,1.0s
SUJ AMS AMS
comp=Z,75µm,18.1s
**NJ2 Nanjing 23.43 297** ⇑*i*P **P 18 28 01.4 -0.3**
NJ2 sP **sP 18 28 10.3 -0.2**
NJ2 S **S 18 32 12.8 -0.6**
NJ2 pmax pmax
comp=Z,160nm,0.9s
NJ2 pmax pmax
comp=Z,9µm,4.3s
NJ2 LR LR
comp=Z,32µm,15.9s
NJ2 LR LR
comp=Z,79µm,17.5s
NJ2 LR LR
comp=Z,94µm,17.5s
**YSS Yuzh-Sakhalins 23.57 359** P **P 18 28 08.2 +5.3**
**YSS Yuzh-Sakhalins 23.57 359** P **P 18 28 02.3 -0.6**
YSS IAmb IAmb 18 28 17.2
comp=Z,955nm,1.4s
**YSS Yuzh-Sakhalins 23.57 359** *e*P **P 18 28 04.3 +1.4**
YSS *e*S **S 18 32 15.0 -0.4**
YSS pmax pmax
comp=Z,8µm,4.1s
YSS pmax pmax
comp=N,6µm,3.8s
YSS pmax pmax
comp=E,2µm,3.8s
YSS pmax pmax
comp=Z,540nm,1.1s
YSS smax smax
comp=E,30µm,8.9s
YSS MLR MLR
comp=N,47µm,15.0s
**DAV Davao City (W) 23.62 230** P **P 18 28 08.5 +4.8**
**DAV Davao City (W) 23.62 230** P **P 18 28 02.9 -0.8**
**DAV Davao City (W) 23.62 230** LR LR 18 35 21.2
comp=N,190µm,21.5s,baz=62,slow=32
**MDJ Mudanjiang 24.08 335** P **P 18 28 10.2 +2.4**
**MDJ Mudanjiang 24.08 335** P **P 18 28 09.0 +1.2**
MDJ pP pP 18 28 11.3 -2.7
MDJ sP sP 18 28 13.6 -3.0
MDJ S **S 18 32 24.6 +1.0**
MDJ sS sS 18 32 33.3 -0.6
MDJ pmax pmax
comp=N,340nm,1.5s
MDJ pmax pmax
comp=N,21µm,4.4s
MDJ LR LR
comp=N,73µm,19.0s
MDJ LR LR
comp=N,48µm,18.5s
MDJ LR LR
comp=N,152µm,18.1s
**MDJ Mudanjiang 24.08 335** IAMs_20 IAMs_20 18 37 01.9
comp=Z,122µm,18.0s
**DL2 Dalian 24.21 315** P **P 18 28 08.0 -1.1**
DL2 S **S 18 32 27.0 +1.1**
DL2 pmax pmax
comp=Z,290nm,0.8s
DL2 pmax pmax
comp=Z,9µm,11.2s
DL2 LR LR
comp=Z,36µm,14.4s
DL2 LR LR
comp=Z,55µm,15.6s
DL2 LR LR
comp=Z,81µm,16.5s
**SNY Shenyang 24.82 323** ⇓P **P 18 28 14.8 +0.3**
SNY S S 18 32 24.4 -11
SNY pmax pmax
comp=Z,230nm,1.4s
SNY pmax pmax
comp=Z,7µm,4.5s
SNY LR LR
comp=Z,23µm,18.4s
SNY LR LR
comp=Z,45µm,17.8s
SNY LR LR
comp=Z,50µm,24.0s
**CN2 Changchun 25.24 328** ⇓P **P 18 28 18.8 +0.5**
CN2 *e*sP pP 18 28 25.8 +1.2
CN2 *e*S **S 18 32 41.0 -1.3**
CN2 pmax pmax
comp=Z,60nm,1.2s
CN2 pmax pmax
comp=Z,2µm,3.0s
CN2 LR LR
comp=Z,18µm,13.0s
CN2 LR LR
comp=Z,31µm,13.0s
CN2 LR LR
comp=Z,25µm,16.0s
**MANU Manus Island 25.51 171** P **P 18 28 20.6 -0.5**
**BNX BinXian 25.88 334** ⇓P **P 18 28 25.3 +1.2**
BNX pmax pmax
comp=Z,460nm,1.1s
**GENI Genyem 25.98 188** P **P 18 28 29.5 +4.2**
**TIA Tai'an 26.13 305** P **P 18 28 27.4 +0.8**
TIA S **S 18 32 55.0 -1.6**
TIA pmax pmax
comp=Z,570nm,0.8s
TIA pmax pmax
comp=Z,15µm,9.4s
TIA LR LR
comp=Z,36µm,17.1s
TIA LR LR
comp=Z,65µm,17.5s
TIA LR LR
comp=Z,57µm,18.0s
**SWI Sorong 26.84 208** P **P 18 28 33.6 +0.6**
**WHN Wuhan 26.89 292** ⇑P **P 18 28 36.5 +3.1**
WHN pP **pP 18 28 40.3 +0.6**
WHN S **S 18 33 15.3 +6.6**
WHN pmax pmax
comp=Z,3µm,1.9s
WHN pmax pmax
comp=Z,20µm,7.4s
WHN LR LR
comp=Z,78µm,13.1s
WHN LR LR
comp=Z,237µm,18.9s
WHN LR LR
comp=Z,270µm,17.9s
**HKC Hong Kong Obse 27.01 274** ⇑P **P 18 28 37.0 +2.4**
**HKPS Hong Kong Po S 27.04 274** P **P 18 28 40.7 +5.8**
**HKPS Hong Kong Po S 27.04 274** P **P 18 28 31.4 -3.5**
HKPS IAmb IAmb 18 28 55.6

comp=Z,886nm,1.6s
HKPS IAMs_20 IAMs_20 18 37 13.9
comp=Z,82µm,22.0s
**TNTI Ternate 27.35 217 P P 18 28 41.4 +3.7**
**TNTI Ternate 27.35 217 P P 18 28 35.7 -2.0**
TNTI IAmb IAmb 18 28 58.8
comp=Z,991nm,2.0s
**KLR Kul'dur 27.45 343 LR LR 18 39 58.5**
comp=Z,63µm,18.1s,baz=156,slow=37
**KLR Kul'dur 27.45 343** *c i* **P P 18 28 38.2 0.0**
KLR pmax pmax
comp=Z,398nm,0.8s
KLR MLR MLR
comp=Z,65µm,16.0s
**TYV Tymovskoe 27.48 359** *e* **P P 18 28 43.6 +5.1**
TYV pmax pmax
comp=Z,600nm,4.5s
TYV pmax pmax
comp=Z,109nm,1.1s
**MCO Taipa Grande 27.60 273 P P 18 28 40.0 +0.1**
**CNSH ChangSha 27.89 286 P P 18 28 44.4 +2.0**
CNSH S **S 18 33 30.3 +5.8**
CNSH pmax pmax
comp=Z,220nm,2.6s
CNSH LR LR
comp=Z,56µm,18.5s
CNSH LR LR
comp=Z,84µm,20.2s
CNSH LR LR
comp=Z,122µm,18.8s
**FAKI Fak Fak 28.30 204 P P 18 28 44.8 -1.4**
FAKI IAMs_20 IAMs_20 18 38 25.0
comp=Z,57µm,18.0s
**HNS HongShan 28.37 306** ⇑P **P 18 28 46.6 0.0**
HNS S **S 18 33 32.0 +0.1**
HNS ScP **ScP 18 35 37.9 -0.4**
HNS ScS **ScS 18 39 31.8 +0.6**
HNS pmax pmax
comp=Z,250nm,0.8s
HNS pmax pmax
comp=Z,10µm,11.4s
HNS LR LR
comp=Z,46µm,15.1s
HNS LR LR
comp=Z,73µm,15.2s
HNS LR LR
comp=Z,78µm,15.3s
**BJT Baijiatuau 28.42 312 P P 18 28 47.2 +0.2**
**BJT Baijiatuau 28.42 312 P P 18 28 44.1 -2.9**
BJT IAmb IAmb 18 29 04.4
comp=Z,468nm,1.8s
**BJT Baijiatuau 28.42 312 P P 18 28 44.1 -2.9**
BJT pmax pmax
comp=Z,468nm,1.8s
BJT MLR MLR
comp=Z,54µm,22.0s
**BJI Beijing 28.42 312 P P 18 28 46.4 -0.6**
BJI pmax pmax
comp=Z,3µm,11.1s
BJI LR LR
comp=Z,17µm,21.6s
BJI LR LR
comp=Z,12µm,21.5s
BJI LR LR
comp=Z,27µm,23.4s
**RABL Rabaul 28.65 162 P P 18 28 48.3 -1.0**
**SKR Severo-Kuril's 29.01 17** *e* **P P 18 28 52.5 +0.4**
**LYN LuoYang 29.23 299 P P 18 28 55.3 +0.9**
LYN pP pP 18 28 59.6 -1.1
LYN sP sP 18 29 02.9 -0.5
LYN PP **PnPn 18 29 49.3 +1.5**
LYN S **S 18 33 47.8 +2.2**
LYN pmax pmax
comp=Z,240nm,1.2s
LYN pmax pmax
comp=Z,10µm,8.7s
**HEH HeiHe 29.65 339 P P 18 28 57.8 0.0**
HEH sP **pP 18 29 02.9 -1.2**
HEH S **S 18 33 52.4 +0.7**
HEH sS **pS 18 33 58.3 -0.3**
HEH pmax pmax
comp=Z,680nm,0.9s
HEH pmax pmax
comp=Z,8µm,4.9s
HEH LR LR
comp=Z,73µm,18.9s
HEH LR LR
comp=Z,88µm,17.5s
HEH LR LR
comp=Z,153µm,18.6s
**NKL Nikolayevsk 29.84 357** *e* **P P 18 29 01.5 +2.1**
NKL *e* **S S 18 33 58.7 +4.1**
NKL pmax pmax
comp=E,343nm,1.0s
NKL pmax pmax
comp=N,273nm,1.1s
NKL pmax pmax
comp=Z,820nm,1.1s
NKL smax smax
comp=E,2µm,3.1s
NKL smax smax
comp=N,1µm,5.6s
**MYLDM Lahad Datu 30.10 237 P P 18 29 00.6 -1.6**
**TIY Taiyuan 30.17 306 P P 18 29 03.8 +1.1**
TIY S **S 18 34 07.4 +7.0**
TIY pmax pmax
comp=N,52nm,0.7s
TIY pmax pmax
comp=N,7µm,11.0s
TIY LR LR
comp=N,20µm,15.8s
TIY LR LR
comp=N,38µm,15.1s
TIY LR LR
comp=N,48µm,17.9s
**XLT XiLinHaoTe 30.45 319** *e* **P P 18 29 04.8 -0.3**
XLT PP **PnPn 18 30 02.8 -1.3**
XLT S S 18 33 55.1 -9.5
XLT SS **ScP 18 35 46.0 +1.0**
XLT pmax pmax
comp=N,56nm,1.0s
XLT pmax pmax
comp=N,4µm,10.6s
XLT LR LR
comp=N,71µm,17.7s
XLT LR LR
comp=N,93µm,17.5s
**SANI Sanana 30.45 216 P P 18 29 05.4 +0.2**
**SANI Sanana 30.45 216** ⇓P **P 18 29 05.2 -0.1**
**ENH Enshi 31.03 290 P P 18 29 12.2 +1.8**
**ENH Enshi 31.03 290 P P 18 29 08.0 -2.4**
**TOLI2 Tolitoli 31.20 228 P P 18 29 17.5 +5.6**
**TOLI2 Tolitoli 31.20 228 P P 18 29 11.6 -0.3**
**KKM Kota Kinabalu 31.38 241 P P 18 29 20.6 +7.0**
**KKM Kota Kinabalu 31.38 241 P P 18 29 13.0 -0.6**
KKM IAmb IAmb 18 29 26.1
comp=Z,367nm,1.2s
KKM IAMs_20 IAMs_20 18 44 11.9
comp=Z,53µm,19.0s
**LUWI Luwuk 31.52 223 P P 18 29 20.4 +5.8**
**LUWI Luwuk 31.52 223 P P 18 29 13.4 -1.2**
**QIZ Qiongzhong 31.61 269 P P 18 29 14.8 -0.7**
QIZ PP **PnPn 18 30 22.6 +3.1**
QIZ S **S 18 34 14.8 -8.3**
QIZ pmax pmax
comp=Z,84nm,2.5s
QIZ pmax pmax
comp=Z,6µm,10.8s
QIZ LR LR
comp=Z,19µm,13.5s
QIZ LR LR
comp=Z,39µm,15.1s
QIZ LR LR
comp=Z,63µm,16.8s
**QIZ Qiongzhong 31.61 269** IAMs_20 IAMs_20 18 39 43.1
comp=Z,71µm,21.0s
**PEA0B Petropavlovsk- 31.63 16 P P 18 29 14.6 -0.7**
**PEA0B Petropavlovsk- 31.63 16 P P 18 29 14.6 -0.7**
PEA0B pmax pmax
comp=Z,97nm,1.2s
**PETK Petropavlovsk- 31.63 16 P P 18 29 14.2 -1.1**
**PETK Petropavlovsk- 31.63 16 P P 18 29 17.8 +2.5**
comp=Z,10nm,0.9s,baz=151,slow=3.4,SNR=3.9
PETK PcP **PcP 18 32 08.3 +1.4**
comp=Z,27nm,0.8s,baz=202,slow=3.8,SNR=4.8
PETK LR LR 18 40 20.3
comp=Z,43µm,21.6s,baz=200,slow=33
comp=Z,10nm,0.9s
**PETK Petropavlovsk- 31.63 16 P P 18 29 14.2 -1.1**
**PET Petropavlovsk 31.81 17 P P** 18 29 21.9 +5.1
**PET Petropavlovsk 31.81 17 P P 18 29 16.0 -0.8**
**PET Petropavlovsk 31.81 17** *eP* **P 18 29 18.6 +1.8**
PET *eS* **S 18 34 25.7 +0.3**
PET pmax pmax
comp=Z,97nm,0.9s
**HIA Hailar 31.92 330 P P 18 29 19.3 +1.4**
**HIA Hailar 31.92 330 P P 18 29 15.8 -2.1**
**HIA Hailar 31.92 330** *i* **P P 18 29 16.5 -1.4**
HIA pmax pmax
comp=Z,130nm,1.8s
HIA MLR MLR
comp=Z,99µm,19.0s
**HHC Hu-ho-hao-te 31.95 311** ⇑*i* **P P 18 29 18.0 -0.4**
HHC pP pP 18 29 21.6 -3.1
HHC sP sP 18 29 25.8 -1.6
HHC S **S 18 34 29.3 +1.1**
HHC SS **SnSn 18 36 20.3 +2.5**
HHC pmax pmax
comp=Z,95nm,0.8s
HHC pmax pmax
comp=Z,4µm,4.5s
HHC LR LR
comp=Z,30µm,16.1s
HHC LR LR
comp=Z,40µm,16.7s
HHC LR LR
comp=Z,70µm,16.7s
**XAN Xi'an 32.00 297** ⇑P **P 18 29 19.0 +0.2**
XAN pP pP 18 29 23.3 -1.8
XAN S **S 18 34 29.6 +0.6**
XAN ScP **ScP 18 35 51.0 +0.7**
XAN ScS **ScS 18 39 48.0 -1.0**
XAN pmax pmax
comp=Z,170nm,2.2s
XAN pmax pmax
comp=Z,13µm,10.5s
XAN LR LR
comp=Z,14µm,15.1s
XAN LR LR
comp=Z,52µm,15.6s
XAN LR LR
comp=Z,76µm,15.8s
**ZEA Zeya 32.73 342** *eP* **P 18 29 26.5 +1.5**
ZEA *eS* **S 18 34 39.0 -0.9**
ZEA pmax pmax
comp=N,400nm,0.7s
ZEA pmax pmax
comp=E,150nm,0.7s
ZEA pmax pmax
comp=E,800nm,3.6s
ZEA pmax pmax
comp=N,2µm,5.9s
ZEA pmax pmax
comp=Z,3µm,5.6s
ZEA pmax pmax
comp=Z,2µm,13.5s
**PMG Port Moresby 32.74 173 P P 18 29 27.1 +1.7**
**PMG Port Moresby 32.74 173 P P 18 29 27.0 +1.7**
**PMG Port Moresby 32.74 173 P P 18 29 23.2 -2.1**
PMG IAmb IAmb 18 30 03.2
comp=Z,150nm,0.9s
**PMG Port Moresby 32.74 173 P P 18 29 24.6 -0.7**
comp=Z,64nm,0.8s,baz=358,slow=8.9,SNR=8.3
PMG S **S 18 34 35.7 -4.9**
comp=Z,23nm,1.1s,baz=254,slow=21,SNR=5.6
comp=Z,64nm,0.8s
**PMG Port Moresby 32.74 173** *c i* **P P 18 29 24.5 -0.9**
PMG pmax pmax
comp=Z,302nm,1.4s
PMG MLR MLR
comp=Z,15µm,16.0s
**BTO Baotou 32.94 309** *eP* **P 18 29 28.6 +1.5**
BTO pP **pP 18 29 33.6 +0.2**
BTO sP **sP 18 29 35.6 -0.5**
BTO PP **PP 18 30 39.1 -2.6**
BTO S **S 18 34 50.0 +6.4**
BTO sS **sS 18 34 55.8 +1.5**
BTO SS **SnSn 18 36 43.0 +1.1**
BTO pmax pmax
comp=Z,130nm,1.9s
BTO pmax pmax
comp=Z,10µm,9.5s
BTO LR LR
comp=Z,139µm,16.9s
BTO LR LR
comp=Z,97µm,18.7s
BTO LR LR
comp=Z,180µm,18.3s
**GYA Guiyang 33.46 283** ⇑P **P 18 29 33.3 +1.5**
GYA S **S 18 34 51.5 -0.6**
GYA pmax pmax
comp=Z,110nm,1.0s
GYA LR LR
comp=Z,54µm,18.6s
GYA LR LR
comp=Z,97µm,20.8s
GYA LR LR
comp=Z,155µm,20.8s
**MIDW Midway 35.48 74 P P 18 29 47.3 -1.8**
MIDW IAmb IAmb 18 29 51.4
comp=Z,184nm,0.9s
**BKB Balikpapan 35.59 230 P P 18 29 53.4 +3.2**
**BKB Balikpapan 35.59 230 P P 18 29 47.6 -2.5**
BKB IAMs_20 IAMs_20 18 42 03.0
comp=Z,58µm,22.0s
**CD2 Chengdu 36.00 291 P P 18 29 54.6 +1.0**
CD2 PP **PP 18 31 15.9 +0.2**
CD2 S **S 18 35 30.1 -0.9**
CD2 pmax pmax
comp=Z,100nm,1.0s
CD2 pmax pmax
comp=Z,6µm,4.1s
CD2 LR LR
comp=Z,58µm,16.5s
CD2 LR LR
comp=Z,77µm,17.1s
CD2 LR LR
comp=Z,85µm,20.3s
**HNR Honiara 36.34 152 P P 18 29 55.9 -0.6**
HNR IAmb IAmb 18 30 23.9
comp=Z,239nm,0.9s
HNR IAMs_20 IAMs_20 18 44 12.9
comp=Z,57µm,20.0s
**HNR Honiara 36.34 152** LR LR 18 46 03.6
comp=Z,353µm,18.4s,baz=320,slow=38
**HNR Honiara 36.34 152 P P 18 29 55.9 -0.6**
HNR pmax pmax
comp=Z,239nm,1.0s
HNR MLR MLR
comp=Z,57µm,20.0s
**LZH Lanzhou 36.45 300** ⇑P **P 18 29 58.5 +1.0**
LZH pP pP 18 30 02.4 -1.5
LZH S **S 18 35 38.4 +0.4**
LZH pmax pmax
comp=Z,160nm,1.7s
LZH pmax pmax
comp=Z,4µm,5.8s
LZH LR LR
comp=Z,50µm,17.5s
LZH LR LR
comp=Z,21µm,16.5s
LZH LR LR
comp=Z,62µm,17.5s
**KAPI Kappang 36.48 222 P P 18 30 00.6 +2.8**
**KAPI Kappang 36.48 222 P P 18 29 55.0 -2.8**
**KAPI Kappang 36.48 222 P P 18 29 55.0 -2.8**
KAPI pmax pmax
comp=Z,567nm,1.1s
KAPI MLR MLR
comp=Z,27µm,20.0s
**MA2 Magadan 36.57 6 P P 18 30 00.9 +2.9**
**MA2 Magadan 36.57 6 P P 18 29 55.1 -2.9**
**MA2 Magadan 36.57 6** LR LR 18 43 31.9
comp=Z,19µm,21.9s,baz=197,slow=34
**MA2 Magadan 36.57 6** *d i* **P P 18 29 56.9 -1.1**
MA2 pmax pmax
comp=Z,131nm,1.2s
**SLVN Son La 36.58 275 P P 18 29 56.2 -2.5**
**UBPT Khong Chiam 36.67 264 P P 18 30 02.8 +3.4**
**UBPT Khong Chiam 36.67 264 P P 18 29 55.3 -4.1**
**SBUM Sibu 36.70 240 P P 18 29 57.6 -2.1**
**COEN Coen 37.07 180 P P 18 30 06.2 +3.5**
**COEN Coen 37.07 180 P P 18 30 02.6 -0.1**
**COEN Coen 37.07 180 P P 18 30 05.8 +3.1**
comp=Z,191nm,0.8s
**KMI Kunming 37.09 281** ⇑P **P 18 30 05.0 +1.8**
KMI S **S 18 35 40.5 -7.6**
KMI pmax pmax
comp=Z,140nm,1.9s
KMI pmax pmax
comp=Z,6µm,9.4s
KMI LR LR
comp=Z,22µm,18.1s
KMI LR LR
comp=Z,36µm,23.8s
KMI LR LR
comp=Z,44µm,22.7s
**KDU Kakadu 37.39 198 P P** 18 30 10.4 +5.0
**SHEM Shemya Is, Ala 37.46 31 P P 18 30 05.9 +0.2**
comp=Z,80nm,0.9s,baz=82,slow=7.0,SNR=3.1
SHEM LR LR 18 43 06.2
comp=Z,27µm,20.9s,baz=226,slow=32
comp=Z,80nm,0.9s
**PZH PanZhiHua 37.86 284 P P 18 30 10.8 +1.2**
PZH PP **PnPn 18 31 37.9 +0.3**
PZH S **S 18 36 00.6 +1.0**
PZH pmax pmax
comp=Z,530nm,0.7s
PZH pmax pmax
comp=Z,5µm,6.9s
PZH LR LR
comp=Z,32µm,18.4s
PZH LR LR
comp=Z,84µm,20.6s
PZH LR LR
comp=Z,112µm,21.1s
**ULN Ulaanbaatar 37.88 319 P P 18 30 07.1 -2.5**
ULN IAmb IAmb 18 30 14.5
comp=Z,681nm,1.9s
**ULN Ulaanbaatar 37.88 319** *eP* **P 18 30 08.1 -1.5**
ULN pmax pmax
comp=Z,215nm,1.7s
ULN MLR MLR
comp=Z,81µm,18.0s
**SOEI Soe 37.89 212 P P** 18 30 14.7 +4.9
**SOEI Soe 37.89 212 P P 18 30 08.9 -0.9**
SOEI IAmb IAmb 18 30 42.1
comp=Z,405nm,1.0s
SOEI IAMs_20 IAMs_20 18 43 10.3
comp=Z,61µm,22.0s
**MTN Manton Dam 37.94 200 P P** 18 30 15.2 +5.1
**MTN Manton Dam 37.94 200 P P 18 30 09.0 -1.1**
MTN IAmb IAmb 18 30 38.4
comp=Z,141nm,0.6s
**MTN Manton Dam 37.94 200 P P 18 30 13.5 +3.5**
**MMRI Maumere 37.97 216 P P 18 30 12.6 +2.2**
**MMRI Maumere 37.97 216 P P 18 30 09.4 -1.0**
MMRI IAmb IAmb 18 30 26.5
comp=Z,641nm,0.9s
MMRI IAMs_20 IAMs_20 18 42 39.2
comp=Z,32µm,21.0s
**SONM Songino Array 38.27 319 P P 18 30 09.9 -2.8**
**SONM Songino Array 38.27 319 P P 18 30 13.1 +0.4**
comp=Z,82nm,0.8s,baz=131,slow=8.4,SNR=15
SONM ScP **ScP 18 36 12.8 +0.1**
comp=Z,14nm,1.2s,baz=155,slow=2.6,SNR=3.8
SONM LR LR 18 47 03.2
comp=Z,92µm,18.1s,baz=124,slow=38
comp=Z,82nm,0.8s
**SONM Songino Array 38.27 319 P P 18 30 09.9 -2.8**
SONM pmax pmax
comp=Z,108nm,0.8s
**KSM Kuching 38.81 241 P P** 18 30 23.5 +5.9
**KSM Kuching 38.81 241 P P 18 30 16.1 -1.5**
KSM ScP **ScP 18 36 14.8 -0.5**
**AMKA Amchitka 39.28 35 P P 18 30 20.9 -0.1**
**YAK Yakutsk 39.80 350 P P 18 30 24.1 -1.1**
YAK IAmb IAmb 18 30 27.9
comp=Z,419nm,0.8s
**YAK Yakutsk 39.80 350** ⇑P **P 18 30 25.3 +0.1**
**YAK Yakutsk 39.80 350** *c i* **P P 18 30 24.7 -0.5**
YAK *e* 18 31 56.3
YAK *e* 18 32 31.5
YAK *e*S **S 18 36 29.9 +2.3**
YAK *e* 18 40 25.1
YAK pmax pmax
comp=Z,365nm,0.8s
YAK pmax pmax
comp=N,63nm,1.1s
YAK pmax pmax
comp=E,29nm,1.0s
YAK pmax pmax
comp=Z,741nm,3.2s
YAK pmax pmax
comp=N,440nm,2.7s
YAK smax smax
comp=E,2µm,3.0s
YAK smax smax
comp=N,258nm,1.5s
YAK MLR MLR
comp=Z,51µm,16.0s
YAK MLR MLR
comp=N,32µm,19.0s
YAK MLR MLR
comp=E,22µm,17.0s
**SEY Seymchan 40.03 6** *c i* **P P 18 30 27.9 +0.8**
SEY pmax pmax
comp=Z,191nm,1.3s
SEY MLR MLR
comp=Z,18µm,19.0s
**CRAI Chiangrai 40.04 274 P P 18 30 25.1 -2.7**
CRAI IAmb IAmb 18 30 42.1
comp=Z,493nm,1.3s
**GTA Gaotai 40.16 304** *eP* **P 18 30 30.3 +1.6**
GTA PP **PnPn 18 32 08.5 +3.6**
GTA ScP **ScP 18 36 19.6 -0.7**
GTA S **S 18 36 35.0 +1.0**
GTA sS sS 18 36 49.1 +4.3
GTA pmax pmax
comp=Z,69nm,1.4s
GTA pmax pmax
comp=Z,7µm,9.5s
GTA LR LR
comp=Z,29µm,18.5s
GTA LR LR
comp=Z,29µm,21.1s
GTA LR LR
comp=Z,39µm,22.5s
**BOD Bodaibo 40.45 336** *eP* **P 18 30 31.7 +1.1**
BOD pmax pmax
comp=Z,435nm,1.8s
**PHRA Phrae 40.57 272 P P 18 30 29.9 -2.3**
**NAYO Nakonayok 40.78 265 P P 18 30 36.5 +2.6**
**TNCH TengChong 40.91 282** ⇑P **P 18 30 36.0 +0.9**
TNCH pP pP 18 30 39.8 -1.7
TNCH sP sP 18 30 43.1 -1.1
TNCH S **S 18 36 52.1 +6.6**
TNCH sS sS 18 37 01.3 +5.1
TNCH pmax pmax
comp=Z,260nm,2.0s
TNCH pmax pmax
comp=Z,4µm,4.6s
TNCH LR LR
comp=Z,9µm,13.9s
TNCH LR LR
comp=Z,24µm,15.1s
TNCH LR LR
comp=Z,31µm,16.9s
**ZAK Zakamensk 41.23 321** *eP* **P 18 30 36.6 -0.7**
ZAK pmax pmax
comp=Z,169nm,1.7s
ZAK pmax pmax
comp=Z,37nm,1.9s
**MTSU Mount Surprise 41.23 179 P P** 18 30 42.7 +5.2
**KNRA Kununurra 41.36 202 P P 18 30 37.7 -0.8**
**KNRA Kununurra 41.36 202 P P 18 30 38.9 +0.3**
comp=Z,0.0nmcomp=Z,213nm,1.1s
**KIWB Kanaga Island 41.43 36 P P 18 30 38.3 -0.6**
**IRK Irkutsk 41.53 324** *eP* **P 18 30 37.6 -2.1**
IRK *eS* **S 18 36 53.6 -0.1**
IRK pmax pmax
comp=Z,589nm,2.8s
**ADK Adak 41.70 37 P P 18 30 42.5 +1.5**
**ADK Adak 41.70 37 P P 18 30 39.8 -1.2**
ADK IAmb IAmb 18 30 59.6

comp=Z,277nm,1.2s
**ADK Adak 41.70 37** IAMs_20 IAMs_20 18 45 49.7
comp=Z,40µm,20.0s
**ADK Adak 41.70 37** P **P** **18 30 39.8 -1.2**
ADK pmax pmax
comp=Z,277nm,1.2s
ADK MLR MLR
comp=Z,40µm,20.0s
**CM31 Chiang Mai Arr 41.77 272** P **P** **18 30 40.2 -1.9**
CM31 IAmb IAmb 18 30 56.1
comp=Z,371nm,1.4s
**CMAR Chiang Mai Arr 41.77 272** P **P** **18 30 39.5 -2.5**
**CMAR Chiang Mai Arr 41.77 272** P **P** **18 30 42.9 +0.9**
comp=Z,266nm,0.6s,baz=60,slow=7.3,SNR=10
CMAR ScP **ScP** **18 36 26.8 0.0**
comp=Z,7.1nm,1.0s,baz=73,slow=3.3,SNR=4.3
comp=Z,266nm,0.6s
**CMAR Chiang Mai Arr 41.77 272** P **P** **18 30 42.9 +0.9**
**CMAR Chiang Mai Arr 41.77 272** P **P** **18 30 39.5 -2.5**
**GSTR Great Sitkin T 42.14 37** P **P** **18 30 43.7 -1.0**
**TV1H Townsville Har 42.47 175** P **P** **18 30 50.3 +2.8**
**JAGI Jajag, Banyuwa 42.69 226** P **P** **18 30 53.1 +3.6**
**JAGI Jajag, Banyuwa 42.69 226** P **P** **18 30 48.0 -1.5**
JAGI IAmb IAmb 18 31 05.8
comp=Z,543nm,1.1s
**SRDT SRDT 42.78 266** P **P** **18 30 52.6 +2.3**
**AUAYR Ayr State High 42.83 175** P **P** **18 30 53.1 +2.6**
**LKP Lekhapani 43.03 286** *eP* **P** **18 30 54.0 +1.8**
LKP IAmb IAmb 18 31 05.8
comp=Z,1µm,1.2s
**LKP Lekhapani 43.03 286** *ex* **P** **18 30 54.8 +2.5**
**LKP Lekhapani 43.03 286** IAML 18 31 06.8
comp=E,465nm,0.8s
**LKP Lekhapani 43.03 286** IAML 18 31 12.7
comp=N,410nm,1.0s
**CTA Charters Tower 43.25 176** P **P** **18 30 56.4 +2.5**
**CTA Charters Tower 43.25 176** P **P** **18 30 54.8 +0.8**
comp=N,4.8nm,1.0s,baz=357,slow=7.3,SNR=7.9
CTA ScP **ScP** **18 36 31.6 -0.9**
comp=N,0.6nm,0.9s,baz=342,slow=5.5,SNR=4.6
CTA S **S** **18 37 17.1 -2.4**
comp=N,0.8nm,1.1s,baz=226,slow=20,SNR=6.0
CTA LR LR 18 49 39.3
comp=N,1µm,18.6s,baz=350,slow=37
**CTAO Charters Tower 43.25 176** P **P** **18 30 55.1 +1.2**
**CTAO Charters Tower 43.25 176** P **P** **18 30 53.5 -0.4**
CTAO IAmb IAmb 18 31 10.7
comp=Z,244nm,1.1s
**CTAO Charters Tower 43.25 176** P **P** **18 30 53.6 -0.4**
CTAO pmax pmax
comp=Z,244nm,1.1s
CTAO MLR MLR
comp=Z,17µm,18.0s
**GOMU GeErMu 43.72 299** P **P** **18 31 01.0 +2.9**
GOMU S **S** **18 37 27.4 +0.2**
GOMU pmax pmax
comp=Z,370nm,0.7s
GOMU LR LR
comp=Z,20µm,17.7s
GOMU LR LR
comp=Z,29µm,18.8s
GOMU LR LR
comp=Z,38µm,19.6s
**WB0 Warramunga Arr 43.75 192** P **P** **18 30 57.5 -0.5**
WB0 IAmb IAmb 18 31 08.0
comp=Z,228nm,1.2s
**QIS Mount Isa 43.80 185** P **P** **18 31 02.8 +4.5**
**QIS Mount Isa 43.80 185** P **P** **18 30 59.8 +1.5**
comp=Z,0.0nmcomp=Z,123nm,0.9s
**WR0 Warramunga Arr 43.91 192** P **P** **18 30 58.3 -1.0**
WR0 IAmb IAmb 18 31 43.5
comp=Z,226nm,1.3s
**WRAB Tennant Creek 43.92 192** P **P** **18 30 58.6 -0.8**
**WRAB Tennant Creek 43.92 192** *c iP* **P** **18 30 59.2 -0.2**
WRAB pmax pmax
comp=Z,308nm,1.5s
WRAB MLR MLR
comp=Z,21µm,20.0s
**WB2 Warramunga Arr 43.93 192** P **P** **18 30 58.8 -0.6**
WB2 IAmb IAmb 18 31 09.5
comp=Z,532nm,1.6s
**WRA Warramunga Arr 43.94 192** P **P** **18 30 58.8 -0.6**
**WRA Warramunga Arr 43.94 192** P **P** **18 30 59.6 +0.2**
comp=Z,66nm,0.8s,baz=16,slow=8.9,SNR=11
WRA ScP **ScP** **18 36 34.3 -1.0**
comp=Z,15nm,0.9s,baz=7.9,slow=4.4,SNR=5.8
WRA S **S** **18 37 25.9 -3.8**
comp=Z,17nm,1.1s,baz=11,slow=14,SNR=5.5
comp=Z,66nm,0.8s
**WRA Warramunga Arr 43.94 192** P **P** **18 30 58.8 -0.6**
WRA pmax pmax
comp=Z,49nm,1.5s
**MYKOM Kota Tinggi 43.96 247** P **P** **18 30 57.5 -2.4**
MYKOM IAmb IAmb 18 31 19.4
comp=Z,396nm,1.6s
MYKOM IAMs_20 IAMs_20 18 47 50.7
comp=Z,49µm,20.0s
**SURA Surathani 44.20 259** P **P** **18 31 04.7 +2.9**
**SMRI Semarang 44.21 231** P **P** **18 30 59.0 -2.9**
SMRI IAMs_20 IAMs_20 18 47 42.5
comp=Z,33µm,21.0s
**BTDF Bukit Timah Da 44.26 246** P **P** **18 31 06.5 +4.3**
**SRIT Nakonsritamara 44.46 258** P **P** **18 31 06.7 +2.8**
**SRIT Nakonsritamara 44.46 258** P **P** **18 31 01.5 -2.4**
SRIT IAmb IAmb 18 31 30.2
comp=Z,143nm,0.9s
**JOHN Johnston Islan 44.48 90** P **P** **18 31 06.0 +2.0**
**JOHN Johnston Islan 44.48 90** P **P** **18 31 03.5 -0.5**
JOHN IAmb IAmb 18 31 34.8
comp=Z,359nm,1.1s
**JORH JORHAT 44.51 285** *eP* **P** **18 31 06.2 +2.1**
JORH IAmb IAmb 18 31 07.3
comp=Z,735nm,0.8s
**JORH JORHAT 44.51 285** *ex* **P** **18 31 07.9 +3.8**
**JORH JORHAT 44.51 285** IAML 18 31 13.6
comp=E,632nm,0.7s
**JORH JORHAT 44.51 285** IAML 18 31 14.5
comp=N,622nm,0.7s
**FITZ Fitzroy Crossi 44.72 204** P **P** **18 31 07.5 +1.8**
**FITZ Fitzroy Crossi 44.72 204** P **P** **18 31 04.5 -1.2**
**UGM Wanagama 44.76 230** P P 18 31 12.0 +5.8
**UGM Wanagama 44.76 230** P **P** **18 31 04.0 -2.1**
UGM IAMs_20 IAMs_20 18 48 15.9
comp=Z,41µm,22.0s
**KOHI KOHIMA 44.77 284** *eP* **P** **18 31 06.6 +0.2**
KOHI IAmb IAmb 18 31 09.7
comp=Z,132nm,1.0s
**KOHI KOHIMA 44.77 284** *ex* **P** **18 31 04.6 -1.8**
**KOHI KOHIMA 44.77 284** IAML 18 31 20.5
comp=E,116nm,0.6s
**KOHI KOHIMA 44.77 284** IAML 18 31 24.0
comp=N,103nm,0.8s
**ZIRO ZIRO 44.78 286** *eP* **P** **18 31 07.9 +1.5**
**ZIRO ZIRO 44.78 286** *ex* **P** **18 31 10.4 +3.9**
**ZIRO ZIRO 44.78 286** IAML 18 31 14.8
comp=E,1µm,0.3s
**ZIRO ZIRO 44.78 286** IAML 18 31 18.2
comp=N,1µm,0.8s
**KULM Kulim 44.98 253** P **P** **18 31 05.6 -2.4**
KULM IAMs_20 IAMs_20 18 47 31.3
comp=Z,47µm,21.0s
**KULM Kulim 44.98 253** ⇑P **P** **18 31 09.9 +1.9**
**IPM Ipoh 45.03 252** P **P** **18 31 11.0 +2.6**
**IPM Ipoh 45.03 252** P **P** **18 31 06.0 -2.4**
IPM IAMs_20 IAMs_20 18 47 51.7
comp=Z,35µm,21.0s
**IMP Imphal 45.04 282** *eP* **P** **18 31 08.5 0.0**
IMP IAmb IAmb 18 31 11.0
comp=Z,52nm,0.7s
**IMP Imphal 45.04 282** *ex* **P** **18 31 09.4 +0.9**
**IMP Imphal 45.04 282** IAML 18 31 31.8
comp=N,66nm,1.2s
**IMP Imphal 45.04 282** IAML 18 31 40.6
comp=E,98nm,2.3s
**CLES Cleveland East 45.88 38** P **P** **18 31 14.2 -0.4**
**NIKH Nikolski High 46.52 38** P **P** **18 31 19.8 +0.2**
**NIKH Nikolski High 46.52 38** P **P** **18 31 18.4 -1.3**
NIKH IAmb IAmb 18 32 03.8
comp=Z,113nm,0.7s
**SHL Shillong 46.78 284** P **P** **18 31 18.7 -3.6**
SHL IAmb IAmb 18 31 25.0
comp=Z,304nm,0.7s
SHL IAMs_20 IAMs_20 18 51 08.0
comp=Z,79µm,21.0s
**SHL Shillong 46.78 284** P **P** **18 31 18.7 -3.6**
SHL pmax pmax
comp=Z,304nm,0.7s
SHL MLR MLR
comp=Z,79µm,21.0s
**BILL Bilibino 46.86 12** P **P** **18 31 21.7 -0.4**
**BILL Bilibino 46.86 12** *ceP* **P** **18 31 23.2 +1.1**
BILL *e* 18 32 52.6
BILL *e* 18 33 10.2
BILL *e*PPP PPP 18 33 54.1
BILL pmax pmax
comp=Z,245nm,1.3s
BILL MLR MLR
comp=Z,12µm,16.0s
**LSA Lhasa 46.93 289** IAMs_20 IAMs_20 18 53 06.6
comp=Z,30µm,18.0s
**RK1H Rockhampton Ha 46.95 171** P **P** **18 31 24.1 +0.9**
**BKNI Bangkinang 47.11 247** P **P** **18 31 22.5 -2.3**
BKNI IAMs_20 IAMs_20 18 49 40.2
comp=Z,33µm,20.0s
**FUNA Funafuti 47.15 128** P **P** **18 31 25.3 +0.3**
**FUNA Funafuti 47.15 128** IAMs_20 IAMs_20 18 47 33.1
comp=Z,44µm,20.0s
**AS31 Alice Springs 47.64 192** P **P** **18 31 28.4 -0.4**
**AS31 Alice Springs 47.64 192** P **P** **18 31 29.7 +1.0**
comp=Z,27nm,0.7s
**ASAR Alice Springs 47.64 192** P **P** **18 31 28.1 -0.6**
**ASAR Alice Springs 47.64 192** P **P** **18 31 28.7 0.0**
comp=Z,34nm,0.7s,baz=12,slow=9.8,SNR=2.8
ASAR ScP **ScP** **18 36 51.2 +0.6**
comp=Z,10nm,0.9s,baz=4.3,slow=4.6,SNR=5.3
comp=Z,34nm,0.7s
**PSI Prapat 47.68 251** P **P** **18 31 26.6 -2.7**
PSI pmax pmax
comp=Z,191nm,1.0s
PSI MLR MLR
comp=Z,22µm,20.0s
**RPSI Rantau Prapat 47.73 251** P **P** **18 31 26.6 -2.9**
RPSI IAmb IAmb 18 31 38.1
comp=Z,191nm,1.0s
**LHMI Lhok Sumawe 48.29 256** IAMs_20 IAMs_20 18 48 49.7
comp=Z,40µm,22.0s
**EIDS Eidsvold 48.98 171** P **P** **18 31 37.4 -1.6**
**EIDS Eidsvold 48.98 171** P **P** **18 31 39.1 +0.1**
comp=Z,60nm,0.9s
**TIXI Tiksi 49.05 354** P **P** **18 31 36.8 -2.2**
TIXI IAmb IAmb 18 31 51.0
comp=Z,172nm,1.1s
**TIXI Tiksi 49.05 354** IAMs_20 IAMs_20 18 54 10.0
comp=Z,39nm,18.0s
**TIXI Tiksi 49.05 354**⇑ *eP* **P** **18 31 38.7 -0.3**
TIXI pmax pmax
comp=Z,86nm,0.9s
TIXI MLR MLR
comp=Z,36µm,16.0s
**GTK Tadong 49.43 287** *eP* **P** **18 31 44.6 +1.8**
**GTK Tadong 49.43 287** *ex* **P** **18 31 44.9 +2.1**
**GSI Gunungsitoli 49.58 251** P **P** **18 31 41.5 -2.4**
**LIFNC LIFOU 49.59 150** P **P** **18 31 42.3 -1.4**
LIFNC IAmb IAmb 18 32 05.0
comp=Z,218nm,1.1s
LIFNC IAMs_20 IAMs_20 18 50 52.9
comp=Z,38µm,20.0s
**QLP Quilpie 49.64 179** P **P** **18 31 44.6 +0.6**
comp=Z,159nm,0.8s
**WMQ Urumqi 49.76 308** ⇑P **P** **18 31 45.1 +0.1**
WMQ ScP **ScP** **18 36 59.0 -0.6**
WMQ S **S** **18 38 53.6 +0.9**
WMQ ScS **ScS** **18 41 32.5 -2.4**
WMQ pmax pmax
comp=Z,220nm,1.5s
WMQ pmax pmax
comp=Z,6µm,4.1s
WMQ LR LR
comp=Z,23µm,18.1s
WMQ LR LR
comp=Z,29µm,22.5s
WMQ LR LR
comp=Z,36µm,23.7s
**MBWA Marble Bar 49.92 209** P **P** **18 31 44.2 -2.0**
MBWA IAmb IAmb 18 32 16.5
comp=Z,161nm,0.9s
**MBWA Marble Bar 49.92 209** P **P** **18 31 47.2 +1.0**
comp=Z,0.0nmcomp=Z,204nm,1.7s
**XMI Christmas Isla 49.95 232** P P 18 31 52.2 +5.6
**XMIS Christmas Isla 50.00 232** P **P** **18 31 44.5 -2.4**
**PSA00 Pilbara Seismi 50.23 209** P **P** **18 31 46.9 -1.7**
**PSA00 Pilbara Seismi 50.23 209** P **P** **18 31 47.3 -1.2**
PSA00 IAmb IAmb 18 32 19.0
comp=Z,198nm,0.9s
**PSA00 Pilbara Seismi 50.23 209** P **P** **18 31 49.3 +0.8**
comp=Z,262nm,1.7s
**WRKA Warakurna 50.29 198** P **P** **18 31 50.5 +1.4**
comp=Z,0.0nmcomp=Z,130nm,0.8s
**DZM Mont Dzumac 50.37 152** *eP* **P** **18 31 49.5 -0.2**
comp=Z,397nm,1.4s
**DZM Mont Dzumac 50.37 152** *ePP* **PP** **18 33 41.6 -4.0**
comp=Z,1µm,22.4s
DZM *eS* **S** **18 39 03.2 +1.7**
comp=Z,8µm,28.1s
DZM *eSS* **SS** **18 42 38.0 +2.2**
comp=Z,7µm,23.4s
DZM *eLQ* LQ 18 44 02.3
comp=Z,46µm,26.9s
DZM *eLR* LR 18 46 17.6
comp=Z,78µm,22.6s
**DZM Mont Dzumac 50.37 152** P **P** **18 31 48.4 -1.4**
DZM IAmb IAmb 18 32 13.3
comp=Z,319nm,1.5s
**DZM Mont Dzumac 50.37 152** P **P** **18 31 51.7 +2.0**
comp=Z,31nm,0.5s,baz=330,slow=5.0,SNR=9.3
DZM LR LR 18 50 41.5
comp=Z,47µm,21.6s,baz=338,slow=33
comp=Z,31nm,0.5s
**DGZ Jazzator, Alta 50.73 316** *c iP* **P** **18 31 52.4 +0.1**
DGZ pmax pmax
comp=Z,649nm,1.5s
DGZ MLR MLR
comp=Z,71µm,17.0s
**AUWSH Wavell State H 51.28 169** P **P** **18 31 58.1 +1.7**
**PINNC Pines Island, 51.28 151** P **P** **18 31 55.4 -1.1**
**OOD Oodnadatta 51.39 189** P **P** **18 31 57.8 +0.6**
**SDPT Sand Point 51.93 37** P **P** **18 32 01.6 +0.6**
**SDPT Sand Point 51.93 37** P **P** **18 32 00.5 -0.5**
SDPT IAmb IAmb 18 32 12.1
comp=Z,229nm,0.8s
**M13K Dall Lake 52.02 30** P **P** **18 32 01.7 +0.2**
M13K IAmb IAmb 18 32 27.6
comp=Z,183nm,1.1s
**ZSN Zaisan 52.10 313** *eP* **P** **18 32 02.4 -0.1**
comp=Z,192nm,1.3s,baz=313
ZSN *eS* **S** **18 39 26.7 +1.7**
baz=313
**ZSN Zaisan 52.10 313** *eP* **P** **18 32 02.3 -0.1**
ZSN *eS* **S** **18 39 26.6 +1.7**
ZSN pmax pmax
comp=Z,192nm,1.3s
**GC1S Gold Coast 1 S 52.11 169** P **P** **18 32 05.6 +3.1**
**KEKH Kekaha 52.15 80** P **P** **18 32 03.5 +0.4**
KEKH IAmb IAmb 18 32 32.3
comp=Z,230nm,1.2s
**CNBA Chernabura Isl 52.30 38** P **P** **18 32 03.6 -0.1**
**O14K Tigyukauivet M 52.62 32** IAMs_20 IAMs_20 18 51 56.0
comp=Z,29µm,20.0s
**AULRC Lightning Ridg 52.65 175** P **P** **18 32 07.9 +1.4**
**M14K Bethel 52.78 30** IAMs_20 IAMs_20 18 53 58.1
comp=Z,22µm,19.0s
**J14K Nanvaranak Lak 52.80 27** IAMs_20 IAMs_20 18 51 45.4
comp=Z,26µm,21.0s
**ANM Nome 52.82 25** P **P** **18 32 06.7 -0.8**
ANM IAmb IAmb 18 32 14.2
comp=Z,220nm,1.4s
ANM IAMs_20 IAMs_20 18 55 14.6
comp=Z,19µm,20.0s
**ANM Nome 52.82 25** P **P** **18 32 06.7 -0.8**
ANM pmax pmax
comp=Z,220nm,1.4s
ANM MLR MLR
comp=Z,19µm,20.0s
**MSVF Nonsavu 52.98 137** P **P** **18 32 13.2 +3.9**
**MSVF Nonsavu 52.98 137** P **P** **18 32 09.3 0.0**
**MSVF Nonsavu 52.98 137** P **P** **18 32 09.3 0.0**
MSVF pmax pmax
comp=Z,123nm,1.0s
MSVF MLR MLR
comp=Z,16µm,21.0s
**ZAA0 Zalesovo Array 53.10 321** P **P** **18 32 07.5 -2.2**
ZAA0 IAmb IAmb 18 32 11.8
comp=Z,206nm,0.8s
**ZALV Zalesovo Beam 53.10 321** P **P** **18 32 10.2 +0.5**
comp=Z,202nm,0.7s,baz=100,slow=6.8,SNR=36
ZALV PKPPKP **P'P'df** **19 02 39.4 -0.1**
comp=Z,5.1nm,1.1s,baz=298,slow=3.2,SNR=4.1
comp=Z,202nm,0.7s
**CHGN Chignik 53.29 36** IAMs_20 IAMs_20 18 51 55.3
comp=Z,30µm,21.0s
**K15K Wolf Creek Mou 53.51 28** IAMs_20 IAMs_20 18 52 20.0
comp=Z,29µm,19.0s
**F15K North Star Dit 53.60 24** P **P** **18 32 13.4 +0.2**
**LCRK Leigh Creek 53.72 186** P **P** **18 32 16.6 +2.2**
**MK31 Makanchi Array 53.80 312** P **P** **18 32 12.6 -2.4**
MK31 IAmb IAmb 18 32 18.1
comp=Z,224nm,0.8s
**MK31 Makanchi Array 53.80 312** P **P** **18 32 12.6 -2.4**
MK31 pmax pmax
comp=Z,224nm,0.8s
**MKAR Makanchi Array 53.80 312** P **P** **18 32 13.0 -2.0**
**MKAR Makanchi Array 53.80 312** P **P** **18 32 16.4 +1.4**
comp=Z,252nm,0.7s,baz=93,slow=8.9,SNR=36
MKAR S **S** **18 39 45.3 -2.8**
comp=Z,2.0nm,1.0s,baz=81,slow=13,SNR=1.2
MKAR PKPPKP P'P'df 19 02 29.9 -8.6
comp=Z,1.5nm,0.9s,baz=260,slow=3.3,SNR=3.7
comp=Z,252nm,0.7s
**MKAR Makanchi Array 53.80 312** P **P** **18 32 13.0 -2.0**
**KIP Kipapa 53.81 80** P **P** **18 32 17.0 +1.6**
**KIP Kipapa 53.81 80** P **P** **18 32 15.7 +0.3**
KIP IAmb IAmb 18 32 24.0
comp=Z,269nm,1.2s
**KIP Kipapa 53.81 80** IAMs_20 IAMs_20 18 52 44.5
comp=Z,22µm,19.0s
**KIP Kipapa 53.81 80** P **P** **18 32 15.7 +0.3**
KIP pmax pmax
comp=Z,269nm,1.2s
KIP MLR MLR
comp=Z,22µm,19.0s
**GIRL Giralia 53.84 214** P **P** **18 32 19.7 +4.3**
**GIRL Giralia 53.84 214** ⇑P **P** **18 32 19.5 +4.1**
**HON Honolulu 53.85 80** P **P** **18 32 15.7 +0.1**
HON IAmb IAmb 18 32 47.7
comp=Z,190nm,0.9s
HON IAMs_20 IAMs_20 18 54 20.5
comp=Z,23µm,19.0s
**HON Honolulu 53.85 80** P **P** **18 32 15.7 +0.1**
HON pmax pmax
comp=Z,190nm,0.9s
HON MLR MLR
comp=Z,23µm,19.0s
**MAKZ Makanchi 54.02 312** P **P** **18 32 15.1 -1.5**
MAKZ IAMs_20 IAMs_20 18 57 12.3
comp=Z,29µm,19.0s
**MAKZ Makanchi 54.02 312** ⇑P **P** **18 32 17.6 +1.1**
**MAKZ Makanchi 54.02 312** P **P** **18 32 15.1 -1.5**
MAKZ pmax pmax
comp=Z,371nm,0.9s
MAKZ MLR MLR
comp=Z,28µm,19.0s
**ARMA Armidale 54.02 171** P **P** **18 32 20.9 +4.1**
**ARMA Armidale 54.02 171** P **P** **18 32 15.8 -1.0**
**DHH Diamond Head 54.05 80** P **P** **18 32 17.9 +0.8**
**DHH Diamond Head 54.05 80** P **P** **18 32 17.9 +0.8**
**MULG Mulgathing 54.08 190** P **P** **18 32 18.6 +1.6**
**L16K Owhat River 54.23 30** P **P** **18 32 17.8 0.0**
L16K IAMs_20 IAMs_20 18 52 53.3
comp=Z,27µm,20.0s
**O16K Kokwok River B 54.27 32** IAMs_20 IAMs_20 18 53 18.8
comp=Z,35µm,20.0s
**I17K Unalakleet 54.43 27** P **P** **18 32 18.5 -0.7**
**AUPHS Peel High Scho 54.60 172** P **P** **18 32 22.6 +1.8**
**CMSA Cobar Meteorol 54.61 178** P **P** **18 32 25.3 +4.4**
**PLK4 Peulik 4 54.68 35** IAMs_20 IAMs_20 18 52 41.9
comp=Z,25µm,21.0s
**KPA Kalaupapa 54.80 80** P **P** **18 32 23.1 +0.6**
**KPA Kalaupapa 54.80 80** P **P** **18 32 23.2 +0.6**
**STKA Stephens Creek 54.94 182** P P 18 32 28.1 +4.9
**STKA Stephens Creek 54.94 182** P **P** **18 32 22.0 -1.2**
**STKA Stephens Creek 54.94 182** P **P** **18 32 24.1 +0.9**
comp=Z,0.0nmcomp=Z,31nm,0.9s
**STKA Stephens Creek 54.94 182** P **P** **18 32 23.9 +0.7**
comp=Z,58nm,0.8s,baz=356,slow=9.0,SNR=7.9
STKA LR LR 18 56 20.2
comp=Z,25µm,21.9s,baz=350,slow=36
comp=Z,58nm,0.8s
**STKA Stephens Creek 54.94 182** P **P** **18 32 22.0 -1.2**
STKA pmax pmax
comp=Z,25nm,0.9s
**K17K Iditarod 55.06 29** IAMs_20 IAMs_20 18 53 18.2
comp=Z,26µm,20.0s
**M17K Holitna River 55.07 30** IAMs_20 IAMs_20 18 54 27.7
comp=Z,21µm,20.0s
**F17K Baldwin Pennin 55.17 24** P **P** **18 32 23.2 -1.3**
F17K IAmb IAmb 18 32 56.1
comp=Z,152nm,1.0s
**MEEK Meekatharra 55.20 207** P **P** **18 32 26.2 +0.9**
**MEEK Meekatharra 55.20 207** P **P** **18 32 25.8 +0.5**
comp=Z,144nm,1.0s
**RDOG Red Dog Mine 55.25 22** P **P** **18 32 24.3 -0.8**
RDOG IAmb IAmb 18 32 49.8
comp=Z,144nm,1.0s
**KHLH Kahului Airpor 55.38 80** P **P** **18 32 26.8 0.0**
KHLH IAMs_20 IAMs_20 18 59 35.1
comp=Z,24µm,18.0s
**SEM Semipalatinsk 55.41 316** *eP* **P** **18 32 26.4 -0.5**
comp=Z,177nm,0.8s,baz=316
SEM LR LR 18 56 30.2
comp=Z,29µm,17.4s,baz=316
**SEM Semipalatinsk 55.41 316** *eP* **P** **18 32 26.3 -0.5**
SEM pmax pmax
comp=Z,177nm,0.8s
SEM MLR MLR
comp=Z,29µm,17.0s
**AUDCS Dubbo College 55.48 175** P **P** **18 32 30.4 +3.3**
**HLK Haleakala 55.58 80** P **P** **18 32 28.1 -0.4**
HLK IAmb IAmb 18 33 08.7
comp=Z,214nm,1.1s
HLK IAMs_20 IAMs_20 18 54 50.1
comp=Z,27µm,19.0s
**L18K Granite Mounta 55.64 29** IAMs_20 IAMs_20 18 53 36.6
comp=Z,31µm,20.0s
**P18K Big Mountain, 55.64 33** IAMs_20 IAMs_20 18 54 21.1
comp=Z,28µm,20.0s
**SII Sitkinak Islan 55.65 36** P **P** **18 32 32.4 +4.2**
**SII Sitkinak Islan 55.65 36** IAMs_20 IAMs_20 18 54 26.6
comp=Z,30µm,21.0s
**SHLS Shalkode 55.72 307** *eP* **P** **18 32 26.5 -2.7**
comp=Z,158nm,1.1s,baz=307
SHLS *eS* **S** **18 40 11.5 -2.7**
baz=307
**SHLS Shalkode 55.72 307** *eP* **P** **18 32 26.4 -2.7**
SHLS *eS* **S** **18 40 11.5 -2.7**
SHLS pmax pmax
comp=Z,158nm,1.1s
**O18K Koktuh Hills 55.75 32** IAMs_20 IAMs_20 18 54 03.9
comp=Z,29µm,20.0s
**ALBI Allahabad 55.78 286** *eP* **P** **18 32 31.3 +1.7**
ALBI IAmb IAmb 18 32 44.0
comp=Z,359nm,0.9s
**ALBI Allahabad 55.78 286** *ex* **P** **18 32 31.9 +2.3**
**ALBI Allahabad 55.78 286** IAML 18 32 47.7
comp=E,145nm,1.9s
**E18K Tukpahlearik C 55.78 23** P **P** **18 32 28.6 -0.4**
E18K IAmb IAmb 18 32 40.2
comp=Z,128nm,0.8s
**FORT Forrest 55.81 196** P **P** **18 32 31.4 +1.9**
**FORT Forrest 55.81 196** P **P** **18 32 28.5 -1.1**
FORT IAMs_20 IAMs_20 18 55 47.4
comp=Z,21µm,20.0s
**FORT Forrest 55.81 196** P **P** **18 32 31.2 +1.6**
comp=Z,394nm,0.9s
**SVW2 Sparrevohn 55.86 31** P **P** **18 32 34.1 +4.5**
**SVW2 Sparrevohn 55.86 31** P **P** **18 32 28.9 -0.7**
**J18K Innoko River 55.97 28** IAMs_20 IAMs_20 18 53 54.2
comp=Z,25µm,20.0s
**MHA Mahukona 56.03 81** **P** **18 32 31.9 +0.4**
**MHA Mahukona 56.03 81** P **P** **18 32 31.9 +0.4**
**UZB Uzynbulak 56.05 307** *eP* **P** **18 32 31.1 -0.4**
baz=307
**UZB Uzynbulak 56.05 307** *eP* **P** **18 32 31.0 -0.4**
**BLSP Bilaspur 56.20 282** *eP* **P** **18 32 32.9 +0.2**
BLSP IAmb IAmb 18 32 35.1
comp=Z,140nm,0.8s
**HUH Hualalai 56.23 81** P **P** **18 32 32.4 -0.8**
HUH IAmb IAmb 18 32 50.3

comp=Z,144nm,1.1s
HUH IAMs_20 IAMs_20 18 51 05.4
comp=Z,23µm,21.0s
**OHAK Old Harbor 56.24 36** P **P** **18 32 36.7 +4.3**
**OHAK Old Harbor 56.24 36** IAMs_20 IAMs_20 18 53 31.2
comp=Z,22µm,21.0s
**HPAH Hawaii Prepara 56.26 81** **P** **18 32 32.6 -0.6**
HPAH IAmb IAmb 18 32 40.9
comp=Z,207nm,1.0s
HPAH IAMs_20 IAMs_20 18 52 17.3
comp=Z,26µm,20.0s
**BBOO Buckleboo 56.28 188** P **P** **18 32 35.7 +2.8**
**BBOO Buckleboo 56.28 188** P **P** **18 32 32.3 -0.6**
BBOO IAmb IAmb 18 32 50.0
comp=Z,98nm,0.8s
BBOO IAMs_20 IAMs_20 18 57 30.6
comp=Z,24µm,18.0s
**BBOO Buckleboo 56.28 188** P **P** **18 32 34.1 +1.2**
comp=Z,142nm,1.0s
**KPKS Kokpek 56.28 308** *e*P **P** **18 32 32.9 -0.3**
comp=Z,112nm,0.9s,baz=308
KPKS *e*S **S** **18 40 23.4 +1.8**
baz=308
**KPKS Kokpek 56.28 308** *e*P **P** **18 32 32.8 -0.3**
KPKS *e*S **S** **18 40 23.4 +1.8**
KPKS pmax pmax
comp=Z,112nm,0.9s
**WHYH Whyalla 56.34 186** P **P** **18 32 35.3 +2.0**
**Q19K Cape Douglas, 56.35 34** IAMs_20 IAMs_20 18 54 21.8
comp=Z,30µm,20.0s
**LGTI Lohaghat 56.37 291** *e*P **P** **18 32 35.4 +1.6**
**PTH Pithoragarh 56.38 291** *e*P **P** **18 32 36.2 +2.1**
**L19K White Mountain 56.46 30** IAMs_20 IAMs_20 18 55 21.3
comp=Z,25µm,20.0s
**KURK Kurchatov 56.47 316** ⇑P **P** **18 32 34.8 +0.6**
**KURK Kurchatov 56.47 316***c i*P **P** **18 32 34.1 0.0**
KURK pmax pmax
comp=Z,795nm,1.5s
KURK MLR MLR
comp=Z,83µm,18.0s
**NTLH Newcastle Hard 56.47 172** P **P** **18 32 38.0 +3.8**
**ZHN Zhinishke 56.47 307** *e*P **P** **18 32 33.9 -0.6**
baz=307
**ZHN Zhinishke 56.47 307** *e*P **P** **18 32 33.9 -0.6**
**POHA Pohakuloa 56.48 81** P **P** **18 32 37.0 +2.0**
**POHA Pohakuloa 56.48 81** **P** **18 32 35.0 0.0**
**POHA Pohakuloa 56.48 81** IAMs_20 IAMs_20 18 52 24.1
comp=Z,26µm,20.0s
**MWH Moku'aweowe 56.49 81** P **P** **18 32 34.8 -0.6**
MWH IAMs_20 IAMs_20 18 51 24.5
comp=Z,25µm,21.0s
**SATY Saty 56.50 307** *e*P **P** **18 32 34.4 -0.3**
comp=Z,159nm,1.2s,baz=307
SATY *e*S **S** **18 40 26.0 +1.4**
baz=307
**SATY Saty 56.50 307** *e*P **P** **18 32 34.4 -0.3**
SATY *e*S **S** **18 40 25.9 +1.4**
SATY pmax pmax
comp=Z,159nm,1.2s
**KURBB Kurchatov Arra 56.52 316** P **P** **18 32 34.5 -0.1**
comp=Z,282nm,0.8s,baz=94,slow=7.8,SNR=19
KURBB S **S** **18 40 21.7 -2.6**
comp=Z,3.0nm,1.0s,baz=86,slow=12,SNR=2.6
KURBB PKPPKP **P'P'df** **19 02 27.8 -6.5**
comp=Z,4.0nm,1.1s,baz=247,slow=3.7,SNR=4.4
KURBB PKP2bc 19 02 48.1
comp=Z,3.7nm,1.0s,baz=272,slow=3.3,SNR=4.4
comp=Z,282nm,0.8s
**PRZ Przheval'sk 56.52 306** IAMs_20 IAMs_20 18 58 18.7
comp=Z,30µm,20.0s
**KHU Kahuku 56.54 82** **P** **18 32 34.7 -0.7**
KHU IAMs_20 IAMs_20 18 51 13.8
comp=Z,22µm,21.0s
**KHU Kahuku 56.54 82** P **P** **18 32 34.7 -0.7**
KHU pmax pmax
comp=Z,568nm,1.3s
KHU MLR MLR
comp=Z,22µm,21.0s
**LHI Lord Howe Isla 56.56 164** P **P** **18 32 33.5 -1.3**
LHI IAmb IAmb 18 34 00.6
comp=Z,448nm,1.9s
**HMH Humu'ula Sheep 56.57 81** P **P** **18 32 34.5 -1.2**
HMH IAMs_20 IAMs_20 18 51 14.4
comp=Z,28µm,21.0s
**M19K Big River Lodg 56.60 30** IAMs_20 IAMs_20 18 55 35.2
comp=Z,26µm,20.0s
**HTT Hallett 56.62 185** P **P** **18 32 39.7 +4.3**
**HTT Hallett 56.62 185** P **P** **18 32 35.9 +0.5**
comp=Z,109nm,1.4s
**MLH Mauna Loa 56.69 81** P **P** **18 32 36.2 -0.3**
MLH IAmb IAmb 18 32 40.6
comp=Z,212nm,1.0s
MLH IAMs_20 IAMs_20 18 51 39.6
comp=Z,24µm,20.0s
**P19K Oil Pt 56.69 33** IAMs_20 IAMs_20 18 54 43.8
comp=Z,30µm,20.0s
**KDAK Kodiak Island 56.70 35***c i*P **P** **18 32 37.0 +1.3**
KDAK pmax pmax
comp=Z,254nm,2.3s
KDAK MLR MLR
comp=Z,12µm,20.0s
**MGCD Mangrove Creek 56.70 172** P **P** **18 32 40.3 +4.4**
**UWE Uwekahuna 56.79 81** P **P** **18 32 36.2 -0.9**
UWE IAmb IAmb 18 32 49.9
comp=Z,285nm,1.1s
UWE IAMs_20 IAMs_20 18 51 21.4
comp=Z,28µm,22.0s
**HLP Hilina Pali 56.81 82** P **P** **18 32 36.1 -1.0**
HLP IAMs_20 IAMs_20 18 51 42.9
comp=Z,24µm,20.0s
**HATHI Halema'uma'u T 56.82 81** P **P** **18 32 36.5 -0.7**
HATHI IAmb IAmb 18 32 56.0
comp=Z,305nm,1.4s
HATHI IAMs_20 IAMs_20 18 51 33.1
comp=Z,26µm,21.0s
**BYL Byron's Ledge 56.82 81** P **P** **18 32 35.8 -1.5**
BYL IAmb IAmb 18 33 06.4
comp=Z,198nm,1.1s
**PUH Pauahi 56.87 81** P **P** **18 32 37.1 -0.5**
PUH IAMs_20 IAMs_20 18 51 34.5
comp=Z,26µm,21.0s
**ARXS Arharly 56.89 309** *e*P **P** **18 32 38.3 +0.9**
**KNHH Kane Nui o Ham 56.91 81** P **P** **18 32 37.4 -0.5**
**HNLY HANLEY 56.94 295** *e*P **P** **18 32 41.4 +3.0**
**HNLY HANLEY 56.94 295** *ex* **P** **18 32 41.4 +3.0**
**STCH Steam Cracks 56.95 81** P **P** **18 32 37.5 -0.7**
STCH IAmb IAmb 18 32 46.0
comp=Z,220nm,1.1s
STCH IAMs_20 IAMs_20 18 51 36.5
comp=Z,28µm,21.0s
**JOKA Jonika Flow 57.05 81** P **P** **18 32 38.9 +0.1**
JOKA IAmb IAmb 18 32 46.7
comp=Z,210nm,1.2s
JOKA IAMs_20 IAMs_20 18 52 29.2
comp=Z,26µm,20.0s
**D19K Kuna River 57.06 22** pP 18 32 42.7 -2.1
**K20K Telida 57.09 28** IAMs_20 IAMs_20 18 54 30.9
comp=Z,26µm,21.0s
**M20K Styx River 57.18 30** P **P** **18 32 38.1 -1.0**
M20K IAmb IAmb 18 33 36.6
comp=Z,165nm,1.3s
**SYDH Sydney Hard Ro 57.21 173** P **P** **18 32 42.5 +3.1**
**I20K Naaghedeneel 57.28 27** pP 18 32 45.2 -1.1
**RiV Riverview 57.32 172** P **P** **18 32 44.7 +4.5**
**AFI Afiamalu 57.33 126** P **P** **18 32 39.9 -0.9**
AFI IAmb IAmb 18 33 16.6
comp=Z,208nm,1.2s
AFI IAMs_20 IAMs_20 18 52 28.9
comp=Z,31µm,21.0s
**AFI Afiamalu 57.33 126** P **P** **18 32 39.9 -0.9**
AFI pmax pmax
comp=Z,208nm,1.2s
AFI MLR MLR
comp=Z,31µm,21.0s
**HOM Homer 57.48 33** IAMs_20 IAMs_20 18 55 07.7
comp=Z,28µm,20.0s
**MDOK Medeo 57.49 307** *e*P **P** **18 32 41.5 -0.3**
baz=307
MDOK *e*S **S** **18 40 39.3 +1.6**
baz=307
MDOK LR LR 18 58 28.8
comp=Z,23µm,15.8s,baz=307
**MDOK Medeo 57.49 307** *e*P **P** **18 32 41.4 -0.3**
MDOK *e*S **S** **18 40 39.3 +1.6**
MDOK MLR MLR
comp=Z,23µm,16.0s

**CHKK Chushkaly 57.50 308** *e*P **P** **18 32 41.7 0.0**
baz=308
**CHKK Chushkaly 57.50 308** *e*P **P** **18 32 41.6 0.0**
**YNG Young 57.51 175** P **P** **18 32 46.3 +4.7**
**YNG Young 57.51 175** P **P** **18 32 43.7 +2.1**
comp=Z,277nm,1.0s
**SPU Mount Spurr 57.55 31** pP 18 32 47.4 -0.9
**AAA Alma-Ata 57.58 307** *e*P **P** **18 32 42.3 0.0**
baz=307
AAA LR LR 18 58 57.8
comp=Z,21µm,14.8s,baz=307
**AAA Alma-Ata 57.58 307** *e*P **P** **18 32 42.2 0.0**
AAA MLR MLR
comp=Z,21µm,15.0s
**CNPM China Poot 57.67 33** IAMs_20 IAMs_20 18 55 15.7
comp=Z,30µm,20.0s
**COCO West Island 57.70 237** P P 18 32 49.1 +5.8
**COCO West Island 57.70 237** P **P** **18 32 41.4 -1.9**
**COCO West Island 57.70 237** P **P** **18 32 41.4 -1.9**
COCO pmax pmax
comp=Z,1µm,1.2s
COCO MLR MLR
comp=Z,16µm,22.0s
**KLP Kalpa 57.73 294** *e*P **P** **18 32 44.7 +0.9**
**WOLH Wollongong Har 57.86 173** P **P** **18 32 48.3 +4.3**
**BRLK Bradley Lake 57.88 33** IAMs_20 IAMs_20 18 55 21.0
comp=Z,28µm,20.0s
**B20K Meade River 57.92 20** P **P** **18 32 44.7 +0.6**
B20K IAmb IAmb 18 32 55.2
comp=Z,168nm,0.8s
**KUU Kurty 57.97 308** *e*P **P** **18 32 44.6 -0.4**
comp=Z,176nm,1.0s,baz=308
KUU LR LR 18 59 22.2
comp=Z,19µm,16.7s,baz=308
**KUU Kurty 57.97 308** *e*P **P** **18 32 44.5 -0.4**
KUU pmax pmax
comp=Z,176nm,1.0s
KUU MLR MLR
comp=Z,19µm,17.0s
**DDI Dehra Dun 58.10 292** *e*P **P** **18 32 48.6 +2.6**
DDI IAmb IAmb 18 32 57.5
comp=Z,379nm,0.9s
**KMBL Kambalda 58.20 202** P **P** **18 32 46.7 +0.2**
**KMBL Kambalda 58.20 202** P **P** **18 32 46.3 -0.2**
comp=Z,96nm,1.6s
**MORW Morawa 58.42 208** P **P** **18 32 49.2 +1.1**
**MORW Morawa 58.42 208** P **P** **18 32 47.0 -1.1**
MORW IAmb IAmb 18 32 56.4
comp=Z,185nm,0.9s
**MORW Morawa 58.42 208** ⇓P **P** **18 32 49.3 +1.2**
**MORW Morawa 58.42 208** P **P** **18 32 48.7 +0.6**
comp=Z,0.0nmcomp=Z,226nm,0.9s
**KSH Kashi 58.55 303** P P 18 32 54.8 +5.6
KSH pP sP 18 32 58.3 -0.2
KSH S **S** **18 40 59.0 +7.4**
KSH ScS **ScS** **18 42 39.3 +1.7**
KSH pmax pmax
comp=Z,470nm,0.8s
KSH pmax pmax
comp=Z,5µm,5.5s
KSH LR LR
comp=Z,24µm,17.5s
KSH LR LR
comp=Z,42µm,18.6s
KSH LR LR
comp=Z,43µm,18.2s
**O22K Cooper Landing 58.56 32** IAMs_20 IAMs_20 18 55 14.2
comp=Z,32µm,20.0s
**CAN Canberra 58.58 175** P **P** **18 32 49.0 -0.1**
**CAN Canberra 58.58 175** P **P** **18 32 49.0 -0.1**
CAN pmax pmax
comp=Z,93nm,1.1s
CAN MLR MLR
comp=Z,10µm,19.0s
**UGON Onchagaon 58.60 290** *e*P **P** **18 32 48.9 -0.6**
**CNB Canberra Magne 58.60 174** P **P** **18 32 50.0 +0.7**
comp=Z,56nm,0.9s
**B21K Ikpikpuk River 58.63 21** pP 18 32 53.4 -2.3
**JHNI Jhansi 58.64 286** *e*P **P** **18 32 49.8 0.0**
JHNI IAmb IAmb 18 32 51.2
comp=Z,249nm,0.7s
**RC01 Rabbit Creek A 58.64 32** P **P** **18 32 49.9 +0.6**
RC01 IAmb IAmb 18 33 22.9
comp=Z,119nm,0.9s
**SMLA Simla 58.71 293** *e*P **P** **18 32 52.1 +1.9**
SMLA IAmb IAmb 18 33 07.8
comp=Z,2µm,1.5s
**BISR Bishrakh 58.95 290** *e*P **P** **18 32 53.4 +1.4**
BISR IAmb IAmb 18 32 55.8
comp=Z,1µm,0.7s
**PMR Palmer 59.00 31** P **P** **18 32 55.7 +4.0**
**PMR Palmer 59.00 31** IAmb IAmb 18 33 21.9
comp=Z,139nm,1.0s
**D22K Ayikyak River 59.07 22** IAMs_20 IAMs_20 18 59 19.5
comp=Z,20µm,20.0s
**NDI New Delhi 59.12 290** *e*P **P** **18 32 54.5 +1.3**
**GHO Glory Hole Cre 59.13 31** IAMs_20 IAMs_20 18 55 22.0
comp=Z,20µm,21.0s
**NPLP NPLP New Delhi 59.17 290** *e*P **P** **18 32 55.1 +1.6**
**NGP Nagpur 59.23 281** *e*P **P** **18 32 55.4 +1.4**
**B22K Teshekpuk Lake 59.24 21** P **P** **18 32 53.5 +0.3**
**DHRM DHARAMSHALA 59.25 295** IAmb IAmb 18 33 09.1
comp=Z,714nm,1.2s
**PWL Port Wells 59.29 32** IAMs_20 IAMs_20 18 55 47.4
comp=Z,31µm,20.0s
**BHK Bhakra 59.29 294** *e*P **P** **18 32 56.2 +1.9**
BHK IAmb IAmb 18 33 05.7
comp=Z,2µm,1.3s
**BHK Bhakra 59.29 294** *ex* **P** **18 32 56.1 +1.8**
**KNK Knik Glacier 59.30 31** IAMs_20 IAMs_20 18 54 47.6
comp=Z,23µm,22.0s
**SONA Sohna 59.32 290** *e*P **P** **18 32 55.5 +1.0**
**AAK Ala-Archa 59.39 307** ⇑P **P** **18 32 56.6 +1.6**
**AAK Ala-Archa 59.39 307***c i*P **P** **18 32 53.3 -1.7**
AAK pmax pmax
comp=Z,254nm,1.7s
AAK MLR MLR
comp=Z,51µm,18.0s
**BLDU Ballidu 59.48 207** P **P** **18 32 56.5 +1.1**
**BLDU Ballidu 59.48 207** P **P** **18 32 56.2 +0.8**
comp=Z,241nm,0.9s
**NEA2 Nenana 59.51 28** P **P** **18 32 55.4 +0.2**
NEA2 IAmb IAmb 18 33 29.6
comp=Z,121nm,1.0s
**BTLS Baital 59.55 310** *e*P **P** **18 32 55.5 -0.4**
comp=Z,96nm,1.1s,baz=310
**BTLS Baital 59.55 310** *e*P **P** **18 32 55.5 -0.4**
BTLS pmax pmax
comp=Z,96nm,1.1s
**THN Thein Dam 59.70 295** *e*P **P** **18 32 58.7 +1.6**
THN IAmb IAmb 18 33 06.9
comp=Z,564nm,1.1s
**D23K Nanushuk River 59.79 22** pP 18 33 01.1 -2.6
**ARPS Mount Arapiles 59.81 182** P **P** **18 32 59.6 +2.1**
**ARPS Mount Arapiles 59.81 182** P **P** **18 32 58.7 +1.2**
comp=Z,303nm,0.9s
**KUDL Kundal 59.86 290** *e*P **P** **18 32 59.3 +1.1**
**KLBR Kellerberrin 59.92 205** P **P** **18 32 59.5 +1.1**
**KLBR Kellerberrin 59.92 205** P **P** **18 32 58.7 +0.3**
comp=Z,410nm,0.8s
**DHY Denali Highway 60.02 29** IAMs_20 IAMs_20 18 56 14.4
comp=Z,28µm,21.0s
**COLA College 60.07 27** P **P** **18 33 03.4 +4.4**
**COLA College 60.07 27** ⇓P **P** **18 33 03.0 +4.0**
**Q23K Middleton Isla 60.13 34** IAMs_20 IAMs_20 18 57 15.1
comp=Z,19µm,18.0s
**MID Middleton Isla 60.14 34** IAMs_20 IAMs_20 18 57 14.1
comp=Z,17µm,18.0s
**BHPL Bhopal 60.15 284** *e*P **P** **18 33 01.9 +1.6**
BHPL IAmb IAmb 18 33 14.3
comp=Z,102nm,0.9s
**JMU Jammu 60.34 295** *e*P **P** **18 33 03.3 +1.9**
**HDA Harding Lake 60.38 28** IAMs_20 IAMs_20 18 55 49.9
comp=Z,20µm,21.0s
**ILAR Eielson Array 60.46 28** P **P** **18 33 02.4 +0.7**
comp=Z,65nm,0.8s,baz=259,slow=5.6,SNR=6.5
ILAR PKPPKP **P'P'df** **19 02 22.9 -5.3**
comp=Z,3.0nm,1.0s,baz=123,slow=1.3,SNR=6.4
ILAR PKP2bc 19 02 35.5
comp=Z,2.1nm,0.9s,baz=59,slow=1.2,SNR=5.4
comp=Z,65nm,0.8s
**D24K Happy Valley 60.48 22** IAMs_20 IAMs_20 19 00 05.9
comp=Z,22µm,20.0s
**KLU Klutina 60.52 31** IAMs_20 IAMs_20 18 56 27.9
comp=Z,23µm,20.0s
**EYAK Cordova Ski Ar 60.52 32** P **P** **18 33 06.5 +4.3**

**BRAT Ballarat 60.57 180** P **P** **18 33 06.2 +3.5**
**TOO Toolangi 60.62 178** P **P** **18 33 05.4 +2.3**
**TOO Toolangi 60.62 178** P **P** **18 33 02.8 -0.3**
**TOO Toolangi 60.62 178** P **P** **18 33 02.8 -0.3**
TOO pmax pmax
comp=Z,67nm,1.0s
TOO MLR MLR
comp=Z,14µm,18.0s
**HYB Hyderabad 60.72 278** *e*P **P** **18 33 04.9 +0.6**
HYB IVmB_BB 18 33 08.5
comp=Z,4µm,2.8s
HYB *e* 18 33 45.1
HYB *e*PP **PP** **18 35 16.8 -1.4**
HYB *e*S **S** **18 41 18.3 -1.7**
HYB IVMs_BB IVMs_BB 18 57 33.2
comp=Z,6µm,20.8s
**MUN Mundaring 60.88 206** P **P** **18 33 06.3 +1.3**
**MUN Mundaring 60.88 206** P **P** **18 33 05.4 +0.4**
comp=Z,129nm,1.1s
**XMAS Kiritimati 60.92 101** P **P** **18 33 08.2 +2.5**
**XMAS Kiritimati 60.92 101** **P** **18 33 04.2 -1.5**
XMAS IAmb IAmb 18 33 42.7
comp=Z,198nm,1.1s
**XMAS Kiritimati 60.92 101** IAMs_20 IAMs_20 18 54 03.9
comp=Z,20µm,21.0s
**MTKN Mount Kenneth 61.02 207** P **P** **18 33 10.3 +4.4**
**MTKN Mount Kenneth 61.02 207** P **P** **18 33 10.3 +4.4**
**KAIM Kayak Island 61.14 33** P **P** **18 33 05.9 -0.5**
KAIM IAMs_20 IAMs_20 18 57 55.6
comp=Z,22µm,19.0s
**GEXS Deakin Univers 61.22 179** P **P** **18 33 11.4 +4.3**
**NWAO Narrogin (SRO) 61.30 205** P **P** **18 33 09.1 +1.3**
**NWAO Narrogin (SRO) 61.30 205** P **P** **18 33 07.5 -0.3**
**NWAO Narrogin (SRO) 61.30 205** P **P** **18 33 08.6 +0.8**
comp=Z,115nm,1.1s,baz=43,slow=6.3,SNR=8.7
comp=Z,115nm,1.1s
**NWAO Narrogin (SRO) 61.30 205** P **P** **18 33 07.5 -0.3**
NWAO pmax pmax
comp=Z,288nm,1.4s
**FYU Fort Yukon 61.38 26** P **P** **18 33 08.8 +0.8**
**SUCK Suckling Hills 61.47 33** IAMs_20 IAMs_20 18 58 16.3
comp=Z,25µm,19.0s
**GLB Gilahina Butte 61.53 31** IAMs_20 IAMs_20 18 56 50.5
comp=Z,24µm,20.0s
**NIL Nilore 61.53 297** IAMs_20 IAMs_20 19 01 18.2
comp=Z,23µm,20.0s
**BVAR Borovoye Array 61.61 319** P **P** **18 33 10.8 +1.1**
comp=Z,568nm,0.7s,baz=90,slow=7.8,SNR=24
BVAR S **S** **18 41 27.9 -2.3**
comp=Z,3.9nm,1.1s,baz=64,slow=9.8,SNR=1.0
BVAR PKP2bc 19 02 33.2
comp=Z,4.5nm,0.9s,baz=268,slow=4.0,SNR=5.5
**SCRK Sand Creek 61.62 29** IAMs_20 IAMs_20 18 56 41.7
comp=Z,23µm,22.0s
**MENT Mentasta 61.66 30** IAMs_20 IAMs_20 18 57 29.0
comp=Z,20µm,20.0s
**BRVK Borovoye 61.67 319** IAMs_20 IAMs_20 18 59 57.8
comp=Z,30µm,21.0s
**BRVK Borovoye 61.67 319***d i*P **P** **18 33 09.8 -0.4**
BRVK pmax pmax
comp=Z,330nm,0.8s
BRVK MLR MLR
comp=Z,24µm,17.0s
**VRDI Verde Repeater 61.69 32** IAMs_20 IAMs_20 18 57 04.8
comp=Z,25µm,21.0s
**CRQM Cirque 61.82 32** IAMs_20 IAMs_20 18 58 50.9
comp=Z,22µm,20.0s
**AJM Ajmer 61.83 289** *e*P **P** **18 33 12.8 +1.1**
AJM IAmb IAmb 18 33 20.5
comp=Z,293nm,1.1s
**AJM Ajmer 61.83 289** *ex* **P** **18 33 13.0 +1.3**
**L26K Log Cabin Wild 61.84 30** IAMs_20 IAMs_20 18 57 44.6
comp=Z,24µm,20.0s
**MCARA McCarthy VSAT 61.90 32** IAMs_20 IAMs_20 18 57 12.4
comp=Z,22µm,21.0s
**SNH Sunshine Point 61.95 33** P **P** **18 33 11.2 -0.7**
SNH IAmb IAmb 18 33 43.1
comp=Z,206nm,1.2s
SNH IAMs_20 IAMs_20 18 58 42.8
comp=Z,20µm,20.0s
**WAX Waxell Ridge 61.95 33** IAMs_20 IAMs_20 18 58 32.8
comp=Z,20µm,19.0s
**TGL Tana Glacier 61.97 32** IAMs_20 IAMs_20 18 58 55.3
comp=Z,22µm,20.0s
**NIUE Niue 62.01 129** P **P** **18 33 16.0 +3.2**
**PALK Pallekele 62.18 266** P **P** **18 33 12.1 -2.1**
PALK IAmb IAmb 18 33 30.5
comp=Z,245nm,1.4s
**PALK Pallekele 62.18 266** IAMs_20 IAMs_20 19 00 01.3
comp=Z,20µm,20.0s
**PALK Pallekele 62.18 266** ⇑P **P** **18 33 15.8 +1.6**
**PALK Pallekele 62.18 266** P **P** **18 33 12.1 -2.1**
PALK pmax pmax
comp=Z,245nm,1.4s
PALK MLR MLR
comp=Z,20µm,20.0s
**ISLE Juniper Island 62.21 32** IAMs_20 IAMs_20 18 58 32.6
comp=Z,19µm,20.0s
**KKAR Karatay Array 62.26 308** ⇑P **P** **18 33 15.6 +1.2**
**MESA MESA 62.39 33** P **P** **18 33 15.3 +0.2**
MESA IAmb IAmb 18 33 31.7
comp=Z,166nm,1.1s
MESA IAMs_20 IAMs_20 18 58 57.5
comp=Z,19µm,20.0s
**K27K Chicken 62.47 29** IAMs_20 IAMs_20 18 58 00.0
comp=Z,25µm,21.0s
**GRNC Granite Creek 62.50 32** IAMs_20 IAMs_20 18 58 42.2
comp=Z,19µm,20.0s
**L27K Beaver Creek, 62.53 30** IAMs_20 IAMs_20 18 58 03.9
comp=Z,29µm,20.0s
**CTGM Chitina Glacie 62.71 32** IAMs_20 IAMs_20 18 57 46.7
comp=Z,24µm,20.0s
**BRLS Boroldav 62.76 308** *e*P **P** **18 33 18.5 +0.7**
baz=307
**BRLS Boroldav 62.76 308** *e*P **P** **18 33 18.4 +0.7**
**TABL Table Mountain 62.80 33** P **P** **18 33 18.1 +0.2**
TABL IAmb IAmb 18 33 50.7
comp=Z,128nm,1.0s
**G27K Doyon Strip 62.82 25** P **P** **18 33 16.6 -1.1**
G27K IAmb IAmb 18 33 42.6
comp=Z,135nm,1.4s
**LOGN Logan Glacier 62.87 32** IAMs_20 IAMs_20 18 58 43.0
comp=Z,23µm,21.0s
**RKGY Rocky Gully 62.89 204** P **P** **18 33 20.4 +2.0**
**RKGY Rocky Gully 62.89 204** P **P** **18 33 20.1 +1.7**
comp=Z,333nm,1.0s
**EGAK Eagle 62.90 28** ⇓P P 18 33 23.1 +4.9
**I28M Miner Creek 63.45 27** IAMs_20 IAMs_20 19 01 59.8
comp=Z,18µm,20.0s
**YKU2 Yakutat 63.54 34** IAMs_20 IAMs_20 18 58 49.1
comp=Z,22µm,20.0s
**BCPM Bancas Point 63.55 33** IAMs_20 IAMs_20 18 58 54.2
comp=Z,18µm,19.0s
**DAWY Dawson 63.65 29** P **P** **18 33 23.8 +0.5**
DAWY IAmb IAmb 18 33 39.8
comp=Z,83nm,1.0s
DAWY IAMs_20 IAMs_20 18 58 46.3
comp=Z,19µm,20.0s
**PNL Peninsula 63.68 34** P **P** **18 33 27.9 +4.4**
**O29M Mount Kennedy 64.07 33** IAMs_20 IAMs_20 19 00 03.0
comp=Z,21µm,20.0s
**H29M Whitestone 64.11 26** IAMs_20 IAMs_20 19 02 46.2
comp=Z,16µm,20.0s
**I29M Ogilvie Camp, 64.13 27** IAMs_20 IAMs_20 18 59 36.8
comp=Z,17µm,20.0s
**RAO Raoul Island 64.14 143** IAMs_20 IAMs_20 19 00 58.4
comp=Z,18µm,20.0s
**J29N Klondike Camp 64.17 28** IAMs_20 IAMs_20 18 59 02.9
comp=Z,18µm,20.0s
**E29M Blow River 64.34 24** pP 18 33 31.5 -2.8
**K29M Barlow Dome 64.48 29** IAMs_20 IAMs_20 18 59 12.2
comp=Z,23µm,20.0s
**P29M Windy Craggy 64.52 34** **pP** **18 33 33.1 -2.5**
P29M IAMs_20 IAMs_20 18 59 40.0
comp=Z,23µm,20.0s
**CORO Coronation Par 64.55 177** P **P** **18 33 33.4 +4.2**
**POO Poona 64.66 280** *e*P **P** **18 33 32.4 +1.8**
POO IAmb IAmb 18 33 47.6
comp=Z,946nm,1.8s
**KAD Karad 64.73 279** *e*P **P** **18 33 31.8 +0.8**
**N30M Aishikik Lake 64.75 31** pP 18 33 36.4 -0.9
**OUZ Omahuta 64.86 153** ⇓P **P** **18 33 35.8 +4.4**
**I30M Mount Dempster 64.94 27** P **P** **18 33 32.1 +0.3**
I30M IAMs_20 IAMs_20 19 02 46.3
comp=Z,17µm,20.0s
**JASL Jaisalmer 64.96 290** *e*P **P** **18 33 33.3 +0.8**

JASL IAmb IAmb 18 33 35.5
comp=Z,170nm,0.7s
**G30M tAoh Zraii Nji** 64.97 25 pP 18 33 35.3 -3.2
**TRD Trivandrum** 65.16 269 *e*P **P** **18 33 34.9 +1.0**
TRD IAmb IAmb 18 33 42.9
comp=Z,151nm,0.9s
**O30N Mendenhall** 65.28 32 IAMs_20 IAMs_20 19 01 52.7
comp=Z,22µm,20.0s
**N31M Braeburn, Yuko** 65.38 31 IAMs_20 IAMs_20 18 59 44.4
comp=Z,28µm,21.0s
**S31K Pelican** 65.42 35 P **P** **18 33 34.3 -0.5**
S31K IAmb IAmb 18 34 21.0
comp=Z,248nm,1.6s
**MOO Moorlands** 65.54 177 P **P** **18 33 38.2 +2.5**
comp=Z,119nm,1.7s
**GOA Goa** 65.63 277 *e*P **P** **18 33 38.0 +1.2**
GOA IAmb IAmb 18 33 44.5
comp=Z,819nm,2.0s
**SKAG Skagway** 65.76 34 P **P** **18 33 41.5 +4.5**
**SKAG Skagway** 65.76 34 IAMs_20 IAMs_20 18 59 44.6
comp=Z,21µm,20.0s
**WHY Whitehorse** 65.88 32 P **P** **18 33 38.6 +0.7**
WHY IAMs_20 IAMs_20 18 59 40.6
comp=Z,27µm,21.0s
**TAU Tasmania Unive** 66.02 177 IAMs_20 IAMs_20 19 04 29.0
comp=Z,21µm,18.0s
**S32K Killisnoo** 66.35 36 P **P** **18 33 41.5 +0.7**
S32K IAmb IAmb 18 34 06.6
comp=Z,190nm,1.6s
**JIS Juneau Island** 66.36 35 P **P** **18 33 45.0 +4.1**
**FARO Faro, Yukon** 66.47 30 IAMs_20 IAMs_20 19 01 07.0
comp=Z,16µm,20.0s
**P32M Atlin** 66.56 33 IAMs_20 IAMs_20 19 00 00.9
comp=Z,25µm,21.0s
**N32M Quiet Lake** 66.71 32 IAMs_20 IAMs_20 19 00 26.3
comp=Z,24µm,21.0s
**SVE Sverdlovsk** 66.92 324 *de*P **P** **18 33 44.8 +0.3**
SVE *e*S **S** **18 42 34.8 -0.9**
SVE pmax pmax
comp=Z,461nm,1.5s
SVE MLR MLR
comp=E,30µm,19.0s
SVE MLR MLR
comp=Z,38µm,19.0s
**P33M Teslin, Yukon** 66.94 33 IAMs_20 IAMs_20 19 01 31.8
comp=Z,21µm,20.0s
**BHUJ Bhuj** 67.03 286 *e*P **P** **18 33 48.5 +2.8**
BHUJ IAmb IAmb 18 34 04.0
comp=Z,641nm,1.5s
**KUZ Kuaotunu** 67.06 152 P **P** **18 33 49.5 +4.0**
**Q32M Nakina River** 67.38 34 IAMs_20 IAMs_20 19 00 50.5
comp=Z,16µm,20.0s
**MMPY Sheldon Lake,** 67.39 30 IAMs_20 IAMs_20 19 00 53.3
comp=Z,23µm,20.0s
**CRAG Craig** 67.42 38 P **P** **18 33 51.8 +4.2**
**CRAG Craig** 67.42 38 P **P** **18 33 48.1 +0.5**
CRAG IAmb IAmb 18 34 13.6
comp=Z,259nm,1.7s
**CRAG Craig** 67.42 38 ⇑P P 18 33 52.6 +5.0
**TOZ Tahuroa Road** 67.80 153 P **P** **18 33 49.2 -0.9**
TOZ IAmb IAmb 18 34 19.5
comp=Z,200nm,1.5s
**R33M Jennings River** 67.98 33 **pP** **18 33 54.8 -3.2**
R33M IAMs_20 IAMs_20 19 01 03.3
comp=Z,23µm,21.0s
**ARU Arti** 68.11 323 *c i*P **P** **18 33 52.0 0.0**
ARU 18 34 13.5
ARU PPP PPP 18 37 57.6
ARU S **S** **18 42 53.7 +3.7**
ARU 18 43 44.0
ARU SS **SS** **18 47 08.9 -3.4**
ARU SSS SSS 18 50 11.9
ARU pmax pmax
comp=Z,292nm,0.8s
ARU pmax pmax
comp=Z,3µm,12.3s
ARU smax smax
comp=N,5µm,12.4s
ARU MLR MLR
comp=Z,33µm,19.0s
**ARU Arti** 68.11 323 P **P** **18 33 53.1 +1.1**
comp=Z,397nm,0.8s,comp=Z,5µm
**DIB Dawson Inlet,** 68.16 40 P **P** **18 33 52.0 -0.4**
**HIZ Hauiti** 68.20 154 P **P** **18 33 52.5 -0.2**
HIZ IAMs_20 IAMs_20 19 01 02.6
comp=Z,17µm,20.0s
**V35K Ketchikan** 68.29 38 P **P** **18 33 56.5 +3.4**
V35K IAmb IAmb 18 34 37.8
comp=Z,161nm,1.5s
**A36M Sachs Harbour** 68.40 20 IAmb IAmb 18 33 59.8
comp=Z,146nm,0.9s
A36M IAMs_20 IAMs_20 19 07 45.9
comp=Z,8µm,20.0s
**ABKAR Akbulak array** 68.56 316 ⇑P **P** **18 33 55.0 +0.1**
**URZ Urewera** 68.93 152 ⇓P **P** **18 34 00.2 +3.0**
**WTLY Watson Lake, Y** 68.94 32 IAMs_20 IAMs_20 19 03 13.7
comp=Z,22µm,19.0s
**RTZ Ruatahuna** 69.17 152 P **P** **18 33 58.0 -0.8**
RTZ IAMs_20 IAMs_20 19 00 20.4
comp=Z,24µm,22.0s
**RUBB Prince Rupert** 69.25 39 pP 18 34 03.4 -2.4
**HMDM Hanimaadhoo** 69.27 269 P **P** **18 33 57.3 -2.7**
**QRZ Quartz Range** 69.32 157 P **P** **18 33 60.0 +0.4**
QRZ IAmb IAmb 18 34 23.2
comp=Z,123nm,0.9s
QRZ IAMs_20 IAMs_20 19 02 03.9
comp=Z,17µm,20.0s
**QRZ Quartz Range** 69.32 157 P **P** **18 34 00.5 +0.9**
**BKZ Black Stump Fm** 69.43 153 P **P** **18 34 01.2 +0.8**
**DUWZ D'Urville Isla** 69.81 156 P **P** **18 34 01.0 -1.7**
**MRNZ Matariki Terra** 69.91 157 P **P** **18 34 03.0 -0.2**
**NNZ Nelson** 69.97 156 IAmb IAmb 18 34 21.8
comp=Z,173nm,1.3s
NNZ IAMs_20 IAMs_20 19 03 54.2
comp=Z,14µm,19.0s
**NNZ Nelson** 69.97 156 P **P** **18 34 03.4 -0.2**
**THZ Tophouse** 70.28 157 IAmb IAmb 18 34 33.8
comp=Z,338nm,1.7s
THZ IAMs_20 IAMs_20 19 02 24.3
comp=Z,19µm,20.0s
**THZ Tophouse** 70.28 157 P **P** **18 34 05.5 -0.1**
**TCW Tory Channel** 70.30 156 P **P** **18 34 05.0 -0.6**
**MRZ Mangatainoka R** 70.33 155 P **P** **18 34 06.3 +0.5**
MRZ IAmb IAmb 18 34 13.1
comp=Z,178nm,1.0s
MRZ IAMs_20 IAMs_20 19 02 48.8
comp=Z,19µm,20.0s
**MRZ Mangatainoka R** 70.33 155 P **P** **18 34 06.7 +0.9**
**TUWZ Tuamarina** 70.36 156 P **P** **18 34 06.4 +0.4**
**SNZO South Karori** 70.55 156 P **P** **18 34 09.5 +2.4**
**SNZO South Karori** 70.55 156 P **P** **18 34 06.3 -0.8**
SNZO IAmb IAmb 18 34 30.5
comp=Z,151nm,0.8s
**BFZ Birch Farm** 70.61 154 P **P** **18 34 09.1 +1.5**
**BFZ Birch Farm** 70.61 154 IAmb IAmb 18 34 50.5
comp=Z,291nm,1.3s
BFZ IAMs_20 IAMs_20 19 03 01.3
comp=Z,19µm,20.0s
**INZ Inchbonnie** 70.62 159 IAmb IAmb 18 34 33.7
comp=Z,115nm,0.9s
INZ IAMs_20 IAMs_20 19 01 45.2
comp=Z,22µm,20.0s
**INZ Inchbonnie** 70.62 159 P **P** **18 34 07.5 0.0**
**WVZ Waitaha Valley** 70.69 159 P **P** **18 34 08.8 +0.9**
**BHW Baring Head** 70.70 155 P **P** **18 34 08.1 +0.1**
BHW IAmb IAmb 18 34 34.3
comp=Z,97nm,0.8s
**WRGLY Wrigley** 70.79 29 IAMs_20 IAMs_20 19 02 11.1
comp=Z,22µm,21.0s
**FOZ Fox Glacier** 70.81 160 P **P** **18 34 09.4 +0.8**
FOZ IAmb IAmb 18 34 35.7
comp=Z,180nm,1.0s
FOZ IAMs_20 IAMs_20 19 02 09.2
comp=Z,14µm,20.0s
**RAR Rarotonga** 70.82 124 P **P** **18 34 13.1 +3.9**
**RAR Rarotonga** 70.82 124 P **P** **18 34 09.7 +0.5**
RAR IAmb IAmb 18 34 14.4
comp=Z,244nm,1.8s
**RAR Rarotonga** 70.82 124 IAMs_20 IAMs_20 19 02 13.4
comp=Z,22µm,20.0s
**RAR Rarotonga** 70.82 124 P **P** **18 34 09.7 +0.5**
RAR pmax pmax
comp=Z,244nm,1.8s
RAR MLR MLR
comp=Z,22µm,20.0s

**MSWZ Moikau Station** 70.85 155 P **P** **18 34 07.5 -1.5**
**LTZ Lake Taylor** 70.95 158 IAmb IAmb 18 34 31.0
comp=Z,90nm,0.9s
**LTZ Lake Taylor** 70.95 158 P **P** **18 34 09.8 +0.2**
**PLWZ Palliser** 70.98 155 P **P** **18 34 09.6 -0.3**
**JCZ Jackson Bay** 70.98 161 P **P** **18 34 12.4 +2.5**
**KHZ Kahutara** 71.08 157 IAmb IAmb 18 34 26.4
comp=Z,116nm,0.8s
KHZ IAMs_20 IAMs_20 19 02 49.4
comp=Z,23µm,21.0s
**KHZ Kahutara** 71.08 157 P **P** **18 34 08.7 -1.5**
**OXZ Oxford** 71.35 158 IAmb IAmb 18 34 37.6
comp=Z,167nm,1.1s
**OXZ Oxford** 71.35 158 P **P** **18 34 11.5 -0.5**
**RPZ Rata Peaks** 71.37 159 IAMs_20 IAMs_20 19 02 13.1
comp=Z,15µm,21.0s
**RPZ Rata Peaks** 71.37 159 LR LR 19 02 24.1
comp=Z,12µm,21.3s,baz=346,slow=33
**GVZ Greta Valley S** 71.38 158 IAmb IAmb 18 34 20.4
comp=Z,780nm,1.7s
GVZ IAMs_20 IAMs_20 19 03 30.4
comp=Z,29µm,21.0s
**GVZ Greta Valley S** 71.38 158 P **P** **18 34 12.5 +0.3**
**LBZ Lake Benmore** 71.69 160 P **P** **18 34 14.8 +0.8**
LBZ IAmb IAmb 18 34 40.8
comp=Z,112nm,1.1s
LBZ IAMs_20 IAMs_20 19 02 37.6
comp=Z,18µm,20.0s
**DCZ Deep Cove** 71.79 163 P **P** **18 34 15.0 +0.5**
**MQZ McQueen's Vall** 71.90 158 IAmb IAmb 18 34 43.0
comp=Z,296nm,1.7s
MQZ IAMs_20 IAMs_20 19 02 54.1
comp=Z,20µm,21.0s
**KAAM Kaadhehdhoo** 71.92 263 P **P** **18 34 13.1 -2.9**
KAAM IAMs_20 IAMs_20 19 02 13.6
comp=Z,16µm,20.0s
**MLZ Mavora Lakes** 71.97 162 P **P** **18 34 16.1 +0.4**
MLZ IAmb IAmb 18 34 43.4
comp=Z,328nm,1.7s
**PYZ Puysegur Point** 72.31 163 IAMs_20 IAMs_20 19 06 12.7
comp=Z,18µm,19.0s
**WHZ Wether Hill Ro** 72.40 162 P **P** **18 34 18.5 +0.2**
WHZ IAmb IAmb 18 35 38.8
comp=Z,357nm,1.9s
**ODZ Otahua Downs** 72.43 160 IAMs_20 IAMs_20 19 02 48.0
comp=Z,15µm,20.0s
**KIRV Kirov** 72.45 327 *ce*P **P** **18 34 18.3 -0.2**
**CBB Campbell River** 73.19 42 P **P** **18 34 22.8 -0.3**
**SYZ Scrubby Hill** 73.33 162 P **P** **18 34 27.8 +4.1**
**HOPEN Hopen** 73.73 348 *e*P **P** **18 34 26.4 +0.6**
HOPEN IVmB_BB 18 34 30.7
comp=Z,4µm,2.4s
HOPEN *e*S **S** **18 43 55.6 +0.9**
HOPEN *e*SS **SS** **18 48 43.1 +5.4**
HOPEN IVMs_BB IVMs_BB 19 09 29.3
comp=Z,11µm,17.8s
**SPA0 Spitsbergen Ar** 74.27 350 *e*P **P** **18 34 28.7 -0.2**
SPA0 IVmBBB 18 34 34.9
comp=Z,3µm,2.6s
SPA0 *e*S **S** **18 44 02.4 +1.6**
SPA0 *e*SS **SS** **18 48 47.7 +1.9**
SPA0 IVMs_BB IVMs_BB 19 09 31.3
comp=Z,8µm,18.4s
**SPITS Spitsbergen Ar** 74.27 350 P **P** **18 34 30.3 +1.3**
comp=Z,40nm,0.9s,baz=84,slow=13,SNR=5.9
comp=Z,40nm,0.9s
**CLRS Cowichan Lake** 74.32 43 P **P** **18 34 29.8 0.0**
CLRS IAMs_20 IAMs_20 19 00 45.3
comp=Z,14µm,20.0s
**KBS Kingsbay** 74.41 351 IAMs_20 IAMs_20 19 09 34.4
comp=Z,19µm,18.0s
**KBS Kingsbay** 74.41 351 *e*P **P** **18 34 30.5 +0.8**
KBS IVmBBB 18 34 32.7
comp=Z,943nm,0.9s
KBS *e*S **S** **18 44 04.6 +2.3**
KBS IVMs_BB IVMs_BB 19 09 42.6
comp=Z,8µm,16.5s
**PGC Sidney** 74.80 43 IAMs_20 IAMs_20 19 00 28.0
comp=Z,14µm,21.0s
**YKA Yellowknife Ar** 74.88 28 P **P** **18 34 33.5 +0.8**
comp=Z,52nm,0.9s,baz=298,slow=5.7,SNR=8.7
comp=Z,52nm,0.9s
**NLWA Neilton Lookou** 74.92 45 **pP** **18 34 37.4 -2.6**
NLWA IAMs_20 IAMs_20 19 01 00.4
comp=Z,18µm,20.0s
**HSPB Hornsund (broa** 75.18 349 *e*P **P** **18 34 35.2 +1.1**
**BELG Belogornoye** 75.29 321 *c i*P **P** **18 34 33.8 -1.4**
BELG pmax pmax
comp=Z,41nm,0.9s
BELG MLR MLR
comp=Z,7µm,19.0s
**LVZ Lovozero** 75.38 338 IAMs_20 IAMs_20 19 11 35.3
comp=Z,21µm,20.0s
**LVZ Lovozero** 75.38 338 *c i*P **P** **18 34 35.5 -0.1**
LVZ pmax pmax
comp=Z,104nm,1.2s
LVZ MLR MLR
comp=Z,16µm,19.0s
**LVZ Lovozero** 75.38 338 P **P** **18 34 36.5 +0.9**
comp=Z,126nm,1.4s,comp=Z,3µm
**E03A Lebam** 75.38 45 P **P** **18 34 34.9 -1.0**
E03A IAmb IAmb 18 34 44.1
comp=Z,172nm,1.0s
E03A IAMs_20 IAMs_20 19 01 22.8
comp=Z,13µm,20.0s
**HEBO Mount Hebo** 75.68 47 IAMs_20 IAMs_20 19 04 59.8
comp=Z,15µm,20.0s
**ADZR Andozero** 75.70 334 *e*P **P** **18 34 37.8 +0.4**
ADZR *e* 18 34 52.1
ADZR *e*S **S** **18 44 19.5 +2.5**
ADZR pmax pmax
comp=Z,171nm,1.2s
**F04D Rainier, OR** 75.90 46 IAMs_20 IAMs_20 19 01 06.3
comp=Z,13µm,21.0s
**APA Apatity** 75.95 338 ⇓ *i*P **P** **18 34 37.7 -1.1**
APA *i* PPP PPP 18 39 25.0
APA *i* S **S** **18 44 19.0 -0.7**
APA *i* 18 44 42.0
APA *i* SSS SSS 18 52 28.0
APA pmax pmax
comp=Z,113nm,0.8s
**G03D McMinnville, O** 76.01 47 IAMs_20 IAMs_20 19 04 49.5
comp=Z,15µm,20.0s
**VADS Vadso** 76.01 341 *e*P **P** **18 34 39.5 +0.4**
VADS IVmBBB 18 34 41.1
comp=Z,2µm,1.0s
VADS *e*S **S** **18 44 19.2 -1.0**
VADS IVMs_BB IVMs_BB 19 12 44.3
comp=Z,17µm,18.1s
**CTZ Chatham Island** 76.13 151 P **P** **18 34 40.5 +0.6**
**BJO1 Bjornoya** 76.14 347 *e*P **P** **18 34 39.9 +0.1**
BJO1 IVmBBB 18 34 41.7
comp=Z,970nm,2.0s
BJO1 *e*S **S** **18 44 20.2 -1.4**
BJO1 IVMs_BB IVMs_BB 19 12 04.8
comp=Z,11µm,17.0s
**COR Corvallis** 76.19 47 IAMs_20 IAMs_20 19 04 26.3
comp=Z,20µm,19.0s
**D05A Enumclaw** 76.20 44 P **P** **18 34 39.6 -1.0**
D05A IAmb IAmb 18 35 05.2
comp=Z,143nm,1.0s
**F04A Amboy** 76.33 46 P **P** **18 34 40.5 -0.8**
F04A IAmb IAmb 18 35 14.1
comp=Z,160nm,1.0s
**BUCK Buck Mountain** 76.53 48 IAMs_20 IAMs_20 19 04 37.4
comp=Z,17µm,20.0s
**H04D Lebanon** 76.59 47 P **P** **18 34 42.0 -0.9**
**DBO Dodson Butte** 76.71 49 P **P** **18 34 43.0 -0.7**
**KRPM Rodgers** 76.82 51 P **P** **18 34 43.2 -1.1**
KRPM IAmb IAmb 18 35 11.7
comp=Z,434nm,1.8s
KRPM IAMs_20 IAMs_20 19 01 53.5
comp=Z,14µm,21.0s
**JCC Jacoby Creek,** 76.93 51 IAMs_20 IAMs_20 19 02 05.4
comp=Z,19µm,20.0s
**PPT Papeete** 76.99 116 P **P** **18 34 48.2 +2.8**
comp=Z,31nm,0.8s,baz=53,slow=17,SNR=1.8
PPT LR LR 19 04 17.8
comp=Z,10µm,19.6s,baz=292,slow=32
comp=Z,31nm,0.8s
**KMPM Mount Pierce** 77.00 52 P **P** **18 34 44.4 -1.0**
KMPM IAmb IAmb 18 34 55.8
comp=Z,109nm,1.0s
**PPT2 Papeete2** 77.00 116 *e*PKIKP **P** **18 34 46.1 +0.5**
comp=Z,2µm,24.8s
**PPT2 Papeete2** 77.00 116 *e*P **P** **18 34 48.6 +3.0**
comp=Z,126nm,1.1s
PPT2 *e*S **S** **18 44 31.2 -1.6**
comp=Z,1µm,25.2s
PPT2 *e*SS **SS** **18 49 36.7 +6.3**
comp=Z,37µm,34.8s
PPT2 *e*LR LR 18 58 32.3
comp=Z,17µm,23.5s
PPT2 *e*LR LR 18 58 36.1
comp=Z,14µm,24.8s
PPT2 *e*LR LR 18 58 42.6
comp=Z,4µm,22.6s
**PPTF Pamatai, Papee** 77.01 116 P **P** **18 34 43.5 -2.1**
PPTF IAmb IAmb 18 35 24.2
comp=Z,193nm,1.1s
**PAE Paea** 77.03 116 *e*PKIKP **P** **18 34 48.3 +2.6**
comp=Z,31nm,1.0s
PAE *e*S **S** **18 44 29.4 -3.6**
comp=Z,539nm,24.0s
**PAE Paea** 77.03 116 *e*LR LR 18 58 36.4
comp=Z,3µm,22.7s
**HOOD Mount Hood Mea** 77.05 46 IAMs_20 IAMs_20 19 02 32.9
comp=Z,13µm,20.0s
**KHMM Horse Mountain** 77.12 51 IAMs_20 IAMs_20 19 02 12.5
comp=Z,20µm,21.0s
**PMOR Pomariorio Ree** 77.15 113 *e*P **P** **18 34 48.8 +2.4**
comp=Z,345nm,1.2s
PMOR *e*S **S** **18 44 32.4 -2.0**
comp=Z,5µm,25.3s
PMOR *e*SS **SS** **18 49 32.0 -0.7**
comp=Z,3µm,21.9s
PMOR *e*LR LR 18 58 38.2
comp=Z,21µm,24.6s
**G05A Wamic** 77.30 46 IAMs_20 IAMs_20 19 02 40.5
comp=Z,13µm,21.0s
**HAMF Hammerfest** 77.34 343 *e*P **P** **18 34 46.8 +0.2**
HAMF IVmBBB 18 34 51.5
comp=Z,2µm,1.9s
HAMF *e*S **S** **18 44 32.8 -2.0**
HAMF *e*SS **SS** **18 49 34.9 +2.4**
HAMF IVMs_BB IVMs_BB 19 13 28.9
comp=Z,5µm,17.3s
**KMRM Mail Ridge** 77.36 52 pP 18 34 51.8 -2.4
**TVO Taravao** 77.36 116 *e*P **P** **18 34 47.0 -0.6**
comp=Z,0.1nm,0.8s
**ARA0 ARCESS Array S** 77.46 341 *e*P **P** **18 34 47.6 +0.3**
ARA0 *e*S **S** **18 44 34.6 -1.6**
**ARCES ARCESS Array B** 77.46 341 P **P** **18 34 48.5 +1.3**
comp=Z,119nm,0.8s,baz=60,slow=7.2,SNR=19
comp=Z,119nm,0.8s
**VAH Vaihoa** 77.49 113 *e*P **P** **18 34 48.7 +0.4**
comp=Z,171nm,1.3s
VAH *e*S **S** **18 44 33.0 -5.0**
comp=Z,7µm,26.0s
VAH *e*SS **SS** **18 49 28.9 -8.9**
comp=Z,4µm,22.4s
VAH *e*LR LR 18 58 46.9
comp=Z,24µm,24.0s
**MXC Moxie City** 77.50 45 IAMs_20 IAMs_20 19 02 33.5
comp=Z,17µm,21.0s
**I05D Terrebonne, OR** 77.59 47 IAMs_20 IAMs_20 19 05 21.5
comp=Z,12µm,20.0s
**KCPM Cahto Peak** 77.63 52 IAMs_20 IAMs_20 19 02 32.1
comp=Z,17µm,20.0s
**L04D Klamath Falls** 77.67 49 P **P** **18 34 52.4 +3.2**
L04D IAmb IAmb 18 35 35.3
comp=Z,176nm,1.2s
**E07A Sunnyside** 77.79 45 P **P** **18 34 49.0 -0.5**
E07A IAMs_20 IAMs_20 19 02 53.3
comp=Z,17µm,20.0s
**F07A Phinny Hill Vi** 77.98 45 IAMs_20 IAMs_20 19 12 51.4
comp=Z,11µm,18.0s
**PINE Pine Mountain** 78.06 47 IAMs_20 IAMs_20 19 05 36.8
comp=Z,17µm,20.0s
**HAWA Hanford** 78.06 45 IAMs_20 IAMs_20 19 03 32.4
comp=Z,18µm,20.0s
**UOSS Minazif** 78.17 292 P **P** **18 34 49.7 -2.4**
UOSS IAmb IAmb 18 35 10.0
comp=Z,178nm,1.0s
**D08A Wollman Farm,** 78.21 44 IAmb IAmb 18 35 17.5
comp=Z,69nm,1.0s
**HOPS Hopland Field** 78.24 53 IAMs_20 IAMs_20 19 02 08.4
comp=Z,16µm,21.0s
**E08A Dider Farm, El** 78.33 44 P **P** **18 34 52.0 -0.5**
E08A IAMs_20 IAMs_20 19 03 11.5
comp=Z,19µm,20.0s
**C09A Chrisman Ranch** 78.34 43 IAmb IAmb 18 35 11.8
comp=Z,110nm,1.2s
**TULEG Thule** 78.41 7 IAmb IAmb 18 34 57.7
comp=Z,198nm,1.1s
**KTK1 Kautokeino** 78.42 341 *e*P **P** **18 34 53.1 +0.5**
KTK1 IVmB_BB 18 34 56.7
comp=Z,2µm,3.1s
KTK1 *e*S **S** **18 44 44.8 -1.7**
KTK1 IVMs_BB IVMs_BB 19 14 05.4
comp=Z,10µm,18.5s
**MAK Makhachkala** 78.62 312 *d i*P P 18 34 48.2 -6.0
MAK *e*PPP PPP 18 39 37.5
MAK *e*S S 18 44 40.0 -10
MAK *e*SS **SS** **18 49 48.5 -4.5**
MAK *e*SSS SSS 18 53 16.0
MAK pmax pmax
comp=Z,312nm,1.5s
MAK pmax pmax
comp=Z,8µm,10.2s
MAK smax smax
comp=N,4µm,8.0s
MAK smax smax
comp=E,3µm,8.4s
**HEF Hetta** 78.65 341 *e*P **P** **18 34 54.8 +0.9**
**MCQ Macquarie Isla** 78.66 171 IAMs_20 IAMs_20 19 10 21.0
comp=Z,12µm,21.0s
**HATC Hat Creek Radi** 78.76 50 IAMs_20 IAMs_20 19 03 30.7
comp=Z,13µm,21.0s
**I07A Izee** 78.92 47 IAMs_20 IAMs_20 19 06 05.5
comp=Z,13µm,20.0s
**JOF Joensuu** 78.95 334 *e*P **P** **18 34 55.7 +0.1**
**VRH Novokhopyorsk** 79.14 321 *e*P **P** **18 34 56.6 -0.3**
VRH *e* 18 34 58.5
VRH *e*S **S** **18 44 50.5 -4.2**
VRH pmax pmax
comp=Z,190nm,1.0s
VRH pmax pmax
comp=Z,710nm,2.6s
VRH smax smax
comp=N,6µm,16.2s
VRH MLR MLR
comp=Z,36µm,18.0s
**ORV Oroville** 79.18 52 IAmb IAmb 18 35 23.3
comp=Z,158nm,1.2s
ORV IAMs_20 IAMs_20 19 04 45.2
comp=Z,11µm,20.0s
**TRO Tromso** 79.25 343 *e*P **P** **18 34 57.4 +0.3**
TRO IVmBBB 18 35 01.9
comp=Z,2µm,1.8s
TRO *e*S **S** **18 44 53.6 -1.6**
TRO *e*SS **SS** **18 49 59.4 -1.7**
TRO IVMs_BB IVMs_BB 19 14 42.7
comp=Z,9µm,16.8s
**MOS Moscow** 79.46 326 *e*P **P** **18 34 56.3 -2.2**
MOS *e* 18 37 54.7
MOS *e*S **S** **18 44 54.1 -3.9**
MOS *e* 18 45 09.0
MOS *e*SS **SS** **18 50 04.1 -0.8**
MOS pmax pmax
comp=Z,1µm,3.0s
MOS pmax pmax
comp=Z,205nm,2.0s
MOS smax smax
comp=E,1µm,4.0s
MOS MLR MLR
comp=N,24µm,18.0s
MOS MLR MLR
comp=E,36µm,18.0s
MOS MLR MLR
comp=Z,47µm,18.0s
**AFDM Forest Hills D** 79.79 52 IAMs_20 IAMs_20 19 03 01.3
comp=Z,12µm,21.0s
**OUL Oulu** 79.83 338 P **P** **18 34 57.6 -2.7**
**J08A Circle Bar Ran** 79.88 47 IAMs_20 IAMs_20 19 06 37.0
comp=Z,13µm,20.0s
**VALR Valaam** 79.92 333 *c i*P **P** **18 35 01.0 +0.1**
VALR pmax pmax
comp=Z,104nm,0.8s
**TBI Tubuai** 79.98 121 *e*P **P** **18 35 01.2 -0.6**
comp=Z,7µm,25.5s
**TBI Tubuai** 79.98 121 *e*P **P** **18 35 04.5 +2.7**
comp=Z,213nm,1.2s

TBI eS **S** **18 45 03.9 -0.5**
comp=Z,23µm,26.8s
TBI eS **S** **18 45 04.5 +0.1**
comp=Z,4µm,22.2s
TBI eSS **SS** **18 50 15.3 +0.2**
comp=Z,3µm,23.1s
TBI eSS SS 18 50 17.3 +2.2
comp=Z,15µm,25.8s
TBI eLQ LQ 18 56 13.0
comp=Z,81µm,32.5s
TBI eLR LR 18 59 53.5
comp=Z,28µm,30.0s
TBI eLR LR 18 59 55.0
comp=Z,18µm,22.5s
TBI eLR LR 18 59 57.1
comp=Z,151µm,30.8s
**BMO Blue Mountains 80.08 45** IAmb IAmb 18 35 12.7
comp=Z,129nm,1.2s
BMO IAMs_20 IAMs_20 19 03 19.1
comp=Z,7µm,20.0s
**WVOR Wild Horse Val 80.12 48** IAMs_20 IAMs_20 19 06 05.6
comp=Z,17µm,20.0s
**LPSR Galich'ya Gora 80.13 323** eP **P** **18 35 01.7 -0.5**
LPSR e 18 35 03.5
LPSR eS **S** **18 44 57.1 -8.1**
LPSR pmax pmax
comp=Z,270nm,2.0s
LPSR pmax pmax
comp=Z,670nm,2.1s
LPSR smax smax
comp=N,4µm,14.8s
LPSR MLR MLR
comp=Z,20µm,17.0s
**SAO San Andreas Ge 80.24 54** P **P** **18 35 06.4 +3.2**
**SAO San Andreas Ge 80.24 54** P **P** **18 35 06.4 +3.2**
SAO pmax pmax
comp=Z,104nm,1.3s
SAO MLR MLR
comp=Z,33µm,20.0s
**OBN Obninsk 80.28 326** P **P** **18 35 02.0 -0.9**
**OBN Obninsk 80.28 326** P **P** **18 35 03.1 +0.2**
comp=Z,22nm,0.5s,baz=101,slow=6.3,SNR=4.9
comp=Z,22nm,0.5s
**OBN Obninsk 80.28 326***c i* P **P** **18 35 02.7 -0.2**
OBN e 18 35 10.2
OBN e 18 38 04.9
OBN ePPP PPP 18 39 51.5
OBN pmax pmax
comp=Z,240nm,2.3s
OBN MLR MLR
comp=Z,62µm,19.0s
**MPK Martis Peak 80.34 51** P **P** **18 35 03.5 -0.5**
MPK IAmb IAmb 18 35 15.6
comp=Z,253nm,1.2s
MPK IAMs_20 IAMs_20 19 04 13.6
comp=Z,16µm,20.0s
**VORR Voronezh 80.38 322** eP **P** **18 35 03.7 +0.1**
VORR e 18 35 05.4
VORR eS **S** **18 45 01.9 -5.9**
VORR pmax pmax
comp=Z,60nm,0.4s
VORR pmax pmax
comp=Z,70nm,0.4s
VORR smax smax
comp=N,7µm,14.1s
VORR MLR MLR
comp=Z,11µm,14.0s
**EMB Emerald Bay 80.41 52** IAMs_20 IAMs_20 19 04 03.5
comp=Z,15µm,20.0s
**VSR Storozhevoye 80.59 322** eP **P** **18 35 04.5 -0.3**
VSR e 18 35 05.7
VSR eS **S** **18 45 06.7 -3.4**
VSR pmax pmax
comp=Z,110nm,0.8s
VSR pmax pmax
comp=Z,1µm,2.6s
VSR smax smax
comp=N,4µm,11.6s
VSR MLR MLR
comp=Z,20µm,19.0s
**BBGB Big Mountain B 80.61 54** **pP** **18 35 10.5 -1.6**
BBGB IAMs_20 IAMs_20 19 03 51.4
comp=Z,38µm,20.0s
**VORD Divnogorie 80.63 322** eP **P** **18 35 04.5 -0.4**
VORD e 18 35 05.7
VORD eS **S** **18 45 04.8 -5.7**
VORD pmax pmax
comp=Z,90nm,1.1s
VORD pmax pmax
comp=Z,150nm,1.2s
VORD smax smax
comp=N,70nm,3.3s
VORD MLR MLR
comp=Z,13µm,16.0s
**PAHR Pah Rah Range 80.64 51** IAMs_20 IAMs_20 19 04 14.6
comp=Z,15µm,20.0s
**PNTR Pine Nut 80.72 52** IAMs_20 IAMs_20 19 04 34.9
comp=Z,15µm,20.0s
**GOF Gofitskoye 80.80 315***c i* P **P** **18 35 06.4 +0.4**
**YERR Yerington 81.02 52** IAMs_20 IAMs_20 19 04 13.8
comp=Z,17µm,20.0s
**WAKR Walker 81.06 52** IAMs_20 IAMs_20 19 04 33.0
comp=Z,18µm,21.0s
**TAOE Nuku Hiva Isla 81.16 104** ePKIKP **P** **18 35 08.3 -0.2**
comp=Z,2µm,25.2s
**TAOE Nuku Hiva Isla 81.16 104** ePP **PP** **18 38 11.0 -3.1**
comp=Z,636nm,25.1s
TAOE eS **S** **18 45 15.7 -1.6**
comp=Z,5µm,29.7s
TAOE eSS **SS** **18 50 31.9 -1.1**
comp=Z,2µm,25.9s
TAOE eLQ LQ 18 56 57.5
comp=Z,6µm,28.6s
TAOE eLR LR 19 00 27.2
comp=Z,24µm,28.6s
**STEI Steigen 81.39 343** eP **P** **18 35 08.8 +0.2**
STEI IVmB_BB 18 35 12.6
comp=Z,4µm,3.0s
STEI eS **S** **18 45 16.4 -1.4**
STEI eSS **SS** **18 50 30.9 -2.1**
STEI IVMs_BB IVMs_BB 19 14 51.0
comp=Z,11µm,21.2s
**KBZ Khabaz 81.43 314** P **P** **18 35 10.5 +1.1**
comp=Z,161nm,0.8s,baz=77,slow=5.0,SNR=9.8
comp=Z,161nm,0.8s
**KBZ Khabaz 81.43 314***c i* P **P** **18 35 09.2 -0.1**
KBZ pmax pmax
comp=Z,194nm,0.9s
KBZ MLR MLR
comp=Z,32µm,19.0s
**MSO Missoula 81.43 43** IAMs_20 IAMs_20 19 06 08.4
comp=Z,15µm,20.0s
**KIV Kislovodsk 81.48 314** eP **P** **18 35 09.4 -0.4**
KIV e 18 38 13.7
KIV eS **S** **18 45 21.0 +1.2**
KIV eSS **SS** **18 50 38.3 +2.4**
KIV pmax pmax
comp=Z,71nm,1.0s
KIV pmax pmax
comp=Z,234nm,3.5s
KIV MLR MLR
comp=Z,18µm,19.0s
**SHA1 Shidzhatmaz 81.58 314***c i* P **P** **18 35 10.8 +0.3**
**GNI Garni 81.60 310** IAMs_20 IAMs_20 19 15 34.4
comp=Z,12µm,18.0s
**RYN Ryan 81.68 52** IAMs_20 IAMs_20 19 04 23.2
comp=Z,18µm,21.0s
**LOF Lofoten 81.71 343** eP **P** **18 35 10.1 -0.2**
LOF eS **S** **18 45 19.1 -2.0**
LOF IVMs_BB IVMs_BB 19 16 35.2
comp=Z,7µm,16.3s
**FAUS Fauske 81.75 342** eP **P** **18 35 10.7 +0.1**
FAUS IVmBBB 18 35 15.5
comp=Z,4µm,2.2s
FAUS eS **S** **18 45 20.2 -1.3**
FAUS eSS **SS** **18 50 33.3 -5.2**
FAUS IVMs_BB IVMs_BB 19 14 05.6
comp=Z,10µm,23.0s
**KVN Kaiserville 81.81 51** IAMs_20 IAMs_20 19 04 51.7
comp=Z,11µm,20.0s
**FINES FINESS Array B 81.82 334** P **P** **18 35 11.1 0.0**
comp=Z,29nm,0.6s,baz=72,slow=6.2,SNR=8.3
comp=Z,29nm,0.6s
**KEF Keuruu 81.88 335** eP **P** **18 35 11.8 +0.4**
**BMN Battle Mountai 81.89 50** IAMs_20 IAMs_20 19 05 23.5
comp=Z,15µm,21.0s

**NVAR Mina Array Bea 81.91 52** P **P** **18 35 13.9 +1.6**
comp=Z,43nm,1.0s,baz=266,slow=5.5,SNR=8.1
NVAR PKKPbc **PKKPbc** **18 53 43.3 +0.7**
comp=Z,1.1nm,0.7s,baz=162,slow=2.2,SNR=6.1
comp=Z,43nm,1.0s
**ERBR Yeremizino-Bor 82.17 316***c i* P **P** **18 35 13.1 -0.1**
ERBR eS **S** **18 45 26.7 0.0**
ERBR pmax pmax
comp=E,116nm,0.8s
ERBR pmax pmax
comp=Z,431nm,1.3s
ERBR pmax pmax
comp=N,34nm,0.6s
ERBR MLR MLR
comp=N,40µm,18.0s
ERBR MLR MLR
comp=Z,43µm,21.0s
ERBR MLR MLR
comp=E,43µm,20.0s
**VAF Ylistaro 82.17 337** eP **P** **18 35 13.4 +0.6**
**LABN Labinsk 82.47 315** eP **P** **18 35 14.5 -0.3**
LABN e 18 38 21.6
LABN eS **S** **18 45 29.6 -0.2**
LABN pmax pmax
comp=E,100nm,1.6s
LABN pmax pmax
comp=Z,387nm,2.3s
LABN pmax pmax
comp=N,54nm,1.1s
LABN MLR MLR
comp=E,26µm,18.0s
LABN MLR MLR
comp=N,40µm,17.0s
LABN MLR MLR
comp=Z,38µm,18.0s
**Q09A Carvers 82.56 51** IAMs_20 IAMs_20 19 05 16.4
comp=Z,16µm,20.0s
**MOR8 Moi Rana 82.83 341** eP **P** **18 35 15.4 -0.9**
MOR8 IVmB_BB 18 35 18.6
comp=Z,3µm,3.2s
MOR8 eS **S** **18 45 28.2 -4.6**
MOR8 eSS **SS** **18 50 50.7 -3.9**
MOR8 IVMs_BB IVMs_BB 19 16 45.5
comp=Z,10µm,17.8s
**MZP Montezuma Peak 82.87 52** IAMs_20 IAMs_20 19 04 57.8
comp=Z,12µm,21.0s
**DLMT Dillon 82.91 44** IAMs_20 IAMs_20 19 07 14.6
comp=Z,14µm,20.0s
**KONS Konsvik 82.98 342** eP **P** **18 35 17.0 0.0**
KONS eS **S** **18 45 33.8 -0.4**
**ARBE Arbavere 83.00 333** eP **P** **18 35 17.7 +0.4**
**SNCC San Nicolas Is 83.04 57** P **P** **18 35 18.3 +0.2**
SNCC IAmb IAmb 18 35 44.1
comp=Z,201nm,1.4s
**GMN Gold Mountain 83.12 52** IAMs_20 IAMs_20 19 05 42.5
comp=Z,14µm,21.0s
**STOK Stokkvaagen 83.13 342** eP **P** **18 35 17.8 0.0**
STOK eS **S** **18 45 31.4 -4.3**
STOK eSS **SS** **18 50 59.2 +0.3**
STOK IVMs_BB IVMs_BB 19 15 22.2
comp=Z,9µm,20.6s
**MEF Metsahovi 83.20 334** eP **P** **18 35 18.9 +0.6**
**VSU Vasula 83.24 332***c i* P **P** **18 35 18.1 -0.4**
VSU pmax pmax
comp=Z,117nm,0.8s
VSU MLR MLR
comp=Z,17µm,16.0s
**BOZ Bozeman (W) 83.41 43** IAMs_20 IAMs_20 19 07 19.9
comp=Z,13µm,20.0s
**SOC Sochi 83.58 315** eP **P** **18 35 21.5 +0.9**
SOC e 18 38 29.2
SOC eS **S** **18 45 39.3 -1.8**
SOC eSS **SS** **18 51 04.6 -2.3**
SOC eSSS SSS 18 54 35.2
SOC pmax pmax
comp=Z,128nm,1.1s
SOC MLR MLR
comp=Z,24µm,17.0s
**PASC Pasadena Art C 83.70 56** P **P** **18 35 21.3 -0.2**
PASC IAmb IAmb 18 35 31.4
comp=Z,249nm,1.9s
**RAF Rauma 83.75 335** eP **P** **18 35 21.2 +0.1**
**R11B Troy Canyon, C 83.90 51** IAMs_20 IAMs_20 19 06 09.8
comp=Z,16µm,21.0s
**JMIC Jan Mayen 83.90 351** eP **P** **18 35 21.9 +0.2**
JMIC IVmB_BB 18 35 35.4
comp=Z,4µm,3.4s
**JMI Jan Mayen 83.98 351** eP **P** **18 35 23.0 +0.9**
JMI IVmB_BB 18 35 29.9
comp=Z,5µm,2.5s
JMI eSKSac **S** **18 45 44.1 -0.1**
**YHL Hebgen Lake 84.03 44** IAMs_20 IAMs_20 19 07 31.3
comp=Z,11µm,20.0s
**Q12A Willow Creek R 84.14 50** IAMs_20 IAMs_20 19 06 32.2
comp=Z,13µm,20.0s
**YMR Madison River 84.25 44** IAMs_20 IAMs_20 19 07 28.2
comp=Z,13µm,20.0s
**SUMG Summit 84.32 1** IAMs_20 IAMs_20 19 13 46.7
comp=Z,13µm,19.0s
**MTSE Matsula 84.34 333** eP **P** **18 35 25.0 +0.9**
**HVU Hansel Valley 84.37 47** IAMs_20 IAMs_20 19 06 34.7
comp=Z,12µm,21.0s
**YNM Yellowstone No 84.39 44** IAMs_20 IAMs_20 19 14 14.9
comp=Z,11µm,18.0s
**YNR Norris Junctio 84.41 44** IAMs_20 IAMs_20 19 05 28.4
comp=Z,11µm,21.0s
**ELS Elsinore Mount 84.49 56** IAmb IAmb 18 35 36.8
comp=Z,205nm,1.8s
**ANN Anapa 84.50 317** eP **P** **18 35 23.4 -1.8**
ANN e 18 38 40.1
ANN *i* S **S** **18 45 47.1 -3.2**
ANN pmax pmax
comp=E,21nm,0.6s
ANN pmax pmax
comp=Z,139nm,0.9s
ANN pmax pmax
comp=N,35nm,0.9s
ANN MLR MLR
comp=N,20µm,18.0s
ANN MLR MLR
comp=Z,23µm,19.0s
ANN MLR MLR
comp=E,7µm,24.0s
**SPR3 Spring Creek 3 84.51 50** P **P** **18 35 29.3 +3.5**
SPR3 IAmb IAmb 18 35 36.6
comp=Z,176nm,1.6s
SPR3 IAMs_20 IAMs_20 19 06 45.9
comp=Z,14µm,20.0s
**BGU Big Grassy Mou 84.57 48** IAMs_20 IAMs_20 19 09 25.3
comp=Z,17µm,20.0s
**FLWY Flagg Ranch 84.69 44** IAMs_20 IAMs_20 19 06 52.8
comp=Z,19µm,21.0s
**NSS Namsos 84.73 341** eP **P** **18 35 25.9 -0.1**
NSS IVmB_BB 18 35 41.5
comp=Z,2µm,4.3s
NSS eSKSac **SKSac** **18 45 48.0 -0.2**
NSS eSS **SS** **18 51 20.5 -2.1**
NSS IVMs_BB IVMs_BB 19 16 49.7
comp=Z,5µm,23.1s
**SPUT South Promonto 84.80 47** IAmb IAmb 18 35 36.8
comp=Z,94nm,1.2s
SPUT IAMs_20 IAMs_20 19 07 39.1
comp=Z,12µm,20.0s
**TPAW Teton Pass 84.80 45** IAMs_20 IAMs_20 19 07 06.7
comp=Z,16µm,20.0s
**MNK Minsk 84.93 328** *i* P **P** **18 35 25.3 -1.9**
MNK *i* 18 35 28.4
MNK *i* 18 38 41.7
MNK *i* PPP PPP 18 40 34.6
MNK *i* S **SKSac** **18 45 49.0 -0.9**
MNK *i* SS **SS** **18 51 31.9 +5.8**
MNK *i* SSS SSS 18 54 59.2
MNK pmax pmax
comp=Z,150nm,0.8s
MNK pmax pmax
comp=E,45nm,1.0s
MNK pmax pmax
comp=N,74nm,1.0s
MNK MLR MLR
comp=N,23µm,17.0s
MNK MLR MLR
comp=Z,35µm,19.0s
MNK MLR MLR
comp=E,18µm,20.0s
**AAL Aland 84.96 335** eP **P** **18 35 26.2 -1.0**
**SHPR Sheep Range 84.98 52** IAMs_20 IAMs_20 19 06 40.9

comp=Z,14µm,20.0s
**IZAR Zarasai 85.00 330** eP **P** **18 35 31.4 +3.9**
**DUG Dugway, Tooele 85.04 48** IAmb IAmb 18 35 38.6
comp=Z,342nm,1.9s
DUG IAMs_20 IAMs_20 19 09 08.8
comp=Z,10µm,20.0s
**109C Camp Elliot, M 85.05 56** IAMs_20 IAMs_20 19 07 00.0
comp=Z,14µm,20.0s
**PSUT Pine Spring 85.05 50** IAMs_20 IAMs_20 19 10 06.2
comp=Z,14µm,20.0s
**RLMT Red Lodge 85.11 43** IAMs_20 IAMs_20 19 08 45.7
comp=Z,12µm,21.0s
**ISAL Salakas 85.16 330** eP **P** **18 35 29.7 +1.4**
**PFO Pinyon Flats O 85.24 56** IAMs_20 IAMs_20 19 07 34.1
comp=Z,13µm,20.0s
**IIGN Ignalina 85.24 329** eP **P** **18 35 28.8 0.0**
**TJX Tijuana 85.24 57** IAMs_20 IAMs_20 19 06 16.2
comp=Z,16µm,20.0s
**HWUT Hardware Ranch 85.25 47** IAMs_20 IAMs_20 19 07 03.1
comp=Z,14µm,21.0s
**FCC Fort Churchill 85.45 26** **pP** **18 35 34.0 -2.5**
FCC IAMs_20 IAMs_20 19 12 54.3
comp=Z,14µm,20.0s
**CTU Camp Tracy 85.55 48** IAmb IAmb 18 35 56.6
comp=Z,77nm,1.2s
CTU IAMs_20 IAMs_20 19 10 17.9
comp=Z,14µm,20.0s
**TKX Tecate 85.56 57** IAMs_20 IAMs_20 19 07 07.7
comp=Z,15µm,20.0s
**TCUT Toone Canyon 85.58 47** P **P** **18 35 30.8 -0.3**
TCUT IAmb IAmb 18 35 35.9
comp=Z,56nm,0.9s
TCUT IAMs_20 IAMs_20 19 08 13.9
comp=Z,13µm,20.0s
**SLIT Slitere, Latvi 85.64 333** eP **P** **18 35 31.1 +0.5**
**NLU North Lily Min 85.66 48** IAmb IAmb 18 35 52.6
comp=Z,168nm,1.7s
NLU IAMs_20 IAMs_20 19 09 39.0
comp=Z,11µm,20.0s
**JLU Jordanelle 85.79 47** IAmb IAmb 18 35 58.1
comp=Z,134nm,1.1s
**CCX Cicese 85.81 57** P **P** **18 35 31.3 -0.8**
**VSVD Vaisvydziai 85.92 331** eP **P** **18 35 32.8 +0.7**
**MPU Maple Canyon 85.93 48** IAmb IAmb 18 35 54.6
comp=Z,63nm,1.1s
MPU IAMs_20 IAMs_20 19 09 07.3
comp=Z,12µm,20.0s
**RMX La Rumorosa 85.95 56** IAMs_20 IAMs_20 19 07 40.5
comp=Z,15µm,20.0s
**SZCU Shurtz Canyon 86.00 51** IAmb IAmb 18 35 58.6
comp=Z,141nm,1.9s
**TCRU Three Creeks R 86.00 50** IAMs_20 IAMs_20 19 07 44.4
comp=Z,16µm,20.0s
**PDAR Pinedale Array 86.04 45** P **P** **18 35 35.0 +1.7**
comp=Z,12nm,0.8s,baz=206,slow=1.8,SNR=10
PDAR PKKPbc **PKKPbc** **18 53 31.1 -2.1**
comp=Z,1.4nm,0.9s,baz=108,slow=4.8,SNR=5.2
comp=Z,12nm,0.8s
**YUH Yuha Desert 86.05 56** IAMs_20 IAMs_20 19 07 51.6
comp=Z,13µm,20.0s
**UPP Uppsala 86.08 336** eP **P** **18 35 32.1 -0.7**
**LCMT Little Creek M 86.15 51** IAMs_20 IAMs_20 19 07 06.5
comp=Z,18µm,21.0s
**TBLU Trondheim 86.18 341** eP **P** **18 35 32.3 -1.0**
TBLU IVmB_BB 18 35 34.0
comp=Z,2µm,3.6s
TBLU eSKSac **SKSac** **18 45 56.7 -0.8**
TBLU IVMs_BB IVMs_BB 19 17 50.2
comp=Z,6µm,17.4s
**PABE Paberze 86.19 330** P **P** **18 35 32.7 -0.7**
PABE IAmb IAmb 18 35 34.8
comp=Z,97nm,0.7s
PABE IAMs_20 IAMs_20 19 15 58.1
comp=Z,14µm,19.0s
**PABE Paberze 86.19 330** eP **P** **18 35 33.8 +0.3**
**ESJX Sierra Juarez 86.30 57** IAMs_20 IAMs_20 19 06 29.4
comp=Z,17µm,21.0s
**AKASG Malin Array Be 86.33 324** P **P** **18 35 33.0 -1.2**
**AKASG Malin Array Be 86.33 324** P **P** **18 35 33.8 -0.5**
comp=Z,20nm,0.7s,baz=55,slow=5.0,SNR=9.4
AKASG S **SKSac** **18 45 54.6 -4.3**
comp=Z,0.2nm,0.3s,baz=56,slow=9.1,SNR=1.2
AKASG PKKPbc **PKKPbc** **18 53 35.4 +3.0**
comp=Z,0.4nm,0.3s,baz=264,slow=2.9,SNR=4.9
comp=Z,20nm,0.7s
**AKASG Malin Array Be 86.33 324** P **P** **18 35 33.0 -1.2**
AKASG pmax pmax
comp=Z,93nm,1.4s
**MTPU Mount Pierson 86.44 50** IAMs_20 IAMs_20 19 07 58.1
comp=Z,15µm,21.0s
**DGMT Dagmar 86.46 38** IAMs_20 IAMs_20 19 12 19.8
comp=Z,10µm,20.0s
**DGMT Dagmar 86.46 38** IAmb IAmb 18 35 44.9
comp=Z,365nm,1.9s
**SIM Simferopol' 86.50 318** eP **P** **18 35 33.7 -1.5**
SIM eS **SKSac** **18 45 59.0 -1.2**
SIM pmax pmax
comp=Z,660nm,5.7s
SIM smax smax
comp=E,900nm,7.2s
**ARPR Arapgir-MALATY 86.53 311** IAMs_20 IAMs_20 19 19 40.6
comp=Z,14µm,19.0s
**VTX Valle De La Tr 86.69 57** P **P** **18 35 35.3 -1.3**
**AIS Amsterdam Isla 86.75 226** IAMs_20 IAMs_20 19 11 24.4
comp=Z,10µm,21.0s
**PBUR Paburge 86.79 331** eP **P** **18 35 35.4 -1.0**
**P18A Preston Nutter 87.06 48** IAMs_20 IAMs_20 19 10 26.1
comp=Z,11µm,20.0s
**RDMU Red Mountain 87.07 47** IAmb IAmb 18 35 59.5
comp=Z,95nm,1.0s
RDMU IAMs_20 IAMs_20 19 09 03.2
comp=Z,16µm,20.0s
**HFS Hagfors 87.32 337** P **P** **18 35 38.5 -0.4**
comp=Z,33nm,0.7s,baz=64,slow=3.4,SNR=9.4
HFS PKKPbc **PKKPbc** **18 53 28.8 -1.6**
comp=Z,1.4nm,0.7s,baz=207,slow=3.7,SNR=6.6
comp=Z,33nm,0.7s
**NC303 NORSAR Array S 87.33 339** IAmb IAmb 18 35 52.5
comp=Z,101nm,1.0s
**VIKU Vikbolandet 87.34 335** eP **P** **18 35 38.7 -0.3**
**SUW Suwalki 87.46 329** P **P** **18 35 38.3 -1.4**
**SUW Suwalki 87.46 329** eP **P** **18 35 39.0 -0.7**
**SUW Suwalki 87.46 329** P **P** **18 35 38.3 -1.4**
SUW pmax pmax
comp=Z,370nm,1.1s
SUW MLR MLR
comp=Z,21µm,19.0s
**DOMB Dombas 87.46 340** eP **P** **18 35 39.2 -0.4**
DOMB IVmB_BB 18 35 42.2
comp=Z,2µm,3.9s
DOMB ePP **PP** **18 39 02.4 -1.2**
DOMB eSKSac **SKSac** **18 46 07.2 +1.7**
DOMB eSS **SS** **18 52 03.5 +0.7**
DOMB IVMs_BB IVMs_BB 19 17 20.5
comp=Z,6µm,17.7s
**NC204 NORSAR Array S 87.49 339** IAmb IAmb 18 35 53.4
comp=Z,126nm,1.1s
**HMU Henry Mountain 87.50 50** IAMs_20 IAMs_20 19 09 05.1
comp=Z,13µm,21.0s
**MOL Molde 87.52 341** eP **P** **18 35 39.2 -0.5**
MOL ePP **PP** **18 39 03.4 -0.6**
MOL eSKSac **SKSac** **18 46 06.5 +0.8**
MOL eSS **SS** **18 52 04.1 +0.7**
MOL IVMs_BB IVMs_BB 19 19 00.8
comp=Z,7µm,18.7s
**NB2 NORSAR Subarra 87.52 339** P **P** **18 35 38.8 -1.1**
baz=43,slow=5.1
**NB2 NORSAR Subarra 87.52 339** P **P** **18 35 38.8 -1.1**
comp=Z,205nm,1.7s,baz=43,slow=5.1
**NB2 NORSAR Subarra 87.52 339** PP PP 18 39 03.9 -0.3
comp=Z,6.7nm,0.8s,baz=66,slow=5.9
**NOA NORSAR Array B 87.52 339** P **P** **18 35 38.9 -1.1**
comp=Z,28nm,0.9s,baz=46,slow=5.6,SNR=10
NOA PKKPbc **PKKPbc** **18 53 28.8 -1.3**
comp=Z,1.1nm,0.7s,baz=228,slow=2.7,SNR=3.7
comp=Z,28nm,0.9s
**SFX San Felipe 87.56 57** P **P** **18 35 40.2 -0.4**
SFX IAmb IAmb 18 35 50.7
comp=Z,100nm,1.4s
SFX IAMs_20 IAMs_20 19 07 04.8
comp=Z,17µm,21.0s
**NC602 NORSAR Array S 87.63 339** P **P** **18 35 38.9 -1.5**
**NC602 NORSAR Array S 87.63 339** eP **P** **18 35 39.8 -0.6**
NC602 ePP **PP** **18 39 03.9 -1.1**
NC602 eSKSac **SKSac** **18 46 09.0 +2.5**
NC602 IVMs_BB IVMs_BB 19 22 50.0
comp=Z,4µm,15.6s

**RAYN Ar Rayn 87.75 295** IAMs_20 IAMs_20 19 19 36.0
comp=Z,16µm,20.0s
**NAO01 NORSAR Array S 87.77 339** P **P** **18 35 39.2 -1.8**
NAO01 IAmb IAmb 18 36 01.2
comp=Z,85nm,1.1s
**RWWY Rawlins 88.09 45** IAMs_20 IAMs_20 19 08 32.8
comp=Z,12µm,21.0s
**GAZ Gaziantep 88.20 310** IAmb IAmb 18 36 02.7
comp=Z,243nm,1.6s
GAZ IAMs_20 IAMs_20 19 19 25.1
comp=Z,39µm,18.0s
**OSL Oslo 88.50 338** *e*P **P** **18 35 42.9 -1.6**
OSL *e*SKSac **SKSac** **18 46 13.0 +1.4**
**KIS Kishinev 88.58 322** *e*PP PP 18 39 13.0 -0.1
KIS *e*S S 18 46 18.0 -12
KIS *e*L L 19 14 33.0
KIS LRM MLR 19 19 47.0
comp=Z,1µm,17.5s
**KIS Kishinev 88.58 322** *e*P P 18 35 40.0 -5.2
KIS *e* 18 39 13.0
KIS *e*S S 18 46 18.0 -12
KIS pmax pmax
comp=Z,1µm,7.5s
**MILM Milestii Mici 88.63 321** *e*PP PP 18 39 13.0 -0.5
MILM *e*SKS **SKSac** **18 46 05.0 -8.0**
MILM *e*S **SKKSac** **18 46 20.0 -4.0**
MILM *e*L L 19 14 43.0
MILM LRM MLR 19 19 50.0
comp=Z,14µm,17.0s
**MILM Milestii Mici 88.63 321** *e*P **P** **18 35 44.0 -1.4**
MILM *e* 18 39 13.0
MILM *e* 18 46 05.0
MILM *e*S S 18 46 20.0 -10
**SKAR Skarslia 88.73 340** *e*P **P** **18 35 44.8 -0.9**
SKAR IVmB_BB 18 36 04.0
comp=Z,2µm,6.2s
SKAR *e*PP **PP** **18 39 13.0 -0.9**
SKAR *e*SKSac **SKSac** **18 46 15.7 +2.4**
SKAR *e*SS **SS** **18 52 22.1 +0.7**
SKAR IVMs_BB IVMs_BB 19 19 27.9
comp=Z,7µm,20.2s
**HYA Hoyanger 89.02 341** *e*P **P** **18 35 47.1 +0.2**
HYA IVmBBB 18 35 51.6
comp=Z,1µm,2.6s
HYA *e*PP **PP** **18 39 14.6 -1.5**
HYA *e*SKSac **SKSac** **18 46 14.7 0.0**
HYA *e*SS **SS** **18 52 25.5 +0.2**
HYA IVMs_BB IVMs_BB 19 19 47.9
comp=Z,8µm,18.9s
**ROCAM Rodrigues Isla 89.06 248** IAMs_20 IAMs_20 19 10 50.8
comp=Z,9µm,20.0s
**KONO Kongsberg 89.09 339** *e*P **P** **18 35 47.2 -0.1**
KONO *e*PP **PP** **18 39 17.8 +1.1**
KONO *e*SKSac **SKSac** **18 46 15.6 +0.4**
KONO *e*SS **SS** **18 52 27.1 +0.6**
KONO IVMs_BB IVMs_BB 19 21 24.6
comp=Z,6µm,16.2s
**N23A Red Feather La 89.31 45** IAMs_20 IAMs_20 19 15 37.3
comp=Z,10µm,20.0s
**SFJD Kangerlussuaq 89.32 5** P **P** **18 35 47.4 -0.8**
**SFJD Kangerlussuaq 89.32 5** LR LR 19 17 05.0
comp=Z,4µm,20.8s,baz=352,slow=36
**SFJD Kangerlussuaq 89.32 5** P **P** **18 35 47.4 -0.8**
SFJD pmax pmax
comp=Z,45nm,1.1s
SFJD MLR MLR
comp=Z,5µm,18.0s
**BR131 Keskin Array S 89.41 313** IAmb IAmb 18 36 16.6
comp=Z,66nm,0.9s
**BRTR Keskin Array B 89.41 313** P **P** **18 35 48.9 -0.6**
comp=Z,16nm,0.8s,baz=94,slow=3.1,SNR=7.4
BRTR PKKPbc **PKKPbc** **18 53 25.4 +0.5**
comp=Z,0.8nm,0.8s,baz=201,slow=2.8,SNR=3.8
comp=Z,16nm,0.8s
**PHWY Pilot Hill 89.42 45** IAMs_20 IAMs_20 19 10 29.0
comp=Z,15µm,20.0s
**BR106 Keskin Array S 89.42 314** P **P** **18 35 49.7 +0.2**
comp=Z,52nm,1.0s,comp=Z,388nm
**BR105 Keskin Array S 89.43 313** P **P** **18 35 49.1 -0.4**
comp=Z,64nm,0.9s,comp=Z,483nm
**SMCO Snowmass 89.49 47** IAMs_20 IAMs_20 19 12 18.4
comp=Z,14µm,20.0s
**SUE Sulen 89.53 341** *e*P **P** **18 35 49.1 -0.1**
SUE IVmBBB 18 35 54.5
comp=Z,2µm,2.9s
SUE *e*PP **PP** **18 39 20.7 +0.6**
SUE *e*SKSac **SKSac** **18 46 18.8 +1.1**
SUE *e*ScS **ScS** **18 46 43.9 +1.2**
SUE *e*SS **SS** **18 52 32.8 +0.1**
SUE IVMs_BB IVMs_BB 19 20 29.6
comp=Z,7µm,18.4s
**DEL Delary 89.85 335** *e*P **P** **18 35 50.5 -0.4**
**ULM Lac du Bonnet 89.93 34** IAmb IAmb 18 36 05.2
comp=Z,61nm,1.1s
**ULM Lac du Bonnet 89.93 34** P **P** **18 35 51.1 -0.3**
comp=Z,22nm,0.9s,baz=311,slow=5.4,SNR=6.7
comp=Z,22nm,0.9s
**ISCO Idaho Springs 90.09 46** IAMs_20 IAMs_20 19 19 11.9
comp=Z,9µm,19.0s
**TUC Tucson 90.09 55** P **P** **18 35 54.1 +1.4**
TUC IAmb IAmb 18 36 03.7
comp=Z,183nm,1.9s
**TUC Tucson 90.09 55** IAMs_20 IAMs_20 19 09 28.3
comp=Z,16µm,21.0s
**TUC Tucson 90.09 55** P **P** **18 35 54.1 +1.4**
TUC pmax pmax
comp=Z,183nm,1.9s
TUC MLR MLR
comp=Z,16µm,21.0s
**BSD Bornholm Skovb 90.39 333** *e*P **P** **18 35 55.2 +1.8**
**BRIGG Briggsdale 90.53 45** IAMs_20 IAMs_20 19 10 10.5
comp=Z,13µm,21.0s
**MDUB Mudurnu 90.64 315** IAmb IAmb 18 36 22.1
comp=Z,359nm,0.9s
MDUB IAMs_20 IAMs_20 19 21 20.2
comp=Z,46µm,20.0s
**ASF Jabal al Asfar 90.78 306** P **P** **18 35 55.7 -0.2**
comp=Z,12nm,0.9s,baz=36,slow=0.0,SNR=5.7
comp=Z,12nm,0.9s
**KOLS Kolonicke sedl 91.02 326** *e*P **P** **18 35 56.6 0.0**
KOLS pmax pmax
comp=Z,14nm,0.9s
**KOLS Kolonicke sedl 91.02 326** *e*P **P** **18 35 56.5 0.0**
**AGMN Agassiz Nation 91.13 35** IAmb IAmb 18 36 10.8
comp=Z,70nm,0.9s
AGMN IAMs_20 IAMs_20 19 13 50.8
comp=Z,12µm,21.0s
**SDCO Great Sand Dun 91.22 48** IAMs_20 IAMs_20 19 19 39.1
comp=Z,9µm,19.0s
**SRIG Santa Rosalia 91.25 60** IAMs_20 IAMs_20 19 11 29.9
comp=Z,11µm,20.0s
**ANGG Ammassalik, Gr 91.32 0** IAMs_20 IAMs_20 19 16 56.7
comp=Z,11µm,20.0s
**CRVS Cervenica-Dubn 91.46 326** *e*P **P** **18 35 59.0 +0.4**
CRVS pmax pmax
comp=Z,57nm,1.0s
**CRVS Cervenica-Dubn 91.46 326** *e*P **P** **18 35 59.0 +0.4**
**MMAI Mount Meron Ar 91.49 307** P **P** **18 35 59.4 +0.2**
comp=Z,12nm,0.8s,baz=58,slow=6.2,SNR=6.7
MMAI LR LR 19 21 25.6
comp=Z,5µm,19.2s,baz=14,slow=38
comp=Z,12nm,0.8s
**VOIR 91.62 322** P **P** **18 36 00.0 +0.5**
comp=Z,20nm,1.6s
**RKT Rikitea 91.69 114** *e*P **P** **18 36 00.8 +0.8**
comp=Z,4µm,26.5s
**RKT Rikitea 91.69 114** *e*PP **PP** **18 39 35.6 -3.5**
RKT comp=Z,3µm,25.8s *e*S **S** **18 46 57.1 -2.1**
RKT comp=Z,22µm,25.5s *e*SS **SS** **18 53 08.5 +1.3**
RKT comp=Z,24µm,27.2s *e*LQ LQ 19 01 06.0
RKT comp=Z,46µm,39.5s *e*LR LR 19 04 50.9
RKT comp=Z,50µm,35.2s *e*LR LR 19 05 30.9
comp=Z,6µm,22.7s
**SUSD Miller 91.71 39** IAMs_20 IAMs_20 19 12 36.6
comp=Z,12µm,21.0s
**OGNE Ogallala 91.80 44** IAMs_20 IAMs_20 19 11 32.9
comp=Z,11µm,21.0s
**ANMO Albuquerque 91.97 51** IAMs_20 IAMs_20 19 10 53.5
comp=Z,13µm,20.0s
**ANMO Albuquerque 91.97 51** pmax pmax
comp=Z,57nm,1.2s

**CSS Mathiatis 92.02 310** IAmb IAmb 18 36 25.8
comp=Z,73nm,1.1s
**GHAJ Ghor Haditha 92.19 305** IAMs_20 IAMs_20 19 24 22.0
comp=Z,12µm,19.0s
**KECS Kecovo 92.23 326** *e*P **P** **18 36 02.4 +0.2**
KECS pmax pmax
comp=Z,15nm,1.0s
**KECS Kecovo 92.23 326** *e*P **P** **18 36 02.3 +0.1**
**T25A Trinidad 92.27 48** IAmb IAmb 18 36 21.8
comp=Z,83nm,1.2s
T25A IAMs_20 IAMs_20 19 12 03.0
comp=Z,10µm,21.0s
**LANS Liptovska Anna 92.31 327** *e*P **P** **18 36 04.0 +1.4**
LANS pmax pmax
comp=Z,7.0nm,0.8s
**LANS Liptovska Anna 92.31 327** *e*P **P** **18 36 04.0 +1.4**
**K30B Basset 92.33 41** IAmb IAmb 18 36 19.2
comp=Z,154nm,1.1s
K30B IAMs_20 IAMs_20 19 13 10.6
comp=Z,13µm,21.0s
**F33A 5 Mile Ranch, 92.39 37** P **P** **18 36 02.6 -0.3**
F33A IAmb IAmb 18 36 17.0
comp=Z,76nm,1.0s
F33A IAMs_20 IAMs_20 19 15 43.6
comp=Z,11µm,20.0s
**KSCO Kaye Shedlock' 92.47 45** IAMs_20 IAMs_20 19 12 28.8
comp=Z,11µm,20.0s
**OKC Ostrava-Krasne 92.52 328** AMS AMS 19 21 00.0
comp=Z,31µm,18.0s
**OKC Ostrava-Krasne 92.52 328** *e*P **P** **18 36 03.9 +0.4**
OKC MLR MLR
comp=Z,31µm,18.0s
**OKC Ostrava-Krasne 92.52 328** *e*P **P** **18 36 03.9 +0.4**
**MORC Moravsky Berou 92.85 328** *e*P **P** **18 36 04.9 -0.2**
MORC *e*PP **PP** **18 39 47.0 +0.2**
**OSTC Ostas 92.95 329** AMS AMS 19 23 00.0
comp=Z,24µm,15.9s
**OSTC Ostas 92.95 329** *e*P **P** **18 36 09.3 +3.8**
OSTC MLR MLR
comp=Z,24µm,15.9s
**OSTC Ostas 92.95 329** *e*P **P** **18 36 09.3 +3.8**
**CHVC Chvalec 93.01 330** AMS AMS 19 23 10.0
comp=Z,20µm,15.8s
**CHVC Chvalec 93.01 330** *e*P **P** **18 36 06.0 +0.2**
CHVC MLR MLR
comp=Z,20µm,15.8s
**CHVC Chvalec 93.01 330** *e*P **P** **18 36 06.0 +0.2**
**KRLC Kraliky 93.01 329** AMS AMS 19 22 10.0
comp=Z,24µm,17.8s
**DPC Dobruska-Polom 93.05 329** AMS AMS 19 23 00.0
comp=Z,28µm,16.3s
**DPC Dobruska-Polom 93.05 329** *e*P **P** **18 36 06.3 +0.3**
DPC MLR MLR
comp=Z,28µm,16.3s
**DPC Dobruska-Polom 93.05 329** *e*P **P** **18 36 06.3 +0.3**
**VYHS Vyhne 93.06 327** *e*P **P** **18 36 06.2 +0.2**
VYHS pmax pmax
comp=Z,124nm,2.0s
**VYHS Vyhne 93.06 327** *e*P **P** **18 36 06.2 +0.2**
**UPC Upice 93.08 330** AMS AMS 19 23 00.0
comp=Z,25µm,16.0s
**JAVC Velka Javorina 93.40 328** *e*P **P** **18 36 08.4 +0.8**
JAVC *e*PP **PP** **18 39 52.0 +0.8**
**EIL Elat 93.45 304** P **P** **18 36 08.2 0.0**
comp=Z,15nm,0.8s,baz=13,slow=4.2,SNR=5.9
EIL LR LR 19 23 57.4
comp=Z,4µm,18.2s,baz=72,slow=39
comp=Z,15nm,0.8s
**EPT El Paso 93.53 53** IAMs_20 IAMs_20 19 12 33.2
comp=Z,13µm,20.0s
**EYMN Ely 93.61 33** IAMs_20 IAMs_20 19 26 56.2
comp=Z,9µm,18.0s
**EYMN Ely 93.61 33** IAmb IAmb 18 36 25.0
comp=Z,54nm,1.2s
**VRAC Vranov 93.62 328** *e*P **P** **18 36 08.3 -0.3**
VRAC *e*PP **PP** **18 39 53.5 +0.6**
**PVCC Panska Ves 93.73 330** AMS AMS 19 25 10.0
comp=Z,16µm,16.7s
**BRG Berggiesshubel 93.78 331** *e*P **P** **18 36 08.9 -0.3**
BRG Amp 18 36 15.3
comp=Z,14nm,1.0s
BRG Amp 18 38 37.1
comp=Z,27nm,1.1s
**BRG Berggiesshubel 93.78 331** S **S** **18 47 17.0 0.0**
**BRG Berggiesshubel 93.78 331** SS SS 18 53 34.0 -0.4
BRG Amp 19 23 25.0
comp=N,12nm,17.4s
BRG Amp 19 23 33.0
comp=E,11nm,18.2s
BRG Amp 19 23 37.0
comp=Z,20nm,17.9s
**BRG Berggiesshubel 93.78 331** PP PP 18 39 53.1 -0.8
**KRUC Moravsky 93.89 328** *e*P **P** **18 36 09.2 -0.6**
KRUC *e*PP **PP** **18 39 54.7 -0.2**
**CLL Collm 93.89 331** IAmb IAmb 18 36 25.3
comp=Z,33nm,1.1s
CLL IAMs_20 IAMs_20 19 22 04.6
comp=Z,26µm,19.0s
**CLL Collm 93.89 331** *i* P **P** **18 36 08.8 -0.9**
CLL *e*S **S** **18 47 17.0 -1.0**
CLL pmax pmax
comp=Z,37nm,1.2s
**RICC Richard 93.94 330** AMS AMS 19 24 50.0
comp=Z,17µm,15.6s
**BGNE Belgrade 93.95 42** IAMs_20 IAMs_20 19 13 37.5
comp=Z,12µm,22.0s
**GOPC GO Pecny, Ondr 94.06 330** AMS AMS 19 23 40.0
comp=Z,18µm,15.7s
**GOPC GO Pecny, Ondr 94.06 330** *e*P **P** **18 36 11.3 +0.7**
GOPC MLR MLR
comp=Z,18µm,15.7s
**GOPC GO Pecny, Ondr 94.06 330** *e*P **P** **18 36 11.3 +0.7**
**PRA Prague 94.12 330** AMS AMS 19 23 50.0
comp=Z,29µm,17.0s
**PRU Pruhonice 94.12 330** AMS AMS 19 23 50.0
comp=Z,29µm,16.8s
**PRU Pruhonice 94.12 330** *e*P **P** **18 36 15.3 +4.4**
PRU MLR MLR
comp=Z,29µm,16.8s
**PRU Pruhonice 94.12 330** *e*pP **P** **18 36 15.3 +4.4**
**TREC Trest 94.16 329** AMS AMS 19 23 10.0
comp=Z,28µm,17.4s
**HSKC Hora Svate Kat 94.19 331** AMS AMS 19 24 40.0
comp=Z,23µm,17.5s
**CBKS Cedar Bluff 94.45 44** IAMs_20 IAMs_20 19 12 47.2
comp=Z,13µm,21.0s
**ZVC Zvikov 94.67 330** AMS AMS 19 24 10.0
comp=Z,30µm,15.9s
**ZVC Zvikov 94.67 330** *e*P **P** **18 36 13.0 -0.4**
**L34A Svendsen Farm, 94.69 40** IAMs_20 IAMs_20 19 19 09.8
comp=Z,10µm,20.0s
**SPMN Marine on St. 94.69 36** IAMs_20 IAMs_20 19 15 41.2
comp=Z,9µm,21.0s
**SLBS Sierra La Lagu 94.76 62** IAMs_20 IAMs_20 19 10 52.2
comp=Z,14µm,20.0s
**RONA Rosalia, Austr 94.86 327** *e*pP **P** **18 36 14.6 +0.2**
comp=Z,3.7nm,0.6s
**CONA Conrad Observa 94.92 328** *e*pP **P** **18 36 15.0 +0.3**
comp=Z,6.4nm,0.7s
**CKRC Cesky Krumlov 95.05 329** AMS AMS 19 24 30.0
comp=Z,19µm,16.6s
**CKRC Cesky Krumlov 95.05 329** *e*P **P** **18 36 14.7 -0.5**
CKRC MLR MLR
comp=Z,19µm,16.6s
**CKRC Cesky Krumlov 95.05 329** *e*P **P** **18 36 14.7 -0.5**
**I37A Lemond, Waseca 95.14 37** IAmb IAmb 18 36 34.0
comp=Z,56nm,1.1s
I37A IAMs_20 IAMs_20 19 19 40.2
comp=Z,10µm,20.0s
**KHC Kasperske Hory 95.17 330** AMS AMS 19 24 20.0
comp=Z,32µm,16.3s
**KHC Kasperske Hory 95.17 330** *e*P **P** **18 36 15.2 -0.6**
KHC *e* 18 46 49.3
KHC MLR MLR
comp=Z,32µm,16.3s
**KHC Kasperske Hory 95.17 330** *e*P **P** **18 36 15.2 -0.6**
**KHC Kasperske Hory 95.17 330** *e*SKS **SKSac** **18 46 49.3 -0.7**
**GERES GERESS Array B 95.32 329** P **P** **18 36 14.3 -2.2**
**GERES GERESS Array B 95.32 329** P **P** **18 36 15.7 -0.8**
comp=Z,3.3nm,0.8s,baz=152,slow=8.9,SNR=4.4
GERES PKKP **PKKPdf** **18 53 09.6 +0.5**
comp=Z,1.3nm,0.8s,baz=198,slow=9.3,SNR=5.1
comp=Z,3.3nm,0.8s
**R32A Long Quarter, 95.34 44** IAMs_20 IAMs_20 19 13 34.6
comp=Z,11µm,21.0s
**AMTX Amarillo 95.34 49** IAmb IAmb 18 36 27.4
comp=Z,188nm,1.9s
AMTX IAMs_20 IAMs_20 19 14 47.5
comp=Z,18µm,20.0s
**ARSA Arzberg 95.55 327** *e*PcP **P** **18 36 17.4 0.0**
comp=Z,2.7nm,0.6s
ARSA *e*PP **PP** **18 40 12.6 +4.7**
comp=Z,18nm,1.3s
**MOA Mollin 95.75 328** *e*pP **P** **18 36 18.5 +0.1**
comp=Z,5.5nm,0.7s
**N35A Tabor 95.80 41** IAMs_20 IAMs_20 19 18 46.3
comp=Z,13µm,20.0s
**KARP Karpathos 95.98 313** IAMs_20 IAMs_20 19 25 36.9
comp=Z,10µm,20.0s
**COWI Conover 96.05 34** IAMs_20 IAMs_20 19 21 40.7
comp=Z,9µm,19.0s
**G40A Rib Lake 96.06 35** IAmb IAmb 18 36 24.4
comp=Z,21nm,0.9s
G40A IAMs_20 IAMs_20 19 18 27.1
comp=Z,8µm,20.0s
**SOKA Soboth 96.19 327** *e*pP **P** **18 36 20.4 -0.1**
comp=Z,7.0nm,0.9s
SOKA *e*PP **PP** **18 40 16.0 +3.1**
comp=Z,38nm,1.6s
**NOKA Waynoka 96.22 46** IAMs_20 IAMs_20 19 25 17.2
comp=Z,10µm,21.0s
**KSU1 Kansas State U 96.27 43** P **P** **18 36 20.2 -0.7**
KSU1 IAmb IAmb 18 36 38.5
comp=Z,54nm,0.9s
KSU1 IAMs_20 IAMs_20 19 19 14.0
comp=Z,10µm,20.0s
**LIT Litokhoron 96.33 319** P **P** **18 36 19.5 -1.7**
LIT IAMs_20 IAMs_20 19 22 54.6
comp=Z,13µm,20.0s
**LIT Litokhoron 96.33 319** P **P** **18 36 19.5 -1.7**
LIT pmax pmax
comp=Z,128nm,1.3s
LIT MLR MLR
comp=Z,13µm,20.0s
**OK038 West end E0370 96.44 46** IAMs_20 IAMs_20 19 14 32.9
comp=Z,10µm,20.0s
**OBKA Obir 96.54 327** *e*pP **P** **18 36 22.1 0.0**
comp=Z,4.4nm,0.7s
OBKA *e*PP **PP** **18 40 17.3 +1.6**
comp=Z,47nm,1.0s
**SCIA State Center 96.58 39** IAMs_20 IAMs_20 19 14 47.6
comp=Z,10µm,22.0s
**HPIG 96.58 57** IAMs_20 IAMs_20 19 19 05.7
comp=Z,14µm,19.0s
**EKA Eskdalemuir Ar 96.62 342** P **P** **18 36 21.4 -0.7**
comp=Z,1.8nm,0.7s,baz=39,slow=3.2,SNR=3.8
comp=Z,1.8nm,0.7s
**ESK Eskdalemuir 96.65 342** IAMs_20 IAMs_20 19 25 14.6
comp=Z,11µm,18.0s
**SANT Santorini 96.65 314** IAMs_20 IAMs_20 19 25 23.5
comp=Z,10µm,19.0s
**KBA Koelnbreinsper 96.74 328** *e*pP **P** **18 36 23.2 +0.1**
comp=Z,6.1nm,0.7s
KBA *e*PP **PP** **18 40 18.1 +0.8**
comp=Z,30nm,1.2s
**F42A Maple Grove Fa 96.79 34** IAMs_20 IAMs_20 19 25 51.2
comp=Z,9µm,18.0s
**LESA Schwarzleotal 96.81 329** *e*PcP **P** **18 36 22.8 -0.5**
comp=Z,6.4nm,0.8s
**TXAR Lajitas Array 96.88 54** P **P** **18 36 26.7 +2.7**
comp=Z,4.4nm,1.0s,baz=280,slow=2.2,SNR=3.7
TXAR PKKP **PKKPdf** **18 53 06.8 +0.5**
comp=Z,2.5nm,0.7s,baz=132,slow=5.3,SNR=12
comp=Z,4.4nm,1.0s
**MYKA Terra Mystica 96.91 328** *e*PcP **P** **18 36 23.3 -0.5**
comp=Z,3.2nm,0.5s
MYKA *e*PP **PP** **18 40 22.7 +4.3**
comp=Z,53nm,1.1s
**CROK Carrier 96.92 45** IAMs_20 IAMs_20 19 14 26.7
comp=Z,15µm,21.0s
**KBN Korca 97.03 320** IAMs_20 IAMs_20 19 25 09.1
comp=Z,14µm,20.0s
**N38A Joes South For 97.27 40** IAMs_20 IAMs_20 19 15 59.1
comp=Z,11µm,21.0s
**ABTA Abfaltersbach 97.37 328** *e*PcP **P** **18 36 24.7 -1.1**
comp=Z,6.3nm,0.8s
ABTA *e*PP **PP** **18 40 25.0 +2.9**
comp=Z,21nm,1.3s
**SABO M.te Sabotino 97.39 327** IAMs_20 IAMs_20 19 28 28.9
comp=Z,20µm,19.0s
**WATA Walderalm 97.39 329** *e*PP **PP** **18 40 25.8 +3.6**
comp=Z,34nm,1.2s
**WTTA Wattenberg 97.42 329** *e*PP **PP** **18 40 25.0 +2.5**
comp=Z,61nm,2.2s
**JFWS Jewell Farm 97.60 37** IAMs_20 IAMs_20 19 20 24.2
comp=Z,8µm,20.0s
**MOTA Moosalm 97.61 330** *e*PP **PP** **18 40 28.9 +5.0**
comp=Z,40nm,1.1s
**L40A Anamosa 97.62 38** IAMs_20 IAMs_20 19 18 15.9
comp=Z,9µm,20.0s
**OK048 Pawnee Station 97.65 45** IAMs_20 IAMs_20 19 16 19.9
comp=Z,13µm,20.0s
**SQTA Sankt Quirin 97.65 329** *e*PP **PP** **18 40 29.7 +5.5**
comp=Z,34nm,1.2s
**I42A Draeger Farm, 97.66 35** IAMs_20 IAMs_20 19 18 55.7
comp=Z,11µm,20.0s
**RETA Reutte 97.66 330** *e*PP **PP** **18 40 28.8 +4.6**
comp=Z,23nm,1.3s
**OK051 E0350 and S346 97.67 45** IAMs_20 IAMs_20 19 16 20.4
comp=Z,13µm,20.0s
**P38A Dawn 97.83 41** IAMs_20 IAMs_20 19 24 48.1
comp=Z,11µm,19.0s
**H43A Windswept, Lux 97.87 34** IAMs_20 IAMs_20 19 23 58.9
comp=Z,9µm,20.0s
**SCHQ Schefferville 97.92 17** P Pdif 18 36 28.9 +0.9
comp=Z,8.5nm,0.9s,baz=318,slow=2.2,SNR=3.9
comp=Z,8.5nm,0.9s
**OK031 S. Brethren Rd 97.99 45** IAMs_20 IAMs_20 19 15 21.0
comp=Z,13µm,20.0s
**OK052 Battle Ridge R 97.99 45** IAMs_20 IAMs_20 19 15 10.0
comp=Z,14µm,21.0s
**FETA Feichten 98.02 330** *e*pP **P** **18 36 28.6 -0.3**
comp=Z,3.0nm,0.7s
**X34A Smith Ranch, M 98.12 47** IAMs_20 IAMs_20 19 15 28.8
comp=Z,15µm,21.0s
**E46A Sault Ste Mari 98.25 31** IAmb IAmb 18 36 45.5
comp=Z,62nm,1.2s
E46A IAMs_20 IAMs_20 19 20 12.5
comp=Z,10µm,20.0s
**DEOK Depew 98.28 45** IAMs_20 IAMs_20 19 14 53.6
comp=Z,13µm,20.0s
**W35A Tecumseh 98.44 46** IAMs_20 IAMs_20 19 17 01.0
comp=Z,12µm,20.0s
**ITM Ithomi 98.46 317** IAMs_20 IAMs_20 19 27 12.2
comp=Z,10µm,19.0s
**L42A Oliver, Polo 98.52 37** IAMs_20 IAMs_20 19 20 44.8
comp=Z,9µm,19.0s
**TUL3 Leonard 98.70 45** IAMs_20 IAMs_20 19 17 00.6
comp=Z,13µm,20.0s
**N41A Harden Midland 98.71 39** IAMs_20 IAMs_20 19 24 56.0
comp=Z,10µm,19.0s
**P40A Paris 98.78 40** IAMs_20 IAMs_20 19 16 21.0
comp=Z,13µm,22.0s
**K43A Burlington 98.78 36** IAMs_20 IAMs_20 19 18 26.4
comp=Z,14µm,21.0s
**FW03 Perrin-Whitt E 98.86 48** IAMs_20 IAMs_20 19 14 51.7
comp=Z,12µm,21.0s
**I45A Fountain 98.96 34** IAMs_20 IAMs_20 19 27 14.8
comp=Z,9µm,18.0s
**S39A Bolivar 99.17 42** IAMs_20 IAMs_20 19 22 28.8
comp=Z,10µm,20.0s
**GLMI Grayling 99.21 32** IAMs_20 IAMs_20 19 25 16.2
comp=Z,10µm,19.0s
**U38A Gravette 99.28 44** IAMs_20 IAMs_20 19 20 47.9
comp=Z,11µm,20.0s
**DSB Dublin 99.37 342** IAMs_20 IAMs_20 19 26 41.5
comp=Z,10µm,20.0s
**L44A Lake County Fo 99.37 36** IAMs_20 IAMs_20 19 18 53.9
comp=Z,11µm,21.0s
**R40A Maddies Statio 99.44 41** IAMs_20 IAMs_20 19 25 47.6
comp=Z,8µm,19.0s
**HHAR Hobbs 99.66 44** IAMs_20 IAMs_20 19 21 19.0
comp=Z,10µm,20.0s
**HDIL Hopedale 99.70 38** IAMs_20 IAMs_20 19 17 04.1
comp=Z,12µm,22.0s
**FURI Furi 99.87 284** IAMs_20 IAMs_20 19 30 51.4
comp=Z,11µm,19.0s
**MGMO Mountain Grove 100.16 42** IAMs_20 IAMs_20 19 17 55.9
comp=Z,11µm,22.0s
**P43A Skaggs, Pawnee 100.18 39** IAMs_20 IAMs_20 19 17 09.9
comp=Z,9µm,22.0s
**CCM Cathedral Cave 100.21 41** IAMs_20 IAMs_20 19 26 28.0
comp=Z,9µm,19.0s
**J47A Sunmer 100.25 34** IAMs_20 IAMs_20 19 27 46.8
comp=Z,10µm,18.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L46A | Eue Claire | 100.35 | 35 | IAMs_20 | IAMs_20 | 19 20 25.8 | | |
| | comp=Z,13µm,20.0s | | | | | | | |
| SLM | Saint Louis | 100.43 | 40 | IAMs_20 | IAMs_20 | 19 17 53.7 | | |
| | comp=Z,12µm,21.0s | | | | | | | |
| 833A | Chaparral WMA, | 100.58 | 53 | IAMs_20 | IAMs_20 | 19 16 06.8 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| I49A | Point Hope | 100.74 | 32 | IAMs_20 | IAMs_20 | 19 24 14.5 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| FVM | French Village | 100.74 | 41 | IAMs_20 | IAMs_20 | 19 17 42.1 | | |
| | comp=Z,10µm,22.0s | | | | | | | |
| CLF | Chambon-Foret | 100.89 | 335 | IAMs_20 | IAMs_20 | 19 27 26.8 | | |
| | comp=Z,11µm,18.0s | | | | | | | |
| T42A | Van Buren | 100.96 | 42 | IAMs_20 | IAMs_20 | 19 21 55.0 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| Q44A | Meyer Farm, Va | 100.97 | 39 | IAMs_20 | IAMs_20 | 19 17 22.7 | | |
| | comp=Z,13µm,22.0s | | | | | | | |
| SFIN | Lafayette | 101.05 | 37 | IAMs_20 | IAMs_20 | 19 18 53.5 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| FCAR | Ozark Folk Cen | 101.05 | 43 | IAMs_20 | IAMs_20 | 19 20 46.7 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| ZAIG | Zacatecas | 101.12 | 59 | IAMs_20 | IAMs_20 | 19 14 41.2 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| VNDA | Vanda | 101.23 | 176 | P | Pdif | 18 36 44.0 | +2.0 | |
| | comp=Z,2.3nm,0.9s,baz=20,slow=8.2,SNR=3.3 | | | | | | | |
| L48A | N Adams | 101.38 | 34 | IAMs_20 | IAMs_20 | 19 27 17.8 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| 735A | Kenedy | 101.43 | 52 | IAMs_20 | IAMs_20 | 19 18 40.2 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| CEL | Celeste | 101.44 | 320 | Pdif | Pdif | 18 36 42.0 | -2.2 | |
| N47A | Urbana | 101.47 | 36 | IAMs_20 | IAMs_20 | 19 19 58.4 | | |
| | comp=Z,11µm,22.0s | | | | | | | |
| X40A | Basin Creek Fa | 101.48 | 45 | IAMs_20 | IAMs_20 | 19 17 52.3 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| P46A | Rosedale | 101.51 | 38 | IAMs_20 | IAMs_20 | 19 22 19.0 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| AAM | Ann Arbor | 101.52 | 34 | IAMs_20 | IAMs_20 | 19 28 52.4 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| PBMO | Poplar Bluff | 101.53 | 41 | IAMs_20 | IAMs_20 | 19 27 20.0 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| LCAR | Lake Charles | 101.54 | 42 | IAMs_20 | IAMs_20 | 19 24 24.5 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| OLIL | Olney | 101.61 | 39 | IAMs_20 | IAMs_20 | 19 17 52.7 | | |
| | comp=Z,11µm,22.0s | | | | | | | |
| S44A | Carbondale | 101.63 | 40 | IAMs_20 | IAMs_20 | 19 26 56.5 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| SIUC | Southern Illin | 101.64 | 40 | IAMs_20 | IAMs_20 | 19 27 05.8 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| CGM3 | Cape Girardeau | 101.65 | 41 | IAMs_20 | IAMs_20 | 19 18 08.2 | | |
| | comp=Z,9µm,22.0s | | | | | | | |
| K50A | Casco | 101.69 | 33 | IAMs_20 | IAMs_20 | 19 27 00.9 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| PARMO | Parma | 102.02 | 41 | IAMs_20 | IAMs_20 | 19 27 42.9 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| HBAR | Harrisburg | 102.18 | 43 | IAMs_20 | IAMs_20 | 19 22 58.5 | | |
| | comp=Z,12µm,21.0s | | | | | | | |
| BLO | Bloomington | 102.20 | 38 | IAMs_20 | IAMs_20 | 19 22 49.3 | | |
| | comp=Z,13µm,20.0s | | | | | | | |
| PVMO | Portageville | 102.21 | 41 | IAMs_20 | IAMs_20 | 19 27 49.1 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| N49A | Columbus Grove | 102.24 | 35 | IAMs_20 | IAMs_20 | 19 26 13.8 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| GNAR | Gosnell | 102.31 | 42 | IAMs_20 | IAMs_20 | 19 19 30.8 | | |
| | comp=Z,9µm,22.0s | | | | | | | |
| HICK | Hickman | 102.41 | 41 | IAMs_20 | IAMs_20 | 19 21 53.3 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| T45A | Paducah | 102.44 | 40 | IAMs_20 | IAMs_20 | 19 18 54.1 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| LDAQ | Lac Daran | 102.47 | 23 | IAMs_20 | IAMs_20 | 19 24 26.1 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| M50A | Fremont | 102.49 | 34 | IAMs_20 | IAMs_20 | 19 29 30.1 | | |
| | comp=Z,10µm,18.0s | | | | | | | |
| LNXT | Lenox | 102.54 | 41 | IAMs_20 | IAMs_20 | 19 27 49.9 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| GLAT | Glass | 102.56 | 41 | IAMs_20 | IAMs_20 | 19 27 59.2 | | |
| | comp=Z,11µm,19.0s | | | | | | | |
| P48A | Milroy | 102.61 | 37 | IAMs_20 | IAMs_20 | 19 20 00.9 | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| O49A | Covington | 102.69 | 36 | IAMs_20 | IAMs_20 | 19 20 54.7 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| DELO | Deloro Mine | 102.72 | 29 | IAMs_20 | IAMs_20 | 19 22 32.5 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| HALT | Halls | 102.76 | 42 | IAMs_20 | IAMs_20 | 19 28 06.7 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| UTMT | University of | 102.76 | 41 | IAMs_20 | IAMs_20 | 19 25 19.5 | | |
| | comp=Z,8µm,19.0s | | | | | | | |
| ABPO | Ambohimpanom | 102.84 | 255 | IAMs_20 | IAMs_20 | 19 17 03.6 | | |
| | comp=Z,10µm,22.0s | | | | | | | |
| MET | Memphis--Engin | 102.91 | 42 | IAMs_20 | IAMs_20 | 19 20 47.9 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| P49A | Miami Univ. Ec | 102.95 | 36 | IAMs_20 | IAMs_20 | 19 20 54.7 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| WCI | Wyandotte Cave | 102.99 | 38 | IAMs_20 | IAMs_20 | 19 21 20.0 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| LMQ | La Malbaie | 103.16 | 23 | IAMs_20 | IAMs_20 | 19 24 57.0 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| M52A | Chesterland | 103.24 | 33 | IAMs_20 | IAMs_20 | 19 27 21.9 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| WBO | Williamsburg | 103.35 | 27 | IAMs_20 | IAMs_20 | 19 22 43.8 | | |
| | comp=Z,12µm,21.0s | | | | | | | |
| ACSO | Alum Creek Sta | 103.37 | 35 | IAMs_20 | IAMs_20 | 19 27 36.7 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| T47A | Sharon Grove | 103.37 | 39 | IAMs_20 | IAMs_20 | 19 18 33.5 | | |
| | comp=Z,14µm,22.0s | | | | | | | |
| PECO | Prince Edward | 103.46 | 29 | IAMs_20 | IAMs_20 | 19 23 05.0 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| ERPA | Erie | 103.48 | 32 | IAMs_20 | IAMs_20 | 19 25 39.0 | | |
| | comp=Z,8µm,19.0s | | | | | | | |
| WVT | Waverly | 103.53 | 41 | IAMs_20 | IAMs_20 | 19 29 08.7 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| R49A | Shelbyville | 103.57 | 37 | IAMs_20 | IAMs_20 | 19 23 31.5 | | |
| | comp=Z,13µm,20.0s | | | | | | | |
| J55A | Hilton | 103.61 | 30 | IAMs_20 | IAMs_20 | 19 21 56.3 | | |
| | comp=Z,8µm,21.0s | | | | | | | |
| OXF | Oxford | 103.64 | 43 | IAMs_20 | IAMs_20 | 19 22 13.1 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| M53A | WI Miller and | 103.65 | 33 | IAMs_20 | IAMs_20 | 19 27 31.8 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| P51A | Williamsport | 103.88 | 35 | IAMs_20 | IAMs_20 | 19 27 32.8 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| WVNY | West Valley, N | 103.92 | 31 | IAMs_20 | IAMs_20 | 19 29 14.4 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| LONY | Lake Ozonia | 103.95 | 27 | IAMs_20 | IAMs_20 | 19 23 13.6 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| D62A | Allapoint, All | 104.00 | 22 | IAMs_20 | IAMs_20 | 19 24 17.4 | | |
| | comp=Z,13µm,20.0s | | | | | | | |
| J56A | Wolcott | 104.04 | 29 | IAMs_20 | IAMs_20 | 19 22 19.4 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| N53A | Lisbon | 104.05 | 33 | IAMs_20 | IAMs_20 | 19 28 05.3 | | |
| | comp=Z,12µm,19.0s | | | | | | | |
| R50A | Paris | 104.05 | 37 | IAMs_20 | IAMs_20 | 19 29 21.0 | | |
| | comp=Z,8µm,19.0s | | | | | | | |
| O52A | Adamsville | 104.05 | 34 | IAMs_20 | IAMs_20 | 19 26 20.6 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| P52A | Corning | 104.25 | 35 | IAMs_20 | IAMs_20 | 19 28 21.0 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| O53A | New Philadelph | 104.27 | 34 | IAMs_20 | IAMs_20 | 19 26 30.4 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| V48A | Smith Brothers | 104.39 | 40 | IAMs_20 | IAMs_20 | 19 25 28.6 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| CLTN | Cedars of Leba | 104.44 | 40 | IAMs_20 | IAMs_20 | 19 20 47.8 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| K57A | Scipio Center | 104.62 | 29 | IAMs_20 | IAMs_20 | 19 22 37.9 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| NCB | Newcomb | 104.62 | 27 | IAMs_20 | IAMs_20 | 19 23 32.5 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| T50A | Nancy | 104.66 | 38 | IAMs_20 | IAMs_20 | 19 22 22.3 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| Q52A | Bidwell | 104.67 | 35 | IAMs_20 | IAMs_20 | 19 27 38.3 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| PQI | Presque Isle | 104.72 | 22 | IAMs_20 | IAMs_20 | 19 25 13.1 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| O54A | Avella | 104.75 | 33 | IAMs_20 | IAMs_20 | 19 27 13.9 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| G62A | West of Eustis | 105.06 | 24 | IAMs_20 | IAMs_20 | 19 25 41.6 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| FOMA | Nahampoana Res | 105.06 | 249 | IAMs_20 | IAMs_20 | 19 17 32.6 | | |
| | comp=Z,9µm,22.0s | | | | | | | |
| 146A | Union | 105.09 | 44 | IAMs_20 | IAMs_20 | 19 24 36.6 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| KIBK | Kibwezi | 105.09 | 274 | IAMs_20 | IAMs_20 | 19 21 31.4 | | |
| | comp=Z,8µm,21.0s | | | | | | | |
| X48A | Hartselle | 105.13 | 41 | IAMs_20 | IAMs_20 | 19 21 29.4 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| F63A | Nahmakanta, Br | 105.17 | 23 | IAMs_20 | IAMs_20 | 19 23 06.4 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| LODK | Lodwar | 105.18 | 281 | IAMs_20 | IAMs_20 | 19 23 05.1 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| SWET | Sewanee | 105.28 | 40 | IAMs_20 | IAMs_20 | 19 25 54.1 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| BINY | Binghamton | 105.28 | 29 | IAMs_20 | IAMs_20 | 19 23 08.4 | | |
| | comp=Z,11µm,22.0s | | | | | | | |
| F64A | Sherman | 105.30 | 22 | IAMs_20 | IAMs_20 | 19 26 33.7 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| ACCN | Adirondack Com | 105.34 | 27 | IAMs_20 | IAMs_20 | 19 25 46.4 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| DRLN | Deer Lake | 105.35 | 14 | IAMs_20 | IAMs_20 | 19 31 24.8 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| MCWV | Mont Chateau | 105.41 | 33 | IAMs_20 | IAMs_20 | 19 28 10.4 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| M57A | Sunshine Farm, | 105.44 | 31 | IAMs_20 | IAMs_20 | 19 24 58.7 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| PKME | Peaks-Kenny Pk | 105.48 | 23 | IAMs_20 | IAMs_20 | 19 23 03.6 | | |
| | comp=Z,8µm,21.0s | | | | | | | |
| SSPA | Standing Stone | 105.63 | 31 | IAMs_20 | IAMs_20 | 19 27 05.8 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| W50A | Signal Mountai | 105.66 | 40 | IAMs_20 | IAMs_20 | 19 26 26.0 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| CEST | Esterri de Car | 105.71 | 332 | IAMs_20 | IAMs_20 | 19 30 36.3 | | |
| | comp=Z,15µm,19.0s | | | | | | | |
| L59A | Walton | 105.71 | 29 | IAMs_20 | IAMs_20 | 19 26 17.6 | | |
| | comp=Z,10µm,22.0s | | | | | | | |
| TZTN | Tazewell | 105.72 | 38 | IAMs_20 | IAMs_20 | 19 19 55.4 | | |
| | comp=Z,12µm,22.0s | | | | | | | |
| TRY | Troy | 105.87 | 28 | IAMs_20 | IAMs_20 | 19 24 52.6 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| KSPA | Keystone Colle | 105.89 | 30 | IAMs_20 | IAMs_20 | 19 23 36.6 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| Y49A | Blount Mountai | 105.92 | 41 | IAMs_20 | IAMs_20 | 19 21 50.3 | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| FPAL | Fort Paine | 105.93 | 40 | IAMs_20 | IAMs_20 | 19 22 37.5 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| WVL | Waterville | 105.94 | 24 | IAMs_20 | IAMs_20 | 19 24 34.9 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| CPCT | Cooper Cave | 105.94 | 39 | IAMs_20 | IAMs_20 | 19 20 47.4 | | |
| | comp=Z,12µm,21.0s | | | | | | | |
| N58A | Sunbury | 106.02 | 31 | IAMs_20 | IAMs_20 | 19 25 04.2 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| LRAL | Lakeview Retre | 106.12 | 42 | IAMs_20 | IAMs_20 | 19 20 41.6 | | |
| | comp=Z,12µm,22.0s | | | | | | | |
| G65A | Princeton | 106.15 | 22 | IAMs_20 | IAMs_20 | 19 27 08.2 | | |
| | comp=Z,11µm,19.0s | | | | | | | |
| Q56A | Snyder Ridge, | 106.21 | 33 | IAMs_20 | IAMs_20 | 19 29 14.6 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| R55A | Marlinton | 106.31 | 34 | IAMs_20 | IAMs_20 | 19 30 12.3 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| X51A | Calhoun | 106.36 | 40 | IAMs_20 | IAMs_20 | 19 31 01.8 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| P57A | Homestead Farm | 106.46 | 32 | IAMs_20 | IAMs_20 | 19 32 35.0 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| GGN | Saint George | 106.47 | 22 | IAMs_20 | IAMs_20 | 19 28 19.6 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| L61B | Northampton | 106.52 | 27 | IAMs_20 | IAMs_20 | 19 25 02.7 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| K62A | Royalston | 106.53 | 27 | IAMs_20 | IAMs_20 | 19 24 40.8 | | |
| | comp=Z,13µm,22.0s | | | | | | | |
| EMMW | East Machias | 106.62 | 22 | IAMs_20 | IAMs_20 | 19 27 12.6 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| U54A | Nelsons Funny | 106.70 | 37 | IAMs_20 | IAMs_20 | 19 31 04.1 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| V53A | Saluda | 106.76 | 38 | IAMs_20 | IAMs_20 | 19 20 25.8 | | |
| | comp=Z,13µm,22.0s | | | | | | | |
| ODNJ | Ogdensburg | 106.80 | 29 | IAMs_20 | IAMs_20 | 19 24 36.4 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| MVL | Millersville | 106.86 | 31 | IAMs_20 | IAMs_20 | 19 28 11.3 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| TRNY | Table Rock, Ra | 106.92 | 29 | IAMs_20 | IAMs_20 | 19 26 13.5 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| HRV | Adam Dziewonsk | 106.93 | 26 | IAMs_20 | IAMs_20 | 19 25 03.6 | | |
| | comp=Z,12µm,21.0s | | | | | | | |
| BLA | Blisburg | 106.95 | 35 | IAMs_20 | IAMs_20 | 19 23 27.5 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| TLIG | Tlapa | 107.03 | 62 | IAMs_20 | IAMs_20 | 19 25 51.2 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| PAL | Palisades | 107.17 | 29 | IAMs_20 | IAMs_20 | 19 29 38.2 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| S57A | Dark Hollow, R | 107.30 | 34 | IAMs_20 | IAMs_20 | 19 32 22.6 | | |
| | comp=Z,9µm,19.0s | | | | | | | |
| CPNY | Central Park | 107.32 | 29 | IAMs_20 | IAMs_20 | 19 27 26.2 | | |
| | comp=Z,12µm,21.0s | | | | | | | |
| Y52A | Lillurn | 107.32 | 40 | IAMs_20 | IAMs_20 | 19 23 21.2 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| N62A | Caumsett State | 107.42 | 29 | IAMs_20 | IAMs_20 | 19 25 27.9 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| V55A | Taylorsville | 107.52 | 37 | IAMs_20 | IAMs_20 | 19 23 48.9 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| U56A | King | 107.61 | 36 | IAMs_20 | IAMs_20 | 19 23 49.1 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| T57A | Hurt | 107.72 | 35 | IAMs_20 | IAMs_20 | 19 25 43.9 | | |
| | comp=Z,11µm,20.0s | | | | | | | |
| CBN | Corbin Frederi | 107.76 | 33 | IAMs_20 | IAMs_20 | 19 30 55.6 | | |
| | comp=Z,11µm,19.0s | | | | | | | |
| 152A | Waverly Hall | 107.77 | 41 | IAMs_20 | IAMs_20 | 19 22 56.1 | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| P61A | Hammonton | 107.84 | 30 | IAMs_20 | IAMs_20 | 19 36 12.1 | | |
| | comp=Z,10µm,18.0s | | | | | | | |
| KMSC | Kings Mountain | 107.98 | 37 | IAMs_20 | IAMs_20 | 19 21 37.0 | | |
| | comp=Z,11µm,22.0s | | | | | | | |
| M65A | Busy, Falmout | 108.10 | 26 | IAMs_20 | IAMs_20 | 19 26 21.0 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| HODGE | Hodges | 108.11 | 39 | IAMs_20 | IAMs_20 | 19 25 35.9 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| 352A | Blakely | 108.46 | 42 | IAMs_20 | IAMs_20 | 19 22 02.6 | | |
| | comp=Z,13µm,22.0s | | | | | | | |
| 451A | Vernon | 108.53 | 44 | IAMs_20 | IAMs_20 | 19 22 34.8 | | |
| | comp=Z,12µm,21.0s | | | | | | | |
| T59A | Double "B" Far | 108.62 | 34 | IAMs_20 | IAMs_20 | 19 30 27.5 | | |
| | comp=Z,11µm,19.0s | | | | | | | |
| JSC | Jenkinsville | 108.65 | 38 | IAMs_20 | IAMs_20 | 19 21 43.9 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| R61A | Willards | 108.66 | 31 | IAMs_20 | IAMs_20 | 19 29 16.0 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| W57A | Gilead | 108.71 | 37 | IAMs_20 | IAMs_20 | 19 24 22.2 | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| 154A | Montrose | 108.77 | 40 | IAMs_20 | IAMs_20 | 19 23 23.6 | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| BIRD | Brown, Kers | 108.83 | 37 | IAMs_20 | IAMs_20 | 19 23 36.5 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| S61A | Accomac | 109.01 | 32 | IAMs_20 | IAMs_20 | 19 34 47.4 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| TIGA | Tifton | 109.31 | 42 | IAMs_20 | IAMs_20 | 19 30 56.9 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| Y57A | Sumter | 109.33 | 38 | IAMs_20 | IAMs_20 | 19 22 46.9 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| X58A | Rowland | 109.51 | 37 | IAMs_20 | IAMs_20 | 19 30 32.6 | | |
| | comp=Z,8µm,19.0s | | | | | | | |
| W59A | Clinton | 109.54 | 36 | IAMs_20 | IAMs_20 | 19 30 50.0 | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| PBRG | Braganca | 109.56 | 337 | *e*PP | PP | 18 41 57.2 | +4.4 | |
| 255A | Hazlehurst | 109.64 | 40 | IAMs_20 | IAMs_20 | 19 23 48.5 | | |
| | comp=Z,11µm,22.0s | | | | | | | |
| 553A | Crawfordville | 109.65 | 43 | IAMs_20 | IAMs_20 | 19 23 47.3 | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| PGAV | Gavieira, Arco | 109.96 | 338 | *e*PP | PP | 18 42 00.0 | +4.3 | |
| PGAV | Gavieira, Arco | 109.96 | 338 | *i* LQ | LQ | 18 57 42.7 | | |
| PGAV | Gavieira, Arco | 109.96 | 338 | *e*LQ | LQ | 19 09 03.1 | | |
| PGAV | Gavieira, Arco | 109.96 | 338 | *e*LR | LR | 19 19 51.1 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| V61A | Roper | 110.03 | 34 | IAMs_20 | IAMs_20 | 19 27 18.8 | | |
| | comp=Z,10µm,20.0s | | | | | | | |
| PCAB | Cabril | 110.10 | 338 | *e*PP | PP | 18 42 03.9 | +7.2 | |
| NHSC | New Hope | 110.12 | 38 | IAMs_20 | IAMs_20 | 19 23 49.9 | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| MVO | Moncorvo | 110.22 | 337 | *e*PP | PP | 18 42 01.8 | +4.2 | |
| MVO | Moncorvo | 110.22 | 337 | *e*LQ | LQ | 19 13 46.9 | | |
| MVO | | | | *e*LR | LR | 19 22 19.4 | | |
| | comp=Z,13µm,18.0s | | | | | | | |
| POLO | Lamas de Olo | 110.31 | 337 | *e*PP | PP | 18 42 00.9 | +2.6 | |
| ESDC | Sonseca Array | 110.33 | 334 | PKKP | | 18 52 37.9 | | |
| | comp=Z,6.6nm,1.1s,baz=231,slow=4.1,SNR=6.8 | | | | | | | |
| Y60A | Bolivia | 110.54 | 36 | IAMs_20 | IAMs_20 | 19 25 37.6 | | |
| | comp=Z,10µm,22.0s | | | | | | | |
| 456A | Hilliard | 110.76 | 41 | IAMs_20 | IAMs_20 | 19 33 32.4 | | |
| | comp=Z,10µm,19.0s | | | | | | | |
| CART | Cartagena | 110.79 | 330 | IAMs_20 | IAMs_20 | 19 32 56.0 | | |
| | comp=Z,10µm,18.0s | | | | | | | |
| PVIS | Viseu | 110.93 | 337 | *e*PP | PP | 18 42 00.9 | -1.8 | |
| MBAR | Monrara | 111.06 | 279 | IAMs_20 | IAMs_20 | 19 26 59.0 | | |
| | comp=Z,7µm,21.0s | | | | | | | |
| MTE | Manteigas | 111.08 | 337 | *e*PP | PP | 18 42 08.1 | +4.3 | |
| MTE | Manteigas | 111.08 | 337 | *e*LQ | LQ | 19 14 01.2 | | |
| MTE | | | | *e*LR | LR | 19 19 53.2 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| PCBR | Castelo Branco | 111.55 | 336 | *e*PP | PP | 18 42 07.6 | +0.5 | |
| PCAS | Casmilo, Conde | 111.73 | 337 | *e*PP | PP | 18 42 11.4 | +3.0 | |
| PMRV | Marv??o | 111.88 | 336 | *e*LQ | LQ | 19 14 44.0 | | |
| PMRV | | | | *e*LR | LR | 19 23 17.8 | | |
| | comp=Z,13µm,18.0s | | | | | | | |
| PSBE | So Bento | 112.31 | 337 | *e*PP | PP | 18 42 19.8 | +7.2 | |
| PESTR | Estremoz | 112.44 | 336 | *e*PP | PP | 18 42 12.8 | -0.7 | |
| PMTG | Montargil | 112.50 | 336 | *e*PP | PP | 18 42 15.5 | +1.6 | |
| PBAR | Barrancos | 112.84 | 335 | *e*PP | PP | 18 42 20.9 | +4.6 | |
| CCIG | Comitan | 112.88 | 59 | IAMs_20 | IAMs_20 | 19 22 52.7 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| EVO | Evora | 112.89 | 336 | *e*PP | PP | 18 42 21.1 | +4.4 | |
| PBEJ | Beja | 113.28 | 336 | *e*PP | PP | 18 42 23.5 | +4.0 | |
| PNCL | Nicolau / Gran | 113.46 | 336 | *e*PP | PP | 18 42 20.2 | -0.5 | |
| MESJ | Messejana | 113.58 | 336 | *e*PP | PP | 18 42 23.4 | +1.8 | |
| PCVE | Castelo Verde | 113.69 | 336 | *e*PP | PP | 18 42 30.2 | +7.8 | |
| PVAQ | Vaqueiros | 113.77 | 335 | *e*PP | PP | 18 42 24.7 | +1.7 | |
| PVAQ | Vaqueiros | 113.77 | 335 | *e*LQ | LQ | 19 16 01.0 | | |
| PVAQ | Vaqueiros | 113.77 | 335 | *e*LR | LR | 19 27 41.3 | | |
| | comp=Z,17µm,20.0s | | | | | | | |
| PBDV | Barranco-do-Ve | 113.99 | 335 | *e*PP | PP | 18 42 26.1 | +1.5 | |
| MORF | Marmelete | 114.21 | 336 | *e*PP | PP | 18 42 33.8 | +7.7 | |
| VA02 | Isla de Pascua | 114.80 | 110 | IAMs_20 | IAMs_20 | 19 21 40.8 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| RPN | Rapa Nui | 114.88 | 110 | IAMs_20 | IAMs_20 | 19 21 42.8 | | |
| | comp=Z,7µm,20.0s | | | | | | | |
| 061Z | Ochoppi | 114.89 | 44 | IAMs_20 | IAMs_20 | 19 27 16.3 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| CAMR | Camarioca | 116.53 | 47 | IAMs_20 | IAMs_20 | 19 27 42.3 | | |
| | comp=Z,10µm,21.0s | | | | | | | |
| SNET | Serv Nac Est T | 116.66 | 60 | IAMs_20 | IAMs_20 | 19 25 42.9 | | |
| | comp=Z,6µm,21.0s | | | | | | | |
| PGRA | Graciosa | 117.44 | 353 | *e*PP | PP | 18 42 48.5 | 0.0 | |
| PAGU | Agualva, Azore | 117.60 | 352 | *e*PP | PP | 18 42 49.3 | -0.3 | |
| PSCM | Serra do Cume | 117.66 | 352 | *e*PP | PP | 18 42 49.9 | -0.1 | |
| ROSA | Rosais | 117.78 | 353 | *e*PP | PP | 18 42 50.5 | -0.3 | |
| PPNO | Prainha do Nor | 118.03 | 353 | *e*PP | PP | 18 42 52.4 | -0.2 | |
| PID | Ribeirinha | 118.04 | 353 | *e*PP | PP | 18 42 52.1 | -0.5 | |
| PCAN | Candelaria | 118.06 | 353 | *e*PP | PP | 18 42 52.0 | -0.8 | |
| BART | Pico Bartolome | 118.28 | 350 | *e*PP | PP | 18 42 54.3 | -0.1 | |
| PGRON | Lagoa das Cont | 118.31 | 350 | *e*PP | PP | 18 42 55.0 | +0.4 | |
| PSET | Sete Cidades | 118.32 | 350 | *e*PP | PP | 18 42 53.7 | -0.9 | |
| BBSR | BB Station | 118.41 | 27 | IAMs_20 | IAMs_20 | 19 30 41.3 | | |
| | comp=Z,7µm,20.0s | | | | | | | |
| TAM | Tamanrasset | 118.56 | 315 | | PKPdf | 18 41 36.9 | -4.1 | |
| TAM | | | | IAMs_20 | IAMs_20 | 19 39 51.6 | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| TAM | Tamanrasset | 118.56 | 315 | PKIKP | PKPdf | 18 41 36.9 | -4.1 | |
| TAM | | | | MLR | MLR | | | |
| | comp=Z,8µm,20.0s | | | | | | | |
| PSMN | Pico do Norte, | 119.02 | 350 | *e*PP | PP | 18 42 59.2 | -0.2 | |
| PSMA | Santa Maria | 119.03 | 350 | *e*PP | PP | 18 42 59.5 | 0.0 | |
| BOAB | BOACO BROADBA | 120.19 | 59 | IAMs_20 | IAMs_20 | 19 32 58.5 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| PMOZ | Porto Moniz, M | 121.18 | 341 | *e*PP | PP | 18 43 17.8 | +3.2 | |
| PMOZ | Porto Moniz, M | 121.18 | 341 | *e*LR | LR | 19 21 13.9 | | |
| | comp=Z,5µm,20.0s | | | | | | | |
| ELIB | Princess Elisa | 121.21 | 198 | *d*PKPdf | PKiKP | 18 41 44.9 | +0.3 | |
| CHIV | Chivirico | 121.97 | 45 | IAMs_20 | IAMs_20 | 19 39 51.1 | | |
| | comp=Z,7µm,19.0s | | | | | | | |
| NMDO | Nuevo Mundo | 122.47 | 44 | IAMs_20 | IAMs_20 | 19 35 36.1 | | |
| | comp=Z,12µm,20.0s | | | | | | | |
| GRTK | Grand Turk | 124.11 | 40 | IAMs_20 | IAMs_20 | 19 33 04.7 | | |
| | comp=Z,9µm,21.0s | | | | | | | |
| BOSA | Boshof | 124.74 | 251 | PKP | PKPdf | 18 41 52.6 | +0.1 | |
| | comp=Z,10nm,0.9s,baz=49,slow=2.9,SNR=6.4 | | | | | | | |
| NVL | N'lazarevskaya | 125.04 | 198 | ⇑*i*PKIKP | PKPdf | 18 41 51.3 | -0.3 | |
| NVL | | | | *e* | | 18 48 53.7 | | |
| NVL | | | | *e*PS | PS | 18 53 34.6 | -6.7 | |
| NVL | | | | *e*SP | SP | 18 53 38.8 | +2.1 | |
| NVL | | | | *e*SS | SS | 19 00 43.0 | +8.2 | |
| NVL | | | | *e*SSS | SSS | 19 05 11.1 | | |
| SDDR | Presa de Saban | 125.95 | 42 | IAMs_20 | IAMs_20 | 19 34 41.9 | | |
| | comp=Z,9µm,20.0s | | | | | | | |
| TROLL | Troll, Antarti | 126.60 | 194 | ⇑

comp=Z,6µm,19.0s
**BO01 Tunca 147.94 118** IAMs_20 IAMs_20 19 38 28.6
comp=Z,6µm,20.0s
**AP01 Chacalluta 148.06 88** IAMs_20 IAMs_20 19 34 49.5
comp=Z,7µm,22.0s
**MT02 Curacav 148.09 116** IAMs_20 IAMs_20 19 51 09.8
comp=Z,6µm,19.0s
**BO02 Sierra Bellavi 148.10 119** PKPdf **PKPdf 18 42 33.7 -1.4**
BO02 **PKiKP 18 42 39.9 -0.2**
**MT09 Talagante 148.12 117** IAMs_20 IAMs_20 19 35 32.7
comp=Z,6µm,22.0s
**CO05 La Serena 148.37 109** IAMs_20 IAMs_20 19 42 48.6
comp=Z,6µm,19.0s
**BO04 La Punta 148.40 117** IAMs_20 IAMs_20 19 35 52.9
comp=Z,6µm,22.0s
**PEL Peldehue 148.48 116** IAMs_20 IAMs_20 20 00 46.4
comp=Z,5µm,19.0s
**MT03 Universidad Ad 148.57 116** IAMs_20 IAMs_20 19 39 01.4
comp=Z,5µm,20.0s
**MT16 CCHEN 148.57 116** IAMs_20 IAMs_20 19 59 47.4
comp=Z,5µm,18.0s
**ETMB Extrema 148.61 70** IAMs_20 IAMs_20 19 44 47.3
comp=Z,7µm,20.0s
**VA03 San Esteban 148.65 115** IAMs_20 IAMs_20 19 40 34.7
comp=Z,6µm,20.0s
**TA02 Huaiquique 148.69 91** PKPdf **PKPdf 18 42 33.0 -3.4**
TA02 **PKiKP 18 42 41.0 -0.6**
**TA01 Diego Aracena 148.70 92** **PKiKP 18 42 41.3 -0.3**
**MT13 San Alfonso 148.71 117** IAMs_20 IAMs_20 19 48 17.1
comp=Z,5µm,18.0s
**LMEL Las Melosas 148.75 117** IAMs_20 IAMs_20 19 36 04.2
comp=Z,6µm,22.0s
**CO03 El Pedregal 148.77 111** IAMs_20 IAMs_20 19 44 37.2
comp=Z,6µm,19.0s
**AC01 Pan de Azucar 148.98 102** PKPdf **PKPdf 18 42 32.8 -4.0**
AC01 **PKiKP 18 42 42.9 +0.9**
**MT08 Bocatoma Ro 148.98 116** IAMs_20 IAMs_20 19 39 05.4
comp=Z,6µm,20.0s
**PB04 IPOC Station P 149.03 95** PKPdf **PKPdf 18 42 33.1 -4.0**
PB04 **PKPbc 18 42 41.8 +0.6**
PB04 IAMs_20 IAMs_20 19 35 03.6
comp=Z,7µm,22.0s
**PB05 IPOC Station P 149.05 96** IAMs_20 IAMs_20 19 36 51.3
comp=Z,5µm,20.0s
**MACA Manacapuru-AM 149.20 53** **PKiKP 18 42 42.7 -0.2**
MACA IAMs_20 IAMs_20 19 46 11.1
comp=Z,6µm,20.0s
**AC05 El Transito 149.26 107** PKPdf **PKPdf 18 42 34.1 -3.2**
AC05 **PKiKP 18 42 43.0 +0.2**
**LPAZ La Paz 149.49 83** PKPbc **PKiKP 18 42 44.4 +0.3**
comp=Z,118nm,1.1s,baz=40,slow=3.2,SNR=5.7
**GO02 Mina Guanaco 149.84 100** PKPdf **PKPdf 18 42 35.0 -3.5**
GO02 **PKPbc 18 42 42.2 -1.1**
**SHEL Horse Pasture 150.14 279** **PKPdf 18 42 35.5 -3.4**
SHEL **PKiKP 18 42 44.9 +0.2**
**SHEL Horse Pasture 150.14 279** IAMs_20 IAMs_20 19 47 02.8
comp=Z,7µm,20.0s
**SHEL Horse Pasture 150.14 279** PKIKP **PKPdf 18 42 35.5 -3.4**
SHEL 18 42 44.9
SHEL MLR MLR
comp=Z,7µm,20.0s
**LVC Limon Verde 150.21 95** PKPbc **PKiKP 18 42 46.0 +0.8**
comp=Z,60nm,1.0s,baz=265,slow=6.7,SNR=5.6
**LVC Limon Verde 150.21 95** PKIKP **PKiKP 18 42 46.0 +0.8**
**SAML Samuel 150.74 65** IAMs_20 IAMs_20 19 59 38.1
comp=Z,6µm,20.0s
**AF01 San Pedro de A 150.92 96** **PKPdf 18 42 36.1 -4.1**
**MAL2 Monte Alegre, 152.76 41** IAMs_20 IAMs_20 20 04 58.2
comp=Z,6µm,22.0s
**ASCN Ascension 153.79 302** IAMs_20 IAMs_20 20 00 15.5
comp=Z,6µm,22.0s
**SIV San Ignacio 155.78 77** PKP **PKPdf 18 42 48.6 +1.6**
comp=Z,4.6nm,0.9s,baz=177,slow=2.4,SNR=1.5
**CPUP Villa Florida 160.88 103** PKP **PKPdf 18 42 53.5 +0.6**
comp=Z,5.7nm,0.8s,baz=273,slow=2.9,SNR=4.5
**BDFB Brasilia 166.74 57** PKP **PKPdf 18 42 58.0 -0.7**
comp=Z,11nm,1.0s,baz=33,slow=0.8,SNR=3.0
**BB19B Bebedouro 168.65 81** *e*P **PKPdf 18 43 02.3 +2.5**

**JMA 16 18:22:57.0±0.0, 37.3N±0.1×139.8E±0.1, h9km, MV0.6/16, WESTERN FUKUSHIMA PREF, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **JFY** | **Yanaizu** | **0.14** | **346** | P | Pg | | 18 23 00.1 | +0.1 |
| JFY | | | | *e*S | Sg | | 18 23 02.1 | -0.1 |
| **JOTO** | **OTAMA OYAMA** | **0.55** | **58** | *e*P | Pg | | 18 23 07.7 | +0.1 |
| JOTO | | | | *e*S | Sg | | 18 23 15.0 | +0.2 |

**HEL 16 18:27:28.5±0.6, 67.81N×25.83E, h0km, ML0.9, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **SGF** | **Sodankyl** | **0.45** | **144** | PG | Pg | | 18 27 37.0 | -0.1 |
| SGF | | | | SG | Sg | | 18 27 41.8 | -1.2 |
| **KLF** | **Kolari** | **0.92** | **232** | MSG | | | 18 27 56.8 | |
| | comp=Z,1.1nm,0.2s | | | | | | | |
| KLF | | | | SB | Sb | | 18 27 59.5 | -0.5 |
| **HEF** | **Hetta** | **1.01** | **308** | *e*P | Sn | | 18 28 05.9 | +1.0 |
| **HEF** | **Hetta** | **1.01** | **308** | PG | Pg | | 18 27 45.8 | -2.1 |
| HEF | | | | MSG | | | 18 27 59.4 | |
| | comp=Z,1.0nm,0.2s | | | | | | | |
| HEF | | | | SN | Sn | | 18 28 06.3 | +1.4 |
| **PAJU** | **Pajala** | **1.31** | **234** | P | Pb | | 18 27 53.9 | 0.0 |
| **PAJU** | **Pajala** | **1.31** | **234** | PN | Pb | | 18 27 53.9 | -0.1 |
| PAJU | | | | SN | Sb | | 18 28 11.2 | -0.1 |
| **LANU** | **Lannavaara** | **1.47** | **281** | P | Pn | | 18 27 54.7 | -1.5 |
| **LANU** | **Lannavaara** | **1.47** | **281** | PG | Pn | | 18 27 54.9 | -1.4 |
| **KTK1** | **Kautokeino** | **1.54** | **323** | SG | Sn | | 18 28 13.7 | -4.3 |
| **ARA0** | **ARCESS Array S** | **1.74** | **356** | SN | Sg | | 18 28 24.8 | +0.5 |
| **KALU** | **Kalix** | **2.19** | **208** | P | Pn | | 18 28 07.2 | +1.1 |
| **KALU** | **Kalix** | **2.19** | **208** | PG | Pn | | 18 28 07.4 | +1.4 |
| KALU | | | | SN | Sn | | 18 28 31.4 | -2.4 |
| **TRO** | **Tromso** | **3.11** | **309** | SN | Sn | | 18 28 56.6 | +0.1 |

**UPP 16 18:27:36.1±0.1, 67.18N×20.69E, h0km, ML2.0, Confirmed Induced event, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **DUNU** | **Dundret** | **0.08** | **216** | P | Pg | | 18 27 37.9 | +0.3 |
| DUNU | | | | S | Sg | | 18 27 39.3 | +0.8 |
| **MASU** | **Masugnsbyn** | **0.58** | **61** | P | Pg | | 18 27 47.2 | 0.0 |
| **SALU** | **Saltoluokta** | **0.87** | **284** | *e*P | Pg | | 18 27 51.8 | -1.0 |
| **SALU** | **Saltoluokta** | **0.87** | **284** | P | Pg | | 18 27 52.3 | -0.4 |
| **HARU** | **Harads** | **1.03** | **173** | P | Pg | | 18 27 55.1 | -0.7 |
| **KOVU** | **Salmi** | **1.06** | **349** | P | Pg | | 18 27 55.9 | -0.6 |
| **SJUU** | **Sjulsmark** | **1.72** | **167** | P | Pn | | 18 28 07.3 | 0.0 |

*NEIC **16** 18:36:00.4±0.9, 37.50N±0.03×110.53W±0.02, h6km±5km, Error ellipse: s-maj=3.7km s-min=2.8km az=164.0*
**UUSS 16 18:36:01.1±0.8, 37.51N±0.03×110.52W±0.02, h6km±5km, Md2.7/7, ML2.4/44(NEIC), Error ellipse: s-maj=3.8km s-min=2.0km az=167.0, Utah**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **HMU** | **Henry Mountain** | **0.46** | **337** | | Pg | | 18 36 09.8 | -0.3 |
| HMU | | | | | Sg | | 18 36 16.4 | +0.3 |
| **MMU** | **Miners Mountai** | **0.92** | **318** | | Pg | | 18 36 18.1 | -0.7 |
| **BTU** | **Barney Top** | **1.10** | **283** | | Pg | | 18 36 21.7 | -0.6 |
| **PV05** | **Paradox Valley** | **1.26** | **63** | | Pn | | 18 36 26.4 | +0.9 |
| **PV05** | **Paradox Valley** | **1.26** | **63** | IAML | | | 18 36 47.7 | |
| | comp=E,62nm,0.5s | | | | | | | |
| PV05 | | | | IAML | | | 18 36 49.2 | |
| | comp=N,50nm,0.5s | | | | | | | |
| **R19A** | **Curley Farm, L** | **1.26** | **52** | | Pg | | 18 36 24.4 | -0.9 |
| **MTPU** | **Mount Pierson** | **1.42** | **292** | | Pn | | 18 36 27.4 | -0.5 |
| **PKCU** | **Pink Cliffs** | **1.43** | **268** | | Pn | | 18 36 27.4 | -0.5 |
| **PKCU** | **Pink Cliffs** | **1.43** | **268** | IAML | | | 18 36 35.8 | |
| | comp=E,76nm,2.2s | | | | | | | |
| PKCU | | | | IAML | | | 18 36 47.0 | |
| | comp=N,60nm,0.3s | | | | | | | |
| **Q16A** | **Castle Valley** | **1.49** | **340** | | Pn | | 18 36 28.4 | -0.2 |
| **PV11** | **David Mesa, Pa** | **1.52** | **58** | | Pn | | 18 36 28.8 | -0.3 |
| **SRU** | **San Rafael Swe** | **1.59** | **360** | | Pn | | 18 36 30.4 | +0.3 |
| **SRU** | **San Rafael Swe** | **1.59** | **360** | | Pn | | 18 36 30.2 | +0.1 |
| **PV21** | **Cone Mtn., Par** | **1.60** | **49** | | Pn | | 18 36 30.3 | +0.1 |
| **PV21** | **Cone Mtn., Par** | **1.60** | **49** | IAML | | | 18 36 54.0 | |
| | comp=N,55nm,0.5s | | | | | | | |
| PV21 | | | | IAML | | | 18 36 56.5 | |
| | comp=E,48nm,0.5s | | | | | | | |
| **MVCO** | **Mesa Verde** | **1.64** | **100** | | Pn | | 18 36 30.8 | +0.2 |
| **MVCO** | **Mesa Verde** | **1.64** | **100** | IAML | | | 18 36 55.2 | |
| | comp=E,40nm,0.3s | | | | | | | |
| MVCO | | | | IAML | | | 18 36 59.4 | |
| | comp=E,44nm,0.5s | | | | | | | |
| **EKU** | **East Kanab** | **1.64** | **255** | | Pn | | 18 36 30.3 | -0.3 |
| **MVU** | **Marysvale** | **1.66** | **307** | | Pn | | 18 36 31.6 | +0.5 |
| **U15A** | **North Rim** | **1.79** | **233** | Pn | Pn | | 18 36 32.6 | -0.2 |
| U15A | | | | IAML | | | 18 36 48.1 | |
| | comp=E,36nm,1.6s | | | | | | | |
| **KNB** | **Kanab** | **1.91** | **256** | Pn | Pn | | 18 36 33.3 | -1.0 |
| KNB | | | | IAML | | | 18 36 46.2 | |
| | comp=N,30nm,2.4s | | | | | | | |
| KNB | | | | IAML | | | 18 37 08.1 | |
| | comp=E,27nm,2.8s | | | | | | | |
| **SZCU** | **Shurtz Canyon** | **2.04** | **273** | Pn | Pn | | 18 36 35.9 | -0.3 |
| **WUAZ** | **Wupatki** | **2.11** | **199** | Pn | Pn | | 18 36 36.3 | -0.8 |
| **LCMT** | **Little Creek M** | **2.23** | **258** | Pn | Pn | | 18 36 38.1 | -0.6 |
| LCMT | | | | IAML | | | 18 37 10.4 | |
| | comp=E,20nm,0.9s | | | | | | | |
| LCMT | | | | IAML | | | 18 37 11.7 | |
| | comp=N,24nm,0.2s | | | | | | | |
| **CCUT** | **Cedar City** | **2.26** | **272** | | Pb | | 18 36 41.3 | -1.2 |
| **S22A** | **4UR Ranch, Cre** | **2.94** | **84** | Pg | Pb | | 18 36 54.1 | 0.0 |
| S22A | | | | IAML | | | 18 37 37.6 | |
| | comp=N,11nm,1.6s | | | | | | | |
| S22A | | | | IAML | | | 18 38 11.8 | |
| | comp=E,15nm,2.9s | | | | | | | |
| **JLU** | **Jordanelle** | **3.17** | **347** | Pn | Pn | | 18 36 51.2 | -0.5 |
| JLU | | | | IAML | | | 18 37 14.3 | |
| | comp=E,14nm,1.8s | | | | | | | |
| JLU | | | | IAML | | | 18 37 17.4 | |
| | comp=N,16nm,2.3s | | | | | | | |

*IDC **16** 18:40:37.7±8.3, 22.98N×142.09E, h0km, mb3.6/6, mbtmp3.6/6, Error ellipse: s-maj=343.7km s-min=31.1km az=75.0*
**ISC 16 18:40:37.0±8.4, 23.4N±0.6×14.4E±°, h35km, n6, g0°88/6, mb3.7/6, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **SONM** | **Songino Array** | **38.50** | **319** | P | **P** | | **18 47 56.7** | **+0.7** |
| | 0.3nm,0.6s,baz=118,slow=8.5,SNR=1.7 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.05** | **193** | P | **P** | | **18 48 41.6** | **0.0** |
| | 0.3nm,0.5s,baz=4.0,slow=8.9,SNR=2.0 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.33** | **321** | P | **P** | | **18 49 51.8** | **-0.7** |
| | 0.3nm,0.4s,baz=100,slow=6.0,SNR=2.0 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.07** | **312** | P | **P** | | **18 49 57.3** | **-0.8** |
| | 0.6nm,0.7s,baz=87,slow=9.2,SNR=4.7 | | | | | | | |
| | 0.6nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.77** | **316** | P | **P** | | **18 50 16.6** | **-0.8** |
| | 0.6nm,0.7s,baz=94,slow=8.8,SNR=5.2 | | | | | | | |
| | 0.6nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.84** | **319** | P | **P** | | **18 50 52.6** | **+0.1** |
| | 1.2nm,0.7s,baz=78,slow=6.6,SNR=5.0 | | | | | | | |
| | 1.2nm,0.7s | | | | | | | |

**ROM 16 18:45:16.0±0.2, 41.846N±0.008×14.856E±0.009, h15km±2km, ML2.1/12, 2D, Error ellipse: s-maj=1.0km s-min=0.1km az=213.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.19** | **312** | ||P | | 18 45 21.1 | -0.2 |
| FRES | | | | S | Sg | | 18 45 23.9 | +0.4 |
| FRES | | | | AML | AML | | | |
| | comp=E,1330µm,0.4s | | | | | | | |
| FRES | | | | AML | AML | | | |
| | comp=N,578µm,0.5s | | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.20** | **169** | P | Pb | | 18 45 21.0 | -0.4 |
| CIGN | | | | S | Sg | | 18 45 24.1 | +0.4 |
| CIGN | | | | AML | AML | | | |
| | comp=E,458µm,1.5s | | | | | | | |
| CIGN | | | | AML | AML | | | |
| | comp=N,534µm,0.6s | | | | | | | |
| **TRIV** | **Trivento** | **0.24** | **251** | P | Pb | | 18 45 22.1 | -0.1 |
| TRIV | | | | S | Sb | | 18 45 26.2 | -0.1 |
| TRIV | | | | AML | AML | | | |
| | comp=E,370µm,1.0s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=N,310µm,0.3s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=E,370µm,1.0s | | | | | | | |
| **MELA** | **Melanico ??? S** | **0.25** | **125** | P | Pg | | 18 45 21.5 | +0.1 |
| MELA | | | | S | Sb | | 18 45 25.9 | -0.4 |
| MELA | | | | AML | AML | | | |
| | comp=N,933µm,0.3s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,762µm,0.7s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,904µm,0.3s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,678µm,0.7s | | | | | | | |
| **GATE** | **Gambatesa** | **0.34** | **173** | P | Pb | | 18 45 24.0 | +0.3 |
| **BSSO** | **Busso** | **0.36** | **213** | P | Pb | | 18 45 24.0 | -0.2 |
| **SACR** | **S. Croce Del S** | **0.46** | **194** | P | Pg | | 18 45 25.3 | +0.1 |
| **MIDA** | **Miranda** | **0.49** | **246** | P | Pg | | 18 45 25.9 | 0.0 |
| MIDA | | | | S | Sg | | 18 45 32.4 | -0.1 |
| MIDA | | | | AML | AML | | | |
| | comp=E,361µm,0.8s | | | | | | | |
| MIDA | | | | AML | AML | | | |
| | comp=N,178µm,0.5s | | | | | | | |
| **APRC** | **Apricena** | **0.52** | **100** | P | Pg | | 18 45 25.9 | -0.5 |
| APRC | | | | S | Sb | | 18 45 34.1 | -0.3 |
| **LPEL** | **Lama dei Pelig** | **0.54** | **292** | P | Pg | | 18 45 26.5 | -0.2 |
| **SGRT** | **San Giovanni R** | **0.67** | **98** | ||P | Pg | 18 45 28.6 | -0.5 |
| **INTR** | **Introdacqua** | **0.73** | **283** | P | Pg | | 18 45 29.4 | -0.8 |

**ROM 16 18:46:10.6±0.2, 41.860N±0.008×14.827E±0.010, h17km±2km, ML1.8/26, Error ellipse: s-maj=1.0km s-min=0.2km az=218.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.16** | **314** | P | Pb | | 18 46 15.4 | +0.1 |
| FRES | | | | S | Sb | | 18 46 18.3 | -0.1 |
| FRES | | | | AML | AML | | | |
| | comp=E,1105µm,0.6s | | | | | | | |
| FRES | | | | AML | AML | | | |
| | comp=N,786µm,0.1s | | | | | | | |
| FRES | | | | AML | AML | | | |
| | comp=E,1105µm,1.4s | | | | | | | |
| FRES | | | | AML | AML | | | |
| | comp=N,383µm,0.1s | | | | | | | |
| FRES | | | | AML | AML | | | |
| | comp=E,860µm,0.3s | | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **164** | P | Pg | | 18 46 15.8 | +0.1 |
| CIGN | | | | S | Sb | | 18 46 19.8 | 0.0 |
| CIGN | | | | AML | AML | | | |
| | comp=N,350µm,0.5s | | | | | | | |
| CIGN | | | | AML | AML | | | |
| | comp=E,290µm,0.6s | | | | | | | |
| CIGN | | | | AML | AML | | | |
| | comp=N,350µm,1.5s | | | | | | | |
| CIGN | | | | AML | AML | | | |
| | comp=N,119µm,0.0s | | | | | | | |
| CIGN | | | | AML | AML | | | |
| | comp=E,125µm,0.0s | | | | | | | |
| **TRIV** | **Trivento** | **0.23** | **246** | P | Pb | | 18 46 16.5 | +0.2 |
| TRIV | | | | S | Sb | | 18 46 20.8 | +0.6 |
| TRIV | | | | AML | AML | | | |
| | comp=E,306µm,0.6s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=N,284µm,1.0s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=N,306µm,1.0s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=E,316µm,0.5s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=E,154µm,0.0s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=E,177µm,0.0s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=N,282µm,0.4s | | | | | | | |
| TRIV | | | | AML | AML | | | |
| | comp=N,304µm,0.4s | | | | | | | |
| **MELA** | **Melanico ??? S** | **0.27** | **124** | P | Pg | | 18 46 16.4 | -0.2 |
| MELA | | | | S | Sg | | 18 46 21.0 | +0.4 |
| MELA | | | | AML | AML | | | |
| | comp=E,584µm,0.4s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,584µm,1.2s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,584µm,1.2s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,584µm,1.2s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,612µm,0.4s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,584µm,0.4s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,454µm,0.2s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,592µm,0.1s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=E,538µm,0.1s | | | | | | | |
| MELA | | | | AML | AML | | | |
| | comp=N,412µm,0.1s | | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **170** | P | Pb | | 18 46 18.8 | +0.3 |
| **BSSO** | **Busso** | **0.36** | **209** | P | Pb | | 18 46 18.4 | -0.2 |
| BSSO | | | | S | Sg | | 18 46 23.0 | -0.2 |
| BSSO | | | | AML | AML | | | |
| | comp=E,48µm,0.3s | | | | | | | |
| BSSO | | | | AML | AML | | | |
| | comp=N,52µm,0.3s | | | | | | | |
| BSSO | | | | AML | AML | | | |
| | comp=E,48µm,1.7s | | | | | | | |
| BSSO | | | | AML | AML | | | |
| | comp=E,69µm,0.0s | | | | | | | |
| BSSO | | | | AML | AML | | | |
| | comp=E,29µm,0.2s | | | | | | | |
| BSSO | | | | AML | AML | | | |
| | comp=N,143µm,0.4s | | | | | | | |
| BSSO | | | | AML | AML | | | |
| | comp=N,52µm,0.3s | | | | | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **191** | P | Pg | | 18 46 19.8 | -0.3 |
| SACR | | | | S | Sb | | 18 46 27.2 | 0.0 |
| **MIDA** | **Miranda** | **0.48** | **243** | P | Pg | | 18 46 20.0 | -0.3 |
| MIDA | | | | S | Sb | | 18 46 27.6 | 0.0 |
| MIDA | | | | AML | AML | | | |
| | comp=N,160µm,1.0s | | | | | | | |
| MIDA | | | | AML | AML | | | |
| | comp=E,222µm,0.8s | | | | | | | |
| MIDA | | | | AML | AML | | | |
| | comp=N,56µm,0.1s | | | | | | | |
| MIDA | | | | AML | AML | | | |
| | comp=E,217µm,0.1s | | | | | | | |
| MIDA | | | | AML | AML | | | |
| | comp=E,194µm,0.1s | | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.52** | **291** | P | Pg | | 18 46 21.0 | 0.0 |
| LPEL | | | | AML | AML | | | |
| | comp=N,264µm,0.2s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=E,262µm,0.2s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=N,263µm,0.2s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=E,258µm,0.1s | | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.53** | **253** | AML | AML | | | |
| RNI2 | comp=N,214µm,0.9s | | | | | | | |
| | comp=E,208µm,1.6s | | | AML | AML | | | |
| RNI2 | | | | | | | | |
| | comp=N,208µm,1.1s | | | AML | AML | | | |
| RNI2 | | | | | | | | |
| | comp=N,214µm,1.1s | | | AML | AML | | | |
| RNI2 | | | | | | | | |
| | comp=E,208µm,0.4s | | | AML | AML | | | |
| RNI2 | | | | | | | | |
| | comp=N,208µm,0.9s | | | AML | AML | | | |
| RNI2 | | | | | | | | |
| | comp=E,207µm,0.1s | | | | | | | |
| **APRC** | **Apricena** | **0.55** | **101** | P | Pb | | 18 46 22.0 | +0.2 |
| APRC | | | | AML | AML | | | |
| | comp=E,270µm,1.6s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=N,296µm,0.5s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=N,296µm,1.5s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=E,270µm,0.4s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=N,274µm,0.3s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=E,252µm,0.2s | | | | | | | |
| APRC | | | | AML | AML | | | |
| | comp=E,274µm,0.2s | | | | | | | |
| **VAGA** | **Valle Agricola** | **0.63** | **225** | AML | AML | | | |
| | comp=N,87µm,0.2s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=E,64µm,0.5s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=N,87µm,1.8s | | | | | | | |
| **INTR** | **Introdacqua** | **0.70** | **283** | P | Pg | | 18 46 23.6 | -0.8 |
| INTR | | | | AML | AML | | | |
| | comp=E,81µm,0.2s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=N,137µm,1.1s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,81µm,1.8s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=N,65µm,0.1s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,81µm,0.2s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=N,137µm,0.9s | | | | | | | |
| **MRB1** | **Monte Rocchett** | **0.74** | **171** | AML | AML | | | |
| | comp=N,136µm,0.4s | | | | | | | |
| MRB1 | | | | AML | AML | | | |
| | comp=E,113µm,1.4s | | | | | | | |
| MRB1 | | | | AML | AML | | | |
| | comp=E,113µm,1.4s | | | | | | | |
| MRB1 | | | | AML | AML | | | |
| | comp=E,113µm,0.6s | | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.82** | **100** | AML | AML | | | |
| | comp=N,113µm,0.4s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,113µm,1.6s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=E,64µm,0.4s | | | | | | | |
| **MCI** | **Monte Cassino** | **0.84** | **244** | AML | AML | | | |
| | comp=E,102µm,0.5s | | | | | | | |
| MCI | | | | AML | AML | | | |
| | comp=N,86µm,0.5s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.91** | **306** | AML | AML | | | |
| | comp=N,140µm,1.2s | | | | | | | |
| VCEL | | | | AML | AML | | | |
| | comp=E,149µm,1.4s | | | | | | | |
| **FAGN** | **Fagnano** | **1.01** | **294** | AML | AML | | | |
| | comp=E,172µm,0.5s | | | | | | | |
| FAGN | | | | AML | AML | | | |
| | comp=N,84µm,0.5s | | | | | | | |
| FAGN | | | | AML | AML | | | |
| | comp=N,84µm,1.5s | | | | | | | |
| **LIK** | **San Giovanni I** | **1.01** | **250** | AML | AML | | | |
| | comp=N,127µm,0.4s | | | | | | | |
| LIK | | | | AML | AML | | | |
| | comp=N,127µm,0.4s | | | | | | | |
| LIK | | | | AML | AML | | | |
| | comp=E,117µm,1.1s | | | | | | | |
| LIK | | | | AML | AML | | | |
| | comp=E,117µm,0.9s | | | | | | | |
| **SF04** | **Casetta** | **2.54** | **294** | AML | AML | | | |
| | comp=N,900µm,0.1s | | | | | | | |
| SF04 | | | | AML | AML | | | |
| | comp=E,976µm,1.2s | | | | | | | |
| SF04 | | | | AML | AML | | | |
| | comp=E,976µm,0.8s | | | | | | | |
| **CAFI** | **Castiglion Fio** | **2.57** | **306** | AML | AML | | | |
| | comp=N,43µm,1.6s | | | | | | | |
| CAFI | | | | AML | AML | | | |
| | comp=E,57µm,1.6s | | | | | | | |
| CAFI | | | | AML | AML | | | |
| | comp=E,57µm,0.4s | | | | | | | |
| CAFI | | | | AML | AML | | | |
| | comp=N,43µm,0.4s | | | | | | | |
| **NDIM** | **Novi di Modena** | **4.17** | **318** | AML | AML | | | |
| | comp=E,719µm,0.1s | | | | | | | |
| NDIM | | | | AML | AML | | | |
| | comp=N,438µm,1.3s | | | | | | | |
| NDIM | | | | AML | AML | | | |
| | comp=E,690µm,0.1s | | | | | | | |
| NDIM | | | | AML | AML | | | |
| | comp=N,455µm,0.1s | | | | | | | |
| NDIM | | | | AML | AML | | | |

comp=N,438μm,0.7s

*IDC* ***16*** *18:49:07.4±0.7,23°.42N×143°.62E,h0km,mb4.4/15, mbtmp4.3/18,ML3.6/3,Error ellipse: s-maj=24.7km s-min=14.3km az=73.0*

*MOS* ***16*** *18:49:07.9±0.7,23°.34N×143°.57E,h15km,mb4.9/26,Error ellipse: s-maj=15.5km s-min=6.9km az=122.0*

*NEIC* ***16*** *18:49:08.0±1.4,23°.44N±0°.09×144°.0E±0°.1,h10km±1km, mb4.9/44,Error ellipse: s-maj=21.2km s-min=14.8km az=88.0*

*JMA* ***16*** *18:49:12.9±0.2,23°.6N±0°.8×14°.4E±°,h92km,MV4.4/17, IOTO ISLANDS REGION*

**ISC 16 18:49:12.2±0.5,23°.43N±0°.06×143°.6E±0°.1,h31km,n114, σ1s01/117,mb4.8/47,8C-1D,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **3.44** | **338** | *e*P | **Pn** | **18 50 04.3** | **+0.6** |
| JHH2 | | | | *e*S | **Sn** | **18 50 44.0** | **+0.5** |
| **JCJ** | **Chichijima** | **3.87** | **341** | Pn | **Pn** | **18 50 10.1** | **+0.5** |
| **JCJ** | **Chichijima** | **3.87** | **341** | Pn | **Pn** | **18 50 07.4** | **-2.2** |
| | 10.0nm,0.3s,baz=286,slow=22,SNR=2.7 | | | | | | |
| JCJ | | | | Sn | **Sn** | **18 50 48.8** | **-5.3** |
| | 23nm,0.3s,baz=256,slow=23,SNR=7.0 | | | | | | |
| | 53nm,0.4s | | | | | | |
| **CBIJ** | **Chichi jima** | **3.87** | **341** | *e*P | **Pn** | **18 50 10.2** | **+0.6** |
| CBIJ | | | | *e*S | **Sn** | **18 50 53.5** | **-0.6** |
| **JOD2** | **Odawara 2** | **12.43** | **343** | *e*P | **Pn** | **18 52 06.6** | **-0.4** |
| **JAO** | **Obara** | **13.02** | **336** | *e*P | **Pn** | **18 52 14.4** | **-0.7** |
| **JRY** | **Ryogami san** | **13.19** | **343** | *e*P | **Pn** | **18 52 15.6** | **-1.8** |
| **JNG** | **Nsakai** | **13.78** | **341** | *e*P | **Pn** | **18 52 24.4** | **-1.2** |
| **MJA0** | **Matsu Arr-Jizo** | **13.86** | **342** | *e*P | **Pn** | **18 52 27.6** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **13.87** | **342** | Pn | **Pn** | **18 52 25.8** | **-0.9** |
| | 0.1nm,0.3s,baz=163,slow=11,SNR=7.9 | | | | | | |
| | 1.8nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **13.88** | **342** | Pn | **Pn** | **18 52 25.8** | **-1.0** |
| **MAJO** | **Matsushiro** | **13.88** | **342** | ⇑*i*P | **Pn** | **18 52 27.0** | **+0.2** |
| **MJB9** | **Matsu-Tunnel** | **13.88** | **342** | Pn | **Pn** | **18 52 25.6** | **-1.2** |
| **JOW** | **Kunigami** | **14.30** | **287** | | **P** | **18 52 38.9** | **-0.4** |
| **JMM** | **Marumori** | **14.59** | **351** | Pn | **Pn** | **18 52 34.4** | **-2.0** |
| **KSRS** | **Korea Array** | **19.41** | **320** | P | **P** | **18 53 35.4** | **-0.4** |
| | 0.3nm,0.3s,baz=134,slow=12,SNR=7.2 | | | | | | |
| | 4.3nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **19.41** | **320** | *e*P | **P** | **18 53 36.5** | **+0.7** |
| **SSLB** | **Suanglung** | **20.77** | **276** | P | Pn | 18 53 54.9 | +1.6 |
| SSLB | | | | IAmb | IAmb | 18 54 08.3 | |
| | comp=Z,61nm,1.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.81** | **338** | P | **P** | **18 54 12.9** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **22.81** | **338** | P | **P** | **18 54 11.8** | **-0.6** |
| | comp=Z,4.0nm,0.7s,baz=157,slow=8.8,SNR=9.3 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.81** | **338** | P | **P** | **18 54 12.9** | **+0.5** |
| **KLR** | **Kul'dur** | **27.39** | **343** | *ce*P | **P** | **18 54 55.9** | **+1.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **ZEA** | **Zeya** | **32.69** | **342** | *e*P | **P** | **18 55 42.8** | **+1.2** |
| ZEA | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.16** | **181** | P | **P** | **18 56 21.1** | **+0.6** |
| COEN | | | | IAmb | IAmb | 18 56 52.6 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **37.90** | **319** | P | **P** | **18 56 26.3** | **-0.4** |
| **ULN** | **Ulaanbaatar** | **37.90** | **319** | ⇑*i*P | **P** | **18 56 26.2** | **-0.4** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **38.07** | **200** | P | **P** | **18 56 27.1** | **-1.1** |
| **SONM** | **Songino Array** | **38.28** | **319** | P | **P** | **18 56 29.3** | **-0.6** |
| **SONM** | **Songino Array** | **38.28** | **319** | P | **P** | **18 56 29.0** | **-0.8** |
| | comp=Z,1.5nm,0.7s,baz=127,slow=6.8,SNR=11 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **38.28** | **319** | *e*P | **P** | **18 56 29.6** | **-0.3** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **YAK** | **Yakutsk** | **39.73** | **350** | P | **P** | **18 56 42.5** | **+0.9** |
| **YAK** | **Yakutsk** | **39.73** | **350** | ⇓*i*P | **P** | **18 56 42.6** | **+0.9** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **CRAI** | **Chiangrai** | **40.16** | **274** | P | **P** | **18 56 46.2** | **+0.5** |
| **TNCH** | **TengChong** | **41.01** | **282** | P | **P** | **18 56 55.0** | **+2.0** |
| TNCH | | | | sP | pP | 18 56 59.3 | -1.3 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,22nm,5.0s | | | | | | |
| **ZAK** | **Zakamensk** | **41.23** | **321** | *e*P | **P** | **18 56 53.7** | **-0.7** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **41.49** | **202** | P | **P** | **18 56 55.8** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 18 58 02.0 | |
| | comp=Z,34nm,1.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.89** | **272** | P | **P** | **18 56 59.9** | **-0.2** |
| | comp=Z,1.9nm,0.8s,baz=58,slow=8.5,SNR=13 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.89** | **272** | *e*P | **P** | **18 57 00.8** | **+0.8** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.87** | **193** | P | **P** | **18 57 16.2** | **+0.3** |
| **WR0** | **Warramunga Arr** | **44.03** | **192** | P | **P** | **18 57 15.7** | **-1.5** |
| **WB2** | **Warramunga Arr** | **44.05** | **193** | P | **P** | **18 57 17.0** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.05** | **193** | P | **P** | **18 57 16.1** | **-1.2** |
| | comp=Z,2.5nm,0.7s,baz=10.0,slow=9.0,SNR=15 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 59 03.1** | **+0.6** |
| | comp=Z,2.1nm,0.8s,baz=10,slow=3.8,SNR=6.5 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.05** | **193** | *e*P | **P** | **18 57 16.9** | **-0.5** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.85** | **205** | P | **P** | **18 57 23.5** | **-0.3** |
| **BILL** | **Bilibino** | **46.75** | **11** | *e*P | **P** | **18 57 41.2** | **+3.0** |
| BILL | | | | *e* | | 18 59 11.9 | |
| BILL | | | | *e* | | 18 59 29.4 | |
| BILL | | | | *e*PPP | PPP | 19 00 11.0 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **SHL** | **Shillong** | **46.88** | **284** | P | **P** | **18 57 39.9** | **-0.2** |
| **SHL** | **Shillong** | **46.88** | **284** | P | **P** | **18 57 39.9** | **-0.2** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **LSA** | **Lhasa** | **47.01** | **289** | P | **P** | **18 57 42.1** | **+0.7** |
| LSA | | | | IAmb | IAmb | 18 57 44.3 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **47.01** | **289** | P | **P** | **18 57 42.1** | **+0.7** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **47.76** | **192** | P | **P** | **18 57 45.4** | **-1.2** |
| **ASAR** | **Alice Springs** | **47.76** | **192** | P | **P** | **18 57 45.7** | **-0.9** |
| | comp=Z,9.9nm,0.3s,baz=7.6,slow=7.4,SNR=2.0 | | | | | | |
| | comp=Z,9.9nm,0.3s | | | | | | |
| **PSI** | **Prapat** | **47.82** | **251** | P | **P** | **18 57 48.0** | **+0.5** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **RPSI** | **Rantau Prapat** | **47.88** | **251** | P | **P** | **18 57 48.0** | **+0.3** |
| RPSI | | | | IAmb | IAmb | 18 57 48.9 | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **50.06** | **210** | P | **P** | **18 58 03.6** | **-0.6** |
| MBWA | | | | IAmb | IAmb | 18 58 04.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **50.37** | **209** | P | **P** | **18 58 05.9** | **-0.7** |
| PSA00 | | | | IAmb | IAmb | 18 58 06.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **50.75** | **316** | ⇑*i*P | **P** | **18 58 10.2** | **+0.7** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,33nm,3.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.11** | **321** | P | **P** | **18 58 26.3** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **53.11** | **321** | P | **P** | **18 58 26.1** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **53.11** | **321** | P | **P** | **18 58 26.4** | **-0.4** |
| | comp=Z,3.4nm,0.6s,baz=107,slow=6.9,SNR=16 | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.11** | **321** | *e*P | **P** | **18 58 26.8** | **+0.1** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **53.83** | **312** | P | **P** | **18 58 32.3** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 18 58 33.7 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **53.83** | **312** | P | **P** | **18 58 32.3** | **+0.1** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.83** | **312** | P | **P** | **18 58 32.4** | **+0.2** |
| **MKAR** | **Makanchi Array** | **53.83** | **312** | P | **P** | **18 58 32.8** | **+0.6** |
| | comp=Z,7.0nm,0.7s,baz=92,slow=9.1,SNR=60 | | | | | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **54.05** | **312** | P | **P** | **18 58 34.4** | **+0.6** |
| MAKZ | | | | IAmb | IAmb | 18 58 35.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **54.05** | **312** | P | **P** | **18 58 34.4** | **+0.6** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **55.03** | **182** | P | **P** | **18 58 40.4** | **-0.5** |
| | comp=Z,1.3nm,0.5s,baz=348,slow=8.1,SNR=4.6 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **55.03** | **182** | *e*P | **P** | **18 58 39.6** | **-1.3** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **56.49** | **316** | P | **P** | **18 58 51.2** | **-0.1** |
| KURK | | | | IAmb | IAmb | 18 58 52.5 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **56.49** | **316** | ⇑*i*P | **P** | **18 58 51.5** | **+0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.54** | **316** | P | **P** | **18 58 51.5** | **-0.1** |
| | comp=Z,13nm,0.8s,baz=93,slow=7.8,SNR=95 | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **PRZ** | **Przheval'sk** | **56.57** | **306** | P | **P** | **18 58 52.5** | **+0.3** |
| **PRZ** | **Przheval'sk** | **56.57** | **306** | P | **P** | **18 58 52.5** | **+0.3** |
| PRZ | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **BOOM** | **Boomskoye usch** | **58.38** | **307** | P | **P** | **18 59 06.2** | **+1.2** |
| BOOM | | | | IAmb | IAmb | 18 59 07.2 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **BOOM** | **Boomskoye usch** | **58.38** | **307** | P | **P** | **18 59 06.2** | **+1.2** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **NRN** | **Naryn** | **58.42** | **305** | P | **P** | **18 59 04.3** | **-1.1** |
| NRN | | | | IAmb | IAmb | 18 59 11.5 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **NRN** | **Naryn** | **58.42** | **305** | P | **P** | **18 59 04.3** | **-1.1** |
| NRN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **MORW** | **Morawa** | **58.56** | **208** | P | **P** | **18 59 05.0** | **-1.0** |
| **ILAR** | **Eielson Array** | **60.32** | **28** | P | **P** | **18 59 17.1** | **-0.7** |
| **ILAR** | **Eielson Array** | **60.32** | **28** | P | **P** | **18 59 18.5** | **+0.7** |
| | comp=Z,0.7nm,0.8s,baz=269,slow=4.9,SNR=6.9 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **60.32** | **28** | *e*P | **P** | **18 59 19.0** | **+1.2** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NIL** | **Nilore** | **61.60** | **297** | P | **P** | **18 59 27.2** | **+0.1** |
| NIL | | | | IAmb | IAmb | 18 59 39.8 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **NIL** | **Nilore** | **61.60** | **297** | P | **P** | **18 59 27.2** | **+0.1** |
| NIL | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.62** | **319** | P | **P** | **18 59 27.4** | **+0.6** |
| | comp=Z,19nm,0.6s,baz=92,slow=8.0,SNR=92 | | | | | | |
| | comp=Z,19nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **61.69** | **319** | P | **P** | **18 59 27.8** | **+0.6** |
| **BRVK** | **Borovoye** | **61.69** | **319** | P | **P** | **18 59 27.8** | **+0.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **62.30** | **308** | P | **P** | **18 59 32.2** | **+0.6** |
| KK31 | | | | IAmb | IAmb | 18 59 40.1 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **62.30** | **308** | P | **P** | **18 59 32.2** | **+0.6** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **62.30** | **308** | P | **P** | **18 59 32.0** | **+0.4** |
| **KKAR** | **Karatay Array** | **62.30** | **308** | P | **P** | **18 59 32.1** | **+0.5** |
| KKAR | | | | IAmb | IAmb | 18 59 40.1 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **62.30** | **308** | P | **P** | **18 59 32.1** | **+0.5** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **GAR** | **Garm** | **63.03** | **303** | P | **P** | **18 59 37.1** | **+0.4** |
| GAR | | | | IAmb | IAmb | 18 59 51.3 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **SIMJ** | **Simiganj** | **64.09** | **303** | P | **P** | **18 59 44.3** | **+0.6** |
| SIMJ | | | | IAmb | IAmb | 18 59 50.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KBL** | **Kabul** | **64.86** | **298** | P | **P** | **18 59 49.5** | **+0.7** |
| KBL | | | | IAmb | IAmb | 19 00 03.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **KBL** | **Kabul** | **64.86** | **298** | P | **P** | **18 59 49.5** | **+0.7** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **ARU** | **Arti** | **68.11** | **323** | P | **P** | **19 00 08.2** | **-0.7** |
| **ARU** | **Arti** | **68.11** | **323** | ⇑*i*P | **P** | **19 00 09.1** | **+0.1** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.59** | **316** | P | **P** | **19 00 11.9** | **-0.2** |
| **KIRV** | **Kirov** | **72.44** | **327** | *ce*P | **P** | **19 00 35.8** | **+0.4** |
| **ARCES** | **ARCESS Array B** | **77.41** | **341** | P | **P** | **19 01 04.0** | **+0.1** |
| | comp=Z,2.8nm,0.7s,baz=52,slow=6.5,SNR=6.4 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **OBN** | **Obninsk** | **80.27** | **326** | *e*P | **P** | **19 01 20.6** | **+0.7** |
| OBN | | | | *e* | | 19 01 27.0 | |
| OBN | | | | *e* | | 19 04 22.1 | |
| OBN | | | | *e*PPP | PPP | 19 06 12.5 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **81.46** | **314** | P | **P** | **19 01 26.9** | **+0.4** |
| | comp=Z,3.7nm,0.8s,baz=92,slow=0.6,SNR=6.4 | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **81.46** | **314** | ⇑*i*P | **P** | **19 01 27.2** | **+0.8** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.76** | **52** | P | **P** | **19 01 26.7** | **-1.8** |
| | comp=Z,0.3nm,0.4s,baz=297,slow=4.0,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **81.79** | **335** | P | **P** | **19 01 27.2** | **-0.7** |
| | comp=Z,1.7nm,0.6s,baz=57,slow=7.0,SNR=8.3 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **81.79** | **335** | *e*P | **P** | **19 01 27.8** | **-0.1** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.08** | **56** | *i* P | **P** | **19 01 44.8** | **-0.7** |
| PFO | | | | pmax | pmax | | |
| | comp=Z,26nm,3.0s | | | | | | |
| **RAYN** | **Ar Rayn** | **87.82** | **295** | P | **P** | **19 01 58.2** | **-0.8** |
| RAYN | | | | IAmb | IAmb | 19 02 00.0 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **RAYN** | **Ar Rayn** | **87.82** | **295** | P | **P** | **19 01 58.3** | **-0.8** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **89.44** | **314** | P | **P** | **19 02 04.4** | **-2.1** |
| | comp=Z,0.2nm,0.4s,baz=50,slow=3.4,SNR=2.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **89.44** | **314** | *e*P | **P** | **19 02 09.1** | **+2.6** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.94** | **310** | PKP | **PKPdf** | **19 08 16.0** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=62,slow=3.4,SNR=3.3 | | | | | | |
| **PLCA** | **Paso Flores** | **146.57** | **129** | PKPbc | **PKPab** | **19 08 52.1** | **+0.3** |
| | comp=Z,3.4nm,0.9s,baz=234,slow=3.9,SNR=8.1 | | | | | | |
| **LPAZ** | **La Paz** | **149.36** | **82** | PKPbc | **PKPbc** | **19 08 59.1** | **-0.5** |
| | comp=Z,1.4nm,0.6s,baz=225,slow=1.4,SNR=5.2 | | | | | | |

**ROM 16 18:58:08.6±0.2,41°.866N±0°.008×14°.861E±0°.010, h18km±2km,ML2.4/40,2C-1D,Error ellipse: s-maj=1.1km s-min=0.3km az=213.0,Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.18** | **307** | P | Pb | 18 58 13.8 | +0.4 |
| FRES | | | | S | Sb | 18 58 16.9 | +0.2 |
| FRES | | | | AML | AML | | |
| | comp=E,4405μm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,2245μm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **171** | P | Pb | 18 58 13.8 | -0.2 |
| CIGN | | | | S | Sb | 18 58 17.6 | 0.0 |
| CIGN | | | | AML | AML | | |
| | comp=N,1630μm,0.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,1305μm,0.5s | | | | | | |
| **TRIV** | **Trivento** | **0.25** | **247** | P | Pg | 18 58 14.2 | -0.2 |
| TRIV | | | | S | Sb | 18 58 19.0 | +0.2 |
| TRIV | | | | AML | AML | | |
| | comp=N,1252μm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,970μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1252μm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1346μm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,900μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1252μm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,970μm,0.3s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.26** | **129** | ⇓P | Pg | 18 58 14.3 | 0.0 |
| MELA | | | | S | Sb | 18 58 18.7 | -0.1 |
| MELA | | | | AML | AML | | |
| | comp=N,2180μm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1780μm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1545μm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2360μm,0.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2360μm,1.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2180μm,1.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1545μm,1.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1780μm,1.4s | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **174** | P | Pb | 18 58 16.8 | +0.4 |
| GATE | | | | AML | AML | | |
| | comp=E,750μm,0.3s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,755μm,1.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,612μm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,755μm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,587μm,0.7s | | | | | | |
| **BSSO** | **Busso** | **0.38** | **212** | ⇑P | Pb | 18 58 16.8 | 0.0 |
| BSSO | | | | S | Sb | 18 58 23.0 | +0.6 |
| BSSO | | | | AML | AML | | |
| | comp=E,542μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,660μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,220μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,277μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,660μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,221μm,0.3s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.48** | **194** | ⇑P | Pg | 18 58 18.1 | -0.2 |
| SACR | | | | S | Sb | 18 58 25.4 | 0.0 |
| SACR | | | | AML | AML | | |
| | comp=E,230μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,230μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,249μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,230μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,233μm,0.4s | | | | | | |
| **MIDA** | **Miranda** | **0.51** | **244** | P | Pg | 18 58 18.8 | 0.0 |
| MIDA | | | | S | Sg | 18 58 25.4 | -0.2 |
| MIDA | | | | AML | AML | | |
| | comp=E,1230μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,668μm,1.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,668μm,0.8s | | | | | | |
| **APRC** | **Apricena** | **0.52** | **102** | P | Pb | 18 58 19.2 | -0.1 |
| APRC | | | | AML | AML | | |
| | comp=N,1095μm,0.2s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,616μm,1.5s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,616μm,0.5s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.54** | **290** | P | Pg | 18 58 19.2 | -0.1 |
| LPEL | | | | AML | AML | | |
| | comp=E,493μm,0.7s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,534μm,0.7s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,534μm,1.3s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,493μm,1.3s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.54** | **156** | AML | AML | | |
| | comp=N,118μm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,194μm,0.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,194μm,1.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,118μm,0.4s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.56** | **253** | P | Pg | 18 58 19.6 | 0.0 |
| RNI2 | | | | AML | AML | | |
| | comp=E,789μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,1105μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,1210μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,1104μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,790μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,856μm,0.2s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.60** | **217** | AML | AML | | |
| | comp=E,1.0nm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,206μm,0.3s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,1.0nm,0.9s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,1.0nm,1.1s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,215μm,0.4s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.65** | **226** | AML | AML | | |
| | comp=E,286μm,1.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,522μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,305μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,554μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,286μm,1.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,305μm,1.7s | | | | | | |
| **CERA** | **Filignano** | **0.69** | **247** | AML | AML | | |
| | comp=E,312μm,0.6s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,312μm,1.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,558μm,0.7s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,529μm,0.7s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,336μm,0.4s | | | | | | |
| **VITU** | **Vitulano (BN)** | **0.70** | **194** | AML | AML | | |
| | comp=E,428μm,0.5s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,508μm,0.7s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,508μm,1.3s | | | | | | |
| **INTR** | **Introdacqua** | **0.73** | **282** | P | Pb | 18 58 22.3 | -0.6 |
| INTR | | | | AML | AML | | |
| | comp=N,352μm,1.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,352μm,0.5s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,296μm,0.4s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,188μm,0.4s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,352μm,1.5s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,350μm,1.6s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.80** | **101** | AML | AML | | |
| | comp=E,124μm,0.2s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,739μm,0.4s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,322μm,0.4s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,297μm,1.4s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,738μm,0.4s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,297μm,0.6s | | | | | | |
| **SGTA** | **Sant Agata di** | **0.82** | **152** | AML | AML | | |
| | comp=N,525μm,0.4s | | | | | | |
| SGTA | | | | AML | AML | | |
| | comp=E,761μm,0.6s | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| SGTA | | | AML | AML | |
| | comp=E,764μm,0.6s | | | | |
| SGTA | | | AML | AML | |
| | comp=E,764μm,1.4s | | | | |
| SGTA | | | AML | AML | |
| | comp=N,524μm,0.4s | | | | |
| SGTA | | | AML | AML | |
| | comp=E,761μm,1.4s | | | | |
| SGTA | | | AML | AML | |
| | comp=N,528μm,0.4s | | | | |
| **PIGN** | **Pignataro Magg** | **0.84 218** | AML | AML | |
| | comp=E,68μm,0.3s | | | | |
| PIGN | | | AML | AML | |
| | comp=E,68μm,0.3s | | | | |
| PIGN | | | AML | AML | |
| | comp=N,80μm,1.3s | | | | |
| PIGN | | | AML | AML | |
| | comp=N,80μm,1.3s | | | | |
| **POFI** | **Posta Fibreno** | **0.87 261** | AML | AML | |
| | comp=N,140μm,0.5s | | | | |
| POFI | | | AML | AML | |
| | comp=N,139μm,0.5s | | | | |
| POFI | | | AML | AML | |
| | comp=E,171μm,0.5s | | | | |
| **CAFE** | **Carife** | **0.88 161** | AML | AML | |
| | comp=E,329μm,1.6s | | | | |
| CAFE | | | AML | AML | |
| | comp=E,329μm,0.4s | | | | |
| CAFE | | | AML | AML | |
| | comp=N,204μm,0.3s | | | | |
| CAFE | | | AML | AML | |
| | comp=N,204μm,0.3s | | | | |
| **T0110** | **Collepietro** | **0.88 294** | AML | AML | |
| | comp=N,218μm,0.6s | | | | |
| T0110 | | | AML | AML | |
| | comp=E,375μm,0.3s | | | | |
| **VCEL** | **Villa Celiera** | **0.93 305** | AML | AML | |
| | comp=E,615μm,0.4s | | | | |
| VCEL | | | AML | AML | |
| | comp=N,646μm,0.4s | | | | |
| **VVLD** | **Villa Vallelon** | **0.93 271** | AML | AML | |
| | comp=E,258μm,0.5s | | | | |
| VVLD | | | AML | AML | |
| | comp=N,148μm,0.9s | | | | |
| VVLD | | | AML | AML | |
| | comp=N,148μm,1.1s | | | | |
| **MTMR** | **Montemarano** | **0.95 174** | AML | AML | |
| | comp=E,487μm,1.2s | | | | |
| MTMR | | | AML | AML | |
| | comp=E,487μm,0.8s | | | | |
| MTMR | | | AML | AML | |
| | comp=N,454μm,0.4s | | | | |
| **SNAL** | **S. Angelo Dei** | **0.97 164** | AML | AML | |
| | comp=E,256μm,1.0s | | | | |
| SNAL | | | AML | AML | |
| | comp=N,198μm,0.4s | | | | |
| SNAL | | | AML | AML | |
| | comp=N,195μm,0.4s | | | | |
| SNAL | | | AML | AML | |
| | comp=N,198μm,1.6s | | | | |
| SNAL | | | AML | AML | |
| | comp=E,268μm,1.0s | | | | |
| SNAL | | | AML | AML | |
| | comp=N,195μm,1.6s | | | | |
| **FAGN** | **Fagnano** | **1.03 293** | AML | AML | |
| | comp=N,256μm,0.3s | | | | |
| FAGN | | | AML | AML | |
| | comp=E,260μm,0.4s | | | | |

**ROM 16 18:59:06.9±0.1, 41°864N±0°007×14°866E±0°007, h17km±1km, ML1.6/36, 1C-1D, Error ellipse: s-maj=0.8km s-min=0.2km az=32.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRES** | **Fresagrandinar** | **0.18** | **307** | P | Pb | 18 59 12.0 | +0.2 |
| FRES | | | | S | Sb | 18 59 15.0 | -0.1 |
| FRES | | | | AML | AML | | |
| | comp=E,608μm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,456μm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,241μm,0.1s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,239μm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **172** | P | Pb | 18 59 12.1 | -0.1 |
| CIGN | | | | S | Sg | 18 59 15.6 | +0.2 |
| CIGN | | | | AML | AML | | |
| | comp=E,295μm,0.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,348μm,0.5s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,348μm,0.5s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,175μm,0.2s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.25** | **129** | ⇓P | Pg | 18 59 12.6 | +0.1 |
| MELA | | | | S | Sb | 18 59 17.1 | +0.1 |
| MELA | | | | AML | AML | | |
| | comp=N,336μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,157μm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,132μm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,309μm,0.3s | | | | | | |
| **TRIV** | **Trivento** | **0.26** | **248** | P | Pb | 18 59 13.2 | +0.2 |
| TRIV | | | | S | Sb | 18 59 17.2 | 0.0 |
| TRIV | | | | AML | AML | | |
| | comp=E,184μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,288μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,269μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,192μm,0.3s | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **175** | P | Pb | 18 59 14.5 | -0.2 |
| GATE | | | | S | Sb | 18 59 20.4 | +0.5 |
| GATE | | | | AML | AML | | |
| | comp=N,41μm,0.2s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,41μm,0.2s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,169μm,0.3s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,29μm,0.2s | | | | | | |
| **BSSO** | **Busso** | **0.38** | **213** | ⇑P | Pb | 18 59 15.0 | -0.2 |
| BSSO | | | | S | Sb | 18 59 20.4 | -0.3 |
| BSSO | | | | AML | AML | | |
| | comp=N,104μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,41μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,106μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,43μm,0.3s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.48** | **195** | P | Pg | 18 59 16.4 | -0.2 |
| SACR | | | | S | Sb | 18 59 23.5 | -0.2 |
| SACR | | | | AML | AML | | |
| | comp=N,50μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,81μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,79μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,55μm,0.3s | | | | | | |
| **MIDA** | **Miranda** | **0.51** | **244** | P | Pg | 18 59 16.7 | -0.4 |
| MIDA | | | | S | Sg | 18 59 24.2 | +0.2 |
| MIDA | | | | AML | AML | | |
| | comp=N,130μm,0.4s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,224μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,198μm,0.1s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,224μm,0.1s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,84μm,0.1s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,114μm,0.1s | | | | | | |
| **APRC** | **Apricena** | **0.52** | **102** | AML | AML | | |
| | comp=E,145μm,1.3s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,222μm,0.3s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.54** | **290** | P | Pg | 18 59 17.7 | 0.0 |
| LPEL | | | | AML | AML | | |
| | comp=E,120μm,0.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,112μm,0.1s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.56** | **253** | P | Pb | 18 59 18.2 | 0.0 |
| RNI2 | | | | AML | AML | | |
| | comp=E,172μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,246μm,0.7s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,188μm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,248μm,1.0s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,181μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,172μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,213μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,226μm,0.1s | | | | | | |
| **INTR** | **Introdacqua** | **0.73** | **282** | P | Pb | 18 59 20.5 | -0.7 |
| INTR | | | | AML | AML | | |
| | comp=N,85μm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,36μm,0.2s | | | | | | |

*NEIC* ***16*** *19:02:48.1±1.4, 43°62N±0°04×105°43W±0°05, h0km±1km, ML3.1/43, Error ellipse: s-maj=8.5km s-min=2.5km az=319.0*
*IDC* ***16*** *19:02:49.7±1.6, 44°24N×105°91W, h0km, mbtmp3.1/2, ML3.1/2, Error ellipse: s-maj=51.7km s-min=9.7km az=145.0*
**ISC 16 19:02:46.6±1.0, 43°81N±0°04×105°56W±0°05, h0km, n30, σ1°33/31, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.14** | **74** | | **Pn** | **19 03 09.4** | **-0.7** |
| **K22A** | **Casper** | **1.36** | **212** | Pg | **Pg** | **19 03 12.3** | **-0.3** |
| **RWWY** | **Rawlins** | **2.45** | **210** | | **Pb** | **19 03 30.5** | **-1.2** |
| RWWY | | | | IAML | | 19 04 04.2 | |
| | 105nm,0.9s | | | | | | |
| RWWY | | | | IAML | | 19 04 10.0 | |
| | 92nm,0.9s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.51** | **178** | | **Pn** | **19 03 28.6** | **-0.4** |
| **LAO** | **LASA Array** | **2.91** | **351** | Pn | **Pb** | **19 03 38.2** | **-1.3** |
| LAO | | | | IAML | | 19 04 51.0 | |
| | 66nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **2.93** | **186** | Pn | **Pn** | **19 03 35.3** | **+0.6** |
| N23A | | | | | **Sn** | **19 04 12.0** | **+1.2** |
| N23A | | | | IAML | | 19 04 22.6 | |
| | comp=N,52nm,0.8s | | | | | | |
| N23A | | | | IAML | | 19 04 27.7 | |
| | comp=E,61nm,1.1s | | | | | | |
| **RLMT** | **Red Lodge** | **2.96** | **298** | | **Pb** | **19 03 40.2** | **-0.2** |
| RLMT | | | | IAML | | 19 04 44.7 | |
| | comp=E,38nm,2.1s | | | | | | |
| RLMT | | | | IAML | | 19 04 46.6 | |
| | comp=E,36nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **3.10** | **252** | | **Pb** | **19 03 40.5** | **-2.3** |
| **PDAR** | **Pinedale Array** | **3.10** | **252** | Pn | **Pb** | **19 03 43.9** | **+1.1** |
| **PDAR** | **Pinedale Array** | **3.10** | **252** | Pn | **Pb** | **19 03 41.2** | **-1.5** |
| | comp=E,2.4nm,0.3s,baz=67,slow=18,SNR=21 | | | | | | |
| PDAR | | | | Lg | Lg | 19 04 25.7 | |
| | comp=E,10nm,0.3s,baz=61,slow=33,SNR=17 | | | | | | |
| | comp=E,1.2nm,0.3s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **3.43** | **287** | | **Pb** | **19 03 48.1** | **-0.3** |
| YMP | | | | IAML | | 19 04 48.5 | |
| | comp=N,51nm,0.8s | | | | | | |
| YMP | | | | IAML | | 19 04 48.8 | |
| | comp=E,52nm,0.6s | | | | | | |
| **H17A** | **Grant Village** | **3.66** | **281** | | **Pn** | **19 03 46.4** | **+1.6** |
| H17A | | | | IAML | | 19 05 04.2 | |
| | comp=N,35nm,0.1s | | | | | | |
| H17A | | | | IAML | | 19 06 06.1 | |
| | comp=E,31nm,0.1s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.72** | **276** | | **Pn** | **19 03 48.6** | **+3.1** |
| FLWY | | | | IAML | | 19 05 12.2 | |
| | comp=E,27nm,1.6s | | | | | | |
| FLWY | | | | IAML | | 19 05 20.9 | |
| | comp=E,36nm,1.7s | | | | | | |
| **YPP** | **Pitchstone Pla** | **3.81** | **279** | | **Pn** | **19 03 45.6** | **-1.3** |
| **REDW** | **Red Top Meadow** | **3.87** | **265** | | **Pn** | **19 03 46.3** | **-1.4** |
| **OGNE** | **Ogallala** | **3.88** | **136** | | **Pn** | **19 03 46.8** | **-0.8** |
| OGNE | | | | Pg | **Pb** | **19 03 56.8** | **+0.8** |
| **IMW** | **Indian Meadow** | **3.89** | **273** | Pn | **Pn** | **19 03 47.8** | **-0.2** |
| IMW | | | | IAML | | 19 04 20.8 | |
| | comp=E,16nm,4.2s | | | | | | |
| **TPAW** | **Teton Pass** | **3.92** | **267** | Pn | **Pn** | **19 03 49.0** | **+0.5** |
| TPAW | | | | IAML | | 19 05 28.1 | |
| | comp=E,30nm,2.5s | | | | | | |
| **RDMU** | **Red Mountain** | **4.40** | **224** | Pn | **Pn** | **19 03 55.0** | **+0.1** |
| RDMU | | | | IAML | | 19 05 09.9 | |
| | comp=E,20nm,1.2s | | | | | | |
| RDMU | | | | IAML | | 19 05 36.7 | |
| | comp=N,19nm,1.6s | | | | | | |
| **SMCO** | **Snowmass** | **4.75** | **193** | Pn | **Pn** | **19 03 59.6** | **-0.2** |
| SMCO | | | | IAML | | 19 04 32.4 | |
| | comp=N,21nm,0.3s | | | | | | |
| SMCO | | | | IAML | | 19 06 24.3 | |
| | comp=N,23nm,4.8s | | | | | | |
| **DGMT** | **Dagmar** | **4.75** | **11** | Pn | **Pn** | **19 04 01.2** | **+1.6** |
| **HWUT** | **Hardware Ranch** | **4.94** | **246** | Pn | **Pn** | **19 04 03.2** | **+0.9** |
| HWUT | | | | IAML | | 19 05 47.3 | |
| | comp=N,21nm,1.2s | | | | | | |
| **EGMT** | **Eagleton** | **5.13** | **327** | Pn | **Pn** | **19 04 06.7** | **+1.9** |
| **P18A** | **Preston Nutter** | **5.46** | **222** | Pn | **Pn** | **19 04 12.0** | **+2.6** |
| **SRU** | **San Rafael Swe** | **6.00** | **220** | Pn | **Pn** | **19 04 17.5** | **+0.7** |
| **SDCO** | **Great Sand Dun** | **6.06** | **180** | Pn | **Pn** | **19 04 17.7** | **-0.1** |
| **TMUT** | **Trail Mountain** | **6.19** | **225** | Pn | **Pn** | **19 04 20.9** | **+1.4** |
| **ECSD** | **EROS Data Cent** | **6.48** | **88** | Pn | **Pn** | **19 04 22.0** | **-1.2** |
| **I56US** | **NEWPORT INFRAS** | **9.19** | **303** | I | I | 19 56 00.0 | |
| | baz=117,slow=314,SNR=6.4 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.22** | **42** | Pn | **Pn** | **19 05 00.9** | **0.0** |
| | comp=N,0.4nm,0.3s,baz=234,slow=13,SNR=1.4 | | | | | | |
| ULM | | | | Lg | Lg | 19 07 31.1 | |
| | comp=N,0.1nm,0.3s,baz=134,slow=22,SNR=1.7 | | | | | | |
| | comp=N,0.9nm,0.3s | | | | | | |

**IDC 16 19:04:14.7±9.4, 26°34N×141°07E, h0km, mb3.5/2, mbtmp3.5/2, Error ellipse: s-maj=359.6km s-min=31.2km az=70.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **46.47** | **189** | P | P | 19 12 42.7 | -0.9 |
| | 0.5nm,0.7s,baz=7.2,slow=7.7,SNR=11 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.19** | **310** | P | P | 19 13 12.1 | -0.1 |
| | 0.4nm,0.5s,baz=96,slow=11,SNR=7.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **50.19** | **189** | P | P | 19 13 13.4 | +1.1 |
| | 0.4nm,0.8s,baz=8.3,slow=7.7,SNR=1.9 | | | | | | |

*NEIC* ***16*** *19:06:07.7±1.5, 69°49N±0°02×144°32W±0°06, h10km±2km, Error ellipse: s-maj=3.7km s-min=3.4km az=270.0*
**AEIC 16 19:06:07.1±1.6, 69°47N±0°02×144°23W±0°06, h2km±5km, ML2.5, ML2.7/68(NEIC), Error ellipse: s-maj=3.4km s-min=3.0km az=168.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **49** | | Pg | 19 06 11.4 | -0.3 |
| **C26K** | **Camden Bay** | **0.51** | **332** | | Pg | 19 06 17.1 | +0.4 |
| C26K | | | | | Sg | 19 06 24.0 | +0.7 |
| **C26K** | **Camden Bay** | **0.51** | **332** | IAML | | 19 06 26.1 | |
| | comp=N,112nm,0.4s | | | | | | |
| C26K | | | | IAML | | 19 06 33.8 | |
| | comp=E,93nm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.77** | **260** | | Pg | 19 06 21.3 | -0.6 |
| **D25K** | **Kavik River** | **0.77** | **260** | | Sg | 19 06 32.1 | +0.3 |
| **D27M** | **Malcolm River** | **1.18** | **100** | | Pg | 19 06 28.9 | -0.7 |
| **D27M** | **Malcolm River** | **1.18** | **100** | | Sb | 19 06 46.5 | +0.6 |
| **D27M** | **Malcolm River** | **1.18** | **100** | IAML | | 19 06 51.5 | |
| | comp=N,60nm,0.6s | | | | | | |
| D27M | | | | IAML | | 19 07 10.4 | |
| | comp=E,66nm,0.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.59** | **281** | | Pn | 19 06 35.7 | -0.3 |
| C24K | | | | IAML | | 19 07 34.7 | |
| | comp=N,87nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.61** | **142** | | Sg | 19 06 59.3 | +0.7 |
| **E27K** | **Coleen River** | **1.61** | **142** | | Pg | 19 06 37.7 | -0.1 |
| **D24K** | **Happy Valley** | **1.66** | **261** | | Pg | 19 06 39.1 | +0.3 |
| **F26K** | **Sheenjek River** | **1.79** | **179** | | Pg | 19 06 40.9 | -0.3 |
| **E28M** | **Babbage River** | **1.90** | **115** | | Pb | 19 06 42.4 | 0.0 |
| E28M | | | | IAML | | 19 07 48.9 | |
| | comp=E,48nm,0.7s | | | | | | |
| **F25K** | **Christian River** | **1.96** | **196** | | Pb | 19 06 43.6 | +0.2 |
| **BMAR** | **Burnt Mountain** | **2.06** | **184** | | Pb | 19 06 44.7 | -0.3 |
| **E24K** | **Your Creek** | **2.09** | **230** | | Pb | 19 06 45.9 | +0.3 |
| E24K | | | | IAML | | 19 07 55.1 | |
| | comp=N,36nm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.09** | **249** | | Pn | 19 06 42.0 | -1.1 |
| TOLK | | | | IAML | | 19 07 56.6 | |
| | comp=E,57nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 19 07 58.2 | |
| | comp=N,46nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **2.26** | **282** | Pn | Pb | 19 06 47.6 | -0.9 |
| **D23K** | **Nanushuk River** | **2.35** | **261** | Pn | Pn | 19 06 48.4 | +1.7 |
| D23K | | | | IAML | | 19 08 05.4 | |
| | comp=E,30nm,0.6s | | | | | | |
| D23K | | | | IAML | | 19 08 12.1 | |
| | comp=N,35nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.38** | **216** | | Pn | 19 06 45.7 | -1.3 |
| **E23K** | **Chandalar** | **2.42** | **237** | | Pb | 19 06 51.0 | -0.2 |
| E23K | | | | IAML | | 19 08 03.5 | |
| | comp=N,31nm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.46** | **137** | | Pn | 19 06 48.0 | -0.1 |
| **E29M** | **Blow River** | **2.54** | **112** | | Pn | 19 06 50.7 | +1.6 |
| **G27K** | **Doyon Strip** | **2.84** | **159** | Pn | Pn | 19 06 53.8 | +0.5 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **205** | Pn | Pn | 19 06 56.2 | +0.2 |
| **COLD** | **Coldfoot** | **3.16** | **227** | Pn | Pn | 19 06 59.9 | +2.3 |
| **G29M** | **Pine Creek** | **3.46** | **135** | Pn | Pn | 19 07 03.2 | +1.3 |
| **G23K** | **Bananza Creek** | **3.52** | **221** | Pn | Pn | 19 07 03.7 | +1.0 |
| **B21K** | **Ikpikpuk River** | **3.65** | **277** | Pn | Pn | 19 07 06.8 | +2.5 |
| **H24K** | **Noodor Dome** | **3.91** | **203** | Pn | Pn | 19 07 09.6 | +1.6 |
| **H29M** | **Whitestone** | **3.95** | **143** | Pn | Pn | 19 07 09.7 | +1.2 |
| **F21K** | **Alatna River** | **4.10** | **241** | Pn | Pn | 19 07 12.6 | +1.9 |
| **I26K** | **Coal Creek Min** | **4.21** | **174** | Pn | Pn | 19 07 13.3 | +1.3 |
| **I28M** | **Miner Creek** | **4.37** | **156** | Pn | Pn | 19 07 17.4 | +3.1 |
| I28M | | | | IAML | | 19 09 06.9 | |
| | comp=E,5.8nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **207** | Pn | Pn | 19 07 21.7 | +1.9 |
| **MDM** | **Murphy Dome** | **4.79** | **201** | Pn | Pn | 19 07 22.4 | +2.3 |
| **CCB** | **Clear Creek Bu** | **5.04** | **198** | Pn | Pn | 19 07 25.2 | +1.7 |
| CCB | | | | IAML | | 19 08 02.4 | |
| | comp=N,3.3nm,0.3s | | | | | | |
| **D19K** | **Kuna River** | **5.09** | **265** | Pn | Pn | 19 07 25.8 | +1.5 |
| **E19K** | **Redstone River** | **5.20** | **253** | Pn | Pn | 19 07 26.9 | +1.2 |
| **I30M** | **Mount Dempster** | **5.23** | **141** | Pn | Pn | 19 07 28.2 | +1.9 |
| **SCRK** | **Sand Creek** | **5.52** | **179** | Pn | Pn | 19 07 33.2 | +3.0 |
| **K27K** | **Chicken** | **5.53** | **170** | Pn | Pn | 19 07 31.8 | +1.5 |
| **F19K** | **Shaleruckik Mo** | **5.70** | **249** | Pn | Pn | 19 07 32.9 | +0.4 |
| **J30M** | **Hart River** | **5.80** | **144** | Pn | Pn | 19 07 35.7 | +1.6 |
| **E18K** | **Tukpahlearik C** | **6.37** | **259** | Pn | Pn | 19 07 42.7 | +1.0 |

*NEIC* ***16*** *19:08:00.2±1.1, 23°3N±0°1×143°3E±0°1, h10km±1km, mb4.4/6, Error ellipse: s-maj=25.1km s-min=14.6km az=301.0*
*IDC* ***16*** *19:08:03.1±7.0, 22°94N×141°84E, h0km, mb3.9/5, mbtmp3.9/5, Error ellipse: s-maj=295.3km s-min=27.3km az=75.0*
**ISC 16 19:08:02.1±1.1, 23°4N±0°1×143°3E±0°2, h31km, n15, σ1°67/15, mb4.2/8, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.83** | **345** | Pn | **Pn** | **19 08 59.7** | **+0.7** |
| **JMN** | **Monobe** | **13.21** | **323** | Pn | **Pn** | **19 11 06.0** | **-1.6** |
| **JMM** | **Marumori** | **14.60** | **352** | Pn | **Pn** | **19 11 23.7** | **-2.7** |
| **MTN** | **Manton Dam** | **37.92** | **200** | P | **P** | **19 15 13.8** | **-3.0** |
| **WB0** | **Warramunga Arr** | **43.76** | **192** | P | **P** | **19 16 05.2** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 19 16 39.7 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.94** | **192** | P | **P** | **19 16 06.1** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 19 16 50.3 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.94** | **192** | P | **P** | **19 16 06.3** | **0.0** |
| | comp=Z,0.5nm,0.6s,baz=6.3,slow=9.1,SNR=8.2 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.69** | **204** | P | **P** | **19 16 12.1** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **52.97** | **321** | P | **P** | **19 17 16.5** | **+1.0** |
| | comp=Z,0.6nm,0.5s,baz=99,slow=8.9,SNR=2.5 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **53.65** | **312** | P | **P** | **19 17 22.2** | **+1.5** |
| **MKAR** | **Makanchi Array** | **53.65** | **312** | P | **P** | **19 17 22.3** | **+1.6** |
| **MKAR** | **Makanchi Array** | **53.65** | **312** | P | **P** | **19 17 22.2** | **+1.5** |
| | comp=Z,1.0nm,0.7s,baz=90,slow=8.5,SNR=8.4 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.38** | **316** | P | **P** | **19 17 41.8** | **+1.4** |
| | comp=Z,1.0nm,0.8s,baz=94,slow=8.4,SNR=6.9 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.47** | **319** | P | **P** | **19 18 17.4** | **+1.8** |
| | comp=Z,2.7nm,0.7s,baz=92,slow=8.1,SNR=12 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **LOHW** | **Long Hollow** | **85.05** | **44** | P | **P** | **19 20 35.9** | **+0.7** |
| LOHW | | | | IAmb | IAmb | 19 20 40.3 | |
| | comp=Z,2.2nm,0.7s | | | | | | |

*NEIC* ***16*** *19:09:12.3±2.1, 2°92S±0°07×81°66W±0°07, h10km±1km, mb4.6/98, Error ellipse: s-maj=12.5km s-min=10.3km az=217.0*
*IGQ* ***16*** *19:09:14.4±2.0, 3°S±3°×8°2W±1°0, h4km, M4.9/18*
*RSNC* ***16*** *19:09:16.5±0.9, 3°S±2°×8°1W±°, h35km, M4.6, mb4.9, mB5.5, ML3.9, Mw(mB)5.0*
*IDC* ***16*** *19:09:17.1±2.4, 2°85S×81°48W, h52km±22km, mb3.9/11, mbtmp4.3/15, ML4.4/4, Error ellipse: s-maj=28.4km s-min=12.8km az=62.0*
*VAO* ***16*** *19:09:25.3±2.6, 2°94S×80°81W, h56km±14km, mb5.0*
**ISC 16 19:09:15.3±0.4, 2°85S±0°04×81°66W±0°09, h35km±4km, n390, σ1°57/374, mb4.6/61, 3C-1D, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SALI** | **Salinas** | **0.94** | **45** | P | **Pn** | **19 09 30.7** | **-1.2** |
| SALI | | | | S | **Sn** | **19 09 44.0** | **-0.2** |
| **MORR** | **Playas El Morr** | **1.33** | **81** | P | **Pn** | **19 09 36.6** | **-0.7** |
| MORR | | | | S | **Sn** | **19 09 56.0** | **+2.2** |
| **ISPG** | **Isla Puna-Puer** | **1.49** | **95** | P | **Pn** | **19 09 40.5** | **+0.9** |
| ISPG | | | | S | **Sn** | **19 10 02.6** | **+4.8** |
| **PPLP** | **Puerto Lpez** | **1.57** | **34** | P | **Pn** | **19 09 38.9** | **-1.7** |
| PPLP | | | | S | **Sn** | **19 09 58.8** | **-0.9** |
| **PPLP** | **Puerto Lpez** | **1.57** | **34** | P | **Pn** | **19 09 39.3** | **-1.4** |
| **ARNL** | **Arenillas** | **1.73** | **114** | | **Pn** | **19 09 42.2** | **-0.6** |
| **ARNL** | **Arenillas** | **1.73** | **114** | S | **Sn** | **19 10 05.8** | **+2.1** |
| ARNL | | | | P | **Pn** | **19 09 42.3** | **-0.6** |
| **ACH1** | **Ecuador-Univer** | **1.80** | **104** | P | **Pn** | **19 09 43.0** | **-0.7** |
| **AGUAY** | **Guayaquil** | **1.88** | **65** | P | **Pn** | **19 09 44.5** | **-0.4** |
| **ACH2** | **Ecuador-Machal** | **1.89** | **103** | P | **Pn** | **19 09 44.8** | **-0.2** |
| **LAMO** | **ALAMOR** | **2.00** | **125** | P | **Pn** | **19 09 46.6** | **-0.1** |
| **MILO** | **Milagro-Astudi** | **2.17** | **75** | P | **Pn** | **19 09 49.2** | **+0.3** |
| **PCRA** | **Pucara 2** | **2.18** | **99** | P | **Pn** | **19 09 49.2** | **-0.2** |
| **AMCR** | **Ecuador-Macara** | **2.27** | **132** | P | **Pn** | **19 09 49.4** | **-0.9** |
| **MCRA** | **Macar, Loja** | **2.27** | **132** | P | **Pn** | **19 09 49.2** | **-1.1** |
| **PECV** | **Mancha de Ca P** | **2.61** | **38** | P | Pn | 19 09 52.2 | -2.9 |
| **ACUE** | **Ecuador-Cuenca** | **2.69** | **91** | P | **Pn** | **19 09 58.4** | **+2.0** |
| **ALJ1** | **Ecuador-Loja-U** | **2.70** | **115** | P | **Pn** | **19 09 58.3** | **+1.9** |
| **JSCH** | **Cashca Totoras** | **2.90** | **67** | P | **Pn** | **19 09 58.9** | **-0.5** |
| **CHSH** | **Refugio Sur-Vo** | **3.09** | **64** | P | **Pn** | **19 10 02.7** | **+0.6** |
| **TAMH** | **Tambohuasha Ch** | **3.15** | **66** | P | **Pn** | **19 10 03.2** | **+0.4** |
| **BOSC** | **San Juan Bosco** | **3.17** | **95** | P | **Pn** | **19 10 04.8** | **+2.0** |
| **ZUMB** | **Zumba** | **3.21** | **129** | P | **Pn** | **19 10 04.2** | **+1.0** |
| **IGUA** | **Igualata** | **3.30** | **66** | P | **Pn** | **19 10 06.0** | **+1.0** |
| **BBIL** | **Ulba Tungurahu** | **3.46** | **66** | P | **Pn** | **19 10 08.6** | **+1.7** |
| **TUYU** | **Q. Yuibug Volc** | **3.46** | **67** | P | **Pn** | **19 10 08.1** | **+1.1** |
| **BPAT** | **Tungurahua Vol** | **3.49** | **67** | P | **Pn** | **19 10 08.7** | **+1.3** |
| **BULB** | **Ulba Tungurahu** | **3.53** | **67** | P | **Pn** | **19 10 09.7** | **+1.7** |
| **ILLI** | **Illinizas Sur** | **3.62** | **54** | P | **Pn** | **19 10 11.5** | **+2.3** |
| **PAST** | **Pastocalle** | **3.70** | **55** | P | **Pn** | **19 10 12.9** | **+2.6** |
| **SLOR** | **San Lorenzo -** | **3.80** | **56** | | **Pn** | **19 10 13.6** | **+1.9** |
| SLOR | | | | | **Sn** | **19 10 56.9** | **+1.6** |
| **SLOR** | **San Lorenzo -** | **3.80** | **56** | P | **Pn** | **19 10 14.7** | **+3.0** |
| **CAMI** | **Rancho Maria** | **3.82** | **56** | P | **Pn** | **19 10 15.2** | **+3.2** |
| **BMOR** | **Cotopaxi Volca** | **3.83** | **57** | P | **Pn** | **19 10 14.8** | **+2.6** |
| **BNAS** | **Cotopaxi Volca** | **3.84** | **56** | P | **Pn** | **19 10 16.1** | **+3.8** |
| **PIAT** | **Ana Tenorio** | **3.86** | **62** | P | **Pn** | **19 10 14.9** | **+2.4** |
| PIAT | | | | S | **Sn** | **19 11 01.4** | **+4.6** |
| **PIAT** | **Ana Tenorio** | **3.86** | **62** | P | **Pn** | **19 10 14.7** | **+2.3** |
| **BREF** | **Cotopaxi Volca** | **3.88** | **56** | P | **Pn** | **19 10 16.1** | **+3.2** |
| **BVC2** | **Cotopaxi Volca** | **3.91** | **56** | P | **Pn** | **19 10 16.3** | **+3.0** |
| **BTAM** | **Cotopaxi Volca** | **3.91** | **56** | P | **Pn** | **19 10 16.2** | **+2.9** |
| **VC1** | **Cotopaxi 1** | **3.92** | **56** | P | **Pn** | **19 10 16.8** | **+3.3** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TAMB | Tambo | 3.92 | 57 | P | | Pn | 19 10 16.5 | +3.0 |
| PITA | Cotopaxi Volc | 3.94 | 55 | P | | Pn | 19 10 16.7 | +3.0 |
| GGPT | Toaza - Volcan | 4.00 | 49 | P | | Pn | 19 10 16.9 | +2.5 |
| JUA2 | San Juan 2 | 4.02 | 49 | P | | Pn | 19 10 17.1 | +2.3 |
| TERV | Terraza Guagua | 4.05 | 49 | P | | Pn | 19 10 17.8 | +2.6 |
| GGPC | Guagua Pichinc | 4.05 | 49 | P | | Pn | 19 10 18.9 | +3.6 |
| PINO | Pino | 4.05 | 49 | P | | Pn | 19 10 17.2 | +1.9 |
| YANA | Yana | 4.11 | 49 | P | | Pn | 19 10 18.5 | +2.5 |
| TAIS | Taisha | 4.18 | 84 | P | | Pn | 19 10 18.9 | +2.3 |
| ANTS | Antisana-Sarah | 4.20 | 56 | | | Pn | 19 10 20.6 | +3.3 |
| ANTS | Antisana-Sarah | 4.20 | 56 | P | | Pn | 19 10 21.5 | +4.2 |
| PAC1 | Pacto, Paraso | 4.22 | 43 | P | | Pn | 19 10 18.1 | +0.9 |
| PAC1 | | | | S | | Sn | 19 11 07.5 | +2.2 |
| PAC1 | Pacto, Paraso | 4.22 | 43 | P | | Pn | 19 10 18.4 | +1.2 |
| ANTI | Antisana | 4.23 | 56 | P | | Pn | 19 10 21.1 | +3.3 |
| PULU | Pululahua | 4.25 | 48 | | | Pn | 19 10 19.1 | +1.2 |
| ARDO | Archidona, Ten | 4.27 | 64 | P | | Pn | 19 10 20.4 | +2.5 |
| OTAV | Otavalo | 4.44 | 46 | Pn | | Pn | 19 10 21.3 | +0.8 |
| CUIC | Cuicocha-Domo | 4.55 | 46 | P | | Pn | 19 10 25.5 | +3.5 |
| ANGU | Angureal | 4.64 | 52 | P | | Pn | 19 10 26.8 | +3.3 |
| IMBA | Imbabura, San | 4.65 | 48 | | | Pn | 19 10 25.9 | +2.5 |
| IMBA | Imbabura, San | 4.65 | 48 | P | | Pn | 19 10 27.5 | +4.2 |
| URCU | Urcuqui | 4.71 | 46 | P | | Pn | 19 10 27.5 | +3.3 |
| LAV4 | Lava4-Reventad | 4.87 | 56 | P | | Pn | 19 10 28.2 | +1.9 |
| REVS | Reventador Sur | 4.87 | 56 | P | | Pn | 19 10 29.3 | +3.0 |
| REVN | San Rafael | 4.88 | 56 | P | | Pn | 19 10 29.4 | +3.0 |
| LITE1 | Lita | 4.89 | 42 | P | | Pn | 19 10 30.3 | +3.8 |
| TULM | Tulcn-Chalpat | 5.25 | 48 | | | Pn | 19 10 33.4 | +1.8 |
| BONI | La Bonita | 5.27 | 52 | P | | Pn | 19 10 34.8 | +3.0 |
| ATAH | Atahualpa | 5.35 | 143 | P | | Pn | 19 10 35.0 | +1.9 |
| | 17nm,0.3s,baz=331,slow=8.1,SNR=74 | | | | | | | |
| ATAH | | | | S | | Sn | 19 11 33.9 | +0.2 |
| | 151nm,0.6s,baz=340,slow=23,SNR=6.7 | | | | | | | |
| | 85nm,0.4s | | | | | | | |
| CRUC | La Cruz | 6.43 | 47 | P | | Pn | 19 10 50.4 | +2.5 |
| BBAC | Balboa, Cauca | 6.55 | 42 | P | | Pn | 19 10 50.3 | +1.0 |
| | 46nm,0.8s,2µm | | | | | | | |
| BBAC | | | | S | | Sn | 19 12 02.9 | 0.0 |
| | 46nm,0.8s,2µm | | | | | | | |
| BBAC | Balboa, Cauca | 6.55 | 42 | P | | Pn | 19 10 51.7 | +2.4 |
| POPC | Popayan, Colom | 7.31 | 43 | P | | Pn | 19 11 00.0 | +0.2 |
| | 29nm,0.9s | | | | | | | |
| POPC | | | | S | | Sn | 19 12 21.8 | 0.0 |
| | 29nm,0.9s | | | | | | | |
| PTLC | Puerto Leguiza | 7.48 | 66 | P | | Pn | 19 11 00.2 | -1.8 |
| | 100nm,0.9s | | | | | | | |
| JAMC | Jamundi, Valle | 7.82 | 40 | P | | Pn | 19 11 05.9 | -0.9 |
| | 25nm,0.9s | | | | | | | |
| GARC | Garzon, Huila | 7.94 | 51 | P | | Pn | 19 11 10.0 | +1.6 |
| YOTC | Yotoco, Valle | 8.62 | 38 | P | | Pn | 19 11 15.9 | -1.8 |
| YOTC | | | | S | | Sn | 19 12 50.3 | -3.4 |
| PAYG | Puerto Ayora | 8.89 | 284 | Pn | | Pn | 19 11 20.7 | -0.6 |
| ORTC | Ortega, Tolima | 9.28 | 44 | P | | Pn | 19 11 22.9 | -3.8 |
| PLMC | San Jos del P | 9.39 | 35 | P | | Pn | 19 11 26.4 | -1.8 |
| URMC | La Uribe, Meta | 9.46 | 50 | P | | Pn | 19 11 29.5 | +0.3 |
| | 32nm,1.0s | | | | | | | |
| CZSB | Cruzeiro do Su | 10.14 | 119 | Pn | | Pn | 19 11 37.6 | -0.8 |
| CZSB | Cruzeiro do Su | 10.14 | 119 | P | | Pn | 19 11 36.9 | -1.6 |
| | 152nm,1.1s,2µm | | | | | | | |
| CZSB | Cruzeiro do Su | 10.14 | 119 | *e*P | | Pn | 19 11 38.0 | -0.5 |
| NNA | Nana | 10.25 | 153 | Pn | | Pn | 19 11 39.1 | -0.9 |
| NNA | Nana | 10.25 | 153 | P | | Pn | 19 11 39.8 | -0.2 |
| | 14nm,0.3s,baz=325,slow=10.0,SNR=13 | | | | | | | |
| NNA | | | | S | | Sn | 19 13 30.2 | -3.6 |
| | 9.6nm,0.3s,baz=231,slow=19,SNR=1.8 | | | | | | | |
| | 32nm,0.3s | | | | | | | |
| NNA | Nana | 10.25 | 153 | P | | Pn | 19 11 39.0 | -1.0 |
| | 44nm,0.5s | | | | | | | |
| CHIC | Chingaza | 10.86 | 47 | P | | Pn | 19 11 46.0 | -2.6 |
| TBTG | Tabatinga, AM | 11.80 | 97 | | | Pn | 19 11 59.4 | -1.8 |
| TBTG | Tabatinga, AM | 11.80 | 97 | P | | Pn | 19 11 59.6 | -1.6 |
| TBTG | Tabatinga, AM | 11.80 | 97 | *e*P | | Pn | 19 12 00.1 | -1.0 |
| RUSC | La Rusia | 12.20 | 45 | Pn | | Pn | 19 12 08.8 | +1.8 |
| RUSC | La Rusia | 12.20 | 45 | P | | Pn | 19 12 11.3 | +4.3 |
| SDV | Santo Domingo | 16.02 | 43 | | | Pn | 19 12 57.4 | -0.8 |
| SDV | | | | IAmb | IAmb | | 19 13 07.5 | |
| | comp=Z,32nm,0.8s | | | | | | | |
| SDV | Santo Domingo | 16.02 | 43 | P | | Pn | 19 12 58.9 | +0.7 |
| | comp=Z,1.9nm,0.3s,baz=228,slow=11,SNR=7.4 | | | | | | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| SDV | Santo Domingo | 16.02 | 43 | *e*P | | Pn | 19 12 59.9 | +1.7 |
| ETMB | Extrema | 16.83 | 115 | Pn | | Pn | 19 13 02.5 | -5.8 |
| ETMB | Extrema | 16.83 | 115 | *e*P | | Pn | 19 13 03.4 | -4.9 |
| TEFE | Tefe | 17.01 | 93 | *e*P | | Pn | 19 13 09.1 | -1.5 |
| BAUV | El Baul | 17.93 | 49 | | | P | 19 13 16.5 | -5.8 |
| MTO3 | Montecristo | 18.76 | 336 | P | | P | 19 13 32.0 | +0.3 |
| LPAZ | La Paz | 18.85 | 136 | | | P | 19 13 30.5 | -2.5 |
| LPAZ | La Paz | 18.85 | 136 | P | | Pn | 19 13 33.9 | +0.1 |
| | comp=Z,1.0nm,0.3s,baz=326,slow=8.3,SNR=20 | | | | | | | |
| | comp=Z,6.9nm,0.5s | | | | | | | |
| LPAZ | La Paz | 18.85 | 136 | *e*P | | Pn | 19 13 34.6 | +0.9 |
| PB18 | Visviri | 18.90 | 142 | | | P | 19 13 31.0 | -2.5 |
| PB18 | | | | IAmb | IAmb | | 19 13 39.6 | |
| | comp=Z,48nm,1.2s | | | | | | | |
| SAML | Samuel | 19.34 | 109 | P | | P | 19 13 36.0 | -1.7 |
| SAML | Samuel | 19.34 | 109 | *e*P | | P | 19 13 36.4 | -1.4 |
| APG | El Apazote | 19.77 | 334 | P | | P | 19 13 44.9 | +2.2 |
| | comp=Z,0.8nm,1.0s,baz=168,slow=9.3,SNR=4.1 | | | | | | | |
| MACA | Manacapuru-AM | 20.95 | 91 | | | P | 19 13 54.0 | -1.2 |
| MACA | Manacapuru-AM | 20.95 | 91 | *e*P | | Pn | 19 13 56.8 | -1.2 |
| PCRV | Puerto La Cruz | 21.32 | 52 | P | | P | 19 14 02.4 | +3.0 |
| | comp=Z,20nm,0.9s,baz=243,slow=6.4,SNR=7.2 | | | | | | | |
| PB01 | IPOC Station P | 21.62 | 148 | P | | P | 19 14 02.7 | +0.2 |
| BOAV | Boa Vista | 21.76 | 76 | P | | P | 19 14 04.4 | +0.4 |
| BOAV | | | | IAmb | IAmb | | 19 14 11.4 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| PB09 | IPOC Station P | 22.37 | 148 | | | P | 19 14 10.3 | -0.3 |
| PB09 | | | | IAmb | IAmb | | 19 14 22.4 | |
| | comp=Z,28nm,1.2s | | | | | | | |
| PB05 | IPOC Station P | 22.77 | 152 | P | | P | 19 14 14.6 | -0.3 |
| PB05 | | | | IAmb | IAmb | | 19 14 28.2 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| LVC | Limon Verde | 23.21 | 149 | P | | P | 19 14 18.6 | -1.1 |
| LVC | | | | IAmb | IAmb | | 19 14 33.5 | |
| | comp=Z,28nm,1.5s | | | | | | | |
| VILB | Vilhena | 23.48 | 116 | P | | P | 19 14 20.8 | -1.1 |
| GO02 | Mina Guanaco | 25.04 | 153 | P | | P | 19 14 36.9 | +0.2 |
| GO02 | | | | IAmb | IAmb | | 19 14 58.4 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| PTLB | Pontes e Lacer | 25.47 | 121 | P | | P | 19 14 40.7 | +0.4 |
| PTLB | | | | IAmb | IAmb | | 19 15 00.5 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| H03N2 | Juan Fernandez | 30.54 | 176 | T | | T | 19 47 26.2 | |
| | baz=355,slow=76,SNR=68 | | | | | | | |
| H03N1 | Juan Fernandez | 30.54 | 175 | T | | T | 19 47 26.1 | |
| | baz=355,slow=76,SNR=67 | | | | | | | |
| H03N3 | Juan Fernandez | 30.55 | 176 | T | | T | 19 47 25.9 | |
| | baz=355,slow=76,SNR=53 | | | | | | | |
| LRAL | Lakeview Retre | 36.05 | 352 | P | | P | 19 16 14.6 | +1.3 |
| | baz=171 | | | | | | | |
| GOGA | Godfrey | 36.11 | 357 | P | | P | 19 16 14.5 | +0.7 |
| | baz=177 | | | | | | | |
| FPAL | Fort Paine | 37.38 | 355 | P | | P | 19 16 24.4 | -0.4 |
| FPAL | | | | IAmb | IAmb | | 19 16 25.6 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| BRDY | Brady | 37.75 | 335 | P | | P | 19 16 27.4 | -0.6 |
| OXF | Oxford | 37.87 | 350 | P | | P | 19 16 30.2 | +1.3 |
| | baz=167 | | | | | | | |
| W50A | Signal Mountai | 38.01 | 355 | P | | P | 19 16 24.6 | -5.4 |
| W50A | | | | IAmb | IAmb | | 19 16 27.1 | |
| | comp=Z,22nm,1.5s | | | | | | | |
| CPCT | Cooper Cave | 38.20 | 356 | P | | P | 19 16 30.7 | -0.9 |
| CPCT | | | | IAmb | IAmb | | 19 16 32.9 | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| TXAR | Lajitas Array | 38.33 | 328 | P | | P | 19 16 33.5 | +0.6 |
| | comp=Z,0.5nm,0.7s,baz=146,slow=9.1,SNR=4.8 | | | | | | | |
| TXAR | | | | PcP | | PcP | 19 18 47.1 | +0.7 |
| | comp=Z,0.6nm,0.6s,baz=155,slow=7.0,SNR=5.6 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| PLPT | Palo Pinto | 38.82 | 337 | P | | P | 19 16 36.5 | -0.5 |
| PLPT | | | | IAmb | IAmb | | 19 16 39.1 | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| MIAR | Mount Ida | 38.85 | 344 | P | | P | 19 16 38.1 | +1.0 |
| | baz=161 | | | | | | | |
| PLCA | Paso Flores | 39.02 | 167 | P | | P | 19 16 38.4 | -0.2 |
| | comp=Z,1.3nm,0.6s,baz=346,slow=9.8,SNR=3.0 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| TZTN | Tazewell | 39.23 | 358 | P | | P | 19 16 40.2 | -0.1 |
| | baz=177 | | | | | | | |
| MNHN | Monahans | 39.49 | 331 | P | | P | 19 16 42.1 | -0.5 |
| LCAR | Lake Charles | 39.72 | 348 | P | | P | 19 16 44.1 | -0.2 |
| FCAR | Ozark Folk Cen | 39.77 | 347 | P | | P | 19 16 44.5 | -0.2 |
| VHRN | Van Horn | 40.17 | 328 | P | | P | 19 16 48.6 | +0.3 |
| VHRN | | | | IAmb | IAmb | | 19 16 50.4 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| POST | Post | 40.35 | 334 | P | | P | 19 16 49.9 | +0.1 |
| HHAR | Hobbs | 40.59 | 345 | P | | P | 19 16 52.4 | +0.8 |
| DKNS | Dickens | 40.62 | 335 | P | | P | 19 16 53.0 | +1.0 |
| DKNS | | | | IAmb | IAmb | | 19 16 55.0 | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| T42A | Van Buren | 40.64 | 348 | P | | P | 19 16 51.2 | -0.7 |
| T42A | | | | IAmb | IAmb | | 19 16 53.0 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| WMOK | Wichita Mounta | 40.71 | 338 | P | | P | 19 16 53.4 | +0.8 |
| | baz=153 | | | | | | | |
| U38A | Gravette | 40.85 | 344 | P | | P | 19 16 54.0 | +0.2 |
| U38A | | | | IAmb | IAmb | | 19 16 55.7 | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| MGMO | Mountain Grove | 41.01 | 347 | P | | P | 19 16 55.9 | +0.8 |
| MNTX | Cornudas Mount | 41.10 | 329 | P | | P | 19 16 57.0 | +1.1 |
| | baz=142 | | | | | | | |
| OK031 | S. Brethren Rd | 41.13 | 341 | P | | P | 19 16 56.4 | +0.4 |
| OK031 | | | | IAmb | IAmb | | 19 16 57.3 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| SMWD | Samnorwood | 41.59 | 337 | IAmb | IAmb | | 19 17 02.0 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| CCM | Cathedral Cave | 41.66 | 349 | P | | P | 19 17 00.2 | -0.1 |
| CCM | | | | IAmb | IAmb | | 19 17 01.7 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| CCM | Cathedral Cave | 41.66 | 349 | P | | P | 19 17 01.4 | +1.1 |
| | baz=166 | | | | | | | |
| AMTX | Amarillo | 41.98 | 335 | P | | P | 19 17 04.2 | +1.0 |
| | baz=149 | | | | | | | |
| R40A | Maddes Statio | 42.10 | 348 | IAmb | IAmb | | 19 17 05.2 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| P52A | Corning | 42.28 | 359 | P | | P | 19 17 06.3 | +0.9 |
| | baz=179 | | | | | | | |
| ACSO | Alum Creek Sta | 42.89 | 359 | P | | P | 19 17 10.6 | +0.3 |
| | baz=178 | | | | | | | |
| O53A | New Philadelph | 42.89 | 0 | P | | P | 19 17 10.6 | +0.2 |
| | baz=181 | | | | | | | |
| 319A | Douglas | 43.01 | 324 | IAmb | IAmb | | 19 17 14.1 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| 121A | Cooks Peak, D | 43.03 | 327 | P | | P | 19 17 13.2 | +1.4 |
| | baz=140 | | | | | | | |
| SSPA | Standing Stone | 43.41 | 4 | P | | P | 19 17 14.8 | +0.2 |
| | baz=185 | | | | | | | |
| RTBA | Rita Blanca | 43.76 | 335 | IAmb | IAmb | | 19 17 19.6 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| KSU1 | Kansas State U | 43.96 | 343 | P | | P | 19 17 20.5 | +1.5 |
| | baz=158 | | | | | | | |
| ANMO | Albuquerque | 44.22 | 330 | P | | P | 19 17 22.2 | +0.8 |
| ANMO | | | | IAmb | IAmb | | 19 17 23.9 | |
| | comp=Z,6.1nm,0.9s | | | | | | | |
| ANMO | Albuquerque | 44.22 | 330 | P | | P | 19 17 23.0 | +1.6 |
| | baz=143 | | | | | | | |
| TUC | Tucson | 44.56 | 324 | P | | P | 19 17 25.8 | +1.8 |
| | baz=136 | | | | | | | |
| T25A | Trinidad | 45.06 | 334 | P | | P | 19 17 29.6 | +1.5 |
| | baz=147 | | | | | | | |
| BINY | Binghamton | 45.13 | 6 | P | | P | 19 17 29.2 | +0.8 |
| | baz=188 | | | | | | | |
| 214A | Organ Pipe Nat | 45.53 | 322 | P | | P | 19 17 33.4 | +1.7 |
| | baz=134 | | | | | | | |
| L61B | Northampton | 45.82 | 9 | P | | P | 19 17 34.7 | +1.0 |
| | baz=192 | | | | | | | |
| W18A | Petrified Fore | 46.04 | 328 | P | | P | 19 17 37.6 | +1.7 |
| | baz=139 | | | | | | | |
| SDCO | Great Sand Dun | 46.05 | 334 | IAmb | IAmb | | 19 17 38.2 | |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| SDCO | Great Sand Dun | 46.05 | 334 | P | | P | 19 17 37.5 | +1.5 |
| | baz=146 | | | | | | | |
| HRV | Adam Dziewonsk | 46.06 | 10 | P | | P | 19 17 37.2 | +1.6 |
| | baz=194 | | | | | | | |
| JFWS | Jewell Farm | 46.21 | 351 | P | | P | 19 17 37.2 | +0.4 |
| | baz=168 | | | | | | | |
| S22A | 4UR Ranch, Cre | 46.65 | 332 | P | | P | 19 17 42.2 | +1.5 |
| | baz=144 | | | | | | | |
| Q24A | Divide | 46.91 | 335 | P | | P | 19 17 44.5 | +1.8 |
| | baz=147 | | | | | | | |
| MVCO | Mesa Verde | 47.02 | 330 | P | | P | 19 17 44.9 | +1.3 |
| | baz=142 | | | | | | | |
| WUAZ | Wupatki | 47.23 | 327 | P | | P | 19 17 45.6 | +0.5 |
| WUAZ | | | | IAmb | IAmb | | 19 17 47.8 | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| WUAZ | Wupatki | 47.23 | 327 | P | | P | 19 17 46.6 | +1.5 |
| | baz=138 | | | | | | | |
| LONY | Lake Ozonia | 47.68 | 7 | P | | P | 19 17 49.8 | +1.5 |
| | baz=190 | | | | | | | |
| ECSD | EROS Data Cent | 48.29 | 345 | P | | P | 19 17 53.4 | +0.5 |
| | baz=160 | | | | | | | |
| HMU | Henry Mountain | 48.71 | 329 | IAmb | IAmb | | 19 18 00.0 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| N23A | Red Feather La | 48.86 | 336 | P | | P | 19 17 59.2 | +1.4 |
| | baz=147 | | | | | | | |
| TPFO | Pinon Flats | 48.91 | 321 | P | | P | 19 17 59.1 | +1.0 |
| | baz=131 | | | | | | | |
| PFO | Pinyon Flats O | 48.92 | 321 | P | | P | 19 17 59.1 | +1.0 |
| | baz=131 | | | | | | | |
| PKCU | Pink Cliffs | 49.16 | 328 | IAmb | IAmb | | 19 18 05.6 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| CCUT | Cedar City | 49.81 | 327 | IAmb | IAmb | | 19 18 08.0 | |
| | comp=Z,9.1nm,1.3s | | | | | | | |
| MVU | Marysvale | 49.90 | 329 | P | | P | 19 18 06.5 | +0.8 |
| RDMU | Red Mountain | 50.19 | 332 | IAmb | IAmb | | 19 18 09.6 | |
| | comp=Z,6.3nm,1.0s | | | | | | | |
| PSUT | Pine Spring | 50.79 | 327 | P | | P | 19 18 12.8 | +0.4 |
| TPNV | Topopah Spring | 51.02 | 324 | P | | P | 19 18 15.7 | +1.5 |
| | baz=133 | | | | | | | |
| EYMN | Ely | 51.32 | 352 | P | | P | 19 18 16.6 | +0.6 |
| | baz=167 | | | | | | | |
| DUG | Dugway, Tooele | 51.47 | 330 | P | | P | 19 18 19.2 | +1.7 |
| | baz=139 | | | | | | | |
| R11B | Troy Canyon, C | 51.61 | 326 | P | | P | 19 18 20.3 | +1.8 |
| | baz=135 | | | | | | | |
| HWUT | Hardware Ranch | 51.93 | 332 | P | | P | 19 18 21.3 | +0.4 |
| HWUT | | | | IAmb | IAmb | | 19 18 22.6 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| BW06 | Boulder Array | 51.94 | 334 | P | | P | 19 18 21.9 | +1.0 |
| | baz=144 | | | | | | | |
| PDAR | Pinedale Array | 51.94 | 334 | P | | P | 19 18 20.4 | -0.5 |
| | comp=Z,1.3nm,0.8s,baz=140,slow=9.5,SNR=9.5 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| BGU | Big Grassy Mou | 52.13 | 330 | IAmb | IAmb | | 19 18 24.4 | |
| | comp=Z,9.4nm,1.4s | | | | | | | |
| AGMN | Agassiz Nation | 52.43 | 348 | P | | P | 19 18 24.7 | +0.5 |
| AGMN | Agassiz Nation | 52.43 | 348 | P | | P | 19 18 25.6 | +1.4 |
| | baz=162 | | | | | | | |
| ELK | Elko | 53.13 | 328 | IAmb | IAmb | | 19 18 32.1 | |
| | comp=Z,9.2nm,1.2s | | | | | | | |
| LHV | Little Huntoon | 53.22 | 324 | IAmb | IAmb | | 19 18 33.0 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| NVAR | Mina Array Bea | 53.22 | 324 | P | | P | 19 18 30.9 | +0.4 |
| NVAR | | | | PcP | | PcP | 19 19 37.5 | -0.6 |
| NVAR | Mina Array Bea | 53.22 | 324 | P | | P | 19 18 31.6 | +1.0 |
| | comp=Z,2.1nm,0.7s,baz=137,slow=7.1,SNR=17 | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| RLMT | Red Lodge | 53.72 | 336 | P | | P | 19 18 35.0 | +0.9 |
| | baz=145 | | | | | | | |
| LAO | LASA Array | 53.88 | 339 | P | | P | 19 18 36.1 | +1.1 |
| | baz=149 | | | | | | | |
| BMN | Battle Mountai | 53.97 | 327 | IAmb | IAmb | | 19 18 38.1 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| ULM | Lac du Bonnet | 54.29 | 349 | P | | P | 19 18 38.0 | +0.2 |
| | comp=Z,18nm,0.9s,baz=160,slow=8.0,SNR=19 | | | | | | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| HLID | Hailey | 54.78 | 331 | P | | P | 19 18 43.1 | +1.2 |
| | baz=139 | | | | | | | |
| BOZ | Bozeman (W) | 55.09 | 335 | P | | P | 19 18 44.0 | +0.1 |
| BOZ | | | | IAmb | IAmb | | 19 18 47.0 | |
| | comp=Z,7.2nm,1.4s | | | | | | | |
| BOZ | Bozeman (W) | 55.09 | 335 | P | | P | 19 18 44.7 | +0.7 |
| | baz=143 | | | | | | | |
| MFID | Camas Ranch | 55.37 | 330 | IAmb | IAmb | | 19 18 48.3 | |
| | comp=Z,8.7nm,1.2s | | | | | | | |
| WVOR | Wild Horse Val | 56.12 | 328 | IAmb | IAmb | | 19 18 53.1 | |
| | comp=Z,9.2nm,1.1s | | | | | | | |
| MSO | Missoula | 57.05 | 334 | P | | P | 19 18 59.2 | +1.3 |
| | baz=141 | | | | | | | |
| I07A | Izee | 57.72 | 328 | P | | P | 19 19 03.6 | +1.0 |
| I07A | | | | IAmb | IAmb | | 19 19 29.5 | |
| | comp=Z,5.8nm,1.3s | | | | | | | |
| F10A | Beach Ranch, E | 57.92 | 331 | IAmb | IAmb | | 19 19 06.2 | |
| | comp=Z,6.1nm,1.0s | | | | | | | |
| G08A | Pilot Rock | 58.28 | 330 | P | | P | 19 19 07.2 | +0.6 |
| YKA | Yellowknife Ar | 69.80 | 344 | P | | P | 19 20 18.5 | -3.2 |
| | comp=Z,1.3nm,0.7s,baz=133,slow=5.7,SNR=3.7 | | | | | | | |
| TOAD | Toad River Com | 70.49 | 338 | P | | P | 19 20 27.2 | +1.1 |
| | baz=133 | | | | | | | |
| KOTAN | Kotaneelee Air | 70.95 | 339 | P | | P | 19 20 29.7 | +0.9 |
| | baz=135 | | | | | | | |
| T35M | Bob Quinn | 71.32 | 334 | P | | P | 19 20 32.7 | +1.5 |
| | baz=128 | | | | | | | |
| WRAK | Wrangell Islan | 71.91 | 333 | P | | P | 19 20 36.3 | +1.7 |
| | baz=126 | | | | | | | |
| U33K | Whale Pass | 72.09 | 333 | P | | P | 19 20 37.5 | +1.8 |
| | baz=125 | | | | | | | |
| DLBC | Dease Lake | 72.12 | 336 | P | | P | 19 20 37.2 | +1.2 |
| DLBC | Dease Lake | 72.12 | 336 | P | | P | 19 20 37.7 | +1.6 |
| | baz=128,SNR=10 | | | | | | | |
| S34M | Telegraph Cree | 72.27 | 335 | P | | P | 19 20 38.4 | +1.6 |
| | baz=127 | | | | | | | |
| R33M | Jennings River | 73.10 | 336 | P | | P | 19 20 43.3 | +1.4 |
| | baz=128,SNR=6.8 | | | | | | | |
| Q32M | Nakina River | 73.37 | 335 | P | | P | 19 20 45.3 | +1.7 |
| | baz=126 | | | | | | | |
| TGTN | Hyland Airport | 73.42 | 339 | P | | P | 19 20 45.3 | +1.7 |
| | baz=131 | | | | | | | |
| S32K | Killisnoo | 73.51 | 333 | P | | P | 19 20 45.9 | +1.8 |
| | baz=124 | | | | | | | |
| R32K | Eaglecrest | 73.94 | 334 | P | | P | 19 20 47.9 | +1.3 |
| | baz=124 | | | | | | | |
| P33M | Teslin, Yukon | 74.34 | 336 | IAmb | IAmb | | 19 20 51.2 | |
| | comp=Z,9.7nm,1.1s | | | | | | | |
| P33M | Teslin, Yukon | 74.34 | 336 | P | | P | 19 20 50.0 | +0.9 |
| | baz=126,SNR=6.7 | | | | | | | |
| SKAG | Skagway | 74.95 | 335 | P | | P | 19 20 54.0 | +1.5 |
| | baz=124 | | | | | | | |
| MMPY | Sheldon Lake, | 75.20 | 339 | P | | P | 19 20 55.6 | +1.6 |
| | baz=128 | | | | | | | |
| FARO | Faro, Yukon | 75.74 | 338 | P | | P | 19 20 58.0 | +0.9 |
| FARO | | | | IAmb | IAmb | | 19 20 59.0 | |
| | comp=Z,4.9nm,1.0s | | | | | | | |
| FARO | Faro, Yukon | 75.74 | 338 | P | | P | 19 20 58.4 | +1.3 |
| | baz=126 | | | | | | | |
| O30N | Mendenhall | 75.99 | 336 | P | | P | 19 21 00.6 | +2.0 |
| | baz=123,SNR=5.0 | | | | | | | |
| P30M | Million Dollar | 76.00 | 335 | P | | P | 19 21 00.0 | +1.4 |
| | baz=122 | | | | | | | |
| P29M | Windy Craggy | 76.08 | 334 | P | | P | 19 21 00.6 | +1.5 |
| | baz=121 | | | | | | | |
| M31M | Drury Creek, Y | 76.12 | 337 | P | | P | 19 21 00.1 | +0.8 |
| | baz=125 | | | | | | | |
| N31M | Braeburn, Yuko | 76.26 | 336 | P | | P | 19 21 01.1 | +1.0 |
| | baz=124 | | | | | | | |
| N30M | Aishikik Lake | 76.77 | 336 | P | | P | 19 21 04.1 | +1.1 |
| N30M | Aishikik Lake | 76.77 | 336 | P | | P | 19 21 04.9 | +1.9 |
| | baz=122,SNR=7.2 | | | | | | | |
| PNL | Peninsula | 76.82 | 334 | P | | P | 19 21 04.2 | +0.9 |
| | baz=120 | | | | | | | |
| YUK6 | Outpost Mounta | 77.03 | 335 | P | | P | 19 21 05.5 | +0.9 |
| | baz=121 | | | | | | | |
| DBIC | Dimbokro | 77.24 | 83 | P | | P | 19 21 05.2 | -1.4 |
| | comp=Z,5.2nm,0.8s,baz=264,slow=5.1,SNR=3.9 | | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| YUK4 | Talbot Arm | 77.35 | 336 | P | | P | 19 21 07.7 | +1.3 |
| | baz=121 | | | | | | | |
| C36M | Paulatuk | 77.56 | 346 | P | | P | 19 21 08.2 | +1.0 |
| | baz=136 | | | | | | | |
| O28M | Mount Upton | 77.71 | 335 | P | | P | 19 21 09.7 | +1.1 |
| | baz=119 | | | | | | | |
| YUK8 | Steele Glacier | 77.79 | 335 | P | | P | 19 21 10.1 | +1.2 |
| | baz=120 | | | | | | | |
| M29M | Somme Creek | 77.84 | 337 | P | | P | 19 21 09.9 | +0.8 |
| M29M | Somme Creek | 77.84 | 337 | P | | P | 19 21 10.3 | +1.2 |
| | baz=121,SNR=14 | | | | | | | |
| J30M | Hart River | 78.19 | 339 | IAmb | IAmb | | 19 21 13.1 | |
| | comp=Z,7.9nm,1.2s | | | | | | | |
| J30M | Hart River | 78.19 | 339 | P | | P | 19 21 12.6 | +1.7 |
| | baz=124 | | | | | | | |
| K29M | Barlow Dome | 78.22 | 338 | P | | P | 19 21 12.4 | +1.2 |
| | baz=122 | | | | | | | |
| YUK3 | Moose Creek | 78.32 | 335 | P | | P | 19 21 12.9 | +1.0 |
| | baz=119,SNR=6.0 | | | | | | | |
| I30M | Mount Dempster | 78.56 | 339 | P | | P | 19 21 14.4 | +1.5 |
| | baz=124 | | | | | | | |
| BGLC | Bering Glacier | 78.76 | 333 | P | | P | 19 21 15.5 | +1.5 |
| | baz=116 | | | | | | | |
| G31M | Satah River | 78.83 | 341 | P | | P | 19 21 15.2 | +1.0 |
| | baz=126 | | | | | | | |
| F31M | Tsiigehtchic | 78.98 | 342 | P | | P | 19 21 16.2 | +1.2 |
| | baz=127 | | | | | | | |
| DAWY | Dawson | 79.04 | 338 | P | | P | 19 21 16.6 | +1.1 |
| | baz=121 | | | | | | | |
| M27K | Edge Creek, AK | 79.19 | 336 | P | | P | 19 21 17.8 | +1.3 |
| | baz=118 | | | | | | | |
| MCARA | McCarthy VSAT | 79.22 | 335 | P | | P | 19 21 17.3 | +0.8 |
| | baz=117 | | | | | | | |
| EPYK | Eagle Plains | 79.32 | 340 | P | | P | 19 21 18.2 | +1.2 |
| | baz=124 | | | | | | | |
| INK | Inuvik | 79.43 | 343 | P | | P | 19 21 18.7 | +1.2 |
| | baz=127 | | | | | | | |
| BCAR | Beaver Creek A | 79.48 | 336 | P | | P | 19 21 18.0 | 0.0 |
| L27K | Beaver Creek, | 79.50 | 336 | P | | P | 19 21 19.2 | +1.2 |
| | baz=118,SNR=5.9 | | | | | | | |
| M26K | Nabesna, AK | 79.67 | 335 | IAmb | IAmb | | 19 21 21.3 | |
| | comp=Z,6.8nm,1.1s | | | | | | | |
| M26K | Nabesna, AK | 79.67 | 335 | P | | P | 19 21 20.0 | +1.0 |
| | baz=117 | | | | | | | |
| F30M | Barrier River | 79.72 | 342 | P | | P | 19 21 19.9 | +0.8 |
| | baz=125 | | | | | | | |
| BMRM | Bremner River | 79.72 | 334 | P | | P | 19 21 20.1 | +0.8 |
| | baz=115 | | | | | | | |
| A36M | Sachs Harbour | 79.74 | 347 | P | | P | 19 21 19.6 | +0.5 |
| | baz=136 | | | | | | | |
| H29M | Whitestone | 79.80 | 340 | P | | P | 19 21 20.5 | +0.9 |
| | baz=122 | | | | | | | |
| Q23K | Middleton Isla | 79.88 | 332 | P | | P | 19 21 21.2 | +1.1 |
| | baz=114 | | | | | | | |
| I28M | Miner Creek | 79.95 | 339 | P | | P | 19 21 21.7 | +1.2 |
| | baz=120 | | | | | | | |
| N25K | Chitina, Valde | 79.99 | 334 | P | | P | 19 21 22.0 | +1.2 |
| | baz=116 | | | | | | | |
| G29M | Pine Creek | 80.05 | 341 | P | | P | 19 21 22.0 | +1.1 |
| | baz=122 | | | | | | | |
| K27K | Chicken | 80.05 | 337 | IAmb | IAmb | | 19 21 23.6 | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| EGAK | Eagle | 80.06 |

**BRSE Bradley Lake S 82.07 331** P **P** 19 21 32.8 +1.0
baz=110
**WAT1 Susitna Watana 82.18 335** P **P** 19 21 33.2 +0.9
baz=112
**VNA2 Neumayer--Watz 82.20 161** ⇑P **P** 19 21 32.4 +0.1
comp=Z,1.0nm,0.6s,baz=306,slow=5.1
**D27M Malcolm River 82.21 342** P **P** 19 21 32.9 +0.5
baz=120
**ILAR Eielson Array 82.26 337** P **P** 19 21 32.2 -0.5
comp=Z,1.2nm,1.0s,baz=133,slow=3.9,SNR=10
comp=Z,1.2nm,1.0s
**KDAK Kodiak Island 82.35 329** P **P** 19 21 33.8 +0.6
baz=108
**ESDC Sonseca Array 82.36 50** P **P** 19 21 34.2 +0.3
comp=Z,1.2nm,0.9s,baz=272,slow=6.6,SNR=5.1
comp=Z,1.2nm,0.9s
**F26K Sheenjek River 82.50 340** P **P** 19 21 34.6 +0.6
baz=117
**RND Reindeer 82.53 335** IAmb IAmb 19 21 36.0
comp=Z,6.9nm,1.0s
**OHAK Old Harbor 82.55 329** P **P** 19 21 34.5 +0.2
**OHAK Old Harbor 82.55 329** P **P** 19 21 35.2 +0.9
baz=107
**SUA Susitna One 82.66 333** P **P** 19 21 35.1 +0.2
baz=110
**G25K Bearman Lake 82.79 339** P **P** 19 21 37.0 +1.6
baz=115
**SII Sitkinak Islan 82.83 328** P **P** 19 21 36.9 +1.0
baz=106
**MDM Murphy Dome 82.86 337** IAmb IAmb 19 21 37.8
comp=Z,8.2nm,1.3s
**H24K Noodor Dome 83.07 338** P **P** 19 21 37.2 +0.3
baz=113
**SKT Skwentna 83.18 333** P **P** 19 21 38.1 +0.6
baz=109,SNR=5.6
**Q19K Cape Douglas, 83.23 330** P **P** 19 21 38.5 +0.6
baz=107
**R18K Karluk 83.25 329** P **P** 19 21 38.2 +0.3
baz=106
**I23K Minto, Yukon-K 83.38 337** P **P** 19 21 38.9 +0.5
baz=112
**BPAW Bear Paw Mtn. 83.66 336** P **P** 19 21 40.4 +0.4
baz=110
**H23K Yukon River 83.70 337** P **P** 19 21 41.2 +1.1
baz=112
**F24K Squaw Lake 83.73 339** P **P** 19 21 40.9 +0.6
baz=113
**M20K Styx River 83.87 333** P **P** 19 21 40.9 -0.3
baz=108
**Q17K Contact Creek 84.17 329** P **P** 19 21 43.2 +0.3
baz=105
**TORD Torodi Ar. Bea 84.17 77** P **P** 19 21 40.7 -2.9
comp=Z,0.8nm,0.8s,baz=270,slow=0.3,SNR=5.3
comp=Z,0.8nm,0.8s
**N19K Bonanza Creek 84.18 332** P **P** 19 21 42.6 -0.2
baz=106
**G23K Bananza Creek 84.20 338** P **P** 19 21 43.5 +0.8
baz=111
**R17L Mt. Peulik Vol 84.26 329** P **P** 19 21 43.8 +0.6
baz=104
**O18K Koktuh Hills 84.26 331** P **P** 19 21 43.8 +0.7
baz=106
**M19K Big River Lodg 84.44 333** P **P** 19 21 44.5 +0.4
baz=107
**COLD Coldfoot 84.45 339** P **P** 19 21 45.0 +1.1
baz=111
**E23K Chandalar 84.55 340** P **P** 19 21 45.4 +0.8
baz=112
**P17K Kvichak River 84.69 330** P **P** 19 21 45.5 +0.3
baz=105
**K20K Telida 84.72 334** P **P** 19 21 45.3 -0.1
baz=107
**L19K White Mountain 84.73 333** P **P** 19 21 45.7 +0.2
baz=106
**N18K Kilae Creek 84.81 332** P **P** 19 21 46.3 +0.4
baz=105
**R16K Pilot Point 84.88 328** P **P** 19 21 48.4 +2.2
baz=104
**M18K Stony River 84.99 332** P **P** 19 21 47.3 +0.6
baz=105
**J20K Nowinta River 85.00 335** P **P** 19 21 47.1 +0.4
baz=107
**CHGN Chignik 85.04 327** P **P** 19 21 47.5 +0.5
baz=103
**O17K Koliganek Bris 85.16 331** P **P** 19 21 47.7 +0.1
baz=104
**D23K Nanushuk River 85.24 340** P **P** 19 21 49.0 +1.2
baz=111
**F22K John River 85.27 339** P **P** 19 21 49.2 +1.1
baz=109
**G21K Allakaket 85.44 338** P **P** 19 21 49.7 +0.8
baz=108
**TROLL Troll, Antarti 85.50 162** ⇑P **P** 19 21 48.9 -0.5
comp=Z,90nm,0.7s
**L18K Granite Mounta 85.57 333** P **P** 19 21 50.0 +0.3
baz=105
**F21K Alatna River 85.65 338** P **P** 19 21 50.4 +0.4
baz=108
**H20K Anotleneega Mo 85.68 336** P **P** 19 21 50.6 +0.4
baz=106
**M17K Holitna River 85.72 332** P **P** 19 21 51.3 +0.9
baz=104
**EKA Eskdalemuir Ar 85.80 34** P **P** 19 21 49.0 -1.9
**EKA Eskdalemuir Ar 85.80 34** P **P** 19 21 49.0 -1.9
comp=Z,1.7nm,0.8s,baz=250,slow=7.2,SNR=3.5
comp=Z,1.7nm,0.8s
**J18K Innoko River 85.90 334** P **P** 19 21 51.7 +0.4
baz=105
**M15K Kasigluk River 87.11 331** P **P** 19 21 57.9 +0.7
baz=101
**QSPA South Pole Qui 87.22 180** P **P** 19 21 57.4 -0.4
**QSPA South Pole Qui 87.22 180** P **P** 19 21 57.7 -0.1
comp=Z,5.7nm,1.1s,baz=162,slow=4.0,SNR=9.6
comp=Z,5.7nm,1.1s
**G18K Tagagawik 87.29 336** P **P** 19 21 58.9 +0.8
baz=103
**N14K Kuskokwak Cree 87.45 330** P **P** 19 21 59.7 +0.8
baz=100
**H17K Granite Mounta 87.60 335** P **P** 19 22 00.6 +1.0
baz=102
**M14K Bethel 87.73 331** P **P** 19 22 00.9 +0.7
baz=100
**K15K Wolf Creek Mou 87.80 333** P **P** 19 22 02.4 +1.8
baz=100
**A21K Barrow 87.90 342** P **P** 19 22 01.7 +0.9
baz=105
**G17K Kiwalik Mounta 88.02 336** P **P** 19 22 02.1 +0.6
baz=101
**E18K Tukpahlearik C 88.38 338** P **P** 19 22 04.4 +1.3
baz=101
**E17K Hotham Inlet 88.78 337** P **P** 19 22 06.2 +1.1
baz=100
**J14K Nanvaranak Lak 88.80 333** P **P** 19 22 06.7 +1.5
baz=98
**B18K Kokolik River 89.17 340** P **P** 19 22 08.0 +1.1
baz=100
**G15K Niukluk 89.34 335** P **P** 19 22 08.5 +0.8
baz=98
**C17K DeLong Mountai 89.52 339** P **P** 19 22 09.5 +1.0
baz=99
**F15K North Star Dit 89.69 336** P **P** 19 22 10.3 +1.0
baz=98
**M11K Mekoryuk 89.76 330** P **P** 19 22 10.0 +0.3
baz=96
**AKTO Aktyubinsk 121.66 29** PKP **PKiKP** 19 28 05.9 +0.3
comp=Z,0.9nm,0.6s,baz=272,slow=3.8,SNR=6.0
**BVAR Borovoye Array 124.91 20** PKP **PKiKP** 19 28 11.7 -0.2
comp=Z,0.9nm,0.6s,baz=311,slow=3.2,SNR=7.0
**STKA Stephens Creek 126.37 226** PKP **PKPdf** 19 28 14.5 -0.6
comp=Z,4.0nm,1.0s,baz=111,slow=4.8,SNR=5.4
**ZALV Zalesovo Beam 127.87 10** PKP **PKPdf** 19 28 16.6 -0.6
comp=Z,1.4nm,0.6s,baz=318,slow=2.0,SNR=12
**KURBB Kurchatov Arra 129.54 16** PKP **PKiKP** 19 28 20.8 -0.4
comp=Z,2.9nm,0.8s,baz=328,slow=2.4,SNR=23
**MKAR Makanchi Array 134.06 15** PKP **PKPdf** 19 28 28.9 -0.2
comp=Z,0.6nm,0.6s,baz=337,slow=2.3,SNR=5.5
**SONM Songino Array 134.65 352** PKP **PKPdf** 19 28 30.5 +0.1
comp=Z,0.4nm,0.4s,baz=35,slow=3.5,SNR=1.8
**ASAR Alice Springs 136.49 231** PKP **PKPdf** 19 28 34.1 -0.3
comp=Z,1.7nm,0.6s,baz=126,slow=2.3,SNR=12
**WRA Warramunga Arr 138.03 236** PKP **PKPdf** 19 28 36.0 -1.3
comp=Z,2.2nm,0.7s,baz=110,slow=2.0,SNR=4.6
**KSH Kashi 138.22 26** PKP **PKiKP** 19 28 39.8 +0.4
**HHC Hu-ho-hao-te 140.34 344** *eP* **PKPdf** 19 28 39.5 -1.6
**NJ2 Nanjing 145.13 329** *eP* **PKPdf** 19 28 50.0 +0.3
NJ2 pmax pmax
comp=Z,4.0nm,0.5s
**PZH PanZhiHua 156.26 352** PKP **PKPdf** 19 29 06.4 -0.7

**KMI Kunming 157.46 350** ⇓PKP **PKPdf** 19 29 08.3 -0.5
**CMAR Chiang Mai Arr 164.48 358** PKP **PKPdf** 19 29 15.8 -0.4
comp=Z,0.4nm,0.3s,baz=298,slow=1.9,SNR=7.4

*BEO* ***16*** *19:28:32.5±3.7,41.58N×13.74E,h101km±5km,ML3.6/15*
*ROM* ***16*** *19:28:38.1±0.1,41.862N±0.004×14.803E±0.007,*
*h17km,ML3.5/196,Error ellipse: s-maj=0.6km s-min=0.3km az=45.0*
*PDG* ***16*** *19:28:38.4±1.2,41.83N×14.82E,h16km±1km,MD3.8/1,*
*ML3.7/11,Error ellipse: s-maj=1.3km s-min=1.3km az=0.0*
*LDG* ***16*** *19:28:39.3±0.2,41.79N×14.74E,h10km,Ml3.6/9,Error ellipse: s-maj=6.0km s-min=3.2km az=44.0*
*PRU* ***16*** *19:28:41.7,42.02N×15.00E,h10km*
**ISC 16 19:28:37.9±0.7,41.86N±0.02×14.79E±0.02,h12km,n226,**
**σ1s87/245,7C-9D,Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRES** | **Fresagrandinar** | **0.14** | **322** | ⇓P | **Pb** | **19 28 43.1** | **+0.5** |
| FRES | | | | S | **Sg** | **19 28 46.5** | **+2.6** |
| FRES | | | | AML | AML | | |
| | comp=E,39600μm,0.5s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,18200μm,0.5s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,18200μm,1.5s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,35342μm,0.4s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,15238μm,0.1s | | | | | | |
| **TRIV** | **Trivento** | **0.20** | **242** | ⇑P | **Pb** | **19 28 43.9** | **+0.3** |
| TRIV | | | | S | **Sg** | **19 28 48.0** | **+2.7** |
| TRIV | | | | AML | AML | | |
| | comp=E,15950μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,15450μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,15400μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,16550μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,15750μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,15763μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,15906μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,16506μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,15410μm,0.5s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.22** | **157** | ⇓P | **Pb** | **19 28 43.8** | **-0.1** |
| CIGN | | | | S | **Sg** | **19 28 47.7** | **+1.8** |
| CIGN | | | | AML | AML | | |
| | comp=E,15900μm,1.3s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,17000μm,0.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,11700μm,0.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,9145μm,1.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,11700μm,1.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,17012μm,0.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,13357μm,0.5s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.30** | **121** | ⇓P | **Pb** | **19 28 44.6** | **-0.6** |
| MELA | | | | S | **Sb** | **19 28 49.4** | **-0.6** |
| MELA | | | | AML | AML | | |
| | comp=E,27150μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,33900μm,1.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,36200μm,1.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,27150μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,33900μm,1.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,29000μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,36200μm,0.9s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,33900μm,0.9s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,30180μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,29030μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,27172μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,32460μm,0.3s | | | | | | |
| **BSSO** | **Busso** | **0.35** | **205** | ⇑P | **Pb** | **19 28 46.3** | **+0.3** |
| BSSO | | | | S | **Sb** | **19 28 51.6** | **+0.1** |
| BSSO | | | | AML | AML | | |
| | comp=E,3690μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,9130μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,5960μm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,2810μm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,9125μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,2556μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,5695μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,3690μm,0.3s | | | | | | |
| **GATE** | **Gambatesa** | **0.36** | **165** | ⇓P | **Pb** | **19 28 46.7** | **+0.5** |
| GATE | | | | AML | AML | | |
| | comp=E,13200μm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,6465μm,0.7s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,6340μm,0.7s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,6340μm,0.7s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,6470μm,0.7s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,13300μm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,5839μm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,13185μm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,13316μm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,6116μm,0.5s | | | | | | |
| **MIDA** | **Miranda** | **0.46** | **242** | ⇑P | **Pb** | **19 28 47.7** | **-0.2** |
| MIDA | | | | S | **Sb** | **19 28 54.8** | **+0.1** |
| MIDA | | | | AML | AML | | |
| | comp=N,5990μm,0.4s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,6350μm,0.4s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,5225μm,0.8s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,5985μm,0.4s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,5225μm,1.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,5810μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,6349μm,0.4s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,5812μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,4905μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,5988μm,0.4s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **188** | ⇑P | **Pb** | **19 28 47.8** | **-0.3** |
| SACR | | | | S | **Sb** | **19 28 55.1** | **+0.1** |
| SACR | | | | AML | AML | | |
| | comp=E,6160μm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,5845μm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,3260μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,3160μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,5846μm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,3258μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,6164μm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,3162μm,0.3s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.49** | **293** | P | **Pg** | **19 28 48.4** | **+0.9** |
| LPEL | | | | AML | AML | | |
| | comp=E,12850μm,1.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,11200μm,0.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,12850μm,0.9s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,11886μm,0.2s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,10895μm,0.2s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.50** | **252** | ⇑P | **Pb** | **19 28 48.7** | **0.0** |
| RNI2 | | | | AML | AML | | |
| | comp=E,9390μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,9895μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,10055μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,10545μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,9390μm,1.8s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,10055μm,1.8s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,10034μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,10546μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,9399μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,9917μm,0.2s | | | | | | |
| **PTRJ** | **Pietraroja** | **0.53** | **201** | P | **Pb** | **19 28 48.5** | **-0.7** |
| PTRJ | | | | S | **Sb** | **19 28 56.8** | **-0.1** |
| PTRJ | | | | AML | AML | | |
| | comp=E,6440μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,6470μm,1.1s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,24μm,1.1s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,7760μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,6445μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,6443μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,24μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,6040μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,7761μm,0.3s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.56** | **150** | ⇓P | **Pb** | **19 28 49.4** | **-0.3** |
| MOCO | | | | AML | AML | | |
| | comp=E,2360μm,0.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,1445μm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,2285μm,0.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,1405μm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| MOCO | | | | AML | AML | | |
| | comp=N,9850μm,1.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,2355μm,0.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,1450μm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,9850μm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| MOCO | | | | AML | AML | | |
| | comp=N,1446μm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,2357μm,0.6s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.56** | **213** | ⇑P | **Pb** | **19 28 49.2** | **-0.5** |
| SGG | | | | S | **Sb** | **19 28 57.7** | **-0.1** |
| SGG | | | | AML | AML | | |
| | comp=E,11nm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,13nm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,13nm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,3725μm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,4150μm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,3724μm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,4152μm,0.4s | | | | | | |
| **APRC** | **Apricena** | **0.57** | **100** | P | **Pg** | **19 28 48.5** | **-0.6** |
| APRC | | | | S | **Sb** | **19 28 57.7** | **-0.3** |
| APRC | | | | AML | AML | | |
| | comp=E,9620μm,1.1s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,4655μm,0.2s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,10010μm,1.1s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,10010μm,0.9s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,13100μm,0.2s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,9620μm,0.9s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.61** | **223** | ⇑P | **Pg** | **19 28 49.9** | **+0.2** |
| **CERA** | **Filignano** | **0.63** | **246** | P | **Pg** | **19 28 50.3** | **+0.1** |
| CERA | | | | AML | AML | | |
| | comp=N,4800μm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,4575μm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,5175μm,0.5s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,5375μm,0.5s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,4800μm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,4572μm,0.4s | | | | | | |
| **PSB1** | **Pescosannita** | **0.64** | **178** | P | **Pb** | **19 28 50.5** | **-0.5** |
| PSB1 | | | | S | **Sb** | **19 29 00.0** | **+0.2** |
| **INTR** | **Introdacqua** | **0.68** | **283** | ⇓P | **Pg** | **19 28 51.3** | **+0.3** |
| INTR | | | | AML | AML | | |
| | comp=E,5695μm,0.5s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,10010μm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,10220μm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,5690μm,0.5s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,3970μm,0.5s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,10237μm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,3966μm,0.5s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,10019μm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,5692μm,0.5s | | | | | | |
| **VITU** | **Vitulano (BN)** | **0.69** | **190** | P | **Pg** | **19 28 51.1** | **-0.2** |
| VITU | | | | AML | AML | | |
| | comp=N,19900μm,0.3s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,6970μm,0.3s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,21300μm,0.4s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,20450μm,0.3s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,21287μm,0.4s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,6969μm,0.3s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,20470μm,0.3s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,19867μm,0.3s | | | | | | |
| **BIOG** | **Biogem** | **0.71** | **158** | AML | AML | | |
| | comp=E,7775μm,0.4s | | | | | | |
| BIOG | | | | AML | AML | | |
| | comp=N,7520μm,0.5s | | | | | | |

BIOG AML AML
comp=N,7300µm,0.5s
BIOG AML AML
comp=E,6390µm,0.4s
**SGRT San Giovanni R 0.72 98** P **Pg** 19 28 51.4 -0.5
SGRT AML AML
comp=N,11950µm,0.4s
SGRT AML AML
comp=E,14450µm,0.5s
SGRT AML AML
comp=E,14456µm,0.5s
SGRT AML AML
comp=N,11953µm,0.5s
**MRB1 Monte Rocchett 0.75 169** P **Pb** 19 28 52.4 -0.4
MRB1 AML AML
comp=N,7695µm,0.5s
MRB1 AML AML
comp=E,6665µm,0.5s
MRB1 AML AML
comp=E,6435µm,0.5s
MRB1 AML AML
comp=N,8110µm,0.5s
MRB1 AML AML
comp=E,6665µm,1.5s
MRB1 AML AML
comp=E,6435µm,1.5s
MRB1 AML AML
comp=N,8110µm,1.5s
MRB1 AML AML
comp=N,7695µm,1.5s
MRB1 AML AML
comp=E,6668µm,0.5s
MRB1 AML AML
comp=N,8112µm,0.5s
MRB1 AML AML
comp=N,7691µm,0.5s
MRB1 AML AML
comp=E,6438µm,0.5s
**PIGN Pignataro Magg 0.80 215** P **Pg** 19 28 53.0 -0.4
PIGN AML AML
comp=E,2290µm,0.7s
PIGN AML AML
comp=N,1990µm,0.2s
PIGN AML AML
comp=E,2240µm,0.7s
PIGN AML AML
comp=E,2290µm,0.7s
PIGN AML AML
comp=N,1990µm,0.3s
PIGN AML AML
comp=N,2020µm,1.1s
PIGN AML AML
comp=E,2290µm,1.3s
PIGN AML AML
comp=E,2240µm,1.3s
PIGN AML AML
comp=N,1989µm,0.2s
PIGN AML AML
comp=N,2011µm,0.2s
PIGN AML AML
comp=E,2235µm,0.4s
PIGN AML AML
comp=E,1925µm,0.6s
**POFI Posta Fibreno 0.82 260** P **Pg** 19 28 53.4 -0.3
POFI AML AML
comp=E,2410µm,0.7s
POFI AML AML
comp=N,2270µm,0.7s
POFI AML AML
comp=E,2425µm,0.7s
POFI AML AML
comp=N,2530µm,0.6s
**MCI Monte Cassino 0.82 243** ⇓*e*P **Pb** 19 28 54.1 0.0
**MCI Monte Cassino 0.82 243** P **Pg** 19 28 53.5 -0.2
MCI AML AML
comp=E,5340µm,0.4s
MCI AML AML
comp=N,3965µm,0.3s
MCI AML AML
comp=N,3965µm,0.3s
MCI AML AML
comp=E,5344µm,0.4s
**T0110 Collepietro 0.84 296** P **Pg** 19 28 53.9 -0.2
T0110 AML AML
comp=E,14800µm,0.5s
T0110 AML AML
comp=N,8305µm,0.6s
T0110 AML AML
comp=N,8302µm,0.6s
T0110 AML AML
comp=E,14789µm,0.5s
**PAOL Paolisi 0.84 191** P **Pg** 19 28 53.6 -0.6
PAOL AML AML
comp=E,13600µm,0.5s
PAOL AML AML
comp=N,7370µm,0.7s
PAOL AML AML
comp=N,6920µm,0.7s
PAOL AML AML
comp=E,14350µm,0.5s
PAOL AML AML
comp=N,6254µm,0.5s
PAOL AML AML
comp=E,14340µm,0.5s
PAOL AML AML
comp=E,13574µm,0.5s
PAOL AML AML
comp=N,5855µm,0.5s
**SGTA Sant Agata di 0.84 149** P **Pg** 19 28 53.5 -0.7
SGTA AML AML
comp=E,8030µm,0.6s
SGTA AML AML
comp=N,5250µm,0.4s
SGTA AML AML
comp=E,8320µm,0.6s
SGTA AML AML
comp=N,5275µm,0.4s
SGTA AML AML
comp=E,8030µm,1.4s
SGTA AML AML
comp=E,8320µm,1.4s
SGTA AML AML
comp=E,8033µm,0.6s
SGTA AML AML
comp=N,5275µm,0.4s
SGTA AML AML
comp=E,8321µm,0.6s
SGTA AML AML
comp=N,5247µm,0.4s
**MSAG Monte S. Angel 0.85 100** P **Pg** 19 28 54.2 -0.1
MSAG AML AML
comp=E,7110µm,0.6s
MSAG AML AML
comp=N,18600µm,0.5s
MSAG AML AML
comp=N,7855µm,0.5s
MSAG AML AML
comp=E,2990µm,0.6s
MSAG AML AML
comp=E,2991µm,0.6s
MSAG AML AML
comp=N,7854µm,0.5s
MSAG AML AML
comp=E,7110µm,0.6s
MSAG AML AML
comp=N,18600µm,0.5s
**VVLD Villa Vallelon 0.87 271** P **Pg** 19 28 54.2 -0.5
**VCEL Villa Celiera 0.88 307** P **Pg** 19 28 54.9 -0.1
VCEL AML AML
comp=E,7630µm,0.6s
VCEL AML AML
comp=N,9480µm,0.4s
VCEL AML AML
comp=N,9467µm,0.4s
VCEL AML AML
comp=E,7629µm,0.6s
**CAFE Carife 0.90 158** P **Pg** 19 28 54.6 -0.7
CAFE AML AML
comp=E,4805µm,0.6s
CAFE AML AML
comp=N,2815µm,0.3s
CAFE AML AML
comp=E,4975µm,0.7s
CAFE AML AML
comp=N,2940µm,0.3s
CAFE AML AML
comp=E,4975µm,1.3s
CAFE AML AML
comp=E,4805µm,1.4s
CAFE AML AML
comp=N,2817µm,0.3s
CAFE AML AML
comp=E,4741µm,0.6s
CAFE AML AML
comp=E,4661µm,0.6s
CAFE AML AML
comp=N,2941µm,0.3s
**LRP Arpino 0.92 257** P **Pg** 19 28 55.1 -0.7
LRP AML AML
comp=E,2225µm,0.7s
LRP AML AML
comp=N,2725µm,0.4s
LRP AML AML
comp=E,2225µm,1.3s
LRP AML AML
comp=N,2725µm,1.6s
LRP AML AML
comp=E,2125µm,0.4s
LRP AML AML
comp=N,2728µm,0.4s
**MTMR Montemarano 0.95 170** P **Pg** 19 28 55.0 -1.4
MTMR AML AML
comp=N,6690µm,0.4s
MTMR AML AML
comp=E,2810µm,0.4s
MTMR AML AML
comp=N,3370µm,0.4s
MTMR AML AML
comp=E,5580µm,0.4s
MTMR AML AML
comp=N,3370µm,1.6s
MTMR AML AML
comp=N,6690µm,1.6s
MTMR AML AML
comp=N,6691µm,0.4s
MTMR AML AML
comp=E,5581µm,0.4s
MTMR AML AML
comp=N,3369µm,0.4s
MTMR AML AML
comp=E,2807µm,0.4s
**FAGN Fagnano 0.98 295** P **Pg** 19 28 56.0 -0.9
FAGN AML AML
comp=N,6750µm,0.4s
FAGN AML AML
comp=E,9155µm,0.5s
FAGN AML AML
comp=N,6750µm,0.4s
FAGN AML AML
comp=E,9157µm,0.5s
**LIK San Giovanni I 0.99 249** AML AML
comp=N,3665µm,0.5s
LIK AML AML
comp=E,3950µm,1.3s
LIK AML AML
comp=N,3665µm,1.5s
LIK AML AML
comp=E,3950µm,0.7s
**SNAL S. Angelo Dei 0.99 161** AML AML
comp=N,5120µm,0.8s
SNAL AML AML
comp=E,3635µm,0.7s
SNAL AML AML
comp=N,5160µm,0.8s
SNAL AML AML
comp=E,4150µm,0.7s
**CAPA Cerignola FG 1.04 132** P **Pb** 19 28 56.4 -1.5
**NSC3 Nusco 1.04 166** P **Pg** 19 28 56.9 -1.1
**PTQR Pietraquaria 1.05 279** P **Pb** 19 28 57.2 -0.8
PTQR AML AML
comp=E,1285µm,1.2s
PTQR AML AML
comp=N,2155µm,0.5s
**CRTO Cratere Ovest, 1.07 195** AML AML
comp=E,17450µm,0.5s
CRTO AML AML
comp=N,10200µm,0.4s
**VCRE Vesuvio Crater 1.07 195** AML AML
comp=N,6835µm,0.5s
VCRE AML AML
comp=E,7735µm,0.8s
**GIGS Gran Sasso 1.08 303** P **Pb** 19 28 57.7 -0.9
GIGS AML AML
comp=N,692µm,1.4s
GIGS AML AML
comp=E,736µm,0.4s
GIGS AML AML
comp=E,735µm,0.4s
GIGS AML AML
comp=N,655µm,0.5s
**VTIR Vesuvio Tirone 1.09 195** AML AML
comp=E,2150µm,1.3s
VTIR AML AML
comp=E,2150µm,0.7s
VTIR AML AML
comp=N,2210µm,0.4s
**MCRV Calabrutti - M 1.11 165** P **Pb** 19 28 58.4 -0.8
MCRV AML AML
comp=E,3025µm,0.4s
MCRV AML AML
comp=N,4625µm,0.3s
MCRV AML AML
comp=E,3025µm,1.6s
MCRV AML AML
comp=N,4625µm,1.7s
MCRV AML AML
comp=N,4623µm,0.3s
**TRTR Tortoreto Alta 1.15 326** AML AML
comp=E,12915µm,0.7s
TRTR AML AML
comp=N,6870µm,0.4s
**TERO Teramo 1.16 311** P **Pn** 19 28 59.2 -0.9
TERO AML AML
comp=N,1098µm,0.6s
TERO AML AML
comp=E,1885µm,0.5s
TERO AML AML
comp=N,1098µm,1.4s
TERO AML AML
comp=E,1040µm,0.5s
TERO AML AML
comp=N,1680µm,0.4s
TERO AML AML
comp=E,1886µm,0.5s
TERO AML AML
comp=E,1044µm,0.5s
TERO AML AML
comp=N,1098µm,0.4s
TERO AML AML
comp=N,1680µm,0.4s
**CAMP Campotosto 1.23 304** P **Pn** 19 29 00.2 -0.8
CAMP AML AML
comp=E,1112µm,0.8s
CAMP AML AML
comp=N,1335µm,0.8s
CAMP AML AML
comp=E,1111µm,0.8s
CAMP AML AML
comp=N,1336µm,0.8s
**PALZ Palazzo San Ge 1.27 136** P **Pg** 19 29 01.8 -0.6
PALZ AML AML
comp=E,2120µm,1.5s
PALZ AML AML
comp=N,2510µm,0.6s
PALZ AML AML
comp=E,2120µm,0.5s
PALZ AML AML
comp=N,2508µm,0.6s
PALZ AML AML
comp=E,1960µm,0.7s
**FIAM Fiamignano 1.31 289** P **Pn** 19 29 01.6 -0.5
FIAM AML AML
comp=E,1425µm,0.6s
FIAM AML AML
comp=N,1560µm,0.5s
FIAM AML AML
comp=E,1425µm,1.4s
FIAM AML AML
comp=E,1430µm,0.6s
FIAM AML AML
comp=N,1561µm,0.5s
**SMA1 SAN MARTINO 1.32 306** P **Pn** 19 29 01.8 -0.5
SMA1 AML AML
comp=N,1685µm,1.2s
SMA1 AML AML
comp=N,1685µm,0.8s
SMA1 AML AML
comp=E,2100µm,0.7s
SMA1 AML AML
comp=N,1679µm,0.6s
SMA1 AML AML
comp=E,2099µm,0.7s
**RM33 Pellescritta ( 1.34 300** P **Pn** 19 29 02.2 -0.3
RM33 AML AML
comp=N,1065µm,0.9s
RM33 AML AML
comp=E,1580µm,0.4s
RM33 AML AML
comp=N,1085µm,0.9s
RM33 AML AML
comp=E,1620µm,0.4s
RM33 AML AML
comp=N,1065µm,1.1s
RM33 AML AML
comp=N,1085µm,1.1s
RM33 AML AML
comp=N,981µm,0.6s
RM33 AML AML
comp=E,1581µm,0.4s
**CERT Cerreto 1.35 274** AML AML
comp=N,878µm,0.4s
CERT AML AML
comp=E,1520µm,0.7s
CERT AML AML
comp=E,1520µm,1.3s
**MTRA Matera 1.37 311** P **Pn** 19 29 02.4 -0.5
MTRA AML AML
comp=E,2640µm,1.1s
MTRA AML AML
comp=E,2690µm,1.1s
MTRA AML AML
comp=N,1795µm,0.4s
MTRA AML AML
comp=N,1845µm,0.4s
MTRA AML AML
comp=E,2382µm,0.4s
MTRA AML AML
comp=N,1844µm,0.4s
MTRA AML AML
comp=N,1791µm,0.4s
MTRA AML AML
comp=E,2366µm,0.4s
**RCAV Rocca di Cave 1.38 270** AML AML
comp=N,912µm,0.6s
RCAV AML AML
comp=E,834µm,0.4s
**ACER Acerenza 1.38 141** P **Pb** 19 29 03.1 -0.5
ACER AML AML
comp=E,2145µm,1.6s
ACER AML AML
comp=N,1705µm,1.0s
ACER AML AML
comp=E,2240µm,1.6s
ACER AML AML
comp=N,1815µm,1.0s
ACER AML AML
comp=N,1815µm,1.0s
ACER AML AML
comp=N,1705µm,1.0s
ACER AML AML
comp=E,2240µm,0.4s
ACER AML AML
comp=E,2145µm,0.4s
ACER AML AML
comp=N,1505µm,0.5s
ACER AML AML
comp=E,2136µm,0.6s
ACER AML AML
comp=N,1549µm,0.5s
ACER AML AML
comp=E,2021µm,0.6s
**LATB Latina 1.42 256** P **Pn** 19 29 03.1 -0.4
LATB AML AML
comp=E,302µm,1.0s
LATB AML AML
comp=N,240µm,0.7s
LATB AML AML
comp=E,302µm,1.0s
**VENT Ventotene 1.48 224** P **Pn** 19 29 04.6 +0.2
VENT AML AML
comp=E,1036µm,0.3s
VENT AML AML
comp=N,1085µm,0.8s
VENT AML AML
comp=N,1085µm,1.2s
VENT AML AML
comp=E,1038µm,0.3s
VENT AML AML
comp=N,1060µm,0.3s
**LNSS Leonessa 1.50 300** P **Pn** 19 29 04.6 -0.1
LNSS AML AML
comp=E,1600µm,0.4s
LNSS AML AML
comp=N,1380µm,0.4s
LNSS AML AML
comp=N,1380µm,1.6s
LNSS AML AML
comp=N,1378µm,0.4s
LNSS AML AML
comp=E,1600µm,0.4s
**MF5 Montefalcone A 1.50 319** AML AML
comp=N,2895µm,0.6s
MF5 AML AML
comp=E,2855µm,0.4s
MF5 AML AML
comp=E,2855µm,1.6s
**MMO1 Montemonaco 1.50 314** P **Pg** 19 29 07.1 +0.4
**MTCE Montecelio 1.54 277** AML AML
comp=E,772µm,0.6s
MTCE AML AML
comp=N,644µm,0.8s
**RMP Rome, Mte Porz 1.56 269** AML AML
comp=E,883µm,1.5s
RMP AML AML
comp=E,883µm,0.5s
RMP AML AML
comp=N,1063µm,1.6s
RMP AML AML
comp=N,1063µm,0.4s
**NRCA Norcia 1.58 309** AML AML
comp=N,1250µm,0.5s
NRCA AML AML
comp=E,1295µm,0.7s
NRCA AML AML
comp=E,1400µm,0.7s
NRCA AML AML
comp=E,1295µm,1.3s
NRCA AML AML
comp=E,1400µm,1.3s
NRCA AML AML
comp=N,1260µm,0.5s
**CMPR Campora 1.59 166** P **Pb** 19 29 06.2 -1.0
CMPR AML AML
comp=E,1830µm,0.8s
CMPR AML AML
comp=N,990µm,0.6s
CMPR AML AML
comp=E,1830µm,1.2s
CMPR AML AML
comp=N,990µm,0.6s
CMPR AML AML
comp=E,1830µm,0.8s
**SLCN Sala Consilina 1.60 156** P **Pn** 19 29 06.3 +0.2
SLCN AML AML
comp=E,1955µm,0.4s
SLCN AML AML
comp=N,1290µm,0.4s
SLCN AML AML
comp=N,1169µm,0.4s
SLCN AML AML
comp=E,2125µm,0.4s
SLCN AML AML
comp=N,1168µm,0.4s
**GUMA Gualdo di Mace 1.61 319** AML AML
comp=E,3650µm,0.4s
GUMA AML AML
comp=N,3640µm,0.3s
GUMA AML AML
comp=N,4025µm,0.6s
GUMA AML AML
comp=E,4385µm,1.2s
**AMUR Altamura 1.67 124** P **Pn** 19 29 07.1 +0.2
AMUR AML AML
comp=N,1920µm,0.7s

AMUR AML AML
comp=N,1920µm,1.3s
AMUR AML AML
comp=E,1770µm,0.4s
AMUR AML AML
comp=E,1768µm,0.4s
AMUR AML AML
comp=N,1753µm,0.4s
**FDMO Fiordimonte 1.72 314** AML AML
comp=E,981µm,0.7s
FDMO AML AML
comp=N,1140µm,0.4s
FDMO AML AML
comp=E,981µm,1.3s
**MTSN Montesano sull 1.75 155** P **Pn 19 29 08.4 +0.3**
MTSN AML AML
comp=E,772µm,0.8s
MTSN AML AML
comp=N,674µm,0.6s
MTSN AML AML
comp=E,772µm,1.2s
MTSN AML AML
comp=E,773µm,0.8s
**MIGL Miglionico 1.77 135** AML AML
comp=E,3135µm,0.8s
MIGL AML AML
comp=N,2625µm,0.6s
**CESI CESI - Serrava 1.80 310** AML AML
comp=N,1385µm,0.4s
CESI AML AML
comp=E,955µm,0.5s
**MGR Morigerati 1.82 161** AML AML
comp=E,622µm,0.7s
MGR AML AML
comp=N,544µm,0.7s
**MATE Matera 1.89 129** P **Pn 19 29 10.1 +0.2**
MATE AML AML
comp=E,1181µm,0.5s
MATE AML AML
comp=N,1425µm,0.4s
MATE AML AML
comp=E,1181µm,0.5s
**LTRZ Laterza 1.98 129** P **Pn 19 29 11.6 +0.4**
LTRZ AML AML
comp=E,994µm,0.6s
LTRZ AML AML
comp=N,1082µm,0.5s
LTRZ AML AML
comp=N,1082µm,1.5s
LTRZ AML AML
comp=N,1083µm,0.6s
LTRZ AML AML
comp=E,936µm,0.3s
LTRZ AML AML
comp=E,987µm,0.3s
**NOCI Noci 2.02 121** P **Pn 19 29 12.1 +0.3**
NOCI AML AML
comp=E,1305µm,0.3s
NOCI AML AML
comp=E,1305µm,1.7s
NOCI AML AML
comp=N,1410µm,0.2s
NOCI AML AML
comp=E,1303µm,0.3s
NOCI AML AML
comp=N,1413µm,0.2s
**ATCC AVT- Casa Cast 2.07 311** AML AML
comp=E,1065µm,0.7s
ATCC AML AML
comp=N,754µm,0.9s
**ARVD Arcevia 2.13 321** AML AML
comp=E,306µm,0.8s
ARVD AML AML
comp=N,334µm,1.3s
**MURB Monte Urbino 2.18 311** AML AML
comp=N,859µm,1.1s
MURB AML AML
comp=E,1105µm,0.4s
MURB AML AML
comp=N,921µm,1.2s
MURB AML AML
comp=E,1175µm,0.4s
MURB AML AML
comp=N,859µm,0.9s
MURB AML AML
comp=N,921µm,0.8s
**COR1 Corinaldo 2.21 324** AML AML
comp=E,574µm,1.4s
COR1 AML AML
comp=E,574µm,0.6s
COR1 AML AML
comp=N,1046µm,0.7s
COR1 AML AML
comp=E,518µm,1.1s
**TAR1 Taranto 2.31 124** AML AML
comp=E,1114µm,0.4s
TAR1 AML AML
comp=N,1036µm,0.4s
TAR1 AML AML
comp=E,1114µm,1.6s
TAR1 AML AML
comp=N,1036µm,1.6s
**ATVO AVT- Monte Val 2.32 312** AML AML
comp=N,299µm,0.7s
ATVO AML AML
comp=E,357µm,0.6s
**SACS San Casciano d 2.35 296** AML AML
comp=N,212µm,1.3s
SACS AML AML
comp=E,198µm,1.2s
SACS AML AML
comp=N,206µm,1.0s
SACS AML AML
comp=E,193µm,1.3s
SACS AML AML
comp=N,206µm,1.0s
SACS AML AML
comp=N,212µm,0.7s
SACS AML AML
comp=E,193µm,0.7s
SACS AML AML
comp=E,198µm,0.8s
**PIEI Pieia 2.36 316** AML AML
comp=N,248µm,0.8s
PIEI AML AML
comp=E,375µm,1.1s
PIEI AML AML
comp=N,248µm,1.2s
PIEI AML AML
comp=E,375µm,0.9s
**ATPI Pietralunga - 2.37 313** AML AML
comp=E,432µm,0.9s
ATPI AML AML
comp=N,346µm,1.1s
**ATMI Monte Miggiano 2.37 309** AML AML
comp=E,488µm,0.6s
ATMI AML AML
comp=N,649µm,0.4s
**STON Ston 2.38 64** *e*Pn **Pn 19 29 17.8 +1.1**
STON *e*Sn **Sn 19 29 47.6 +1.8**
**STON Ston 2.38 64** AML AML
comp=E,424µm,0.4s
STON AML AML
comp=N,606µm,0.5s
STON AML AML
comp=E,424µm,1.6s
STON AML AML
comp=N,606µm,0.5s
STON AML AML
comp=E,423µm,0.4s
**STON Ston 2.38 64** *e*Pn **Pb 19 29 19.7 -1.0**
**NARO Abbazia di Nar 2.39 318** P **Pn 19 29 18.9 +2.0**
NARO AML AML
comp=E,289µm,0.8s
NARO AML AML
comp=E,289µm,1.2s
NARO AML AML
comp=N,214µm,0.8s
NARO AML AML
comp=N,172µm,0.3s
NARO AML AML
comp=E,289µm,0.8s
**APEC Apecchio 2.43 315** P **Pb 19 29 20.8 -0.9**
APEC AML AML
comp=E,432µm,1.3s
APEC AML AML
comp=N,375µm,1.0s
APEC AML AML
comp=E,432µm,0.7s
APEC AML AML
comp=N,373µm,0.4s
APEC AML AML
comp=E,394µm,0.5s
**CET2 Cetraro 2.49 159** P **Pn 19 29 18.8 +0.4**
CET2 AML AML
comp=N,596µm,0.4s
CET2 AML AML
comp=E,398µm,0.7s
CET2 AML AML
comp=N,596µm,0.4s
CET2 AML AML
comp=E,398µm,0.7s
**PARC Parchiule 2.59 314** P **Pb 19 29 22.6 -1.7**
PARC AML AML
comp=E,274µm,1.0s
PARC AML AML
comp=N,254µm,0.8s
PARC AML AML
comp=N,253µm,0.8s
PARC AML AML
comp=E,275µm,1.0s
**SSP9 Sansepolcro 2.60 312** P **Pb 19 29 22.9 -1.5**
SSP9 AML AML
comp=E,232µm,1.3s
SSP9 AML AML
comp=N,278µm,1.5s
SSP9 AML AML
comp=E,232µm,0.7s
SSP9 AML AML
comp=N,278µm,0.5s
SSP9 AML AML
comp=N,278µm,1.5s
SSP9 AML AML
comp=E,226µm,1.1s
**CPGN Carpegna, Ital 2.66 318** P **Pb 19 29 23.9 -1.5**
CPGN AML AML
comp=E,356µm,1.0s
CPGN AML AML
comp=N,384µm,1.0s
CPGN AML AML
comp=E,356µm,1.0s
CPGN AML AML
comp=N,429µm,0.8s
CPGN AML AML
comp=E,382µm,0.9s
CPGN AML AML
comp=N,384µm,1.0s
CPGN AML AML
comp=E,356µm,1.0s
**TREB Trebinje 2.78 71** *e*Pn **Pn 19 29 22.9 +0.7**
**A050A Klekovaca 2.91 25** *e*Pn **Pn 19 29 26.3 +2.2**
**ASQU Asqua 2.93 312** AML AML
comp=N,126µm,0.9s
ASQU AML AML
comp=E,148µm,1.5s
**BRY Bratogost 2.97 68** *e*Pn **Pn 19 29 25.5 +0.6**
**BRY Bratogost 2.97 68** || *i* Pn **Pn 19 29 25.8 +0.9**
BRY *i* Sn **Sn 19 30 03.0 +2.5**
**SFI Santa Sofia 2.97 314** P **Pn 19 29 27.9 +3.0**
SFI AML AML
comp=E,112µm,0.9s
SFI AML AML
comp=N,197µm,1.0s
SFI AML AML
comp=E,112µm,1.1s
SFI AML AML
comp=N,259µm,1.0s
SFI AML AML
comp=E,77µm,0.7s
SFI AML AML
comp=E,186µm,0.7s
SFI AML AML
comp=N,197µm,1.0s
**BUM Brajici-Budva 3.09 80** *e*Pn **Pn 19 29 28.3 +1.8**
BUM *i* Sn **Sn 19 30 05.0 +1.6**
**CEME Cevo 3.14 76** *e*Pn **Pn 19 29 28.8 +1.5**
CEME *i* Sn **Sn 19 30 06.4 +1.6**
**LMD Lutirano 3.17 315** P **Pn 19 29 30.6 +3.1**
LMD AML AML
comp=E,111µm,1.5s
LMD AML AML
comp=N,115µm,1.2s
LMD AML AML
comp=N,115µm,0.8s
LMD AML AML
comp=E,111µm,0.5s
LMD AML AML
comp=E,107µm,0.8s
LMD AML AML
comp=N,107µm,0.6s
**NKME Niksic 3.22 72** *e*Pn **Pn 19 29 29.9 +1.6**
NKME *i* Sn **Sn 19 30 08.0 +1.4**
**DRME Dracevica, Mon 3.29 83** *e*Pn **Pn 19 29 30.6 +1.3**
**DRME Dracevica, Mon 3.29 83** *e*Pn **Pn 19 29 31.1 +1.8**
DRME *i* Sn **Sn 19 30 10.2 +1.9**
**SCTE Santa Cesarea 3.31 121** P **Pn 19 29 30.3 +0.8**
SCTE AML AML
comp=E,667µm,0.6s
SCTE AML AML
comp=N,438µm,1.2s
SCTE AML AML
comp=E,667µm,0.6s
SCTE AML AML
comp=N,394µm,0.8s
**UPM Unac-Piva 3.33 65** *e*Pn **Pn 19 29 31.2 +1.3**
**UPM Unac-Piva 3.33 65** *e*Pn **Pn 19 29 31.2 +1.3**
UPM *i* Sn **Sn 19 30 10.6 +1.2**
**SEI Scarperia 3.34 312** P **Pn 19 29 32.8 +2.8**
SEI AML AML
comp=N,266µm,0.5s
SEI AML AML
comp=E,174µm,0.5s
SEI AML AML
comp=E,174µm,0.5s
SEI AML AML
comp=N,266µm,0.6s
**PDG Podgorica 3.37 79** *e*Pn **Pn 19 29 31.8 +1.5**
PDG *e*Sn **Sn 19 30 11.5 +1.3**
**PDG Podgorica 3.37 79** *e*Pn **Pn 19 29 31.6 +1.3**
**PDG Podgorica 3.37 79** *e*Pn **Pn 19 29 31.9 +1.6**
PDG *i* Sn **Sn 19 30 12.0 +1.8**
**BLY Banja Luka 3.38 30** *e*Pn **Pn 19 29 33.5 +3.1**
**MOCL Monte Cuccoli 3.41 310** P **Pn 19 29 33.5 +2.6**
MOCL AML AML
comp=E,79µm,1.6s
MOCL AML AML
comp=N,68µm,1.5s
MOCL AML AML
comp=N,68µm,0.5s
MOCL AML AML
comp=E,79µm,0.4s
MOCL AML AML
comp=N,68µm,1.5s
MOCL AML AML
comp=E,85µm,1.9s
**A051A Mrakovica 3.51 25** *e*Pn **Pn 19 29 34.5 +2.2**
**MTCR Monte La Croce 3.52 309** P **Pn 19 29 35.1 +2.5**
MTCR AML AML
comp=N,72µm,0.5s
MTCR AML AML
comp=E,69µm,0.5s
**MSRU Castanea 3.64 171** P **Pn 19 29 34.7 +0.7**
MSRU AML AML
comp=N,98µm,1.3s
MSRU AML AML
comp=E,98µm,0.8s
**KOME Kolasin 3.64 73** *e*Pn **Pn 19 29 35.9 +1.8**
KOME *e*Sn **Sn 19 30 18.3 +1.2**
**BOJS Bojanci 3.66 5** AML AML
comp=E,642µm,0.9s
**BOJS Bojanci 3.66 5** *e*Pn **Pn 19 29 36.2 +1.9**
**PLE Pljevlja 3.70 65** *e*Pn **Pn 19 29 36.4 +1.4**
PLE *i* Sn **Sn 19 30 19.9 +1.3**
**HAPS Han Pijesak,Bl 3.78 53** *e*Pn **Pn 19 29 39.9 +3.8**
**RUDO Rudo 3.81 61** *e*Pn **Pn 19 29 37.9 +1.6**
**PUK Puka 3.81 86** P **Pn 19 29 38.8 +2.3**
PUK AML AML
comp=E,166µm,0.8s
PUK AML AML
comp=N,252µm,0.7s
PUK AML AML
comp=E,166µm,1.2s
PUK AML AML
comp=N,252µm,1.3s
PUK AML AML
comp=E,166µm,0.5s
PUK AML AML
comp=N,252µm,0.7s
**CARD Cardoso 3.83 306** P **Pn 19 29 39.7 +3.0**
CARD AML AML
comp=E,56µm,0.6s
CARD AML AML
comp=N,58µm,0.9s
CARD AML AML
comp=E,56µm,1.4s
CARD AML AML
comp=E,49µm,0.5s
CARD AML AML
comp=N,54µm,0.3s
**CEY Cerknica 3.89 356** *e*Pn **Pn 19 29 40.6 +3.1**
**PVY Plav 3.91 77** *e*Pn **Pn 19 29 39.6 +1.7**
PVY *i* Sn **Sn 19 30 24.9 +1.2**
**IVA Berane 3.92 73** *e*Pn **Pn 19 29 39.6 +1.7**
IVA *i* Sn **Sn 19 30 25.1 +1.3**
**BBLS Lazi&#263i 3.94 58** *e*Pn **Pn 19 29 40.4 +2.1**
BBLS *e*Sn **Sn 19 30 24.1 -0.3**
**BBLS Lazi&#263i 3.94 58** *e*Pn **Pn 19 29 41.3 +3.0**
**VLC Villacollemand 3.96 307** P **Pn 19 29 40.8 +2.3**
VLC AML AML
comp=E,106µm,1.6s
VLC AML AML
comp=N,125µm,1.6s
VLC AML AML
comp=N,125µm,0.4s
VLC AML AML
comp=E,106µm,0.4s
VLC AML AML
comp=E,28µm,1.0s
VLC AML AML
comp=N,38µm,1.1s
**SARO Sassorosso 3.97 307** P **Pn 19 29 40.8 +2.2**
**SJES Sjenica 4.08 68** *e*Pn **Pn 19 29 41.7 +1.5**
SJES *e*Sn **Sn 19 30 28.1 +0.2**
**SJES Sjenica 4.08 68** *e*Pn **Pn 19 29 42.4 +2.2**
**EQUI Equi 4.11 306** P **Pn 19 29 42.8 +2.4**
**PGF Pioggiola 4.35 281** *e*P **Pn 19 29 47.2 +3.2**
**KEK Kerkira 4.37 118** P **Pn 19 29 45.4 +1.4**
**TEKS Tekeris 4.38 51** *e*Pn **Pn 19 29 45.6 +1.3**
TEKS *e*Sn **Sn 19 30 33.1 -2.2**
**TEKS Tekeris 4.38 51** *e*Pn **Pn 19 29 46.7 +2.4**
**SRN Sarande 4.42 115** P **Pn 19 29 46.2 +1.5**
**DIVS Divibare 4.42 58** *e*Pn **Pn 19 29 47.1 +2.2**
DIVS *e*Sn **Sn 19 30 35.6 -0.8**
**MPRI Monte Prat 4.57 344** P **Pn 19 29 47.3 +0.5**
**OHR Ohrid 4.58 97** *i* Pn **Pn 19 29 49.9 +2.9**
OHR *i* Sn **Sn 19 30 40.9 +0.8**
**OBKA Obir 4.65 358** *e*Pn **Pn 19 29 49.2 +1.2**
comp=N,1.5nm,0.2s,SNR=5.3
**OBKA Obir 4.65 358** *e*Pn **Pn 19 29 48.7 +0.7**
**VSL Villasalto 4.74 242** P **Pn 19 29 49.9 +0.7**
**TRUS Trudelj 4.75 58** *e*Pn **Pn 19 29 50.4 +1.1**
**CTI Castel Tesino 4.76 333** P **Pn 19 29 50.2 +0.6**
**MBAL Monte Baldo - 4.78 325** P **Pn 19 29 50.5 +0.7**
MBAL AML AML
comp=E,117µm,0.3s
MBAL AML AML
comp=N,98µm,0.1s
MBAL AML AML
comp=E,100µm,0.8s
MBAL AML AML
comp=N,162µm,0.6s
**DOSS Dosso del Somm 4.79 328** P **Pn 19 29 50.7 +0.7**
**GRUS Gruza 4.80 63** *e*Pn **Pn 19 29 51.8 +1.8**
GRUS *e*Sn **Sn 19 30 45.1 -0.5**
**IGT Igoumenitsa 4.81 117** P **Pn 19 29 51.7 +1.5**
**SOKA Soboth 4.82 2** *i* Pn **Pn 19 29 51.9 +1.6**
comp=N,1.7nm,0.2s
**MYKA Terra Mystica 4.84 351** *i* Pn **Pn 19 29 52.3 +1.7**
comp=N,1.6nm,0.2s
**VARA Varagna 4.86 326** P **Pn 19 29 51.6 +0.6**
**GORR Gorreto 4.86 306** P **Pn 19 29 54.2 +3.4**
**SELS Selova 4.87 72** *e*Pn **Pn 19 29 52.8 +1.8**
SELS *e*Sn **Sn 19 30 46.4 -0.9**
**PANI Panarotta 4.87 330** || *e*Pn **Pn 19 29 52.8 +1.6**
**PANI Panarotta 4.87 330** P **Pn 19 29 51.9 +0.7**
**NEST Nestorio 4.94 105** P **Pn 19 29 54.6 +2.5**
**LUSI Trento, Gardas 4.95 327** P **Pn 19 29 52.6 +0.5**
**ZIAN Ziano 4.99 333** P **Pn 19 29 53.5 +0.8**
**AVAS Avala Beograd 5.05 54** *e*Pn **Pn 19 29 55.0 +1.6**
AVAS *e*Sn **Sn 19 30 50.6 -1.1**
**FNA Florina 5.08 100** P **Pn 19 29 55.6 +1.8**
**PENT Pentalofos 5.08 107** P **Pn 19 29 56.8 +2.8**
**RONC Roncone 5.10 325** P **Pn 19 29 55.0 +0.7**
**JAN Janina 5.10 114** P **Pn 19 29 56.0 +1.8**
**ABTA Abfaltersbach 5.15 342** *i* Pn **Pn 19 29 56.7 +1.8**
comp=N,0.6nm,0.1s,SNR=6.4
**BARS Barje 5.30 77** *e*Pn **Pn 19 29 58.7 +1.9**
BARS *e*Sn **Sn 19 30 56.2 -1.5**
**KBA Koelnbreinsper 5.32 349** *i* Pn **Pn 19 29 59.3 +2.1**
comp=N,0.9nm,0.2s
**BOVS Bovan 5.39 68** *e*Pn **Pn 19 30 00.4 +2.3**
**TSLK Tsoukalades, L 5.41 122** P **Pn 19 29 59.7 +1.3**
**ARSA Arzberg 5.42 5** *i* Pn **Pn 19 30 01.2 +2.8**
comp=N,2.1nm,0.4s
ARSA *i* Sn **Sn 19 30 59.1 -1.6**
comp=N,6.8nm,0.5s
**LKD2 Lefkada island 5.43 122** P **Pn 19 30 00.3 +1.6**
**KZN Kozani 5.50 104** P **Pn 19 30 01.9 +2.2**
**NYDR Nydri-Lefkada 5.50 123** P **Pn 19 30 01.0 +1.4**
**EVGI Lefkada island 5.53 124** P **Pn 19 30 01.5 +1.4**
**STIP Stip 5.53 89** *i* Pn **Pn 19 30 04.1 +3.9**
STIP *i* Sn **Sn 19 31 05.8 +2.1**
**FSK Fiskardo 5.58 126** P **Pn 19 30 02.0 +1.4**
**KTI Kastanea 5.72 102** P **Pn 19 30 04.5 +1.7**
**SBF Sospel 5.76 293** *e*P **Pn 19 30 07.5 +4.2**
**LESA Schwarzleotal 5.76 346** *i* Pn **Pn 19 30 04.5 +1.2**
comp=N,3.1nm,0.2s
**VLS Valsamata 5.78 128** P **Pn 19 30 04.7 +1.3**
**ZAGS Zajecar 5.81 68** *e*Pn **Pn 19 30 04.5 +0.6**
ZAGS *e*Sn **Sn 19 31 09.1 -1.3**
**WTTA Wattenberg 5.85 338** *i* Pn **Pn 19 30 07.4 +2.8**
comp=N,1.2nm,0.2s
WTTA *e*Sn **Sn 19 31 14.2 +2.5**
comp=N,9.1nm,0.3s
**BIOA Bad Ischl, Aus 5.89 352** *i* Pn **Pn 19 30 07.4 +2.4**
comp=N,2.8nm,0.2s,SNR=5.6
**FETA Feichten 5.92 332** *e*Pn **Pn 19 30 09.0 +3.4**
comp=N,1.1nm,0.3s
FETA *e*Sn **Sn 19 31 13.9 +0.6**
comp=N,3.7nm,0.4s
**WATA Walderalm 5.93 338** *e*Pn **Pn 19 30 08.6 +2.9**
comp=N,2.2nm,0.2s,SNR=5.4
WATA *e*Sn **Sn 19 31 14.6 +1.0**
comp=N,9.6nm,0.3s
**RONA Rosalia, Austr 5.94 10** *e*Pn **Pn 19 30 07.4 +1.8**
comp=N,0.7nm,0.2s
**SQTA Sankt Quirin 5.94 336** *i* Pn **Pn 19 30 08.6 +2.9**
comp=N,2.6nm,0.3s,SNR=7.1
**THL Klokotos Trika 5.95 110** P **Pn 19 30 07.9 +2.1**
**ZAPS Zavoj 5.96 74** *e*Pn **Pn 19 30 07.5 +1.5**
ZAPS *e*Sn **Sn 19 31 11.7 -2.5**
**MOA Molln 6.00 357** *e*Sg **Sn 19 31 14.9 -0.1**
comp=N,5.7nm,0.3s
**TYRN Tyrnavos 6.04 108** P **Pn 19 30 08.8 +1.7**
**MOTA Moosalm 6.08 336** *i* Pn **Pn 19 30 11.6 +3.9**
comp=N,0.5nm,0.3s
**LIT Litokhoron 6.09 104** P **Pn 19 30 09.2 +1.5**
**PVO Paravola 6.09 120** P **Pn 19 30 09.5 +1.8**
**EVR Evrytania 6.11 116** P **Pn 19 30 11.8 +3.7**
**CONA Conrad Observa 6.12 7** *e*Pn **Pn 19 30 10.6 +2.5**
comp=N,1.6nm,0.3s
**MAKR Makrakomi, Fth 6.28 114** P **Pn 19 30 13.3 +2.9**
**LMR La Mourre 6.29 286** *e*P **Pn 19 30 13.5 +3.1**
**ANX Ano Chora 6.36 119** P **Pn 19 30 13.9 +2.4**
**RLS Riolos of Patr 6.38 124** P **Pn 19 30 13.9 +2.2**
**EFP Efpalio 6.44 120** P **Pn 19 30 14.7 +2.2**
**DAVA Damuels 6.46 329** *e*Pn **Pn 19 30 16.3 +3.4**
comp=N,3.3nm,0.5s
DAVA *e*Sn **Sn 19 31 27.3 +0.8**
comp=N,5.1nm,0.3s
**MBDF Montbardon 6.51 299** *e*P **Pn 19 30 16.1 +2.5**
**KLV Kalavryta, Ach 6.82 122** P **Pn 19 30 19.7 +1.9**
**LPG La Plagne 6.87 305** *e*Pn **Pn 19 30 18.9 +0.3**
LPG *e*Sn **Sn 19 31 33.3 -3.5**
comp=N,4.8nm,0.3s
**LPL La Plagne 6.89 305** *e*Pn **Pn 19 30 19.1 +0.3**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LPL | | | | *e*Sn | **Sn** | **19 31 34.7** | **-2.5** |
| | comp=N,6.7nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **6.97 357** | | *e*PN | **Pn** | **19 30 20.7** | **+0.9** |
| CKRC | | | | *e*SN | **Sn** | **19 31 35.8** | **-3.1** |
| **GUR** | **Goura** | **7.00 122** | | P | **Pn** | **19 30 23.0** | **+2.6** |
| **SMRF** | **Simiane la Rot** | **7.09 290** | | *e*P | **Pn** | **19 30 25.4** | **+4.0** |
| **ORIF** | **Oris-en-Rattie** | **7.17 298** | | *e*Pn | **Pn** | **19 30 22.8** | **+0.2** |
| **KRUC** | **Moravsky** | **7.29 8** | | *e*SN | **Sn** | **19 31 43.1** | **-3.7** |
| **KHC** | **Kasperske Hory** | **7.32 354** | | *e*PN | **Pn** | **19 30 24.8** | **+0.2** |
| KHC | | | | *e*SN | **Sn** | **19 31 44.2** | **-3.4** |
| **CABF** | **La Chapelle** | **7.84 310** | | *e*Pn | **Pn** | **19 30 32.5** | **+0.6** |
| CABF | | | | *e*Sn | **Sn** | **19 31 57.0** | **-3.6** |
| | comp=N,6.8nm,0.5s | | | | | | |
| **HINF** | **Hinteralfeld** | **8.20 319** | | *e*Pn | **Pn** | **19 30 36.3** | **-0.4** |
| **CDF** | **Champ du Feu** | **8.43 324** | | *e*Pn | **Pn** | **19 30 40.2** | **+0.3** |
| CDF | | | | *e*Sn | **Sn** | **19 32 11.2** | **-3.7** |
| | comp=N,4.3nm,0.2s | | | | | | |
| **HAU** | **Haudompre** | **8.57 319** | | *e*Pn | **Pn** | **19 30 41.8** | **0.0** |
| HAU | | | | *e*Sn | **Sn** | **19 32 12.6** | **-5.8** |
| | comp=N,17nm,0.3s | | | | | | |
| **SMF** | **Signal de Mont** | **9.19 305** | | *e*Pn | **Pn** | **19 30 50.1** | **-0.2** |
| SMF | | | | *e*Sn | **Sn** | **19 32 28.6** | **-5.0** |
| | comp=N,22nm,1.0s | | | | | | |
| **PAGF** | **Fort de Pagny** | **9.25 319** | | *e*Sn | **Sn** | **19 32 31.0** | **-4.1** |
| | comp=N,2.3nm,0.3s | | | | | | |
| **LOR** | **Lormes** | **9.49 308** | | *e*Pn | **Pn** | **19 30 54.5** | **+0.2** |
| | baz=122 | | | | | | |
| LOR | | | | *e*Sn | **Sn** | **19 32 35.6** | **-5.2** |
| | comp=N,10.0nm,0.8s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **9.55 317** | | *e*Sn | **Sn** | **19 32 37.6** | **-4.8** |
| | comp=N,0.3nm,0.1s | | | | | | |

*NEIC* **16** *19:57:23.3±1.8, 69.°53N±0.°02×144.°30W±0.°04, h10km±1km, Error ellipse: s-maj=3.7km s-min=2.6km az=13.0*

**AEIC 16 19:57:22.8±2.1, 69.°49N±0.°02×144.°26W±0.°04, h4km±5km, ML3.5, ML3.5/116(NEIC), Error ellipse: s-maj=3.5km s-min=2.0km az=175.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **55** | | Pg | 19 57 28.0 | +0.7 |
| C27K | | | | | Sg | 19 57 31.2 | +0.7 |
| **C26K** | **Camden Bay** | **0.49** | **332** | | Sg | 19 57 39.7 | +1.3 |
| **D25K** | **Kavik River** | **0.77** | **258** | | Pg | 19 57 37.4 | -0.1 |
| D25K | | | | | Sg | 19 57 48.2 | +0.8 |
| **D27M** | **Malcolm River** | **1.19** | **100** | | Sb | 19 58 02.4 | +0.6 |
| **D27M** | **Malcolm River** | **1.19** | **100** | | Pg | 19 57 44.5 | -1.2 |
| **D27M** | **Malcolm River** | **1.19** | **100** | IAML | | 19 58 07.3 | |
| | comp=N,1μm,0.5s | | | | | | |
| D27M | | | | IAML | | 19 58 08.3 | |
| | comp=E,937nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.57** | **281** | | Pb | 19 57 52.5 | +0.1 |
| C24K | | | | IAML | | 19 58 18.3 | |
| | comp=E,738nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.63** | **142** | | Sg | 19 58 16.1 | +1.1 |
| **E27K** | **Coleen River** | **1.63** | **142** | | Pb | 19 57 53.1 | -0.3 |
| **E27K** | **Coleen River** | **1.63** | **142** | IAML | | 19 58 18.2 | |
| | comp=N,443nm,0.6s | | | | | | |
| E27K | | | | IAML | | 19 58 19.3 | |
| | comp=E,546nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **260** | | Sg | 19 58 18.0 | +2.1 |
| **D24K** | **Happy Valley** | **1.66** | **260** | | Pg | 19 57 54.3 | -0.2 |
| **D24K** | **Happy Valley** | **1.66** | **260** | IAML | | 19 58 21.7 | |
| | comp=E,960nm,0.8s | | | | | | |
| D24K | | | | IAML | | 19 58 23.4 | |
| | comp=N,917nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81** | **179** | | Pg | 19 57 57.3 | 0.0 |
| F26K | | | | IAML | | 19 58 25.6 | |
| | comp=E,598nm,0.6s | | | | | | |
| F26K | | | | IAML | | 19 58 28.3 | |
| | comp=N,545nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **115** | Pn | Pn | 19 57 55.3 | -1.0 |
| E28M | | | | Pg | Pb | 19 57 58.5 | +0.1 |
| E28M | | | | IAML | | 19 58 29.6 | |
| | comp=N,381nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **1.96** | **92** | | Pb | 19 57 58.6 | -0.4 |
| **F25K** | **Christian Rive** | **1.97** | **196** | | Pb | 19 57 59.8 | +0.4 |
| F25K | | | | IAML | | 19 58 29.8 | |
| | comp=E,475nm,0.6s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.08** | **183** | | Pb | 19 58 00.6 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **248** | | Pb | 19 58 00.0 | -1.3 |
| TOLK | | | | IAML | | 19 58 37.3 | |
| | comp=E,351nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 19 58 39.9 | |
| | comp=N,265nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.09** | **229** | Pn | Pn | 19 57 57.5 | -1.3 |
| E24K | | | | | Pb | 19 58 01.1 | -0.2 |
| **C23K** | **Itkillik River** | **2.25** | **282** | | Pn | 19 58 02.3 | +1.6 |
| **D23K** | **Nanushuk River** | **2.35** | **260** | | Pb | 19 58 04.1 | -1.6 |
| **F24K** | **Squaw Lake** | **2.39** | **216** | | Pb | 19 58 04.8 | -1.6 |
| F24K | | | | IAML | | 19 58 45.4 | |
| | comp=N,194nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.42** | **236** | | Pb | 19 58 05.2 | -1.8 |
| **F28M** | **Old Crow** | **2.48** | **137** | | Pn | 19 58 05.8 | +1.8 |
| F28M | | | | IAML | | 19 58 46.5 | |
| | comp=N,263nm,0.6s | | | | | | |
| F28M | | | | IAML | | 19 58 52.4 | |
| | comp=E,237nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.55** | **113** | | Pb | 19 58 07.1 | -2.0 |
| E29M | | | | IAML | | 19 58 47.6 | |
| | comp=E,178nm,0.6s | | | | | | |
| E29M | | | | IAML | | 19 58 55.6 | |
| | comp=N,212nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.82** | **195** | | Pn | 19 58 10.2 | +1.5 |
| **G27K** | **Doyon Strip** | **2.87** | **159** | | Pn | 19 58 11.6 | +2.2 |
| **G24K** | **Hadweenzic Riv** | **3.05** | **205** | Pn | Pn | 19 58 13.5 | +1.6 |
| G24K | | | | IAML | | 19 59 01.9 | |
| | comp=E,130nm,0.9s | | | | | | |
| G24K | | | | IAML | | 19 59 06.2 | |
| | comp=N,181nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **3.07** | **262** | Pn | Pn | 19 58 13.6 | +1.5 |
| D22K | | | | IAML | | 19 59 13.1 | |
| | comp=E,161nm,1.0s | | | | | | |
| D22K | | | | IAML | | 19 59 21.1 | |
| | comp=N,146nm,0.9s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.27** | **289** | Pn | Pn | 19 58 16.5 | +1.7 |
| **G29M** | **Pine Creek** | **3.48** | **135** | | Pn | 19 58 19.5 | +1.7 |
| **G23K** | **Bananza Creek** | **3.53** | **220** | Pn | Pn | 19 58 19.9 | +1.5 |
| G23K | | | | IAML | | 19 59 21.2 | |
| | comp=E,100nm,0.8s | | | | | | |
| G23K | | | | IAML | | 19 59 22.2 | |
| | comp=N,83nm,1.1s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.63** | **277** | Pn | Pn | 19 58 21.0 | +1.2 |
| B21K | | | | IAML | | 19 59 06.0 | |
| | comp=E,106nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.64** | **117** | | Pn | 19 58 22.8 | +2.9 |
| **E21K** | **Killik River** | **3.66** | **258** | | Pn | 19 58 21.2 | +1.0 |
| E21K | | | | IAML | | 19 59 28.5 | |
| | comp=E,104nm,0.8s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.91** | **126** | Pn | Pn | 19 58 25.9 | +2.2 |
| G30M | | | | IAML | | 19 59 42.7 | |
| | comp=N,66nm,1.0s | | | | | | |
| G30M | | | | IAML | | 19 59 47.0 | |
| | comp=E,68nm,0.9s | | | | | | |
| **H24K** | **Noodor Dome** | **3.92** | **202** | | Pn | 19 58 25.2 | +1.4 |
| **H29M** | **Whitestone** | **3.97** | **143** | Pn | Pn | 19 58 26.2 | +1.7 |
| H29M | | | | IAML | | 19 59 37.4 | |
| | comp=N,80nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.02** | **188** | Pn | Pn | 19 58 26.5 | +1.2 |
| PRP | | | | IAML | | 19 59 22.1 | |
| | comp=N,59nm,0.7s | | | | | | |
| PRP | | | | IAML | | 19 59 39.0 | |
| | comp=E,51nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.06** | **102** | | Pn | 19 58 27.0 | +1.4 |
| **F21K** | **Alatna River** | **4.11** | **241** | Pn | Pn | 19 58 27.9 | +1.6 |
| F21K | | | | IAML | | 19 59 38.4 | |
| | comp=E,54nm,0.8s | | | | | | |
| F21K | | | | IAML | | 19 59 45.9 | |
| | comp=N,59nm,0.9s | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **211** | | Pn | 19 58 29.4 | +1.8 |
| H23K | | | | IAML | | 19 59 46.0 | |
| | comp=E,60nm,0.9s | | | | | | |
| H23K | | | | IAML | | 19 59 48.6 | |
| | comp=N,58nm,1.0s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.22** | **174** | | Pn | 19 58 30.6 | +2.6 |
| I26K | | | | IAML | | 19 59 46.9 | |
| | comp=E,66nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.23** | **134** | Pn | Pn | 19 58 30.6 | +2.5 |
| **F31M** | **Tsiigehtchic** | **4.39** | **113** | Pn | Pn | 19 58 32.3 | +2.1 |
| F31M | | | | IAML | | 19 59 48.2 | |
| | comp=N,48nm,0.7s | | | | | | |
| F31M | | | | IAML | | 19 59 55.6 | |
| | comp=E,58nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **4.39** | **156** | Pn | Pn | 19 58 32.1 | +1.9 |
| I28M | | | | IAML | | 19 59 28.6 | |
| | comp=N,46nm,0.5s | | | | | | |
| I28M | | | | IAML | | 19 59 55.2 | |
| | comp=E,61nm,1.2s | | | | | | |
| **B20K** | **Meade River** | **4.51** | **283** | Pn | Pn | 19 58 33.3 | +1.5 |
| B20K | | | | IAML | | 20 00 01.0 | |
| | comp=N,59nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **4.53** | **120** | | Pn | 19 58 32.3 | +0.2 |
| G31M | | | | IAML | | 19 59 58.2 | |
| | comp=E,48nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.56** | **197** | | Pn | 19 58 33.0 | +0.4 |
| POKR | | | | IAML | | 19 59 31.2 | |
| | comp=N,40nm,0.4s | | | | | | |
| POKR | | | | IAML | | 20 00 02.9 | |
| | comp=E,44nm,0.9s | | | | | | |
| **G21K** | **Allakaket** | **4.58** | **234** | | Pn | 19 58 33.1 | +0.3 |
| G21K | | | | IAML | | 19 59 55.7 | |
| | comp=N,42nm,1.0s | | | | | | |
| **I29M** | **Ogilvie Camp.** | **4.74** | **148** | Pn | Pn | 19 58 35.6 | +0.6 |
| **I23K** | **Minto, Yukon-K** | **4.79** | **207** | Pn | Pn | 19 58 37.4 | +1.8 |
| I23K | | | | IAML | | 20 00 18.7 | |
| | comp=E,34nm,1.0s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **201** | | Pn | 19 58 37.5 | +1.6 |
| MDM | | | | IAML | | 20 00 06.7 | |
| | comp=N,34nm,0.7s | | | | | | |
| **COLA** | **College** | **4.84** | **198** | | Pn | 19 58 38.6 | +2.2 |
| **IL31** | | **4.85** | **193** | | Pn | 19 58 39.0 | +2.5 |
| **ILAR** | **Eielson Array** | **4.85** | **193** | | Pn | 19 58 38.5 | +2.0 |
| **EGAK** | **Eagle** | **4.89** | **164** | Pn | Pn | 19 58 39.0 | +2.0 |
| EGAK | | | | IAML | | 19 59 41.5 | |
| | comp=N,42nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 20 00 12.5 | |
| | comp=N,43nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.91** | **246** | Pn | Pn | 19 58 39.0 | +1.6 |
| F20K | | | | IAML | | 20 00 04.8 | |
| | comp=N,25nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **4.92** | **186** | | Pn | 19 58 40.1 | +2.6 |
| J25K | | | | IAML | | 20 00 01.6 | |
| | comp=N,26nm,1.0s | | | | | | |
| J25K | | | | IAML | | 20 00 12.4 | |
| | comp=E,41nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.02** | **177** | | Pn | 19 58 41.6 | +2.7 |
| J26L | | | | IAML | | 19 59 44.2 | |
| | comp=E,42nm,0.6s | | | | | | |
| J26L | | | | IAML | | 19 59 44.4 | |
| | comp=N,33nm,0.4s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.04** | **230** | | Pn | 19 58 41.2 | +2.1 |
| **H21K** | **Melozitna Rive** | **5.05** | **224** | Pn | Pn | 19 58 41.8 | +2.5 |
| H21K | | | | IAML | | 20 00 13.3 | |
| | comp=N,30nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.06** | **198** | Pn | Pn | 19 58 41.7 | +2.3 |
| **D19K** | **Kuna River** | **5.08** | **265** | Pn | Pn | 19 58 41.4 | +1.6 |
| **MLY** | **Manley** | **5.13** | **212** | Pn | Pn | 19 58 41.3 | +0.8 |
| **E19K** | **Redstone River** | **5.19** | **253** | Pn | Pn | 19 58 42.0 | +0.8 |
| E19K | | | | IAML | | 19 59 49.4 | |
| | comp=N,31nm,0.5s | | | | | | |
| E19K | | | | IAML | | 20 00 22.6 | |
| | comp=E,29nm,0.9s | | | | | | |
| **HDA** | **Harding Lake** | **5.21** | **193** | Pn | Pn | 19 58 43.9 | +2.4 |
| HDA | | | | IAML | | 20 00 14.6 | |
| | comp=N,31nm,1.0s | | | | | | |
| **I30M** | **Mount Dempster** | **5.25** | **141** | Pn | Pn | 19 58 44.0 | +1.8 |
| I30M | | | | IAML | | 19 59 45.9 | |
| | comp=N,31nm,0.6s | | | | | | |
| **WRH** | **Wood River Hil** | **5.26** | **198** | | Pn | 19 58 44.1 | +1.9 |
| WRH | | | | IAML | | 20 00 15.1 | |
| | comp=E,24nm,0.7s | | | | | | |
| **NEA2** | **Nenana** | **5.27** | **203** | | Pn | 19 58 43.4 | +1.2 |
| NEA2 | | | | IAML | | 20 00 23.6 | |
| | comp=E,22nm,1.0s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.45** | **273** | Pn | Pn | 19 58 46.4 | +1.6 |
| **SCRK** | **Sand Creek** | **5.54** | **179** | Pn | Pn | 19 58 48.0 | +1.9 |
| **K27K** | **Chicken** | **5.55** | **170** | | Pn | 19 58 47.7 | +1.6 |
| **J29N** | **Klondike Camp** | **5.59** | **152** | | Pn | 19 58 48.2 | +1.5 |
| **F19K** | **Shaleruckik Mo** | **5.70** | **249** | Pn | Pn | 19 58 49.3 | +1.1 |
| **BWN** | **Browne** | **5.72** | **203** | | Pn | 19 58 50.1 | +1.6 |
| **K24K** | **Donnelly Dome** | **5.74** | **187** | | Pn | 19 58 51.4 | +2.5 |
| **DAWY** | **Dawson** | **5.78** | **158** | Pn | Pn | 19 58 52.0 | +2.7 |
| **J30M** | **Hart River** | **5.83** | **144** | Pn | Pn | 19 58 52.1 | +2.0 |
| **DOT** | **Dot Lake** | **5.87** | **179** | | Pn | 19 58 53.2 | +2.7 |
| **G19K** | **Purcell Mounta** | **5.90** | **241** | Pn | Pn | 19 58 52.9 | +1.9 |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **209** | Pn | Pn | 19 58 54.4 | +1.7 |
| **C18K** | **Utukok River** | **6.12** | **270** | Pn | Pn | 19 58 55.2 | +1.1 |
| **H19K** | **Roundabout Mou** | **6.13** | **235** | | Pn | 19 58 56.3 | +2.2 |
| **I20K** | **Naaghedeneel** | **6.16** | **225** | Pn | Pn | 19 58 56.4 | +1.9 |
| **K29M** | **Barlow Dome** | **6.27** | **152** | Pn | Pn | 19 58 58.3 | +2.2 |
| **E18K** | **Tukpahlearik C** | **6.36** | **259** | Pn | Pn | 19 58 58.6 | +1.3 |
| **L26K** | **Log Cabin Wild** | **6.50** | **176** | Pn | Pn | 19 59 02.0 | +2.8 |
| **BCAR** | **Beaver Creek A** | **6.53** | **170** | Pn | Pn | 19 59 01.6 | +2.0 |
| **L27K** | **Beaver Creek,** | **6.53** | **170** | Pn | Pn | 19 59 02.2 | +2.6 |
| **G18K** | **Tagagawik** | **6.55** | **243** | | Pn | 19 59 02.3 | +2.4 |
| **DHY** | **Denali Highway** | **6.56** | **192** | Pn | Pn | 19 59 03.9 | +3.8 |
| **PAX** | **Paxson** | **6.57** | **185** | | Pn | 19 59 03.7 | +3.5 |
| **MENT** | **Mentasta** | **6.59** | **178** | | Pn | 19 59 03.4 | +3.0 |
| **J20K** | **Nowinta River** | **6.60** | **221** | Pn | Pn | 19 59 01.8 | +1.2 |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | Pn | Pn | 19 59 02.5 | -0.1 |
| **RDOG** | **Red Dog Mine** | **6.91** | **267** | Pn | Pn | 19 59 04.6 | -0.2 |
| **WAT7** | **Susitna Watana** | **6.94** | **198** | | Pn | 19 59 07.8 | +2.5 |
| **F17K** | **Baldwin Pennin** | **7.07** | **253** | | Pn | 19 59 07.2 | +0.2 |
| **D17K** | **Noatak River** | **7.11** | **264** | | Pn | 19 59 08.1 | +0.6 |
| **HARP** | **HAARP** | **7.13** | **183** | | Pn | 19 59 11.1 | +3.2 |
| **M26K** | **Nabesna, AK** | **7.14** | **175** | Pn | Pn | 19 59 09.3 | +1.3 |
| **M27K** | **Edge Creek, AK** | **7.23** | **171** | | Pn | 19 59 10.9 | +1.6 |
| **M29M** | **Somme Creek** | **7.46** | **159** | | Pn | 19 59 15.1 | +2.7 |
| **H17K** | **Granite Mounta** | **7.59** | **241** | | Pn | 19 59 15.8 | +1.7 |
| **BMRM** | **Bremner River** | **8.56** | **181** | | Pn | 19 59 30.1 | +2.7 |
| **BARK** | **Barkley Ridge** | **9.16** | **174** | | Pn | 19 59 39.9 | +4.2 |

**ROM 16 19:59:39.6±0.2, 41.°892N±0.°009×14.°891E±0.°009, h21km±1km, ML1.8/24, Error ellipse: s-maj=1.1km s-min=0.2km az=209.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRES** | **Fresagrandinar** | **0.18** | **296** | P | Pb | 19 59 45.1 | -0.4 |
| FRES | | | | S | Sb | 19 59 48.3 | -1.4 |
| FRES | | | | AML | AML | | |
| | comp=E,850μm,0.2s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,428μm,1.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,770μm,0.4s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,314μm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.24** | **177** | P | Pb | 19 59 45.4 | -0.3 |
| CIGN | | | | S | Sb | 19 59 49.5 | -0.4 |
| CIGN | | | | AML | AML | | |
| | comp=E,197μm,0.3s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,194μm,0.5s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.26** | **136** | P | Pb | 19 59 45.8 | 0.0 |
| MELA | | | | S | Sb | 19 59 50.5 | +0.4 |
| MELA | | | | AML | AML | | |
| | comp=E,354μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,359μm,0.9s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,358μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,373μm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,280μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,353μm,0.2s | | | | | | |
| **TRIV** | **Trivento** | **0.28** | **244** | P | Pb | 19 59 46.4 | +0.3 |
| TRIV | | | | S | Sb | 19 59 51.5 | +0.8 |
| TRIV | | | | AML | AML | | |
| | comp=E,155μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,170μm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,164μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,180μm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,181μm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,181μm,1.1s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,170μm,1.1s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,156μm,0.4s | | | | | | |
| **GATE** | **Gambatesa** | **0.38** | **178** | P | Pb | 19 59 47.9 | +0.3 |
| **BSSO** | **Busso** | **0.41** | **213** | P | Pb | 19 59 48.4 | +0.3 |
| BSSO | | | | S | Sb | 19 59 54.9 | +1.0 |
| BSSO | | | | AML | AML | | |
| | comp=E,34μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,43μm,0.5s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,43μm,1.5s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,82μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,113μm,0.5s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,34μm,0.3s | | | | | | |
| **MIDA** | **Miranda** | **0.54** | **243** | P | Pb | 19 59 50.3 | -0.2 |
| MIDA | | | | S | Sb | 19 59 57.6 | -0.3 |
| MIDA | | | | AML | AML | | |
| | comp=E,192μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,115μm,0.5s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.55** | **287** | P | Pb | 19 59 50.6 | -0.1 |
| LPEL | | | | AML | AML | | |
| | comp=E,98μm,1.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,71μm,1.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,98μm,0.9s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,71μm,0.5s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.58** | **251** | P | Pb | 19 59 50.9 | -0.5 |
| RNI2 | | | | AML | AML | | |
| | comp=E,168μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,218μm,1.0s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,207μm,1.0s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,164μm,0.2s | | | | | | |

**ROM 16 20:00:04.3±0.1, 41.°858N±0.°007×14.°822E±0.°007, h19km±1km, ML2.0/45, 2C-2D, Error ellipse: s-maj=0.7km s-min=0.4km az=208.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRES** | **Fresagrandinar** | **0.16** | **316** | P | Pg | 20 00 09.1 | +0.3 |
| FRES | | | | S | Sg | 20 00 12.3 | +0.4 |
| FRES | | | | AML | AML | | |
| | comp=N,1365μm,0.7s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,2475μm,0.4s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,1365μm,1.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,783μm,0.1s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,1099μm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **163** | ⇓P | Pg | 20 00 09.8 | +0.3 |
| CIGN | | | | S | Sg | 20 00 13.3 | +0.3 |
| CIGN | | | | AML | AML | | |
| | comp=N,504μm,0.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,535μm,0.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,535μm,1.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,504μm,1.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,263μm,0.2s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,182μm,0.3s | | | | | | |
| **TRIV** | **Trivento** | **0.22** | **246** | P | Pg | 20 00 10.4 | +0.7 |
| TRIV | | | | S | Sg | 20 00 14.1 | +0.7 |
| TRIV | | | | AML | AML | | |
| | comp=E,722μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,620μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,758μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,670μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,670μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,670μm,1.6s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,620μm,1.6s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,722μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,252μm,0.2s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,404μm,0.0s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,670μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,382μm,0.2s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.27** | **124** | ⇓P | Pb | 20 00 10.5 | 0.0 |
| MELA | | | | S | Sg | 20 00 15.4 | +0.8 |
| MELA | | | | AML | AML | | |
| | comp=E,942μm,0.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,838μm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1024μm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,894μm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,894μm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,942μm,0.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1024μm,1.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,942μm,1.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,718μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,906μm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,828μm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| **GATE** | **Gambatesa** | **0.35** | **169** | AML | AML | | |
| | comp=N,458μm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,505μm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,505μm,0.3s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,505μm,1.7s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,505μm,1.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,402μm,0.6s | | | | | | |
| **BSSO** | **Busso** | **0.35** | **209** | ⇑P | Pb | 20 00 12.4 | +0.2 |
| BSSO | | | | S | Sb | 20 00 17.5 | +0.1 |
| BSSO | | | | AML | AML | | |
| | comp=N,69μm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,176μm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,172μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,84μm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,172μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,176μm,1.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,84μm,0.9s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,68μm,0.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,64μm,0.2s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,118μm,0.0s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,53μm,0.2s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **191** | ⇑P | Pg | 20 00 13.8 | 0.0 |
| SACR | | | | S | Sb | 20 00 21.0 | +0.4 |
| SACR | | | | AML | AML | | |
| | comp=N,115μm,1.1s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,148μm,0.7s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,115μm,0.9s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SACR | | | | AML | AML | | |
| | comp=N,85μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,141μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,126μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,103μm,0.3s | | | | | | |
| **MIDA** | **Miranda** | **0.48 243** | | P | Pg | 20 00 13.8 | -0.2 |
| MIDA | | | | S | Sb | 20 00 20.9 | +0.1 |
| MIDA | | | | AML | AML | | |
| | comp=N,388μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,610μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,388μm,0.1s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,532μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,212μm,0.1s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,610μm,0.2s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.51 292** | | P | Pg | 20 00 14.6 | -0.1 |
| LPEL | | | | AML | AML | | |
| | comp=N,304μm,1.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,300μm,1.3s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,300μm,0.7s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,304μm,0.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,297μm,0.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,245μm,0.1s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.52 253** | | P | Pb | 20 00 14.9 | 0.0 |
| RNI2 | | | | AML | AML | | |
| | comp=E,671μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,821μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,896μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,737μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,822μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,229μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,195μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,895μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,821μm,0.1s | | | | | | |
| **APRC** | **Apricena** | **0.55 100** | | P | Pb | 20 00 14.9 | -0.3 |
| APRC | | | | AML | AML | | |
| | comp=N,390μm,1.4s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,221μm,1.5s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,390μm,0.6s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,207μm,0.1s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,352μm,0.1s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,212μm,0.1s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.55 153** | | P | Pg | 20 00 15.6 | +0.2 |
| MOCO | | | | AML | AML | | |
| | comp=N,45μm,0.2s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,75μm,0.3s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.58 215** | | P | Pb | 20 00 15.3 | -0.4 |
| SGG | | | | AML | AML | | |
| | comp=E,79μm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,72μm,0.3s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,79μm,1.6s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.62 225** | | P | Pb | 20 00 16.1 | -0.4 |
| VAGA | | | | AML | AML | | |
| | comp=N,184μm,0.4s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,183μm,0.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,193μm,0.4s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,170μm,0.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,65μm,0.0s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,183μm,0.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,193μm,0.4s | | | | | | |
| **SGRT** | **San Giovanni R** | **0.70 98** | | AML | AML | | |
| | comp=E,200μm,1.2s | | | | | | |
| SGRT | | | | AML | AML | | |
| | comp=N,188μm,0.4s | | | | | | |
| **INTR** | **Introdacqua** | **0.70 283** | | P | Pb | 20 00 17.4 | -0.5 |
| INTR | | | | AML | AML | | |
| | comp=E,87μm,0.4s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,202μm,1.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,87μm,1.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,173μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,128μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,86μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,171μm,0.3s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.83 100** | | AML | AML | | |
| | comp=N,173μm,0.3s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,72μm,1.1s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,173μm,1.7s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,72μm,0.9s | | | | | | |
| **POFI** | **Posta Fibreno** | **0.84 261** | | AML | AML | | |
| | comp=N,73μm,0.5s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,84μm,1.3s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,84μm,0.7s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=N,73μm,1.5s | | | | | | |
| **PAOL** | **Paolisi** | **0.85 193** | | AML | AML | | |
| | comp=E,129μm,0.5s | | | | | | |
| PAOL | | | | AML | AML | | |
| | comp=N,95μm,0.7s | | | | | | |
| PAOL | | | | AML | AML | | |
| | comp=N,95μm,1.3s | | | | | | |
| **T0110** | **Collepietro** | **0.86 296** | | AML | AML | | |
| | comp=E,120μm,1.2s | | | | | | |
| T0110 | | | | AML | AML | | |
| | comp=N,144μm,0.6s | | | | | | |
| T0110 | | | | AML | AML | | |
| | comp=E,120μm,0.8s | | | | | | |
| T0110 | | | | AML | AML | | |
| | comp=N,144μm,1.4s | | | | | | |
| **CAFE** | **Carife** | **0.89 159** | | AML | AML | | |
| | comp=E,136μm,0.4s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=N,95μm,0.3s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=N,95μm,1.7s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=E,136μm,1.6s | | | | | | |
| **MTMR** | **Montemarano** | **0.95 172** | | AML | AML | | |
| | comp=N,250μm,0.3s | | | | | | |
| MTMR | | | | AML | AML | | |
| | comp=E,212μm,0.3s | | | | | | |
| **SNAL** | **S. Angelo Dei** | **0.98 163** | | AML | AML | | |
| | comp=E,138μm,1.1s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,138μm,0.9s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,128μm,1.1s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,128μm,0.9s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=N,160μm,0.5s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=N,158μm,0.5s | | | | | | |

*IDC **16** 20:04:12.3±1.2,23.°40N×143.°94E,h0km,mb3.9/8, mbtmp3.8/10,ML2.9/2,Error ellipse: s-maj=38.0km s-min=19.6km az=81.0*
*NEIC **16** 20:04:14.8±1.5,23.°4N±0.°1×143.°7E±0.°3,h10km±2km, mb4.3/10,Error ellipse: s-maj=54.3km s-min=4.8km az=69.0*

**ISC 16 20:04:15.7±0.9,23.°52N±0.°08×144.°0E±0.°2,h28km,n27, σ1°14/29,mb4.1/14,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.91** | **336** | Pn | **Pn** | **20 05 14.4** | **+0.5** |
| JCJ | | | | Sn | **Sn** | **20 05 59.4** | **+0.5** |
| **JCJ** | **Chichijima** | **3.91** | **336** | Pn | **Pn** | **20 05 11.6** | **-2.3** |
| | 9.8nm,0.3s,baz=118,slow=24,SNR=6.4 | | | | | | |
| JCJ | | | | Sn | **Sn** | **20 05 56.9** | **-2.0** |
| | 14nm,0.3s,baz=285,slow=23,SNR=7.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.90** | **340** | Pn | **Pn** | **20 07 30.1** | **-0.8** |
| | baz=161,slow=11,SNR=2.4 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **JMM** | **Marumori** | **14.56** | **350** | Pn | **Pn** | **20 07 40.6** | **+0.8** |
| **KSRS** | **Korea Array** | **19.56** | **319** | P | **Pn** | **20 08 41.9** | **-0.8** |
| | 0.1nm,0.3s,baz=131,slow=14,SNR=2.6 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **COEN** | **Coen** | **37.25** | **181** | P | **P** | **20 11 24.4** | **-0.8** |
| **SONM** | **Songino Array** | **38.43** | **319** | P | **P** | **20 11 35.4** | **+0.4** |
| | 0.5nm,0.7s,baz=122,slow=6.4,SNR=4.0 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.21** | **272** | P | **P** | **20 12 07.0** | **+0.5** |
| | 0.4nm,0.3s,baz=72,slow=8.6,SNR=4.3 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.02** | **193** | P | **P** | **20 12 20.1** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 20 12 53.7 | |
| | comp=Z,4.7nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.19** | **193** | P | **P** | **20 12 22.2** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 20 12 31.6 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.20** | **193** | P | **P** | **20 12 22.2** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 20 12 52.0 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.20** | **193** | P | **P** | **20 12 22.1** | **-0.4** |
| | comp=Z,0.9nm,0.6s,baz=16,slow=9.2,SNR=19 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **45.07** | **205** | P | **P** | **20 12 28.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **47.91** | **192** | P | **P** | **20 12 51.2** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=16,slow=9.2,SNR=1.3 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.25** | **321** | P | **P** | **20 13 31.2** | **-0.4** |
| ZAA0 | | | | IAmb | IAmb | 20 13 35.6 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.25** | **321** | P | **P** | **20 13 32.1** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **53.25** | **321** | P | **P** | **20 13 33.0** | **+1.3** |
| | comp=Z,1.4nm,0.7s,baz=124,slow=7.4,SNR=5.7 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **54.02** | **312** | P | **P** | **20 13 38.8** | **+1.4** |
| **MKAR** | **Makanchi Array** | **54.02** | **312** | P | **P** | **20 13 37.3** | **-0.1** |
| **MKAR** | **Makanchi Array** | **54.02** | **312** | P | **P** | **20 13 39.1** | **+1.6** |
| | comp=Z,1.7nm,0.7s,baz=93,slow=8.5,SNR=13 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.71** | **316** | P | **P** | **20 13 58.1** | **+1.4** |
| | comp=Z,1.7nm,0.8s,baz=92,slow=7.5,SNR=12 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **60.10** | **28** | P | **P** | **20 14 21.8** | **+1.7** |
| | comp=Z,0.5nm,0.9s,baz=249,slow=7.1,SNR=4.8 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.77** | **319** | P | **P** | **20 14 33.7** | **+1.9** |
| | comp=Z,3.8nm,0.7s,baz=89,slow=7.5,SNR=24 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **61.84** | **319** | P | **P** | **20 14 31.8** | **-0.4** |
| BRVK | | | | IAmb | IAmb | 20 14 34.9 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **62.51** | **308** | P | **P** | **20 14 37.1** | **+0.3** |
| **KKAR** | **Karatay Array** | **62.51** | **308** | P | **P** | **20 14 37.9** | **+1.0** |
| **E28M** | **Babbage River** | **63.40** | **24** | P | **P** | **20 14 40.7** | **-1.7** |

**ROM 16 20:07:07.3±0.1,41.°865N±0.°005×14.°830E±0.°005, h12km,ML1.8/26,4C-3D,Error ellipse: s-maj=0.5km s-min=0.4km az=6.0,Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.16** | **312** | ⇓P | Pb | 20 07 12.0 | -0.3 |
| FRES | | | | S | Sg | 20 07 14.6 | +1.0 |
| FRES | | | | AML | AML | | |
| | comp=E,864μm,0.4s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,512μm,0.5s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,512μm,1.5s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.22** | **165** | ⇓P | Pg | 20 07 12.4 | +0.5 |
| CIGN | | | | S | Sg | 20 07 16.5 | +1.4 |
| CIGN | | | | AML | AML | | |
| | comp=E,256μm,0.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,256μm,1.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,374μm,0.6s | | | | | | |
| **TRIV** | **Trivento** | **0.23** | **245** | P | Pb | 20 07 13.1 | -0.3 |
| TRIV | | | | S | Sg | 20 07 16.4 | +0.9 |
| TRIV | | | | AML | AML | | |
| | comp=N,276μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,272μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,244μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,262μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,272μm,0.3s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.27** | **125** | ⇓P | Pg | 20 07 13.1 | +0.2 |
| MELA | | | | S | Sb | 20 07 17.7 | -1.0 |
| MELA | | | | AML | AML | | |
| | comp=E,428μm,1.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,398μm,1.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,678μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,740μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,428μm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,398μm,0.4s | | | | | | |
| **GATE** | **Gambatesa** | **0.36** | **170** | P | Pb | 20 07 15.2 | -0.4 |
| GATE | | | | S | Sg | 20 07 20.1 | +0.8 |
| GATE | | | | AML | AML | | |
| | comp=E,206μm,0.3s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,152μm,1.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,152μm,0.5s | | | | | | |
| **BSSO** | **Busso** | **0.36** | **209** | ⇑P | Pg | 20 07 15.1 | +0.5 |
| BSSO | | | | S | Sb | 20 07 20.5 | -1.0 |
| BSSO | | | | AML | AML | | |
| | comp=E,43μm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,43μm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,49μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,43μm,0.9s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.48** | **191** | ⇑P | Pg | 20 07 16.5 | -0.1 |
| SACR | | | | S | Sb | 20 07 24.0 | -0.7 |
| **MIDA** | **Miranda** | **0.48** | **243** | ⇑P | Pg | 20 07 16.6 | -0.2 |
| MIDA | | | | S | Sg | 20 07 23.9 | +0.6 |
| MIDA | | | | AML | AML | | |
| | comp=E,144μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,108μm,0.5s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.52** | **291** | P | Pg | 20 07 17.4 | 0.0 |
| LPEL | | | | S | Sb | 20 07 25.3 | -0.5 |
| **RNI2** | **Rionero Sannit** | **0.53** | **252** | P | Pg | 20 07 17.8 | +0.1 |
| RNI2 | | | | S | Sb | 20 07 25.7 | -0.6 |
| **APRC** | **Apricena** | **0.54** | **101** | P | Pg | 20 07 17.5 | -0.4 |
| APRC | | | | S | Sg | 20 07 25.2 | +0.1 |
| APRC | | | | AML | AML | | |
| | comp=E,160μm,0.3s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,270μm,0.9s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.55** | **153** | ⇑P | Pg | 20 07 18.1 | +0.1 |
| MOCO | | | | AML | AML | | |
| | comp=E,60μm,1.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,36μm,1.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,36μm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,60μm,0.6s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.58** | **215** | P | Pg | 20 07 18.6 | -0.1 |
| **VAGA** | **Valle Agricola** | **0.63** | **225** | P | Pg | 20 07 19.2 | -0.4 |
| **SGRT** | **San Giovanni R** | **0.69** | **99** | P | Pb | 20 07 21.1 | -0.2 |
| SGRT | | | | S | Sb | 20 07 30.6 | -0.4 |
| **INTR** | **Introdacqua** | **0.71** | **282** | P | Pg | 20 07 20.4 | -0.6 |
| INTR | | | | S | Sg | 20 07 30.6 | +0.4 |
| INTR | | | | AML | AML | | |
| | comp=E,56μm,0.8s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,114μm,1.2s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.82** | **100** | AML | AML | | |
| | comp=E,53μm,0.6s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,53μm,1.4s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,125μm,0.4s | | | | | | |

**ROM 16 20:08:04.2±0.1,41.°859N±0.°004×14.°833E±0.°006, h21km±1km,ML2.2/58,2C-2D,Error ellipse: s-maj=0.6km s-min=0.1km az=39.0,Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.17** | **313** | P | Pb | 20 08 09.5 | -0.7 |
| FRES | | | | S | Sb | 20 08 12.8 | -1.6 |
| FRES | | | | AML | AML | | |
| | comp=E,2045μm,0.4s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,1390μm,0.1s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,1279μm,0.1s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,1387μm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **165** | ⇓P | Pb | 20 08 09.8 | -0.3 |
| CIGN | | | | S | Sb | 20 08 13.5 | -0.7 |
| CIGN | | | | AML | AML | | |
| | comp=N,805μm,0.5s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,553μm,0.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,435μm,0.0s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,199μm,0.0s | | | | | | |
| **TRIV** | **Trivento** | **0.23** | **246** | ⇑P | Pb | 20 08 10.3 | 0.0 |
| TRIV | | | | S | Sb | 20 08 14.0 | -0.5 |
| TRIV | | | | AML | AML | | |
| | comp=E,648μm,0.6s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,722μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,684μm,0.6s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,684μm,0.6s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,742μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,722μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,649μm,0.6s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,721μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,408μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,487μm,0.0s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,386μm,0.4s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.27** | **125** | ⇓P | Pb | 20 08 10.4 | -0.1 |
| MELA | | | | S | Sb | 20 08 15.3 | +0.5 |
| MELA | | | | AML | AML | | |
| | comp=E,1190μm,0.7s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2305μm,1.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1270μm,1.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2450μm,1.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1190μm,0.7s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2450μm,0.8s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1270μm,0.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2295μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1170μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1069μm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,2435μm,0.3s | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **171** | AML | AML | | |
| | comp=N,373μm,0.8s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,372μm,1.2s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,318μm,1.2s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,373μm,1.2s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,554μm,1.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,318μm,0.8s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,582μm,1.5s | | | | | | |
| **BSSO** | **Busso** | **0.36** | **210** | ⇑P | Pb | 20 08 12.5 | +0.6 |
| BSSO | | | | S | Sb | 20 08 17.8 | +0.7 |
| BSSO | | | | AML | AML | | |
| | comp=E,621μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,203μm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,504μm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,622μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,266μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,203μm,1.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,621μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,101μm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,119μm,0.5s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,265μm,0.6s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **192** | P | Pb | 20 08 14.0 | +0.2 |
| SACR | | | | S | Sb | 20 08 21.3 | +1.0 |
| SACR | | | | AML | AML | | |
| | comp=N,232μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,472μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,511μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,252μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,232μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,511μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,253μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,472μm,0.4s | | | | | | |
| **MIDA** | **Miranda** | **0.48** | **244** | P | Pb | 20 08 14.0 | -0.1 |
| MIDA | | | | S | Sb | 20 08 21.4 | +0.7 |
| MIDA | | | | AML | AML | | |
| | comp=E,302μm,1.0s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,290μm,0.5s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,290μm,1.5s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,89μm,0.1s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,168μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,104μm,0.1s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,106μm,0.1s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LPEL** | **Lama dei Pelig** | **0.52 291** | P | Pb | 20 08 15.1 | +0.3 | | |
| LPEL | | | AML | AML | | | | |
| | comp=E,766μm,1.1s | | | | | | | |
| LPEL | | | AML | AML | | | | |
| | comp=N,1205μm,0.5s | | | | | | | |
| LPEL | | | AML | AML | | | | |
| | comp=N,1205μm,1.5s | | | | | | | |
| LPEL | | | AML | AML | | | | |
| | comp=E,722μm,0.1s | | | | | | | |
| LPEL | | | AML | AML | | | | |
| | comp=N,1136μm,0.2s | | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.53 253** | AML | AML | | | | |
| | comp=E,422μm,1.5s | | | | | | | |
| RNI2 | | | AML | AML | | | | |
| | comp=E,384μm,1.5s | | | | | | | |
| RNI2 | | | AML | AML | | | | |
| | comp=N,377μm,0.4s | | | | | | | |
| RNI2 | | | AML | AML | | | | |
| | comp=N,393μm,0.4s | | | | | | | |
| RNI2 | | | AML | AML | | | | |
| | comp=E,384μm,0.5s | | | | | | | |
| RNI2 | | | AML | AML | | | | |
| | comp=E,422μm,0.5s | | | | | | | |
| RNI2 | | | AML | AML | | | | |
| | comp=N,378μm,0.4s | | | | | | | |
| **APRC** | **Apricena** | **0.54 101** | AML | AML | | | | |
| | comp=N,1310μm,1.7s | | | | | | | |
| APRC | | | AML | AML | | | | |
| | comp=E,978μm,1.1s | | | | | | | |
| APRC | | | AML | AML | | | | |
| | comp=N,1310μm,0.3s | | | | | | | |
| APRC | | | AML | AML | | | | |
| | comp=E,978μm,0.9s | | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.55 153** | P | Pb | 20 08 15.3 | 0.0 | | |
| MOCO | | | AML | AML | | | | |
| | comp=E,119μm,0.7s | | | | | | | |
| MOCO | | | AML | AML | | | | |
| | comp=N,70μm,0.8s | | | | | | | |
| MOCO | | | AML | AML | | | | |
| | comp=N,70μm,0.8s | | | | | | | |
| MOCO | | | AML | AML | | | | |
| | comp=E,119μm,1.3s | | | | | | | |
| MOCO | | | AML | AML | | | | |
| | comp=E,101μm,0.6s | | | | | | | |
| MOCO | | | AML | AML | | | | |
| | comp=N,66μm,0.3s | | | | | | | |
| **SGG** | **Gregorio Mates** | **0.58 216** | P | Pb | 20 08 15.6 | -0.2 | | |
| SGG | | | AML | AML | | | | |
| | comp=E,222μm,0.5s | | | | | | | |
| SGG | | | AML | AML | | | | |
| | comp=N,246μm,0.3s | | | | | | | |
| SGG | | | AML | AML | | | | |
| | comp=N,245μm,0.3s | | | | | | | |
| **VAGA** | **Valle Agricola** | **0.63 226** | P | Pb | 20 08 16.4 | -0.3 | | |
| VAGA | | | AML | AML | | | | |
| | comp=E,310μm,0.7s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=N,412μm,0.4s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=E,314μm,0.7s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=N,413μm,0.4s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=N,439μm,0.4s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=N,211μm,0.2s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=E,150μm,0.2s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=N,226μm,0.2s | | | | | | | |
| VAGA | | | AML | AML | | | | |
| | comp=E,107μm,0.2s | | | | | | | |
| **PSB1** | **Pescosannita** | **0.64 182** | P | Pb | 20 08 16.6 | -0.1 | | |
| PSB1 | | | S | Sb | 20 08 26.0 | +0.8 | | |
| **CERA** | **Filignano** | **0.66 247** | P | Pb | 20 08 16.7 | -0.5 | | |
| CERA | | | AML | AML | | | | |
| | comp=N,334μm,0.6s | | | | | | | |
| CERA | | | AML | AML | | | | |
| | comp=N,334μm,0.6s | | | | | | | |
| CERA | | | AML | AML | | | | |
| | comp=E,238μm,1.2s | | | | | | | |
| CERA | | | AML | AML | | | | |
| | comp=N,334μm,0.6s | | | | | | | |
| CERA | | | AML | AML | | | | |
| | comp=E,240μm,0.5s | | | | | | | |
| CERA | | | AML | AML | | | | |
| | comp=N,334μm,0.6s | | | | | | | |
| CERA | | | AML | AML | | | | |
| | comp=E,122μm,0.4s | | | | | | | |
| CERA | | | AML | AML | | | | |
| | comp=N,333μm,0.6s | | | | | | | |
| **SGRT** | **San Giovanni R** | **0.69 98** | P | Pb | 20 08 17.5 | -0.2 | | |
| SGRT | | | AML | AML | | | | |
| | comp=E,992μm,0.3s | | | | | | | |
| **INTR** | **Introdacqua** | **0.71 283** | P | Pb | 20 08 17.8 | -0.2 | | |
| INTR | | | AML | AML | | | | |
| | comp=E,494μm,0.5s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=N,596μm,0.6s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=E,328μm,0.5s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=N,544μm,0.6s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=E,493μm,0.5s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=E,493μm,1.5s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=N,545μm,0.6s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=E,328μm,1.5s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=N,596μm,0.6s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=N,334μm,0.2s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=N,521μm,0.2s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=E,305μm,0.2s | | | | | | | |
| INTR | | | AML | AML | | | | |
| | comp=E,435μm,0.2s | | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.82 100** | AML | AML | | | | |
| | comp=N,1255μm,1.6s | | | | | | | |
| MSAG | | | AML | AML | | | | |
| | comp=E,583μm,0.4s | | | | | | | |
| MSAG | | | AML | AML | | | | |
| | comp=N,1255μm,0.4s | | | | | | | |
| MSAG | | | AML | AML | | | | |
| | comp=E,242μm,0.4s | | | | | | | |
| MSAG | | | AML | AML | | | | |
| | comp=N,540μm,0.5s | | | | | | | |
| MSAG | | | AML | AML | | | | |
| | comp=N,540μm,1.5s | | | | | | | |
| **PIGN** | **Pignataro Magg** | **0.82 217** | AML | AML | | | | |
| | comp=E,162μm,0.6s | | | | | | | |
| PIGN | | | AML | AML | | | | |
| | comp=N,140μm,0.4s | | | | | | | |
| PIGN | | | AML | AML | | | | |
| | comp=N,140μm,1.6s | | | | | | | |
| **SGTA** | **Sant Agata di** | **0.83 151** | P | Pb | 20 08 19.6 | -0.4 | | |
| SGTA | | | AML | AML | | | | |
| | comp=E,420μm,0.5s | | | | | | | |
| SGTA | | | AML | AML | | | | |
| | comp=N,264μm,0.5s | | | | | | | |
| SGTA | | | AML | AML | | | | |
| | comp=E,210μm,0.4s | | | | | | | |
| SGTA | | | AML | AML | | | | |
| | comp=N,264μm,0.5s | | | | | | | |
| SGTA | | | AML | AML | | | | |
| | comp=N,225μm,0.3s | | | | | | | |
| SGTA | | | AML | AML | | | | |
| | comp=E,421μm,0.5s | | | | | | | |
| **MCI** | **Monte Cassino** | **0.85 244** | AML | AML | | | | |
| | comp=N,270μm,0.3s | | | | | | | |
| MCI | | | AML | AML | | | | |
| | comp=E,304μm,1.3s | | | | | | | |
| **POFI** | **Posta Fibreno** | **0.85 261** | AML | AML | | | | |
| | comp=E,106μm,0.6s | | | | | | | |
| POFI | | | AML | AML | | | | |
| | comp=N,122μm,0.7s | | | | | | | |
| POFI | | | AML | AML | | | | |
| | comp=N,122μm,1.3s | | | | | | | |
| **T0110** | **Collepietro** | **0.87 295** | P | Pb | 20 08 20.6 | -0.1 | | |
| T0110 | | | AML | AML | | | | |
| | comp=N,400μm,0.9s | | | | | | | |
| T0110 | | | AML | AML | | | | |
| | comp=E,1050μm,0.7s | | | | | | | |
| T0110 | | | AML | AML | | | | |
| | comp=E,1050μm,0.7s | | | | | | | |
| T0110 | | | AML | AML | | | | |
| | comp=N,367μm,0.7s | | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.91 271** | P | Pb | 20 08 20.8 | -0.5 | | |
| VVLD | | | AML | AML | | | | |
| | comp=N,180μm,0.6s | | | | | | | |
| VVLD | | | AML | AML | | | | |
| | comp=E,172μm,0.3s | | | | | | | |
| VVLD | | | AML | AML | | | | |
| | comp=N,180μm,1.4s | | | | | | | |
| VVLD | | | AML | AML | | | | |
| | comp=N,180μm,0.6s | | | | | | | |
| VVLD | | | AML | AML | | | | |
| | comp=E,173μm,0.3s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.91 306** | P | Pb | 20 08 21.1 | -0.3 | | |
| VCEL | | | AML | AML | | | | |
| | comp=N,575μm,0.4s | | | | | | | |
| VCEL | | | AML | AML | | | | |
| | comp=E,752μm,0.4s | | | | | | | |
| VCEL | | | AML | AML | | | | |
| | comp=E,754μm,0.4s | | | | | | | |
| VCEL | | | AML | AML | | | | |
| | comp=N,264μm,0.0s | | | | | | | |
| **MTMR** | **Montemarano** | **0.95 172** | AML | AML | | | | |
| | comp=N,456μm,0.4s | | | | | | | |
| MTMR | | | AML | AML | | | | |
| | comp=E,294μm,0.9s | | | | | | | |
| MTMR | | | AML | AML | | | | |
| | comp=N,456μm,0.4s | | | | | | | |
| **SNAL** | **S. Angelo Dei** | **0.97 163** | AML | AML | | | | |
| | comp=N,228μm,0.8s | | | | | | | |
| SNAL | | | AML | AML | | | | |
| | comp=E,187μm,0.4s | | | | | | | |
| SNAL | | | AML | AML | | | | |
| | comp=N,234μm,0.8s | | | | | | | |
| SNAL | | | AML | AML | | | | |
| | comp=E,196μm,0.7s | | | | | | | |
| SNAL | | | AML | AML | | | | |
| | comp=E,187μm,1.6s | | | | | | | |
| SNAL | | | AML | AML | | | | |
| | comp=N,234μm,0.8s | | | | | | | |
| **FAGN** | **Fagnano** | **1.01 294** | AML | AML | | | | |
| | comp=N,308μm,0.5s | | | | | | | |
| FAGN | | | AML | AML | | | | |
| | comp=E,544μm,0.4s | | | | | | | |
| FAGN | | | AML | AML | | | | |
| | comp=N,308μm,0.5s | | | | | | | |
| **PTQR** | **Pietraquaria** | **1.08 279** | AML | AML | | | | |
| | comp=E,72μm,1.5s | | | | | | | |
| PTQR | | | AML | AML | | | | |
| | comp=N,81μm,0.8s | | | | | | | |
| **PALZ** | **Palazzo San Ge** | **1.25 137** | AML | AML | | | | |
| | comp=N,236μm,1.6s | | | | | | | |
| PALZ | | | AML | AML | | | | |
| | comp=E,252μm,1.2s | | | | | | | |
| **ACER** | **Acerenza** | **1.36 142** | AML | AML | | | | |
| | comp=E,129μm,0.4s | | | | | | | |
| ACER | | | AML | AML | | | | |
| | comp=N,102μm,0.5s | | | | | | | |
| ACER | | | AML | AML | | | | |
| | comp=N,102μm,1.5s | | | | | | | |
| **AMUR** | **Altamura** | **1.64 125** | P | Pb | 20 08 33.0 | -0.7 | | |
| AMUR | | | AML | AML | | | | |
| | comp=E,146μm,1.2s | | | | | | | |
| AMUR | | | AML | AML | | | | |
| | comp=N,141μm,0.9s | | | | | | | |
| AMUR | | | AML | AML | | | | |
| | comp=E,146μm,0.8s | | | | | | | |
| AMUR | | | AML | AML | | | | |
| | comp=E,126μm,0.5s | | | | | | | |
| **NOCI** | **Noci** | **1.99 122** | AML | AML | | | | |
| | comp=N,143μm,0.2s | | | | | | | |
| NOCI | | | AML | AML | | | | |
| | comp=E,114μm,0.3s | | | | | | | |

*PDG* **16** *20:22:32.9±0.1, 41˚.85N×14˚.81E, h5km±2km, MD4.8/10, ML4.7/10, Error ellipse: s-maj=1.1km s-min=2.3km az=0.0*
*IDC* **16** *20:22:33.6±0.6, 41˚.93N×14˚.69E, h0km, mb4.0/17, mbtmp4.1/28, ML4.1/11, Error ellipse: s-maj=11.5km s-min=10.0km az=81.0*
*MOS* **16** *20:22:33.4±1.1, 41˚.84N×14˚.76E, h12km, mb4.5/15, Error ellipse: s-maj=4.5km s-min=3.1km az=76.7*
*NEIC* **16** *20:22:34.1±1.7, 41˚.84N±0˚.05×14˚.78E±0˚.05, h3km±5km, mb4.5/60, Error ellipse: s-maj=7.8km s-min=5.1km az=198.0*
*ROM* **16** *20:22:34.5±0.1, 41˚.873N±0˚.004×14˚.875E±0˚.005, h22km, ML4.5/377, Mw4.4, Error ellipse: s-maj=0.4km s-min=0.1km az=37.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.38; $M_{\theta\theta}$2.80; $M_{\phi\phi}$-3.19; $M_{r\theta}$-1.21; $M_{\theta\phi}$-2.69; $M_{\phi r}$0.05; Fault plane solution: $M_o$4.21808×$10^{15}$ NP1:$\phi_s$337.00000°, $\delta$75.00000°, $\lambda$9.00000°. NP2:$\phi_s$245.00000°, $\delta$82.00000°, $\lambda$164.00000°.*
*MED_RC* **16** *20:22:35.0±0.2, 41˚.86N×14˚.94E, h22km±1km, MW4.7/26, Moment Tensor Solution.Mantle waves: s26,c40; Duration: 1s0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.31±.11; $M_{\theta\theta}$0.78±.06; $M_{\phi\phi}$-1.10±.08; $M_{r\theta}$-0.64±.10; $M_{\theta\phi}$-0.62±.04; $M_{\phi r}$0.13±.07; Best double couple: $M_o$1.33000×$10^{16}$ NP1:$\phi_s$237.00000°, $\delta$70.00000°, $\lambda$155.00000°. NP2:$\phi_s$336.00000°, $\delta$66.00000°, $\lambda$22.00000°. Principal axes: T 1.3700, Plg32.0000°, Azm196.0000°; N -0.0900, Plg58.0000°, Azm21.0000°; P -1.2900, Plg2.0000°, Azm287.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*
*MCSM* **16** *20:22:36.6±0.3, 42˚.N±3˚×1˚.5E±˚, h10km, mb4.5, mB4.5, MLv4.8, Mw(mB)3.7*
*PRU* **16** *20:22:37.0, 41˚.94N×14˚.44E, h10km, M4.5*
*BGR* **16** *20:22:37.1±0.5, 41˚.93N×14˚.93E, h10km, ML4.8, Error ellipse: s-maj=11.1km s-min=8.9km az=56.0*
*LDG* **16** *20:22:37.5±0.7, 41˚.69N×14˚.42E, h10km, Ml4.7/15, Error ellipse: s-maj=13.9km s-min=9.4km az=132.0*
*BEO* **16** *20:22:40.1±0.6, 41˚.97N×14˚.93E, h38km±5km, ML4.7/17*
*NAO* **16** *20:22:46.3, 42˚.49N×15˚.12E, h33km, mb4.4*

**ISC 16 20:22:35.6±0.8, 41˚.86N±0˚.02×14˚.83E±0˚.02, h14km±5km, n685, σ2$00/774, mb4.4/43, 58C-55D, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.17** | **313** | ⇓P | **Pg** | **20 22 40.1** | **+0.5** |
| FRES | | | | S | **Sb** | **20 22 43.7** | **-0.2** |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **166** | ⇑P | **Pg** | **20 22 40.3** | **-0.1** |
| CIGN | | | | S | **Sg** | **20 22 44.3** | **+0.7** |
| CIGN | | | | AML | AML | | |
| CIGN | | | | AML | AML | | |
| CIGN | | | | AML | AML | | |
| CIGN | | | | AML | AML | | |
| CIGN | | | | AML | AML | | |
| **TRIV** | **Trivento** | **0.23** | **246** | ⇓P | **Pg** | **20 22 41.2** | **+0.5** |
| TRIV | | | | S | **Sb** | **20 22 46.5** | **+0.8** |
| TRIV | | | | AML | AML | | |
| TRIV | | | | AML | AML | | |
| TRIV | | | | AML | AML | | |
| TRIV | | | | AML | AML | | |
| TRIV | | | | AML | AML | | |
| TRIV | | | | AML | AML | | |
| TRIV | | | | AML | AML | | |
| TRIV | | | | AML | AML | | |
| **MELA** | **Melanico ??? S** | **0.27** | **125** | ⇓P | **Pg** | **20 22 40.6** | **-0.6** |
| MELA | | | | S | **Sg** | **20 22 45.1** | **0.0** |
| MELA | | | | AML | AML | | |
| MELA | | | | AML | AML | | |
| MELA | | | | AML | AML | | |
| MELA | | | | AML | AML | | |
| MELA | | | | AML | AML | | |
| MELA | | | | AML | AML | | |
| MELA | | | | AML | AML | | |
| MELA | | | | AML | AML | | |
| **GATE** | **Gambatesa** | **0.35** | **171** | ⇑P | **Pg** | **20 22 43.0** | **+0.3** |
| GATE | | | | S | **Sg** | **20 22 48.8** | **+1.2** |
| GATE | | | | AML | AML | | |
| | comp=N,60050μm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,94650μm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,95500μm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,58400μm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,95500μm,1.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,94650μm,1.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,58385μm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,60043μm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,95600μm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,94804μm,0.6s | | | | | | |
| **BSSO** | **Busso** | **0.36** | **210** | ⇑P | **Pg** | **20 22 43.2** | **+0.2** |
| BSSO | | | | S | **Sb** | **20 22 49.2** | **-0.2** |
| BSSO | | | | AML | AML | | |
| BSSO | | | | AML | AML | | |
| | comp=E,75050μm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| BSSO | | | | AML | AML | | |
| | comp=N,43250μm,0.5s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,75100μm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,31400μm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| BSSO | | | | AML | AML | | |
| | comp=N,43293μm,0.5s | | | | | | |
| BSSO | | | | AML | AML | | |
| BSSO | | | | AML | AML | | |
| | comp=E,75065μm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,31399μm,0.4s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **192** | ⇑P | **Pg** | **20 22 44.5** | **-0.5** |
| SACR | | | | S | **Sg** | **20 22 51.9** | **+0.6** |
| SACR | | | | AML | AML | | |
| | comp=E,19450μm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,26050μm,0.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,19600μm,1.2s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,26000μm,0.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,25300μm,0.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,19500μm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,19500μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,17715μm,0.7s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,19276μm,0.7s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,25304μm,0.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,26018μm,0.6s | | | | | | |
| **MIDA** | **Miranda** | **0.49** | **244** | ⇑P | **Pg** | **20 22 44.9** | **-0.4** |
| MIDA | | | | S | **Sb** | **20 22 52.6** | **-0.4** |
| **LPEL** | **Lama dei Pelig** | **0.52** | **291** | ⇓P | **Pg** | **20 22 45.7** | **-0.2** |
| LPEL | | | | AML | AML | | |
| | comp=E,43750μm,0.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,41450μm,0.2s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,43776μm,0.5s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.53** | **253** | ⇓P | **Pg** | **20 22 45.9** | **-0.3** |
| RNI2 | | | | S | **Sb** | **20 22 54.8** | **+0.3** |
| RNI2 | | | | AML | AML | | |
| | comp=E,81850μm,1.6s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,87000μm,1.6s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,73450μm,1.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,81900μm,1.6s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,76100μm,1.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,73400μm,1.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,87000μm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,81900μm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,69350μm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,66333μm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,79168μm,0.3s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,75836μm,0.3s | | | | | | |
| **APRC** | **Apricena** | **0.54** | **101** | ⇓P | **Pg** | **20 22 44.4** | **-1.8** |
| **PTRJ** | **Pietraroja** | **0.55** | **205** | ⇑P | **Pg** | **20 22 45.4** | **-0.9** |
| PTRJ | | | | AML | AML | | |
| | comp=E,32250μm,0.9s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,24800μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,114μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,31850μm,0.5s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,32300μm,0.9s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,24750μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,114μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,32300μm,1.1s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,114μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,31872μm,0.5s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,24766μm,0.5s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,32280μm,0.9s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.55** | **153** | ⇓P | **Pg** | **20 22 45.7** | **-0.7** |
| MOCO | | | | AML | AML | | |
| | comp=E,29500μm,1.0s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,30250μm,1.0s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,30250μm,1.0s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,21550μm,1.3s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,29500μm,1.0s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,29554μm,0.5s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,28360μm,0.5s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,21508μm,1.3s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,20350μm,1.3s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.58** | **216** | ⇓P | **Pg** | **20 22 46.2** | **-0.9** |
| SGG | | | | S | **Sg** | **20 22 55.0** | **+0.2** |
| SGG | | | | AML | AML | | |
| | comp=E,92nm,0.9s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,107nm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,29950μm,0.9s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,34850μm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,92nm,0.9s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,107nm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,34850μm,1.6s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,107nm,1.6s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,29950μm,1.1s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,92nm,1.1s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,34838μm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,29931μm,0.9s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.63** | **226** | ⇑P | **Pg** | **20 22 47.1** | **-0.9** |
| VAGA | | | | AML | AML | | |
| | comp=E,40550μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,63650μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,42550μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |

comp=N,67000µm,0.3s
VAGA AML AML
comp=N,63650µm,1.7s
VAGA AML AML
comp=N,67000µm,1.7s
VAGA AML AML
comp=E,40574µm,0.3s
VAGA AML AML
comp=E,42555µm,0.3s
VAGA AML AML
comp=N,67002µm,0.3s
VAGA AML AML
comp=N,63672µm,0.3s
**PSB1 Pescosannita 0.64 182 ⇑P Pg 20 22 46.9 -1.1**
**CERA Filignano 0.66 247 P Pg 20 22 47.7 -0.9**
CERA AML AML
comp=E,80000µm,0.6s
CERA AML AML
comp=E,83750µm,0.7s
CERA AML AML
CERA AML AML
comp=E,79950µm,0.6s
CERA AML AML
CERA AML AML
CERA AML AML
CERA AML AML
comp=E,79950µm,1.4s
CERA AML AML
CERA AML AML
CERA AML AML
comp=E,83853µm,0.7s
**SGRT San Giovanni R 0.69 98 Pg 20 22 46.8 -2.2**
SGRT Sg **Sg 20 22 57.6 -0.6**
**SGRT San Giovanni R 0.69 98 ⇓P Pg 20 22 46.9 -2.2**
SGRT AML AML
comp=N,58950µm,0.4s
SGRT AML AML
comp=E,61150µm,0.7s
SGRT AML AML
comp=E,58354µm,0.5s
SGRT AML AML
comp=N,58960µm,0.5s
**VITU Vitulano (BN) 0.69 193 ⇑P Pg 20 22 47.7 -1.4**
VITU AML AML
comp=E,11900µm,0.6s
VITU AML AML
comp=N,38000µm,0.4s
VITU AML AML
comp=N,35750µm,0.4s
VITU AML AML
comp=E,31200µm,0.4s
VITU AML AML
comp=N,38000µm,1.6s
VITU AML AML
comp=N,35750µm,1.6s
VITU AML AML
comp=E,11900µm,1.4s
VITU AML AML
comp=E,31216µm,0.4s
VITU AML AML
comp=N,37957µm,0.4s
VITU AML AML
comp=N,35759µm,0.4s
VITU AML AML
comp=E,11894µm,0.6s
**BIOG Biogem 0.70 161 P Pb 20 22 49.1 -0.5**
BIOG AML AML
comp=E,75800µm,0.8s
BIOG AML AML
BIOG AML AML
comp=E,75800µm,0.8s
BIOG AML AML
comp=E,81750µm,0.9s
BIOG AML AML
comp=N,84300µm,1.0s
BIOG AML AML
comp=E,81750µm,1.1s
BIOG AML AML
BIOG AML AML
comp=N,84300µm,1.0s
BIOG AML AML
comp=E,81768µm,0.9s
BIOG AML AML
BIOG AML AML
comp=N,84284µm,1.0s
BIOG AML AML
comp=E,75842µm,0.8s
**INTR Introdacqua 0.71 283 Pg 20 22 48.5 -1.0**
**INTR Introdacqua 0.71 283 ⇓P Pg 20 22 48.5 -1.0**
INTR S **Sb 20 23 00.1 +0.6**
**MRB1 Monte Rocchett 0.74 172 ⇑P Pb 20 22 48.9 -1.4**
MRB1 AML AML
comp=E,48100µm,0.9s
MRB1 AML AML
comp=N,78000µm,0.6s
MRB1 AML AML
comp=N,81150µm,0.6s
MRB1 AML AML
comp=E,48100µm,0.9s
MRB1 AML AML
comp=N,78000µm,0.6s
MRB1 AML AML
comp=E,50450µm,0.9s
MRB1 AML AML
comp=N,81200µm,0.6s
MRB1 AML AML
comp=E,50450µm,1.1s
MRB1 AML AML
comp=E,48100µm,1.1s
MRB1 AML AML
comp=N,78000µm,1.4s
MRB1 AML AML
comp=E,50459µm,0.9s
MRB1 AML AML
comp=E,48096µm,0.9s
MRB1 AML AML
comp=N,81162µm,0.6s
**MSAG Monte S. Angel 0.82 100 ⇓P Pb 20 22 49.4 -2.3**
MSAG AML AML
comp=E,50600µm,0.9s
MSAG AML AML
comp=N,81600µm,0.4s
MSAG AML AML
comp=E,21000µm,0.9s
MSAG AML AML
comp=N,34550µm,0.4s
MSAG AML AML
comp=E,21000µm,1.1s
MSAG AML AML
comp=E,19946µm,0.9s
MSAG AML AML
comp=E,49549µm,0.9s
MSAG AML AML
comp=E,50600µm,1.1s
MSAG AML AML
comp=N,34557µm,0.4s
MSAG AML AML
comp=N,81633µm,0.4s
MSAG AML AML
comp=N,81650µm,0.4s
**PIGN Pignataro Magg 0.82 217 ⇑P Pb 20 22 50.2 -1.5**
PIGN AML AML
comp=E,14800µm,1.2s
PIGN AML AML
comp=E,14800µm,1.3s
PIGN AML AML
comp=N,16500µm,0.7s
PIGN AML AML
comp=E,13350µm,0.8s
PIGN AML AML
comp=N,16500µm,1.3s
PIGN AML AML
comp=N,15550µm,0.8s
PIGN AML AML
comp=E,11713µm,0.5s
PIGN AML AML
comp=N,16482µm,0.7s
PIGN AML AML
comp=N,15546µm,0.8s
PIGN AML AML
comp=E,12938µm,0.7s
**SGTA Sant Agata di 0.83 151 P Pb 20 22 49.8 -2.0**
SGTA AML AML
SGTA AML AML
comp=N,86900µm,0.8s
SGTA AML AML
SGTA AML AML

comp=N,88450µm,0.8s
**MCI Monte Cassino 0.85 244 P Pb 20 22 50.9 -1.3**
**POFI Posta Fibreno 0.85 261 ⇓P Pb 20 22 50.7 -1.5**
POFI AML AML
comp=E,28800µm,0.5s
POFI AML AML
comp=N,25050µm,0.9s
POFI AML AML
comp=E,30600µm,1.3s
POFI AML AML
comp=E,28800µm,1.5s
POFI AML AML
comp=E,30600µm,0.7s
POFI AML AML
comp=N,24400µm,0.7s
POFI AML AML
comp=E,28788µm,0.5s
POFI AML AML
comp=E,28706µm,0.9s
POFI AML AML
comp=N,25046µm,0.9s
**PAOL Paolisi 0.85 194 Pb 20 22 50.1 -2.2**
**PAOL Paolisi 0.85 194 P Pb 20 22 50.2 -2.1**
PAOL AML AML
comp=N,19750µm,1.0s
PAOL AML AML
comp=N,20550µm,1.0s
PAOL AML AML
comp=E,20000µm,1.0s
PAOL AML AML
comp=N,19700µm,1.0s
PAOL AML AML
comp=E,20950µm,1.0s
PAOL AML AML
comp=N,20550µm,1.0s
PAOL AML AML
comp=E,16522µm,0.5s
PAOL AML AML
comp=E,15680µm,0.5s
PAOL AML AML
comp=N,16784µm,0.4s
PAOL AML AML
comp=N,16064µm,0.4s
**T0110 Collepietro 0.87 295 ⇓P Pb 20 22 51.2 -1.3**
T0110 AML AML
comp=E,55450µm,0.4s
T0110 AML AML
comp=N,47950µm,0.6s
T0110 AML AML
comp=E,55417µm,0.4s
T0110 AML AML
comp=N,47949µm,0.6s
**CAFE Carife 0.88 160 P Pb 20 22 50.9 -1.9**
CAFE AML AML
comp=E,51350µm,0.9s
CAFE AML AML
comp=E,52900µm,0.9s
CAFE AML AML
comp=E,51300µm,0.9s
CAFE AML AML
comp=N,42000µm,0.4s
CAFE AML AML
comp=E,52900µm,1.1s
CAFE AML AML
comp=E,51300µm,1.1s
CAFE AML AML
comp=N,42000µm,1.6s
CAFE AML AML
comp=N,40300µm,0.4s
CAFE AML AML
comp=N,41994µm,0.5s
CAFE AML AML
comp=E,47147µm,0.7s
CAFE AML AML
comp=E,48634µm,0.7s
**VVLD Villa Vallelon 0.91 271 ⇓P Pb 20 22 51.5 -1.7**
VVLD AML AML
comp=N,34100µm,0.9s
VVLD AML AML
comp=E,51050µm,0.9s
VVLD AML AML
comp=E,51050µm,1.1s
VVLD AML AML
comp=E,51023µm,0.9s
VVLD AML AML
comp=N,34062µm,0.9s
**VCEL Villa Celiera 0.91 306 ⇓P Pb 20 22 52.1 -1.2**
VCEL AML AML
comp=N,64800µm,0.5s
VCEL AML AML
comp=N,64850µm,0.5s
VCEL AML AML
comp=E,66600µm,0.5s
VCEL AML AML
comp=N,64818µm,0.5s
VCEL AML AML
comp=E,66606µm,0.5s
**SNAL S. Angelo Dei 0.97 163 P Pb 20 22 52.0 -2.3**
SNAL AML AML
comp=E,84600µm,1.0s
SNAL AML AML
comp=N,55450µm,0.7s
SNAL AML AML
comp=E,84650µm,1.0s
SNAL AML AML
comp=E,87200µm,1.0s
SNAL AML AML
comp=N,48550µm,0.7s
SNAL AML AML
comp=E,87200µm,1.0s
SNAL AML AML
comp=E,84650µm,1.0s
SNAL AML AML
comp=N,55432µm,0.7s
SNAL AML AML
comp=N,48534µm,0.7s
SNAL AML AML
comp=E,87232µm,1.0s
SNAL AML AML
comp=E,84634µm,1.0s
**FAGN Fagnano 1.02 294 P Pb 20 22 53.4 -1.6**
FAGN AML AML
comp=E,64700µm,0.6s
FAGN AML AML
comp=N,43650µm,0.5s
FAGN AML AML
comp=E,64700µm,1.4s
FAGN AML AML
comp=N,43631µm,0.5s
FAGN AML AML
comp=E,64724µm,0.6s
**LIK San Giovanni I 1.02 250 P Pb 20 22 54.8 -0.3**
**LIK San Giovanni I 1.02 250 AML AML**
comp=N,79900µm,0.8s
LIK AML AML
comp=E,47350µm,0.8s
LIK AML AML
comp=E,47400µm,0.8s
LIK AML AML
comp=N,79900µm,1.2s
LIK AML AML
comp=E,47400µm,1.2s
LIK AML AML
comp=E,44799µm,0.5s
LIK AML AML
comp=N,59124µm,0.9s
**PTQR Pietraquaria 1.08 279 ⇓P Pb 20 22 54.4 -1.8**
PTQR AML AML
comp=E,18850µm,0.6s
PTQR AML AML
comp=N,19800µm,1.2s
PTQR AML AML
comp=N,19800µm,0.8s
PTQR AML AML
comp=E,18850µm,1.4s
PTQR AML AML
comp=N,19789µm,1.2s
PTQR AML AML
comp=E,18842µm,0.6s
**MCRV Calabrutti - M 1.10 167 P Pb 20 22 56.3 -0.3**
MCRV AML AML
comp=E,47200µm,1.0s
MCRV AML AML
comp=N,36150µm,0.8s
MCRV AML AML
comp=E,47205µm,1.0s
MCRV AML AML
comp=N,34363µm,0.4s

**GIGS Gran Sasso 1.11 303 P Pb 20 22 55.0 -1.7**
GIGS AML AML
comp=N,11950µm,0.7s
GIGS AML AML
comp=E,9115µm,0.9s
GIGS AML AML
comp=N,11953µm,0.7s
GIGS AML AML
comp=E,9124µm,0.9s
**TRTR Tortoreto Alta 1.17 325 P Pg 20 22 59.3 +1.2**
TRTR AML AML
TRTR AML AML
TRTR AML AML
TRTR AML AML
TRTR AML AML
TRTR AML AML
TRTR AML AML
**PALZ Palazzo San Ge 1.25 137 P Pn 20 22 57.9 -0.8**
PALZ AML AML
PALZ AML AML
comp=N,76000µm,0.9s
PALZ AML AML
PALZ AML AML
comp=N,75958µm,0.9s
**CAMP Campotosto 1.26 303 Pn 20 22 57.2 -1.7**
**CAMP Campotosto 1.26 303 P Pn 20 22 57.4 -1.5**
CAMP AML AML
comp=N,16150µm,1.0s
CAMP AML AML
comp=E,18400µm,0.7s
CAMP AML AML
comp=N,16150µm,1.0s
CAMP AML AML
comp=E,18404µm,0.7s
**FIAM Fiamignano 1.34 288 P Pn 20 22 58.5 -1.6**
FIAM AML AML
comp=E,17300µm,0.9s
FIAM AML AML
comp=N,18350µm,0.8s
FIAM AML AML
comp=E,17300µm,1.1s
FIAM AML AML
comp=N,18358µm,0.8s
FIAM AML AML
comp=E,17342µm,0.9s
**SMA1 SAN MARTINO 1.35 305 P Pn 20 22 59.1 -1.1**
SMA1 AML AML
comp=E,23650µm,0.7s
SMA1 AML AML
comp=N,28500µm,1.3s
SMA1 AML AML
comp=N,28500µm,0.7s
SMA1 AML AML
comp=E,23651µm,0.7s
SMA1 AML AML
comp=N,27111µm,1.0s
**ACER Acerenza 1.36 142 P Pn 20 22 59.6 -0.6**
ACER AML AML
comp=E,40100µm,1.6s
ACER AML AML
comp=N,35000µm,0.7s
ACER AML AML
comp=E,42250µm,1.6s
ACER AML AML
comp=N,36950µm,0.7s
ACER AML AML
comp=N,36950µm,1.3s
ACER AML AML
comp=N,35000µm,1.3s
ACER AML AML
comp=E,42250µm,0.4s
ACER AML AML
comp=E,40100µm,0.4s
ACER AML AML
comp=N,36953µm,0.7s
ACER AML AML
comp=N,34992µm,0.7s
ACER AML AML
comp=E,32846µm,0.7s
ACER AML AML
comp=E,31252µm,0.7s
**CERT Cerreto 1.39 274 P Pn 20 22 59.3 -1.3**
CERT AML AML
comp=E,19150µm,0.8s
CERT AML AML
comp=N,10240µm,0.8s
CERT AML AML
comp=E,19150µm,1.2s
CERT AML AML
comp=N,10221µm,0.8s
CERT AML AML
comp=E,19111µm,0.8s
**RCAV Rocca di Cave 1.41 270 P Pn 20 23 00.5 -0.5**
RCAV AML AML
comp=E,6540µm,0.4s
RCAV AML AML
comp=N,9545µm,1.2s
RCAV AML AML
comp=E,6540µm,1.6s
RCAV AML AML
comp=N,9545µm,0.8s
RCAV AML AML
comp=E,6537µm,0.5s
RCAV AML AML
comp=N,8848µm,1.0s
**LATB Latina 1.45 256 P Pn 20 23 00.4 -1.0**
LATB AML AML
comp=E,5595µm,0.8s
LATB AML AML
comp=N,4600µm,0.9s
LATB AML AML
comp=N,4600µm,1.1s
LATB AML AML
comp=E,5599µm,0.8s
LATB AML AML
comp=N,4603µm,0.9s
**VENT Ventotene 1.50 225 P Pn 20 23 00.8 -1.4**
VENT AML AML
comp=E,10840µm,1.2s
VENT AML AML
comp=N,10365µm,1.0s
VENT AML AML
comp=N,10365µm,1.0s
VENT AML AML
comp=E,10840µm,0.8s
VENT AML AML
comp=E,8120µm,0.6s
VENT AML AML
comp=N,8505µm,0.9s
**LNSS Leonessa 1.52 300 P Pb 20 23 03.8 +0.1**
LNSS AML AML
comp=E,21000µm,0.6s
LNSS AML AML
comp=N,10110µm,1.4s
LNSS AML AML
comp=E,21000µm,1.4s
LNSS AML AML
comp=N,9363µm,0.8s
LNSS AML AML
comp=E,20996µm,0.6s
**CMPR Campora 1.58 167 ⇑P Pn 20 23 02.9 -0.4**
CMPR AML AML
comp=N,7615µm,0.9s
CMPR AML AML
comp=E,11100µm,0.7s
CMPR AML AML
comp=N,7615µm,1.1s
CMPR AML AML
comp=E,11119µm,0.7s
CMPR AML AML
comp=N,7615µm,0.9s
**SLCN Sala Consilina 1.59 157 P Pn 20 23 02.5 -1.0**
SLCN AML AML
comp=N,17400µm,1.0s
SLCN AML AML
comp=N,18700µm,1.0s
SLCN AML AML
comp=N,18700µm,1.0s
SLCN AML AML
comp=N,17400µm,1.0s
SLCN AML AML
comp=E,18700µm,0.9s
SLCN AML AML
comp=E,20450µm,0.7s
SLCN AML AML
comp=N,18708µm,1.0s
SLCN AML AML
comp=N,17385µm,1.0s

SLCN AML AML
comp=E,18715µm,0.9s
SLCN AML AML
comp=E,20430µm,0.7s
**RMP Rome, Mte Porz 1.59 269** P **Pn 20 23 03.6 +0.1**
RMP AML AML
comp=E,12550µm,0.9s
RMP AML AML
comp=N,11270µm,0.8s
RMP AML AML
comp=E,12564µm,0.9s
RMP AML AML
comp=N,11244µm,0.8s
**NRCA Norcia 1.60 308 Pn 20 23 02.9 -0.8**
**NRCA Norcia 1.60 308** P **Pn 20 23 03.1 -0.5**
NRCA AML AML
comp=N,18400µm,0.6s
NRCA AML AML
comp=N,19050µm,0.6s
NRCA AML AML
comp=N,18400µm,1.4s
NRCA AML AML
comp=N,19050µm,1.4s
NRCA AML AML
comp=E,15100µm,1.0s
NRCA AML AML
comp=E,14950µm,1.0s
NRCA AML AML
comp=N,18427µm,0.6s
NRCA AML AML
comp=N,19034µm,0.6s
NRCA AML AML
comp=E,13804µm,0.6s
NRCA AML AML
comp=E,13099µm,0.6s
**GUMA Gualdo di Mace 1.64 318 Pb 20 23 05.1 -0.5**
**GUMA Gualdo di Mace 1.64 318** ⇓P **Pb 20 23 05.9 +0.3**
GUMA AML AML
comp=E,57250µm,0.5s
GUMA AML AML
comp=N,45800µm,0.5s
GUMA AML AML
comp=E,61000µm,0.5s
GUMA AML AML
comp=E,61000µm,1.5s
GUMA AML AML
comp=E,57250µm,1.5s
GUMA AML AML
comp=N,34700µm,0.6s
GUMA AML AML
comp=N,45800µm,1.5s
GUMA AML AML
comp=E,57257µm,0.5s
GUMA AML AML
comp=E,61006µm,0.5s
GUMA AML AML
comp=N,34719µm,0.6s
GUMA AML AML
comp=N,45822µm,0.5s
**AMUR Altamura 1.64 125** ⇓P **Pn 20 23 03.4 -0.7**
AMUR AML AML
comp=E,14450µm,0.4s
AMUR AML AML
comp=N,18700µm,1.4s
AMUR AML AML
comp=E,14450µm,1.6s
AMUR AML AML
comp=N,17386µm,0.3s
AMUR AML AML
comp=E,14432µm,0.4s
**MCEL Monticello 1.70 154** P **Pn 20 23 05.1 +0.2**
MCEL AML AML
comp=E,7980µm,0.8s
MCEL AML AML
comp=N,10395µm,1.0s
MCEL AML AML
comp=E,7830µm,0.8s
MCEL AML AML
comp=E,7980µm,1.2s
MCEL AML AML
comp=N,10085µm,1.0s
MCEL AML AML
comp=E,7831µm,0.8s
MCEL AML AML
comp=E,7981µm,0.8s
MCEL AML AML
comp=N,10088µm,1.0s
MCEL AML AML
comp=N,10399µm,1.0s
**MTSN Montesano sull 1.74 156** P **Pn 20 23 04.9 -0.6**
MTSN AML AML
comp=N,7585µm,0.6s
MTSN AML AML
comp=E,9750µm,0.9s
MTSN AML AML
comp=N,7586µm,0.6s
MTSN AML AML
comp=E,9735µm,0.9s
**MIGL Miglionico 1.74 135** P **Pn 20 23 04.8 -0.7**
MIGL AML AML
comp=N,63872µm,0.8s
**FDMO Fiordimonte 1.75 313 Pn 20 23 05.5 -0.1**
**CESX Cesi 1.83 295** Pn **Pn 20 23 06.7 0.0**
**MATE Matera 1.86 130** ⇑P **Pn 20 23 06.8 -0.2**
**STON Ston 2.35 64** *e*Pn **Pn 20 23 15.1 +1.3**
STON *e*Sn **Sn 20 23 41.3 -1.2**
**STON Ston 2.35 64** AML AML
comp=N,12626µm,0.7s
STON AML AML
comp=E,8400µm,0.8s
STON AML AML
comp=N,12600µm,0.7s
STON AML AML
comp=E,8399µm,0.8s
**STON Ston 2.35 64** ⇓*i*Pn **Pn 20 23 13.4 -0.4**
**TREB Trebinje 2.75 71** *e*Pn **Pn 20 23 19.4 +0.1**
**A050A Klekovaca 2.90 25** *i*Pn **Pn 20 23 22.7 +1.2**
**BRY Bratogost 2.94 68** *e*Pn **Pn 20 23 22.8 +0.8**
**BRY Bratogost 2.94 68** *e*Pn **Pn 20 23 22.2 +0.2**
BRY *i*Sn **Sn 20 23 58.0 +0.9**
**BRY Bratogost 2.94 68** P **Pn 20 23 22.2 +0.2**
BRY S **Sn 20 23 58.0 +0.9**
**ASQU Asqua 2.96 312** P **Pn 20 23 23.6 +1.4**
**SFI Santa Sofia 3.00 314** P **Pb 20 23 26.1 -2.7**
**TIP Timpagrande 3.05 151** Pn **Pn 20 23 24.1 +0.6**
**TIP Timpagrande 3.05 151** ⇑P **Pn 20 23 24.1 +0.6**
**TIP Timpagrande 3.05 151** P **Pn 20 23 25.3 +1.7**
**BUM Brajici-Budva 3.05 80** ⇑*i*Pn **Pn 20 23 23.7 +0.1**
BUM *e*Sn **Sn 20 24 01.2 +1.3**
**CASP Castiglione de 3.09 289** Pn **Pn 20 23 24.7 +0.8**
**CEME Cevo 3.11 76** ⇓*i*Pn **Pn 20 23 24.6 +0.3**
CEME *i*Sn **Sn 20 24 02.4 +1.1**
**RUFI Rufina 3.15 310** P **Pn 20 23 26.5 +1.7**
**NKME Niksic 3.19 72** *e*Pn **Pn 20 23 25.5 +0.1**
NKME *e*Sn **Sn 20 24 04.6 +1.4**
**LMD Lutirano 3.19 315** P **Pn 20 23 27.6 +2.2**
**DRME Dracevica, Mon 3.26 83** ⇓*i*Pn **Pn 20 23 26.9 +0.6**
**DRME Dracevica, Mon 3.26 83** ⇓*i*Pn **Pn 20 23 26.9 +0.6**
DRME *i*Sn **Sn 20 24 06.1 +1.2**
**SCTE Santa Cesarea 3.28 122** Pn **Pn 20 23 26.0 -0.6**
**UPM Unac-Piva 3.29 65** *e*Pn **Pn 20 23 28.2 +1.2**
**UPM Unac-Piva 3.29 65** *e*Pn **Pn 20 23 27.5 +0.5**
UPM *i*Sn **Sn 20 24 07.0 +0.9**
**PDG Podgorica 3.34 79 Pn 20 23 28.0 +0.6**
**PDG Podgorica 3.34 79** *e*Pn **Pn 20 23 28.1 +0.7**
PDG *e*Sn **Sn 20 24 04.7 -2.1**
**PDG Podgorica 3.34 79** ⇓*i*Pn **Pn 20 23 28.0 +0.6**
**PDG Podgorica 3.34 79** ⇑P **Pn 20 23 28.5 +1.1**
PDG ⇓S **Sn 20 24 09.5 +2.7**
**PDG Podgorica 3.34 79** ⇓*i*Pn **Pn 20 23 28.0 +0.6**
PDG *i*Sn **Sn 20 24 07.9 +1.1**
**BLY Banja Luka 3.36 30** *e*Pn **Pn 20 23 28.9 +1.2**
**SEI Scarperia 3.37 312** P **Pn 20 23 29.6 +1.8**
**IMOL Imola, Italy 3.37 319** P **Pn 20 23 30.3 +2.5**
**PRIJ Prijedor 3.40 23** *e*Pn **Pn 20 23 30.0 +1.7**
**A051A Mrakovica 3.49 25** ⇑*i*Pn **Pn 20 23 30.4 +0.8**
**MTRZ Monterenzio 3.52 317** P **Pn 20 23 32.6 +2.7**
**MTCR Monte La Croce 3.55 309** P **Pn 20 23 31.8 +1.4**
**KOME Kolasin 3.61 73** *e*Pn **Pn 20 23 32.0 +0.8**
KOME *e*Sn **Sn 20 24 14.5 +0.9**
**BOJS Bojanci 3.66 5** AML AML
comp=E,6845µm,1.0s
**BOJS Bojanci 3.66 5** *e*Pn **Pn 20 23 31.6 -0.2**
**BOJS Bojanci 3.66 5** *e*Pn **Pn 20 23 32.2 +0.4**
**GBRS Gornja Briga 3.67 360** *i*Pn **Pn 20 23 32.0 0.0**

**PLE Pljevlja 3.67 65** *e*Pn **Pn 20 23 32.5 +0.4**
PLE *i*Sn **Sn 20 24 16.1 +0.9**
**CEL Celeste 3.69 167** Pn **Pn 20 23 31.6 -0.6**
**CEL Celeste 3.69 167** P **Pn 20 23 32.9 +0.7**
**DOB Doboj 3.73 39** *e*Pn **Pn 20 23 33.5 +0.7**
**SKDS Skadanscina 3.73 351** *i*Pn **Pn 20 23 32.3 -0.6**
**SKDS Skadanscina 3.73 351** *e*Pn **Pn 20 23 32.3 -0.6**
**HAPS Han Pijesak,Bl 3.75 52** *e*Pn **Pn 20 23 35.8 +2.6**
**ZCCA Zocca 3.77 313 Pn 20 23 35.5 +2.1**
**RUDO Rudo 3.77 61** *e*Pn **Pn 20 23 35.0 +1.6**
**PUK Puka 3.78 86** Pn **Pn 20 23 34.6 +1.1**
**VLO Vlora 3.78 110 Pn 20 23 34.1 +0.7**
**VLO Vlora 3.78 110** P **Pn 20 23 34.2 +0.7**
**VLO Vlora 3.78 110** P **Pn 20 23 34.1 +0.7**
**MAIM Mastiano 3.79 304** P **Pn 20 23 35.6 +1.9**
**TIR Tirane 3.81 96 Pn 20 23 34.0 +0.1**
**TIR Tirane 3.81 96** P **Pn 20 23 34.3 +0.5**
**TIR Tirane 3.81 96** ⇓P **Pn 20 23 34.5 +0.7**
TIR ⇑S **Sn 20 24 20.3 +1.9**
**TIR Tirane 3.81 96** P **Pn 20 23 34.5 +0.7**
**BDI Bagni Di Lucca 3.81 307** P **Pn 20 23 35.2 +1.2**
**CARD Cardoso 3.86 306** P **Pn 20 23 36.3 +1.7**
**PVY Plav 3.88 77** ⇑*i*Pn **Pn 20 23 36.8 +1.9**
**IVA Berane 3.88 73** *e*Pn **Pn 20 23 36.2 +1.2**
IVA *i*Sn **Sn 20 24 21.4 +1.0**
**CEY Cerknica 3.89 356** *e*Pn **Pn 20 23 35.6 +0.6**
**SOI Samo 3.90 166** P **Pn 20 23 35.8 +0.7**
**BBLS Lazi&#263i 3.91 58** *e*Pn **Pn 20 23 36.6 +1.2**
BBLS *e*Sn **Sn 20 24 19.1 -2.0**
**BBLS Lazi&#263i 3.91 58** *e*Pn **Pn 20 23 36.4 +1.0**
**RAVA Ravarino 3.97 318** P **Pn 20 23 38.4 +2.4**
**GSCL Gusciola 3.98 310** P **Pn 20 23 38.8 +2.5**
**VLC Villacollemand 3.99 307** P **Pn 20 23 37.6 +1.2**
**SARO Sassorosso 4.00 307** AML AML
comp=E,294µm,0.7s
SARO AML AML
comp=N,370µm,0.8s
SARO AML AML
comp=N,370µm,1.2s
**SARO Sassorosso 4.00 307** P **Pn 20 23 37.6 +1.1**
**SJES Sjenica 4.05 68** *e*Pn **Pn 20 23 39.7 +2.5**
SJES *e*Sn **Sn 20 24 20.9 -3.6**
**SJES Sjenica 4.05 68** *e*Pn **Pn 20 23 39.7 +2.5**
**CAVE Cavezzo 4.10 318** AML AML
comp=E,1632µm,0.5s
CAVE AML AML
comp=E,1930µm,1.4s
CAVE AML AML
comp=N,2315µm,1.1s
CAVE AML AML
comp=N,2315µm,0.9s
CAVE AML AML
comp=E,1930µm,0.6s
CAVE AML AML
comp=N,1505µm,0.5s
**TEOL Teolo 4.19 328 Pn 20 23 38.6 -0.5**
**SABO M.te Sabotino 4.21 348** Pn **Pn 20 23 39.4 -0.1**
**KEK Kerkira 4.34 118 Pn 20 23 41.4 +0.3**
**KEK Kerkira 4.34 118** P **Pn 20 23 41.4 +0.3**
**TEKS Tekeris 4.36 50** *e*Pn **Pn 20 23 41.2 -0.3**
TEKS *e*Sn **Sn 20 24 27.5 -4.6**
**TEKS Tekeris 4.36 50** *e*Pn **Pn 20 23 40.7 -0.8**
**SRN Sarande 4.39 115** P **Pn 20 23 42.7 +0.9**
**VAE Valguarnera 4.39 184** Pn **Pn 20 23 45.3 +3.4**
comp=N,1.0nm,0.3s,baz=26,slow=2.9,SNR=3.0
**PGF Pioggiola 4.39 281** *e*P **Pn 20 23 43.4 +1.5**
**PGF Pioggiola 4.39 281** AML AML
comp=N,158µm,0.5s
PGF AML AML
comp=N,158µm,0.5s
PGF AML AML
comp=E,202µm,0.5s
PGF AML AML
comp=E,203µm,0.5s
**PGF Pioggiola 4.39 281** P **Pn 20 23 43.7 +1.8**
**PRMA PARMA 4.39 313 Pn 20 23 44.0 +2.1**
**DIVS Divibare 4.40 58** *e*Pn **Pn 20 23 42.7 +0.7**
**CLTB Caltabellotta 4.45 197** Pn **Pn 20 23 45.8 +3.0**
**OHR Ohrid 4.54 97** *i*Pn **Pn 20 23 45.4 +1.4**
OHR *i*Sn **Sn 20 24 36.8 +0.2**
**MSSA Maissana 4.60 304** Pn **Pn 20 23 46.3 +1.4**
**GROS Grobnik 4.62 6** *i*Pn **Pn 20 23 44.5 -0.6**
**OBKA Obir 4.65 358** *i*Pn **Pn 20 23 45.6 +0.1**
comp=E,16nm,0.3s,SNR=32
**OBKA Obir 4.65 358** *e*Pn **Pn 20 23 45.4 -0.2**
**OBKA Obir 4.65 358** *e*Pn **Pn 20 23 45.9 +0.3**
OBKA *e*Sn **Sn 20 24 37.7 -1.7**
**KBN Korca 4.66 103 Pn 20 23 46.8 +1.2**
**KBN Korca 4.66 103** P **Pn 20 23 46.6 +1.0**
**KBN Korca 4.66 103** P **Pn 20 23 46.8 +1.2**
**STAL STALIGIAL 4.66 342 Pn 20 23 45.0 -0.5**
**TRUS Trudelj 4.72 58** *e*Pn **Pn 20 23 46.2 -0.2**
TRUS *e*Sn **Sn 20 24 36.3 -4.6**
**VSL Villasalto 4.77 242** Pn **Pn 20 23 46.5 -0.7**
**VSL Villasalto 4.77 242** AML AML
comp=E,227µm,0.8s
VSL AML AML
comp=N,170µm,0.8s
**GRUS Gruza 4.77 63** *e*Pn **Pn 20 23 47.7 +0.6**
GRUS *e*Sn **Sn 20 24 39.2 -3.0**
**CTI Castel Tesino 4.78 332** Pn **Pn 20 23 46.8 -0.5**
**CTI Castel Tesino 4.78 332** P **Pn 20 23 46.8 -0.5**
**IGT Igoumenitsa 4.78 117** P **Pn 20 23 47.9 +0.6**
**SOKA Soboth 4.82 2** *i*Pn **Pn 20 23 47.8 0.0**
comp=N,25nm,0.5s,SNR=35
**SELS Selova 4.84 72** *e*Pn **Pn 20 23 49.1 +1.1**
SELS *e*Sn **Sn 20 24 39.9 -4.0**
**MYKA Terra Mystica 4.85 350** *i*Pn **Pn 20 23 48.6 +0.4**
comp=N,4.0nm,0.2s,SNR=33
MYKA *e*Sn **Sn 20 24 46.0 +1.9**
comp=N,103nm,0.4s
**BOB Bobbio (Coli) 4.89 308** P **Pn 20 23 50.9 +2.1**
**FRGS Fruska Gora 4.89 46** *e*Pn **Pn 20 23 49.9 +1.1**
FRGS *e*Sn **Sn 20 24 41.6 -3.7**
**FRGS Fruska Gora 4.89 46** *e*Pn **Pn 20 23 51.3 +2.5**
**NEST Nestorio 4.91 105** P **Pn 20 23 50.5 +1.4**
**AVAS Avala Beograd 5.02 54** *e*Pn **Pn 20 23 50.6 0.0**
AVAS *e*Sn **Sn 20 24 44.7 -3.7**
**FNA Florina 5.04 100** Pn **Pn 20 23 51.4 +0.5**
**FNA Florina 5.04 100** P **Pn 20 23 51.2 +0.3**
**FNA Florina 5.04 100** P **Pn 20 23 51.4 +0.5**
**PENT Pentalofos 5.05 107** P **Pn 20 23 52.6 +1.6**
**JAN Janina 5.07 114** P **Pn 20 23 52.0 +0.7**
**MORH Mrgy, Hungar 5.15 31** ⇑P **Pn 20 23 54.4 +2.2**
**ABTA Abfaltersbach 5.16 342** *i*Pn **Pn 20 23 52.5 0.0**
comp=N,7.2nm,0.3s,SNR=47
ABTA *i*Sn **Sn 20 24 53.2 +1.3**
comp=N,354nm,0.8s
**SVIS Svilajnac 5.26 61** *e*Pn **Pn 20 23 53.7 0.0**
SVIS *e*Sn **Sn 20 24 50.7 -3.4**
**BARS Barje 5.26 77** *e*Pn **Pn 20 23 54.6 +0.8**
BARS *e*Sn **Sn 20 24 51.9 -2.4**
**KBA Koelnbreinsper 5.33 349** *i*Pn **Pn 20 23 54.9 0.0**
comp=N,0.2nm,0.2s,SNR=33
KBA *i*Sn **Sn 20 24 54.4 -1.7**
comp=N,103nm,0.6s
**KBA Koelnbreinsper 5.33 349** *e*Pn **Pn 20 23 55.9 +1.1**
KBA *e*Sn **Sn 20 24 54.6 -1.5**
**BOVS Bovan 5.36 68** *e*Pn **Pn 20 23 55.8 +0.6**
BOVS *e*Sn **Sn 20 24 51.9 -4.8**
**BOVS Bovan 5.36 68** ⇓P **Pn 20 23 56.2 +1.0**
**TSLK Tsoukalades, L 5.38 122** P **Pn 20 23 56.3 +0.8**
**LKD2 Lefkada island 5.40 123** P **Pn 20 23 56.3 +0.5**
**ARSA Arzberg 5.41 5** *i*Pn **Pn 20 23 55.8 -0.2**
comp=N,8.5nm,0.3s,SNR=17
**ARSA Arzberg 5.41 5** *e*Pn **Pn 20 23 55.8 -0.2**
**KZN Kozani 5.47 104** P **Pn 20 23 57.4 +0.7**
**NYDR Nydri-Lefkada 5.47 123** P **Pn 20 23 56.9 +0.2**
**STIP Stip 5.50 89** *i*Pn **Pn 20 23 60.0 +2.9**
STIP *i*Sn **Sn 20 25 02.2 +2.1**
**EVGI Lefkada island 5.50 124** P **Pn 20 23 57.6 +0.4**
**FSK Fiskardo 5.55 126** P **Pn 20 23 57.7 -0.1**
**DMLN Damoulianata-K 5.58 129** P **Pn 20 23 58.5 +0.3**
**KUBS Kucevo 5.62 61** *e*Pn **Pn 20 23 57.4 -1.3**
**VRSS Vrsac 5.74 53** *e*Pn **Pn 20 23 59.3 -1.1**
**VLS Valsamata 5.75 128** P **Pn 20 24 00.9 +0.4**
**LESA Schwarzleotal 5.77 345** *i*Pn **Pn 20 24 01.0 +0.1**
comp=N,8.6nm,0.2s
LESA *i*Sn **Sn 20 25 07.2 +0.2**
comp=N,140nm,0.5s
**ZAGS Zajecar 5.78 68** *e*Pn **Pn 20 24 01.6 +0.7**
ZAGS *e*Sn **Sn 20 25 01.7 -5.3**

**FUORN Ofenpass-Fuorn 5.78 327** Pn **Pn 20 24 01.5 +0.3**
**SBF Sospel 5.79 293** *e*P **Pn 20 24 03.3 +2.1**
**MDVR Moldovita 5.80 57** ⇑P **Pn 20 24 03.3 +2.0**
**WTTA Wattenberg 5.87 338** *i*Pn **Pn 20 24 03.3 +1.0**
comp=N,3.5nm,0.2s,SNR=20
WTTA *i*Sn **Sn 20 25 10.9 +1.5**
comp=N,184nm,0.5s
**WTTA Wattenberg 5.87 338** *e*Pn **Pn 20 24 05.0 +2.7**
WTTA *e*Sn **Sn 20 25 10.3 +0.8**
**BIOA Bad Ischl, Aus 5.89 352** *i*Pn **Pn 20 24 03.3 +0.8**
comp=N,36nm,0.3s,SNR=38
BIOA *e*Sn **Sn 20 25 10.4 +0.5**
comp=N,170nm,0.4s
**THL Klokotos Trika 5.92 110** P **Pn 20 24 03.5 +0.7**
**RTZL Ratzakli, Kefa 5.92 128** P **Pn 20 24 03.5 +0.6**
**ZAPS Zavoj 5.93 74** *e*Pn **Pn 20 24 04.0 +0.9**
ZAPS *e*Sn **Sn 20 25 06.7 -4.1**
**RONA Rosalia, Austr 5.93 10** *i*Pn **Pn 20 24 03.1 +0.1**
comp=N,4.5nm,0.2s,SNR=24
**FETA Feichten 5.94 332** *i*Pn **Pn 20 24 03.9 +0.6**
comp=N,9.3nm,0.6s,SNR=29
FETA *i*Sn **Sn 20 25 14.2 +3.0**
comp=N,56nm,0.4s
**WATA Walderalm 5.95 338** *i*Pn **Pn 20 24 04.8 +1.4**
comp=N,8.1nm,0.3s,SNR=40
WATA *i*Sn **Sn 20 25 12.1 +0.7**
comp=N,191nm,0.5s
**SOP Sopron 5.95 11** P **Pn 20 24 03.2 -0.1**
**SQTA Sankt Quirin 5.95 335** *i*Pn **Pn 20 24 04.4 +0.9**
comp=N,25nm,0.3s,SNR=65
SQTA *e*Sn **Sn 20 25 13.1 +1.6**
comp=N,224nm,0.5s
**MOA Molln 6.00 356** *i*Pn **Pn 20 24 04.5 +0.5**
comp=N,1.3nm,0.1s,SNR=33
MOA *i*Sn **Sn 20 25 09.6 -3.0**
comp=N,44nm,0.4s
**MOA Molln 6.00 356** *e*Pn **Pn 20 24 04.7 +0.6**
MOA *e*Sn **Sn 20 25 11.4 -1.1**
**TYRN Tyrnavos 6.01 108** P **Pn 20 24 04.7 +0.6**
**WDD Wied Dalam 6.02 182** Pn **Pn 20 24 02.8 -1.4**
**RJOB Jochberg 6.05 347** *e*Sn **Sn 20 25 13.7 -0.2**
**LIT Litokhoron 6.05 104 Pn 20 24 04.8 +0.1**
**LIT Litokhoron 6.05 104** P **Pn 20 24 04.7 -0.1**
**LIT Litokhoron 6.05 104** P **Pn 20 24 04.8 +0.1**
**PVO Paravola 6.06 120** P **Pn 20 24 05.6 +0.8**
**DAVOX Davos/Dischmat 6.07 326** Pn **Pn 20 24 07.0 +1.9**
comp=N,17nm,0.3s,baz=147,slow=14,SNR=204
DAVOX Sn **Sn 20 25 13.4 -1.0**
comp=N,13nm,0.3s,baz=109,slow=17,SNR=5.5
**EVR Evrytania 6.08 117** P **Pn 20 24 07.8 +2.6**
**KNT Kendrikon 6.09 94** P **Pn 20 24 04.8 -0.5**
**MOTA Moosalm 6.10 335** *i*Pn **Pn 20 24 06.7 +1.2**
comp=N,33nm,0.5s
MOTA *i*Sn **Sn 20 25 17.4 +2.3**
comp=N,164nm,0.7s
**CONA Conrad Observa 6.11 7** *i*Pn **Pn 20 24 05.7 +0.1**
comp=N,26nm,0.5s,SNR=33
CONA *i*Sn **Sn 20 25 15.5 +0.2**
comp=N,77nm,0.4s
**BZS Buzias 6.18 50** ⇑P **Pn 20 24 08.4 +1.9**
**BZS Buzias 6.18 50** P **Pn 20 24 08.4 +1.9**
**KKB Krupnik 6.19 87** ⇓*i*P **Pn 20 24 07.5 +0.8**
**LTHK Lithakia 6.21 130** P **Pn 20 24 06.5 -0.3**
**PART Garmisch-Parte 6.23 336** *e*Sn **Sn 20 25 19.4 +1.3**
**THE Thessaloniki 6.25 99** P **Pn 20 24 06.9 -0.5**
**MAKR Makrakomi, Fth 6.25 115** P **Pn 20 24 09.0 +1.5**
**VTS Vitosha 6.28 80** ⇓*i*P **Pn 20 24 08.9 +0.9**
**HERR Herculane 6.30 59** ⇑P **Pn 20 24 10.4 +2.4**
**LMR La Mourre 6.32 286** *e*P **Pn 20 24 09.6 +1.3**
**ANX Ano Chora 6.33 119** P **Pn 20 24 10.0 +1.4**
**RETA Reutte 6.33 334** *i*Pn **Pn 20 24 09.9 +1.4**
comp=N,12nm,0.5s,SNR=10
RETA *e*Sn **Sn 20 25 23.7 +3.0**
comp=N,42nm,0.3s
**RLS Riolos of Patr 6.35 125** P **Pn 20 24 09.5 +0.7**
**HORT Hortiatis 6.36 99** P **Pn 20 24 08.3 -0.7**
**PUNG Punghina 6.40 65** ⇑P **Pn 20 24 11.1 +1.6**
**EFP Efpalio 6.41 120** P **Pn 20 24 10.9 +1.3**
**PLNA Plana 6.41 82** *i*P **Pn 20 24 10.8 +1.0**
**UPR University Cam 6.42 122** P **Pn 20 24 11.6 +1.9**
**OBER Oberstdorf 6.42 331** *e*Pn **Pn 20 24 12.0 +2.4**
OBER *e*Sn **Sn 20 25 23.4 +0.4**
**SRO Srobarova 6.45 21** *e*P **Pn 20 24 10.5 +0.4**
SRO *e* 20 25 23.0
SRO MLR MLR
comp=Z,100nm,0.9s
**SRO Srobarova 6.45 21** *e*PN **Pn 20 24 10.5 +0.4**
SRO *e*PG Pg 20 24 44.5 +5.5
SRO *e*SN **Sn 20 25 23.0 -0.4**
SRO *e*LG Lg 20 25 44.1
**DAVA Damuels 6.48 329** *e*Pn **Pn 20 24 11.9 +1.2**
comp=Z,20nm,0.4s,SNR=38
DAVA *i*Sn **Sn 20 25 26.8 +2.4**
comp=Z,49nm,0.4s
**DAVA Damuels 6.48 329** *e*Pn **Pn 20 24 12.3 +1.7**
**PLONS Plons/SG 6.49 325** *e*Pn **Pn 20 24 12.2 +1.5**
PLONS *e*Sn **Sn 20 25 24.1 -0.5**
**SOH Sokhos 6.50 96** P **Pn 20 24 10.7 -0.1**
**ZST Bratislava 6.54 13** *e*P **Pn 20 24 13.5 +2.2**
ZST *e* 20 25 21.2
ZST MLR MLR
comp=Z,200nm,1.2s
**ZST Bratislava 6.54 13** *e*PN **Pn 20 24 13.5 +2.2**
ZST *e*SN **Sn 20 25 21.2 -4.4**
ZST *e*LG Lg 20 26 08.9
**MBDF Montbardon 6.54 299** *e*Pn **Pn 20 24 12.5 +0.9**
**SURR Surduc 6.55 51** ⇑P **Pn 20 24 13.3 +1.7**
**VALD Valchedram 6.59 71** *i*P **Pn 20 24 14.2 +2.2**
**SIRR Siria 6.60 46** ⇑P **Pn 20 24 14.2 +1.9**
**SRS Serrai 6.62 94** P **Pn 20 24 12.2 -0.3**
**ALIK Aliki, Aigiali 6.64 120** P **Pn 20 24 14.0 +1.3**
**MMB Musomishta 6.68 90** ⇓*i*P **Pn 20 24 13.8 +0.4**
**UBR Ueberruh 6.72 332** *e*Pn **Pn 20 24 15.1 +1.1**
**SRE Strehaia 6.72 63** ⇑P **Pn 20 24 16.1 +2.2**
**SRE Strehaia 6.72 63** P **Pn 20 24 16.0 +2.2**
**AXAR Agios Charalam 6.73 115** P **Pn 20 24 15.2 +1.2**
**BNI Bardonecchia 6.74 301** Pn **Pn 20 24 14.1 -0.1**
**BNI Bardonecchia 6.74 301** P **Pn 20 24 14.1 -0.1**
**MPEP Malo Peshtene 6.74 74** P **Pn 20 24 16.1 +2.0**
**GZR Gura Zlata 6.76 56** ⇑P **Pn 20 24 16.2 +1.7**
**NVR Nevrokopi 6.79 91** P **Pn 20 24 16.3 +1.5**
**FUR Furstenfeldbru 6.79 339** *e*Pn **Pn 20 24 15.4 +0.5**
**KLV Kalavryta, Ach 6.79 122** P **Pn 20 24 15.8 +0.9**
**NEO Neokhori 6.88 109** P **Pn 20 24 15.8 -0.2**
**LPG La Plagne 6.90 305** *e*Pn **Pn 20 24 16.0 -0.5**
**SMOL Smolenice 6.90 15** *e*P **Pn 20 24 17.9 +1.6**
SMOL *e* 20 25 30.1
SMOL MLR MLR
comp=Z,100nm,1.0s
**LPL La Plagne 6.92 305** *e*Pn **Pn 20 24 16.1 -0.7**
LPL *e*Sn **Sn 20 25 29.0 -6.3**
comp=Z,86nm,0.5s
**PGB Panagyurishte 6.97 82** ⇓*i*P **Pn 20 24 19.0 +1.7**
**CKRC Cesky Krumlov 6.97 357** *e*PN **Pn 20 24 16.5 -0.8**
CKRC *e*SN **Sn 20 25 32.5 -3.9**
**CKRC Cesky Krumlov 6.97 357** *e*P **Pn 20 24 16.5 -0.8**
CKRC *e* 20 25 32.5
**GUR Goura 6.97 122** P **Pn 20 24 18.4 +0.9**
**KOKK Kokkinochori, 6.98 96** P **Pn 20 24 17.2 -0.2**
**WILA Wila 6.98 325** *e*Pn **Pn 20 24 18.3 +0.8**
**GEC2 GERESS Array S 7.03 354** Pn **Pn 20 24 17.8 -0.4**
**GEC2 GERESS Array S 7.03 354** *e*Sn **Sn 20 25 33.4 -4.5**
**GERES GERESS Array B 7.03 354 Pn 20 24 17.5 -0.7**
**GERES GERESS Array B 7.03 354** Pn **Pn 20 24 17.9 -0.4**
comp=Z,12nm,0.3s,baz=173,slow=24,SNR=116
GERES Sn **Sn 20 25 34.6 -3.4**
comp=Z,11nm,0.3s,baz=172,slow=30,SNR=11
comp=Z,10nm,0.3s
**PSZ Piszkesteto 7.04 29** Pn **Pn 20 24 18.3 0.0**
**PSZ Piszkesteto 7.04 29** ⇑P **Pn 20 24 20.1 +1.8**
**PSZ Piszkesteto 7.04 29** P **Pn 20 24 20.1 +1.8**
**SENIN Lac Senin/Sane 7.05 312** Pn **Pn 20 24 18.0 -0.5**
**OUR Ouranopolis 7.08 99** P **Pn 20 24 18.1 -0.6**
**SMRF Simiane la Rot 7.12 290** *e*P **Pn 20 24 22.3 +2.9**
**WALHA Wallhausen, DE 7.16 327** *e*Pn **Pn 20 24 19.6 -0.2**
**ITM Ithomi 7.20 128** Pn **Pn 20 24 20.1 -0.5**
**ITM Ithomi 7.20 128** P **Pn 20 24 20.6 +0.1**
**ORIF Oris-en-Rattie 7.20 298** *e*Pn **Pn 20 24 21.9 +1.3**
**ORIF Oris-en-Rattie 7.20 298** P **Pn 20 24 22.7 +2.1**
**VYHS Vyhne 7.21 22** *e*P **Pn 20 24 20.6 0.0**
VYHS *e* 20 25 38.1
**VYHS Vyhne 7.21 22** *e*PN **Pn 20 24 20.6 0.0**

VYHS eSN Sn 20 25 38.1 -4.2
**JAVC Velka Javorina 7.28 15** ePN Pn 20 24 21.4 -0.2
**KRUC Moravsky 7.29 8** ePN Pn 20 24 21.2 -0.4
KRUC eSN Sn 20 25 39.3 -4.8
**PYL PYLOS 7.29 131** P Pn 20 24 21.5 -0.2
**KHC Kasperske Hory 7.33 354** Pn Pn 20 24 21.3 -0.8
**KHC Kasperske Hory 7.33 354** ePN Pn 20 24 21.7 -0.5
KHC eSN Sn 20 25 41.7 -3.4
**KHC Kasperske Hory 7.33 354***c iP* Pn 20 24 21.4 -0.8
KHC pmax pmax
comp=Z,72nm,0.8s
**KAVA Kavala 7.33 94** P Pn 20 24 22.1 -0.1
**PLD Plovdiv 7.39 84** *i* P Pn 20 24 24.0 +1.0
**LOT Lotru 7.41 58** ⇑P Pn 20 24 26.5 +3.1
**RZN Rozhen 7.41 88** ⇓*iP* Pn 20 24 24.2 +0.8
**WET Wettzell 7.41 350** ePn Pn 20 24 22.4 -0.9
WET eSn Sn 20 25 41.8 -5.4
**SULZ Cheisacher 7.42 322** ePn Pn 20 24 23.7 +0.3
SULZ eSn Sn 20 25 45.3 -2.1
**SLE Schleitheim 7.43 325** ePn Pn 20 24 23.0 -0.6
SLE eSn Sn 20 25 43.6 -4.0
**TREC Trest 7.45 3** ePN Pn 20 24 23.5 -0.4
**TREC Trest 7.45 3** *eP* Pn 20 24 23.5 -0.4
**KEST Kesra 7.47 217** Pn Pn 20 24 23.8 -0.4
**KEST Kesra 7.47 217** Pn Pn 20 24 26.6 +2.3
comp=Z,3.9nm,0.3s,baz=322,slow=3.3,SNR=98
**VILL Villia 7.48 117** P Pn 20 24 24.1 -0.2
**METMA Mettma DE 7.49 324** ePn Pn 20 24 23.9 -0.6
METMA eSn Sn 20 25 44.6 -4.6
**DRGR 7.50 46** ⇑P Pn 20 24 27.8 +3.3
**DRGR 7.50 46** P Pn 20 24 27.8 +3.3
**VRAC Vranov 7.55 9** ePN Pn 20 24 24.9 -0.4
**VRAC Vranov 7.55 9** Pn Pn 20 24 25.1 -0.1
comp=Z,1.3nm,0.3s,baz=198,slow=14,SNR=9.1
comp=Z,4.5nm,0.4s
**VRAC Vranov 7.55 9** ⇑P Pn 20 24 27.9 +2.7
**VRAC Vranov 7.55 9** P Pn 20 24 27.9 +2.7
**THAS Thassos island 7.56 96** P Pn 20 24 24.4 -0.9
**MSS Messtetten 7.56 329** ePn Pn 20 24 25.0 -0.5
**ZVC Zvikov 7.59 357** eSN Sn 20 25 46.0 -5.6
**KECS Kecovo 7.73 29** *eP* Pn 20 24 30.6 +2.9
KECS *e* 20 25 52.5
**KECS Kecovo 7.73 29** ePN Pn 20 24 30.6 +2.9
KECS eSN Sn 20 25 52.5 -2.5
KECS eLG Lg 20 26 20.9
**KYMI Kymi, Euboea I 7.78 111** P Pn 20 24 28.5 0.0
**KRND KRANIDI 7.82 122** P Pn 20 24 29.1 +0.1
**CABF La Chapelle 7.87 310** eSn Sn 20 25 51.7 -7.0
comp=Z,148nm,0.9s
**HUMR Humele 7.88 67** ⇓P Pn 20 24 31.4 +1.7
**ATHU Athens Univers 7.90 117** P Pn 20 24 30.2 +0.1
**PTL Penteli 7.91 116** P Pn 20 24 30.4 +0.2
**BFO Black Forest 7.94 327** Pn 20 24 29.6 -1.0
**BFO Black Forest 7.94 327** P Pn 20 24 29.6 -1.0
**BFO Black Forest 7.94 327** *e*Pn Pn 20 24 31.1 +0.5
**DION Dionisos Attik 7.94 115** P Pn 20 24 32.1 +1.4
**COPA Copaceanca 7.94 70** ⇓P Pn 20 24 32.6 +2.0
**VLY Voula,Athens 7.97 117** P Pn 20 24 30.6 -0.4
**STU Stuttgart 7.97 332** Pn 20 24 30.1 -0.9
**STU Stuttgart 7.97 332** P Pn 20 24 30.1 -0.9
**VIVF Saint-Julien-l 7.99 295** ePn Pn 20 24 31.8 +0.5
**GOPC GO Pecny, Ondr 8.06 360** ePN Pn 20 24 31.4 -0.8
**GOPC GO Pecny, Ondr 8.06 360** *eP* Pn 20 24 31.4 -0.8
**RDO Rodhopi 8.07 92** Pn 20 24 31.9 -0.4
**LIA Limnos Island 8.08 101** P Pn 20 24 31.9 -0.6
**VLI Veliai 8.11 127** P Pn 20 24 34.0 +1.0
**ROTZ Rotzenmuhle 8.12 348** ePn Pn 20 24 31.4 -1.6
ROTZ eSn Sn 20 25 57.6 -6.9
**PRU Pruhonice 8.13 359** ePN Pn 20 24 32.1 -1.1
**PRU Pruhonice 8.13 359** *eP* Pn 20 24 32.1 -1.1
**MORC Moravsky Berou 8.14 12** ePn Pn 20 24 33.9 +0.5
**MORC Moravsky Berou 8.14 12** ePN Pn 20 24 34.1 +0.7
MORC eSN Sn 20 26 02.2 -3.0
**MORC Moravsky Berou 8.14 12** ⇑P Pn 20 24 36.1 +2.7
**MORC Moravsky Berou 8.14 12** P Pn 20 24 36.1 +2.7
**PRA Prague 8.22 358** ePN Pn 20 24 34.8 +0.4
**PRA Prague 8.22 358** *eP* Pn 20 24 34.8 +0.4
**SSB Saint Sauveur 8.22 298** Pn Pn 20 24 33.8 -0.6
**SSB Saint Sauveur 8.22 298** P Pn 20 24 33.8 -0.6
**HINF Hinteralfeld 8.22 319** ePn Pn 20 24 32.9 -1.6
HINF eSn Sn 20 26 00.0 -7.2
comp=Z,132nm,0.4s
**VOIR 8.22 61** ⇓P Pn 20 24 36.9 +2.3
**VOIR 8.22 61** P Pn 20 24 36.8 +2.3
**VOIR 8.22 61** P Pn 20 24 37.9 +3.3
comp=Z,65nm,1.1s
**GRFO Grafenberg 8.23 343** Pn 20 24 34.1 -0.4
**GRFO Grafenberg 8.23 343** P Pn 20 24 34.1 -0.4
**GRA1 Grafenberg Arr 8.23 343** Pn 20 24 34.3 -0.3
**GRF Grafenberg Arr 8.23 343** P Pn 20 24 34.3 -0.3
**GRF Grafenberg Arr 8.23 343** ePn Pn 20 24 35.6 +1.0
**ELND Elena 8.24 79** ⇑P Pn 20 24 36.4 +1.7
**KRLC Kraliky 8.33 9** ePN Pn 20 24 36.4 +0.5
**KRLC Kraliky 8.33 9** *eP* Pn 20 24 41.9 +6.0
**MANZ Manzenberg 8.35 348** ePn Pn 20 24 35.3 -0.9
**ECH Echery 8.36 322** Pn Pn 20 24 35.3 -1.0
**ECH Echery 8.36 322** P Pn 20 24 35.3 -1.0
**ECH Echery 8.36 322** *e*Pn Pn 20 24 35.5 -0.8
ECH eSn Sn 20 26 05.2 -5.3
**CRVS Cervenica-Dubn 8.44 31** *eP* Pn 20 24 40.0 +2.5
**CRVS Cervenica-Dubn 8.44 31** ePN Pn 20 24 40.0 +2.5
CRVS *e*PG Pb 20 25 18.2 +17
CRVS eSN Sn 20 26 01.9 -11
**CDF Champ du Feu 8.45 323** *e*Pn Pn 20 24 36.3 -1.4
CDF eSn Sn 20 26 05.8 -7.1
comp=Z,144nm,0.6s
**ALN Alexandroupoli 8.49 93** Pn Pn 20 24 37.8 -0.2
**ALN Alexandroupoli 8.49 93** P Pn 20 24 37.9 -0.2
**ALN Alexandroupoli 8.49 93** P Pn 20 24 37.8 -0.2
**SGRR Singureni 8.49 70** ⇑P Pn 20 24 40.0 +1.8
**KTHA Kythira Island 8.50 128** P Pn 20 24 39.5 +1.2
**HOLU Holmets 8.53 36** P Pn 20 24 41.3 +2.6
**DPC Dobruska-Polom 8.55 6** P Pn 20 24 42.0 +2.9
comp=Z,7.3nm,0.8s
**ROHR Rohrbach 8.56 349** *e*Pn Pn 20 24 38.1 -1.0
**HAU Haudompre 8.60 318** *e*Pn Pn 20 24 38.3 -1.3
HAU eSn Sn 20 26 09.0 -7.4
comp=Z,422nm,0.8s
**WERN Wernitzgruen 8.60 349** ePn Pn 20 24 41.0 +1.4
**KORU Korolevo 8.61 40** P Pn 20 24 43.6 +3.8
**CAVK Edirne/Enez-Ca 8.62 94** ⇑P Pn 20 24 40.0 +0.1
**DOPR Dopca 8.65 58** ⇓P Pn 20 24 43.4 +3.0
**TRIB Obertriebel 8.70 349** ePn Pn 20 24 40.7 -0.3
**TANN Tannenbergstha 8.71 350** ePn Pn 20 24 41.6 +0.3
**MULD Muldenberg 8.72 350** ePn Pn 20 24 40.8 -0.5
**WERD Werda 8.77 349** ePn Pn 20 24 42.2 +0.3
**KOLS Kolonicke sedl 8.79 34** *eP* Pn 20 24 47.6 +5.3
**KOLS Kolonicke sedl 8.79 34** ePN Pn 20 24 47.6 +5.3
KOLS *e*PG 20 25 24.7
**SIGR SIGRI 8.80 104** P Pn 20 24 42.1 -0.3
**HSKC Hora Svate Kat 8.80 354** ePN Pn 20 24 41.9 -0.5
**PLN Plauen 8.82 349** *e*Pn Pn 20 24 43.7 +1.0
**MLR Muntele Rosu 8.83 62** Pn Pn 20 24 43.4 +0.5
**MLR Muntele Rosu 8.83 62** Pn Pn 20 24 45.3 +2.4
comp=Z,0.5nm,0.3s,baz=240,slow=4.9,SNR=20
**MLR Muntele Rosu 8.83 62** ⇑P Pn 20 24 45.5 +2.6
**MLR Muntele Rosu 8.83 62** P Pn 20 24 45.5 +2.6
**MLR Muntele Rosu 8.83 62** P Pn 20 24 46.7 +3.8
comp=Z,59nm,1.1s,comp=Z,559nm
**SCHF Schoenfels 8.98 350** ePn Pn 20 24 45.1 +0.3
**GRZ1 Mausoleum Wald 9.02 349** ePn Pn 20 24 45.7 +0.4
**BRG Berggiesshubel 9.04 356** *eP* Pn 20 24 45.6 0.0
BRG Amp 20 24 48.7
comp=Z,3.6nm,0.4s
BRG r 20 24 56.2
BRG r 20 26 28.9
BRG r 20 27 36.2
BRG Amp 20 27 57.9
comp=Z,48nm,1.1s
**BRG Berggiesshubel 9.04 356** *e*Pn Pn 20 24 44.8 -0.8
**HWTS Hohenwarte Tal 9.04 346** ePn Pn 20 24 44.9 -0.8
**RAKU Rahkiv 9.04 44** P Pn 20 24 48.2 +2.5
**KSP Ksiaz 9.04 6** P Pn 20 24 47.8 +2.1
comp=Z,17nm,1.1s
**NEHR Nehoiu 9.04 63** ⇑P Pn 20 24 48.4 +2.7
**OJC Ojcow 9.04 21** Pn 20 24 46.8 +1.1
**OJC Ojcow 9.04 21** P Pn 20 24 46.8 +1.1
**MOX Moxa 9.06 347** *e*Pn Pn 20 24 45.4 -0.6
**TURR Turia 9.09 59** ⇓P Pn 20 24 49.1 +2.7
**FBE Freiberg 9.12 354** *e*Pn Pn 20 24 46.4 -0.3
**COVR Voineasa-Covas 9.13 60** ⇓P Pn 20 24 49.4 +2.4
**MLFH Mildenfurth 9.13 349** *e*Pn Pn 20 24 47.8 +0.9
**SMF Signal de Mont 9.22 305** *e*Pn Pn 20 24 46.7 -1.5
SMF *e*Sn Sn 20 26 23.3 -8.4
comp=Z,41nm,0.5s
**MODW Modelwitz 9.23 351** *e*Pn Pn 20 24 48.6 +0.4
**PAGF Fort de Pagny 9.28 319** *e*Pn Pn 20 24 47.6 -1.3
PAGF *e*Sn Sn 20 26 25.3 -7.7
comp=Z,233nm,0.9s
**BURAR Bucovina Array 9.36 49** Pn 20 24 51.9 +1.8
**BURAR Bucovina Array 9.36 49** ⇑P Pn 20 24 53.2 +3.0
**BURAR Bucovina Array 9.36 49** P Pn 20 24 53.1 +3.0
**BBWF Bergwerk Finst 9.37 343** *e*Pn Pn 20 24 49.0 -1.2
**BUR08 Bucovina Ar. S 9.37 48** Pn Pn 20 24 52.3 +2.0
**SFTF Sexfontaines 9.39 316** *e*Pn Pn 20 24 48.9 -1.6
baz=132
SFTF *e*Sn Sn 20 26 27.9 -8.0
comp=Z,224nm,1.1s
**PLOR3 Plostina Array 9.42 61** P Pn 20 24 53.6 +2.7
comp=Z,24nm,1.1s
**PLOR Plostina 9.42 61** ⇓P Pn 20 24 53.2 +2.3
**PLOR Plostina 9.42 61** P Pn 20 24 53.2 +2.3
**MTLF Montolieu 9.42 283** *e*Pn Pn 20 24 48.9 -2.0
**PLOR5 Plostina Array 9.43 61** P Pn 20 24 53.9 +2.9
comp=Z,31nm,1.5s
**ONER Baraj Valea Uz 9.44 58** ⇓P Pn 20 24 54.0 +2.8
**TNS Taunus Mts 9.47 334** *e*Pn Pn 20 24 51.8 +0.2
**VRI Vrincioaia 9.48 61** ⇑P Pn 20 24 54.0 +2.3
**VRI Vrincioaia 9.48 61** P Pn 20 24 53.9 +2.3
**VRI Vrincioaia 9.48 61** P Pn 20 24 54.3 +2.6
comp=Z,15nm,1.1s,comp=Z,232nm
**ABH Alteburg 9.49 330** *e*Pn Pn 20 24 53.3 +1.4
**LOR Lormes 9.52 308** *e*Pn Pn 20 24 49.9 -2.3
baz=118
LOR *e*Sn Sn 20 26 30.6 -8.3
comp=Z,41nm,0.4s
**CLL Collm 9.54 353** Pn Pn 20 24 52.1 -0.3
**CLL Collm 9.54 353** *i* Pn Pn 20 24 52.5 +0.1
comp=Z,16nm,0.9s
CLL *e*Sn Sn 20 26 32.0 -7.3
CLL *ex* x 20 26 47.0
CLL *e*Sb 20 27 09.0
CLL *ex* x 20 27 26.0
CLL *e*Sg 20 27 42.0
comp=Z,76nm,1.0s
CLL AMS AMS 20 28 00.0
comp=N,600nm,20.6s
CLL AMS AMS 20 28 00.0
comp=E,2µm,20.3s
**CLL Collm 9.54 353** *i* P Pn 20 24 52.5 +0.1
CLL pmax pmax
comp=Z,16nm,0.9s
**CLL Collm 9.54 353** P Pn 20 24 52.6 +0.1
comp=Z,17nm,0.5s
**CLL Collm 9.54 353** *e*Pn Pn 20 24 52.4 +0.1
**APE Apeiranthos 9.55 117** ⇑P Pn 20 24 52.5 -0.3
**APE Apeiranthos 9.55 117** P Pn 20 24 52.4 -0.3
**MEZF Maizieres J'vi 9.58 317** *e*Pn Pn 20 24 52.1 -0.9
baz=138
MEZF *e*Sn Sn 20 26 32.2 -8.2
comp=Z,110nm,0.8s
**AVF Avril sur Loir 9.59 305** *e*Pn Pn 20 24 51.6 -1.6
**SSF Saint Saulge 9.62 307** *e*Pn Pn 20 24 51.5 -2.1
SSF *e*Sn Sn 20 26 33.3 -8.2
comp=Z,31nm,0.5s
**RIVT Riveris 9.66 327** *e*Pn Pn 20 24 56.0 +1.9
**KSV Kosov 9.69 45** P Pn 20 24 57.8 +3.2
**BGF Bois d'Agland 9.80 303** *e*Pn Pn 20 24 55.1 -1.0
**TATN Tataouine 9.88 202** Pn Pn 20 24 56.1 -1.2
**WLF Walferdange 9.88 325** Pn Pn 20 24 58.0 +0.8
**WLF Walferdange 9.88 325** *dP* Pn 20 24 58.2 +1.1
WLF *dS* Sn 20 26 48.4 +0.7
**WLF Walferdange 9.88 325** P Pn 20 24 58.0 +0.8
**SANT Santorini 9.91 120** Pn Pn 20 24 57.7 +0.1
**SANT Santorini 9.91 120** ⇓P Pn 20 24 58.3 +0.7
**HARR Harsova 9.96 69** ⇑P Pn 20 24 59.3 +1.0
**HARR Harsova 9.96 69** P Pn 20 24 59.3 +1.0
**CEST Esterri de Car 10.10 279** Pn Pn 20 24 59.9 -0.4
**TCF Toulx Ste Croi 10.10 300** *e*Pn Pn 20 24 57.3 -3.0
TCF *e*Sn Sn 20 26 44.3 -9.1
comp=Z,39nm,1.1s
**BAND Balkesir-Ban 10.12 94** ⇑P Pn 20 25 00.9 +0.4
**CFR Carcaliu 10.21 67** ⇑P Pn 20 25 02.8 +1.0
**CFR Carcaliu 10.21 67** P Pn 20 25 02.7 +1.0
**LVV L'vov 10.22 36** *eP* Pn 20 25 05.4 +3.6
**HYF Humbligny 10.24 306** *e*Pn Pn 20 24 59.5 -2.6
HYF *e*Sn Sn 20 26 47.7 -9.0
comp=Z,149nm,0.6s
**IDI Anoyia 10.24 127** Pn Pn 20 25 01.6 -0.6
**IDI Anoyia 10.24 127** Pn Pn 20 25 01.1 -1.2
comp=Z,3.4nm,0.3s,baz=336,slow=5.0,SNR=26
IDI Sn Sn 20 26 48.0 -8.9
comp=Z,3.2nm,0.3s,baz=277,slow=20,SNR=2.7
**RJF Les Rejaudoux 10.26 294** *e*Pn Pn 20 24 59.4 -3.0
**KASTN Kahler Asten 10.33 337** *e*Pn Pn 20 25 03.9 +0.5
**TPGR Topolog 10.34 69** ⇓P Pn 20 25 04.8 +1.4
**KMPD K-Podol'skiy 10.59 47** P Pn 20 25 10.3 +3.5
**BTNL Ternell 10.60 328** *eP* Pn 20 25 09.9 +2.9
**RCHB Rochefort 10.64 324** *dP* Pn 20 25 09.2 +1.6
RCHB *dS* Sn 20 27 01.8 -4.7
**MEM Membach 10.67 328** *dP* Pn 20 25 10.7 +2.8
MEM *dS* Sn 20 27 03.8 -3.3
**GIVF Givet 10.78 323** *e*Pn Pn 20 25 09.6 +0.1
**GIVF Givet 10.78 323** *eP* Pn 20 25 17.2 +7.7
GIVF *e*Sn Sn 20 27 01.1 -8.8
comp=Z,55nm,0.8s
**BCLA Clavier 10.81 326** *dP* Pn 20 25 11.9 +2.1
**CLF Chambon-Foret 10.83 309** Pn Pn 20 25 11.1 +0.9
**BGES Gesves 10.88 325** *dP* Pn 20 25 12.1 +1.3
**DOU Dourbes 10.88 323** *dP* Pn 20 25 12.6 +1.7
DOU *dS* Sn 20 27 05.8 -6.5
**BMRD Maredsous 10.95 324** *dP* Pn 20 25 13.1 +1.2
**BAIF Baives 11.03 322** *e*Pn Pn 20 25 11.2 -1.7
BAIF *e*Sn Sn 20 27 06.1 -10
comp=Z,42nm,0.9s
**KARP Karpathos 11.50 119** Pn Pn 20 25 20.2 +0.7
**MFF Saint Martin d 11.74 299** *e*Pn Pn 20 25 22.5 -0.1
**ARG Arkhangelos 11.77 114** Pn 20 25 23.2 +0.2
**ARG Arkhangelos 11.77 114** P Pn 20 25 23.3 +0.2
**LUBAR Lubar, Ukraine 12.07 44** P Pn 20 25 28.6 +1.5
**RNPP9 Sopachiv 12.19 35** P Pn 20 25 32.3 +3.5
**MDUB Mudurnu 12.41 91** Pn 20 25 32.2 +0.3
**LDF La Druitiere 12.50 308** *e*Pn Pn 20 25 30.4 -2.6
**ELL Elmali 12.74 109** Pn Pn 20 25 35.6 -0.8
**ELL Elmali 12.74 109** P Pn 20 25 35.6 -0.8
**FLN La Foliniere 12.79 308** *e*Pn Pn 20 25 32.8 -4.1
**MI30 MI30,Zelenitsa 12.80 41** P Pn 20 25 41.0 +4.0
**GRR Gorron 12.85 306** *e*Pn Pn 20 25 35.0 -2.8
**AK07 Malin Array Si 13.19 44** P Pn 20 25 45.5 +3.1
**AK08 Malin Array Si 13.23 44** P Pn 20 25 45.8 +2.0
**AK10 Malin Array Si 13.25 44** P Pn 20 25 46.1 +2.9
**AK09 Malin Array Si 13.27 44** P Pn 20 25 46.4 +2.9
**KIEV Kiev 13.28 43** Pn Pn 20 25 44.1 +0.5
**KIEV Kiev 13.28 43** P Pn 20 25 44.1 +0.5
**AKASG Malin Array Be 13.29 43** Pn Pn 20 25 43.8 0.0
**AKASG Malin Array Be 13.29 43** Pn Pn 20 25 45.3 +1.5
comp=Z,0.6nm,0.3s,baz=233,slow=12,SNR=11
comp=Z,1.3nm,0.4s
**AKASG Malin Array Be 13.29 43** *eP* Pn 20 25 46.0 +2.2
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**AKBB Malin Array Si 13.29 43** Pn Pn 20 25 44.8 +1.0
**AKBB Malin Array Si 13.29 43** ⇓*iP* Pn 20 25 45.9 +2.1
AKBB pmax pmax
comp=Z,12nm,1.4s
**SUW Suwalki 13.37 22** Pn 20 25 45.4 +0.6
**SUW Suwalki 13.37 22** P Pn 20 25 45.4 +0.6
**ANTO Ankara 13.74 92** Pn Pn 20 25 50.9 +0.9
**ANTO Ankara 13.74 92** P Pn 20 25 50.9 +0.9
**QUIF Quistinic 14.11 302** *e*Pn Pn 20 25 53.4 -1.6
**ROSF Rostrenen 14.32 303** *e*Pn Pn 20 25 55.0 -2.8
**BR106 Keskin Array S 14.39 92** P Pn 20 26 00.7 +1.7
comp=Z,11nm,1.0s,comp=Z,95nm
**BR105 Keskin Array S 14.39 92** P Pn 20 26 00.7 +1.7
comp=Z,16nm,0.9s,comp=Z,127nm
**BR131 Keskin Array S 14.41 92** Pn Pn 20 25 57.6 -1.6
**BR131 Keskin Array S 14.41 92***c iP* Pn 20 26 00.6 +1.4
**BRTR Keskin Array B 14.41 92** Pn Pn 20 25 57.8 -1.4
**BRTR Keskin Array B 14.41 92** Pn Pn 20 26 00.5 +1.2
comp=Z,0.2nm,0.3s,baz=276,slow=11,SNR=30
comp=Z,5.9nm,0.8s
**BR104 Keskin Array S 14.41 92** P Pn 20 26 00.9 +1.6
comp=Z,13nm,1.0s,comp=Z,91nm
**ESDC Sonseca Array 14.41 268** Pn Pn 20 25 58.7 -0.5
baz=74,slow=14,SNR=2.1
comp=Z,0.7nm,0.9s
**KIRS Kirsehir-Merke 14.77 94** ⇑P Pn 20 26 05.5 +1.3
**PABE Paberze 14.91 21** Pn 20 26 05.8 +0.1
**PABE Paberze 14.91 21** *eP* P 20 26 12.3 +0.9
**NACGM Naroch 15.24 27** ⇑*iP* Pn 20 26 10.1 -0.2
comp=Z,672nm,0.8s,baz=216
**MNK Minsk 15.32 30** *i* P Pn 20 26 08.0 -3.3
comp=E,13nm,0.8s,baz=220
MNK *i* P Pn 20 26 08.0 -3.3
comp=N,6.0nm,0.7s,baz=220
MNK *i* P Pn 20 26 08.0 -3.3
comp=Z,13nm,0.9s,baz=220
MNK *i* PP P 20 26 16.1 +0.1
baz=220
MNK *i* PPP PPP 20 26 23.8
baz=220
MNK *i* S Sn 20 28 57.3 -3.3
baz=220
MNK *i* SS SnSn 20 29 11.3 -2.0
baz=220
MNK *i* SSS SSS 20 29 23.9
baz=220
MNK *i* LQ LQ 20 30 20.8
baz=220
MNK *i* LR LR 20 32 24.9
baz=220
MNK *i* LRM MLR 20 32 46.9
comp=E,326nm,18.6s,baz=220
MNK *i* LRM MLR 20 32 53.6
comp=N,244nm,14.4s,baz=220
MNK *i* LRM MLR 20 33 02.2
comp=Z,407nm,15.0s,baz=220
**MNK Minsk 15.32 30** *i* P Pn 20 26 08.0 -3.3
MNK *i* S Sn 20 28 57.3 -3.3
MNK pmax pmax
comp=E,13nm,0.8s
MNK pmax pmax
comp=Z,13nm,0.9s
MNK pmax pmax
comp=N,6.0nm,0.7s
MNK MLR MLR
comp=E,326nm,19.0s
MNK MLR MLR
comp=N,244nm,14.0s
MNK MLR MLR
comp=Z,407nm,15.0s
**IIGN Ignalina 15.43 25** *eP* P 20 26 17.7 +0.5
**CSS Mathiatis 16.04 109** Pn 20 26 17.3 -3.4
**BNN Bunyan 16.29 94** Pn 20 26 21.1 -3.0
**TOKA Tokat 16.39 88** Pn Pn 20 26 23.8 -1.4
**SLIT Slitere, Latvi 16.49 14** *eP* P 20 26 30.0 +1.1
**COI Coimbra 17.61 272** Pn Pn 20 26 37.5 -2.9
COI IAmb IAmb 20 26 48.8
comp=Z,26nm,0.9s
**COI Coimbra 17.61 272** P Pn 20 26 37.6 -2.9
COI pmax pmax
comp=Z,26nm,0.9s
**MTSE Matsula 17.79 15** *eP* P 20 26 44.7 +1.4
**MDT Midelt 17.87 246** P P 20 26 44.8 +0.2
comp=Z,0.1nm,0.3s,baz=78,slow=11,SNR=4.6
comp=Z,2.2nm,0.8s
**GAZ Gaziantep 17.87 98** P Pn 20 26 41.2 -2.7
**EKA Eskdalemuir Ar 17.91 325** P Pn 20 26 43.8 -0.2
baz=134,slow=12
comp=Z,2.5nm,0.6s
**ESK Eskdalemuir 17.92 325** P P 20 26 45.5 +0.8
**ESK Eskdalemuir 17.92 325** P P 20 26 45.5 +0.8
ESK pmax pmax
comp=Z,34nm,1.4s
**PVAQ Vaqueiros 17.92 263** Pn 20 26 41.3 -3.1
**EKB Eskdalemuir 17.92 325** Pn Pn 20 26 40.9 -3.4
**ARPR Arapgir-MALATY 18.08 91** P Pn 20 26 44.1 -2.4
**UPP Uppsala 18.10 5** *eP* P 20 26 47.9 +1.1
**DSB Dublin 18.22 316** P 20 26 48.2 +0.2
DSB IAmb IAmb 20 27 30.3
comp=Z,54nm,1.4s
**VSU Vasula 18.24 20** ⇑*iP* Pn 20 26 48.2 +0.1
VSU pmax pmax
comp=Z,9.0nm,0.7s
**HFS Hagfors 18.31 358** P Pn 20 26 47.2 -1.8
comp=Z,0.8nm,0.4s,baz=202,slow=19,SNR=1.9
**SOC Sochi 18.35 76** *eP* Pn 20 26 50.7 +1.1
SOC *e* 20 30 18.5
SOC pmax pmax
comp=Z,23nm,0.9s
SOC MLR MLR
comp=Z,230nm,13.0s
**MMAI Mount Meron Ar 18.53 112** P Pn 20 26 52.6 +0.6
comp=Z,0.8nm,0.3s,baz=313,slow=12,SNR=8.6
comp=Z,9.3nm,0.9s
**ARBE Arbavere 18.92 18** *eP* Pn 20 26 58.8 +2.5
**NC602 NORSAR Array S 19.01 355** P P 20 26 55.5 -1.2
**VORD Divnogorie 19.09 53** *eP* P 20 26 56.8 -0.9
VORD pmax pmax
comp=Z,10.0nm,0.5s
**VSR Storozhevoye 19.10 52** *eP* Pn 20 26 59.6 +1.0
VSR pmax pmax
comp=Z,5.0nm,0.4s
**NAO01 NORSAR Array S 19.16 354** P P 20 26 57.4 -1.0
NAO01 IAmb IAmb 20 27 03.4
comp=Z,29nm,1.1s
**VORR Voronezh 19.28 51** *eP* P 20 27 00.4 +0.6
VORR pmax pmax
comp=Z,36nm,0.4s
**MEF Metsahovi 19.30 15** *eP* P 20 27 00.2 +0.3
**NB2 NORSAR Subarra 19.33 355** P Pn 20 27 01.1 -0.3
comp=Z,28nm,1.2s,baz=171,slow=12
**NOA NORSAR Array B 19.33 355** P P 20 26 57.9 -2.4
baz=171,slow=12,SNR=12
comp=Z,0.8nm,0.6s
**NOA NORSAR Array B 19.33 355** *eP* P 20 26 59.8 -0.5
**NB201 NORSAR Array S 19.34 355** P P 20 26 59.8 -0.5
NB201 IAmb IAmb 20 27 05.4
comp=Z,24nm,1.1s
**NBO00 NORSAR Array S 19.36 354** P P 20 27 00.6 +0.1
NBO00 IAmb IAmb 20 27 12.7
comp=Z,26nm,1.1s
**NC405 NORSAR Array S 19.37 355** P P 20 26 59.5 -1.2
NC405 IAmb IAmb 20 27 11.1
comp=Z,48nm,1.4s
**OBN Obninsk 19.47 40** P P 20 27 01.4 -0.3
comp=Z,4.8nm,0.3s,baz=225,slow=1.4,SNR=6.3
comp=Z,20nm,0.5s
**OBN Obninsk 19.47 40***c iP* Pn 20 27 03.8 +0.8
OBN pmax pmax
comp=Z,13nm,0.8s
**LPSR Galich'ya Gora 19.48 48** *eP* P 20 27 01.0 -0.9
LPSR pmax pmax
comp=Z,20nm,1.4s
**NC303 NORSAR Array S 19.51 355** P P 20 27 01.9 -0.3
NC303 IAmb IAmb 20 27 12.5
comp=Z,32nm,1.1s
**NC204 NORSAR Array S 19.60 354** P P 20 27 03.0 -0.3
NC204 IAmb IAmb 20 27 09.3
comp=Z,19nm,0.8s
**ASF Jabal al Asfar 20.05 112** P Pn 20 27 09.8 -0.4
comp=Z,2.2nm,0.8s,baz=23,slow=0.0,SNR=3.5
comp=Z,2.2nm,0.8s
**EIL Elat 20.30 120** P P 20 27 12.2 +1.1
comp=Z,12nm,1.0s,baz=345,slow=13,SNR=6.3
EIL S S 20 30 46.0 -12
comp=Z,6.6nm,0.9s,baz=72,slow=6.8,SNR=5.2
comp=Z,12nm,1.0s
**MOS Moscow 20.32 39** *eP* P 20 27 11.6 +0.6
MOS *e* 20 27 35.7
MOS pmax pmax
comp=Z,27nm,0.7s
**SHA1 Shidzhatmaz 20.47 75** *eP* Pn 20 27 15.6 +0.4
**KIV Kislovodsk 20.47 75** P P 20 27 13.0 0.0
KIV IAmb IAmb 20 27 25.1
comp=Z,17nm,1.0s
**KIV Kislovodsk 20.47 75** *eP* Pn 20 27 15.5 +0.4
KIV pmax pmax
comp=Z,15nm,1.1s
**KVAR Kislovodsk Ar 20.48 75** P P 20 27 14.1 +1.0
comp=Z,2.2nm,0.8s,baz=287,slow=20,SNR=1.4
comp=Z,2.2nm,0.8s
**TAM Tamanrasset 20.55 205** P P 20 27 11.9 -2.1
TAM IAmb IAmb 20 27 21.6
comp=Z,40nm,1.5s
**TAM Tamanrasset 20.55 205** P P 20 27 11.9 -2.1
TAM pmax pmax
comp=Z,40nm,1.5s
**VRH Novokhopyorsk 20.62 54** *eP* Pn 20 27 16.6 -0.1
VRH pmax pmax

comp=Z,10.0nm,0.7s
**KBZ Khabaz 20.64 75** P Pn 20 27 16.4 -0.5
comp=Z,15nm,1.0s,baz=268,slow=8.4,SNR=11
comp=Z,15nm,1.0s
**KBZ Khabaz 20.64 75** *e*P Pn 20 27 17.3 +0.4
KBZ pmax pmax
comp=Z,13nm,0.9s
**FINES FINESS Array B 20.76 15** P **P 20 27 14.2 -1.5**
**FINES FINESS Array B 20.76 15** P **P 20 27 15.1 -0.6**
comp=Z,20nm,0.8s,baz=190,slow=8.5,SNR=23
FINES PcP **PcP 20 31 24.1 -0.3**
comp=Z,1.6nm,0.8s,baz=268,slow=5.1,SNR=4.1
comp=Z,20nm,0.8s
**FINES FINESS Array B 20.76 15** *e*P **P 20 27 15.6 -0.1**
FINES pmax pmax
comp=Z,20nm,0.8s
**FIA1 FINESS Array S 20.76 15** P **P 20 27 14.6 -1.1**
**GURO Guroymak-BITLI 21.00 90** P **P 20 27 16.9 -1.8**
GURO IAmb IAmb 20 27 25.5
comp=Z,26nm,1.3s
**KEF Keuruu 21.21 13** *e*P **P 20 27 22.1 +1.5**
**KARS Kars 21.24 84** P **P 20 27 21.5 +0.2**
KARS IAmb IAmb 20 27 39.6
comp=Z,29nm,0.9s
**KARS Kars 21.24 84** P **P 20 27 21.5 +0.2**
KARS pmax pmax
comp=Z,29nm,0.9s
**GEVA Gevas 21.84 90** P **P 20 27 27.4 -0.4**
**GNI Garni 22.59 84** P **P 20 27 35.5 -0.3**
GNI IAmb IAmb 20 28 13.1
comp=Z,11nm,0.8s
**GNI Garni 22.59 84** P **P 20 27 35.5 -0.3**
GNI pmax pmax
comp=Z,11nm,0.9s
**JOF Joensuu 23.23 19** *e*P **P 20 27 45.4 +3.3**
**MAK Makhachkala 24.07 76** *e*P **P 20 27 47.5 -2.9**
MAK *e*S **S 20 32 04.3 -2.9**
MAK pmax pmax
comp=Z,162nm,1.4s
**BELG Belogornoye 24.47 53** *i*P **P 20 27 54.8 +0.8**
BELG pmax pmax
comp=Z,5.0nm,1.0s
**KIRV Kirov 27.32 40***ce*P **P 20 28 20.0 +0.4**
**ARCES ARCESS Array B 28.29 8** P **P 20 28 27.8 -0.5**
ARCES IAmb IAmb 20 28 42.8
comp=Z,11nm,1.2s
**ARCES ARCESS Array B 28.29 8** P **P 20 28 27.7 -0.6**
comp=Z,3.6nm,0.8s,baz=205,slow=4.7,SNR=7.6
ARCES PcP **PcP 20 31 40.6 -0.3**
comp=Z,1.5nm,0.9s,baz=213,slow=3.1,SNR=5.2
comp=Z,3.6nm,0.8s
**ARCES ARCESS Array B 28.29 8** *e*P **P 20 28 30.4 +2.1**
ARCES pmax pmax
comp=Z,4.0nm,0.8s
**TORD Torodi Ar. Bea 30.81 206** P **P 20 28 51.5 +0.5**
comp=Z,1.8nm,0.8s,baz=24,slow=9.2,SNR=12
comp=Z,1.8nm,0.8s
**ARU Arti 31.50 47** P **P 20 28 55.9 -0.9**
**ARU Arti 31.50 47***c i*P **P 20 28 59.4 +2.7**
ARU 20 30 01.8
ARU 20 31 47.7
ARU S **S 20 34 10.9 +6.6**
ARU SS **SnSn 20 35 55.9 +7.0**
ARU pmax pmax
comp=Z,24nm,1.1s
**ABKAR Akbulak array 32.04 61** P **P 20 29 00.6 -1.1**
**ABKAR Akbulak array 32.04 61** P **P 20 29 00.8 -0.8**
**SVE Sverdlovsk 32.69 47** *e*P **P 20 29 11.1 +3.9**
SVE pmax pmax
comp=Z,16nm,0.8s
**SPB3 Spitsbergen Ar 36.43 1** P **P 20 29 39.1 -0.2**
SPB3 IAmb IAmb 20 29 43.5
comp=Z,17nm,1.2s
**SPB2 Spitsbergen Ar 36.43 1** P **P 20 29 38.5 -0.8**
SPB2 IAmb IAmb 20 30 19.4
comp=Z,13nm,1.1s
**SPA2 Spitsbergen Ar 36.44 1** P **P 20 29 38.8 -0.6**
**SPA0 Spitsbergen Ar 36.44 1** P **P 20 29 39.1 -0.4**
**SPA3 Spitsbergen Ar 36.44 1** P **P 20 29 39.0 -0.4**
**SPITS Spitsbergen Ar 36.44 1** P **P 20 29 38.5 -0.9**
SPITS pmax pmax
comp=Z,42nm,1.5s
**UOSS Minazif 38.02 103** P **P 20 29 53.0 -0.4**
**BRVK Borovoye 38.21 53** P **P 20 29 54.9 +0.2**
BRVK IAmb IAmb 20 30 01.7
comp=Z,14nm,0.7s
**BRVK Borovoye 38.21 53***ce*P **P 20 29 55.5 +0.8**
BRVK pmax pmax
comp=Z,19nm,1.0s
**BVAR Borovoye Array 38.27 54** P **P 20 29 56.2 +1.0**
comp=Z,6.2nm,0.8s,baz=275,slow=6.7,SNR=27
comp=Z,6.2nm,0.8s
**DBIC Dimbokro 39.16 212** P **P 20 30 02.4 -0.6**
comp=Z,2.6nm,0.6s,baz=8.7,slow=6.8,SNR=5.8
comp=Z,2.6nm,0.6s
**SUMG Summit 39.78 338** P **P 20 30 08.5 +0.4**
SUMG IAmb IAmb 20 30 13.9
comp=Z,13nm,1.4s
**SUMG Summit 39.78 338** P **P 20 30 08.5 +0.4**
SUMG pmax pmax
comp=Z,13nm,1.4s
**KK31 Karatay Array 40.44 69** P **P 20 30 14.4 +0.9**
**KK31 Karatay Array 40.44 69** P **P 20 30 14.4 +0.9**
KK31 pmax pmax
comp=Z,5.0nm,0.7s
**KKAR Karatay Array 40.44 69** P **P 20 30 13.5 +0.1**
**KKAR Karatay Array 40.44 69** P **P 20 30 14.7 +1.3**
KKAR IAmb IAmb 20 30 22.1
comp=Z,4.6nm,0.7s
**KKAR Karatay Array 40.44 69** P **P 20 30 13.5 +0.1**
KKAR 20 30 14.7
KKAR pmax pmax
comp=Z,5.0nm,0.7s
**GAR Garm 41.71 75** P **P 20 30 25.1 +1.0**
GAR IAmb IAmb 20 30 38.2
comp=Z,19nm,1.3s
**AAK Ala-Archa 43.35 68**⇑ *i*P **P 20 30 40.8 +3.3**
AAK pmax pmax
comp=Z,5.0nm,0.7s
**FRU1 Bishkek 43.39 68** P **P 20 30 37.6 0.0**
FRU1 IAmb IAmb 20 30 45.5
comp=Z,16nm,0.8s
**FRU1 Bishkek 43.39 68** P **P 20 30 37.7 0.0**
FRU1 pmax pmax
comp=Z,16nm,0.8s
**KURBB Kurchatov Arra 43.67 56** P **P 20 30 40.8 +1.1**
comp=Z,3.7nm,1.2s,baz=291,slow=9.5,SNR=7.4
KURBB PP **PP 20 32 23.1 +2.0**
comp=Z,1.0nm,0.7s,baz=289,slow=4.7,SNR=2.2
comp=Z,3.7nm,1.2s
**KURK Kurchatov 43.70 56** P **P 20 30 39.6 -0.4**
**KURK Kurchatov 43.70 56**⇑ *i*P **P 20 30 43.6 +3.7**
KURK pmax pmax
comp=Z,4.0nm,0.9s
**KSH Kashi 45.55 72** P P 20 31 00.0 +4.9
KSH pmax pmax
comp=Z,5.0nm,0.7s
**ZAA0 Zalesovo Array 46.58 50** P **P 20 31 02.9 +0.2**
ZAA0 IAmb IAmb 20 31 07.1
comp=Z,5.5nm,1.3s
**ZALV Zalesovo Beam 46.58 50** P **P 20 31 02.3 -0.4**
**ZALV Zalesovo Beam 46.58 50** P **P 20 31 03.3 +0.6**
comp=Z,1.2nm,0.4s,baz=302,slow=10,SNR=6.7
comp=Z,1.2nm,0.4s
**ZALV Zalesovo Beam 46.58 50** *e*P **P 20 31 06.4 +3.6**
ZALV pmax pmax
comp=Z,2.0nm,0.6s
**MAKZ Makanchi 46.96 60** P **P 20 31 05.5 -0.5**
MAKZ IAmb IAmb 20 31 10.8
comp=Z,4.0nm,1.1s
**MAKZ Makanchi 46.96 60** P **P 20 31 05.5 -0.5**
MAKZ pmax pmax
comp=Z,4.0nm,1.1s
**MK31 Makanchi Array 47.17 60** P **P 20 31 07.4 -0.1**
MK31 IAmb IAmb 20 31 14.6
comp=Z,2.6nm,0.8s
**MK31 Makanchi Array 47.17 60***ce*P **P 20 31 09.7 +2.1**
**MKAR Makanchi Array 47.17 60** P **P 20 31 07.5 0.0**
**MKAR Makanchi Array 47.17 60** P **P 20 31 08.1 +0.5**
comp=Z,2.6nm,0.8s,baz=290,slow=6.4,SNR=15
comp=Z,2.6nm,0.8s
**MKAR Makanchi Array 47.17 60** *e*P **P 20 31 09.5 +1.9**
MKAR pmax pmax
comp=Z,3.0nm,0.6s
**DGZ Jazzator, Alta 49.41 55** *i*P **P 20 31 25.8 +0.9**
DGZ pmax pmax
comp=Z,6.0nm,1.8s
**EUNU Eureka 51.00 347** P **P 20 31 36.5 0.0**
EUNU IAmb IAmb 20 31 45.8
comp=Z,11nm,1.0s
**SONM Songino Array 61.47 50** P **P 20 32 53.0 +1.2**
SONM IAmb IAmb 20 32 56.9
comp=Z,4.0nm,1.2s
**SONM Songino Array 61.47 50** P **P 20 32 51.6 -0.2**
comp=Z,2.4nm,1.0s,baz=291,slow=8.6,SNR=6.3
comp=Z,2.4nm,1.0s
**SONM Songino Array 61.47 50** *e*P **P 20 32 52.8 +1.0**
SONM pmax pmax
comp=Z,4.0nm,1.1s
**K62A Royalston 61.50 303** P **P 20 32 51.8 -0.1**
**ULN Ulaanbaatar 61.83 50***ce*P **P 20 32 55.5 +1.3**
ULN pmax pmax
comp=Z,2.0nm,1.3s
**GTA Gaotai 61.90 61** P **P 20 32 59.3 +4.5**
**UCCT U. Connecticut 61.96 302** P **P 20 32 55.1 +0.2**
**FCC Fort Churchill 63.82 327** P **P 20 33 06.3 -0.7**
**FCC Fort Churchill 63.82 327** P **P 20 33 06.3 -0.7**
FCC pmax pmax
comp=Z,57nm,1.2s
**I49A Point Hope 67.18 309** P **P 20 33 27.7 -1.3**
**M53A WI Miller and 67.39 306** P **P 20 33 29.9 -0.6**
**JSRW J. Sargeant Re 67.87 301** P **P 20 33 33.1 -0.4**
**BILL Bilibino 68.33 11** *e*P **P 20 33 39.5 +3.6**
BILL *e* 20 34 04.2
BILL *e* 20 36 08.4
BILL *e*PPP PPP 20 37 46.5
BILL pmax pmax
comp=Z,3.0nm,1.2s
**HHC Hu-ho-hao-te 68.48 54** *e*P **P 20 33 36.5 -1.0**
HHC pP pP 20 33 40.3 -1.7
HHC sP sP 20 33 42.8 -0.9
HHC pmax pmax
comp=Z,9.0nm,0.6s
**PZH PanZhiHua 70.66 71** P **P 20 33 51.9 +0.8**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,250nm,8.8s
**E19K Redstone River 70.84 357** P **P 20 33 53.0 +1.6**
E19K IAmb IAmb 20 33 57.8
comp=Z,8.2nm,1.1s
**F21K Alatna River 70.88 355** P **P 20 33 52.8 +1.1**
F21K IAmb IAmb 20 34 02.8
comp=Z,6.2nm,1.0s
**H21K Melozitna Rive 72.39 355** P **P 20 34 02.3 +1.6**
**ILAR Eielson Array 72.74 352** P **P 20 34 03.8 +0.9**
comp=Z,0.3nm,0.7s,baz=7.5,slow=7.5,SNR=2.6
comp=Z,0.3nm,0.7s
**CMAR Chiang Mai Arr 73.62 80** P **P 20 34 08.9 +0.1**
comp=Z,1.3nm,0.7s,baz=308,slow=8.0,SNR=10
comp=Z,1.3nm,0.7s
**CMAR Chiang Mai Arr 73.62 80** *e*P **P 20 34 10.1 +1.3**
CMAR pmax pmax
comp=Z,1.0nm,0.7s
**DHY Denali Highway 74.45 352** P **P 20 34 14.2 +1.1**
**NJ2 Nanjing 78.61 57** *e*P **P 20 34 35.4 -1.6**
NJ2 pmax pmax
comp=Z,10.0nm,0.5s
**PDAR Pinedale Array 82.01 322** P **P 20 34 56.2 +0.8**
comp=Z,0.3nm,0.5s,baz=39,slow=5.8,SNR=2.2
comp=Z,0.3nm,0.5s
**TXAR Lajitas Array 89.27 310** P **P 20 35 32.2 +0.6**
comp=Z,0.4nm,0.8s,baz=56,slow=3.2,SNR=4.1
comp=Z,0.4nm,0.8s
**WRA Warramunga Arr 124.86 86** PKP **PKPdf 20 41 33.8 -1.6**
comp=Z,0.3nm,0.8s,baz=342,slow=1.7,SNR=4.5
**WRA Warramunga Arr 124.86 86** *e*PKIKP **PKiKP 20 41 35.6 -0.1**
**ASAR Alice Springs 126.74 90** PKP **PKPdf 20 41 37.9 -1.0**
comp=Z,0.2nm,0.4s,baz=301,slow=1.5,SNR=1.9

**AFAD 16 20:23:27.8±0.0, 40.47N×29.26E, h10km±1km, ML1.5, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KRSK** | **Karsak** | **0.06** | **179** | P | Pg | 20 23 30.8 | +0.9 |
| KRSK | | | | S | Sg | 20 23 32.6 | +1.2 |
| **KURT** | **Yalova, Merkez** | **0.13** | **344** | P | Pg | 20 23 30.9 | +0.1 |
| KURT | | | | S | Sg | 20 23 32.9 | 0.0 |
| KURT | | | | *i* AML | AML | 20 23 34.0 | |
| | comp=N,115nm,0.9s | | | | | | |
| KURT | | | | *i* AML | AML | 20 23 42.0 | |
| | comp=E,169nm,1.4s | | | | | | |
| **AVDN** | **Avdancik/Bursa** | **0.19** | **202** | P | Pg | 20 23 32.7 | +0.9 |
| AVDN | | | | S | Sg | 20 23 35.5 | +1.1 |
| **IGD** | **Bursa** | **0.21** | **192** | P | Pg | 20 23 32.8 | +0.7 |
| IGD | | | | S | Sg | 20 23 35.5 | +0.5 |
| **ULDT** | **Uludag** | **0.34** | **196** | P | Pb | 20 23 35.3 | -0.7 |
| ULDT | | | | S | Sg | 20 23 39.7 | +0.6 |
| **YYLC** | **Yaylacik** | **0.37** | **244** | P | Pg | 20 23 35.8 | +0.6 |
| YYLC | | | | S | Sb | 20 23 41.7 | -0.7 |
| YYLC | | | | *i* AML | AML | 20 23 42.0 | |
| | comp=N,82nm,0.4s | | | | | | |
| **HISA** | **Bilecik-Osmane** | **0.51** | **90** | P | Pg | 20 23 37.9 | +0.2 |
| HISA | | | | S | Sg | 20 23 44.1 | -0.3 |
| **BILE** | **Bilecik/Merkez** | **0.56** | **123** | P | Pg | 20 23 39.1 | +0.4 |
| BILE | | | | S | Sg | 20 23 46.8 | +0.6 |
| BILE | | | | *i* AML | AML | 20 23 48.0 | |
| | comp=N,30nm,0.2s | | | | | | |
| **DOMA** | **Ktahya-Doman** | **0.76** | **154** | P | Pb | 20 23 43.1 | 0.0 |
| DOMA | | | | S | Sg | 20 23 52.1 | -0.2 |
| **GEYV** | **SAKARYA_Geyve** | **0.79** | **88** | P | Pg | 20 23 42.9 | -0.2 |
| **BAND** | **Balkesir-Ban** | **0.89** | **263** | P | Pg | 20 23 44.5 | -0.5 |
| BAND | | | | *i* AML | AML | 20 24 09.0 | |
| | comp=E,14nm,1.1s | | | | | | |
| BAND | | | | *i* AML | AML | 20 24 10.0 | |
| | comp=N,14nm,0.9s | | | | | | |
| **DURS** | **Dursunbey** | **1.05** | **215** | P | Pn | 20 23 49.2 | +0.5 |
| DURS | | | | S | Sb | 20 24 02.2 | +0.2 |
| **BORA** | **Eskisehir** | **1.09** | **122** | P | Pn | 20 23 49.0 | -0.1 |

*NEIC **16** 21:09:26.9±1.0, 7.39S±0.09×34.9E±0.1, h10km±2km, mb4.3/7, Error ellipse: s-maj=21.9km s-min=12.9km az=118.0*
*IDC **16** 21:09:31.8±1.4, 7.67S×33.86E, h0km, mb3.8/4, mbtmp3.9/4, Error ellipse: s-maj=48.7km s-min=29.2km az=117.0*

**ISC 16 21:09:25.7±0.6, 7.53S±0.05×35.07E±0.07, h10km, n41, σ2s53/44, mb4.4/7, 5C, Tanzania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DODT** | **Dodoma, Tanzan** | **1.49** | **27** | *i* P | **Pg** | **21 09 54.1** | **-0.3** |
| DODT | | | | *i* S | **Sn** | **21 10 10.8** | **-1.5** |
| **PDHT** | **Panda Hill** | **2.32** | **231** | *i* P | **Pb** | **21 10 08.5** | **+0.8** |
| PDHT | | | | *i* S | **Sg** | **21 10 45.1** | **+4.8** |
| **KSMZ** | **Kasama** | **4.62** | **235** | *i* S | **Sg** | **21 11 53.3** | **-0.9** |
| **KSMZ** | **Kasama** | **4.62** | **235** | *i* P | **Pn** | **21 10 38.1** | **+2.3** |
| **KSMZ** | **Kasama** | **4.62** | **235** | *i* | **Pn** | **21 10 38.1** | **+2.3** |
| | baz=24,slow=6.9 | | | | | | |
| **KIBK** | **Kibwezi** | **5.95** | **30** | Pn | **Pn** | **21 10 54.6** | **+0.7** |
| **KMBO** | **Kilima Mbogo** | **6.72** | **19** | Pn | **Pn** | **21 11 04.4** | **-0.4** |
| **ZOMB** | **Zomba** | **7.81** | **178** | *e*PN | **Pn** | **21 11 20.4** | **+0.8** |
| ZOMB | | | | *i* SN | **Sn** | **21 12 41.4** | **-6.8** |
| **MBAR** | **Mbarara** | **8.13** | **328** | Pn | **Pn** | **21 11 22.2** | **-1.8** |
| **LSZ** | **Lusaka** | **10.23** | **221** | Pn | **Pn** | **21 11 54.1** | **+1.2** |
| **KRI** | **Karoi** | **10.67** | **209** | *i* P | **Pn** | **21 12 02.9** | **+4.0** |
| **KRI** | **Karoi** | **10.67** | **209** | *i* P | **Pn** | **21 12 02.9** | **+4.0** |
| **LODK** | **Lodwar** | **10.88** | **2** | Pn | **Pn** | **21 12 01.2** | **-0.5** |
| **CHIPN** | **CHIPINGE** | **12.85** | **190** | *i* P | **Pn** | **21 12 30.0** | **+1.4** |
| **CHIPN** | **CHIPINGE** | **12.85** | **190** | *i* P | **Pn** | **21 12 30.0** | **+1.4** |
| **MATP** | **Matopo** | **14.31** | **206** | *i* P | **Pn** | **21 12 45.6** | **-3.1** |
| **MATP** | **Matopo** | **14.31** | **206** | *i* P | **Pn** | **21 12 45.6** | **-3.1** |
| **MUSN** | **Musina, Limpop** | **15.51** | **198** | *i* P | **Pn** | **21 13 03.5** | **-1.2** |
| MUSN | | | | *i* S | **Sn** | **21 15 50.9** | **-5.8** |
| **MUSN** | **Musina, Limpop** | **15.51** | **198** | *i* P | **Pn** | **21 13 03.5** | **-1.2** |
| MUSN | | | | *i* S | **Sn** | **21 15 50.9** | **-5.8** |
| **MOPA** | **Mopani** | **16.28** | **192** | *i* P | **P** | **21 13 18.2** | **+0.5** |
| **MOPA** | **Mopani** | **16.28** | **192** | *i* P | **P** | **21 13 18.2** | **+0.5** |
| **ABPO** | **Ambohimpanom** | **16.43** | **135** | | **P** | **21 13 21.2** | **+1.7** |
| ABPO | | | | IAmb | IAmb | 21 13 39.9 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **VOI** | **Vohitsoka** | **18.22** | **143** | P | **P** | **21 13 42.1** | **+2.8** |
| VOI | | | | IAmb | IAmb | 21 13 46.5 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **LBTB** | **Lobatse** | **19.60** | **206** | P | **P** | **21 13 54.9** | **+0.5** |
| LBTB | | | | IAmb | IAmb | 21 14 25.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **LBTB** | **Lobatse** | **19.60** | **206** | *i* P | **P** | **21 13 52.8** | **-1.6** |
| **LBTB** | **Lobatse** | **19.60** | **206** | *i* P | **P** | **21 13 52.8** | **-1.6** |
| **POGA** | **Pongola** | **19.96** | **189** | P | **Pn** | **21 13 59.3** | **-0.6** |
| POGA | | | | IAmb | IAmb | 21 14 17.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **22.93** | **203** | P | **P** | **21 14 31.4** | **+1.1** |
| BOSA | | | | IAmb | IAmb | 21 14 50.3 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **BOSA** | **Boshof** | **22.93** | **203** | P | **P** | **21 14 31.7** | **+1.5** |
| | comp=Z,5.1nm,0.8s,baz=38,slow=8.7,SNR=6.7 | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **22.93** | **203** | *i* P | **P** | **21 14 29.2** | **-1.0** |
| **BOSA** | **Boshof** | **22.93** | **203** | *i* P | **P** | **21 14 29.2** | **-1.0** |
| **TORD** | **Torodi Ar. Bea** | **39.01** | **302** | P | **P** | **21 16 51.1** | **-1.7** |
| **TORD** | **Torodi Ar. Bea** | **39.01** | **302** | P | **P** | **21 16 52.2** | **-0.6** |
| | comp=Z,0.6nm,0.9s,baz=111,slow=9.9,SNR=3.9 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **SHEL** | **Horse Pasture** | **40.77** | **254** | P | **P** | **21 17 06.6** | **-0.9** |
| **TROLL** | **Troll, Antarti** | **67.45** | **190** | ⇑P | **P** | **21 20 23.7** | **+2.2** |
| | comp=Z,118nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **68.22** | **192** | ⇑P | **P** | **21 20 28.1** | **+1.8** |
| | comp=Z,37nm,1.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **68.69** | **194** | ⇑P | **P** | **21 20 31.2** | **+2.1** |
| | comp=Z,3.1nm,0.5s,baz=37,slow=5.5 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **68.71** | **194** | ⇑P | **P** | **21 20 31.7** | **+2.5** |
| | comp=Z,5.5nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.02** | **28** | P | P | 21 20 43.5 | +12 |
| | comp=Z,1.1nm,0.8s,baz=233,slow=7.2,SNR=5.9 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **69.45** | **194** | ⇑P | **P** | **21 20 35.6** | **+1.7** |
| | comp=Z,5.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **74.12** | **28** | P | P | 21 21 13.7 | +12 |
| | comp=Z,1.0nm,0.6s,baz=224,slow=6.0,SNR=5.1 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |

**IDC 16 21:15:17.1±4.1, 24.61N×94.87E, h94km±39km, mb3.2/3, mbtmp3.4/4, MS4.5/1, Error ellipse: s-maj=72.9km s-min=19.3km az=68.0, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **7.20** | **147** | P | Pn | 21 16 59.8 | 0.0 |
| | 0.8nm,0.4s,baz=320,slow=14,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.32** | **339** | P | P | 21 20 26.0 | +0.1 |
| | 0.5nm,0.6s,baz=161,slow=8.7,SNR=9.8 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **24.92** | **19** | P | P | 21 20 31.3 | -0.2 |
| | 1.0nm,0.9s,baz=192,slow=9.6,SNR=5.2 | | | | | | |
| | 1.0nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **51.96** | **32** | LR | LR | 21 46 12.1 | |
| | comp=Z,434nm,20.2s,baz=168,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.62** | **136** | P | P | 21 25 04.5 | -0.1 |
| | 0.5nm,0.8s,baz=324,slow=7.3,SNR=12 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **61.12** | **139** | P | P | 21 25 21.7 | 0.0 |
| | 0.3nm,0.3s,baz=316,slow=5.2,SNR=2.9 | | | | | | |

*IDC **16** 21:33:58.9±3.2, 23.33N×143.73E, h0km, mb3.9/7, mbtmp3.9/7, MS4.0/3, Error ellipse: s-maj=126.2km s-min=24.7km az=80.0*
*NEIC **16** 21:34:00.0±1.2, 23.37N±0.05×144.0E±0.2, h10km±1km, mb4.1/9, Error ellipse: s-maj=26.0km s-min=3.2km az=73.0*

**ISC 16 21:34:02.6±1.0, 23.47N±0.10×144.0E±0.1, h28km, n25, σ1s53/23, mb4.0/12, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.96** | **336** | Pn | **Pn** | **21 35 02.5** | **+0.9** |
| JCJ | | | | Sn | **Sn** | **21 35 46.8** | **-0.3** |
| **JCJ** | **Chichijima** | **3.96** | **336** | Pn | Pn | 21 34 57.7 | -3.9 |
| | 2.8nm,0.3s,baz=309,slow=18,SNR=2.0 | | | | | | |
| JCJ | | | | Sn | **Sn** | **21 35 42.5** | **-4.6** |
| | 17nm,0.3s,baz=249,slow=23,SNR=5.8 | | | | | | |
| **JHJ2** | **Mitsune** | **10.29** | **340** | Pn | **Pn** | **21 36 28.6** | **+0.3** |
| **JHJ** | **Hachijo jima 2** | **10.30** | **340** | LR | LR | 21 39 25.7 | |
| | comp=Z,612nm,21.8s,baz=162,slow=32 | | | | | | |
| **JMZ** | **Minamidaito 2** | **11.85** | **284** | Pn | **Pn** | **21 36 51.3** | **+1.5** |
| **JOW** | **Kunigami** | **14.63** | **286** | Pn | **Pn** | **21 37 29.4** | **+1.6** |
| **KLR** | **Kul'dur** | **27.46** | **342** | P | **P** | **21 39 47.4** | **+1.2** |
| | 1.6nm,0.7s,baz=143,slow=7.2,SNR=6.2 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **38.48** | **319** | P | **P** | **21 41 21.9** | **-0.5** |
| | 0.2nm,0.3s,baz=117,slow=8.3,SNR=2.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.99** | **193** | P | **P** | **21 42 06.1** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 21 42 20.8 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.14** | **193** | P | **P** | **21 42 08.3** | **-0.7** |
| **WRAB** | **Tennant Creek** | **44.16** | **193** | P | **P** | **21 42 07.4** | **-1.6** |
| WRAB | | | | IAmb | IAmb | 21 42 17.3 | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.17** | **193** | P | **P** | **21 42 06.8** | **-2.4** |
| WB2 | | | | IAmb | IAmb | 21 42 17.3 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.17** | **193** | P | **P** | **21 42 07.8** | **-1.3** |
| **WRA** | **Warramunga Arr** | **44.17** | **193** | P | **P** | **21 42 07.8** | **-1.3** |
| | comp=Z,0.5nm,0.7s,baz=15,slow=8.7,SNR=11 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.31** | **321** | P | **P** | **21 43 18.8** | **-0.2** |
| | comp=Z,0.7nm,0.5s,baz=115,slow=6.7,SNR=4.3 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **54.07** | **312** | P | **P** | **21 43 25.0** | **+0.2** |
| MK31 | | | | IAmb | IAmb | 21 43 25.6 | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.07** | **312** | P | **P** | **21 43 24.7** | **-0.1** |
| | comp=Z,1.1nm,0.7s,baz=93,slow=9.0,SNR=9.4 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **I17K** | **Unalakleet** | **54.09** | **27** | P | **P** | **21 43 25.3** | **+0.8** |
| **KURBB** | **Kurchatov Arra** | **56.76** | **316** | P | **P** | **21 43 44.0** | **0.0** |
| | comp=Z,1.3nm,0.2s,baz=91,slow=7.9,SNR=9.3 | | | | | | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| **NEA2** | **Nenana** | **59.17** | **28** | P | **P** | **21 44 02.1** | **+1.4** |
| NEA2 | | | | IAmb | IAmb | 21 44 04.6 | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.83** | **319** | P | **P** | **21 44 19.4** | **+0.3** |
| | comp=Z,1.9nm,0.6s,baz=85,slow=6.7,SNR=15 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **KKAR** | **Karatay Array** | **62.56** | **308** | P | **P** | **21 44 23.6** | **-0.5** |
| **FARO** | **Faro, Yukon** | **66.11** | **31** | P | **P** | **21 44 47.0** | **-0.1** |
| **RAR** | **Rarotonga** | **70.50** | **125** | LR | LR | 22 08 25.4 | |
| | comp=Z,54nm,20.2s,baz=304,slow=29 | | | | | | |
| **RES** | **Resolute Bay** | **75.18** | **14** | LR | LR | 22 20 03.3 | |
| | comp=Z,288nm,18.8s,slow=37 | | | | | | |

*IDC **16** 22:07:21.6±1.1, 69.79N×145.33W, h0km, mb3.8/6, mbtmp3.8/10, ML3.7/4, MS3.5/1, Error ellipse: s-maj=26.7km s-min=13.9km az=77.0*
*AEIC **16** 22:07:21.6±1.3, 69.54N±0.06×144.83W±0.06, h5km±6km, ML3.8, ML3.8/86(NEIC), Error ellipse: s-maj=8.3km s-min=2.8km az=184.0*
*NEIC **16** 22:07:22.5±0.8, 69.62N±0.04×144.85W±0.05, h2km±6km, Error ellipse: s-maj=6.4km s-min=2.3km az=174.0*

**ISC 16 22:07:21.9±1.2, 69.63N±0.04×144.80W±0.02, h3km±9km, n88, σ0s97/100, mb3.9/6, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.38** | **90** | Pg | **Pg** | **22 07 29.4** | **+0.2** |
| C27K | | | | Sg | **Sg** | **22 07 34.7** | **+0.5** |
| C27K | | | | IAML | | 22 07 37.3 | |
| | comp=E,12μm,0.4s | | | | | | |
| C27K | | | | IAML | | 22 07 37.4 | |
| | comp=N,13μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.64** | **241** | Pg | **Pg** | **22 07 33.2** | **-0.9** |
| D25K | | | | Sg | **Sg** | **22 07 42.4** | **+0.1** |
| **C24K** | **Franklin Bluff** | **1.36** | **276** | | **Pg** | **22 07 47.9** | **-0.1** |
| C24K | | | | Sg | **Sn** | **22 08 07.3** | **+0.9** |
| C24K | | | | IAML | | 22 08 08.9 | |
| | comp=N,2μm,0.6s | | | | | | |
| C24K | | | | IAML | | 22 08 09.9 | |
| | comp=E,2μm,1.1s | | | | | | |
| **D27M** | **Malcolm River** | **1.41** | **104** | | **Pn** | **22 07 47.3** | **-1.2** |
| D27M | | | | Sg | **Sn** | **22 08 09.9** | **+2.3** |
| D27M | | | | IAML | | 22 08 10.8 | |
| | comp=N,1μm,0.8s | | | | | | |
| D27M | | | | IAML | | 22 08 12.2 | |
| | comp=E,1μm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.50** | **253** | Pn | **Pn** | **22 07 49.8** | **0.0** |
| D24K | | | | Sg | **Sg** | **22 08 10.9** | **+0.9** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **E27K** | **Coleen River** | **1.86** | **140** | Pn | **Pn** | **22 07 55.1 +0.4** |
| E27K | | | | Sg | **Sn** | **22 08 19.2 +0.6** |
| E27K | | | | IAML | | 22 08 22.2 |
| | comp=E,862nm,0.9s | | | | | |
| **F26K** | **Sheenjek River** | **1.96** | **173** | | **Pn** | **22 07 56.8 +0.7** |
| F26K | | | | Sg | **Sn** | **22 08 21.5 +0.3** |
| F26K | | | | IAML | | 22 08 23.9 |
| | comp=E,788nm,0.9s | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.98** | **242** | Pn | **Pn** | **22 07 56.5 +0.2** |
| TOLK | | | | Sg | **Sg** | **22 08 25.9 +0.6** |
| TOLK | | | | IAML | | 22 08 29.8 |
| | comp=E,1μm,0.6s | | | | | |
| TOLK | | | | IAML | | 22 08 32.8 |
| | comp=N,854nm,1.0s | | | | | |
| **C23K** | **Itkillik River** | **2.03** | **279** | Pn | **Pn** | **22 07 57.3 +0.3** |
| C23K | | | | IAML | | 22 08 48.9 |
| | comp=E,876nm,0.8s | | | | | |
| **E24K** | **Your Creek** | **2.06** | **222** | Pn | **Pn** | **22 07 57.7 +0.3** |
| E24K | | | | Sg | **Sb** | **22 08 26.1 +0.2** |
| **F25K** | **Christian Rive** | **2.07** | **189** | | **Pn** | **22 07 57.2 -0.4** |
| F25K | | | | IAML | | 22 08 32.0 |
| | comp=E,588nm,0.9s | | | | | |
| F25K | | | | IAML | | 22 08 39.4 |
| | comp=N,619nm,1.2s | | | | | |
| **E28M** | **Babbage River** | **2.15** | **116** | | **Pn** | **22 07 59.2 +0.6** |
| E28M | | | | Sg | **Sb** | **22 08 29.0 +0.5** |
| **D28M** | **Stokes Point** | **2.16** | **95** | | **Pb** | **22 08 00.1 -1.4** |
| D28M | | | | Sg | **Sg** | **22 08 32.1 +1.0** |
| D28M | | | | IAML | | 22 08 42.4 |
| | comp=N,645nm,0.9s | | | | | |
| **D23K** | **Nanushuk River** | **2.19** | **255** | | **Pn** | **22 08 00.1 +0.9** |
| D23K | | | | IAML | | 22 08 50.5 |
| | comp=E,641nm,0.9s | | | | | |
| D23K | | | | IAML | | 22 08 52.8 |
| | comp=N,603nm,1.0s | | | | | |
| **BMAR** | **Burnt Mountain** | **2.21** | **178** | | **Pn** | **22 08 00.1 +0.5** |
| **E23K** | **Chandalar** | **2.35** | **230** | | **Pn** | **22 08 01.8 +0.3** |
| E23K | | | | IAML | | 22 08 45.4 |
| | comp=E,516nm,0.7s | | | | | |
| **F24K** | **Squaw Lake** | **2.41** | **210** | | **Pn** | **22 08 02.4 +0.2** |
| **F28M** | **Old Crow** | **2.71** | **136** | Pn | **Pn** | **22 08 06.5 +0.1** |
| F28M | | | | IAML | | 22 08 53.3 |
| | comp=N,331nm,1.1s | | | | | |
| **E29M** | **Blow River** | **2.78** | **113** | | **Pn** | **22 08 07.7 +0.4** |
| E29M | | | | IAML | | 22 08 54.1 |
| | comp=N,401nm,0.8s | | | | | |
| E29M | | | | IAML | | 22 08 58.9 |
| | comp=E,316nm,0.5s | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.95** | **243** | | **Pn** | **22 08 10.0 +0.3** |
| **B22K** | **Teshekpuk Lake** | **3.05** | **288** | | **Pn** | **22 08 11.3 +0.4** |
| B22K | | | | IAML | | 22 09 07.0 |
| | comp=N,364nm,1.1s | | | | | |
| **G27K** | **Doyon Strip** | **3.07** | **156** | | **Pn** | **22 08 11.1 -0.2** |
| **FYU** | **Fort Yukon** | **3.08** | **183** | | **Pn** | **22 08 11.9 +0.5** |
| **G24K** | **Hadweenzic Riv** | **3.11** | **200** | | **Pn** | **22 08 11.6 -0.2** |
| **H25L** | **Birch Creek** | **3.40** | **187** | | **Pn** | **22 08 16.5 +0.7** |
| **B21K** | **Ikpikpuk River** | **3.43** | **274** | | **Pn** | **22 08 16.4 +0.2** |
| B21K | | | | IAML | | 22 09 22.1 |
| | comp=E,282nm,0.8s | | | | | |
| **E21K** | **Killik River** | **3.51** | **254** | | **Pn** | **22 08 18.7 +1.4** |
| **E21K** | **Killik River** | **3.51** | **254** | IAML | | 22 09 23.3 |
| | comp=E,253nm,1.0s | | | | | |
| E21K | | | | IAML | | 22 09 27.4 |
| | comp=N,248nm,1.2s | | | | | |
| **C21K** | **Knifeblade Rid** | **3.56** | **267** | | **Pn** | **22 08 19.9 +1.9** |
| **H27K** | **Steamboat Moun** | **3.63** | **159** | | **Pn** | **22 08 20.0 +1.0** |
| **G29M** | **Pine Creek** | **3.72** | **134** | | **Pn** | **22 08 20.5 +0.3** |
| **F30M** | **Barrier River** | **3.87** | **117** | | **Pn** | **22 08 23.7 +1.4** |
| **H24K** | **Noodor Dome** | **3.99** | **199** | | **Pn** | **22 08 23.9 0.0** |
| H24K | | | | IAML | | 22 09 29.3 |
| | comp=E,138nm,0.8s | | | | | |
| H24K | | | | IAML | | 22 09 37.8 |
| | comp=N,154nm,1.0s | | | | | |
| **F21K** | **Alatna River** | **4.01** | **237** | | **Pn** | **22 08 24.1 -0.1** |
| F21K | | | | IAML | | 22 09 33.6 |
| | comp=E,139nm,0.9s | | | | | |
| F21K | | | | IAML | | 22 09 37.4 |
| | comp=N,158nm,0.8s | | | | | |
| **H29M** | **Whitestone** | **4.20** | **142** | | **Pn** | **22 08 27.4 +0.6** |
| **H23K** | **Yukon River** | **4.23** | **207** | | **Pn** | **22 08 27.4 +0.3** |
| **INK** | **Inuvik** | **4.28** | **103** | Pn | **Pn** | **22 08 31.8 +4.1** |
| | comp=N,2.6nm,0.3s,baz=336,slow=5.6,SNR=11 | | | | | |
| INK | | | | Sn | **Sn** | **22 09 18.0 -0.1** |
| | comp=N,3.7nm,0.3s,baz=152,slow=14,SNR=6.3 | | | | | |
| | comp=N,11nm,0.6s | | | | | |
| **B20K** | **Meade River** | **4.30** | **281** | | **Pn** | **22 08 29.0 +0.9** |
| B20K | | | | IAML | | 22 09 51.2 |
| | comp=N,142nm,0.8s | | | | | |
| **I26K** | **Coal Creek Min** | **4.39** | **171** | | **Pn** | **22 08 29.6 +0.2** |
| **G21K** | **Allakaket** | **4.52** | **230** | | **Pn** | **22 08 31.1 -0.1** |
| G21K | | | | IAML | | 22 09 58.1 |
| | comp=N,104nm,1.2s | | | | | |
| **I28M** | **Miner Creek** | **4.60** | **154** | Pn | **Pn** | **22 08 32.9 +0.6** |
| **POKR** | **Poker Plat Res** | **4.65** | **194** | | **Pn** | **22 08 33.6 +0.7** |
| **G31M** | **Satah River** | **4.76** | **120** | Pn | **Pn** | **22 08 34.8 +0.4** |
| G31M | | | | IAML | | 22 10 04.7 |
| | comp=N,82nm,1.1s | | | | | |
| G31M | | | | IAML | | 22 10 09.5 |
| | comp=E,98nm,1.2s | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83** | **203** | | **Pn** | **22 08 35.8 +0.4** |
| I23K | | | | IAML | | 22 10 03.9 |
| | comp=N,90nm,1.4s | | | | | |
| I23K | | | | IAML | | 22 10 09.7 |
| | comp=E,103nm,1.2s | | | | | |
| **MDM** | **Murphy Dome** | **4.88** | **197** | | **Pn** | **22 08 36.4 +0.3** |
| MDM | | | | IAML | | 22 10 01.8 |
| | comp=N,74nm,1.2s | | | | | |
| MDM | | | | IAML | | 22 10 05.5 |
| | comp=E,86nm,1.1s | | | | | |
| **D19K** | **Kuna River** | **4.91** | **263** | | **Pn** | **22 08 37.3 +0.8** |
| **ILAR** | **Eielson Array** | **4.95** | **190** | Pn | **Pn** | **22 08 37.6 +0.5** |
| | comp=E,1.3nm,0.3s,baz=5.1,slow=14,SNR=45 | | | | | |
| ILAR | | | | Sn | **Sn** | **22 09 34.7 0.0** |
| | comp=E,3.9nm,0.3s,baz=5.5,slow=26,SNR=7.7 | | | | | |
| ILAR | | | | Lg | Lg | 22 10 01.3 |
| | comp=E,3.8nm,0.3s,baz=5.0,slow=31,SNR=5.6 | | | | | |
| | comp=E,5.8nm,0.6s | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.96** | **147** | Pn | **Pn** | **22 08 37.3 +0.1** |
| I29M | | | | IAML | | 22 10 09.1 |
| | comp=N,78nm,1.2s | | | | | |
| I29M | | | | IAML | | 22 10 12.1 |
| | comp=E,85nm,1.1s | | | | | |
| **IMAR** | **Indian Mountai** | **4.99** | **227** | | **Pn** | **22 08 37.8 +0.2** |
| **H21K** | **Melozitna River** | **5.02** | **221** | | **Pn** | **22 08 38.8 +0.7** |
| **J25K** | **Salcha River,** | **5.05** | **183** | Pn | **Pn** | **22 08 39.0 +0.5** |
| J25K | | | | IAML | | 22 10 12.9 |
| | comp=E,81nm,1.1s | | | | | |
| **E19K** | **Redstone River** | **5.06** | **250** | | **Pn** | **22 08 39.5 +0.9** |
| **EGAK** | **Eagle** | **5.08** | **162** | Pn | **Pn** | **22 08 39.4 +0.6** |
| EGAK | | | | IAML | | 22 10 13.3 |
| | comp=E,88nm,1.4s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.14** | **195** | Pn | **Pn** | **22 08 40.0 +0.3** |
| CCB | | | | IAML | | 22 10 17.4 |
| | comp=E,56nm,1.1s | | | | | |
| **MLY** | **Manley** | **5.16** | **209** | Pn | **Pn** | **22 08 40.7 +0.7** |
| MLY | | | | IAML | | 22 10 13.9 |
| | comp=E,54nm,0.9s | | | | | |
| **J26L** | **Joseph Creek** | **5.18** | **174** | Pn | **Pn** | **22 08 40.9 +0.6** |
| **C19K** | **Lookout Ridge** | **5.25** | **271** | | **Pn** | **22 08 42.5 +1.2** |
| **HDA** | **Harding Lake** | **5.31** | **190** | | **Pn** | **22 08 42.5 +0.4** |
| **NEA2** | **Nenana** | **5.33** | **200** | | **Pn** | **22 08 42.6 +0.4** |
| **WRH** | **Wood River Hil** | **5.34** | **195** | | **Pn** | **22 08 42.8 +0.4** |
| WRH | | | | IAML | | 22 10 17.7 |
| | comp=N,62nm,1.5s | | | | | |
| WRH | | | | IAML | | 22 10 20.3 |
| | comp=E,55nm,0.9s | | | | | |
| **I30M** | **Mount Dempster** | **5.49** | **140** | Pn | **Pn** | **22 08 44.8 +0.2** |
| **F19K** | **Shaleruckik Mo** | **5.58** | **246** | | **Pn** | **22 08 46.2 +0.5** |
| **SCRK** | **Sand Creek** | **5.69** | **176** | Pn | **Pn** | **22 08 48.3 +0.9** |
| **G19K** | **Purcell Mounta** | **5.81** | **239** | Pn | **Pn** | **22 08 48.8 0.0** |
| **J30M** | **Hart River** | **6.05** | **143** | Pn | **Pn** | **22 08 52.7 +0.4** |
| **BPAW** | **Bear Paw Mtn.** | **6.06** | **207** | | **Pn** | **22 08 52.8 +0.5** |
| **E18K** | **Tukpahlearik C** | **6.21** | **257** | Pn | **Pn** | **22 08 54.7 +0.5** |
| **K29M** | **Barlow Dome** | **6.48** | **150** | Pn | **Pn** | **22 08 58.9 +0.6** |
| **J20K** | **Nowinta River** | **6.59** | **218** | | **Pn** | **22 09 00.3 +0.8** |
| **DHY** | **Denali Highway** | **6.67** | **190** | | **Pn** | **22 09 02.3 +1.5** |
| **BCAR** | **Beaver Creek A** | **6.71** | **168** | Pn | **Pn** | **22 09 02.0 +0.8** |
| **RDOG** | **Red Dog Mine** | **6.73** | **265** | Pn | **Pn** | **22 09 01.7 +0.2** |
| **MENT** | **Mentasta** | **6.74** | **176** | | **Pn** | **22 09 02.3 +0.7** |
| **A36M** | **Sachs Harbour** | **6.85** | **61** | | **Pn** | **22 09 03.3 +0.2** |
| **F17K** | **Baldwin Pennin** | **6.94** | **250** | | **Pn** | **22 09 04.7 +0.4** |
| **WAT7** | **Susitna Watana** | **7.02** | **195** | | **Pn** | **22 09 07.0 +1.4** |
| **WAT6** | **Susitna Watana** | **7.18** | **191** | | **Pn** | **22 09 08.6 +0.7** |
| **M27K** | **Edge Creek, AK** | **7.40** | **169** | | **Pn** | **22 09 11.6 +0.8** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **M29M** | **Somme Creek** | **7.66** | **157** | Pn | **Pn** | **22 09 15.0 +0.6** |
| **KDAK** | **Kodiak Island** | **12.37** | **200** | LR | LR | 22 15 31.6 |
| | comp=E,208nm,18.9s,baz=244,slow=39 | | | | | |
| **DLBC** | **Dease Lake** | **12.91** | **143** | Pn | **Pn** | **22 10 27.6 +1.5** |
| | comp=E,0.3nm,0.3s,baz=186,slow=10.0,SNR=4.0 | | | | | |
| DLBC | | | | Sn | **Sn** | **22 12 47.1 -3.0** |
| | comp=E,0.2nm,0.3s,baz=201,slow=23,SNR=1.4 | | | | | |
| DLBC | | | | Lg | Lg | 22 14 20.5 |
| | comp=E,0.2nm,0.3s,baz=187,slow=24,SNR=1.4 | | | | | |
| | comp=E,0.8nm,0.3s | | | | | |
| **YKA** | **Yellowknife Ar** | **14.04** | **106** | Pn | **Pn** | **22 10 39.5 -1.9** |
| | comp=E,0.4nm,0.3s,baz=314,slow=14,SNR=6.2 | | | | | |
| | comp=E,2.0nm,0.7s | | | | | |
| **PDAR** | **Pinedale Array** | **32.40** | **128** | P | **P** | **22 13 53.9 +1.1** |
| | comp=E,0.7nm,0.6s,baz=27,slow=7.0,SNR=7.7 | | | | | |
| | comp=E,0.7nm,0.6s | | | | | |
| **NVAR** | **Mina Array Bea** | **34.32** | **142** | P | **P** | **22 14 11.9 +2.4** |
| | comp=E,1.0nm,0.9s,baz=346,slow=8.6,SNR=4.5 | | | | | |
| | comp=E,1.0nm,0.9s | | | | | |
| **TXAR** | **Lajitas Array** | **46.62** | **128** | P | **P** | **22 15 52.8 +1.6** |
| | comp=E,0.2nm,0.7s,baz=347,slow=7.4,SNR=2.2 | | | | | |
| | comp=E,0.2nm,0.7s | | | | | |
| **FINES** | **FINESS Array B** | **49.05** | **6** | P | **P** | **22 16 08.0 -1.4** |
| | comp=E,1.4nm,0.8s,baz=7.5,slow=9.1,SNR=4.7 | | | | | |
| | comp=E,1.4nm,0.8s | | | | | |
| **HFS** | **Hagfors** | **49.62** | **14** | P | **P** | **22 16 12.3 -1.5** |
| | comp=E,1.2nm,0.5s,baz=324,slow=7.3,SNR=6.7 | | | | | |
| | comp=E,1.2nm,0.5s | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.95** | **328** | P | **P** | **22 17 00.3 -0.4** |
| | comp=E,0.9nm,0.2s,baz=15,slow=7.1,SNR=1.1 | | | | | |
| | comp=E,0.9nm,0.2s | | | | | |

*AFAD* ***16*** *22:09:12.7±0.0,35.°11N×27.°33E,h9km±2km,ML2.3*
*ATH* ***16*** *22:09:13.2,35.°10N×27.°32E,h6km±2km,ML2.6/3,Error ellipse: s-maj=3.9km s-min=1.5km az=321.0*
*THE* ***16*** *22:09:13.4,35.°15N×27.°29E,h2km±2km,ML2.4/3,Error ellipse: s-maj=2.8km s-min=1.0km az=155.0*
*ISK* ***16*** *22:09:13.5,35.°14N×27.°26E,h21km,ML2.5/7*

**ISC 16 22:09:14.3±1.5,35.°19N±0.°06×27.°28E±0.°04,h16km±8km, n38,σ1§04/57,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KARP** | **Karpathos** | **0.37** | **345** | Pg | **Pg** | | **22 09 21.9** | **-0.1** |
| KARP | | | | Sg | **Sb** | | **22 09 29.0** | **+0.9** |
| **KARP** | **Karpathos** | **0.37** | **345** | P | **Pg** | | **22 09 21.3** | **-0.7** |
| KARP | | | | S | **Sb** | | **22 09 28.8** | **+0.7** |
| | 585nm,0.0s | | | | | | | |
| **KARP** | **Karpathos** | **0.37** | **345** | P | **Pg** | | **22 09 21.6** | **-0.4** |
| KARP | | | | S | **Sg** | | **22 09 28.4** | **+1.2** |
| KARP | | | | AML | AML | | 22 09 30.7 | |
| | comp=N,2158μm,0.2s | | | | | | | |
| KARP | | | | AML | AML | | 22 09 31.1 | |
| | comp=E,2487μm,0.1s | | | | | | | |
| **ZKR** | **Zakros** | **0.87** | **265** | Pg | **Pg** | | **22 09 30.3** | **-1.0** |
| ZKR | | | | Sg | **Sb** | | **22 09 43.5** | **+1.0** |
| **ZKR** | **Zakros** | **0.87** | **265** | P | **Pg** | | **22 09 30.3** | **-1.0** |
| ZKR | | | | S | **Sb** | | **22 09 44.3** | **+1.8** |
| | comp=E,258nm,0.6s | | | | | | | |
| **ZKR** | **Zakros** | **0.87** | **265** | P | **Pg** | | **22 09 30.2** | **-1.0** |
| ZKR | | | | S | **Sg** | | **22 09 42.8** | **0.0** |
| ZKR | | | | AML | AML | | 22 09 45.8 | |
| | comp=E,644μm,0.5s | | | | | | | |
| ZKR | | | | AML | AML | | 22 09 48.7 | |
| | comp=N,450μm,0.3s | | | | | | | |
| **ARG** | **Arkhangelos** | **1.24** | **34** | Pn | **Pn** | | **22 09 36.9** | **0.0** |
| ARG | | | | Sn | **Sg** | | **22 09 53.9** | **-0.4** |
| **ARG** | **Arkhangelos** | **1.24** | **34** | P | **Pn** | | **22 09 36.9** | **0.0** |
| ARG | | | | S | **Sn** | | **22 09 54.1** | **+0.9** |
| | comp=N,222nm,0.6s | | | | | | | |
| **ARG** | **Arkhangelos** | **1.24** | **34** | P | **Pn** | | **22 09 36.7** | **-0.2** |
| ARG | | | | S | **Sn** | | **22 09 54.5** | **+1.2** |
| ARG | | | | AML | AML | | 22 09 57.8 | |
| | comp=E,556μm,0.5s | | | | | | | |
| ARG | | | | AML | AML | | 22 09 58.7 | |
| | comp=N,331μm,0.8s | | | | | | | |
| **YAZI** | **Mula-Dat§a-** | **1.50** | **5** | P | **Pn** | | **22 09 40.5** | **+0.1** |
| YAZI | | | | S | **Sn** | | **22 09 57.3** | **-2.3** |
| **DAT** | **Datca** | **1.56** | **9** | Pn | **Pn** | | **22 09 41.5** | **+0.1** |
| DAT | | | | Sn | **Sn** | | **22 10 01.8** | **+0.5** |
| **DAT** | **Datca** | **1.56** | **9** | P | **Pn** | | **22 09 41.9** | **+0.5** |
| DAT | | | | *i* AML | AML | | 22 10 04.0 | |
| | comp=N,48nm,0.3s | | | | | | | |
| DAT | | | | *i* AML | AML | | 22 10 05.0 | |
| | comp=N,28nm,0.2s | | | | | | | |
| **DAT** | **Datca** | **1.56** | **9** | P | **Pn** | | **22 09 41.5** | **+0.1** |
| DAT | | | | S | **Sn** | | **22 10 02.1** | **+0.8** |
| **TURN** | **Turunc** | **1.77** | **26** | Pn | **Pn** | | **22 09 44.5** | **+0.3** |
| **TURN** | **Turunc** | **1.77** | **26** | P | **Pn** | | **22 09 44.0** | **-0.2** |
| TURN | | | | S | **Sn** | | **22 10 07.4** | **+1.1** |
| TURN | | | | *i* AML | AML | | 22 10 14.0 | |
| | comp=N,28nm,0.9s | | | | | | | |
| TURN | | | | *i* AML | AML | | 22 10 17.0 | |
| | comp=N,40nm,0.4s | | | | | | | |
| **BODT** | **Bodrum** | **1.87** | **1** | Pn | **Pn** | | **22 09 45.6** | **0.0** |
| **BDRM** | **Kayabasi** | **1.88** | **4** | P | **Pn** | | **22 09 45.8** | **0.0** |
| BDRM | | | | S | **Sn** | | **22 10 05.8** | **-3.3** |
| **SANT** | **Santorini** | **1.89** | **309** | Pn | **Pn** | | **22 09 45.4** | **-0.5** |
| **IDI** | **Anoyia** | **1.96** | **274** | P | **Pn** | | **22 09 47.2** | **+0.3** |
| IDI | | | | S | **Sn** | | **22 10 11.3** | **+0.2** |
| **DALY** | **Dalyan (Mula)** | **1.97** | **34** | Pn | **Pn** | | **22 09 47.1** | **+0.1** |
| **IZZE** | **Mula-Seydike** | **2.01** | **51** | P | **Pn** | | **22 09 46.9** | **-0.7** |
| IZZE | | | | *i* AML | AML | | 22 10 31.0 | |
| | comp=N,26nm,0.4s | | | | | | | |
| IZZE | | | | *i* AML | AML | | 22 10 40.0 | |
| | comp=N,25nm,1.1s | | | | | | | |
| **FETY** | **Fethiye** | **2.06** | **45** | Pn | **Pn** | | **22 09 48.5** | **+0.3** |
| **YER** | **Yerkesik** | **2.10** | **22** | Pn | **Pn** | | **22 09 49.6** | **+0.7** |
| **SABU** | **Mula-Dalaman** | **2.13** | **40** | P | **Pn** | | **22 09 48.7** | **-0.5** |
| SABU | | | | S | **Sn** | | **22 10 17.1** | **+1.8** |
| SABU | | | | *i* AML | AML | | 22 10 31.0 | |
| | comp=N,34nm,1.6s | | | | | | | |
| **MLSB** | **Milas** | **2.14** | **11** | Pn | **Pn** | | **22 09 49.6** | **+0.2** |
| **AKAS** | **Kas** | **2.16** | **61** | Pn | **Pn** | | **22 09 49.4** | **-0.3** |
| **MULA** | **Mugla, Merkez-** | **2.23** | **22** | P | **Pg** | | **22 09 56.1** | **-1.0** |
| **APE** | **Apeiranthos** | **2.35** | **323** | Pn | **Pn** | | **22 09 52.2** | **-0.1** |
| **APE** | **Apeiranthos** | **2.35** | **323** | P | **Pn** | | **22 09 52.6** | **+0.4** |
| **CAME** | **Cameli-Denizli** | **2.40** | **43** | Pn | **Pn** | | **22 09 53.4** | **+0.4** |
| **DNZT** | **Denizli-Tavas-** | **2.52** | **34** | P | **Pn** | | **22 09 54.2** | **-0.4** |
| DNZT | | | | S | **Sn** | | **22 10 23.9** | **-1.1** |
| **TAVA** | **DENIZLI_Tavas** | **2.63** | **30** | P | **Pn** | | **22 09 56.2** | **+0.1** |
| TAVA | | | | S | **Sn** | | **22 10 28.1** | **+0.4** |
| TAVA | | | | *i* AML | AML | | 22 10 39.0 | |
| | comp=N,13nm,0.7s | | | | | | | |
| TAVA | | | | *i* AML | AML | | 22 10 40.0 | |
| | comp=N,12nm,0.5s | | | | | | | |
| **ESEN** | **Aydn-Nazilli** | **2.74** | **18** | P | **Pn** | | **22 09 57.1** | **-0.5** |
| ESEN | | | | S | **Sn** | | **22 10 26.5** | **-3.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.80** | **10** | Pn | **Pn** | | **22 09 58.8** | **+0.3** |
| **APMY** | **Acipayam-Deniz** | **2.80** | **35** | Pn | **Pn** | | **22 09 58.2** | **-0.3** |
| **NAZL** | **Nazilli-Aydin** | **2.89** | **16** | Pn | **Pn** | | **22 10 00.5** | **+0.9** |
| **KORT** | **Korkueli** | **3.08** | **53** | Pn | **Pn** | | **22 10 03.1** | **+0.8** |
| **ODEM** | **Odemis-Izmir** | **3.15** | **11** | Pn | **Pn** | | **22 10 04.1** | **+0.9** |

*IDC* ***16*** *22:11:31.2±1.2,23.°46N×143.°52E,h0km,mb3.9/11, mbtmp3.9/13,ML3.4/2,Error ellipse: s-maj=40.5km s-min=18.8km az=84.0*
*NEIC* ***16*** *22:11:32.2±2.9,23.°46N±0.°10×143.°9E±0.°2,h10km±1km, mb4.3/9,Error ellipse: s-maj=26.7km s-min=15.7km az=79.0*

**ISC 16 22:11:35.1±0.8,23.°49N±0.°08×143.°6E±0.°1,h31km,n26, σ1§46/28,mb3.8/17,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.79** | **341** | Pn | **Pn** | | **22 12 33.9** | **+2.5** |
| JCJ | | | | Sn | **Sn** | | **22 13 17.0** | **+1.9** |
| **JCJ** | **Chichijima** | **3.79** | **341** | Pn | **Pn** | | **22 12 29.4** | **-2.0** |
| | 7.4nm,0.3s,baz=267,slow=19,SNR=2.2 | | | | | | | |
| JCJ | | | | Sn | **Sn** | | **22 13 12.1** | **-3.0** |
| | 72nm,0.3s,baz=283,slow=21,SNR=15 | | | | | | | |
| | 63nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.80** | **342** | Pn | **Pn** | | **22 14 48.4** | **-0.2** |
| | 0.1nm,0.3s,baz=157,slow=13,SNR=1.8 | | | | | | | |
| | 0.6nm,0.2s | | | | | | | |
| **JOW** | **Kunigami** | **14.23** | **287** | Pn | **P** | | **22 14 59.7** | **-1.9** |
| **JMM** | **Marumori** | **14.52** | **351** | Pn | **Pn** | | **22 14 59.4** | **+0.9** |
| **ERM** | **Erimo** | **18.47** | **359** | P | **P** | | **22 15 45.5** | **-2.8** |
| **KLR** | **Kul'dur** | **27.32** | **343** | P | **P** | | **22 17 18.7** | **+1.7** |
| | 1.3nm,0.5s,baz=129,slow=8.2,SNR=4.3 | | | | | | | |
| | 1.3nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **38.20** | **319** | P | **P** | | **22 18 52.3** | **+0.3** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 0.6nm,0.7s,baz=101,slow=7.5,SNR=1.3 | | | | | |
| | 0.6nm,0.7s | | | | | |
| **KNRA** | **Kununurra** | **41.53** | **202** | P | **P** | **22 19 19.1 -0.7** |
| KNRA | | | | IAmb | IAmb | 22 19 20.0 |
| | comp=Z,5.4nm,1.0s | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.84** | **272** | P | **P** | **22 19 22.0 -0.5** |
| | comp=Z,0.6nm,0.3s,baz=75,slow=7.6,SNR=1.5 | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | |
| **WB0** | **Warramunga Arr** | **43.92** | **192** | P | **P** | **22 19 38.9 -0.3** |
| **WB2** | **Warramunga Arr** | **44.10** | **192** | P | **P** | **22 19 40.1 -0.5** |
| WB2 | | | | IAmb | IAmb | 22 19 58.1 |
| | comp=Z,5.0nm,1.1s | | | | | |
| **WRA** | **Warramunga Arr** | **44.10** | **193** | P | **P** | **22 19 40.5 -0.2** |
| | comp=Z,0.6nm,0.6s,baz=18,slow=8.9,SNR=11 | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | |
| **ASAR** | **Alice Springs** | **47.81** | **192** | P | **P** | **22 20 11.1 +1.2** |
| | comp=Z,0.3nm,0.6s,baz=13,slow=8.0,SNR=3.0 | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.03** | **321** | P | **P** | **22 20 49.6 +0.6** |
| | comp=Z,0.6nm,0.5s,baz=102,slow=8.5,SNR=2.3 | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | |
| **N15K** | **Kwethluk River** | **53.30** | **31** | P | **P** | **22 20 50.1 -0.8** |
| N15K | | | | IAmb | IAmb | 22 21 06.4 |
| | comp=Z,3.1nm,1.1s | | | | | |
| **MKAR** | **Makanchi Array** | **53.75** | **312** | P | **P** | **22 20 55.2 +0.6** |
| | comp=Z,1.7nm,0.8s,baz=90,slow=8.3,SNR=11 | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.46** | **316** | P | **P** | **22 21 15.0 +1.1** |
| | comp=Z,0.7nm,0.2s,baz=94,slow=7.8,SNR=10 | | | | | |
| | comp=Z,0.7nm,0.2s | | | | | |
| **ILAR** | **Eielson Array** | **60.29** | **28** | P | **P** | **22 21 41.0 +0.5** |
| | comp=Z,0.5nm,0.8s,baz=246,slow=6.8,SNR=2.0 | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | |
| **BVAR** | **Borovoye Array** | **61.54** | **319** | P | **P** | **22 21 50.5 +1.4** |
| | comp=Z,3.1nm,0.6s,baz=96,slow=7.6,SNR=18 | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | |
| **BRVK** | **Borovoye** | **61.61** | **319** | P | **P** | **22 21 49.9 +0.3** |
| **ABKAR** | **Akbulak array** | **68.51** | **316** | P | **P** | **22 22 34.8 +0.3** |
| ABKAR | | | | IAmb | IAmb | 22 22 37.5 |
| | comp=Z,1.2nm,0.7s | | | | | |
| **PAHR** | **Pah Rah Range** | **80.49** | **51** | P | **P** | **22 23 43.0 -1.5** |
| PAHR | | | | IAmb | IAmb | 22 23 47.3 |
| | comp=Z,4.6nm,1.1s | | | | | |
| **KBZ** | **Khabaz** | **81.38** | **314** | P | **P** | **22 23 50.7 +1.8** |
| | comp=Z,0.4nm,0.4s,baz=71,slow=2.9,SNR=1.7 | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | |
| **FINES** | **FINESS Array B** | **81.72** | **334** | P | **P** | **22 23 51.5 +1.2** |
| | comp=Z,0.5nm,0.5s,baz=65,slow=5.6,SNR=4.1 | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | |
| **NV11** | **Mina Array Sit** | **81.87** | **52** | P | **P** | **22 23 51.1 -0.7** |

*IDC* ***16*** *22:25:23.3±7.4,36.°45N×71.°22E,h184km±65km,mb3.2/1, mbtmp3.7/6,Error ellipse: s-maj=62.7km s-min=38.9km az=44.0*
*NNC* ***16*** *22:25:26.5±3.8,36.°88N×70.°66E,h188km±72km,mb2.9, mpv3.9,Error ellipse: s-maj=36.4km s-min=22.2km az=20.0*

**ISC 16 22:25:24.5±1.6,36.°7N±0.°1×70.°8E±0.°1,h200km,n16, σ1§36/22,1C-7D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **5.88** | **22** | P | | **Pn** | **22 26 50.9** | **+0.5** |
| | SNR=58 | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.39** | **20** | P | | **Pn** | **22 26 57.5** | **+0.7** |
| | SNR=11 | | | | | | | |
| **KK31** | **Karatay Array** | **6.40** | **358** | ⇓P | | **Pn** | **22 26 57.8** | **+0.9** |
| | 1.7nm,0.3s,baz=183,slow=14 | | | | | | | |
| KK31 | | | | ⇑S | | **Sn** | **22 28 07.7** | **-2.4** |
| | 12nm,0.5s,baz=180,slow=21 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.59** | **25** | P | | **Pn** | **22 27 00.1** | **+0.8** |
| | SNR=5.3 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.59** | **25** | P | | **Pn** | **22 26 60.0** | **+0.6** |
| | 6.0nm,0.3s,baz=190,slow=4.6,SNR=8.1 | | | | | | | |
| AAK | | | | S | | **Sn** | **22 28 14.2** | **-0.5** |
| | 4.2nm,0.6s,baz=138,slow=21,SNR=9.5 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.59** | **25** | P | | **Pn** | **22 26 59.6** | **+0.2** |
| | 4.0nm,0.4s | | | | | | | |
| AAK | | | | S | | **Sn** | **22 28 14.9** | **+0.2** |
| | 7.6nm,1.0s | | | | | | | |
| **CHMS** | **Chumysh** | **7.00** | **25** | ⇓P | | **Pn** | **22 27 04.2** | **-0.4** |
| | 3.8nm,0.4s | | | | | | | |
| CHMS | | | | ⇓S | | **Sn** | **22 28 22.2** | **-1.9** |
| | 4.1nm,0.6s | | | | | | | |
| **USP** | **Ospenovka** | **7.16** | **22** | P | | **Pn** | **22 27 07.0** | **+0.3** |
| | SNR=7.9 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.24** | **29** | P | | **Pn** | **22 27 08.4** | **+0.5** |
| | SNR=17 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.24** | **29** | ⇓P | | **Pn** | **22 27 07.6** | **-0.3** |
| | 9.1nm,0.6s | | | | | | | |
| TKM2 | | | | ⇓S | | **Sn** | **22 28 29.4** | **-0.6** |
| | 4.2nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.24** | **37** | P | | **Pn** | **22 28 25.4** | **+0.6** |
| | 0.2nm,0.3s,baz=218,slow=14,SNR=2.6 | | | | | | | |
| **AB31** | **Akbulak array** | **14.82** | **331** | ⇓P | | **P** | **22 28 45.0** | **-0.2** |
| | 0.7nm,0.5s,baz=142,slow=12,SNR=16 | | | | | | | |
| AB31 | | | | ⇓S | | **S** | **22 31 27.1** | **-1.8** |
| | 0.4nm,0.5s,baz=159,

| | | | | | | |
|---|---|---|---|---|---|---|
| **TOLK** | **Toolik Lake Re** | **2.11 249** | Pn | **Pn** | **22 35 11.4** | **+1.0** |
| TOLK | | | Sn | **Sg** | **22 35 42.6** | **-0.3** |
| TOLK | | | IAML | | 22 35 47.9 | |
| | comp=E,477nm,1.1s | | | | | |
| **C23K** | **Itkillik River** | **2.27 282** | Pn | **Pn** | **22 35 12.9** | **+0.3** |
| C23K | | | IAML | | 22 35 54.2 | |
| | comp=E,417nm,0.6s | | | | | |
| C23K | | | IAML | | 22 35 58.0 | |
| | comp=N,357nm,0.7s | | | | | |
| **D23K** | **Nanushuk River** | **2.38 260** | | **Pn** | **22 35 14.9** | **+0.9** |
| **F24K** | **Squaw Lake** | **2.40 216** | Pn | **Pn** | **22 35 15.6** | **+1.2** |
| F24K | | | Sn | **Sb** | **22 35 49.0** | **+1.1** |
| F24K | | | IAML | | 22 35 59.4 | |
| | comp=E,348nm,0.8s | | | | | |
| **E23K** | **Chandalar** | **2.44 237** | | **Pn** | **22 35 16.4** | **+1.4** |
| E23K | | | Sn | **Sb** | **22 35 50.5** | **+1.3** |
| E23K | | | IAML | | 22 35 56.8 | |
| | comp=N,305nm,0.9s | | | | | |
| **F28M** | **Old Crow** | **2.46 138** | | **Pn** | **22 35 16.1** | **+0.9** |
| F28M | | | Sn | **Sn** | **22 35 46.3** | **+1.1** |
| F28M | | | IAML | | 22 35 54.6 | |
| | comp=N,465nm,0.7s | | | | | |
| F28M | | | IAML | | 22 35 57.6 | |
| | comp=E,442nm,1.2s | | | | | |
| **E29M** | **Blow River** | **2.52 113** | Pn | **Pn** | **22 35 17.4** | **+1.4** |
| E29M | | | | **Sb** | **22 35 51.2** | **-0.3** |
| E29M | | | IAML | | 22 36 02.2 | |
| | comp=E,386nm,0.9s | | | | | |
| **G27K** | **Doyon Strip** | **2.85 159** | | **Pn** | **22 35 21.1** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.06 205** | Pn | **Pn** | **22 35 23.6** | **+0.2** |
| G24K | | | IAML | | 22 36 19.9 | |
| | comp=N,249nm,1.5s | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.08 248** | Pn | **Pn** | **22 35 24.6** | **+0.8** |
| **D22K** | **Ayikyak River** | **3.10 263** | Pn | **Pn** | **22 35 24.6** | **+0.7** |
| D22K | | | IAML | | 22 36 21.6 | |
| | comp=E,238nm,1.1s | | | | | |
| D22K | | | IAML | | 22 36 28.8 | |
| | comp=N,182nm,0.8s | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.30 289** | Pn | **Pn** | **22 35 28.2** | **+1.5** |
| B22K | | | IAML | | 22 36 28.5 | |
| | comp=E,207nm,1.1s | | | | | |
| **G29M** | **Pine Creek** | **3.46 135** | | **Pn** | **22 35 30.3** | **+1.4** |
| **G23K** | **Bananza Creek** | **3.54 221** | Pn | **Pn** | **22 35 30.6** | **+0.5** |
| **F22K** | **John River** | **3.55 240** | | **Pn** | **22 35 31.7** | **+1.5** |
| **B21K** | **Ikpikpuk River** | **3.66 277** | Pn | **Pn** | **22 35 32.3** | **+0.6** |
| B21K | | | IAML | | 22 36 47.8 | |
| | comp=N,97nm,1.2s | | | | | |
| B21K | | | IAML | | 22 36 48.5 | |
| | comp=E,108nm,1.2s | | | | | |
| **C21K** | **Knifeblade Rid** | **3.77 270** | | **Pn** | **22 35 34.7** | **+1.4** |
| **H24K** | **Noodor Dome** | **3.92 203** | Pn | **Pn** | **22 35 36.2** | **+0.8** |
| H24K | | | IAML | | 22 36 25.1 | |
| | comp=N,101nm,0.7s | | | | | |
| H24K | | | IAML | | 22 36 44.8 | |
| | comp=E,118nm,1.3s | | | | | |
| **H29M** | **Whitestone** | **3.95 143** | Pn | **Pn** | **22 35 36.7** | **+1.1** |
| **A22K** | **Sinclair Lake** | **3.97 298** | | **Pn** | **22 35 37.3** | **+1.5** |
| **PRP** | **Porcupine Dome** | **4.02 188** | Pn | **Pn** | **22 35 38.4** | **+1.7** |
| PRP | | | IAML | | 22 36 44.3 | |
| | comp=N,113nm,0.7s | | | | | |
| PRP | | | IAML | | 22 36 48.8 | |
| | comp=E,80nm,1.4s | | | | | |
| **INK** | **Inuvik** | **4.03 102** | LR | LR | 22 37 39.6 | |
| | comp=E,102nm,19.8s,baz=316,slow=44 | | | | | |
| **F21K** | **Alatna River** | **4.12 241** | Pn | **Pn** | **22 35 39.0** | **+1.0** |
| F21K | | | IAML | | 22 36 51.4 | |
| | comp=E,108nm,0.7s | | | | | |
| F21K | | | IAML | | 22 36 57.1 | |
| | comp=N,80nm,0.8s | | | | | |
| **H23K** | **Yukon River** | **4.20 212** | | **Pn** | **22 35 40.5** | **+1.3** |
| **EPYK** | **Eagle Plains** | **4.21 134** | Pn | **Pn** | **22 35 40.9** | **+1.7** |
| **I26K** | **Coal Creek Min** | **4.21 174** | | **Pn** | **22 35 40.5** | **+1.2** |
| **I26K** | **Coal Creek Min** | **4.21 174** | IAML | | 22 36 57.6 | |
| | comp=N,103nm,0.8s | | | | | |
| **I28M** | **Miner Creek** | **4.37 156** | Pn | **Pn** | **22 35 42.6** | **+1.1** |
| I28M | | | IAML | | 22 37 03.7 | |
| | comp=N,77nm,0.9s | | | | | |
| **D20K** | **Etivluk River** | **4.52 266** | | **Pn** | **22 35 44.3** | **+0.8** |
| **B20K** | **Meade River** | **4.54 283** | Pn | **Pn** | **22 35 44.2** | **+0.5** |
| B20K | | | IAML | | 22 37 14.2 | |
| | comp=N,78nm,1.4s | | | | | |
| B20K | | | IAML | | 22 37 24.3 | |
| | comp=E,89nm,1.5s | | | | | |
| **POKR** | **Poker Plat Res** | **4.56 198** | | **Pn** | **22 35 46.0** | **+2.0** |
| POKR | | | IAML | | 22 36 41.7 | |
| | comp=N,74nm,0.7s | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.72 149** | | **Pn** | **22 35 46.9** | **+0.7** |
| **I23K** | **Minto, Yukon-K** | **4.79 207** | | **Pn** | **22 35 48.1** | **+0.9** |
| I23K | | | IAML | | 22 37 17.4 | |
| | comp=N,72nm,1.2s | | | | | |
| I23K | | | IAML | | 22 37 19.3 | |
| | comp=E,72nm,1.4s | | | | | |
| **MDM** | **Murphy Dome** | **4.81 201** | | **Pn** | **22 35 48.8** | **+1.3** |
| MDM | | | IAML | | 22 37 09.9 | |
| | comp=N,64nm,0.8s | | | | | |
| MDM | | | IAML | | 22 37 10.3 | |
| | comp=E,60nm,1.1s | | | | | |
| **IL31** | | **4.85 194** | | **Pn** | **22 35 49.1** | **+1.1** |
| **ILAR** | **Eielson Array** | **4.85 194** | | **Pn** | **22 35 48.8** | **+0.8** |
| **ILAR** | **Eielson Array** | **4.85 194** | Pn | **Pn** | **22 35 49.5** | **+1.5** |
| | comp=E,2.2nm,0.3s,baz=6.6,slow=13,SNR=110 | | | | | |
| ILAR | | | Sn | **Sn** | **22 36 45.5** | **+1.4** |
| | comp=E,2.5nm,0.3s,baz=8.7,slow=23,SNR=8.5 | | | | | |
| ILAR | | | Lg | Lg | 22 37 08.8 | |
| | comp=E,4.8nm,0.3s,baz=13,slow=28,SNR=5.1 | | | | | |
| ILAR | | | LR | LR | 22 38 10.9 | |
| | comp=E,89nm,20.0s,baz=92,slow=45 | | | | | |
| | comp=E,9.4nm,0.5s | | | | | |
| **EGAK** | **Eagle** | **4.87 165** | Pn | **Pn** | **22 35 49.6** | **+1.3** |
| EGAK | | | IAML | | 22 36 48.2 | |
| | comp=E,65nm,1.0s | | | | | |
| EGAK | | | IAML | | 22 37 23.7 | |
| | comp=E,58nm,1.1s | | | | | |
| **J25K** | **Salcha River,** | **4.91 186** | Pn | **Pn** | **22 35 50.2** | **+1.2** |
| J25K | | | IAML | | 22 36 50.9 | |
| | comp=N,42nm,0.8s | | | | | |
| J25K | | | IAML | | 22 37 10.2 | |
| | comp=E,51nm,0.9s | | | | | |
| **F20K** | **Avaraart Lake** | **4.94 246** | Pn | **Pn** | **22 35 50.2** | **+1.1** |
| F20K | | | IAML | | 22 37 23.2 | |
| | comp=N,38nm,1.1s | | | | | |
| **J26L** | **Joseph Creek** | **5.01 177** | Pn | **Pn** | **22 35 51.7** | **+1.4** |
| J26L | | | IAML | | 22 36 56.8 | |
| | comp=E,42nm,0.6s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.06 198** | | **Pn** | **22 35 51.8** | **+0.9** |
| CCB | | | IAML | | 22 36 53.9 | |
| | comp=E,34nm,0.5s | | | | | |
| **H21K** | **Melozitna River** | **5.06 225** | Pn | **Pn** | **22 35 51.9** | **+1.0** |
| H21K | | | IAML | | 22 37 27.4 | |
| | comp=N,55nm,1.1s | | | | | |
| **D19K** | **Kuna River** | **5.11 265** | Pn | **Pn** | **22 35 52.3** | **+0.6** |
| **MLY** | **Manley** | **5.14 213** | Pn | **Pn** | **22 35 53.1** | **+1.1** |
| MLY | | | IAML | | 22 37 29.8 | |
| | comp=N,30nm,1.3s | | | | | |
| **HDA** | **Harding Lake** | **5.21 193** | Pn | **Pn** | **22 35 54.4** | **+1.5** |
| HDA | | | IAML | | 22 37 25.0 | |
| | comp=E,55nm,1.0s | | | | | |
| **E19K** | **Redstone River** | **5.22 253** | Pn | **Pn** | **22 35 53.3** | **+0.3** |
| E19K | | | IAML | | 22 36 57.9 | |
| | comp=N,42nm,0.8s | | | | | |
| E19K | | | IAML | | 22 37 29.4 | |
| | comp=E,52nm,1.2s | | | | | |
| **I30M** | **Mount Dempster** | **5.23 141** | Pn | **Pn** | **22 35 54.5** | **+1.1** |
| **WRH** | **Wood River Hil** | **5.26 199** | | **Pn** | **22 35 55.1** | **+1.5** |
| WRH | | | IAML | | 22 37 27.5 | |
| | comp=N,44nm,0.7s | | | | | |
| WRH | | | IAML | | 22 37 29.9 | |
| | comp=E,51nm,1.2s | | | | | |
| **NEA2** | **Nenana** | **5.27 204** | | **Pn** | **22 35 55.1** | **+1.3** |
| NEA2 | | | IAML | | 22 37 31.8 | |
| | comp=E,34nm,1.1s | | | | | |
| **C19K** | **Lookout Ridge** | **5.48 273** | Pn | **Pn** | **22 35 57.5** | **+0.8** |
| **SCRK** | **Sand Creek** | **5.53 179** | Pn | **Pn** | **22 35 59.0** | **+1.5** |
| **F19K** | **Shaleruckit Mo** | **5.72 249** | Pn | **Pn** | **22 36 00.8** | **+0.8** |
| **K24K** | **Donnelly Dome** | **5.74 187** | | **Pn** | **22 36 02.2** | **+2.0** |
| **DAWY** | **Dawson** | **5.76 159** | | **Pn** | **22 36 02.2** | **+1.6** |
| **J30M** | **Hart River** | **5.80 144** | Pn | **Pn** | **22 36 02.1** | **+0.9** |
| **G19K** | **Purcell Mounta** | **5.92 242** | Pn | **Pn** | **22 36 02.5** | **-0.2** |
| **E18K** | **Tukpahlearik C** | **6.39 259** | Pn | **Pn** | **22 36 09.6** | **+0.5** |
| **J20K** | **Nowinta River** | **6.61 221** | Pn | **Pn** | **22 36 13.3** | **+1.1** |
| **WAT7** | **Susitna Watana** | **6.94 198** | | **Pn** | **22 36 18.4** | **+1.7** |
| **M27K** | **Edge Creek, AK** | **7.22 171** | | **Pn** | **22 36 21.9** | **+1.2** |
| **M29M** | **Somme Creek** | **7.44 159** | Pn | **Pn** | **22 36 25.1** | **+1.5** |
| **KNK** | **Knik Glacier** | **8.29 194** | | **Pn** | **22 36 38.6** | **+3.4** |
| **VRDI** | **Verde Repeater** | **8.30 178** | | **Pn** | **22 36 37.7** | **+2.3** |
| **M31M** | **Drury Creek, Y** | **8.33 147** | | **Pn** | **22 36 37.0** | **+1.3** |
| **PTPK** | **Patty Peak** | **8.36 174** | | **Pn** | **22 36 37.9** | **+1.5** |
| **J17K** | **VABM Dome** | **8.51 231** | Pn | **Pn** | **22 36 40.1** | **+1.9** |
| **BMRM** | **Bremner River** | **8.55 181** | | **Pn** | **22 36 41.3** | **+2.5** |
| **KIAG** | **Kiagna River** | **8.63 174** | | **Pn** | **22 36 41.8** | **+1.8** |
| **YKA** | **Yellowknife Ar** | **13.79 106** | Pn | **Pn** | **22 37 50.7** | **+0.4** |
| | comp=E,0.3nm,0.3s,baz=314,slow=15,SNR=4.6 | | | | | |
| YKA | | | Sn | Sn | 22 40 12.7 | -11 |
| | comp=E,0.6nm,0.3s,baz=313,slow=24,SNR=7.2 | | | | | |
| | comp=E,1.9nm,0.9s | | | | | |
| **PDAR** | **Pinedale Array** | **32.14 128** | P | P | 22 41 08.9 | +6.3 |
| | comp=E,0.2nm,0.6s,baz=346,slow=7.5,SNR=1.9 | | | | | |
| PDAR | | | LR | LR | 22 53 17.6 | |
| | comp=E,31nm,21.5s,baz=232,slow=35 | | | | | |
| | comp=E,0.2nm,0.6s | | | | | |
| **TXAR** | **Lajitas Array** | **46.36 128** | P | P | 22 43 06.7 | +5.6 |
| | comp=E,0.2nm,0.5s,baz=353,slow=6.4,SNR=2.5 | | | | | |
| | comp=E,0.2nm,0.5s | | | | | |

**NAM 16 22:39:57.5±4.7, 19°.83S×14°.47E, h26km±21km, ML0.3, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST6N** | **ST6** | **0.07** | **295** | *i* P | Pb | 22 40 05.5 | +3.2 |
| ST6N | | | | *i* S | Sb | 22 40 08.0 | +2.4 |
| ST6N | | | | IAML | | 22 40 08.2 | |
| | comp=Z,3.1nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.07** | **295** | *i* P | Pb | 22 40 05.5 | +3.2 |
| ST6N | | | | *i* S | Sb | 22 40 07.9 | +2.4 |
| ST6N | | | | IAML | | 22 40 08.2 | |
| | comp=Z,3.0nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.08** | **64** | *i* P | Pb | 22 40 03.2 | +0.9 |
| ST9N | | | | *i* S | Sb | 22 40 04.0 | -1.6 |
| ST9N | | | | IAML | | 22 40 04.3 | |
| | comp=Z,48nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.08** | **64** | *i* P | Pb | 22 40 03.2 | +0.9 |
| ST9N | | | | *i* S | Sb | 22 40 03.9 | -1.7 |
| ST9N | | | | IAML | | 22 40 04.3 | |
| | comp=Z,47nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.10** | **17** | *i* P | Pb | 22 40 04.5 | +2.0 |
| ST3N | | | | *i* S | Sb | 22 40 05.7 | 0.0 |
| ST3N | | | | IAML | | 22 40 06.5 | |
| | comp=Z,1.9nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.10** | **17** | *i* P | Pb | 22 40 04.5 | +2.0 |
| ST3N | | | | *i* S | Sb | 22 40 05.7 | -0.1 |
| ST3N | | | | IAML | | 22 40 06.1 | |
| | comp=Z,1.9nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.15** | **128** | *i* P | Pb | 22 40 00.5 | -2.4 |
| ST2N | | | | *i* S | Sb | 22 40 06.4 | -0.2 |
| ST2N | | | | IAML | | 22 40 06.8 | |
| | comp=Z,4.2nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.15** | **128** | *i* P | Pb | 22 40 00.8 | -2.1 |
| ST2N | | | | *i* S | Sb | 22 40 06.4 | -0.2 |
| ST2N | | | | IAML | | 22 40 06.8 | |
| | comp=Z,4.1nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.17** | **55** | *i* P | Pn | 22 40 04.2 | -0.2 |
| ST1N | | | | *i* S | Sb | 22 40 05.6 | -1.2 |
| ST1N | | | | IAML | | 22 40 05.8 | |
| | comp=Z,5.4nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.17** | **55** | *i* P | Pn | 22 40 04.2 | -0.3 |
| ST1N | | | | *i* S | Sb | 22 40 05.6 | -1.2 |
| ST1N | | | | IAML | | 22 40 05.8 | |
| | comp=Z,5.4nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.20** | **315** | *i* P | Pn | 22 40 06.7 | +1.7 |
| ST8N | | | | *i* S | Sb | 22 40 11.5 | +4.0 |
| ST8N | | | | IAML | | 22 40 14.8 | |
| | comp=Z,0.3nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **81** | *i* P | Pn | 22 40 05.7 | -0.2 |
| ST5N | | | | *i* S | Sb | 22 40 08.4 | -0.6 |
| ST5N | | | | IAML | | 22 40 08.6 | |
| | comp=Z,2.5nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **81** | *i* P | Pn | 22 40 05.8 | -0.2 |
| ST5N | | | | *i* S | Sb | 22 40 08.4 | -0.7 |
| ST5N | | | | IAML | | 22 40 08.6 | |
| | comp=Z,2.5nm,0.1s | | | | | | |

**IDC 16 23:11:52.5±8.0, 23°.58N×144°.53E, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=308.0km s-min=34.2km az=76.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.38** | **194** | P | P | 23 20 04.8 | -0.1 |
| | 0.2nm,0.6s,baz=15,slow=8.7,SNR=4.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.54** | **321** | P | P | 23 21 14.5 | -0.3 |
| | 0.4nm,0.4s,baz=100,slow=7.4,SNR=2.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.37** | **312** | P | P | 23 21 21.3 | +0.2 |
| | 0.5nm,0.8s,baz=100,slow=6.0,SNR=2.6 | | | | | | |
| | 0.5nm,0.8s | | | | | | |

**IDC 16 23:52:37.8±13.0, 15°.12S×165°.37E, h0km, mb3.8/3, mbtmp3.8/4, ML3.4/1, Error ellipse: s-maj=223.2km s-min=36.2km az=54.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **6.99** | **172** | Pn | Pn | 23 54 21.3 | -0.2 |
| | 0.7nm,0.3s,baz=323,slow=20,SNR=8.1 | | | | | | |
| DZM | | | | Sn | Sn | 23 55 42.9 | +1.1 |
| | 0.6nm,0.3s,baz=335,slow=23,SNR=2.0 | | | | | | |
| | 1.9nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **27.35** | **228** | P | P | 23 58 24.9 | +0.3 |
| | 1.9nm,0.4s,baz=34,slow=13,SNR=7.2 | | | | | | |
| | 1.9nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **29.95** | **256** | P | P | 23 58 47.7 | -0.3 |
| | 0.1nm,0.3s,baz=88,slow=9.3,SNR=4.7 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **30.81** | **249** | P | P | 23 58 55.6 | 0.0 |
| | 0.5nm,0.4s,baz=78,slow=9.1,SNR=6.8 | | | | | | |
| | 0.5nm,0.4s | | | | | | |

*NEIC* ***17*** *00:03:39.5±1.3, 13°.24N±0°.07×89°.87W±0°.06, h54km±12km, mb4.3/80, Error ellipse: s-maj=10.7km s-min=7.9km az=211.0*

*CATAC* ***17*** *00:03:39.4±0.5, 13°.28N×89°.85W, h27km±2km, ML4.8*

*IDC* ***17*** *00:03:41.0±1.6, 13°.63N×89°.32W, h82km±15km, mb3.6/11, mbtmp4.0/12, MS3.2/11, Error ellipse: s-maj=32.2km s-min=11.9km az=46.0*

*GCG* ***17*** *00:03:48.4±0.4, 13°.82N×90°.29W, h56km±18km, MD4.3*

**ISC 17 00:03:38.3±0.8, 13°.25N±0°.05×89°.87W±0°.04, h63km±6km, n183, σ1°17/197, mb4.2/39, 1D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ACAJ** | **Puerto de Acaj** | **0.32** | **6** | *i* P | **Pn** | **00 03 48.8** | **-0.1** |
| ACAJ | | | | *e* S | **Sn** | **00 03 55.8** | **-0.8** |
| **JAYA** | **Jayaque - finc** | **0.57** | **45** | *e* P | **Pn** | **00 03 51.4** | **0.0** |
| JAYA | | | | *e* S | **Sn** | **00 04 00.5** | **-0.5** |
| **JAYA** | **Jayaque - finc** | **0.57** | **45** | *i* P | **Pn** | **00 03 51.4** | **0.0** |
| JAYA | | | | *i* S | **Sn** | **00 04 00.0** | **-1.0** |
| JAYA | | | | IAML | | 00 04 01.9 | |
| | comp=Z,110μm,1.0s | | | | | | |
| **LALI** | **Alcalda de L** | **0.58** | **66** | *e* P | **Pn** | **00 03 51.4** | **+0.1** |
| **LALI** | **Alcalda de L** | **0.58** | **66** | *i* P | **Pn** | **00 03 51.5** | **+0.1** |
| LALI | | | | *i* S | **Sn** | **00 04 00.3** | **-0.6** |
| LALI | | | | IAML | | 00 04 00.6 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **JUA** | **Alcaldia, muni** | **0.60** | **11** | *i* P | **Pn** | **00 03 51.7** | **0.0** |
| JUA | | | | *e* | | 00 03 51.7 | |
| JUA | | | | *e* S | **Sn** | **00 04 01.9** | **+0.4** |
| **CEVE** | **Cerro Verde** | **0.62** | **23** | *i* P | **Pn** | **00 03 52.2** | **+0.2** |
| **CEVE** | **Cerro Verde** | **0.62** | **23** | *i* P | **Pn** | **00 03 52.3** | **+0.2** |
| CEVE | | | | *i* S | **Sn** | **00 04 01.5** | **-0.6** |
| CEVE | | | | IAML | | 00 04 03.8 | |
| | comp=Z,72μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **0.63** | **22** | *i* P | **Pn** | **00 03 52.3** | **+0.1** |
| **NUBE** | **Las Nubes** | **0.65** | **8** | *e* P | **Pn** | **00 03 52.3** | **0.0** |
| NUBE | | | | *e* S | **Sn** | **00 04 02.1** | **-0.5** |
| **NUBE** | **Las Nubes** | **0.65** | **8** | *i* P | **Pn** | **00 03 52.5** | **+0.2** |
| NUBE | | | | *i* S | **Sn** | **00 04 02.0** | **-0.6** |
| NUBE | | | | IAML | | 00 04 04.5 | |
| | comp=Z,41μm,1.0s | | | | | | |
| **SNJE** | **San Jose** | **0.67** | **23** | *i* P | **Pn** | **00 03 52.6** | **+0.1** |
| **RTR** | **El Retiro** | **0.68** | **19** | *i* P | **Pn** | **00 03 53.0** | **+0.3** |
| **PMON** | **Piamonte** | **0.71** | **50** | *e* P | **Pn** | **00 03 53.2** | **+0.3** |
| **PMON** | **Piamonte** | **0.71** | **50** | *i* P | **Pn** | **00 03 53.4** | **+0.5** |
| PMON | | | | *i* S | **Sn** | **00 04 03.8** | **+0.2** |
| PMON | | | | IAML | | 00 04 08.0 | |
| | comp=Z,47μm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **0.71** | **54** | *e* P | **Pn** | **00 03 53.1** | **+0.1** |
| **ITCA** | **Escuela Especi** | **0.71** | **54** | *i* P | **Pn** | **00 03 53.2** | **+0.3** |
| ITCA | | | | IAML | | 00 03 54.9 | |
| | comp=Z,68μm,1.0s | | | | | | |
| ITCA | | | | *i* S | **Sn** | **00 04 04.2** | **+0.5** |
| **CEDA** | **San Andres** | **0.72** | **40** | *e* P | **Pn** | **00 03 53.3** | **+0.4** |
| **CEDA** | **San Andres** | **0.72** | **40** | *i* P | **Pn** | **00 03 53.1** | **+0.2** |
| CEDA | | | | *i* S | **Sn** | **00 04 03.8** | **+0.1** |
| CEDA | | | | IAML | | 00 04 09.1 | |
| | comp=Z,76μm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **0.75** | **50** | *e* P | **Pn** | **00 03 53.9** | **+0.4** |
| **LOAL** | **Lomas de Alarc** | **0.75** | **7** | *e* P | **Pn** | **00 03 53.8** | **+0.5** |
| **LOAL** | **Lomas de Alarc** | **0.75** | **7** | *i* P | **Pn** | **00 03 54.0** | **+0.7** |
| LOAL | | | | *i* S | **Sn** | **00 04 04.7** | **+0.3** |
| LOAL | | | | IAML | | 00 04 07.4 | |
| | comp=Z,50μm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.76** | **55** | | | **00 03 53.4** | **0.0** |
| SNET | | | | Sn | **Sn** | **00 04 04.7** | **+0.1** |
| **SNET** | **Serv Nac Est T** | **0.76** | **55** | *e* P | **Pn** | **00 03 53.7** | **+0.3** |
| **SNET** | **Serv Nac Est T** | **0.76** | **55** | *i* P | **Pn** | **00 03 53.5** | **0.0** |
| SNET | | | | IAML | | 00 03 55.1 | |
| | comp=Z,59μm,1.0s | | | | | | |
| SNET | | | | *i* S | **Sn** | **00 04 05.2** | **+0.6** |
| **PANCS** | **Alcalda de** | **0.76** | **62** | *e* P | **Pn** | **00 03 53.5** | **0.0** |
| **PANCS** | **Alcalda de** | **0.76** | **62** | *i* P | **Pn** | **00 03 53.6** | **+0.1** |
| PANCS | | | | *i* S | **Sn** | **00 04 04.1** | **-0.6** |
| PANCS | | | | IAML | | 00 04 08.2 | |
| | comp=Z,53μm,1.0s | | | | | | |
| **UEES** | **Universidad Ev** | **0.77** | **53** | *i* P | **Pn** | **00 03 54.2** | **+0.6** |
| UEES | | | | *i* S | **Sn** | **00 04 05.3** | **+0.4** |
| UEES | | | | IAML | | 00 04 08.1 | |
| | comp=Z,22μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **0.78** | **60** | *e* P | **Pn** | **00 03 54.0** | **+0.2** |
| **LOMA** | **Loma Larga** | **0.78** | **60** | *i* P | **Pn** | **00 03 54.0** | **+0.2** |
| LOMA | | | | *i* S | **Sn** | **00 04 05.0** | **-0.3** |
| LOMA | | | | IAML | | 00 04 07.6 | |
| | comp=Z,20μm,1.0s | | | | | | |
| **UTEC** | **Universidad Te** | **0.79** | **55** | *i* P | **Pn** | **00 03 54.4** | **+0.6** |
| UTEC | | | | *i* S | **Sn** | **00 04 05.2** | **-0.1** |
| UTEC | | | | IAML | | 00 04 10.2 | |
| | comp=Z,17μm,1.0s | | | | | | |
| **UNIC** | **Universidad Ca** | **0.79** | **23** | *e* P | **Pn** | **00 03 54.3** | **+0.4** |
| **UNIC** | **Universidad Ca** | **0.79** | **23** | *i* P | **Pn** | **00 03 54.4** | **+0.5** |
| UNIC | | | | *i* S | **Sn** | **00 04 05.8** | **+0.5** |
| UNIC | | | | IAML | | 00 04 07.6 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **IGN** | **Direccin Gen** | **0.82** | **56** | *i* P | **Pn** | **00 03 54.8** | **+0.6** |
| IGN | | | | *i* S | **Sn** | **00 04 06.5** | **+0.5** |
| IGN | | | | IAML | | 00 04 09.9 | |
| | comp=Z,80μm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **0.82** | **45** | *e* P | **Pn** | **00 03 54.9** | **+0.8** |
| **QUEZ** | **Alcaldia de Qu** | **0.82** | **45** | *i* P | **Pn** | **00 03 55.0** | **+0.8** |
| QUEZ | | | | *i* S | **Sn** | **00 04 07.0** | **+1.1** |
| QUEZ | | | | IAML | | 00 04 13.8 | |
| | comp=Z,80μm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **0.83** | **56** | *e* P | **Pn** | **00 03 54.9** | **+0.5** |
| **UDBS** | **Universidad Do** | **0.83** | **56** | *i* P | **Pn** | **00 03 54.7** | **+0.3** |
| UDBS | | | | *i* S | **Sn** | **00 04 05.9** | **-0.4** |
| UDBS | | | | IAML | | 00 04 12.5 | |
| | comp=Z,21μm,1.0s | | | | | | |
| **LFRS** | **El Faro** | **0.87** | **65** | *e* P | **Pn** | **00 03 55.1** | **+0.3** |
| **LFU** | **La Fuente** | **0.89** | **56** | *e* P | **Pn** | **00 03 55.8** | **+0.8** |
| **COEG** | **Centro de Oper** | **1.03** | **69** | *i* P | **Pn** | **00 03 57.7** | **+0.8** |
| **COEG** | **Centro de Oper** | **1.03** | **69** | *i* P | **Pn** | **00 03 57.8** | **+0.9** |
| COEG | | | | IAML | | 00 03 58.6 | |
| | comp=Z,28μm,1.0s | | | | | | |
| COEG | | | | *i* S | **Sn** | **00 04 11.1** | **+0.4** |
| **SNVI** | **San Vicente** | **1.06** | **70** | *e* P | **Pn** | **00 03 58.3** | **+0.9** |
| **TECO** | **Alcaldia de Te** | **1.10** | **75** | *e* P | **Pn** | **00 03 58.3** | **+0.6** |
| **TECO** | **Alcaldia de Te** | **1.10** | **75** | *i* P | **Pn** | **00 03 58.0** | **+0.3** |
| TECO | | | | IAML | | 00 03 59.3 | |
| | comp=Z,11μm,1.0s | | | | | | |
| TECO | | | | *i* S | **Sn** | **00 04 12.5** | **+0.3** |
| **UESV** | **Universidad de** | **1.12** | **70** | *e* P | **Pn** | **00 03 59.1** | **+1.1** |
| UESV | | | | *e* S | **Sn** | **00 04 14.4** | **+1.7** |
| **UESV** | **Universidad de** | **1.12** | **70** | *i* P | **Pn** | **00 03 59.1** | **+1.1** |
| UESV | | | | IAML | | 00 03 59.7 | |
| | comp=Z,15μm,1.0s | | | | | | |
| UESV | | | | *i* S | **Sn** | **00 04 13.7** | **+1.0** |
| **MTO3** | **Montecristo** | **1.24** | **23** | | **Pn** | **00 04 00.4** | **+0.6** |
| MTO3 | | | | Sn | **Sn** | **00 04 16.8** | **+0.9** |
| **MTO3** | **Montecristo** | **1.24** | **23** | *i* P | **Pn** | **00 04 00.5** | **+0.6** |
| **MTO3** | **Montecristo** | **1.24** | **23** | *i* P | **Pn** | **00 04 00.2** | **+0.4** |
| MTO3 | | | | IAML | | 00 04 01.7 | |
| | comp=Z,6μm,1.0s | | | | | | |
| MTO3 | | | | *i* S | **Sn** | **00 04 16.2** | **+0.3** |
| **LLGN** | **La Laguna** | **1.28** | **45** | *i* P | **Pn** | **00 04 00.8** | **+0.7** |
| **LLGN** | **La Laguna** | **1.28** | **45** | *i* P | **Pn** | **00 04 00.7** | **+0.6** |
| LLGN | | | | *i* S | **Sn** | **00 04 17.5** | **+1.0** |
| LLGN | | | | IAML | | 00 04 23.0 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **1.33** | **74** | *e* P | **Pn** | **00 04 01.8** | **+1.1** |
| **PQSS** | **Presa 15 de Se** | **1.33** | **74** | *i* P | **Pn** | **00 04 01.8** | **+1.1** |
| PQSS | | | | IAML | | 00 04 03.4 | |
| | comp=Z,6μm,1.0s | | | | | | |
| PQSS | | | | *i* S | **Sn** | **00 04 18.3** | **+0.8** |
| **PCG** | **Pacaya** | **1.34** | **328** | *e* P | **Pn** | **00 04 02.6** | **+1.4** |
| **ESQI** | **Esquipulas** | **1.40** | **21** | | **Pn** | **00 04 02.7** | **+0.9** |
| ESQI | | | | Sn | **Sn** | **00 04 20.9** | **+1.4** |
| **NBG** | **Las Nubes** | **1.41** | **341** | *e* P | **Pn** | **00 04 04.2** | **+2.2** |
| **GCG4** | **OSOP** | **1.48** | **334** | *i* P | **Pn** | **00 04 04.1** | **+1.2** |
| GCG4 | | | | *i* S | **Sn** | **00 04 22.6** | **+1.2** |
| GCG4 | | | | IAML | | 00 04 26.4 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **FUG** | **Fuego 3** | **1.52** | **322** | *e* P | **Pn** | **00 04 04.7** | **+1.2** |
| FUG | | | | *e* P | | 00 04 04.8 | |
| **PACA** | **Pacayal** | **1.52** | **82** | *e* P | **Pn** | **00 04 04.9** | **+1.5** |
| **PACA** | **Pacayal** | **1.52** | **82** | *i* P | **Pn** | **00 04 05.1** | **+1.7** |
| PACA | | | | *i* S | **Sn**

**DRIO Del Rio 18.93 330 Pn 00 07 56.2 +0.8**
**NATX Nacogdoches 18.94 347 P Pn 00 07 56.8 +1.3**
NATX IAmb IAmb 00 08 00.3
comp=Z,22nm,0.9s
**SDV Santo Domingo 19.37 101** LR LR 00 15 21.1
comp=Z,36nm,19.0s,baz=241,slow=37
**237A Washetta, Mont 19.44 345 P Pn 00 08 02.1 +0.7**
237A IAmb IAmb 00 08 16.2
comp=Z,14nm,0.8s
**JCT Junction City 19.45 333 P Pn 00 08 01.7 +0.2**
**BRDY Brady 19.82 336 P P 00 08 04.5 +0.6**
BRDY IAmb IAmb 00 08 08.5
comp=Z,8.7nm,0.6s
**LRAL Lakeview Retre 19.87 7 Pn 00 08 06.2 -0.2**
**152A Waverly Hall 19.89 13 P Pn 00 08 06.3 -0.5**
**SAND Sanderson 20.12 328** P Pn 00 08 10.6 +1.0
**TREL Terrell 20.21 345** P Pn 00 08 09.9 -0.5
**154A Montrose 20.24 17** P Pn 00 08 11.3 +0.4
**OZNA Ozona 20.42 331 P P 00 08 12.2 +1.7**
OZNA IAmb IAmb 00 08 15.5
comp=Z,14nm,1.5s
**TXAR Lajitas Array 20.50 324** Pn 00 08 13.7 -0.3
**TXAR Lajitas Array 20.50 324 P P 00 08 12.8 +1.5**
comp=Z,1.3nm,0.5s,baz=150,slow=11,SNR=16
TXAR PcP PcP **00 12 20.3 -0.8**
comp=Z,0.2nm,0.5s,baz=135,slow=5.2,SNR=1.5
comp=Z,1.3nm,0.5s
**TX31 Lajitas Ar. Si 20.50 324 P 00 08 13.1 +1.8**
**Y45A Yeager Farm, C 20.52 1** Pn 00 08 13.2 -1.0
**WLAR White Oak Lake 20.56 352** P Pn 00 08 13.4 -1.1
WLAR IAmb IAmb 00 08 34.1
comp=Z,20nm,1.1s
**FW07 Weatherford 20.67 341 P P 00 08 13.4 +0.3**
FW07 IAmb IAmb 00 08 15.2
comp=Z,16nm,0.7s
**FW06 Azle 20.85 342 P P 00 08 16.5 +1.6**
FW06 IAmb IAmb 00 08 18.4
comp=Z,11nm,0.6s
**GOGA Godfrey 20.90 15 P P 00 08 16.7 +1.2**
**PLPT Palo Pinto 20.95 340 P P 00 08 16.8 +0.7**
PLPT IAmb IAmb 00 08 18.8
comp=Z,12nm,0.6s
**FW03 Perrin-Whitt E 21.07 341 P P 00 08 18.7 +1.3**
**OXF Oxford 21.17 1 P P 00 08 20.3 +1.9**
**Y52A Lilburn 21.19 13 P P 00 08 19.8 +1.2**
**X48A Hartselle 21.26 6 P P 00 08 21.3 +1.9**
**ALPN Alpine 21.27 325 P P 00 08 21.0 +1.4**
**MIAR Mount Ida 21.47 352 P P 00 08 23.4 +1.9**
MIAR IAmb IAmb 00 08 32.0
comp=Z,7.1nm,0.9s
**UALR University of 21.55 354 P P 00 08 24.2 +1.8**
UALR IAmb IAmb 00 08 28.3
comp=Z,7.8nm,0.6s
**MNHN Monahans 21.56 329 P P 00 08 24.0 +1.4**
**LOOK Love County 21.69 343 P P 00 08 24.9 +0.9**
LOOK IAmb IAmb 00 08 40.8
comp=Z,13nm,0.7s
**PLAL Pickwick Lake 21.70 4 P P 00 08 25.5 +1.5**
**X37A Clayton 21.82 348 P P 00 08 27.3 +1.9**
X37A IAmb IAmb 00 08 45.9
comp=Z,7.8nm,0.5s
**APMT Aspermont 22.06 337** IAmb IAmb 00 08 31.6
comp=Z,8.8nm,0.7s
**SWET Sewanee 22.16 9** IAmb IAmb 00 08 32.0
comp=Z,6.0nm,0.7s
**SN07 Snyder 07 22.17 335 P P 00 08 30.3 +1.2**
**POST Post 22.40 334 P P 00 08 31.6 -0.1**
POST IAmb IAmb 00 08 41.4
comp=Z,5.1nm,0.7s
**X34A Smith Ranch, M 22.45 343 P P 00 08 33.5 +1.4**
X34A IAmb IAmb 00 08 49.0
comp=Z,8.1nm,0.8s
**CPCT Cooper Cave 22.62 11 P P 00 08 34.8 +0.9**
CPCT IAmb IAmb 00 08 59.1
comp=Z,10nm,1.4s
**DKNS Dickens 22.68 335 P 00 08 35.0 +0.3**
DKNS IAmb IAmb 00 08 38.1
comp=Z,5.7nm,0.7s
**WVT Waverly 22.86 4 P P 00 08 36.4 +0.1**
**WMOK Wichita Mounta 22.87 341 P P 00 08 35.8 -0.7**
WMOK IAmb IAmb 00 08 37.6
comp=Z,5.8nm,0.7s
**TKL Tuckaleechee C 22.98 13 P P 00 08 38.4 +0.8**
TKL IAmb IAmb 00 08 41.5
comp=Z,6.5nm,0.9s
**TKL Tuckaleechee C 22.98 13** LR LR 00 17 42.9
comp=Z,88nm,21.6s,baz=174,slow=37
**HHAR Hobbs 23.22 352 P P 00 08 42.1 +2.1**
HHAR IAmb IAmb 00 08 54.0
comp=Z,6.6nm,1.0s
**PBMO Poplar Bluff 23.43 359** IAmb IAmb 00 08 57.5
comp=Z,5.9nm,0.8s
**U49A Red Boiling Sp 23.45 8** IAmb IAmb 00 08 43.2
comp=Z,7.7nm,0.9s
**OK052 Battle Ridge R 23.49 346** IAmb IAmb 00 08 58.4
comp=Z,9.8nm,0.9s
**SMWD Samnorwood 23.69 338** IAmb IAmb 00 09 02.5
comp=Z,9.5nm,0.6s
**T47A Sharon Grove 23.77 5 P P 00 08 46.3 +1.3**
T47A IAmb IAmb 00 09 02.4
comp=Z,11nm,0.8s
**MGMO Mountain Grove 23.90 355** IAmb IAmb 00 09 17.4
comp=Z,10nm,1.4s
**CGM3 Cape Girardeau 23.95 0 P P 00 08 47.9 +1.2**
CGM3 IAmb IAmb 00 08 50.1
comp=Z,6.4nm,0.8s
**AMTX Amarillo 24.05 336 P P 00 08 48.0 +0.3**
AMTX IAmb IAmb 00 08 51.1
comp=Z,7.7nm,0.8s
**T50A Nancy 24.10 10 P P 00 08 50.2 +2.2**
**U54A Nelsons Funny 24.27 16 P P 00 08 50.8 +1.1**
U54A IAmb IAmb 00 09 08.6
comp=Z,7.9nm,0.6s
**BLOK Blackwell 24.32 346 P P 00 08 50.8 +0.8**
**V58A Windy Hill, Pi 24.45 22** IAmb IAmb 00 08 51.6
comp=Z,6.9nm,0.6s
**S39A Bolivar 24.53 353** IAmb IAmb 00 08 52.8
comp=Z,4.5nm,0.6s
**CCM Cathedral Cave 24.73 357 P P 00 08 54.5 +0.7**
CCM IAmb IAmb 00 08 55.7
comp=Z,7.0nm,1.0s
**WCI Wyandotte Cave 25.08 7 P P 00 08 58.0 +1.1**
WCI IAmb IAmb 00 09 16.4
comp=Z,10.0nm,0.7s
**OLIL Olney 25.43 3 P P 00 09 02.0 +1.9**
OLIL IAmb IAmb 00 09 19.6
comp=Z,10nm,0.7s
**ECSD EROS Data Cent 30.93 350 P P 00 09 49.1 0.0**
ECSD IAmb IAmb 00 09 59.0
comp=Z,10nm,1.5s
**SRU San Rafael Swe 31.58 328 P 00 09 56.4 +1.3**
**P18A Preston Nutter 31.83 329 P P 00 09 58.8 +1.3**
**P17A Butcher Ranch, 31.96 329 P P 00 09 59.9 +1.5**
**SADO Sadowa 32.72 14** LR LR 00 23 46.0
comp=Z,60nm,21.5s,baz=240,slow=37
**ETMB Extrema 32.81 133 P P 00 10 07.1 +1.1**
**PDAR Pinedale Array 33.98 334 P P 00 10 17.0 +0.9**
comp=Z,0.2nm,0.4s,baz=133,slow=6.6,SNR=2.1
PDAR PcP PcP **00 12 53.3 +0.2**
comp=Z,0.1nm,0.4s,baz=112,slow=4.0,SNR=1.8
comp=Z,0.2nm,0.4s
**SAML Samuel 34.48 128 P P 00 10 21.0 +0.5**
**NVAR Mina Array Bea 35.56 320 P P 00 10 31.2 +1.4**
**NVAR Mina Array Bea 35.56 320 P P 00 10 32.0 +2.2**
comp=Z,2.3nm,0.7s,baz=133,slow=8.9,SNR=12
NVAR PcP PcP **00 12 58.2 +0.4**
comp=Z,0.8nm,0.7s,baz=158,slow=4.1,SNR=4.1
comp=Z,2.3nm,0.7s
**LHV Little Huntoon 35.58 320 P P 00 10 31.8 +2.1**
LHV IAmb IAmb 00 10 49.3
comp=Z,4.1nm,0.8s
**LPAZ La Paz 36.38 143 P P 00 10 37.8 +0.4**
comp=Z,1.2nm,0.6s,baz=340,slow=6.9,SNR=6.5
comp=Z,1.2nm,0.6s
**ULM Lac du Bonnet 37.22 354 P P 00 10 41.1 -2.4**
comp=Z,3.8nm,0.7s,baz=153,slow=8.3,SNR=4.9
ULM LR LR 00 28 30.0
comp=Z,34nm,19.6s,baz=164,slow=40
comp=Z,3.8nm,0.7s
**SCHQ Schefferville 45.23 19 P P 00 11 47.0 -2.2**
comp=Z,6.1nm,0.5s,baz=270,slow=5.1,SNR=19
SCHQ PcP PcP **00 13 25.8 -2.5**
comp=Z,1.5nm,0.6s,baz=265,slow=14,SNR=1.9
comp=Z,6.1nm,0.5s
**H03N2 Juan Fernandez 47.59 168** T T 01 03 09.7
baz=346,slow=76,SNR=5.9
**H03N1 Juan Fernandez 47.59 168** T T 01 03 14.2
baz=346,slow=76,SNR=6.0
**H03N3 Juan Fernandez 47.60 168** T T 01 03 09.5
baz=346,slow=76,SNR=4.1
**FRB Frobisher Bay 52.60 12** LR LR 00 35 05.1
comp=Z,57nm,19.4s,baz=191,slow=36
**SFJD Kangerlussuaq 59.62 17** LR LR 00 39 25.3
comp=Z,38nm,18.4s,baz=231,slow=36
**BORG Borgarnes 68.99 25** LR LR 00 42 50.1
comp=Z,19nm,20.7s,baz=320,slow=34
**JMIC Jan Mayen 74.75 20** LR LR 00 46 50.9
comp=Z,22nm,19.2s,baz=237,slow=35
**EKA Eskdalemuir Ar 77.36 36** P P 00 15 21.7 -4.5
comp=Z,0.8nm,0.6s,baz=266,slow=5.6,SNR=3.6
comp=Z,0.8nm,0.6s
**ESDC Sonseca Array 78.55 52** P **P 00 15 29.4 -3.9**
comp=Z,0.6nm,1.0s,baz=291,slow=4.6,SNR=4.5
ESDC LR LR 00 45 46.9
comp=Z,12nm,19.9s,baz=111,slow=32
comp=Z,0.6nm,1.0s
**NOA NORSAR Array B 83.81 29** LR LR 00 51 47.6
comp=Z,7.4nm,20.1s,baz=350,slow=35
**HFS Hagfors 85.25 29 P P 00 16 06.3 -1.7**
comp=Z,1.1nm,0.7s,baz=272,slow=12,SNR=4.6
comp=Z,1.1nm,0.7s
**ARCES ARCESS Array B 86.19 19 P P 00 16 10.8 -1.6**
comp=Z,0.4nm,0.3s,baz=282,slow=5.8,SNR=9.2
comp=Z,0.4nm,0.3s
**TORD Torodi Ar. Bea 88.53 77 P P 00 16 21.9 -2.9**
comp=Z,0.4nm,0.9s,baz=308,slow=4.5,SNR=2.0
comp=Z,0.4nm,0.9s
**WRA Warramunga Arr 137.21 255** PKP **PKPdf 00 22 56.9 +1.6**
comp=Z,9.9nm,0.7s,baz=88,slow=2.4,SNR=14
**CMAR Chiang Mai Arr 147.32 344** PKPbc **PKPdf 00 23 15.3 +2.0**
comp=Z,1.6nm,0.3s,baz=4.6,slow=4.5,SNR=2.1

*IDC **17** 00:06:57.4±0.6, 23°.58N×143°.49E, h0km, mb4.0/15, mbtmp4.0/17, ML3.8/2, MS3.3/1, Error ellipse: s-maj=24.2km s-min=14.7km az=75.0*
*NEIC **17** 00:06:58.1±1.8, 23°.5N±0°.1×143°.6E±0°.2, h10km±1km, mb4.6/18, Error ellipse: s-maj=25.1km s-min=16.3km az=69.0*
**ISC 17 00:07:01.7**±0.6, **23°.63N**±0°.08×**143°.5E**±0°.1, **h31**km, **n43,** σ1°.**14**/**46**, **mb4.2**/**26**, **Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.66** | **341** | Pn | **Pn** | **00 07 56.7** | **+0.5** |
| JCJ | | | | Sn | **Sn** | **00 08 40.7** | **+2.4** |
| **JCJ** | **Chichijima** | **3.66** | **341** | Pn | **Pn** | **00 07 55.0** | **-1.1** |
| | 24nm,0.3s,baz=106,slow=20,SNR=10 | | | | | | |
| JCJ | | | | Sn | **Sn** | **00 08 36.5** | **-1.9** |
| | 42nm,0.3s,baz=257,slow=24,SNR=10 | | | | | | |
| | 50nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.67** | **342** | Pn | **Pn** | **00 10 12.1** | **-1.3** |
| | 0.1nm,0.3s,baz=138,slow=13,SNR=2.1 | | | | | | |
| | 1.2nm,0.3s | | | | | | |
| **JMM** | **Marumori** | **14.39** | **351** | Pn | **Pn** | **00 10 22.3** | **-0.8** |
| **KSRS** | **Korea Array** | **19.22** | **319** | P | **Pn** | **00 11 26.3** | **+2.1** |
| | 1.2nm,0.5s,baz=137,slow=12,SNR=3.3 | | | | | | |
| KSRS | | | | LR | LR | 00 18 51.6 | |
| | comp=Z,86nm,18.6s,baz=130,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.60** | **338** | P | **P** | **00 11 59.0** | **-0.7** |
| | 1.0nm,0.4s,baz=132,slow=9.9,SNR=2.3 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **38.09** | **319** | P | **P** | **00 14 17.5** | **-0.2** |
| | 0.5nm,0.5s,baz=126,slow=6.2,SNR=4.6 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.81** | **272** | P | **P** | **00 14 49.0** | **+0.2** |
| | 0.6nm,0.3s,baz=64,slow=7.8,SNR=1.1 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.04** | **192** | P | **P** | **00 15 05.0** | **-1.7** |
| **WR0** | **Warramunga Arr** | **44.20** | **192** | P | **P** | **00 15 06.4** | **-1.6** |
| **WB2** | **Warramunga Arr** | **44.22** | **192** | P | **P** | **00 15 06.8** | **-1.4** |
| WB2 | | | | IAmb | IAmb | 00 15 14.6 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.23** | **192** | P | **P** | **00 15 06.9** | **-1.3** |
| **WRA** | **Warramunga Arr** | **44.23** | **192** | P | **P** | **00 15 06.6** | **-1.6** |
| | comp=Z,1.1nm,0.6s,baz=17,slow=8.8,SNR=27 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 16 53.3** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=0.8,slow=3.2,SNR=3.1 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **47.93** | **192** | P | **P** | **00 15 36.5** | **-0.9** |
| | comp=Z,0.3nm,0.4s,baz=9.8,slow=9.7,SNR=7.8 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.92** | **321** | P | **P** | **00 16 15.0** | **+0.2** |
| | comp=Z,1.3nm,0.5s,baz=107,slow=9.0,SNR=7.0 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.65** | **312** | P | **P** | **00 16 21.1** | **+0.8** |
| | comp=Z,1.6nm,0.6s,baz=90,slow=8.7,SNR=14 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **55.22** | **182** | P | **P** | **00 16 33.5** | **+1.7** |
| | comp=Z,1.1nm,0.3s,baz=343,slow=10,SNR=3.0 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **56.30** | **316** | P | **P** | **00 16 37.8** | **-1.6** |
| KURK | | | | IAmb | IAmb | 00 16 41.7 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.35** | **316** | P | **P** | **00 16 40.9** | **+1.2** |
| | comp=Z,4.6nm,0.7s,baz=93,slow=7.8,SNR=34 | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **60.18** | **28** | P | **P** | **00 17 06.7** | **+0.4** |
| | comp=Z,0.8nm,0.7s,baz=258,slow=6.3,SNR=4.3 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.43** | **319** | P | **P** | **00 17 15.6** | **+0.7** |
| | comp=Z,11nm,0.5s,baz=90,slow=8.3,SNR=30 | | | | | | |
| **NIL** | **Nilore** | **61.45** | **297** | P | **P** | **00 17 14.4** | **-1.1** |
| NIL | | | | IAmb | IAmb | 00 17 20.0 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **61.49** | **319** | P | **P** | **00 17 14.1** | **-1.2** |
| **KK31** | **Karatay Array** | **62.13** | **308** | P | **P** | **00 17 19.4** | **-0.4** |
| KK31 | | | | IAmb | IAmb | 00 17 27.9 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **62.13** | **308** | P | **P** | **00 17 20.1** | **+0.2** |
| **EPYK** | **Eagle Plains** | **64.50** | **26** | P | **P** | **00 17 34.5** | **-0.7** |
| **KBL** | **Kabul** | **64.70** | **298** | P | **P** | **00 17 36.6** | **-0.6** |
| KBL | | | | IAmb | IAmb | 00 17 45.6 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **ARU** | **Arti** | **67.91** | **323** | P | **P** | **00 17 57.5** | **+0.4** |
| ARU | | | | IAmb | IAmb | 00 17 59.3 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.40** | **316** | P | **P** | **00 18 00.8** | **+0.4** |
| ABKAR | | | | IAmb | IAmb | 00 18 02.2 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.20** | **341** | P | **P** | **00 18 52.8** | **+0.6** |
| | comp=Z,2.5nm,0.8s,baz=73,slow=8.1,SNR=5.7 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **MSO** | **Missoula** | **81.19** | **43** | P | **P** | **00 19 13.5** | **-1.1** |
| MSO | | | | IAmb | IAmb | 00 19 23.4 | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **FIA1** | **FINESS Array S** | **81.59** | **334** | P | **P** | **00 19 15.4** | **-0.8** |
| FIA1 | | | | IAmb | IAmb | 00 19 25.3 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **81.59** | **334** | P | **P** | **00 19 16.0** | **-0.2** |
| **FINES** | **FINESS Array B** | **81.59** | **334** | P | **P** | **00 19 17.0** | **+0.8** |
| | comp=Z,0.8nm,0.3s,baz=76,slow=5.1,SNR=12 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **KVN** | **Kaiserville** | **81.59** | **51** | P | **P** | **00 19 15.7** | **-1.3** |
| **NVAR** | **Mina Array Bea** | **81.69** | **52** | P | **P** | **00 19 18.9** | **+1.4** |
| **NVAR** | **Mina Array Bea** | **81.69** | **52** | P | **P** | **00 19 19.0** | **+1.4** |
| | comp=Z,0.7nm,0.7s,baz=267,slow=6.0,SNR=6.1 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **85.80** | **45** | P | **P** | **00 19 39.3** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=54,slow=7.7,SNR=4.1 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **KNB** | **Kanab** | **86.23** | **51** | P | **P** | **00 19 42.2** | **+1.5** |
| KNB | | | | IAmb | IAmb | 00 19 43.7 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **87.27** | **339** | P | **P** | **00 19 45.8** | **+0.7** |
| | comp=Z,0.7nm,0.8s,baz=45,slow=4.7,SNR=3.7 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.77** | **310** | PKP | **PKiKP** | **00 26 05.2** | **-0.3** |
| | comp=Z,0.1nm,0.6s,baz=331,slow=3.1,SNR=1.2 | | | | | | |
| **PLCA** | **Paso Flores** | **146.75** | **129** | PKPbc | **PKPab** | **00 26 41.3** | **-0.7** |
| | comp=Z,0.9nm,0.5s,baz=234,slow=5.4,SNR=5.1 | | | | | | |
| **LPAZ** | **La Paz** | **149.40** | **82** | PKPbc | **PKiKP** | **00 26 49.7** | **-0.6** |
| | comp=Z,1.2nm,0.6s,baz=266,slow=2.7,SNR=5.8 | | | | | | |

**NAM 17 00:07:15.8**±0.4, **19°.81S**×**14°.58E**, **h5**km±2km, **ML0.5, 2C-5D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST9N** | **ST9** | **0.03** | **280** | *i* P | Pg | 00 07 17.0 | 0.0 |
| ST9N | | | | *i* S | Sg | 00 07 17.7 | -0.1 |
| ST9N | | | | IAML | | 00 07 18.1 | |
| | comp=Z,180nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.03** | **280** | *i* P | Pg | 00 07 17.0 | 0.0 |
| ST9N | | | | *i* S | Sg | 00 07 17.7 | -0.1 |
| **ST1N** | **ST1** | **0.08** | **28** | ↓*i* P | Pg | 00 07 17.7 | +0.1 |
| ST1N | | | | IAML | | 00 07 19.0 | |
| | comp=Z,54nm,0.1s | | | | | | |
| ST1N | | | | *i* S | Sg | 00 07 19.0 | +0.2 |
| **ST1N** | **ST1** | **0.08** | **28** | *i* P | Pg | 00 07 17.7 | +0.1 |
| ST1N | | | | *i* S | Sg | 00 07 18.9 | +0.1 |
| ST1N | | | | IAML | | 00 07 19.0 | |
| | comp=Z,54nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.08** | **28** | *i* P | Pg | 00 07 17.7 | +0.1 |
| ST1N | | | | *i* S | Sg | 00 07 18.9 | +0.1 |
| ST1N | | | | IAML | | 00 07 19.0 | |
| | comp=Z,56nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.10** | **310** | ↓*i* P | Pg | 00 07 18.0 | +0.1 |
| ST3N | | | | *i* S | Sg | 00 07 19.5 | +0.1 |
| ST3N | | | | IAML | | 00 07 19.8 | |
| | comp=Z,9.1nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.10** | **310** | *i* P | Pg | 00 07 18.0 | +0.1 |
| ST3N | | | | *i* S | Sg | 00 07 19.4 | +0.1 |
| ST3N | | | | IAML | | 00 07 19.8 | |
| | comp=Z,9.0nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.10** | **310** | *i* S | Sg | 00 07 19.5 | +0.2 |
| **ST2N** | **ST2** | **0.12** | **171** | ↑*i* P | Pg | 00 07 18.5 | +0.1 |
| ST2N | | | | *i* S | Sg | 00 07 20.4 | +0.2 |
| ST2N | | | | IAML | | 00 07 20.5 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.12** | **171** | *i* P | Pg | 00 07 18.5 | +0.1 |
| ST2N | | | | *i* S | Sg | 00 07 20.4 | +0.2 |
| ST2N | | | | IAML | | 00 07 20.5 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.12** | **171** | *i* P | Pg | 00 07 18.5 | +0.1 |
| ST2N | | | | *i* S | Sg | 00 07 20.4 | +0.2 |
| ST2N | | | | IAML | | 00 07 20.5 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.17** | **271** | ↓*i* P | Pg | 00 07 19.2 | +0.1 |
| ST6N | | | | *i* S | Sg | 00 07 21.7 | +0.3 |
| ST6N | | | | IAML | | 00 07 21.8 | |
| | comp=Z,9.0nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.17** | **271** | *i* P | Pg | 00 07 19.2 | +0.1 |
| ST6N | | | | *i* S | Sg | 00 07 21.7 | +0.3 |
| ST6N | | | | IAML | | 00 07 21.8 | |
| | comp=Z,9.0nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.17** | **271** | *i* P | Pg | 00 07 19.2 | +0.1 |
| ST6N | | | | IAML | | 00 07 19.4 | |
| | comp=Z,12nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **86** | ↓*i* P | Pg | 00 07 19.4 | +0.2 |
| ST5N | | | | IAML | | 00 07 22.3 | |
| | comp=Z,6.6nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **86** | *i* P | Pg | 00 07 19.4 | +0.2 |
| ST5N | | | | *i* S | Sg | 00 07 21.6 | +0.1 |
| ST5N | | | | IAML | | 00 07 22.3 | |
| | comp=Z,6.9nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.17** | **86** | *i* P | Pg | 00 07 19.3 | +0.1 |
| ST5N | | | | IAML | | 00 07 22.3 | |
| | comp=Z,6.7nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.39** | **103** | ↓*e*P | Pg | 00 07 23.0 | -0.3 |
| ST4N | | | | IAML | | 00 07 36.1 | |
| | comp=Z,1.9nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.39** | **103** | *i* P | Pg | 00 07 23.4 | +0.1 |
| ST4N | | | | *i* S | Sg | 00 07 28.5 | +0.1 |
| ST4N | | | | IAML | | 00 07 32.0 | |
| | comp=Z,2.0nm,0.1s | | | | | | |

**NAM 17 00:12:37.9**±3.8, **19°.78S**×**14°.57E**, **h20**km±17km, **ML1.7, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST9N** | **ST9** | **0.03** | **226** | *i* P | Pg | 00 12 40.7 | -0.8 |
| ST9N | | | | *i* S | Sg | 00 12 44.3 | +0.3 |
| ST9N | | | | IAML | | 00 12 44.7 | |
| | comp=Z,701nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.03** | **226** | *i* P | Pg | 00 12 40.5 | -1.1 |
| ST9N | | | | *i* S | Sg | 00 12 43.6 | -0.4 |
| ST9N | | | | IAML | | 00 12 44.7 | |
| | comp=Z,693nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.06** | **46** | *i* P | Pg | 00 12 41.1 | -0.6 |
| ST1N | | | | *i* S | Sg | 00 12 45.1 | +0.8 |
| ST1N | | | | IAML | | 00 12 45.4 | |
| | comp=Z,123nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.06** | **46** | *i* P | Pg | 00 12 41.0 | -0.7 |
| ST1N | | | | *i* S | Sg | 00 12 45.3 | +1.0 |
| ST1N | | | | IAML | | 00 12 45.4 | |
| | comp=Z,123nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.07** | **301** | *i* P | Pg | 00 12 41.5 | -0.3 |
| ST3N | | | | *i* S | Sg | 00 12 44.2 | -0.2 |
| ST3N | | | | IAML | | 00 12 46.2 | |
| | comp=Z,38nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.07** | **301** | *i* P | Pg | 00 12 41.4 | -0.4 |
| ST3N | | | | IAML | | 00 12 46.2 | |
| | comp=Z,38nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.15** | **169** | *i* P | Pb | 00 12 42.0 | +0.2 |
| ST2N | | | | *i* S | Sg | 00 12 46.0 | +0.3 |
| ST2N | | | | IAML | | 00 12 47.5 | |
| | comp=Z,106nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.15** | **169** | *i* P | Pb | 00 12 41.9 | +0.1 |
| ST2N | | | | *i* S | Sg | 00 12 46.9 | +1.2 |
| ST2N | | | | IAML | | 00 12 47.5 | |
| | comp=Z,107nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.16** | **262** | *i* P | Pg | 00 12 42.7 | +0.1 |
| ST6N | | | | *i* S | Sb | 00 12 45.0 | +0.3 |
| ST6N | | | | IAML | | 00 12 48.5 | |
| | comp=Z,51nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.16** | **262** | *i* P | Pg | 00 12 42.6 | 0.0 |
| ST6N | | | | IAML | | 00 12 48.4 | |
| | comp=N,3μm,0.0s | | | | | | |
| ST6N | | | | IAML | | 00 12 48.5 | |
| | comp=Z,51nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.18** | **93** | *i* P | Pg | 00 12 44.2 | +1.3 |
| ST5N | | | | *i* S | Sg | 00 12 47.5 | +1.2 |
| ST5N | | | | IAML | | 00 12 48.1 | |
| | comp=Z,69nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.18** | **93** | *i* P | Pg | 00 12 42.7 | -0.2 |
| ST5N | | | | *i* S | Sg | 00 12 47.6 | +1.3 |
| ST5N | | | | IAML | | 00 12 48.1 | |
| | comp=Z,75nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.40** | **106** | *i* P | Pn | 00 12 49.4 | +0.8 |
| ST4N | | | | IAML | | 00 12 54.9 | |
| | comp=Z,29nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.40** | **106** | *i* P | Pn | 00 12 49.5 | +0.8 |
| ST4N | | | | *i* S | Sg | 00 12 49.5 | -2.6 |
| ST4N | | | | IAML | | 00 12 54.9 | |
| | comp=Z,30nm,0.1s | | | | | | |

*IDC **17** 00:13:16.8±1.2, 34°.64N×25°.40E, h0km, mb3.7/6, mbtmp3.6/10, ML3.0/4, MS2.6/1, Error ellipse: s-maj=21.6km s-min=15.8km az=34.0*
*THE **17** 00:13:20.5, 34°.53N×25°.33E, h1km±2km, ML2.8/3, Error ellipse: s-maj=2.9km s-min=1.2km az=170.0*
*ISK **17** 00:13:21.9, 34°.71N×25°.32E, h13km±1km, ML2.8/20*
*ATH **17** 00:13:22.4, 34°.65N×25°.35E, h13km±1km, ML3.1/9, Error ellipse: s-maj=2.5km s-min=1.0km az=2.0*
**ISC 17 00:13:20.2**±1.4, **34°.57N**±0°.05×**25°.38E**±0°.03, **h17**km±8km, **n74,** σ1°.**66**/**94**, **mb3.6**/**6**, **Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TMBK** | **Timbaki Herakl** | **0.71** | **315** | P | **Pg** | **00 13 34.4** | **+0.3** |
| TMBK | | | | S | **Sb** | **00 13 45.1** | **+1.5** |
| **TMBK** | **Timbaki Herakl** | **0.71** | **315** | P | **Pg** | **00 13 34.5** | **+0.3** |
| TMBK | | | | S | **Sg** | **00 13 43.7** | **+0.1** |
| **KSTL** | **Kastelli Herak** | **0.78** | **341** | P | **Pg** | **00 13 33.3** | **-2.0** |
| KSTL | | | | S | **Sg** | **00 13 45.1** | **-0.5** |
| | 488nm,0.6s | | | | | | |
| **KSTL** | **Kastelli Herak** | **0.78** | **341** | P | **Pg** | **00 13 33.4** | **-1.9** |
| KSTL | | | | S | **Sg** | **00 13 40.9** | **-4.7** |
| KSTL | | | | AML | AML | 00 13 46.8 | |
| | comp=N,3948μm,0.4s | | | | | | |
| KSTL | | | | AML | AML | 00 13 48.6 | |
| | comp=E,1724μm,0.4s | | | | | | |
| **IACM** | **Heraklion** | **0.78** | **341** | P | **Pg** | **00 13 36.0** | **+0.6** |
| IACM | | | | S | **Sn** | **00 13 49.2** | **+1.7** |
| **IACM** | **Heraklion** | **0.78** | **341** | P | **Pg** | **00 13 35.8** | **+0.4** |
| IACM | | | | S | **Sg** | **00 13 45.1** | **-0.6** |
| **IDI** | **Anoyia** | **0.82** | **331** | Pg | **Pg** | **00 13 35.8** | **-0.4** |
| IDI | | | | Sg | **Sg** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **IDI** | **Anoyia** | **0.82** | **331** | P | **Pg** | **00 13 36.0** | **-0.3** |
| **IDI** | **Anoyia** | **0.82** | **331** | Pn | **Pg** | **00 13 35.6** | **-0.6** |
| | comp=E,34nm,0.3s,baz=178,slow=8.5,SNR=266 | | | | | | |
| IDI | | | | Sn | **Sb** | **00 13 48.0** | **+1.1** |
| | comp=E,76nm,0.3s,baz=97,slow=23,SNR=11 | | | | | | |
| **IDI** | **Anoyia** | **0.82** | **331** | P | **Pg** | **00 13 35.9** | **-0.3** |
| IDI | | | | S | **Sg** | **00 13 45.7** | **-1.5** |
| IDI | | | | AML | AML | 00 13 51.5 | |
| | comp=N,1761µm,0.5s | | | | | | |
| IDI | | | | AML | AML | 00 13 52.5 | |
| | comp=E,2592µm,0.5s | | | | | | |
| **ZKR** | **Zakros** | **0.87** | **51** | Pg | **Pb** | **00 13 38.7** | **+1.8** |
| ZKR | | | | Sg | **Sb** | **00 13 51.0** | **+2.8** |
| **ZKR** | **Zakros** | **0.87** | **51** | P | **Pn** | **00 13 39.1** | **+1.4** |
| ZKR | | | | S | **Sn** | **00 13 52.0** | **+2.0** |
| | comp=E,555nm,0.4s | | | | | | |
| **ZKR** | **Zakros** | **0.87** | **51** | P | **Pb** | **00 13 38.7** | **+1.8** |
| ZKR | | | | S | **Sb** | **00 13 50.0** | **+1.7** |
| ZKR | | | | AML | AML | 00 13 59.0 | |
| | comp=E,1785µm,0.5s | | | | | | |
| ZKR | | | | AML | AML | 00 14 04.4 | |
| | comp=N,748µm,0.5s | | | | | | |
| **GVD** | **Gavdhos** | **1.10** | **284** | Pg | **Pb** | **00 13 41.5** | **+0.8** |
| GVD | | | | Sg | **Sb** | **00 13 57.0** | **+2.2** |
| **GVD** | **Gavdhos** | **1.10** | **284** | P | **Pb** | **00 13 41.5** | **+0.8** |
| GVD | | | | S | **Sg** | **00 13 56.0** | **+0.1** |
| | comp=N,1µm,0.3s | | | | | | |
| **GVD** | **Gavdhos** | **1.10** | **284** | P | **Pb** | **00 13 41.3** | **+0.6** |
| GVD | | | | S | **Sg** | **00 13 56.4** | **+0.5** |
| GVD | | | | AML | AML | 00 14 03.5 | |
| | comp=E,2957µm,0.4s | | | | | | |
| GVD | | | | AML | AML | 00 14 07.9 | |
| | comp=N,3528µm,0.4s | | | | | | |
| **CHAN** | **Chania** | **1.45** | **311** | P | **Pn** | **00 13 46.6** | **+1.0** |
| CHAN | | | | S | **Sn** | **00 14 04.3** | **+0.1** |
| CHAN | | | | AML | AML | 00 14 24.7 | |
| | comp=N,1505µm,0.7s | | | | | | |
| CHAN | | | | AML | AML | 00 14 26.0 | |
| | comp=E,926µm,0.9s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.45** | **308** | Pn | **Pn** | **00 13 47.3** | **+1.7** |
| IMMV | | | | Sn | **Sn** | **00 14 05.3** | **+1.0** |
| **IMMV** | **Iera Moni Meta** | **1.45** | **308** | P | **Pn** | **00 13 46.9** | **+1.3** |
| **IMMV** | **Iera Moni Meta** | **1.45** | **308** | P | **Pn** | **00 13 46.8** | **+1.3** |
| IMMV | | | | S | **Sn** | **00 14 04.5** | **+0.2** |
| IMMV | | | | AML | AML | 00 14 18.6 | |
| | comp=N,1372µm,0.5s | | | | | | |
| IMMV | | | | AML | AML | 00 14 21.5 | |
| | comp=E,1288µm,0.5s | | | | | | |
| **KNDR** | **Palaiochora Ch** | **1.54** | **296** | Pn | **Pb** | **00 13 49.5** | **+1.2** |
| **KNDR** | **Palaiochora Ch** | **1.54** | **296** | P | **Pn** | **00 13 48.5** | **+1.7** |
| KNDR | | | | S | **Sn** | **00 14 07.3** | **+0.9** |
| KNDR | | | | AML | AML | 00 14 26.9 | |
| | comp=N,818µm,0.5s | | | | | | |
| KNDR | | | | AML | AML | 00 14 29.4 | |
| | comp=E,1094µm,0.5s | | | | | | |
| **RODP** | **Rodopos** | **1.66** | **307** | Pn | **Pn** | **00 13 49.8** | **+1.3** |
| **KARP** | **Karpathos** | **1.75** | **56** | Pn | **Pb** | **00 13 52.6** | **+0.7** |
| **THR6** | **Thira Island,** | **1.78** | **0** | P | **Pn** | **00 13 50.9** | **+0.8** |
| **THR9** | **Santorini-Faro** | **1.78** | **359** | P | **Pn** | **00 13 50.8** | **+0.7** |
| **SANT** | **Santorini** | **1.80** | **2** | Pn | **Pn** | **00 13 51.4** | **+1.0** |
| **SANT** | **Santorini** | **1.80** | **2** | P | **Pn** | **00 13 52.2** | **+1.8** |
| **SANT** | **Santorini** | **1.80** | **2** | P | **Pn** | **00 13 51.4** | **+1.0** |
| **SNT5** | **Nea Kammeni, S** | **1.83** | **0** | P | **Pn** | **00 13 51.9** | **+1.2** |
| **THR3** | **Thira Island,** | **1.83** | **0** | P | **Pn** | **00 13 51.8** | **+1.0** |
| **THR8** | **Santorini-Mono** | **1.83** | **2** | P | **Pn** | **00 13 51.7** | **+0.9** |
| **THR5** | **Thira Island,** | **1.84** | **359** | P | **Pn** | **00 13 51.8** | **+0.9** |
| **SAP3** | **Santorini-Thir** | **1.86** | **359** | P | **Pn** | **00 13 52.3** | **+1.1** |
| **THR2** | **Thira island,** | **1.87** | **1** | P | **Pn** | **00 13 51.8** | **+0.4** |
| **CMBO** | **Columbo, Santo** | **1.90** | **1** | P | **Pn** | **00 13 52.7** | **+1.1** |
| **ANKY** | **Antikythira Is** | **2.14** | **308** | P | **Pn** | **00 13 56.5** | **+1.5** |
| **ANKY** | **Antikythira Is** | **2.14** | **308** | P | **Pn** | **00 13 56.9** | **+1.9** |
| **MHLO** | **Agia Marina, M** | **2.26** | **340** | P | **Pn** | **00 13 57.4** | **+0.7** |
| **MHLO** | **Agia Marina, M** | **2.26** | **340** | P | **Pn** | **00 13 57.3** | **+0.6** |
| MHLO | | | | AML | AML | 00 14 42.4 | |
| | comp=N,1109µm,0.6s | | | | | | |
| MHLO | | | | AML | AML | 00 14 43.6 | |
| | comp=E,1112µm,0.8s | | | | | | |
| **APE** | **Apeiranthos** | **2.50** | **3** | Pn | **Pn** | **00 14 00.9** | **+0.9** |
| **APE** | **Apeiranthos** | **2.50** | **3** | P | **Pn** | **00 14 00.6** | **+0.6** |
| **APE** | **Apeiranthos** | **2.50** | **3** | P | **Pn** | **00 14 00.5** | **+0.5** |
| **KTHA** | **Kythira Island** | **2.54** | **312** | Pn | **Pn** | **00 14 01.7** | **+1.2** |
| **KTHA** | **Kythira Island** | **2.54** | **312** | P | **Pn** | **00 14 01.3** | **+0.8** |
| **KTHA** | **Kythira Island** | **2.54** | **312** | P | **Pn** | **00 14 01.6** | **+1.2** |
| KTHA | | | | AML | AML | 00 14 53.3 | |
| | comp=N,182µm,0.5s | | | | | | |
| KTHA | | | | AML | AML | 00 15 00.1 | |
| | comp=E,277µm,0.8s | | | | | | |
| **ARG** | **Arkhangelos** | **2.78** | **53** | Pn | **Pn** | **00 14 07.3** | **+3.5** |
| **ARG** | **Arkhangelos** | **2.78** | **53** | P | **Pn** | **00 14 05.8** | **+2.0** |
| **DAT** | **Datca** | **2.80** | **39** | Pn | **Pn** | **00 14 06.8** | **+2.6** |
| **VLI** | **Veliai** | **2.93** | **318** | P | **Pn** | **00 14 06.1** | **+0.2** |
| **BODT** | **Bodrum** | **2.94** | **32** | Pn | **Pn** | **00 14 08.6** | **+2.6** |
| **TURN** | **Turunc** | **3.20** | **46** | Pn | **Pn** | **00 14 12.4** | **+2.8** |
| **MLSB** | **Milas** | **3.34** | **35** | Pn | **Pn** | **00 14 14.4** | **+2.8** |
| **YER** | **Yerkesik** | **3.48** | **42** | Pn | **Pn** | **00 14 16.3** | **+2.8** |
| **DALY** | **Dalyan (Mula)** | **3.48** | **49** | Pn | **Pn** | **00 14 16.3** | **+2.9** |
| **FETY** | **Fethiye** | **3.65** | **55** | Pn | **Pn** | **00 14 19.6** | **+3.7** |
| **ITM** | **Ithomi** | **3.83** | **314** | Pn | **Pn** | **00 14 19.2** | **+0.9** |
| **CHOS** | **Chios island** | **3.85** | **8** | Pn | **Pn** | **00 14 20.6** | **+2.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **3.93** | **30** | Pn | **Pn** | **00 14 22.4** | **+2.6** |
| **BRTR** | **Keskin Array B** | **8.36** | **50** | Pn | **Pn** | **00 15 20.9** | **+0.2** |
| | comp=E,0.1nm,0.3s,baz=225,slow=9.4,SNR=1.4 | | | | | | |
| BRTR | | | | Sn | **Sn** | **00 16 52.2** | **-2.5** |
| | comp=E,0.1nm,0.3s,baz=347,slow=10,SNR=3.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **8.48** | **98** | Pn | **Pn** | **00 15 21.2** | **-1.0** |
| | comp=E,0.5nm,0.3s,baz=295,slow=11,SNR=2.2 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **EIL** | **Elat** | **9.47** | **118** | Pn | **Pn** | **00 15 34.2** | **-1.5** |
| | comp=E,0.4nm,0.3s,baz=290,slow=6.1,SNR=4.4 | | | | | | |
| EIL | | | | Sn | **Sn** | **00 17 17.6** | **-4.2** |
| | comp=E,0.3nm,0.3s,baz=20,slow=15,SNR=2.4 | | | | | | |
| | comp=E,1.7nm,0.5s | | | | | | |
| **AK07** | **Malin Array Si** | **16.21** | **9** | P | **Pn** | **00 17 08.4** | **+1.4** |
| **AK10** | **Malin Array Si** | **16.27** | **9** | P | **Pn** | **00 17 09.0** | **+1.4** |
| **AK09** | **Malin Array Si** | **16.29** | **9** | P | **Pn** | **00 17 09.2** | **+1.3** |
| **AK12** | **Malin Array Si** | **16.30** | **9** | P | **Pn** | **00 17 09.5** | **+1.5** |
| **KBZ** | **Khabaz** | **16.35** | **51** | Pn | **Pn** | **00 17 08.1** | **-0.7** |
| | baz=254,slow=10,SNR=4.7 | | | | | | |
| KBZ | | | | LR | LR | 00 25 16.6 | |
| | comp=E,25nm,20.9s,baz=207,slow=44 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **AKASG** | **Malin Array Be** | **16.36** | **9** | Pn | **Pn** | **00 17 07.7** | **-1.1** |
| | comp=E,0.3nm,0.3s,baz=204,slow=11,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **26.89** | **1** | P | **P** | **00 18 56.7** | **-3.1** |
| | comp=E,1.9nm,0.8s,baz=179,slow=9.0,SNR=5.4 | | | | | | |
| | comp=E,1.9nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.26** | **231** | P | **P** | **00 19 30.0** | **-0.2** |
| | comp=E,0.4nm,0.5s,baz=29,slow=9.4,SNR=8.8 | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **35.02** | **0** | P | P | 00 20 08.5 | -2.9 |
| | comp=E,2.4nm,1.0s,baz=180,slow=9.9,SNR=1.4 | | | | | | |
| | comp=E,2.4nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.35** | **50** | P | **P** | **00 21 04.6** | **-0.4** |
| | comp=E,0.2nm,0.3s,baz=273,slow=8.0,SNR=3.1 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.95** | **56** | P | **P** | **00 21 25.8** | **-0.3** |
| | comp=E,0.2nm,0.4s,baz=273,slow=8.1,SNR=4.4 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.28** | **46** | P | **P** | **00 21 35.1** | **-1.5** |
| | comp=E,0.6nm,0.4s,baz=249,slow=6.9,SNR=3.1 | | | | | | |
| | comp=E,0.6nm,0.4s | | | | | | |

*IDC **17** 00:15:15.9±0.9,23°.43N×143°.53E,h0km,mb3.8/8, mbtmp3.8/10,ML3.6/2, Error ellipse: s-maj=38.1km s-min=19.2km az=69.0*

**ISC 17 00:15:20.8±0.9,23°.6N±0°.1×143°.4E±0°.2,h31km,n14, σ1§45/15,mb3.8/8,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.64** | **342** | Pn | **Pn** | **00 16 13.2** | **-1.8** |
| | 6.2nm,0.3s,baz=215,slow=22,SNR=2.0 | | | | | | |
| JCJ | | | | Sn | **Sn** | **00 16 54.8** | **-2.2** |
| | 16nm,0.3s,baz=285,slow=23,SNR=1.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.65** | **342** | Pn | **Pn** | **00 18 33.6** | **+1.4** |
| | 0.1nm,0.3s,baz=123,slow=20,SNR=2.3 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **19.16** | **320** | P | **Pn** | **00 19 44.4** | **+1.8** |
| | 0.5nm,0.3s,baz=148,slow=14,SNR=2.5 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.19** | **192** | P | **P** | **00 23 25.6** | **-1.5** |
| | 0.3nm,0.3s,baz=17,slow=9.1,SNR=13 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **47.90** | **192** | P | **P** | **00 23 54.5** | **-1.7** |
| | 0.2nm,0.5s,baz=11,slow=9.9,SNR=2.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.86** | **321** | P | **P** | **00 24 33.6** | **+0.1** |
| | 0.4nm,0.4s,baz=101,slow=7.8,SNR=2.3 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.58** | **312** | P | **P** | **00 24 40.2** | **+1.3** |
| | 0.8nm,0.6s,baz=83,slow=8.9,SNR=6.6 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.29** | **316** | P | **P** | **00 24 59.5** | **+1.1** |
| | 2.3nm,0.8s,baz=93,slow=7.9,SNR=16 | | | | | | |
| | 2.3nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.37** | **319** | P | **P** | **00 25 35.4** | **+1.7** |
| | 4.6nm,0.5s,baz=83,slow=7.3,SNR=25 | | | | | | |
| | 4.6nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **81.55** | **334** | P | **P** | **00 27 35.9** | **+0.7** |
| | 0.4nm,0.3s,baz=57,slow=7.0,SNR=7.4 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.78** | **52** | P | **P** | **00 27 37.7** | **+0.5** |
| | 0.2nm,0.4s,baz=223,slow=11,SNR=3.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.69** | **310** | PKP | **PKPdf** | **00 34 24.1** | **+0.2** |
| | 0.5nm,1.1s,baz=35,slow=2.5,SNR=1.8 | | | | | | |
| **PLCA** | **Paso Flores** | **146.82** | **129** | PKPbc | **PKPdf** | **00 34 58.8** | **+0.5** |
| | 1.1nm,0.8s,baz=225,slow=6.7,SNR=3.8 | | | | | | |
| **LPAZ** | **La Paz** | **149.50** | **82** | PKPbc | **PKPbc** | **00 35 08.3** | **-0.2** |
| | 0.8nm,0.6s,baz=266,slow=11,SNR=2.4 | | | | | | |

*IDC **17** 00:20:29.1±0.9,23°.44N×143°.53E,h0km,mb3.9/11, mbtmp3.9/13,ML3.5/2,MS3.0/4, Error ellipse: s-maj=31.2km s-min=19.1km az=78.0*

**ISC 17 00:20:34.1±1.0,23°.6N±0°.1×143°.4E±0°.2,h31km,n16, σ1§42/15,mb3.9/11,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.66** | **342** | Pn | **Pn** | **00 21 26.2** | **-2.3** |
| | 5.8nm,0.3s,baz=329,slow=22,SNR=1.9 | | | | | | |
| JCJ | | | | Sn | **Sn** | **00 22 09.6** | **-1.0** |
| | 56nm,0.3s,baz=272,slow=21,SNR=10.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.66** | **342** | Pn | **Pn** | **00 23 45.1** | **-0.6** |
| | 0.1nm,0.3s,baz=156,slow=11,SNR=4.9 | | | | | | |
| MJAR | | | | LR | LR | 00 28 16.6 | |
| | comp=Z,41nm,18.1s,baz=172,slow=34 | | | | | | |
| | 1.1nm,0.3s | | | | | | |
| **JNU** | **Nakatsue** | **14.54** | **313** | LR | LR | 00 29 15.0 | |
| | comp=Z,320nm,20.0s,baz=144,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **19.17** | **320** | P | **P** | **00 24 55.9** | **+0.9** |
| | 0.2nm,0.3s,baz=146,slow=10,SNR=1.8 | | | | | | |
| KSRS | | | | LR | LR | 00 32 46.2 | |
| | comp=Z,50nm,18.5s,baz=135,slow=38 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.59** | **338** | P | **P** | **00 25 32.4** | **+0.5** |
| | 2.6nm,0.9s,baz=142,slow=37,SNR=4.0 | | | | | | |
| | 2.6nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **38.04** | **319** | P | **P** | **00 27 50.8** | **+1.1** |
| | 0.7nm,0.7s,baz=132,slow=6.5,SNR=4.4 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.18** | **192** | P | **P** | **00 28 38.3** | **-1.9** |
| | 0.2nm,0.3s,baz=16,slow=9.1,SNR=12 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **47.89** | **192** | P | **P** | **00 29 07.7** | **-1.7** |
| | 0.2nm,0.5s,baz=15,slow=11,SNR=1.2 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.87** | **321** | P | **P** | **00 29 47.2** | **+0.5** |
| | 0.8nm,0.5s,baz=108,slow=9.1,SNR=4.3 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.59** | **312** | P | **P** | **00 29 53.3** | **+1.0** |
| | 1.0nm,0.5s,baz=92,slow=8.0,SNR=9.8 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.30** | **316** | P | **P** | **00 30 13.0** | **+1.3** |
| | 2.8nm,0.8s,baz=93,slow=7.8,SNR=14 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **60.25** | **28** | P | **P** | **00 30 38.9** | **-0.3** |
| | 0.7nm,0.7s,baz=270,slow=5.9,SNR=8.0 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.38** | **319** | P | **P** | **00 30 48.7** | **+1.7** |
| | 2.7nm,0.5s,baz=90,slow=8.9,SNR=9.5 | | | | | | |
| | 2.7nm,0.5s | | | | | | |
| **KIRV** | **Kirov** | **72.21** | **327** | LR | LR | 01 05 47.8 | |
| | comp=Z,27nm,19.6s,baz=54,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **81.57** | **334** | P | **P** | **00 32 49.8** | **+1.3** |
| | 4.1nm,1.1s,baz=54,slow=12,SNR=1.9 | | | | | | |
| | 4.1nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.79** | **52** | P | **P** | **00 32 51.5** | **+1.0** |
| | 0.5nm,0.7s,baz=261,slow=8.7,SNR=4.5 | | | | | | |
| | 0.5nm,0.7s | | | | | | |

**ATH 17 00:48:09.5,38°.74N×21°.95E,h23km±1km,ML1.4/4, Manual Solution by N.Liadopoulou This location: 2020/06/16 07:40:08 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 1 km; Longitude uncertainty: 1 km,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANX** | **Ano Chora** | **0.15** | **190** | P | Pb | 00 48 14.7 | +0.2 |
| ANX | | | | S | Sb | 00 48 18.2 | +0.5 |
| **EVR** | **Evrytania** | **0.21** | **328** | P | Pb | 00 48 15.4 | +0.2 |
| EVR | | | | S | Sb | 00 48 18.6 | -0.5 |
| **MAKR** | **Makrakomi, Fth** | **0.31** | **27** | P | Pb | 00 48 16.7 | +0.2 |
| MAKR | | | | S | Sb | 00 48 21.6 | +0.3 |
| **EFP** | **Efpalio** | **0.31** | **187** | P | Pb | 00 48 17.6 | +1.0 |
| EFP | | | | S | Sn | 00 48 23.0 | -1.5 |
| **PVO** | **Paravola** | **0.35** | **250** | P | Pb | 00 48 17.5 | +0.2 |
| PVO | | | | S | Sb | 00 48 22.7 | +0.2 |

**ATH 17 00:48:37.4,38°.76N×21°.95E,h16km±3km,ML1.5/4,Error ellipse: s-maj=3.9km s-min=1.0km az=283.0,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANX** | **Ano Chora** | **0.17** | **188** | P | Pg | 00 48 41.4 | -0.3 |
| ANX | | | | S | Sg | 00 48 44.5 | -0.1 |
| ANX | | | | AML | AML | 00 48 45.1 | |
| | comp=E,683µm,0.2s | | | | | | |
| ANX | | | | AML | AML | 00 48 45.5 | |
| | comp=N,660µm,0.3s | | | | | | |
| **EVR** | **Evrytania** | **0.19** | **325** | P | Pg | 00 48 42.2 | +0.1 |
| EVR | | | | S | Sg | 00 48 45.1 | -0.2 |
| EVR | | | | AML | AML | 00 48 45.7 | |
| | comp=N,198µm,0.4s | | | | | | |
| EVR | | | | AML | AML | 00 48 49.0 | |
| | comp=E,149µm,0.4s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.29** | **29** | P | Pg | 00 48 43.4 | -0.3 |
| MAKR | | | | S | Sg | 00 48 48.0 | +0.1 |
| MAKR | | | | AML | AML | 00 48 49.4 | |
| | comp=N,162µm,0.3s | | | | | | |
| MAKR | | | | AML | AML | 00 48 49.4 | |
| | comp=E,342µm,0.2s | | | | | | |
| **EFP** | **Efpalio** | **0.33** | **186** | P | Pg | 00 48 44.3 | 0.0 |
| EFP | | | | S | Sg | 00 48 49.5 | +0.4 |
| EFP | | | | AML | AML | 00 48 50.8 | |
| | comp=E,230µm,0.3s | | | | | | |
| EFP | | | | AML | AML | 00 48 50.8 | |
| | comp=N,223µm,0.3s | | | | | | |
| **PVO** | **Paravola** | **0.36** | **247** | P | Pg | 00 48 44.4 | -0.4 |
| PVO | | | | S | Sg | 00 48 50.2 | +0.3 |

*IDC **17** 00:50:54.0±0.6,6°.42S×153°.84E,h0km,mb4.4/15, mbtmp4.4/17,ML3.0/3,MS3.4/15, Error ellipse: s-maj=21.2km s-min=14.9km az=102.0*
*NEIC **17** 00:50:56.2±1.1,6°.50S±0°.07×153°.9E±0°.1,h10km±2km, mb4.3/12, Error ellipse: s-maj=20.0km s-min=11.5km az=93.0*

**ISC 17 00:51:00.5±0.5,6°.49S±0°.06×153°.87E±0°.08,h48km,n53, σ1§36/43,mb4.3/24,MS3.5/13,1C,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **2.85** | **323** | | **Pn** | **00 51 42.1** | **-1.5** |
| **PMG** | **Port Moresby** | **7.25** | **246** | Pn | **Pn** | **00 52 42.8** | **-1.2** |
| **PMG** | **Port Moresby** | **7.25** | **246** | Pn | **Pn** | **00 52 43.0** | **-1.0** |
| | 18nm,0.3s,baz=53,slow=8.9,SNR=38 | | | | | | |
| PMG | | | | Sn | **Sn** | **00 54 04.8** | **-0.3** |
| | 7.6nm,0.3s,baz=347,slow=23,SNR=9.8 | | | | | | |
| PMG | | | | LR | LR | 00 55 53.8 | |
| | comp=Z,157nm,18.9s,baz=58,slow=41 | | | | | | |
| | 113nm,0.6s | | | | | | |
| **PATS** | **Pohnpei** | **13.96** | **19** | Pn | **Pn** | **00 54 13.2** | **-2.6** |
| **CTA** | **Charters Tower** | **15.41** | **208** | Pn | **Pn** | **00 54 33.8** | **-1.0** |
| | baz=32,slow=12,SNR=2.3 | | | | | | |
| CTA | | | | LR | LR | 00 59 23.2 | |
| | comp=Z,7.0nm,20.9s,baz=53,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **15.41** | **208** | | **P** | **00 54 37.3** | **-1.4** |
| **DZM** | **Mont Dzumac** | **19.68** | **143** | P | **P** | **00 55 26.3** | **+0.5** |
| DZM | | | | IAmb | IAmb | 00 55 42.5 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.68** | **143** | P | **Pn** | **00 55 27.5** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=330,slow=20,SNR=6.1 | | | | | | |
| DZM | | | | LR | LR | 01 01 24.4 | |
| | comp=Z,74nm,18.2s,baz=133,slow=32 | | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **PINNC** | **Pines Island,** | **20.69** | **142** | P | **P** | **00 55 36.0** | **-0.8** |
| **FAKI** | **Fak Fak** | **21.84** | **278** | P | **P** | **00 55 48.6** | **-0.6** |
| **WR0** | **Warramunga Arr** | **23.06** | **233** | P | **P** | **00 56 01.3** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 00 56 21.1 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **23.07** | **233** | P | **P** | **00 56 01.6** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 00 56 21.9 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.19** | **233** | P | **P** | **00 56 02.5** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 00 56 06.8 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.20** | **233** | | **P** | **00 56 02.5** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 00 56 41.6 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.21** | **233** | P | **P** | **00 56 04.0** | **+0.5** |
| **WRA** | **Warramunga Arr** | **23.21** | **233** | P | **P** | **00 56 02.1** | **-1.4** |
| | comp=Z,4.1nm,0.7s,baz=57,slow=9.7,SNR=25 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 59 52.0** | **+1.5** |
| | comp=Z,1.3nm,0.6s,baz=61,slow=2.2,SNR=8.5 | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **23.89** | **185** | P | **P** | **00 56 11.4** | **+1.4** |
| ARMA | | | | IAmb | IAmb | 00 56 30.5 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **25.69** | **226** | | **P** | **00 56 25.1** | **-1.3** |
| **ASAR** | **Alice Springs** | **25.69** | **226** | P | **P** | **00 56 25.4** | **-1.0** |
| | comp=Z,13nm,0.4s,baz=59,slow=8.7,SNR=22 | | | | | | |
| ASAR | | | | LR | LR | 01 05 34.3 | |
| | comp=Z,75nm,19.4s,baz=10.0,slow=34 | | | | | | |
| | comp=Z,13nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **27.74** | **203** | P | **P** | **00 56 44.1** | **-0.6** |
| | comp=Z,4.2nm,0.9s,baz=8.3,slow=8.6,SNR=4.5 | | | | | | |
| STKA | | | | LR | LR | 01 07 11.0 | |
| | comp=Z,65nm,18.9s,baz=350,slow=35 | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.86** | **27** | T | T | 01 25 05.6 | |
| | baz=207,slow=73,SNR=7.3 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.87** | **27** | T | T | 01 25 13.5 | |
| | baz=207,slow=73,SNR=9.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.88** | **27** | T | T | 01 25 09.9 | |
| | baz=207,slow=73,SNR=3.7 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.85** | **245** | | **P** | **00 57 02.1** | **-1.4** |
| **MJAR** | **Matsushiro Arr** | **45.26** | **342** | LR | LR | 01 17 32.7 | |
| | comp=Z,26nm,20.1s,baz=209,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **49.98** | **333** | P | **P** | **00 59 50.2** | **+0.2** |
| | comp=Z,3.4nm,0.9s,baz=151,slow=7.7,SNR=6.6 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **341** | P | **P** | **01 00 19.0** | **-2.1** |
| | comp=Z,1.5nm,0.7s,baz=146,slow=9.0,SNR=2.4 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **BNX** | **BinXian** | **57.13** | **338** | ⇑P | **P** | **01 00 42.6** | **+0.4** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **58.76** | **343** | LR | LR | 01 26 01.7 | |
| | comp=Z,16nm,19.8s,baz=292,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.46** | **3** | P | **P** | **01 00 58.6** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=155,slow=9.2,SNR=4.2 | | | | | | |
| PETK | | | | LR | LR | 01 29 00.7 | |
| | comp=Z,9.5nm,18.0s,baz=146,slow=38 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **59.56** | **296** | P | **P** | **01 00 59.6** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **59.56** | **296** | P | **P** | **01 01 01.1** | **+1.4** |
| | comp=Z,2.1nm,0.6s,baz=116,slow=4.6,SNR=16 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **PZH** | **PanZhiHua** | **60.22** | **305** | P | **P** | **01 01 07.4** | **+3.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,4.2s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **61.04** | **324** | *e*P | **P** | **01 01 12.9** | **+3.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,84nm,4.8s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **61.45** | **14** | LR | LR | 01 27 52.9 | |
| | comp=Z,36nm,18.7s,baz=351,slow=36 | | | | | | |
| **MA2** | **Magadan** | **65.90** | **358** | LR | LR | 01 31 38.9 | |
| | comp=Z,14nm,18.8s,baz=230,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **68.32** | **328** | P | **P** | **01 01 57.2** | **+0.3** |
| | comp=Z,2.2nm,0.6s,baz=143,slow=5.6,SNR=17 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **77.21** | **26** | LR | LR | 01 31 55.0 | |
| | comp=Z,22nm,21.5s,baz=213,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.30** | **319** | P | **P** | **01 03 17.5** | **+0.4** |
| | comp=Z,1.4nm,0.6s,baz=97,slow=7.4,SNR=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SNR=5.8 | | | | | | | | |
| **CHMS** | **Chumysh** | **6.19** | **22** | ⇑P | | **Pn** | **01 17 09.9** | **+1.1** |
| | 5.3nm,0.4s | | | | | | | | |
| CHMS | | | | ⇓S | | **Sn** | **01 18 16.8** | **-1.2** |
| | 15nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.40** | **27** | P | | **Pn** | **01 17 13.5** | **+1.7** |
| | SNR=11 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.40** | **27** | ⇓P | | **Pn** | **01 17 12.4** | **+0.6** |
| | 4.7nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑S | | **Sn** | **01 18 24.2** | **+0.7** |
| | 10nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **12.37** | **37** | P | | **Pn** | **01 18 30.6** | **-1.7** |
| | 0.4nm,0.6s,baz=219,slow=10,SNR=2.0 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.22** | **18** | P | | **Pn** | **01 18 54.0** | **-2.5** |
| | 0.1nm,0.3s,baz=204,slow=11,SNR=1.9 | | | | | | | | |
| **AB31** | **Akbulak array** | **14.64** | **328** | ⇓P | | **Pn** | **01 19 01.2** | **-0.7** |
| | 1.9nm,0.4s | | | | | | | | |
| AB31 | | | | ⇑S | | **Sn** | **01 21 42.5** | **-0.7** |
| | 1.5nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **15.76** | **357** | P | | **Pn** | **01 19 14.9** | **-1.0** |
| | 1.5nm,0.5s,baz=163,slow=10.0,SNR=6.4 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.35** | **328** | P | | **P** | **01 19 24.6** | **+0.2** |
| | 6.8nm,0.6s,baz=126,slow=11,SNR=18 | | | | | | | | |
| AKTO | | | | S | | Sn | 01 22 09.9 | -15 |
| | 0.5nm,0.3s,baz=192,slow=11,SNR=1.0 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.00** | **25** | P | | **P** | **01 19 52.4** | **-1.0** |
| | 1.5nm,0.5s,baz=225,slow=8.1,SNR=6.7 | | | | | | | | |
| **ARU** | **Arti** | **21.05** | **340** | P | | **P** | **01 20 16.1** | **+0.5** |
| | 1.8nm,0.4s,baz=161,slow=14,SNR=4.4 | | | | | | | | |
| | 1.8nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **29.66** | **287** | LR | | LR | 01 37 10.0 | | |
| | comp=Z,14nm,19.0s,baz=169,slow=43 | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.10** | **325** | P | | **P** | **01 22 40.5** | **+0.3** |
| | 1.1nm,0.4s,baz=122,slow=9.2,SNR=13 | | | | | | | | |
| | 1.1nm,0.4s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.60** | **337** | P | | **P** | **01 23 09.2** | **-0.1** |
| | 5.0nm,1.2s,baz=109,slow=9.1,SNR=3.8 | | | | | | | | |
| | 5.0nm,1.2s | | | | | | | | |
| **HFS** | **Hagfors** | **42.74** | **321** | P | | **P** | **01 23 27.0** | **0.0** |
| | 2.6nm,0.4s,baz=93,slow=10.0,SNR=19 | | | | | | | | |
| | 2.6nm,0.4s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.04** | **323** | P | | **P** | **01 23 37.3** | **-0.1** |
| | comp=Z,0.4nm,0.5s,baz=93,slow=7.4 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.04** | **323** | P | | **P** | **01 23 36.5** | **-0.9** |
| | comp=Z,0.7nm,0.7s,baz=95,slow=7.6,SNR=2.5 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **45.74** | **302** | P | | **P** | **01 23 51.3** | **0.0** |
| | comp=Z,1.0nm,0.6s,baz=80,slow=7.6,SNR=3.9 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **52.73** | **59** | LR | | LR | 01 50 40.4 | | |
| | comp=Z,13nm,18.8s,baz=220,slow=40 | | | | | | | | |
| **TSUM** | **Tsumeb** | **75.78** | **232** | LR | | LR | 02 04 44.8 | | |
| | comp=Z,86nm,18.3s,baz=152,slow=39 | | | | | | | | |

**HEL 17 01:18:28.0±0.8, 67.78N×20.30E, h0km, ML0.9,**
**Suspected explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LANU** | **Lannavaara** | **0.70** | **66** | PG | Pg | 01 18 39.9 | -1.4 |
| LANU | | | | SG | Sg | 01 18 49.4 | -1.0 |
| **PAJU** | **Pajala** | **1.32** | **123** | PG | Pg | 01 18 51.8 | -1.5 |
| PAJU | | | | SN | Sg | 01 19 10.6 | +0.1 |
| **HEF** | **Hetta** | **1.41** | **62** | PG | Pn | 01 18 52.8 | -2.1 |
| HEF | | | | MSG | | 01 19 10.5 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| HEF | | | | SN | Sn | 01 19 14.7 | +0.5 |
| **KLF** | **Kolari** | **1.51** | **109** | PG | Pn | 01 18 55.3 | -1.0 |
| KLF | | | | MSG | | 01 19 13.4 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| KLF | | | | SN | Sn | 01 19 17.4 | +0.8 |
| **KTK1** | **Kautokeino** | **1.65** | **40** | PN | Pn | 01 18 58.2 | -0.1 |
| KTK1 | | | | SN | Sg | 01 19 20.9 | -0.1 |
| **TRO** | **Tromso** | **1.93** | **346** | SG | Sn | 01 19 26.1 | -0.9 |
| **TOF** | **Tornio** | **2.33** | **135** | MSG | | 01 19 36.9 | |
| | comp=Z,0.3nm,0.2s | | | | | | |
| TOF | | | | SG | Sb | 01 19 40.8 | +0.8 |
| **SGF** | **Sodankyl** | **2.41** | **95** | PB | Pn | 01 19 08.6 | 0.0 |
| | baz=283 | | | | | | |
| **RNF** | **Rovaniemi** | **2.52** | **115** | PG | Pn | 01 19 11.4 | +1.4 |
| RNF | | | | SG | Sb | 01 19 45.9 | +0.5 |

*SKO* ***17*** *01:19:39.0, 41.23N×19.78E, h12km, ML2.5*
*TIR* ***17*** *01:19:39.8, 41.56N×20.19E, h20km±1km, Md2.9, Ml2.5*
*THE* ***17*** *01:19:39.8, 41.67N×20.16E, h10km±7km, ML2.2/3, Error ellipse: s-maj=10.0km s-min=1.5km az=298.0*
*BEO* ***17*** *01:19:40.6±0.4, 41.52N×20.21E, h10km±2km, ML2.2/12*
*RHSSO* ***17*** *01:19:40.3±0.7, 41.51N×20.25E, h4km±3km, ML2.7/11*
*PDG* ***17*** *01:19:40.6±0.2, 41.58N×20.20E, h0km±11km, ML2.7/10, Error ellipse: s-maj=0.3km s-min=0.7km az=0.0*

**ISC 17 01:19:40.7±1.0, 41.55N±0.02×20.19E±0.02, h11km±8km,**
**n67, σ0.98/120, 10C-7D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.32** | **230** | P | **Pg** | **01 19 47.2** | **+0.1** |
| | baz=230 | | | | | | |
| TIR | | | | S | **Sg** | **01 19 52.2** | **+0.9** |
| | baz=230 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,1.0nm,0.2s,baz=230 | | | | | | |
| **TIR** | **Tirane** | **0.32** | **230** | P | **Pg** | **01 19 47.1** | **+0.1** |
| TIR | | | | S | **Sb** | **01 19 52.7** | **-0.8** |
| | comp=E,238nm,0.2s | | | | | | |
| **TIR** | **Tirane** | **0.32** | **230** | *e*Pg | **Pg** | **01 19 46.9** | **-0.2** |
| TIR | | | | *e*Sg | **Sg** | **01 19 52.1** | **+0.7** |
| **TIR** | **Tirane** | **0.32** | **230** | ⇓P | **Pg** | **01 19 46.9** | **-0.2** |
| TIR | | | | ⇓S | **Sg** | **01 19 52.3** | **+0.9** |
| **PUK** | **Puka** | **0.54** | **336** | P | **Pg** | **01 19 50.8** | **-0.4** |
| | baz=336 | | | | | | |
| PUK | | | | S | **Sb** | **01 19 59.2** | **-0.7** |
| | baz=336 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,3.1nm,0.2s,baz=336 | | | | | | |
| **OHR** | **Ohrid** | **0.64** | **134** | *i* Pg | **Pb** | **01 19 53.3** | **-0.5** |
| OHR | | | | *i* Sg | **Sn** | **01 20 04.5** | **-1.3** |
| OHR | | | | *e*Lg | Lg | 01 20 04.8 | |
| | comp=N,125nm,0.5s | | | | | | |
| OHR | | | | *e*Lg | Lg | 01 20 04.9 | |
| | comp=E,91nm,0.5s | | | | | | |
| **BCI** | **Bajram Curri** | **0.82** | **354** | P | **Pg** | **01 19 55.9** | **-0.5** |
| | baz=354 | | | | | | |
| BCI | | | | S | **Sb** | **01 20 07.7** | **-0.3** |
| | baz=354 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=E,1.2nm,0.5s,baz=354 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.98** | **310** | ⇓*i*Pg | **Pg** | **01 19 58.4** | **-1.2** |
| DRME | | | | *e*Sg | **Sn** | **01 20 13.5** | **-0.8** |
| **DRME** | **Dracevica, Mon** | **0.98** | **310** | ⇓*i*Pg | **Pg** | **01 19 58.3** | **-1.3** |
| DRME | | | | *e*Sg | **Sn** | **01 20 13.8** | **-0.5** |
| **KBN** | **Korca** | **1.03** | **154** | P | **Pb** | **01 20 00.4** | **-0.2** |
| | baz=153 | | | | | | |
| KBN | | | | S | **Sb** | **01 20 14.6** | **+0.4** |
| | baz=153 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,0.4nm,0.8s,baz=153 | | | | | | |
| **KBN** | **Korca** | **1.03** | **154** | P | **Pn** | **01 20 00.8** | **-0.3** |
| KBN | | | | S | **Sn** | **01 20 18.3** | **+2.7** |
| | comp=E,122nm,0.7s | | | | | | |
| **PVY** | **Plav** | **1.05** | **351** | ⇑*i*Pg | **Pg** | **01 19 59.7** | **-1.3** |
| PVY | | | | *i* Sg | **Sn** | **01 20 15.5** | **-0.7** |
| **PDG** | **Podgorica** | **1.12** | **322** | *e*Pg | **Pb** | **01 20 00.8** | **-1.2** |
| PDG | | | | *e*Sg | **Sn** | **01 20 17.9** | **+0.3** |
| **PDG** | **Podgorica** | **1.12** | **322** | ⇓*i*Pg | **Pb** | **01 20 01.0** | **-1.0** |
| PDG | | | | *e*Sg | **Sn** | **01 20 18.1** | **+0.5** |
| **PDG** | **Podgorica** | **1.12** | **322** | ⇑P | **Pb** | **01 20 00.8** | **-1.2** |
| PDG | | | | ⇓S | **Sn** | **01 20 19.0** | **+1.4** |
| **PDG** | **Podgorica** | **1.12** | **322** | *i* Pg | **Pb** | **01 20 01.0** | **-1.0** |
| PDG | | | | *i* Sg | **Sn** | **01 20 19.4** | **+1.8** |
| **PDG** | **Podgorica** | **1.12** | **322** | *e*Pg | **Pb** | **01 20 00.8** | **-1.2** |
| PDG | | | | *i* Sg | **Sn** | **01 20 18.1** | **+0.5** |
| **FNA** | **Florina** | **1.18** | **130** | P | **Pb** | **01 20 02.2** | **-0.8** |
| | baz=130 | | | | | | |
| FNA | | | | S | **Sn** | **01 20 19.5** | **+0.2** |
| | baz=130 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.3nm,0.4s,baz=130 | | | | | | |
| **FNA** | **Florina** | **1.18** | **130** | P | **Pb** | **01 20 02.5** | **-0.6** |
| FNA | | | | S | **Sn** | **01 20 19.8** | **+0.6** |
| | comp=E,170nm,0.3s | | | | | | |
| **FNA** | **Florina** | **1.18** | **130** | *i* Pg | **Pb** | **01 20 02.7** | **-0.4** |
| FNA | | | | *i* Sg | **Sn** | **01 20 19.6** | **+0.4** |
| **BUM** | **Brajici-Budva** | **1.22** | **308** | *e*Pg | **Pn** | **01 20 02.7** | **-1.0** |
| BUM | | | | *i* Sg | **Sn** | **01 20 22.0** | **+1.7** |
| **NEST** | **Nestorio** | **1.31** | **150** | P | **Pg** | **01 20 05.4** | **-0.4** |
| **IVA** | **Berane** | **1.34** | **351** | *e*Pg | **Pn** | **01 20 04.6** | **-0.7** |
| IVA | | | | *i* Sg | **Sg** | **01 20 24.9** | **+1.2** |
| **CEME** | **Cevo** | **1.37** | **317** | ⇑*i*Pg | **Pn** | **01 20 05.2** | **-0.6** |
| CEME | | | | *e*Sg | **Sg** | **01 20 26.8** | **+2.0** |
| **KOME** | **Kolasin** | **1.39** | **339** | *e*Pg | **Pn** | **01 20 05.6** | **-0.5** |
| KOME | | | | *i* Sg | **Sg** | **01 20 27.1** | **+1.7** |
| **NKME** | **Niksic** | **1.52** | **323** | *e*Pg | **Pn** | **01 20 08.0** | **+0.2** |
| NKME | | | | *i* Sg | **Sg** | **01 20 31.7** | **+2.1** |
| **SRN** | **Sarande** | **1.68** | **185** | P | **Pg** | **01 20 12.0** | **-0.8** |
| | baz=185 | | | | | | |
| SRN | | | | S | **Sg** | **01 20 34.6** | **0.0** |
| | baz=185 | | | | | | |
| **SJES** | **Sjenica** | **1.71** | **355** | *e*Pg | **Pg** | **01 20 12.8** | **-0.8** |
| SJES | | | | *e*Sg | **Sg** | **01 20 34.9** | **-0.9** |
| **SJES** | **Sjenica** | **1.71** | **355** | *e*Pn | **Pb** | **01 20 11.9** | **-0.3** |
| SJES | | | | *e*Sn | **Sb** | **01 20 34.1** | **+0.3** |
| **KZN** | **Kozani** | **1.73** | **136** | P | **Pb** | **01 20 11.3** | **-1.1** |
| **BARS** | **Barje** | **1.75** | **43** | *e*Pg | **Pb** | **01 20 12.1** | **-0.6** |
| BARS | | | | *e*Sg | **Sg** | **01 20 36.6** | **-0.3** |
| **BARS** | **Barje** | **1.75** | **43** | *i* Pn | **Pg** | **01 20 13.7** | **-0.5** |
| BARS | | | | *i* Sn | **Sg** | **01 20 38.9** | **+2.1** |
| **TREB** | **Trebinje** | **1.79** | **311** | *e*Pn | **Pn** | **01 20 12.3** | **+0.8** |
| TREB | | | | *e*Sn | **Sb** | **01 20 36.7** | **+0.7** |
| **SELS** | **Selova** | **1.80** | **22** | *e*Pn | **Pn** | **01 20 11.8** | **+0.1** |
| SELS | | | | *e*Sn | **Sb** | **01 20 35.3** | **-1.0** |
| **VAY** | **Valandovo** | **1.81** | **97** | *i* Pn | **Pg** | **01 20 14.7** | **-0.5** |
| VAY | | | | *i* Sn | **Sg** | **01 20 38.1** | **-0.6** |
| VAY | | | | *e*Lg | Lg | 01 20 38.3 | |
| | comp=E,24nm,0.9s | | | | | | |
| VAY | | | | *e*Lg | Lg | 01 20 40.1 | |
| | comp=N,27nm,0.8s | | | | | | |
| **BRY** | **Bratogost** | **1.82** | **318** | ⇑*i*Pn | **Pb** | **01 20 13.3** | **-0.8** |
| BRY | | | | *e*Sn | **Sb** | **01 20 37.5** | **+0.6** |
| **BRY** | **Bratogost** | **1.82** | **318** | ⇓*i*Pn | **Pb** | **01 20 13.2** | **-0.8** |
| BRY | | | | *i* Sn | **Sg** | **01 20 40.3** | **+1.1** |
| **KEK** | **Kerkira** | **1.86** | **189** | P | **Pn** | **01 20 12.7** | **+0.2** |
| **PLE** | **Pljevlja** | **1.87** | **342** | *e*Pn | **Pb** | **01 20 14.7** | **-0.2** |
| PLE | | | | *i* Sn | **Sg** | **01 20 41.5** | **+0.6** |
| **UPM** | **Unac-Piva** | **1.90** | **330** | *e*Pn | **Pb** | **01 20 14.8** | **-0.7** |
| UPM | | | | *e*Sn | **Sb** | **01 20 39.4** | **+0.1** |
| **UPM** | **Unac-Piva** | **1.90** | **330** | *e*Pn | **Pb** | **01 20 15.3** | **-0.2** |
| UPM | | | | *i* Sn | **Sg** | **01 20 42.4** | **+0.5** |
| **SCTE** | **Santa Cesarea** | **1.97** | **222** | P | **Pb** | **01 20 15.6** | **-1.0** |
| | baz=223 | | | | | | |
| **KLINJ** | **Klinje** | **2.00** | **324** | *e*Pn | **Pb** | **01 20 16.3** | **-0.9** |
| KLINJ | | | | *e*Sn | **Sb** | **01 20 41.4** | **-0.8** |
| **IGT** | **Igoumenitsa** | **2.02** | **177** | P | **Pn** | **01 20 15.8** | **+1.1** |
| | baz=176 | | | | | | |
| IGT | | | | S | **Sg** | **01 20 44.7** | **-0.9** |
| | baz=176 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=E,0.1nm,0.5s,baz=176 | | | | | | |
| **IGT** | **Igoumenitsa** | **2.02** | **177** | P | **Pn** | **01 20 15.6** | **+0.9** |
| **IGT** | **Igoumenitsa** | **2.02** | **177** | *i* Pn | **Pn** | **01 20 15.8** | **+1.1** |
| **RUDO** | **Rudo** | **2.15** | **344** | *e*Pn | **Pn** | **01 20 17.5** | **+1.1** |
| RUDO | | | | *e*Sn | **Sb** | **01 20 45.5** | **-0.8** |
| **STON** | **Ston** | **2.27** | **306** | *e*Pn | **Pb** | **01 20 19.9** | **-1.7** |
| STON | | | | *e*Sn | **Sb** | **01 20 48.4** | **-1.3** |
| **GRUS** | **Gruza** | **2.37** | **9** | *e*Pn | **Pn** | **01 20 20.4** | **+1.0** |
| GRUS | | | | *e*Sn | **Sn** | **01 20 49.4** | **+1.0** |
| **BBLS** | **Lazi&#263i** | **2.38** | **346** | *e*Pn | **Pn** | **01 20 20.8** | **+1.1** |
| BBLS | | | | *e*Sn | **Sn** | **01 20 49.9** | **+1.0** |
| **BBLS** | **Lazi&#263i** | **2.38** | **346** | *e*Pn | **Pn** | **01 20 20.9** | **+1.2** |
| BBLS | | | | *e*Sn | **Sb** | **01 20 51.3** | **-1.7** |
| **NOCI** | **Noci** | **2.48** | **253** | P | **Pn** | **01 20 20.5** | **-0.4** |
| | baz=254 | | | | | | |
| **ZAPS** | **Zavoj** | **2.50** | **46** | *e*Pn | **Pn** | **01 20 22.8** | **+1.6** |
| ZAPS | | | | *e*Sn | **Sn** | **01 20 53.3** | **+1.6** |
| **DIVS** | **Divibare** | **2.55** | **357** | *e*Pn | **Pn** | **01 20 21.3** | **-0.7** |
| DIVS | | | | *e*Sn | **Sn** | **01 20 53.8** | **+0.8** |
| **HAPS** | **Han Pijesak,Bl** | **2.69** | **341** | ⇑*i*Pn | **Pn** | **01 20 24.7** | **+0.7** |
| HAPS | | | | *e*Sn | **Sn** | **01 20 58.8** | **+2.2** |
| **TEKS** | **Tekeris** | **3.03** | **351** | *e*Pn | **Pn** | **01 20 28.7** | **+0.1** |
| TEKS | | | | *e*Sn | **Sn** | **01 21 05.5** | **+0.6** |
| **TEKS** | **Tekeris** | **3.03** | **351** | *e*Pn | **Pn** | **01 20 29.9** | **+1.3** |
| **KUBS** | **Kucevo** | **3.06** | **20** | *e*Pn | **Pn** | **01 20 28.2** | **-0.7** |
| KUBS | | | | *e*Sn | **Sn** | **01 21 05.6** | **+0.1** |
| **MDVR** | **Moldovita** | **3.41** | **19** | ⇑P | **Pn** | **01 20 33.2** | **-0.6** |
| **FRGS** | **Fruska Gora** | **3.61** | **356** | *e*Sn | **Sn** | **01 21 20.2** | **+1.0** |
| **HERR** | **Herculane** | **3.70** | **25** | ⇑P | **Pn** | **01 20 38.8** | **+1.1** |
| **BLY** | **Banja Luka** | **3.88** | **326** | *e*Pn | **Pn** | **01 20 41.1** | **+0.9** |
| BLY | | | | *e*Sn | **Sn** | **01 21 27.2** | **+1.5** |
| **A050A** | **Klekovaca** | **3.97** | **319** | *e*Pn | **Pn** | **01 20 42.2** | **+0.7** |
| A050A | | | | *e*Sn | **Sn** | **01 21 29.2** | **+1.1** |
| **BZS** | **Buzias** | **4.19** | **14** | ⇑P | **Pn** | **01 20 45.0** | **+0.5** |
| **A051A** | **Mrakovica** | **4.21** | **326** | *e*Pn | **Pn** | **01 20 45.6** | **+0.9** |
| A051A | | | | *e*Sn | **Sn** | **01 21 34.5** | **+0.6** |
| **GZR** | **Gura Zlata** | **4.28** | **25** | ⇑P | **Pn** | **01 20 46.3** | **+0.6** |
| **MORH** | **Mrgy, Hungar** | **4.79** | **347** | ⇑P | **Pn** | **01 20 53.0** | **+0.3** |

**HEL 17 01:19:49.7±0.1, 67.63N×33.61E, h0km, ML1.5,**
**Suspected explosion, Baltic**
**States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVZ** | **Lovozero** | **0.48** | **55** | PG | Pg | 01 19 58.2 | -0.6 |
| LVZ | | | | SG | Sg | 01 20 02.4 | -2.6 |
| **VRF** | **Varrio** | **1.53** | **276** | SG | Pn | 01 20 16.8 | -1.4 |
| **VRF** | **Varrio** | **1.53** | **276** | PG | Pn | 01 20 16.8 | -1.4 |
| VRF | | | | MSG | | 01 20 35.6 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| VRF | | | | SG | Sg | 01 20 37.3 | -1.6 |
| **OLKF** | **Oulanka, Finla** | **2.12** | **234** | PG | Pn | 01 20 27.4 | +1.1 |
| OLKF | | | | MSG | | 01 20 52.4 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **2.17** | **296** | PB | Pn | 01 20 27.0 | +0.1 |
| RAJF | | | | SB | Sn | 01 20 54.5 | 0.0 |
| **KU6** | **Riekki** | **2.18** | **224** | SB | Pn | 01 20 28.4 | +1.2 |
| **KU6** | **Riekki** | **2.18** | **224** | PG | Pn | 01 20 28.4 | +1.2 |
| KU6 | | | | MSG | | 01 20 54.5 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| KU6 | | | | SG | Sb | 01 20 57.6 | 0.0 |
| **MSF** | **Maaselka** | **2.50** | **229** | PG | Pb | 01 20 34.1 | -1.4 |
| MSF | | | | SG | Sb | 01 21 07.7 | +0.9 |
| **SGF** | **Sodankyl** | **2.73** | **269** | PB | Pn | 01 20 36.1 | +1.4 |
| SGF | | | | SB | Sb | 01 21 10.8 | -2.4 |
| **RNF** | **Rovaniemi** | **3.14** | **254** | PN | Pn | 01 20 39.9 | -0.4 |
| RNF | | | | SN | Sn | 01 21 18.8 | +0.4 |
| **RANF** | **Ranua** | **3.15** | **242** | PG | Pb | 01 20 44.1 | -2.4 |
| | baz=56 | | | | | | |
| RANF | | | | SG | Sb | 01 21 25.8 | +0.5 |
| **KEV** | **Kevo** | **3.22** | **315** | PN | Pn | 01 20 40.9 | -0.5 |
| KEV | | | | SN | Sn | 01 21 19.0 | -1.5 |
| **ARA0** | **ARCESS Array S** | **3.54** | **306** | PN | Pn | 01 20 44.6 | -1.2 |
| | baz=122 | | | | | | |
| ARA0 | | | | SN | Sn | 01 21 27.1 | -1.1 |
| **KLF** | **Kolari** | **3.74** | **268** | SN | Sn | 01 21 32.6 | -0.6 |
| **HEF** | **Hetta** | **3.82** | **286** | PG | Pb | 01 20 58.8 | +0.8 |
| | baz=98 | | | | | | |
| HEF | | | | SN | Sn | 01 21 33.8 | -1.6 |
| **TOF** | **Tornio** | **3.98** | **251** | SN | Sn | 01 21 37.7 | -1.5 |
| **KTK1** | **Kautokeino** | **4.09** | **295** | SG | Sb | 01 21 55.7 | +3.3 |
| **PAJU** | **Pajala** | **4.11** | **266** | SN | Sn | 01 21 40.8 | -1.6 |
| **LANU** | **Lannavaara** | **4.42** | **281** | SG | Sg | 01 22 07.2 | -4.3 |

**NAM 17 01:22:09.6±3.1, 19.74S×14.55E, h18km±13km, ML0.2,**
**Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.05** | **261** | *i* P | Pg | 01 22 14.4 | +1.4 |
| ST3N | | | | *i* S | Sg | 01 22 15.9 | +0.7 |
| ST3N | | | | IAML | | 01 22 15.9 | |
| | comp=Z,1.8nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.05** | **261** | *i* P | Pg | 01 22 14.4 | +1.4 |
| ST3N | | | | *i* S | Sg | 01 22 14.6 | -0.6 |
| ST3N | | | | IAML | | 01 22 16.4 | |
| | comp=Z,1.8nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.06** | **93** | *i* P | Pg | 01 22 13.6 | +0.6 |
| ST1N | | | | *i* S | Sg | 01 22 14.7 | -0.7 |
| ST1N | | | | IAML | | 01 22 14.8 | |
| | comp=Z,26nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.06** | **93** | *i* P | Pg | 01 22 13.7 | +0.6 |
| ST1N | | | | *i* S | Sg | 01 22 14.7 | -0.7 |
| ST1N | | | | IAML | | 01 22 14.8 | |
| | comp=Z,27nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.06** | **183** | *i* P | Pg | 01 22 13.2 | +0.2 |
| ST9N | | | | *i* S | Sg | 01 22 14.0 | -1.4 |
| ST9N | | | | IAML | | 01 22 14.7 | |
| | comp=Z,34nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.06** | **183** | *i* P | Pg | 01 22 13.2 | +0.2 |
| ST9N | | | | *i* S | Sg | 01 22 14.0 | -1.4 |
| ST9N | | | | IAML | | 01 22 14.7 | |
| | comp=Z,34nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.16** | **245** | *i* P | Pg | 01 22 15.7 | +1.6 |
| ST6N | | | | *i* S | Sg | 01 22 17.5 | +0.5 |
| ST6N | | | | IAML | | 01 22 18.9 | |
| | comp=Z,1.0nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.16** | **245** | *i* P | Pg | 01 22 15.7 | +1.7 |
| ST6N | | | | IAML | | 01 22 24.0 | |
| | comp=N,1.6nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.20** | **167** | *i* P | Pg | 01 22 14.5 | -0.1 |
| ST2N | | | | IAML | | 01 22 16.4 | |
| | comp=Z,3.2nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.20** | **167** | *i* P | Pg | 01 22 14.6 | 0.0 |
| ST2N | | | | IAML | | 01 22 19.7 | |
| | comp=Z,2.7nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.20** | **106** | *i* P | Pb | 01 22 15.1 | +0.2 |
| ST5N | | | | IAML | | 01 22 15.3 | |
| | comp=Z,7.3nm,0.0s | | | | | | |
| ST5N | | | | *i* S | Sg | 01 22 15.3 | -2.8 |
| **ST8N** | **ST8** | **0.22** | **281** | *i* P | Pb | 01 22 17.7 | +2.5 |
| ST8N | | | | IAML | | 01 22 22.3 | |
| | comp=Z,0.5nm,0.1s | | | | | | |

**ROM 17 01:23:35.2±0.3, 41.88N±0.01×14.89E±0.01, h18km±2km,**
**ML1.4/16, Error ellipse: s-maj=1.4km s-min=0.4km**
**az=30.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRES** | **Fresagrandinar** | **0.19** | **301** | P | Pg | 01 23 40.5 | +0.5 |
| FRES | | | | S | Sg | 01 23 43.7 | +0.2 |
| FRES | | | | AML | AML | | |
| | comp=N,192μm,0.2s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,224μm,0.6s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.22** | **177** | P | Pg | 01 23 40.5 | 0.0 |
| CIGN | | | | S | Sg | 01 23 44.0 | -0.1 |
| CIGN | | | | AML | AML | | |
| | comp=N,118μm,0.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,107μm,1.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,107μm,0.6s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.24** | **134** | P | Pb | 01 23 41.0 | +0.1 |
| MELA | | | | S | Sb | 01 23 45.4 | +0.6 |
| MELA | | | | AML | AML | | |
| | comp=E,192μm,1.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,198μm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,192μm,0.5s | | | | | | |
| **TRIV** | **Trivento** | **0.28** | **247** | P | Pb | 01 23 41.7 | +0.1 |
| TRIV | | | | S | Sb | 01 23 46.8 | +1.0 |
| TRIV | | | | AML | AML | | |
| | comp=E,64μm,1.1s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,92μm,0.3s | | | | | | |
| **GATE** | **Gambatesa** | **0.36** | **178** | P | Pb | 01 23 43.5 | +0.4 |
| GATE | | | | AML | AML | | |
| | comp=E,61μm,1.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,61μm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,49μm,0.6s | | | | | | |
| **BSSO** | **Busso** | **0.40** | **214** | P | Pg | 01 23 43.4 | -0.1 |
| BSSO | | | | S | Sb | 01 23 50.2 | +0.6 |
| BSSO | | | | AML | AML | | |
| | comp=N,17μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,23μm,1.0s | | | | | | |
| **MIDA** | **Miranda** | **0.53** | **244** | P | Pg | 01 23 45.1 | -0.8 |
| MIDA | | | | AML | AML | | |
| | comp=N,47μm,1.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,67μm,0.8s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.56** | **288** | P | Pg | 01 23 46.2 | -0.1 |
| LPEL | | | | AML | AML | | |
| | comp=E,65μm,1.3s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,66μm,0.1s | | | | | | |
| **SGRT** | **San Giovanni R** | **0.65** | **100** | P | Pg | 01 23 48.1 | 0.0 |

*NEIC* ***17*** *01:25:11.7±1.0, 48.91N±0.04×18.18E±0.07, h7km±7km, ML2.8/24, Error ellipse: s-maj=7.3km s-min=5.1km az=65.0*
*IPEC* ***17*** *01:25:11.5±0.1, 48.87N×18.23E, h11km, ML3.1/14, Error ellipse: s-maj=0.6km s-min=0.5km az=243.0*
*VIE* ***17*** *01:25:11.9±0.3, 48.91N×18.19E, h8km±2km, mb2.5/18, ml2.6/19, ms3.3/1, Error ellipse: s-maj=3.3km s-min=2.5km az=64.0*
*KRSZO* ***17*** *01:25:11.6±0.8, 48.90N×18.23E, h8km±4km, M3.1/48, Error ellipse: s-maj=2.4km s-min=2.0km az=66.0*
*BGR* ***17*** *01:25:11.6±0.3, 48.88N×18.21E, h1km, ML2.9/9, Error ellipse: s-maj=5.6km s-min=4.4km az=32.0*
*IDC* ***17*** *01:25:11.6±2.0, 48.83N×18.05E, h0km, mb3.5/1, mbtmp3.4/5, ML2.8/4, MS2.7/3, Error ellipse: s-maj=20.6km s-min=10.6km az=155.0*
*PRU* ***17*** *01:25:12.5, 48.90N×18.16E, h10km, Trencianske Teplice-felt In Slovakia*
*LDG* ***17*** *01:25:12.3±0.5, 49.04N×18.26E, h5km, Ml3.1/5, Error ellipse: s-maj=15.9km s-min=9.7km az=2.0*
*MCSM* ***17*** *01:25:12.1±2.6, 49°N±3°×1°8E±°, h6km±22km, mb3.2, MLv3.1*

**ISC 17 01:25:11.1±1.0, 48.90N±0.01×18.15E±0.01, h6km±8km,**
**n257, σ1.20/394, 11C-7D, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **A332A** | **Rudnianska** | **0.23** | **115** | Lg | Lg | 01 25 18.2 | |
| **A331A** | **Zubak** | **0.25** | **11** | Pg | **Pg**

OKC Pg Pb 01 25 29.9 +0.2
OKC Lg Lg 01 25 41.0
222nm,0.7s
OKC Lg Lg 01 25 42.4
**OKC Ostrava-Krasne 0.93 360** *e*Pg **Pb 01 25 29.9 +0.2**
**MORC Moravsky Berou 0.96 336 Pb 01 25 30.0 -0.2**
MORC Sg **Sb 01 25 43.6 +0.5**
MORC IAML 01 25 45.9
comp=E,390nm,0.6s
MORC IAML 01 25 46.7
comp=N,236nm,0.5s
**MORC Moravsky Berou 0.96 336** *e*Pg **Pb 01 25 30.1 -0.1**
baz=334
MORC *e*Sg **Sb 01 25 43.7 +0.6**
comp=N,368nm,0.4s,baz=334
**MORC Moravsky Berou 0.96 336** Pg **Pb 01 25 29.9 -0.2**
MORC Pg **Pb 01 25 30.1 -0.1**
MORC Pg **Pb 01 25 30.1 -0.1**
MORC Lg Lg 01 25 43.5
MORC Sg **Sb 01 25 43.6 +0.5**
MORC Sb **Sb 01 25 43.7 +0.6**
comp=N,368nm,0.4s
MORC Sb **Sb 01 25 43.8 +0.6**
MORC Lg Lg 01 25 44.4
MORC *i* AML AML 01 25 45.9
comp=N,390nm,0.6s
MORC *i* AML AML 01 25 46.7
comp=N,236nm,0.5s
**MORC Moravsky Berou 0.96 336** ⇑P **Pb 01 25 30.0 -0.2**
MORC ⇓S **Sb 01 25 43.5 +0.4**
**MORC Moravsky Berou 0.96 336** *e*Pg **Pb 01 25 30.0 -0.2**
MORC *e*Sg **Sb 01 25 44.1 +1.1**
**ZST Bratislava 0.99 225** Pn **Pn 01 25 31.3 -0.3**
ZST Pg **Pb 01 25 33.3 +2.6**
ZST Lg Lg 01 25 46.0
**ZST Bratislava 0.99 225** *e*PG **Pn 01 25 31.2 -0.3**
ZST *e*SG **Sn 01 25 46.0 +0.2**
ZST *e*LG Lg 01 25 50.2
**MUVC Mutkov 1.06 328** *e*Pg **Pb 01 25 31.8 -0.1**
baz=327
MUVC *e*Sg **Sb 01 25 46.8 +0.8**
comp=N,309nm,0.4s,baz=327
**MUVC Mutkov 1.06 328** Pg **Pb 01 25 31.8 -0.1**
MUVC Lg Lg 01 25 46.8
comp=N,309nm,0.4s
**LUKC Luka 1.07 315** *e*Pg **Pn 01 25 32.6 -0.1**
baz=314
LUKC *e*Sg **Sn 01 25 47.3 -0.6**
comp=N,391nm,0.3s,baz=314
**LUKC Luka 1.07 315** Pn **Pn 01 25 32.6 -0.1**
LUKC Lg Lg 01 25 47.3
comp=N,391nm,0.3s
**SRO Srobarova 1.10 174** Pn **Pn 01 25 32.8 -0.1**
SRO Pg **Pb 01 25 33.6 +1.2**
**SRO Srobarova 1.10 174** *e*PG **Pn 01 25 33.2 +0.3**
SRO *e*SG **Sn 01 25 48.2 -0.2**
SRO *e*LG Lg 01 25 50.4
**VRAC Vranov 1.10 292** *e*Pg **Pb 01 25 32.6 +0.1**
baz=293
VRAC *e*Sg **Sn 01 25 48.0 -0.5**
comp=N,336nm,0.3s,baz=293
**VRAC Vranov 1.10 292** Pn **Pg 01 25 31.5 -0.7**
comp=N,23nm,0.3s
VRAC Pn **Pb 01 25 32.6 +0.1**
VRAC Lg Lg 01 25 48.0
comp=N,336nm,0.3s
VRAC Lg Lg 01 25 48.1
VRAC Lg Lg 01 25 48.8
VRAC Sn **Sn 01 25 49.0 +0.5**
comp=N,149nm,0.3s
**VRAC Vranov 1.10 292** Pg **Pg 01 25 31.5 -0.7**
comp=N,23nm,0.3s,baz=112,slow=13,SNR=115
VRAC Lg Lg 01 25 49.0
comp=N,149nm,0.3s,baz=17,slow=23,SNR=51
**VRAC Vranov 1.10 292** ⇑P **Pb 01 25 32.7 +0.1**
VRAC ⇑S **Sn 01 25 48.7 +0.2**
**VRAC Vranov 1.10 292** *e*Pg **Pb 01 25 32.7 +0.1**
**A339A Balon 1.12 197** Pg **Pn 01 25 33.9 +0.6**
A339A Sn **Sn 01 25 48.7 -0.3**
**KRUC Moravsky 1.17 278** *e*Pg **Pb 01 25 33.5 -0.1**
baz=280
KRUC *e*Sg **Sn 01 25 49.9 -0.2**
comp=N,91nm,0.4s,baz=280
**KRUC Moravsky 1.17 278** Pn **Pb 01 25 33.5 -0.1**
KRUC Pn **Pb 01 25 33.5 -0.1**
KRUC Pn **Pb 01 25 33.7 0.0**
KRUC Sn **Sb 01 25 49.6 +0.7**
KRUC Sn **Sn 01 25 49.9 -0.2**
comp=N,91nm,0.4s
**KRUC Moravsky 1.17 278** *e*Pg **Pb 01 25 33.6 0.0**
**LIPC Lipinka 1.18 323** *e*Pg **Pn 01 25 34.4 +0.2**
baz=322
LIPC *e*Sg **Sn 01 25 50.3 -0.3**
comp=N,482nm,0.3s,baz=322
**LIPC Lipinka 1.18 323** Pg **Pn 01 25 34.4 +0.2**
LIPC Lg Lg 01 25 50.3
comp=N,482nm,0.3s
**A270A Szokolya 1.21 151** Pn **Pn 01 25 34.4 -0.1**
A270A Sn **Sb 01 25 50.3 +0.1**
**ANAC Anensky vrch 1.27 337** *e*Pg **Pn 01 25 35.5 0.0**
baz=336
ANAC *e*Sg **Sb 01 25 52.4 +0.2**
comp=N,202nm,0.6s,baz=336
**ANAC Anensky vrch 1.27 337** Pn **Pn 01 25 35.5 0.0**
ANAC Lg Lg 01 25 52.4
comp=N,202nm,0.6s
**A269A Baj 1.28 173** Pn **Pg 01 25 35.1 -0.5**
A269A Sn **Sg 01 25 51.3 -0.8**
**A003A Andau 1.36 213** Pn **Pg 01 25 37.5 +0.4**
A003A Lg Lg 01 25 56.9
**A268A Rede 1.48 186** Pn **Pn 01 25 38.1 -0.1**
A268A Sn **Sb 01 25 58.0 0.0**
**NIE Niedzica 1.50 69** *e*Pg **Pb 01 25 39.4 0.0**
NIE *e*Sg **Sg 01 26 00.8 +1.4**
**NIE Niedzica 1.50 69** Pg **Pb 01 25 39.3 -0.1**
NIE Pg **Pb 01 25 39.4 0.0**
NIE Pb **Pn 01 25 39.9 +1.3**
NIE Lg Lg 01 26 00.8
**NIE Niedzica 1.50 69** ePn **Pb 01 25 39.0 -0.4**
**NIE Niedzica 1.50 69** P **Pb 01 25 39.1 -0.3**
**PSZ Piszkesteto 1.52 130** Pn **Pn 01 25 38.5 -0.5**
PSZ IAML 01 26 02.9
comp=E,128nm,0.7s
PSZ IAML 01 26 04.0
comp=N,120nm,0.5s
**PSZ Piszkesteto 1.52 130** Pn **Pn 01 25 38.2 -0.7**
PSZ Pn **Pb 01 25 39.3 -0.5**
PSZ Pg **Pg 01 25 39.9 -0.4**
PSZ *i* AML AML 01 26 02.9
comp=N,128nm,0.7s
PSZ *i* AML AML 01 26 04.0
comp=N,120nm,0.5s
**PSZ Piszkesteto 1.52 130** ⇑S **Sg 01 25 59.9 -0.2**
**PSZ Piszkesteto 1.52 130** *e*Pn **Pn 01 25 37.9 -1.0**
**PSZ Piszkesteto 1.52 130** ⇑P **Pn 01 25 38.3 -0.7**
**BUD Budapest 1.54 157** Pg **Pg 01 25 40.6 0.0**
**CSKK Cskako 1.54 177** Pn **Pn 01 25 38.7 -0.4**
CSKK Pn **Pb 01 25 39.1 -1.0**
CSKK Pg **Pg 01 25 41.8 +1.1**
**EGYH Egyhazaskeszo 1.58 200** Pn **Pn 01 25 40.0 +0.4**
EGYH Pn **Pb 01 25 40.8 0.0**
EGYH Sn **Sn 01 26 00.7 +0.3**
**KECS Kecovo 1.60 104** Pn **Pn 01 25 39.3 -0.7**
KECS Pg **Pg 01 25 43.5 +1.6**
**KECS Kecovo 1.60 104** *e*PG **Pn 01 25 39.3 -0.7**
KECS *e*SG **Sg 01 26 03.3 +0.6**
KECS *e*LG Lg 01 26 05.2
**SOP Sopron 1.62 222** Pn **Pn 01 25 40.5 +0.3**
SOP Pn **Pg 01 25 41.7 -0.4**
SOP Sn **Sn 01 26 01.3 +0.1**
**OJC Ojcow 1.70 39** *e*Pg **Pb 01 25 42.8 +0.1**
OJC *e*Sg **Sb 01 26 04.9 +0.6**
**OJC Ojcow 1.70 39** Pn **Pn 01 25 40.7 -0.5**
OJC Sn **Sn 01 26 03.8 +0.5**
OJC IAML 01 26 09.5
comp=E,121nm,0.7s
**OJC Ojcow 1.70 39** Pn **Pn 01 25 40.9 -0.3**
OJC Pn **Pb 01 25 42.8 +0.1**
OJC Sn **Sn 01 26 03.8 +0.5**
OJC Sn **Sb 01 26 04.7 +0.4**
OJC *i* AML AML 01 26 09.5
comp=E,121nm,0.7s
**OJC Ojcow 1.70 39** *e*Pn **Pn 01 25 40.9 -0.3**

**OJC Ojcow 1.70 39** P **Pn 01 25 41.3 0.0**
**RONA Rosalia, Austr 1.73 226** *e*Pn **Pn 01 25 42.3 +0.7**
comp=E,7.8nm,0.3s,SNR=39
RONA *e*Sn **Sn 01 26 03.9 -0.1**
comp=E,27nm,0.4s
**RONA Rosalia, Austr 1.73 226** Pn **Pn 01 25 42.3 +0.7**
comp=E,7.8nm,0.3s
RONA Sn **Sn 01 26 03.9 -0.1**
comp=E,27nm,0.4s
**A008A Tiefenfucha 1.74 253** Pn **Pn 01 25 42.2 +0.4**
A008A Sn **Sn 01 26 04.4 +0.1**
**MPLH Magyarpolny 1.78 193** Pn **Pn 01 25 42.3 -0.1**
MPLH Pg **Pg 01 25 45.7 +0.4**
**MPLH Magyarpolny 1.78 193** P **Pn 01 25 42.4 0.0**
**TREC Trest 1.79 284** *e*PG **Pn 01 25 43.4 +0.8**
**TREC Trest 1.79 284** Pn **Pn 01 25 43.4 +0.8**
TREC Pn **Pb 01 25 43.5 -0.8**
TREC Sn **Sn 01 26 06.3 +0.7**
**TREC Trest 1.79 284** *e*Pn **Pb 01 25 43.5 -0.8**
**CONA Conrad Observa 1.81 238** *e*Pn **Pn 01 25 43.5 +0.6**
comp=E,4.7nm,0.2s,SNR=43
CONA *e*Sn **Sg 01 26 09.2 -0.1**
comp=E,34nm,0.5s
**CONA Conrad Observa 1.81 238** Pn **Pn 01 25 43.0 +0.2**
CONA Pn **Pn 01 25 43.5 +0.6**
comp=E,4.7nm,0.2s
CONA Pg **Pg 01 25 44.2 -1.6**
CONA Sn **Sb 01 26 07.4 -0.2**
CONA Sn **Sg 01 26 09.2 -0.1**
comp=E,34nm,0.5s
**DPC Dobruska-Polom 1.87 321** *e*SG **Sg 01 26 10.9 -0.4**
comp=E,83nm,0.5s
**DPC Dobruska-Polom 1.87 321** Lg Lg 01 26 10.9
comp=E,83nm,0.5s
**DPC Dobruska-Polom 1.87 321** *e*Pn **Pn 01 25 44.2 +0.5**
**DPC Dobruska-Polom 1.87 321** P **Pb 01 25 46.3 +0.6**
**A260A Vassurany 1.89 211** Pn **Pn 01 25 44.2 +0.4**
**A267A Kaloz 1.97 173** Pn **Pn 01 25 45.7 +0.8**
A267A Sn **Sb 01 26 11.0 -1.1**
**TIH Tihany 2.01 185** Pn **Pb 01 25 46.8 -1.3**
TIH Pg **Pg 01 25 54.2 +4.5**
**A261A Ohid 2.07 199** Pn **Pn 01 25 47.4 +1.1**
**UPC Upice 2.12 320** *e*SG **Sg 01 26 18.8 -0.4**
comp=E,136nm,0.5s
**UPC Upice 2.12 320** Lg Lg 01 26 18.8
comp=E,136nm,0.5s
**ABAH Abaujker 2.14 105** Pn **Pn 01 25 46.7 -0.6**
**BSZH Besenyszg 2.14 138** Pn **Pn 01 25 48.2 +0.9**
BSZH Pg **Pg 01 25 52.0 -0.2**
**BSZH Besenyszg 2.14 138** ⇑P **Pn 01 25 48.2 +0.9**
**A012A Langenwang 2.15 234** Sn **Sn 01 26 15.6 +1.1**
**CRVS Cervenica-Dubn 2.19 89** Pn **Pb 01 25 49.7 -1.3**
CRVS Pg **Pg 01 25 52.2 -0.8**
**CRVS Cervenica-Dubn 2.19 89** *e*PG **Pn 01 25 49.1 +1.1**
CRVS *e*SG **Sg 01 26 24.2 +2.9**
CRVS *e*LG Lg 01 26 28.4
**KSP Ksiaz 2.28 329** Pn **Pn 01 25 50.5 +1.3**
KSP Pg **Pb 01 25 51.9 -0.8**
KSP Pg **Pg 01 25 55.5 +0.6**
**KSP Ksiaz 2.28 329** P **Pb 01 25 51.1 -1.6**
**A010A Fuerstenfeld 2.30 218** Pn **Pb 01 25 51.5 -1.5**
A010A Sn **Sn 01 26 19.5 +1.4**
**ARSA Arzberg 2.42 228** *e*Pn **Pn 01 25 52.7 +1.6**
comp=E,3.3nm,0.3s,SNR=6.7
ARSA *e*Sn **Sn 01 26 22.1 +1.1**
comp=E,4.1nm,0.3s
**ARSA Arzberg 2.42 228** Pn **Pn 01 25 52.5 +1.4**
ARSA Pn **Pn 01 25 52.7 +1.6**
comp=E,3.3nm,0.3s
ARSA Pg **Pg 01 26 01.2 +3.8**
ARSA Sn **Sn 01 26 22.1 +1.1**
comp=E,4.1nm,0.3s
ARSA Sn **Sb 01 26 22.4 -2.6**
**A019A Kaintal 2.52 236** Pn **Pn 01 25 54.6 +2.0**
A019A Sn **Sn 01 26 25.2 +1.7**
**CKRC Cesky Krumlov 2.54 270** *e*PN **Pn 01 25 53.8 +1.0**
CKRC *e*SG **Sg 01 26 33.3 +0.7**
comp=E,25nm,0.6s
**CKRC Cesky Krumlov 2.54 270** Pn **Pn 01 25 53.5 +0.7**
CKRC Pn **Pn 01 25 53.8 +1.0**
CKRC Lg Lg 01 26 33.3
comp=E,25nm,0.6s
**PRU Pruhonice 2.59 296** *e*PN **Pn 01 25 54.2 +0.7**
PRU *e*PG **Pg 01 26 00.1 -0.7**
PRU *e*SG **Sg 01 26 33.9 -0.4**
comp=E,40nm,0.3s
**PRU Pruhonice 2.59 296** Pn **Pn 01 25 53.8 +0.3**
PRU Pn **Pn 01 25 54.2 +0.7**
PRU Pg **Pg 01 26 00.1 -0.7**
PRU Lg Lg 01 26 33.9
comp=E,40nm,0.3s
**BEHE Becsehely 2.61 201** Pn **Pn 01 25 55.2 +1.5**
BEHE Pn **Pb 01 25 58.1 -0.1**
**A021A Deutsch Goritz 2.66 217** Pn **Pn 01 25 55.1 +0.7**
**MORH Mrgy, Hungar 2.71 173** Pn **Pn 01 25 54.7 -0.4**
MORH Pn **Pb 01 25 56.1 -3.9**
**MORH Mrgy, Hungar 2.71 173** ⇓P **Pn 01 25 54.8 -0.4**
**MORH Mrgy, Hungar 2.71 173** P **Pn 01 25 55.0 -0.1**
**KOLS Kolonicke sedl 2.72 88** Pn **Pn 01 25 55.5 +0.2**
KOLS Pg **Pb 01 26 01.1 +1.0**
KOLS Pg **Pg 01 26 01.5 -1.7**
**KOLS Kolonicke sedl 2.72 88** *e*PG **Pn 01 25 56.3 +1.0**
KOLS *e*SG **Sg 01 26 43.3 +4.8**
KOLS *e*LG Lg 01 26 46.7
**KOGS Kog 2.77 208** Pn **Pn 01 25 56.2 +0.3**
KOGS Pg Pg 01 26 10.3 +6.1
**MOA Molln 2.79 249** *e*Pn **Pn 01 25 57.2 +0.9**
comp=E,2.9nm,0.3s,SNR=16
MOA *e*Sn **Sn 01 26 31.6 +1.2**
comp=E,5.5nm,0.3s
**MOA Molln 2.79 249** Pn **Pn 01 25 57.2 +0.9**
comp=E,2.9nm,0.3s
MOA Sn **Sn 01 26 31.6 +1.2**
comp=E,5.5nm,0.3s
**KOVH Kovagotottos 2.82 181** Pn **Pn 01 25 56.6 0.0**
KOVH Pg **Pg 01 26 06.2 +1.1**
KOVH Sn **Sn 01 26 28.9 -1.9**
**HOLU Holmets 2.83 96** P **Pn 01 25 56.7 -0.1**
**PVCC Panska Ves 2.83 306** *e*SG **Sg 01 26 43.0 +0.9**
**PVCC Panska Ves 2.83 306** Lg Lg 01 26 43.0
**GEC2 GERESS Array S 2.94 271** Pn **Pn 01 25 59.7 +1.3**
GEC2 IAML 01 26 56.3
comp=N,30nm,0.8s
GEC2 IAML 01 26 57.5
comp=E,27nm,0.6s
**GEC2 GERESS Array S 2.94 271** *i* AML AML 01 26 56.3
comp=E,30nm,0.8s
GEC2 *i* AML AML 01 26 57.5
comp=E,27nm,0.6s
**GEC2 GERESS Array S 2.94 271** *e*Pn **Pn 01 25 59.7 +1.3**
**GERES GERESS Array B 2.94 271** Pn **Pn 01 25 59.4 +1.0**
**GERES GERESS Array B 2.94 271** Pn **Pn 01 25 58.4 0.0**
comp=E,2.1nm,0.3s
GERES Sn **Sn 01 26 33.8 -0.1**
comp=E,5.2nm,0.3s
GERES Lg Lg 01 26 44.4
comp=E,3.7nm,0.3s
**GERES GERESS Array B 2.94 271** Pn **Pn 01 25 58.4 0.0**
comp=E,2.1nm,0.3s,baz=83,slow=15,SNR=30
GERES Sn **Sn 01 26 33.8 -0.1**
comp=E,5.2nm,0.3s,baz=90,slow=22,SNR=8.0
GERES Lg Lg 01 26 44.4
comp=E,3.7nm,0.3s,baz=84,slow=27,SNR=5.8
comp=E,1.8nm,0.3s
**LTVH Ltavrtes, Hu 2.94 120** Pn **Pn 01 25 56.5 -1.7**
**KHC Kasperske Hory 3.02 276** Pn **Pn 01 26 00.0 +0.6**
KHC IAML 01 27 00.0
comp=N,37nm,0.8s
**KHC Kasperske Hory 3.02 276** *e*PN **Pn 01 26 00.8 +1.4**
KHC *e*PG **Pg 01 26 07.7 -1.2**
KHC *e*SG **Sg 01 26 48.0 0.0**
comp=N,30nm,0.6s
**KHC Kasperske Hory 3.02 276** Pn **Pn 01 26 00.8 +1.4**
KHC Pg **Pg 01 26 07.7 -1.2**
KHC Lg Lg 01 26 48.0
comp=N,30nm,0.6s
KHC *i* AML AML 01 27 00.0
comp=N,37nm,0.8s
**TRPA Tarpa 3.02 103** Pn **Pn 01 25 58.3 -1.0**
TRPA Pg **Pg 01 26 07.4 -1.5**
**SOKA Soboth 3.06 224** *i* Pn **Pn 01 26 01.1 +1.0**
comp=N,1.1nm,0.3s,SNR=10
SOKA *i* Sn **Sn 01 26 37.9 +0.9**
comp=N,1.3nm,0.3s

**SOKA Soboth 3.06 224** Pn **Pn 01 26 01.1 +1.0**
comp=N,1.1nm,0.3s
SOKA Sn **Sn 01 26 37.9 +0.9**
comp=N,1.3nm,0.3s
**KWP Kalwaria Pacla 3.07 75** Pn **Pn 01 26 01.0 +0.9**
KWP IAML 01 27 07.3
comp=N,23nm,1.2s
KWP IAML 01 27 14.1
comp=E,32nm,1.6s
**KWP Kalwaria Pacla 3.07 75** Pn **Pn 01 26 01.0 +0.9**
KWP Pg **Pb 01 26 05.9 -0.2**
KWP *i* AML AML 01 27 07.3
comp=E,23nm,1.2s
KWP *i* AML AML 01 27 14.1
comp=E,32nm,1.6s
**KWP Kalwaria Pacla 3.07 75** P **Pn 01 26 02.6 +2.5**
**BIOA Bad Ischl, Aus 3.25 250** *i* Pn **Pn 01 26 03.4 +0.8**
comp=E,3.5nm,0.3s,SNR=9.7
BIOA *i* Sn **Sn 01 26 43.1 +1.6**
comp=E,4.1nm,0.2s
**BIOA Bad Ischl, Aus 3.25 250** Pn **Pn 01 26 03.4 +0.8**
comp=E,3.5nm,0.3s
BIOA Sn **Sn 01 26 43.1 +1.6**
comp=E,4.1nm,0.2s
**BRIU Brid 3.28 98** P **Pn 01 26 02.7 -0.3**
**BRG Berggiesshubel 3.36 308** Pg **Pg 01 26 14.5 -0.9**
BRG Lg Lg 01 26 57.8
BRG x x 01 27 04.5
comp=E,31nm,0.5s
**BRG Berggiesshubel 3.36 308** Pg **Pg 01 26 14.5 -0.9**
BRG Sg **Sg 01 26 57.8 -1.1**
BRG Amp 01 27 04.5
comp=E,31nm,0.5s
**KORU Korolevo 3.40 101** P **Pn 01 26 04.2 -0.3**
**OBKA Obir 3.41 227** *i* Pn **Pn 01 26 06.4 +1.5**
comp=E,4.4nm,0.3s,SNR=9.5
OBKA *i* Sn **Sn 01 26 46.8 +1.1**
comp=E,8.0nm,0.6s
**OBKA Obir 3.41 227** Pn **Pn 01 26 06.3 +1.5**
OBKA Sn **Sn 01 26 46.8 +1.1**
comp=E,8.0nm,0.6s
**SIRR Siria 3.55 137** Pn **Pn 01 26 06.0 -0.7**
SIRR Pn **Pn 01 26 06.2 -0.5**
SIRR Pg **Pn 01 26 06.5 -0.2**
**SIRR Siria 3.55 137** ⇑P **Pn 01 26 06.2 -0.5**
**MESR Meseseni 3.67 117** Pn **Pn 01 26 08.4 +0.1**
**MESR Meseseni 3.67 117** ⇓P **Pn 01 26 08.4 +0.1**
**KBA Koelnbreinsper 3.71 242** *i* Pn **Pn 01 26 11.7 +2.6**
comp=Z,3.1nm,0.4s
**KBA Koelnbreinsper 3.71 242** Pn **Pn 01 26 11.7 +2.6**
comp=Z,3.1nm,0.4s
**DRGR 3.73 123** Pn **Pn 01 26 09.1 -0.1**
DRGR Pn **Pn 01 26 09.3 +0.1**
DRGR Pg **Pn 01 26 09.4 +0.2**
**DRGR 3.73 123** ⇑P **Pn 01 26 09.4 +0.2**
**MORS Morshin 3.79 84** P **Pn 01 26 10.4 +0.5**
**MYKA Terra Mystica 3.80 235** *i* Pn **Pn 01 26 11.7 +1.5**
comp=Z,0.7nm,0.3s
MYKA *i* Sn **Sn 01 26 54.7 -0.4**
comp=Z,1.9nm,0.4s
**MYKA Terra Mystica 3.80 235** Pn **Pn 01 26 11.7 +1.5**
comp=Z,0.7nm,0.3s
MYKA Sn **Sn 01 26 54.7 -0.4**
comp=Z,1.9nm,0.4s
**LESA Schwarzleotal 3.95 250** *i* Pn **Pn 01 26 12.7 +0.4**
comp=Z,0.3nm,0.3s
LESA *i* Sn **Sn 01 26 59.6 +0.7**
comp=Z,1.8nm,0.4s
**LESA Schwarzleotal 3.95 250** Pn **Pn 01 26 12.7 +0.4**
comp=Z,0.3nm,0.3s
LESA Sn **Sn 01 26 59.6 +0.7**
comp=Z,1.8nm,0.4s
**PRED Cave del Predi 3.96 233** Pn **Pn 01 26 13.0 +0.7**
**PRED Cave del Predi 3.96 233** Pn **Pn 01 26 13.0 +0.7**
**ROTZ Rotzenmuhle 3.98 285** *e*Pn **Pn 01 26 12.6 0.0**
**TANN Tannenbergstha 3.99 294** *e*Pn **Pn 01 26 12.9 +0.1**
**BZS Buzias 4.05 143** Pn **Pn 01 26 13.0 -0.6**
BZS Pn **Pn 01 26 13.5 0.0**
BZS Pg **Pb 01 26 23.1 +0.3**
**BZS Buzias 4.05 143** ⇑P **Pn 01 26 13.0 -0.6**
**MANZ Manzenberg 4.09 288** *e*Pn **Pn 01 26 14.3 +0.2**
**CLL Collm 4.09 308** Pn **Pn 01 26 14.3 +0.2**
**CLL Collm 4.09 308** *e*Pn **Pn 01 26 15.0 +0.9**
CLL *e*Pg **Pg 01 26 29.0 -0.5**
CLL *e*Sg **Sg 01 27 22.0 -0.5**
comp=Z,45nm,0.8s
**CLL Collm 4.09 308** *e*Pn **Pn 01 26 14.4 +0.2**
**CLL Collm 4.09 308** P **Pn 01 26 15.0 +0.9**
**SURR Surduc 4.15 138** Pn **Pn 01 26 14.5 -0.5**
**SURR Surduc 4.15 138** ⇓P **Pn 01 26 14.5 -0.5**
**BLY Banja Luka 4.21 189** Pn **Pn 01 26 16.9 +1.2**
**SABO M.te Sabotino 4.25 228** Pn **Pn 01 26 17.0 +0.6**
SABO IAML 01 27 46.3
comp=E,12nm,2.0s
SABO IAML 01 28 17.1
comp=N,9.8nm,1.1s
**CJR Cluj-Napoca 4.28 119** Pn **Pn 01 26 16.4 -0.3**
CJR Pn **Pn 01 26 16.8 +0.1**
CJR Pn **Pn 01 26 18.8 +2.1**
**CJR Cluj-Napoca 4.28 119** ⇓P **Pn 01 26 16.4 -0.3**
**ABTA Abfaltersbach 4.37 242** *i* Pn **Pn 01 26 21.3 +3.3**
comp=N,0.8nm,0.5s
ABTA *e*Sg **Sg 01 27 36.8 +5.6**
comp=N,4.1nm,0.6s
**ABTA Abfaltersbach 4.37 242** Pn **Pn 01 26 21.3 +3.3**
comp=N,0.8nm,0.5s
ABTA Lg Lg 01 27 36.8
comp=N,4.1nm,0.6s
**DEV Deva 4.42 131** Pn **Pn 01 26 19.2 +0.5**
**STAL STALIGIAL 4.53 236** Pn **Pn 01 26 20.7 +0.5**
**STAL STALIGIAL 4.53 236** Pn **Pn 01 26 20.7 +0.5**
**GRA1 Grafenberg Arr 4.60 282** Pn **Pn 01 26 21.6 +0.5**
**GRA1 Grafenberg Arr 4.60 282** Pn **Pn 01 26 21.6 +0.5**
**GRFO Grafenberg 4.60 282** Pn **Pn 01 26 20.9 -0.2**
**GRFO Grafenberg 4.60 282** Pn **Pn 01 26 20.9 -0.2**
**WTTA Wattenberg 4.66 252** *i* Pn **Pn 01 26 24.7 +2.6**
comp=N,1.1nm,0.2s
WTTA *i* Sn **Sn 01 27 15.7 -0.9**
comp=N,2.8nm,0.6s
**WTTA Wattenberg 4.66 252** Pn **Pn 01 26 24.7 +2.6**
comp=N,1.1nm,0.2s
WTTA Sn **Sn 01 27 15.7 -0.9**
comp=N,2.8nm,0.6s
**WATA Walderalm 4.67 253** *i* Pn **Pn 01 26 24.5 +2.3**
comp=N,0.2nm,0.2s
WATA *e*Sn **Sn 01 27 17.9 +1.1**
comp=N,0.4nm,0.2s
**WATA Walderalm 4.67 253** Pn **Pn 01 26 24.5 +2.3**
comp=N,0.2nm,0.2s
WATA Sn **Sn 01 27 17.9 +1.1**
comp=N,0.4nm,0.2s
**GZR Gura Zlata 4.72 136** Pn **Pn 01 26 23.2 +0.3**
**GZR Gura Zlata 4.72 136** ⇑P **Pn 01 26 23.2 +0.3**
**BURR08 Bucovina Ar. S 4.88 102** Pn **Pn 01 26 24.9 -0.1**
**BURAR Bucovina Array 4.89 103** Pn **Pn 01 26 25.9 +0.7**
**BURAR Bucovina Array 4.89 103** Pn **Pn 01 26 25.3 0.0**
BURAR Pn **Pn 01 26 26.2 +1.0**
BURAR Sn **Sn 01 27 22.3 +0.1**
**BURAR Bucovina Array 4.89 103** ⇓P **Pn 01 26 25.3 0.0**
**SQTA Sankt Quirin 4.95 253** *i* Pn **Pn 01 26 27.8 +1.8**
comp=N,0.5nm,0.2s
SQTA *i* Sn **Sn 01 27 23.9 +0.4**
comp=N,3.0nm,0.4s
**SQTA Sankt Quirin 4.95 253** Pn **Pn 01 26 27.8 +1.8**
comp=N,0.5nm,0.2s
SQTA Sn **Sn 01 27 23.9 +0.4**
comp=N,3.0nm,0.4s
**MOTA Moosalm 4.97 254** *i* Pn **Pn 01 26 28.6 +2.3**
comp=N,0.4nm,0.2s
MOTA *i* Sn **Sn 01 27 23.7 -0.4**
comp=N,1.1nm,0.4s
**MOTA Moosalm 4.97 254** Pn **Pn 01 26 28.6 +2.3**
comp=N,0.4nm,0.2s
MOTA Sn **Sn 01 27 23.7 -0.4**
comp=N,1.1nm,0.4s
**HERR Herculane 4.97 142** Pn **Pn 01 26 26.0 -0.3**
**HERR Herculane 4.97 142** ⇑P **Pn 01 26 26.0 -0.3**
**RETA Reutte 5.14 257** *i* Pn **Pn 01 26 30.3 +1.7**
comp=N,0.6nm,0.4s
RETA *e*Sn **Sn 01 27 27.6 -0.6**
comp=N,3.6nm,0.7s
**RETA Reutte 5.14 257** Pn **Pn 01 26 30.3 +1.7**
comp=N,0.6nm,0.4s
RETA Sn **Sn 01 27 27.6 -0.6**
comp=N,3.6nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FETA** | **Feichten** | **5.33** | **252** | *i* Pn | | **Pn** | **01 26 33.3** | **+2.0** |
| | comp=N,0.5nm,0.4s | | | | | | | |
| FETA | | | | *e*Sn | | **Sn** | **01 27 35.6** | **+2.6** |
| | comp=N,1.4nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **5.33** | **252** | Pn | | **Pn** | **01 26 33.3** | **+2.0** |
| | comp=N,0.5nm,0.4s | | | | | | | |
| FETA | | | | Sn | | **Sn** | **01 27 35.6** | **+2.6** |
| | comp=N,1.4nm,0.5s | | | | | | | |
| **KMPD** | **K-Podol'skiy** | **5.51** | **90** | P | | **Pn** | **01 26 33.7** | **+0.1** |
| **TEOL** | **Teolo** | **5.67** | **234** | Pn | | **Pn** | **01 26 36.5** | **+0.7** |
| **TEOL** | **Teolo** | **5.67** | **234** | Pn | | **Pn** | **01 26 36.5** | **+0.7** |
| **DAVA** | **Damuels** | **5.77** | **257** | *i* Pn | | **Pn** | **01 26 38.6** | **+1.3** |
| | comp=N,0.5nm,0.2s | | | | | | | |
| DAVA | | | | *i* Sn | | **Sn** | **01 27 43.6** | **-0.3** |
| | comp=N,3.5nm,0.4s | | | | | | | |
| **DAVA** | **Damuels** | **5.77** | **257** | Pn | | **Pn** | **01 26 38.6** | **+1.3** |
| | comp=N,0.5nm,0.2s | | | | | | | |
| DAVA | | | | Sn | | **Sn** | **01 27 43.6** | **-0.3** |
| | comp=N,3.5nm,0.4s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **5.79** | **250** | Pn | | **Pn** | **01 26 38.5** | **+0.9** |
| **FUORN** | **Ofenpass-Fuorn** | **5.79** | **250** | Pn | | **Pn** | **01 26 38.5** | **+0.9** |
| **VOIR** | | **5.84** | **124** | Pn | | **Pn** | **01 26 38.8** | **+0.5** |
| **VOIR** | | **5.84** | **124** | ⇓P | | **Pn** | **01 26 38.8** | **+0.5** |
| **VOIR** | | **5.84** | **124** | P | | **Pn** | **01 26 39.1** | **+0.8** |
| **STU** | **Stuttgart** | **5.91** | **272** | Pn | | **Pn** | **01 26 41.3** | **+2.2** |
| **STU** | **Stuttgart** | **5.91** | **272** | Pn | | **Pn** | **01 26 41.3** | **+2.2** |
| **DAVOX** | **Davos/Dischmat** | **5.96** | **252** | Pn | | **Pn** | **01 26 40.3** | **+0.4** |
| | comp=N,0.8nm,0.3s,baz=64,slow=11,SNR=13 | | | | | | | |
| DAVOX | | | | Sn | | **Sn** | **01 27 47.0** | **-1.6** |
| | comp=N,0.4nm,0.3s,baz=3.6,slow=16,SNR=2.1 | | | | | | | |
| DAVOX | | | | Lg | | Lg | 01 28 21.0 | |
| | comp=N,0.5nm,0.3s,baz=182,slow=17,SNR=2.5 | | | | | | | |
| | comp=N,1.5nm,0.3s | | | | | | | |
| **ZCCA** | **Zocca** | **6.72** | **230** | Pn | | **Pn** | **01 26 51.7** | **+1.5** |
| **ZCCA** | **Zocca** | **6.72** | **230** | Pn | | **Pn** | **01 26 51.7** | **+1.5** |
| **NRCA** | **Norcia** | **7.01** | **212** | Pn | | **Pn** | **01 26 54.8** | **+0.4** |
| **NRCA** | **Norcia** | **7.01** | **212** | Pn | | **Pn** | **01 26 54.8** | **+0.4** |
| **CDF** | **Champ du Feu** | **7.22** | **270** | *e*Pn | | **Pn** | **01 26 56.6** | **-0.6** |
| CDF | | | | *e*Sg | | **Sg** | **01 29 00.1** | **-2.7** |
| | comp=N,22nm,1.0s | | | | | | | |
| **CDF** | **Champ du Feu** | **7.22** | **270** | Pn | | **Pn** | **01 26 56.6** | **-0.6** |
| CDF | | | | Lg | | Lg | 01 29 00.1 | |
| | comp=N,11nm,1.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **7.39** | **72** | LR | | LR | 01 30 25.3 | |
| | comp=N,26nm,19.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **7.39** | **72** | LR | | LR | 01 30 25.3 | |
| | comp=N,26nm,19.0s,baz=43,slow=42 | | | | | | | |
| **HAU** | **Haudompre** | **7.90** | **268** | *e*Sg | | **Sg** | **01 29 21.3** | **-3.2** |
| | comp=N,35nm,1.5s | | | | | | | |
| **HAU** | **Haudompre** | **7.90** | **268** | Lg | | Lg | 01 29 21.3 | |
| | comp=N,18nm,1.5s | | | | | | | |
| **LPG** | **La Plagne** | **8.47** | **251** | *e*Pn | | **Pn** | **01 27 15.5** | **+0.9** |
| LPG | | | | *e*Sn | | **Sn** | **01 28 46.7** | **-3.9** |
| | comp=N,0.4nm,0.3s | | | | | | | |
| **LPG** | **La Plagne** | **8.47** | **251** | Pn | | **Pn** | **01 27 15.5** | **+0.9** |
| LPG | | | | Sn | | **Sn** | **01 28 46.7** | **-3.9** |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **LPL** | **La Plagne** | **8.48** | **251** | *e*Pn | | **Pn** | **01 27 15.0** | **+0.5** |
| **LPL** | **La Plagne** | **8.48** | **251** | Pn | | **Pn** | **01 27 15.0** | **+0.5** |
| **MBDF** | **Montbardon** | **8.85** | **246** | *e*Pn | | **Pn** | **01 27 19.1** | **-0.5** |
| MBDF | | | | *e*Sn | | **Sn** | **01 28 56.9** | **-2.7** |
| | comp=N,0.3nm,0.3s | | | | | | | |
| **MBDF** | **Montbardon** | **8.85** | **246** | Pn | | **Pn** | **01 27 19.1** | **-0.5** |
| MBDF | | | | Sn | | **Sn** | **01 28 56.9** | **-2.7** |
| | comp=N,0.1nm,0.3s | | | | | | | |
| **SBF** | **Sospel** | **8.96** | **240** | *e*Pn | | **Pn** | **01 27 21.3** | **+0.4** |
| **SBF** | **Sospel** | **8.96** | **240** | Pn | | **Pn** | **01 27 21.3** | **+0.4** |
| **ORIF** | **Oris-en-Rattie** | **9.29** | **249** | *e*Pn | | **Pn** | **01 27 27.3** | **+1.7** |
| ORIF | | | | *e*Sn | | **Sn** | **01 29 06.4** | **-4.0** |
| | comp=N,0.6nm,0.3s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **9.29** | **249** | Pn | | **Pn** | **01 27 27.3** | **+1.7** |
| ORIF | | | | Sn | | **Sn** | **01 29 06.4** | **-4.0** |
| | comp=N,0.3nm,0.3s | | | | | | | |
| **SMRF** | **Simiane la Rot** | **9.98** | **245** | *e*Pn | | **Pn** | **01 27 35.3** | **+0.4** |
| **SMRF** | **Simiane la Rot** | **9.98** | **245** | Pn | | **Pn** | **01 27 35.3** | **+0.4** |
| **VIVF** | **Saint-Julien-l** | **10.07** | **251** | *e*Pn | | **Pn** | **01 27 36.6** | **+0.4** |
| **VIVF** | **Saint-Julien-l** | **10.07** | **251** | Pn | | **Pn** | **01 27 36.6** | **+0.4** |
| **NOA** | **NORSAR Array B** | **12.79** | **345** | Pn | | **Pn** | **01 28 12.1** | **-1.2** |
| **NOA** | **NORSAR Array B** | **12.79** | **345** | Pn | | **Pn** | **01 28 12.1** | **-1.2** |
| | baz=156,slow=11,SNR=2.0 | | | | | | | |
| | comp=N,0.6nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **13.34** | **17** | Pn | | **Pn** | **01 28 18.9** | **-1.9** |
| | comp=N,0.1nm,0.3s | | | | | | | |
| FINES | | | | Sn | | Sn | 01 30 38.7 | -10 |
| | comp=N,0.1nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **13.34** | **17** | Pn | | **Pn** | **01 28 18.9** | **-1.9** |
| | comp=N,0.1nm,0.3s,baz=207,slow=11,SNR=6.0 | | | | | | | |
| FINES | | | | Sn | | Sn | 01 30 38.7 | -10 |
| | comp=N,0.1nm,0.3s,baz=188,slow=25,SNR=1.5 | | | | | | | |
| | comp=N,0.8nm,0.6s | | | | | | | |
| **SGMF** | **Saint Gilles** | **13.72** | **275** | *e*Pn | | **Pn** | **01 28 26.2** | **+0.2** |
| **SGMF** | **Saint Gilles** | **13.72** | **275** | Pn | | **Pn** | **01 28 26.2** | **+0.2** |
| **ESDC** | **Sonseca Array** | **18.27** | **248** | LR | | LR | 01 36 56.5 | |
| | comp=N,19nm,21.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **18.27** | **248** | LR | | LR | 01 36 56.5 | |
| | comp=N,19nm,21.5s,baz=150,slow=39 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **21.00** | **7** | P | | **P** | **01 29 57.4** | **+2.5** |
| | comp=N,2.3nm,1.0s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **21.00** | **7** | P | | **P** | **01 29 57.4** | **+2.5** |
| | comp=N,2.3nm,1.0s,baz=191,slow=13,SNR=2.3 | | | | | | | |
| | comp=N,2.3nm,1.0s | | | | | | | |
| **ARU** | **Arti** | **25.32** | **57** | LR | | LR | 01 40 55.1 | |
| | comp=N,62nm,21.9s | | | | | | | |
| **ARU** | **Arti** | **25.32** | **57** | LR | | LR | 01 40 55.1 | |
| | comp=N,62nm,21.9s,baz=166,slow=37 | | | | | | | |

*IDC* ***17*** *01:48:47.4±2.3, 1°.37S×127°.45E, h0km, mb3.4/2, mbtmp3.4/3, ML3.4/1, Error ellipse: s-maj=202.0km s-min=27.3km az=66.0*
*DJA* ***17*** *01:48:49.5±0.4, 1°.53×12°.8E±°, h16km±3km, M3.3/7, MLv3.3/7*
**ISC 17 01:48:49.3±1.1, 1°.24S±0°.07×127°.5E±0°.1, h10km, n7, σ1s45/8, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LBMI** | **Labuha** | **0.60** | **357** | P | | **Pg** | | **01 49 00.7** | **-0.2** |
| LBMI | | | | S | | **Sg** | | **01 49 10.0** | **+1.2** |
| **SANI** | **Sanana** | **1.74** | **242** | P | | **Pn** | | **01 49 20.8** | **+1.2** |
| **NLAI** | **Namlea** | **2.03** | **192** | P | | **Pn** | | **01 49 25.2** | **+1.6** |
| **LUWI** | **Luwuk** | **4.76** | **272** | P | | **Pn** | | **01 50 00.8** | **-0.4** |
| **WRA** | **Warramunga Arr** | **19.75** | **161** | P | | **P** | | **01 53 17.5** | **-1.9** |
| | 0.1nm,0.3s,baz=342,slow=12,SNR=6.8 | | | | | | | | |
| | 0.2nm,0.3s | | | | | | | | |
| **ASAR** | **Alice Springs** | **23.14** | **165** | P | | **P** | | **01 53 54.8** | **-1.1** |
| | 0.9nm,0.7s,baz=344,slow=11,SNR=7.5 | | | | | | | | |
| | 0.9nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.09** | **326** | P | | **P** | | **01 59 10.4** | **0.0** |
| | 0.3nm,0.5s,baz=120,slow=6.4,SNR=4.4 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |

*UPA* ***17*** *01:57:27.4±0.7, 6°.25N×82°.37W, h19km±9km, MW4.2*
*CATAC* ***17*** *01:57:27.0±0.7, 6°.28N×82°.44W, h10km, mb4.4, ML4.7*
*UCR* ***17*** *01:57:28.9±1.8, 6°.28N×82°.40W, h35km±41km, MW3.8*
**ISC 17 01:57:26.3±2.3, 6°.3N±0°.1×82°.37W±0°.05, h10km, n84, σ0s97/105, 6C-2D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CACAO** | **El Cacao, Vera** | **1.85** | **54** | *e*P | | **Pn** | | **01 57 57.3** | **-0.9** |
| CACAO | | | | *e*S | | **Sn** | | **01 58 19.9** | **-1.8** |
| **GMAL** | **Guarumal, Vera** | **1.88** | **37** | *e*P | | **Pn** | | **01 57 58.0** | **-0.6** |
| GMAL | | | | *e*S | | **Sn** | | **01 58 21.6** | **-0.8** |
| **MARI3** | **Mariato, Verag** | **1.95** | **45** | *e*P | | **Pn** | | **01 57 58.9** | **-0.7** |
| **PTPM** | **Petroterminale** | **2.00** | **346** | *e*P | | **Pn** | | **01 57 59.2** | **-1.1** |
| **NANC3** | **Nancito, Chiri** | **2.07** | **18** | *e*P | | **Pn** | | **01 58 00.2** | **-1.0** |
| **PEDE3** | **Pedregal, Chir** | **2.12** | **359** | *e*P | | **Pn** | | **01 58 01.7** | **-0.1** |
| **DVD** | **David** | **2.17** | **358** | *e*P | | **Pn** | | **01 58 01.8** | **-0.8** |
| **MESA3** | **La Mesa, Verag** | **2.22** | **32** | *e*P | | **Pn** | | **01 58 03.3** | **0.0** |
| **STIA3** | **Santiago, Vera** | **2.30** | **37** | *e*P | | **Pn** | | **01 58 04.3** | **0.0** |
| **NELY** | **Ciudad Neily** | **2.45** | **347** | ⇑*e*P | | **Pn** | | **01 58 05.4** | **-1.0** |
| NELY | | | | *e*S | | **Sn** | | **01 58 35.0** | **-1.4** |
| **PTJ1** | **Puerto Jimnez** | **2.45** | **338** | *i* P | | **Pn** | | **01 58 05.2** | **-1.2** |
| PTJ1 | | | | IAML | | | | 01 58 06.3 | |
| | comp=Z,5μm,1.0s | | | | | | | | |
| **PTJ1** | **Puerto Jimnez** | **2.45** | **338** | *e*P | | **Pn** | | **01 58 05.8** | **-0.6** |
| **BCO2** | **Palmira** | **2.45** | **356** | *e*P | | **Pn** | | **01 58 06.5** | **-0.1** |
| BCO2 | | | | *e*S | | **Sn** | | **01 58 36.4** | **-0.4** |
| **JIME** | **Puerto Jimenez** | **2.46** | **337** | *e*P | | **Pn** | | **01 58 05.3** | **-1.2** |
| **EDAD** | **Golfito** | **2.51** | **342** | *e*P | | **Pn** | | **01 58 05.3** | **-2.0** |
| **LNBQ3** | **Los Naranjos,** | **2.52** | **358** | *e*P | | **Pn** | | **01 58 07.6** | **+0.1** |
| **BRU2** | **Volcan** | **2.54** | **353** | *i* P | | **Pn** | | **01 58 07.9** | **+0.1** |
| BRU2 | | | | IAML | | | | 01 58 08.4 | |
| | comp=Z,910nm,1.0s | | | | | | | | |
| BRU2 | | | | *i* S | | **Sn** | | **01 58 38.7** | **-0.2** |
| **BRU2** | **Volcan** | **2.54** | **353** | *e*P | | **Pn** | | **01 58 07.5** | **-0.4** |
| BRU2 | | | | *e*S | | **Sn** | | **01 58 38.8** | **-0.2** |
| **BRU2** | **Volcan** | **2.54** | **353** | *e*P | | **Pn** | | **01 58 07.9** | **+0.1** |
| BRU2 | | | | *e*S | | **Sn** | | **01 58 39.2** | **+0.2** |
| **MLIR3** | **Monte Lirio, C** | **2.56** | **350** | *e*P | | **Pn** | | **01 58 07.8** | **-0.3** |
| **CHIT3** | **Chitre** | **2.58** | **49** | *e*P | | **Pn** | | **01 58 07.9** | **-0.2** |
| CHIT3 | | | | *e*S | | **Sn** | | **01 58 38.1** | **-1.5** |
| **AZU** | **Azuero** | **2.58** | **54** | *e*P | | **Pn** | | **01 58 08.0** | **-0.2** |
| AZU | | | | *e*S | | **Sn** | | **01 58 38.4** | **-1.4** |
| **AZU** | **Azuero** | **2.58** | **54** | ⇓*i*P | | **Pn** | | **01 58 08.1** | **-0.1** |
| AZU | | | | *e*S | | **Sn** | | **01 58 38.4** | **-1.4** |
| **VITO** | **San Vito** | **2.62** | **347** | *e*P | | **Pn** | | **01 58 08.8** | **0.0** |
| **CHGR2** | **Aguacate** | **2.68** | **5** | *e*P | | **Pn** | | **01 58 09.0** | **-0.6** |
| CHGR2 | | | | *e*S | | **Sn** | | **01 58 41.1** | **-0.9** |
| **EDP2** | **Potrero Grande** | **2.86** | **344** | *e*P | | **Pn** | | **01 58 11.9** | **-0.2** |
| **EDPN** | **Palmar Norte** | **2.90** | **338** | *e*P | | **Pn** | | **01 58 11.4** | **-1.2** |
| **BURE** | **Buenos Aires** | **3.06** | **342** | *e*P | | **Pn** | | **01 58 14.7** | **-0.1** |
| **OCHAL** | **Ojochal** | **3.10** | **336** | *i* P | | **Pn** | | **01 58 14.4** | **-0.9** |
| OCHAL | | | | IAML | | | | 01 58 14.7 | |
| | comp=Z,720nm,1.0s | | | | | | | | |
| OCHAL | | | | *i* S | | **Sn** | | **01 58 50.4** | **-2.0** |
| **DRK0** | **Durika** | **3.11** | **344** | *i* P | | **Pn** | | **01 58 15.2** | **-0.5** |
| DRK0 | | | | IAML | | | | 01 58 17.0 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| DRK0 | | | | *i* S | | **Sn** | | **01 58 55.5** | **+2.4** |
| **DRK0** | **Durika** | **3.11** | **344** | *e*P | | **Pn** | | **01 58 15.1** | **-0.5** |
| **DRK0** | **Durika** | **3.11** | **344** | *e*P | | **Pn** | | **01 58 15.0** | **-0.7** |
| **CNI2** | **El Empalme, Bo** | **3.15** | **358** | *e*P | | **Pn** | | **01 58 15.6** | **-0.4** |
| **BUS1** | **Rivas** | **3.55** | **338** | ⇑*e*P | | **Pn** | | **01 58 21.7** | **-0.2** |
| BUS1 | | | | *e*S | | **Sn** | | **01 59 04.9** | **+0.6** |
| **LLNJ** | **Naranjito** | **3.63** | **332** | ⇑*e*P | | **Pn** | | **01 58 22.0** | **-0.7** |
| **ZANG** | **Zanguenga, Cho** | **3.66** | **43** | *e*P | | **Pn** | | **01 58 21.9** | **-1.1** |
| **ZANG** | **Zanguenga, Cho** | **3.66** | **43** | *e*P | | **Pn** | | **01 58 24.3** | **+1.3** |
| **ABE2** | **San Pablo** | **3.81** | **334** | ⇓*i*P | | **Pn** | | **01 58 25.2** | **-0.1** |
| **LCR2** | **La Lucha 2** | **3.82** | **335** | *i* P | | **Pn** | | **01 58 25.2** | **-0.3** |
| LCR2 | | | | IAML | | | | 01 58 25.7 | |
| | comp=Z,280nm,1.0s | | | | | | | | |
| LCR2 | | | | *i* S | | **Sn** | | **01 59 10.2** | **-0.5** |
| **LCR2** | **La Lucha 2** | **3.82** | **335** | ⇑*i*P | | **Pn** | | **01 58 25.2** | **-0.3** |
| LCR2 | | | | *e*S | | **Sn** | | **01 59 09.2** | **-1.4** |
| **BCIP** | **Isla Barro Col** | **3.83** | **41** | *i* P | | **Pn** | | **01 58 26.5** | **+1.1** |
| BCIP | | | | *i* S | | **Sn** | | **01 59 12.3** | **+1.7** |
| BCIP | | | | IAML | | | | 01 59 25.3 | |
| | comp=Z,88nm,1.0s | | | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.83** | **41** | *e*P | | **Pn** | | **01 58 24.9** | **-0.5** |
| **BCIP** | **Isla Barro Col** | **3.83** | **41** | *e*P | | **Pn** | | **01 58 26.7** | **+1.2** |
| **REPA** | **Paraso** | **3.85** | **337** | *e*P | | **Pn** | | **01 58 27.1** | **+1.3** |
| **VERB** | **Verbena** | **3.89** | **340** | *e*P | | **Pn** | | **01 58 27.2** | **+0.8** |
| **UPA** | **Univ. de Panam** | **3.91** | **46** | *e*P | | **Pn** | | **01 58 26.3** | **-0.1** |
| **ACOS** | **Acosta** | **3.94** | **333** | *e*P | | **Pn** | | **01 58 26.8** | **-0.3** |
| **VTCV** | **VTCV, Calle Va** | **3.94** | **340** | *e*P | | **Pn** | | **01 58 27.2** | **+0.1** |
| **RAFA** | **San Farael, Vo** | **3.95** | **339** | *i* P | | **Pn** | | **01 58 28.0** | **+0.7** |
| RAFA | | | | IAML | | | | 01 58 29.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| RAFA | | | | *i* S | | **Sn** | | **01 59 15.4** | **+1.5** |
| **RAFA** | **San Farael, Vo** | **3.95** | **339** | ⇑*e*P | | **Pn** | | **01 58 27.4** | **+0.1** |
| **FRIJ** | **El Hiral** | **3.95** | **41** | *e*P | | **Pn** | | **01 58 26.5** | **-0.5** |
| **CVTV** | **Tajo** | **3.97** | **340** | *e*P | | **Pn** | | **01 58 27.8** | **+0.2** |
| **CVTQ** | **Turrialba Volc** | **3.97** | **340** | *e*P | | **Pn** | | **01 58 28.3** | **+0.6** |
| **VTLA** | **Turrialba Volc** | **3.98** | **340** | *e*P | | **Pn** | | **01 58 27.9** | **+0.2** |
| **LCOCO** | **El Coco** | **3.98** | **343** | *e*P | | **Pn** | | **01 58 29.0** | **+1.5** |
| **VICA** | **Volcano Irazu** | **3.98** | **339** | *e*P | | **Pn** | | **01 58 27.7** | **-0.2** |
| **VTR0** | **Volcan Turrial** | **3.98** | **340** | *e*P | | **Pn** | | **01 58 28.3** | **+0.4** |
| **CVTR** | **Volcan Turrial** | **3.99** | **340** | *e*P | | **Pn** | | **01 58 27.8** | **-0.1** |
| **CVIMO** | **Finca Echandi** | **4.06** | **338** | *e*P | | **Pn** | | **01 58 29.5** | **+0.8** |
| **SANTA** | **Santa Ana** | **4.07** | **334** | *e*P | | **Pn** | | **01 58 28.8** | **0.0** |
| **DOMI** | **Santo Domingo** | **4.08** | **335** | *e*P | | **Pn** | | **01 58 29.5** | **+0.6** |
| **HDC** | **Heredia** | **4.10** | **335** | *i* P | | **Pn** | | **01 58 29.7** | **+0.4** |
| HDC | | | | IAML | | | | 01 58 30.1 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| HDC | | | | *i* S | | **Sn** | | **01 59 17.4** | **-0.1** |
| **HDC** | **Heredia** | **4.10** | **335** | ⇑*i*P | | **Pn** | | **01 58 30.1** | **+0.8** |
| **HDC3** | **Heredia 3** | **4.10** | **335** | *i* P | | **Pn** | | **01 58 29.7** | **+0.4** |
| HDC3 | | | | IAML | | | | 01 58 30.0 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| HDC3 | | | | *i* S | | **Sn** | | **01 59 17.8** | **+0.3** |
| **TCS1** | **Tacares** | **4.22** | **333** | *i* P | | **Pn** | | **01 58 31.3** | **+0.5** |
| TCS1 | | | | IAML | | | | 02 00 05.2 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **TCS1** | **Tacares** | **4.22** | **333** | *e*P | | **Pn** | | **01 58 30.9** | **0.0** |
| **CBL1** | **Cabuya** | **4.27** | **321** | *e*P | | **Pn** | | **01 58 29.9** | **-1.5** |
| **SOCE** | **Pocosol** | **4.67** | **332** | *i* P | | **Pn** | | **01 58 37.5** | **+0.6** |
| SOCE | | | | IAML | | | | 01 58 41.1 | |
| | comp=Z,210nm,1.0s | | | | | | | | |
| SOCE | | | | *i* S | | **Sn** | | **01 59 30.6** | **-0.6** |
| **SOCE** | **Pocosol** | **4.67** | **332** | *e*P | | **Pn** | | **01 58 37.5** | **+0.6** |
| **INDI** | **Punta indio, G** | **4.74** | **319** | *i* P | | **Pn** | | **01 58 36.6** | **-1.3** |
| INDI | | | | IAML | | | | 01 58 37.8 | |
| | comp=Z,130nm,1.0s | | | | | | | | |
| **JTS** | **Las Juntas de** | **4.75** | **328** | *e*P | | **Pn** | | **01 58 38.0** | **-0.1** |
| **JTS** | **Las Juntas de** | **4.75** | **328** | *e*P | | **Pn** | | **01 58 38.0** | **-0.1** |
| **VAR** | **Volcan Arenal** | **4.77** | **332** | *e*P | | **Pn** | | **01 58 39.0** | **+0.5** |
| **ARE1** | **Arenal 1** | **4.78** | **331** | *e*P | | **Pn** | | **01 58 39.0** | **+0.5** |
| **CEDE** | **Laguna Cedeo** | **4.80** | **331** | *e*P | | **Pn** | | **01 58 39.5** | **+0.7** |
| **CUI** | **Cuipilapa** | **5.17** | **328** | *e*P | | **Pn** | | **01 58 44.0** | **+0.1** |
| **ALIBA** | **Liberia Airpor** | **5.33** | **324** | *e*P | | **Pn** | | **01 58 48.1** | **+2.1** |
| **ELI1** | **Hacienda Flor** | **5.38** | **324** | *e*P | | **Pn** | | **01 58 47.6** | **+0.9** |
| **ESPN** | **Las Esperanzas** | **6.20** | **342** | *i* P | | **Pn** | | **01 58 58.0** | **0.0** |
| ESPN | | | | IAmb | | IAmb | | 01 58 58.8 | |
| | comp=Z,29nm,0.7s | | | | | | | | |
| ESPN | | | | IAML | | | | 01 59 07.2 | |
| | comp=Z,190nm,1.0s | | | | | | | | |
| **ESPN** | **Las Esperanzas** | **6.20** | **342** | *e*P | | **Pn** | | **01 58 58.1** | **+0.1** |
| **ACON** | **Acoyapa** | **6.32** | **334** | *i* P | | **Pn** | | **01 58 59.1** | **-0.5** |
| ACON | | | | IAmb | | IAmb | | 01 59 13.8 | |
| | comp=Z,26nm,0.6s | | | | | | | | |
| ACON | | | | IAML | | | | 02 01 07.4 | |
| | comp=Z,61nm,1.0s | | | | | | | | |
| **ACON** | **Acoyapa** | **6.32** | **334** | *e*P | | **Pn** | | **01 59 00.1** | **+0.5** |
| **BOAB** | **BOACO BROADBAN** | **6.96** | **332** | *i* P | | **Pn** | | **01 59 09.0** | **+0.6** |
| BOAB | | | | IAML | | | | 01 59 09.2 | |
| | comp=Z,35nm,1.0s | | | | | | | | |
| BOAB | | | | IAmb | | IAmb | | 01 59 09.6 | |
| | comp=Z,19nm,1.1s | | | | | | | | |
| **RUSI** | **La Rusia** | **9.25** | **92** | *i* P | | **Pn** | | **01 59 45.0** | **+4.7** |

**NAM 17 02:06:39.4±5.4, 19°.78S×14°.44E, h26km±22km, ML0.6, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ST6N** | **ST6** | **0.04** | **238** | *i* P | | Pb | | 02 06 46.7 | +2.7 |
| ST6N | | | | *i* S | | Sb | | 02 06 49.8 | +2.6 |
| ST6N | | | | IAML | | | | 02 06 50.1 | |
| | comp=Z,1.8nm,0.3s | | | | | | | | |
| **ST6N** | **ST6** | **0.04** | **238** | *i* P | | Pb | | 02 06 47.3 | +3.2 |
| ST6N | | | | *i* S | | Sb | | 02 06 49.7 | +2.6 |
| ST6N | | | | IAML | | | | 02 06 50.0 | |
| | comp=Z,8.0nm,0.0s | | | | | | | | |
| **ST3N** | **ST3** | **0.07** | **58** | *i* P | | Pb | | 02 06 46.2 | +2.1 |
| ST3N | | | | *i* S | | Sb | | 02 06 47.6 | +0.3 |
| ST3N | | | | IAML | | | | 02 06 49.1 | |
| | comp=Z,1.6nm,0.3s | | | | | | | | |
| **ST3N** | **ST3** | **0.07** | **58** | *i* P | | Pb | | 02 06 46.2 | +2.1 |
| ST3N | | | | *i* S | | Sb | | 02 06 47.9 | +0.6 |
| ST3N | | | | IAML | | | | 02 06 47.9 | |
| | comp=Z,3.3nm,0.0s | | | | | | | | |
| **ST9N** | **ST9** | **0.10** | **102** | *i* P | | Pn | | 02 06 45.3 | -0.3 |
| ST9N | | | | *i* S | | Sb | | 02 06 46.0 | -1.7 |
| ST9N | | | | IAML | | | | 02 06 46.4 | |
| | comp=Z,10nm,0.3s | | | | | | | | |
| **ST9N** | **ST9** | **0.10** | **102** | *i* P | | Pn | | 02 06 45.1 | -0.4 |
| ST9N | | | | *i* S | | Sb | | 02 06 46.0 | -1.7 |
| ST9N | | | | IAML | | | | 02 06 46.1 | |
| | comp=Z,71nm,0.1s | | | | | | | | |
| **ST8N** | **ST8** | **0.14** | **307** | *i* S | | Sb | | 02 06 53.3 | +5.1 |
| **ST8N** | **ST8** | **0.14** | **307** | *i* S | | Sb | | 02 06 50.9 | +2.7 |
| **ST1N** | **ST1** | **0.17** | **76** | *i* P | | Pn | | 02 06 46.3 | -0.2 |
| ST1N | | | | *i* S | | Sb | | 02 06 47.1 | -1.6 |
| ST1N | | | | IAML | | | | 02 06 47.6 | |
| | comp=Z,8.2nm,0.3s | | | | | | | | |
| **ST1N** | **ST1** | **0.17** | **76** | *i* P | | Pn | | 02 06 45.9 | -0.6 |
| ST1N | | | | *i* S | | Sb | | 02 06 47.3 | -1.4 |
| ST1N | | | | IAML | | | | 02 06 47.5 | |
| | comp=Z,12nm,0.0s | | | | | | | | |
| **ST2N** | **ST2** | **0.21** | **135** | *i* P | | Pb | | 02 06 46.0 | +0.6 |
| ST2N | | | | *i* S | | Sb | | 02 06 47.0 | -2.5 |
| ST2N | | | | IAML | | | | 02 06 47.7 | |
| | comp=Z,2.5nm,0.3s | | | | | | | | |
| **ST2N** | **ST2** | **0.21** | **135** | *i* P | | Pb | | 02 06 45.9 | +0.5 |
| ST2N | | | | *i* S | | Sb | | 02 06 47.3 | -2.2 |
| ST2N | | | | IAML | | | | 02 06 48.2 | |
| | comp=Z,17nm,0.1s | | | | | | | | |
| **ST5N** | **ST5** | **0.30** | **93** | *i* P | | Pb | | 02 06 47.3 | +0.7 |
| ST5N | | | | IAML | | | | 02 06 50.0 | |
| | comp=Z,3.6nm,0.3s | | | | | | | | |
| **ST5N** | **ST5** | **0.30** | **93** | *i* P | | Pb | | 02 06 47.1 | +0.5 |
| ST5N | | | | *i* S | | Sb | | 02 06 49.6 | -1.9 |
| ST5N | | | | IAML | | | | 02 06 49.6 | |
| | comp=Z,5.8nm,0.0s | | | | | | | | |
| **ST4N** | **ST4** | **0.52** | **103** | *i* P | | Pn | | 02 06 51.0 | -0.3 |
| ST4N | | | | IAML | | | | 02 06 56.8 | |
| | comp=Z,0.8nm,0.1s | | | | | | | | |

*IDC* ***17*** *02:12:47.5±1.2, 31°.11S×179°.34W, h228km±15km, mb3.4/5, mbtmp4.1/6, Error ellipse: s-maj=22.6km s-min=19.6km az=29.0*
**ISC 17 02:12:44.9±0.7, 31°.54S±0°.08×179°.3W±0°.2, h200km, n40, σ2s42/40, mb4.0/8, 10C, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **2.58** | **28** | P | | **Pn** | | **02 13 29.4** | **-0.4** |
| | 225nm,0.3s,baz=101,slow=16,SNR=3.4 | | | | | | | | |
| RAO | | | | S | | **Sn** | | **02 14 04.8** | **+0.1** |
| | 169nm,0.3s,baz=63,slow=20,SNR=2.0 | | | | | | | | |
| **HAZ** | **Te Kaha** | **6.64** | **200** | P | | **Sn** | | **02 15 41.8** | **+5.5** |
| **RUGZ** | **Raukumara Rang** | **6.87** | **200** | P | | **Sn** | | **02 15 41.5** | **-0.2** |
| **TWGZ** | **Tauwhareparae** | **6.98** | **198** | P | | **Sn** | | **02 15 47.5** | **+3.2** |
| **MWZ** | **Matawai** | **7.26** | **200** | P | | **Sn** | | **02 15 53.6** | **+2.8** |
| **URZ** | **Urewera** | **7.32** | **203** | P | | **Pn** | | **02 14 29.4** | **+0.3** |
| | 8.6nm,0.3s,baz=342,slow=5.3,SNR=13 | | | | | | | | |
| URZ | | | | S | | **Sn** | | **02 15 51.8** | **-0.3** |
| | 16nm,0.4s,baz=68,slow=23,SNR=12 | | | | | | | | |
| **URZ** | **Urewera** | **7.32** | **203** | P | | **Sn** | | **02 15 53.4** | **+1.3** |
| **RIGZ** | **Rimuhau** | **7.54** | **198** | P | | **Sn** | | **02 15 57.0** | **-0.3** |
| **PRGZ** | **Paritu Road** | **7.71** | **197** | P | | **Sn** | | **02 15 57.9** | **-3.6** |
| **SNGZ** | **Shannon Statio** | **7.72** | **200** | P | | **Sn** | | **02 16 04.4** | **+2.6** |
| **ALRZ** | **Allen Road** | **7.86** | **206** | P | | **Sn** | | **02 16 01.8** | **-3.1** |
| **KNZ** | **Kokohu** | **7.86** | **197** | P | | **Sn** | | **02 16 00.7** | **-4.2** |
| **MHGZ** | **Mahia Peninsul** | **7.93** | **196** | P | | **Sn** | | **02 16 02.2** | **-4.2** |
| **MTHZ** | **Maungataniwha** | **7.94** | **202** | P | | **Sn** | | **02 16 02.9** | **-4.1** |
| **ETVZ** | **East Tongariro** | **8.60** | **207** | P | | Sn | | 02 16 11.4 | -11 |
| **WAZ** | **Wanganui** | **9.41** | **208** | P | | Pn | | 02 15 10.1 | +14 |
| **MRZ** | **Mangatainoka R** | **9.99** | **203** | P | | **Pn** | | **02 15 01.5** | **-2.5** |
| **HOWZ** | **Holdsworth Sta** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KOTS** | **Kotyrbulak** | **3.89** | **17** | *e*P | | **Pg** | **02 51 48.1** | **-1.3** |
| | 3.0nm,0.3s | | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **02 52 41.0** | **+1.2** |
| | 21nm,0.5s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.89** | **17** | Pg | | **Pg** | **02 51 48.1** | **-1.3** |
| | 3.0nm,0.3s | | | | | | | | |
| KOTS | | | | Lg | | Lg | 02 52 41.0 | | |
| | 21nm,0.8s | | | | | | | | |
| **SATY** | **Saty** | **4.13** | **30** | *e*P | | **Pb** | **02 51 50.6** | **+2.9** |
| | 8.5nm,0.6s | | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **02 52 45.7** | **-1.8** |
| | 16nm,1.1s | | | | | | | | |
| **SATY** | **Saty** | **4.13** | **30** | Pg | | **Pb** | **02 51 50.6** | **+2.9** |
| | 8.6nm,1.0s | | | | | | | | |
| SATY | | | | Lg | | Lg | 02 52 45.7 | | |
| | 16nm,1.1s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.18** | **1** | *e*P | | **Pg** | **02 51 53.4** | **-1.6** |
| | 4.0nm,0.5s | | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **02 52 50.1** | **+1.0** |
| | 4.2nm,0.7s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.18** | **1** | Pg | | **Pg** | **02 51 53.4** | **-1.6** |
| | 4.0nm,0.5s | | | | | | | | |
| KRBS | | | | Lg | | Lg | 02 52 50.1 | | |
| | 4.2nm,0.8s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.28** | **11** | *e*P | | **Pg** | **02 51 54.8** | **-2.0** |
| | 3.7nm,0.6s | | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **02 52 52.5** | **+0.4** |
| | 6.5nm,0.5s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.28** | **11** | Pg | | **Pg** | **02 51 54.8** | **-2.0** |
| | 3.7nm,0.6s | | | | | | | | |
| KTBS | | | | Lg | | Lg | 02 52 52.5 | | |
| | 6.5nm,0.6s | | | | | | | | |
| **KURS** | **Kuram** | **4.42** | **25** | *e*P | | **Pg** | **02 51 56.9** | **-2.6** |
| | 3.7nm,0.6s | | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **02 52 56.1** | **-0.7** |
| | 8.9nm,0.9s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.46** | **34** | *e*P | | **Pb** | **02 51 55.9** | **+2.6** |
| | 4.5nm,0.5s | | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **02 52 54.4** | **-3.6** |
| | 5.6nm,0.5s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.46** | **34** | Pg | | **Pb** | **02 51 55.9** | **+2.6** |
| | 5.0nm,0.6s | | | | | | | | |
| UZB | | | | Lg | | Lg | 02 52 54.4 | | |
| | 5.6nm,0.6s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.59** | **29** | *e*P | | **Pb** | **02 51 59.2** | **+3.8** |
| | 4.6nm,0.5s | | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **02 53 00.1** | **-1.9** |
| | 9.9nm,0.6s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.59** | **29** | Pg | | **Pb** | **02 51 59.2** | **+3.8** |
| | 4.6nm,0.6s | | | | | | | | |
| KPKS | | | | Lg | | Lg | 02 53 00.1 | | |
| | 9.9nm,0.6s | | | | | | | | |
| **SHLS** | **Shalkode** | **4.67** | **37** | *e*P | | **Pg** | **02 52 04.5** | **+0.3** |
| | 6.8nm,0.3s | | | | | | | | |
| SHLS | | | | *e*S | | **Sg** | **02 53 09.6** | **+4.9** |
| | 17nm,0.9s | | | | | | | | |
| **SHLS** | **Shalkode** | **4.67** | **37** | Pg | | **Pg** | **02 52 04.5** | **+0.3** |
| | 6.2nm,0.5s | | | | | | | | |
| SHLS | | | | Lg | | Lg | 02 53 09.6 | | |
| | 17nm,1.0s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.81** | **36** | Pg | | **Pb** | **02 52 02.6** | **+3.3** |
| | 2.1nm,0.5s | | | | | | | | |
| PDGK | | | | Lg | | Lg | 02 53 06.0 | | |
| | 3.9nm,1.1s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.81** | **36** | ⇑Pg | | **Pb** | **02 51 59.2** | **-0.1** |
| | 4.2nm,0.7s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 02 53 04.9 | | |
| | 13nm,0.9s | | | | | | | | |
| **ARXS** | **Arharly** | **4.99** | **19** | *e*P | | **Pg** | **02 52 07.2** | **-3.1** |
| | 3.1nm,0.4s | | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **02 53 14.1** | **-0.9** |
| | 4.1nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **4.99** | **19** | Pg | | **Pg** | **02 52 07.3** | **-3.1** |
| | 3.1nm,0.4s | | | | | | | | |
| ARXS | | | | Lg | | Lg | 02 53 14.1 | | |
| | 4.5nm,0.8s | | | | | | | | |
| **BLB** | **Baldybastay** | **5.07** | **24** | Pg | | **Pg** | **02 52 09.1** | **-2.8** |
| | 14nm,0.5s | | | | | | | | |
| BLB | | | | Lg | | Lg | 02 53 17.6 | | |
| | 9.6nm,0.9s | | | | | | | | |
| **KK31** | **Karatay Array** | **5.24** | **315** | ⇓Pn | | **Pn** | **02 51 49.9** | **-3.4** |
| | 0.3nm,0.3s,baz=124,slow=12 | | | | | | | | |
| KK31 | | | | ⇑Pg | | **Pb** | **02 52 07.1** | **+0.5** |
| | 0.6nm,0.4s | | | | | | | | |
| KK31 | | | | ⇑Sn | | **Sn** | **02 52 54.2** | **+0.5** |
| | 0.5nm,0.3s | | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 02 53 16.7 | | |
| | 3.2nm,0.8s,baz=133,slow=26 | | | | | | | | |

*BJI* ***17*** *02:51:09.9≈0.0,5˜61S×153˜00E,h10km,mb5.0/36, mB5.2/10,Ms7 4.5/2*
*IDC* ***17*** *02:51:09.6≈0.5,5˜76S×152˜69E,h0km,mb4.6/20, mbtmp4.6/21,ML3.1/2,MS3.7/19,Error ellipse: s-maj=19.8km s-min=13.6km az=98.0*
*MOS* ***17*** *02:51:10.7±1.0,5˜74S×152˜65E,h11km,mb5.1/25,Error ellipse: s-maj=10.9km s-min=7.8km az=85.6*
*NEIC* ***17*** *02:51:12.8±1.2,5˜78S±0˜03×152˜7E±0˜1,h10km±1km, mb5.1/182,Error ellipse: s-maj=18.8km s-min=4.4km az=94.0*
*DJA* ***17*** *02:51:14.4±1.0,6˜S±9˜×15˜3E±1˜0,h10km,M5.0/11, mB5.5/6,mb4.8/11,MLv5.2/1,Mw(mB)5.0/6*
**ISC 17 02:51:12.0**±0.4,**5˜84S**±0˜05×**152˜72E**±0˜07,**h10**km,**n555,** σ1**§23**/500,**mb5.1**/143,**MS3.8**/20,**9C-9D,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I40PG** | **Keravat** | **1.68** | **335** | Pg | Pn | 02 51 35.0 | -6.5 |
| | baz=167,slow=24 | | | | | | |
| **RABL** | **Rabaul** | **1.73** | **341** | | **Pn** | **02 51 42.4** | **+0.3** |
| **PMG** | **Port Moresby** | **6.55** | **237** | P | **Pn** | **02 52 50.4** | **+1.9** |
| **PMG** | **Port Moresby** | **6.55** | **237** | Pn | **Pn** | **02 52 49.7** | **+1.2** |
| **PMG** | **Port Moresby** | **6.55** | **237** | Pn | **Pn** | **02 52 49.5** | **+1.0** |
| | 47nm,0.3s,baz=58,slow=6.6,SNR=47 | | | | | | |
| PMG | | | | Sn | **Sn** | **02 54 04.7** | **+1.4** |
| | 25nm,0.3s,baz=73,slow=17,SNR=4.3 | | | | | | |
| | 144nm,0.4s | | | | | | |
| **PMG** | **Port Moresby** | **6.55** | **237** | *c i*P | **Pn** | **02 52 50.2** | **+1.7** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,177nm,0.8s | | | | | | |
| **COEN** | **Coen** | **12.38** | **229** | Pn | **Pn** | **02 54 07.9** | **-0.5** |
| **COEN** | **Coen** | **12.38** | **229** | P | **Pn** | **02 54 08.0** | **-0.5** |
| | comp=Z,688nmcomp=Z,11nm,1.2s | | | | | | |
| **MMPI** | **Merauke** | **12.52** | **257** | P | **Pn** | **02 54 12.9** | **+2.7** |
| **PATS** | **Pohnpei** | **13.77** | **24** | Pn | **Pn** | **02 54 27.5** | **+0.1** |
| **CTA** | **Charters Tower** | **15.50** | **203** | Pn | **Pn** | **02 54 51.5** | **+0.7** |
| | baz=21,slow=17,SNR=1.5 | | | | | | |
| CTA | | | | LR | LR | 03 00 17.1 | |
| | comp=Z,15nm,20.6s,baz=16,slow=35 | | | | | | |
| **CTAO** | **Charters Tower** | **15.50** | **203** | | **Pn** | **02 54 52.5** | **+1.8** |
| **CTAO** | **Charters Tower** | **15.50** | **203** | P | **Pn** | **02 54 52.6** | **+1.8** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,27nm,1.9s | | | | | | |
| **QIS** | **Mount Isa** | **19.39** | **220** | P | **Pn** | **02 55 39.9** | **+0.5** |
| **QIS** | **Mount Isa** | **19.39** | **220** | P | **P** | **02 55 39.4** | **+1.1** |
| | comp=Z,670nmcomp=Z,31nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **19.49** | **184** | P | **P** | **02 55 40.4** | **+1.1** |
| **EIDS** | **Eidsvold** | **19.49** | **184** | P | **Pn** | **02 55 41.4** | **+0.9** |
| | comp=Z,682nmcomp=Z,24nm,1.3s | | | | | | |
| **FAKI** | **Fak Fak** | **20.61** | **277** | P | Pn | 02 55 59.2 | +5.3 |
| **FAKI** | **Fak Fak** | **20.61** | **277** | P | **P** | **02 55 50.5** | **-1.2** |
| **GUMO** | **Guam** | **20.81** | **338** | LR | LR | 03 04 36.4 | |
| | comp=Z,80nm,19.0s,baz=196,slow=39 | | | | | | |
| **NOUC** | **Port Laguerre** | **20.83** | **142** | P | Pn | 02 56 04.7 | +8.3 |
| **DZM** | **Mont Dzumac** | **20.89** | **142** | P | **P** | **02 55 56.6** | **+1.9** |
| **DZM** | **Mont Dzumac** | **20.89** | **142** | P | **P** | **02 55 54.9** | **+0.2** |
| | comp=Z,8.8nm,0.9s,baz=14,slow=8.6,SNR=6.1 | | | | | | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **KDU** | **Kakadu** | **21.10** | **250** | P | **P** | **02 56 01.1** | **+4.2** |
| **KDU** | **Kakadu** | **21.10** | **250** | P | **P** | **02 55 56.9** | **0.0** |
| | comp=Z,132nm,1.1s | | | | | | |
| **QLP** | **Quilpie** | **22.16** | **201** | P | **P** | **02 56 12.4** | **+4.2** |
| **QLP** | **Quilpie** | **22.16** | **201** | P | **P** | **02 56 10.1** | **+1.9** |
| | comp=Z,104nm,1.2s | | | | | | |
| **MTN** | **Manton Dam** | **22.39** | **250** | P | **P** | **02 56 11.1** | **+0.2** |
| **MTN** | **Manton Dam** | **22.39** | **250** | P | **P** | **02 56 11.2** | **+0.4** |
| | comp=Z,125nm,0.6s | | | | | | |
| **DRS** | **Darwin Rock St** | **22.50** | **252** | P | **P** | **02 56 16.4** | **+4.4** |
| **WB0** | **Warramunga Arr** | **22.57** | **230** | P | **P** | **02 56 12.5** | **-0.1** |
| **WR0** | **Warramunga Arr** | **22.57** | **230** | P | **P** | **02 56 12.9** | **+0.3** |
| **WRAB** | **Tennant Creek** | **22.70** | **230** | *c i*P | **P** | **02 56 15.0** | **+1.0** |
| **WB2** | **Warramunga Arr** | **22.70** | **230** | P | **P** | **02 56 13.3** | **-0.7** |
| **WRA** | **Warramunga Arr** | **22.71** | **230** | P | **P** | **02 56 12.7** | **-1.5** |
| **WRA** | **Warramunga Arr** | **22.71** | **230** | P | **P** | **02 56 13.7** | **-0.5** |
| | comp=Z,5.4nm,0.6s,baz=54,slow=10,SNR=86 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 00 06.4** | **-0.2** |
| | comp=Z,1.1nm,0.3s,baz=11,slow=5.1,SNR=0.7 | | | | | | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.71** | **230** | *c e*P | **P** | **02 56 12.1** | **-2.1** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **INKA** | **Innaminka** | **24.58** | **206** | P | **P** | **02 56 37.3** | **+5.0** |
| **AS31** | **Alice Springs** | **25.34** | **224** | P | **P** | **02 56 37.9** | **-1.4** |
| **AS31** | **Alice Springs** | **25.34** | **224** | P | **P** | **02 56 40.1** | **+0.8** |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **25.34** | **224** | P | **P** | **02 56 39.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **25.34** | **224** | P | **P** | **02 56 37.7** | **-1.6** |
| | comp=Z,7.2nm,0.8s,baz=60,slow=8.6,SNR=41 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 00 12.2** | **0.0** |
| | comp=Z,0.5nm,0.5s,baz=79,slow=3.5,SNR=2.6 | | | | | | |
| ASAR | | | | LR | LR | 03 07 00.8 | |
| | comp=Z,140nm,18.6s,baz=58,slow=38 | | | | | | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **25.46** | **246** | P | **P** | **02 56 40.7** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 02 57 01.1 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **25.46** | **246** | P | **P** | **02 56 41.0** | **+0.6** |
| | comp=Z,59nm,0.7s | | | | | | |
| **NLAI** | **Namlea** | **25.67** | **275** | P | **P** | **02 56 44.0** | **+1.7** |
| | comp=Z,31nm,1.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.40** | **194** | P | **P** | **02 56 54.1** | **+5.3** |
| **CMSA** | **Cobar Meteorol** | **26.40** | **194** | P | **P** | **02 56 51.7** | **+2.9** |
| | comp=Z,19nm,1.4s | | | | | | |
| **OOD** | **Oodnadatta** | **27.18** | **215** | P | **P** | **02 57 01.3** | **+5.5** |
| **STKA** | **Stephens Creek** | **27.92** | **201** | P | **P** | **02 57 01.6** | **-0.8** |
| **STKA** | **Stephens Creek** | **27.92** | **201** | P | **P** | **02 57 05.6** | **+3.1** |
| | comp=Z,2.9nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **27.92** | **201** | P | **P** | **02 57 00.3** | **-2.1** |
| | comp=Z,1.4nm,0.7s,baz=311,slow=14,SNR=2.0 | | | | | | |
| STKA | | | | LR | LR | 03 09 34.6 | |
| | comp=Z,214nm,18.1s,baz=23,slow=40 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **27.92** | **201** | P | **P** | **02 57 01.6** | **-0.8** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **LCRK** | **Leigh Creek** | **28.03** | **207** | P | P | 02 57 08.3 | +4.9 |
| **FITZ** | **Fitzroy Crossi** | **29.10** | **243** | P | **P** | **02 57 12.6** | **-0.6** |
| **DAV** | **Davao City (W)** | **29.96** | **295** | LR | LR | 03 09 26.0 | |
| | comp=Z,207nm,18.0s,baz=166,slow=37 | | | | | | |
| **EDFI** | **Ende, Flores** | **30.91** | **263** | P | **P** | **02 57 27.4** | **-1.9** |
| | comp=Z,27nm,1.2s,comp=Z,588nm | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **32.05** | **268** | P | **P** | **02 57 42.3** | **+3.0** |
| **KAPI** | **Kappang** | **32.83** | **270** | LR | LR | 03 12 58.6 | |
| | comp=Z,67nm,19.4s,baz=90,slow=40 | | | | | | |
| **FORT** | **Forrest** | **33.94** | **220** | P | **P** | **02 57 55.1** | **-0.5** |
| **URZ** | **Urewera** | **39.14** | **149** | LR | LR | 03 12 21.2 | |
| | comp=Z,92nm,20.8s,baz=28,slow=32 | | | | | | |
| **RPZ** | **Rata Peaks** | **41.03** | **160** | LR | LR | 03 15 39.3 | |
| | comp=Z,245nm,19.2s,baz=318,slow=36 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.61** | **226** | LR | LR | 03 16 56.6 | |
| | comp=Z,150nm,19.6s,baz=90,slow=36 | | | | | | |
| **JNU** | **Nakatsue** | **43.94** | **333** | P | **P** | **02 59 17.0** | **-2.3** |
| | comp=Z,10nm,0.8s,baz=73,slow=6.8,SNR=5.4 | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.29** | **343** | P | **P** | **02 59 18.8** | **-3.3** |
| | comp=Z,3.4nm,0.9s,baz=170,slow=8.2,SNR=5.6 | | | | | | |
| MJAR | | | | LR | LR | 03 16 36.7 | |
| | comp=Z,61nm,18.2s,baz=164,slow=34 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.20** | **341** | P | **P** | **03 00 28.0** | **-2.4** |
| | comp=Z,2.0nm,0.8s,baz=168,slow=5.6,SNR=3.5 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MDJ** | **Mudanjiang** | **54.36** | **340** | P | **P** | **03 00 38.5** | **-0.4** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,11nm,1.5s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,230nm,5.0s | | | | | | |
| **CN2** | **Changchun** | **55.21** | **336** | P | **P** | **03 00 41.9** | **-3.1** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **BNX** | **BinXian** | **56.10** | **339** | ⇑P | **P** | **03 00 50.8** | **-0.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **57.31** | **317** | ⇑P | **P** | **03 00 59.9** | **-0.5** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| **KLR** | **Kul'dur** | **57.81** | **344** | *e*P | **P** | **03 01 02.6** | **-0.9** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.25** | **296** | P | **P** | **03 01 05.5** | **-1.6** |
| | comp=Z,1.6nm,0.3s,baz=111,slow=5.4,SNR=7.7 | | | | | | |
| | comp=Z,1.6nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.25** | **296** | *c e*P | **P** | **03 01 09.0** | **+1.9** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **58.87** | **4** | *c i*P | **P** | **03 01 10.7** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **58.87** | **4** | P | **P** | **03 01 09.0** | **-1.8** |
| | comp=Z,7.4nm,0.7s,baz=170,slow=6.8,SNR=10 | | | | | | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **58.90** | **306** | P | **P** | **03 01 14.6** | **+2.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.3s | | | | | | |
| **XLT** | **XiLinHaoTe** | **59.52** | **330** | *e*P | **P** | **03 01 15.0** | **-0.6** |
| XLT | | | | pP | sP | 03 01 20.4 | +3.6 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **59.84** | **325** | *e*P | **P** | **03 01 21.3** | **+3.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,4.3s | | | | | | |
| **BTO** | **Baotou** | **60.58** | **324** | *e*P | **P** | **03 01 26.0** | **+3.0** |
| BTO | | | | pP | **pwP** | **03 01 29.6** | **-4.1** |
| BTO | | | | S | **S** | **03 09 45.8** | **+6.6** |
| BTO | | | | SS | **SS** | **03 13 36.9** | **-0.9** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,230nm,8.7s | | | | | | |
| **TNCH** | **TengChong** | **60.96** | **303** | P | **P** | **03 01 23.3** | **-2.7** |
| TNCH | | | | sP | sP | 03 01 31.1 | +4.0 |
| TNCH | | | | S | **S** | **03 09 43.6** | **-1.2** |
| TNCH | | | | sS | sS | 03 09 50.4 | +4.4 |
| TNCH | | | | SS | **SS** | **03 13 44.8** | **+0.4** |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,150nm,4.0s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,54nm,4.9s | | | | | | |
| **MA2** | **Magadan** | **65.22** | **359** | P | **P** | **03 01 52.0** | **-1.4** |
| MA2 | | | | IAmb | IAmb | 03 01 54.1 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **65.22** | **359** | ⇓*i*P | **P** | **03 01 52.2** | **-1.2** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **65.22** | **359** | P | **P** | **03 01 53.2** | **-0.2** |
| | comp=Z,26nm,0.9s | | | | | | |
| **SHL** | **Shillong** | **66.76** | **301** | P | **P** | **03 02 03.2** | **-1.0** |
| SHL | | | | IAmb | IAmb | 03 02 07.3 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **66.76** | **301** | P | **P** | **03 02 03.2** | **-1.0** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **66.83** | **328** | ⇓*i*P | **P** | **03 02 04.8** | **+0.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **NIKH** | **Nikolski High** | **66.99** | **24** | P | **P** | **03 02 04.9** | **0.0** |
| | baz=222 | | | | | | |
| **SONM** | **Songino Array** | **67.15** | **328** | P | **P** | **03 02 06.0** | **-0.2** |
| **SONM** | **Songino Array** | **67.15** | **328** | P | **P** | **03 02 05.7** | **-0.6** |
| | comp=Z,3.0nm,0.5s,baz=141,slow=4.8,SNR=19 | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **67.15** | **328** | P | **P** | **03 02 06.0** | **-0.2** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| **SEY** | **Seymchan** | **68.58** | **360** | ⇓*i*P | **P** | **03 02 14.7** | **0.0** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **UNV** | **Unalaska Valle** | **68.59** | **25** | P | **P** | **03 02 14.4** | **-0.5** |
| | baz=224 | | | | | | |
| **YAK** | **Yakutsk** | **69.97** | **349** | LR | LR | 03 34 54.5 | |
| | comp=Z,24nm,18.8s,baz=170,slow=38 | | | | | | |
| **ZAK** | **Zakamensk** | **70.33** | **329** | *e*P | **P** | **03 02 24.8** | **-1.1** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **FALS** | **False Pass** | **70.59** | **25** | P | **P** | **03 02 26.9** | **-0.3** |
| | baz=227 | | | | | | |
| **S12K** | **Black Hills** | **71.73** | **25** | P | **P** | **03 02 34.0** | **-0.2** |
| | baz=228 | | | | | | |
| **SDPT** | **Sand Point** | **72.18** | **26** | P | **P** | **03 02 36.5** | **-0.3** |
| | baz=230 | | | | | | |
| **CHNA** | **Chernabura Isl** | **72.24** | **27** | P | **P** | **03 02 37.3** | **+0.1** |
| | baz=231 | | | | | | |
| **PALK** | **Pallekele** | **73.02** | **279** | LR | LR | 03 38 54.0 | |
| | comp=Z,34nm,18.1s,baz=289,slow=39 | | | | | | |
| **BILL** | **Bilibino** | **74.32** | **5** | *de*P | **P** | **03 02 50.0** | **+0.7** |
| BILL | | | | *e* | | 03 03 04.2 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,40nm,18.0s | | | | | | |
| **GAMB** | **Gambell** | **74.40** | **16** | P | **P** | **03 02 49.6** | **-0.1** |
| | baz=217 | | | | | | |
| **O14K** | **Tigyukauivet M** | **74.44** | **23** | P | **P** | **03 02 50.9** | **+0.8** |
| | baz=228 | | | | | | |
| **M13K** | **Dall Lake** | **74.46** | **21** | P | **P** | **03 02 51.5** | **+1.3** |
| | baz=226 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **74.73** | **22** | P | **P** | **03 02 52.3** | **+0.6** |
| | baz=228 | | | | | | |
| **O15K** | **Ungalikthiuk R** | **74.94** | **23** | P | **P** | **03 02 53.6** | **+0.6** |
| | baz=229 | | | | | | |
| **K13K** | **Kusilvak Mount** | **75.09** | **19** | P | **P** | **03 02 54.2** | **+0.3** |
| | baz=224 | | | | | | |
| **M14K** | **Bethel** | **75.19** | **21** | P | **P** | **03 02 55.2** | **+0.8** |
| M14K | | | | IAmb | IAmb | 03 02 56.0 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **M14K** | **Bethel** | **75.19** | **21** | P | **P** | **03 02 55.4** | **+1.0** |
| | baz=227 | | | | | | |
| **L14K** | **Kuka Creek** | **75.35** | **20** | P | **P** | **03 02 55.2** | **-0.1** |
| L14K | | | | IAmb | IAmb | 03 02 57.5 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **L14K** | **Kuka Creek** | **75.35** | **20** | P | **P** | **03 02 56.2** | **+0.9** |
| | baz=226,SNR=8.8 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **75.39** | **26** | P | **P** | **03 02 56.1** | **+0.4** |
| | baz=233,SNR=8.6 | | | | | | |
| **PLK4** | **Peulik 4** | **75.39** | **26** | P | **P** | **03 02 56.2** | **+0.4** |
| PLK4 | | | | IAmb | IAmb | 03 02 57.2 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **N15K** | **Kwethluk River** | **75.49** | **22** | P | **P** | **03 02 57.1** | **+0.9** |
| | baz=229 | | | | | | |
| **P16K** | **Nushagak River** | **75.58** | **24** | P | **P** | **03 02 57.5** | **+0.8** |
| | baz=231 | | | | | | |
| **M15K** | **Kasigluk River** | **75.62** | **22** | P | **P** | **03 02 57.3** | **+0.4** |
| | baz=228 | | | | | | |
| **SII** | **Sitkinak Islan** | **75.72** | **27** | P | **P** | **03 02 58.1** | **+0.5** |
| | baz=235 | | | | | | |
| **O16K** | **Kokwok River B** | **75.89** | **23** | P | **P** | **03 02 58.8** | **+0.3** |
| | baz=231 | | | | | | |
| **Q17K** | **Contact Creek** | **75.97** | **25** | P | **P** | **03 02 59.0** | **-0.1** |
| | baz=233,SNR=16 | | | | | | |
| **L15K** | **Ungalak Mounta** | **76.00** | **21** | P | **P** | **03 02 59.7** | **+0.7** |
| | baz=227 | | | | | | |
| **J14K** | **Nanvaranak Lak** | **76.04** | **19** | P | **P** | **03 03 00.5** | **+1.3** |
| J14K | | | | IAmb | IAmb | 03 03 01.9 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **J14K** | **Nanvaranak Lak** | **76.04** | **19** | P | **P** | **03 03 00.6** | **+1.3** |
| | baz=225 | | | | | | |
| **ACHA** | **Angle Creek He** | **76.18** | **25** | P | **P** | **03 03 00.5** | **+0.2** |
| **R18K** | **Karluk** | **76.18** | **26** | P | **P** | **03 03 01.2** | **+1.1** |
| | baz=235 | | | | | | |
| **N16K** | **Nishlik Lake** | **76.19** | **22** | P | **P** | **03 03 01.6** | **+1.4** |
| | baz=230,SNR=5.5 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **76.40** | **20** | P | **P** | **03 03 02.2** | **+0.8** |
| K15K | | | | IAmb | IAmb | 03 03 03.2 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **76.40** | **20** | P | **P** | **03 03 02.6** | **+1.3** |
| | baz=227 | | | | | | |
| **O17K** | **Koliganek Bris** | **76.40** | **24** | P | **P** | **03 03 02.7** | **+1.4** |
| | baz=232 | | | | | | |
| **WMQ** | **Urumqi** | **76.45** | **318** | *e*P | **P** | **03 03 04.4** | **+2.3** |
| **M16K** | **Timber Creek** | **76.47** | **22** | P | **P** | **03 03 02.9** | **+1.1** |
| M16K | | | | IAmb | IAmb | 03 03 04.1 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **M16K** | **Timber Creek** | **76.47** | **22** | P | **P** | **03 03 02.9** | **+1.1** |
| | baz=230 | | | | | | |
| **OHAK** | **Old Harbor** | **76.50** | **27** | P | **P** | **03 03 02.8** | **+0.8** |
| **OHAK** | **Old Harbor** | **76.50** | **27** | P | **P** | **03 03 02.4** | **+0.4** |
| | baz=236 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **76.58** | **25** | P | **P** | **03 03 02.4** | **-0.1** |
| | baz=234,SNR=10 | | | | | | |
| **L16K** | **Owhat River** | **76.73** | **21** | P | **P** | **03 03 04.1** | **+0.8** |
| L16K | | | | IAmb | IAmb | 03 03 05.2 | |
| | comp=Z,40nm,1.9s | | | | | | |
| **L16K** | **Owhat River** | **76.73** | **21** | P | **P** | **03 03 03.9** | **+0.7** |
| | baz=229 | | | | | | |
| **HYB** | **Hyderabad** | **76.75** | **289** | *e*P | **P** | **03 03 03.8** | **-0.6** |
| **TNA** | **Tin City** | **76.81** | **16** | P | **P** | **03 03 05.3** | **+1.7** |
| | baz=220 | | | | | | |
| **N17K** | **Nushagak Hills** | **76.83** | **23** | P | **P** | **03 03 05.0** | **+1.2** |
| | baz=232 | | | | | | |
| **P18K** | **Big Mountain,** | **76.92** | **24** | P | **P** | **03 03 04.8** | **+0.3** |
| P18K | | | | IAmb | IAmb | 03 03 05.1 | |
| | comp=Z,39nm,2.0s | | | | | | |
| **P18K** | **Big Mountain,** | **76.92** | **24** | P | **P** | **03 03 05.2** | **+0.8** |
| | baz=234 | | | | | | |
| **KDAK** | **Kodiak Island** | **77.13** | **27** | P | **P** | **03 03 05.2** | **-0.4** |
| **KDAK** | **Kodiak Island** | **77.13** | **27** | P | **P** | **03 03 06.1** | **+0.5** |
| | baz=236 | | | | | | |
| **KDAK** | **Kodiak Island** | **77.13** | **27** | P | **P** | **03 03 05.2** | **-0.4** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **O18K** | **Koktuh Hills** | **77.21** | **24** | P | **P** | **03 03 06.7** | **+0.7** |
| | baz=234 | | | | | | |
| **M17K** | **Holitna River** | **77.28** | **22** | P | **P** | **03 03 07.0** | **+0.6** |
| **M17K** | **Holitna River** | **77.28** | **22** | P | **P** | **03 03 07.9** | **+1.6** |
| | baz=231,SNR=5.3 | | | | | | |
| **Q19K** | **Cape Douglas,** | **77.32** | **25** | P | **P** | **03 03 06.3** | **-0.4** |
| **J16K** | **Anvik River** | **77.39** | **20** | P | **P** | **03 03 07.4** | **+0.5** |
| J16K | | | | IAmb | IAmb | 03 03 10.5 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **J16K** | **Anvik River** | **77.39** | **20** | P | **P** | **03 03 08.

comp=Z,35nm,1.5s
**M19K Big River Lodg** 78.74 23 P P 03 03 15.8 +1.3
baz=234,SNR=12
**J18K Innoko River** 78.84 21 P P 03 03 15.5 +0.6
baz=232
**DGZ Jazzator, Alta** 78.86 323 *d iP* P 03 03 15.4 -0.2
DGZ pmax pmax
comp=Z,11nm,0.7s
**G17K Kiwalik Mounta** 78.87 18 P P 03 03 16.4 +1.4
baz=228,SNR=6.7
**TIXI Tiksi** 78.91 352 *ij iP* P 03 03 16.1 +1.0
TIXI pmax pmax
comp=Z,10.0nm,0.9s
**BRSE Bradley Lake S** 79.01 25 P P 03 03 16.5 +0.5
baz=238
**M20K Styx River** 79.22 23 P P 03 03 17.1 -0.1
**M20K Styx River** 79.22 23 P P 03 03 18.0 +0.8
baz=235
**L20K Farewell, AK** 79.28 22 P P 03 03 18.6 +1.2
baz=234,SNR=11
**J19K Poorman** 79.55 21 P P 03 03 20.0 +1.2
J19K IAmb IAmb 03 03 21.4
comp=Z,35nm,1.4s
**J19K Poorman** 79.55 21 P P 03 03 20.1 +1.2
baz=233,SNR=14
**E17K Hotham Inlet** 79.61 16 P P 03 03 20.5 +1.4
baz=226
**ZSN Zaisan** 79.61 320 *eP* P 03 03 19.6 0.0
comp=Z,5.6nm,0.6s,baz=320
**ZSN Zaisan** 79.61 320 *eP* P 03 03 19.6 0.0
ZSN pmax pmax
comp=Z,6.0nm,0.6s
**D17K Noatak River** 79.70 16 P P 03 03 20.9 +1.3
baz=225
**K20K Telida** 79.72 22 P P 03 03 20.9 +1.1
K20K IAmb IAmb 03 03 22.2
comp=Z,34nm,1.4s
**K20K Telida** 79.72 22 P P 03 03 21.2 +1.4
baz=234,SNR=12
**G18K Tagagawik** 79.75 18 P P 03 03 20.7 +0.8
G18K IAmb IAmb 03 03 21.8
comp=Z,19nm,1.1s
**G18K Tagagawik** 79.75 18 P P 03 03 20.5 +0.6
baz=229
**SEW Seward** 79.75 26 P P 03 03 20.3 +0.3
baz=239
**O22K Cooper Landing** 79.83 25 P P 03 03 21.2 +0.8
**F18K Selawik** 79.91 17 P P 03 03 21.1 +0.4
baz=228
**SUA Susitna One** 79.93 24 P 03 03 21.5 +0.4
**SUA Susitna One** 79.93 24 P P 03 03 20.9 -0.3
baz=238
**RDOG Red Dog Mine** 80.00 15 P P 03 03 21.6 +0.4
RDOG IAmb IAmb 03 03 23.5
comp=Z,24nm,0.8s
**RDOG Red Dog Mine** 80.00 15 P P 03 03 22.3 +1.1
baz=225
**RC01 Rabbit Creek A** 80.15 25 P 03 03 22.7 +0.6
RC01 IAmb IAmb 03 03 23.5
comp=Z,17nm,1.0s
**RC01 Rabbit Creek A** 80.15 25 P P 03 03 22.5 +0.4
baz=238,SNR=9.2
**J20K Nowinta River** 80.18 21 P P 03 03 23.3 +1.1
**J20K Nowinta River** 80.18 21 P P 03 03 23.5 +1.3
baz=234,SNR=16
**E18K Tukpahlearik C** 80.19 17 P P 03 03 23.3 +1.0
**E18K Tukpahlearik C** 80.19 17 P P 03 03 23.6 +1.3
baz=227
**H19K Roundabout Mou** 80.22 19 P P 03 03 23.5 +1.1
H19K IAmb IAmb 03 03 24.1
comp=Z,14nm,0.8s
**H19K Roundabout Mou** 80.22 19 P P 03 03 23.7 +1.3
baz=232,SNR=11
**C17K DeLong Mountai** 80.23 15 P P 03 03 23.7 +1.3
baz=225
**M22K Willow** 80.34 24 P P 03 03 22.8 -0.3
**M22K Willow** 80.34 24 P P 03 03 24.0 +0.9
baz=238
**G19K Purcell Mounta** 80.40 18 P P 03 03 23.3 -0.1
G19K IAmb IAmb 03 03 25.8
comp=Z,26nm,1.1s
**G19K Purcell Mounta** 80.40 18 P P 03 03 24.6 +1.2
baz=231,SNR=9.5
**I20K Naaghedeneel** 80.43 20 P P 03 03 24.2 +0.7
**I20K Naaghedeneel** 80.43 20 P P 03 03 25.0 +1.4
baz=234
**P23K Montague Islan** 80.59 26 P P 03 03 25.2 +0.7
baz=241
**PWL Port Wells** 80.61 25 P P 03 03 24.1 -0.6
**PWL Port Wells** 80.61 25 P P 03 03 25.2 +0.5
baz=240,SNR=12
**CUT Chulitna** 80.63 23 P P 03 03 25.2 +0.5
baz=238
**F19K Shaleruckik Mo** 80.63 18 P P 03 03 25.2 +0.6
F19K IAmb IAmb 03 03 26.4
comp=Z,12nm,0.8s
**F19K Shaleruckik Mo** 80.63 18 P P 03 03 25.4 +0.8
baz=230,SNR=13
**PMR Palmer** 80.66 24 P P 03 03 25.2 +0.4
**PMR Palmer** 80.66 24 P P 03 03 25.0 +0.2
baz=239,SNR=6.8
**PMR Palmer** 80.66 24 P P 03 03 25.2 +0.4
PMR pmax pmax
comp=Z,16nm,1.1s
**H20K Anotleneega Mo** 80.71 20 P P 03 03 26.1 +0.9
baz=233,SNR=6.9
**GHO Glory Hole Cre** 80.83 24 P P 03 03 25.9 0.0
GHO IAmb IAmb 03 03 36.2
comp=Z,16nm,1.0s
**KNK Knik Glacier** 80.84 25 P P 03 03 26.4 +0.5
KNK IAmb IAmb 03 03 27.7
comp=Z,22nm,1.2s
**KNK Knik Glacier** 80.84 25 P P 03 03 26.5 +0.6
baz=240
**C18K Utukok River** 80.87 15 P P 03 03 26.7 +0.7
baz=227
**MK31 Makanchi Array** 81.05 319 P P 03 03 27.5 +0.2
**MK31 Makanchi Array** 81.05 319 *d iP* P 03 03 27.3 0.0
**MKAR Makanchi Array** 81.05 319 P P 03 03 27.4 +0.1
**MKAR Makanchi Array** 81.05 319 P P 03 03 26.7 -0.6
comp=Z,8.4nm,0.8s,baz=105,slow=5.8,SNR=29
comp=Z,8.4nm,0.8s
**MKAR Makanchi Array** 81.05 319 P P 03 03 27.4 +0.1
**SML Sawmill** 81.09 24 P P 03 03 27.8 +0.6
**SML Sawmill** 81.09 24 P P 03 03 27.7 +0.4
baz=240,SNR=12
**GLI Glacier Island** 81.15 25 P P 03 03 28.0 +0.5
baz=241
**E19K Redstone River** 81.19 17 P P 03 03 28.4 +0.8
**E19K Redstone River** 81.19 17 P P 03 03 29.0 +1.4
baz=231,SNR=14
**B18K Kokolik River** 81.21 15 P P 03 03 28.1 +0.5
baz=226
**MAKZ Makanchi** 81.26 319 P P 03 03 28.4 -0.1
MAKZ IAmb IAmb 03 03 29.6
comp=Z,17nm,0.9s
**MAKZ Makanchi** 81.26 319 P P 03 03 28.4 -0.1
MAKZ pmax pmax
comp=Z,17nm,1.0s
**BPAW Bear Paw Mtn.** 81.27 22 P P 03 03 28.0 -0.1
BPAW IAmb IAmb 03 03 29.1
comp=Z,27nm,1.5s
**BPAW Bear Paw Mtn.** 81.27 22 P P 03 03 27.6 -0.5
baz=237,SNR=8.2
**M23K Glacier View** 81.34 24 P P 03 03 28.9 +0.4
baz=240
**IMAR Indian Mountai** 81.38 19 P P 03 03 29.1 +0.5
**F20K Avaraart Lake** 81.39 18 P P 03 03 29.1 +0.5
**F20K Avaraart Lake** 81.39 18 P P 03 03 30.0 +1.4
baz=232
**H21K Melozitna Rive** 81.51 20 P P 03 03 29.8 +0.5
H21K IAmb IAmb 03 03 31.5
comp=Z,26nm,1.5s
**H21K Melozitna Rive** 81.51 20 P P 03 03 30.2 +0.8
baz=235,SNR=7.1
**SCM Sheep Creek Mo** 81.52 25 P P 03 03 29.8 +0.2
SCM IAmb IAmb 03 03 31.4
comp=Z,18nm,1.0s
**SCM Sheep Creek Mo** 81.52 25 P P 03 03 30.2 +0.6
baz=241,SNR=5.7
**SCM Sheep Creek Mo** 81.52 25 P P 03 03 29.8 +0.2
SCM pmax pmax
comp=Z,18nm,1.0s
**WAT1 Susitna Watana** 81.53 23 P P 03 03 29.6 +0.1
baz=239
**EYAK Cordova Ski Ar** 81.57 26 P P 03 03 30.4 +0.7
baz=242
**D19K Kuna River** 81.61 16 IAmb IAmb 03 03 31.7
comp=Z,17nm,0.8s
**D19K Kuna River** 81.61 16 P P 03 03 30.8 +1.0
baz=230
**C19K Lookout Ridge** 81.61 16 P P 03 03 30.5 +0.7
C19K IAmb IAmb 03 03 34.2
comp=Z,25nm,0.9s
**C19K Lookout Ridge** 81.61 16 P P 03 03 30.9 +1.0
baz=228
**RND Reindeer** 81.71 23 P P 03 03 30.5 0.0
RND IAmb IAmb 03 03 31.3
comp=Z,16nm,0.8s
**RND Reindeer** 81.71 23 P P 03 03 30.5 0.0
RND pmax pmax
comp=Z,16nm,0.8s
**WAT6 Susitna Watana** 81.72 24 P P 03 03 31.1 +0.4
baz=240,SNR=6.6
**G21K Allakaket** 81.78 19 P P 03 03 31.1 +0.3
**G21K Allakaket** 81.78 19 P P 03 03 31.7 +0.9
baz=234,SNR=6.7
**MCK McKinley** 81.85 22 P P 03 03 30.9 -0.2
baz=239,SNR=13
**MLY Manley** 81.87 21 P P 03 03 31.7 +0.4
**MLY Manley** 81.87 21 P P 03 03 31.8 +0.4
baz=237,SNR=16
**BWN Browne** 81.88 22 P P 03 03 31.4 +0.1
BWN IAmb IAmb 03 03 33.3
comp=Z,29nm,1.0s
**SHLS Shalkode** 81.90 315 *eP* P 03 03 30.3 -1.8
comp=Z,5.3nm,0.9s,baz=315
**SHLS Shalkode** 81.90 315 *eP* P 03 03 30.3 -1.8
SHLS pmax pmax
comp=Z,5.0nm,0.9s
**KLU Klutina** 81.94 25 P P 03 03 31.9 0.0
**KLU Klutina** 81.94 25 P P 03 03 32.6 +0.8
baz=242,SNR=13
**ZAA0 Zalesovo Array** 81.97 326 P P 03 03 31.0 -0.9
**ZALV Zalesovo Beam** 81.97 326 P P 03 03 30.9 -1.1
**ZALV Zalesovo Beam** 81.97 326 P P 03 03 31.0 -0.9
comp=Z,5.7nm,0.5s,baz=108,slow=5.7,SNR=24
comp=Z,5.7nm,0.5s
**E20K Nigu River** 82.01 17 P P 03 03 33.0 +1.0
baz=232,SNR=11
**DHY Denali Highway** 82.12 23 P P 03 03 32.5 -0.3
DHY IAmb IAmb 03 03 34.3
comp=Z,14nm,1.0s
**DHY Denali Highway** 82.12 23 P P 03 03 33.0 +0.2
baz=240,SNR=12
**H22K Ishtalitna Cre** 82.13 20 P P 03 03 33.1 +0.5
baz=236,SNR=7.9
**M24K Tolsona, Glenn** 82.13 25 P P 03 03 33.3 +0.6
M24K IAmb IAmb 03 03 35.0
comp=Z,19nm,0.9s
**M24K Tolsona, Glenn** 82.13 25 P P 03 03 33.7 +0.9
baz=242
**D20K Etivluk River** 82.17 17 P P 03 03 33.5 +0.7
baz=231
**F21K Alatna River** 82.20 18 P P 03 03 33.8 +0.8
**F21K Alatna River** 82.20 18 P P 03 03 33.7 +0.7
baz=234,SNR=5.4
**UZB Uzynbulak** 82.21 315 *eP* P 03 03 33.8 0.0
comp=Z,4.4nm,0.7s,baz=315
**UZB Uzynbulak** 82.21 315 *eP* P 03 03 33.7 0.0
UZB pmax pmax
comp=Z,4.0nm,0.7s
**NEA2 Nenana** 82.24 22 P P 03 03 33.3 +0.1
NEA2 IAmb IAmb 03 03 33.9
comp=Z,16nm,0.9s
**NEA2 Nenana** 82.24 22 P P 03 03 32.8 -0.5
baz=239,SNR=5.2
**BMRM Bremner River** 82.27 26 P P 03 03 34.0 +0.5
baz=243
**I23K Minto, Yukon-K** 82.43 21 P P 03 03 34.7 +0.6
**I23K Minto, Yukon-K** 82.43 21 P P 03 03 34.4 +0.3
baz=238,SNR=6.7
**KPKS Kokpek** 82.53 315 *eP* P 03 03 35.4 +0.1
baz=315
**KPKS Kokpek** 82.53 315 *eP* P 03 03 35.4 +0.1
**WRH Wood River Hil** 82.55 22 P P 03 03 35.1 +0.3
**N25K Chitina, Valde** 82.56 25 P P 03 03 35.5 +0.5
N25K IAmb IAmb 03 03 37.2
comp=Z,26nm,1.4s
**N25K Chitina, Valde** 82.56 25 P P 03 03 35.9 +0.9
baz=243,SNR=7.2
**G22K Bettles** 82.66 19 P P 03 03 36.1 +0.8
baz=236,SNR=7.8
**HARP HAARP** 82.69 25 P P 03 03 35.7 +0.1
baz=242
**H23K Yukon River** 82.72 21 P P 03 03 36.2 +0.5
**H23K Yukon River** 82.72 21 P P 03 03 36.5 +0.8
baz=238,SNR=8.3
**CCB Clear Creek Bu** 82.74 22 P P 03 03 35.2 -0.6
**MDM Murphy Dome** 82.74 22 P P 03 03 36.1 +0.3
MDM IAmb IAmb 03 03 36.5
comp=Z,20nm,1.4s
**E21K Killik River** 82.77 17 P P 03 03 36.7 +0.8
baz=234
**F22K John River** 82.78 19 P P 03 03 36.9 +0.9
baz=235
**CRQM Cirque** 82.82 26 P P 03 03 36.9 +0.4
**GLB Gilahina Butte** 82.82 26 P P 03 03 36.8 +0.4
GLB IAmb IAmb 03 03 38.2
comp=Z,20nm,1.0s
**PAX Paxson** 82.83 24 P P 03 03 36.8 +0.3
baz=242
**CRQE Cirque** 82.83 26 P P 03 03 37.3 +0.7
baz=245,SNR=7.0
**COLA College** 82.84 22 P P 03 03 35.9 -0.3
**COLA College** 82.84 22 P P 03 03 36.4 +0.2
baz=240
**COLA College** 82.84 22 *d iP* P 03 03 35.6 -0.7
COLA pmax pmax
comp=Z,24nm,0.9s
**B20K Meade River** 82.85 15 P P 03 03 37.1 +0.9
baz=230
**VRDI Verde Repeater** 82.88 26 P P 03 03 37.1 +0.3
VRDI IAmb IAmb 03 03 38.7
comp=Z,19nm,1.0s
**HDA Harding Lake** 82.94 22 P P 03 03 36.2 -0.6
HDA IAmb IAmb 03 03 37.8
comp=Z,8.7nm,0.5s
**HDA Harding Lake** 82.94 22 P P 03 03 36.5 -0.3
baz=241,SNR=7.1
**TGL Tana Glacier** 82.95 27 P P 03 03 37.9 +0.8
TGL IAmb IAmb 03 03 39.1
comp=Z,14nm,1.0s
**C21K Knifeblade Rid** 82.97 17 P P 03 03 37.7 +0.8
baz=233
**G23K Bananza Creek** 83.03 20 P P 03 03 37.3 -0.1
G23K IAmb IAmb 03 03 39.4
comp=Z,16nm,1.1s
**G23K Bananza Creek** 83.03 20 P P 03 03 38.3 +1.0
baz=238,SNR=10
**K24K Donnelly Dome** 83.10 23 P P 03 03 38.2 +0.5
baz=242
**MESA MESA** 83.11 27 P P 03 03 37.8 -0.2
baz=246
**POKR Poker Plat Res** 83.11 22 P P 03 03 36.4 -1.4
POKR IAmb IAmb 03 03 38.1
comp=Z,18nm,1.4s
**POKR Poker Plat Res** 83.11 22 P P 03 03 36.7 -1.0
baz=240,SNR=8.1
**MCARA McCarthy VSAT** 83.14 26 P P 03 03 37.8 -0.2
MCARA IAmb IAmb 03 03 40.0
comp=Z,18nm,0.9s
**MCARA McCarthy VSAT** 83.14 26 P P 03 03 37.1 -0.9
baz=245
**IL31** 83.14 22 P P 03 03 37.1 -0.7
IL31 IAmb IAmb 03 03 38.1
comp=Z,10nm,0.8s
**ILAR Eielson Array** 83.14 22 P P 03 03 37.3 -0.6
**ILAR Eielson Array** 83.14 22 P P 03 03 37.1 -0.8
comp=Z,7.9nm,0.7s,baz=248,slow=5.3,SNR=70
ILAR LR LR 03 42 09.4
comp=Z,23nm,18.1s,baz=284,slow=37
comp=Z,7.9nm,0.7s
**ILAR Eielson Array** 83.14 22 P P 03 03 37.3 -0.6
**E22K Anaktuvuk Pass** 83.25 18 IAmb IAmb 03 03 40.6
comp=Z,16nm,0.9s
**E22K Anaktuvuk Pass** 83.25 18 P P 03 03 39.2 +0.8
baz=236
**COLD Coldfoot** 83.26 19 P P 03 03 39.5 +1.1
baz=237
**B21K Ikpikpuk River** 83.30 16 P P 03 03 39.1 +0.6
baz=233
**H24K Noodor Dome** 83.32 21 P P 03 03 39.1 +0.3
baz=240,SNR=6.3
**ARXS Arharly** 83.32 316 *eP* P 03 03 38.3 -1.1
**D22K Ayikyak River** 83.41 17 P P 03 03 40.6 +1.4
baz=235,SNR=5.6
**MENT Mentasta** 83.53 24 IAmb IAmb 03 03 44.8
comp=Z,8.3nm,0.8s
**KSH Kashi** 83.55 311 P P 03 03 42.9 +2.2
KSH pmax pmax
comp=Z,11nm,1.2s
**TABL Table Mountain** 83.58 27 IAmb IAmb 03 03 46.0
comp=Z,16nm,0.9s
**M26K Nabesna, AK** 83.59 25 P P 03 03 40.7 +0.4
baz=244
**MDOK Medeo** 83.61 314 *eP* P 03 03 40.7 -0.3
baz=314
**MDOK Medeo** 83.61 314 *eP* P 03 03 40.7 -0.3
**J25K Salcha River,** 83.64 22 P P 03 03 40.5 0.0
baz=242,SNR=40
**CTG Chitna Glacier** 83.70 27 P P 03 03 41.8 +0.8
baz=246,SNR=8.1
**AAA Alma-Ata** 83.72 315 *eP* P 03 03 41.0 -0.5
baz=314
**AAA Alma-Ata** 83.72 315 *eP* P 03 03 40.9 -0.5
**L26K Log Cabin Wild** 83.72 24 IAmb IAmb 03 03 42.8
comp=Z,12nm,1.0s
**L26K Log Cabin Wild** 83.72 24 P P 03 03 41.7 +0.8
baz=244
**LOGN Logan Glacier** 83.80 27 IAmb IAmb 03 03 47.1
comp=Z,12nm,1.1s
**CHKK Chushkaly** 83.82 315 *eP* P 03 03 41.4 -0.5
baz=315
**CHKK Chushkaly** 83.82 315 *eP* P 03 03 41.4 -0.5
**PINM Pinnacle** 83.85 28 P P 03 03 42.3 +0.6
baz=247
**SCRK Sand Creek** 83.88 23 IAmb IAmb 03 03 42.9
comp=Z,7.4nm,0.7s
**SCRK Sand Creek** 83.88 23 P P 03 03 42.2 +0.3
baz=243,SNR=9.3
**E23K Chandalar** 83.89 19 IAmb IAmb 03 03 44.1
comp=Z,22nm,1.1s
**E23K Chandalar** 83.89 19 P P 03 03 42.9 +1.1
baz=238,SNR=11
**G24K Hadweenzic Riv** 83.89 20 P P 03 03 42.4 +0.7
G24K IAmb IAmb 03 03 43.2
comp=Z,9.8nm,0.8s
**G24K Hadweenzic Riv** 83.89 20 P P 03 03 41.9 +0.2
baz=240
**ULHL Ulahol** 83.97 313 P P 03 03 43.6 +0.7
SNR=5.0
**M27K Edge Creek, AK** 84.04 25 P P 03 03 44.2 +1.4
baz=246,SNR=32
**B22K Teshekpuk Lake** 84.06 16 P P 03 03 44.0 +1.6
baz=234
**D23K Nanushuk River** 84.06 18 P P 03 03 44.5 +2.0
baz=237,SNR=22
**PNL Peninsula** 84.08 28 P P 03 03 43.9 +1.1
baz=248,SNR=6.0
**QSPA South Pole Qui** 84.13 180 P P 03 03 42.7 -0.4
**QSPA South Pole Qui** 84.13 180 P P 03 03 42.9 -0.2
comp=Z,2.5nm,0.9s,baz=282,slow=1.6,SNR=14
comp=Z,2.5nm,0.9s
**O28M Mount Upton** 84.14 27 P P 03 03 44.6 +1.2
baz=247,SNR=8.8
**F24K Squaw Lake** 84.17 19 P P 03 03 44.5 +1.3
baz=239,SNR=14
**TOLK Toolik Lake Re** 84.22 18 P P 03 03 44.3 +0.9
baz=238,SNR=8.9
**H25L Birch Creek** 84.26 21 P P 03 03 44.4 +0.8
baz=242
**E24K Your Creek** 84.26 19 P P 03 03 44.5 +0.8
baz=239
**J26L Joseph Creek** 84.28 23 P P 03 03 44.5 +0.7
baz=244,SNR=5.7
**KUU Kurty** 84.28 315 *eP* P 03 03 43.9 -0.3
baz=315
**KUU Kurty** 84.28 315 *eP* P 03 03 43.9 -0.3
**L27K Beaver Creek,** 84.36 25 IAmb IAmb 03 03 46.4
comp=Z,23nm,1.4s
**L27K Beaver Creek,** 84.36 25 P P 03 03 45.1 +0.9
baz=246,SNR=12
**BCAR Beaver Creek A** 84.38 25 P P 03 03 44.9 +0.6
**G25K Bearman Lake** 84.40 20 P P 03 03 45.2 +1.0
baz=241
**YUK3 Moose Creek** 84.42 26 P P 03 03 45.9 +1.2
baz=247
**NIL Nilore** 84.49 305 P P 03 03 45.2 -0.3
**NIL Nilore** 84.49 305 P P 03 03 45.2 -0.3
NIL pmax pmax
comp=Z,26nm,0.8s
**KURK Kurchatov** 84.53 322 P P 03 03 45.1 -0.2
**KURK Kurchatov** 84.53 322 P P 03 03 45.1 -0.2
KURK pmax pmax
comp=Z,27nm,1.2s
**YUK8 Steele Glacier** 84.53 27 P P 03 03 46.7 +1.3
baz=248,SNR=5.8
**C23K Itkillik River** 84.56 17 P P 03 03 46.0 +1.0
baz=237,SNR=6.0
**KURBB Kurchatov Arra** 84.56 322 P P 03 03 44.7 -0.8
comp=Z,8.1nm,0.9s,baz=109,slow=4.2,SNR=48
comp=Z,8.1nm,0.9s
**TKM2 Tokmak 2** 84.59 314 P P 03 03 46.5 +0.4
SNR=12
**K27K Chicken** 84.66 24 P P 03 03 47.2 +1.6
baz=245
**O29M Mount Kennedy** 84.70 28 IAmb IAmb 03 03 48.7
comp=Z,9.3nm,0.9s
**O29M Mount Kennedy** 84.70 28 P P 03 03 47.5 +1.4
baz=249
**D24K Happy Valley** 84.72 18 P P 03 03 47.2 +1.3
baz=238,SNR=7.1
**I26K Coal Creek Min** 84.80 22 IAmb IAmb 03 03 47.9
comp=Z,17nm,1.4s
**I26K Coal Creek Min** 84.80 22 P P 03 03 46.4 +0.1
baz=244
**P29M Windy Craggy** 84.86 29 IAmb IAmb 03 03 53.5
comp=Z,13nm,1.1s
**P29M Windy Craggy** 84.86 29 P P 03 03 47.6 +0.8
baz=249
**F25K Christian Rive** 84.96 20 P P 03 03 47.9 +0.8
baz=242
**KBK Karagaybulak** 84.99 314 P P 03 03 48.7 +0.7
SNR=5.2
**S31K Pelican** 85.02 30 P P 03 03 48.7 +1.2
baz=251
**YUK6 Outpost Mounta** 85.04 27 P P 03 03 49.1 +1.2
baz=249
**YUK4 Talbot Arm** 85.06 27 P P 03 03 49.7 +1.7
baz=249
**C24K Franklin Bluff** 85.06 17 P P 03 03 48.7 +1.2
baz=238
**SIT Sitka** 85.20 31 P P 03 03 49.8 +1.3
baz=252
**CHMS Chumysh** 85.21 314 P P 03 03 49.8 +0.8
SNR=8.4
**BMAR Burnt Mountain** 85.24 20 P P 03 03 49.7 +1.1
**G26K Porcupine Rive** 85.30 21 P P 03 03 50.3 +1.5
baz=243,SNR=19
**AAK Ala-Archa** 85.32 314 P P 03 03 50.8 +1.1
SNR=7.4
**AAK Ala-Archa** 85.32 314 P P 03 03 49.6 -0.1
**AAK Ala-Archa** 85.32 314 P P 03 03 49.1 -0.6
comp=Z,12nm,0.8s,baz=110,slow=4.1,SNR=15
comp=Z,12nm,0.8s
**AAK Ala-Archa** 85.32 314 *d iP* P 03 03 50.1 +0.4
AAK pmax pmax
comp=Z,22nm,0.9s
**EGAK Eagle** 85.34 23 IAmb IAmb 03 03 51.1
comp=Z,12nm,0.8s
**EGAK Eagle** 85.34 23 P P 03 03 49.8 +0.8
baz=246,SNR=16
**P30M Million Dollar** 85.39 28 P P 03 03 51.1 +1.6
baz=250
**USP Ospenovka** 85.45 314 P P 03 03 50.5 +0.4
SNR=19
**PLBC Pleasant Camp** 85.45 29 P P 03 03 50.8 +1.1
baz=251
**I27K Kandik River** 85.50 22 P P 03 03 50.8 +0.9
baz=246,SNR=12
**F26K Sheenjek River** 85.51 20 IAmb IAmb 03 03 52.6
comp=Z,16nm,1.1s
**F26K Sheenjek River** 85.51 20 P P 03 03 51.3 +1.3
baz=243,SNR=11
**M29M Somme Creek** 85.54 26 IAmb IAmb 03 03 53.4
comp=Z,9.9nm,0.8s
**M29M Somme Creek** 85.54 26 P P 03 03 51.5 +1.2
baz=249,SNR=14
**D25K Kavik River** 85.56 18 IAmb IAmb 03 03 51.9
comp=Z,17nm,1.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **D25K** | **Kavik River** | **85.56** | **18** | P | **P** | **03 03 50.5 +0.4** |
| | baz=241 | | | | | |
| **H02S1** | **DAWSON INLET T** | **85.63** | **36** | T | T | 04 37 28.6 |
| | SNR=7.3 | | | | | |
| **S32K** | **Killisnoo** | **85.71** | **31** | P | **P** | **03 03 52.2 +1.2** |
| | baz=252,SNR=5.3 | | | | | |
| **DAWY** | **Dawson** | **85.76** | **24** | IAmb | IAmb | 03 03 53.8 |
| | comp=Z,25nm,1.4s | | | | | |
| **DAWY** | **Dawson** | **85.76** | **24** | P | **P** | **03 03 52.5 +1.3** |
| | baz=248,SNR=13 | | | | | |
| **AML** | **Almayashu** | **85.79** | **313** | P | **P** | **03 03 56.0 +3.7** |
| | SNR=9.1 | | | | | |
| **N30M** | **Aishikik Lake** | **85.80** | **27** | P | **P** | **03 03 52.8 +1.3** |
| | baz=250 | | | | | |
| **H27K** | **Steamboat Moun** | **85.80** | **22** | P | **P** | **03 03 52.6 +1.2** |
| | baz=246 | | | | | |
| **EKS2** | **Erkin-Say** | **85.84** | **313** | P | **P** | **03 03 53.5 +1.3** |
| | SNR=20 | | | | | |
| **SKAG** | **Skagway** | **85.95** | **29** | P | **P** | **03 03 53.6 +1.4** |
| | baz=252 | | | | | |
| **R32K** | **Eaglecrest** | **85.99** | **30** | IAmb | IAmb | 03 03 55.0 |
| | comp=Z,14nm,1.3s | | | | | |
| **R32K** | **Eaglecrest** | **85.99** | **30** | P | **P** | **03 03 53.5 +1.1** |
| | baz=252 | | | | | |
| **G27K** | **Doyon Strip** | **86.00** | **21** | IAmb | IAmb | 03 03 54.7 |
| | comp=Z,17nm,1.4s | | | | | |
| **G27K** | **Doyon Strip** | **86.00** | **21** | P | **P** | **03 03 53.8 +1.5** |
| | baz=245,SNR=13 | | | | | |
| **O30N** | **Mendenhall** | **86.02** | **28** | IAmb | IAmb | 03 03 55.1 |
| | comp=Z,20nm,1.2s | | | | | |
| **O30N** | **Mendenhall** | **86.02** | **28** | P | **P** | **03 03 53.6 +1.1** |
| | baz=251,SNR=6.4 | | | | | |
| **U33K** | **Whale Pass** | **86.08** | **33** | P | **P** | **03 03 54.0 +1.2** |
| | baz=254 | | | | | |
| **I28M** | **Miner Creek** | **86.08** | **23** | IAmb | IAmb | 03 03 54.3 |
| | comp=Z,6.3nm,0.6s | | | | | |
| **I28M** | **Miner Creek** | **86.08** | **23** | P | **P** | **03 03 53.6 +0.7** |
| | baz=247,SNR=9.6 | | | | | |
| **BTLS** | **Baital** | **86.14** | **316** | *e*P | **P** | **03 03 53.2 -0.3** |
| | comp=Z,5.2nm,0.8s,baz=316 | | | | | |
| **BTLS** | **Baital** | **86.14** | **316** | *e*P | **P** | **03 03 53.2 -0.3** |
| BTLS | | | | pmax | pmax | |
| | comp=Z,5.0nm,0.8s | | | | | |
| **J29N** | **Klondike Camp** | **86.38** | **24** | IAmb | IAmb | 03 03 57.8 |
| | comp=Z,16nm,0.9s | | | | | |
| **J29N** | **Klondike Camp** | **86.38** | **24** | P | **P** | **03 03 56.0 +1.7** |
| | baz=249 | | | | | |
| **N31M** | **Braeburn, Yuko** | **86.40** | **27** | P | **P** | **03 03 55.8 +1.4** |
| | baz=251,SNR=12 | | | | | |
| **K29M** | **Barlow Dome** | **86.45** | **25** | P | **P** | **03 03 56.2 +1.5** |
| | baz=249,SNR=21 | | | | | |
| **WHY** | **Whitehorse** | **86.55** | **28** | IAmb | IAmb | 03 03 57.6 |
| | comp=Z,10nm,0.9s | | | | | |
| **WHY** | **Whitehorse** | **86.55** | **28** | P | **P** | **03 03 56.5 +1.2** |
| | baz=252,SNR=6.8 | | | | | |
| **WRAK** | **Wrangell Islan** | **86.58** | **33** | P | **P** | **03 03 56.9 +1.6** |
| | baz=254 | | | | | |
| **E27K** | **Coleen River** | **86.59** | **20** | P | **P** | **03 03 56.9 +1.6** |
| | baz=245,SNR=18 | | | | | |
| **I29M** | **Ogilvie Camp,** | **86.68** | **23** | P | **P** | **03 03 56.4 +0.7** |
| | baz=248,SNR=17 | | | | | |
| **V35K** | **Ketchikan** | **86.68** | **34** | IAmb | IAmb | 03 03 58.8 |
| | comp=Z,23nm,1.1s | | | | | |
| **V35K** | **Ketchikan** | **86.68** | **34** | P | **P** | **03 03 57.2 +1.3** |
| | baz=255,SNR=5.1 | | | | | |
| **P32M** | **Atlin** | **86.78** | **29** | P | **P** | **03 03 57.5 +1.1** |
| | baz=253 | | | | | |
| **F28M** | **Old Crow** | **86.96** | **21** | P | **P** | **03 03 58.3 +1.2** |
| | baz=247,SNR=5.8 | | | | | |
| **H29M** | **Whitestone** | **86.97** | **22** | P | **P** | **03 03 58.3 +1.2** |
| | baz=248 | | | | | |
| **J30M** | **Hart River** | **87.19** | **24** | P | **P** | **03 03 59.6 +1.2** |
| | baz=250,SNR=23 | | | | | |
| **D27M** | **Malcolm River** | **87.24** | **19** | P | **P** | **03 03 60.0 +1.5** |
| | baz=246 | | | | | |
| **M31M** | **Drury Creek, Y** | **87.25** | **27** | IAmb | IAmb | 03 04 00.5 |
| | comp=Z,13nm,0.9s | | | | | |
| **M31M** | **Drury Creek, Y** | **87.25** | **27** | P | **P** | **03 03 59.2 +0.6** |
| | baz=252,SNR=12 | | | | | |
| **Q32M** | **Nakina River** | **87.31** | **30** | IAmb | IAmb | 03 04 01.9 |
| | comp=Z,13nm,1.2s | | | | | |
| **Q32M** | **Nakina River** | **87.31** | **30** | P | **P** | **03 04 00.1 +1.0** |
| | baz=254 | | | | | |
| **G29M** | **Pine Creek** | **87.36** | **22** | P | **P** | **03 03 59.9 +1.0** |
| | baz=249,SNR=10 | | | | | |
| **I30M** | **Mount Dempster** | **87.39** | **23** | IAmb | IAmb | 03 04 01.3 |
| | comp=Z,21nm,1.1s | | | | | |
| **I30M** | **Mount Dempster** | **87.39** | **23** | P | **P** | **03 03 60.0 +0.7** |
| | baz=250,SNR=16 | | | | | |
| **P33M** | **Teslin, Yukon** | **87.39** | **29** | IAmb | IAmb | 03 04 01.4 |
| | comp=Z,12nm,1.2s | | | | | |
| **P33M** | **Teslin, Yukon** | **87.39** | **29** | P | **P** | **03 04 00.0 +0.7** |
| | baz=254 | | | | | |
| **E28M** | **Babbage River** | **87.46** | **20** | P | **P** | **03 04 00.4 +1.0** |
| | baz=247,SNR=5.1 | | | | | |
| **N32M** | **Quiet Lake** | **87.53** | **28** | P | **P** | **03 04 01.0 +1.0** |
| | baz=253 | | | | | |
| **S34M** | **Telegraph Cree** | **87.61** | **31** | P | **P** | **03 04 01.9 +1.6** |
| | baz=255,SNR=8.3 | | | | | |
| **EPYK** | **Eagle Plains** | **87.65** | **22** | P | **P** | **03 04 01.3 +0.8** |
| | baz=250,SNR=17 | | | | | |
| **FARO** | **Faro, Yukon** | **87.72** | **27** | IAmb | IAmb | 03 04 02.9 |
| | comp=Z,16nm,1.0s | | | | | |
| **FARO** | **Faro, Yukon** | **87.72** | **27** | P | **P** | **03 04 01.7 +0.9** |
| | baz=253,SNR=18 | | | | | |
| **T35M** | **Bob Quinn** | **87.84** | **32** | IAmb | IAmb | 03 04 04.3 |
| | comp=Z,8.9nm,1.0s | | | | | |
| **T35M** | **Bob Quinn** | **87.84** | **32** | P | **P** | **03 04 02.8 +1.3** |
| | baz=256 | | | | | |
| **E29M** | **Blow River** | **87.94** | **20** | P | **P** | **03 04 01.9 +0.1** |
| | baz=249 | | | | | |
| **BBB** | **Bella Bella** | **87.97** | **37** | LR | LR | 03 43 59.8 |
| | comp=Z,35nm,18.6s,baz=204,slow=36 | | | | | |
| **D28M** | **Stokes Point** | **88.01** | **19** | P | **P** | **03 04 02.9 +0.9** |
| | baz=248,SNR=6.0 | | | | | |
| **G30M** | **tAoh Zraii Nji** | **88.05** | **22** | P | **P** | **03 04 02.8 +0.5** |
| | baz=250 | | | | | |
| **R33M** | **Jennings River** | **88.07** | **30** | IAmb | IAmb | 03 04 05.5 |
| | comp=Z,12nm,1.0s | | | | | |
| **R33M** | **Jennings River** | **88.07** | **30** | P | **P** | **03 04 04.3 +1.6** |
| | baz=255,SNR=13 | | | | | |
| **DLBC** | **Dease Lake** | **88.31** | **31** | IAmb | IAmb | 03 04 06.5 |
| | comp=Z,16nm,1.2s | | | | | |
| **DLBC** | **Dease Lake** | **88.31** | **31** | LR | LR | 03 39 59.6 |
| | comp=Z,86nm,18.7s,baz=242,slow=33 | | | | | |
| **DLBC** | **Dease Lake** | **88.31** | **31** | P | **P** | **03 04 05.1 +1.3** |
| | baz=256,SNR=12 | | | | | |
| **F30M** | **Barrier River** | **88.42** | **21** | P | **P** | **03 04 04.7 +0.7** |
| | baz=251,SNR=8.0 | | | | | |
| **G31M** | **Satah River** | **88.75** | **22** | IAmb | IAmb | 03 04 07.3 |
| | comp=Z,16nm,0.9s | | | | | |
| **G31M** | **Satah River** | **88.75** | **22** | P | **P** | **03 04 06.2 +0.7** |
| | baz=252 | | | | | |
| **BRLS** | **Borolday** | **88.76** | **313** | *e*P | **P** | **03 04 05.9 -0.3** |
| | baz=313 | | | | | |
| **BRLS** | **Borolday** | **88.76** | **313** | *e*P | **P** | **03 04 05.8 -0.4** |
| **MMPY** | **Sheldon Lake,** | **88.77** | **27** | IAmb | IAmb | 03 04 08.3 |
| | comp=Z,22nm,1.4s | | | | | |
| **MMPY** | **Sheldon Lake,** | **88.77** | **27** | P | **P** | **03 04 07.3 +1.5** |
| | baz=255,SNR=9.8 | | | | | |
| **WTLY** | **Watson Lake, Y** | **89.31** | **29** | P | **P** | **03 04 09.8 +1.4** |
| | baz=257 | | | | | |
| **INK** | **Inuvik** | **89.44** | **21** | IAmb | IAmb | 03 04 10.2 |
| | comp=Z,8.2nm,0.9s | | | | | |
| **INK** | **Inuvik** | **89.44** | **21** | P | **P** | **03 04 09.2 +0.4** |
| | baz=253 | | | | | |
| **YBH** | **Yreka Blue Hor** | **89.80** | **48** | LR | LR | 03 40 57.9 |
| | comp=Z,50nm,18.4s,baz=273,slow=33 | | | | | |
| **TGTN** | **Hyland Airport** | **89.87** | **28** | P | **P** | **03 04 11.2 +0.2** |
| | baz=258 | | | | | |
| **BVAR** | **Borovoye Array** | **90.02** | **323** | P | **P** | **03 04 10.9 -0.9** |
| | comp=Z,9.9nm,0.7s,baz=102,slow=5.9,SNR=35 | | | | | |
| | comp=Z,9.9nm,0.7s | | | | | |
| **BRVK** | **Borovoye** | **90.09** | **323** | P | **P** | **03 04 11.9 -0.2** |
| **BRVK** | **Borovoye** | **90.09** | **323** | *e*P | **P** | **03 04 11.6 -0.5** |
| BRVK | | | | pmax | pmax | |
| | comp=Z,8.0nm,1.0s | | | | | |
| **LIRD** | **Liard River Hi** | **90.50** | **30** | P | **P** | **03 04 14.7 +0.8** |
| | baz=260 | | | | | |
| **TOAD** | **Toad River Com** | **90.85** | **31** | P | **P** | **03 04 16.4 +0.8** |
| | baz=260 | | | | | |
| **J05D** | **Fort Rock, OR** | **91.08** | **47** | P | **P** | **03 04 17.8 +0.6** |
| J05D | | | | IAmb | IAmb | 03 04 20.4 |
| | comp=Z,14nm,1.2s | | | | | |
| **WRGLY** | **Wrigley** | **92.38** | **27** | P | **P** | **03 04 23.6 +1.0** |
| | baz=262 | | | | | |
| **LHV** | **Little Huntoon** | **92.61** | **52** | IAmb | IAmb | 03 04 28.0 |
| | comp=Z,6.8nm,1.0s | | | | | |
| **NVAR** | **Mina Array Bea** | **92.79** | **52** | P | **P** | **03 04 25.6 +0.3** |
| **NVAR** | **Mina Array Bea** | **92.79** | **52** | P | **P** | **03 04 25.5 +0.1** |
| | comp=Z,5.2nm,1.0s,baz=256,slow=6.5,SNR=20 | | | | | |
| | comp=Z,5.2nm,1.0s | | | | | |
| **NV11** | **Mina Array Sit** | **92.90** | **52** | IAmb | IAmb | 03 04 29.1 |
| | comp=Z,7.5nm,1.2s | | | | | |
| **G08A** | **Pilot Rock** | **92.92** | **45** | P | **P** | **03 04 25.9 +0.2** |
| **DSP** | **Deep Springs** | **92.95** | **53** | P | **P** | **03 04 26.0 +0.2** |
| **E09A** | **Wood Farm, Sta** | **93.59** | **44** | IAmb | IAmb | 03 04 30.6 |
| | comp=Z,6.6nm,0.8s | | | | | |
| **MONP2** | **Monument Peak** | **93.85** | **57** | P | **P** | **03 04 31.4 +1.0** |
| | baz=266 | | | | | |
| **PFO** | **Pinyon Flats O** | **93.88** | **57** | LR | LR | 03 39 42.6 |
| | comp=Z,44nm,19.6s,baz=249,slow=31 | | | | | |
| **PFO** | **Pinyon Flats O** | **93.88** | **57** | P | **P** | **03 04 31.4 +1.1** |
| | baz=266 | | | | | |
| **TPFO** | **Pinon Flats** | **93.88** | **57** | P | **P** | **03 04 31.6 +1.3** |
| | baz=266 | | | | | |
| **WCT** | **Wildcat Mounta** | **93.98** | **54** | IAmb | IAmb | 03 04 34.1 |
| | comp=Z,14nm,1.6s | | | | | |
| **TPNV** | **Topopah Spring** | **94.29** | **53** | P | **P** | **03 04 33.3 +1.1** |
| | baz=266 | | | | | |
| **NEW** | **Newport** | **94.42** | **42** | P | **P** | **03 04 33.5 +1.1** |
| | baz=266 | | | | | |
| **R11B** | **Troy Canyon, C** | **94.91** | **52** | P | **P** | **03 04 36.3 +1.3** |
| | baz=266 | | | | | |
| **SPR3** | **Spring Creek 3** | **95.92** | **51** | IAmb | IAmb | 03 04 43.1 |
| | comp=Z,5.9nm,1.1s | | | | | |
| **HLID** | **Hailey** | **96.06** | **47** | P | **P** | **03 04 41.1 +1.0** |
| | baz=268 | | | | | |
| **ABKAR** | **Akbulak array** | **96.19** | **319** | P | **P** | **03 04 38.4 -2.0** |
| **ABKAR** | **Akbulak array** | **96.19** | **319** | IAmb | IAmb | 03 04 39.6 |
| | comp=Z,1.7nm,0.8s | | | | | |
| **YKA** | **Yellowknife Ar** | **96.38** | **28** | P | **P** | **03 04 39.6 -1.3** |
| | comp=Z,0.9nm,0.9s,baz=265,slow=4.3,SNR=3.3 | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | |
| **ARU** | **Arti** | **97.13** | **326** | LR | LR | 03 50 29.9 |
| | comp=Z,49nm,19.5s,baz=284,slow=37 | | | | | |
| **BOZ** | **Bozeman (W)** | **98.09** | **45** | P | Pdif | 03 04 50.4 +1.1 |
| | baz=270 | | | | | |
| **LPIG** | **La Paz** | **98.71** | **67** | LR | LR | 03 45 36.4 |
| | comp=Z,33nm,18.2s,baz=202,slow=33 | | | | | |
| **EGMT** | **Eagleton** | **99.34** | **42** | P | **Pdif** | **03 04 55.4 +0.6** |
| | baz=272 | | | | | |
| **BW06** | **Boulder Array** | **99.60** | **48** | P | **Pdif** | **03 04 57.2 +1.0** |
| | baz=271 | | | | | |
| **PDAR** | **Pinedale Array** | **99.60** | **48** | P | **Pdif** | **03 04 55.7 -0.5** |
| **PDAR** | **Pinedale Array** | **99.60** | **48** | P | **Pdif** | **03 04 53.9 -2.3** |
| | comp=Z,1.0nm,0.8s,baz=264,slow=3.0,SNR=6.4 | | | | | |
| PDAR | | | | LR | LR | 03 48 48.5 |
| | comp=Z,20nm,18.1s,baz=257,slow=35 | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | |
| **RLMT** | **Red Lodge** | **99.76** | **45** | P | **Pdif** | **03 04 57.9 +1.1** |
| | baz=272 | | | | | |
| **LAO** | **LASA Array** | **101.81** | **44** | P | **Pdif** | **03 05 07.6 +1.9** |
| | baz=274 | | | | | |
| **T25A** | **Trinidad** | **103.76** | **53** | P | **Pdif** | **03 05 15.8 +1.0** |
| | baz=273 | | | | | |
| **OBN** | **Obninsk** | **109.55** | **327** | *i* P | **Pdif** | **03 05 39.9 +0.1** |
| OBN | | | | *e* | | 03 10 13.8 |
| OBN | | | | *e*PPP | PPP | 03 12 34.1 |
| OBN | | | | pmax | pmax | |
| | comp=Z,3.0nm,0.9s | | | | | |
| **MIAR** | **Mount Ida** | **112.78** | **55** | P | **PKiKP** | **03 09 51.1 +1.5** |
| | baz=279 | | | | | |
| **NACGM** | **Naroch** | **114.81** | **329** | *e*Pdif | **Pdif** | **03 05 59.2 -4.0** |
| | comp=Z,131nm,0.8s,baz=63 | | | | | |
| **L44A** | **Lake County Fo** | **115.48** | **46** | P | **PKPdf** | **03 09 56.0 +1.5** |
| | baz=286 | | | | | |
| **NOA** | **NORSAR Array B** | **117.85** | **340** | PKP | **PKPdf** | **03 09 56.5 -2.1** |
| | comp=Z,0.7nm,0.6s,baz=45,slow=1.6,SNR=3.8 | | | | | |
| **PLCA** | **Paso Flores** | **119.00** | **143** | PKP | **PKPdf** | **03 10 00.6 -0.9** |
| | comp=Z,0.7nm,0.8s,baz=299,slow=3.7,SNR=3.8 | | | | | |
| **CLL** | **Collm** | **123.71** | **331** | *e*PKPdf | **PKPdf** | **03 10 10.0 -0.1** |
| **CLL** | **Collm** | **123.71** | **331** | *e*PKIKP | **PKPdf** | **03 10 10.0 -0.1** |
| **KHC** | **Kasperske Hory** | **124.78** | **328** | *c i*PKIKP | **PKPdf** | **03 10 11.8 -0.5** |
| KHC | | | | pmax | pmax | |
| | comp=Z,5.0nm,1.0s | | | | | |
| **GERES** | **GERESS Array B** | **124.89** | **328** | PKP | **PKPdf** | **03 10 10.7 -1.8** |
| | comp=Z,1.0nm,0.8s,baz=48,slow=3.2,SNR=4.8 | | | | | |
| **SOKA** | **Soboth** | **125.44** | **325** | *e*PKP | **PKPdf** | **03 10 13.3 -0.3** |
| | comp=Z,4.4nm,1.2s | | | | | |
| **LESA** | **Schwarzleotal** | **126.30** | **327** | *i* PKP | **PKPdf** | **03 10 15.1 -0.2** |
| | comp=Z,3.0nm,1.2s | | | | | |
| **EKA** | **Eskdalemuir Ar** | **126.99** | **343** | PKP | **PKPdf** | **03 10 16.5 +0.2** |
| | comp=Z,0.9nm,0.4s,baz=7.2,slow=2.3,SNR=10.0 | | | | | |
| **MOTA** | **Moosalm** | **127.19** | **328** | *e*PKP | **PKPdf** | **03 10 17.0 0.0** |
| | comp=Z,3.8nm,0.8s | | | | | |
| **SQTA** | **Sankt Quirin** | **127.21** | **328** | *e*PKP | **PKPdf** | **03 10 16.2 -0.9** |
| | comp=Z,3.0nm,0.9s | | | | | |
| **FETA** | **Feichten** | **127.59** | **328** | *e*PKP | **PKPdf** | **03 10 18.0 +0.1** |
| | comp=Z,3.6nm,1.1s | | | | | |
| **LPAZ** | **La Paz** | **133.99** | **119** | PKP | **PKPdf** | **03 10 32.3 +0.9** |
| | comp=Z,1.3nm,0.7s,baz=338,slow=6.6,SNR=4.9 | | | | | |
| **SAML** | **Samuel** | **141.31** | **112** | PKPdf | **PKPdf** | **03 10 43.5 -0.7** |
| **SAML** | **Samuel** | **141.31** | **112** | PKIKP | **PKPdf** | **03 10 43.5 -0.7** |
| **PTLB** | **Pontes e Lacer** | **142.01** | **124** | PKPdf | **PKPdf** | **03 10 45.0 -0.4** |
| **TAM** | **Tamanrasset** | **144.16** | **301** | | PKPbc | 03 10 47.7 +0.4 |
| **TAM** | **Tamanrasset** | **144.16** | **301** | PKIKP | PKPbc | 03 10 47.7 +0.4 |
| **BDFB** | **Brasilia** | **150.39** | **136** | PKPbc | **PKPbc** | **03 11 03.3 -1.6** |
| | comp=Z,7.7nm,0.9s,baz=181,slow=4.6,SNR=14 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.53** | **286** | | **PKPbc** | **03 11 04.1 -1.1** |
| **TORD** | **Torodi Ar. Bea** | **150.53** | **286** | PKPbc | **PKPbc** | **03 11 03.8 -1.4** |
| | comp=Z,3.8nm,0.7s,baz=78,slow=1.7,SNR=29 | | | | | |

*IDC **17** 02:58:37.4±1.3, 15°.13N×122°.97E, h0km, mb3.8/7, mbtmp3.8/7, Error ellipse: s-maj=56.9km s-min=20.3km az=63.0*
*NEIC **17** 02:58:41.4±1.3, 15°.11N±0°.09×122°.9E±0°.2, h24km±2km, mb4.5/15, Error ellipse: s-maj=24.8km s-min=12.3km az=83.0*

**ISC 17 02:58:41.5±0.7, 15°.12N±0°.09×122°.9E±0°.2, h28km, n29, σ0s74/23, mb4.2/14, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YULB** | **Yu-li** | **8.38** | **350** | Pn | **Pn** | **03 00 41.1** | **-0.1** |
| **SBUM** | **Sibu** | **16.44** | **221** | | **Pn** | **03 02 30.9** | **+0.6** |
| **ENH** | **Enshi** | **19.51** | **323** | P | **P** | **03 03 06.0** | **-0.6** |
| ENH | | | | IAmb | IAmb | 03 03 11.2 | |
| | comp=Z,22nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.21** | **282** | P | **P** | **03 03 46.0** | **-0.4** |
| | comp=Z,2.0nm,0.4s,baz=90,slow=7.9,SNR=7.6 | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **30.00** | **13** | P | **P** | **03 04 48.7** | **+1.0** |
| USA0B | | | | IAmb | IAmb | 03 05 01.1 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **35.39** | **341** | P | **P** | **03 05 33.7** | **-1.2** |
| | comp=Z,0.6nm,0.5s,baz=98,slow=40,SNR=3.4 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **36.45** | **162** | P | **P** | **03 05 43.4** | **-0.7** |
| **WRA** | **Warramunga Arr** | **36.60** | **162** | P | **P** | **03 05 45.9** | **+0.5** |
| **WRA** | **Warramunga Arr** | **36.60** | **162** | P | **P** | **03 05 45.6** | **+0.1** |
| | comp=Z,7.1nm,0.7s,baz=341,slow=9.4,SNR=4.1 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **36.60** | **162** | P | **P** | **03 05 45.0** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 03 05 59.6 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **36.67** | **162** | P | **P** | **03 05 45.5** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 03 05 50.7 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **40.01** | **164** | P | **P** | **03 06 14.1** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=337,slow=6.0,SNR=2.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.94** | **79** | T | T | 03 51 45.5 | |
| | baz=272,slow=74,SNR=54 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.95** | **79** | T | T | 03 51 42.6 | |
| | baz=272,slow=74,SNR=41 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.96** | **79** | T | T | 03 51 46.6 | |
| | baz=272,slow=74,SNR=43 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.10** | **77** | T | T | 03 51 55.5 | |
| | baz=271,slow=75,SNR=23 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.10** | **77** | T | T | 03 51 56.2 | |
| | baz=271,slow=75,SNR=22 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.12** | **77** | T | T | 03 51 56.5 | |
| | baz=271,slow=75,SNR=17 | | | | | | |
| **MORW** | **Morawa** | **44.43** | **189** | P | **P** | **03 06 50.3** | **+0.2** |
| MORW | | | | IAmb | IAmb | 03 06 52.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **46.23** | **322** | P | **P** | **03 07 05.7** | **+1.5** |
| MK31 | | | | IAmb | IAmb | 03 07 22.1 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.23** | **322** | P | **P** | **03 07 05.7** | **+1.5** |
| | comp=Z,1.0nm,0.8s,baz=131,slow=8.5,SNR=3.1 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.84** | **331** | P | **P** | **03 07 24.3** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **48.84** | **331** | P | **P** | **03 07 24.7** | **+0.3** |
| | comp=Z,1.1nm,0.4s,baz=122,slow=7.7,SNR=4.0 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **50.26** | **325** | P | **P** | **03 07 34.5** | **-0.7** |
| KURK | | | | IAmb | IAmb | 03 07 36.8 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.27** | **325** | P | **P** | **03 07 35.4** | **+0.1** |
| | comp=Z,2.1nm,0.7s,baz=121,slow=8.4,SNR=12 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **O14K** | **Tigyukauivet M** | **69.88** | **32** | P | **P** | **03 09 49.2** | **-0.4** |
| **F17K** | **Baldwin Pennin** | **70.58** | **24** | P | **P** | **03 09 54.5** | **+0.7** |
| **N18K** | **Kilae Creek** | **72.63** | **31** | P | **P** | **03 10 06.8** | **+0.5** |
| N18K | | | | IAmb | IAmb | 03 10 16.2 | |
| | comp=Z,3.4nm,1.2s | | | | | | |
| **INZ** | **Inchbonnie** | **72.76** | **145** | P | **P** | **03 10 06.7** | **-0.6** |

**IDC 17 03:01:51.1±2.9, 8°.46S×157°.69E, h0km, mb3.7/3, mbtmp3.6/4, ML2.6/1, MS3.3/1, Error ellipse: s-maj=169.4km s-min=29.8km az=132.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.94** | **149** | LR | LR | 03 10 01.6 | |
| | comp=Z,93nm,18.1s,baz=298,slow=31 | | | | | | |
| **CTA** | **Charters Tower** | **16.00** | **223** | Pn | P | 03 05 39.7 | -1.7 |
| | baz=44,slow=12,SNR=6.2 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **25.31** | **241** | P | P | 03 07 19.5 | -0.2 |
| | 1.0nm,0.5s,baz=70,slow=9.2,SNR=6.5 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **27.33** | **234** | P | P | 03 07 37.8 | -0.3 |
| | 0.8nm,0.8s,baz=61,slow=8.6,SNR=4.2 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.22** | **18** | T | T | 03 36 41.5 | |
| | baz=195,slow=76,SNR=5.5 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.22** | **18** | T | T | 03 36 50.5 | |
| | baz=195,slow=76,SNR=7.4 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.24** | **18** | T | T | 03 36 44.5 | |
| | baz=195,slow=76,SNR=3.0 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.43** | **18** | T | T | 03 38 20.5 | |
| | baz=195,slow=76,SNR=3.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.44** | **18** | T | T | 03 38 21.4 | |
| | baz=195,slow=76,SNR=4.6 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.45** | **18** | T | T | 03 38 24.1 | |
| | baz=195,slow=76,SNR=6.1 | | | | | | |
| **ILAR** | **Eielson Array** | **83.77** | **21** | P | P | 03 14 22.0 | +0.1 |
| | 0.3nm,0.4s,baz=245,slow=5.5,SNR=6.0 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*SSNC **17** 03:03:14.5±1.4, 19°.69N×76°.59W, h4km±7km, MD2.8, ML2.4, MW2.7*
*JSN **17** 03:03:15.5±0.5, 19°.70N×76°.59W, h60km±51km, MD3.7*

**ISC 17 03:03:13.4±1.1, 19°.73N±0°.07×76°.56W±0°.04, h28km±11km, n13, σ0s52/23, 2D, Cuba region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHIV** | **Chivirico** | **0.28** | **30** | *e*P | **Pb** | **03 03 20.5** | **+0.1** |
| CHIV | | | | *e*S | **Sb** | **03 03 25.1** | **0.0** |
| CHIV | | | | IAML | | 03 03 25.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| CHIV | | | | IAML | | 03 03 25.9 | |
| | comp=E,966nm,0.2s | | | | | | |
| **LMGC** | **Las Mercedes** | **0.53** | **309** | *e*P | **Pb** | **03 03 24.1** | **-0.2** |
| LMGC | | | | *e*S | **Sb** | **03 03 31.5** | **-0.1** |
| LMGC | | | | IAML | | 03 03 31.7 | |
| | comp=E,428nm,0.2s | | | | | | |
| LMGC | | | | IAML | | 03 03 31.9 | |
| | comp=N,1μm,0.1s | | | | | | |
| **MARVS** | **Santiago de Cu** | **0.68** | **67** | *e*P | **Pn** | **03 03 27.1** | **0.0** |
| MARVS | | | | *e*S | **Sn** | **03 03 36.7** | **-0.2** |
| MARVS | | | | IAML | | 03 03 39.7 | |
| | comp=N,214nm,0.3s | | | | | | |
| MARVS | | | | IAML | | 03 03 40.0 | |
| | comp=E,169nm,0.3s | | | | | | |
| **RCC** | **Rio Carpintero** | **0.86** | **72** | *e*P | **Pn** | **03 03 29.9** | **+0.3** |
| RCC | | | | *e*S | **Sn** | **03 03 41.9** | **+0.7** |
| RCC | | | | IAML | | 03 03 45.7 | |
| | comp=E,57nm,0.3s | | | | | | |
| RCC | | | | IAML | | 03 03 46.2 | |
| | comp=N,65nm,0.2s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **1.38** | **82** | *i* P | **Pb** | **03 03 38.4** | **-0.2** |
| **GTBY** | **Guantanamo Bay** | **1.38** | **82** | *e*P | **Pb** | **03 03 38.0** | **-0.6** |
| GTBY | | | | *e*S | **Sb** | **03 03 55.8** | **0.0** |
| GTBY | | | | IAML | | 03 04 03.0 | |
| | comp=N,84nm,0.6s | | | | | | |
| GTBY | | | | IAML | | 03 04 03.2 | |
| | comp=N,116nm,0.7s | | | | | | |
| **STH** | **Stony Hill** | **1.66** | **188** | *i* P | **Pn** | **03 03 41.2** | **+0.5** |
| **NMDO** | **Nuevo Mundo** | **1.70** | **61** | *e*P | **Pb** | **03 03 43.2** | **-0.7** |
| NMDO | | | | *e*S | **Sb** | **03 04 04.0** | **-0.9** |
| NMDO | | | | IAML | | 03 04 12.1 | |
| | comp=N,20nm,0.4s | | | | | | |
| NMDO | | | | IAML | | 03 04 17.3 | |
| | comp=E,24nm,0.7s | | | | | | |
| **QMBU** | **Quimbuelo** | **1.71** | **74** | *e*P | **Pn** | **03 03 41.6** | **+0.2** |
| QMBU | | | | *e*S | **Sn** | **03 04 02.2** | **-0.2** |
| QMBU | | | | IAML | | 03 04 09.6 | |
| | comp=E,44nm,0.3s | | | | | | |
| QMBU | | | | IAML | | 03 04 10.2 | |
| | comp=N,47nm,0.3s | | | | | | |
| **MTDJ** | **Mount Denham** | **1.76** | **212** | *i* P | **Pn** | **03 03 42.6** | **+0.4** |
| **MTDJ** | **Mount Denham** | **1.76** | **212** | *e*P | **Pn** | **03 03 42.5** | **+0.3** |
| MTDJ | | | | *e*S | **Sn** | **03 04 03.1** | **-0.6** |
| **MOAC** | **Moa** | **1.77** | **58** | *e*P | **Pb** | **03 03 44.6** | **-0.5** |
| MOAC | | | | *e*S | **Sb** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.14** | **193** | P | | **P** | **03 19 12.3** | **-1.0** | |
| | comp=Z,1.3nm,0.7s,baz=13,slow=8.6,SNR=6.3 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **ASAR** | **Alice Springs** | **47.85** | **192** | P | | **P** | **03 19 40.9** | **-1.6** | |
| **ASAR** | **Alice Springs** | **47.85** | **192** | P | | **P** | **03 19 41.7** | **-0.8** | |
| | comp=Z,0.4nm,0.5s,baz=20,slow=8.9,SNR=2.8 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **S12K** | **Black Hills** | **50.82** | **36** | P | | **P** | **03 20 05.2** | **+0.4** | |
| S12K | | | | IAmb | | IAmb | 03 20 06.2 | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.27** | **321** | P | | **P** | **03 20 22.7** | **-0.4** | |
| | comp=Z,1.4nm,0.5s,baz=105,slow=8.3,SNR=7.0 | | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | | |
| **MK31** | **Makanchi Array** | **54.02** | **312** | P | | **P** | **03 20 29.8** | **+1.0** | |
| MK31 | | | | IAmb | | IAmb | 03 20 48.4 | | |
| | comp=Z,4.8nm,1.2s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.02** | **312** | P | | **P** | **03 20 28.4** | **-0.4** | |
| **MKAR** | **Makanchi Array** | **54.02** | **312** | P | | **P** | **03 20 28.9** | **+0.2** | |
| | comp=Z,0.8nm,0.7s,baz=97,slow=9.9,SNR=3.5 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **STKA** | **Stephens Creek** | **55.07** | **182** | P | | **P** | **03 20 36.1** | **-0.3** | |
| | comp=Z,2.7nm,0.8s,baz=345,slow=16,SNR=3.3 | | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **56.66** | **316** | P | | **P** | **03 20 48.0** | **+0.3** | |
| **KURBB** | **Kurchatov Arra** | **56.71** | **316** | P | | **P** | **03 20 48.5** | **+0.5** | |
| | comp=Z,1.2nm,0.5s,baz=91,slow=7.9,SNR=14 | | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **60.16** | **28** | P | | **P** | **03 21 12.2** | **+0.3** | |
| | comp=Z,0.4nm,0.8s,baz=236,slow=3.8,SNR=4.4 | | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | | |
| **C24K** | **Franklin Bluff** | **60.38** | **22** | P | | **P** | **03 21 14.2** | **+0.9** | |
| **BVAR** | **Borovoye Array** | **61.78** | **319** | P | | **P** | **03 21 24.4** | **+1.3** | |
| | comp=Z,5.8nm,0.6s,baz=94,slow=8.4,SNR=26 | | | | | | | | |
| | comp=Z,5.8nm,0.6s | | | | | | | | |
| **KKAR** | **Karatay Array** | **62.51** | **308** | P | | **P** | **03 21 27.9** | **-0.3** | |
| **E28M** | **Babbage River** | **63.47** | **24** | P | | **P** | **03 21 34.2** | **+0.1** | |
| E28M | | | | IAmb | | IAmb | 03 21 42.2 | | |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| **N32M** | **Quiet Lake** | **66.39** | **32** | P | | **P** | **03 21 51.2** | **-2.0** | |
| **ABKAR** | **Akbulak array** | **68.76** | **316** | P | | **P** | **03 22 09.0** | **+0.6** | |
| ABKAR | | | | IAmb | | IAmb | 03 22 22.8 | | |
| | comp=Z,4.6nm,1.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.76** | **316** | P | | **P** | **03 22 09.1** | **+0.8** | |
| **RPZ** | **Rata Peaks** | **71.34** | **160** | P | | **P** | **03 22 24.7** | **+0.6** | |
| **ARCES** | **ARCESS Array B** | **77.47** | **342** | P | | **P** | **03 23 01.9** | **+2.4** | |
| ARCES | | | | IAmb | | IAmb | 03 23 07.0 | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.47** | **342** | P | | **P** | **03 23 00.8** | **+1.3** | |
| | comp=Z,1.6nm,0.6s,baz=64,slow=6.9,SNR=6.5 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **MCCM** | **Marconi Confer** | **78.28** | **54** | P | | **P** | **03 23 04.6** | **0.0** | |
| **NVAR** | **Mina Array Bea** | **81.52** | **52** | P | | **P** | **03 23 23.4** | **+1.0** | |
| | comp=Z,0.1nm,0.3s,baz=284,slow=4.5,SNR=1.8 | | | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | | | |
| **KBZ** | **Khabaz** | **81.64** | **314** | P | | **P** | **03 23 24.1** | **+1.5** | |
| | comp=Z,2.1nm,0.9s,baz=0.0,slow=0.0,SNR=2.6 | | | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |
| **FINES** | **FINESS Array B** | **81.89** | **335** | P | | **P** | **03 23 23.9** | **+0.3** | |
| | comp=Z,1.2nm,0.6s,baz=106,slow=4.8,SNR=4.9 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| **GMN** | **Gold Mountain** | **82.73** | **53** | P | | **P** | **03 23 26.6** | **-2.2** | |
| GMN | | | | IAmb | | IAmb | 03 23 28.3 | | |
| | comp=Z,4.7nm,1.1s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **89.62** | **314** | P | | **P** | **03 24 01.4** | **-1.2** | |
| | comp=Z,0.4nm,0.6s,baz=91,slow=4.8,SNR=3.2 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **ANMO** | **Albuquerque** | **91.58** | **51** | LR | | LR | 03 57 37.2 | | |
| | comp=Z,19nm,20.0s,baz=355,slow=30 | | | | | | | | |
| **PLCA** | **Paso Flores** | **146.37** | **129** | PKPbc | | **PKPbc** | **03 30 45.0** | **-0.5** | |
| | comp=Z,2.1nm,1.0s,baz=256,slow=8.8,SNR=4.2 | | | | | | | | |
| **LPAZ** | **La Paz** | **149.08** | **83** | PKPbc | | **PKPbc** | **03 30 53.1** | **-1.1** | |
| | comp=Z,0.9nm,0.7s,baz=202,slow=7.6,SNR=4.1 | | | | | | | | |

*IDC **17** 03:16:00.0±1.3, 23°.27N×143°.74E, h0km, mb3.7/8, mbtmp3.7/8, Error ellipse: s-maj=45.5km s-min=22.5km az=81.0*

**ISC 17 03:16:05.0±1.3, 23°.5N±0°.1×143°.6E±0°.3, h31km, n9, σ1s92/10, mb3.8/8, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.85** | **340** | Pn | **Pn** | **03 17 00.2** | **-1.9** |
| JCJ | 4.3nm,0.3s,baz=212,slow=18,SNR=1.9 | | | Sn | **Sn** | **03 17 44.2** | **-2.0** |
| | 7.4nm,0.3s,baz=278,slow=23,SNR=2.5 | | | | | | |
| **SONM** | **Songino Array** | **38.27** | **319** | P | **P** | **03 23 25.4** | **+2.9** |
| | 0.4nm,0.7s,baz=140,slow=11,SNR=1.5 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.09** | **193** | P | **P** | **03 24 08.2** | **-2.2** |
| | 0.2nm,0.4s,baz=16,slow=9.1,SNR=5.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **47.79** | **192** | P | **P** | **03 24 38.4** | **-1.2** |
| | 0.5nm,0.8s,baz=8.2,slow=8.4,SNR=1.6 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.10** | **321** | P | **P** | **03 25 20.2** | **+0.8** |
| | 0.9nm,0.5s,baz=94,slow=5.9,SNR=4.1 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.83** | **312** | P | **P** | **03 25 25.7** | **+0.8** |
| | 1.1nm,0.7s,baz=90,slow=8.5,SNR=5.0 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.53** | **316** | P | **P** | **03 25 45.0** | **+0.6** |
| | 1.3nm,0.8s,baz=91,slow=8.3,SNR=8.0 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **60.29** | **28** | P | **P** | **03 26 11.0** | **+0.7** |
| | 0.6nm,1.0s,baz=273,slow=5.2,SNR=4.8 | | | | | | |
| | 0.6nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.61** | **319** | P | **P** | **03 26 20.8** | **+1.3** |
| | 1.5nm,0.6s,baz=103,slow=6.5,SNR=6.3 | | | | | | |
| | 1.5nm,0.6s | | | | | | |

*IDC **17** 03:23:26.1±1.2, 55°.30S×1°.70W, h0km, mb4.2/6, mbtmp4.2/7, ML4.3/1, MS3.6/23, Error ellipse: s-maj=42.9km s-min=21.9km az=59.0*
*NEIC **17** 03:23:28.9±1.5, 55°.4S±0°.1×1°.7W±0°.2, h10km±1km, mb4.5/12, Error ellipse: s-maj=27.9km s-min=10.8km az=149.0*

**ISC 17 03:23:29.1±0.7, 55°.30S±0°.09×1°.7W±0°.1, h16km, n48, σ0s77/25, mb4.4/9, MS3.6/22, 10C-4D, Bouvet Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **15.68** | **188** | ⇑P | **Pn** | **03 27 09.7** | **+0.7** |
| VNA1 | comp=Z,7.1nm,0.4s | | | ⇑x | x | 03 27 09.7 | |
| | comp=Z,7.1nm,0.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **15.88** | **187** | ⇑P | **Pn** | **03 27 11.5** | **-0.1** |
| | comp=Z,5.7nm,0.3s,baz=12,slow=15 | | | | | | |
| VNA2 | | | | ⇑S | Sn | 03 29 52.9 | -14 |
| | comp=Z,0.3nm,0.3s,baz=12,slow=22 | | | | | | |
| VNA2 | | | | ⇑x | x | 03 29 52.9 | |
| | comp=Z,0.3nm,0.3s,baz=12,slow=22 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.37** | **189** | ⇑P | **Pn** | **03 27 18.5** | **+0.5** |
| | comp=Z,4.9nm,0.5s | | | | | | |
| VNA3 | | | | ⇓S | Sn | 03 30 00.9 | -18 |
| | comp=Z,0.4nm,0.6s | | | | | | |
| VNA3 | | | | ⇓x | x | 03 30 00.9 | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **16.44** | **181** | P | **Pn** | **03 27 19.2** | **+0.3** |
| **SNAA** | **Sanae** | **16.44** | **181** | ⇑P | **Pn** | **03 27 19.3** | **+0.4** |
| | comp=Z,64nm,0.4s | | | | | | |
| SNAA | | | | ⇑S | Sn | 03 30 04.6 | -16 |
| | comp=Z,5.7nm,0.5s | | | | | | |
| SNAA | | | | ⇑x | x | 03 30 04.6 | |
| | comp=Z,5.7nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **16.44** | **181** | Pn | **Pn** | **03 27 18.9** | **0.0** |
| | comp=Z,1.0nm,0.3s,baz=31,slow=12,SNR=72 | | | | | | |
| SNAA | | | | Sn | Sn | 03 30 06.3 | -14 |
| | comp=Z,0.1nm,0.3s,baz=294,slow=22,SNR=2.7 | | | | | | |
| SNAA | | | | LR | LR | 03 31 55.9 | |
| | comp=Z,82nm,21.6s,baz=248,slow=31 | | | | | | |
| | comp=Z,3.1nm,0.3s | | | | | | |
| **TROLL** | **Troll, Antarti** | **16.87** | **175** | ⇑P | **Pn** | **03 27 25.0** | **+0.6** |
| | comp=Z,111nm,0.5s | | | | | | |
| TROLL | | | | ⇓S | Sn | 03 30 13.8 | -18 |
| | comp=Z,6.9nm,0.3s | | | | | | |
| TROLL | | | | ⇓x | x | 03 30 13.8 | |
| | comp=Z,6.9nm,0.3s | | | | | | |
| **HOPE** | **Hope Point** | **19.97** | **258** | P | **P** | **03 27 59.2** | **-1.1** |
| HOPE | | | | IAmb | IAmb | 03 28 01.4 | |
| | comp=Z,50nm,1.2s | | | | | | |
| **BELA** | **Belgrano 2** | **25.41** | **196** | P | **P** | **03 28 54.7** | **-0.6** |
| **SUR** | **Sutherland** | **27.84** | **44** | LR | LR | 03 37 30.3 | |
| | comp=Z,136nm,18.5s,baz=179,slow=30 | | | | | | |
| **ESPZ** | **Base Esperanza** | **28.47** | **231** | P | **P** | **03 29 23.3** | **+0.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SOE** | **Somerset East** | **29.56** | **51** | P | | **P** | **03 29 33.5** | **+0.5** | |
| **PMSA** | **Palmer Station** | **31.25** | **227** | P | | **P** | **03 29 48.6** | **+1.0** | |
| PMSA | | | | IAmb | | IAmb | 03 29 56.8 | | |
| | comp=Z,9.9nm,1.2s | | | | | | | | |
| **MAW** | **Mawson** | **31.58** | **139** | P | | **P** | **03 29 49.3** | **-1.1** | |
| | comp=Z,1.4nm,0.7s,baz=320,slow=13,SNR=2.1 | | | | | | | | |
| MAW | | | | LR | | LR | 03 40 02.5 | | |
| | comp=Z,118nm,21.8s,baz=281,slow=32 | | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | | |
| **BOSA** | **Boshof** | **32.96** | **47** | LR | | LR | 03 40 06.9 | | |
| | comp=Z,62nm,21.9s,baz=196,slow=30 | | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **33.94** | **98** | T | | T | 04 06 27.3 | | |
| | baz=236,slow=75,SNR=132 | | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **33.94** | **98** | T | | T | 04 06 27.3 | | |
| | baz=236,slow=75,SNR=116 | | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **33.95** | **98** | T | | T | 04 06 27.3 | | |
| | baz=236,slow=75,SNR=144 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.94** | **180** | P | | **P** | **03 30 19.9** | **-0.1** | |
| QSPA | | | | IAmb | | IAmb | 03 30 23.1 | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.94** | **180** | P | | **P** | **03 30 19.4** | **-0.5** | |
| | comp=Z,2.8nm,0.9s,baz=250,slow=2.0,SNR=12 | | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | | |
| **LBTB** | **Lobatse** | **36.28** | **45** | P | | **P** | **03 30 33.1** | **+1.4** | |
| LBTB | | | | IAmb | | IAmb | 03 30 37.4 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **LBTB** | **Lobatse** | **36.28** | **45** | LR | | LR | 03 42 10.0 | | |
| | comp=Z,75nm,20.4s,baz=182,slow=31 | | | | | | | | |
| **MG03** | **Isla Dawson** | **38.42** | **243** | P | | **P** | **03 30 51.0** | **+1.6** | |
| **TSUM** | **Tsumeb** | **38.89** | **30** | LR | | LR | 03 42 44.5 | | |
| | comp=Z,49nm,20.8s,baz=160,slow=30 | | | | | | | | |
| **PLTB** | **Pedras Altas** | **43.10** | **281** | P | | **P** | **03 31 28.8** | **+0.4** | |
| PLTB | | | | IAmb | | IAmb | 03 31 32.2 | | |
| | comp=Z,9.7nm,1.4s | | | | | | | | |
| **PLCA** | **Paso Flores** | **46.38** | **258** | LR | | LR | 03 48 40.4 | | |
| | comp=Z,81nm,19.1s,baz=160,slow=33 | | | | | | | | |
| **CPUP** | **Villa Florida** | **49.34** | **282** | P | | **P** | **03 32 16.7** | **-0.8** | |
| | comp=Z,2.0nm,0.8s,baz=141,slow=5.2,SNR=4.9 | | | | | | | | |
| CPUP | | | | LR | | LR | 03 49 49.9 | | |
| | comp=Z,63nm,21.9s,baz=152,slow=32 | | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **OPO** | **Ambohidratompo** | **51.94** | **65** | LR | | LR | 03 49 12.8 | | |
| | comp=Z,106nm,21.3s,baz=6.5,slow=30 | | | | | | | | |
| **BDFB** | **Brasilia** | **53.11** | **299** | P | | **P** | **03 32 45.4** | **-0.6** | |
| | comp=Z,1.6nm,0.5s,baz=118,slow=8.9,SNR=4.0 | | | | | | | | |
| BDFB | | | | LR | | LR | 03 51 20.2 | | |
| | comp=Z,72nm,19.1s,baz=149,slow=32 | | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| **LVC** | **Limon Verde** | **58.79** | **275** | LR | | LR | 03 55 31.3 | | |
| | comp=Z,43nm,21.8s,baz=152,slow=33 | | | | | | | | |
| **SIV** | **San Ignacio** | **59.69** | **287** | LR | | LR | 03 56 43.4 | | |
| | comp=Z,46nm,19.0s,baz=116,slow=34 | | | | | | | | |
| **MBAR** | **Mbarara** | **60.58** | **38** | LR | | LR | 03 57 49.3 | | |
| | comp=Z,38nm,19.2s,baz=160,slow=34 | | | | | | | | |
| **DBIC** | **Dimbokro** | **61.80** | **356** | P | | **P** | **03 33 46.6** | **-0.4** | |
| | comp=Z,10nm,1.2s,baz=192,slow=9.3,SNR=2.7 | | | | | | | | |
| DBIC | | | | LR | | LR | 03 56 43.9 | | |
| | comp=Z,22nm,18.1s,baz=188,slow=32 | | | | | | | | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **LPAZ** | **La Paz** | **63.38** | **280** | P | | **P** | **03 33 58.2** | **-0.2** | |
| LPAZ | | | | IAmb | | IAmb | 03 34 03.2 | | |
| | comp=Z,4.7nm,1.3s | | | | | | | | |
| **LPAZ** | **La Paz** | **63.38** | **280** | P | | **P** | **03 33 57.5** | **-0.9** | |
| | comp=Z,1.6nm,0.7s,baz=158,slow=5.7,SNR=6.3 | | | | | | | | |
| LPAZ | | | | LR | | LR | 03 59 37.2 | | |
| | comp=Z,52nm,20.8s,baz=72,slow=34 | | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | | |
| **BBTS** | **Babate** | **70.81** | **345** | LR | | LR | 03 59 23.6 | | |
| | comp=Z,53nm,20.3s,baz=354,slow=30 | | | | | | | | |
| **NNA** | **Nana** | **71.78** | **275** | LR | | LR | 04 04 41.7 | | |
| | comp=Z,28nm,21.9s,baz=142,slow=34 | | | | | | | | |
| **FURI** | **Furi** | **72.27** | **42** | LR | | LR | 04 06 06.5 | | |
| | comp=Z,25nm,19.1s,baz=183,slow=35 | | | | | | | | |
| **MDP** | **Montagnes des** | **73.36** | **306** | LR | | LR | 04 02 37.6 | | |
| | comp=Z,57nm,20.0s,baz=112,slow=32 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **74.78** | **130** | T | | T | 04 58 18.0 | | |
| | baz=211,slow=75,SNR=15 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **74.80** | **130** | T | | T | 04 58 16.5 | | |
| | baz=211,slow=75,SNR=16 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **74.80** | **130** | T | | T | 04 58 09.4 | | |
| | baz=211,slow=75,SNR=11 | | | | | | | | |
| **BOAV** | **Boa Vista** | **74.83** | **298** | P | | **P** | **03 35 09.3** | **+0.5** | |
| **NWAO** | **Narrogin (SRO)** | **77.81** | **131** | LR | | LR | 04 04 40.9 | | |
| | comp=Z,80nm,18.3s,baz=170,slow=32 | | | | | | | | |
| **ROSC** | **El Rosal** | **84.19** | **287** | LR | | LR | 04 12 11.2 | | |
| | comp=Z,64nm,19.3s,baz=116,slow=35 | | | | | | | | |
| **SDV** | **Santo Domingo** | **85.58** | **292** | LR | | LR | 04 14 13.0 | | |
| | comp=Z,32nm,18.2s,baz=76,slow=36 | | | | | | | | |
| **EIL** | **Elat** | **90.27** | **31** | LR | | LR | 04 14 15.2 | | |
| | comp=Z,26nm,21.5s,baz=249,slow=34 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **146.10** | **310** | PKPbc | | **PKPbc** | **03 43 06.5** | **-0.4** | |
| | comp=Z,0.8nm,0.8s,baz=104,slow=3.0,SNR=3.5 | | | | | | | | |

*NEIC **17** 03:23:59.8±1.1, 39°.093N±0°.006×77°.48W±0°.02, h5km±1km, Error ellipse: s-maj=2.9km s-min=2.5km az=56.0*

**LDO 17 03:24:00.5±1.5, 39°.076N±0°.010×77°.48W±0°.02, h5km±1km, ML1.3/5, ML1.7/12(NEIC), Error ellipse: s-maj=2.9km s-min=2.5km az=64.0, Virginia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSR** | **Geological Sur** | **0.15** | **146** | Pg | Pg | 03 24 03.0 | -0.6 |
| **P57A** | **Homestead Farm** | **0.58** | **315** | Pg | Pg | 03 24 10.7 | -1.5 |
| P57A | | | | Sg | Sg | 03 24 17.7 | -1.5 |
| P57A | | | | IAML | | 03 24 19.5 | |
| | comp=N,37nm,0.1s | | | | | | |
| **SDMD** | **Soldier's Deli** | **0.60** | **56** | Pg | Pg | 03 24 10.3 | -1.7 |
| SDMD | | | | Sg | Sg | 03 24 18.4 | -1.4 |
| **CBN** | **Corbin Frederi** | **0.87** | **175** | Pg | Pg | 03 24 16.2 | -1.0 |
| CBN | | | | Sg | Sg | 03 24 27.0 | -1.6 |
| CBN | | | | IAML | | 03 24 31.1 | |
| | comp=N,25nm,0.6s | | | | | | |
| CBN | | | | IAML | | 03 24 35.4 | |
| | comp=N,23nm,1.1s | | | | | | |
| **R58B** | **Mineral** | **1.15** | **196** | Pg | Pg | 03 24 20.8 | -1.8 |
| R58B | | | | Sg | Sg | 03 24 37.0 | -0.6 |
| R58B | | | | IAML | | 03 24 38.8 | |
| | comp=E,18nm,0.2s | | | | | | |
| R58B | | | | IAML | | 03 24 40.7 | |
| | comp=N,19nm,0.2s | | | | | | |
| **MVL** | **Millersville** | **1.27** | **43** | Pg | Pg | 03 24 22.7 | -2.1 |
| MVL | | | | IAML | | 03 24 44.5 | |
| | comp=N,11nm,0.5s | | | | | | |
| **PAGS** | **Pennsylvania G** | **1.29** | **27** | | Pn | 03 24 22.9 | -2.3 |
| **Q56A** | **Snyder Ridge,** | **1.33** | **269** | | Pn | 03 24 23.3 | -2.5 |
| **SSPA** | **Standing Stone** | **1.59** | **349** | | Pn | 03 24 27.5 | -1.9 |
| **SSPA** | **Standing Stone** | **1.59** | **349** | | Sn | 03 24 47.6 | -2.7 |
| **P60A** | **Greenville** | **1.60** | **62** | | Sn | 03 24 49.0 | -1.6 |
| **WUPA** | **West Chester U** | **1.68** | **59** | | Pn | 03 24 29.8 | -0.8 |
| **WUPA** | **West Chester U** | **1.68** | **59** | | Sn | 03 24 50.4 | -2.1 |
| **S57A** | **Dark Hollow, R** | **1.75** | **222** | Pn | Pn | 03 24 31.1 | -0.4 |
| **N58A** | **Sunbury** | **1.86** | **18** | Pn | Pn | 03 24 32.3 | -0.7 |
| **N58A** | **Sunbury** | **1.86** | **18** | | Sn | 03 24 54.8 | -2.0 |
| **R55A** | **Marlinton** | **2.21** | **250** | Pn | Pn | 03 24 37.5 | -0.5 |
| **M57A** | **Sunshine Farm,** | **2.27** | **7** | Pn | Pn | 03 24 38.3 | -0.4 |
| **T57A** | **Hurt** | **2.50** | **215** | Pn | Pn | 03 24 39.9 | -1.9 |
| **KSPA** | **Keystone Colle** | **2.80** | **27** | Pn | Pn | 03 24 44.4 | -1.5 |
| **BLA** | **Blacksburg** | **2.97** | **232** | Pn | Pn | 03 24 47.8 | -0.6 |
| **ODNJ** | **Ogdensburg** | **2.98** | **47** | Pn | Pn | 03 24 47.5 | -0.9 |

*IDC **17** 03:30:45.7±3.7, 28°.19N×52°.58E, h0km, mb3.7/5, mbtmp3.6/6, ML3.3/1, MS3.3/2, Error ellipse: s-maj=73.4km s-min=35.7km az=136.0*
*TEH **17** 03:30:48.5, 28°.34N×52°.56E, h9km±23km, ML3.4*
*DSN **17** 03:30:51.7±0.8, 28°.25N×52°.74E, h15km, ML2.8/7, Error ellipse: s-maj=23.2km s-min=7.5km az=45.0*

**ISC 17 03:30:49.3±0.7, 28°.27N±0°.04×52°.53E±0°.04, h16km, n35, σ1s24/35, mb3.7/5, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **QIR1** | **Qir** | **0.50** | **66** | Pg | **Pg** | **03 30 57.5** | **-1.7** |
| **JHRM** | **Jahrom** | **0.95** | **76** | Pg | **Pb** | **03 31 07.2** | **-0.3** |
| **LMD1** | **Lamerd** | **1.09** | **149** | Pg | **Pg** | **03 31 10.9** | **+0.5** |
| **DSBU** | **Dashti - Bushe** | **1.12** | **275** | Pg | **Pg** | **03 31 11.0** | **0.0** |
| **AHBU** | **AHRAM** | **1.23** | **299** | Pg | **Pg** | **03 31 12.8** | **-0.4** |
| **SHI** | **Shiraz** | **1.36** | **359** | Pg | **Pn** | **03 31 15.0** | **+1.1** |
| **KAZ2** | **Kazeron-Fars-I** | **1.54** | **331** | Pg | **Pb** | **03 31 17.4** | **0.0** |
| **LAR1** | **LAR** | **1.74** | **110** | Pg | **Pb** | **03 31 21.9** | **+0.9** |
| **KLNJ** | **Kolanjah** | **2.84** | **344** | Pn | **Pn** | **03 31 35.4** | **+1.0** |
| **IRAM** | **Ramesheh** | **3.53** | **358** | Pn | **Pn** | **03 31 45.3** | **+1.6** |
| **IMEH** | **Mehriz** | **3.59** | **30** | Pn | **Pn** | **03 31 46.3** | **+1.6** |
| **SHME** | **Shamm** | **3.91** | **124** | P | **Pn** | **03 31 49.3** | **+0.6** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NGRK** | **Negar Kerman** | **3.93** | **69** | Pn | | **Pn** | **03 31 50.7** | **+1.4** | |
| **KHGB** | **Koh Gabri** | **4.03** | **58** | Pn | | **Pn** | **03 31 53.0** | **+2.4** | |
| **IBAF** | **Bafgh** | **4.23** | **38** | Pn | | **Pn** | **03 31 55.0** | **+1.7** | |
| **ICHK** | **Chekchek** | **4.28** | **22** | Pn | | **Pn** | **03 31 56.3** | **+2.3** | |
| **MSFE** | **Esma-Masafi** | **4.35** | **131** | P | | **Pn** | **03 31 55.9** | **+1.1** | |
| MSFE | | | | S | | **Sn** | **03 32 44.9** | **-0.4** | |
| **MDH** | **Madha** | **4.49** | **130** | P | | **Pn** | **03 31 56.4** | **-0.2** | |
| **IZEF** | **Zefreh** | **4.61** | **358** | Pn | | **Pn** | **03 32 00.6** | **+2.0** | |
| **CHMN** | **Cheshme madani** | **4.66** | **69** | Pn | | **Pn** | **03 32 01.5** | **+2.1** | |
| **UOSS** | **Minazif** | **4.67** | **134** | P | | **Pn** | **03 31 59.3** | **+0.1** | |
| **HATD** | **Hatta, Dubai** | **4.71** | **136** | P | | **Pn** | **03 32 00.8** | **+1.0** | |
| **ASHO** | **Ashiyiah** | **4.77** | **138** | P | | **Pn** | **03 32 01.5** | **+0.8** | |
| ASHO | | | | S | | **Sn** | **03 32 56.1** | **+0.4** | |
| **ANAR** | **Anarak** | **5.01** | **12** | Pn | | **Pn** | **03 32 05.5** | **+1.6** | |
| **ALNE** | **Al Ain** | **5.10** | **145** | P | | **Pn** | **03 32 06.3** | **+1.2** | |
| **KBAM** | **BAM** | **5.27** | **79** | Pn | | **Pn** | **03 32 09.5** | **+1.9** | |
| **SOHO** | **SOHO** | **5.47** | **138** | P | | **Pn** | **03 32 10.1** | **-0.1** | |
| **MMAI** | **Mount Meron Ar** | **15.48** | **292** | LR | | LR | 03 41 50.0 | | |
| | comp=Z,40nm,20.2s,baz=1.0,slow=43 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **19.34** | **311** | P | | **P** | **03 35 14.4** | **+0.2** | |
| | 0.1nm,0.3s,baz=139,slow=12,SNR=3.7 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **28.04** | **23** | P | | **P** | **03 36 39.2** | **-0.5** | |
| | 0.4nm,0.5s,baz=218,slow=7.9,SNR=2.2 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.56** | **339** | P | | **P** | **03 38 02.2** | **-0.4** | |
| | 1.4nm,0.7s,baz=150,slow=9.6,SNR=8.2 | | | | | | | | |
| | 1.4nm,0.7s | | | | | | | | |
| **HFS** | **Hagfors** | **41.25** | **332** | P | | **P** | **03 38 32.7** | **-0.7** | |
| | 1.0nm,0.4s,baz=116,slow=9.8,SNR=10 | | | | | | | | |
| | 1.0nm,0.4s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **42.77** | **332** | P | | **P** | **03 38 45.0** | **-0.9** | |
| | 0.3nm,0.4s,baz=120,slow=7.4,SNR=2.2 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **49.52** | **263** | P | | **P** | **03 39 38.7** | **-0.9** | |
| | 0.4nm,0.5s,baz=61,slow=9.5,SNR=6.0 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |
| **TSUM** | **Tsumeb** | **58.05** | **220** | LR | | LR | 04 06 41.6 | | |
| | comp=Z,77nm,20.6s,baz=156,slow=37 | | | | | | | | |

*IDC **17** 03:41:09.3±1.2, 2°.72S×130°.28E, h0km, mb4.0/5, mbtmp4.0/6, ML3.9/1, MS2.8/2, Error ellipse: s-maj=52.6km s-min=21.3km az=71.0*
*DJA **17** 03:41:15.6±1.2, 3°.5S±3°×13°.0E±°, h29km±13km, M4.2/10, mb4.5/1, MLv4.0/10*

**ISC 17 03:41:14.9±0.8, 2°.80S±0°.06×129°.75E±0°.05, h35km, n17, σ2s12/18, mb4.0/6, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **0.98** | **236** | P | **Pn** | **03 41 32.7** | **+0.5** |
| MSAI | | | | S | **Sn** | **03 41 47.7** | **+2.9** |
| **BNDI** | **Bandanaira** | **1.72** | **175** | P | **Pn** | **03 41 45.1** | **+2.7** |
| **SWI** | **Sorong** | **2.45** | **38** | P | **Pn** | **03 41 53.3** | **+0.9** |
| SWI | | | | S | **Sn** | **03 42 21.9** | **+0.7** |
| **FAKI** | **Fak Fak** | **2.50** | **93** | P | **Pn** | **03 41 54.3** | **+1.1** |
| **NLAI** | **Namlea** | **2.68** | **261** | P | **Pn** | **03 41 56.8** | **+1.2** |
| NLAI | | | | S | **Sn** | **03 42 28.2** | **+1.4** |
| **SANI** | **Sanana** | **3.83** | **281** | P | **Pn** | **03 42 10.1** | **-1.3** |
| **KMPI** | **Kaimana, Papua** | **4.04** | **102** | P | **Pn** | **03 42 15.4** | **+1.0** |
| **KAPI** | **Kappang** | **10.21** | **257** | Pn | Pn | 03 43 46.5 | +7.4 |
| | 30nm,0.3s,baz=119,slow=19,SNR=31 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.62** | **166** | P | **Pn** | **03 45 13.9** | **-3.9** |
| | 0.4nm,0.3s,baz=346,slow=13,SNR=28 | | | | | | |
| WRA | | | | S | Sn | 03 48 22.0 | -11 |
| | 0.2nm,0.4s,baz=341,slow=20,SNR=1.7 | | | | | | |
| | 2.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **21.13** | **169** | P | **P** | **03 45 55.3** | **-1.7** |
| | 5.5nm,0.4s,baz=347,slow=11,SNR=50 | | | | | | |
| ASAR | | | | S | **S** | **03 49 45.7** | **-4.6

*mbtmp4.1/9,Error ellipse: s-maj=56.5km s-min=18.0km az=73.0*

*DJA* ***17*** *03:52:51.9±0.5,8˚S±5˝×12˚9E±˚,h90km±28km,M4.8/7, mb4.9/3,mB5.2/2,MLv4.7/7,Mw(mB)4.6/2*

**ISC 17 03:52:48.5**±0.6,**7.66S**±0.07×**128.58E**±0.06,**h151**km,**n20, σ2§65/25,mb4.0/7,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | | | |
| **SAUI** | **Saumlaki** | **2.72** | **97** | P | **Pn** | **03 53 35.3** | **+2.9** |
| SAUI | | | | S | **Sn** | **03 54 07.8** | **+1.6** |
| **MSAI** | **Masohi** | **4.30** | **5** | P | **Pn** | **03 53 56.0** | **+3.2** |
| **SOEI** | **Soe** | **4.74** | **244** | P | **Pn** | **03 54 02.9** | **+4.2** |
| SOEI | | | | S | **Sn** | **03 54 50.8** | **-2.5** |
| **BATI** | **Baumata** 345nm,0.5s,5μm1.6nm | **5.47** | **242** | P | **Pn** | **03 54 11.9** | **+3.6** |
| BATI | 345nm,0.5s,5μm1.6nm | | | S | **Sn** | **03 55 09.9** | **-0.7** |
| **FAKI** | **Fak Fak** | **5.96** | **38** | P | **Pn** | **03 54 12.2** | **-2.6** |
| **KMPI** | **Kaimana, Papua** | **6.47** | **52** | P | **Pn** | **03 54 21.7** | **+0.2** |
| **EDFI** | **Ende, Flores** 26nm,0.9s | **6.90** | **261** | P | **Pn** | **03 54 29.4** | **+2.0** |
| **BASI** | **Baing, Sumba** | **8.30** | **252** | P | **Pn** | **03 54 48.4** | **+2.4** |
| **WRA** | **Warramunga Arr** 1.0nm,0.6s,baz=344,slow=13,SNR=30 | **13.42** | **156** | P | **Pn** | **03 55 54.4** | **+1.2** |
| WRA | 4.5nm,0.6s,baz=336,slow=22,SNR=10 | | | S | **Sn** | **03 58 15.8** | **-6.1** |
| **ASAR** | **Alice Springs** 2.1nm,0.6s,baz=339,slow=11,SNR=20 | **16.71** | **163** | P | **Pn** | **03 56 38.6** | **+4.7** |
| ASAR | 1.0nm,0.5s,baz=313,slow=15,SNR=4.8 | | | S | **S** | **03 59 37.5** | **-2.3** |
| **SONM** | **Songino Array** 1.1nm,0.5s,baz=167,slow=8.0,SNR=7.9 1.1nm,0.5s | **58.63** | **343** | P | **P** | **04 02 29.6** | **-0.3** |
| **PETK** | **Petropavlovsk-** 1.7nm,0.5s,baz=188,slow=3.8,SNR=4.5 1.7nm,0.5s | **65.40** | **19** | P | **P** | **04 03 14.1** | **-0.7** |
| **MKAR** | **Makanchi Array** 0.9nm,0.3s,baz=114,slow=8.6,SNR=16 0.9nm,0.3s | **68.02** | **328** | P | **P** | **04 03 31.0** | **-0.5** |
| **ZALV** | **Zalesovo Beam** 1.8nm,0.5s,baz=123,slow=6.0,SNR=7.9 1.8nm,0.5s | **71.56** | **334** | P | **P** | **04 03 51.3** | **-1.7** |
| **KURBB** | **Kurchatov Arra** 2.0nm,0.4s,baz=133,slow=5.1,SNR=20 2.0nm,0.4s | **72.34** | **329** | P | **P** | **04 03 56.7** | **-1.0** |
| **BVAR** | **Borovoye Array** 0.8nm,0.5s,baz=116,slow=10,SNR=4.7 0.8nm,0.5s | **77.88** | **328** | P | **P** | **04 04 28.1** | **-1.2** |
| **QSPA** | **South Pole Qui** 0.3nm,0.5s,baz=348,slow=1.9,SNR=5.6 0.3nm,0.5s | **82.32** | **180** | P | **P** | **04 04 55.2** | **+2.0** |
| **TORD** | **Torodi Ar. Bea** 0.6nm,0.9s,baz=75,slow=4.6,SNR=3.2 | **127.55** | **281** | PKP | **PKiKP** | **04 11 36.4** | **-0.8** |
| **CPUP** | **Villa Florida** 1.0nm,0.6s,baz=188,slow=6.5,SNR=2.8 | **145.73** | **171** | PKPbc | **PKiKP** | **04 12 12.9** | **-1.0** |
| **LPAZ** | **La Paz** 0.4nm,0.4s,baz=281,slow=5.2,SNR=2.0 | **151.02** | **145** | PKPbc | **PKiKP** | **04 12 25.9** | **0.0** |

*ROM* ***17*** *04:12:55.4±0.1,43˚.619N±0˚.008×13˚.462E±0˚.009, h7km,ML2.5/27,Error ellipse: s-maj=1.0km s-min=0.5km az=38.0*

*LDG* ***17*** *04:12:56.6±0.6,43˚.81N×13˚.57E,h8km,Ml2.6/11,Error ellipse: s-maj=12.8km s-min=7.9km az=93.0*

*PRU* ***17*** *04:12:58.4,43˚.87N×13˚.76E,h10km*

**ISC 17 04:12:54.7**±0.8,**43˚.62N**±0˚.02×**13˚.49E**±0˚.02,**h15**km±5km, **n114,σ1§66/137,5D,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | | | |
| **PCRO** | **Pietralacroce** | **0.04** | **108** | ⇓*i*P | **Pg** | **04 12 57.0** | **-0.4** |
| PCRO | | | | S | **Sg** | **04 12 58.7** | **-0.6** |
| PCRO | | | | AML | AML | | |
| PCRO | comp=E,75007μm,0.2s | | | AML | AML | | |
| **AOI** | **Ancona** | **0.11** | **129** | ⇓*i*P | **Pg** | **04 12 58.2** | **0.0** |
| AOI | | | | S | **Sg** | **04 13 00.7** | **+0.3** |
| AOI | comp=E,10000μm,0.2s | | | AML | AML | | |
| AOI | comp=N,4785μm,0.2s | | | AML | AML | | |
| AOI | comp=N,4785μm,1.8s | | | AML | AML | | |
| AOI | comp=N,4784μm,0.2s | | | AML | AML | | |
| AOI | comp=E,9983μm,0.2s | | | AML | AML | | |
| **SENI** | **Senigallia** | **0.20** | **295** | P | **Pg** | **04 12 59.8** | **+0.4** |
| SENI | comp=E,1575μm,1.2s | | | AML | AML | | |
| SENI | comp=N,1185μm,1.0s | | | AML | AML | | |
| SENI | comp=E,1580μm,1.2s | | | AML | AML | | |
| SENI | comp=E,1165μm,0.6s | | | AML | AML | | |
| SENI | comp=N,1079μm,1.0s | | | AML | AML | | |
| SENI | comp=E,1165μm,1.4s | | | AML | AML | | |
| SENI | comp=E,1439μm,0.5s | | | AML | AML | | |
| SENI | comp=N,1128μm,0.3s | | | AML | AML | | |
| **PP3** | **Marolino** | **0.26** | **160** | P | **Pb** | **04 13 01.6** | **+0.6** |
| PP3 | | | | S | **Sb** | **04 13 04.8** | **-0.4** |
| **CING** | **Cingoli** | **0.32** | **221** | ⇓*i*P | **Pb** | **04 13 02.3** | **+0.1** |
| CING | | | | S | **Sb** | **04 13 07.9** | **+0.7** |
| CING | comp=N,1225μm,0.4s | | | AML | AML | | |
| CING | comp=E,1365μm,0.3s | | | AML | AML | | |
| CING | comp=N,1225μm,0.4s | | | AML | AML | | |
| CING | comp=E,1363μm,0.3s | | | AML | AML | | |
| **COR1** | **Corinaldo** | **0.35** | **272** | P | **Pb** | **04 13 03.0** | **+0.4** |
| **EL6** | **Elcito** | **0.40** | **224** | P | **Pb** | **04 13 03.7** | **+0.1** |
| EL6 | | | | S | **Sb** | **04 13 11.5** | **+2.0** |
| EL6 | comp=E,1048μm,0.6s | | | AML | AML | | |
| EL6 | comp=N,913μm,0.4s | | | AML | AML | | |
| EL6 | comp=N,912μm,0.4s | | | AML | AML | | |
| EL6 | comp=N,912μm,1.6s | | | AML | AML | | |
| EL6 | comp=E,930μm,0.3s | | | AML | AML | | |
| EL6 | comp=E,1047μm,0.6s | | | AML | AML | | |
| | comp=N,913μm,0.4s | | | | | | |
| **ARVD** | **Arcevia** | **0.41** | **253** | ⇓*e*P | **Pg** | **04 13 03.5** | **+0.4** |
| ARVD | comp=E,336μm,0.6s | | | AML | AML | | |
| ARVD | comp=N,276μm,0.2s | | | AML | AML | | |
| ARVD | comp=E,311μm,0.4s | | | AML | AML | | |
| ARVD | comp=N,276μm,0.2s | | | AML | AML | | |
| **MPAG** | **Monte Paganucc** comp=N,242μm,1.0s | **0.53** | **271** | AML | AML | | |
| MPAG | comp=E,292μm,0.8s | | | AML | AML | | |
| MPAG | comp=N,286μm,1.5s | | | AML | AML | | |
| MPAG | comp=E,285μm,0.9s | | | AML | AML | | |
| MPAG | comp=E,285μm,1.1s | | | AML | AML | | |
| **SNTG** | **Esanatoglia** | **0.54** | **228** | P | **Pb** | **04 13 06.0** | **+0.2** |
| **SSFR** | **Montelago di S** | **0.54** | **251** | P | **Pg** | **04 13 05.8** | **+0.3** |
| SSFR | comp=N,681μm,1.1s | | | AML | AML | | |
| SSFR | comp=N,612μm,0.3s | | | AML | AML | | |
| SSFR | comp=E,630μm,0.8s | | | AML | AML | | |
| SSFR | comp=N,666μm,0.3s | | | AML | AML | | |
| SSFR | comp=N,612μm,0.3s | | | AML | AML | | |
| SSFR | comp=E,605μm,0.2s | | | AML | AML | | |
| SSFR | comp=E,580μm,0.2s | | | AML | AML | | |
| SSFR | comp=E,580μm,0.2s | | | AML | AML | | |
| **FRON** | **Frontone** | **0.56** | **260** | P | **Pb** | **04 13 06.4** | **+0.1** |
| FRON | comp=N,322μm,0.4s | | | AML | AML | | |
| FRON | comp=E,322μm,0.5s | | | AML | AML | | |
| FRON | comp=E,322μm,0.5s | | | AML | AML | | |
| FRON | comp=N,321μm,0.4s | | | AML | AML | | |
| **GUMA** | **Gualdo di Mace** | **0.57** | **191** | P | **Pb** | **04 13 07.0** | **+0.7** |
| GUMA | comp=E,1930μm,1.4s | | | AML | AML | | |
| GUMA | comp=N,1445μm,0.4s | | | AML | AML | | |
| GUMA | comp=E,1930μm,0.6s | | | AML | AML | | |
| GUMA | comp=N,1327μm,0.3s | | | AML | AML | | |
| GUMA | comp=E,1804μm,0.4s | | | AML | AML | | |
| GUMA | comp=E,1607μm,0.4s | | | AML | AML | | |
| GUMA | comp=N,1443μm,0.4s | | | AML | AML | | |
| **ATSC** | **Scheggia e Pas** | **0.61** | **252** | P | **Pb** | **04 13 07.3** | **+0.1** |
| **MF5** | **Montefalcone A** | **0.63** | **182** | P | **Pb** | **04 13 08.3** | **+0.9** |
| MF5 | comp=E,1205μm,0.9s | | | AML | AML | | |
| MF5 | comp=N,1676μm,0.6s | | | AML | AML | | |
| MF5 | comp=N,1675μm,0.6s | | | AML | AML | | |
| MF5 | comp=E,1202μm,0.4s | | | AML | AML | | |
| MF5 | comp=E,1205μm,1.1s | | | AML | AML | | |
| **MML1** | **Montelago di S** | **0.63** | **217** | P | **Pb** | **04 13 07.5** | **+0.1** |
| **FDMO** | **Fiordimonte** | **0.65** | **207** | P | **Pb** | **04 13 07.9** | **+0.2** |
| FDMO | comp=N,378μm,0.9s | | | AML | AML | | |
| FDMO | comp=N,378μm,1.1s | | | AML | AML | | |
| FDMO | comp=E,468μm,0.2s | | | AML | AML | | |
| FDMO | comp=E,469μm,0.2s | | | AML | AML | | |
| FDMO | comp=N,334μm,0.2s | | | AML | AML | | |
| **NARO** | **Abbazia di Nar** | **0.66** | **270** | P | **Pg** | **04 13 07.7** | **0.0** |
| NARO | comp=E,119μm,1.5s | | | AML | AML | | |
| NARO | comp=N,158μm,0.7s | | | AML | AML | | |
| NARO | comp=N,139μm,0.6s | | | AML | AML | | |
| NARO | comp=E,116μm,0.4s | | | AML | AML | | |
| NARO | comp=E,119μm,0.5s | | | AML | AML | | |
| **ATBU** | **Serra di Buran** | **0.70** | **259** | P | **Pg** | **04 13 08.6** | **+0.2** |
| **PIEI** | **Pieia** | **0.70** | **264** | P | **Pg** | **04 13 08.4** | **+0.1** |
| PIEI | comp=N,192μm,0.2s | | | AML | AML | | |
| PIEI | comp=E,220μm,0.2s | | | AML | AML | | |
| PIEI | comp=N,191μm,0.2s | | | AML | AML | | |
| PIEI | comp=E,219μm,0.2s | | | AML | AML | | |
| **ATFO** | **Monte Foce - G** | **0.71** | **250** | P | **Pb** | **04 13 09.6** | **+0.7** |
| ATFO | comp=E,416μm,0.5s | | | AML | AML | | |
| ATFO | comp=E,416μm,0.5s | | | AML | AML | | |
| ATFO | comp=N,296μm,0.5s | | | AML | AML | | |
| ATFO | comp=N,296μm,0.5s | | | AML | AML | | |
| **PE3** | **Peglio** | **0.72** | **277** | P | **Pb** | **04 13 09.8** | **+0.8** |
| PE3 | comp=E,1280μm,0.5s | | | AML | AML | | |
| PE3 | comp=N,1330μm,0.4s | | | AML | AML | | |
| PE3 | comp=N,1333μm,0.4s | | | AML | AML | | |
| PE3 | comp=E,1281μm,0.5s | | | AML | AML | | |
| **MMO1** | **Montemonaco** | **0.73** | **189** | P | **Pb** | **04 13 09.9** | **+0.8** |
| **MC2** | **Monte Cornacci** | **0.74** | **197** | P | **Pb** | **04 13 09.7** | **+0.3** |
| **CESI** | **CESI - Serrava** | **0.75** | **215** | P | **Pb** | **04 13 09.8** | **+0.3** |
| **ATCC** | **AVT- Casa Cast** | **0.75** | **235** | P | **Pb** | **04 13 09.9** | **+0.4** |
| ATCC | comp=E,594μm,0.6s | | | AML | AML | | |
| ATCC | comp=N,371μm,1.2s | | | AML | AML | | |
| ATCC | comp=E,595μm,0.6s | | | AML | AML | | |
| ATCC | comp=N,371μm,0.8s | | | AML | AML | | |
| ATCC | comp=N,331μm,0.4s | | | AML | AML | | |
| **ATPC** | **Poggio Castell** | **0.76** | **260** | P | **Pb** | **04 13 09.9** | **+0.2** |
| **MURB** | **Monte Urbino** | **0.79** | **243** | ⇓P | **Pb** | **04 13 10.8** | **+0.7** |
| MURB | comp=N,654μm,0.3s | | | AML | AML | | |
| MURB | comp=E,700μm,0.4s | | | AML | AML | | |
| MURB | comp=N,770μm,0.3s | | | AML | AML | | |
| MURB | comp=N,654μm,1.7s | | | AML | AML | | |
| MURB | comp=N,770μm,0.3s | | | AML | AML | | |
| MURB | comp=N,654μm,0.3s | | | AML | AML | | |
| MURB | comp=E,604μm,0.4s | | | AML | AML | | |
| MURB | comp=E,700μm,0.4s | | | AML | AML | | |
| MURB | comp=E,604μm,0.4s | | | AML | AML | | |
| **ATPI** | **Pietralunga -** | **0.81** | **258** | P | **Pb** | **04 13 10.9** | **+0.5** |
| ATPI | comp=E,192μm,0.4s | | | AML | AML | | |
| ATPI | comp=N,170μm,0.6s | | | AML | AML | | |
| ATPI | comp=N,171μm,0.6s | | | AML | AML | | |
| ATPI | comp=E,193μm,0.4s | | | AML | AML | | |
| **RSM** | **Repubblica di** | **0.81** | **293** | AML | AML | | |
| RSM | comp=N,328μm,0.9s | | | AML | AML | | |
| RSM | comp=E,192μm,0.7s | | | AML | AML | | |
| **ATVO** | **AVT- Monte Val** | **0.82** | **254** | P | **Pn** | **04 13 11.7** | **0.0** |
| ATVO | comp=N,214μm,0.4s | | | AML | AML | | |
| ATVO | comp=E,196μm,0.4s | | | AML | AML | | |
| ATVO | comp=E,195μm,0.4s | | | AML | AML | | |
| ATVO | comp=N,214μm,1.6s | | | AML | AML | | |
| ATVO | comp=N,214μm,0.4s | | | AML | AML | | |
| **NRCA** | **Norcia** | **0.83** | **199** | P | **Pb** | **04 13 11.4** | **+0.6** |
| NRCA | comp=E,535μm,1.3s | | | AML | AML | | |
| NRCA | comp=N,450μm,1.1s | | | AML | AML | | |
| NRCA | comp=N,450μm,0.9s | | | AML | AML | | |
| NRCA | comp=E,535μm,0.7s | | | AML | AML | | |
| NRCA | comp=N,395μm,0.2s | | | AML | AML | | |
| NRCA | comp=N,474μm,1.1s | | | AML | AML | | |
| NRCA | comp=N,393μm,0.2s | | | AML | AML | | |
| NRCA | comp=E,572μm,0.2s | | | AML | AML | | |
| NRCA | comp=E,572μm,0.2s | | | AML | AML | | |
| NRCA | comp=E,510μm,0.2s | | | AML | AML | | |
| **MTRA** | **Matera** | **0.86** | **184** | P | **Pb** | **04 13 11.8** | **+0.4** |
| MTRA | comp=N,21500μm,1.6s | | | AML | AML | | |
| MTRA | comp=N,820μm,0.3s | | | AML | AML | | |
| MTRA | comp=E,28500μm,1.6s | | | AML | AML | | |
| MTRA | comp=N,22000μm,1.6s | | | AML | AML | | |
| MTRA | comp=E,1074μm,0.3s | | | AML | AML | | |
| MTRA | comp=N,22000μm,0.4s | | | AML | AML | | |
| MTRA | comp=N,820μm,0.3s | | | AML | AML | | |
| MTRA | comp=E,28500μm,0.4s | | | AML | AML | | |
| MTRA | comp=E,1076μm,0.3s | | | AML | AML | | |
| **CPGN** | **Carpegna, Ital** | **0.86** | **283** | AML | AML | | |
| CPGN | comp=E,244μm,0.5s | | | AML | AML | | |
| CPGN | comp=E,243μm,0.5s | | | AML | AML | | |
| CPGN | comp=N,202μm,0.6s | | | AML | AML | | |
| CPGN | comp=N,202μm,0.6s | | | AML | AML | | |
| CPGN | comp=N,271μm,1.3s | | | AML | AML | | |
| CPGN | comp=N,202μm,1.4s | | | AML | AML | | |
| CPGN | comp=N,202μm,0.6s | | | AML | AML | | |
| CPGN | comp=E,243μm,0.5s | | | AML | AML | | |
| CPGN | comp=E,271μm,0.4s | | | AML | AML | | |
| **TRTR** | **Tortoreto Alta** | **0.87** | **159** | AML | AML | | |
| TRTR | comp=N,1210μm,0.5s | | | AML | AML | | |
| TRTR | comp=E,1365μm,1.0s | | | AML | AML | | |
| TRTR | comp=N,1210μm,1.5s | | | AML | AML | | |
| TRTR | comp=N,1130μm,0.9s | | | AML | AML | | |
| TRTR | comp=E,1148μm,0.4s | | | AML | AML | | |
| **PARC** | **Parchiule** | **0.91** | **272** | P | **Pg** | **04 13 12.8** | **+0.5** |
| PARC | comp=E,162μm,0.5s | | | AML | AML | | |
| PARC | comp=N,184μm,0.6s | | | AML | AML | | |
| PARC | comp=E,162μm,0.5s | | | AML | AML | | |
| PARC | comp=N,184μm,0.6s | | | AML | AML | | |
| **ATTE** | **AVT- Monte Tez** | **0.93** | **243** | AML | AML | | |
| ATTE | comp=N,164μm,0.6s | | | AML | AML | | |
| ATTE | comp=E,162μm,0.5s | | | AML | AML | | |
| ATTE | comp=E,162μm,0.5s | | | AML | AML | | |
| **ATMC** | **Monte Cedrone** | **0.96** | **260** | P | **Pn** | **04 13 14.2** | **+0.5** |
| **SMA1** | **SAN MARTINO** | **0.99** | **186** | P | **Pn** | **04 13 14.3** | **+0.2** |
| SMA1 | comp=E,378μm,0.4s | | | AML | AML | | |
| SMA1 | comp=N,635μm,0.3s | | | AML | AML | | |
| SMA1 | comp=E,378μm,1.6s | | | AML | AML | | |
| SMA1 | comp=N,635μm,0.3s | | | AML | AML | | |
| SMA1 | comp=E,377μm,0.4s | | | AML | AML | | |
| **TERO** | **Teramo** | **1.00** | **175** | P | **Pn** | **04 13 14.4** | **+0.2** |
| TERO | comp=E,320μm,0.3s | | | AML | AML | | |
| TERO | comp=N,347μm,1.2s | | | AML | AML | | |
| TERO | comp=N,347μm,0.8s | | | AML | AML | | |
| TERO | comp=N,346μm,0.4s | | | AML | AML | | |
| TERO | comp=N,169μm,0.3s | | | AML | AML | | |
| TERO | comp=E,320μm,0.3s | | | AML | AML | | |
| TERO | comp=E,188μm,0.4s | | | AML | AML | | |
| **CAMP** | **Campotosto** | **1.08** | **183** | P | **Pn** | **04 13 15.6** | **+0.2** |
| CAMP | comp=E,264μm,0.6s | | | AML | AML | | |
| CAMP | comp=N,298μm,0.8s | | | AML | AML | | |
| CAMP | comp=E,264μm,0.6s | | | AML | AML | | |
| CAMP | comp=N,262μm,0.8s | | | AML | AML | | |
| **RM33** | **Pellescritta (** | **1.13** | **190** | P | **Pg** | **04 13 17.0** | **+0.6** |
| RM33 | comp=E,342μm,1.6s | | | AML | AML | | |
| RM33 | comp=N,305μm,1.5s | | | AML | AML | | |
| RM33 | comp=E,342μm,1.6s | | | AML | AML | | |
| RM33 | comp=N,305μm,1.5s | | | AML | AML | | |
| RM33 | comp=E,342μm,1.2s | | | AML | AML | | |
| RM33 | comp=N,250μm,0.4s | | | AML | AML | | |
| RM33 | comp=E,342μm,0.8s | | | AML | AML | | |
| RM33 | comp=E,323μm,0.4s | | | AML | AML | | |
| RM33 | comp=E,323μm,0.4s | | | AML | AML | | |
| RM33 | comp=N,287μm,0.4s | | | AML | AML | | |
| RM33 | comp=N,250μm,0.4s | | | AML | AML | | |
| RM33 | comp=N,305μm,0.5s | | | AML | AML | | |
| **CAFI** | **Castiglion Fio** | **1.14** | **256** | AML | AML | | |
| CAFI | comp=N,86μm,0.6s | | | AML | AML | | |
| CAFI | comp=N,86μm,0.6s | | | AML | AML | | |
| CAFI | comp=E,81μm,0.6s | | | AML | AML | | |
| CAFI | comp=E,91μm,0.8s | | | AML | AML | | |
| CAFI | comp=N,86μm,1.4s | | | AML | AML | | |
| **DUGI** | **Dugi Otok** | **1.20** | **71** | *e*Pg | **Pb** | **04 13 17.3** | **+0.2** |
| DUGI | | | | Sg | **Sg** | **04 13 33.7** | **+0.3** |
| **CESX** | **Cesi** | **1.21** | **214** | P | **Pg** | **04 13 18.0** | **+0.1** |
| **VCEL** | **Villa Celiera** | **1.25** | **168** | AML | AML | | |
| VCEL | comp=N,323μm,0.3s | | | AML | AML | | |
| VCEL | comp=E,331μm,1.5s | | | AML | AML | | |
| VCEL | comp=E,331μm,0.5s | | | AML | AML | | |
| VCEL | comp=N,323μm,0.3s | | | AML | AML | | |
| VCEL | comp=E,320μm,0.3s | | | AML | AML | | |
| **BRJN** | **Brijuni** | **1.30** | **8** | *i* Pg | **Pn** | **04 13 18.5** | **+0.2** |
| BRJN | | | | Sg | **Sn** | **04 13 36.3** | **+0.9** |
| **VIRC** | **Vir** | **1.32** | **59** | *e*Pg | **Pn** | **04 13 18.9** | **+0.4** |
| VIRC | | | | Sg | **Sg** | **04 13 37.1** | **-0.2** |
| **FAGN** | **Fagnano** | **1.35** | **177** | AML | AML | | |
| FAGN | comp=N,369μm,0.4s | | | AML | AML | | |
| FAGN | comp=N,369μm,0.4s | | | AML | AML | | |
| FAGN | comp=E,352μm,0.4s | | | AML | AML | | |
| FAGN | comp=E,352μm,0.4s | | | AML | AML | | |
| **NVLJ** | **Novalja** | **1.37** | **46** | *i* Pg | **Pn** | **04 13 19.6** | **+0.3** |
| NVLJ | | | | Sg | **Sb** | **04 13 38.0** | **+0.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SACS** | **San Casciano d** | **1.39** | **237** | | AML | AML | | |
| | comp=N,129µm,0.8s | | | | | | | |
| SACS | | | | | AML | AML | | |
| | comp=E,69µm,0.8s | | | | | | | |
| SACS | | | | | AML | AML | | |
| | comp=E,69µm,0.8s | | | | | | | |
| SACS | | | | | AML | AML | | |
| | comp=E,99µm,1.1s | | | | | | | |
| SACS | | | | | AML | AML | | |
| | comp=N,114µm,0.5s | | | | | | | |
| SACS | | | | | AML | AML | | |
| | comp=N,114µm,0.5s | | | | | | | |
| **T0110** | **Collepietro** | **1.41** | **171** | | P | **Pg** | **04 13 21.7** | **-0.1** |
| T0110 | | | | | AML | AML | | |
| | comp=E,199µm,1.1s | | | | | | | |
| T0110 | | | | | AML | AML | | |
| | comp=E,199µm,0.9s | | | | | | | |
| T0110 | | | | | AML | AML | | |
| | comp=N,298µm,1.5s | | | | | | | |
| T0110 | | | | | AML | AML | | |
| | comp=N,287µm,0.7s | | | | | | | |
| T0110 | | | | | AML | AML | | |
| | comp=E,191µm,0.5s | | | | | | | |
| **RABC** | **Rab** | **1.47** | **39** | *i* Pg | | **Pb** | **04 13 22.4** | **+0.7** |
| RABC | | | | Sg | | **Sg** | **04 13 42.0** | **+0.1** |
| **SMRN** | **Sveta Marina** | **1.50** | **18** | *i* Pn | | **Pn** | **04 13 21.3** | **+0.4** |
| SMRN | | | | Sg | | **Sb** | **04 13 41.9** | **+1.0** |
| **ZIRJ** | **Zirje** | **1.57** | **88** | *e*Pn | | **Pb** | **04 13 23.3** | **0.0** |
| ZIRJ | | | | Sn | | **Sg** | **04 13 44.2** | **-0.9** |
| **MORI** | **Morici** | **1.63** | **80** | *e*Pn | | **Pb** | **04 13 24.6** | **+0.2** |
| MORI | | | | Sn | | **Sg** | **04 13 46.3** | **-0.8** |
| **INTR** | **Introdacqua** | **1.64** | **169** | P | | **Pb** | **04 13 25.0** | **+0.4** |
| INTR | | | | AML | AML | | | |
| | comp=N,56µm,0.6s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,45µm,0.5s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=N,56µm,1.4s | | | | | | | |
| **RIY** | **Rijeka** | **1.85** | **22** | *e*Pn | | **Pn** | **04 13 26.8** | **+1.0** |
| RIY | | | | Sn | | **Sn** | **04 13 50.2** | **+1.2** |
| **UDBI** | **Udbina** | **1.88** | **60** | *i* Pn | | **Pb** | **04 13 28.1** | **-0.6** |
| UDBI | | | | Sn | | **Sb** | **04 13 52.9** | **+1.0** |
| **PLIT** | **Plitvice** | **1.99** | **50** | *i* Pn | | **Pn** | **04 13 29.2** | **+1.5** |
| PLIT | | | | Sn | | **Sb** | **04 13 55.0** | **0.0** |
| **KIJV** | **Kijevo** | **2.15** | **79** | *i* Pn | | **Pb** | **04 13 32.1** | **-1.2** |
| KIJV | | | | Sn | | **Sb** | **04 13 59.7** | **0.0** |
| **HVAR** | **Hvar** | **2.20** | **101** | *e*Pn | | **Pb** | **04 13 32.7** | **-1.5** |
| HVAR | | | | Sn | | **Sb** | **04 13 60.0** | **-1.3** |
| **SABO** | **M.te Sabotino** | **2.36** | **2** | AML | AML | | | |
| | comp=N,83µm,0.6s | | | | | | | |
| SABO | | | | | AML | AML | | |
| | comp=N,335µm,0.8s | | | | | | | |
| SABO | | | | | AML | AML | | |
| | comp=E,72µm,0.6s | | | | | | | |
| SABO | | | | | AML | AML | | |
| | comp=E,72µm,1.4s | | | | | | | |
| SABO | | | | | AML | AML | | |
| | comp=E,298µm,1.2s | | | | | | | |
| **SGRT** | **San Giovanni R** | **2.50** | **137** | | AML | AML | | |
| | comp=N,59µm,1.3s | | | | | | | |
| SGRT | | | | | AML | AML | | |
| | comp=E,48µm,1.4s | | | | | | | |
| SGRT | | | | | AML | AML | | |
| | comp=E,48µm,0.6s | | | | | | | |
| **MAKA** | **Makarska** | **2.59** | **96** | Sn | | **Sn** | **04 14 09.9** | **+2.6** |
| **MPRI** | **Monte Prat** | **2.65** | **352** | AML | AML | | | |
| | comp=N,78µm,0.4s | | | | | | | |
| MPRI | | | | | AML | AML | | |
| | comp=E,54µm,0.3s | | | | | | | |
| MPRI | | | | | AML | AML | | |
| | comp=E,54µm,1.7s | | | | | | | |
| **STAL** | **STALIGIAL** | **2.70** | **348** | | AML | AML | | |
| | comp=N,43µm,1.3s | | | | | | | |
| STAL | | | | | AML | AML | | |
| | comp=E,51µm,0.3s | | | | | | | |
| STAL | | | | | AML | AML | | |
| | comp=N,43µm,0.7s | | | | | | | |
| **CTI** | **Castel Tesino** | **2.76** | **332** | | AML | AML | | |
| | comp=N,48µm,0.5s | | | | | | | |
| CTI | | | | | AML | AML | | |
| | comp=E,47µm,0.4s | | | | | | | |
| **CIMO** | **Cimolais** | **2.79** | **345** | | AML | AML | | |
| | comp=E,14µm,0.3s | | | | | | | |
| CIMO | | | | | AML | AML | | |
| | comp=N,15µm,1.3s | | | | | | | |
| **DOSS** | **Dosso del Somm** | **2.79** | **325** | | AML | AML | | |
| | comp=E,52µm,0.5s | | | | | | | |
| DOSS | | | | | AML | AML | | |
| | comp=N,50µm,0.6s | | | | | | | |
| **CLUD** | **Cludinico** | **2.87** | **352** | | AML | AML | | |
| | comp=E,32µm,1.2s | | | | | | | |
| CLUD | | | | | AML | AML | | |
| | comp=N,25µm,0.8s | | | | | | | |
| CLUD | | | | | AML | AML | | |
| | comp=E,32µm,0.8s | | | | | | | |
| CLUD | | | | | AML | AML | | |
| | comp=N,25µm,1.2s | | | | | | | |
| **VARA** | **Varagna** | **2.88** | **321** | | AML | AML | | |
| | comp=E,68µm,1.6s | | | | | | | |
| VARA | | | | | AML | AML | | |
| | comp=N,52µm,0.5s | | | | | | | |
| **LUSI** | **Trento, Gardas** | **2.96** | **323** | | AML | AML | | |
| | comp=N,43µm,0.3s | | | | | | | |
| LUSI | | | | | AML | AML | | |
| | comp=E,40µm,0.8s | | | | | | | |
| **ZOU** | **Zoufplan** | **2.96** | **353** | | AML | AML | | |
| | comp=N,80µm,1.2s | | | | | | | |
| ZOU | | | | | AML | AML | | |
| | comp=E,76µm,1.5s | | | | | | | |
| ZOU | | | | | AML | AML | | |
| | comp=E,29µm,1.0s | | | | | | | |
| ZOU | | | | | AML | AML | | |
| | comp=N,80µm,0.8s | | | | | | | |
| ZOU | | | | | AML | AML | | |
| | comp=N,25µm,1.2s | | | | | | | |
| ZOU | | | | | AML | AML | | |
| | comp=E,76µm,0.5s | | | | | | | |
| ZOU | | | | | AML | AML | | |
| | comp=E,29µm,1.0s | | | | | | | |
| **OBKA** | **Obir** | **2.99** | **14** | *e*Pn | | **Pn** | **04 13 43.0** | **+1.4** |
| OBKA | | | | | *e*Sn | **Sn** | **04 14 16.3** | **-0.8** |
| | comp=E,1.5nm,0.2s | | | | | | | |
| **MYKA** | **Terra Mystica** | **3.01** | **2** | *e*Pn | | **Pn** | **04 13 43.3** | **+1.4** |
| | comp=E,9.4nm,0.4s | | | | | | | |
| MYKA | | | | | *e*Sn | **Sn** | **04 14 18.4** | **+0.6** |
| | comp=E,2.8nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **3.20** | **348** | *i* Pn | | **Pn** | **04 13 45.8** | **+1.3** |
| | comp=E,4.0nm,0.4s | | | | | | | |
| ABTA | | | | | *i* Sn | **Sn** | **04 14 22.0** | **-0.5** |
| | comp=E,3.0nm,0.3s,SNR=16 | | | | | | | |
| **KOSI** | **Kohlern** | **3.21** | **333** | | AML | AML | | |
| | comp=E,6.5nm,0.6s | | | | | | | |
| KOSI | | | | | AML | AML | | |
| | comp=N,41µm,0.7s | | | | | | | |
| KOSI | | | | | AML | AML | | |
| | comp=E,41µm,0.6s | | | | | | | |
| KOSI | | | | | AML | AML | | |
| | comp=N,41µm,1.3s | | | | | | | |
| **MABI** | **Malga Bissina** | **3.23** | **320** | | AML | AML | | |
| | comp=N,29µm,0.2s | | | | | | | |
| MABI | | | | | AML | AML | | |
| | comp=E,14µm,1.0s | | | | | | | |
| **SOKA** | **Soboth** | **3.25** | **19** | *e*Pn | | **Pn** | **04 13 46.5** | **+1.3** |
| | comp=E,0.7nm,0.2s | | | | | | | |
| SOKA | | | | | *i* Sn | **Sn** | **04 14 24.2** | **+0.6** |
| | comp=E,1.6nm,0.3s | | | | | | | |
| **OZOL** | **Ozolo** | **3.28** | **329** | | AML | AML | | |
| | comp=E,561µm,0.4s | | | | | | | |
| OZOL | | | | | AML | AML | | |
| | comp=E,561µm,1.6s | | | | | | | |
| OZOL | | | | | AML | AML | | |
| | comp=N,324µm,1.3s | | | | | | | |
| **PGF** | **Pioggiola** | **3.46** | **254** | *e*Pn | | **Pn** | **04 13 50.9** | **+2.9** |
| PGF | | | | | *e*Sn | **Sn** | **04 14 29.9** | **+1.2** |
| | comp=N,0.2nm,0.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **3.46** | **358** | *i* Pn | | **Pn** | **04 13 49.5** | **+1.3** |
| | comp=N,0.8nm,0.2s,SNR=6.8 | | | | | | | |
| KBA | | | | | *i* Sn | **Sn** | **04 14 28.9** | **-0.1** |
| | comp=N,3.3nm,0.4s | | | | | | | |
| **LESA** | **Schwarzleotal** | **3.85** | **352** | *i* Pn | | **Pn** | **04 13 54.8** | **+1.4** |
| | comp=N,6.4nm,0.3s | | | | | | | |
| LESA | | | | | *i* Sn | **Sn** | **04 14 38.9** | **+0.6** |
| | comp=N,7.2nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **3.87** | **341** | *i* Pn | | **Pn** | **04 13 56.4** | **+2.6** |
| | comp=N,1.4nm,0.2s,SNR=5.1 | | | | | | | |
| WTTA | | | | | *i* Sn | **Sn** | **04 14 40.3** | **+1.3** |
| | comp=N,3.1nm,0.3s | | | | | | | |
| **ARSA** | **Arzberg** | **3.91** | **21** | *i* Pn | | **Pn** | **04 13 55.1** | **+1.0** |
| | comp=N,2.5nm,0.4s | | | | | | | |
| ARSA | | | | | *i* Sn | **Sn** | **04 14 40.0** | **+0.3** |
| | comp=N,1.4nm,0.3s | | | | | | | |
| **FETA** | **Feichten** | **3.92** | **331** | *i* Pn | | **Pn** | **04 13 56.6** | **+2.2** |
| | comp=N,2.7nm,0.4s,SNR=6.0 | | | | | | | |
| FETA | | | | | *i* Sn | **Sn** | **04 14 40.0** | **-0.2** |
| | comp=N,1.3nm,0.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **3.94** | **337** | *i* Pn | | **Pn** | **04 13 57.0** | **+2.2** |
| | comp=N,4.4nm,0.3s,SNR=5.8 | | | | | | | |
| SQTA | | | | | *e*Sn | **Sn** | **04 14 40.1** | **-0.7** |
| | comp=N,2.3nm,0.3s | | | | | | | |
| **WATA** | **Walderalm** | **3.95** | **341** | *i* Pn | | **Pn** | **04 13 57.7** | **+2.8** |
| | comp=N,3.4nm,0.2s,SNR=5.4 | | | | | | | |
| WATA | | | | | *i* Sn | **Sn** | **04 14 41.5** | **+0.5** |
| | comp=N,3.3nm,0.3s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **4.08** | **1** | Pn | | **Pn** | **04 13 57.8** | **+1.3** |
| | comp=N,3.5nm,0.3s,SNR=6.9 | | | | | | | |
| BIOA | | | | | *i* Sn | **Sn** | **04 14 43.8** | **0.0** |
| **MOTA** | **Moosalm** | **4.09** | **337** | *i* Pn | | **Pn** | **04 13 59.3** | **+2.6** |
| | comp=N,1.1nm,0.3s | | | | | | | |
| MOTA | | | | | *i* Sn | **Sn** | **04 14 45.9** | **+1.6** |
| | comp=N,1.0nm,0.3s | | | | | | | |
| **MOA** | **Molln** | **4.27** | **7** | *i* Pn | | **Pn** | **04 14 00.7** | **+1.6** |
| | comp=N,2.1nm,0.3s,SNR=5.0 | | | | | | | |
| MOA | | | | | *i* Sn | **Sn** | **04 14 46.9** | **-1.6** |
| | comp=N,0.8nm,0.3s | | | | | | | |
| **RETA** | **Reutte** | **4.32** | **335** | *i* Pn | | **Pn** | **04 14 01.7** | **+1.9** |
| | comp=N,1.8nm,0.3s | | | | | | | |
| RETA | | | | | *i* Sn | **Sn** | **04 14 50.6** | **+0.7** |
| | comp=N,0.8nm,0.3s | | | | | | | |
| **SBF** | **Sospel** | **4.39** | **275** | *e*Pn | | **Pn** | **04 14 02.5** | **+1.6** |
| **DAVA** | **Damuels** | **4.46** | **327** | *e*Pn | | **Pn** | **04 14 04.5** | **+2.7** |
| | comp=N,1.8nm,0.3s | | | | | | | |
| DAVA | | | | | *i* Sn | **Sn** | **04 14 55.0** | **+1.5** |
| | comp=N,3.1nm,0.3s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **4.53** | **25** | *i* Pn | | **Pn** | **04 14 02.7** | **0.0** |
| | comp=N,0.6nm,0.2s | | | | | | | |
| **CONA** | **Conrad Observa** | **4.62** | **20** | *i* Pn | | **Pn** | **04 14 05.2** | **+1.2** |
| | comp=N,1.5nm,0.3s | | | | | | | |
| CONA | | | | | *i* Sn | **Sn** | **04 14 56.9** | **-0.4** |
| | comp=N,0.3nm,0.2s | | | | | | | |
| **MBDF** | **Montbardon** | **4.96** | **285** | *e*Pn | | **Pn** | **04 14 10.5** | **+1.8** |
| MBDF | | | | | *e*Sn | **Sn** | **04 15 03.3** | **-2.5** |
| | comp=N,0.9nm,0.3s | | | | | | | |
| **LMR** | **La Mourre** | **5.09** | **269** | *e*Pn | | **Pn** | **04 14 11.9** | **+1.6** |
| **LPG** | **La Plagne** | **5.17** | **294** | *e*Pn | | **Pn** | **04 14 11.4** | **-0.3** |
| LPG | | | | | *e*Sn | **Sn** | **04 15 09.0** | **-2.1** |
| | comp=N,1.1nm,0.4s | | | | | | | |
| **LPL** | **La Plagne** | **5.19** | **294** | *e*Pn | | **Pn** | **04 14 11.5** | **-0.4** |
| LPL | | | | | *e*Sn | **Sn** | **04 15 09.0** | **-2.5** |
| | comp=N,1.8nm,0.3s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **5.23** | **6** | *e*PN | | **Pn** | **04 14 12.1** | **-0.3** |
| **KHC** | **Kasperske Hory** | **5.51** | **1** | *e*PN | | **Pn** | **04 14 15.8** | **-0.4** |
| KHC | | | | | *e*SN | **Sn** | **04 15 15.6** | **-3.7** |
| **ORIF** | **Oris-en-Rattie** | **5.62** | **286** | *e*Pn | | **Pn** | **04 14 18.9** | **+1.2** |
| **SMRF** | **Simiane la Rot** | **5.74** | **276** | *e*Pn | | **Pn** | **04 14 19.5** | **+0.2** |
| **CABF** | **La Chapelle** | **6.03** | **302** | *e*Pn | | **Pn** | **04 14 25.5** | **+2.1** |
| CABF | | | | | *e*Sn | **Sn** | **04 15 28.0** | **-4.1** |
| | comp=N,0.9nm,0.3s | | | | | | | |
| **HINF** | **Hinteralfeld** | **6.26** | **314** | *e*Pn | | **Pn** | **04 14 26.5** | **0.0** |
| HINF | | | | | *e*Sn | **Sn** | **04 15 34.0** | **-3.7** |
| | comp=N,1.5nm,0.3s | | | | | | | |
| **CDF** | **Champ du Feu** | **6.46** | **320** | *e*Pn | | **Pn** | **04 14 28.3** | **-0.9** |
| CDF | | | | | *e*Sn | **Sn** | **04 15 38.1** | **-4.5** |
| | comp=N,1.2nm,0.3s | | | | | | | |
| **HAU** | **Haudompre** | **6.64** | **314** | *e*Pn | | **Pn** | **04 14 29.6** | **-2.1** |
| HAU | | | | | *e*Sn | **Sn** | **04 15 41.1** | **-6.0** |
| | comp=N,1.6nm,0.2s | | | | | | | |
| **SMF** | **Signal de Mont** | **7.46** | **297** | *e*P | | **Pn** | **04 14 45.9** | **+3.0** |
| SMF | | | | | *e*Sn | **Sn** | **04 16 00.5** | **-6.8** |
| | comp=N,1.3nm,0.3s | | | | | | | |
| **LOR** | **Lormes** | **7.69** | **302** | *e*Pn | | **Pn** | **04 14 45.4** | **-0.7** |
| LOR | | | | | *e*Sn | **Sn** | **04 16 07.0** | **-5.9** |
| | comp=N,1.4nm,0.3s | | | | | | | |
| **AVF** | **Avril sur Loir** | **7.83** | **297** | *e*Pn | | **Pn** | **04 14 48.9** | **+1.0** |
| **BGF** | **Bois d'Agland** | **8.08** | **295** | *e*Pn | | **Pn** | **04 14 49.7** | **-1.7** |
| **BGF** | **Bois d'Agland** | **8.08** | **295** | *e*P | | **Pn** | **04 14 55.9** | **+4.5** |

*BJI* ***17*** *04:35:24.9±0.0,51°.15N×177°.75W,h25km,mb5.2/74, mB5.5/57,Ms5.3/65,Ms7 5.0/67*

*AEIC* ***17*** *04:35:27.1±3.1,50°.82N±0°.09×178°.07W±0°.07,h16km±3km, Error ellipse: s-maj=13.4km s-min=6.7km az=176.0*

*MOS* ***17*** *04:35:27.2±1.0,51°.32N×178°.04W,h21km,mb5.6/82, MS5.0/21,Error ellipse: s-maj=7.2km s-min=4.3km az=102.8*

*IDC* ***17*** *04:35:28.8±1.7,51°.36N×178°.02W,h23km±10km,mb4.8/32, mbtmp4.9/35,ML4.9/3,MS4.8/82,Error ellipse: s-maj=12.8km s-min=9.2km az=155.0*

*BGR* ***17*** *04:35:29.5,50°.77N×178°.90W,h33km,mb5.5*

*IPGP* ***17*** *04:35:29.0,50°.76N×178°.06W,h34km,Mw5.4, Fault plane solution: NP1:φ≈27.00000°,δ53.00000°,λ115.00000°. NP2:φ≈169.00000°,δ43.00000°,λ61.00000°.*

*NEIC* ***17*** *04:35:30.1,51°.29N×178°.13W,h36km*

*NEIC* ***17*** *04:35:30.1,51°.09N×177°.97W,h36km,Moment Tensor Solution. Duration: 2≈6 Moment tensor: Scale 10¹⁷Nm; Mrr1.47; Mθθ-1.40; Mφφ-0.07; Mrθ 0.57; Mφθ-0.53; Mrφ 0.17; Fault plane solution: M₀1.64000×10¹⁷ NP1:φ≈71.96000°, δ55.59000°,λ91.39000°. NP2:φ≈249.50000°,δ34.43000°, λ87.97000°. Principal axes: T 1.5844, Plg79.0000°, Azm347.0000°; N 0.1129, Plg1.0000°, Azm251.0000°; P -1.6973, Plg11.0000°, Azm161.0000°;*

*NEIC* ***17*** *04:35:30.5±1.3,51°.30N±0°.09×178°.15W±0°.05,h32km±3km, mb5.7/910,Mww5.4/47,ML5.9(AEIC) Error ellipse: s-maj=13.3km s-min=4.1km az=178.0*

*GCMT* ***17*** *04:35:31.5±0.1,51°.19N±0°.01×177°.94W±0°.01,h30km, MW5.4/137,Moment Tensor Solution. s137,c248; s136,c254; Duration: 1≈3 Moment tensor: Scale 10¹⁷ Nm; Mrr1.47±.02; Mθθ-1.35±.02; Mφφ-0.11±.02; Mrθ0.76±.03; Mθφ-0.63±.01; Mφr0.06±.03; Best double couple: M₀1.72300×10¹⁷ NP1:φ≈76.00000°,δ58.00000°, λ99.00000°. NP2:φ≈238.00000°,δ33.00000°,λ75.00000°. Principal axes: T 1.6680, Plg75.0000°, Azm12.0000°; N 0.1100, Plg8.0000°, Azm251.0000°; P -1.7770, Plg13.0000°, Azm159.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 17 04:35:29.5±0.4,51°.24N±0°.04×178°.03W±0°.02,h29km±2km, h30km:pP-P,n1669,σ1°52/1456,mb5.6/587,MS4.9/127, 81C-62D,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **1.68** | **276** | | | **Pn** | **04 35 55.9** | **-1.0** |
| **AMKA** | **Amchitka** | **1.68** | **276** | | | **Sb** | **04 36 19.3** | **-1.3** |
| **KOKL** | **Mount Kliuchef** | **2.61** | **64** | | | **Pn** | **04 36 12.1** | **+2.3** |
| **KOFP** | **Korovin Flat P** | **2.65** | **65** | | | **Pn** | **04 36 12.4** | **+2.1** |
| **KONE** | **Korovin Northe** | **2.69** | **63** | | | **Pn** | **04 36 13.6** | **+2.9** |
| **KOSE** | **Korovin Southe** | **2.71** | **64** | | | **Pn** | **04 36 13.9** | **+2.9** |
| **SHEM** | **Shemya Is, Ala** | **5.09** | **290** | Pn | | **Pn** | **04 36 45.1** | **+1.4** |
| | 16nm,0.3s,baz=60,slow=4.0,SNR=15 | | | | | | | |
| SHEM | | | | | Sn | **Sn** | **04 37 44.2** | **+2.8** |
| | 5.4nm,0.3s,baz=300,slow=8.1,SNR=1.4 | | | | | | | |
| SHEM | | | | | LR | LR | 04 38 50.8 | |
| | comp=Z,25µm,18.2s,baz=133,slow=40 53nm,0.5s | | | | | | | |
| **CLES** | **Cleveland East** | **5.26** | **69** | Pn | | **Pn** | **04 36 47.7** | **+1.6** |
| **CLES** | **Cleveland East** | **5.26** | **69** | | | **Sn** | **04 37 51.6** | **+5.9** |
| **CLCO** | **Concord Point,** | **5.36** | **70** | | | **Pn** | **04 36 50.6** | **+3.2** |
| CLCO | | | | | | **Sn** | **04 37 54.9** | **+6.9** |
| **NIKH** | **Nikolski High** | **5.91** | **69** | P | | **Pn** | **04 36 57.8** | **+2.8** |
| **NIKH** | **Nikolski High** | **5.91** | **69** | | | **Pn** | **04 36 57.5** | **+2.5** |
| NIKH | | | | | | **Sn** | **04 38 08.3** | **+6.6** |
| **NIKH** | **Nikolski High** | **5.91** | **69** | P | | **Pn** | **04 36 57.0** | **+2.0** |
| | baz=253,SNR=167 | | | | | | | |
| NIKH | | | | | S | **Sn** | **04 38 04.0** | **+2.3** |
| | baz=253 | | | | | | | |
| **OKWE** | **Okmok W'ng Wal** | **6.40** | **66** | | | **Pn** | **04 37 04.6** | **+2.9** |
| **OKCE** | **Okmok Cone E** | **6.43** | **66** | | | **Pn** | **04 37 05.5** | **+3.3** |
| **OKNC** | **Okmok New Cone** | **6.46** | **66** | | | **Pn** | **04 37 06.5** | **+4.0** |
| **OKFG** | **Magazine Ridge** | **6.57** | **67** | | | **Pn** | **04 37 07.4** | **+3.3** |
| **P08K** | **Saint George I** | **7.34** | **40** | | | **Pn** | **04 37 18.5** | **+3.9** |
| **P08K** | **Saint George I** | **7.34** | **40** | P | | Pn | 04 37 19.4 | +4.8 |
| | baz=225,SNR=14 | | | | | | | |
| P08K | | | | | S | **Sn** | **04 38 36.8** | **0.0** |
| | baz=225 | | | | | | | |
| P08K | | | | | S | **Sn** | **04 38 36.8** | **0.0** |
| | baz=225 | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **7.50** | **34** | P | | Pn | 04 37 21.6 | +4.9 |
| **SPIA** | **Saint Paul Isl** | **7.50** | **34** | | | Pn | 04 37 22.2 | +5.5 |
| | baz=219,SNR=56 | | | | | | | |
| SPIA | | | | | S | **Sn** | **04 38 41.0** | **+0.5** |
| | baz=219 | | | | | | | |
| **UNV** | **Unalaska Valle** | **7.50** | **65** | P | | **Pn** | **04 37 20.2** | **+3.5** |
| **UNV** | **Unalaska Valle** | **7.50** | **65** | | | **Sn** | **04 38 47.1** | **+6.5** |
| **UNV** | **Unalaska Valle** | **7.50** | **65** | P | | **Pn** | **04 37 19.2** | **+2.5** |
| | baz=252,SNR=139 | | | | | | | |
| UNV | | | | | S | **Sn** | **04 38 43.3** | **+2.7** |
| | baz=252 | | | | | | | |
| **AKRB** | **Akutan Reef Bi** | **7.82** | **64** | | | **Pn** | **04 37 25.1** | **+3.9** |
| **LVA** | **Lava Point** | **7.85** | **63** | | | **Pn** | **04 37 25.2** | **+3.6** |
| **AKGG** | **Akutan Green G** | **7.89** | **63** | | | **Pn** | **04 37 25.8** | **+3.7** |
| **WECS** | **Westdahl Cape** | **8.66** | **62** | | | **Pn** | **04 37 36.8** | **+4.0** |
| **SSLS** | **Shishaldin Sou** | **9.15** | **62** | | | **Pn** | **04 37 43.0** | **+3.6** |
| **ISNN** | **Isanotski Nort** | **9.31** | **62** | | | **Pn** | **04 37 46.1** | **+4.5** |
| **FALS** | **False Pass** | **9.51** | **62** | P | | **Pn** | **04 37 47.5** | **+3.2** |
| **FALS** | **False Pass** | **9.51** | **62** | | | **Pn** | **04 37 47.7** | **+3.4** |
| **FALS** | **False Pass** | **9.51** | **62** | P | | **Pn** | **04 37 46.7** | **+2.3** |
| | baz=251,SNR=49 | | | | | | | |
| **S12K** | **Black Hills** | **10.51** | **59** | Pn | | **Pn** | **04 38 00.3** | **+2.3** |
| **S12K** | **Black Hills** | **10.51** | **59** | P | | **Pn** | **04 38 00.2** | **+2.2** |
| | baz=250,SNR=35 | | | | | | | |
| **SDPT** | **Sand Point** | **11.27** | **62** | P | | **Pn** | **04 38 09.4** | **+1.0** |
| **SDPT** | **Sand Point** | **11.27** | **62** | Pn | | **Pn** | **04 38 08.8** | **+0.4** |
| **SDPT** | **Sand Point** | **11.27** | **62** | P | | **Pn** | **04 38 09.0** | **+0.6** |
| | baz=254,SNR=47 | | | | | | | |
| **M11K** | **Mekoryuk** | **11.31** | **31** | P | | Pn | 04 38 14.2 | +5.4 |
| | baz=220 | | | | | | | |
| **CNBA** | **Chernabura Isl** | **11.66** | **65** | Pn | | **Pn** | **04 38 13.4** | **-0.3** |
| **CHNA** | **Chernabura Isl** | **11.66** | **65** | P | | **Pn** | **04 38 13.7** | **0.0** |
| | baz=258,SNR=107 | | | | | | | |
| **S14K** | **Fog Glacier** | **12.03** | **58** | P | | **Pn** | **04 38 20.1** | **+1.3** |
| | baz=251,SNR=8.3 | | | | | | | |
| **M13K** | **Dall Lake** | **12.32** | **36** | P | | Pn | 04 38 28.2 | +5.5 |
| | baz=227 | | | | | | | |
| **O14K** | **Tigyukauivet M** | **12.46** | **43** | P | | **Pn** | **04 38 29.3** | **+4.7** |
| | baz=236 | | | | | | | |
| **CHGN** | **Chignik** | **12.64** | **59** | Pn | | **Pn** | **04 38 27.5** | **+0.4** |
| **CHGN** | **Chignik** | **12.64** | **59** | P | | **Pn** | **04 38 27.1** | **0.0** |
| | baz=253,SNR=14 | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **12.66** | **40** | P | | **Pn** | **04 38 31.7** | **+4.4** |
| | baz=233,SNR=98 | | | | | | | |
| **GAMB** | **Gambell** | **13.02** | **13** | P | | Pn | 04 38 37.2 | +5.0 |
| | baz=198,SNR=9.4 | | | | | | | |
| **O15K** | **Ungalikthiuk R** | **13.05** | **45** | P | | **Pn** | **04 38 36.9** | **+4.2** |
| | baz=239,SNR=305 | | | | | | | |
| **M14K** | **Bethel** | **13.06** | **37** | Pn | | **Pn** | **04 38 35.9** | **+3.1** |
| **M14K** | **Bethel** | **13.06** | **37** | P | | **Pn** | **04 38 37.3** | **+4.5** |
| | baz=229,SNR=66 | | | | | | | |
| **L14K** | **Kuka Creek** | **13.19** | **34** | Pn | | **Pn** | **04 38 39.2** | **+4.6** |
| **L14K** | **Kuka Creek** | **13.19** | **34** | P | | **P** | **04 38 40.3** | **-3.9** |
| | baz=226,SNR=107 | | | | | | | |
| **N15K** | **Kwethluk River** | **13.46** | **41** | Pn | | **Pn** | **04 38 41.2** | **+2.9** |
| **N15K** | **Kwethluk River** | **13.46** | **41** | P | | **Pn** | **04 38 42.2** | **+3.9** |
| | baz=235,SNR=132 | | | | | | | |
| **R16K** | **Pilot Point** | **13.46** | **54** | | | **Pn** | **04 38 39.6** | **+1.4** |
| **R16K** | **Pilot Point** | **13.46** | **54** | P | | **Pn** | **04 38 40.0** | **+1.7** |
| | baz=249 | | | | | | | |
| **M15K** | **Kasigluk River** | **13.52** | **39** | P | | **Pn** | **04 38 42.7** | **+3.6** |
| | baz=232 | | | | | | | |
| **P16K** | **Nushagak River** | **13.82** | **48** | P | | **P** | **04 38 47.5** | **-3.7** |
| | baz=243 | | | | | | | |
| **L15K** | **Ungaliak Mounta** | **13.84** | **35** | P | | **P** | **04 38 48.0** | **-3.4** |
| | baz=228,SNR=155 | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **13.93** | **29** | P | | **P** | **04 38 49.1** | **-3.3** |
| | baz=220 | | | | | | | |
| **O16K** | **Kokwok River B** | **14.03** | **46** | Pn | | **Pn** | **04 38 48.7** | **+2.7** |
| **O16K** | **Kokwok River B** | **14.03** | **46** | P | | **Pn** | **04 38 49.5** | **+3.5** |
| | baz=241,SNR=177 | | | | | | | |
| **CHIR** | **Chirikof Islan** | **14.07** | **62** | Pn | | **Pn** | **04 38 45.0** | **-1.6** |
| **CHIR** | **Chirikof Islan** | **14.07** | **62** | P | | **Pn** | **04 38 47.8** | **+1.2** |
| | baz=259,SNR=9.1 | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **14.10** | **55** | P | | **Pn** | **04 38 47.3** | **+0.2** |
| | baz=251,SNR=59 | | | | | | | |
| **PLK4** | **Peulik 4** | **14.10** | **55** | Pn | | **Pn** | **04 38 46.7** | **-0.4** |
| **N16K** | **Nishlik Lake** | **14.18** | **42** | P | | **Pn** | **04 38 51.2** | **+3.1** |
| | baz=237,SNR=243 | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **14.25** | **33** | P | | **P** | **04 38 53.5** | **-2.4** |
| | baz=226 | | | | | | | |
| **Q16K** | **King Salmon** | **14.31** | **50** | P | | **Pn** | **04 38 52.4** | **+2.5** |
| | baz=247 | | | | | | | |
| **M16K** | **Timber Creek** | **14.40** | **40** | P | | **Pn** | **04 38 53.0** | **+1.9** |
| | baz=235 | | | | | | | |
| **PET** | **Petropavlovsk** | **14.42** | **286** | | | P | 04 39 05.9 | +8.0 |
| | 241nm,1.1s | | | | | | | |
| **PET** | **Petropavlovsk** | **14.42** | **286** | Pn | | **Pn** | **04 38 50.4** | **-1.0** |
| **PET** | **Petropavlovsk** | **14.42** | **286** | *e*P | | **Pn** | **04 38 53.2** | **+1.8** |
| PET | | | | | *e*S | **Sn** | **04 41 34.1** | **+4.0** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,65nm,1.2s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,500nm,10.1s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,300nm,13.9s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,2µm,17.0s | | | | | | | |
| PET | | | | | MLR | MLR | | |
| | comp=Z,2µm,15.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **14.42** | **286** | P | | **Pn** | **04 38 51.2** | **-0.2** |
| | comp=Z,72nm,1.6s | | | | | | | |
| **Q17K** | **Contact Creek** | **14.54** | **52** | P | | **Pn** | **04 38 53.6** | **+0.5** |
| | baz=249,SNR=74 | | | | | | | |
| **O17K** | **Koliganek Bris** | **14.56** | **46** | P | | **Pn** | **04 38 56.1** | **+2.8** |
| | baz=242 | | | | | | | |
| **L16K** | **Owhat River** | **14.61** | **37** | Pn | | **Pn** | **04 38 55.2** | **+1.4** |
| **L16K** | **Owhat River** | **14.61** | **37** | P | | **P** | **04 38 57.3** | **-2.6** |
| | baz=232 | | | | | | | |
| **P17K** | **Kvichak River** | **14.62** | **49** | P | | **Pn** | **04 38 56.7** | **+2.7** |
| | baz=245 | | | | | | | |
| **ACHA** | **Angle Creek He** | **14.81** | **53** | Pn | | **Pn** | **04 38 56.6** | **-0.1** |
| **N17K** | **Nushagak Hills** | **14.88** | **43** | Pn | | **Pn** | **04 38 59.8** | **+2.3** |
| **N17K** | **Nushagak Hills** | **14.88** | **43** | P | | **P** | **04 39 00.6** | **-2.3** |
| | baz=240,SNR=116 | | | | | | | |
| **ANM** | **Nome** | **14.91** | **22** | | | **Pn** | **04 38 58.4** | **+0.4** |
| **ANM** | **Nome** | **14.91** | **22** | P | | **P** | **04 39 01.1** | **-2.2** |
| | baz=212 | | | | | | | |
| **ANM** | **Nome** | **14.91**

**K17K Iditarod** 15.66 35 P P 04 39 10.4 -1.2
baz=231
**H16K Elim** 15.76 26 P P 04 39 12.5 -0.3
baz=218,SNR=30
**J17K VABM Dome** 15.82 32 IAmb IAmb 04 39 18.1
comp=Z,688nm,1.1s
**J17K VABM Dome** 15.82 32 P P 04 39 13.3 -0.1
baz=228,SNR=240
**Q19K Cape Douglas,** 15.87 52 Pn Pn 04 39 09.8 -0.7
Q19K IAmb IAmb 04 39 19.4
comp=Z,349nm,0.6s
**Q19K Cape Douglas,** 15.87 52 P Pn 04 39 09.4 -1.2
baz=250,SNR=70
**M18K Stony River** 15.93 41 P P 04 39 13.7 -0.9
baz=239,SNR=220
**L18K Granite Mounta** 15.97 38 P 04 39 14.0 -1.1
**L18K Granite Mounta** 15.97 38 P P 04 39 14.6 -0.5
baz=235,SNR=224
**O19K Port Alsworth** 16.00 47 P P 04 39 14.4 -1.0
baz=245
**F15K North Star Dit** 16.05 20 P P 04 39 16.4 +0.5
baz=211
**KDAK Kodiak Island** 16.10 56 Pn Pn 04 39 11.2 -2.2
comp=Z,14nm,0.3s,baz=257,slow=5.4,SNR=238
KDAK Sn Sn 04 42 01.9 -8.9
comp=Z,1.1nm,0.3s,baz=303,slow=22,SNR=1.2
comp=Z,185nm,0.8s
**KDAK Kodiak Island** 16.10 56 P Pn 04 39 11.5 -1.9
baz=256
**KDAK Kodiak Island** 16.10 56 *d i* P Pn 04 39 10.8 -2.6
**N19K Bonanza Creek** 16.19 45 Pn P 04 39 16.2 -1.4
N19K IAmb IAmb 04 39 21.6
comp=Z,2µm,1.9s
**N19K Bonanza Creek** 16.19 45 P P 04 39 16.7 -0.9
baz=243,SNR=191
**SKR Severo-Kuril's** 16.28 278 *e* P Pn 04 39 15.6 -0.1
**P19K Oil Pt** 16.31 49 Pn Pn 04 39 17.0 +0.9
P19K IAmb IAmb 04 39 23.7
comp=Z,353nm,0.8s
**P19K Oil Pt** 16.31 49 P Pn 04 39 16.3 +0.2
baz=249,SNR=48
**G16K Koyuk River** 16.33 24 IAmb IAmb 04 39 24.9
comp=Z,544nm,1.3s
**G16K Koyuk River** 16.33 24 P Pn 04 39 17.2 +0.9
baz=217,SNR=54
**Q20K Shuyak Island** 16.40 53 P Pn 04 39 15.6 -1.7
baz=253,SNR=22
**H17K Granite Mounta** 16.64 28 P Pn 04 39 18.0 -2.3
baz=222
**L19K White Mountain** 16.68 40 P 04 39 22.8 -0.2
**L19K White Mountain** 16.68 40 P Pn 04 39 21.4 +0.6
baz=239,SNR=462
**J18K Innoko River** 16.69 35 IAmb IAmb 04 39 29.7
comp=Z,650nm,1.1s
**J18K Innoko River** 16.69 35 P Pn 04 39 19.5 -1.4
baz=232
**M19K Big River Lodg** 16.73 41 IAmb IAmb 04 39 28.8
comp=Z,418nm,0.9s
**M19K Big River Lodg** 16.73 41 P Pn 04 39 21.6 +0.1
baz=240,SNR=350
**O20K Slope Mountain** 16.75 48 P P 04 39 23.0 -0.8
baz=248,SNR=104
**RSO Redoubt South** 16.83 47 P 04 39 25.0 +0.3
**G17K Kiwalik Mounta** 16.86 25 P Pn 04 39 23.8 +0.8
baz=220,SNR=53
**HOM Homer** 17.07 50 Pn Pn 04 39 26.2 +0.5
HOM IAmb IAmb 04 39 33.5
comp=Z,935nm,0.8s
**HOM Homer** 17.07 50 P Pn 04 39 26.3 +0.5
baz=251,SNR=20
**L20K Farewell, AK** 17.22 40 P P 04 39 30.5 +1.5
baz=239
**CNPM China Poot** 17.23 51 Pn Pn 04 39 28.1 +0.3
CNPM IAmb IAmb 04 39 35.0
comp=Z,318nm,0.7s
**M20K Styx River** 17.25 42 IAmb IAmb 04 39 36.4
comp=Z,718nm,1.5s
**M20K Styx River** 17.25 42 P P 04 39 31.4 +2.1
baz=242
**N20K Mount Spurr** 17.36 45 P P 04 39 32.9 +2.4
baz=246,SNR=111
**SPCR Spurr Chakacha** 17.36 45 P Pn 04 39 12.3 -17
baz=246
**J19K Poorman** 17.40 34 P 04 39 31.6 +0.7
J19K IAmb IAmb 04 39 38.5
comp=Z,766nm,1.1s
**J19K Poorman** 17.40 34 P P 04 39 32.6 +1.8
baz=232,SNR=453
**SPU Mount Spurr** 17.42 45 P 04 39 32.8 +1.6
SPU IAmb IAmb 04 39 38.1
comp=Z,457nm,1.0s
**F17K Baldwin Pennin** 17.44 23 P P 04 39 34.3 +3.0
baz=217,SNR=11
**GCSA Galena City Sc** 17.44 31 P P 04 39 33.8 +2.5
baz=228,SNR=93
**BRSE Bradley Lake S** 17.54 50 P P 04 39 31.9 -0.5
baz=252,SNR=55
**K20K Telida** 17.60 37 P P 04 39 35.0 +1.9
baz=237
**G18K Tagagawik** 17.70 27 P P 04 39 36.8 +2.6
baz=223
**E17K Hotham Inlet** 17.83 21 P P 04 39 38.6 +3.1
baz=214
**F18K Selawik** 17.97 24 P P 04 39 40.4 +3.3
baz=220,SNR=26
**SKT Skwentna** 17.97 43 IAmb IAmb 04 39 44.1
comp=Z,2µm,1.5s
**SKT Skwentna** 17.97 43 P P 04 39 39.2 +2.0
baz=244,SNR=278
**J20K Nowinta River** 18.03 35 IAmb IAmb 04 39 44.5
comp=Z,597nm,1.2s
**J20K Nowinta River** 18.03 35 P P 04 39 40.0 +2.2
baz=235,SNR=270
**D17K Noatak River** 18.08 18 P P 04 39 41.6 +3.4
baz=211
**H19K Roundabout Mou** 18.10 30 P P 04 39 40.4 +1.9
baz=228,SNR=134
**SUA Susitna One** 18.11 45 P P 04 39 40.3 +1.5
**SUA Susitna One** 18.11 45 P P 04 39 40.4 +1.5
baz=247,SNR=48
**C16K Lisburne Hills** 18.17 15 P P 04 39 41.3 +2.0
baz=206,SNR=8.5
**O22K Cooper Landing** 18.24 49 IAmb IAmb 04 39 52.8
comp=Z,1µm,1.0s
**O22K Cooper Landing** 18.24 49 P P 04 39 39.3 -0.8
baz=251,SNR=11
**SEW Seward** 18.26 50 P P 04 39 40.0 -0.4
baz=253,SNR=108
**I20K Naaghedeneel** 18.28 33 IAmb IAmb 04 39 46.7
comp=Z,355nm,0.9s
**I20K Naaghedeneel** 18.28 33 P Pn 04 39 42.9 +2.4
baz=232,SNR=48
**G19K Purcell Mounta** 18.33 28 IAmb IAmb 04 39 48.3
comp=Z,524nm,1.1s
**G19K Purcell Mounta** 18.33 28 P Pn 04 39 43.4 +2.2
baz=225,SNR=176
**E18K Tukpahlearik C** 18.38 22 Pn 04 39 43.0 +1.2
**E18K Tukpahlearik C** 18.38 22 P Pn 04 39 44.8 +3.0
baz=216,SNR=38
**RDOG Red Dog Mine** 18.42 18 P P 04 39 41.7 -0.3
baz=211,SNR=14
**RC01 Rabbit Creek A** 18.43 47 P Pn 04 39 43.0 +0.5
**RC01 Rabbit Creek A** 18.43 47 P Pn 04 39 42.6 +0.1
baz=250,SNR=41
**M22K Willow** 18.50 45 P Pn 04 39 44.0 +0.8
baz=247,SNR=150
**BILL Bilibino** 18.52 341 Pn 04 39 44.1 +0.6
**BILL Bilibino** 18.52 341 *e* P P 04 39 42.0 -1.2
BILL pmax pmax
comp=Z,364nm,1.3s
BILL MLR MLR
comp=Z,5µm,20.0s
**H20K Anotlenegga Mo** 18.57 31 P Pn 04 39 45.6 +1.4
baz=230,SNR=145
**F19K Shaleruckik Mo** 18.64 25 IAmb IAmb 04 39 51.5
comp=Z,1µm,1.6s
**F19K Shaleruckik Mo** 18.64 25 P Pn 04 39 46.8 +1.9
baz=222,SNR=262
**CUT Chulitna** 18.69 43 P Pn 04 39 45.5 -0.1
CUT IAmb IAmb 04 39 55.1
comp=Z,2µm,1.9s
**CUT Chulitna** 18.69 43 P P 04 39 44.8 -0.2
baz=245,SNR=36
**C17K DeLong Mountai** 18.73 17 P Pn 04 39 47.0 +1.0
baz=210,SNR=56
**PMR Palmer** 18.88 46 P Pn 04 39 48.5 +0.7
**PMR Palmer** 18.88 46 P Pn 04 39 47.9 0.0
baz=249,SNR=30
**PMR Palmer** 18.88 46 P Pn 04 39 47.9 0.0
**PWL Port Wells** 19.01 48 P P 04 39 47.9 -0.7
baz=252,SNR=64
**KNK Knik Glacier** 19.12 46 IAmb IAmb 04 39 56.2
comp=Z,405nm,0.8s
**KNK Knik Glacier** 19.12 46 P P 04 39 49.8 0.0
baz=250,SNR=135
**BPAW Bear Paw Mtn.** 19.16 37 IAmb IAmb 04 39 56.5
comp=Z,426nm,1.0s
**BPAW Bear Paw Mtn.** 19.16 37 P Pn 04 39 52.1 +0.8
baz=240,SNR=227
**P23K Montague Islan** 19.23 51 P P 04 39 50.5 -0.5
baz=256,SNR=71
**E19K Redstone River** 19.24 25 IAmb IAmb 04 39 59.8
comp=Z,1µm,1.4s
**E19K Redstone River** 19.24 25 P Pn 04 39 53.4 +1.2
baz=222,SNR=308
**IMAR Indian Mountai** 19.25 31 P Pn 04 39 52.5 +0.2
**C18K Utukok River** 19.26 19 P Pn 04 39 52.8 +0.3
baz=213,SNR=20
**SML Sawmill** 19.31 45 P P 04 39 52.1 +0.1
baz=250,SNR=86
**F20K Avaraart Lake** 19.36 27 P Pn 04 39 54.6 +1.0
baz=226
**H21K Melozitna Rive** 19.36 32 P Pn 04 39 54.3 +0.7
H21K IAmb IAmb 04 39 59.9
comp=Z,1µm,1.4s
**H21K Melozitna Rive** 19.36 32 P Pn 04 39 54.9 +1.3
baz=233,SNR=724
**MA2 Magadan** 19.42 308 P Pn 04 40 01.0 +6.6
**MA2 Magadan** 19.42 308 P Pn 04 39 53.9 -0.5
**MA2 Magadan** 19.42 308 LR LR 04 47 01.7
comp=Z,5µm,19.4s,baz=105,slow=36
**MA2 Magadan** 19.42 308 P Pn 04 39 53.9 -0.5
MA2 pmax pmax
comp=Z,28nm,0.9s
**M23K Glacier View** 19.58 46 P P 04 39 53.5 -1.4
baz=250,SNR=86
**WAT1 Susitna Watana** 19.59 42 P P 04 39 54.5 -0.4
baz=246
**GLI Glacier Island** 19.60 49 P Pn 04 39 55.7 -0.8
**GLI Glacier Island** 19.60 49 P P 04 39 54.7 -0.3
baz=254,SNR=14
**Q23K Middleton Isla** 19.63 53 IAmb IAmb 04 40 02.0
comp=Z,518nm,0.7s
**Q23K Middleton Isla** 19.63 53 P Pn 04 39 56.3 -0.5
baz=258,SNR=12
**MID Middleton Isla** 19.64 53 P Pn 04 39 57.6 +0.7
**MID Middleton Isla** 19.64 53 P P 04 39 55.9 +0.5
**MID Middleton Isla** 19.64 53 P P 04 39 55.9 +0.5
**G21K Allakaket** 19.66 30 IAmb IAmb 04 40 03.8
comp=Z,674nm,1.1s
**G21K Allakaket** 19.66 30 P Pn 04 39 57.8 +0.6
baz=230,SNR=396
**SEY Seymchan** 19.68 318 P Pn 04 39 56.7 -0.7
comp=Z,2.5nm,0.3s,baz=115,slow=11,SNR=55
SEY LR LR 04 47 22.4
comp=Z,5µm,18.6s,baz=124,slow=36
SEY ScP ScP 04 47 47.9 +0.5
comp=Z,6.0nm,0.9s,baz=178,slow=9.8,SNR=5.6
comp=Z,124nm,1.1s
**SEY Seymchan** 19.68 318 ⇑ *e* P P 04 39 56.0 +0.2
SEY pmax pmax
comp=Z,191nm,1.3s
**RND Reindeer** 19.69 41 P P 04 39 55.8 -0.3
RND IAmb IAmb 04 39 58.1
comp=Z,459nm,1.4s
**RND Reindeer** 19.69 41 P P 04 39 55.8 -0.3
RND pmax pmax
comp=Z,459nm,1.4s
**MLY Manley** 19.73 35 IAmb IAmb 04 40 03.1
comp=Z,400nm,0.9s
**MLY Manley** 19.73 35 P Pn 04 39 58.5 +0.4
baz=238,SNR=282
**B18K Kokolik River** 19.75 17 P P 04 39 56.7 0.0
baz=211,SNR=9.8
**HIN Hinchinbrook I** 19.76 50 IAmb IAmb 04 40 03.2
comp=Z,379nm,1.0s
**SCM Sheep Creek Mo** 19.77 46 P P 04 39 56.6 -0.4
SCM IAmb IAmb 04 40 05.0
comp=Z,416nm,0.9s
**SCM Sheep Creek Mo** 19.77 46 P P 04 39 55.9 -1.1
baz=251,SNR=70
**SCM Sheep Creek Mo** 19.77 46 P P 04 39 56.6 -0.4
SCM pmax pmax
comp=Z,416nm,0.9s
**MCK McKinley** 19.80 40 P P 04 39 56.8 -0.4
baz=244,SNR=76
**D19K Kuna River** 19.81 22 IAmb IAmb 04 40 03.6
comp=Z,537nm,1.1s
**D19K Kuna River** 19.81 22 P Pn 04 39 59.2 +0.2
baz=219,SNR=94
**WAT6 Susitna Watana** 19.84 43 P P 04 39 56.8 -1.1
baz=248,SNR=47
**C19K Lookout Ridge** 19.97 19 IAmb IAmb 04 40 07.8
comp=Z,612nm,1.4s
**C19K Lookout Ridge** 19.97 19 P Pn 04 40 01.1 +0.2
baz=215,SNR=28
**H22K Ishtalitna Cre** 19.98 33 P Pn 04 40 01.5 +0.6
baz=235,SNR=280
**E20K Nigu River** 20.10 24 P Pn 04 40 02.7 +0.2
baz=222,SNR=140
**F21K Alatna River** 20.12 28 P Pn 04 40 02.9 +0.2
baz=229,SNR=129
**NEA2 Nenana** 20.13 37 IAmb IAmb 04 40 09.3
comp=Z,461nm,1.0s
**NEA2 Nenana** 20.13 37 P P 04 40 01.4 +0.5
baz=242,SNR=378
**EYAK Cordova Ski Ar** 20.16 50 P Pn 04 40 03.2 +0.1
**EYAK Cordova Ski Ar** 20.16 50 P Pn 04 40 02.0 -1.0
baz=256,SNR=37
**DHY Denali Highway** 20.18 42 P 04 40 01.3 -0.1
**DHY Denali Highway** 20.18 42 P P 04 40 01.4 -0.1
baz=248,SNR=369
**I23K Milo, Yukon-K** 20.29 36 IAmb IAmb 04 40 11.6
comp=Z,688nm,1.2s
**I23K Minto, Yukon-K** 20.29 36 P Pn 04 40 04.0 -0.6
baz=240,SNR=322
**KLU Klutina** 20.31 47 IAmb IAmb 04 40 12.6
comp=Z,336nm,1.1s
**KLU Klutina** 20.31 47 P Pn 04 40 04.8 -0.2
baz=253,SNR=117
**D20K Etivluk River** 20.33 23 P Pn 04 40 05.0 -0.1
baz=245,SNR=138
**M24K Tolsona, Glenn** 20.37 45 IAmb IAmb 04 40 15.6
comp=Z,515nm,1.0s
**M24K Tolsona, Glenn** 20.37 45 P P 04 40 03.4 -0.1
baz=252,SNR=47
**WRH Wood River Hil** 20.46 38 P P 04 40 03.5 -0.8
**G22K Bettles** 20.54 30 P Pn 04 40 07.0 -0.5
baz=233
**H23K Yukon River** 20.57 34 IAmb IAmb 04 40 11.6
comp=Z,359nm,1.0s
**H23K Yukon River** 20.57 34 P Pn 04 40 07.0 -0.9
baz=238,SNR=235
**A19K Wainwright** 20.61 16 P Pn 04 40 07.2 -1.1
baz=211
**RAGM Ragged Mountai** 20.64 51 IAmb IAmb 04 40 22.8
comp=Z,164nm,0.8s
**KAIM Kayak Island** 20.68 52 IAmb IAmb 04 40 14.6
comp=Z,207nm,0.9s
**KAIM Kayak Island** 20.68 52 P Pn 04 40 09.8 +0.5
baz=259
**F22K John River** 20.69 28 P Pn 04 40 09.0 -0.3
baz=230
**COLA College** 20.73 37 P P 04 40 08.0 +0.8
**COLA College** 20.73 37 P P 04 40 08.0 +0.8
COLA IAmb IAmb 04 40 16.3
comp=Z,275nm,0.8s
**COLA College** 20.73 37 P P 04 40 07.9 +0.7
baz=242
**COLA College** 20.73 37 ⇑ *i* P P 04 40 05.0 -2.2
COLA pmax pmax
comp=Z,80nm,0.8s
**BMRM Bremner River** 20.80 49 P Pn 04 40 09.9 -0.7
baz=256,SNR=95
**E21K Killik River** 20.81 25 P Pn 04 40 09.6 -1.0
baz=226
**HMT Hamilton** 20.84 51 IAmb IAmb 04 40 27.7
comp=Z,210nm,0.8s
**HDA Harding Lake** 20.88 39 P P 04 40 07.5 -1.4
**HDA Harding Lake** 20.88 39 P P 04 40 08.0 -0.9
baz=245,SNR=65
**G23K Bananza Creek** 20.89 32 IAmb IAmb 04 40 15.9
comp=Z,212nm,1.0s
**G23K Bananza Creek** 20.89 32 P Pn 04 40 11.1 -0.6
baz=235,SNR=162
**HARP HAARP** 20.92 45 P P 04 40 08.7 -0.6
baz=252,SNR=126
**N25K Chitina, Valde** 20.95 47 IAmb IAmb 04 40 20.3
comp=Z,181nm,0.7s
**N25K Chitina, Valde** 20.95 47 P P 04 40 09.4 -0.4
baz=255,SNR=98
**PAX Paxson** 20.96 43 P P 04 40 09.4 -0.5
baz=250,SNR=136
**POKR Poker Plat Res** 21.00 37 IAmb IAmb 04 40 20.2
comp=Z,388nm,1.1s
**POKR Poker Plat Res** 21.00 37 P P 04 40 11.4 +1.3
baz=243,SNR=161
**ILAR Eielson Array** 21.05 38 P P 04 40 08.6 -2.2
comp=Z,14nm,0.8s,baz=238,slow=6.0,SNR=97
ILAR S S 04 44 01.2 -2.1
comp=Z,1.6nm,0.9s,baz=222,slow=10,SNR=1.4
ILAR ScP ScP 04 47 52.0 +1.3
comp=Z,2.6nm,0.6s,baz=278,slow=3.7,SNR=18
ILAR LR LR 04 48 38.7
comp=Z,3µm,20.1s,baz=220,slow=38
comp=Z,14nm,0.8s
**C21K Knifeblade Rid** 21.11 23 P P 04 40 12.7 +1.4
baz=223,SNR=44
C21K S S 04 44 06.2 +1.9
baz=223
**K24K Donnelly Dome** 21.11 41 P P 04 40 11.4 -0.1
baz=248,SNR=89
**COLD Coldfoot** 21.13 30 P P 04 40 13.2 +1.6
baz=234
**H24K Noodor Dome** 21.17 35 IAmb IAmb 04 40 18.3
comp=Z,202nm,0.9s
**H24K Noodor Dome** 21.17 35 P P 04 40 13.2 +1.1
baz=240,SNR=158
**E22K Anaktuvuk Pass** 21.20 27 IAmb IAmb 04 40 20.2
comp=Z,211nm,0.8s
**E22K Anaktuvuk Pass** 21.20 27 P P 04 40 13.7 +1.4
baz=230
E22K S S 04 44 07.3 +1.0
baz=230
**B20K Meade River** 21.21 20 IAmb IAmb 04 40 17.1
comp=Z,378nm,0.9s
**B20K Meade River** 21.21 20 P P 04 40 13.7 +1.3
baz=218
B20K S S 04 44 07.0 +0.7
baz=218
**GLB Gilahina Butte** 21.28 48 P P 04 40 13.2 -0.1
**VRDI Verde Repeater** 21.40 49 IAmb IAmb 04 40 24.8
comp=Z,338nm,1.4s
**D22K Ayikyak River** 21.45 25 IAmb IAmb 04 40 20.8
comp=Z,322nm,0.9s
**D22K Ayikyak River** 21.45 25 P P 04 40 16.9 +1.8
baz=227,SNR=67
**CRQM Cirque** 21.46 50 IAmb IAmb 04 40 35.0
comp=Z,152nm,0.8s
**CRQE Cirque** 21.48 50 P P 04 40 17.0 +1.5
baz=259,SNR=35
**B21K Ikpikpuk River** 21.49 22 IAmb IAmb 04 40 20.5
comp=Z,440nm,0.9s
**B21K Ikpikpuk River** 21.49 22 P P 04 40 16.9 +1.5
baz=223
**SNH Sunshine Point** 21.51 52 IAmb IAmb 04 40 26.2
comp=Z,209nm,0.8s
**J25K Salcha River,** 21.59 39 P P 04 40 14.1 -2.5
baz=247,SNR=87
**TGL Tana Glacier** 21.61 50 P P 04 40 18.2 +1.3
**MCARA McCarthy VSAT** 21.64 48 IAmb IAmb 04 40 27.5
comp=Z,464nm,0.9s
**MCARA McCarthy VSAT** 21.64 48 P P 04 40 17.7 +0.6
baz=257,SNR=41
**MENT Mentasta** 21.71 44 IAmb IAmb 04 40 30.8
comp=Z,266nm,1.2s
**G24K Hadweenzic Riv** 21.74 33 IAmb IAmb 04 40 25.4
comp=Z,665nm,1.1s
**G24K Hadweenzic Riv** 21.74 33 P P 04 40 19.7 +1.5
baz=239,SNR=255
G24K S S 04 44 17.7 +0.8
baz=239
**E23K Chandalar** 21.80 29 IAmb IAmb 04 40 29.8
comp=Z,270nm,1.1s
**E23K Chandalar** 21.80 29 P P 04 40 19.9 +1.1
baz=233,SNR=66
E23K S S 04 44 16.6 -1.6
baz=233
**M26K Nabesna, AK** 21.89 46 P P 04 40 18.6 -1.1
baz=255,SNR=69
M26K S S 04 44 19.8 0.0
baz=255
M26K S S 04 44 19.8 0.0
baz=255
**PRP Porcupine Dome** 21.89 37 P P 04 40 18.2 -1.7
baz=244,SNR=14
PRP S S 04 44 16.9 -3.2
baz=244
**L26K Log Cabin Wild** 21.90 44 IAmb IAmb 04 40 27.0
comp=Z,367nm,1.1s
**L26K Log Cabin Wild** 21.90 44 P P 04 40 19.1 -0.7
baz=253,SNR=232
L26K S S 04 44 19.3 -0.6
baz=253
L26K S S 04 44 19.3 -0.6
baz=253
**SCRK Sand Creek** 21.92 41 P P 04 40 18.8 -1.3
**SCRK Sand Creek** 21.92 41 P P 04 40 19.3 -0.9
baz=250,SNR=142
SCRK S S 04 44 18.3 -2.2
baz=250
**MESA MESA** 21.95 52 P P 04 40 21.2 +0.6
baz=261
**F24K Squaw Lake** 22.04 31 P P 04 40 22.4 +1.1
F24K IAmb IAmb 04 40 28.5
comp=Z,388nm,1.0s
**F24K Squaw Lake** 22.04 31 P P 04 40 23.1 +1.8
baz=237,SNR=97
**D23K Nanushuk River** 22.05 26 IAmb IAmb 04 40 28.3
comp=Z,214nm,0.8s
**D23K Nanushuk River** 22.05 26 P P 04 40 22.6 +1.1
baz=230
D23K S S 04 44 25.4 +2.6
baz=230
**H25L Birch Creek** 22.12 35 P P 04 40 22.1 0.0
baz=242,SNR=90
**E24K Your Creek** 22.16 29 P P 04 40 23.9 +1.2
baz=235
**TOLK Toolik Lake Re** 22.17 28 IAmb IAmb 04 40 29.4
comp=Z,232nm,1.1s
**TOLK Toolik Lake Re** 22.17 28 P P 04 40 23.8 +1.1
baz=232,SNR=73
TOLK S S 04 44 26.6 +1.6
baz=232
**G25K Bearman Lake** 22.25 34 P P 04 40 24.5 +1.0
baz=241,SNR=16
**J26L Joseph Creek** 22.27 40 IAmb IAmb 04 40 29.7
comp=Z,166nm,0.8s
**J26L Joseph Creek** 22.27 40 P P 04 40 23.0 -0.9
baz=249,SNR=199
**B22K Teshekpuk Lake** 22.30 22 IAmb IAmb 04 40 31.9
comp=Z,602nm,1.9s
**CTG Chitna Glacier** 22.36 50 P P 04 40 25.4 +0.4
baz=260,SNR=23
**A21K Barrow** 22.36 18 P P 04 40 24.8 0.0
baz=217
**CTGM Chitina Glacie** 22.36 50 IAmb IAmb 04 40 37.1
comp=Z,180nm,0.8s
**M27K Edge Creek, AK** 22.38 46 IAmb IAmb 04 40 32.2
comp=Z,974nm,1.0s
**M27K Edge Creek, AK** 22.38 46 P P 04 40 27.0 +1.8
baz=256,SNR=322
M27K S S 04 44 26.2 -3.0
baz=256
M27K S S 04 44 26.2 -3.0
baz=256
**TABL Table Mountain** 22.38 51 IAmb IAmb 04 40 49.0
comp=Z,169nm,0.8s
**A22K Sinclair Lake** 22.45 20 P P 04 40 26.7 +1.1
baz=220
**FYU Fort Yukon** 22.46 35 IAmb IAmb 04 40 31.7
comp=Z,494nm,1.2s
**LOGN Logan Glacier** 22.50 50 P P 04 40 26.3 -0.2
**L27K Beaver Creek,** 22.57 44 P P 04 40 26.6 -0.5
baz=255,SNR=147
L27K S S 04 44 29.6 -2.9
baz=255
**BCAR Beaver Creek A** 22.59 44 P P 04 40 26.4 -1.0
**C23K Itkillik River** 22.64 25 IAmb IAmb 04 40 31.6
comp=Z,335nm,1.1s
**C23K Itkillik River** 22.64 25 P P 04 40 27.1 -0.6

baz=228,SNR=66
C23K S S 04 44 33.8 +0.3
baz=228
**D24K Happy Valley 22.69 27** lAmb lAmb 04 40 34.2
comp=Z,286nm,0.9s
**D24K Happy Valley 22.69 27** P P 04 40 28.9 +0.7
baz=232,SNR=98
D24K S S 04 44 36.1 +1.6
baz=232
**I26K Coal Creek Min 22.72 38** P P 04 40 26.6 -2.0
baz=248
**K27K Chicken 22.73 42** P P 04 40 28.7 0.0
baz=252
K27K S S 04 44 34.0 -1.2
baz=252
K27K S S 04 44 34.0 -1.2
baz=252
**PINM Pinnacle 22.78 52** P P 04 40 29.0 -0.3
baz=263,SNR=15
**F25K Christian Rive 22.81 32** lAmb lAmb 04 40 35.3
comp=Z,243nm,0.9s
**F25K Christian Rive 22.81 32** P P 04 40 30.7 +1.1
baz=240,SNR=203
F25K S S 04 44 37.4 +0.8
baz=240
**O28M Mount Upton 22.89 51** P P 04 40 29.8 -0.9
baz=262,SNR=34
O28M S S 04 44 35.9 -2.7
baz=262
**YUK3 Moose Creek 22.92 48** P P 04 40 29.7 -1.3
baz=259,SNR=20
**C24K Franklin Bluff 23.08 26** lAmb lAmb 04 40 37.6
comp=Z,196nm,0.8s
**C24K Franklin Bluff 23.08 26** P P 04 40 33.0 +0.7
baz=231
**BMAR Burnt Mountain 23.09 33** P P 04 40 32.8 +0.3
**G26K Porcupine Rive 23.15 34** P P 04 40 32.7 -0.3
baz=244,SNR=175
G26K S S 04 44 44.4 +2.2
baz=244
**YUK8 Steele Glacier 23.17 49** P P 04 40 33.2 -0.3
baz=261,SNR=7.6
**PNL Peninsula 23.17 54** P P 04 40 36.9 +3.6
**PNL Peninsula 23.17 54** P P 04 40 31.2 -2.2
baz=265,SNR=6.9
**EGAK Eagle 23.34 40** lAmb lAmb 04 40 37.1
comp=Z,536nm,1.6s
**EGAK Eagle 23.34 40** P P 04 40 34.7 -0.2
baz=252,SNR=141
EGAK S S 04 44 43.4 -2.0
baz=252
**F26K Sheenjek River 23.36 32** lAmb lAmb 04 40 41.6
comp=Z,187nm,1.0s
**F26K Sheenjek River 23.36 32** P P 04 40 36.0 +0.8
baz=242,SNR=188
F26K S S 04 44 45.7 -0.1
baz=242
**I27K Kandik River 23.43 38** P P 04 40 34.5 -1.3
baz=249,SNR=40
**D25K Kavik River 23.50 28** lAmb lAmb 04 40 41.7
comp=Z,153nm,0.8s
**D25K Kavik River 23.50 28** P P 04 40 36.8 +0.3
baz=235
**O29M Mount Kennedy 23.63 52** P P 04 40 37.2 -0.7
baz=264
**H27K Steamboat Moun 23.68 37** P P 04 40 36.6 -1.7
baz=248,SNR=6.6
**YUK4 Talbot Arm 23.71 50** P P 04 40 38.8 0.0
baz=262,SNR=40
**YUK6 Outpost Mounta 23.80 51** P P 04 40 37.6 -2.0
baz=263
**G27K Doyon Strip 23.86 35** P P 04 40 38.4 -1.5
baz=247,SNR=21
**DAWY Dawson 23.88 43** lAmb lAmb 04 40 45.3
comp=Z,177nm,1.0s
**DAWY Dawson 23.88 43** P P 04 40 39.3 -0.8
baz=255,SNR=224
**M29M Somme Creek 23.96 47** lAmb lAmb 04 40 46.4
comp=Z,146nm,0.9s
**M29M Somme Creek 23.96 47** P P 04 40 40.1 -0.9
baz=260,SNR=258
**P29M Windy Craggy 24.01 54** lAmb lAmb 04 41 08.2
comp=Z,143nm,0.8s
**P29M Windy Craggy 24.01 54** P P 04 40 40.2 -1.2
baz=267,SNR=10
**I28M Miner Creek 24.04 39** lAmb lAmb 04 40 47.3
comp=Z,233nm,0.9s
**I28M Miner Creek 24.04 39** P P 04 40 41.1 -0.6
baz=252,SNR=361
**C26K Camden Bay 24.26 27** P P 04 40 44.4 +0.8
baz=236
**P30M Million Dollar 24.43 53** P P 04 40 44.4 -0.9
baz=266
**E27K Coleen River 24.45 32** lAmb lAmb 04 40 51.9
comp=Z,259nm,1.1s
**E27K Coleen River 24.45 32** P P 04 40 45.9 +0.6
baz=244,SNR=197
**C27K Jago River 24.46 28** P P 04 40 45.9 +0.5
baz=238
**N30M Aishikik Lake 24.47 49** P P 04 40 44.4 -1.3
**N30M Aishikik Lake 24.47 49** P P 04 40 44.3 -1.4
baz=263
**J29N Klondike Camp 24.47 42** P P 04 40 45.6 0.0
baz=256,SNR=8.0
**K29M Barlow Dome 24.64 44** lAmb lAmb 04 40 53.4
comp=Z,346nm,1.0s
**K29M Barlow Dome 24.64 44** P P 04 40 47.0 -0.2
baz=258,SNR=420
**I29M Ogilvie Camp, 24.67 40** lAmb lAmb 04 40 52.1
comp=Z,206nm,1.0s
**I29M Ogilvie Camp, 24.67 40** P P 04 40 46.7 -0.7
baz=254,SNR=222
**PLBC Pleasant Camp 24.70 54** P P 04 40 47.0 -0.7
baz=268,SNR=8.6
**S31K Pelican 24.79 58** P P 04 40 48.5 +0.1
baz=272
**F28M Old Crow 24.81 34** lAmb lAmb 04 40 55.1
comp=Z,233nm,0.9s
**F28M Old Crow 24.81 34** P P 04 40 48.7 +0.1
baz=247,SNR=58
**H29M Whitestone 24.89 38** P P 04 40 48.6 -0.7
baz=252,SNR=86
**O30N Mendenhall 24.89 51** P P 04 40 49.1 -0.3
baz=266,SNR=16
**R31K City Hall, Gus 25.04 57** P P 04 40 50.0 -0.7
baz=271
**N31M Braeburn, Yuko 25.09 50** P P 04 40 51.1 -0.2
baz=265,SNR=12
**D27M Malcolm River 25.12 30** lAmb lAmb 04 40 58.1
comp=Z,137nm,1.0s
**D27M Malcolm River 25.12 30** P P 04 40 51.8 +0.4
baz=243
**NKL Nikolayevsk 25.14 291** *e*P P 04 40 52.0 +0.4
NKL *e*S S 04 45 13.9 -0.5
NKL pmax pmax
comp=N,136nm,1.6s
NKL pmax pmax
comp=E,110nm,1.0s
NKL pmax pmax
comp=Z,202nm,1.0s
NKL smax smax
comp=E,532nm,2.8s
NKL smax smax
comp=N,767nm,5.6s
NKL MLR MLR
comp=E,10µm,17.0s
NKL MLR MLR
comp=N,13µm,13.0s
NKL MLR MLR
comp=Z,16µm,24.0s
**SKAG Skagway 25.23 54** P P 04 40 55.7 +3.2
**SKAG Skagway 25.23 54** P P 04 40 51.9 -0.5
baz=269
**G29M Pine Creek 25.24 36** P P 04 40 52.0 -0.4
**G29M Pine Creek 25.24 36** P P 04 40 52.1 -0.4
baz=251,SNR=31
**J30M Hart River 25.30 42** P P 04 40 53.2 +0.1
baz=258,SNR=114
**E28M Babbage River 25.31 32** lAmb lAmb 04 41 00.5
comp=Z,389nm,1.4s
**E28M Babbage River 25.31 32** P P 04 40 53.6 +0.5
baz=246,SNR=133
**SIT Sitka 25.34 60** P P 04 40 55.1 +1.7
**SIT Sitka 25.34 60** P P 04 40 53.8 +0.3
baz=274,SNR=13
**I30M Mount Dempster 25.42 41** P P 04 40 53.7 -0.5
baz=256,SNR=125
**WHY Whitehorse 25.48 52** P P 04 40 55.2 +0.3
baz=267,SNR=5.5
**EPYK Eagle Plains 25.57 38** P P 04 40 54.8 -0.7
baz=254,SNR=42
**R32K Eaglecrest 25.69 57** P P 04 40 56.8 +0.1
baz=272
**S32K Killisnoo 25.71 59** P P 04 40 57.4 +0.6
baz=274,SNR=12
**JIS Juneau Island 25.76 57** P P 04 40 58.5 +1.3
**E29M Blow River 25.79 33** P P 04 40 58.1 +0.7
baz=248,SNR=76
**M31M Drury Creek, Y 25.81 48** P P 04 40 57.8 0.0
baz=264,SNR=19
**YSS Yuzh-Sakhalins 25.82 276** P P 04 40 59.4 +1.5
YSS lAmb lAmb 04 41 15.2
comp=Z,198nm,1.1s
**YSS Yuzh-Sakhalins 25.82 276** *e*P P 04 40 59.3 +1.5
YSS *e**PP **sP** 04 41 08.5 -0.3
YSS *e*S S 04 45 22.9 -2.4
YSS pmax pmax
comp=Z,800nm,6.0s
YSS pmax pmax
comp=Z,100nm,0.9s
**D28M Stokes Point 25.87 31** P P 04 40 57.7 -0.4
baz=245
**G30M tAoh Zraii Nji 25.93 37** P P 04 40 58.0 -0.8
baz=253
**P32M Atlin 26.05 54** P P 04 41 00.5 +0.5
baz=270
**F30M Barrier River 26.28 36** P P 04 41 02.4 +0.6
baz=252,SNR=31
**FARO Faro, Yukon 26.30 48** P P 04 41 02.1 -0.1
baz=265,SNR=37
**N32M Quiet Lake 26.38 50** P P 04 41 03.0 +0.1
baz=268
**P33M Teslin, Yukon 26.50 53** P P 04 41 04.1 +0.1
baz=270,SNR=36
**G31M Satah River 26.66 37** P P 04 41 05.0 -0.2
**G31M Satah River 26.66 37** P P 04 41 04.5 -0.8
baz=255,SNR=8.2
**T33K Petersburg 26.66 60** P P 04 41 06.6 +1.2
baz=276
**U33K Whale Pass 26.67 62** P P 04 41 06.9 +1.5
baz=278,SNR=11
**CRAG Craig 26.77 63** P P 04 41 09.0 +2.6
**CRAG Craig 26.77 63** P P 04 41 08.0 +1.7
baz=279,SNR=17
**Q32M Nakina River 26.82 55** P P 04 41 08.3 +1.2
baz=273,SNR=16
**F31M Tsiigehtchic 26.99 36** P P 04 41 08.0 -0.2
baz=255,SNR=11
**ASAJ Asahikawa 27.19 270** LR LR 04 51 33.9
comp=Z,1µm,20.2s,baz=70,slow=36
**INK Inuvik 27.30 35** LR LR 04 53 02.6
comp=Z,3µm,18.3s,baz=244,slow=39
**INK Inuvik 27.30 35** P P 04 41 11.0 0.0
baz=253,SNR=34
**R33M Jennings River 27.46 54** P P 04 41 13.4 +0.6
baz=273,SNR=17
**S34M Telegraph Cree 27.51 58** P P 04 41 13.9 +0.8
baz=276,SNR=7.9
**DIB Dawson Inlet, 27.62 68** P P 04 41 16.1 +2.1
DIB lAmb lAmb 04 41 21.5
comp=Z,286nm,1.0s
**V35K Ketchikan 27.64 63** P P 04 41 15.7 +1.5
baz=280,SNR=19
**DLBC Dease Lake 28.03 56** P P 04 41 17.9 +0.1
**DLBC Dease Lake 28.03 56** LR LR 04 53 44.9
comp=Z,2µm,18.4s,baz=286,slow=39
**DLBC Dease Lake 28.03 56** P P 04 41 19.0 +1.2
baz=276,SNR=13
**T35M Bob Quinn 28.11 59** P P 04 41 20.1 +1.7
baz=278,SNR=11
**GRNR Gornyy 28.32 287** ⇑*i*P P 04 41 21.2 +0.8
GRNR pmax pmax
comp=E,10.0nm,1.1s
GRNR pmax pmax
comp=Z,20nm,1.1s
**U35K Hyder 28.41 62** P P 04 41 22.7 +1.7
baz=280
**HG4B Hotspring 28.61 69** P P 04 41 24.3 +1.4
HG4B lAmb lAmb 04 41 26.7
comp=Z,340nm,1.6s
**TGTN Hyland Airport 28.69 50** P P 04 41 24.0 +0.3
baz=271,SNR=9.6
**GRNB Grenville Isla 28.91 66** P P 04 41 27.4 +1.8
GRNB lAmb lAmb 04 41 34.9
comp=Z,160nm,1.2s
**YAK Yakutsk 29.88 312** LR LR 04 53 49.6
comp=Z,4µm,18.7s,baz=94,slow=37
**YAK Yakutsk 29.88 312** ⇑*i*P P 04 41 34.9 +0.9
YAK pmax pmax
comp=Z,23nm,1.1s
**BBB Bella Bella 30.45 68** lAmb lAmb 04 41 42.9
comp=Z,262nm,1.2s
**BBB Bella Bella 30.45 68** LR LR 04 53 46.5
comp=Z,698nm,18.0s,baz=290,slow=36
**TOAD Toad River Com 30.46 55** P P 04 41 40.2 +1.0
baz=278
**WRGLY Wrigley 30.86 46** lAmb lAmb 04 41 48.1
comp=Z,104nm,0.9s
**WRGLY Wrigley 30.86 46** P P 04 41 43.4 +0.7
baz=272,SNR=30
**C36M Paulatuk 30.87 34** P P 04 41 42.8 +0.1
baz=262
**KOTAN Kotaneelee Air 30.87 52** P P 04 41 43.4 +0.6
baz=277
**HOLB Holberg 30.96 71** lAmb lAmb 04 42 02.2
comp=Z,201nm,1.5s
**A36M Sachs Harbour 30.98 29** P P 04 41 44.7 +1.1
baz=256
**TIXI Tiksi 31.00 331** P P 04 41 43.5 -0.2
**TIXI Tiksi 31.00 331** LR LR 04 54 48.1
comp=Z,3µm,19.8s,baz=135,slow=38
**TIXI Tiksi 31.00 331** ⇑*i*P P 04 41 43.6 -0.2
TIXI pmax pmax
comp=Z,25nm,1.1s
**TIXI Tiksi 31.00 331** P P 04 41 46.4 +2.6
TIXI PcP **PcP** 04 44 39.4 +0.4
TIXI ScP **ScP** 04 48 20.5 +1.1
**KLR Kul'dur 31.69 286** LR LR 04 55 27.1
comp=Z,2µm,19.5s,baz=69,slow=38
**KLR Kul'dur 31.69 286** *ce*P P 04 41 50.6 +0.5
KLR pmax pmax
comp=Z,176nm,1.5s
**ZEA Zeya 32.73 296** *e*P P 04 41 58.7 -0.5
ZEA pmax pmax
comp=Z,200nm,2.3s
ZEA pmax pmax
comp=Z,40nm,1.2s
**CBB Campbell River 32.83 71** lAmb lAmb 04 42 04.4
comp=Z,185nm,1.4s
**H11N2 WAKE ISLAND Hy 33.61 206** T T 05 17 59.3
baz=18,slow=76,SNR=5698
**H11N3 WAKE ISLAND Hy 33.62 206** T T 05 17 59.3
baz=18,slow=76,SNR=7806
**H11N1 WAKE ISLAND Hy 33.63 206** T T 05 17 59.3
baz=18,slow=76,SNR=7450
**USA0B Ussuriysk Arra 33.80 278** ⇑*i*P P 04 42 08.3 -0.3
**USRK Ussuriysk Ar. 33.80 278** P P 04 42 08.2 -0.4
**USRK Ussuriysk Ar. 33.80 278** P P 04 42 08.7 +0.1
comp=Z,11nm,0.6s,baz=64,slow=9.6,SNR=21
USRK PcP **PcP** 04 44 48.2 +1.0
comp=Z,4.0nm,0.8s,baz=57,slow=7.0,SNR=4.6
USRK LR LR 04 54 49.8
comp=Z,1µm,21.9s,baz=54,slow=34
comp=Z,11nm,0.6s
**HEH HeiHe 33.87 290** *e*P P 04 42 08.8 -0.4
HEH pP **pP** 04 42 16.1 -1.2
HEH S S 04 47 28.8 -2.6
HEH pmax pmax
comp=Z,82nm,1.3s
HEH pmax pmax
comp=Z,430nm,4.1s
HEH LR LR
comp=Z,1µm,20.1s
HEH LR LR
comp=Z,1µm,20.9s
HEH LR LR
comp=Z,2µm,21.1s
**CLRS Cowichan Lake 34.06 72** lAmb lAmb 04 42 14.7
comp=Z,151nm,1.1s
**MAJO Matsushiro 34.24 262** P P 04 42 13.4 +0.8
MAJO lAmb lAmb 04 42 19.6
comp=Z,101nm,1.3s
**MAJO Matsushiro 34.24 262** P P 04 42 13.4 +0.8
MAJO pmax pmax
comp=Z,101nm,1.3s
**MAJO Matsushiro 34.24 262** P P 04 42 14.0 +1.4
MAJO PcP **PcP** 04 44 49.9 +1.3
**MJAR Matsushiro Arr 34.24 262** P P 04 42 13.1 +0.5
comp=Z,7.6nm,0.9s,baz=53,slow=6.4,SNR=15
MJAR PcP **PcP** 04 44 49.9 +1.3
comp=Z,6.7nm,0.6s,baz=70,slow=2.2,SNR=9.6
MJAR LR LR 04 54 21.8
comp=Z,2µm,21.4s,baz=53,slow=33
comp=Z,7.6nm,0.9s
**MJB9 Matsu-Tunnel 34.24 262** lAmb lAmb 04 42 19.6
comp=Z,103nm,1.3s
**PGC Sidney 34.54 72** lAmb lAmb 04 42 32.7
comp=Z,98nm,1.3s
**B04A Port Angeles 34.77 73** lAmb lAmb 04 42 20.4
comp=Z,106nm,1.1s
**H11S1 WAKE ISLAND Hy 34.83 206** T T 05 19 33.6
baz=17,slow=76,SNR=7391
**H11S2 WAKE ISLAND Hy 34.84 206** T T 05 19 34.9
baz=17,slow=76,SNR=4616
**H11S3 WAKE ISLAND Hy 34.84 206** T T 05 19 34.9
baz=17,slow=76,SNR=3378
**YKA Yellowknife Ar 34.98 46** P P 04 42 18.3 -0.3
comp=Z,67nm,1.0s,baz=284,slow=8.7,SNR=66
YKA PcP **PcP** 04 44 51.4 +1.2
comp=Z,7.4nm,0.9s,baz=312,slow=2.3,SNR=6.1
YKA ScP **ScP** 04 48 33.0 -0.3
comp=Z,2.4nm,0.8s,baz=296,slow=3.3,SNR=5.7
YKA LR LR 04 58 26.4
comp=Z,3µm,18.7s,baz=277,slow=39
comp=Z,67nm,1.0s
**YKA Yellowknife Ar 34.98 46** *i* P P 04 42 18.6 0.0
YKA pmax pmax
comp=Z,75nm,1.0s
**MDJ Mudanjiang 35.08 280** P P 04 42 23.6 +3.9
MDJ pP pP 04 42 27.4 -0.4
MDJ sP pwP 04 42 30.1 +0.2
MDJ PP **PP** 04 43 40.6 +1.3
MDJ S S 04 47 53.5 +3.4
MDJ pmax pmax
comp=Z,24nm,1.4s
MDJ pmax pmax
comp=Z,310nm,6.1s
MDJ LR LR
comp=Z,1µm,20.7s
MDJ LR LR
comp=Z,1µm,19.0s
MDJ LR LR
comp=Z,2µm,18.1s
**MSHR Mys Shultsa 35.15 276** *ce*P P 04 42 21.4 +1.1
MSHR pmax pmax
comp=Z,33nm,0.9s
**PSTR Posyet 35.34 276** *c i*P P 04 42 23.0 +1.1
**JGF Kuroka 35.38 261** lAmb lAmb 04 42 39.1
comp=Z,148nm,1.4s
**GNW Green Mountain 35.40 74** lAmb lAmb 04 42 26.5
comp=Z,217nm,1.2s
**JHJ Hachijo jima 2 35.53 256** LR LR 04 54 49.0
comp=Z,652nm,22.0s,baz=86,slow=33
**F03A Seaside 35.71 77** P P 04 42 27.4 +2.3
**BNX BinXian 35.87 283** ⇓P P 04 42 26.3 -0.2
BNX pmax pmax
comp=Z,27nm,1.1s
**HEBO Mount Hebo 35.94 78** lAmb lAmb 04 42 36.9
comp=Z,156nm,1.1s
**D05A Enumclaw 36.07 74** P P 04 42 30.4 +2.1
**G03D McMinnville, O 36.25 78** lAmb lAmb 04 42 33.5
comp=Z,254nm,1.3s
**LON Longmire 36.39 74** lAmb lAmb 04 42 34.6
comp=Z,84nm,0.9s
**F04A Amboy 36.41 76** P P 04 42 32.4 +1.3
F04A lAmb lAmb 04 42 34.6
comp=Z,153nm,0.7s
**COR Corvallis 36.54 78** P P 04 42 34.6 +2.4
COR lAmb lAmb 04 42 36.4
comp=Z,244nm,1.1s
**COR Corvallis 36.54 78** P P 04 42 34.6 +2.4
COR pmax pmax
comp=Z,244nm,1.1s
**COR Corvallis 36.54 78** P P 04 42 35.1 +3.0
**LTY Liberty 36.84 73** P P 04 42 35.9 +1.1
LTY lAmb lAmb 04 42 38.0
comp=Z,101nm,1.1s
**J01E Myrtle Point 36.88 81** lAmb lAmb 04 43 17.1
comp=Z,98nm,1.2s
**H04D Lebanon 36.92 78** lAmb lAmb 04 42 39.3
comp=Z,114nm,0.8s
**BUCK Buck Mountain 36.93 79** lAmb lAmb 04 42 45.8
comp=Z,113nm,1.0s
**I03D Drain, OR 36.97 80** lAmb lAmb 04 42 39.8
comp=Z,302nm,1.8s
**KBO Bosley Butte 37.21 82** lAmb lAmb 04 42 42.1
comp=Z,167nm,1.4s
**DBO Dodson Butte 37.33 81** P P 04 42 40.8 +1.7
**MXC Moxie City 37.39 74** lAmb lAmb 04 42 42.9
comp=Z,184nm,1.3s
**I04A Tendick Farm, 37.49 79** lAmb lAmb 04 42 43.9
comp=Z,189nm,0.9s
**E07A Sunnyside 37.66 74** lAmb lAmb 04 42 45.3
comp=Z,246nm,1.4s
**HUMO Hull Mountain 37.79 81** P P 04 42 44.8 +1.9
HUMO lAmb lAmb 04 42 46.7
comp=Z,170nm,1.8s
**KRMB Red Mountain 37.79 83** lAmb lAmb 04 42 47.0
comp=Z,148nm,1.5s
**G06A Carlson Farm, 37.84 76** lAmb lAmb 04 42 46.8
comp=Z,251nm,1.4s
**I05D Terrebonne, OR 37.87 78** lAmb lAmb 04 42 47.2
comp=Z,230nm,1.0s
**KRPM Rodgers 37.92 84** lAmb lAmb 04 42 48.1
comp=Z,130nm,1.3s
**HAWA Hanford 37.94 74** lAmb lAmb 04 42 47.4
comp=Z,224nm,1.0s
**F07A Phinny Hill Vi 37.94 75** lAmb lAmb 04 42 47.6
comp=Z,207nm,1.0s
**C09A Chrisman Ranch 38.01 71** P P 04 42 45.6 +0.9
**CN2 Changchun 38.05 282** P P 04 42 43.3 -1.7
CN2 S S 04 48 31.5 -4.0
CN2 pmax pmax
comp=Z,10.0nm,0.7s
CN2 LR LR
comp=Z,2µm,18.0s
CN2 LR LR
comp=Z,1µm,18.0s
CN2 LR LR
comp=Z,2µm,17.0s
**JCC Jacoby Creek, 38.11 84** lAmb lAmb 04 42 49.6
comp=Z,185nm,1.6s
**E08A Elder Farm, El 38.17 73** lAmb lAmb 04 42 49.2
comp=Z,226nm,1.3s
**KHMM Horse Mountain 38.26 84** lAmb lAmb 04 42 51.2
comp=Z,132nm,1.2s
**KMPM Mount Pierce 38.28 85** lAmb lAmb 04 42 51.3
comp=Z,148nm,1.2s
**PINE Pine Mountain 38.40 78** lAmb lAmb 04 42 52.3
comp=Z,286nm,1.2s
**L04D Klamath Falls 38.40 81** lAmb lAmb 04 42 51.8
comp=Z,150nm,1.1s
**YBH Yreka Blue Hor 38.42 82** P P 04 42 50.3 +2.0
**YBH Yreka Blue Hor 38.42 82** LR LR 04 55 27.7
comp=Z,1µm,21.8s,baz=302,slow=31
**YBH Yreka Blue Hor 38.42 82** P P 04 42 50.3 +2.0
YBH pmax pmax
comp=Z,61nm,1.1s
**BOD Bodaibo 38.45 307** *e*P P 04 42 46.6 -1.6
BOD pmax pmax
comp=Z,19nm,1.2s
**JCJ Chichijima 38.47 247** LR LR 04 56 01.5
comp=Z,1µm,21.7s,baz=63,slow=32
**NEW Newport 38.48 70** lAmb lAmb 04 42 51.6
comp=Z,259nm,1.2s
**NEW Newport 38.48 70** LR LR 04 58 20.5
comp=Z,678nm,19.7s,baz=300,slow=36
**NEW Newport 38.48 70** P P 04 42 50.1 +1.5
baz=298,SNR=164
NEW S S 04 48 39.2 -2.8
baz=298
**J05D Fort Rock, OR 38.49 79** lAmb lAmb 04 42 52.9
comp=Z,319nm,1.4s
**K04D Chiloquin, OR 38.52 80** lAmb lAmb 04 42 52.9
comp=Z,122nm,0.8s
**KMRM Mail Ridge 38.65 85** lAmb lAmb 04 42 54.5
comp=Z,114nm,1.2s
**E09A Wood Farm, Sta 38.71 73** P P 04 42 51.6 +1.1
E09A lAmb lAmb 04 42 53.5
comp=Z,237nm,1.3s
**HIA Hailar 38.79 292** P P 04 42 51.2 -0.1
HIA lAmb lAmb 04 42 52.8

comp=Z,132nm,1.4s
**HIA Hailar 38.79 292** *c i* P **P 04 42 51.4 +0.2**
HIA pmax pmax
comp=Z,115nm,1.5s
**HIA Hailar 38.79 292** P **P 04 42 51.6 +0.4**
**G08A Pilot Rock 38.84 75** IAmb IAmb 04 42 54.7
comp=Z,146nm,1.3s
**KCPM Cahto Peak 39.04 85** IAmb IAmb 04 42 57.2
comp=Z,126nm,1.2s
**I07A Izee 39.13 77** IAmb IAmb 04 42 57.6
comp=Z,140nm,0.8s
**O02D Mt. Diablo Mer 39.25 84** P **P 04 42 56.9 +1.7**
O02D IAmb IAmb 04 42 59.3
comp=Z,100nm,1.1s
**F10A Beach Ranch, E 39.53 73** IAmb IAmb 04 43 08.2
comp=Z,110nm,1.1s
**HATC Hat Creek Radi 39.71 82** IAmb IAmb 04 43 07.7
comp=Z,178nm,0.9s
**HOPS Hopland Field 39.77 86** IAmb IAmb 04 43 02.8
comp=Z,136nm,1.4s
**BMO Blue Mountains 40.06 75** IAmb IAmb 04 43 05.1
comp=Z,218nm,1.4s
**KSRS Korea Array 40.13 272** P **P 04 43 03.7 +1.3**
comp=Z,7.9nm,0.9s,baz=51,slow=8.3,SNR=14
KSRS LR LR 04 58 42.2
comp=Z,635nm,21.6s,baz=60,slow=35
comp=Z,7.9nm,0.9s
**J08A Circle Bar Ran 40.15 77** P **P 04 43 04.3 +1.5**
J08A IAmb IAmb 04 43 06.0
comp=Z,111nm,0.8s
**ORV Oroville 40.42 84** P **P 04 43 05.2 +0.4**
**ORV Oroville 40.42 84** P **P 04 43 05.3 +0.4**
ORV pmax pmax
comp=Z,46nm,1.2s
**WVOR Wild Horse Val 40.55 79** IAmb IAmb 04 43 09.3
comp=Z,142nm,0.9s
**CIT Chita 41.04 299** *e* P **P 04 43 11.0 +1.1**
CIT *e* 04 43 19.6
CIT *e* 04 44 43.6
CIT pmax pmax
comp=Z,130nm,1.9s
**JNU Nakatsue 41.04 264** P **P 04 43 09.9 -0.2**
**JNU Nakatsue 41.04 264** LR LR 04 59 01.0
comp=Z,2µm,21.6s,baz=56,slow=34
**MSO Missoula 41.06 70** P **P 04 43 10.8 +0.6**
MSO IAmb IAmb 04 43 12.9
comp=Z,184nm,1.1s
**MSO Missoula 41.06 70** P **P 04 43 11.4 +1.2**
baz=300,SNR=185
MSO S **S 04 49 20.8 0.0**
baz=300
**AFDM Forest Hills D 41.11 84** P **P 04 43 11.4 +0.8**
**MPK Martis Peak 41.49 83** P **P 04 43 16.2 +2.2**
MPK IAmb IAmb 04 43 18.3
comp=Z,158nm,1.2s
**PAHR Pah Rah Range 41.65 82** IAmb IAmb 04 43 18.3
comp=Z,123nm,1.1s
**MFID Camas Ranch 41.73 76** P **P 04 43 16.4 +0.7**
MFID IAmb IAmb 04 43 18.6
comp=Z,184nm,1.4s
**PNTR Pine Nut 41.88 83** IAmb IAmb 04 43 31.3
comp=Z,106nm,0.9s
**YERR Yerington 42.17 83** P **P 04 43 20.8 +1.4**
**HLID Hailey 42.51 75** IAmb IAmb 04 43 25.2
comp=Z,156nm,1.1s
**HLID Hailey 42.51 75** P **P 04 43 23.9 +1.7**
baz=303,SNR=272
HLID S **S 04 49 44.0 +1.5**
baz=303
**BMN Battle Mountai 42.57 80** IAmb IAmb 04 43 25.7
comp=Z,159nm,1.5s
**ALE Alert 42.68 10** P **P 04 43 23.2 +0.4**
ALE PcP **PcP 04 45 14.2 +0.1**
**EGMT Eagleton 42.89 66** IAmb IAmb 04 43 34.8
comp=Z,113nm,0.9s
**EGMT Eagleton 42.89 66** P **P 04 43 25.9 +0.8**
baz=300,SNR=54
EGMT S **S 04 49 47.9 +0.1**
baz=300
**LHV Little Huntoon 43.07 84** IAmb IAmb 04 43 38.6
comp=Z,110nm,1.1s
**BOZ Bozeman (W) 43.07 70** IAmb IAmb 04 43 29.4
comp=Z,460nm,1.6s
**BOZ Bozeman (W) 43.07 70** P **P 04 43 27.8 +1.1**
baz=302,SNR=220
BOZ S **S 04 49 51.5 +0.8**
baz=302
**NVAR Mina Array Bea 43.09 83** P **P 04 43 27.7 +0.8**
**NVAR Mina Array Bea 43.09 83** P **P 04 43 28.6 +1.6**
comp=Z,22nm,0.9s,baz=292,slow=8.2,SNR=146
NVAR PcP **PcP 04 45 16.5 +0.1**
comp=Z,3.5nm,0.7s,baz=329,slow=2.2,SNR=2.1
NVAR ScP **ScP 04 49 08.2 +2.9**
comp=Z,1.9nm,0.9s,baz=264,slow=3.2,SNR=3.6
NVAR LR LR 04 58 17.2
comp=Z,578nm,21.3s,baz=290,slow=32
comp=Z,22nm,0.9s
**ELK Elko 43.61 78** LR LR 05 01 47.3
comp=Z,980nm,18.1s,baz=314,slow=36
**XLT XiLinHaoTe 43.70 287** *e* P **P 04 43 32.9 +1.2**
XLT pP pwP 04 43 42.9 +0.7
XLT sP sP 04 43 47.5 +4.2
XLT S **S 04 50 00.3 +0.6**
XLT ScS **ScS 04 53 28.4 -0.2**
XLT pmax pmax
comp=Z,76nm,1.7s
XLT pmax pmax
comp=Z,240nm,5.5s
XLT LR LR
comp=Z,2µm,23.8s
XLT LR LR
comp=Z,2µm,21.3s
**YHL Hebgen Lake 43.74 71** IAmb IAmb 04 43 35.0
comp=Z,388nm,1.5s
**FFC Flin Flon 43.83 54** P **P 04 43 31.8 -0.7**
**FFC Flin Flon 43.83 54** P **P 04 43 31.8 -0.7**
FFC pmax pmax
comp=Z,11nm,0.9s
**FFC Flin Flon 43.83 54** P **P 04 43 32.1 -0.4**
FFC PcP **PcP 04 45 19.0 +0.6**
**DSP Deep Springs 43.94 84** IAmb IAmb 04 43 37.2
comp=Z,106nm,1.3s
**YNM Yellowstone No 44.09 71** IAmb IAmb 04 43 39.0
comp=Z,136nm,1.2s
**YNR Norris Junctio 44.12 71** IAmb IAmb 04 43 39.2
comp=Z,378nm,1.5s
**H17A Grant Village 44.35 71** P **P 04 43 40.0 +2.8**
baz=303,SNR=111
**LKWY Lake 44.37 71** P **P 04 43 39.3 +2.1**
LKWY IAmb IAmb 04 43 44.1
comp=Z,106nm,0.9s
**LKWY Lake 44.37 71** P **P 04 43 39.3 +2.1**
LKWY pmax pmax
comp=Z,106nm,1.0s
**YMP Mirror Lake Pl 44.41 71** IAmb IAmb 04 43 41.5
comp=Z,244nm,1.4s
**FLWY Flagg Ranch 44.46 72** IAmb IAmb 04 43 55.4
comp=Z,102nm,0.9s
**FXWY Fox Creek 44.51 72** IAmb IAmb 04 43 41.7
comp=Z,153nm,1.9s
**HVU Hansel Valley 44.52 76** IAmb IAmb 04 43 41.2
comp=Z,112nm,0.8s
**GRAC Grapevine Rang 44.55 84** IAmb IAmb 04 43 41.9
comp=Z,114nm,1.4s
**BCW Bitter Crk WRg 44.57 88** IAmb IAmb 04 43 42.1
comp=Z,81nm,1.1s
**TPAW Teton Pass 44.64 73** IAmb IAmb 04 43 41.9
comp=Z,111nm,1.2s
**RLMT Red Lodge 44.73 70** P **P 04 43 41.6 +1.6**
baz=303,SNR=211
RLMT S **S 04 50 15.6 +0.8**
baz=303
**SNOW Snow King Moun 44.77 72** IAmb IAmb 04 43 43.9
comp=Z,70nm,1.1s
**LOHW Long Hollow 44.78 72** IAmb IAmb 04 43 43.6
comp=Z,228nm,1.9s
**R11B Troy Canyon, C 44.83 81** IAmb IAmb 04 43 43.6
comp=Z,147nm,1.5s
**R11B Troy Canyon, C 44.83 81** P **P 04 43 42.1 +1.2**
baz=307,SNR=130
R11B S **S 04 50 18.6 +2.1**
baz=307
**BGU Big Grassy Mou 44.86 77** IAmb IAmb 04 43 44.1
comp=Z,378nm,1.9s
**Q12A Willow Creek R 44.88 80** IAmb IAmb 04 43 57.7
comp=Z,156nm,1.1s
**AHID Auburn Hatcher 44.96 73** IAmb IAmb 04 43 44.9
comp=Z,178nm,1.3s
**SPUT South Promonto 44.99 76** P **P 04 43 42.8 +0.7**
**S11A Rachel 45.16 82** IAmb IAmb 04 43 46.5
comp=Z,116nm,1.1s
**SPR3 Spring Creek 3 45.21 80** IAmb IAmb 04 43 47.5
comp=Z,249nm,2.0s
**TPNV Topopah Spring 45.28 83** P **P 04 43 45.9 +1.4**
baz=308,SNR=123
TPNV S **S 04 50 27.0 +4.0**
baz=308
**HWUT Hardware Ranch 45.35 75** IAmb IAmb 04 43 47.9
comp=Z,91nm,1.1s
**DUG Dugway, Tooele 45.43 77** P **P 04 43 47.3 +1.7**
baz=306,SNR=225
DUG S **S 04 50 26.8 +1.8**
baz=306
**GWY Greenwater Val 45.50 85** IAmb IAmb 04 43 48.7
comp=Z,94nm,1.5s
**LAO LASA Array 45.63 66** P **P 04 43 48.5 +1.5**
baz=303,SNR=150
LAO S **S 04 50 28.6 +0.9**
baz=303
**PRN Pahroc Range 45.74 82** P **P 04 43 49.1 +1.0**
PRN IAmb IAmb 04 43 51.1
comp=Z,163nm,1.0s
**CTU Camp Tracy 45.78 76** IAmb IAmb 04 43 51.0
comp=Z,144nm,1.2s
**PSUT Pine Spring 45.79 80** IAmb IAmb 04 43 58.9
comp=Z,62nm,0.9s
**DGMT Dagmar 45.82 63** P **P 04 43 49.1 +0.7**
baz=302,SNR=29
DGMT S **S 04 50 33.0 +2.8**
baz=302
**BJI Beijing 45.88 283** P **P 04 43 49.6 +0.7**
BJI PcP **PcP 04 45 27.3 +1.6**
BJI S **S 04 50 34.3 +3.2**
BJI pmax pmax
comp=Z,8.0nm,1.0s
BJI pmax pmax
comp=Z,220nm,4.1s
BJI LR LR
comp=Z,400nm,16.2s
BJI LR LR
comp=Z,540nm,19.0s
BJI LR LR
comp=Z,580nm,18.1s
**BW06 Boulder Array 45.89 73** P **P 04 43 50.5 +1.1**
baz=305,SNR=285
BW06 S **S 04 50 33.6 +1.9**
baz=305
**PDAR Pinedale Array 45.89 73** P **P 04 43 49.7 +0.4**
**PDAR Pinedale Array 45.89 73** P **P 04 43 49.9 +0.6**
comp=Z,107nm,0.8s,baz=308,slow=4.9,SNR=672
PDAR LR LR 05 00 36.8
comp=Z,567nm,21.7s,baz=301,slow=33
**GSC Goldstone, Bar 45.98 86** IAmb IAmb 04 43 52.5
comp=Z,154nm,1.5s
**JLU Jordanelle 46.02 76** IAmb IAmb 04 43 53.2
comp=Z,128nm,1.0s
**NLU North Lily Min 46.02 77** IAmb IAmb 04 43 53.2
comp=Z,93nm,0.9s
**MPU Maple Canyon 46.26 77** IAmb IAmb 04 43 54.9
comp=Z,57nm,0.7s
**ELS Elsinore Mount 46.66 88** IAmb IAmb 04 43 57.8
comp=Z,106nm,1.7s
**CCUT Cedar City 46.70 81** IAmb IAmb 04 43 58.9
comp=Z,152nm,1.6s
**ULN Ulaanbaatar 46.76 297** P **P 04 43 56.3 +0.3**
**ULN Ulaanbaatar 46.76 297** *ce* P **P 04 43 57.0 +1.0**
ULN pmax pmax
comp=Z,20nm,1.0s
**SZCU Shurtz Canyon 46.84 81** IAmb IAmb 04 43 59.6
comp=Z,71nm,1.4s
**TMUT Trail Mountain 46.95 77** IAmb IAmb 04 44 00.8
comp=Z,171nm,1.1s
**JOW Kunigami 47.02 260** LR LR 05 02 33.0
comp=Z,308nm,20.8s,baz=312,slow=34
**NOR Nord 47.03 4** *i* P **P 04 43 55.8 -1.7**
NOR IAmb IAmb 04 44 12.9
comp=Z,239nm,2.7s
**LCMT Little Creek M 47.11 81** IAmb IAmb 04 44 01.9
comp=Z,120nm,1.2s
**MTPU Mount Pierson 47.13 79** IAmb IAmb 04 44 02.5
comp=Z,141nm,1.3s
**SONM Songino Array 47.14 297** P **P 04 43 59.3 +0.3**
SONM IAmb IAmb 04 44 01.8
comp=Z,162nm,1.8s
**SONM Songino Array 47.14 297** P **P 04 43 59.1 +0.2**
comp=Z,8.8nm,0.6s,baz=60,slow=6.3,SNR=78
SONM PcP **PcP 04 45 31.3 +1.1**
comp=Z,4.3nm,0.7s,baz=87,slow=1.5,SNR=2.4
SONM ScP **ScP 04 49 23.1 +1.3**
comp=Z,6.7nm,1.0s,baz=73,slow=1.8,SNR=12
SONM LR LR 05 04 50.4
comp=Z,4µm,19.4s,baz=64,slow=37
comp=Z,8.8nm,0.6s
**SONM Songino Array 47.14 297** P **P 04 43 59.3 +0.3**
SONM pmax pmax
comp=Z,162nm,1.8s
**PFO Pinyon Flats O 47.29 87** P **P 04 44 00.4 +0.1**
PFO IAmb IAmb 04 44 02.8
comp=Z,90nm,1.7s
**PFO Pinyon Flats O 47.29 87** LR LR 04 59 33.4
comp=Z,590nm,21.9s,baz=294,slow=30
**PFO Pinyon Flats O 47.29 87** P **P 04 44 01.2 +0.9**
baz=311,SNR=16
**PFO Pinyon Flats O 47.29 87** *c i* P **P 04 44 00.9 +0.7**
PFO pmax pmax
comp=Z,84nm,1.8s
**PFO Pinyon Flats O 47.29 87** P **P 04 44 01.0 +0.7**
**TPFO Pinon Flats 47.30 87** P **P 04 44 01.2 +0.9**
baz=311,SNR=16
**109C Camp Elliot, M 47.36 88** IAmb IAmb 04 44 03.2
comp=Z,128nm,1.7s
**109C Camp Elliot, M 47.36 88** P **P 04 44 01.8 +1.2**
baz=311
**KNB Kanab 47.37 81** IAmb IAmb 04 44 04.2
comp=Z,244nm,1.6s
**PKCU Pink Cliffs 47.42 80** IAmb IAmb 04 44 04.8
comp=Z,146nm,1.4s
**ZAK Zakamensk 47.44 302** *e* P **P 04 44 02.0 +0.8**
ZAK pmax pmax
comp=Z,24nm,1.5s
ZAK pmax pmax
comp=Z,10.0nm,1.3s
**NEEM North Greenlan 47.46 14** *i* P **P 04 43 59.5 -1.7**
NEEM IAmb IAmb 04 44 36.2
comp=Z,452nm,2.5s
**SRU San Rafael Swe 47.49 77** IAmb IAmb 04 44 04.9
comp=Z,131nm,0.8s
**TIA Tai'an 47.66 278** P **P 04 44 04.0 +1.0**
TIA S **S 04 51 00.3 +3.5**
TIA pmax pmax
comp=Z,31nm,0.9s
TIA pmax pmax
comp=Z,710nm,3.5s
TIA LR LR
comp=Z,980nm,17.7s
TIA LR LR
comp=Z,1µm,17.3s
TIA LR LR
comp=Z,2µm,19.9s
**MONP2 Monument Peak 47.79 88** P **P 04 44 05.1 +0.9**
baz=311,SNR=14
**RWWY Rawlins 47.93 72** IAmb IAmb 04 44 07.3
comp=Z,158nm,1.1s
**W13A Hualapai Mount 47.93 84** IAmb IAmb 04 44 07.7
comp=Z,94nm,1.7s
**GUMO Guam 48.00 232** LR LR 05 02 35.0
comp=Z,433nm,20.6s,baz=65,slow=34
**CBX Cerro Bola 48.02 89** IAmb IAmb 04 44 08.7
comp=Z,186nm,1.5s
**U15A North Rim 48.08 81** IAmb IAmb 04 44 09.5
comp=Z,147nm,1.2s
**HHC Hu-ho-hao-te 48.20 287** *e* P **P 04 44 08.0 +0.8**
HHC pP pP 04 44 15.3 -0.2
HHC PP **PP 04 45 58.8 -0.6**
HHC S **S 04 51 00.1 -4.3**
HHC ScS **ScS 04 53 56.3 -1.6**
HHC SS **SS 04 54 31.6 -1.8**
HHC pmax pmax
comp=Z,38nm,1.1s
HHC LR LR
comp=Z,1µm,17.6s
HHC LR LR
comp=Z,2µm,18.3s
HHC LR LR
comp=Z,2µm,18.3s
**RMX La Rumorosa 48.20 88** IAmb IAmb 04 44 10.3
comp=Z,118nm,1.9s
**RSSD Black Hills 48.36 68** P **P 04 44 08.5 -0.1**
RSSD IAmb IAmb 04 44 10.5
comp=Z,205nm,1.4s
**RSSD Black Hills 48.36 68** P **P 04 44 09.1 +0.5**
baz=306
RSSD S **S 04 51 05.4 -1.6**
baz=306
**RSSD Black Hills 48.36 68** P **P 04 44 08.5 -0.1**
RSSD pmax pmax
comp=Z,205nm,1.4s
**RSSD Black Hills 48.36 68** P **P 04 44 09.1 +0.5**
**HNS HongShan 48.41 281** ⇑P **P 04 44 09.8 +1.1**
HNS PP **PP 04 45 59.4 -1.8**
HNS S **S 04 51 09.6 +2.4**
HNS ScS **ScS 04 54 00.6 +1.5**
HNS pmax pmax
comp=Z,36nm,1.2s
HNS pmax pmax
comp=Z,500nm,5.5s
HNS LR LR
comp=Z,990nm,19.1s
HNS LR LR
comp=Z,1µm,19.1s
HNS LR LR
comp=Z,2µm,22.0s
**BLYC Blythe 48.41 86** IAmb IAmb 04 44 11.1
comp=Z,72nm,1.2s
**ESJX Sierra Juarez 48.68 88** IAmb IAmb 04 44 13.6
comp=Z,112nm,1.8s
**GLA Glamis 48.68 86** IAmb IAmb 04 44 13.3
comp=Z,240nm,1.9s
**N23A Red Feather La 49.17 72** IAmb IAmb 04 44 17.6
comp=Z,180nm,1.2s
**N23A Red Feather La 49.17 72** P **P 04 44 16.2 +1.3**
baz=307,SNR=94
**PHWY Pilot Hill 49.21 72** IAmb IAmb 04 44 17.3
comp=Z,141nm,1.8s
**WUAZ Wupatki 49.23 81** IAmb IAmb 04 44 18.1
comp=Z,82nm,1.1s
**WUAZ Wupatki 49.23 81** P **P 04 44 16.7 +1.4**
baz=310,SNR=54
**BTO Baotou 49.27 287** *e* P **P 04 44 17.4 +2.0**
BTO pP **sP 04 44 26.3 -0.8**
BTO sP **pwP 04 44 32.1 +6.1**
BTO S **S 04 51 22.9 +3.3**
BTO pmax pmax
comp=Z,170nm,1.7s
BTO LR LR
comp=Z,2µm,19.0s
BTO LR LR
comp=Z,3µm,21.2s
BTO LR LR
comp=Z,5µm,21.4s
**NJ2 Nanjing 49.30 273** *e* P **P 04 44 15.0 -0.6**
NJ2 pmax pmax
comp=Z,50nm,0.5s
**ULM Lac du Bonnet 49.35 57** IAmb IAmb 04 44 17.0
comp=Z,137nm,1.7s
**ULM Lac du Bonnet 49.35 57** P **P 04 44 15.1 -0.7**
comp=Z,11nm,0.5s,baz=304,slow=8.0,SNR=28
ULM LR LR 05 05 09.2
comp=Z,1µm,21.9s,baz=312,slow=36
comp=Z,11nm,0.5s
**ULM Lac du Bonnet 49.35 57** *c i* P **P 04 44 15.5 -0.3**
**113A Mohawk Valley, 49.54 86** IAmb IAmb 04 44 19.5
comp=Z,82nm,1.6s
**TIY Taiyuan 49.61 283** *e* P **P 04 44 19.3 +1.3**
TIY PP **PP 04 46 12.8 +0.5**
TIY S **S 04 51 28.3 +4.0**
TIY pmax pmax
comp=Z,470nm,3.5s
TIY LR LR
comp=Z,860nm,22.0s
TIY LR LR
comp=Z,840nm,21.3s
TIY LR LR
comp=Z,850nm,22.7s
**X16A Lo Mia Camp, P 49.90 83** IAmb IAmb 04 44 23.4
comp=Z,149nm,1.8s
**MVCO Mesa Verde 49.92 78** IAmb IAmb 04 44 23.0
comp=Z,204nm,1.3s
**MVCO Mesa Verde 49.92 78** P **P 04 44 21.5 +0.9**
baz=309,SNR=94
MVCO S **S 04 51 29.2 +0.2**
baz=309
**UPNV Upernavik 49.95 19** *i* P **P 04 44 19.4 -0.5**
UPNV IAmb IAmb 04 44 35.9
comp=Z,30nm,0.9s
**KBS Kingsbay 49.96 357** P **P 04 44 20.7 +0.7**
KBS IAmb IAmb 04 44 24.2
comp=Z,140nm,1.8s
**KBS Kingsbay 49.96 357** *e* P **P 04 44 20.5 +0.5**
KBS IAmb IAmb 04 44 23.6
comp=Z,137nm,1.8s
**KBS Kingsbay 49.96 357** *ce* P **P 04 44 20.6 +0.5**
KBS pmax pmax
comp=Z,34nm,0.9s
**KBS Kingsbay 49.96 357** *i* P **P 04 44 20.9 +0.9**
**KBS Kingsbay 49.96 357** P **P 04 44 20.9 +0.9**
KBS ScP **ScP 04 49 34.0 +1.0**
**ISCO Idaho Springs 50.05 73** IAmb IAmb 04 44 24.4
comp=Z,95nm,1.1s
**ISCO Idaho Springs 50.05 73** P **P 04 44 22.9 +1.3**
baz=308,SNR=93
ISCO S **S 04 51 33.3 +2.5**
baz=308
**AGMN Agassiz Nation 50.50 59** IAmb IAmb 04 44 25.6
comp=Z,110nm,1.3s
**AGMN Agassiz Nation 50.50 59** P **P 04 44 24.2 -0.3**
baz=306,SNR=34
**W18A Petrified Fore 50.51 81** IAmb IAmb 04 44 27.8
comp=Z,172nm,1.4s
**W18A Petrified Fore 50.51 81** P **P 04 44 26.3 +1.3**
baz=310,SNR=5.5
W18A S **S 04 51 40.2 +3.1**
baz=310
**SPA0 Spitsbergen Ar 50.55 356** *e* P **P 04 44 24.4 -0.2**
SPA0 IAmb IAmb 04 44 25.9
comp=Z,162nm,1.6s
**SPITS Spitsbergen Ar 50.55 356** P **P 04 44 24.0 -0.6**
comp=Z,18nm,0.6s,baz=57,slow=6.1,SNR=37
SPITS LR LR 05 06 43.3
comp=Z,697nm,18.2s,baz=338,slow=37
comp=Z,18nm,0.6s
**SPITS Spitsbergen Ar 50.55 356** P **P 04 44 24.4 -0.2**
SPITS pmax pmax
comp=Z,172nm,1.6s
**SPB2 Spitsbergen Ar 50.55 356** P **P 04 44 23.8 -0.8**
SPB2 IAmb IAmb 04 44 26.6
comp=Z,163nm,1.6s
**214A Organ Pipe Nat 50.68 86** IAmb IAmb 04 44 28.4
comp=Z,85nm,1.4s
**214A Organ Pipe Nat 50.68 86** P **P 04 44 27.1 +0.9**
baz=312,SNR=26
214A S **S 04 51 40.6 +1.3**
baz=312
**Q24A Divide 50.85 74** IAmb IAmb 04 44 30.6
comp=Z,201nm,1.9s
**Q24A Divide 50.85 74** P **P 04 44 28.8 +1.1**
baz=309
Q24A S **S 04 51 44.2 +2.1**
baz=309
**SDCO Great Sand Dun 51.41 75** IAmb IAmb 04 44 34.7
comp=Z,107nm,1.1s
**SDCO Great Sand Dun 51.41 75** P **P 04 44 33.3 +1.4**
baz=310,SNR=165
SDCO S **S 04 51 51.5 +1.8**
baz=310
**OGNE Ogallala 51.47 70** P **P 04 44 33.5 +1.5**
baz=308,SNR=21
**NUUG Nuugaatsiaq 51.48 20** *i* P **P 04 44 31.1 -0.4**
NUUG IAmb IAmb 04 44 48.0
comp=Z,25nm,1.1s
**LYN LuoYang 51.63 280** P **P 04 44 34.0 +0.8**
LYN PP **PP 04 46 30.1 -0.5**
LYN S **S 04 51 52.8 +0.5**
LYN pmax pmax
comp=Z,39nm,0.8s
LYN pmax pmax
comp=Z,560nm,8.4s
LYN LR LR
comp=Z,830nm,18.6s
LYN LR LR
comp=Z,1µm,19.0s

LYN LR LR
comp=Z,1µm,21.4s
HOPEN **Hopen** **51.67 353** *e*P **P** **04 44 32.7 -0.2**
HOPEN IAmb IAmb 04 44 36.6
comp=Z,33nm,0.9s
**TUC** **Tucson** **51.71 84** P **P** **04 44 34.2 +0.3**
TUC IAmb IAmb 04 44 36.4
comp=Z,96nm,1.6s
**TUC** **Tucson** **51.71 84** P **P** **04 44 35.0 +1.1**
baz=312
**TUC** **Tucson** **51.71 84** P **P** **04 44 34.3 +0.3**
TUC pmax pmax
comp=Z,96nm,1.6s
**TUC** **Tucson** **51.71 84** P **P** **04 44 35.0 +1.1**
**F33A** **5 Mile Ranch,** **51.74 62** IAmb IAmb 04 44 34.8
comp=Z,91nm,1.2s
**HSPB** **Hornsund (broa** **51.75 356** *e*P **P** **04 44 34.5 +1.1**
**K30B** **Basset** **51.80 67** P **P** **04 44 35.4 +0.9**
**T25A** **Trinidad** **52.47 75** P **P** **04 44 41.3 +1.6**
baz=310,SNR=166
T25A S **S** **04 52 07.5 +3.4**
baz=310
**ANMO** **Albuquerque** **52.65 79** P **P** **04 44 41.3 +0.3**
**ANMO** **Albuquerque** **52.65 79** LR LR 05 04 26.1
comp=Z,868nm,21.4s,baz=46,slow=33
**ANMO** **Albuquerque** **52.65 79** P **P** **04 44 42.1 +1.0**
baz=311
ANMO S **S** **04 52 09.0 +2.4**
baz=311
**ANMO** **Albuquerque** **52.65 79***c* *i*P **P** **04 44 42.0 +1.0**
ANMO pmax pmax
comp=Z,35nm,1.4s
**ANMO** **Albuquerque** **52.65 79** P **P** **04 44 41.9 +0.9**
ANMO PcP **PcP** **04 45 51.7 +1.0**
**ECSD** **EROS Data Cent** **52.86 64** IAmb IAmb 04 44 43.3
comp=Z,162nm,1.4s
**ECSD** **EROS Data Cent** **52.86 64** P **P** **04 44 42.0 -0.3**
baz=308,SNR=73
ECSD S **S** **04 52 08.0 -0.9**
baz=308
**FRB** **Frobisher Bay** **52.89 32** LR LR 05 10 17.2
comp=Z,3µm,18.1s,baz=304,slow=40
**Y22D** **IRIS PASSCAL I** **52.94 80** IAmb IAmb 04 44 50.5
comp=Z,100nm,0.9s
**Y22D** **IRIS PASSCAL I** **52.94 80** P **P** **04 44 45.0 +2.0**
baz=311
Y22D S **S** **04 52 16.2 +5.8**
baz=311
**EYMN** **Ely** **53.04 57** IAmb IAmb 04 44 44.8
comp=Z,100nm,1.2s
**EYMN** **Ely** **53.04 57** P **P** **04 44 43.3 -0.2**
baz=308,SNR=34
**WHN** **Wuhan** **53.15 274** ⇓P **P** **04 44 45.0 +0.5**
**319A** **Douglas** **53.28 84** IAmb IAmb 04 44 48.1
comp=Z,80nm,1.3s
**SUMG** **Summit** **53.32 14** P **P** **04 44 44.8 -0.9**
**SUMG** **Summit** **53.32 14** P **P** **04 44 44.8 -0.9**
SUMG pmax pmax
comp=Z,38nm,1.0s
**SUMG** **Summit** **53.32 14** *i*P **P** **04 44 44.5 -1.1**
SUMG IAmb IAmb 04 45 02.9
comp=Z,47nm,1.1s
**121A** **Cookes Peak, D** **53.43 82** P **P** **04 44 47.9 +1.1**
baz=312,SNR=29
**SSLB** **Suanglung** **53.78 263** P **P** **04 44 49.4 +0.2**
SSLB IAmb IAmb 04 45 02.3
comp=Z,100nm,1.1s
**E38A** **The Farm, Brul** **53.84 58** IAmb IAmb 04 44 50.4
comp=Z,92nm,0.8s
**DBG** **Daneborg** **53.85 7** *i*P **P** **04 44 48.6 -0.4**
**YULB** **Yu-li** **53.85 263** P **P** **04 44 49.4 -0.4**
YULB IAmb IAmb 04 45 10.9
comp=Z,66nm,1.2s
**XAN** **Xi'an** **54.16 282** ⇓P **P** **04 44 52.8 +0.8**
XAN sP sP 04 45 07.5 +3.8
XAN S **S** **04 52 25.6 -1.3**
XAN pmax pmax
comp=Z,33nm,1.7s
XAN pmax pmax
comp=Z,520nm,9.8s
XAN LR LR
comp=Z,1µm,17.2s
XAN LR LR
comp=Z,2µm,17.9s
XAN LR LR
comp=Z,2µm,15.8s
**CBKS** **Cedar Bluff** **54.19 71** P **P** **04 44 53.1 +1.0**
baz=310,SNR=43
CBKS S **S** **04 52 29.2 +2.1**
baz=310
**SRIG** **Santa Rosalia** **54.24 90** P **P** **04 44 53.2 +0.7**
SRIG IAmb IAmb 04 44 54.3
comp=Z,120nm,1.7s
**ZALV** **Zalesovo Beam** **54.48 314** P **P** **04 44 53.9 0.0**
comp=Z,1.2nm,0.3s,baz=28,slow=6.7,SNR=4.3
ZALV PcP **PcP** **04 45 57.7 +0.7**
comp=Z,16nm,0.8s,baz=35,slow=3.9,SNR=26
ZALV ScP **ScP** **04 49 53.7 +0.7**
comp=Z,1.1nm,0.6s,baz=49,slow=2.7,SNR=4.0
ZALV LR LR 05 09 01.7
comp=Z,1µm,20.6s,baz=46,slow=37
comp=Z,1.2nm,0.3s
**ZALV** **Zalesovo Beam** **54.48 314** *i*P **P** **04 44 55.4 +1.5**
ZALV pmax pmax
comp=Z,1.0nm,0.3s
**EPT** **El Paso** **54.74 82** IAmb IAmb 04 44 58.5
comp=Z,120nm,1.1s
**R32A** **Long Quarter,** **55.05 70** IAmb IAmb 04 45 00.0
comp=Z,114nm,0.8s
**G40A** **Rib Lake** **55.43 59** IAmb IAmb 04 45 02.2
comp=Z,90nm,1.1s
**COWI** **Conover** **55.46 58** IAmb IAmb 04 45 02.3
comp=Z,38nm,0.8s
**MNTX** **Cornudas Mount** **55.49 81** P **P** **04 45 02.6 +1.0**
baz=313,SNR=108
**SFJD** **Kangerlussuaq** **55.60 22** P **P** **04 45 01.5 -0.2**
SFJD IAmb IAmb 04 46 02.6
comp=Z,90nm,1.6s
**SFJD** **Kangerlussuaq** **55.60 22** LR LR 05 10 33.4
comp=Z,1µm,21.0s,baz=310,slow=38
**SFJD** **Kangerlussuaq** **55.60 22** P **P** **04 45 01.5 -0.2**
SFJD pmax pmax
comp=Z,90nm,1.7s
**SFJD** **Kangerlussuaq** **55.60 22** *i*P **P** **04 45 00.9 -0.9**
SFJD IAmb IAmb 04 46 02.2
comp=Z,103nm,1.7s
**AMTX** **Amarillo** **55.61 75** IAmb IAmb 04 45 04.1
comp=Z,58nm,0.9s
**AMTX** **Amarillo** **55.61 75** P **P** **04 45 03.3 +0.8**
baz=312
**KSU1** **Kansas State U** **55.84 68** P **P** **04 45 04.2 +0.3**
baz=311,SNR=49
KSU1 S **S** **04 52 47.8 -1.3**
baz=311
**LZH** **Lanzhou** **55.89 287** ⇑P **P** **04 45 06.0 +1.5**
LZH sP sP 04 45 20.6 +4.3
LZH S **S** **04 52 52.1 +1.9**
LZH pmax pmax
comp=Z,47nm,1.6s
LZH pmax pmax
comp=Z,260nm,5.5s
LZH LR LR
comp=Z,2µm,17.5s
LZH LR LR
comp=Z,1µm,17.2s
LZH LR LR
comp=Z,2µm,17.5s
**SCIA** **State Center** **55.95 64** P **P** **04 45 05.2 +0.5**
baz=311,SNR=23
**DGZ** **Jazzator, Alta** **56.01 309***d* *i*P **P** **04 45 05.8 +0.6**
DGZ *i* *PP **pP** **04 45 12.2 -1.4**
DGZ pmax pmax
comp=Z,23nm,1.4s
**GTA** **Gaotai** **56.07 292** ⇑P **P** **04 45 06.8 +1.0**
GTA sP pwP 04 45 20.4 +3.9
GTA S **S** **04 52 52.9 +0.4**
GTA ScS **ScS** **04 54 52.4 -0.3**
GTA pmax pmax
comp=Z,82nm,1.5s
GTA pmax pmax
comp=Z,480nm,8.7s
GTA LR LR
comp=Z,1µm,20.4s
GTA LR LR
comp=Z,1µm,19.3s
GTA LR LR
comp=Z,2µm,19.3s

**I40A** **Norwalk** **56.09 60** IAmb IAmb 04 45 07.0
comp=Z,97nm,1.1s
**ICESG** **Greenland Ices** **56.14 17** *i*P **P** **04 45 04.9 -1.2**
ICESG IAmb IAmb 04 46 04.0
comp=Z,36nm,1.0s
**ELIS** **Ellis County** **56.19 73** IAmb IAmb 04 45 08.6
comp=Z,191nm,1.4s
**F42A** **Maple Grove Fa** **56.21 57** IAmb IAmb 04 45 08.3
comp=Z,79nm,0.8s
**KAN12** **Harper NE Stat** **56.22 71** IAmb IAmb 04 45 08.0
comp=Z,54nm,0.9s
**KAN08** **Anthony NE Sta** **56.28 71** IAmb IAmb 04 45 08.3
comp=Z,49nm,0.8s
**OK038** **West end E0370** **56.32 72** P **P** **04 45 07.5 +0.1**
OK038 IAmb IAmb 04 45 09.2
comp=Z,87nm,1.0s
**VHRN** **Van Horn** **56.37 81** IAmb IAmb 04 45 10.4
comp=Z,86nm,1.2s
**ENH** **Enshi** **56.38 278** IAmb IAmb 04 45 24.7
comp=Z,127nm,1.8s
**OK032** **Salt Plains WL** **56.42 71** IAmb IAmb 04 45 09.7
comp=Z,244nm,1.7s
**KAN01** **Argonia South** **56.45 71** IAmb IAmb 04 45 09.8
comp=Z,182nm,1.2s
**KAN14** **Manchester OK** **56.47 71** IAmb IAmb 04 45 09.8
comp=Z,80nm,1.4s
**KAN17** **Caldwell West** **56.52 71** IAmb IAmb 04 45 10.2
comp=Z,112nm,0.9s
**PECS** **Pecos** **56.66 80** IAmb IAmb 04 45 12.1
comp=Z,62nm,1.2s
**DKNS** **Dickens** **56.90 76** IAmb IAmb 04 45 18.5
comp=Z,62nm,0.9s
**CSTR** **Hydro, Custer** **56.91 73** P **P** **04 45 12.2 +0.5**
**JFWS** **Jewell Farm** **56.94 61** IAmb IAmb 04 45 12.5
comp=Z,73nm,0.8s
**JFWS** **Jewell Farm** **56.94 61** P **P** **04 45 11.3 -0.4**
baz=311,SNR=27
**POST** **Post** **56.95 77** IAmb IAmb 04 45 19.2
comp=Z,93nm,0.8s
**ODSA** **Odessa** **56.96 78** IAmb IAmb 04 45 13.7
comp=Z,79nm,1.1s
**I42A** **Draeger Farm,** **57.02 60** IAmb IAmb 04 45 13.8
comp=Z,250nm,1.8s
**DY2G** **Dye2** **57.03 21** *i*P **P** **04 45 12.1 -0.2**
DY2G IAmb IAmb 04 46 08.0
comp=Z,223nm,1.8s
**BLOK** **Blackwell** **57.04 71** IAmb IAmb 04 45 14.1
comp=Z,155nm,1.1s
**H43A** **Windswept, Lux** **57.25 58** IAmb IAmb 04 45 15.3
comp=Z,84nm,0.8s
**SN07** **Snyder 07** **57.31 77** IAmb IAmb 04 45 16.3
comp=Z,182nm,1.6s
**VADS** **Vadso** **57.33 349** *e*P **P** **04 45 13.8 -0.3**
VADS IAmb IAmb 04 45 18.0
comp=Z,57nm,1.4s
**T35A** **Sooner Cattle** **57.35 70** IAmb IAmb 04 45 16.0
comp=Z,87nm,0.8s
**MNHN** **Monahans** **57.36 79** IAmb IAmb 04 45 21.6
comp=Z,86nm,0.8s
**HAMF** **Hammerfest** **57.42 352** *e*P **P** **04 45 14.8 +0.1**
HAMF IAmb IAmb 04 45 17.8
comp=Z,20nm,0.9s
**OK048** **Pawnee Station** **57.43 71** IAmb IAmb 04 45 16.8
comp=Z,132nm,1.0s
**OK051** **E0350 and S346** **57.44 71** IAmb IAmb 04 45 16.8
comp=Z,99nm,1.0s
**SN05** **Snyder 5** **57.46 77** IAmb IAmb 04 45 17.1
comp=Z,44nm,0.8s
**WMOK** **Wichita Mounta** **57.47 74** IAmb IAmb 04 45 17.8
comp=Z,268nm,1.8s
**WMOK** **Wichita Mounta** **57.47 74** P **P** **04 45 16.3 +0.7**
baz=313,SNR=89
WMOK S **S** **04 53 11.7 +0.9**
baz=313
**OK029** **Liberty Lake** **57.55 72** IAmb IAmb 04 45 19.1
comp=Z,89nm,0.8s
**QUOK** **Quay** **57.74 71** IAmb IAmb 04 45 19.0
comp=Z,102nm,1.1s
**LPIG** **La Paz** **57.75 91** LR LR 05 04 33.6
comp=Z,157nm,21.9s,baz=307,slow=30
**JMIC** **Jan Mayen** **57.85 4** LR LR 05 11 48.3
comp=Z,365nm,19.3s,baz=14,slow=38
**L42A** **Oliver, Polo** **57.87 62** IAmb IAmb 04 45 19.1
comp=Z,198nm,1.3s
**SGCY** **Sterling City** **57.97 78** P **P** **04 45 19.1 -0.1**
**X34A** **Smith Ranch, M** **58.13 73** IAmb IAmb 04 45 29.4
comp=Z,98nm,1.0s
**TX31** **Lajitas Ar. Si** **58.19 82** IAmb IAmb 04 45 22.9
comp=Z,108nm,1.4s
**TXAR** **Lajitas Array** **58.19 82** P **P** **04 45 20.8 -0.1**
comp=Z,18nm,1.0s,baz=305,slow=4.4,SNR=130
TXAR PKPPKP **P'P'df** **05 14 57.6 -6.4**
comp=Z,0.3nm,1.0s,baz=136,slow=9.6,SNR=2.2
comp=Z,18nm,1.0s
**SLBS** **Sierra La Lagu** **58.28 91** P **P** **04 45 21.5 0.0**
SLBS IAmb IAmb 04 45 23.6
comp=Z,61nm,1.3s
**SLBS** **Sierra La Lagu** **58.28 91** P **P** **04 45 22.0 +0.5**
**SOEG** **Soedalen** **58.31 14** *i*P **P** **04 45 21.4 +0.4**
SOEG IAmb IAmb 04 45 59.2
comp=Z,515nm,2.5s
**ARA0** **ARCESS Array S** **58.31 351** *e*P **P** **04 45 20.4 -0.6**
**ARCES** **ARCESS Array B** **58.31 351** P **P** **04 45 19.9 -1.1**
**ARCES** **ARCESS Array B** **58.31 351** P **P** **04 45 20.4 -0.6**
comp=Z,7.1nm,0.6s,baz=20,slow=6.8,SNR=31
ARCES PcP **PcP** **04 46 10.9 -0.8**
comp=Z,11nm,0.9s,baz=15,slow=5.0,SNR=7.6
ARCES ScP **ScP** **04 50 08.5 -1.1**
comp=Z,5.7nm,1.1s,baz=8.7,slow=18,SNR=5.5
ARCES LR LR 05 13 44.6
comp=Z,467nm,19.2s,baz=28,slow=40
comp=Z,7.1nm,0.6s
**ARCES** **ARCESS Array B** **58.31 351** P **P** **04 45 19.9 -1.1**
ARCES pmax pmax
comp=Z,18nm,1.0s
**I45A** **Fountain** **58.36 58** IAmb IAmb 04 45 23.4
comp=Z,94nm,0.8s
**HPIG** **58.64 85** IAmb IAmb 04 45 25.9
comp=Z,114nm,1.8s
**OZNA** **Ozona** **58.66 79** IAmb IAmb 04 45 32.3
comp=Z,58nm,0.9s
**GLMI** **Grayling** **58.68 56** P **P** **04 45 24.3 +0.3**
baz=312,SNR=5.2
**LVZ** **Lovozero** **58.70 346** P **P** **04 45 21.9 -1.9**
**LVZ** **Lovozero** **58.70 346***ce* P **P** **04 45 22.8 -0.9**
LVZ pmax pmax
comp=Z,36nm,1.2s
**LVZ** **Lovozero** **58.70 346** P **P** **04 45 22.6 -1.1**
comp=Z,37nm,1.0s
**LVZ** **Lovozero** **58.70 346** P **P** **04 45 22.7 -0.9**
**S39A** **Bolivar** **58.70 68** IAmb IAmb 04 45 24.6
comp=Z,47nm,0.7s
**L44A** **Lake County Fo** **58.71 60** P **P** **04 45 24.4 +0.2**
baz=312,SNR=12
**RLO** **Rose Lookout** **58.74 70** IAmb IAmb 04 45 25.7
comp=Z,73nm,0.7s
**ZSN** **Zaisan** **58.78 308** *e*P **P** **04 45 24.0 -0.7**
comp=Z,12nm,1.0s,baz=308
**ZSN** **Zaisan** **58.78 308** *e*P **P** **04 45 23.9 -0.7**
ZSN pmax pmax
comp=Z,12nm,1.0s
**TRO** **Tromso** **58.81 353** *e*P **P** **04 45 24.0 -0.4**
TRO IAmb IAmb 04 45 25.1
comp=Z,38nm,1.3s
**U38A** **Gravette** **58.93 69** IAmb IAmb 04 45 26.8
comp=Z,59nm,0.8s
**KTK1** **Kautokeino** **59.05 351** *e*P **P** **04 45 25.5 -0.6**
KTK1 IAmb IAmb 04 45 26.7
comp=Z,17nm,1.0s
**HDIL** **Hopedale** **59.05 63** P **P** **04 45 26.8 +0.2**
baz=313
HDIL S **S** **04 53 29.1 -2.2**
baz=313
**APA** **Apatity** **59.19 347** ⇓*i*P **P** **04 45 26.3 -0.7**
APA *i* PS **PnS** **04 53 50.0 +3.5**
APA *i* 04 55 11.0
**HHAR** **Hobbs** **59.30 69** IAmb IAmb 04 45 29.1
comp=Z,51nm,0.7s
**Z35A** **Perchaven, San** **59.36 74** IAmb IAmb 04 45 32.6
comp=Z,85nm,0.9s
**ISOG** **Isortoq, Green** **59.37 18** *i*P **P** **04 45 27.5 -0.8**
ISOG IAmb IAmb 04 45 32.4
comp=Z,282nm,2.1s
**KURK** **Kurchatov** **59.47 314** P **P** **04 45 28.8 -0.5**
KURK IAmb IAmb 04 46 18.5
comp=Z,58nm,1.3s
**KURK** **Kurchatov** **59.47 314***ce* P **P** **04 45 28.6 -0.7**

KURK pmax pmax
comp=Z,8.0nm,0.8s
**KURK** **Kurchatov** **59.47 314** P **P** **04 45 29.0 -0.2**
KURK PcP **PcP** **04 46 17.3 +0.7**
**CD2** **Chengdu** **59.48 282** P **P** **04 45 29.4 -0.3**
CD2 S **S** **04 53 41.8 +4.7**
CD2 pmax pmax
comp=Z,40nm,0.8s
CD2 LR LR
comp=Z,970nm,15.7s
CD2 LR LR
comp=Z,1µm,18.0s
CD2 LR LR
comp=Z,1µm,17.3s
**ANGG** **Ammassalik, Gr** **59.57 18** *i*P **P** **04 45 28.8 -0.9**
ANGG IAmb IAmb 04 46 52.5
comp=Z,1µm,4.2s
**KURBB** **Kurchatov Arra** **59.58 314** P **P** **04 45 28.8 -1.2**
comp=Z,5.1nm,0.6s,baz=42,slow=6.8,SNR=32
KURBB PcP **PcP** **04 46 14.3 -2.7**
comp=Z,7.0nm,0.9s,baz=46,slow=4.2,SNR=6.4
KURBB ScP **ScP** **04 50 15.6 0.0**
comp=Z,0.9nm,0.3s,baz=35,slow=4.0,SNR=4.3
KURBB LR LR 05 12 33.7
comp=Z,2µm,19.4s,baz=38,slow=37
KURBB PKPPKP **P'P'df** **05 14 57.0 -7.6**
comp=Z,0.3nm,0.3s,baz=251,slow=3.1,SNR=5.5
comp=Z,5.1nm,0.6s
**X37A** **Clayton** **59.62 72** IAmb IAmb 04 45 38.5
comp=Z,82nm,0.8s
**CCM** **Cathedral Cave** **59.65 66** P **P** **04 45 29.6 -1.2**
CCM IAmb IAmb 04 45 31.6
comp=Z,133nm,1.2s
**CCM** **Cathedral Cave** **59.65 66** P **P** **04 45 30.1 -0.6**
baz=313
CCM S **S** **04 53 36.7 -2.4**
baz=313
**CCM** **Cathedral Cave** **59.65 66** P **P** **04 45 29.6 -1.2**
CCM pmax pmax
comp=Z,133nm,1.2s
**CCM** **Cathedral Cave** **59.65 66** P **P** **04 45 30.0 -0.7**
CCM PcP **PcP** **04 46 17.3 -0.3**
**MGMO** **Mountain Grove** **59.68 67** IAmb IAmb 04 45 32.2
comp=Z,64nm,0.8s
**BRDY** **Brady** **59.71 77** IAmb IAmb 04 45 37.4
comp=Z,53nm,1.1s
**JCT** **Junction City** **59.78 78** IAmb IAmb 04 45 33.0
comp=Z,116nm,1.4s
**JCT** **Junction City** **59.78 78** P **P** **04 45 31.8 0.0**
baz=314,SNR=22
JCT S **S** **04 53 40.1 -1.0**
baz=314
**SCHQ** **Schefferville** **59.81 39** P **P** **04 45 31.1 -0.5**
comp=Z,13nm,1.0s,baz=332,slow=8.8,SNR=5.5
SCHQ LR LR 05 13 08.7
comp=Z,2µm,18.1s,baz=320,slow=38
comp=Z,13nm,1.0s
**WMQ** **Urumqi** **59.83 303** *e*P **P** **04 45 33.3 +1.4**
WMQ ScP **ScP** **04 50 12.8 -4.1**
WMQ S **S** **04 53 38.8 -2.5**
WMQ pmax pmax
comp=Z,22nm,0.7s
WMQ LR LR
comp=Z,1µm,21.1s
WMQ LR LR
comp=Z,1µm,22.5s
WMQ LR LR
comp=Z,2µm,18.5s
**VLDQ** **Val d'Or** **60.01 50** IAmb IAmb 04 45 32.6
comp=Z,41nm,1.0s
**DRIO** **Del Rio** **60.02 79** IAmb IAmb 04 45 34.2
comp=Z,39nm,1.0s
**FW14** **Alvarado** **60.04 75** IAmb IAmb 04 45 35.6
comp=Z,164nm,1.4s
**FW16** **Waxahatchie** **60.16 74** IAmb IAmb 04 45 37.9
comp=Z,92nm,1.2s
**I49A** **Point Hope** **60.23 56** IAmb IAmb 04 45 36.7
comp=Z,109nm,0.9s
**T42A** **Van Buren** **60.45 67** IAmb IAmb 04 45 36.7
comp=Z,206nm,1.6s
**TREL** **Terrell** **60.48 74** IAmb IAmb 04 45 39.4
comp=Z,76nm,1.0s
**MK31** **Makanchi Array** **60.50 309** P **P** **04 45 35.4 -1.0**
**MK31** **Makanchi Array** **60.50 309***d* *i*P **P** **04 45 36.0 -0.5**
**MKAR** **Makanchi Array** **60.50 309** P **P** **04 45 35.5 -1.0**
comp=Z,3.6nm,0.5s,baz=49,slow=6.6,SNR=26
MKAR LR LR 05 12 08.2
comp=Z,2µm,22.0s,baz=47,slow=36
MKAR PKPPKP **P'P'df** **05 14 55.8 -7.2**
comp=Z,0.2nm,0.5s,baz=189,slow=8.0,SNR=3.0
comp=Z,3.6nm,0.5s
**LOF** **Lofoten** **60.64 355** *e*P **P** **04 45 37.0 0.0**
LOF IAmb IAmb 04 45 38.5
comp=Z,52nm,1.6s
**MAKZ** **Makanchi** **60.65 309** P **P** **04 45 36.1 -1.3**
**MAKZ** **Makanchi** **60.65 309** P **P** **04 45 36.1 -1.3**
MAKZ pmax pmax
comp=Z,17nm,1.2s
**MIAR** **Mount Ida** **60.71 70** P **P** **04 45 38.7 +0.7**
baz=314,SNR=119
MIAR S **S** **04 53 53.7 +0.9**
baz=314
**STEI** **Steigen** **60.74 354** *e*P **P** **04 45 37.7 0.0**
STEI IAmb IAmb 04 45 39.1
comp=Z,6.7nm,0.7s
**GYA** **Guiyang** **60.82 277** ⇑P **P** **04 45 38.9 -0.1**
GYA PP **PP** **04 47 53.0 +0.1**
GYA S **S** **04 53 52.3 -2.3**
GYA pmax pmax
comp=Z,25nm,1.4s
GYA pmax pmax
comp=Z,420nm,4.8s
GYA LR LR
comp=Z,1µm,22.4s
**AAM** **Ann Arbor** **60.93 58** IAmb IAmb 04 45 41.3
comp=Z,86nm,0.8s
**AAM** **Ann Arbor** **60.93 58** P **P** **04 45 40.0 +0.6**
baz=314,SNR=11
AAM S **S** **04 53 57.5 +2.2**
baz=314
**435B** **Jarrell** **60.93 76** IAmb IAmb 04 45 46.7
comp=Z,78nm,1.0s
**435B** **Jarrell** **60.93 76** P **P** **04 45 40.4 +0.8**
baz=314
435B S **S** **04 53 57.7 +2.0**
baz=314
**WHAR** **Wooly Hollow** **60.95 69** IAmb IAmb 04 45 40.9
comp=Z,92nm,1.1s
**IVI** **Ivigtut** **60.96 25** *i*P **P** **04 45 39.5 +0.3**
IVI IAmb IAmb 04 45 55.8
comp=Z,446nm,2.6s
**OLIL** **Olney** **60.97 63** P **P** **04 45 39.8 +0.1**
**S44A** **Carbondale** **61.04 65** IAmb IAmb 04 45 41.7
comp=Z,143nm,1.1s
**LCAR** **Lake Charles** **61.08 68** IAmb IAmb 04 45 42.2
comp=Z,91nm,1.2s
**CGM3** **Cape Girardeau** **61.09 66** IAmb IAmb 04 45 41.6
comp=Z,190nm,1.8s
**K50A** **Casco** **61.14 57** IAmb IAmb 04 45 42.7
comp=Z,102nm,0.9s
**GOMU** **GeErMu** **61.15 293** P **P** **04 45 41.8 +0.3**
GOMU S **S** **04 53 59.8 +0.7**
GOMU pmax pmax
comp=Z,42nm,0.8s
GOMU LR LR
comp=Z,3µm,16.2s
GOMU LR LR
comp=Z,2µm,16.5s
GOMU LR LR
comp=Z,4µm,16.5s
**237A** **Washetta, Mont** **61.15 74** IAmb IAmb 04 45 44.6
comp=Z,82nm,0.8s
**X40A** **Basin Creek Fa** **61.19 70** IAmb IAmb 04 45 42.9
comp=Z,62nm,1.1s
**FAUS** **Fauske** **61.28 354** *e*P **P** **04 45 41.0 -0.3**
FAUS IAmb IAmb 04 45 41.4
comp=Z,44nm,1.4s
**UALR** **University of** **61.28 69** IAmb IAmb 04 45 42.9
comp=Z,56nm,1.0s
**BVAR** **Borovoye Array** **61.31 320** P **P** **04 45 41.2 -0.6**
comp=Z,11nm,0.5s,baz=52,slow=6.5,SNR=44
BVAR LR LR 05 14 36.3
comp=Z,3µm,19.1s,baz=44,slow=38
BVAR PKPPKP **P'P'df** **05 14 54.7 -7.5**
comp=Z,1.1nm,0.9s,baz=253,slow=2.5,SNR=3.8
comp=Z,11nm,0.5s
**BRVK** **Borovoye** **61.33 320** P **P** **04 45 40.9 -1.1**

**BRVK Borovoye** 61.33 320 *c iP* **P** 04 45 41.6 -0.3
BRVK pmax pmax
comp=Z,33nm,1.8s
**BRVK Borovoye** 61.33 320 P **P** 04 45 41.9 0.0
BRVK PcP **PcP** 04 46 25.2 +1.2
**SADO Sadowa** 61.53 53 IAmb IAmb 04 45 44.9
comp=Z,35nm,0.9s
**SADO Sadowa** 61.53 53 LR LR 05 13 48.2
comp=Z,562nm,19.0s,baz=322,slow=37
**833A Chaparral WMA,** 61.56 79 IAmb IAmb 04 45 46.0
comp=Z,150nm,1.5s
**833A Chaparral WMA,** 61.56 79 P **P** 04 45 44.4 +0.6
baz=315,SNR=12
833A S **S** 04 54 03.8 +0.1
baz=315
**HBAR Harrisburg** 61.72 68 P **P** 04 45 45.0 +0.2
**M50A Fremont** 61.88 58 IAmb IAmb 04 45 47.5
comp=Z,73nm,0.8s
**SVE Sverdlovsk** 61.97 328 *de*P **P** 04 45 47.0 +0.8
SVE pmax pmax
comp=Z,98nm,1.9s
SVE MLR MLR
comp=Z,2µm,21.0s
**NATX Nacogdoches** 62.02 73 P **P** 04 45 47.7 +0.9
baz=315
**735A Kenedy** 62.16 78 IAmb IAmb 04 45 50.7
comp=Z,93nm,1.2s
**KONS Konsvik** 62.29 355 *e*P **P** 04 45 49.2 +1.1
KONS IAmb IAmb 04 45 53.5
comp=Z,15nm,1.1s
**P49A Miami Univ. Ec** 62.29 61 P **P** 04 45 48.8 +0.1
baz=315,SNR=73
**WCI Wyandotte Cave** 62.34 63 P **P** 04 45 49.2 +0.3
**WCI Wyandotte Cave** 62.34 63 P **P** 04 45 49.5 +0.5
baz=314
WCI S **S** 04 54 12.2 -1.0
baz=314
**WCI Wyandotte Cave** 62.34 63 P **P** 04 45 49.2 +0.3
WCI pmax pmax
comp=Z,218nm,1.0s
**WCI Wyandotte Cave** 62.34 63 P **P** 04 45 49.4 +0.5
**STOK Stokkvaagen** 62.46 355 *e*P **P** 04 45 49.2 -0.1
STOK IAmb IAmb 04 46 03.0
comp=Z,276nm,2.5s
**DELO Deloro Mine** 62.48 53 IAmb IAmb 04 45 51.4
comp=Z,58nm,1.2s
**HKT Hockley** 62.59 76 P **P** 04 45 51.4 +0.7
HKT IAmb IAmb 04 45 53.3
comp=Z,203nm,1.6s
**HKT Hockley** 62.59 76 *c iP* **P** 04 45 51.7 +1.1
HKT pmax pmax
comp=Z,123nm,1.5s
**HKT Hockley** 62.59 76 P **P** 04 45 51.6 +1.0
**ACSO Alum Creek Sta** 62.74 59 P **P** 04 45 52.2 +0.5
baz=315,SNR=36
**J54A Appleton** 62.85 54 IAmb IAmb 04 45 54.3
comp=Z,68nm,0.8s
**HBVL Hebbronville** 62.90 80 IAmb IAmb 04 45 58.8
comp=Z,119nm,1.5s
**BORG Borgarnes** 62.95 11 LR LR 05 15 41.1
comp=Z,615nm,18.9s,baz=337,slow=38
**WVT Waverly** 62.95 65 P **P** 04 45 53.5 +0.4
WVT IAmb IAmb 04 45 55.1
comp=Z,129nm,1.1s
**WVT Waverly** 62.95 65 P **P** 04 45 53.7 +0.6
baz=315
WVT S **S** 04 54 19.5 -1.5
baz=315
**WVT Waverly** 62.95 65 P **P** 04 45 53.5 +0.4
WVT pmax pmax
comp=Z,129nm,1.2s
**WVT Waverly** 62.95 65 P **P** 04 45 53.4 +0.4
**ARU Arti** 62.98 329 P **P** 04 45 52.8 -0.1
ARU IAmb IAmb 04 45 55.4
comp=Z,171nm,1.7s
**ARU Arti** 62.98 329 LR LR 05 16 55.8
comp=Z,1µm,18.0s,baz=34,slow=40
**ARU Arti** 62.98 329 *c iP* **P** 04 45 53.0 +0.1
ARU 04 46 30.6
ARU S **S** 04 54 21.8 +1.0
ARU SS **SS** 04 58 22.1 -3.4
ARU pmax pmax
comp=Z,60nm,1.0s
ARU MLR MLR
comp=Z,1µm,19.0s
**ARU Arti** 62.98 329 P **P** 04 45 52.7 -0.2
comp=Z,50nm,1.5s,comp=Z,694nm
**ERPA Erie** 62.98 56 P **P** 04 45 53.8 +0.5
baz=315,SNR=7.3
ERPA S **S** 04 54 20.5 -0.8
baz=315
**LDAQ Lac Daran** 63.01 46 IAmb IAmb 04 46 32.9
comp=Z,103nm,1.7s
**MEDO Medina** 63.02 54 IAmb IAmb 04 45 55.5
comp=Z,31nm,0.8s
**M53A WI Miller and** 63.11 57 P **P** 04 45 54.9 +0.8
baz=315,SNR=29
**OXF Oxford** 63.18 68 P **P** 04 45 55.2 +0.6
baz=315,SNR=47
OXF S **S** 04 54 22.6 -1.4
baz=315
**PECO Prince Edward** 63.21 53 IAmb IAmb 04 45 56.2
comp=Z,63nm,1.0s
**J55A Hilton** 63.27 54 IAmb IAmb 04 45 56.9
comp=Z,69nm,0.8s
**143A Socs Landing,** 63.30 70 IAmb IAmb 04 45 58.3
comp=Z,116nm,1.1s
**WVNY West Valley, N** 63.49 55 IAmb IAmb 04 45 58.5
comp=Z,192nm,1.4s
**ZAIG Zacatecas** 63.58 86 P **P** 04 45 57.5 -0.2
ZAIG IAmb IAmb 04 45 59.8
comp=Z,89nm,1.7s
**ICQ Pointe Anglais** 63.60 43 IAmb IAmb 04 45 58.8
comp=Z,52nm,1.2s
**441A DeRidder** 63.62 73 IAmb IAmb 04 46 01.7
comp=Z,65nm,1.1s
**PLAL Pickwick Lake** 63.62 66 IAmb IAmb 04 45 58.5
comp=Z,80nm,0.9s
**P52A Corning** 63.63 59 P **P** 04 45 57.8 +0.3
baz=316,SNR=31
**O53A New Philadelph** 63.68 58 P **P** 04 45 58.3 +0.5
baz=316,SNR=33
O53A S **S** 04 54 27.7 -2.3
baz=316
**LMQ La Malbaie** 63.73 46 IAmb IAmb 04 45 59.6
comp=Z,96nm,1.5s
**J56A Wolcott** 63.75 53 IAmb IAmb 04 45 59.8
comp=Z,62nm,0.8s
**PZH PanZhiHua** 63.85 280 P **P** 04 45 59.9 +0.6
PZH sP **pwP** 04 46 09.8 -0.2
PZH S **S** 04 54 32.0 -0.7
PZH sS **pS** 04 54 42.8 -0.4
PZH SS **SS** 04 58 42.4 +1.7
PZH pmax pmax
comp=Z,40nm,0.9s
PZH pmax pmax
comp=Z,420nm,4.5s
PZH LR LR
comp=Z,440nm,15.7s
PZH LR LR
comp=Z,360nm,15.7s
PZH LR LR
comp=Z,400nm,15.7s
**JOF Joensuu** 63.86 346 *e*P **P** 04 45 58.3 -0.3
**DAV Davao City (W)** 63.87 247 LR LR 05 09 20.2
comp=Z,1µm,22.0s,baz=4.5,slow=32
**LONY Lake Ozonia** 63.90 51 P **P** 04 45 58.5 -0.7
baz=317,SNR=7.3
**KIRV Kirov** 63.91 335 LR LR 05 15 51.1
comp=Z,2µm,21.5s,baz=30,slow=38
**J57A Williamstown** 64.08 52 IAmb IAmb 04 46 37.6
comp=Z,41nm,1.0s
**VBMS Vicksburg** 64.16 70 P **P** 04 46 02.0 +0.9
baz=316
VBMS S **S** 04 54 34.2 -2.0
baz=316
**KMI Kunming** 64.23 279 ⇑P **P** 04 46 02.3 +0.4
KMI pP pwP 04 46 12.4 -0.2
KMI S **S** 04 54 36.3 -1.3
KMI SKS **ScS** 04 55 54.5 +0.4
KMI SS **SS** 04 58 47.3 +0.4
KMI pmax pmax
comp=Z,23nm,1.6s
KMI pmax pmax
comp=Z,300nm,4.3s
KMI LR LR
comp=Z,370nm,24.9s
KMI LR LR
comp=Z,550nm,16.8s
KMI LR LR
comp=Z,710nm,26.1s
**QIZ Qiongzhong** 64.25 269 P **P** 04 46 02.6 +0.8
QIZ S **S** 04 54 37.9 +0.4
QIZ SS **SS** 04 58 53.0 +6.0
QIZ pmax pmax
comp=Z,450nm,8.8s
QIZ LR LR
comp=Z,510nm,19.0s
QIZ LR LR
comp=Z,450nm,15.8s
QIZ LR LR
comp=Z,640nm,20.6s
**NSS Namsos** 64.31 355 *e*P **P** 04 46 01.9 +0.4
NSS IAmb IAmb 04 46 07.7
comp=Z,19nm,1.2s
**K57A Scipio Center** 64.32 53 IAmb IAmb 04 46 03.6
comp=Z,77nm,0.8s
**J58A Remsen** 64.47 52 IAmb IAmb 04 46 04.4
comp=Z,54nm,1.2s
**SHLS Shalkode** 64.51 308 *e*P **P** 04 46 01.4 -2.1
comp=Z,8.3nm,0.9s,baz=307
**SHLS Shalkode** 64.51 308 *e*P **P** 04 46 01.3 -2.1
SHLS pmax pmax
comp=Z,8.0nm,0.9s
**NCB Newcomb** 64.55 51 IAmb IAmb 04 46 39.5
comp=Z,88nm,1.8s
**D62A Allapoint, All** 64.66 46 IAmb IAmb 04 46 05.9
comp=Z,53nm,1.1s
**KPKS Kokpek** 64.67 308 *e*P **P** 04 46 04.0 -0.5
comp=Z,14nm,1.2s,baz=308
**KPKS Kokpek** 64.67 308 *e*P **P** 04 46 03.9 -0.5
KPKS pmax pmax
comp=Z,14nm,1.2s
**UZB Uzynbulak** 64.74 308 *e*P **P** 04 46 04.3 -0.7
baz=308
**UZB Uzynkulak** 64.74 308 *e*P **P** 04 46 04.2 -0.7
**MCWV Mont Chateau** 64.83 58 P **P** 04 46 06.0 +0.6
baz=316,SNR=11
MCWV S **S** 04 54 44.8 +0.5
baz=316
**BINY Binghamton** 64.98 53 IAmb IAmb 04 46 08.2
comp=Z,138nm,1.2s
**BINY Binghamton** 64.98 53 P **P** 04 46 06.6 +0.3
baz=317,SNR=28
**M57A Sunshine Farm,** 65.03 55 IAmb IAmb 04 46 08.7
comp=Z,201nm,1.5s
**TZTN Tazewell** 65.07 62 P **P** 04 46 08.1 +1.1
baz=316,SNR=115
TZTN S **S** 04 54 47.1 -0.2
baz=316
**SATY Saty** 65.11 308 *e*P **P** 04 46 06.8 -0.5
comp=Z,11nm,1.2s,baz=308
**SATY Saty** 65.11 308 *e*P **P** 04 46 06.8 -0.5
SATY pmax pmax
comp=Z,11nm,1.2s
**SSPA Standing Stone** 65.15 56 P **P** 04 46 07.4 0.0
SSPA IAmb IAmb 04 46 09.2
comp=Z,95nm,1.2s
**SSPA Standing Stone** 65.15 56 P **P** 04 46 07.9 +0.4
baz=317
SSPA S **S** 04 54 49.0 +0.9
baz=317
**SSPA Standing Stone** 65.15 56 P **P** 04 46 07.7 +0.3
SSPA PcP **PcP** 04 46 40.9 +1.0
**CHKK Chushkaly** 65.21 310 *e*P **P** 04 46 07.1 -0.7
baz=310
**CHKK Chushkaly** 65.21 310 *e*P **P** 04 46 07.1 -0.7
**ACCN Adirondack Com** 65.25 51 IAmb IAmb 04 46 09.2
comp=Z,44nm,1.1s
**G62A West of Eustis** 65.38 48 IAmb IAmb 04 46 10.0
comp=Z,43nm,0.9s
**346A Big Creek Wild** 65.38 70 IAmb IAmb 04 46 11.2
comp=Z,122nm,1.1s
**L59A Walton** 65.46 53 IAmb IAmb 04 46 11.1
comp=Z,48nm,0.8s
**LBNH Lisbon** 65.46 49 P **P** 04 46 08.2 -1.2
baz=318,SNR=8.1
**KEF Keuruu** 65.49 348 *e*P **P** 04 46 10.4 +1.2
**KSPA Keystone Colle** 65.56 54 IAmb IAmb 04 46 11.8
comp=Z,202nm,1.7s
**H62A Milan** 65.57 49 IAmb IAmb 04 46 11.2
comp=Z,56nm,0.8s
**TKL Tuckaleechee C** 65.58 63 LR LR 05 15 56.6
comp=Z,842nm,19.0s,baz=323,slow=37
**N58A Sunbury** 65.60 55 IAmb IAmb 04 46 12.2
comp=Z,130nm,1.4s
**Q56A Snyder Ridge,** 65.63 58 IAmb IAmb 04 46 12.7
comp=Z,186nm,1.9s
**LRAL Lakeview Retre** 65.64 67 IAmb IAmb 04 46 13.6
comp=Z,55nm,0.8s
**LRAL Lakeview Retre** 65.64 67 P **P** 04 46 10.6 -0.2
baz=316,SNR=51
LRAL S **S** 04 54 51.6 -2.8
baz=316
**TBLU Trondheim** 65.67 356 IAmb IAmb 04 46 09.4
comp=Z,44nm,1.5s
TBLU *e*P **P** 04 46 09.9 -0.5
**MDOK Medeo** 65.69 309 *e*P **P** 04 46 10.5 -0.6
baz=309
**MDOK Medeo** 65.69 309 *e*P **P** 04 46 10.5 -0.6
**BTLS Baital** 65.72 312 *e*P **P** 04 46 10.4 -0.6
baz=312
**BTLS Baital** 65.72 312 *e*P **P** 04 46 10.4 -0.6
**AAA Alma-Ata** 65.72 309 *e*P **P** 04 46 10.7 -0.5
comp=Z,14nm,0.8s,baz=309
**AAA Alma-Ata** 65.72 309 *e*P **P** 04 46 10.7 -0.5
AAA pmax pmax
comp=Z,14nm,0.8s
**BATG Bathurst New B** 65.83 44 IAmb IAmb 04 46 45.1
comp=Z,50nm,1.2s
**F64A Sherman** 65.90 46 IAmb IAmb 04 46 13.1
comp=Z,44nm,1.0s
**PKME Peaks-Kenny Pk** 65.92 47 P **P** 04 46 11.7 -0.6
baz=319,SNR=6.7
**P57A Homestead Farm** 65.93 57 IAmb IAmb 04 46 14.3
comp=Z,54nm,1.2s
**FIA1 FINESS Array S** 66.03 348 IAmb IAmb 04 46 14.5
comp=Z,106nm,1.3s
**FINES FINESS Array B** 66.03 348 P **P** 04 46 11.5 -1.3
comp=Z,6.4nm,0.7s,baz=21,slow=6.3,SNR=17
FINES LR LR 05 21 38.0
comp=Z,303nm,18.1s,baz=28,slow=42
comp=Z,6.4nm,0.7s
**FINES FINESS Array B** 66.03 348 *i* P **P** 04 46 12.3 -0.5
FINES pmax pmax
comp=Z,6.0nm,0.7s
**I63A Otisfield** 66.24 49 P **P** 04 46 14.5 +0.1
I63A IAmb IAmb 04 46 15.8
comp=Z,49nm,0.9s
**SLVN Son La** 66.27 275 P **P** 04 46 15.1 +0.1
**WVL Waterville** 66.28 48 P **P** 04 46 14.1 -0.6
**BLA Blacksburg** 66.31 60 P **P** 04 46 15.9 +0.9
**BLA Blacksburg** 66.31 60 P **P** 04 46 15.8 +0.9
baz=317,SNR=69
BLA S **S** 04 55 04.0 +1.5
baz=317
**BLA Blacksburg** 66.31 60 P **P** 04 46 15.9 +0.9
BLA pmax pmax
comp=Z,617nm,1.6s
**MVL Millersville** 66.41 55 P **P** 04 46 15.9 +0.3
MVL IAmb IAmb 04 46 17.3
comp=Z,121nm,1.7s
**L61B Northampton** 66.43 51 P **P** 04 46 16.0 +0.4
**L61B Northampton** 66.43 51 P **P** 04 46 15.4 -0.3
baz=318,SNR=5.7
**MOL Molde** 66.45 357 *e*P **P** 04 46 15.6 +0.2
MOL IAmb IAmb 04 46 28.0
comp=Z,470nm,3.2s
**ODNJ Ogdensburg** 66.50 53 P **P** 04 46 15.7 -0.5
**BG3 Lake Jocassee** 66.54 63 P **P** 04 46 17.1 +0.6
**KSCT Kent School, K** 66.58 52 P **P** 04 46 16.8 +0.2
KSCT IAmb IAmb 04 46 17.8
comp=Z,72nm,0.8s
**TKM2 Tokmak 2** 66.58 310 P **P** 04 46 17.6 +0.7
SNR=7.4
**SDMD Soldier's Deli** 66.59 56 P **P** 04 46 17.1 +0.4
**TRNY Table Rock, Ra** 66.64 53 P **P** 04 46 17.4 +0.4
**S57A Dark Hollow, R** 66.69 58 P **P** 04 46 17.6 +0.1
**Y52A Lilburn** 66.72 65 P **P** 04 46 18.1 +0.5
**G65A Princeton** 66.76 46 P **P** 04 46 17.4 -0.3
G65A IAmb IAmb 04 46 18.8
comp=Z,74nm,1.4s
**ULHL Ulahol** 66.78 309 P **P** 04 46 19.6 +1.4
SNR=6.1
**250A Grady** 66.83 68 P **P** 04 46 18.8 +0.4
**WUPA West Chester U** 66.84 55 P **P** 04 46 18.3 0.0
**USP Ospenovka** 66.84 311 P **P** 04 46 19.9 +1.5
SNR=6.7
**V55A Taylorsville** 66.86 61 P **P** 04 46 19.6 +1.0
**PAL Palisades** 66.91 53 P **P** 04 46 18.4 -0.3
PAL IAmb IAmb 04 46 20.2
comp=Z,45nm,0.8s
**PAL Palisades** 66.91 53 P **P** 04 46 18.6 -0.1
baz=318,SNR=11
**PAL Palisades** 66.91 53 P **P** 04 46 18.4 -0.3
PAL pmax pmax
comp=Z,45nm,0.9s
**TNCH TengChong** 66.91 282 P **P** 04 46 18.8 -0.4
TNCH pP pP 04 46 22.9 -5.0
TNCH PcP **PcP** 04 46 44.3 -3.4
TNCH PP **PP** 04 48 52.5 +6.0
TNCH S **S** 04 55 12.0 +1.7
TNCH pmax pmax
comp=Z,39nm,1.4s
TNCH pmax pmax
comp=Z,400nm,3.4s
TNCH LR LR
comp=Z,380nm,16.8s
TNCH LR LR
comp=Z,500nm,19.0s
TNCH LR LR
comp=Z,600nm,22.0s
**DOMB Dombas** 66.93 356 *e*P **P** 04 46 18.4 -0.2
DOMB IAmb IAmb 04 46 19.3
comp=Z,27nm,1.3s
**HRV Adam Dziewonsk** 66.94 50 P **P** 04 46 19.2 +0.3
HRV IAmb IAmb 04 46 20.1
comp=Z,63nm,1.3s
**HRV Adam Dziewonsk** 66.94 50 P **P** 04 46 18.4 -0.5
baz=319
HRV S **S** 04 55 07.7 -2.2
baz=319
**HRV Adam Dziewonsk** 66.94 50 P **P** 04 46 19.2 +0.3
HRV pmax pmax
comp=Z,63nm,1.3s
**HRV Adam Dziewonsk** 66.94 50 P **P** 04 46 18.8 -0.1
**U56A King** 66.96 60 P **P** 04 46 20.0 +0.8
**BRAL Brewton** 66.96 69 P **P** 04 46 20.2 +1.0
baz=317
BRAL S **S** 04 55 11.1 +0.6
baz=317
**CPNY Central Park** 67.04 53 P **P** 04 46 20.1 +0.6
CPNY IAmb IAmb 04 46 21.2
comp=Z,51nm,0.8s
**T57A Hurt** 67.09 59 P **P** 04 46 19.7 -0.3
**R58B Mineral** 67.12 58 P **P** 04 46 20.6 +0.5
R58B IAmb IAmb 04 46 22.2
comp=Z,201nm,1.8s
**WES Weston** 67.14 50 P **P** 04 46 20.4 +0.2
**WES Weston** 67.14 50 P **P** 04 46 20.4 +0.2
WES pmax pmax
comp=Z,32nm,0.8s
**UCCT U. Connecticut** 67.15 51 P **P** 04 46 20.5 +0.3
UCCT IAmb IAmb 04 46 21.6
comp=Z,48nm,1.1s
**GGN Saint George** 67.15 46 P **P** 04 46 20.2 0.0
GGN IAmb IAmb 04 46 21.8
comp=Z,95nm,1.4s
**EMMW East Machias** 67.19 46 P **P** 04 46 20.3 -0.1
EMMW IAmb IAmb 04 46 21.4
comp=Z,52nm,1.0s
**CBN Corbin Frederi** 67.21 57 P **P** 04 46 21.0 +0.4
baz=318
CBN S **S** 04 55 13.3 +0.1
baz=318
**152A Waverly Hall** 67.22 66 P **P** 04 46 20.7 -0.2
**BCX Boston College** 67.25 50 P **P** 04 46 21.3 +0.4
**SWI Sorong** 67.27 237 P **P** 04 46 22.6 +1.3
**PAULI Pauline** 67.29 62 P **P** 04 46 22.2 +1.0
**AAK Ala-Archa** 67.33 310 P **P** 04 46 21.2 -0.4
**AAK Ala-Archa** 67.33 310 LR LR 05 18 42.7
comp=Z,1µm,18.9s,baz=26,slow=39
**AAK Ala-Archa** 67.33 310 P **P** 04 46 21.2 -0.4
**AAK Ala-Archa** 67.33 310 P **P** 04 46 22.6 +1.1
**GOGA Godfrey** 67.39 65 P **P** 04 46 22.3 +0.4
**GOGA Godfrey** 67.39 65 P **P** 04 46 22.2 +0.3
baz=317,SNR=66
GOGA S **S** 04 55 13.4 -2.2
baz=317
**GOGA Godfrey** 67.39 65 P **P** 04 46 22.3 +0.4
GOGA pmax pmax
comp=Z,621nm,2.0s
**MEF Metsahovi** 67.44 348 *e*P **P** 04 46 21.6 -0.2
**P61A Hammonton** 67.45 54 P **P** 04 46 23.1 +0.9
**HODGE Hodges** 67.47 63 P **P** 04 46 23.2 +0.8
**PMG Port Moresby** 67.48 218 LR LR 05 13 11.9
comp=Z,705nm,19.8s,baz=48,slow=34
**LMN Caledonia Moun** 67.48 44 P **P** 04 46 22.8 +0.5
LMN IAmb IAmb 04 46 23.4
comp=Z,60nm,1.0s
**NRN Naryn** 67.51 309 P **P** 04 46 22.6 -0.4
**NRN Naryn** 67.51 309 P **P** 04 46 22.6 -0.4
NRN pmax pmax
comp=Z,42nm,1.6s
**M63A Gales Ferry** 67.53 52 P **P** 04 46 23.1 +0.5
M63A IAmb IAmb 04 46 23.8
comp=Z,81nm,1.0s
**NC204 NORSAR Array S** 67.62 355 P **P** 04 46 22.8 -0.2
**NC303 NORSAR Array S** 67.64 355 P **P** 04 46 22.9 -0.1
**EKS2 Erkin-Say** 67.65 311 P **P** 04 46 24.5 +0.9
SNR=7.5
**L64A Middleborough** 67.72 50 IAmb IAmb 04 46 24.9
comp=Z,120nm,1.6s
**NC405 NORSAR Array S** 67.73 355 P **P** 04 46 23.5 -0.2
**NB201 NORSAR Array S** 67.82 355 IAmb IAmb 04 46 25.3
comp=Z,76nm,1.6s
**NB2 NORSAR Subarra** 67.83 355 P **P** 04 46 24.1 -0.2
comp=Z,110nm,2.0s,baz=5.6,slow=6.5
**NB2 NORSAR Subarra** 67.83 355 P **P** 04 46 24.1 -0.2
baz=5.6,slow=6.5
**NB2 NORSAR Subarra** 67.83 355 P **P** 04 46 23.9 -0.4
**NOA NORSAR Array B** 67.83 355 P **P** 04 46 22.8 -1.5
comp=Z,2.0nm,0.5s,baz=6.2,slow=6.5,SNR=15
NOA LR LR 05 14 24.1
comp=Z,471nm,21.8s,baz=345,slow=34
comp=Z,2.0nm,0.5s
**HYA Hoyanger** 67.90 358 *e*P **P** 04 46 24.5 -0.1
HYA IAmb IAmb 04 46 27.4
comp=Z,105nm,1.8s
**LSA Lhasa** 67.95 290 P **P** 04 46 29.0 +2.9
LSA pmax pmax
comp=Z,80nm,1.6s
**LSA Lhasa** 67.95 290 P **P** 04 46 25.1 -0.9
LSA IAmb IAmb 04 46 29.8
comp=Z,131nm,1.3s
**LSA Lhasa** 67.95 290 P **P** 04 46 25.1 -0.9
LSA pmax pmax
comp=Z,131nm,1.3s
**LSA Lhasa** 67.95 290 P **P** 04 46 28.3 +2.2
**352A Blakely** 67.97 67 P **P** 04 46 25.9 +0.4
**ARBE Arbavere** 67.98 347 *e*P **P** 04 46 25.2 +0.1
**JSC Jenkinsville** 67.99 62 P **P** 04 46 26.7 +1.0
**JSC Jenkinsville** 67.99 62 P **P** 04 46 26.7 +1.0
JSC pmax pmax
comp=Z,541nm,1.4s
**T59A Double "B" Far** 68.03 58 P **P** 04 46 26.5 +0.7
**W57A Gilead** 68.05 61 P **P** 04 46 26.8 +0.8
**V58A Windy Hill, Pi** 68.06 60 P **P** 04 46 26.9 +0.8
**AKTO Aktyubinsk** 68.08 325 LR LR 05 18 23.5
comp=Z,1µm,19.8s,baz=56,slow=38
**AML Almayashu** 68.09 310 P **P** 04 46 27.6 +0.9
SNR=8.8
**NC602 NORSAR Array S** 68.12 355 P **P** 04 46 25.7 -0.3
NC602 IAmb IAmb 04 46 27.1
comp=Z,86nm,1.8s
**NC602 NORSAR Array S** 68.12 355 *e*P **P** 04 46 26.4 +0.3
NC602 IAmb IAmb 04 46 26.6
comp=Z,99nm,1.9s
**451A Vernon** 68.13 68 P **P** 04 46 27.5 +0.9
451A IAmb IAmb 04 46 28.9
comp=Z,150nm,1.1s
**BIRD Birdtown, Kers** 68.17 62 P **P** 04 46 27.8 +1.0
**R61A Willards** 68.18 56 P **P** 04 46 27.7 +0.9
**154A Montrose** 68.18 65 P **P** 04 46 27.1 +0.2
**TAOE Nuku Hiva Isla** 68.19 139 *e*P **P** 04 46 29.6 +2.4
comp=Z,120nm,27.0s
**TAOE Nuku Hiva Isla** 68.19 139 *e*PP **PP** 04 48 55.6 -2.4
comp=Z,53nm,25.6s
TAOE *e*S **S** 04 55 22.8 -2.7

comp=Z,234nm,30.3s
TAOE *e*SS **SS** **04 59 50.0 +1.0**
comp=Z,187nm,39.2s
TAOE *e*LR LR 05 07 05.7
comp=Z,2µm,21.9s
**SKAR Skarslia 68.32 357** *e*P **P** **04 46 27.6 +0.2**
SKAR IAmb IAmb 04 46 28.3
comp=Z,145nm,2.1s
**ABKAR Akbulak array 68.34 323** P **P** **04 46 27.8 +0.1**
**ABKAR Akbulak array 68.34 323** P **P** **04 46 28.0 +0.3**
ABKAR IAmb IAmb 04 46 29.4
comp=Z,60nm,1.4s
**HFS Hagfors 68.58 354** P **P** **04 46 29.0 +0.1**
comp=Z,3.9nm,0.5s,baz=329,slow=1.7,SNR=37
HFS LR LR 05 17 06.6
comp=Z,589nm,20.1s,baz=3.5,slow=36
comp=Z,3.9nm,0.5s
**Y57A Sumter 68.67 62** P **P** **04 46 30.9 +1.0**
**KK31 Karatay Array 68.84 313** P **P** **04 46 30.4 -0.5**
**KK31 Karatay Array 68.84 313** P **P** **04 46 30.4 -0.5**
KK31 pmax pmax
comp=Z,7.0nm,0.8s
**KKAR Karatay Array 68.84 313** P **P** **04 46 30.1 -0.8**
**KKAR Karatay Array 68.84 313** P **P** **04 46 30.1 -0.8**
KKAR IAmb IAmb 04 46 33.7
comp=Z,7.1nm,0.8s
**KKAR Karatay Array 68.84 313** P **P** **04 46 30.1 -0.8**
**X58A Rowland 68.86 61** P **P** **04 46 31.6 +0.6**
**W59A Clinton 68.89 60** P **P** **04 46 32.2 +1.0**
**HAL Halifax 68.97 44** IAmb IAmb 04 46 32.7
comp=Z,53nm,1.1s
**MTSE Matsula 68.97 348** *e*P **P** **04 46 31.5 +0.1**
**KSH Kashi 68.97 307** P **P** **04 46 36.3 +4.4**
KSH pP sP 04 46 42.8 -1.0
KSH pmax pmax
comp=Z,25nm,1.6s
KSH pmax pmax
comp=Z,440nm,5.4s
KSH LR LR
comp=Z,1µm,19.9s
KSH LR LR
comp=Z,750nm,17.9s
KSH LR LR
comp=Z,1µm,19.7s
**255A Hazlehurst 69.05 65** P **P** **04 46 32.7 +0.4**
**CNNC Cliffs of the 69.14 60** P **P** **04 46 33.5 +0.7**
**CNNC Cliffs of the 69.14 60** P **P** **04 46 33.8 +1.0**
baz=318,SNR=10.0
**Y58A Scranton 69.16 62** P **P** **04 46 34.1 +1.2**
**BRLS Boroldav 69.20 313** *e*P **P** **04 46 34.3 +1.1**
baz=313
**BRLS Boroldav 69.20 313** *e*P **P** **04 46 34.2 +1.1**
**553A Crawfordville 69.21 68** P **P** **04 46 33.9 +0.6**
**CRAI Chiangrai 69.30 277** P **P** **04 46 33.9 -0.1**
**KONO Kongsberg 69.30 356** *e*P **P** **04 46 33.5 +0.1**
**MOS Moscow 69.36 339** *e*P **P** **04 46 32.0 -1.9**
MOS pmax pmax
comp=Z,400nm,2.2s
MOS pmax pmax
comp=Z,156nm,1.5s
**V61A Roper 69.43 58** P **P** **04 46 35.0 +0.4**
**NHSC New Hope 69.47 63** P **P** **04 46 35.0 +0.2**
**NHSC New Hope 69.47 63** P **P** **04 46 36.6 +1.7**
baz=318,SNR=44
**BELG Belogornoye 69.80 332** LR LR 05 21 16.9
comp=Z,2µm,18.1s,baz=30,slow=39
**OBN Obninsk 70.17 340** P **P** **04 46 38.7 -0.2**
**OBN Obninsk 70.17 340** LR LR 05 24 00.5
comp=Z,534nm,18.1s,baz=20,slow=42
**OBN Obninsk 70.17 340** ⇓P **P** **04 46 40.2 +1.4**
**OBN Obninsk 70.17 340** *c iP* **P** **04 46 38.5 -0.3**
OBN *e**PP **pP** **04 46 45.4 -1.9**
OBN *e**SP **pwP** **04 46 47.4 -2.8**
OBN *e* 04 47 00.8
OBN *e* 04 49 13.5
OBN *e*PPP PPP 04 50 55.1
OBN pmax pmax
comp=Z,88nm,1.5s
OBN MLR MLR
comp=Z,804nm,22.0s
**OBN Obninsk 70.17 340** P **P** **04 46 39.0 +0.2**
comp=Z,98nm,1.6s,comp=Z,2µm
**456A Hilliard 70.20 66** P **P** **04 46 40.5 +1.1**
**SHL Shillong 70.56 287** P **P** **04 46 41.9 0.0**
SHL IAmb IAmb 04 46 48.7
comp=Z,127nm,1.1s
**SHL Shillong 70.56 287** P **P** **04 46 41.9 0.0**
SHL pmax pmax
comp=Z,127nm,1.1s
**PHRA Phrae 70.68 276** P **P** **04 46 42.4 -0.1**
**656A Willston 70.92 67** P **P** **04 46 44.5 +0.7**
**BTK Batken 71.07 311** P **P** **04 46 45.0 +0.3**
**BTK Batken 71.07 311** P **P** **04 46 45.0 +0.3**
BTK pmax pmax
comp=Z,26nm,1.2s
**CMAR Chiang Mai Arr 71.51 277** P **P** **04 46 47.5 0.0**
comp=Z,3.0nm,0.4s,baz=29,slow=6.2,SNR=19
CMAR LR LR 05 22 19.1
comp=Z,461nm,18.5s,baz=70,slow=39
comp=Z,3.0nm,0.4s
**LPSR Galich'ya Gora 71.95 337** *e*P **P** **04 46 48.7 -1.0**
LPSR pmax pmax
comp=Z,80nm,1.1s
LPSR MLR MLR
comp=Z,1µm,18.0s
**PABE Paberze 72.07 347** IAmb IAmb 04 46 52.1
comp=Z,124nm,1.5s
**PABE Paberze 72.07 347** *e*P **P** **04 46 50.6 +0.3**
**GAR Garm 72.14 310** P **P** **04 46 51.3 0.0**
**MNK Minsk 72.43 344** *i* P **P** **04 46 52.1 -0.4**
MNK *i* 04 47 10.1
MNK *i* S **S** **04 56 14.4 +0.4**
MNK *i* SS **SS** **05 00 51.6 +0.2**
MNK pmax pmax
comp=Z,32nm,0.9s
MNK pmax pmax
comp=E,19nm,0.9s
MNK pmax pmax
comp=N,9.0nm,0.8s
MNK MLR MLR
comp=Z,556nm,17.0s
MNK MLR MLR
comp=E,401nm,17.0s
MNK MLR MLR
comp=N,444nm,18.0s
**DWPF Disney Wildern 72.50 67** P **P** **04 46 55.0 +1.7**
DWPF IAmb IAmb 04 46 55.8
comp=Z,116nm,0.7s
**DWPF Disney Wildern 72.50 67** P **P** **04 46 54.7 +1.3**
baz=319
DWPF S **S** **04 56 16.0 +0.5**
baz=319
**VRH Novokhopyorsk 72.52 335** *e*P **P** **04 46 52.3 -0.8**
VRH pmax pmax
comp=Z,94nm,1.3s
**CMIG Matias Romero 72.61 84** LR LR 05 14 22.8
comp=Z,252nm,22.0s,baz=307,slow=32
**VORR Voronezh 72.73 337** *e*P **P** **04 46 52.4 -2.0**
VORR pmax pmax
comp=Z,50nm,0.4s
**PPT Papeete 72.90 152** LR LR 05 14 58.6
comp=Z,506nm,18.8s,baz=323,slow=32
**PPT2 Papeete2 72.92 152** *e*P **P** **04 46 58.7 +2.8**
comp=Z,96nm,25.5s
**PPT2 Papeete2 72.92 152** *e*PP **PP** **04 49 31.7 -7.0**
comp=Z,61nm,31.5s
PPT2 *e*S **SKiKP** **04 56 25.3 -1.3**
comp=Z,552nm,30.8s
PPT2 *e*SS **SS** **05 01 03.3 +1.6**
comp=Z,333nm,26.8s
PPT2 *e*LR LR 05 09 14.9
comp=Z,629nm,22.5s
PPT2 *e*LR LR 05 09 21.8
comp=Z,737nm,21.8s
**CHGR Chuyangaron 72.97 311** P **P** **04 46 55.4 -0.7**
**CHGR Chuyangaron 72.97 311** P **P** **04 46 55.4 -0.7**
CHGR pmax pmax
comp=Z,48nm,1.0s
**SIMJ Simiganj 73.04 311** P **P** **04 46 55.5 -1.1**
**VSR Storozhevoye 73.16 337** *e*P **P** **04 46 55.9 -1.0**
VSR pmax pmax
comp=Z,80nm,1.3s
VSR MLR MLR
comp=Z,2µm,18.0s
**COEN Coen 73.19 219** P **P** **04 46 57.6 +0.2**

**SUW Suwalki 73.63 347** *e*P **P** **04 46 58.8 -0.8**
**SUW Suwalki 73.63 347** IAmb IAmb 04 47 00.9
comp=Z,100nm,1.4s
**SUW Suwalki 73.63 347** *e*P **P** **04 46 59.3 -0.3**
**EKA Eskdalemuir Ar 73.71 3** P **P** **04 47 00.2 +0.1**
comp=Z,20nm,1.0s,baz=359,slow=4.5,SNR=16
comp=Z,20nm,1.0s
**ESK Eskdalemuir 73.73 3** P **P** **04 47 00.3 +0.1**
**ESK Eskdalemuir 73.73 3** P **P** **04 47 00.3 +0.1**
ESK pmax pmax
comp=Z,61nm,1.3s
**RAR Rarotonga 73.90 162** LR LR 05 14 24.7
comp=Z,1µm,19.2s,baz=320,slow=32
**060A Indiantown 73.93 67** IAmb IAmb 04 47 08.0
comp=Z,158nm,0.9s
**DZM Mont Dzumac 74.26 195** *e*P **P** **04 47 07.5 +3.9**
comp=Z,131nm,25.9s
**DZM Mont Dzumac 74.26 195** *e*PP **PP** **04 49 48.1 -2.0**
comp=Z,66nm,25.1s
DZM *e*S **S** **04 56 36.2 +0.8**
comp=Z,327nm,26.8s
DZM *e*SS **SS** **05 01 24.1 +2.1**
comp=Z,333nm,28.6s
DZM *e*LR LR 05 09 52.3
comp=Z,1µm,24.2s
**DZM Mont Dzumac 74.26 195** P **P** **04 47 04.4 +0.8**
**DZM Mont Dzumac 74.26 195** P **P** **04 47 04.7 +1.0**
comp=Z,15nm,1.0s,baz=57,slow=11,SNR=12
comp=Z,15nm,1.0s
**NIL Nilore 74.89 305** P **P** **04 47 07.9 +0.5**
**NIL Nilore 74.89 305** P **P** **04 47 07.9 +0.5**
NIL pmax pmax
comp=Z,47nm,1.2s
**SOR Soroa 75.59 72** P **P** **04 47 12.1 +0.6**
SOR IAmb IAmb 04 47 15.3
comp=Z,80nm,1.1s
**SOR Soroa 75.59 72** P **P** **04 47 12.1 +0.6**
SOR pmax pmax
comp=Z,80nm,1.1s
**RNPP9 Sopachiv 75.74 345** P **P** **04 47 11.3 -0.6**
**AK23 Malin Array Si 75.79 343** P **P** **04 47 12.3 +0.1**
**AK21 Malin Array Si 75.79 343** P **P** **04 47 11.7 -0.5**
**RNPP8 Varash 75.82 345** P **P** **04 47 11.8 -0.5**
**AK04 Malin Array Si 75.82 343** P **P** **04 47 12.2 -0.1**
**AKASG Malin Array Be 75.83 343** P **P** **04 47 12.4 0.0**
**AKASG Malin Array Be 75.83 343** P **P** **04 47 11.6 -0.8**
comp=Z,12nm,0.6s,baz=17,slow=5.4,SNR=91
AKASG LR LR 05 23 51.2
comp=Z,598nm,20.9s,baz=19,slow=38
comp=Z,12nm,0.6s
**AKASG Malin Array Be 75.83 343** P **P** **04 47 12.4 0.0**
AKASG pmax pmax
comp=Z,76nm,1.6s
**AKBB Malin Array Si 75.83 343** P **P** **04 47 12.7 +0.3**
AKBB IAmb IAmb 04 47 13.6
comp=Z,84nm,1.1s
**AKBB Malin Array Si 75.83 343** P **P** **04 47 12.7 +0.3**
AKBB pmax pmax
comp=Z,84nm,1.1s
**AKBB Malin Array Si 75.83 343** P **P** **04 47 11.7 -0.7**
**KIEV Kiev 75.84 343** P **P** **04 47 12.7 +0.2**
KIEV IAmb IAmb 04 47 13.6
comp=Z,76nm,1.1s
**KIEV Kiev 75.84 343** P **P** **04 47 12.7 +0.2**
KIEV pmax pmax
comp=Z,76nm,1.1s
**PETF Flores 75.86 81** P **P** **04 47 13.8 +0.7**
**MI28 Mi28,Pidlybu 75.90 344** P **P** **04 47 12.4 -0.4**
**RNPP5 Staryi Chortor 75.92 345** P **P** **04 47 12.0 -0.9**
**MI30 MI30,Zelenitsa 75.98 343** P **P** **04 47 12.9 -0.4**
**BEL Belsk 76.08 348** *e*P **P** **04 47 14.0 +0.2**
**SPSI Sidrap Palu 76.17 245** P P 04 47 22.3 +7.5
**KBL Kabul 76.31 309** P **P** **04 47 15.5 -0.2**
**KBL Kabul 76.31 309** P **P** **04 47 15.5 -0.2**
KBL pmax pmax
comp=Z,14nm,0.8s
**MI29 MI29, Kamyanyy 76.36 343** P **P** **04 47 15.1 -0.3**
**CAMR Camarioca 76.36 70** P **P** **04 47 16.3 +0.5**
CAMR IAmb IAmb 04 47 19.9
comp=Z,157nm,1.0s
**LUBAR Lubar, Ukraine 76.85 343** P **P** **04 47 17.9 -0.3**
**KAPI Kappang 77.03 245** LR LR 05 16 39.1
comp=Z,143nm,20.7s,baz=52,slow=32
**CLL Collm 77.41 353** P **P** **04 47 21.2 -0.2**
**CLL Collm 77.41 353** ⇑*iP* **P** **04 47 20.8 -0.5**
CLL *e*S **S** **04 57 08.0 -1.5**
CLL pmax pmax
comp=Z,75nm,1.6s
CLL MLR MLR
comp=Z,500nm,19.0s
**CLL Collm 77.41 353** P **P** **04 47 21.1 -0.2**
comp=Z,28nm,1.7s,comp=Z,523nm
**MTN Manton Dam 77.56 231** P **P** **04 47 22.7 +0.2**
MTN IAmb IAmb 04 47 38.8
comp=Z,53nm,0.9s
**KSP Ksiaz 77.57 351** *e*P **P** **04 47 21.6 -0.6**
**KSP Ksiaz 77.57 351** P **P** **04 47 22.3 0.0**
comp=Z,13nm,1.7s,comp=Z,444nm
**LVV L'vov 77.58 346** *e*P **P** **04 47 22.9 +0.6**
LVV *e* 04 47 26.9
LVV *e*S **S** **04 57 11.4 0.0**
**LVV L'vov 77.58 346** P **P** **04 47 22.7 +0.4**
**CTA Charters Tower 77.63 214** LR LR 05 17 06.1
comp=Z,36nm,19.5s,baz=24,slow=32
**CTAO Charters Tower 77.63 214** P **P** **04 47 23.3 +0.5**
**CTAO Charters Tower 77.63 214** P **P** **04 47 23.3 +0.5**
CTAO pmax pmax
comp=Z,29nm,1.2s
**GOF Gofitskoye 77.72 332** *c iP* **P** **04 47 23.5 +0.3**
**BRG Berggiesshubel 77.76 352** *i* P **P** **04 47 23.1 -0.2**
BRG Amp 04 47 24.7
comp=Z,37nm,1.2s
BRG ⇑PP **pwP** **04 47 33.6 -1.1**
BRG Amp 04 47 34.6
comp=Z,9.0nm,0.9s
**BRG Berggiesshubel 77.76 352** S **S** **04 57 13.0 -0.3**
**BRG Berggiesshubel 77.76 352** SS SS 05 02 15.0 +2.8
BRG Amp 05 23 54.0
comp=N,0.3nm,24.5s
BRG Amp 05 24 02.0
comp=E,0.2nm,18.3s
BRG Amp 05 24 09.0
comp=Z,0.6nm,20.6s
**HORU Horodok 77.77 344** P **P** **04 47 23.2 -0.2**
**OJC Ojcow 77.79 348** *e*P **P** **04 47 23.3 -0.1**
**OJC Ojcow 77.79 348** P **P** **04 47 23.4 -0.1**
**OJC Ojcow 77.79 348** P **P** **04 47 23.4 -0.1**
OJC pmax pmax
comp=Z,38nm,1.2s
**OJC Ojcow 77.79 348** P **P** **04 47 22.8 -0.7**
comp=Z,33nm,1.6s,comp=Z,543nm
**CHVC Chvalec 77.85 351** AMS AMS 05 22 00.0
comp=Z,700nm,21.3s
**OSTC Ostas 77.86 351** AMS AMS 05 22 10.0
comp=Z,700nm,20.1s
**ERBR Yeremizino-Bor 77.86 333** *e*P **P** **04 47 22.5 -1.5**
ERBR pmax pmax
comp=Z,204nm,1.4s
ERBR MLR MLR
comp=Z,2µm,17.0s
**UPC Upice 77.93 351** *e*P **P** **04 47 25.5 +1.2**
UPC AMS AMS 05 22 10.0
comp=Z,700nm,17.8s
**UPC Upice 77.93 351** *e*P **P** **04 47 25.5 +1.2**
UPC MLR MLR
comp=Z,700nm,17.8s
**KWP Kalwaria Pacla 77.96 346** *e*P **P** **04 47 24.9 +0.4**
**KWP Kalwaria Pacla 77.96 346** P **P** **04 47 24.9 +0.4**
KWP IAmb IAmb 04 47 26.5
comp=Z,114nm,1.0s
**KWP Kalwaria Pacla 77.96 346** P **P** **04 47 24.9 +0.4**
KWP pmax pmax
comp=Z,114nm,1.0s
**KWP Kalwaria Pacla 77.96 346** P **P** **04 47 24.5 0.0**
comp=Z,138nm,1.4s,comp=Z,1µm
**PVCC Panska Ves 78.05 352** AMS AMS 05 24 00.0
comp=Z,700nm,21.4s
**DPC Dobruska-Polom 78.06 351** *e*P **P** **04 47 26.4 +1.4**
DPC *e*PCP **pP** **04 47 32.2 -1.5**
DPC AMS AMS 05 22 10.0
comp=Z,700nm,19.0s
**DPC Dobruska-Polom 78.06 351** *e*P **P** **04 47 26.4 +1.4**
DPC *e* 04 47 32.2
DPC MLR MLR
comp=Z,700nm,19.0s

**DPC Dobruska-Polom 78.06 351** P **P** **04 47 25.0 0.0**
comp=Z,28nm,1.5s,comp=Z,444nm
**HSKC Hora Svate Kat 78.07 353** *e*P **P** **04 47 25.9 +0.8**
HSKC AMS AMS 05 24 40.0
comp=Z,500nm,18.4s
**RICC Richard 78.07 352** *e*P **P** **04 47 26.7 +1.7**
**MAK Makhachkala 78.18 328** *e*P **P** **04 47 22.6 -3.2**
MAK *e* 04 50 17.9
MAK *e*S **S** **04 57 11.3 -6.8**
MAK *e*SS **SS** **05 02 16.0 -3.0**
MAK *e*SSS SSS 05 05 36.2
MAK pmax pmax
comp=Z,205nm,1.3s
**BBSR BB Station 78.25 53** P **P** **04 47 26.6 +0.3**
BBSR IAmb IAmb 04 47 28.1
comp=Z,214nm,1.6s
**SHIU Shidnytsya 78.26 346** P **P** **04 47 27.0 +0.8**
**MORS Morshin 78.27 345** P **P** **04 47 26.0 -0.1**
**KRLC Kraliky 78.28 350** *e*P **P** **04 47 27.3 +1.0**
KRLC AMS AMS 05 23 00.0
comp=Z,500nm,19.0s
**KRLC Kraliky 78.28 350** *e*P **P** **04 47 25.9 -0.4**
KRLC MLR MLR
comp=Z,500nm,18.4s
**OKC Ostrava-Krasne 78.36 349** AMS AMS 05 29 20.0
comp=Z,800nm,15.0s
**KMPD K-Podol'skiy 78.39 344** P **P** **04 47 26.4 -0.4**
KMPD P **P** **04 47 26.4 -0.4**
**TBI Tubuai 78.41 153** *e*P **P** **04 47 29.1 +2.1**
comp=Z,705nm,41.8s
TBI *e*S **S** **04 57 19.4 -1.2**
comp=Z,2µm,39.8s
TBI *e*SS **SS** **05 02 24.2 -0.4**
comp=Z,919nm,26.0s
TBI *e*LR LR 05 11 46.7
comp=Z,1µm,25.2s
TBI *e*LR LR 05 11 53.1
comp=Z,4µm,22.8s
**SORM Soroca 78.46 342** ⇓P **P** **04 47 27.7 +0.5**
**SORM Soroca 78.46 342** P **P** **04 47 27.7 +0.5**
**SORM Soroca 78.46 342** P **P** **04 47 26.9 -0.3**
comp=Z,141nm,1.4s,comp=Z,2µm
**MEM Membach 78.47 357** *d*P **P** **04 47 27.7 +0.5**
comp=Z,28nm,1.2s
**MORC Moravsky Berou 78.49 350** P **P** **04 47 27.6 +0.1**
**MORC Moravsky Berou 78.49 350** *e*P **P** **04 47 26.9 -0.5**
**MORC Moravsky Berou 78.49 350** ⇓P **P** **04 47 28.4 +0.9**
**MORC Moravsky Berou 78.49 350** P **P** **04 47 27.6 +0.1**
MORC pmax pmax
comp=Z,33nm,1.4s
**BTNL Ternell 78.49 357** *d*P **P** **04 47 28.0 +0.6**
comp=Z,23nm,1.4s
BTNL *dx* x 04 47 42.5
**NIE Niedzica 78.51 348** *e*P **P** **04 47 28.0 +0.5**
**NIE Niedzica 78.51 348** P **P** **04 47 27.4 -0.1**
comp=Z,9.6nm,1.6s
**BSTI Sart Tilman 78.51 358** *d*P **P** **04 47 28.4 +1.0**
comp=Z,4.9nm,1.5s
**PRA Prague 78.51 352** AMS AMS 05 24 30.0
comp=Z,700nm,24.3s
**STNU Starunia 78.58 345** P **P** **04 47 27.3 -0.6**
**PRU Pruhonice 78.59 352** *e*PS 04 58 12.0
PRU AMS AMS 05 24 20.0
comp=Z,700nm,24.2s
**GOPC GO Pecny, Ondr 78.64 352** AMS AMS 05 24 30.0
comp=Z,600nm,19.1s
**BCLA Clavier 78.68 358** *d*P **P** **04 47 27.4 -1.0**
comp=Z,20nm,1.3s
**KOLS Kolonicke sedl 78.71 347** *e*P **P** **04 47 29.4 +0.8**
KOLS pmax pmax
comp=Z,27nm,0.9s
**KOLS Kolonicke sedl 78.71 347** *e*P **P** **04 47 29.4 +0.8**
**BGES Gesves 78.72 358** *d*P **P** **04 47 28.3 -0.3**
comp=Z,20nm,1.3s
**BHOU Houvegnez 78.73 357** *d*P **P** **04 47 29.1 +0.4**
**LABN Labinsk 78.78 333** *e*P **P** **04 47 26.6 -2.5**
LABN MLR MLR
comp=Z,2µm,21.0s
**BMRD Maredsous 78.81 358** *d*P **P** **04 47 29.3 +0.2**
comp=Z,33nm,1.3s
**KVAR Kislovodsk Arr 78.83 331** LR LR 05 27 10.0
comp=Z,1µm,19.8s,baz=268,slow=39
**KIV Kislovodsk 78.83 331** P **P** **04 47 30.1 +0.6**
KIV IAmb IAmb 04 47 31.4
comp=Z,68nm,1.1s
**KIV Kislovodsk 78.83 331** ⇑P **P** **04 47 30.9 +1.5**
**KIV Kislovodsk 78.83 331** *e*P **P** **04 47 29.7 +0.2**
KIV *e*S **S** **04 57 26.6 +1.3**
KIV pmax pmax
comp=Z,46nm,1.0s
KIV pmax pmax
comp=Z,67nm,4.1s
KIV MLR MLR
comp=Z,546nm,19.0s
**KIV Kislovodsk 78.83 331** P **P** **04 47 29.3 -0.2**
comp=Z,54nm,1.3s,comp=Z,724nm
**CRVS Cervenica-Dubn 78.86 347** *e*P **P** **04 47 29.9 +0.5**
CRVS pmax pmax
comp=Z,98nm,1.6s
**CRVS Cervenica-Dubn 78.86 347** *e*P **P** **04 47 29.9 +0.5**
**KSV Kosov 78.87 345** P **P** **04 47 28.9 -0.6**
**LANS Liptovska Anna 78.88 348** *e*P **P** **04 47 30.7 +1.1**
LANS pmax pmax
comp=Z,40nm,1.4s
**LANS Liptovska Anna 78.88 348** *e*P **P** **04 47 30.7 +1.1**
**RCHB Rochefort 78.95 358** *d*P **P** **04 47 30.4 +0.5**
comp=Z,17nm,1.2s
**KBZ Khabaz 78.97 331** P **P** **04 47 31.0 +0.9**
comp=Z,20nm,0.9s,baz=32,slow=1.5,SNR=48
KBZ LR LR 05 27 30.6
comp=Z,1µm,19.8s,baz=20,slow=40
comp=Z,20nm,0.9s
**GIVF Givet 79.01 358** P **P** **04 47 29.8 -0.4**
**EDFI Ende, Flores 79.02 241** P **P** **04 47 30.5 -0.3**
comp=Z,30nm,1.5s,comp=Z,610nm
**DOU Dourbes 79.02 358** *d*P **P** **04 47 30.3 0.0**
comp=Z,22nm,1.5s
**VRAC Vranov 79.06 350** *e*P **P** **04 47 30.5 0.0**
**VRAC Vranov 79.06 350** ⇑P **P** **04 47 31.8 +1.2**
**VRAC Vranov 79.06 350** P **P** **04 47 31.7 +1.2**
**BAIF Baives 79.06 359** P **P** **04 47 30.3 -0.2**
**HOLU Holmets 79.09 346** P **P** **04 47 30.5 -0.1**
**MUKU Mukachevo 79.11 346** P **P** **04 47 31.0 +0.2**
**GRA1 Grafenberg Arr 79.14 354** P **P** **04 47 31.7 +0.7**
GRA1 IAmb IAmb 04 47 33.1
comp=Z,132nm,1.4s
**GRF Grafenberg Arr 79.14 354** P **P** **04 47 31.7 +0.7**
GRF pmax pmax
comp=Z,132nm,1.4s
**GRF Grafenberg Arr 79.14 354** *e*P **P** **04 47 31.5 +0.5**
comp=Z,79nm,1.3s,baz=9.3,slow=4.8
**GRFO Grafenberg 79.14 354** P **P** **04 47 31.4 +0.4**
GRFO IAmb IAmb 04 47 33.0
comp=Z,129nm,1.4s
**GRFO Grafenberg 79.14 354** P **P** **04 47 31.4 +0.4**
GRFO pmax pmax
comp=Z,129nm,1.4s
**ZVC Zvikov 79.16 352** *e*P **P** **04 47 31.4 +0.3**
ZVC AMS AMS 05 24 40.0
comp=Z,600nm,19.3s
**BRIU Brid 79.18 346** P **P** **04 47 31.5 +0.4**
**TREC Trest 79.18 351** AMS AMS 05 22 30.0
comp=Z,800nm,22.4s
**KRUC Moravsky 79.32 350** *e*P **P** **04 47 31.6 -0.3**
**NE56 Odesa 79.33 340** P **P** **04 47 30.7 -1.3**
**BERU Beregovo 79.34 346** P **P** **04 47 32.3 +0.3**
**KORU Korolevo 79.34 346** P **P** **04 47 32.3 +0.3**
**JAVC Velka Javorina 79.38 350** *e*P **P** **04 47 32.9 +0.5**
**KECS Kecovo 79.40 348** *e*P **P** **04 47 33.2 +0.8**
KECS pmax pmax
comp=Z,38nm,1.2s
**KECS Kecovo 79.40 348** *e*P **P** **04 47 33.1 +0.7**
**WLF Walferdange 79.41 357** IAmb IAmb 04 47 34.6
comp=Z,95nm,1.5s
**WLF Walferdange 79.41 357** *d*P **P** **04 47 33.4 +1.0**
comp=Z,16nm,1.4s
**TRSU Trosnyk 79.42 346** P **P** **04 47 33.7 +1.2**
**BUR08 Bucovina Ar. S 79.50 344** P **P** **04 47 33.4 +0.3**
**KHC Kasperske Hory 79.52 352** P **P** **04 47 33.1 0.0**
**KHC Kasperske Hory 79.52 352** *e*P **P** **04 47 33.5 +0.4**
KHC *e*PCP **PcP** **04 47 38.1 -2.9**
KHC *e*S **S** **04 57 30.3 -2.0**
KHC AMS AMS 05 26 50.0
comp=Z,500nm,18.3s
**KHC Kasperske Hory 79.52 352** *e*P **P** **04 47 33.5 +0.4**

KHC *e* 04 47 38.1
KHC *eS* **S** **04 57 30.3 -2.0**
KHC MLR MLR
comp=Z,500nm,18.3s
**BURAR Bucovina Array 79.52 344** P **P** **04 47 33.7 +0.5**
**BURAR Bucovina Array 79.52 344** ⇓P **P** **04 47 34.5 +1.3**
**MILM Milestii Mici 79.53 342** ⇓P **P** **04 47 33.8 +0.7**
**MILM Milestii Mici 79.53 342** P **P** **04 47 33.7 +0.7**
**ANN Anapa 79.54 335** *eP* **P** **04 47 31.8 -1.4**
ANN *eS* **S** **04 57 31.5 -1.0**
ANN pmax pmax
comp=Z,78nm,1.4s
**VYHS Vyhne 79.60 349** *eP* **P** **04 47 33.9 +0.4**
VYHS pmax pmax
comp=Z,44nm,1.4s
**VYHS Vyhne 79.60 349** *eP* **P** **04 47 33.9 +0.4**
**TGUH Tegucigalpa,Un 79.65 81** P **P** **04 47 34.8 +0.4**
TGUH IAmb IAmb 04 47 37.5
comp=Z,239nm,1.4s
**HRA Herat 79.67 313** P **P** **04 47 34.4 0.0**
**PURM Purcari 79.69 341** P **P** **04 47 34.0 +0.1**
comp=Z,127nm,1.5s,comp=Z,3µm
**SMOL Smolenice 79.75 350** *eP* **P** **04 47 35.0 +0.7**
SMOL pmax pmax
comp=Z,42nm,1.7s
**CKRC Cesky Krumlov 79.77 352** *eP* **P** **04 47 34.4 0.0**
CKRC AMS AMS 05 25 00.0
comp=Z,500nm,17.2s
**CKRC Cesky Krumlov 79.77 352** *eP* **P** **04 47 34.4 0.0**
CKRC MLR MLR
comp=Z,500nm,17.2s
**GERES GERESS Array B 79.79 352** P **P** **04 47 34.4 -0.2**
**GERES GERESS Array B 79.79 352** P **P** **04 47 34.9 +0.2**
comp=Z,6.5nm,1.0s,baz=17,slow=7.3,SNR=23
comp=Z,6.5nm,1.0s
**GERES GERESS Array B 79.79 352** P **P** **04 47 34.4 -0.2**
**SEKA Sheki 79.85 327** P **P** **04 47 34.9 -0.1**
**PSZ Piszkesteto 80.03 348** IAmb IAmb 04 47 38.2
comp=Z,87nm,1.4s
**PSZ Piszkesteto 80.03 348** ⇓P **P** **04 47 37.2 +1.2**
**PSZ Piszkesteto 80.03 348** P **P** **04 47 37.1 +1.2**
**SOC Sochi 80.04 333** *eP* **P** **04 47 35.0 -0.9**
SOC *e* 04 50 34.9
SOC *eS* **S** **04 57 37.6 -0.3**
SOC *eSS* **SS** **05 02 53.0 +6.2**
SOC *eSSS* SSS 05 06 14.4
SOC pmax pmax
comp=Z,31nm,1.0s
SOC MLR MLR
comp=Z,1µm,19.0s
**ZST Bratislava 80.10 350** *eP* **P** **04 47 37.5 +1.3**
ZST *e* 04 52 32.8
**ZST Bratislava 80.10 350** *eP* **P** **04 47 37.5 +1.3**
**RAO Raoul Island 80.14 180** LR LR 05 17 02.2
comp=Z,852nm,19.9s,baz=346,slow=31
**ARCR ARCALIA 80.18 345** ⇓P **P** **04 47 38.5 +1.9**
**SIM Simferopol' 80.24 337** *eP* P 04 47 29.6 -7.4
SIM *eS* **S** **04 57 31.4 -8.5**
SIM pmax pmax
comp=Z,49nm,1.4s
SIM smax smax
comp=N,93nm,15.8s
**MNGR Mingechevir, A 80.27 327** P **P** **04 47 37.4 +0.2**
**TESR Tescani 80.34 343** ⇑P **P** **04 47 38.0 +0.5**
**TESR Tescani 80.34 343** P **P** **04 47 37.5 0.0**
comp=N,73nm,1.5s,comp=N,1µm
**SRO Srobarova 80.34 349** *eP* **P** **04 47 39.1 +1.7**
**SRO Srobarova 80.34 349** *eP* **P** **04 47 39.1 +1.7**
**CONA Conrad Observa 80.50 351** *i* P **P** **04 47 39.1 +0.6**
comp=N,48nm,1.5s,SNR=22
**ONER Baraj Valea Uz 80.55 343** ⇑P **P** **04 47 40.7 +2.0**
**GHRR 80.63 342** ⇓P **P** **04 47 41.1 +2.0**
**GHRR 80.63 342** P **P** **04 47 40.0 +1.0**
**GANJ Ganja 80.65 327** P **P** **04 47 39.5 +0.2**
**BFO Black Forest 80.66 356** P **P** **04 47 39.8 +0.6**
**BFO Black Forest 80.66 356** P **P** **04 47 39.8 +0.6**
BFO pmax pmax
comp=Z,65nm,1.5s
**CJR Cluj-Napoca 80.67 345** ⇓P **P** **04 47 40.9 +1.5**
**CJR Cluj-Napoca 80.67 345** P **P** **04 47 40.8 +1.5**
**RONA Rosalia, Austr 80.68 350** *i* P **P** **04 47 40.5 +1.1**
comp=Z,36nm,1.6s,SNR=13
**VLDR Vladesti 80.71 342** ⇓P **P** **04 47 40.9 +1.4**
**MOA Molln 80.73 352** *i* P **P** **04 47 40.2 +0.5**
comp=Z,23nm,1.7s,SNR=9.1
**DRGR 80.73 346** ⇑P **P** **04 47 40.9 +1.1**
**DRGR 80.73 346** P **P** **04 47 40.8 +1.1**
**ECH Echery 80.83 356** P **P** **04 47 40.6 +0.5**
**ECH Echery 80.83 356** P **P** **04 47 40.6 +0.5**
ECH pmax pmax
comp=Z,40nm,1.2s
**COSR Cosmesti PH 80.84 342** ⇑P **P** **04 47 42.5 +2.3**
**TURR Turia 80.89 343** ⇓P **P** **04 47 42.4 +1.9**
**OZUR 80.89 343** ⇓P **P** **04 47 42.2 +1.7**
**BIOA Bad Ischl, Aus 80.94 352** *eP* **P** **04 47 41.2 +0.4**
comp=Z,48nm,1.4s,SNR=21
**VRI Vrincioaia 80.94 343** ⇑P **P** **04 47 41.5 +0.7**
**VRI Vrincioaia 80.94 343** P **P** **04 47 41.4 +0.7**
**VRI Vrincioaia 80.94 343** P **P** **04 47 41.3 +0.5**
comp=Z,22nm,1.4s,comp=Z,308nm
**PLOR3 Plostina Array 80.97 343** P **P** **04 47 41.6 +0.6**
comp=Z,45nm,1.5s,comp=Z,846nm
**PLOR Plostina 80.97 343** ⇓P **P** **04 47 42.2 +1.3**
**PLOR Plostina 80.97 343** P **P** **04 47 42.2 +1.3**
**PLOR5 Plostina Array 80.97 343** P **P** **04 47 41.5 +0.5**
comp=Z,35nm,1.9s,comp=Z,939nm
**ODBI Odobesti 80.98 343** ⇓P **P** **04 47 42.9 +2.0**
**ODBI Odobesti 80.98 343** P **P** **04 47 41.2 +0.3**
comp=Z,32nm,0.4s,comp=Z,21µm
**EIDS Eidsvold 80.98 208** P **P** **04 47 41.6 +0.6**
EIDS IAmb IAmb 04 49 40.2
comp=Z,76nm,1.2s
**SLCR Slobozia Conac 81.01 342** ⇑P **P** **04 47 42.9 +1.8**
**TUDR 81.03 342** ⇑P **P** **04 47 43.3 +2.1**
**IZVR Izvoarele 81.06 342** ⇓P **P** **04 47 42.9 +1.6**
**COVR Voineasa-Covas 81.06 343** ⇑P **P** **04 47 43.1 +1.7**
**SCHL Schela 81.08 342** ⇑P **P** **04 47 43.4 +2.0**
**DOPR Dopca 81.09 344** ⇓P **P** **04 47 43.3 +1.7**
**CLF Chambon-Foret 81.12 360** P **P** **04 47 42.2 +0.6**
**QUIF Quistinic 81.13 3** P **P** **04 47 42.3 +0.6**
**KNRA Kununurra 81.13 231** P **P** **04 47 42.7 +0.6**
**TLCR 81.19 341** ⇑P **P** **04 47 43.3 +1.2**
**TLCR 81.19 341** P **P** **04 47 43.2 +1.2**
**ARSA Arzberg 81.20 351** *i* P **P** **04 47 43.4 +1.3**
comp=Z,36nm,1.5s,SNR=14
**LESA Schwarzleotal 81.29 353** *i* P **P** **04 47 43.2 +0.5**
comp=Z,37nm,1.7s
**CFR Carcaliu 81.33 342** ⇓P **P** **04 47 43.7 +0.9**
**CFR Carcaliu 81.33 342** P **P** **04 47 43.7 +0.9**
**GRER 81.37 342** ⇓P **P** **04 47 45.5 +2.5**
**RETA Reutte 81.37 354** *i* P **P** **04 47 43.3 +0.2**
comp=Z,24nm,1.4s,SNR=12
**SIRR Siria 81.40 346** ⇓P **P** **04 47 44.4 +1.2**
**NEHR Nehoiu 81.45 343** ⇓P **P** **04 47 44.7 +1.3**
**MLR Muntele Rosu 81.45 343** P **P** **04 47 44.1 +0.5**
MLR IAmb IAmb 04 47 46.8
comp=Z,158nm,1.3s
**MLR Muntele Rosu 81.45 343** LR LR 05 29 31.0
comp=Z,908nm,18.4s,baz=22,slow=40
**MLR Muntele Rosu 81.45 343** ⇓P **P** **04 47 45.5 +1.8**
**MLR Muntele Rosu 81.45 343** P **P** **04 47 44.1 +0.5**
MLR pmax pmax
comp=Z,158nm,1.3s
**MLR Muntele Rosu 81.45 343** P **P** **04 47 45.0 +1.4**
comp=Z,102nm,1.4s,comp=Z,1µm
**WATA Walderalm 81.46 353** *i* P **P** **04 47 44.2 +0.6**
comp=Z,65nm,1.3s,SNR=15
**MOTA Moosalm 81.49 354** *i* P **P** **04 47 44.2 +0.4**
comp=Z,65nm,1.4s
**WTTA Wattenberg 81.53 353** *i* P **P** **04 47 44.7 +0.6**
comp=Z,75nm,1.4s,SNR=31
**KBA Koelnbreinsper 81.58 352** *i* P **P** **04 47 45.2 +0.9**
comp=Z,96nm,1.1s,SNR=57
**TPGR Topolog 81.59 341** ⇑P **P** **04 47 45.1 +0.9**
**SQTA Sankt Quirin 81.60 354** *i* P **P** **04 47 44.9 +0.5**
comp=Z,58nm,1.5s,SNR=31
**DAVA Damuels 81.62 355** *i* P **P** **04 47 45.1 +0.5**
comp=Z,41nm,1.6s,SNR=11
**GNI Garni 81.62 328** P **P** **04 47 44.4 -0.3**
GNI IAmb IAmb 04 47 47.6
comp=Z,151nm,1.6s
**GNI Garni 81.62 328** LR LR 05 28 50.0
comp=Z,857nm,19.6s,baz=22,slow=39
**GNI Garni 81.62 328** P **P** **04 47 44.4 -0.3**
GNI pmax pmax
comp=Z,151nm,1.6s
**GNI Garni 81.62 328** P **P** **04 47 46.0 +1.3**
comp=Z,53nm,1.6s,comp=Z,962nm
**CHIV Chivirico 81.66 69** P **P** **04 47 45.8 +0.9**
CHIV IAmb IAmb 04 47 51.8
comp=Z,88nm,1.1s
**VOIR 81.66 344** ⇓P **P** **04 47 46.3 +1.6**
**VOIR 81.66 344** P **P** **04 47 46.2 +1.6**
**VOIR 81.66 344** P **P** **04 47 45.0 +0.3**
comp=Z,95nm,1.4s,comp=Z,1µm
**ISR Istrita 81.70 343** ⇑P **P** **04 47 46.6 +1.8**
**ISR Istrita 81.70 343** P **P** **04 47 46.6 +1.8**
**ISR Istrita 81.70 343** P **P** **04 47 45.7 +0.9**
comp=Z,109nm,1.5s
**ARR Arges 81.80 344** ⇓P **P** **04 47 47.0 +1.6**
**SOKA Soboth 81.82 351** *i* P **P** **04 47 46.2 +0.7**
comp=Z,92nm,1.3s,SNR=55
**FETA Feichten 81.83 354** *i* P **P** **04 47 46.0 +0.4**
comp=Z,38nm,1.1s,SNR=20
**SURR Surduc 81.83 346** ⇓P **P** **04 47 46.6 +1.2**
**HARR Harsova 81.84 342** ⇓P **P** **04 47 46.8 +1.3**
**HARR Harsova 81.84 342** P **P** **04 47 46.8 +1.3**
**PERS Pernice 81.85 351** *i* P **P** **04 47 45.9 +0.3**
**MTUR Matau 81.86 344** ⇑P **P** **04 47 47.8 +2.1**
**MTUR Matau 81.86 344** P **P** **04 47 47.8 +2.1**
**LOT Lotru 81.87 345** ⇓P **P** **04 47 46.3 +0.5**
**MORH Mrgy, Hungar 81.87 348** ⇓P **P** **04 47 46.0 +0.3**
**BOAB BOACO BROADBAN 81.88 80** IAmb IAmb 04 47 48.0
comp=Z,112nm,1.3s
**ABTA Abfaltersbach 81.97 353** *i* P **P** **04 47 46.5 +0.1**
comp=Z,35nm,1.1s,SNR=26
**MYKA Terra Mystica 82.00 352** *i* P **P** **04 47 46.6 +0.2**
comp=Z,34nm,1.4s,SNR=16
**OBKA Obir 82.03 351** *i* P **P** **04 47 47.5 +0.8**
comp=Z,31nm,1.1s,SNR=15
**OBKA Obir 82.03 351** ⇑*i*P **P** **04 47 46.9 +0.3**
**NMDO Nuevo Mundo 82.04 67** IAmb IAmb 04 47 49.0
comp=Z,62nm,1.1s
**BZS Buzias 82.05 346** ⇓P **P** **04 47 47.3 +0.7**
**BZS Buzias 82.05 346** P **P** **04 47 47.3 +0.7**
**WB0 Warramunga Arr 82.07 225** P **P** **04 47 46.1 -0.8**
WB0 IAmb IAmb 04 47 47.9
comp=Z,107nm,1.8s
**GZR Gura Zlata 82.08 345** ⇑P **P** **04 47 47.7 +0.8**
**GZR Gura Zlata 82.08 345** P **P** **04 47 47.6 +0.8**
**DAVOX Davos/Dischmat 82.13 355** LR LR 05 23 15.1
comp=Z,448nm,22.0s,baz=2.0,slow=35
**WR0 Warramunga Arr 82.18 224** P **P** **04 47 47.1 -0.3**
WR0 IAmb IAmb 04 47 48.4
comp=Z,105nm,1.9s
**SULR 82.18 343** ⇓P **P** **04 47 48.5 +1.2**
**STFAR Stefanesti-Arg 82.23 344** ⇑P **P** **04 47 49.0 +1.4**
**WRAB Tennant Creek 82.24 225** P **P** **04 47 47.7 -0.1**
**WRAB Tennant Creek 82.24 225** P **P** **04 47 47.7 -0.1**
WRAB pmax pmax
comp=Z,27nm,1.1s
**WB2 Warramunga Arr 82.24 225** P **P** **04 47 47.5 -0.3**
**WRA Warramunga Arr 82.25 225** P **P** **04 47 47.0 -0.8**
**WRA Warramunga Arr 82.25 225** P **P** **04 47 47.4 -0.5**
comp=Z,5.5nm,0.7s,baz=32,slow=5.8,SNR=75
WRA LR LR 05 21 58.1
comp=Z,472nm,19.3s,baz=19,slow=34
comp=Z,5.5nm,0.7s
**WRA Warramunga Arr 82.25 225** P **P** **04 47 47.1 -0.8**
WRA pmax pmax
comp=Z,5.0nm,1.7s
**FUORN Ofenpass-Fuorn 82.26 354** P **P** **04 47 48.1 +0.1**
FUORN IAmb IAmb 04 47 50.2
comp=Z,77nm,1.6s
**AVF Avril sur Loir 82.35 359** P **P** **04 47 47.6 -0.5**
**MTDJ Mount Denham 82.36 71** P **P** **04 47 49.3 +0.6**
MTDJ IAmb IAmb 04 47 52.7
comp=Z,148nm,1.1s
**CADS Cadrg 82.39 352** *i* P **P** **04 47 47.7 -0.7**
**ACON Acoyapa 82.55 80** IAmb IAmb 04 47 51.5
comp=Z,102nm,1.7s
**HERR Herculane 82.64 346** ⇓P **P** **04 47 50.4 +0.7**
**SABO M.te Sabotino 82.64 352** IAmb IAmb 04 47 50.5
comp=Z,25nm,1.2s
**SENIN Lac Senin/Sane 82.67 356** IAmb IAmb 04 47 52.2
comp=Z,108nm,1.5s
**SRE Strehaia 82.73 345** ⇑P **P** **04 47 51.4 +1.2**
**SRE Strehaia 82.73 345** P **P** **04 47 51.3 +1.2**
**CTI Castel Tesino 82.74 353** P **P** **04 47 51.1 +0.8**
**CTI Castel Tesino 82.74 353** P **P** **04 47 51.1 +0.8**
CTI pmax pmax
comp=Z,37nm,1.3s
**FRGS Fruska Gora 82.75 347** ⇑*i*P **P** **04 47 50.6 +0.3**
**CEY Cerknica 82.81 351** ⇑*i*P **P** **04 47 50.2 -0.4**
**DJES Djerdap 82.83 345** ⇑P **P** **04 47 52.0 +1.3**
**MDVR Moldovita 82.85 346** ⇓P **P** **04 47 51.5 +0.7**
**ESPN Las Esperanzas 82.92 79** P **P** **04 47 52.5 +1.0**
ESPN IAmb IAmb 04 47 53.9
comp=Z,130nm,1.2s
**BOJS Bojanci 82.96 351** *i* P **P** **04 47 51.5 +0.1**
**BOJS Bojanci 82.96 351** ⇑*i*P **P** **04 47 51.4 +0.1**
**DIKM Dikmen 83.05 336** ⇑P **P** **04 47 53.1 +1.2**
**DIKM Dikmen 83.05 336** P **P** **04 47 52.7 +0.8**
comp=Z,47nm,1.8s,comp=Z,946nm
**PUNG Punghina 83.14 345** ⇓P **P** **04 47 53.2 +0.9**
**RKT Rikitea 83.15 141** *eP* **P** **04 47 52.0 -0.4**
comp=Z,751nm,48.8s
**RKT Rikitea 83.15 141** *eS* **S** **04 58 07.0 -3.1**
comp=Z,949nm,35.5s
RKT *eSS* **SS** **05 03 35.3 -0.2**
comp=Z,1µm,27.0s
**RKT Rikitea 83.15 141** *eLR* LR 05 14 01.2
comp=Z,4µm,22.2s
**VLAD Vladila 83.17 344** ⇑P **P** **04 47 53.7 +1.3**
**A051A Mrakovica 83.26 349** ⇑*i*P **P** **04 47 52.9 -0.1**
**TEKS Tekeris 83.39 347** ⇑*i*P **P** **04 47 53.4 -0.2**
**PSI Prapat 83.47 266** P **P** **04 47 54.4 -0.2**
PSI pmax pmax
comp=Z,39nm,1.0s
**BLY Banja Luka 83.49 349** ⇑*i*P **P** **04 47 54.1 0.0**
**LPL La Plagne 83.54 357** P **P** **04 47 54.9 +0.3**
**RPSI Rantau Prapat 83.55 266** P **P** **04 47 54.4 -0.4**
RPSI IAmb IAmb 04 47 56.0
comp=Z,39nm,1.0s
**LPG La Plagne 83.56 357** P **P** **04 47 55.3 +0.5**
**A050A Klekovaca 83.83 350** ⇑*i*P **P** **04 47 55.4 -0.6**
**SSB Saint Sauveur 83.84 358** P **P** **04 47 56.1 +0.1**
SSB IAmb IAmb 04 47 58.1
comp=Z,84nm,1.5s
**SSB Saint Sauveur 83.84 358** P **P** **04 47 56.1 +0.1**
SSB pmax pmax
comp=Z,84nm,1.5s
**HAPS Han Pijesak,Bl 83.92 348** ⇑*i*P **P** **04 47 57.0 +0.5**
**ELND Elena 83.94 343** ⇓P **P** **04 47 56.8 +0.3**
**GURO Guroymak-BITLI 83.95 330** IAmb IAmb 04 48 00.2
comp=Z,79nm,1.4s
**BOVS Bovan 83.97 346** ⇓P **P** **04 47 56.8 +0.2**
**BNI Bardonecchia 84.01 357** P **P** **04 47 57.4 +0.5**
BNI IAmb IAmb 04 47 59.9
comp=Z,106nm,1.4s
**BNI Bardonecchia 84.01 357** P **P** **04 47 57.4 +0.5**
BNI pmax pmax
comp=Z,106nm,1.4s
**PWJI Pagerwojo 84.07 249** P P 04 48 02.0 +4.6
**BBLS Lazi&#263i 84.08 347** ⇑*i*P **P** **04 47 58.1 +0.9**
**RUDO Rudo 84.33 347** ⇑*i*P **P** **04 47 58.6 +0.2**
**ARPR Arapgir-MALATY 84.58 332** P **P** **04 47 60.0 0.0**
**SJES Sjenica 84.59 347** ⇑*i*P **P** **04 48 00.7 +0.8**
**MSSA Maissana 84.60 355** P **P** **04 47 59.8 -0.1**
MSSA IAmb IAmb 04 48 00.8
comp=Z,48nm,1.1s
**VTS Vitosha 84.71 344** *i* P **P** **04 48 00.6 +0.1**
**HYB Hyderabad 84.72 291** *eP* **P** **04 47 59.9 -0.9**
**FITZ Fitzroy Crossi 84.76 233** P **P** **04 48 01.5 +0.8**
**UPM Unac-Piva 84.80 348** ⇑*i*P **P** **04 48 00.8 -0.2**
**EDRB Edirne 84.81 342** P **P** **04 48 01.1 +0.2**
**BRY Bratogost 85.14 348** ⇑*i*P **P** **04 48 02.6 -0.1**
**BR106 Keskin Array S 85.27 336** P **P** **04 48 03.0 -0.4**
comp=Z,37nm,1.1s,comp=Z,310nm
**BR131 Keskin Array S 85.28 336** IAmb IAmb 04 48 04.9
comp=Z,36nm,0.9s
**BRTR Keskin Array B 85.28 336** P **P** **04 48 03.7 +0.3**
**BRTR Keskin Array B 85.28 336** P **P** **04 48 03.5 +0.1**
comp=Z,16nm,0.7s,baz=50,slow=2.6,SNR=120
BRTR LR LR 05 31 36.3
comp=Z,370nm,19.4s,baz=34,slow=40
comp=Z,16nm,0.7s
**BRTR Keskin Array B 85.28 336** *i* P **P** **04 48 03.5 +0.1**
BRTR pmax pmax
comp=Z,17nm,0.7s
**STON Ston 85.28 348** ⇑*i*P **P** **04 48 02.4 -0.7**
**BR105 Keskin Array S 85.29 336** P **P** **04 48 03.3 -0.2**
comp=Z,43nm,1.0s,comp=Z,359nm
**BR104 Keskin Array S 85.29 336** P **P** **04 48 03.6 +0.1**
comp=Z,41nm,1.0s,comp=Z,328nm
**TREB Trebinje 85.35 348** ⇑*i*P **P** **04 48 03.5 0.0**
**ANTO Ankara 85.35 337** P **P** **04 48 04.4 +0.7**
ANTO IAmb IAmb 04 48 05.8
comp=Z,88nm,1.2s
**ANTO Ankara 85.35 337** ⇓P **P** **04 48 05.1 +1.3**
**ANTO Ankara 85.35 337** P **P** **04 48 04.4 +0.7**
ANTO pmax pmax
comp=Z,88nm,1.2s
**ANTO Ankara 85.35 337** P **P** **04 48 03.7 0.0**
comp=Z,32nm,1.3s,comp=Z,437nm
**SDDR Presa de Saban 85.41 65** P **P** **04 48 04.9 +0.7**
**YLV Yalova 85.49 339** P **P** **04 48 04.5 +0.1**
comp=Z,55nm,1.4s,comp=Z,771nm
**PDG Podgorica 85.51 347** P **P** **04 48 04.5 +0.2**
PDG IAmb IAmb 04 48 05.6
comp=Z,95nm,0.9s
**PDG Podgorica 85.51 347** ⇑*i*P **P** **04 48 04.4 +0.1**
**BNN Bunyan 85.51 334** P **P** **04 48 04.9 +0.3**
**GUMA Gualdo di Mace 85.56 352** P **P** **04 48 05.1 +0.4**
GUMA IAmb IAmb 04 48 06.9
comp=Z,203nm,1.2s
**ARMA Armidale 85.59 206** P **P** **04 48 05.8 +1.0**
ARMA IAmb IAmb 04 48 07.8
comp=Z,35nm,1.0s
**FDMO Fiordimonte 85.61 352** P **P** **04 48 05.5 +0.6**
**MMB Musomishta 85.66 344** *i* P **P** **04 48 04.8 -0.4**
**ASAR Alice Springs 85.71 223** P **P** **04 48 05.5 +0.1**
**ASAR Alice Springs 85.71 223** P **P** **04 48 05.7 +0.3**
comp=Z,11nm,0.7s,baz=29,slow=4.9,SNR=78
ASAR LR LR 05 24 02.1
comp=Z,510nm,19.5s,baz=34,slow=34
comp=Z,11nm,0.7s
**DRME Dracevica, Mon 85.76 347** ⇑*i*P **P** **04 48 05.7 +0.1**
**KIRS Kirsehir-Merke 85.76 336** ⇓P **P** **04 48 06.8 +1.0**
**PUK Puka 85.80 347** P **P** **04 48 06.3 +0.4**
PUK IAmb IAmb 04 48 08.8
comp=Z,116nm,1.5s
**NRCA Norcia 85.81 352** P **P** **04 48 06.4 +0.5**
**NVR Nevrokopi 85.83 344** P **P** **04 48 07.4 +1.4**
**ALN Alexandroupoli 85.87 342** P **P** **04 48 06.2 +0.1**
ALN IAmb IAmb 04 48 08.6
comp=Z,44nm,1.3s
**ALN Alexandroupoli 85.87 342** P **P** **04 48 03.3 -2.8**
**ALN Alexandroupoli 85.87 342** P **P** **04 48 06.2 +0.1**
ALN pmax pmax
comp=Z,44nm,1.3s
**ENEZ Enez 86.00 342** P **P** **04 48 06.5 -0.3**
**CAVP Castiglione de 86.03 353** P **P** **04 48 06.2 -0.8**
**KAVA Kavala 86.06 343** P **P** **04 48 07.0 -0.1**
**CAMP Campotosto 86.08 352** P **P** **04 48 08.0 +0.7**
**CESX Cesi 86.08 352** IAmb IAmb 04 48 08.4
comp=Z,124nm,1.4s
**VAY Valandovo 86.08 345** *i* P **P** **04 48 08.1 +0.8**
**SRS Serrai 86.11 344** P **P** **04 48 07.0 -0.4**
**KNT Kendrikon 86.19 344** P **P** **04 48 08.1 +0.4**
**KOKK Kokkinochori, 86.33 343** P **P** **04 48 08.2 -0.2**
**SMTH Samothraki Isl 86.38 342** P **P** **04 48 07.6 -1.1**
**CEST Esterri de Car 86.54 1** P **P** **04 48 09.7 +0.1**
CEST IAmb IAmb 04 48 11.7
comp=Z,59nm,1.2s
**INTR Introdacqua 86.55 351** IAmb IAmb 04 48 11.9
comp=Z,87nm,1.3s
**PCED Cedros 86.56 24** *eP* **P** **04 48 10.3 +0.7**
comp=Z,112nm,1.3s
**OHR Ohrid 86.57 346** *i* P **P** **04 48 09.8 +0.1**
**ROSA Rosais 86.59 23** *eP* **P** **04 48 10.7 +0.9**
comp=Z,75nm,1.7s
**CALA Caldeira 86.61 24** *eP* **P** **04 48 10.5 +0.6**
comp=Z,157nm,1.3s
**SGRT San Giovanni R 86.61 350** P **P** **04 48 10.3 +0.4**
**GAZ Gaziantep 86.69 333** IAmb IAmb 04 48 12.6
comp=Z,95nm,1.1s
**PMAN Manadas 86.71 23** *eP* **P** **04 48 11.1 +0.8**
comp=Z,158nm,1.2s
**PGAV Gavieira, Arco 86.75 8** *e*PP **PP** **04 51 37.3 +5.2**
**PGAV Gavieira, Arco 86.75 8** *e*LR LR 05 16 44.4
comp=Z,405nm,22.0s
**PICO Pico 86.75 23** *eP* **P** **04 48 11.5 +0.9**
comp=Z,160nm,1.1s
**PSBA Serra de Santa 86.77 23** *eP* **P** **04 48 11.6 +0.9**
comp=Z,94nm,0.8s
**PCAN Candelaria 86.77 23** *eP* **P** **04 48 11.4 +0.7**
comp=Z,120nm,1.3s
**PAGU Agualva, Azore 86.80 22** *eP* **P** **04 48 11.6 +0.8**
comp=Z,70nm,1.1s
**FNA Florina 86.80 345** P **P** **04 48 10.7 -0.2**
**FNA Florina 86.80 345** P **P** **04 48 10.7 -0.2**
FNA pmax pmax
comp=Z,14nm,0.7s
**PPNO Prainha do Nor 86.82 23** *eP* **P** **04 48 11.9 +0.9**
comp=Z,144nm,1.3s
**PSCM Serra do Cume 86.88 22** *eP* **P** **04 48 12.5 +1.3**
comp=Z,108nm,1.2s
**PID Ribeirinha 86.88 23** *eP* **P** **04 48 12.1 +0.9**
comp=Z,147nm,1.4s
**ADH Angra Heroismo 86.90 22** *eP* **P** **04 48 12.5 +1.3**
comp=Z,225nm,1.3s
**PBRG Braganca 87.03 7** *eP* **P** **04 48 11.8 -0.1**
comp=Z,30nm,1.7s
**KZN Kozani 87.21 345** P **P** **04 48 12.1 -0.7**
**POLO Lamas de Olo 87.38 7** *eP* **P** **04 48 14.1 +0.4**
comp=Z,20nm,1.6s
**PAOL Paolisi 87.45 350** IAmb IAmb 04 48 15.1
comp=Z,108nm,1.5s
**PVRL Vila Real 87.48 7** *eP* **P** **04 48 14.6 +0.5**
comp=Z,45nm,1.4s
**MVO Moncorvo 87.64 7** *eP* **P** **04 48 15.1 +0.2**
comp=Z,51nm,1.2s
**MVO Moncorvo 87.64 7** *e*PP **PP** **04 51 39.9 +0.6**
**MVO Moncorvo 87.64 7** *e*LR LR 05 15 57.9
comp=Z,386nm,18.0s
**PVIS Viseu 88.02 7** *eP* **P** **04 48 17.1 +0.4**
comp=Z,56nm,1.6s
**PSET Sete Cidades 88.05 22** *eP* **P** **04 48 17.8 +1.0**
comp=Z,181nm,1.4s
**KEK Kerkira 88.09 346** P **P** **04 48 17.1 +0.1**
KEK IAmb IAmb 04 48 17.3
comp=Z,29nm,0.9s
**KEK Kerkira 88.09 346** P **P** **04 48 16.5 -0.5**
**PDA Ponta Delgada 88.13 22** *eP* **P** **04 48 17.6 +0.4**
comp=Z,95nm,1.4s
**IGT Igoumenitsa 88.19 346** P **P** **04 48 16.6 -0.9**
**MTE Manteigas 88.36 7** P **P** **04 48 18.6 +0.2**
MTE IAmb IAmb 04 48 18.7
comp=Z,30nm,1.0s
**MTE Manteigas 88.36 7** *eP* **P** **04 48 18.2 -0.1**
comp=Z,41nm,1.5s
**MTE Manteigas 88.36 7** *e*PP PP 04 51 53.8 +8.7
MTE *e*SKS **S** **04 58 54.1 -7.4**
**MTE Manteigas 88.36 7** *e*LR LR 05 17 49.1
comp=Z,332nm,18.0s
**COI Coimbra 88.48 8** *eP* **P** **04 48 19.3 +0.5**
**EVR Evrytania 88.56 345** P **P** **04 48 19.7 +0.4**
**UUPR Utuado, UPR, P 88.57 62** P **P** **04 48 20.2 +0.7**
UUPR IAmb IAmb 04 48 36.8
comp=Z,36nm,0.9s
**PCAS Casmilo, Conde 88.63 8** *eP* **P** **04 48 19.4 -0.1**
comp=Z,60nm,1.5s
**CELP Cerrillos 88.79 62** P **P** **04 48 21.4 +0.8**
CELP IAmb IAmb 04 48 37.7
comp=Z,59nm,1.1s
**OBIP Obispado Ponce 88.80 62** P **P** **04 48 20.9 +0.3**
OBIP IAmb IAmb 04 48 36.9
comp=Z,91nm,1.1s
**TSLK Tsoukalades, L 88.83 346** P **P** **04 48 20.3 -0.2**
**ANX Ano Chora 88.85 344** P **P** **04 48 20.2 -0.5**
**LKD2 Lefkada island 88.87 345** P **P** **04 48 19.8 -0.9**
**GCPR Guaynabo City 88.87 62** P **P** **04 48 21.6 +0.6**
**PCBR Castelo Branco 88.92 7** *eP* **P** **04 48 20.6 -0.3**
**NYDR Nydri-Lefkada 88.94 345** P **P** **04 48 19.9 -1.0**
**EFP Efpalio 89.02 344** P **P** **04 48 20.9 -0.5**
**EVGI Lefkada island 89.03 345** P **P** **04 48 21.0 -0.4**
**TIP Timpagrande 89.03 349** P **P** **04 48 21.7 +0.2**
**TIP Timpagrande 89.03 349** P **P** **04 48 20.4 -1.1**
comp=Z,40nm,1.3s,comp=Z,510nm
**PSBE So Bento 89.14 8** *eP* **P** **04 48 22.2 +0.3**
**HUMP Col San Antoni 89.14 62** P **P** **04 48 22.4 +0.1**
HUMP IAmb IAmb 04 48 25.6

comp=Z,83nm,1.3s
**IGPR InterUniversit 89.14 62** P **P** **04 48 22.6 +0.4**
**FSK Fiskardo 89.20 346** P **P** **04 48 20.7 -1.5**
**URZ Urewera 89.22 184** LR LR 05 22 53.1
comp=Z,538nm,20.1s,baz=130,slow=32
**ESBB Sonseca Array 89.32 5** IAmb IAmb 04 48 24.5
comp=Z,46nm,1.3s
**ESDC Sonseca Array 89.32 5** P **P** **04 48 22.7 -0.1**
ESDC IAmb IAmb 04 48 23.8
comp=Z,62nm,1.5s
**ESDC Sonseca Array 89.32 5** P **P** **04 48 21.9 -0.9**
comp=Z,12nm,0.9s,baz=351,slow=4.3,SNR=57
ESDC LR LR 05 29 36.7
comp=Z,340nm,19.9s,baz=354,slow=36
comp=Z,12nm,0.9s
**PMRV Marv??o 89.34 7** *eP* **P** **04 48 23.3 +0.4**
comp=Z,54nm,1.6s
**PMRV Marv??o 89.34 7** *e*PP **PP** **04 51 54.3 +1.5**
**PMRV Marv??o 89.34 7** *e*LR LR 05 17 59.7
comp=Z,404nm,16.0s
**KLV Kalavryta, Ach 89.35 344** P **P** **04 48 22.0 -1.0**
**VSL Villasalto 89.41 354** P **P** **04 48 22.9 -0.3**
**GUR Goura 89.42 344** P **P** **04 48 21.9 -1.5**
**PAB San Pablo 89.43 5** P **P** **04 48 23.0 -0.4**
**PAB San Pablo 89.43 5** P **P** **04 48 23.0 -0.4**
PAB pmax pmax
comp=Z,38nm,1.6s
**PMTG Montargil 89.63 8** *eP* **P** **04 48 23.9 -0.3**
comp=Z,47nm,1.6s
**CSS Mathiatis 89.85 335** P **P** **04 48 24.8 -0.6**
CSS IAmb IAmb 04 48 26.3
comp=Z,71nm,1.5s
**PESTR Estremoz 89.88 7** P **P** **04 48 25.3 -0.2**
PESTR IAmb IAmb 04 48 26.0
comp=Z,33nm,1.1s
**PESTR Estremoz 89.88 7** *eP* **P** **04 48 25.3 -0.2**
comp=Z,58nm,1.4s
**CEL Celeste 90.05 349** P **P** **04 48 24.8 -1.5**
CEL IAmb IAmb 04 48 26.4
comp=Z,27nm,0.8s
**STKA Stephens Creek 90.07 213** P **P** **04 48 27.2 +1.1**
**STKA Stephens Creek 90.07 213** P **P** **04 48 26.8 +0.8**
comp=Z,17nm,0.8s,baz=345,slow=7.0,SNR=24
STKA LR LR 05 25 44.5
comp=Z,840nm,19.9s,baz=21,slow=33
comp=Z,17nm,0.8s
**STKA Stephens Creek 90.07 213** P **P** **04 48 27.2 +1.1**
STKA pmax pmax
comp=Z,7.0nm,0.9s
**EVO Evora 90.18 8** *eP* **P** **04 48 26.5 -0.3**
comp=Z,30nm,1.6s
**UOSS Minazif 90.42 313** P **P** **04 48 26.5 -1.6**
**PBAR Barrancos 90.61 7** *eP* **P** **04 48 28.1 -0.7**
comp=Z,79nm,1.7s
**PSA00 Pilbara Seismi 90.61 235** P **P** **04 48 29.6 +0.7**
**WSAR Wadi Sarin 90.73 310** LR LR 05 32 53.3
comp=Z,532nm,21.6s,baz=82,slow=38
**MESJ Messejana 90.85 8** *eP* **P** **04 48 29.9 0.0**
MESJ IAmb IAmb 04 48 31.3
comp=Z,12nm,0.9s
**MESJ Messejana 90.85 8** *eP* **P** **04 48 29.9 0.0**
**VAE Valguarnera 90.99 350** LR LR 05 33 33.8
comp=Z,630nm,19.3s,baz=16,slow=38
**PCVE Castro Verde 91.07 8** *eP* **P** **04 48 31.1 +0.1**
**MMAI Mount Meron Ar 91.09 332** P **P** **04 48 28.9 -2.3**
comp=Z,5.5nm,0.8s,baz=46,slow=2.4,SNR=10.0
MMAI LR LR 05 35 37.1
comp=Z,352nm,18.3s,baz=334,slow=40
comp=Z,5.5nm,0.8s
**PVAQ Vaqueiros 91.32 8** *eP* **P** **04 48 32.2 +0.1**
comp=Z,48nm,1.7s
**PVAQ Vaqueiros 91.32 8** *e*PP **PP** **04 52 11.1 +2.5**
PVAQ *e*SKS **SKSac** **04 59 02.2 -0.1**
**PVAQ Vaqueiros 91.32 8** *e*LR LR 05 18 53.6
comp=Z,373nm,22.0s
**PALK Pallekele 91.38 283** LR LR 05 32 53.7
comp=Z,390nm,20.4s,baz=135,slow=38
**IDI Anoyia 91.52 341** LR LR 05 35 33.7
comp=Z,420nm,18.2s,baz=16,slow=39
**KEST Kesra 93.16 354** IAmb IAmb 04 48 42.0
comp=Z,40nm,1.4s
**KEST Kesra 93.16 354** P **P** **04 48 40.0 -0.7**
comp=Z,20nm,1.2s,baz=99,slow=0.8,SNR=13
comp=Z,20nm,1.2s
**SDV Santo Domingo 93.80 71** LR LR 05 31 31.6
comp=Z,259nm,21.6s,baz=27,slow=36
**SDV Santo Domingo 93.80 71** *eP* **P** **04 48 45.2 +1.1**
**EIL Elat 94.36 332** LR LR 05 39 06.7
comp=Z,626nm,18.1s,baz=62,slow=40
**MDT Midelt 96.11 6** LR LR 05 33 13.8
comp=Z,212nm,20.2s,baz=0.0,slow=36
**TATN Tataouine 96.21 353** IAmb IAmb 04 48 53.8
comp=Z,49nm,1.6s
**PCRV Puerto La Cruz 96.27 65** LR LR 05 32 21.4
comp=Z,200nm,21.6s,slow=36
**RAYN Ar Rayn 96.30 321** P **P** **04 48 54.4 -0.9**
**RAYN Ar Rayn 96.30 321** P **P** **04 48 54.4 -0.9**
RAYN pmax pmax
comp=Z,9.0nm,0.9s
**TORD Torodi Ar. Bea 115.89 0** **PKPdf** **04 54 09.3 -0.1**
**TORD Torodi Ar. Bea 115.89 0** PKP **PKiKP** **04 54 08.6 -0.9**
comp=Z,1.5nm,0.5s,baz=359,slow=2.7,SNR=17
TORD PKKPbc **PKKPbc** **05 04 38.9 +0.3**
comp=Z,1.4nm,0.9s,baz=128,slow=3.2,SNR=5.7
**H03N2 Juan Fernandez 120.64 106** T T 07 06 16.8
baz=317,slow=77,SNR=496
**H03N1 Juan Fernandez 120.65 106** T T 07 06 18.1
baz=317,slow=77,SNR=768
**H03N3 Juan Fernandez 120.65 106** T T 07 06 19.7
baz=317,slow=77,SNR=533
**DBIC Dimbokro 122.03 8** PKPdf **PKiKP** **04 54 21.4 -0.1**
**DBIC Dimbokro 122.03 8** PKP **PKPdf** **04 54 20.9 -0.4**
comp=Z,7.6nm,0.4s,baz=0.5,slow=2.4,SNR=26
**TIC Toumodi 122.04 8**⇑*i*PKIKP **PKiKP** **04 54 21.9 +0.4**
comp=Z,12nm,0.3s
**KIC Kosan Boka 122.34 8**⇑*e*PKIKP **PKiKP** **04 54 21.6 -0.5**
comp=Z,15nm,0.6s
**LIC Lamto 122.45 8**⇓*i*PKIKP **PKiKP** **04 54 22.2 -0.1**
comp=Z,20nm,0.4s
**MT13 San Alfonso 126.13 101** **PKiKP** **04 54 28.3 -0.7**
**BDFB Brasilia 126.71 67** PKP **PKiKP** **04 54 30.0 -0.7**
comp=Z,2.4nm,0.8s,baz=33,slow=3.2,SNR=4.5
BDFB PP **PP** **04 56 27.6 +0.5**
comp=Z,9.3nm,1.0s,baz=360,slow=3.4,SNR=7.6
**BDFB Brasilia 126.71 67** PKIKP **PKiKP** **04 54 30.0 -0.7**
**CASY Casey 129.07 210** PKPdf **PKPdf** **04 54 31.1 -1.9**
**CPUP Villa Florida 129.13 84** PKP **PKPdf** **04 54 33.9 -0.5**
comp=Z,2.4nm,0.9s,baz=263,slow=1.8,SNR=4.9
**PLCA Paso Flores 130.46 108** PKP **PKPdf** **04 54 36.0 -0.5**
comp=Z,25nm,1.2s,baz=311,slow=3.3,SNR=3.2
**TRQA Tornquist 134.05 99** PKPdf **PKiKP** **04 54 44.0 -0.7**
**TRQA Tornquist 134.05 99** PKIKP **PKiKP** **04 54 44.0 -0.7**
**PMSA Palmer Station 144.30 138** PKPbc 04 54 59.0 -0.6
**TSUM Tsumeb 145.74 333** PKPdf **PKPdf** **04 55 03.4 -1.8**
**MAW Mawson 146.67 218** PKPbc **PKPdf** **04 55 05.3 +0.2**
comp=Z,17nm,0.8s,baz=88,slow=3.8,SNR=28
**BOSA Boshof 151.43 313** **PKiKP** **04 55 20.6 -0.2**
**BOSA Boshof 151.43 313** PKPbc **PKPbc** **04 55 18.1 -2.3**
comp=Z,19nm,0.6s,baz=32,slow=2.2,SNR=58
**ELIB Princess Elisa 157.14 197** *d*PKPdf **PKPdf** **04 55 20.1 -0.7**
ELIB *d*PKP **PKPab** **04 55 51.1 -0.6**
**TROLL Troll, Antarti 159.15 180** ⇑PKPab **PKPab** **04 55 58.5 -2.0**
comp=Z,221nm,1.1s
TROLL ⇓PKPdf **PKPdf** **04 55 22.2 -1.1**
comp=Z,311nm,0.9s
TROLL ⇑x x 04 55 58.5
comp=Z,221nm,1.1s
**VNA3 Neumayer Olymp 159.24 169** ⇑PKPab **PKPab** **04 55 60.0 -0.7**
comp=Z,7.7nm,0.8s
VNA3 ⇑PKPdf **PKPdf** **04 55 21.0 -2.3**
comp=Z,3.9nm,0.9s
VNA3 ⇑x x 04 55 60.0
comp=Z,7.7nm,0.8s
**SNAA Sanae 159.38 176** PKPdf **PKPdf** **04 55 22.6 -0.9**
**SNAA Sanae 159.38 176** ⇑PKPab **PKPab** **04 55 59.7 -1.7**
comp=Z,95nm,0.9s
SNAA ⇓PKPdf **PKPdf** **04 55 21.8 -1.6**
SNAA ⇑x x 04 55 59.7
comp=Z,95nm,0.9s
**SNAA Sanae 159.38 176** PKP **PKPdf** **04 55 21.6 -1.9**
comp=Z,8.2nm,1.1s,baz=111,slow=0.9,SNR=14
**SNAA Sanae 159.38 176** PKIKP **PKPdf** **04 55 22.6 -0.9**
**VNA2 Neumayer--Watz 159.78 171** ⇑PKPab **PKPab** **04 56 02.3 -0.8**
comp=Z,13nm,0.7s,baz=216,slow=2.7
VNA2 ⇓PKPdf **PKPdf** **04 55 22.1 -1.7**
comp=Z,7.7nm,1.0s,baz=253,slow=0.7
VNA2 ⇑x x 04 56 02.3
comp=Z,13nm,0.7s,baz=216,slow=2.7
**VNA1 Neumayer--Stat 159.95 170** ⇑PKPab **PKPab** **04 56 02.9 -0.8**
comp=Z,11nm,0.9s
VNA1 ⇓PKPdf **PKPdf** **04 55 22.8 -1.2**
comp=Z,6.8nm,1.2s
VNA1 ⇑x x 04 56 02.9
comp=Z,11nm,0.9s

**WEL 17 04:46:28.8, 45°S±15°×16°8E±2°0, h74km±27km, M2.4/2, ML3.0/12, MLv2.4/2, Error ellipse: s-maj=0.0km s-min=0.0km az=60.3, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLZ** | **Mavora Lakes** | **0.38** | **111** | P | Pn | 04 46 42.5 | +1.5 |
| **DCZ** | **Deep Cove** | **0.40** | **234** | P | Pn | 04 46 40.9 | -0.3 |
| **MSZ** | **Milford Sound** | **0.60** | **22** | P | Pn | 04 46 43.5 | +0.6 |
| **WHZ** | **Wether Hill Ro** | **0.70** | **161** | P | Pn | 04 46 45.1 | +1.0 |
| **WKZ** | **Wanaka** | **1.07** | **68** | P | Pn | 04 46 49.4 | +1.0 |
| **EAZ** | **Earnscleugh** | **1.20** | **91** | P | Pn | 04 46 51.1 | +1.2 |
| **JCZ** | **Jackson Bay** | **1.43** | **36** | P | Pn | 04 46 52.2 | -0.8 |
| **TUZ** | **Tuapeka** | **1.59** | **118** | P | Pn | 04 46 56.0 | +1.0 |
| **APZ** | **The Paps** | **1.62** | **171** | P | Pn | 04 46 55.8 | +0.3 |
| **SYZ** | **Scrubby Hill** | **1.69** | **141** | P | Pn | 04 46 56.9 | +0.7 |
| **LBZ** | **Lake Benmore** | **2.01** | **66** | P | Pn | 04 46 59.6 | -1.1 |
| **ODZ** | **Otahua Downs** | **2.15** | **86** | P | Pn | 04 47 02.2 | -0.3 |
| **HHSZ** | **Highcliff Hill** | **2.19** | **108** | P | Pn | 04 47 03.7 | +0.6 |
| **TMZ** | **Timaru** | **2.56** | **72** | P | Pn | 04 47 06.4 | -1.6 |
| **GCSZ** | **Gaunt Creek Bo** | **2.73** | **46** | P | Pn | 04 47 07.7 | -2.6 |

*NOU 17 04:46:56.7, 36°98S×179°70E, h0km, MLv4.5/8, Off E. Coast of N. Island, N.Z.*
*IDC 17 04:46:58.8±2.5, 36°70S×179°24E, h0km, mb4.2/2, mbtmp4.3/3, ML4.4/1, MS2.2/1, Error ellipse: s-maj=60.0km s-min=39.6km az=136.0*
*WEL 17 04:47:03.2±0.8, 37°S±5°×17°9E±°, h12km, M4.2/28, ML4.5/29, MLv4.2/28, Error ellipse: s-maj=0.0km s-min=0.0km az=99.6, confirmed*
**ISC 17 04:46:59.7±2.4, 36°98S±0°07×179°40E±0°09, h11km±11km, n113, σ1°68/117, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.04** | **236** | P | **Pg** | **04 47 19.5** | **-0.3** |
| **MXZ** | **Matakaoa Point** | **1.04** | **236** | P | **Pg** | 04 47 19.6 | -0.2 |
| MXZ | | | | S | **Sg** | **04 47 33.5** | **+0.1** |
| **WMGZ** | **Waiomatatini S** | **1.14** | **223** | P | **Pn** | **04 47 24.1** | **+2.5** |
| WMGZ | | | | S | **Sn** | **04 47 39.3** | **+1.9** |
| **PKGZ** | **Pakihiroa** | **1.37** | **229** | P | **Pg** | **04 47 26.1** | **+0.1** |
| PKGZ | | | | S | **Sg** | **04 47 44.0** | **+0.1** |
| **PUZ** | **Puketiti** | **1.42** | **219** | P | **Pg** | **04 47 27.6** | **+0.7** |
| PUZ | | | | S | **Sg** | **04 47 45.4** | **+0.1** |
| **HAZ** | **Te Kaha** | **1.50** | **238** | P | **Pg** | **04 47 29.4** | **+0.9** |
| HAZ | | | | S | **Sg** | **04 47 47.7** | **-0.3** |
| **TWGZ** | **Tauwhareparae** | **1.64** | **223** | P | **Pg** | **04 47 31.1** | **-0.1** |
| **RUGZ** | **Raukumara Rang** | **1.68** | **234** | P | **Pb** | **04 47 30.6** | **-0.2** |
| **CNGZ** | **Carnagh Statio** | **1.77** | **212** | P | **Pb** | **04 47 33.2** | **+1.0** |
| CNGZ | | | | S | **Sg** | **04 47 56.7** | **0.0** |
| **WIZ** | **White Island** | **1.84** | **252** | P | **Pn** | **04 47 30.4** | **-0.9** |
| **TKGZ** | **Te Karaka** | **1.90** | **220** | P | **Pb** | **04 47 34.5** | **+0.1** |
| **MWZ** | **Matawai** | **2.00** | **227** | P | **Pb** | **04 47 35.7** | **-0.5** |
| MWZ | | | | S | **Sn** | **04 47 58.4** | **-0.3** |
| **WHRZ** | **Whale Island** | **2.12** | **245** | P | **Pb** | **04 47 37.2** | **-0.9** |
| WHRZ | | | | S | **Sn** | **04 48 01.2** | **-0.1** |
| **RIGZ** | **Rimuhau** | **2.15** | **216** | P | **Pn** | **04 47 37.2** | **+1.6** |
| RIGZ | | | | S | **Sn** | **04 48 02.8** | **+0.4** |
| **RAGZ** | **Rawiri** | **2.18** | **225** | P | **Pb** | **04 47 38.1** | **-1.2** |
| **URZ** | **Urewera** | **2.22** | **234** | P | **Pb** | **04 47 38.4** | **-1.4** |
| **URZ** | **Urewera** | **2.22** | **234** | Pn | **Pn** | **04 47 37.3** | **+0.9** |
| | 109nm,0.3s,baz=48,slow=1.1,SNR=264 | | | | | | |
| URZ | | | | Sn | **Sn** | **04 48 03.5** | **-0.3** |
| | 135nm,0.3s,baz=49,slow=20,SNR=30 | | | | | | |
| URZ | | | | LR | LR | 04 48 09.5 | |
| | comp=Z,44nm,18.2s,baz=103,slow=31 | | | | | | |
| | 416nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **2.22** | **234** | P | **Pn** | **04 47 38.3** | **+1.8** |
| URZ | | | | S | **Sn** | **04 48 03.2** | **-0.6** |
| **PRGZ** | **Paritu Road** | **2.28** | **211** | P | **Pn** | **04 47 39.1** | **+1.8** |
| **MARZ** | **Manawahe** | **2.38** | **244** | P | **Pn** | **04 47 40.1** | **+1.3** |
| **EDRZ** | **Edgecumbe** | **2.39** | **241** | P | **Pn** | **04 47 40.9** | **+2.0** |
| EDRZ | | | | S | **Sn** | **04 48 08.0** | **-0.2** |
| **OPRZ** | **Ohinepanea** | **2.42** | **248** | P | **Pn** | **04 47 40.4** | **+1.2** |
| **SNGZ** | **Shannon Statio** | **2.42** | **222** | P | **Pn** | **04 47 41.0** | **+1.7** |
| **KNZ** | **Kokoha** | **2.45** | **213** | P | **Pn** | **04 47 40.6** | **+1.0** |
| **MHGZ** | **Mahia Peninsul** | **2.46** | **208** | P | **Pn** | **04 47 41.5** | **+1.6** |
| **RTZ** | **Ruatahuna** | **2.51** | **229** | P | **Pn** | **04 47 42.7** | **+2.1** |
| RTZ | | | | S | **Sn** | **04 48 10.5** | **-0.8** |
| **MUGZ** | **Murupara** | **2.56** | **234** | P | **Pn** | **04 47 43.0** | **+1.8** |
| **TGRZ** | **Tauranga** | **2.61** | **252** | P | **Pn** | **04 47 42.9** | **+1.1** |
| **TARZ** | **Mount Tarawera** | **2.61** | **241** | P | **Pn** | **04 47 44.2** | **+2.2** |
| **OMRZ** | **Omania** | **2.65** | **244** | P | **Pn** | **04 47 44.8** | **+2.3** |
| **RRRZ** | **Republican Roa** | **2.66** | **238** | P | **Pn** | **04 47 44.6** | **+2.1** |
| **WHHZ** | **Waihua** | **2.70** | **219** | P | **Pn** | **04 47 45.5** | **+2.4** |
| **KARZ** | **Kaharoa** | **2.71** | **247** | P | **Pn** | **04 47 45.0** | **+1.7** |
| **HLRZ** | **Highlands Stat** | **2.73** | **241** | P | **Pn** | **04 47 45.9** | **+2.4** |
| **MTHZ** | **Maungataniwha** | **2.75** | **226** | P | **Pn** | **04 47 45.8** | **+2.0** |
| **UTU** | **Utuhina** | **2.81** | **244** | P | **Pb** | **04 47 48.2** | **-1.7** |
| **HRRZ** | **Handcock Road** | **2.84** | **239** | P | **Pb** | **04 47 48.6** | **-1.9** |
| **KMRZ** | **Kaimai** | **2.88** | **252** | P | **Pn** | **04 47 47.2** | **+1.6** |
| **ALRZ** | **Allen Road** | **2.89** | **236** | P | **Pn** | **04 47 47.4** | **+1.7** |
| **NMRZ** | **Naumai** | **2.94** | **223** | P | **Pn** | **04 47 48.2** | **+1.7** |
| **GRRZ** | **Naiatos Road** | **2.94** | **241** | P | **Pn** | **04 47 48.7** | **+2.2** |
| **KUZ** | **Kuaotunu** | **2.96** | **273** | P | **Pn** | **04 47 47.8** | **+1.2** |
| **KUZ** | **Kuaotunu** | **2.96** | **273** | P | **Pn** | **04 47 45.8** | **-0.8** |
| **ARHZ** | **Aropaoanui** | **2.96** | **219** | P | **Pn** | **04 47 48.1** | **+1.5** |
| **MRHZ** | **Matea Rd** | **2.99** | **231** | P | **Pn** | **04 47 48.8** | **+1.6** |
| **BKZ** | **Black Stump Fm** | **3.16** | **226** | P | **Pn** | **04 47 51.1** | **+1.6** |
| **BKZ** | **Black Stump Fm** | **3.16** | **226** | P | **Pn** | **04 47 50.8** | **+1.3** |
| **TOZ** | **Tahuroa Road** | **3.19** | **255** | P | **Pn** | **04 47 50.5** | **+0.7** |
| **KUTZ** | **Kaahu Road** | **3.21** | **241** | P | **Pn** | **04 47 52.2** | **+2.1** |
| **CKHZ** | **Cape Kidnapper** | **3.23** | **214** | P | **Pn** | **04 47 51.0** | **+0.6** |
| **GRZ** | **Great Barrier** | **3.25** | **282** | P | **Pn** | **04 47 52.1** | **+1.4** |
| **MCHZ** | **McNeill Hill** | **3.25** | **220** | P | **Pn** | **04 47 52.1** | **+1.5** |
| **TLZ** | **Tolley Road** | **3.34** | **245** | P | **Pn** | **04 47 53.9** | **+2.0** |
| **KWHZ** | **Kaweka Forest** | **3.38** | **223** | P | **Pn** | **04 47 54.1** | **+1.6** |
| **MKAZ** | **Moumakai** | **3.39** | **267** | P | **Pn** | **04 47 52.5** | **-0.1** |
| **WIAZ** | **Waiheke Island** | **3.42** | **272** | P | **Pn** | **04 47 54.0** | **+1.0** |
| **RATZ** | **Rangitukua** | **3.43** | **236** | P | **Pn** | **04 47 56.0** | **+2.9** |
| **KAHZ** | **Kahuranaki** | **3.44** | **214** | P | **Pn** | **04 47 53.7** | **+0.9** |
| **KRHZ** | **Kereru** | **3.57** | **221** | P | **Pn** | **04 47 55.8** | **+0.7** |
| **ETAZ** | **East Tamaki Re** | **3.58** | **269** | P | **Pn** | **04 47 56.8** | **+1.6** |
| **TMVZ** | **Te Maari** | **3.61** | **233** | P | **Pn** | **04 47 56.9** | **+1.2** |
| **MBAZ** | **Motutapu North** | **3.61** | **272** | P | **Pn** | **04 47 57.2** | **+1.6** |
| **ETVZ** | **East Tongariro** | **3.62** | **232** | P | **Pn** | **04 47 57.5** | **+1.7** |
| **NTVZ** | **North Tongarir** | **3.62** | **233** | P | **Pn** | **04 47 57.6** | **+1.8** |
| **PXZ** | **Pawanui** | **3.63** | **212** | P | **Pn** | **04 47 56.0** | **0.0** |
| **OTVZ** | **Oturere** | **3.66** | **232** | P | **Pn** | **04 47 59.3** | **+2.8** |
| **NNVZ** | **North Ngauruho** | **3.67** | **233** | P | **Pn** | **04 47 58.7** | **+2.0** |
| **ABAZ** | **Army Bay** | **3.68** | **275** | P | **Pn** | **04 47 58.6** | **+2.1** |
| **WTVZ** | **West Tongariro** | **3.68** | **234** | P | **Pn** | **04 47 59.5** | **+2.8** |
| **SNVZ** | **South Ngauruho** | **3.69** | **232** | P | **Pn** | **04 47 58.4** | **+1.6** |
| **NGZ** | **Ngauruhoe** | **3.71** | **233** | P | **Pn** | **04 47 59.0** | **+1.9** |
| **EPAZ** | **Eden Park BICE** | **3.73** | **270** | P | **Pn** | **04 47 59.9** | **+2.7** |
| **HBAZ** | **Herne Bay Bore** | **3.74** | **271** | P | **Pn** | **04 48 00.2** | **+2.8** |
| **MOVZ** | **Moawhango** | **3.75** | **229** | P | **Pn** | **04 47 58.6** | **+1.0** |
| **TWVZ** | **Taurewa** | **3.76** | **235** | P | **Pn** | **04 47 59.8** | **+2.0** |
| **AWAZ** | **Awhitu Peninsu** | **3.80** | **267** | P | **Pn** | **04 47 58.9** | **+0.6** |
| **PNHZ** | **Pukenui** | **3.85** | **220** | P | **Pn** | **04 47 59.7** | **+0.7** |
| **WTAZ** | **Waiatarua** | **3.86** | **269** | P | **Pn** | **04 48 01.6** | **+2.5** |
| **RVAZ** | **Riverhead Bore** | **3.87** | **272** | P | **Pn** | **04 48 01.0** | **+1.8** |
| **HIZ** | **Hauiti** | **3.91** | **246** | P | **Pn** | **04 48 01.4** | **+1.7** |
| **HIZ** | **Hauiti** | **3.91** | **246** | P | **Pn** | **04 48 01.9** | **+2.2** |
| **PRHZ** | **Porangahau** | **3.93** | **213** | P | **Pn** | **04 48 00.2** | **+0.2** |
| **PKVZ** | **Pokaka** | **3.94** | **233** | P | **Pn** | **04 48 03.1** | **+2.9** |
| **ANWZ** | **Angora Road** | **4.16** | **212** | P | **Pn** | **04 48 04.2** | **+1.1** |
| **DVHZ** | **Dannevirke** | **4.17** | **216** | P | **Pn** | **04 48 03.2** | **0.0** |
| **WCZ** | **Waipu Caves** | **4.20** | **283** | P | **Pn** | **04 48 05.2** | **+1.5** |
| **VRZ** | **Vera Road** | **4.24** | **238** | P | **Pn** | **04 48 06.6** | **+2.3** |
| **POWZ** | **Post Office Ro** | **4.43** | **219** | P | **Pn** | **04 48 07.2** | **+0.3** |
| **WAZ** | **Wanganui** | **4.43** | **230** | P | **Pn** | **04 48 08.8** | **+1.8** |
| **PRWZ** | **Pori Road** | **4.46** | **216** | P | **Pn** | **04 48 07.6** | **+0.3** |
| **LREZ** | **Lake Rotokare** | **4.64** | **236** | P | **Pn** | **04 48 12.4** | **+2.6** |
| **MRZ** | **Mangatainoka R** | **4.73** | **218** | P | **Pn** | **04 48 10.1** | **-0.9** |
| **NEZ** | **North Egmont** | **4.76** | **240** | P | **Pn** | **04 48 15.8** | **+4.3** |
| **PKE** | **Pukeiti** | **4.80** | **241** | P | Pn | 04 48 17.0 | +5.0 |
| **KHEZ** | **Kahui Hut** | **4.83** | **240** | P | **Pn** | **04 48 16.8** | **+4.3** |
| **NBEZ** | **Newall Road No** | **4.92** | **241** | P | Pn | 04 48 19.2 | +5.6 |

**TMWZ Te Maipa 4.94 212** P **Pn** **04 48 12.4 -1.5**
**OUZ Omahuta 5.01 289** P **Pn** **04 48 16.9 +2.0**
**QRZ Quartz Range 6.59 232** P **Pn** **04 48 36.7 +0.2**
**KHZ Kahutara 7.06 218** P **Pn** **04 48 44.2 +1.3**
**CTZ Chatham Island 7.40 157** P **Pn** **04 48 51.0 +3.4**
**RPZ Rata Peaks 9.26 221** Pn **Pn** **04 49 10.2 -3.0**
0.7nm,0.3s,baz=59,slow=5.9,SNR=1.6
RPZ Sn Sn 04 50 44.8 -12
4.0nm,0.3s,baz=49,slow=11,SNR=12
**ODZ Otahua Downs 10.41 217** P **Pn** **04 49 27.4 -1.6**
**ASAR Alice Springs 41.08 276** P **P** **04 54 42.9 -0.7**
3.8nm,0.8s,baz=118,slow=7.5,SNR=22
3.8nm,0.8s
**WRA Warramunga Arr 42.67 281** P **P** **04 54 56.2 -0.4**
1.5nm,0.4s,baz=121,slow=7.7,SNR=44
1.5nm,0.4s
**H03S2 Juan Fernandez 78.64 124** T T 06 25 46.6
baz=230,slow=74,SNR=5.1
**H03S1 Juan Fernandez 78.64 124** T T 06 25 48.0
baz=230,slow=74,SNR=5.6
**H03S3 Juan Fernandez 78.65 124** T T 06 25 44.3
baz=230,slow=74,SNR=5.7
**H03N3 Juan Fernandez 78.86 123** T T 06 25 58.6
baz=235,slow=72,SNR=12
**H03N2 Juan Fernandez 78.87 123** T T 06 25 58.0
baz=235,slow=72,SNR=11
**H03N1 Juan Fernandez 78.88 123** T T 06 26 06.1
baz=235,slow=72,SNR=13
**ARCES ARCESS Array B 144.45 345** PKP PKPbc 05 06 34.1 +0.6
2.5nm,0.9s,baz=22,slow=3.9,SNR=4.4
**FINES FINESS Array B 150.35 334** PKPbc **PKPbc** **05 06 50.2 0.0**
0.7nm,0.8s,baz=42,slow=3.1,SNR=5.3

**DJA 17 04:52:32.4±0.6, 11°S±5°×11°8E±°, h10km, M4.0/7, mb4.3/2, MLv3.9/7, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **1.86** | **39** | P | Pn | 04 53 05.0 | +0.5 |
| WBSI | | | | S | Sn | 04 53 28.3 | +0.2 |
| **PLAI** | **Plampang** | **2.30** | **349** | P | Pb | 04 53 12.3 | -1.7 |
| PLAI | | | | S | Sn | 04 53 38.2 | -0.5 |
| **TWSI** | **Taliwang, Sumb** | **2.68** | **331** | P | Pn | 04 53 17.1 | +1.4 |
| TWSI | | | | S | Sn | 04 53 48.3 | +0.1 |
| **IGBI** | **Denpasar** | **3.77** | **307** | P | Pn | 04 53 30.3 | -0.3 |
| **EDFI** | **Ende, Flores** | **4.16** | **56** | P | Pn | 04 53 34.9 | -1.2 |
| **SRBI** | **Singaraja** | **4.20** | **315** | P | Pn | 04 53 36.5 | -0.1 |
| SRBI | | | | S | Sn | 04 54 27.8 | +2.0 |
| **JAGI** | **Jajag, Banyuwa** | **4.77** | **303** | P | Pn | 04 53 42.4 | -2.0 |
| **PWJI** | **Pagerwojo** | **7.01** | **295** | P | Pn | 04 54 14.7 | -0.5 |
| | 13nm,1.7s | | | | | | |
| **UGM** | **Wanagama** | **8.21** | **292** | P | Pn | 04 54 31.2 | -0.5 |

*NEIC 17 05:05:35.6±2.0, 31°86N±0°02×115°84W±0°02, h10km±6km, Error ellipse: s-maj=2.6km s-min=2.0km az=132.0*
*PAS 17 05:05:36.6±2.1, 31°898N±0°005×115°83W±0°02, h9km±8km, ML3.2/89, ML3.2/35(NEIC), Error ellipse: s-maj=2.2km s-min=0.3km az=71.0*
*MEX 17 05:05:37.8±0.4, 31°85N×115°87W, h20km±8km, MD3.3*
**ECX 17 05:05:36.8±0.6, 31°91N×115°81W, h3km±2km, MD3.0, ML3.3, 9C-14D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ALAMX** | **Rancho Alamar** | **0.14** | **41** | ⇑*iP* | Pg | 05 05 39.4 | -0.1 |
| ALAMX | | | | *eS* | Sg | 05 05 41.3 | 0.0 |
| ALAMX | | | | ⇑*e* | | 05 05 41.7 | |
| ALAMX | | | | IAML | | 05 05 41.7 | |
| | comp=E,17μm,0.2s | | | | | | |
| ALAMX | | | | IAML | | 05 05 41.9 | |
| | comp=N,15μm,0.2s | | | | | | |
| ALAMX | | | | ⇑*e* | | 05 05 41.9 | |
| **ESJX** | **Sierra Juarez** | **0.15** | **311** | | Pg | 05 05 39.8 | -0.1 |
| ESJX | | | | | Sg | 05 05 42.1 | +0.2 |
| **ESJX** | **Sierra Juarez** | **0.15** | **311** | IAML | | 05 05 42.5 | |
| | comp=N,19μm,0.1s | | | | | | |
| ESJX | | | | IAML | | 05 05 42.7 | |
| | comp=E,26μm,0.1s | | | | | | |
| **SJX** | **San Joaquin** | **0.19** | **221** | ⇓*iP* | Pg | 05 05 39.8 | -0.6 |
| SJX | | | | *eS* | Sg | 05 05 42.1 | -0.8 |
| SJX | | | | IAML | | 05 05 42.5 | |
| | comp=N,28μm,0.1s | | | | | | |
| SJX | | | | ⇓*e* | | 05 05 42.5 | |
| SJX | | | | ⇑*e* | | 05 05 42.7 | |
| SJX | | | | IAML | | 05 05 42.7 | |
| | comp=E,34μm,0.1s | | | | | | |
| **VTX** | **Valle De La Tr** | **0.51** | **177** | | Pg | 05 05 46.1 | -0.5 |
| VTX | | | | | Sg | 05 05 53.0 | -0.3 |
| **VTX** | **Valle De La Tr** | **0.51** | **177** | IAML | | 05 05 54.2 | |
| | comp=E,2μm,0.4s | | | | | | |
| VTX | | | | IAML | | 05 05 54.5 | |
| | comp=N,830nm,0.1s | | | | | | |
| **VTX** | **Valle De La Tr** | **0.51** | **177** | ⇓*eP* | Pg | 05 05 46.1 | -0.5 |
| VTX | | | | *eS* | Sg | 05 05 53.2 | -0.1 |
| VTX | | | | IAML | | 05 05 53.5 | |
| | comp=E,1μm,0.1s | | | | | | |
| VTX | | | | *e* | | 05 05 53.5 | |
| VTX | | | | IAML | | 05 05 54.5 | |
| | comp=N,822nm,0.1s | | | | | | |
| VTX | | | | *e* | | 05 05 54.5 | |
| **JARAX** | **Ej. Heriberto** | **0.66** | **17** | *eP* | Pg | 05 05 48.6 | -0.9 |
| JARAX | | | | *eS* | Sg | 05 05 58.3 | +0.2 |
| **CPBX** | **Cerro Prieto** | **0.67** | **40** | | Pg | 05 05 49.8 | +0.2 |
| **CPBX** | **Cerro Prieto** | **0.67** | **40** | | Sb | 05 05 59.7 | -1.2 |
| **CPBX** | **Cerro Prieto** | **0.67** | **40** | IAML | | 05 06 02.3 | |
| | comp=E,9μm,0.4s | | | | | | |
| CPBX | | | | IAML | | 05 06 02.5 | |
| | comp=N,5μm,0.5s | | | | | | |
| **MBIG** | **Mexicali** | **0.72** | **46** | *eP* | Pg | 05 05 51.3 | +0.6 |
| MBIG | | | | *eS* | Sb | 05 06 01.8 | -0.6 |
| **CCX** | **Cicese** | **0.73** | **267** | | Pg | 05 05 50.2 | -0.6 |
| **CCX** | **Cicese** | **0.73** | **267** | | Sg | 05 05 60.0 | -0.2 |
| **CCX** | **Cicese** | **0.73** | **267** | ⇑*iP* | Pg | 05 05 50.2 | -0.5 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CBX | | | | IAML | | | 05 06 04.2 | |
| | comp=E,1µm,0.5s | | | | | | | |
| **CBX** | **Cerro Bola** | **0.83** | **300** | ⇓*iP* | | Pg | 05 05 52.0 | -0.7 |
| CBX | | | | *eS* | | Sg | 05 06 03.0 | -0.5 |
| CBX | | | | ⇓*e* | | | 05 06 04.3 | |
| CBX | | | | IAML | | | 05 06 04.3 | |
| | comp=E,1µm,0.3s | | | | | | | |
| **WESC** | **Westside Schoo** | **0.85** | **5** | | | Pg | 05 05 52.9 | -0.3 |
| WESC | | | | | | Sg | 05 06 04.7 | +0.4 |
| **5054** | **Holtville Bond** | **0.88** | **27** | | | Pg | 05 05 53.8 | 0.0 |
| **TJIG** | **Tijuana** | **0.90** | **306** | *eP* | | Pg | 05 05 52.7 | -1.4 |
| TJIG | | | | *eS* | | Sg | 05 06 04.5 | -1.3 |
| **TJIG** | **Tijuana** | **0.90** | **306** | ⇓*iP* | | Pg | 05 05 52.8 | -1.3 |
| TJIG | | | | *eS* | | Sg | 05 06 04.6 | -1.2 |
| TJIG | | | | IAML | | | 05 06 06.4 | |
| | comp=E,636nm,0.1s | | | | | | | |
| TJIG | | | | ⇓*e* | | | 05 06 06.4 | |
| TJIG | | | | IAML | | | 05 06 06.8 | |
| | comp=N,632nm,0.1s | | | | | | | |
| TJIG | | | | ⇑*e* | | | 05 06 06.8 | |
| **SPIG** | **San Pedro Mart** | **0.91** | **161** | *eP* | | Pg | 05 05 53.5 | -0.7 |
| SPIG | | | | *eS* | | Sg | 05 06 04.9 | -1.0 |
| **SPIG** | **San Pedro Mart** | **0.91** | **161** | ⇓*iP* | | Pg | 05 05 53.5 | -0.7 |
| SPIG | | | | *eS* | | Sg | 05 06 05.4 | -0.6 |
| **COK2** | **Cook Ranch 2** | **0.94** | **4** | | | Pg | 05 05 54.7 | -0.3 |
| COK2 | | | | | | Sg | 05 06 08.0 | +0.8 |
| **TKX** | **Tecate** | **0.94** | **315** | | | Pg | 05 05 53.2 | -1.7 |
| **TKX** | **Tecate** | **0.94** | **315** | | | Sg | 05 06 06.1 | -1.1 |
| **TKX** | **Tecate** | **0.94** | **315** | IAML | | | 05 06 08.8 | |
| | comp=E,1µm,0.2s | | | | | | | |
| TKX | | | | IAML | | | 05 06 11.0 | |
| | comp=N,614nm,0.2s | | | | | | | |
| **TKX** | **Tecate** | **0.94** | **315** | *eP* | | Pg | 05 05 53.3 | -1.7 |
| TKX | | | | *eS* | | Sg | 05 06 05.9 | -1.3 |
| **DREC** | **Desert Rsrch C** | **0.95** | **19** | | | Pg | 05 05 54.9 | -0.1 |
| **CRR** | **Carrizo Plain** | **0.99** | **352** | | | Pg | 05 05 55.0 | -0.8 |
| **SNR** | **Schaffner Ranc** | **1.00** | **18** | | | Pg | 05 05 55.6 | -0.5 |
| SNR | | | | | | Sb | 05 06 10.0 | -0.5 |
| **IMPE** | **Imperial** | **1.02** | **12** | | | Pg | 05 05 56.3 | 0.0 |
| IMPE | | | | | | Sb | 05 06 10.7 | -0.2 |
| **SWSC** | **Sam W. Stewart** | **1.04** | **1** | | | Sg | 05 06 09.7 | -0.5 |
| **BAR** | **Barrett** | **1.06** | **317** | | | Pg | 05 05 55.6 | -1.5 |
| BAR | | | | | | Sg | 05 06 09.6 | -1.3 |
| **DUZA** | **Dulzura** | **1.07** | **311** | | | Pg | 05 05 55.7 | -1.7 |
| DUZA | | | | | | Sg | 05 06 09.8 | -1.5 |
| **EMSC** | **East Mesa** | **1.09** | **40** | | | Pg | 05 05 56.2 | -1.4 |
| **MONP2** | **Monument Peak** | **1.11** | **332** | | | Pg | 05 05 56.9 | -1.2 |
| **MONP2** | **Monument Peak** | **1.11** | **332** | ⇓*iP* | | Pg | 05 05 56.9 | -1.2 |
| **COA** | **Coachella** | **1.12** | **31** | | | Sg | 05 06 13.3 | +0.5 |
| **WEMD** | **Westmorland, C** | **1.15** | **10** | | | Sb | 05 06 14.8 | +0.2 |
| **OLP** | **Otay Lakes Par** | **1.18** | **307** | | | Pg | 05 05 57.7 | -1.7 |
| OLP | | | | | | Sg | 05 06 13.0 | -1.6 |
| **OLP** | **Otay Lakes Par** | **1.18** | **307** | *eP* | | Pg | 05 05 57.3 | -2.1 |
| OLP | | | | *eS* | | Sg | 05 06 12.9 | -1.8 |
| **ERRC** | **Elmore Ranch** | **1.21** | **360** | | | Sb | 05 06 16.6 | +0.3 |
| **TJX** | **Tijuana** | **1.21** | **300** | | | Sg | 05 06 17.2 | -0.6 |
| **TJX** | **Tijuana** | **1.21** | **300** | | | Pg | 05 05 58.6 | -1.4 |
| **TJX** | **Tijuana** | **1.21** | **300** | IAML | | | 05 06 19.4 | |
| | comp=E,1µm,0.8s | | | | | | | |
| TJX | | | | IAML | | | 05 06 21.6 | |
| | comp=N,746nm,0.8s | | | | | | | |
| **SDRC** | **San Diego Road** | **1.27** | **311** | | | Pg | 05 05 58.9 | -2.2 |
| **RUN** | **Ruthven** | **1.28** | **33** | | | Pg | 05 05 58.6 | -2.7 |
| **EML** | **El Monte Cty P** | **1.32** | **319** | | | Pg | 05 05 59.8 | -2.3 |
| **CORX** | **Isla Coronado** | **1.32** | **293** | *eP* | | Pg | 05 05 59.9 | -2.2 |
| **SQX** | **San Quintin** | **1.33** | **182** | *eP* | | Pg | 05 05 59.7 | -2.5 |
| SQX | | | | *eS* | | Sg | 05 06 17.2 | -2.2 |
| SQX | | | | IAML | | | 05 06 20.7 | |
| | comp=N,561nm,0.2s | | | | | | | |
| SQX | | | | *e* | | | 05 06 20.7 | |
| SQX | | | | IAML | | | 05 06 20.7 | |
| | comp=E,723nm,0.3s | | | | | | | |
| SQX | | | | ⇑*e* | | | 05 06 20.7 | |
| **SLH** | **Sleepy Hollow** | **1.34** | **344** | | | Pn | 05 06 00.9 | -1.5 |
| **JUEM** | **Julian Eagle M** | **1.35** | **331** | | | Pg | 05 06 01.0 | -1.7 |
| JUEM | | | | | | Sg | 05 06 19.2 | -0.9 |
| **GLA** | **Glamis** | **1.41** | **36** | | | Pn | 05 06 00.2 | -3.3 |
| GLA | | | | IAML | | | 05 06 28.8 | |
| | comp=E,149nm,0.6s | | | | | | | |
| **SDMC** | **San Diego Miss** | **1.42** | **308** | | | Sg | 05 06 20.8 | -1.8 |
| **DPP** | **Dos Picos Cty** | **1.45** | **319** | | | Pn | 05 06 02.0 | -2.0 |
| DPP | | | | | | Sb | 05 06 21.5 | -1.9 |
| **109C** | **Camp Elliot, M** | **1.47** | **312** | | | Pn | 05 06 18.0 | -2.4 |
| 109C | | | | IAML | | | 05 06 23.4 | |
| | comp=N,542nm,0.2s | | | | | | | |
| **CPE** | **Camp Elliot** | **1.47** | **312** | | | Pn | 05 06 02.2 | -2.0 |
| CPE | | | | | | Sb | 05 06 21.1 | -2.8 |
| **MATG** | **Mataguay Scout** | **1.47** | **332** | | | Pn | 05 06 03.2 | -1.2 |
| MATG | | | | | | Sb | 05 06 22.4 | -1.7 |
| **PLM** | **Palomar** | **1.69** | **329** | | | Pn | 05 06 06.3 | -1.2 |
| **FRD** | **Ford Ranch, An** | **1.72** | **337** | | | Pn | 05 06 06.0 | -1.8 |
| **FRD** | **Ford Ranch, An** | **1.72** | **337** | | | Pn | 05 06 06.0 | -1.8 |
| **GORC** | **Green Oak Ranc** | **1.73** | **317** | | | Pn | 05 06 06.7 | -1.1 |
| GORC | | | | | | Sn | 05 06 29.0 | -1.4 |
| **BZNA** | **Buzz No.'s Pla** | **1.74** | **336** | | | Pn | 05 06 08.5 | +0.4 |
| **SNDA** | **J Saunders Pla** | **1.78** | **338** | | | Pn | 05 06 07.0 | -1.6 |
| **PFO** | **Pinyon Flats O** | **1.79** | **342** | Pn | | Pn | 05 06 06.3 | -2.4 |
| **PMD** | **Palm Desert** | **1.80** | **345** | | | Pn | 05 06 06.7 | -2.2 |
| **CRY** | **Cary Ranch** | **1.83** | **335** | | | Pn | 05 06 10.0 | +0.7 |
| **113A** | **Mohawk Valley,** | **1.93** | **63** | Pn | | Pn | 05 06 08.2 | -2.4 |
| **BACC** | **Bachelor Mtn.** | **1.99** | **329** | | | Pn | 05 06 11.6 | +0.1 |
| **POB** | **Polly Butte** | **2.01** | **333** | | | Pn | 05 06 10.4 | -1.3 |
| **DGR** | **Domenigoni Val** | **2.01** | **330** | | | Pn | 05 06 11.9 | +0.1 |
| **HMTC** | **Hemet** | **2.06** | **331** | | | Pn | 05 06 12.9 | +0.5 |
| **EW2** | **E Wide Canyon** | **2.09** | **346** | | | Pb | 05 06 15.2 | -0.3 |
| **BLYC** | **Blythe** | **2.14** | **30** | | | Pn | 05 06 12.6 | -0.9 |
| **TPC** | **Twentynine Pal** | **2.20** | **355** | | | Pb | 05 06 18.1 | +0.8 |
| **ELS** | **Elsinore Mount** | **2.21** | **322** | | | Pn | 05 06 13.6 | -0.8 |
| ELS | | | | IAML | | | 05 06 45.3 | |
| | comp=E,122nm,0.3s | | | | | | | |
| ELS | | | | IAML | | | 05 06 46.0 | |
| | comp=N,88nm,0.4s | | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.55** | **88** | | | Pn | 05 06 16.7 | -2.5 |
| **CIAC** | **Catalina I. Ai** | **2.65** | **305** | | | Pn | 05 06 16.2 | -4.3 |
| **SSK** | **Sunset Peak** | **2.79** | **326** | | | Pn | 05 06 25.0 | +2.4 |
| **GR2C** | **Griffith Obs.** | **3.04** | **317** | | | Pb | 05 06 29.6 | -2.0 |
| **Y14A** | **Wickenburg** | **3.11** | **49** | | | Pn | 05 06 26.0 | -0.9 |
| **LAPR** | **La Primavera** | **3.30** | **114** | *e* | | Pg | 05 06 39.1 | -1.0 |
| **TUC** | **Tucson** | **4.29** | **83** | *e* | | Pg | 05 07 01.4 | +2.5 |
| TUC | | | | *e* | | | 05 07 44.5 | |
| **X16A** | **Lo Mia Camp, P** | **4.44** | **54** | Pn | | Pn | 05 06 44.5 | -0.7 |
| **U15A** | **North Rim** | **5.37** | **32** | Pn | | Pn | 05 06 58.4 | +0.2 |
| **KNB** | **Kanab** | **5.67** | **25** | Pn | | Pn | 05 07 02.5 | +0.4 |

**TRN 17 05:48:01.2, 14°.85N×59°.26W, h44km, MD4.0, Far East of Martinique., Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILAM** | **Ilet Lapin Mar** | **1.56** | **267** | *eP* | Pn | 05 48 28.4 | +1.9 |
| ILAM | | | | *eS* | Sn | 05 48 48.3 | +2.8 |
| **MPOM** | **Morne Pois Mar** | **1.60** | **256** | *eP* | Pn | 05 48 28.0 | +1.0 |
| **MVM** | **Montagne Vaucl** | **1.61** | **260** | *eP* | Pn | 05 48 28.3 | +1.1 |
| **LPMF** | **Morne Lapointe** | **1.68** | **261** | *eP* | Pn | 05 48 28.9 | +0.9 |
| **BBGH** | **Gun Hill** | **1.72** | **190** | *eP* | Pn | 05 48 31.4 | +2.6 |
| BBGH | | | | *eS* | Sn | 05 48 51.9 | +2.3 |
| **BIM** | **Bigot** | **1.79** | **259** | *eP* | Pn | 05 48 31.1 | +1.5 |
| BIM | | | | *eS* | Sn | 05 48 53.4 | +2.3 |
| **FDF** | **Fort de France** | **1.83** | **267** | *eP* | Pn | 05 48 31.6 | +1.4 |
| **GBMF** | **Grand Be** | **1.84** | **269** | *eP* | Pn | 05 48 32.1 | +1.7 |
| **SVN** | **Savane Anatole** | **1.85** | **270** | *eP* | Pn | 05 48 31.4 | +0.9 |
| SVN | | | | *eS* | Sn | 05 48 54.0 | +1.4 |
| **SLAC** | **Saint Lucia, A** | **1.85** | **239** | *eP* | Pn | 05 48 31.8 | +1.4 |
| SLAC | | | | *eS* | Sn | 05 48 55.0 | +2.4 |
| **SLBI** | **Saint Lucia, B** | **1.85** | **244** | *eP* | Pn | 05 48 31.8 | +1.3 |
| SLBI | | | | *eS* | Sn | 05 48 55.0 | +2.2 |
| **PML** | **Morne Lenard** | **1.86** | **268** | *eP* | Pn | 05 48 32.2 | +1.6 |
| **PCM** | **Pelee Case Pet** | **1.89** | **269** | *eP* | Pn | 05 48 32.2 | +1.2 |
| **MAGL** | **Barre de l'ile** | **2.23** | **299** | *eP* | Pn | 05 48 37.1 | +1.4 |
| **SVB** | **Belmont** | **2.49** | **231** | *eP* | Pn | 05 48 40.8 | +1.5 |
| SVB | | | | *eS* | Sn | 05 49 10.6 | +2.1 |
| **TDBA** | **Terre de Bas,** | **2.50** | **294** | *eP* | Pn | 05 48 41.4 | +2.1 |
| **TBG** | **Guadaloupe-3** | **2.51** | **294** | *eP* | Pn | 05 48 41.5 | +2.0 |
| TBG | | | | *eS* | Sn | 05 49 10.9 | +2.1 |
| **SVOC** | **Richmond Hill,** | **2.55** | **229** | *eP* | Pn | 05 48 42.0 | +2.1 |
| SVOC | | | | *eS* | Sn | 05 49 11.7 | +1.9 |
| **SVT** | **Saint Vincent** | **2.55** | **229** | *eP* | Pn | 05 48 41.4 | +1.4 |
| SVT | | | | *eS* | Sn | 05 49 10.6 | +0.7 |
| **CBE** | **Ff, Capester** | **2.57** | **298** | *eP* | Pn | 05 48 42.2 | +1.9 |
| **ABD** | **La Joyeuse, An** | **2.69** | **307** | *eP* | Pn | 05 48 42.7 | +0.8 |
| **GCMP** | **Grenada, Carri** | **3.16** | **222** | *eP* | Pn | 05 48 50.4 | +2.0 |
| GCMP | | | | *eS* | Sn | 05 49 26.3 | +1.4 |
| **ANBD** | **Bethesda, Anti** | **3.25** | **312** | *eP* | Pn | 05 48 50.6 | +0.9 |
| ANBD | | | | *eS* | Sn | 05 49 27.9 | +0.7 |
| **MBWH** | | **3.39** | **304** | *eP* | Pn | 05 48 53.4 | +1.7 |
| MBWH | | | | *eS* | Sn | 05 49 31.8 | +1.1 |
| **MBFL** | **Flemmings, Mon** | **3.41** | **304** | *eP* | Pn | 05 48 53.1 | +1.2 |
| MBFL | | | | *eS* | Sn | 05 49 31.8 | +0.7 |
| **GRHS** | **Sauteurs** | **3.49** | **222** | *eP* | Pn | 05 48 55.7 | +2.7 |
| **GRGR** | **Grenville** | **3.57** | **221** | *eP* | Pn | 05 48 56.2 | +2.1 |
| GRGR | | | | *eS* | Sn | 05 49 36.2 | +1.2 |
| **ANWB** | **Willy Bob** | **3.71** | **319** | *eP* | Pn | 05 48 59.5 | +3.6 |
| ANWB | | | | *eS* | Sn | 05 49 39.6 | +1.2 |
| **TRN** | **Trinidad (W)** | **4.67** | **207** | *eP* | Pn | 05 49 12.0 | +2.7 |
| TRN | | | | *eS* | Sn | 05 50 02.0 | -0.2 |

*SOF* ***17*** *05:54:50.7, 40°.65N±0°.02×26°.79E±0°.01, h2km±3km, MD3.7/6*
*ISK* ***17*** *05:54:55.4, 40°.85N×26°.51E, h10km, ML3.6/84*
*AFAD* ***17*** *05:54:55.2±0.0, 40°.88N×26°.43E, h20km±1km, MW3.7*
*THE* ***17*** *05:54:56.2, 40°.89N×26°.49E, h10km±1km, ML3.5/10, Error ellipse: s-maj=1.5km s-min=0.8km az=311.0*
*MCSM* ***17*** *05:54:58.2±1.5, 40°.N±12°×2°.6E±°, h67km±36km, mb3.9, mB4.6, MLv4.1, Mw(mB)3.8*
*ATH* ***17*** *05:54:58.4, 40°.77N×26°.31E, h10km±1km, ML3.4/8, Error ellipse: s-maj=2.5km s-min=1.1km az=55.0*

**ISC 17 05:54:56.4±0.8, 40°.84N±0°.02×26°.49E±0°.02, h12km±6km, n172, σ1°23/212, 10C-12D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ERIK** | **Erikli-Kesan** | **0.17** | **173** | Pg | **Pg** | **05 54 59.9** | **-0.4** |
| ERIK | | | | Sg | **Sg** | **05 55 02.7** | **-0.3** |
| **ENEZ** | **Enez** | **0.27** | **248** | Pg | **Pg** | **05 55 01.9** | **-0.1** |
| ENEZ | | | | Sg | **Sg** | **05 55 06.6** | **+0.7** |
| **ENEZ** | **Enez** | **0.27** | **248** | P | **Pg** | **05 55 02.0** | **-0.1** |
| ENEZ | | | | S | **Sg** | **05 55 06.7** | **+0.8** |
| | 9µm,0.5s | | | | | | |
| **CAVK** | **Edirne/Enez-Ca** | **0.28** | **239** | P | **Pg** | **05 55 01.8** | **-0.5** |
| CAVK | | | | S | **Sg** | **05 55 06.5** | **+0.3** |
| **CAVK** | **Edirne/Enez-Ca** | **0.28** | **239** | ⇑P | **Pg** | **05 55 02.0** | **-0.3** |
| **UKOP** | **Uzunkopru-Edir** | **0.31** | **21** | Pg | **Pg** | **05 55 02.3** | **-0.5** |
| **ALN** | **Alexandroupoli** | **0.34** | **280** | Pg | **Pg** | **05 55 02.8** | **-0.5** |
| **ALN** | **Alexandroupoli** | **0.34** | **280** | P | **Pg** | **05 55 02.7** | **-0.5** |
| ALN | | | | S | **Sg** | **05 55 08.3** | **+0.4** |
| | 5µm,0.6s | | | | | | |
| **ALN** | **Alexandroupoli** | **0.34** | **280** | P | **Pg** | **05 55 02.8** | **-0.5** |
| ALN | | | | S | **Sg** | **05 55 06.9** | **-1.1** |
| ALN | | | | AML | AML | 05 55 12.6 | |
| | comp=N,12057µm,0.4s | | | | | | |
| ALN | | | | AML | AML | 05 55 12.8 | |
| | comp=E,12454µm,0.4s | | | | | | |
| **ENZZ** | **Sultanice-Enez** | **0.35** | **229** | Pg | **Pg** | **05 55 03.1** | **-0.4** |
| **GELI** | **Tayfur-Gelibol** | **0.44** | **181** | Pg | **Pg** | **05 55 04.9** | **-0.2** |
| GELI | | | | Sg | **Sg** | **05 55 11.6** | **+0.6** |
| **LPK** | **Lapseki** | **0.51** | **156** | Pg | **Pg** | **05 55 06.2** | **-0.2** |
| **RKY** | **Sarkoy-Tekirda** | **0.55** | **106** | Pg | **Pg** | **05 55 06.5** | **-0.6** |
| **KRBG** | **Karabiga-Canak** | **0.76** | **126** | Pg | **Pg** | **05 55 10.2** | **-0.9** |
| **GOKC** | **Gokceada-Canak** | **0.77** | **214** | Pg | **Pg** | **05 55 10.9** | **-0.5** |
| **GADA** | **Gvkgeada** | **0.79** | **215** | Pg | **Pg** | **05 55 11.3** | **-0.4** |
| **GOAD** | **anakkale-Gʈ** | **0.81** | **213** | P | **Pg** | **05 55 11.1** | **-0.9** |
| GOAD | | | | S | **Sb** | **05 55 23.6** | **+0.4** |
| **TKR** | **Tekirdag** | **0.81** | **79** | Pg | **Pg** | **05 55 11.2** | **-0.9** |
| **SMTH** | **Samothraki Isl** | **0.82** | **244** | P | **Pg** | **05 55 11.3** | **-0.9** |
| SMTH | | | | S | **Sb** | **05 55 24.7** | **+1.3** |
| **SMTH** | **Samothraki Isl** | **0.82** | **244** | P | **Pg** | **05 55 11.2** | **-1.0** |
| SMTH | | | | S | **Sg** | **05 55 20.1** | **-2.7** |
| **ECEA** | **Canakkale, Ece** | **0.83** | **197** | P | **Pg** | **05 55 12.2** | **-0.3** |
| ECEA | | | | S | **Sb** | **05 55 24.5** | **+0.8** |
| **MRMT** | **Marmara Adasi** | **0.87** | **105** | Pg | **Pg** | **05 55 11.9** | **-1.4** |
| **CRLT** | **Corlu** | **0.99** | **73** | Pg | **Pg** | **05 55 14.5** | **-1.0** |
| **EZN** | **Ezine** | **1.02** | **187** | Pg | **Pg** | **05 55 14.8** | **-1.2** |
| **EZN** | **Ezine** | **1.02** | **187** | P | **Pg** | **05 55 14.9** | **-1.1** |
| EZN | | | | S | **Sn** | **05 55 31.4** | **+0.8** |
| | comp=E,5µm,0.6s | | | | | | |
| **EZN** | **Ezine** | **1.02** | **187** | P | **Pg** | **05 55 14.6** | **-1.4** |
| **EDRB** | **Edirne** | **1.03** | **11** | Pg | **Pg** | **05 55 14.9** | **-1.3** |
| **EDRB** | **Edirne** | **1.03** | **11** | P | **Pg** | **05 55 14.7** | **-1.5** |
| EDRB | | | | S | **Sg** | **05 55 28.4** | **-1.2** |
| **KIRK** | **Kırklareli** | **1.05** | **26** | P | **Pg** | **05 55 14.7** | **-1.9** |
| KIRK | | | | S | **Sg** | **05 55 28.4** | **-1.9** |
| **BAYC** | **CANAKKALE_Bayr** | **1.10** | **178** | P | **Pb** | **05 55 17.0** | **-0.3** |
| BAYC | | | | S | **Sn** | **05 55 34.0** | **+1.4** |
| **EDC** | **Edincik** | **1.16** | **115** | Pn | **Pb** | **05 55 17.6** | **-0.7** |
| EDC | | | | Sn | **Sn** | **05 55 34.4** | **+0.3** |
| **KDZ** | **Kurdzhali** | **1.17** | **313** | Pn | **Pb** | **05 55 18.4** | **-0.1** |
| **KDZ** | **Kurdzhali** | **1.17** | **313** | *i* P | **Pb** | **05 55 18.5** | **-0.1** |
| KDZ | | | | S | **Sn** | **05 55 38.5** | **+4.0** |
| **GONE** | **Gonen-Balikesi** | **1.21** | **130** | Pn | **Pn** | **05 55 18.9** | **-0.2** |
| **BAND** | **Balkesir-Ban** | **1.32** | **111** | P | **Pn** | **05 55 20.0** | **-0.6** |
| BAND | | | | S | **Sg** | **05 55 38.8** | **-0.1** |
| **BAND** | **Balkesir-Ban** | **1.32** | **111** | ⇓P | **Pb** | **05 55 21.2** | **+0.1** |
| BAND | | | | ⇓S | **Sg** | **05 55 39.6** | **+0.7** |
| **SLVT** | **Silivri** | **1.36** | **73** | Pn | **Pn** | **05 55 20.4** | **-0.8** |
| **KOCA** | **Canakkale, Ayv** | **1.36** | **191** | P | **Pn** | **05 55 20.8** | **-0.4** |
| KOCA | | | | S | **Sn** | **05 55 39.9** | **+0.8** |
| **THAS** | **Thassos island** | **1.36** | **261** | P | **Pn** | **05 55 20.1** | **-1.1** |
| THAS | | | | S | **Sb** | **05 55 38.7** | **-0.5** |
| | comp=E,730nm,0.3s | | | | | | |
| **THAS** | **Thassos island** | **1.36** | **261** | P | **Pn** | **05 55 20.4** | **-0.8** |
| THAS | | | | S | **Sb** | **05 55 37.0** | **-2.1** |
| THAS | | | | AML | AML | 05 55 42.0 | |
| | comp=N,1490µm,0.3s | | | | | | |
| THAS | | | | AML | AML | 05 55 47.3 | |
| | comp=E,1446µm,0.4s | | | | | | |
| **LIA** | **Limnos Island** | **1.37** | **227** | P | **Pn** | **05 55 20.2** | **-1.1** |
| LIA | | | | S | **Sg** | **05 55 40.2** | **-0.3** |
| | comp=E,3µm,0.5s | | | | | | |
| **LIA** | **Limnos Island** | **1.37** | **227** | P | **Pn** | **05 55 20.4** | **-0.9** |
| LIA | | | | S | **Sb** | **05 55 36.7** | **-2.6** |
| LIA | | | | AML | AML | 05 55 45.1 | |
| | comp=N,5831µm,0.5s | | | | | | |
| LIA | | | | AML | AML | 05 55 45.6 | |
| | comp=E,4259µm,0.5s | | | | | | |
| **DIM** | **Dimitrovgrad** | **1.39** | **331** | P | **Pn** | **05 55 21.7** | **+0.2** |
| **GPNR** | **Gulpinar-Canak** | **1.41** | **191** | Pn | **Pn** | **05 55 21.7** | **-0.1** |
| **BUHA** | **Balíkesir, Bur** | **1.41** | **161** | P | **Pn** | **05 55 21.9** | **0.0** |
| BUHA | | | | S | **Sn** | **05 55 40.8** | **+0.4** |
| **SUSR** | **Susurluk-Balik** | **1.50** | **125** | Pn | **Pn** | **05 55 23.1** | **0.0** |
| **CTYL** | **Yalikoy Yolu** | **1.50** | **64** | Pn | **Pn** | **05 55 22.2** | **-0.9** |
| **CTYL** | **Yalikoy Yolu** | **1.50** | **64** | P | **Pn** | **05 55 22.6** | **-0.5** |
| **KAVA** | **Kavala** | **1.50** | **277** | P | **Pn** | **05 55 22.5** | **-0.6** |
| KAVA | | | | S | **Sn** | **05 55 42.6** | **0.0** |
| | comp=E,1µm,0.3s | | | | | | |
| **KAVA** | **Kavala** | **1.50** | **277** | P | **Pn** | **05 55 22.7** | **-0.4** |
| **KIYI** | **Yalıkoy-Catalc** | **1.51** | **64** | Pn | **Pn** | **05 55 22.5** | **-0.7** |
| **KCTX** | **Karacabey (Bur** | **1.54** | **111** | Pn | **Pn** | **05 55 23.4** | **-0.2** |
| **BKES** | **Balkesir-Mer** | **1.56** | **135** | P | **Pn** | **05 55 24.4** | **+0.5** |
| BKES | | | | S | **Sb** | **05 55 45.3** | **+0.5** |
| **RZN** | **Rozhen** | **1.57** | **304** | P | **Pn** | **05 55 24.7** | **+0.5** |
| **CTKS** | **Kestanelik-??a** | **1.58** | **75** | Pn | **Pn** | **05 55 24.1** | **0.0** |
| **KVLA** | **Kavala** | **1.60** | **274** | P | **Pn** | **05 55 24.0** | **-0.4** |
| **PRK** | **Paraskevi** | **1.60** | **186** | P | **Pn** | **05 55 25.0** | **+0.6** |
| PRK | | | | S | **Sb** | **05 55 47.0** | **+1.1** |
| | comp=E,2µm,0.8s | | | | | | |
| **PRK** | **Paraskevi** | **1.60** | **186** | P | **Pn** | **05 55 25.2** | **+0.8** |
| PRK | | | | S | **Sn** | **05 55 44.4** | **-0.5** |
| PRK | | | | AML | AML | 05 55 48.8 | |
| | comp=N,4606µm,0.9s | | | | | | |
| PRK | | | | AML | AML | 05 55 52.5 | |
| | comp=E,4691µm,0.8s | | | | | | |
| **JMB** | **Yambol** | **1.65** | **1** | Pn | **Pn** | **05 55 24.5** | **-0.6** |
| **JMB** | **Yambol** | **1.65** | **1** | P | **Pn** | **05 55 24.6** | **-0.6** |
| **SIGR** | **SIGRI** | **1.70** | **197** | Pn | **Pn** | **05 55 25.7** | **-0.1** |
| **SIGR** | **SIGRI** | **1.70** | **197** | P | **Pn** | **05 55 25.7** | **-0.1** |
| SIGR | | | | S | **Sb** | **05 55 48.9** | **+0.2** |
| | comp=E,3µm,0.5s | | | | | | |
| **SIGR** | **SIGRI** | **1.70** | **197** | P | **Pn** | **05 55 25.9** | **+0.2** |
| SIGR | | | | S | **Sn** | **05 55 46.3** | **-1.1** |
| SIGR | | | | AML | AML | 05 55 51.4 | |
| | comp=E,5607µm,0.4s | | | | | | |
| SIGR | | | | AML | AML | 05 55 51.4 | |
| | comp=N,6180µm,0.6s | | | | | | |
| **AVCI** | **Avcilar-stanb** | **1.70** | **84** | Pn | **Pn** | **05 55 25.6** | **-0.2** |
| **EFSA** | **Agios Efstrati** | **1.73** | **222** | P | **Pn** | **05 55 25.7** | **-0.5** |
| **STEP** | **BALIKESIR_Sava** | **1.74** | **147** | P | **Pn** | **05 55 26.1** | **-0.3** |
| STEP | | | | S | **Sg** | **05 55 52.1** | **-0.3** |
| **BGKT** | **Bogazkoy** | **1.76** | **78** | Pn | **Pn** | **05 55 26.6** | **-0.1** |
| **DKL** | **Dikili** | **1.79** | **170** | Pn | **Pn** | **05 55 26.9** | **-0.2** |
| **ARMT** | **Armutlu** | **1.82** | **98** | Pn | **Pn** | **05 55 26.9** | **-0.7** |
| **PLD** | **Plovdiv** | **1.85** | **316** | Pn | **Pn** | **05 55 27.5** | **-0.4** |
| **SOMA** | **Soma-Manisa** | **1.86** | **154** | Pn | **Pn** | **05 55 28.4** | **+0.3** |
| **MDNY** | **Mudanya-Bursa** | **1.88** | **104** | Pn | **Pn** | **05 55 28.0** | **-0.3** |
| **KOKK** | **Kokkinochori,** | **1.89** | **270** | P | **Pn** | **05 55 27.8** | **-0.6** |
| **KOKK** | **Kokkinochori,** | **1.89** | **270** | P | **Pn** | **05 55 28.1** | **-0.3** |
| **CAND** | **Candarli** | **1.90** | **173** | Pn | **Pn** | **05 55 29.1** | **+0.6** |
| **ZEDA** | **zmir-Bergama** | **1.92** | **166** | P | **Pn** | **05 55 28.6** | **-0.3** |
| ZEDA | | | | S | **Sg** | **05 55 58.0** | **-0.3** |
| **ISK** | **Istanbul-Kandi** | **1.96** | **83** | Pn | **Pn** | **05 55 28.3** | **-1.1** |
| **ISK** | **Istanbul-Kandi** | **1.96** | **83** | P | **Pn** | **05 55 28.3** | **-1.1** |
| ISK | | | | S | **Sn** | **05 55 54.1** | **+0.2** |
| | comp=N,752nm,0.3s | | | | | | |
| **KAVV** | **Kandilli-Istan** | **1.96** | **83** | Pn | **Pn** | **05 55 28.8** | **-0.6** |
| **OUR** | **Ouranopolis** | **1.97** | **256** | Pn | **Pn** | **05 55 28.8** | **-0.8** |
| **OUR** | **Ouranopolis** | **1.97** | **256** | P | **Pn** | **05 55 28.8** | **-0.8** |
| OUR | | | | S | **Sn** | **05 55 53.1** | **-1.1** |
| | comp=N,435nm,0.4s | | | | | | |
| **OUR** | **Ouranopolis** | **1.97** | **256** | P | **Pn** | **05 55 28.8** | **-0.8** |
| OUR | | | | S | **Sn** | **05 55 51.8** | **-2.4** |
| OUR | | | | AML | AML | 05 56 05.8 | |
| | comp=E,1114µm,0.5s | | | | | | |
| OUR | | | | AML | AML | 05 56 07.4 | |
| | comp=N,752µm,0.3s | | | | | | |
| **KLYT** | **Kilyos** | **1.98** | **77** | Pn | **Pn** | **05 55 29.0** | **-0.6** |
| **KLYT** | **Kilyos** | **1.98** | **77** | P | **Pn** | **05 55 30.6** | **+1.0** |
| **ORLT** | **Orhaneli** | **2.00** | **113** | Pn | **Pn** | **05 55 30.4** | **+0.4** |
| **DST** | **Dursunbey** | **2.04** | **126** | Pn | **Pn** | **05 55 31.3** | **+0.7** |
| **NVR** | **Nevrokopí** | **2.05** | **285** | P | **Pn** | **05 55 31.3** | **+0.6** |
| **NVR** | **Nevrokopí** | **2.05** | **285** | P | **Pn** | **05 55 31.6** | **+0.9** |
| **GEMT** | **Gemlik** | **2.10** | **100** | Pn | **Pn** | **05 55 32.1** | **+0.8** |
| **FOCM** | **Foa** | **2.13** | **175** | Pn | **Pn** | **05 55 32.5** | **+0.8** |
| **ELND** | **Elena** | **2.14** | **348** | ⇓P | **Pb** | **05 55 33.4** | **-1.6** |
| ELND | | | | ⇑S | **Sb** | **05 56 02.5** | **+1.0** |
| **KARB** | **zmir-Karabur** | **2.17** | **182** | P | **Pn** | **05 55 31.9** | **-0.4** |
| **MMB** | **Musomishta** | **2.18** | **290** | P | **Pn** | **05 55 32.8** | **+0.3** |
| MMB | | | | S | **Sg** | **05 56 05.1** | **-1.5** |
| **AKS** | **Akhisar** | **2.21** | **152** | Pn | **Pn** | **05 55 32.1** | **-0.7** |
| **SRS** | **Serrai** | **2.21** | **278** | P | **Pn** | **05 55 32.3** | **-0.6** |
| **SRS** | **Serrai** | **2.21** | **278** | P | **Pn** | **05 55 32.6** | **-0.2** |
| SRS | | | | S | **Sb** | **05 56 03.9** | **+0.4** |
| SRS | | | | AML | AML | 05 56 10.6 | |
| | comp=E,824µm,0.9s | | | | | | |
| SRS | | | | AML | AML | 05 56 12.0 | |
| | comp=N,665µm,0.3s | | | | | | |
| **YLV** | **Yalova** | **2.21** | **96** | Pn | **Pn** | **05 55 32.0** | **-0.9** |
| **YLV** | **Yalova** | **2.21** | **96** | P | **Pn** | **05 55 32.9** | **0.0** |
| **GORD** | **Gordes-Manisa** | **2.33** | **145** | Pn | **Pn** | **05 55 34.6** | **+0.1** |
| **GOMA** | **Golmarmara-Man** | **2.40** | **152** | Pn | **Pn** | **05 55 35.7** | **+0.3** |
| **HRT** | **Hereke** | **2.41** | **89** | Pn | **Pn** | **05 55 35.3** | **-0.4** |
| **CHOS** | **Chios island** | **2.47** | **188** | Pn | **Pn** | **05 55 36.9** | **+0.4** |
| **CHOS** | **Chios island** | **2.47** | **188** | P | **Pn** | **05 55 37.2** | **+0.7** |
| **CHOS** | **Chios island** | **2.47** | **188** | P | **Pn** | **05 55 37.2** | **+0.7** |
| CHOS | | | | S | **Sn** | **05 56 05.5** | **-1.1** |
| CHOS | | | | AML | AML | 05 56 17.0 | |
| | comp=E,605µ

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PTBC | | | S | **Sn** | **05 58 07.4** | **-2.2** |
| **ZARC** | **Zaragoza, Cauc** | **1.38 271** | P | **Pn** | **05 57 51.2** | **+0.1** |
| ZARC | | | S | **Sn** | **05 58 10.8** | **+0.6** |
| **RUSC** | **La Rusia** | **1.61 166** | P | **Pn** | **05 57 53.1** | **-1.4** |
| RUSC | | | S | **Sn** | **05 58 14.9** | **-1.1** |
| **SPBC** | **San Pablo de B** | **1.90 198** | P | **Pn** | **05 57 56.3** | **-1.4** |
| SPBC | | | S | **Sn** | **05 58 21.8** | **-0.1** |
| **TAMC** | **Tame, Arauca** | **1.96 122** | P | **Pn** | **05 57 58.0** | **-0.3** |
| TAMC | | | S | **Sn** | **05 58 23.2** | **+0.2** |
| **UREC** | **San Jos de Ur** | **2.06 278** | P | **Pn** | **05 57 58.5** | **-1.1** |
| UREC | | | S | **Sn** | **05 58 23.8** | **-1.6** |
| **NORC** | **Norcasia** | **2.35 216** | P | **Pn** | **05 58 03.0** | **-0.4** |
| NORC | | | S | **Sn** | **05 58 30.6** | **-1.5** |
| **ARGC** | **Ariguani, Magd** | **2.49 342** | P | **Pn** | **05 58 07.0** | **+1.8** |
| ARGC | | | S | **Sn** | **05 58 38.9** | **+3.6** |
| **ROSC** | **El Rosal** | **2.75 198** | P | **Pn** | **05 58 10.4** | **+1.5** |
| | 47nm,0.4s,baz=6.0,slow=19,SNR=39 | | | | | |
| ROSC | | | S | **Sn** | **05 58 46.4** | **+4.5** |
| | 106nm,0.4s,baz=355,slow=22,SNR=13 | | | | | |
| **ROSC** | **El Rosal** | **2.75 198** | P | **Pn** | **05 58 10.3** | **+1.4** |
| ROSC | | | S | **Sn** | **05 58 44.2** | **+2.3** |
| **DBBC** | **Dabeiba** | **2.75 261** | P | **Pn** | **05 58 08.5** | **-0.2** |
| DBBC | | | S | **Sn** | **05 58 39.1** | **-2.5** |
| **CHIC** | **Chingaza** | **2.83 185** | P | **Pn** | **05 58 10.0** | **-0.1** |
| CHIC | | | S | **Sn** | **05 58 45.3** | **+1.3** |
| **SJCC** | **San Jacinto, C** | **2.94 325** | P | **Pn** | **05 58 10.9** | **-0.3** |
| SJCC | | | S | **Sn** | **05 58 44.3** | **-1.7** |
| **CBOC** | **Ciudad Bolivar** | **2.99 238** | P | **Pn** | **05 58 12.2** | **+0.3** |
| CBOC | | | S | **Sn** | **05 58 43.9** | **-3.3** |
| **APAC** | **Apartado, Choc** | **3.11 278** | P | **Pn** | **05 58 13.3** | **-0.1** |
| APAC | | | S | **Sn** | **05 58 47.0** | **-2.9** |
| **SDV** | **Santo Domingo** | **3.14 63** | P | **Pn** | **05 58 14.2** | **+0.2** |
| | 12nm,0.2s,baz=229,slow=10,SNR=3.4 | | | | | |
| SDV | | | S | **Sn** | **05 58 49.9** | **-1.0** |
| | 70nm,0.3s,baz=193,slow=23,SNR=16 | | | | | |
| **SDV** | **Santo Domingo** | **3.14 63** | P | **Pn** | **05 58 14.3** | **+0.4** |
| SDV | | | S | **Sn** | **05 58 49.9** | **-1.0** |
| **LCBC** | **Los crdobas,** | **3.18 296** | P | **Pn** | **05 58 13.7** | **-0.6** |
| LCBC | | | S | **Sn** | **05 58 51.8** | **+0.2** |
| **VILC** | **Villavicencio,** | **3.34 184** | P | **Pn** | **05 58 16.4** | **-0.2** |
| VILC | | | S | **Sn** | **05 58 57.4** | **+1.7** |
| **PTGC** | **Puerto Gaitan,** | **3.51 158** | P | **Pn** | **05 59 17.1** | **-1.7** |
| PTGC | | | S | **Sn** | **05 58 57.4** | **-2.2** |
| **ANIL** | **Santa Ana** | **3.53 213** | P | **Pn** | **05 58 21.6** | **+2.3** |
| ANIL | | | S | **Sn** | **05 59 03.5** | **+3.1** |
| **CRJC** | **Cerrejon, Guaj** | **3.57 9** | P | **Pn** | **05 58 18.8** | **-0.9** |
| CRJC | | | S | **Sn** | **05 59 00.8** | **-0.3** |
| **SMRC** | **Santa Marta, M** | **3.74 349** | P | **Pn** | **05 58 22.4** | **+0.6** |
| **PLMC** | **San Jos del P** | **3.78 228** | P | **Pn** | **05 58 21.8** | **-0.7** |
| **ORTC** | **Ortega, Tolima** | **3.96 207** | P | **Pn** | **05 58 26.3** | **+1.6** |
| ORTC | | | S | **Sn** | **05 59 14.0** | **+3.7** |
| **PRAC** | **Prado** | **3.99 201** | P | **Pn** | **05 58 25.3** | **+0.1** |
| PRAC | | | S | **Sn** | **05 59 13.8** | **+2.7** |
| **CAPC** | **Capurgana** | **4.01 287** | P | **Pn** | **05 58 22.6** | **-2.9** |
| **URIC** | **Uribia, Colomb** | **4.45 19** | P | **Pn** | **05 58 30.1** | **-1.2** |
| **YOTC** | **Yotoco, Valle** | **4.49 220** | P | **Pn** | **05 58 31.0** | **-1.1** |
| **GUVC** | **San Jose del G** | **4.96 170** | P | **Pn** | **05 58 37.2** | **-1.2** |
| GUVC | | | S | **Sn** | **05 59 32.4** | **-2.3** |
| **BCIP** | **Isla Barro Col** | **6.52 285** | P | **Pn** | **05 58 57.3** | **-2.1** |
| **PCRV** | **Puerto La Cruz** | **9.13 72** | P | **Pn** | **05 59 34.1** | **-0.8** |
| | 8.6nm,0.9s,baz=225,slow=5.0,SNR=7.3 | | | | | |
| PCRV | | | S | **Sn** | **06 01 11.2** | **-4.8** |
| | 5.2nm,0.6s,baz=158,slow=15,SNR=1.9 | | | | | |
| **ASAR** | **Alice Springs** | **149.20 235** | PKPbc | **PKPdf** | **06 17 00.1** | **+1.4** |
| | 0.4nm,0.7s,baz=114,slow=3.2,SNR=3.0 | | | | | |
| **WRA** | **Warramunga Arr** | **150.34 242** | PKPbc | **PKPdf** | **06 17 02.9** | **+2.3** |
| | 0.5nm,0.4s,baz=106,slow=2.9,SNR=28 | | | | | |

*IDC* ***17*** *06:01:51.5±1.0,23°.51N×143°.55E, h0km, mb3.9/8, mbtmp3.9/10, ML3.7/2, MS3.6/3, Error ellipse: s-maj=31.8km s-min=21.1km az=76.0*

**ISC 17 06:01:56.1±1.0, 23°.6N±0°.1×143°.5E±0°.2, h31km, n13, σ1§17/12, mb3.8/8, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.68** | **342** | Pn | **Pn** | **06 02 49.5** | **-1.4** |
| | 9.5nm,0.3s,baz=268,slow=23,SNR=5.7 | | | | | | |
| JCJ | | | | Sn | **Sn** | **06 03 32.7** | **-0.6** |
| | 31nm,0.3s,baz=269,slow=22,SNR=9.4 | | | | | | |
| | 44nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **19.20** | **320** | P | **P** | **06 06 18.1** | **+0.6** |
| | 0.1nm,0.3s,baz=142,slow=8.2,SNR=1.9 | | | | | | |
| KSRS | | | | LR | LR | 06 13 01.4 | |
| | comp=Z,22nm,20.6s,baz=5.0,slow=35 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **27.21** | **343** | P | **P** | **06 07 36.7** | **-0.4** |
| | 0.8nm,0.3s,baz=144,slow=9.6,SNR=5.7 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.16** | **192** | P | **P** | **06 10 00.7** | **-1.5** |
| | 0.7nm,0.6s,baz=17,slow=8.8,SNR=18 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.90** | **321** | P | **P** | **06 11 10.3** | **+1.2** |
| | 0.7nm,0.5s,baz=118,slow=8.3,SNR=2.4 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.62** | **312** | P | **P** | **06 11 16.3** | **+1.7** |
| | 1.3nm,0.6s,baz=91,slow=9.3,SNR=13 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.33** | **316** | P | **P** | **06 11 35.0** | **+1.0** |
| | 2.4nm,1.0s,baz=93,slow=7.7,SNR=11 | | | | | | |
| | 2.4nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **60.26** | **28** | P | **P** | **06 12 01.2** | **-0.1** |
| | 0.4nm,0.7s,baz=265,slow=5.2,SNR=5.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.41** | **319** | P | **P** | **06 12 10.5** | **+1.2** |
| | 3.3nm,0.5s,baz=92,slow=8.2,SNR=17 | | | | | | |
| | 3.3nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.68** | **28** | P | **P** | **06 13 33.1** | **+0.6** |
| | 0.6nm,0.7s,baz=302,slow=3.5,SNR=8.0 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **IDI** | **Anoyia** | **97.47** | **314** | LR | LR | 07 03 38.7 | |
| | comp=Z,73nm,18.8s,baz=333,slow=38 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **98.37** | **330** | LR | LR | 07 04 56.7 | |
| | comp=Z,50nm,18.2s,baz=242,slow=38 | | | | | | |
| **PLCA** | **Paso Flores** | **146.78** | **129** | PKPbc | **PKPbc** | **06 21 35.8** | **+0.5** |
| | 1.4nm,0.9s,baz=248,slow=5.4,SNR=2.0 | | | | | | |

*CATAC* ***17*** *06:02:42.4±0.9, 13°.55N×91°.76W, h10km, ML3.3*
*GCG* ***17*** *06:02:54.6±0.3, 14°.42N×91°.39W, h0km±36km, MD3.9*

**ISC 17 06:02:39.0±3.6, 13°.6N±0°.1×92°.0W±0°.1, h8km±13km, n12, σ1§54/20, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SULM** | **Suchitepequez,** | **0.82** | **27** | *eP* | **Pn** | **06 02 59.7** | **+2.8** |
| **RTAL** | **Retalhuleu** | **0.98** | **15** | *i* P | **Pn** | **06 02 59.7** | **+0.6** |
| RTAL | | | | *i* S | **Sn** | **06 03 11.5** | **-1.7** |
| RTAL | | | | IAML | | 06 03 17.0 | |
| | comp=Z,680nm,1.0s | | | | | | |
| **STG3** | **Santiaguito 3,** | **1.20** | **18** | *eP* | **Pn** | **06 03 03.2** | **+1.0** |
| **SOKI** | **Kika Raxquin** | **1.35** | **23** | *i* P | **Pn** | **06 03 04.8** | **+0.2** |
| SOKI | | | | *i* S | **Sn** | **06 03 24.4** | **+1.5** |
| SOKI | | | | IAML | | 06 03 27.1 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **FUG** | **Fuego 3** | **1.39** | **51** | *eP* | **Pn** | **06 03 06.6** | **+1.7** |
| **HUEH** | **Huehuetenango** | **1.79** | **14** | *i* P | **Pg** | **06 03 12.2** | **-1.3** |
| HUEH | | | | *i* S | **Sg** | **06 03 37.3** | **+0.5** |
| HUEH | | | | IAML | | 06 03 51.4 | |
| | comp=Z,380nm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.86** | **57** | *eP* | **Pg** | **06 03 15.2** | **+0.5** |
| **QUIS** | **Sacapulas** | **1.91** | **26** | *i* P | **Pg** | **06 03 14.2** | **-1.4** |
| QUIS | | | | IAML | | 06 03 22.8 | |
| | comp=Z,480nm,1.0s | | | | | | |
| QUIS | | | | *i* S | **Sg** | **06 03 40.4** | **+0.1** |
| **NUBE** | **Las Nubes** | **2.14** | **81** | *i* P | **Pn** | **06 03 15.4** | **+0.2** |
| NUBE | | | | *i* S | **Sn** | **06 03 40.6** | **-1.4** |
| NUBE | | | | IAML | | 06 03 45.7 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **2.57** | **87** | *i* P | **Pn** | **06 03 22.5** | **+1.4** |
| PMON | | | | *i* S | **Sn** | **06 03 50.5** | **-2.1** |
| PMON | | | | IAML | | 06 04 02.2 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **2.99** | **89** | *i* P | **Pn** | **06 03 28.7** | **+1.9** |
| COEG | | | | *i* S | **Sn** | **06 04 01.3** | **-1.6** |
| COEG | | | | IAML | | 06 04 16.1 | |
| | comp=Z,64nm,1.0s | | | | | | |
| **LCND** | **La Caada** | **3.96** | **93** | *i* P | **Pn** | **06 03 41.1** | **+1.0** |
| LCND | | | | *i* S | **Sn** | **06 04 25.8** | **-1.0** |
| LCND | | | | IAML | | 06 04 36.3 | |
| | comp=Z,43nm,1.0s | | | | | | |

*IDC* ***17*** *06:16:32.3±1.1, 17°.16S×178°.03W, h0km, mb3.5/5, mbtmp3.5/5, Error ellipse: s-maj=66.6km s-min=27.0km az=155.0, Fiji Islands region*

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.13** | **259** | P | P | 06 24 50.4 | -0.5 |
| | 0.1nm,0.3s,baz=94,slow=7.9,SNR=5.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **254** | P | P | 06 24 52.9 | +0.2 |
| | 0.7nm,0.5s,baz=89,slow=8.3,SNR=11 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.64** | **44** | P | P | 06 28 36.4 | -0.1 |
| | 0.2nm,0.3s,baz=216,slow=5.6,SNR=3.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.29** | **58** | P | P | 06 29 11.8 | +0.2 |
| | 0.2nm,0.7s,baz=230,slow=4.2,SNR=3.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **91.33** | **178** | P | P | 06 29 39.5 | -0.1 |
| | 0.8nm,0.8s,baz=190,slow=7.4,SNR=6.2 | | | | | | |
| | 0.8nm,0.8s | | | | | | |

*IDC* ***17*** *06:18:18.2±1.0, 23°.32N×143°.63E, h0km, mb3.9/7, mbtmp3.9/8, ML3.6/1, MS3.1/2, Error ellipse: s-maj=41.9km s-min=18.8km az=79.0*

**ISC 17 06:18:23.3±1.1, 23°.5N±0°.1×143°.4E±0°.3, h31km, n11, σ1§84/10, mb3.7/7, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.76** | **344** | Pn | **Pn** | **06 19 18.8** | **-0.5** |
| | 4.3nm,0.3s,baz=210,slow=18,SNR=2.0 | | | | | | |
| JCJ | | | | Sn | **Sn** | **06 20 00.1** | **-2.5** |
| | 8.1nm,0.3s,baz=287,slow=22,SNR=1.3 | | | | | | |
| | 59nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **14.60** | **314** | LR | LR | 06 26 07.6 | |
| | comp=Z,40nm,21.9s,baz=110,slow=32 | | | | | | |
| **KLR** | **Kul'dur** | **27.29** | **343** | P | **P** | **06 24 06.0** | **+1.0** |
| | 1.3nm,0.7s,baz=156,slow=7.7,SNR=4.9 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **38.10** | **319** | LR | LR | 06 41 09.6 | |
| | comp=Z,50nm,19.4s,baz=186,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.04** | **192** | P | **P** | **06 26 26.2** | **-2.3** |
| | 0.7nm,0.5s,baz=18,slow=9.0,SNR=19 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **47.75** | **192** | P | **P** | **06 26 56.4** | **-1.3** |
| | 0.4nm,0.6s,baz=16,slow=11,SNR=4.5 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.64** | **312** | P | **P** | **06 27 43.9** | **+2.0** |
| | 1.5nm,0.7s,baz=96,slow=8.7,SNR=11 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.36** | **316** | P | **P** | **06 28 02.9** | **+1.5** |
| | 1.9nm,0.8s,baz=93,slow=7.4,SNR=13 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.45** | **319** | P | **P** | **06 28 38.3** | **+1.5** |
| | 2.9nm,0.7s,baz=88,slow=7.8,SNR=11 | | | | | | |
| | 2.9nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.81** | **28** | P | **P** | **06 30 00.3** | **0.0** |
| | 0.4nm,0.8s,baz=310,slow=4.8,SNR=4.7 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **146.77** | **129** | PKPbc | **PKPdf** | **06 38 01.9** | **+1.1** |
| | 1.0nm,0.9s,baz=271,slow=4.3,SNR=4.8 | | | | | | |

*NEIC* ***17*** *06:26:55.9±1.1, 69°.54N±0°.07×144°.36W±0°.04, h1km±6km, Error ellipse: s-maj=10.4km s-min=2.4km az=181.0*

**AEIC 17 06:26:54.9±1.6, 69°.47N±0°.08×144°.45W±0°.05, h2km±6km, ML2.7, ML2.8/70(NEIC), Error ellipse: s-maj=12.2km s-min=2.0km az=184.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.30** | **58** | Pg | Pg | 06 26 60.0 | -0.7 |
| **C26K** | **Camden Bay** | **0.48** | **341** | | Pg | 06 27 04.2 | +0.1 |
| C26K | | | | | Sg | 06 27 11.1 | +0.8 |
| **C26K** | **Camden Bay** | **0.48** | **341** | IAML | | 06 27 13.5 | |
| | comp=N,151nm,0.5s | | | | | | |
| C26K | | | | IAML | | 06 27 19.7 | |
| | comp=E,130nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.70** | **259** | | Pg | 06 27 07.6 | -0.6 |
| **D25K** | **Kavik River** | **0.70** | **259** | | Sb | 06 27 18.8 | -1.0 |
| **D27M** | **Malcolm River** | **1.26** | **99** | | Pn | 06 27 19.4 | -0.1 |
| **D27M** | **Malcolm River** | **1.26** | **99** | | Sn | 06 27 37.3 | +0.4 |
| **C24K** | **Franklin Bluff** | **1.51** | **282** | | Pg | 06 27 24.2 | +0.4 |
| **C24K** | **Franklin Bluff** | **1.51** | **282** | | Sg | 06 27 44.3 | +1.0 |
| **C24K** | **Franklin Bluff** | **1.51** | **282** | IAML | | 06 27 53.2 | |
| | comp=E,128nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.59** | **261** | | Pg | 06 27 25.3 | +0.1 |
| **E27K** | **Coleen River** | **1.65** | **140** | | Pb | 06 27 25.7 | -0.3 |
| **F26K** | **Sheenjek River** | **1.79** | **176** | | Pg | 06 27 29.1 | 0.0 |
| **F26K** | **Sheenjek River** | **1.79** | **176** | | Sg | 06 27 54.0 | +1.8 |
| **F26K** | **Sheenjek River** | **1.79** | **176** | IAML | | 06 28 23.1 | |
| | comp=N,72nm,0.8s | | | | | | |
| F26K | | | | IAML | | 06 28 23.3 | |
| | comp=E,92nm,0.3s | | | | | | |
| **F25K** | **Christian Rive** | **1.94** | **194** | | Pb | 06 27 31.0 | +0.2 |
| F25K | | | | IAML | | 06 28 25.8 | |
| | comp=E,82nm,0.8s | | | | | | |
| F25K | | | | IAML | | 06 28 29.6 | |
| | comp=N,88nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.97** | **114** | Pn | Pb | 06 27 31.3 | -0.1 |
| E28M | | | | IAML | | 06 28 25.4 | |
| | comp=N,53nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.02** | **248** | | Pg | 06 27 33.4 | -0.2 |
| **TOLK** | **Toolik Lake Re** | **2.02** | **248** | | Sg | 06 28 00.1 | +0.4 |
| **TOLK** | **Toolik Lake Re** | **2.02** | **248** | IAML | | 06 28 32.4 | |
| | comp=E,53nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 06 28 41.1 | |
| | comp=N,62nm,0.7s | | | | | | |
| **D28M** | **Stokes Point** | **2.03** | **91** | | Pb | 06 27 32.7 | +0.4 |
| **E24K** | **Your Creek** | **2.03** | **228** | | Pb | 06 27 32.4 | 0.0 |
| **BMAR** | **Burnt Mountain** | **2.05** | **181** | | Pb | 06 27 32.0 | -0.8 |
| **C23K** | **Itkillik River** | **2.19** | **283** | | Pb | 06 27 35.7 | +0.7 |
| C23K | | | | IAML | | 06 28 41.4 | |
| | comp=E,73nm,0.4s | | | | | | |
| **D23K** | **Nanushuk River** | **2.28** | **260** | | Pb | 06 27 35.8 | -0.8 |
| D23K | | | | IAML | | 06 28 49.2 | |
| | comp=N,39nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.33** | **214** | | Pb | 06 27 36.1 | -1.4 |
| **E23K** | **Chandalar** | **2.35** | **235** | | Pb | 06 27 37.4 | -0.6 |
| **E29M** | **Blow River** | **2.60** | **112** | | Pn | 06 27 39.5 | +1.7 |
| E29M | | | | IAML | | 06 28 41.4 | |
| | comp=E,32nm,0.6s | | | | | | |
| E29M | | | | IAML | | 06 28 49.4 | |
| | comp=N,39nm,0.6s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.57** | **277** | Pn | Pn | 06 27 52.3 | +1.2 |
| **C21K** | **Knifeblade Rid** | **3.68** | **270** | | Pn | 06 27 55.1 | +2.5 |
| **H24K** | **Noodor Dome** | **3.88** | **201** | Pn | Pn | 06 27 57.1 | +1.7 |
| H24K | | | | IAML | | 06 29 12.2 | |
| | comp=N,14nm,0.8s | | | | | | |
| H24K | | | | IAML | | 06 29 30.2 | |
| | comp=E,11nm,1.3s | | | | | | |
| **H29M** | **Whitestone** | **3.99** | **142** | Pn | Pn | 06 27 58.9 | +2.0 |
| **F21K** | **Alatna River** | **4.04** | **240** | Pn | Pn | 06 27 59.4 | +1.8 |
| F21K | | | | IAML | | 06 29 10.1 | |
| | comp=N,11nm,1.7s | | | | | | |
| F21K | | | | IAML | | 06 29 18.0 | |
| | comp=E,9,9nm,1.0s | | | | | | |
| **H23K** | **Yukon River** | **4.14** | **210** | | Pn | 06 28 01.1 | +2.1 |
| **I26K** | **Coal Creek Min** | **4.21** | **173** | | Pn | 06 28 01.9 | +2.0 |
| **I28M** | **Miner Creek** | **4.40** | **155** | Pn | Pn | 06 28 04.5 | +2.0 |
| **E20K** | **Nigu River** | **4.42** | **260** | | Pn | 06 28 04.3 | +1.4 |
| **I29M** | **Ogilvie Camp,** | **4.76** | **147** | | Pn | 06 28 08.6 | +1.2 |
| I29M | | | | IAML | | 06 29 35.9 | |
| | comp=N,9.3nm,0.4s | | | | | | |
| I29M | | | | IAML | | 06 29 53.5 | |
| | comp=E,7.5nm,0.7s | | | | | | |
| **MDM** | **Murphy Dome** | **4.76** | **200** | Pn | Pn | 06 28 10.5 | +2.9 |
| MDM | | | | IAML | | 06 29 58.5 | |
| | comp=E,7.1nm,0.9s | | | | | | |
| MDM | | | | IAML | | 06 30 00.7 | |
| | comp=N,5.9nm,0.8s | | | | | | |
| **IL31** | | **4.81** | **193** | Pn | Pn | 06 28 12.2 | +4.0 |
| **EGAK** | **Eagle** | **4.88** | **163** | Pn | Pn | 06 28 11.3 | +2.2 |
| EGAK | | | | IAML | | 06 29 34.1 | |
| | comp=N,8.0nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **4.89** | **185** | | Pn | 06 28 13.0 | +3.6 |
| J25K | | | | IAML | | 06 29 55.9 | |
| | comp=N,4.9nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.00** | **176** | | Pn | 06 28 13.9 | +3.0 |
| J26L | | | | IAML | | 06 29 45.1 | |
| | comp=N,5.0nm,0.7s | | | | | | |
| J26L | | | | IAML | | 06 30 02.5 | |
| | comp=E,6.0nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.01** | **265** | Pn | Pn | 06 28 12.4 | +1.4 |
| **CCB** | **Clear Creek Bu** | **5.02** | **197** | | Pn | 06 28 14.0 | +3.0 |
| CCB | | | | IAML | | 06 29 39.2 | |
| | comp=E,5.6nm,0.5s | | | | | | |
| CCB | | | | IAML | | 06 29 40.5 | |
| | comp=N,4.8nm,0.7s | | | | | | |
| **E19K** | **Redstone River** | **5.12** | **253** | | Pn | 06 28 14.2 | +1.8 |
| **I30M** | **Mount Dempster** | **5.28** | **140** | Pn | Pn | 06 28 15.8 | +1.0 |
| I30M | | | | IAML | | 06 29 45.5 | |
| | comp=N,5.4nm,0.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.38** | **273** | | Pn | 06 28 17.4 | +1.3 |
| **SCRK** | **Sand Creek** | **5.52** | **178** | Pn | Pn | 06 28 20.4 | +2.4 |
| **F19K** | **Shaleruckik Mo** | **5.63** | **248** | | Pn | 06 28 21.6 | +2.2 |
| **DAWY** | **Dawson** | **5.78** | **157** | | Pn | 06 28 24.3 | +2.8 |
| **J30M** | **Hart River** | **5.85** | **143** | Pn | Pn | 06 28 24.1 | +1.5 |
| **K29M** | **Barlow Dome** | **6.28** | **151** | Pn | Pn | 06 28 30.9 | +2.4 |
| **E18K** | **Tukpahlearik C** | **6.29** | **259** | | Pn | 06 28 30.1 | +1.7 |

*IDC* ***17*** *06:59:46.0±1.6, 54°.59N×83°.73E, h0km, mbtmp3.0/3, ML2.6/3, Error ellipse: s-maj=14.9km s-min=9.7km az=8.0, Southwestern Siberia*

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.91** | **135** | I | I | 07 05 02.5 | |
| | baz=317,slow=316,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.91** | **135** | Pg | Pg | 07 00 02.8 | -0.6 |
| | 3.0nm,0.3s,baz=314,slow=15,SNR=22 | | | | | | |
| ZALV | | | | Lg | Lg | 07 00 16.8 | |
| | 12nm,0.3s,baz=315,slow=28,SNR=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.09** | **221** | Pn | Pn | 07 01 03.5 | 0.0 |
| | 0.1nm,0.3s,baz=40,slow=14,SNR=6.1 | | | | | | |
| KURBB | | | | Lg | Lg | 07 02 27.1 | |
| | 0.1nm,0.3s,baz=44,slow=30,SNR=5.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.86** | **187** | Pn | Pn | 07 01 42.1 | +0.4 |
| | 0.2nm,0.3s,baz=12,slow=13,SNR=5.9 | | | | | | |
| MKAR | | | | Lg | Lg | 07 03 55.3 | |
| | 0.1nm,0.3s,baz=6.6,slow=28,SNR=2.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **8.06** | **264** | Pn | Pn | 07 01 43.4 | -0.8 |
| | 0.1nm,0.3s,baz=66,slow=15,SNR=4.2 | | | | | | |
| | 0.9nm,0.3s | | | | | | |

*IDC* ***17*** *07:11:56.5±6.0, 48°.20N×80°.42E, h0km, 1C-1D, Error ellipse: s-maj=67.1km s-min=41.8km az=46.0, Eastern Kazakhstan*

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **1.90** | **137** | ⇑P | Pn | 07 12 30.5 | +0.4 |
| | 0.8nm,0.8s,baz=324,slow=16,SNR=12 | | | | | | |
| MK31 | | | | ⇓S | Sn | 07 12 51.0 | -3.7 |
| | 0.2nm,0.3s,baz=326,slow=26 | | | | | | |
| **MKAR** | **Makanchi Array** | **1.90** | **137** | Pg | Pn | 07 12 30.9 | +0.8 |
| | 0.3nm,0.3s,baz=323,slow=16,SNR=14 | | | | | | |
| MKAR | | | | Lg | Lg | 07 12 56.9 | |
| | 0.3nm,0.3s,baz=332,slow=27,SNR=5.4 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.39** | **24** | I | I | 07 55 44.2 | |
| | baz=207,slow=303,SNR=3.0 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **14.76** | **287** | I | I | 08 38 00.0 | |
| | baz=91,slow=318,SNR=1.4 | | | | | | |

*IDC* ***17*** *07:13:48.3±0.6, 5°.98S×104°.64E, h0km, mb4.1/14, mbtmp4.1/15, ML3.6/1, MS3.3/7, Error ellipse: s-maj=25.9km s-min=14.0km az=62.0*
*DJA* ***17*** *07:13:52.0±0.7, 6°.5±3°×10°.5E±°, h13km±5km, M4.8/17, mB6.0/3, mb4.9/12, MLv4.7/17, Mw(mB)5.6/3*
*NEIC* ***17*** *07:13:56.0±1.5, 6°.2S±0°.1×104°.54E±0°.09, h59km±5km, mb4.5/19, Error ellipse: s-maj=18.9km s-min=8.2km az=212.0*

**ISC 17 07:13:54.9±0.5, 6°.14S±0°.07×104°.60E±0°.06, h49km, n95, σ1§20/80, mb4.4/26, MS3.3/6, 7C, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KASI** | **Kota Agung** | **0.62** | **351** | P | **Pn** | **07 14 07.4** | **-0.2** |
| KASI | | | | S | **Sn** | **07 14 16.0** | **-0.7** |
| **BLSI** | **Bandar Lampung** | **1.00** | **40** | P | **Pn** | **07 14 13.3** | **+0.7** |
| **LWLI** | **Liwa** | **1.24** | **334** | P | **Pn** | **07 14 16.8** | **+0.9** |
| LWLI | | | | S | **Sn** | **07 14 33.5** | **+2.0** |
| **SBJI** | **Serang** | **1.52** | **89** | P | **Pn** | **07 14 19.7** | **0.0** |
| **SKJI** | **Sukabumi** | **2.13** | **114** | P | **Pn** | **07 14 27.2** | **-0.8** |
| SKJI | | | | S | **Sn** | **07 14 54.8** | **+1.6** |
| **DBJI** | **Dramaga** | **2.18** | **101** | P | **Pn** | **07 14 29.3** | **+0.6** |
| **CBJI** | **Citeko** | **2.26** | **97** | P | **Pn** | **07 14 32.6** | **+2.9** |
| **MNAI** | **Manna** | **2.41** | **317** | P | **Pn** | **07 14 32.3** | **+0.5** |
| **MNAI** | **Manna** | **2.41** | **317** | | **Pn** | **07 14 32.6** | **+0.7** |
| **MNAI** | **Manna** | **2.41** | **317** | P | **Pn** | **07 14 32.0** | **+0.2** |
| **CNJI** | **Cibinong** | **2.77** | **115** | P | **Pn** | **07 14 36.1** | **-0.7** |
| **PMBI** | **Palembang** | **3.19** | **3** | Pn | Pn | 07 14 47.5 | +4.9 |
| **BBJI** | **Bungbulang** | **3.30** | **114** | P | **Pn** | **07 14 44.5** | **+0.3** |
| **CMJI** | **Cimerak** | **4.16** | **113** | P | **Pn** | **07 14 55.9** | **+0.1** |
| CMJI | | | | S | **Sn** | **07 15 41.3** | **-1.9** |
| **PPBI** | **Pangkal Pinang** | **4.24** | **21** | P | **Pn** | **07 14 59.0** | **+2.0** |
| **XMI** | **Christmas Isla** | **4.42** | **166** | P | **Pn** | **07 14 56.0** | **-3.4** |
| **XMIS** | **Christmas Isla** | **4.44** | **166** | P | Pn | 07 14 55.2 | -4.5 |
| **XMIS** | **Christmas Isla** | **4.44** | **166** | Pn | Pn | 07 14 54.5 | -5.3 |
| **PPSI** | **Pulau Pagai** | **5.67** | **306** | P | **Pn** | **07 15 16.4** | **-0.2** |
| **UGM** | **Wanagama** | **6.14** | **107** | P | **Pn** | **07 15 25.2** | **+2.1** |
| **UGM** | **Wanagama** | **6.14** | **107** | Pn | **Pn** | **07 15 25.5** | **+2.5** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WB0** | **Warramunga Arr** | **31.96** | **118** | P | **P** | **07 20 16.2** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 07 20 26.7 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.98** | **118** | P | **P** | **07 20 16.2** | **-0.3** |
| **WRA** | **Warramunga Arr** | **31.98** | **118** | P | **P** | **07 20 16.4** | **-0.3** |
| | comp=Z,1.5nm,0.4s,baz=304,slow=8.8,SNR=45 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 23 06.0** | **0.0** |
| | comp=Z,0.5nm,0.5s,baz=311,slow=1.8,SNR=2.9 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **32.16** | **118** | P | **P** | **07 20 17.6** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 07 20 20.1 | |
| | comp=Z,6.5nm,0.5s | | | | | | |
| **PZH** | **PanZhiHua** | **32.57** | **355** | P | P | 07 20 28.9 | +7.1 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,4.2s | | | | | | |
| **ASAR** | **Alice Springs** | **33.13** | **125** | P | **P** | **07 20 27.0** | **+0.3** |
| | comp=Z,1.7nm,0.5s,baz=302,slow=7.2,SNR=30 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 23 09.8** | **+0.6** |
| | comp=Z,0.7nm,1.0s,baz=302,slow=3.1,SNR=6.1 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **33.13** | **125** | | **P** | **07 20 26.7** | **-0.1** |
| **COEN** | **Coen** | **38.73** | **105** | P | **P** | **07 21 13.6** | **-1.0** |
| COEN | | | | IAmb | IAmb | 07 21 14.4 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **XAN** | **Xi'an** | **40.17** | **6** | ⇑P | P | 07 21 32.8 | +6.4 |
| XAN | | | | pP | pP | 07 21 38.8 | -0.7 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **42.27** | **97** | LR | LR | 07 45 02.4 | |
| | comp=Z,58nm,18.9s,baz=175,slow=44 | | | | | | |
| **STKA** | **Stephens Creek** | **42.99** | **131** | P | **P** | **07 21 49.9** | **+0.2** |
| STKA | | | | IAmb | IAmb | 07 21 52.5 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **42.99** | **131** | P | **P** | **07 21 50.5** | **+0.9** |
| | comp=Z,18nm,0.4s,baz=307,slow=7.8,SNR=41 | | | | | | |
| STKA | | | | LR | LR | 07 40 32.0 | |
| | comp=Z,45nm,19.9s,baz=209,slow=37 | | | | | | |
| **EIDS** | **Eidsvold** | **48.34** | **119** | P | **P** | **07 22 32.1** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 07 22 55.7 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **53.77** | **2** | P | **P** | **07 23 12.7** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=181,slow=9.5,SNR=4.3 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.86** | **24** | P | **P** | **07 23 26.6** | **-0.9** |
| | comp=Z,1.4nm,0.5s,baz=204,slow=7.5,SNR=4.3 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.30** | **342** | P | **P** | **07 23 29.4** | **-1.2** |
| | comp=Z,0.6nm,0.6s,baz=145,slow=8.1,SNR=1.8 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **60.38** | **220** | T | T | 08 29 42.4 | |
| | baz=66,slow=75 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.39** | **220** | T | T | 08 29 34.5 | |
| | baz=66,slow=75 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.40** | **220** | T | T | 08 29 41.0 | |
| | baz=66,slow=75 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **60.59** | **219** | T | T | 08 29 53.5 | |
| | baz=66,slow=76,SNR=35 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **60.61** | **219** | T | T | 08 29 52.2 | |
| | baz=66,slow=76,SNR=19 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **60.61** | **219** | T | T | 08 29 53.3 | |
| | baz=66,slow=76,SNR=30 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.85** | **341** | P | **P** | **07 24 01.5** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=169,slow=6.6,SNR=1.9 | | | | | | |
| KURBB | | | | LR | LR | 07 54 06.2 | |
| | comp=Z,34nm,18.0s,baz=169,slow=40 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.13** | **347** | P | **P** | **07 24 09.2** | **-1.6** |
| | comp=Z,1.1nm,0.3s,baz=157,slow=6.8,SNR=5.2 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **65.67** | **338** | P | **P** | **07 24 33.1** | **-0.9** |
| | comp=Z,0.6nm,0.5s,baz=137,slow=9.3,SNR=4.2 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **67.47** | **330** | P | **P** | **07 24 44.3** | **-1.3** |
| **MAW** | **Mawson** | **67.51** | **196** | P | **P** | **07 24 46.6** | **+1.0** |
| | comp=Z,1.8nm,0.8s,baz=49,slow=11,SNR=2.6 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **LODK** | **Lodwar** | **69.78** | **276** | P | **P** | **07 25 00.2** | **-0.7** |
| LODK | | | | IAmb | IAmb | 07 25 36.6 | |
| | comp=Z,8.1nm,1.5s | | | | | | |
| **BKZ** | **Black Stump Fm** | **72.12** | **129** | P | **P** | **07 25 14.1** | **-0.5** |
| **KBZ** | **Khabaz** | **74.42** | **318** | P | **P** | **07 25 27.6** | **-0.3** |
| | comp=Z,1.0nm,0.4s,baz=101,slow=5.0,SNR=4.5 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **EIL** | **Elat** | **75.60** | **303** | LR | LR | 07 57 30.9 | |
| | comp=Z,12nm,19.6s,baz=249,slow=35 | | | | | | |
| **BRTR** | **Keskin Array B** | **79.48** | **312** | P | **P** | **07 25 55.5** | **-1.2** |
| **BRTR** | **Keskin Array B** | **79.48** | **312** | P | **P** | **07 25 56.6** | **-0.1** |
| | comp=Z,1.4nm,0.6s,baz=132,slow=6.9,SNR=8.0 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.85** | **180** | P | **P** | **07 26 19.1** | **0.0** |
| QSPA | | | | IAmb | IAmb | 07 26 52.5 | |
| | comp=Z,3.1nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.85** | **180** | P | **P** | **07 26 19.6** | **+0.4** |
| | comp=Z,2.0nm,1.0s,baz=262,slow=2.4,SNR=3.8 | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **89.63** | **198** | ⇑Pdiff | **P** | **07 26 49.2** | **+2.0** |
| | comp=Z,33nm,0.7s | | | | | | |
| SNAA | | | | ⇑x | x | 07 26 49.2 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **89.63** | **198** | P | **P** | **07 26 49.5** | **+2.3** |
| | comp=Z,1.4nm,0.8s,baz=131,slow=5.6,SNR=12 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.27** | **198** | ⇑Pdiff | **P** | **07 26 56.6** | **+1.9** |
| | comp=Z,3.4nm,0.7s,baz=97,slow=4.3 | | | | | | |
| VNA2 | | | | ⇑x | x | 07 26 56.6 | |
| | comp=Z,3.4nm,0.7s,baz=97,slow=4.3 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.82** | **197** | ⇑Pdiff | **P** | **07 26 59.1** | **+1.8** |
| | comp=Z,1.4nm,0.8s | | | | | | |
| VNA3 | | | | ⇑x | x | 07 26 59.1 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **144.74** | **46** | PKP | **PKPdf** | **07 33 26.6** | **-0.5** |
| | comp=Z,3.1nm,0.7s,baz=277,slow=1.5,SNR=51 | | | | | | |
| **BDFB** | **Brasilia** | **145.30** | **231** | PKPbc | **PKPdf** | **07 33 29.5** | **+1.0** |
| | comp=Z,1.0nm,0.5s,baz=218,slow=9.9,SNR=4.0 | | | | | | |
| **LPAZ** | **La Paz** | **156.58** | **198** | PKPab | **PKPab** | **07 34 17.3** | **+2.1** |
| | comp=Z,0.8nm,0.7s,baz=226,slow=5.6,SNR=4.7 | | | | | | |

*NOU* ***17*** *07:38:32.4,34.˝35S×178.˝20W, h0km, ML4.8/7, South of Kermadec Islands*

*IDC* ***17*** *07:38:48.7±1.0, 34.˝78S×179.˝66W, h0km, mb4.2/4, mbtmp4.3/5, ML4.1/1, MS3.4/4, Error ellipse: s-maj=34.9km s-min=27.6km az=62.0*

*NEIC* ***17*** *07:38:51.5±2.8, 35.˝1S±0.˝1×179.˝69W±0.˝06, h10km±2km, mb4.3/5, Error ellipse: s-maj=21.5km s-min=8.3km az=7.0*

*WEL* ***17*** *07:38:55.0±0.8, 35˚S±4˝×18˚0W±˚, h12km, M4.3/32, mB5.3/2, ML4.5/34, MLv4.3/32, Mw(mB)4.7/2, Error ellipse: s-maj=0.0km s-min=0.0km az=100.2, confirmed*

**ISC 17 07:38:52.9±0.9, 35.14S±0.08×179.79W±0.10, h10km, n91, σ1§59/93, mb4.3/6, MS3.3/3, 3C, East of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **2.87** | **212** | P | **Pn** | **07 39 38.7** | **+0.1** |
| **MXZ** | **Matakaoa Point** | **2.87** | **212** | Pn | **Pn** | **07 39 38.8** | **+0.2** |
| **MXZ** | **Matakaoa Point** | **2.87** | **212** | P | **Pn** | **07 39 39.0** | **+0.4** |
| MXZ | | | | S | **Sn** | **07 40 14.6** | **+1.4** |
| **WMGZ** | **Waiomatatini S** | **3.04** | **208** | P | **Pn** | **07 39 42.7** | **+1.7** |
| WMGZ | | | | S | **Sn** | **07 40 20.4** | **+2.9** |
| **PKGZ** | **Pakihiroa** | **3.22** | **212** | P | **Pn** | **07 39 44.7** | **+1.1** |
| PKGZ | | | | S | **Sn** | **07 40 23.5** | **+1.6** |
| **HAZ** | **Te Kaha** | **3.27** | **216** | P | **Pn** | **07 39 43.5** | **-0.6** |
| **PUZ** | **Puketiti** | **3.33** | **208** | P | **Pn** | **07 39 45.8** | **+0.8** |
| PUZ | | | | S | **Sn** | **07 40 25.0** | **+0.5** |
| **WIZ** | **White Island** | **3.41** | **225** | P | **Pn** | **07 39 45.7** | **-0.4** |
| WIZ | | | | S | **Sn** | **07 40 21.7** | **-5.0** |
| **RUGZ** | **Raukumara Rang** | **3.48** | **215** | P | **Pn** | **07 39 48.2** | **+0.9** |
| **TWGZ** | **Tauwhareparae** | **3.52** | **210** | P | **Pn** | **07 39 48.7** | **+0.9** |
| TWGZ | | | | S | **Sn** | **07 40 31.1** | **+1.6** |
| **CNGZ** | **Carnagh Statio** | **3.71** | **205** | P | **Pn** | **07 39 51.3** | **+1.1** |
| **TKGZ** | **Te Karaka** | **3.80** | **209** | P | **Pn** | **07 39 51.2** | **-0.3** |
| **MWZ** | **Matawai** | **3.85** | **213** | P | **Pn** | **07 39 52.5** | **+0.3** |
| MWZ | | | | S | **Sn** | **07 40 38.3** | **+0.8** |
| **KUZ** | **Kuaotunu** | **3.98** | **245** | P | **Pn** | **07 39 54.2** | **+0.3** |
| **URZ** | **Urewera** | **3.99** | **218** | P | **Pn** | **07 39 55.1** | **+1.0** |
| **URZ** | **Urewera** | **3.99** | **218** | Pn | **Pn** | **07 39 54.7** | **+0.7** |
| | 11nm,0.3s,baz=10,slow=2.1,SNR=80 | | | | | | |
| URZ | | | | Sn | **Sn** | **07 40 40.0** | **-0.9** |
| | 18nm,0.3s,baz=184,slow=22,SNR=7.0 | | | | | | |
| | 50nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **3.99** | **218** | P | **Pn** | **07 39 54.4** | **+0.3** |
| **OPRZ** | **Ohinepanea** | **4.00** | **226** | P | **Pn** | **07 39 54.4** | **+0.2** |
| **MARZ** | **Manawahe** | **4.02** | **224** | P | **Pn** | **07 39 54.8** | **+0.2** |
| **GRZ** | **Great Barrier** | **4.02** | **253** | P | **Pn** | **07 39 55.0** | **+0.4** |
| **RAGZ** | **Rawiri** | **4.03** | **213** | P | **Pn** | **07 39 54.9** | **+0.2** |
| RAGZ | | | | S | **Sn** | **07 40 41.8** | **-0.3** |
| **RIGZ** | **Rimuhau** | **4.07** | **208** | P | **Pn** | **07 39 56.2** | **+1.0** |
| RIGZ | | | | S | **Sn** | **07 40 43.0** | **+0.2** |
| **EDRZ** | **Edgecumbe** | **4.07** | **222** | P | **Pn** | **07 39 57.0** | **+1.7** |
| **TGRZ** | **Tauranga** | **4.10** | **230** | P | **Pn** | **07 39 56.1** | **+0.5** |
| **PRGZ** | **Paritu Road** | **4.21** | **206** | P | **Pn** | **07 39 57.2** | **0.0** |
| **OMRZ** | **Omania** | **4.28** | **225** | P | **Pn** | **07 39 59.2** | **+1.1** |
| **TARZ** | **Mount Tarawera** | **4.29** | **223** | P | **Pn** | **07 40 01.6** | **+3.3** |
| **KARZ** | **Kaharoa** | **4.30** | **227** | P | **Pn** | **07 39 59.0** | **+0.7** |
| **SNGZ** | **Shannon Statio** | **4.30** | **211** | P | **Pn** | **07 39 59.1** | **+0.7** |
| SNGZ | | | | S | **Sn** | **07 40 48.7** | **0.0** |
| **MUGZ** | **Murupara** | **4.33** | **219** | P | **Pn** | **07 39 59.3** | **+0.5** |
| MUGZ | | | | S | **Sn** | **07 40 48.7** | **-0.6** |
| **RTZ** | **Ruatahuna** | **4.33** | **216** | | **Pn** | **07 39 58.8** | **0.0** |
| **RTZ** | **Ruatahuna** | **4.33** | **216** | P | **Pn** | **07 39 59.4** | **+0.6** |
| **RRRZ** | **Republican Roa** | **4.36** | **222** | P | **Pn** | **07 40 00.9** | **+1.7** |
| **KMRZ** | **Kaimai** | **4.38** | **231** | P | **Pn** | **07 39 60.0** | **+0.6** |
| **KNZ** | **Kokohu** | **4.38** | **207** | P | **Pn** | **07 39 58.7** | **-0.6** |
| KNZ | | | | S | **Sn** | **07 40 49.4** | **-1.0** |
| **MHGZ** | **Mahia Peninsul** | **4.41** | **204** | P | **Pn** | **07 39 59.5** | **-0.4** |
| MHGZ | | | | S | **Sn** | **07 40 50.4** | **-0.9** |
| **UTU** | **Utuhina** | **4.43** | **226** | P | **Pn** | **07 40 01.6** | **+1.4** |
| **WIAZ** | **Waiheke Island** | **4.44** | **247** | P | **Pn** | **07 40 01.9** | **+1.7** |
| **HSRZ** | **Hossack Road** | **4.49** | **224** | P | **Pn** | **07 40 02.5** | **+1.5** |
| **MKAZ** | **Moumakai** | **4.53** | **243** | P | **Pn** | **07 40 02.8** | **+1.3** |
| **TOZ** | **Tahuroa Road** | **4.59** | **234** | | **Pn** | **07 40 03.1** | **+0.7** |
| **TOZ** | **Tahuroa Road** | **4.59** | **234** | P | **Pn** | **07 40 03.5** | **+1.1** |
| **ABAZ** | **Army Bay** | **4.60** | **250** | P | **Pn** | **07 40 05.9** | **+3.4** |
| **MBAZ** | **Motutapu North** | **4.61** | **248** | P | **Pn** | **07 40 05.1** | **+2.6** |
| **ETAZ** | **East Tamaki Re** | **4.65** | **245** | P | **Pn** | **07 40 04.8** | **+1.7** |
| **NMHZ** | **Namai** | **4.80** | **214** | P | **Pn** | **07 40 06.0** | **+0.7** |
| **WCZ** | **Waipu Caves** | **4.85** | **259** | P | **Pn** | **07 40 06.4** | **+0.6** |
| **RVAZ** | **Riverhead Bore** | **4.85** | **249** | P | **Pn** | **07 40 08.5** | **+2.6** |
| **ARHZ** | **Aropaoanui** | **4.85** | **211** | P | **Pn** | **07 40 05.5** | **-0.5** |
| ARHZ | | | | S | **Sn** | **07 41 01.9** | **-0.3** |
| **AWAZ** | **Awhitu Peninsu** | **4.90** | **245** | P | **Pn** | **07 40 08.5** | **+1.9** |
| **BKZ** | **Black Stump Fm** | **5.00** | **215** | P | **Pn** | **07 40 07.1** | **-0.9** |
| **BKZ** | **Black Stump Fm** | **5.00** | **215** | | **Pn** | **07 40 07.5** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **5.00** | **215** | P | **Pn** | **07 40 07.0** | **-1.0** |
| **MCHZ** | **McNeill Hill** | **5.13** | **212** | P | **Pn** | **07 40 10.1** | **+0.4** |
| MCHZ | | | | S | **Sn** | **07 41 07.8** | **-1.3** |
| **CKHZ** | **Cape Kidnapper** | **5.16** | **208** | P | **Pn** | **07 40 08.9** | **-1.2** |
| CKHZ | | | | S | **Sn** | **07 41 07.1** | **-2.6** |
| **OUZ** | **Omahuta** | **5.42** | **267** | P | **Pn** | **07 40 13.8** | **+0.1** |
| **HIZ** | **Hauiti** | **5.46** | **230** | P | **Pn** | **07 40 15.7** | **+1.4** |
| **HIZ** | **Hauiti** | **5.46** | **230** | Pn | **Pn** | **07 40 15.9** | **+1.6** |
| **BFZ** | **Birch Farm** | **6.36** | **208** | Pn | **Pn** | **07 40 24.9** | **-1.8** |
| **KHEZ** | **Kahui Hut** | **6.45** | **228** | P | **Pn** | **07 40 30.9** | **+2.9** |
| **CTZ** | **Chatham Island** | **8.93** | **165** | P | **Pn** | **07 41 02.9** | **+1.0** |
| CTZ | | | | S | Sn | 07 42 31.7 | -11 |
| **KHZ** | **Kahutara** | **8.94** | **214** | Pn | **Pn** | **07 41 02.6** | **+0.7** |
| **LTZ** | **Lake Taylor** | **9.82** | **217** | Pn | Pn | 07 41 12.2 | -2.0 |
| **DZM** | **Mont Dzumac** | **17.74** | **314** | LR | LR | 07 48 08.0 | |
| | comp=Z,187nm,20.4s,baz=160,slow=32 | | | | | | |
| **RAR** | **Rarotonga** | **22.39** | **57** | LR | LR | 07 50 21.2 | |
| | comp=Z,38nm,20.1s,baz=237,slow=31 | | | | | | |
| **STKA** | **Stephens Creek** | **32.23** | **265** | LR | LR | 07 56 35.8 | |
| | comp=Z,73nm,21.2s,baz=205,slow=33 | | | | | | |
| **AS31** | **Alice Springs** | **41.60** | **273** | P | **P** | **07 46 39.7** | **-1.5** |
| AS31 | | | | IAmb | IAmb | 07 46 43.1 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **41.60** | **273** | P | **P** | **07 46 40.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **41.60** | **273** | P | **P** | **07 46 39.5** | **-1.7** |
| | comp=Z,5.3nm,0.7s,baz=116,slow=7.3,SNR=27 | | | | | | |
| ASAR | | | | LR | LR | 08 04 12.1 | |
| | comp=Z,106nm,18.0s,baz=178,slow=36 | | | | | | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **43.01** | **278** | P | P | 07 46 50.2 | -2.6 |
| **WRA** | **Warramunga Arr** | **43.02** | **278** | P | **P** | **07 46 51.1** | **-1.7** |
| **WRA** | **Warramunga Arr** | **43.02** | **278** | P | **P** | **07 46 50.9** | **-1.9** |
| | comp=Z,4.7nm,0.7s,baz=118,slow=7.7,SNR=34 | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **CASY** | **Casey** | **50.27** | **210** | P | P | 07 47 47.0 | -2.0 |
| CASY | | | | IAmb | IAmb | 07 47 48.9 | |
| | comp=Z,4.6nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **54.99** | **180** | P | **P** | **07 48 24.9** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 07 48 34.8 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **54.99** | **180** | P | **P** | **07 48 25.1** | **+1.0** |
| | comp=Z,1.4nm,0.8s,baz=37,slow=3.3,SNR=5.8 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **73.47** | **179** | P | **P** | **07 50 24.5** | **-0.6** |
| | comp=Z,0.8nm,0.9s,baz=184,slow=13,SNR=1.5 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **73.69** | **177** | ⇑P | P | 07 50 23.4 | -2.9 |
| **VNA2** | **Neumayer--Watz** | **74.10** | **177** | ⇑P | **P** | **07 50 28.1** | **-0.7** |
| | baz=191,slow=7.0 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **74.34** | **177** | ⇑P | P | 07 50 22.7 | -7.4 |
| **H03S2** | **Juan Fernandez** | **79.11** | **124** | T | T | 09 19 02.2 | |
| | baz=232,slow=74,SNR=7.2 | | | | | | |
| **H03S1** | **Juan Fernandez** | **79.12** | **124** | T | T | 09 19 03.4 | |
| | baz=232,slow=74,SNR=6.5 | | | | | | |
| **H03S3** | **Juan Fernandez** | **79.13** | **124** | T | T | 09 19 03.4 | |
| | baz=232,slow=74,SNR=7.8 | | | | | | |
| **H03N3** | **Juan Fernandez** | **79.33** | **123** | T | T | 09 19 23.1 | |
| | baz=237,slow=72,SNR=6.9 | | | | | | |
| **H03N2** | **Juan Fernandez** | **79.33** | **123** | T | T | 09 19 19.1 | |
| | baz=237,slow=72,SNR=6.6 | | | | | | |
| **H03N1** | **Juan Fernandez** | **79.34** | **123** | T | T | 09 19 18.8 | |
| | baz=237,slow=72,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **119.59** | **308** | PKP | **PKPdf** | **07 57 39.2** | **-3.4** |
| | comp=Z,0.3nm,0.7s,baz=93,slow=2.9,SNR=2.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **123.18** | **312** | PKP | **PKPdf** | **07 57 45.5** | **-3.8** |
| | comp=Z,0.8nm,0.7s,baz=116,slow=2.1,SNR=8.6 | | | | | | |
| **FINES** | **FINESS Array B** | **148.96** | **336** | PKPbc | **PKPdf** | **07 58 37.2** | **+1.1** |
| | comp=Z,3.6nm,0.8s,baz=15,slow=7.9,SNR=6.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **153.13** | **349** | PKPbc | **PKPdf** | **07 58 47.2** | **+4.5** |
| | comp=Z,0.8nm,0.8s,baz=26,slow=2.0,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **153.15** | **290** | PKPbc | **PKPdf** | **07 58 47.6** | **+4.2** |
| | comp=Z,1.2nm,0.7s,baz=103,slow=3.9,SNR=5.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **158.07** | **184** | PKPab | **PKPab** | **07 59 22.3** | **-1.5** |
| | comp=Z,1.4nm,1.0s,baz=135,slow=4.4,SNR=5.6 | | | | | | |

**IDC 17 07:45:09.2±7.1, 23.˝37N×144.˝10E, h0km, mb3.8/4, mbtmp3.9/5, ML3.9/1, MS2.9/4, Error ellipse: s-maj=276.0km s-min=26.7km az=77.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **4.10** | **335** | Pn | Pn | 07 46 11.3 | -1.8 |
| | 7.8nm,0.3s,baz=107,slow=19,SNR=7.3 | | | | | | |
| JCJ | | | | Sn | Sn | 07 46 54.7 | -7.1 |
| | 13nm,0.3s,baz=277,slow=23,SNR=6.9 | | | | | | |
| | 48nm,0.5s | | | | | | |
| **JOW** | **Kunigami** | **14.75** | **287** | LR | LR | 07 53 19.2 | |
| | comp=Z,55nm,20.6s,baz=128,slow=33 | | | | | | |
| **JNU** | **Nakatsue** | **15.16** | **313** | LR | LR | 07 54 08.6 | |
| | comp=Z,37nm,18.3s,baz=133,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **19.75** | **319** | LR | LR | 07 56 03.8 | |
| | comp=Z,22nm,20.4s,baz=190,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **38.62** | **319** | LR | LR | 08 09 23.7 | |
| | comp=Z,32nm,18.2s,baz=38,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.09** | **193** | P | P | 07 53 18.8 | -0.5 |
| | 0.3nm,0.5s,baz=12,slow=8.6,SNR=6.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.45** | **321** | P | P | 07 54 30.6 | -0.2 |
| | 0.8nm,0.4s,baz=100,slow=7.5,SNR=1.9 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.21** | **312** | P | P | 07 54 37.2 | +0.6 |
| | 0.6nm,0.4s,baz=88,slow=8.4,SNR=14 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.90** | **316** | P | P | 07 54 55.9 | 0.0 |
| | 0.6nm,0.4s,baz=92,slow=8.3,SNR=8.3 | | | | | | |
| | 0.6nm,0.4s | | | | | | |

*IDC* ***17*** *07:49:22.1±0.8, 13.˝51S×111.˝39W, h0km, mb3.9/8, mbtmp3.9/8, MS4.0/29, Error ellipse: s-maj=39.0km s-min=20.7km az=80.0*

*NEIC* ***17*** *07:49:22.9±0.9, 13.˝70S±0.˝03×111.˝5W±0.˝2, h10km±1km, mb4.6/58, Error ellipse: s-maj=28.4km s-min=4.3km az=263.0*

**ISC 17 07:49:22.7±0.5, 13.64S±0.08×111.47W±0.10, h11km, n106, σ0§83/72, mb4.6/37, MS4.0/30, 8C, Central East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VA02** | **Isla de Pascua** | **13.59** | **172** | Pn | **Pn** | **07 52 34.5** | **-1.0** |
| **TAOE** | **Nuku Hiva Isla** | **28.51** | **277** | eLR | LR | 08 02 29.0 | |
| | 645nm,24.9s | | | | | | |
| **ATAH** | **Atahualpa** | **33.15** | **82** | LR | LR | 08 05 48.2 | |
| | comp=Z,154nm,19.1s,baz=254,slow=30 | | | | | | |
| **NNA** | **Nana** | **33.79** | **91** | LR | LR | 08 06 00.6 | |
| | comp=Z,261nm,20.7s,baz=257,slow=30 | | | | | | |
| **CMIG** | **Matias Romero** | **34.65** | **29** | LR | LR | 08 07 10.4 | |
| | comp=Z,195nm,21.2s,baz=214,slow=31 | | | | | | |
| **APG** | **El Apazote** | **35.24** | **37** | LR | LR | 08 07 51.2 | |
| | comp=Z,5.3nm,19.5s,baz=58,slow=32 | | | | | | |
| **PULU** | **Pululahua** | **35.36** | **70** | P | **P** | **07 56 20.0** | **+0.9** |
| **JTS** | **Las Juntas de** | **35.47** | **49** | LR | LR | 08 06 35.2 | |
| | comp=Z,68nm,21.6s,baz=220,slow=29 | | | | | | |
| **OTAV** | **Otavalo** | **35.50** | **70** | P | **P** | **07 56 18.4** | **-1.9** |
| OTAV | | | | IAmb | IAmb | 07 56 32.3 | |
| | comp=Z,9.9nm,1.3s | | | | | | |
| **H03N2** | **Juan Fernandez** | **35.53** | **129** | T | T | 08 33 54.3 | |
| | baz=300,slow=77,SNR=112 | | | | | | |
| **H03N3** | **Juan Fernandez** | **35.55** | **129** | T | T | 08 34 01.8 | |
| | baz=300,slow=77,SNR=112 | | | | | | |
| **H03N1** | **Juan Fernandez** | **35.55** | **129** | T | T | 08 34 00.3 | |
| | baz=300,slow=77,SNR=96 | | | | | | |
| **CNGN** | **Cerro Negro** | **35.74** | **44** | P | **P** | **07 56 21.6** | **-0.3** |
| **PPT** | **Papeete** | **36.87** | **259** | LR | LR | 08 07 07.6 | |
| | comp=Z,132nm,21.8s,baz=114,slow=29 | | | | | | |
| **PPT2** | **Papeete2** | **36.87** | **259** | *e*S | **S** | **08 02 14.2** | **-2.2** |
| | comp=Z,33nm,28.8s | | | | | | |
| PPT2 | | | | *e*SS | **SS** | **08 04 56.9** | **-0.8** |
| | comp=Z,401nm,32.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 08 06 25.8 | |
| | comp=Z,152nm,27.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 08 06 26.1 | |
| | comp=Z,246nm,25.5s | | | | | | |
| **TBI** | **Tubuai** | **37.20** | **249** | *e*SS | SS | 08 04 59.6 | -4.6 |
| | comp=Z,1μm,35.8s | | | | | | |
| TBI | | | | *e*LR | LR | 08 06 27.0 | |
| | comp=Z,615nm,34.5s | | | | | | |
| TBI | | | | *e*LR | LR | 08 06 36.0 | |
| | comp=Z,679nm,32.8s | | | | | | |
| **ZAIG** | **Zacatecas** | **37.22** | **14** | P | **P** | **07 56 34.9** | **+0.1** |
| **LPIG** | **La Paz** | **37.53** | **2** | LR | LR | 08 08 11.0 | |
| | comp=Z,231nm,18.2s,baz=188,slow=30 | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **38.51** | **85** | P | **P** | **07 56 45.5** | **0.0** |
| CZSB | | | | IAmb | IAmb | 07 56 53.7 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **AC05** | **El Transito** | **41.04** | **118** | P | **P** | **07 57 05.2** | **-1.4** |
| AC05 | | | | IAmb | IAmb | 07 57 20.4 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **CO03** | **El Pedregal** | **41.18** | **121** | | **P** | **07 57 06.8** | **-0.9** |
| CO03 | | | | IAmb | IAmb | 07 57 32.8 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **LVC** | **Limon Verde** | **41.30** | **109** | LR | LR | 08 10 10.3 | |
| | comp=Z,256nm,18.0s,baz=272,slow=30 | | | | | | |
| **LPAZ** | **La Paz** | **41.90** | **99** | P | **P** | **07 57 14.9** | **+0.6** |
| **LPAZ** | **La Paz** | **41.90** | **99** | P | **P** | **07 57 15.1** | **+0.8** |
| | comp=Z,2.5nm,0.9s,baz=243,slow=7.1,SNR=10.0 | | | | | | |
| LPAZ | | | | LR | LR | 08 10 39.9 | |
| | comp=Z,374nm,20.4s,baz=252,slow=30 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **43.38** | **10** | P | **P** | **07 57 25.5** | **0.0** |
| **TXAR** | **Lajitas Array** | **43.38** | **10** | P | **P** | **07 57 25.7** | **+0.2** |
| | comp=Z,2.7nm,1.2s,baz=186,slow=10,SNR=11 | | | | | | |
| | comp=Z,2.7nm,1.2s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **43.38** | **10** | P | **P** | **07 57 25.4** | **-0.1** |
| **DRIO** | **Del Rio** | **44.08** | **14** | P | **P** | **07 57 30.5** | **-0.4** |
| **SAND** | **Sanderson** | **44.27** | **12** | P | **P** | **07 57 32.3** | **-0.2** |
| SAND | | | | IAmb | IAmb | 07 57 34.6 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **ALPN** | **Alpine** | **44.40** | **10** | P | **P** | **07 57 34.2** | **+0.5** |
| ALPN | | | | I

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| COWI | Conover | 62.78 | 17 | P | P | 07 59 47.9 | -0.2 |
| SADO | Sadowa | 65.12 | 25 | LR | LR | 08 26 51.7 | |
| | comp=Z,40nm,18.8s,baz=200,slow=35 | | | | | | |
| BBB | Bella Bella | 67.12 | 349 | LR | LR | 08 22 30.3 | |
| | comp=Z,71nm,21.9s,baz=194,slow=30 | | | | | | |
| BELA | Belgrano 2 | 73.99 | 168 | P | P | 08 00 59.7 | +1.8 |
| BELA | | | | IAmb | IAmb | 08 01 00.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| YKA | Yellowknife Ar | 75.93 | 359 | P | P | 08 01 09.4 | +0.3 |
| | comp=Z,0.6nm,0.8s,baz=194,slow=5.5,SNR=4.6 | | | | | | |
| YKA | | | | LR | LR | 08 31 34.3 | |
| | comp=Z,165nm,18.4s,baz=179,slow=33 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 76.47 | 180 | P | P | 08 01 14.6 | +2.1 |
| | comp=Z,7.8nm,1.1s,baz=135,slow=2.5,SNR=11 | | | | | | |
| QSPA | | | | LR | LR | 08 30 22.6 | |
| | comp=Z,73nm,18.6s,baz=90,slow=32 | | | | | | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| DZM | Mont Dzumac | 77.78 | 250 | eLR | LR | 08 25 19.1 | |
| | comp=Z,54nm,21.6s | | | | | | |
| SCHQ | Schefferville | 77.93 | 25 | LR | LR | 08 34 28.0 | |
| | comp=Z,85nm,19.9s,baz=200,slow=35 | | | | | | |
| K29M | Barlow Dome | 79.80 | 349 | P | P | 08 01 31.1 | +0.2 |
| K29M | | | | IAmb | IAmb | 08 01 37.5 | |
| | comp=Z,12nm,1.3s | | | | | | |
| VNA3 | Neumayer Olymp | 80.94 | 161 | ⇑P | P | 08 01 38.0 | +1.1 |
| VNA3 | comp=Z,3.8nm,0.9s | | | | | | |
| | | | | ⇑x | x | 08 01 38.0 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| VNA2 | Neumayer--Watz | 81.75 | 161 | ⇑P | P | 08 01 42.6 | +1.5 |
| | comp=Z,1.9nm,1.0s,baz=307,slow=31 | | | | | | |
| VNA2 | | | | ⇑x | x | 08 01 42.6 | |
| | comp=Z,1.9nm,1.0s,baz=307,slow=31 | | | | | | |
| ILAR | Eielson Array | 82.66 | 345 | P | P | 08 01 46.4 | +0.5 |
| | comp=Z,1.0nm,1.1s,baz=179,slow=4.0,SNR=5.8 | | | | | | |
| ILAR | | | | LR | LR | 08 30 56.8 | |
| | comp=Z,42nm,18.4s,baz=61,slow=30 | | | | | | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| CCB | Clear Creek Bu | 82.78 | 345 | P | P | 08 01 46.2 | -0.2 |
| CCB | | | | IAmb | IAmb | 08 01 47.6 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| SNAA | Sanae | 82.88 | 162 | P | P | 08 01 47.6 | +0.5 |
| SNAA | | | | IAmb | IAmb | 08 02 30.5 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| SNAA | Sanae | 82.88 | 162 | ⇑P | P | 08 01 47.7 | +0.6 |
| | comp=Z,30nm,1.0s | | | | | | |
| SNAA | | | | ⇑x | x | 08 01 47.7 | |
| | comp=Z,30nm,1.0s | | | | | | |
| SNAA | Sanae | 82.88 | 162 | P | P | 08 01 48.3 | +1.1 |
| | comp=Z,1.0nm,0.8s,baz=288,slow=5.8,SNR=3.8 | | | | | | |
| SNAA | | | | LR | LR | 08 31 41.0 | |
| | comp=Z,85nm,21.4s,baz=194,slow=31 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| INK | Inuvik | 83.25 | 352 | LR | LR | 08 34 12.1 | |
| | comp=Z,96nm,18.6s,baz=156,slow=32 | | | | | | |
| I23K | Minto, Yukon-K | 83.58 | 345 | P | P | 08 01 51.4 | +0.9 |
| TROLL | Troll, Antarti | 84.27 | 163 | ⇑P | P | 08 01 55.3 | +0.9 |
| | comp=Z,107nm,1.1s | | | | | | |
| TROLL | | | | ⇑x | x | 08 01 55.3 | |
| | comp=Z,107nm,1.1s | | | | | | |
| F26K | Sheenjek River | 84.50 | 348 | P | P | 08 01 56.2 | +0.9 |
| H11S2 | WAKE ISLAND Hy | 86.71 | 290 | T | T | 09 37 53.4 | |
| | baz=106,slow=75 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 86.72 | 290 | T | T | 09 37 54.8 | |
| | baz=106,slow=75 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 86.73 | 290 | T | T | 09 37 55.9 | |
| | baz=106,slow=75 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 86.85 | 291 | T | T | 09 38 02.2 | |
| | baz=106,slow=75 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 86.87 | 291 | T | T | 09 38 04.5 | |
| | baz=106,slow=75 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 86.87 | 291 | T | T | 09 38 02.7 | |
| | baz=106,slow=75 | | | | | | |
| SHEM | Shemya Is, Ala | 91.56 | 324 | LR | LR | 08 34 36.3 | |
| | comp=Z,113nm,21.7s,baz=100,slow=30 | | | | | | |
| CASY | Casey | 94.47 | 196 | P | P | 08 02 41.3 | -1.4 |
| CASY | | | | IAmb | IAmb | 08 02 48.5 | |
| | comp=Z,5.7nm,1.4s | | | | | | |
| BVAR | Borovoye Array | 140.68 | 358 | PKP | PKPdf | 08 08 50.6 | -1.8 |
| | comp=Z,0.3nm,0.4s,baz=20,slow=4.7,SNR=1.7 | | | | | | |
| KURBB | Kurchatov Arra | 142.23 | 350 | PKP | PKPdf | 08 08 55.3 | +0.1 |
| | comp=Z,0.5nm,0.5s,baz=11,slow=3.1,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 144.39 | 343 | PKP | PKPab | 08 08 59.6 | +0.1 |
| | comp=Z,6.6nm,1.1s,baz=27,slow=3.0,SNR=21 | | | | | | |
| CMAR | Chiang Mai Arr | 150.40 | 283 | PKPbc | PKiKP | 08 09 17.1 | +1.1 |
| | comp=Z,1.9nm,0.5s,baz=58,slow=1.2,SNR=15 | | | | | | |

**IDC 17 08:06:03.1±3.2, 54°32N×87°23E, h0km, mbtmp2.9/2, ML2.5/2, Error ellipse: s-maj=28.6km s-min=20.0km az=48.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 1.47 | 256 | I | I | 08 15 10.0 | |
| | 0.1nm,1.0s,baz=74,slow=310,SNR=18 | | | | | | |
| ZALV | Zalesovo Beam | 1.47 | 256 | Pg | Pn | 08 06 29.5 | -1.3 |
| | 1.7nm,0.3s,baz=70,slow=16,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 08 06 50.5 | |
| | 1.2nm,0.3s,baz=78,slow=29,SNR=5.0 | | | | | | |
| KURBB | Kurchatov Arra | 6.48 | 239 | Pn | Pn | 08 07 39.6 | 0.0 |
| | 0.1nm,0.3s,baz=53,slow=13,SNR=6.6 | | | | | | |
| KURBB | | | | Lg | Lg | 08 09 27.6 | |
| | baz=55,slow=32,SNR=1.7 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 8.16 | 205 | Pn | Pn | 08 08 04.6 | +1.8 |
| | 0.1nm,0.3s,baz=22,slow=14,SNR=4.1 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| BVAR | Borovoye Array | 10.08 | 269 | Sn | Sn | 08 10 15.7 | -7.0 |
| | baz=73,slow=24,SNR=2.0 | | | | | | |

*NNC 17 08:14:20.3±2.3, 54°48N×87°63E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=22.7km s-min=12.7km az=178.0, Suspected Mining explosion.*

*IDC 17 08:14:29.7±2.5, 54°42N×86°65E, h0km, mbtmp3.2/3, ML2.6/3, Error ellipse: s-maj=20.8km s-min=13.6km az=53.0*

**ISC 17 08:14:22.5±3.8, 54°5N±0°2×87°4E±0°2, h0km, n9, σ2s06/13, 5C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 1.62 | 251 | I | I | 08 22 53.2 | |
| | baz=64,slow=312,SNR=9.9 | | | | | | |
| ZAA0 | Zalesovo Array | 1.62 | 251 | ⇑P | Pn | 08 14 50.9 | -1.4 |
| | 1.2nm,0.9s | | | | | | |
| ZAA0 | | | | ⇓S | Sb | 08 15 15.0 | +0.9 |
| | 4.2nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 1.62 | 251 | Pg | Pn | 08 14 51.1 | -1.2 |
| | 1.3nm,0.3s,baz=63,slow=16,SNR=23 | | | | | | |
| ZALV | | | | Lg | Lg | 08 15 08.9 | |
| | 0.9nm,0.3s,baz=71,slow=26,SNR=13 | | | | | | |
| KURK | Kurchatov | 6.56 | 238 | ⇑Pn | Pn | 08 16 01.4 | +1.3 |
| | 4.1nm,1.0s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 08 17 17.5 | +2.0 |
| | 3.2nm,0.9s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 08 17 54.7 | |
| | 5.7nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 6.66 | 238 | Pn | Pn | 08 16 04.1 | +2.6 |
| | 0.1nm,0.3s,baz=53,slow=14,SNR=24 | | | | | | |
| KURBB | | | | Sn | Sn | 08 17 13.6 | -4.4 |
| | baz=51,slow=26,SNR=2.7 | | | | | | |
| KURBB | | | | Lg | Lg | 08 17 51.7 | |
| | baz=51,slow=32,SNR=6.4 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 6.66 | 238 | ⇑Pn | Pn | 08 16 02.6 | +1.2 |
| | 4.3nm,0.9s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 08 17 17.5 | -0.5 |
| | 7.4nm,0.8s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 08 17 55.5 | |
| | 12nm,0.8s | | | | | | |
| MK31 | Makanchi Array | 8.37 | 205 | ⇓Pn | Pn | 08 16 22.9 | -2.1 |
| | 0.4nm,0.5s,baz=19,slow=13,SNR=8.0 | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 08 18 00.3 | +0.2 |
| | 2.7nm,1.0s,baz=27,slow=26,SNR=7.6 | | | | | | |
| MK31 | | | | Lg | Lg | 08 18 45.6 | |
| | 4.2nm,0.8s,baz=30,slow=32,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 8.37 | 205 | Pn | Pn | 08 16 29.8 | +4.8 |
| | 0.3nm,0.3s,baz=22,slow=13,SNR=9.5 | | | | | | |
| MKAR | | | | Sn | Sn | 08 18 00.1 | 0.0 |
| | 0.1nm,0.3s,baz=18,slow=25,SNR=13 | | | | | | |
| MKAR | | | | Lg | Lg | 08 18 46.0 | |
| | baz=19,slow=32,SNR=2.9 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| BVAR | Borovoye Array | 10.19 | 269 | Pn | Pn | 08 16 50.3 | +0.4 |
| | baz=80,slow=16,SNR=2.3 | | | | | | |
| BVAR | | | | Sn | Sn | 08 18 35.6 | -9.1 |
| | baz=74,slow=25,SNR=3.1 | | | | | | |
| | 0.5nm,0.4s | | | | | | |

*IDC 17 08:28:07.1±5.9, 23°67N×144°58E, h0km, mb3.6/5, mbtmp3.6/6, ML3.4/1, Error ellipse: s-maj=232.9km s-min=22.4km az=76.0*

**ISC 17 08:28:11.4±4.9, 23°7N±0°3×14°4E±°, h10km, n6, σ2s16/7, mb3.6/5, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JCJ | Chichijima | 3.67 | 338 | Pn | Pn | 08 29 08.6 | +0.4 |
| | 2.6nm,0.3s,baz=95,slow=16,SNR=2.4 | | | | | | |
| JCJ | | | | Sn | Sn | 08 29 48.7 | -2.9 |
| | 6.0nm,0.3s,baz=292,slow=23,SNR=1.4 | | | | | | |
| | 39nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 44.30 | 193 | P | P | 08 36 20.1 | -1.6 |
| | 0.2nm,0.5s,baz=17,slow=9.5,SNR=9.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| ASAR | Alice Springs | 48.01 | 192 | P | P | 08 36 49.4 | -1.4 |
| | 0.2nm,0.7s,baz=17,slow=6.8,SNR=1.4 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 53.73 | 312 | P | P | 08 37 35.1 | +1.4 |
| | 0.6nm,0.8s,baz=91,slow=8.5,SNR=4.3 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 56.42 | 316 | P | P | 08 37 54.0 | +0.9 |
| | 0.9nm,0.7s,baz=94,slow=7.4,SNR=10 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 61.49 | 319 | P | P | 08 38 30.0 | +1.8 |
| | 1.4nm,0.6s,baz=94,slow=7.9,SNR=6.2 | | | | | | |
| | 1.4nm,0.6s | | | | | | |

*IDC 17 08:48:16.2±2.6, 34°05S×179°00W, h0km, mb3.6/2, mbtmp3.6/3, ML3.6/1, MS3.2/1, Error ellipse: s-maj=66.1km s-min=44.2km az=130.0*

*WEL 17 08:48:24.0±1.3, 35°S±15°×17°9W±1°8, h222km±33km, M4.0/6, mB4.4/1, ML4.2/6, MLv4.0/6, Mw(mB)3.5/1, Error ellipse: s-maj=0.0km s-min=0.0km az=115.3, confirmed*

**ISC 17 08:48:26.5±1.7, 34°57S±0°10×178°9W±0°2, h100km, n19, σ1s81/32, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WMGZ | Waiomatatini S | 3.92 | 214 | P | Pn | 08 49 24.0 | -0.6 |
| WMGZ | | | | S | Sn | 08 50 13.3 | +3.7 |
| PKGZ | Pakihiroa | 4.12 | 216 | P | Pn | 08 49 26.2 | -1.1 |
| PKGZ | | | | S | Sn | 08 50 16.9 | +2.5 |
| HAZ | Te Kaha | 4.19 | 220 | P | Pn | 08 49 27.6 | -0.6 |
| HAZ | | | | S | Sn | 08 50 19.2 | +3.2 |
| PUZ | Puketiti | 4.20 | 213 | P | Pn | 08 49 26.8 | -1.6 |
| PUZ | | | | S | Sn | 08 50 18.0 | +1.6 |
| RUGZ | Raukumara Rang | 4.40 | 219 | P | Pn | 08 49 30.1 | -1.1 |
| RUGZ | | | | S | Sn | 08 50 21.0 | -0.3 |
| CNGZ | Carnagh Statio | 4.57 | 210 | P | Pn | 08 49 30.9 | -2.4 |
| MWZ | Matawai | 4.76 | 217 | P | Pn | 08 49 34.0 | -1.9 |
| MWZ | | | | S | Sn | 08 50 31.1 | +1.2 |
| URZ | Urewera | 4.92 | 220 | Pn | Pn | 08 49 36.1 | -1.9 |
| | 2.0nm,0.3s,baz=342,slow=9.6,SNR=24 | | | | | | |
| URZ | | | | Sn | Sn | 08 50 32.7 | -1.0 |
| | 5.2nm,0.3s,baz=249,slow=16,SNR=11 | | | | | | |
| | 4.1nm,0.3s | | | | | | |
| URZ | Urewera | 4.92 | 220 | P | Pn | 08 49 36.6 | -1.4 |
| URZ | | | | S | Sn | 08 50 33.8 | +0.1 |
| RIGZ | Rimuhau | 4.95 | 212 | P | Pn | 08 49 38.0 | -0.4 |
| RIGZ | | | | S | Sn | 08 50 36.0 | +1.6 |
| SNGZ | Shannon Statio | 5.20 | 215 | P | Pn | 08 49 42.3 | +0.5 |
| SNGZ | | | | S | Sn | 08 50 42.5 | +1.9 |
| KNZ | Kokohu | 5.25 | 211 | P | Pn | 08 49 40.0 | -2.5 |
| KNZ | | | | S | Sn | 08 50 37.8 | -3.8 |
| MUGZ | Murupara | 5.26 | 221 | P | Pn | 08 49 41.0 | -1.6 |
| MUGZ | | | | S | Sn | 08 50 40.7 | -1.2 |
| ARHZ | Aropaoanui | 5.75 | 214 | P | Pn | 08 49 47.3 | -1.9 |
| ARHZ | | | | S | Sn | 08 50 54.8 | +1.0 |
| OUZ | Omahuta | 6.24 | 262 | P | Pn | 08 49 54.6 | -1.4 |
| DZM | Mont Dzumac | 17.94 | 310 | LR | LR | 08 57 47.7 | |
| | comp=Z,72nm,19.5s,baz=62,slow=33 | | | | | | |
| ASAR | Alice Springs | 42.35 | 272 | P | P | 08 56 11.1 | +0.2 |
| | 0.4nm,0.5s,baz=114,slow=8.5,SNR=12 | | | | | | |
| ASAR | | | | PcP | PcP | 08 58 03.5 | +0.9 |
| | 0.3nm,0.6s,baz=120,slow=3.7,SNR=4.3 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 43.72 | 277 | P | P | 08 56 21.8 | -0.1 |
| | 0.4nm,0.4s,baz=118,slow=8.0,SNR=28 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| FINES | FINESS Array B | 148.75 | 337 | PKPbc | PKiKP | 09 08 03.6 | +0.9 |
| | 2.2nm,0.7s,baz=56,slow=3.5,SNR=6.3 | | | | | | |

**IDC 17 08:50:17.3±3.8, 53°49N×90°73E, h0km, mbtmp2.9/3, ML2.4/3, Error ellipse: s-maj=34.3km s-min=25.9km az=33.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 3.54 | 280 | I | I | 09 11 50.0 | |
| | 0.1nm,1.1s,baz=92,slow=316,SNR=3.4 | | | | | | |
| ZALV | Zalesovo Beam | 3.54 | 280 | Pn | Pn | 08 51 15.3 | +1.8 |
| | 0.5nm,0.3s,baz=96,slow=15,SNR=4.4 | | | | | | |
| ZALV | | | | Lg | Lg | 08 52 07.4 | |
| | 0.9nm,0.3s,baz=92,slow=24,SNR=7.3 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 8.05 | 254 | Pn | Pn | 08 52 15.2 | -0.1 |
| | 0.1nm,0.3s,baz=70,slow=15,SNR=2.8 | | | | | | |
| KURBB | | | | Sn | Sn | 08 53 46.5 | -0.5 |
| | baz=66,slow=25,SNR=3.8 | | | | | | |
| KURBB | | | | Lg | Lg | 08 54 32.9 | |
| | baz=66,slow=32,SNR=1.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 8.61 | 222 | Pn | Pn | 08 52 23.3 | +0.2 |
| | 0.1nm,0.3s,baz=39,slow=14,SNR=3.4 | | | | | | |
| MKAR | | | | Lg | Lg | 08 54 49.3 | |
| | 0.1nm,0.3s,baz=36,slow=32,SNR=1.1 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

**IDC 17 08:54:55.8±2.6, 54°08N×86°50E, h0km, mbtmp3.0/2, ML2.8/2, Error ellipse: s-maj=19.8km s-min=12.1km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | ZALESOVO INFRA | 1.00 | 263 | I | I | 09 01 40.0 | |
| | baz=82,slow=312,SNR=2.1 | | | | | | |
| ZALV | Zalesovo Beam | 1.00 | 263 | Pg | Pg | 08 55 13.9 | -1.1 |
| | 1.2nm,0.3s,baz=84,slow=17,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 08 55 29.1 | |
| | 2.1nm,0.3s,baz=82,slow=26,SNR=9.4 | | | | | | |
| KURBB | Kurchatov Arra | 5.99 | 238 | Pn | Pn | 08 56 26.1 | +0.5 |
| | 0.2nm,0.3s,baz=54,slow=13,SNR=5.2 | | | | | | |
| KURBB | | | | Sn | Sn | 08 57 34.7 | -0.1 |
| | baz=50,slow=28 | | | | | | |
| KURBB | | | | Lg | Lg | 08 58 06.8 | |
| | baz=55,slow=33,SNR=1.8 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 7.78 | 202 | Pn | Pn | 08 56 51.6 | +1.4 |
| | 0.2nm,0.3s,baz=24,slow=14,SNR=7.1 | | | | | | |
| MKAR | | | | Sn | Sn | 08 58 18.3 | -0.6 |
| | 0.1nm,0.3s,baz=22,slow=28,SNR=3.6 | | | | | | |
| MKAR | | | | Lg | Lg | 08 59 02.7 | |
| | 0.1nm,0.3s,baz=20,slow=32,SNR=3.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*AEIC 17 09:00:46.5±1.9, 51°.26N±0°.05×177°.83W±0°.05, h35km±7km, Error ellipse: s-maj=7.3km s-min=4.0km az=169.0*

**NEIC 17 09:00:46.6±2.1, 51°.28N±0°.05×177°.86W±0°.04, h35km±2km, mb4.0/17, ML3.2(AEIC), Error ellipse: s-maj=7.9km s-min=4.2km az=176.0, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TASE | Tanaga Southea | 0.57 | 349 | | Pn | 09 00 59.0 | +0.7 |
| KIMD | Kanaga Island | 0.62 | 39 | | Pn | 09 00 58.6 | -0.4 |
| KIMD | | | | | Sn | 09 01 08.2 | +0.6 |
| TAFP | Tanaga Falls P | 0.62 | 353 | | Pn | 09 00 59.4 | +0.3 |
| TAFP | | | | | Sn | 09 01 09.4 | +1.6 |
| TANO | Tanaga North | 0.66 | 346 | | Pn | 09 01 00.3 | +0.8 |
| KIWB | Kanaga Island | 0.72 | 37 | Pn | Pn | 09 01 00.2 | -0.2 |
| KIWB | | | | Sn | Sn | 09 01 10.9 | +0.7 |
| GALAA | Gareloi Lava P | 0.75 | 311 | | Pn | 09 01 01.3 | +0.6 |
| GAEA | Gareloi East | 0.75 | 313 | | Pn | 09 01 01.4 | +0.7 |
| KICM | Kanaga Island | 0.76 | 33 | | Pn | 09 01 01.3 | +0.4 |
| KIRH | Kanaga Island | 0.78 | 37 | | Pn | 09 01 01.5 | +0.3 |
| GASW | Gareloi Southw | 0.80 | 309 | | Pn | 09 01 01.7 | +0.3 |
| GASW | | | | | Sn | 09 01 14.2 | +2.2 |
| GANO | Gareloi North | 0.80 | 313 | | Pn | 09 01 01.9 | +0.4 |
| ADAG | Mount Adagdak | 1.05 | 48 | | Pn | 09 01 05.1 | +0.2 |
| GSCK | Great Sitkin C | 1.29 | 55 | | Pn | 09 01 08.2 | +0.1 |
| GSTD | Great Sitkin T | 1.32 | 53 | | Sn | 09 01 27.0 | +1.9 |
| GSMY | Great Sitkin M | 1.36 | 55 | | Pn | 09 01 09.4 | +0.3 |
| GSTR | Great Sitkin T | 1.39 | 53 | | Pn | 09 01 10.2 | +0.7 |
| AMKA | Amchitka | 1.78 | 274 | | Pn | 09 01 14.9 | 0.0 |
| AMKA | | | | | Sn | 09 01 37.5 | +1.2 |
| KOFP | Korovin Flat P | 2.54 | 65 | | Pn | 09 01 26.5 | +1.2 |
| SDPT | Sand Point | 11.16 | 62 | Pn | Pn | 09 03 22.7 | -0.8 |
| CNBA | Chernabura Isl | 11.55 | 65 | Pn | Pn | 09 03 27.6 | -1.1 |
| PETK | Petropavlovsk- | 15.08 | 287 | Pn | Pn | 09 04 16.9 | 0.0 |
| OHAK | Old Harbor | 15.49 | 58 | Pn | Pn | 09 04 20.4 | -1.8 |
| OHAK | | | | IAmb | IAmb | 09 04 44.6 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| I17K | Unalakleet | 15.55 | 29 | Pn | Pn | 09 04 21.0 | -1.9 |
| I17K | | | | IAmb | IAmb | 09 04 25.6 | |
| | comp=Z,30nm,1.2s | | | | | | |
| KDAK | Kodiak Island | 15.98 | 56 | Pn | Pn | 09 04 27.1 | -1.5 |
| L19K | White Mountain | 16.58 | 40 | Pn | Pn | 09 04 34.2 | -1.9 |
| L19K | | | | IAmb | IAmb | 09 04 56.3 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| M20K | Styx River | 17.14 | 42 | Pn | Pn | 09 04 40.7 | -2.6 |
| D19K | Kuna River | 19.73 | 22 | P | P | 09 05 12.1 | -0.8 |
| D19K | | | | IAmb | IAmb | 09 05 35.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| C19K | Lookout Ridge | 19.89 | 19 | P | P | 09 05 14.6 | -0.2 |
| C19K | | | | IAmb | IAmb | 09 05 14.8 | |
| | comp=Z,24nm,1.4s | | | | | | |
| MENT | Mentasta | 21.60 | 44 | P | P | 09 05 31.7 | -1.5 |
| PRP | Porcupine Dome | 21.79 | 37 | P | P | 09 05 32.6 | -2.7 |
| PRP | | | | IAmb | IAmb | 09 05 55.5 | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| MESA | MESA | 21.84 | 52 | IAmb | IAmb | 09 05 32.6 | |
| | comp=Z,11nm,1.0s | | | | | | |
| MESA | | | | P | P | 09 05 33.2 | -2.7 |
| F24K | Squaw Lake | 21.94 | 31 | P | P | 09 05 34.5 | -2.3 |
| F24K | | | | IAmb | IAmb | 09 05 41.7 | |
| | comp=Z,8.1nm,1.5s | | | | | | |
| K29M | Barlow Dome | 24.53 | 44 | P | P | 09 06 02.5 | -0.1 |
| I29M | Ogilvie Camp, | 24.56 | 40 | P | P | 09 06 00.1 | -2.7 |
| I29M | | | | IAmb | IAmb | 09 06 28.0 | |
| | comp=Z,3.6nm,1.5s | | | | | | |
| F28M | Old Crow | 24.71 | 34 | P | P | 09 06 03.3 | -0.8 |
| USA0B | Ussuriysk Arsa | 33.89 | 278 | P | P | 09 07 25.1 | -0.8 |
| USRK | Ussuriysk Ar. | 33.89 | 278 | P | P | 09 07 25.1 | -0.7 |
| MAJO | Matsushiro | 34.35 | 262 | P | P | 09 07 27.4 | -2.5 |
| MJB9 | Matsu-Tunnel | 34.35 | 262 | P | P | 09 07 27.4 | -2.5 |
| ABKAR | Akbulak array | 68.37 | 323 | P | P | 09 11 44.0 | -0.1 |

*IDC 17 09:01:51.6±0.9, 15°.97S×177°.73W, h0km, mb3.9/7, mbtmp3.9/7, MS3.7/35, Error ellipse: s-maj=51.8km s-min=22.1km az=146.0*

*NEIC 17 09:01:54.5±1.6, 16°.01S±0°.09×177°.80W±0°.06, h10km±1km, mb4.5/54, Error ellipse: s-maj=17.6km s-min=5.8km az=27.0*

**ISC 17 09:01:53.9±0.5, 16°1S±0°.1×177°81W±0°.08, h10km, n96, σ0s90/64, mb4.4/34, MS3.7/36, 2C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 4.30 | 247 | Pn | Pn | 09 02 59.3 | -0.2 |
| NIUE | Niue | 8.10 | 113 | Pn | Pn | 09 03 51.9 | +0.3 |
| LIFNC | LIFOU | 14.95 | 249 | Pn | Pn | 09 05 25.1 | -0.2 |
| KOUNC | Koumac, New Ca | 17.58 | 253 | | Pn | 09 05 58.7 | -0.4 |
| URZ | Urewera | 22.57 | 190 | LR | LR | 09 14 14.2 | |
| | comp=Z,309nm,19.5s,baz=114,slow=33 | | | | | | |
| CTA | Charters Tower | 34.36 | 258 | LR | LR | 09 20 34.0 | |
| | comp=Z,9.9nm,20.7s,baz=88,slow=33 | | | | | | |
| CTAO | Charters Tower | 34.36 | 258 | P | P | 09 08 42.8 | +1.5 |
| CTAO | | | | IAmb | IAmb | 09 08 43.7 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| PMG | Port Moresby | 34.77 | 277 | LR | LR | 09 20 52.2 | |
| | comp=Z,156nm,21.1s,baz=80,slow=33 | | | | | | |
| STKA | Stephens Creek | 40.05 | 239 | LR | LR | 09 24 28.5 | |
| | comp=Z,131nm,19.9s,baz=37,slow=34 | | | | | | |
| BBOO | Buckleboo | 44.82 | 239 | P | P | 09 10 09.1 | +0.7 |
| WR0 | Warramunga Arr | 45.37 | 258 | P | P | 09 10 12.0 | -0.9 |
| WR0 | | | | IAmb | IAmb | 09 10 16.4 | |
| | comp=Z,7.2nm,1.4s | | | | | | |
| WB0 | Warramunga Arr | 45.52 | 258 | P | P | 09 10 14.0 | -0.1 |
| WB0 | | | | IAmb | IAmb | 09 10 19.4 | |
| | comp=Z,7.8nm,1.3s | | | | | | |
| WB2 | Warramunga Arr | 45.55 | 258 | P | P | 09 10 13.6 | -0.7 |
| WB2 | | | | IAmb | IAmb | 09 10 38.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| WRAB | Tennant Creek | 45.55 | 258 | P | P | 09 10 14.6 | +0.3 |
| WRAB | | | | IAmb | IAmb | 09 10 56.0 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 45.56 | 258 | P | P | 09 10 14.6 | +0.3 |
| WRA | Warramunga Arr | 45.56 | 258 | P | P | 09 10 14.7 | +0.3 |
| | comp=Z,1.0nm,0.9s,baz=86,slow=7.7,SNR=6.8 | | | | | | |
| WRA | | | | LR | LR | 09 27 23.6 | |
| | comp=Z,109nm,19.2s,baz=210,slow=34 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| AS31 | Alice Springs | 45.87 | 252 | P | P | 09 10 17.0 | +0.2 |
| ASAR | Alice Springs | 45.87 | 252 | P | P | 09 10 16.8 | -0.1 |
| ASAR | Alice Springs | 45.87 | 252 | P | P | 09 10 16.5 | -0.3 |
| | comp=Z,2.8nm,0.8s,baz=83,slow=8.5,SNR=21 | | | | | | |
| ASAR | | | | LR | LR | 09 27 56.4 | |
| | comp=Z,161nm,20.7s,baz=95,slow=34 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| GUMO | Guam | 47.21 | 307 | LR | LR | 09 27 55.4 | |
| | comp=Z,58nm,21.7s,baz=125,slow=33 | | | | | | |
| SAUI | Saumlaki | 50.31 | 273 | P | P | 09 10 51.1 | -0.1 |
| FAKI | Fak Fak | 50.81 | 280 | P | P | 09 10 55.3 | +0.2 |
| PSA00 | Pilbara Seismi | 58.95 | 254 | P | P | 09 11 52.0 | -1.9 |
| MBWA | Marble Bar | 59.10 | 255 | P | P | 09 11 53.9 | -1.1 |
| DAV | Davao City (W) | 60.56 | 288 | LR | LR | 09 36 21.2 | |
| | comp=Z,32nm,19.7s,baz=141,slow=34 | | | | | | |
| NWAO | Narrogin (SRO) | 60.60 | 241 | LR | LR | 09 36 55.2 | |
| | comp=Z,152nm,19.4s,baz=42,slow=35 | | | | | | |
| KAPI | Kappang | 62.16 | 273 | LR | LR | 09 38 10.7 | |
| | comp=Z,51nm,18.2s,baz=126,slow=35 | | | | | | |
| TOLI2 | Tolitoli | 62.95 | 280 | P | P | 09 12 20.9 | -0.4 |
| JHJ2 | Mitsune | 63.47 | 321 | P | P | 09 12 22.9 | -1.3 |
| MJAR | Matsushiro Arr | 66.78 | 323 | LR | LR | 09 39 45.5 | |
| | comp=Z,16nm,18.3s,baz=158,slow=34 | | | | | | |
| JTM | Tenmabayashi | 68.22 | 327 | P | P | 09 12 56.4 | +1.7 |
| SHEM | Shemya Is, Ala | 68.85 | 355 | LR | LR | 09 37 36.1 | |
| | comp=Z,23nm,19.3s,baz=56,slow=31 | | | | | | |
| JNU | Nakatsue | 69.21 

comp=Z,3.3nm,1.1s
**YERR Yerington 77.37 43** P **P** 09 13 47.9 -1.5
YERR IAmb IAmb 09 13 50.0
comp=Z,2.6nm,0.9s
**NVAR Mina Array Bea 77.69 44** P **P** **09 13 50.5 -0.8**
comp=Z,1.9nm,1.0s,baz=226,slow=8.0,SNR=12
NVAR LR LR 09 40 45.3
comp=Z,55nm,21.0s,baz=263,slow=30
comp=Z,1.9nm,1.0s
**NV11 Mina Array Sit 77.79 44** P **P** **09 13 51.7 -0.1**
**GMN Gold Mountain 77.81 45** P **P** **09 13 51.1 -0.9**
**J05D Fort Rock, OR 78.52 38** P **P** **09 13 56.4 +0.7**
J05D IAmb IAmb 09 13 57.2
comp=Z,5.6nm,0.9s
**KLR Kul'dur 78.82 329** LR LR 09 43 09.2
comp=Z,94nm,20.9s,baz=153,slow=31
**M17K Holitna River 78.88 10** P **P** **09 13 58.1 +1.0**
**RADR Rader Ridge 78.91 35** P **P** **09 13 56.1 -1.4**
**PINE Pine Mountain 78.98 38** P **P** **09 13 58.4 +0.1**
PINE IAmb IAmb 09 14 01.2
comp=Z,6.3nm,1.1s
**K15K Wolf Creek Mou 79.14 8** P **P** **09 13 58.9 +0.5**
K15K IAmb IAmb 09 14 02.9
comp=Z,8.3nm,1.0s
**Y14A Wickenburg 79.19 50** P **P** **09 13 57.1 -2.4**
**F04A Amboy 79.38 36** P **P** **09 14 00.6 +0.6**
F04A IAmb IAmb 09 14 25.1
comp=Z,6.6nm,0.8s
**BMN Battle Mountai 79.46 43** P **P** **09 14 00.4 -0.5**
**MA2 Magadan 79.57 344** LR LR 09 43 01.8
comp=Z,41nm,21.8s,baz=227,slow=31
**L18K Granite Mounta 79.78 10** P **P** **09 14 02.3 +0.4**
L18K IAmb IAmb 09 14 03.4
comp=Z,4.5nm,1.1s
**BBB Bella Bella 80.42 28** LR LR 09 44 41.7
comp=Z,44nm,18.5s,baz=326,slow=32
**X16A Lo Mia Camp, P 80.56 50** P **P** **09 14 07.8 +0.7**
X16A IAmb IAmb 09 14 08.1
comp=Z,3.8nm,1.2s
**KNB Kanab 80.75 47** P **P** **09 14 08.2 +0.2**
**ELK Elko 80.92 43** P **P** **09 14 09.0 +0.1**
ELK IAmb IAmb 09 14 09.2
comp=Z,4.2nm,1.4s
**ELK Elko 80.92 43** LR LR 09 45 35.2
comp=Z,34nm,18.0s,baz=278,slow=32
**N25K Chitina, Valde 81.77 15** P **P** **09 14 13.0 +0.3**
N25K IAmb IAmb 09 14 56.4
comp=Z,6.7nm,1.5s
**SRU San Rafael Swe 83.33 46** P **P** **09 14 21.0 -0.4**
SRU IAmb IAmb 09 14 22.1
comp=Z,2.3nm,1.0s
**MLY Manley 83.42 11** P **P** **09 14 21.1 -0.1**
MLY IAmb IAmb 09 14 21.2
comp=Z,2.2nm,0.8s
**CCB Clear Creek Bu 83.66 13** P **P** **09 14 22.1 -0.2**
CCB IAmb IAmb 09 14 32.6
comp=Z,2.1nm,0.9s
**NEW Newport 83.68 36** LR LR 09 45 45.9
comp=Z,47nm,18.7s,baz=249,slow=32
**COLA College 83.85 12** P **P** **09 14 23.2 0.0**
**DLBC Dease Lake 83.91 23** LR LR 09 44 39.4
comp=Z,79nm,19.7s,baz=222,slow=31
**SCRK Sand Creek 83.93 14** P **P** **09 14 22.4 -1.5**
SCRK IAmb IAmb 09 14 22.8
comp=Z,2.6nm,1.1s
**IL31 83.96 13** P **P** **09 14 22.9 -0.9**
IL31 IAmb IAmb 09 14 24.0
comp=Z,2.1nm,1.0s
**ILAR Eielson Array 83.96 13** P **P** **09 14 22.9 -1.0**
comp=Z,1.1nm,0.9s,baz=233,slow=6.2,SNR=7.3
ILAR LR LR 09 44 51.0
comp=Z,30nm,21.1s,baz=226,slow=31
comp=Z,1.1nm,0.9s
**VHRN Van Horn 84.01 56** P **P** **09 14 25.1 0.0**
VHRN IAmb IAmb 09 14 38.2
comp=Z,2.1nm,0.8s
**J25K Salcha River, 84.15 13** P **P** **09 14 23.1 -1.9**
J25K IAmb IAmb 09 14 24.1
comp=Z,3.5nm,1.1s
**ANMO Albuquerque 84.50 51** LR LR 09 45 09.5
comp=Z,36nm,19.2s,baz=353,slow=31
**TXAR Lajitas Array 84.52 58** P **P** **09 14 26.1 -1.6**
comp=Z,0.5nm,1.0s,baz=222,slow=4.5,SNR=4.4
comp=Z,0.5nm,1.0s
**PMSA Palmer Station 85.28 157** LR LR 09 48 06.0
comp=Z,31nm,18.1s,baz=186,slow=32
**PDAR Pinedale Array 85.61 43** P **P** **09 14 31.5 -1.5**
comp=Z,0.7nm,0.9s,baz=225,slow=4.0,SNR=5.5
PDAR LR LR 09 44 44.2
comp=Z,19nm,20.5s,baz=250,slow=30
comp=Z,0.7nm,0.9s
**MAW Mawson 85.79 200** LR LR 09 49 53.3
comp=Z,43nm,20.8s,baz=90,slow=34
**YAK Yakutsk 88.08 338** LR LR 09 47 17.5
comp=Z,26nm,21.5s,baz=159,slow=31
**TROLL Troll, Antarti 92.15 180** ⇑P **P** **09 15 04.1 +0.6**
comp=Z,473nm,0.9s
**PLCA Paso Flores 92.19 133** LR LR 09 54 15.1
comp=Z,25nm,18.0s,baz=224,slow=34
**YKA Yellowknife Ar 92.41 25** LR LR 09 50 17.1
comp=Z,57nm,19.9s,baz=272,slow=32
**VNA3 Neumayer Olymp 92.54 176** ⇑P **P** **09 15 05.2 0.0**
**NNA Nana 97.02 105** LR LR 09 50 02.5
comp=Z,25nm,19.9s,baz=235,slow=30
**ULM Lac du Bonnet 97.13 40** LR LR 09 53 10.8
comp=Z,43nm,19.3s,baz=316,slow=32
**BRTR Keskin Array B 143.86 317** PKP PKPab 09 21 27.2 +0.2
comp=Z,2.4nm,0.9s,baz=73,slow=2.8,SNR=8.8

*NEIC **17** 09:07:24.0±2.5, 26.37S±0.07×176.72W±0.10, h10km±1km, mb4.6/23, Error ellipse: s-maj=15.4km s-min=11.5km az=112.0*

*IDC **17** 09:07:33.2±3.1, 26.33S×177.25W, h79km±26km, mb3.8/11, mbtmp4.1/12, MS3.6/1, Error ellipse: s-maj=23.2km s-min=19.5km az=58.0*

**ISC 17 09:07:33.9±0.4, 26.37S±0.06×177.07W±0.08, h95km, n80, σ1§47/80, mb4.3/24, 14C, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **2.97** | **194** | Pn | **Pn** | 09 08 13.4 | -5.8 |
| **RAO** | **Raoul Island** | **2.97** | **194** | P | **Pn** | **09 08 18.5** | **-0.7** |
| | 427nm,0.2s,baz=82,slow=9.0,SNR=15 | | | | | | |
| RAO | | | | S | **Sn** | **09 08 53.1** | **-0.9** |
| | 788nm,0.3s,baz=247,slow=22,SNR=2.1 | | | | | | |
| **MSVF** | **Nonsavu** | **9.71** | **331** | Pn | **Pn** | **09 09 47.4** | **-3.4** |
| **NIUE** | **Niue** | **9.80** | **44** | Pn | Pn | 09 09 41.9 | -10 |
| **URZ** | **Urewera** | **12.84** | **201** | P | **Pn** | **09 10 32.6** | **-0.1** |
| | 3.2nm,0.7s,baz=259,slow=19,SNR=1.1 | | | | | | |
| URZ | | | | S | Sn | 09 12 40.8 | -13 |
| | 6.9nm,0.4s,baz=319,slow=21,SNR=10 | | | | | | |
| **AFI** | **Afiamalu** | **13.35** | **23** | Pn | Pn | 09 10 29.3 | -10 |
| **PINNC** | **Pines Island,** | **14.58** | **282** | | **Pn** | **09 10 53.1** | **-2.5** |
| **DZM** | **Mont Dzumac** | **15.64** | **282** | Pn | **Pn** | **09 11 07.6** | **-1.4** |
| **DZM** | **Mont Dzumac** | **15.64** | **282** | LR | LR | 09 16 04.3 | |
| | comp=Z,194nm,18.3s,baz=114,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **16.63** | **76** | | Pn | 09 11 12.7 | -8.6 |
| **RAR** | **Rarotonga** | **16.63** | **76** | P | **Pn** | **09 11 18.7** | **-2.6** |
| | 8.3nm,0.5s,baz=275,slow=5.5,SNR=4.5 | | | | | | |
| RAR | | | | S | Sn | 09 14 06.7 | -19 |
| | 4.5nm,0.3s,baz=76,slow=16,SNR=3.7 | | | | | | |
| **HNR** | **Honiara** | **27.52** | **304** | LR | LR | 09 21 31.6 | |
| | comp=Z,934nm,20.5s,baz=13,slow=31 | | | | | | |
| **CTAO** | **Charters Tower** | **34.20** | **273** | P | **P** | **09 14 12.6** | **+2.1** |
| CTAO | | | | IAmb | IAmb | 09 14 14.2 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **COEN** | **Coen** | **39.15** | **280** | P | **P** | **09 14 52.8** | **+0.2** |
| COEN | | | | IAmb | IAmb | 09 14 55.1 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **44.30** | **262** | P | **P** | **09 15 34.5** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.30** | **262** | P | **P** | **09 15 34.0** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.30** | **262** | P | **P** | **09 15 34.6** | **0.0** |
| | comp=Z,2.1nm,0.8s,baz=95,slow=6.9,SNR=18 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.74** | **268** | P | **P** | **09 15 38.0** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 09 15 38.1 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.92** | **268** | P | **P** | **09 15 39.3** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 09 15 39.5 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.92** | **268** | P | **P** | **09 15 39.3** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 09 15 39.4 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.93** | **268** | P | **P** | **09 15 39.3** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.93** | **268** | P | **P** | **09 15 38.8** | **-0.8** |
| | comp=Z,2.2nm,0.8s,baz=106,slow=7.4,SNR=18 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.93** | **268** | P | **P** | **09 15 39.3** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 09 15 54.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **51.35** | **271** | P | **P** | **09 16 29.0** | **0.0** |
| KNRA | | | | IAmb | IAmb | 09 16 29.8 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **SAUI** | **Saumlaki** | **52.23** | **281** | P | **P** | **09 16 36.7** | **+1.1** |
| **CASY** | **Casey** | **59.09** | **207** | P | **P** | **09 17 24.1** | **+0.3** |
| CASY | | | | IAmb | IAmb | 09 17 28.1 | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **63.73** | **180** | P | **P** | **09 17 56.0** | **+0.7** |
| QSPA | | | | IAmb | IAmb | 09 18 01.6 | |
| | comp=Z,7.3nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **63.73** | **180** | P | **P** | **09 17 57.0** | **+1.7** |
| | comp=Z,5.2nm,0.7s,baz=5.3,slow=0.8,SNR=40 | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **76.36** | **200** | P | **P** | **09 19 13.7** | **+1.4** |
| | comp=Z,1.0nm,0.5s,baz=147,slow=4.3,SNR=7.2 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **81.89** | **180** | ⇑P | **P** | **09 19 43.0** | **+0.4** |
| | comp=Z,152nm,0.5s | | | | | | |
| TROLL | | | | ⇑PcP | **pP** | **09 20 04.1** | **-2.8** |
| | comp=Z,161nm,0.8s | | | | | | |
| TROLL | | | | ⇑x | x | 09 20 04.1 | |
| | comp=Z,161nm,0.8s | | | | | | |
| **H03S2** | **Juan Fernandez** | **82.01** | **124** | T | T | 10 50 25.7 | |
| | baz=242,slow=74,SNR=10 | | | | | | |
| **H03S1** | **Juan Fernandez** | **82.02** | **124** | T | T | 10 50 39.2 | |
| | baz=242,slow=74,SNR=8.4 | | | | | | |
| **H03S3** | **Juan Fernandez** | **82.02** | **124** | T | T | 10 50 21.8 | |
| | baz=242,slow=74,SNR=13 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **82.13** | **345** | P | **P** | **09 19 45.5** | **+1.9** |
| **PETK** | **Petropavlovsk-** | **82.13** | **345** | P | **P** | **09 19 45.3** | **+1.6** |
| **PETK** | **Petropavlovsk-** | **82.13** | **345** | P | **P** | **09 19 43.9** | **+0.2** |
| | comp=Z,2.8nm,0.8s,baz=139,slow=7.8,SNR=4.2 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **82.15** | **178** | P | **P** | **09 19 44.8** | **+0.9** |
| SNAA | | | | IAmb | IAmb | 09 19 45.5 | |
| | comp=Z,3.3nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **82.15** | **178** | ⇑P | **P** | **09 19 44.2** | **+0.3** |
| | comp=Z,20nm,0.6s | | | | | | |
| SNAA | | | | ⇑PcP | **pP** | **09 20 04.4** | **-3.8** |
| | comp=Z,13nm,0.7s | | | | | | |
| SNAA | | | | ⇑x | x | 09 20 04.4 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **82.15** | **178** | P | **P** | **09 19 44.7** | **+0.9** |
| | comp=Z,1.8nm,0.9s,baz=200,slow=12,SNR=14 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **H03N2** | **Juan Fernandez** | **82.18** | **123** | T | T | 10 50 36.8 | |
| | baz=242,slow=73,SNR=3.8 | | | | | | |
| **H03N3** | **Juan Fernandez** | **82.18** | **123** | T | T | 10 50 42.3 | |
| | baz=242,slow=73,SNR=5.3 | | | | | | |
| **H03N1** | **Juan Fernandez** | **82.19** | **123** | T | T | 10 50 50.0 | |
| | baz=242,slow=73,SNR=4.9 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **82.26** | **176** | ⇑P | **P** | **09 19 44.7** | **+0.4** |
| | comp=Z,2.8nm,0.6s | | | | | | |
| VNA3 | | | | ⇑PcP | **pP** | **09 20 04.4** | **-4.3** |
| | comp=Z,0.9nm,0.6s | | | | | | |
| VNA3 | | | | ⇑x | x | 09 20 04.4 | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **82.71** | **177** | ⇑P | **P** | **09 19 47.3** | **+0.6** |
| | comp=Z,3.0nm,0.7s,baz=184,slow=4.2 | | | | | | |
| VNA2 | | | | ⇑PcP | **pP** | **09 20 06.4** | **-4.6** |
| | comp=Z,1.6nm,0.8s,baz=210,slow=3.3 | | | | | | |
| VNA2 | | | | ⇑x | x | 09 20 06.4 | |
| | comp=Z,1.6nm,0.8s,baz=210,slow=3.3 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **82.93** | **176** | ⇑P | **P** | **09 19 48.6** | **+0.9** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| VNA1 | | | | ⇑x | x | 09 19 48.6 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **84.65** | **133** | P | **P** | **09 19 57.1** | **-0.1** |
| PLCA | | | | IAmb | IAmb | 09 20 40.1 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **PLCA** | **Paso Flores** | **84.65** | **133** | P | **P** | **09 19 59.5** | **+2.3** |
| | comp=Z,1.8nm,0.8s,baz=292,slow=1.2,SNR=4.9 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.72** | **42** | P | **P** | **09 19 58.8** | **+1.2** |
| **NVAR** | **Mina Array Bea** | **84.72** | **42** | P | **P** | **09 19 59.9** | **+2.2** |
| | comp=Z,0.7nm,0.8s,baz=224,slow=4.9,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **86.70** | **49** | P | **P** | **09 20 07.4** | **-0.1** |
| **ZAIG** | **Zacatecas** | **87.06** | **63** | P | **P** | **09 20 08.9** | **-0.7** |
| ZAIG | | | | IAmb | IAmb | 09 20 13.8 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **N15K** | **Kwethluk River** | **87.34** | **8** | P | **P** | **09 20 11.3** | **+1.7** |
| N15K | | | | IAmb | IAmb | 09 20 21.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **MT01** | **Popeta** | **87.62** | **127** | P | **P** | **09 20 10.2** | **-1.7** |
| **TXAR** | **Lajitas Array** | **89.51** | **57** | P | **P** | **09 20 22.2** | **+1.4** |
| | comp=Z,0.2nm,0.8s,baz=212,slow=4.4,SNR=3.4 | | | | | | |
| | comp=Z,0.2nm,0.8s | | | | | | |
| **AC05** | **El Transito** | **90.89** | **123** | P | **P** | **09 20 26.6** | **-0.9** |
| **MESA** | **MESA** | **90.90** | **17** | P | **P** | **09 20 27.1** | **+0.4** |
| **PDAR** | **Pinedale Array** | **92.64** | **43** | P | **P** | **09 20 33.1** | **-2.1** |
| **PDAR** | **Pinedale Array** | **92.64** | **43** | P | **P** | **09 20 36.8** | **+1.6** |
| | comp=Z,0.2nm,0.7s,baz=242,slow=3.4,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.86** | **289** | P | **P** | **09 20 36.9** | **+0.4** |
| | comp=Z,1.0nm,0.3s,baz=98,slow=3.8,SNR=1.7 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **NC303** | **NORSAR Array S** | **144.68** | **353** | | **PKPab** | **09 26 58.3** | **+0.5** |
| **NC405** | **NORSAR Array S** | **144.75** | **353** | | **PKPab** | **09 26 58.4** | **+0.3** |
| **NB201** | **NORSAR Array S** | **144.86** | **353** | | **PKPab** | **09 26 59.5** | **+0.9** |
| **NB2** | **NORSAR Subarra** | **144.88** | **353** | PKP | **PKPab** | **09 26 58.6** | **0.0** |
| | comp=Z,4.2nm,0.8s,baz=9.4,slow=2.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **144.88** | **353** | PKP | **PKPab** | **09 26 59.1** | **+0.5** |
| | comp=Z,3.3nm,0.9s,baz=16,slow=2.4,SNR=7.4 | | | | | | |
| **GURO** | **Guroymak-BITLI** | **145.09** | **300** | PKPab | **PKPdf** | **09 27 01.7** | **+1.2** |
| **NAO01** | **NORSAR Array S** | **145.11** | **353** | PKPbc | **PKPbc** | **09 26 58.6** | **-0.7** |
| **NC602** | **NORSAR Array S** | **145.14** | **353** | PKPbc | **PKPbc** | **09 26 59.7** | **+0.3** |
| **HFS** | **Hagfors** | **145.44** | **351** | PKPbc | **PKPdf** | **09 27 00.6** | **+0.4** |
| | comp=Z,3.0nm,0.6s,baz=27,slow=3.6,SNR=5.7 | | | | | | |
| **KONO** | **Kongsberg** | **146.41** | **354** | PKPbc | **PKPab** | **09 27 04.8** | **+0.5** |
| **ARPR** | **Arapgir-MALATY** | **147.83** | **302** | PKPdf | **PKPdf** | **09 27 04.5** | **-0.6** |
| ARPR | | | | PKPbc | **PKPbc** | **09 27 08.8** | **+0.6** |
| ARPR | | | | PKPab | **PKPab** | **09 27 12.5** | **+1.6** |
| **AKASG** | **Malin Array Be** | **148.47** | **327** | PKPbc | **PKPbc** | **09 27 09.5** | **+0.3** |
| | comp=Z,0.3nm,0.3s,baz=57,slow=1.9,SNR=4.7 | | | | | | |
| **AKBB** | **Malin Array Si** | **148.47** | **327** | PKPbc | **PKPbc** | **09 27 09.5** | **+0.3** |
| **KIEV** | **Kiev** | **148.48** | **327** | PKPdf | **PKPdf** | **09 27 05.2** | **-0.3** |
| KIEV | | | | PKPbc | **PKPbc** | **09 27 09.5** | **+0.3** |
| KIEV | | | | PKPab | **PKPab** | **09 27 13.8** | **+1.0** |
| **GAZ** | **Gaziantep** | **149.08** | **299** | PKPdf | **PKPdf** | **09 27 05.5** | **-1.6** |
| GAZ | | | | PKPab | **PKPab** | **09 27 17.5** | **+1.6** |
| **BR131** | **Keskin Array S** | **151.17** | **305** | PKPab | **PKPab** | **09 27 25.6** | **+1.1** |
| **BRTR** | **Keskin Array B** | **151.17** | **305** | PKPab | **PKPab** | **09 27 25.6** | **+1.1** |
| **BRTR** | **Keskin Array B** | **151.17** | **305** | PKPbc | **PKPbc** | **09 27 16.6** | **+0.3** |
| | comp=Z,0.9nm,0.8s,baz=82,slow=3.1,SNR=4.3 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **09 27 25.3** | **+0.8** |
| | comp=Z,4.6nm,0.7s,baz=78,slow=4.8,SNR=20 | | | | | | |
| **PSZ** | **Piszkesteto** | **154.70** | **333** | PKPab | **PKPab** | **09 27 41.2** | **+2.2** |
| **TORD** | **Torodi Ar. Bea** | **166.80** | **175** | PKPab | **PKPab** | **09 28 33.2** | **+1.0** |
| | comp=Z,0.7nm,0.9s,baz=180,slow=3.8,SNR=3.0 | | | | | | |
| **SFS** | **San Fernando** | **167.27** | **36** | PKPdf | **PKPdf** | **09 27 28.8** | **0.0** |
| SFS | | | | PKPab | **PKPab** | **09 28 31.8** | **-2.2** |

**TAP 17 09:16:56.4, 24.34N×120.85E, h6km, ML1.9, 4D, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWQ1** | **Liyutan** | **0.07** | **276** | ⇓P | Pg | 09 16 58.5 | +0.3 |
| | baz=274 | | | | | | |
| TWQ1 | | | | S | Sg | 09 17 00.3 | +0.8 |
| | baz=274 | | | | | | |
| **WHP** | **Taichung City** | **0.11** | **126** | ⇓P | Pg | 09 16 59.9 | +1.1 |
| | baz=126 | | | | | | |
| WHP | | | | *e*S | Sg | 09 17 02.7 | +2.3 |
| | baz=126 | | | | | | |
| **NSY** | **Sanyi** | **0.11** | **312** | ⇓P | Pg | 09 16 59.6 | +0.8 |
| | baz=314 | | | | | | |
| NSY | | | | S | Sg | 09 17 02.4 | +1.9 |
| | baz=314 | | | | | | |
| **WDJ** | **Dajia District** | **0.19** | **272** | *i* P | Pg | 09 17 01.5 | +1.2 |
| | baz=264 | | | | | | |
| WDJ | | | | *e*S | Sg | 09 17 05.4 | +2.5 |
| | baz=264 | | | | | | |
| **NMLH** | **Miaoli** | **0.20** | **344** | *i* P | Pg | 09 17 01.8 | +1.3 |
| | baz=344 | | | | | | |
| NMLH | | | | *e*S | Sg | 09 17 05.5 | +2.3 |
| | baz=344 | | | | | | |
| **TCU** | **Taichung** | **0.25** | **220** | P | Pb | 09 17 02.8 | -0.5 |
| | baz=218 | | | | | | |
| TCU | | | | *e*S | Sb | 09 17 06.6 | -1.4 |
| | baz=218 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.29** | **169** | *e*P | Pb | 09 17 03.5 | -0.5 |
| | baz=155 | | | | | | |
| WCS | | | | S | Sb | 09 17 08.0 | -1.0 |
| | baz=155 | | | | | | |
| **TDCB** | **Techi** | **0.29** | **107** | *i* P | Pb | 09 17 03.3 | -0.8 |
| | baz=107 | | | | | | |
| TDCB | | | | *i* S | Sg | 09 17 07.4 | +1.3 |
| | baz=107 | | | | | | |
| **TWT** | **Tachien** | **0.31** | **106** | ⇓P | Pb | 09 17 03.5 | -0.9 |
| | baz=108 | | | | | | |
| TWT | | | | *i* S | Sg | 09 17 07.9 | +1.3 |
| | baz=108 | | | | | | |
| **NSTT** | **Nanjuang** | **0.32** | **25** | *i* P | Pb | 09 17 03.9 | -0.7 |
| | baz=27 | | | | | | |
| NSTT | | | | *e*S | Sb | 09 17 08.9 | -1.1 |
| | baz=27 | | | | | | |
| **LIOB** | **Emei** | **0.34** | **26** | P | Pb | 09 17 04.3 | -0.6 |
| | baz=27 | | | | | | |
| LIOB | | | | *i* S | Sb | 09 17 09.2 | -1.3 |
| | baz=27 | | | | | | |
| **FUSS** | **Fushou** | **0.37** | **104** | *i* P | Pb | 09 17 04.9 | -0.6 |
| | baz=105 | | | | | | |
| FUSS | | | | *e*S | Sg | 09 17 09.6 | +1.1 |
| | baz=105 | | | | | | |
| **WCHH** | **Zhanghua** | **0.37** | **226** | *e*P | Pb | 09 17 05.6 | +0.2 |
| | baz=211 | | | | | | |
| WCHH | | | | S | Sb | 09 17 12.3 | +0.8 |
| | baz=211 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.38** | **40** | P | Pb | 09 17 04.8 | -0.7 |
| | baz=41 | | | | | | |
| NFF | | | | *e*S | Sg | 09 17 09.9 | +1.1 |
| | baz=41 | | | | | | |
| **CHGB** | **Renai** | **0.41** | **133** | P | Pb | 09 17 05.7 | -0.4 |
| | baz=133 | | | | | | |
| CHGB | | | | S | Sb | 09 17 11.8 | -0.9 |
| | baz=133 | | | | | | |
| **WUSB** | **Renai** | **0.42** | **145** | P | Pb | 09 17 05.9 | -0.5 |
| | baz=145 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.42** | **117** | P | Pb | 09 17 06.5 | -0.1 |
| | baz=117 | | | | | | |
| WHF | | | | *e*S | Sb | 09 17 14.9 | +1.5 |
| | baz=117 | | | | | | |
| **TYC** | **Yuchr** | **0.43** | **179** | *i* P | Pb | 09 17 06.6 | +0.1 |
| | baz=165 | | | | | | |
| TYC | | | | S | Sb | 09 17 13.5 | +0.3 |
| | baz=165 | | | | | | |
| **NNSB** | **Datong** | **0.49** | **80** | P | Pb | 09 17 07.1 | -0.4 |
| | baz=80 | | | | | | |
| NNSB | | | | S | Sg | 09 17 13.2 | +0.8 |
| | baz=80 | | | | | | |
| **VWDT** | **VWDT** | **0.64** | **156** | P | Pb | 09 17 10.1 | +0.1 |
| | baz=146 | | | | | | |
| VWDT | | | | *e*S | Sb | 09 17 18.4 | -0.8 |
| | baz=146 | | | | | | |
| **WHYT** | **Xinyi Township** | **0.64** | **180** | P | Pb | 09 17 10.5 | +0.4 |
| | baz=180 | | | | | | |
| WHYT | | | | S | Sb | 09 17 20.2 | +0.9 |
| | baz=180 | | | | | | |
| **LATG** | **Datong** | **0.64** | **72** | *e*P | Pb | 09 17 10.1 | 0.0 |
| | baz=73 | | | | | | |
| LATG | | | | *e*S | Sg | 09 17 18.1 | +0.8 |
| | baz=73 | | | | | | |
| **NACB** | **Ninganchiao** | **0.70** | **104** | P | Pb | 09 17 11.6 | +0.6 |
| | baz=95 | | | | | | |
| NACB | | | | *e*S | Sb | 09 17 20.8 | 0.0 |
| | baz=95 | | | | | | |
| **HGSD** | **Ruisui** | **0.99** | **148** | *e*P | Pn | 09 17 18.4 | +1.5 |
| | baz=148 | | | | | | |
| HGSD | | | | *e*S | Sn | 09 17 32.6 | +1.4 |
| | baz=148 | | | | | | |
| **YULB** | **Yu-li** | **1.03** | **157** | *e*P | Pn | 09 17 17.9 | +0.6 |
| | baz=150 | | | | | | |
| YULB | | | | S | Sn | 09 17 32.0 | 0.0 |
| | baz=150 | | | | | | |
| **EYUL** | **Yuli** | **1.08** | **157** | *e*P | Pn | 09 17 18.6 | +0.6 |
| | baz=151 | | | | | | |
| EYUL | | | | *e*S | Sn | 09 17 33.3 | 0.0 |
| | baz=151 | | | | | | |

**TAP 17 09:17:02.3, 24.34N×120.85E, h7km, ML2.4, 2D, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWQ1** | **Liyutan** | **0.07** | **277** | ⇓*i*P | Pg | 09 17 04.3 | +0.2 |
| | baz=275 | | | | | | |
| TWQ1 | | | | S | Sg | 09 17 06.1 | +0.7 |
| | baz=275 | | | | | | |
| **NSY** | **Sanyi** | **0.11** | **314** | *i* P | Pg | 09 17 05.4 | +0.6 |
| | baz=316 | | | | | | |
| NSY | | | | *e*S | Sg | 09 17 08.1 | +1.7 |
| | baz=316 | | | | | | |
| **WHP** | **Taichung City** | **0.11** | **124** | ⇓*i*P | Pg | 09 17 05.5 | +0.7 |
| | baz=124 | | | | | | |
| WHP | | | | *i* S | Sg | 09 17 07.8 | +1.3 |
| | baz=124 | | | | | | |
| **WDJ** | **Dajia District** | **0.19** | **272** | *e*P | Pg | 09 17 09.2 | +3.1 |
| | baz=272 | | | | | | |
| WDJ | | | | *e*S | Sg | 09 17 11.2 | +2.6 |
| | baz=272 | | | | | | |
| **NMLH** | **Miaoli** | **0.20** | **346** | P | Pg | 09 17 07.5 | +1.1 |
| | baz=345 | | | | | | |
| NMLH | | | | S | Sg | 09 17 10.5 | +1.4 |
| | baz=345 | | | | | | |
| **TCU** | **Taichung** | **0.25** | **219** | *e*P | Pg | 09 17 09.0 | +1.8 |
| | baz=217 | | | | | | |
| TCU | | | | S | Sg | 09 17 12.4 | +1.9 |
| | baz=217 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.29** | **168** | *e*P | Pb | 09 17 10.1 | +0.4 |
| | baz=167 | | | | | | |
| WCS | | | | *e*S | Sb | 09 17 13.6 | -1.1 |
| | baz=167 | | | | | | |
| **TDCB** | **Techi** | **0.30** | **107** | P | Pg | 09 17 09.1 | +0.9 |
| | baz=107 | | | | | | |
| TDCB | | | | *i* S | Sb | 09 17 14.4 | -0.8 |
| | baz=107 | | | | | | |
| **DPDB** | **Guoxing** | **0.31** | **166** | *i* P | Pb | 09 17 09.6 | -0.7 |
| | baz=166 | | | | | | |
| DPDB | | | | *i* S | Sb | 09 17 14.9 | -0.6 |
| | baz=166 | | | | | | |
| **LIOB** | **Emei** | **0.34** | **27** | *i* P | Pb | 09 17 10.1 | -0.6 |
| | baz=27 | | | | | | |
| LIOB | | | | *i* S | Sb | 09 17 15.8 | -0.5 |
| | baz=27 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.38** | **40** | *e*P | Pb | 09 17 11.8 | +0.4 |
| | baz=40 | | | | | | |
| NFF | | | | *e*S | Sg | 09 17 15.6 | +0.8 |
| | baz=40 | | | | | | |
| **CHGB** | **Renai** | **0.41** | **133** | *e*S | Sb | 09 17 17.6 | -0.9 |
| | baz=132 | | | | | | |
| **WUSB** | **Renai** | **0.43** | **144** | *i* P | Pb | 09 17 11.8 | -0.4 |
| | baz=144 | | | | | | |
| **WUSB** | **Renai** | **0.43** | **144** | *e*S | Pg | 09 17 11.8 | +1.2 |
| | baz=145 | | | | | | |

**IDC 17 09:29:13.1±2.9, 54.37N×86.69E, h0km, mbtmp3.1/2, ML2.5/2, Error ellipse: s-maj=22.9km s-min=15.1km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.18** | **250** | I | I | 09 37 10.0 | |
| | baz=67,slow=312,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.18** | **250** | Pg | Pg | 09 29 35.1 | -0.6 |
| | 0.7nm,0.3s,baz=64,slow=17,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 09 29 51.9 | |
| | 1.2nm,0.3s,baz=68,slow=27,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.24** | **236** | Pn | Pn | 09 30 47.2 | +0.9 |
| | 0.1nm,0

*KRNET* ***17*** *09:50:01.3±0.1, 40.˚33N×69.˚16E, mb2.6*
*ISU* ***17*** *09:50:02.6, 40.˚40N×69.˚12E, h5km*

**ISC 17 09:50:02.5±1.7, 40.˚31N±0.˚05×69.˚32E±0.˚04, h2km±14km, n9, σ1§62/17, 9C-3D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BXML** | **Bakhmal** | **1.17** | **238** | P | **Pn** | **09 50 26.9** | **+1.0** |
| BXML | | | | S | **Sn** | **09 50 45.0** | **+2.5** |
| **BTK** | **Batken** | **1.18** | **102** | ⇓*e*P | **Pn** | **09 50 25.4** | **-0.6** |
| BTK | baz=2.0 | | | ⇓*e*S | **Sn** | **09 50 43.3** | **+0.7** |
| **KRSA** | **Karasay** | **1.22** | **262** | P | **Pb** | **09 50 24.7** | **-1.6** |
| KRSA | baz=2.0 | | | S | **Sn** | **09 50 41.0** | **-2.7** |
| **CHMG** | **Chimgan** | **1.35** | **23** | P | **Pg** | **09 50 28.5** | **+0.2** |
| CHMG | | | | S | **Sg** | **09 50 47.7** | **+1.9** |
| **TRKS** | **Terek-Say** | **1.84** | **48** | ⇑*i*P | **Pb** | **09 50 36.1** | **-0.9** |
| TRKS | baz=53 | | | ⇑*i*S | **Sg** | **09 51 01.7** | **-0.1** |
| **DRK** | **Karamyk** | **2.08** | **113** | ⇑*e*P | **Pb** | **09 50 40.2** | **-0.9** |
| DRK | baz=53 | | | ⇑*e*S | **Sb** | **09 51 09.0** | **+1.5** |
| **ARK** | **Arkit** | **2.50** | **52** | ⇑*i*P | **Pb** | **09 50 45.8** | **-2.3** |
| ARK | baz=12 | | | ⇑*i*S | **Sb** | **09 51 17.9** | **-1.4** |
| **KK31** | **Karatay Array** | **2.94** | **17** | ⇑Pg | **Pb** | **09 50 55.1** | **-0.4** |
| KK31 | baz=54 0.2nm,0.3s,baz=200,slow=16,SNR=9.5 0.7nm,0.3s,baz=199,slow=30,SNR=8.1 | | | ⇓Lg | Lg | 09 51 34.0 | |
| **KKAR** | **Karatay Array** | **2.94** | **17** | ⇑*i*P | **Pn** | **09 50 51.0** | **+0.9** |
| KKAR | baz=20 | | | ⇑*i*S | **Sn** | **09 51 26.8** | **+0.9** |
| | baz=20 | | | | | | |

**IDC 17 09:50:13.2±3.0, 54.˚33N×87.˚13E, h0km, mbtmp3.4/2, ML3.0/2, Error ellipse: s-maj=25.7km s-min=17.5km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.41** | **255** | I | I | 09 58 50.0 | |
| **ZALV** | **Zalesovo Beam** | **1.41** | **255** | Pg | Pn | 09 50 38.4 | -1.7 |
| ZALV | baz=76,slow=314,SNR=8.2 3.0nm,0.3s,baz=72,slow=17,SNR=24 2.9nm,0.3s,baz=70,slow=22,SNR=9.7 | | | Lg | Lg | 09 50 57.8 | |
| **KURBB** | **Kurchatov Arra** | **6.43** | **238** | Pn | Pn | 09 51 50.4 | +1.3 |
| KURBB | 0.2nm,0.3s,baz=56,slow=13,SNR=4.3 baz=55,slow=33 2.3nm,0.2s | | | Lg | Lg | 09 53 37.6 | |
| **MKAR** | **Makanchi Array** | **8.15** | **204** | Pn | Pn | 09 52 13.5 | +0.8 |
| MKAR | 0.3nm,0.3s,baz=26,slow=14,SNR=7.9 0.2nm,0.3s,baz=22,slow=26,SNR=5.8 baz=22,slow=32,SNR=3.2 0.3nm,0.3s | | | Sn | Sn | 09 53 45.5 | 0.0 |
| MKAR | | | | Lg | Lg | 09 54 28.4 | |
| **BVAR** | **Borovoye Array** | **10.02** | **269** | Sn | Sn | 09 54 24.5 | -6.8 |
| | baz=71,slow=26,SNR=3.3 | | | | | | |

*IDC* ***17*** *09:54:25.1±0.6, 23.˚39N×143.˚58E, h0km, mb4.1/15, mbtmp4.0/17, ML3.6/2, MS3.2/7, Error ellipse: s-maj=25.0km s-min=14.3km az=76.0*
*NEIC* ***17*** *09:54:27.6±1.8, 23.˚48N±0.˚09×143.˚43E±0.˚09, h10km±1km, mb4.5/50, Error ellipse: s-maj=15.5km s-min=13.7km az=159.0*

**ISC 17 09:54:30.2±0.6, 23.˚52N±0.˚07×143.˚4E±0.˚1, h31km, n94, σ1§15/92, mb4.4/38, MS3.0/3, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.74** | **343** | Pn | **Pn** | **09 55 26.8** | **+1.0** |
| **JCJ** | **Chichijima** | **3.74** | **343** | Pn | **Pn** | **09 55 22.8** | **-3.0** |
| JCJ | 30nm,0.3s,baz=252,slow=18,SNR=13 39nm,0.3s,baz=277,slow=23,SNR=7.3 | | | Sn | **Sn** | **09 56 06.1** | **-2.6** |
| **GUMO** | **Guam** | **9.97** | **172** | LR | LR | 10 00 06.9 | |
| **JHJ2** | **Mitsune** | **10.07** | **342** | Pn | **Pn** | **09 56 49.9** | **-2.8** |
| **JMZ** | **Minamidaito 2** | **11.34** | **284** | Pn | **Pn** | **09 57 08.8** | **-1.2** |
| **INU** | **Inuyama** | **13.04** | **336** | Pn | **Pn** | **09 57 32.5** | **-0.9** |
| **MJAR** | **Matsushiro Arr** | **13.74** | **342** | Pn | **Pn** | **09 57 44.5** | **+1.6** |
| **MAJO** | **Matsushiro** | **13.74** | **342** | Pn | **Pn** | **09 57 40.5** | **-2.4** |
| **MJB9** | **Matsu-Tunnel** | **13.75** | **342** | Pn | **Pn** | **09 57 40.2** | **-2.7** |
| **JOW** | **Kunigami** | **14.11** | **287** | Pn | **P** | **09 57 57.4** | **+2.1** |
| JOW | 2.2nm,0.3s,baz=128,slow=11,SNR=6.9 comp=Z,177nm,18.9s,baz=65,slow=36 | | | LR | LR | 10 02 59.3 | |
| **JMM** | **Marumori** | **14.48** | **352** | Pn | **Pn** | **09 57 51.9** | **-1.1** |
| **JNU** | **Nakatsue** | **14.61** | **314** | LR | LR | 10 02 48.2 | |
| **JTM** | **Tenmabayashi** | **17.33** | **354** | Pn | **Pn** | **09 58 29.6** | **-0.1** |
| JTM | comp=Z,62nm,21.1s,baz=135,slow=34 comp=Z,88nm,1.2s | | | IAmb | IAmb | 09 59 11.5 | |
| **ERM** | **Erimo** | **18.45** | **359** | P | **P** | **09 58 42.4** | **-0.7** |
| **KSRS** | **Korea Array** | **19.24** | **320** | P | **Pn** | **09 58 53.5** | **+0.4** |
| KSRS | comp=Z,0.3nm,0.3s,baz=132,slow=11,SNR=6.3 comp=Z,107nm,18.4s,baz=130,slow=36 comp=Z,1.3nm,0.5s | | | LR | LR | 10 06 13.0 | |
| **KSAR** | **Wonju Array Be** | **19.25** | **320** | P | **P** | **09 58 51.4** | **-0.6** |
| **JKA** | **Kamikawa-asahi** | **20.56** | **358** | P | **P** | **09 59 07.0** | **+0.8** |
| JKA | comp=Z,43nm,1.3s | | | IAmb | IAmb | 09 59 22.3 | |
| **USRK** | **Ussuriysk Ar.** | **22.67** | **338** | P | **P** | **09 59 30.0** | **+1.1** |
| **DAV** | **Davao City (W)** | **23.70** | **229** | LR | LR | 10 06 54.0 | |
| **PETK** | **Petropavlovsk-** | **31.47** | **17** | LR | LR | 10 15 01.1 | |
| **SHEM** | **Shemya Is, Ala** | **37.33** | **31** | LR | LR | 10 13 52.0 | |
| **SONM** | **Songino Array** | **38.10** | **319** | P | **P** | **10 01 47.0** | **+0.6** |
| **KNRA** | **Kununurra** | **41.51** | **202** | P | **P** | **10 02 14.6** | **-0.1** |
| KNRA | comp=Z,11nm,1.4s | | | IAmb | IAmb | 10 02 31.6 | |
| **WB0** | **Warramunga Arr** | **43.92** | **192** | P | **P** | **10 02 33.5** | **-0.7** |
| WB0 | comp=Z,12nm,1.4s | | | IAmb | IAmb | 10 02 50.9 | |
| **WR0** | **Warramunga Arr** | **44.08** | **192** | P | **P** | **10 02 34.9** | **-0.7** |
| WR0 | comp=Z,9.5nm,1.4s | | | IAmb | IAmb | 10 02 54.2 | |
| **WRAB** | **Tennant Creek** | **44.09** | **192** | P | **P** | **10 02 35.3** | **-0.4** |
| WRAB | comp=Z,8.9nm,1.4s | | | IAmb | IAmb | 10 02 43.1 | |
| **WB2** | **Warramunga Arr** | **44.09** | **192** | P | **P** | **10 02 34.7** | **-1.0** |
| WB2 | comp=Z,6.8nm,1.1s | | | IAmb | IAmb | 10 02 57.9 | |
| **WRA** | **Warramunga Arr** | **44.10** | **192** | P | **P** | **10 02 34.4** | **-1.4** |
| **WRA** | **Warramunga Arr** | **44.10** | **192** | P | **P** | **10 02 34.3** | **-1.4** |
| WRA | comp=Z,0.8nm,0.4s,baz=17,slow=9.2,SNR=32 comp=Z,0.6nm,0.7s,baz=4.1,slow=3.5,SNR=2.2 comp=Z,0.8nm,0.4s | | | PcP | **PcP** | **10 04 20.3** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **44.86** | **204** | P | **P** | **10 02 41.4** | **-0.4** |
| **AS31** | **Alice Springs** | **47.80** | **192** | P | **P** | **10 03 02.9** | **-2.1** |
| **ASAR** | **Alice Springs** | **47.81** | **192** | P | **P** | **10 03 03.5** | **-1.4** |
| **ASAR** | **Alice Springs** | **47.81** | **192** | P | **P** | **10 03 03.6** | **-1.3** |
| ASAR | comp=Z,0.3nm,0.4s,baz=11,slow=6.7,SNR=7.8 comp=Z,0.3nm,0.7s,baz=3.8,slow=3.4,SNR=1.9 comp=Z,0.3nm,0.4s | | | PcP | **PcP** | **10 04 32.6** | **-1.0** |
| **ZAA0** | **Zalesovo Array** | **52.94** | **321** | P | **P** | **10 03 42.2** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **52.94** | **321** | P | **P** | **10 03 42.8** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **52.94** | **321** | P | **P** | **10 03 44.6** | **+1.1** |
| **N15K** | **Kwethluk River** | **53.34** | **31** | P | **P** | **10 03 46.8** | **+0.5** |
| N15K | comp=Z,1.0nm,0.4s,baz=98,slow=7.8,SNR=2.7 comp=Z,1.0nm,0.4s comp=Z,8.9nm,1.2s | | | IAmb | IAmb | 10 04 12.8 | |
| **MK31** | **Makanchi Array** | **53.65** | **312** | P | **P** | **10 03 48.0** | **-0.8** |
| **MKAR** | **Makanchi Array** | **53.65** | **312** | P | **P** | **10 03 49.6** | **+0.7** |
| **MKAR** | **Makanchi Array** | **53.65** | **312** | P | **P** | **10 03 50.0** | **+1.1** |
| | comp=Z,2.1nm,0.6s,baz=88,slow=9.0,SNR=21 comp=Z,2.1nm,0.6s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **55.11** | **182** | P | **P** | **10 03 58.1** | **-1.3** |
| **J18K** | **Innoko River** | **55.84** | **28** | P | **P** | **10 04 03.5** | **-0.9** |
| J18K | comp=Z,2.7nm,1.0s,baz=8.8,slow=10,SNR=3.7 comp=Z,2.7nm,1.0s comp=Z,4.8nm,1.1s | | | IAmb | IAmb | 10 04 35.1 | |
| **OHAK** | **Old Harbor** | **56.12** | **36** | P | **P** | **10 04 04.9** | **-1.6** |
| **KURK** | **Kurchatov** | **56.31** | **316** | P | **P** | **10 04 08.1** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **56.37** | **316** | P | **P** | **10 04 09.3** | **+0.9** |
| | comp=Z,5.6nm,0.6s,baz=93,slow=7.8,SNR=32 comp=Z,5.6nm,0.6s | | | | | | |
| **J19K** | **Poorman** | **56.45** | **28** | P | **P** | **10 04 10.2** | **+1.4** |
| J19K | comp=Z,8.8nm,1.5s | | | IAmb | IAmb | 10 04 35.7 | |
| **G19K** | **Purcell Mounta** | **56.49** | **25** | P | **P** | **10 04 09.0** | **0.0** |
| G19K | comp=Z,11nm,1.5s | | | IAmb | IAmb | 10 04 28.0 | |
| **H19K** | **Roundabout Mou** | **56.55** | **26** | P | **P** | **10 04 09.5** | **+0.1** |
| **SYI** | **Shuyak Island** | **56.81** | **34** | P | **P** | **10 04 12.2** | **+0.8** |
| **J20K** | **Nowinta River** | **57.12** | **28** | P | **P** | **10 04 14.1** | **+0.6** |
| J20K | comp=Z,3.7nm,1.0s | | | IAmb | IAmb | 10 04 21.9 | |
| **F20K** | **Avaraart Lake** | **57.29** | **24** | P | **P** | **10 04 14.8** | **+0.2** |
| **IMAR** | **Indian Mountai** | **57.75** | **26** | P | **P** | **10 04 19.0** | **+1.1** |
| **B20K** | **Meade River** | **57.78** | **20** | P | **P** | **10 04 20.1** | **+2.1** |
| **SKT** | **Skwentna** | **57.81** | **30** | P | **P** | **10 04 19.3** | **+0.8** |
| SKT | comp=Z,4.9nm,1.0s | | | IAmb | IAmb | 10 04 32.5 | |
| **H21K** | **Melozitna Rive** | **58.04** | **26** | P | **P** | **10 04 20.5** | **+0.5** |
| H21K | comp=Z,4.7nm,1.2s | | | IAmb | IAmb | 10 04 28.4 | |
| **F21K** | **Alatna River** | **58.18** | **24** | P | **P** | **10 04 20.4** | **-0.6** |
| F21K | comp=Z,4.8nm,1.2s | | | IAmb | IAmb | 10 04 26.2 | |
| **BOOM** | **Boomskoye usch** | **58.20** | **306** | P | **P** | **10 04 20.7** | **-1.0** |
| BOOM | comp=Z,4.9nm,0.6s | | | IAmb | IAmb | 10 04 24.5 | |
| **MORW** | **Morawa** | **58.55** | **208** | P | **P** | **10 04 24.3** | **+0.3** |
| **D22K** | **Ayikyak River** | **58.92** | **22** | P | **P** | **10 04 27.0** | **+0.9** |
| **SML** | **Sawmill** | **59.28** | **31** | P | **P** | **10 04 28.9** | **+0.2** |
| SML | comp=Z,5.6nm,0.9s | | | IAmb | IAmb | 10 05 10.2 | |
| **D23K** | **Nanushuk River** | **59.64** | **22** | P | **P** | **10 04 33.0** | **+2.0** |
| D23K | comp=Z,8.7nm,1.3s | | | IAmb | IAmb | 10 04 54.6 | |
| **SCM** | **Sheep Creek Mo** | **59.76** | **31** | P | **P** | **10 04 33.0** | **+1.0** |
| **C23K** | **Itkillik River** | **59.88** | **21** | P | **P** | **10 04 33.8** | **+1.2** |
| **CCB** | **Clear Creek Bu** | **59.92** | **28** | P | **P** | **10 04 33.5** | **+0.6** |
| CCB | comp=Z,4.3nm,1.5s | | | IAmb | IAmb | 10 04 37.9 | |
| **IL31** | | **60.32** | **28** | P | **P** | **10 04 35.3** | **-0.4** |
| **ILAR** | **Eielson Array** | **60.32** | **28** | P | **P** | **10 04 36.5** | **+0.7** |
| **ILAR** | **Eielson Array** | **60.32** | **28** | P | **P** | **10 04 35.3** | **-0.5** |
| | comp=Z,0.9nm,0.9s,baz=256,slow=5.6,SNR=6.6 comp=Z,0.9nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.45** | **319** | P | **P** | **10 04 44.8** | **+1.2** |
| | comp=Z,8.8nm,0.5s,baz=92,slow=7.9,SNR=37 comp=Z,8.8nm,0.5s | | | | | | |
| **SCRK** | **Sand Creek** | **61.49** | **29** | P | **P** | **10 04 44.1** | **+0.2** |
| SCRK | comp=Z,2.4nm,0.8s | | | IAmb | IAmb | 10 05 09.0 | |
| **BRVK** | **Borovoye** | **61.51** | **319** | P | **P** | **10 04 45.1** | **+1.1** |
| **J26L** | **Joseph Creek** | **61.72** | **28** | P | **P** | **10 04 46.4** | **+1.0** |
| **ISLE** | **Juniper Island** | **62.08** | **33** | P | **P** | **10 04 47.7** | **-0.2** |
| ISLE | comp=Z,5.9nm,0.9s | | | IAmb | IAmb | 10 05 07.7 | |
| **KK31** | **Karatay Array** | **62.12** | **308** | P | **P** | **10 04 49.2** | **+0.8** |
| KK31 | comp=Z,2.4nm,0.7s | | | IAmb | IAmb | 10 04 55.4 | |
| **KKAR** | **Karatay Array** | **62.12** | **308** | P | **P** | **10 04 49.2** | **+0.8** |
| **I28M** | **Miner Creek** | **63.31** | **27** | P | **P** | **10 04 56.6** | **+0.6** |
| **F28M** | **Old Crow** | **63.42** | **25** | P | **P** | **10 04 56.6** | **0.0** |
| F28M | comp=Z,3.3nm,0.8s | | | IAmb | IAmb | 10 05 23.0 | |
| **CHGR** | **Chuyangaron** | **63.79** | **303** | P | **P** | **10 05 00.3** | **+0.6** |
| **SIMJ** | **Simiganj** | **63.91** | **303** | P | **P** | **10 05 01.7** | **+1.3** |
| **I30M** | **Mount Dempster** | **64.80** | **27** | P | **P** | **10 05 06.5** | **+0.7** |
| I30M | comp=Z,2.7nm,0.9s | | | IAmb | IAmb | 10 05 08.7 | |
| **J30M** | **Hart River** | **64.84** | **28** | P | **P** | **10 05 07.6** | **+1.5** |
| **G31M** | **Satah River** | **65.60** | **25** | P | **P** | **10 05 12.2** | **+1.5** |
| G31M | comp=Z,4.2nm,0.8s | | | IAmb | IAmb | 10 05 12.4 | |
| **ABKAR** | **Akbulak array** | **68.41** | **316** | P | **P** | **10 05 29.6** | **+0.7** |
| **YKA** | **Yellowknife Ar** | **74.75** | **28** | P | **P** | **10 06 07.3** | **+0.5** |
| | comp=Z,0.8nm,0.6s,baz=297,slow=6.1,SNR=11 comp=Z,0.8nm,0.6s | | | | | | |
| **YKAB2** | **New Yellowknif** | **74.77** | **28** | P | **P** | **10 06 07.7** | **+0.7** |
| **ARCES** | **ARCESS Array B** | **77.28** | **341** | P | **P** | **10 06 22.4** | **+1.3** |
| ARCES | comp=Z,7.4nm,1.3s | | | IAmb | IAmb | 10 06 35.4 | |
| **ARCES** | **ARCESS Array B** | **77.28** | **341** | P | **P** | **10 06 21.9** | **+0.7** |
| | comp=Z,1.9nm,0.7s,baz=66,slow=9.4,SNR=4.1 comp=Z,1.9nm,0.7s | | | | | | |
| **CMB** | **Columbia Colle** | **80.48** | **53** | P | **P** | **10 06 40.2** | **+0.7** |
| **KBZ** | **Khabaz** | **81.28** | **314** | P | **P** | **10 06 44.6** | **+1.2** |
| | comp=Z,1.3nm,0.7s,baz=29,slow=4.8,SNR=1.8 comp=Z,1.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **81.64** | **334** | P | **P** | **10 06 45.4** | **+0.3** |
| **FINES** | **FINESS Array B** | **81.64** | **334** | P | **P** | **10 06 45.0** | **-0.1** |
| | comp=Z,1.5nm,0.8s,baz=69,slow=6.3,SNR=6.0 comp=Z,1.5nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.84** | **52** | P | **P** | **10 06 46.6** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=276,slow=5.0,SNR=5.2 comp=Z,0.5nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **128.16** | **193** | PKP | **PKPdf** | **10 13 32.0** | **-0.7** |
| | comp=Z,0.8nm,0.9s,baz=92,slow=21,SNR=2.0 | | | | | | |
| **PLCA** | **Paso Flores** | **146.75** | **129** | PKPbc | **PKPbc** | **10 14 09.1** | **-0.2** |
| | comp=Z,1.0nm,0.5s,baz=232,slow=3.4,SNR=7.6 | | | | | | |
| **LPAZ** | **La Paz** | **149.51** | **82** | PKPbc | **PKPbc** | **10 14 16.9** | **-1.0** |
| | comp=Z,0.9nm,0.7s,baz=205,slow=5.3,SNR=3.5 | | | | | | |

**IDC 17 09:55:02.3±2.6, 54.˚30N×86.˚05E, h0km, mbtmp3.2/2, ML3.0/2, Error ellipse: s-maj=19.2km s-min=11.1km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.81** | **244** | I | I | 10 00 30.0 | |
| **ZALV** | **Zalesovo Beam** | **0.81** | **244** | Pg | Pg | 09 55 16.9 | -0.8 |
| ZALV | baz=66,slow=311,SNR=1.6 2.8nm,0.3s,baz=62,slow=17,SNR=18 12nm,0.3s,baz=61,slow=33,SNR=34 | | | Lg | Lg | 09 55 29.5 | |
| **KURBB** | **Kurchatov Arra** | **5.89** | **234** | Pn | Pn | 09 56 31.1 | +0.4 |
| **MKAR** | **Makanchi Array** | **7.89** | **199** | Pn | Pn | 09 56 59.5 | +1.3 |
| MKAR | 0.3nm,0.3s,baz=49,slow=15,SNR=4.6 1.0nm,0.4s 0.4nm,0.3s,baz=18,slow=14,SNR=8.7 | | | Sn | Sn | 09 58 27.4 | -0.7 |
| MKAR | 0.1nm,0.3s,baz=19,slow=25,SNR=2.1 0.1nm,0.3s,baz=18,slow=33,SNR=2.0 0.5nm,0.3s | | | Lg | Lg | 09 59 13.6 | |

*NEIC* ***17*** *10:09:40.7±1.5, 24.˚06N±0.˚05×120.˚96E±0.˚05, h10km±1km, mb4.7/78, Mwr4.5/13, Error ellipse: s-maj=9.3km s-min=6.0km az=220.0, Moment Tensor Solution. Moment tensor: Scale 10^15 Nm; Mrr 2.21; Mθθ 2.02; Mϕϕ -4.22; Mrθ -3.49; Mθϕ 0.52; Mϕr -5.66; Fault plane solution: M0 7.61000×10^15 NP1: ϕs 319.92000°, δ 24.36000°, λ 23.35000°. NP2: ϕs 208.46000°, δ 80.59000°, λ 112.58000°. Principal axes: T 7.5019, Plg49.0000°, Azm143.0000°; N 0.2085, Plg22.0000°, Azm25.0000°; P -7.7104, Plg32.0000°, Azm280.0000°;*
*NEIC* ***17*** *10:09:41.1, 23.˚99N×120.˚95E, h10km*
*BJI* ***17*** *10:09:41.6±0.0, 24.˚07N×121.˚02E, h7km, mb4.4/29, mB4.7/14, ML4.7/9, Ms4.6/44, Ms7 4.5/42*
*TAP* ***17*** *10:09:42.5, 24.˚01N×121.˚01E, h19km, ML4.9, B*
*ASIES* ***17*** *10:09:42.5, 24.˚01N×121.˚01E, h19km, ML4.9, Mw4.6, Moment Tensor Solution. Moment tensor: Scale 10^22 Nm; Mrr 7.91; Mθθ -1.03; Mϕϕ -6.88; Mrθ -3.10; Mθϕ -0.83; Mϕr -4.51; Fault plane solution: M0 9.27894×10^22 NP1: ϕs 202.07000°, δ 63.04000°, λ 101.41000°. NP2: ϕs 358.07000°, δ 29.11000°, λ 68.75000°. Principal axes: T Plg69.7850°, Azm135.9430°; N Plg10.1560°, Azm16.8360°; P Plg17.2880°, Azm283.6400°;*
*NIED* ***17*** *10:09:43.1, 24.˚00N×121.˚04E, h15km, MW4.6, Moment Tensor Solution. s3 Moment tensor: Scale 1015Nm; Mrr-0.28; Mθθ 6.24; Mϕϕ -5.96; Mrθ -3.04; Mθϕ 0.34; Mϕr -5.62; Fault plane solution: M0 8.74000×10^15 NP1: ϕs 42.00000°, δ 87.00000°, λ -135.00000°. NP2: ϕs 309.00000°, δ 45.00000°, λ -4.00000°.*
*JMA* ***17*** *10:09:43.1±0.2, 24.˚0N×0.˚3×121.˚0E±0.˚9, h15km±3km, MV4.2/16, TAIWAN REGION*
*IDC* ***17*** *10:09:45.3±3.0, 23.˚94N×121.˚26E, h44km±29km, mb3.7/19, mbtmp4.0/21, ML4.0/2, MS4.0/25, Error ellipse: s-maj=21.3km s-min=12.8km az=58.0*

**ISC 17 10:09:42.4±0.5, 23.˚994N±0.˚010×121.˚06E±0.˚01, h19km±1km, n361, σ1§41/479, mb4.6/56, MS4.0/28, 21C-71D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WUSB** | **Renai** | **0.05** | **92** | ⇓*i*P | **Pg** | **10 09 46.6** | **+0.5** |
| WUSB | baz=102 | | | S | **Sg** | **10 09 49.1** | **+0.5** |
| **WPL** | **Puli Township** | **0.10** | **281** | ⇑*e*P | **Pg** | **10 09 48.1** | **+1.8** |
| OWD | baz=270 **Renai** baz=111 | **0.11** | **110** | ⇓*i*P | **Pg** | **10 09 47.5** | **+0.8** |
| OWD | | | | *i* S | **Sg** | **10 09 50.8** | **+1.4** |
| **CHGB** | **Renai** | **0.12** | **58** | ⇓*i*P | **Pg** | **10 09 47.5** | **+0.7** |
| CHGB | baz=79 | | | *i* S | **Sg** | **10 09 50.5** | **+0.8** |
| **DPDB** | **Guoxing** | **0.13** | **288** | ⇑*i*P | **Pg** | **10 09 46.5** | **-0.2** |
| DPDB | baz=285 | | | *i* S | **Sg** | **10 09 49.3** | **-0.2** |
| **WCS** | **Beigang Elemen** | **0.15** | **295** | ⇑*i*P | **Pg** | **10 09 46.7** | **-0.2** |
| WCS | baz=296 | | | S | **Sg** | **10 09 49.5** | **-0.4** |
| **TYC** | **Yuchr** | **0.21** | **244** | ⇑P | **Pg** | **10 09 47.4** | **-0.2** |
| TYC | baz=230 | | | *e*S | **Sg** | **10 09 50.7** | **-0.4** |
| **SSLB** | **Suanglung** | **0.23** | **205** | P | **Pg** | **10 09 49.4** | **+1.4** |
| **SSLB** | **Suanglung** | **0.23** | **205** | | **Pb** | **10 09 46.8** | **-0.8** |
| SSLB | | | | Sg | **Sb** | **10 09 51.2** | **+0.2** |
| **SSLB** | **Suanglung** | **0.23** | **205** | ⇑*i*P | **Pg** | **10 09 47.9** | **0.0** |
| SSLB | baz=188 | | | *i* S | **Sg** | **10 09 51.4** | **-0.3** |
| **WHF** | **Hehuan Shan** | **0.24** | **51** | ⇓*i*P | **Pg** | **10 09 49.6** | **+1.1** |
| WHF | baz=70 | | | S | **Sg** | **10 09 54.1** | **+1.5** |
| **VWDT** | **VWDT** | **0.25** | **163** | ⇓*i*P | **Pg** | **10 09 49.3** | **+1.0** |
| VWDT | baz=156 | | | *i* S | **Sg** | **10 09 53.6** | **+1.3** |
| **TDCB** | **Techi** | **0.27** | **19** | ⇓*i*P | **Pb** | **10 09 49.0** | **+0.3** |
| TDCB | baz=24 | | | *i* S | **Sb** | **10 09 52.9** | **-0.1** |
| **TWT** | **Tachien** | **0.28** | **22** | ⇓*i*P | **Pb** | **10 09 49.0** | **+0.2** |
| TWT | baz=25 | | | *i* S | **Sg** | **10 09 53.0** | **-0.3** |
| **WHP** | **Taichung City** | **0.30** | **340** | ⇑*i*P | **Pg** | **10 09 49.2** | **0.0** |
| WHP | baz=347 | | | S | **Sb** | **10 09 54.4** | **+0.6** |
| **FUSS** | **Fushou** | **0.30** | **34** | ⇓*i*P | **Pb** | **10 09 49.8** | **+0.5** |
| FUSS | baz=42 | | | S | **Sb** | **10 09 54.6** | **+0.6** |
| **LXIB** | **Xiulin Townshi** | **0.33** | **85** | ⇓*i*P | **Pb** | **10 09 50.7** | **+1.0** |
| LXIB | baz=85 | | | S | **Sb** | **10 09 55.5** | **+1.0** |
| **WJS** | **Zhushan** | **0.35** | **241** | ⇓*i*P | **Pb** | **10 09 50.4** | **+0.3** |
| WJS | baz=234 | | | S | **Sb** | **10 09 56.3** | **+1.1** |
| **WHYT** | **Xinyi Township** | **0.35** | **213** | ⇑*i*P | **Pb** | **10 09 50.2** | **0.0** |
| WHYT | baz=201 | | | *e*S | **Sb** | **10 09 55.7** | **+0.4** |
| **WNT1** | **Nantou City** | **0.36** | **256** | ⇓P | **Pb** | **10 09 50.6** | **+0.4** |
| **WNT** | **Mingjian** | **0.36** | **252** | ⇓*i*P | **Pb** | **10 09 50.7** | **+0.4** |
| WNT | baz=251 baz=245 | | | S | **Sb** | **10 09 56.8** | **+1.1** |
| **TCU** | **Taichung** | **0.38** | **294** | ⇓*i*P | **Pb** | **10 09 51.2** | **+0.5** |
| TCU | baz=294 | | | *e*S | **Sb** | **10 09 57.5** | **+1.2** |
| **ESL** | **Shilin** | **0.39** | **118** | ⇓*i*P | **Pb** | **10 09 51.8** | **+1.1** |
| ESL | baz=117 | | | *e*S | **Sb** | **10 09 57.5** | **+1.2** |
| **ETM** | **Tongmen** | **0.40** | **94** | ⇓*i*P | **Pb** | **10 09 51.8** | **+0.8** |
| ETM | baz=102 | | | *e*S | **Sb** | **10 09 57.4** | **+0.7** |
| **WARBT** | **Fenglin Townsh** | **0.41** | **132** | ⇓*i*P | **Pb** | **10 09 51.9** | **+0.8** |
| WARBT | baz=124 | | | *e*S | **Sb** | **10 09 57.5** | **+0.6** |
| **TWQ1** | **Liyutan** | **0.44** | **323** | ⇑*i*P | **Pb** | **10 09 52.0** | **+0.4** |
| TWQ1 | baz=328 | | | *e*S | **Sb** | **10 09 58.5** | **+0.6** |
| **ETLH** | **Xiulin Townshi** | **0.44** | **61** | ⇓*i*P | **Pb** | **10 09 52.4** | **+0.7** |
| ETLH | baz=62 | | | *e*S | **Sb** | **10 09 58.5** | **+0.5** |
| **WYL** | **Yuanlin Townsh** | **0.44** | **266** | ⇓P | **Pb** | **10 09 52.1** | **+0.5** |
| **WCHH** | **Zhanghua** | **0.47** | **281** | ⇓*i*P | **Pb** | **10 09 52.3** | **+0.2** |
| WCHH | baz=278 | | | *e*S | **Sb** | **10 09 58.7** | **+0.2** |
| **EGFH** | **Guangfu** | **0.47** | **134** | *e*P | **Pb** | **10 09 52.9** | **+0.8** |
| EGFH | baz=126 | | | *e*S | **Sb** | **10 09 59.5** | **+0.9** |
| **TWD** | **Chiawan** | **0.50** | **80** | ⇓*i*P | **Pb** | **10 09 53.4** | **+0.8** |
| TWD | baz=90 | | | *e*S | **Sb** | **10 10 00.9** | **+1.4** |
| **HWA** | **Hwalien** | **0.50** | **92** | ⇓*i*P | **Pn** | **10 09 54.1** | **-0.4** |
| HWA | baz=94 | | | *e*S | **Sn** | **10 10 01.5** | **-1.1** |
| **NSY** | **Sanyi** | **0.50** | **327** | ⇑*i*P | **Pb** | **10 09 53.6** | **+0.9** |
| NSY | baz=331 | | | *e*S | **Sb** | **10 10 00.7** | **+1.1** |
| **SHUL** | **Shoufeng** | **0.51** | **114** | ⇓*i*P | **Pn** | **10 09 54.2** | **-0.4** |
| SHUL | baz=114 | | | *e*S | **Sn** | **10 10 02.2** | **-0.5** |
| **TEYL** | **Yanliau Villag** | **0.51** | **104** | ⇓*i*P | **Pn** | **10 09 54.1** | **-0.6** |
| TEYL | baz=101 | | | *e*S | **Sn** | **10 10 01.9** | **-0.9** |
| **YUS** | **Yu-Shan** | **0.51** | **191** | ⇓P | **Pb** | **10 09 53.2** | **+0.1** |
| YUS | baz=186 | | | *e*S | **Sb** | **10 10 01.2** | **+0.9** |
| **WDJ** | **Dajia District** | **0.52** | **313** | ⇓*i*P | **Pn** | **10 09 54.0** | **-0.9** |
| WDJ | baz=315 | | | *e*S | **Sn** | **10 10 01.6** | **+1.5** |
| **NACB** | **Ninganchiao** | **0.52** | **70** | P | **Pb** | **10 09 53.6** | **+0.7** |
| **NACB** | **Ninganchiao** | **0.52** | **70** | | **Pg** | **10 09 52.8** | **-0.2** |
| NACB | | | | Sg | **Sb** | **10 10 00.5** | **+0.4** |
| **NACB** | **Ninganchiao** | **0.52** | **70** | ⇓*i*P | **Pb** | **10 09 53.7** | **+0.8** |
| NACB | baz=81 | | | S | **Sb** | **10 10 01.1** | **+1.0** |
| **NNSB** | **Datong** | **0.52** | **34** | ⇓*i*P | **Pb** | **10 09 53.1** | **+0.1** |
| NNSB | baz=39 | | | *e*S | **Sg** | **10 09 59.6** | **-0.7** |
| **NNSH** | **Datong** | **0.52** | **34** | ⇓*e*P | **Pb** | **10 09 53.2** | **+0.2** |
| **TEGC** | baz=39 **Jichi Village** baz=119 | **0.52** | **123** | ⇓P | **Pn** | **10 09 54.6** | **-0.2** |
| TEGC | | | | *e*S | **Sn** | **10 10 03.5** | **+0.4** |

baz=119
NNS Nan Shan 0.53 33 ⇓iP Pb 10 09 53.4 +0.2
baz=38
NNS eS Sg 10 10 00.1 -0.3
baz=38
ETL Fush Village 0.54 72 ⇓iP Pg 10 09 54.0 +0.7
baz=83
ETL eS Sn 10 10 02.8 -0.9
baz=83
EHY Hungye 0.54 154 ⇓iP Pg 10 09 54.2 +0.8
baz=145
EHY eS Sb 10 10 01.5 +0.9
baz=145
EHYH Wanrong 0.56 152 ⇓iP Pg 10 09 54.5 +0.8
baz=144
EHYH eS Sg 10 10 02.4 +1.0
baz=144
WDLH Douliu 0.57 238 ⇓P Pg 10 09 54.2 +0.4
baz=233
WDLH eS Sg 10 10 02.8 +1.4
baz=233
NMLH Miaoli 0.59 336 eP Pn 10 09 55.5 -0.4
baz=339
NMLH eS Sn 10 10 03.9 -1.1
baz=339
HGSD Ruisui 0.60 146 ⇓iP Pn 10 09 55.7 -0.2
baz=144
HGSD S Sn 10 10 04.8 -0.3
baz=144
WRL Guolierlin Hig 0.63 262 eP Pb 10 09 54.7 0.0
baz=259
WRL eS Sg 10 10 04.7 +1.2
baz=259
NSTT Nanjuang 0.64 355 ⇑iP Pg 10 09 55.7 +0.6
baz=348
NSTT iS Sg 10 10 04.3 +0.6
baz=348
NFF Wufeng Townshi 0.64 5 ⇑eP Pg 10 09 55.4 +0.2
baz=16
NFF S Sg 10 10 04.3 +0.6
baz=16
YULB Yu-li 0.64 160 P Pn 10 09 56.2 -0.2
YULB Yu-li 0.64 160 Pg Pb 10 09 54.9 0.0
YULB Sg Sg 10 10 04.0 +0.3
YULB Yu-li 0.64 160 ⇓iP Pg 10 09 55.7 +0.6
baz=149
YULB eS Sg 10 10 03.7 0.0
baz=149
LIOB Emei 0.65 356 ⇑iP Pn 10 09 56.0 -0.6
baz=349
LIOB eS Sg 10 10 05.2 +1.1
baz=349
TWF1 Yuli 0.68 161 ⇓iP Pn 10 09 56.5 -0.5
baz=152
TWF1 eS Sg 10 10 05.8 +0.9
baz=152
EYUL Yuli 0.69 160 ⇓P Pn 10 09 56.8 -0.3
baz=151
EYUL iS Sn 10 10 06.4 -0.8
baz=151
WTK Tuku 0.69 244 ⇓eP Pg 10 09 56.0 0.0
baz=241
WTK S Sn 10 10 06.6 -0.6
baz=241
LATG Datong 0.69 38 ⇓iP Pg 10 09 56.0 -0.1
baz=33
LATG iS Sg 10 10 05.7 +0.4
baz=33
WCKO Fanlu 0.69 217 ⇓iP Pg 10 09 56.2 +0.1
baz=213
WCKO S Sg 10 10 06.3 +0.9
baz=213
EHP Heping Village 0.70 63 eP Pn 10 09 56.8 -0.4
baz=66
EHP eS Sn 10 10 07.4 -0.2
baz=66
EAHA Aohua 0.70 62 ⇓eP Pn 10 09 56.9 -0.5
baz=64
EAHA eS Sn 10 10 07.1 -0.6
baz=64
CHN2 Minshiung 0.71 229 ⇓iP Pg 10 09 56.8 +0.4
baz=226
CHN2 iS Sn 10 10 07.4 -0.3
baz=226
NJN Zhunan 0.71 346 eP Pn 10 09 57.3 -0.1
baz=349
WTCT Ta-ch'eng 0.72 260 eP Pb 10 09 56.2 -0.2
baz=257
WTCT S Sg 10 10 06.5 +0.2
baz=257
NSK Sanguang 0.73 22 ⇓iP Pg 10 09 57.0 +0.1
baz=32
NSK iS Sb 10 10 06.0 -0.2
baz=32
YHNB Yeheng 0.73 23 P Pg 10 09 56.9 0.0
YHNB Yeheng 0.73 23 Pb 10 09 55.6 -1.0
YHNB Yeheng 0.73 23 ⇓iP Pg 10 09 56.9 0.0
baz=33
YHNB iS Sg 10 10 06.5 -0.2
baz=33
NDT Datong Townshi 0.73 34 ⇓eP Pg 10 09 56.9 -0.1
baz=32
NDT eS Sg 10 10 07.3 +0.5
baz=32
ENA Nanau 0.76 55 ⇓iP Pn 10 09 57.8 -0.2
baz=58
ENA eS Sn 10 10 08.7 -0.3
baz=58
CHY Chiayi 0.76 230 eP Pg 10 09 57.7 +0.2
baz=226
CHY S Sn 10 10 08.8 -0.3
baz=226
ECBN Changbin 0.76 152 eP Pn 10 09 59.2 +1.0
baz=150
ECBN eS Sn 10 10 09.6 +0.5
baz=150
ENTT Nioudou 0.79 36 ⇓iP Pg 10 09 58.0 -0.1
baz=34
ENTT eS Sg 10 10 09.2 +0.6
baz=34
TPUB Ta-pu 0.80 210 P Pn 10 09 58.8 +0.2
TPUB Ta-pu 0.80 210 Pg Pb 10 09 56.3 -1.3
TPUB Ta-pu 0.80 210 ⇓iP Pg 10 09 57.9 -0.1
baz=207
TPUB S Sg 10 10 09.1 +0.5
baz=207
EWUT Wuta 0.80 55 ⇓iP Pn 10 09 58.4 -0.2
baz=58
EWUT eS Sn 10 10 10.2 +0.3
baz=58
SBCB Hsinchu 0.80 355 eP Pn 10 09 59.0 +0.3
baz=358
SBCB eS Sn 10 10 10.8 +0.8
baz=358
ELDTW Lidau 0.80 183 eP Pb 10 09 58.0 +0.2
baz=184
HSN Hsinchu 0.81 354 eP Pn 10 09 59.4 +0.6
baz=359
HSN S Sn 10 10 11.6 +1.4
baz=359
FULB Fuli 0.82 165 ⇓iP Pn 10 09 59.9 +0.9
baz=163
FULB eS Sn 10 10 11.7 +1.1
baz=163
WSF Szhu 0.84 245 ⇓iP Pb 10 09 58.3 -0.2
baz=243
WSF iS Sg 10 10 10.5 +0.3
baz=243
WTP Ta-pu 0.85 209 ⇓iP Pb 10 09 58.8 +0.2
baz=205
WTP S Sn 10 10 10.9 -0.4
baz=205
EHD Haiduan 0.85 171 ⇓P Pn 10 09 59.7 +0.3
baz=179
EHD S Sn 10 10 12.0 +0.7
baz=179
CHKH Chenggong 0.86 159 ⇑eP Pn 10 10 00.5 +1.0
baz=157
CHKH eS Sn 10 10 13.5 +2.1
baz=157
STYT Tauyuan 0.87 199 eP Pg 10 09 59.6 +0.1
baz=196
STYT iS Sn 10 10 11.7 -0.2
baz=196
NDS Dongshan 0.87 43 ⇓P Pn 10 09 59.8 +0.1
baz=56
NDS eS Sn 10 10 12.4 +0.5
baz=56
NWLT Wulai 0.88 27 ⇓P Pg 10 09 59.5 -0.1
baz=35
NWLT eS Sg 10 10 11.2 0.0
baz=35
TWK Hsinying 0.89 216 ⇓P Pb 10 09 59.5 +0.2
baz=213
TWK eS Sn 10 10 12.2 -0.2
baz=213
WSL Shuilin Townsh 0.90 239 eP Pb 10 09 59.5 +0.1
baz=236
WSL iS Sn 10 10 12.8 +0.4
baz=236
FUSB Fushanzhiwuyua 0.90 32 ⇓iP Pb 10 09 59.8 +0.3
baz=30
FUSB eS Sn 10 10 12.8 +0.1
baz=30
ECS Chishang 0.91 171 ⇓eP Pn 10 10 01.0 +0.9
baz=179
ECS S Sn 10 10 14.4 +1.7
baz=179
TWE Neicheng 0.91 37 ⇓iP Pn 10 10 00.4 +0.2
baz=37
TWE eS Sn 10 10 14.0 +1.2
baz=37
ESAO Su ao 0.92 51 ⇓eP Pg 10 10 00.6 +0.2
baz=53
ESAO eS Sn 10 10 13.5 +0.5
baz=53
SNST Tainan City 0.93 214 eP Pb 10 10 00.1 +0.2
baz=211
SNST eS Sn 10 10 13.2 0.0
baz=211
CHKT Chengkung 0.93 162 ⇑iP Pg 10 10 01.5 +0.8
baz=161
CHKT iS Sn 10 10 15.9 +2.6
baz=161
CHN1 Nanshi 0.94 211 ⇓P Pb 10 10 00.2 +0.1
baz=209
CHN1 S Sn 10 10 13.7 +0.1
baz=209
TWC Suao 0.95 49 ⇓iP Pg 10 10 01.0 +0.1
baz=52
TWC eS Sn 10 10 14.4 +0.8
baz=52
ICHU Yijhu 0.95 229 eP Pb 10 10 00.5 +0.2
baz=237
ICHU eS Sn 10 10 14.6 +0.8
baz=237
NCUH Zhongli 0.98 7 eP Pg 10 10 02.0 +0.5
baz=9.0
NCUH eS Sn 10 10 15.3 +0.8
baz=9.0
ILA Ilan 0.99 39 eP Pg 10 10 02.1 +0.3
baz=42
ILA S Sn 10 10 15.6 +0.8
baz=42
SGST Jiashian 1.01 206 eP Pb 10 10 01.1 -0.2
baz=212
SGST eS Sg 10 10 15.5 +0.2
baz=212
NHW Xinwu Township 1.01 359 eP Pn 10 10 01.8 +0.2
baz=1.0
CHN8 Yiju 1.01 231 eP Pb 10 10 01.3 0.0
baz=238
CHN8 iS Sg 10 10 15.9 +0.5
baz=238
NTY Taoyuan 1.02 12 eP Pg 10 10 02.9 +0.5
baz=16
EDH Donghe 1.04 167 ⇑eP Pg 10 10 03.0 +0.3
baz=152
EDH S Sg 10 10 18.9 +2.5
baz=152
TATO Taipei 1.05 22 P Pg 10 10 03.8 +0.9
TATO Taipei 1.05 22 Pg 10 10 03.0 +0.1
TATO Taipei 1.05 22 ⇑P Pg 10 10 03.0 +0.1
baz=27
TATO eS Sg 10 10 18.1 +1.3
baz=27
NHDH Xindian Distri 1.05 24 eP Pg 10 10 03.3 +0.3
baz=8.0
SLGT Liugui 1.07 201 eP Pg 10 10 03.4 +0.2
baz=199
SLGT iS Sg 10 10 18.3 +1.1
baz=199
LONT Longtian 1.08 177 ⇑eP Pg 10 10 03.9 +0.3
baz=175
LONT eS Sg 10 10 18.5 +0.7
baz=175
TWA Mucha 1.09 26 ⇓eP Pg 10 10 03.6 -0.1
baz=11
NTC Toucheng 1.11 39 eP Pg 10 10 05.2 +1.3
baz=43
CHN3 Shinhua 1.11 215 ⇓eP Pg 10 10 04.3 +0.2
baz=224
CHN3 iS Sg 10 10 20.8 +2.1
baz=224
TAP Taipei 1.12 21 eP Pg 10 10 04.0 -0.1
baz=24
TAP eS Sg 10 10 18.7 -0.1
baz=24
SCLT Jiali 1.14 224 ⇓eP Pb 10 10 03.7 +0.2
baz=222
SCLT iS Sg 10 10 20.5 +1.0
baz=222
TWS1 Kuangyinshan 1.15 16 eP Pn 10 10 03.4 -0.1
baz=19
TWS1 eS Sg 10 10 20.8 +0.9
baz=19
EOS2 EOS2 1.15 68 eP Pg 10 10 06.1 +1.4
baz=69
EOS4 EOS4 1.16 83 eP Pg 10 10 04.8 0.0
baz=99
EGS 1.16 43 eP Pg 10 10 05.5 +0.5
baz=57
EGS eS Sg 10 10 20.7 +0.5
baz=57
SHHT Tainan City 1.17 214 eP Pg 10 10 05.4 +0.3
baz=212
TWG Pinlang 1.17 179 Pb 10 10 04.4 +0.4
TWG Pinlang 1.17 179 ⇑P Pg 10 10 05.0 0.0
baz=171
TWG S Sg 10 10 21.7 +1.3
baz=171
TWGBT Beinan 1.17 179 P Pg 10 10 05.6 +0.4
TWGBT Beinan 1.17 179 ⇑iP Pg 10 10 05.0 -0.2
baz=171
TWGBT iS Sg 10 10 21.9 +1.3
baz=171
EOS3 EOS3 1.19 76 eP Pg 10 10 05.8 +0.4
baz=91
TIPB Shuangxi 1.20 35 ⇓eP Pg 10 10 05.1 -0.6
baz=39
NTST Danshui 1.22 17 eP Pb 10 10 04.9 0.0
baz=19
NTST eS Sg 10 10 21.4 -0.6
baz=19
TAI1 Yung-k'ang 1.22 219 eP Pg 10 10 05.8 -0.3
baz=217
TAI1 iS Sg 10 10 23.3 +1.3
baz=217
SCST Cishan 1.22 205 eP Pg 10 10 05.9 -0.2
baz=204
SCST eS Sg 10 10 22.5 +0.5
baz=204
TSCK Chigu Township 1.23 227 eP Pn 10 10 04.8 +0.3
baz=236
TSCK eS Sg 10 10 23.0 +0.7
baz=236
TTN Taitung 1.24 176 eP Pg 10 10 07.0 +0.6
baz=176
TTN eS Sg 10 10 25.8 +3.1
baz=176
YM01 YM01 1.24 22 ⇑P Pb 10 10 05.6 +0.4
baz=24
YM01 eS Sg 10 10 21.4 +0.5
baz=24
NWF Wu-fen Shan 1.26 31 eP Pg 10 10 06.9 +0.1
baz=35
WFSB Wu-fen Shan 1.26 31 eP Pg 10 10 07.3 +0.5
baz=33
WFSB eS Sg 10 10 23.0 -0.3
baz=33
ANP Anpu 1.26 19 eP Pb 10 10 05.5 -0.1
baz=2.0
TAI Tainan 1.27 219 eP Pb 10 10 05.8 +0.1
baz=230
YM08 YM08 1.28 22 eP Pb 10 10 05.9 -0.1
baz=25
SSD Sandimen 1.30 198 eP Pb 10 10 06.7 +0.4
baz=196
SSD eS Sg 10 10 24.2 -0.5
baz=196
TWM1 Shoushan 1.30 207 eP Pg 10 10 08.1 +0.4
baz=205
TWB1 Santiao Chiao 1.32 40 eP Pg 10 10 07.6 -0.4
baz=42
TWB1 eS Sg 10 10 25.9 +0.7
baz=42
NWRT Kuosheng 1.32 24 eP Pg 10 10 07.8 -0.2
baz=27
TNOU National Taiwa 1.32 29 eP Pb 10 10 06.8 +0.2
baz=33
SXI1 Grass Mountain 1.32 34 eP Pg 10 10 07.4 -0.7
baz=21
SXI1 eS Sg 10 10 25.2 -0.2
baz=21
TSMG Majia 1.34 197 eP Pg 10 10 07.9 -0.4
baz=196
TSMG eS Sg 10 10 26.4 +0.6
baz=196
LDUT Ludao 1.37 164 eP Pb 10 10 07.2 -0.2
baz=164
LDUT eS Sg 10 10 25.9 -0.8
baz=164
SGLT Jiouru 1.37 203 eP Pg 10 10 09.1 +0.3
baz=201
TWY Chenhua 1.37 21 eP Pb 10 10 08.1 +0.7
baz=5.0
NSM Shimen 1.38 20 eP Pg 10 10 08.8 -0.3
baz=23
ECL Taimali 1.39 184 eP Pg 10 10 08.9 -0.4
baz=169
ECL eS Sg 10 10 27.5 -0.1
baz=169
TSPT Pingtung City 1.41 202 eP Pb 10 10 08.4 +0.3
baz=200
MASBT Mashibuluo 1.43 196 eP Pb 10 10 09.0 +0.6
baz=195
MASBT iS Sg 10 10 29.0 +0.3
baz=195
PNG Penghu 1.44 253 eP Pn 10 10 06.8 -0.6
baz=253
PNG eS Sn 10 10 26.1 +0.3
baz=253
WDGT Dungji 1.48 241 ⇓P Pn 10 10 07.9 0.0
baz=249
WDGT eS Sb 10 10 28.4 +0.8
baz=249
WSSB Gushan 1.53 209 eP Pb 10 10 09.9 -0.3
baz=208
EAST Anshuo 1.61 187 eP Pb 10 10 11.8 +0.2
baz=204
TAW Tawu 1.64 185 eP Pb 10 10 11.7 -0.3
baz=168
TAWH Dawu Township 1.65 186 eP Pb 10 10 12.6 +0.3
baz=169
SCZT Fangliau 1.66 194 eP Pb 10 10 12.2 -0.3
baz=193
SCZT eS Sb 10 10 33.9 +0.9
baz=193
VCHM Qimei 1.69 243 ⇓P Pn 10 10 10.7 -0.2
baz=243
VCHM eS Sn 10 10 31.4 -0.5
baz=243
VWUC VWUC 1.77 304 ⇓eP Pn 10 10 10.6 -1.5
baz=303
JYNG Yonagunijimaku 1.78 75 eP Pb 10 10 14.2 -0.2
JYNG eS Sb 10 10 37.1 +0.7
SLIU Shizi 1.79 188 eP Pb 10 10 13.7 -0.8
baz=204
YOJ Yonaguni jima 1.84 75 P Pn 10 10 15.2 -0.3
YOJ Yonaguni jima 1.84 75 Pb 10 10 14.2 +1.2
YOJ Yonaguni jima 1.84 75 eP Pb 10 10 14.8 -0.7
baz=76
YOJ Yonaguni jima 1.84 75 P Pb 10 10 15.0 -0.5
YOJ eS Sb 10 10 38.9 +0.7
PCYT Pengchaiyu 1.87 29 eP Pn 10 10 13.9 +0.5
baz=32
SMST Manzhou Townsh 1.98 186 eP Pb 10 10 16.8 -1.0
baz=201
LAY Lan-yu 2.00 167 eP Pn 10 10 16.1 +0.9
baz=155
HEN Hengchun 2.00 189 eP Pb 10 10 16.9 -1.3
baz=203
LYUB Lan-yu 2.04 166 eP Pn 10 10 16.4 +0.6
baz=155
PTMZ Houxiangcun 2.05 301 eP Pn 10 10 14.6 -1.3
baz=299
TWK1 Hengchun 2.05 187 eP Pb 10 10 17.8 -1.4
baz=201
TWKBT Hengchun 2.06 186 eP Pn 10 10 17.4 +1.4
baz=200
MATB Ma-tsu 2.37 335 eP Pn 10 10 19.2 -1.2
baz=331
KNM Kinmen 2.43 280 eP Pn 10 10 22.0 +0.9
baz=279
QZH Quanzhou 2.44 293 Pn Pn 10 10 20.0 -1.2
QZH Sn Sn 10 10 49.6 -0.9
QZH smax smax
comp=N,2µm,0.9s
QZH smax smax
comp=E,1µm,0.7s
IRIF Iriomote-Funau 2.46 82 P Pn 10 10 23.4 +1.9
IRIF eS Sb 10 10 53.8 -2.2
KNMB Chin-men Tao 2.48 281 Pn 10 10 20.6 -1.2
KNMB Chin-men Tao 2.48 281 eP Pn 10 10 20.6 -1.2
baz=280
HATJ Hateruma jima 2.51 88 eP Pn 10 10 23.6 +1.3
HATJ eS Sb 10 10 55.1 -2.4
JKRS Kuro-shima 2.71 84 P Pn 10 10 27.3 +2.4
JKRS eS Sn 10 10 59.8 +2.7
MHZQ Yeshan 2.79 319 eP Pn 10 10 25.0 -1.1
baz=316
LYJJ Jianjiangzhen 2.80 335 eP Pn 10 10 25.9 -0.4
baz=331
JIJ Ishigaki jima 2.84 82 P Pn 10 10 28.5 +1.8
JIJ eS Sn 10 11 02.9 +2.5
JISG Ishigakijimahi 3.02 78 P Pn 10 10 31.2 +1.9
JISG eS Sn 10 11 06.5 +1.5
XPSS Dashiqiu 3.03 345 eP Pn 10 10 28.7 -0.6
baz=341
ZPLA Ao Xicun 3.03 269 eP Pn 10 10 28.6 -0.7
baz=270
JTJ Tarama 3.38 78 P Pn 10 10 37.3 +3.1
JTJ eS Sn 10 11 17.6 +3.7
SXFK Yanhouchang 3.91 308 eP Pn 10 10 40.5 -1.0
baz=306
JIKM Ikemajima 3.93 76 eP Pn 10 10 45.3 +3.6
JIKM eS Sn 10 11 31.2 +4.0
JMJ Miyako jima 2 3.95 77 P Pn 10 10 45.7 +3.8
JMJ Miyako jima 2 3.95 77 eP Pn 10 10 44.5 +2.6
baz=78
HKPS Hong Kong Po S 6.59 256 Pn Pn 10 11 16.9 -1.4
JOW Kunigami 7.11 65 Pn Pn 10 11 26.4 +0.9
JOW Kunigami 7.11 65 P Pn 10 11 26.6 +1.1
15nm,0.3s,baz=112,slow=25,SNR=60
JOW S Sn 10 12 42.0 -3.7
14nm,0.8s,baz=302,slow=26,SNR=0.8
30nm,0.2s
JOW Kunigami 7.11 65 eP Pn 10 11 26.5 +1.1
baz=69
NJ2 Nanjing 8.26 347 eP Pn 10 11 41.8 +0.6
NJ2 S Sn 10 13 11.8 -2.2
NJ2 pmax pmax
comp=Z,23nm,1.1s
NJ2 smax smax
comp=N,180nm,1.0s
NJ2 smax smax
comp=E,180nm,1.5s
NJ2 LR LR
comp=N,1µm,9.5s
NJ2 LR LR
comp=E,2µm,8.7s
NJ2 LR LR
comp=Z,2µm,13.3s
CNSH ChangSha 8.41 301 P Pn 10 11 47.5 +4.2
CNSH S Sn 10 13 21.8 +4.0
CNSH smax smax
comp=N,660nm,1.3s
CNSH smax smax
comp=E,620nm,1.0s
WHN Wuhan 8.84 319 P Pn 10 11 48.8 -0.4
WHN S Sn 10 13 32.8 +4.5
WHN LR LR
comp=N,7µm,8.4s

WHN LR LR
comp=E,3µm,5.7s
WHN LR LR
comp=Z,9µm,11.3s
**JMZ Minamidaito 2 9.40 77** Pn **Pn** **10 11 55.7 -1.3**
**QIZ Qiongzhong 11.55 247** P **Pn** **10 12 27.0 +0.7**
QIZ S **Sn** **10 14 37.9 +3.1**
QIZ LR LR
comp=N,760nm,11.7s
QIZ LR LR
comp=E,380nm,10.0s
QIZ LR LR
comp=Z,720nm,11.7s
**JNU Nakatsue 12.53 41** P **Pn** **10 12 39.7 -0.1**
0.3nm,0.3s,baz=114,slow=5.0,SNR=2.0
13nm,1.1s
**GYA Guiyang 13.26 284** P **Pn** **10 12 49.9 +0.1**
GYA S **Sn** **10 15 10.8 -6.0**
GYA LR LR
comp=Z,3µm,13.0s
**HNS HongShan 14.43 339** *e*P **Pn** **10 13 08.9 +3.3**
HNS PP **PnPn** **10 13 20.8 +7.1**
HNS LR LR
comp=N,2µm,14.7s
HNS LR LR
comp=E,750nm,12.0s
HNS LR LR
comp=Z,1µm,14.1s
**XAN Xi'an 14.58 316** ⇑P **Pn** **10 13 07.8 0.0**
XAN pmax pmax
comp=Z,8.0nm,1.0s
XAN LR LR
comp=N,2µm,9.6s
XAN LR LR
comp=E,2µm,13.4s
XAN LR LR
comp=Z,3µm,14.4s
**KSRS Korea Array 14.65 22** P **Pn** **10 13 06.0 -2.6**
0.7nm,0.8s,baz=205,slow=12,SNR=1.8
**SLVN Son La 16.05 264** Pn **Pn** **10 13 24.9 -2.4**
**BJT Baijiatuau 16.50 347** Pn **Pn** **10 13 30.8 -2.0**
**KMI Kunming 16.71 278** ⇓P **P** **10 13 39.5 +1.5**
KMI S **Sn** **10 16 43.8 +2.8**
KMI pmax pmax
comp=Z,10.0nm,1.3s
KMI LR LR
comp=N,660nm,7.5s
KMI LR LR
comp=E,3µm,10.3s
KMI LR LR
comp=Z,3µm,10.7s
**UBPT Khong Chiam 17.04 242** Pn **Pn** **10 13 36.9 -2.8**
**DAV Davao City (W) 17.38 165** Pn **Pn** **10 13 43.4 -0.6**
**PZH PanZhiHua 17.65 282** P **Pn** **10 13 46.5 -1.0**
PZH PP **PnPn** **10 14 03.8 +5.8**
PZH S **Sn** **10 17 05.5 +1.7**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,180nm,4.1s
PZH LR LR
comp=N,580nm,10.0s
PZH LR LR
comp=E,2µm,11.5s
PZH LR LR
comp=Z,2µm,12.6s
**JSG Sagara 18.31 51** P **Pn** **10 13 53.4 -1.9**
**HHC Hu-ho-hao-te 18.60 337** *e*P **Pn** **10 13 59.3 +0.4**
HHC PP **PnPn** **10 14 17.1 +6.1**
HHC S **Sn** **10 17 25.8 -0.6**
HHC sS S 10 17 32.5 +2.5
HHC SS **SnSn** **10 17 48.3 +7.8**
HHC pmax pmax
comp=Z,21nm,0.6s
HHC pmax pmax
comp=Z,89nm,5.0s
HHC LR LR
comp=N,680nm,9.9s
HHC LR LR
comp=E,330nm,10.3s
HHC LR LR
comp=Z,800nm,12.7s
**JHJ Hachijo jima 2 18.77 57** LR LR 10 22 10.1
comp=Z,634nm,18.2s,baz=276,slow=40
**BTO Baotou 18.98 333** *e*P **Pn** **10 14 06.5 +2.9**
BTO pP **sP** **10 14 10.8 -0.7**
BTO sP **pP** **10 14 14.3 +5.8**
BTO pmax pmax
comp=Z,14nm,0.6s
BTO pmax pmax
comp=Z,260nm,4.9s
BTO LR LR
comp=N,4µm,12.6s
BTO LR LR
comp=E,2µm,11.7s
BTO LR LR
comp=Z,5µm,12.3s
**LZH Lanzhou 19.13 313** *e*P **Pn** **10 14 09.4 +3.9**
LZH sP sP 10 14 13.8 +0.3
LZH pmax pmax
comp=Z,15nm,1.5s
LZH LR LR
comp=N,1µm,11.7s
LZH LR LR
comp=E,2µm,10.3s
LZH LR LR
comp=Z,2µm,12.0s
**MJAR Matsushiro Arr 19.35 46** P **Pn** **10 14 09.8 +1.9**
1.3nm,0.8s,baz=255,slow=9.5,SNR=2.0
MJAR LR LR 10 23 20.0
comp=Z,253nm,18.4s,baz=197,slow=42
**XLT XiLinHaoTe 20.27 350** *e*P Pn 10 14 20.1 +1.2
XLT sP sP 10 14 26.6 +0.9
XLT pmax pmax
comp=Z,12nm,1.0s
XLT pmax pmax
comp=Z,130nm,3.8s
XLT LR LR
comp=N,57nm,12.8s
XLT LR LR
comp=E,320nm,8.9s
XLT LR LR
comp=Z,630nm,13.2s
**TNCH TengChong 20.53 278** *e*P Pn 10 14 23.4 +1.1
TNCH sP pP 10 14 26.0 +0.2
TNCH pmax pmax
comp=Z,27nm,0.5s
TNCH LR LR
comp=N,460nm,6.6s
TNCH LR LR
comp=E,2µm,9.7s
TNCH LR LR
comp=Z,2µm,10.2s
**CM31 Chiang Mai Arr 21.33 259** P **P** **10 14 26.2 -2.2**
**CMAR Chiang Mai Arr 21.33 259** P **P** **10 14 24.1 -4.3**
**CMAR Chiang Mai Arr 21.33 259** P **P** **10 14 30.3 +1.9**
1.7nm,0.9s,baz=62,slow=8.9,SNR=1.6
CMAR LR LR 10 23 12.1
comp=Z,200nm,19.2s,baz=70,slow=38
1.7nm,0.9s
**MDJ Mudanjiang 21.72 17** P **P** **10 14 30.5 -1.9**
**JMM Marumori 21.80 46** P **P** **10 14 31.1 -2.2**
JMM lAmb lAmb 10 14 57.0
comp=Z,48nm,1.2s
**TOLI2 Tolitoli 22.75 181** P **P** **10 14 42.8 -0.9**
TOLI2 lAmb lAmb 10 14 45.8
comp=Z,21nm,0.8s
**SBUM Sibu 23.06 203** P **P** **10 14 45.8 -1.1**
**GUMO Guam 24.76 110** LR LR 10 24 40.2
comp=Z,416nm,19.1s,baz=329,slow=36
**LUWI Luwuk 24.94 176** P **P** **10 15 03.3 -1.3**
**LUWI Luwuk 24.94 176** P **P** **10 15 11.1 +6.5**
**SONM Songino Array 26.50 338** P **P** **10 15 17.0 -1.6**
**SONM Songino Array 26.50 338** P **P** **10 15 19.4 +0.8**
comp=Z,1.5nm,0.9s,baz=152,slow=7.9,SNR=7.0
SONM LR LR 10 27 27.3
comp=Z,309nm,18.4s,baz=150,slow=40
comp=Z,1.5nm,0.9s
**KLR Kul'dur 26.55 16** LR LR 10 26 37.2
comp=Z,282nm,18.6s,baz=185,slow=38
**ASAJ Asahikawa 26.71 36** LR LR 10 26 25.7
comp=Z,392nm,18.9s,baz=216,slow=38
**KULM Kulim 27.05 230** P **P** **10 15 21.5 -2.2**
KULM lAmb lAmb 10 15 27.4
comp=Z,23nm,1.5s
**KAPI Kappang 28.86 183** LR LR 10 29 24.1
comp=Z,99nm,18.3s,baz=345,slow=41
**EDFI Ende, Flores 32.55 179** P **P** **10 16 11.5 -1.1**
**WMQ Urumqi 33.70 314** *e*P **P** **10 16 23.6 +1.1**
WMQ LR LR
comp=Z,480nm,12.5s
WMQ LR LR
comp=Z,620nm,11.7s
WMQ LR LR
comp=Z,250nm,10.9s
**MK31 Makanchi Array 38.40 316** P **P** **10 17 00.0 -2.5**
**MKAR Makanchi Array 38.40 316** P **P** **10 17 02.5 0.0**
**MKAR Makanchi Array 38.40 316** P **P** **10 17 03.6 +1.1**
comp=Z,1.4nm,0.6s,baz=109,slow=10,SNR=18
MKAR LR LR 10 34 01.3
comp=Z,250nm,18.0s,baz=108,slow=38
comp=Z,1.4nm,0.6s
**YAK Yakutsk 38.47 7** LR LR 10 34 30.1
comp=Z,161nm,18.9s,baz=185,slow=39
**MAKZ Makanchi 38.60 316** P **P** **10 17 01.5 -2.7**
**PEA0B Petropavlovsk- 40.09 34** P **P** **10 17 14.9 -1.7**
**KNRA Kununurra 40.14 168** P **P** **10 17 16.3 -1.0**
KNRA lAmb lAmb 10 17 28.1
comp=Z,18nm,1.5s
**ZAA0 Zalesovo Array 40.34 327** P **P** **10 17 16.6 -2.0**
**ZALV Zalesovo Beam 40.34 327** P **P** **10 17 16.7 -1.9**
**ZALV Zalesovo Beam 40.34 327** P **P** **10 17 18.5 -0.1**
comp=Z,2.2nm,0.8s,baz=134,slow=12,SNR=7.7
ZALV LR LR 10 34 12.5
comp=Z,113nm,19.9s,baz=115,slow=36
comp=Z,2.2nm,0.8s
**MA2 Magadan 41.20 23** LR LR 10 35 18.7
comp=Z,149nm,19.4s,baz=249,slow=37
**FITZ Fitzroy Crossi 42.07 173** P **P** **10 17 31.1 -2.1**
**KURBB Kurchatov Arra 42.18 320** P **P** **10 17 33.6 -0.1**
comp=Z,0.6nm,0.3s,baz=118,slow=8.8,SNR=7.3
comp=Z,0.6nm,0.3s
**AAK Ala-Archa 42.53 308** LR LR 10 37 23.8
comp=Z,126nm,18.7s,baz=96,slow=39
**H11N1 WAKE ISLAND Hy 42.61 87** T T 11 02 46.4
baz=283,slow=74,SNR=8.5
**H11N2 WAKE ISLAND Hy 42.61 86** T T 11 02 46.7
baz=283,slow=74,SNR=16
**H11N3 WAKE ISLAND Hy 42.63 86** T T 11 02 47.9
baz=283,slow=74,SNR=16
**H11S3 WAKE ISLAND Hy 42.74 88** T T 11 02 52.6
baz=284,slow=74,SNR=24
**H11S1 WAKE ISLAND Hy 42.75 88** T T 11 02 53.3
baz=284,slow=74,SNR=9.8
**H11S2 WAKE ISLAND Hy 42.76 88** T T 11 03 01.7
baz=284,slow=74,SNR=8.7
**COEN Coen 43.47 148** P **P** **10 17 44.0 -0.6**
COEN lAmb lAmb 10 17 45.3
comp=Z,13nm,1.0s
**MBWA Marble Bar 44.90 182** P **P** **10 17 54.6 -1.3**
MBWA lAmb lAmb 10 17 55.8
comp=Z,12nm,0.9s
**PSA00 Pilbara Seismi 45.31 182** P **P** **10 17 57.9 -1.3**
**WB0 Warramunga Arr 45.40 162** P **P** **10 17 58.8 -1.1**
**KK31 Karatay Array 45.49 308** P **P** **10 17 59.3 -1.3**
**KKAR Karatay Array 45.49 308** P **P** **10 17 59.0 -1.5**
**WRAB Tennant Creek 45.54 162** P **P** **10 17 59.6 -1.5**
WRAB lAmb lAmb 10 18 01.1
comp=Z,8.0nm,1.1s
**WRA Warramunga Arr 45.55 162** P **P** **10 18 00.3 -0.8**
**WRA Warramunga Arr 45.55 162** P **P** **10 17 59.7 -1.4**
comp=Z,4.1nm,1.0s,baz=344,slow=8.7,SNR=23
WRA PcP **PcP** **10 19 38.2 -1.5**
comp=Z,0.9nm,0.9s,baz=343,slow=2.6,SNR=3.0
comp=Z,4.1nm,1.0s
**WB2 Warramunga Arr 45.55 162** P **P** **10 18 00.0 -1.1**
WB2 lAmb lAmb 10 18 01.2
comp=Z,6.1nm,0.9s
**WR0 Warramunga Arr 45.62 162** P **P** **10 18 00.6 -1.1**
WR0 lAmb lAmb 10 18 01.6
comp=Z,13nm,1.3s
**CHGR Chuyangaron 46.10 301** P **P** **10 18 03.2 -2.4**
CHGR lAmb lAmb 10 18 13.4
comp=Z,11nm,1.1s
**KBL Kabul 46.14 296** P **P** **10 18 04.7 -1.4**
KBL lAmb lAmb 10 18 26.7
comp=Z,6.3nm,0.9s
**BRVK Borovoye 47.82 321** P **P** **10 18 15.4 -3.2**
BRVK lAmb lAmb 10 18 27.3
comp=Z,9.1nm,1.0s
**TIXI Tiksi 47.89 3** LR LR 10 40 54.7
comp=Z,90nm,18.0s,baz=199,slow=39
**AS31 Alice Springs 48.99 164** P **P** **10 18 26.8 -1.1**
**ASAR Alice Springs 48.99 164** P **P** **10 18 27.6 -0.3**
**ASAR Alice Springs 48.99 164** P **P** **10 18 26.6 -1.3**
comp=Z,0.9nm,0.3s,baz=343,slow=6.8,SNR=31
ASAR PcP **PcP** **10 19 48.5 -3.4**
comp=Z,0.6nm,0.8s,baz=335,slow=4.1,SNR=4.1
comp=Z,0.9nm,0.3s
**CTA Charters Tower 50.22 149** LR LR 10 39 02.3
comp=Z,6.8nm,19.8s,baz=310,slow=35
**ABKAR Akbulak array 53.49 314** P **P** **10 18 59.8 -1.6**
**AKTO Aktyubinsk 54.83 316** P **P** **10 19 13.7 +2.5**
comp=Z,1.8nm,0.9s,baz=125,slow=4.6,SNR=2.9
AKTO LR LR 10 44 12.5
comp=Z,190nm,18.1s,baz=204,slow=38
comp=Z,1.8nm,0.9s
**FORT Forrest 54.87 173** P **P** **10 19 10.9 -0.7**
**ARU Arti 55.19 323** P **P** **10 19 15.4 +1.7**
comp=Z,1.6nm,0.2s,baz=113,slow=5.7,SNR=1.1
comp=Z,1.6nm,0.2s
**STKA Stephens Creek 58.92 160** P **P** **10 19 39.8 -0.6**
STKA lAmb lAmb 10 20 12.1
comp=Z,6.5nm,1.5s
**STKA Stephens Creek 58.92 160** P **P** **10 19 40.4 0.0**
comp=Z,1.1nm,0.7s,baz=312,slow=9.5,SNR=1.4
comp=Z,2.1nm,0.7s
**KIRV Kirov 60.31 325** P **P** **10 19 51.2 +1.6**
comp=Z,9.0nm,0.5s,baz=124,slow=3.6,SNR=1.7
**DZM Mont Dzumac 63.59 133** *e*LR LR 10 39 07.9
comp=Z,377nm,24.6s
**C19K Lookout Ridge 64.02 23** P **P** **10 20 14.2 -0.2**
**M16K Timber Creek 64.49 32** P **P** **10 20 17.0 -0.6**
M16K lAmb lAmb 10 20 42.5
comp=Z,11nm,1.5s
**D19K Kuna River 64.56 24** P **P** **10 20 16.6 -1.4**
**CNBA Chernabura Isl 64.69 39** P **P** **10 20 18.2 -0.7**
CNBA lAmb lAmb 10 20 20.5
comp=Z,8.5nm,1.0s
**B20K Meade River 64.87 22** P **P** **10 20 19.7 -0.2**
**E19K Redstone River 64.92 25** P **P** **10 20 20.3 0.0**
E19K lAmb lAmb 10 20 52.1
comp=Z,4.7nm,1.1s
**H19K Roundabout Mou 65.33 27** P **P** **10 20 22.7 -0.3**
H19K lAmb lAmb 10 20 35.1
comp=Z,14nm,1.2s
**KBZ Khabaz 65.51 309** P **P** **10 20 27.1 +2.6**
comp=Z,1.3nm,0.7s,baz=60,slow=8.1,SNR=6.9
comp=Z,1.3nm,0.7s
**B21K Ikpikpuk River 65.77 22** P **P** **10 20 25.3 -0.4**
**IMAR Indian Mountai 66.40 26** P **P** **10 20 29.3 -0.6**
**G21K Allakaket 66.44 26** P **P** **10 20 29.4 -0.7**
G21K lAmb lAmb 10 21 02.7
comp=Z,4.4nm,1.1s
**CHIR Chirikof Islan 66.80 38** P **P** **10 20 32.3 -0.3**
**H21K Melozitna Rive 66.83 27** P **P** **10 20 32.6 0.0**
H21K lAmb lAmb 10 20 40.1
comp=Z,5.1nm,1.1s
**D23K Nanushuk River 67.22 23** P **P** **10 20 35.0 -0.1**
D23K lAmb lAmb 10 20 42.6
comp=Z,10.0nm,1.3s
**OHAK Old Harbor 67.85 36** P **P** **10 20 39.0 -0.2**
**SKT Skwentna 67.92 31** P **P** **10 20 38.8 -0.8**
SKT lAmb lAmb 10 20 46.9
comp=Z,13nm,1.4s
**SYI Shuyak Island 68.08 34** P **P** **10 20 40.8 +0.2**
**KDAK Kodiak Island 68.12 35** P **P** **10 20 40.9 0.0**
KDAK lAmb lAmb 10 20 47.8
comp=Z,6.2nm,0.9s
**E24K Your Creek 68.16 24** P **P** **10 20 40.0 -1.1**
E24K lAmb lAmb 10 21 13.0
comp=Z,6.2nm,1.4s
**RAYN Ar Rayn 68.29 287** P **P** **10 20 40.7 -2.0**
RAYN lAmb lAmb 10 20 50.6
comp=Z,6.7nm,1.1s
**F24K Squaw Lake 68.48 24** P **P** **10 20 42.6 -0.5**
F24K lAmb lAmb 10 21 13.1
comp=Z,3.1nm,0.8s
**G24K Hadweenzic Riv 68.80 25** P **P** **10 20 45.1 +0.1**
**MDM Murphy Dome 68.83 27** P **P** **10 20 45.7 +0.4**
MDM lAmb lAmb 10 21 09.5
comp=Z,13nm,1.4s
**RND Reindeer 68.87 29** P **P** **10 20 45.8 +0.2**
**COLA College 69.01 27** P **P** **10 20 45.2 -1.1**
COLA lAmb lAmb 10 21 11.4
comp=Z,4.7nm,0.8s
**ILAR Eielson Array 69.43 27** P **P** **10 20 48.9 -0.1**
comp=Z,0.1nm,0.5s,baz=279,slow=7.6,SNR=1.6
comp=Z,0.1nm,0.5s
**SPB2 Spitsbergen Ar 69.64 348** P **P** **10 20 49.4 -0.6**
**SPITS Spitsbergen Ar 69.64 348** LR LR 10 54 52.0
comp=Z,92nm,18.3s,baz=22,slow=39
**ARCES ARCESS Array B 69.67 338** P **P** **10 20 49.8 -0.6**
ARCES lAmb lAmb 10 21 11.6
comp=Z,13nm,1.3s
**ARCES ARCESS Array B 69.67 338** P **P** **10 20 50.8 +0.4**
comp=Z,1.1nm,0.7s,baz=78,slow=4.7,SNR=1.4
comp=Z,1.1nm,0.7s
**BMAR Burnt Mountain 69.75 24** P **P** **10 20 50.8 -0.1**
**F26K Sheenjek River 69.84 24** P **P** **10 20 49.0 -2.5**
F26K lAmb lAmb 10 20 54.2
comp=Z,8.2nm,1.4s
**SCM Sheep Creek Mo 69.90 30** P **P** **10 20 50.7 -1.2**
SCM lAmb lAmb 10 20 59.6
comp=Z,11nm,1.0s
**G27K Doyon Strip 71.01 25** P **P** **10 20 58.2 -0.5**
**F28M Old Crow 71.44 24** P **P** **10 21 00.2 -1.0**
F28M lAmb lAmb 10 21 06.6
comp=Z,6.4nm,1.1s
**FIA1 FINESS Array S 71.55 330** P **P** **10 21 00.9 -1.0**
**FINES FINESS Array B 71.55 330** P **P** **10 21 00.5 -1.5**
**FINES FINESS Array B 71.55 330** P **P** **10 21 01.9 0.0**
comp=Z,1.6nm,0.8s,baz=42,slow=4.3,SNR=4.9
FINES LR LR 10 55 01.1
comp=Z,120nm,20.1s,baz=61,slow=38
comp=Z,1.6nm,0.8s
**GLB Gilahina Butte 71.62 30** P **P** **10 21 02.0 -0.4**
GLB lAmb lAmb 10 21 09.8
comp=Z,6.0nm,1.1s
**M26K Nabesna, AK 71.72 29** P **P** **10 21 02.9 -0.1**
M26K lAmb lAmb 10 21 10.4
comp=Z,5.0nm,1.0s
**EGAK Eagle 71.80 27** P **P** **10 21 04.0 +0.6**
**MCARA McCarthy VSAT 72.00 30** P **P** **10 21 04.6 0.0**
MCARA lAmb lAmb 10 21 29.9
comp=Z,10nm,1.2s
**L27K Beaver Creek, 72.04 28** P **P** **10 21 03.8 -1.1**
**BCAR Beaver Creek A 72.05 28** P **P** **10 21 05.9 +0.9**
**CRQM Cirque 72.13 31** P **P** **10 21 05.3 -0.4**
CRQM lAmb lAmb 10 21 08.4
comp=Z,18nm,1.4s
**AKASG Malin Array Be 72.94 318** P **P** **10 21 09.6 -0.8**
comp=Z,0.5nm,0.4s,baz=59,slow=5.7,SNR=2.8
comp=Z,0.5nm,0.4s
**EPYK Eagle Plains 73.02 24** P **P** **10 21 11.4 +0.7**
EPYK lAmb lAmb 10 21 14.9
comp=Z,10nm,1.2s
**NACGM Naroch 73.10 323** *e*P P 10 21 18.6 +7.3
comp=Z,417nm,0.8s,baz=72
**LOGN Logan Glacier 73.11 30** P **P** **10 21 10.7 -0.8**
LOGN lAmb lAmb 10 21 49.4
comp=Z,6.7nm,1.2s
**BR131 Keskin Array S 73.19 306** P **P** **10 21 11.3 -1.0**
BR131 lAmb lAmb 10 21 20.5
comp=Z,7.2nm,1.1s
**BRTR Keskin Array B 73.19 306** P **P** **10 21 11.5 -0.9**
**BRTR Keskin Array B 73.19 306** P **P** **10 21 12.9 +0.5**
comp=Z,0.4nm,0.6s,baz=77,slow=3.1,SNR=9.4
comp=Z,0.4nm,0.6s
**INK Inuvik 73.44 22** LR LR 10 56 52.7
comp=Z,58nm,18.0s,baz=283,slow=38
**HFS Hagfors 77.67 331** P **P** **10 21 36.9 -0.6**
comp=Z,0.7nm,0.5s,baz=60,slow=7.3,SNR=1.5
HFS LR LR 10 59 00.6
comp=Z,253nm,20.1s,baz=60,slow=38
comp=Z,0.7nm,0.5s
**NC405 NORSAR Array S 78.09 332** P **P** **10 21 40.4 +0.6**
**NB2 NORSAR Subarra 78.34 332** P **P** **10 21 40.4 -0.8**
comp=Z,11nm,1.4s,baz=61,slow=5.6
**NOA NORSAR Array B 78.34 332** P **P** **10 21 41.3 +0.1**
comp=Z,1.2nm,0.8s,baz=61,slow=5.3,SNR=3.1
NOA LR LR 11 00 14.0
comp=Z,157nm,20.4s,baz=60,slow=39
comp=Z,1.2nm,0.8s
**JMIC Jan Mayen 78.98 345** LR LR 10 59 46.2
comp=Z,41nm,19.3s,baz=340,slow=38
**DLBC Dease Lake 79.17 30** LR LR 11 00 07.7
comp=Z,55nm,18.0s,baz=312,slow=38
**VYHS Vyhne 80.03 319** *e*P P 10 21 58.4 +7.7
**MORC Moravsky Berou 80.25 320** *e*P P 10 21 59.6 +7.7
**JAVC Velka Javorina 80.57 319** *e*P P 10 22 02.3 +8.6
**CLL Collm 82.14 323** *e*P **P** **10 22 03.0 +1.2**
CLL *i* Pmax 10 22 08.5
comp=Z,14nm,1.6s
CLL AMS AMS 11 02 00.0
comp=Z,200nm,18.5s
**YKA Yellowknife Ar 83.19 23** P **P** **10 22 07.1 0.0**
comp=Z,0.4nm,0.9s,baz=321,slow=4.8,SNR=2.7
comp=Z,0.4nm,0.9s
**DAVOX Davos/Dischmat 86.18 320** LR LR 11 05 09.7
comp=Z,98nm,18.0s,baz=73,slow=38
**BORG Borgarnes 86.88 345** LR LR 11 04 23.9
comp=Z,62nm,19.8s,baz=351,slow=38
**PPT Papeete 96.41 106** LR LR 10 57 32.3
comp=Z,46nm,20.0s,baz=300,slow=30
**PPT2 Papeete2 96.42 106** *e*LR LR 10 54 21.9
comp=Z,91nm,22.2s
**LPAZ La Paz 168.46 50** PKP **PKPdf** **10 29 49.6 +0.1**
comp=Z,0.9nm,0.7s,baz=69,slow=2.9,SNR=3.7
**SIV San Ignacio 171.79 15** PKP **PKPdf** **10 29 50.5 -0.1**
comp=Z,0.4nm,0.4s,baz=268,slow=5.2,SNR=2.7

*TAP* ***17*** *10:14:59.6,24.01N×121.01E,h18km,ML4.3,B*
*ASIES* ***17*** *10:14:59.6,24.02N×121.01E,h19km,ML4.3,Mw3.8, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; $M_{rr}$4.04; $M_{\theta\theta}$1.01; $M_{\phi\phi}$-2.26; $M_{r\theta}$-2.06; $M_{\theta\phi}$0.66; $M_{\phi r}$-3.90; Fault plane solution: $M_o$5.57979×$10^{21}$ NP1: $\phi_s$197.75000°,$\delta$73.27000°,$\lambda$107.69000°. NP2: $\phi_s$329.81000°,$\delta$24.16000°,$\lambda$44.68000°. Principal axes: T Plg58.0670°, Azm131.7200°; N Plg16.9190°, Azm12.5060°; P Plg26.2110°, Azm273.8940°;*
*JMA* ***17*** *10:15:00.0±0.3,24.0N±0.4×121.0E±0.9,h10km±4km, MV3.7/14,TAIWAN REGION*
*IDC* ***17*** *10:15:03.0±9.0,23.91N×121.18E,h57km±94km,mb3.4/7, mbtmp3.7/9,ML3.5/2,Error ellipse: s-maj=62.3km s-min=16.3km az=59.0*
**ISC 17 10:14:59.8±0.7,24.01N±0.01×121.02E±0.01,h18km±3km, n190,σ0$^s$77/316,mb3.7/7,18C-56D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WUSB** | **Renai** | **0.09** | **102** | ⇑*i*P | | **Pg** | **10 15 03.7** | **+0.2** |
| | baz=102 | | | | | | | |
| WUSB | | | | S | | **Sg** | **10 15 05.9** | **-0.1** |
| | baz=102 | | | | | | | |
| **DPDB** | **Guoxing** | **0.09** | **285** | ⇑*i*P | | **Pg** | **10 15 03.5** | **+0.1** |
| | baz=285 | | | | | | | |
| DPDB | | | | *i* S | | **Sg** | **10 15 06.2** | **+0.3** |
| | baz=285 | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **295** | ⇑*i*P | | **Pg** | **10 15 03.6** | **+0.1** |
| | baz=296 | | | | | | | |
| WCS | | | | S | | **Sg** | **10 15 06.3** | **+0.2** |
| | baz=296 | | | | | | | |
| **CHGB** | **Renai** | **0.15** | **70** | ⇓*i*P | | **Pg** | **10 15 04.6** | **+0.4** |
| | baz=73 | | | | | | | |
| CHGB | | | | S | | **Sg** | **10 15 07.8** | **+0.6** |
| | baz=73 | | | | | | | |
| **OWD** | **Renai** | **0.15** | **112** | ⇓*i*P | | **Pg** | **10 15 04.5** | **+0.4** |
| | baz=111 | | | | | | | |
| OWD | | | | S | | **Sg** | **10 15 07.6** | **+0.5** |
| | baz=111 | | | | | | | |
| **TYC** | **Yuchr** | **0.18** | **235** | ⇑*i*P | | **Pg** | **10 15 04.5** | **0.0** |
| | baz=228 | | | | | | | |
| TYC | | | | *i* S | | **Sg** | **10 15 07.6** | **0.0** |
| | baz=228 | | | | | | | |
| **SSLB** | **Suanglung** | **0.23** | **196** | P | | **Pb** | **10 15 05.0** | **-0.3** |
| **SSLB** | **Suanglung** | **0.23** | **196** | ⇑*i*P | | **Pb** | **10 15 05.0** | **-0.3** |
| | baz=188 | | | | | | | |
| SSLB | | | | S | | **Sb** | **10 15 08.2** | **-0.8** |
| | baz=188 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.26** | **59** | ⇓*i*P | | **Pg** | **10 15 06.7** | **+0.7** |
| | baz=70 | | | | | | | |
| WHF | | | | S | | **Sg** | **10 15 11.1** | **+0.9** |
| | baz=70 | | | | | | | |
| **TDCB** | **Techi** | **0.27** | **27** | ⇓*i*P | | **Pg** | **10 15 06.0** | **+0.1** |
| | baz=24 | | | | | | | |

TDCB S Sg 10 15 09.8 -0.4
baz=24
WHP Taichung City 0.28 345 ⇑iP Pg 10 15 06.2 +0.2
baz=348
WHP S Sb 10 15 10.8 +0.3
baz=348
VWDT VWDT 0.28 157 ⇓iP Pb 10 15 06.4 +0.1
baz=155
VWDT S Sb 10 15 10.6 +0.1
baz=155
TWT Tachien 0.28 30 ⇓iP Pg 10 15 06.1 -0.1
baz=25
TWT iS Sg 10 15 10.0 -0.5
baz=25
WWF Wufeng 0.30 276 ⇓eP Pb 10 15 07.3 +0.7
baz=276
FUSS Fushou 0.31 41 ⇓iP Pg 10 15 06.8 +0.1
baz=42
FUSS eS Sg 10 15 11.0 -0.4
baz=42
WJS Zhushan 0.33 235 ⇓iP Pb 10 15 07.5 +0.4
baz=233
WJS eS Sb 10 15 13.3 +1.2
baz=233
WNT1 Nantou City 0.33 252 ⇓eP Pb 10 15 07.8 +0.6
baz=251
WNT Mingjian 0.34 247 ⇓iP Pb 10 15 07.8 +0.5
baz=244
WNT S Sb 10 15 13.5 +1.1
baz=244
TCU Taichung 0.34 293 ⇓iP Pb 10 15 08.2 +0.7
baz=294
TCU S Sb 10 15 14.3 +1.7
baz=294
WHYT Xinyi Township 0.35 206 P Pg 10 15 07.4 +0.2
baz=200
WHYT S Sb 10 15 12.9 +0.1
baz=200
LXIB Xiulin Townshi 0.36 88 ⇓iP Pg 10 15 07.7 +0.3
baz=85
TWQ1 Liyutan 0.41 326 ⇑iP Pb 10 15 09.1 +0.6
baz=329
TWQ1 S Sb 10 15 15.8 +1.4
baz=329
WYL Yuanlin Townsh 0.41 263 ⇓eP Pb 10 15 09.1 +0.6
baz=262
WYL eS Sb 10 15 15.8 +1.4
baz=262
ESL Shilin 0.42 117 ⇓iP Pb 10 15 08.9 +0.1
baz=117
ESL S Sb 10 15 14.9 0.0
baz=117
WCHH Zhanghua 0.43 279 ⇓iP Pb 10 15 09.3 +0.5
baz=278
WCHH eS Sb 10 15 16.3 +1.3
baz=278
ETM Tongmen 0.43 96 ⇓iP Pg 10 15 08.8 +0.2
baz=102
ETM S Sg 10 15 14.9 +0.3
baz=102
WARBT Fenglin Townsh 0.44 131 ⇓iP Pg 10 15 09.0 +0.2
baz=125
WARBT eS Sg 10 15 14.7 -0.3
baz=125
ETLH Xiulin Townshi 0.46 65 ⇓iP Pg 10 15 09.4 +0.2
baz=63
ETLH S Sg 10 15 16.0 +0.3
baz=63
NSY Sanyi 0.47 330 ⇑iP Pb 10 15 10.6 +1.0
baz=332
NSY S Sn 10 15 18.5 -1.0
baz=332
WDJ Dajia District 0.48 314 ⇓iP Pb 10 15 10.9 +1.1
baz=315
WDJ S Sn 10 15 18.8 -1.1
baz=315
EGFH Guangfu 0.50 132 eP Pb 10 15 10.1 +0.1
baz=127
EGFH eS Sb 10 15 17.2 +0.1
baz=127
YUS Yu-Shan 0.52 187 eP Pg 10 15 10.4 0.0
baz=186
YUS eS Sg 10 15 17.9 +0.2
baz=186
TWD Chiawan 0.53 82 ⇓iP Pg 10 15 10.5 +0.1
baz=90
TWD eS Sb 10 15 19.3 +1.5
baz=90
NNSB Datong 0.53 38 ⇓iP Pg 10 15 10.2 -0.3
baz=39
NNSB S Sg 10 15 17.2 -0.5
baz=39
NNSH Datong 0.53 38 ⇓eP Pg 10 15 10.1 -0.4
baz=33
NNSH eS Sg 10 15 17.5 -0.2
baz=33
HWA Hwalien 0.53 93 ⇓iP Pb 10 15 11.2 +0.6
baz=94
HWA S Sb 10 15 19.1 +1.1
baz=94
NNS Nan Shan 0.53 37 ⇓iP Pg 10 15 10.3 -0.2
baz=38
NNS S Sg 10 15 17.5 -0.3
baz=38
SHUL Shoufeng 0.54 114 ⇓iP Pg 10 15 11.4 +0.7
baz=114
SHUL S Sb 10 15 19.3 +1.1
baz=114
TEYL Yanliau Villag 0.55 105 eP Pg 10 15 11.2 +0.5
baz=101
TEYL eS Sb 10 15 19.6 +1.3
baz=101
WDLH Douliu 0.55 234 ⇓P Pg 10 15 11.3 +0.6
baz=232
WDLH S Sn 10 15 20.2 -1.1
baz=232
NACB Ninganchiao 0.55 73 P Pb 10 15 10.7 -0.1
NACB Ninganchiao 0.55 73 ⇓P Pb 10 15 10.8 -0.1
baz=81
NACB eS Sb 10 15 18.7 +0.3
baz=81
TEGC Jichi Village 0.56 122 eP Pg 10 15 11.7 +0.7
baz=119
TEGC S Sg 10 15 19.4 +0.8
baz=119
NMLH Miaoli 0.56 338 ⇓P Pn 10 15 12.6 -0.4
baz=339
NMLH S Sn 10 15 21.5 -0.4
baz=339
ETL Fush Village 0.57 75 ⇓iP Pb 10 15 11.1 -0.1
baz=85
ETL S Sg 10 15 19.7 +0.9
baz=85
EHY Hungye 0.57 151 ⇓iP Pb 10 15 11.3 0.0
baz=145
EHY eS Sb 10 15 18.7 -0.4
baz=145
EHYH Wanrong 0.59 150 ⇓P Pb 10 15 11.7 0.0
baz=144
EHYH S Sb 10 15 19.5 -0.2
baz=144
WRL Guolierlin Hig 0.60 260 eP Pg 10 15 12.1 +0.4
baz=259
WRL S Sg 10 15 21.1 +1.4
baz=259
NSTT Nanjuang 0.62 358 ⇑iP Pg 10 15 12.7 +0.6
baz=7.0
NSTT S Sg 10 15 21.0 +0.6
baz=7.0
NFF Wufeng Townshi 0.62 8 eP Pg 10 15 12.4 +0.2
baz=16
NFF S Sg 10 15 21.5 +0.9
baz=16
LIOB Emei 0.63 359 ⇑P Pg 10 15 13.1 +0.7
baz=8.0
LIOB eS Sg 10 15 21.8 +1.0
baz=8.0
HGSD Ruisui 0.63 144 ⇓P Pg 10 15 12.8 +0.5
baz=144
HGSD eS Sg 10 15 21.9 +1.1
baz=144
WTK Tuku 0.66 241 P Pb 10 15 13.1 +0.3
baz=240
WTK S Sn 10 15 23.3 -0.9
baz=240
YULB Yu-li 0.67 158 P Pb 10 15 13.0 +0.1
YULB Yu-li 0.67 158 ⇓P Pb 10 15 12.8 0.0
baz=148
YULB S Sb 10 15 21.7 -0.1
baz=148
NJN Zhunan 0.68 348 eP Pg 10 15 13.8 +0.5
baz=349
WCKO Fanlu 0.69 214 ⇓P Pb 10 15 13.3 +0.1
baz=213
WCKO S Sg 10 15 23.2 +0.7
baz=213
CHN2 Minshiung 0.69 227 ⇓iP Pg 10 15 13.9 +0.5
baz=225
CHN2 S Sn 10 15 24.2 -0.8
baz=225
WTCT Ta-ch'eng 0.69 258 eP Pb 10 15 13.6 +0.3
baz=257
WTCT eS Sg 10 15 23.8 +1.2
baz=257
LATG Datong 0.70 41 ⇓iP Pb 10 15 13.1 -0.4
baz=34
LATG eS Sb 10 15 22.2 -0.6
baz=34
TWF1 Yuli 0.70 159 ⇓iP Pb 10 15 13.6 +0.1
baz=149
TWF1 S Sg 10 15 23.5 +0.5
baz=149
EYUL Yuli 0.71 158 P Pb 10 15 14.0 +0.3
baz=157
EYUL S Sb 10 15 23.4 +0.2
baz=157
EHP Heping Village 0.72 65 eP Pb 10 15 14.0 +0.2
baz=66
EHP eS Sg 10 15 24.3 +0.7
baz=66
NJD Zhudong 0.72 5 eP Pg 10 15 14.7 +0.6
baz=354
EAHA Aohua 0.73 64 eP Pb 10 15 13.9 0.0
baz=64
EAHA eS Sg 10 15 24.4 +0.6
baz=64
NSK Sanguang 0.73 25 ⇓iP Pb 10 15 14.1 +0.1
baz=32
NSK eS Sb 10 15 22.5 -1.3
baz=32
YHNB Yeheng 0.73 26 P Pb 10 15 14.0 -0.1
YHNB Yeheng 0.73 26 ⇓P Pb 10 15 14.0 -0.1
baz=33
YHNB S Sb 10 15 22.7 -1.1
baz=33
NDT Datong Townshi 0.74 37 ⇓eP Pb 10 15 13.8 -0.3
baz=39
CHY Chiayi 0.75 227 eP Pb 10 15 14.6 +0.3
baz=226
CHY S Sg 10 15 25.6 +1.2
baz=226
HSN1 Hsinchu 0.76 360 eP Pn 10 15 15.7 0.0
baz=1.0
HSN1 eS Sn 10 15 27.2 +0.4
baz=1.0
ENA Nanau 0.78 58 ⇓P Pb 10 15 14.9 +0.1
baz=58
ENA S Sg 10 15 25.6 +0.2
baz=58
SBCB Hsinchu 0.78 358 eP Pn 10 15 15.8 -0.1
baz=359
SBCB S Sn 10 15 26.8 -0.4
baz=359
HSN Hsinchu 0.79 357 eP Pn 10 15 16.6 +0.6
baz=360
HSN S Sn 10 15 28.5 +1.1
baz=360
TPUB Ta-pu 0.79 207 P Pb 10 15 14.9 -0.2
TPUB Ta-pu 0.79 207 ⇓iP Pb 10 15 15.1 0.0
baz=206
TPUB eS Sg 10 15 26.1 +0.2
baz=206
ECBN Changbin 0.80 150 eP Pn 10 15 16.3 +0.2
baz=150
ECBN eS Sn 10 15 27.5 0.0
baz=150
ENTT Nioudou 0.80 38 ⇓P Pb 10 15 15.0 -0.2
baz=34
ENTT eS Sg 10 15 27.0 +0.9
baz=34
EWUT Wuta 0.81 58 ⇓P Pb 10 15 15.6 +0.1
baz=58
EWUT S Sb 10 15 26.0 -0.1
baz=58
ELDTW Lidau 0.82 180 eP Pb 10 15 15.4 -0.2
baz=185
ELDTW eS Sb 10 15 26.4 +0.1
baz=185
WSF Szhu 0.82 243 eP Pb 10 15 15.3 -0.3
baz=242
WSF eS Sg 10 15 27.5 +0.7
baz=242
FULB Fuli 0.85 163 ⇓P Pn 10 15 16.9 +0.1
baz=163
FULB eS Sn 10 15 29.5 +0.7
baz=163
WTP Ta-pu 0.85 206 ⇓P Pb 10 15 15.9 -0.2
baz=205
WTP S Sg 10 15 27.7 +0.1
baz=205
EHD Haiduan 0.87 169 ⇑P Pb 10 15 16.9 +0.4
baz=169
EHD S Sn 10 15 29.3 -0.2
baz=169
WSL Shuilin Townsh 0.88 236 eP Pb 10 15 16.3 -0.2
baz=235
WSL eS Sn 10 15 30.2 +0.7
baz=235
STYT Tauyuan 0.88 196 P Pb 10 15 16.7 +0.1
baz=195
STYT S Sg 10 15 28.7 +0.2
baz=195
NWLT Wulai 0.88 30 ⇓iP Pb 10 15 16.5 -0.1
baz=30
NWLT eS Sg 10 15 28.8 +0.2
baz=30
CHKH Chenggong 0.88 157 eP Pn 10 15 17.4 +0.1
baz=157
CHKH S Sn 10 15 30.5 +0.8
baz=157
NDS Dongshan 0.89 45 ⇑P Pb 10 15 17.0 +0.3
baz=46
NDS eS Sg 10 15 28.8 0.0
baz=46
TWK Hsinying 0.89 214 ⇓iP Pb 10 15 16.7 0.0
baz=212
TWK eS Sg 10 15 29.4 +0.6
baz=212
FUSB Fushanzhiwuyua 0.91 35 ⇓P Pb 10 15 16.9 -0.2
baz=30
FUSB eS Sg 10 15 29.4 -0.1
baz=30
TWE Neicheng 0.92 40 ⇓iP Pb 10 15 17.4 +0.2
baz=41
TWE S Sg 10 15 30.3 +0.4
baz=41
SNST Tainan City 0.92 212 eP Pb 10 15 17.3 +0.1
baz=211
SNST eS Sn 10 15 30.6 0.0
baz=211
ECS Chishang 0.93 169 eP Pg 10 15 18.2 +0.3
baz=178
ECS eS Sn 10 15 31.4 +0.5
baz=178
CHN1 Nanshi 0.94 209 P Pb 10 15 17.6 +0.1
baz=208
CHN1 S Sg 10 15 30.5 +0.1
baz=208
ESAO Su ao 0.94 53 eP Pb 10 15 17.7 +0.2
baz=53
ESAO eS Sg 10 15 30.6 +0.2
baz=53
ICHU Yijhu 0.94 227 ⇓P Pb 10 15 17.6 +0.1
baz=236
ICHU S Sn 10 15 31.4 +0.3
baz=236
CHKT Chengkung 0.96 161 ⇑iP Pn 10 15 18.6 +0.2
baz=161
CHKT S Sn 10 15 32.9 +1.4
baz=161
TWC Suao 0.96 52 ⇓P Pb 10 15 17.9 0.0
baz=52
TWC S Sg 10 15 31.1 -0.1
baz=52
NCUH Zhongli 0.96 9 eP Pg 10 15 19.8 +1.2
baz=9.0
NCUH eS Sn 10 15 32.3 +0.6
baz=9.0
NHW Xinwu Township 0.99 1 eP Pg 10 15 19.2 +0.1
baz=2.0
CHN8 Yiju 0.99 229 P Pb 10 15 18.4 -0.1
baz=237
CHN8 S Sn 10 15 32.6 +0.2
baz=237
ILA Ilan 1.00 41 eP Pb 10 15 18.5 -0.2
baz=43
SGST Jiashian 1.01 204 eP Pb 10 15 18.4 -0.4
baz=212
SGST S Sg 10 15 33.0 +0.4
baz=212
TATO Taipei 1.05 24 P Pg 10 15 20.5 +0.3
TATO Taipei 1.05 24 eP Pg 10 15 20.4 +0.2
baz=24
TATO eS Sg 10 15 36.0 +2.0
baz=24
NHDH Xindian Distri 1.05 26 eP Pg 10 15 20.3 +0.1
baz=29
NHDH eS Sg 10 15 35.9 +1.9
baz=29
EDH Donghe 1.06 166 eP Pg 10 15 20.4 0.0
baz=152
EDH eS Sg 10 15 35.1 +0.7
baz=152
SLGT Liugui 1.07 199 eP Pg 10 15 20.7 +0.1
baz=199
SLGT eS Sg 10 15 35.1 +0.5
baz=199
TWA Mucha 1.09 28 eP Pn 10 15 20.6 +0.4
baz=29
TWA eS Sg 10 15 36.6 +1.3
baz=29
LONT Longtian 1.10 175 eP Pb 10 15 20.9 +0.5
baz=175
LONT eS Sg 10 15 35.9 +0.3
baz=175
CHN3 Shinhua 1.11 213 eP Pg 10 15 21.5 +0.2
baz=222
CHN3 eS Sg 10 15 38.0 +2.2
baz=222
TAP Taipei 1.11 23 eP Pb 10 15 21.1 +0.5
baz=26
SCLT Jiali 1.13 223 eP Pn 10 15 20.9 +0.2
baz=221
SCLT eS Sg 10 15 37.7 +1.3
baz=221
TWS1 Kuangyinshan 1.14 18 eP Pg 10 15 22.1 +0.1
baz=19
TWS1 eS Sg 10 15 37.0 +0.1
baz=19
SHHT Tainan City 1.16 212 eP Pg 10 15 22.6 +0.3
baz=212
SHHT eS Sg 10 15 40.3 +2.7
baz=212
EGS 1.17 45 ⇓P Pg 10 15 22.2 -0.3
baz=59
EOS2 EOS2 1.18 70 ⇑eP Pg 10 15 23.3 +0.7
baz=69
TWG Pinlang 1.19 178 ⇑P Pb 10 15 22.1 +0.4
baz=171
TWG eS Sg 10 15 38.1 -0.1
baz=171
TWGBT Beinan 1.19 177 P Pb 10 15 22.5 +0.7
TWGBT Beinan 1.19 177 ⇑P Pb 10 15 22.1 +0.3
baz=171
TWGBT S Sg 10 15 38.2 -0.2
baz=171
EOS4 EOS4 1.19 84 eP Pb 10 15 21.8 +0.2
baz=99
EOS4 eS Sg 10 15 38.2 0.0
baz=99
TIPB Shuangxi 1.21 37 ⇓P Pb 10 15 22.4 +0.2
baz=38
TIPB eS Sn 10 15 38.1 +0.3
baz=38
TAI1 Yung-k'ang 1.21 217 S Sg 10 15 39.8 +0.8
baz=216
NTST Danshui 1.21 19 eP Pg 10 15 24.0 +0.7
baz=359
EOS3 EOS3 1.22 77 eP Pg 10 15 22.9 -0.3
baz=91
TSCK Chigu Township 1.22 225 eP Pn 10 15 21.9 0.0
baz=235
TSCK eS Sn 10 15 38.8 +0.9
baz=235
SCST Cishan 1.22 204 eP Pg 10 15 23.2 -0.2
baz=204
SCST S Sg 10 15 40.4 +1.0
baz=204
YM01 YM01 1.24 24 ⇑eP Pb 10 15 22.7 0.0
baz=24
YM01 eS Sg 10 15 39.8 -0.1
baz=24
ANP Anpu 1.26 21 eP Pn 10 15 22.8 +0.3
baz=2.0
TTN Taitung 1.26 175 eP Pg 10 15 23.9 -0.2
baz=175
TTN eS Sg 10 15 42.1 +1.6
baz=175
NWF Wu-fen Shan 1.26 33 eP Pb 10 15 23.7 +0.5
baz=34
NWF eS Sg 10 15 41.1 +0.3
baz=34
WFSB Wu-fen Shan 1.26 33 eP Pg 10 15 23.9 -0.3
baz=35
YM08 YM08 1.28 24 eP Pg 10 15 24.2 -0.4
baz=26
TWM1 Shoushan 1.30 205 eP Pg 10 15 25.1 +0.1
baz=205
SSD Sandimen 1.31 196 eP Pb 10 15 23.9 0.0
baz=204
TNOU National Taiwa 1.32 31 eP Pb 10 15 24.8 +0.7
baz=19
TWB1 Santiao Chiao 1.33 41 ⇑P Pb 10 15 24.6 +0.4
baz=42
TWB1 eS Sb 10 15 41.5 +0.7
baz=42
SXI1 Grass Mountain 1.33 36 eP Pb 10 15 25.0 +0.7
baz=36
SXI1 eS Sg 10 15 42.8 -0.1
baz=36
TSMG Majia 1.34 195 eP Pb 10 15 24.6 +0.1
baz=203
LDUT Ludao 1.39 163 eP Pn 10 15 24.3 0.0
baz=164
LDUT eS Sn 10 15 42.6 +0.4
baz=164
ECL Taimali 1.41 183 ⇓P Pb 10 15 25.6 0.0
baz=168
ECL eS Sg 10 15 44.8 -0.6
baz=168
PNG Penghu 1.41 252 eP Pn 10 15 24.6 0.0
baz=251
PNG eS Sn 10 15 42.3 -0.5
baz=251
MASBT Mashibuluo 1.44 194 eP Pb 10 15 26.0 -0.1
baz=195
MASBT eS Sb 10 15 45.0 +0.9
baz=195
WDGT Dungji 1.46 239 eP Pn 10 15 25.1 -0.1
baz=249
WDGT eS Sn 10 15 44.1 +0.3
baz=249
EAST Anshuo 1.63 186 eP Pb 10 15 28.9 -0.5
baz=186
EAST eS Sb 10 15 50.8 +1.2
baz=186
TAW Tawu 1.65 184 eP Pb 10 15 29.3 -0.3
baz=168
VCHM Qimei 1.67 242 eP Pn 10 15 27.7 -0.4
baz=243
VCHM eS Sn 10 15 49.0 0.0
baz=243
TAWH Dawu Township 1.67 184 eP Pb 10 15 30.0 0.0
baz=199
TAWH eS Sb 10 15 51.7 +1.1
baz=199
SCZT Fangliau 1.67 193 eP Pn 10 15 29.2 +1.0
baz=193
SCZT eS Sb 10 15 50.8 0.0
baz=193
VWUC VWUC 1.73 305 eP Pn 10 17 27.4 -1.6
baz=303
SLIU Shizi 1.80 187 eP Pn 10 15 31.1 +1.2
baz=204

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SLIU | | | | | *e*S | | **Sb** | **10 15 55.7** | **+1.3** |
| | baz=204 | | | | | | | | | |
| **JYNG** | **Yonaguni jima** | **1.81** | **76** | | P | | **Pb** | **10 15 31.6** | **-0.8** |
| JYNG | | | | | S | | **Sb** | **10 15 54.2** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **1.87** | **76** | | P | | **Pn** | **10 15 32.0** | **+1.1** |
| **YOJ** | **Yonaguni jima** | **1.87** | **76** | | *e*P | | **Pn** | **10 15 32.0** | **+1.1** |
| | baz=87 | | | | | | | | | |
| YOJ | | | | | *e*S | | **Sn** | **10 15 55.0** | **+1.0** |
| | baz=87 | | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.87** | **76** | | P | | **Pn** | **10 15 32.2** | **+1.3** |
| YOJ | | | | | S | | **Sn** | **10 15 55.2** | **+1.2** |
| **HEN** | **Hengchun** | **2.01** | **188** | | *e*P | | **Pn** | **10 15 33.5** | **+0.6** |
| | baz=203 | | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.01** | **301** | | *e*P | | **Pn** | **10 15 31.5** | **-1.4** |
| | baz=299 | | | | | | | | | |
| **LAY** | **Lan-yu** | **2.02** | **166** | | *e*P | | **Pn** | **10 15 33.0** | **0.0** |
| | baz=155 | | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.06** | **165** | | *e*P | | **Pn** | **10 15 33.3** | **-0.3** |
| | baz=157 | | | | | | | | | |
| LYUB | | | | | *e*S | | **Sn** | **10 15 58.9** | **+0.1** |
| | baz=157 | | | | | | | | | |
| **TWK1** | **Hengchun** | **2.07** | **186** | | *e*P | | **Pn** | **10 15 34.3** | **+0.7** |
| | baz=200 | | | | | | | | | |
| **TWKBT** | **Hengchun** | **2.07** | **185** | | *e*P | | **Pn** | **10 15 34.7** | **+1.1** |
| | baz=200 | | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.34** | **336** | | *e*P | | **Pn** | **10 15 36.7** | **-0.7** |
| | baz=331 | | | | | | | | | |
| **KNM** | **Kinmen** | **2.40** | **280** | | *e*P | | **Pn** | **10 15 38.8** | **+0.7** |
| | baz=279 | | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.45** | **281** | | *e*P | | **Pn** | **10 15 37.8** | **-1.0** |
| | baz=280 | | | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.54** | **88** | | *e*P | | **Pn** | **10 15 41.5** | **+1.3** |
| HATJ | | | | | S | | **Sn** | **10 16 12.4** | **+1.6** |
| **JKRS** | **Kuro-shima** | **2.74** | **85** | | P | | **Pn** | **10 15 44.8** | **+2.0** |
| JKRS | | | | | S | | **Sn** | **10 16 17.5** | **+2.0** |
| **MHZQ** | **Yeshan** | **2.75** | **319** | | *e*P | | **Pn** | **10 15 42.8** | **-0.3** |
| | baz=316 | | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.87** | **82** | | P | | **Pn** | **10 15 45.6** | **+0.9** |
| JIJ | | | | | S | | **Sn** | **10 16 18.6** | **-0.2** |
| **ZPLA** | **Ao Xicun** | **2.99** | **269** | | *e*P | | **Pn** | **10 15 45.5** | **-0.8** |
| | baz=269 | | | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.00** | **346** | | *e*P | | **Pn** | **10 15 45.9** | **-0.6** |
| | baz=340 | | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.06** | **79** | | P | | **Pn** | **10 15 48.2** | **+1.0** |
| JISG | | | | | S | | **Sn** | **10 16 23.6** | **+0.3** |
| **JTJ** | **Tarama** | **3.42** | **79** | | *e*P | | **Pn** | **10 15 54.8** | **+2.6** |
| JTJ | | | | | S | | **Sn** | **10 16 32.9** | **+0.7** |
| **SXFK** | **Yanhouchang** | **3.87** | **309** | | *e*P | | **Pn** | **10 15 58.0** | **-0.6** |
| | baz=306 | | | | | | | | | |
| **JMJ** | **Miyako jima 2** | **3.98** | **78** | | *e*P | | **Pn** | **10 16 01.4** | **+1.6** |
| | baz=78 | | | | | | | | | |
| **JOW** | **Kunigami** | **7.13** | **65** | | P | | **Pn** | **10 16 43.5** | **+0.2** |
| | 4.5nm,0.3s,baz=112,slow=28,SNR=30 | | | | | | | | | |
| JOW | | | | | S | | **Sn** | **10 18 02.5** | **-1.4** |
| | 5.6nm,0.6s,baz=104,slow=25,SNR=1.3 | | | | | | | | | |
| | 11nm,0.2s | | | | | | | | | |
| **KSRS** | **Korea Array** | **14.65** | **22** | | P | | **Pn** | **10 18 29.0** | **+2.9** |
| | baz=192,slow=6.4,SNR=1.6 | | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | | |
| **SONM** | **Songino Array** | **26.47** | **338** | | P | | **P** | **10 20 36.9** | **+0.9** |
| | 0.3nm,0.5s,baz=119,slow=12,SNR=1.8 | | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.36** | **316** | | P | | **P** | **10 22 20.6** | **+0.8** |
| | 0.3nm,0.5s,baz=113,slow=9.4,SNR=2.9 | | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.31** | **327** | | P | | **P** | **10 22 34.7** | **-1.2** |
| | 1.1nm,0.7s,baz=116,slow=6.6,SNR=3.8 | | | | | | | | | |
| | 1.1nm,0.7s | | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.65** | **87** | | T | | T | 11 08 13.2 | | |
| | baz=283 | | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.65** | **86** | | T | | T | 11 08 09.1 | | |
| | baz=283 | | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.66** | **86** | | T | | T | 11 08 11.0 | | |
| | baz=283 | | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.77** | **88** | | T | | T | 11 08 10.3 | | |
| | baz=284 | | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.78** | **88** | | T | | T | 11 08 12.1 | | |
| | baz=284 | | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.79** | **88** | | T | | T | 11 08 11.3 | | |
| | baz=284 | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.57** | **162** | | P | | **P** | **10 23 15.9** | **-3.0** |
| | 0.4nm,0.4s,baz=344,slow=8.6,SNR=11 | | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **47.71** | **321** | | P | | **P** | **10 23 34.1** | **-1.3** |
| | 0.4nm,0.5s,baz=78,slow=9.4,SNR=2.2 | | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **49.02** | **164** | | P | | **P** | **10 23 42.8** | **-2.9** |
| | 0.3nm,0.3s,baz=342,slow=6.8,SNR=13 | | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | | |
| **STKA** | **Stephens Creek** | **58.95** | **160** | | P | | **P** | **10 24 56.5** | **-1.6** |
| | 3.4nm,0.9s,baz=348,slow=12,SNR=3.7 | | | | | | | | | |
| | 3.4nm,0.9s | | | | | | | | | |

*MOS* ***17*** *10:15:25.9±1.0,23˚.21N×143˚.72E,h18km,mb4.9/40,Error ellipse: s-maj=10.6km s-min=5.4km az=113.0*

*NEIC* ***17*** *10:15:27.5±2.1,23˚.29N±0˚.06×143˚.72E±0˚.06,h10km±1km, mb4.7/99,Error ellipse: s-maj=11.5km s-min=7.4km az=36.0*

*IDC* ***17*** *10:15:32.2±3.4,23˚.23N×143˚.57E,h49km±30km,mb4.1/23, mbtmp4.3/26,ML3.3/3,MS3.8/24,Error ellipse: s-maj=17.8km s-min=13.7km az=94.0*

**ISC 17 10:15:28.0±0.8,23˚.25N±0˚.05×143˚.74E±0˚.07,h20km±3km, n228,σ1§51/261,mb4.7/103,MS3.9/27,13C-10D,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **JCJ** | **Chichijima** | **4.08** | **340** | Pn | **Pn** | | **10 16 27.8** | **-1.6** |
| JCJ | | | | Sn | **Sn** | | **10 17 15.8** | **-0.8** |
| **JCJ** | **Chichijima** | **4.08** | **340** | P | **Pn** | | **10 16 25.5** | **-3.9** |
| | 61nm,0.4s,baz=262,slow=22,SNR=7.6 | | | | | | | |
| JCJ | | | | S | **Sn** | | **10 17 09.0** | **-7.7** |
| | 223nm,0.4s,baz=280,slow=22,SNR=12 | | | | | | | |
| **GUMO** | **Guam** | **9.66** | **173** | Pn | **Pn** | | **10 17 45.5** | **-0.6** |
| **GUMO** | **Guam** | **9.66** | **173** | P | **Pn** | | **10 17 45.5** | **-0.6** |
| **JHJ2** | **Mitsune** | **10.42** | **341** | Pn | **Pn** | | **10 17 55.3** | **-1.0** |
| **JSG** | **Sagara** | **12.38** | **338** | Pn | **Pn** | | **10 18 22.3** | **-0.8** |
| **INU** | **Inuyama** | **13.40** | **336** | Pn | **Pn** | | **10 18 36.5** | **-0.6** |
| **JGF** | **Kuroka** | **13.50** | **337** | Pn | **Pn** | | **10 18 38.9** | **+0.4** |
| **JMN** | **Monobe** | **13.56** | **323** | Pn | **Pn** | | **10 18 39.4** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **14.09** | **341** | P | **Pn** | | **10 18 46.7** | **+0.2** |
| | baz=158,slow=15,SNR=2.0 | | | | | | | |
| MJAR | | | | S | Sn | | 10 21 13.7 | -8.6 |
| | 1.3nm,0.6s,baz=160,slow=32,SNR=2.0 | | | | | | | |
| | 2.9nm,0.7s | | | | | | | |
| **MAJO** | **Matsushiro** | **14.09** | **341** | Pn | **Pn** | | **10 18 46.6** | **+0.1** |
| **MAJO** | **Matsushiro** | **14.09** | **341** | *e*P | **Pn** | | **10 18 47.6** | **+1.1** |
| **MJB9** | **Matsu-Tunnel** | **14.09** | **341** | Pn | **Pn** | | **10 18 46.0** | **-0.6** |
| **JOW** | **Kunigami** | **14.47** | **287** | Pn | **Pn** | | **10 18 49.9** | **-1.8** |
| **JOW** | **Kunigami** | **14.47** | **287** | P | **Pn** | | **10 18 53.0** | **+1.3** |
| | 0.3nm,0.3s,baz=257,slow=12,SNR=2.1 | | | | | | | |
| JOW | | | | LR | LR | | 10 24 04.9 | |
| | comp=Z,573nm,18.5s,baz=115,slow=36 | | | | | | | |
| | 17nm,1.1s | | | | | | | |
| **JMM** | **Marumori** | **14.79** | **351** | Pn | **Pn** | | **10 18 55.1** | **-0.9** |
| **JTM** | **Tenmabayashi** | **17.63** | **353** | Pn | **Pn** | | **10 19 31.2** | **-1.3** |
| **ERM** | **Erimo** | **18.72** | **359** | P | **P** | | **10 19 44.3** | **-1.0** |
| **ERM** | **Erimo** | **18.72** | **359** | P | **P** | | **10 19 44.3** | **-1.0** |
| ERM | | | | pmax | pmax | | | |
| | comp=Z,130nm,1.3s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **19.00** | **278** | P | **P** | | **10 19 47.9** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **19.00** | **278** | P | **P** | | **10 19 47.9** | **-0.7** |
| YOJ | | | | pmax | pmax | | | |
| | comp=Z,94nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **19.63** | **320** | P | **P** | | **10 19 55.3** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=132,slow=13,SNR=13 | | | | | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **19.64** | **320** | P | **P** | | **10 19 54.7** | **-0.8** |
| **KSAR** | **Wonju Array Be** | **19.64** | **320** | P | **P** | | **10 19 54.7** | **-0.8** |
| **KS19** | **Wonju Array Si** | **19.69** | **320** | P | **P** | | **10 19 56.1** | **0.0** |
| KS19 | | | | IAmb | IAmb | | 10 20 04.2 | |
| | comp=Z,60nm,1.4s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **20.84** | **358** | P | **P** | | **10 20 08.5** | **+0.1** |
| JKA | | | | IAmb | IAmb | | 10 20 12.1 | |
| | comp=Z,80nm,1.5s | | | | | | | |
| **ASAJ** | **Asahikawa** | **20.84** | **358** | P | Pn | | 10 20 11.1 | +0.2 |
| | comp=Z,21nm,1.1s,baz=201,slow=18,SNR=2.4 | | | | | | | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **ASAJ** | **Asahikawa** | **20.84** | **358** | P | **P** | | **10 20 08.5** | **+0.1** |
| ASAJ | | | | pmax | pmax | | | |
| | comp=Z,80nm,1.5s | | | | | | | |
| **TWG** | **Pinlang** | **20.87** | **273** | P | **P** | | **10 20 06.9** | **-2.1** |
| TWG | | | | IAmb | IAmb | | 10 20 30.1 | |
| | comp=Z,37nm,1.1s | | | | | | | |
| **SSLB** | **Suanglung** | **20.90** | **276** | P | **P** | | **10 20 08.3** | **-1.1** |
| SSLB | | | | IAmb | IAmb | | 10 20 16.7 | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **TPUB** | **Ta-pu** | **21.23** | **275** | P | **P** | | **10 20 12.1** | **-0.8** |
| TPUB | | | | IAmb | IAmb | | 10 20 42.4 | |
| | comp=Z,51nm,1.1s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.82** | **95** | T | T | | 10 42 48.0 | |
| | baz=283,slow=74,SNR=5.6 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.82** | **95** | T | T | | 10 42 58.4 | |
| | baz=283,slow=74,SNR=6.5 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.84** | **95** | T | T | | 10 43 01.0 | |
| | baz=283,slow=74,SNR=6.7 | | | | | | | |
| **MSHR** | **Mys Shultsa** | **21.94** | **334⇑** | *e*P | **P** | | **10 20 22.8** | **+2.5** |
| MSHR | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.95** | **98** | T | T | | 10 43 49.3 | |
| | baz=284 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.95** | **98** | T | T | | 10 43 50.6 | |
| | baz=284 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.96** | **98** | T | T | | 10 43 45.4 | |
| | baz=284 | | | | | | | |
| **PSTR** | **Posyet** | **22.14** | **334⇑** | *e*P | **P** | | **10 20 23.2** | **+0.8** |
| **TEY** | **Ternei** | **22.50** | **347** | *e*P | P | | 10 20 17.2 | -9.1 |
| TEY | | | | *e* | | | 10 20 28.7 | |
| **USA0B** | **Ussuriysk Arra** | **23.02** | **338** | P | **P** | | **10 20 29.8** | **-2.0** |
| USA0B | | | | IAmb | IAmb | | 10 20 35.3 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **23.02** | **338** | P | **P** | | **10 20 29.8** | **-2.0** |
| USA0B | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **23.02** | **338** | P | **P** | | **10 20 31.2** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** | **23.02** | **338** | P | **P** | | **10 20 32.2** | **+0.4** |
| | comp=Z,5.7nm,0.7s,baz=151,slow=11,SNR=15 | | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **23.02** | **338** | P | **P** | | **10 20 31.2** | **-0.6** |
| **NJ2** | **Nanjing** | **23.68** | **297** | *e*P | **P** | | **10 20 38.3** | **-0.2** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **DAV** | **Davao City (W)** | **23.74** | **230** | LR | LR | | 10 27 53.4 | |
| | comp=Z,444nm,21.5s,baz=58,slow=31 | | | | | | | |
| **MDJ** | **Mudanjiang** | **24.27** | **335** | P | **P** | | **10 20 45.6** | **+1.8** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.4s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,380nm,8.9s | | | | | | | |
| **MDJ** | **Mudanjiang** | **24.27** | **335** | P | **P** | | **10 20 45.4** | **+1.6** |
| MDJ | | | | IAmb | IAmb | | 10 20 46.7 | |
| | comp=Z,27nm,1.0s | | | | | | | |
| **MANU** | **Manus Island** | **25.38** | **172** | P | **P** | | **10 20 52.6** | **-1.6** |
| MANU | | | | IAmb | IAmb | | 10 21 16.1 | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **CN2** | **Changchun** | **25.44** | **328** | P | **P** | | **10 20 58.8** | **+4.3** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **BNX** | **BinXian** | **26.07** | **333** | ⇓P | **P** | | **10 21 01.4** | **+1.2** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **TIA** | **Tai'an** | **26.38** | **305** | P | **P** | | **10 21 03.5** | **+0.4** |
| TIA | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **27.61** | **343** | *ce*P | **P** | | **10 21 15.3** | **+1.3** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **HNS** | **HongShan** | **28.62** | **306** | ⇓P | **P** | | **10 21 23.3** | **+0.1** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=N,420nm,15.9s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,280nm,16.7s | | | | | | | |
| **HEH** | **HeiHe** | **29.83** | **339** | *e*P | **P** | | **10 21 35.3** | **+1.6** |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **30.25** | **237** | P | **P** | | **10 21 37.5** | **-0.3** |
| **TOLI2** | **Tolitoli** | **31.32** | **229** | P | **P** | | **10 21 47.8** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **31.65** | **16** | P | **P** | | **10 21 52.7** | **+2.9** |
| | comp=Z,2.1nm,0.7s,baz=214,slow=7.0,SNR=1.8 | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **32.19** | **311** | *e*P | **P** | | **10 21 56.4** | **+1.6** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **XAN** | **Xi'an** | **32.26** | **297** | ⇓P | **P** | | **10 21 56.1** | **+0.7** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.6s | | | | | | | |
| **PMG** | **Port Moresby** | **32.62** | **174** | P | **P** | | **10 21 58.4** | **-0.2** |
| **PMG** | **Port Moresby** | **32.62** | **174⇑** | *e*P | **P** | | **10 21 57.8** | **-0.8** |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **ZEA** | **Zeya** | **32.90** | **342** | *e*P | **P** | | **10 22 02.3** | **+1.6** |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **BTO** | **Baotou** | **33.19** | **309** | *e*P | **P** | | **10 22 06.0** | **+2.5** |
| BTO | | | | pP | **pwP** | | **10 22 10.0** | **-4.9** |
| BTO | | | | sP | **sP** | | **10 22 14.1** | **+4.1** |
| BTO | | | | PP | **PP** | | **10 23 18.3** | **-0.4** |
| BTO | | | | S | **S** | | **10 27 28.6** | **+6.2** |
| BTO | | | | SS | **SS** | | **10 29 35.9** | **-10** |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.6s | | | | | | | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,250nm,5.1s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=N,710nm,15.5s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=E,370nm,11.6s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,560nm,13.8s | | | | | | | |
| **HNR** | **Honiara** | **36.14** | **152** | LR | LR | | 10 38 22.4 | |
| | comp=Z,631nm,18.5s,baz=352,slow=38 | | | | | | | |
| **KAPI** | **Kappang** | **36.58** | **223** | P | **P** | | **10 22 33.9** | **+1.0** |
| KAPI | | | | IAmb | IAmb | | 10 22 34.8 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **KAPI** | **Kappang** | **36.58** | **223** | P | **P** | | **10 22 33.9** | **+1.0** |
| KAPI | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **36.98** | **181** | P | **P** | | **10 22 36.5** | **+0.3** |
| COEN | | | | IAmb | IAmb | | 10 22 51.1 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **37.42** | **30** | LR | LR | | 10 36 40.6 | |
| | comp=Z,129nm,21.1s,baz=290,slow=34 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **38.11** | **319** | P | **P** | | **10 22 45.9** | **0.0** |
| ULN | | | | IAmb | IAmb | | 10 22 47.2 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **38.11** | **319** | ⇓*e*P | **P** | | **10 22 46.4** | **+0.6** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,18nm,2.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **38.12** | **284** | P | **P** | | **10 22 47.3** | **+1.2** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,50nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **38.50** | **319** | P | **P** | | **10 22 47.6** | **-1.3** |
| **SONM** | **Songino Array** | **38.50** | **319** | P | **P** | | **10 22 48.8** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=126,slow=8.4,SNR=8.3 | | | | | | | |
| SONM | | | | PcP | **PcP** | | **10 25 02.0** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=103,slow=4.7,SNR=4.0 | | | | | | | |
| SONM | | | | LR | LR | | 10 39 38.7 | |
| | comp=Z,154nm,18.6s,baz=130,slow=38 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **38.50** | **319** | P | **P** | | **10 22 47.7** | **-1.3** |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **YAK** | **Yakutsk** | **39.94** | **350** | *de*P | **P** | | **10 23 01.5** | **+0.9** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **SEY** | **Seymchan** | **40.10** | **6** | P | **P** | | **10 23 02.6** | **+0.6** |
| | comp=Z,1.3nm,0.8s,baz=232,slow=19,SNR=4.8 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **SEY** | **Seymchan** | **40.10** | **6⇓** | *e*P | **P** | | **10 23 02.3** | **+0.3** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **CRAI** | **Chiangrai** | **40.29** | **274** | P | **P** | | **10 23 05.0** | **+0.8** |
| CRAI | | | | IAmb | IAmb | | 10 23 06.4 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **PHRA** | **Phrae** | **40.82** | **272** | P | **P** | | **10 23 07.6** | **-1.0** |
| **TNCH** | **TengChong** | **41.16** | **282** | P | **P** | | **10 23 13.3** | **+1.7** |
| TNCH | | | | pP | sP | | 10 23 15.1 | -2.9 |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,39nm,0.3s | | | | | | | |
| **KNRA** | **Kununurra** | **41.37** | **202** | P | **P** | | **10 23 11.8** | **-1.1** |
| **ZAK** | **Zakamensk** | **41.45** | **321** | *e*P | **P** | | **10 23 13.5** | **0.0** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.01** | **272** | P | **P** | | **10 23 19.3** | **+0.9** |
| **CMAR** | **Chiang Mai Arr** | **42.01** | **272** | P | **P** | | **10 23 17.9** | **-0.4** |
| | comp=Z,2.0nm,0.6s,baz=63,slow=8.0,SNR=10 | | | | | | | |
| CMAR | | | | LR | LR | | 10 39 39.8 | |
| | comp=Z,98nm,20.6s,baz=75,slow=35 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.01** | **272** | *i* P | **P** | | **10 23 19.5** | **+1.1** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **43.14** | **177** | P | **P** | | **10 23 27.5** | **+0.1** |
| CTAO | | | | IAmb | IAmb | | 10 23 28.8 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **43.14** | **177** | P | **P** | | **10 23 27.5** | **+0.1** |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.72** | **193** | P | **P** | | **10 23 30.6** | **-1.4** |
| **WR0** | **Warramunga Arr** | **43.87** | **193** | P | **P** | | **10 23 33.7** | **+0.5** |
| **WRAB** | **Tennant Creek** | **43.88** | **193** | P | **P** | | **10 23 32.9** | **-0.5** |
| WRAB | | | | IAmb | IAmb | | 10 23 34.9 | |
| | comp=Z,9.9nm,1.0s | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.88** | **193⇓** | *e*P | **P** | | **10 23 32.7** | **-0.7** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.89** | **193** | P | **P** | | **10 23 33.0** | **-0.5** |
| WB2 | | | | IAmb | IAmb | | 10 23 35.0 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.90** | **193** | P | **P** | | **10 23 32.5** | **-1.0** |
| **WRA** | **Warramunga Arr** | **43.90** | **193** | P | **P** | | **10 23 33.1** | **-0.4** |
| | comp=Z,5.8nm,0.9s,baz=12,slow=8.5,SNR=22 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **10 25 19.7** | **+0.2** |
| | comp=Z,2.2nm,0.8s,baz=4.4,slow=3.6,SNR=6.6 | | | | | | | |
| WRA | | | | LR | LR | | 10 41 45.7 | |
| | comp=Z,111nm,18.1s,baz=9.0,slow=36 | | | | | | | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.90** | **193** | P | **P** | | **10 23 32.5** | **-1.0** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.2s | | | | | | | |
| **GOMU** | **GeErMu** | **43.98** | **299** | P | **P** | | **10 23 37.0** | **+2.4** |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,69nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.74** | **205** | P | **P** | | **10 23 40.3** | **+0.1** |
| **BILL** | **Bilibino** | **46.91** | **11** | *e*P | **P** | | **10 23 58.6** | **+1.8** |
| BILL | | | | *e* | | | 10 24 06.3 | |
| BILL | | | | *e* | | | 10 25 29.8 | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| **SHL** | **Shillong** | **47.04** | **284** | P | **P** | | **10 23 58.8** | **+0.1** |
| **SHL** | **Shillong** | **47.04** | **284** | P | **P** | | **10 23 58.8** | **+0.1** |
| SHL | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **47.60** | **192** | P | **P** | | **10 24 03.2** | **+0.5** |
| **ASAR** | **Alice Springs** | **47.60** | **192** | P | **P** | | **10 24 03.4** | **+0.6** |
| **ASAR** | **Alice Springs** | **47.60** | **192** | P | **P** | | **10 24 02.6** | **-0.2** |
| | comp=Z,1.6nm,0.6s,baz=14,slow=9.8,SNR=18 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **10 25 32.2** | **-0.1** |
| | comp=Z,1.3nm,0.8s,baz=24,slow=3.9,SNR=6.5 | | | | | | | |
| ASAR | | | | LR | LR | | 10 42 52.0 | |
| | comp=Z,149nm,20.3s,baz=356,slow=34 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.60** | **192** | P | **P** | | **10 24 03.4** | **+0.6** |
| **WMQ** | **Urumqi** | **50.01** | **308** | *e*P | **P** | | **10 24 23.0** | **+1.8** |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.1s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,74nm,21.5s | | | | | | | |
| **DZM** | **Mont Dzumac** | **50.17** | **152** | LR | LR | | 10 45 03.2 | |
| | comp=Z,120nm,19.6s,baz=344,slow=35 | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **50.97** | **316** | *c* P | **P** | | **10 24 29.5** | **+1.1** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.33** | **321** | P | **P** | | **10 24 46.0** | **+0.3** |
| ZAA0 | | | | IAmb | IAmb | | 10 24 46.7 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.33** | **321** | P | **P** | | **10 24 46.1** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **53.33** | **321** | P | **P** | | **10 24 45.9** | **+0.2** |
| | comp=Z,5.5nm,0.7s,baz=98,slow=6.9,SNR=16 | | | | | | | |
| ZALV | | | | PcP | **PcP** | | **10 25 50.5** | **-2.6** |
| | comp=Z,2.3nm,0.8s,baz=116,slow=6.1,SNR=4.2 | | | | | | | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.33** | **321** | *i* P | **P** | | **10 24 46.0** | **+0.3** |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **54.04** | **312** | P | **P** | | **10 24 51.2** | **0.0** |
| MK31 | | | | IAmb | IAmb | | 10 24 53.8 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **MK31** | **Makanchi Array** | **54.04** | **312** | *d i* P | **P** | | **10 24 52.1** | **+1.0** |
| **MKAR** | **Makanchi Array** | **54.04** | **312** | P | **P** | | **10 24 51.5** | **+0.3** |
| **MKAR** | **Makanchi Array** | **54.04** | **312** | P | **P** | | **10 24 51.1** | **0.0** |
| | comp=Z,4.0nm,0.6s,baz=93,slow=8.9,SNR=29 | | | | | | | |
| MKAR | | | | PcP | **PcP** | | **10 25 54.7** | **-1.3** |
| | comp=Z,1.3nm,0.8s,baz=90,slow=5.8,SNR=1.1 | | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.04** | **312** | *i* P | **P** | | **10 24 51.7** | **+0.6** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **MAKZ** | **Makanchi** | **54.26** | **312** | P | **P** | | **10 24 53.7** | **+1.0** |
| **MAKZ** | **Makanchi** | **54.26** | **312** | P | **P** | | **10 24 53.7** | **+1.0** |
| MAKZ | | | | pmax | pmax | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ILAR | | | | | LR | LR | 10 49 28.4 | |
| | comp=Z,56nm,21.0s,baz=266,slow=34 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.43** | **27** | P | **P** | **10 25 35.0** | **-0.9** |
| **KLU** | **Klutina** | **60.47** | **31** | P | **P** | **10 25 34.8** | **-1.6** |
| KLU | | | | IAmb | IAmb | 10 25 50.1 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **SCRK** | **Sand Creek** | **61.59** | **29** | P | **P** | **10 25 44.1** | **+0.1** |
| SCRK | | | | IAmb | IAmb | 10 26 04.6 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **61.82** | **28** | P | **P** | **10 25 45.9** | **+0.4** |
| J26L | | | | IAmb | IAmb | 10 26 13.0 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.84** | **319** | P | **P** | **10 25 45.7** | **+0.1** |
| | comp=Z,18nm,0.7s,baz=91,slow=7.8,SNR=73 | | | | | | |
| BVAR | | | | LR | LR | 10 53 16.6 | |
| | comp=Z,72nm,18.9s,baz=96,slow=37 | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **61.90** | **319** | P | **P** | **10 25 46.8** | **+0.7** |
| **BRVK** | **Borovoye** | **61.90** | **319** | *c i* P | **P** | **10 25 46.6** | **+0.5** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **62.42** | **266** | P | **P** | **10 25 50.6** | **+0.4** |
| **PALK** | **Pallekele** | **62.42** | **266** | LR | LR | 10 52 39.4 | |
| | comp=Z,62nm,19.2s,baz=204,slow=36 | | | | | | |
| **PALK** | **Pallekele** | **62.42** | **266** | P | **P** | **10 25 50.6** | **+0.4** |
| PALK | | | | pmax | pmax | | |
| | comp=Z,32nm,1.2s | | | | | | |
| **KK31** | **Karatay Array** | **62.51** | **308** | P | **P** | **10 25 51.3** | **+0.9** |
| KK31 | | | | IAmb | IAmb | 10 26 09.7 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **62.51** | **308** | P | **P** | **10 25 51.3** | **+0.9** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **62.51** | **308** | P | **P** | **10 25 51.2** | **+0.8** |
| **KKAR** | **Karatay Array** | **62.51** | **308** | P | **P** | **10 25 51.2** | **+0.8** |
| **TABL** | **Table Mountain** | **62.74** | **33** | P | **P** | **10 25 50.7** | **-1.2** |
| **I28M** | **Miner Creek** | **63.42** | **27** | P | **P** | **10 25 56.0** | **-0.1** |
| I28M | | | | IAmb | IAmb | 10 25 58.4 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **M29M** | **Somme Creek** | **64.03** | **30** | P | **P** | **10 26 01.8** | **+1.5** |
| M29M | | | | IAmb | IAmb | 10 26 03.1 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **CHGR** | **Chuyangaron** | **64.18** | **303** | P | **P** | **10 26 02.3** | **+0.7** |
| **CHGR** | **Chuyangaron** | **64.18** | **303** | P | **P** | **10 26 02.3** | **+0.7** |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,41nm,0.9s | | | | | | |
| **SIMJ** | **Simiganj** | **64.29** | **303** | P | **P** | **10 26 03.2** | **+0.8** |
| **N30M** | **Aishikik Lake** | **64.71** | **31** | P | **P** | **10 26 06.2** | **+1.6** |
| N30M | | | | IAmb | IAmb | 10 26 07.5 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **KBL** | **Kabul** | **65.05** | **299** | P | **P** | **10 26 08.2** | **+0.7** |
| **KBL** | **Kabul** | **65.05** | **299** | P | **P** | **10 26 08.2** | **+0.7** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,26nm,1.0s | | | | | | |
| **ARU** | **Arti** | **68.33** | **323** | P | **P** | **10 26 27.0** | **-0.8** |
| ARU | | | | IAmb | IAmb | 10 26 45.1 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **ARU** | **Arti** | **68.33** | **323** | *c i* P | **P** | **10 26 28.0** | **+0.2** |
| ARU | | | | | | 10 26 51.4 | |
| ARU | | | | | | 10 28 55.5 | |
| ARU | | | | S | **S** | **10 35 33.0** | **+5.3** |
| ARU | | | | SS | **SS** | **10 39 50.7** | **+0.1** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,18nm,1.4s | | | | | | |
| **DLBC** | **Dease Lake** | **68.56** | **34** | P | **P** | **10 26 31.0** | **+1.8** |
| DLBC | | | | IAmb | IAmb | 10 27 02.4 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.80** | **316** | P | **P** | **10 26 31.0** | **+0.1** |
| **RTZ** | **Ruatahuna** | **68.98** | **153** | P | **P** | **10 26 32.2** | **+0.2** |
| **AKTO** | **Aktyubinsk** | **69.78** | **317** | P | **P** | **10 26 36.7** | **-0.2** |
| | comp=Z,0.6nm,0.3s,baz=73,slow=14,SNR=2.5 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **KIRV** | **Kirov** | **72.66** | **327** | *e* P | **P** | **10 26 54.4** | **+0.3** |
| **YKA** | **Yellowknife Ar** | **74.85** | **28** | P | **P** | **10 27 07.7** | **+0.8** |
| | comp=Z,2.1nm,0.8s,baz=298,slow=6.0,SNR=16 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.85** | **28** | *i* P | **P** | **10 27 08.0** | **+1.1** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **B08A** | **Colville Reser** | **77.38** | **43** | | **P** | **10 27 22.0** | **+0.3** |
| B08A | | | | IAmb | IAmb | 10 27 23.9 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.62** | **342** | P | **P** | **10 27 23.7** | **+1.1** |
| **ARCES** | **ARCESS Array B** | **77.62** | **342** | P | **P** | **10 27 23.4** | **+0.8** |
| | comp=Z,7.0nm,0.8s,baz=58,slow=9.1,SNR=12 | | | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.62** | **342** | P | **P** | **10 27 23.7** | **+1.1** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **J05D** | **Fort Rock, OR** | **77.92** | **48** | P | **P** | **10 27 26.5** | **+1.6** |
| J05D | | | | IAmb | IAmb | 10 27 27.8 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **PINE** | **Pine Mountain** | **77.94** | **48** | | **P** | **10 27 26.3** | **+1.2** |
| PINE | | | | IAmb | IAmb | 10 27 28.1 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **D08A** | **Wollman Farm,** | **78.11** | **44** | P | **P** | **10 27 26.2** | **+0.5** |
| D08A | | | | IAmb | IAmb | 10 27 28.0 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **NEW** | **Newport** | **78.79** | **42** | P | **P** | **10 27 29.6** | **+0.1** |
| **NEW** | **Newport** | **78.79** | **42** | LR | LR | 10 55 18.7 | |
| | comp=Z,39nm,21.8s,baz=304,slow=30 | | | | | | |
| **NEW** | **Newport** | **78.79** | **42** | P | **P** | **10 27 29.6** | **+0.1** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **BMO** | **Blue Mountains** | **79.98** | **46** | | **P** | **10 27 36.6** | **+0.5** |
| **BMO** | **Blue Mountains** | **79.98** | **46** | P | **P** | **10 27 36.6** | **+0.5** |
| BMO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **80.35** | **323** | *e* P | **P** | **10 27 36.6** | **-1.2** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **OBN** | **Obninsk** | **80.49** | **326** | *e* P | **P** | **10 27 38.2** | **-0.3** |
| OBN | | | | *e* | | 10 30 40.5 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **VSR** | **Storozhevoye** | **80.82** | **322** | *e* P | **P** | **10 27 38.7** | **-1.7** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **MFID** | **Camas Ranch** | **81.52** | **46** | P | **P** | **10 27 45.4** | **+1.0** |
| **KBZ** | **Khabaz** | **81.67** | **314** | P | **P** | **10 27 45.8** | **+0.8** |
| | comp=Z,8.8nm,0.8s,baz=101,slow=3.9,SNR=14 | | | | | | |
| KBZ | | | | LR | LR | 11 07 59.3 | |
| | comp=Z,62nm,19.8s,baz=54,slow=39 | | | | | | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **81.67** | **314** | *c i* P | **P** | **10 27 45.6** | **+0.6** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **KVN** | **Kaiserville** | **81.69** | **51** | P | **P** | **10 27 46.6** | **+1.1** |
| **KVN** | **Kaiserville** | **81.69** | **51** | P | **P** | **10 27 46.6** | **+1.1** |
| KVN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **KIV** | **Kislovodsk** | **81.72** | **314** | *e* P | **P** | **10 27 43.7** | **-1.7** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,70nm,19.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.78** | **52** | P | **P** | **10 27 47.5** | **+1.4** |
| **NVAR** | **Mina Array Bea** | **81.78** | **52** | P | **P** | **10 27 47.1** | **+1.0** |
| | comp=Z,1.8nm,0.8s,baz=270,slow=5.4,SNR=19 | | | | | | |
| NVAR | | | | LR | LR | 10 58 38.5 | |
| | comp=Z,62nm,19.6s,baz=288,slow=32 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **82.01** | **335** | P | **P** | **10 27 45.6** | **-0.9** |
| | comp=Z,1.7nm,0.6s,baz=64,slow=6.3,SNR=6.8 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **82.01** | **335** | *i* P | **P** | **10 27 46.2** | **-0.3** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **HEL** | **Helsinki** | **83.19** | **334** | P | **P** | **10 27 55.1** | **+2.5** |
| HEL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **R11B** | **Troy Canyon, C** | **83.77** | **51** | P | **P** | **10 27 56.6** | **+0.3** |
| **GWY** | **Greenwater Val** | **83.87** | **53** | P | **P** | **10 27 57.7** | **+0.8** |
| GWY | | | | IAmb | IAmb | 10 28 15.1 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| **IMW** | **Indian Meadow** | **84.52** | **44** | IAmb | IAmb | 10 28 03.0 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **RLMT** | **Red Lodge** | **85.02** | **43** | IAmb | IAmb | 10 28 05.3 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.09** | **56** | LR | LR | 11 03 14.2 | |
| | comp=Z,45nm,18.8s,baz=274,slow=34 | | | | | | |
| **HWUT** | **Hardware Ranch** | **85.14** | **47** | P | **P** | **10 28 02.4** | **-0.9** |
| HWUT | | | | IAmb | IAmb | 10 28 05.5 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **CCUT** | **Cedar City** | **85.70** | **51** | P | **P** | **10 28 06.5** | **+0.4** |
| **PDAR** | **Pinedale Array** | **85.94** | **45** | P | **P** | **10 28 06.4** | **-0.9** |
| **PDAR** | **Pinedale Array** | **85.94** | **45** | P | **P** | **10 28 07.2** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=252,slow=2.6,SNR=6.9 | | | | | | |
| PDAR | | | | LR | LR | 11 01 42.7 | |
| | comp=Z,30nm,20.2s,baz=312,slow=32 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **LCMT** | **Little Creek M** | **86.02** | **51** | P | **P** | **10 28 07.4** | **-0.2** |
| **MSU** | **Marysvale** | **86.11** | **50** | P | **P** | **10 28 07.9** | **-0.3** |
| **MSU** | **Marysvale** | **86.11** | **50** | P | **P** | **10 28 07.9** | **-0.3** |
| **KNB** | **Kanab** | **86.32** | **51** | IAmb | IAmb | 10 28 11.8 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **86.55** | **325** | P | **P** | **10 28 08.2** | **-1.5** |
| | comp=Z,0.9nm,0.4s,baz=52,slow=5.0,SNR=5.0 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **86.55** | **325** | *e* P | **P** | **10 28 11.1** | **+1.3** |
| **RDMU** | **Red Mountain** | **86.96** | **47** | IAmb | IAmb | 10 28 14.3 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **SRU** | **San Rafael Swe** | **86.99** | **49** | IAmb | IAmb | 10 28 53.0 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.69** | **339** | P | **P** | **10 28 14.0** | **-1.1** |
| | comp=Z,5.5nm,1.1s,baz=44,slow=5.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **87.69** | **339** | P | **P** | **10 28 14.1** | **-1.1** |
| | comp=Z,1.9nm,0.9s,baz=47,slow=4.8,SNR=4.1 | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **RAYN** | **Ar Rayn** | **88.01** | **295** | P | **P** | **10 28 17.9** | **+0.5** |
| **RAYN** | **Ar Rayn** | **88.01** | **295** | P | **P** | **10 28 17.9** | **+0.5** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| **PV23** | **Carpenter Ridg** | **88.34** | **49** | P | **P** | **10 28 20.1** | **+1.0** |
| **PV14** | **Lion Creek, Pa** | **88.37** | **49** | P | **P** | **10 28 19.2** | **+0.1** |
| PV14 | | | | IAmb | IAmb | 10 28 21.1 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **89.39** | **6** | LR | LR | 11 09 28.5 | |
| | comp=Z,23nm,20.2s,baz=351,slow=36 | | | | | | |
| **BR131** | **Keskin Array S** | **89.66** | **314** | *de* P | **P** | **10 28 24.0** | **-1.0** |
| **BRTR** | **Keskin Array B** | **89.66** | **314** | P | **P** | **10 28 24.4** | **-0.6** |
| **BRTR** | **Keskin Array B** | **89.66** | **314** | P | **P** | **10 28 23.9** | **-1.0** |
| | comp=Z,1.8nm,0.8s,baz=88,slow=4.3,SNR=9.6 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **89.66** | **314** | *i* P | **P** | **10 28 24.0** | **-1.0** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **FRB** | **Frobisher Bay** | **89.67** | **14** | LR | LR | 11 14 55.5 | |
| | comp=Z,43nm,18.3s,baz=3.0,slow=40 | | | | | | |
| **BURAR** | **Bucovina Array** | **90.47** | **324** | P | **P** | **10 28 28.5** | **0.0** |
| **ANMO** | **Albuquerque** | **91.84** | **51** | LR | LR | 11 04 47.8 | |
| | comp=Z,39nm,19.6s,baz=48,slow=32 | | | | | | |
| **ANMO** | **Albuquerque** | **91.84** | **51** | *e* P | **P** | **10 28 36.3** | **+0.9** |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **VRAC** | **Vranov** | **93.83** | **328** | LR | LR | 11 14 20.3 | |
| | comp=Z,51nm,19.4s,baz=48,slow=38 | | | | | | |
| **SCHQ** | **Schefferville** | **97.94** | **17** | LR | LR | 11 15 31.2 | |
| | comp=Z,47nm,20.3s,baz=90,slow=37 | | | | | | |
| **BELA** | **Belgrano 2** | **125.31** | **180** | PKPdf | **PKPdf** | **10 34 26.3** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **128.16** | **310** | PKP | **PKPdf** | **10 34 33.6** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=35,slow=2.6,SNR=2.9 | | | | | | |
| **LL02** | **Futaleuf** | **144.56** | **133** | PKPdf | PKPbc | 10 35 03.2 | +1.3 |
| **LL04** | **Puerto Octay** | **144.98** | **129** | PKPdf | **PKPab** | **10 35 03.8** | **+0.5** |
| **BOAV** | **Boa Vista** | **145.24** | **46** | | **PKPbc** | **10 35 05.0** | **+0.1** |
| **GO06** | **Currerehue** | **146.08** | **127** | PKPbc | **PKPdf** | **10 35 05.7** | **-0.4** |
| **PLCA** | **Paso Flores** | **146.36** | **129** | PKPbc | **PKPbc** | **10 35 08.9** | **+1.1** |
| **PLCA** | **Paso Flores** | **146.36** | **129** | PKPbc | **PKPbc** | **10 35 08.5** | **+0.8** |
| | comp=Z,7.0nm,0.9s,baz=236,slow=3.6,SNR=12 | | | | | | |
| **PLCA** | **Paso Flores** | **146.36** | **129** | PKP2 | **PKPbc** | **10 35 08.9** | **+1.1** |
| **BI02** | **San Fabin de** | **147.04** | **122** | PKPbc | **PKPbc** | **10 35 10.3** | **+0.5** |
| **ML02** | **Panimavida** | **147.13** | **120** | PKPbc | **PKPbc** | **10 35 11.4** | **+1.4** |
| **VA05** | **Santo Domingo** | **147.37** | **116** | PKPbc | **PKPbc** | **10 35 10.4** | **-0.3** |
| **BO02** | **Sierra Bellavi** | **147.84** | **119** | PKPbc | **PKPbc** | **10 35 12.6** | **+0.5** |
| **ETMB** | **Extrema** | **148.41** | **70** | PKPbc | **PKPbc** | **10 35 14.0** | **-0.1** |
| **AC05** | **El Transito** | **149.00** | **108** | PKPbc | **PKPbc** | **10 35 15.1** | **-0.2** |
| **LPAZ** | **La Paz** | **149.26** | **83** | PKPbc | **PKPbc** | **10 35 16.1** | **-0.7** |
| **LPAZ** | **La Paz** | **149.26** | **83** | PKPbc | **PKPbc** | **10 35 18.3** | **+1.4** |
| | comp=Z,1.6nm,0.6s,baz=314,slow=2.2,SNR=8.3 | | | | | | |
| **LPAZ** | **La Paz** | **149.26** | **83** | PKP2 | **PKPbc** | **10 35 16.2** | **-0.7** |
| **LVC** | **Limon Verde** | **149.95** | **95** | PKPbc | **PKPbc** | **10 35 17.2** | **-0.9** |
| **LVC** | **Limon Verde** | **149.95** | **95** | PKP2 | **PKPbc** | **10 35 17.3** | **-0.9** |
| **SAML** | **Samuel** | **150.56** | **66** | | **PKPbc** | **10 35 19.4** | **0.0** |
| **SAML** | **Samuel** | **150.56** | **66** | PKIKP | **PKPbc** | **10 35 19.4** | **0.0** |
| **TRQA** | **Tornquist** | **153.51** | **130** | PKPdf | **PKPdf** | **10 35 16.2** | **-1.6** |
| TRQA | | | | PKPab | **PKPab** | **10 35 37.8** | **0.0** |
| **TRQA** | **Tornquist** | **153.51** | **130** | PKIKP | **PKPdf** | **10 35 16.2** | **-1.6** |
| **ASCN** | **Ascension** | **154.05** | **302** | PKPdf | **PKPdf** | **10 35 17.7** | **-1.5** |
| ASCN | | | | PKPab | **PKPab** | **10 35 38.9** | **-1.7** |
| **TRIS** | **Tristan da Cun** | **155.22** | **231** | PKPdf | **PKPdf** | **10 35 18.1** | **-2.0** |
| TRIS | | | | PKPab | **PKPab** | **10 35 45.2** | **+0.1** |
| **BDFB** | **Brasilia** | **166.58** | **58** | PKPdf | **PKPdf** | **10 35 30.6** | **-2.4** |
| BDFB | | | | PKPab | **PKPab** | **10 36 33.4** | **-1.9** |
| **BDFB** | **Brasilia** | **166.58** | **58** | PKIKP | **PKPdf** | **10 35 30.7** | **-2.4** |
| BDFB | | | | | | 10 36 33.4 | |
| **VAO** | **Valinhos** | **170.14** | **91** | PKPdf | **PKPdf** | **10 35 33.2** | **-2.1** |
| VAO | | | | PKPab | **PKPab** | **10 36 50.0** | **-1.0** |

*IDC* ***17*** *10:19:03.5±0.9,22.°91N×142.°91E,h0km,mb3.8/10, mbtmp3.8/13,ML3.4/3,Error ellipse: s-maj=33.5km s-min=17.8km az=77.0*
*NEIC* ***17*** *10:19:03.5±1.1,23.°12N±0.°02×143.°1E±0.°1,h10km±2km, mb4.2/11,Error ellipse: s-maj=22.8km s-min=4.0km az=89.0*

**ISC 17 10:19:04.0±0.7,23.°11N±0.°07×143.°0E±0.°1,h10km,n31, σ2s12/33,mb4.0/17,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **4.03** | **350** | Pn | **Pn** | **Pn** | **10 20 05.4** | **-0.4** |
| **JCJ** | **Chichijima** | **4.03** | **350** | Pn | **Pn** | **Pn** | **10 20 09.1** | **+3.3** |
| | 4.9nm,0.3s,baz=281,slow=17,SNR=1.1 | | | | | | | |
| JCJ | | | | Sn | **Sn** | **Sn** | **10 20 47.1** | **-5.9** |
| | 3.0nm,0.3s,baz=287,slow=23,SNR=1.5 | | | | | | | |
| | 63nm,0.7s | | | | | | | |
| **JMZ** | **Minamidaito 2** | **11.01** | **287** | Pn | **Pn** | **Pn** | **10 21 43.0** | **+1.3** |
| **MJAR** | **Matsushiro Arr** | **14.00** | **344** | Pn | **P** | **P** | **10 22 27.5** | **-3.1** |
| | baz=160,slow=12,SNR=2.3 | | | | | | | |
| | 1.1nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **19.27** | **321** | P | | **Pn** | **10 23 32.5** | **+2.8** |
| | 0.2nm,0.3s,baz=123,slow=11,SNR=2.8 | | | | | | | |
| | 1.1nm,0.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.88** | **339** | P | **P** | **P** | **10 24 04.3** | **-3.4** |
| **COEN** | **Coen** | **36.84** | **180** | P | **P** | **P** | **10 26 11.3** | **-1.3** |
| COEN | | | | IAmb | IAmb | IAmb | 10 26 34.8 | |
| | comp=Z,9.2nm,1.3s | | | | | | | |
| **MA2** | **Magadan** | **36.85** | **7** | P | **P** | **P** | **10 26 10.8** | **-1.5** |
| MA2 | | | | IAmb | IAmb | IAmb | 10 26 23.0 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **SOEI** | **Soe** | **37.44** | **211** | P | **P** | **P** | **10 26 16.7** | **-1.2** |
| **SONM** | **Songino Array** | **38.12** | **319** | P | **P** | **P** | **10 26 24.1** | **+0.8** |
| **SONM** | **Songino Array** | **38.12** | **319** | P | **P** | **P** | **10 26 25.8** | **+2.5** |
| | comp=Z,0.5nm,0.8s,baz=125,slow=9.0,SNR=2.1 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **CTAO** | **Charters Tower** | **43.06** | **175** | P | **P** | **P** | **10 27 02.7** | **-1.5** |
| CTAO | | | | IAmb | IAmb | IAmb | 10 27 05.1 | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.43** | **192** | P | **P** | **P** | **10 27 06.9** | **-0.3** |
| WB0 | | | | IAmb | IAmb | IAmb | 10 27 22.3 | |
| | comp=Z,4.3nm,1.2s | | | | | | | |
| **WR0** | **Warramunga Arr** | **43.59** | **192** | P | **P** | **P** | **10 27 07.4** | **-1.1** |
| WR0 | | | | IAmb | IAmb | IAmb | 10 27 29.6 | |
| | comp=Z,6.3nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.61** | **192** | P | **P** | **P** | **10 27 09.1** | **+0.4** |
| WB2 | | | | IAmb | IAmb | IAmb | 10 27 24.0 | |
| | comp=Z,4.4nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.61** | **192** | P | **P** | **P** | **10 27 08.0** | **-0.7** |
| **WRA** | **Warramunga Arr** | **43.61** | **192** | P | **P** | **P** | **10 27 09.2** | **+0.5** |
| | comp=Z,0.8nm,0.7s,baz=16,slow=9.3,SNR=8.6 | | | | | | | |
| WRA | | | | PcP | **PcP** | **PcP** | **10 28 56.3** | **0.0** |
| | comp=Z,0.3nm,0.7s,baz=10,slow=4.1,SNR=2.0 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **47.32** | **191** | P | **P** | **P** | **10 27 36.8** | **-1.4** |
| AS31 | | | | IAmb | IAmb | IAmb | 10 28 05.7 | |
| | comp=Z,1.3nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.32** | **191** | P | **P** | **P** | **10 27 34.9** | **-3.2** |
| **ASAR** | **Alice Springs** | **47.32** | **191** | P | **P** | **P** | **10 27 37.3** | **-0.8** |
| | comp=Z,0.5nm,0.7s,baz=11,slow=9.8,SNR=5.1 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **49.79** | **209** | P | **P** | **P** | **10 27 56.2** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **52.97** | **321** | P | **P** | **P** | **10 28 22.1** | **+1.4** |
| | comp=Z,1.0nm,0.5s,baz=108,slow=9.4,SNR=3.1 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **53.59** | **312** | P | **P** | **P** | **10 28 25.1** | **-0.2** |
| **MKAR** | **Makanchi Array** | **53.59** | **312** | P | **P** | **P** | **10 28 26.1** | **+0.8** |
| **MKAR** | **Makanchi Array** | **53.59** | **312** | P | **P** | **P** | **10 28 27.4** | **+2.0** |
| | comp=Z,0.9nm,0.7s,baz=87,slow=7.5,SNR=3.6 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.35** | **316** | P | **P** | **P** | **10 28 46.4** | **+1.2** |
| | comp=Z,0.7nm,0.6s,baz=91,slow=8.2,SNR=3.0 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.89** | **27** | P | **P** | **P** | **10 29 19.6** | **+3.0** |
| | comp=Z,0.5nm,0.8s,baz=257,slow=8.0,SNR=4.3 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.46** | **319** | P | **P** | **P** | **10 29 22.5** | **+1.8** |
| | comp=Z,2.6nm,0.6s,baz=98,slow=8.9,SNR=6.4 | | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.44** | **52** | P | **P** | **P** | **10 31 30.0** | **+2.8** |
| | comp=Z,0.4nm,0.8s,baz=260,slow=5.4,SNR=2.2 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **86.23** | **324** | P | **P** | **P** | **10 31 46.4** | **+0.6** |
| | comp=Z,0.5nm,0.4s,baz=74,slow=4.0,SNR=2.2 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **PLCA** | **Paso Flores** | **146.84** | **130** | PKPbc | **PKPdf** | **PKPdf** | **10 38 44.5** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=288,slow=3.2,SNR=1.4 | | | | | | | |

*IDC* ***17*** *10:27:17.8±1.0,30.°25S×71.°65W,h0km,mb3.8/3, mbtmp3.7/7,ML3.6/4,MS3.2/3,Error ellipse: s-maj=33.4km s-min=24.8km az=93.0*
*SJA* ***17*** *10:27:19.6±0.9,30.°05S×71.°77W,h10km±3km,ML3.8, MW3.5*
*GUC* ***17*** *10:27:23.8±0.6,30.°14S×71.°59W,h37km±1km,ML3.7*
*NEIC* ***17*** *10:27:24.1±2.0,30.°09S±0.°04×71.°58W±0.°07,h35km±2km, mb4.4/14,ML3.7(GUC),Error ellipse: s-maj=10.4km s-min=6.3km az=96.0*

**ISC 17 10:27:19.7±1.5,30.°10S±0.°02×71.°80W±0.°04,h12km±10km, n125,σ2s07/168,mb4.3/10,2C-3D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.52** | **70** | Pg | **Pn** | **Pn** | **10 27 32.5** | **-0.4** |
| CO05 | | | | Sg | **Sg** | **Sg** | **10 27 38.3** | **+1.5** |
| **CO05** | **La Serena** | **0.52** | **70** | *e* P | **Pn** | **Pn** | **10 27 32.5** | **-0.4** |
| CO05 | | | | *i* S | **Sg** | **Sg** | **10 27 38.3** | **+1.5** |
| CO05 | | | | IAML | | | 10 27 39.4 | |
| | comp=E,28μm,0.4s | | | | | | | |
| **CO06** | **Fray Jorge** | **0.59** | **166** | | | **Pn** | **10 27 34.5** | **+0.5** |
| CO06 | | | | | | **Sn** | **10 27 42.6** | **-1.0** |
| **CO06** | **Fray Jorge** | **0.59** | **166** | *e* P | | **Pn** | **10 27 34.5** | **+0.5** |
| CO06 | | | | *e* S | | **Sn** | **10 27 42.3** | **-1.3** |
| CO06 | | | | IAML | | | 10 27 43.0 | |
| | comp=E,4μm,0.3s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.87** | **95** | | | **Pb** | **10 27 37.2** | **+0.3** |
| GO04 | | | | | | **Sb** | **10 27 46.8** | **-1.8** |
| **GO04** | **Tololo Observa** | **0.87** | **95** | *e* P | | **Pb** | **10 27 36.5** | **-0.4** |
| GO04 | | | | IAML | | | 10 27 52.4 | |
| | comp=Z,6μm,0.5s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.87** | **95** | *e* P | | **Pb** | **10 27 37.2** | **+0.3** |
| GO04 | | | | *e* S | | **Sb** | **10 27 46.6** | **-2.1** |
| **CO03** | **El Pedregal** | **1.21** | **128** | | | **Pn** | **10 27 42.4** | **-0.2** |
| CO03 | | | | Sn | | **Sb** | **10 27 57.1** | **-1.2** |
| **CO03** | **El Pedregal** | **1.21** | **128** | *e* P | | **Pn** | **10 27 42.5** | **-0.1** |
| CO03 | | | | *e* S | | **Sg** | **10 28 00.3** | **+1.4** |
| **CO03** | **El Pedregal** | **1.21** | **128** | *e* P | | **Pn** | **10 27 42.4** | **-0.2** |
| CO03 | | | | *e* S | | **Sb** | **10 27 56.7** | **-1.7** |
| **CO02** | **Combarbal** | **1.30** | **148** | | | **Pb** | **10 27 44.7** | **+0.5** |
| CO02 | | | | Sn | | **Sn** | **10 28 01.5** | **+0.2** |
| **CO02** | **Combarbal** | **1.30** | **148** | *e* P | | **Pn** | **10 27 44.0** | **+0.2** |
| CO02 | | | | IAML | | | 10 28 01.4 | |
| | comp=Z,1μm,0.8s | | | | | | | |
| CO02 | | | | *e* S | | **Sn** | **10 28 01.4** | **+0.2** |
| **CO02** | **Combarbal** | **1.30** | **148** | *e* P | | **Pn** | **10 27 44.5** | **+0.7** |
| CO02 | | | | *e* S | | **Sb** | **10 27 59.8** | **-1.2** |
| CO02 | | | | IAML | | | 10 28 03.0 | |
| | comp=N,5μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **1.44** | **42** | Pn | | **Pn** | **10 27 46.8** | **+0.9** |
| **LCO** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FCH | | | | IAML | | | 10 29 09.8 | |
| | comp=N,65nm,0.2s | | | | | | | |
| **MT16** | **CCHEN** | **3.50** | **162** | Pn | | **Pn** | **10 28 15.8** | **+1.8** |
| **ASAL** | **Salagasta** | **3.55** | **135** | *e*P | | **Pn** | **10 28 14.2** | **-0.6** |
| ASAL | | | | *e*P | | **Pb** | **10 28 18.9** | **-3.6** |
| ASAL | | | | *e*S | | **Sb** | **10 29 04.7** | **-1.0** |
| ASAL | | | | IAML | | | 10 29 24.7 | |
| | comp=Z,84nm,1.3s | | | | | | | |
| **VA05** | **Santo Domingo** | **3.56** | **177** | Pn | | **Pn** | **10 28 14.1** | **-0.6** |
| **MT03** | **Universidad Ad** | **3.56** | **162** | Pn | | **Pn** | **10 28 16.9** | **+2.0** |
| **MT04** | **Ro Olivares** | **3.59** | **157** | *e*P | | **Pn** | **10 28 18.6** | **+3.1** |
| MT04 | | | | *e*S | | **Sb** | **10 29 03.2** | **-3.8** |
| MT04 | | | | IAML | | | 10 29 12.5 | |
| | comp=Z,97nm,0.9s | | | | | | | |
| **MT04** | **Ro Olivares** | **3.59** | **157** | *e*P | | **Pn** | **10 28 19.2** | **+3.7** |
| MT04 | | | | *i* S | | **Sn** | **10 28 58.4** | **+0.5** |
| MT04 | | | | IAML | | | 10 29 11.4 | |
| | comp=E,109nm,0.5s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **3.67** | **156** | | | **Pn** | **10 28 17.8** | **+1.3** |
| **MT08** | **Bocatoma Ro** | **3.67** | **156** | *e*P | | **Pn** | **10 28 20.8** | **+4.2** |
| MT08 | | | | *i* S | | **Sn** | **10 29 03.4** | **+3.6** |
| **MT09** | **Talagante** | **3.73** | **170** | | | **Pn** | **10 28 19.4** | **+2.1** |
| **MT09** | **Talagante** | **3.73** | **170** | *e*P | | **Pn** | **10 28 19.4** | **+2.1** |
| MT09 | | | | *i* S | | **Sn** | **10 29 02.5** | **+1.2** |
| **MT01** | **Popeta** | **3.79** | **173** | | | **Pn** | **10 28 20.7** | **+2.8** |
| **MT01** | **Popeta** | **3.79** | **173** | ⇓*e*P | | **Pn** | **10 28 20.7** | **+2.8** |
| **AVFE** | **Valle Fertil** | **3.80** | **100** | *e*P | | **Pn** | **10 28 20.6** | **+2.5** |
| AVFE | | | | *e*S | | **Sn** | **10 29 04.7** | **+1.9** |
| AVFE | | | | *e*S | | **Sb** | **10 29 05.7** | **-7.0** |
| AVFE | | | | IAML | | | 10 29 21.1 | |
| | comp=Z,182nm,0.8s | | | | | | | |
| **MT13** | **San Alfonso** | **3.86** | **161** | Pn | | **Pn** | **10 28 20.2** | **+1.2** |
| **LMEL** | **Las Melosas** | **3.98** | **160** | | | **Pn** | **10 28 23.9** | **+3.2** |
| **LMEL** | **Las Melosas** | **3.98** | **160** | *e*P | | **Pn** | **10 28 24.2** | **+3.5** |
| LMEL | | | | *e*S | | **Sn** | **10 29 12.7** | **+5.3** |
| LMEL | | | | IAML | | | 10 29 23.6 | |
| | comp=Z,114nm,0.8s | | | | | | | |
| **LMEL** | **Las Melosas** | **3.98** | **160** | *e*P | | **Pn** | **10 28 23.1** | **+2.4** |
| LMEL | | | | *e*S | | **Sn** | **10 29 09.3** | **+1.9** |
| **BO04** | **La Punta** | **4.01** | **166** | | | **Pn** | **10 28 22.2** | **+1.1** |
| **BO04** | **La Punta** | **4.01** | **166** | *e*P | | **Pn** | **10 28 23.1** | **+2.0** |
| BO04 | | | | *i* S | | **Sn** | **10 29 08.2** | **+0.2** |
| **AC01** | **Pan de Azucar** | **4.07** | **15** | Pn | | **Pn** | **10 28 21.9** | **0.0** |
| **AC01** | **Pan de Azucar** | **4.07** | **15** | *e*P | | **Pn** | **10 28 21.9** | **0.0** |
| AC01 | | | | IAML | | | 10 29 33.4 | |
| | comp=Z,106nm,0.7s | | | | | | | |
| **AC01** | **Pan de Azucar** | **4.07** | **15** | *e*P | | **Pn** | **10 28 22.0** | **+0.1** |
| **ACLC** | **CERRO LA CRUZ** | **4.27** | **82** | *e*S | | **Sn** | **10 29 17.7** | **+3.2** |
| ACLC | | | | IAML | | | 10 29 26.0 | |
| | comp=Z,176nm,0.7s | | | | | | | |
| **BO01** | **Tunca** | **4.33** | **172** | Pn | | **Pn** | **10 28 29.6** | **+4.3** |
| **BO01** | **Tunca** | **4.33** | **172** | *e*P | | Pn | 10 28 14.2 | -11 |
| BO01 | | | | IAML | | | 10 29 40.4 | |
| | comp=Z,59nm,0.8s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **4.76** | **170** | | | **Pn** | **10 28 33.3** | **+1.9** |
| **BO02** | **Sierra Bellavi** | **4.76** | **170** | *e*P | | **Pn** | **10 28 33.9** | **+2.5** |
| BO02 | | | | *i* S | | **Sn** | **10 29 25.9** | **-0.7** |
| **GO05** | **Huala** | **4.90** | **181** | Pn | | **Pn** | **10 28 34.8** | **+1.5** |
| **GO02** | **Mina Guanaco** | **5.29** | **22** | Pn | | **Pn** | **10 28 39.5** | **+0.6** |
| **PB14** | **IPOC Station P** | **5.59** | **13** | Pn | | **Pn** | **10 28 42.2** | **-0.8** |
| **BI02** | **San Fabin de** | **6.56** | **176** | Pn | | **Pn** | **10 28 57.0** | **+0.8** |
| **H03N1** | **Juan Fernandez** | **6.91** | **239** | Pn | | **Pn** | **10 29 02.5** | **+1.9** |
| | baz=114,slow=19 | | | | | | | |
| H03N1 | | | | Sn | | **Sn** | **10 30 14.9** | **-4.1** |
| | baz=45 | | | | | | | |
| H03N1 | | | | T | | T | 10 36 33.6 | |
| | baz=66,slow=72,SNR=1376 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.93** | **239** | Pn | | **Pn** | **10 29 03.0** | **+2.2** |
| | baz=114,slow=19 | | | | | | | |
| H03N2 | | | | Sn | | **Sn** | **10 30 15.0** | **-4.4** |
| | baz=45 | | | | | | | |
| H03N2 | | | | T | | T | 10 36 34.4 | |
| | baz=66,slow=72,SNR=1086 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.93** | **239** | Pn | | **Pn** | **10 29 03.0** | **+2.1** |
| | baz=114,slow=19 | | | | | | | |
| H03N3 | | | | Sn | | **Sn** | **10 30 14.6** | **-4.9** |
| | baz=45 | | | | | | | |
| H03N3 | | | | T | | T | 10 36 33.1 | |
| | baz=66,slow=72,SNR=870 | | | | | | | |
| **PB04** | **IPOC Station P** | **7.87** | **11** | Pn | | **Pn** | **10 29 14.3** | **+0.1** |
| **LVC** | **Limon Verde** | **7.89** | **20** | Pn | | **Pn** | **10 29 13.7** | **-1.0** |
| **LVC** | **Limon Verde** | **7.89** | **20** | Pn | | **Pn** | **10 29 14.3** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=228,slow=15,SNR=2.5 | | | | | | | |
| LVC | | | | Sn | | **Sn** | **10 30 39.5** | **-4.6** |
| | comp=Z,0.6nm,0.3s,baz=176,slow=20,SNR=1.3 comp=Z,0.9nm,0.3s | | | | | | | |
| **PB09** | **IPOC Station P** | **8.58** | **16** | Pn | | Pn | 10 29 19.6 | -4.3 |
| **TA01** | **Diego Aracena** | **9.60** | **9** | Pn | | **Pn** | **10 29 36.5** | **-1.3** |
| **PLCA** | **Paso Flores** | **10.66** | **175** | Pn | | **Pn** | **10 29 55.3** | **+2.9** |
| **PLCA** | **Paso Flores** | **10.66** | **175** | LR | | LR | 10 33 53.2 | |
| | comp=Z,91nm,18.4s,baz=304,slow=38 | | | | | | | |
| **LL04** | **Puerto Octay** | **10.80** | **182** | Pn | | **Pn** | **10 29 55.5** | **+1.3** |
| **LL03** | **Petrohue** | **11.03** | **182** | Pn | | **Pn** | **10 29 58.2** | **+0.9** |
| **TRQA** | **Tornquist** | **11.37** | **137** | | | **Pn** | **10 30 03.9** | **+2.0** |
| **CPUP** | **Villa Florida** | **13.30** | **77** | Pn | | **Pn** | **10 30 26.8** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=229,slow=9.3,SNR=1.9 | | | | | | | |
| CPUP | | | | Sn | | **Sn** | **10 32 56.2** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=192,slow=7.3,SNR=4.0 | | | | | | | |
| CPUP | | | | LR | | LR | 10 36 07.7 | |
| | comp=Z,40nm,18.6s,baz=223,slow=40 comp=Z,0.6nm,0.5s | | | | | | | |
| **LPAZ** | **La Paz** | **14.15** | **15** | Pn | | **Pn** | **10 30 42.8** | **+2.2** |
| | comp=Z,0.1nm,0.3s,baz=184,slow=4.2,SNR=1.5 comp=Z,0.5nm,0.5s | | | | | | | |
| **SIV** | **San Ignacio** | **17.14** | **37** | Pn | | **Pn** | **10 31 19.6** | **+0.3** |
| | baz=204,slow=12,SNR=8.0 comp=Z,2.3nm,0.8s | | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **22.27** | **358** | P | | **P** | **10 32 15.0** | **-1.8** |
| CZSB | | | | IAmb | | IAmb | 10 32 21.0 | |
| | comp=Z,8.5nm,1.0s | | | | | | | |
| **SAML** | **Samuel** | **22.53** | **23** | P | | **P** | **10 32 17.0** | **-2.6** |
| **SPB** | **Sao Paulo** | **22.66** | **79** | P | | **P** | **10 32 19.7** | **-1.2** |
| SPB | | | | IAmb | | IAmb | 10 32 44.0 | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **MG04** | **Isla Riesco** | **22.74** | **180** | P | | **P** | **10 32 21.2** | **-0.3** |
| MG04 | | | | IAmb | | IAmb | 10 32 45.0 | |
| | comp=Z,181nm,1.3s | | | | | | | |
| **BOAV** | **Boa Vista** | **34.06** | **20** | P | | **P** | **10 34 04.4** | **+0.4** |
| **PAYG** | **Puerto Ayora** | **34.14** | **326** | P | | **P** | **10 34 06.7** | **+2.0** |
| **ORCD** | **Orcadas** | **35.54** | **157** | P | | **P** | **10 34 17.2** | **+0.9** |
| **SMAI** | **San Martin Ant** | **38.17** | **177** | P | | **P** | **10 34 39.6** | **+1.0** |
| SMAI | | | | IAmb | | IAmb | 10 34 51.4 | |
| | comp=Z,5.8nm,1.4s | | | | | | | |
| **BAUV** | **El Baul** | **38.98** | **6** | P | | **P** | **10 34 45.6** | **-0.3** |
| BAUV | | | | IAmb | | IAmb | 10 34 48.0 | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **EMPR** | **Esperanza - Ma** | **48.56** | **7** | P | | **P** | **10 36 02.8** | **-0.1** |
| **SNAA** | **Sanae** | **55.13** | **159** | P | | **P** | **10 36 51.3** | **-0.3** |
| SNAA | | | | IAmb | | IAmb | 10 36 52.9 | |
| | comp=Z,8.2nm,1.5s | | | | | | | |
| **SNAA** | **Sanae** | **55.13** | **159** | P | | **P** | **10 36 50.6** | **-0.9** |
| | comp=Z,1.4nm,0.7s,baz=274,slow=8.1,SNR=14 comp=Z,1.4nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.13** | **180** | P | | **P** | **10 37 28.1** | **+1.3** |
| QSPA | | | | IAmb | | IAmb | 10 37 40.6 | |
| | comp=Z,3.1nm,1.3s | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.45** | **330** | P | | **P** | **10 38 10.7** | **+1.6** |
| **TXAR** | **Lajitas Array** | **66.45** | **330** | P | | **P** | **10 38 10.8** | **+1.7** |
| | comp=Z,0.3nm,0.7s,baz=150,slow=9.3,SNR=5.8 comp=Z,0.3nm,0.7s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **66.45** | **330** | P | | **P** | **10 38 11.5** | **+2.4** |
| **LCAR** | **Lake Charles** | **68.28** | **343** | P | | **P** | **10 38 21.9** | **+1.5** |
| LCAR | | | | IAmb | | IAmb | 10 38 36.2 | |
| | comp=Z,4.1nm,1.4s | | | | | | | |
| **SADO** | **Sadowa** | **74.81** | **355** | LR | | LR | 11 14 58.2 | |
| | comp=Z,34nm,19.6s,baz=3.0,slow=38 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.70** | **70** | P | | **P** | **10 39 42.7** | **-1.0** |
| | comp=Z,0.5nm,0.5s,baz=279,slow=6.8,SNR=5.8 comp=Z,0.5nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.25** | **210** | PKP | | **PKPdf** | **10 46 17.3** | **-1.7** |
| | comp=Z,0.3nm,0.7s,baz=160,slow=1.6,SNR=5.4 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.94** | **272** | T | | T | 13 05 06.2 | |
| | baz=115,slow=75,SNR=18 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.96** | **272** | T | | T | 13 05 07.4 | |
| | baz=115,slow=75,SNR=21 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.96** | **272** | T | | T | 13 05 14.3 | |
| | baz=115,slow=75,SNR=21 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **149.80** | **39** | PKPbc | | **PKPbc** | **10 47 09.3** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=295,slow=3.2,SNR=4.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.77** | **29** | PKPbc | | **PKiKP** | **10 47 12.0** | **-0.1** |
| | comp=Z,1.5nm,0.4s,baz=301,slow=3.7,SNR=7.3 | | | | | | | |

*SOME **17** 10:28:15.4,43.°67N×69.°60E*

*KRNET **17** 10:28:17.3±0.1,43.°51N×69.°60E,mb2.2*
*NNC **17** 10:28:18.9±1.5,43.°63N×69.°84E,h0km,mb3.5,mpv2.8, Error ellipse: s-maj=7.8km s-min=5.2km az=123.0, Suspected Mining explosion.*

**ISC 17 10:28:22.3±2.4,43.50N±0.08×70.0E±0.1,h0km,n10, σ0s54/16,7C-5D,Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **0.55** | **136** | ⇓P | **Pg** | **10 28 32.5** | **-0.2** |
| | 1.2nm,0.6s,baz=317,slow=16,SNR=25 | | | | | | |
| KK31 | | | | ⇑S | **Sb** | **10 28 42.9** | **-0.3** |
| | 103nm,0.9s,baz=318,slow=31,SNR=41 | | | | | | |
| **KKAR** | **Karatay Array** | **0.55** | **136** | ⇑*i*P | **Pg** | **10 28 32.3** | **-0.4** |
| | baz=21 | | | | | | |
| KKAR | | | | ⇑*i*S | **Sb** | **10 28 43.2** | **0.0** |
| | baz=21 | | | | | | |
| **MNAS** | **Manas** | **2.10** | **118** | ⇑*e*P | **Pn** | **10 28 59.4** | **+0.5** |
| | baz=15 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sg** | **10 29 30.1** | **+0.3** |
| | baz=15 | | | | | | |
| **TRKS** | **Terek-Say** | **2.14** | **156** | ⇑*e*P | **Pn** | **10 28 59.2** | **-0.2** |
| | baz=50 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sb** | **10 29 29.9** | **+0.7** |
| | baz=50 | | | | | | |
| **ARK** | **Arkit** | **2.24** | **139** | ⇓*e*P | **Pn** | **10 29 00.3** | **-0.4** |
| | baz=34 | | | | | | |
| ARK | | | | ⇓*e*S | **Sb** | **10 29 32.0** | **+0.1** |
| | baz=34 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.90** | **105** | ⇓*e*P | **Pn** | **10 29 10.6** | **+0.8** |
| | baz=4.0 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sb** | **10 29 49.6** | **-1.3** |
| | baz=4.0 | | | | | | |
| **BTLS** | **Baital** | **3.29** | **61** | Pg | **Pb** | **10 29 21.5** | **-0.1** |
| | 6.0nm,0.7s | | | | | | |
| BTLS | | | | Lg | Lg | 10 30 10.5 | |
| | 3.5nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **4.13** | **85** | Pg | **Pb** | **10 29 35.9** | **0.0** |
| | 1.7nm,0.7s | | | | | | |
| KRBS | | | | Lg | Lg | 10 30 34.4 | |
| | 2.1nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **4.22** | **91** | Pg | **Pb** | **10 29 37.7** | **+0.2** |
| | 2.3nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 10 30 37.7 | |
| | 5.4nm,0.7s | | | | | | |
| **KTBS** | **Karatobe** | **4.86** | **85** | Pg | **Pb** | **10 29 48.5** | **+0.1** |
| | 1.8nm,0.7s | | | | | | |
| KTBS | | | | Lg | Lg | 10 30 56.0 | |
| | 5.9nm,0.8s | | | | | | |

**TAP 17 10:30:38.4,23.°98N×121.°00E,h16km,ML1.4,2D,A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DPDB** | **Guoxing** | **0.09** | **307** | P | Pg | 10 30 42.1 | +0.5 |
| | baz=307 | | | | | | |
| **WUSB** | **Renai** | **0.11** | **85** | ⇓*i*P | Pb | 10 30 42.4 | +0.3 |
| | baz=84 | | | | | | |
| WUSB | | | | *i* S | Sb | 10 30 44.7 | 0.0 |
| | baz=84 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **312** | *i* P | Pb | 10 30 42.3 | +0.1 |
| | baz=312 | | | | | | |
| **TYC** | **Yuchr** | **0.15** | **240** | P | Pb | 10 30 42.8 | 0.0 |
| | baz=237 | | | | | | |
| TYC | | | | S | Sb | 10 30 45.6 | -0.2 |
| | baz=237 | | | | | | |
| **OWD** | **Renai** | **0.16** | **100** | P | Pb | 10 30 43.3 | +0.2 |
| | baz=99 | | | | | | |
| **CHGB** | **Renai** | **0.18** | **64** | ⇓*i*P | Pb | 10 30 43.4 | -0.1 |
| | baz=63 | | | | | | |
| **SSLB** | **Suanglung** | **0.20** | **193** | *e*P | Pb | 10 30 43.5 | -0.2 |
| | baz=192 | | | | | | |
| **WWF** | **Wufeng** | **0.28** | **282** | *e*P | Pb | 10 30 45.8 | +0.7 |
| | baz=282 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.29** | **56** | P | Pb | 10 30 45.7 | +0.2 |
| | baz=57 | | | | | | |
| **WHP** | **Taichung City** | **0.30** | **350** | *e*P | Pb | 10 30 45.3 | -0.2 |
| | baz=350 | | | | | | |
| **TDCB** | **Techi** | **0.31** | **28** | *e*P | Pg | 10 30 44.9 | 0.0 |
| | baz=28 | | | | | | |
| **FUSS** | **Fushou** | **0.34** | **40** | *e*P | Pg | 10 30 45.6 | 0.0 |
| | baz=39 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.38** | **84** | P | Pb | 10 30 46.6 | -0.2 |
| | baz=84 | | | | | | |
| **TWQ1** | **Liyutan** | **0.42** | **330** | *e*P | Pg | 10 30 46.7 | -0.2 |
| | baz=330 | | | | | | |
| **ESL** | **Shilin** | **0.43** | **113** | *e*P | Pb | 10 30 48.3 | +0.7 |
| | baz=112 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.44** | **127** | *e*P | Pb | 10 30 47.6 | -0.2 |
| | baz=126 | | | | | | |

*NNC **17** 10:36:21.7±5.1,54.°48N×61.°93E,h0km,mb3.3,mpv2.9, Error ellipse: s-maj=50.2km s-min=13.4km az=149.0, Suspected Mining explosion.*
*IDC **17** 10:36:44.9±2.7,53.°66N×62.°89E,h0km,mb3.3/1, mbtmp3.4/2,ML2.3/1,Error ellipse: s-maj=80.5km s-min=17.6km az=15.0*

**ISC 17 10:36:36.4±1.4,52.°9N±0.°1×63.°65E±0.°07,h0km,n7, σ1s42/9,4C-5D,Western Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BRVK** | **Borovoye** | **4.01** | **85** | ⇓Lg | Lg | 10 39 03.8 | |
| | 5.0nm,0.5s | | | | | | |
| **BVA0** | **Borovoye Array** | **4.08** | **86** | ⇓Pn | **Pn** | **10 37 39.5** | **-0.5** |
| | 1.0nm,0.5s,baz=288,slow=13,SNR=4.9 | | | | | | |
| BVA0 | | | | ⇑Pg | **Pg** | **10 37 54.5** | **0.0** |
| | 2.0nm,0.8s,baz=288,slow=14,SNR=8.1 | | | | | | |
| BVA0 | | | | ⇓Sn | **Sg** | **10 38 45.1** | **-2.2** |
| | 3.4nm,0.5s | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 10 39 06.5 | |
| | 5.1nm,0.5s,baz=292,slow=29,SNR=3.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **4.08** | **86** | Pn | **Pg** | **10 37 55.5** | **+1.0** |
| | 0.2nm,0.3s,baz=287,slow=14,SNR=11 | | | | | | |
| BVAR | | | | Sn | **Sg** | **10 38 48.6** | **+1.4** |
| | 0.2nm,0.3s,baz=285,slow=24,SNR=6.1 | | | | | | |
| BVAR | | | | Lg | Lg | 10 39 07.8 | |
| | 0.3nm,0.3s,baz=291,slow=28,SNR=6.5 1.9nm,0.3s | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **4.31** | **237** | I | I | 11 02 30.0 | |
| | 0.1nm,0.6s,baz=43,slow=318,SNR=3.9 | | | | | | |
| **AB31** | **Akbulak array** | **4.35** | **214** | ⇓Pn | **Pn** | **10 37 45.4** | **+1.7** |
| | 0.7nm,0.7s,baz=24,slow=13,SNR=5.6 | | | | | | |
| AB31 | | | | ⇑Pg | **Pg** | **10 37 58.9** | **-0.9** |
| | 0.2nm,0.2s,baz=25,slow=11,SNR=3.6 | | | | | | |
| AB31 | | | | ⇓Sn | **Sb** | **10 38 46.2** | **-0.4** |
| | 1.2nm,0.4s,baz=18,slow=25,SNR=3.6 | | | | | | |
| AB31 | | | | ⇑Lg | Lg | 10 39 11.6 | |
| | 4.3nm,0.5s,baz=30,slow=24,SNR=4.4 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **5.66** | **295** | I | I | 12 07 49.3 | |
| | 0.2nm,0.8s,baz=95,slow=318,SNR=5.3 | | | | | | |
| **FINES** | **FINESS Array B** | **21.79** | **308** | P | **P** | **10 41 29.2** | **-0.4** |
| | 1.0nm,0.6s,baz=99,slow=11,SNR=3.7 1.0nm,0.6s | | | | | | |

**TAP 17 10:38:03.8,23.°99N×121.°01E,h17km,ML1.1,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DPDB** | **Guoxing** | **0.09** | **300** | P | Pg | 10 38 07.7 | +0.3 |
| | baz=300 | | | | | | |
| DPDB | | | | S | Sg | 10 38 10.6 | +0.9 |
| | baz=300 | | | | | | |
| **WUSB** | **Renai** | **0.10** | **88** | *i* P | Pg | 10 38 08.1 | +0.6 |
| | baz=87 | | | | | | |
| WUSB | | | | *i* S | Sg | 10 38 10.5 | +0.5 |
| | baz=87 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.12** | **307** | P | Pb | 10 38 08.1 | +0.5 |
| | baz=306 | | | | | | |
| WCS | | | | S | Sb | 10 38 10.6 | +0.5 |
| | baz=306 | | | | | | |
| **OWD** | **Renai** | **0.15** | **103** | P | Pb | 10 38 09.2 | +0.8 |
| | baz=102 | | | | | | |
| OWD | | | | S | Sb | 10 38 12.1 | +0.8 |
| | baz=102 | | | | | | |
| **CHGB** | **Renai** | **0.17** | **64** | *i* P | Pb | 10 38 09.2 | +0.6 |
| | baz=64 | | | | | | |
| CHGB | | | | *i* S | Sb | 10 38 12.2 | +0.5 |
| | baz=64 | | | | | | |
| **SSLB** | **Suanglung** | **0.21** | **195** | *e*P | Pb | 10 38 09.2 | 0.0 |
| | baz=194 | | | | | | |
| SSLB | | | | S | Sb | 10 38 12.6 | -0.2 |
| | baz=194 | | | | | | |
| **VWDT** | **VWDT** | **0.26** | **153** | *e*P | Pb | 10 38 10.5 | +0.4 |
| | baz=153 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.28** | **56** | *i* P | Pb | 10 38 11.3 | +0.6 |
| | baz=56 | | | | | | |
| **WHP** | **Taichung City** | **0.29** | **348** | *e*P | Pb | 10 38 11.3 | +0.6 |
| | baz=348 | | | | | | |
| **TDCB** | **Techi** | **0.30** | **27** | P | Pb | 10 38 10.6 | -0.2 |
| | baz=26 | | | | | | |
| **TWT** | **Tachien** | **0.30** | **30** | *e*P | Pb | 10 38 10.9 | -0.1 |
| | baz=27 | | | | | | |
| **WHYT** | **Xinyi Township** | **0.33** | **207** | *e*P | Pb | 10 38 11.7 | +0.5 |
| | baz=206 | | | | | | |
| WHYT | | | | *e*S | Sb | 10 38 16.9 | +0.7 |
| | baz=206 | | | | | | |
| **FUSS** | **Fushou** | **0.33** | **39** | *e*P | Pb | 10 38 11.6 | +0.1 |
| | baz=39 | | | | | | |
| FUSS | | | | *e*S | Sb | 10 38 16.5 | -0.2 |
| | baz=39 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.37** | **85** | P | Pb | 10 38 12.2 | +0.2 |
| | baz=84 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.44** | **128** | P | Pb | 10 38 13.2 | +0.1 |
| | baz=128 | | | | | | |

*IDC **17** 10:38:47.8±1.1,23.°36N×143.°65E,h0km,mb3.6/8, mbtmp3.6/10,ML3.6/2, Error ellipse: s-maj=38.6km s-min=20.6km az=84.0*

**ISC 17 10:38:52.9±1.0,23.°5N±0.°1×143.°5E±0.°2,h31km,n10, σ1s67/11,mb3.5/8,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.77** | **342** | Pn | **Pn** | **10 39 48.9** | **-0.1** |
| | 5.0nm,0.3s,baz=313,slow=21,SNR=0.9 | | | | | | |
| JCJ | | | | Sn | **Sn** | **10 40 29.4** | **-2.9** |
| | 3.8nm,0.3s,baz=120,slow=22,SNR=2.3 26nm,0.4s | | | | | | |
| **KSRS** | **Korea Array** | **19.29** | **320** | P | **P** | **10 43 14.8** | **-0.4** |
| | 0.2nm,0.3s,baz=150,slow=10,SNR=2.4 0.4nm,0.3s | | | | | | |
| **KLR** | **Kul'dur** | **27.30** | **343** | P | **P** | **10 44 36.5** | **+1.9** |
| | 0.7nm,0.5s,baz=133,slow=7.6,SNR=3.8 0.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.09** | **192** | P | **P** | **10 46 56.3** | **-2.1** |
| | 0.5nm,0.7s,baz=16,slow=9.0,SNR=5.8 0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **47.80** | **192** | P | **P** | **10 47 26.8** | **-0.8** |
| | 0.2nm,0.7s,baz=20,slow=11,SNR=1.8 0.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.71** | **312** | P | **P** | **10 48 13.1** | **+1.1** |
| | 0.4nm,0.6s,baz=90,slow=8.6,SNR=4.5 0.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.42** | **316** | P | **P** | **10 48 32.9** | **+1.5** |
| | 0.3nm,0.5s,baz=93,slow=8.1,SNR=4.5 0.3nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **60.31** | **28** | P | **P** | **10 48 58.4** | **0.0** |
| | 0.2nm,0.6s,baz=260,slow=5.1,SNR=2.1 0.2nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.50** | **319** | P | **P** | **10 49 07.7** | **+1.0** |
| | 1.4nm,0.5s,baz=96,slow=7.2,SNR=6.2 1.4nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.73** | **28** | P | **P** | **10 50 29.3** | **-0.2** |
| | 0.3nm,0.7s,baz=298,slow=6.5,SNR=3.5 0.3nm,0.7s | | | | | | |

**KRSC 17 10:42:28.3±0.8,54.°42N×168.°39E,h20km±12km,Ml3.7, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BKI** | **Bering** | **1.61** | **300** | *e*P | Pb | 10 42 56.6 | -0.6 |
| BKI | | | | *e*S | Sb | 10 43 17.2 | +0.2 |
| **KBTR** | **Krutoberegovo** | **3.65** | **302** | *e*P | Pn | 10 43 26.7 | +3.1 |
| **TUMD** | **Tumrok D** | **4.69** | **283** | *e*S | Sn | 10 44 37.3 | +5.7 |
| **TUMR** | **Tumrok** | **4.84** | **284** | *e*P | Pn | 10 43 44.8 | +4.8 |
| **KMNR** | **Kamenistaya** | **4.87** | **289** | *e*P | Pn | 10 43 44.9 | +4.5 |
| **GNL** | **Ganaly** | **6.20** | **268** | *e*P | Pn | 10 44 03.4 | +4.8 |
| **KRMR** | **Karymshinskiy** | **6.31** | **260** | *e*S | Sn | 10 45 16.0 | +4.6 |

*NOU **17** 10:47:22.4,19.°43S×175.°67W,h15km,mb4.4/8,Tonga Islands*
*IDC **17** 10:48:13.3±3.1,20.°69S×178.°18W,h525km±36km, mb3.0/11,mbtmp4.0/14,Error ellipse: s-maj=23.6km s-min=16.5km az=169.0*
*NEIC **17** 10:48:13.6±1.6,20.°6S±0.°1×178.°0W±0.°1,h520km±8km, mb4.1/42, Error ellipse: s-maj=22.0km s-min=16.6km az=135.0*

**ISC 17 10:48:14.3±0.5,20.°62S±0.°10×178.°13W±0.°09,h534km, n77,σ1s16/75,mb4.1/33,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.61** | **308** | P | **P** | **10 49 42.1** | **+2.0** |
| **AFI** | **Afiamalu** | **9.01** | **43** | P | **P** | **10 50 20.5** | **-1.5** |
| **FUNA** | **Funafuti** | **12.29** | **347** | P | **P** | **10 50 53.6** | **-2.4** |
| **PINNC** | **Pines Island,** | **13.56** | **259** | P | **P** | **10 51 09.2** | **+0.1** |
| **LIFNC** | **LIFOU** | **13.70** | **267** | P | **P** | **10 51 09.3** | **-1.2** |
| **LIFNC** | **LIFOU** | **13.70** | **267** | P | **P** | **10 51 09.4** | **-1.2** |
| **YATNC** | **Mamie plateau,** | **14.03** | **261** | P | **P** | **10 51 13.4** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.45** | **261** | P | **P** | **10 51 17.9** | **-0.6** |
| **DZM** | **Mont Dzumac** | **14.45** | **261** | P | **P** | **10 51 17.9** | **-0.6** |
| **DZM** | **Mont Dzumac** | **14.45** | **261** | P | **P** | **10 51 17.1** | **-1.4** |
| | 3.9nm,0.6s,baz=77,slow=17,SNR=14 | | | | | | |
| **OUZ** | **Omahuta** | **16.27** | **205** | P | **P** | **10 51 37.0** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **16.47** | **267** | P | **P** | **10 51 41.1** | **+2.2** |
| **RAR** | **Rarotonga** | **17.16** | **95** | P | **P** | **10 51 44.3** | **-1.1** |
| | 5.4nm,0.8s,baz=300,slow=8.1,SNR=3.8 | | | | | | |
| **URZ** | **Urewera** | **18.06** | **192** | P | **P** | **10 51 52.1** | **-1.2** |
| **URZ** | **Urewera** | **18.06** | **192** | P | **P** | **10 51 51.8** | **-1.5** |
| | 3.5nm,0.4s,baz=359,slow=2.8,SNR=6.9 | | | | | | |
| **BFZ** | **Birch Farm** | **20.57** | **192** | P | **P** | **10 52 18.4** | **+2.2** |
| | 30nm,1.1s | | | | | | |
| **QRZ** | **Quartz Range** | **21.66** | **199** | P | P | 10 52 33.2 | +7.2 |
| **EIDS** | **Eidsvold** | **28.70** | **255** | P | **P** | **10 53 28.2** | **-0.3** |
| **ARMA** | **Armidale** | **28.91** | **244** | P | **P** | **10 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CHIR** | **Chirikof Islan** | **78.50** | **13** | P | | **P** | | **10 59 21.1** | **+1.3** |
| **OMMB** | **Old Mammoth Mi** | **80.27** | **44** | P | | **P** | | **10 59 29.0** | **-1.1** |
| **OHAK** | **Old Harbor** | **80.29** | **13** | P | | **P** | | **10 59 30.6** | **+1.4** |
| **NVAR** | **Mina Array Bea** | **81.19** | **43** | P | | **P** | | **10 59 35.8** | **+1.1** |
| | comp=Z,0.3nm,0.8s,baz=232,slow=5.5,SNR=3.1 | | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | | |
| **O16K** | **Kokwok River B** | **81.59** | **10** | P | | **P** | | **10 59 36.3** | **+0.4** |
| O16K | | | | IAmb | | IAmb | | 11 00 14.9 | |
| | comp=Z,5.6nm,1.2s | | | | | | | | |
| **N15K** | **Kwethluk River** | **81.83** | **9** | P | | **P** | | **10 59 39.0** | **+1.9** |
| **O18K** | **Koktuh Hills** | **82.34** | **11** | P | | **P** | | **10 59 39.3** | **-0.5** |
| O18K | | | | IAmb | | IAmb | | 10 59 43.6 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **M16K** | **Timber Creek** | **82.81** | **9** | P | | **P** | | **10 59 44.4** | **+2.3** |
| M16K | | | | IAmb | | IAmb | | 11 00 22.0 | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **CNPM** | **China Poot** | **82.84** | **13** | P | | **P** | | **10 59 43.6** | **+1.3** |
| CNPM | | | | IAmb | | IAmb | | 11 00 10.8 | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| **ILSW** | **Iliamna Southw** | **82.86** | **12** | P | | **P** | | **10 59 43.7** | **+1.2** |
| ILSW | | | | IAmb | | IAmb | | 11 00 07.0 | |
| | comp=Z,6.1nm,1.0s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **83.37** | **11** | P | | **P** | | **10 59 45.6** | **+0.6** |
| N19K | | | | IAmb | | IAmb | | 10 59 48.5 | |
| | comp=Z,4.8nm,1.0s | | | | | | | | |
| **M17K** | **Holitna River** | **83.41** | **10** | P | | **P** | | **10 59 47.1** | **+2.1** |
| M17K | | | | IAmb | | IAmb | | 11 00 20.3 | |
| | comp=Z,9.0nm,1.4s | | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **83.68** | **8** | P | | **P** | | **10 59 48.6** | **+2.3** |
| K15K | | | | IAmb | | IAmb | | 10 59 59.9 | |
| | comp=Z,9.1nm,1.2s | | | | | | | | |
| **M20K** | **Styx River** | **84.61** | **12** | P | | **P** | | **10 59 52.3** | **+1.2** |
| M20K | | | | IAmb | | IAmb | | 11 00 30.6 | |
| | comp=Z,7.4nm,1.5s | | | | | | | | |
| **N25K** | **Chitina, Valde** | **86.23** | **15** | P | | **P** | | **11 00 00.3** | **+1.4** |
| N25K | | | | IAmb | | IAmb | | 11 00 23.8 | |
| | comp=Z,7.4nm,1.5s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.22** | **57** | P | | **P** | | **11 00 05.4** | **+1.0** |
| | comp=Z,0.3nm,0.9s,baz=246,slow=6.8,SNR=2.9 | | | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **88.14** | **10** | P | | **P** | | **11 00 09.0** | **+1.3** |
| H21K | | | | IAmb | | IAmb | | 11 00 33.6 | |
| | comp=Z,4.6nm,1.4s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **88.15** | **13** | P | | **P** | | **11 00 08.2** | **+0.4** |
| CCB | | | | IAmb | | IAmb | | 11 00 08.5 | |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **88.29** | **10** | P | | **P** | | **11 00 09.1** | **+0.7** |
| **I23K** | **Minto, Yukon-K** | **88.29** | **12** | P | | **P** | | **11 00 08.4** | **0.0** |
| I23K | | | | IAmb | | IAmb | | 11 00 42.5 | |
| | comp=Z,4.2nm,1.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **88.45** | **13** | P | | **P** | | **11 00 08.8** | **-0.3** |
| | comp=Z,0.3nm,0.4s,baz=224,slow=5.0,SNR=6.4 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **M29M** | **Somme Creek** | **88.54** | **17** | P | | **P** | | **11 00 10.6** | **+0.8** |
| M29M | | | | IAmb | | IAmb | | 11 00 36.5 | |
| | comp=Z,3.9nm,1.3s | | | | | | | | |
| **J25K** | **Salcha River,** | **88.64** | **13** | P | | **P** | | **11 00 11.2** | **+1.1** |
| J25K | | | | IAmb | | IAmb | | 11 00 47.8 | |
| | comp=Z,2.8nm,1.2s | | | | | | | | |
| **E19K** | **Redstone River** | **89.17** | **8** | P | | **P** | | **11 00 13.7** | **+1.2** |
| E19K | | | | IAmb | | IAmb | | 11 00 31.0 | |
| | comp=Z,4.6nm,1.1s | | | | | | | | |
| **H17A** | **Grant Village** | **89.29** | **41** | P | | **P** | | **11 00 13.4** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **90.04** | **290** | P | | **P** | | **11 00 16.6** | **-1.0** |
| | comp=Z,0.5nm,0.3s,baz=146,slow=2.1,SNR=5.0 | | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | | |
| **I28M** | **Miner Creek** | **90.60** | **15** | P | | **P** | | **11 00 20.3** | **+1.1** |
| I28M | | | | IAmb | | IAmb | | 11 00 47.8 | |
| | comp=Z,4.4nm,1.5s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **119.09** | **320** | PKP | | **PKPdf** | | **11 06 01.2** | **-1.0** |
| | comp=Z,0.6nm,0.4s,baz=76,slow=6.1,SNR=3.0 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.06** | **331** | PKP | | PKPab | | 11 06 44.1 | -0.6 |
| | comp=Z,2.6nm,0.4s,baz=44,slow=4.3,SNR=12 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **145.13** | **5** | PKPbc | | **PKPdf** | | **11 06 50.7** | **0.0** |
| | comp=Z,1.1nm,0.5s,baz=5.4,slow=3.0,SNR=2.5 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.83** | **312** | PKPbc | | **PKPbc** | | **11 06 55.8** | **-1.2** |
| | comp=Z,0.6nm,0.6s,baz=100,slow=4.4,SNR=3.6 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.77** | **300** | PKPbc | | **PKPbc** | | **11 06 60.0** | **+0.4** |
| | comp=Z,3.6nm,0.7s,baz=46,slow=6.0,SNR=3.7 | | | | | | | | |

**IDC 17 11:14:53.2±1.4, 23.52N×144.50E, h0km, mb3.6/6, mbtmp3.6/6, MS2.6/1, Error ellipse: s-maj=56.0km s-min=24.1km az=84.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **JCJ** | **Chichijima** | **4.14** | **330** | Sn | Sn | | 11 16 39.1 | -7.7 |
| | 9.2nm,0.3s,baz=125,slow=23,SNR=7.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.70** | **272** | LR | LR | | 11 40 45.3 | |
| | comp=Z,7.5nm,18.7s,baz=155,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.32** | **194** | P | P | | 11 23 05.5 | +0.4 |
| | 0.3nm,0.5s,baz=16,slow=9.4,SNR=8.7 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.02** | **193** | P | P | | 11 23 33.4 | -0.8 |
| | 0.2nm,0.8s,baz=15,slow=12,SNR=1.8 | | | | | | | |
| | 0.2nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.57** | **321** | P | P | | 11 24 15.7 | -0.1 |
| | 0.7nm,0.5s,baz=87,slow=6.1,SNR=2.5 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.05** | **316** | P | P | | 11 24 41.4 | +0.4 |
| | 0.3nm,0.2s,baz=92,slow=7.5,SNR=2.6 | | | | | | | |
| | 0.3nm,0.2s | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.10** | **319** | P | P | | 11 25 15.4 | -0.4 |
| | 1.4nm,0.5s,baz=99,slow=8.0,SNR=5.9 | | | | | | | |
| | 1.4nm,0.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.28** | **28** | P | P | | 11 26 32.0 | 0.0 |
| | 0.5nm,0.9s,baz=299,slow=7.6,SNR=2.8 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |

**IDC 17 11:23:45.5±2.3, 17.42S×176.87W, h0km, mb3.6/5, mbtmp3.6/5, MS3.4/15, Error ellipse: s-maj=140.0km s-min=26.2km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **DZM** | **Mont Dzumac** | **16.37** | **251** | LR | LR | | 11 32 35.4 | |
| | comp=Z,144nm,19.4s,baz=72,slow=32 | | | | | | | |
| **RAR** | **Rarotonga** | **16.57** | **106** | LR | LR | | 11 32 56.5 | |
| | comp=Z,63nm,20.5s,baz=288,slow=33 | | | | | | | |
| **URZ** | **Urewera** | **21.43** | **193** | LR | LR | | 11 36 21.3 | |
| | comp=Z,136nm,18.9s,baz=49,slow=35 | | | | | | | |
| **STKA** | **Stephens Creek** | **40.15** | **241** | LR | LR | | 11 45 32.9 | |
| | comp=Z,40nm,20.4s,baz=33 | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.16** | **259** | P | P | | 11 32 11.2 | -1.1 |
| | 0.6nm,1.0s,baz=88,slow=7.1,SNR=3.2 | | | | | | | |
| | 0.6nm,1.0s | | | | | | | |
| **ASAR** | **Alice Springs** | **46.34** | **254** | P | P | | 11 32 13.9 | +0.3 |
| | 1.7nm,0.6s,baz=84,slow=8.4,SNR=33 | | | | | | | |
| ASAR | | | | LR | LR | | 11 49 26.0 | |
| | comp=Z,55nm,21.7s,baz=232,slow=33 | | | | | | | |
| | 1.7nm,0.6s | | | | | | | |
| **DAV** | **Davao City (W)** | **61.83** | **288** | LR | LR | | 11 59 46.5 | |
| | comp=Z,17nm,19.1s,baz=315,slow=35 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **70.29** | **354** | LR | LR | | 11 58 43.7 | |
| | comp=Z,18nm,20.1s,baz=56,slow=30 | | | | | | | |
| **JNU** | **Nakatsue** | **70.81** | **315** | LR | LR | | 12 00 60.0 | |
| | comp=Z,15nm,21.9s,baz=206,slow=32 | | | | | | | |
| **ASAJ** | **Asahikawa** | **71.56** | **330** | LR | LR | | 11 59 13.8 | |
| | comp=Z,75nm,21.5s,baz=168,slow=30 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.59** | **344** | LR | LR | | 12 05 04.2 | |
| | comp=Z,20nm,19.0s,baz=141,slow=34 | | | | | | | |
| **KSRS** | **Korea Array** | **75.32** | **318** | LR | LR | | 12 02 16.4 | |
| | comp=Z,17nm,20.8s,baz=100,slow=31 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **76.73** | **48** | LR | LR | | 12 00 51.2 | |
| | comp=Z,37nm,20.1s,baz=276,slow=29 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.06** | **43** | P | P | | 11 35 47.6 | +1.1 |
| | 0.4nm,0.6s,baz=215,slow=7.6,SNR=4.2 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **KLR** | **Kul'dur** | **80.44** | **329** | LR | LR | | 12 03 58.7 | |
| | comp=Z,60nm,21.6s,baz=153,slow=30 | | | | | | | |
| **MA2** | **Magadan** | **81.12** | **344** | LR | LR | | 12 04 22.3 | |
| | comp=Z,22nm,21.6s,baz=176,slow=30 | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.50** | **57** | P | P | | 11 36 19.7 | -1.1 |
| | 0.1nm,0.4s,baz=227,slow=7.3,SNR=1.1 | | | | | | | |
| TXAR | | | | LR | LR | | 12 09 09.6 | |
| | comp=Z,16nm,18.2s,baz=294,slow=32 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.09** | **12** | P | P | | 11 36 21.9 | -1.0 |
| | 0.4nm,0.8s,baz=215,slow=6.6,SNR=4.3 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.46** | **316** | PKPbc | PKPab | | 11 43 26.3 | +0.1 |
| | 0.7nm,0.7s,baz=27,slow=1.6,SNR=4.4 | | | | | | | |

*TAP **17** 11:30:57.8, 24.00N×121.01E, h18km, ML3.8, B*

*ASIES **17** 11:30:57.9, 24.00N×121.01E, h18km, ML3.8, Mw3.4, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; $M_{rr}$0.96; $M_{\theta\theta}$0.34; $M_{\phi\phi}$-0.70; $M_{r\theta}$-0.46; $M_{r\phi}$-0.05; $M_{\theta r}$-1.03; Fault plane solution: $M_0$1.43008×$10^{21}$ NP1: $\phi_s$200.40000°, $\delta$72.65000°, $\lambda$102.70000°. NP2: $\phi_s$343.33000°, $\delta$21.38000°, $\lambda$54.88000°. Principal axes: T Plg60.3770°, Azm128.7140°; N Plg12.1060°, Azm16.5520°; P Plg26.5900°, Azm280.3890°;*

*JMA **17** 11:30:58.2±0.2, 24.0N±0.3×121.0E±0.8, h9km, MV3.5/13, TAIWAN REGION*

**ISC 17 11:30:58.0±0.7, 24.00N±0.01×121.01E±0.01, h18km±4km, n163, σ0.60/270, 6C-33D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **DPDB** | **Guoxing** | **0.09** | **292** | ⇑*i* P | Pg | | 11 31 01.8 | +0.2 |
| | baz=292 | | | | | | | |
| DPDB | | | | *i* S | Sg | | 11 31 04.6 | +0.6 |
| | baz=292 | | | | | | | |
| **WUSB** | **Renai** | **0.10** | **96** | ⇓*i* P | Pg | | 11 31 01.8 | +0.1 |
| | baz=95 | | | | | | | |
| WUSB | | | | S | Sg | | 11 31 04.5 | +0.2 |
| | baz=95 | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **301** | ⇑*i* P | Pg | | 11 31 01.9 | +0.2 |
| | baz=301 | | | | | | | |
| WCS | | | | *e* S | Sg | | 11 31 04.8 | +0.5 |
| | baz=301 | | | | | | | |
| **OWD** | **Renai** | **0.16** | **107** | ⇓*i* P | Pg | | 11 31 02.7 | +0.2 |
| | baz=107 | | | | | | | |
| OWD | | | | *e* S | Sg | | 11 31 05.8 | +0.4 |
| | baz=107 | | | | | | | |
| **CHGB** | **Renai** | **0.16** | **68** | ⇓*i* P | Pg | | 11 31 02.8 | +0.2 |
| | baz=74 | | | | | | | |
| CHGB | | | | S | Sg | | 11 31 05.9 | +0.2 |
| | baz=74 | | | | | | | |
| **TYC** | **Yuchr** | **0.17** | **236** | ⇑*i* P | Pg | | 11 31 02.6 | +0.1 |
| | baz=234 | | | | | | | |
| TYC | | | | *e* S | Sg | | 11 31 05.9 | +0.3 |
| | baz=234 | | | | | | | |
| **SSLB** | **Suanglung** | **0.22** | **194** | P | Pg | | 11 31 02.7 | -0.5 |
| **SSLB** | **Suanglung** | **0.22** | **194** | ⇑*i* P | Pg | | 11 31 03.1 | -0.2 |
| | baz=190 | | | | | | | |
| SSLB | | | | *e* S | Sg | | 11 31 06.4 | -0.4 |
| | baz=190 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.27** | **58** | ⇓P | Pb | | 11 31 04.9 | +0.5 |
| | baz=67 | | | | | | | |
| WHF | | | | S | Sb | | 11 31 09.2 | +0.5 |
| | baz=67 | | | | | | | |
| **VWDT** | **VWDT** | **0.27** | **154** | ⇓*i* P | Pb | | 11 31 04.4 | +0.1 |
| | baz=155 | | | | | | | |
| VWDT | | | | *e* S | Sb | | 11 31 08.6 | 0.0 |
| | baz=155 | | | | | | | |
| **WHP** | **Taichung City** | **0.28** | **347** | ⇑P | Pb | | 11 31 04.5 | 0.0 |
| | baz=347 | | | | | | | |
| WHP | | | | *e* S | Sb | | 11 31 09.4 | +0.5 |
| | baz=347 | | | | | | | |
| **TDCB** | **Techi** | **0.28** | **28** | ⇓*i* P | Pg | | 11 31 04.3 | -0.1 |
| | baz=23 | | | | | | | |
| TDCB | | | | *e* S | Sg | | 11 31 08.2 | -0.5 |
| | baz=23 | | | | | | | |
| **WWF** | **Wufeng** | **0.29** | **278** | ⇓*e* P | Pb | | 11 31 05.7 | +1.0 |
| | baz=278 | | | | | | | |
| **TWT** | **Tachien** | **0.29** | **31** | ⇓P | Pg | | 11 31 04.3 | -0.2 |
| | baz=28 | | | | | | | |
| TWT | | | | *e* S | Sg | | 11 31 08.4 | -0.6 |
| | baz=28 | | | | | | | |
| **WJS** | **Zhushan** | **0.32** | **236** | P | Pb | | 11 31 05.6 | +0.5 |
| | baz=236 | | | | | | | |
| WJS | | | | *e* S | Sn | | 11 31 11.9 | -1.9 |
| | baz=236 | | | | | | | |
| **WNT1** | **Nantou City** | **0.32** | **253** | *e* P | Pb | | 11 31 06.0 | +0.8 |
| | baz=253 | | | | | | | |
| WNT1 | | | | *e* S | Sb | | 11 31 11.6 | +1.6 |
| | baz=253 | | | | | | | |
| **FUSS** | **Fushou** | **0.32** | **41** | ⇓*i* P | Pg | | 11 31 05.0 | 0.0 |
| | baz=40 | | | | | | | |
| FUSS | | | | *e* S | Sb | | 11 31 10.7 | +0.3 |
| | baz=40 | | | | | | | |
| **WNT** | **Mingjian** | **0.33** | **248** | ⇓*i* P | Pb | | 11 31 05.9 | +0.6 |
| | baz=247 | | | | | | | |
| WNT | | | | *e* S | Sb | | 11 31 11.8 | +1.7 |
| | baz=247 | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.34** | **206** | *e* P | Pb | | 11 31 05.4 | -0.1 |
| | baz=202 | | | | | | | |
| WHYT | | | | *e* S | Sb | | 11 31 10.9 | +0.3 |
| | baz=202 | | | | | | | |
| **TCU** | **Taichung** | **0.34** | **295** | ⇓*e* P | Pb | | 11 31 06.4 | +0.8 |
| | baz=296 | | | | | | | |
| TCU | | | | *e* S | Sn | | 11 31 12.7 | -1.7 |
| | baz=296 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.37** | **87** | ⇓*i* P | Pb | | 11 31 05.9 | -0.2 |
| | baz=83 | | | | | | | |
| LXIB | | | | *e* S | Sb | | 11 31 11.8 | +0.3 |
| | baz=83 | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **0.40** | **264** | ⇓*e* P | Pb | | 11 31 07.2 | +0.7 |
| | baz=264 | | | | | | | |
| **TWQ1** | **Liyutan** | **0.41** | **328** | P | Pb | | 11 31 07.4 | +0.7 |
| | baz=329 | | | | | | | |
| TWQ1 | | | | *e* S | Sn | | 11 31 15.0 | -1.2 |
| | baz=329 | | | | | | | |
| **WCHH** | **Zhanghua** | **0.42** | **281** | ⇓*i* P | Pb | | 11 31 07.6 | +0.7 |
| | baz=280 | | | | | | | |
| WCHH | | | | *e* S | Sn | | 11 31 15.3 | -1.2 |
| | baz=280 | | | | | | | |
| **ESL** | **Shilin** | **0.43** | **116** | ⇓*i* P | Pb | | 11 31 06.9 | -0.1 |
| | baz=109 | | | | | | | |
| ESL | | | | *e* S | Sb | | 11 31 12.8 | -0.4 |
| | baz=109 | | | | | | | |
| **ETM** | **Tongmen** | **0.44** | **95** | ⇓P | Pg | | 11 31 07.0 | 0.0 |
| | baz=94 | | | | | | | |
| ETM | | | | *e* S | Sg | | 11 31 13.1 | +0.1 |
| | baz=94 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.44** | **129** | ⇓*i* P | Pb | | 11 31 07.1 | -0.2 |
| | baz=124 | | | | | | | |
| WARBT | | | | *e* S | Sg | | 11 31 12.9 | -0.2 |
| | baz=124 | | | | | | | |
| **NSY** | **Sanyi** | **0.47** | **331** | P | Pn | | 11 31 09.0 | -0.9 |
| | baz=332 | | | | | | | |
| NSY | | | | *e* S | Sn | | 11 31 17.2 | -0.6 |
| | baz=332 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.47** | **64** | ⇓P | Pg | | 11 31 07.6 | -0.1 |
| | baz=61 | | | | | | | |
| ETLH | | | | *e* S | Sg | | 11 31 14.2 | +0.1 |
| | baz=61 | | | | | | | |
| **WDJ** | **Dajia District** | **0.48** | **315** | ⇓*e* P | Pn | | 11 31 09.2 | -0.8 |
| | baz=316 | | | | | | | |
| WDJ | | | | *e* S | Sn | | 11 31 17.5 | -0.5 |
| | baz=316 | | | | | | | |
| **EGFH** | **Guangfu** | **0.50** | **131** | *e* P | Pb | | 11 31 08.1 | -0.2 |
| | baz=126 | | | | | | | |
| EGFH | | | | *e* S | Sb | | 11 31 15.2 | -0.1 |
| | baz=126 | | | | | | | |
| **YUS** | **Yu-Shan** | **0.51** | **186** | ⇓*e* P | Pg | | 11 31 08.2 | -0.3 |
| | baz=186 | | | | | | | |
| YUS | | | | *e* S | Sb | | 11 31 16.3 | +0.2 |
| | baz=186 | | | | | | | |
| **WDLH** | **Douliu** | **0.54** | **234** | ⇓*e* P | Pb | | 11 31 09.5 | +0.7 |
| | baz=234 | | | | | | | |
| WDLH | | | | *e* S | Sn | | 11 31 17.9 | -1.3 |
| | baz=234 | | | | | | | |
| **TWD** | **Chiawan** | **0.54** | **82** | ⇓P | Pg | | 11 31 08.6 | -0.2 |
| | baz=88 | | | | | | | |
| TWD | | | | S | Sb | | 11 31 16.1 | -0.2 |
| | baz=88 | | | | | | | |
| **HWA** | **Hwalien** | **0.54** | **92** | ⇓P | Pb | | 11 31 09.3 | +0.4 |
| | baz=92 | | | | | | | |
| HWA | | | | *e* S | Sb | | 11 31 17.1 | +0.7 |
| | baz=92 | | | | | | | |
| **NNSB** | **Datong** | **0.54** | **38** | P | Pg | | 11 31 08.4 | -0.5 |
| | baz=38 | | | | | | | |
| NNSB | | | | *e* S | Sg | | 11 31 15.6 | -0.7 |
| | baz=38 | | | | | | | |
| **NNSH** | **Datong** | **0.54** | **38** | *e* P | Pg | | 11 31 08.5 | -0.4 |
| | baz=38 | | | | | | | |
| **NNS** | **Nan Shan** | **0.55** | **37** | *e* P | Pg | | 11 31 08.8 | -0.2 |
| | baz=38 | | | | | | | |
| NNS | | | | *e* S | Sb | | 11 31 16.5 | -0.2 |
| | baz=38 | | | | | | | |
| **SHUL** | **Shoufeng** | **0.55** | **113** | ⇓*e* P | Pb | | 11 31 09.4 | +0.4 |
| | baz=107 | | | | | | | |
| SHUL | | | | S | Sb | | 11 31 17.2 | +0.7 |
| | baz=107 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.55** | **104** | *e* P | Pb | | 11 31 09.3 | +0.2 |
| | baz=100 | | | | | | | |
| TEYL | | | | *e* S | Sb | | 11 31 16.9 | +0.3 |
| | baz=100 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.56** | **72** | P | Pg | | 11 31 08.8 | -0.3 |
| | baz=80 | | | | | | | |
| NACB | | | | *e* S | Sg | | 11 31 16.6 | -0.1 |
| | baz=80 | | | | | | | |
| **TEGC** | **Jichi Village** | **0.56** | **121** | *e* P | Pb | | 11 31 09.9 | +0.6 |
| | baz=118 | | | | | | | |
| TEGC | | | | *e* S | Sb | | 11 31 18.0 | +1.1 |
| | baz=118 | | | | | | | |
| **EHY** | **Hungye** | **0.57** | **150** | ⇓*i* P | Pb | | 11 31 09.3 | -0.1 |
| | baz=145 | | | | | | | |
| EHY | | | | *e* S | Sg | | 11 31 16.9 | -0.1 |
| | baz=145 | | | | | | | |
| **NMLH** | **Miaoli** | **0.57** | **339** | ⇓*e* P | Pn | | 11 31 11.0 | -0.3 |
| | baz=339 | | | | | | | |
| NMLH | | | | *e* S | Sn | | 11 31 20.0 | -0.2 |
| | baz=339 | | | | | | | |
| **ETL** | **Fush Village** | **0.58** | **74** | *e* P | Pg | | 11 31 09.3 | -0.3 |
| | baz=82 | | | | | | | |
| ETL | | | | *e* S | Sb | | 11 31 17.5 | 0.0 |
| | baz=82 | | | | | | | |
| **EHYH** | **Wanrong** | **0.59** | **149** | *e* P | Pb | | 11 31 09.7 | -0.1 |
| | baz=144 | | | | | | | |
| EHYH | | | | *e* S | Sg | | 11 31 17.1 | -0.5 |
| | baz=144 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.59** | **260** | *e* P | Pb | | 11 31 10.1 | +0.4 |
| | baz=260 | | | | | | | |
| WRL | | | | *e* S | Sb | | 11 31 19.0 | +1.2 |
| | baz=260 | | | | | | | |
| **NSTT** | **Nanjuang** | **0.63** | **359** | ⇑P | Pg | | 11 31 11.1 | +0.7 |
| | baz=6.0 | | | | | | | |
| NSTT | | | | *e* S | Sb | | 11 31 20.0 | +1.1 |
| | baz=6.0 | | | | | | | |
| **HGSD** | **Ruisui** | **0.63** | **143** | ⇓P | Pg | | 11 31 10.8 | +0.3 |
| | baz=144 | | | | | | | |
| HGSD | | | | *e* S | Sb | | 11 31 19.6 | +0.6 |
| | baz=144 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.64** | **9** | *e* P | Pg | | 11 31 11.0 | +0.4 |
| | baz=15 | | | | | | | |
| NFF | | | | *e* S | Sb | | 11 31 20.1 | +1.0 |
| | baz=15 | | | | | | | |
| **LIOB** | **Emei** | **0.64** | **0** | *e* P | Pn | | 11 31 11.4 | -0.8 |
| | baz=7.0 | | | | | | | |
| LIOB | | | | *e* S | Sn | | 11 31 21.3 | -0.7 |
| | baz=7.0 | | | | | | | |
| **WTK** | **Tuku** | **0.65** | **241** | *e* P | Pg | | 11 31 11.3 | +0.4 |
| | baz=241 | | | | | | | |
| WTK | | | | *e* S | Sn | | 11 31 21.4 | -0.8 |
| | baz=241 | | | | | | | |
| **YULB** | **Yu-li** | **0.66** | **157** | P | Pb | | 11 31 10.8 | -0.1 |
| **YULB** | **Yu-li** | **0.66** | **157** | P | Pb | | 11 31 10.8 | -0.1 |
| | baz=148 | | | | | | | |
| YULB | | | | *e* S | Sb | | 11 31 19.2 | -0.6 |
| | baz=148 | | | | | | | |
| **WCKO** | **Fanlu** | **0.67** | **214** | *e* P | Pb | | 11 31 11.1 | -0.1 |
| | baz=214 | | | | | | | |
| WCKO | | | | S | Sg | | 11 31 21.3 | +1.1 |
| | baz=214 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.68** | **259** | *e* P | Pg | | 11 31 11.7 | +0.2 |
| | baz=258 | | | | | | | |
| WTCT | | | | *e* S | Sn | | 11 31 22.2 | -0.7 |
| | baz=258 | | | | | | | |
| **NJN** | **Zhunan** | **0.69** | **349** | *e* P | Pn | | 11 31 12.5 | -0.3 |
| | baz=349 | | | | | | | |
| **TWF1** | **Yuli** | **0.70** | **158** | ⇓P | Pg | | 11 31 11.7 | 0.0 |
| | baz=152 | | | | | | | |
| TWF1 | | | | *e* S | Sg | | 11 31 20.9 | -0.1 |
| | baz=152 | | | | | | | |
| **EYUL** | **Yuli** | **0.71** | **157** | *e* P | Pb | | 11 31 11.7 | -0.1 |
| | baz=157 | | | | | | | |
| EYUL | | | | *e* S | Sg | | 11 31 21.5 | +0.1 |
| | baz=157 | | | | | | | |
| **LATG** | **Datong** | **0.71** | **41** | ⇓P | Pb | | 11 31 11.3 | -0.6 |
| | baz=33 | | | | | | | |
| LATG | | | | *e* S | Sb | | 11 31 20.7 | -0.7 |
| | baz=33 | | | | | | | |
| **CHY** | **Chiayi** | **0.74** | **227** | *e* P | Pg | | 11 31 12.7 | +0.3 |
| | baz=227 | | | | | | | |
| CHY | | | | *e* S | Sn | | 11 31 23.7 | -0.5 |
| | baz=227 | | | | | | | |
| **EAHA** | **Aohua** | **0.74** | **64** | *e* P | Pg | | 11 31 12.4 | -0.1 |
| | baz=63 | | | | | | | |
| EAHA | | | | *e* S | Sg | | 11 31 22.3 | -0.1 |
| | baz=63 | | | | | | | |
| **NSK** | **Sanguang** | **0.74** | **25** | ⇓*i* P | Pb | | 11 31 12.3 | -0.1 |
| | baz=31 | | | | | | | |
| NSK | | | | *e* S | Sb | | 11 31 21.6 | -0.7 |
| | baz=31 | | | | | | | |
| **YHNB** | **Yeheng** | **0.74** | **26** | P | Pb | | 11 31 12.3 | -0.1 |
| **YHNB** | **Yeheng** | **0.74** | **26** | ⇓*i* P | Pb | | 11 31 12.3 | -0.1 |
| | baz=33 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.75** | **37** | *e* P | Pb | | 11 31 12.4 | -0.1 |
| | baz=31 | | | | | | | |
| NDT | | | | *e* S | Sb | | 11 31 22.3 | -0.2 |
| | baz=31 | | | | | | | |
| **HSN1** | **Hsinchu** | **0.77** | **0** | *e* P | Pn | | 11 31 13.9 | -0.2 |
| | baz=1.0 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.78** | **207** | P | Pg | | 11 31 13.4 | +0.1 |
| **TPUB** | **Ta-pu** | **0.78** | **207** | *e* P | Pb | | 11 31 13.0 | 0.0 |
| | baz=207 | | | | | | | |
| TPUB | | | | *e* S | Sg | | 11 31 24.4 | +0.8 |
| | baz=207 | | | | | | | |
| **SBCB** | **Hsinchu** | **0.79** | **358** | *e* P | Pn | | 11 31 14.4 | +0.2 |
| | baz=358 | | | | | | | |
| SBCB | | | | *e* S | Sn | | 11 31 26.7 | +1.1 |
| | baz=358 | | | | | | | |
| **ENA** | **Nanau** | **0.79** | **57** | P | Pg | | 11 31 13.3 | -0.1 |
| | baz=57 | | | | | | | |
| ENA | | | | *e* S | Sb | | 11 31 23.6 | 0.0 |
| | baz=57 | | | | | | | |
| **ECBN** | **Changbin** | **0.79** | **149** | *e* P | Pn | | 11 31 14.5 | +0.3 |
| | baz=149 | | | | | | | |
| **HSN** | **Hsinchu** | **0.80** | **357** | *e* P | Pn | | 11 31 14.8 | +0.5 |
| **ELDTW** | **Lidau** | **0.81** | **180** | *e* P | Pg | | 11 31 13.7 | -0.1 |
| | baz=185 | | | | | | | |
| ELDTW | | | | *e* S | Sg | | 11 31 25.2 | +0.6 |
| | baz=185 | | | | | | | |
| **WSF** | **Szhu** | **0.81** | **244** | P | Pb | | 11 31 13.6 | +0.1 |
| | baz=243 | | | | | | | |
| WSF | | | | *e* S | Sn | | 11 31 25.7 | -0.3 |
| | baz=243 | | | | | | | |
| **ENTT** | **Nioudou** | **0.81** | **38** | *e* P | Pb | | 11 31 13.4 | -0.2 |
| | baz=40 | | | | | | | |
| **EWUT** | **Wuta** | **0.83** | **58** | *e* P | Pb | | 11 31 13.7 | -0.1 |
| | baz=57 | | | | | | | |
| EWUT | | | | *e* S | Sb | | 11 31 24.6 | 0.0 |
| | baz=57 | | | | | | | |
| **WTP** | **Ta-pu** | **0.84** | **206** | *e* P | Pg | | 11 31 14.1 | -0.2 |
| | baz=206 | | | | | | | |
| WTP | | | | *e* S | Sg | | 11 31 25.9 | +0.5 |
| | baz=206 | | | | | | | |
| **FULB** | **Fuli** | **0.84** | **162** | *e* P | Pn | | 11 31 14.9 | 0.0 |
| | baz=163 | | | | | | | |
| FULB | | | | *e* S | Sn | | 11 31 27.7 | +0.9 |
| | baz=163 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.86** | **237** | *e* P | Pb | | 11 31 14.4 | 0.0 |
| | baz=236 | | | | | | | |
| WSL | | | | *e*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CHN1** | **Nanshi** | **0.93** | **209** | *eP* | **Pg** | **11 31 15.7** | **-0.3** |
| | baz=209 | | | | | | | | |
| CHN1 | | | | | *eS* | **Sn** | **11 31 28.6** | **-0.4** |
| | baz=209 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.93** | **227** | *eP* | **Pb** | **11 31 15.4** | **-0.1** |
| | baz=238 | | | | | | | | |
| ICHU | | | | | *eS* | **Sn** | **11 31 29.5** | **+0.6** |
| | baz=238 | | | | | | | | |
| **TWE** | **Neicheng** | **0.93** | **40** | *eP* | **Pb** | **11 31 15.4** | **-0.2** |
| | baz=40 | | | | | | | | |
| TWE | | | | | *eS* | **Sn** | **11 31 28.9** | **-0.2** |
| | baz=40 | | | | | | | | |
| **ESAO** | **Su ao** | **0.95** | **53** | *eP* | **Pb** | **11 31 15.9** | **0.0** |
| | baz=53 | | | | | | | | |
| ESAO | | | | | *eS* | **Sg** | **11 31 29.0** | **0.0** |
| | baz=53 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.95** | **160** | *eP* | **Pg** | **11 31 16.9** | **+0.3** |
| | baz=145 | | | | | | | | |
| **TWC** | **Suao** | **0.97** | **51** | *eP* | **Pb** | **11 31 16.4** | **+0.1** |
| | baz=51 | | | | | | | | |
| TWC | | | | | *eS* | **Sn** | **11 31 30.2** | **+0.1** |
| | baz=51 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.97** | **9** | *eP* | **Pg** | **11 31 17.6** | **+0.7** |
| | baz=9.0 | | | | | | | | |
| NCUH | | | | | *eS* | **Sn** | **11 31 31.4** | **+1.2** |
| | baz=9.0 | | | | | | | | |
| **NCU** | **National Centr** | **0.98** | **9** | *eP* | **Pb** | **11 31 15.9** | **-0.5** |
| | baz=10.0 | | | | | | | | |
| **CHN8** | **Yiju** | **0.98** | **229** | *eP* | **Pb** | **11 31 16.3** | **-0.2** |
| | baz=239 | | | | | | | | |
| CHN8 | | | | | *eS* | **Sn** | **11 31 30.9** | **+0.6** |
| | baz=239 | | | | | | | | |
| **SGST** | **Jiashian** | **1.00** | **203** | *eP* | **Pb** | **11 31 16.4** | **-0.3** |
| | baz=212 | | | | | | | | |
| SGST | | | | | *eS* | **Sn** | **11 31 30.5** | **-0.2** |
| | baz=212 | | | | | | | | |
| **NHW** | **Xinwu Township** | **1.00** | **2** | *eP* | **Pn** | **11 31 17.2** | **+0.1** |
| | baz=1.0 | | | | | | | | |
| NHW | | | | | *eS* | **Sn** | **11 31 32.0** | **+1.1** |
| | baz=1.0 | | | | | | | | |
| **SLGT** | **Liugui** | **1.06** | **199** | *eP* | **Pg** | **11 31 18.6** | **+0.1** |
| | baz=199 | | | | | | | | |
| SLGT | | | | | *eS* | **Sg** | **11 31 33.6** | **+1.2** |
| | baz=199 | | | | | | | | |
| **EDH** | **Donghe** | **1.06** | **165** | *eP* | **Pg** | **11 31 18.2** | **-0.3** |
| | baz=151 | | | | | | | | |
| **TATO** | **Taipei** | **1.06** | **24** | *P* | **Pg** | **11 31 19.0** | **+0.4** |
| **TATO** | **Taipei** | **1.06** | **24** | *eP* | **Pg** | **11 31 18.6** | **+0.1** |
| | baz=24 | | | | | | | | |
| TATO | | | | | *eS* | **Sg** | **11 31 33.2** | **+0.6** |
| | baz=24 | | | | | | | | |
| **LONT** | **Longtian** | **1.09** | **174** | *eP* | **Pg** | **11 31 18.8** | **-0.4** |
| | baz=175 | | | | | | | | |
| LONT | | | | | *eS* | **Sg** | **11 31 34.0** | **+0.4** |
| | baz=175 | | | | | | | | |
| **CHN3** | **Shinhua** | **1.10** | **213** | *eP* | **Pg** | **11 31 19.5** | **+0.3** |
| | baz=212 | | | | | | | | |
| **TWA** | **Mucha** | **1.10** | **28** | *eP* | **Pg** | **11 31 19.3** | **-0.1** |
| | baz=32 | | | | | | | | |
| TWA | | | | | *eS* | **Sg** | **11 31 34.8** | **+0.9** |
| | baz=32 | | | | | | | | |
| **SCLT** | **Jiali** | **1.11** | **223** | *eP* | **Pb** | **11 31 18.7** | **0.0** |
| | baz=222 | | | | | | | | |
| **SHHT** | **Tainan City** | **1.15** | **212** | *eP* | **Pg** | **11 31 20.9** | **+0.6** |
| | baz=212 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.16** | **19** | *eP* | **Pg** | **11 31 20.6** | **+0.2** |
| | baz=19 | | | | | | | | |
| TWS1 | | | | | *eS* | **Sg** | **11 31 36.6** | **+1.1** |
| | baz=19 | | | | | | | | |
| **TWG** | **Pinlang** | **1.18** | **177** | *eP* | **Pg** | **11 31 20.3** | **-0.4** |
| | baz=171 | | | | | | | | |
| TWG | | | | | *eS* | **Sg** | **11 31 36.4** | **+0.2** |
| | baz=171 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.18** | **177** | *P* | **Pg** | **11 31 20.3** | **-0.5** |
| **TWGBT** | **Beinan** | **1.18** | **177** | *P* | **Pg** | **11 31 20.3** | **-0.5** |
| | baz=171 | | | | | | | | |
| TWGBT | | | | | *eS* | **Sg** | **11 31 36.1** | **-0.2** |
| | baz=171 | | | | | | | | |
| **EGS** | | **1.19** | **45** | *eP* | **Pg** | **11 31 21.2** | **+0.3** |
| | baz=58 | | | | | | | | |
| **EOS2** | **EOS2** | **1.19** | **69** | *eP* | **Pg** | **11 31 21.1** | **+0.2** |
| | baz=68 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.20** | **217** | *eP* | **Pg** | **11 31 20.8** | **-0.4** |
| | baz=231 | | | | | | | | |
| **EOS4** | **EOS4** | **1.20** | **84** | *eP* | **Pb** | **11 31 20.1** | **+0.1** |
| | baz=99 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.20** | **225** | *eP* | **Pn** | **11 31 20.0** | **+0.1** |
| | baz=236 | | | | | | | | |
| TSCK | | | | | *eS* | **Sg** | **11 31 37.1** | **+0.1** |
| | baz=236 | | | | | | | | |
| **SCST** | **Cishan** | **1.21** | **203** | *eP* | **Pg** | **11 31 21.2** | **-0.2** |
| | baz=204 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.22** | **37** | *eP* | **Pb** | **11 31 20.7** | **+0.2** |
| | baz=37 | | | | | | | | |
| TIPB | | | | | *eS* | **Sg** | **11 31 37.3** | **-0.2** |
| | baz=37 | | | | | | | | |
| **EOS3** | **EOS3** | **1.23** | **76** | *eP* | **Pg** | **11 31 21.0** | **-0.6** |
| | baz=90 | | | | | | | | |
| **YM01** | **YM01** | **1.25** | **24** | *eP* | **Pb** | **11 31 20.9** | **-0.1** |
| | baz=25 | | | | | | | | |
| **ANP** | **Anpu** | **1.27** | **21** | *eP* | **Pb** | **11 31 21.6** | **+0.2** |
| | baz=3.0 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.27** | **33** | *eP* | **Pg** | **11 31 22.7** | **+0.1** |
| | baz=33 | | | | | | | | |
| NWF | | | | | *eS* | **Sg** | **11 31 39.2** | **-0.1** |
| | baz=33 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.27** | **33** | *eP* | **Pg** | **11 31 22.9** | **+0.3** |
| | baz=33 | | | | | | | | |
| WFSB | | | | | *eS* | **Sg** | **11 31 39.6** | **+0.4** |
| | baz=33 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.29** | **205** | *eP* | **Pg** | **11 31 22.9** | **0.0** |
| | baz=205 | | | | | | | | |
| **YM08** | **YM08** | **1.29** | **24** | *eP* | **Pg** | **11 31 22.5** | **-0.5** |
| | baz=25 | | | | | | | | |
| **SSD** | **Sandimen** | **1.30** | **196** | *eP* | **Pb** | **11 31 22.1** | **+0.2** |
| | baz=197 | | | | | | | | |
| SSD | | | | | *eS* | **Sg** | **11 31 39.0** | **-1.0** |
| | baz=197 | | | | | | | | |
| **TSMG** | **Majia** | **1.33** | **195** | *eP* | **Pg** | **11 31 23.1** | **-0.6** |
| | baz=188 | | | | | | | | |
| **TNOU** | **National Taiwa** | **1.34** | **31** | *eP* | **Pg** | **11 31 23.3** | **-0.5** |
| | baz=32 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.34** | **41** | *eP* | **Pg** | **11 31 23.3** | **-0.5** |
| | baz=41 | | | | | | | | |
| TWB1 | | | | | *eS* | **Sg** | **11 31 41.1** | **-0.3** |
| | baz=41 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.34** | **36** | *eP* | **Pg** | **11 31 23.6** | **-0.3** |
| | baz=35 | | | | | | | | |
| SXI1 | | | | | *eS* | **Sg** | **11 31 41.1** | **-0.3** |
| | baz=35 | | | | | | | | |
| **TWY** | **Chenhua** | **1.38** | **23** | *eP* | **Pb** | **11 31 22.8** | **-0.4** |
| | baz=7.0 | | | | | | | | |
| **LDUT** | **Ludao** | **1.39** | **162** | *eP* | **Pn** | **11 31 22.4** | **0.0** |
| | baz=164 | | | | | | | | |
| **ECL** | **Taimali** | **1.40** | **182** | *eP* | **Pb** | **11 31 23.8** | **+0.2** |
| | baz=169 | | | | | | | | |
| ECL | | | | | *eS* | **Sg** | **11 31 42.6** | **-0.6** |
| | baz=169 | | | | | | | | |
| **PNG** | **Penghu** | **1.40** | **252** | *eP* | **Pn** | **11 31 22.3** | **-0.3** |
| | baz=251 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.43** | **194** | *eP* | **Pb** | **11 31 24.0** | **-0.1** |
| | baz=195 | | | | | | | | |
| MASBT | | | | | *eS* | **Sg** | **11 31 43.0** | **-1.1** |
| | baz=195 | | | | | | | | |
| **WDGT** | **Dungji** | **1.44** | **240** | *eP* | **Pn** | **11 31 23.1** | **-0.1** |
| | baz=249 | | | | | | | | |
| WDGT | | | | | *eS* | **Sb** | **11 31 42.5** | **+0.2** |
| | baz=249 | | | | | | | | |
| **WSSB** | **Gushan** | **1.52** | **207** | *eP* | **Pn** | **11 31 24.1** | **-0.2** |
| | baz=207 | | | | | | | | |
| **EAST** | **Anshuo** | **1.62** | **185** | *eP* | **Pn** | **11 31 26.9** | **-0.4** |
| | baz=204 | | | | | | | | |
| **VCHM** | **Qimei** | **1.65** | **242** | *eP* | **Pn** | **11 31 26.2** | **+0.1** |
| | baz=242 | | | | | | | | |
| VCHM | | | | | *eS* | **Sn** | **11 31 47.3** | **+0.4** |
| | baz=242 | | | | | | | | |
| **SCZT** | **Fangliau** | **1.66** | **193** | *eP* | **Pb** | **11 31 27.3** | **-0.8** |
| | baz=194 | | | | | | | | |
| SCZT | | | | | *eS* | **Sb** | **11 31 48.5** | **-0.2** |
| | baz=194 | | | | | | | | |
| **VWUC** | **VWUC** | **1.73** | **305** | *eP* | **Pn** | **11 31 25.9** | **-1.3** |
| | baz=303 | | | | | | | | |
| **SLIU** | **Shizi** | **1.79** | **186** | *eP* | **Pb** | **11 31 29.4** | **-0.8** |
| | baz=204 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.82** | **75** | *P* | **Pb** | **11 31 29.9** | **-0.8** |
| JYNG | | | | | *eS* | **Sb** | **11 31 52.6** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **1.88** | **75** | *P* | **Pn** | **11 31 30.3** | **+1.1** |
| | baz=86 | | | | | | | | |
| YOJ | | | | | *eS* | **Sn** | **11 31 53.5** | **+1.0** |
| | baz=86 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.88** | **75** | *eP* | **Pb** | **11 31 30.9** | **-0.9** |
| YOJ | | | | | *eS* | **Sb** | **11 31 54.9** | **0.0** |
| **PTMZ** | **Houxiangcun** | **2.01** | **301** | *eP* | **Pn** | **11 31 29.8** | **-1.2** |
| | baz=299 | | | | | | | | |
| **LAY** | **Lan-yu** | **2.02** | **166** | *eP* | **Pn** | **11 31 31.4** | **+0.3** |
| | baz=155 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.06** | **165** | *eP* | **Pn** | **11 31 31.6** | **-0.1** |
| | baz=155 | | | | | | | | |
| **TWKBT** | **Hengchun** | **2.06** | **185** | *eP* | **Pn** | **11 31 32.2** | **+0.5** |
| | baz=201 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.35** | **336** | *eP* | **Pn** | **11 31 34.8** | **-0.9** |
| | baz=331 | | | | | | | | |
| **KNM** | **Kinmen** | **2.39** | **280** | *eP* | **Pn** | **11 31 37.1** | **+0.8** |
| | baz=279 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.44** | **281** | *eP* | **Pn** | **11 31 36.0** | **-1.0** |
| | baz=281 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **2.50** | **82** | *P* | **Pn** | **11 31 39.1** | **+1.3** |
| **JKRS** | **Kuro-shima** | **2.75** | **84** | *P* | **Pn** | **11 31 43.8** | **+2.6** |
| JKRS | | | | | *S* | **Sn** | **11 32 16.6** | **+2.7** |
| **MHZQ** | **Yeshan** | **2.76** | **320** | *eP* | **Pn** | **11 31 40.1** | **-1.2** |
| | baz=316 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.78** | **336** | *eP* | **Pn** | **11 31 41.1** | **-0.5** |
| | baz=331 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.88** | **82** | *P* | **Pn** | **11 31 43.7** | **+0.7** |
| JIJ | | | | | *S* | **Sn** | **11 32 17.9** | **+0.6** |
| **ZPLA** | **Ao Xicun** | **2.99** | **269** | *eP* | **Pn** | **11 31 43.7** | **-0.7** |
| | baz=269 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **3.01** | **346** | *eP* | **Pn** | **11 31 44.0** | **-0.7** |
| | baz=341 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.06** | **78** | *P* | **Pn** | **11 31 46.4** | **+0.9** |
| JISG | | | | | *S* | **Sn** | **11 32 21.8** | **0.0** |

*MIRAS* ***17*** *11:32:44.7, 56.98N×61.49E, h0km, ML2.8/4*
**ISC 17 11:32:44.4±1.7, 56.85N±0.08×61.60E±0.09, h10km, n5, σ1°05/10, 2C-1D, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SVE** | **Sverdlovsk** | **0.53** | **268** | *i* | P | **Pg** | | **11 32 54.1** | **-0.6** |
| | 26nm,100.0s,baz=252 | | | | | | | | |
| SVE | | | | *i* | S | **Sg** | | **11 33 00.9** | **-0.7** |
| | 124nm,0.4s,baz=252 | | | | | | | | |
| SVE | | | | *i* | AML | AML | | 11 33 04.8 | |
| | 260nm,0.8s | | | | | | | | |
| **ARU** | **Arti** | **1.73** | **257** | *i* | P | **Pb** | | **11 33 15.8** | **-0.4** |
| | 32nm,0.5s,baz=252 | | | | | | | | |
| ARU | | | | *i* | S | **Sb** | | **11 33 39.8** | **+1.8** |
| | baz=252 | | | | | | | | |
| ARU | | | | *i* | AML | AML | | 11 33 41.4 | |
| | 154nm,0.5s | | | | | | | | |
| **PR7R** | **Sarany** | **2.29** | **319** | *i* | P | **Pn** | | **11 33 22.0** | **-0.2** |
| | 47nm,0.5s,baz=318 | | | | | | | | |
| PR7R | | | | *i* | S | **Sn** | | **11 33 50.6** | **+0.2** |
| | 89nm,0.5s,baz=318 | | | | | | | | |
| PR7R | | | | *i* | AML | AML | | 11 33 52.1 | |
| | 87nm,0.6s | | | | | | | | |
| **PR3R** | **Kungur** | **2.58** | **285** | *i* | P | **Pn** | | **11 33 26.1** | **0.0** |
| | 11nm,0.7s,baz=283 | | | | | | | | |
| PR3R | | | | *i* | S | **Sn** | | **11 33 58.1** | **+0.7** |
| | 10nm,0.5s,baz=283 | | | | | | | | |
| PR3R | | | | *i* | AML | AML | | 11 33 59.6 | |
| | 28nm,0.5s | | | | | | | | |
| **AB31** | **Akbulak array** | **7.67** | **188** | ⇓ | Pn | **Pn** | | **11 34 37.1** | **+1.0** |
| | 1.1nm,0.9s,baz=13,slow=13,SNR=3.6 | | | | | | | | |
| AB31 | | | | ⇑ | Sn | **Sn** | | **11 36 01.6** | **-1.3** |
| | 0.6nm,0.6s | | | | | | | | |
| AB31 | | | | ⇑ | Lg | Lg | | 11 36 40.7 | |
| | 3.0nm,1.0s,baz=14,slow=27,SNR=3.9 | | | | | | | | |

*AEIC* ***17*** *12:11:27.5±2.1, 56.19N±0.08×149.4W±0.1, h12km±8km, Error ellipse: s-maj=13.0km s-min=7.5km az=148.0*
**NEIC 17 12:11:23.0±1.9, 56.25N±0.08×149.4W±0.1, h10km±2km, ML3.0/60, ML2.8(AEIC), Error ellipse: s-maj=13.6km s-min=9.0km az=153.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **2.32** | **313** | | | | Pn | 12 12 01.3 | +0.1 |
| KDAK | | | | | | | Sn | 12 12 28.3 | -1.5 |
| **OHAK** | **Old Harbor** | **2.35** | **296** | P | | | Pn | 12 12 01.6 | 0.0 |
| **OHAK** | **Old Harbor** | **2.35** | **296** | | | | Pn | 12 12 01.3 | -0.4 |
| OHAK | | | | | | | Sn | 12 12 28.1 | -2.5 |
| **SII** | **Sitkinak Islan** | **2.67** | **279** | P | | | Pn | 12 12 05.8 | -0.3 |
| **SII** | **Sitkinak Islan** | **2.67** | **279** | | | | Pn | 12 12 05.9 | -0.2 |
| SII | | | | | | | Sn | 12 12 36.6 | -1.9 |
| **SYI** | **Shuyak Island** | **2.87** | **327** | | | | Pn | 12 12 08.9 | +0.2 |
| SYI | | | | | | | Sn | 12 12 41.9 | -1.3 |
| **R18K** | **Karluk** | **3.07** | **298** | | | | Pn | 12 12 12.0 | +0.5 |
| R18K | | | | | | | Sn | 12 12 46.1 | -2.0 |
| R18K | | | | | | IAML | | 12 12 48.2 | |
| | comp=N,42nm,0.5s | | | | | | | | |
| R18K | | | | | | IAML | | 12 12 54.9 | |
| | comp=E,46nm,0.4s | | | | | | | | |
| **CNPM** | **China Poot** | **3.43** | **344** | | | | Pn | 12 12 16.3 | -0.2 |
| **CHIR** | **Chirikof Islan** | **3.51** | **266** | | | | Pn | 12 12 17.9 | +0.3 |
| CHIR | | | | | | | Sn | 12 12 56.2 | -3.0 |
| CHIR | | | | | | IAML | | 12 12 57.6 | |
| | comp=N,17nm,1.3s | | | | | | | | |
| CHIR | | | | | | IAML | | 12 13 19.1 | |
| | comp=E,20nm,1.3s | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.52** | **321** | | | | Pn | 12 12 15.5 | -2.3 |
| Q19K | | | | | | IAML | | 12 13 07.7 | |
| | comp=N,50nm,1.4s | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **3.57** | **349** | | | | Pn | 12 12 18.6 | +0.1 |
| BRSE | | | | | | | Sn | 12 12 59.7 | -1.0 |
| **Q23K** | **Middleton Isla** | **3.58** | **26** | | | | Pn | 12 12 17.9 | -0.6 |
| Q23K | | | | | | IAML | | 12 14 13.9 | |
| | comp=N,50nm,1.4s | | | | | | | | |
| **MID** | **Middleton Isla** | **3.58** | **26** | P | | | Pn | 12 12 17.4 | -1.2 |
| **MID** | **Middleton Isla** | **3.58** | **26** | | | | Pn | 12 12 17.8 | -0.8 |
| MID | | | | | | IAML | | 12 13 51.7 | |
| | comp=N,50nm,1.5s | | | | | | | | |
| **BRLK** | **Bradley Lake** | **3.61** | **348** | | | | Pn | 12 12 18.9 | -0.1 |
| **HOM** | **Homer** | **3.62** | **342** | Pn | | | Pn | 12 12 20.4 | +1.3 |
| **ACHA** | **Angle Creek He** | **3.77** | **304** | Pn | | | Pn | 12 12 22.9 | +1.6 |
| **KAHC** | **Katmai Hardscr** | **3.87** | **311** | | | | Pn | 12 12 23.6 | +1.1 |
| **SEW** | **Seward** | **3.87** | **360** | | | | Pn | 12 12 20.2 | -2.3 |
| **P23K** | **Montague Islan** | **3.91** | **15** | | | | Pn | 12 12 22.9 | -0.1 |
| **P19K** | **Oil Pt** | **3.98** | **331** | | | | Pn | 12 12 24.9 | +1.0 |
| P19K | | | | | | IAML | | 12 13 16.0 | |
| | comp=E,38nm,0.7s | | | | | | | | |
| P19K | | | | | | IAML | | 12 13 17.9 | |
| | comp=N,36nm,0.6s | | | | | | | | |
| **PLK4** | **Peulik 4** | **4.05** | **293** | | | | Pn | 12 12 26.2 | +1.1 |
| PLK4 | | | | | | IAML | | 12 13 16.6 | |
| | comp=N,13nm,0.7s | | | | | | | | |
| PLK4 | | | | | | IAML | | 12 13 21.3 | |
| | comp=E,15nm,0.6s | | | | | | | | |
| **PLK2** | **Peulik 2** | **4.08** | **295** | | | | Pn | 12 12 26.3 | +0.9 |
| **ILSW** | **Iliamna Southw** | **4.24** | **334** | | | | Pn | 12 12 27.9 | +0.3 |
| **SLKM** | **Skilak Lake** | **4.29** | **355** | | | | Pn | 12 12 28.4 | 0.0 |
| **P18K** | **Big Mountain,** | **4.43** | **318** | | | | Pn | 12 12 30.9 | +0.7 |
| P18K | | | | | | IAML | | 12 13 09.0 | |
| | comp=N,10nm,1.0s | | | | | | | | |
| P18K | | | | | | IAML | | 12 14 15.4 | |
| | comp=E,8.9nm,1.1s | | | | | | | | |
| **HIN** | **Hinchinbrook I** | **4.43** | **19** | | | | Pn | 12 12 30.0 | -0.3 |
| HIN | | | | | | IAML | | 12 13 35.7 | |
| | comp=N,37nm,1.3s | | | | | | | | |
| **KAIM** | **Kayak Island** | **4.54** | **34** | | | | Pn | 12 12 32.0 | +0.3 |
| KAIM | | | | | | IAML | | 12 14 30.8 | |
| | comp=E,31nm,1.5s | | | | | | | | |
| **RSO** | **Redoubt South** | **4.58** | **339** | Pn | | Pn | | 12 12 32.6 | +0.1 |
| **PWL** | **Port Wells** | **4.66** | **6** | | | | Pn | 12 12 33.5 | +0.1 |
| PWL | | | | | | IAML | | 12 13 53.5 | |
| | comp=N,12nm,1.1s | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **4.72** | **23** | P | | | Pn | 12 12 33.2 | -1.0 |
| **O18K** | **Koktuh Hills** | **4.75** | **322** | | | | Pn | 12 12 35.0 | +0.4 |
| O18K | | | | | | IAML | | 12 13 51.1 | |
| | comp=N,8.6nm,1.2s | | | | | | | | |
| O18K | | | | | | IAML | | 12 14 35.1 | |
| | comp=E,6.2nm,1.4s | | | | | | | | |
| **GLI** | **Glacier Island** | **4.80** | **14** | | | | Pn | 12 12 34.2 | -1.1 |
| **RAGM** | **Ragged Mountai** | **4.84** | **29** | | | | Pn | 12 12 36.0 | +0.1 |
| **SUCK** | **Suckling Hills** | **4.86** | **36** | | | | Pn | 12 12 36.7 | +0.7 |
| SUCK | | | | | | IAML | | 12 13 20.6 | |
| | comp=E,24nm,1.5s | | | | | | | | |
| SUCK | | | | | | IAML | | 12 13 48.9 | |
| | comp=N,21nm,1.4s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **4.86** | **358** | Pn | | Pn | | 12 12 33.2 | -2.9 |
| RC01 | | | | | | IAML | | 12 13 45.3 | |
| | comp=N,9.6nm,1.2s | | | | | | | | |
| RC01 | | | | | | IAML | | 12 15 24.6 | |
| | comp=E,16nm,0.5s | | | | | | | | |
| **HMT** | **Hamilton** | **4.92** | **31** | | | | Pn | 12 12 37.3 | +0.4 |
| **NICHA** | **Nichawak Mount** | **4.92** | **33** | | | | Pn | 12 12 37.8 | +0.8 |
| **GOAT** | **Goat Mountain** | **4.99** | **28** | | | | Pn | 12 12 38.5 | +0.6 |
| **CHGN** | **Chignik** | **5.02** | **274** | Pn | | | Pn | 12 12 38.6 | +0.3 |
| **GRIN** | **Grindle Hills** | **5.16** | **36** | | | | Pn | 12 12 40.9 | +0.6 |
| **SNH** | **Sunshine Point** | **5.25** | **39** | Pn | | | Pn | 12 12 42.2 | +0.7 |
| SNH | | | | | | IAML | | 12 14 14.6 | |
| | comp=N,14nm,1.4s | | | | | | | | |
| SNH | | | | | | IAML | | 12 15 16.4 | |
| | comp=E,16nm,1.5s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **5.29** | **332** | | | | Pn | 12 12 42.0 | -0.1 |
| N19K | | | | | | IAML | | 12 15 38.8 | |
| | comp=N,4.3nm,1.5s | | | | | | | | |
| **KHIT** | **Khitrov Hills** | **5.31** | **35** | | | | Pn | 12 12 42.6 | +0.3 |
| **BMRM** | **Bremner River** | **5.36** | **26** | | | | Pn | 12 12 43.4 | +0.4 |
| **PMR** | **Palmer** | **5.36** | **1** | Pn | | | Pn | 12 12 43.6 | +0.7 |
| PMR | | | | | | IAML | | 12 13 50.1 | |
| | comp=N,5.7nm,1.4s | | | | | | | | |
| **WAX** | **Waxell Ridge** | **5.44** | **37** | | | | Pn | 12 12 44.1 | -0.1 |
| **BARK** | **Barkley Ridge** | **5.53** | **38** | | | | Pn | 12 12 45.8 | +0.3 |
| **KLU** | **Klutina** | **5.56** | **18** | | | | Pn | 12 12 44.0 | -1.8 |
| **MESA** | **MESA** | **5.57** | **42** | Pn | | | Pn | 12 12 43.9 | -2.2 |
| **CRQM** | **Cirque** | **5.59** | **33** | Pn | | | Pn | 12 12 45.7 | -0.6 |
| **N18K** | **Kilae Creek** | **5.59** | **325** | Pn | | | Pn | 12 12 46.5 | +0.2 |
| **SML** | **Sawmill** | **5.60** | **5** | Pn | | | Pn | 12 12 47.3 | +0.9 |
| **TGL** | **Tana Glacier** | **5.68** | **35** | | | | Pn | 12 12 47.9 | +0.3 |
| **SCM** | **Sheep Creek Mo** | **5.70** | **10** | Pn | | | Pn | 12 12 48.8 | +1.1 |
| **O16K** | **Kokwok River B** | **5.71** | **310** | Pn | | | Pn | 12 12 49.3 | +1.5 |
| **ISLE** | **Juniper Island** | **5.73** | **37** | Pn | | | Pn | 12 12 46.1 | -2.1 |
| **BAGL** | **Bagley Icefiel** | **5.73** | **39** | | | | Pn | 12 12 48.8 | +0.7 |
| **VRDI** | **Verde Repeater** | **5.88** | **29** | Pn | | | Pn | 12 12 49.3 | -0.9 |
| **N25K** | **Chitina, Valde** | **5.92** | **23** | Pn | | | Pn | 12 12 51.9 | +1.1 |
| **N17K** | **Nushagak Hills** | **5.93** | **320** | Pn | | | Pn | 12 12 49.2 | -1.6 |
| **CNBA** | **Chernabura Isl** | **5.96** | **260** | | | | Pn | 12 12 50.9 | -0.3 |
| **KIAG** | **Kiagna River** | **5.96** | **35** | | | | Pn | 12 12 51.9 | +0.5 |
| **GLB** | **Gilahina Butte** | **5.96** | **27** | Pn | | | Pn | 12 12 49.8 | -1.5 |
| **M20K** | **Styx River** | **5.97** | **343** | Pn | | | Pn | 12 12 50.8 | -0.6 |
| **GRNC** | **Granite Creek** | **6.02** | **39** | Pn | | | Pn | 12 12 52.2 | -0.1 |
| **TABL** | **Table Mountain** | **6.05** | **43** | Pn | | | Pn | 12 12 51.0 | -1.7 |
| **M24K** | **Tolsona, Glenn** | **6.11** | **14** | Pn | | | Pn | 12 12 52.5 | -0.7 |
| **MCARA** | **McCarthy VSAT** | **6.12** | **30** | Pn | | | Pn | 12 12 53.4 | 0.0 |
| **M18K** | **Stony River** | **6.22** | **330** | | | | Pn | 12 12 54.5 | -0.2 |
| **PNL** | **Peninsula** | **6.33** | **53** | P | | | Pn | 12 12 56.7 | +0.3 |
| **PNL** | **Peninsula** | **6.33** | **53** | | | | Pn | 12 12 56.8 | +0.4 |
| **BCPM** | **Bancas Point** | **6.37** | **50** | Pn | | | Pn | 12 12 55.9 | -1.0 |
| **L19K** | **White Mountain** | **6.57** | **337** | Pn | | | Pn | 12 12 58.6 | -1.0 |
| **M17K** | **Holitna River** | **6.63** | **324** | Pn | | | Pn | 12 13 00.7 | +0.2 |
| **N15K** | **Kwethluk River** | **6.88** | **309** | Pn | | | Pn | 12 13 05.5 | +1.7 |
| **M16K** | **Timber Creek** | **6.91** | **318** | Pn | | | Pn | 12 13 02.4 | -1.9 |
| **DHY** | **Denali Highway** | **6.92** | **8** | Pn | | | Pn | 12 13 02.6 | -2.0 |
| **O14K** | **Tigyukauivet M** | **7.02** | **300** | Pn | | | Pn | 12 13 03.4 | -2.3 |
| **P29M** | **Windy Craggy** | **7.07** | **57** | Pn | | | Pn | 12 13 06.2 | -0.4 |
| **S12K** | **Black Hills** | **7.12** | **271** | Pn | | | Pn | 12 13 06.5 | -0.7 |
| **RND** | **Reindeer** | **7.19** | **2** | Pn | | | Pn | 12 13 07.5 | -0.6 |
| **S31K** | **Pelican** | **7.38** | **71** | | | | Pn | 12 13 08.7 | -1.9 |
| **FALS** | **False Pass** | **8.07** | **266** | P | | | Pn | 12 13 20.9 | +0.8 |

**UCR 17 12:16:05.0±1.0, 8.88N×84.30W, h15km±8km, MW3.7, 1D, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ABE2** | **San Pablo** | **0.85** | **16** | *eP* | | | Pg | 12 16 20.6 | -1.0 |
| ABE2 | | | | *eS* | | | Sg | 12 16 32.8 | -0.1 |
| **BUS1** | **Rivas** | **0.86** | **39** | *eP* | | | Pg | 12 16 19.8 | -2.1 |
| BUS1 | | | | *eS* | | | Sg | 12 16 31.4 | -1.8 |
| **LCR2** | **La Lucha 2** | **0.90** | **19** | *eP* | | | Pb | 12 16 21.1 | -1.4 |
| LCR2 | | | | *eS* | | | Sb | 12 16 33.5 | -0.9 |
| **ACOS** | **Acosta** | **0.92** | **8** | *eP* | | | Pb | 12 16 21.5 | -1.2 |
| ACOS | | | | *eS* | | | Sb | 12 16 33.8 | -1.0 |
| **BELE** | **Belen** | **1.09** | **6** | *eP* | | | Pb | 12 16 24.5 | -1.2 |
| BELE | | | | *e* | | | | 12 16 24.5 | |
| **DRK0** | **Durika** | **1.10** | **70** | *eP* | | | Pb | 12 16 24.4 | -1.6 |
| DRK0 | | | | *eS* | | | Sb | 12 16 39.0 | -1.2 |
| **TCS1** | **Tacares** | **1.15** | **360** | *eP* | | | Pn | 12 16 26.1 | -0.6 |
| **RAFA** | **San Farael, Vo** | **1.17** | **24** | *eP* | | | Pb | 12 16 26.0 | -1.2 |
| **VICA** | **Volcano Irazu** | **1.18** | **22** | *eP* | | | Pb | 12 16 26.2 | -1.2 |
| **CVIMO** | **Finca Echandi** | **1.19** | **17** | *eP* | | | Pb | 12 16 26.4 | -0.9 |
| **VTLA** | **Turrialba Volc** | **1.23** | **25** | *eP* | | | Pn | 12 16 26.9 | -1.1 |
| **VTCV** | **VTCV, Calle Va** | **1.23** | **27** | *eP* | | | Pn | 12 16 27.0 | -0.9 |
| **CVTQ** | **Turrialba Volc** | **1.23** | **25** | *eP* | | | Pn | 12 16 27.1 | -1.0 |
| **CVTV** | **Tajo** | **1.24** | **26** | *eP* | | | Pn | 12 16 26.9 | -1.2 |
| CVTV | | | | *eS* | | | Sb | 12 16 43.2 | -1.0 |
| **VTR0** | **Volcan Turrial** | **1.25** | **25** | *eP* | | | Pn | 12 16 27.4 | -0.9 |
| **CVTR** | **Volcan Turrial** | **1.25** | **25** | *eP* | | | Pn | 12 16 27.3 | -1.0 |
| **SOCE** | **Pocosol** | **1.52** | **348** | *eP* | | | Pb | 12 16 32.9 | -0.1 |
| **JTS** | **Las Juntas de** | **1.54** | **335** | ⇓*eP* | | | Pn | 12 16 31.9 | -0.1 |

*FUNV* ***17*** *12:19:58.7, 10.73N×62.45W, h28km, MW3.2*
**ISC 17 12:19:56.6±1.3, 10.81N±0.06×62.47W±0.04, h35km, n7, σ2°78/12, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op |

21nm,0.3s,baz=146,slow=16,SNR=10
JCJ Sn **Sn** **12 25 33.0 0.0**
61nm,0.3s,baz=91,slow=23,SNR=11
**GUMO Guam 10.10 172** Pn **Pn** **12 26 19.3 -1.2**
**JMZ Minamidaito 2 11.28 284** Pn **Pn** **12 26 35.3 -1.5**
**MJAR Matsushiro Arr 13.62 342** Pn **Pn** **12 27 08.0 -0.6**
0.1nm,0.3s,baz=162,slow=10,SNR=6.7
1.1nm,0.5s
**MAJO Matsushiro 13.62 342** Pn Pn 12 27 04.1 -4.5
**MJB9 Matsu-Tunnel 13.62 342** Pn Pn 12 27 04.4 -4.3
**JOW Kunigami 14.06 286** Pn **Pn** **12 27 14.4 -0.3**
**JNU Nakatsue 14.51 313** LR LR 12 32 45.3
comp=Z,40nm,18.6s,baz=140,slow=36
**JTM Tenmabayashi 17.21 354** Pn **Pn** **12 27 54.0 -1.6**
**KSRS Korea Array 19.13 320** P **Pn** **12 28 19.4 +0.2**
0.2nm,0.3s,baz=140,slow=12,SNR=6.4
KSRS LR LR 12 35 34.5
comp=Z,44nm,19.4s,baz=120,slow=36
1.7nm,0.7s
**KS19 Wonju Array Si 19.19 320** P **P** **12 28 17.6 -1.2**
**NACB Ninganchiao 19.95 276** P **P** **12 28 26.6 -0.6**
NACB IAmb IAmb 12 28 42.6
comp=Z,16nm,0.9s
**H11N1 WAKE ISLAND Hy 22.16 96** T T 12 51 28.4
baz=288
**H11N2 WAKE ISLAND Hy 22.17 96** T T 12 51 36.1
baz=288
**H11N3 WAKE ISLAND Hy 22.18 96** T T 12 51 29.1
baz=288
**H11S3 WAKE ISLAND Hy 22.31 99** T T 12 51 43.0
baz=290
**H11S1 WAKE ISLAND Hy 22.32 99** T T 12 51 45.0
baz=290
**H11S2 WAKE ISLAND Hy 22.33 99** T T 12 51 45.6
baz=290
**USRK Ussuriysk Ar. 22.54 338** P **P** **12 28 52.2 -2.8**
**USRK Ussuriysk Ar. 22.54 338** P **P** **12 28 53.5 -1.5**
comp=Z,1.3nm,0.7s,baz=146,slow=8.4,SNR=2.7
**USA0B Ussuriysk Arra 22.55 338** P **P** **12 28 52.9 -2.1**
**KLR Kul'dur 27.14 343** LR LR 12 38 57.2
comp=Z,24nm,20.6s,baz=170,slow=33
**PETK Petropavlovsk- 31.36 17** LR LR 12 42 58.9
comp=Z,17nm,19.5s,baz=197,slow=36
**MA2 Magadan 36.28 6** LR LR 12 47 04.8
comp=Z,19nm,18.5s,baz=277,slow=38
**HNR Honiara 36.63 152** LR LR 12 43 25.6
comp=Z,624nm,20.3s,baz=360,slow=32
**SHEM Shemya Is, Ala 37.24 31** LR LR 12 43 49.2
comp=Z,22nm,21.2s,baz=294,slow=32
**SONM Songino Array 38.00 319** P **P** **12 31 13.0 +0.2**
comp=Z,0.5nm,0.5s,baz=115,slow=5.5,SNR=2.4
SONM LR LR 12 48 20.2
comp=Z,30nm,18.5s,baz=208,slow=38
comp=Z,0.5nm,0.5s
**CMAR Chiang Mai Arr 41.69 272** P **P** **12 31 44.6 +0.8**
comp=Z,0.3nm,0.3s,baz=64,slow=6.2,SNR=1.7
CMAR LR LR 12 48 05.5
comp=Z,29nm,20.5s,baz=200,slow=35
comp=Z,0.3nm,0.3s
**WB0 Warramunga Arr 44.03 192** P **P** **12 32 01.9 -0.7**
WB0 IAmb IAmb 12 32 29.0
comp=Z,7.9nm,1.4s
**WR0 Warramunga Arr 44.19 192** P **P** **12 32 02.1 -1.8**
WR0 IAmb IAmb 12 32 24.1
comp=Z,9.6nm,1.3s
**WRAB Tennant Creek 44.20 192** P **P** **12 32 01.9 -2.0**
**WB2 Warramunga Arr 44.21 192** P **P** **12 32 01.9 -2.1**
WB2 IAmb IAmb 12 32 32.9
comp=Z,6.8nm,1.1s
**WRA Warramunga Arr 44.21 192** P **P** **12 32 03.0 -1.1**
**WRA Warramunga Arr 44.21 192** P **P** **12 32 02.2 -1.8**
comp=Z,0.3nm,0.4s,baz=17,slow=9.6,SNR=13
comp=Z,0.3nm,0.4s
**FITZ Fitzroy Crossi 44.97 204** P **P** **12 32 09.1 -1.0**
**SHL Shillong 46.65 283** P **P** **12 32 24.7 +1.0**
**ASAR Alice Springs 47.92 192** P **P** **12 32 31.5 -1.8**
comp=Z,0.2nm,0.6s,baz=13,slow=8.6,SNR=2.2
comp=Z,2.2nm,0.6s
**PSA00 Pilbara Seismi 50.46 209** P **P** **12 32 52.7 +0.1**
PSA00 IAmb IAmb 12 33 19.7
comp=Z,14nm,1.4s
**ZAA0 Zalesovo Array 52.83 321** P **P** **12 33 10.9 +0.9**
**ZALV Zalesovo Beam 52.83 321** P **P** **12 33 10.3 +0.3**
**ZALV Zalesovo Beam 52.83 321** P **P** **12 33 10.0 0.0**
comp=Z,0.5nm,0.3s,baz=105,slow=7.9,SNR=2.2
comp=Z,0.5nm,0.3s
**MK31 Makanchi Array 53.55 312** P **P** **12 33 17.2 +1.7**
MK31 IAmb IAmb 12 33 29.3
comp=Z,5.2nm,1.4s
**MKAR Makanchi Array 53.55 312** P **P** **12 33 16.4 +0.8**
**MKAR Makanchi Array 53.55 312** P **P** **12 33 17.1 +1.5**
comp=Z,1.5nm,0.7s,baz=96,slow=8.6,SNR=11
MKAR LR LR 12 58 07.1
comp=Z,26nm,18.9s,baz=90,slow=38
comp=Z,1.5nm,0.7s
**J17K VABM Dome 54.70 28** P **P** **12 33 22.7 -0.9**
**N17K Nushagak Hills 54.73 31** P **P** **12 33 23.2 -0.7**
N17K IAmb IAmb 12 33 36.3
comp=Z,7.8nm,1.4s
**G18K Tagagawik 55.70 25** P **P** **12 33 31.5 +0.7**
G18K IAmb IAmb 12 33 33.5
comp=Z,6.7nm,1.1s
**OHAK Old Harbor 56.03 36** P **P** **12 33 33.7 +0.4**
OHAK IAmb IAmb 12 33 57.0
comp=Z,5.7nm,1.4s
**KURK Kurchatov 56.21 316** P **P** **12 33 36.3 +1.6**
KURK IAmb IAmb 12 33 49.9
comp=Z,3.8nm,0.8s
**KURBB Kurchatov Arra 56.26 316** P **P** **12 33 36.0 +1.0**
comp=Z,3.4nm,0.8s,baz=93,slow=7.8,SNR=25
comp=Z,3.4nm,0.8s
**KDAK Kodiak Island 56.50 35** P **P** **12 33 36.4 -0.1**
KDAK IAmb IAmb 12 34 13.9
comp=Z,11nm,1.4s
**KDAK Kodiak Island 56.50 35** LR LR 12 55 14.9
comp=Z,20nm,21.9s,baz=224,slow=33
**C19K Lookout Ridge 56.54 21** P **P** **12 33 38.1 +1.3**
C19K IAmb IAmb 12 34 20.5
comp=Z,8.7nm,1.3s
**E19K Redstone River 56.76 23** P **P** **12 33 38.0 -0.3**
E19K IAmb IAmb 12 34 20.0
comp=Z,10nm,1.5s
**F20K Avaraart Lake 57.19 24** P **P** **12 33 42.1 +0.8**
F20K IAmb IAmb 12 34 02.3
comp=Z,8.1nm,1.4s
**IMAR Indian Mountai 57.65 26** P **P** **12 33 44.3 -0.3**
**G21K Allakaket 57.88 25** P **P** **12 33 45.7 -0.5**
G21K IAmb IAmb 12 34 12.7
comp=Z,10nm,1.4s
**H21K Melozitna Rive 57.94 26** P **P** **12 33 47.4 +0.7**
H21K IAmb IAmb 12 34 27.1
comp=Z,4.4nm,1.2s
**F21K Alatna River 58.08 24** P **P** **12 33 48.0 +0.4**
**M22K Willow 58.34 31** P **P** **12 33 47.8 -1.6**
**CUT Chulitna 58.37 30** P **P** **12 33 49.8 +0.1**
**D22K Ayikyak River 58.81 22** P **P** **12 33 52.0 -0.7**
D22K IAmb IAmb 12 34 20.1
comp=Z,7.1nm,1.1s
**AAK Ala-Archa 59.16 307** LR LR 13 02 09.9
comp=Z,35nm,18.9s,baz=144,slow=39
**SCM Sheep Creek Mo 59.66 31** P **P** **12 33 58.1 -0.7**
**ILAR Eielson Array 60.23 28** P **P** **12 34 02.0 -0.5**
comp=Z,1.4nm,0.9s,baz=268,slow=5.2,SNR=7.7
comp=Z,1.4nm,0.9s
**BVAR Borovoye Array 61.34 319** P **P** **12 34 12.0 +1.7**
comp=Z,4.2nm,0.5s,baz=97,slow=7.6,SNR=16
comp=Z,4.2nm,0.5s
**BRVK Borovoye 61.40 319** P **P** **12 34 10.5 -0.2**
**BMAR Burnt Mountain 61.50 25** P **P** **12 34 11.6 +0.4**
**TGL Tana Glacier 61.75 32** P **P** **12 34 13.1 0.0**
**KK31 Karatay Array 62.03 308** P **P** **12 34 15.7 +0.6**
KK31 IAmb IAmb 12 34 20.5
comp=Z,5.4nm,1.2s
**KKAR Karatay Array 62.03 308** P **P** **12 34 14.9 -0.2**
**KKAR Karatay Array 62.03 308** P **P** **12 34 15.7 +0.6**
KKAR IAmb IAmb 12 34 20.5
comp=Z,5.3nm,1.2s
**K27K Chicken 62.24 29** P **P** **12 34 16.4 +0.3**
K27K IAmb IAmb 12 34 27.5
comp=Z,3.4nm,1.2s
**BCAR Beaver Creek A 62.33 30** P **P** **12 34 15.5 -1.3**
**EGAK Eagle 62.67 28** P **P** **12 34 19.3 +0.3**
EGAK IAmb IAmb 12 34 41.8
comp=Z,4.8nm,1.2s
**I28M Miner Creek 63.21 27** P **P** **12 34 24.2 +1.5**
I28M IAmb IAmb 12 34 48.1
comp=Z,4.9nm,1.2s
**CHGR Chuyangaron 63.70 303** P **P** **12 34 27.8 +1.3**
**SIMJ Simiganj 63.82 303** P **P** **12 34 27.0 -0.3**
**M29M Somme Creek 63.85 30** P **P** **12 34 28.5 +1.5**
M29M IAmb IAmb 12 34 29.6
comp=Z,2.0nm,0.8s
**ABKAR Akbulak array 68.31 316** P **P** **12 34 57.1 +1.4**
**SPITS Spitsbergen Ar 73.96 350** P **P** **12 35 31.3 +1.8**
comp=Z,3.9nm,0.9s,baz=58,slow=8.8,SNR=1.3
comp=Z,3.9nm,0.9s
**YKA Yellowknife Ar 74.65 28** P **P** **12 35 34.0 +0.3**
**YKA Yellowknife Ar 74.65 28** P **P** **12 35 34.3 +0.6**
comp=Z,1.1nm,0.7s,baz=299,slow=6.3,SNR=11
comp=Z,1.1nm,0.7s
**B08A Colville Reser 77.30 43** P **P** **12 35 50.0 +0.9**
**YBH Yreka Blue Hor 77.41 50** P **P** **12 35 49.3 -0.7**
YBH IAmb IAmb 12 36 19.7
comp=Z,9.1nm,1.5s
**YBH Yreka Blue Hor 77.41 50** LR LR 13 06 19.6
comp=Z,18nm,19.1s,baz=284,slow=33
**PINE Pine Mountain 77.90 47** P **P** **12 35 52.5 -0.4**
PINE IAmb IAmb 12 35 55.1
comp=Z,4.7nm,0.8s
**J08A Circle Bar Ran 79.73 47** P **P** **12 36 03.5 +0.7**
**BMO Blue Mountains 79.92 45** P **P** **12 36 04.7 +0.9**
**CMB Columbia Colle 80.42 53** P **P** **12 36 07.1 +0.6**
**PNTR Pine Nut 80.59 52** P **P** **12 36 08.6 +1.0**
PNTR IAmb IAmb 12 36 10.3
comp=Z,3.0nm,0.6s
**WAKR Walker 80.93 52** P **P** **12 36 10.6 +1.1**
**KBZ Khabaz 81.17 314** P **P** **12 36 12.5 +2.2**
comp=Z,2.0nm,0.8s,baz=98,slow=2.8,SNR=4.9
comp=Z,2.0nm,0.8s
**MFID Camas Ranch 81.47 46** P **P** **12 36 13.3 +1.2**
**FINES FINESS Array B 81.52 334** P **P** **12 36 13.4 +1.6**
comp=Z,4.9nm,1.1s,baz=52,slow=6.7,SNR=2.0
comp=Z,4.9nm,1.1s
**NVAR Mina Array Bea 81.78 52** P **P** **12 36 13.7 -0.3**
comp=Z,1.1nm,0.8s,baz=279,slow=6.0,SNR=10
comp=Z,1.1nm,0.8s
**PDAR Pinedale Array 85.88 45** P **P** **12 36 34.6 -0.3**
comp=Z,0.3nm,0.5s,baz=309,slow=4.5,SNR=2.4
comp=Z,0.3nm,0.5s
**KNB Kanab 86.31 51** P **P** **12 36 36.4 -0.7**
KNB IAmb IAmb 12 36 38.9
comp=Z,3.6nm,0.9s
**NOA NORSAR Array B 87.21 339** P **P** **12 36 41.0 +0.2**
comp=Z,0.4nm,0.7s,baz=48,slow=4.7,SNR=2.0
comp=Z,0.4nm,0.7s
**PLCA Paso Flores 146.85 129** PKPbc **PKPdf** **12 43 35.0 -0.2**
comp=Z,5.0nm,1.3s,baz=315,slow=1.4,SNR=3.0
**LPAZ La Paz 149.52 82** PKPbc **PKPbc** **12 43 45.4 0.0**
comp=Z,0.6nm,0.6s,baz=282,slow=12,SNR=1.7

*IDC **17** 12:40:20.2±1.0, 7°.94N×127°.49E, h0km, mb3.6/9, mbtmp3.7/10, ML4.1/1, MS3.3/3, Error ellipse: s-maj=28.0km s-min=20.0km az=91.0*
**ISC 17 12:40:24.8±0.9, 7°.9N±0°.1×127°.5E±0°.1, h31km, n12, σ0s90/12, mb3.7/9, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **2.07** | **246** | Pn | | **Pn** | **Pn** | **12 40 57.4** | **-0.1** |
| | 70nm,0.3s,baz=246,slow=10,SNR=2.0 | | | | | | | | |
| DAV | | | | Sn | | **Sn** | **Sn** | **12 41 22.4** | **+0.1** |
| | 56nm,0.3s,baz=277,slow=22,SNR=1.7 | | | | | | | | |
| DAV | | | | LR | | LR | LR | 12 42 03.1 | |
| | comp=Z,279nm,18.3s,baz=38,slow=49 | | | | | | | | |
| | 205nm,0.3s | | | | | | | | |
| **GUMO** | **Guam** | **17.98** | **70** | LR | | LR | LR | 12 51 39.6 | |
| | comp=Z,24nm,19.0s,baz=220,slow=38 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.50** | **166** | P | | **P** | **P** | **12 46 18.6** | **+1.1** |
| | 0.4nm,1.0s,baz=346,slow=10,SNR=2.4 | | | | | | | | |
| | 0.4nm,1.0s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **30.12** | **17** | P | | **P** | **P** | **12 46 32.9** | **+1.1** |
| | 0.8nm,0.6s,baz=189,slow=6.9,SNR=1.5 | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **32.01** | **169** | P | | **P** | **P** | **12 46 47.8** | **-0.8** |
| | 0.1nm,0.4s,baz=344,slow=8.7,SNR=1.5 | | | | | | | | |
| | 0.1nm,0.4s | | | | | | | | |
| **SONM** | **Songino Array** | **43.63** | **339** | P | | **P** | **P** | **12 48 26.4** | **-0.2** |
| | 0.2nm,0.4s,baz=154,slow=8.0,SNR=1.6 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.62** | **323** | P | | **P** | **P** | **12 49 50.2** | **-0.4** |
| | 1.0nm,0.7s,baz=124,slow=8.4,SNR=9.5 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **PcP** | **12 50 54.5** | **+1.2** |
| | 0.4nm,0.7s,baz=140,slow=3.7,SNR=2.0 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.25** | **332** | P | | **P** | **P** | **12 50 09.1** | **-0.1** |
| | 0.4nm,0.4s,baz=90,slow=5.8,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.68** | **326** | P | | **P** | **P** | **12 50 19.5** | **+0.2** |
| | 1.8nm,0.3s,baz=128,slow=6.3,SNR=5.1 | | | | | | | | |
| | 1.8nm,0.3s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **64.27** | **326** | P | | **P** | **P** | **12 50 56.6** | **-0.4** |
| | 0.4nm,0.4s,baz=111,slow=8.0,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **81.02** | **26** | P | | **P** | **P** | **12 52 34.9** | **-1.5** |
| | 0.1nm,0.5s,baz=238,slow=5.2,SNR=2.6 | | | | | | | | |
| | 0.1nm,0.5s | | | | | | | | |
| **OPO** | **Ambohidratompo** | **83.40** | **250** | LR | | LR | LR | 13 29 37.8 | |
| | comp=Z,91nm,18.0s,baz=68,slow=36 | | | | | | | | |

**IDC 17 12:52:46.2±7.3, 22°.95N×142°.29E, h0km, mb3.4/5, mbtmp3.4/5, Error ellipse: s-maj=302.8km s-min=25.4km az=75.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.33** | **191** | P | | P | P | 13 00 49.9 | -0.2 |
| | 0.1nm,0.3s,baz=11,slow=8.9,SNR=8.1 | | | | | | | | |
| | 0.1nm,0.3s | | | | | | | | |
| **ASAR** | **Alice Springs** | **47.04** | **191** | P | | P | P | 13 01 19.7 | +0.1 |
| | 0.2nm,0.7s,baz=13,slow=6.1,SNR=1.5 | | | | | | | | |
| | 0.2nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.25** | **312** | P | | P | P | 13 02 06.9 | +0.3 |
| | 0.3nm,0.7s,baz=110,slow=8.1,SNR=2.9 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.05** | **316** | P | | P | P | 13 02 27.8 | +1.0 |
| | 0.4nm,0.7s,baz=92,slow=8.3,SNR=1.9 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.19** | **319** | P | | P | P | 13 03 01.2 | -1.4 |
| | 0.4nm,0.4s,baz=104,slow=6.1,SNR=2.1 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |

*IDC **17** 13:17:52.5±0.9, 22°.14S×67°.09W, h159km±10km, mb3.5/4, mbtmp3.9/8, MS3.1/1, Error ellipse: s-maj=18.6km s-min=10.7km az=121.0*
*NEIC **17** 13:17:52.9±2.2, 22°.20S±0°.07×67°.3W±0°.1, h186km±7km, mb4.0/3, ML3.8(GUC), Error ellipse: s-maj=19.3km s-min=10.5km az=95.0*
*SJA **17** 13:17:53.8±1.6, 22°.16S×67°.33W, h160km, ML3.5, MW3.7*
*SCB **17** 13:17:53.0±1.2, 22°.27S×67°.28W, h176km±12km, ML4.0/2, MW3.9, Error ellipse: s-maj=11.4km s-min=4.4km az=0.0*
*GUC **17** 13:17:55.1±0.7, 22°.24S×67°.51W, h191km±7km, ML3.8*
**ISC 17 13:17:52.9±0.7, 22°.17S±0°.04×67°.29W±0°.04, h177km±6km, n80, σ1s52/99, mb3.7/4, 7C-4D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AF01** | **San Pedro de A** | **1.13** | **226** | Pn | | **Pn** | **Pn** | **13 18 22.9** | **+1.3** |
| **LVC** | **Limon Verde** | **1.56** | **253** | *i* P | | **Pn** | **Pn** | **13 18 26.0** | **+0.4** |
| LVC | | | | IAML | | | | 13 18 54.2 | |
| | comp=Z,36nm,0.2s | | | | | | | | |
| **LVC** | **Limon Verde** | **1.56** | **253** | P | | **Pn** | **Pn** | **13 18 26.7** | **+1.2** |
| | comp=Z,31nm,0.3s,baz=70,slow=4.0,SNR=122 | | | | | | | | |
| LVC | | | | S | | **Sn** | | **13 18 51.2** | **+0.3** |
| | comp=Z,61nm,0.4s,baz=72,slow=20,SNR=51 | | | | | | | | |
| **LVC** | **Limon Verde** | **1.56** | **253** | *i* eP | | **Pn** | **Pn** | **13 18 26.7** | **+1.2** |
| LVC | | | | *e*S | | **Sn** | **Sn** | **13 18 51.0** | **+0.2** |
| LVC | | | | IAML | | | | 13 18 53.5 | |
| | comp=Z,540nm,0.1s | | | | | | | | |
| **YJA** | **Yavi** | **1.65** | **91** | *i* P | | **Pn** | **Pn** | **13 18 27.9** | **+1.3** |
| YJA | | | | *e*S | | **Sn** | **Sn** | **13 18 53.4** | **+0.9** |
| YJA | | | | IAML | | | | 13 18 55.7 | |
| | comp=Z,274nm,0.4s | | | | | | | | |
| **MOCB** | **Mochara** | **1.79** | **60** | Pg | | **Pn** | **Pn** | **13 18 29.4** | **+1.4** |
| MOCB | | | | Sg | | **Sn** | **Sn** | **13 18 56.4** | **+1.3** |
| MOCB | | | | IAML | | | | 13 19 04.4 | |
| | comp=Z,1μm,0.6s | | | | | | | | |
| **PB09** | **IPOC Station P** | **1.84** | **281** | Pn | | **Pn** | **Pn** | **13 18 29.2** | **+0.9** |
| **PB09** | **IPOC Station P** | **1.84** | **281** | *i* P | | **Pn** | **Pn** | **13 18 29.2** | **+0.9** |
| PB09 | | | | *e*S | | **Sn** | **Sn** | **13 18 57.5** | **+1.8** |
| PB09 | | | | IAML | | | | 13 19 02.2 | |
| | comp=Z,136nm,0.5s | | | | | | | | |
| **PB09** | **IPOC Station P** | **1.84** | **281** | *e*P | ↑ | **Pn** | **Pn** | **13 18 29.6** | **+1.3** |
| PB09 | | | | *i* S | | **Sn** | **Sn** | **13 18 55.9** | **+0.2** |
| **PB09** | **IPOC Station P** | **1.84** | **281** | Pg | | **Pn** | **Pn** | **13 18 29.7** | **+1.4** |
| **PB01** | **IPOC Station P** | **2.33** | **298** | | | **Pn** | **Pn** | **13 18 33.7** | **+0.2** |
| **PB01** | **IPOC Station P** | **2.33** | **298** | *i* P | | **Pn** | **Pn** | **13 18 33.7** | **+0.2** |
| PB01 | | | | IAML | | | | 13 19 06.4 | |
| | comp=Z,234nm,0.2s | | | | | | | | |
| **PB01** | **IPOC Station P** | **2.33** | **298** | *e*P | ↑ | **Pn** | **Pn** | **13 18 34.1** | **+0.6** |
| PB01 | | | | *e*S | | **Sn** | **Sn** | **13 19 05.1** | **0.0** |
| PB01 | | | | IAML | | | | 13 19 06.5 | |
| | comp=N,483nm,0.5s | | | | | | | | |
| **PB01** | **IPOC Station P** | **2.33** | **298** | Pg | | **Pn** | **Pn** | **13 18 34.7** | **+1.2** |
| PB01 | | | | Sg | | **Sn** | **Sn** | **13 19 05.8** | **+0.8** |
| PB01 | | | | IAML | | | | 13 19 11.7 | |
| | comp=N,285nm,0.3s | | | | | | | | |
| **AOVT** | **TarijaAcel** | **2.48** | **76** | Pg | | **Pn** | **Pn** | **13 18 36.4** | **+0.9** |
| **PB04** | **IPOC Station P** | **2.65** | **266** | Pn | | **Pn** | **Pn** | **13 18 36.8** | **-0.6** |
| **PB04** | **IPOC Station P** | **2.65** | **266** | *i* P | | **Pn** | **Pn** | **13 18 38.2** | **+0.8** |
| PB04 | | | | *e*S | | **Sn** | **Sn** | **13 19 11.1** | **-0.8** |
| PB04 | | | | IAML | | | | 13 19 12.9 | |
| | comp=Z,284nm,0.3s | | | | | | | | |
| **PB04** | **IPOC Station P** | **2.65** | **266** | *e*P | | **Pn** | **Pn** | **13 18 37.2** | **-0.1** |
| PB04 | | | | *e*S | | **Sn** | **Sn** | **13 19 09.4** | **-2.5** |
| PB04 | | | | IAML | | | | 13 19 17.6 | |
| | comp=N,264nm,0.5s | | | | | | | | |
| **PX03** | **IPOC Station P** | **2.80** | **308** | *e*P | | **Pn** | **Pn** | **13 18 39.8** | **+0.8** |
| PX03 | | | | *e*S | | **Sn** | **Sn** | **13 19 14.6** | **-0.4** |
| **AZAP** | **Zapla** | **2.90** | **135** | *i* P | | **Pn** | **Pn** | **13 18 41.2** | **+0.8** |
| AZAP | | | | IAML | | | | 13 19 22.9 | |
| | comp=Z,71nm,0.5s | | | | | | | | |
| **PATCX** | **Punta Patache** | **2.98** | **296** | | | **Pn** | **Pn** | **13 18 41.3** | **+0.1** |
| **PATCX** | **Punta Patache** | **2.98** | **296** | *i* P | | **Pn** | **Pn** | **13 18 40.8** | **-0.4** |
| PATCX | | | | *e*S | | **Sn** | **Sn** | **13 19 17.8** | **-1.1** |
| PATCX | | | | IAML | | | | 13 19 20.3 | |
| | comp=Z,298nm,0.4s | | | | | | | | |
| **PATCX** | **Punta Patache** | **2.98** | **296** | *e*P | ↑ | **Pn** | **Pn** | **13 18 41.3** | **+0.1** |
| PATCX | | | | *i* S | | **Sn** | **Sn** | **13 19 17.6** | **-1.2** |
| **SLA** | **San Lorenzo** | **3.03** | **147** | *i* P | | **Pn** | **Pn** | **13 18 43.6** | **+1.7** |
| SLA | | | | *e*S | | **Sn** | **Sn** | **13 19 20.4** | **+0.2** |
| SLA | | | | IAML | | | | 13 19 22.0 | |
| | comp=Z,18nm,0.5s | | | | | | | | |
| **GO01** | **Chusmiza** | **3.05** | **324** | Pn | | **Pn** | **Pn** | **13 18 44.0** | **+1.4** |
| **GO01** | **Chusmiza** | **3.05** | **324** | *i* P | | **Pn** | **Pn** | **13 18 43.5** | **+1.0** |
| GO01 | | | | IAML | | | | 13 19 27.9 | |
| | comp=Z,376nm,0.1s | | | | | | | | |
| **GO01** | **Chusmiza** | **3.05** | **324** | *i* P | ↑ | **Pn** | **Pn** | **13 18 43.8** | **+1.3** |
| GO01 | | | | *e*S | | **Sn** | **Sn** | **13 19 21.8** | **+0.6** |
| **GO01** | **Chusmiza** | **3.05** | **324** | Pg | | **Pn** | **Pn** | **13 18 44.2** | **+1.6** |
| **HMBC** | **Humberstone** | **3.06** | **307** | | | **Pn** | **Pn** | **13 18 42.3** | **0.0** |
| **TA01** | **Diego Aracena** | **3.13** | **300** | | | **Pn** | **Pn** | **13 18 42.1** | **-0.8** |
| **TA01** | **Diego Aracena** | **3.13** | **300** | *i* P | | **Pn** | **Pn** | **13 18 42.1** | **-0.8** |
| TA01 | | | | IAML | | | | 13 19 21.6 | |
| | comp=Z,145nm,0.7s | | | | | | | | |
| **TA01** | **Diego Aracena** | **3.13** | **300** | *e*P | ↑ | **Pn** | **Pn** | **13 18 42.7** | **-0.2** |
| TA01 | | | | *e*S | | **Sn** | **Sn** | **13 19 20.0** | **-1.9** |
| **TA02** | **Huaiquique** | **3.25** | **305** | | | **Pn** | **Pn** | **13 18 44.6** | **+0.1** |
| **TA02** | **Huaiquique** | **3.25** | **305** | *e*P | | **Pn** | **Pn** | **13 18 44.9** | **+0.4** |
| TA02 | | | | *i* S | | **Sn** | **Sn** | **13 19 22.6** | **-2.1** |
| TA02 | | | | IAML | | | | 13 19 26.5 | |
| | comp=N,155nm,0.1s | | | | | | | | |
| **SOEO** | **Opoqueri** | **3.63** | **351** | Pg | | **Pn** | **Pn** | **13 18 52.0** | **+2.3** |
| **GO02** | **Mina Guanaco** | **3.65** | **215** | Pn | | **Pn** | **Pn** | **13 18 49.8** | **0.0** |
| **GO02** | **Mina Guanaco** | **3.65** | **215** | *i* P | | **Pn** | **Pn** | **13 18 49.6** | **-0.2** |
| GO02 | | | | IAML | | | | 13 19 34.3 | |
| | comp=Z,159nm,0.2s | | | | | | | | |
| **GO02** | **Mina Guanaco** | **3.65** | **215** | *e*P | ↑ | **Pn** | **Pn** | **13 18 50.1** | **+0.3** |
| GO02 | | | | *i* S | | **Sn** | **Sn** | **13 19 31.9** | **-2.3** |
| **PB14** | **IPOC Station P** | **3.76** | **229** | Pn | | **Pn** | **Pn** | **13 18 51.2** | **+0.1** |
| **PB14** | **IPOC Station P** | **3.76** | **229** | *e*P | | **Pn** | **Pn** | **13 18 51.3** | **+0.1** |
| PB14 | | | | *e*S | | **Sn** | **Sn** | **13 19 34.0** | **-2.7** |
| **SOTI** | **Planta Incahua** | **4.12** | **56** | Pg | | **Pn** | **Pn** | **13 18 56.5** | **+0.9** |
| **SOET** | **ToroToro** | **4.26** | **19** | Pg | | **Pn** | **Pn** | **13 18 58.6** | **+0.9** |
| **AOEA** | **Aiquile** | **4.41** | **26** | Pg | | **Pn** | **Pn** | **13 19 00.4** | **+0.9** |
| **AP01** | **Chacalluta** | **4.74** | **322** | *i* S | | **Sn** | **Sn** | **13 19 56.5** | **-2.2** |
| **AC01** | **Pan de Azucar** | **4.98** | **217** | | | **Pn** | **Pn** | **13 19 05.7** | **-0.8** |
| **AC01** | **Pan de Azucar** | **4.98** | **217** | *i* P | | **Pn** | **Pn** | **13 19 04.5** | **-2.0** |
| AC01 | | | | IAML | | | | 13 20 04.6 | |
| | comp=Z,40nm,0.4s | | | | | | | | |
| **PB18** | **Visviri** | **5.00** | **335** | | | **Pn** | **Pn** | **13 19 07.0** | **-0.3** |
| **SOEJ** | **Jacaque** | **5.23** | **351** | Pg | | **Pn** | **Pn** | **13 19 12.5** | **+2.1** |
| **BBOE** | **La Paz, Chanca** | **5.36** | **353** | Pg | | **Pn** | **Pn** | **13 19 14.6** | **+2.5** |
| **BBOD** | **La Paz, Gloria** | **5.63** | **347** | Pg | | **Pn** | **Pn** | **13 19 17.2** | **+1.6** |
| **AC06** | **Mina Casimiro** | **5.87** | **208** | | | **Pn** | **Pn** | **13 19 15.5** | **-2.7** |
| **LPAZ** | **La Paz** | **5.90** | **352** | Pn | | **Pn** | **Pn** | **13 19 20.9** | **+1.8** |
| **LPAZ** | **La Paz** | **5.90** | **352** | P | | **Pn** | **Pn** | **13 19 20.5** | **+1.3** |
| | comp=Z,4.8nm,0.4s,baz=166,slow=7.5,SNR=15 | | | | | | | | |
| LPAZ | | | | S | | **Sn** | **Sn** | **13 20 27.5** | **+0.6** |
| | comp=Z,3.7nm,0.5s,baz=207,slow=24,SNR=1.9 | | | | | | | | |
| **LPAZ** | **La Paz** | **5.90** | **352** | Pg | | **Pn** | **Pn** | **13 19 21.0** | **+1.8** |
| **GO03** | **Copiap** | **6.03** | **206** | | | **Pn** | **Pn** | **13 19 19.3** | **-1.0** |
| **AC04** | **Llanos de Chal** | **6.92** | **209** | Pn | | **Pn** | **Pn** | **13 19 26.4** | **-5.5** |
| **AC05** | **El Transito** | **7.17** | **201** | Pn | | **Pn** | **Pn** | **13 19 33.6** | **-1.6** |
| **LCO** | **Las Campanas** | **7.48** | **204** | Pn | | **Pn** | **Pn** | **13 19 37.0** | **-2.5** |
| **CO01** | **Juntas del Tor** | **8.18** | **197** | Pn | | **Pn** | **Pn** | **13 19 47.5** | **-1.2** |
| **SIV** | **San Ignacio** | **8.50** | **45** | P | | **Pn** | **Pn** | **13 19 50.8** | **-2.1** |
| | comp=Z,13nm,0.4s,baz=220,slow=9.9,SNR=28 | | | | | | | | |
| SIV | | | | S | | **Sn** | **Sn** | **13 21 21.4** | **-6.6** |
| | comp=Z,5.9nm,0.3s,baz=125,slow=22,SNR=11 | | | | | | | | |
| **CPUP** | **Villa Florida** | **9.99** | **116** | P | | **Pn** | **Pn** | **13 20 10.5** | **-1.8** |
| | comp=Z,2.3nm,0.9s,baz=292,slow=12,SNR=4.9 | | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.21** | **51** | Pn | | **Pn** | **Pn** | **13 20 15.7** | **+0.4** |
| **VA06** | **Catapilco** | **10.95** | **198** | Pn | | **Pn** | **Pn** | **13 20 20.8** | **-4.0** |
| **VILB** | **Vilhena** | **11.38** | **38** | Pn | | **Pn** | **Pn** | **13 20 29.6** | **-1.0** |
| **MT02** | **Curacav** | **11.56** | **196** | Pn | | **Pn** | **Pn** | **13 20 32.4** | **-0.3** |
| **ITAB** | **Concordia** | **14.67** | **113** | P | | **P** | **P** | **13 21 13.3** | **-0.3** |
| **TRQA** | **Tornquist** | **16.49** | **165** | P | | **P** | **P** | **13 21 32.0** | **-1.6** |
| TRQA | | | | IAmb | | IAmb | IAmb | 13 22 08.5 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **PLCA** | **Paso Flores** | **18.72** | **188** | P | | **Pn** | **Pn** | **13 21 59.2** | **-1.2** |
| | comp=Z,1.6nm,0.8s,baz=341,slow=16,SNR

KIMD Sb 13 19 54.9 -0.3
**TASE Tanaga Southea 0.72 342 Pb 13 19 47.1 -0.1**
**KIWB Kanaga Island 0.77 24 Pn Pb 13 19 47.3 -0.7**
**TAFP Tanaga Falls P 0.78 345 Pb 13 19 47.5 -0.5**
TAFP Sb 13 19 57.3 -0.9
**TANO Tanaga North 0.82 340 Pb 13 19 48.5 -0.3**
TANO Sb 13 19 58.8 -0.6
**KICM Kanaga Island 0.82 21 Pb 13 19 48.5 -0.3**
**KIRH Kanaga Island 0.83 25 Pb 13 19 48.4 -0.6**
**KINC Kanaga Island 0.85 23 Pb 13 19 48.8 -0.5**
**GALAA Gareloi Lava P 0.92 312 Pb 13 19 50.0 -0.5**
**GAEA Gareloi East 0.93 314 Pb 13 19 50.1 -0.5**
**GASW Gareloi Southw 0.97 311 Pn 13 19 50.6 -0.8**
**GANO Gareloi North 0.98 314 Pn 13 19 50.5 -1.0**
**GSCK Great Sitkin C 1.28 47 Pn 13 19 55.3 -0.3**
**GSTD Great Sitkin T 1.31 46 Pn 13 19 56.1 0.0**
GSTD Sn 13 20 12.6 -0.4
**GSMY Great Sitkin M 1.34 48 Pn 13 19 56.4 -0.1**
GSMY Sn 13 20 13.6 0.0
**GSTR Great Sitkin T 1.38 46 Pn Pn 13 19 57.2 +0.2**
**AMKA Amchitka 1.92 278 Pn 13 20 04.0 -0.3**
**AMKA Amchitka 1.92 278 Sn 13 20 28.5 +0.8**
**KOKL Mount Kliuchef 2.46 60 Pn 13 20 13.8 +1.9**
**KOFP Korovin Flat P 2.49 62 Pn 13 20 14.1 +1.8**
**CLES Cleveland East 5.09 68 Pn Pn 13 20 47.4 -0.5**
**SHEM Shemya Is, Ala 5.33 290 P Pn 13 20 55.2 +4.0**
2.4nm,0.3s,baz=74,slow=15,SNR=1.4
SHEM S Sn 13 21 54.3 +2.4
14nm,0.5s,baz=72,slow=18,SNR=1.2
SHEM LR LR 13 23 01.9
comp=Z,198nm,19.1s,baz=204,slow=39
17nm,0.6s
**LVA Lava Point 7.69 62 Pn Pn 13 21 24.2 +0.5**
**S12K Black Hills 10.36 58 Pn Pn 13 22 01.4 +1.1**
**CNBA Chernabura Isl 11.49 64 Pn Pn 13 22 14.3 -1.4**
**O14K Tigyukauivet M 12.37 43 Pn Pn 13 22 30.9 +3.4**
**O16K Kokwok River B 13.93 45 Pn Pn 13 22 51.7 +2.8**
**PLK4 Peulik 4 13.97 54 Pn Pn 13 22 52.0 +2.4**
**K15K Wolf Creek Mou 14.20 32 Pn P 13 22 56.4 -3.5**
**M16K Timber Creek 14.32 39 Pn P 13 22 58.3 -2.9**
**L16K Owhat River 14.54 36 Pn P 13 23 01.1 -2.5**
**N17K Nushagak Hills 14.79 43 P 13 23 04.5 -1.8**
**M17K Holitna River 15.15 40 Pn Pn 13 23 06.1 +0.7**
**PETK Petropavlovsk- 15.23 287 P P 13 23 09.6 -1.8**
1.3nm,0.9s,baz=96,slow=15,SNR=2.5
PETK LR LR 13 28 50.9
comp=Z,47nm,21.5s,baz=91,slow=36
**O18K Koktuh Hills 15.35 47 Pn Pn 13 23 10.2 +2.0**
**N18K Kilae Creek 15.42 43 P 13 23 12.0 -1.4**
**J17K VABM Dome 15.78 32 P P 13 23 18.2 +0.9**
J17K IAmb IAmb 13 23 21.7
comp=Z,9.3nm,1.1s
**L18K Granite Mounta 15.90 38 P P 13 23 17.6 -1.1**
**KDAK Kodiak Island 15.96 56 P Pn 13 23 17.3 +1.4**
comp=Z,1.7nm,0.3s,baz=255,slow=4.3,SNR=35
comp=Z,3.3nm,0.3s
**N19K Bonanza Creek 16.09 44 P Pn 13 23 19.6 +1.8**
**L19K White Mountain 16.60 40 P P 13 23 27.4 +0.9**
**J18K Innoko River 16.63 34 P P 13 23 27.0 +0.2**
J18K IAmb IAmb 13 23 30.9
comp=Z,9.7nm,1.4s
**J19K Poorman 17.34 34 P P 13 23 35.1 +0.5**
**K20K Telida 17.54 37 P P 13 23 38.3 +1.5**
**SKT Skwentna 17.88 43 P P 13 23 42.5 +1.8**
SKT IAmb IAmb 13 23 59.4
comp=Z,8.2nm,0.9s
**J20K Nowinta River 17.97 35 P P 13 23 42.4 +0.8**
**F19K Shaleruckik Mo 18.62 25 P Pn 13 23 49.4 +0.4**
F19K IAmb IAmb 13 23 52.8
comp=Z,12nm,1.4s
**E19K Redstone River 19.23 24 P Pn 13 23 56.1 -0.2**
E19K IAmb IAmb 13 24 28.3
comp=Z,8.7nm,1.3s
**C18K Utukok River 19.27 18 P P 13 23 55.4 -0.5**
C18K IAmb IAmb 13 24 12.5
comp=Z,10nm,1.1s
**H21K Melozitna Rive 19.31 32 P P 13 23 57.0 +0.7**
**G21K Allakaket 19.62 29 P P 13 24 00.2 +0.6**
G21K IAmb IAmb 13 24 16.1
comp=Z,4.2nm,0.8s
**MA2 Magadan 19.66 308 LR LR 13 30 40.2**
comp=Z,45nm,20.5s,baz=109,slow=34
**SCM Sheep Creek Mo 19.67 45 P P 13 24 00.4 +0.1**
**D19K Kuna River 19.81 21 P P 13 24 02.1 +0.4**
D19K IAmb IAmb 13 24 08.8
comp=Z,7.8nm,0.9s
**SEY Seymchan 19.89 318 P Pn 13 24 04.5 +0.2**
comp=Z,0.2nm,0.3s,baz=110,slow=12,SNR=9.6
comp=Z,2.8nm,0.7s
**DHY Denali Highway 20.09 42 P P 13 24 03.8 -1.1**
**F21K Alatna River 20.09 28 P P 13 24 05.0 +0.2**
**KLU Klutina 20.20 47 P P 13 24 06.6 +0.5**
KLU IAmb IAmb 13 24 23.9
comp=Z,9.1nm,1.2s
**I23K Minto, Yukon-K 20.23 35 P P 13 24 06.8 +0.6**
I23K IAmb IAmb 13 24 26.7
comp=Z,7.8nm,1.4s
**M24K Tolsona, Glenn 20.27 45 P P 13 24 07.6 +0.8**
**N25K Chitina, Valde 20.85 47 P P 13 24 14.1 +1.1**
N25K IAmb IAmb 13 24 34.8
comp=Z,4.5nm,1.1s
**G23K Bananza Creek 20.85 31 P P 13 24 11.6 -1.4**
**ILAR Eielson Array 20.98 38 P P 13 24 13.7 -0.7**
comp=Z,0.2nm,0.6s,baz=230,slow=8.6,SNR=4.2
comp=Z,0.2nm,0.6s
**H24K Noodor Dome 21.11 35 P P 13 24 16.1 +0.3**
H24K IAmb IAmb 13 24 21.9
comp=Z,3.1nm,0.8s
**GLB Gilahina Butte 21.17 48 P P 13 24 18.0 +1.5**
GLB IAmb IAmb 13 24 56.6
comp=Z,3.6nm,1.0s
**B20K Meade River 21.21 19 P P 13 24 17.1 +0.3**
**VRDI Verde Repeater 21.29 49 P P 13 24 19.0 +1.1**
VRDI IAmb IAmb 13 24 46.4
comp=Z,6.1nm,1.3s
**D22K Ayikyak River 21.43 25 P P 13 24 19.6 +0.3**
D22K IAmb IAmb 13 24 34.9
comp=Z,5.7nm,0.9s
**B21K Ikpikpuk River 21.48 22 P P 13 24 20.2 +0.5**
**J25K Salcha River, 21.51 39 P P 13 24 19.8 -0.4**
J25K IAmb IAmb 13 24 59.0
comp=Z,5.1nm,1.4s
**F24K Squaw Lake 21.99 31 P P 13 24 27.9 +2.6**
**D23K Nanushuk River 22.03 26 P P 13 24 26.5 +0.9**
**K27K Chicken 22.65 42 P P 13 24 31.9 -0.3**
K27K IAmb IAmb 13 24 47.8
comp=Z,3.7nm,1.1s
**EGAK Eagle 23.26 40 P P 13 24 37.9 -0.6**
EGAK IAmb IAmb 13 24 59.4
comp=Z,4.1nm,1.1s
**DAWY Dawson 23.79 42 P P 13 24 43.1 -0.7**
DAWY IAmb IAmb 13 25 17.0
comp=Z,4.2nm,1.3s
**I28M Miner Creek 23.96 39 P P 13 24 45.3 -0.2**
I28M IAmb IAmb 13 24 59.7
comp=Z,3.1nm,0.9s
**K29M Barlow Dome 24.54 43 P P 13 24 50.1 -0.7**
**J30M Hart River 25.21 42 P P 13 24 56.7 -0.2**
J30M IAmb IAmb 13 25 34.3
comp=Z,2.7nm,1.2s
**I30M Mount Dempster 25.34 41 P P 13 24 57.7 -0.3**
I30M IAmb IAmb 13 25 38.7
comp=Z,2.9nm,1.1s
**YAK Yakutsk 30.10 312 LR LR 13 37 58.5**
comp=Z,30nm,19.9s,baz=44,slow=37
**KLR Kul'dur 31.93 287 LR LR 13 38 49.6**
comp=Z,30nm,21.7s,baz=67,slow=36
**H11N2 WAKE ISLAND Hy 33.64 207 T T 14 02 27.6**
baz=17,slow=75,SNR=94
**H11N3 WAKE ISLAND Hy 33.65 207 T T 14 02 28.3**
baz=17,slow=75,SNR=104
**H11N1 WAKE ISLAND Hy 33.65 207 T T 14 02 29.0**
baz=17,slow=75,SNR=109
**USRK Ussuriysk Ar. 34.03 278 P P 13 26 14.2 -0.9**
comp=Z,2.6nm,0.7s,baz=57,slow=12,SNR=4.2
comp=Z,2.6nm,0.7s
**H11S1 WAKE ISLAND Hy 34.85 207 T T 14 03 26.7**
baz=17,slow=76,SNR=138
**H11S2 WAKE ISLAND Hy 34.87 207 T T 14 03 27.8**
baz=17,slow=76,SNR=72
**H11S3 WAKE ISLAND Hy 34.87 207 T T 14 03 27.8**
baz=17,slow=76,SNR=74
**YKA Yellowknife Ar 34.87 46 P P 13 26 22.1 -0.1**
comp=Z,0.2nm,0.4s,baz=261,slow=8.1,SNR=2.5
comp=Z,0.2nm,0.4s
**NVAR Mina Array Bea 42.87 83 P P 13 27 30.5 +0.8**
comp=Z,0.3nm,0.7s,baz=298,slow=8.0,SNR=3.1
comp=Z,0.3nm,0.7s
**PDAR Pinedale Array 45.70 73 P P 13 27 52.5 +0.1**
comp=Z,0.9nm,0.6s,baz=302,slow=6.2,SNR=7.9
comp=Z,0.9nm,0.6s
**SONM Songino Array 47.38 297 P P 13 28 04.7 -0.6**
comp=Z,0.4nm,0.4s,baz=59,slow=8.6,SNR=2.6
comp=Z,0.4nm,0.4s
**TXAR Lajitas Array 57.98 82 P P 13 29 23.7 -0.2**
comp=Z,0.4nm,0.6s,baz=306,slow=4.5,SNR=3.5
comp=Z,0.4nm,0.6s
**WRA Warramunga Arr 82.35 225 P P 13 31 52.2 -0.7**
comp=Z,0.4nm,0.9s,baz=26,slow=6.1,SNR=2.4
comp=Z,0.4nm,0.9s
**BRTR Keskin Array B 85.44 336 P P 13 32 07.3 -1.5**
comp=Z,1.0nm,0.8s,baz=41,slow=3.9,SNR=5.2
comp=Z,1.0nm,0.8s
**ASAR Alice Springs 85.81 223 P P 13 32 10.8 +0.3**
comp=Z,0.6nm,0.8s,baz=21,slow=5.9,SNR=8.5
comp=Z,0.6nm,0.8s
**H03N2 Juan Fernandez 120.40 107 T T 15 50 23.9**
baz=317,slow=77,SNR=14
**H03N1 Juan Fernandez 120.41 107 T T 15 50 25.3**
baz=317,slow=77,SNR=20
**H03N3 Juan Fernandez 120.42 107 T T 15 50 28.8**
baz=317,slow=77,SNR=16

*AEIC **17** 13:27:08.1±1.8, 69°.50N±0°.03×144°.19W±0°.09, h11km±6km, ML4.0,ML4.0/108(NEIC), Mwr3.9/24(NEIC), Error ellipse: s-maj=4.6km s-min=4.3km az=217.0*
*NEIC **17** 13:27:08.9, 69°.61N×144°.21W, h0km*
*IDC **17** 13:27:09.0±0.9, 69°.68N×144°.29W, h0km, mb3.7/6, mbtmp3.8/10, ML3.9/4, MS3.2/13, Error ellipse: s-maj=26.5km s-min=13.7km az=48.0*
*NEIC **17** 13:27:09.0±1.7, 69°.55N±0°.04×144°.24W±0°.08, h3km±2km, Error ellipse: s-maj=7.4km s-min=4.7km az=11.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=1.11; $M_{\theta\theta}$=4.64; $M_{\phi\phi}$5.76; $M_{r\theta}$-1.62; $M_{r\phi}$-7.78; $M_{\theta\phi}$2.49; Fault plane solution: $M_0$9.86000×$10^{14}$ NP1: $\phi_s$286.09000°,$\delta$81.53000°,$\lambda$168.51000°. NP2: $\phi_s$17.80000°,$\delta$78.63000°,$\lambda$8.64000°. Principal axes: T 10.6579, Plg14.0000°, Azm242.0000°; N -1.8479, Plg76.0000°, Azm70.0000°; P -8.8100, Plg2.0000°, Azm332.0000°;*

**ISC 17 13:27:08.3±1.2, 69°.51N±0°.04×144°.18W±0°.02, h1km±9km, n145, σ1s33/151, mb3.8/6, MS3.1/12, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **54** | Pg | **Pg** | **13 27 12.5** | **+0.3** |
| C27K | | | | | **Sg** | **13 27 15.7** | **+0.8** |
| **C26K** | **Camden Bay** | **0.49** | **329** | | **Pg** | **13 27 18.4** | **+0.8** |
| **D25K** | **Kavik River** | **0.80** | **258** | | **Pg** | **13 27 22.3** | **-1.2** |
| D25K | | | | Sg | **Sg** | **13 27 33.8** | **-0.1** |
| **D27M** | **Malcolm River** | **1.17** | **102** | | **Pb** | **13 27 29.4** | **-1.9** |
| D27M | | | | IAML | | 13 27 52.8 | |
| comp=N,2μm,0.7s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.60** | **280** | | **Pn** | **13 27 37.7** | **+0.1** |
| C24K | | | | Sn | **Sb** | **13 27 59.3** | **+0.1** |
| C24K | | | | IAML | | 13 28 02.2 | |
| comp=E,2μm,0.7s | | | | | | | |
| **E27K** | **Coleen River** | **1.62** | **144** | | **Pn** | **13 27 38.0** | **-0.1** |
| E27K | | | | Sn | **Sb** | **13 28 00.7** | **+0.7** |
| E27K | | | | IAML | | 13 28 03.7 | |
| comp=N,2μm,0.8s | | | | | | | |
| E27K | | | | IAML | | 13 28 05.2 | |
| comp=E,2μm,0.8s | | | | | | | |
| **D24K** | **Happy Valley** | **1.69** | **260** | Pn | **Pn** | **13 27 39.0** | **+0.1** |
| D24K | | | | Sn | **Sg** | **13 28 03.2** | **+0.8** |
| **F26K** | **Sheenjek River** | **1.82** | **180** | | **Pn** | **13 27 41.5** | **+0.7** |
| F26K | | | | Sn | **Sb** | **13 28 05.5** | **-0.1** |
| F26K | | | | IAML | | 13 28 09.6 | |
| comp=N,1μm,0.8s | | | | | | | |
| **E28M** | **Babbage River** | **1.90** | **116** | | **Pn** | **13 27 42.5** | **+0.7** |
| E28M | | | | Sn | **Sb** | **13 28 08.3** | **+0.5** |
| E28M | | | | IAML | | 13 28 14.1 | |
| comp=E,1μm,1.0s | | | | | | | |
| **D28M** | **Stokes Point** | **1.93** | **93** | | **Pb** | **13 27 43.3** | **-0.9** |
| D28M | | | | Sn | **Sg** | **13 28 11.6** | **+1.3** |
| **F25K** | **Christian Rive** | **2.00** | **196** | | **Pn** | **13 27 43.9** | **+0.8** |
| F25K | | | | Sn | **Sb** | **13 28 10.1** | **-0.6** |
| F25K | | | | IAML | | 13 28 13.1 | |
| comp=E,2μm,0.9s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.09** | **184** | | **Pn** | **13 27 45.3** | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **2.12** | **248** | Pn | **Pn** | **13 27 44.7** | **-0.1** |
| TOLK | | | | IAML | | 13 28 19.5 | |
| comp=E,811nm,0.5s | | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **229** | | **Pn** | **13 27 45.8** | **+0.8** |
| E24K | | | | Sn | **Sb** | **13 28 14.4** | **0.0** |
| **C23K** | **Itkillik River** | **2.27** | **281** | | **Pn** | **13 27 47.6** | **+0.8** |
| **D23K** | **Nanushuk River** | **2.38** | **260** | | **Pn** | **13 27 48.8** | **+0.4** |
| D23K | | | | IAML | | 13 28 30.7 | |
| comp=E,735nm,0.9s | | | | | | | |
| D23K | | | | IAML | | 13 28 38.5 | |
| comp=N,818nm,0.8s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **216** | | **Pn** | **13 27 49.6** | **+0.6** |
| **E23K** | **Chandalar** | **2.45** | **236** | | **Pn** | **13 27 50.1** | **+0.6** |
| **F28M** | **Old Crow** | **2.47** | **138** | | **Pn** | **13 27 50.2** | **+0.5** |
| F28M | | | | Sn | **Sn** | **13 28 21.7** | **+1.2** |
| F28M | | | | IAML | | 13 28 33.8 | |
| comp=E,742nm,0.8s | | | | | | | |
| F28M | | | | IAML | | 13 28 36.3 | |
| comp=N,660nm,1.0s | | | | | | | |
| **E29M** | **Blow River** | **2.53** | **113** | | **Pn** | **13 27 51.7** | **+1.2** |
| E29M | | | | | **Sb** | **13 28 25.0** | **-1.0** |
| E29M | | | | IAML | | 13 28 32.4 | |
| comp=E,640nm,0.8s | | | | | | | |
| E29M | | | | IAML | | 13 28 33.1 | |
| comp=N,810nm,0.8s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.57** | **177** | | **Pn** | **13 27 51.6** | **+0.6** |
| **G25K** | **Bearman Lake** | **2.85** | **196** | | **Pn** | **13 27 55.6** | **+0.9** |
| **G27K** | **Doyon Strip** | **2.87** | **160** | | **Pn** | **13 27 55.2** | **+0.1** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **205** | Pn | **Pn** | **13 27 58.3** | **+0.3** |
| G24K | | | | Sn | **Sn** | **13 28 36.3** | **+1.0** |
| G24K | | | | IAML | | 13 28 51.5 | |
| comp=E,514nm,0.9s | | | | | | | |
| **D22K** | **Ayikyak River** | **3.10** | **262** | | **Pn** | **13 27 58.7** | **+0.5** |
| D22K | | | | IAML | | 13 28 54.3 | |
| comp=E,519nm,1.1s | | | | | | | |
| **COLD** | **Coldfoot** | **3.19** | **227** | | **Pn** | **13 28 00.1** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **3.29** | **289** | | **Pn** | **13 28 01.4** | **+0.5** |
| **H27K** | **Steamboat Moun** | **3.44** | **162** | | **Pn** | **13 28 03.4** | **+0.4** |
| **G29M** | **Pine Creek** | **3.47** | **136** | | **Pn** | **13 28 04.2** | **+0.8** |
| G29M | | | | IAML | | 13 29 07.6 | |
| comp=N,464nm,0.6s | | | | | | | |
| **G23K** | **Bananza Creek** | **3.56** | **221** | Pn | **Pn** | **13 28 04.6** | **0.0** |
| G23K | | | | IAML | | 13 29 06.1 | |
| comp=E,355nm,1.3s | | | | | | | |
| G23K | | | | IAML | | 13 29 06.6 | |
| comp=N,241nm,0.8s | | | | | | | |
| **F22K** | **John River** | **3.56** | **239** | | **Pn** | **13 28 05.2** | **+0.5** |
| **F30M** | **Barrier River** | **3.62** | **118** | | **Pn** | **13 28 07.2** | **+1.8** |
| **B21K** | **Ikpikpuk River** | **3.66** | **277** | | **Pn** | **13 28 06.5** | **+0.6** |
| **E21K** | **Killik River** | **3.69** | **258** | Pn | **Pn** | **13 28 06.6** | **+0.2** |
| E21K | | | | IAML | | 13 29 16.6 | |
| comp=N,377nm,1.0s | | | | | | | |
| E21K | | | | IAML | | 13 29 17.2 | |
| comp=E,317nm,1.2s | | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.78** | **270** | | **Pn** | **13 28 08.9** | **+1.4** |
| **H24K** | **Noodor Dome** | **3.95** | **203** | Pn | **Pn** | **13 28 10.0** | **0.0** |
| H24K | | | | IAML | | 13 29 21.9 | |
| comp=E,292nm,1.0s | | | | | | | |
| H24K | | | | IAML | | 13 29 27.9 | |
| comp=N,183nm,1.2s | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.96** | **297** | | **Pn** | **13 28 10.7** | **+0.7** |
| **H29M** | **Whitestone** | **3.97** | **144** | Pn | **Pn** | **13 28 11.1** | **+1.0** |
| H29M | | | | IAML | | 13 29 06.8 | |
| comp=E,251nm,0.6s | | | | | | | |
| H29M | | | | IAML | | 13 29 22.3 | |
| comp=N,266nm,0.8s | | | | | | | |
| **INK** | **Inuvik** | **4.04** | **102** | Pn | **Pn** | **13 28 11.5** | **+0.4** |
| **INK** | **Inuvik** | **4.04** | **102** | Pn | **Pn** | **13 28 11.1** | **+0.1** |
| comp=N,3.1nm,0.3s,baz=310,slow=6.2,SNR=40 | | | | | | | |
| INK | | | | Sn | **Sn** | **13 28 57.4** | **-1.5** |
| comp=N,6.7nm,0.3s,baz=281,slow=16,SNR=8.4 | | | | | | | |
| comp=N,12nm,0.5s | | | | | | | |
| **I27K** | **Kandik River** | **4.04** | **165** | | **Pn** | **13 28 12.7** | **+1.4** |
| **F21K** | **Alatna River** | **4.14** | **241** | Pn | **Pn** | **13 28 12.6** | **+0.1** |
| **EPYK** | **Eagle Plains** | **4.22** | **135** | | **Pn** | **13 28 14.4** | **+0.7** |
| **H23K** | **Yukon River** | **4.22** | **211** | | **Pn** | **13 28 14.0** | **+0.3** |
| H23K | | | | IAML | | 13 29 25.8 | |
| comp=N,193nm,1.3s | | | | | | | |
| H23K | | | | IAML | | 13 29 28.8 | |
| comp=E,189nm,1.2s | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.24** | **174** | | **Pn** | **13 28 14.0** | **+0.1** |
| **F31M** | **Tsiigehtchic** | **4.37** | **113** | | **Pn** | **13 28 16.6** | **+1.0** |
| F31M | | | | IAML | | 13 29 30.7 | |
| comp=N,175nm,0.6s | | | | | | | |
| F31M | | | | IAML | | 13 29 33.2 | |
| comp=E,214nm,1.2s | | | | | | | |
| **I28M** | **Miner Creek** | **4.39** | **156** | Pn | **Pn** | **13 28 17.2** | **+1.1** |
| I28M | | | | IAML | | 13 29 12.4 | |
| comp=N,163nm,0.6s | | | | | | | |
| I28M | | | | IAML | | 13 29 39.2 | |
| comp=E,156nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **4.51** | **120** | Pn | **Pn** | **13 28 18.7** | **+1.1** |
| G31M | | | | IAML | | 13 29 37.1 | |
| comp=N,215nm,1.0s | | | | | | | |
| G31M | | | | IAML | | 13 29 37.1 | |
| comp=E,204nm,0.8s | | | | | | | |
| **E20K** | **Nigu River** | **4.52** | **260** | | **Pn** | **13 28 18.8** | **+1.0** |
| **D20K** | **Etivluk River** | **4.52** | **266** | | **Pn** | **13 28 18.8** | **+1.0** |
| **B20K** | **Meade River** | **4.54** | **282** | Pn | **Pn** | **13 28 18.4** | **+0.5** |
| **H22K** | **Ishtalitna Cre** | **4.55** | **220** | | **Pn** | **13 28 18.1** | **0.0** |
| **A21K** | **Barrow** | **4.56** | **299** | | **Pn** | **13 28 19.5** | **+1.3** |
| **G21K** | **Allakaket** | **4.61** | **234** | | **Pn** | **13 28 18.9** | **-0.2** |
| G21K | | | | IAML | | 13 29 43.7 | |
| comp=N,134nm,1.1s | | | | | | | |
| G21K | | | | IAML | | 13 29 47.7 | |
| comp=E,175nm,0.9s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.74** | **149** | Pn | **Pn** | **13 28 21.3** | **+0.5** |
| I29M | | | | IAML | | 13 29 17.5 | |
| comp=N,113nm,0.5s | | | | | | | |
| I29M | | | | IAML | | 13 29 44.8 | |
| comp=E,117nm,1.6s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **207** | | **Pn** | **13 28 21.9** | **+0.2** |
| I23K | | | | IAML | | 13 29 49.0 | |
| comp=E,133nm,1.3s | | | | | | | |
| I23K | | | | IAML | | 13 29 59.4 | |
| comp=N,139nm,1.1s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **201** | | **Pn** | **13 28 22.8** | **+0.7** |
| MDM | | | | IAML | | 13 29 50.4 | |
| comp=N,125nm,0.7s | | | | | | | |
| MDM | | | | IAML | | 13 29 50.9 | |
| comp=E,124nm,1.0s | | | | | | | |
| **COLA** | **College** | **4.87** | **199** | | **Pn** | **13 28 23.9** | **+1.4** |
| **IL31** | | **4.87** | **194** | | **Pn** | **13 28 23.4** | **+0.9** |
| **ILAR** | **Eielson Array** | **4.87** | **194** | | **Pn** | **13 28 23.2** | **+0.6** |
| **ILAR** | **Eielson Array** | **4.87** | **194** | Pn | **Pn** | **13 28 23.7** | **+1.1** |
| comp=E,3.1nm,0.3s,baz=3.8,slow=13,SNR=174 | | | | | | | |
| ILAR | | | | Sn | **Sn** | **13 29 19.4** | **-0.1** |
| comp=E,6.0nm,0.3s,baz=355,slow=17,SNR=7.0 | | | | | | | |
| ILAR | | | | Lg | Lg | 13 29 37.7 | |
| comp=E,9.7nm,0.3s,baz=10,slow=30,SNR=7.1 | | | | | | | |
| ILAR | | | | LR | LR | 13 30 36.4 | |
| comp=E,135nm,21.7s,baz=35,slow=41 | | | | | | | |
| comp=E,12nm,0.5s | | | | | | | |
| **EGAK** | **Eagle** | **4.89** | **165** | Pn | **Pn** | **13 28 23.8** | **+0.9** |
| EGAK | | | | IAML | | 13 29 25.2 | |
| comp=E,109nm,1.0s | | | | | | | |
| EGAK | | | | IAML | | 13 29 49.5 | |
| comp=E,139nm,1.0s | | | | | | | |
| **J25K** | **Salcha River,** | **4.94** | **186** | | **Pn** | **13 28 24.5** | **+1.0** |
| J25K | | | | IAML | | 13 29 56.3 | |
| comp=N,86nm,1.4s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.95** | **246** | Pn | **Pn** | **13 28 24.2** | **+0.7** |
| F20K | | | | IAML | | 13 29 57.4 | |
| comp=N,89nm,1.3s | | | | | | | |
| **IMAR** | **Indian Mountai** | **5.07** | **230** | | **Pn** | **13 28 24.5** | **-0.8** |
| **H21K** | **Melozitna Rive** | **5.08** | **225** | Pn | **Pn** | **13 28 25.8** | **+0.3** |
| H21K | | | | IAML | | 13 30 01.1 | |
| comp=N,106nm,1.1s | | | | | | | |
| H21K | | | | IAML | | 13 30 09.8 | |
| comp=E,79nm,1.0s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **198** | | **Pn** | **13 28 25.6** | **+0.2** |
| CCB | | | | IAML | | 13 29 37.4 | |
| comp=E,83nm,0.8s | | | | | | | |
| **D19K** | **Kuna River** | **5.11** | **265** | | **Pn** | **13 28 26.6** | **+0.7** |
| D19K | | | | IAML | | 13 30 05.2 | |
| comp=E,77nm,1.2s | | | | | | | |
| **MLY** | **Manley** | **5.16** | **213** | Pn | **Pn** | **13 28 27.5** | **+0.9** |
| **E19K** | **Redstone River** | **5.22** | **253** | | **Pn** | **13 28 27.0** | **-0.4** |
| E19K | | | | IAML | | 13 30 13.3 | |
| comp=E,118nm,1.1s | | | | | | | |
| E19K | | | | IAML | | 13 30 15.0 | |
| comp=N,112nm,0.7s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.25** | **141** | Pn | **Pn** | **13 28 28.3** | **+0.4** |
| **WRH** | **Wood River Hil** | **5.28** | **199** | Pn | **Pn** | **13 28 29.3** | **+1.1** |
| WRH | | | | IAML | | 13 29 30.7 | |
| comp=N,84nm,0.8s | | | | | | | |
| WRH | | | | IAML | | 13 30 06.6 | |
| comp=E,110nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **203** | | **Pn** | **13 28 28.7** | **+0.4** |
| NEA2 | | | | IAML | | 13 30 04.1 | |
| comp=E,63nm,1.2s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.48** | **273** | Pn | **Pn** | **13 28 31.8** | **+0.8** |
| **F19K** | **Shaleruckik Mo** | **5.73** | **249** | Pn | **Pn** | **13 28 34.2** | **-0.1** |
| **H20K** | **Anotleneega Mo** | **5.75** | **231** | | **Pn** | **13 28 34.9** | **+0.2** |
| **K24K** | **Donnelly Dome** | **5.76** | **187** | | **Pn** | **13 28 36.5** | **+1.7** |
| **DAWY** | **Dawson** | **5.78** | **159** | | **Pn** | **13 28 35.6** | **+0.5** |
| **J30M** | **Hart River** | **5.82** | **144** | Pn | **Pn** | **13 28 36.3** | **+0.6** |
| **DOT** | **Dot Lake** | **5.88** | **179** | | **Pn** | **13 28 38.5** | **+2.0** |
| **G19K** | **Purcell Mounta** | **5.93** | **241** | Pn | **Pn** | **13 28 36.9** | **-0.3** |
| **BPAW** | **Bear Paw Mtn.** | **6.06** | **210** | Pn | **Pn** | **13 28 39.5** | **+0.6** |
| **MCK** | **McKinley** | **6.10** | **200** | | **Pn** | **13 28 40.4** | **+1.0** |
| **C18K** | **Utukok River** | **6.15** | **270** | Pn | **Pn** | **13 28 40.2** | **0.0** |
| **H19K** | **Roundabout Mou** | **6.17** | **236** | Pn | **Pn** | **13 28 40.9** | **+0.6** |
| **K29M** | **Barlow Dome** | **6.27** | **152** | Pn | **Pn** | **13 28 43.1** | **+1.3** |
| **E18K** | **Tukpahlearik C** | **6.39** | **259** | | **Pn** | **13 28 43.8** | **+0.4** |
| **F18K** | **Selawik** | **6.48** | **251** | | **Pn** | **13 28 45.0** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **6.54** | **170** | Pn | **Pn** | **13 28 46.3** | **+0.8** |
| **G18K** | **Tagagawik** | **6.58** | **244** | | **Pn** | **13 28 46.7** | **+0.6** |
| **PAX** | **Paxson** | **6.59** | **185** | | **Pn** | **13 28 48.3** | **+2.1** |
| **MENT** | **Mentasta** | **6.60** | **178** | | **Pn** | **13 28 47.6** | **+1.3** |
| **J20K** | **Nowinta River** | **6.63** | **221** | Pn | **Pn** | **13 28 46.8** | **0.0** |
| **A36M** | **Sachs Harbour** | **6.72** | **60** | Pn | **Pn** | **13 28 47.2** | **-0.7** |
| **C17K** | **DeLong Mountai** | **6.90** | **270** | | **Pn** | **13 28 50.0** | **-0.4** |
| **WAT1** | **Susitna Watana** | **6.93** | **197** | | **Pn** | **13 28 52.6** | **+1.7** |
| **WAT7** | **Susitna Watana** | **6.96** | **198** | | **Pn** | **13 28 54.0** | **+2.7** |
| **E17K** | **Hotham Inlet** | **6.97** | **258** | | **Pn** | **13 28 51.5** | **+0.1** |
| **H18K** | **Honhosa River** | **7.00** | **238** | | **Pn** | **13 28 52.5** | **+0.7** |
| **F17K** | **Baldwin Pennin** | **7.11** | **253** | Pn | **Pn** | **13 28 52.5** | **-0.6** |
| **D17K** | **Noatak River** | **7.14** | **264** | | **Pn** | **13 28 52.7** | **-0.9** |
| **HARP** | **HAARP** | **7.15** | **184** | | **Pn** | **13 28 55.3** | **+1.4** |
| **M27K** | **Edge Creek, AK** | **7.24** | **171** | | **Pn** | **13 28 57.1** | **+1.9** |
| **G17K** | **Kiwalik Mounta** | **7.47** | **245** | | **Pn** | **13 28 58.6** | **+0.4** |
| **H17K** | **Granite Mounta** | **7.62** | **241** | | **Pn** | **13 29 00.7** | **+0.4** |
| **C16K** | **Lisburne Hills** | **7.72** | **271** | Pn | **Pn** | **13 29 00.8** | **-0.9** |
| **YUK2** | **White River** | **7.87** | **168** | | **Pn** | **13 29 05.8** | **+2.0** |
| **GLB** | **Gilahina Butte** | **8.10** | **179** | | **Pn** | **13 29 09.6** | **+2.7** |
| **PTPK** | **Patty Peak** | **8.38** | **174** | | **Pn** | **13 29 13.4** | **+2.5** |
| **YUK8** | **Steele Glacier** | **8.46** | **165** | | **Pn** | **13 29 13.8** | **+1.8** |
| **M20K** | **Styx River** | **8.49** | **210** | | **Pn** | **13 29 13.1** | **+0.8** |
| **BMRM** | **Bremner River** | **8.58** | **181** | | **Pn** | **13 29 16.0** | **+2.6** |
| **STLK** | **Strandline Lak** | **8.64** | **205** | | **Pn** | **13 29 16.6** | **+2.3** |
| **KIAG** | **Kiagna River** | **8.65** | **174** | | **Pn** | **13 29 17.3** | **+2.7** |
| **CTGM** | **Chitina Glacie** | **8.66** | **171** | | **Pn** | **13 29 16.2** | **+1.6** |
| **YUK5** | **Granite Creek** | **8.81** | **160** | | **Pn** | **13 29 18.5** | **+1.8** |
| **SPNN** | **North Nagishla** | **8.90** | **207** | | **Pn** | **13 29 20.1** | **+2.2** |
| **O28M** | **Mount Upton** | **8.93** | **167** | | **Pn** | **13 29 20.8** | **+2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SEY** | **Seymchan** | **25.27** | **287** | P | | **P** | | **13 32 35.3** | **-0.2** |
| | comp=E,2.6nm,0.6s,baz=78,slow=6.7,SNR=12 | | | | | | | | |
| | comp=E,2.6nm,0.6s | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.47** | **250** | LR | | LR | | 13 42 07.4 | |
| | comp=E,36nm,20.7s,baz=32,slow=35 | | | | | | | | |
| **FRB** | **Frobisher Bay** | **28.70** | **64** | LR | | LR | | 13 46 11.4 | |
| | comp=E,51nm,19.8s,baz=336,slow=40 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.01** | **147** | LR | | LR | | 13 46 13.4 | |
| | comp=E,44nm,18.6s,baz=309,slow=38 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.15** | **128** | P | | **P** | | **13 33 39.1** | **+1.8** |
| | comp=E,0.4nm,0.5s,baz=357,slow=5.9,SNR=6.1 | | | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | | | |
| **YAK** | **Yakutsk** | **33.22** | **301** | LR | | LR | | 13 47 35.4 | |
| | comp=E,34nm,19.4s,baz=9.0,slow=37 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.09** | **142** | P | | **P** | | **13 33 57.1** | **+2.9** |
| | comp=E,1.1nm,0.9s,baz=339,slow=6.7,SNR=8.4 | | | | | | | | |
| | comp=E,1.1nm,0.9s | | | | | | | | |
| **SCHQ** | **Schefferville** | **36.10** | **73** | LR | | LR | | 13 48 27.7 | |
| | comp=E,32nm,18.4s,baz=260,slow=35 | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.12** | **142** | LR | | LR | | 13 53 02.1 | |
| | comp=E,30nm,18.8s,baz=318,slow=40 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.37** | **128** | P | | **P** | | **13 35 38.3** | **+2.4** |
| | comp=E,0.4nm,0.6s,baz=339,slow=7.0,SNR=5.7 | | | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **46.78** | **104** | LR | | LR | | 13 57 32.9 | |
| | comp=E,29nm,18.2s,baz=342,slow=39 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.80** | **325** | P | | **P** | | **13 36 16.6** | **-0.5** |
| | comp=E,0.5nm,0.4s,baz=10,slow=9.1,SNR=2.3 | | | | | | | | |
| ZALV | | | | LR | | LR | | 14 00 28.6 | |
| | comp=E,19nm,19.0s,baz=47,slow=39 | | | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | | | |
| **ARU** | **Arti** | **53.29** | **344** | LR | | LR | | 14 01 40.2 | |
| | comp=E,24nm,18.2s,baz=20,slow=39 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.17** | **329** | P | | **P** | | **13 36 48.6** | **-0.4** |
| KURBB | comp=E,0.8nm,0.8s,baz=16,slow=7.0,SNR=8.4 | | | LR | | LR | | 14 02 49.5 | |
| | comp=E,22nm,21.4s,baz=180,slow=38 | | | | | | | | |
| | comp=E,0.8nm,0.8s | | | | | | | | |
| **BELG** | **Belogornoye** | **58.10** | **352** | LR | | LR | | 14 03 43.5 | |
| | comp=E,23nm,20.2s,baz=7.4,slow=38 | | | | | | | | |

**NOU 17 13:53:06.9, 15°.99S × 166°.76E, h0 km, MLv 4.0/8, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LIFNC** | **LIFOU** | **4.78** | **175** | P | | Pn 13 54 19.1 | -1.2 |
| **KOUNC** | **Koumac, New Ca** | **5.11** | **207** | P | | Pn 13 54 24.3 | -0.4 |
| **YATNC** | **Mamie plateau,** | **6.04** | **179** | P | | Pn 13 54 36.7 | -0.8 |
| **DZM** | **Mont Dzumac** | **6.06** | **183** | P | | Pn 13 54 38.2 | +0.3 |
| **NOUC** | **Port Laguerre** | **6.09** | **184** | P | | Pn 13 54 39.2 | +0.9 |
| **PINNC** | **Pines Island,** | **6.62** | **174** | P | | Pn 13 54 46.6 | +1.1 |

*IDC* ***17*** *14:09:00.8±0.9, 13°.42S × 111°.48W, h0 km, mb3.8/6, mbtmp3.8/6, MS3.8/34, Error ellipse: s-maj=41.1km s-min=23.7km az=82.0*
*NEIC* ***17*** *14:09:03.1±1.8, 13°.5S±0°.1 × 111°.4W±0°.2, h10 km±1 km, mb4.6/44, Error ellipse: s-maj=30.0km s-min=18.3km az=258.0*

**ISC 17 14:09:02.5±0.7, 13°.44S±0°.08 × 111°.3W±0°.2, h11 km, n92, σ1°.22/54, mb4.6/26, MS3.8/33, Central East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RPN** | **Rapa Nui** | **13.74** | **173** | Pn | | **Pn** | **14 12 19.7** | **+2.4** |
| **RPN** | **Rapa Nui** | **13.74** | **173** | LR | | LR | 14 16 12.5 | |
| | comp=Z,486nm,19.0s,baz=12,slow=31 | | | | | | | |
| **VA02** | **Isla de Pascua** | **13.76** | **173** | Pn | | **Pn** | **14 12 17.6** | **0.0** |
| **ATAH** | **Atahualpa** | **32.93** | **82** | LR | | LR | 14 25 26.5 | |
| | comp=Z,245nm,21.1s,baz=256,slow=30 | | | | | | | |
| **TLIG** | **Tlapa** | **33.26** | **23** | P | | **P** | **14 15 39.5** | **-0.8** |
| TLIG | | | | IAmb | | IAmb | 14 16 08.4 | |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| **NNA** | **Nana** | **33.61** | **91** | LR | | LR | 14 25 38.5 | |
| | comp=Z,238nm,21.1s,baz=240,slow=30 | | | | | | | |
| **CMIG** | **Matias Romero** | **34.39** | **29** | LR | | LR | 14 26 48.7 | |
| | comp=Z,329nm,22.0s,baz=194,slow=31 | | | | | | | |
| **MTO3** | **Montecristo** | **35.16** | **99** | P | | **P** | **14 15 58.0** | **+1.2** |
| **JTS** | **Las Juntas de** | **35.19** | **49** | LR | | LR | 14 25 33.5 | |
| | comp=Z,45nm,18.7s,baz=218,slow=28 | | | | | | | |
| **CRIN** | **San Cristobal** | **35.38** | **44** | P | | **P** | **14 15 57.8** | **-0.8** |
| **H03N2** | **Juan Fernandez** | **35.51** | **130** | T | | T | 14 53 37.2 | |
| | baz=300,slow=76,SNR=145 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **35.53** | **130** | T | | T | 14 53 53.9 | |
| | baz=300,slow=76,SNR=206 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **35.53** | **130** | T | | T | 14 53 36.7 | |
| | baz=300,slow=76,SNR=271 | | | | | | | |
| **PPT** | **Papeete** | **37.09** | **259** | LR | | LR | 14 26 59.6 | |
| | comp=Z,132nm,21.5s,baz=82,slow=29 | | | | | | | |
| **LPIG** | **La Paz** | **37.33** | **1** | LR | | LR | 14 27 41.8 | |
| | comp=Z,255nm,21.4s,baz=191,slow=30 | | | | | | | |
| **ROSC** | **El Rosal** | **40.94** | **66** | LR | | LR | 14 30 10.5 | |
| | comp=Z,48nm,18.6s,baz=240,slow=31 | | | | | | | |
| **VA06** | **Catapilco** | **41.12** | **124** | P | | **P** | **14 16 45.4** | **-1.4** |
| **LVC** | **Limon Verde** | **41.19** | **109** | P | | **P** | **14 16 49.1** | **+1.1** |
| **LVC** | **Limon Verde** | **41.19** | **109** | LR | | LR | 14 29 40.0 | |
| | comp=Z,140nm,19.6s,baz=278,slow=30 | | | | | | | |
| **LPAZ** | **La Paz** | **41.75** | **99** | P | | **P** | **14 16 54.7** | **+1.9** |
| **LPAZ** | **La Paz** | **41.75** | **99** | P | | **P** | **14 16 54.3** | **+1.5** |
| | comp=Z,1.9nm,0.7s,baz=260,slow=3.7,SNR=7.2 | | | | | | | |
| LPAZ | | | | LR | | LR | 14 30 18.5 | |
| | comp=Z,258nm,20.9s,baz=266,slow=30 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **ML02** | **Panimavida** | **42.12** | **129** | P | | **P** | **14 16 51.3** | **-3.6** |
| **BO02** | **Sierra Bellavi** | **42.26** | **127** | P | | **P** | **14 16 53.7** | **-2.5** |
| **833A** | **Chaparral WMA,** | **43.08** | **15** | P | | **P** | **14 17 03.9** | **+1.1** |
| 833A | | | | IAmb | | IAmb | 14 17 10.7 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **43.15** | **10** | P | | **P** | **14 17 04.6** | **+1.1** |
| **TXAR** | **Lajitas Array** | **43.15** | **10** | P | | **P** | **14 17 04.2** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=190,slow=8.2,SNR=3.8 | | | | | | | |
| TXAR | | | | LR | | LR | 14 31 58.5 | |
| | comp=Z,72nm,18.6s,baz=193,slow=32 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **SAND** | **Sanderson** | **44.04** | **11** | P | | **P** | **14 17 11.7** | **+1.2** |
| SAND | | | | IAmb | | IAmb | 14 17 18.2 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **ALPN** | **Alpine** | **44.18** | **9** | P | | **P** | **14 17 12.6** | **+0.9** |
| **VHRN** | **Van Horn** | **44.39** | **8** | P | | **P** | **14 17 14.0** | **+0.6** |
| **PLCA** | **Paso Flores** | **44.73** | **135** | LR | | LR | 14 31 03.9 | |
| | comp=Z,108nm,19.0s,baz=250,slow=30 | | | | | | | |
| **JCT** | **Junction City** | **45.04** | **14** | P | | **P** | **14 17 19.3** | **+0.8** |
| JCT | | | | IAmb | | IAmb | 14 17 25.9 | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **OZNA** | **Ozona** | **45.17** | **12** | P | | **P** | **14 17 21.4** | **+1.9** |
| OZNA | | | | IAmb | | IAmb | 14 17 27.4 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **MNHN** | **Monahans** | **45.27** | **10** | P | | **P** | **14 17 21.5** | **+1.2** |
| MNHN | | | | IAmb | | IAmb | 14 17 27.2 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **BRDY** | **Brady** | **46.01** | **15** | P | | **P** | **14 17 27.0** | **+0.9** |
| BRDY | | | | IAmb | | IAmb | 14 17 33.1 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **SGCY** | **Sterling City** | **46.13** | **12** | P | | **P** | **14 17 27.7** | **+0.6** |
| **RAR** | **Rarotonga** | **46.79** | **253** | LR | | LR | 14 32 08.0 | |
| | comp=Z,96nm,19.2s,baz=122,slow=30 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **47.05** | **354** | LR | | LR | 14 32 12.9 | |
| | comp=Z,146nm,21.0s,baz=162,slow=30 | | | | | | | |
| **SAML** | **Samuel** | **47.34** | **90** | P | | **P** | **14 17 37.2** | **+0.4** |
| **PLPT** | **Palo Pinto** | **47.63** | **15** | P | | **P** | **14 17 39.5** | **+0.7** |
| **DKNS** | **Dickens** | **47.87** | **12** | P | | **P** | **14 17 40.9** | **+0.1** |
| **W13A** | **Hualapai Mount** | **48.34** | **357** | P | | **P** | **14 17 45.9** | **+1.5** |
| **ANMO** | **Albuquerque** | **48.34** | **5** | LR | | LR | 14 34 46.2 | |
| | comp=Z,143nm,18.2s,baz=290,slow=32 | | | | | | | |
| **SIV** | **San Ignacio** | **48.54** | **100** | LR | | LR | 14 34 48.6 | |
| | comp=Z,219nm,21.1s,baz=290,slow=32 | | | | | | | |
| **VILB** | **Vilhena** | **49.66** | **96** | P | | **P** | **14 17 55.9** | **+1.1** |
| **CSTR** | **Hydro, Custer** | **50.25** | **13** | P | | **P** | **14 17 59.7** | **+0.8** |
| **PTLB** | **Pontes e Lacer** | **50.44** | **99** | P | | **P** | **14 18 02.9** | **+2.2** |
| PTLB | | | | IAmb | | IAmb | 14 18 12.1 | |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| **MIAR** | **Mount Ida** | **50.60** | **19** | P | | **P** | **14 18 02.4** | **+0.9** |
| MIAR | | | | IAmb | | IAmb | 14 18 08.2 | |
| | comp=Z,9.5nm,1.0s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **51.20** | **6** | P | | **P** | **14 18 07.2** | **+0.9** |
| SDCO | | | | IAmb | | IAmb | 14 18 13.8 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **OK048** | **Pawnee Station** | **51.40** | **15** | P | | **P** | **14 18 08.2** | **+0.7** |
| **WHAR** | **Wooly Hollow** | **51.70** | **20** | P | | **P** | **14 18 10.2** | **+0.5** |
| WHAR | | | | IAmb | | IAmb | 14 18 12.3 | |
| | comp=Z,9.9nm,1.2s | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **51.90** | **65** | LR | | LR | 14 37 26.6 | |
| | comp=Z,62nm,20.3s,slow=33 | | | | | | | |
| **CPUP** | **Villa Florida** | **51.99** | **113** | LR | | LR | 14 36 46.2 | |
| | comp=Z,113nm,18.4s,baz=228,slow=32 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **52.01** | **353** | P | | **P** | **14 18 12.4** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=175,slow=11,SNR=4.9 | | | | | | | |
| NVAR | | | | LR | | LR | 14 34 33.0 | |
| | comp=Z,82nm,21.6s,baz=164,slow=30 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **S39A** | **Bolivar** | **53.58** | **18** | P | | **P** | **14 18 24.4** | **+0.7** |
| S39A | | | | IAmb | | IAmb | 14 18 29.8 | |
| | comp=Z,6.8nm,1.0s | | | | | | | |
| **T42A** | **Van Buren** | **53.68** | **20** | P | | **P** | **14 18 24.6** | **+0.2** |
| T42A | | | | IAmb | | IAmb | 14 18 30.6 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **55.34** | **27** | LR | | LR | 14 39 52.0 | |
| | comp=Z,46nm,21.2s,baz=189,slow=33 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **55.90** | **350** | LR | | LR | 14 36 53.3 | |
| | comp=Z,84nm,20.8s,baz=186,slow=30 | | | | | | | |
| **PDAR** | **Pinedale Array** | **55.95** | **2** | P | | **P** | **14 18 40.1** | **-0.9** |
| | comp=Z,0.7nm,0.7s,baz=151,slow=6.4,SNR=5.2 | | | | | | | |
| PDAR | | | | LR | | LR | 14 38 26.1 | |
| | comp=Z,69nm,19.9s,baz=166,slow=32 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **I07A** | **Izee** | **57.73** | **353** | P | | **P** | **14 18 54.5** | **+1.0** |
| **YHL** | **Hebgen Lake** | **58.01** | **0** | P | | **P** | **14 18 55.0** | **-0.7** |
| **I05D** | **Terrebonne, OR** | **58.23** | **352** | P | | **P** | **14 18 57.6** | **+0.7** |
| I05D | | | | IAmb | | IAmb | 14 19 32.5 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **MDP** | **Montagnes des** | **61.05** | **76** | LR | | LR | 14 42 44.2 | |
| | comp=Z,38nm,18.4s,baz=77,slow=33 | | | | | | | |
| **BDFB** | **Brasilia** | **61.08** | **101** | LR | | LR | 14 41 59.7 | |
| | comp=Z,78nm,20.3s,baz=135,slow=32 | | | | | | | |
| **NEW** | **Newport** | **61.65** | **356** | LR | | LR | 14 41 21.5 | |
| | comp=Z,54nm,19.6s,baz=194,slow=32 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **64.84** | **11** | LR | | LR | 14 45 09.1 | |
| | comp=Z,52nm,18.3s,baz=202,slow=33 | | | | | | | |
| **SADO** | **Sadowa** | **64.86** | **25** | LR | | LR | 14 47 05.4 | |
| | comp=Z,84nm,18.1s,baz=235,slow=35 | | | | | | | |
| **URZ** | **Uruzra** | **67.41** | **234** | LR | | LR | 14 41 26.5 | |
| | comp=Z,59nm,20.0s,baz=262,slow=29 | | | | | | | |
| **RCBR** | **Riachuelo** | **74.47** | **92** | LR | | LR | 14 50 49.1 | |
| | comp=Z,70nm,20.1s,baz=153,slow=34 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.73** | **358** | P | | **P** | **14 20 47.5** | **-0.3** |
| | comp=Z,0.6nm,0.9s,baz=181,slow=4.9,SNR=2.5 | | | | | | | |
| YKA | | | | LR | | LR | 14 50 36.3 | |
| | comp=Z,75nm,19.4s,baz=74,slow=33 | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **76.66** | **180** | P | | **P** | **14 20 54.3** | **+0.9** |
| QSPA | | | | IAmb | | IAmb | 14 21 03.0 | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **76.66** | **180** | P | | **P** | **14 20 53.9** | **+0.5** |
| | comp=Z,2.2nm,0.7s,baz=82,slow=3.4,SNR=17 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **SCHQ** | **Schefferville** | **77.67** | **24** | LR | | LR | 14 54 10.6 | |
| | comp=Z,42nm,20.4s,baz=266,slow=35 | | | | | | | |
| **M19K** | **Big River Lodg** | **82.37** | **341** | | | **P** | **14 21 23.3** | **-0.9** |
| M19K | | | | IAmb | | IAmb | 14 21 25.4 | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| **NEA2** | **Nenana** | **82.92** | **345** | P | | **P** | **14 21 26.6** | **-0.4** |
| NEA2 | | | | IAmb | | IAmb | 14 21 33.1 | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **83.01** | **162** | P | | **P** | **14 21 26.5** | **-1.1** |
| SNAA | | | | IAmb | | IAmb | 14 21 53.4 | |
| | comp=Z,7.3nm,1.5s | | | | | | | |
| **INK** | **Inuvik** | **83.08** | **352** | LR | | LR | 14 56 55.5 | |
| | comp=Z,31nm,18.5s,baz=286,slow=35 | | | | | | | |
| **K20K** | **Telida** | **83.35** | **342** | | | **P** | **14 21 27.7** | **-1.6** |
| K20K | | | | IAmb | | IAmb | 14 21 29.5 | |
| | comp=Z,5.3nm,1.1s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **83.44** | **345** | P | | **P** | **14 21 29.8** | **+0.1** |
| I23K | | | | IAmb | | IAmb | 14 21 31.7 | |
| | comp=Z,7.1nm,1.2s | | | | | | | |
| **FRB** | **Frobisher Bay** | **83.63** | **18** | LR | | LR | 14 55 57.7 | |
| | comp=Z,81nm,21.1s,baz=173,slow=34 | | | | | | | |
| **F24K** | **Squaw Lake** | **85.00** | **347** | P | | **P** | **14 21 37.6** | **0.0** |
| F24K | | | | IAmb | | IAmb | 14 21 49.0 | |
| | comp=Z,3.8nm,1.0s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **85.03** | **339** | P | | **P** | **14 21 39.1** | **+1.3** |
| **H19K** | **Roundabout Mou** | **85.66** | **343** | P | | **P** | **14 21 41.0** | **+0.1** |
| **H11S2** | **WAKE ISLAND Hy** | **86.82** | **290** | T | | T | 15 57 36.3 | |
| | baz=106,slow=75,SNR=103 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **86.83** | **290** | T | | T | 15 57 35.4 | |
| | baz=106,slow=75,SNR=72 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **86.84** | **290** | T | | T | 15 57 37.6 | |
| | baz=106,slow=75,SNR=70 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **86.96** | **291** | T | | T | 15 57 44.9 | |
| | baz=106,slow=75,SNR=9.7 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **86.97** | **291** | T | | T | 15 57 59.1 | |
| | baz=106,slow=75,SNR=8.4 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **86.97** | **291** | T | | T | 15 57 45.2 | |
| | baz=106,slow=75,SNR=5.1 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **91.43** | **20** | LR | | LR | 15 01 26.3 | |
| | comp=Z,82nm,20.0s,baz=227,slow=34 | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.85** | **344** | | | **PKPab** | **14 28 37.5** | **-1.3** |
| **MKAR** | **Makanchi Array** | **144.85** | **344** | PKP | | **PKPab** | **14 28 37.4** | **-1.5** |
| | comp=Z,1.2nm,0.6s,baz=23,slow=4.0,SNR=8.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **150.54** | **284** | PKPbc | | **PKPbc** | **14 28 55.0** | **-0.5** |
| | comp=Z,2.1nm,0.6s,baz=92,slow=0.7,SNR=13 | | | | | | | |

*IDC* ***17*** *14:21:37.3±0.6, 59°.41S × 25°.11W, h0 km, mb4.4/8, mbtmp4.4/9, ML4.4/1, MS3.6/5, Error ellipse: s-maj=25.5km s-min=19.8km az=63.0*
*NEIC* ***17*** *14:21:39.6±1.8, 59°.4S±0°.1 × 25°.2W±0°.1, h10 km±1 km, mb4.6/21, Error ellipse: s-maj=20.4km s-min=3.6km az=24.0*

**ISC 17 14:21:41.2±0.5, 59°.47S±0°.08 × 25°.16W±0°.09, h27 km, n57, σ1°.14/45, mb4.6/16, MS3.6/3, 9C-4D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **8.09** | **305** | Pn | | **Pn** | **14 23 35.2** | **-1.5** |
| **ORCD** | **Orcadas** | **9.85** | **254** | Pn | | **Pn** | **14 23 58.7** | **-2.1** |
| **VNA1** | **Neumayer--Stat** | **13.21** | **155** | ↑P | | **Pn** | **14 24 45.2** | **-1.5** |
| | comp=Z,8.3nm,0.3s | | | | | | | |
| VNA1 | | | | ↑x | | x | 14 24 45.2 | |
| | comp=Z,8.3nm,0.3s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **13.40** | **158** | ↑P | | **Pn** | **14 24 47.4** | **-1.8** |
| | comp=Z,8.2nm,0.3s | | | | | | | |
| VNA3 | | | | ↑S | | Sn | 14 27 01.1 | -16 |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| VNA3 | | | | ↑x | | x | 14 27 01.1 | |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **13.61** | **155** | ↑P | | **Pn** | **14 24 50.4** | **-1.7** |
| | comp=Z,5.7nm,0.4s,baz=320,slow=13 | | | | | | | |
| VNA2 | | | | ↑x | | x | 14 24 50.4 | |
| | comp=Z,5.7nm,0.4s,baz=320,slow=13 | | | | | | | |
| **SNAA** | **Sanae** | **15.18** | **153** | | | **Pn** | **14 25 11.9** | **-1.5** |
| **SNAA** | **Sanae** | **15.18** | **153** | ↑P | | **Pn** | **14 25 11.3** | **-2.1** |
| | comp=Z,122nm,0.5s | | | | | | | |
| SNAA | | | | ↓S | | Sn | 14 27 46.0 | -14 |
| | comp=Z,17nm,0.4s | | | | | | | |
| SNAA | | | | ↓x | | x | 14 27 46.0 | |
| | comp=Z,17nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **15.18** | **153** | Pn | | **Pn** | **14 25 11.6** | **-1.8** |
| | comp=Z,1.7nm,0.3s,baz=316,slow=14,SNR=79 | | | | | | | |
| SNAA | | | | Sn | | Sn | 14 27 45.0 | -15 |
| | comp=Z,0.2nm,0.3s,baz=289,slow=14,SNR=2.5 | | | | | | | |
| SNAA | | | | LR | | LR | 14 30 12.7 | |
| | comp=Z,141nm,18.2s,baz=309,slow=34 | | | | | | | |
| | comp=Z,5.4nm,0.4s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **16.71** | **150** | ↑P | | **Pn** | **14 25 32.2** | **-0.9** |
| | comp=Z,14nm,0.2s | | | | | | | |
| TROLL | | | | ↓S | | Sn | 14 28 23.1 | -15 |
| | comp=Z,19nm,0.3s | | | | | | | |
| TROLL | | | | ↓x | | x | 14 28 23.1 | |
| | comp=Z,19nm,0.3s | | | | | | | |
| **PMSA** | **Palmer Station** | **18.70** | **237** | LR | | LR | 14 31 53.5 | |
| | comp=Z,159nm,19.2s,baz=78,slow=33 | | | | | | | |
| **BELA** | **Belgrano 2** | **18.76** | **186** | P | | **Pn** | **14 25 58.5** | **+0.4** |
| **SMAI** | **San Martin Ant** | **20.03** | **227** | P | | **Pn** | **14 26 13.9** | **+0.5** |
| **AY03** | **Cochrane** | **30.15** | **273** | P | | **P** | **14 27 50.8** | **+2.3** |
| AY03 | | | | IAmb | | IAmb | 14 28 21.4 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **30.77** | **180** | P | | **P** | **14 27 56.6** | **+2.6** |
| QSPA | | | | IAmb | | IAmb | 14 28 06.0 | |
| | comp=Z,7.4nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **30.77** | **180** | P | | **P** | **14 27 55.9** | **+1.9** |
| | comp=Z,3.4nm,0.8s,baz=194,slow=2.6,SNR=24 | | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **TRQA** | **Tornquist** | **31.74** | **296** | P | | **P** | **14 28 02.8** | **+0.2** |
| **PLCA** | **Paso Flores** | **33.76** | **283** | P | | **P** | **14 28 20.4** | **0.0** |
| PLCA | | | | IAmb | | IAmb | 14 28 45.5 | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **PLCA** | **Paso Flores** | **33.76** | **283** | P | | **P** | **14 28 20.4** | **0.0** |
| | comp=Z,2.4nm,0.9s,baz=166,slow=8.9,SNR=4.8 | | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **MAW** | **Mawson** | **36.78** | **140** | P | | **P** | **14 28 46.1** | **+0.2** |
| | comp=Z,3.5nm,0.9s,baz=250,slow=7.3,SNR=6.3 | | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **38.53** | **289** | P | | **P** | **14 29 01.9** | **+0.7** |
| BO02 | | | | IAmb | | IAmb | 14 29 09.0 | |
| | comp=Z,16nm,1.5s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **39.26** | **291** | P | | **P** | **14 29 09.2** | **+1.7** |
| MT08 | | | | IAmb | | IAmb | 14 29 10.6 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **MT09** | **Talagante** | **39.46** | **290** | P | | **P** | **14 29 08.9** | **-0.1** |
| **MT01** | **Popeta** | **39.51** | **290** | P | | **P** | **14 29 08.8** | **-0.5** |
| MT01 | | | | IAmb | | IAmb | 14 29 10.8 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **PEL** | **Peldehue** | **39.83** | **291** | P | | **P** | **14 29 11.9** | **-0.1** |
| **MT02** | **Curacav** | **39.95** | **290** | P | | **P** | **14 29 12.8** | **-0.1** |
| MT02 | | | | IAmb | | IAmb | 14 29 26.6 | |
| | comp=Z,21nm,1.2s | | | | | | | |
| **VA06** | **Catapilco** | **40.60** | **291** | P | | **P** | **14 29 18.8** | **+0.5** |
| **CO01** | **Juntas del Tor** | **42.18** | **294** | P | | **P** | **14 29 32.6** | **+1.0** |
| CO01 | | | | IAmb | | IAmb | 14 29 35.9 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **AC05** | **El Transito** | **43.23** | **295** | P | | **P** | **14 29 39.5** | **-0.4** |
| AC05 | | | | IAmb | | IAmb | 14 29 58.3 | |
| | comp=Z,27nm,1.2s | | | | | | | |
| **AC04** | **Llanos de Chal** | **44.13** | **294** | P | | **P** | **14 29 47.3** | **+0.2** |
| **H04S2** | **CROZET ISLANDS** | **45.26** | **110** | T | | T | 15 18 54.2 | |
| | baz=222,slow=74 | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **45.27** | **110** | T | | T | 15 18 56.5 | |
| | baz=222,slow=74 | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **45.28** | **110** | T | | T | 15 18 52.6 | |
| | baz=222 | | | | | | | |
| **BOSA** | **Boshof** | **45.92** | **71** | P | | **P** | **14 30 00.9** | **-0.5** |
| | comp=Z,6.1nm,0.7s,baz=209,slow=11,SNR=1.2 | | | | | | | |
| BOSA | | | | LR | | LR | 14 47 00.6 | |
| | comp=Z,67nm,18.4s,baz=200,slow=33 | | | | | | | |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **LBTB** | **Lobatse** | **49.11** | **68** | LR | | LR | 14 47 57.6 | |
| | comp=Z,56nm,18.2s,baz=162,slow=32 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **51.03** | **13** | T | | T | 15 25 45.8 | |
| | baz=186,slow=74,SNR=9.7 | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **51.03** | **13** | T | | T | 15 25 47.0 | |
| | baz=34,slow=74,SNR=9.0 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **52.15** | **13** | T | | T | 15 27 22.6 | |
| | baz=190 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **52.15** | **13** | T | | T | 15 27 34.5 | |
| | baz=190 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **52.16** | **13** | T | | T | 15 27 11.6 | |
| | baz=190 | | | | | | | |
| **LPAZ** | **La Paz** | **53.24** | **305** | P | | **P** | **14 30 57.0** | **-0.9** |
| **LPAZ** | **La Paz** | **53.24** | **305** | P | | **P** | **14 30 57.2** | **-0.7** |
| | comp=Z,1.1nm,0.4s,baz=245,slow=13,SNR=4.9 | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| **BOAV** | **Boa Vista** | **67.65** | **321** | P | | **P** | **14 32 34.5** | **-1.0** |
| BOAV | | | | IAmb | | IAmb | 14 32 43.0 | |
| | comp=Z,6.8nm,1.2s | | | | | | | |
| **DBIC** | **Dimbokro** | **67.89** | **22** | P | | **P** | **14 32 37.3** | **+0.3** |
| | comp=Z,7.7nm,0.9s,baz=175,slow=9.1,SNR=4.6 | | | | | | | |
| | comp=Z,7.7nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.56** | **27** | P | | **P** | **14 33 23.3** | **+0.2** |
| **TORD** | **Torodi Ar. Bea** | **75.56** | **27** | P | | **P** | **14 33 23.9** | **+0.8** |
| | comp=Z,14nm,0.7s,baz=201,slow=5.1,SNR=54 | | | | | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **SDV** | **Santo Domingo** | **77.19** | **314** | LR | | LR | 15 08 25.4 | |
| | comp=Z,72nm,19.6s,baz=134,slow=36 | | | | | | | |
| **ASAR** | **Alice Springs** | **95.39** | **161** | P | | **P** | **14 35 03.0** | **0.0** |
| | comp=Z,0.9nm,1.0s,baz=186,slow=5.0,SNR=7.2 | | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **122.84** | **111** | PKP | | **PKPdf** | **14 40 33.2** | **-1.2** |
| | comp=Z,1.2nm,0.7s,baz=236,slow=3.2,SNR=6.0 | | | | | | | |
| **PDAR** | **Pinedale Array** | **123.03** | **299** | PKP | | **PKPdf** | **14 40 34.4** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=145,slow=3.3,SNR=2.4 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **123.66** | **290** | PKP | | **PKiKP** | **14 40 37.5** | **+1.6** |
| | comp=Z,1.1nm,0.8s,baz=152,slow=3.6,SNR=6.0 | | | | | | | |
| **BVAR** | **Borovoye Array** | **135.65** | **59** | PKP | | **PKPdf** | **14 40 57.0** | **-0.6** |
| |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WB2 | | | | | IAmb | IAmb | 15 05 48.3 | | |
| | comp=Z,8.5nm,1.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.13** | **192** | P | **P** | | **15 05 33.3** | **-0.3** | |
| **WRA** | **Warramunga Arr** | **44.13** | **192** | P | **P** | | **15 05 32.7** | **-0.9** | |
| | comp=Z,1.6nm,0.5s,baz=17,slow=9.2,SNR=56 | | | | | | | | |
| WRA | | | | PcP | **PcP** | | **15 07 18.7** | **+0.3** | |
| | comp=Z,0.5nm,0.6s,baz=358,slow=3.1,SNR=4.6 | | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.89** | **204** | P | **P** | | **15 05 39.2** | **-0.5** | |
| **ASAR** | **Alice Springs** | **47.84** | **192** | P | **P** | | **15 06 01.9** | **-0.9** | |
| | comp=Z,0.3nm,0.4s,baz=11,slow=10,SNR=9.1 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **GSI** | **Gunungsitoli** | **49.62** | **250** | P | **P** | | **15 06 16.6** | **-0.1** | |
| **DZM** | **Mont Dzumac** | **50.57** | **152** | P | **P** | | **15 06 23.5** | **-0.3** | |
| DZM | | | | IAmb | IAmb | | 15 06 37.9 | | |
| | comp=Z,5.9nm,1.1s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **50.57** | **152** | P | **P** | | **15 06 24.0** | **+0.2** | |
| | comp=Z,1.4nm,0.6s,baz=27,slow=2.3,SNR=6.5 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.92** | **321** | P | **P** | | **15 06 41.8** | **+0.8** | |
| | comp=Z,0.7nm,0.4s,baz=112,slow=7.1,SNR=4.7 | | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| **N15K** | **Kwethluk River** | **53.31** | **31** | P | **P** | | **15 06 45.0** | **+1.3** | |
| N15K | | | | IAmb | IAmb | | 15 07 27.9 | | |
| | comp=Z,9.6nm,1.2s | | | | | | | | |
| **MK31** | **Makanchi Array** | **53.63** | **312** | P | **P** | | **15 06 47.0** | **+0.6** | |
| **MKAR** | **Makanchi Array** | **53.63** | **312** | P | **P** | | **15 06 47.6** | **+1.2** | |
| | comp=Z,1.9nm,0.6s,baz=90,slow=8.8,SNR=16 | | | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **53.85** | **312** | P | **P** | | **15 06 49.2** | **+1.2** | |
| MAKZ | | | | IAmb | IAmb | | 15 06 50.3 | | |
| | comp=Z,4.9nm,1.0s | | | | | | | | |
| **M17K** | **Holitna River** | **54.91** | **30** | P | **P** | | **15 06 54.9** | **-0.5** | |
| M17K | | | | IAmb | IAmb | | 15 07 33.5 | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **STKA** | **Stephens Creek** | **55.14** | **182** | P | **P** | | **15 06 56.1** | **-1.2** | |
| **STKA** | **Stephens Creek** | **55.14** | **182** | P | **P** | | **15 06 56.6** | **-0.7** | |
| | comp=Z,1.3nm,0.5s,baz=11,slow=7.0,SNR=6.5 | | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| **FORT** | **Forrest** | **56.00** | **196** | P | **P** | | **15 07 02.9** | **-0.6** | |
| **OHAK** | **Old Harbor** | **56.09** | **36** | P | **P** | | **15 07 02.5** | **-1.4** | |
| OHAK | | | | IAmb | IAmb | | 15 07 31.1 | | |
| | comp=Z,5.9nm,1.3s | | | | | | | | |
| **KURK** | **Kurchatov** | **56.30** | **316** | | **P** | | **15 07 05.8** | **+0.3** | |
| KURK | | | | IAmb | IAmb | | 15 07 07.4 | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.35** | **316** | P | **P** | | **15 07 06.9** | **+1.0** | |
| | comp=Z,5.9nm,0.7s,baz=92,slow=7.8,SNR=55 | | | | | | | | |
| | comp=Z,5.9nm,0.7s | | | | | | | | |
| **C19K** | **Lookout Ridge** | **56.62** | **21** | | **P** | | **15 07 09.0** | **+1.5** | |
| **J20K** | **Nowinta River** | **57.09** | **28** | P | **P** | | **15 07 11.6** | **+0.6** | |
| J20K | | | | IAmb | IAmb | | 15 07 26.4 | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **57.26** | **24** | P | **P** | | **15 07 13.0** | **+0.9** | |
| **IMAR** | **Indian Mountai** | **57.72** | **26** | P | **P** | | **15 07 15.3** | **0.0** | |
| **B20K** | **Meade River** | **57.74** | **20** | P | **P** | | **15 07 16.4** | **+1.0** | |
| **BOOM** | **Boomskoye usch** | **58.19** | **306** | P | **P** | | **15 07 20.2** | **+1.0** | |
| BOOM | | | | IAmb | IAmb | | 15 07 22.2 | | |
| | comp=Z,4.1nm,0.7s | | | | | | | | |
| **MORW** | **Morawa** | **58.59** | **208** | P | **P** | | **15 07 20.5** | **-1.3** | |
| **D22K** | **Ayikyak River** | **58.89** | **22** | P | **P** | | **15 07 22.9** | **-0.6** | |
| D22K | | | | IAmb | IAmb | | 15 07 39.2 | | |
| | comp=Z,4.7nm,1.0s | | | | | | | | |
| **PWL** | **Port Wells** | **59.13** | **32** | P | **P** | | **15 07 25.6** | **+0.3** | |
| PWL | | | | IAmb | IAmb | | 15 07 31.7 | | |
| | comp=Z,8.7nm,1.1s | | | | | | | | |
| **ILAR** | **Eielson Array** | **60.29** | **28** | P | **P** | | **15 07 32.6** | **-0.6** | |
| | comp=Z,0.5nm,0.7s,baz=254,slow=6.0,SNR=4.7 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| **ARSB** | **Arslanbob** | **60.49** | **305** | P | **P** | | **15 07 35.5** | **+0.3** | |
| **BVAR** | **Borovoye Array** | **61.43** | **319** | P | **P** | | **15 07 42.5** | **+1.3** | |
| | comp=Z,11nm,0.5s,baz=86,slow=7.3,SNR=62 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **61.47** | **205** | P | **P** | | **15 07 40.6** | **-1.0** | |
| **BRVK** | **Borovoye** | **61.49** | **319** | | **P** | | **15 07 42.1** | **+0.6** | |
| BRVK | | | | IAmb | IAmb | | 15 07 43.7 | | |
| | comp=Z,8.3nm,0.8s | | | | | | | | |
| **KK31** | **Karatay Array** | **62.11** | **308** | | **P** | | **15 07 46.2** | **+0.3** | |
| KK31 | | | | IAmb | IAmb | | 15 07 56.5 | | |
| | comp=Z,3.8nm,0.9s | | | | | | | | |
| **KKAR** | **Karatay Array** | **62.11** | **308** | | **P** | | **15 07 46.5** | **+0.6** | |
| **KKAR** | **Karatay Array** | **62.11** | **308** | P | **P** | | **15 07 46.7** | **+0.8** | |
| KKAR | | | | IAmb | IAmb | | 15 07 56.5 | | |
| | comp=Z,3.8nm,0.9s | | | | | | | | |
| **GAR** | **Garm** | **62.83** | **303** | P | **P** | | **15 07 51.3** | **+0.3** | |
| **M29M** | **Somme Creek** | **63.91** | **30** | P | **P** | | **15 07 58.8** | **+1.1** | |
| **J30M** | **Hart River** | **64.81** | **28** | P | **P** | | **15 08 03.4** | **-0.2** | |
| J30M | | | | IAmb | IAmb | | 15 08 06.9 | | |
| | comp=Z,3.8nm,1.2s | | | | | | | | |
| **G31M** | **Satah River** | **65.57** | **25** | P | **P** | | **15 08 08.1** | **-0.1** | |
| G31M | | | | IAmb | IAmb | | 15 08 33.5 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **ARU** | **Arti** | **67.92** | **323** | P | **P** | | **15 08 23.9** | **+0.5** | |
| **ABKAR** | **Akbulak array** | **68.39** | **316** | | **P** | | **15 08 27.1** | **+0.7** | |
| **RTZ** | **Ruatahuna** | **69.37** | **152** | P | **P** | | **15 08 31.4** | **-1.3** | |
| **YKA** | **Yellowknife Ar** | **74.72** | **28** | P | **P** | | **15 09 04.8** | **+0.5** | |
| | comp=Z,0.6nm,0.6s,baz=296,slow=6.5,SNR=4.8 | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.25** | **341** | P | **P** | | **15 09 19.5** | **+0.8** | |
| | comp=Z,2.7nm,0.8s,baz=76,slow=10,SNR=4.8 | | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **81.26** | **314** | P | **P** | | **15 09 42.1** | **+1.1** | |
| | comp=Z,1.8nm,0.7s,baz=0.0,slow=1.0,SNR=4.1 | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **81.62** | **334** | P | **P** | | **15 09 43.6** | **+1.0** | |
| | comp=Z,0.9nm,0.3s,baz=339,slow=10,SNR=4.0 | | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.81** | **52** | P | **P** | | **15 09 45.6** | **+1.3** | |
| | comp=Z,0.6nm,0.6s,baz=274,slow=5.2,SNR=5.9 | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.92** | **45** | P | **P** | | **15 10 06.5** | **+1.2** | |
| | comp=Z,0.2nm,0.4s,baz=0.0,slow=4.4,SNR=2.8 | | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.75** | **310** | PKP | **PKPdf** | | **15 16 31.2** | **+0.1** | |
| | comp=Z,0.5nm,0.8s,baz=32,slow=1.0,SNR=2.9 | | | | | | | | |
| **DBIC** | **Dimbokro** | **136.86** | **310** | PKP | **PKPdf** | | **15 16 47.8** | **-0.5** | |
| | comp=Z,4.3nm,0.8s,baz=324,slow=1.6,SNR=3.5 | | | | | | | | |
| **PLCA** | **Paso Flores** | **146.77** | **129** | PKPbc | **PKPbc** | | **15 17 07.3** | **+0.3** | |
| | comp=Z,1.0nm,0.5s,baz=225,slow=5.4,SNR=8.6 | | | | | | | | |
| **LPAZ** | **La Paz** | **149.50** | **82** | PKPbc | **PKPbc** | | **15 17 14.9** | **-0.7** | |
| | comp=Z,1.7nm,0.7s,baz=197,slow=9.5,SNR=4.8 | | | | | | | | |

*DNK **17** 15:06:55.3±2.8,58.97N×19.94E,h0km,ML2.6,*
*ML2.0(UPP), Explosion*
*UPP **17** 15:06:58.0±0.2,58.87N×18.96E,h0km,ML2.0, Unknown*
*HEL **17** 15:06:59.4±0.2,58.88N×18.83E,h0km,ML1.5, Explosion*
**ISC 17 15:06:57.7±0.8,58.87N±0.02×18.94E±0.03,h0km,n48,**
**σ1s30/59,Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NYNU** | **Nynaeshamn** | **0.51** | **286** | P | **Pg** | **15 07 07.8** | **+0.4** |
| **NYNU** | **Nynaeshamn** | **0.51** | **286** | P | **Pg** | **15 07 07.8** | **+0.4** |
| **NRTU** | **Norrtaelje** | **0.83** | **349** | P | **Pg** | **15 07 13.4** | **-0.2** |
| NRTU | | | | S | **Sg** | **15 07 24.7** | **+0.4** |
| **NRTU** | **Norrtaelje** | **0.83** | **349** | P | **Pg** | **15 07 13.4** | **-0.2** |
| NRTU | | | | S | **Sg** | **15 07 24.7** | **+0.4** |
| **NRTU** | **Norrtaelje** | **0.83** | **349** | *eP* | **Pg** | **15 07 13.4** | **-0.2** |
| **GOTU** | **Gotland** | **1.20** | **190** | P | **Pg** | **15 07 20.5** | **-0.3** |
| **GOTU** | **Gotland** | **1.20** | **190** | P | **Pg** | **15 07 20.5** | **-0.3** |
| **GOTU** | **Gotland** | **1.20** | **190** | *eS* | **Sb** | **15 07 37.0** | **-0.4** |
| **GOTU** | **Gotland** | **1.20** | **190** | *eP* | **Pg** | **15 07 20.4** | **-0.3** |
| **UPP** | **Uppsala** | **1.20** | **326** | P | **Pg** | **15 07 20.6** | **-0.1** |
| **UPP** | **Uppsala** | **1.20** | **326** | P | **Pg** | **15 07 20.6** | **-0.1** |
| **UPP** | **Uppsala** | **1.20** | **326** | *eP* | **Pg** | **15 07 20.6** | **-0.1** |
| **VIKU** | **Vikbolandet** | **1.23** | **254** | P | **Pg** | **15 07 20.6** | **-0.6** |
| VIKU | | | | S | **Sg** | **15 07 37.3** | **+0.2** |
| **VIKU** | **Vikbolandet** | **1.23** | **254** | P | **Pg** | **15 07 20.6** | **-0.6** |
| VIKU | | | | S | **Sg** | **15 07 37.3** | **+0.2** |
| **FIBU** | **Brunna** | **1.32** | **323** | P | **Pg** | **15 07 22.6** | **-0.3** |
| **FIBU** | **Brunna** | **1.32** | **323** | P | **Pg** | **15 07 22.6** | **-0.3** |
| **FLYU** | **Flymyra** | **1.38** | **337** | P | **Pg** | **15 07 23.7** | **-0.4** |
| **FLYU** | **Flymyra** | **1.38** | **337** | P | **Pg** | **15 07 23.7** | **-0.4** |
| **AAL** | **Aland** | **1.42** | **22** | P | **Pn** | **15 07 24.2** | **-0.6** |
| **AAL** | **Aland** | **1.42** | **22** | P | **Pn** | **15 07 24.2** | **-0.6** |
| **AAL** | **Aland** | **1.42** | **22** | *eS* | **Sg** | **15 07 43.2** | **-0.1** |
| **AAL** | **Aland** | **1.42** | **22** | *eP* | **Pn** | **15 07 24.5** | **-0.2** |
| **GRAU** | **Graesoe** | **1.49** | **352** | P | **Pn** | **15 07 25.4** | **-0.2** |
| **GRAU** | **Graesoe** | **1.49** | **352** | P | **Pn** | **15 07 25.4** | **-0.2** |
| **FORU** | **Forsmark** | **1.57** | **346** | P | **Pn** | **15 07 27.0** | **+0.1** |
| **FORU** | **Forsmark** | **1.57** | **346** | P | **Pn** | **15 07 27.0** | **+0.1** |
| **OSTU** | **Oestervaala** | **1.65** | **327** | P | **Pb** | **15 07 28.5** | **-0.5** |
| **OSTU** | **Oestervaala** | **1.65** | **327** | P | **Pb** | **15 07 28.5** | **-0.5** |
| **SLIT** | **Slitere, Latvi** | **2.16** | **124** | *eP* | **Pn** | **15 07 35.5** | **+0.6** |
| **SLIT** | **Slitere, Latvi** | **2.16** | **124** | *eP* | **Pb** | **15 07 37.2** | **-0.5** |
| SLIT | | | | *eS* | **Sb** | **15 08 05.5** | **+0.5** |
| **MTSE** | **Matsula** | **2.54** | **91** | *eP* | **Pn** | **15 07 40.2** | **+0.1** |
| **MTSE** | **Matsula** | **2.54** | **91** | *eP* | **Pn** | **15 07 41.7** | **+1.6** |
| MTSE | | | | *eS* | **Sb** | **15 08 13.8** | **-2.1** |
| **RAF** | **Rauma** | **2.59** | **32** | *eP* | **Pb** | **15 07 43.6** | **-1.3** |
| **RAF** | **Rauma** | **2.59** | **32** | *eP* | **Pn** | **15 07 42.6** | **+1.8** |
| RAF | | | | *eS* | **Sb** | **15 08 15.1** | **-2.1** |
| RAF | | | | MSG | | 15 08 15.3 | |
| | comp=Z,1.7nm,0.1s | | | | | | |
| **MEF** | **Metsahovi** | **3.09** | **62** | *eP* | **Pn** | **15 07 48.7** | **+1.1** |
| **MEF** | **Metsahovi** | **3.09** | **62** | *eS* | **Sn** | **15 08 27.3** | **+2.0** |
| MEF | | | | MSG | | 15 08 28.1 | |
| | comp=Z,1.0nm,0.1s | | | | | | |
| **KPF** | **Kankaanpaa** | **3.36** | **26** | *eP* | **Pn** | **15 07 53.9** | **+2.5** |
| **BORU** | **Boraas** | **3.49** | **252** | *iP* | **Pb** | **15 07 57.6** | **-2.7** |
| BORU | | | | *iS* | **Sb** | **15 08 45.4** | **+2.3** |
| **DEL** | **Delary** | **3.63** | **231** | *iP* | **Pb** | **15 08 00.2** | **-2.5** |
| DEL | | | | *iS* | **Sb** | **15 08 46.1** | **-1.2** |
| **FABU** | **Falkenberg** | **3.81** | **243** | *iP* | **Pb** | **15 08 02.0** | **-3.7** |
| **TJOU** | **Tjoern** | **3.94** | **261** | *iP* | **Pb** | **15 08 08.6** | **+0.7** |
| **ONAU** | **Onsala** | **4.00** | **251** | *iP* | **Pb** | **15 08 09.7** | **+0.6** |
| **STRU** | **Stroemstad** | **4.02** | **276** | *iP* | **Pb** | **15 08 08.8** | **-0.6** |
| STRU | | | | *iS* | **Sb** | **15 08 57.3** | **-1.2** |
| **BSD** | **Bornholm Skovb** | **4.36** | **212** | *eP* | **Pn** | **15 08 08.4** | **+3.3** |
| **BSD** | **Bornholm Skovb** | **4.36** | **212** | *iP* | **Pn** | **15 08 08.0** | **+2.9** |
| BSD | | | | *iS* | **Sn** | **15 08 56.2** | **-0.3** |
| BSD | | | | IAML | | 15 09 25.0 | |
| | comp=Z,4.9nm,0.3s | | | | | | |
| **KEF** | **Keuruu** | **4.42** | **39** | *eP* | **Pn** | **15 08 07.4** | **+1.5** |
| **VAF** | **Ylistaro** | **4.57** | **22** | *eP* | **Pn** | **15 08 10.1** | **+2.2** |
| **JOF** | **Joensuu** | **7.27** | **51** | *eP* | **Pn** | **15 08 45.5** | **+0.4** |

*IDC **17** 15:07:02.7±2.1,59.33N×18.90E,h0km,mbtmp2.9/4,*
*ML2.1/4,Error ellipse: s-maj=29.2km s-min=8.0km*
*az=175.0*
*UPP **17** 15:07:05.8±0.2,58.95N×18.81E,h0km,ML2.2, Unknown*
*DNK **17** 15:07:06.2±1.0,58.95N×18.86E,h0km,ML2.2(UPP),*
*Explosion*
**ISC 17 15:07:02.0±1.7,58.86N±0.09×19.01E±0.06,h0km,n24,**
**σ1s53/23,Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NYNU** | **Nynaeshamn** | **0.54** | **286** | P | **Pb** | **15 07 13.8** | **-0.6** |
| NYNU | | | | S | **Sg** | **15 07 20.6** | **+1.2** |
| **NYNU** | **Nynaeshamn** | **0.54** | **286** | P | **Pb** | **15 07 13.8** | **-0.6** |
| NYNU | | | | S | **Sg** | **15 07 20.6** | **+1.2** |
| **NRTU** | **Norrtaelje** | **0.84** | **347** | P | **Pb** | **15 07 19.6** | **0.0** |
| **NRTU** | **Norrtaelje** | **0.84** | **347** | P | **Pb** | **15 07 19.6** | **0.0** |
| **GOTU** | **Gotland** | **1.20** | **191** | P | Pn | 15 07 30.2 | +4.2 |
| **GOTU** | **Gotland** | **1.20** | **191** | P | Pn | 15 07 30.2 | +4.2 |
| **UPP** | **Uppsala** | **1.23** | **325** | P | **Pn** | **15 07 26.6** | **+0.2** |
| **UPP** | **Uppsala** | **1.23** | **325** | P | **Pn** | **15 07 26.6** | **+0.2** |
| **VIKU** | **Vikbolandet** | **1.26** | **255** | P | **Pn** | **15 07 27.7** | **+0.9** |
| **VIKU** | **Vikbolandet** | **1.26** | **255** | P | **Pn** | **15 07 27.7** | **+0.9** |
| **FIBU** | **Brunna** | **1.35** | **322** | P | **Pb** | **15 07 28.7** | **+0.6** |
| **FIBU** | **Brunna** | **1.35** | **322** | P | **Pb** | **15 07 28.7** | **+0.6** |
| **FLYU** | **Flymyra** | **1.40** | **336** | P | **Pb** | **15 07 29.6** | **+0.7** |
| **FLYU** | **Flymyra** | **1.40** | **336** | P | **Pb** | **15 07 29.6** | **+0.7** |
| **AAL** | **Aland** | **1.42** | **20** | P | **Pb** | **15 07 30.4** | **+1.1** |
| **AAL** | **Aland** | **1.42** | **20** | P | **Pb** | **15 07 30.4** | **+1.1** |
| **GRAU** | **Graesoe** | **1.50** | **351** | P | **Pg** | **15 07 31.5** | **+0.7** |
| **GRAU** | **Graesoe** | **1.50** | **351** | P | **Pg** | **15 07 31.5** | **+0.7** |
| **OSTU** | **Oestervaala** | **1.68** | **326** | P | **Pg** | **15 07 34.8** | **+0.7** |
| **OSTU** | **Oestervaala** | **1.68** | **326** | P | **Pg** | **15 07 34.8** | **+0.7** |
| **HFS** | **Hagfors** | **3.00** | **298** | Pn | **Pn** | **15 07 47.4** | **-3.4** |
| | 1.0nm,0.3s,baz=103,slow=13,SNR=41 | | | | | | |
| HFS | | | | Lg | Lg | 15 08 28.8 | |
| | 1.7nm,0.3s,baz=103,slow=30,SNR=9.0 | | | | | | |
| | 1.8nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **4.38** | **51** | Pn | **Pn** | **15 08 07.3** | **-2.4** |
| | 0.2nm,0.3s,baz=238,slow=8.0,SNR=7.4 | | | | | | |
| FINES | | | | Lg | Lg | 15 09 11.8 | |
| | 1.3nm,0.3s,baz=242,slow=26,SNR=9.4 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **NOA** | **NORSAR Array B** | **4.49** | **302** | Pn | **Pn** | **15 08 07.0** | **-4.3** |
| | baz=131,slow=12,SNR=2.1 | | | | | | |
| NOA | | | | Lg | Lg | 15 09 15.3 | |
| | 0.1nm,0.3s,baz=113,slow=16,SNR=3.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **11.08** | **12** | Pn | Pn | 15 09 32.2 | -9.2 |
| | 0.1nm,0.3s,baz=195,slow=14,SNR=4.0 | | | | | | |
| | 2.8nm,0.9s | | | | | | |

*RHSSO **17** 15:07:38.7±0.2,46.01N×15.10E,h3km±2km,ML2.3/9*
*PRU **17** 15:07:43.0,46.22N×15.05E,h10km*
**LJU 17 15:07:38.1,46.02N×15.09E,h10km,ML2.4,17C-6D,**
**Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDKS** | **Podkum** | **0.08** | **305** | *iPg* | Pg | 15 07 41.1 | +0.6 |
| PDKS | | | | *i* Sg | Sg | 15 07 42.6 | +0.4 |
| PDKS | | | | IAML | | 15 07 43.0 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **LEGS** | **Legarje** | **0.17** | **113** | *iPg* | Pg | 15 07 42.2 | +0.4 |
| LEGS | | | | *i* Sg | Sg | 15 07 44.6 | +0.3 |
| **CESS** | **Cesta pri Krsk** | **0.26** | **99** | *iPg* | Pg | 15 07 43.9 | +0.5 |
| CESS | | | | *i* Sg | Sg | 15 07 47.9 | +0.9 |
| CESS | | | | IAML | | 15 07 48.8 | |
| | comp=Z,477nm,0.1s | | | | | | |
| **VISS** | **Visnje** | **0.28** | **220** | *iPg* | Pg | 15 07 44.4 | +0.7 |
| VISS | | | | *i* Sg | Sg | 15 07 48.2 | +0.7 |
| VISS | | | | IAML | | 15 07 48.8 | |
| | comp=Z,256nm,0.1s | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **0.29** | **288** | *iPg* | Pg | 15 07 44.6 | +0.7 |
| VNDS | | | | *i* Sg | Sg | 15 07 48.5 | +0.7 |
| VNDS | | | | IAML | | 15 07 49.5 | |
| | comp=Z,465nm,0.1s | | | | | | |
| **DOBS** | **Dobrina** | **0.29** | **63** | *iPg* | Pg | 15 07 44.3 | +0.3 |
| DOBS | | | | *i* Sg | Sg | 15 07 48.4 | +0.5 |
| DOBS | | | | IAML | | 15 07 49.3 | |
| | comp=Z,359nm,0.1s | | | | | | |
| **CRES** | **Cresnjev** | **0.32** | **127** | *iPg* | Pg | 15 07 44.6 | +0.2 |
| CRES | | | | *i* Sg | Sg | 15 07 49.0 | +0.3 |
| CRES | | | | IAML | | 15 07 50.4 | |
| | comp=Z,72nm,0.1s | | | | | | |
| **GOLS** | **Golise** | **0.37** | **90** | *iPg* | Pg | 15 07 45.9 | +0.5 |
| GOLS | | | | *i* Sg | Sb | 15 07 51.6 | -1.0 |
| GOLS | | | | IAML | | 15 07 52.5 | |
| | comp=Z,495nm,0.2s | | | | | | |
| **LJU** | **Ljubljana** | **0.40** | **274** | *iPg* | Pb | 15 07 46.7 | -0.6 |
| LJU | | | | *i* Sg | Sg | 15 07 52.2 | +1.0 |
| LJU | | | | IAML | | 15 07 54.3 | |
| | comp=Z,97nm,0.1s | | | | | | |
| **GCIS** | **Gornji Cirnik** | **0.40** | **111** | *iPg* | Pg | 15 07 46.3 | +0.4 |
| GCIS | | | | *i* Sg | Sg | 15 07 52.0 | +0.7 |
| GCIS | | | | IAML | | 15 07 53.3 | |
| | comp=Z,100nm,0.1s | | | | | | |
| **ZAVS** | **Zavodnje** | **0.42** | **353** | *iPg* | Pg | 15 07 47.0 | +0.6 |
| ZAVS | | | | *i* Sg | Sg | 15 07 52.6 | +0.6 |
| **GBAS** | **Gorenja Brezov** | **0.46** | **260** | *iPg* | Pg | 15 07 47.7 | +0.6 |
| GBAS | | | | *i* Sg | Sg | 15 07 53.6 | +0.4 |
| GBAS | | | | IAML | | 15 07 55.8 | |
| | comp=Z,37nm,0.1s | | | | | | |
| **OZLJ** | **Ozalj** | **0.48** | **147** | *i* Pg | Pg | 15 07 47.7 | +0.3 |
| OZLJ | | | | Sg | Sg | 15 07 53.7 | +0.1 |
| **BOJS** | **Bojanci** | **0.52** | **168** | *i* Pg | Pg | 15 07 48.1 | -0.1 |
| BOJS | | | | *i* Sg | Sg | 15 07 54.7 | -0.5 |
| BOJS | | | | IAML | | 15 07 57.8 | |
| | comp=Z,40nm,0.1s | | | | | | |
| **BOJS** | **Bojanci** | **0.52** | **168** | *eP* | Pg | 15 07 47.6 | -0.7 |
| BOJS | | | | *eS* | Sg | 15 07 55.5 | +0.4 |
| **GBRS** | **Gornja Briga** | **0.52** | **202** | *i* Pg | Pg | 15 07 48.7 | +0.4 |
| GBRS | | | | IAML | | 15 07 58.6 | |
| | comp=Z,54nm,0.1s | | | | | | |
| **GROS** | **Grobnik** | **0.53** | **32** | *iPg* | Pg | 15 07 48.6 | +0.2 |
| GROS | | | | *i* Sg | Sg | 15 07 55.3 | -0.1 |
| GROS | | | | IAML | | 15 07 55.9 | |
| | comp=Z,342nm,0.1s | | | | | | |
| **MOZS** | **Mozjanca** | **0.53** | **302** | *iPg* | Pb | 15 07 49.1 | -0.4 |
| MOZS | | | | *i* Sg | Sg | 15 07 56.0 | +0.6 |
| MOZS | | | | IAML | | 15 07 57.6 | |
| | comp=Z,70nm,0.1s | | | | | | |
| **CEY** | **Cerknica** | **0.54** | **240** | *i* Pg | Pg | 15 07 49.1 | +0.5 |
| CEY | | | | *i* Sg | Sg | 15 07 56.1 | +0.3 |
| CEY | | | | IAML | | 15 07 59.5 | |
| | comp=Z,93nm,0.1s | | | | | | |
| **CEY** | **Cerknica** | **0.54** | **240** | *iPg* | Pg | 15 07 49.0 | +0.4 |
| CEY | | | | *eSg* | Sg | 15 07 55.7 | -0.1 |
| **CRNS** | **Crni Vrh** | **0.58** | **277** | *iPg* | Pb | 15 07 49.9 | -0.5 |
| CRNS | | | | *i* Sg | Sb | 15 07 59.0 | +0.2 |
| CRNS | | | | IAML | | 15 08 00.4 | |
| | comp=Z,113nm,0.1s | | | | | | |
| **PTJ** | **Puntijarka** | **0.62** | **100** | *i* Pg | Pg | 15 07 50.5 | +0.4 |
| PTJ | | | | Sg | Sb | 15 07 59.4 | -0.5 |
| **PERS** | **Pernice** | **0.62** | **1** | *iPg* | Pg | 15 07 50.4 | +0.2 |
| PERS | | | | IAML | | 15 07 59.2 | |
| | comp=Z,35nm,0.1s | | | | | | |
| **OBKA** | **Obir** | **0.62** | **323** | *i* Pg | Pb | 15 07 50.7 | -0.4 |
| | comp=Z,9.4nm,0.2s,SNR=97 | | | | | | |
| OBKA | | | | *eSg* | Sb | 15 07 59.2 | -0.8 |
| | comp=Z,43nm,0.2s | | | | | | |
| **OBKA** | **Obir** | **0.62** | **323** | *iPg* | Pb | 15 07 50.7 | -0.4 |
| OBKA | | | | *eSg* | Sg | 15 07 58.9 | +0.5 |
| **ZAG** | **Zagreb** | **0.65** | **106** | *i* Pg | Pb | 15 07 51.4 | -0.1 |
| ZAG | | | | Sg | Sb | 15 08 00.4 | -0.2 |
| **SOKA** | **Soboth** | **0.67** | **356** | *ePg* | Pg | 15 07 51.2 | +0.2 |
| | comp=Z,41nm,0.2s,SNR=156 | | | | | | |
| SOKA | | | | *i* Sg | Sg | 15 07 59.5 | -0.2 |
| | comp=Z,10nm,0.1s | | | | | | |
| **LOBO** | **Lobor** | **0.69** | **78** | *i* Pg | Pg | 15 07 51.5 | 0.0 |
| LOBO | | | | Sg | Sb | 15 08 01.5 | -0.4 |
| **KNDS** | **Knezji Dol** | **0.70** | **226** | *i* Pg | Pg | 15 07 51.8 | +0.2 |
| KNDS | | | | *i* Sg | Sb | 15 08 01.5 | -0.6 |
| KNDS | | | | IAML | | 15 08 03.7 | |
| | comp=Z,96nm,0.2s | | | | | | |
| **JAVS** | **Javornik** | **0.73** | **261** | *iPg* | Pg | 15 07 52.2 | 0.0 |
| JAVS | | | | *i* Sg | Sb | 15 08 03.4 | +0.4 |
| JAVS | | | | IAML | | 15 08 05.2 | |
| | comp=Z,34nm,0.1s | | | | | | |
| **RIY** | **Rijeka** | **0.81** | **212** | *ePg* | Pb | 15 07 54.1 | -0.2 |
| RIY | | | | Sg | Sb | 15 08 05.8 | +0.5 |
| **GORS** | **Gorjuse** | **0.82** | **292** | *i* Pg | Pg | 15 07 54.0 | +0.1 |
| GORS | | | | *i* Sg | Sb | 15 08 05.4 | -0.3 |
| GORS | | | | IAML | | 15 08 08.0 | |
| | comp=Z,28nm,0.1s | | | | | | |
| **VOJS** | **Vojsko** | **0.84** | **272** | *iPg* | Pg | 15 07 54.2 | -0.2 |
| VOJS | | | | *i* Sg | Sb | 15 08 07.1 | +0.8 |
| VOJS | | | | IAML | | 15 08 09.3 | |
| | comp=Z,34nm,0.1s | | | | | | |
| **SKDS** | **Skadanscina** | **0.89** | **239** | *ePg* | Pg | 15 07 55.1 | -0.1 |
| SKDS | | | | *i* Sg | Sb | 15 08 07.8 | +0.3 |
| SKDS | | | | IAML | | 15 08 09.4 | |
| | comp=Z,49nm,0.1s | | | | | | |
| **SKDS** | **Skadanscina** | **0.89** | **239** | *iPg* | Pg | 15 07 55.0 | -0.2 |
| SKDS | | | | *eSg* | Sg | 15 08 05.9 | -0.9 |
| **KOGS** | **Kog** | **0.91** | **61** | *iPg* | Pg | 15 07 55.6 | 0.0 |
| KOGS | | | | *i* Sg | Sb | 15 08 08.5 | +0.3 |
| KOGS | | | | IAML | | 15 08 10.6 | |
| | comp=Z,57nm,0.2s | | | | | | |
| **KALN** | **Kalnik** | **0.95** | **83** | *i* Pg | Pg | 15 07 55.9 | -0.6 |
| KALN | | | | Sg | Sb | 15 08 10.2 | +0.7 |
| **CADS** | **Cadrg** | **0.97** | **283** | *i* Pg | Pg | 15 07 56.6 | -0.1 |
| CADS | | | | *eSg* | Sb | 15 08 10.1 | +0.3 |
| CADS | | | | IAML | | 15 08 13.9 | |
| | comp=Z,94nm,0.2s | | | | | | |
| **ROBS** | **Robic** | **1.13** | **282** | *ePg* | Pb | 15 07 59.4 | -0.3 |
| ROBS | | | | *eSg* | Sn | 15 08 15.5 | +0.1 |
| ROBS | | | | IAML | | 15 08 17.2 | |
| | comp=Z,32nm,0.2s | | | | | | |
| **MYKA** | **Terra Mystica** | **1.18** | **302** | *i* Pg | Pg | 15 08 01.6 | +0.9 |
| | comp=Z,1.0nm,0.1s | | | | | | |
| MYKA | | | | *eSg* | Sn | 15 08 16.9 | 0.0 |
| | comp=Z,19nm,0.3s | | | | | | |
| **SMRN** | **Sveta Marina** | **1.18** | **214** | *ePg* | Pg | 15 08 01.4 | +0.6 |
| SMRN | | | | Sg | Sn | 15 08 17.7 | +0.9 |
| **PLIT** | **Plitvice** | **1.20** | **162** | *ePg* | Pb | 15 

**NEIC 17 15:08:21.9±0.9,51.30N±0.08×178.03W±0.06,h35km±2km, ML3.5(AEIC),Error ellipse: s-maj=13.3km s-min=6.1km az=349.0,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAPA** | **Tanaga Point A** | **0.54** | **15** | | Pn | 15 08 32.8 | -0.3 |
| **TASE** | **Tanaga Southea** | **0.54** | **360** | | Pn | 15 08 33.1 | -0.1 |
| **GAKI** | **Gareloi-Kavalg** | **0.55** | **298** | | Pn | 15 08 32.5 | -0.7 |
| **TAFP** | **Tanaga Falls P** | **0.60** | **3** | | Pn | 15 08 33.6 | -0.4 |
| **TANO** | **Tanaga North** | **0.62** | **355** | | Pn | 15 08 34.2 | 0.0 |
| **GALAA** | **Gareloi Lava P** | **0.66** | **316** | | Pn | 15 08 34.6 | -0.1 |
| **GAEA** | **Gareloi East** | **0.66** | **318** | | Pn | 15 08 34.7 | 0.0 |
| **KIMD** | **Kanaga Island** | **0.68** | **47** | | Pn | 15 08 34.6 | -0.4 |
| KIMD | | | | | Sn | 15 08 44.3 | -0.1 |
| **GANO** | **Gareloi North** | **0.71** | **318** | | Pn | 15 08 35.1 | -0.4 |
| **KIWB** | **Kanaga Island** | **0.78** | **44** | | Pn | 15 08 36.2 | -0.2 |
| KIWB | | | | | Sn | 15 08 46.9 | -0.1 |
| **KIKV** | **Kanaga Island** | **0.79** | **42** | | Sn | 15 08 47.4 | +0.2 |
| **KICM** | **Kanaga Island** | **0.81** | **40** | | Pn | 15 08 36.9 | +0.1 |
| **KIRH** | **Kanaga Island** | **0.84** | **44** | | Pn | 15 08 37.1 | -0.1 |
| **KINC** | **Kanaga Island** | **0.85** | **41** | | Pn | 15 08 37.1 | -0.2 |
| **GSTD** | **Great Sitkin T** | **1.40** | **56** | | Sn | 15 09 03.2 | +0.9 |
| **GSTR** | **Great Sitkin T** | **1.47** | **56** | | Pn | 15 08 46.5 | +0.7 |
| **AMKA** | **Amchitka** | **1.67** | **274** | | Sn | 15 09 09.3 | +0.5 |
| **AMKA** | **Amchitka** | **1.67** | **274** | Pn | Pn | 15 08 47.9 | -0.8 |
| **KOKL** | **Mount Kliuchef** | **2.59** | **65** | | Pn | 15 09 02.7 | +1.4 |
| KOKL | | | | | Sn | 15 09 34.7 | +3.1 |
| **KOFP** | **Korovin Flat P** | **2.63** | **67** | | Pn | 15 09 03.2 | +1.3 |
| **NIKH** | **Nikolski High** | **5.90** | **70** | | Pn | 15 09 48.5 | +1.8 |
| **CNBA** | **Chernabura Isl** | **11.64** | **65** | Pn | Pn | 15 11 03.9 | -1.4 |

**TAP 17 15:09:35.3,23.98N×121.00E,h15km,ML0.8,2D,A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DPDB** | **Guoxing** baz=306 | **0.09** | **306** | P | Pg | 15 09 38.9 | +0.5 |
| DPDB | | | | S | Sg | 15 09 41.3 | +0.9 |
| **WUSB** | **Renai** baz=85 | **0.11** | **85** | ⇓*i* P | Pb | 15 09 39.3 | +0.1 |
| WUSB | | | | *i* S | Sb | 15 09 41.7 | -0.1 |
| **WCS** | **Beigang Elemen** baz=311 | **0.11** | **312** | P | Pb | 15 09 39.0 | -0.2 |
| WCS | | | | S | Sb | 15 09 41.6 | -0.1 |
| **TYC** | **Yuchr** baz=236 | **0.15** | **239** | P | Pb | 15 09 39.7 | -0.2 |
| TYC | | | | *e*S | Sb | 15 09 42.7 | -0.2 |
| **OWD** | **Renai** baz=100 | **0.16** | **100** | P | Pb | 15 09 40.2 | +0.1 |
| OWD | | | | *e*S | Sb | 15 09 43.3 | 0.0 |
| **CHGB** | **Renai** baz=64 | **0.18** | **64** | ⇓*i* P | Pb | 15 09 40.2 | -0.2 |
| **SSLB** | **Suanglung** baz=192 | **0.20** | **192** | P | Pb | 15 09 40.4 | -0.3 |
| **VWDT** | **VWDT** baz=150 | **0.26** | **151** | *e*P | Pb | 15 09 42.1 | +0.4 |
| **WHF** | **Hehuan Shan** baz=57 | **0.29** | **56** | *e*P | Pb | 15 09 42.6 | +0.1 |
| WHF | | | | *e*S | Sb | 15 09 47.1 | -0.2 |
| **WHP** | **Taichung City** baz=350 | **0.30** | **350** | *e*P | Pb | 15 09 42.3 | -0.1 |
| WHP | | | | *e*S | Sb | 15 09 47.3 | +0.1 |
| **TDCB** | **Techi** baz=28 | **0.30** | **28** | *e*P | Pg | 15 09 42.1 | +0.3 |
| **TWT** | **Tachien** baz=29 | **0.31** | **31** | *e*P | Pg | 15 09 42.0 | +0.1 |
| **WHYT** | **Xinyi Township** baz=205 | **0.32** | **205** | *e*P | Pb | 15 09 42.6 | -0.1 |
| WHYT | | | | *e*S | Sb | 15 09 48.0 | +0.3 |
| **FUSS** | **Fushou** baz=40 | **0.34** | **40** | *e*P | Pg | 15 09 42.5 | +0.1 |
| FUSS | | | | *e*S | Sg | 15 09 47.8 | +0.5 |
| **LXIB** | **Xiulin Townshi** baz=84 | **0.38** | **84** | *e*P | Pg | 15 09 43.1 | +0.1 |
| **WARBT** | **Fenglin Townsh** baz=126 | **0.44** | **127** | *e*P | Pb | 15 09 44.8 | 0.0 |

**TAP 17 15:14:01.8,23.99N×121.02E,h16km,ML1.4,3C-2D,A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DPDB** | **Guoxing** baz=296 | **0.09** | **297** | ⇑*i* P | Pg | 15 14 05.7 | +0.4 |
| DPDB | | | | S | Sg | 15 14 08.3 | +0.7 |
| **WUSB** | **Renai** baz=90 | **0.09** | **90** | ⇓*i* P | Pg | 15 14 05.9 | +0.6 |
| WUSB | | | | S | Sg | 15 14 08.4 | +0.7 |
| **WCS** | **Beigang Elemen** baz=303 | **0.12** | **304** | ⇑*i* P | Pb | 15 14 05.8 | +0.2 |
| WCS | | | | *e*S | Sb | 15 14 08.4 | +0.3 |
| **OWD** | **Renai** baz=104 | **0.15** | **104** | P | Pb | 15 14 06.7 | +0.3 |
| OWD | | | | S | Sb | 15 14 09.8 | +0.5 |
| **CHGB** | **Renai** baz=64 | **0.16** | **65** | ⇓*i* P | Pb | 15 14 06.8 | +0.2 |
| CHGB | | | | *i* S | Sb | 15 14 09.8 | +0.1 |
| **TYC** | **Yuchr** baz=237 | **0.17** | **239** | ⇑*i* P | Pb | 15 14 06.6 | 0.0 |
| TYC | | | | S | Sb | 15 14 09.6 | -0.1 |
| **SSLB** | **Suanglung** baz=195 | **0.21** | **196** | P | Pb | 15 14 07.1 | -0.2 |
| SSLB | | | | *e*S | Sb | 15 14 10.7 | -0.3 |
| **VWDT** | **VWDT** baz=154 | **0.26** | **154** | P | Pb | 15 14 08.4 | +0.3 |
| VWDT | | | | *e*S | Sb | 15 14 12.6 | +0.2 |
| **WHF** | **Hehuan Shan** baz=57 | **0.27** | **56** | *e*P | Pb | 15 14 08.9 | +0.3 |
| WHF | | | | *e*S | Sb | 15 14 13.2 | 0.0 |
| **TDCB** | **Techi** baz=26 | **0.29** | **27** | P | Pg | 15 14 08.3 | +0.1 |
| TDCB | | | | *e*S | Sg | 15 14 12.2 | -0.4 |
| **WHP** | **Taichung City** baz=347 | **0.29** | **347** | *e*P | Pb | 15 14 08.6 | -0.1 |
| WHP | | | | *e*S | Sb | 15 14 13.8 | +0.4 |
| **TWT** | **Tachien** baz=27 | **0.30** | **29** | *e*P | Pg | 15 14 08.4 | 0.0 |
| TWT | | | | *e*S | Sg | 15 14 12.2 | -0.5 |
| **WNT** | **Mingjian** baz=248 | **0.32** | **250** | *e*P | Pb | 15 14 09.4 | +0.2 |
| **FUSS** | **Fushou** baz=39 | **0.33** | **39** | *e*P | Pb | 15 14 09.3 | -0.1 |
| **WHYT** | **Xinyi Township** baz=206 | **0.33** | **207** | *e*P | Pb | 15 14 09.6 | +0.2 |
| WHYT | | | | *e*S | Sb | 15 14 14.9 | +0.5 |
| **LXIB** | **Xiulin Townshi** baz=85 | **0.36** | **85** | *e*P | Pb | 15 14 09.9 | -0.1 |
| LXIB | | | | *e*S | Sb | 15 14 15.9 | +0.4 |
| **TWQ1** | **Liyutan** baz=327 | **0.42** | **328** | *e*P | Pb | 15 14 11.1 | +0.3 |
| **ESL** | **Shilin** baz=114 | **0.42** | **115** | *e*P | Pb | 15 14 11.1 | +0.2 |
| **WARBT** | **Fenglin Townsh** baz=128 | **0.43** | **129** | P | Pb | 15 14 11.1 | 0.0 |
| **ETLH** | **Xiulin Townshi** baz=63 | **0.48** | **63** | *e*P | Pb | 15 14 11.9 | +0.1 |
| **YUS** | **Yu-Shan** baz=185 | **0.50** | **187** | *e*P | Pb | 15 14 12.9 | +0.4 |
| **TWD** | **Chiawan** baz=80 | **0.54** | **81** | *e*P | Pb | 15 14 12.7 | -0.1 |
| **SHUL** | **Shoufeng** baz=112 | **0.54** | **112** | *e*P | Pb | 15 14 13.4 | +0.5 |
| SHUL | | | | *e*S | Sb | 15 14 21.3 | +0.9 |
| **NNSB** | **Datong** baz=112 | **0.55** | **38** | *e*P | Pb | 15 14 13.3 | +0.2 |
| **EHY** | **Hungye** baz=37 | **0.56** | **150** | *e*P | Pb | 15 14 14.0 | +0.8 |
| **NACB** | **Ninganchiao** baz=149 | **0.56** | **71** | P | Pg | 15 14 12.9 | 0.0 |
| NACB | | | | S | Sb | 15 14 21.3 | +0.3 |
| **HGSD** | **Ruisui** baz=71 | **0.62** | **143** | *e*P | Pb | 15 14 14.8 | +0.5 |
| **NSTT** | **Nanjuang** baz=143 | **0.64** | **359** | *e*P | Pb | 15 14 14.9 | +0.3 |
| NSTT | | | | *e*S | Sn | 15 14 24.6 | -1.3 |
| **NFF** | **Wufeng Townshi** baz=359 | **0.64** | **8** | *e*P | Pb | 15 14 15.1 | +0.4 |
| **YULB** | **Yu-li** baz=8.0 | **0.65** | **157** | *e*P | Pb | 15 14 14.9 | +0.1 |
| YULB | | | | *e*S | Sb | 15 14 24.2 | +0.6 |
| **LIOB** | **Emei** baz=156 | **0.65** | **360** | *e*P | Pn | 15 14 15.7 | -0.7 |
| LIOB | | | | *e*S | Sb | 15 14 24.2 | +0.5 |
| **TWF1** | **Yuli** baz=157 | **0.69** | **158** | *e*P | Pb | 15 14 15.8 | +0.4 |
| TWF1 | | | | *e*S | Sb | 15 14 25.7 | +1.1 |
| **LATG** | **Datong** baz=40 | **0.71** | **41** | *e*P | Pg | 15 14 15.8 | 0.0 |

**WEL 17 15:18:51.4±0.8,35.5S±7°×17.9E±°,h173km±13km,M3.9/20, mB4.3/2,ML4.2/23,MLv3.9/20,Mw(mB)3.4/2,Error ellipse: s-maj=0.0km s-min=0.0km az=87.1,confirmed, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **2.30** | **192** | P | Pn | 15 19 31.9 | +0.6 |
| MXZ | | | | S | Sn | 15 20 00.9 | -1.5 |
| **WMGZ** | **Waiomatatini S** | **2.54** | **189** | P | Pn | 15 19 35.2 | +1.1 |
| WMGZ | | | | S | Sn | 15 20 08.4 | +1.0 |
| **HAZ** | **Te Kaha** | **2.61** | **200** | P | Pn | 15 19 35.7 | +0.8 |
| HAZ | | | | S | Sn | 15 20 08.7 | -0.1 |
| **PKGZ** | **Pakihiroa** | **2.64** | **195** | P | Pn | 15 19 36.3 | +1.0 |
| PKGZ | | | | S | Sn | 15 20 09.1 | -0.4 |
| **PUZ** | **Puketiti** | **2.81** | **191** | P | Pn | 15 19 37.8 | +0.5 |
| PUZ | | | | S | Sn | 15 20 11.8 | -1.4 |
| **RUGZ** | **Raukumara Rang** | **2.83** | **200** | P | Pn | 15 19 38.3 | +0.6 |
| RUGZ | | | | S | Sn | 15 20 15.2 | +1.3 |
| **TWGZ** | **Tauwhareparae** | **2.96** | **195** | P | Pn | 15 19 40.2 | +1.0 |
| TWGZ | | | | S | Sn | 15 20 16.6 | 0.0 |
| **CNGZ** | **Carnagh Statio** | **3.22** | **190** | P | Pn | 15 19 43.2 | +0.9 |
| **MWZ** | **Matawai** | **3.22** | **200** | P | Pn | 15 19 43.0 | +0.6 |
| MWZ | | | | S | Sn | 15 20 22.8 | +0.5 |
| **TKGZ** | **Te Karaka** | **3.24** | **195** | P | Pn | 15 19 42.9 | +0.3 |
| TKGZ | | | | S | Sn | 15 20 22.9 | +0.3 |
| **URZ** | **Urewera** | **3.28** | **206** | P | Pn | 15 19 43.4 | +0.3 |
| URZ | | | | S | Sn | 15 20 22.5 | -1.1 |
| **RIGZ** | **Rimuhau** | **3.51** | **195** | P | Pn | 15 19 45.5 | -0.6 |
| RIGZ | | | | S | Sn | 15 20 28.6 | -0.2 |
| **MKAZ** | **Moumakai** | **3.53** | **238** | P | Pn | 15 19 46.7 | +0.4 |
| **MUGZ** | **Murupara** | **3.60** | **208** | P | Pn | 15 19 47.8 | +0.6 |
| MUGZ | | | | S | Sn | 15 20 31.8 | +1.1 |
| **RTZ** | **Ruatahuna** | **3.65** | **205** | P | Pn | 15 19 47.4 | -0.4 |
| **SNGZ** | **Shannon Statio** | **3.69** | **200** | P | Pn | 15 19 48.8 | +0.5 |
| SNGZ | | | | S | Sn | 15 20 33.9 | +1.1 |
| **PRGZ** | **Paritu Road** | **3.70** | **193** | P | Pn | 15 19 48.6 | +0.2 |
| **WCZ** | **Waipu Caves** | **3.78** | **259** | P | Pn | 15 19 49.1 | -0.4 |
| **KNZ** | **Kokohu** | **3.83** | **195** | P | Pn | 15 19 49.4 | -0.7 |
| **MTHZ** | **Maungataniwha** | **3.91** | **205** | P | Pn | 15 19 51.2 | +0.1 |
| MTHZ | | | | S | Sn | 15 20 39.4 | +1.6 |
| **MHGZ** | **Mahia Peninsul** | **3.92** | **192** | P | Pn | 15 19 51.2 | 0.0 |
| MHGZ | | | | S | Sn | 15 20 37.2 | -0.8 |
| **MRHZ** | **Matea Rd** | **4.05** | **209** | P | Pn | 15 19 52.9 | 0.0 |
| **NMHZ** | **Naumai** | **4.14** | **204** | P | Pn | 15 19 54.7 | +0.6 |
| NMHZ | | | | S | Sn | 15 20 45.2 | +2.0 |
| **ARHZ** | **Aropaoanui** | **4.23** | **201** | P | Pn | 15 19 54.8 | -0.4 |
| ARHZ | | | | S | Sn | 15 20 45.8 | +0.6 |
| **BKZ** | **Black Stump Fm** | **4.31** | **206** | P | Pn | 15 19 55.6 | -0.6 |
| **OUZ** | **Omahuta** | **4.36** | **270** | P | Pn | 15 19 55.9 | -1.0 |
| **MCHZ** | **McNeill Hill** | **4.49** | **203** | P | Pn | 15 19 58.3 | -0.2 |
| MCHZ | | | | S | Sn | 15 20 51.6 | +0.5 |
| **KWHZ** | **Kaweka Forest** | **4.56** | **205** | P | Pn | 15 19 59.7 | +0.2 |
| KWHZ | | | | S | Sn | 15 20 53.0 | +0.1 |
| **OTVZ** | **Oturere** | **4.64** | **213** | P | Pn | 15 20 01.4 | +0.8 |
| **SNVZ** | **South Ngauruho** | **4.67** | **213** | P | Pn | 15 20 01.0 | 0.0 |
| **KAHZ** | **Kahuranaki** | **4.76** | **199** | P | Pn | 15 20 01.3 | -0.8 |
| **KRHZ** | **Kereru** | **4.78** | **204** | P | Pn | 15 20 00.9 | -1.4 |
| **WNVZ** | **Wahianoa** | **4.80** | **213** | P | Pn | 15 20 02.7 | 0.0 |
| **PXZ** | **Pawanui** | **4.99** | **199** | P | Pn | 15 20 03.2 | -1.8 |
| **PNHZ** | **Pukenui** | **5.08** | **204** | P | Pn | 15 20 05.1 | -1.1 |
| **WPHZ** | **Waipukurau** | **5.14** | **202** | P | Pn | 15 20 05.9 | -1.0 |

*IDC **17** 15:21:07.2±0.7,8.22S×116.46E,h0km,mb4.1/13, mbtmp4.1/14,ML4.3/1,MS2.8/1,Error ellipse: s-maj=27.6km s-min=15.5km az=70.0*
*DJA **17** 15:21:09.8±0.3,8°S±3°×11°7E±°,h10km,M4.6/9,MLv4.6/9*
*NEIC **17** 15:21:09.6±1.3,8.29S±0.09×116.51E±0.06,h10km±1km, mb4.4/15,Error ellipse: s-maj=14.6km s-min=10.4km az=169.0*

**ISC 17 15:21:09.0±0.4,8.23S±0.05×116.57E±0.04,h10km,n65, σ1§21/69,mb4.4/15,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.59** | **149** | P | **Pg** | **15 21 21.2** | **+0.8** |
| TWSI | | | | S | **Sb** | **15 21 29.3** | **-0.5** |
| **PLAI** | **Plampang** | **1.33** | **116** | P | **Pb** | **15 21 35.0** | **+1.0** |
| **PLAI** | **Plampang** | **1.33** | **116** | P | **Pn** | **15 21 34.6** | **+1.0** |
| **SRBI** | **Singaraja** | **1.35** | **276** | P | **Pn** | **15 21 33.8** | **-0.2** |
| SRBI | | | | S | **Sg** | **15 21 54.0** | **+1.4** |
| **DNP** | **Denpasar** | **1.42** | **252** | P | **Pg** | **15 21 36.7** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.41** | **264** | P | **Pn** | **15 21 48.8** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.41** | **264** | | **Pn** | **15 21 48.7** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.41** | **264** | P | **Pn** | **15 21 48.7** | **+0.3** |
| **WBSI** | **Waikabubak, Su** | **3.12** | **117** | P | **Pn** | **15 21 59.0** | **+0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.41** | **62** | P | **Pn** | **15 22 16.6** | **+0.6** |
| **KAPI** | **Kappang** | **4.50** | **45** | P | **Pn** | **15 22 17.8** | **+0.6** |
| **KAPI** | **Kappang** | **4.50** | **45** | | **Pn** | **15 22 17.5** | **+0.3** |
| **KAPI** | **Kappang** 14nm,0.3s,baz=213,slow=4.4,SNR=24 | **4.50** | **45** | Pn | **Pn** | **15 22 17.4** | **+0.2** |
| KAPI | 17nm,0.3s,baz=210,slow=20,SNR=5.9 | | | Sn | **Sn** | **15 23 08.2** | **-1.4** |
| KAPI | comp=Z,105nm,19.3s,baz=241,slow=36 43nm,0.4s | | | LR | LR | 15 23 54.1 | |
| **PWJI** | **Pagerwojo** | **4.73** | **272** | P | **Pb** | **15 22 31.7** | **-0.3** |
| **EDFI** | **Ende, Flores** | **5.09** | **96** | P | **Pn** | **15 22 28.2** | **+2.7** |
| **BNSI** | **Bone** | **5.18** | **43** | P | **Pn** | **15 22 29.4** | **+2.8** |
| **MMRI** | **Maumere** | **5.62** | **94** | P | **Pn** | **15 22 33.9** | **+1.2** |
| **MMRI** | **Maumere** | **5.62** | **94** | Pn | **Pn** | **15 22 33.9** | **+1.2** |
| **MMRI** | **Maumere** | **5.62** | **94** | P | **Pb** | **15 22 45.2** | **-2.0** |
| **UGM** | **Wanagama** | **6.00** | **273** | P | **Pn** | **15 22 40.0** | **+2.1** |
| **UGM** | **Wanagama** | **6.00** | **273** | Pn | **Pn** | **15 22 39.6** | **+1.7** |
| **MTKI** | **Muara Teweh, K** | **7.43** | **347** | P | **Pn** | **15 23 01.9** | **+4.3** |
| **SOEI** | **Soe** | **7.75** | **102** | Pn | **Pn** | **15 23 04.4** | **+2.4** |
| **BBJI** | **Bungbulang** | **8.87** | **274** | P | **Pn** | **15 23 20.0** | **+2.6** |
| **FITZ** | **Fitzroy Crossi** | **13.19** | **139** | Pn | **Pn** | **15 24 14.7** | **-1.8** |
| **MBWA** | **Marble Bar** | **13.21** | **167** | P | **Pn** | **15 24 17.0** | **+0.3** |
| **MBWA** | **Marble Bar** | **13.21** | **167** | Pn | **Pn** | **15 24 15.4** | **-1.3** |
| **KNRA** | **Kununurra** | **14.03** | **123** | Pn | **Pn** | **15 24 27.8** | **-0.2** |
| **GIRL** | **Giralia** | **14.50** | **189** | P | **Pn** | **15 24 34.5** | **+0.1** |
| **MTN** | **Manton Dam** | **15.03** | **109** | Pn | **Pn** | **15 24 39.7** | **-1.9** |
| MTN | comp=Z,14nm,1.1s | | | IAmb | IAmb | 15 24 52.4 | |
| **FAKI** | **Fak Fak** | **16.47** | **72** | P | **Pn** | **15 25 01.3** | **+1.0** |
| **WB0** | **Warramunga Arr** | **20.72** | **125** | | **P** | **15 25 50.0** | **+0.1** |
| WB0 | comp=Z,21nm,1.4s | | | IAmb | IAmb | 15 25 56.2 | |
| **WRA** | **Warramunga Arr** | **20.77** | **126** | P | **P** | **15 25 50.3** | **-0.1** |
| **WRA** | **Warramunga Arr** comp=Z,4.0nm,0.7s,baz=300,slow=12,SNR=34 | **20.77** | **126** | P | **P** | **15 25 50.2** | **-0.1** |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.77** | **126** | P | **P** | **15 25 50.6** | **+0.3** |
| WRAB | comp=Z,7.2nm,0.6s | | | IAmb | IAmb | 15 25 57.4 | |
| **WB2** | **Warramunga Arr** | **20.78** | **126** | | **P** | **15 25 50.7** | **+0.2** |
| **WR0** | **Warramunga Arr** | **20.94** | **126** | P | **P** | **15 25 52.5** | **+0.3** |
| WR0 | comp=Z,7.8nm,0.8s | | | IAmb | IAmb | 15 25 53.1 | |
| **AS31** | **Alice Springs** | **22.61** | **135** | | **P** | **15 26 10.5** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.61** | **135** | P | **P** | **15 26 09.8** | **-0.4** |
| **ASAR** | **Alice Springs** comp=Z,15nm,1.1s,baz=311,slow=8.9,SNR=42 | **22.61** | **135** | P | **P** | **15 26 10.5** | **+0.4** |
| ASAR | | | | PcP | **PcP** | **15 30 02.4** | **-1.0** |
| | comp=Z,0.6nm,0.8s,baz=321,slow=0.8,SNR=4.7 comp=Z,15nm,1.1s | | | | | | |
| **COEN** | **Coen** | **26.70** | **105** | P | **P** | **15 26 48.0** | **-0.7** |
| COEN | comp=Z,12nm,1.0s | | | IAmb | IAmb | 15 26 50.0 | |
| **CMAR** | **Chiang Mai Arr** comp=Z,0.3nm,0.4s,baz=161,slow=5.7,SNR=1.5 comp=Z,0.3nm,0.4s | **31.72** | **327** | P | **P** | **15 27 32.6** | **-0.7** |
| **KSRS** | **Korea Array** comp=Z,1.6nm,0.8s,baz=183,slow=6.3,SNR=4.9 comp=Z,1.6nm,0.8s | **46.67** | **12** | P | **P** | **15 29 38.0** | **+0.1** |
| **MJAR** | **Matsushiro Arr** comp=Z,2.7nm,0.8s,baz=199,slow=8.2,SNR=6.4 comp=Z,2.7nm,0.8s | **48.96** | **23** | P | **P** | **15 29 55.5** | **-0.1** |
| **MDJ** | **Mudanjiang** | **53.90** | **11** | P | **P** | **15 30 32.8** | **+0.2** |
| **USRK** | **Ussuriysk Ar.** | **54.02** | **14** | P | **P** | **15 30 34.0** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** comp=Z,3.6nm,0.6s,baz=199,slow=7.3,SNR=10.0 comp=Z,3.6nm,0.6s | **54.02** | **14** | P | **P** | **15 30 34.2** | **+0.8** |
| **SONM** | **Songino Array** | **56.55** | **352** | P | **P** | **15 30 53.3** | **+1.5** |
| SONM | comp=Z,3.6nm,0.8s | | | IAmb | IAmb | 15 30 54.4 | |
| **SONM** | **Songino Array** comp=Z,3.7nm,0.8s,baz=169,slow=9.0,SNR=18 comp=Z,3.7nm,0.8s | **56.55** | **352** | P | **P** | **15 30 52.3** | **+0.5** |
| **JKA** | **Kamikawa-asahi** | **57.19** | **22** | P | **P** | **15 30 56.8** | **+0.6** |
| **HEH** | **HeiHe** | **59.01** | **8** | *e*P | **P** | **15 31 09.4** | **+0.6** |
| HEH | comp=Z,11nm,1.0s | | | pmax | pmax | | |
| **BFZ** | **Birch Farm** | **61.80** | **132** | P | **P** | **15 31 28.7** | **+0.4** |
| **MK31** | **Makanchi Array** | **62.71** | **334** | P | **P** | **15 31 34.2** | **+0.1** |
| MK31 | comp=Z,2.8nm,0.9s | | | IAmb | IAmb | 15 31 36.3 | |
| **MKAR** | **Makanchi Array** comp=Z,2.5nm,0.8s,baz=141,slow=7.8,SNR=17 comp=Z,2.5nm,0.8s | **62.71** | **334** | P | **P** | **15 31 33.8** | **-0.4** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.6nm,0.5s,baz=148,slow=5.4,SNR=8.2 comp=Z,0.6nm,0.5s | **67.24** | **335** | P | **P** | **15 32 02.6** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **67.50** | **340** | P | **P** | **15 32 05.0** | **0.0** |
| **ZALV** | **Zalesovo Beam** comp=Z,2.8nm,0.6s,baz=137,slow=5.0,SNR=13 comp=Z,2.8nm,0.6s | **67.50** | **340** | P | **P** | **15 32 03.5** | **-1.5** |
| **BVAR** | **Borovoye Array** comp=Z,1.0nm,0.7s,baz=134,slow=8.5,SNR=5.5 comp=Z,1.0nm,0.7s | **72.51** | **333** | P | **P** | **15 32 34.8** | **-1.1** |
| **ABKAR** | **Akbulak array** | **75.57** | **326** | P | **P** | **15 32 52.3** | **-1.6** |
| **QSPA** | **South Pole Qui** | **81.76** | **180** | P | **P** | **15 33 27.4** | **-0.5** |
| QSPA | comp=Z,9.2nm,1.5s | | | IAmb | IAmb | 15 33 46.9 | |
| **QSPA** | **South Pole Qui** comp=Z,0.4nm,0.6s,baz=88,slow=2.3,SNR=1.4 comp=Z,0.4nm,0.6s | **81.76** | **180** | P | **P** | **15 33 27.5** | **-0.3** |
| **SNAA** | **Sanae** | **91.08** | **196** | P | **P** | **15 34 13.9** | **+0.3** |
| SNAA | comp=Z,2.7nm,1.2s | | | IAmb | IAmb | 15 34 20.0 | |
| **SNAA** | **Sanae** comp=Z,0.8nm,0.7s,baz=151,slow=5.4,SNR=8.7 comp=Z,0.8nm,0.7s | **91.08** | **196** | P | **P** | **15 34 14.3** | **+0.7** |
| **TORD** | **Torodi Ar. Bea** | **115.96** | **281** | PKP | **PKPdf** | **15 39 51.5** | **-1.7** |
| **CPUP** | **Villa Florida** comp=Z,3.1nm,0.7s,baz=152,slow=4.0,SNR=8.7 | **145.13** | **190** | PKPbc | **PKPab** | **15 40 47.7** | **+0.6** |

**IDC 17 15:28:14.1±6.1,23.68N×144.73E,h0km,mb3.7/5, mbtmp3.7/5,MS2.7/1,Error ellipse: s-maj=244.2km s-min=23.5km az=77.0,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** comp=Z,38nm,18.7s,baz=189,slow=36 | **10.04** | **179** | LR | LR | 15 34 11.6 | |
| **WRA** | **Warramunga Arr** 0.3nm,0.5s,baz=17,slow=9.1,SNR=12 0.3nm,0.5s | **44.53** | **194** | P | P | 15 36 27.4 | -0.4 |
| **ASAR** | **Alice Springs** 0.2nm,0.7s,baz=11,slow=8.9,SNR=1.8 0.2nm,0.7s | **48.23** | **193** | P | P | 15 36 57.1 | +0.4 |
| **MKAR** | **Makanchi Array** 0.6nm,0.7s,baz=94,slow=7.8,SNR=4.5 0.6nm,0.7s | **54.44** | **312** | P | P | 15 37 42.7 | -0.6 |
| **KURBB** | **Kurchatov Arra** 1.2nm,0.7s,baz=93,slow=7.8,SNR=14 1.2nm,0.7s | **57.08** | **316** | P | P | 15 38 01.6 | -0.5 |
| **BVAR** | **Borovoye Array** 3.2nm,0.7s,baz=91,slow=7.6,SNR=12 3.2nm,0.7s | **62.11** | **319** | P | P | 15 38 37.4 | +0.6 |

*BJI **17** 15:34:59.9±0.0,7.45S×119.85E,h540km,mb6.7/88, mB6.5/67*
*DJA **17** 15:35:01.9±0.1,7°S±1°×12°0E±°,h541km±1km,M6.3/144, mb6.6/144,mB6.7/140,MLv7.0/24,Mw6.4/97, Mw(mB)6.5/140,MwMwp6.0/120,Mwp6.1/120*
*MOS **17** 15:35:01.2±0.8,7.29S×119.86E,h548km,mb6.5/74, MS5.3/7,Error ellipse: s-maj=7.5km s-min=4.2km az=116.0*
*NEIC **17** 15:35:01.9±2.0,7.37S±0.08×119.80E±0.08,h529km±1km, mb6.5/324,Mwb6.5/59,Mww6.5/48,Error ellipse: s-maj=13.9km s-min=12.9km az=205.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁸Nm; Mrr3.19; Mθθ-1.14; Mθφ-2.05; Mrθ4.54; Mrφ-1.93; Mθr5.94; Fault plane solution: M₀8.21000×10¹⁸ NP1:φ₁219.57000°, δ12.18000°, λ92.06000°. NP2:φ₂37.46000°, δ77.83000°, λ89.55000°. Principal axes: T 8.0089, Plg57.0000°, Azm307.0000°; N 0.3872, Plg0.0000°, Azm38.0000°; P -8.3961, Plg33.0000°, Azm128.0000°;*
*NEIC **17** 15:35:01.9, 7.32S×119.88E,h550km,Moment Tensor Solution. Duration: 9s1 Moment tensor: Scale 10¹⁸Nm; Mrr1.78; Mθθ-1.10; Mφφ-0.68; Mrθ4.12; Mrφ-1.72; Mθr5.51; Fault plane solution: M₀7.24000×10¹⁸ NP1:φ₁36.85000°, δ81.42000°, λ84.63000°. NP2:φ₂249.05000°, δ10.12000°, λ121.79000°. Principal axes: T 6.8836, Plg53.0000°, Azm300.0000°; N 0.7061, Plg5.0000°, Azm38.0000°; P -7.5897, Plg36.0000°, Azm132.0000°;*
*IDC **17** 15:35:01.9±0.6,7.27S×119.82E,h536km±5km,mb6.0/34, mbtmp6.8/35 Error ellipse: s-maj=7.8km s-min=4.4km az=76.0*
*NEIC **17** 15:35:01.9, 7.32S×119.78E,h534km*
*NEIC **17** 15:35:01.9, 7.32S×119.78E,h550km*
*IPGP **17** 15:35:02.0,7.41S×119.82E,h543km,Mw6.6,Fault plane solution: NP1:φ₁37.00000°,δ81.00000°,λ86.00000°. NP2:φ₂243.00000°,δ10.00000°,λ115.00000°.*
*GCMT **17** 15:35:03.9±0.1,7.31S±0.01×119.75E±0.01,h539km, MW6.5/165,Moment Tensor Solution. s165,c419; s152,c275; Duration: 4s4 Moment tensor: Scale 10¹⁸ Nm; Mrr1.68±.02; Mθθ-0.91±.04; Mφφ-0.76±.04; Mrθ4.12±.03; Mθφ-1.78±.03; Mφr5.65±.03; Best double couple: M₀7.32500×10¹⁸ NP1:φ₁36.00000°,δ82.00000°, λ85.00000°. NP2:φ₂246.00000°,δ10.00000°,λ120.00000°. Principal axes: T 6.9070, Plg53.0000°, Azm300.0000°; N 0.8420, Plg5.0000°, Azm37.0000°; P -7.7430, Plg37.0000°, Azm130.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to mantle waves, cutoff=125s. Triangular moment-rate function*

**ISC 17 15:35:02.4±0.2,7.37S±0.02×119.79E±0.03,h549km±1km, h550km:pP-P,n2232,σ1§96/2924,mb6.6/405,272C-87D, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSSI** | **Bau Bau, Buton** | **1.40** | **30** | P | **P** | **15 36 09.9** | **+0.1** |
| BSSI | | | | S | **S** | **15 37 03.6** | **-0.8** |
| **WBSI** | **Waikabubak, Su** | **2.29** | **190** | P | **P** | **15 36 12.0** | **-1.5** |
| WBSI | | | | S | **S** | **15 37 07.2** | **-4.0** |
| **EDFI** | **Ende, Flores** | **2.33** | **126** | P | **P** | **15 36 11.7** | **-2.0** |
| **KAPI** | **Kappang** | **2.34** | **359** | P | **P** | **15 36 15.0** | **+1.3** |
| **KAPI** | **Kappang** | **2.

4µm,0.8s,baz=66,slow=23,SNR=21
KAPI Kappang 2.34 359 P P 15 36 15.2 +1.5
KAPI S S 15 37 11.9 +0.4
KAPI Kappang 2.34 359 P P 15 36 15.0 +1.3
PLAI Plampang 2.46 234 P P 15 36 14.1 -0.2
PLAI S S 15 37 09.7 -3.0
MMRI Maumere 2.74 118 P P 15 36 14.1 -1.7
MMRI Maumere 2.74 118 P P 15 36 12.6 -3.2
MMRI Maumere 2.74 118 ⇑P P 15 36 13.9 -1.9
MMRI Maumere 2.74 118 P P 15 36 14.1 -1.7
MMRI S S 15 37 10.9 -4.6
BASI Baing, Sumba 2.94 165 P P 15 36 16.7 -0.3
BASI S S 15 37 15.7 -2.0
BNSI Bone 2.96 6 P P 15 36 18.7 +1.5
TWSI Taliwang, Sumb 3.18 244 P P 15 36 18.1 -0.4
TWSI S S 15 37 17.2 -3.2
BBSI Bau Bau 3.34 56 P P 15 36 21.2 +1.6
BBSI S S 15 37 24.1 +1.8
TTSI Tana Toraja 4.29 0 P P 15 36 27.6 +1.1
TTSI S S 15 37 36.5 +1.5
SRBI Singaraja 4.59 261 P P 15 36 28.4 -0.4
SRBI S S 15 37 37.7 -1.5
DNP Denpasar 4.71 254 P P 15 36 29.4 -0.4
BATI Baumata 4.76 127 P P 15 36 29.0 -1.2
SOEI Soe 5.03 118 P P 15 36 31.2 -1.4
SOEI Soe 5.03 118 P P 15 36 30.9 -1.7
SOEI Soe 5.03 118 S S 15 37 41.1 -5.0
SOEI P P 15 36 28.5 -4.1
SOEI Soe 5.03 118 ⇑P P 15 36 30.9 -1.7
SOEI Soe 5.03 118 P P 15 36 31.1 -1.5
JAGI Jajag, Banyuwa 5.69 258 P P 15 36 36.9 -1.3
JAGI Jajag, Banyuwa 5.69 258 P P 15 36 36.6 -1.6
JAGI Jajag, Banyuwa 5.69 258 ⇑P P 15 36 36.6 -1.6
JAGI Jajag, Banyuwa 5.69 258 P P 15 36 36.8 -1.4
10µm,0.7s,268µm137µm111nm
BKB Balikpapan 6.71 334 P P 15 36 51.3 +3.6
BKB Balikpapan 6.71 334 P P 15 36 51.9 +4.2
BKB Balikpapan 6.71 334 ⇑P P 15 36 51.9 +4.2
BKB Balikpapan 6.71 334 P P 15 36 51.7 +4.0
LUWI Luwuk 6.95 25 P P 15 36 51.0 +1.0
LUWI Luwuk 6.95 25 P P 15 36 50.7 +0.7
LUWI Luwuk 6.95 25 S S 15 38 17.0 -0.9
LUWI P P 15 36 42.4 -7.5
LUWI Luwuk 6.95 25 ⇑P P 15 36 50.7 +0.7
LUWI Luwuk 6.95 25 P P 15 36 50.6 +0.6
29µm,0.8s,316µm47µm126nm
BWJI Bawean 7.24 282 P P 15 36 53.1 +0.4
22µm,1.4s,256µm169µm80nm
GRJI Gresik 7.26 273 P P 15 36 53.0 +0.1
36µm,0.9s,291µm132µm104nm
SMKI Samarinda 7.34 339 P P 15 36 56.5 +2.8
38µm,1.2s
MPSI Mapaga 7.65 1 P P 15 36 58.0 +1.2
34µm,1.2s,323µm132µm
PWJI Pagerwojo 7.94 265 P P 15 36 57.4 -2.1
6µm,0.9s,79µm60µm35nm
MTKI Muara Teweh, K 8.03 322 P P 15 37 01.4 +0.9
24µm,0.8s
MRSI Marisa 8.08 16 P P 15 37 01.3 +0.3
43µm,1.1s,66µm
SANI Sanana 8.13 50 P P 15 37 01.7 +0.2
SANI Sanana 8.13 50 P P 15 36 54.3 -7.2
SANI S S 15 38 38.0 -1.0
SANI Sanana 8.13 50 ⇑P P 15 37 01.2 -0.3
SANI Sanana 8.13 50 P P 15 37 01.2 -0.3
15µm,0.9s,198µm61µm
NGJI Ngawi 8.26 269 P P 15 37 03.0 +0.3
4µm,0.8s,89µm
NLAI Namlea 8.36 61 P P 15 37 04.5 +0.8
TOLI2 Tolitoli 8.48 7 P P 15 37 05.2 +0.2
TOLI2 Tolitoli 8.48 7 P P 15 37 04.6 -0.4
GTOI Gorontalo 8.57 22 P P 15 37 06.8 +0.9
9µm,1.0s,102µm
KMSI Cibinong 8.93 28 P P 15 37 10.3 +0.8
41µm,1.1s,378µm
UGM Wanagama 9.20 266 P P 15 37 12.3 +0.1
UGM Wanagama 9.20 266 P P 15 37 11.6 -0.6
UGM Wanagama 9.20 266 P P 15 37 11.3 -0.9
9µm,1.4s,93µm49µm
SMRI Semarang 9.28 271 P P 15 37 14.0 +1.0
SMRI Semarang 9.28 271 P P 15 37 12.6 -0.4
SMRI Semarang 9.28 271 ⇑P P 15 37 12.7 -0.3
SMRI Semarang 9.28 271 P P 15 37 12.8 -0.3
3µm,0.6s,55µm62µm
MSAI Masohi 9.94 67 P P 15 37 17.2 -2.6
5µm,0.8s,52µm26µm
LBMI Labuha 10.19 49 P P 15 37 22.8 +0.4
7µm,1.0s,96µm43µm
BNDI Bandanaira 10.45 75 P P 15 37 24.5 -0.6
BNDI Bandanaira 10.45 75 ⇑P P 15 37 24.0 -1.1
BNDI Bandanaira 10.45 75 P P 15 37 24.0 -1.1
KPJI Karang Pucung 10.77 269 P P 15 37 28.6 +0.3
17µm,0.7s,148µm30µm
TNTI Ternate 11.07 43 P P 15 37 31.2 -0.2
TNTI Ternate 11.07 43 P P 15 37 31.2 -0.2
TNTI Ternate 11.07 43 ⇑P P 15 37 31.4 0.0
TNTI Ternate 11.07 43 P P 15 37 31.2 -0.2
STKI Sintang 11.10 311 P P 15 37 33.7 +2.0
6µm,1.0s,53µm65µm
CMJI Cimerak 11.25 267 P P 15 37 31.5 -1.7
14µm,1.0s,153µm20µm
SAUI Saumlaki 11.43 94 P P 15 37 33.7 -1.4
SAUI Saumlaki 11.43 94 P P 15 37 32.7 -2.4
SAUI Saumlaki 11.43 94 ⇑P P 15 37 32.7 -2.4
SAUI Saumlaki 11.43 94 P P 15 37 32.7 -2.4
JCJI Jatiwangi 11.46 274 P P 15 37 35.3 -0.2
3µm,0.8s,80µm31µm
BBJI Bungbulang 12.04 269 P P 15 37 41.0 -0.5
DRS Darwin Rock St 12.05 116 P P 15 37 40.8 -0.7
KNRA Kununurra 12.06 134 P P 15 37 40.1 -1.5
KNRA Kununurra 12.06 134 P P 15 37 40.2 -1.5
comp=Z,0.0nmcomp=Z,6µm,0.5s
FITZ Fitzroy Crossi 12.10 152 P P 15 37 41.3 -0.7
FITZ Fitzroy Crossi 12.10 152 P P 15 37 41.2 -0.8
SBUM Sibu 12.33 322 P P 15 37 46.1 +1.7
SBUM Sibu 12.33 322 ⇑P P 15 37 46.3 +1.8
MTN Manton Dam 12.42 117 P P 15 37 44.1 -1.3
MTN Manton Dam 12.42 117 P P 15 37 44.0 -1.3
MTN Manton Dam 12.42 117 ⇑P P 15 37 42.3 -3.1
MTN Manton Dam 12.42 117 P P 15 37 44.0 -1.3
MYLDM Lahad Datu 12.53 354 P P 15 37 48.1 +1.6
MYLDM Lahad Datu 12.53 354 ⇑P P 15 37 48.6 +2.1
CNJI Cibinong 12.55 269 P P 15 37 45.1 -1.7
comp=Z,4µm,0.9s,comp=Z,42µm
CBJI Citeko 12.88 273 P P 15 37 48.1 -2.0
comp=Z,11µm,0.7s,comp=Z,127µm
KSM Kuching 12.90 313 P P 15 37 51.8 +1.4
KSM Kuching 12.90 313 P P 15 37 51.5 +1.1
KSM Kuching 12.90 313 ⇑P P 15 37 51.5 +1.1
DBJI Dramaga 12.97 273 P P 15 37 50.4 -0.7
comp=Z,6µm,1.4s,comp=Z,62µmcomp=Z,20µm
TNG Tangerang 13.10 274 P P 15 37 52.2 -0.2
comp=Z,3µm,1.2s,comp=Z,43µm
TNG P P 15 37 52.0 -0.4
comp=Z,5µm,1.2s,comp=Z,67µm
SKJI Sukabumi 13.13 271 P P 15 37 50.9 -1.9
comp=Z,15µm,0.7s,comp=Z,142µmcomp=Z,18µm
SWI Sorong 13.14 61 P P 15 37 51.5 -1.3
comp=Z,9µm,1.0s,comp=Z,65µm
FAKI Fak Fak 13.17 71 P P 15 37 51.2 -2.0
FAKI Fak Fak 13.17 71 P P 15 37 50.9 -2.3
FAKI Fak Fak 13.17 71 ⇑P P 15 37 50.1 -3.1
FAKI Fak Fak 13.17 71 P P 15 37 50.6 -2.6
comp=Z,17µm,0.9s,comp=Z,112µm
KDU Kakadu 13.56 114 P P 15 37 54.8 -2.4
KDU Kakadu 13.56 114 ⇑P P 15 37 54.8 -2.4
KDU Kakadu 13.56 114 P P 15 37 54.8 -2.4
SBJI Serang 13.62 274 P P 15 37 56.5 -1.3
MBWA Marble Bar 13.71 180 P P 15 37 58.2 -0.4
MBWA Marble Bar 13.71 180 P P 15 37 57.8 -0.8
MBWA Marble Bar 13.71 180 ⇑P P 15 37 57.9 -0.8
MBWA Marble Bar 13.71 180 P P 15 37 57.9 -0.8
comp=Z,0.0nmcomp=Z,6µm,0.8s
MBWA Marble Bar 13.71 180 P P 15 37 58.3 -0.4
MBWA P P 15 37 58.3 -0.4
KKM Kota Kinabalu 13.79 345 P P 15 38 00.2 +0.5
KKM Kota Kinabalu 13.79 345 P P 15 37 59.9 +0.2
KKM Kota Kinabalu 13.79 345 ⇑P P 15 37 59.4 -0.2
PSA00 Pilbara Seismi 14.12 180 P P 15 38 02.4 -0.5
PSA00 Pilbara Seismi 14.12 180 P P 15 38 02.2 -0.8
PSA00 Pilbara Seismi 14.12 180 P P 15 38 02.1 -0.8
PSA00 Pilbara Seismi 14.12 180 P P 15 38 02.1 -0.8
comp=Z,5µm,0.9s

XMI Christmas Isla 14.26 257 P P 15 38 03.8 -0.6
XMI Christmas Isla 14.26 257 ⇑P P 15 38 03.4 -1.0
XMIS Christmas Isla 14.30 256 P P 15 38 03.9 -0.9
XMIS Christmas Isla 14.30 256 P P 15 38 03.4 -1.5
KMPI Kaimana, Papua 14.33 76 P P 15 38 03.0 -2.2
comp=Z,17µm,0.7s,comp=Z,156µmcomp=Z,31µm
PPBI Pangkal Pinang 14.55 290 P P 15 38 08.0 +0.6
comp=Z,7µm,1.1s,comp=Z,101µmcomp=Z,27µm
BLSI Bandar Lampung 14.59 277 P P 15 38 05.9 -1.9
comp=Z,3µm,0.5s
KASI Kota Agung 15.30 276 P P 15 38 11.4 -3.7
comp=Z,7µm,0.9s,comp=Z,55µmcomp=Z,24µm
DAV Davao City (W) 15.46 22 P P 15 38 17.1 +0.3
DAV Davao City (W) 15.46 22 P P 15 38 16.4 -0.3
DAV Davao City (W) 15.46 22 ⇑P P 15 38 16.0 -0.8
DAV Davao City (W) 15.46 22 P P 15 38 15.8 -1.0
comp=Z,3µm,0.9s,baz=112,slow=1.2,SNR=54
DAV S S 15 40 54.4 -1.8
comp=Z,2µm,0.8s,baz=79,slow=22,SNR=2.8
DAV Davao City (W) 15.46 22 P P 15 38 16.3 -0.5
DAV P P 15 38 16.3 -0.5
DAV S S 15 40 56.0 -0.2
DAV S S 15 40 56.0 -0.2
PMBI Palembang 15.59 286 P P 15 38 19.2 +1.2
PMBI Palembang 15.59 286 P P 15 38 18.8 +0.7
PMBI Palembang 15.59 286 ⇑P P 15 38 18.9 +0.9
PMBI Palembang 15.59 286 P P 15 38 18.8 +0.7
comp=Z,3µm,0.7s,comp=Z,72µm
LWLI Liwa 15.81 278 P P 15 38 17.6 -2.8
comp=Z,5µm,0.7s,comp=Z,51µmcomp=Z,25µm
GIRL Giralia 16.10 199 P P 15 38 23.2 +0.2
GIRL Giralia 16.10 199 P P 15 38 23.3 +0.3
GIRL Giralia 16.10 199 ⇑P P 15 38 22.9 -0.1
MNAI Manna 17.00 279 P P 15 38 30.6 -0.8
MNAI Manna 17.00 279 P P 15 38 29.5 -1.9
MNAI Manna 17.00 279 ⇑P P 15 38 28.9 -2.5
MNAI Manna 17.00 279 P P 15 38 29.3 -2.1
comp=Z,10µm,0.6s,comp=Z,104µmcomp=Z,32µm
TPRI Tanjung Pinang 17.30 298 P P 15 38 35.1 +1.0
comp=Z,6µm,1.2s,comp=Z,69µmcomp=Z,49µm
BTDF Bukit Timah Da 18.18 298 P P 15 38 42.4 +0.3
MYKOM Kota Tinggi 18.32 299 P P 15 38 44.2 +0.8
MYKOM Kota Tinggi 18.32 299 ⇑P P 15 38 44.5 +1.1
I07AU WARRAMUNGA INF 18.84 133 P P 15 38 48.5 +0.3
baz=302,slow=12,SNR=17
WRA Warramunga Arr 18.85 133 P P 15 38 47.5 -0.8
comp=Z,26µm,0.8s,baz=310,slow=11,SNR=1201
WRA S S 15 41 55.0 +3.2
comp=Z,1µm,0.9s,baz=306,slow=18,SNR=6.7
WRA P3KPbc 16 12 46.0
comp=Z,4.1nm,0.6s,baz=126,slow=3.3,SNR=29
WRA Warramunga Arr 18.85 133 *i* P P 15 38 46.2 -2.0
WRA pmax pmax
comp=Z,26µm,0.8s
WRAB Tennant Creek 18.86 133 P P 15 38 48.8 +0.6
WRAB Tennant Creek 18.86 133 *d* P P 15 38 47.4 -0.9
MEEK Meekatharra 19.20 183 P P 15 38 50.9 -0.4
MEEK Meekatharra 19.20 183 P P 15 38 50.7 -0.6
comp=Z,0.0nmcomp=Z,7µm,0.8s
WRKA Warakurna 19.36 156 P P 15 38 52.6 -0.3
WRKA Warakurna 19.36 156 ⇑P P 15 38 52.5 -0.4
WRKA Warakurna 19.36 156 P P 15 38 52.6 -0.3
comp=Z,0.0nmcomp=Z,16µm,0.7s
BKNI Bangkinang 20.20 291 P P 15 39 02.7 +2.2
BKNI Bangkinang 20.20 291 P P 15 39 00.4 -0.1
BKNI Bangkinang 20.20 291 P P 15 38 55.5 -5.0
BKNI Bangkinang 20.20 291 ⇑P P 15 39 00.8 +0.3
BKNI Bangkinang 20.20 291 P P 15 39 01.0 +0.5
comp=Z,6µm,0.9s,comp=Z,88µmcomp=Z,49µm
PPSI Pulau Pagai 20.22 282 P P 15 38 59.3 -1.4
comp=Z,5µm,0.5s,comp=Z,63µmcomp=Z,35µm
PDSI Padang 20.30 288 P P 15 38 59.5 -2.0
comp=Z,2µm,0.6s,comp=Z,27µm
MMPI Merauke 20.43 94 P P 15 39 01.5 -1.1
GENI Genyem 20.85 78 P P 15 39 05.8 -0.6
GENI Genyem 20.85 78 ⇑P P 15 39 05.5 -0.9
GENI Genyem 20.85 78 P P 15 39 05.3 -1.1
comp=Z,4µm,0.9s,comp=Z,52µmcomp=Z,33µm
AS31 Alice Springs 21.13 142 P P 15 39 08.1 -0.7
AS31 Alice Springs 21.13 142 P P 15 39 08.2 -0.6
comp=Z,0.0nmcomp=Z,3µm,0.7s
ASAR Alice Springs 21.13 142 P P 15 39 08.5 -0.4
ASAR Alice Springs 21.13 142 P P 15 39 08.3 -0.5
comp=Z,5µm,0.6s,baz=319,slow=8.2,SNR=4607
ASAR S S 15 42 28.9 +0.8
comp=Z,599nm,0.9s,baz=305,slow=14,SNR=4.2
ASAR ScP ScP 15 45 37.0 +0.4
comp=Z,608nm,0.7s,baz=340,slow=2.2,SNR=16
ASAR P3KPbc 16 12 38.0
comp=Z,1.2nm,0.4s,baz=137,slow=3.5,SNR=28
comp=Z,5µm,0.6s
AS01 Alice Springs 21.16 142 P P 15 39 08.5 -0.6
JAY Jayapura 21.39 78 P P 15 39 09.4 -1.9
comp=Z,2µm,0.8s,comp=Z,17µm
TABU Tabubil 21.41 86 P P 15 39 10.4 -1.1
SISI Saibi 21.48 285 P P 15 39 10.4 -1.7
comp=Z,2µm,0.5s,comp=Z,21µmcomp=Z,34µm
MORW Morawa 21.88 189 P P 15 39 15.4 0.0
MORW Morawa 21.88 189 P P 15 39 15.1 -0.4
MORW Morawa 21.88 189 ⇑P P 15 39 15.1 -0.4
MORW Morawa 21.88 189 P P 15 39 15.0 -0.4
comp=Z,0.0nmcomp=Z,3µm,1.2s
IPM Ipoh 22.11 302 P P 15 39 18.0 +0.2
IPM Ipoh 22.11 302 P P 15 39 17.9 +0.2
IPM Ipoh 22.11 302 ⇑P P 15 39 17.9 +0.1
PBSI Pulau Batu 22.64 288 P P 15 39 22.8 +0.3
comp=Z,2µm,0.7s,comp=Z,20µmcomp=Z,28µm
KULM Kulim 22.86 303 ⇑P P 15 39 24.1 -0.3
COCO West Island 23.11 256 P P 15 39 27.0 +0.3
COCO West Island 23.11 256 P P 15 39 26.8 +0.1
COCO West Island 23.11 256 ⇑P P 15 39 26.9 +0.3
COCO West Island 23.11 256 P P 15 39 27.9 +1.2
COCO West Island 23.11 256 P P 15 39 26.8 +0.1
PSI Prapat 23.14 295 P P 15 39 26.9 -0.2
QIS Mount Isa 23.24 126 P P 15 39 27.3 -0.5
QIS Mount Isa 23.24 126 P P 15 39 27.1 -0.7
comp=Z,0.0nmcomp=Z,6µm,0.9s
BLDU Ballidu 23.31 187 P P 15 39 27.7 -0.5
BLDU Ballidu 23.31 187 P P 15 39 27.5 -0.8
comp=Z,0.0nmcomp=Z,2µm,1.4s
GSI Gunungsitoli 23.77 290 P P 15 39 31.4 -1.2
GSI Gunungsitoli 23.77 290 P P 15 39 31.2 -1.4
GSI Gunungsitoli 23.77 290 ⇑P P 15 39 31.2 -1.4
GSI Gunungsitoli 23.77 290 P P 15 39 31.1 -1.4
comp=Z,4µm,0.6s,comp=Z,48µmcomp=Z,30µm
COEN Coen 23.89 108 P P 15 39 32.5 -1.1
COEN Coen 23.89 108 P P 15 39 32.3 -1.3
COEN Coen 23.89 108 ⇑P P 15 39 32.2 -1.4
COEN Coen 23.89 108 P P 15 39 32.4 -1.1
comp=Z,0.0nmcomp=Z,6µm,0.9s
KMBL Kambalda 23.96 176 P P 15 39 33.3 -0.7
KMBL Kambalda 23.96 176 P P 15 39 33.2 -0.8
comp=Z,0.0nmcomp=Z,3µm,0.7s
KLBR Kellerberrin 24.18 184 P P 15 39 35.4 -0.5
KLBR Kellerberrin 24.18 184 P P 15 39 35.3 -0.6
comp=Z,4µm,0.8s
KCSI Kotacane, Aceh 24.49 295 P P 15 39 37.3 -1.6
comp=Z,7µm,0.7s,comp=Z,62µm
FORT Forrest 24.55 163 P P 15 39 39.0 -0.2
FORT Forrest 24.55 163 P P 15 39 39.0 -0.2
FORT Forrest 24.55 163 ⇑P P 15 39 38.8 -0.4
FORT Forrest 24.55 163 P P 15 39 38.9 -0.3
comp=Z,0.0nmcomp=Z,11µm,0.7s
MUN Mundaring 24.71 187 P P 15 39 40.3 -0.4
MUN Mundaring 24.71 187 P P 15 39 40.0 -0.6
comp=Z,0.0nmcomp=Z,1µm,1.3s
MTKN Mount Kenneth 24.73 188 P P 15 39 43.1 +2.3
MTKN Mount Kenneth 24.73 188 P P 15 39 42.6 +1.8
comp=Z,1µm,1.0s
SZP Santa 24.77 2 P P 15 39 41.4 +0.1
OOD Oodnadatta 25.29 145 P P 15 39 45.1 -0.7
SNSI Sinabang, Aceh 25.34 292 P P 15 39 46.3 -0.2
NWAO Narrogin (SRO) 25.55 185 P P 15 39 47.7 -0.2
NWAO Narrogin (SRO) 25.55 185 P P 15 39 47.8 -0.2
NWAO Narrogin (SRO) 25.55 185 P P 15 39 47.8 -0.2
NWAO Narrogin (SRO) 25.55 185 P P 15 39 48.0 0.0
comp=Z,1µm,0.6s,baz=6.6,slow=7.4,SNR=511
NWAO ScP ScP 15 45 49.4 +0.9
comp=Z,443nm,0.9s,baz=344,slow=10.0,SNR=5.0
comp=Z,1µm,0.6s
NWAO Narrogin (SRO) 25.55 185 P P 15 39 48.2 +0.2
NWAO P P 15 39 48.2 +0.2
SRIT Nakonsritamara 25.61 308 P P 15 39 49.5 +0.7
SRIT Nakonsritamara 25.61 308 P P 15 39 49.4 +0.5

AUHAR St Anne's Scho 25.85 188 P P 15 39 51.0 +0.3
SURA Surathani 25.94 309 P P 15 39 52.1 +0.4
LHMI Lhok Sumawe 26.00 298 P P 15 39 52.0 -0.2
LHMI Lhok Sumawe 26.00 298 ⇑P P 15 39 51.8 -0.5
LHMI Lhok Sumawe 26.00 298 P P 15 39 51.7 -0.5
comp=Z,5µm,1.2s,comp=Z,57µmcomp=Z,37µm
MLSI Meulaboh, Aceh 26.04 296 P P 15 39 51.6 -1.0
MTSU Mount Surprise 26.17 116 P P 15 39 53.4 -0.4
MULG Mulgathing 26.44 151 P P 15 39 55.4 -0.5
AUCSH Cairns State H 27.09 113 P P 15 40 01.8 0.0
PMG Port Moresby 27.15 96 P P 15 40 01.6 -0.8
PMG Port Moresby 27.15 96 P P 15 40 01.5 -0.9
PMG Port Moresby 27.15 96 ⇑P P 15 40 01.5 -0.9
PMG Port Moresby 27.15 96 *d* *i* P P 15 40 02.1 -0.3
PMG pmax pmax
comp=Z,3µm,0.9s
RKGY Rocky Gully 27.24 185 P P 15 40 03.8 +1.0
RKGY Rocky Gully 27.24 185 P P 15 40 03.8 +1.0
comp=Z,13µm,0.6s
AUALB St Joseph's Co 27.56 183 P P 15 40 06.6 +1.0
H01W3 Cape Leeuwin H 27.88 190 P P 15 40 09.9 +1.7
baz=19,slow=5.3,SNR=90
H01W1 Cape Leeuwin H 27.88 190 P P 15 40 09.9 +1.7
baz=19,slow=5.3,SNR=73
H01W2 Cape Leeuwin H 27.89 190 P P 15 40 10.9 +2.6
baz=19,slow=5.3,SNR=52
MANU Manus Island 27.98 80 P P 15 40 09.9 +0.2
QIZ Qiongzhong 28.00 340 P P 15 40 10.1 +0.4
QIZ Qiongzhong 28.00 340 P P 15 40 10.3 +0.6
QIZ sP sP 15 42 39.8 -2.9
QIZ S S 15 44 15.0 -0.9
QIZ pmax pmax
comp=Z,3µm,0.9s
QIZ pmax pmax
comp=Z,8µm,3.5s
NAYO Nakonayok 28.28 320 P P 15 40 12.6 +0.4
INKA Innaminka 28.37 138 P P 15 40 12.7 -0.1
CTA Charters Tower 28.60 119 P P 15 40 14.5 -0.5
CTA Charters Tower 28.60 119 P P 15 40 14.5 -0.5
comp=Z,346nm,1.0s,baz=295,slow=10,SNR=1244
CTA S S 15 44 25.3 0.0
comp=Z,11nm,0.9s,baz=198,slow=23,SNR=6.3
CTA ScP ScP 15 45 59.0 +0.9
comp=Z,22nm,1.0s,baz=61,slow=8.0,SNR=3.7
CTA P3KPbc 16 12 08.8
comp=Z,0.1nm,0.8s,baz=196,slow=6.4,SNR=1.6
comp=Z,346nm,1.0s
CTAO Charters Tower 28.60 119 P P 15 40 14.7 -0.3
CTAO Charters Tower 28.60 119 P P 15 40 14.7 -0.3
CTAO Charters Tower 28.60 119 ⇑P P 15 40 14.6 -0.3
CTAO Charters Tower 28.60 119 P P 15 40 14.7 -0.3
LCRK Leigh Creek 28.74 145 P P 15 40 15.7 -0.3
TV1H Townsville Har 28.77 117 P P 15 40 16.2 -0.2
AUAYR Ayr State High 29.42 117 P P 15 40 22.5 +0.4
CMBY CAMPBELL BAY 29.48 298 *e* P P 15 40 21.1 -1.6
CMBY IAmb IAmb 15 40 25.7
comp=Z,9µm,0.9s
BBOO Buckleboo 29.48 151 P P 15 40 21.7 -0.8
BBOO Buckleboo 29.48 151 P P 15 40 21.8 -0.6
comp=Z,0.0nmcomp=Z,10µm,0.8s
SRDT SRDT 29.76 316 P P 15 40 26.2 +1.1
MCO Taipa Grande 29.93 348 P P 15 40 28.0 +1.6
HKPS Hong Kong Po S 29.98 349 P P 15 40 27.3 +0.5
HKPS Hong Kong Po S 29.98 349 P P 15 40 26.7 -0.1
HKPS IAmb IAmb 15 40 30.2
comp=Z,2µm,1.0s
HKC Hong Kong Obse 29.99 350 ⇑P P 15 40 27.0 +0.1
TWGBT Beinan 30.02 2 P P 15 40 26.1 -1.1
TWG Pinlang 30.03 2 P P 15 40 25.7 -1.6
QLP Quilpie 30.09 132 P P 15 40 27.7 -0.1
QLP Quilpie 30.09 132 ⇑P P 15 40 28.0 +0.2
QLP Quilpie 30.09 132 P P 15 40 28.0 +0.2
comp=Z,0.0nmcomp=Z,12µm,1.1s
BULU Kimbe 30.39 88 P P 15 40 28.5 -2.0
WHYH Whyalla 30.41 150 P P 15 40 29.9 -0.5
TPUB Ta-pu 30.49 2 P P 15 40 31.4 +0.2
TPUB Ta-pu 30.49 2 P P 15 40 30.9 -0.4
TPUB PcP PcP 15 43 15.0 +1.7
YULB Yu-li 30.61 3 P P 15 40 30.4 -1.8
YULB Yu-li 30.61 3 P P 15 40 29.7 -2.5
YULB IAmb IAmb 15 40 36.2
comp=Z,2µm,0.9s
PTPS Port Pirie 30.73 149 P P 15 40 33.6 +0.4
SSLB Suanglung 30.98 2 P P 15 40 34.8 -0.7
SSLB Suanglung 30.98 2 P P 15 40 34.2 -1.3
SSLB IAmb IAmb 15 40 37.8
comp=Z,2µm,1.0s
KAVG Kavieng 31.26 83 P P 15 40 38.8 +0.8
NACB Ninganchiao 31.40 3 P P 15 40 37.5 -1.5
NACB Ninganchiao 31.40 3 P P 15 40 37.1 -1.8
NACB IAmb IAmb 15 40 40.7
comp=Z,984nm,0.9s
HTT Hallett 31.41 148 P P 15 40 39.0 -0.1
HTT Hallett 31.41 148 ⇑P P 15 40 37.9 -1.2
HTT Hallett 31.41 148 P P 15 40 39.2 +0.1
comp=Z,11µm,0.8s
KNMB Chin-men Tao 31.66 358 P P 15 40 40.7 -0.6
STKA Stephens Creek 31.75 143 P P 15 40 41.2 -0.7
STKA Stephens Creek 31.75 143 P P 15 40 41.9 -0.1
STKA IAmb IAmb 15 40 44.0
comp=Z,1µm,1.1s
STKA Stephens Creek 31.75 143 P P 15 40 41.7 -0.2
comp=Z,0.0nmcomp=Z,2µm,0.9s
STKA Stephens Creek 31.75 143 P P 15 40 41.7 -0.2
comp=Z,4µm,0.4s,baz=321,slow=8.6,SNR=1401
STKA S S 15 45 11.2 -2.2
comp=Z,274nm,1.0s,baz=248,slow=17,SNR=2.4
STKA ScP ScP 15 46 08.4 +0.1
comp=Z,423nm,0.8s,baz=318,slow=5.6,SNR=5.5
STKA P3KPbc 16 11 56.6
comp=Z,1.7nm,0.6s,baz=2.2,slow=6.4,SNR=3.0
comp=Z,4µm,0.4s
STKA Stephens Creek 31.75 143 *d* *i* P P 15 40 41.8 -0.1
YOJ Yonaguni jima 31.79 6 P P 15 40 42.7 +0.4
YOJ Yonaguni jima 31.79 6 P P 15 40 41.8 -0.5
YOJ Yonaguni jima 31.79 6 ⇑P P 15 40 41.9 -0.5
YOJ Yonaguni jima 31.79 6 P P 15 40 41.8 -0.5
YOJ pmax pmax
comp=Z,4µm,1.1s
YHNB Yeheng 31.88 3 P P 15 40 42.3 -0.9
YHNB Yeheng 31.88 3 P P 15 40 42.0 -1.1
QZH Quanzhou 32.13 358 *i* P P 15 40 44.9 -0.3
QZH pP pP 15 42 20.3 +3.3
QZH PcP sP 15 43 19.3 -1.4
QZH sP PcP 15 43 22.6 +4.9
QZH S S 15 45 18.6 -0.8
QZH ScP ScP 15 46 11.3 +1.7
QZH sS sS 15 48 09.8 +1.8
QZH ScS ScS 15 50 11.3 +1.2
QZH pmax pmax
comp=Z,3µm,1.2s
QZH pmax pmax
comp=Z,7µm,5.9s
TATO Taipei 32.19 3 P P 15 40 44.8 -1.0
TATO Taipei 32.19 3 P P 15 40 44.1 -1.6
TATO IAmb IAmb 15 40 47.4
comp=Z,2µm,0.8s
TATO PcP PcP 15 43 19.4 +1.5
TATO Taipei 32.19 3 P P 15 40 44.7 -1.0
TATO P P 15 40 44.7 -1.0
TATO S S 15 45 14.9 -5.3
TATO S S 15 45 14.9 -5.3
TATO Taipei 32.19 3 P P 15 40 44.6 -1.1
TATO pP pP 15 42 18.8 +1.0
TATO PP PP 15 42 25.6 -1.3
TATO PcP PcP 15 43 18.9 +1.0
TATO ScP ScP 15 46 11.1 +1.3
RABL Rabaul 32.36 86 P P 15 40 46.8 -0.7
RABL IAmb IAmb 15 40 50.1
comp=Z,2µm,1.1s
RABL Rabaul 32.36 86 ⇑P P 15 40 45.3 -2.1
GHSS Government Hou 32.43 150 P P 15 40 48.8 +1.2
JMJ Miyako jima 2 32.43 9 P P 15 40 48.6 +0.8
GUMO Guam 32.46 50 P P 15 40 48.0 -0.2
GUMO Guam 32.46 50 P P 15 40 47.0 -1.2
GUMO Guam 32.46 50 ⇑P P 15 40 47.1 -1.1
GUMO Guam 32.46 50 P P 15 40 47.0 -1.2
GUMO pmax pmax
comp=Z,2µm,1.0s
SLVN Son La 32.50 332 IAmb IAmb 15 40 53.4
comp=Z,2µm,1.0s
PBA Port Blair 32.87 305 *e* P P 15 40 50.7 -1.0
PBA IAmb IAmb 15 40 56.9

comp=Z,2µm,0.6s
**PBA Port Blair 32.87 305** ⇑P **P** **15 40 50.5 -1.2**
**PBA Port Blair 32.87 305** P **P** **15 40 51.7 0.0**
SNR=21
**CM31 Chiang Mai Arr 32.88 322** P **P** **15 40 52.3 +0.5**
CM31 IAmb IAmb 15 40 54.8
comp=Z,1µm,0.9s
**CMAR Chiang Mai Arr 32.88 322** P **P** **15 40 52.3 +0.5**
CMAR **15 42 25.6 +1.8**
**CMAR Chiang Mai Arr 32.88 322** P **P** **15 40 51.8 +0.1**
comp=Z,755nm,0.9s,baz=147,slow=6.5,SNR=931
CMAR PcP **PcP** **15 43 22.6 +2.5**
comp=Z,384nm,0.7s,baz=181,slow=2.1,SNR=33
CMAR S **S** **15 45 30.8 -0.3**
comp=Z,26nm,0.9s,baz=134,slow=2.3,SNR=1.2
CMAR ScP **ScP** **15 46 14.1 +1.7**
comp=Z,36nm,0.7s,baz=178,slow=2.9,SNR=5.8
CMAR ScS **ScS** **15 50 18.6 +4.2**
comp=Z,16nm,1.2s,baz=157,slow=4.9,SNR=4.5
CMAR PKiKP **PKiKP** **15 50 45.8 +0.4**
comp=Z,11nm,0.8s,baz=228,slow=1.9,SNR=6.1
CMAR P3KPbc 16 11 57.4
comp=Z,3.2nm,0.8s,baz=307,slow=5.8,SNR=14
CMAR PKP2ab 16 15 54.9
comp=Z,2.4nm,0.9s,baz=244,slow=4.4,SNR=4.7
CMAR P4KPbc 16 19 15.4
comp=Z,0.9nm,0.5s,baz=160,slow=3.6,SNR=4.1
comp=Z,755nm,0.9s
**CMAR Chiang Mai Arr 32.88 322** *i*P **P** **15 40 52.2 +0.5**
CMAR pmax pmax
comp=Z,826nm,0.9s
**CRAI Chiangrai 33.42 325** P **P** **15 40 57.0 +0.8**
CRAI PcP **PcP** **15 43 24.2 +2.6**
**RMQ Roma 33.47 128** P **P** **15 40 57.7 +1.1**
**RMQ Roma 33.47 128** P **P** **15 40 57.2 +0.5**
comp=Z,654nm,0.9s
**RK1H Rockhampton Ha 33.51 122** P **P** **15 40 56.0 -0.9**
**CMSA Cobar Meteorol 34.10 138** P **P** **15 41 01.8 0.0**
**CMSA Cobar Meteorol 34.10 138** P **P** **15 41 01.9 +0.2**
comp=Z,0.0nmcomp=Z,6µm,1.0s
**GD1S Gladstone Solt 34.26 122** P **P** **15 41 02.7 -0.5**
**AULRC Lightning Ridg 34.43 133** P **P** **15 41 04.4 -0.2**
**JMZ Minamidaito 2 34.81 18** P **P** **15 41 08.2 +0.4**
**JMZ Minamidaito 2 34.81 18** P **P** **15 41 07.8 0.0**
JMZ IAmb IAmb 15 41 10.0
comp=Z,2µm,0.9s
JMZ PcP **PcP** **15 43 23.7 -1.8**
**JMZ Minamidaito 2 34.81 18** ⇑P **P** **15 41 07.7 0.0**
**EIDS Eidsvold 34.81 125** P **P** **15 41 07.6 -0.3**
**EIDS Eidsvold 34.81 125** IAmb IAmb 15 41 13.7
comp=Z,2µm,1.0s
**EIDS Eidsvold 34.81 125** ⇑P **P** **15 41 07.2 -0.7**
**EIDS Eidsvold 34.81 125** P **P** **15 41 07.4 -0.5**
comp=Z,0.0nmcomp=Z,2µm,1.0s
**JOW Kunigami 34.98 13** P **P** **15 41 09.3 +0.1**
**JOW Kunigami 34.98 13** IAmb IAmb 15 41 11.5
comp=Z,1µm,0.9s
**JOW Kunigami 34.98 13** ⇑P **P** **15 41 08.8 -0.3**
**JOW Kunigami 34.98 13** P **P** **15 41 08.9 -0.3**
comp=Z,1µm,0.8s,baz=205,slow=6.5,SNR=128
JOW S **S** **15 46 00.4 -2.0**
comp=Z,45nm,0.8s,baz=227,slow=29,SNR=1.6
JOW ScP **ScP** **15 46 20.9 +1.2**
comp=Z,189nm,0.8s,baz=245,slow=6.5,SNR=5.6
comp=Z,1µm,0.8s
**ARPS Mount Arapiles 35.51 149** P **P** **15 41 13.3 -0.1**
**ARPS Mount Arapiles 35.51 149** P **P** **15 41 13.5 +0.1**
comp=Z,22µm,0.8s
**CNSH ChangSha 35.95 350** P **P** **15 41 17.3 +0.1**
CNSH pP **pwP** **15 42 56.3 +3.6**
CNSH sP **sP** **15 43 56.5 +3.3**
CNSH S **S** **15 46 16.3 -0.7**
CNSH sS **sS** **15 49 02.8 -5.3**
CNSH pmax pmax
comp=Z,2µm,1.0s
**GYA Guiyang 35.95 340** ⇑P **P** **15 41 18.1 +0.7**
GYA pP pwP 15 42 57.3 +4.3
GYA PcP **PcP** **15 43 30.8 +1.7**
GYA sP sP 15 43 56.8 +3.5
GYA S **S** **15 46 18.6 +1.3**
GYA ScP **ScP** **15 46 25.8 +2.3**
GYA ScS **ScS** **15 50 33.4 +2.3**
GYA pmax pmax
comp=Z,4µm,0.7s
GYA pmax pmax
comp=Z,8µm,7.4s
**KMI Kunming 36.31 333** ⇑P **P** **15 41 22.3 +1.8**
KMI pP pP 15 42 57.8 +3.3
KMI PcP **PcP** **15 43 32.5 +2.2**
KMI sP sP 15 43 55.3 -2.0
KMI S **S** **15 46 21.3 -1.5**
KMI ScP **ScP** **15 46 27.8 +2.8**
KMI SS **SS** **15 49 29.6 -5.8**
KMI ScS **ScS** **15 50 37.6 +4.2**
KMI pmax pmax
comp=Z,3µm,1.0s
KMI pmax pmax
comp=Z,12µm,7.8s
**AUMAG Moama Anglican 36.59 145** P **P** **15 41 22.8 +0.4**
**BRAT Ballarat 37.19 147** P **P** **15 41 27.9 +0.6**
**AUWSH Wavell State H 37.28 126** P **P** **15 41 29.0 +0.8**
**AUPHS Peel High Scho 37.44 133** P **P** **15 41 30.3 +0.8**
**YNG Young 37.60 139** P **P** **15 41 31.0 +0.3**
**YNG Young 37.60 139** P **P** **15 41 31.2 +0.4**
comp=Z,0.0nmcomp=Z,60µm,0.8s
**ARMA Armidale 37.63 132** P **P** **15 41 32.6 +1.5**
**ARMA Armidale 37.63 132** ⇑P **P** **15 41 32.5 +1.3**
**ARMA Armidale 37.63 132** P **P** **15 41 32.4 +1.3**
comp=Z,0.0nmcomp=Z,4µm,1.0s
**GEXS Deakin Univers 37.86 148** P **P** **15 41 34.1 +1.3**
**MLBS Spotswood, Mel 37.91 147** P **P** **15 41 34.4 +1.2**
**PZH PanZhiHua 37.95 333** P **P** **15 41 34.3 +0.5**
PZH PcP **PcP** **15 43 37.0 +1.7**
PZH sP **sP** **15 44 13.8 +2.5**
PZH ScP **ScP** **15 46 33.3 +2.3**
PZH S **S** **15 46 47.9 +1.0**
PZH SS **SS** **15 49 59.4 -7.1**
PZH ScS **ScS** **15 50 43.4 +0.8**
PZH pmax pmax
comp=Z,2µm,1.1s
PZH pmax pmax
comp=Z,11µm,5.6s
**GC1S Gold Coast 1 S 37.99 127** P **P** **15 41 34.6 +0.7**
**WHN Wuhan 38.05 352** ⇑P **P** **15 41 34.9 +0.5**
WHN pP **pP** **15 43 13.5 +4.5**
WHN PP **PP** **15 43 19.0 -0.3**
WHN PcP **PcP** **15 43 37.3 +2.0**
WHN sP **sP** **15 44 11.9 -0.1**
WHN ScP **ScP** **15 46 33.3 +2.2**
WHN S **S** **15 46 48.8 +0.8**
WHN ScS **ScS** **15 50 44.3 +1.6**
WHN pmax pmax
comp=Z,6µm,0.9s
WHN pmax pmax
comp=Z,25µm,7.5s
**TOO Toolangi 38.05 146** P **P** **15 41 35.3 +0.9**
**TOO Toolangi 38.05 146** ⇑P **P** **15 41 35.3 +0.9**
**TOO Toolangi 38.05 146** P **P** **15 41 35.2 +0.9**
comp=Z,0.0nmcomp=Z,5µm,1.0s
**SSE Sheshan 38.27 2** P **P** **15 41 37.6 +1.5**
SSE S **S** **15 46 55.6 +4.5**
SSE pmax pmax
comp=Z,720nm,1.1s
SSE pmax pmax
comp=Z,980nm,4.1s
**TNCH TengChong 38.28 328** ⇑*i*P **P** **15 41 38.4 +1.8**
TNCH pP pP 15 43 12.6 +0.8
TNCH PP **PP** **15 43 21.0 -1.1**
TNCH sP sP 15 44 15.4 +1.1
TNCH S **S** **15 46 56.1 +4.1**
TNCH pmax pmax
comp=Z,3µm,1.4s
**CAN Canberra 38.63 140** P **P** **15 41 39.6 +0.5**
**CAN Canberra 38.63 140** ⇑P **P** **15 41 39.5 +0.5**
**CAN Canberra 38.63 140** P **P** **15 41 39.6 +0.5**
comp=Z,0.0nmcomp=Z,5µm,1.0s
**CAN Canberra 38.63 140** P **P** **15 41 40.5 +1.4**
CAN PP **PP** **15 43 24.2 -1.1**
CAN ScP **ScP** **15 46 33.8 +0.3**
**ENH Enshi 38.71 346** P **P** **15 41 39.4 -0.4**
**ENH Enshi 38.71 346** P **P** **15 41 39.6 -0.1**
ENH PcP **PcP** **15 43 38.7 +1.2**
ENH ScP **ScP** **15 46 35.7 +1.9**
**SYDH Sydney Hard Ro 38.83 137** P **P** **15 41 41.7 +1.0**

**CNB Canberra Magne 38.85 140** P **P** **15 41 41.3 +0.3**
**CNB Canberra Magne 38.85 140** P **P** **15 41 41.3 +0.3**
comp=Z,0.0nmcomp=Z,3µm,1.1s
**NTLH Newcastle Hard 39.00 135** P **P** **15 41 43.4 +1.3**
**RIV Riverview 39.15 137** P **P** **15 41 44.6 +1.3**
**RIV Riverview 39.15 137** ⇑P **P** **15 41 44.5 +1.3**
**RIV Riverview 39.15 137** P **P** **15 41 44.6 +1.3**
comp=Z,0.0nmcomp=Z,10µm,0.9s
**NJ2 Nanjing 39.21 359** ⇑*i*P **P** **15 41 44.3 +0.6**
NJ2 pP **pP** **15 43 24.4 +4.6**
NJ2 PcP **PcP** **15 43 41.0 +2.0**
NJ2 ScP **ScP** **15 46 36.8 +1.2**
NJ2 S **S** **15 47 05.0 +0.1**
NJ2 ScS **ScS** **15 50 54.0 +4.5**
NJ2 pmax pmax
comp=Z,2µm,1.0s
NJ2 pmax pmax
comp=Z,9µm,3.5s
**WOLH Wollongong Har 39.29 138** P **P** **15 41 45.4 +1.0**
**AUSSC Sale College, 39.32 145** P **P** **15 41 45.2 +0.7**
**HNR Honiara 39.77 96** P **P** **15 41 48.2 -0.3**
**HNR Honiara 39.77 96** P **P** **15 41 48.3 -0.3**
**HNR Honiara 39.77 96** ⇑P **P** **15 41 47.6 -1.0**
**HNR Honiara 39.77 96** P **P** **15 41 48.3 -0.3**
**MILA Mila 39.83 142** P **P** **15 41 49.0 +1.1**
**MILA Mila 39.83 142** ⇑P **P** **15 41 49.0 +0.1**
**MILA Mila 39.83 142** P **P** **15 41 49.0 +0.1**
comp=Z,1µm,0.9s
**JCJ Chichijima 40.55 32** P **P** **15 41 54.4 -0.2**
**JCJ Chichijima 40.55 32** ⇑P **P** **15 41 53.6 -1.0**
**IMP Imphal 40.72 323** *e*P **P** **15 41 55.3 -0.8**
IMP IAmb IAmb 15 41 58.2
comp=Z,2µm,0.9s
**PATS Pohnpei 40.94 71** P **P** **15 41 58.4 +0.5**
**PATS Pohnpei 40.94 71** IAmb IAmb 15 42 01.1
comp=Z,3µm,1.1s
**PATS Pohnpei 40.94 71** ⇑P **P** **15 41 57.9 0.0**
**PATS Pohnpei 40.94 71** P **P** **15 41 58.3 +0.5**
comp=Z,0.0nmcomp=Z,2µm,1.1s
**CD2 Chengdu 41.04 339** ⇑*i*P **P** **15 41 58.4 -0.1**
CD2 PP **PcP** **15 43 41.0 -4.1**
CD2 sP sP 15 44 37.3 -0.1
CD2 ScP **ScP** **15 46 43.8 +0.8**
CD2 S **S** **15 47 31.3 -0.5**
CD2 pmax pmax
comp=Z,5µm,0.6s
CD2 pmax pmax
comp=Z,9µm,3.8s
**HALK Hakmana 41.24 288** ⇑P **P** **15 41 59.7 -0.6**
**KOHI KOHIMA 41.29 324** *e*P **P** **15 41 60.0 -0.7**
KOHI IAmb IAmb 15 42 03.1
comp=Z,11µm,0.9s
**LKP Lekhapani 41.56 327** *e*P **P** **15 42 02.5 0.0**
LKP IAmb IAmb 15 42 05.0
comp=Z,9µm,1.4s
**PALK Pallekele 41.60 290** P **P** **15 42 02.7 -0.6**
PALK IAmb IAmb 15 42 04.9
comp=Z,1µm,1.0s
**PALK Pallekele 41.60 290** ⇑P **P** **15 42 02.5 -0.7**
**PALK Pallekele 41.60 290** P **P** **15 42 02.9 -0.4**
**PALK Pallekele 41.60 290** *c*P **P** **15 42 02.6 -0.6**
PALK pmax pmax
comp=Z,2µm,1.1s
**PALK Pallekele 41.60 290** P **P** **15 42 02.8 -0.4**
PALK pP **pP** **15 43 41.9 +1.3**
PALK PcP **PcP** **15 43 49.4 +2.0**
PALK ScP **ScP** **15 46 47.7 +2.1**
**JNU Nakatsue 41.62 14** P **P** **15 42 01.9 -1.1**
**JNU Nakatsue 41.62 14** IAmb IAmb 15 42 04.7
comp=Z,922nm,0.8s
**JNU Nakatsue 41.62 14** ⇑P **P** **15 42 01.6 -1.5**
**JNU Nakatsue 41.62 14** P **P** **15 42 01.6 -1.4**
comp=Z,1µm,0.9s,baz=207,slow=2.0,SNR=163
JNU PcP **PcP** **15 43 48.4 +1.4**
comp=Z,115nm,0.9s,baz=169,slow=2.5,SNR=1.8
JNU ScP **ScP** **15 46 46.1 +0.9**
comp=Z,99nm,0.9s,baz=164,slow=5.9,SNR=4.1
JNU S **S** **15 47 38.2 -1.8**
comp=Z,39nm,0.8s,baz=99,slow=22,SNR=7.1
comp=Z,1µm,0.9s
**AGT Agartala 41.73 319** *e*P **P** **15 42 05.0 +1.1**
AGT IAmb IAmb 15 42 06.9
comp=Z,6µm,0.9s
**CORO Coronation Par 41.74 149** P **P** **15 42 05.5 +1.7**
**GLAD Gladstone 41.85 148** P **P** **15 42 05.7 +1.0**
**JORH JORHAT 41.98 325** *e*P **P** **15 42 05.7 -0.2**
**MALK Mahakanadarawa 42.13 291** P **P** **15 42 05.7 -1.6**
**MALK Mahakanadarawa 42.13 291** ⇑P **P** **15 42 06.7 -0.7**
**LYN LuoYang 42.26 351** P **P** **15 42 07.8 -0.1**
LYN PcP **PcP** **15 43 51.3 +2.2**
LYN sP sP 15 44 47.4 -0.1
LYN ScP **ScP** **15 46 48.6 +0.9**
LYN S **S** **15 47 46.5 -2.6**
LYN sS sS 15 50 47.3 +1.8
LYN pmax pmax
comp=Z,3µm,0.9s
LYN pmax pmax
comp=Z,13µm,6.6s
**XAN Xi'an 42.45 347** ⇑P **P** **15 42 09.1 -0.4**
XAN pP pwP 15 43 48.8 -0.5
XAN PP **PP** **15 43 56.9 -4.2**
XAN sP sP 15 44 46.9 -1.7
XAN ScP **ScP** **15 46 50.6 +2.1**
XAN S **S** **15 47 50.8 -1.1**
XAN ScS **ScS** **15 51 11.9 +2.4**
XAN pmax pmax
comp=Z,7µm,0.8s
XAN pmax pmax
comp=Z,16µm,7.9s
**MOO Moorlands 42.49 150** P **P** **15 42 11.4 +1.7**
**MOO Moorlands 42.49 150** P **P** **15 42 10.6 +0.9**
comp=Z,0.0nmcomp=Z,3µm,1.2s
**SHL Shillong 42.52 321** IAmb IAmb 15 42 13.3
comp=Z,3µm,0.7s
**SHL Shillong 42.52 321** *e*P **P** **15 42 10.0 -0.4**
SHL IAmb IAmb 15 42 13.1
comp=Z,2µm,0.8s
**SHL Shillong 42.52 321** P **P** **15 42 10.0 -0.4**
SNR=1152
**JTU Tsushima 42.64 12** P **P** **15 42 10.8 -0.1**
**JTU Tsushima 42.64 12** ⇑P **P** **15 42 10.6 -0.4**
**JTU Tsushima 42.64 12** P **P** **15 42 10.5 -0.4**
**ZIRO ZIRO 42.81 325** *e*P **P** **15 42 12.2 -0.4**
ZIRO IAmb IAmb 15 42 15.4
comp=Z,3µm,1.2s
**TAU Tasmania Unive 42.90 150** P **P** **15 42 14.2 +1.4**
**TAU Tasmania Unive 42.90 150** P **P** **15 42 13.7 +0.9**
**TAU Tasmania Unive 42.90 150** ⇑P **P** **15 42 13.6 +0.7**
**TAU Tasmania Unive 42.90 150** P **P** **15 42 13.7 +0.9**
TAU pmax pmax
comp=Z,5µm,1.2s
**AUTAR Taroona High S 42.94 150** P **P** **15 42 15.0 +1.9**
**JMN Monobe 43.00 17** P **P** **15 42 13.6 -0.2**
**JMN Monobe 43.00 17** IAmb IAmb 15 42 15.4
comp=Z,2µm,1.3s
**JMN Monobe 43.00 17** ⇑P **P** **15 42 13.1 -0.8**
**TIA Tai'an 43.42 357** P **P** **15 42 15.5 -1.5**
TIA PcP **PcP** **15 43 52.0 -1.0**
TIA S **S** **15 48 04.8 -0.8**
**LHI Lord Howe Isla 43.78 129** IAmb IAmb 15 42 22.7
comp=Z,3µm,1.1s
**LHI Lord Howe Isla 43.78 129** ⇑P **P** **15 42 20.0 +0.1**
**JHS Saijyo 43.98 16** P **P** **15 42 21.0 -0.4**
**TJN Taejon 44.09 9** P **P** **15 42 21.9 -0.2**
**TJN Taejon 44.09 9** *de*P **P** **15 42 22.4 +0.3**
**MDRS Chennai 44.21 297** *e*P **P** **15 42 23.8 +0.3**
MDRS IAmb IAmb 15 42 25.4
comp=Z,3µm,0.9s
**JHJ Hachijo jima 2 44.53 24** P **P** **15 42 24.5 -1.1**
comp=Z,1µm,0.8s,baz=197,slow=12,SNR=20
JHJ PcP **PcP** **15 43 58.9 +1.9**
comp=Z,491nm,0.7s,baz=49,slow=22,SNR=2.6
JHJ S **S** **15 48 19.8 -1.6**
comp=Z,265nm,0.9s,baz=93,slow=23,SNR=2.3
comp=Z,1µm,0.8s
**JHJ2 Mitsune 44.53 24** P **P** **15 42 24.5 -1.2**
**JHJ2 Mitsune 44.53 24** IAmb IAmb 15 42 30.6
comp=Z,1µm,0.9s
**JHJ2 Mitsune 44.53 24** ⇑P **P** **15 42 24.4 -1.2**
**HNS HongShan 44.78 354** ⇑P **P** **15 42 26.8 -0.7**
HNS PcP **PcP** **15 43 59.1 +1.4**
HNS pP **pP** **15 44 06.4 -0.6**
HNS sP **sP** **15 45 07.3 -1.2**

HNS ScP **ScP** **15 46 59.3 +1.3**
HNS S **S** **15 48 23.0 -1.8**
HNS ScS **ScS** **15 51 25.4 +1.3**
HNS pmax pmax
comp=Z,2µm,1.2s
HNS pmax pmax
comp=Z,9µm,3.8s
**KOUNC Koumac, New Ca 44.98 112** P **P** **15 42 29.4 +0.1**
**KOUNC Koumac, New Ca 44.98 112** IAmb IAmb 15 42 32.0
comp=Z,2µm,1.0s
**KOUNC Koumac, New Ca 44.98 112** ⇑P **P** **15 42 29.4 +0.1**
**INCN Inchon 45.07 8** P **P** **15 42 29.7 0.0**
**INCN Inchon 45.07 8** P **P** **15 42 29.5 -0.2**
**INCN Inchon 45.07 8** ⇑P **P** **15 42 29.7 0.0**
**INCN Inchon 45.07 8** P **P** **15 42 30.2 +0.5**
INCN P **P** **15 42 30.2 +0.5**
**INCN Inchon 45.07 8** P **P** **15 42 29.5 -0.2**
INCN pmax pmax
comp=Z,509nm,0.8s
**INCN Inchon 45.07 8** P **P** **15 42 29.7 0.0**
INCN PcP **PcP** **15 44 00.3 +1.6**
INCN ScP **ScP** **15 47 00.6 +1.3**
**KSAR Wonju Array Be 45.21 9** PcP **PcP** **15 44 00.7 +1.5**
KSAR **pP** **15 44 12.4 +1.6**
**KSRS Korea Array 45.23 9** P **P** **15 42 30.2 -0.7**
comp=Z,829nm,0.7s,baz=187,slow=7.8,SNR=827
KSRS PcP **PcP** **15 44 01.4 +2.2**
comp=Z,197nm,0.6s,baz=181,slow=3.2,SNR=18
KSRS ScP **ScP** **15 47 01.2 +1.4**
comp=Z,58nm,0.8s,baz=195,slow=3.2,SNR=6.7
KSRS S **S** **15 48 33.7 +2.6**
comp=Z,10nm,0.6s,baz=314,slow=27,SNR=1.9
KSRS PKiKP **PKiKP** **15 50 55.6 +0.4**
comp=Z,3.1nm,0.7s,baz=269,slow=1.9,SNR=4.5
KSRS P4KPbc 16 20 10.6
comp=Z,2.1nm,1.0s,baz=197,slow=2.6,SNR=4.2
comp=Z,829nm,0.7s
**KS19 Wonju Array Si 45.27 9** P **P** **15 42 30.9 -0.3**
**JSG Sagara 45.29 21** P **P** **15 42 32.0 +0.6**
**JSG Sagara 45.29 21** IAmb IAmb 15 42 33.8
comp=Z,1µm,0.7s
**JSG Sagara 45.29 21** ⇑P **P** **15 42 31.1 -0.3**
**KNTI KHUNTI 45.31 313** *e*P **P** **15 42 35.4 +3.5**
KNTI IAmb IAmb 15 42 37.3
comp=Z,2µm,0.4s
**BOK Bokaro 45.33 314** *e*P **P** **15 42 31.8 -0.2**
BOK IAmb IAmb 15 42 35.2
comp=Z,964nm,0.9s
**TIY Taiyuan 45.37 352** *e*P **P** **15 42 31.6 -0.5**
TIY pP **pP** **15 44 13.8 +1.8**
TIY sP **sP** **15 45 14.8 +1.5**
TIY S **S** **15 48 31.3 -1.9**
TIY sS **ScS** **15 51 27.8 -0.3**
TIY pmax pmax
comp=Z,1µm,1.0s
TIY pmax pmax
comp=Z,3µm,3.9s
**SALM Salem 45.47 294** *e*P **P** **15 42 33.5 +0.3**
SALM IAmb IAmb 15 42 36.8
comp=Z,8µm,1.7s
**INU Inuyama 45.49 20** P **P** **15 42 32.2 -0.7**
**INU Inuyama 45.49 20** ⇑P **P** **15 42 31.6 -1.3**
**INU Inuyama 45.49 20** P **P** **15 42 32.0 -1.0**
INU PcP **PcP** **15 44 01.7 +1.4**
INU ScP **ScP** **15 47 02.2 +1.2**
**TRD Trivandrum 45.51 290** *e*P **P** **15 42 33.2 -0.2**
TRD IAmb IAmb 15 42 35.1
comp=Z,3µm,1.3s
**KOD Kodaikanal 45.62 292** *e*P **P** **15 42 34.2 -0.4**
KOD IAmb IAmb 15 42 36.2
comp=Z,3µm,1.1s
**JHSG JHARSUGUGA 45.66 310** *e*P **P** **15 42 34.3 -0.3**
JHSG IAmb IAmb 15 42 37.6
comp=Z,3µm,0.9s
**LZH Lanzhou 45.75 342** *e*P **P** **15 42 36.0 +0.9**
LZH PcP **PcP** **15 44 03.5 +2.1**
LZH pP pP 15 44 19.5 +4.4
LZH ScP **ScP** **15 47 04.3 +2.0**
LZH S **S** **15 48 32.8 -6.0**
LZH ScS **ScS** **15 51 33.8 +2.9**
LZH pmax pmax
comp=Z,4µm,1.5s
LZH pmax pmax
comp=Z,3µm,5.8s
**GTK Tadong 45.83 320** *e*P **P** **15 42 36.4 +0.6**
GTK IAmb IAmb 15 42 38.0
comp=Z,4µm,0.6s
**JGF Kuroka 45.83 20** P **P** **15 42 34.7 -0.9**
**JGF Kuroka 45.83 20** IAmb IAmb 15 42 37.3
comp=Z,736nm,0.6s
**JGF Kuroka 45.83 20** ⇑P **P** **15 42 34.2 -1.4**
**LSA Lhasa 46.00 325** P **P** **15 42 38.8 +1.3**
LSA S **S** **15 48 40.6 -2.5**
**LSA Lhasa 46.00 325** P **P** **15 42 38.2 +0.6**
**LSA Lhasa 46.00 325** P **P** **15 42 38.1 +0.6**
LSA PcP **PcP** **15 44 04.5 +1.7**
LSA pP **pP** **15 44 21.5 +3.8**
**DL2 Dalian 46.07 2** ⇑*i*P **P** **15 42 36.4 -0.8**
DL2 PcP **PcP** **15 44 03.6 +1.4**
DL2 sP **sP** **15 45 18.5 -0.5**
DL2 ScP **ScP** **15 47 04.8 +1.5**
DL2 PcS **PcS** **15 47 56.8 -0.8**
DL2 S **S** **15 48 39.4 -3.3**
DL2 ScS **ScS** **15 51 32.8 +0.3**
DL2 SS **SS** **15 52 20.8 +3.3**
DL2 pmax pmax
comp=Z,3µm,0.8s
DL2 pmax pmax
comp=Z,10µm,5.0s
**JGN Niukaw 46.38 20** P **P** **15 42 38.7 -1.1**
**DGAR Diego Garcia 46.92 267** P **P** **15 42 45.2 +1.0**
**DGAR Diego Garcia 46.92 267** ⇑P **P** **15 42 45.2 +1.0**
**DGAR Diego Garcia 46.92 267** P **P** **15 42 44.9 +0.7**
**DGAR Diego Garcia 46.92 267** *c*P **P** **15 42 45.3 +1.1**
DGAR pmax pmax
comp=Z,2µm,0.9s
**DGAR Diego Garcia 46.92 267** P **P** **15 42 44.9 +0.7**
DGAR PcP **PcP** **15 44 07.2 +1.4**
**MAJO Matsushiro 46.97 20** P **P** **15 42 42.6 -1.6**
**MAJO Matsushiro 46.97 20** P **P** **15 42 42.7 -1.6**
MAJO IAmb IAmb 15 42 47.1
comp=Z,1µm,0.7s
**MAJO Matsushiro 46.97 20** ⇑P **P** **15 42 42.4 -1.8**
**MAJO Matsushiro 46.97 20** *c*P **P** **15 42 42.6 -1.6**
MAJO pmax pmax
comp=Z,1µm,1.0s
**MAJO Matsushiro 46.97 20** P **P** **15 42 42.6 -1.6**
MAJO PcP **PcP** **15 44 06.9 +1.3**
MAJO ScP **ScP** **15 47 08.4 +1.1**
**MAT Matsushiro 46.97 20** P **P** **15 42 42.5 -1.8**
**MJAR Matsushiro Arr 46.97 20** P **P** **15 42 42.8 -1.4**
comp=Z,2µm,0.9s,baz=192,slow=7.5,SNR=963
MJAR PcP **PcP** **15 44 06.8 +1.3**
comp=Z,148nm,0.8s,baz=203,slow=4.1,SNR=6.5
MJAR ScP **ScP** **15 47 08.2 +1.0**
comp=Z,105nm,0.8s,baz=184,slow=4.2,SNR=9.9
MJAR S **S** **15 48 56.0 +0.5**
comp=Z,22nm,0.9s,baz=208,slow=24,SNR=3.7
MJAR PKPPKP P'P'df 16 13 36.1 -14
comp=Z,2.1nm,0.8s,baz=36,slow=0.9,SNR=4.2
MJAR P4KPbc 16 20 16.9
comp=Z,3.6nm,0.6s,baz=177,slow=4.5,SNR=23
comp=Z,2µm,0.9s
**MJB9 Matsu-Tunnel 46.98 20** IAmb IAmb 15 42 47.1
comp=Z,992nm,0.7s
**NOUC Port Laguerre 47.11 113** P **P** **15 42 45.4 0.0**
**NOUC Port Laguerre 47.11 113** P **P** **15 42 45.5 0.0**
NOUC ScP **ScP** **15 47 09.4 +1.2**
**BLSP Bilaspur 47.12 309** *e*P **P** **15 42 44.5 -1.1**
BLSP IAmb IAmb 15 42 47.8
comp=Z,2µm,1.1s
**DZM Mont Dzumac 47.23 113** P **P** **15 42 46.7 +0.2**
**DZM Mont Dzumac 47.23 113** *e*P **P** **15 42 46.1 -0.4**
comp=Z,5µm,1.1s
DZM *e*pP **pP** **15 44 26.0 -1.3**
comp=Z,682nm,1.1s
DZM *e*S **S** **15 48 58.2 -1.6**
comp=Z,8µm,26.2s
DZM *e*SS **SS** **15 52 31.9 -4.7**
comp=Z,9µm,23.9s
DZM *e*LQ LQ 15 54 44.0
comp=Z,9µm,25.4s
DZM *e*LR LR 15 56 57.3
comp=Z,7µm,21.8s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **47.23** | **113** | IAmb | IAmb | 15 42 49.3 | | | |
| | comp=Z,3µm,1.1s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **47.23** | **113** | ⇑P | **P** | **15 42 46.8** | **+0.2** | | |
| **BJT** | **Baijiatuau** | **47.26** | **356** | P | **P** | **15 42 45.7** | **-0.6** | | |
| **BJT** | **Baijiatuau** | **47.26** | **356** | P | **P** | **15 42 46.1** | **-0.2** | | |
| BJT | | | | PcP | **PcP** | **15 44 07.4** | **+0.9** | | |
| BJT | | | | ScP | **ScP** | **15 47 10.5** | **+2.1** | | |
| **BJI** | **Beijing** | **47.29** | **356** | P | **P** | **15 42 46.1** | **-0.3** | | |
| BJI | | | | PcP | **PcP** | **15 44 08.9** | **+2.4** | | |
| BJI | | | | ScP | **ScP** | **15 47 11.0** | **+2.6** | | |
| BJI | | | | S | **S** | **15 48 54.9** | **-4.7** | | |
| BJI | | | | ScS | **ScS** | **15 51 43.3** | **+2.8** | | |
| BJI | | | | pmax | pmax | | | | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **47.31** | **277** | ⇑P | **P** | **15 42 47.6** | **+0.5** | | |
| **KAAM** | **Kaadhehdhoo** | **47.31** | **277** | P | **P** | **15 42 47.5** | **+0.3** | | |
| | SNR=21 | | | | | | | | |
| **HYB** | **Hyderabad** | **47.60** | **302** | *e*P | **P** | **15 42 48.5** | **-0.8** | | |
| HYB | | | | IVmB_BB | | 15 42 51.1 | | | |
| | comp=Z,42µm,1.4s | | | | | | | | |
| HYB | | | | *e*PcP | **PcP** | **15 44 08.5** | **+0.2** | | |
| HYB | | | | *e*pP | **pP** | **15 44 29.8** | **-0.7** | | |
| HYB | | | | *e*sP | **sP** | **15 45 26.6** | **-4.6** | | |
| HYB | | | | *e*ScP | **ScP** | **15 47 13.2** | **+2.8** | | |
| HYB | | | | *e*PcS | **PcS** | **15 48 05.7** | **+0.7** | | |
| HYB | | | | *e*S | **S** | **15 49 02.8** | **-2.1** | | |
| HYB | | | | *e*ScS | **ScS** | **15 51 44.7** | **+1.0** | | |
| HYB | | | | *e*sS | **sS** | **15 52 06.9** | **+0.9** | | |
| **YATNC** | **Mamie plateau,** | **47.64** | **113** | P | **P** | **15 42 50.6** | **+1.1** | | |
| **LIFNC** | **LIFOU** | **47.74** | **111** | P | **P** | **15 42 50.2** | **0.0** | | |
| **LIFNC** | **LIFOU** | **47.74** | **111** | P | **P** | **15 42 50.6** | **+0.3** | | |
| **DVP** | **Devils Point** | **48.23** | **107** | P | **P** | **15 42 54.6** | **+0.7** | | |
| **PINNC** | **Pines Island,** | **48.24** | **114** | P | **P** | **15 42 54.2** | **+0.2** | | |
| **PINNC** | **Pines Island,** | **48.24** | **114** | P | **P** | **15 42 54.5** | **+0.5** | | |
| PINNC | | | | IAmb | IAmb | 15 42 57.0 | | | |
| | comp=Z,1µm,1.1s | | | | | | | | |
| **JSD** | **Sado** | **48.34** | **20** | P | **P** | **15 42 53.1** | **-1.3** | | |
| **RTV** | **Rentapao** | **48.46** | **107** | P | **P** | **15 42 55.9** | **+0.3** | | |
| **HHC** | **Hu-ho-hao-te** | **48.57** | **352** | *e*P | **P** | **15 42 56.8** | **+0.6** | | |
| HHC | | | | pP | pP | 15 44 38.4 | +0.1 | | |
| HHC | | | | sP | sP | 15 45 36.9 | -1.9 | | |
| HHC | | | | S | **S** | **15 49 16.6** | **-0.9** | | |
| HHC | | | | ScS | **ScS** | **15 51 46.0** | **-3.5** | | |
| HHC | | | | sS | sS | 15 52 22.8 | +3.2 | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,1µm,0.8s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,9µm,4.6s | | | | | | | | |
| **BTO** | **Baotou** | **48.57** | **350** | *e*P | **P** | **15 42 58.0** | **+1.8** | | |
| BTO | | | | pP | **pP** | **15 44 40.3** | **+2.0** | | |
| BTO | | | | sP | **sP** | **15 45 36.1** | **-2.8** | | |
| BTO | | | | S | **S** | **15 49 22.0** | **+4.4** | | |
| BTO | | | | SS | **SS** | **15 53 02.9** | **+5.5** | | |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,11µm,7.3s | | | | | | | | |
| **MARNC** | **Mare, Loyalty** | **48.58** | **112** | P | **P** | **15 42 57.2** | **+0.7** | | |
| **MARNC** | **Mare, Loyalty** | **48.58** | **112** | ⇑P | **P** | **15 42 57.6** | **+1.1** | | |
| **AIS** | **Amsterdam Isla** | **48.73** | **225** | P | **P** | **15 42 59.9** | **+2.6** | | |
| **AIS** | **Amsterdam Isla** | **48.73** | **225** | P | **P** | **15 43 00.5** | **+3.2** | | |
| **VLK** | **Valmikinagar** | **48.96** | **316** | *e*P | **P** | **15 43 00.1** | **+0.9** | | |
| **MNGI** | **Mangalore** | **49.02** | **294** | *e*P | **P** | **15 42 59.3** | **-0.5** | | |
| MNGI | | | | IAmb | IAmb | 15 43 01.1 | | | |
| | comp=Z,2µm,0.6s | | | | | | | | |
| **NGP** | **Nagpur** | **49.02** | **306** | *e*P | **P** | **15 42 58.8** | **-0.9** | | |
| NGP | | | | IAmb | IAmb | 15 43 01.9 | | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| **SNY** | **Shenyang** | **49.08** | **4** | ⇑P | **P** | **15 42 58.4** | **-1.3** | | |
| SNY | | | | pP | **pP** | **15 44 37.5** | **-4.7** | | |
| SNY | | | | sP | **sP** | **15 45 40.0** | **-2.7** | | |
| SNY | | | | S | **S** | **15 49 19.3** | **-4.8** | | |
| SNY | | | | ScS | **ScS** | **15 51 53.3** | **+0.7** | | |
| SNY | | | | pmax | pmax | | | | |
| | comp=Z,2µm,1.1s | | | | | | | | |
| SNY | | | | pmax | pmax | | | | |
| | comp=Z,6µm,3.5s | | | | | | | | |
| **JMM** | **Marumori** | **49.08** | **22** | P | **P** | **15 42 59.9** | **0.0** | | |
| **JMM** | **Marumori** | **49.08** | **22** | IAmb | IAmb | 15 43 02.5 | | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| **JMM** | **Marumori** | **49.08** | **22** | ⇑P | **P** | **15 42 59.2** | **-0.7** | | |
| **JMM** | **Marumori** | **49.08** | **22** | P | **P** | **15 42 59.2** | **-0.7** | | |
| **ALBI** | **Allahabad** | **49.19** | **313** | *e*P | **P** | **15 43 00.0** | **-0.9** | | |
| ALBI | | | | IAmb | IAmb | 15 43 01.8 | | | |
| | comp=Z,3µm,0.9s | | | | | | | | |
| **GOMU** | **GeErMu** | **49.28** | **333** | P | **P** | **15 43 02.4** | **+0.6** | | |
| GOMU | | | | PcP | **PcP** | **15 44 16.1** | **+1.6** | | |
| GOMU | | | | S | **S** | **15 49 28.0** | **+0.1** | | |
| GOMU | | | | ScS | **ScS** | **15 51 59.0** | **+3.9** | | |
| GOMU | | | | SS | **SS** | **15 53 09.4** | **+0.2** | | |
| GOMU | | | | pmax | pmax | | | | |
| | comp=Z,970nm,0.9s | | | | | | | | |
| **GTA** | **Gaotai** | **50.09** | **340** | ⇑P | **P** | **15 43 08.3** | **+0.9** | | |
| GTA | | | | PcP | **PcP** | **15 44 19.6** | **+2.5** | | |
| GTA | | | | ScP | **ScP** | **15 47 23.0** | **+2.4** | | |
| GTA | | | | S | **S** | **15 49 39.5** | **+1.2** | | |
| GTA | | | | ScS | **ScS** | **15 52 02.0** | **+1.9** | | |
| GTA | | | | sS | sS | 15 52 45.3 | +3.6 | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,160nm,0.6s | | | | | | | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,11µm,9.5s | | | | | | | | |
| **NFK** | **Norfolk Island** | **50.14** | **122** | P | **P** | **15 43 09.5** | **+1.6** | | |
| **NFK** | **Norfolk Island** | **50.14** | **122** | P | **P** | **15 43 08.5** | **+0.6** | | |
| | comp=Z,0.0nmcomp=Z,3µm,1.2s | | | | | | | | |
| **KWJN** | **Gagan, Kwajale** | **50.35** | **72** | P | **P** | **15 43 09.8** | **+0.1** | | |
| **AKL** | **Akola** | **50.44** | **304** | *e*P | **P** | **15 43 09.1** | **-1.1** | | |
| AKL | | | | IAmb | IAmb | 15 43 12.3 | | | |
| | comp=Z,12µm,1.8s | | | | | | | | |
| **JOM** | **Ohasama** | **50.68** | **22** | P | **P** | **15 43 10.8** | **-0.8** | | |
| **BRCI** | **Bahraich** | **50.70** | **315** | *e*P | **P** | **15 43 12.2** | **+0.3** | | |
| **MSHR** | **Mys Shultsa** | **50.78** | **11** | *c i*P | **P** | **15 43 12.6** | **+0.4** | | |
| MSHR | | | | pmax | pmax | | | | |
| | comp=Z,1µm,1.0s | | | | | | | | |
| **PSTR** | **Posyet** | **50.78** | **10** | *d i*P | **P** | **15 43 12.1** | **-0.1** | | |
| **GOA** | **Goa** | **50.88** | **297** | *e*P | **P** | **15 43 13.2** | **-0.2** | | |
| GOA | | | | IAmb | IAmb | 15 43 15.2 | | | |
| | comp=Z,5µm,0.8s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **51.13** | **357** | ⇑*i*P | **P** | **15 43 14.6** | **-0.3** | | |
| XLT | | | | PcP | **PcP** | **15 44 19.9** | **-0.9** | | |
| XLT | | | | pP | pP | 15 44 57.8 | -0.9 | | |
| XLT | | | | sP | sP | 15 45 58.6 | -0.2 | | |
| XLT | | | | S | **S** | **15 49 48.6** | **-3.6** | | |
| XLT | | | | ScS | **ScS** | **15 52 06.6** | **-0.5** | | |
| XLT | | | | SS | **SKiKP** | **15 53 44.6** | **+2.5** | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,4µm,0.7s | | | | | | | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,6µm,5.0s | | | | | | | | |
| **CN2** | **Changchun** | **51.18** | **5** | P | **P** | **15 43 13.4** | **-1.7** | | |
| CN2 | | | | PcP | **PcP** | **15 44 22.1** | **+1.2** | | |
| CN2 | | | | pP | pP | 15 44 57.5 | -1.1 | | |
| CN2 | | | | sP | sP | 15 45 54.0 | -4.6 | | |
| CN2 | | | | ScP | **ScP** | **15 47 25.4** | **+0.3** | | |
| CN2 | | | | S | **S** | **15 49 47.6** | **-5.0** | | |
| CN2 | | | | ScS | **ScS** | **15 52 08.8** | **+1.6** | | |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,980nm,0.8s | | | | | | | | |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,4µm,5.0s | | | | | | | | |
| **KAD** | **Karad** | **51.30** | **299** | *e*P | **P** | **15 43 15.8** | **-0.8** | | |
| KAD | | | | IAmb | IAmb | 15 43 17.6 | | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| **BHPL** | **Bhopal** | **51.38** | **308** | *e*P | **P** | **15 43 15.5** | **-1.5** | | |
| BHPL | | | | IAmb | IAmb | 15 43 18.7 | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| **JHNI** | **Jhansi** | **51.71** | **311** | *e*P | **P** | **15 43 17.2** | **-2.1** | | |
| JHNI | | | | IAmb | IAmb | 15 43 19.0 | | | |
| | comp=Z,4µm,0.8s | | | | | | | | |
| **JTM** | **Tenmabayashi** | **51.77** | **21** | P | **P** | **15 43 18.9** | **-0.5** | | |
| **JTM** | **Tenmabayashi** | **51.77** | **21** | IAmb | IAmb | 15 43 21.8 | | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| **JTM** | **Tenmabayashi** | **51.77** | **21** | P | **P** | **15 43 18.7** | **-0.7** | | |
| **FRKB** | **FARRUKHABAD** | **52.04** | **313** | *e*P | **P** | **15 43 20.7** | **-0.9** | | |
| FRKB | | | | IAmb | IAmb | 15 43 22.2 | | | |
| | comp=Z,7µm,1.0s | | | | | | | | |
| **POO** | **Poona** | **52.10** | **300** | *e*P | **P** | **15 43 22.2** | **0.0** | | |
| POO | | | | IAmb | IAmb | 15 43 24.5 | | | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **52.49** | **9** | P | **P** | **15 43 24.2** | **-0.3** | | |
| **MDJ** | **Mudanjiang** | **52.49** | **9** | P | **P** | **15 43 23.9** | **-0.7** | | |
| MDJ | | | | S | **S** | **15 50 06.3** | **-3.8** | | |
| **MDJ** | **Mudanjiang** | **52.49** | **9** | IAmb | IAmb | 15 43 27.0 | | | |
| | comp=Z,5µm,1.4s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **52.49** | **9** | P | **P** | **15 43 23.8** | **-0.7** | | |
| MDJ | | | | pP | **pP** | **15 45 10.7** | **+1.9** | | |
| MDJ | | | | sP | **sP** | **15 46 09.0** | **+0.5** | | |
| MDJ | | | | ScP | **ScP** | **15 47 32.2** | **+1.4** | | |
| **USA0B** | **Ussuriysk Arra** | **52.50** | **11** | *c i*P | **P** | **15 43 23.7** | **-0.9** | | |
| **USRK** | **Ussuriysk Ar.** | **52.50** | **11** | P | **P** | **15 43 24.1** | **-0.5** | | |
| USRK | | | | | **pP** | **15 45 11.1** | **+2.6** | | |
| **USRK** | **Ussuriysk Ar.** | **52.50** | **11** | P | **P** | **15 43 23.9** | **-0.6** | | |
| | comp=Z,999nm,0.6s,baz=194,slow=5.9,SNR=719 | | | | | | | | |
| USRK | | | | ScP | **ScP** | **15 47 31.8** | **+1.1** | | |
| | comp=Z,87nm,0.8s,baz=220,slow=4.1,SNR=6.2 | | | | | | | | |
| USRK | | | | S | **S** | **15 50 10.8** | **+0.7** | | |
| | comp=Z,5.1nm,0.8s,baz=49,slow=36,SNR=2.3 | | | | | | | | |
| USRK | | | | PKPPKP | **P'P'df** | **16 13 42.4** | **0.0** | | |
| | comp=Z,7.1nm,0.9s,baz=18,slow=6.5,SNR=8.5 | | | | | | | | |
| USRK | | | | PKP2ab | | 16 14 29.8 | | | |
| | comp=Z,3.7nm,0.9s,baz=66,slow=2.3,SNR=4.6 | | | | | | | | |
| USRK | | | | P4KPbc | | 16 20 40.1 | | | |
| | comp=Z,1.8nm,0.6s,baz=242,slow=2.3,SNR=6.9 | | | | | | | | |
| | comp=Z,999nm,0.6s | | | | | | | | |
| **LGTI** | **Lohaghat** | **52.78** | **316** | *e*P | **P** | **15 43 25.9** | **-1.0** | | |
| LGTI | | | | IAmb | IAmb | 15 43 27.8 | | | |
| | comp=Z,7µm,0.2s | | | | | | | | |
| **PTH** | **Pithoragarh** | **52.86** | **316** | *e*P | **P** | **15 43 26.2** | **-1.5** | | |
| PTH | | | | IAmb | IAmb | 15 43 31.1 | | | |
| | comp=Z,1µm,0.6s | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **52.92** | **60** | P | **P** | **15 43 30.2** | **+2.3** | | |
| | baz=256,slow=5.6,SNR=4.0 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **52.93** | **60** | P | **P** | **15 43 29.1** | **+1.2** | | |
| | baz=256,slow=5.6,SNR=5.6 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **52.94** | **60** | P | **P** | **15 43 29.1** | **+1.1** | | |
| | baz=256,slow=5.6,SNR=3.6 | | | | | | | | |
| **WAKE** | **Wake Island** | **53.22** | **59** | P | **P** | **15 43 31.2** | **+1.0** | | |
| **WAKE** | **Wake Island** | **53.22** | **59** | P | **P** | **15 43 29.6** | **-0.5** | | |
| **WAKE** | **Wake Island** | **53.22** | **59** | ⇑P | **P** | **15 43 31.2** | **+1.0** | | |
| **WAKE** | **Wake Island** | **53.22** | **59** | P | **P** | **15 43 30.4** | **+0.3** | | |
| WAKE | | | | PcP | **PcP** | **15 44 30.8** | **+1.6** | | |
| WAKE | | | | ScP | **ScP** | **15 47 37.4** | **+2.9** | | |
| **BNX** | **BinXian** | **53.30** | **7** | ⇑P | **P** | **15 43 28.6** | **-1.7** | | |
| BNX | | | | pP | **pP** | **15 45 16.9** | **+1.9** | | |
| BNX | | | | PP | **PP** | **15 45 42.0** | **+3.4** | | |
| BNX | | | | sP | **sP** | **15 46 13.0** | **-1.6** | | |
| BNX | | | | S | **S** | **15 50 16.8** | **-4.0** | | |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,800nm,0.6s | | | | | | | | |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,4µm,3.9s | | | | | | | | |
| **ERM** | **Erimo** | **53.59** | **22** | P | **P** | **15 43 33.0** | **+0.7** | | |
| **ERM** | **Erimo** | **53.59** | **22** | P | **P** | **15 43 32.5** | **+0.2** | | |
| **ERM** | **Erimo** | **53.59** | **22** | *c i*P | **P** | **15 43 33.1** | **+0.7** | | |
| ERM | | | | pmax | pmax | | | | |
| | comp=Z,598nm,0.8s | | | | | | | | |
| **ERM** | **Erimo** | **53.59** | **22** | P | **P** | **15 43 33.0** | **+0.7** | | |
| ERM | | | | PcP | **PcP** | **15 44 31.8** | **+1.7** | | |
| ERM | | | | pP | **pP** | **15 45 19.8** | **+2.2** | | |
| ERM | | | | ScP | **ScP** | **15 47 36.1** | **+0.5** | | |
| **JEM** | **Erimo** | **53.59** | **22** | P | **P** | **15 43 32.8** | **+0.4** | | |
| **H11N1** | **WAKE ISLAND Hy** | **53.61** | **59** | P | **P** | **15 43 33.6** | **+0.9** | | |
| | baz=235,slow=9.5,SNR=29 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **53.62** | **59** | P | **P** | **15 43 34.2** | **+1.5** | | |
| | baz=235,slow=9.5,SNR=26 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **53.62** | **59** | P | **P** | **15 43 33.1** | **+0.3** | | |
| | baz=235,slow=9.5,SNR=26 | | | | | | | | |
| **TARA** | **Tarawa** | **53.71** | **83** | P | **P** | **15 43 34.1** | **+0.3** | | |
| **UGON** | **Onchagaon** | **53.77** | **313** | *e*P | **P** | **15 43 31.2** | **-2.7** | | |
| **ASOR** | **Ausora** | **54.12** | **314** | *e*P | **P** | **15 43 36.0** | **-0.3** | | |
| **BISR** | **Bishrakh** | **54.25** | **313** | *e*P | **P** | **15 43 35.9** | **-1.4** | | |
| BISR | | | | IAmb | IAmb | 15 43 37.0 | | | |
| | comp=Z,8µm,0.8s | | | | | | | | |
| **TEY** | **Ternei** | **54.31** | **15** | ⇓*e*P | **P** | **15 43 37.5** | **+0.1** | | |
| TEY | | | | *e* | | 15 45 24.2 | | | |
| TEY | | | | pmax | pmax | | | | |
| | comp=Z,760nm,0.8s | | | | | | | | |
| TEY | | | | pmax | pmax | | | | |
| | comp=N,320nm,0.8s | | | | | | | | |
| TEY | | | | pmax | pmax | | | | |
| | comp=E,60nm,0.8s | | | | | | | | |
| TEY | | | | pmax | pmax | | | | |
| | comp=E,200nm,3.6s | | | | | | | | |
| TEY | | | | pmax | pmax | | | | |
| | comp=N,500nm,3.7s | | | | | | | | |
| TEY | | | | pmax | pmax | | | | |
| | comp=Z,800nm,3.9s | | | | | | | | |
| **SONA** | **Sohna** | **54.33** | **313** | *e*P | **P** | **15 43 35.9** | **-2.0** | | |
| SONA | | | | IAmb | IAmb | 15 43 39.1 | | | |
| | comp=Z,4µm,1.0s | | | | | | | | |
| **JMIU** | **JAMIA UNIVERSI** | **54.36** | **313** | *e*P | **P** | **15 43 36.1** | **-1.9** | | |
| JMIU | | | | IAmb | IAmb | 15 43 37.8 | | | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| **NDI** | **New Delhi** | **54.48** | **313** | *e*P | **P** | **15 43 36.5** | **-2.4** | | |
| NDI | | | | IAmb | IAmb | 15 43 38.4 | | | |
| | comp=Z,2µm,0.6s | | | | | | | | |
| **NPLP** | **NPLP New Delhi** | **54.49** | **313** | *e*P | **P** | **15 43 36.6** | **-2.4** | | |
| NPLP | | | | IAmb | IAmb | 15 43 38.4 | | | |
| | comp=Z,2µm,0.6s | | | | | | | | |
| **BHGR** | **Bahadurgarh** | **54.68** | **313** | *e*P | **P** | **15 43 39.2** | **-1.1** | | |
| **KUDL** | **Kundal** | **54.71** | **312** | *e*P | **P** | **15 43 38.3** | **-2.2** | | |
| KUDL | | | | IAmb | IAmb | 15 43 40.2 | | | |
| | comp=Z,4µm,0.6s | | | | | | | | |
| **DDI** | **Dehra Dun** | **54.83** | **315** | *e*P | **P** | **15 43 40.3** | **-1.1** | | |
| DDI | | | | IAmb | IAmb | 15 43 43.0 | | | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| **AJM** | **Ajmer** | **55.21** | **309** | *e*P | **P** | **15 43 42.7** | **-1.5** | | |
| AJM | | | | IAmb | IAmb | 15 43 44.6 | | | |
| | comp=Z,3µm,0.6s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **55.24** | **20** | P | **P** | **15 43 43.5** | **-0.4** | | |
| ASAJ | | | | pmax | pmax | | | | |
| | comp=Z,935nm,0.8s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **55.24** | **20** | P | **P** | **15 43 43.7** | **-0.2** | | |
| **JKA** | **Kamikawa-asahi** | **55.24** | **20** | P | **P** | **15 43 43.5** | **-0.4** | | |
| **KLP** | **Kalpa** | **55.41** | **317** | *e*P | **P** | **15 43 45.5** | **-0.3** | | |
| **KKR** | **Kurukshetra** | **55.49** | **314** | *e*P | **P** | **15 43 44.7** | **-1.3** | | |
| KKR | | | | IAmb | IAmb | 15 43 46.4 | | | |
| | comp=Z,4µm,0.8s | | | | | | | | |
| **HNLY** | **HANLEY** | **55.68** | **318** | *e*P | **P** | **15 43 47.9** | **0.0** | | |
| **DCZ** | **Deep Cove** | **55.72** | **141** | IAmb | IAmb | 15 43 50.5 | | | |
| | comp=Z,2µm,1.1s | | | | | | | | |
| **PYZ** | **Puysegur Point** | **55.76** | **142** | P | **P** | **15 43 48.3** | **+0.7** | | |
| **PYZ** | **Puysegur Point** | **55.76** | **142** | IAmb | IAmb | 15 43 50.3 | | | |
| | comp=Z,3µm,1.0s | | | | | | | | |
| **SMLA** | **Simla** | **55.92** | **315** | *e*P | **P** | **15 43 48.6** | **-0.2** | | |
| SMLA | | | | IAmb | IAmb | 15 43 51.5 | | | |
| | comp=Z,6µm,0.6s | | | | | | | | |
| **ROCAM** | **Rodrigues Isla** | **55.98** | **251** | IAmb | IAmb | 15 43 53.1 | | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| **ROCAM** | **Rodrigues Isla** | **55.98** | **251** | ⇑P | **P** | **15 43 51.1** | **+1.6** | | |
| **ROCAM** | **Rodrigues Isla** | **55.98** | **251** | P | **P** | **15 43 51.1** | **+1.6** | | |
| **JCZ** | **Jackson Bay** | **56.13** | **139** | P | **P** | **15 43 50.3** | **0.0** | | |
| **ULN** | **Ulaanbaatar** | **56.13** | **350** | P | **P** | **15 43 50.5** | **+0.3** | | |
| ULN | | | | IAmb | IAmb | 15 43 53.6 | | | |
| | comp=Z,3µm,0.9s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.13** | **350** | P | **P** | **15 43 50.8** | **+0.5** | | |
| ULN | | | | P | **P** | **15 43 50.8** | **+0.5** | | |
| **ULN** | **Ulaanbaatar** | **56.13** | **350** | *c i*P | **P** | **15 43 50.3** | **+0.1** | | |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,4µm,1.3s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.13** | **350** | P | **P** | **15 43 50.9** | **+0.6** | | |
| ULN | | | | pP | **pP** | **15 45 38.9** | **+2.4** | | |
| ULN | | | | ScP | **ScP** | **15 47 48.7** | **+1.8** | | |
| **I34MN** | **SONGINO INFRAS** | **56.19** | **349** | P | **P** | **15 43 50.0** | **-0.6** | | |
| | baz=160,slow=9.4,SNR=2.2 | | | | | | | | |
| **SONM** | **Songino Array** | **56.22** | **349** | P | **P** | **15 43 51.2** | **+0.4** | | |
| SONM | | | | IAmb | IAmb | 15 43 54.5 | | | |
| | comp=Z,3µm,0.8s | | | | | | | | |
| SONM | | | | | **pP** | **15 45 39.6** | **+2.4** | | |
| **SONM** | **Songino Array** | **56.22** | **349** | P | **P** | **15 43 51.0** | **+0.2** | | |
| | comp=Z,3µm,0.8s,baz=166,slow=9.0,SNR=1614 | | | | | | | | |
| SONM | | | | ScP | **ScP** | **15 47 48.3** | **+1.1** | | |
| | comp=Z,112nm,0.8s,baz=176,slow=5.1,SNR=5.5 | | | | | | | | |
| SONM | | | | S | **S** | **15 50 59.5** | **+0.5** | | |
| | comp=Z,33nm,1.1s,baz=187,slow=9.0,SNR=4.4 | | | | | | | | |
| SONM | | | | PKPPKP | P'P'df | 16 13 28.2 | -9.0 | | |
| | comp=Z,12nm,0.8s,baz=324,slow=4.3,SNR=36 | | | | | | | | |
| SONM | | | | P4KPbc | | 16 20 57.4 | | | |
| | comp=Z,3.7nm,0.5s,baz=170,slow=5.0,SNR=13 | | | | | | | | |
| | comp=Z,3µm,0.8s | | | | | | | | |
| **SONM** | **Songino Array** | **56.22** | **349** | P | **P** | **15 43 51.2** | **+0.4** | | |
| SONM | | | | *PP | **pP** | **15 45 39.6** | **+2.4** | | |
| SONM | | | | pmax | pmax | | | | |
| | comp=Z,3µm,0.8s | | | | | | | | |
| **MLZ** | **Mavora Lakes** | **56.28** | **141** | IAmb | IAmb | 15 43 53.4 | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **56.34** | **22** | *d i*P | **P** | **15 43 51.6** | **+0.1** | | |
| YUK | | | | *e* | | 15 46 10.3 | | | |
| YUK | | | | *i* S | **S** | **15 50 59.0** | **-1.3** | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=Z,5µm,0.7s | | | | | | | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=N,952nm,0.5s | | | | | | | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=Z,2µm,1.7s | | | | | | | | |
| **HIA** | **Hailar** | **56.39** | **360** | P | **P** | **15 43 52.0** | **+0.2** | | |
| **HIA** | **Hailar** | **56.39** | **360** | P | **P** | **15 43 51.7** | **-0.1** | | |
| HIA | | | | PcP | **PcP** | **15 44 42.3** | **+1.4** | | |
| HIA | | | | sP | **sP** | **15 46 37.4** | **-0.1** | | |
| HIA | | | | ScP | **ScP** | **15 47 49.9** | **+2.1** | | |
| **WHZ** | **Wether Hill Ro** | **56.41** | **141** | IAmb | IAmb | 15 43 54.1 | | | |
| | comp=Z,3µm,1.0s | | | | | | | | |
| **OUZ** | **Omahuta** | **56.45** | **128** | P | **P** | **15 43 53.9** | **+1.4** | | |
| **MCQ** | **Macquarie Isla** | **56.50** | **154** | P | **P** | **15 43 53.8** | **+1.4** | | |
| **MCQ** | **Macquarie Isla** | **56.50** | **154** | P | **P** | **15 43 53.3** | **+0.9** | | |
| | comp=Z,5µm,1.0s | | | | | | | | |
| **BHK** | **Bhakra** | **56.61** | **315** | *e*P | **P** | **15 43 53.0** | **-0.7** | | |
| BHK | | | | IAmb | IAmb | 15 43 54.8 | | | |
| | comp=Z,2µm,0.6s | | | | | | | | |
| **BKNR** | **BIKANER** | **57.04** | **310** | *e*P | **P** | **15 43 55.2** | **-1.5** | | |
| BKNR | | | | IAmb | IAmb | 15 43 58.3 | | | |
| | comp=Z,4µm,0.9s | | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **57.17** | **316** | *e*P | **P** | **15 43 57.7** | **-0.1** | | |
| **KLR** | **Kul'dur** | **57.32** | **9** | P | **P** | **15 43 56.7** | **-1.5** | | |
| | comp=Z,257nm,0.8s,baz=207,slow=4.8,SNR=353 | | | | | | | | |
| KLR | | | | PcP | **PcP** | **15 44 44.8** | **+0.2** | | |
| | comp=Z,147nm,0.7s,baz=12,slow=5.2,SNR=4.4 | | | | | | | | |
| KLR | | | | ScP | **ScP** | **15 47 52.8** | **+0.9** | | |
| | comp=Z,82nm,1.0s,baz=159,slow=4.1,SNR=3.7 | | | | | | | | |
| KLR | | | | S | **S** | **15 51 12.7** | **-0.1** | | |
| | comp=Z,20nm,1.0s,baz=325,slow=21,SNR=10 | | | | | | | | |
| KLR | | | | PKPPKP | P'P'df | 16 13 21.6 | -14 | | |
| | comp=Z,16nm,0.9s,baz=343,slow=3.3,SNR=18 | | | | | | | | |
| | comp=Z,257nm,0.8s | | | | | | | | |
| **KLR** | **Kul'dur** | **57.32** | **9** | *c i*P | **P** | **15 43 57.2** | **-1.0** | | |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,436nm,1.0s | | | | | | | | |
| **INZ** | **Inchbonnie** | **57.35** | **137** | IAmb | IAmb | 15 44 01.4 | | | |
| | comp=Z,4µm,1.1s | | | | | | | | |
| **QRZ** | **Quartz Range** | **57.41** | **134** | P | **P** | **15 44 00.1** | **+1.1** | | |
| **QRZ** | **Quartz Range** | **57.41** | **134** | IAmb | IAmb | 15 44 02.6 | | | |
| | comp=Z,4µm,1.2s | | | | | | | | |
| **SYZ** | **Scrubby Hill** | **57.44** | **142** | P | **P** | **15 43 59.1** | **0.0** | | |
| **RPZ** | **Rata Peaks** | **57.47** | **138** | P | **P** | **15 43 59.5** | **+0.1** | | |
| **MSVF** | **Nonsavu** | **57.60** | **106** | P | **P** | **15 44 01.3** | **+0.5** | | |
| **MSVF** | **Nonsavu** | **57.60** | **106** | P | **P** | **15 44 01.4** | **+0.5** | | |
| MSVF | | | | IAmb | IAmb | 15 44 03.5 | | | |
| | comp=Z,1µm,0.8s | | | | | | | | |
| **MSVF** | **Nonsavu** | **57.60** | **106** | *d i*P | **P** | **15 44 01.1** | **+0.3** | | |
| MSVF | | | | pmax | pmax | | | | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| **MSVF** | **Nonsavu** | **57.60** | **106** | P | **P** | **15 44 01.0** | **+0.3** | | |
| **BHUJ** | **Bhuj** | **57.67** | **303** | *e*P | **P** | **15 43 59.5** | **-1.5** | | |
| BHUJ | | | | IAmb | IAmb | 15 44 03.5 | | | |
| | comp=Z,3µm,1.3s | | | | | | | | |
| **THN** | **Thein Dam** | **57.68** | **316** | *e*P | **P** | **15 44 00.1** | **-0.8** | | |
| **ODZ** | **Otahua Downs** | **57.75** | **139** | P | **P** | **15 44 01.5** | **+0.3** | | |
| **HEH** | **HeiHe** | **57.76** | **6** | *e*P | **P** | **15 44 00.4** | **-0.7** | | |
| HEH | | | | PcP | **PcP** | **15 44 46.9** | **+0.6** | | |
| HEH | | | | pP | **pP** | **15 45 53.0** | **+4.6** | | |
| HEH | | | | ScP | **ScP** | **15 47 54.9** | **+1.1** | | |
| HEH | | | | S | **S** | **15 51 14.5** | **-3.9** | | |
| HEH | | | | ScS | **ScS** | **15 52 53.1** | **-1.4** | | |
| HEH | | | | sS | **sS** | **15 54 27.3** | **-1.1** | | |
| HEH | | | | pmax | pmax | | | | |
| | comp=Z,3µm,1.0s | | | | | | | | |
| HEH | | | | pmax | pmax | | | | |
| | comp=Z,8µm,3.6s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **57.80** | **18** | P | **P** | **15 44 01.2** | **-0.3** | | |
| **YSS** | **Yuzh-Sakhalins** | **57.80** | **18** | P | **P** | **15 44 00.3** | **-1.1** | | |
| YSS | | | | IAmb | IAmb | 15 44 03.4 | | | |
| | comp=Z,3µm,1.5s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **57.80** | **18** | *e*P | **P** | **15 44 01.0** | **-0.5** | | |
| YSS | | | | *e* | | 15 44 47.1 | | | |
| YSS | | | | *e**PP | **pP** | **15 45 49.1** | **+0.5** | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KIW | Kapiti Island | 59.12 | 134 | P | | P | | 15 44 09.8 | -0.8 |
| KATZ | Kakaramea | 59.13 | 131 | P | | P | | 15 44 12.0 | +1.2 |
| WHVZ | Whangaehu Hut | 59.14 | 132 | P | | P | | 15 44 11.1 | +0.1 |
| SNVZ | South Ngauruho | 59.15 | 131 | P | | P | | 15 44 11.3 | +0.3 |
| NTVZ | North Tongarir | 59.15 | 131 | P | | P | | 15 44 11.7 | +0.7 |
| RATZ | Rangitukua | 59.15 | 131 | P | | P | | 15 44 12.7 | +1.8 |
| WNVZ | Wahianoa | 59.16 | 132 | P | | P | | 15 44 11.1 | +0.1 |
| OTVZ | Oturere | 59.16 | 131 | P | | P | | 15 44 11.1 | 0.0 |
| WEL | Wellington | 59.16 | 134 | P | | P | | 15 44 09.5 | -1.3 |
| CASY | Casey | 59.17 | 184 | P | | P | | 15 44 10.1 | -0.3 |
| CASY | Casey | 59.17 | 184 | P | | P | | 15 44 09.9 | -0.5 |
| CASY | | | | pP | | pP | | 15 45 59.4 | +3.0 |
| CASY | | | | sP | | sP | | 15 46 54.6 | -0.3 |
| CASY | | | | ScP | | ScP | | 15 48 01.9 | +2.1 |
| TMVZ | Te Maari | 59.18 | 131 | P | | P | | 15 44 11.6 | +0.5 |
| TUVZ | Tukino | 59.18 | 132 | P | | P | | 15 44 11.4 | +0.2 |
| ETVZ | East Tongariro | 59.19 | 131 | P | | P | | 15 44 11.4 | +0.2 |
| OHWZ | Ohakea | 59.21 | 133 | P | | P | | 15 44 10.2 | -0.9 |
| WHTZ | Whakaora | 59.24 | 131 | P | | P | | 15 44 12.6 | +1.2 |
| GRRZ | Galatos Road | 59.26 | 130 | P | | P | | 15 44 11.8 | +0.2 |
| ZAK | Zakamensk | 59.27 | 348 | *e*P | | P | | 15 44 11.6 | +0.2 |
| ZAK | | | | *e* | | | | 15 51 38.1 | |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,1µm,1.1s | | | | | | | | |
| BHW | Baring Head | 59.27 | 134 | lAmb | | lAmb | | 15 44 12.4 | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| BHW | Baring Head | 59.27 | 134 | P | | P | | 15 44 10.2 | -1.3 |
| UTU | Utuhina | 59.28 | 130 | P | | P | | 15 44 12.9 | +1.3 |
| MOVZ | Moawhango | 59.30 | 132 | P | | P | | 15 44 11.2 | -0.6 |
| OGWZ | Otaki Gorge | 59.30 | 133 | P | | P | | 15 44 11.0 | -0.7 |
| CAW | Cannon Point | 59.32 | 134 | P | | P | | 15 44 11.0 | -0.9 |
| HSRZ | Hossack Road | 59.35 | 130 | P | | P | | 15 44 13.2 | +1.0 |
| CIT | Chita | 59.39 | 356 | *e*P | | P | | 15 44 12.1 | 0.0 |
| CIT | | | | *e* | | | | 15 44 54.1 | |
| CIT | | | | *e* | | | | 15 45 59.0 | |
| CIT | | | | *e* | | | | 15 46 35.9 | |
| CIT | | | | *e* | | | | 15 46 54.3 | |
| CIT | | | | *e* | | | | 15 48 08.2 | |
| CIT | | | | *e* | | | | 15 51 42.0 | |
| CIT | | | | *e* | | | | 15 53 05.4 | |
| CIT | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| OMRZ | Omania | 59.39 | 130 | P | | P | | 15 44 13.1 | +0.6 |
| HRRZ | Handcock Road | 59.40 | 130 | P | | P | | 15 44 13.8 | +1.3 |
| HLRZ | Highlands Stat | 59.42 | 130 | P | | P | | 15 44 15.4 | +2.8 |
| MKRZ | Makatiti | 59.47 | 130 | P | | P | | 15 44 15.8 | +2.7 |
| ALRZ | Allen Road | 59.50 | 131 | P | | P | | 15 44 13.3 | +0.2 |
| UGL | Uglegorsk | 59.50 | 17 | *e*P | | P | | 15 44 12.8 | 0.0 |
| UGL | | | | *e* | | | | 15 46 02.1 | |
| UGL | | | | *e*S | | S | | 15 51 38.3 | -2.0 |
| UGL | | | | *e* | | | | 15 53 06.0 | |
| UGL | | | | pmax | | pmax | | | |
| | comp=Z,8µm,3.7s | | | | | | | | |
| UGL | | | | pmax | | pmax | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| TARZ | Mount Tarawera | 59.53 | 130 | P | | P | | 15 44 14.6 | +1.1 |
| MRZ | Mangatainoka R | 59.55 | 133 | lAmb | | lAmb | | 15 44 14.6 | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| MRZ | Mangatainoka R | 59.55 | 133 | P | | P | | 15 44 12.6 | -0.8 |
| MSWZ | Moikau Station | 59.55 | 134 | P | | P | | 15 44 12.3 | -1.1 |
| RRRZ | Republican Roa | 59.56 | 130 | P | | P | | 15 44 13.6 | -0.1 |
| HOWZ | Holdsworth Sta | 59.57 | 133 | P | | P | | 15 44 12.8 | -0.8 |
| PLWZ | Palliser | 59.60 | 134 | P | | P | | 15 44 12.5 | -1.2 |
| POWZ | Post Office Ro | 59.60 | 133 | P | | P | | 15 44 13.0 | -0.8 |
| MRHZ | Matea Rd | 59.63 | 131 | P | | P | | 15 44 13.3 | -0.8 |
| MTW | Mount Morrison | 59.64 | 134 | P | | P | | 15 44 13.0 | -1.1 |
| PAWZ | Paruwai Farm | 59.66 | 134 | P | | P | | 15 44 13.5 | -0.7 |
| GRNR | Gornyy | 59.66 | 12 | ⇑*i*P | | P | | 15 44 14.1 | +0.2 |
| GRNR | | | | *e* | | | | 15 46 00.2 | |
| GRNR | | | | *e*S | | S | | 15 51 42.2 | -0.2 |
| GRNR | | | | *e*SS | | ScS | | 15 53 08.0 | -0.7 |
| GRNR | | | | pmax | | pmax | | | |
| | comp=N,260nm,0.7s | | | | | | | | |
| GRNR | | | | pmax | | pmax | | | |
| | comp=E,90nm,0.7s | | | | | | | | |
| GRNR | | | | pmax | | pmax | | | |
| | comp=Z,730nm,0.7s | | | | | | | | |
| GRNR | | | | smax | | smax | | | |
| | comp=E,20nm,1.0s | | | | | | | | |
| PNHZ | Pukenui | 59.77 | 132 | P | | P | | 15 44 14.2 | -0.8 |
| BKZ | Black Stump Fm | 59.78 | 131 | P | | P | | 15 44 14.4 | -0.6 |
| BKZ | Black Stump Fm | 59.78 | 131 | P | | P | | 15 44 14.5 | -0.6 |
| WHRZ | Whale Island | 59.78 | 130 | P | | P | | 15 44 16.3 | +1.2 |
| MUGZ | Murupara | 59.80 | 130 | P | | P | | 15 44 14.4 | -0.8 |
| PRWZ | Pori Road | 59.80 | 133 | P | | P | | 15 44 14.5 | -0.6 |
| KWHZ | Kaweka Forest | 59.80 | 132 | P | | P | | 15 44 15.0 | -0.2 |
| KRHZ | Kereru | 59.82 | 132 | P | | P | | 15 44 14.6 | -0.7 |
| TRWZ | Traveller | 59.85 | 134 | P | | P | | 15 44 15.3 | -0.1 |
| DVHZ | Dannevirke | 59.86 | 133 | P | | P | | 15 44 14.8 | -0.7 |
| TMWZ | Te Maipa | 59.91 | 134 | P | | P | | 15 44 15.5 | -0.3 |
| MTHZ | Maungataniwha | 59.95 | 131 | P | | P | | 15 44 15.7 | -0.5 |
| NMHZ | Naumai | 59.99 | 131 | P | | P | | 15 44 16.7 | +0.2 |
| URZ | Urewera | 59.99 | 130 | P | | P | | 15 44 15.5 | -0.9 |
| WPHZ | Waipukurau | 60.00 | 132 | P | | P | | 15 44 16.1 | -0.4 |
| MCHZ | McNeill Hill | 60.01 | 131 | P | | P | | 15 44 16.5 | 0.0 |
| BFZ | Birch Farm | 60.04 | 133 | P | | P | | 15 44 16.6 | -0.1 |
| BFZ | Birch Farm | 60.04 | 133 | lAmb | | lAmb | | 15 44 18.8 | |
| | comp=Z,3µm,1.3s | | | | | | | | |
| BFZ | Birch Farm | 60.04 | 133 | P | | P | | 15 44 15.7 | -1.0 |
| NIL | Nilore | 60.07 | 316 | P | | P | | 15 44 16.1 | -1.0 |
| NIL | Nilore | 60.07 | 316 | P | | P | | 15 44 16.2 | -0.8 |
| NIL | Nilore | 60.07 | 316 | P | | P | | 15 44 16.1 | -1.0 |
| NIL | | | | pmax | | pmax | | | |
| | comp=Z,3µm,0.6s | | | | | | | | |
| NIL | Nilore | 60.07 | 316 | P | | P | | 15 44 16.2 | -0.8 |
| ARHZ | Aropaoanui | 60.18 | 131 | P | | P | | 15 44 17.4 | -0.3 |
| KAHZ | Kahuranaki | 60.24 | 132 | P | | P | | 15 44 17.9 | -0.2 |
| RAGZ | Rawiri | 60.29 | 130 | P | | P | | 15 44 17.8 | -0.7 |
| PXZ | Pawanui | 60.30 | 132 | P | | P | | 15 44 17.7 | -0.7 |
| MXZ | Matakaoa Point | 60.73 | 129 | P | | P | | 15 44 21.8 | +0.5 |
| MXZ | Matakaoa Point | 60.73 | 129 | lAmb | | lAmb | | 15 44 23.2 | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| DRV | Dumont d'Urvil | 60.82 | 171 | P | | P | | 15 44 21.4 | +0.1 |
| DRV | | | | pP | | pwP | | 15 46 10.7 | -1.1 |
| DRV | | | | PP | | PP | | 15 46 41.4 | -2.8 |
| IRK | Irkutsk | 60.84 | 349 | *e*P | | P | | 15 44 21.3 | -0.4 |
| IRK | | | | *e* | | | | 15 52 00.0 | |
| IRK | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.8s | | | | | | | | |
| WUS | Wushi | 60.99 | 326 | P | | P | | 15 44 23.7 | +0.6 |
| WUS | | | | PcP | | PcP | | 15 45 01.0 | +1.2 |
| WUS | | | | pP | | pwP | | 15 46 15.2 | +1.3 |
| ZEA | Zeya | 61.20 | 5 | *e*P | | P | | 15 44 23.7 | -0.3 |
| ZEA | | | | *e* | | | | 15 46 11.9 | |
| ZEA | | | | *e* | | | | 15 46 44.3 | |
| ZEA | | | | *e**SP | | sP | | 15 47 12.4 | +1.1 |
| ZEA | | | | *e*S | | S | | 15 51 59.4 | -1.9 |
| ZEA | | | | *e* | | | | 15 53 19.6 | |
| ZEA | | | | *e*SS | | SS | | 15 56 13.8 | -1.0 |
| ZEA | | | | pmax | | pmax | | | |
| | comp=N,940nm,1.0s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.3s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=N,2µm,1.7s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=E,300nm,1.7s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,3µm,2.1s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=N,1µm,5.8s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,2µm,6.0s | | | | | | | | |
| ZEA | | | | smax | | smax | | | |
| | comp=N,2µm,7.2s | | | | | | | | |
| ZEA | | | | smax | | smax | | | |
| | comp=E,3µm,7.2s | | | | | | | | |
| ZEA | | | | MLR | | MLR | | | |
| | comp=N,2µm,15.0s | | | | | | | | |
| ZEA | | | | MLR | | MLR | | | |
| | comp=Z,2µm,15.0s | | | | | | | | |
| FUTU | Fugatoga | 61.23 | 102 | P | | P | | 15 44 26.9 | +1.9 |
| FUTU | | | | PP | | PP | | 15 46 48.0 | -0.9 |
| TYV | Tymovskoe | 61.27 | 16 | *e*P | | P | | 15 44 26.1 | +1.6 |
| TYV | | | | *e*S | | S | | 15 52 03.0 | +0.7 |
| TYV | | | | pmax | | pmax | | | |
| | comp=Z,590nm,0.8s | | | | | | | | |
| TYV | | | | pmax | | pmax | | | |
| | comp=Z,4µm,3.9s | | | | | | | | |
| TYV | | | | smax | | smax | | | |
| | comp=N,4µm,7.5s | | | | | | | | |
| TYV | | | | smax | | smax | | | |
| | comp=E,5µm,7.5s | | | | | | | | |
| KSH | Kashi | 61.77 | 323 | P | | P | | 15 44 28.3 | +0.1 |
| KSH | | | | pP | | pP | | 15 46 16.1 | -0.7 |
| KSH | | | | PP | | PP | | 15 46 54.9 | +1.4 |
| KSH | | | | S | | S | | 15 52 09.4 | +0.1 |
| KSH | | | | sS | | sS | | 15 55 20.9 | -1.7 |
| KSH | | | | pmax | | pmax | | | |
| | comp=E,5µm,0.8s | | | | | | | | |
| SHLS | Shalkode | 62.19 | 328 | ⇑*i*P | | P | | 15 44 29.9 | -0.9 |
| | comp=E,1µm,0.7s,baz=328 | | | | | | | | |
| SHLS | | | | *e*S | | S | | 15 52 12.5 | -1.8 |
| | baz=328 | | | | | | | | |
| SHLS | Shalkode | 62.19 | 328 | *c* iP | | P | | 15 44 29.9 | -0.9 |
| SHLS | | | | *e*S | | S | | 15 52 12.4 | -1.8 |
| SHLS | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.7s | | | | | | | | |
| PDGK | Podgornoye | 62.29 | 328 | P | | P | | 15 44 31.6 | +0.1 |
| RAO | Raoul Island | 62.30 | 119 | P | | P | | 15 44 32.5 | +0.8 |
| UZB | Uzynbulak | 62.42 | 327 | ⇑*i*P | | P | | 15 44 32.6 | +0.2 |
| | baz=327 | | | | | | | | |
| UZB | | | | *e*S | | S | | 15 52 17.3 | +0.2 |
| | baz=327 | | | | | | | | |
| UZB | Uzynbulak | 62.42 | 327 | *c* iP | | P | | 15 44 32.5 | +0.2 |
| UZB | | | | *e*S | | S | | 15 52 17.3 | +0.2 |
| SATY | Saty | 62.69 | 327 | ⇑*i*P | | P | | 15 44 34.4 | +0.3 |
| | comp=Z,1µm,0.7s,baz=327 | | | | | | | | |
| SATY | Saty | 62.69 | 327 | *c* iP | | P | | 15 44 34.4 | +0.3 |
| SATY | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.7s | | | | | | | | |
| ZSN | Zaisan | 62.71 | 334 | *e*P | | P | | 15 44 34.3 | +0.3 |
| | comp=Z,1µm,0.9s,baz=334 | | | | | | | | |
| ZSN | | | | *e*S | | S | | 15 52 20.8 | +0.6 |
| | baz=334 | | | | | | | | |
| ZSN | Zaisan | 62.71 | 334 | *e*P | | P | | 15 44 34.2 | +0.3 |
| ZSN | | | | *e*S | | S | | 15 52 20.8 | +0.6 |
| ZSN | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| ZHN | Zhinishke | 62.75 | 327 | ⇑*i*P | | P | | 15 44 34.6 | +0.1 |
| | baz=327 | | | | | | | | |
| ZHN | Zhinishke | 62.75 | 327 | *c* iP | | P | | 15 44 34.5 | +0.1 |
| KPKS | Kokpek | 62.81 | 327 | ⇑*i*P | | P | | 15 44 35.0 | +0.1 |
| | comp=Z,1µm,0.8s,baz=327 | | | | | | | | |
| KPKS | | | | *e*S | | S | | 15 52 22.1 | +0.3 |
| | baz=327 | | | | | | | | |
| KPKS | Kokpek | 62.81 | 327 | *c* iP | | P | | 15 44 34.9 | +0.1 |
| KPKS | | | | *e*S | | S | | 15 52 22.1 | +0.3 |
| KPKS | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.8s | | | | | | | | |
| NKL | Nikolayevsk | 62.84 | 14 | *e*P | | P | | 15 44 34.1 | -0.5 |
| NKL | | | | *e* | | | | 15 46 26.8 | |
| NKL | | | | *e*S | | S | | 15 52 20.9 | -0.5 |
| NKL | | | | pmax | | pmax | | | |
| | comp=E,936nm,0.7s | | | | | | | | |
| NKL | | | | pmax | | pmax | | | |
| | comp=N,1µm,0.9s | | | | | | | | |
| NKL | | | | pmax | | pmax | | | |
| | comp=Z,6µm,0.8s | | | | | | | | |
| NKL | | | | smax | | smax | | | |
| | comp=N,2µm,3.3s | | | | | | | | |
| NKL | | | | smax | | smax | | | |
| | comp=E,8µm,3.3s | | | | | | | | |
| NKL | | | | MLR | | MLR | | | |
| | comp=E,18µm,19.0s | | | | | | | | |
| NKL | | | | MLR | | MLR | | | |
| | comp=N,8µm,12.0s | | | | | | | | |
| NKL | | | | MLR | | MLR | | | |
| | comp=Z,7µm,18.0s | | | | | | | | |
| NRN | Naryn | 62.97 | 324 | lAmb | | lAmb | | 15 44 38.0 | |
| | comp=Z,1µm,0.7s | | | | | | | | |
| RER | Riviere de l'E | 63.19 | 250 | lAmb | | lAmb | | 15 44 41.2 | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| RER | Riviere de l'E | 63.19 | 250 | P | | P | | 15 44 39.5 | +1.7 |
| | SNR=15 | | | | | | | | |
| RER | Riviere de l'E | 63.19 | 250 | P | | P | | 15 44 39.4 | +1.7 |
| RER | | | | PcP | | PcP | | 15 45 10.9 | +1.7 |
| ULHL | Ulahol | 63.35 | 325 | P | | P | | 15 44 39.9 | +1.4 |
| | SNR=41 | | | | | | | | |
| MK31 | Makanchi Array | 63.38 | 332 | P | | P | | 15 44 38.5 | +0.2 |
| MK31 | Makanchi Array | 63.38 | 332 | *c* iP | | P | | 15 44 38.2 | -0.1 |
| MK31 | | | | pmax | | pmax | | | |
| | comp=Z,2µm,0.6s | | | | | | | | |
| MKAR | Makanchi Array | 63.38 | 332 | P | | P | | 15 44 38.4 | +0.1 |
| | comp=Z,3µm,0.5s,baz=146,slow=6.3,SNR=2762 | | | | | | | | |
| MKAR | | | | S | | S | | 15 52 29.8 | +1.4 |
| | comp=Z,54nm,1.1s,baz=154,slow=12,SNR=7.2 | | | | | | | | |
| MKAR | | | | PKPPKP | | P'P'df | | 16 13 21.4 | -5.1 |
| | comp=Z,3.6nm,0.9s,baz=343,slow=3.8,SNR=6.2 | | | | | | | | |
| MKAR | | | | P4KPbc | | | | 16 21 30.4 | |
| | comp=Z,6.8nm,0.7s,baz=146,slow=3.0,SNR=36 | | | | | | | | |
| | comp=Z,3µm,0.5s | | | | | | | | |
| DGZ | Jazzator, Alta | 63.44 | 337 | *c* iP | | P | | 15 44 38.9 | +0.1 |
| DGZ | | | | pmax | | pmax | | | |
| | comp=Z,5µm,0.9s | | | | | | | | |
| TNSS | Tian-Shan | 63.47 | 326 | *e*P | | P | | 15 44 39.6 | +0.2 |
| | baz=326 | | | | | | | | |
| TNSS | Tian-Shan | 63.47 | 326 | *e*P | | P | | 15 44 39.6 | +0.2 |
| KBL | Kabul | 63.50 | 314 | P | | P | | 15 44 38.9 | -0.6 |
| KBL | Kabul | 63.50 | 314 | P | | P | | 15 44 39.0 | -0.6 |
| | SNR=1208 | | | | | | | | |
| KBL | | | | P | | P | | 15 44 39.0 | -0.6 |
| | SNR=1208 | | | | | | | | |
| KBL | | | | S | | S | | 15 52 27.1 | -3.6 |
| KBL | | | | S | | S | | 15 52 27.1 | -3.6 |
| KBL | Kabul | 63.50 | 314 | P | | P | | 15 44 38.9 | -0.6 |
| KBL | | | | pmax | | pmax | | | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| MDOK | Medeo | 63.50 | 326 | *e*P | | P | | 15 44 39.5 | +0.1 |
| | baz=326 | | | | | | | | |
| MDOK | | | | *e*S | | S | | 15 52 30.6 | +0.4 |
| | baz=326 | | | | | | | | |
| MDOK | Medeo | 63.50 | 326 | *e*P | | P | | 15 44 39.4 | +0.1 |
| MDOK | | | | *e*S | | S | | 15 52 30.6 | +0.4 |
| MAKZ | Makanchi | 63.53 | 332 | P | | P | | 15 44 39.0 | -0.2 |
| MAKZ | | | | lAmb | | lAmb | | 15 44 42.3 | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| MAKZ | Makanchi | 63.53 | 332 | P | | P | | 15 44 39.0 | -0.2 |
| MAKZ | | | | pmax | | pmax | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| KNDC | Almaty | 63.58 | 326 | P | | P | | 15 44 39.9 | +0.2 |
| AAA | Alma-Ata | 63.60 | 326 | *e*P | | P | | 15 44 40.2 | +0.4 |
| | comp=Z,1µm,0.9s,baz=326 | | | | | | | | |
| AAA | Alma-Ata | 63.60 | 326 | *e*P | | P | | 15 44 40.2 | +0.4 |
| AAA | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| ARXS | Arharly | 63.78 | 328 | *e*P | | P | | 15 44 40.6 | -0.4 |
| MSEY | Mahe Island | 63.97 | 268 | P | | P | | 15 44 43.1 | +0.4 |
| MSEY | Mahe Island | 63.97 | 268 | P | | P | | 15 44 43.1 | +0.4 |
| MSEY | | | | pmax | | pmax | | | |
| | comp=Z,736nm,1.2s | | | | | | | | |
| MSEY | Mahe Island | 63.97 | 268 | P | | P | | 15 44 43.4 | +0.6 |
| CHKK | Chushkaly | 63.99 | 327 | *e*P | | P | | 15 44 42.4 | +0.1 |
| | baz=327 | | | | | | | | |
| CHKK | Chushkaly | 63.99 | 327 | *e*P | | P | | 15 44 42.3 | +0.1 |
| TKM2 | Tokmak 2 | 64.15 | 325 | P | | P | | 15 44 43.5 | 0.0 |
| | SNR=1383 | | | | | | | | |
| TKM2 | Tokmak 2 | 64.15 | 325 | *i* P | | P | | 15 44 43.2 | -0.3 |
| TKM2 | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.1s | | | | | | | | |
| UCH | Uchtor | 64.33 | 324 | P | | P | | 15 44 46.0 | +1.0 |
| | SNR=22 | | | | | | | | |
| DRK | Karamyk | 64.33 | 320 | P | | P | | 15 44 45.7 | +0.8 |
| DRK | Karamyk | 64.33 | 320 | P | | P | | 15 44 45.7 | +0.8 |
| KBK | Karagaybulak | 64.35 | 325 | P | | P | | 15 44 45.1 | +0.4 |
| | SNR=678 | | | | | | | | |
| KUU | Kurty | 64.37 | 327 | *e*P | | P | | 15 44 44.9 | +0.2 |
| | comp=Z,1µm,0.8s,baz=326 | | | | | | | | |
| KUU | Kurty | 64.37 | 327 | *e*P | | P | | 15 44 44.8 | +0.2 |
| KUU | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.8s | | | | | | | | |
| AAK | Ala-Archa | 64.60 | 325 | P | | P | | 15 44 46.7 | +0.4 |
| | SNR=602 | | | | | | | | |
| AAK | Ala-Archa | 64.60 | 325 | P | | P | | 15 44 47.2 | +0.8 |
| AAK | | | | lAmb | | lAmb | | 15 44 48.9 | |
| | comp=Z,1µm,0.7s | | | | | | | | |
| AAK | Ala-Archa | 64.60 | 325 | *i* P | | P | | 15 44 46.6 | +0.2 |
| | SNR=612 | | | | | | | | |
| AAK | Ala-Archa | 64.60 | 325 | P | | P | | 15 44 46.3 | 0.0 |
| | comp=Z,1µm,0.7s,baz=138,slow=5.5,SNR=625 | | | | | | | | |
| AAK | | | | PKPPKP | | | | 16 13 17.2 | |
| | comp=Z,9.5nm,1.0s,baz=228,slow=4.1,SNR=7.0 | | | | | | | | |
| | comp=Z,1µm,0.7s | | | | | | | | |
| AAK | Ala-Archa | 64.60 | 325 | P | | P | | 15 44 47.1 | +0.8 |
| AAK | | | | S | | S | | 15 52 45.2 | +1.7 |
| AAK | Ala-Archa | 64.60 | 325 | *c* iP | | P | | 15 44 46.5 | +0.2 |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,994nm,0.8s | | | | | | | | |
| AAK | Ala-Archa | 64.60 | 325 | P | | P | | 15 44 46.5 | +0.2 |
| AAK | | | | PcP | | PcP | | 15 45 16.1 | +1.5 |
| FRU1 | Bishkek | 64.63 | 325 | lAmb | | lAmb | | 15 44 49.0 | |
| | comp=Z,2µm,1.6s | | | | | | | | |
| CHMS | Chumysh | 64.68 | 325 | P | | P | | 15 44 46.2 | -0.4 |
| | SNR=263 | | | | | | | | |
| AML | Almayashu | 64.75 | 324 | P | | P | | 15 44 47.8 | +0.2 |
| | SNR=2135 | | | | | | | | |
| USP | Ospenovka | 64.99 | 325 | P | | P | | 15 44 48.5 | -0.2 |
| | SNR=760 | | | | | | | | |
| EKS2 | Erkin-Say | 65.03 | 324 | P | | P | | 15 44 49.2 | +0.2 |
| | SNR=1500 | | | | | | | | |
| BOD | Bodaibo | 65.13 | 357 | ⇑*i*P | | P | | 15 44 49.2 | +0.1 |
| BOD | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| NGCH | Negor - Chabah | 65.63 | 302 | P | | P | | 15 44 53.4 | +0.5 |
| | SNR=31 | | | | | | | | |
| SIMJ | Simiganj | 65.68 | 318 | P | | P | | 15 44 52.8 | -0.4 |
| SIMJ | | | | lAmb | | lAmb | | 15 44 56.3 | |
| | comp=Z,2µm,1.1s | | | | | | | | |
| SIMJ | Simiganj | 65.68 | 318 | P | | P | | 15 44 52.8 | -0.4 |
| SIMJ | | | | PcP | | PcP | | 15 45 19.5 | +0.3 |
| SKR | Severo-Kuril's | 65.79 | 24 | *e*P | | P | | 15 44 51.9 | -1.4 |
| SKR | | | | *e*SS | | SKiKP | | 15 53 53.9 | -6.4 |
| SKR | | | | pmax | | pmax | | | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| SKR | | | | pmax | | pmax | | | |
| | comp=Z,2µm,4.5s | | | | | | | | |
| CTZ | Chatham Island | 65.96 | 135 | P | | P | | 15 44 55.6 | +1.0 |
| CTZ | Chatham Island | 65.96 | 135 | P | | P | | 15 44 55.2 | +0.6 |
| CTZ | | | | lAmb | | lAmb | | 15 44 57.2 | |
| | comp=Z,971nm,0.9s | | | | | | | | |
| JLN | Jalan Bani Buh | 66.00 | 298 | P | | P | | 15 44 54.8 | -0.5 |
| | SNR=57 | | | | | | | | |
| JLN | | | | P | | P | | 15 44 54.8 | -0.5 |
| | SNR=57 | | | | | | | | |
| BTLS | Baital | 66.36 | 326 | *e*P | | P | | 15 44 57.0 | -0.1 |
| | baz=326 | | | | | | | | |
| BTLS | Baital | 66.36 | 326 | *e*P | | P | | 15 44 56.9 | -0.1 |
| WBK | Wadi Bani Khal | 66.53 | 298 | P | | P | | 15 44 58.9 | +0.3 |
| | SNR=106 | | | | | | | | |
| WBK | | | | P | | P | | 15 44 58.9 | +0.3 |
| | SNR=106 | | | | | | | | |
| MHTO | MHTO | 66.90 | 296 | P | | P | | 15 45 00.1 | -0.8 |
| | SNR=110 | | | | | | | | |
| MHTO | | | | P | | P | | 15 45 00.1 | -0.8 |
| | SNR=110 | | | | | | | | |
| MHTO | | | | S | | S | | 15 53 08.4 | -2.7 |
| MHTO | | | | S | | S | | 15 53 08.4 | -2.7 |
| SEM | Semipalatinsk | 66.95 | 334 | *e*P | | P | | 15 45 00.6 | -0.3 |
| | comp=Z,1µm,0.7s,baz=334 | | | | | | | | |
| SEM | Semipalatinsk | 66.95 | 334 | *e*P | | P | | 15 45 00.5 | -0.3 |
| SEM | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.7s | | | | | | | | |
| DQM | DQM | 66.96 | 295 | P | | P | | 15 45 01.6 | +0.3 |
| | SNR=61 | | | | | | | | |
| DQM | | | | P | | P | | 15 45 01.6 | +0.3 |
| | SNR=61 | | | | | | | | |
| JMDO | Jabal Madar | 67.21 | 298 | P | | P | | 15 45 03.1 | +0.3 |
| | SNR=116 | | | | | | | | |
| JMDO | | | | P | | P | | 15 45 03.1 | +0.3 |
| | SNR=116 | | | | | | | | |
| KK31 | Karatay Array | 67.22 | 323 | P | | P | | 15 45 01.9 | -0.5 |
| KK31 | Karatay Array | 67.22 | 323 | P | | P | | 15 45 01.9 | -0.5 |
| KK31 | | | | pmax | | pmax | | | |
| | comp=Z,856nm,1.1s | | | | | | | | |
| KKAR | Karatay Array | 67.22 | 323 | P | | P | | 15 45 01.7 | -0.7 |
| KKAR | Karatay Array | 67.22 | 323 | lAmb | | lAmb | | 15 45 05.7 | |
| | comp=Z,851nm,1.1s | | | | | | | | |
| KKAR | Karatay Array | 67.22 | 323 | P | | P | | 15 45 01.7 | -0.7 |
| AFI | Afiamalu | 67.39 | 102 | P | | P | | 15 45 05.6 | +1.5 |
| AFI | | | | lAmb | | lAmb | | 15 45 08.3 | |
| | comp=Z,2µm,1.1s | | | | | | | | |
| AFI | Afiamalu | 67.39 | 102 | P | | P | | 15 45 05.6 | +1.5 |
| AFI | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| SMDO | Samad | 67.48 | 299 | P | | P | | 15 45 04.4 | -0.1 |
| | SNR=143 | | | | | | | | |
| SMDO | | | | P | | P | | 15 45 04.4 | -0.1 |
| | SNR=143 | | | | | | | | |
| SMDO | | | | S | | S | | 15 53 18.9 | +0.7 |
| SMDO | | | | S | | S | | 15 53 18.9 | +0.7 |
| BIDO | Bidbid | 67.56 | 299 | P | | P | | 15 45 05.3 | +0.4 |
| | SNR=283 | | | | | | | | |
| BIDO | | | | P | | P | | 15 45 05.3 | +0.4 |
| | SNR=283 | | | | | | | | |
| BRLS | Borolday | 67.58 | 323 | *e*P | | P | | 15 45 04.2 | -0.4 |
| | baz=322 | | | | | | | | |
| BRLS | Borolday | 67.58 | 323 | *e*P | | P | | 15 45 04.2 | -0.4 |
| CCD | Concordia, Ant | 67.72 | 179 | P | | P | | 15 45 06.2 | +0.8 |
| CCD | | | | pP | | pwP | | 15 46 59.2 | +0.1 |
| I46RU | ZALESOVO INFRA | 67.81 | 339 | P | | P | | 15 45 05.9 | +0.2 |
| | baz=138,slow=5.6,SNR=22 | | | | | | | | |
| ZAA0 | Zalesovo Array | 67.81 | 339 | P | | P | | 15 45 05.2 | -0.6 |
| ZALV | Zalesovo Beam | 67.81 | 339 | P | | P | | 15 45 05.0 | -0.8 |
| | comp=Z,4µm,0.4s,baz=138,slow=5.2,SNR=1824 | | | | | | | | |
| ZALV | | | | S | | S | | 15 53 19.5 | -1.1 |
| | comp=Z,163nm,0.8s,baz=148,slow=9.1,SNR=24 | | | | | | | | |
| ZALV | | | | PKPPKP | | P'P'df | | 16 13 17.2 | -1.6 |
| | comp=Z,7.9nm,1.0s,baz=282,slow=2.9,SNR=7.7 | | | | | | | | |
| | comp=Z,4µm,0.4s | | | | | | | | |
| KURBB | Kurchatov Arra | 67.86 | 333 | P | | P | | 15 45 04.8 | -1.3 |
| | comp=Z,1µm,0.5s,baz=143,slow=5.4,SNR=396 | | | | | | | | |
| KURBB | | | | PcP | | PcP | | 15 45 28.4 | +0.6 |
| | comp=Z,312nm,0.7s,baz=140,slow=3.0,SNR=6.3 | | | | | | | | |
| KURBB | | | | S | | S | | 15 53 22.9 | +1.5 |
| | comp=Z,30nm,1.1s,baz=137,slow=10.0,SNR=6.0 | | | | | | | | |
| KURBB | | | | PKKP | | PKKPdf | | 16 05 25.2 | +20 |
| | comp=Z,2.0nm,0.9s,baz=314,slow=6.5,SNR=4.4 | | | | | | | | |
| KURBB | | | | PKPPKP | | P'P'df | | 16 13 17.3 | -1.7 |
| | comp=Z,3.6nm,0.9s,baz=314,slow=3.7,SNR=8.0 | | | | | | | | |
| KURBB | | | | P4KPbc | | | | 16 21 50.5 | |
| | comp=Z,6.5nm,0.8s,baz=136,slow=3.8,SNR=23 | | | | | | | | |
| | comp=Z,1µm,0.5s | | | | | | | | |
| KURBB | Kurchatov Arra | 67.86 | 333 | P | | P | | 15 45 05.8 | -0.4 |
| KURK | Kurchatov | 67.89 | 333 | P | | P | | 15 45 06.3 | 0.0 |
| KURK | Kurchatov | 67.89 | 333 | P | | P | | 15 45 07.3 | +1.0 |
| KURK | | | | P | | P | | 15 45 07.3 | +1.0 |
| KURK | | | | S | | S | | 15 53 22.3 | +0.7 |
| KURK | | | | S | | S | | 15 53 22.3 | +0.7 |
| KURK | Kurchatov | 67.89 | 333 | *c* iP | | P | | 15 45 06.1 | -0.2 |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,7µm,1.3s | | | | | | | | |
| BSY | Bisya | 68.12 | 298 | P | | P | | 15 45 08.1 | -0.3 |
| | SNR=72 | | | | | | | | |
| BSY | | | | P | | P | | 15 45 08.1 | -0.3 |
| | SNR=72 | | | | | | | | |
| SHAO | Shalim | 68.15 | 293 | *i* P | | P | | 15 45 08.2 | -0.4 |
| | SNR=93

PET MLR MLR
comp=Z,800nm,12.0s
**PET Petropavlovsk 68.59 24** P **P** **15 45 11.7 +1.3**
PET PcP **PcP** **15 45 31.4 +0.5**
PET pP **pP** **15 47 06.8 +4.2**
**DMTO DMTO 68.69 292** P **P** **15 45 12.1 +0.2**
SNR=11
DMTO P **P** **15 45 12.1 +0.2**
SNR=11
**SBV Sambava 68.80 258** P **P** **15 45 13.8 +1.2**
SNR=23
**ARQ Araqi 68.90 298** P **P** **15 45 13.3 +0.2**
SNR=68
ARQ P **P** **15 45 13.3 +0.2**
SNR=68
**NIUE Niue 69.04 108** P **P** **15 45 15.3 +1.4**
**NIUE Niue 69.04 108** lAmb lAmb 15 45 18.8
comp=Z,2μm,1.1s
**NIUE Niue 69.04 108** P **P** **15 45 14.7 +0.8**
comp=Z,0.0nmcomp=Z,2μm,1.4s
**SOHO SOHO 69.14 299** *i* P **P** **15 45 13.7 -0.7**
SNR=98
**SOHO SOHO 69.14 299** P **P** **15 45 14.8 +0.4**
SOHO P **P** **15 45 14.8 +0.4**
SOHO S **S** **15 53 36.6 -0.5**
SOHO S **S** **15 53 36.6 -0.5**
**OTUK Ortayu 69.29 328** P **P** **15 45 15.2 +0.3**
**RBK Rabkut 69.32 292** P **P** **15 45 15.9 +0.2**
SNR=39
RBK P **P** **15 45 15.9 +0.2**
SNR=39
**H04N2 CROZET ISLANDS 69.51 223** P **P** **15 45 19.8 +3.8**
baz=72,slow=4.3,SNR=11
**H04N1 CROZET ISLANDS 69.53 223** P **P** **15 45 20.0 +3.9**
baz=72,slow=4.3,SNR=8.3
**H04N3 CROZET ISLANDS 69.53 223** P **P** **15 45 19.5 +3.4**
baz=72,slow=4.3,SNR=8.9
**H04S1 CROZET ISLANDS 69.57 223** P **P** **15 45 19.3 +2.9**
baz=82,slow=5.7,SNR=12
**H04S2 CROZET ISLANDS 69.58 223** P **P** **15 45 19.3 +2.8**
baz=82,slow=5.7,SNR=12
**H04S3 CROZET ISLANDS 69.59 223** P **P** **15 45 19.4 +2.9**
baz=82,slow=5.7,SNR=20
**YAK Yakutsk 69.61 5** P **P** **15 45 15.3 -1.1**
**YAK Yakutsk 69.61 5** *eP* **P** **15 45 16.2 -0.2**
YAK *e* 15 45 35.5
YAK *e**PP **pP** **15 47 08.4 -0.9**
YAK *e* 15 47 56.8
YAK *i* S **S** **15 53 38.0 -3.0**
YAK *e* 15 54 24.7
YAK pmax pmax
comp=Z,3μm,1.1s
YAK pmax pmax
comp=N,1μm,1.0s
YAK pmax pmax
comp=E,77nm,0.9s
YAK pmax pmax
comp=Z,268nm,0.9s
YAK pmax pmax
comp=N,157nm,1.2s
YAK pmax pmax
comp=E,24nm,0.9s
YAK smax smax
comp=E,2μm,1.9s
YAK smax smax
comp=N,1μm,1.8s
**YAK Yakutsk 69.61 5** P **P** **15 45 16.2 -0.2**
YAK PcP **PcP** **15 45 34.6 -0.4**
**DOK Doka 69.68 293** P **P** **15 45 17.2 -0.6**
SNR=71
DOK P **P** **15 45 17.2 -0.6**
SNR=71
DOK S **S** **15 53 38.6 -4.9**
DOK S **S** **15 53 38.6 -4.9**
**UOSS Minazif 69.68 300** P **P** **15 45 16.9 -0.8**
UOSS lAmb lAmb 15 45 20.6
comp=Z,1μm,1.3s
**UOSS Minazif 69.68 300** *i* P **P** **15 45 17.0 -0.7**
SNR=83
**UOSS Minazif 69.68 300** P **P** **15 45 17.3 -0.4**
UOSS S **S** **15 53 41.0 -2.3**
**HATD Hatta, Dubai 69.71 300** *i* P **P** **15 45 17.6 -0.3**
SNR=350
**HATD Hatta, Dubai 69.71 300** P **P** **15 45 18.2 +0.4**
SNR=162
HATD P **P** **15 45 18.2 +0.4**
SNR=162
HATD S **S** **15 53 44.6 +0.9**
HATD S **S** **15 53 44.6 +0.9**
**MDH Madha 69.72 300** *i* P **P** **15 45 16.3 -1.5**
SNR=34
**MDH Madha 69.72 300** P **P** **15 45 18.0 +0.1**
SNR=37
MDH P **P** **15 45 18.0 +0.1**
SNR=37
**ASHO Ashiyiah 69.73 300** *i* P **P** **15 45 17.7 -0.3**
SNR=716
**ASHO Ashiyiah 69.73 300** P **P** **15 45 18.3 +0.3**
SNR=205
ASHO S **S** **15 53 43.1 -0.8**
**ALNE Al Ain 69.80 299** *i* P **P** **15 45 17.9 -0.5**
SNR=567
**ALNE Al Ain 69.80 299** P **P** **15 45 18.2 -0.2**
SNR=207
ALNE P **P** **15 45 18.2 -0.2**
SNR=207
**WHFO Wadi Hawf 69.82 292** P **P** **15 45 18.0 -0.7**
SNR=61
WHFO P **P** **15 45 18.0 -0.7**
SNR=61
WHFO S **S** **15 53 41.5 -3.7**
WHFO S **S** **15 53 41.5 -3.7**
**MSFE Esma-Masafi 69.86 300** *i* P **P** **15 45 18.5 -0.3**
SNR=85
**MASF Masafi 69.86 300** P **P** **15 45 19.1 +0.3**
SNR=87
MASF P **P** **15 45 19.1 +0.3**
SNR=87
**UMZA Um Al Zommool 69.90 297** P **P** **15 45 18.5 -0.5**
UMZA P **P** **15 45 18.5 -0.5**
UMZA S **S** **15 53 43.0 -2.9**
UMZA S **S** **15 53 43.0 -2.9**
**BANOM Banah 69.92 301** *i* P **P** **15 45 19.0 -0.1**
SNR=18
**BANOM Banah 69.92 301** P **P** **15 45 19.4 +0.3**
**SHME Shamm 70.09 301** *i* P **P** **15 45 20.0 -0.1**
SNR=290
**SHME Shamm 70.09 301** P **P** **15 45 20.5 +0.4**
SNR=107
SHME S **S** **15 53 47.9 -0.1**
**ABTO Aybut 70.11 291** P **P** **15 45 20.1 -0.4**
SNR=55
ABTO P **P** **15 45 20.1 -0.4**
SNR=55
ABTO S **S** **15 53 45.2 -3.4**
ABTO S **S** **15 53 45.2 -3.4**
**FAQ Al Faqa, Dubai 70.15 300** *i* P **P** **15 45 20.0 -0.4**
SNR=120
**FAQ Al Faqa, Dubai 70.15 300** P **P** **15 45 20.4 -0.1**
SNR=217
FAQ P **P** **15 45 20.4 -0.1**
SNR=217
FAQ S **S** **15 53 46.0 -2.6**
FAQ S **S** **15 53 46.0 -2.6**
**MIDW Midway 70.15 57** P **P** **15 45 21.9 +1.6**
**MIDW Midway 70.15 57** P **P** **15 45 21.6 +1.2**
**NAZ Nazwa, Dubai 70.17 300** *i* P **P** **15 45 20.0 -0.6**
SNR=275
**NAZ Nazwa, Dubai 70.17 300** P **P** **15 45 20.8 +0.2**
SNR=145
NAZ P **P** **15 45 20.8 +0.2**
SNR=145
**UMQ Umm Al-Quwin 70.33 300** *i* P **P** **15 45 21.7 +0.2**
SNR=76
**UMQ Umm Al-Quwin 70.33 300** P **P** **15 45 21.9 +0.4**
SNR=65
**ASUD Al Ashush, Dub 70.34 299** *i* P **P** **15 45 21.3 -0.2**
SNR=588
**ASUD Al Ashush, Dub 70.34 299** P **P** **15 45 22.0 +0.4**
SNR=190
ASUD S **S** **15 53 49.4 -1.4**
**AJN Ajban 70.61 299** *i* P **P** **15 45 22.5 -0.7**
SNR=38
**AJN Ajban 70.61 299** P **P** **15 45 22.6 -0.6**
SNR=126
AJN S **S** **15 53 50.2 -3.7**

**MAW Mawson 71.03 200** P **P** **15 45 25.5 +0.7**
comp=Z,416nm,1.0s,baz=72,slow=6.4,SNR=188
MAW S **S** **15 53 58.9 +1.9**
comp=Z,33nm,1.0s,baz=168,slow=20,SNR=9.4
MAW PKPPKP **P'P'df** **16 13 11.9 -2.2**
comp=Z,98nm,1.3s,baz=231,slow=3.6,SNR=21
comp=Z,416nm,1.0s
**MA2 Magadan 71.15 16** P **P** **15 45 26.6 +1.0**
**MA2 Magadan 71.15 16** P **P** **15 45 25.9 +0.3**
**MA2 Magadan 71.15 16***c* *i*P **P** **15 45 26.1 +0.5**
MA2 pmax pmax
comp=Z,4μm,1.0s
**MA2 Magadan 71.15 16** P **P** **15 45 26.3 +0.7**
comp=Z,5μm,0.9s,comp=Z,38μm
**ABPO Ambohimpanom 71.18 252** P **P** **15 45 27.2 +0.3**
ABPO lAmb lAmb 15 45 30.4
comp=Z,3μm,1.9s
**ABPO Ambohimpanom 71.18 252** *eP* **P** **15 45 27.4 +0.5**
ABPO lAmb lAmb 15 45 29.2
comp=Z,4μm,1.9s
**ABPO Ambohimpanom 71.18 252** P **P** **15 45 27.2 +0.3**
ABPO pmax pmax
comp=Z,3μm,2.0s
**ABPO Ambohimpanom 71.18 252** P **P** **15 45 27.1 +0.2**
ABPO PcP **PcP** **15 45 43.4 +0.4**
ABPO pP **pP** **15 47 22.7 +2.4**
**MZWR Madinat Zayed 71.34 298** S **S** **15 53 58.1 -4.0**
**FOMA Nahampoana Res 71.36 246** P **P** **15 45 29.2 +1.6**
SNR=29
**FOMA Nahampoana Res 71.36 246** P **P** **15 45 29.1 +1.5**
**MZR Muzera 71.47 297** *i* P **P** **15 45 28.0 -0.3**
SNR=426
**MZR Muzera 71.47 297** P **P** **15 45 28.4 +0.2**
SNR=217
**VOI Vohitsoka 71.54 249** *eP* **P** **15 45 28.5 -0.4**
**VOI Vohitsoka 71.54 249** P **P** **15 45 29.3 +0.4**
SNR=100
**GHWR Ruwais 72.28 298** P **P** **15 45 32.7 -0.2**
GHWR S **S** **15 54 09.2 -3.4**
**JRN Qarnain Island 72.58 299** P **P** **15 45 34.3 -0.4**
SNR=150
**BVA0 Borovoye Array 73.24 331** *i* P **P** **15 45 37.4 -0.4**
**BVAR Borovoye Array 73.24 331** P **P** **15 45 37.5 -0.4**
comp=Z,2μm,0.7s,baz=134,slow=8.3,SNR=1249
BVAR S **S** **15 54 20.9 -1.2**
comp=Z,64nm,0.9s,baz=130,slow=14,SNR=10
BVAR PKKP **PKKPdf** **16 04 57.8 +0.9**
comp=Z,3.0nm,0.9s,baz=303,slow=6.9,SNR=3.6
BVAR PKPPKP **P'P'df** **16 13 09.6 -0.3**
comp=Z,3.7nm,1.0s,baz=327,slow=2.5,SNR=5.8
BVAR P4KPbc 16 22 14.3
comp=Z,2.2nm,0.8s,baz=126,slow=7.5,SNR=8.6
comp=Z,2μm,0.7s
**BRVK Borovoye 73.31 331** P **P** **15 45 37.9 -0.3**
BRVK lAmb lAmb 15 45 41.0
comp=Z,2μm,0.8s
**BRVK Borovoye 73.31 331** P **P** **15 45 38.4 +0.2**
BRVK S **S** **15 54 23.3 +0.4**
**BRVK Borovoye 73.31 331***c* *i*P **P** **15 45 37.6 -0.6**
BRVK pmax pmax
comp=Z,3μm,1.3s
**SLWR Sila 73.35 298** P **P** **15 45 39.0 0.0**
SLWR S **S** **15 54 20.3 -4.1**
SLWR S **S** **15 54 20.8 -3.6**
**JOHN Johnston Islan 73.86 70** P **P** **15 45 43.1 +1.0**
**JOHN Johnston Islan 73.86 70** P **P** **15 45 42.9 +0.8**
**TRNA Turayna 73.95 298** P **P** **15 45 42.4 -0.1**
SNR=112
TRNA S **S** **15 54 26.8 -4.2**
**SMRA Abu-Samra 74.29 298** P **P** **15 45 44.4 0.0**
SNR=168
SMRA S **S** **15 54 30.7 -4.0**
**SEY Seymchan 74.39 15***c* *i*P **P** **15 45 44.4 +0.3**
SEY pmax pmax
comp=Z,4μm,1.0s
**SHMA Al-Shehemyia 74.48 299** P **P** **15 45 45.3 -0.1**
SNR=90
SHMA S **S** **15 54 33.3 -3.3**
**SAKB Bahrain 74.88 299** P **P** **15 45 48.0 +0.3**
SAKB S **S** **15 54 37.1 -4.0**
**SHEM Shemya Is, Ala 75.48 31** S **S** **15 54 47.2 +0.8**
comp=Z,124nm,1.1s,baz=274,slow=23,SNR=10
**AB31 Akbulak array 76.69 324** *i* P **P** **15 45 56.7 -0.5**
**ABKAR Akbulak array 76.69 324** P **P** **15 45 56.3 -0.9**
**ABKAR Akbulak array 76.69 324** P **P** **15 45 56.7 -0.5**
ABKAR lAmb lAmb 15 45 58.9
comp=Z,5μm,1.6s
**KBD Kabd 78.17 302** P **P** **15 46 05.9 +0.2**
KBD S **S** **15 55 13.1 -2.9**
**I31KZ AKTYUBINSK INF 78.32 325** P **P** **15 46 05.0 -1.0**
baz=101,slow=5.8,SNR=6.1
**AKTO Aktyubinsk 78.34 325** P **P** **15 46 06.0 -0.2**
comp=Z,2μm,0.7s,baz=110,slow=6.0,SNR=1146
AKTO S **S** **15 55 17.6 +0.7**
comp=Z,11nm,1.0s,baz=217,slow=22,SNR=10
AKTO PKPPKP **P'P'df** **16 12 57.8 -3.3**
comp=Z,3.2nm,1.0s,baz=229,slow=2.8,SNR=2.7
comp=Z,2μm,0.7s
**RAR Rarotonga 78.49 110** P **P** **15 46 08.6 +1.0**
**RAR Rarotonga 78.49 110** P **P** **15 46 08.6 +1.0**
**RAR Rarotonga 78.49 110** P **P** **15 46 08.6 +1.0**
RAR pmax pmax
comp=Z,635nm,1.3s
**RAYN Ar Rayn 78.69 296** P **P** **15 46 08.8 +0.2**
RAYN lAmb lAmb 15 46 11.1
comp=Z,2μm,0.8s
**RAYN Ar Rayn 78.69 296** *i* P **P** **15 46 08.7 0.0**
SNR=1513
**RAYN Ar Rayn 78.69 296** P **P** **15 46 08.7 0.0**
**RAYN Ar Rayn 78.69 296** P **P** **15 46 08.8 +0.2**
RAYN pmax pmax
comp=Z,2μm,0.9s
**ATD Arta Tunnel 78.79 283** lAmb lAmb 15 46 14.8
comp=Z,2μm,1.3s
**ATD Arta Tunnel 78.79 283** P **P** **15 46 10.4 +1.0**
comp=Z,29nm,0.8s,baz=98,slow=2.8,SNR=136
**ATD Arta Tunnel 78.79 283** *eP* **P** **15 46 06.9 -2.5**
ATD *eS* S 15 55 14.0 -9.0
**TIXI Tiksi 79.08 3** P **P** **15 46 08.5 -1.1**
TIXI lAmb lAmb 15 46 11.9
comp=Z,2μm,1.1s
**TIXI Tiksi 79.08 3***de*P **P** **15 46 09.1 -0.5**
TIXI pmax pmax
comp=Z,2μm,1.0s
**SVE Sverdlovsk 80.02 331***d* *i*P **P** **15 46 14.1 -0.8**
SVE *i* S **S** **15 55 31.6 -2.4**
SVE pmax pmax
comp=Z,2μm,1.4s
**ARU Arti 80.83 330** P **P** **15 46 18.3 -0.8**
ARU lAmb lAmb 15 46 20.9
comp=Z,1μm,1.0s
**ARU Arti 80.83 330** P **P** **15 46 17.9 -1.2**
comp=Z,798nm,0.9s,baz=120,slow=2.5,SNR=402
comp=Z,798nm,0.9s
**ARU Arti 80.83 330***c* *i*P **P** **15 46 17.8 -1.2**
ARU *PP **pP** **15 48 14.7 -1.4**
ARU 15 49 31.3
ARU S **S** **15 55 38.8 -3.4**
ARU pmax pmax
comp=Z,2μm,1.1s
**KIBK Kibwezi 81.52 269** lAmb lAmb 15 46 27.4
comp=Z,2μm,1.7s
**KIBK Kibwezi 81.52 269** P **P** **15 46 21.8 -1.8**
**KIBK Kibwezi 81.52 269** P **P** **15 46 24.5 +0.8**
SNR=88
**BILL Bilibino 82.02 16** P **P** **15 46 24.8 -0.2**
**BILL Bilibino 82.02 16***ce*P **P** **15 46 24.9 0.0**
BILL *e**PP **pP** **15 48 22.2 -0.6**
BILL *e**SP **sP** **15 49 20.4 +1.7**
BILL *e* 15 49 42.3
BILL *e*PPP PPP 15 51 36.6
BILL *i* S **SKSac** **15 55 52.0 -0.6**
BILL pmax pmax
comp=Z,605nm,1.7s
**MAK Makhachkala 82.23 315***d* *i*P **P** **15 46 27.0 +0.5**
MAK *e**PP **pP** **15 48 21.4 -3.0**
MAK *e**SP **sP** **15 49 18.0 -2.2**
MAK *e* 15 49 43.0
MAK *e*S **SKSac** **15 55 54.4 -0.6**
MAK *e*SS **SS** **16 01 34.4 +1.1**
MAK *e*SSS SSS 16 05 08.4
MAK pmax pmax
comp=Z,1μm,0.7s
MAK pmax pmax
comp=Z,7μm,2.2s

**FURI Furi 82.42 280** *eP* **P** **15 46 24.3 -4.2**
FURI *eS* **SKSac** **15 55 49.3 -8.8**
**KMBO Kilima Mbogo 82.45 270** P **P** **15 46 29.4 +0.8**
**KMBO Kilima Mbogo 82.45 270** P **P** **15 46 29.4 +0.8**
KMBO pmax pmax
comp=Z,558nm,1.1s
**QSPA South Pole Qui 82.62 180** P **P** **15 46 28.1 -0.2**
**QSPA South Pole Qui 82.62 180** P **P** **15 46 28.0 -0.2**
comp=Z,292nm,0.6s,baz=279,slow=0.4,SNR=673
QSPA S **SKSac** **15 55 56.2 -0.8**
comp=Z,41nm,1.0s,baz=95,slow=22,SNR=29
comp=Z,292nm,0.6s
**XMAS Kiritimati 83.09 87** P **P** **15 46 34.2 +2.7**
**GNI Garni 83.43 312** P **P** **15 46 34.1 +1.3**
**GNI Garni 83.43 312** P **P** **15 46 33.3 +0.5**
**GNI Garni 83.43 312** S **SKSac** **15 55 57.4 -5.9**
comp=Z,11nm,0.7s,baz=208,slow=9.6,SNR=3.8
**GNI Garni 83.43 312** P **P** **15 46 35.1 +2.2**
**GNI Garni 83.43 312***c* *i*P **P** **15 46 33.6 +0.7**
GNI pmax pmax
comp=Z,1μm,1.1s
**TEMBE Tembe Elephant 84.36 244** *eP* **P** **15 46 37.6 +0.1**
TEMBE lAmb lAmb 15 46 41.0
comp=Z,550nm,0.8s
**NIKH Nikolski High 84.82 35** P **P** **15 46 39.6 +0.5**
**NIKH Nikolski High 84.82 35** P **P** **15 46 39.4 +0.2**
**NIKH Nikolski High 84.82 35** P **P** **15 46 39.2 +0.1**
baz=251,SNR=28
NIKH S **S** **15 56 19.5 -2.2**
baz=251
**CHIPN CHIPINGE 84.82 250** *eP* **P** **15 46 40.4 +0.4**
**CHIPN CHIPINGE 84.82 250** *i* P **P** **15 46 42.0 +1.9**
**CHIPN CHIPINGE 84.82 250** *i* P **P** **15 46 41.2 +1.1**
**CHIPN CHIPINGE 84.82 250** *i* P **P** **15 46 40.8 +0.7**
**LODK Lodwar 84.91 274** P **P** **15 46 41.3 +0.7**
SNR=216
**LODK Lodwar 84.91 274** *eP* P 15 46 33.5 -7.1
LODK *eS* SKSac 15 56 02.5 -11
**POGA Pongola 84.96 243** lAmb lAmb 15 46 43.5
comp=Z,2μm,0.7s
**POGA Pongola 84.96 243** *eP* **P** **15 46 41.5 +1.0**
POGA lAmb lAmb 15 46 43.3
comp=Z,2μm,0.8s
**ELIB Princess Elisa 85.05 198** *dP* **P** **15 46 40.8 +0.7**
comp=Z,340nm,0.9s
ELIB *dp*P **pP** **15 48 37.5 -1.5**
ELIB *d*PP **PP** **15 50 07.1 +0.1**
**BELG Belogornoye 85.09 324** S **SKSac** **15 56 11.1 -1.6**
comp=Z,75nm,1.1s,baz=342,slow=23,SNR=12
**BELG Belogornoye 85.09 324***c* *i*P **P** **15 46 39.8 -0.6**
BELG pmax pmax
comp=Z,574nm,1.4s
**NCK Nalchik 85.13 315***c* *i*P **P** **15 46 42.2 +1.3**
NCK pmax pmax
comp=Z,2μm,1.2s
**KIP Kipapa 85.46 68** P **P** **15 46 45.8 +2.9**
**KIP Kipapa 85.46 68***de*P **P** **15 46 44.7 +1.8**
KIP pmax pmax
comp=Z,192nm,1.8s
**SPIA Saint Paul Isl 85.51 31** P **P** **15 46 43.4 +1.0**
**SPIA Saint Paul Isl 85.51 31** P **P** **15 46 43.8 +1.4**
**SPIA Saint Paul Isl 85.51 31** P **P** **15 46 43.3 +1.0**
baz=249,SNR=20
SPIA S **S** **15 56 26.4 -1.7**
baz=249
**DHH Diamond Head 85.63 68** P **P** **15 46 44.3 +0.5**
**DHH Diamond Head 85.63 68** P **P** **15 46 44.3 +0.5**
**MOPA Mopani 85.63 247** *eP* **P** **15 46 43.5 -0.3**
MOPA lAmb lAmb 15 46 46.4
comp=Z,3μm,0.9s
**MOPA Mopani 85.63 247** *i* P **P** **15 46 45.1 +1.3**
**MOPA Mopani 85.63 247** *i* P **P** **15 46 44.7 +0.9**
**MOPA Mopani 85.63 247** *i* P **P** **15 46 45.1 +1.3**
**P08K Saint George I 85.67 32** P **P** **15 46 44.2 +1.1**
baz=250,SNR=6.8
P08K S **S** **15 56 28.5 -1.2**
baz=250
P08K S **S** **15 56 28.5 -1.2**
baz=250
**KBZ Khabaz 85.68 315** P **P** **15 46 43.6 +0.2**
comp=Z,853nm,0.8s,baz=111,slow=4.0,SNR=792
KBZ PKKPbc **PKKPbc** **16 04 42.9 -0.9**
comp=Z,10nm,0.8s,baz=207,slow=1.8,SNR=11
comp=Z,853nm,0.8s
**KBZ Khabaz 85.68 315***c* *i*P **P** **15 46 43.4 -0.1**
KBZ pmax pmax
comp=Z,1μm,0.9s
**PMBG Pietermaritzbu 85.79 241** *eP* **P** **15 46 45.2 +0.6**
PMBG lAmb lAmb 15 46 47.8
comp=Z,1μm,1.8s
**SHA1 Shidzhatmaz 85.85 315***c* *i*P **P** **15 46 44.5 -0.1**
**KVAR Kislovodsk Arr 85.87 315** S **SKSac** **15 56 19.1 +0.8**
comp=Z,38nm,1.3s,baz=178,slow=18,SNR=2.3
**KIV Kislovodsk 85.88 315** P **P** **15 46 45.3 +0.7**
KIV lAmb lAmb 15 46 47.7
comp=Z,786nm,0.9s
**KIV Kislovodsk 85.88 315** *i* P **P** **15 46 44.4 -0.2**
SNR=91
**KIV Kislovodsk 85.88 315** P **P** **15 46 46.0 +1.3**
**KIV Kislovodsk 85.88 315** ⇑P **P** **15 46 46.0 +1.3**
**KIV Kislovodsk 85.88 315** *eP* **P** **15 46 44.6 0.0**
KIV *e**PP **pP** **15 48 43.2 -0.6**
KIV *e**SP **sP** **15 49 39.4 +0.1**
KIV *e* 15 50 13.8
KIV *e*PPP PPP 15 52 15.2
KIV *e*SSS SSS 16 05 57.6
KIV pmax pmax
comp=Z,762nm,1.1s
KIV pmax pmax
comp=Z,2μm,4.0s
KIV MLR MLR
comp=Z,1μm,20.0s
**KIV Kislovodsk 85.88 315** P **P** **15 46 45.5 +0.9**
comp=Z,833nm,0.9s,comp=Z,10μm
**GOF Gofitskoye 85.91 316***c* *i*P **P** **15 46 44.8 +0.2**
GOF *e*S **SKSac** **15 56 17.4 -0.8**
**HOED Hoedspruit, Li 85.96 246** *eP* **P** **15 46 45.8 +0.3**
HOED lAmb lAmb 15 46 47.6
comp=Z,779nm,1.1s
**BCA Borcka 86.05 312** ⇑P **P** **15 46 47.0 +1.7**
**PILG Pilgrimsrest, 86.11 245** *eP* **P** **15 46 46.6 +0.3**
PILG lAmb lAmb 15 46 48.5
comp=Z,435nm,1.0s
**KIRV Kirov 86.21 330** S **SKSac** **15 56 18.7 -0.6**
comp=Z,17nm,0.7s,baz=295,slow=23,SNR=7.9
**KIRV Kirov 86.21 330***c* *i*P **P** **15 46 45.5 -0.2**
**UNV Unalaska Valle 86.43 35** P **P** **15 46 46.7 -0.1**
**UNV Unalaska Valle 86.43 35** P **P** **15 46 47.0 +0.2**
**UNV Unalaska Valle 86.43 35** P **P** **15 46 46.8 0.0**
baz=252,SNR=51
UNV S **S** **15 56 33.0 -4.1**
baz=252
**NWCL Newcastle 86.53 243** *eP* **P** **15 46 48.0 -0.1**
NWCL lAmb lAmb 15 46 50.0
comp=Z,394nm,1.1s
**DULL Dullstroom, Mp 86.54 245** *eP* **P** **15 46 49.2 +0.9**
DULL lAmb lAmb 15 46 51.2
comp=Z,4μm,2.0s
**CRLN Carolina, Mapu 86.61 244** *eP* **P** **15 46 49.7 +1.1**
CRLN lAmb lAmb 15 46 51.9
comp=Z,210nm,1.0s
**KSTD Kokstad 86.71 240** *eP* **P** **15 46 50.1 +1.1**
KSTD lAmb lAmb 15 46 53.1
comp=Z,2μm,2.6s
**LVA Lava Point 86.79 35** lAmb lAmb 15 46 51.4
comp=Z,765nm,0.6s
**MPHEP Siloam, Limpop 86.81 247** *eP* **P** **15 46 50.5 +1.0**
MPHEP lAmb lAmb 15 46 52.4
comp=Z,2μm,1.8s
**MUSN Musina, Limpop 87.18 248** *eP* **P** **15 46 52.0 +0.8**
MUSN lAmb lAmb 15 46 54.5
comp=Z,4μm,1.8s
**MUSN Musina, Limpop 87.18 248** *i* P **P** **15 46 52.5 +1.3**
**MUSN Musina, Limpop 87.18 248** *i* P **P** **15 46 52.5 +1.3**
**MUSN Musina, Limpop 87.18 248** *i* P **P** **15 46 52.5 +1.3**
**HUH Hualalai 87.20 70** lAmb lAmb 15 46 57.7
comp=Z,2μm,1.5s
**GAMB Gambell 87.29 24** P **P** **15 46 52.0 +1.4**
baz=247
GAMB S **S** **15 56 44.1 -0.5**
baz=247
**KHU Kahuku 87.34 70** lAmb lAmb 15 46 57.2
comp=Z,833nm,1.4s
**HPAH Hawaii Prepara 87.38 70** lAmb lAmb 15 46 58.1
comp=Z,682nm,1.1s

MWH **Moku'aweowe** **87.39 70** IAmb IAmb 15 46 57.9
comp=Z,1µm,1.4s
LABN **Labinsk** **87.41 315** *e*P **P** **15 46 52.1 +0.4**
LABN *e**PP **pP** **15 48 48.8 -2.6**
LABN *e* 15 50 25.7
LABN *e*S **SKSac** **15 56 27.6 +0.4**
LABN pmax pmax
comp=Z,2µm,1.5s
POHA **Pohakuloa** **87.49 70** P **P** **15 46 55.5 +2.6**
MLH **Mauna Loa** **87.59 70** IAmb IAmb 15 46 58.7
comp=Z,2µm,1.2s
HLP **Hilina Pali** **87.63 70** IAmb IAmb 15 46 58.6
comp=Z,1µm,1.4s
UWE **Uwekahuna** **87.66 70** IAmb IAmb 15 46 58.7
comp=Z,1µm,1.5s
BYL **Byron's Ledge** **87.69 70** IAmb IAmb 15 46 58.8
comp=Z,977nm,1.6s
HATHI **Halema'uma'u T** **87.69 70** IAmb IAmb 15 46 59.6
comp=Z,915nm,1.4s
PUH **Pauahi** **87.73 70** IAmb IAmb 15 46 58.9
comp=Z,771nm,1.4s
TBI **Tubuai** **87.81 113** *e*PKIKP P 15 46 48.7 -5.3
comp=Z,4µm,28.0s
TBI **Tubuai** **87.81 113** *e*P **P** **15 46 55.4 +1.4**
comp=Z,1µm,1.3s
TBI *e*pP **pP** **15 48 50.8 -2.6**
comp=Z,7µm,29.0s
TBI *e*S **SKSac** **15 56 34.4 +3.9**
comp=Z,18µm,31.8s
TBI *e*SS **SS** **16 02 53.9 -0.9**
comp=Z,11µm,27.5s
TBI *e*LQ LQ 16 11 55.7
comp=Z,7µm,24.2s
TBI *e*LR LR 16 15 39.2
comp=Z,10µm,31.2s
TBI *e*LR LR 16 15 40.6
comp=Z,2µm,30.5s
ERBR **Yeremizino-Bor** **87.81 316** *e*P **P** **15 46 52.9 -0.7**
ERBR *e**PP **pP** **15 48 51.4 -2.1**
ERBR *e* 15 50 26.5
ERBR *e*S **SKSac** **15 56 27.0 -2.6**
ERBR pmax pmax
comp=Z,843nm,0.7s
WTBG **Waterberg Wild** **87.84 246** *e*P **P** **15 46 54.9 +0.5**
WTBG IAmb IAmb 15 46 57.0
comp=Z,597nm,1.6s
SOC **Sochi** **87.89 314** *e*P **P** **15 46 52.1 -1.8**
SOC *e**PP **pP** **15 48 49.9 -4.0**
SOC *e**SP **sP** **15 49 47.0 -2.3**
SOC *e* 15 50 26.5
SOC *e*PPP PPP 15 52 28.2
SOC *e*S **SKSac** **15 56 27.2 -2.9**
SOC *e*SS **SS** **16 02 54.5 -0.9**
SOC *e*SSS SSS 16 06 34.4
SOC pmax pmax
comp=Z,360nm,0.6s
ASF **Jabal al Asfar** **87.90 303** PKKPbc PKKPbc 16 04 39.2 +1.1
comp=Z,12nm,1.0s,baz=48,slow=0.1,SNR=7.1
RUST **Rust De Winter** **88.04 245** *e*P **P** **15 46 55.5 +0.3**
RUST IAmb IAmb 15 46 57.2
comp=Z,192nm,0.7s
KRI **Karoi** **88.06 253** *e*P **P** **15 46 55.5 0.0**
KRI **Karoi** **88.06 253** *i*P **P** **15 46 55.7 +0.1**
KRI **Karoi** **88.06 253** *i*P **P** **15 46 57.1 +1.5**
KRI **Karoi** **88.06 253** *i*P **P** **15 46 55.7 +0.1**
VRH **Novokhopyorsk** **88.28 322** *e*P **P** **15 46 54.4 -1.1**
VRH pmax pmax
comp=Z,753nm,0.6s
SNKL **Senekal, Frees** **88.32 242** *e*P **P** **15 46 56.7 +0.1**
SNKL IAmb IAmb 15 46 58.5
comp=Z,222nm,1.0s
PAE **Paea** **88.40 107** *e*P **P** **15 46 58.4 +1.5**
comp=Z,370nm,1.2s
PAE *e*pP **pwP** **15 49 04.3 +4.6**
comp=Z,75nm,1.2s
PAE *e*S **S** **15 56 58.5 +1.7**
comp=Z,878nm,23.7s
PAE **Paea** **88.40 107** *e*LR LR 16 15 53.9
comp=Z,338nm,22.5s
PPT2 **Papeete2** **88.41 107** *e*PKIKP **P** **15 46 54.3 -2.8**
comp=Z,1µm,25.5s
PPT2 **Papeete2** **88.41 107** *e*P **P** **15 46 59.6 +2.5**
comp=Z,1µm,1.2s
PPT2 *e*pP **pP** **15 48 50.1 -6.2**
comp=Z,2µm,26.0s
PPT2 *e*pP **pwP** **15 49 04.0 +4.1**
comp=Z,189nm,1.2s
PPT2 *e*S **S** **15 56 52.1 -5.1**
comp=Z,1µm,23.5s
PPT2 *e*S **SKKSac** **15 56 52.3 +4.7**
comp=Z,6µm,26.0s
PPT2 *e*SS **SS** **16 02 58.3 -5.6**
comp=Z,4µm,26.5s
PPT2 *e*LQ LQ 16 12 11.0
comp=Z,3µm,25.2s
PPT2 *e*LR LR 16 15 53.3
comp=Z,3µm,28.0s
PPT2 *e*LR LR 16 15 55.4
comp=Z,1µm,27.6s
PPT2 *e*LR LR 16 16 00.0
comp=Z,2µm,29.2s
TSWA **Tswaing Meteor** **88.41 245** *e*P **P** **15 46 57.8 +0.8**
TSWA IAmb IAmb 15 47 00.7
comp=Z,215nm,0.8s
PPT **Papeete** **88.42 107** P **P** **15 46 59.3 +2.3**
comp=Z,1µm,1.1s,baz=318,slow=2.3,SNR=44
comp=Z,1µm,1.1s
PPTF **Pamatai, Papee** **88.42 107** P **P** **15 46 59.8 +2.7**
PPTF **Pamatai, Papee** **88.42 107** IAmb IAmb 15 47 03.1
comp=Z,1µm,1.1s
FALS **False Pass** **88.45 34** P **P** **15 46 56.1 -0.1**
FALS **False Pass** **88.45 34** P **P** **15 46 56.2 0.0**
baz=255,SNR=43
FALS S **S** **15 56 50.2 -5.5**
baz=255
GAZ **Gaziantep** **88.52 308** IAmb IAmb 15 46 59.6
comp=Z,2µm,1.6s
M11K **Mekoryuk** **88.56 29** P **P** **15 46 58.5 +1.8**
baz=252,SNR=31
M11K S **S** **15 56 55.2 -1.3**
baz=252
CRAIL **Swartwater, Li** **88.60 247** *e*P **P** **15 46 58.0 +0.1**
MATP **Matopo** **88.66 250** *i*P **P** **15 47 00.3 +2.1**
MATP **Matopo** **88.66 250** *i*P **P** **15 46 59.7 +1.4**
MATP **Matopo** **88.66 250** *i*P **P** **15 47 00.3 +2.1**
TVO **Taravao** **88.69 108** *e*P **P** **15 47 01.0 +2.6**
comp=Z,732nm,1.2s
TVO *e*S **S** **15 56 54.4 -5.3**
comp=Z,1µm,24.2s
HRAO **HartRAO** **88.71 244** *e*P **P** **15 46 58.7 +0.3**
GRHM **Grahamstown, E** **88.85 237** IAmb IAmb 15 47 01.7
comp=Z,355nm,0.8s
GRHM **Grahamstown, E** **88.85 237** *e*P **P** **15 46 59.8 +1.0**
GRHM IAmb IAmb 15 47 01.4
comp=Z,387nm,0.9s
PRYS **Parys** **88.86 243** *e*P **P** **15 46 58.8 -0.3**
PRYS IAmb IAmb 15 47 01.0
comp=Z,432nm,0.7s
LEPH **Lephalale, Lim** **88.87 246** *e*P **P** **15 46 59.4 +0.2**
LEPH IAmb IAmb 15 47 01.2
comp=Z,523nm,1.5s
NYAT **Nyati, Northwe** **88.88 245** *e*P **P** **15 47 00.3 +1.2**
NYAT IAmb IAmb 15 47 01.9
comp=Z,888nm,0.7s
NVL **N'lazarevskaya** **88.92 198**⇑*i*P **P** **15 46 57.7 -0.5**
NVL *e**PP **pP** **15 48 59.4 +0.9**
NVL *e* 15 50 37.0
NVL *e*S **SKSac** **15 56 35.1 -0.1**
NVL *e*SS **SS** **16 03 09.9 +1.7**
NVL pmax pmax
comp=Z,169nm,1.2s
NVL MLR MLR
comp=Z,897nm,18.0s
MBAR **Mbarara** **88.98 270** P **P** **15 47 00.8 +0.8**
MBAR **Mbarara** **88.98 270** *e*P **P** **15 47 00.6 +0.7**
MBAR IAmb IAmb 15 47 02.2
comp=Z,580nm,1.4s
MBAR **Mbarara** **88.98 270** P **P** **15 47 00.5 +0.7**
MBAR **Mbarara** **88.98 270** *e*P P 15 46 52.9 -7.0
MBAR *e*S **SKSac** **15 56 31.1 -7.0**
MBAR **Mbarara** **88.98 270***c**e*P **P** **15 47 00.3 +0.4**
MBAR pmax pmax
comp=Z,565nm,1.7s
HWQ **Hawqa** **89.04 305** *e*P **P** **15 47 00.7 +1.0**
NHAM **Northam, North** **89.17 245** *e*P **P** **15 47 01.2 +0.7**
NHAM IAmb IAmb 15 47 02.9
comp=Z,282nm,0.8s
BHL **Bhannes** **89.22 304** *e*P **P** **15 47 01.7 +1.2**
MMAI **Mount Meron Ar** **89.28 303** P **P** **15 47 01.9 +1.1**
comp=Z,127nm,0.5s,baz=88,slow=6.0,SNR=270
MMAI S **SKSac** **15 56 40.6 +1.7**
comp=Z,2.0nm,0.7s,baz=356,slow=2.5,SNR=1.3
MMAI PKKPbc **PKKPbc** **16 04 35.3 +0.5**
comp=Z,10nm,1.1s,baz=37,slow=0.4,SNR=5.4
comp=Z,127nm,0.5s
NMMU **Nelson Mandela** **89.33 236** *e*P **P** **15 47 02.7 +1.8**
S12K **Black Hills** **89.41 34** P **P** **15 47 00.5 -0.3**
baz=256,SNR=67
S12K S **S** **15 56 58.9 -5.6**
baz=256
TNA **Tin City** **89.44 23** P **P** **15 47 01.6 +1.0**
baz=251
TNA S **S** **15 57 02.9 -1.5**
baz=251
MTLB **Matlabas, Limp** **89.55 246** *e*P **P** **15 47 02.7 +0.4**
MTLB IAmb IAmb 15 47 05.8
comp=Z,681nm,0.7s
SOE **Somerset East** **89.60 237** IAmb IAmb 15 47 07.0
comp=Z,524nm,1.2s
SOE **Somerset East** **89.60 237** *e*P **P** **15 47 02.3 0.0**
SOE IAmb IAmb 15 47 06.7
comp=Z,525nm,1.2s
LSZ **Lusaka** **89.62 255** P **P** **15 47 03.1 +0.3**
LSZ IAmb IAmb 15 47 05.2
comp=Z,515nm,0.9s
LSZ **Lusaka** **89.62 255** *e*P **P** **15 47 03.0 +0.3**
LSZ IAmb IAmb 15 47 04.6
comp=Z,618nm,0.6s
LSZ **Lusaka** **89.62 255** P **P** **15 47 03.3 +0.5**
LSZ **Lusaka** **89.62 255** P **P** **15 47 03.1 +0.3**
LSZ pmax pmax
comp=Z,515nm,0.9s
VORD **Divnogorie** **89.72 321** *e*P **P** **15 47 00.8 -1.4**
VORD *e**PP **pP** **15 49 01.0 -1.7**
VORD *e* 15 50 40.0
VORD *e* 15 56 36.2
VORD pmax pmax
comp=Z,400nm,0.5s
K13K **Kusilvak Mount** **89.73 27** P **P** **15 47 03.4 +1.4**
baz=254
K13K S **S** **15 57 02.9 -4.2**
baz=254
ANN **Anapa** **89.74 315***c**i*P **P** **15 47 01.5 -1.0**
ANN *e**PP **pP** **15 49 01.9 -1.0**
ANN *e* 15 50 44.0
ANN *e*S **SKSac** **15 56 39.0 -1.7**
ANN pmax pmax
comp=Z,1µm,0.8s
VSR **Storozhevoye** **89.85 322** *e*P **P** **15 47 00.5 -2.3**
VSR *e**PP **pP** **15 48 58.1 -5.1**
VSR *e* 15 50 40.0
VSR *e* 15 56 37.1
VSR pmax pmax
comp=Z,430nm,0.4s
VORR **Voronezh** **89.92 322** *e*P **P** **15 47 02.2 -0.9**
VORR *e**PP **pP** **15 49 00.0 -3.5**
VORR *e* 15 50 42.9
VORR *e* 15 56 35.2
VORR pmax pmax
comp=Z,1µm,1.2s
M13K **Dall Lake** **89.93 29** P **P** **15 47 04.5 +1.5**
baz=255,SNR=42
M13K S **S** **15 57 06.9 -2.0**
baz=255
HVD **Gariep Dam** **89.97 239** *e*P **P** **15 47 05.4 +1.3**
HVD IAmb IAmb 15 47 07.9
comp=Z,563nm,1.5s
F14K **Arctic Creek** **90.05 24** P **P** **15 47 04.9 +1.5**
baz=252,SNR=30
F14K S **S** **15 57 07.1 -2.8**
baz=252
BUFB **Buffelsbos** **90.07 236** *e*P **P** **15 47 06.3 +2.0**
BUFB IAmb IAmb 15 47 08.3
comp=Z,613nm,1.5s
ANM **Nome** **90.16 25** P **P** **15 47 05.3 +1.2**
baz=253,SNR=8.6
ANM S **S** **15 57 07.6 -3.3**
baz=253
SDPT **Sand Point** **90.21 34** P **P** **15 47 04.2 -0.2**
SDPT **Sand Point** **90.21 34** P **P** **15 47 04.4 0.0**
baz=257,SNR=133
SDPT S **S** **15 57 07.0 -4.7**
baz=257
LPSR **Galich'ya Gora** **90.28 323** *e*P **P** **15 47 04.1 -0.7**
LPSR *e* 15 50 45.7
LPSR *e* 15 56 36.2
LPSR pmax pmax
comp=Z,660nm,0.8s
PMOR **Pomariorio Ree** **90.35 105** *e*P **P** **15 47 08.8 +2.9**
comp=Z,2µm,1.1s
PMOR **Pomariorio Ree** **90.35 105** *e*S **S** **15 57 15.4 +0.9**
comp=Z,4µm,27.6s
PMOR **Pomariorio Ree** **90.35 105** *e*LR LR 16 16 41.8
comp=Z,3µm,24.4s
J14K **Nanvaranak Lak** **90.44 27** P **P** **15 47 06.5 +1.2**
baz=255
J14K S **S** **15 57 09.7 -3.7**
baz=255
BOSA **Boshof** **90.47 241** IAmb IAmb 15 47 10.4
comp=Z,1µm,1.6s
BOSA **Boshof** **90.47 241**⇑*i*P **P** **15 47 07.5 +1.0**
BOSA IAmb IAmb 15 47 08.3
comp=Z,762nm,1.6s
BOSA **Boshof** **90.47 241** P **P** **15 47 06.4 -0.1**
comp=Z,153nm,0.7s,baz=106,slow=3.9,SNR=241
BOSA PKKPbc **PKKPbc** **16 04 32.2 +0.5**
comp=Z,8.4nm,0.6s,baz=307,slow=2.5,SNR=15
comp=Z,153nm,0.7s
BOSA **Boshof** **90.47 241** *i*P **P** **15 47 07.5 +1.0**
BOSA **Boshof** **90.47 241** *i*P **P** **15 47 06.8 +0.3**
BOSA **Boshof** **90.47 241** *i*P **P** **15 47 07.5 +1.0**
L14K **Kuka Creek** **90.48 28** P **P** **15 47 06.4 +0.9**
baz=256,SNR=47
L14K S **S** **15 57 09.8 -4.0**
baz=256
VAH **Vaihoa** **90.57 105** *e*P **P** **15 47 09.2 +2.2**
comp=Z,2µm,1.3s
VAH **Vaihoa** **90.57 105** *e*S **S** **15 57 17.1 +0.6**
comp=Z,5µm,29.2s
CHNA **Chennaura Isl** **90.60 35** P **P** **15 47 06.1 -0.1**
baz=258,SNR=18
CHNA S **S** **15 57 09.5 -5.6**
baz=258
N14K **Kuskokwak Cree** **90.61 30** P **P** **15 47 07.0 +0.9**
baz=256
N14K S **S** **15 57 10.0 -5.0**
baz=256
SWZ **Schweizer** **90.61 243** *e*P **P** **15 47 07.1 -0.1**
SWZ IAmb IAmb 15 47 09.3
comp=Z,240nm,1.0s
O14K **Tigyukauivet M** **90.67 30** IAmb IAmb 15 47 09.7
comp=Z,460nm,0.8s
O14K **Tigyukauivet M** **90.67 30** P **P** **15 47 07.5 +1.1**
baz=257
O14K S **S** **15 57 11.1 -4.5**
baz=257
M14K **Bethel** **90.67 29** IAmb IAmb 15 47 09.6
comp=Z,319nm,0.8s
M14K **Bethel** **90.67 29** P **P** **15 47 07.4 +1.0**
baz=256,SNR=111
M14K S **S** **15 57 11.5 -4.0**
baz=256
LBTB **Lobatse** **90.70 245** IAmb IAmb 15 47 09.9
comp=Z,183nm,1.1s
LBTB **Lobatse** **90.70 245**⇑*i*P **P** **15 47 08.6 +1.1**
LBTB IAmb IAmb 15 47 09.7
comp=Z,177nm,1.0s
LBTB **Lobatse** **90.70 245** *i*P **P** **15 47 09.4 +1.8**
LBTB **Lobatse** **90.70 245** *i*P **P** **15 47 09.4 +1.8**
LBTB **Lobatse** **90.70 245** *i*P **P** **15 47 09.4 +1.8**
DIKM **Dikmen** **90.77 312** ⇓P **P** **15 47 08.0 +0.7**
DIKM **Dikmen** **90.77 312** P **P** **15 47 07.6 +0.2**
comp=Z,462nm,1.0s,comp=Z,5µm
F15K **North Star Dit** **90.78 24** IAmb IAmb 15 47 09.8
comp=Z,254nm,0.6s
F15K **North Star Dit** **90.78 24** P **P** **15 47 08.0 +1.1**
baz=254,SNR=62
F15K S **S** **15 57 12.5 -4.0**
baz=254
G15K **Niukluk** **90.83 24** P **P** **15 47 07.7 +0.6**
baz=254,SNR=20
G15K S **S** **15 57 11.9 -5.0**
baz=254
S14K **Fog Glacier** **90.92 33** P **P** **15 47 08.3 +0.5**
baz=258,SNR=23
S14K S **S** **15 57 12.2 -6.0**
baz=258
L15K **Ungalak Mounta** **91.12 28** P **P** **15 47 09.1 +0.6**
baz=256,SNR=45
L15K S **S** **15 57 15.1 -4.3**
baz=256
TROLL **Troll, Antarti** **91.15 196**⇑P **P** **15 47 10.0 +1.3**
comp=Z,94nm,0.2s
TROLL ⇑pP **pP** **15 49 07.6 -1.8**
comp=Z,2µm,0.8s
TROLL ⇓SKSac **SKSac** **15 56 47.2 -1.0**
comp=Z,10µm,1.5s
TROLL ⇓S **S** **15 57 17.0 -2.9**
comp=Z,21µm,4.2s
TROLL ⇑PKKPdf **PKKPdf** **16 04 27.5 +1.1**
comp=Z,392nm,0.4s
TROLL ⇑P'P'df P'P'df 16 12 26.2 -12
comp=Z,22nm,0.5s
TROLL ⇑x x 16 12 26.2
comp=Z,22nm,0.5s
K15K **Wolf Creek Mou** **91.24 27** P **P** **15 47 10.2 +1.2**
baz=256,SNR=28
K15K S **S** **15 57 17.3 -3.3**
baz=256
C16K **Lisburne Hills** **91.25 21** IAmb IAmb 15 47 12.0
comp=Z,967nm,1.1s
C16K **Lisburne Hills** **91.25 21** P **P** **15 47 10.4 +1.4**
baz=253,SNR=126
C16K S **S** **15 57 18.5 -1.9**
baz=253
M15K **Kasigluk River** **91.27 29** P **P** **15 47 09.9 +0.7**
baz=257,SNR=146
M15K S **S** **15 57 15.8 -5.0**
baz=257
CSS **Mathiatis** **91.28 305** IAmb IAmb 15 47 11.6
comp=Z,301nm,0.8s
CSS **Mathiatis** **91.28 305** P **P** **15 47 09.4 -0.5**
comp=Z,397nm,0.9s,comp=Z,4µm
BFON **Badfontein, M** **91.31 238**⇑*i*P **P** **15 47 11.9 +1.6**
BFON IAmb IAmb 15 47 12.9
comp=Z,198nm,0.9s
ROOI **Rooidraai Farm** **91.31 237** *e*P **P** **15 47 11.0 +0.7**
ROOI IAmb IAmb 15 47 14.6
comp=Z,1µm,2.2s
O15K **Ungalikthiuk R** **91.37 31** P **P** **15 47 10.6 +0.9**
baz=258,SNR=78
O15K S **S** **15 57 17.1 -4.8**
baz=258
KIRS **Kirsehir-Merke** **91.40 309**⇑P **P** **15 47 11.1 +0.7**
N15K **Kwethluk River** **91.45 30** IAmb IAmb 15 47 12.2
comp=Z,333nm,0.8s
N15K **Kwethluk River** **91.45 30** P **P** **15 47 11.1 +1.1**
baz=258,SNR=143
N15K S **S** **15 57 17.4 -5.1**
baz=258
H16K **Elim** **91.49 25** P **P** **15 47 11.1 +1.0**
baz=256,SNR=76
H16K S **S** **15 57 19.2 -3.4**
baz=256
CHGN **Chignik** **91.54 33** P **P** **15 47 10.1 -0.4**
baz=259,SNR=21
CHGN S **S** **15 57 17.4 -6.0**
baz=259
G16K **Koyuk River** **91.62 24** P **P** **15 47 11.9 +1.2**
baz=256,SNR=175
G16K S **S** **15 57 20.7 -3.1**
baz=256
MOS **Moscow** **91.63 326** *e*P **P** **15 47 10.3 -0.7**
MOS *e**PP **pP** **15 49 09.7 -1.7**
MOS *e* 15 51 01.0
MOS *e*S **SKSac** **15 56 51.4 +0.5**
MOS *e* 15 57 19.0
MOS pmax pmax
comp=Z,579nm,0.6s
BR131 **Keskin Array S** **91.70 310** IAmb IAmb 15 47 13.2
comp=Z,430nm,0.9s
BRTR **Keskin Array B** **91.70 310** P **P** **15 47 10.8 -1.1**
BRTR **Keskin Array B** **91.70 310** P **P** **15 47 10.9 -0.9**
comp=Z,242nm,0.9s,baz=130,slow=4.6,SNR=702
BRTR PP **PP** **15 51 00.1 -0.4**
comp=Z,77nm,1.1s,baz=111,slow=6.8,SNR=6.7
BRTR PKKPbc **PKKPbc** **16 04 29.1 0.0**
comp=Z,6.5nm,0.9s,baz=208,slow=2.4,SNR=5.7
BRTR SKKPbc SKKPbc 16 07 15.6 -1.0
comp=Z,2.7nm,0.8s,baz=137,slow=1.1,SNR=4.3
comp=Z,242nm,0.9s
BRTR **Keskin Array B** **91.70 310** P **P** **15 47 11.0 -0.9**
BR105 **Keskin Array S** **91.72 310** P **P** **15 47 10.9 -1.1**
comp=Z,393nm,1.0s,comp=Z,3µm
BR106 **Keskin Array S** **91.72 310** P **P** **15 47 10.9 -1.1**
comp=Z,354nm,1.0s,comp=Z,3µm
BZK **Bozkurt** **91.74 312** ⇓P **P** **15 47 12.4 +0.6**
BZK **Bozkurt** **91.74 312** P **P** **15 47 12.5 +0.6**
comp=Z,1µm,1.0s,comp=Z,10µm
J16K **Anvik River** **91.88 26** P **P** **15 47 13.2 +1.3**
baz=257,SNR=89
J16K S **S** **15 57 22.6 -3.5**
baz=257
D17K **Noatak River** **91.92 22** P **P** **15 47 13.7 +1.7**
baz=255,SNR=233
D17K S **S** **15 57 24.4 -1.9**
baz=255
I17K **Unalakleet** **91.97 26** IAmb IAmb 15 47 14.8
comp=Z,627nm,1.4s
I17K **Unalakleet** **91.97 26** P **P** **15 47 13.8 +1.4**
baz=257,SNR=28
I17K S **S** **15 57 23.8 -3.0**
baz=257
BRAK **Brakfontein** **91.98 238** *e*P **P** **15 47 15.0 +1.6**
BRAK IAmb IAmb 15 47 16.6
comp=Z,952nm,2.0s
L16K **Owhat River** **92.06 28** IAmb IAmb 15 47 14.6
comp=Z,269nm,0.7s
L16K **Owhat River** **92.06 28** P **P** **15 47 13.6 +0.7**
baz=258,SNR=240
L16K S **S** **15 57 23.0 -4.8**
baz=258
RDOG **Red Dog Mine** **92.07 22** IAmb IAmb 15 47 15.9
comp=Z,458nm,1.0s
RDOG **Red Dog Mine** **92.07 22** P **P** **15 47 14.2 +1.4**
baz=255,SNR=82
RDOG S **S** **15 57 24.3 -3.4**
baz=255
C17K **DeLong Mountai** **92.08 21** P **P** **15 47 14.3 +1.5**
baz=255,SNR=133
C17K S **S** **15 57 23.9 -3.8**
baz=255
SIM **Simferopol'** **92.09 315** *e*P **P** **15 47 12.4 -1.0**
SIM *e*S **S** **15 57 24.9 -3.9**
SIM pmax pmax
comp=Z,797nm,1.3s
OBN **Obninsk** **92.12 325** P **P** **15 47 13.5 +0.3**
OBN IAmb IAmb 15 47 14.4
comp=Z,513nm,0.7s
OBN **Obninsk** **92.12 325** S **SKSac** **15 56 52.6 -1.0**
comp=Z,12nm,0.3s,baz=332,slow=23,SNR=8.5
OBN SKKPbc **SKKPbc** **16 07 14.9 -1.4**
comp=Z,14nm,0.5s,baz=331,slow=3.1,SNR=4.3
OBN **Obninsk** **92.12 325**⇑P **P** **15 47 13.3 +0.1**
OBN **Obninsk** **92.12 325***c**i*P **P** **15 47 13.1 -0.1**
OBN *e**PP **pP** **15 49 09.5 -4.2**
OBN *i* 15 51 00.7
OBN *i*S **SKSac** **15 56 51.8 -1.8**
OBN *e* 15 57 31.7
OBN *e*SS **SS** **16 03 52.7 -2.3**
OBN pmax pmax
comp=Z,1µm,1.6s
OBN **Obninsk** **92.12 325** P **P** **15 47 12.5 -0.7**
comp=Z,881nm,1.2s,comp=Z,10µm
N16K **Nishlik Lake** **92.15 29** P **P** **15 47 14.7 +1.4**
baz=259,SNR=392
N16K S **S** **15 57 24.2 -4.5**
baz=259
M16K **Timber Creek** **92.17 29** IAmb IAmb 15 47 15.3
comp=Z,299nm,0.7s
M16K **Timber Creek** **92.17 29** P **P** **15 47 14.3 +0.9**
baz=259,SNR=299
M16K S **S** **15 57 23.9 -4.9**
baz=259
R16K **Pilot Point** **92.22 32** IAmb IAmb 15 47 14.8
comp=Z,676nm,1.0s
R16K **Pilot Point** **92.22 32** P **P** **15 47 13.8 +0.1**
baz=260,SNR=6.6
R16K S **S** **15 57 22.9 -6.4**

R16K baz=260 S **S** **15 57 22.9 -6.4**
**E17K** **Hotham Inlet** baz=260,SNR=74 **92.23 23** P **P** **15 47 14.9 +1.4**
E17K S **S** **15 57 25.8 -3.3**
**P16K** **Nushagak River** baz=256,SNR=32 **92.27 31** P **P** **15 47 14.7 +0.9**
P16K S **S** **15 57 25.2 -4.5**
P16K baz=260 S **S** **15 57 25.2 -4.5**
**F17K** **Baldwin Pennin** baz=260 **92.31 23** IAmb IAmb 15 47 16.2
comp=Z,289nm,0.8s
**F17K** **Baldwin Pennin** baz=257,SNR=35 **92.31 23** P **P** **15 47 15.2 +1.4**
F17K S **S** **15 57 26.2 -3.6**
**O16K** **Kokwok River B** baz=257 **92.32 30** IAmb IAmb 15 47 15.9
comp=Z,316nm,0.7s
**O16K** **Kokwok River B** baz=259,SNR=192 **92.32 30** P **P** **15 47 14.9 +0.9**
O16K S **S** **15 57 25.0 -5.1**
**G17K** **Kiwalik Mounta** baz=259 **92.34 24** P **P** **15 47 15.3 +1.3**
G17K S **S** **15 57 25.9 -4.2**
**ANTO** **Ankara** baz=257,SNR=291 **92.36 310** P **P** **15 47 15.5 +0.7**
ANTO IAmb IAmb 15 47 17.8
comp=Z,389nm,1.0s
**ANTO** **Ankara** **92.36 310** P **P** **15 47 15.3 +0.4**
**ANTO** **Ankara** **92.36 310** ⇑P **P** **15 47 15.4 +0.6**
**ANTO** **Ankara** **92.36 310** P **P** **15 47 15.5 +0.7**
ANTO pmax pmax
comp=Z,389nm,1.0s
**ANTO** **Ankara** **92.36 310** P **P** **15 47 14.4 -0.5**
comp=Z,215nm,1.4s,comp=Z,3μm
**BR231** **Keskin MP Arra** comp=Z,450nm,1.2s **92.37 310** IAmb IAmb 15 47 17.9
**GRAN** **Grantham** **92.50 237** *e*P **P** **15 47 17.1 +1.4**
GRAN IAmb IAmb 15 47 18.2
comp=Z,39nm,0.8s
**CIDE** **Kastamonu/Cide** **92.51 312** ⇑P **P** **15 47 15.8 +0.5**
**H17K** **Granite Mounta** baz=258 **92.53 25** P **P** **15 47 16.1 +1.2**
H17K S **S** **15 57 27.1 -4.6**
**J17K** **VABM Dome** baz=258 **92.57 26** P **P** **15 47 16.3 +1.1**
baz=259,SNR=90
J17K S **S** **15 57 27.8 -4.5**
J17K baz=259 S **S** **15 57 27.8 -4.5**
**L17K** **Donlin** baz=259 **92.69 28** P **P** **15 47 16.9 +1.2**
baz=259,SNR=133
L17K S **S** **15 57 29.5 -3.8**
**SNAA** **Sanae** **92.77 195** ⇓*i*P **P** **15 47 17.1 +1.0**
SNAA IAmb IAmb 15 47 19.3
comp=Z,6μm,0.8s
**SNAA** **Sanae** **92.77 195** ⇑P **P** **15 47 16.4 +0.3**
comp=Z,1μm,0.5s
SNAA ⇑pP **pP** **15 49 14.8 -2.0**
SNAA comp=Z,33μm,4.6s ⇓SKSac **SKSac** **15 56 55.4 -1.5**
SNAA comp=Z,130nm,0.8s ⇑S **S** **15 57 32.1 -1.8**
SNAA comp=Z,5μm,2.9s ⇑PKKPdf **PKKPdf** **16 04 22.9 -0.6**
SNAA comp=Z,372nm,0.5s ⇑P'P'df P'P'df 16 12 23.7 -11
SNAA comp=Z,30nm,0.6s ⇑x x 16 12 23.7
comp=Z,30nm,0.6s
**SNAA** **Sanae** **92.77 195** P **P** **15 47 16.4 +0.3**
comp=Z,95nm,0.6s,baz=176,slow=5.1,SNR=333
SNAA S **SKSac** **15 56 56.5 -0.5**
comp=Z,7.7nm,0.8s,baz=216,slow=23,SNR=12
SNAA PKKP **PKKPdf** **16 04 22.9 -0.6**
SNAA comp=Z,15nm,0.5s,baz=272,slow=4.4,SNR=41 SKKPbc **SKKPbc** **16 07 10.3 -3.1**
comp=Z,11nm,1.2s,baz=310,slow=4.4,SNR=3.4
comp=Z,95nm,0.6s
**E18K** **Tukpahlearik C** comp=Z,483nm,0.6s **92.78 22** IAmb IAmb 15 47 18.5
**E18K** **Tukpahlearik C** baz=258,SNR=232 **92.78 22** P **P** **15 47 17.5 +1.5**
E18K S **S** **15 57 29.5 -4.3**
**B18K** **Kokolik River** baz=258 **92.78 20** P **P** **15 47 17.9 +1.9**
baz=256,SNR=41
B18K S **S** **15 57 29.9 -3.9**
**K17K** **Iditarod** baz=256 **92.79 27** IAmb IAmb 15 47 19.5
comp=Z,307nm,0.9s
**K17K** **Iditarod** baz=259 **92.79 27** P **P** **15 47 17.0 +0.8**
K17K S **S** **15 57 30.2 -3.9**
**C18K** **Utukok River** baz=259 **92.83 21** IAmb IAmb 15 47 19.3
comp=Z,664nm,1.4s
**C18K** **Utukok River** baz=257,SNR=91 **92.83 21** P **P** **15 47 17.4 +1.1**
C18K S **S** **15 57 30.9 -3.5**
**ADZR** **Andozero** baz=257 **92.84 334** ⇑*i*P **P** **15 47 15.9 -0.4**
ADZR *e* 15 51 06.2
ADZR pmax pmax
comp=Z,420nm,1.2s
**O17K** **Koliganek Bris** baz=260,SNR=103 **92.85 30** P **P** **15 47 17.1 +0.6**
O17K S **S** **15 57 29.8 -5.0**
**R17L** **Mt. Peulik Vol** baz=260 **92.88 32** P **P** **15 47 16.9 +0.2**
baz=261,SNR=152
R17L S **S** **15 57 27.1 -8.1**
**PLK4** **Peulik 4** baz=261 **92.88 32** IAmb IAmb 15 47 19.0
comp=Z,461nm,0.8s
**Q16K** **King Salmon** baz=261 **92.89 31** P **P** **15 47 16.1 -0.5**
Q16K S **S** **15 57 26.7 -8.4**
**N17K** **Nushagak Hills** baz=260,SNR=137 **92.93 29** P **P** **15 47 18.1 +1.2**
N17K S **S** **15 57 32.1 -3.3**
**M17K** **Holitna River** baz=260 **92.96 29** IAmb IAmb 15 47 19.3
comp=Z,246nm,0.8s
**M17K** **Holitna River** baz=260,SNR=105 **92.96 29** P **P** **15 47 18.2 +1.3**
M17K S **S** **15 57 31.5 -4.2**
**MERW** **Merweville** baz=260 **92.97 237** *e*P **P** **15 47 18.9 +1.0**
MERW IAmb IAmb 15 47 22.2
comp=Z,178nm,1.0s
**F18K** **Selawik** baz=258,SNR=68 **92.97 23** P **P** **15 47 17.8 +1.0**
F18K S **S** **15 57 29.2 -6.3**
**CHIR** **Chirikof Islan** baz=258 **93.00 34** IAmb IAmb 15 47 18.7
comp=Z,254nm,0.6s
**CHIR** **Chirikof Islan** baz=261,SNR=22 **93.00 34** P **P** **15 47 17.8 +0.5**
CHIR S **S** **15 57 30.8 -5.4**
**P17K** **Kvichak River** baz=261 **93.09 31** P **P** **15 47 17.9 +0.3**
P17K S **S** **15 57 28.9 -7.9**
P17K baz=261 S **S** **15 57 28.9 -7.9**
**FRAZ** **Fraserburg** baz=261 **93.20 237** *e*P **P** **15 47 20.8 +1.8**
FRAZ IAmb IAmb 15 47 22.4
comp=Z,1μm,2.1s
**H18K** **Honhosa River** baz=260 **93.21 25** P **P** **15 47 18.7 +0.6**
H18K S **S** **15 57 32.6 -5.2**
**A19K** **Wainwright** baz=260 **93.22 20** P **P** **15 47 20.2 +2.3**
baz=257,SNR=39
A19K S **S** **15 57 34.3 -3.2**
**Q17K** **Contact Creek** baz=257 **93.23 32** P **P** **15 47 17.8 -0.6**
baz=261,SNR=270
Q17K S S 15 57 29.1 -9.3

**G18K** **Tagagawik** baz=261 **93.23 24** P **P** **15 47 18.8 +0.6**
baz=259
G18K S **S** **15 57 32.7 -5.2**
**L18K** **Granite Mounta** baz=259 **93.45 28** IAmb IAmb 15 47 21.3
comp=Z,289nm,1.0s
**L18K** **Granite Mounta** baz=261,SNR=181 **93.45 28** P **P** **15 47 20.2 +1.1**
L18K S **S** **15 57 34.5 -5.4**
L18K baz=261 S **S** **15 57 34.5 -5.4**
**C19K** **Lookout Ridge** baz=259,SNR=191 **93.49 21** P **P** **15 47 21.3 +2.0**
C19K S **S** **15 57 36.3 -3.8**
**N18K** **Kilae Creek** baz=261,SNR=93 **93.59 29** P **P** **15 47 20.9 +1.0**
N18K S **S** **15 57 36.7 -4.5**
N18K baz=261 S **S** **15 57 36.7 -4.5**
**SUR** **Sutherland** **93.61 237** P **P** **15 47 22.4 +1.4**
**SUR** **Sutherland** **93.61 237** ⇑*i*P **P** **15 47 23.1 +2.1**
SUR IAML 15 47 26.0
comp=Z,37nm,0.7s
**SUR** **Sutherland** **93.61 237** PKKPbc PKKPbc 16 04 24.5 +0.5
comp=Z,12nm,0.7s,baz=272,slow=4.0,SNR=7.4
**SUR** **Sutherland** **93.61 237** P **P** **15 47 22.7 +1.8**
**J18K** **Innoko River** comp=Z,181nm,0.6s **93.63 27** IAmb IAmb 15 47 21.7
**J18K** **Innoko River** baz=261,SNR=209 **93.63 27** P **P** **15 47 20.6 +0.6**
J18K S **S** **15 57 34.5 -6.9**
**MATJ** **Matjiesfontein** **93.64 236** *e*P **P** **15 47 22.4 +1.5**
MATJ IAmb IAmb 15 47 23.8
comp=Z,340nm,0.8s
**P18K** **Big Mountain,** baz=262,SNR=70 **93.73 31** P **P** **15 47 20.2 -0.4**
P18K S **S** **15 57 34.1 -8.4**
**M18K** **Stony River** baz=262,SNR=219 **93.74 29** P **P** **15 47 21.6 +1.1**
M18K S **S** **15 57 37.4 -5.0**
**Q18K** **Katmai Hardscr** baz=262,SNR=154 **93.74 31** P **P** **15 47 20.2 -0.6**
Q18K S S 15 57 33.0 -10
**F19K** **Shaleruckik Mo** baz=262 **93.75 23** P **P** **15 47 21.2 +0.7**
baz=260,SNR=120
F19K S **S** **15 57 36.6 -5.6**
**GCSA** **Galena City Sc** baz=260 **93.77 25** P **P** **15 47 21.4 +0.9**
baz=261,SNR=43
GCSA S **S** **15 57 37.9 -4.5**
**O18K** **Koktuh Hills** baz=261 **93.81 30** IAmb IAmb 15 47 22.3
comp=Z,196nm,0.6s
**O18K** **Koktuh Hills** baz=262,SNR=85 **93.81 30** P **P** **15 47 21.3 +0.4**
O18K S **S** **15 57 37.3 -5.9**
O18K baz=262 S **S** **15 57 37.3 -5.9**
**R18K** **Karluk** baz=262 **93.89 33** P **P** **15 47 21.2 0.0**
R18K S **S** **15 57 37.5 -6.3**
R18K baz=262 S **S** **15 57 37.5 -6.3**
**SII** **Sitkinak Islan** baz=262 **93.90 34** P **P** **15 47 22.2 +0.8**
**SII** **Sitkinak Islan** baz=263,SNR=94 **93.90 34** P **P** **15 47 22.3 +0.8**
SII S **S** **15 57 38.5 -5.6**
**G19K** **Purcell Mounta** baz=263 **93.90 24** P **P** **15 47 22.5 +1.3**
baz=261,SNR=846
G19K S **S** **15 57 38.9 -4.8**
**D19K** **Kuna River** baz=261 **93.91 21** IAmb IAmb 15 47 23.5
comp=Z,888nm,1.4s
**D19K** **Kuna River** baz=260 **93.91 21** P **P** **15 47 22.4 +1.2**
D19K S **S** **15 57 42.6 -1.2**
**UPI** **Upington** baz=260 **93.99 241** *e*P **P** **15 47 22.6 0.0**
UPI IAmb IAmb 15 47 25.9
comp=Z,276nm,1.5s
**E19K** **Redstone River** baz=261 **94.06 23** P **P** **15 47 23.3 +1.4**
E19K S **S** **15 57 39.2 -5.8**
**H19K** **Roundabout Mou** baz=261,SNR=542 **94.07 25** P **P** **15 47 23.2 +1.3**
H19K S **S** **15 57 41.3 -3.8**
**KEIM** **Keimoes** baz=261 **94.17 241** *e*P **P** **15 47 24.2 +0.8**
KEIM IAmb IAmb 15 47 26.9
comp=Z,930nm,1.9s
**J19K** **Poorman** comp=Z,204nm,0.7s **94.19 26** IAmb IAmb 15 47 24.6
**J19K** **Poorman** baz=262,SNR=179 **94.19 26** P **P** **15 47 23.5 +0.9**
J19K S **S** **15 57 41.4 -4.9**
J19K baz=262 S **S** **15 57 41.4 -4.9**
**N19K** **Bonanza Creek** comp=Z,411nm,0.8s **94.29 29** IAmb IAmb 15 47 25.2
**N19K** **Bonanza Creek** baz=263,SNR=298 **94.29 29** P **P** **15 47 24.1 +0.9**
N19K S **S** **15 57 41.8 -5.6**
N19K baz=263 S **S** **15 57 41.8 -5.6**
**L19K** **White Mountain** baz=263 **94.29 28** IAmb IAmb 15 47 25.7
comp=Z,375nm,1.2s
**L19K** **White Mountain** baz=262,SNR=309 **94.29 28** P **P** **15 47 24.0 +1.0**
L19K S **S** **15 57 40.7 -6.6**
L19K baz=262 S **S** **15 57 40.7 -6.6**
**O19K** **Port Alsworth** baz=262 **94.29 30** P **P** **15 47 23.0 0.0**
O19K S **S** **15 57 40.0 -7.2**
O19K baz=263 S **S** **15 57 40.0 -7.2**
**VNA2** **Neumayer--Watz** baz=263 **94.40 195** ⇑P **P** **15 47 23.7 +0.2**
comp=Z,44nm,0.6s,baz=130,slow=2.5
VNA2 ⇑pP **pP** **15 49 23.5 -0.8**
comp=Z,52nm,1.4s,baz=191,slow=5.8
VNA2 ⇑SKSac **SKSac** **15 57 03.8 -1.8**
comp=Z,8.6nm,0.8s,baz=242,slow=0.3
VNA2 ⇓S **S** **15 57 45.2 -2.7**
comp=Z,67μm,0.0s,baz=130,slow=2.2
VNA2 ⇑PKKPdf **PKKPdf** **16 04 17.7 -2.8**
comp=Z,33nm,0.6s,baz=325,slow=3.5
VNA2 ⇓SKSPbc **SKKPbc** **16 07 06.3 -3.1**
comp=Z,10nm,0.8s
VNA2 ⇑P'P'df **P'P'df** **16 12 23.7 -7.7**
comp=Z,2.7nm,0.6s
VNA2 ⇑x x 16 12 23.7
comp=Z,2.7nm,0.6s,baz=325,slow=3.5
**OHAK** **Old Harbor** **94.47 33** P **P** **15 47 23.9 0.0**
**OHAK** **Old Harbor** baz=263,SNR=196 **94.47 33** P **P** **15 47 24.5 +0.6**
OHAK S **S** **15 57 42.2 -6.6**
**M19K** **Big River Lodg** baz=263,SNR=145 **94.47 28** P **P** **15 47 25.1 +1.2**
M19K S **S** **15 57 45.0 -3.8**
M19K baz=263 S **S** **15 57 45.0 -3.8**
**Q19K** **Cape Douglas,** comp=Z,425nm,0.7s **94.48 31** IAmb IAmb 15 47 24.5
**Q19K** **Cape Douglas,** baz=263,SNR=48 **94.48 31** P **P** **15 47 23.3 -0.7**
Q19K S **S** **15 57 41.9 -7.1**
Q19K baz=263 S **S** **15 57 41.9 -7.1**
**D20K** **Etivluk River** baz=263 **94.48 21** P **P** **15 47 25.1 +1.3**

D20K baz=261,SNR=209 S **S** **15 57 43.9 -4.7**
**B20K** **Meade River** baz=261 **94.49 20** IAmb IAmb 15 47 27.2
comp=Z,398nm,0.9s
**B20K** **Meade River** baz=261,SNR=101 **94.49 20** P **P** **15 47 25.3 +1.6**
B20K S **S** **15 57 45.6 -3.0**
**E20K** **Nigu River** baz=262,SNR=349 **94.57 22** P **P** **15 47 25.7 +1.5**
E20K S **S** **15 57 45.1 -4.4**
**F20K** **Avaraart Lake** comp=Z,255nm,0.8s **94.58 23** IAmb IAmb 15 47 26.7
**F20K** **Avaraart Lake** baz=262,SNR=344 **94.58 23** P **P** **15 47 25.6 +1.4**
F20K S **S** **15 57 46.3 -3.1**
**CVNA** **Calvinia** **94.66 238** *e*P **P** **15 47 27.6 +1.9**
CVNA IAmb IAmb 15 47 29.0
comp=Z,1μm,2.0s
**CER** **Ceres** **94.67 236** *e*P **P** **15 47 27.2 +1.7**
CER IAmb IAmb 15 47 29.5
comp=Z,108nm,0.8s
**H20K** **Anotleneega Mo** baz=263,SNR=170 **94.71 25** P **P** **15 47 25.9 +1.0**
H20K S **S** **15 57 46.1 -4.6**
**AUGR** **Augrabies** **94.73 241** *e*P **P** **15 47 27.6 +1.7**
AUGR IAmb IAmb 15 47 30.1
comp=Z,506nm,1.9s
**P19K** **Oil Pt** baz=264,SNR=26 **94.77 31** P **P** **15 47 24.7 -0.7**
P19K S S 15 57 42.4 -9.1
**L20K** **Farewell, AK** baz=263 **94.78 28** P **P** **15 47 25.1 -0.2**
L20K S **S** **15 57 46.0 -5.5**
baz=263
L20K S **S** **15 57 46.0 -5.5**
baz=263
**VNA3** **Neumayer Olymp** comp=Z,25nm,0.7s **94.78 195** ⇑P **P** **15 47 25.1 -0.1**
VNA3 ⇑pP **pP** **15 49 23.7 -2.4**
VNA3 comp=Z,30nm,1.0s ⇑SKSac **SKSac** **15 57 05.8 -1.8**
VNA3 comp=Z,5.0nm,0.8s ⇓S **S** **15 57 47.6 -3.6**
VNA3 comp=Z,0.0nm,0.1s ⇑PKKPdf **PKKPdf** **16 04 16.5 -3.4**
VNA3 comp=Z,21nm,0.6s ⇓SKKPbc **SKKPbc** **16 07 04.3 -4.3**
VNA3 comp=Z,29nm,1.2s ⇑P'P'df P'P'df 16 12 16.0 -15
VNA3 comp=Z,1.9nm,0.8s ⇑x x 16 12 16.0
comp=Z,1.9nm,0.8s
**I20K** **Naaghedeneel** comp=Z,245nm,0.7s **94.79 25** IAmb IAmb 15 47 27.5
**I20K** **Naaghedeneel** baz=263,SNR=41 **94.79 25** P **P** **15 47 26.4 +1.2**
I20K S **S** **15 57 45.7 -5.6**
baz=263
**K20K** **Telida** comp=Z,173nm,0.7s **94.80 27** IAmb IAmb 15 47 27.5
**K20K** **Telida** baz=263,SNR=200 **94.80 27** P **P** **15 47 26.5 +1.1**
K20K S **S** **15 57 45.3 -6.2**
K20K baz=263 S **S** **15 57 45.3 -6.2**
baz=263
**VNA1** **Neumayer--Stat** comp=Z,48nm,0.7s **94.80 195** ⇑P **P** **15 47 25.6 +0.4**
VNA1 ⇓SKSac **SKSac** **15 57 09.1 +1.5**
VNA1 comp=Z,18nm,1.4s ⇑PKKPdf **PKKPdf** **16 04 18.9 -0.8**
VNA1 comp=Z,41nm,1.1s ⇓SKKPbc **SKKPbc** **16 07 05.6 -2.8**
VNA1 ⇑P'P'df **P'P'df** **16 12 23.6 -7.0**
VNA1 comp=Z,4.1nm,0.8s ⇑x x 16 12 23.6
comp=Z,4.1nm,0.8s
**J20K** **Nowinta River** comp=Z,686nm,1.6s **94.86 26** IAmb IAmb 15 47 28.6
**J20K** **Nowinta River** baz=263,SNR=179 **94.86 26** P **P** **15 47 26.8 +1.2**
J20K S **S** **15 57 46.4 -5.6**
J20K baz=263 S **S** **15 57 46.4 -5.6**
baz=263
**A21K** **Barrow** baz=262,SNR=22 **94.87 19** P **P** **15 47 27.0 +1.6**
A21K S **S** **15 57 47.3 -4.5**
baz=262
**PRTV** **Porterville,We** **94.90 236** *e*P **P** **15 47 28.5 +1.9**
**KDAK** **Kodiak Island** **94.91 32** P **P** **15 47 25.2 -0.7**
KDAK IAmb IAmb 15 47 28.5
comp=Z,203nm,0.7s
**KDAK** **Kodiak Island** comp=Z,4.9nm,0.7s,baz=125,slow=4.6,SNR=4.9 **94.91 32** PKKPbc PKKPbc 16 04 21.6 +0.2
KDAK SKKPbc SKKPbc 16 07 07.2 -2.5
comp=Z,4.1nm,0.7s,baz=312,slow=3.0,SNR=6.3
**KDAK** **Kodiak Island** baz=264 **94.91 32** P **P** **15 47 26.3 +0.4**
KDAK S **S** **15 57 45.8 -6.8**
baz=264
**KDAK** **Kodiak Island** **94.91 32** P **P** **15 47 25.2 -0.7**
**LVZ** **Lovozero** **94.94 338** P **P** **15 47 25.0 -0.9**
LVZ IAmb IAmb 15 47 26.8
comp=Z,564nm,1.7s
**LVZ** **Lovozero** **94.94 338** P **P** **15 47 25.0 -0.9**
LVZ pmax pmax
comp=Z,564nm,1.7s
**M20K** **Styx River** comp=Z,289nm,0.7s **95.06 28** IAmb IAmb 15 47 28.5
**M20K** **Styx River** baz=264 **95.06 28** P **P** **15 47 26.4 -0.3**
M20K S **S** **15 57 48.9 -5.1**
baz=264
M20K S **S** **15 57 48.9 -5.1**
baz=264
**Q20K** **Shuyak Island** baz=264,SNR=65 **95.09 32** P **P** **15 47 26.8 +0.1**
Q20K S **S** **15 57 46.2 -8.0**
baz=264
**SYI** **Shuyak Island** comp=Z,265nm,0.7s **95.09 32** IAmb IAmb 15 47 28.9
**O20K** **Slope Mountain** baz=264,SNR=7.4 **95.12 30** P **P** **15 47 26.2 -0.7**
O20K S S 15 57 45.2 -9.4
O20K baz=264 S S 15 57 45.2 -9.4
baz=264
**C21K** **Knifeblade Rid** baz=263,SNR=138 **95.20 21** P **P** **15 47 28.6 +1.6**
C21K S **S** **15 57 50.3 -4.4**
baz=263
**IMAR** **Indian Mountai** **95.23 24** P **P** **15 47 27.5 +0.3**
IMAR **pP** **15 49 30.5 +2.8**
**B21K** **Ikpikpuk River** comp=Z,324nm,0.9s **95.32 21** IAmb IAmb 15 47 30.8
**B21K** **Ikpikpuk River** baz=263,SNR=166 **95.32 21** P **P** **15 47 29.1 +1.6**
B21K S **S** **15 57 52.0 -3.6**
baz=263
**ISK** **Istanbul-Kandi** **95.33 311** P **P** **15 47 27.8 -0.4**
**KLYT** **Kilyos** comp=Z,233nm,1.6s,comp=Z,3μm **95.36 311** P **P** **15 47 28.5 +0.2**
**A22K** **Sinclair Lake** baz=263,SNR=51 **95.36 19** P **P** **15 47 29.3 +1.7**
A22K S **S** **15 57 53.3 -2.6**
baz=263
**APA** **Apatity** **95.37 337** ⇓*i*P **P** **15 47 25.4 -2.4**
APA *i* *PP **pP** **15 49 28.9 +0.4**
APA *i* 15 57 10.0
APA *i* S **S** **15 57 51.0 -5.2**
APA *i* PS **PS** **16 00 28.0 -4.0**
APA *i* SS SS 16 04 55.0 +15
APA *i* SSS SSS 16 08 37.0
APA pmax pmax
comp=Z,67nm,1.2s
**G21K** **Allakaket** comp=Z,403nm,1.1s **95.39 24** IAmb IAmb 15 47 30.8
**G21K** **Allakaket** baz=264 **95.39 24** P **P** **15 47 29.1 +1.2**
G21K S **S** **15 57 51.6 -4.9**

baz=264
**KULA Kula-Manisa 95.41 308 P P 15 47 29.1 +0.3**
**E21K Killik River 95.41 22 P P 15 47 29.2 +1.1**
baz=264,SNR=101
E21K S **S** 15 57 51.3 -5.4
baz=264
**N20K Mount Spurr 95.44 29 P P 15 47 28.1 -0.2**
baz=265,SNR=63
N20K S S 15 57 47.3 -10
baz=265
**F21K Alatna River 95.47 23 P P 15 47 29.1 +0.8**
baz=264,SNR=101
F21K S **S** 15 57 51.9 -5.3
baz=264
**HOM Homer 95.58 31 P P 15 47 28.9 0.0**
baz=265,SNR=28
HOM S S 15 57 48.7 -10
baz=265
**H21K Melozitna Rive 95.58 25 IAmb IAmb** 15 47 31.8
comp=Z,164nm,0.7s
**H21K Melozitna Rive 95.58 25 P P 15 47 30.0 +1.2**
baz=264,SNR=242
H21K S **S** 15 57 53.6 -4.6
baz=264
H21K S **S** 15 57 53.6 -4.6
baz=264
**YER Yerkesik 95.59 307 P P 15 47 29.6 0.0**
**CNPM China Poot 95.77 31 IAmb IAmb** 15 47 31.3
comp=Z,291nm,0.7s
**B22K Teshekpuk Lake 95.80 20 P P 15 47 31.1 +1.5**
baz=264,SNR=70
B22K S **S** 15 57 55.4 -4.4
baz=264
**JOF Joensuu 95.81 333** *e*P **P 15 47 29.0 -0.8**
**SKT Skwentna 95.83 28 IAmb IAmb** 15 47 30.3
comp=Z,218nm,0.6s
**SKT Skwentna 95.83 28 P P 15 47 29.3 -0.7**
baz=265,SNR=136
SKT S S 15 57 50.3 -10
baz=265
**TLCR 95.85 315** ⇑P **P 15 47 30.4 -0.1**
**TLCR 95.85 315** *i*P **P 15 47 30.3 -0.1**
**EFOR EFORIE 95.89 314** ⇑P **P 15 47 31.3 +0.6**
**CAPN Captain Cook N 95.91 30 P P 15 47 30.1 -0.2**
baz=266
**D22K Ayikyak River 95.92 21 P P 15 47 31.9 +1.5**
baz=265,SNR=92
D22K S **S** 15 57 56.3 -4.7
baz=265
**CTYL Yalikoy Yolu 95.94 311 P P 15 47 30.8 -0.1**
comp=Z,390nm,1.2s,comp=Z,5μm
**MILM Milestii Mici 95.98 316** ⇑*i*P **P 15 47 30.0 -1.0**
comp=Z,920nm,2.0s
MILM *i* pP **pP 15 49 27.0 -5.0**
**MILM Milestii Mici 95.98 316** *i* PP **PP 15 51 27.0 -5.9**
**MILM Milestii Mici 95.98 316** ⇓P **P 15 47 30.9 -0.2**
**MILM Milestii Mici 95.98 316***c i*P **P 15 47 30.0 -1.0**
MILM *i* *PP **pP 15 49 27.0 -5.0**
MILM *i* 15 51 34.0
MILM *i* 15 57 14.0
MILM *e*S **S 15 57 57.0 -5.3**
MILM pmax pmax
comp=Z,920nm,2.0s
**KIS Kishinev 95.99 317** ⇑*i*P **P 15 47 30.0 -1.0**
comp=Z,510nm,4.9s
KIS *i* pP **pP 15 49 29.0 -3.0**
**KIS Kishinev 95.99 317** *i* PP **PP 15 51 27.0 -5.9**
comp=Z,1μm,7.3s
**KIS Kishinev 95.99 317** *e*PS PS 16 00 27.0 -12
**KIS Kishinev 95.99 317***c i*P **P 15 47 30.0 -1.0**
KIS *i* *PP **pP 15 49 29.0 -3.0**
KIS *i* 15 51 34.0
KIS pmax pmax
comp=Z,510nm,4.9s
KIS pmax pmax
comp=Z,1μm,7.3s
**BAND Balkesir-Ban 96.00 310** ⇓P **P 15 47 31.6 +0.3**
**AKASG Malin Array Be 96.00 320** P **P 15 47 29.2 -1.8**
AKASG IAmb IAmb 15 47 31.5
comp=Z,187nm,0.8s
**AKASG Malin Array Be 96.00 320** P **P 15 47 29.6 -1.4**
comp=Z,117nm,0.7s,baz=82,slow=4.3,SNR=253
AKASG PP **PP 15 51 32.1 -0.7**
comp=Z,73nm,0.8s,baz=81,slow=6.9,SNR=12
AKASG PKiKP **PKiKP 15 52 06.8 +0.7**
comp=Z,13nm,0.5s,baz=72,slow=2.2,SNR=7.4
AKASG S **SKSac 15 57 14.3 -0.2**
comp=Z,5.6nm,0.8s,baz=77,slow=6.9,SNR=5.2
AKASG PKKPbc **PKKPdf 16 04 18.1 -0.1**
comp=Z,5.2nm,0.7s,baz=277,slow=3.2,SNR=7.7
AKASG SKKPbc **SKKPbc 16 07 03.5 -3.1**
comp=Z,5.3nm,0.7s,baz=273,slow=3.2,SNR=8.5
comp=Z,117nm,0.7s
**AKASG Malin Array Be 96.00 320** P **P 15 47 29.2 -1.8**
AKASG pmax pmax
comp=Z,187nm,0.8s
**AKBB Malin Array Si 96.00 320 IAmb IAmb** 15 47 31.5
comp=Z,203nm,0.8s
**F22K John River 96.00 23 P P 15 47 32.2 +1.5**
baz=265,SNR=186
F22K S **S 15 57 57.4 -4.2**
baz=265
**KIEV Kiev 96.01 320** P **P 15 47 29.5 -1.5**
KIEV IAmb IAmb 15 47 31.5
comp=Z,182nm,0.8s
**KIEV Kiev 96.01 320** *i* P **P 15 47 29.6 -1.5**
SNR=20
**KIEV Kiev 96.01 320** ⇑P **P 15 47 30.6 -0.4**
**KIEV Kiev 96.01 320** P **P 15 47 29.5 -1.5**
KIEV pmax pmax
comp=Z,182nm,0.8s
**BRSE Bradley Lake S 96.04 31 P P 15 47 30.7 -0.3**
baz=266,SNR=82
BRSE S **S 15 57 54.0 -8.3**
baz=266
**MFTR Murfatlar 96.05 314** ⇑P **P 15 47 31.7 +0.3**
**TPGR Topolog 96.10 314** ⇑P **P 15 47 31.6 -0.1**
**DAT Datca 96.11 306** P **P 15 47 31.5 -0.5**
**SUA Susitna One 96.16 29** P **P 15 47 31.5 -0.2**
baz=266,SNR=100
SUA S **S 15 57 54.9 -8.5**
baz=266
**H22K Ishtalitna Cre 96.19 24** P **P 15 47 33.0 +1.4**
baz=266,SNR=161
H22K S **S 15 57 59.5 -3.9**
baz=266
H22K S **S 15 57 59.5 -3.9**
baz=266
**G22K Bettles 96.21 23** P **P 15 47 32.1 +0.5**
baz=266
G22K S **S 15 57 58.8 -4.6**
baz=266
**PSN Preselentsi 96.22 313** P **P 15 47 32.0 -0.2**
**BPAW Bear Paw Mtn. 96.23 26** P **P 15 47 32.1 +0.3**
baz=266,SNR=90
BPAW S **S 15 57 56.1 -7.7**
baz=266
**CFR Carcaliu 96.33 315** ⇑P **P 15 47 32.5 -0.1**
**CFR Carcaliu 96.33 315** P **P 15 47 32.4 -0.1**
**CVDA Cernavoda 96.34 314** ⇑P **P 15 47 33.5 +0.8**
**TLBR Topalu 96.35 314** ⇑P **P 15 47 32.9 +0.2**
**BODT Bodrum 96.36 306** P **P 15 47 32.7 -0.3**
**KARP Karpathos 96.36 305** P **P 15 47 33.6 +0.6**
**KARP Karpathos 96.36 305** P **P 15 47 33.0 -0.1**
comp=Z,1μm,1.1s,comp=Z,7μm
**SORM Soroca 96.38 318** ⇓P **P 15 47 32.6 -0.2**
**SORM Soroca 96.38 318** P **P 15 47 32.6 -0.2**
**SORM Soroca 96.38 318** P **P 15 47 31.5 -1.3**
comp=Z,355nm,0.8s,comp=Z,3μm
**MLY Manley 96.40 25 Pdiff P 15 47 33.3 +0.8**
baz=266
MLY S **S 15 57 58.7 -6.5**
baz=266
**VLDR Vladesti 96.41 315** ⇓P **P 15 47 33.7 +0.8**
**HARR Harsova 96.44 314** ⇓P **P 15 47 33.7 +0.6**
**HARR Harsova 96.44 314** P **P 15 47 33.7 +0.6**
**CUT Chulitna 96.45 28 Pdiff P 15 47 32.5 -0.2**
baz=266
**SCTR Scanteiesti 96.46 315** ⇓P **P 15 47 34.0 +0.8**
**M22K Willow 96.48 29 Pdiff P 15 47 32.4 -0.4**
baz=266
M22K S **S 15 58 01.1 -4.7**
baz=266
**ICOR Ion Corvin 96.49 314** ⇑P **P 15 47 33.8 +0.5**
**NEGRR Negrea 96.53 315** ⇓P **P 15 47 35.1 +1.6**
**SCHLR Schela 96.56 315** ⇓P **P 15 47 35.2 +1.6**

**SCHL Schela 96.57 315** ⇑P **P 15 47 34.8 +1.2**
**VARL Varlezi 96.58 315** ⇑P **P 15 47 34.8 +1.1**
**O22K Cooper Landing 96.59 30 Pdiff P 15 47 33.5 +0.1**
baz=267
O22K S **S 15 57 59.6 -7.2**
baz=267
**IZVR Izvoarele 96.61 315** ⇑P **P 15 47 33.9 +0.1**
**RC01 Rabbit Creek A 96.62 29 IAmb IAmb** 15 47 34.5
comp=Z,318nm,0.6s
**RC01 Rabbit Creek A 96.62 29 Pdiff P 15 47 33.3 -0.2**
baz=267
RC01 S **S 15 57 59.0 -8.2**
baz=267
**D23K Nanushuk River 96.65 21 IAmb IAmb** 15 47 37.2
comp=Z,342nm,1.2s
**D23K Nanushuk River 96.65 21 Pdiff P 15 47 35.3 +1.8**
baz=267
D23K S **S 15 58 03.9 -3.2**
baz=267
**TUDR 96.69 315** ⇑P **P 15 47 34.8 +0.6**
**SEW Seward 96.71 30 Pdiff P 15 47 34.2 +0.2**
baz=267
SEW S **S 15 58 00.1 -7.7**
baz=267
**PRD Provadia 96.71 313 P P 15 47 34.6 +0.2**
**C23K Itkillik River 96.72 20 Pdiff P 15 47 35.2 +1.4**
baz=267
C23K S **S 15 58 04.6 -3.0**
baz=267
**COLD Coldfoot 96.74 23 Pdiff P 15 47 35.5 +1.5**
baz=267
COLD S **S 15 58 03.9 -4.0**
baz=267
**G23K Bananza Creek 96.79 24 IAmb IAmb** 15 47 37.6
comp=Z,363nm,0.9s
**G23K Bananza Creek 96.79 24 Pdiff P 15 47 35.8 +1.5**
baz=267
G23K S **S 15 58 05.7 -2.7**
baz=267
**NEF NEVSHA 96.82 313 P P 15 47 35.1 +0.2**
**AMRR Amara 96.86 314** ⇓P **P 15 47 35.5 +0.5**
**AMRR Amara 96.86 314 P P 15 47 35.5 +0.5**
**GHRR 96.90 316** ⇓P **P 15 47 36.4 +1.2**
**BWN Browne 96.90 26 IAmb IAmb** 15 47 36.4
comp=Z,291nm,1.0s
**KOMG Komaggas 96.93 239** *e*P **P 15 47 37.2 +1.5**
KOMG IAmb IAmb 15 47 38.8
comp=Z,83nm,1.2s
**PMR Palmer 96.94 29 P P 15 47 34.5 -0.4**
**PMR Palmer 96.94 29 IAmb IAmb** 15 47 35.9
comp=Z,412nm,1.4s
**PMR Palmer 96.94 29 Pdiff P 15 47 34.8 -0.1**
baz=267
PMR S **S 15 58 00.8 -8.9**
baz=267
**H23K Yukon River 96.94 25 IAmb IAmb** 15 47 38.5
comp=Z,151nm,0.7s
**H23K Yukon River 96.94 25 Pdiff P 15 47 36.3 +1.4**
baz=268
H23K S **S 15 58 05.2 -4.5**
baz=268
H23K S **S 15 58 05.2 -4.5**
baz=268
**I23K Minto, Yukon-K 96.99 25 IAmb IAmb** 15 47 37.2
comp=Z,257nm,0.7s
**I23K Minto, Yukon-K 96.99 25 Pdiff P 15 47 36.1 +1.0**
baz=268
I23K S **S 15 58 04.6 -5.4**
baz=268
I23K S **S 15 58 04.6 -5.4**
baz=268
**E23K Chandalar 97.00 22 IAmb IAmb** 15 47 38.6
comp=Z,306nm,0.8s
**E23K Chandalar 97.00 22 Pdiff Pdif** 15 47 36.8 +1.6
baz=268
E23K S **S 15 58 06.2 -4.0**
baz=268
**VADS Vadso 97.02 340** *e*P **P 15 47 34.4 -0.7**
VADS IVmB_BB 15 47 36.4
comp=Z,2μm,2.6s
VADS *e*pP **pP 15 49 34.2 -2.1**
VADS *e*PP **PP 15 51 39.8 -0.2**
VADS *e*SKSac **SKSac 15 57 18.7 -0.2**
VADS *e*PS **PS 16 00 48.4 -0.5**
**TOLK Toolik Lake Re 97.04 22 IAmb IAmb** 15 47 38.6
comp=Z,191nm,0.6s
**TOLK Toolik Lake Re 97.04 22 Pdiff Pdif** 15 47 36.8 +1.4
baz=268
TOLK S **S 15 58 06.4 -4.1**
baz=268
**MNK Minsk 97.05 324** *i* P Pdif 15 47 36.1 +0.5
MNK *i* *PP pP 15 49 39.3 +2.7
MNK *i* *SP sP 15 50 29.9 -1.6
MNK *i* S **SKSac 15 57 20.8 +1.1**
MNK pmax pmax
comp=Z,312nm,0.9s
MNK pmax pmax
comp=N,182nm,1.0s
MNK pmax pmax
comp=E,62nm,0.9s
**GHO Glory Hole Cre 97.05 29 P Pdif** 15 47 35.7 +0.2
GHO IAmb IAmb 15 47 53.0
comp=Z,129nm,0.8s
**PANC Panciu 97.07 315** ⇓P Pdif 15 47 37.1 +1.2
**NEA2 Nenana 97.09 26 Pdiff Pdif** 15 47 35.4 -0.2
baz=268
NEA2 S **S 15 58 03.8 -7.1**
baz=268
**MCK McKinley 97.12 27 Pdiff Pdif** 15 47 35.7 0.0
baz=268
MCK S **S 15 58 02.7 -8.5**
baz=268
**EDRB Edirne 97.12 311 P P 15 47 36.0 -0.3**
**ODBI Odobesti 97.12 315** ⇓P Pdif 15 47 37.7 +1.5
**ODBI Odobesti 97.12 315 P Pdif** 15 47 37.4 +1.2
comp=Z,135nm,0.9s,comp=Z,1μm
**PGOR Pogoanele 97.13 314** ⇓P Pdif 15 47 37.5 +1.4
**RND Reindeer 97.14 27 IAmb IAmb** 15 47 36.7
comp=Z,386nm,0.9s
**GRER 97.16 315** ⇑P Pdif 15 47 38.0 +1.6
**KNK Knik Glacier 97.25 29 Pdiff P 15 47 37.0 +0.6**
baz=268
**WAT1 Susitna Watana 97.26 28 Pdiff P 15 47 36.6 +0.1**
baz=268
**PWL Port Wells 97.30 30 IAmb IAmb** 15 47 39.1
comp=Z,260nm,1.0s
**PWL Port Wells 97.30 30 Pdiff P 15 47 37.0 +0.4**
baz=268
**EZN Ezine 97.32 309 P P 15 47 37.2 0.0**
**EZN Ezine 97.32 309 P P 15 47 37.2 0.0**
comp=Z,235nm,1.2s,comp=Z,3μm
**JMB Yambol 97.32 312 P P 15 47 37.4 +0.3**
**PRK Paraskevi 97.32 309 P Pdif** 15 47 37.1 -0.1
**D24K Happy Valley 97.33 21 IAmb IAmb** 15 47 39.6
comp=Z,618nm,1.6s
**D24K Happy Valley 97.33 21 Pdiff P 15 47 38.2 +1.6**
baz=269
**SML Sawmill 97.33 29 Pdiff P 15 47 37.2 +0.4**
baz=268
**BISRR Bisoca 97.36 315** ⇓P **P 15 47 38.8 +1.5**
**VRI Vrincioaia 97.36 315** ⇓P **P 15 47 37.6 +0.4**
**VRI Vrincioaia 97.36 315 P P 15 47 37.6 +0.4**
**VRI Vrincioaia 97.36 315 P Pdif** 15 47 37.2 -0.1
comp=Z,194nm,1.2s,comp=Z,2μm
**C24K Franklin Bluff 97.38 21 IAmb IAmb** 15 47 40.0
comp=Z,190nm,0.7s
**C24K Franklin Bluff 97.38 21 Pdiff P 15 47 38.0 +1.3**
baz=269
**PLOR5 Plostina Array 97.40 315 P P 15 47 37.6 +0.1**
comp=Z,198nm,0.7s,comp=Z,3μm
**PLOR3 Plostina Array 97.42 315 P P 15 47 37.7 +0.1**
comp=Z,106nm,0.9s,comp=Z,3μm
**E24K Your Creek 97.43 22 Pdiff P 15 47 38.3 +1.2**
baz=269
**CHOS Chios island 97.44 308 P P 15 47 38.2 +0.3**
**TESR Tescani 97.45 316** ⇑P **P 15 47 37.8 +0.2**
**TESR Tescani 97.45 316 P Pdif** 15 47 36.8 -0.8
comp=Z,274nm,1.2s,comp=Z,5μm
**CAVK Edirne/Enez-Ca 97.49 310** ⇑P **P 15 47 38.1 +0.2**
**ENEZ Enez 97.50 310 P Pdif** 15 47 37.9 -0.1
**WRH Wood River Hil 97.51 26 IAmb IAmb** 15 47 38.5
comp=Z,131nm,0.8s
**DRBR Darabani 97.55 318** ⇓P Pdif 15 47 37.8 -0.2
**ALN Alexandroupoli 97.59 310 IAmb IAmb** 15 47 40.1
comp=Z,222nm,1.1s
**ALN Alexandroupoli 97.59 310 P Pdif** 15 47 38.0 -0.4

**ONER Baraj Valea Uz 97.61 316** ⇓P **P 15 47 39.2 +0.8**
**M23K Glacier View 97.62 29 Pdiff P 15 47 38.4 +0.4**
baz=269
**COLA College 97.62 25 P Pdif** 15 47 37.4 -0.5
**COLA College 97.62 25 Pdiff Pdif** 15 47 37.5 -0.4
baz=269
**COLA College 97.62 25 P Pdif** 15 47 37.5 -0.4
**H24K Noodor Dome 97.63 25 IAmb IAmb** 15 47 40.7
comp=Z,154nm,0.8s
**H24K Noodor Dome 97.63 25 Pdiff P 15 47 39.3 +1.2**
baz=269
**WAT6 Susitna Watana 97.63 28 Pdiff P 15 47 38.7 +0.4**
baz=269
**SULR 97.63 314** ⇑P **P 15 47 39.5 +1.0**
**CCB Clear Creek Bu 97.64 26 IAmb IAmb** 15 47 38.9
comp=Z,156nm,0.7s
**NEHR Nehoiu 97.64 315** ⇑P **P 15 47 39.3 +0.8**
**SIGR SIGRI 97.64 309 P Pdif** 15 47 38.6 0.0
**F24K Squaw Lake 97.65 23 Pdiff P 15 47 39.6 +1.5**
baz=269
**COVR Voineasa-Covas 97.72 315** ⇓P **P 15 47 39.0 +0.1**
**P23K Montague Islan 97.73 30 Pdiff P 15 47 39.1 +0.6**
baz=269
**SZH Strazhitsa 97.77 313 P P 15 47 39.2 +0.1**
**APE Apeiranthos 97.78 306** ⇓P **P** Pdif 15 47 39.0 -0.3
**APE Apeiranthos 97.78 306 P P** Pdif 15 47 39.0 -0.4
**SANT Santorini 97.79 306** ⇑P **P 15 47 40.4 +1.0**
**G24K Hadweenzic Riv 97.80 24 Pdiff P 15 47 40.0 +1.3**
baz=270
**DHY Denali Highway 97.80 27 Pdiff P 15 47 39.5 +0.4**
baz=269
**POKR Poker Plat Res 97.80 25 Pdiff Pdif** 15 47 38.2 -0.6
baz=269
**SCM Sheep Creek Mo 97.81 29 Pdiff P 15 47 39.5 +0.5**
baz=269
**SGRR Singureni 97.81 314** ⇓P **P 15 47 40.0 +0.7**
**ELND Elena 97.82 312** ⇓P **P** Pdif 15 47 39.3 -0.1
**KEV Kevo 97.82 339** Pdif Pdif 15 47 38.0 -0.7
**KEV Kevo 97.82 339 P Pdif** 15 47 38.0 -0.7
KEV pmax pmax
comp=Z,92nm,0.8s
**TURR Turia 97.86 315** ⇑P **P 15 47 39.7 +0.1**
**MLR Muntele Rosu 97.89 315 S SKSac 15 57 25.6 +0.9**
comp=Z,39nm,0.8s,baz=203,slow=14,SNR=12
**MLR Muntele Rosu 97.89 315** ⇑P **P 15 47 40.2 +0.3**
**MLR Muntele Rosu 97.89 315 P P 15 47 40.1 +0.3**
**MLR Muntele Rosu 97.89 315 P Pdif** 15 47 39.3 -0.5
comp=Z,247nm,1.6s,comp=Z,4μm
**GLI Glacier Island 97.90 30 Pdiff P 15 47 39.8 +0.5**
baz=269
**SMTH Samothraki Isl 97.96 310 P Pdif** 15 47 39.5 -0.6
**HDA Harding Lake 98.00 26 Pdiff Pdif** 15 47 39.2 -0.5
baz=270
**OZUR 98.03 315** ⇑P **P 15 47 40.3 0.0**
**IZAR Zarasai 98.03 325** *e*P **P 15 47 43.2 +3.3**
**IIGN Ignalina 98.03 325** *e*P Pdif 15 47 39.5 -0.5
**ILAR Eielson Array 98.03 26** pP 15 49 44.5 +3.9
**ILAR Eielson Array 98.03 26 P Pdif** 15 47 38.5 -1.3
comp=Z,29nm,0.6s,baz=250,slow=4.4,SNR=267
ILAR PP **PP 15 51 47.5 -0.4**
comp=Z,50nm,1.2s,baz=262,slow=6.6,SNR=4.5
ILAR PKiKP **PKiKP 15 52 09.4 +0.1**
comp=Z,7.9nm,0.7s,baz=247,slow=4.2,SNR=5.8
ILAR S **SKSac 15 57 26.5 +2.2**
comp=Z,2.3nm,0.8s,baz=308,slow=7.6,SNR=4.2
ILAR PKKPbc **PKKPbc 16 04 12.2 -1.1**
comp=Z,5.9nm,0.9s,baz=92,slow=1.8,SNR=7.3
ILAR SKKP 16 06 59.0
comp=Z,6.9nm,0.9s,baz=62,slow=1.7,SNR=6.6
comp=Z,29nm,0.6s
**IDI Anoyia 98.19 305 P P 15 47 41.5 +0.2**
**IDI Anoyia 98.19 305 P Pdif** 15 47 40.5 -0.8
**IDI Anoyia 98.19 305 PP PP 15 51 49.7 -0.3**
comp=Z,75nm,0.7s,baz=139,slow=4.5,SNR=4.4
IDI S **SKSac 15 57 26.2 -0.3**
comp=Z,24nm,0.8s,baz=206,slow=22,SNR=6.3
IDI PKKPbc **PKKPbc 16 04 10.8 -1.0**
comp=Z,29nm,0.7s,baz=319,slow=2.3,SNR=15
**FINES FINESS Array B 98.19 331 P Pdif** 15 47 39.5 -1.0
comp=Z,71nm,0.6s,baz=84,slow=3.9,SNR=208
FINES PP **PP 15 51 48.3 -0.8**
comp=Z,45nm,0.8s,baz=91,slow=8.6,SNR=4.6
FINES PKiKP **PKiKP 15 52 10.5 +0.8**
comp=Z,60nm,0.7s,baz=116,slow=3.6,SNR=12
FINES PKKPbc **PKKPbc 16 04 10.4 -2.2**
comp=Z,2.5nm,0.5s,baz=268,slow=2.4,SNR=9.9
comp=Z,71nm,0.6s
**LIA Limnos Island 98.20 309 P Pdif** 15 47 40.7 -0.4
**D25K Kavik River 98.20 21 Pdiff P 15 47 41.7 +1.2**
baz=271
**ARBE Arbavere 98.23 329** *e*P **P 15 47 41.6 +0.9**
**HOPEN Hopen 98.23 346** *e*P **P 15 47 40.8 +0.3**
HOPEN IVmB_BB 15 47 41.6
comp=Z,2μm,1.2s
HOPEN *e*pP **pP 15 49 41.6 -0.1**
HOPEN *e*PP **PP 15 51 49.1 0.0**
HOPEN *e*SKSac **SKSac 15 57 26.0 +1.2**
HOPEN *e*SS **SS 16 05 23.1 +3.5**
**Q23K Middleton Isla 98.26 31 IAmb IAmb** 15 47 42.8
comp=Z,246nm,1.1s
**Q23K Middleton Isla 98.26 31 Pdiff P 15 47 41.3 +0.4**
baz=270
**MID Middleton Isla 98.26 31 P P 15 47 42.7 +1.8**
**MID Middleton Isla 98.26 31 IAmb IAmb** 15 47 42.8
comp=Z,242nm,1.1s
**DOPR Dopca 98.30 315** ⇑P **P 15 47 41.7 +0.3**
**G25K Bearman Lake 98.34 24 Pdiff P 15 47 42.8 +1.7**
baz=271
**ARA0 ARCESS Array S 98.35 339** *e*P **P 15 47 41.8 +0.7**
ARA0 *e*pP **pP 15 49 40.4 -1.9**
ARA0 *e*sP **sP 15 50 33.4 -3.8**
ARA0 *e*PP **PP 15 51 50.7 +0.6**
ARA0 *e*SKSac **SKSac 15 57 24.5 -1.2**
ARA0 *e*SS **SS 16 05 25.5 +3.9**
**ARCES ARCESS Array B 98.35 339** pP pP 15 49 32.3 -10
**ARCES ARCESS Array B 98.35 339 P Pdif** 15 47 40.8 -0.3
comp=Z,101nm,0.8s,baz=94,slow=3.8,SNR=95
ARCES PP **PP 15 51 48.5 -1.6**
comp=Z,44nm,1.1s,baz=76,slow=7.6,SNR=4.4
ARCES PKiKP **PKiKP 15 52 10.8 +1.0**
comp=Z,33nm,0.8s,baz=144,slow=0.8,SNR=11
ARCES S **SKSac 15 57 26.2 +0.5**
comp=Z,17nm,0.8s,baz=103,slow=16,SNR=6.6
ARCES PKKPbc **PKKPbc 16 04 10.6 -1.9**
comp=Z,5.7nm,0.8s,baz=275,slow=3.8,SNR=4.8
ARCES SKKP 16 06 58.4
comp=Z,5.1nm,1.0s,baz=318,slow=1.2,SNR=3.2
comp=Z,101nm,0.8s
**M24K Tolsona, Glenn 98.35 28 Pdiff P 15 47 42.7 +1.3**
baz=270
**H25L Birch Creek 98.47 24 Pdiff P 15 47 43.5 +1.8**
baz=271
**BURAR Bucovina Array 98.47 317** pP pP 15 49 42.0 -1.5
**BURAR Bucovina Array 98.47 317** ⇑P **P 15 47 43.0 +0.7**
**BURAR Bucovina Array 98.47 317 P P 15 47 43.0 +0.7**
**KLU Klutina 98.47 29 Pdiff P 15 47 42.8 +0.8**
baz=270
**MTUR Matau 98.50 315** ⇑P **P 15 47 42.9 +0.3**
**MTUR Matau 98.50 315 P P 15 47 42.8 +0.3**
**F25K Christian Rive 98.51 23 Pdiff P 15 47 43.7 +1.7**
baz=271
**VOIR 98.52 315** ⇓P Pdif 15 47 42.3 -0.2
**VOIR 98.52 315 P Pdif** 15 47 42.3 -0.2
**VOIR 98.52 315 P Pdif** 15 47 41.7 -0.8
comp=Z,55nm,1.1s,comp=Z,1μm
**K24K Donnelly Dome 98.52 27 Pdiff P 15 47 42.5 +0.5**
baz=271
**HUMR Humele 98.54 314** ⇓P **P 15 47 42.6 +0.1**
**STFAR Stefanesti-Arg 98.56 314** ⇑P **P 15 47 43.0 +0.3**
**EYAK Cordova Ski Ar 98.56 30 P P 15 47 43.2 +1.0**
**EYAK Cordova Ski Ar 98.56 30 Pdiff P 15 47 43.1 +0.8**
baz=270
**THAS Thassos island 98.58 310 P Pdif** 15 47 42.5 -0.3
**PRP Porcupine Dome 98.60 25 Pdiff Pdif** 15 47 41.9 -0.5
baz=271
**RZN Rozhen 98.61 311 P P 15 47 43.3 +0.1**
**PLD Plovdiv 98.62 311 P P 15 47 43.0 0.0**
**SKY Skiros Island 98.64 308 P Pdif** 15 47 43.0 -0.1
**PAX Paxson 98.67 27 Pdiff P 15 47 43.7 +0.8**
baz=271
**J25K Salcha River, 98.69 26 Pdiff Pdif** 15 47 42.6 -0.2
baz=271
**C26K Camden Bay 98.69 20 Pdiff P 15 47 44.8 +2.1**
baz=272
**TAOE Nuku Hiva Isla 98.73 100** *e*S **S 15 58 21.2 -6.0**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,7µm,25.6s | | | | | | | |
| TAOE | | | | | *e*SS | **SS** | **16 05 23.0** | **-6.6** |
| | comp=Z,4µm,29.6s | | | | | | | |
| **KAVA** | **Kavala** | **98.75** | **310** | | P | Pdif | 15 47 43.1 | -0.4 |
| **KEF** | **Keuruu** | **98.76** | **332** | | *e*P | Pdif | 15 47 42.8 | -0.3 |
| **ARR** | **Arges** | **98.81** | **315** | ⇓ | P | **P** | **15 47 44.5** | **+0.7** |
| **HARP** | **HAARP** | **98.83** | **28** | | Pdiff | **P** | **15 47 44.5** | **+1.1** |
| | baz=271 | | | | | | | |
| **TGMR** | **Targu Mures** | **98.91** | **316** | ⇓ | P | **P** | **15 47 45.6** | **+1.4** |
| **BMAR** | **Burnt Mountain** | **98.92** | **23** | | | pP | 15 49 49.4 | +4.7 |
| **HAMF** | **Hammerfest** | **98.93** | **340** | | *e*P | Pdif | 15 47 43.3 | -0.4 |
| HAMF | | | | | IVmB_BB | | 15 47 45.0 | |
| | comp=Z,2µm,0.7s | | | | | | | |
| HAMF | | | | | *e*pP | pP | 15 49 43.5 | -1.5 |
| HAMF | | | | | *e*PP | **PP** | **15 51 55.6** | **+1.2** |
| HAMF | | | | | *e*SKSac | **SKSac** | **15 57 31.1** | **+2.7** |
| HAMF | | | | | *e*SP | **SP** | **15 59 57.3** | **+0.5** |
| HAMF | | | | | *e*SS | **SS** | **16 05 33.8** | **+4.4** |
| **VLAD** | **Vladila** | **98.93** | **313** | ⇑ | P | **P** | **15 47 44.8** | **+0.4** |
| **IMMV** | **Iera Moni Meta** | **98.94** | **305** | | P | **P** | **15 47 45.2** | **+0.6** |
| **KYMI** | **Kymi, Euboea I** | **98.98** | **308** | | P | Pdif | 15 47 43.9 | -0.7 |
| **TSUM** | **Tsumeb** | **99.00** | **249** | | *e*P | **Pdif** | **15 47 46.9** | **+1.6** |
| TSUM | | | | | IAmb | IAmb | 15 47 47.5 | |
| | comp=Z,283nm,2.0s | | | | | | | |
| **MDB** | **Medias** | **99.00** | **316** | ⇑ | P | **Pdif** | **15 47 46.0** | **+1.4** |
| **MDB** | **Medias** | **99.00** | **316** | | P | **Pdif** | **15 47 45.9** | **+1.4** |
| **MEF** | **Metsahovi** | **99.03** | **330** | | *e*P | **Pdif** | **15 47 44.9** | **+0.6** |
| **ARCR** | **ARCALIA** | **99.04** | **316** | ⇓ | P | **Pdif** | **15 47 45.3** | **+0.6** |
| **PGB** | **Panagyurishte** | **99.06** | **312** | | P | **Pdif** | **15 47 44.8** | **-0.1** |
| **TNR** | **Turnu Rosu** | **99.07** | **315** | ⇓ | P | **Pdif** | **15 47 45.7** | **+0.8** |
| **TNR** | **Turnu Rosu** | **99.07** | **315** | | P | **Pdif** | **15 47 45.6** | **+0.8** |
| **F26K** | **Sheenjek River** | **99.08** | **23** | | Pdiff | **Pdif** | **15 47 46.3** | **+1.9** |
| | baz=273 | | | | | | | |
| **DION** | **Dionisos Attik** | **99.09** | **307** | | P | **Pdif** | **15 47 45.6** | **+0.4** |
| **N25K** | **Chitina, Valde** | **99.11** | **29** | | Pdiff | **Pdif** | **15 47 45.9** | **+1.2** |
| | baz=271 | | | | | | | |
| **BMRM** | **Bremner River** | **99.12** | **29** | | Pdiff | **Pdif** | **15 47 45.7** | **+0.9** |
| | baz=271 | | | | | | | |
| **C27K** | **Jago River** | **99.13** | **21** | | Pdiff | **Pdif** | **15 47 46.7** | **+2.1** |
| | baz=274 | | | | | | | |
| **OUR** | **Ouranopolis** | **99.14** | **310** | | P | **Pdif** | **15 47 44.9** | **-0.3** |
| **KOKK** | **Kokkinochori,** | **99.14** | **310** | | P | **Pdif** | **15 47 44.7** | **-0.6** |
| **KTK1** | **Kautokeino** | **99.18** | **339** | | *e*P | **Pdif** | **15 47 44.0** | **-0.8** |
| KTK1 | | | | | IVmB_BB | | 15 47 45.8 | |
| | comp=Z,1µm,3.1s | | | | | | | |
| KTK1 | | | | | *e*pP | **pP** | **15 49 43.9** | **-2.2** |
| KTK1 | | | | | *e*PP | **PP** | **15 51 57.5** | **+1.1** |
| KTK1 | | | | | *e*SKSac | **SKSac** | **15 57 29.0** | **-0.8** |
| KTK1 | | | | | *e*PS | PS | 16 01 14.6 | +3.5 |
| **ATHU** | **Athens Univers** | **99.21** | **307** | | P | **Pdif** | **15 47 44.9** | **-0.7** |
| **KAIM** | **Kayak Island** | **99.23** | **31** | | IAmb | IAmb | 15 47 48.8 | |
| | comp=Z,259nm,0.9s | | | | | | | |
| **KAIM** | **Kayak Island** | **99.23** | **31** | | Pdiff | **Pdif** | **15 47 46.6** | **+1.4** |
| | baz=271 | | | | | | | |
| **G26K** | **Porcupine Rive** | **99.25** | **23** | | Pdiff | **Pdif** | **15 47 47.2** | **+2.1** |
| | baz=273 | | | | | | | |
| **NVR** | **Nevrokopi** | **99.26** | **311** | | P | **Pdif** | **15 47 46.3** | **+0.5** |
| **LVV** | **L'vov** | **99.29** | **319** | | *e*P | **Pdif** | **15 47 45.9** | **+0.2** |
| LVV | | | | | *e* | | 15 51 54.7 | |
| LVV | | | | | *e* | | 15 57 31.7 | |
| LVV | | | | | *e*S | **S** | **15 58 25.7** | **-4.7** |
| LVV | | | | | MLR | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | | |
| **SCRK** | **Sand Creek** | **99.31** | **26** | | Pdiff | **Pdif** | **15 47 46.3** | **+0.6** |
| | baz=272 | | | | | | | |
| **PABE** | **Paberze** | **99.32** | **325** | | *e*P | **Pdif** | **15 47 46.8** | **+1.1** |
| **VSVD** | **Vaisvydziai** | **99.33** | **325** | | *e*P | **Pdif** | **15 47 46.8** | **+1.0** |
| **MMB** | **Musomishta** | **99.35** | **311** | | P | **Pdif** | **15 47 45.6** | **-0.6** |
| **MTSE** | **Matsula** | **99.35** | **328** | | *e*P | **Pdif** | **15 47 46.8** | **+1.0** |
| **PAIG** | **Paliouri** | **99.36** | **309** | | P | **Pdif** | **15 47 45.6** | **-0.6** |
| **MPEP** | **Malo Peshtene** | **99.40** | **313** | | P | **Pdif** | **15 47 46.6** | **+0.2** |
| **SRS** | **Serrai** | **99.45** | **310** | | P | **Pdif** | **15 47 45.2** | **-1.5** |
| **J26L** | **Joseph Creek** | **99.47** | **26** | | Pdiff | **Pdif** | **15 47 47.0** | **+0.7** |
| | baz=273 | | | | | | | |
| **MENT** | **Mentasta** | **99.47** | **27** | | P | **Pdif** | **15 47 47.0** | **+0.7** |
| **ANKY** | **Antikythira Is** | **99.51** | **305** | | P | **Pdif** | **15 47 47.9** | **+0.9** |
| **CJR** | **Cluj-Napoca** | **99.55** | **316** | ⇑ | P | **Pdif** | **15 47 48.2** | **+1.2** |
| **CJR** | **Cluj-Napoca** | **99.55** | **316** | | P | **Pdif** | **15 47 48.2** | **+1.2** |
| **VILL** | **Villía** | **99.58** | **307** | | P | **Pdif** | **15 47 46.1** | **-1.3** |
| **I26K** | **Coal Creek Min** | **99.60** | **25** | | Pdiff | **Pdif** | **15 47 47.6** | **+0.9** |
| | baz=273 | | | | | | | |
| **VALD** | **Valchedram** | **99.63** | **313** | | P | **Pdif** | **15 47 47.7** | **+0.4** |
| **BMR** | **Baia Mare** | **99.63** | **317** | ⇓ | P | **Pdif** | **15 47 48.4** | **+1.0** |
| **BMR** | **Baia Mare** | **99.63** | **317** | | P | **Pdif** | **15 47 48.3** | **+1.0** |
| **L26K** | **Log Cabin Wild** | **99.64** | **27** | | Pdiff | **Pdif** | **15 47 48.2** | **+1.2** |
| | baz=273 | | | | | | | |
| **KRND** | **KRANIDI** | **99.69** | **307** | | P | **Pdif** | **15 47 46.5** | **-1.3** |
| **VAF** | **Ylistaro** | **99.75** | **333** | | *e*P | **Pdif** | **15 47 47.5** | **0.0** |
| **VTS** | **Vitosha** | **99.75** | **312** | | P | **Pdif** | **15 47 48.1** | **-0.1** |
| **SUW** | **Suwalki** | **99.80** | **323** | | *e*Pdif | **Pdif** | **15 47 48.0** | **+0.1** |
| SUW | | | | | *e*PP | **PP** | **15 51 59.9** | **-1.5** |
| SUW | | | | | *e*SKSac | **SKSac** | **15 57 33.2** | **-0.1** |
| **SUW** | **Suwalki** | **99.80** | **323** | | *e*P | **Pdif** | **15 47 48.4** | **+0.5** |
| **BGLC** | **Bering Glacier** | **99.80** | **30** | | Pdiff | **Pdif** | **15 47 49.7** | **+2.0** |
| | baz=272 | | | | | | | |
| **SRE** | **Strehaia** | **99.81** | **314** | ⇓ | P | **Pdif** | **15 47 49.2** | **+1.0** |
| **SRE** | **Strehaia** | **99.81** | **314** | | P | **Pdif** | **15 47 49.1** | **+1.0** |
| **HORT** | **Hortiatis** | **99.82** | **310** | | P | **Pdif** | **15 47 47.3** | **-1.1** |
| **KKB** | **Krupnik** | **99.82** | **311** | | P | **Pdif** | **15 47 47.9** | **-0.4** |
| **M26K** | **Nabesna, AK** | **99.83** | **28** | | Pdiff | **Pdif** | **15 47 49.0** | **+1.1** |
| | baz=273 | | | | | | | |
| **VLI** | **Veliai** | **99.84** | **306** | | P | **Pdif** | **15 47 47.4** | **-1.1** |
| **LOUT** | **Loutraki** | **99.85** | **307** | | P | **Pdif** | **15 47 47.0** | **-1.5** |
| **CRQE** | **Cirque** | **99.86** | **30** | | Pdiff | **Pdif** | **15 47 49.2** | **+1.0** |
| | baz=272 | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **99.87** | **29** | | Pdiff | **Pdif** | **15 47 49.2** | **+1.2** |
| | baz=273 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **99.91** | **348** | | *e*P | **Pdif** | **15 47 47.6** | **-0.3** |
| SPA0 | | | | | IVmB_BB | | 15 47 50.1 | |
| | comp=Z,3µm,2.0s | | | | | | | |
| SPA0 | | | | | *e*pP | **pP** | **15 49 47.3** | **-2.1** |
| SPA0 | | | | | *e*PP | **PP** | **15 52 01.8** | **+0.2** |
| SPA0 | | | | | *e*SKSac | **SKSac** | **15 57 33.2** | **+0.2** |
| **SPITS** | **Spitsbergen Ar** | **99.91** | **348** | | P | **Pdif** | **15 47 46.7** | **-1.2** |
| | comp=Z,197nm,0.7s,baz=101,slow=7.7,SNR=174 | | | | | | | |
| SPITS | | | | | PP | **PP** | **15 52 00.8** | **-0.8** |
| | comp=Z,103nm,1.0s,baz=122,slow=24,SNR=3.8 | | | | | | | |
| SPITS | | | | | PKiKP | **PKiKP** | **15 52 13.4** | **+1.0** |
| | comp=Z,76nm,1.0s,baz=91,slow=7.2,SNR=3.5 | | | | | | | |
| SPITS | | | | | PKKPbc | **PKKPbc** | **16 04 06.0** | **-2.3** |
| | comp=Z,7.3nm,0.7s,baz=126,slow=4.2,SNR=3.2 | | | | | | | |
| | comp=Z,197nm,0.7s | | | | | | | |
| **BJO1** | **Bjornoya** | **99.94** | **344** | | *e*P | **Pdif** | **15 47 46.8** | **-1.3** |
| BJO1 | | | | | IVmB_BB | | 15 47 47.4 | |
| | comp=Z,1µm,1.0s | | | | | | | |
| BJO1 | | | | | *e*pP | **pP** | **15 49 48.1** | **-1.4** |
| BJO1 | | | | | *e*PP | **PP** | **15 52 03.4** | **+1.6** |
| BJO1 | | | | | *e*SKSac | **SKSac** | **15 57 34.3** | **+1.1** |
| BJO1 | | | | | *e*PS | **PS** | **16 01 19.8** | **+1.2** |
| BJO1 | | | | | *e*SS | **SS** | **16 05 46.7** | **+3.6** |
| **KNT** | **Kendrikon** | **99.98** | **310** | | P | **Pdif** | **15 47 48.3** | **-0.7** |
| **PUNG** | **Punghina** | **100.00** | **314** | ⇓ | P | **Pdif** | **15 47 49.8** | **+0.8** |
| **E27K** | **Coleen River** | **100.00** | **22** | | Pdiff | **Pdif** | **15 47 50.1** | **+1.6** |
| | baz=275 | | | | | | | |
| **DEV** | **Deva** | **100.03** | **315** | ⇑ | P | **Pdif** | **15 47 50.1** | **+1.0** |
| **DEV** | **Deva** | **100.03** | **315** | | P | **Pdif** | **15 47 50.1** | **+1.0** |
| **G27K** | **Doyon Strip** | **100.10** | **23** | | Pdiff | **Pdif** | **15 47 50.8** | **+1.8** |
| | baz=275 | | | | | | | |
| **AXAR** | **Agios Charalam** | **100.11** | **308** | | P | **Pdif** | **15 47 48.5** | **-1.2** |
| **GZR** | **Gura Zlata** | **100.12** | **315** | ⇓ | P | **Pdif** | **15 47 50.1** | **+0.4** |
| **GZR** | **Gura Zlata** | **100.12** | **315** | | P | **Pdif** | **15 47 50.0** | **+0.4** |
| **D27M** | **Malcolm River** | **100.13** | **21** | | Pdiff | **Pdif** | **15 47 50.8** | **+1.6** |
| | baz=276 | | | | | | | |
| **K27K** | **Chicken** | **100.15** | **26** | | Pdiff | **Pdif** | **15 47 51.3** | **+2.1** |
| | baz=274 | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **100.15** | **319** | | *e*Pdif | **Pdif** | **15 47 50.1** | **+0.5** |
| KWP | | | | | *e*PP | **PP** | **15 52 02.7** | **-1.4** |
| KWP | | | | | *e*SKSac | **SKSac** | **15 57 38.4** | **+3.1** |
| **KWP** | **Kalwaria Pacla** | **100.15** | **319** | | P | **Pdif** | **15 47 49.6** | **0.0** |
| **DRGR** | | **100.16** | **316** | ⇑ | P | **Pdif** | **15 47 50.2** | **+0.4** |
| **DRGR** | | **100.16** | **316** | | P | **Pdif** | **15 47 50.2** | **+0.4** |
| **SLIT** | **Slitere, Latvi** | **100.19** | **327** | | *e*P | **Pdif** | **15 47 49.8** | **+0.3** |
| **H27K** | **Steamboat Moun** | **100.20** | **24** | | Pdiff | **Pdif** | **15 47 51.3** | **+1.8** |
| | baz=275 | | | | | | | |
| **I27K** | **Kandik River** | **100.22** | **25** | | Pdiff | **Pdif** | **15 47 51.4** | **+1.8** |
| | baz=275 | | | | | | | |
| **VAY** | **Valandovo** | **100.23** | **311** | | *i* P | **Pdif** | **15 47 49.3** | **-0.8** |
| **LIT** | **Litokhoron** | **100.27** | **309** | | P | **Pdif** | **15 47 48.6** | **-1.8** |
| **RAF** | **Rauma** | **100.29** | **331** | | *e*P | **Pdif** | **15 47 49.8** | **-0.1** |
| **DJES** | **Djerdap** | **100.30** | **314** | ⇑ | P | **Pdif** | **15 47 51.4** | **+1.0** |
| **L27K** | **Beaver Creek,** | **100.33** | **27** | | Pdiff | **Pdif** | **15 47 51.8** | **+1.7** |
| | baz=274 | | | | | | | |
| **HSPB** | **Hornsund (broa** | **100.33** | **347** | | *e*Pdif | **Pdif** | **15 47 48.9** | **-0.9** |
| HSPB | | | | | *e*PP | **PP** | **15 52 00.4** | **-4.3** |
| **HSPB** | **Hornsund (broa** | **100.33** | **347** | | *e*P | **Pdif** | **15 47 49.1** | **-0.7** |
| **GUR** | **Goura** | **100.34** | **307** | | P | **Pdif** | **15 47 50.0** | **-0.8** |
| **BCAR** | **Beaver Creek A** | **100.35** | **27** | | | pP | 15 49 53.8 | +2.6 |
| **M27K** | **Edge Creek, AK** | **100.35** | **28** | | Pdiff | **Pdif** | **15 47 51.7** | **+1.3** |
| | baz=274 | | | | | | | |
| **HERR** | **Herculane** | **100.37** | **314** | ⇑ | P | **Pdif** | **15 47 51.1** | **+0.5** |
| **KOLS** | **Kolonicke sedl** | **100.44** | **318** | | *i* P | **Pdif** | **15 47 51.6** | **+0.7** |
| **KOLS** | **Kolonicke sedl** | **100.44** | **318** | | *e*PDIFF | **Pdif** | **15 47 51.6** | **+0.7** |
| KOLS | | | | | *e* | | 16 07 02.3 | |
| **PBUR** | **Paburge** | **100.46** | **326** | | *e*P | **Pdif** | **15 47 51.9** | **+1.2** |
| **MESA** | **MESA** | **100.46** | **30** | | Pdiff | **Pdif** | **15 47 52.4** | **+1.5** |
| | baz=273 | | | | | | | |
| **EGAK** | **Eagle** | **100.48** | **25** | | Pdiff | **Pdif** | **15 47 51.6** | **+0.9** |
| | baz=275 | | | | | | | |
| **KLV** | **Kalavryta, Ach** | **100.50** | **307** | | P | **Pdif** | **15 47 50.5** | **-1.0** |
| **MAKR** | **Makrakomi, Fth** | **100.53** | **308** | | P | **Pdif** | **15 47 50.5** | **-1.0** |
| **SURR** | **Surduc** | **100.57** | **315** | ⇑ | P | **Pdif** | **15 47 51.8** | **+0.3** |
| **KBS** | **Kingsbay** | **100.59** | **349** | | *e*P | **Pdif** | **15 47 50.2** | **-0.7** |
| KBS | | | | | *e*PP | **PP** | **15 52 07.2** | **+0.6** |
| KBS | | | | | *e*SKSac | **SKSac** | **15 57 37.5** | **+1.2** |
| KBS | | | | | *e*SS | **SS** | **16 05 55.3** | **+3.5** |
| **KBS** | **Kingsbay** | **100.59** | **349** | | *i* P | **Pdif** | **15 47 49.4** | **-1.5** |
| **TRO** | **Tromso** | **100.64** | **340** | | *e*P | **Pdif** | **15 47 50.2** | **-1.0** |
| TRO | | | | | IVmB_BB | | 15 47 52.3 | |
| | comp=Z,1µm,1.0s | | | | | | | |
| TRO | | | | | *e*PP | **PP** | **15 52 08.9** | **+1.7** |
| TRO | | | | | *e*SKSac | **SKSac** | **15 57 35.6** | **-1.1** |
| TRO | | | | | *e*SS | **SS** | **16 05 58.0** | **+5.0** |
| **ANX** | **Ano Chora** | **100.69** | **308** | | P | **Pdif** | **15 47 51.7** | **-0.6** |
| **EFP** | **Efpalio** | **100.70** | **308** | | P | **Pdif** | **15 47 52.1** | **-0.1** |
| **CTG** | **Chitna Glacier** | **100.71** | **29** | | Pdiff | **Pdif** | **15 47 53.7** | **+1.7** |
| | baz=274 | | | | | | | |
| **F28M** | **Old Crow** | **100.71** | **23** | | Pdiff | **Pdif** | **15 47 53.0** | **+1.3** |
| | baz=277 | | | | | | | |
| **E28M** | **Babbage River** | **100.72** | **22** | | Pdiff | **Pdif** | **15 47 53.1** | **+1.5** |
| | baz=277 | | | | | | | |
| **EVR** | **Evrytania** | **100.78** | **308** | | P | **Pdif** | **15 47 53.5** | **+0.7** |
| **MDVR** | **Moldovita** | **100.87** | **314** | ⇑ | P | **Pdif** | **15 47 53.4** | **+0.5** |
| **BOVS** | **Bovan** | **100.88** | **313** | ⇓ | P | **Pdif** | **15 47 52.8** | **-0.2** |
| **SIRR** | **Siria** | **100.89** | **316** | ⇑ | P | **Pdif** | **15 47 53.3** | **+0.3** |
| **D28M** | **Stokes Point** | **100.90** | **21** | | Pdiff | **Pdif** | **15 47 54.2** | **+1.8** |
| | baz=278 | | | | | | | |
| **BZS** | **Buzias** | **100.93** | **315** | ⇑ | P | **Pdif** | **15 47 53.1** | **-0.1** |
| **BZS** | **Buzias** | **100.93** | **315** | | P | **Pdif** | **15 47 53.0** | **-0.1** |
| **I28M** | **Miner Creek** | **100.93** | **25** | | Pdiff | **Pdif** | **15 47 54.4** | **+1.6** |
| | baz=276 | | | | | | | |
| **RKT** | **Rikitea** | **100.97** | **115** | | *e*P | **Pdif** | **15 47 51.4** | **-2.4** |
| | comp=Z,1µm,30.8s | | | | | | | |
| RKT | | | | | *e*pP | **pPdif** | **15 49 46.0** | **-8.2** |
| | comp=Z,3µm,32.5s | | | | | | | |
| **RKT** | **Rikitea** | **100.97** | **115** | | *e*LR | LR | 16 21 44.4 | |
| | comp=Z,8µm,26.5s | | | | | | | |
| RKT | | | | | *e*LR | LR | 16 21 51.7 | |
| | comp=Z,3µm,23.5s | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **100.98** | **318** | | *e*PDIFF | **Pdif** | **15 47 54.0** | **+0.7** |
| CRVS | | | | | *e* | | 15 49 53.7 | |
| CRVS | | | | | *e*PP | **PP** | **15 52 11.0** | **+0.6** |
| **PVO** | **Paravola** | **101.00** | **308** | | P | **Pdif** | **15 47 53.8** | **+0.2** |
| **YUK3** | **Moose Creek** | **101.07** | **29** | | Pdiff | **Pdif** | **15 47 54.9** | **+1.2** |
| | baz=275 | | | | | | | |
| **O28M** | **Mount Upton** | **101.28** | **30** | | Pdiff | **Pdif** | **15 47 56.2** | **+1.5** |
| | baz=275 | | | | | | | |
| **BEL** | **Belsk** | **101.31** | **321** | | *e*Pdif | **Pdif** | **15 47 55.6** | **+0.9** |
| BEL | | | | | *e*PP | PP | 15 52 02.8 | -10 |
| BEL | | | | | *e*SKSac | **SKSac** | **15 57 42.1** | **+1.5** |
| BEL | | | | | *e*pS | **pS** | **16 01 25.2** | **+1.4** |
| **DAWY** | **Dawson** | **101.32** | **26** | | Pdiff | **Pdif** | **15 47 55.7** | **+1.2** |
| | baz=276 | | | | | | | |
| **E29M** | **Blow River** | **101.34** | **22** | | Pdiff | **Pdif** | **15 47 55.7** | **+1.2** |
| | baz=279 | | | | | | | |
| **YUK8** | **Steele Glacier** | **101.44** | **29** | | Pdiff | **Pdif** | **15 47 57.0** | **+1.7** |
| | baz=276 | | | | | | | |
| **H29M** | **Whitestone** | **101.48** | **24** | | Pdiff | **Pdif** | **15 47 56.4** | **+1.3** |
| | baz=278 | | | | | | | |
| **G29M** | **Pine Creek** | **101.52** | **23** | | Pdiff | **Pdif** | **15 47 56.5** | **+1.2** |
| | baz=278 | | | | | | | |
| **OHR** | **Ohrid** | **101.57** | **310** | | *i* P | **Pdif** | **15 47 55.5** | **-0.6** |
| **I29M** | **Ogilvie Camp,** | **101.62** | **25** | | Pdiff | **Pdif** | **15 47 56.8** | **+1.1** |
| | baz=278 | | | | | | | |
| **KECS** | **Kecovo** | **101.64** | **318** | | *i* P | **Pdif** | **15 47 56.7** | **+0.5** |
| **KECS** | **Kecovo** | **101.64** | **318** | | *e*PDIFF | **Pdif** | **15 47 56.7** | **+0.5** |
| **NYDR** | **Nydri-Lefkada** | **101.65** | **308** | | P | **Pdif** | **15 47 55.8** | **-0.6** |
| **LKD2** | **Lefkada island** | **101.68** | **308** | | P | **Pdif** | **15 47 55.8** | **-0.9** |
| **EVGI** | **Lefkada island** | **101.68** | **308** | | P | **Pdif** | **15 47 56.8** | **+0.2** |
| **TSLK** | **Tsoukalades, L** | **101.68** | **308** | | P | **Pdif** | **15 47 56.4** | **-0.2** |
| **NIE** | **Niedzica** | **101.72** | **319** | | *e*Pdif | **Pdif** | **15 47 57.7** | **+1.1** |
| NIE | | | | | *e*PP | **PP** | **15 52 10.9** | **-5.0** |
| NIE | | | | | *e*SKSac | **SKSac** | **15 57 44.9** | **+2.0** |
| **FSK** | **Fiskardo** | **101.75** | **308** | | P | **Pdif** | **15 47 56.3** | **-0.6** |
| **J29N** | **Klondike Camp** | **101.78** | **26** | | Pdiff | **Pdif** | **15 47 58.3** | **+1.8** |
| | baz=278 | | | | | | | |
| **PNL** | **Peninsula** | **101.78** | **31** | | P | **Pdif** | **15 47 57.9** | **+1.3** |
| **PNL** | **Peninsula** | **101.78** | **31** | | Pdiff | **Pdif** | **15 47 58.0** | **+1.3** |
| | baz=276 | | | | | | | |
| **M29M** | **Somme Creek** | **101.93** | **28** | | Pdiff | **Pdif** | **15 47 59.2** | **+1.9** |
| | baz=277 | | | | | | | |
| **IGT** | **Igoumenitsa** | **101.93** | **309** | | P | **Pdif** | **15 47 57.3** | **-0.4** |
| **YUK4** | **Talbot Arm** | **101.97** | **29** | | Pdiff | **Pdif** | **15 47 59.4** | **+1.7** |
| | baz=277 | | | | | | | |
| **OJC** | **Ojcow** | **102.01** | **320** | | *e*Pdif | **Pdif** | **15 47 58.3** | **+0.5** |
| OJC | | | | | *e*PP | **PKiKP** | **15 52 16.8** | **-0.2** |
| OJC | | | | | *e*SKSac | **SKSac** | **15 57 46.5** | **+2.4** |
| **PSZ** | **Piszkesteto** | **102.06** | **317** | ⇑ | P | **Pdif** | **15 47 58.6** | **+0.5** |
| **PSZ** | **Piszkesteto** | **102.06** | **317** | | P | **Pdif** | **15 47 58.6** | **+0.5** |
| **EPYK** | **Eagle Plains** | **102.11** | **24** | | Pdiff | **Pdif** | **15 47 58.8** | **+0.8** |
| | baz=279 | | | | | | | |
| **O29M** | **Mount Kennedy** | **102.13** | **30** | | Pdiff | **Pdif** | **15 47 59.7** | **+1.4** |
| | baz=276 | | | | | | | |
| **SJES** | **Sjenica** | **102.15** | **313** | ⇑ | *i*P | **Pdif** | **15 47 59.0** | **+0.3** |
| **YUK6** | **Outpost Mounta** | **102.16** | **29** | | Pdiff | **Pdif** | **15 47 60.0** | **+1.5** |
| | baz=277 | | | | | | | |
| **K29M** | **Barlow Dome** | **102.17** | **26** | | Pdiff | **Pdif** | **15 47 59.9** | **+1.6** |
| | baz=278 | | | | | | | |
| **SRN** | **Sarande** | **102.18** | **309** | | P | **Pdif** | **15 47 58.5** | **-0.3** |
| **G30M** | **tAoh Zraii Nji** | **102.20** | **23** | | Pdiff | **Pdif** | **15 47 58.9** | **+0.5** |
| | baz=280 | | | | | | | |
| **FRGS** | **Fruska Gora** | **102.21** | **315** | ⇑ | *i*P | **Pdif** | **15 47 58.7** | **-0.2** |
| **IVA** | **Berane** | **102.22** | **312** | ⇑ | *i*P | **Pdif** | **15 47 57.6** | **-1.4** |
| **STEI** | **Steigen** | **102.24** | **338** | | *e*P | **Pdif** | **15 47 57.4** | **-1.0** |
| STEI | | | | | *e*PP | **PP** | **15 52 20.0** | **+0.9** |
| STEI | | | | | *e*SKSac | **SKSac** | **15 57 46.7** | **+2.4** |
| **F30M** | **Barrier River** | **102.26** | **22** | | Pdiff | **Pdif** | **15 47 59.6** | **+1.0** |
| | baz=280 | | | | | | | |
| **TIR** | **Tirane** | **102.27** | **311** | ⇑ | P | **Pdif** | **15 47 59.8** | **+0.6** |
| **TIR** | **Tirane** | **102.27** | **311** | | P | **Pdif** | **15 47 59.7** | **+0.6** |
| **LANS** | **Liptovska Anna** | **102.28** | **319** | | *i* P | **Pdif** | **15 48 00.7** | **+1.6** |
| LANS | | | | | *e* | | 15 52 18.9 | |
| **LANS** | **Liptovska Anna** | **102.28** | **319** | | *e*PDIFF | **Pdif** | **15 48 00.7** | **+1.6** |
| **LANS** | **Liptovska Anna** | **102.28** | **319** | | *e*PP | **PKiKP** | **15 52 18.9** | **+1.4** |
| **FAUS** | **Fauske** | **102.33** | **337** | | *e*P | **Pdif** | **15 47 58.1** | **-0.7** |
| FAUS | | | | | IVmBBB | | 15 48 00.6 | |
| | comp=Z,758nm,0.8s | | | | | | | |
| FAUS | | | | | *e*PP | **PP** | **15 52 19.7** | **0.0** |
| FAUS | | | | | *e*SKSac | **SKSac** | **15 57 45.5** | **+0.7** |
| **KEK** | **Kerkira** | **102.34** | **309** | | P | **Pdif** | **15 47 59.3** | **-0.2** |
| **TEKS** | **Tekeris** | **102.43** | **314** | | *e*P | **Pdif** | **15 47 58.9** | **-1.0** |
| **I30M** | **Mount Dempster** | **102.44** | **25** | | Pdiff | **Pdif** | **15 48 00.5** | **+0.9** |
| | baz=280 | | | | | | | |
| **KOME** | **Kolasin** | **102.50** | **312** | ⇑ | *i*P | **Pdif** | **15 47 59.5** | **-0.8** |
| **BBLS** | **Lazi&#263i** | **102.55** | **313** | ⇑ | *i*P | **Pdif** | **15 48 00.9** | **+0.5** |
| **J30M** | **Hart River** | **102.57** | **25** | | Pdiff | **Pdif** | **15 48 01.6** | **+1.4** |
| | baz=279 | | | | | | | |
| **PLE** | **Pljevlja** | **102.57** | **313** | ⇑ | *i*P | **Pdif** | **15 48 00.4** | **-0.2** |
| **RUDO** | **Rudo** | **102.58** | **313** | ⇑ | *i*P | **Pdif** | **15 47 59.3** | **-1.2** |
| **P29M** | **Windy Craggy** | **102.62** | **31** | | Pdiff | **Pdif** | **15 48 02.0** | **+1.6** |
| | baz=277 | | | | | | | |
| **PDG** | **Podgorica** | **102.70** | **312** | ⇑ | *i*P | **Pdif** | **15 48 00.7** | **-0.3** |
| **PDG** | **Podgorica** | **102.70** | **312** | ⇓ | *i*P | **Pdif** | **15 48 01.1** | **+0.1** |
| **PDG** | **Podgorica** | **102.70** | **312** | ⇑ | *i*P | **Pdif** | **15 48 00.8** | **-0.3** |
| **N30M** | **Aishikik Lake** | **102.70** | **29** | | Pdiff | **Pdif** | **15 48 02.4** | **+1.6** |
| | baz=278 | | | | | | | |
| **VYHS** | **Vyhne** | **102.73** | **318** | | *e*PP | **PKiKP** | **15 52 23.8** | **+5.5** |
| **VYHS** | **Vyhne** | **102.73** | **318** | | *e*PDIFF | **Pdif** | **15 48 01.4** | **+0.3** |
| **DRME** | **Dracevica, Mon** | **102.76** | **311** | ⇑ | *i*P | **Pdif** | **15 48 00.9** | **-0.4** |
| **DRME** | **Dracevica, Mon** | **102.76** | **311** | ⇑ | *i*P | **Pdif** | **15 48 01.1** | **-0.2** |
| **LOF** | **Lofoten** | **102.83** | **338** | | *e*P | **Pdif** | **15 48 00.9** | **-0.1** |
| LOF | | | | | IVmB_BB | | 15 48 03.6 | |
| | comp=Z,1µm,3.8s | | | | | | | |
| LOF | | | | | *e*PP | **PKiKP** | **15 52 19.9** | **+2.1** |
| LOF | | | | | *e*SKSac | **SKSac** | **15 57 46.8** | **-0.3** |
| **HAPS** | **Han Pijesak,Bl** | **102.86** | **313** | ⇑ | *i*P | **Pdif** | **15 48 02.4** | **+0.5** |
| **MOR8** | **Moi Rana** | **102.89** | **336** | | *e*P | **Pdif** | **15 48 00.1** | **-1.3** |
| MOR8 | | | | | IVmB_BB | | 15 48 01.4 | |
| | comp=Z,736nm,0.7s | | | | | | | |
| MOR8 | | | | | *e*PP | **PP** | **15 52 23.0** | **-0.9** |
| MOR8 | | | | | *e*SKSac | **SKSac** | **15 57 47.3** | **-0.3** |
| MOR8 | | | | | *e*SS | **SS** | **16 06 22.9** | **-0.8** |
| **NKME** | **Niksic** | **102.91** | **312** | ⇑ | *i*P | **Pdif** | **15 48 01.6** | **-0.5** |
| **UPM** | **Unac-Piva** | **102.93** | **313** | ⇑ | *i*P | **Pdif** | **15 48 01.3** | **-1.0** |
| **UPM** | **Unac-Piva** | **102.93** | **313** | ⇑ | *i*P | **Pdif** | **15 48 01.7** | **-0.6** |
| **CEME** | **Cevo** | **102.94** | **312** | ⇑ | *i*P | **Pdif** | **15 48 01.8** | **-0.4** |
| **P30M** | **Million Dollar** | **102.95** | **30** | | Pdiff | **Pdif** | **15 48 03.2** | **+1.4** |
| | baz=278 | | | | | | | |
| **INK** | **Inuvik** | **102.95** | **21** | | PKKPbc | PKKPbc | 16 03 58.6 | -0.7 |
| | comp=Z,6.2nm,0.6s,baz=33,slow=6.7,SNR=3.8 | | | | | | | |
| INK | | | | | SKKP | | 16 06 46.1 | |
| | comp=Z,10nm,0.8s,baz=105,slow=3.6,SNR=4.8 | | | | | | | |
| **INK** | **Inuvik** | **102.95** | **21** | | Pdiff | **Pdif** | **15 48 02.4** | **+0.8** |
| | baz=283 | | | | | | | |
| **BUM** | **Brajici-Budva** | **102.97** | **312** | ⇑ | *i*P | **Pdif** | **15 48 01.8** | **-0.6** |
| **G31M** | **Satah River** | **102.97** | **23** | | Pdiff | **Pdif** | **15 48 02.4** | **+0.7** |
| | baz=282 | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **102.99** | **316** | ⇓ | P | **Pdif** | **15 48 02.7** | **+0.5** |
| **F31M** | **Tsiigehtchic** | **103.06** | **22** | | Pdiff | **Pdif** | **15 48 02.8** | **+0.7** |
| | baz=282 | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **103.10** | **319** | | *e*PDIFF | **Pdif** | **15 48 03.3** | **+0.7** |
| OKC | | | | | *e*PP | **PP** | **15 52 26.6** | **+0.7** |
| **OKC** | **Ostrava-Krasne** | **103.10** | **319** | | *e*P | **Pdif** | **15 48 03.3** | **+0.7** |
| OKC | | | | | *e* | | 15 52 26.6 | |
| **SRO** | **Srobarova** | **103.12** | **317** | | *e*PP | **PKiKP** | **15 52

NC602 eSKSac **SKSac** 15 57 57.9 -0.6
NC602 eSS **SS** 16 06 56.7 +0.5
**TBLU Trondheim 105.28 334** eP **Pdif** 15 48 10.7 -1.4
TBLU IVmB_BB 15 48 12.7
comp=Z,952nm,1.4s
TBLU ePP **PP** 15 52 40.5 -0.9
TBLU eSKSac **SKSac** 15 57 59.0 +0.6
**PVCC Panska Ves 105.32 320** ePDIFF **Pdif** 15 48 13.9 +1.4
PVCC ePKP **PKiKP** 15 52 24.8 +1.8
PVCC eSKS **SKSac** 15 57 57.9 -1.2
**PVCC Panska Ves 105.32 320** eP **Pdif** 15 48 13.9 +1.4
PVCC e 15 57 57.9
**NB2 NORSAR Subarra105.37 331** P **Pdif** 15 48 12.0 -0.5
comp=Z,40nm,0.7s,baz=76,slow=4.4
NB2 PP **PP** 15 52 41.9 -0.3
comp=Z,464nm,1.7s,baz=82,slow=7.9
NB2 PKKP **PKKPbc** 16 03 49.5 -2.6
comp=Z,3.9nm,0.8s,baz=258,slow=2.4
**NB2 NORSAR Subarra105.37 331** P **Pdif** 15 48 12.0 -0.5
baz=76,slow=4.4
**NOA NORSAR Array B 105.37 331** Pdiff **Pdif** 15 48 11.6 -1.0
comp=Z,29nm,0.7s,baz=76,slow=4.5,SNR=93
NOA PKKPbc **PKKPbc** 16 03 49.9 -2.2
comp=Z,2.7nm,0.8s,baz=63,slow=2.6,SNR=6.7
NOA PKKPab **PKKPab** 16 04 09.8 0.0
comp=Z,5.1nm,1.0s,baz=251,slow=4.0,SNR=4.3
NOA SKKP 16 06 40.1
comp=Z,1.0nm,0.8s,baz=335,slow=2.0,SNR=3.5
**BOJS Bojanci 105.40 315** eSKiKP **SKiKP** 15 55 08.4 +1.7
**BOJS Bojanci 105.40 315**⇑ *i*P **Pdif** 15 48 13.6 +0.6
**PRU Pruhonice 105.40 320** ePDIFF **Pdif** 15 48 13.6 +0.7
PRU eSKS **SKSac** 15 57 59.4 -0.1
PRU AMS AMS 16 37 40.0
comp=Z,4μm,19.8s
**PRU Pruhonice 105.40 320** eP **Pdif** 15 48 13.6 +0.7
PRU e 15 57 59.4
PRU MLR MLR
comp=Z,4μm,19.8s
**SOKA Soboth 105.44 316** *i* Pdiff **Pdif** 15 48 13.6 +0.3
comp=Z,9.6nm,0.9s,SNR=17
SOKA *i* PKiKP **PKiKP** 15 52 24.2 +0.8
comp=Z,180nm,1.2s
SOKA eSKS **SKSac** 15 58 00.2 +0.2
comp=Z,25nm,1.6s
SOKA *i* PKKP **PKKPbc** 16 03 48.6 -2.8
comp=Z,7.2nm,1.1s
SOKA *i* SKKP 16 06 40.3
comp=Z,6.5nm,0.8s
**PRA Prague 105.46 320** ePKP **PKiKP** 15 52 25.1 +1.9
**Q32M Nakina River 105.50 31** Pdiff **Pdif** 15 48 14.7 +1.3
baz=282
**RUE Ruedersdorf 105.55 322** eP **Pdif** 15 48 15.0 +1.5
**U33K Whale Pass 105.59 34** Pdiff **Pdif** 15 48 14.4 +0.9
baz=280
**BRG Berggiesshubel 105.67 321**⇑ *i*P **Pdif** 15 48 14.9 +0.8
BRG Amp 15 48 17.0
comp=Z,19nm,0.8s
**BRG Berggiesshubel 105.67 321** P **PKiKP** 15 52 25.6 +1.9
BRG Amp 15 52 30.4
comp=Z,38nm,1.0s
BRG PP **PP** 15 52 42.1 -2.5
BRG Amp 15 52 50.2
comp=Z,108nm,0.9s
**CKRC Cesky Krumlov 105.69 319** ePKP **PKiKP** 15 52 24.5 +0.7
CKRC eSKS **SKSac** 15 58 02.0 +1.1
CKRC AMS AMS 16 40 10.0
comp=Z,3μm,20.2s
**CKRC Cesky Krumlov 105.69 319** eP **Pdif** 15 48 15.1 +0.8
**ZVC Zvikov 105.69 319** ePDIFF **Pdif** 15 48 15.1 +0.9
ZVC ePKKP **PKKPbc** 16 03 50.4 -0.2
**CRAG Craig 105.70 34** Pdiff **Pdif** 15 48 16.1 +2.1
baz=280
**OBKA Obir 105.79 316** *i* Pdiff **Pdif** 15 48 15.1 +0.3
comp=Z,12nm,0.9s,SNR=9.8
OBKA ePP **PP** 15 52 44.5 -1.3
comp=Z,219nm,1.3s
OBKA ePKKP **PKKPbc** 16 03 48.0 -2.3
comp=Z,17nm,1.0s,SNR=5.9
OBKA *i* SKKP 16 06 39.2
comp=Z,14nm,0.9s
**OBKA Obir 105.79 316**⇑ *i*P **Pdif** 15 48 14.1 -0.7
**MOA Molln 105.84 318** *i* Pdiff **Pdif** 15 48 15.4 +0.5
comp=Z,31nm,1.7s,SNR=14
MOA *i* PP **PP** 15 52 43.3 -2.7
comp=Z,124nm,0.9s,SNR=5.2
MOA *i* PKKP **PKKPbc** 16 03 48.0 -2.2
comp=Z,18nm,1.1s
MOA *i* SKKP 16 06 39.2
comp=Z,11nm,0.8s
**OSL Oslo 105.85 330** eP **Pdif** 15 48 15.3 +0.7
OSL IVmB_BB 15 48 16.8
comp=Z,1μm,2.0s
OSL ePP PP 15 52 36.9 -8.7
OSL eSKSac **SKSac** 15 58 01.2 +0.2
OSL eSS **SS** 16 07 06.6 +2.6
**LJU Ljubljana 105.85 316** *i* Pdiff **Pdif** 15 48 15.7 +0.7
LJU epPdiff **pPdif** 15 50 15.4 -0.8
LJU *i* 15 52 20.1
LJU *i* PP **PP** 15 52 43.0 -3.2
LJU *i* pPP 15 54 23.5
LJU *i* 15 54 35.9
LJU eSKiKP **SKiKP** 15 55 09.5 +2.0
LJU eSKSac **SKSac** 15 58 02.9 +1.2
LJU *e* 15 58 50.9
LJU *i* 16 02 04.8
LJU *e* 16 03 01.9
LJU *e* 16 04 39.7
LJU *e* 16 21 26.2
**C36M Paulatuk 105.91 19** Pdiff **Pdif** 15 48 15.8 +1.1
baz=292
**CEY Cerknica 105.96 315**⇑ *i*P **Pdif** 15 48 15.4 -0.1
**HSKC Hora Svate Kat 106.03 320** ePDIFF **Pdif** 15 48 16.6 +0.9
HSKC eSKS **SKSac** 15 57 58.1 -4.2
**R33M Jennings River 106.06 30** Pdiff **Pdif** 15 48 17.3 +1.5
baz=283
**GEC2 GERESS Array S 106.09 319** ePKiKP **PKiKP** 15 52 25.6 +1.0
baz=76,slow=2.0
**GERES GERESS Array B 106.09 319** Pdiff **Pdif** 15 48 16.0 -0.1
comp=Z,7.5nm,0.8s,baz=150,slow=11,SNR=36
GERES PKKPbc **PKKPbc** 16 03 49.0 -0.5
comp=Z,9.7nm,1.0s,baz=187,slow=9.4,SNR=8.0
GERES PKKPab **PKKPab** 16 04 06.2 -0.5
comp=Z,2.1nm,0.8s,baz=182,slow=14,SNR=4.0
GERES SKKP 16 06 38.6
comp=Z,4.3nm,0.9s,baz=187,slow=9.4,SNR=6.0
**DOMB Dombas 106.12 333** eP **Pdif** 15 48 15.8 0.0
DOMB IVmB_BB 15 48 17.6
comp=Z,784nm,2.3s
DOMB ePP **PP** 15 52 44.4 -3.2
DOMB eSKSac **SKSac** 15 58 02.0 -0.3
**KHC Kasperske Hory 106.13 319** ePDIFF **Pdif** 15 48 16.7 +0.5
KHC ePKP **PKiKP** 15 52 24.6 0.0
KHC ePP **PP** 15 52 40.9 -7.2
KHC eSKS **SKSac** 15 58 02.9 0.0
KHC ePKKP **PKKPbc** 16 03 48.7 -0.6
KHC AMS AMS 16 38 10.0
comp=Z,3μm,18.9s
**KHC Kasperske Hory 106.13 319** eP **Pdif** 15 48 16.7 +0.5
KHC *e* 15 58 02.9
KHC MLR MLR
comp=Z,3μm,18.9s
**CLL Collm 106.19 321** eP **Pdif** 15 48 17.0 +0.6
CLL *i* 15 52 46.2
CLL *e* 15 58 03.0
CLL pmax pmax
comp=Z,38nm,1.5s
**SKDS Skadanscina 106.26 315**⇑ *i*P **Pdif** 15 48 16.6 -0.3
**BIOA Bad Ischl, Aus 106.28 317** *i* Pdiff **Pdif** 15 48 17.1 +0.2
comp=Z,13nm,1.4s,SNR=7.7
BIOA ePKiKP **PKiKP** 15 52 24.8 -0.1
comp=Z,22nm,1.0s
BIOA eSKS **SKSac** 15 58 00.8 -2.7
comp=Z,9.0nm,0.9s
BIOA *i* PKKP **PKKPbc** 16 03 46.3 -2.5
comp=Z,21nm,1.0s
BIOA *i* SKKP 16 06 37.6
comp=Z,12nm,0.7s
**S34M Telegraph Cree 106.31 32** Pdiff **Pdif** 15 48 18.3 +1.6
baz=282
**CADS Cadrg 106.38 316** *i* Pdiff **Pdif** 15 48 17.1 -0.3
CADS *i* pPdiff **pPdif** 15 50 16.7 -1.9
**MYKA Terra Mystica 106.40 316** ePdiff **Pdif** 15 48 17.5 0.0
comp=Z,5.3nm,0.7s
MYKA *i* PP **PP** 15 52 49.7 -0.5
comp=Z,81nm,1.0s
MYKA eSKS **SKSac** 15 58 04.3 +0.1
comp=Z,39nm,1.7s
MYKA *i* PKKP **PKKPbc** 16 03 46.4 -2.1
comp=Z,11nm,0.5s,SNR=6.3
MYKA *i* SKKP 16 06 37.6
comp=Z,13nm,0.8s
**KONO Kongsberg 106.47 330** eP **Pdif** 15 48 17.6 +0.2
KONO IVmBBB 15 48 20.3
comp=Z,450nm,1.6s
KONO ePP **PP** 15 52 47.8 -2.3
KONO eSKSac **SKSac** 15 58 03.4 -0.3
KONO eSS **SS** 16 07 15.3 +3.0
**KBA Koelnbreinsper 106.55 317** *i* Pdiff **Pdif** 15 48 17.8 -0.5
comp=Z,6.4nm,0.7s,SNR=7.0
KBA *i* PP **PP** 15 52 51.2 -0.2
comp=Z,139nm,1.2s
KBA eSKS **SKSac** 15 58 05.6 +0.5
comp=Z,47nm,1.9s
KBA ePKKP **PKKPbc** 16 03 45.4 -2.8
comp=Z,9.4nm,0.5s
KBA ePKKP **PKKPab** 16 04 04.4 -0.3
comp=Z,19nm,0.8s
KBA *i* SKKP 16 06 36.0
comp=Z,4.1nm,0.6s
**V35K Ketchikan 106.58 34** Pdiff **Pdif** 15 48 19.8 +1.8
baz=281
**WET Wettzell 106.59 319** ePKiKP **PKiKP** 15 52 26.8 +1.4
baz=76,slow=2.0
**MOL Molde 106.66 333** eP **Pdif** 15 48 18.4 +0.3
MOL IVmBBB 15 48 19.6
comp=Z,699nm,0.8s
MOL ePP **PP** 15 52 51.8 +0.5
MOL eSKSac **SKSac** 15 58 07.4 +3.0
**TANN Tannenbergstha 106.67 320** ePKiKP **PKiKP** 15 52 26.6 +1.0
baz=76,slow=2.0
**DLBC Dease Lake 106.76 31** PKKPbc PKKPbc 16 03 46.7 -1.1
comp=Z,4.6nm,0.8s,baz=242,slow=4.2,SNR=4.5
**DLBC Dease Lake 106.76 31** Pdiff **Pdif** 15 48 20.1 +1.3
**TGTN Hyland Airport 106.82 28** Pdiff **Pdif** 15 48 20.4 +1.4
baz=286
**RJOB Jochberg 106.83 318** ePKiKP **PKiKP** 15 52 26.7 +0.8
baz=76,slow=2.0
**SKAR Skarslia 106.84 331** ePdif **Pdif** 15 48 18.6 -0.5
SKAR IVmB_BB 15 48 21.5
comp=Z,884nm,3.0s
SKAR ePP **PP** 15 52 52.9 +0.1
SKAR eSKSac **SKSac** 15 58 06.7 +1.3
**LESA Schwarzleotal 106.95 317** *i* Pdiff **Pdif** 15 48 19.7 -0.3
comp=Z,15nm,0.8s
LESA *i* PKiKP **PKiKP** 15 52 27.1 +0.9
comp=Z,85nm,1.2s
LESA eSKS **SKSac** 15 58 06.9 +0.3
comp=Z,34nm,1.9s
LESA *i* PKKP **PKKPbc** 16 03 43.8 -3.0
comp=Z,11nm,0.7s
LESA *i* PKKP **PKKPab** 16 04 02.7 -0.1
comp=Z,24nm,1.1s
LESA *i* SKKP 16 06 36.2
comp=Z,8.3nm,0.7s
**WTLY Watson Lake, Y 106.96 29** Pdiff **Pdif** 15 48 21.1 +1.5
baz=285
**MANZ Manzenberg 106.96 320** ePKiKP **PKiKP** 15 52 26.5 +0.4
baz=76,slow=2.0
**NEUB Neuenburg 106.97 321** ePKiKP **PKiKP** 15 52 25.7 -0.3
baz=76,slow=2.0
**T35M Bob Quinn 106.98 33** Pdiff **Pdif** 15 48 20.4 +0.6
baz=283
**FLTG Flechtingen 107.11 323** ePKiKP **PKiKP** 15 52 26.2 0.0
baz=76,slow=2.0
**DAG Danmarks Havn 107.15 351** *i* P **Pdif** 15 48 18.5 -1.6
DAG IAmb IAmb 15 48 25.1
comp=Z,32nm,0.7s
**ABTA Abfaltersbach 107.16 317** *i* Pdiff **Pdif** 15 48 20.5 -0.4
comp=Z,10.0nm,0.8s,SNR=7.8
ABTA ePKiKP **PKiKP** 15 52 27.2 +0.6
comp=Z,46nm,0.8s,SNR=9.8
ABTA eSKS **SKSac** 15 58 04.4 -3.1
comp=Z,16nm,1.0s
ABTA ePKKP **PKKPbc** 16 03 43.4 -2.8
comp=Z,26nm,1.3s
ABTA *i* PKKP **PKKPab** 16 04 02.2 +0.2
comp=Z,58nm,1.2s
ABTA *i* SKKP 16 06 36.0
comp=Z,12nm,0.9s
**BSEG Bad Segeberg 107.35 324** ePKiKP **PKiKP** 15 52 27.9 +1.3
baz=76,slow=2.0
**HOMB Homborsund 107.36 329** eP **Pdif** 15 48 21.3 -0.1
HOMB IVmB_BB 15 48 26.2
comp=Z,1μm,3.0s
HOMB ePP **PP** 15 52 58.7 +2.2
HOMB eSKSac **SKSac** 15 58 07.6 +0.1
**GRF Grafenberg Arr 107.57 320** ePKiKP **PKiKP** 15 52 28.2 +1.0
baz=76,slow=2.0
GRF ePKKPdf **PKKPbc** 16 03 41.8 -3.1
baz=246,slow=3.3
GRF eSKKPdf SKKPdf 16 06 34.0 -6.3
baz=245,slow=3.2
GRF *e*X 16 07 51.9
baz=252,slow=5.3
**WTTA Wattenberg 107.68 317** *i* Pdiff **Pdif** 15 48 23.3 -0.1
comp=Z,24nm,0.9s,SNR=10
WTTA *i* PKiKP **PKiKP** 15 52 28.7 +1.0
comp=Z,80nm,0.6s,SNR=8.5
WTTA eSKS **SKSac** 15 58 09.0 -1.0
comp=Z,21nm,0.8s
WTTA ePKKP **PKKPbc** 16 03 42.1 -2.6
comp=Z,20nm,1.2s
WTTA *i* PKKP **PKKPab** 16 04 00.8 +1.1
comp=Z,63nm,1.4s
WTTA *i* SKKP 16 06 34.8
comp=Z,6.7nm,0.8s
**HYA Hoyanger 107.69 332** eP **Pdif** 15 48 25.2 +2.5
HYA IVmBBB 15 48 28.1
comp=Z,1μm,3.3s
HYA ePP **PP** 15 52 59.3 +0.5
HYA eSKSac **SKSac** 15 58 07.9 -1.0
**WATA Walderalm 107.71 317** *i* Pdiff **Pdif** 15 48 23.0 -0.5
comp=Z,20nm,1.0s,SNR=14
WATA ePKiKP **PKiKP** 15 52 28.5 +0.8
comp=Z,30nm,0.5s,SNR=4.9
WATA eSKS **SKSac** 15 58 10.0 0.0
comp=Z,30nm,1.6s
WATA *i* PKKP **PKKPbc** 16 03 41.9 -2.7
comp=Z,9.7nm,0.9s
WATA ePKKP **PKKPab** 16 03 59.8 +0.3
comp=Z,46nm,1.2s
WATA *i* SKKP 16 06 34.3
comp=Z,9.8nm,0.9s
**CLZ Clausthal 107.72 322** ePKiKP **PKiKP** 15 52 29.1 +1.6
baz=76,slow=2.0
**FUR Furstenfeldbru 107.78 318** ePKiKP **PKiKP** 15 52 29.2 +1.5
baz=76,slow=2.0
**ODD1 Odda 107.85 331** eP **Pdif** 15 48 26.0 +2.3
ODD1 IVmB_BB 15 49 25.4
comp=Z,2μm,3.2s
ODD1 ePP **PP** 15 53 00.6 +0.5
ODD1 eSKSac **SKSac** 15 58 12.5 +2.7
**SQTA Sankt Quirin 107.97 317** *i* Pdiff **Pdif** 15 48 24.4 -0.2
comp=Z,23nm,0.9s,SNR=12
SQTA ePKiKP **PKiKP** 15 52 28.3 +0.1
comp=Z,197nm,1.9s
SQTA *i* SKS **SKSac** 15 58 10.8 -0.2
comp=Z,28nm,1.0s
SQTA *i* PKKP **PKKPbc** 16 03 40.8 -2.9
comp=Z,34nm,1.2s,SNR=4.2
SQTA ePKKP **PKKPab** 16 03 58.8 +0.4
comp=Z,66nm,1.5s
SQTA *i* SKKP 16 06 33.2
comp=Z,15nm,0.8s
**SNART Snartemo 108.00 329** eP **Pdif** 15 48 25.1 +0.9
SNART ePP **PP** 15 52 59.9 -1.2
SNART eSKSac **SKSac** 15 58 08.8 -1.5
**MOTA Moosalm 108.03 317** *i* Pdiff **Pdif** 15 48 24.7 -0.2
comp=Z,24nm,0.8s
MOTA *i* PKiKP **PKiKP** 15 52 29.4 +1.1
comp=Z,84nm,0.9s
MOTA eSKS **SKSac** 15 58 12.0 +0.7
comp=Z,47nm,1.7s
MOTA *i* PKKP **PKKPbc** 16 03 41.0 -2.6
comp=Z,26nm,1.0s
MOTA *i* PKKP **PKKPab** 16 03 59.0 +0.8
comp=Z,42nm,1.0s
MOTA *i* SKKP 16 06 33.5
comp=Z,10nm,0.8s
**GTTG Gottingen 108.03 322** ePKiKP **PKiKP** 15 52 28.8 +0.9
baz=76,slow=2.0
**BLS5 Blasjo 108.08 330** eP **Pdif** 15 48 24.9 +0.3
BLS5 IVmB_BB 15 48 29.1
comp=Z,1μm,3.6s
BLS5 ePP **PP** 15 53 01.4 -0.3
BLS5 eSKSac **SKSac** 15 58 11.0 +0.3
**RETH Rethem/Aller, 108.15 323** ePKiKP **PKiKP** 15 52 28.9 +0.8
baz=76,slow=2.0
**RETA Reutte 108.23 318** *i* Pdiff **Pdif** 15 48 25.7 +0.1
comp=Z,15nm,1.0s,SNR=9.9
RETA ePKiKP **PKiKP** 15 52 29.4 +0.8
comp=Z,66nm,1.4s
RETA eSKS **SKSac** 15 58 13.5 +1.5
comp=Z,19nm,1.1s
RETA ePKKP **PKKPbc** 16 03 40.3 -2.6
comp=Z,18nm,1.4s
RETA ePKKP **PKKPab** 16 03 57.6 +0.5
comp=Z,19nm,0.8s
RETA *i* SKKP 16 06 35.8
comp=Z,7.2nm,1.1s
**FETA Feichten 108.33 317** *i* Pdiff **Pdif** 15 48 26.4 +0.2
comp=Z,18nm,0.9s,SNR=15
FETA *i* PKiKP **PKiKP** 15 52 29.0 +0.1
comp=Z,142nm,1.5s
FETA eSKS **SKSac** 15 58 12.9 +0.2
comp=Z,24nm,1.3s
FETA ePKKP **PKKPbc** 16 03 40.4 -2.3
comp=Z,25nm,1.3s,SNR=5.6
FETA *i* PKKP **PKKPab** 16 03 57.9 +1.0
comp=Z,48nm,1.1s
FETA *i* SKKP 16 06 33.0
comp=Z,6.1nm,0.7s
**BER Bergen 108.33 332** eP **Pdif** 15 48 24.7 -0.9
BER IVmB_BB 15 48 53.6
comp=Z,2μm,3.0s
BER ePP **PP** 15 53 03.0 -0.4
BER eSKSac **SKSac** 15 58 12.3 +0.7
**SUE Sulen 108.38 332** eP **Pdif** 15 48 26.7 +0.9
SUE IVmBBB 15 48 34.2
comp=Z,998nm,2.4s
SUE ePP **PP** 15 53 06.9 +3.2
SUE eSKSac **SKSac** 15 58 13.7 +1.9
**UBR Ueberruh 108.64 318** ePKiKP **PKiKP** 15 52 30.7 +1.4
baz=76,slow=2.0
**KMY Karmoy 108.73 330** eP **Pdif** 15 48 29.4 +1.9
KMY ePP **PP** 15 53 02.9 -3.4
**JMIC Jan Mayen 108.77 344** IVmB_BB 15 48 27.0
comp=Z,2μm,3.3s
JMIC eP **Pdif** 15 48 29.1 +1.7
JMIC ePP **PP** 15 53 05.8 -0.4
JMIC eSKSac **SKSac** 15 58 16.1 +3.0
**DAVA Damuels 108.86 317** *i* Pdiff **Pdif** 15 48 29.1 +0.6
comp=Z,22nm,1.0s,SNR=10
DAVA ePKiKP **PKiKP** 15 52 30.6 +0.7
comp=Z,54nm,0.7s
DAVA ePKKP **PKKPbc** 16 03 39.6 -1.4
comp=Z,34nm,1.6s
DAVA ePKKP **PKKPdf** 16 03 55.6 +1.0
comp=Z,20nm,0.8s
DAVA *i* SKKP 16 06 30.7
comp=Z,16nm,1.4s
**JMI Jan Mayen 108.86 344** eP **Pdif** 15 48 29.7 +1.9
JMI IVmBBB 15 48 35.8
comp=Z,3μm,2.6s
JMI eSKSac **SKSac** 15 58 16.9 +3.4
**DAVOX Davos/Dischmat 108.94 317** PKiKP **PKiKP** 15 52 30.7 +0.5
comp=Z,27nm,0.7s,baz=117,slow=2.3,SNR=6.4
DAVOX PKKPbc **PKKPbc** 16 03 39.2 -1.5
comp=Z,10.0nm,0.6s,baz=252,slow=8.8,SNR=11
DAVOX PKKPab **PKKPdf** 16 03 54.4 -0.1
comp=Z,13nm,0.5s,baz=278,slow=5.9,SNR=9.6
**STU Stuttgart 109.04 319** ePKiKP **PKiKP** 15 52 30.9 +1.0
baz=76,slow=2.0
**KASTN Kahler Asten 109.05 322** ePKiKP **PKiKP** 15 52 30.9 +0.9
baz=76,slow=2.0
**IBBN Ibbenburen 109.20 323** ePKiKP **PKiKP** 15 52 30.7 +0.6
baz=76,slow=2.0
**DBG Daneborg 109.23 349** *i* P **Pdif** 15 48 29.5 +0.1
**TNS Taunus Mts 109.23 321** ePKiKP **PKiKP** 15 52 31.7 +1.3
baz=76,slow=2.0
**BUG Bochum-Univer 109.70 322** ePKiKP **PKiKP** 15 52 31.9 +0.8
baz=76,slow=2.0
**NEEM North Greenlan 109.79 358** *i* P **Pdif** 15 48 33.7 +1.5
NEEM IAmb IAmb 15 48 35.9
comp=Z,43nm,0.7s
**AHRW Bad Neuenahr-A 110.02 321** ePKiKP **PKiKP** 15 52 33.3 +1.5
baz=76,slow=2.0
**BTNL Ternell 110.60 321** *d*Pdif **Pdif** 15 48 39.3 +3.3
BTNL *d*PKiKP **PKiKP** 15 52 33.9 +1.0
BTNL *d*PP **PP** 15 53 20.2 +0.3
**MEM Membach 110.67 321** *d*Pdif **Pdif** 15 48 36.9 +0.6
MEM *d*PKiKP **PKiKP** 15 52 33.7 +0.8
MEM *d*PP **PP** 15 53 20.5 +0.1
**BHOU Houvegnez 110.73 321** *d*PKiKP **PKiKP** 15 52 34.1 +1.0
BHOU *d*PP **PP** 15 53 23.3 +2.4
**WLF Walferdange 110.80 320** *d*Pdif **Pdif** 15 48 38.1 +1.2
WLF *d*PKiKP **PKiKP** 15 52 34.7 +1.4
**WLF Walferdange 110.80 320** ePKiKP **PKiKP** 15 52 34.9 +1.6
baz=76,slow=2.0
**KEST Kesra 110.85 305** Pdiff **Pdif** 15 48 37.3 -0.3
comp=Z,14nm,0.8s,baz=303,slow=1.8,SNR=13
KEST PKiKP **PKiKP** 15 52 35.5 +1.6
comp=Z,51nm,0.9s,baz=244,slow=3.0,SNR=10
KEST PKKPbc **PKKPbc** 16 03 34.0 -0.1
comp=Z,9.1nm,0.5s,baz=159,slow=2.3,SNR=6.2
KEST PKKPab **PKKPab** 16 03 47.1 +1.5
comp=Z,35nm,1.0s,baz=170,slow=1.3,SNR=5.7
**BSTI Sart Tilman 110.95 321** *d*Pdif **Pdif** 15 48 38.3 +0.8
BSTI *d*PKiKP **PKiKP** 15 52 35.0 +1.5
**BCLA Clavier 111.15 321** *d*PKiKP **PKiKP** 15 52 34.8 +0.9
BCLA *d*PP **PP** 15 53 24.9 +1.1
**RCHB Rochefort 111.26 321** *d*PKiKP **PKiKP** 15 52 34.8 +0.7
**BGES Gesves 111.29 321** *d*Pdif **Pdif** 15 48 39.3 +0.2
BGES *d*PKiKP **PKiKP** 15 52 35.1 +0.9
BGES *d*PP **PP** 15 53 25.9 +1.1
**LRW Lerwick 111.45 333** eP **PKiKP** 15 52 34.6 +0.4
**BMRD Maredsous 111.51 321** *d*Pdif **Pdif** 15 48 38.9 -1.1
BMRD *d*PKiKP **PKiKP** 15 52 35.5 +0.9
BMRD *d*PP **PP** 15 53 26.5 +0.1
**DOU Dourbes 111.67 321** *d*PKiKP **PKiKP** 15 52 35.6 +0.7
DOU *d*PP **PP** 15 53 30.2 +2.8
**ABSA Djebel Ababsia 112.29 306** P **PKiKP** 15 52 38.1 +1.4
**CMAH Djebel Manchou 112.29 306** P **PKiKP** 15 52 37.8 +1.2
**YKA Yellowknife Ar 112.39 24** Pdiff **Pdif** 15 48 43.9 +0.2
comp=Z,8.1nm,0.9s,baz=309,slow=4.7,SNR=21
YKA PKiKP **PKiKP** 15 52 35.8 -0.1
comp=Z,46nm,0.5s,baz=282,slow=7.9,SNR=223
YKA SKP 15 55 19.6
comp=Z,18nm,0.7s,baz=307,slow=2.4,SNR=7.4
YKA PKKPbc **PKKPbc** 16 03 29.2 -0.7
comp=Z,3.3nm,0.7s,baz=116,slow=3.1,SNR=7.1
YKA PKKP **PKKPdf** 16 03 48.9 +0.8
comp=Z,0.7nm,0.5s,baz=113,slow=2.2,SNR=4.6
YKA SKKPbc SKKPbc 16 06 19.4 -3.4
comp=Z,7.6nm,0.8s,baz=110,slow=2.3,SNR=12
**CAEH 'Ain El Ouahch 112.72 307** P **PKiKP** 15 52 39.2 +1.8
**KULLO Kullorsuaq 112.81 359** *i* P **Pdif** 15 48 47.0 +1.7
KULLO IAmb IAmb 15 48 51.1
comp=Z,15nm,0.7s
**CKFL Kef-Lekhel 112.88 306** P **PKiKP** 15 52 39.2 +1.4
**CASM Ain Smara 113.08 306** P **PKiKP** 15 52 39.0 +0.9
**ELMS Elmsett, Ipswi 113.27 324** eP **PKiKP** 15 52 36.9 -1.0
**DRUM Mains of Drumt 113.39 330** eP **PKiKP** 15 52 38.5 +0.5
**BIGH Upper Bighouse 113.41 332** eP **PKiKP** 15 52 37.8 -0.1
**GDLE Glaisdale, N Y 113.48 327** eP **PKiKP** 15 52 39.2 +1.0
**ELSH Elham, Standar 113.48 323** eP **PKiKP** 15 52 38.6 +0.3
**SUMG Summit 113.51 353** *i* P **Pdif** 15 48 50.8 +1.8
**EDMD Edmundbyers 113.94 327** eP **PKiKP** 15 52 39.2 +0.1
**SET Setif 113.96 306** P **PKiKP** 15 52 42.0 +2.1
**HPK Haverah Park 114.09 326** eP **PKiKP** 15 52 40.1 +0.7
**EDI Edinburgh 114.15 329** eP **PKiKP** 15 52 40.1 +0.7
**LINV Loch Inver, As 114.18 332** eP **PKiKP** 15 52 40.1 +0.7
**LBWR Ladybower, Pea 114.36 326** eP **PKiKP** 15 52 40.2 +0.3
**CWF Charnwood Fore 114.37 325** eP **PKiKP** 15 52 40.3 +0.3
**INVG Invergeldie, C 114.37 330** eP **PKiKP** 15 52 40.3 +0.5
**EKA Eskdalemuir Ar 114.38 328** Pdiff **Pdif** 15 48 53.8 +1.1
comp=Z,2.8nm,0.6s,baz=67,slow=6.1,SNR=7.2
EKA PKP **PKiKP** 15 52 40.1 +0.2
comp=Z,44nm,0.6s,baz=10,slow=1.5,SNR=86
EKA SKP 15 55 24.8
comp=Z,25nm,1.0s,baz=41,slow=2.7,SNR=3.0
EKA PKKPbc **PKKPbc** 16 03 22.1 -1.0
comp=Z,12nm,0.6s,baz=242,slow=2.2,SNR=18
EKA PKKPab **PKKPab** 16 03 29.3 -0.4
comp=Z,11nm,0.7s,baz=234,slow=5.1,SNR=8.5
EKA SKKPbc SKKPbc 16 06 12.4 -4.2

comp=Z,3.0nm,0.7s,baz=241,slow=2.4,SNR=5.2
**ESK Eskdalemuir 114.41 328** *e*P **PKiKP 15 52 40.7 +0.7**
**UPNV Upernavik 114.60 359** *i* P **Pdif 15 48 54.0 +0.7**
UPNV IAmb IAmb 15 48 56.8
comp=Z,15nm,0.7s
**KESW Keswick, Cumbr 114.65 327** *e*P **PKiKP 15 52 41.0 +0.5**
**EJON La Jonquera 114.69 313** PKP PKPdf 15 52 40.3 -0.7
**KPL Plockton 114.76 331** *e*P **PKiKP 15 52 41.0 +0.4**
**WOL Wolverton 114.83 324** *e*P **PKiKP 15 52 41.4 +0.5**
**PGNU Glenifferbraes 114.86 329** *e*P **PKiKP 15 52 41.2 +0.4**
**NEWG New Galloway 115.02 328** *e*P **PKiKP 15 52 41.5 +0.4**
**SWN1 Swindon 115.09 324** *e*P **PKiKP 15 52 42.0 +0.6**
**LAWE Loch Awe, Argy 115.12 330** *e*P **PKiKP 15 52 41.6 +0.3**
**STRD Stroud 115.21 324** *e*P **PKiKP 15 52 42.1 +0.5**
**ETOS Mallorca 115.33 311** PKP **PKiKP 15 52 43.3 +1.0**
**HLM1 Long Mynd 115.34 325** *e*P **PKiKP 15 52 42.5 +0.6**
**FOEL Foel Wylfa 115.37 326** *e*P **PKiKP 15 52 42.4 +0.5**
**GAL1 Galloway 115.38 328** *e*P **PKiKP 15 52 42.0 +0.1**
**MONM Monmouth 115.55 325** *e*P **PKPdf 15 52 41.7 -0.6**
**IOMK Kirk Michael 115.56 328** *e*P **PKiKP 15 52 43.0 +0.8**
**LLW Llanuwychllyn 115.65 326** *e*P **PKiKP 15 52 42.7 +0.3**
**WME Myndd Eilian 115.78 327** *e*P **PKiKP 15 52 43.3 +0.6**
**WLF1 Llynfaes 115.87 326** *e*P **PKiKP 15 52 43.5 +0.7**
**WPS Cemaes, Angles 115.88 327** *e*P **PKiKP 15 52 43.3 +0.5**
**CLGH Cloghs, Cushen 116.01 329** *e*P **PKPdf 15 52 43.0 -0.1**
**JSA Saint Aubin 116.14 322** *e*P **PKiKP 15 52 43.7 +0.2**
**SOEG Soedalen 116.27 348** *i* P **Pdif 15 49 04.9 +4.1**
**BORG Borgarnes 116.50 342** **PKiKP 15 52 46.7 +3.0**
**BORG Borgarnes 116.50 342** PKIKP **PKiKP 15 52 46.7 +3.0**
**ILTH Belurgan, Co L 116.60 328** PKP **PKPdf 15 52 44.0 -0.2**
ILTH PPP PPP 15 53 55.3
**EIBI Ibiza 116.60 310** PKP **PKiKP 15 52 45.7 +0.9**
**RSBS Rosebush, Pemb 116.61 325** *e*P **PKiKP 15 52 44.7 +0.4**
**IDGL Inch Island, C 116.73 329** PKP **PKiKP 15 52 45.4 +0.9**
IDGL PPP PPP 15 54 06.9
**DYA Yadsworthy 116.74 323** *e*P **PKPdf 15 52 44.4 -0.3**
**HTL Hartland 116.85 324** *e*P **PKiKP 15 52 45.6 +0.8**
**ICESG Greenland Ices 116.89 352** *i* P **Pdif 15 49 06.4 +2.4**
**DSB Dublin 116.97 327** PKP **PKiKP 15 52 45.6 +0.6**
DSB PPP PPP 15 54 07.8
**SBD Saint Breward 117.14 324** *e*P **PKiKP 15 52 45.4 0.0**
**NEW Newport 117.17 39** PKiKP **PKiKP 15 52 46.4 +0.7**
baz=291
**IWEX Carrickbyrne, 117.57 326** PKP **PKiKP 15 52 46.9 +0.7**
IWEX PPP PPP 15 54 09.5
**CCA1 Carnmenellis 117.61 324** *e*P **PKiKP 15 52 46.5 +0.2**
**USHA Ushuaia 117.65 175** SKP 15 55 31.1
comp=Z,134nm,0.8s,baz=185,slow=1.3,SNR=16
USHA PKKPbc PKKPbc 16 03 10.8 -1.5
comp=Z,50nm,0.6s,baz=9.2,slow=4.0,SNR=9.4
**ECHE Chera 118.21 311** PKP **PKiKP 15 52 48.2 +0.3**
**IGLA Glengowla, Co 118.48 328** PKP **PKiKP 15 52 48.4 +0.5**
**CART Cartagena 118.73 309** PKP **PKPdf 15 52 48.5 -0.3**
**EMUR La Murta 118.85 309** PKP **PKiKP 15 52 49.4 +0.1**
**ETOB Tobarra 118.89 310** PKP **PKiKP 15 52 49.8 +0.5**
**TORD Torodi Ar. Bea 118.93 281** **PKPdf 15 52 49.9 0.0**
**TORD Torodi Ar. Bea 118.93 281** Pdiff **Pdif 15 49 14.3 +0.5**
comp=Z,0.2nm,0.6s,baz=156,slow=36,SNR=2.8
TORD PKhKP PKPpre 15 52 38.1
comp=Z,1.8nm,0.6s,baz=357,slow=1.2,SNR=4.3
TORD PP **PKPdf 15 52 49.5 -0.3**
comp=Z,245nm,0.5s,baz=44,slow=1.9,SNR=317
TORD PP **PP 15 54 11.6 -7.3**
comp=Z,28nm,0.9s,baz=67,slow=4.7,SNR=4.7
TORD SKP 15 55 34.5
comp=Z,65nm,0.9s,baz=4.6,slow=2.6,SNR=8.1
TORD PKKPbc **PKKPbc 16 03 05.7 -0.6**
comp=Z,8.5nm,0.5s,baz=304,slow=2.4,SNR=32
**TLOR Lorca, Murcia 119.24 309** PKP **PKiKP 15 52 50.8 +0.8**
**NVAR Mina Array Bea 119.38 50** **PKiKP 15 52 51.8 +1.3**
**NVAR Mina Array Bea 119.38 50** Pdiff **Pdif 15 49 15.8 +0.2**
comp=Z,0.8nm,0.6s,baz=272,slow=5.7,SNR=6.9
NVAR PKP **PKiKP 15 52 51.5 +1.0**
comp=Z,65nm,0.6s,baz=254,slow=2.8,SNR=169
NVAR SKP 15 55 35.1
comp=Z,17nm,0.8s,baz=222,slow=3.2,SNR=2.2
NVAR PKKPbc **PKKPbc 16 03 04.1 -1.4**
comp=Z,9.5nm,0.7s,baz=143,slow=4.5,SNR=15
NVAR SKKP 16 06 20.9
comp=Z,3.4nm,0.8s,baz=85,slow=3.2,SNR=3.7
**VAL Valentia 119.67 327** PKP **PKiKP 15 52 51.1 +0.8**
VAL PPP PPP 15 54 25.0
**VAL Valentia 119.67 327** PKP **PKPdf 15 52 49.8 -0.4**
**UCM Universidad Co 119.70 312** PKP **PKiKP 15 52 52.1 +1.2**
**MSO Missoula 119.70 40** PKiKP **PKiKP 15 52 51.3 +0.6**
baz=293
**SFJD Kangerlussuaq 120.10 356** **PKiKP 15 52 51.2 +0.5**
**SFJD Kangerlussuaq 120.10 356** PKIKP **PKiKP 15 52 51.2 +0.5**
**DY2G Dye2 120.20 354** *i* P **Pdif 15 49 22.3 +3.6**
DY2G IAmb IAmb 15 49 24.5
comp=Z,15nm,0.6s
**EBER Berja 120.36 309** P **PKiKP 15 52 52.9 +0.5**
**ESDC Sonseca Array 120.42 312** Pdiff **Pdif 15 49 20.9 +0.9**
comp=Z,0.9nm,0.9s,baz=245,slow=31,SNR=4.1
ESDC PKhKP PKPpre 15 52 48.0
comp=Z,35nm,1.0s,baz=16,slow=1.4,SNR=8.9
ESDC PKP **PKiKP 15 52 52.5 +0.2**
comp=Z,55nm,0.8s,baz=22,slow=2.7,SNR=67
ESDC PP **PP 15 54 20.7 -7.4**
comp=Z,41nm,1.1s,baz=65,slow=6.4,SNR=7.1
ESDC PKKPbc **PKKPbc 16 03 00.7 -1.0**
comp=Z,5.5nm,0.9s,baz=281,slow=3.6,SNR=11
ESDC SKKPbc SKKPbc 16 05 56.2 -0.9
comp=Z,6.4nm,1.1s,baz=265,slow=2.8,SNR=5.2
**HLID Hailey 120.61 43** PKiKP **PKiKP 15 52 54.3 +1.6**
baz=291
**PAB San Pablo 120.74 312** **PKiKP 15 52 54.6 +1.7**
**PAB San Pablo 120.74 312** PKIKP **PKiKP 15 52 54.6 +1.7**
**ELGU Los Guajares, 120.94 309** **PKiKP 15 52 53.8 +0.4**
**ELK Elko 120.98 47** PKKPbc PKKPbc 16 02 59.6 -0.2
comp=Z,13nm,0.7s,baz=113,slow=3.9,SNR=20
ELK SKKPbc SKKPbc 16 05 55.2 -0.4
comp=Z,7.0nm,0.9s,baz=20,slow=2.9,SNR=4.9
**EFI East Falkland 121.17 182** **PKiKP 15 52 54.5 +1.2**
**EFI East Falkland 121.17 182** PKIKP **PKiKP 15 52 54.5 +1.2**
**EGOR Sierra Gorda, 121.25 309** P **PKiKP 15 52 54.2 +0.1**
**EADA Adamuz 121.31 310** P **PKiKP 15 52 54.9 +0.9**
**TPNV Topopah Spring 121.34 51** PKiKP **PKiKP 15 52 55.7 +1.4**
baz=286
**R11B Troy Canyon, C 121.46 49** PKiKP **PKiKP 15 52 56.0 +1.5**
baz=287
**BOZ Bozeman (W) 121.67 40** PKiKP **PKiKP 15 52 55.9 +1.2**
baz=294
**PBRG Braganca 121.73 315** *e*PKPdf **PKiKP 15 52 55.2 +0.4**
**PBRG Braganca 121.73 315** *e*PP **PP 15 54 33.0 -3.8**
**EGMT Eagleton 121.77 37** PKiKP **PKiKP 15 52 55.5 +0.8**
baz=297
**ECAB El Cabril 121.97 311** P **PKiKP 15 52 56.5 +1.1**
**PFO Pinyon Flats O 122.01 55** **PKiKP 15 52 57.7 +2.0**
**PFO Pinyon Flats O 122.01 55** PKiKP **PKiKP 15 52 57.1 +1.5**
baz=283
**PFO Pinyon Flats O 122.01 55** PKiKP **PKiKP 15 52 57.7 +2.0**
**TPFO Pinon Flats 122.02 55** PKiKP **PKiKP 15 52 57.2 +1.5**
baz=283
**MVO Moncorvo 122.16 314**⇑ *e*PKPdf **PKiKP 15 52 57.0 +1.3**
**MVO Moncorvo 122.16 314** *e*PP **PP 15 54 41.4 +1.7**
**FFC Flin Flon 122.20 27** **PKiKP 15 52 56.4 +1.1**
**FFC Flin Flon 122.20 27** PKIKP **PKiKP 15 52 56.4 +1.1**
**MONP2 Monument Peak 122.21 56** PKiKP **PKiKP 15 52 57.8 +1.6**
baz=283
**CEU Ceuta 122.55 308** P **PKiKP 15 52 57.0 +0.5**
**PVRL Vila Real 122.60 315** *e*PKPdf **PKiKP 15 52 57.9 +1.4**
**PVRL Vila Real 122.60 315** *e*PP **PP 15 54 38.2 -4.4**
**POLO Lamas de Olo 122.62 315** *e*PKPdf **PKiKP 15 52 57.8 +1.2**
**POLO Lamas de Olo 122.62 315** *e*PP **PP 15 54 44.6 +1.8**
**PCAB Cabril 122.66 315**⇑ *e*PKPdf **PKiKP 15 52 57.7 +1.1**
**PCAB Cabril 122.66 315** *e*PP **PP 15 54 39.8 -3.2**
**MDT Midelt 122.72 304** PKhKP PKPpre 15 52 46.5
comp=Z,3.3nm,0.7s,baz=108,slow=3.2,SNR=4.3
MDT PKP **PKiKP 15 52 57.9 +0.8**
comp=Z,119nm,0.7s,baz=93,slow=1.8,SNR=99
MDT PKKPbc **PKKPab 16 02 53.4 0.0**
comp=Z,44nm,0.9s,baz=271,slow=4.4,SNR=16
MDT SKKPbc SKKPbc 16 05 47.6 -1.8
comp=Z,7.3nm,0.8s,baz=265,slow=7.8,SNR=5.0
**PGAV Gavieira, Arco 122.74 316**⇑ *e*PKPdf **PKiKP 15 52 58.0 +1.2**
**PGAV Gavieira, Arco 122.74 316** *e*PP **PP 15 54 42.4 -1.1**
**MTE Manteigas 122.79 314**⇑ *e*PKPdf **PKiKP 15 52 58.2 +1.3**
**MTE Manteigas 122.79 314** *e*PP **PP 15 54 45.6 +1.7**
**H17A Grant Village 122.85 41** PKiKP **PKiKP 15 52 59.2 +2.0**
baz=295
**DUG Dugway, Tooele 122.91 46** PKiKP **PKiKP 15 52 58.6 +1.4**
baz=290
**PVIS Viseu 122.93 314**⇑ *e*PKPdf **PKiKP 15 52 58.4 +1.2**
**PVIS Viseu 122.93 314** *e*PP **PP 15 54 38.4 -6.4**
**PCBR Castelo Branco 122.93 313**⇑ *e*PKPdf **PKiKP 15 52 58.3 +1.2**
**PCBR Castelo Branco 122.93 313** *e*PP **PP 15 54 49.7 +4.9**
**PMRV Marv??o 123.01 313**⇑ *e*PKPdf **PKiKP 15 52 58.2 +0.9**
**PMRV Marv??o 123.01 313** *e*PP **PP 15 54 46.3 +0.9**
**PBAR Barrancos 123.16 311**⇑ *e*PKPdf **PKiKP 15 52 58.9 +1.3**
**PBAR Barrancos 123.16 311** *e*PP **PP 15 54 50.0 +3.6**
**PBAR Barrancos 123.16 311** P **PKiKP 15 52 59.0 +1.3**
**PESTR Estremoz 123.34 312**⇑ *e*PKPdf **PKiKP 15 52 59.2 +1.2**
**PESTR Estremoz 123.34 312** *e*PP **PP 15 54 50.0 +2.4**
**RLMT Red Lodge 123.38 40** PKiKP **PKiKP 15 52 59.5 +1.4**
baz=296
**COI Coimbra 123.48 314**⇑ *e*PKPdf **PKiKP 15 52 59.6 +1.4**
**COI Coimbra 123.48 314** *e*PP **PP 15 54 49.3 +0.9**
**PCAS Casmilo, Conde 123.59 314** *e*PKPdf **PKiKP 15 52 59.4 +0.9**
**EGRO El Granado 123.69 311** P **PKiKP 15 53 00.2 +1.5**
**PMTG Montargil 123.74 312**⇑ *e*PKPdf **PKiKP 15 52 59.5 +0.8**
**EVO Evora 123.76 312**⇑ *e*PKPdf **PKiKP 15 53 00.0 +1.2**
**PBEJ Beja 123.82 311**⇑ *e*PKPdf **PKiKP 15 53 00.3 +1.3**
**PBEJ Beja 123.82 311** *e*PP **PP 15 54 48.0 -2.8**
**PVAQ Vaqueiros 123.91 310**⇑ *e*PKPdf **PKiKP 15 53 00.5 +1.4**
**PVAQ Vaqueiros 123.91 310** *e*PP **PP 15 54 52.2 +0.8**
**PVAQ Vaqueiros 123.91 310** P **PKiKP 15 53 00.6 +1.5**
**PSBE So Bento 124.00 313**⇑ *e*PKPdf **PKiKP 15 53 00.5 +1.2**
**PSBE So Bento 124.00 313** *e*PP **PP 15 54 54.4 +2.5**
**PCVE Castro Verde 124.08 311**⇑ *e*PKPdf **PKiKP 15 53 00.8 +1.3**
**PCVE Castro Verde 124.08 311** *e*PP **PP 15 54 56.4 +3.9**
**PBDV Barranco-do-Ve 124.12 310**⇑ *e*PKPdf **PKiKP 15 53 01.3 +1.7**
**PBDV Barranco-do-Ve 124.12 310** *e*PP **PP 15 54 54.6 +1.8**
**MESJ Messejana 124.15 311**⇑ *e*PKPdf **PKiKP 15 53 01.0 +1.4**
**MESJ Messejana 124.15 311** *e*PP **PP 15 54 53.9 +1.0**
**MESJ Messejana 124.15 311** *e*PKPdf **PKiKP 15 53 00.8 +1.2**
MESJ *e*PP **PP 15 54 55.0 +2.1**
**BW06 Boulder Array 124.20 42** PKiKP **PKiKP 15 53 00.3 +0.5**
baz=294
**PDAR Pinedale Array 124.20 42** **PKPdf 15 52 59.4 -0.2**
**PDAR Pinedale Array 124.20 42** PKP **PKPdf 15 52 59.2 -0.3**
comp=Z,25nm,0.6s,baz=94,slow=1.2,SNR=76
PDAR PP **pPKPdf 15 55 13.8 +6.2**
comp=Z,13nm,0.9s,baz=318,slow=4.0,SNR=4.0
PDAR PKKPbc **PKKPab 16 02 47.0 0.0**
comp=Z,10nm,0.5s,baz=118,slow=6.5,SNR=33
**PNCL Nicolau / Gran 124.29 311**⇑ *e*PKPdf **PKiKP 15 53 00.9 +1.0**
**PNCL Nicolau / Gran 124.29 311** *e*PP **PP 15 54 55.6 +1.8**
**PACT Alcochete 124.29 312** *e*PP **PP 15 54 53.6 -0.2**
**LAO LASA Array 124.51 37** PKiKP **PKiKP 15 53 01.5 +1.4**
baz=300
**LIS Lisbon 124.54 312** *e*PKP **PKiKP 15 53 02.2 +1.9**
**LIS Lisbon 124.54 312** *e*PKPdf **PKiKP 15 53 01.6 +1.3**
LIS *e*PP **PP 15 54 57.4 +2.0**
**PTEO Sao Teotonio 124.62 311**⇑ *e*PKPdf **PKiKP 15 53 02.1 +1.6**
**PTEO Sao Teotonio 124.62 311** *e*PP **PP 15 54 57.4 +1.4**
**MORF Marmelete 124.65 311**⇑ *e*PKPdf **PKiKP 15 53 02.2 +1.5**
**MORF Marmelete 124.65 311** *e*PP **PP 15 54 57.0 +0.7**
**MORF Marmelete 124.65 311** *e*PKPdf **PKiKP 15 53 01.9 +1.2**
**DGMT Dagmar 124.75 34** PKiKP **PKiKP 15 53 01.1 +0.5**
baz=303
**PFVI Vila Bisbo 124.83 310**⇑ *e*PKPdf **PKiKP 15 53 02.5 +1.5**
**PFVI Vila Bisbo 124.83 310** *e*PP **PP 15 54 58.6 +1.1**
**KIC Kosan Boka 124.94 273**⇑ *i*PKIKP **PKiKP 15 53 02.3 +0.4**
comp=Z,496nm,0.7s
**DBIC Dimbokro 125.08 273** PKhKP PKPpre 15 52 45.1
comp=Z,4.4nm,0.6s,baz=121,slow=3.4,SNR=4.0
DBIC PKP **PKiKP 15 53 02.0 -0.1**
comp=Z,318nm,0.7s,baz=91,slow=2.0,SNR=137
DBIC PKKPbc **PKKPab 16 02 44.6 +1.1**
comp=Z,8.1nm,0.7s,baz=268,slow=3.7,SNR=4.7
**LIC Lamto 125.22 272**⇑ *i*PKIKP **PKiKP 15 53 02.7 +0.3**
comp=Z,1μm,0.7s
**TIC Toumodi 125.24 273**⇑ *i*PKIKP **PKiKP 15 53 02.8 +0.3**
comp=Z,84nm,0.3s
**214A Organ Pipe Nat 125.39 56** PKiKP **PKiKP 15 53 03.3 +1.0**
baz=285
**WUAZ Wupatki 125.53 51** PKiKP **PKiKP 15 53 04.1 +1.4**
baz=288
**W18A Petrified Fore 126.93 51** PKiKP **PKiKP 15 53 06.7 +1.2**
baz=289
**TUC Tucson 126.95 55** PKiKP **PKiKP 15 53 06.7 +1.2**
baz=286
**MVCO Mesa Verde 127.13 48** PKiKP **PKiKP 15 53 06.9 +1.0**
baz=292
**RSSD Black Hills 127.14 39** PKiKP **PKiKP 15 53 05.6 0.0**
baz=300
**N23A Red Feather La 127.44 43** PKiKP **PKiKP 15 53 06.9 +0.4**
baz=297
**ULM Lac du Bonnet 127.95 28** PKP **PKPdf 15 53 06.0 -0.1**
comp=Z,103nm,0.6s,baz=309,slow=1.4,SNR=73
ULM SKPbc SKPbc 15 55 34.5
comp=Z,77nm,0.7s,baz=310,slow=5.0,SNR=11
**S22A 4UR Ranch, Cre 128.15 47** PKiKP **PKiKP 15 53 09.2 +1.2**
baz=294
**ISCO Idaho Springs 128.15 44** PKiKP **PKiKP 15 53 08.6 +0.7**
baz=296
**Q24A Divide 128.84 45** PKiKP **PKiKP 15 53 09.3 -0.1**
baz=295
**SDCO Great Sand Dun 129.11 47** PKiKP **PKiKP 15 53 10.0 0.0**
baz=312
**AGMN Agassiz Nation 129.27 30** PKiKP **PKPdf 15 53 08.8 +0.1**
**121A Cookes Peak, D 129.30 54** PKiKP **PKiKP 15 53 11.5 +1.2**
baz=289
**Y22D IRIS PASSCAL I 129.46 51** PKiKP **PKiKP 15 53 11.4 +0.8**
baz=291
**ANMO Albuquerque 129.50 50** SKPbc SKPbc 15 55 41.6 +0.8
comp=Z,100nm,0.6s,baz=339,slow=3.2,SNR=12
ANMO SKKPbc **SKKPbc 16 05 24.5 -2.1**
comp=Z,4.0nm,0.8s,baz=237,slow=1.9,SNR=4.5
**ANMO Albuquerque 129.50 50** PKiKP **PKiKP 15 53 11.3 +0.6**
baz=292
**OGNE Ogallala 130.02 41** PKiKP **PKPdf 15 53 10.8 +0.2**
baz=300
**T25A Trinidad 130.15 47** PKiKP **PKiKP 15 53 12.5 +0.6**
baz=293
**PLCA Paso Flores 131.20 170** PKhKP PKPpre 15 52 56.8
comp=Z,3.3nm,0.8s,baz=122,slow=3.1,SNR=5.9
PLCA PKP **PKiKP 15 53 14.0 +0.1**
comp=Z,18nm,0.7s,baz=215,slow=1.7,SNR=17
PLCA SKPbc **SKPab 15 55 48.4 +0.8**
comp=Z,146nm,0.8s,baz=193,slow=4.5,SNR=24
PLCA PKKP **PKKPdf 16 03 11.1 -0.4**
comp=Z,2.6nm,0.5s,baz=77,slow=4.1,SNR=3.0
PLCA SKKPbc **SKKPbc 16 05 20.1 +0.1**
comp=Z,15nm,0.8s,baz=16,slow=4.2,SNR=10
**MNTX Cornudas Mount 131.50 54** PKiKP **PKiKP 15 53 14.8 +0.2**
baz=290
**EYMN Ely 131.62 28** PKiKP **PKPdf 15 53 13.3 +0.1**
baz=316
**ECSD EROS Data Cent 131.79 35** PKiKP **PKiKP 15 53 14.3 -0.5**
baz=308
**ASCN Ascension 131.82 253** **PKiKP 15 53 16.9 +1.3**
**H10N1 ASCENSION HYDR 131.96 253** PKP **PKiKP 15 53 16.2 +0.6**
baz=102,slow=2.6,SNR=20
**H10N2 ASCENSION HYDR 131.97 253** PKP **PKiKP 15 53 17.3 +1.7**
baz=102,slow=2.6,SNR=14
**H10N3 ASCENSION HYDR 131.98 253** PKP **PKiKP 15 53 17.1 +1.4**
baz=102,slow=2.6,SNR=14
**PMPST Porto Santo, M 132.02 308** *e*PKPdf **PKiKP 15 53 17.4 +1.8**
**PMPST Porto Santo, M 132.02 308** *e*PP **PP 15 55 46.6 +2.7**
**PMPS Porto Santo 132.03 308** *e*PKPdf **PKiKP 15 53 15.5 0.0**
**PMPS Porto Santo 132.03 308** *e*PP **PP 15 55 45.5 +1.6**
**SCHQ Schefferville 132.37 5** PKhKP PKPpre 15 52 56.0
comp=Z,6.7nm,0.6s,baz=258,slow=5.9,SNR=5.4
SCHQ PKP **PKiKP 15 53 15.7 0.0**
comp=Z,142nm,0.5s,baz=293,slow=1.4,SNR=52
SCHQ SKPbc **SKPbc 15 55 51.0 +0.8**
comp=Z,559nm,0.8s,baz=9.9,slow=4.2,SNR=39
SCHQ PKKP **PKKPdf 16 03 09.2 -0.5**
comp=Z,4.5nm,0.6s,baz=252,slow=5.8,SNR=3.8
**PMAR Madeira 132.61 308** KPdf **PKPdf 15 53 10.6 -5.2**
**PMAR Madeira 132.61 308** *e*PP **PP 15 55 48.9 +1.0**
**FUL Funchal 132.62 308** *e*PKPdf **PKiKP 15 53 17.3 +0.6**
**CBKS Cedar Bluff 132.63 43** PKiKP **PKiKP 15 53 16.2 -0.5**
baz=301
**PMOZ Porto Moniz, M 132.79 308** *e*PKPdf **PKiKP 15 53 17.6 +0.3**
**PMOZ Porto Moniz, M 132.79 308** *e*PP **PP 15 55 49.7 +0.8**
**AMTX Amarillo 133.12 48** PKiKP **PKPdf 15 53 16.9 +0.3**
baz=296
**TXAR Lajitas Array 133.69 56** PKhKP PKPpre 15 53 01.0
comp=Z,18nm,0.7s,baz=251,slow=1.5,SNR=20
TXAR PKP **PKiKP 15 53 20.0 +0.8**
comp=Z,43nm,0.7s,baz=321,slow=0.7,SNR=22
TXAR SKPbc **SKPbc 15 55 56.6 +1.1**
comp=Z,98nm,0.7s,baz=251,slow=2.0,SNR=27
**KSU1 Kansas State U 134.53 40** PKiKP **PKPdf 15 53 19.7 +0.7**
baz=304
**TRQA Tornquist 134.78 178** **PKiKP 15 53 20.8 -0.3**
**TRQA Tornquist 134.78 178** PKIKP **PKiKP 15 53 20.8 -0.3**
**SCIA State Center 134.88 35** PKiKP **PKPdf 15 53 19.9 +0.4**
baz=310
**WMOK Wichita Mounta 135.31 47** PKiKP **PKiKP 15 53 22.2 0.0**
baz=298
**JFWS Jewell Farm 135.83 32** PKiKP **PKPdf 15 53 22.1 +0.9**
baz=315
**BART Pico Bartolome 136.15 319** *e*PKP **PKiKP 15 53 25.1 +1.2**
**BART Pico Bartolome 136.15 319** *e*PP **PP 15 56 04.6 -4.8**
**PGRON Lagoa das Cont 136.29 319** *e*PKP **PKiKP 15 53 27.9 +3.8**
**PGRON Lagoa das Cont 136.29 319** *e*PP **PP 15 56 06.4 -3.8**
**CMLA Cha da Macela 136.39 319** *e*PP **PP 15 56 05.7 -5.0**
**JCT Junction City 136.40 53** PKiKP **PKPdf 15 53 23.5 +0.8**
baz=294
**PSET Sete Cidades 136.48 319** *e*PP **PP 15 56 07.2 -4.1**
**PSMN Pico do Norte, 136.51 318** *e*PKP **PKiKP 15 53 24.4 -0.2**
**PSMN Pico do Norte, 136.51 318** *e*PP **PP 15 56 06.8 -4.8**
**PSMA Santa Maria 136.56 318** *e*PKP **PKiKP 15 53 24.5 -0.1**
**PSMA Santa Maria 136.56 318** *e*PP **PP 15 56 06.9 -4.9**
**PSCM Serra do Cume 136.84 321** *e*PKP **PKiKP 15 53 25.7 +0.5**
**PSCM Serra do Cume 136.84 321** *e*PP **PP 15 56 06.8 -6.7**
**PAGU Agualva, Azore 136.84 321** *e*PP **PP 15 56 07.1 -6.4**
**PSBA Serra de Santa 136.93 322** *e*PP **PP 15 56 08.1 -5.9**
**GLMI Grayling 137.08 26** PKiKP **PKPdf 15 53 24.3 +0.8**
baz=323
**PMAN Manadas 137.48 322** *e*PP PP 15 56 09.5 -7.8
**ROSA Rosais 137.52 322** *e*PP PP 15 56 09.3 -8.3
**833A Chaparral WMA, 137.56 56** PKiKP **PKiKP 15 53 26.1 -0.8**
baz=292
**L44A Lake County Fo 137.56 31** PKiKP **PKiKP 15 53 25.9 -0.6**
baz=317
**PID Ribeirinha 137.62 322** *e*PKP **PKiKP 15 53 28.8 +2.0**
**PID Ribeirinha 137.62 322** *e*PP PP 15 56 10.4 -7.8
**PPNO Prainha do Nor 137.69 322** *e*PKP **PKiKP 15 53 29.5 +2.5**
**PPNO Prainha do Nor 137.69 322** *e*PP PP 15 56 10.5 -8.2
**PICO Pico 137.77 322** *e*PKP **PKiKP 15 53 29.7 +2.5**
**PICO Pico 137.77 322** *e*PP PP 15 56 10.6 -8.6
**PCAN Candelaria 137.83 322** *e*PKP **PKiKP 15 53 27.2 0.0**
**PCAN Candelaria 137.83 322** *e*PP PP 15 56 10.1 -9.4
**PCED Cedros 137.86 322** *e*PP PP 15 56 10.9 -8.7
**CALA Caldeira 137.89 322** *e*PP PP 15 56 10.2 -10
**HDIL Hopedale 137.98 34** PKiKP **PKiKP 15 53 26.8 -0.7**
baz=314
**435B Jarrell 138.01 51** PKiKP **PKiKP 15 53 26.8 -1.0**
baz=296
**CCM Cathedral Cave 138.51 38** PKiKP **PKiKP 15 53 28.3 -0.3**
baz=310
**H07N1 FLORES T-PHASE 138.57 325** *e*PKP **PKPdf 15 53 25.8 -0.6**
**MIAR Mount Ida 139.09 44** PKiKP **PKiKP 15 53 29.2 -0.7**
baz=304
**SADO Sadowa 139.26 21** SKPbc **SKPbc 15 56 11.6 +0.2**
comp=Z,266nm,1.0s,baz=324,slow=4.7,SNR=25
SADO SKKPbc **SKKPbc 16 04 50.0 -1.1**
comp=Z,19nm,0.8s,baz=198,slow=3.8,SNR=6.1
**AAM Ann Arbor 139.51 27** PKiKP **PKiKP 15 53 29.7 -0.8**
baz=323
**NATX Nacogdoches 139.77 48** PKiKP **PKiKP 15 53 31.0 -0.3**
baz=300
**WVT Waverly 141.84 37** **PKPdf 15 53 29.8 -2.5**
**WVT Waverly 141.84 37** PKIKP **PKPdf 15 53 29.8 -2.5**
**LCO Las Campanas 142.45 165** **PKPdf 15 53 32.7 -1.4**
**LCO Las Campanas 142.45 165** PKIKP **PKPdf 15 53 32.7 -1.4**
**SSPA Standing Stone 143.30 23** **PKPdf 15 53 34.5 -0.3**
**SACV Santiago Islan 143.34 285** **PKPdf 15 53 35.9 +0.3**
**HRV Adam Dziewonsk 143.59 14** **PKPdf 15 53 35.9 +0.6**
**HRV Adam Dziewonsk 143.59 14** PKIKP **PKPdf 15 53 35.9 +0.6**
**LRAL Lakeview Retre 144.38 41** **PKPab 15 53 38.2 +1.0**
**TKL Tuckaleechee C 144.52 34** SKPbc **SKiKP 15 56 25.3 -0.1**
comp=Z,247nm,0.8s,baz=310,slow=0.8,SNR=8.4
**BRAL Brewton 145.51 43** PKiKP **PKPab 15 53 42.1 +0.5**
baz=308
**GOGA Godfrey 146.31 37** PKiKP **PKPab 15 53 43.7 -1.0**
baz=315
**CPUP Villa Florida 146.39 185** PKP **PKPbc 15 53 41.8 -1.0**
comp=Z,227nm,0.9s,baz=148,slow=1.1,SNR=86
CPUP PKPbc **PKiKP 15 53 45.1 0.0**
comp=Z,193nm,0.8s,baz=176,slow=1.9,SNR=85
CPUP SKPbc **SKiKP 15 56 30.3 +0.8**
comp=Z,169nm,0.8s,baz=143,slow=1.2,SNR=11
CPUP SKKPbc **SKKPab 16 04 20.4 -0.6**
comp=Z,22nm,0.9s,baz=339,slow=3.7,SNR=7.4
**SPB Sao Paulo 146.79 202** **PKPbc 15 53 43.2 -0.8**
**CNNC Cliffs of the 147.86 28** PKiKP **PKiKP 15 53 47.5 -0.3**
baz=326
**NHSC New Hope 148.40 33** PKiKP **PKiKP 15 53 49.2 +0.1**
baz=320
**PAYG Puerto Ayora 148.96 104** **PKPab 15 53 54.1 -2.1**
**LVC Limon Verde 149.02 164** PKP **PKPdf 15 53 47.6 +2.2**
comp=Z,192nm,0.7s,baz=229,slow=1.0,SNR=46
LVC PKPbc **PKiKP 15 53 52.2 +1.1**
comp=Z,192nm,0.7s,baz=208,slow=1.1,SNR=57
**DWPF Disney Wildern 151.22 42** PKiKP **PKiKP 15 53 55.7 +0.7**
baz=312
**RCBR Riachuelo 152.43 242** **PKPdf 15 53 52.1 +1.7**
**RCBR Riachuelo 152.43 242** PKP **PKPdf 15 53 51.4 +1.0**
comp=Z,35nm,0.8s,baz=63,slow=1.9,SNR=27
RCBR PKPbc **PKiKP 15 53 59.1 +1.2**
comp=Z,66nm,0.7s,baz=63,slow=1.5,SNR=20
RCBR PKPab **PKPab 15 54 12.2 +1.4**
comp=Z,91nm,0.7s,baz=63,slow=21,SNR=9.0
**PB18 Visviri 153.57 160** **PKPdf 15 53 56.5 +4.0**
**BDFB Brasilia 154.14 208** PKPbc **PKPdf 15 53 54.4 +1.5**
**BDFB Brasilia 154.14 208** PKP **PKPdf 15 53 54.1 +1.3**
comp=Z,94nm,0.7s,baz=142,slow=1.1,SNR=111
BDFB PKPbc **PKiKP 15 54 02.5 +1.0**
comp=Z,42nm,0.5s,baz=145,slow=1.9,SNR=15
BDFB PKPab **PKPab 15 54 19.7 +1.8**
comp=Z,79nm,0.7s,baz=256,slow=1.5,SNR=11
**NNA Nana 154.64 139** PKP **PKPdf 15 53 54.6 +1.1**
comp=Z,47nm,0.8s,baz=277,slow=2.5,SNR=14
NNA PKPbc **PKPbc 15 54 03.1 +0.6**
comp=Z,120nm,1.1s,baz=296,slow=2.1,SNR=4.4
NNA PKPab **PKPab 15 54 20.9 +0.9**
comp=Z,84nm,0.8s,baz=246,slow=6.3,SNR=10
**LPAZ La Paz 155.23 162** PKP **PKPdf 15 53 56.1 +1.1**
comp=Z,28nm,0.8s,baz=149,slow=0.5,SNR=61
LPAZ PKPab **PKPab 15 54 24.6 +1.5**
comp=Z,284nm,0.6s,baz=182,slow=3.4,SNR=34
**SIV San Ignacio 156.78 178** PKP **PKPdf 15 53 57.3 +1.0**
comp=Z,34nm,0.8s,baz=173,slow=1.2,SNR=131
SIV PKPab **PKPab 15 54 30.1 +1.1**
comp=Z,130nm,0.7s,baz=171,slow=4.1,SNR=34
**ATAH Atahualpa 156.84 128** PKP **PKPdf 15 53 58.2 +1.4**
comp=Z,30nm,0.7s,baz=207,slow=1.0,SNR=18
ATAH PKPab **PKPab 15 54 31.9 +1.8**
comp=Z,286nm,1.2s,baz=253,slow=4.5,SNR=18
**MTDJ Mount Denham 159.98 56**⇑ *i*P **PKPdf 15 53 58.5 -1.5**
**STH Stony Hill 160.65 55** *i* P **PKPdf 15 54 00.5 -0.2**
STH *i* S **PKPab 15 54 45.7 -0.4**
**SAML Samuel 163.53 170** **PKPdf 15 54 05.3 +1.7**
**SAML Samuel 163.53 170** PKIKP **PKPdf 15 54 05.3 +1.7**
**ROSC El Rosal 165.75 99** PKP **PKPdf 15 54 05.3 -0.7**
comp=Z,49nm,0.8s,baz=273,slow=0.7,SNR=23
ROSC PK

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=67 | | | | | | |
| **TYC** | **Yuchr** | **0.17** | **237** | P | Pg | 15 39 59.0 | +0.5 |
| | baz=234 | | | | | | |
| TYC | | | | *i* S | Sg | 15 40 02.2 | +0.6 |
| | baz=234 | | | | | | |
| **SSLB** | **Suanglung** | **0.22** | **195** | P | Pg | 15 39 59.4 | +0.2 |
| | baz=194 | | | | | | |
| SSLB | | | | *e*S | Sg | 15 40 02.9 | +0.1 |
| | baz=194 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.27** | **58** | *e*P | Pb | 15 40 01.2 | +0.8 |
| | baz=58 | | | | | | |
| WHF | | | | *e*S | Sb | 15 40 05.6 | +0.9 |
| | baz=58 | | | | | | |
| **VWDT** | **VWDT** | **0.27** | **155** | P | Pb | 15 40 00.7 | +0.5 |
| | baz=154 | | | | | | |
| **TDCB** | **Techi** | **0.28** | **27** | ⇑P | Pb | 15 40 00.6 | +0.1 |
| | baz=27 | | | | | | |
| TDCB | | | | *e*S | Sg | 15 40 04.4 | -0.3 |
| | baz=27 | | | | | | |
| **WHP** | **Taichung City** | **0.28** | **347** | *e*P | Pb | 15 40 01.1 | +0.7 |
| | baz=347 | | | | | | |
| WHP | | | | *e*S | Sb | 15 40 06.0 | +1.2 |
| | baz=347 | | | | | | |
| **TWT** | **Tachien** | **0.29** | **30** | *e*P | Pb | 15 40 00.7 | 0.0 |
| | baz=28 | | | | | | |
| TWT | | | | *e*S | Sg | 15 40 04.7 | -0.2 |
| | baz=28 | | | | | | |
| **FUSS** | **Fushou** | **0.32** | **40** | *e*P | Pb | 15 40 01.3 | 0.0 |
| | baz=40 | | | | | | |
| FUSS | | | | *e*S | Sg | 15 40 06.0 | +0.1 |
| | baz=40 | | | | | | |
| **WHYT** | **Xinyi Township** | **0.34** | **206** | *e*P | Pb | 15 40 01.9 | +0.5 |
| | baz=206 | | | | | | |
| WHYT | | | | *e*S | Sb | 15 40 07.6 | +1.1 |
| | baz=206 | | | | | | |
| **WHYT** | **Xinyi Township** | **0.34** | **206** | *e*S | Sb | 15 40 07.8 | +1.3 |
| | baz=92 | | | | | | |
| **WHYT** | **Xinyi Township** | **0.34** | **206** | *e*P | Pb | 15 40 02.0 | +0.5 |
| | baz=92 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.36** | **87** | P | Pb | 15 40 02.2 | +0.2 |
| | baz=86 | | | | | | |
| LXIB | | | | *e*S | Sb | 15 40 08.0 | +0.5 |
| | baz=86 | | | | | | |
| **TWQ1** | **Liyutan** | **0.41** | **328** | *e*P | Pb | 15 40 03.6 | +0.9 |
| | baz=327 | | | | | | |
| **ESL** | **Shilin** | **0.42** | **116** | *e*P | Pb | 15 40 03.2 | +0.3 |
| | baz=115 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.44** | **130** | ⇓P | Pb | 15 40 03.4 | +0.2 |
| | baz=129 | | | | | | |
| WARBT | | | | *e*S | Sb | 15 40 09.9 | +0.4 |
| | baz=129 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.47** | **64** | *e*P | Pb | 15 40 04.0 | +0.2 |
| | baz=64 | | | | | | |
| ETLH | | | | *e*S | Sb | 15 40 10.6 | +0.1 |
| | baz=64 | | | | | | |
| **YUS** | **Yu-Shan** | **0.51** | **186** | *e*P | Pg | 15 40 04.5 | 0.0 |
| | baz=185 | | | | | | |

**TAP 17 15:39:55.0, 23.71N×120.52E, h20km, ML1.0, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WDLH** | **Douliu** | **0.03** | **139** | *i* P | Pg | 15 39 58.9 | +0.4 |
| | baz=139 | | | | | | |
| WDLH | | | | *i* S | Sg | 15 40 01.6 | +0.7 |
| | baz=139 | | | | | | |
| **WTK** | **Tuku** | **0.12** | **258** | P | Pg | 15 39 59.6 | +0.5 |
| | baz=258 | | | | | | |
| WTK | | | | S | Sg | 15 40 02.7 | +0.8 |
| | baz=258 | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.23** | **326** | *e*P | Pg | 15 40 01.1 | +0.5 |
| | baz=326 | | | | | | |
| **CHY** | **Chiayi** | **0.23** | **202** | *e*P | Pg | 15 40 00.9 | +0.3 |
| | baz=199 | | | | | | |
| **WNT1** | **Nantou City** | **0.24** | **38** | *e*P | Pg | 15 40 01.1 | +0.3 |
| | baz=37 | | | | | | |
| **WCKO** | **Fanlu** | **0.28** | **163** | *e*P | Pg | 15 40 02.3 | +0.9 |
| | baz=163 | | | | | | |
| WCKO | | | | *e*S | Sg | 15 40 07.1 | +1.2 |
| | baz=163 | | | | | | |
| **TPUB** | **Ta-pu** | **0.42** | **166** | *e*P | Pb | 15 40 04.1 | +0.2 |
| | baz=165 | | | | | | |
| TPUB | | | | *e*S | Sb | 15 40 11.2 | +1.3 |
| | baz=165 | | | | | | |
| **TWK** | **Hsinying** | **0.44** | **183** | *e*P | Pb | 15 40 04.8 | +0.5 |
| | baz=181 | | | | | | |
| TWK | | | | *e*S | Sb | 15 40 11.6 | +1.1 |
| | baz=181 | | | | | | |
| **WTP** | **Ta-pu** | **0.47** | **169** | *e*P | Pg | 15 40 05.5 | +0.7 |
| | baz=168 | | | | | | |
| WTP | | | | *e*S | Sb | 15 40 12.8 | +1.4 |
| | baz=168 | | | | | | |

**IDC 17 16:03:12.4±3.9, 47.58N×92.90W, h0km, mbtmp2.8/1, ML0.9/1, Error ellipse: s-maj=65.4km s-min=26.6km az=55.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.31** | **325** | Pn | Pn | 16 04 04.2 | -1.3 |
| | 0.2nm,0.3s,baz=139,slow=13,SNR=1.8 | | | | | | |
| ULM | | | | Pg | Pb | 16 04 11.4 | -0.6 |
| | 0.8nm,0.3s,baz=145,slow=14,SNR=12 | | | | | | |
| ULM | | | | Sn | Sn | 16 04 43.7 | -1.9 |
| | 1.2nm,0.3s,baz=334,slow=3.1,SNR=3.3 | | | | | | |
| ULM | | | | Lg | Lg | 16 04 54.6 | |
| | 9.0nm,0.3s,baz=214,slow=15,SNR=19 5.2nm,0.9s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.34** | **323** | I | I | 16 24 05.0 | |
| | 0.1nm,1.2s,baz=140,slow=325,SNR=33 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **16.24** | **281** | I | I | 17 41 40.0 | |
| | baz=85,slow=315,SNR=1.9 | | | | | | |

*DJA **17** 16:15:59.9±0.6, 6°S±3°×13°0E±°, h168km±14km, M4.2/9, mbB4.7/1, mb4.1/5, MLv4.2/9, Mw(mB)3.9/1*
**ISC 17 16:16:00.6±1.5, 6.32S±0.07×130.5E±0.1, h150km, n14, σ0s97/14, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.83** | **154** | P | **Pn** | **16 16 34.7** | **+0.9** |
| **SAUI** | **Saumlaki** | **1.83** | **154** | P | **Pn** | **16 16 34.8** | **+0.9** |
| **BNDI** | **Bandanaira** | **1.88** | **342** | P | **Pn** | **16 16 35.9** | **+1.5** |
| **BNDI** | **Bandanaira** | **1.88** | **342** | P | **Pn** | **16 16 33.9** | **-0.5** |
| **MSAI** | **Masohi** | **3.34** | **332** | P | **Pn** | **16 16 52.8** | **+0.4** |
| **FAKI** | **Fak Fak** | **3.81** | **27** | P | **Pn** | **16 16 57.5** | **-0.9** |
| **FAKI** | **Fak Fak** | **3.81** | **27** | P | **Pn** | **16 16 57.7** | **-0.7** |
| **DRS** | **Darwin Rock St** | **6.08** | **176** | P | **Pn** | **16 17 27.4** | **-1.0** |
| **SANI** | **Sanana** | **6.18** | **313** | P | **Pn** | **16 17 30.9** | **+1.1** |
| **MTN** | **Manton Dam** | **6.51** | **174** | P | **Pn** | **16 17 33.6** | **-0.5** |
| **KDU** | **Kakadu** | **6.62** | **163** | P | **Pn** | **16 17 35.0** | **-0.6** |
| **SOEI** | **Soe** | **7.04** | **241** | P | **Pn** | **16 17 40.7** | **-0.7** |
| **SOEI** | **Soe** | **7.04** | **241** | P | **Pn** | **16 17 40.8** | **-0.7** |
| | 27nm,0.8s,0.2nm | | | | | | |
| **BATI** | **Baumata** | **7.78** | **240** | P | **Pn** | **16 17 50.3** | **-0.9** |

**IDC 17 16:19:23.2±1.4, 23.39N×143.83E, h0km, mb3.6/4, mbtmp3.6/5, ML2.7/1, Error ellipse: s-maj=63.3km s-min=26.1km az=92.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **13.98** | **341** | Pn | Pn | 16 22 41.4 | -1.3 |
| | baz=160,slow=11,SNR=1.5 0.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.05** | **193** | P | P | 16 27 33.6 | +0.6 |
| | 0.3nm,0.6s,baz=11,slow=8.4,SNR=1.6 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **47.76** | **192** | P | P | 16 28 01.1 | -1.1 |
| | 0.7nm,0.8s,baz=14,slow=6.2,SNR=2.7 0.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **60.27** | **27** | P | P | 16 29 33.1 | -0.1 |
| | 0.3nm,0.6s,baz=252,slow=6.1,SNR=2.5 0.3nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.79** | **319** | P | P | 16 29 44.0 | +0.3 |
| | 1.2nm,0.7s,baz=91,slow=6.0,SNR=5.0 1.2nm,0.7s | | | | | | |

**IDC 17 16:22:03.1±2.8, 20.86N×45.69W, h0km, mb3.9/5, mbtmp3.9/5, Error ellipse: s-maj=83.2km s-min=32.6km az=29.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ESDC** | **Sonseca Array** | **40.20** | **53** | P | P | 16 29 41.0 | -0.3 |
| | 0.5nm,0.6s,baz=257,slow=8.1,SNR=4.4 0.5nm,0.6s | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **41.86** | **130** | T | T | 17 14 21.7 | |
| | baz=313,slow=75,SNR=219 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **41.86** | **130** | T | T | 17 14 21.8 | |
| | baz=313,slow=75,SNR=222 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **41.88** | **130** | T | T | 17 14 21.8 | |
| | baz=313,slow=75,SNR=200 | | | | | | |
| **DBIC** | **Dimbokro** | **41.95** | **104** | P | P | 16 29 56.1 | +0.1 |
| | 7.8nm,0.9s,baz=241,slow=7.0,SNR=4.5 7.8nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.82** | **92** | P | P | 16 30 26.5 | -0.7 |
| | 0.5nm,0.7s,baz=303,slow=10,SNR=2.6 0.5nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **68.97** | **54** | P | P | 16 33 11.0 | +0.4 |
| | 1.1nm,0.8s,baz=268,slow=3.4,SNR=6.4 1.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **76.00** | **334** | P | P | 16 33 51.8 | 0.0 |
| | 1.2nm,0.8s,baz=72,slow=4.8,SNR=8.0 1.2nm,0.8s | | | | | | |

*IDC **17** 16:23:26.7±0.8, 23°25N×143°44E, h0km, mb4.1/15, mbtmp4.0/17, ML3.3/2, Error ellipse: s-maj=30.1km s-min=15.6km az=77.0*
*NEIC **17** 16:23:28.2±2.8, 23°37N±0°09×143°8E±0°2, h10km±1km, mb4.5/8, Error ellipse: s-maj=32.5km s-min=13.7km az=78.0*
**ISC 17 16:23:31.3±0.8, 23°39N±0°08×143°5E±0°2, h31km, n34, σ1s44/34, mb4.1/18, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.87** | **343** | Pn | **Pn** | **16 24 31.2** | **+2.5** |
| **JCJ** | **Chichijima** | **3.87** | **343** | Pn | **Pn** | **16 24 26.3** | **-2.4** |
| | 8.4nm,0.3s,baz=260,slow=16,SNR=2.9 | | | | | | |
| JCJ | | | | Sn | **Sn** | **16 25 09.4** | **-3.6** |
| | 32nm,0.3s,baz=147,slow=22,SNR=6.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.87** | **342** | Pn | **Pn** | **16 26 44.6** | **-1.2** |
| | 0.1nm,0.3s,baz=148,slow=10,SNR=2.0 0.7nm,0.6s | | | | | | |
| **JMM** | **Marumori** | **14.61** | **352** | Pn | **Pn** | **16 26 54.1** | **-1.7** |
| **KSRS** | **Korea Array** | **19.35** | **320** | P | **P** | **16 27 55.4** | **+1.1** |
| | 0.2nm,0.3s,baz=135,slow=12,SNR=7.5 3.0nm,0.8s | | | | | | |
| **SSLB** | **Suanglung** | **20.63** | **276** | P | Pn | 16 28 12.9 | +2.2 |
| SSLB | | | | IAmb | IAmb | 16 28 51.4 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **22.80** | **338** | P | **P** | **16 28 33.0** | **+1.7** |
| **USRK** | **Ussuriysk Ar.** | **22.80** | **338** | P | **P** | **16 28 32.9** | **+1.5** |
| **USRK** | **Ussuriysk Ar.** | **22.80** | **338** | P | **P** | **16 28 32.0** | **+0.7** |
| | comp=Z,1.8nm,0.6s,baz=141,slow=8.8,SNR=10 comp=Z,1.8nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **27.39** | **343** | P | **P** | **16 29 15.2** | **+1.3** |
| | comp=Z,2.4nm,0.6s,baz=150,slow=7.7,SNR=8.6 comp=Z,2.4nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **38.22** | **319** | P | **P** | **16 30 47.9** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=108,slow=4.7,SNR=2.6 comp=Z,0.4nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.75** | **272** | P | **P** | **16 31 17.8** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=68,slow=7.7,SNR=5.1 comp=Z,0.8nm,0.5s | | | | | | |
| **CTAO** | **Charters Tower** | **43.30** | **176** | P | **P** | **16 31 29.1** | **-1.3** |
| **WB0** | **Warramunga Arr** | **43.80** | **192** | P | **P** | **16 31 33.3** | **-1.1** |
| WB0 | | | | IAmb | IAmb | 16 32 05.9 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.98** | **192** | P | **P** | **16 31 35.0** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 16 31 42.3 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.98** | **192** | P | **P** | **16 31 35.0** | **-0.9** |
| | comp=Z,1.2nm,0.5s,baz=17,slow=9.3,SNR=28 comp=Z,1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **47.69** | **192** | P | **P** | **16 32 03.6** | **-1.6** |
| | comp=Z,0.7nm,0.6s,baz=15,slow=10,SNR=17 comp=Z,0.7nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.06** | **321** | P | **P** | **16 32 46.2** | **+0.8** |
| | comp=Z,2.3nm,0.6s,baz=102,slow=7.8,SNR=9.2 comp=Z,2.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.76** | **312** | P | **P** | **16 32 51.9** | **+1.2** |
| **MKAR** | **Makanchi Array** | **53.76** | **312** | P | **P** | **16 32 51.6** | **+0.8** |
| | comp=Z,0.9nm,0.6s,baz=90,slow=8.4,SNR=6.4 comp=Z,0.9nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **56.42** | **316** | P | **P** | **16 33 11.3** | **+1.5** |
| KURK | | | | IAmb | IAmb | 16 33 20.6 | |
| | comp=Z,6.1nm,1.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.48** | **316** | P | **P** | **16 33 11.8** | **+1.5** |
| | comp=Z,1.3nm,0.5s,baz=91,slow=7.9,SNR=19 comp=Z,1.3nm,0.5s | | | | | | |
| **D22K** | **Ayikyak River** | **59.03** | **22** | P | **P** | **16 33 27.9** | **0.0** |
| **ILAR** | **Eielson Array** | **60.42** | **28** | P | **P** | **16 33 39.7** | **+2.1** |
| | comp=Z,0.5nm,0.9s,baz=277,slow=4.2,SNR=2.0 comp=Z,0.5nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.56** | **319** | P | **P** | **16 33 47.2** | **+1.7** |
| | comp=Z,7.6nm,0.5s,baz=88,slow=7.7,SNR=34 comp=Z,7.6nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **61.63** | **319** | P | **P** | **16 33 46.1** | **+0.2** |
| **KKAR** | **Karatay Array** | **62.22** | **308** | P | **P** | **16 33 51.8** | **+1.6** |
| **ARU** | **Arti** | **68.06** | **323** | P | **P** | **16 34 28.6** | **+0.9** |
| | comp=Z,2.1nm,0.3s,baz=5.6,slow=2.5,SNR=6.1 comp=Z,2.1nm,0.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.52** | **316** | P | **P** | **16 34 30.7** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **77.41** | **341** | P | **P** | **16 35 24.1** | **+1.1** |
| | comp=Z,1.9nm,0.7s,baz=64,slow=8.2,SNR=5.8 comp=Z,1.9nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **81.77** | **334** | P | **P** | **16 35 47.0** | **+0.2** |
| | comp=Z,0.8nm,0.4s,baz=67,slow=3.4,SNR=11 comp=Z,0.8nm,0.4s | | | | | | |
| **NOA** | **NORSAR Array B** | **87.47** | **339** | P | **P** | **16 36 15.7** | **0.0** |
| | comp=Z,0.9nm,0.8s,baz=40,slow=5.0,SNR=2.3 comp=Z,0.9nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **146.65** | **129** | PKPbc | **PKPbc** | **16 43 09.7** | **-0.5** |
| | comp=Z,1.5nm,0.6s,baz=240,slow=2.9,SNR=6.7 | | | | | | |
| **LPAZ** | **La Paz** | **149.50** | **82** | PKPbc | **PKPbc** | **16 43 18.9** | **-0.2** |
| | comp=Z,1.3nm,0.5s,baz=243,slow=1.8,SNR=4.7 | | | | | | |

*IDC **17** 16:31:39.8±5.3, 7°26S×119°28E, h88km±50km, mb3.6/7, mbtmp4.0/8, ML4.3/1, Error ellipse: s-maj=53.6km s-min=12.3km az=53.0*
*NEIC **17** 16:31:55.8±1.3, 7°5S±0°1×119°45E±0°07, h256km±11km, mb4.1/16, Error ellipse: s-maj=16.5km s-min=9.4km az=200.0*
*DJA **17** 16:31:57.9±0.5, 8°S±14°×11°9E±°, h265km±12km, M4.4/10, mb4.5/3, mB5.3/1, MLv4.3/10, Mw(mB)4.8/1*
**ISC 17 16:31:55.3±0.5, 7.58S±0.07×119.45E±0.05, h250km, n61, σ1s56/66, mb3.9/17, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **2.05** | **182** | P | **Pn** | **16 32 40.0** | **+1.7** |
| WBSI | | | | S | **S** | **16 33 12.6** | **+0.3** |
| **PLAI** | **Plampang** | **2.07** | **233** | P | **Pn** | **16 32 41.0** | **+2.6** |
| **PLAI** | **Plampang** | **2.07** | **233** | P | **Pn** | **16 32 41.2** | **+2.8** |
| PLAI | | | | S | **S** | **16 33 15.0** | **+2.5** |
| **EDFI** | **Ende, Flores** | **2.50** | **118** | P | **Pn** | **16 32 45.6** | **+2.9** |
| **TWSI** | **Taliwang, Sumb** | **2.79** | **245** | P | **Pn** | **16 32 47.7** | **+2.1** |
| **MMRI** | **Maumere** | **2.95** | **111** | P | **Pn** | **16 32 50.3** | **+3.1** |
| **MMRI** | **Maumere** | **2.95** | **111** | Pn | **Pn** | **16 32 50.0** | **+2.7** |
| **MMRI** | **Maumere** | **2.95** | **111** | P | **Pn** | **16 32 50.4** | **+3.2** |
| **BATI** | **Baumata** | **4.91** | **122** | P | **Pn** | **16 33 12.4** | **+2.3** |
| **SOEI** | **Soe** | **5.23** | **115** | P | **Pn** | **16 33 16.0** | **+2.0** |
| **SOEI** | **Soe** | **5.23** | **115** | Pn | **Pn** | **16 33 16.2** | **+2.2** |
| SOEI | | | | Sn | **S** | **16 34 14.6** | **-2.2** |
| **SOEI** | **Soe** | **5.23** | **115** | P | **Pn** | **16 33 16.3** | **+2.2** |
| | 378nm,0.8s,6µm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.33** | **260** | P | **Pn** | **16 33 14.9** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **5.33** | **260** | Pn | **Pn** | **16 33 15.6** | **+0.5** |
| JAGI | | | | Sn | **S** | **16 34 15.9** | **-2.9** |
| **JAGI** | **Jajag, Banyuwa** 32nm,0.9s,0.3nm | **5.33** | **260** | P | **Pn** | **16 33 15.6** | **+0.5** |
| JAGI | 32nm,0.9s,0.3nm | | | S | **S** | **16 34 17.3** | **-1.5** |
| **PWJI** | **Pagerwojo** | **7.59** | **266** | P | **Pn** | **16 33 44.6** | **+1.1** |
| **UGM** | **Wanagama** | **8.86** | **267** | P | **Pn** | **16 34 00.0** | **+0.5** |
| **UGM** | **Wanagama** | **8.86** | **267** | Pn | **Pn** | **16 33 57.6** | **-1.9** |
| **BBJI** | **Bungbulang** | **11.70** | **270** | P | **Pn** | **16 34 36.1** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **12.07** | **151** | Pn | **Pn** | **16 34 40.3** | **+0.5** |
| **KNRA** | **Kununurra** | **12.16** | **132** | Pn | **Pn** | **16 34 40.6** | **-0.3** |
| **DRS** | **Darwin Rock St** | **12.26** | **114** | P | **P** | **16 34 43.9** | **-0.9** |
| **SBUM** | **Sibu** | **12.30** | **324** | P | **Pn** | **16 34 43.4** | **+0.7** |
| **MTN** | **Manton Dam** | **12.63** | **115** | P | **Pn** | **16 34 47.6** | **+0.9** |
| **MTN** | **Manton Dam** | **12.63** | **115** | | **Pn** | **16 34 47.7** | **+0.9** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **13.55** | **71** | P | **P** | **16 34 59.7** | **+0.5** |
| **FAKI** | **Fak Fak** | **13.55** | **71** | | **Pn** | **16 34 57.2** | **-1.0** |
| **KDU** | **Kakadu** | **13.78** | **113** | P | **Pn** | **16 35 01.1** | **+0.2** |
| **KKM** | **Kota Kinabalu** | **13.91** | **346** | P | **P** | **16 35 04.9** | **+1.6** |
| **KKM** | **Kota Kinabalu** | **13.91** | **346** | | **Pn** | **16 35 01.4** | **-1.1** |
| **WB0** | **Warramunga Arr** | **18.89** | **131** | P | **P** | **16 35 57.3** | **-0.3** |
| **WRA** | **Warramunga Arr** | **18.95** | **132** | P | **P** | **16 35 58.2** | **-0.2** |
| **WRA** | **Warramunga Arr** | **18.95** | **132** | P | **P** | **16 35 58.4** | **+0.1** |
| | 1.0nm,0.3s,baz=304,slow=12,SNR=130 | | | | | | |
| WRA | | | | S | S | 16 39 32.6 | +12 |
| | 0.4nm,0.5s,baz=304,slow=23,SNR=4.8 8.1nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.96** | **132** | P | **P** | **16 35 58.2** | **-0.1** |
| **WB2** | **Warramunga Arr** | **18.96** | **132** | P | **P** | **16 35 58.5** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 16 35 59.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **19.11** | **132** | P | **P** | **16 36 00.3** | **+0.3** |
| **WRKA** | **Warakurna** | **19.31** | **155** | P | **P** | **16 36 02.5** | **+0.4** |
| **AS31** | **Alice Springs** | **21.17** | **141** | P | **P** | **16 36 21.7** | **0.0** |
| AS31 | | | | IAmb | IAmb | 16 36 23.2 | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **21.17** | **141** | P | **P** | **16 36 22.0** | **+0.4** |
| **ASAR** | **Alice Springs** | **21.17** | **141** | P | **P** | **16 36 21.6** | **-0.1** |
| | comp=Z,2.5nm,0.4s,baz=314,slow=8.7,SNR=134 comp=Z,2.5nm,0.4s | | | | | | |
| **IPM** | **Ipoh** | **21.95** | **303** | P | **P** | **16 36 28.4** | **-0.6** |
| IPM | | | | IAmb | IAmb | 16 36 31.1 | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **22.70** | **304** | P | **P** | **16 36 34.3** | **-1.5** |
| KULM | | | | IAmb | IAmb | 16 36 49.9 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **COEN** | **Coen** | **24.14** | **107** | P | **P** | **16 36 49.9** | **+1.0** |
| COEN | | | | IAmb | IAmb | 16 37 19.6 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **31.78** | **142** | P | **P** | **16 37 56.1** | **-0.4** |
| **PZH** | **PanZhiHua** | **37.99** | **334** | P | **P** | **16 38 53.0** | **+3.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **47.29** | **21** | P | **P** | **16 40 02.0** | **-1.9** |
| | comp=Z,1.9nm,0.9s,baz=203,slow=8.9,SNR=4.0 comp=Z,1.9nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **48.73** | **352** | *e*P | **P** | **16 40 18.3** | **+3.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,200nm,6.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.77** | **11** | P | **P** | **16 40 43.9** | **-0.9** |
| | comp=Z,1.4nm,0.7s,baz=196,slow=9.8,SNR=6.7 comp=Z,1.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.37** | **349** | P | **P** | **16 41 10.4** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=174,slow=5.9,SNR=2.2 comp=Z,0.6nm,0.5s | | | | | | |
| **KSH** | **Kashi** | **61.74** | **323** | P | **P** | **16 41 47.3** | **-0.4** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **63.41** | **332** | P | **P** | **16 41 57.8** | **-0.6** |
| MK31 | | | | IAmb | IAmb | 16 41 59.1 | |
| | comp=Z,1.8nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.41** | **332** | P | **P** | **16 41 57.7** | **-0.7** |
| **MKAR** | **Makanchi Array** | **63.41** | **332** | P | **P** | **16 41 58.2** | **-0.2** |
| | comp=Z,1.6nm,0.6s,baz=150,slow=7.4,SNR=14 comp=Z,1.6nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **63.56** | **332** | P | **P** | **16 41 59.0** | **-0.4** |
| MAKZ | | | | IAmb | IAmb | 16 42 28.8 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **MSEY** | **Mahe Island** | **63.63** | **269** | P | **P** | **16 41 59.9** | **-0.7** |
| **ARSB** | **Arslanbob** | **64.65** | **323** | P | **P** | **16 42 05.7** | **-1.0** |
| ARSB | | | | IAmb | IAmb | 16 42 06.7 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.88** | **339** | P | **P** | **16 42 26.0** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=142,slow=6.0,SNR=3.1 comp=Z,0.5nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.91** | **333** | P | **P** | **16 42 25.9** | **-1.0** |
| | comp=Z,0.5nm,0.6s,baz=142,slow=5.9,SNR=5.6 comp=Z,0.5nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **67.93** | **333** | P | **P** | **16 42 25.8** | **-1.3** |
| **ABKAR** | **Akbulak array** | **76.67** | **325** | P | **P** | **16 43 17.9** | **-0.8** |
| **ABKAR** | **Akbulak array** | **76.67** | **325** | P | **P** | **16 43 17.1** | **-1.5** |
| ABKAR | | | | IAmb | IAmb | 16 43 32.1 | |
| | comp=Z,2.0nm,1.4s | | | | | | |

*JMA **17** 16:38:07.1±0.4, 44°N±2°×14°8E±°, h0km, MV3.8/20, SE OFF ETOROFU*
*SKHL **17** 16:38:08.0±0.3, 44.40N×148.70E, h58km±6km, mb3.7/2*
**ISC 17 16:38:06.5±4.0, 44.4N±0.1×148.8E±0.2, h50km, n12, σ1s08/17, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.05** | **323** | *e*P | **Pn** | **16 38 24.9** | **+0.1** |
| KUR | | | | AMB | AMB | 16 38 26.5 | |
| | 60nm,0.3s | | | | | | |
| KUR | | | | *e*S | **Sn** | **16 38 37.7** | **-0.7** |
| KUR | | | | A | A | 16 38 39.2 | |
| | 260nm,0.4s | | | | | | |
| KUR | | | | A | A | 16 38 39.2 | |
| | 260nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **1.49** | **250** | *e*P | **Pn** | **16 38 31.1** | **+0.3** |
| SHO | | | | AMB | AMB | 16 38 32.4 | |
| | 30nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **16 38 48.2** | **-0.9** |
| SHO | | | | A | A | 16 38 49.3 | |
| | 80nm,0.3s | | | | | | |
| SHO | | | | A | A | 16 38 49.3 | |
| | 50nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.12** | **261** | *e*S | **Sn** | **16 39 03.2** | **-1.3** |
| YUK | | | | A | A | 16 39 10.6 | |
| | 130nm,0.7s | | | | | | |
| YUK | | | | A | A | 16 39 10.6 | |
| | 190nm,0.7s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.42** | **246** | *e*P | **Pn** | **16 38 43.5** | **0.0** |
| NEM2 | | | | S | **Sn** | **16 39 10.4** | **-1.4** |
| **JRA** | **Rausu** | **2.66** | **261** | *e*P | **Pn** | **16 38 48.1** | **+1.3** |
| **JNSB** | **Nemuroshibetsu** | **2.78** | **258** | P | **Pn** | **16 38 50.0** | **+1.6** |
| **JKHN** | **Kushirohamanak** | **2.92** | **245** | P | **Pn** | **16 38 51.1** | **+0.6** |
| **JNK** | **Nakash** | **3.03** | **256** | P | **Pn** | **16 38 53.2** | **+1.3** |
| JNK | | | | *e*S | **Sn** | **16 39 27.6** | **+0.7** |
| **JAK** | **Akkeshi** | **3.27** | **246** | P | **Pn** | **16 38 55.4** | **+0.3** |
| **JAR** | **Ashorobuto** | **3.78** | **255** | P | **Pn** | **16 39 03.7** | **+1.6** |
| **JCH** | **Churui** | **4.31** | **247** | *e*P | **Pn** | **16 39 10.1** | **+0.6** |
| JCH | | | | *e*S | **Sn** | **16 39 57.1** | **-1.3** |
| **JNBK** | **Urakawa-nobuka** | **4.87** | **246** | *e*P | **Pn** | **16 39 17.2** | **+0.1** |

**IDC 17 16:44:12.5±3.5, 7.80S×115.11E

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS01** | **Alice Springs** | **19.62** | **207** | P | | **Pn** | **17 01 59.1** | **-0.2** |
| **ASAR** | **Alice Springs** | **19.64** | **207** | P | | **P** | **17 01 58.2** | **+0.2** |
| | 0.5nm,0.3s,baz=34,slow=9.1,SNR=91 | | | | | | | |
| ASAR | | | | S | | **S** | **17 05 38.5** | **+0.7** |
| | 0.5nm,0.9s,baz=26,slow=28,SNR=1.6 | | | | | | | |
| | 4.7nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **75.60** | **322** | P | | **P** | **17 09 13.8** | **+0.2** |
| | 0.3nm,0.8s,baz=101,slow=7.6,SNR=1.9 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |

*IDC* ***17*** *17:21:55.8±0.5,6˚.99S×106˚.76E, h0km, mb4.4/27, mbtmp4.4/27, Error ellipse: s-maj=20.4km s-min=12.8km az=59.0*

*NEIC* ***17*** *17:22:04.7±2.6, 7˚.41S±0˚.04×106˚.62E±0˚.05, h65km±7km, mb4.5/36, Error ellipse: s-maj=9.0km s-min=2.6km az=46.0*

*DJA* ***17*** *17:22:05.3±0.4, 8˚S±3˚×10˚7E±˚, h35km±6km, M4.7/15, MLv4.7/15*

**ISC 17 17:22:04.2**±0.4,**7˚.31S**±0˚.05×**106˚.69E**±0˚.05,**h66km**,**n131**, σ1℘**60**/116,**mb4.4**/42,**6C-1D**,**Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKJI** | **Sukabumi** | **0.33** | **336** | P | **Pn** | **17 22 17.5** | **+2.3** |
| **CNJI** | **Cibinong** | **0.44** | **89** | P | **Pn** | **17 22 17.0** | **+1.0** |
| CNJI | | | | S | **Sn** | **17 22 25.8** | **+1.1** |
| **DBJI** | **Dramaga** | **0.76** | **4** | P | Pn | 17 22 22.4 | +2.9 |
| DBJI | | | | S | **Sn** | **17 22 35.2** | **+4.4** |
| **BBJI** | **Bungbulang** | **0.96** | **99** | P | **Pn** | **17 22 22.7** | **+0.6** |
| **TNG** | **Tangerang** | **1.14** | **358** | P | | 17 22 27.4 | |
| TNG | | | | P | Pn | 17 22 27.3 | +3.1 |
| **SBJI** | **Serang** | **1.31** | **335** | P | Pn | 17 22 29.6 | +3.1 |
| **JCJI** | **Jatiwangi** | **1.77** | **63** | P | **Pn** | **17 22 33.9** | **+1.3** |
| **CMJI** | **Cimerak** | **1.81** | **105** | P | **Pn** | **17 22 33.8** | **+0.7** |
| **BLSI** | **Bandar Lampung** | **2.41** | **323** | P | Pn | 17 22 44.6 | +3.3 |
| **KASI** | **Kota Agung** | **2.81** | **309** | P | **Pn** | **17 22 49.8** | **+3.0** |
| **XMI** | **Christmas Isla** | **3.27** | **198** | P | **Pn** | **17 22 51.5** | **-1.6** |
| **XMIS** | **Christmas Isla** | **3.31** | **198** | P | Pn | 17 22 51.4 | -2.2 |
| **XMIS** | **Christmas Isla** | **3.31** | **198** | Pn | Pn | 17 22 51.3 | -2.4 |
| XMIS | | | | Sn | Sn | 17 23 24.3 | -7.5 |
| **LWLI** | **Liwa** | **3.47** | **311** | P | Pn | 17 23 00.2 | +4.3 |
| **SMRI** | **Semarang** | **3.73** | **86** | | **Pn** | **17 23 01.6** | **+2.3** |
| **SMRI** | **Semarang** | **3.73** | **86** | P | Pn | 17 23 05.7 | +6.3 |
| **UGM** | **Wanagama** | **3.85** | **99** | P | **Pn** | **17 23 02.3** | **+1.4** |
| **UGM** | **Wanagama** | **3.85** | **99** | Pn | **Pn** | **17 23 02.4** | **+1.4** |
| UGM | | | | Sn | **Sn** | **17 23 42.5** | **-2.5** |
| **UGM** | **Wanagama** | **3.85** | **99** | P | **Pn** | **17 23 02.1** | **+1.1** |
| **MNAI** | **Manna** | **4.73** | **308** | Pn | **Pn** | **17 23 15.8** | **+2.7** |
| **MNAI** | **Manna** | **4.73** | **308** | P | Pn | 17 23 17.1 | +4.0 |
| **JAGI** | **Jajag, Banyuwa** | **7.48** | **99** | P | **Pn** | **17 23 53.9** | **+3.2** |
| **JAGI** | **Jajag, Banyuwa** | **7.48** | **99** | Pn | **Pn** | **17 23 51.4** | **+0.7** |
| JAGI | | | | Sn | **Sn** | **17 25 11.3** | **-2.8** |
| **MYKOM** | **Kota Tinggi** | **9.48** | **342** | Pn | **Pn** | **17 24 18.1** | **+0.1** |
| **PLAI** | **Plampang** | **11.08** | **99** | P | **Pn** | **17 24 40.7** | **+0.8** |
| **GSI** | **Gunungsitoli** | **12.49** | **313** | Pn | **Pn** | **17 24 55.1** | **-4.0** |
| **KULM** | **Kulim** | **13.89** | **334** | Pn | **Pn** | **17 25 17.7** | **-0.4** |
| **KKM** | **Kota Kinabalu** | **16.32** | **36** | | **P** | **17 25 52.0** | **+0.7** |
| KKM | | | | IAmb | IAmb | 17 25 56.7 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **TOLI2** | **Tolitoli** | **16.36** | **60** | | **P** | **17 25 52.1** | **+0.5** |
| **GIRL** | **Giralia** | **16.88** | **155** | Pn | **Pn** | **17 25 54.9** | **-1.3** |
| **SOEI** | **Soe** | **17.55** | **99** | P | **P** | **17 26 06.5** | **+1.6** |
| **SOEI** | **Soe** | **17.55** | **99** | | **Pn** | **17 26 03.5** | **-1.1** |
| SOEI | | | | IAmb | IAmb | 17 26 17.5 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **18.67** | **139** | P | **Pn** | **17 26 21.1** | **+3.1** |
| **PSA00** | **Pilbara Seismi** | **19.04** | **139** | P | **Pn** | **17 26 24.8** | **+2.3** |
| **PSA00** | **Pilbara Seismi** | **19.04** | **139** | | **P** | **17 26 20.9** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **21.34** | **122** | | **P** | **17 26 47.0** | **+0.9** |
| **KNRA** | **Kununurra** | **23.15** | **113** | P | **P** | **17 27 04.9** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 17 27 06.2 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **DRS** | **Darwin Rock St** | **24.38** | **104** | P | **P** | **17 27 17.9** | **+1.5** |
| **MTN** | **Manton Dam** | **24.67** | **105** | P | **P** | **17 27 18.9** | **-0.2** |
| **MTN** | **Manton Dam** | **24.67** | **105** | P | **P** | **17 27 18.6** | **-0.5** |
| MTN | | | | IAmb | IAmb | 17 27 22.0 | |
| | comp=Z,10nm,0.5s | | | | | | |
| **KDU** | **Kakadu** | **25.93** | **104** | P | **P** | **17 27 29.9** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **26.72** | **343** | P | **P** | **17 27 35.5** | **-2.1** |
| | comp=Z,1.2nm,0.6s,baz=177,slow=8.7,SNR=7.9 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **WRKA** | **Warakurna** | **27.15** | **133** | P | **P** | **17 27 43.1** | **+1.6** |
| **H01W3** | **Cape Leeuwin H** | **28.28** | **167** | T | T | 17 57 41.8 | |
| | baz=329,slow=78 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **28.30** | **167** | T | T | 17 57 42.8 | |
| | baz=329,slow=78 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **28.30** | **167** | T | T | 17 57 43.8 | |
| | baz=329,slow=78 | | | | | | |
| **WB0** | **Warramunga Arr** | **29.58** | **118** | P | **P** | **17 28 04.1** | **+0.9** |
| WB0 | | | | IAmb | IAmb | 17 28 05.3 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **29.60** | **118** | P | **P** | **17 28 03.5** | **+0.2** |
| **WRA** | **Warramunga Arr** | **29.60** | **118** | P | **P** | **17 28 04.2** | **+0.9** |
| | comp=Z,4.5nm,0.9s,baz=298,slow=9.8,SNR=60 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 31 07.1** | **+0.2** |
| | comp=Z,0.5nm,0.5s,baz=307,slow=2.0,SNR=4.9 | | | | | | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **29.60** | **118** | P | **P** | **17 28 04.2** | **+0.9** |
| WRAB | | | | IAmb | IAmb | 17 28 18.1 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **29.61** | **118** | P | **P** | **17 28 03.7** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 17 28 04.9 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **29.78** | **118** | P | **P** | **17 28 05.8** | **+0.9** |
| WR0 | | | | IAmb | IAmb | 17 28 06.6 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **30.76** | **125** | P | **P** | **17 28 13.9** | **+0.3** |
| **ASAR** | **Alice Springs** | **30.76** | **125** | P | **P** | **17 28 14.5** | **+0.9** |
| | comp=Z,2.1nm,0.8s,baz=303,slow=7.7,SNR=11 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **33.90** | **267** | T | T | 18 04 13.6 | |
| | baz=91,slow=76,SNR=121 | | | | | | |
| **H08S3** | **Diego Garcia H** | **33.91** | **267** | T | T | 18 04 17.3 | |
| | baz=91,slow=76,SNR=73 | | | | | | |
| **H08S1** | **Diego Garcia H** | **33.92** | **267** | T | T | 18 04 18.0 | |
| | baz=91,slow=76,SNR=50 | | | | | | |
| **PZH** | **PanZhiHua** | **33.96** | **352** | P | P | 17 28 48.1 | +6.5 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **OOD** | **Oodnadatta** | **34.18** | **130** | P | **P** | **17 28 44.5** | **+1.1** |
| **MULG** | **Mulgathing** | **34.36** | **135** | P | **P** | **17 28 46.3** | **+1.3** |
| **QIS** | **Mount Isa** | **34.46** | **116** | P | **P** | **17 28 47.0** | **+1.0** |
| **COEN** | **Coen** | **36.43** | **104** | P | **P** | **17 29 03.0** | **+0.1** |
| **COEN** | **Coen** | **36.43** | **104** | P | **P** | **17 29 02.7** | **-0.2** |
| COEN | | | | IAmb | IAmb | 17 29 09.7 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **MTSU** | **Mount Surprise** | **38.16** | **110** | P | **P** | **17 29 18.5** | **+0.9** |
| **PMG** | **Port Moresby** | **40.08** | **96** | P | **P** | **17 29 33.0** | **-0.6** |
| **CTAO** | **Charters Tower** | **40.36** | **112** | P | **P** | **17 29 37.1** | **+1.2** |
| CTAO | | | | IAmb | IAmb | 17 29 38.2 | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **40.66** | **132** | P | **P** | **17 29 39.6** | **+1.4** |
| **STKA** | **Stephens Creek** | **40.66** | **132** | P | **P** | **17 29 39.5** | **+1.4** |
| STKA | | | | IAmb | IAmb | 17 29 40.9 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **40.66** | **132** | P | **P** | **17 29 39.8** | **+1.6** |
| | comp=Z,13nm,0.4s,baz=311,slow=7.3,SNR=70 | | | | | | |
| | comp=Z,13nm,0.4s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **43.61** | **129** | P | **P** | **17 30 04.4** | **+2.2** |
| **YNG** | **Young** | **46.84** | **131** | P | **P** | **17 30 30.2** | **+2.4** |
| **KSRS** | **Korea Array** | **48.76** | **23** | P | **P** | **17 30 41.2** | **-1.2** |
| | comp=Z,1.3nm,0.8s,baz=215,slow=8.2,SNR=4.5 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.70** | **32** | P | **P** | **17 31 09.0** | **-3.2** |
| | comp=Z,1.5nm,0.8s,baz=210,slow=7.2,SNR=4.8 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **54.91** | **360** | P | **P** | **17 31 26.8** | **-1.5** |
| | comp=Z,1.0nm,0.7s,baz=164,slow=6.1,SNR=5.0 | | | | | | |
| SONM | | | | PcP | **PcP** | **17 32 28.8** | **-0.7** |
| | comp=Z,1.7nm,0.6s,baz=177,slow=6.0,SNR=6.4 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **BNX** | **BinXian** | **55.98** | **17** | ⇓P | **P** | **17 31 34.9** | **-0.9** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.14** | **22** | P | **P** | **17 31 35.4** | **-1.5** |
| **USRK** | **Ussuriysk Ar.** | **56.14** | **22** | P | **P** | **17 31 35.2** | **-1.7** |
| | comp=Z,2.2nm,0.5s,baz=194,slow=5.3,SNR=9.9 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.08** | **340** | P | **P** | **17 31 48.3** | **-2.3** |
| **MKAR** | **Makanchi Array** | **58.08** | **340** | P | **P** | **17 31 48.6** | **-2.0** |
| | comp=Z,1.2nm,0.6s,baz=151,slow=7.5,SNR=14 | | | | | | |
| MKAR | | | | PcP | **PcP** | **17 32 41.4** | **-0.4** |
| | comp=Z,1.2nm,0.8s,baz=135,slow=6.6,SNR=3.1 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **VOI** | **Vohitsoka** | **59.41** | **249** | P | **P** | **17 31 59.1** | **-1.4** |
| **HEH** | **HeiHe** | **60.09** | **15** | *e*P | **P** | **17 32 03.1** | **-1.3** |
| **H04N2** | **CROZET ISLANDS** | **60.83** | **221** | T | T | 18 38 07.2 | |
| | baz=69,slow=75 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.84** | **221** | T | T | 18 38 02.6 | |
| | baz=69,slow=75 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.84** | **221** | T | T | 18 38 01.6 | |
| | baz=69,slow=75 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **61.01** | **220** | T | T | 18 38 19.4 | |
| | baz=60,slow=76,SNR=20 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **61.02** | **220** | T | T | 18 38 17.7 | |
| | baz=60,slow=76,SNR=5.1 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **61.02** | **220** | T | T | 18 38 24.5 | |
| | baz=60,slow=76,SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.64** | **340** | P | **P** | **17 32 19.9** | **-1.8** |
| | comp=Z,3.0nm,0.2s,baz=154,slow=6.1,SNR=4.6 | | | | | | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| **MCQ** | **Macquarie Isla** | **62.82** | **149** | P | **P** | **17 32 22.9** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **63.76** | **346** | P | **P** | **17 32 26.9** | **-2.1** |
| **ZALV** | **Zalesovo Beam** | **63.76** | **346** | P | **P** | **17 32 26.2** | **-2.8** |
| | comp=Z,0.7nm,0.5s,baz=170,slow=4.9,SNR=4.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **THZ** | **Tophouse** | **67.47** | **132** | P | **P** | **17 32 53.5** | **+0.2** |
| **BVAR** | **Borovoye Array** | **67.53** | **337** | P | **P** | **17 32 51.6** | **-1.8** |
| | comp=Z,2.3nm,0.5s,baz=143,slow=8.3,SNR=16 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **67.60** | **337** | P | **P** | **17 32 51.9** | **-1.9** |
| **ABKAR** | **Akbulak array** | **69.52** | **329** | P | **P** | **17 33 04.3** | **-1.5** |
| ABKAR | | | | IAmb | IAmb | 17 33 06.1 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **69.52** | **329** | P | **P** | **17 33 04.5** | **-1.4** |
| **BKZ** | **Black Stump Fm** | **69.77** | **129** | P | **P** | **17 33 08.3** | **+0.6** |
| **RTZ** | **Ruatahuna** | **70.08** | **128** | P | **P** | **17 33 10.3** | **+0.6** |
| **AKTO** | **Aktyubinsk** | **71.23** | **330** | P | **P** | **17 33 15.2** | **-1.1** |
| | comp=Z,1.6nm,0.5s,baz=119,slow=6.7,SNR=7.9 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.01** | **29** | P | **P** | **17 33 30.8** | **-1.9** |
| | comp=Z,1.0nm,0.5s,baz=192,slow=1.8,SNR=6.3 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **ARU** | **Arti** | **74.77** | **335** | P | **P** | **17 33 36.0** | **-1.0** |
| ARU | | | | IAmb | IAmb | 17 33 37.5 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **ARU** | **Arti** | **74.77** | **335** | P | **P** | **17 33 36.2** | **-0.8** |
| | comp=Z,4.7nm,0.7s,baz=150,slow=1.6,SNR=9.9 | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **76.67** | **318** | P | **P** | **17 33 48.9** | **+0.7** |
| | comp=Z,5.0nm,0.9s,baz=173,slow=4.7,SNR=9.7 | | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **ASF** | **Jabal al Asfar** | **77.08** | **305** | P | **P** | **17 33 51.0** | **+0.2** |
| | comp=Z,4.6nm,0.6s,baz=349,slow=0.0,SNR=4.0 | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **BELG** | **Belogornoye** | **77.73** | **327** | P | **P** | **17 33 53.5** | **-0.4** |
| | comp=Z,19nm,1.1s,baz=248,slow=0.4,SNR=4.1 | | | | | | |
| | comp=Z,19nm,1.1s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **78.53** | **306** | P | **P** | **17 34 00.5** | **+1.6** |
| | comp=Z,2.2nm,0.6s,baz=100,slow=6.0,SNR=4.7 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **LBTB** | **Lobatse** | **78.90** | **246** | P | **P** | **17 34 03.0** | **+1.8** |
| LBTB | | | | IAmb | IAmb | 17 34 04.5 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **79.04** | **242** | P | **P** | **17 34 03.7** | **+1.8** |
| **BOSA** | **Boshof** | **79.04** | **242** | P | **P** | **17 34 04.1** | **+2.2** |
| | comp=Z,4.1nm,0.9s,baz=86,slow=3.5,SNR=7.0 | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **KIRV** | **Kirov** | **80.03** | **333** | P | **P** | **17 34 05.0** | **-1.3** |
| | comp=Z,14nm,0.6s,baz=113,slow=7.7,SNR=6.4 | | | | | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **BR131** | **Keskin Array S** | **81.81** | **312** | P | **P** | **17 34 15.9** | **-0.6** |
| **BRTR** | **Keskin Array B** | **81.81** | **312** | P | **P** | **17 34 15.9** | **-0.6** |
| **BRTR** | **Keskin Array B** | **81.81** | **312** | P | **P** | **17 34 16.1** | **-0.4** |
| | comp=Z,2.0nm,0.7s,baz=132,slow=6.9,SNR=11 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **SUR** | **Sutherland** | **82.66** | **238** | P | **P** | **17 34 24.5** | **+3.3** |
| **QSPA** | **South Pole Qui** | **82.68** | **180** | | **P** | **17 34 21.6** | **+1.1** |
| **QSPA** | **South Pole Qui** | **82.68** | **180** | P | **P** | **17 34 21.8** | **+1.3** |
| | comp=Z,1.1nm,0.4s,baz=315,slow=4.5,SNR=14 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **87.43** | **198** | ⇑P | **P** | **17 34 46.7** | **+2.5** |
| | comp=Z,53nm,0.8s | | | | | | |
| TROLL | | | | ⇑x | x | 17 34 46.7 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **ALN** | **Alexandroupoli** | **87.72** | **312** | P | **P** | **17 34 46.6** | **+0.6** |
| **AKASG** | **Malin Array Be** | **87.75** | **322** | P | **P** | **17 34 45.4** | **-0.5** |
| | comp=Z,1.7nm,0.7s,baz=90,slow=4.3,SNR=4.6 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **89.14** | **197** | | **P** | **17 34 53.6** | **+1.4** |
| SNAA | | | | IAmb | IAmb | 17 34 58.3 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **89.14** | **197** | ⇑P | **P** | **17 34 54.4** | **+2.2** |
| | comp=Z,38nm,0.9s | | | | | | |
| SNAA | | | | ⇑x | x | 17 34 54.4 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **89.14** | **197** | P | **P** | **17 34 54.5** | **+2.2** |
| | comp=Z,1.9nm,1.0s,baz=98,slow=4.0,SNR=5.5 | | | | | | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| **BURAR** | **Bucovina Array** | **89.63** | **318** | P | **P** | **17 34 55.6** | **+0.6** |
| BURAR | | | | IAmb | IAmb | 17 34 58.3 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **89.65** | **318** | P | **P** | **17 34 55.6** | **+0.6** |
| BUR08 | | | | IAmb | IAmb | 17 34 58.2 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **LIT** | **Litokhoron** | **90.24** | **310** | P | **P** | **17 34 57.8** | **-0.1** |
| **VNA2** | **Neumayer--Watz** | **90.78** | **197** | ⇑P | **P** | **17 35 02.1** | **+2.3** |
| | comp=Z,0.8nm,0.6s,baz=94,slow=1.9 | | | | | | |
| VNA2 | | | | ⇑x | x | 17 35 02.1 | |
| | comp=Z,0.8nm,0.6s,baz=94,slow=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **91.90** | **332** | P | **P** | **17 35 04.7** | **-0.3** |
| | comp=Z,3.5nm,0.8s,baz=112,slow=6.2,SNR=6.9 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **93.72** | **340** | P | **P** | **17 35 11.6** | **-1.7** |
| | comp=Z,1.4nm,0.7s,baz=88,slow=5.5,SNR=4.2 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **128.99** | **46** | PKP | **PKiKP** | **17 41 07.0** | **+1.0** |
| | comp=Z,1.0nm,0.9s,baz=305,slow=3.2,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **144.00** | **49** | PKP | **PKPdf** | **17 41 31.8** | **-1.3** |
| | comp=Z,1.0nm,0.5s,baz=325,slow=1.1,SNR=17 | | | | | | |
| **BDFB** | **Brasilia** | **146.12** | **228** | PKPbc | **PKPab** | **17 41 40.0** | **+1.3** |
| | comp=Z,3.5nm,0.6s,baz=130,slow=6.0,SNR=5.6 | | | | | | |

**IDC 17 17:27:04.2**±262.0,**52˚.76N**×**32˚.69E**,**h0km**,**Error ellipse: s-maj=118.1km s-min=90.5km az=16.0**,**Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **4.76** | **32** | I | I | 17 55 30.0 | |
| | baz=214,slow=328,SNR=1.1 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **12.62** | **260** | I | I | 18 41 40.0 | |
| | baz=59,slow=342,SNR=0.4 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.90** | **88** | I | I | 19 07 10.0 | |
| | baz=283,slow=319,SNR=0.6 | | | | | | |
| **I48TN** | **KESRA INFRASON** | **23.65** | **233** | I | I | 19 51 50.0 | |
| | baz=37,slow=314,SNR=1.1 | | | | | | |

*MOS* ***17*** *17:36:37.5±0.9, 27˚.39N×103˚.99E, h15km, mb4.6/29, Error ellipse: s-maj=8.7km s-min=5.9km az=114.7*

*BJI* ***17*** *17:36:38.0±0.0, 27˚.40N×103˚.98E, h10km, mb4.4/42, mB4.8/10, ML4.4/21, Ms4.1/32, Ms7 3.9/29*

*NEIC* ***17*** *17:36:40.1±1.7, 27˚.54N±0˚.06×104˚.01E±0˚.08, h16km±3km, mb4.7/95, Error ellipse: s-maj=10.4km s-min=9.2km az=112.0*

*IDC* ***17*** *17:36:46.0±3.1, 27˚.41N×103˚.99E, h72km±28km, mb3.9/20, mbtmp4.2/21, Error ellipse: s-maj=18.0km s-min=13.0km az=43.0*

*BGR* ***17*** *17:36:55.1, 29˚.08N×103˚.02E, h33km, mb4.4*

**ISC 17 17:36:39.3**±0.3,**27˚.43N**±0˚.04×**104˚.01E**±0˚.04,**h10km**,**n241**, σ1℘**47**/230,**mb4.5**/107,**14C-3D**,**Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PZH** | **PanZhiHua** | **2.22** | **246** | Pn | **Pn** | **17 37 17.4** | **+1.0** |
| PZH | | | | Pg | **Pb** | **17 37 19.8** | **+0.1** |
| PZH | | | | Sg | **Sn** | **17 37 47.1** | **+3.2** |
| PZH | | | | smax | smax | | |
| | comp=N,4μm,1.0s | | | | | | |
| PZH | | | | smax | smax | | |
| | comp=E,2μm,1.0s | | | | | | |
| **GYA** | **Guiyang** | **2.56** | **112** | Pn | **Pn** | **17 37 23.3** | **+2.3** |
| GYA | | | | Sn | **Sn** | **17 37 54.8** | **+2.5** |
| GYA | | | | smax | smax | | |
| | comp=N,3μm,0.8s | | | | | | |
| GYA | | | | smax | smax | | |
| | comp=E,3μm,0.9s | | | | | | |
| **KMI** | **Kunming** | **2.56** | **207** | ⇑Pn | **Pn** | **17 37 22.0** | **+0.9** |
| KMI | | | | Sn | **Sn** | **17 37 55.6** | **+3.2** |
| KMI | | | | smax | smax | | |
| | comp=N,350nm,1.3s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,400nm,0.7s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,3μm,6.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,2μm,5.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,2μm,9.6s | | | | | | |
| **TNCH** | **TengChong** | **5.48** | **245** | Pn | **Pn** | **17 38 02.4** | **+1.2** |
| TNCH | | | | Sn | **Sn** | **17 39 06.4** | **+2.0** |
| TNCH | | | | Sg | **Sg** | **17 39 34.1** | **-1.1** |
| TNCH | | | | smax | smax | | |
| | comp=N,500nm,1.3s | | | | | | |
| TNCH | | | | smax | smax | | |
| | comp=E,380nm,1.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,1μm,5.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,1μm,9.2s | | | | | | |
| **ENH** | **Enshi** | **5.58** | **58** | Pn | **Pn** | **17 38 03.6** | **+1.2** |
| **SLVN** | **Son La** | **6.07** | **181** | Pn | **Pn** | **17 38 09.7** | **+0.5** |
| **XAN** | **Xi'an** | **7.83** | **31** | P | **Pn** | **17 38 33.3** | **-0.1** |
| XAN | | | | S | **Sn** | **17 40 05.8** | **+3.7** |
| XAN | | | | smax | smax | | |
| | comp=N,680nm,0.9s | | | | | | |
| XAN | | | | smax | smax | | |
| | comp=E,490nm,0.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,2μm,6.2s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,700nm,4.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,8.9s | | | | | | |
| **CRAI** | **Chiangrai** | **7.90** | **206** | Pn | **Pn** | **17 38 36.3** | **+2.0** |
| **CNSH** | **ChangSha** | **7.94** | **82** | P | **Pn** | **17 38 37.0** | **+2.2** |
| CNSH | | | | S | **Sn** | **17 40 01.3** | **-3.4** |
| CNSH | | | | smax | smax | | |
| | comp=N,230nm,1.2s | | | | | | |
| CNSH | | | | smax | smax | | |
| | comp=E,160nm,1.1s | | | | | | |
| **LZH** | **Lanzhou** | **8.64** | **359** | P | **Pn** | **17 38 46.3** | **+1.8** |
| LZH | | | | S | **Sn** | **17 40 21.8** | **-0.3** |
| LZH | | | | smax | smax | | |
| | comp=N,60nm,1.5s | | | | | | |
| LZH | | | | smax | smax | | |
| | comp=E,51nm,1.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,690nm,6.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,700nm,8.6s | | | | | | |
| **WHN** | **Wuhan** | **9.57** | **69** | P | **Pn** | **17 39 01.4** | **+4.2** |
| WHN | | | | S | **Sn** | **17 40 42.6** | **-2.3** |
| WHN | | | | LR | LR | | |
| | comp=N,5μm,12.9s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,3μm,14.6s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,4μm,7.8s | | | | | | |
| **QIZ** | **Qiongzhong** | **9.93** | **146** | P | **Pn** | **17 39 00.8** | **-1.3** |
| QIZ | | | | S | **Sn** | **17 40 54.8** | **+1.1** |
| QIZ | | | | LR | LR | | |
| | comp=N,590nm,10.0s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,550nm,6.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **9.93** | **146** | Pn | **Pn** | **17 39 00.8** | **-1.3** |
| **CM31** | **Chiang Mai Arr** | **10.07** | **209** | Pn | **Pn** | **17 39 06.9** | **+2.8** |
| **CMAR** | **Chiang Mai Arr** | **10.07** | **209** | Pn | **Pn** | **17 39 06.0** | **+1.9** |
| **CMAR** | **Chiang Mai Arr** | **10.07** | **209** | P | **Pn** | **17 39 08.0** | **+3.9** |
| | 6.2nm,0.9s,baz=17,slow=12,SNR=29 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **10.07** | **209** | P | **Pn** | **17 39 06.0** | **+1.9** |
| **LYN** | **LuoYang** | **10.15** | **44** | P | **Pn** | **17 39 03.8** | **-1.4** |
| LYN | | | | pP | | 17 39 11.3 | |
| LYN | | | | S | **Sn** | **17 41 00.9** | **+1.8** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,67nm,0.6s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=N,1μm,7.5s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=E,1μm,8.3s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,2μm,10.8s | | | | | | |
| **LSA** | **Lhasa** | **11.53** | **284** | P | **Pn** | **17 39 26.3** | **+1.8** |
| **LSA** | **Lhasa** | **11.53** | **284** | Pn | **Pn** | **17 39 24.6** | **+0.1** |
| **LSA** | **Lhasa** | **11.53** | **284** | P | **Pn** | **17 39 24.6** | **+0.1** |
| **UBPT** | **Khong Chiam** | **12.16** | **173** | Pn | **Pn** | **17 39 35.4** | **+2.6** |
| **GTA** | **Gaotai** | **12.45** | **345** | *e*P | **Pn** | **17 39 37.8** | **+1.0** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,470nm,13.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,270nm,14.2s | | | | | | |
| **HNS** | **HongShan** | **13.43** | **40** | *e*P | **Pn** | **17 39 52.6** | **+2.7** |
| HNS | | | | LR | LR |

IPM IAmb IAmb 17 41 50.0
comp=Z,12nm,0.8s
**CN2 Changchun 23.79 41** P **P** **17 41 52.5 +0.4**
CN2 pmax pmax
comp=Z,30nm,0.8s
**JNU Nakatsue 23.86 70** P **P** **17 41 51.3 -1.7**
**KKM Kota Kinabalu 24.23 149** P **P** **17 41 57.2 +0.6**
KKM IAmb IAmb 17 42 00.4
comp=Z,29nm,1.0s
**DGZ Jazzator, Alta 25.63 335***c e* P **P** **17 42 09.2 +0.1**
DGZ pmax pmax
comp=Z,11nm,1.0s
**MK31 Makanchi Array 25.81 324** P **P** **17 42 09.9 -0.7**
MK31 IAmb IAmb 17 42 15.7
comp=Z,14nm,0.8s
**MK31 Makanchi Array 25.81 324***c e* P **P** **17 42 11.0 +0.4**
**MKAR Makanchi Array 25.81 324** P **P** **17 42 10.1 -0.5**
**MKAR Makanchi Array 25.81 324** P **P** **17 42 11.6 +1.0**
comp=Z,16nm,0.7s,baz=128,slow=12,SNR=73
comp=Z,16nm,0.7s
**MKAR Makanchi Array 25.81 324** *e* P **P** **17 42 10.9 +0.3**
MKAR pmax pmax
comp=Z,16nm,0.7s
**MAKZ Makanchi 25.98 324** P **P** **17 42 12.1 -0.1**
MAKZ IAmb IAmb 17 42 17.0
comp=Z,13nm,0.9s
**MAKZ Makanchi 25.98 324** P **P** **17 42 12.1 -0.1**
MAKZ pmax pmax
comp=Z,13nm,1.0s
**SBUM Sibu 26.05 161** P **P** **17 42 14.4 +1.4**
**BNX BinXian 26.06 39** ⇑P **P** **17 42 14.3 +1.5**
BNX pmax pmax
comp=Z,21nm,0.9s
**MYLDM Lahad Datu 26.08 145** P **P** **17 42 13.9 +0.6**
MYLDM IAmb IAmb 17 42 19.5
comp=Z,28nm,1.0s
**KSH Kashi 26.20 305** P **P** **17 42 16.6 +2.2**
KSH sP sP 17 42 23.3 +3.9
KSH pmax pmax
comp=Z,9.0nm,1.6s
**NRN Naryn 26.86 309** P **P** **17 42 19.1 -1.5**
**NRN Naryn 26.86 309** P **P** **17 42 19.1 -1.5**
NRN pmax pmax
comp=Z,4.0nm,0.9s
**NIL Nilore 27.14 291** P **P** **17 42 21.5 -1.4**
**NIL Nilore 27.14 291** P **P** **17 42 21.5 -1.4**
NIL pmax pmax
comp=Z,28nm,0.7s
**BOOM Boomskoye usch 27.32 311** P **P** **17 42 22.9 -1.6**
**BOOM Boomskoye usch 27.32 311** P **P** **17 42 22.9 -1.6**
BOOM pmax pmax
comp=Z,4.0nm,0.9s
**USA0B Ussuriysk Arra 28.01 46** P **P** **17 42 29.9 -0.5**
USA0B IAmb IAmb 17 42 32.3
comp=Z,12nm,0.8s
**USA0B Ussuriysk Arra 28.01 46** P **P** **17 42 29.9 -0.5**
USA0B pmax pmax
comp=Z,12nm,0.9s
**USRK Ussuriysk Ar. 28.01 46** P **P** **17 42 30.3 -0.1**
**USRK Ussuriysk Ar. 28.01 46** P **P** **17 42 31.1 +0.7**
comp=Z,9.8nm,0.7s,baz=246,slow=7.8,SNR=14
comp=Z,9.8nm,0.7s
**ARSB Arslanbob 28.95 307** P **P** **17 42 39.0 +0.1**
**ARSB Arslanbob 28.95 307** P **P** **17 42 39.1 +0.1**
ARSB pmax pmax
comp=Z,2.0nm,1.2s
**HEH HeiHe 28.96 32** *e* P **P** **17 42 40.6 +1.8**
**ZAA0 Zalesovo Array 30.03 337** P **P** **17 42 46.7 -1.5**
ZAA0 IAmb IAmb 17 42 50.6
comp=Z,14nm,1.1s
**ZALV Zalesovo Beam 30.03 337** P **P** **17 42 46.7 -1.5**
**ZALV Zalesovo Beam 30.03 337** P **P** **17 42 47.5 -0.8**
comp=Z,7.2nm,0.7s,baz=145,slow=8.7,SNR=21
comp=Z,7.2nm,0.7s
**BTK Batken 30.16 303** P **P** **17 42 49.2 -0.5**
BTK IAmb IAmb 17 42 51.0
comp=Z,15nm,1.4s
**BTK Batken 30.16 303** P **P** **17 42 49.2 -0.5**
BTK pmax pmax
comp=Z,15nm,1.5s
**KURBB Kurchatov Arra 30.20 327** P **P** **17 42 49.5 -0.3**
comp=Z,3.3nm,0.5s,baz=130,slow=10,SNR=14
KURBB PcP **PcP** **17 45 48.9 -1.7**
comp=Z,1.1nm,0.2s,baz=119,slow=3.0,SNR=4.3
comp=Z,3.3nm,0.5s
**KURK Kurchatov 30.21 327** P **P** **17 42 48.7 -1.2**
**KURK Kurchatov 30.21 327***c e* P **P** **17 42 49.3 -0.6**
KURK pmax pmax
comp=Z,10.0nm,1.3s
**GAR Garm 30.30 301** P P 17 42 49.3 -1.7
GAR IAmb IAmb 17 42 51.0
comp=Z,7.8nm,0.7s
**KLR Kul'dur 30.49 37**⇑ *e* P **P** **17 42 53.3 +0.9**
KLR pmax pmax
comp=Z,4.0nm,1.3s
**JSD Sado 30.54 61** P **P** **17 42 51.8 -1.1**
**KBL Kabul 30.69 292** P **P** **17 42 53.4 -1.2**
KBL IAmb IAmb 17 42 56.0
comp=Z,15nm,1.2s
**KBL Kabul 30.69 292** P **P** **17 42 53.4 -1.2**
KBL pmax pmax
comp=Z,15nm,1.2s
**BKB Balikpapan 31.10 154** P **P** **17 42 57.4 -0.6**
**SIMJ Simiganj 31.23 300** P 17 42 57.5 -1.8
SIMJ IAmb IAmb 17 43 04.6
comp=Z,5.2nm,0.7s
**KKAR Karatay Array 31.26 309** P P 17 42 57.3 -2.0
**KKAR Karatay Array 31.26 309** P P 17 42 57.3 -2.0
**ZEA Zeya 31.38 27** *e* P **P** **17 43 01.5 +1.3**
**BVAR Borovoye Array 35.68 325** P **P** **17 43 36.9 -0.8**
comp=Z,1.3nm,0.5s,baz=129,slow=9.0,SNR=5.4
BVAR PcP **PcP** **17 46 04.1 -1.8**
comp=Z,2.4nm,0.6s,baz=127,slow=3.5,SNR=9.3
comp=Z,1.3nm,0.5s
**BRVK Borovoye 35.76 325** P P 17 43 36.2 -2.0
**BRVK Borovoye 35.76 325**⇑ *e* P **P** **17 43 37.7 -0.6**
BRVK pmax pmax
comp=Z,9.0nm,1.7s
**YAK Yakutsk 38.58 19** P **P** **17 44 00.4 -1.7**
YAK IAmb IAmb 17 44 06.1
comp=Z,12nm,0.8s
**YAK Yakutsk 38.58 19***d e* P **P** **17 44 00.9 -1.2**
YAK pmax pmax
comp=Z,14nm,0.8s
**ABKAR Akbulak array 40.13 315** P **P** **17 44 14.5 -0.8**
**ABKAR Akbulak array 40.13 315** P **P** **17 44 14.6 -0.7**
ABKAR IAmb IAmb 17 44 20.5
comp=Z,2.7nm,0.8s
**ARU Arti 43.33 325** P **P** **17 44 40.0 -1.4**
ARU IAmb IAmb 17 44 44.2
comp=Z,14nm,1.3s
**ARU Arti 43.33 325***c i* P **P** **17 44 40.8 -0.6**
ARU 17 46 20.4
ARU S **S** **17 51 10.7 +1.9**
ARU pmax pmax
comp=Z,11nm,1.2s
**ARU Arti 43.33 325** P **P** **17 44 40.7 -0.6**
comp=Z,8.1nm,1.1s
**SEY Seymchan 47.35 28**⇑ *e* P **P** **17 45 12.8 -0.3**
SEY pmax pmax
comp=Z,8.0nm,1.8s
**BELG Belogornoye 48.42 317***d e* P **P** **17 45 21.1 -0.5**
BELG pmax pmax
comp=Z,4.0nm,0.9s
**KIRV Kirov 48.70 325**⇓ *e* P **P** **17 45 23.5 -0.1**
**GNI Garni 50.03 301** P **P** **17 45 34.4 +0.1**
GNI IAmb IAmb 17 45 43.7
comp=Z,10nm,0.9s
**GNI Garni 50.03 301** P **P** **17 45 34.4 +0.1**
GNI pmax pmax
comp=Z,10.0nm,1.0s
**PSA00 Pilbara Seismi 51.06 161** P **P** **17 45 43.2 +1.3**
PSA00 IAmb IAmb 17 45 47.5
comp=Z,8.3nm,0.9s
**KBZ Khabaz 51.18 305**⇑ *e* P **P** **17 45 44.1 +1.4**
KBZ pmax pmax
comp=Z,3.0nm,1.0s
**KIV Kislovodsk 51.32 306** P **P** **17 45 42.5 -1.4**
KIV IAmb IAmb 17 45 45.3
comp=Z,11nm,0.9s
**KIV Kislovodsk 51.32 306** *e* P **P** **17 45 43.8 -0.1**
KIV pmax pmax
comp=Z,12nm,1.1s
**KIV Kislovodsk 51.32 306** P **P** **17 45 44.3 +0.4**
comp=Z,11nm,0.9s
KIV pP **pP** **17 45 47.9 +0.2**
comp=Z,11nm,0.9s
**SHA1 Shidzhatmaz 51.35 305**⇑ *e* P **P** **17 45 43.9 -0.4**
**GURO Guroymak-BITLI 52.28 299** P **P** **17 45 51.2 0.0**
**BILL Bilibino 54.54 24** *e* P **P** **17 46 07.7 +0.5**
BILL *e* 17 47 10.5
BILL pmax pmax
comp=Z,4.0nm,1.1s
**OBN Obninsk 55.19 320** *e* P **P** **17 46 11.1 -0.9**
OBN *e* 17 47 11.8
OBN *e* 17 48 16.0
OBN *e* PPP PPP 17 49 25.3
OBN pmax pmax
comp=Z,8.0nm,1.2s
**WB0 Warramunga Arr 55.38 145** P **P** **17 46 12.7 -1.2**
WB0 IAmb IAmb 17 46 46.9
comp=Z,9.8nm,1.4s
**WRAB Tennant Creek 55.50 145** P **P** **17 46 14.2 -0.5**
WRAB IAmb IAmb 17 46 16.1
comp=Z,13nm,1.4s
**WRAB Tennant Creek 55.50 145** P **P** **17 46 14.2 -0.5**
WRAB pmax pmax
comp=Z,13nm,1.5s
**WRA Warramunga Arr 55.50 145** P **P** **17 46 14.2 -0.6**
comp=Z,3.1nm,0.9s,baz=334,slow=8.5,SNR=29
comp=Z,3.1nm,0.9s
**WRA Warramunga Arr 55.50 145** *e* P **P** **17 46 14.1 -0.6**
WRA pmax pmax
comp=Z,6.0nm,1.1s
**WB2 Warramunga Arr 55.51 145** P **P** **17 46 14.1 -0.6**
WB2 IAmb IAmb 17 46 20.7
comp=Z,8.2nm,1.2s
**BNN Bunyan 57.02 300** P **P** **17 46 24.6 -1.0**
**AS31 Alice Springs 58.42 148** P **P** **17 46 35.0 -0.5**
**BR131 Keskin Array S 58.54 302** P P 17 46 33.7 -2.5
**BR131 Keskin Array S 58.54 302** P P 17 46 33.7 -2.6
BR131 pmax pmax
comp=Z,2.0nm,0.8s
**BRTR Keskin Array B 58.54 302** P **P** **17 46 34.8 -1.5**
comp=Z,1.1nm,0.5s,baz=97,slow=4.5,SNR=6.7
comp=Z,1.1nm,0.5s
**BRTR Keskin Array B 58.54 302** *e* P **P** **17 46 35.3 -1.0**
BRTR pmax pmax
comp=Z,1.0nm,0.5s
**BR106 Keskin Array S 58.55 302** P **P** **17 46 35.2 -1.2**
comp=Z,2.2nm,0.8s
**BR105 Keskin Array S 58.55 302** P **P** **17 46 35.2 -1.2**
comp=Z,1.8nm,1.4s
**MMAI Mount Meron Ar 58.61 294** P **P** **17 46 35.7 -1.1**
comp=Z,1.5nm,0.6s,baz=40,slow=7.6,SNR=3.7
comp=Z,1.5nm,0.6s
**ANTO Ankara 59.15 302** P **P** **17 46 39.9 -0.6**
comp=Z,5.3nm,1.0s
**AK08 Malin Array Si 59.86 315** P **P** **17 46 44.3 -0.8**
**AK10 Malin Array Si 59.87 315** P **P** **17 46 43.7 -1.4**
**AK03 Malin Array Si 59.87 315** P **P** **17 46 43.7 -1.4**
**AKASG Malin Array Be 59.87 315** P P 17 46 42.6 -2.5
comp=Z,0.8nm,0.5s,baz=79,slow=5.8,SNR=5.3
comp=Z,0.8nm,0.5s
**AKASG Malin Array Be 59.87 315** *e* P **P** **17 46 46.3 +1.2**
AKASG pmax pmax
comp=Z,3.0nm,0.7s
**AKBB Malin Array Si 59.87 315**⇑ *e* P **P** **17 46 45.7 +0.6**
**AKBB Malin Array Si 59.87 315** P **P** **17 46 43.9 -1.2**
**KIEV Kiev 59.88 315** P **P** **17 46 44.2 -1.0**
KIEV IAmb IAmb 17 47 01.9
comp=Z,3.4nm,0.7s
**KIEV Kiev 59.88 315** P **P** **17 46 44.2 -1.0**
KIEV pmax pmax
comp=Z,3.0nm,0.7s
**KIEV Kiev 59.88 315** P **P** **17 46 44.2 -1.0**
comp=Z,25nm,1.3s
**AK19 Malin Array Si 60.00 315** P **P** **17 46 44.8 -1.2**
**KEV Kevo 60.06 337** P **P** **17 46 45.4 -0.7**
**KEV Kevo 60.06 337** P **P** **17 46 45.4 -0.7**
KEV pmax pmax
comp=Z,30nm,1.4s
**ARCES ARCESS Array B 60.58 337** P **P** **17 46 48.3 -1.4**
**ARCES ARCESS Array B 60.58 337** P **P** **17 46 48.6 -1.1**
comp=Z,3.2nm,1.0s,baz=89,slow=7.8,SNR=10.0
comp=Z,3.2nm,1.0s
**ARCES ARCESS Array B 60.58 337** *e* P 17 46 47.7 -2.0
ARCES pmax pmax
comp=Z,1.0nm,0.6s
**FIA1 FINESS Array S 60.59 327** P **P** **17 46 48.8 -1.0**
**FINES FINESS Array B 60.59 327** P P 17 46 48.0 -1.8
**FINES FINESS Array B 60.59 327** P **P** **17 46 48.8 -1.0**
comp=Z,1.6nm,0.6s,baz=74,slow=5.5,SNR=9.6
comp=Z,1.6nm,0.6s
**LUBAR Lubar, Ukraine 60.91 314** P **P** **17 46 52.2 -0.1**
**RNPP9 Sopachiv 61.85 316** P **P** **17 46 57.7 -0.9**
**VRI Vrincioaia 62.32 310** P P 17 47 00.2 -1.7
comp=Z,5.5nm,1.2s,comp=Z,103nm
**PLOR5 Plostina Array 62.37 310** P **P** **17 47 01.4 -0.9**
comp=Z,11nm,1.2s
**CTA Charters Tower 62.48 135** P P 17 47 01.1 -2.1
comp=Z,0.1nm,0.5s,baz=322,slow=9.9,SNR=2.2
**KWP Kalwaria Pacla 64.18 314** P P 17 47 12.3 -1.9
comp=Z,15nm,0.6s
**HOLU Holmets 64.64 313** P **P** **17 47 16.9 -0.2**
**IDI Anoyia 66.37 299** P **P** **17 47 26.0 -2.7**
**HFS Hagfors 66.78 327** P P 17 47 29.0 -1.7
comp=Z,1.3nm,0.5s,baz=101,slow=7.5,SNR=6.2
comp=Z,1.3nm,0.5s
**C19K Lookout Ridge 66.92 23** P **P** **17 47 30.8 -0.8**
**VYHS Vyhne 66.93 314** *e* P **P** **17 47 32.3 +0.3**
**VYHS Vyhne 66.93 314** *e* P **P** **17 47 32.3 +0.3**
**MORC Moravsky Berou 67.39 316** *e* P **P** **17 47 36.2 +1.3**
**B20K Meade River 67.46 22** P **P** **17 47 33.9 -1.0**
**NC405 NORSAR Array S 67.46 328** P P 17 47 33.1 -2.0
**JAVC Velka Javorina 67.57 315** *e* P **P** **17 47 35.6 -0.5**
**NC303 NORSAR Array S 67.59 328** P P 17 47 33.3 -2.6
**D19K Kuna River 67.61 23** P **P** **17 47 34.4 -1.5**
D19K IAmb IAmb 17 47 51.8
comp=Z,8.2nm,1.1s
**NB201 NORSAR Array S 67.68 328** P P 17 47 34.6 -1.9
**MORH Mrgy, Hungar 67.69 312** P **P** **17 47 36.4 -0.4**
comp=Z,3.0nm,0.8s
**NB2 NORSAR Subarra 67.72 328** P P 17 47 34.6 -2.2
comp=Z,4.4nm,1.2s,baz=75,slow=6.5
**NOA NORSAR Array B 67.72 328** P P 17 47 34.1 -2.7
comp=Z,1.2nm,0.8s,baz=81,slow=5.8,SNR=2.7
comp=Z,1.2nm,0.8s
**VRAC Vranov 68.12 315** *e* P **P** **17 47 41.1 +1.6**
**F19K Shaleruckik Mo 68.25 25** P **P** **17 47 38.5 -1.4**
F19K IAmb IAmb 17 47 59.8
comp=Z,6.2nm,1.1s
**KRUC Moravsky 68.32 315** *e* P **P** **17 47 41.4 +0.7**
**B21K Ikpikpuk River 68.43 22** P **P** **17 47 40.4 -0.6**
B21K IAmb IAmb 17 48 02.2
comp=Z,9.7nm,1.1s
**B22K Teshekpuk Lake 68.55 21** P **P** **17 47 40.2 -1.6**
**G19K Purcell Mounta 68.74 26** P P 17 47 41.1 -1.9
G19K IAmb IAmb 17 47 47.2
comp=Z,7.8nm,1.4s
**RONA Rosalia, Austr 68.79 314** *e* P **P** **17 47 42.7 -1.0**
comp=Z,1.4nm,0.7s
**F20K Avaraart Lake 68.94 24** P **P** **17 47 43.5 -0.8**
**CONA Conrad Observa 69.00 314** *e* P **P** **17 47 44.2 -0.9**
comp=Z,3.3nm,1.2s
**E21K Killik River 69.06 23** P **P** **17 47 44.0 -1.1**
E21K IAmb IAmb 17 47 47.9
comp=Z,8.3nm,1.1s
**N15K Kwethluk River 69.44 32** P **P** **17 47 45.9 -1.6**
**M16K Timber Creek 69.69 31** P **P** **17 47 48.7 -0.3**
M16K IAmb IAmb 17 48 01.3
comp=Z,8.7nm,1.1s
**F21K Alatna River 69.69 24** P **P** **17 47 48.4 -0.6**
**CLL Collm 69.70 318** *e* P **P** **17 47 50.0 +0.8**
**CLL Collm 69.70 318** *e* P **P** **17 47 50.0 +0.8**
**SOKA Soboth 69.93 313** *e* P **P** **17 47 50.3 -0.6**
comp=Z,3.2nm,1.2s
**S12K Black Hills 69.93 37** P P 17 47 48.8 -1.8
**G21K Allakaket 69.96 25** P **P** **17 47 49.4 -1.2**
G21K IAmb IAmb 17 47 53.4
comp=Z,3.3nm,0.8s
**MOA Molln 70.04 314** *e* P **P** **17 47 50.5 -0.9**
comp=Z,2.2nm,0.9s
**GERES GERESS Array B 70.07 315** P **P** **17 47 51.1 -0.6**
comp=Z,0.6nm,0.6s,baz=144,slow=12,SNR=4.1
comp=Z,0.6nm,0.6s
**L18K Granite Mounta 70.28 29** P **P** **17 47 51.4 -1.2**
L18K IAmb IAmb 17 48 24.5
comp=Z,6.3nm,1.2s
**OBKA Obir 70.30 313** *i* P **P** **17 47 52.0 -1.2**
comp=Z,2.0nm,0.9s
**BIOA Bad Ischl, Aus 70.49 314** *i* P **P** **17 47 54.0 -0.2**
comp=Z,3.2nm,1.0s
**H21K Melozitna Rive 70.56 25** P **P** **17 47 52.9 -1.3**
H21K IAmb IAmb 17 47 58.5
comp=Z,9.7nm,1.5s
**O16K Kokwok River B 70.59 32** P **P** **17 47 54.5 0.0**
O16K IAmb IAmb 17 48 01.1
comp=Z,5.8nm,1.1s
**J20K Nowinta River 70.61 27** P **P** **17 47 54.3 -0.3**
**N17K Nushagak Hills 70.67 31** P **P** **17 47 54.7 -0.4**
N17K IAmb IAmb 17 48 35.0
comp=Z,7.4nm,1.4s
**KBA Koelnbreinsper 70.89 314** *e* P **P** **17 47 55.7 -1.1**
comp=Z,2.2nm,1.2s
**L19K White Mountain 71.09 29** P **P** **17 47 56.0 -1.6**
**LESA Schwarzleotal 71.20 314** *e* P P 17 47 56.7 -1.8
comp=Z,0.5nm,0.5s
**GRF Grafenberg Arr 71.32 317** *e* P **P** **17 47 59.8 +0.6**
comp=Z,2.3nm,0.8s,baz=73,slow=5.3
**ABTA Abfaltersbach 71.54 314** *e* P P 17 47 58.3 -2.3
comp=Z,2.0nm,0.8s
**H23K Yukon River 71.71 25** P **P** **17 48 01.1 -0.1**
**N19K Bonanza Creek 71.80 30** P **P** **17 48 00.5 -1.5**
N19K IAmb IAmb 17 48 04.2
comp=Z,8.8nm,1.4s
**O18K Koktuh Hills 71.85 31** P **P** **17 48 02.2 +0.1**
O18K IAmb IAmb 17 48 28.6
comp=Z,6.8nm,1.1s
**WTTA Wattenberg 71.92 314** *i* P **P** **17 48 01.6 -1.4**
comp=Z,5.6nm,1.4s
**WATA Walderalm 71.93 314** *e* P P 17 48 00.8 -2.3
comp=Z,2.3nm,0.8s
**I23K Minto, Yukon-K 72.08 25** P **P** **17 48 02.9 -0.5**
**SQTA Sankt Quirin 72.20 314** *i* P P 17 48 02.9 -1.8
comp=Z,2.0nm,0.5s
**MOTA Moosalm 72.22 315** *i* P **P** **17 48 03.4 -1.5**
comp=Z,4.6nm,0.7s
**CTI Castel Tesino 72.34 313** P **P** **17 48 04.7 -0.8**
**CTI Castel Tesino 72.34 313** P **P** **17 48 04.7 -0.8**
CTI pmax pmax
comp=Z,2.0nm,0.7s
**RETA Reutte 72.39 315** *e* P P 17 48 04.0 -1.7
comp=Z,1.6nm,0.6s
**NEA2 Nenana 72.44 26** P **P** **17 48 04.6 -1.0**
NEA2 IAmb IAmb 17 48 08.3
comp=Z,6.6nm,1.2s
**FDMO Fiordimonte 72.48 310** P **P** **17 48 05.3 -1.0**
FDMO IAmb IAmb 17 48 23.6
comp=Z,11nm,1.4s
**FETA Feichten 72.58 314** *e* P **P** **17 48 05.5 -1.5**
comp=Z,4.6nm,1.2s
**TEOL Teolo 72.58 312** P **P** **17 48 05.2 -1.6**
TEOL IAmb IAmb 17 48 39.5
comp=Z,5.9nm,0.7s
**POKR Poker Flat Res 72.82 25** P **P** **17 48 06.5 -1.4**
POKR IAmb IAmb 17 48 45.3
comp=Z,5.4nm,0.8s
**DAVA Damuels 73.02 315** *i* P P 17 48 07.6 -2.0
comp=Z,4.7nm,1.5s
**ILAR Eielson Array 73.19 25** P **P** **17 48 08.8 -1.3**
**ILAR Eielson Array 73.19 25** P **P** **17 48 09.3 -0.8**
comp=Z,0.3nm,0.4s,baz=272,slow=4.6,SNR=3.1
comp=Z,0.3nm,0.4s
**SYI Shuyak Island 73.68 32** P **P** **17 48 11.4 -1.6**
**DHY Denali Highway 73.81 27** P **P** **17 48 12.5 -1.5**
DHY IAmb IAmb 17 48 41.0
comp=Z,6.9nm,1.4s
**OHAK Old Harbor 73.85 34** P **P** **17 48 12.9 -1.2**
OHAK IAmb IAmb 17 48 16.7
comp=Z,4.0nm,0.6s
**KDAK Kodiak Island 73.95 33** P **P** **17 48 13.2 -1.4**
KDAK IAmb IAmb 17 48 16.1
comp=Z,6.3nm,1.0s
**KDAK Kodiak Island 73.95 33** P **P** **17 48 13.2 -1.4**
KDAK pmax pmax
comp=Z,6.0nm,1.0s
**G27K Doyon Strip 74.00 22** P **P** **17 48 13.6 -1.3**
**SENIN Lac Senin/Sane 75.01 315** P **P** **17 48 20.0 -1.3**
**KLU Klutina 75.19 28** P **P** **17 48 20.3 -1.6**
KLU IAmb IAmb 17 48 24.7
comp=Z,5.8nm,0.6s
**N25K Chitina, Valde 75.67 27** P **P** **17 48 24.3 -0.4**
N25K IAmb IAmb 17 48 27.3
comp=Z,4.8nm,1.0s
**L27K Beaver Creek, 75.99 25** P **P** **17 48 27.0 +0.6**
**BCAR Beaver Creek A 76.00 25** P **P** **17 48 26.2 -0.3**
**BMRM Bremner River 76.00 28** P **P** **17 48 25.7 -0.9**
**GLB Gilahina Butte 76.08 27** P **P** **17 48 25.8 -1.2**
**M27K Edge Creek, AK 76.36 26** P **P** **17 48 27.6 -1.0**
M27K IAmb IAmb 17 48 57.3
comp=Z,9.6nm,1.4s
**ESDC Sonseca Array 85.43 313** P **P** **17 49 16.4 -1.1**
comp=Z,1.2nm,1.0s,baz=46,slow=4.6,SNR=3.2
comp=Z,1.2nm,1.0s
**TORD Torodi Ar. Bea 94.65 287** P **P** **17 50 00.7 -0.5**
comp=Z,0.4nm,0.5s,baz=38,slow=6.1,SNR=3.4
comp=Z,0.4nm,0.5s
**QSPA South Pole Qui 117.21 180** PKP **PKPdf** **17 55 21.7 -2.4**
comp=Z,2.0nm,0.8s,baz=280,slow=2.0,SNR=9.1
**TXAR Lajitas Array 117.65 27** PKP **PKPdf** **17 55 24.8 -1.5**
comp=Z,0.2nm,0.5s,baz=338,slow=2.1,SNR=2.6

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*IDC* ***17*** *18:03:17.1±1.0, 4.°51N×127.°29E, h0km, mb3.9/5, mbtmp3.9/5, Error ellipse: s-maj=84.8km s-min=17.9km az=71.0*

*NEIC* ***17*** *18:03:31.3±1.1, 4.°58N±0.°09×127.°7E±0.°1, h119km±8km, mb4.3/22, Error ellipse: s-maj=19.7km s-min=13.1km az=72.0*

**ISC 17 18:03:29.3±0.6, 4.°65N±0.°08×127.°7E±0.°1, h104km, n38, σ0s83/38, mb4.3/17, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **3.87** | **186** | Pn | **Pn** | **18 04 28.0** | **+1.2** |
| **LUWI** | **Luwuk** | **7.52** | **221** | Pn | **Pn** | **18 05 17.7** | **+1.3** |
| **TOLI2** | **Tolitoli** | **7.78** | **243** | Pn | **Pn** | **18 05 18.9** | **-1.0** |
| **FAKI** | **Fak Fak** | **8.76** | **149** | Pn | **Pn** | **18 05 33.6** | **+0.3** |
| **MYLDM** | **Lahad Datu** | **9.22** | **274** | Pn | **Pn** | **18 05 41.1** | **+1.6** |
| **FITZ** | **Fitzroy Crossi** | **22.70** | **185** | P | **P** | **18 08 22.4** | **0.0** |
| **WB0** | **Warramunga Arr** | **25.13** | **165** | P | **P** | **18 08 43.6** | **-1.2** |
| **WRA** | **Warramunga Arr** | **25.28** | **165** | P | **P** | **18 08 45.2** | **-0.9** |
| | 0.6nm,0.3s,baz=342,slow=10,SNR=45 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **25.29** | **165** | P | **P** | **18 08 44.9** | **-1.3** |
| **ASAR** | **Alice Springs** | **28.78** | **168** | P | **P** | **18 09 16.5** | **-0.9** |
| | 0.7nm,0.6s,baz=355,slow=8.8,SNR=5.7 | | | | | | |
| **KSRS** | **Korea Array** | **32.65** | **0** | P | **P** | **18 09 51.7** | **+0.2** |
| | 0.9nm,0.6s,baz=176,slow=10,SNR=4.0 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **JMM** | **Marumori** | **35.15** | **18** | P | **P** | **18 10 13.6** | **+0.6** |
| **JTM** | **Tenmabayashi** | **37.92** | **17** | P | **P** | **18 10 35.9** | **-0.7** |
| **BBOO** | **Buckleboo** | **38.08** | **169** | P | **P** | **18 10 37.5** | **-0.5** |
| **STKA** | **Stephens Creek** | **38.64** | **161** | P | **P** | **18 10 42.0** | **-0.7** |
| **STKA** | **Stephens Creek** | **38.64** | **161** | P | **P** | **18 10 42.4** | **-0.4** |
| | 4.7nm,0.9s,baz=335,slow=5.7,SNR=4.5 | | | | | | |
| | 4.7nm,0.9s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **41.43** | **16** | P | **P** | **18 11 06.7** | **+1.0** |
| **MK31** | **Makanchi Array** | **57.39** | **324** | P | **P** | **18 13 07.0** | **0.0** |
| **MKAR** | **Makanchi Array** | **57.39** | **324** | P | **P** | **18 13 07.2** | **+0.2** |
| | 0.6nm,0.6s,baz=110,slow=8.2,SNR=9.8 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.52** | **327** | P | **P** | **18 13 34.2** | **-1.0** |
| | 0.7nm,0.4s,baz=125,slow=6.4,SNR=5.7 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **KKAR** | **Karatay Array** | **63.26** | **316** | P | **P** | **18 13 46.9** | **-0.2** |
| **CASY** | **Casey** | **71.84** | **187** | P | **P** | **18 14 40.4** | **0.0** |
| CASY | | | | IAmb | IAmb | 18 15 12.2 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.09** | **320** | P | **P** | **18 14 41.4** | **-1.0** |
| **M16K** | **Timber Creek** | **77.89** | **28** | P | **P** | **18 15 15.2** | **-0.3** |
| M16K | | | | IAmb | IAmb | 18 15 30.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **L18K** | **Granite Mounta** | **79.20** | **28** | P | **P** | **18 15 23.5** | **+0.8** |
| L18K | | | | IAmb | IAmb | 18 15 35.9 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **79.54** | **20** | P | **P** | **18 15 24.7** | **+0.3** |
| C19K | | | | IAmb | IAmb | 18 16 00.4 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **79.91** | **21** | P | **P** | **18 15 27.3** | **+0.8** |
| D19K | | | | IAmb | IAmb | 18 15 58.0 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **N19K** | **Bonanza Creek** | **80.00** | **29** | P | **P** | **18 15 28.6** | **+1.4** |
| N19K | | | | IAmb | IAmb | 18 15 53.9 | |

comp=Z,6.8nm,1.3s
**OHAK** **Old Harbor** **80.14** **33** P **P** **18 15 28.2 +0.4**
OHAK IAmb IAmb 18 16 01.9
comp=Z,7.7nm,1.5s
**KDAK** **Kodiak Island** **80.58** **32** P **P** **18 15 30.5 +0.3**
KDAK IAmb IAmb 18 15 34.8
comp=Z,5.9nm,1.1s
**IMAR** **Indian Mountai** **81.10** **24** P **P** **18 15 32.7 -0.1**
**B21K** **Ikpikpuk River** **81.37** **20** P **P** **18 15 35.0 +0.9**
B21K IAmb IAmb 18 15 48.2
comp=Z,6.9nm,1.2s
**SKT** **Skwentna** **81.56** **28** P **P** **18 15 35.3 -0.1**
SKT IAmb IAmb 18 16 04.1
comp=Z,3.3nm,1.2s
**B22K** **Teshekpuk Lake** **81.89** **20** P **P** **18 15 37.4 +0.6**
**KLU** **Klutina** **84.19** **29** P **P** **18 15 49.7 +0.6**
KLU IAmb IAmb 18 16 06.2
comp=Z,2.9nm,1.0s
**BMAR** **Burnt Mountain** **84.85** **23** P **P** **18 15 53.2 +1.0**
**KAIM** **Kayak Island** **84.93** **30** P **P** **18 15 53.6 +0.9**
**BCAR** **Beaver Creek A** **86.11** **27** P **P** **18 15 58.2 -0.3**

*IDC* ***17*** *18:15:29.4±0.7,23°.38N×143°.63E, h0km, mb4.1/18, mbtmp4.1/19, ML3.6/1, MS3.6/9, Error ellipse: s-maj=20.7km s-min=16.5km az=76.0*
*NEIC* ***17*** *18:15:32.0±1.4,23°.53N±0°.08×143°.6E±0°.1, h10km±1km, mb4.7/108, Error ellipse: s-maj=19.8km s-min=13.2km az=252.0*
**ISC 17 18:15:34.7**±0.5**,23°.55N**±0°.06×**143°.6E**±0°.1**, h31**km, n160,**
σ1§**20**/149**, mb4.6**/75**, MS3.8**/9**, 1C, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **JCJ** | **Chichijima** | **3.76** | **340** | Pn | **Pn** | | **18 16 29.4** | **-1.2** |
| JCJ | | | | Sn | **Sn** | | **18 17 14.4** | **+0.6** |
| **JCJ** | **Chichijima** | **3.76** | **340** | Pn | **Pn** | | **18 16 26.6** | **-4.0** |
| | 14nm,0.3s,baz=114,slow=20,SNR=4.5 | | | | | | | |
| JCJ | | | | Sn | **Sn** | | **18 17 09.2** | **-4.6** |
| | 37nm,0.3s,baz=108,slow=19,SNR=7.0 | | | | | | | |
| **INU** | **Inuyama** | **13.08** | **335** | Pn | **Pn** | | **18 18 37.9** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **13.77** | **341** | Pn | **Pn** | | **18 18 45.4** | **-2.4** |
| | 0.1nm,0.3s,baz=159,slow=10,SNR=4.9 | | | | | | | |
| MJAR | | | | Sn | **Sn** | | **18 21 20.9** | **+1.3** |
| | baz=345,slow=20,SNR=1.4 | | | | | | | |
| **MAJO** | **Matsushiro** | **13.77** | **341** | | **Pn** | | **18 18 47.0** | **-0.7** |
| **MJB9** | **Matsu-Tunnel** | **13.77** | **341** | | **Pn** | | **18 18 47.1** | **-0.7** |
| **JMM** | **Marumori** | **14.47** | **351** | | **Pn** | | **18 18 54.2** | **-3.2** |
| **JTM** | **Tenmabayashi** | **17.32** | **353** | P | **Pn** | | **18 19 34.8** | **+0.7** |
| JTM | | | | IAmb | IAmb | | 18 19 38.4 | |
| | comp=Z,85nm,1.2s | | | | | | | |
| **KSRS** | **Korea Array** | **19.32** | **319** | P | **P** | | **18 19 57.7** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=132,slow=13,SNR=11 | | | | | | | |
| KSRS | | | | LR | LR | | 18 27 16.7 | |
| | comp=Z,252nm,18.4s,baz=130,slow=36 | | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **19.34** | **319** | P | **P** | | **18 19 58.3** | **+0.8** |
| **YHNB** | **Yeheng** | **20.33** | **278** | P | Pn | | 18 20 10.1 | -0.6 |
| **YULB** | **Yu-li** | **20.47** | **274** | P | Pn | | 18 20 11.4 | -0.9 |
| **ASAJ** | **Asahikawa** | **20.53** | **358** | P | **P** | | **18 20 11.7** | **+1.2** |
| | comp=Z,11nm,0.9s,baz=182,slow=18,SNR=2.3 | | | | | | | |
| ASAJ | | | | LR | LR | | 18 28 44.0 | |
| | comp=Z,118nm,20.8s,baz=205,slow=38 | | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.96** | **96** | T | T | | 18 42 54.8 | |
| | baz=283,slow=75,SNR=7.8 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.96** | **95** | T | T | | 18 42 54.9 | |
| | baz=283,slow=75,SNR=8.0 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.98** | **96** | T | T | | 18 42 55.4 | |
| | baz=283,slow=75,SNR=7.2 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.11** | **99** | T | T | | 18 43 20.2 | |
| | baz=289,slow=75,SNR=4.2 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.11** | **99** | T | T | | 18 43 08.7 | |
| | baz=289,slow=75,SNR=5.4 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.12** | **99** | T | T | | 18 43 09.4 | |
| | baz=289,slow=75,SNR=5.2 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.70** | **338** | P | **P** | | **18 20 34.2** | **+0.4** |
| | comp=Z,4.1nm,1.1s,baz=125,slow=12,SNR=2.3 | | | | | | | |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **NJ2** | **Nanjing** | **23.45** | **297** | *e*P | **P** | | **18 20 42.0** | **+0.6** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **MDJ** | **Mudanjiang** | **23.94** | **335** | P | **P** | | **18 20 47.5** | **+1.5** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.8s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,410nm,6.2s | | | | | | | |
| **MDJ** | **Mudanjiang** | **23.94** | **335** | P | **P** | | **18 20 46.5** | **+0.4** |
| **BNX** | **BinXian** | **25.75** | **333** | ⇑P | **P** | | **18 21 04.6** | **+2.2** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **HNS** | **HongShan** | **28.35** | **306** | *e*P | **P** | | **18 21 30.0** | **+4.0** |
| HNS | | | | LR | LR | | | |
| | comp=N,420nm,16.7s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,240nm,18.3s | | | | | | | |
| **HEH** | **HeiHe** | **29.50** | **339** | *e*P | **P** | | **18 21 36.9** | **+0.9** |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **31.39** | **16** | LR | LR | | 18 31 36.8 | |
| | comp=Z,93nm,21.2s,baz=184,slow=31 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.91** | **310** | *e*P | **P** | | **18 22 00.4** | **+2.9** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,69nm,4.1s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **37.22** | **31** | LR | LR | | 18 37 45.0 | |
| | comp=Z,45nm,19.1s,baz=90,slow=36 | | | | | | | |
| **PZH** | **PanZhiHua** | **37.94** | **283** | P | **P** | | **18 22 52.5** | **+2.8** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,140nm,4.2s | | | | | | | |
| **SONM** | **Songino Array** | **38.19** | **319** | P | **P** | | **18 22 52.1** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=134,slow=7.7,SNR=3.5 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **YAK** | **Yakutsk** | **39.62** | **350** | P | **P** | | **18 23 02.9** | **-0.3** |
| YAK | | | | IAmb | IAmb | | 18 23 04.5 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **CRAI** | **Chiangrai** | **40.15** | **274** | P | **P** | | **18 23 08.1** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **41.89** | **272** | P | **P** | | **18 23 22.5** | **0.0** |
| | comp=Z,0.5nm,0.4s,baz=68,slow=9.4,SNR=2.3 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **CTAO** | **Charters Tower** | **43.45** | **176** | P | **P** | | **18 23 35.0** | **0.0** |
| **WB0** | **Warramunga Arr** | **43.98** | **193** | P | **P** | | **18 23 37.3** | **-2.0** |
| **WB2** | **Warramunga Arr** | **44.16** | **193** | P | **P** | | **18 23 38.8** | **-1.9** |
| **WRA** | **Warramunga Arr** | **44.16** | **193** | P | **P** | | **18 23 38.2** | **-2.6** |
| | comp=Z,1.6nm,0.6s,baz=13,slow=8.6,SNR=21 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.96** | **205** | | **P** | | **18 23 44.7** | **-2.4** |
| **AS31** | **Alice Springs** | **47.87** | **192** | P | **P** | | **18 24 07.5** | **-2.5** |
| **ASAR** | **Alice Springs** | **47.87** | **192** | P | **P** | | **18 24 08.0** | **-2.0** |
| **ASAR** | **Alice Springs** | **47.87** | **192** | P | **P** | | **18 24 07.8** | **-2.1** |
| | comp=Z,0.6nm,0.7s,baz=11,slow=6.5,SNR=9.9 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **LIFNC** | **LIFOU** | **49.71** | **151** | P | **P** | | **18 24 25.0** | **+1.0** |
| **M14K** | **Bethel** | **52.54** | **30** | P | **P** | | **18 24 44.6** | **-0.2** |
| M14K | | | | IAmb | IAmb | | 18 24 47.9 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.02** | **321** | P | **P** | | **18 24 47.4** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **53.02** | **321** | P | **P** | | **18 24 47.3** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **53.02** | **321** | P | **P** | | **18 24 48.4** | **-0.2** |
| | comp=Z,1.6nm,0.5s,baz=111,slow=8.2,SNR=8.3 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **F15K** | **North Star Dit** | **53.36** | **24** | P | **P** | | **18 24 50.3** | **-0.6** |
| **MK31** | **Makanchi Array** | **53.76** | **312** | P | **P** | | **18 24 53.4** | **-0.7** |
| **MKAR** | **Makanchi Array** | **53.76** | **312** | P | **P** | | **18 24 52.9** | **-1.2** |
| **MKAR** | **Makanchi Array** | **53.76** | **312** | P | **P** | | **18 24 54.5** | **+0.3** |
| | comp=Z,2.7nm,0.8s,baz=87,slow=8.4,SNR=14 | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **53.97** | **312** | P | **P** | | **18 24 55.3** | **-0.4** |
| **N17K** | **Nushagak Hills** | **54.71** | **31** | P | **P** | | **18 25 00.8** | **0.0** |
| N17K | | | | IAmb | IAmb | | 18 25 02.9 | |
| | comp=Z,15nm,1.5s | | | | | | | |
| **M17K** | **Holitna River** | **54.83** | **30** | P | **P** | | **18 25 01.8** | **+0.2** |
| M17K | | | | IAmb | IAmb | | 18 25 04.3 | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **O18K** | **Koktuh Hills** | **55.51** | **32** | P | **P** | | **18 25 06.6** | **0.0** |
| O18K | | | | IAmb | IAmb | | 18 25 13.7 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **C18K** | **Utukok River** | **55.84** | **21** | P | **P** | | **18 25 09.6** | **+0.7** |
| C18K | | | | IAmb | IAmb | | 18 25 32.7 | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| **OHAK** | **Old Harbor** | **56.00** | **36** | P | **P** | | **18 25 11.0** | **+0.9** |
| OHAK | | | | IAmb | IAmb | | 18 25 11.5 | |
| | comp=Z,7.1nm,1.2s | | | | | | | |
| **N19K** | **Bonanza Creek** | **56.07** | **31** | P | **P** | | **18 25 12.0** | **+1.2** |
| N19K | | | | IAmb | IAmb | | 18 25 17.8 | |
| | comp=Z,6.4nm,1.0s | | | | | | | |
| **J19K** | **Poorman** | **56.34** | **28** | P | **P** | | **18 25 12.4** | **-0.1** |
| J19K | | | | IAmb | IAmb | | 18 25 15.2 | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| **G19K** | **Purcell Mounta** | **56.39** | **25** | P | **P** | | **18 25 13.3** | **+0.5** |
| **KURK** | **Kurchatov** | **56.41** | **316** | P | **P** | | **18 25 12.2** | **-1.0** |
| KURK | | | | IAmb | IAmb | | 18 25 20.6 | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| **H19K** | **Roundabout Mou** | **56.45** | **26** | P | **P** | | **18 25 14.1** | **+1.0** |
| **KDAK** | **Kodiak Island** | **56.46** | **35** | LR | LR | | 18 46 47.1 | |
| | comp=Z,74nm,21.3s,baz=271,slow=33 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.46** | **316** | P | **P** | | **18 25 13.5** | **0.0** |
| | comp=Z,3.0nm,0.7s,baz=93,slow=7.7,SNR=27 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **C19K** | **Lookout Ridge** | **56.56** | **21** | P | **P** | | **18 25 15.9** | **+1.9** |
| **E19K** | **Redstone River** | **56.77** | **23** | P | **P** | | **18 25 16.0** | **+0.5** |
| E19K | | | | IAmb | IAmb | | 18 25 17.9 | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| **D19K** | **Kuna River** | **56.82** | **22** | P | **P** | | **18 25 17.2** | **+1.3** |
| D19K | | | | IAmb | IAmb | | 18 25 17.6 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **K20K** | **Telida** | **56.85** | **28** | P | **P** | | **18 25 17.2** | **+1.1** |
| K20K | | | | IAmb | IAmb | | 18 25 23.5 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **J20K** | **Nowinta River** | **57.02** | **28** | P | **P** | | **18 25 18.2** | **+0.9** |
| J20K | | | | IAmb | IAmb | | 18 25 20.0 | |
| | comp=Z,8.4nm,0.9s | | | | | | | |
| **F20K** | **Avaraart Lake** | **57.19** | **24** | P | **P** | | **18 25 20.0** | **+1.5** |
| **IMAR** | **Indian Mountai** | **57.65** | **25** | P | **P** | | **18 25 22.3** | **+0.7** |
| **B20K** | **Meade River** | **57.69** | **20** | P | **P** | | **18 25 23.3** | **+1.4** |
| **H21K** | **Melozitna Rive** | **57.94** | **26** | P | **P** | | **18 25 24.4** | **+0.7** |
| H21K | | | | IAmb | IAmb | | 18 25 26.4 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **F21K** | **Alatna River** | **58.08** | **24** | P | **P** | | **18 25 25.0** | **+0.3** |
| **B21K** | **Ikpikpuk River** | **58.39** | **21** | P | **P** | | **18 25 27.9** | **+1.1** |
| B21K | | | | IAmb | IAmb | | 18 25 46.5 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **KSH** | **Kashi** | **58.55** | **303** | P | **P** | | **18 25 32.8** | **+4.2** |
| KSH | | | | pP | pP | | 18 25 37.8 | +1.4 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **MORW** | **Morawa** | **58.66** | **208** | P | **P** | | **18 25 27.8** | **-1.4** |
| **D22K** | **Ayikyak River** | **58.83** | **22** | P | **P** | | **18 25 30.1** | **+0.2** |
| D22K | | | | IAmb | IAmb | | 18 25 37.5 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **PWL** | **Port Wells** | **59.05** | **32** | P | **P** | | **18 25 31.6** | **0.0** |
| **SML** | **Sawmill** | **59.17** | **31** | P | **P** | | **18 25 33.0** | **+0.6** |
| **I23K** | **Minto, Yukon-K** | **59.24** | **27** | P | **P** | | **18 25 33.5** | **+0.7** |
| I23K | | | | IAmb | IAmb | | 18 25 40.8 | |
| | comp=Z,9.9nm,1.4s | | | | | | | |
| **G23K** | **Bananza Creek** | **59.28** | **25** | P | **P** | | **18 25 33.7** | **+0.6** |
| G23K | | | | IAmb | IAmb | | 18 25 40.6 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **D23K** | **Nanushuk River** | **59.55** | **22** | P | **P** | | **18 25 35.2** | **+0.3** |
| D23K | | | | IAmb | IAmb | | 18 25 37.6 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **59.65** | **31** | P | **P** | | **18 25 35.5** | **-0.2** |
| **E23K** | **Chandalar** | **59.72** | **24** | P | **P** | | **18 25 36.4** | **+0.2** |
| **DHY** | **Denali Highway** | **59.78** | **29** | P | **P** | | **18 25 36.9** | **+0.2** |
| DHY | | | | IAmb | IAmb | | 18 26 18.9 | |
| | comp=Z,5.2nm,1.2s | | | | | | | |
| **C23K** | **Itkillik River** | **59.79** | **21** | P | **P** | | **18 25 36.3** | **-0.2** |
| C23K | | | | IAmb | IAmb | | 18 25 39.1 | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| **HIN** | **Hinchinbrook I** | **59.90** | **33** | P | **P** | | **18 25 38.4** | **+0.9** |
| **H24K** | **Noodor Dome** | **59.97** | **26** | P | **P** | | **18 25 38.1** | **+0.2** |
| H24K | | | | IAmb | IAmb | | 18 25 41.2 | |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| **IL31** | | **60.22** | **28** | P | **P** | | **18 25 38.7** | **-0.7** |
| IL31 | | | | IAmb | IAmb | | 18 25 40.2 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.22** | **28** | P | **P** | | **18 25 38.4** | **-1.2** |
| **ILAR** | **Eielson Array** | **60.22** | **28** | P | **P** | | **18 25 39.2** | **-0.4** |
| | comp=Z,2.9nm,0.9s,baz=259,slow=5.5,SNR=21 | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **KLU** | **Klutina** | **60.28** | **31** | P | **P** | | **18 25 39.8** | **-0.3** |
| KLU | | | | IAmb | IAmb | | 18 25 41.9 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **60.28** | **32** | P | **P** | | **18 25 40.2** | **+0.2** |
| **DIV** | **Divide** | **60.32** | **32** | P | **P** | | **18 25 40.9** | **+0.5** |
| DIV | | | | IAmb | IAmb | | 18 25 47.1 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **ARSB** | **Arslanbob** | **60.62** | **305** | P | **P** | | **18 25 42.9** | **0.0** |
| **PAX** | **Paxson** | **60.63** | **30** | P | **P** | | **18 25 42.9** | **+0.4** |
| PAX | | | | IAmb | IAmb | | 18 25 44.4 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **J25K** | **Salcha River,** | **60.84** | **28** | P | **P** | | **18 25 43.6** | **-0.3** |
| **BMRM** | **Bremner River** | **60.87** | **32** | P | **P** | | **18 25 44.1** | **-0.1** |
| **GLB** | **Gilahina Butte** | **61.28** | **32** | P | **P** | | **18 25 46.9** | **-0.1** |
| GLB | | | | IAmb | IAmb | | 18 25 53.5 | |
| | comp=Z,7.1nm,1.3s | | | | | | | |
| **SCRK** | **Sand Creek** | **61.38** | **29** | P | **P** | | **18 25 47.3** | **-0.4** |
| SCRK | | | | IAmb | IAmb | | 18 25 49.0 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **VRDI** | **Verde Repeater** | **61.45** | **32** | P | **P** | | **18 25 47.8** | **-0.4** |
| VRDI | | | | IAmb | IAmb | | 18 25 59.7 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.54** | **319** | P | **P** | | **18 25 49.1** | **+0.4** |
| | comp=Z,7.3nm,0.7s,baz=89,slow=8.0,SNR=27 | | | | | | | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **CRQM** | **Cirque** | **61.58** | **32** | P | **P** | | **18 25 49.6** | **+0.5** |
| **L26K** | **Log Cabin Wild** | **61.60** | **30** | P | **P** | | **18 25 49.0** | **0.0** |
| L26K | | | | IAmb | IAmb | | 18 26 02.2 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **BRVK** | **Borovoye** | **61.60** | **319** | P | **P** | | **18 25 48.9** | **-0.3** |
| BRVK | | | | IAmb | IAmb | | 18 25 55.0 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **J26L** | **Joseph Creek** | **61.61** | **28** | P | **P** | | **18 25 49.2** | **0.0** |
| **MCARA** | **McCarthy VSAT** | **61.66** | **32** | P | **P** | | **18 25 49.4** | **0.0** |
| MCARA | | | | IAmb | IAmb | | 18 25 51.4 | |
| | comp=Z,9.5nm,1.2s | | | | | | | |
| **KK31** | **Karatay Array** | **62.24** | **308** | P | **P** | | **18 25 53.8** | **+0.1** |
| KK31 | | | | IAmb | IAmb | | 18 26 11.2 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **62.24** | **308** | P | **P** | | **18 25 53.5** | **-0.1** |
| **KKAR** | **Karatay Array** | **62.24** | **308** | P | **P** | | **18 25 53.3** | **-0.4** |
| KKAR | | | | IAmb | IAmb | | 18 26 11.2 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **62.31** | **30** | P | **P** | | **18 25 54.4** | **+0.6** |
| **I28M** | **Miner Creek** | **63.21** | **27** | P | **P** | | **18 26 00.3** | **+0.5** |
| I28M | | | | IAmb | IAmb | | 18 26 01.7 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **O29M** | **Mount Kennedy** | **63.83** | **33** | P | **P** | | **18 26 05.3** | **+1.3** |
| O29M | | | | IAmb | IAmb | | 18 26 06.8 | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **M29M** | **Somme Creek** | **63.83** | **30** | P | **P** | | **18 26 05.5** | **+1.6** |
| M29M | | | | IAmb | IAmb | | 18 26 06.5 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **H29M** | **Whitestone** | **63.87** | **26** | P | **P** | | **18 26 05.5** | **+1.5** |
| **CHGR** | **Chuyangaron** | **63.92** | **303** | P | **P** | | **18 26 05.2** | **+0.2** |
| **SIMJ** | **Simiganj** | **64.03** | **303** | P | **P** | | **18 26 05.0** | **-0.8** |
| SIMJ | | | | IAmb | IAmb | | 18 26 20.1 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **P29M** | **Windy Craggy** | **64.28** | **34** | P | **P** | | **18 26 07.2** | **+0.3** |
| P29M | | | | IAmb | IAmb | | 18 26 09.5 | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **EPYK** | **Eagle Plains** | **64.54** | **26** | P | **P** | | **18 26 09.2** | **+0.7** |
| **J30M** | **Hart River** | **64.74** | **28** | P | **P** | | **18 26 10.7** | **+0.8** |
| J30M | | | | IAmb | IAmb | | 18 26 18.1 | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| **G31M** | **Satah River** | **65.50** | **25** | P | **P** | | **18 26 14.6** | **0.0** |
| **ARU** | **Arti** | **68.02** | **323** | P | **P** | | **18 26 30.6** | **-0.2** |
| ARU | | | | IAmb | IAmb | | 18 26 36.6 | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| **ARU** | **Arti** | **68.02** | **323** | LR | LR | | 18 58 13.1 | |
| | comp=Z,7.1nm,18.6s,baz=196,slow=38 | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.51** | **316** | P | **P** | | **18 26 33.9** | **-0.1** |
| **ABKAR** | **Akbulak array** | **68.51** | **316** | P | **P** | | **18 26 34.3** | **+0.2** |
| ABKAR | | | | IAmb | IAmb | | 18 26 42.3 | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.64** | **28** | P | **P** | | **18 27 11.3** | **+0.6** |
| | comp=Z,2.2nm,0.7s,baz=298,slow=5.9,SNR=11 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.30** | **341** | P | **P** | | **18 27 26.0** | **+0.2** |
| | comp=Z,3.3nm,0.8s,baz=76,slow=7.5,SNR=4.4 | | | | | | | |
| ARCES | | | | LR | LR | | 19 06 37.5 | |
| | comp=Z,63nm,18.5s,baz=139,slow=40 | | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **F07A** | **Phinny Hill Vi** | **77.74** | **45** | P | **P** | | **18 27 28.8** | **+0.1** |
| **PINE** | **Pine Mountain** | **77.82** | **48** | P | **P** | | **18 27 29.1** | **-0.3** |
| PINE | | | | IAmb | IAmb | | 18 27 31.8 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **NEW** | **Newport** | **78.64** | **42** | P | **P** | | **18 27 34.0** | **+0.3** |
| NEW | | | | IAmb | IAmb | | 18 27 35.4 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **J08A** | **Circle Bar Ran** | **79.65** | **47** | | **P** | | **18 27 39.8** | **+0.4** |
| J08A | | | | IAmb | IAmb | | 18 27 41.3 | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **BMO** | **Blue Mountains** | **79.85** | **46** | P | **P** | | **18 27 40.7** | **+0.3** |
| **CMB** | **Columbia Colle** | **80.33** | **53** | P | **P** | | **18 27 43.5** | **+0.4** |
| **KBZ** | **Khabaz** | **81.38** | **314** | P | **P** | | **18 27 49.1** | **+0.6** |
| | comp=Z,2.0nm,0.6s,baz=108,slow=4.3,SNR=5.2 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **MFID** | **Camas Ranch** | **81.40** | **46** | | **P** | | **18 27 49.5** | **+0.7** |
| **KVN** | **Kaiserville** | **81.59** | **51** | P | **P** | | **18 27 50.9** | **+0.9** |
| **NVAR** | **Mina Array Bea** | **81.69** | **52** | P | **P** | | **18 27 50.8** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **81.69** | **52** | P | **P** | | **18 27 51.5** | **+0.9** |
| | comp=Z,1.9nm,0.8s,baz=270,slow=5.5,SNR=12 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **81.69** | **334** | P | **P** | | **18 27 51.4** | **+1.6** |
| | comp=Z,1.4nm,0.8s,baz=76,slow=5.9,SNR=5.7 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **NV11** | **Mina Array Sit** | **81.79** | **52** | P | **P** | | **18 27 51.1** | **+0.1** |
| **ELK** | **Elko** | **82.91** | **49** | P | **P** | | **18 27 57.2** | **+0.2** |
| **R11B** | **Troy Canyon, C** | **83.67** | **51** | P | **P** | | **18 28 01.0** | **+0.2** |
| **GWY** | **Greenwater Val** | **83.79** | **53** | P | **P** | | **18 28 01.6** | **+0.2** |
| GWY | | | | IAmb | IAmb | | 18 28 02.8 | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **YHL** | **Hebgen Lake** | **83.80** | **44** | P | **P** | | **18 28 02.1** | **+0.6** |
| **FFC** | **Flin Flon** | **84.05** | **32** | P | **P** | | **18 28 01.8** | **-0.4** |
| **IMW** | **Indian Meadow** | **84.39** | **44** | | **P** | | **18 28 02.8** | **-1.7** |
| IMW | | | | IAmb | IAmb | | 18 28 06.8 | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **84.45** | **44** | P | **P** | | **18 28 04.7** | **-0.1** |
| **YMP** | **Mirror Lake Pl** | **84.50** | **43** | P | **P** | | **18 28 05.8** | **+0.7** |
| YMP | | | | IAmb | IAmb | | 18 28 13.6 | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| **PSUT** | **Pine Spring** | **84.82** | **50** | P | **P** | | **18 28 06.0** | **-0.7** |
| **RLMT** | **Red Lodge** | **84.87** | **43** | P | **P** | | **18 28 07.0** | **+0.1** |
| RLMT | | | | IAmb | IAmb | | 18 28 09.0 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.81** | **45** | P | **P** | | **18 28 11.6** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=267,slow=1.5,SNR=1.7 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **LAO** | **LASA Array** | **85.96** | **40** | P | **P** | | **18 28 12.2** | **+0.2** |
| LAO | | | | IAmb | IAmb | | 18 28 18.4 | |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| **MVU** | **Marysvale** | **85.98** | **50** | P | **P** | | **18 28 13.4** | **+0.8** |
| **KNB** | **Kanab** | **86.22** | **51** | P | **P** | | **18 28 14.4** | **+0.7** |
| KNB | | | | IAmb | IAmb | | 18 28 15.6 | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **87.18** | **337** | LR | LR | | 19 10 59.7 | |
| | comp=Z,44nm,18.2s,baz=147,slow=38 | | | | | | | |
| **NOA** | **NORSAR Array B** | **87.37** | **339** | LR | LR | | 19 12 18.2 | |
| | comp=Z,21nm,19.2s,baz=85,slow=39 | | | | | | | |
| **BRTR** | **Keskin Array B** | **89.36** | **314** | P | **P** | | **18 28 30.4** | **+1.8** |
| | comp=Z,0.5nm,0.6s,baz=65,slow=3.8,SNR=3.2 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **PLCA** | **Paso Flores** | **146.64** | **129** | PKPbc | **PKPdf** | | **18 35 12.1** | **+0.2** |
| | comp=Z,1.9nm,0.9s,baz=239,slow=5.8,SNR=2.2 | | | | | | | |
| **LPAZ** | **La Paz** | **149.34** | **82** | PKPbc | **PKPbc** | | **18 35 21.9** | **-0.1** |
| | comp=Z,2.3nm,0.6s,baz=279,slow=4.6,SNR=5.4 | | | | | | | |

*SKHL* ***17*** *18:34:51.3±0.2,45°.30N×152°.70E, h35km±4km, mb4.5/3*
*IDC* ***17*** *18:34:53.4±2.5,47°.17N×151°.42E, h158km±22km, mb3.3/5, mbtmp3.9/7, Error ellipse: s-maj=28.3km s-min=20.8km az=91.0*
*JMA* ***17*** *18:34:54.9±0.8,46°.N±5°.×15°.2E±°, h172km, MV3.8/13, KURILE ISLANDS REGION*
**ISC 17 18:34:51.1**±1.1**,46°.7N**±0°.1×**151°.7E**±0°.1**, h150**km**, n29,**
σ2§**34**/30**, mb3.6**/5**, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **KUR** | **Kuril'sk** | **3.06** | **242** | *e*P | **Pn** | | **18 35 42.7** | **+3.6** |
| KUR | | | | AMB | AMB | | 18 35 44.6 | |
| | 50nm,0.5s | | | | | | | |
| KUR | | | | *e*S | **Sn** | | **18 36 21.1** | **+4.8** |
| KUR | | | | A | A | | 18 36 27.0 | |
| | 90nm,0.5s | | | | | | | |
| KUR | | | | A | A | | 18 36 27.0 | |
| | 50nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **4.47** | **232** | *e*P | **Pn** | | **18 35 57.0** | **-0.4** |
| SHO | | | | AMB | AMB | | 18

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB18** | **Visviri** | **2.08** | **161** | Pn | **Pn** | **18 39 56.8** | **+1.3** |
| **LPAZ** | **La Paz** | **2.10** | **109** | Pn | **Pn** | **18 39 56.3** | **+0.5** |
| LPAZ | | | | Sn | **S** | **18 40 27.3** | **-1.1** |
| **LPAZ** | **La Paz** | **2.10** | **109** | P | **Pn** | **18 39 56.3** | **+0.5** |
| LPAZ | 621nm,0.3s,baz=307,slow=6.9,SNR=1562 | | | S | **S** | **18 40 27.9** | **-0.4** |
| | 531nm,0.6s,baz=188,slow=24,SNR=29 | | | | | | |
| **AP01** | **Chacalluta** | **2.75** | **183** | | **Pn** | **18 40 00.3** | **-1.6** |
| AP01 | | | | Sn | **S** | **18 40 36.3** | **-3.2** |
| **GO01** | **Chusmiza** | **4.14** | **167** | Pn | **Pn** | **18 40 18.5** | **-0.2** |
| GO01 | | | | Sn | **S** | **18 41 08.1** | **-1.7** |
| **TA02** | **Huaiquique** | **4.63** | **179** | | **Pn** | **18 40 22.2** | **-2.0** |
| TA02 | | | | Sn | **S** | **18 41 14.6** | **-5.3** |
| **HMBC** | **Humberstone** | **4.65** | **176** | | **Pn** | **18 40 22.1** | **-2.4** |
| HMBC | | | | Sn | **S** | **18 41 16.1** | **-4.4** |
| **TA01** | **Diego Aracena** | **4.93** | **180** | | **Pn** | **18 40 25.5** | **-2.4** |
| TA01 | | | | Sn | **S** | **18 41 20.7** | **-5.8** |
| **PATCX** | **Punta Patache** | **5.18** | **180** | Pn | **Pn** | **18 40 29.1** | **-2.1** |
| PATCX | | | | Sn | **S** | **18 41 27.1** | **-5.4** |
| **PB01** | **IPOC Station P** | **5.44** | **173** | | **Pn** | **18 40 32.7** | **-1.8** |
| PB01 | | | | Sn | **S** | **18 41 33.2** | **-5.2** |
| **PB09** | **IPOC Station P** | **6.22** | **172** | | **Pn** | **18 40 42.7** | **-1.7** |
| **PB04** | **IPOC Station P** | **6.69** | **180** | Pn | **Pn** | **18 40 48.5** | **-1.8** |
| **ETMB** | **Extrema** | **6.95** | **34** | Pn | **Pn** | **18 40 52.7** | **-0.9** |
| **ETMB** | **Extrema** | **6.95** | **34** | *eP* | **Pn** | **18 40 53.1** | **-0.5** |
| **LVC** | **Limon Verde** | **7.07** | **170** | Pn | **Pn** | **18 40 54.4** | **-1.0** |
| **LVC** | **Limon Verde** | **7.07** | **170** | P | **Pn** | **18 40 54.6** | **-0.7** |
| LVC | 67nm,0.3s,baz=350,slow=8.9,SNR=141 | | | S | **S** | **18 42 11.4** | **-5.0** |
| | 90nm,0.5s,baz=253,slow=19,SNR=15 | | | | | | |
| **LVC** | **Limon Verde** | **7.07** | **170** | *eP* | **Pn** | **18 40 54.7** | **-0.7** |
| **AF01** | **San Pedro de A** | **7.54** | **166** | | **Pn** | **18 40 59.4** | **-2.1** |
| **CZSB** | **Cruzeiro do Su** | **8.21** | **342** | Pn | **Pn** | **18 41 06.2** | **-3.7** |
| **SIV** | **San Ignacio** | **8.79** | **94** | P | **Pn** | **18 41 16.0** | **-1.4** |
| SIV | 5.9nm,0.6s,baz=281,slow=10,SNR=29 | | | S | **S** | **18 42 55.5** | **-1.1** |
| | 9.8nm,0.6s,baz=179,slow=11,SNR=3.4 | | | | | | |
| **PB14** | **IPOC Station P** | **8.97** | **181** | Pn | **Pn** | **18 41 18.3** | **-1.5** |
| **BBSD** | **Serra de San D** | **9.33** | **101** | *eP* | **Pn** | **18 41 23.4** | **-0.8** |
| **GO02** | **Mina Guanaco** | **9.52** | **177** | Pn | **Pn** | **18 41 25.6** | **-1.2** |
| **SAML** | **Samuel** | **9.53** | **47** | Pn | **Pn** | **18 41 25.3** | **-1.5** |
| **SAML** | **Samuel** | **9.53** | **47** | *eP* | **Pn** | **18 41 25.2** | **-1.5** |
| **VILB** | **Vilhena** | **10.04** | **76** | Pn | **Pn** | **18 41 31.9** | **-1.5** |
| **VILB** | **Vilhena** | **10.04** | **76** | *eP* | **Pn** | **18 41 32.6** | **-0.7** |
| **AC01** | **Pan de Azucar** | **10.49** | **182** | | **Pn** | **18 41 37.6** | **-1.3** |
| **PTLB** | **Pontes e Lacer** | **10.66** | **91** | Pn | **Pn** | **18 41 41.4** | **+0.2** |
| **PTLB** | **Pontes e Lacer** | **10.66** | **91** | *eP* | **Pn** | **18 41 41.0** | **-0.2** |
| **ATAH** | **Atahualpa** | **11.64** | **315** | P | **Pn** | **18 41 53.1** | **-0.9** |
| | 6.4nm,0.8s,baz=148,slow=14,SNR=2.9 | | | | | | |
| **AC06** | **Mina Casimiro** | **11.69** | **181** | | **Pn** | **18 41 53.3** | **-0.8** |
| **GO03** | **Copiap** | **11.92** | **180** | Pn | **Pn** | **18 41 56.3** | **-0.8** |
| **AC04** | **Llanos de Chal** | **12.56** | **184** | Pn | **Pn** | **18 42 04.6** | **-0.4** |
| **AC05** | **El Transito** | **13.16** | **180** | | **Pn** | **18 42 12.7** | **+0.1** |
| **TEFE** | **Tefe** | **13.21** | **25** | *eP* | **Pn** | **18 42 13.6** | **+0.3** |
| **LCO** | **Las Campanas** | **13.34** | **182** | Pn | **Pn** | **18 42 15.3** | **+0.3** |
| **PDRB** | **Porto dos Gac** | **13.68** | **75** | *eP* | **Pn** | **18 42 19.0** | **-0.1** |
| **SALV** | **Santo Antonio** | **13.97** | **93** | *eP* | **P** | **18 42 23.8** | **0.0** |
| **CO01** | **Juntas del Tor** | **14.30** | **180** | P | **Pn** | **18 42 27.6** | **+0.9** |
| **CLDB** | **Colider** | **14.79** | **73** | *eP* | **P** | **18 42 33.5** | **+0.5** |
| **CO06** | **Fray Jorge** | **15.05** | **185** | P | **Pn** | **18 42 35.8** | **+0.2** |
| CO06 | | | | IAmb | IAmb | 18 42 54.2 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **CO03** | **El Pedregal** | **15.16** | **182** | P | **P** | **18 42 38.0** | **+1.0** |
| CO03 | | | | IAmb | IAmb | 18 42 41.3 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **ARNL** | **Arenillas** | **15.43** | **320** | P | **Pn** | **18 42 41.0** | **+0.7** |
| **MACA** | **Manacapuru-AM** | **15.52** | **38** | P | **P** | **18 42 39.5** | **-1.5** |
| **CO02** | **Combarbal** | **15.54** | **183** | | **P** | **18 42 42.0** | **+0.8** |
| CO02 | | | | IAmb | IAmb | 18 42 43.7 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **ZON** | **Zonda** | **15.92** | **175** | P | **P** | **18 42 46.4** | **+1.0** |
| **CPUP** | **Villa Florida** | **16.05** | **134** | P | **Pn** | **18 42 48.1** | **+0.5** |
| **CPUP** | **Villa Florida** | **16.05** | **134** | P | **Pn** | **18 42 47.9** | **+0.2** |
| | comp=Z,1.2nm,0.4s,baz=310,slow=13,SNR=2.9 | | | | | | |
| **CPUP** | **Villa Florida** | **16.05** | **134** | *eP* | **Pn** | **18 42 48.3** | **+0.6** |
| **NPGB** | **Novo Progresso** | **16.85** | **61** | *eP* | **P** | **18 42 56.3** | **+0.6** |
| **VA06** | **Catapilco** | **16.90** | **183** | P | **Pn** | **18 42 58.7** | **+1.1** |
| VA06 | | | | IAmb | IAmb | 18 43 11.2 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **ANTS** | **Antisana-Sarah** | **16.96** | **332** | P | **P** | **18 42 57.7** | **+0.2** |
| **VA03** | **San Esteban** | **17.08** | **181** | P | **Pn** | **18 43 00.3** | **+0.5** |
| **PEL** | **Peldehue** | **17.46** | **181** | P | **P** | **18 43 03.8** | **+1.6** |
| PEL | | | | IAmb | IAmb | 18 43 05.8 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **MT02** | **Curacav** | **17.59** | **183** | P | **P** | **18 43 04.7** | **+1.1** |
| MT02 | | | | IAmb | IAmb | 18 43 06.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **IMBA** | **Imbabura, San** | **17.66** | **333** | Pn | **P** | **18 43 06.0** | **+1.1** |
| **ARAG** | **Araguaiana, MT** | **17.71** | **93** | *eP* | **Pn** | **18 43 06.4** | **-0.9** |
| **MT08** | **Bocatoma Ro** | **17.76** | **180** | | **Pn** | **18 43 08.3** | **+0.4** |
| MT08 | | | | IAmb | IAmb | 18 43 12.5 | |
| | comp=Z,21nm,0.6s | | | | | | |
| **MT03** | **Universidad Ad** | **17.81** | **181** | P | **Pn** | **18 43 08.5** | **+0.1** |
| **MT09** | **Talagante** | **18.10** | **182** | P | **P** | **18 43 09.5** | **+0.2** |
| MT09 | | | | IAmb | IAmb | 18 43 12.9 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **LMEL** | **Las Melosas** | **18.16** | **180** | P | **P** | **18 43 11.5** | **+1.6** |
| LMEL | | | | IAmb | IAmb | 18 43 19.2 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **MT01** | **Popeta** | **18.20** | **183** | P | **P** | **18 43 11.7** | **+1.5** |
| MT01 | | | | IAmb | IAmb | 18 43 14.3 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **BO04** | **La Punta** | **18.30** | **181** | P | **P** | **18 43 12.7** | **+1.3** |
| BO04 | | | | IAmb | IAmb | 18 43 18.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **SNDB** | **Serra Nova Dou** | **18.71** | **81** | *eP* | **P** | **18 43 16.9** | **+1.0** |
| **BO01** | **Tunca** | **18.72** | **182** | P | **P** | **18 43 17.9** | **+2.1** |
| BO01 | | | | IAmb | IAmb | 18 43 19.4 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **ITQB** | **Itaqui** | **18.75** | **141** | P | **P** | **18 43 17.8** | **+1.5** |
| ITQB | | | | IAmb | IAmb | 18 43 22.5 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **ITQB** | **Itaqui** | **18.75** | **141** | *eP* | **Pn** | **18 43 18.9** | **-0.6** |
| **CRSM** | **Crissiumal (Br** | **19.09** | **131** | *eP* | **P** | **18 43 20.9** | **+1.0** |
| **BO02** | **Sierra Bellavi** | **19.11** | **181** | P | **P** | **18 43 21.4** | **+1.6** |
| **PSAL** | **Palomas, Salto** | **19.23** | **145** | *eP* | **P** | **18 43 23.7** | **+2.4** |
| **ML02** | **Panimavida** | **20.10** | **183** | P | **P** | **18 43 32.1** | **+1.5** |
| ML02 | | | | IAmb | IAmb | 18 43 39.0 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **RODS** | **Rosario do Sul** | **20.11** | **139** | *eP* | **P** | **18 43 31.9** | **+1.2** |
| **BOAV** | **Boa Vista** | **20.29** | **29** | P | **P** | **18 43 33.1** | **+0.3** |
| BOAV | | | | IAmb | IAmb | 18 43 38.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **BOAV** | **Boa Vista** | **20.29** | **29** | *eP* | **P** | **18 43 33.2** | **+0.3** |
| **ALGR** | **Alto Alegre (B** | **20.58** | **133** | *eP* | **P** | **18 43 36.0** | **+0.2** |
| **BI02** | **San Fabin de** | **20.99** | **182** | P | **P** | **18 43 41.3** | **+1.2** |
| **IPMB** | **Ipameri, GO** | **21.18** | **100** | *eP* | **P** | **18 43 41.7** | **-0.5** |
| **CPSB** | **Cacapava Do Su** | **21.28** | **137** | *eP* | **P** | **18 43 44.9** | **+1.9** |
| **BDFB** | **Brasilia** | **21.36** | **93** | P | **P** | **18 43 44.0** | **-0.2** |
| BDFB | | | | IAmb | IAmb | 18 43 45.8 | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **BDFB** | **Brasilia** | **21.36** | **93** | P | **P** | **18 43 43.4** | **-0.8** |
| | comp=Z,4.4nm,0.4s,baz=251,slow=12,SNR=8.1 | | | | | | |
| | comp=Z,4.4nm,0.4s | | | | | | |
| **PLTB** | **Pedras Altas** | **22.07** | **140** | *eP* | **P** | **18 43 52.8** | **+2.1** |
| **PRPB** | **Paraupebas** | **22.08** | **67** | *eP* | **P** | **18 43 50.7** | **-0.3** |
| **SMTB** | **Santa Maria do** | **23.08** | **76** | *eP* | **P** | **18 44 02.4** | **+2.4** |
| **MCPB** | **Macapa, AP** | **23.46** | **51** | *eP* | **P** | **18 44 05.0** | **+1.5** |
| **TRQA** | **Tornquist** | **23.50** | **164** | P | **P** | **18 44 05.5** | **+1.9** |
| TRQA | | | | IAmb | IAmb | 18 44 08.9 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **GO06** | **Curarrehue** | **23.91** | **182** | P | **P** | **18 44 09.0** | **+1.6** |
| GO06 | | | | IAmb | IAmb | 18 44 12.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **BAUV** | **El Baul** | **24.49** | **5** | P | **P** | **18 44 12.1** | **-0.7** |
| BAUV | | | | | **pP** | **18 44 52.1** | **-3.2** |
| **LR05** | **Currie** | **24.58** | **183** | P | **P** | **18 44 14.1** | **+0.8** |
| **SDBA** | **SAO DESIDERIO** | **24.74** | **86** | *eP* | **P** | **18 44 15.1** | **-0.1** |
| **JANB** | **Januaria** | **24.97** | **92** | *eP* | **P** | **18 44 16.8** | **-0.4** |
| **PLCA** | **Paso Flores** | **25.03** | **181** | P | **P** | **18 44 17.9** | **+0.3** |
| PLCA | | | | IAmb | IAmb | 18 44 23.6 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **PLCA** | **Paso Flores** | **25.03** | **181** | P | **P** | **18 44 19.1** | **+1.6** |
| | comp=Z,4.9nm,0.5s,baz=0.8,slow=11,SNR=10 | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **PLCA** | **Paso Flores** | **25.03** | **181** | *eP* | **P** | **18 44 19.2** | **+1.6** |
| **DIAM** | **Diamantina, MG** | **25.50** | **100** | *eP* | **P** | **18 44 23.0** | **+0.9** |
| **ALF01** | **Guarapari-ES** | **28.43** | **104** | *eP* | **P** | **18 44 48.1** | **+0.2** |
| **MPOM** | **Morne Pois Mar** | **31.26** | **18** | P | **P** | **18 45 11.8** | **-1.1** |
| **BIM** | **Bigot** | **31.27** | **17** | P | **P** | **18 45 12.1** | **-0.9** |
| **FDF** | **Fort de France** | **31.45** | **17** | P | **P** | **18 45 12.2** | **-2.4** |
| **MLPR** | **Magueyes Islan** | **33.51** | **5** | P | **P** | **18 45 31.4** | **-1.0** |
| **CRPR** | **Cabo Rojo, PR** | **33.55** | **5** | P | **P** | **18 45 31.5** | **-1.2** |
| **NBAN** | **Anadia - AL** | **33.59** | **84** | *eP* | **P** | **18 45 32.9** | **-0.4** |
| **CELP** | **Cerrillos** | **33.66** | **6** | P | **P** | **18 45 33.9** | **+0.2** |
| CELP | | | | IAmb | IAmb | 18 46 00.3 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **AOPR** | **Arecibo Observ** | **33.91** | **6** | P | **P** | **18 45 34.6** | **-1.3** |
| **MTO3** | **Montecristo** | **35.33** | **327** | P | **P** | **18 45 48.7** | **+0.4** |
| **SMAI** | **San Martin Ant** | **52.52** | **179** | P | **P** | **18 48 05.4** | **+1.7** |
| **HNDO** | **Hondo** | **52.93** | **328** | P | **P** | **18 48 07.2** | **-0.1** |
| HNDO | | | | IAmb | IAmb | 18 48 09.1 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **DRIO** | **Del Rio** | **53.55** | **327** | P | **P** | **18 48 11.8** | **0.0** |
| **BRDY** | **Brady** | **54.22** | **329** | P | **P** | **18 48 16.2** | **-0.5** |
| **SAND** | **Sanderson** | **54.77** | **326** | P | **P** | **18 48 21.0** | **+0.3** |
| **OZNA** | **Ozona** | **55.00** | **327** | P | **P** | **18 48 22.1** | **-0.1** |
| OZNA | | | | IAmb | IAmb | 18 48 24.0 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **Q56A** | **Snyder Ridge,** | **55.01** | **351** | P | **P** | **18 48 21.8** | **-0.3** |
| Q56A | | | | IAmb | IAmb | 18 48 22.8 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **55.15** | **324** | P | **P** | **18 48 23.7** | **+0.3** |
| **TXAR** | **Lajitas Array** | **55.15** | **324** | P | **P** | **18 48 23.5** | **+0.1** |
| **TXAR** | **Lajitas Array** | **55.15** | **324** | P | **P** | **18 48 23.7** | **+0.3** |
| | comp=Z,0.9nm,0.6s,baz=144,slow=6.3,SNR=11 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **PLPT** | **Palo Pinto** | **55.15** | **331** | P | **P** | **18 48 23.0** | **-0.3** |
| PLPT | | | | IAmb | IAmb | 18 48 25.6 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **55.37** | **335** | P | **P** | **18 48 24.9** | **+0.2** |
| X37A | | | | IAmb | IAmb | 18 48 26.2 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **SGCY** | **Sterling City** | **55.79** | **328** | P | **P** | **18 48 27.1** | **-0.8** |
| SGCY | | | | IAmb | IAmb | 18 48 29.6 | |
| | comp=Z,8.9nm,1.0s | | | | | | |
| **S44A** | **Carbondale** | **55.97** | **342** | P | **P** | **18 48 27.1** | **-1.8** |
| **SIUC** | **Southern Illin** | **55.98** | **342** | P | **P** | **18 48 27.6** | **-1.4** |
| **WTFS** | **Witchita Falls** | **56.01** | **332** | | **P** | **18 48 29.4** | **0.0** |
| **MNHN** | **Monahans** | **56.19** | **326** | P | **P** | **18 48 30.6** | **-0.1** |
| MNHN | | | | IAmb | IAmb | 18 48 32.1 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **X34A** | **Smith Ranch, M** | **56.43** | **333** | P | **P** | **18 48 32.8** | **+0.5** |
| X34A | | | | IAmb | IAmb | 18 48 33.7 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **APMT** | **Aspermont** | **56.43** | **330** | P | **P** | **18 48 32.2** | **-0.1** |
| APMT | | | | IAmb | IAmb | 18 48 33.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **56.44** | **329** | P | **P** | **18 48 32.6** | **+0.2** |
| SN05 | | | | IAmb | IAmb | 18 48 33.8 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **SN07** | **Snyder 07** | **56.62** | **329** | P | **P** | **18 48 33.5** | **-0.2** |
| SN07 | | | | IAmb | IAmb | 18 48 34.7 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **DEOK** | **Depew** | **56.91** | **335** | | **P** | **18 48 35.7** | **+0.1** |
| **WMOK** | **Wichita Mounta** | **56.97** | **332** | | **P** | **18 48 35.1** | **-1.0** |
| **OK052** | **Battle Ridge R** | **57.17** | **334** | P | **P** | **18 48 36.5** | **-0.9** |
| OK052 | | | | IAmb | IAmb | 18 48 38.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **QUOK** | **Quay** | **57.28** | **335** | | **P** | **18 48 37.9** | **-0.3** |
| QUOK | | | | IAmb | IAmb | 18 48 39.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **OK048** | **Pawnee Station** | **57.59** | **335** | | **P** | **18 48 40.8** | **+0.5** |
| OK048 | | | | IAmb | IAmb | 18 48 42.0 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **OK051** | **E0350 and S346** | **57.62** | **335** | P | **P** | **18 48 41.0** | **+0.5** |
| OK051 | | | | IAmb | IAmb | 18 48 42.3 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **SMWD** | **Samnorwood** | **57.94** | **331** | P | **P** | **18 48 42.8** | **-0.1** |
| **BLOK** | **Blackwell** | **58.00** | **335** | IAmb | IAmb | 18 48 44.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **G62A** | **West of Eustis** | **60.54** | **360** | P | **P** | **18 49 00.4** | **0.0** |
| G62A | | | | IAmb | IAmb | 18 49 01.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **D62A** | **Allapoint, All** | **62.41** | **1** | P | **P** | **18 49 11.6** | **-1.3** |
| D62A | | | | IAmb | IAmb | 18 49 13.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **62.59** | **329** | P | **P** | **18 49 14.5** | **-0.1** |
| SDCO | | | | IAmb | IAmb | 18 49 16.6 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **63.37** | **330** | IAmb | IAmb | 18 49 20.9 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **ISCO** | **Idaho Springs** | **64.25** | **330** | P | **P** | **18 49 25.7** | **+0.2** |
| ISCO | | | | IAmb | IAmb | 18 49 48.0 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **KNB** | **Kanab** | **65.97** | **324** | P | **P** | **18 49 37.6** | **+1.1** |
| KNB | | | | IAmb | IAmb | 18 49 39.4 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **66.02** | **162** | ⇑P | **P** | **18 49 37.9** | **+1.9** |
| | comp=Z,2.8nm,0.9s | | | | | | |
| VNA3 | | | | ⇑x | x | 18 49 37.9 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **66.22** | **161** | ⇑P | **P** | **18 49 39.1** | **+1.8** |
| | comp=Z,3.7nm,1.0s | | | | | | |
| VNA1 | | | | ⇑x | x | 18 49 39.1 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **66.59** | **161** | ⇑P | **P** | **18 49 41.5** | **+1.9** |
| | comp=Z,3.4nm,1.0s,baz=287,slow=6.6 | | | | | | |
| VNA2 | | | | ⇑x | x | 18 49 41.5 | |
| | comp=Z,3.4nm,1.0s,baz=287,slow=6.6 | | | | | | |
| **S11A** | **Rachel** | **68.10** | **322** | IAmb | IAmb | 18 50 04.4 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **68.22** | **162** | P | **P** | **18 49 51.2** | **+1.3** |
| **SNAA** | **Sanae** | **68.22** | **162** | ⇓P | **P** | **18 49 51.6** | **+1.7** |
| | comp=Z,40nm,0.5s | | | | | | |
| SNAA | | | | ⇓x | x | 18 49 51.6 | |
| | comp=Z,40nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **68.22** | **162** | P | **P** | **18 49 51.4** | **+1.5** |
| | comp=Z,2.4nm,0.5s,baz=283,slow=10,SNR=42 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **DBIC** | **Dimbokro** | **68.38** | **76** | P | **P** | **18 49 51.2** | **-0.6** |
| | comp=Z,5.9nm,0.4s,baz=246,slow=6.6,SNR=19 | | | | | | |
| | comp=Z,5.9nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **68.43** | **330** | P | **P** | **18 49 52.3** | **+0.5** |
| | comp=Z,0.7nm,0.4s,baz=123,slow=9.8,SNR=2.2 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **69.36** | **343** | P | **P** | **18 49 55.8** | **-1.3** |
| | comp=Z,2.9nm,0.4s,baz=150,slow=7.6,SNR=9.6 | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **69.93** | **162** | ⇓P | **P** | **18 50 02.4** | **+1.9** |
| | comp=Z,45nm,0.3s | | | | | | |
| TROLL | | | | ⇓x | x | 18 50 02.4 | |
| | comp=Z,45nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **70.14** | **322** | P | **P** | **18 50 04.3** | **+2.0** |
| | comp=Z,0.5nm,0.6s,baz=140,slow=3.2,SNR=5.4 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **MFID** | **Camas Ranch** | **72.07** | **327** | P | **P** | **18 50 14.3** | **+0.6** |
| **BPMT** | **Black Pine Rid** | **73.01** | **330** | P | **P** | **18 50 18.7** | **-0.6** |
| **QSPA** | **South Pole Qui** | **74.55** | **180** | P | **P** | **18 50 29.1** | **+1.3** |
| **QSPA** | **South Pole Qui** | **74.55** | **180** | P | **P** | **18 50 29.4** | **+1.5** |
| | comp=Z,3.0nm,0.7s,baz=172,slow=2.8,SNR=14 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.63** | **72** | P | **P** | **18 50 39.1** | **-1.3** |
| | comp=Z,4.0nm,0.7s,baz=265,slow=5.2,SNR=23 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **82.55** | **45** | P | **P** | **18 51 12.2** | **+0.3** |
| **ESDC** | **Sonseca Array** | **82.55** | **45** | P | **P** | **18 51 11.9** | **+0.1** |
| | comp=Z,1.1nm,0.7s,baz=272,slow=3.6,SNR=6.3 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.25** | **341** | P | **P** | **18 51 24.9** | **0.0** |
| **YKA** | **Yellowknife Ar** | **85.25** | **341** | P | **P** | **18 51 25.5** | **+0.7** |
| | comp=Z,5.8nm,0.8s,baz=134,slow=4.5,SNR=28 | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **134.40** | **212** | PKP | **PKPdf** | **18 58 06.5** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=130,slow=1.6,SNR=2.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **136.95** | **29** | PKP | **PKiKP** | **18 58 11.7** | **0.0** |
| | comp=Z,0.7nm,0.6s,baz=305,slow=2.7,SNR=9.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **137.06** | **21** | PKP | **PKiKP** | **18 58 11.6** | **-0.2** |
| | comp=Z,6.5nm,0.8s,baz=300,slow=2.8,SNR=23 | | | | | | |
| **WRA** | **Warramunga Arr** | **137.22** | **215** | PKP | **PKPdf** | **18 58 12.2** | **+0.9** |
| | comp=Z,0.5nm,0.4s,baz=138,slow=1.6,SNR=8.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **141.40** | **31** | PKP | **PKPdf** | **18 58 19.4** | **+1.3** |
| | comp=Z,0.9nm,0.8s,baz=298,slow=3.6,SNR=5.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **145.85** | **331** | PKPbc | **PKPab** | **18 58 28.0** | **+0.4** |
| | comp=Z,2.3nm,0.6s,baz=22,slow=3.9,SNR=6.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **147.26** | **315** | PKPbc | **PKPbc** | **18 58 32.5** | **+1.4** |
| | comp=Z,3.0nm,0.6s,baz=87,slow=2.4,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **147.75** | **4** | PKPbc | **PKPbc** | **18 58 33.3** | **+1.0** |
| | comp=Z,4.2nm,0.5s,baz=326,slow=1.8,SNR=30 | | | | | | |
| **KSRS** | **Korea Array** | **152.97** | **327** | PKPbc | **PKiKP** | **18 58 46.6** | **+1.6** |
| | comp=Z,1.9nm,1.0s,baz=32,slow=1.8,SNR=3.0 | | | | | | |

*IDC **17** 18:56:07.2±0.8, 1°.96S×140°.72E, h0km, mb4.0/9, mbtmp4.0/10, ML3.9/1, Error ellipse: s-maj=37.8km s-min=19.1km az=84.0*

*NEIC **17** 18:56:12.5±1.4, 2°.12S±0°.07×140°.6E±0°.1, h29km±5km, mb4.3/24, Error ellipse: s-maj=15.3km s-min=10.0km az=70.0*

**ISC 17 18:56:12.6±0.6, 2°.17S±0°.06×140°.56E±0°.09, h35km, n44, σ1.9s67/43, mb4.1/16, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **8.33** | **265** | Pn | **Pn** | **18 58 12.8** | **+1.8** |
| **COEN** | **Coen** | **11.99** | **168** | Pn | **Pn** | **18 59 00.9** | **-0.3** |
| **MTN** | **Manton Dam** | **14.12** | **221** | | **Pn** | **18 59 29.1** | **-1.1** |
| MTN | | | | | **Sn** | **19 02 04.7** | **-1.1** |
| **KNRA** | **Kununurra** | **17.75** | **220** | P | **P** | **19 00 17.5** | **-0.1** |
| **SOEI** | **Soe** | **17.86** | **244** | | **Pn** | **19 00 18.6** | **0.0** |
| SOEI | | | | IAmb | IAmb | 19 00 56.5 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **18.63** | **198** | P | **Pn** | **19 00 27.8** | **-0.1** |
| **CTAO** | **Charters Tower** | **18.66** | **163** | P | **Pn** | **19 00 28.3** | **+0.2** |
| **WRAB** | **Tennant Creek** | **18.66** | **199** | P | **Pn** | **19 00 28.4** | **+0.1** |
| **WB2** | **Warramunga Ar** | **18.67** | **199** | P | **Pn** | **19 00 28.2** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 19 00 51.2 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.68** | **199** | P | **Pn** | **19 00 29.4** | **+1.0** |
| | comp=Z,0.4nm,0.3s,baz=17,slow=11,SNR=21 | | | | | | |
| WRA | | | | S | **Sn** | **19 03 47.8** | **-8.6** |
| | comp=Z,0.6nm,0.8s,baz=16,slow=22,SNR=1.6 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **TOLI2** | **Tolitoli** | **20.04** | **279** | P | **P** | **19 00 42.7** | **-0.1** |
| TOLI2 | | | | IAmb | IAmb | 19 00 45.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.55** | **222** | P | **P** | **19 00 59.5** | **+0.4** |
| **AS31** | **Alice Springs** | **22.32** | **196** | P | **P** | **19 01 08.1** | **+0.8** |
| **ASAR** | **Alice Springs** | **22.32** | **196** | P | **P** | **19 01 08.7** | **+1.3** |
| | comp=Z,5.3nm,0.4s,baz=28,slow=11,SNR=9.6 | | | | | | |
| | comp=Z,5.3nm,0.4s | | | | | | |
| **EIDS** | **Eidsvold** | **25.20** | **157** | P | **P** | **19 01 35.7** | **+0.7** |
| EIDS | | | | IAmb | IAmb | 19 01 47.6 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **30.77** | **187** | P | **P** | **19 02 26.2** | **+1.4** |
| **FORT** | **Forrest** | **30.81** | **201** | P | **P** | **19 02 26.4** | **+1.1** |
| **H11N1** | **WAKE ISLAND Hy** | **33.79** | **49** | T | T | 19 39 05.2 | |
| | baz=233 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.80** | **49** | T | T | 19 39 06.2 | |
| | baz=233 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.80** | **49** | T | T | 19 39 17.8 | |
| | baz=233 | | | | | | |
| **CAN** | **Canberra** | **33.90** | **168** | P | **P** | **19 02 53.6** | **+1.3** |
| **MJAR** | **Matsushiro Arr** | **38.58** | **357** | P | **P** | **19 03 29.6** | **-2.5** |
| | comp=Z,1.3nm,0.7s,baz=164,slow=8.3,SNR=3.1 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **GSI** | **Gunungsitoli** | **43.11** | **274** | P | **P** | **19 04 09.6** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **45.79** | **298** | P | **P** | **19 04 31.1** | **-0.2** |
| | comp=Z,0.5nm,0.5s,baz=116,slow=6.1,SNR=4.1 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **YAK** | **Yakutsk** | **64.57** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SHL** | **Shillong** | **0.79** | **94** | *e*P | | **Pb** | **19 04 37.3** | **+0.9** |
| SHL | | | | *e*S | | **Sn** | **19 04 48.0** | **+0.1** |
| SHL | | | | IAML | | | 19 04 49.0 | |
| | comp=E,1μm,0.1s | | | | | | | |
| SHL | | | | IAML | | | 19 04 50.1 | |
| | comp=E,1μm,0.1s | | | | | | | |
| **AGT** | **Agartala** | **1.75** | **173** | *ex* | | **Sn** | **19 05 08.3** | **-3.1** |
| **GTK** | **Tadong** | **2.74** | **308** | *e*P | | **Pn** | **19 05 04.7** | **+1.2** |
| GTK | | | | *e*S | | **Sn** | **19 05 38.7** | **+2.8** |
| GTK | | | | IAML | | | 19 05 42.3 | |
| | comp=E,173nm,0.5s | | | | | | | |
| GTK | | | | IAML | | | 19 05 49.1 | |
| | comp=E,128nm,0.3s | | | | | | | |
| **IMP** | **Imphal** | **2.77** | **106** | *e*P | | **Pn** | **19 05 06.7** | **+2.7** |
| IMP | | | | *e*S | | **Sn** | **19 05 37.0** | **+0.3** |
| IMP | | | | IAML | | | 19 05 43.4 | |
| | comp=E,34nm,0.4s | | | | | | | |
| **KOHI** | **KOHIMA** | **2.80** | **88** | *e*P | | **Pn** | **19 05 05.1** | **+0.7** |
| KOHI | | | | IAML | | | 19 05 38.4 | |
| | comp=E,249nm,0.4s | | | | | | | |
| KOHI | | | | *e*S | | **Sn** | **19 05 40.2** | **+2.8** |
| KOHI | | | | IAML | | | 19 05 42.7 | |
| | comp=E,323nm,0.6s | | | | | | | |
| **JORH** | **JORHAT** | **3.12** | **68** | *e*S | | **Sn** | **19 05 45.1** | **+0.1** |
| JORH | | | | IAML | | | 19 05 45.6 | |
| | comp=E,1μm,0.2s | | | | | | | |
| JORH | | | | IAML | | | 19 05 53.3 | |
| | comp=E,835nm,0.1s | | | | | | | |
| **ZIRO** | **ZIRO** | **3.17** | **53** | *e*P | | **Pn** | **19 05 09.4** | **-0.1** |
| ZIRO | | | | IAML | | | 19 05 45.8 | |
| | comp=E,1μm,0.4s | | | | | | | |
| ZIRO | | | | *e*S | | **Sn** | **19 05 48.1** | **+1.5** |
| ZIRO | | | | *e*S | | **Sb** | **19 05 49.2** | **-5.9** |
| ZIRO | | | | IAML | | | 19 05 51.4 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **LSA** | **Lhasa** | **4.05** | **2** | Pn | | **Pn** | **19 05 23.4** | **+1.4** |
| **BOK** | **Bokaro** | **5.01** | **250** | *e*P | | **Pn** | **19 05 36.5** | **+1.8** |
| BOK | | | | *e*S | | **Sn** | **19 06 29.8** | **-2.0** |
| BOK | | | | IAML | | | 19 06 33.4 | |
| | comp=E,79nm,0.1s | | | | | | | |
| BOK | | | | IAML | | | 19 06 34.6 | |
| | comp=E,118nm,0.2s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **10.25** | **133** | Pn | | **Pn** | **19 06 48.5** | **+1.8** |
| | comp=E,0.2nm,0.3s,baz=325,slow=12,SNR=1.8 | | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **20.89** | **327** | | | **P** | **19 09 01.7** | **+0.1** |
| **MK31** | **Makanchi Array** | **22.23** | **344** | P | | **P** | **19 09 14.8** | **-1.0** |
| MK31 | | | | IAmb | | IAmb | 19 09 17.8 | |
| | comp=E,4.0nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **22.23** | **344** | P | | **P** | **19 09 14.8** | **-1.1** |
| | comp=E,2.5nm,0.5s,baz=155,slow=9.9,SNR=26 | | | | | | | |
| | comp=E,2.5nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **22.32** | **344** | P | | **P** | **19 09 16.1** | **-0.8** |
| MAKZ | | | | IAmb | | IAmb | 19 09 18.5 | |
| | comp=E,2.9nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **25.27** | **25** | P | | **P** | **19 09 45.3** | **-0.1** |
| SONM | | | | IAmb | | IAmb | 19 09 57.9 | |
| | comp=E,2.2nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **25.27** | **25** | P | | **P** | **19 09 45.0** | **-0.4** |
| | comp=E,1.0nm,0.5s,baz=211,slow=10.0,SNR=13 | | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **26.74** | **342** | P | | **P** | **19 09 57.6** | **-0.8** |
| | comp=E,1.3nm,0.3s,baz=150,slow=9.8,SNR=4.3 | | | | | | | |
| | comp=E,1.3nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **31.44** | **336** | P | | **P** | **19 10 39.1** | **-1.1** |
| | comp=E,0.8nm,0.4s,baz=136,slow=9.3,SNR=9.2 | | | | | | | |
| | comp=E,0.8nm,0.4s | | | | | | | |
| **ABKAR** | **Akbulak array** | **33.73** | **322** | P | | **P** | **19 10 59.7** | **-0.6** |
| ABKAR | | | | IAmb | | IAmb | 19 11 25.2 | |
| | comp=E,1.5nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **61.75** | **133** | P | | **P** | **19 14 37.4** | **-0.3** |
| **WRA** | **Warramunga Arr** | **61.84** | **133** | P | | **P** | **19 14 38.3** | **-0.1** |
| | comp=E,0.4nm,0.5s,baz=321,slow=7.2,SNR=18 | | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **61.85** | **133** | P | | **P** | **19 14 38.1** | **-0.3** |
| **AS31** | **Alice Springs** | **64.24** | **136** | P | | **P** | **19 14 54.2** | **0.0** |
| **ASAR** | **Alice Springs** | **64.24** | **136** | P | | **P** | **19 14 54.7** | **+0.5** |
| | comp=E,0.6nm,0.5s,baz=316,slow=6.5,SNR=6.1 | | | | | | | |
| | comp=E,0.6nm,0.5s | | | | | | | |

*NEIC* ***17*** *19:17:02.4±1.5,23°.8N±0°.1×145°.1E±0°.2,h21km±7km, mb4.3/5, Error ellipse: s-maj=35.5km s-min=14.8km az=65.0*

*IDC* ***17*** *19:17:04.6±5.0,23°.47N×143°.94E,h0km,mb3.9/6, mbtmp3.9/9,ML3.2/2, Error ellipse: s-maj=198.8km s-min=19.3km az=77.0*

**ISC 17 19:17:05.5±1.7, 23°.6N±0°.1×144°.0E±0°.3, h10km, n20, σ1s 90/21, mb4.0/8, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.84** | **335** | Pn | **Pn** | **19 18 08.4** | **+3.8** |
| JCJ | | | | Sn | **Sn** | **19 18 47.5** | **-2.4** |
| **JCJ** | **Chichijima** | **3.84** | **335** | Pn | **Pn** | **19 18 04.8** | **+0.1** |
| | 6.5nm,0.3s,baz=283,slow=21,SNR=2.0 | | | | | | |
| JCJ | | | | Sn | **Sn** | **19 18 45.9** | **-3.9** |
| | 22nm,0.3s,baz=295,slow=21,SNR=9.0 | | | | | | |
| | 77nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.82** | **340** | Pn | **Pn** | **19 20 22.9** | **+1.3** |
| | baz=162,slow=11,SNR=2.3 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **13.82** | **340** | Pn | **Pn** | **19 20 20.1** | **-1.5** |
| **MJB9** | **Matsu-Tunnel** | **13.83** | **340** | Pn | **Pn** | **19 20 20.6** | **-1.1** |
| **JMM** | **Marumori** | **14.47** | **350** | Pn | Pn | 19 20 25.3 | -5.2 |
| **JOW** | **Kunigami** | **14.58** | **286** | Pn | **P** | **19 20 39.4** | **+1.0** |
| JOW | | | | IAmb | IAmb | 19 20 50.0 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **19.50** | **319** | P | **Pn** | **19 21 34.1** | **0.0** |
| | comp=Z,1.4nm,0.9s,baz=149,slow=9.3,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **38.37** | **319** | P | **P** | **19 24 26.9** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=109,slow=7.8,SNR=3.6 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.12** | **193** | P | **P** | **19 25 12.5** | **-1.8** |
| **WB2** | **Warramunga Arr** | **44.29** | **193** | P | **P** | **19 25 12.9** | **-2.8** |
| WB2 | | | | IAmb | IAmb | 19 25 21.2 | |
| | comp=Z,5.3nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.30** | **193** | P | **P** | **19 25 14.3** | **-1.5** |
| | comp=Z,0.8nm,0.6s,baz=12,slow=8.7,SNR=12 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **45.16** | **205** | P | **P** | **19 25 21.3** | **-1.3** |
| **ASAR** | **Alice Springs** | **48.00** | **192** | P | **P** | **19 25 45.2** | **+0.3** |
| | comp=Z,0.2nm,0.6s,baz=20,slow=12,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.19** | **321** | P | **P** | **19 26 25.1** | **+1.3** |
| | comp=Z,0.6nm,0.5s,baz=106,slow=7.8,SNR=4.2 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **53.97** | **312** | P | **P** | **19 26 29.2** | **-0.5** |
| **MKAR** | **Makanchi Array** | **53.97** | **312** | P | **P** | **19 26 29.8** | **+0.1** |
| **MKAR** | **Makanchi Array** | **53.97** | **312** | P | **P** | **19 26 31.2** | **+1.6** |
| | comp=Z,1.0nm,0.6s,baz=92,slow=9.1,SNR=10 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.65** | **316** | P | **P** | **19 26 50.4** | **+1.5** |
| | comp=Z,1.4nm,0.7s,baz=94,slow=7.7,SNR=13 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.72** | **319** | P | **P** | **19 27 25.6** | **+1.7** |
| | comp=Z,3.3nm,0.6s,baz=91,slow=7.8,SNR=27 | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | |

*IDC* ***17*** *19:23:53.9±0.7,1°.86S×139°.80E,h0km,mb4.3/11, mbtmp4.3/12,ML3.7/2,MS3.6/7, Error ellipse: s-maj=35.2km s-min=15.3km az=78.0*

*NEIC* ***17*** *19:24:00.9±1.8,1°.97S±0°.09×139°.68E±0°.06,h46km±7km, mb4.6/39, Error ellipse: s-maj=13.2km s-min=8.1km az=161.0*

*DJA* ***17*** *19:24:04.8±1.9,3°.S±70°.×14°.0E±°, h37km±66km, M4.0/3, MLv4.0/3*

**ISC 17 19:23:59.4±0.4, 1°.94S±0°.06×139°.72E±0°.07, h35km, n99, σ1s 14/92, mb4.6/41, MS3.7/6, 3C-4D, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GENI** | **Genyem** | **0.79** | **145** | P | **Pn** | **19 24 14.3** | **+0.3** |
| **GENI** | **Genyem** | **0.79** | **145** | P | **Pn** | **19 24 13.8** | **-0.2** |
| GENI | | | | S | **Sn** | **19 24 20.5** | **-4.0** |
| **JAY** | **Jayapura** | **1.14** | **120** | P | **Pn** | **19 24 17.4** | **-1.4** |
| **TABU** | **Tabubil** | **3.63** | **156** | P | **Pn** | **19 24 57.1** | **+3.9** |
| **FAKI** | **Fak Fak** | **7.53** | **262** | P | **Pn** | **19 25 47.6** | **+0.8** |
| **FAKI** | **Fak Fak** | **7.53** | **262** | Pn | **Pn** | **19 25 47.2** | **+0.4** |
| **COEN** | **Coen** | **12.42** | **164** | P | **Pn** | **19 26 55.1** | **+1.3** |
| **COEN** | **Coen** | **12.42** | **164** | Pn | **Pn** | **19 26 55.5** | **+1.7** |
| **KDU** | **Kakadu** | **12.87** | **214** | P | **Pn** | **19 26 58.6** | **-1.3** |
| **MTN** | **Manton Dam** | **13.77** | **218** | Pn | **Pn** | **19 27 10.0** | **-2.3** |
| **DAV** | **Davao City (W)** | **16.71** | **303** | LR | LR | 19 34 53.1 | |
| | comp=Z,119nm,18.9s,baz=106,slow=39 | | | | | | |
| **LUWI** | **Luwuk** | **16.97** | **273** | Pn | **Pn** | **19 27 53.2** | **-1.0** |
| LUWI | | | | IAmb | IAmb | 19 28 32.8 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **17.21** | **243** | P | **Pn** | **19 27 58.7** | **+1.3** |
| **SOEI** | **Soe** | **17.21** | **243** | P | **Pn** | **19 27 56.8** | **-0.6** |
| SOEI | | | | IAmb | IAmb | 19 28 20.4 | |
| | comp=Z,91nm,1.0s | | | | | | |
| **KNRA** | **Kunumurra** | **17.41** | **218** | Pn | **Pn** | **19 27 58.3** | **-1.4** |
| **WB0** | **Warramunga Arr** | **18.47** | **196** | P | **P** | **19 28 11.1** | **-1.3** |
| **QIS** | **Mount Isa** | **18.50** | **180** | P | **P** | **19 28 13.2** | **+0.4** |
| **WR0** | **Warramunga Arr** | **18.61** | **195** | P | **P** | **19 28 12.7** | **-1.3** |
| **WRAB** | **Tennant Creek** | **18.64** | **196** | P | **P** | **19 28 12.4** | **-1.8** |
| **WB2** | **Warramunga Arr** | **18.65** | **196** | | **P** | **19 28 13.7** | **-0.7** |
| **WRA** | **Warramunga Arr** | **18.65** | **196** | P | **P** | **19 28 13.0** | **-1.4** |
| **WRA** | **Warramunga Arr** | **18.65** | **196** | P | **P** | **19 28 13.2** | **-1.1** |
| | comp=Z,0.7nm,0.3s,baz=16,slow=12,SNR=64 | | | | | | |
| WRA | | | | S | Sn | 19 31 31.4 | -11 |
| | comp=Z,2.0nm,1.0s,baz=18,slow=20,SNR=4.6 | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **19.13** | **161** | P | **P** | **19 28 19.3** | **-0.4** |
| | baz=344,slow=14,SNR=4.3 | | | | | | |
| **TOLI2** | **Tolitoli** | **19.18** | **279** | P | **P** | **19 28 20.1** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **21.18** | **220** | P | **P** | **19 28 42.2** | **+0.2** |
| **AS31** | **Alice Springs** | **22.32** | **194** | P | **P** | **19 28 54.5** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.32** | **194** | P | **P** | **19 28 53.8** | **-0.4** |
| | comp=Z,11nm,0.4s,baz=27,slow=12,SNR=48 | | | | | | |
| | comp=Z,11nm,0.4s | | | | | | |
| **MYLDM** | **Lahad Datu** | **22.35** | **289** | P | **P** | **19 28 56.0** | **+1.4** |
| MYLDM | | | | IAmb | IAmb | 19 29 05.8 | |
| | comp=Z,30nm,1.0s | | | | | | |
| **WRKA** | **Warakurna** | **25.47** | **205** | P | **P** | **19 29 25.0** | **+0.6** |
| **INKA** | **Innaminka** | **25.67** | **178** | P | **P** | **19 29 28.1** | **+2.0** |
| **EIDS** | **Eidsvold** | **25.74** | **156** | P | **P** | **19 29 28.9** | **+2.1** |
| **EIDS** | **Eidsvold** | **25.74** | **156** | P | **P** | **19 29 27.3** | **+0.5** |
| EIDS | | | | IAmb | IAmb | 19 29 35.8 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **OOD** | **Oodnadatta** | **26.00** | **188** | P | **P** | **19 29 31.9** | **+2.8** |
| **PSA00** | **Pilbara Seismi** | **27.48** | **223** | P | **P** | **19 29 42.9** | **+0.3** |
| PSA00 | | | | IAmb | IAmb | 19 30 03.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **30.73** | **200** | P | **P** | **19 30 10.4** | **-0.9** |
| **DZM** | **Mont Dzumac** | **32.79** | **130** | LR | LR | 19 42 05.2 | |
| | comp=Z,146nm,18.2s,baz=116,slow=33 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.27** | **50** | T | T | 20 06 51.8 | |
| | baz=233,slow=75,SNR=5.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.28** | **50** | T | T | 20 06 56.8 | |
| | baz=233,slow=75,SNR=6.3 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.29** | **50** | T | T | 20 07 02.5 | |
| | baz=233,slow=75,SNR=6.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **38.31** | **358** | P | **P** | **19 31 14.9** | **-1.9** |
| | comp=Z,1.7nm,0.7s,baz=182,slow=9.8,SNR=4.6 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **NJ2** | **Nanjing** | **39.17** | **331** | *e*P | **P** | **19 31 25.3** | **+1.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,29nm,0.5s | | | | | | |
| **GSI** | **Gunungsitoli** | **42.26** | **274** | P | **P** | **19 31 49.3** | **-0.5** |
| **GYA** | **Guiyang** | **42.61** | **314** | ⇓P | **P** | **19 31 54.0** | **+1.4** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **LYN** | **LuoYang** | **44.41** | **327** | *e*P | **P** | **19 32 07.3** | **+0.4** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,26nm,1.2s | | | | | | |
| **KMI** | **Kunming** | **44.81** | **309** | ⇑P | **P** | **19 32 11.6** | **+1.1** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.95** | **299** | P | **P** | **19 32 11.2** | **-0.2** |
| CMAR | | | | PcP | **PcP** | **19 33 53.0** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **44.95** | **299** | P | **P** | **19 32 11.8** | **+0.4** |
| | comp=Z,2.0nm,0.9s,baz=121,slow=5.9,SNR=10 | | | | | | |
| CMAR | | | | PcP | **PcP** | **19 33 53.9** | **+1.4** |
| | comp=Z,1.4nm,0.9s,baz=123,slow=3.3,SNR=5.4 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **HNS** | **HongShan** | **45.50** | **332** | ⇓P | **P** | **19 32 15.8** | **+0.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | |
| **XAN** | **Xi'an** | **46.04** | **324** | ⇓P | **P** | **19 32 20.3** | **+0.4** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | |
| **PZH** | **PanZhiHua** | **46.29** | **310** | P | **P** | **19 32 21.9** | **-0.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,160nm,4.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **46.45** | **352** | P | **P** | **19 32 21.5** | **-1.4** |
| | comp=Z,3.0nm,0.9s,baz=177,slow=8.7,SNR=4.8 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **CN2** | **Changchun** | **47.30** | **346** | P | **P** | **19 32 27.9** | **-1.6** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **BNX** | **BinXian** | **48.72** | **349** | ⇓P | **P** | **19 32 40.3** | **-0.1** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.72** | **332** | *e*P | **P** | **19 32 50.3** | **+1.9** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,64nm,4.5s | | | | | | |
| **URZ** | **Urewera** | **49.77** | **141** | LR | LR | 19 54 17.7 | |
| | comp=Z,58nm,18.7s,baz=40,slow=37 | | | | | | |
| **RTZ** | **Ruatahuna** | **49.90** | **142** | P | **P** | **19 32 50.2** | **+0.5** |
| **TUWZ** | **Tuamarina** | **49.94** | **146** | P | **P** | **19 32 49.8** | **-0.1** |
| **LZH** | **Lanzhou** | **50.49** | **322** | *e*P | **P** | **19 32 55.6** | **+1.3** |
| LZH | | | | pP | pwP | 19 33 06.0 | -1.4 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,27nm,1.5s | | | | | | |
| **BFZ** | **Birch Farm** | **50.75** | **144** | P | **P** | **19 32 56.6** | **+0.5** |
| **HEH** | **HeiHe** | **53.06** | **350** | *e*P | **P** | **19 33 11.9** | **-1.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **SHL** | **Shillong** | **53.74** | **304** | P | **P** | **19 33 18.4** | **-0.4** |
| SHL | | | | IAmb | IAmb | 19 33 19.3 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **HIA** | **Hailar** | **53.85** | **344** | P | **P** | **19 33 18.9** | **-0.1** |
| HIA | | | | IAmb | IAmb | 19 33 20.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **GTA** | **Gaotai** | **55.06** | **323** | *e*P | **P** | **19 33 28.8** | **+0.7** |
| GTA | | | | pP | pP | 19 33 38.3 | +0.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **56.03** | **308** | P | **P** | **19 33 36.0** | **+0.4** |
| LSA | | | | IAmb | IAmb | 19 33 38.0 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **56.89** | **13** | LR | LR | 19 59 43.2 | |
| | comp=Z,36nm,18.6s,baz=168,slow=38 | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.21** | **334** | P | **P** | **19 33 43.3** | **+0.1** |
| ULN | | | | IAmb | IAmb | 19 33 44.9 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **57.47** | **334** | P | **P** | **19 33 45.0** | **0.0** |
| **SONM** | **Songino Array** | **57.47** | **334** | P | **P** | **19 33 44.7** | **-0.3** |
| | comp=Z,1.3nm,0.9s,baz=134,slow=6.2,SNR=5.6 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **64.26** | **355** | P | **P** | **19 34 30.4** | **-0.4** |
| **HPAH** | **Hawaii Prepara** | **66.93** | **67** | P | **P** | **19 34 48.7** | **-0.2** |
| **MK31** | **Makanchi Array** | **69.81** | **322** | P | **P** | **19 35 06.2** | **-0.2** |
| MK31 | | | | IAmb | IAmb | 19 35 08.1 | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **69.81** | **322** | P | **P** | **19 35 06.4** | **0.0** |
| **MKAR** | **Makanchi Array** | **69.81** | **322** | P | **P** | **19 35 06.9** | **+0.5** |
| | comp=Z,4.3nm,0.8s,baz=114,slow=8.1,SNR=38 | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **70.01** | **322** | P | **P** | **19 35 07.5** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 19 35 09.2 | |
| | comp=Z,9.8nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **71.79** | **329** | | **P** | **19 35 16.8** | **-1.4** |
| ZAA0 | | | | IAmb | IAmb | 19 35 18.5 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.79** | **329** | P | **P** | **19 35 17.1** | **-1.1** |
| | comp=Z,3.1nm,0.7s,baz=117,slow=6.0,SNR=18 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **73.68** | **325** | P | **P** | **19 35 28.6** | **-0.9** |
| KURK | | | | IAmb | IAmb | 19 35 30.7 | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.69** | **324** | P | **P** | **19 35 29.2** | **-0.4** |
| | comp=Z,3.3nm,0.9s,baz=111,slow=5.6,SNR=18 | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **79.27** | **325** | P | **P** | **19 36 00.8** | **-0.3** |
| | comp=Z,3.1nm,0.7s,baz=122,slow=6.5,SNR=17 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **N19K** | **Bonanza Creek** | **80.12** | **27** | P | **P** | **19 36 05.8** | **0.0** |
| N19K | | | | IAmb | IAmb | 19 36 07.3 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **L19K** | **White Mountain** | **80.49** | **26** | | **P** | **19 36 07.8** | **+0.2** |
| L19K | | | | IAmb | IAmb | 19 36 09.3 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **J19K** | **Poorman** | **80.89** | **24** | P | **P** | **19 36 09.2** | **-0.5** |
| J19K | | | | IAmb | IAmb | 19 36 11.2 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **M20K** | **Styx River** | **81.13** | **26** | P | **P** | **19 36 10.8** | **-0.3** |
| M20K | | | | IAmb | IAmb | 19 36 12.7 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **MAW** | **Mawson** | **83.21** | **202** | LR | LR | 20 11 41.8 | |
| | comp=Z,57nm,19.2s,baz=99,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **84.72** | **24** | P | **P** | **19 36 28.1** | **-1.4** |
| | comp=Z,0.9nm,0.8s,baz=251,slow=5.6,SNR=4.1 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **84.79** | **320** | P | **P** | **19 36 29.5** | **-0.7** |
| ABKAR | | | | IAmb | IAmb | 19 36 31.3 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **CTGM** | **Chitina Glacie** | **86.32** | **29** | P | **P** | **19 36 37.7** | **-0.1** |
| CTGM | | | | IAmb | IAmb | 19 36 39.2 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **88.00** | **180** | P | **P** | **19 36 45.6** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 19 36 57.1 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **88.00** | **180** | P | **P** | **19 36 45.5** | **-0.3** |
| | comp=Z,1.2nm,0.7s,baz=284,slow=1.2,SNR=16 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **S34M** | **Telegraph Cree** | **91.17** | **32** | | **P** | **19 37 01.2** | **+0.5** |
| **YBH** | **Yreka Blue Hor** | **96.94** | **48** | LR | LR | 20 15 15.6 | |
| | comp=Z,32nm,18.9s,baz=301,slow=32 | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.93** | **27** | LR | LR | 20 19 15.0 | |
| | comp=Z,26nm,20.1s,baz=308,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **137.01** | **287** | PKP | **PKPdf** | **19 43 19.8** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=64,slow=1.9,SNR=5.5 | | | | | | |
| **KIC** | **Kosan Boka** | **144.30** | **278** | ⇑*i*PKP1 | **PKPab** | **19 43 31.3** | **+0.4** |
| | comp=Z,16nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **144.38** | **279** | PKP | **PKPab** | **19 43 31.7** | **+0.5** |
| | comp=Z,11nm,0.7s,baz=70,slow=3.1,SNR=12 | | | | | | |
| **TIC** | **Toumodi** | **144.54** | **279** | *e*PKP1 | **PKPab** | **19 43 32.2** | **+0.4** |
| | comp=Z,4.7nm,0.3s | | | | | | |
| **LIC** | **Lamto** | **144.59** | **278** | ⇑*i*PKP1 | **PKPab** | **19 43 32.4** | **+0.4** |
| | comp=Z,11nm,0.4s | | | | | | |
| **LPAZ** | **La Paz** | **147.06** | **124** | PKPbc | **PKPbc** | **19 43 41.0** | **+0.6** |
| | comp=Z,4.8nm,0.8s,baz=195,slow=2.5,SNR=15 | | | | | | |
| **CPUP** | **Villa Florida** | **147.42** | **151** | PKPbc | **PKPbc** | **19 43 41.4** | **+1.0** |
| | comp=Z,8.2nm,1.1s,baz=212,slow=2.6,SNR=10.0 | | | | | | |

*NEIC* ***17*** *19:25:33.2±2.0,40°.73N±0°.03×124°.83W±0°.05, h24km±11km, Error ellipse: s-maj=5.5km s-min=3.5km az=75.0*

**NCEDC 17 19:25:33.7±2.0, 40°.68N±0°.03×124°.90W±0°.05, h24km±2km, ML3.4/26, ML3.0/98(NEIC), Error ellipse: s-maj=7.1km s-min=4.8km az=283.0, Near coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KCTM** | **Capetown** | **0.47** | **115** | | Pb | 19 25 43.5 | 0.0 |
| KCTM | | | | | Sb | 19 25 51.0 | +0.9 |
| **FER** | **Ferndale** | **0.49** | **102** | | Pb | 19 25 43.6 | -0.2 |
| **KMPM** | **Mount Pierce** | **0.65** | **114** | Pn | Pb | 19 25 45.7 | -0.8 |
| KMPM | | | | Sg | Sb | 19 25 53.7 | -1.4 |
| **JCC** | **Jacoby Creek,** | **0.67** | **78** | | Pb | 19 25 45.2 | -1.6 |
| JCC | | | | Sg | Sb | 19 25 53.4 | -2.3 |
| **KSMM** | **Slide Mountain** | **0.74** | **132** | | Pb | 19 25 46.9 | -1.1 |
| **KRPM** | **Rodgers** | **0.82** | **54** | Pn | Pb | 19 25 47.8 | -1.5 |
| KRPM | | | | Sg | Sb | 19 25 57.4 | -2.5 |
| **KCRM** | **Chalk Rock** | **0.86** | **107** | | Pb | 19 25 48.8 | -1.3 |
| **KHMM** | **Horse Mountain** | **0.91** | **77** | | Pb | 19 25 49.3 | -1.6 |
| KHMM | | | | Sg | Sb | 19 26 00.1 | -2.5 |
| **KMRM** | **Mail Ridge** | **1.02** | **116** | Pn | Pn | 19 25 51.3 | -1.3 |
| KMRM | | | | Sg | Sb | 19 26 04.4 | -1.3 |
| KMRM | | | | IAML | | 19 26 08.7 | |
| | comp=N,580nm,0.3s | | | | | | |
| **KRMB** | **Red Mountain** | **1.13** | **41** | | Pn | 19 25 52.0 | -2.2 |
| KRMB | | | | Sg | Sb | 19 26 05.1 | -3.8 |
| **KOMM** | **Orleans Mounta** | **1.25** | **61** | | Pn | 19 25 54.0 | -1.8 |
| **KHBM** | **Hayfork Bally** | **1.28** | **90** | | Pn | 19 25 54.5 | -1.8 |
| **KSXB** | **Camp Six Broad** | **1.38** | **33** | | Pn | 19 25 55.7 | -2.0 |
| KSXB | | | | | Sn | 19 26 11.4 | -3.9 |
| KSXB | | | | IAML | | 19 26 12.6 | |
| | comp=E,338nm,0.3s | | | | | | |
| KSXB | | | | IAML | | 19 26 12.6 | |
| | comp=N,405nm,0.3s | | | | | | |
| **KIPM** | **Iron Peak** | **1.39** | **128** | | Pn | 19 25 56.6 | -1.2 |
| **KCPM** | **Cahto Peak** | **1.41** | **134** | | Pn | 19 25 56.6 | -1.5 |
| **KBNM** | **Bluenose Ridge** | **1.52** | **121** | | Pn | 19 25 59.0 | -0.6 |
| **KFPM** | **Farley Peak** | **1.53** | **132** | | Pn | 19 25 58.4 | -1.3 |
| **LBPM** | **Beegum Peak** | **1.58** | **103** | | Pn | 19 25 58.9 | -1.5 |
| **LGPM** | **Granite Peak** | **1.59** | **81** | | Pn | 19 25 58.8 | -1.8 |
| **KBO** | **Bosley Butte** | **1.61** | **18** | | Pn | 19 25 58.9 | -1.9 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **I03D** | **Drain, OR** | **3.23** | **20** | Pn | | Pn | 19 26 23.1 | +0.2 | |
| **AFDM** | **Forest Hills D** | **3.48** | **118** | Pn | | Pn | 19 26 25.2 | -1.2 | |
| **I04A** | **Tendick Farm,** | **3.62** | **30** | | | | 19 26 28.5 | +0.2 | |
| I04A | | | | IAML | | | 19 27 12.7 | | |
| | comp=E,18nm,0.2s | | | | | | | | |
| **SAC** | **San Andreas** | **3.64** | **147** | | | Pn | 19 26 29.9 | +1.3 | |
| **DONR** | **Donner Summit** | **3.76** | **109** | | | Pn | 19 26 30.9 | +0.4 | |
| **J05D** | **Fort Rock, OR** | **3.77** | **45** | | | Pn | 19 26 30.6 | 0.0 | |
| J05D | | | | IAML | | | 19 27 30.7 | | |
| | comp=E,17nm,0.7s | | | | | | | | |
| J05D | | | | IAML | | | 19 27 42.2 | | |
| | comp=N,16nm,0.9s | | | | | | | | |
| **BUCK** | **Buck Mountain** | **3.79** | **21** | Pn | | Pn | 19 26 31.8 | +1.1 | |
| BUCK | | | | IAML | | | 19 27 04.1 | | |
| | comp=N,24nm,2.6s | | | | | | | | |
| BUCK | | | | IAML | | | 19 28 54.1 | | |
| | comp=E,24nm,3.4s | | | | | | | | |
| **JFP** | **Foothills Park** | **3.93** | **147** | | | Pn | 19 26 31.6 | -1.0 | |
| **MPK** | **Martis Peak** | **3.99** | **109** | | | Pn | 19 26 33.9 | +0.2 | |
| MPK | | | | IAML | | | 19 28 40.2 | | |
| | comp=E,37nm,0.9s | | | | | | | | |
| **JPSM** | | **4.00** | **149** | | | Pn | 19 26 33.6 | +0.1 | |
| **EMB** | **Emerald Bay** | **4.07** | **113** | | | Pn | 19 26 34.1 | -0.5 | |
| EMB | | | | IAML | | | 19 27 30.3 | | |
| | comp=E,31nm,0.9s | | | | | | | | |
| EMB | | | | IAML | | | 19 28 16.4 | | |
| | comp=N,39nm,0.9s | | | | | | | | |
| **H04D** | **Lebanon** | **4.16** | **22** | Pn | | Pn | 19 26 35.2 | -0.6 | |
| H04D | | | | IAML | | | 19 28 04.4 | | |
| | comp=E,25nm,3.6s | | | | | | | | |
| H04D | | | | IAML | | | 19 28 54.3 | | |
| | comp=N,22nm,3.2s | | | | | | | | |
| **PINE** | **Pine Mountain** | **4.28** | **42** | | | Pn | 19 26 37.3 | -0.3 | |
| PINE | | | | IAML | | | 19 27 25.4 | | |
| | comp=E,14nm,3.4s | | | | | | | | |
| PINE | | | | IAML | | | 19 28 05.5 | | |
| | comp=N,12nm,4.8s | | | | | | | | |
| **PAHR** | **Pah Rah Range** | **4.33** | **101** | | | Pn | 19 26 37.0 | -1.2 | |
| **PNTR** | **Pine Nut** | **4.37** | **110** | | | Pn | 19 26 38.5 | -0.4 | |
| PNTR | | | | IAML | | | 19 27 12.4 | | |
| | comp=E,19nm,1.7s | | | | | | | | |
| PNTR | | | | IAML | | | 19 27 42.8 | | |
| | comp=N,16nm,1.1s | | | | | | | | |
| **CMB** | **Columbia Colle** | **4.38** | **126** | Pn | | Pn | 19 26 37.8 | -1.0 | |
| **H04A** | **Detroit Lake** | **4.47** | **26** | Pn | | Pn | 19 26 38.0 | -2.1 | |
| H04A | | | | IAML | | | 19 27 31.0 | | |
| | comp=N,11nm,0.8s | | | | | | | | |
| H04A | | | | IAML | | | 19 27 34.6 | | |
| | comp=E,14nm,0.4s | | | | | | | | |
| **I05D** | **Terrebonne, OR** | **4.50** | **35** | Pn | | Pn | 19 26 39.9 | -0.7 | |
| I05D | | | | IAML | | | 19 29 09.2 | | |
| | comp=E,15nm,4.0s | | | | | | | | |
| I05D | | | | IAML | | | 19 29 17.3 | | |
| | comp=N,20nm,3.8s | | | | | | | | |
| **YERR** | **Yerington** | **4.67** | **109** | | | Pn | 19 26 42.5 | -0.5 | |
| YERR | | | | IAML | | | 19 27 50.3 | | |
| | comp=E,17nm,0.9s | | | | | | | | |
| YERR | | | | IAML | | | 19 27 50.6 | | |
| | comp=N,7.4nm,1.0s | | | | | | | | |
| **WAKR** | **Walker** | **4.74** | **115** | | | Pn | 19 26 44.2 | +0.2 | |
| WAKR | | | | IAML | | | 19 28 02.3 | | |
| | comp=E,6.7nm,3.1s | | | | | | | | |
| **SAO** | **San Andreas Ge** | **4.75** | **144** | Pn | | Pn | 19 26 41.6 | -2.3 | |
| **BCGM** | **Cienega Road** | **4.84** | **144** | | | Pn | 19 26 47.4 | +2.3 | |
| **WVOR** | **Wild Horse Val** | **5.01** | **67** | Pn | | Pn | 19 26 45.7 | -1.9 | |
| **BBGB** | **Big Mountain B** | **5.09** | **142** | Pn | | Pn | 19 26 48.0 | -0.6 | |
| **HOOD** | **Mount Hood Mea** | **5.21** | **26** | Pn | | Pn | 19 26 48.4 | -2.0 | |
| HOOD | | | | IAML | | | 19 27 54.1 | | |
| | comp=N,13nm,2.8s | | | | | | | | |
| HOOD | | | | IAML | | | 19 28 47.6 | | |
| | comp=E,17nm,2.1s | | | | | | | | |
| **G05A** | **Wamic** | **5.26** | **29** | Pn | | Pn | 19 26 52.3 | +1.3 | |
| G05A | | | | IAML | | | 19 29 30.3 | | |
| | comp=N,17nm,3.1s | | | | | | | | |
| **RYN** | **Ryan** | **5.33** | **111** | | | Pn | 19 26 50.3 | -1.7 | |
| **MDPB** | **Devils Postpil** | **5.45** | **122** | Pn | | Pn | 19 26 54.3 | +0.6 | |
| **KVN** | **Kaiserville** | **5.48** | **105** | | | Pn | 19 26 52.9 | -1.2 | |
| **J08A** | **Circle Bar Ran** | **5.48** | **59** | Pn | | Pn | 19 26 50.7 | -3.3 | |
| **PMPB** | **Monarch Peak** | **5.49** | **143** | Pn | | Pn | 19 26 52.3 | -1.8 | |
| **LHV** | **Little Huntoon** | **5.51** | **114** | | | Pn | 19 26 54.1 | -0.2 | |
| **OMMB** | **Old Mammoth Mi** | **5.51** | **122** | Pn | | Pn | 19 26 54.9 | +0.3 | |
| **G06A** | **Carlson Farm,** | **5.52** | **33** | Pn | | Pn | 19 26 56.3 | +1.8 | |
| **NVAR** | **Mina Array Bea** | **5.57** | **112** | | | Pn | 19 26 54.5 | -0.8 | |
| **NV11** | **Mina Array Sit** | **5.67** | **111** | | | Pn | 19 26 56.1 | -0.6 | |
| **BMN** | **Battle Mountai** | **5.85** | **90** | Pn | | Pn | 19 26 58.9 | -0.3 | |
| **Q09A** | **Carvers** | **6.22** | **105** | Pn | | Pn | 19 27 02.9 | -1.4 | |
| **DSP** | **Deep Springs** | **6.32** | **119** | Pn | | Pn | 19 27 02.8 | -2.7 | |
| **TPH** | **Tonopah** | **6.49** | **111** | Pn | | Pn | 19 27 07.7 | -0.3 | |
| **MZP** | **Montezuma Peak** | **6.55** | **115** | | | Pn | 19 27 06.7 | -2.2 | |
| **BMO** | **Blue Mountains** | **6.97** | **51** | | | Pn | 19 27 12.8 | -1.6 | |
| **ISA** | **Isabella, Lake** | **7.12** | **133** | | | Pn | 19 27 17.0 | +0.5 | |
| **BCW** | **Bitter Crk WRg** | **7.19** | **141** | Pn | | Pn | 19 27 16.3 | -1.2 | |
| **R11B** | **Troy Canyon, C** | **7.57** | **105** | Pn | | Pn | 19 27 22.4 | -0.3 | |
| **Q12A** | **Willow Creek R** | **7.92** | **99** | | | Pn | 19 27 28.6 | +1.1 | |
| **PRN** | **Pahroc Range** | **8.33** | **110** | | | Pn | 19 27 33.1 | 0.0 | |
| **PSUT** | **Pine Spring** | **8.79** | **101** | Pn | | Pn | 19 27 39.7 | +0.2 | |
| **PFO** | **Pinyon Flats O** | **9.75** | **134** | Pn | | Pn | 19 27 53.0 | +0.4 | |
| **LCMT** | **Little Creek M** | **9.80** | **108** | Pn | | Pn | 19 27 52.2 | -1.1 | |
| **MVU** | **Marysvale** | **10.03** | **98** | | | Pn | 19 27 57.5 | +1.0 | |
| **MSU** | **Marysvale** | **10.05** | **98** | Pn | | Pn | 19 27 57.7 | +0.9 | |

*BGR **17** 19:29:02.3, 19.90S×170.66E, h33km*
*BJI **17** 19:29:25.6±0.0, 18.45S×169.45E, h203km, mb5.3/67, mB5.1/26*
*NEIC **17** 19:29:26, 18.87S×169.23E, h200km*
*NEIC **17** 19:29:26, 18.87S×168.91E, h200km, Moment Tensor Solution. Duration: 2s0 Moment tensor: Scale 10^16^Nm; Mrr5.45; Mθθ2.36; Mϕϕ-7.80; Mrθ3.71; Mθϕ-3.00; Mϕr-1.56; Fault plane solution: M08.56000×10^16^ NP1: ϕs164.27000°, δ57.62000°, λ44.64000°. NP2:ϕs46.40000°, δ53.60000°, λ138.29000°. Principal axes: T 8.4736, Plg53.0000°, Azm18.0000°; N 0.1747, Plg37.0000°, Azm193.0000°; P -8.6483, Plg2.0000°, Azm285.0000°;*
*NEIC **17** 19:29:26.3±1.9, 18.88S±0.07×169.23E±0.07, h194km±4km, mb5.4/480, Mww5.2/17 Error ellipse: s-maj=10.8km s-min=8.8km az=145.0*
*IDC **17** 19:29:27.8±0.9, 18.88S×169.07E, h214km±7km, mb4.8/20, mbtmp5.3/21, Error ellipse: s-maj=8.5km s-min=7.7km az=121.0*
*NOU **17** 19:29:27.6, 18.81S×169.17E, h206km, mb5.3/112, Vanuatu Islands*
*MOS **17** 19:29:27.8±0.8, 18.84S×169.09E, h224km, mb5.4/34, Error ellipse: s-maj=8.0km s-min=7.3km az=111.0*
*GCMT **17** 19:29:29.0±0.3, 18.75S±0.02×169.00E±0.02, h216km±2km, MW5.3/110, Moment Tensor Solution. s42, c54; s110, c153; Duration: 181 Moment tensor: Scale 10^17^ Nm; Mrr0.76±.03; Mθθ0.13±.03; Mϕϕ-0.88±.03; Mrθ0.43±.03; Mϕr-0.33±.03; Mθr-0.28±.03; Best double couple: M01.02900×10^17^ NP1:ϕs169.00000°, δ57.00000°, λ53.00000°. NP2:ϕs43.00000°, δ47.00000°, λ133.00000°. Principal axes: T 1.0630, Plg59.0000°, Azm24.0000°; N -0.0670, Plg30.0000°, Azm191.0000°; P -0.9960, Plg6.0000°, Azm284.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 17 19:29:26.6±0.3, 18.89S±0.03×169.17E±0.04, h208km±3km, h209km:pP-P,n1275,σ1s33/1148, mb5.3/306, 80C-54D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.30** | **327** | P | **Pn** | **19 30 00.9** | **+1.5** |
| **DVP** | **Devils Point** | **1.48** | **321** | P | **Pn** | **19 30 02.0** | **+1.1** |
| **LIFNC** | **LIFOU** | **2.61** | **224** | P | **Pn** | **19 30 12.0** | **-0.2** |
| **LIFNC** | **LIFOU** | **2.61** | **224** | Pn | **Pn** | **19 30 11.5** | **-0.7** |
| LIFNC | | | | Sn | **S** | **19 30 42.6** | **-4.8** |
| **MARNC** | **Mare, Loyalty** | **2.79** | **202** | P | **Pn** | **19 30 14.4** | **+0.2** |
| **YATNC** | **Mamie plateau,** | **3.81** | **214** | P | **Pn** | **19 30 26.0** | **-0.3** |
| **PINNC** | **Pines Island,** | **4.04** | **203** | P | **Pn** | **19 30 29.9** | **+0.8** |
| **PINNC** | **Pines Island,** | **4.04** | **203** | | **Pn** | **19 30 29.3** | **+0.1** |
| PINNC | | | | Sn | **S** | **19 31 16.4** | **-1.6** |
| **DZM** | **Mont Dzumac** | **4.07** | **218** | P | **Pn** | **19 30 30.8** | **+1.2** |
| **DZM** | **Mont Dzumac** | **4.07** | **218** | *e*Pn | **Pn** | **19 30 30.6** | **+1.0** |
| DZM | 4μm,1.4s | | | *e*Sn | **S** | **19 31 19.2** | **+0.4** |
| | 4μm,1.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **4.07** | **218** | Pn | **Pn** | **19 30 30.4** | **+0.8** |
| DZM | | | | Sn | **S** | **19 31 18.8** | **0.0** |
| **DZM** | **Mont Dzumac** | **4.07** | **218** | P | **Pn** | **19 30 30.2** | **+0.6** |
| | 551nm,0.5s,baz=49,slow=16,SNR=1381 | | | | | | |
| DZM | | | | S | **S** | **19 31 19.0** | **+0.3** |
| | 363nm,0.7s,baz=104,slow=19,SNR=11 | | | | | | |
| **NOUC** | **Port Laguerre** | **4.17** | **220** | P | **Pn** | **19 30 32.1** | **+1.3** |
| **KOUNC** | **Koumac, New Ca** | **4.89** | **249** | P | **Pn** | **19 30 42.4** | **+2.6** |
| **KOUNC** | **Koumac, New Ca** | **4.89** | **249** | Pn | **Pn** | **19 30 41.7** | **+1.9** |
| KOUNC | | | | Sn | **S** | **19 31 36.3** | **-0.8** |
| **MSVF** | **Nonsavu** | **8.52** | **84** | P | **Pn** | **19 31 29.5** | **+2.8** |
| **MSVF** | **Nonsavu** | **8.52** | **84** | Pn | **Pn** | **19 31 29.3** | **+2.6** |
| **MSVF** | **Nonsavu** | **8.52** | **84** | P | **Pn** | **19 31 29.3** | **+2.6** |
| **HNR** | **Honiara** | **12.97** | **315** | P | **P** | **19 32 25.2** | **-1.4** |
| **HNR** | **Honiara** | **12.97** | **315** | | **Pn** | **19 32 24.0** | **+0.5** |
| **HNR** | **Honiara** | **12.97** | **315** | P | **Pn** | **19 32 24.0** | **+0.5** |
| **FUNA** | **Funafuti** | **14.17** | **45** | P | **P** | **19 32 39.4** | **-0.5** |
| **FUNA** | **Funafuti** | **14.17** | **45** | P | **P** | **19 32 39.4** | **-0.5** |
| **LHI** | **Lord Howe Isla** | **15.54** | **214** | P | **Pn** | **19 32 57.1** | **+2.2** |
| **GC1S** | **Gold Coast 1 S** | **17.05** | **234** | P | **Pn** | **19 33 14.9** | **+1.8** |
| **AUWSH** | **Wavell State H** | **17.07** | **237** | P | **Pn** | **19 33 15.0** | **+1.7** |
| **GD1S** | **Gladstone Soft** | **17.47** | **250** | P | **Pn** | **19 33 19.4** | **+1.3** |
| **EIDS** | **Eidsvold** | **17.95** | **246** | P | **Pn** | **19 33 23.9** | **+0.3** |
| **EIDS** | **Eidsvold** | **17.95** | **246** | | **Pn** | **19 33 24.1** | **+0.5** |
| **EIDS** | **Eidsvold** | **17.95** | **246** | P | **Pn** | **19 33 24.1** | **+0.5** |
| | comp=Z,269nm,1.0s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **17.98** | **252** | P | **Pn** | **19 33 24.3** | **+0.2** |
| **TOZ** | **Tahuroa Road** | **19.57** | **165** | | **Pn** | **19 33 41.0** | **-1.8** |
| **ARMA** | **Armidale** | **19.61** | **231** | P | **P** | **19 33 41.8** | **+2.3** |
| **ARMA** | **Armidale** | **19.61** | **231** | P | **P** | **19 33 41.7** | **+2.3** |
| **ARMA** | **Armidale** | **19.61** | **231** | P | **P** | **19 33 42.0** | **+2.5** |
| | comp=Z,69nm,1.4s | | | | | | |
| **ALOT** | **Alotau** | **20.00** | **293** | P | **P** | **19 33 44.4** | **+0.8** |
| **TARA** | **Tarawa** | **20.45** | **11** | P | **P** | **19 33 48.1** | **-0.3** |
| **URZ** | **Urewera** | **20.51** | **162** | P | Pn | 19 33 52.4 | -1.8 |
| **URZ** | **Urewera** | **20.51** | **162** | P | **P** | **19 33 51.0** | **+2.2** |
| | comp=Z,13nm,0.5s,baz=94,slow=7.1,SNR=14 | | | | | | |
| URZ | | | | S | **S** | **19 37 29.9** | **+3.6** |
| | comp=Z,5.4nm,0.7s,baz=134,slow=20,SNR=1.5 | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **AUPHS** | **Peel High Scho** | **20.51** | **230** | P | **P** | **19 33 51.2** | **+2.2** |
| **AUAYR** | **Ayr State High** | **20.56** | **265** | P | **P** | **19 33 52.3** | **+2.8** |
| **RTZ** | **Ruatahuna** | **20.80** | **163** | | **P** | **19 33 53.6** | **+1.6** |
| **NTLH** | **Newcastle Hard** | **20.97** | **225** | P | **P** | **19 33 55.9** | **+2.2** |
| **TV1H** | **Townsville Har** | **21.15** | **265** | P | **P** | **19 33 56.1** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **21.18** | **164** | P | **P** | **19 33 59.1** | **+3.2** |
| **BKZ** | **Black Stump Fm** | **21.18** | **164** | | **P** | **19 33 57.5** | **+1.6** |
| **CTA** | **Charters Tower** | **21.63** | **263** | P | **P** | **19 34 00.7** | **0.0** |
| | comp=Z,6.4nm,0.7s,baz=90,slow=11,SNR=100 | | | | | | |
| CTA | | | | S | **S** | **19 37 47.5** | **+1.3** |
| | comp=Z,1.5nm,1.1s,baz=270,slow=16,SNR=8.2 | | | | | | |
| **CTAO** | **Charters Tower** | **21.63** | **263** | P | **P** | **19 34 01.4** | **+0.7** |
| **CTAO** | **Charters Tower** | **21.63** | **263** | | **P** | **19 34 01.4** | **+0.7** |
| **CTAO** | **Charters Tower** | **21.63** | **263** | P | **P** | **19 34 01.4** | **+0.7** |
| **RIV** | **Riverview** | **21.90** | **224** | P | **P** | **19 34 05.3** | **+2.2** |
| **RIV** | **Riverview** | **21.90** | **224** | P | **P** | **19 34 05.4** | **+2.2** |
| | comp=Z,110nm,1.0s | | | | | | |
| **QRZ** | **Quartz Range** | **22.05** | **173** | P | **P** | **19 34 07.5** | **+2.9** |
| **QRZ** | **Quartz Range** | **22.05** | **173** | P | **P** | **19 34 07.3** | **+2.7** |
| **SYDH** | **Sydney Hard Ro** | **22.13** | **224** | P | **P** | **19 34 07.3** | **+1.9** |
| **AUCSH** | **Cairns State H** | **22.35** | **271** | P | **P** | **19 34 09.3** | **+1.8** |
| **MRZ** | **Mangatainoka R** | **22.39** | **167** | | **P** | **19 34 08.7** | **+1.0** |
| **WOLH** | **Wollongong Har** | **22.44** | **223** | P | **P** | **19 34 10.4** | **+2.2** |
| **BFZ** | **Birch Farm** | **22.56** | **166** | P | **P** | **19 34 10.4** | **+1.2** |
| **BFZ** | **Birch Farm** | **22.56** | **166** | P | **P** | **19 34 10.3** | **+1.1** |
| **TCW** | **Tory Channel** | **22.68** | **170** | P | **P** | **19 34 12.4** | **+2.2** |
| **AUDCS** | **Dubbo College** | **22.75** | **230** | P | **P** | **19 34 13.0** | **+2.0** |
| **TUWZ** | **Tuamarina** | **22.84** | **171** | P | **P** | **19 34 13.8** | **+2.1** |
| **THZ** | **Tophouse** | **23.02** | **173** | P | **P** | **19 34 15.0** | **+1.5** |
| **MSWZ** | **Moikau Station** | **23.05** | **168** | P | **P** | **19 34 14.4** | **+0.8** |
| **PLWZ** | **Palliser** | **23.20** | **168** | P | **P** | **19 34 15.8** | **+0.7** |
| **AUUHS** | **Ulladulla High** | **23.30** | **221** | P | **P** | **19 34 18.4** | **+2.4** |
| **PMG** | **Port Moresby** | **23.30** | **291** | P | **P** | **19 34 17.2** | **+1.1** |
| **PMG** | **Port Moresby** | **23.30** | **291** | P | **P** | **19 34 16.9** | **+0.7** |
| | comp=Z,119nm,0.8s,baz=88,slow=6.3,SNR=32 | | | | | | |
| | comp=Z,119nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **23.30** | **291** | *d* iP | **P** | **19 34 17.3** | **+1.1** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,134nm,0.8s | | | | | | |
| **MTSU** | **Mount Surprise** | **23.57** | **268** | P | **P** | **19 34 20.5** | **+1.8** |
| **INZ** | **Inchbonnie** | **23.84** | **176** | P | **P** | **19 34 22.5** | **+1.7** |
| INZ | | | | IAmb | IAmb | 19 34 23.6 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **LTZ** | **Lake Taylor** | **23.96** | **174** | P | **P** | **19 34 23.6** | **+1.7** |
| LTZ | | | | IAmb | IAmb | 19 34 24.5 | |
| | comp=Z,59nm,0.8s | | | | | | |
| **CNB** | **Canberra Magne** | **23.98** | **223** | P | **P** | **19 34 24.2** | **+2.0** |
| **CNB** | **Canberra Magne** | **23.98** | **223** | P | **P** | **19 34 24.3** | **+2.0** |
| | comp=Z,50nm,1.0s | | | | | | |
| **YNG** | **Young** | **24.02** | **226** | P | **P** | **19 34 24.7** | **+2.1** |
| **YNG** | **Young** | **24.02** | **226** | P | **P** | **19 34 24.5** | **+1.9** |
| | comp=Z,182nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **24.21** | **247** | P | **P** | **19 34 25.1** | **+0.7** |
| **QLP** | **Quilpie** | **24.21** | **247** | P | **P** | **19 34 25.2** | **+0.8** |
| | comp=Z,307nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **24.22** | **223** | P | **P** | **19 34 26.5** | **+2.1** |
| **CAN** | **Canberra** | **24.22** | **223** | P | **P** | **19 34 25.5** | **+1.1** |
| **CAN** | **Canberra** | **24.22** | **223** | P | **P** | **19 34 26.9** | **+2.4** |
| | comp=Z,36nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **24.22** | **223** | P | **P** | **19 34 25.5** | **+1.1** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| **OXZ** | **Oxford** | **24.48** | **175** | P | **P** | **19 34 27.5** | **+0.9** |
| **CMSA** | **Cobar Meteorol** | **24.63** | **235** | P | **P** | **19 34 29.2** | **+1.1** |
| **CMSA** | **Cobar Meteorol** | **24.63** | **235** | P | **P** | **19 34 29.3** | **+1.2** |
| | comp=Z,64nm,0.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **24.80** | **177** | P | **P** | **19 34 31.2** | **+1.7** |
| **COEN** | **Coen** | **25.40** | **277** | P | **P** | **19 34 36.3** | **+1.1** |
| **COEN** | **Coen** | **25.40** | **277** | P | **P** | **19 34 35.9** | **+0.7** |
| COEN | | | | IAmb | IAmb | 19 34 42.2 | |
| | comp=Z,86nm,1.1s | | | | | | |
| **COEN** | **Coen** | **25.40** | **277** | P | **P** | **19 34 36.1** | **+0.9** |
| | comp=Z,85nm,1.2s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **26.95** | **182** | P | **P** | **19 34 49.3** | **+0.5** |
| **INKA** | **Innaminka** | **27.50** | **246** | P | **P** | **19 34 55.0** | **+1.2** |
| **PATS** | **Pohnpei** | **27.71** | **336** | P | **P** | **19 34 55.2** | **-0.6** |
| PATS | | | | IAmb | IAmb | 19 34 56.8 | |
| | comp=Z,99nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **27.83** | **223** | P | **P** | **19 34 57.1** | **+0.4** |
| **TOO** | **Toolangi** | **27.83** | **223** | P | **P** | **19 34 57.1** | **+0.4** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,60nm,1.6s | | | | | | |
| **QIS** | **Mount Isa** | **27.86** | **262** | P | **P** | **19 34 58.1** | **+0.9** |
| **QIS** | **Mount Isa** | **27.86** | **262** | P | **P** | **19 34 58.1** | **+0.9** |
| | comp=Z,30nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **27.98** | **237** | P | **P** | **19 34 59.6** | **+1.5** |
| **STKA** | **Stephens Creek** | **27.98** | **237** | P | **P** | **19 34 59.5** | **+1.4** |
| **STKA** | **Stephens Creek** | **27.98** | **237** | P | **P** | **19 34 59.6** | **+1.5** |
| | comp=Z,11nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **27.98** | **237** | P | **P** | **19 34 59.2** | **+1.1** |
| | comp=Z,31nm,0.6s,baz=75,slow=9.2,SNR=67 | | | | | | |
| STKA | | | | PcP | **PcP** | **19 38 08.3** | **+0.5** |
| | comp=Z,35nm,0.8s,baz=55,slow=2.3,SNR=12 | | | | | | |
| | comp=Z,31nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **27.98** | **237** | *d* iP | **P** | **19 34 59.0** | **+0.9** |
| **TAU** | **Tasmania Unive** | **30.24** | **213** | P | **P** | **19 35 18.4** | **+0.5** |
| **TAU** | **Tasmania Unive** | **30.24** | **213** | P | **P** | **19 35 18.4** | **+0.5** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,316nm,1.9s | | | | | | |
| **LCRK** | **Leigh Creek** | **30.29** | **242** | P | **P** | **19 35 19.3** | **+0.8** |
| **TABU** | **Tabubil** | **30.43** | **293** | P | **P** | **19 35 21.4** | **+1.5** |
| **HTT** | **Hallett** | **30.63** | **236** | P | **P** | **19 35 22.8** | **+1.2** |
| | comp=Z,39nm,0.8s | | | | | | |
| **WHYH** | **Whyalla** | **31.57** | **237** | P | **P** | **19 35 31.1** | **+1.4** |
| **OOD** | **Oodnadatta** | **31.91** | **248** | P | **P** | **19 35 33.9** | **+1.2** |
| **WR0** | **Warramunga Arr** | **32.64** | **262** | P | **P** | **19 35 38.4** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 19 35 39.6 | |
| | comp=Z,63nm,1.1s | | | | | | |
| **GENI** | **Genyem** | **32.68** | **296** | P | **P** | **19 35 41.0** | **+1.4** |
| **GENI** | **Genyem** | **32.68** | **296** | P | **P** | **19 35 40.7** | **+1.1** |
| **BBOO** | **Buckleboo** | **32.71** | **238** | P | **P** | **19 35 40.4** | **+0.7** |
| **BBOO** | **Buckleboo** | **32.71** | **238** | P | **P** | **19 35 40.6** | **+0.9** |
| | comp=Z,63nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.79** | **263** | P | **P** | **19 35 39.6** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 19 35 41.0 | |
| | comp=Z,68nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.82** | **262** | P | **P** | **19 35 39.9** | **-0.9** |
| **WRAB** | **Tennant Creek** | **32.82** | **262** | P | **P** | **19 35 40.0** | **-0.8** |
| WRAB | | | | IAmb | IAmb | 19 35 41.2 | |
| | comp=Z,67nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **32.82** | **262** | *d* iP | **P** | **19 35 40.0** | **-0.8** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,56nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.83** | **262** | P | **P** | **19 35 40.1** | **-0.8** |
| **WRA** | **Warramunga Arr** | **32.83** | **262** | P | **P** | **19 35 39.7** | **-1.2** |
| | comp=Z,32nm,0.6s,baz=81,slow=6.2,SNR=216 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 38 20.9** | **+0.1** |
| | comp=Z,12nm,0.7s,baz=95,slow=3.3,SNR=11 | | | | | | |
| WRA | | | | S | **S** | **19 40 38.5** | **-4.3** |
| | comp=Z,22nm,1.1s,baz=91,slow=14,SNR=21 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 41 46.5** | **+1.3** |
| | comp=Z,6.5nm,1.0s,baz=91,slow=3.8,SNR=6.6 | | | | | | |
| WRA | | | | PKiKP | **PKiKP** | **19 45 45.7** | **-1.4** |
| | comp=Z,3.0nm,0.9s,baz=343,slow=0.2,SNR=18 | | | | | | |
| | comp=Z,32nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.83** | **262** | *i* P | **P** | **19 35 40.0** | **-0.8** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,17nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **33.15** | **255** | P | **P** | **19 35 43.6** | **0.0** |
| **AS31** | **Alice Springs** | **33.15** | **255** | P | **P** | **19 35 43.9** | **+0.3** |
| | comp=Z,167nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **33.15** | **255** | P | **P** | **19 35 44.3** | **+0.7** |
| **ASAR** | **Alice Springs** | **33.15** | **255** | P | **P** | **19 35 43.9** | **+0.2** |
| | comp=Z,228nm,0.5s,baz=82,slow=8.8,SNR=21 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 38 21.2** | **-0.5** |
| | comp=Z,9.1nm,0.8s,baz=86,slow=1.9,SNR=9.3 | | | | | | |
| ASAR | | | | S | **S** | **19 40 45.0** | **-2.7** |
| | comp=Z,20nm,0.8s,baz=81,slow=18,SNR=20 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 41 47.2** | **+1.0** |
| | comp=Z,4.0nm,0.9s,baz=104,slow=3.9,SNR=5.4 | | | | | | |
| ASAR | | | | PKiKP | **PKiKP** | **19 45 46.0** | **-1.3** |
| | comp=Z,1.5nm,0.8s,baz=94,slow=1.4,SNR=13 | | | | | | |
| **MULG** | **Mulgathing** | **33.75** | **244** | P | **P** | **19 35 49.5** | **+0.8** |
| **KDU** | **Kakadu** | **35.80** | **274** | P | **P** | **19 36 06.6** | **+0.3** |
| **KDU** | **Kakadu** | **35.80** | **274** | P | **P** | **19 36 06.5** | **+0.1** |
| | comp=Z,53nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **37.02** | **274** | P | **P** | **19 36 16.9** | **+0.2** |
| **MTN** | **Manton Dam** | **37.02** | **274** | P | **P** | **19 36 16.8** | **+0.1** |
| MTN | | | | IAmb | IAmb | 19 36 17.8 | |
| | comp=Z,83nm,0.7s | | | | | | |
| MTN | | | | | **PcP** | **19 38 33.6** | **+0.5** |
| MTN | | | | | **S** | **19 41 45.4** | **-1.5** |
| **MTN** | **Manton Dam** | **37.02** | **274** | P | **P** | **19 36 17.2** | **+0.4** |
| | comp=Z,119nm,0.7s | | | | | | |
| **DRS** | **Darwin Rock St** | **37.35** | **274** | P | **P** | **19 36 19.9** | **+0.5** |
| **WAKE** | **Wake Island** | **38.01** | **356** | P | **P** | **19 36 25.0** | **+0.1** |
| **WAKE** | **Wake Island** | **38.01** | **356** | P | **P** | **19 36 23.5** | **-1.4** |
| WAKE | | | | IAmb | IAmb | 19 36 25.6 | |
| | comp=Z,158nm,1.1s | | | | | | |
| **WRKA** | **Warakurna** | **38.29** | **253** | P | **P** | **19 36 27.3** | **0.0** |
| **WRKA** | **Warakurna** | **38.29** | **253** | P | **P** | **19 36 27.6** | **+0.3** |
| | comp=Z,94nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **38.66** | **268** | P | **P** | **19 36 30.5** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 19 36 31.2 | |
| | comp=Z,68nm,0.6s | | | | | | |
| KNRA | | | | | **S** | **19 42 08.5** | **-3.0** |
| **KNRA** | **Kununurra** | **38.66** | **268** | P | **P** | **19 36 30.4** | **+0.1** |
| | comp=Z,113nm,0.7s | | | | | | |
| **TBI** | **Tubuai** | **38.76** | **104** | *e*P | P | 19 36 36.4 | +5.3 |
| | comp=Z,587nm,33.8s | | | | | | |
| TBI | | | | *e*S | **S** | **19 42 17.0** | **+4.2** |
| | comp=Z,1μm,40.8s | | | | | | |
| TBI | | | | *e*SS | **SS** | **19 45 11.7** | **-1.1** |
| | comp=Z,1μm,29.5s | | | | | | |
| TBI | | | | *e*LR | LR | 19 47 30.1 | |
| | comp=Z,785nm,29.8s | | | | | | |
| **XMAS** | **Kiritimati** | **38.86** | **61** | P | **P** | **19 36 31.0** | **-1.1** |
| XMAS | | | | IAmb | IAmb | 19 36 33.7 | |
| | comp=Z,104nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **38.94** | **244** | P | **P** | **19 36 32.8** | **+0.2** |
| **FORT** | **Forrest** | **38.94** | **244** | P | **P** | **19 36 32.5** | **-0.1** |
| | comp=Z,60nm,0.9s | | | | | | |
| **PPT2** | **Papeete2** | **39.14** | **95** | *e*P | **P** | **19 36 34.6** | **+0.1** |
| | comp=Z,95nm,27.5s | | | | | | |
| PPT2 | | | | *e*S | **S** | **19 42 17.7** | **-1.2** |
| | comp=Z,201nm,30.2s | | | | | | |
| PPT2 | | | | *e*SS | **SS** | **19 45 24.4** | **+3.6** |
| | comp=Z,211nm,24.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 19 47 35.4 | |
| | comp=Z,96nm,25.2s |

**JOW Kunigami 60.33 318** P **P** 19 39 14.4 +0.6
JOW IAmb IAmb 19 39 16.0
comp=Z,75nm,0.9s
**CASY Casey 60.42 203** P **P** 19 39 14.3 +0.5
CASY **pP** 19 40 01.7 +2.0
**CASY Casey 60.42 203** P **P** 19 39 14.4 +0.5
CASY PcP **PcP** 19 39 56.0 -0.5
**CCD Concordia, Ant 61.23 192** ⇑P **P** 19 39 19.9 +0.3
CCD PcP **PcP** 19 40 00.5 +0.4
**INU Inuyama 61.97 330** P **P** 19 39 25.5 +0.9
**INU Inuyama 61.97 330** P **P** 19 39 25.1 +0.5
INU IAmb IAmb 19 39 27.1
comp=Z,46nm,1.1s
**INU Inuyama 61.97 330** P **P** 19 39 25.3 +0.7
INU PcP **PcP** 19 40 04.0 +0.8
**JGF Kuroka 62.02 331** P **P** 19 39 25.3 +0.3
**JGF Kuroka 62.02 331** IAmb IAmb 19 39 34.0
comp=Z,136nm,1.7s
**JMN Monobe 62.21 327** P **P** 19 39 27.3 +1.0
**JMN Monobe 62.21 327** IAmb IAmb 19 39 28.6
comp=Z,100nm,1.1s
**MJAR Matsushiro Arr 62.41 332** P **P** 19 39 27.3 -0.2
comp=Z,31nm,0.9s,baz=172,slow=8.3,SNR=76
MJAR PcP **PcP** 19 40 05.8 +0.8
comp=Z,8.2nm,0.8s,baz=147,slow=4.3,SNR=4.1
comp=Z,31nm,0.9s
**MAJO Matsushiro 62.41 332** P **P** 19 39 27.9 +0.3
**MAJO Matsushiro 62.41 332** P **P** 19 39 27.7 +0.2
MAJO IAmb IAmb 19 39 28.9
comp=Z,88nm,1.2s
**MAJO Matsushiro 62.41 332***c iP* **P** 19 39 27.6 0.0
MAJO pmax pmax
comp=Z,80nm,1.3s
**MAJO Matsushiro 62.41 332** P **P** 19 39 27.8 +0.3
MAJO PcP **PcP** 19 40 06.3 +1.3
MAJO pP **pP** 19 40 13.1 -2.0
**MJB9 Matsu-Tunnel 62.42 332** P **P** 19 39 27.8 +0.2
MJB9 IAmb IAmb 19 39 28.9
comp=Z,85nm,1.2s
**JMM Marumori 62.44 335** P **P** 19 39 28.9 +1.2
**JMM Marumori 62.44 335** IAmb IAmb 19 39 29.8
comp=Z,71nm,1.0s
**TWGBT Beinan 62.65 309** P **P** 19 39 30.2 +0.8
**YULB Yu-li 62.84 310** P **P** 19 39 31.0 +0.4
**YULB Yu-li 62.84 310** P **P** 19 39 30.7 +0.1
**NACB Ninganchiao 63.10 311** P **P** 19 39 32.8 +0.5
**NACB Ninganchiao 63.10 311** IAmb IAmb 19 39 33.6
comp=Z,61nm,0.9s
**TPUB Ta-pu 63.27 310** P **P** 19 39 33.1 -0.4
**TPUB Ta-pu 63.27 310** P **P** 19 39 33.0 -0.4
**SSLB Suanglung 63.33 310** P **P** 19 39 33.6 -0.3
**SSLB Suanglung 63.33 310** P **P** 19 39 33.2 -0.7
SSLB IAmb IAmb 19 39 34.4
comp=Z,59nm,0.8s
**JNU Nakatsue 63.34 324** P **P** 19 39 34.5 +0.7
**JNU Nakatsue 63.34 324** P **P** 19 39 34.1 +0.3
JNU IAmb IAmb 19 39 35.3
comp=Z,69nm,0.8s
**YHNB Yeheng 63.57 311** P **P** 19 39 36.2 +0.7
**YHNB Yeheng 63.57 311** IAmb IAmb 19 39 37.0
comp=Z,72nm,0.8s
**JHS Saijyo 63.59 327** P **P** 19 39 34.3 -1.1
**JSD Sado 63.64 333** P **P** 19 39 36.6 +1.1
**JSD Sado 63.64 333** P **P** 19 39 36.2 +0.7
**TATO Taipei 63.68 312** P **P** 19 39 36.5 +0.5
**JTM Tenmabayashi 64.86 337** P **P** 19 39 43.6 +0.2
**ERM Erimo 65.19 339** P **P** 19 39 47.4 +1.9
**JKA Kamikawa-asahi 67.25 340** P **P** 19 40 00.1 +1.5
**ASAJ Asahikawa 67.25 340** P **P** 19 40 00.1 +1.5
ASAJ pmax pmax
comp=Z,135nm,0.9s
**TJN Taejon 67.69 324** P **P** 19 40 02.7 +1.2
**TJN Taejon 67.69 324***deP* **P** 19 40 02.7 +1.2
**KSRS Korea Array 68.18 326** P **P** 19 40 04.1 -0.4
comp=Z,6.9nm,0.9s,baz=144,slow=5.5,SNR=16
comp=Z,6.9nm,0.9s
**KSAR Wonju Array Be 68.19 326** P **P** 19 40 05.4 +0.8
**KSAR Wonju Array Be 68.19 326** P **P** 19 40 05.4 +0.8
**INCN Inchon 68.90 325** P **P** 19 40 10.1 +1.1
**INCN Inchon 68.90 325** P **P** 19 40 09.8 +0.8
INCN IAmb IAmb 19 40 11.2
comp=Z,145nm,1.4s
**INCN Inchon 68.90 325** P **P** 19 40 09.8 +0.8
INCN pmax pmax
comp=Z,145nm,1.4s
**INCN Inchon 68.90 325** P **P** 19 40 10.5 +1.5
**QIZ Qiongzhong 69.35 300** P **P** 19 40 13.0 +0.9
**YSS Yuzh-Sakhalins 69.73 341** P **P** 19 40 15.6 +1.8
**YSS Yuzh-Sakhalins 69.73 341** P **P** 19 40 14.8 +1.0
YSS IAmb IAmb 19 40 16.8
comp=Z,104nm,0.9s
**YSS Yuzh-Sakhalins 69.73 341** *eP* **P** 19 40 15.1 +1.3
YSS *eS* **S** 19 49 00.9 -4.6
YSS pmax pmax
comp=Z,200nm,1.2s
YSS pmax pmax
comp=Z,110nm,1.0s
**YSS Yuzh-Sakhalins 69.73 341** P **P** 19 40 15.7 +1.8
YSS PcP **PcP** 19 40 36.4 +1.2
**NJ2 Nanjing 69.91 316** *eP* **P** 19 40 16.4 +1.1
NJ2 pmax pmax
comp=Z,30nm,1.0s
**SKR Severo-Kuril's 70.21 351***deP* **P** 19 40 17.8 +1.1
**MSHR Mys Shultsa 70.48 331**⇑*eP* **P** 19 40 19.9 +1.4
MSHR pmax pmax
comp=Z,43nm,1.2s
**AMKA Amchitka 70.52 7** P **P** 19 40 18.8 +0.2
**PSTR Posyet 70.70 331***d iP* **P** 19 40 21.3 +1.5
**QSPA South Pole Qui 71.16 180** P **P** 19 40 23.0 +0.5
QSPA IAmb IAmb 19 40 24.3
comp=Z,56nm,1.0s
**QSPA South Pole Qui 71.16 180** P **P** 19 40 22.7 +0.2
comp=Z,41nm,0.9s,baz=33,slow=1.9,SNR=102
comp=Z,41nm,0.9s
**QSPA South Pole Qui 71.16 180** P **P** 19 40 22.9 +0.3
QSPA PcP **PcP** 19 40 42.2 +0.9
QSPA pP **pP** 19 41 10.0 -1.1
**USA0B Ussuriysk Arra 71.39 333** IAmb IAmb 19 40 26.4
comp=Z,65nm,1.1s
**USRK Ussuriysk Ar. 71.39 333** P **P** 19 40 24.4 +0.5
**USRK Ussuriysk Ar. 71.39 333** P **P** 19 40 25.1 +1.2
comp=Z,26nm,0.8s,baz=144,slow=4.4,SNR=33
comp=Z,26nm,0.8s
**KIWB Kanaga Island 71.45 9** P **P** 19 40 24.6 +0.6
**GSTR Great Sitkin T 71.85 10** P **P** 19 40 27.0 +0.4
**WHN Wuhan 72.06 312** ⇑P **P** 19 40 29.1 +0.8
WHN pmax pmax
comp=Z,130nm,0.9s
**PET Petropavlovsk 72.19 353** P **P** 19 40 29.4 +0.9
**PET Petropavlovsk 72.19 353** P **P** 19 40 29.3 +0.9
**PET Petropavlovsk 72.19 353** *eP* **P** 19 40 29.3 +0.9
PET *e**PP **pwP** 19 41 22.9 +3.2
PET *eS* **S** 19 49 34.9 +1.4
PET pmax pmax
comp=Z,123nm,1.5s
PET pmax pmax
comp=Z,100nm,11.6s
PET MLR MLR
comp=Z,100nm,15.0s
**RPSI Rantau Prapat 72.26 279** P **P** 19 40 29.2 -0.6
**PSI Prapat 72.30 279** P **P** 19 40 29.9 -0.3
**PSI Prapat 72.30 279** P **P** 19 40 29.3 -0.9
PSI pmax pmax
comp=Z,30nm,1.1s
**PEA0B Petropavlovsk- 72.38 353** P **P** 19 40 30.8 +1.1
**PEA0B Petropavlovsk- 72.38 353***c iP* **P** 19 40 30.9 +1.3
**PETK Petropavlovsk- 72.38 353** P **P** 19 40 30.3 +0.7
**PETK Petropavlovsk- 72.38 353** P **P** 19 40 29.8 +0.1
comp=Z,130nm,0.9s,baz=143,slow=6.2,SNR=108
comp=Z,130nm,0.9s
**PETK Petropavlovsk- 72.38 353** P **P** 19 40 30.3 +0.7
**DL2 Dalian 72.70 323** P **P** 19 40 33.0 +1.2
DL2 pmax pmax
comp=Z,180nm,0.9s
**MDJ Mudanjiang 72.78 332** P **P** 19 40 33.3 +1.1
**MDJ Mudanjiang 72.78 332** P **P** 19 40 33.3 +1.1
MDJ pmax pmax
comp=Z,76nm,1.1s
MDJ pmax pmax
comp=Z,330nm,4.5s
**MDJ Mudanjiang 72.78 332** IAmb IAmb 19 40 34.6
comp=Z,58nm,0.9s
**GSI Gunungsitoli 73.04 277** P **P** 19 40 34.8 +0.3
GSI IAmb IAmb 19 40 36.2
comp=Z,46nm,1.0s
**TYV Tymovskoe 73.26 343** *eP* **P** 19 40 36.2 +1.4
TYV pmax pmax
comp=Z,26nm,0.9s
TYV pmax pmax
comp=Z,100nm,5.1s
**TIA Tai'an 73.64 318** P **P** 19 40 37.3 -0.1
TIA pmax pmax
comp=Z,67nm,0.9s
**NIKH Nikolski High 74.05 14** P **P** 19 40 39.3 0.0
**NIKH Nikolski High 74.05 14** P **P** 19 40 39.4 0.0
baz=202,SNR=21
**CN2 Changchun 74.12 329***i*P **P** 19 40 41.0 +1.0
CN2 pmax pmax
comp=Z,80nm,0.8s
**BNX BinXian 74.64 331** ⇑P **P** 19 40 43.3 +0.4
BNX pmax pmax
comp=Z,59nm,0.8s
**GRNR Gornyy 75.10 339**⇑*iP* **P** 19 40 47.5 +2.0
GRNR pmax pmax
comp=E,20nm,1.0s
GRNR pmax pmax
comp=N,20nm,1.2s
GRNR pmax pmax
comp=Z,80nm,1.0s
**ENH Enshi 75.40 309** P **P** 19 40 47.8 +0.1
**UNV Unalaska Valle 75.40 15** P **P** 19 40 46.8 -0.3
**UNV Unalaska Valle 75.40 15** P **P** 19 40 46.7 -0.3
baz=204,SNR=13
**KLR Kul'dur 75.52 336** P **P** 19 40 49.0 +1.1
comp=Z,33nm,1.0s,baz=129,slow=3.6,SNR=73
comp=Z,33nm,1.0s
**KLR Kul'dur 75.52 336***c iP* **P** 19 40 49.4 +1.5
KLR pmax pmax
comp=Z,67nm,1.1s
**LYN LuoYang 75.68 315**⇑*iP* **P** 19 40 50.4 +1.3
LYN pP pP 19 41 39.8 +1.3
LYN pmax pmax
comp=Z,160nm,0.8s
LYN pmax pmax
comp=Z,130nm,5.0s
**HNS HongShan 75.89 318** ⇑P **P** 19 40 51.6 +1.3
HNS PcP **PcP** 19 41 06.9 +5.1
HNS sP **sP** 19 41 58.9 -2.7
HNS pmax pmax
comp=Z,41nm,1.1s
**SRDT SRDT 76.47 290** P **P** 19 40 55.5 +1.5
**BJT Baijiatuan 76.61 321** P **P** 19 40 55.7 +1.4
**BJT Baijiatuan 76.61 321** IAmb IAmb 19 40 56.4
comp=Z,43nm,0.9s
**BJI Beijing 76.62 321** P **P** 19 40 55.4 +1.1
BJI pmax pmax
comp=Z,27nm,0.8s
BJI pmax pmax
comp=Z,97nm,5.1s
**FALS False Pass 77.09 16** P **P** 19 40 55.9 -0.6
baz=206
**P08K Saint George I 77.30 12** P **P** 19 40 57.8 +0.1
baz=201
**SPIA Saint Paul Isl 77.71 11** P **P** 19 41 00.2 +0.3
baz=200
**XAN Xi'an 77.83 312** ⇑P **P** 19 41 02.4 +1.2
XAN pmax pmax
comp=Z,98nm,0.9s
**KMI Kunming 78.03 302** ⇑P **P** 19 41 04.8 +2.0
KMI pmax pmax
comp=Z,89nm,0.8s
**HEH HeiHe 78.07 334** *eP* **P** 19 41 02.1 0.0
HEH pmax pmax
comp=Z,37nm,1.2s
**CNBA Chernabura Isl 78.11 18** IAmb IAmb 19 41 03.2
comp=Z,77nm,1.1s
**CHNA Chnabura Isl 78.12 18** P **P** 19 41 02.0 -0.2
baz=210,SNR=6.2
**S12K Black Hills 78.20 16** P **P** 19 41 02.4 -0.3
baz=208,SNR=16
**CM31 Chiang Mai Arr 78.30 294** P **P** 19 41 05.0 +0.9
**CMAR Chiang Mai Arr 78.30 294** P **P** 19 41 05.5 +1.4
**CMAR Chiang Mai Arr 78.30 294** P **P** 19 41 05.7 +1.5
comp=Z,15nm,0.8s,baz=130,slow=4.2,SNR=77
CMAR PKiKP **PKiKP** 19 46 39.2 -0.1
comp=Z,0.6nm,0.3s,baz=229,slow=1.7,SNR=4.9
CMAR PKKPbc **PKKPbc** 19 59 59.9 -0.7
comp=Z,0.6nm,0.6s,baz=294,slow=4.5,SNR=4.3
comp=Z,15nm,0.8s
**CMAR Chiang Mai Arr 78.30 294** *i* P **P** 19 41 05.9 +1.8
CMAR pmax pmax
comp=Z,16nm,0.8s
**SDPT Sand Point 78.32 17** P **P** 19 41 02.9 -0.4
SDPT IAmb IAmb 19 41 03.9
comp=Z,72nm,0.8s
**SDPT Sand Point 78.32 17** P **P** 19 41 03.1 -0.3
baz=209
**MAW Mawson 78.73 202** P **P** 19 41 06.5 +0.9
comp=Z,22nm,0.7s,baz=115,slow=6.2,SNR=46
comp=Z,22nm,0.7s
**XLT XiLinHaoTe 79.12 324**⇑*iP* **P** 19 41 09.1 +0.9
XLT PcP **PcP** 19 41 17.3 +1.5
XLT pP pP 19 41 57.9 +0.1
XLT sP sP 19 42 19.8 +0.1
XLT pmax pmax
comp=Z,47nm,0.7s
XLT pmax pmax
comp=Z,160nm,4.6s
**S14K Fog Glacier 79.39 17** P **P** 19 41 09.6 +0.3
baz=210,SNR=12
**PZH PanZhiHua 79.46 303** P **P** 19 41 11.3 +0.9
PZH S **S** 19 50 54.8 +0.2
PZH pmax pmax
comp=Z,40nm,1.0s
PZH pmax pmax
comp=Z,160nm,4.5s
**MA2 Magadan 79.61 351** P **P** 19 41 10.6 +0.3
**MA2 Magadan 79.61 351** P **P** 19 41 10.5 +0.1
MA2 IAmb IAmb 19 41 11.5
comp=Z,51nm,1.1s
**MA2 Magadan 79.61 351***c iP* **P** 19 41 10.2 -0.1
MA2 pmax pmax
comp=Z,43nm,1.0s
**CHGN Chignik 79.72 18** P **P** 19 41 10.7 -0.3
CHGN IAmb IAmb 19 41 15.0
comp=Z,70nm,0.8s
**CHGN Chignik 79.72 18** P **P** 19 41 10.9 0.0
baz=211,SNR=8.6
**HHC Hu-ho-hao-te 79.91 319** *eP* **P** 19 41 14.1 +1.6
HHC S **S** 19 51 01.6 +2.9
HHC sS sS 19 52 23.9 -0.2
HHC pmax pmax
comp=Z,54nm,0.8s
HHC pmax pmax
comp=Z,220nm,5.0s
**CD2 Chengdu 79.97 307** P **P** 19 41 14.1 +1.1
CD2 pmax pmax
comp=Z,30nm,0.7s
**CHIR Chirikof Islan 80.16 19** P **P** 19 41 13.7 +0.4
baz=214
**BTO Baotou 80.73 319** *eP* **P** 19 41 18.8 +1.9
BTO pP **pP** 19 42 04.9 -1.8
BTO PP **PP** 19 44 29.4 +5.2
BTO S **S** 19 51 07.0 -0.2
BTO pmax pmax
comp=Z,36nm,0.7s
BTO pmax pmax
comp=Z,190nm,4.8s
BTO LR LR
comp=Z,330nm,4.3s
BTO LR LR
comp=Z,210nm,4.6s
BTO LR LR
comp=Z,150nm,8.4s
**HIA Hailar 80.78 330** P **P** 19 41 17.7 +0.9
**ZEA Zeya 80.81 336** *eP* **P** 19 41 18.1 +1.3
ZEA pmax pmax
comp=Z,40nm,0.9s
**R16K Pilot Point 81.05 17** P **P** 19 41 18.4 +0.4
baz=212
**SII Sitkinak Islan 81.22 20** P **P** 19 41 20.4 +1.4
**SII Sitkinak Islan 81.22 20** P **P** 19 41 19.4 +0.5
**SII Sitkinak Islan 81.22 20** P **P** 19 41 19.8 +0.9
baz=215,SNR=12
**TNCH TengChong 81.42 300**⇑*iP* **P** 19 41 22.0 +1.1
TNCH pP pP 19 42 09.5 -1.6
TNCH sS sS 19 52 38.5 -1.4
TNCH pmax pmax
comp=Z,29nm,0.9s
TNCH pmax pmax
comp=Z,110nm,5.0s
**R17L Mt. Peulik Vol 81.45 18** P **P** 19 41 20.9 +0.7
baz=213,SNR=25
**M11K Mekoryuk 81.48 12** P **P** 19 41 21.8 +1.6
baz=203,SNR=6.8
**O14K Tigyukauivet M 81.54 15** IAmb IAmb 19 41 22.9
comp=Z,64nm,0.8s
**O14K Tigyukauivet M 81.54 15** P **P** 19 41 21.1 +0.6
baz=208
**O15K Ungalikthiuk R 81.83 16** P **P** 19 41 22.2 +0.1
baz=209,SNR=7.9
**R18K Karluk 81.97 19** P **P** 19 41 23.3 +0.6
baz=214
**N14K Kuskokwak Cree 82.04 14** P **P** 19 41 24.1 +1.0
baz=208,SNR=23
**OHAK Old Harbor 82.05 20** P **P** 19 41 24.1 +0.9
**OHAK Old Harbor 82.05 20** IAmb IAmb 19 41 26.1
comp=Z,83nm,0.8s
**OHAK Old Harbor 82.05 20** P **P** 19 41 24.2 +1.0
baz=216,SNR=46
**M13K Dall Lake 82.10 13** IAmb IAmb 19 41 25.8
comp=Z,45nm,0.8s
**M13K Dall Lake 82.10 13** P **P** 19 41 24.9 +1.5
baz=206
**Q17K Contact Creek 82.12 18** P **P** 19 41 24.1 +0.4
baz=213,SNR=69
**P16K Nushagak River 82.19 16** P **P** 19 41 24.1 +0.2
baz=211
**ACHA Angle Creek He 82.24 18** IAmb IAmb 19 41 26.5
comp=Z,51nm,0.9s
**LZH Lanzhou 82.44 312** ⇑P **P** 19 41 27.8 +1.8
LZH pmax pmax
comp=Z,76nm,1.4s
**BELA Belgrano 2 82.45 175** IAmb IAmb 19 41 25.4
comp=Z,45nm,0.6s
**SEY Seymchan 82.61 352***ce*P **P** 19 41 26.4 +0.4
SEY pmax pmax
comp=Z,47nm,1.4s
**N15K Kwethluk River 82.64 15** P **P** 19 41 27.7 +1.4
baz=209,SNR=26
**O16K Kokwok River B 82.64 16** P **P** 19 41 25.8 -0.4
baz=211,SNR=15
**Q18K Katmai Hardscr 82.70 18** P **P** 19 41 27.1 +0.3
baz=214,SNR=112
**M14K Bethel 82.71 14** IAmb IAmb 19 41 28.6
comp=Z,70nm,0.8s
**M14K Bethel 82.71 14** P **P** 19 41 27.6 +1.1
baz=207
**KDAK Kodiak Island 82.73 20** P **P** 19 41 27.4 +0.8
**KDAK Kodiak Island 82.73 20** P **P** 19 41 27.6 +0.9
baz=216
**KDAK Kodiak Island 82.73 20** P **P** 19 41 27.5 +0.8
KDAK pmax pmax
comp=Z,145nm,1.0s
**P17K Kvichak River 82.75 17** P **P** 19 41 26.8 0.0
baz=213
**M15K Kasigluk River 82.95 14** P **P** 19 41 28.8 +1.0
baz=209,SNR=25
**O17K Koliganek Bris 83.06 16** P **P** 19 41 28.6 +0.2
baz=212
**L14K Kuka Creek 83.08 13** IAmb IAmb 19 41 30.7
comp=Z,58nm,0.8s
**L14K Kuka Creek 83.08 13** P **P** 19 41 29.5 +1.1
baz=207,SNR=25
**K13K Kusilvak Mount 83.20 12** IAmb IAmb 19 41 31.6
comp=Z,59nm,1.1s
**K13K Kusilvak Mount 83.20 12** P **P** 19 41 30.5 +1.4
baz=205
**N16K Nishlik Lake 83.23 15** P **P** 19 41 30.9 +1.6
baz=210
**P18K Big Mountain, 83.25 17** P **P** 19 41 29.7 +0.2
baz=214,SNR=140
**Q19K Cape Douglas, 83.33 18** P **P** 19 41 30.1 +0.3
**Q19K Cape Douglas, 83.33 18** P **P** 19 41 30.3 +0.4
baz=215,SNR=53
**Q20K Shuyak Island 83.45 19** P **P** 19 41 31.4 +1.0
baz=216,SNR=34
**L15K Ungalak Mounta 83.64 14** P **P** 19 41 32.1 +0.8
baz=208,SNR=17
**O18K Koktuh Hills 83.65 17** P **P** 19 41 31.6 +0.2
baz=214,SNR=53
**M16K Timber Creek 83.66 15** P **P** 19 41 33.3 +1.9
baz=210
**N17K Nushagak Hills 83.68 16** IAmb IAmb 19 41 34.7
comp=Z,106nm,0.9s
**N17K Nushagak Hills 83.68 16** P **P** 19 41 32.6 +1.1
baz=212,SNR=50
**GAMB Gambell 83.73 8** P **P** 19 41 32.9 +1.2
baz=198
**P19K Oil Pt 84.05 18** P **P** 19 41 34.2 +0.7
baz=215,SNR=54
**L16K Owhat River 84.13 14** P **P** 19 41 35.2 +1.4
baz=210,SNR=78
**N18K Kilae Creek 84.15 16** IAmb IAmb 19 41 35.9
comp=Z,75nm,0.8s
**N18K Kilae Creek 84.15 16** P **P** 19 41 34.5 +0.6
baz=213,SNR=52
**J14K Nanvaranak Lak 84.16 12** P **P** 19 41 34.8 +0.9
J14K IAmb IAmb 19 41 36.6
comp=Z,123nm,1.2s
**J14K Nanvaranak Lak 84.16 12** P **P** 19 41 35.4 +1.5
baz=206
**K15K Wolf Cnek Mou 84.18 13** P **P** 19 41 35.7 +1.7
baz=208
**SMAI San Martin Ant 84.18 162** IAmb IAmb 19 41 35.9
comp=Z,76nm,0.8s
**M17K Holitna River 84.36 15** P **P** 19 41 36.8 +1.8
baz=212,SNR=68
**HOM Homer 84.53 19** P **P** 19 41 36.3 +0.5
baz=217,SNR=11
**O20K Slope Mountain 84.58 18** P **P** 19 41 35.8 -0.4
baz=216,SNR=12
**N19K Bonanza Creek 84.64 17** IAmb IAmb 19 41 37.8
comp=Z,52nm,0.8s
**N19K Bonanza Creek 84.64 17** P **P** 19 41 36.0 -0.5
baz=214,SNR=37
**L17K Donlin 84.78 15** P **P** 19 41 38.8 +1.8
baz=211
**BRLK Bradley Lake 84.85 19** P **P** 19 41 37.1 -0.4
BRLK IAmb IAmb 19 41 39.9
comp=Z,94nm,1.0s
**RSO Redoubt South 84.85 18** P **P** 19 41 36.8 -0.9
**M18K Stony River 84.85 16** P **P** 19 41 38.7 +1.3
baz=213,SNR=165
**BRSE Bradley Lake S 84.87 19** P **P** 19 41 37.6 0.0
baz=218,SNR=24
**L18K Granite Mounta 85.25 15** IAmb IAmb 19 41 42.1
comp=Z,183nm,1.7s
**L18K Granite Mounta 85.25 15** P **P** 19 41 40.5 +1.2
baz=212,SNR=33
**J16K Anvik River 85.25 13** P **P** 19 41 40.8 +1.4
baz=208,SNR=41
**MCCM Marconi Confer 85.28 47** P **P** 19 41 40.8 +0.7
MCCM IAmb IAmb 19 41 41.8
comp=Z,41nm,0.8s
**K17K Iditarod 85.28 14** P **P** 19 41 40.8 +1.3
baz=211
**ANM Nome 85.47 11** P **P** 19 41 42.0 +1.6
baz=204
**KMPM Mount Pierce 85.53 45** P **P** 19 41 42.6 +1.2
**KCPM Cahto Peak 85.53 46** P **P** 19 41 42.4 +0.9
**HOPS Hopland Field 85.55 46** P **P** 19 41 42.6 +1.2
HOPS IAmb IAmb 19 41 44.1
comp=Z,121nm,1.4s
**CIT Chita 85.56 329** *eP* **P** 19 41 41.6 +0.4
CIT *e* 19 42 39.7
CIT pmax pmax
comp=Z,75nm,2.7s
**SEW Seward 85.56 19** P **P** 19 41 40.4 -0.5
baz=219,SNR=5.9
**CAPN Captain Cook N 85.56 18** P **P** 19 41 40.7 -0.2
baz=217
**M19K Big River Lodg 85.57 16** P **P** 19 41 41.3 +0.3
baz=214,SNR=26
**N20K Mount Spurr 85.60 18** P **P** 19 41 40.4 -0.9
baz=216
**SAO San Andreas Ge 85.64 49** IAmb IAmb 19 41 44.6
comp=Z,52nm,1.1s
**L19K White Mountain 85.68 16** IAmb IAmb 19 41 45.3
comp=Z,83nm,0.9s
**L19K White Mountain 85.68 16** P **P** 19 41 42.3 +0.7
baz=214,SNR=60
**J17K VABM Dome 85.69 14** P **P** 19 41 42.4 +0.9
J17K IAmb IAmb 19 41 44.4
comp=Z,88nm,1.0s
**J17K VABM Dome 85.69 14** P **P** 19 41 42.6 +1.0
baz=210,SNR=24
**KMRM Mail Ridge 85.71 45** P **P** 19 41 43.2 +1.0

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| I17K | **Unalakleet** baz=208 | 85.77 | 13 | P | | **P** | | 19 41 42.8 | +1.0 |
| O22K | **Cooper Landing** baz=219 | 85.77 | 19 | P | | **P** | | 19 41 41.6 | -0.3 |
| BBGB | **Big Mountain B** | 85.85 | 49 | P | | **P** | | 19 41 43.7 | +0.6 |
| BBGB | comp=Z,51nm,0.9s | | | lAmb | | lAmb | | 19 41 50.6 | |
| PMPB | **Monarch Peak** | 85.86 | 50 | P | | **P** | | 19 41 43.9 | +0.8 |
| PMPB | comp=Z,70nm,1.2s | | | lAmb | | lAmb | | 19 41 47.9 | |
| M20K | **Styx River** baz=215,SNR=12 | 85.90 | 17 | P | | **P** | | 19 41 42.8 | +0.1 |
| KRPM | **Rodgers** | 85.95 | 44 | P | | **P** | | 19 41 44.8 | +1.3 |
| KRPM | comp=Z,74nm,1.1s | | | lAmb | | lAmb | | 19 41 46.7 | |
| TNA | **Tin City** baz=202 | 85.97 | 9 | P | | **P** | | 19 41 43.8 | +0.9 |
| KHMM | **Horse Mountain** | 86.01 | 44 | P | | **P** | | 19 41 45.3 | +1.4 |
| KHMM | comp=Z,89nm,0.9s | | | lAmb | | lAmb | | 19 41 46.9 | |
| Q23K | **Middleton Isla** baz=222 | 86.06 | 21 | P | | **P** | | 19 41 43.3 | -0.1 |
| G15K | **Niukluk** baz=205 | 86.10 | 11 | P | | **P** | | 19 41 44.0 | +0.5 |
| H16K | **Elim** baz=207,SNR=6.3 | 86.12 | 12 | P | | **P** | | 19 41 44.7 | +1.1 |
| P23K | **Montague Islan** baz=221,SNR=6.5 | 86.14 | 20 | P | | **P** | | 19 41 43.2 | -0.6 |
| F14K | **Arctic Creek** baz=203 | 86.15 | 10 | P | | **P** | | 19 41 43.4 | -0.3 |
| L20K | **Farewell, AK** baz=215 | 86.19 | 16 | P | | **P** | | 19 41 44.2 | +0.2 |
| KRMB | **Red Mountain** comp=Z,98nm,1.3s | 86.21 | 44 | lAmb | | lAmb | | 19 41 47.9 | |
| SUA | **Susitna One** comp=Z,46nm,1.0s | 86.24 | 18 | lAmb | | lAmb | | 19 41 47.6 | |
| SUA | **Susitna One** baz=218,SNR=17 | 86.24 | 18 | P | | **P** | | 19 41 43.6 | -0.8 |
| RC01 | **Rabbit Creek A** baz=218,SNR=12 | 86.24 | 19 | P | | **P** | | 19 41 43.8 | -0.5 |
| J18K | **Innoko River** comp=Z,62nm,0.7s | 86.30 | 15 | lAmb | | lAmb | | 19 41 46.5 | |
| J18K | **Innoko River** baz=212 | 86.30 | 15 | P | | **P** | | 19 41 45.1 | +0.6 |
| BCW | **Bitter Crk WRg** comp=Z,61nm,0.8s | 86.31 | 51 | lAmb | | lAmb | | 19 41 50.3 | |
| KSXB | **Camp Six Broad** | 86.38 | 44 | P | | **P** | | 19 41 47.2 | +1.7 |
| KSXB | comp=Z,63nm,1.1s | | | lAmb | | lAmb | | 19 41 48.5 | |
| SKT | **Skwentna** baz=217 | 86.42 | 17 | P | | **P** | | 19 41 43.1 | -2.1 |
| ELIB | **Princess Elisa** comp=Z,12nm,0.6s | 86.47 | 190 | *d*P | | **P** | | 19 41 45.4 | -0.3 |
| PWL | **Port Wells** comp=Z,60nm,1.0s | 86.50 | 19 | lAmb | | lAmb | | 19 41 48.4 | |
| PWL | **Port Wells** baz=220,SNR=16 | 86.50 | 19 | P | | **P** | | 19 41 44.9 | -0.7 |
| YAK | **Yakutsk** | 86.52 | 343 | P | | **P** | | 19 41 45.5 | 0.0 |
| YAK | **Yakutsk** | 86.52 | 343 | *c i*P | | **P** | | 19 41 45.6 | 0.0 |
| YAK | | | | *e**PP | | **pP** | | 19 42 36.7 | +0.7 |
| YAK | | | | *e*S | | **SKSac** | | 19 51 51.9 | +0.2 |
| YAK | | | | *e*SS | | **SS** | | 19 57 52.1 | +2.2 |
| YAK | comp=Z,124nm,1.0s | | | pmax | | pmax | | | |
| YAK | comp=N,27nm,1.5s | | | pmax | | pmax | | | |
| YAK | comp=E,7.0nm,1.0s | | | pmax | | pmax | | | |
| YAK | comp=Z,113nm,3.4s | | | pmax | | pmax | | | |
| YAK | comp=N,62nm,12.7s | | | smax | | smax | | | |
| YAK | comp=E,43nm,10.8s | | | smax | | smax | | | |
| ULN | **Ulaanbaatar** | 86.54 | 323 | P | | **P** | | 19 41 46.5 | +0.2 |
| ULN | comp=Z,83nm,0.9s | | | lAmb | | lAmb | | 19 41 48.4 | |
| ULN | **Ulaanbaatar** comp=Z,83nm,1.0s | 86.54 | 323 | P | | **P** | | 19 41 46.5 | +0.2 |
| | | | | pmax | | pmax | | | |
| F15K | **North Star Dit** baz=205 | 86.64 | 11 | P | | **P** | | 19 41 46.9 | +0.8 |
| M22K | **Willow** baz=218 | 86.65 | 18 | P | | **P** | | 19 41 45.6 | -0.6 |
| BILL | **Bilibino** | 86.70 | 359 | *c i*P | | **P** | | 19 41 46.8 | +0.4 |
| BILL | | | | *e* | | | | 19 45 07.7 | |
| BILL | | | | *e*PPP | | PPP | | 19 47 07.8 | |
| BILL | comp=Z,104nm,0.9s | | | pmax | | pmax | | | |
| HIN | **Hinchinbrook I** comp=Z,44nm,0.9s | 86.73 | 20 | lAmb | | lAmb | | 19 41 48.3 | |
| G16K | **Koyuk River** comp=Z,62nm,0.9s | 86.78 | 12 | lAmb | | lAmb | | 19 41 49.3 | |
| G16K | **Koyuk River** baz=207,SNR=12 | 86.78 | 12 | P | | **P** | | 19 41 47.9 | +1.1 |
| PMR | **Palmer** | 86.82 | 19 | P | | **P** | | 19 41 46.5 | -0.6 |
| PMR | **Palmer** | 86.82 | 19 | P | | **P** | | 19 41 46.4 | -0.6 |
| PMR | **Palmer** | 86.82 | 19 | P | | **P** | | 19 41 46.4 | -0.6 |
| PMR | comp=Z,20nm,0.7s | | | pmax | | pmax | | | |
| GTA | **Gaotai** | 86.84 | 313 | ⇑P | | **P** | | 19 41 48.9 | +1.0 |
| GTA | comp=Z,59nm,1.0s | | | pmax | | pmax | | | |
| H17K | **Granite Mounta** comp=Z,48nm,0.8s | 86.86 | 13 | lAmb | | lAmb | | 19 41 49.6 | |
| H17K | **Granite Mounta** baz=209 | 86.86 | 13 | P | | **P** | | 19 41 48.0 | +0.8 |
| K20K | **Telida** baz=214 | 86.86 | 16 | P | | **P** | | 19 41 47.4 | +0.2 |
| KNK | **Knik Glacier** baz=220,SNR=13 | 86.89 | 19 | P | | **P** | | 19 41 46.7 | -0.7 |
| ORV | **Oroville** comp=Z,69nm,1.1s | 86.89 | 46 | lAmb | | lAmb | | 19 41 50.3 | |
| PASC | **Pasadena Art C** comp=Z,25nm,0.7s | 86.89 | 52 | lAmb | | lAmb | | 19 41 49.5 | |
| SONM | **Songino Array** | 86.90 | 323 | P | | **P** | | 19 41 48.2 | +0.2 |
| SONM | comp=Z,58nm,0.9s | | | lAmb | | lAmb | | 19 41 49.8 | |
| SONM | **Songino Array** comp=Z,42nm,0.8s,baz=151,slow=6.0,SNR=203 | 86.90 | 323 | P | | **P** | | 19 41 48.2 | +0.2 |
| SONM | | | | PKKPbc | | **PKKPbc** | | 19 59 40.1 | -2.4 |
| | comp=Z,1.2nm,0.6s,baz=263,slow=2.9,SNR=8.7 comp=Z,42nm,0.8s | | | | | | | | |
| GLI | **Glacier Island** comp=Z,42nm,0.8s | 86.91 | 20 | lAmb | | lAmb | | 19 41 48.9 | |
| GLI | **Glacier Island** baz=221,SNR=6.6 | 86.91 | 20 | P | | **P** | | 19 41 46.7 | -0.8 |
| CMB | **Columbia Colle** comp=Z,58nm,1.1s | 86.97 | 48 | lAmb | | lAmb | | 19 41 50.7 | |
| AFDM | **Forest Hills D** comp=Z,83nm,1.1s | 86.98 | 47 | lAmb | | lAmb | | 19 41 50.8 | |
| J01E | **Myrtle Point** comp=Z,70nm,1.0s | 86.99 | 42 | lAmb | | lAmb | | 19 41 50.9 | |
| J19K | **Poorman** baz=213,SNR=18 | 87.01 | 15 | P | | **P** | | 19 41 48.8 | +0.9 |
| KAIM | **Kayak Island** comp=Z,65nm,1.1s | 87.09 | 21 | lAmb | | lAmb | | 19 41 50.0 | |
| KAIM | **Kayak Island** baz=223,SNR=6.4 | 87.09 | 21 | P | | **P** | | 19 41 48.6 | +0.2 |
| CCX | **Cicese** | 87.09 | 55 | P | | **P** | | 19 41 49.1 | 0.0 |
| YBH | **Yreka Blue Hor** comp=Z,84nm,1.1s | 87.09 | 44 | lAmb | | lAmb | | 19 41 51.9 | |
| EYAK | **Cordova Ski Ar** | 87.10 | 21 | P | | **P** | | 19 41 48.3 | -0.1 |
| EYAK | **Cordova Ski Ar** baz=222,SNR=8.6 | 87.10 | 21 | P | | **P** | | 19 41 47.6 | -0.8 |
| CUT | **Chulitna** comp=Z,67nm,1.1s | 87.12 | 18 | lAmb | | lAmb | | 19 41 49.0 | |
| CUT | **Chulitna** baz=218,SNR=5.5 | 87.12 | 18 | P | | **P** | | 19 41 47.1 | -1.4 |
| 109C | **Camp Elliot, M** | 87.17 | 54 | P | | **P** | | 19 41 49.5 | +0.1 |
| 109C | comp=Z,63nm,1.2s | | | lAmb | | lAmb | | 19 41 51.6 | |
| 109C | **Camp Elliot, M** baz=245 | 87.17 | 54 | P | | **P** | | 19 41 49.6 | +0.1 |
| G17K | **Kiwalik Mounta** baz=208,SNR=10 | 87.20 | 12 | P | | **P** | | 19 41 49.4 | +0.6 |
| SML | **Sawmill** baz=220,SNR=17 | 87.23 | 19 | P | | **P** | | 19 41 48.5 | -0.6 |
| CBX | **Cerro Bola** | 87.28 | 55 | P | | **P** | | 19 41 50.7 | +0.6 |
| CBX | comp=Z,59nm,1.0s | | | lAmb | | lAmb | | 19 41 52.5 | |
| ISA | **Isabella, Lake** comp=Z,54nm,1.1s | 87.31 | 51 | lAmb | | lAmb | | 19 41 52.7 | |
| RAGM | **Ragged Mountai** comp=Z,50nm,1.2s | 87.34 | 21 | lAmb | | lAmb | | 19 41 51.5 | |
| GCSA | **Galena City Sc** baz=212 | 87.35 | 14 | P | | **P** | | 19 41 50.0 | +0.5 |
| HUMO | **Hull Mountain** comp=Z,69nm,1.0s | 87.35 | 43 | lAmb | | lAmb | | 19 41 53.1 | |
| H18K | **Honhosa River** baz=210 | 87.37 | 13 | P | | **P** | | 19 41 49.6 | -0.1 |
| M23K | **Glacier View** baz=220,SNR=6.8 | 87.40 | 19 | P | | **P** | | 19 41 49.4 | -0.6 |
| DBO | **Dodson Butte** comp=Z,44nm,1.0s | 87.41 | 43 | lAmb | | lAmb | | 19 41 53.1 | |
| HMT | **Hamilton** comp=Z,34nm,0.9s | 87.44 | 21 | lAmb | | lAmb | | 19 41 50.9 | |
| J20K | **Nowinta River** | 87.52 | 15 | P | | **P** | | 19 41 50.4 | 0.0 |
| J20K | **Nowinta River** baz=214,SNR=20 | 87.52 | 15 | P | | **P** | | 19 41 50.4 | 0.0 |
| SCM | **Sheep Creek Mo** comp=Z,29nm,0.8s | 87.56 | 19 | lAmb | | lAmb | | 19 41 54.3 | |
| SCM | **Sheep Creek Mo** baz=221,SNR=16 | 87.56 | 19 | P | | **P** | | 19 41 50.1 | -0.6 |
| DIB | **Dawson Inlet,** comp=Z,54nm,1.0s | 87.61 | 31 | lAmb | | lAmb | | 19 41 53.3 | |
| I03D | **Drain, OR** comp=Z,51nm,1.0s | 87.62 | 42 | lAmb | | lAmb | | 19 41 53.3 | |
| MONP2 | **Monument Peak** baz=246,SNR=41 | 87.70 | 54 | P | | **P** | | 19 41 53.7 | +1.5 |
| HG4B | **Hotspring** comp=Z,124nm,1.5s | 87.70 | 32 | lAmb | | lAmb | | 19 41 54.1 | |
| MDPB | **Devils Postpil** comp=Z,60nm,1.2s | 87.72 | 49 | lAmb | | lAmb | | 19 41 54.8 | |
| KLU | **Klutina** | 87.74 | 20 | P | | **P** | | 19 41 50.5 | -1.1 |
| KLU | comp=Z,27nm,0.6s | | | lAmb | | lAmb | | 19 43 57.7 | |
| KLU | **Klutina** baz=222,SNR=19 | 87.74 | 20 | P | | **P** | | 19 41 51.1 | -0.5 |
| OMMB | **Old Mammoth Mi** comp=Z,67nm,1.4s | 87.77 | 49 | lAmb | | lAmb | | 19 41 55.2 | |
| BMRM | **Bremner River** baz=223,SNR=12 | 87.79 | 21 | P | | **P** | | 19 41 51.0 | -0.7 |
| SNH | **Susna Point** comp=Z,52nm,0.9s | 87.82 | 22 | lAmb | | lAmb | | 19 41 53.2 | |
| RMX | **La Rumorosa** comp=Z,57nm,1.0s | 87.84 | 55 | lAmb | | lAmb | | 19 41 55.5 | |
| WAKR | **Walker** comp=Z,93nm,1.3s | 87.85 | 48 | lAmb | | lAmb | | 19 41 55.7 | |
| F17K | **Baldwin Pennin** baz=208,SNR=7.4 | 87.92 | 11 | P | | **P** | | 19 41 53.4 | +1.2 |
| G18K | **Tagagawik** comp=Z,52nm,1.1s | 87.95 | 13 | lAmb | | lAmb | | 19 41 55.5 | |
| G18K | **Tagagawik** baz=210 | 87.95 | 13 | P | | **P** | | 19 41 53.0 | +0.6 |
| I20K | **Naaghedeneel** comp=Z,66nm,1.1s | 87.95 | 15 | lAmb | | lAmb | | 19 41 55.2 | |
| I20K | **Naaghedeneel** baz=214,SNR=6.2 | 87.95 | 15 | P | | **P** | | 19 41 53.3 | +1.0 |
| WAT1 | **Susitna Watana** baz=220 | 87.95 | 18 | P | | **P** | | 19 41 51.5 | -1.0 |
| PFO | **Pinyon Flats O** | 87.96 | 54 | P | | **P** | | 19 41 53.8 | +0.4 |
| PFO | **Pinyon Flats O** baz=246,SNR=14 | 87.96 | 54 | P | | **P** | | 19 41 54.2 | +0.8 |
| PFO | **Pinyon Flats O** | 87.96 | 54 | *ce*P | | **P** | | 19 41 54.1 | +0.8 |
| PFO | comp=Z,56nm,1.3s | | | pmax | | pmax | | | |
| TPFO | **Pinon Flats** baz=246,SNR=13 | 87.96 | 54 | P | | **P** | | 19 41 54.4 | +1.0 |
| YUH | **Yuha Desert** comp=Z,40nm,1.1s | 87.98 | 55 | lAmb | | lAmb | | 19 41 55.8 | |
| PNTR | **Pine Nut** comp=Z,110nm,1.4s | 87.99 | 48 | lAmb | | lAmb | | 19 41 56.2 | |
| WAT6 | **Susitna Watana** baz=220,SNR=27 | 88.00 | 18 | P | | **P** | | 19 41 52.3 | -0.6 |
| WAX | **Waxell Ridge** comp=Z,44nm,0.8s | 88.01 | 22 | lAmb | | lAmb | | 19 41 53.8 | |
| COR | **Corvallis** | 88.08 | 41 | P | | **P** | | 19 41 54.8 | +1.3 |
| COR | comp=Z,60nm,1.1s | | | lAmb | | lAmb | | 19 41 56.5 | |
| COR | **Corvallis** | 88.08 | 41 | P | | **P** | | 19 41 54.8 | +1.3 |
| COR | comp=Z,60nm,1.1s | | | pmax | | pmax | | | |
| BUCK | **Buck Mountain** comp=Z,79nm,1.1s | 88.09 | 42 | lAmb | | lAmb | | 19 41 56.5 | |
| H19K | **Roundabout Mou** baz=212,SNR=16 | 88.11 | 14 | P | | **P** | | 19 41 53.8 | +0.7 |
| M24K | **Tolsona, Glenn** comp=Z,71nm,1.4s | 88.12 | 19 | lAmb | | lAmb | | 19 41 55.7 | |
| M24K | **Tolsona, Glenn** baz=222 | 88.12 | 19 | P | | **P** | | 19 41 53.1 | -0.3 |
| CRQM | **Cirque** comp=Z,36nm,1.0s | 88.13 | 21 | lAmb | | lAmb | | 19 41 56.4 | |
| MESA | **MESA** comp=Z,37nm,0.8s | 88.14 | 22 | lAmb | | lAmb | | 19 41 54.7 | |
| MESA | **MESA** baz=226 | 88.14 | 22 | P | | **P** | | 19 41 53.5 | -0.1 |
| K04D | **Chiloquin, OR** comp=Z,76nm,0.9s | 88.14 | 44 | lAmb | | lAmb | | 19 41 56.6 | |
| CRQE | **Cirque** baz=224,SNR=14 | 88.14 | 21 | P | | **P** | | 19 41 52.5 | -1.0 |
| YERR | **Yerington** | 88.20 | 48 | P | | **P** | | 19 41 55.4 | +0.9 |
| YERR | comp=Z,47nm,1.1s | | | lAmb | | lAmb | | 19 41 56.9 | |
| N25K | **Chitina, Valde** baz=223,SNR=17 | 88.26 | 20 | P | | **P** | | 19 41 53.5 | -0.5 |
| BPAW | **Bear Paw Mtn.** baz=217,SNR=9.2 | 88.27 | 16 | P | | **P** | | 19 41 52.6 | -1.4 |
| RND | **Reindeer** comp=Z,49nm,0.9s | 88.31 | 18 | lAmb | | lAmb | | 19 41 55.8 | |
| F18K | **Selawik** baz=209,SNR=15 | 88.36 | 12 | P | | **P** | | 19 41 54.3 | +0.1 |
| HOLB | **Holberg** comp=Z,74nm,1.0s | 88.37 | 34 | lAmb | | lAmb | | 19 41 57.3 | |
| E17K | **Hotham Inlet** baz=207,SNR=12 | 88.38 | 11 | P | | **P** | | 19 41 55.3 | +0.9 |
| GSC | **Goldstone, Bar** | 88.39 | 52 | P | | **P** | | 19 41 56.1 | +0.9 |
| GSC | comp=Z,52nm,1.4s | | | lAmb | | lAmb | | 19 41 57.9 | |
| GSC | **Goldstone, Bar** | 88.39 | 52 | P | | **P** | | 19 41 56.2 | +0.9 |
| GSC | comp=Z,52nm,1.4s | | | pmax | | pmax | | | |
| LHV | **Little Huntoon** comp=Z,78nm,1.2s | 88.40 | 49 | lAmb | | lAmb | | 19 41 58.1 | |
| DSP | **Deep Springs** comp=Z,68nm,1.2s | 88.41 | 50 | lAmb | | lAmb | | 19 41 58.0 | |
| PAHR | **Pah Rah Range** comp=Z,90nm,1.2s | 88.42 | 47 | lAmb | | lAmb | | 19 41 58.0 | |
| H20K | **Anotlenegga Mo** baz=214,SNR=24 | 88.44 | 14 | P | | **P** | | 19 41 55.1 | +0.4 |
| DHY | **Denali Highway** comp=Z,54nm,1.7s | 88.49 | 18 | lAmb | | lAmb | | 19 41 58.3 | |
| DHY | **Denali Highway** baz=221,SNR=12 | 88.49 | 18 | P | | **P** | | 19 41 54.7 | -0.5 |
| G19K | **Purcell Mounta** comp=Z,55nm,0.9s | 88.50 | 13 | lAmb | | lAmb | | 19 41 58.4 | |
| G19K | **Purcell Mounta** baz=212,SNR=30 | 88.50 | 13 | P | | **P** | | 19 41 55.8 | +0.8 |
| MCK | **McKinley** baz=219,SNR=12 | 88.54 | 17 | P | | **P** | | 19 41 54.5 | -0.8 |
| RYN | **Ryan** | 88.55 | 48 | P | | **P** | | 19 41 56.5 | +0.5 |
| RYN | comp=Z,53nm,1.2s | | | lAmb | | lAmb | | 19 41 58.6 | |
| GRNC | **Granite Creek** comp=Z,26nm,0.8s | 88.59 | 22 | lAmb | | lAmb | | 19 41 56.5 | |
| TABL | **Table Mountain** comp=Z,45nm,0.8s | 88.61 | 22 | lAmb | | lAmb | | 19 41 56.7 | |
| MCARA | **McCarthy YSAT** baz=224,SNR=12 | 88.62 | 21 | P | | **P** | | 19 41 55.1 | -0.5 |
| NVAR | **Mina Array Bea** | 88.62 | 49 | P | | **P** | | 19 41 57.0 | +0.5 |
| NVAR | **Mina Array Bea** | 88.62 | 49 | P | | **P** | | 19 41 57.2 | +0.8 |
| NVAR | comp=Z,21nm,1.0s,baz=228,slow=7.4,SNR=109 comp=Z,0.9nm,0.6s,baz=54,slow=4.7,SNR=9.4 comp=Z,21nm,1.0s | | | PKKPbc | | **PKKPbc** | | 19 59 38.5 | +0.6 |
| CRAG | **Craig** baz=233 | 88.65 | 29 | P | | **P** | | 19 41 54.8 | -1.0 |
| SIT | **Sitka** baz=231 | 88.66 | 27 | P | | **P** | | 19 41 54.9 | -1.0 |
| HARP | **HAARP** baz=223,SNR=5.8 | 88.66 | 19 | P | | **P** | | 19 41 55.2 | -0.6 |
| GRAC | **Grapevine Rang** | 88.69 | 50 | P | | **P** | | 19 41 57.4 | +0.8 |
| GRAC | comp=Z,93nm,1.3s | | | lAmb | | lAmb | | 19 41 59.4 | |
| D17K | **Noatak River** baz=206,SNR=11 | 88.72 | 10 | P | | **P** | | 19 41 56.6 | +0.7 |
| PNL | **Peninsula** | 88.72 | 23 | P | | **P** | | 19 41 56.2 | 0.0 |
| PNL | **Peninsula** baz=228,SNR=5.8 | 88.72 | 23 | P | | **P** | | 19 41 55.9 | -0.2 |
| NV11 | **Mina Array Sit** comp=Z,58nm,1.1s | 88.73 | 49 | lAmb | | lAmb | | 19 41 59.4 | |
| S31K | **Pelican** comp=Z,69nm,1.1s | 88.85 | 26 | lAmb | | lAmb | | 19 41 58.6 | |
| S31K | **Pelican** baz=230,SNR=22 | 88.85 | 26 | P | | **P** | | 19 41 56.9 | +0.2 |
| GWY | **Greenwater Val** comp=Z,62nm,1.0s | 88.86 | 51 | lAmb | | lAmb | | 19 42 00.4 | |
| C16K | **Lisburne Hills** baz=204 | 88.88 | 9 | P | | **P** | | 19 41 57.0 | +0.4 |
| TROLL | **Troll, Antarti** comp=Z,2µm,0.6s | 88.88 | 184 | ⇑P | | **P** | | 19 41 57.1 | 0.0 |
| TROLL | comp=Z,378nm,0.8s | | | ⇓pP | | **pP** | | 19 42 47.6 | -0.4 |
| TROLL | comp=Z,378nm,0.8s | | | ⇓x | | x | | 19 42 47.6 | |
| CTG | **Chitna Glacier** baz=226,SNR=21 | 88.90 | 22 | P | | **P** | | 19 41 56.6 | -0.5 |
| CTGM | **Chitina Glacie** comp=Z,38nm,0.8s | 88.91 | 22 | P | | **P** | | 19 41 56.9 | -0.2 |
| CTGM | | | | lAmb | | lAmb | | 19 41 58.0 | |
| E18K | **Tukpahlearik C** comp=Z,41nm,0.9s | 88.91 | 11 | lAmb | | lAmb | | 19 41 59.7 | |
| E18K | **Tukpahlearik C** baz=208,SNR=13 | 88.91 | 11 | P | | **P** | | 19 41 57.8 | +1.0 |
| LOGN | **Logan Glacier** comp=Z,26nm,0.7s | 88.92 | 22 | lAmb | | lAmb | | 19 41 58.0 | |
| F19K | **Shaleruckik Mo** comp=Z,27nm,0.9s | 88.94 | 12 | lAmb | | lAmb | | 19 41 59.7 | |
| F19K | **Shaleruckik Mo** baz=211,SNR=20 | 88.94 | 12 | P | | **P** | | 19 41 57.4 | +0.4 |
| PAX | **Paxson** baz=222,SNR=7.3 | 88.98 | 19 | P | | **P** | | 19 41 56.3 | -1.2 |
| BOD | **Bodaibo** | 88.99 | 334 | *e*P | | **P** | | 19 41 57.0 | -0.4 |
| BOD | comp=Z,77nm,1.2s | | | pmax | | pmax | | | |
| WISH | **Wishkah** | 89.03 | 39 | P | | **P** | | 19 41 58.9 | +1.0 |
| KVN | **Kaiserville** comp=Z,59nm,1.1s | 89.03 | 48 | lAmb | | lAmb | | 19 42 00.7 | |
| U33K | **Whale Pass** baz=233 | 89.04 | 28 | P | | **P** | | 19 41 58.4 | +0.8 |
| H21K | **Melozitna Rive** baz=216,SNR=22 | 89.06 | 15 | P | | **P** | | 19 41 57.8 | +0.1 |
| RDOG | **Red Dog Mine** comp=Z,31nm,1.0s | 89.07 | 10 | lAmb | | lAmb | | 19 42 00.5 | |
| RDOG | **Red Dog Mine** baz=206,SNR=5.5 | 89.07 | 10 | P | | **P** | | 19 41 58.4 | +0.9 |
| MLY | **Manley** baz=218,SNR=8.2 | 89.08 | 16 | P | | **P** | | 19 41 56.7 | -1.1 |
| IMAR | **Indian Mountai** | 89.11 | 14 | P | | **P** | | 19 41 57.8 | 0.0 |
| WCT | **Wildcat Mounta** comp=Z,77nm,1.2s | 89.14 | 51 | lAmb | | lAmb | | 19 42 01.3 | |
| NEA2 | **Nenana** baz=219,SNR=8.8 | 89.18 | 17 | P | | **P** | | 19 41 56.7 | -1.5 |
| O28M | **Mount Upton** baz=227,SNR=25 | 89.18 | 22 | P | | **P** | | 19 41 58.3 | -0.4 |
| BBB | **Bella Bella** comp=Z,74nm,1.0s | 89.22 | 33 | lAmb | | lAmb | | 19 42 01.1 | |
| S32K | **Killisnoo** comp=Z,52nm,1.2s | 89.23 | 27 | lAmb | | lAmb | | 19 42 00.4 | |
| S32K | **Killisnoo** baz=232,SNR=12 | 89.23 | 27 | P | | **P** | | 19 41 59.0 | +0.5 |
| TPH | **Tonopah** | 89.24 | 49 | P | | **P** | | 19 42 00.2 | +0.9 |
| TPH | **Tonopah** | 89.24 | 49 | P | | **P** | | 19 42 00.2 | +0.9 |
| TPH | comp=Z,212nm,1.1s | | | pmax | | pmax | | | |
| V35K | **Ketchikan** baz=234,SNR=11 | 89.26 | 29 | P | | **P** | | 19 41 59.8 | +1.1 |
| LSA | **Lhasa** | 89.29 | 302 | P | | **P** | | 19 42 01.4 | +1.3 |
| LSA | comp=Z,31nm,0.7s | | | pmax | | pmax | | | |
| LSA | **Lhasa** comp=Z,23nm,0.7s | 89.29 | 302 | lAmb | | lAmb | | 19 42 01.9 | |
| LSA | **Lhasa** | 89.29 | 302 | P | | **P** | | 19 42 00.8 | +0.7 |
| P29M | **Windy Craggy** baz=229,SNR=24 | 89.33 | 24 | P | | **P** | | 19 41 58.8 | -0.2 |
| RUBB | **Prince Rupert** comp=Z,59nm,1.2s | 89.33 | 31 | lAmb | | lAmb | | 19 42 01.8 | |
| R31K | **City Hall, Gus** baz=231 | 89.34 | 26 | P | | **P** | | 19 41 59.7 | +0.8 |
| WRH | **Wood River Hil** comp=Z,29nm,0.8s | 89.35 | 17 | lAmb | | lAmb | | 19 42 01.0 | |
| M26K | **Nabesna, AK** baz=224,SNR=20 | 89.36 | 20 | P | | **P** | | 19 41 58.6 | -0.5 |
| C17K | **DeLong Mountai** baz=206 | 89.40 | 10 | P | | **P** | | 19 42 00.1 | +0.9 |
| O29M | **Mount Kennedy** | 89.45 | 23 | P | | **P** | | 19 41 59.5 | -0.2 |
| O29M | comp=Z,58nm,2.0s | | | lAmb | | lAmb | | 19 42 00.7 | |
| O29M | **Mount Kennedy** baz=228,SNR=5.0 | 89.45 | 23 | P | | **P** | | 19 41 59.4 | -0.2 |
| PIX | **Pinacate** comp=Z,37nm,0.9s | 89.48 | 56 | lAmb | | lAmb | | 19 42 02.6 | |
| TPNV | **Topopah Spring** baz=246,SNR=74 | 89.48 | 51 | P | | **P** | | 19 42 01.9 | +1.4 |
| SLBS | **Sierra La Lagu** | 89.49 | 65 | P | | **P** | | 19 42 02.6 | +1.9 |
| BLYC | **Blythe** comp=Z,84nm,1.1s | 89.50 | 54 | lAmb | | lAmb | | 19 42 03.2 | |
| SNAA | **Sanae** comp=Z,29nm,0.9s | 89.51 | 183 | lAmb | | lAmb | | 19 42 00.6 | |
| SNAA | **Sanae** comp=Z,442nm,0.7s | 89.51 | 183 | ⇑P | | **P** | | 19 41 59.5 | -0.4 |
| SNAA | comp=Z,89nm,0.6s | | | ⇓pP | | **pP** | | 19 42 50.1 | -0.7 |
| SNAA | comp=Z,22nm,0.6s | | | ⇑PKiKP | | **PKiKP** | | 19 46 55.2 | -0.9 |
| SNAA | comp=Z,22nm,0.6s | | | ⇑x | | x | | 19 46 55.2 | |
| SNAA | **Sanae** comp=Z,18nm,0.6s,baz=199,slow=5.5,SNR=139 comp=Z,18nm,0.6s | 89.51 | 183 | P | | **P** | | 19 41 59.1 | -0.8 |
| SNAA | **Sanae** | 89.51 | 183 | *c i*P | | **P** | | 19 41 59.3 | -0.6 |
| SNAA | comp=Z,57nm,1.5s | | | pmax | | pmax | | | |
| MENT | **Mentasta** | 89.51 | 20 | P | | **P** | | 19 41 59.4 | -0.4 |
| K24K | **Donnelly Dome** baz=222,SNR=6.7 | 89.51 | 18 | P | | **P** | | 19 41 59.3 | -0.5 |
| I23K | **Minto, Yukon-K** baz=219 | 89.53 | 16 | P | | **P** | | 19 41 58.4 | -1.3 |
| F20K | **Avaraart Lake** baz=213,SNR=25 | 89.56 | 13 | P | | **P** | | 19 42 00.6 | +0.8 |
| WRAK | **Wrangell Islan** baz=234 | 89.57 | 28 | P | | **P** | | 19 42 00.7 | +0.6 |
| E19K | **Redstone River** comp=Z,38nm,1.1s | 89.59 | 12 | lAmb | | lAmb | | 19 42 04.2 | |
| E19K | **Redstone River** baz=212,SNR=29 | 89.59 | 12 | P | | **P** | | 19 42 01.0 | +0.9 |
| G21K | **Allakaket** comp=Z,31nm,0.9s | 89.60 | 14 | lAmb | | lAmb | | 19 42 01.6 | |
| G21K | **Allakaket** baz=215,SNR=22 | 89.60 | 14 | P | | **P** | | 19 42 00.4 | +0.2 |
| H22K | **Ishtalitna Cre** baz=217,SNR=19 | 89.61 | 15 | P | | **P** | | 19 42 00.7 | +0.5 |
| HDA | **Harding Lake** comp=Z,30nm,0.7s | 89.63 | 18 | lAmb | | lAmb | | 19 42 05.2 | |
| HDA | **Harding Lake** baz=221,SNR=27 | 89.63 | 18 | P | | **P** | | 19 41 59.2 | -1.0 |
| G05A | **Wamic** | 89.64 | 41 | P | | **P** | | 19 42 02.1 | +1.3 |
| YUK8 | **Steele Glacier** baz=227,SNR=48 | 89.68 | 22 | P | | **P** | | 19 42 01.0 | 0.0 |
| MDM | **Murphy Dome** comp=Z,30nm,0.8s | 89.69 | 17 | lAmb | | lAmb | | 19 42 00.5 | |
| L26K | **Log Cabin Wild** baz=224,SNR=8.7 | 89.69 | 20 | P | | **P** | | 19 41 60.0 | -0.6 |
| M27K | **Edge Creek, AK** baz=226,SNR=18 | 89.69 | 21 | P | | **P** | | 19 42 00.3 | -0.5 |
| 113A | **Mohawk Valley,** comp=Z,76nm,1.3s | 89.70 | 55 | lAmb | | lAmb | | 19 42 04.1 | |
| COLA | **College** | 89.73 | 17 | P | | **P** | | 19 41 59.9 | -0.8 |
| COLA | **College** | 89.73 | 17 | P | | **P** | | 19 41 59.7 | -1.0 |
| COLA | **College** baz=220 | 89.73 | 17 | P | | **P** | | 19 41 59.6 | -1.0 |
| COLA | **College** | 89.73 | 17 | P | | **P** | | 19 41 59.7 | -1.0 |
| COLA | comp=Z,94nm,0.3s | | | pmax | | pmax | | | |
| PLBC | **Pleasant Camp** baz=230,SNR=26 | 89.75 | 25 | P | | **P** | | 19 42 00.9 | 0.0 |
| R32K | **Eaglecrest** comp=Z,32nm,1.1s | 89.75 | 26 | lAmb | | lAmb | | 19 42 02.9 | |
| R32K | **Eaglecrest** baz=232,SNR=9.3 | 89.75 | 26 | P | | **P** | | 19 42 01.3 | +0.3 |
| YUK3 | **Moose Creek** baz=227 | 89.77 | 21 | P | | **P** | | 19 42 01.2 | -0.1 |
| JIS | **Juneau Island** | 89.81 | 26 | P | | **P** | | 19 42 02.1 | +0.9 |
| C18K | **Utukok River** comp=Z,27nm,0.9s | 89.89 | 10 | lAmb | | lAmb | | 19 42 04.0 | |
| C18K | **Utukok River** baz=208,SNR=8.8 | 89.89 | 10 | P | | **P** | | 19 42 01.0 | -0.4 |
| IL31 | comp=Z,25nm,0.8s | 89.92 | 17 | lAmb | | lAmb | | 19 42 01.5 | |
| ILAR | **Eielson Array** comp=Z,17nm,0.7s,baz=237,slow=5.5,SNR=135 comp=Z,17nm,0.7s | 89.92 | 17 | P | | **P** | | 19 42 00.4 | -1.2 |
| YUK6 | **Outpost Mounta** | 89.96 | 23 | P | | **P** | | 19 42 02.2 | 0.0 |

baz=229,SNR=9.2
**ZAK Zakamensk 89.97 324** *e*P **P** **19 42 02.2 -0.1**
ZAK *e* 19 42 53.9
ZAK pmax pmax
comp=Z,29nm,1.4s
ZAK pmax pmax
comp=Z,6.0nm,1.4s
**H23K Yukon River 90.01 16** P **P** **19 42 01.2 -0.8**
baz=219,SNR=12
**POKR Poker Plat Res 90.03 17** P **P** **19 42 00.8 -1.3**
baz=220,SNR=6.7
**LON Longmire 90.03 40** IAmb IAmb 19 42 04.7
comp=Z,48nm,1.1s
**G06A Carlson Farm, 90.06 42** IAmb IAmb 19 42 05.1
comp=Z,51nm,1.0s
**VNA3 Neumayer Olymp 90.10 180** ⇑P **P** **19 42 02.2 -0.5**
comp=Z,85nm,0.8s
VNA3 ⇓pP **pP** **19 42 52.6 -0.9**
comp=Z,19nm,0.7s
VNA3 ⇑PKiKP **PKiKP** **19 46 56.4 -0.6**
comp=Z,1.0nm,0.8s
VNA3 ⇑x x 19 46 56.4
comp=Z,1.0nm,0.8s
**SHPR Sheep Range 90.10 51** IAmb IAmb 19 42 06.1
comp=Z,32nm,1.2s
**YUK4 Talbot Arm 90.12 22** P **P** **19 42 03.1 +0.2**
baz=228,SNR=17
**D05A Enumclaw 90.13 40** P **P** **19 42 04.7 +1.7**
**S11A Rachel 90.13 50** IAmb IAmb 19 42 05.8
comp=Z,65nm,1.0s
**214A Organ Pipe Nat 90.14 56** IAmb IAmb 19 42 06.4
comp=Z,74nm,1.1s
**214A Organ Pipe Nat 90.14 56** P **P** **19 42 05.0 +1.5**
baz=248,SNR=34
**SKAG Skagway 90.16 25** P **P** **19 42 04.0 +1.2**
**SKAG Skagway 90.16 25** P **P** **19 42 03.4 +0.5**
baz=231,SNR=12
**SCRK Sand Creek 90.18 19** IAmb IAmb 19 42 04.6
comp=Z,29nm,0.8s
**SCRK Sand Creek 90.18 19** P **P** **19 42 02.4 -0.6**
baz=224,SNR=34
**F21K Alatna River 90.19 14** IAmb IAmb 19 42 04.3
comp=Z,28nm,0.8s
**F21K Alatna River 90.19 14** P **P** **19 42 02.8 -0.1**
baz=215,SNR=26
**L27K Beaver Creek, 90.20 20** P **P** **19 42 02.9 -0.2**
baz=226,SNR=20
**BCAR Beaver Creek A 90.22 20** P **P** **19 42 02.4 -0.8**
**BMN Battle Mountai 90.23 47** IAmb IAmb 19 42 06.3
comp=Z,63nm,1.0s
**J25K Salcha River, 90.23 18** IAmb IAmb 19 42 10.0
comp=Z,34nm,1.1s
**J25K Salcha River, 90.23 18** P **P** **19 42 02.2 -0.9**
baz=222,SNR=35
**D19K Kuna River 90.31 11** IAmb IAmb 19 42 06.3
comp=Z,31nm,0.8s
**D19K Kuna River 90.31 11** P **P** **19 42 04.0 +0.6**
baz=211,SNR=18
**IRK Irkutsk 90.39 326** *e*P **P** **19 42 03.5 -0.6**
IRK pmax pmax
comp=Z,42nm,1.2s
**VNA2 Neumayer--Watz 90.39 181** ⇑P **P** **19 42 03.8 -0.2**
comp=Z,48nm,0.7s,baz=177,slow=4.3
VNA2 ⇓pP **pP** **19 42 53.9 -1.0**
comp=Z,9.4nm,0.5s,baz=183,slow=5.4
VNA2 ⇑PKiKP **PKiKP** **19 46 57.1 -0.4**
comp=Z,2.1nm,0.6s,baz=189,slow=0.9
VNA2 ⇑x x 19 46 57.1
comp=Z,2.1nm,0.6s,baz=189,slow=0.9
**G22K Bettles 90.40 14** P **P** **19 42 04.4 +0.6**
baz=217
**B18K Kokolik River 90.42 10** P **P** **19 42 05.0 +1.1**
baz=207
**H24K Noodor Dome 90.46 16** P **P** **19 42 02.4 -1.8**
baz=220,SNR=6.4
**E20K Nigu River 90.48 12** P **P** **19 42 05.1 +0.8**
baz=212
**W13A Hualapai Mount 90.51 53** P **P** **19 42 06.1 +0.8**
W13A IAmb IAmb 19 42 08.0
comp=Z,50nm,1.0s
**R11B Troy Canyon, C 90.53 49** P **P** **19 42 05.9 +0.6**
baz=246,SNR=36
**C19K Lookout Ridge 90.57 11** P **P** **19 42 05.4 +0.8**
baz=209
**G23K Bananza Creek 90.59 15** P **P** **19 42 05.3 +0.5**
baz=218,SNR=16
**VNA1 Neumayer--Stat 90.68 181** ⇑P **P** **19 42 05.1 -0.1**
comp=N,1.7nm,0.6s
VNA1 ⇑x x 19 42 05.1
comp=N,1.7nm,0.6s
**J26L Joseph Creek 90.69 19** IAmb IAmb 19 42 07.4
comp=Z,23nm,0.8s
**J26L Joseph Creek 90.69 19** P **P** **19 42 05.4 +0.1**
baz=224
**O30N Mendenhall 90.69 24** IAmb IAmb 19 42 06.4
comp=Z,42nm,1.1s
**O30N Mendenhall 90.69 24** P **P** **19 42 05.3 -0.1**
**F22K John River 90.72 14** P **P** **19 42 06.0 +0.7**
baz=216,SNR=33
**Y14A Wickenburg 90.74 54** P **P** **19 42 06.0 -0.3**
Y14A IAmb IAmb 19 42 08.7
comp=Z,30nm,1.0s
**N30M Aishikik Lake 90.76 23** P **P** **19 42 05.6 -0.1**
baz=230,SNR=15
**D20K Etivluk River 90.78 12** P **P** **19 42 06.6 +1.0**
baz=212,SNR=22
**K27K Chicken 90.81 19** IAmb IAmb 19 42 08.0
comp=Z,24nm,0.8s
**K27K Chicken 90.81 19** P **P** **19 42 06.2 +0.4**
baz=225
**T35M Bob Quinn 90.84 28** IAmb IAmb 19 42 08.5
comp=Z,44nm,1.1s
**T35M Bob Quinn 90.84 28** P **P** **19 42 07.1 +1.0**
baz=236,SNR=16
**PRP Porcupine Dome 90.86 17** P **P** **19 42 04.5 -1.7**
baz=222
**P32M Atlin 90.89 25** P **P** **19 42 06.2 -0.1**
**P32M Atlin 90.89 25** P **P** **19 42 06.6 +0.3**
baz=233,SNR=37
**M29M Somme Creek 90.92 22** P **P** **19 42 06.4 -0.1**
baz=228,SNR=20
**COLD Coldfoot 90.95 15** P **P** **19 42 07.0 +0.6**
baz=218,SNR=34
**LTY Liberty 90.96 40** IAmb IAmb 19 42 09.0
comp=Z,58nm,1.0s
**S34M Telegraph Cree 90.98 27** P **P** **19 42 07.9 +1.2**
baz=235,SNR=35
**WHY Whitehorse 91.09 24** IAmb IAmb 19 42 08.3
comp=Z,36nm,0.9s
**WHY Whitehorse 91.09 24** P **P** **19 42 07.4 +0.1**
baz=232,SNR=29
**E21K Killik River 91.09 13** IAmb IAmb 19 42 08.7
comp=Z,40nm,0.9s
**E21K Killik River 91.09 13** P **P** **19 42 07.6 +0.6**
baz=215
**Q32M Nakina River 91.11 26** IAmb IAmb 19 42 09.5
comp=Z,60nm,1.1s
**Q32M Nakina River 91.11 26** P **P** **19 42 08.2 +0.7**
baz=234,SNR=37
**G08A Pilot Rock 91.14 42** P **P** **19 42 08.7 +0.8**
**G24K Hadweenzic Riv 91.22 16** IAmb IAmb 19 42 08.2
comp=Z,18nm,0.7s
**G24K Hadweenzic Riv 91.22 16** P **P** **19 42 07.6 -0.1**
baz=220,SNR=5.6
**N31M Braeburn, Yuko 91.26 23** P **P** **19 42 08.2 +0.2**
baz=231,SNR=27
**A19K Wainwright 91.29 10** P **P** **19 42 08.8 +1.0**
baz=208
**Q12A Willow Creek R 91.35 49** IAmb IAmb 19 42 11.6
comp=Z,36nm,0.9s
**I26K Coal Creek Min 91.39 18** IAmb IAmb 19 42 10.7
comp=Z,35nm,1.0s
**I26K Coal Creek Min 91.39 18** P **P** **19 42 08.5 +0.1**
baz=224
**C21K Knifeblade Rid 91.52 12** P **P** **19 42 10.4 +1.4**
baz=214,SNR=22
**EGAK Eagle 91.62 19** IAmb IAmb 19 42 10.9
comp=Z,41nm,0.8s
**EGAK Eagle 91.62 19** P **P** **19 42 09.3 -0.1**
baz=226,SNR=24
**P33M Teslin, Yukon 91.63 25** IAmb IAmb 19 42 10.9
comp=Z,36nm,0.9s
**P33M Teslin, Yukon 91.63 25** P **P** **19 42 09.8 +0.1**
baz=233,SNR=36
**G25K Bearman Lake 91.63 16** P **P** **19 42 09.2 -0.3**
baz=222
**DAWY Dawson 91.69 20** P **P** **19 42 09.9 0.0**
**DAWY Dawson 91.69 20** P **P** **19 42 09.6 -0.3**
baz=228,SNR=12
**LCMT Little Creek M 91.72 51** IAmb IAmb 19 42 13.4
comp=Z,55nm,0.9s
**D22K Ayikyak River 91.72 13** IAmb IAmb 19 42 12.1
comp=Z,71nm,1.2s
**D22K Ayikyak River 91.72 13** P **P** **19 42 11.2 +1.3**
baz=216,SNR=26
**ELK Elko 91.73 47** IAmb IAmb 19 42 13.2
comp=Z,26nm,1.1s
**F24K Squaw Lake 91.75 15** P **P** **19 42 10.4 +0.3**
F24K IAmb IAmb 19 42 11.9
comp=Z,26nm,0.9s
**F24K Squaw Lake 91.75 15** P **P** **19 42 10.8 +0.7**
baz=220,SNR=21
**E23K Chandalar 91.75 14** IAmb IAmb 19 42 11.9
comp=Z,34nm,0.8s
**E23K Chandalar 91.75 14** P **P** **19 42 11.0 +0.8**
baz=219,SNR=25
**DLBC Dease Lake 91.76 27** P **P** **19 42 11.3 +0.9**
baz=236,SNR=41
**B20K Meade River 91.78 11** P **P** **19 42 11.2 +1.1**
baz=212,SNR=5.9
**CCUT Cedar City 91.83 51** IAmb IAmb 19 42 14.3
comp=Z,38nm,1.0s
**TUC Tucson 91.87 57** P **P** **19 42 12.7 +1.1**
**TUC Tucson 91.87 57** P **P** **19 42 13.4 +1.8**
baz=249
**TUC Tucson 91.87 57** P **P** **19 42 12.7 +1.1**
**R33M Jennings River 91.91 26** P **P** **19 42 11.7 +0.5**
baz=235,SNR=62
**B21K Ikpikpuk River 91.94 12** IAmb IAmb 19 42 13.0
comp=Z,32nm,0.8s
**B21K Ikpikpuk River 91.94 12** P **P** **19 42 11.7 +0.8**
baz=214,SNR=16
**D08A Wollman Farm, 91.94 41** IAmb IAmb 19 42 13.2
comp=Z,90nm,0.9s
**E24K Your Creek 92.03 15** P **P** **19 42 12.0 +0.6**
baz=220,SNR=14
**KNB Kanab 92.03 52** IAmb IAmb 19 42 15.1
comp=Z,51nm,1.0s
**I27K Kandik River 92.05 18** P **P** **19 42 11.4 -0.1**
baz=226,SNR=18
**SZCU Shurtz Canyon 92.05 51** P **P** **19 42 13.9 +1.4**
SZCU IAmb IAmb 19 42 15.1
comp=Z,31nm,1.0s
**N32M Quiet Lake 92.08 24** P **P** **19 42 12.1 +0.3**
baz=233
**K29M Barlow Dome 92.16 21** P **P** **19 42 12.1 -0.1**
baz=229,SNR=9.3
**E09A Wood Farm, Sta 92.19 41** IAmb IAmb 19 42 15.4
comp=Z,40nm,1.3s
**TOLK Toolik Lake Re 92.22 14** IAmb IAmb 19 42 13.4
comp=Z,15nm,0.7s
**TOLK Toolik Lake Re 92.22 14** P **P** **19 42 12.6 +0.3**
baz=219,SNR=9.7
**D23K Nanushuk River 92.22 13** IAmb IAmb 19 42 14.6
comp=Z,56nm,1.0s
**D23K Nanushuk River 92.22 13** P **P** **19 42 13.3 +1.1**
baz=218,SNR=28
**M31M Drury Creek, Y 92.23 23** IAmb IAmb 19 42 12.8
comp=Z,33nm,0.9s
**M31M Drury Creek, Y 92.23 23** P **P** **19 42 11.9 -0.5**
baz=232,SNR=21
**B08A Colville Reser 92.26 39** P **P** **19 42 13.0 +0.1**
**J29N Klondike Camp 92.33 20** IAmb IAmb 19 42 14.7
comp=Z,30nm,0.6s
**J29N Klondike Camp 92.33 20** P **P** **19 42 13.1 +0.2**
baz=229
**F25K Christian Rive 92.37 16** P **P** **19 42 13.6 +0.5**
baz=222,SNR=8.8
**G26K Porcupine Rive 92.39 17** P **P** **19 42 13.5 +0.5**
baz=224,SNR=17
**MFID Camas Ranch 92.40 45** IAmb IAmb 19 42 15.9
comp=Z,26nm,0.9s
**I28M Miner Creek 92.45 19** IAmb IAmb 19 42 14.7
comp=Z,20nm,0.8s
**I28M Miner Creek 92.45 19** P **P** **19 42 12.9 -0.6**
baz=227,SNR=12
**H27K Steamboat Moun 92.52 18** P **P** **19 42 13.7 0.0**
baz=226,SNR=13
**BMAR Burnt Mountain 92.53 16** P **P** **19 42 14.1 +0.4**
**F10A Beach Ranch, E 92.53 42** IAmb IAmb 19 42 16.1
comp=Z,104nm,2.0s
**WUAZ Wupatki 92.57 53** IAmb IAmb 19 42 17.5
comp=Z,47nm,1.0s
**WUAZ Wupatki 92.57 53** P **P** **19 42 16.3 +1.4**
baz=249,SNR=24
**FARO Faro, Yukon 92.63 23** IAmb IAmb 19 42 14.8
comp=Z,75nm,1.7s
**FARO Faro, Yukon 92.63 23** P **P** **19 42 13.8 -0.5**
baz=233,SNR=9.5
**B22K Teshekpuk Lake 92.77 12** IAmb IAmb 19 42 16.7
comp=Z,43nm,1.2s
**B22K Teshekpuk Lake 92.77 12** P **P** **19 42 15.5 +0.8**
baz=215
**D24K Happy Valley 92.79 14** IAmb IAmb 19 42 16.8
comp=Z,25nm,0.8s
**D24K Happy Valley 92.79 14** P **P** **19 42 15.6 +0.8**
baz=219,SNR=12
**F26K Sheenjek River 92.84 16** P **P** **19 42 15.4 +0.3**
F26K IAmb IAmb 19 45 07.5
comp=Z,15nm,0.6s
**F26K Sheenjek River 92.84 16** P **P** **19 42 15.8 +0.6**
baz=224,SNR=8.9
**MTPU Mount Pierson 92.88 51** IAmb IAmb 19 42 19.5
comp=Z,28nm,0.9s
**G27K Doyon Strip 92.89 17** P **P** **19 42 15.3 0.0**
baz=226,SNR=12
**TCRU Three Creeks R 92.90 50** IAmb IAmb 19 42 19.1
comp=Z,19nm,0.8s
**I29M Ogilvie Camp, 92.90 19** IAmb IAmb 19 42 17.1
comp=Z,31nm,1.1s
**I29M Ogilvie Camp, 92.90 19** P **P** **19 42 15.1 -0.3**
baz=229,SNR=13
**C23K Itkillik River 92.93 13** P **P** **19 42 16.4 +1.0**
baz=218,SNR=29
**A21K Barrow 93.00 10** P **P** **19 42 16.4 +0.7**
baz=212
**A22K Sinclair Lake 93.02 11** P **P** **19 42 16.1 +0.3**
baz=214
**J30M Hart River 93.03 21** P **P** **19 42 15.7 -0.5**
baz=230,SNR=8.8
**WTLY Watson Lake, Y 93.22 26** P **P** **19 42 17.9 +0.8**
baz=237
**DUG Dugway, Tooele 93.23 49** P **P** **19 42 18.2 +0.5**
**DUG Dugway, Tooele 93.23 49** P **P** **19 42 18.2 +0.5**
baz=248,SNR=11
**DUG Dugway, Tooele 93.23 49** P **P** **19 42 18.2 +0.5**
DUG pmax pmax
comp=Z,27nm,1.6s
**C24K Franklin Bluff 93.25 14** P **P** **19 42 17.8 +0.9**
baz=220
**X18A Snowflake 93.31 55** IAmb IAmb 19 42 20.9
comp=Z,33nm,1.0s
**HLID Hailey 93.40 45** IAmb IAmb 19 42 20.7
comp=Z,19nm,0.9s
**HLID Hailey 93.40 45** P **P** **19 42 19.5 +1.0**
baz=247,SNR=22
**I30M Mount Dempster 93.43 20** IAmb IAmb 19 42 19.5
comp=Z,33nm,0.9s
**I30M Mount Dempster 93.43 20** P **P** **19 42 17.2 -0.9**
baz=230,SNR=28
**H29M Whitestone 93.45 19** IAmb IAmb 19 42 19.4
comp=Z,18nm,0.9s
**H29M Whitestone 93.45 19** P **P** **19 42 17.6 -0.3**
baz=229,SNR=9.1
**D25K Kavik River 93.48 14** IAmb IAmb 19 44 39.9
comp=Z,20nm,0.6s
**D25K Kavik River 93.48 14** P **P** **19 42 18.2 +0.1**
baz=222,SNR=8.9
**NEW Newport 93.55 40** P **P** **19 42 19.2 +0.3**
baz=246,SNR=8.7
**MMPY Sheldon Lake, 93.65 24** IAmb IAmb 19 42 20.3
comp=Z,48nm,1.0s
**MMPY Sheldon Lake, 93.65 24** P **P** **19 42 19.1 +0.1**
baz=235,SNR=21
**W18A Petrified Fore 93.68 54** IAmb IAmb 19 42 22.4
comp=Z,28nm,1.1s
**W18A Petrified Fore 93.68 54** P **P** **19 42 21.0 +1.0**
baz=250
**HVU Hansel Valley 93.84 47** IAmb IAmb 19 42 22.5
comp=Z,17nm,0.9s
**E27K Coleen River 93.86 16** IAmb IAmb 19 42 22.0
comp=Z,20nm,0.8s
**E27K Coleen River 93.86 16** P **P** **19 42 20.1 +0.2**
baz=226,SNR=15
**Q16A Castle Valley 93.94 50** IAmb IAmb 19 42 23.9
comp=Z,33nm,1.2s
**F28M Old Crow 93.94 17** P **P** **19 42 20.3 +0.1**
**F28M Old Crow 93.94 17** P **P** **19 42 20.4 +0.2**
baz=227
**LIRD Liard River Hi 94.00 28** P **P** **19 42 21.2 +0.6**
baz=239,SNR=5.9
**G29M Pine Creek 94.01 18** IAmb IAmb 19 42 21.8
comp=Z,30nm,0.9s
**G29M Pine Creek 94.01 18** P **P** **19 42 19.8 -0.7**
baz=229,SNR=10
**EPYK Eagle Plains 94.06 19** P **P** **19 42 20.6 -0.1**
baz=230,SNR=17
**TOAD Toad River Com 94.10 28** P **P** **19 42 21.4 +0.3**
baz=240,SNR=25
**TGTN Hyland Airport 94.20 25** P **P** **19 42 21.7 +0.1**
baz=237,SNR=5.7
**C26K Camden Bay 94.27 14** P **P** **19 42 23.0 +1.5**
baz=223
**121A Cookes Peak, D 94.32 57** P **P** **19 42 23.9 +0.9**
121A IAmb IAmb 19 42 25.8
comp=Z,47nm,1.4s
**121A Cookes Peak, D 94.32 57** P **P** **19 42 24.4 +1.5**
baz=250,SNR=13
**C27K Jago River 94.34 15** P **P** **19 42 22.7 +0.8**
baz=224,SNR=6.2
**TCUT Toone Canyon 94.56 48** IAmb IAmb 19 42 27.0
comp=Z,19nm,0.8s
**G30M tAoh Zraii Nji 94.60 19** P **P** **19 42 22.6 -0.7**
baz=231,SNR=14
**E28M Babbage River 94.71 17** P **P** **19 42 24.2 +0.5**
baz=228,SNR=29
**D27M Malcolm River 94.77 16** IAmb IAmb 19 42 26.1
comp=Z,34nm,0.9s
**D27M Malcolm River 94.77 16** P **P** **19 42 24.6 +0.6**
baz=226,SNR=11
**P18A Preston Nutter 94.86 50** P **P** **19 42 25.4 -0.1**
**E29M Blow River 95.02 17** IAmb IAmb 19 42 26.1
comp=Z,17nm,1.1s
**E29M Blow River 95.02 17** P **P** **19 42 24.5 -0.5**
baz=229,SNR=8.1
**F30M Barrier River 95.13 18** P **P** **19 42 25.1 -0.5**
baz=231,SNR=12
**G31M Satah River 95.17 19** P **P** **19 42 25.8 +0.1**
baz=232,SNR=15
**KOTAN Kotaneelee Air 95.26 28** P **P** **19 42 26.5 +0.2**
baz=241
**DLMT Dillon 95.28 44** IAmb IAmb 19 42 28.9
comp=Z,16nm,1.1s
**Y22D IRIS PASSCAL I 95.51 56** P **P** **19 42 28.7 +0.4**
baz=251
**F31M Tsiigehtchic 95.64 19** P **P** **19 42 27.6 -0.3**
baz=233,SNR=15
**MNTX Cornudas Mount 95.98 59** P **P** **19 42 31.0 +0.6**
baz=252,SNR=19
**BOZ Bozeman (W) 96.00 44** P **P** **19 42 31.0 +0.7**
baz=249,SNR=11
**YHL Hebgen Lake 96.04 45** IAmb IAmb 19 42 33.0
comp=Z,14nm,1.1s
**LYMT Lyon Mountain 96.07 42** P **P** **19 42 31.1 +0.4**
**ANMO Albuquerque 96.16 55** P **P** **19 42 31.6 +0.3**
**ANMO Albuquerque 96.16 55** P **P** **19 42 31.4 +0.1**
baz=251
**ANMO Albuquerque 96.16 55** P **P** **19 42 31.6 +0.3**
ANMO pmax pmax
comp=Z,10.0nm,1.1s
**INK Inuvik 96.23 18** P **P** **19 42 30.2 -0.4**
baz=233,SNR=7.6
**H17A Grant Village 96.28 45** P **P** **19 42 32.5 +0.8**
baz=250
**BW06 Boulder Array 96.43 47** P **P** **19 42 31.9 -0.4**
baz=250
**PDAR Pinedale Array 96.43 47** P **P** **19 42 31.0 -1.4**
**PDAR Pinedale Array 96.43 47** P **P** **19 42 32.0 -0.3**
comp=Z,3.4nm,0.9s,baz=197,slow=2.8,SNR=19
PDAR PP **PP** **19 46 23.6 -5.8**
comp=Z,1.0nm,0.9s,baz=216,slow=4.0,SNR=4.2
comp=Z,3.4nm,0.9s
**TX31 Lajitas Ar. Si 96.66 61** IAmb IAmb 19 42 36.1
comp=Z,12nm,1.0s
**TXAR Lajitas Array 96.66 61** P **P** **19 42 34.0 +0.4**
**TXAR Lajitas Array 96.66 61** P **P** **19 42 34.4 +0.8**
comp=Z,5.7nm,0.8s,baz=224,slow=5.0,SNR=51
TXAR PKKP **PKKPbc** **19 59 17.1 +0.7**
comp=Z,1.7nm,0.9s,baz=96,slow=3.2,SNR=11
comp=Z,5.7nm,0.8s
**TXAR Lajitas Array 96.66 61** P **P** **19 42 34.0 +0.4**
**S22A 4UR Ranch, Cre 96.76 53** P **P** **19 42 34.7 +0.6**
baz=251
**WMQ Urumqi 96.92 314** *e*P **P** **19 42 35.1 +0.8**
WMQ pmax pmax
comp=Z,23nm,1.1s
**WRGLY Wrigley 97.00 25** P **P** **19 42 34.5 +0.4**
baz=242,SNR=7.4
**RLMT Red Lodge 97.41 45** P Pdif 19 42 37.3 +0.6
baz=251
**RWWY Rawlins 97.72 49** IAmb IAmb 19 42 39.7
comp=Z,9.3nm,1.0s
**SDCO Great Sand Dun 97.76 53** P Pdif 19 42 39.0 +0.3
SDCO IAmb IAmb 19 43 10.2
comp=Z,8.7nm,0.4s
**EGMT Eagleton 98.04 42** P Pdif 19 42 39.9 +0.6
baz=251
**N23A Red Feather La 98.39 50** P Pdif 19 42 42.1 +0.8
baz=252
**T25A Trinidad 98.41 54** P Pdif 19 42 41.9 +0.5
baz=253
**OZNA Ozona 99.23 61** IAmb IAmb 19 42 46.7
comp=Z,11nm,1.1s
**C36M Paulatuk 99.69 19** P **Pdif** **19 42 46.0 0.0**
baz=242
**AMTX Amarillo 99.89 57** P **Pdif** **19 42 48.2 +0.3**
baz=254
**LAO LASA Array 99.91 44** P **Pdif** **19 42 48.5 +0.9**
baz=253
**JCT Junction City 100.20 61** P **Pdif** **19 42 49.2 -0.1**
baz=254
**YKA Yellowknife Ar 100.39 27** P **Pdif** **19 42 49.9 +0.6**
comp=Z,13nm,0.8s,baz=260,slow=4.6,SNR=39
**RSSD Black Hills 100.67 47** P **Pdif** **19 42 51.6 +0.3**
baz=254
**MKAR Makanchi Array 101.44 316** P **Pdif** **19 42 54.6 +0.2**
comp=Z,6.7nm,0.7s,baz=97,slow=5.7,SNR=42
MKAR PP **PP** **19 47 04.1 -3.0**
comp=Z,2.0nm,1.0s,baz=99,slow=9.2,SNR=5.3
MKAR PKiKP **PKiKP** **19 47 16.6 -0.9**
comp=Z,2.2nm,0.7s,baz=101,slow=1.3,SNR=6.1
MKAR PKKPbc **PKKPbc** **19 59 00.8 -2.9**
comp=Z,1.2nm,0.6s,baz=259,slow=3.7,SNR=11
**MKAR Makanchi Array 101.44 316** *i* P **Pdif** **19 42 54.7 +0.3**
MKAR pmax pmax
comp=Z,7.0nm,0.7s
**MAKZ Makanchi 101.65 316** ⇑P **Pdif** **19 42 55.5 +0.2**
**ZALV Zalesovo Beam 101.80 323** P **Pdif** **19 42 55.0 -0.7**
comp=Z,2.8nm,0.7s,baz=121,slow=5.1,SNR=11
ZALV PP **PP** **19 47 05.3 -4.2**
comp=Z,1.1nm,0.7s,baz=127,slow=6.0,SNR=3.8
ZALV PKiKP **PKiKP** **19 47 17.3 -0.5**
comp=Z,1.7nm,0.7s,baz=90,slow=0.7,SNR=5.9
ZALV PKKPbc **PKKPbc** **19 59 00.4 -2.4**
comp=Z,0.8nm,0.5s,baz=281,slow=3.7,SNR=4.6
**ZALV Zalesovo Beam 101.80 323** *i* P **Pdif** **19 42 55.2 -0.5**
ZALV pmax pmax
comp=Z,3.0nm,0.7s
**KURBB Kurchatov Arra 104.76 319** Pdiff **Pdif** **19 43 09.1 +0.1**
comp=Z,1.5nm,0.8s,baz=95,slow=4.2,SNR=8.3
KURBB PKiKP **PKiKP** **19 47 22.5 -0.8**
comp=Z,2.9nm,0.8s,baz=113,slow=1.7,SNR=16
KURBB PKKPbc **PKKPbc** **19 58 51.4 -2.5**
comp=Z,2.1nm,0.9s,baz=286,slow=3.7,SNR=13
**BVAR Borovoye Array 110.10 321** PKiKP **PKiKP** **19 47 32.4 -0.8**
comp=Z,3.4nm,0.5s,baz=117,slow=0.6,SNR=17
BVAR PKKPbc **PKKPbc** **19 58 34.5 -2.8**
comp=Z,1.1nm,0.8s,baz=149,slow=3.4,SNR=5.1
**BRVK Borovoye 110.17 321** *d* PKiKP **PKiKP** **19 47 32.7 -0.6**
**LPAZ La Paz 113.68 118** PKiKP **PKiKP** **19 47 41.3 -0.6**
comp=Z,2.1nm,0.9s,baz=3.8,slow=1.3,SNR=4.9
LPAZ PKKPbc **PKKPbc** **19 58 23.6 -1.6**
comp=Z,0.5nm,0.4s,baz=54,slow=2.3,SNR=4.6
**CPUP Villa Florida 116.29 133** **PKiKP** **19 47 45.8 -0.2**
**CPUP Villa Florida 116.29 133** PKP **PKPdf** **19 47 45.4 -0.6**
comp=Z,2.0nm,0.7s,baz=198,slow=3.6,SNR=6.9
CPUP PKKPbc **PKKPbc** **19 58 14.2 -1.6**
comp=Z,1.3nm,0.7s,baz=104,slow=4.2,SNR=2.6
**CPUP Villa Florida 116.29 133** PKiKP **PKiKP** **19 47 45.8 -0.2**
**ABKAR Akbulak array 116.57 316** PKPdf **PKPdf** **19 47 45.0 -0.7**
**ARU Arti 116.92 324** PKPdf **PKPdf** **19 47 45.4 -0.7**
**ARU Arti 116.92 324** *i* PKiKP **PKPdf** **19 47 45.6 -0.5**

ARU 19 48 55.4
ARU 19 54 38.3
**BLA Blacksburg** 117.22 57 P **PKPdf** 19 47 46.6 -0.8
baz=266
**M53A Wi Miller and** 117.22 53 P **PKPdf** 19 47 46.1 -1.1
baz=268
**SOHO SOHO** 117.63 288 *i* P **PKPdf** 19 47 47.9 -0.6
SMN=20
**UOSS Minazif** 118.05 289 P **PKPdf** 19 47 47.5 -1.8
**HATD Hatta, Dubai** 118.10 289 P **PKPdf** 19 47 48.8 -0.7
**BANOM Banah** 118.11 290 P **PKPdf** 19 47 48.1 -1.3
**ASHO Ashiyiah** 118.14 288 P **PKPdf** 19 47 48.8 -0.8
**MSFE Esma-Masafi** 118.16 289 P **PKPdf** 19 47 49.1 -0.4
**ALNE Al Ain** 118.32 288 *i* P **PKPdf** 19 47 49.4 -0.5
SNR=6.5
**NAZ Nazwa, Dubai** 118.55 289 *i* P **PKPdf** 19 47 49.8 -0.4
SNR=10
**FAQ Al Faqa, Dubai** 118.57 288 P **PKPdf** 19 47 50.0 -0.3
**ASUD Al Ashush, Dub** 118.79 288 P **PKiKP** 19 47 50.7 -0.1
**SPA0 Spitsbergen Ar** 119.24 354 *e*PKPdf **PKPdf** 19 47 49.5 -0.6
**SPITS Spitsbergen Ar** 119.24 354 PKP **PKPdf** 19 47 49.0 -1.1
comp=Z,16nm,0.7s,baz=90,slow=5.0,SNR=13
**SSPA Standing Stone** 119.32 53 P **PKPdf** 19 47 49.8 -1.5
baz=270
**MZR Muzera** 120.21 286 *i* P **PKiKP** 19 47 54.0 +0.4
SNR=28
**BINY Binghamton** 120.73 52 P **PKPdf** 19 47 52.4 -1.5
baz=272
**BOSA Boshof** 121.29 217 PKP **PKPdf** 19 47 55.6 0.0
comp=Z,12nm,0.7s,baz=140,slow=1.9,SNR=23
BOSA PKKPbc **PKKPbc** 19 57 55.5 -2.5
comp=Z,4.2nm,1.0s,baz=255,slow=4.8,SNR=6.9
**SAML Samuel** 121.44 114 PKPdf **PKPdf** 19 47 55.2 -1.0
**SAML Samuel** 121.44 114 PKiKP **PKPdf** 19 47 55.2 -1.0
**LONY Lake Ozonia** 121.62 49 P **PKPdf** 19 47 54.1 -1.4
baz=274
**PAL Palisades** 122.33 53 P **PKPdf** 19 47 56.0 -1.0
baz=272
**L61B Northampton** 123.16 51 P **PKPdf** 19 47 57.7 -0.9
baz=274
**LBNH Lisbon** 123.55 49 **PKPdf** 19 47 58.4 -0.9
**LBNH Lisbon** 123.55 49 P **PKPdf** 19 47 58.6 -0.7
baz=276
**LBNH Lisbon** 123.55 49 PKiKP **PKPdf** 19 47 58.4 -0.9
**SUMG Summit** 124.03 10 PKPdf **PKPdf** 19 47 59.3 -0.6
**SUMG Summit** 124.03 10 PKiKP **PKPdf** 19 47 59.3 -0.6
**HAMF Hammerfest** 124.30 347 *e*PKPdf **PKPdf** 19 47 58.9 -1.0
**SCHQ Schefferville** 124.66 36 PKP **PKPdf** 19 47 59.8 -1.3
comp=Z,7.4nm,0.8s,baz=313,slow=4.2,SNR=4.3
**ARA0 ARCESS Array S** 124.71 345 *e*PKPdf **PKPdf** 19 48 00.6 -0.2
**ARCES ARCESS Array B** 124.71 345 **PKPdf** 19 47 59.9 -0.9
**ARCES ARCESS Array B** 124.71 345 PKP **PKPdf** 19 48 00.2 -0.6
comp=Z,14nm,0.5s,baz=66,slow=1.3,SNR=99
**PKME Peaks-Kenny Pk** 125.28 48 P **PKPdf** 19 48 01.9 -0.6
baz=279
**F63A Nahmakanta, Br** 125.34 47 **PKPdf** 19 48 01.9 -0.7
**KTK1 Kautokeino** 125.64 346 *e*PKPdf **PKPdf** 19 48 01.9 -0.7
**PQI Presque Isle** 125.92 46 **PKPdf** 19 48 02.1 -1.7
**TRO Tromso** 126.10 348 *e*PKPdf **PKPdf** 19 48 02.6 -0.8
**BATG Bathurst New B** 127.11 45 PKPdf **PKPdf** 19 48 05.0 -1.1
**JOF Joensuu** 127.40 337 *e*P **PKPdf** 19 48 05.3 -0.7
**RAYN Ar Rayn** 127.55 286 PKPdf **PKPdf** 19 48 07.7 +0.1
**RAYN Ar Rayn** 127.55 286 *i* P **PKiKP** 19 48 08.1 -0.1
SNR=14
**RAYN Ar Rayn** 127.55 286 PKiKP **PKPdf** 19 48 07.7 +0.1
**VRH Novokhopyorsk** 127.75 321 *e*PKiKP **PKPdf** 19 48 06.5 -0.6
VRH pmax pmax
comp=Z,45nm,0.8s
**STEI Steigen** 128.26 348 *e*PKPdf **PKPdf** 19 48 06.5 -1.0
**GOF Gofitskoye** 128.51 313 *ce*PKiKP **PKPdf** 19 48 08.7 0.0
**LSZ Lusaka** 128.73 231 PKPdf **PKiKP** 19 48 10.8 -0.1
**LSZ Lusaka** 128.73 231 PKiKP **PKiKP** 19 48 10.8 -0.1
**KBZ Khabaz** 128.88 311 PKP **PKPdf** 19 48 09.4 -0.1
comp=Z,5.3nm,0.9s,baz=130,slow=3.5,SNR=8.6
**LPSR Galich'ya Gora** 128.91 323 *e*PKiKP **PKPdf** 19 48 08.7 -0.5
LPSR pmax pmax
comp=Z,80nm,1.2s
**KIV Kislovodsk** 128.99 312 PKPdf **PKPdf** 19 48 09.4 -0.4
**KIV Kislovodsk** 128.99 312 *i* P **PKPdf** 19 48 09.8 0.0
SNR=6.9
**KIV Kislovodsk** 128.99 312 ⇓P **PKiKP** 19 48 10.6 +0.1
**KIV Kislovodsk** 128.99 312 *i* PKiKP **PKiKP** 19 48 10.3 -0.2
KIV pmax pmax
comp=Z,18nm,1.1s
**VORR Voronezh** 129.08 322 *e*PKiKP **PKiKP** 19 48 09.8 -0.5
VORR pmax pmax
comp=Z,61nm,0.6s
**OBN Obninsk** 129.16 327 **PKPdf** 19 48 09.8 +0.1
**OBN Obninsk** 129.16 327 ⇓P **PKiKP** 19 48 10.2 -0.2
**OBN Obninsk** 129.16 327 *d*/PKiKP **PKPdf** 19 48 07.5 -2.1
OBN *e* 19 49 01.8
OBN *e* 19 50 21.0
OBN *e*PPP PPP 19 53 08.9
OBN pmax pmax
comp=Z,26nm,1.1s
**VSR Storozhevoye** 129.27 322 *e*PKiKP **PKPdf** 19 48 08.7 -1.3
VSR pmax pmax
comp=Z,60nm,1.5s
**VORD Divnogorie** 129.28 321 *e*PKiKP **PKPdf** 19 48 08.8 -1.2
VORD pmax pmax
comp=Z,20nm,0.9s
**BDFB Brasilia** 129.83 131 PKP **PKPdf** 19 48 11.6 -0.7
comp=Z,13nm,0.8s,baz=230,slow=2.4,SNR=16
**MOR8 Moi Rana** 129.93 347 *e*PKPdf **PKPdf** 19 48 10.3 -0.6
**STOK Stokkvaagen** 130.09 348 *e*PKPdf **PKPdf** 19 48 10.5 -0.6
**KEF Keuruu** 130.16 339 *e*P **PKPdf** 19 48 11.1 -0.2
**BCA Borcka** 130.24 309 ⇑P **PKiKP** 19 48 13.2 +0.1
**FINES FINESS Array B** 130.24 338 PKPdf **PKPdf** 19 48 10.7 -0.8
**FINES FINESS Array B** 130.24 338 PKhKP PKPpre 19 48 04.3
comp=Z,1.1nm,0.6s,baz=159,slow=1.6,SNR=4.9
FINES PKP **PKPdf** 19 48 10.5 -1.0
comp=Z,7.2nm,0.9s,baz=54,slow=2.4,SNR=11
FINES SKPbc **SKPbc** 19 51 14.4 -0.6
comp=Z,4.4nm,0.8s,baz=29,slow=3.2,SNR=6.4
**VAF Ylistaro** 130.26 341 *e*P **PKPdf** 19 48 11.5 +0.1
**SOC Sochi** 131.17 312 *i* PKiKP **PKPdf** 19 48 13.6 -0.2
SOC *e* 19 50 32.9
SOC *e*PPP PPP 19 53 30.1
SOC *e*PS **PS** **20 00 48.0 -2.4**
SOC *e*SS SS 20 07 49.1 -0.1
SOC *e*SSS SSS 20 12 45.1
SOC pmax pmax
comp=Z,6.0nm,0.5s
**ARBE Arbavere** 131.60 336 *e*P **PKiKP** 19 48 14.6 -0.5
**MEF Metsahovi** 131.68 337 *e*P **PKiKP** 19 48 14.6 -0.6
**NSS Namsos** 131.88 347 *e*PKPdf **PKPdf** 19 48 14.4 -0.1
**LODK Lodwar** 132.32 257 PKPdf **PKPdf** 19 48 17.1 +0.1
**TSUM Tsumeb** 132.98 218 PKPdf **PKPdf** 19 48 18.5 +0.3
**TBLU Trondheim** 133.37 347 *e*PKPdf **PKiKP** 19 48 17.9 -0.7
**MNK Minsk** 133.81 330 *i* PKiKP **PKiKP** 19 48 19.2 -0.6
MNK *i* 19 49 11.0
MNK *i* 19 50 51.4
MNK *i* SS SS 20 08 23.5 +3.5
MNK pmax pmax
comp=Z,24nm,0.9s
MNK pmax pmax
comp=E,16nm,0.9s
MNK pmax pmax
comp=N,3.0nm,0.8s
**ISAL Salakas** 133.99 332 *e*P **PKPdf** 19 48 17.9 -0.8
**IIGN Ignalina** 134.08 331 *e*P **PKPdf** 19 48 17.9 -1.0
**SIM Simferopol'** 134.62 315 *e*PKiKP **PKiKP** 19 48 21.2 -0.5
SIM *e* 19 50 59.6
SIM pmax pmax
comp=Z,21nm,1.0s
**DOMB Dombas** 134.70 347 *e*PKPdf **PKPdf** 19 48 19.1 -0.8
**PABE Paberze** 134.99 333 *e*P **PKiKP** 19 48 21.2 -0.9
**NB2 NORSAR Subarra** 135.09 345 PKPdf **PKPdf** 19 48 20.5 -0.2
comp=Z,2.7nm,0.7s,baz=31,slow=1.9
**NOA NORSAR Array B** 135.09 345 PKP **PKPdf** 19 48 20.5 -0.2
comp=Z,3.4nm,0.7s,baz=31,slow=2.1,SNR=13
NOA SKKP 20 01 25.8
comp=Z,0.7nm,0.6s,baz=276,slow=4.3,SNR=3.6
**AKASG Malin Array Be** 135.17 325 **PKPdf** 19 48 20.0 -1.1
**AKASG Malin Array Be** 135.17 325 PKhKP PKPpre 19 48 09.9
comp=Z,1.0nm,0.3s,baz=79,slow=2.0,SNR=5.4
AKASG PKP **PKPdf** 19 48 20.4 -0.7
comp=Z,9.6nm,0.9s,baz=62,slow=2.0,SNR=10
AKASG PP **PP** 19 50 56.8 -2.2
comp=Z,0.3nm,0.4s,baz=51,slow=7.8,SNR=1.5
AKASG SKP 19 51 32.5
comp=Z,2.6nm,0.6s,baz=48,slow=4.1,SNR=10
**KIEV Kiev** 135.18 325 PKPdf **PKPdf** 19 48 20.5 -0.7
**KIEV Kiev** 135.18 325 *i* P **PKPdf** 19 48 20.4 -0.7
SNR=6.8
**KIEV Kiev** 135.18 325 ⇓P **PKPdf** 19 48 21.0 -0.1
**KIEV Kiev** 135.18 325 ⇓PKiKP **PKPdf** 19 48 21.0 -0.1
**HFS Hagfors** 135.21 343 PKhKP PKPpre 19 48 13.1
comp=Z,2.8nm,0.8s,baz=90,slow=5.8,SNR=4.3
HFS PKP **PKPdf** 19 48 20.8 -0.1
comp=Z,2.8nm,0.7s,baz=48,slow=2.1,SNR=9.2
**NC60 NORSAR Array S** 135.27 345 *e*PKPdf **PKPdf** 19 48 21.4 +0.4
**PBUR Paburge** 135.50 334 *e*P **PKiKP** 19 48 22.7 -0.5
**SUW Suwalki** 136.30 331 *e*P **PKiKP** 19 48 24.3 -0.5
**MMAI Mount Meron Ar** 136.45 298 PKP **PKPdf** 19 48 24.5 +0.3
comp=Z,12nm,0.8s,baz=5.7,slow=1.4,SNR=14
MMAI SKP 19 51 39.5
comp=Z,4.7nm,0.6s,baz=64,slow=6.6,SNR=11
**KIRS Kirsehir-Merke** 136.49 307 ⇓P **PKPdf** 19 48 24.6 +0.5
**BR131 Keskin Array S** 136.54 308 ⇑/PKiKP **PKPdf** 19 48 24.6 +0.4
**BRTR Keskin Array B** 136.54 308 PKPre 19 48 11.9
BRTR PKPdf **PKPdf** 19 48 21.9 -2.4
**BRTR Keskin Array B** 136.54 308 PKhKP PKPpre 19 48 17.0
comp=Z,0.9nm,0.7s,baz=134,slow=3.6,SNR=5.1
BRTR PKP **PKPdf** 19 48 24.8 +0.5
comp=Z,4.4nm,0.7s,baz=130,slow=3.5,SNR=16
BRTR PP **PP** 19 51 02.2 -6.2
comp=Z,0.8nm,0.8s,baz=75,slow=7.6,SNR=3.6
**SORM Soroca** 136.93 322 ⇓P **PKPdf** 19 48 24.3 -0.1
**SORM Soroca** 136.93 322 ⇓PKiKP **PKPdf** 19 48 24.3 -0.1
**ANTO Ankara** 137.13 309 **PKPdf** 19 48 24.9 -0.3
**ANTO Ankara** 137.13 309 ⇓P **PKPdf** 19 48 25.1 -0.1
**ANTO Ankara** 137.13 309 PKiKP **PKPdf** 19 48 24.9 -0.3
**TLCR** 137.99 318 ⇑P **PKPdf** 19 48 26.9 +0.4
**TLCR** 137.99 318 ⇑PKiKP **PKPdf** 19 48 26.9 +0.4
**CFR Carcaliu** 138.43 318 ⇓P **PKPdf** 19 48 27.7 +0.4
**CFR Carcaliu** 138.43 318 ⇓PKiKP **PKPdf** 19 48 27.7 +0.4
**LVV L'vov** 138.45 326 *e*PKiKP **PKiKP** 19 48 29.1 -0.3
**TESR Tescani** 138.73 320 ⇑P **PKPdf** 19 48 28.3 +0.4
**ONER Baccal Valea Uz** 138.97 320 ⇓P **PKPdf** 19 48 29.2 +0.9
**BURAR Bucovina Array** 139.01 323 PKPre 19 48 19.3
BURAR PKPdf **PKPdf** 19 48 28.6 +0.1
**BURAR Bucovina Array** 139.01 323 ⇑P **PKPdf** 19 48 27.6 -0.9
**BURAR Bucovina Array** 139.01 323 ⇑PKiKP **PKPdf** 19 48 27.6 -0.9
**SPBR Spulber** 139.03 319 ⇓P **PKPdf** 19 48 27.5 -1.0
**PLOR Plostina** 139.05 320 ⇑P **PKPdf** 19 48 28.7 +0.2
**PLOR Plostina** 139.05 320 ⇑PKiKP **PKPdf** 19 48 28.7 +0.2
**MLR Muntele Rosu** 139.66 319 PKhKP PKPpre 19 48 23.4
comp=Z,2.9nm,0.6s,baz=175,slow=7.1,SNR=2.2
MLR PKP **PKPdf** 19 48 29.1 -0.7
comp=Z,4.5nm,0.6s,baz=56,slow=3.6,SNR=6.9
**MLR Muntele Rosu** 139.66 319 ⇑P **PKPdf** 19 48 29.4 -0.4
**MLR Muntele Rosu** 139.66 319 PKiKP **PKPdf** 19 48 29.4 -0.4
**KOLS Kolonicke sedl** 139.90 326 *e*PKHKP PKPpre 19 48 23.5
**KOLS Kolonicke sedl** 139.90 326 *e*PKP **PKPdf** 19 48 23.5 -6.4
**VOIR** 140.23 320 ⇑P **PKPdf** 19 48 27.0 -3.7
**VOIR** 140.23 320 ⇑PKiKP **PKPdf** 19 48 27.0 -3.7
**CRVS Cervenica-Dubn** 140.34 326 *e*PKiKP **PKPdf** 19 48 26.3 -4.4
**CRVS Cervenica-Dubn** 140.34 326 *e*PKP **PKPdf** 19 48 26.3 -4.4
**TNR Turnu Rosu** 140.59 321 ⇓P **PKPdf** 19 48 26.5 -4.8
**TNR Turnu Rosu** 140.59 321 ⇓PKiKP **PKPdf** 19 48 26.5 -4.8
**HUMR Humele** 140.72 319 ⇑P **PKPdf** 19 48 26.4 -5.2
**DRGR** 140.90 323 ⇓P **PKPdf** 19 48 27.8 -4.1
**DRGR** 140.90 323 ⇓PKiKP **PKPdf** 19 48 27.8 -4.1
**LOT Lotru** 141.00 321 ⇓P **PKPdf** 19 48 27.7 -4.5
**LANS Liptovska Anna** 141.21 328 *e*PKiKP **PKPdf** 19 48 29.8 -2.5
**LANS Liptovska Anna** 141.21 328 *e*PKP **PKPdf** 19 48 29.8 -2.5
**RUE Ruedersdorf** 141.36 336 *e*P **PKPdf** 19 48 32.8 +0.4
**GZR Gura Zlata** 141.62 321 ⇑P **PKPdf** 19 48 28.6 -4.6
**GZR Gura Zlata** 141.62 321 ⇑PKHKP PKPpre 19 48 28.6
**MORC Moravsky Berou** 141.73 330 *e*PKP **PKPdf** 19 48 28.1 -5.1
**MORC Moravsky Berou** 141.73 330 ⇓P **PKPdf** 19 48 28.9 -4.4
**MORC Moravsky Berou** 141.73 330 ⇓PKHKP PKPpre 19 48 28.9
**PSZ Piszkesteto** 141.77 326 ⇓P **PKPdf** 19 48 29.8 -3.6
**PSZ Piszkesteto** 141.77 326 ⇓PKiKP **PKPdf** 19 48 29.8 -3.6
**OSTC Ostas** 141.78 332 *e*PKP **PKPdf** 19 48 29.0 -4.3
**OSTC Ostas** 141.78 332 *e*PKHKP PKPpre 19 48 29.0
**SIRR Siria** 141.79 323 ⇑P **PKPdf** 19 48 29.3 -4.1
**SURR Surduc** 141.81 322 ⇑P **PKPdf** 19 48 29.4 -4.0
**CHVC Chvalec** 141.83 332 *e*PKP **PKPdf** 19 48 29.4 -4.0
**CHVC Chvalec** 141.83 332 *e*PKiKP **PKPdf** 19 48 29.4 -4.0
**KRLC Kraliky** 141.87 331 *e*PKP **PKPdf** 19 48 27.8 -5.7
**KRLC Kraliky** 141.87 331 *e*PKHKP PKPpre 19 48 27.8
**MAUC Maruska** 141.87 329 *e*PKP **PKPdf** 19 48 31.3 -2.2
**DPC Dobruska-Polom** 141.88 332 *e*PKP **PKPdf** 19 48 29.0 -4.5
**DPC Dobruska-Polom** 141.88 332 *e*PKHKP PKPpre 19 48 29.0
**UPC Upice** 141.91 332 *e*PKP **PKPdf** 19 48 29.6 -3.9
**UPC Upice** 141.91 332 *e*PKiKP **PKPdf** 19 48 29.6 -3.9
**VYHS Vyhne** 141.95 328 *e*PKiKP **PKPdf** 19 48 30.1 -3.5
**VYHS Vyhne** 141.95 328 *e*PKP **PKPdf** 19 48 30.1 -3.5
**HERR Herculane** 142.11 321 ⇓P **PKPdf** 19 48 30.5 -3.5
**BZS Buzias** 142.18 322 ⇓P **PKPdf** 19 48 34.1 0.0
**BZS Buzias** 142.18 322 ⇓PKiKP **PKPdf** 19 48 34.1 0.0
**JAVC Velka Javorina** 142.29 329 *e*PKP **PKPdf** 19 48 32.0 -2.3
**FLTG Flechtingen** 142.42 338 *e*PKPbc **PKPdf** 19 48 30.5 -3.8
baz=36,slow=3.2
**VRAC Vranov** 142.50 330 *e*PKP **PKPdf** 19 48 30.3 -4.3
**VRAC Vranov** 142.50 330 PKhKP PKPpre 19 48 30.5
comp=Z,6.7nm,0.7s,baz=198,slow=6.4,SNR=9.4
VRAC SKKPbc SKKPbc 20 00 08.2 -2.9
comp=Z,1.0nm,0.4s,baz=342,slow=3.2,SNR=3.8
**VRAC Vranov** 142.50 330 ⇓P **PKPdf** 19 48 30.9 -3.7
**VRAC Vranov** 142.50 330 ⇓PKiKP **PKPdf** 19 48 30.9 -3.7
**PVCC Panska Ves** 142.52 333 *e*PKP **PKPdf** 19 48 31.2 -3.4
**PVCC Panska Ves** 142.52 333 *e*PKiKP **PKPdf** 19 48 31.2 -3.4
**BRG Berggiesshubel** 142.53 334 *i* PKP **PKPdf** 19 48 31.1 -3.5
BRG Amp 19 48 32.0
comp=Z,13nm,0.9s
**BRG Berggiesshubel** 142.53 334 P PKiKP 19 48 45.3 +7.6
BRG Amp 19 48 45.9
comp=Z,7.4nm,0.9s
**BRG Berggiesshubel** 142.53 334 *e*PKPbc **PKPdf** 19 48 31.3 -3.3
baz=36,slow=3.2
**CLL Collm** 142.57 335 *i* PKPpre PKPpre 19 48 30.8
comp=Z,22nm,1.2s
CLL *e*(PKPdf) **PKiKP** 19 48 36.0 -1.8
comp=Z,12nm,0.9s
**CLL Collm** 142.57 335 *i* PKiKP **PKPdf** 19 48 30.8 -3.8
CLL pmax pmax
comp=Z,22nm,1.2s
**CLL Collm** 142.57 335 *e*PKPbc **PKPdf** 19 48 30.8 -3.8
baz=36,slow=3.2
**MDVR Moldovita** 142.59 321 ⇓P **PKPdf** 19 48 32.2 -2.7
**SRO Srobarova** 142.66 327 *e*PKiKP **PKPdf** 19 48 32.3 -2.6
**SRO Srobarova** 142.66 327 *e*PKP **PKPdf** 19 48 32.3 -2.6
**RETH Rethem/Aller,** 142.73 340 *e*PKPbc **PKPdf** 19 48 31.5 -3.3
baz=36,slow=3.2
**KRUC Moravsky** 142.76 330 *e*PKP **PKPdf** 19 48 31.1 -3.9
**GOPC GO Pecny, Ondr** 142.88 332 *e*PKP **PKPdf** 19 48 31.6 -3.7
**GOPC GO Pecny, Ondr** 142.88 332 *e*PKiKP **PKPdf** 19 48 31.6 -3.7
**NVR Nevrokopi** 142.93 315 P **PKPdf** 19 48 33.4 -2.2
**PRU Pruhonice** 142.94 333 *e*PKP **PKPdf** 19 48 32.1 -3.2
**PRU Pruhonice** 142.94 333 *e*PKiKP **PKPdf** 19 48 32.1 -3.2
**HSKC Hora Svate Kat** 142.94 334 *e*PKP **PKPdf** 19 48 32.8 -2.5
**KOKK Kokkinochori,** 143.07 314 P PKPab 19 48 32.1 +0.4
**NEUB Neuenburg** 143.13 336 *e*PKPbc PKPbc 19 48 32.9 -0.2
baz=36,slow=3.2
**CLZ Clausthal** 143.13 338 *e*PKPbc PKPbc 19 48 33.2 0.0
baz=36,slow=3.2
**EKA Eskdalemuir Ar** 143.15 353 PKhKP PKPpre 19 48 31.8
comp=Z,3.8nm,0.5s,baz=352,slow=2.8,SNR=14
EKA PKP **PKPdf** 19 48 35.5 0.0
comp=Z,3.6nm,0.5s,baz=346,slow=1.5,SNR=7.7
**SRS Serrai** 143.21 314 P PKPab 19 48 32.7 +0.4
**OUR Ouranopolis** 143.29 313 P PKPbc 19 48 33.4 -0.5
**FRGS Fruska Gora** 143.49 323 ⇑/P PKPbc 19 48 34.6 +0.2
**ZVC Zvikov** 143.49 332 *e*PKP PKPbc 19 48 34.3 +0.1
**GTTG Gottingen** 143.52 338 *e*PKPbc PKPbc 19 48 34.5 +0.3
baz=36,slow=3.2
**PLN Plauen** 143.55 335 *e*PKPbc PKPbc 19 48 34.3 -0.1
baz=36,slow=3.2
**IBBN Ibbenburen** 143.61 341 *e*PKPbc PKPbc 19 48 34.6 +0.2
baz=36,slow=3.2
**MOX Moxa** 143.64 336 *e*PKPbc PKPbc 19 48 34.5 -0.1
baz=36,slow=3.2
**KNT Kendrikon** 143.66 315 P PKPab 19 48 34.2 +0.1
**PAIG Palouri** 143.67 313 P PKPab 19 48 34.0 -0.1
**SANT Santorini** 143.70 306 PKPbc 19 48 35.5 +0.2
**RONA Rosalia, Austr** 143.75 329 *i* PKP PKPbc 19 48 35.7 +0.6
comp=Z,77nm,0.9s,SNR=91
**HORT Hortiatis** 143.78 314 P PKPab 19 48 34.5 -0.2
**VAY Valandovo** 143.81 315 *i* P PKPbc 19 48 35.1 -0.2
**CONA Conrad Observa** 143.81 329 *i* PKP **PKPdf** 19 48 36.2 -0.8
comp=Z,34nm,0.6s,SNR=56
**CKRC Cesky Krumlov** 143.90 332 *e*PKP PKPbc 19 48 35.8 +0.4
**CKRC Cesky Krumlov** 143.90 332 *e*PKiKP PKPbc 19 48 35.8 +0.4
**KYMI Kymi, Euboea I** 143.90 310 P PKPab 19 48 34.5 -0.6
**MANZ Manzenberg** 143.96 335 *e*PKPbc PKPbc 19 48 35.9 +0.4
baz=36,slow=3.2
**KHC Kasperske Hory** 143.99 332 PKPdf PKPbc 19 48 35.8 0.0
**KHC Kasperske Hory** 143.99 332 *e*PKP PKPbc 19 48 36.1 +0.4
**KHC Kasperske Hory** 143.99 332 *e*PKiKP PKPbc 19 48 36.1 +0.4
**TEKS Tekeris** 144.01 322 ⇑/P PKPbc 19 48 36.1 +0.2
**ROTZ Rotzenmuhle** 144.09 334 *e*PKPbc **PKPdf** 19 48 36.5 -0.9
baz=36,slow=3.2
**UBBA Unterbreizbach** 144.10 337 *e*PKPbc PKPbc 19 48 36.3 +0.5
baz=36,slow=3.2
**GEC2 GERESS Array S** 144.15 332 PKPdf PKPbc 19 48 36.1 -0.1
**GEC2 GERESS Array S** 144.15 332 *e*PKPbc PKPbc 19 48 36.4 +0.1
baz=36,slow=3.2
**GERES GERESS Array B** 144.15 332 PKPbc 19 48 36.1 -0.1
**GERES GERESS Array B** 144.15 332 PKP PKPbc 19 48 36.0 -0.3
comp=Z,39nm,0.8s,baz=159,slow=8.3,SNR=224
**HPK Haverah Park** 144.28 351 *e*P PKPbc 19 48 36.0 -0.4
**WET Wettzell** 144.29 333 *e*PKPbc **PKPdf** 19 48 37.1 -0.7
baz=36,slow=3.2
**KASTN Kahler Asten** 144.34 339 *e*PKPbc PKPbc 19 48 36.9 +0.2
baz=36,slow=3.2
**ATHU Athens Univers** 144.39 310 P **PKPab** 19 48 36.6 -0.4
**MHLO Agia Marina, M** 144.40 307 P **PKPab** 19 48 36.5 -0.5
**LIT Litokhoron** 144.42 314 P **PKPab** 19 48 36.7 -0.4
**ARSA Arzberg** 144.44 329 *i* PKP **PKPdf** 19 48 37.7 -0.4
comp=Z,24nm,0.6s,SNR=62
**SJES Sjenica** 144.47 320 ⇑/P **PKPdf** 19 48 38.5 +0.1
**BBLS Lazi&#263i** 144.47 321 ⇑/P **PKPdf** 19 48 38.3 0.0
**IDI Anoyia** 144.48 305 P **PKPab** 19 48 36.8 -0.7
**IDI Anoyia** 144.48 305 PKP **PKPab** 19 48 37.2 -0.3
comp=Z,43nm,0.4s,baz=40,slow=7.3,SNR=108
**BUG Bochum--Univer** 144.51 340 *e*PKPbc PKPbc 19 48 37.1 0.0
baz=36,slow=3.2
**KTI Kastanea** 144.54 314 P **PKPab** 19 48 37.5 -0.2
**GRF Grafenberg Arr** 144.54 335 *e*PKPbc **PKPdf** 19 48 38.2 0.0
baz=36,slow=3.2
**GRFO Grafenberg** 144.55 335 **PKPdf** 19 48 37.7 -0.5
**GRFO Grafenberg** 144.55 335 PKiKP **PKPdf** 19 48 37.7 -0.5
**HAPS Han Pijesak,BI** 144.61 322 ⇑/P **PKPdf** 19 48 38.9 +0.3
**MOA Molln** 144.62 330 *i* PKP **PKPdf** 19 48 38.4 0.0
comp=Z,153nm,0.7s,SNR=166
**RUDO Rudo** 144.63 321 *e*P PKPbc 19 48 37.9 +0.1
**VILL Villia** 144.66 310 P **PKPab** 19 48 36.8 -1.3
**TYRN Tyrnavos** 144.77 313 P PKPbc 19 48 37.0 -1.3
**KZN Kozani** 144.81 314 P PKPbc 19 48 37.9 -0.7
**LBWR Ladybower, Pea** 144.84 351 *e*P **PKPab** 19 48 37.9 -0.2
LBWR lAmb lAmb 19 48 38.8
comp=Z,192nm,1.1s
**FNA Florina** 144.85 315 *i* P PKPbc 19 48 33.4 -5.2
**FNA Florina** 144.85 315 P PKPbc 19 48 38.0 -0.7
**AXAR Agios Charalam** 144.88 311 P PKPbc 19 48 38.1 -0.6
**BCI Bajram Curri** 144.90 319 *i* P PKPbc 19 48 33.4 -5.3
**LOUT Loutraki** 144.97 310 P **PKPbc** 19 48 37.9 -1.1
**BIOA Bad Ischl, Aus** 145.03 331 *i* PKP **PKPab** 19 48 39.3 +0.2
comp=Z,50nm,0.7s,SNR=78
**WACR West Acre** 145.06 348 *e*P **PKPab** 19 48 38.8 -0.2
WACR lAmb lAmb 19 48 39.5
comp=Z,245nm,0.9s
**KRND KRANIDI** 145.08 309 P **PKPbc** 19 48 38.4 -1.0
**OHR Ohrid** 145.08 316 *i* P **PKPab** 19 48 40.2 +0.6
**SOKA Soboth** 145.08 328 *i* PKP **PKPbc** 19 48 39.0 -0.2
comp=Z,88nm,0.7s,SNR=158
**IMMV Iera Moni Meta** 145.13 305 P **PKPab** 19 48 40.0 +0.1
**MAKR Makrakomi, Fth** 145.15 312 P **PKPdf** 19 48 39.4 -0.2
**UPM Unac-Piva** 145.15 321 ⇑/P **PKPbc** 19 48 39.6 -0.1
**TNS Taunus Mts** 145.15 338 *e*PKPbc **PKPab** 19 48 39.8 +0.3
baz=36,slow=3.2
**RCBR Riachuelo** 145.16 132 **PKPbc** 19 48 39.7 -0.7
**RCBR Riachuelo** 145.16 132 PKIKP **PKPbc** 19 48 39.7 -0.7
**PUK Puka** 145.18 318 *i* P **PKPab** 19 48 39.4 -0.2
**WME Myndd Eilian** 145.19 353 *e*P **PKPab** 19 48 39.1 -0.4
**WPS Cemaes, Angles** 145.21 353 *e*P **PKPdf** 19 48 38.8 -0.3
WPS lAmb lAmb 19 48 39.7
comp=Z,88nm,1.0s
**A051A Mrakovica** 145.21 325 ⇑/P **PKPab** 19 48 40.1 +0.2
**STNC Stoke** 145.21 351 *e*P **PKPab** 19 48 39.9 +0.4
STNC lAmb lAmb 19 48 40.4
comp=Z,191nm,0.9s
**BLY Banja Luka** 145.22 324 ⇑/P **PKPab** 19 48 40.5 +0.6
**NEST Nestorio** 145.25 315 P **PKPbc** 19 48 39.8 -0.1
**WLF1 Llynfaes** 145.30 353 *e*P **PKPab** 19 48 39.5 -0.4
WLF1 lAmb lAmb 19 48 40.2
comp=Z,320nm,1.0s
**KBN Korca** 145.32 315 *i* P **PKPdf** 19 48 37.5 -2.4
**KBN Korca** 145.32 315 P **PKPab** 19 48 40.5 0.0
**PRIJ Prijedor** 145.34 325 ⇑/P **PKPab** 19 48 41.0 +0.7
**PDG Podgorica** 145.37 319 ⇑/P **PKPab** 19 48 40.4 -0.1
**PDG Podgorica** 145.37 319 ⇓P **PKPab** 19 48 40.5 -0.1
**RJOB Jochberg** 145.38 332 *e*PKPbc **PKPab** 19 48 40.4 0.0
baz=36,slow=3.2
**CWF Charnwood Fore** 145.41 350 *e*P **PKPbc** 19 48 39.8 -0.1
**EVR Evrytania** 145.41 312 P **PKPab** 19 48 41.5 +0.5
**YLL Llanberis** 145.42 353 *e*P **PKPdf** 19 48 39.3 -0.3
**OBKA Obir** 145.44 329 *i* PKP **PKPab** 19 48 40.5 -0.2
comp=Z,56nm,0.7s,SNR=55
**OBKA Obir** 145.44 329 ⇑/P **PKPbc** 19 48 40.2 -0.1
**GUR Goura** 145.45 310 P **PKPdf** 19 48 39.6 -0.6
**ANV Ano Chora** 145.47 312 P **PKPbc** 19 48 40.8 +0.1
**VLI Veliai** 145.48 308 P **PKPdf** 19 48 39.8 -0.4
**ANKY Antikythira Is** 145.51 306 P **PKPab** 19 48 41.3 0.0
**IGLA Glengowla, Co** 145.52 358 *e*P **PKPbc** 19 48 39.9 -0.2
**BRY Bratogost** 145.54 320 ⇑/P **PKPbc** 19 48 40.8 0.0
**KLV Kalavryta, Ach** 145.54 311 P **PKPdf** 19 48 40.3 0.0
**DRME Dracevica, Mon** 145.55 319 ⇑/P **PKPab** 19 48 41.0 -0.2
**FOEL Foel Wylfa** 145.55 352 *e*P **PKPab** 19 48 40.5 -0.3
**EFP Efpalio** 145.56 311 P **PKPab** 19 48 41.4 0.0
**KTHA Kythira Island** 145.56 307 P **PKPbc** 19 48 40.9 0.0
**TIR Tirane** 145.56 317 *i* P **PKPab** 19 48 41.5 +0.2
**TIR Tirane** 145.56 317 P **PKPab** 19 48 41.3 0.0
**TIR Tirane** 145.56 317 ⇑P **PKPab** 19 48 41.5 +0.2
**TIR Tirane** 145.56 317 ⇑PK2 **PKPab** 19 48 41.5 +0.2
**BEBN Eben Emael** 145.56 341 *d*PKPdf **PKPab** 19 48 40.6 -0.3
**ELMS Elmsett, Ipswi** 145.59 347 *e*P **PKPab** 19 48 40.6 -0.4
**BTNL Ternell** 145.61 341 *d*PKPdf **PKPab** 19 48 40.7 -0.5
**KBA Koelnbreinsper** 145.61 330 *e*PKP **PKPdf** 19 48 40.2 -0.1
comp=Z,23nm,0.6s,SNR=57
**MEM Membach** 145.63 341 *d*PKPdf **PKPbc** 19 48 40.6 0.0
**LLW Llanuwchllyn** 145.65 352 *e*P **PKPbc** 19 48 40.5 -0.1
**LESA Schwarzleotal** 145.67 331 *i* PKP **PKPbc** 19 48 41.1 +0.1
comp=Z,62nm,0.6s
**FUR Furstenfeldbru** 145.72 333 *e*PKPbc **PKPab** 19 48 41.7 0.0
baz=36,slow=3.2
**PVO Parav

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WLF** | **Walferdange** | **146.41 340** | *e*PKPbc | **PKPab** | 19 48 44.0 | -0.3 |
| | baz=36,slow=3.2 | | | | | | |
| **MOTA** | **Moosalm** | **146.43 333** | *e*PKP | **PKPdf** | 19 48 41.5 | -0.2 |
| | comp=Z,74nm,0.8s | | | | | | |
| **KEK** | **Kerkira** | **146.43 315** | P | **PKPbc** | 19 48 43.5 | +0.1 |
| **IWEX** | **Carrickbyrne,** | **146.43 356** | *e*P | **PKPbc** | 19 48 42.8 | -0.1 |
| **RETA** | **Reutte** | **146.46 333** | *e*PKP | **PKPbc** | 19 48 43.6 | +0.3 |
| | comp=Z,16nm,0.6s,SNR=28 | | | | | | |
| **SQTA** | **Sankt Quirin** | **146.48 332** | *i* PKP | **PKPdf** | 19 48 42.1 | +0.4 |
| | comp=Z,77nm,0.7s,SNR=80 | | | | | | |
| **STRD** | **Stroud** | **146.48 350** | *e*P | **PKPbc** | 19 48 43.0 | -0.1 |
| STRD | | | IAmb | IAmb | 19 48 44.9 | | |
| | comp=Z,110nm,0.7s | | | | | | |
| **FSK** | **Fiskardo** | **146.49 312** | P | **PKPbc** | 19 48 43.2 | -0.4 |
| **DOU** | **Dourbes** | **146.51 342** | *d*PKPdf | **PKPbc** | 19 48 43.5 | +0.3 |
| **MONM** | **Monmouth** | **146.51 351** | *e*P | **PKPbc** | 19 48 43.1 | -0.1 |
| MONM | | | IAmb | IAmb | 19 48 43.9 | | |
| | comp=Z,116nm,1.1s | | | | | | |
| **UBR** | **Ueberruh** | **146.59 334** | *e*PKPbc | **PKPbc** | 19 48 43.9 | +0.3 |
| | baz=36,slow=3.2 | | | | | | |
| **RSBS** | **Rosebush, Pemb** | **146.66 353** | *e*P | **PKPbc** | 19 48 43.2 | -0.4 |
| RSBS | | | IAmb | IAmb | 19 48 44.1 | | |
| | comp=Z,54nm,0.9s | | | | | | |
| **SWN1** | **Swindon** | **146.67 350** | *e*P | **PKPbc** | 19 48 43.8 | +0.1 |
| SWN1 | | | IAmb | IAmb | 19 48 44.6 | | |
| | comp=Z,245nm,0.7s | | | | | | |
| **WOL** | **Wolverton** | **146.76 349** | *e*P | **PKPbc** | 19 48 43.9 | 0.0 |
| **BFO** | **Black Forest** | **146.77 336** | | **PKPbc** | 19 48 44.1 | 0.0 |
| **BFO** | **Black Forest** | **146.77 336** | PKP2 | **PKPbc** | 19 48 44.1 | 0.0 |
| **BFO** | **Black Forest** | **146.77 336** | *e*PKPbc | **PKPbc** | 19 48 44.3 | +0.2 |
| | baz=36,slow=3.2 | | | | | | |
| **FETA** | **Feichten** | **146.84 333** | *i* PKP | **PKPdf** | 19 48 42.5 | +0.1 |
| | comp=Z,43nm,0.7s,SNR=70 | | | | | | |
| **DAVA** | **Damuels** | **146.99 334** | *i* PKP | **PKPbc** | 19 48 45.4 | +0.5 |
| | comp=Z,37nm,0.9s,SNR=33 | | | | | | |
| **SCTE** | **Santa Cesarea** | **147.13 316** | *i* P | **PKPbc** | 19 48 45.5 | +0.2 |
| **DAVOX** | **Davos/Dischmat** | **147.39 333** | PKPbc | **PKPbc** | 19 48 46.3 | +0.2 |
| | comp=Z,99nm,0.6s,baz=13,slow=2.8,SNR=216 | | | | | | |
| **NOCI** | **Noci** | **147.65 318** | *i* P | **PKPbc** | 19 48 45.5 | -1.2 |
| **SGRT** | **San Giovanni R** | **147.89 321** | PKPdf | **PKPdf** | 19 48 43.1 | -1.1 |
| SGRT | | | PKPbc | **PKPbc** | 19 48 47.5 | 0.0 |
| **SGRT** | **San Giovanni R** | **147.89 321** | *i* P | **PKPdf** | 19 48 45.5 | +1.4 |
| **MATE** | **Matera** | **147.95 318** | ⇑P | **PKPbc** | 19 48 47.6 | +0.1 |
| **SBD** | **Saint Breward** | **148.02 353** | *e*P | **PKPbc** | 19 48 47.1 | -0.2 |
| **DYA** | **Yadsworthy** | **148.05 352** | *e*P | **PKPbc** | 19 48 46.9 | -0.5 |
| **CCA1** | **Carnmenellis** | **148.45 353** | *e*P | **PKPbc** | 19 48 48.2 | -0.2 |
| **NRCA** | **Norcia** | **148.71 325** | | **PKPdf** | 19 48 44.5 | -0.9 |
| NRCA | | | PKPbc | **PKPbc** | 19 48 49.4 | -0.1 |
| **TIP** | **Timpagrande** | **148.72 316** | PKPdf | **PKPdf** | 19 48 45.3 | -0.3 |
| TIP | | | PKPbc | **PKiKP** | 19 48 50.3 | -0.7 |
| **TIP** | **Timpagrande** | **148.72 316** | ⇑P | **PKiKP** | 19 48 50.2 | -0.7 |
| **JQE** | **Queens East** | **148.94 349** | *e*P | **PKPbc** | 19 48 49.7 | 0.0 |
| **JSA** | **Saint Aubin** | **148.98 349** | *e*P | **PKPbc** | 19 48 49.9 | +0.1 |
| JSA | | | IAmb | IAmb | 19 48 50.2 | | |
| | comp=Z,59nm,0.7s | | | | | | |
| **MSSA** | **Maissana** | **149.46 331** | PKPdf | **PKPdf** | 19 48 45.4 | -1.2 |
| MSSA | | | | **PKPbc** | 19 48 49.9 | -1.4 |
| **VAE** | **Valguarnera** | **151.19 315** | PKPbc | **PKiKP** | 19 48 56.6 | +0.5 |
| | comp=Z,33nm,1.0s,baz=217,slow=5.1,SNR=5.2 | | | | | | |
| **VSL** | **Villasalto** | **153.04 324** | PKPdf | **PKPdf** | 19 48 51.7 | -0.4 |
| VSL | | | PKPbc | **PKPbc** | 19 48 59.2 | -0.4 |
| VSL | | | PKPab | **PKPab** | 19 49 11.5 | -0.4 |
| **KEST** | **Kesra** | **155.53 317** | PKP | **PKPdf** | 19 48 55.9 | +0.1 |
| | comp=Z,2.7nm,1.0s,baz=198,slow=2.2,SNR=2.9 | | | | | | |
| KEST | | | PKPab | **PKPab** | 19 49 24.0 | +1.3 |
| | comp=Z,20nm,0.8s,baz=229,slow=4.9,SNR=11 | | | | | | |
| **TATN** | **Tataouine** | **156.48 310** | PKPdf | **PKPdf** | 19 48 56.3 | -0.8 |
| TATN | | | PKPab | **PKPab** | 19 49 26.3 | -0.5 |
| **PBRG** | **Braganca** | **156.89 352** | *e*PKPab | **PKPab** | 19 49 28.6 | +0.4 |
| **PGAV** | **Gavieira, Arco** | **156.89 355** | *e*PKPab | **PKPab** | 19 49 29.0 | +0.8 |
| **POLO** | **Lamas de Olo** | **157.44 354** | *e*PKPab | **PKPab** | 19 49 31.3 | +0.7 |
| **PVRL** | **Vila Real** | **157.53 354** | *e*PKPab | **PKPab** | 19 49 31.7 | +0.8 |
| **MVO** | **Moncorvo** | **157.56 352** | *e*PKPab | **PKPab** | 19 49 31.4 | +0.3 |
| **PVIS** | **Viseu** | **158.10 354** | *e*PKPab | **PKPab** | 19 49 33.6 | +0.2 |
| **MTE** | **Manteigas** | **158.37 353** | *e*PKPab | **PKPab** | 19 49 35.4 | +0.8 |
| **ESDC** | **Sonseca Array** | **158.45 345** | PKPdf | **PKPdf** | 19 48 58.7 | -0.6 |
| ESDC | | | PKPab | **PKPab** | 19 49 34.5 | -0.5 |
| **ESDC** | **Sonseca Array** | **158.45 345** | PKPab | **PKPab** | 19 49 34.6 | -0.4 |
| | comp=Z,3.5nm,0.8s,baz=10,slow=4.0,SNR=12 | | | | | | |
| **PCAS** | **Casmilo, Conde** | **158.81 355** | *e*PKPab | **PKPab** | 19 49 37.2 | +0.7 |
| **PCBR** | **Castelo Branco** | **158.92 353** | *e*PKPab | **PKPab** | 19 49 37.5 | +0.6 |
| **PMRV** | **Marv??o** | **159.31 352** | *e*PKPab | **PKPab** | 19 49 39.5 | +0.8 |
| **PSBE** | **So Bento** | **159.37 356** | *e*PKPab | **PKPab** | 19 49 39.8 | +0.9 |
| **PESTR** | **Estremoz** | **159.89 353** | *e*PKPab | **PKPab** | 19 49 41.6 | +0.4 |
| **PBAR** | **Barrancos** | **160.50 351** | *e*PKPab | **PKPab** | 19 49 43.7 | -0.2 |
| **PBEJ** | **Beja** | **160.75 353** | *e*PKPab | **PKPab** | 19 49 46.0 | +1.0 |
| **PCVE** | **Castro Verde** | **161.16 353** | *e*PKPab | **PKPab** | 19 49 47.8 | +1.0 |
| **PVAQ** | **Vaqueiros** | **161.35 352** | *e*PKPab | **PKPab** | 19 49 48.4 | +0.8 |
| **PBDV** | **Barranco-do-Ve** | **161.54 353** | *e*PKPab | **PKPab** | 19 49 49.7 | +1.2 |
| **MDT** | **Midelt** | **165.05 339** | PKP | **PKPdf** | 19 49 05.5 | -0.9 |
| | comp=Z,3.1nm,0.9s,baz=312,slow=1.6,SNR=4.2 | | | | | | |
| MDT | | | PKPab | **PKPab** | 19 50 04.8 | +0.6 |
| | comp=Z,4.4nm,0.8s,baz=88,slow=5.4,SNR=6.5 | | | | | | |
| **LIC** | **Lamto** | **166.20 205** | ⇓*i* P | **PKPab** | 19 50 09.1 | -0.4 |
| | comp=Z,18nm,0.6s | | | | | | |
| **KIC** | **Kosan Boka** | **166.21 206** | ⇑*i* P | **PKPab** | 19 50 09.8 | +0.3 |
| | comp=Z,17nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **166.53 206** | | **PKPdf** | 19 49 07.3 | -0.7 |
| **DBIC** | **Dimbokro** | **166.53 206** | PKP | **PKPdf** | 19 49 07.5 | -0.4 |
| | comp=Z,14nm,1.0s,baz=165,slow=1.9,SNR=5.8 | | | | | | |
| DBIC | | | PKPab | **PKPab** | 19 50 11.5 | +0.5 |
| | comp=Z,9.4nm,0.8s,baz=136,slow=5.9,SNR=7.3 | | | | | | |
| **DBIC** | **Dimbokro** | **166.53 206** | PKIKP | **PKPdf** | 19 49 07.3 | -0.7 |
| **TIC** | **Toumodi** | **166.58 206** | ⇑*i* P | **PKPab** | 19 50 11.5 | +0.3 |
| | comp=Z,3.1nm,0.2s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.68 246** | | **PKPdf** | 19 49 07.6 | -0.4 |
| TORD | | | | **PKPab** | 19 50 11.2 | -0.7 |
| **TORD** | **Torodi Ar. Bea** | **166.68 246** | PKP | **PKPdf** | 19 49 07.4 | -0.7 |
| | comp=Z,19nm,0.9s,baz=24,slow=0.8,SNR=72 | | | | | | |
| TORD | | | PKPab | **PKPab** | 19 50 11.7 | -0.1 |
| | comp=Z,8.9nm,1.0s,baz=84,slow=3.9,SNR=11 | | | | | | |

*NNC **17** 19:34:09.7±3.5, 37.˚19N×71.˚22E, h0km, mb4.0, mpv3.7, Error ellipse: s-maj=26.8km s-min=25.2km az=151.0*
*IDC **17** 19:34:11.3±8.6, 36.˚41N×71.˚74E, h256km±96km, mb3.1/5, mbtmp3.6/9, MS2.7/1, Error ellipse: s-maj=58.6km s-min=43.9km az=142.0*

**ISC 17 19:34:03.8±1.6, 36.˚6N±0.˚1×71.˚3E±0.˚1, h150km, n13, σ1s74/15, mb3.6/6, 2C-4D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK31** | **Karatay Array** | **6.54** | **355** | ⇑Pn | **Pn** | **19 35 39.3** | **+1.6** |
| | 2.6nm,0.3s,baz=178,slow=12,SNR=44 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **19 36 48.2** | **-3.0** |
| | 8.9nm,0.5s,baz=182,slow=24,SNR=6.6 | | | | | | |
| **AAK** | **Ala-Archa** | **6.54** | **21** | ⇓Pn | **Pn** | **19 35 39.5** | **+1.7** |
| | 2.7nm,0.3s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **19 36 51.4** | **0.0** |
| | 26nm,1.0s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.16** | **26** | ⇓Pn | **Pn** | **19 35 48.3** | **+2.2** |
| | 2.4nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sn** | **19 37 05.3** | **-1.0** |
| | 5.6nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **13.10** | **35** | P | **P** | **19 37 08.0** | **-0.9** |
| | 0.4nm,0.5s,baz=214,slow=13,SNR=7.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.98** | **18** | P | **P** | **19 37 30.9** | **+1.3** |
| | 0.5nm,0.6s,baz=211,slow=10,SNR=4.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.45** | **358** | P | **Pn** | **19 37 46.7** | **+0.8** |
| | 0.6nm,0.5s,baz=161,slow=8.5,SNR=2.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.75** | **24** | P | **Pn** | **19 38 21.9** | **-3.0** |
| | 1.0nm,0.4s,baz=214,slow=11,SNR=6.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **29.61** | **288** | P | P | 19 39 57.0 | +2.0 |
| | 0.2nm,0.5s,baz=109,slow=11,SNR=2.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **33.06** | **309** | P | **P** | **19 40 25.8** | **+0.9** |
| | 0.2nm,0.3s,baz=71,slow=5.9,SNR=2.2 | | | | | | |
| AKASG | | | | LR | LR | 19 57 15.0 | |
| | comp=Z,13nm,21.0s,baz=200,slow=41 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **37.54** | **326** | P | **P** | **19 41 03.6** | **+0.6** |
| | 1.9nm,0.9s,baz=126,slow=7.1,SNR=3.6 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **43.14** | **322** | P | **P** | **19 41 49.6** | **+0.6** |
| | 1.0nm,0.5s,baz=95,slow=9.1,SNR=8.1 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.45** | **323** | P | **P** | **19 41 59.6** | **+0.1** |
| | comp=Z,1.0nm,0.7s,baz=99,slow=7.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.93** | **269** | P | **P** | **19 44 32.5** | **-1.6** |
| | comp=Z,0.7nm,0.5s,baz=41,slow=6.2,SNR=5.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |

**IDC 17 19:39:33.3±6.8, 23.˚59N×145.˚37E, h0km, mb3.7/5, mbtmp3.7/5, Error ellipse: s-maj=267.0km s-min=30.6km az=78.0, North Pacific Ocean**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.59** | **195** | P | P | 19 47 47.1 | -0.2 |
| | 0.5nm,0.9s,baz=16,slow=8.9,SNR=5.0 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.01** | **320** | P | P | 19 48 57.4 | -1.7 |
| | 0.6nm,0.5s,baz=101,slow=7.5,SNR=2.6 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.93** | **312** | P | P | 19 49 06.0 | 0.0 |
| | 0.2nm,0.5s,baz=84,slow=9.0,SNR=1.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.55** | **316** | P | P | 19 49 24.5 | 0.0 |
| | 0.4nm,0.5s,baz=90,slow=7.7,SNR=6.4 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.56** | **319** | P | P | 19 49 59.9 | +0.9 |
| | 1.9nm,0.5s,baz=80,slow=6.9,SNR=7.0 | | | | | | |
| | 1.9nm,0.5s | | | | | | |

*IDC **17** 19:42:49.5±0.8, 23.˚47N×143.˚50E, h0km, mb4.1/12, mbtmp4.1/15, ML3.6/3, MS3.5/5, Error ellipse: s-maj=31.4km s-min=16.1km az=75.0*
*NEIC **17** 19:42:51.6±1.9, 23.˚41N±0.˚06×143.˚5E±0.˚1, h10km±1km, mb4.6/20, Error ellipse: s-maj=18.4km s-min=3.0km az=120.0*

**ISC 17 19:42:54.6±0.7, 23.˚56N±0.˚07×143.˚5E±0.˚1, h31km, n53, σ1s25/47, mb4.4/22, MS3.6/3, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.72** | **342** | | **Pn** | **19 43 51.4** | **+1.6** |
| JCJ | | | | Sn | **Sn** | **19 44 33.0** | **+0.4** |
| **JCJ** | **Chichijima** | **3.72** | **342** | Pn | **Pn** | **19 43 47.8** | **-2.1** |
| | 11nm,0.3s,baz=275,slow=22,SNR=2.8 | | | | | | |
| JCJ | | | | Sn | **Sn** | **19 44 30.1** | **-2.5** |
| | 39nm,0.3s,baz=291,slow=23,SNR=8.8 | | | | | | |
| | 88nm,0.6s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **10.07** | **342** | LR | LR | 19 49 02.0 | |
| | comp=Z,125nm,21.3s,baz=248,slow=37 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.72** | **342** | Pn | **Pn** | **19 46 05.2** | **-1.8** |
| | 0.1nm,0.3s,baz=161,slow=10,SNR=7.7 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **13.72** | **342** | Pn | **Pn** | **19 46 07.8** | **+0.7** |
| **MJB9** | **Matsu-Tunnel** | **13.73** | **342** | Pn | **Pn** | **19 46 07.5** | **+0.4** |
| **JOW** | **Kunigami** | **14.15** | **286** | Pn | **Pn** | **19 46 14.0** | **+1.1** |
| **JOW** | **Kunigami** | **14.15** | **286** | LR | LR | 19 51 14.9 | |
| | comp=Z,240nm,20.1s,baz=114,slow=36 | | | | | | |
| **JMM** | **Marumori** | **14.45** | **351** | Pn | **Pn** | **19 46 15.8** | **-1.1** |
| **KSRS** | **Korea Array** | **19.24** | **320** | P | **Pn** | **19 47 17.7** | **+0.2** |
| | 0.2nm,0.3s,baz=125,slow=13,SNR=6.6 | | | | | | |
| | 3.2nm,0.9s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.08** | **95** | T | T | 20 10 25.0 | |
| | baz=284 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.08** | **95** | T | T | 20 10 27.2 | |
| | baz=284 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.10** | **95** | T | T | 20 10 27.9 | |
| | baz=284 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.22** | **99** | T | T | 20 10 36.0 | |
| | baz=288 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.23** | **99** | T | T | 20 10 38.1 | |
| | baz=288 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.24** | **99** | T | T | 20 10 36.9 | |
| | baz=288 | | | | | | |
| **KLR** | **Kul'dur** | **27.24** | **343** | P | **P** | **19 48 37.0** | **+1.3** |
| | 4.7nm,0.7s,baz=141,slow=6.2,SNR=16 | | | | | | |
| | 4.7nm,0.7s | | | | | | |
| **COEN** | **Coen** | **37.28** | **181** | P | **P** | **19 50 06.2** | **+2.3** |
| COEN | | | | IAmb | IAmb | 19 50 35.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **38.11** | **319** | P | **P** | **19 50 10.5** | **-0.3** |
| **SONM** | **Songino Array** | **38.11** | **319** | P | **P** | **19 50 10.5** | **-0.3** |
| | comp=Z,1.1nm,0.8s,baz=125,slow=7.2,SNR=5.5 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **41.57** | **202** | P | **P** | **19 50 37.7** | **-1.9** |
| KNRA | | | | IAmb | IAmb | 19 51 06.5 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.97** | **192** | P | **P** | **19 50 56.8** | **-2.3** |
| **WB2** | **Warramunga Arr** | **44.14** | **192** | P | **P** | **19 50 58.4** | **-2.1** |
| WB2 | | | | IAmb | IAmb | 19 51 07.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.15** | **192** | P | **P** | **19 50 57.8** | **-2.8** |
| | comp=Z,0.4nm,0.3s,baz=6.0,slow=7.6,SNR=13 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 52 44.3** | **-0.9** |
| | comp=Z,0.8nm,1.0s,baz=3.3,slow=3.3,SNR=2.9 | | | | | | |
| WRA | | | | LR | LR | 20 10 55.1 | |
| | comp=Z,63nm,18.1s,baz=352,slow=38 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.92** | **204** | P | **P** | **19 51 04.6** | **-2.1** |
| **SHL** | **Shillong** | **46.74** | **284** | | **P** | **19 51 20.6** | **-0.8** |
| **LSA** | **Lhasa** | **46.87** | **289** | P | **P** | **19 51 23.8** | **+1.1** |
| LSA | | | | IAmb | IAmb | 19 51 25.4 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **47.85** | **192** | P | **P** | **19 51 29.6** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=9.7,slow=9.6,SNR=7.3 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **52.95** | **321** | P | **P** | **19 52 07.4** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **52.95** | **321** | P | **P** | **19 52 07.5** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **52.95** | **321** | P | **P** | **19 52 07.3** | **-0.6** |
| | comp=Z,1.8nm,0.6s,baz=99,slow=7.6,SNR=7.1 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **N15K** | **Kwethluk River** | **53.28** | **31** | P | **P** | **19 52 10.9** | **+0.7** |
| N15K | | | | IAmb | IAmb | 19 52 21.8 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **53.66** | **312** | P | **P** | **19 52 13.9** | **+0.6** |
| **MKAR** | **Makanchi Array** | **53.66** | **312** | P | **P** | **19 52 13.8** | **+0.4** |
| | comp=Z,3.3nm,0.7s,baz=92,slow=8.9,SNR=31 | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **56.32** | **316** | P | **P** | **19 52 32.1** | **-0.3** |
| KURK | | | | IAmb | IAmb | 19 52 33.6 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.38** | **316** | P | **P** | **19 52 32.6** | **-0.2** |
| | comp=Z,6.9nm,0.9s,baz=93,slow=7.7,SNR=45 | | | | | | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **57.72** | **20** | P | **P** | **19 52 43.8** | **+1.8** |
| **D22K** | **Ayikyak River** | **58.86** | **22** | P | **P** | **19 52 51.8** | **+1.7** |
| D22K | | | | IAmb | IAmb | 19 53 24.4 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **59.82** | **21** | P | **P** | **19 52 58.2** | **+1.6** |
| **ILAR** | **Eielson Array** | **60.27** | **28** | P | **P** | **19 52 58.8** | **-1.0** |
| | comp=Z,0.5nm,0.8s,baz=278,slow=6.3,SNR=3.2 | | | | | | |
| ILAR | | | | LR | LR | 20 16 05.2 | |
| | comp=Z,35nm,21.7s,baz=244,slow=33 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **60.28** | **22** | P | **P** | **19 52 59.5** | **-0.3** |
| **BVAR** | **Borovoye Array** | **61.46** | **319** | P | **P** | **19 53 08.5** | **+0.4** |
| | comp=Z,8.4nm,0.6s,baz=96,slow=8.3,SNR=36 | | | | | | |
| | comp=Z,8.4nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **61.52** | **319** | P | **P** | **19 53 08.5** | **0.0** |
| BRVK | | | | IAmb | IAmb | 19 53 09.9 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **62.14** | **308** | P | **P** | **19 53 12.9** | **0.0** |
| KKAR | | | | IAmb | IAmb | 19 53 15.3 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **62.14** | **308** | P | **P** | **19 53 13.5** | **+0.7** |
| **CHGR** | **Chuyangaron** | **63.81** | **303** | P | **P** | **19 53 24.7** | **+0.5** |
| **ABKAR** | **Akbulak array** | **68.42** | **316** | P | **P** | **19 53 53.0** | **-0.4** |
| ABKAR | | | | IAmb | IAmb | 19 53 54.0 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.42** | **316** | P | **P** | **19 53 53.1** | **-0.3** |
| **KBZ** | **Khabaz** | **81.29** | **314** | P | **P** | **19 55 07.7** | **-0.2** |
| | comp=Z,2.4nm,0.9s,baz=20,slow=1.5,SNR=3.6 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **81.63** | **334** | P | **P** | **19 55 10.4** | **+1.0** |
| | comp=Z,2.0nm,0.9s,baz=28,slow=6.9,SNR=4.1 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.77** | **52** | P | **P** | **19 55 11.1** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=289,slow=8.2,SNR=4.4 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **86.17** | **324** | LR | LR | 20 37 04.6 | |
| | comp=Z,29nm,18.5s,baz=64,slow=38 | | | | | | |
| **PLCA** | **Paso Flores** | **146.74** | **129** | PKPbc | **PKPab** | **20 02 34.2** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=283,slow=4.6,SNR=1.5 | | | | | | |

**HEL 17 20:06:14.4±0.2, 67.˚58N×33.˚39E, h0km, ML1.1, Explosion, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVZ** | **Lovozero** | **0.58** | **56** | PG | Pg | 20 06 25.2 | -0.3 |
| | baz=225 | | | | | | |
| **VRF** | **Varrio** | **1.45** | **279** | PG | Pn | 20 06 41.0 | -0.9 |
| VRF | | | | MSG | | 20 06 58.2 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| VRF | | | | SG | Sg | 20 07 00.3 | -0.7 |
| **OLKF** | **Oulanka, Finla** | **2.01** | **233** | PG | Pb | 20 06 50.7 | -1.1 |
| OLKF | | | | MSG | | 20 07 14.3 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| **KU6** | **Riekki** | **2.08** | **223** | PG | Pb | 20 06 52.2 | -0.8 |
| | baz=42 | | | | | | |
| KU6 | | | | MSG | | 20 07 16.1 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **2.11** | **298** | SN | Sn | 20 07 17.3 | -0.6 |
| **SGF** | **Sodankyl** | **2.64** | **270** | SG | Sb | 20 07 34.1 | -1.3 |
| **KEV** | **Kevo** | **3.20** | **316** | SN | Sn | 20 07 42.3 | -2.3 |
| **ARA0** | **ARCESS Array S** | **3.50** | **308** | SN | Sn | 20 07 48.6 | -3.4 |
| **LANU** | **Lannavaara** | **4.35** | **282** | SG | Sg | 20 08 29.5 | -4.3 |

**KOLA 17 20:06:55.1, 67.˚66N×33.˚73E, h0km, ML1.6, Error ellipse: s-maj=4.5km s-min=1.3km az=160.0, Khibiny, mines Kirovsk, Yukspor, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **APA** | **Apatity** | **0.16** | **232** | P | Pg | 20 06 58.1 | 0.0 |
| **APA0** | **Apatity Array** | **0.29** | **259** | P | Pg | 20 07 00.4 | -0.2 |
| APA0 | | | | S | Sg | 20 07 04.2 | -0.1 |
| **LVZ** | **Lovozero** | **0.42** | **56** | P | Pg | 20 07 02.9 | -0.4 |
| LVZ | | | | S | Sg | 20 07 08.9 | +0.2 |
| **VADS** | **Vadso** | **2.93** | **329** | S | Sn | 20 08 18.6 | -0.2 |
| **ARCES** | **ARCESS Array B** | **3.55** | **306** | P | Pn | 20 07 49.8 | -1.7 |
| ARCES | | | | S | Sn | 20 08 32.2 | -1.9 |

*IDC **17** 20:28:56.3±1.6, 5.˚35S×145.˚55E, h80km±15km, mb4.0/15, mbtmp4.3/17, MS3.4/22, Error ellipse: s-maj=18.9km s-min=9.1km az=96.0*
*NEIC **17** 20:28:58.6±1.8, 5.˚31S±0.˚06×145.˚59E±0.˚08, h96km±7km, mb4.6/61, Error ellipse: s-maj=12.2km s-min=8.7km az=92.0*
*DJA **17** 20:28:59.2±0.9, 5.˚5S±6.˚×14.˚6E±.˚, h85km±6km, M4.8/25, mb4.7/25, mB5.1/8, MLv5.2/3, Mw(mB)4.5/8*

**ISC 17 20:28:57.8±0.4, 5.˚33S±0.˚04×145.˚63E±0.˚05, h86km, n168, σ1s57/158, mb4.6/53, 3C-1D, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MANU** | **Manus Island** | **3.70** | **28** | | **Pn** | **20 29 52.9** | **0.0** |
| **PMG** | **Port Moresby** | **4.32** | **159** | P | **Pn** | **20 30 02.0** | **+0.8** |
| **PMG** | **Port Moresby** | **4.32** | **159** | Pn | **Pn** | **20 30 01.4** | **+0.2** |
| PMG | | | | | **Sn** | **20 30 48.7** | **-1.8** |
| **PMG** | **Port Moresby** | **4.32** | **159** | P | **Pn** | **20 30 00.9** | **-0.4** |
| | 432nm,0.6s,baz=344,slow=8.4,SNR=141 | | | | | | |
| PMG | | | | S | **Sn** | **20 30 49.0** | **-1.4** |
| | 612nm,0.4s,baz=167,slow=19,SNR=25 | | | | | | |
| PMG | | | | LR | LR | 20 32 19.0 | |
| | comp=Z,873nm,20.8s,baz=327,slow=47 | | | | | | |
| **TABU** | **Tabubil** | **4.38** | **271** | P | **Pn** | **20 30 05.6** | **+3.5** |
| **JAY** | **Jayapura** | **5.65** | **300** | P | **Pn** | **20 30 22.3** | **+2.9** |
| | 52nm,0.9s,0.4nm | | | | | | |
| **GENI** | **Genyem** | **6.09** | **296** | P | Pn | 20 30 31.3 | +6.0 |
| | 196nm,0.9s,3µm2.4nm | | | | | | |
| **RABL** | **Rabaul** | **6.61** | **80** | Pn | **Pn** | **20 30 33.7** | **+1.2** |
| **COEN** | **Coen** | **8.90** | **196** | P | **Pn** | **20 31 06.0** | **+2.3** |
| **COEN** | **Coen** | **8.90** | **196** | Pn | **Pn** | **20 31 05.2** | **+1.5** |
| COEN | | | | Sn | **Sn** | **20 32 39.4** | **-3.0** |
| **MTSU** | **Mount Surprise** | **12.79** | **186** | P | **Pn** | **20 31 58.4** | **+2.0** |
| **FAKI** | **Fak Fak** | **13.56** | **280** | P | **P** | **20 32 10.8** | **-1.9** |
| **FAKI** | **Fak Fak** | **13.56** | **280** | Pn | **Pn** | **20 32 03.4** | **-3.2** |
| **TV1H** | **Townsville Har** | **13.89** | **175** | P | Pn | **20 32 13.3** | **+2.4** |
| **SAUI** | **Saumlaki** | **14.47** | **259** | Pn | **Pn** | **20 32 15.8** | **-2.7** |
| **CTA** | **Charters

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YNG | Young | 28.93 | 175 | P | P | 20 34 50.7 | +1.7 | |
| CAN | Canberra | 30.00 | 174 | P | P | 20 35 00.4 | +1.9 | |
| CAN | Canberra | 30.00 | 174 | P | P | 20 34 59.0 | +0.5 | |
| CAN | | | | IAmb | IAmb | 20 35 01.1 | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| FORT | Forrest | 30.23 | 211 | P | P | 20 35 01.0 | +0.5 | |
| FORT | Forrest | 30.23 | 211 | P | P | 20 35 00.9 | +0.5 | |
| MTKI | Muara Teweh, K | 30.98 | 277 | P | P | 20 35 10.9 | +3.5 | |
| KKM | Kota Kinabalu | 31.46 | 291 | P | P | 20 35 10.3 | -1.4 | |
| ARPS | Mount Arapiles | 31.48 | 186 | P | P | 20 35 12.7 | +1.3 | |
| H11S3 | WAKE ISLAND Hy | 31.49 | 41 | T | T | 21 08 44.0 | | |
| | baz=211,slow=75,SNR=14 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 31.50 | 41 | T | T | 21 08 38.6 | | |
| | baz=211,slow=75,SNR=7.1 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 31.51 | 41 | T | T | 21 08 42.3 | | |
| | baz=211,slow=75,SNR=8.5 | | | | | | | |
| JCJ | Chichijima | 32.41 | 354 | LR | LR | 20 47 31.6 | | |
| | comp=Z,201nm,18.8s,baz=116,slow=34 | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 32.52 | 39 | T | T | 21 08 51.2 | | |
| | baz=267,slow=75,SNR=5.6 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 32.53 | 39 | T | T | 21 08 53.0 | | |
| | baz=267,slow=75,SNR=6.7 | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 32.53 | 39 | T | T | 21 08 55.7 | | |
| | baz=267,slow=75,SNR=6.0 | | | | | | | |
| MEEK | Meekatharra | 33.36 | 228 | P | P | 20 35 29.5 | +1.4 | |
| MSVF | Nonsavu | 34.00 | 114 | P | P | 20 35 34.4 | +0.6 | |
| SBUM | Sibu | 34.25 | 282 | P | P | 20 35 35.1 | -0.8 | |
| SBUM | | | | IAmb | IAmb | 20 35 37.4 | | |
| | comp=Z,8.4nm,1.3s | | | | | | | |
| STKI | Sintang | 34.52 | 278 | P | P | 20 35 41.8 | +3.6 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| KSM | Kuching | 35.92 | 280 | P | P | 20 35 49.0 | -1.2 | |
| KLBR | Kellerberrin | 36.94 | 222 | P | P | 20 35 59.1 | +0.4 | |
| BLDU | Ballidu | 37.04 | 224 | P | P | 20 36 01.0 | +1.4 | |
| | comp=Z,20nm,2.2s | | | | | | | |
| BBJI | Bungbulang | 37.79 | 265 | P | P | 20 36 09.2 | +3.0 | |
| NWAO | Narrogin (SRO) | 38.13 | 220 | LR | LR | 20 52 50.8 | | |
| | comp=Z,73nm,19.6s,baz=114,slow=38 | | | | | | | |
| JMN | Monobe | 40.41 | 345 | P | P | 20 36 26.6 | -1.1 | |
| JNU | Nakatsue | 40.73 | 341 | P | P | 20 36 29.2 | -1.1 | |
| JNU | Nakatsue | 40.73 | 341 | LR | LR | 20 52 20.2 | | |
| | comp=Z,54nm,18.1s,baz=140,slow=34 | | | | | | | |
| MJAR | Matsushiro Arr | 42.23 | 351 | P | P | 20 36 40.9 | -1.7 | |
| | comp=Z,1.7nm,0.5s,baz=155,slow=7.8,SNR=9.4 | | | | | | | |
| MJAR | | | | LR | LR | 20 51 58.3 | | |
| | comp=Z,29nm,21.4s,baz=164,slow=33 | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| MAJO | Matsushiro | 42.23 | 351 | P | P | 20 36 40.6 | -2.0 | |
| MAJO | | | | IAmb | IAmb | 20 36 42.6 | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| MJB9 | Matsu-Tunnel | 42.24 | 351 | P | P | 20 36 40.9 | -1.7 | |
| MJB9 | | | | IAmb | IAmb | 20 36 42.6 | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| URZ | Urewera | 43.50 | 143 | LR | LR | 20 53 26.1 | | |
| | comp=Z,53nm,19.0s,baz=36,slow=34 | | | | | | | |
| RTZ | Ruatahuna | 43.65 | 144 | P | P | 20 36 54.5 | +0.3 | |
| RTZ | | | | IAmb | IAmb | 20 37 00.6 | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| NJ2 | Nanjing | 45.08 | 327 | eP | P | 20 37 05.8 | +0.4 | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| IPM | Ipoh | 45.60 | 282 | P | P | 20 37 09.2 | -0.8 | |
| KSRS | Korea Array | 45.66 | 340 | P | P | 20 37 09.4 | -0.4 | |
| | comp=Z,4.6nm,0.9s,baz=163,slow=9.5,SNR=11 | | | | | | | |
| KSRS | | | | LR | LR | 20 54 41.7 | | |
| | comp=Z,31nm,21.6s,baz=155,slow=34 | | | | | | | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| JTM | Tenmabayashi | 46.09 | 355 | P | P | 20 37 12.7 | -0.6 | |
| KULM | Kulim | 46.13 | 283 | P | P | 20 37 13.6 | -0.5 | |
| GSI | Gunungsitoli | 48.44 | 276 | P | P | 20 37 31.2 | -0.9 | |
| JKA | Kamikawa-asahi | 49.30 | 357 | P | P | 20 37 37.4 | -0.6 | |
| ASAJ | Asahikawa | 49.30 | 357 | LR | LR | 20 58 17.4 | | |
| | comp=Z,11nm,20.7s,baz=189,slow=36 | | | | | | | |
| USA0B | Ussuriysk Arra | 50.81 | 347 | P | P | 20 37 49.0 | -0.6 | |
| USRK | Ussuriysk Ar. | 50.81 | 347 | P | P | 20 37 49.0 | -0.5 | |
| USRK | Ussuriysk Ar. | 50.81 | 347 | P | P | 20 37 49.2 | -0.3 | |
| | comp=Z,11nm,0.7s,baz=174,slow=6.8,SNR=18 | | | | | | | |
| USRK | | | | LR | LR | 20 57 55.2 | | |
| | comp=Z,32nm,19.6s,baz=202,slow=34 | | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| HNS | HongShan | 51.36 | 328 | ⇓P | P | 20 37 53.0 | -0.7 | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| CMAR | Chiang Mai Arr | 51.73 | 298 | P | P | 20 37 57.0 | +0.1 | |
| | comp=Z,0.9nm,0.5s,baz=116,slow=5.9,SNR=6.7 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| XAN | Xi'an | 52.31 | 321 | ⇑P | P | 20 38 00.8 | -0.1 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| BNX | BinXian | 53.38 | 344 | ⇑P | P | 20 38 07.9 | -0.6 | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| HHC | Hu-ho-hao-te | 55.56 | 329 | eP | P | 20 38 25.8 | +1.3 | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,110nm,4.6s | | | | | | | |
| KLR | Kul'dur | 55.67 | 349 | LR | LR | 20 59 20.4 | | |
| | comp=Z,48nm,21.8s,baz=160,slow=33 | | | | | | | |
| LZH | Lanzhou | 56.82 | 320 | ⇑P | P | 20 38 34.9 | +1.2 | |
| LZH | | | | pP | pP | 20 38 57.3 | +2.1 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.3s | | | | | | | |
| HEH | HeiHe | 57.56 | 346 | eP | P | 20 38 37.3 | -1.1 | |
| PEA0B | Petropavlovsk- | 59.11 | 8 | P | P | 20 38 47.7 | -1.5 | |
| PETK | Petropavlovsk- | 59.11 | 8 | P | P | 20 38 48.8 | -0.4 | |
| PETK | Petropavlovsk- | 59.11 | 8 | P | P | 20 38 48.6 | -0.6 | |
| | comp=Z,1.6nm,0.5s,baz=161,slow=6.0,SNR=5.4 | | | | | | | |
| PETK | | | | LR | LR | 21 02 12.4 | | |
| | comp=Z,21nm,19.7s,baz=219,slow=34 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| GTA | Gaotai | 61.36 | 321 | eP | P | 20 39 05.4 | +0.4 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| SONM | Songino Array | 63.17 | 331 | P | P | 20 39 14.0 | -2.8 | |
| SONM | Songino Array | 63.17 | 331 | P | P | 20 39 16.3 | -0.5 | |
| | comp=Z,1.2nm,0.9s,baz=152,slow=9.1,SNR=7.4 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| MA2 | Magadan | 64.83 | 3 | LR | LR | 21 02 51.8 | | |
| | comp=Z,15nm,21.8s,baz=164,slow=31 | | | | | | | |
| CASY | Casey | 65.54 | 195 | P | P | 20 39 31.6 | -0.2 | |
| MK31 | Makanchi Array | 76.12 | 321 | P | P | 20 40 35.3 | -1.1 | |
| MKAR | Makanchi Array | 76.12 | 321 | P | P | 20 40 35.0 | -1.4 | |
| MKAR | Makanchi Array | 76.12 | 321 | P | P | 20 40 35.5 | -0.9 | |
| | comp=Z,1.1nm,0.7s,baz=101,slow=6.3,SNR=7.3 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| MAKZ | Makanchi | 76.32 | 321 | P | P | 20 40 36.3 | -1.2 | |
| MAKZ | | | | pP | pP | 20 41 01.2 | +1.1 | |
| ZALV | Zalesovo Beam | 77.73 | 328 | P | P | 20 40 43.5 | -1.7 | |
| ZALV | Zalesovo Beam | 77.73 | 328 | P | P | 20 40 42.6 | -2.6 | |
| | comp=Z,0.8nm,0.6s,baz=120,slow=6.5,SNR=4.8 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| KSH | Kashi | 77.92 | 312 | P | P | 20 40 49.0 | +2.2 | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.5s | | | | | | | |
| BOOM | Boomskoye usch | 78.84 | 315 | P | P | 20 40 50.0 | -1.9 | |
| L16K | Owhat River | 78.96 | 23 | P | P | 20 40 51.5 | -0.3 | |
| L16K | | | | IAmb | IAmb | 20 41 14.8 | | |
| | comp=Z,7.3nm,1.2s | | | | | | | |
| KURBB | Kurchatov Arra | 79.88 | 323 | P | P | 20 40 55.1 | -2.0 | |
| | comp=Z,0.5nm,0.5s,baz=110,slow=4.9,SNR=5.1 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| J17K | VABM Dome | 80.05 | 22 | P | P | 20 40 57.1 | -0.7 | |
| J17K | | | | IAmb | IAmb | 20 41 00.1 | | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| L18K | Granite Mounta | 80.34 | 24 | P | P | 20 40 58.7 | -0.6 | |
| L18K | | | | IAmb | IAmb | 20 41 01.1 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| L18K | | | | | pP | 20 41 23.7 | +1.6 | |
| L19K | White Mountain | 81.06 | 24 | P | P | 20 41 03.2 | 0.0 | |
| L19K | | | | IAmb | IAmb | 20 41 29.2 | | |
| | comp=Z,9.4nm,1.4s | | | | | | | |
| J19K | Poorman | 81.67 | 22 | P | P | 20 41 05.6 | -0.8 | |
| H19K | Roundabout Mou | 82.17 | 21 | P | P | 20 41 07.8 | -1.1 | |
| H19K | | | | IAmb | IAmb | 20 41 10.3 | | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| H19K | | | | pP | pP | 20 41 33.1 | +1.3 | |
| J20K | Nowinta River | 82.33 | 23 | P | P | 20 41 10.0 | +0.2 | |
| J20K | | | | IAmb | IAmb | 20 41 11.3 | | |
| | comp=Z,6.8nm,1.1s | | | | | | | |
| MAW | Mawson | 82.33 | 203 | P | P | 20 41 09.9 | +0.1 | |
| | comp=Z,10nm,1.3s,baz=94,slow=3.1,SNR=5.1 | | | | | | | |
| | comp=Z,10nm,1.3s | | | | | | | |
| E19K | Redstone River | 82.93 | 19 | P | P | 20 41 12.8 | 0.0 | |
| E19K | | | | IAmb | IAmb | 20 41 15.5 | | |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| F20K | Avaraart Lake | 83.21 | 20 | P | P | 20 41 13.6 | -0.7 | |
| IMAR | Indian Mountai | 83.36 | 21 | P | P | 20 41 14.2 | -0.9 | |
| MLY | Manley | 84.03 | 22 | P | P | 20 41 18.3 | -0.3 | |
| MLY | | | | IAmb | IAmb | 20 41 19.3 | | |
| | comp=Z,5.4nm,0.7s | | | | | | | |
| QSPA | South Pole Qui | 84.63 | 180 | P | P | 20 41 21.0 | -0.8 | |
| QSPA | | | | IAmb | IAmb | 20 41 24.4 | | |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| QSPA | South Pole Qui | 84.63 | 180 | P | P | 20 41 21.7 | -0.1 | |
| | comp=Z,6.9nm,1.0s,baz=302,slow=0.9,SNR=18 | | | | | | | |
| QSPA | | | | LR | LR | 21 18 17.7 | | |
| | comp=Z,38nm,20.0s,baz=26,slow=35 | | | | | | | |
| | comp=Z,6.9nm,1.0s | | | | | | | |
| CCB | Clear Creek Bu | 85.00 | 23 | P | P | 20 41 22.1 | -1.4 | |
| CCB | | | | IAmb | IAmb | 20 41 22.9 | | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| CCB | | | | pP | pP | 20 41 46.2 | -0.3 | |
| G23K | Bananza Creek | 85.03 | 21 | P | P | 20 41 22.2 | -1.4 | |
| IL31 | | 85.41 | 23 | P | P | 20 41 23.5 | -1.9 | |
| IL31 | | | | IAmb | IAmb | 20 41 24.6 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| ILAR | Eielson Array | 85.41 | 23 | P | P | 20 41 23.3 | -2.2 | |
| ILAR | Eielson Array | 85.41 | 23 | P | P | 20 41 23.6 | -2.0 | |
| | comp=Z,3.9nm,0.8s,baz=255,slow=5.0,SNR=36 | | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| BVAR | Borovoye Array | 85.43 | 324 | P | P | 20 41 24.5 | -1.4 | |
| | comp=Z,1.6nm,0.8s,baz=123,slow=6.4,SNR=8.0 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| D23K | Nanushuk River | 85.80 | 19 | P | P | 20 41 27.2 | -0.1 | |
| D23K | | | | IAmb | IAmb | 20 41 29.3 | | |
| | comp=Z,7.7nm,0.9s | | | | | | | |
| J25K | Salcha River, | 85.96 | 24 | P | P | 20 41 26.8 | -1.5 | |
| J25K | | | | IAmb | IAmb | 20 41 28.4 | | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| CTGM | Chitina Glacie | 86.50 | 28 | P | P | 20 41 30.2 | -0.9 | |
| CTGM | | | | IAmb | IAmb | 20 41 32.3 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| M27K | Edge Creek, AK | 86.67 | 26 | P | P | 20 41 31.2 | -0.8 | |
| M27K | | | | IAmb | IAmb | 20 41 33.2 | | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| L27K | Beaver Creek, | 86.92 | 26 | P | P | 20 41 31.9 | -1.1 | |
| BCAR | Beaver Creek A | 86.94 | 26 | P | P | 20 41 31.6 | -1.5 | |
| F26K | Sheenjek River | 87.52 | 21 | P | P | 20 41 35.5 | -0.3 | |
| F26K | | | | IAmb | IAmb | 20 41 37.5 | | |
| | comp=Z,9.9nm,1.3s | | | | | | | |
| F26K | | | | pP | pP | 20 42 01.0 | +2.0 | |
| K29M | Barlow Dome | 88.99 | 26 | P | P | 20 41 41.7 | -1.2 | |
| K29M | | | | IAmb | IAmb | 20 41 44.1 | | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| K29M | | | | pP | pP | 20 42 07.3 | +1.2 | |
| I30M | Mount Dempster | 89.80 | 24 | P | P | 20 41 46.5 | -0.2 | |
| I30M | | | | IAmb | IAmb | 20 41 47.8 | | |
| | comp=Z,5.5nm,1.2s | | | | | | | |
| INK | Inuvik | 91.54 | 22 | LR | LR | 21 21 00.1 | | |
| | comp=Z,27nm,18.6s,baz=306,slow=34 | | | | | | | |
| ARU | Arti | 92.78 | 326 | LR | LR | 21 23 06.4 | | |
| | comp=Z,20nm,20.6s,baz=110,slow=35 | | | | | | | |
| YBH | Yreka Blue Hor | 94.75 | 49 | LR | LR | 21 20 16.2 | | |
| | comp=Z,29nm,18.5s,baz=300,slow=32 | | | | | | | |
| KIRV | Kirov | 97.76 | 328 | LR | LR | 21 30 00.3 | | |
| | comp=Z,11nm,18.4s,baz=34,slow=38 | | | | | | | |
| PFO | Pinyon Flats O | 99.52 | 57 | LR | LR | 21 20 23.3 | | |
| | comp=Z,26nm,18.3s,baz=218,slow=31 | | | | | | | |
| TORD | Torodi Ar. Bea | 143.60 | 285 | PKP | PKPbc | 20 48 21.8 | +0.4 | |
| | comp=Z,0.5nm,0.5s,baz=50,slow=3.7,SNR=5.8 | | | | | | | |
| DBIC | Dimbokro | 150.62 | 274 | PKPbc | PKPdf | 20 48 38.5 | +3.0 | |
| | comp=Z,15nm,1.1s,baz=124,slow=3.6,SNR=2.6 | | | | | | | |

*IDC* ***17*** *20:29:55.3±7.9, 0.˚26N×99.˚89E, h0km, mb4.0/6, mbtmp4.0/6, Error ellipse: s-maj=172.8km s-min=126.5km az=137.0*

*DJA* ***17*** *20:30:22.4±0.8, 1.˚1N±4.˚1×10.˚0E±.˚, h165km±10km, M3.7/7, MLv3.7/7*

**ISC 17 20:30:19.7±1.0, 1.˚23N±0.˚07×99.˚91E±0.˚09, h150km, n15, σ1§48/15, mb3.8/6, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| PBSI | Pulau Batu | 2.07 | 232 | P | Pn | 20 30 56.9 | | | +1.3 |
| PDSI | Padang | 2.19 | 165 | P | Pn | 20 31 00.1 | | | +2.9 |
| GSI | Gunungsitoli | 2.33 | 272 | P | Pn | 20 31 00.9 | | | +2.1 |
| GSI | | | | S | Sn | 20 31 29.6 | | | +0.7 |
| SISI | Saibi | 2.66 | 198 | P | Pn | 20 31 02.7 | | | -0.2 |
| SISI | | | | S | Sn | 20 31 35.8 | | | -0.5 |
| SNSI | Sinabang, Aceh | 3.77 | 288 | P | Pn | 20 31 18.7 | | | +1.7 |
| SNSI | | | | S | Sn | 20 32 00.1 | | | -1.3 |
| MLSI | Meulaboh, Aceh | 4.62 | 311 | P | Pn | 20 31 30.2 | | | +2.0 |
| H08S2 | Diego Garcia H | 28.73 | 252 | T | T | 21 04 07.5 | | | |
| | baz=71 | | | | | | | | |
| H08S3 | Diego Garcia H | 28.73 | 252 | T | T | 21 04 14.1 | | | |
| | baz=71 | | | | | | | | |
| H08S1 | Diego Carcia H | 28.75 | 252 | T | T | 21 03 51.4 | | | |
| | baz=71 | | | | | | | | |
| SONM | Songino Array | 46.77 | 6 | P | P | 20 38 33.8 | | | -0.3 |
| | 0.4nm,0.4s,baz=190,slow=7.9,SNR=2.7 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| MKAR | Makanchi Array | 47.92 | 344 | P | P | 20 38 42.9 | | | -0.1 |
| | 0.9nm,0.5s,baz=158,slow=8.3,SNR=18 | | | | | | | | |
| | 0.9nm,0.5s | | | | | | | | |
| KURBB | Kurchatov Arra | 52.45 | 343 | P | P | 20 39 16.5 | | | -0.4 |
| | 0.5nm,0.3s,baz=161,slow=7.3,SNR=4.7 | | | | | | | | |
| | 0.5nm,0.3s | | | | | | | | |
| ZALV | Zalesovo Beam | 54.00 | 349 | P | P | 20 39 27.6 | | | -0.5 |
| | 1.6nm,0.4s,baz=162,slow=7.0,SNR=9.6 | | | | | | | | |
| | 1.6nm,0.4s | | | | | | | | |
| BVAR | Borovoye Array | 57.15 | 339 | P | P | 20 39 49.5 | | | -1.2 |
| | 0.9nm,0.5s,baz=138,slow=9.4,SNR=6.9 | | | | | | | | |
| | 0.9nm,0.5s | | | | | | | | |
| ARCES | ARCESS Array B | 83.43 | 340 | P | P | 20 42 29.1 | | | -0.9 |
| | 2.2nm,0.8s,baz=99,slow=5.7,SNR=5.6 | | | | | | | | |
| | 2.2nm,0.8s | | | | | | | | |

**ROM 17 21:17:56.4±0.1, 41.˚878N±0.˚006×14.˚882E±0.˚006, h22km±1km, ML2.3/23, 4C-5D, Error ellipse: s-maj=0.6km s-min=0.4km az=15.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| FRES | Fresagrandinar | 0.18 | 301 | ⇓P | Pb | 21 18 01.9 | | | -0.1 |
| FRES | | | | S | Sb | 21 18 05.0 | | | -0.8 |
| FRES | | | | AML | AML | | | | |
| | comp=N,1795μm,1.0s | | | | | | | | |
| FRES | | | | AML | AML | | | | |
| | comp=E,2815μm,0.3s | | | | | | | | |
| FRES | | | | AML | AML | | | | |
| | comp=N,1795μm,1.0s | | | | | | | | |
| FRES | | | | AML | AML | | | | |
| | comp=E,1165μm,0.2s | | | | | | | | |
| CIGN | Sant'Elia a Pi | 0.22 | 176 | ⇓P | Pb | 21 18 02.0 | | | -0.2 |
| CIGN | | | | S | Sb | 21 18 05.8 | | | -0.4 |
| CIGN | | | | AML | AML | | | | |
| | comp=N,1200μm,0.5s | | | | | | | | |
| CIGN | | | | AML | AML | | | | |
| | comp=E,1036μm,0.5s | | | | | | | | |
| CIGN | | | | AML | AML | | | | |
| | comp=N,1114μm,0.4s | | | | | | | | |
| CIGN | | | | AML | AML | | | | |
| | comp=E,1036μm,0.5s | | | | | | | | |
| MELA | Melanico ??? S | 0.25 | 133 | ⇓P | Pb | 21 18 02.6 | | | +0.1 |
| MELA | | | | S | Sb | 21 18 07.0 | | | +0.3 |
| MELA | | | | AML | AML | | | | |
| | comp=E,1665μm,0.9s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,1490μm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,1800μm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,1650μm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,2750μm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,2590μm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,2865μm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,2595μm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,2965μm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,1193μm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,1306μm,0.3s | | | | | | | | |
| TRIV | Trivento | 0.27 | 246 | P | Pb | 21 18 03.0 | | | +0.2 |
| TRIV | | | | S | Sb | 21 18 08.3 | | | +1.1 |
| TRIV | | | | AML | AML | | | | |
| | comp=E,713μm,0.8s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,754μm,1.2s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,744μm,0.8s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,802μm,1.2s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,624μm,0.9s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,687μm,0.9s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,621μm,0.3s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,654μm,0.3s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,712μm,0.8s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,654μm,1.7s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,390μm,0.3s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,397μm,0.3s | | | | | | | | |
| GATE | Gambatesa | 0.36 | 177 | P | Pb | 21 18 05.1 | | | +0.9 |
| GATE | | | | S | Sb | 21 18 10.8 | | | +1.3 |
| GATE | | | | AML | AML | | | | |
| | comp=E,870μm,1.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,505μm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,825μm,0.3s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,914μm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,505μm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,874μm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,521μm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,660μm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,504μm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,636μm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,504μm,1.6s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,521μm,1.6s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,231μm,0.3s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,632μm,0.3s | | | | | | | | |
| BSSO | Busso | 0.40 | 213 | ⇑P | Pb | 21 18 05.0 | | | +0.3 |
| BSSO | | | | S | Sb | 21 18 11.7 | | | +1.4 |
| BSSO | | | | AML | AML | | | | |
| | comp=E,501μm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,420μm,0.7s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,420μm,0.7s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,214μm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,164μm,0.7s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,332μm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,352μm,0.3s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,138μm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,140μm,0.3s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,138μm,0.9s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,332μm,0.9s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,119μm,0.4s | | | | | | | | |
| SACR | S. Croce Del S | 0.50 | 195 | ⇑P | Pb | 21 18 06.3 | | | -0.1 |
| SACR | | | | S | Sb | 21 18 13.8 | | | +0.5 |
| SACR | | | | AML | AML | | | | |
| | comp=E,668μm,0.3s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=N,316μm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=N,321μm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=N,320μm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=E,686μm,0.3s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=E,479μm,0.3s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=E,506μm,0.3s | | | | | | | | |
| APRC | Apricena | 0.51 | 103 | P | Pb | 21 18 06.4 | | | -0.3 |
| APRC | | | | S | Sb | 21 18 14.2 | | | +0.6 |
| APRC | | | | AML | AML | | | | |
| | comp=E,852μm,1.4s | | | | | | | | |
| APRC | | | | AML | AML | | | | |
| | comp=N,1105μm,1.4s | | | | | | | | |
| APRC | | | | AML | AML | | | | |
| | comp=N,1105μm,0.6s | | | | | | | | |
| APRC | | | | AML | AML | | | | |
| | comp=E,852μm,0.6s | | | | | | | | |
| MIDA | Miranda | 0.53 | 244 | ⇑P | Pb | 21 18 06.6 | | | -0.4 |
| MIDA | | | | S | Sb | 21 18 14.3 | | | +0.2 |
| MIDA | | | | AML | AML | | | | |
| | comp=E,580μm,1.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,546μm,0.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,579μm,1.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,596μm,1.5s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,596μm,0.5s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,638μm,0.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,416μm,0.3s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,436μm,0.3s | | | | | | | | |
| LPEL | Lama dei Pelig | 0.55 | 288 | ⇓P | Pb | 21 18 07.5 | | | +0.1 |
| LPEL | | | | S | Sb | 21 18 16.0 | | | +1.2 |
| LPEL | | | | AML | AML | | | | |
| | comp=E,715μm,0.1s | | | | | | | | |
| LPEL | | | | AML | AML | | | | |
| | comp=N,702μm,0.2s | | | | | | | | |
| MOCO | Biccari - m.te | 0.55 | 158 | P | Pb | 21 18 07.6 | | | +0.2 |
| MOCO | | | | AML | AML | | | | |
| | comp=N,102μm,0.5s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=N,93μm,1.5s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=N,93μm,0.5s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=E,212μm,0.2s | | | | | | | | |
| RNI2 | Rionero Sannit | 0.57 | 252 | P | Pb | 21 18 07.6 | | | -0.2 |
| RNI2 | | | | S | Sb | 21 18 16.3 | | | +0.7 |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,782μm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1345μm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,856μm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1440μm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1340μm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1440μm,1.8s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1340μm,1.8s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,782μm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,716μm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1363μm,0.1s | | | | | | | | |
| SGRT | San Giovanni R | 0.66 | 101 | P | Pb | 21 18 09.2 | | | 0.0 |
| SGRT | | | | AML | AML | | | | |
| | comp=E,485μm,1.4s | | | | | | | | |
| SGRT | | | | AML | AML | | | | |
| | comp=N,556μm,0.5s | | | | | | | | |
| SGRT | | | | AML | AML | | | | |
| | comp=E,485μm,0.6s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VAGA** | **Valle Agricola** | **0.67** | **227** | ⇑P | Pb | 21 | 18 | 08.8 -0.6 |
| VAGA | | | | AML | AML | | | |
| | comp=E,162µm,0.2s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=N,266µm,0.3s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=N,278µm,0.3s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=E,161µm,0.2s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=N,252µm,0.3s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=E,177µm,0.4s | | | | | | | |
| VAGA | | | | AML | AML | | | |
| | comp=N,258µm,0.3s | | | | | | | |
| **CERA** | **Filignano** | **0.70** | **247** | P | Pb | 21 | 18 | 09.3 -0.7 |
| CERA | | | | AML | AML | | | |
| | comp=E,198µm,1.0s | | | | | | | |
| CERA | | | | AML | AML | | | |
| | comp=N,322µm,0.8s | | | | | | | |
| CERA | | | | AML | AML | | | |
| | comp=N,302µm,0.8s | | | | | | | |
| CERA | | | | AML | AML | | | |
| | comp=N,302µm,1.2s | | | | | | | |
| **VITU** | **Vitulano (BN)** | **0.72** | **195** | P | Pb | 21 | 18 | 09.6 -0.6 |
| VITU | | | | AML | AML | | | |
| | comp=E,519µm,1.6s | | | | | | | |
| VITU | | | | AML | AML | | | |
| | comp=N,410µm,0.8s | | | | | | | |
| **INTR** | **Introdacqua** | **0.74** | **281** | ⇓P | Pb | 21 | 18 | 10.3 -0.3 |
| INTR | | | | S | Sb | 21 | 18 | 21.1 +0.8 |
| INTR | | | | AML | AML | | | |
| | comp=E,438µm,0.7s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=N,474µm,1.1s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=N,494µm,1.1s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,306µm,0.2s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,438µm,1.3s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,171µm,0.2s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,249µm,0.2s | | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.79** | **102** | P | Pn | 21 | 18 | 12.3 +0.2 |
| MSAG | | | | AML | AML | | | |
| | comp=E,370µm,1.0s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,1170µm,0.2s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,500µm,0.3s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,500µm,1.7s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=N,1170µm,1.8s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=E,148µm,0.2s | | | | | | | |
| MSAG | | | | AML | AML | | | |
| | comp=E,136µm,0.4s | | | | | | | |
| **SGTA** | **Sant Agata di** | **0.83** | **154** | P | Pb | 21 | 18 | 11.7 -0.4 |
| SGTA | | | | AML | AML | | | |
| | comp=E,558µm,0.6s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=N,338µm,0.4s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=E,541µm,0.5s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=N,345µm,1.6s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=N,199µm,0.4s | | | | | | | |
| SGTA | | | | AML | AML | | | |
| | comp=E,433µm,0.6s | | | | | | | |
| **PIGN** | **Pignataro Magg** | **0.86** | **218** | AML | AML | | | |
| | comp=N,70µm,1.3s | | | | | | | |
| PIGN | | | | AML | AML | | | |
| | comp=E,96µm,1.4s | | | | | | | |
| PIGN | | | | AML | AML | | | |
| | comp=N,70µm,0.7s | | | | | | | |
| PIGN | | | | AML | AML | | | |
| | comp=E,96µm,0.6s | | | | | | | |
| **PAOL** | **Paolisi** | **0.88** | **196** | AML | AML | | | |
| | comp=N,224µm,0.2s | | | | | | | |
| PAOL | | | | AML | AML | | | |
| | comp=E,280µm,0.6s | | | | | | | |
| **GAVE** | **Gavelli** | **1.68** | **300** | AML | AML | | | |
| | comp=E,68µm,0.7s | | | | | | | |
| GAVE | | | | AML | AML | | | |
| | comp=N,64µm,1.5s | | | | | | | |
| GAVE | | | | AML | AML | | | |
| | comp=N,64µm,0.5s | | | | | | | |
| **CESI** | **CESI - Serrava** | **1.85** | **308** | AML | AML | | | |
| | comp=N,67µm,0.7s | | | | | | | |
| CESI | | | | AML | AML | | | |
| | comp=E,63µm,0.6s | | | | | | | |
| **ATCC** | **AVT- Casa Cast** | **2.11** | **309** | AML | AML | | | |
| | comp=E,45µm,0.4s | | | | | | | |
| ATCC | | | | AML | AML | | | |
| | comp=N,43µm,0.7s | | | | | | | |
| **STON** | **Ston** | **2.31** | **64** | AML | AML | | | |
| | comp=N,25µm,0.6s | | | | | | | |
| STON | | | | AML | AML | | | |
| | comp=E,27µm,1.1s | | | | | | | |

**ROM 17 21:18:07.6±0.1, 41°.885N±0°.005×14°.892E±0°.006, h19$^{km}_{\pm 1}{}^{km}$, ML2.4/83, Error ellipse: s-maj=0.6km s-min=0.0km az=28.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **FRES** | **Fresagrandinar** | **0.19** | **298** | P | Pg | 21 | 18 | 13.1 | +0.6 |
| FRES | | | | S | Sg | 21 | 18 | 16.1 | +0.2 |
| FRES | | | | AML | AML | | | | |
| | comp=E,2815µm,0.3s | | | | | | | | |
| FRES | | | | AML | AML | | | | |
| | comp=N,1795µm,1.0s | | | | | | | | |
| FRES | | | | AML | AML | | | | |
| | comp=N,1727µm,0.2s | | | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.23** | **178** | P | Pg | 21 | 18 | 13.2 | +0.1 |
| CIGN | | | | S | Sg | 21 | 18 | 17.1 | +0.2 |
| CIGN | | | | AML | AML | | | | |
| | comp=E,1036µm,0.5s | | | | | | | | |
| CIGN | | | | AML | AML | | | | |
| | comp=N,1200µm,0.5s | | | | | | | | |
| CIGN | | | | AML | AML | | | | |
| | comp=N,1346µm,0.4s | | | | | | | | |
| CIGN | | | | AML | AML | | | | |
| | comp=E,1390µm,0.3s | | | | | | | | |
| **MELA** | **Melanico ??? S** | **0.25** | **135** | P | Pg | 21 | 18 | 13.7 | +0.2 |
| MELA | | | | S | Sg | 21 | 18 | 18.0 | +0.6 |
| MELA | | | | AML | AML | | | | |
| | comp=E,1665µm,0.9s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,1490µm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,1800µm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,1650µm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,2750µm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,2590µm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,2865µm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,2595µm,0.6s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,2965µm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,1672µm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,2962µm,0.2s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=E,2749µm,0.1s | | | | | | | | |
| MELA | | | | AML | AML | | | | |
| | comp=N,1871µm,0.1s | | | | | | | | |
| **TRIV** | **Trivento** | **0.28** | **245** | P | Pb | 21 | 18 | 14.1 | +0.1 |
| TRIV | | | | S | Sg | 21 | 18 | 19.4 | +1.1 |
| TRIV | | | | AML | AML | | | | |
| | comp=E,713µm,0.8s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,754µm,1.2s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,802µm,1.2s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,712µm,0.8s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,624µm,0.9s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,687µm,0.9s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,621µm,0.3s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,744µm,0.8s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,654µm,0.3s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,696µm,0.4s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,924µm,0.4s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=N,873µm,0.4s | | | | | | | | |
| TRIV | | | | AML | AML | | | | |
| | comp=E,717µm,0.4s | | | | | | | | |
| **GATE** | **Gambatesa** | **0.37** | **178** | P | Pb | 21 | 18 | 15.8 | +0.2 |
| GATE | | | | S | Sb | 21 | 18 | 22.2 | +1.1 |
| GATE | | | | AML | AML | | | | |
| | comp=E,870µm,1.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,505µm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,825µm,0.3s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,914µm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,505µm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,874µm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,660µm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,504µm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,636µm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,521µm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,916µm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=E,874µm,0.5s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,604µm,0.4s | | | | | | | | |
| GATE | | | | AML | AML | | | | |
| | comp=N,643µm,0.3s | | | | | | | | |
| **BSSO** | **Busso** | **0.41** | **213** | P | Pb | 21 | 18 | 16.3 | 0.0 |
| BSSO | | | | S | Sb | 21 | 18 | 22.9 | +0.8 |
| BSSO | | | | AML | AML | | | | |
| | comp=E,501µm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,420µm,0.7s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,420µm,0.7s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,214µm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,164µm,0.7s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,332µm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,352µm,0.3s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,138µm,1.1s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,140µm,0.3s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,352µm,0.3s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=N,143µm,0.3s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,434µm,0.3s | | | | | | | | |
| BSSO | | | | AML | AML | | | | |
| | comp=E,165µm,0.3s | | | | | | | | |
| **APRC** | **Apricena** | **0.50** | **105** | P | Pg | 21 | 18 | 17.3 | -0.5 |
| APRC | | | | S | Sb | 21 | 18 | 25.3 | +0.5 |
| APRC | | | | AML | AML | | | | |
| | comp=E,852µm,1.4s | | | | | | | | |
| APRC | | | | AML | AML | | | | |
| | comp=N,1105µm,1.4s | | | | | | | | |
| APRC | | | | AML | AML | | | | |
| | comp=E,764µm,0.2s | | | | | | | | |
| APRC | | | | AML | AML | | | | |
| | comp=E,812µm,0.2s | | | | | | | | |
| APRC | | | | AML | AML | | | | |
| | comp=N,923µm,0.3s | | | | | | | | |
| **SACR** | **S. Croce Del S** | **0.51** | **196** | P | Pg | 21 | 18 | 17.4 | -0.5 |
| SACR | | | | S | Sg | 21 | 18 | 24.8 | 0.0 |
| SACR | | | | AML | AML | | | | |
| | comp=N,321µm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=E,668µm,0.3s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=N,316µm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=E,686µm,0.3s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=N,320µm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=N,321µm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=N,315µm,0.2s | | | | | | | | |
| SACR | | | | AML | AML | | | | |
| | comp=E,686µm,0.3s | | | | | | | | |
| **MIDA** | **Miranda** | **0.54** | **243** | P | Pb | 21 | 18 | 17.8 | -0.5 |
| MIDA | | | | S | Sb | 21 | 18 | 25.5 | -0.2 |
| MIDA | | | | AML | AML | | | | |
| | comp=E,580µm,1.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,638µm,0.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,546µm,0.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,596µm,1.5s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,596µm,0.5s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,579µm,1.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,546µm,0.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=N,501µm,0.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,637µm,0.2s | | | | | | | | |
| MIDA | | | | AML | AML | | | | |
| | comp=E,560µm,0.2s | | | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.55** | **159** | AML | AML | | | | |
| | comp=N,93µm,1.5s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=E,212µm,0.2s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=N,102µm,0.5s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=N,11µm,1.6s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=E,8µm,0.2s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=N,33µm,0.4s | | | | | | | | |
| MOCO | | | | AML | AML | | | | |
| | comp=E,34µm,0.5s | | | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.55** | **287** | P | Pb | 21 | 18 | 18.3 | -0.3 |
| LPEL | | | | S | Sg | 21 | 18 | 26.8 | +0.6 |
| LPEL | | | | AML | AML | | | | |
| | comp=E,715µm,0.1s | | | | | | | | |
| LPEL | | | | AML | AML | | | | |
| | comp=N,702µm,0.2s | | | | | | | | |
| LPEL | | | | AML | AML | | | | |
| | comp=E,715µm,0.1s | | | | | | | | |
| LPEL | | | | AML | AML | | | | |
| | comp=N,703µm,0.2s | | | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.58** | **252** | P | Pb | 21 | 18 | 19.1 | -0.1 |
| RNI2 | | | | S | Sg | 21 | 18 | 27.5 | +0.4 |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,782µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1345µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,782µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1340µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,856µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1440µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,857µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=E,782µm,0.2s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1441µm,0.1s | | | | | | | | |
| RNI2 | | | | AML | AML | | | | |
| | comp=N,1340µm,0.1s | | | | | | | | |
| **SGRT** | **San Giovanni R** | **0.65** | **101** | P | Pb | 21 | 18 | 19.8 | -0.5 |
| SGRT | | | | AML | AML | | | | |
| | comp=E,485µm,1.4s | | | | | | | | |
| SGRT | | | | AML | AML | | | | |
| | comp=N,556µm,0.5s | | | | | | | | |
| SGRT | | | | AML | AML | | | | |
| | comp=E,462µm,0.3s | | | | | | | | |
| SGRT | | | | AML | AML | | | | |
| | comp=N,391µm,0.2s | | | | | | | | |
| **VAGA** | **Valle Agricola** | **0.68** | **227** | AML | AML | | | | |
| | comp=E,58µm,0.1s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=E,162µm,0.2s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=N,266µm,0.3s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=E,177µm,0.4s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=N,278µm,0.3s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=E,161µm,0.2s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=N,252µm,0.3s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=N,258µm,0.3s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=N,54µm,0.2s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=N,50µm,0.2s | | | | | | | | |
| VAGA | | | | AML | AML | | | | |
| | comp=E,58µm,0.2s | | | | | | | | |
| **CERA** | **Filignano** | **0.71** | **247** | P | Pb | 21 | 18 | 21.5 | +0.1 |
| CERA | | | | AML | AML | | | | |
| | comp=N,322µm,0.8s | | | | | | | | |
| CERA | | | | AML | AML | | | | |
| | comp=E,198µm,1.0s | | | | | | | | |
| CERA | | | | AML | AML | | | | |
| | comp=N,302µm,0.8s | | | | | | | | |
| CERA | | | | AML | AML | | | | |
| | comp=E,173µm,0.6s | | | | | | | | |
| CERA | | | | AML | AML | | | | |
| | comp=N,299µm,0.8s | | | | | | | | |
| CERA | | | | AML | AML | | | | |
| | comp=N,303µm,0.8s | | | | | | | | |
| CERA | | | | AML | AML | | | | |
| | comp=E,184µm,0.6s | | | | | | | | |
| **VITU** | **Vitulano (BN)** | **0.73** | **196** | P | Pb | 21 | 18 | 21.2 | -0.5 |
| VITU | | | | AML | AML | | | | |
| | comp=E,519µm,1.6s | | | | | | | | |
| VITU | | | | AML | AML | | | | |
| | comp=N,410µm,0.8s | | | | | | | | |
| VITU | | | | AML | AML | | | | |
| | comp=N,390µm,0.4s | | | | | | | | |
| VITU | | | | AML | AML | | | | |
| | comp=N,393µm,0.4s | | | | | | | | |
| VITU | | | | AML | AML | | | | |
| | comp=E,475µm,0.3s | | | | | | | | |
| **INTR** | **Introdacqua** | **0.75** | **280** | P | Pb | 21 | 18 | 21.7 | -0.3 |
| INTR | | | | S | Sg | 21 | 18 | 32.3 | 0.0 |
| INTR | | | | AML | AML | | | | |
| | comp=E,438µm,0.7s | | | | | | | | |
| INTR | | | | AML | AML | | | | |
| | comp=N,494µm,1.1s | | | | | | | | |
| INTR | | | | AML | AML | | | | |
| | comp=E,306µm,0.2s | | | | | | | | |
| INTR | | | | AML | AML | | | | |
| | comp=N,474µm,1.1s | | | | | | | | |
| INTR | | | | AML | AML | | | | |
| | comp=N,414µm,0.2s | | | | | | | | |
| INTR | | | | AML | AML | | | | |
| | comp=N,438µm,0.2s | | | | | | | | |
| INTR | | | | AML | AML | | | | |
| | comp=E,306µm,0.2s | | | | | | | | |
| INTR | | | | AML | AML | | | | |
| | comp=E,436µm,0.1s | | | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.78** | **102** | P | Pb | 21 | 18 | 22.1 | -0.4 |
| MSAG | | | | AML | AML | | | | |
| | comp=E,370µm,1.0s | | | | | | | | |
| MSAG | | | | AML | AML | | | | |
| | comp=N,1170µm,0.2s | | | | | | | | |
| MSAG | | | | AML | AML | | | | |
| | comp=E,148µm,0.2s | | | | | | | | |
| MSAG | | | | AML | AML | | | | |
| | comp=N,500µm,0.3s | | | | | | | | |
| MSAG | | | | AML | AML | | | | |
| | comp=N,499µm,0.3s | | | | | | | | |
| MSAG | | | | AML | AML | | | | |
| | comp=E,139µm,0.3s | | | | | | | | |
| MSAG | | | | AML | AML | | | | |
| | comp=N,1170µm,0.2s | | | | | | | | |
| MSAG | | | | AML | AML | | | | |
| | comp=E,359µm,0.3s | | | | | | | | |
| **SGTA** | **Sant Agata di** | **0.83** | **154** | P | Pb | 21 | 18 | 22.7 | -0.7 |
| SGTA | | | | AML | AML | | | | |
| | comp=E,558µm,0.6s | | | | | | | | |
| SGTA | | | | AML | AML | | | | |
| | comp=E,541µm,0.5s | | | | | | | | |
| SGTA | | | | AML | AML | | | | |
| | comp=N,338µm,0.4s | | | | | | | | |
| SGTA | | | | AML | AML | | | | |
| | comp=N,345µm,1.6s | | | | | | | | |
| SGTA | | | | AML | AML | | | | |
| | comp=N,338µm,0.4s | | | | | | | | |
| SGTA | | | | AML | AML | | | | |
| | comp=E,541µm,0.5s | | | | | | | | |
| SGTA | | | | AML | AML | | | | |
| | comp=N,321µm,0.5s | | | | | | | | |
| SGTA | | | | AML | AML | | | | |
| | comp=E,558µm,0.6s | | | | | | | | |
| **PIGN** | **Pignataro Magg** | **0.87** | **218** | AML | AML | | | | |
| | comp=N,70µm,1.3s | | | | | | | | |
| PIGN | | | | AML | AML | | | | |
| | comp=E,96µm,1.4s | | | | | | | | |
| PIGN | | | | AML | AML | | | | |
| | comp=N,173µm,1.0s | | | | | | | | |
| PIGN | | | | AML | AML | | | | |
| | comp=N,47µm,0.3s | | | | | | | | |
| PIGN | | | | AML | AML | | | | |
| | comp=E,95µm,0.4s | | | | | | | | |
| PIGN | | | | AML | AML | | | | |
| | comp=E,59µm,0.3s | | | | | | | | |
| **PAOL** | **Paolisi** | **0.89** | **196** | AML | AML | | | | |
| | comp=E,244µm,0.3s | | | | | | | | |
| PAOL | | | | AML | AML | | | | |
| | comp=E,280µm,0.6s | | | | | | | | |
| PAOL | | | | AML | AML | | | | |
| | comp=N,224µm,0.2s | | | | | | | | |
| PAOL | | | | AML | AML | | | | |
| | comp=N,189µm,0.4s | | | | | | | | |
| PAOL | | | | AML | AML | | | | |
| | comp=E,233µm,0.7s | | | | | | | | |
| PAOL | | | | AML | AML | | | | |
| | comp=N,119µm,0.2s | | | | | | | | |
| **T0110** | **Collepietro** | **0.90** | **293** | AML | AML | | | | |
| | comp=E,111µm,0.2s | | | | | | | | |
| T0110 | | | | AML | AML | | | | |
| | comp=E,379µm,1.0s | | | | | | | | |
| T0110 | | | | AML | AML | | | | |
| | comp=N,284µm,0.5s | | | | | | | | |
| T0110 | | | | AML | AML | | | | |
| | comp=N,150µm,0.3s | | | | | | | | |
| **MTMR** | **Montemarano** | **0.97** | **175** | AML | AML | | | | |
| | comp=N,5379µm,58.2s | | | | | | | | |
| MTMR | | | | AML | AML | | | | |
| | comp=N,474µm,0.5s | | | | | | | | |
| MTMR | | | | AML | AML | | | | |
| | comp=E,435µm,0.4s | | | | | | | | |
| **FAGN** | **Fagnano** | **1.04** | **292** | AML | AML | | | | |
| | comp=E,177µm,0.5s | | | | | | | | |
| FAGN | | | | AML | AML | | | | |
| | comp=E,510µm,0.4s | | | | | | | | |
| FAGN | | | | AML | AML | | | | |
| | comp=N,296µm,0.5s | | | | | | | | |
| FAGN | | | | AML | AML | | | | |
| | comp=N,129µm,0.3s | | | | | | | | |
| **AMUR** | **Altamura** | **1.62** | **127** | AML | AML | | | | |
| | comp=E,110µm,0.3s | | | | | | | | |
| AMUR | | | | AML | AML | | | | |
| | comp=N,124µm,0.3s | | | | | | | | |
| AMUR | | | | AML | AML | | | | |
| | comp=E,110µm,0.3s | | | | | | | | |
| AMUR | | | | AML | AML | | | | |
| | comp=N,112µm,0.3s | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **GAVE** | **Gavelli** | **1.69** | **299** | AML | AML |
| | comp=N,64μm,1.5s | | | | |
| GAVE | | | | AML | AML |
| | comp=E,68μm,0.7s | | | | |
| **MIGL** | **Miglionico** | **1.73** | **137** | AML | AML |
| | comp=E,171μm,0.5s | | | | |
| MIGL | | | | AML | AML |
| | comp=E,202μm,1.0s | | | | |
| MIGL | | | | AML | AML |
| | comp=N,186μm,1.1s | | | | |
| MIGL | | | | AML | AML |
| | comp=N,154μm,0.5s | | | | |
| **CSP1** | **Cessapalombo** | **1.73** | **315** | AML | AML |
| | comp=E,65μm,0.4s | | | | |
| CSP1 | | | | AML | AML |
| | comp=N,112μm,0.3s | | | | |
| **CESI** | **CESI - Serrava** | **1.85** | **308** | AML | AML |
| | comp=N,67μm,0.7s | | | | |
| CESI | | | | AML | AML |
| | comp=E,63μm,0.6s | | | | |
| CESI | | | | AML | AML |
| | comp=E,39μm,0.2s | | | | |
| CESI | | | | AML | AML |
| | comp=N,62μm,0.5s | | | | |
| **ATCC** | **AVT- Casa Cast** | **2.11** | **309** | AML | AML |
| | comp=E,45μm,0.4s | | | | |
| ATCC | | | | AML | AML |
| | comp=N,43μm,0.7s | | | | |
| ATCC | | | | AML | AML |
| | comp=E,45μm,0.4s | | | | |
| ATCC | | | | AML | AML |
| | comp=N,43μm,0.7s | | | | |
| **STON** | **Ston** | **2.30** | **64** | AML | AML |
| | comp=N,25μm,0.6s | | | | |
| STON | | | | AML | AML |
| | comp=E,27μm,1.1s | | | | |
| STON | | | | AML | AML |
| | comp=N,25μm,0.6s | | | | |
| STON | | | | AML | AML |
| | comp=E,19μm,0.4s | | | | |

*ISN* ***17*** *21:46:22.5±0.7, 33.˙68N×45.˙66E, h11km±999km, ML2.8*
*TEH* ***17*** *21:46:24.2, 33.˙67N×45.˙67E, h9km±38km, ML3.1*
**ISC 17 21:46:23.0±1.0, 33.˙67N±0.˙03×45.˙57E±0.˙05, h10km, n21, σ1§64/26, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLG1** | **Gilan-e-Gharb** | **0.52** | **33** | Pg | **Pb** | **21 46 33.3** | **-1.1** |
| **ILBA** | **Ilam Banvizeh** | **0.53** | **95** | Pg | **Pb** | **21 46 33.6** | **-1.0** |
| ILBA | | | | Sg | **Sg** | **21 46 39.9** | **-0.6** |
| **IBDR** | **Badra** | **0.64** | **152** | *e*Pg | **Pg** | **21 46 35.0** | **-0.3** |
| IBDR | | | | *e*Sg | **Sg** | **21 46 43.0** | **-0.7** |
| **KGS1** | **Ghasr-e-Shirin** | **0.83** | **1** | Pg | **Pn** | **21 46 40.8** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **1.06** | **51** | Pg | **Pn** | **21 46 43.6** | **-0.6** |
| **IDHR** | **Dehrash** | **1.23** | **33** | Pg | **Pg** | **21 46 46.8** | **+0.1** |
| IDHR | | | | Sg | **Sn** | **21 47 05.2** | **+1.9** |
| **KCHF** | **Cheshme Sefid,** | **1.36** | **63** | Pg | **Pg** | **21 46 48.5** | **-0.7** |
| **ILIN** | **Lien** | **1.70** | **42** | Pg | **Pg** | **21 46 55.1** | **-0.5** |
| **IKFM** | **Kafar-mosalman** | **1.91** | **94** | Pg | **Pn** | **21 46 57.9** | **-1.7** |
| **RAFI** | **Al-Rafai** | **2.00** | **167** | *e*Pn | **Pb** | **21 46 58.0** | **-1.4** |
| RAFI | | | | *e*Sn | **Sb** | **21 47 24.0** | **-0.3** |
| **IKRK** | **Kirkuk** | **2.00** | **330** | *e*Pn | **Pb** | **21 46 58.5** | **-1.0** |
| IKRK | | | | *e*Sn | **Sb** | **21 47 25.0** | **+0.5** |
| IKRK | | | | AML | AML | 21 47 39.5 | |
| | comp=N,85nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 21 47 44.5 | |
| | comp=E,100nm,0.4s | | | | | | |
| **IBZA** | **Bozab** | **2.06** | **67** | Pn | **Pb** | **21 46 59.6** | **-1.1** |
| **SNQR** | **Sonqor, Kerman** | **2.08** | **55** | Pn | **Pb** | **21 47 00.1** | **-0.9** |
| **HSAM** | **Samen** | **2.58** | **77** | Pn | **Pb** | **21 47 06.8** | **-2.7** |
| **HAGD** | **Aghdareh** | **3.17** | **68** | Pn | **Pn** | **21 47 15.1** | **+1.9** |
| **IRAZ** | **Razeghan** | **3.99** | **63** | Pn | **Pn** | **21 47 26.4** | **+1.9** |
| **IPIR** | **Pirpir** | **4.57** | **101** | Pn | **Pn** | **21 47 35.2** | **+2.7** |
| **ZNGN** | **Zangian** | **4.71** | **108** | Pn | **Pn** | **21 47 37.6** | **+3.2** |
| **QAMS** | **Qamsar** | **4.86** | **88** | Pn | **Pn** | **21 47 38.4** | **+2.0** |
| **IKLH** | **Kolahrood** | **5.03** | **92** | Pn | **Pn** | **21 47 41.3** | **+2.5** |
| **IZEF** | **Zefreh** | **5.71** | **96** | Pn | **Pn** | **21 47 50.1** | **+1.9** |

*MOS* ***17*** *22:06:53.4±0.9, 23.˙43N×143.˙24E, h9km, mb5.7/94, MS5.3/75, Error ellipse: s-maj=6.8km s-min=3.5km az=116.0*
*BJI* ***17*** *22:06:54.6±0.0, 23.˙72N×143.˙28E, h10km, mb5.3/95, mB5.5/63, Ms5.5/98, Ms7 5.4/93*
*IPGP* ***17*** *22:06:55.0, 23.˙51N×143.˙35E, h18km, Mw5.7, Fault plane solution: NP1:ϕs334.00000°, δ74.00000°, λ92.00000°. NP2:ϕs147.00000°, δ16.00000°, λ83.00000°.*
*NEIC* ***17*** *22:06:57.3, 23.˙58N×143.˙44E, h20km, Moment Tensor Solution. Duration: 3§1 Moment tensor: Scale 10¹⁷Nm; Mrr2.36; Mθθ-0.72; Mϕϕ-1.64; Mrθ 0.27; Mθϕ 1.13; Mϕr 1.84; Fault plane solution: M₀3.01000×10¹⁷ NP1: ϕs348.48000°, δ63.88000°, λ110.54000°. NP2: ϕs128.09000°, δ32.78000°, λ54.42000°. Principal axes: T 3.2005, Plg65.0000°, Azm294.0000°; N -0.3882, Plg18.0000°, Azm159.0000°; P -2.8123, Plg16.0000°, Azm63.0000°;*
*NEIC* ***17*** *22:06:57.4±1.4, 23.˙48N±0.˙05×143.˙33E±0.˙08, h18km±1km, mb5.6/630, Ms_20 5.4/757, Mwb5.4/80, Mww5.6/31 Error ellipse: s-maj=13.1km s-min=7.6km az=253.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr0.90; Mθθ-0.01; Mϕϕ-0.89; Mrθ-0.45; Mθϕ 0.16; Mϕr 1.53; Fault plane solution: M₀1.83000×10¹⁷ NP1: ϕs175.68000°, δ15.05000°, λ100.83000°. NP2: ϕs344.48000°, δ75.22000°, λ87.11000°. Principal axes: T 1.8280, Plg60.0000°, Azm250.0000°; N 0.0135, Plg3.0000°, Azm345.0000°; P -1.8415, Plg30.0000°, Azm77.0000°;*
*NEIC* ***17*** *22:06:57.4, 23.˙48N×143.˙35E, h18km*
*NEIC* ***17*** *22:06:57.3, 23.˙48N×143.˙33E, h20km*
*JMA* ***17*** *22:06:58.9±0.1, 23.˙6N±0.˙6×143.˙5E±0.˙6, h114km, MV5.8/28, MW5.7/28, IOTO ISLANDS REGION*
*IDC* ***17*** *22:06:59.2±1.2, 23.˙50N×143.˙23E, h39km±9km, mb4.8/28, mbtmp5.1/33, ML4.3/5, MS5.2/72, Error ellipse: s-maj=13.4km s-min=8.1km az=58.0*
*GCMT* ***17*** *22:07:00.3±0.1, 23.˙53N±0.˙01×143.˙46E±0.˙01, h22km, MW5.6/146, Moment Tensor Solution. s124,c232; s146,c288; Duration: 1§6 Moment tensor: Scale 10¹⁷ Nm; Mrr2.59±.04; Mθθ-0.73±.03; Mϕϕ-1.86±.03; Mrθ-0.68±.06; Mθϕ 1.68±.02; Mϕr 1.98±.07; Best double couple: M₀3.53000×10¹⁷ NP1:ϕs335.00000°, δ64.00000°, λ101.00000°. NP2:ϕs131.00000°, δ29.00000°, λ69.00000°. Principal axes: T 3.3440, Plg69.0000°, Azm268.0000°; N 0.3700, Plg10.0000°, Azm150.0000°; P -3.7160, Plg18.0000°, Azm57.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 17 22:06:57.3±0.3, 23.˙49N±0.˙03×143.˙35E±0.˙03, h24km±1km, h24km:pP-P, n1796, σ1§51/1960, mb5.6/477, MS5.4/534, 67C-33D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **3.31** | **341** | P | **Pn** | **22 07 48.7** | **+1.1** |
| JHH2 | | | | S | **Sn** | **22 08 27.6** | **+1.5** |
| **JHH2** | **Haha-jima-NKT2** | **3.31** | **341** | A | A | 22 07 48.7 | |
| | comp=E,53nm,7.4s,comp=N,44nm,2.3s | | | | | | |
| **CBIJ** | **Chichi jima** | **3.74** | **344** | P | **Pn** | **22 07 54.9** | **+1.3** |
| CBIJ | | | | S | **Sn** | **22 08 36.6** | **-0.3** |
| **CBIJ** | **Chichi jima** | **3.74** | **344** | A | A | 22 07 54.9 | |
| | comp=E,42nm,6.8s,comp=N,36nm,8.6s | | | | | | |
| **JCJ** | **Chichijima** | **3.74** | **344** | P | **Pn** | **22 07 55.2** | **+1.6** |
| **JCJ** | **Chichijima** | **3.74** | **344** | Pn | **Pn** | **22 07 53.9** | **+0.3** |
| JCJ | | | | Sn | **Sn** | **22 08 36.7** | **-0.2** |
| **JCJ** | **Chichijima** | **3.74** | **344** | Pn | **Pn** | **22 07 50.0** | **-3.6** |
| | comp=N,113nm,0.3s,baz=280,slow=21,SNR=27 | | | | | | |
| JCJ | | | | Sn | **Sn** | **22 08 31.9** | **-5.0** |
| | comp=N,578nm,0.3s,baz=124,slow=22,SNR=22 | | | | | | |
| **GUMO** | **Guam** | **9.95** | **171** | P | **Pn** | **22 09 20.9** | **+2.0** |
| **GUMO** | **Guam** | **9.95** | **171** | Pn | **Pn** | **22 09 19.7** | **+0.8** |
| **GUMO** | **Guam** | **9.95** | **171** | Pn | **Pn** | **22 09 20.2** | **+1.4** |
| | comp=N,6.0nm,0.3s,baz=195,slow=24,SNR=1.1 | | | | | | |
| | comp=N,33nm,0.2s | | | | | | |
| **GUMO** | **Guam** | **9.95** | **171** | P | **Pn** | **22 09 19.7** | **+0.8** |
| **JHCJ** | **Hachijojimakas** | **10.05** | **343** | *e*S | **Sn** | **22 11 06.9** | **-5.2** |
| **JHJ2** | **Mitsune** | **10.08** | **343** | Pn | **Pn** | **22 09 20.4** | **-0.1** |
| **JHJ** | **Hachijo jima 2** | **10.10** | **343** | Pn | **Pn** | **22 09 19.1** | **-1.7** |
| | comp=N,13nm,0.3s,baz=99,slow=8.9,SNR=1.8 | | | | | | |
| JHJ | | | | Sn | Sn | 22 11 04.2 | -9.0 |
| | comp=N,5.1nm,0.3s,baz=108,slow=7.2,SNR=2.5 | | | | | | |
| JHJ | | | | LR | LR | 22 12 44.9 | |
| | comp=N,6μm,21.4s,baz=166,slow=34 | | | | | | |
| | comp=N,189nm,0.8s | | | | | | |
| **JMKN** | **Mikurajimanish** | **10.88** | **343** | P | **Pn** | **22 09 31.6** | **+0.1** |
| JMKN | | | | *e*S | **Sn** | **22 11 29.5** | **-3.0** |
| **JMYK** | **Miyake Tsubota** | **11.05** | **343** | *e*P | **Pn** | **22 09 33.3** | **-0.5** |
| JMYK | | | | *e*S | **Sn** | **22 11 31.2** | **-5.4** |
| **JMZ** | **Minamidaito 2** | **11.27** | **284** | P | **Pn** | **22 09 40.2** | **+3.3** |
| **JMZ** | **Minamidaito 2** | **11.27** | **284** | Pn | **Pn** | **22 09 37.5** | **+0.6** |
| **JMZ** | **Minamidaito 2** | **11.27** | **284** | *e*P | Pn | 22 09 42.1 | +5.2 |
| **BSO1** | **Boso 1** | **11.32** | **350** | P | **Pn** | **22 09 37.5** | **+0.5** |
| BSO1 | | | | *e*S | **Sn** | **22 11 35.8** | **-6.6** |
| **BSO3** | **Boso 3** | **11.54** | **348** | *e*P | **Pn** | **22 09 39.4** | **-0.9** |
| **JSG** | **Sagara** | **12.02** | **339** | Pn | **Pn** | **22 09 47.5** | **+0.3** |
| **JOD2** | **Odawara 2** | **12.31** | **343** | P | **Pn** | **22 09 49.3** | **-1.8** |
| JOD2 | | | | S | **Sn** | **22 12 00.6** | **-6.9** |
| **INU** | **Inuyama** | **13.04** | **336** | P | **Pn** | **22 10 01.4** | **+0.4** |
| **INU** | **Inuyama** | **13.04** | **336** | Pn | **Pn** | **22 10 00.6** | **-0.5** |
| **JRY** | **Ryogami san** | **13.07** | **344** | *e*P | **Pn** | **22 09 60.0** | **-1.5** |
| JRY | | | | S | **Sn** | **22 12 21.2** | **-4.9** |
| **JGF** | **Kuroka** | **13.14** | **338** | P | **Pn** | **22 10 02.7** | **+0.2** |
| **JGF** | **Kuroka** | **13.14** | **338** | | **Pn** | **22 10 01.5** | **-1.0** |
| **JMN** | **Monobe** | **13.16** | **323** | P | **Pn** | **22 10 05.5** | **+2.8** |
| **JMN** | **Monobe** | **13.16** | **323** | | **Pn** | **22 10 03.3** | **+0.6** |
| **JAMN** | **Amaminishikomi** | **13.61** | **293** | P | **P** | **22 10 13.4** | **-4.2** |
| **MJAR** | **Matsushiro Arr** | **13.75** | **342** | Pn | **Pn** | **22 10 08.6** | **-2.1** |
| | comp=N,0.7nm,0.3s,baz=160,slow=11,SNR=31 | | | | | | |
| MJAR | | | | Sn | Sn | 22 12 33.7 | -9.0 |
| | comp=N,0.3nm,0.3s,baz=247,slow=43,SNR=2.8 | | | | | | |
| MJAR | | | | LR | LR | 22 15 21.5 | |
| | comp=N,5μm,18.2s,baz=166,slow=37 | | | | | | |
| MJAR | | | | ScP | **ScP** | **22 19 03.7** | **-2.4** |
| | comp=N,0.9nm,0.3s,baz=133,slow=1.2,SNR=4.0 | | | | | | |
| | comp=N,17nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **13.75** | **342** | P | **Pn** | **22 10 10.2** | **-0.5** |
| **MAJO** | **Matsushiro** | **13.75** | **342** | | **Pn** | **22 10 09.5** | **-1.2** |
| **MAJO** | **Matsushiro** | **13.75** | **342** | *de*P | **Pn** | **22 10 09.4** | **-1.3** |
| **MJB9** | **Matsu-Tunnel** | **13.75** | **342** | | **Pn** | **22 10 09.6** | **-1.2** |
| **JOW** | **Kunigami** | **14.05** | **287** | P | **Pn** | **22 10 18.5** | **+3.6** |
| **JOW** | **Kunigami** | **14.05** | **287** | Pn | **Pn** | **22 10 15.1** | **+0.1** |
| **JOW** | **Kunigami** | **14.05** | **287** | Pn | **Pn** | **22 10 13.0** | **-2.0** |
| | baz=66,slow=26 | | | | | | |
| JOW | | | | LR | LR | 22 15 15.3 | |
| | comp=N,22μm,19.2s,baz=108,slow=36 | | | | | | |
| **JOW** | **Kunigami** | **14.05** | **287** | *e*P | **P** | **22 10 19.0** | **-3.5** |
| **JMM** | **Marumori** | **14.50** | **352** | P | **Pn** | **22 10 20.6** | **-0.4** |
| **JMM** | **Marumori** | **14.50** | **352** | | **Pn** | **22 10 18.8** | **-2.1** |
| **JHS** | **Saijyo** | **14.53** | **324** | *e*P | **Pn** | **22 10 22.6** | **+1.2** |
| **JNU** | **Nakatsue** | **14.57** | **314** | P | **Pn** | **22 10 24.7** | **+2.6** |
| **JNU** | **Nakatsue** | **14.57** | **314** | | **Pn** | **22 10 22.9** | **+0.8** |
| **JNU** | **Nakatsue** | **14.57** | **314** | Pn | **Pn** | **22 10 23.2** | **+1.1** |
| | comp=N,0.5nm,0.3s,baz=126,slow=7.5,SNR=13 | | | | | | |
| JNU | | | | Sn | **Sn** | **22 12 59.5** | **-3.5** |
| | comp=N,0.2nm,0.3s,baz=118,slow=13,SNR=1.3 | | | | | | |
| JNU | | | | LR | LR | 22 15 53.1 | |
| | comp=N,6μm,18.7s,baz=120,slow=37 | | | | | | |
| | comp=N,47nm,1.0s | | | | | | |
| **JSD** | **Sado** | **15.14** | **344** | P | **Pn** | **22 10 30.6** | **+1.0** |
| **JSD** | **Sado** | **15.14** | **344** | Pn | **Pn** | **22 10 28.3** | **-1.3** |
| **JTU** | **Tsushima** | **16.41** | **315** | P | **P** | **22 10 48.6** | **0.0** |
| **JMJ** | **Miyako jima 2** | **16.54** | **278** | P | **P** | **22 10 50.9** | **+0.8** |
| **JTM** | **Tenmabayashi** | **17.36** | **354** | P | **Pn** | **22 10 58.0** | **+0.1** |
| **JTM** | **Tenmabayashi** | **17.36** | **354** | Pn | **Pn** | **22 10 57.3** | **-0.6** |
| JTM | | | | IAmb | IAmb | 22 11 08.1 | |
| | comp=Z,491nm,1.3s | | | | | | |
| **ERM** | **Erimo** | **18.48** | **360** | P | **Pn** | **22 11 13.4** | **+1.8** |
| **ERM** | **Erimo** | **18.48** | **360** | P | **P** | **22 11 09.5** | **-1.9** |
| **ERM** | **Erimo** | **18.48** | **360** | *de*P | **Pn** | **22 11 12.8** | **+1.2** |
| **YOJ** | **Yonaguni jima** | **18.61** | **277** | P | **Pn** | **22 11 15.9** | **+2.4** |
| **YOJ** | **Yonaguni jima** | **18.61** | **277** | P | **P** | **22 11 13.0** | **-0.1** |
| YOJ | | | | IAmb | IAmb | 22 11 17.6 | |
| | comp=Z,701nm,1.3s | | | | | | |
| **YOJ** | **Yonaguni jima** | **18.61** | **277** | P | **P** | **22 11 13.0** | **-0.1** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,701nm,1.3s | | | | | | |
| **TJN** | **Taejon** | **18.86** | **317** | P | **P** | **22 11 15.8** | **+0.1** |
| **TJN** | **Taejon** | **18.86** | **317** | P | **P** | **22 11 14.5** | **-1.2** |
| TJN | | | | IAmb | IAmb | 22 11 17.6 | |
| | comp=Z,530nm,1.1s | | | | | | |
| **TJN** | **Taejon** | **18.86** | **317** | P | **P** | **22 11 14.5** | **-1.2** |
| TJN | | | | pmax | pmax | | |
| | comp=Z,530nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **19.21** | **320** | P | **P** | **22 11 18.9** | **-0.7** |
| | comp=Z,2.5nm,0.3s,baz=136,slow=11,SNR=47 | | | | | | |
| KSRS | | | | S | **Sn** | **22 14 53.0** | **-2.2** |
| | comp=Z,1.7nm,0.8s,baz=103,slow=39,SNR=1.0 | | | | | | |
| KSRS | | | | LR | LR | 22 18 38.7 | |
| | comp=Z,7μm,18.5s,baz=135,slow=36 | | | | | | |
| KSRS | | | | ScP | **ScP** | **22 19 14.9** | **-1.9** |
| | comp=Z,4.6nm,1.0s,baz=104,slow=1.4,SNR=7.1 | | | | | | |
| | comp=Z,58nm,1.0s | | | | | | |
| **KSAR** | **Wonju Array Be** | **19.23** | **320** | P | **P** | **22 11 19.4** | **-0.3** |
| **KSAR** | **Wonju Array Be** | **19.23** | **320** | P | **P** | **22 11 19.4** | **-0.3** |
| **KS19** | **Wonju Array Si** | **19.28** | **320** | P | **P** | **22 11 19.6** | **-0.6** |
| **NACB** | **Ninganchiao** | **19.91** | **276** | P | **Pn** | **22 11 29.8** | **+0.7** |
| **NACB** | **Ninganchiao** | **19.91** | **276** | P | **P** | **22 11 27.9** | **+0.6** |
| **TATO** | **Taipei** | **19.99** | **279** | P | **Pn** | **22 11 30.9** | **+0.9** |
| **TATO** | **Taipei** | **19.99** | **279** | P | **P** | **22 11 27.9** | **-0.2** |
| TATO | | | | IAmb | IAmb | 22 11 43.8 | |
| | comp=Z,722nm,1.6s | | | | | | |
| **INCN** | **Inchon** | **20.01** | **318** | P | **P** | **22 11 27.7** | **-0.6** |
| **INCN** | **Inchon** | **20.01** | **318** | P | **P** | **22 11 27.7** | **-0.6** |
| **INCN** | **Inchon** | **20.01** | **318** | P | **P** | **22 11 27.7** | **-0.6** |
| INCN | | | | pmax | pmax | | |
| | comp=Z,73nm,1.0s | | | | | | |
| INCN | | | | MLR | MLR | | |
| | comp=Z,7μm,18.0s | | | | | | |
| **YHNB** | **Yeheng** | **20.10** | **278** | P | Pn | 22 11 31.9 | +0.6 |
| **YHNB** | **Yeheng** | **20.10** | **278** | P | **P** | **22 11 29.8** | **+0.3** |
| YHNB | | | | IAmb | IAmb | 22 11 46.2 | |
| | comp=Z,363nm,1.2s | | | | | | |
| **YULB** | **Yu-li** | **20.24** | **274** | P | Pn | 22 11 33.9 | +1.0 |
| **YULB** | **Yu-li** | **20.24** | **274** | P | **P** | **22 11 31.7** | **+0.8** |
| **TWGBT** | **Beinan** | **20.49** | **273** | P | Pn | 22 11 36.4 | +0.5 |
| **TWG** | **Pinlang** | **20.50** | **273** | P | **P** | **22 11 34.4** | **+0.7** |
| TWG | | | | IAmb | IAmb | 22 11 49.7 | |
| | comp=Z,533nm,1.6s | | | | | | |
| **SSLB** | **Suanglung** | **20.52** | **275** | P | Pn | 22 11 36.8 | +0.5 |
| **SSLB** | **Suanglung** | **20.52** | **275** | P | **P** | **22 11 34.9** | **+0.9** |
| SSLB | | | | IAmb | IAmb | 22 11 49.9 | |
| | comp=Z,362nm,1.1s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **20.59** | **358** | | **P** | **22 11 34.8** | **+0.4** |
| JKA | | | | IAmb | IAmb | 22 11 40.6 | |
| | comp=Z,327nm,1.5s | | | | | | |
| **ASAJ** | **Asahikawa** | **20.59** | **358** | P | Pn | 22 11 37.0 | +0.3 |
| | comp=Z,49nm,0.8s,baz=224,slow=6.1,SNR=9.1 | | | | | | |
| ASAJ | | | | S | **S** | **22 15 23.9** | **+0.5** |
| | comp=Z,16nm,0.8s,baz=345,slow=28,SNR=2.1 | | | | | | |
| ASAJ | | | | LR | LR | 22 22 47.1 | |
| | comp=Z,2μm,19.3s,baz=199,slow=46 | | | | | | |
| **ASAJ** | **Asahikawa** | **20.59** | **358** | P | **P** | **22 11 34.8** | **+0.4** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,327nm,1.5s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,5μm,20.0s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **20.60** | **5** | P | Pn | 22 11 37.6 | +0.7 |
| YUK | | | | *i* S | **S** | **22 15 25.5** | **+1.8** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,548nm,1.3s | | | | | | |
| **TPUB** | **Ta-pu** | **20.86** | **274** | P | Pn | 22 11 40.7 | +0.6 |
| **TPUB** | **Ta-pu** | **20.86** | **274** | P | **P** | **22 11 38.4** | **+0.8** |
| TPUB | | | | IAmb | IAmb | 22 11 51.6 | |
| | comp=Z,260nm,1.2s | | | | | | |
| **SSE** | **Sheshan** | **21.08** | **296** | P | **P** | **22 11 40.9** | **+1.0** |
| SSE | | | | pmax | pmax | | |
| | comp=Z,140nm,1.4s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,740nm,4.5s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,2μm,20.6s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,3μm,19.9s | | | | | | |
| **MSHR** | **Mys Shultsa** | **21.57** | **335** | *ce*P | **P** | **22 11 45.1** | **+0.1** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,131nm,1.3s | | | | | | |
| **PSTR** | **Posyet** | **21.77** | **334** | *c i*P | **P** | **22 11 48.3** | **+1.2** |
| **PATS** | **Pohnpei** | **21.93** | **137** | P | **P** | **22 11 49.1** | **0.0** |
| **KUR** | **Kuril'sk** | **22.00** | **9** | *e*P | **P** | **22 11 52.7** | **+3.0** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,773nm,1.3s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,15μm,18.0s | | | | | | |
| **WAKE** | **Wake Island** | **22.09** | **96** | P | **P** | **22 11 51.4** | **+0.6** |
| **WAKE** | **Wake Island** | **22.09** | **96** | P | **P** | **22 11 50.2** | **-0.7** |
| **TEY** | **Ternei** | **22.19** | **347** | *e*P | **P** | **22 11 52.5** | **+0.8** |
| TEY | | | | *e* | | 22 15 46.6 | |
| TEY | | | | pmax | pmax | | |
| | comp=Z,40nm,1.2s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.1s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=N,30nm,1.0s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.20** | **95** | P | **P** | **22 11 52.3** | **+0.5** |
| | baz=267,slow=12,SNR=6.1 | | | | | | |
| H11N1 | | | | T | T | 22 36 00.0 | |
| | baz=283,slow=74,SNR=29 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.20** | **95** | P | **P** | **22 11 54.3** | **+2.4** |
| | baz=267,slow=12,SNR=6.9 | | | | | | |
| H11N2 | | | | T | T | 22 36 01.7 | |
| | baz=283,slow=74,SNR=23 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.22** | **95** | P | **P** | **22 11 52.8** | **+0.9** |
| | baz=267,slow=12,SNR=4.7 | | | | | | |
| H11N3 | | | | T | T | 22 36 06.3 | |
| | baz=283,slow=74,SNR=19 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.34** | **98** | T | T | 22 35 21.7 | |
| | baz=284,slow=75,SNR=9.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.34** | **98** | T | T | 22 35 33.3 | |
| | baz=284,slow=75,SNR=10 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.35** | **98** | T | T | 22 35 32.6 | |
| | baz=284,slow=75,SNR=8.5 | | | | | | |
| **QZH** | **Quanzhou** | **22.62** | **279** | P | **P** | **22 11 56.1** | **-0.4** |
| QZH | | | | pmax | pmax | | |
| | comp=N,96nm,1.4s | | | | | | |
| QZH | | | | pmax | pmax | | |
| | comp=N,2μm,6.4s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=N,5μm,17.4s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=N,5μm,16.4s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=N,13μm,19.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.67** | **338** | P | **P** | **22 11 56.1** | **-0.7** |
| | comp=N,49nm,0.8s,baz=162,slow=11,SNR=27 | | | | | | |
| USRK | | | | S | **S** | **22 16 03.8** | **+0.2** |
| | comp=N,1.6nm,0.9s,baz=146,slow=32,SNR=1.1 | | | | | | |
| USRK | | | | LR | LR | 22 20 17.4 | |
| | comp=N,10μm,20.1s,baz=149,slow=35 | | | | | | |
| | comp=N,49nm,0.8s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **22.67** | **338** | P | **P** | **22 11 56.1** | **-0.8** |
| **USA0B** | **Ussuriysk Arra** | **22.67** | **338** | *ce*P | **P** | **22 11 56.5** | **-0.3** |
| **KNMB** | **Chin-men Tao** | **22.82** | **278** | P | **P** | **22 11 57.9** | **-0.7** |
| KNMB | | | | IAmb | IAmb | 22 12 14.5 | |
| | comp=Z,203nm,1.1s | | | | | | |
| **NJ2** | **Nanjing** | **23.25** | **297** | P | **P** | **22 12 00.8** | **-2.2** |
| NJ2 | | | | S | **S** | **22 16 10.3** | **-3.5** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,69nm,1.3s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,2μm,3.5s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2μm,10.9s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,8μm,15.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,7μm,16.1s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **23.42** | **359** | P | **P** | **22 12 06.4** | **+2.0** |
| **YSS** | **Yuzh-Sakhalins** | **23.42** | **359** | P | **P** | **22 12 05.3** | **+0.9** |
| YSS | | | | IAmb | IAmb | 22 12 21.9 | |
| | comp=Z,225nm,1.1s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **23.42** | **359** | *e*P | **P** | **22 12 05.8** | **+1.4** |
| YSS | | | | *e**SP | **sP** | **22 12 13.1** | **+0.6** |
| YSS | | | | *e*PPP | PPP | 22 12 33.7 | |
| YSS | | | | *e*S | **S** | **22 16 15.9** | **-0.3** |
| YSS | | | | *e*SS | **SnSn** | **22 17 03.5** | **+11** |
| YSS | | | | *e*SSS | SSS | 22 17 17.6 | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,2μm,3.9s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=N,1μm,4.2s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,130nm,1.4s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,3μm,10.5s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,4μm,8.2s | | | | | | |
| **DAV** | **Davao City (W)** | **23.62** | **229** | P | **P** | **22 12 07.4** | **+0.6** |
| **DAV** | **Davao City (W)** | **23.62** | **229** | IAMs_20 | IAMs_20 | 22 19 11.1 | |
| | comp=Z,18μm,21.0s | | | | | | |
| **DAV** | **Davao City (W)** | **23.62** | **229** | LR | LR | 22 19 21.2 | |
| | comp=Z,18μm,21.8s,baz=84,slow=32 | | | | | | |
| **MDJ** | **Mudanjiang** | **23.89** | **335** | P | **P** | **22 12 09.0** | **-0.1** |
| **MDJ** | **Mudanjiang** | **23.89** | **335** | P | **P** | **22 12 09.8** | **+0.7** |
| MDJ | | | | pP | pP | 22 12 13.3 | -1.6 |
| MDJ | | | | sP | sP | 22 12 15.0 | -2.3 |
| MDJ | | | | S | **S** | **22 16 17.0** | **-6.9** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,150nm,1.6s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,11μm,17.7s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,7μm,17.7s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,15μm,18.4s | | | | | | |
| **MDJ** | **Mudanjiang** | **23.89** | **335** | P | **P** | **22 12 08.0** | **-1.1** |
| MDJ | | | | IAmb | IAmb | 22 12 26.4 | |
| | comp=Z,180nm,1.1s | | | | | | |
| MDJ | | | | IAMs_20 | IAMs_20 | 22 21 08.2 | |
| | comp=Z,13μm,19.0s | | | | | | |
| **DL2** | **Dalian** | **24.03** | **315** | P | **P** | **22 12 08.6** | **-1.8** |
| DL2 | | | | S | **S** | **22 16 25.8** | **-0.3** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,92nm,1.4s | | | | | | |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,860nm,6.1s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,5μm,19.0s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,4μm,15.3s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,7μm,18.0s | | | | | | |
| **SNY** | **Shenyang** | **24.63** | **323** | P | **P** | **22 12 15.8** | **0.0** |
| SNY | | | | S | **S** | **22 16 35.3** | **-0.4** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,140nm,1.5s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,750nm,5.0s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,5μm,14.0s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,3μm

TIA pmax pmax
comp=E,95nm,0.9s
TIA pmax pmax
comp=E,540nm,4.0s
TIA LR LR
comp=E,4μm,14.3s
TIA LR LR
comp=E,7μm,19.4s
TIA LR LR
comp=E,5μm,19.1s
**WHN Wuhan 26.73 292** ⇑P **P** **22 12 35.5 +0.5**
WHN sP **pwP** **22 12 48.0 +1.6**
WHN S **S** **22 17 12.0 +2.7**
WHN pmax pmax
comp=E,610nm,1.4s
WHN LR LR
comp=E,8μm,10.9s
WHN LR LR
comp=E,20μm,17.7s
WHN LR LR
comp=E,23μm,16.8s
**SWI Sorong 26.91 208** P **P** **22 12 35.7 -1.0**
**SWI Sorong 26.91 208** P **P** **22 12 36.4 -0.3**
**HKPS Hong Kong Po S 26.92 273** P **P** **22 12 36.9 +0.1**
**KLR Kul'dur 27.27 343** LR LR 22 23 54.7
comp=E,8μm,18.9s,baz=156,slow=37
**KLR Kul'dur 27.27 343** *c i*P **P** **22 12 40.8 +1.1**
KLR pmax pmax
comp=Z,91nm,1.0s
KLR MLR MLR
comp=Z,7μm,17.0s
**TYV Tymovskoe 27.33 359** *e*P **P** **22 12 41.6 +1.4**
TYV *e*S **S** **22 17 24.6 +6.2**
TYV pmax pmax
comp=Z,29nm,1.0s
TYV pmax pmax
comp=Z,100nm,3.2s
TYV smax smax
comp=N,600nm,8.4s
TYV smax smax
comp=E,1μm,8.4s
**TNTI Ternate 27.40 217** P **P** **22 12 41.8 +0.7**
**TNTI Ternate 27.40 217** P **P** **22 12 40.7 -0.4**
TNTI IAmb IAmb 22 12 55.3
comp=Z,282nm,1.6s
**TNTI Ternate 27.40 217** P **P** **22 12 41.8 +0.7**
**GRNR Gornyy 27.76 351** ⇓*i*P **P** **22 12 45.2 +1.1**
GRNR *e* 22 13 45.8
GRNR pmax pmax
comp=Z,20nm,1.1s
GRNR MLR MLR
comp=N,2μm,15.0s
**HNS HongShan 28.19 306** ⇑P **P** **22 12 47.3 -0.7**
HNS S **S** **22 17 28.0 -4.2**
HNS PcS **PcS** **22 19 44.3 +0.7**
HNS ScS **ScS** **22 23 32.3 -1.4**
HNS pmax pmax
comp=N,51nm,1.1s
HNS pmax pmax
comp=N,900nm,6.8s
HNS LR LR
comp=N,7μm,15.9s
HNS LR LR
comp=N,4μm,16.7s
HNS LR LR
comp=N,5μm,15.9s
**BJT Baijiatuau 28.23 312** P **P** **22 12 47.8 -0.6**
**BJT Baijiatuau 28.23 312** P **P** **22 12 46.9 -1.5**
**BJT Baijiatuau 28.23 312** P **P** **22 12 46.9 -1.5**
BJT pmax pmax
comp=Z,37nm,1.0s
BJT MLR MLR
comp=Z,4μm,22.0s
**BJI Beijing 28.24 312** P **P** **22 12 47.0 -1.4**
BJI S **S** **22 17 31.4 -1.5**
BJI pmax pmax
comp=Z,9.0nm,1.2s
BJI LR LR
comp=Z,1μm,14.0s
BJI LR LR
comp=Z,2μm,15.4s
BJI LR LR
comp=Z,3μm,15.5s
**FAKI Fak Fak 28.39 204** P **P** **22 12 49.6 -0.3**
FAKI IAmb IAmb 22 13 04.5
comp=Z,151nm,1.3s
**RABL Rabaul 28.82 162** P **P** **22 12 52.1 -1.7**
**SKR Severo-Kuril's 28.91 17** *e*P **P** **22 12 53.5 -0.7**
SKR *e* 22 13 45.0
SKR pmax pmax
comp=Z,500nm,5.7s
SKR MLR MLR
comp=Z,3μm,13.0s
**LYN LuoYang 29.06 299** P **P** **22 12 55.5 -0.3**
LYN sP pP 22 13 01.9 +0.1
LYN S **S** **22 17 44.0 -2.0**
LYN pmax pmax
comp=Z,84nm,1.3s
LYN pmax pmax
comp=Z,1μm,10.1s
LYN LR LR
comp=Z,5μm,18.6s
LYN LR LR
comp=Z,8μm,18.2s
LYN LR LR
comp=Z,13μm,18.6s
**HEH HeiHe 29.47 339** *e*P **P** **22 13 00.1 +0.8**
HEH pP **pP** **22 13 03.8 -1.3**
HEH S **S** **22 17 52.3 +0.2**
HEH sS **sS** **22 18 01.4 -0.2**
HEH pmax pmax
comp=Z,280nm,1.2s
HEH LR LR
comp=Z,7μm,19.0s
HEH LR LR
comp=Z,9μm,17.3s
HEH LR LR
comp=Z,14μm,17.8s
**NKL Nikolayevsk 29.69 357** *e*P **P** **22 13 01.5 +0.4**
NKL *e*S **S** **22 17 59.9 +4.5**
NKL pmax pmax
comp=N,123nm,1.1s
NKL pmax pmax
comp=E,120nm,1.1s
NKL pmax pmax
comp=Z,250nm,1.1s
NKL smax smax
comp=E,1μm,7.8s
NKL smax smax
comp=N,795nm,5.1s
NKL MLR MLR
comp=E,26μm,20.0s
NKL MLR MLR
comp=N,29μm,21.0s
NKL MLR MLR
comp=Z,11μm,17.0s
**TIY Taiyuan 29.99 305** *e*P **P** **22 13 03.9 -0.3**
TIY S **S** **22 17 59.3 -1.5**
TIY pmax pmax
comp=Z,640nm,11.3s
TIY LR LR
comp=Z,3μm,19.9s
TIY LR LR
comp=Z,4μm,20.6s
TIY LR LR
comp=Z,3μm,22.7s
**MYLDM Lahad Datu 30.09 237** P **P** **22 13 05.6 +0.5**
**GTOI Gorontalo 30.10 224** P **P** **22 13 05.0 -0.1**
comp=Z,140nm,1.4s
**XLT XiLinHaoTe 30.26 319** *e*P **P** **22 13 03.6 -2.8**
XLT sP sP 22 13 13.8 -0.9
XLT S **S** **22 18 04.3 -0.5**
XLT sS pS 22 18 11.9 +0.7
XLT pmax pmax
comp=Z,22nm,1.0s
XLT pmax pmax
comp=Z,260nm,10.0s
XLT LR LR
comp=Z,5μm,16.2s
XLT LR LR
comp=Z,6μm,18.7s
**SANI Sanana 30.50 216** P **P** **22 13 07.9 -0.8**
**ENH Enshi 30.87 290** P **P** **22 13 12.2 +0.3**
**ENH Enshi 30.87 290** P **P** **22 13 11.1 -0.9**
**MRSI Marisa 30.91 225** P **P** **22 13 13.0 +0.7**
comp=Z,494nm,1.4s,comp=Z,5μm

**TOLI2 Tolitoli 31.21 228** P **P** **22 13 15.0 0.0**
**KKM Kota Kinabalu 31.35 241** P **P** **22 13 18.5 +2.2**
**KKM Kota Kinabalu 31.35 241** P **P** **22 13 16.0 -0.4**
**QIZ Qiongzhong 31.50 268** P **P** **22 13 16.5 -1.0**
QIZ PP **PP** **22 14 26.3 -2.5**
QIZ S **S** **22 18 28.5 +4.0**
QIZ pmax pmax
comp=Z,25nm,2.1s
QIZ pmax pmax
comp=Z,870nm,7.4s
QIZ LR LR
comp=Z,2μm,16.6s
QIZ LR LR
comp=Z,4μm,16.6s
QIZ LR LR
comp=Z,5μm,18.3s
**PETK Petropavlovsk- 31.52 17** PcP **PcP** **22 16 09.8 0.0**
comp=Z,8.4nm,0.9s,baz=245,slow=2.4,SNR=3.1
PETK S **S** **22 18 19.1 -5.1**
comp=Z,1.6nm,0.8s,baz=50,slow=24,SNR=0.8
PETK LR LR 22 24 30.6
comp=Z,6μm,21.9s,baz=199,slow=33
**LUWI Luwuk 31.55 222** P **P** **22 13 17.3 -0.6**
**LUWI Luwuk 31.55 222** P **P** **22 13 18.0 +0.1**
comp=Z,356nm,1.2s,comp=Z,5μm
**PET Petropavlovsk 31.70 18** P **P** **22 13 19.0 +0.1**
PET IAmb IAmb 22 13 44.8
comp=Z,235nm,1.9s
**PET Petropavlovsk 31.70 18** *e*P **P** **22 13 20.5 +1.6**
PET *e* 22 14 38.9
PET *e*S **S** **22 18 29.2 +2.2**
PET pmax pmax
comp=Z,56nm,1.5s
PET pmax pmax
comp=Z,300nm,10.7s
PET pmax pmax
comp=Z,500nm,12.2s
PET pmax pmax
comp=Z,400nm,17.1s
**HIA Hailar 31.73 330** P **P** **22 13 19.5 +0.2**
**HIA Hailar 31.73 330** P **P** **22 13 18.8 -0.5**
**HIA Hailar 31.73 330** IAMs_20 IAMs_20 22 25 48.6
comp=Z,8μm,20.0s
**HIA Hailar 31.73 330** P **P** **22 13 18.8 -0.5**
HIA pmax pmax
comp=Z,34nm,1.1s
HIA MLR MLR
comp=Z,8μm,20.0s
**HHC Hu-ho-hao-te 31.76 311** *e*P **P** **22 13 19.0 -0.8**
HHC PP **PnPn** **22 14 25.3 +1.1**
HHC S **S** **22 18 21.5 -7.0**
HHC SS **SnSn** **22 20 19.8 +3.5**
HHC pmax pmax
comp=Z,48nm,1.2s
HHC pmax pmax
comp=Z,270nm,5.3s
HHC LR LR
comp=Z,4μm,18.3s
HHC LR LR
comp=Z,3μm,17.6s
HHC LR LR
comp=Z,7μm,17.6s
**XAN Xi'an 31.83 297** ⇑P **P** **22 13 20.3 0.0**
XAN S **S** **22 18 28.6 -0.9**
XAN sS sS 22 18 44.5 +5.0
XAN ScP **ScP** **22 19 51.3 -1.7**
XAN pmax pmax
comp=Z,73nm,1.4s
XAN pmax pmax
comp=Z,1μm,7.1s
XAN LR LR
comp=Z,8μm,15.9s
XAN LR LR
comp=Z,5μm,17.7s
XAN LR LR
comp=Z,3μm,16.5s
**MPSI Mapaga 32.37 228** P **P** **22 13 26.1 +0.9**
comp=Z,100nm,1.7s,comp=Z,2μm
**ZEA Zeya 32.56 342** *e*P **P** **22 13 27.5 +1.1**
ZEA *e*S **S** **22 18 38.9 -1.5**
ZEA pmax pmax
comp=E,20nm,0.4s
ZEA pmax pmax
comp=N,70nm,0.9s
ZEA pmax pmax
comp=Z,150nm,0.8s
ZEA pmax pmax
comp=N,100nm,1.6s
ZEA pmax pmax
comp=Z,300nm,1.8s
ZEA smax smax
comp=N,400nm,9.1s
ZEA smax smax
comp=E,800nm,8.7s
ZEA MLR MLR
comp=E,2μm,14.0s
**BTO Baotou 32.76 309** *e*P **P** **22 13 29.4 +0.9**
BTO pP **sP** **22 13 35.3 -1.5**
BTO sP **pP** **22 13 36.4 +2.1**
BTO PP **PnPn** **22 14 34.6 -2.4**
BTO pmax pmax
comp=E,60nm,1.4s
BTO pmax pmax
comp=E,210nm,5.4s
BTO LR LR
comp=E,13μm,17.4s
BTO LR LR
comp=E,8μm,19.7s
BTO LR LR
comp=E,16μm,19.0s
**PMG Port Moresby 32.90 173** P **P** **22 13 29.1 -0.7**
**PMG Port Moresby 32.90 173** P **P** **22 13 28.8 -1.0**
**PMG Port Moresby 32.90 173** P **P** **22 13 28.6 -1.1**
PMG IAmb IAmb 22 13 44.7
comp=Z,65nm,0.8s
**PMG Port Moresby 32.90 173** *ce*P **P** **22 13 27.9 -1.9**
PMG pmax pmax
comp=Z,55nm,1.3s
PMG MLR MLR
comp=Z,2μm,19.0s
**GYA Guiyang 33.32 283** ⇑P **P** **22 13 33.9 +0.3**
GYA S **S** **22 18 53.1 +0.1**
GYA pmax pmax
comp=Z,42nm,1.6s
GYA LR LR
comp=Z,5μm,19.0s
GYA LR LR
comp=Z,7μm,21.4s
GYA LR LR
comp=Z,12μm,20.9s
**SMKI Samarinda 34.80 231** P P 22 13 51.1 +4.7
comp=Z,513nm,1.6s
**BBSI Bau Bau 35.23 218** P P 22 13 57.4 +7.4
**MIDW Midway 35.55 74** P **P** **22 13 52.1 -0.7**
MIDW IAMs_20 IAMs_20 22 25 48.4
comp=Z,5μm,19.0s
**BKB Balikpapan 35.60 230** P **P** **22 13 54.7 +1.5**
**BKB Balikpapan 35.60 230** P **P** **22 13 52.5 -0.7**
BKB IAMs_20 IAMs_20 22 26 03.0
comp=Z,5μm,21.0s
**BNSI Bone 35.81 222** P **P** **22 13 57.0 +2.0**
**CD2 Chengdu 35.84 291** P **P** **22 13 55.4 +0.1**
CD2 sP sP 22 14 04.8 +1.0
CD2 S **S** **22 19 30.3 -1.4**
CD2 sS sS 22 19 41.5 -0.2
CD2 pmax pmax
comp=Z,70nm,0.8s
CD2 pmax pmax
comp=Z,790nm,6.4s
CD2 LR LR
comp=Z,6μm,17.5s
CD2 LR LR
comp=Z,7μm,15.7s
CD2 LR LR
comp=Z,7μm,17.8s
**LZH Lanzhou 36.27 299** ⇑P **P** **22 13 59.3 +0.2**
LZH pP sP 22 14 06.8 -0.6
LZH S **S** **22 19 35.8 -2.7**
LZH pmax pmax
comp=Z,33nm,1.4s
LZH pmax pmax
comp=Z,610nm,4.8s
LZH LR LR
comp=Z,4μm,14.1s
LZH LR LR
comp=Z,4μm,15.8s

LZH LR LR
comp=Z,6μm,16.2s
**MA2 Magadan 36.44 6** P **P** **22 14 01.8 +1.9**
**MA2 Magadan 36.44 6** P **P** **22 14 00.0 +0.1**
**MA2 Magadan 36.44 6** LR LR 22 30 31.7
comp=Z,2μm,18.8s,baz=199,slow=39
**MA2 Magadan 36.44 6** *de*P **P** **22 14 01.2 +1.3**
MA2 pmax pmax
comp=Z,90nm,2.5s
**MA2 Magadan 36.44 6** P **P** **22 14 01.2 +1.3**
comp=Z,51nm,1.2s,comp=Z,2μm
**SLVN Son La 36.45 275** P **P** **22 14 00.7 0.0**
**CIT Chita 36.49 329** *e*P **P** **22 14 00.4 -0.2**
CIT *e* 22 14 09.0
CIT *e* 22 15 18.6
CIT *e* 22 15 45.8
CIT *e* 22 16 18.8
CIT *e* 22 19 41.0
CIT *e* 22 24 10.2
CIT pmax pmax
comp=Z,107nm,2.0s
**KAPI Kappang 36.51 222** P **P** **22 14 01.3 +0.3**
**KAPI Kappang 36.51 222** LR LR 22 27 56.5
comp=Z,3μm,20.6s,baz=43,slow=34
**KAPI Kappang 36.51 222** P **P** **22 14 02.0 +1.0**
KAPI P **P** **22 14 02.0 +1.0**
KAPI S **S** **22 19 42.5 +0.5**
KAPI S **S** **22 19 42.5 +0.5**
**KAPI Kappang 36.51 222** *c i*P **P** **22 14 01.1 +0.1**
KAPI pmax pmax
comp=Z,85nm,1.0s
KAPI MLR MLR
comp=Z,2μm,18.0s
**HNR Honiara 36.52 152** P **P** **22 14 03.3 +2.2**
**HNR Honiara 36.52 152** LR LR 22 30 09.4
comp=Z,43μm,18.4s,baz=321,slow=38
**UBPT Khong Chiam 36.57 264** P **P** **22 14 02.8 +1.3**
**UBPT Khong Chiam 36.57 264** P **P** **22 14 01.1 -0.4**
UBPT IAmb IAmb 22 14 30.8
comp=Z,152nm,1.7s
**SBUM Sibu 36.68 240** P **P** **22 14 03.1 +0.6**
**MTKI Muara Teweh, K 36.81 233** P **P** **22 14 04.6 +1.0**
comp=Z,212nm,1.8s,comp=Z,5μm
**KMI Kunming 36.95 281** ⇑P **P** **22 14 06.3 +1.3**
KMI PP **PnPn** **22 15 31.6 +2.0**
KMI pmax pmax
comp=Z,59nm,1.5s
KMI pmax pmax
comp=Z,570nm,4.5s
KMI LR LR
comp=Z,2μm,20.8s
KMI LR LR
comp=Z,3μm,23.6s
KMI LR LR
comp=Z,4μm,20.3s
**COEN Coen 37.22 180** P **P** **22 14 07.5 +0.5**
**COEN Coen 37.22 180** P **P** **22 14 06.8 -0.1**
COEN IAmb IAmb 22 14 15.3
comp=Z,78nm,0.8s
**SHEM Shemya Is, Ala 37.40 31** LR LR 22 26 57.4
comp=Z,4μm,21.8s,baz=232,slow=32
**ULN Ulaanbaatar 37.70 319** P **P** **22 14 10.2 -0.8**
**ULN Ulaanbaatar 37.70 319** IAMs_20 IAMs_20 22 30 25.3
comp=Z,6μm,19.0s
**ULN Ulaanbaatar 37.70 319** P **P** **22 14 11.1 +0.1**
ULN P **P** **22 14 11.1 +0.1**
ULN P **P** **22 14 11.1 +0.1**
ULN S **S** **22 20 00.6 +0.7**
ULN S **S** **22 20 00.6 +0.7**
ULN S **S** **22 20 00.6 +0.7**
**ULN Ulaanbaatar 37.70 319** *c i*P **P** **22 14 10.5 -0.5**
ULN pmax pmax
comp=Z,66nm,1.3s
ULN MLR MLR
comp=Z,5μm,18.0s
**PZH PanZhiHua 37.72 283** P **P** **22 14 12.3 +0.9**
PZH PP **PnPn** **22 15 43.3 +4.5**
PZH S **S** **22 19 57.9 -2.7**
PZH sS **pS** **22 20 08.3 +0.6**
PZH ScP **ScP** **22 20 14.1 -0.2**
PZH pmax pmax
comp=Z,120nm,1.2s
PZH pmax pmax
comp=Z,850nm,5.6s
PZH LR LR
comp=Z,3μm,19.6s
PZH LR LR
comp=Z,6μm,20.8s
PZH LR LR
comp=Z,9μm,20.6s
**SOEI Soe 37.95 212** P **P** **22 14 14.6 +1.3**
**SOEI Soe 37.95 212** P **P** **22 14 12.3 -1.0**
SOEI IAMs_20 IAMs_20 22 27 22.2
comp=Z,6μm,22.0s
**MMRI Maumere 38.02 215** P **P** **22 14 12.5 -1.3**
**MTN Manton Dam 38.04 200** P **P** **22 14 12.3 -1.6**
MTN IAmb IAmb 22 14 29.1
comp=Z,129nm,1.3s
**SONM Songino Array 38.08 319** P **P** **22 14 13.4 -0.8**
**SONM Songino Array 38.08 319** P **P** **22 14 13.5 -0.8**
comp=Z,12nm,1.0s,baz=130,slow=8.6,SNR=60
SONM S **S** **22 20 03.6 -2.0**
comp=Z,0.4nm,0.3s,baz=346,slow=41,SNR=1.8
SONM ScP **ScP** **22 20 11.9 -3.4**
comp=Z,1.1nm,0.7s,baz=116,slow=3.4,SNR=1.9
SONM ScS **ScS** **22 24 21.9 -2.7**
comp=Z,0.2nm,0.3s,baz=146,slow=43,SNR=1.8
SONM LR LR 22 30 59.5
comp=Z,6μm,18.6s,baz=122,slow=38
comp=Z,12nm,1.0s
**SONM Songino Array 38.08 319** P **P** **22 14 13.4 -0.8**
SONM pmax pmax
comp=Z,105nm,1.9s
**BATI Baumata 38.63 212** P **P** **22 14 18.4 -0.6**
comp=Z,254nm,1.2s,comp=Z,2μm
**STKI Sintang 38.73 238** P **P** **22 14 20.9 +1.1**
comp=Z,165nm,1.7s,comp=Z,6μm
**KSM Kuching 38.79 240** P **P** **22 14 21.8 +1.5**
**KSM Kuching 38.79 240** P **P** **22 14 19.3 -1.0**
**AMKA Amchitka 39.23 36** P **P** **22 14 24.6 +1.0**
**YAK Yakutsk 39.64 350** P **P** **22 14 27.3 +0.5**
YAK IAmb IAmb 22 14 35.6
comp=Z,93nm,0.8s
**YAK Yakutsk 39.64 350** LR LR 22 32 13.9
comp=Z,3μm,18.1s,baz=157,slow=38
**YAK Yakutsk 39.64 350** *e*P **P** **22 14 26.5 -0.3**
YAK *e**PP **pP** **22 14 32.4 -0.4**
YAK *e* 22 16 37.3
YAK *e*S **S** **22 20 26.8 -1.6**
YAK *e**SS **pS** **22 20 33.6 -1.3**
YAK *e*SS **SS** **22 23 20.6 -3.2**
YAK *e* 22 24 27.3
YAK pmax pmax
comp=Z,70nm,1.3s
YAK pmax pmax
comp=E,5.0nm,1.0s
YAK pmax pmax
comp=N,27nm,1.0s
YAK pmax pmax
comp=Z,128nm,2.0s
YAK pmax pmax
comp=N,114nm,1.9s
YAK pmax pmax
comp=E,48nm,2.0s
YAK smax smax
comp=N,90nm,1.9s
YAK smax smax
comp=E,211nm,1.9s
YAK MLR MLR
comp=Z,5μm,16.0s
YAK MLR MLR
comp=N,4μm,17.0s
YAK MLR MLR
comp=E,2μm,16.0s
**SEY Seymchan 39.90 6** *de*P **P** **22 14 30.6 +1.6**
SEY pmax pmax
comp=Z,56nm,1.3s
SEY MLR MLR
comp=Z,3μm,19.0s
**CRAI Chiangrai 39.91 274** P **P** **22 14 29.8 +0.1**
CRAI IAmb IAmb 22 14 46.6
comp=Z,132nm,1.0s
**GTA Gaotai 39.98 304** *e*P **P** **22 14 29.9 -0.3**
GTA PP **PP** **22 16 03.3 +1.0**
GTA ScP **ScP** **22 20 20.8 -2.0**

GTA S **S** **22 20 35.1 +0.6**
GTA sS sS 22 20 42.4 -2.1
GTA pmax pmax
comp=Z,10.0nm,1.5s
GTA pmax pmax
comp=Z,470nm,10.5s
GTA LR LR
comp=Z,3µm,18.9s
GTA LR LR
comp=Z,2µm,20.4s
GTA LR LR
comp=Z,3µm,20.0s
**BASI Baing, Sumba 40.23 216** P **P** **22 14 32.6 +0.3**
**BOD Bodaibo 40.27 336** *e*P **P** **22 14 31.9 -0.2**
BOD pmax pmax
comp=Z,117nm,1.3s
**PHRA Phrae 40.45 271** P **P** **22 14 34.5 +0.2**
**NAYO Nakonayok 40.67 265** P **P** **22 14 37.6 +1.6**
**TNCH TengChong 40.76 282** ⇑P **P** **22 14 37.8 +0.9**
TNCH pP pP 22 14 40.4 -2.6
TNCH sP sP 22 14 42.9 -2.5
TNCH PP **PnPn** **22 16 15.4 +0.2**
TNCH PcP **PcP** **22 16 39.5 +1.5**
TNCH S **S** **22 20 49.9 +3.4**
TNCH sS sS 22 21 00.5 +3.6
TNCH ScS **ScS** **22 24 42.3 +1.0**
TNCH pmax pmax
comp=Z,78nm,1.5s
TNCH LR LR
comp=Z,1µm,17.2s
TNCH LR LR
comp=Z,1µm,19.2s
TNCH LR LR
comp=Z,3µm,21.0s
**ZAK Zakamensk 41.04 321** *e*P **P** **22 14 37.8 -1.0**
ZAK pmax pmax
comp=Z,44nm,1.3s
ZAK pmax pmax
comp=Z,15nm,1.8s
**TWSI Taliwang, Sumb 41.18 222** P **P** **22 14 42.5 +2.4**
comp=Z,150nm,1.1s,comp=Z,3µm
**IRK Irkutsk 41.34 324** *e*P **P** **22 14 40.6 -0.5**
IRK pmax pmax
comp=Z,97nm,2.0s
**MTSU Mount Surprise 41.38 179** P **P** **22 14 42.2 +0.5**
**KIWB Kanaga Island 41.38 37** P **P** **22 14 41.6 +0.2**
**KNRA Kununurra 41.46 201** P **P** **22 14 41.6 -0.7**
KNRA IAmb IAmb 22 15 00.5
comp=Z,86nm,0.8s
**CM31 Chiang Mai Arr 41.65 272** P **P** **22 14 44.1 +0.1**
**CMAR Chiang Mai Arr 41.65 272** P **P** **22 14 44.2 +0.2**
comp=Z,15nm,0.8s,baz=54,slow=8.3,SNR=63
CMAR PcP **PcP** **22 16 40.7 -0.1**
comp=Z,3.6nm,1.0s,baz=83,slow=2.4,SNR=2.1
CMAR ScP **ScP** **22 20 26.6 -2.9**
comp=Z,2.4nm,1.0s,baz=64,slow=6.8,SNR=2.1
CMAR LR LR 22 31 02.6
comp=Z,5µm,20.6s,baz=80,slow=35
comp=Z,15nm,0.8s
**CMAR Chiang Mai Arr 41.65 272** *i* P **P** **22 14 44.7 +0.7**
CMAR pmax pmax
comp=Z,17nm,0.7s
**SRBI Singaraja 41.73 225** P **P** **22 14 46.8 +2.1**
comp=Z,316nm,1.4s,comp=Z,5µm
**TV1H Townsville Har 42.62 175** P **P** **22 14 52.3 +0.5**
**SRDT SRDT 42.67 266** P **P** **22 14 53.6 +1.2**
**JAGI Jajag, Banyuwa 42.71 225** P **P** **22 14 51.2 -1.4**
**AUAYR Ayr State High 42.99 174** P **P** **22 14 56.1 +1.3**
**CTA Charters Tower 43.41 176** LR LR 22 33 33.4
comp=Z,121nm,19.6s,baz=348,slow=37
**CTAO Charters Tower 43.41 176** P **P** **22 14 57.7 -0.5**
**CTAO Charters Tower 43.41 176** P **P** **22 14 57.7 -0.5**
CTAO IAmb IAmb 22 15 14.0
comp=Z,141nm,1.4s
**CTAO Charters Tower 43.41 176** P **P** **22 14 57.7 -0.5**
CTAO pmax pmax
comp=Z,141nm,1.4s
CTAO MLR MLR
comp=Z,2µm,18.0s
**GOMU GeErMu 43.55 298** P **P** **22 15 01.3 +1.5**
GOMU S **S** **22 21 28.3 +0.5**
GOMU pmax pmax
comp=Z,68nm,1.1s
GOMU LR LR
comp=Z,3µm,18.6s
GOMU LR LR
comp=Z,3µm,19.0s
GOMU LR LR
comp=Z,4µm,18.7s
**WB0 Warramunga Arr 43.87 192** P **P** **22 15 01.3 -0.7**
WB0 IAmb IAmb 22 15 17.5
comp=Z,207nm,1.3s
MYKOM **Kota Tinggi 43.91 246** P **P** **22 15 01.7 -0.8**
MYKOM IAmb IAmb 22 15 18.1
comp=Z,150nm,1.4s
MYKOM IAMs_20 IAMs_20 22 31 49.3
comp=Z,5µm,21.0s
**QIS Mount Isa 43.93 185** P **P** **22 15 01.9 -0.5**
**WR0 Warramunga Arr 44.03 192** P **P** **22 15 02.3 -0.9**
WR0 IAmb IAmb 22 15 18.8
comp=Z,140nm,1.1s
**WRAB Tennant Creek 44.04 192** P **P** **22 15 02.2 -1.1**
**WRAB Tennant Creek 44.04 192***c i*P **P** **22 15 01.8 -1.5**
WRAB pmax pmax
comp=Z,46nm,1.1s
**WB2 Warramunga Arr 44.05 192** IAmb IAmb 22 15 19.0
comp=Z,151nm,0.9s
**WRA Warramunga Arr 44.05 192** P **P** **22 15 01.4 -2.0**
**WRA Warramunga Arr 44.05 192** P **P** **22 15 02.2 -1.2**
comp=Z,26nm,0.5s,baz=11,slow=8.1,SNR=346
WRA PcP **PcP** **22 16 48.0 -0.6**
comp=Z,20nm,0.8s,baz=5.4,slow=3.4,SNR=6.0
WRA S S 22 21 25.6 -8.9
comp=Z,1.8nm,0.9s,baz=356,slow=15,SNR=1.6
WRA ScS **ScS** **22 24 57.6 -3.4**
comp=Z,0.6nm,1.1s,baz=187,slow=26,SNR=1.7
WRA LR LR 22 31 58.8
comp=Z,3µm,21.9s,baz=6.0,slow=34
comp=Z,26nm,0.5s
**WRA Warramunga Arr 44.05 192** *i* P **P** **22 15 01.7 -1.7**
WRA pmax pmax
comp=Z,27nm,0.5s
**SURA Surathani 44.12 259** P **P** **22 15 06.2 +2.1**
**SMRI Semarang 44.22 231** P **P** **22 15 07.2 +2.4**
**SMRI Semarang 44.22 231** P **P** **22 15 04.9 +0.1**
**SRIT Nakonsritamara 44.38 258** P **P** **22 15 07.5 +1.3**
**SRIT Nakonsritamara 44.38 258** P **P** **22 15 05.6 -0.6**
SRIT IAmb IAmb 22 15 08.9
comp=Z,95nm,1.4s
**UGM Wanagama 44.76 230** P **P** **22 15 11.4 +2.2**
**UGM Wanagama 44.76 230** P **P** **22 15 08.3 -0.9**
UGM IAMs_20 IAMs_20 22 32 37.7
comp=Z,4µm,21.0s
**KULM Kulim 44.91 253** P **P** **22 15 10.0 -0.4**
KULM IAMs_20 IAMs_20 22 31 16.7
comp=Z,4µm,22.0s
**IPM Ipoh 44.97 252** P **P** **22 15 11.9 +1.0**
**IPM Ipoh 44.97 252** P **P** **22 15 10.1 -0.9**
**NIKH Nikolski High 46.48 38** P **P** **22 15 22.1 -0.2**
baz=250
NIKH S **S** **22 22 09.5 +0.5**
baz=250
**BBJI Bungbulang 46.51 233** P **P** **22 15 25.4 +2.3**
**SHL Shillong 46.63 284** P **P** **22 15 23.8 -0.4**
**SHL Shillong 46.63 284** P **P** **22 15 24.6 +0.4**
SNR=44
**SHL Shillong 46.63 284** P **P** **22 15 23.8 -0.4**
SHL pmax pmax
comp=Z,173nm,1.0s
SHL MLR MLR
comp=Z,6µm,20.0s
**BILL Bilibino 46.74 12** P **P** **22 15 25.7 +1.5**
**BILL Bilibino 46.74 12***de*P **P** **22 15 25.1 +0.9**
BILL *e**PP **pP** **22 15 29.6 -0.6**
BILL *e* 22 16 56.2
BILL *e* 22 17 12.2
BILL pmax pmax
comp=Z,112nm,1.7s
**LSA Lhasa 46.77 289** P **P** **22 15 28.0 +2.5**
LSA pmax pmax
comp=Z,96nm,1.3s
LSA LR LR
comp=Z,2µm,19.6s
LSA LR LR
comp=Z,2µm,18.6s
LSA LR LR
comp=Z,3µm,17.2s
**LSA Lhasa 46.77 289** P **P** **22 15 25.8 +0.3**
LSA IAMs_20 IAMs_20 22 36 17.7
comp=Z,3µm,18.0s
**LSA Lhasa 46.77 289** P **P** **22 15 27.1 +1.6**
**LSA Lhasa 46.77 289** P **P** **22 15 25.8 +0.3**
LSA pmax pmax
comp=Z,196nm,1.4s
LSA MLR MLR
comp=Z,3µm,18.0s
**BKNI Bangkinang 47.06 247** P **P** **22 15 29.8 +2.4**
**BKNI Bangkinang 47.06 247** P **P** **22 15 27.6 +0.1**
**SPIA Saint Paul Isl 47.38 32** P **P** **22 15 29.9 +0.6**
baz=245
**P08K Saint George I 47.48 33** P **P** **22 15 30.7 +0.6**
baz=246
**DVP Devils Point 47.61 147** P **P** **22 15 32.5 +1.0**
**PSI Prapat 47.61 251** P **P** **22 15 32.4 +0.5**
**PSI Prapat 47.61 251** P **P** **22 15 31.8 -0.1**
PSI pmax pmax
comp=Z,97nm,1.2s
PSI MLR MLR
comp=Z,3µm,21.0s
**RPSI Rantau Prapat 47.67 251** P **P** **22 15 31.8 -0.3**
RPSI IAmb IAmb 22 15 46.7
comp=Z,97nm,1.2s
**ASAR Alice Springs 47.76 192** P **P** **22 15 31.4 -1.2**
**ASAR Alice Springs 47.76 192** P **P** **22 15 31.1 -1.6**
comp=Z,6.8nm,0.4s,baz=15,slow=9.3,SNR=115
ASAR PcP **PcP** **22 17 01.0 -0.6**
comp=Z,4.9nm,0.8s,baz=4.0,slow=5.4,SNR=4.3
ASAR S S 22 22 20.6 -7.2
comp=Z,1.8nm,0.9s,baz=19,slow=20,SNR=2.7
ASAR LR LR 22 34 14.6
comp=Z,5µm,21.9s,baz=8.5,slow=34
comp=Z,6.8nm,0.4s
**UNV Unalaska Valle 48.10 38** P **P** **22 15 35.1 +0.2**
**UNV Unalaska Valle 48.10 38** P **P** **22 15 34.9 0.0**
baz=251,SNR=6.2
**MNAI Manna 48.14 240** IAMs_20 IAMs_20 22 33 59.3
comp=Z,4µm,22.0s
**LHMI Lhok Sumawe 48.21 255** P **P** **22 15 35.8 -0.6**
**KOUNC Koumac, New Ca 48.30 153** P **P** **22 15 37.3 +0.5**
**KOUNC Koumac, New Ca 48.30 153** P **P** **22 15 36.4 -0.4**
KOUNC IAmb IAmb 22 15 56.1
comp=Z,118nm,1.5s
**LVA Lava Point 48.46 37** P **P** **22 15 37.1 -0.6**
**TIXI Tiksi 48.89 354** P **P** **22 15 40.8 +0.1**
**TIXI Tiksi 48.89 354** IAMs_20 IAMs_20 22 37 56.7
comp=Z,3µm,19.0s
**TIXI Tiksi 48.89 354** LR LR 22 38 19.5
comp=Z,1µm,20.6s,baz=178,slow=38
**TIXI Tiksi 48.89 354***de*P **P** **22 15 41.8 +1.0**
TIXI pmax pmax
comp=Z,65nm,1.3s
TIXI MLR MLR
comp=Z,3µm,18.0s
**EIDS Eidsvold 49.14 171** P **P** **22 15 42.0 -1.2**
**PBA Port Blair 49.43 265** IAMs_20 IAMs_20 22 39 34.5
comp=Z,4µm,18.0s
**WMQ Urumqi 49.58 308** ⇑P **P** **22 15 47.1 +0.5**
WMQ PcP **PcP** **22 17 06.6 -1.4**
WMQ S **S** **22 22 51.9 -1.5**
WMQ sS sS 22 23 04.6 +1.0
WMQ ScS **ScS** **22 25 35.4 -1.5**
WMQ pmax pmax
comp=Z,75nm,1.7s
WMQ pmax pmax
comp=Z,610nm,3.6s
WMQ LR LR
comp=Z,4µm,14.3s
WMQ LR LR
comp=Z,2µm,19.1s
WMQ LR LR
comp=Z,3µm,19.1s
**SISI Saibi 49.59 246** P P 22 15 52.7 +5.8
**LIFNC LIFOU 49.78 150** P **P** **22 15 49.4 +1.3**
**LIFNC LIFOU 49.78 150** P **P** **22 15 47.8 -0.4**
**GAMB Gambell 49.93 24** P **P** **22 15 49.8 +1.1**
baz=238
GAMB S **S** **22 22 59.6 +2.2**
baz=238
**XMI Christmas Isla 49.95 232** P **P** **22 15 52.4 +2.8**
**MBWA Marble Bar 49.99 209** P **P** **22 15 49.4 -0.3**
**MBWA Marble Bar 49.99 209** P **P** **22 15 49.9 +0.1**
MBWA P **P** **22 15 49.9 +0.1**
**XMIS Christmas Isla 49.99 232** P **P** **22 15 51.9 +2.0**
**XMIS Christmas Isla 49.99 232** P **P** **22 15 48.9 -1.0**
**FALS False Pass 50.12 37** P **P** **22 15 49.5 -0.9**
baz=253
**PSA00 Pilbara Seismi 50.30 209** P **P** **22 15 51.8 -0.3**
**DGZ Jazzator, Alta 50.55 316***c i*P **P** **22 15 54.4 +0.5**
DGZ pmax pmax
comp=Z,66nm,1.0s
**DZM Mont Dzumac 50.55 152** P **P** **22 15 55.0 +0.9**
**DZM Mont Dzumac 50.55 152** *e*P **P** **22 15 52.6 -1.5**
comp=Z,159nm,1.2s
DZM *e*S **S** **22 23 06.3 -0.9**
comp=Z,553nm,27.3s
DZM *e*SS **SS** **22 26 40.2 -1.7**
comp=Z,634nm,25.1s
DZM *e*LQ LQ 22 28 10.2
comp=Z,4µm,26.8s
DZM *e*LR LR 22 30 21.6
comp=Z,7µm,25.4s
**DZM Mont Dzumac 50.55 152** IAmb IAmb 22 16 13.5
comp=Z,53nm,0.9s
DZM IAMs_20 IAMs_20 22 34 44.5
comp=Z,5µm,21.0s
**DZM Mont Dzumac 50.55 152** LR LR 22 34 56.2
comp=Z,4µm,20.9s,baz=353,slow=33
**M11K Mekoryuk 50.63 30** P **P** **22 15 54.1 0.0**
baz=246
M11K S **S** **22 23 10.0 +2.8**
baz=246
**YATNC Mamie plateau, 50.74 151** P **P** **22 15 56.8 +1.4**
**S12K Black Hills 51.11 36** IAMs_20 IAMs_20 22 35 22.4
comp=Z,3µm,20.0s
**S12K Black Hills 51.11 36** P **P** **22 15 57.1 -0.8**
baz=254
**AUWSH Wavell State H 51.45 169** P **P** **22 16 01.3 +0.7**
**PINNC Pines Island, 51.47 151** P **P** **22 15 59.1 -1.7**
**SDPT Sand Point 51.88 37** P **P** **22 16 02.9 -0.7**
**SDPT Sand Point 51.88 37** P **P** **22 16 03.6 0.0**
baz=256
SDPT S **S** **22 23 21.2 -3.5**
baz=256
**ZSN Zaisan 51.92 313** *e*P **P** **22 16 04.1 0.0**
comp=Z,50nm,1.1s,baz=313
ZSN *e*S **S** **22 23 28.0 +2.3**
baz=313
**ZSN Zaisan 51.92 313** *e*P **P** **22 16 04.1 0.0**
ZSN *e*S **S** **22 23 27.9 +2.3**
ZSN pmax pmax
comp=Z,50nm,1.1s
**K13K Kusilvak Mount 51.93 28** IAMs_20 IAMs_20 22 35 12.0
comp=Z,3µm,21.0s
**K13K Kusilvak Mount 51.93 28** P **P** **22 16 05.4 +1.5**
baz=247
K13K S **S** **22 23 27.0 +1.8**
baz=247
**M13K Dall Lake 51.95 30** P **P** **22 16 04.2 +0.2**
M13K IAmb IAmb 22 16 20.5
comp=Z,153nm,1.2s
**M13K Dall Lake 51.95 30** P **P** **22 16 05.7 +1.7**
baz=249,SNR=6.1
M13K S **S** **22 23 29.0 +3.5**
baz=249
**KEKH Kekaha 52.24 80** IAMs_20 IAMs_20 22 37 01.5
comp=Z,2µm,18.0s
**TNA Tin City 52.24 23** P **P** **22 16 07.1 +1.0**
baz=241
**CNBA Chernabura Isl 52.26 38** P **P** **22 16 06.3 -0.1**
CNBA IAmb IAmb 22 16 25.6
comp=Z,64nm,1.1s
**CHNA Chernabura Isl 52.26 38** P **P** **22 16 06.3 -0.1**
baz=257
CHNA S **S** **22 23 29.6 -0.3**
baz=257
**O14K Tigyukauivet M 52.56 32** P **P** **22 16 08.9 +0.3**
O14K IAmb IAmb 22 16 37.1
comp=Z,116nm,1.4s
O14K IAMs_20 IAMs_20 22 35 58.6
comp=Z,4µm,20.0s
**O14K Tigyukauivet M 52.56 32** P **P** **22 16 09.6 +1.0**
baz=252,SNR=5.0
O14K S **S** **22 23 34.8 +0.9**
baz=252
**N14K Kuskokwak Cree 52.57 31** P **P** **22 16 09.6 +1.0**
baz=251,SNR=7.0
N14K S **S** **22 23 35.6 +1.7**
baz=251
**L14K Kuka Creek 52.59 29** P **P** **22 16 09.9 +1.2**
L14K IAmb IAmb 22 16 31.2
comp=Z,70nm,1.1s
L14K IAMs_20 IAMs_20 22 35 34.0
comp=Z,3µm,21.0s
**L14K Kuka Creek 52.59 29** P **P** **22 16 10.1 +1.4**
baz=249
L14K S **S** **22 23 36.4 +2.3**
baz=249
**S14K Fog Glacier 52.62 36** P **P** **22 16 10.8 +1.5**
baz=256
**M14K Bethel 52.71 30** P **P** **22 16 10.2 +0.5**
M14K IAMs_20 IAMs_20 22 35 38.6
comp=Z,3µm,21.0s
**M14K Bethel 52.71 30** P **P** **22 16 10.9 +1.3**
baz=250,SNR=15
M14K S **S** **22 23 38.0 +2.1**
baz=250
**J14K Nanvaranak Lak 52.73 28** P **P** **22 16 10.7 +1.0**
J14K IAmb IAmb 22 16 12.9
comp=Z,167nm,1.6s
J14K IAMs_20 IAMs_20 22 36 48.0
comp=Z,3µm,20.0s
**J14K Nanvaranak Lak 52.73 28** P **P** **22 16 11.2 +1.4**
baz=247,SNR=5.8
J14K S **S** **22 23 38.7 +2.7**
baz=247
**ANM Nome 52.74 25** P **P** **22 16 10.2 +0.4**
ANM IAmb IAmb 22 16 26.1
comp=Z,153nm,1.4s
**ANM Nome 52.74 25** P **P** **22 16 11.6 +1.8**
baz=244
ANM S **S** **22 23 39.6 +3.4**
baz=244
**ANM Nome 52.74 25** P **P** **22 16 10.2 +0.4**
ANM pmax pmax
comp=Z,153nm,1.4s
ANM MLR MLR
comp=Z,2µm,20.0s
**F14K Arctic Creek 52.78 24** P **P** **22 16 12.1 +1.9**
baz=242
F14K S **S** **22 23 39.8 +3.0**
baz=242
**AULRC Lightning Ridg 52.80 175** P **P** **22 16 09.8 -0.9**
**ZAA0 Zalesovo Array 52.92 321** P **P** **22 16 10.7 -0.6**
ZAA0 IAmb IAmb 22 16 12.5
comp=Z,97nm,1.6s
**ZALV Zalesovo Beam 52.92 321** P **P** **22 16 10.7 -0.6**
**ZALV Zalesovo Beam 52.92 321** P **P** **22 16 10.2 -1.1**
comp=Z,5.5nm,0.3s,baz=108,slow=7.7,SNR=48
ZALV LR LR 22 39 00.0
comp=Z,2µm,20.1s,baz=100,slow=36
ZALV PKP2bc 22 46 52.3
comp=Z,0.2nm,0.3s,baz=290,slow=4.4,SNR=4.9
comp=Z,5.5nm,0.3s
**ZALV Zalesovo Beam 52.92 321** *i* P **P** **22 16 10.8 -0.6**
ZALV pmax pmax
comp=Z,6.0nm,0.3s
**MSVF Nonsavu 53.17 137** P **P** **22 16 14.1 +0.4**
**MSVF Nonsavu 53.17 137** P **P** **22 16 13.5 -0.2**
MSVF IAmb IAmb 22 16 36.5
comp=Z,137nm,1.6s
**MSVF Nonsavu 53.17 137***de*P **P** **22 16 13.2 -0.5**
MSVF pmax pmax
comp=Z,27nm,1.1s
**L15K Ungalak Mounta 53.24 29** P **P** **22 16 14.4 +0.8**
baz=250,SNR=6.0
L15K S **S** **22 23 43.3 +0.2**
baz=250
**CHGN Chignik 53.24 36** P **P** **22 16 13.3 -0.4**
CHGN IAMs_20 IAMs_20 22 35 45.8
comp=Z,4µm,20.0s
**CHGN Chignik 53.24 36** P **P** **22 16 13.1 -0.5**
baz=257
**O15K Ungalikthiuk R 53.24 33** P **P** **22 16 14.8 +1.2**
baz=254,SNR=7.8
O15K S **S** **22 23 43.7 +0.5**
baz=254
**M15K Kasigluk River 53.28 31** P **P** **22 16 15.1 +1.2**
baz=252,SNR=7.8
M15K S **S** **22 23 43.6 -0.1**
baz=252
**N15K Kwethluk River 53.40 31** P **P** **22 16 15.1 +0.3**
N15K IAmb IAmb 22 16 30.2
comp=Z,125nm,1.4s
**N15K Kwethluk River 53.40 31** P **P** **22 16 16.0 +1.2**
baz=253,SNR=12
N15K S **S** **22 23 45.9 +0.5**
baz=253
**K15K Wolf Creek Mou 53.43 29** P **P** **22 16 15.9 +0.9**
K15K IAmb IAmb 22 16 43.3
comp=Z,69nm,1.1s
K15K IAMs_20 IAMs_20 22 36 20.6
comp=Z,4µm,21.0s
**K15K Wolf Creek Mou 53.43 29** P **P** **22 16 16.4 +1.3**
baz=250,SNR=11
K15K S **S** **22 23 46.0 +0.2**
baz=250
**G15K Niukluk 53.44 25** P **P** **22 16 16.4 +1.4**
baz=245,SNR=5.8
G15K S **S** **22 23 47.9 +2.2**
baz=245
**F15K North Star Dit 53.51 24** P **P** **22 16 16.3 +0.8**
F15K IAmb IAmb 22 16 26.5
comp=Z,66nm,1.2s
**F15K North Star Dit 53.51 24** P **P** **22 16 16.8 +1.3**
baz=244
F15K S **S** **22 23 49.3 +2.5**
baz=244
**MK31 Makanchi Array 53.62 312** P **P** **22 16 16.7 +0.1**
MK31 IAmb IAmb 22 16 18.5
comp=Z,58nm,1.1s
**MK31 Makanchi Array 53.62 312** *i* P **P** **22 16 16.9 +0.2**
MK31 pmax pmax
comp=Z,96nm,1.2s
**MKAR Makanchi Array 53.62 312** P **P** **22 16 16.6 -0.1**
**MKAR Makanchi Array 53.62 312** P **P** **22 16 17.0 +0.3**
comp=Z,19nm,0.8s,baz=92,slow=9.7,SNR=144
MKAR S **S** **22 23 47.2 -1.6**
comp=Z,5.4nm,1.1s,baz=95,slow=15,SNR=4.1
MKAR LR LR 22 41 01.2
comp=Z,2µm,18.2s,baz=102,slow=38
MKAR PKP2bc 22 46 50.8
comp=Z,0.9nm,1.0s,baz=297,slow=5.3,SNR=3.9
comp=Z,19nm,0.8s
**MAKZ Makanchi 53.83 312** P **P** **22 16 17.6 -0.6**
MAKZ IAmb IAmb 22 16 20.2
comp=Z,114nm,1.1s
**MAKZ Makanchi 53.83 312** P **P** **22 16 17.6 -0.6**
MAKZ pmax pmax
comp=Z,114nm,1.2s
MAKZ MLR MLR
comp=Z,2µm,18.0s
**GIRL Giralia 53.89 214** P **P** **22 16 20.8 +2.0**
**GIRL Giralia 53.89 214** P **P** **22 16 18.6 -0.2**
**KIP Kipapa 53.90 80** P **P** **22 16 20.2 +1.1**
**KIP Kipapa 53.90 80** P **P** **22 16 18.6 -0.5**
KIP IAmb IAmb 22 16 29.2
comp=Z,88nm,1.1s
**KIP Kipapa 53.90 80** IAMs_20 IAMs_20 22 38 24.7
comp=Z,3µm,20.0s
**KIP Kipapa 53.90 80** ⇑*i*P **P** **22 16 20.4 +1.3**
KIP pmax pmax
comp=Z,38nm,1.6s
**HON Honolulu 53.94 80** IAMs_20 IAMs_20 22 37 38.7
comp=Z,3µm,20.0s
**H16K Elim 54.00 26** P **P** **22 16 20.0 +0.9**
baz=247
H16K S **S** **22 23 54.9 +1.6**
baz=247
**P16K Nushagak River 54.12 33** P **P** **22 16 21.7 +1.6**
baz=255
P16K S **S** **22 23 57.4 +2.3**
baz=255
P16K S **S** **22 23 57.4 +2.3**
baz=255
**N16K Nishlik Lake 54.12 31** P **P** **22 16 21.7 +1.6**
baz=254,SNR=21
N16K S **S** **22 23 56.4 +1.2**
baz=254

**L16K** **Owhat River** 54.16 30 P P 22 16 20.9 +0.6
L16K IAmb IAmb 22 16 35.2
comp=Z,92nm,1.6s
L16K IAMs_20 IAMs_20 22 37 05.5
comp=Z,4µm,21.0s
**L16K** **Owhat River** 54.16 30 P P 22 16 21.2 +0.9
baz=252,SNR=11
L16K S S 22 23 56.0 +0.5
baz=252
**J16K** **Anvik River** 54.18 28 P P 22 16 21.6 +1.1
J16K IAmb IAmb 22 16 36.1
comp=Z,80nm,1.2s
**J16K** **Anvik River** 54.18 28 P P 22 16 21.7 +1.3
baz=250,SNR=5.4
J16K S S 22 23 59.1 +3.3
baz=250
**ARMA** **Armidale** 54.18 171 P P 22 16 22.0 +1.1
**ARMA** **Armidale** 54.18 171 P P 22 16 20.6 -0.4
**M16K** **Timber Creek** 54.19 30 P P 22 16 21.4 +0.9
M16K IAmb IAmb 22 16 36.5
comp=Z,67nm,1.1s
**M16K** **Timber Creek** 54.19 30 P P 22 16 21.7 +1.1
baz=253,SNR=13
M16K S S 22 23 56.9 +0.8
baz=253
**MULG** **Mulgathing** 54.20 190 P P 22 16 20.9 0.0
**O16K** **Kokwok River B** 54.21 32 P P 22 16 21.6 +0.9
O16K IAmb IAmb 22 16 43.5
comp=Z,62nm,1.1s
O16K IAMs_20 IAMs_20 22 36 59.2
comp=Z,4µm,20.0s
**O16K** **Kokwok River B** 54.21 32 P P 22 16 21.7 +0.9
baz=255,SNR=15
O16K S S 22 23 57.8 +1.5
baz=255
**G16K** **Koyuk River** 54.25 25 P P 22 16 21.3 +0.4
baz=247
G16K S S 22 23 58.4 +1.7
baz=247
**I17K** **Unalakleet** 54.35 27 P P 22 16 22.7 +1.1
I17K IAmb IAmb 22 16 37.9
comp=Z,79nm,1.1s
**I17K** **Unalakleet** 54.35 27 P P 22 16 23.1 +1.4
baz=249
I17K S S 22 24 00.7 +2.7
baz=249
**C16K** **Lisburne Hills** 54.44 21 P P 22 16 22.8 +0.5
**C16K** **Lisburne Hills** 54.44 21 P P 22 16 22.9 +0.7
baz=242
C16K S S 22 24 02.1 +2.9
baz=242
**R17L** **Mt. Peulik Vol** 54.63 35 P P 22 16 23.3 -0.5
baz=258
R17L S S 22 24 00.0 -2.1
baz=258
**PLK4** **Peulik 4** 54.63 35 P P 22 16 22.4 -1.5
PLK4 IAmb IAmb 22 16 42.3
comp=Z,63nm,1.2s
PLK4 IAMs_20 IAMs_20 22 36 43.4
comp=Z,4µm,21.0s
**CHIR** **Chirikof Islan** 54.68 37 IAMs_20 IAMs_20 22 37 02.8
comp=Z,3µm,20.0s
**CHIR** **Chirikof Islan** 54.68 37 P P 22 16 24.3 +0.1
baz=260
CHIR S S 22 24 05.6 +2.8
baz=260
**Q16K** **King Salmon** 54.70 34 P P 22 16 24.3 0.0
baz=257
Q16K S S 22 24 05.4 +2.4
baz=257
**O17K** **Koliganek Bris** 54.74 32 P P 22 16 25.7 +1.1
baz=256
O17K S S 22 24 04.8 +1.3
baz=256
**AUPHS** **Peel High Scho** 54.76 172 P P 22 16 26.5 +1.5
**CMSA** **Cobar Meteorol** 54.76 178 P P 22 16 24.9 -0.1
**L17K** **Donlin** 54.82 29 P P 22 16 26.8 +1.7
baz=253,SNR=17
L17K S S 22 24 06.8 +2.4
baz=253
**J17K** **VABM Dome** 54.86 28 P P 22 16 25.7 +0.3
J17K IAmb IAmb 22 16 48.0
comp=Z,128nm,1.4s
J17K IAMs_20 IAMs_20 22 37 24.4
comp=Z,3µm,21.0s
**J17K** **VABM Dome** 54.86 28 P P 22 16 27.1 +1.7
baz=251,SNR=15
J17K S S 22 24 07.6 +2.5
baz=251
J17K S S 22 24 07.6 +2.5
baz=251
**N17K** **Nushagak Hills** 54.89 31 P P 22 16 27.0 +1.3
N17K IAmb IAmb 22 16 42.1
comp=Z,50nm,1.1s
**N17K** **Nushagak Hills** 54.89 31 P P 22 16 27.2 +1.5
baz=255,SNR=22
N17K S S 22 24 07.7 +2.3
baz=255
**P17K** **Kvichak River** 54.93 33 P P 22 16 26.5 +0.5
baz=257
P17K S S 22 24 06.8 +0.8
baz=257
P17K S S 22 24 06.8 +0.8
baz=257
**D17K** **Noatak River** 54.94 22 P P 22 16 27.5 +1.6
baz=244,SNR=6.3
D17K S S 22 24 07.9 +2.0
baz=244
**G17K** **Kiwalik Mounta** 54.95 25 P P 22 16 27.4 +1.4
baz=248
G17K S S 22 24 08.0 +1.9
baz=248
**K17K** **Iditarod** 54.99 29 P P 22 16 27.2 +0.9
K17K IAMs_20 IAMs_20 22 36 36.7
comp=Z,4µm,21.0s
**K17K** **Iditarod** 54.99 29 P P 22 16 28.2 +1.9
baz=253,SNR=25
K17K S S 22 24 09.3 +2.6
baz=253
**M17K** **Holitna River** 55.00 30 P P 22 16 27.8 +1.3
M17K IAmb IAmb 22 16 49.8
comp=Z,95nm,1.2s
M17K IAMs_20 IAMs_20 22 38 21.9
comp=Z,3µm,20.0s
**M17K** **Holitna River** 55.00 30 P P 22 16 27.9 +1.4
baz=254,SNR=13
M17K S S 22 24 08.6 +1.6
baz=254
**Q17K** **Contact Creek** 55.01 34 P P 22 16 25.7 -0.9
baz=258
Q17K S S 22 24 05.9 -1.5
baz=258
**H17K** **Granite Mounta** 55.04 26 P P 22 16 27.5 +0.8
H17K IAmb IAmb 22 16 42.8
comp=Z,58nm,1.1s
**H17K** **Granite Mounta** 55.04 26 P P 22 16 27.9 +1.2
baz=250,SNR=6.7
H17K S S 22 24 09.2 +1.9
baz=250
**STKA** **Stephens Creek** 55.08 182 P P 22 16 26.9 -0.4
**STKA** **Stephens Creek** 55.08 182 P P 22 16 26.7 -0.6
**STKA** **Stephens Creek** 55.08 182 P P 22 16 26.4 -0.8
comp=Z,14nm,0.4s,baz=14,slow=7.5,SNR=48
STKA LR LR 22 40 36.5
comp=Z,2µm,21.8s,baz=352,slow=37
comp=Z,14nm,0.4s
**F17K** **Baldwin Pennin** 55.08 24 P P 22 16 26.9 +0.1
F17K IAmb IAmb 22 16 39.5
comp=Z,60nm,1.0s
**F17K** **Baldwin Pennin** 55.08 24 P P 22 16 28.0 +1.1
baz=247
F17K S S 22 24 10.4 +2.6
baz=247
**E17K** **Hotham Inlet** 55.12 23 P P 22 16 28.6 +1.4
baz=246,SNR=8.4
E17K S S 22 24 10.3 +1.9
baz=246
**RDOG** **Red Dog Mine** 55.16 22 P P 22 16 28.0 +0.6
RDOG IAmb IAmb 22 16 38.4
comp=Z,113nm,1.2s
**RDOG** **Red Dog Mine** 55.16 22 P P 22 16 29.1 +1.6
baz=244,SNR=6.4
RDOG S S 22 24 11.6 +2.7
baz=244
**SEM** **Semipalatinsk** 55.23 316 *e*P P 22 16 28.2 -0.4
comp=Z,67nm,1.1s,baz=316
SEM LR LR 22 40 39.7
comp=Z,2µm,15.9s,baz=316
**SEM** **Semipalatinsk** 55.23 316 *e*P P 22 16 28.1 -0.4
SEM pmax pmax
comp=Z,67nm,1.1s
SEM MLR MLR
comp=Z,2µm,16.0s
**C17K** **DeLong Mountai** 55.25 21 P P 22 16 29.5 +1.4
baz=244,SNR=10
C17K S S 22 24 13.7 +3.6
baz=244
**MEEK** **Meekatharra** 55.28 207 P P 22 16 28.5 -0.4
**ACHA** **Angle Creek He** 55.29 34 P P 22 16 28.3 -0.4
**KHLH** **Kahului Airpor** 55.47 80 P P 22 16 30.0 -0.4
KHLH IAMs_20 IAMs_20 22 37 51.1
comp=Z,4µm,20.0s
**Q18K** **Katmai Hardscr** 55.54 34 P P 22 16 29.8 -0.7
baz=258,SNR=13
Q18K S S 22 24 11.6 -2.9
baz=258
**SHLS** **Shalkode** 55.54 307 *e*P P 22 16 28.7 -2.2
comp=Z,62nm,1.3s,baz=307
SHLS *e*S S 22 24 12.7 -2.3
baz=307
**SHLS** **Shalkode** 55.54 307 *e*P P 22 16 28.6 -2.2
SHLS *e*S S 22 24 12.7 -2.3
SHLS pmax pmax
comp=Z,62nm,1.3s
**N18K** **Kilae Creek** 55.55 31 P P 22 16 31.7 +1.2
N18K IAmb IAmb 22 16 45.9
comp=Z,69nm,1.3s
**N18K** **Kilae Creek** 55.55 31 P P 22 16 31.6 +1.2
baz=256,SNR=16
N18K S S 22 24 16.4 +2.1
baz=256
N18K S S 22 24 16.4 +2.1
baz=256
**L18K** **Granite Mounta** 55.56 29 P P 22 16 31.7 +1.2
L18K IAmb IAmb 22 16 41.7
comp=Z,106nm,1.5s
**L18K** **Granite Mounta** 55.56 29 P P 22 16 32.2 +1.7
baz=254,SNR=18
L18K S S 22 24 16.5 +2.1
baz=254
L18K S S 22 24 16.5 +2.1
baz=254
**P18K** **Big Mountain,** 55.58 33 P P 22 16 31.1 +0.4
P18K IAmb IAmb 22 16 45.1
comp=Z,62nm,1.3s
P18K IAMs_20 IAMs_20 22 38 03.2
comp=Z,3µm,20.0s
**P18K** **Big Mountain,** 55.58 33 P P 22 16 31.0 +0.3
baz=258
P18K S S 22 24 13.5 -1.3
baz=258
**SII** **Sitkinak Islan** 55.60 37 P P 22 16 31.5 +0.7
**SII** **Sitkinak Islan** 55.60 37 P P 22 16 31.6 +0.8
SII IAMs_20 IAMs_20 22 38 17.0
comp=Z,3µm,20.0s
**SII** **Sitkinak Islan** 55.60 37 P P 22 16 31.7 +0.8
baz=261
SII S S 22 24 15.5 +0.4
baz=261
**R18K** **Karluk** 55.62 35 P P 22 16 30.6 -0.3
baz=260
R18K S S 22 24 12.4 -2.9
baz=260
R18K S S 22 24 12.4 -2.9
baz=260
**AUDCS** **Dubbo College** 55.63 175 P P 22 16 32.7 +1.4
**HLK** **Haleakala** 55.66 80 IAMs_20 IAMs_20 22 38 27.3
comp=Z,4µm,20.0s
**O18K** **Koktuh Hills** 55.69 32 P P 22 16 32.0 +0.6
O18K IAMs_20 IAMs_20 22 38 16.4
comp=Z,3µm,20.0s
**O18K** **Koktuh Hills** 55.69 32 P P 22 16 32.9 +1.4
baz=258,SNR=29
O18K S S 22 24 18.5 +2.2
baz=258
O18K S S 22 24 18.5 +2.2
baz=258
**E18K** **Tukpahlearik C** 55.70 23 P P 22 16 32.4 +1.0
E18K IAmb IAmb 22 16 47.2
comp=Z,81nm,1.1s
**E18K** **Tukpahlearik C** 55.70 23 P P 22 16 33.0 +1.6
baz=247,SNR=12
E18K S S 22 24 17.5 +1.4
baz=247
**H18K** **Honhosa River** 55.73 26 P P 22 16 32.6 +0.9
H18K IAmb IAmb 22 16 43.7
comp=Z,66nm,1.1s
**H18K** **Honhosa River** 55.73 26 P P 22 16 32.5 +0.8
baz=251,SNR=10
H18K S S 22 24 17.7 +1.1
baz=251
**F18K** **Selawik** 55.73 24 P P 22 16 33.1 +1.5
baz=249,SNR=13
F18K S S 22 24 19.0 +2.5
baz=249
**M18K** **Stony River** 55.77 30 P P 22 16 33.5 +1.5
baz=256,SNR=20
M18K S S 22 24 19.7 +2.4
baz=256
**G18K** **Tagagawik** 55.86 25 P P 22 16 33.4 +0.8
G18K IAmb IAmb 22 16 48.3
comp=Z,62nm,1.1s
**G18K** **Tagagawik** 55.86 25 P P 22 16 33.7 +1.1
baz=250,SNR=20
G18K S S 22 24 19.3 +0.9
baz=250
**UZB** **Uzynbulak** 55.87 307 *e*P P 22 16 33.3 +0.1
comp=Z,31nm,1.2s,baz=307
**UZB** **Uzynbulak** 55.87 307 *e*P P 22 16 33.2 +0.1
UZB pmax pmax
comp=Z,31nm,1.2s
**J18K** **Innoko River** 55.90 28 P P 22 16 33.7 +0.8
J18K IAmb IAmb 22 16 54.8
comp=Z,118nm,1.9s
J18K IAMs_20 IAMs_20 22 38 47.5
comp=Z,3µm,20.0s
**J18K** **Innoko River** 55.90 28 P P 22 16 33.9 +1.0
baz=254,SNR=11
J18K S S 22 24 20.0 +1.1
baz=254
**FORT** **Forrest** 55.92 196 P P 22 16 32.8 -0.5
**FORT** **Forrest** 55.92 196 IAMs_20 IAMs_20 22 39 39.2
comp=Z,4µm,20.0s
**C18K** **Utukok River** 55.98 21 P P 22 16 34.0 +0.5
C18K IAmb IAmb 22 17 06.9
comp=Z,109nm,1.6s
**C18K** **Utukok River** 55.98 21 P P 22 16 34.1 +0.7
baz=246,SNR=6.1
C18K S S 22 24 20.4 +0.4
baz=246
**B18K** **Kokolik River** 56.08 20 P P 22 16 36.0 +1.9
baz=245
B18K S S 22 24 23.2 +2.0
baz=245
**KPKS** **Kokpek** 56.10 308 *e*P P 22 16 34.9 0.0
comp=Z,65nm,1.3s,baz=308
KPKS *e*S S 22 24 24.4 +1.9
baz=308
**KPKS** **Kokpek** 56.10 308 *e*P P 22 16 34.8 0.0
KPKS *e*S S 22 24 24.4 +1.9
KPKS pmax pmax
comp=Z,65nm,1.3s
**MHA** **Mahukona** 56.12 81 P P 22 16 35.3 +0.2
**MHA** **Mahukona** 56.12 81 P P 22 16 35.3 +0.2
**OHAK** **Old Harbor** 56.19 36 P P 22 16 35.3 +0.3
**OHAK** **Old Harbor** 56.19 36 P P 22 16 34.8 -0.2
OHAK IAMs_20 IAMs_20 22 37 43.4
comp=Z,4µm,21.0s
**OHAK** **Old Harbor** 56.19 36 P P 22 16 35.2 +0.3
baz=261,SNR=8.7
OHAK S S 22 24 22.6 -0.2
baz=261
**GCSA** **Galena City Sc** 56.20 26 P P 22 16 34.9 -0.1
baz=253
GCSA S S 22 24 23.0 +0.2
baz=253
**N19K** **Bonanza Creek** 56.25 31 P P 22 16 35.8 +0.2
N19K IAMs_20 IAMs_20 22 37 41.9
comp=Z,2µm,21.0s
**N19K** **Bonanza Creek** 56.25 31 P P 22 16 36.8 +1.2
baz=258,SNR=21
N19K S S 22 24 25.2 +1.3
baz=258
N19K S S 22 24 25.2 +1.3
baz=258
**TDK** **Taldyqorghan** 56.28 309 *e*P P 22 16 36.5 +0.6
comp=Z,68nm,1.3s,baz=310
TDK LR LR 22 41 20.0
comp=Z,2µm,16.5s,baz=310
**TDK** **Taldyqorghan** 56.28 309 *e*P P 22 16 36.5 +0.6
TDK pmax pmax
comp=Z,68nm,1.3s
TDK MLR MLR
comp=Z,2µm,17.0s
**KURK** **Kurchatov** 56.28 316 P P 22 16 35.8 0.0
**KURK** **Kurchatov** 56.28 316 P P 22 16 36.1 +0.3
KURK P P 22 16 36.1 +0.3
KURK P P 22 16 36.1 +0.3
KURK S S 22 24 21.6 -2.7
KURK S S 22 24 21.6 -2.7
KURK S S 22 24 21.6 -2.7
**KURK** **Kurchatov** 56.28 316 P P 22 16 35.8 0.0
KURK pmax pmax
comp=Z,253nm,1.2s
KURK MLR MLR
comp=Z,7µm,18.0s
**Q19K** **Cape Douglas,** 56.29 34 P P 22 16 35.4 -0.4
Q19K IAMs_20 IAMs_20 22 39 05.0
comp=Z,3µm,20.0s
**Q19K** **Cape Douglas,** 56.29 34 P P 22 16 35.1 -0.7
baz=260
**ZHN** **Zhinishke** 56.29 307 *e*P P 22 16 36.5 +0.2
baz=307
**ZHN** **Zhinishke** 56.29 307 *e*P P 22 16 36.4 +0.2
**HUH** **Hualalai** 56.32 81 IAMs_20 IAMs_20 22 36 33.4
comp=Z,3µm,20.0s
**SATY** **Saty** 56.32 307 *e*P P 22 16 36.8 +0.4
comp=Z,51nm,1.2s,baz=307
SATY *e*S S 22 24 27.8 +2.4
baz=307
**SATY** **Saty** 56.32 307 *e*P P 22 16 36.8 +0.4
SATY *e*S S 22 24 27.7 +2.4
SATY pmax pmax
comp=Z,51nm,1.2s
**KURBB** **Kurchatov Arra** 56.34 316 P P 22 16 36.2 0.0
comp=Z,159nm,1.1s,baz=93,slow=7.6,SNR=429
KURBB S S 22 24 21.9 -3.1
comp=Z,1.2nm,1.0s,baz=82,slow=9.1,SNR=6.6
KURBB LR LR 22 42 08.3
comp=Z,6µm,18.4s,baz=112,slow=38
KURBB PKPPKP P'P'df 22 46 33.2 -4.5
comp=Z,0.9nm,1.0s,baz=237,slow=3.5,SNR=5.8
KURBB PKP2bc 22 46 43.6
comp=Z,1.4nm,1.0s,baz=245,slow=2.9,SNR=4.9
comp=Z,159nm,1.1s
**PRZ** **Przheval'sk** 56.34 306 P P 22 16 37.8 +1.2
PRZ IAMs_20 IAMs_20 22 42 15.1
comp=Z,3µm,20.0s
**PRZ** **Przheval'sk** 56.34 306 P P 22 16 37.8 +1.2
PRZ pmax pmax
comp=Z,267nm,1.1s
PRZ MLR MLR
comp=Z,3µm,20.0s
**HPAH** **Hawaii Prepara** 56.35 81 IAMs_20 IAMs_20 22 36 43.2
comp=Z,3µm,20.0s
**L19K** **White Mountain** 56.39 30 P P 22 16 36.5 0.0
L19K IAmb IAmb 22 16 59.2
comp=Z,55nm,1.1s
L19K IAMs_20 IAMs_20 22 38 34.5
comp=Z,4µm,20.0s
**L19K** **White Mountain** 56.39 30 P P 22 16 37.8 +1.4
baz=256,SNR=20
L19K S S 22 24 26.6 +1.1
baz=256
L19K S S 22 24 26.6 +1.1
baz=256
**BBOO** **Buckleboo** 56.41 187 P P 22 16 37.1 +0.2
**BBOO** **Buckleboo** 56.41 187 P P 22 16 36.8 0.0
BBOO IAmb IAmb 22 16 52.0
comp=Z,98nm,1.1s
**WHYH** **Whyalla** 56.48 186 P P 22 16 38.2 +1.0
**J19K** **Poorman** 56.51 28 IAmb IAmb 22 16 53.1
comp=Z,78nm,1.1s
J19K IAMs_20 IAMs_20 22 39 35.7
comp=Z,3µm,20.0s
**J19K** **Poorman** 56.51 28 P P 22 16 38.4 +1.2
baz=254,SNR=26
J19K S S 22 24 27.6 +0.6
baz=254
J19K S S 22 24 27.6 +0.6
baz=254
**F19K** **Shaleruckik Mo** 56.51 24 P P 22 16 37.9 +0.7
**F19K** **Shaleruckik Mo** 56.51 24 P P 22 16 37.9 +0.7
baz=250
F19K S S 22 24 26.4 -0.5
baz=250
**M19K** **Big River Lodg** 56.54 30 P P 22 16 38.6 +1.2
M19K IAmb IAmb 22 16 52.9
comp=Z,98nm,1.6s
M19K IAMs_20 IAMs_20 22 39 39.4
comp=Z,3µm,20.0s
**M19K** **Big River Lodg** 56.54 30 P P 22 16 38.8 +1.3
baz=257,SNR=11
M19K S S 22 24 29.5 +2.1
baz=257
M19K S S 22 24 29.5 +2.1
baz=257
**G19K** **Purcell Mounta** 56.55 25 P P 22 16 38.5 +1.0
baz=252,SNR=11
G19K S S 22 24 28.3 +0.9
baz=252
**POHA** **Pohakuloa** 56.57 81 P P 22 16 39.1 +0.4
**POHA** **Pohakuloa** 56.57 81 P P 22 16 38.6 0.0
**POHA** **Pohakuloa** 56.57 81 IAMs_20 IAMs_20 22 37 10.1
comp=Z,3µm,20.0s
**MWH** **Moku'aweowe** 56.59 81 IAMs_20 IAMs_20 22 34 57.5
comp=Z,3µm,20.0s
**H19K** **Roundabout Mou** 56.61 26 P P 22 16 39.3 +1.4
**H19K** **Roundabout Mou** 56.61 26 P P 22 16 39.5 +1.6
baz=253,SNR=20
H19K S S 22 24 29.6 +1.4
baz=253
**P19K** **Oil Pt** 56.63 33 P P 22 16 38.1 -0.1
P19K IAmb IAmb 22 17 00.1
comp=Z,94nm,1.1s
P19K IAMs_20 IAMs_20 22 38 46.0
comp=Z,3µm,20.0s
**P19K** **Oil Pt** 56.63 33 P P 22 16 38.4 +0.2
baz=259,SNR=7.5
P19K S S 22 24 26.8 -1.9
baz=259
**KHU** **Kahuku** 56.64 82 P P 22 16 39.1 0.0
KHU IAMs_20 IAMs_20 22 36 11.8
comp=Z,3µm,21.0s
**KHU** **Kahuku** 56.64 82 P P 22 16 39.1 0.0
KHU pmax pmax
comp=Z,151nm,1.2s
KHU MLR MLR
comp=Z,3µm,21.0s
**KDAK** **Kodiak Island** 56.65 35 P P 22 16 39.0 +0.7
KDAK IAmb IAmb 22 17 07.1
comp=Z,78nm,1.2s
**KDAK** **Kodiak Island** 56.65 35 LR LR 22 37 58.0
comp=Z,5µm,21.9s,baz=270,slow=33
**KDAK** **Kodiak Island** 56.65 35 P P 22 16 38.8 +0.4
baz=261
KDAK S S 22 24 28.4 -0.6
baz=261
**KDAK** **Kodiak Island** 56.65 35*d* *i*P P 22 16 38.7 +0.4
KDAK pmax pmax
comp=Z,53nm,1.3s
**HMH** **Humu'ula Sheep** 56.66 81 P P 22 16 39.5 +0.2
HMH IAMs_20 IAMs_20 22 34 45.4
comp=Z,4µm,21.0s
**A19K** **Wainwright** 56.67 20 P P 22 16 40.2 +1.9
baz=245,SNR=6.0
A19K S S 22 24 30.5 +1.6
baz=245
**C19K** **Lookout Ridge** 56.70 21 P P 22 16 39.4 +0.8
C19K IAmb IAmb 22 16 54.5
comp=Z,110nm,1.1s
**C19K** **Lookout Ridge** 56.70 21 P P 22 16 40.3 +1.7
baz=247,SNR=17
C19K S S 22 24 29.8 +0.4
baz=247
**HTT** **Hallett** 56.76 184 P P 22 16 39.7 +0.3
**MLH** **Mauna Loa** 56.78 81 IAMs_20 IAMs_20 22 35 33.5
comp=Z,3µm,22.0s
**Q20K** **Shuyak Island** 56.88 34 P P 22 16 39.9 0.0
baz=261,SNR=11
Q20K S S 22 24 28.0 -4.0

baz=261
**SYI Shuyak Island 56.88 34** P **P** **22 16 40.5 +0.6**
SYI IAmb IAmb 22 17 01.7
comp=Z,103nm,1.1s
SYI IAMs_20 IAMs_20 22 37 05.6
comp=Z,3µm,22.0s
**UWE Uwekahuna 56.88 81** P **P** **22 16 40.3 -0.5**
UWE IAMs_20 IAMs_20 22 35 46.3
comp=Z,3µm,20.0s
**L20K Farewell, AK 56.90 30** P **P** **22 16 41.2 +1.2**
baz=257,SNR=15
L20K S **S** **22 24 33.9 +1.7**
baz=257
L20K S **S** **22 24 33.9 +1.7**
baz=257
**HLP Hilina Pali 56.90 82** IAMs_20 IAMs_20 22 35 14.9
comp=Z,3µm,20.0s
**E19K Redstone River 56.92 23** P **P** **22 16 41.7 +1.5**
E19K IAmb IAmb 22 17 09.0
comp=Z,82nm,1.1s
**E19K Redstone River 56.92 23** P **P** **22 16 41.4 +1.3**
baz=251,SNR=24
E19K S **S** **22 24 32.9 +0.5**
baz=251
**PUH Pauahi 56.96 82** P **P** **22 16 40.4 -0.9**
PUH IAmb IAmb 22 16 55.8
comp=Z,63nm,1.0s
PUH IAMs_20 IAMs_20 22 36 30.5
comp=Z,3µm,20.0s
**D19K Kuna River 56.97 22** IAmb IAmb 22 16 51.1
comp=Z,89nm,1.2s
**D19K Kuna River 56.97 22** P **P** **22 16 41.4 +1.0**
baz=249,SNR=22
D19K S **S** **22 24 35.3 +2.2**
baz=249
**KNHH Kane Nui o Ham 57.01 81** P **P** **22 16 41.4 -0.2**
**O20K Slope Mountain 57.01 32** P **P** **22 16 41.0 0.0**
baz=260
O20K S **S** **22 24 31.8 -2.1**
baz=260
O20K S **S** **22 24 31.8 -2.1**
baz=260
**K20K Telida 57.02 28** P **P** **22 16 41.8 +0.9**
K20K IAmb IAmb 22 16 57.3
comp=Z,72nm,1.0s
K20K IAMs_20 IAMs_20 22 38 32.1
comp=Z,3µm,21.0s
**K20K Telida 57.02 28** P **P** **22 16 42.5 +1.6**
baz=256,SNR=32
K20K S **S** **22 24 36.6 +2.9**
baz=256
K20K S **S** **22 24 36.6 +2.9**
baz=256
**STCH Steam Cracks 57.04 81** P **P** **22 16 42.4 +0.6**
**M20K Styx River 57.11 30** P **P** **22 16 42.7 +1.1**
M20K IAmb IAmb 22 17 04.8
comp=Z,50nm,1.1s
M20K IAMs_20 IAMs_20 22 41 41.7
comp=Z,2µm,19.0s
**M20K Styx River 57.11 30** P **P** **22 16 43.1 +1.4**
baz=258,SNR=16
M20K S **S** **22 24 37.7 +2.5**
baz=258
M20K S **S** **22 24 37.7 +2.5**
baz=258
**JOKA Jonika Flow 57.14 81** P **P** **22 16 42.8 +0.3**
JOKA IAMs_20 IAMs_20 22 35 30.1
comp=Z,4µm,22.0s
**J20K Nowinta River 57.18 28** P **P** **22 16 43.2 +1.2**
**J20K Nowinta River 57.18 28** P **P** **22 16 43.8 +1.8**
baz=256,SNR=62
J20K S **S** **22 24 38.6 +2.8**
baz=256
J20K S **S** **22 24 38.6 +2.8**
baz=256
**I20K Naaghedeneel 57.20 27** P **P** **22 16 43.4 +1.3**
**I20K Naaghedeneel 57.20 27** P **P** **22 16 43.8 +1.7**
baz=255
I20K S **S** **22 24 39.2 +3.1**
baz=255
**H20K Anotleneega Mo 57.22 26** P **P** **22 16 43.6 +1.3**
baz=254,SNR=29
H20K S **S** **22 24 38.9 +2.5**
baz=254
**MDOK Medeo 57.31 307** *e*P **P** **22 16 43.5 0.0**
baz=307
MDOK *e*S **S** **22 24 40.3 +1.7**
baz=307
MDOK LR LR 22 42 20.9
comp=Z,1µm,19.3s,baz=307
**MDOK Medeo 57.31 307** *e*P **P** **22 16 43.4 0.0**
MDOK *e*S **S** **22 24 40.2 +1.7**
MDOK MLR MLR
comp=Z,1µm,19.0s
**CHKK Chushkaly 57.32 308** *e*P **P** **22 16 43.5 +0.1**
baz=308
**CHKK Chushkaly 57.32 308** *e*P **P** **22 16 43.4 +0.1**
**F20K Avaraart Lake 57.35 24** P **P** **22 16 44.5 +1.4**
baz=252,SNR=23
F20K S **S** **22 24 38.8 +0.9**
baz=252
**SYDH Sydney Hard Ro 57.37 173** P **P** **22 16 44.8 +1.3**
**TNSS Tian-Shan 57.39 307** *e*P **P** **22 16 44.1 -0.2**
baz=307
**TNSS Tian-Shan 57.39 307** *e*P **P** **22 16 44.1 -0.2**
**AAA Alma-Ata 57.40 307** *e*P **P** **22 16 44.1 +0.1**
baz=307
**AAA Alma-Ata 57.40 307** *e*P **P** **22 16 44.1 +0.1**
**N20K Mount Spurr 57.41 31** P **P** **22 16 44.4 +0.6**
baz=259
N20K S **S** **22 24 39.0 -0.2**
baz=259
**HOM Homer 57.43 33** P **P** **22 16 43.5 -0.3**
HOM IAMs_20 IAMs_20 22 39 09.9
comp=Z,3µm,21.0s
**HOM Homer 57.43 33** P **P** **22 16 43.8 0.0**
baz=261
HOM S **S** **22 24 36.1 -3.0**
baz=261
**SPU Mount Spurr 57.48 31** P **P** **22 16 44.6 +0.4**
**AFI Afiamalu 57.51 126** P **P** **22 16 45.0 0.0**
AFI IAmb IAmb 22 17 06.3
comp=Z,95nm,1.1s
AFI IAMs_20 IAMs_20 22 36 32.5
comp=Z,3µm,20.0s
**AFI Afiamalu 57.51 126** P **P** **22 16 45.0 0.0**
AFI pmax pmax
comp=Z,95nm,1.1s
AFI MLR MLR
comp=Z,3µm,20.0s
**E20K Nigu River 57.56 23** P **P** **22 16 45.7 +1.1**
baz=251,SNR=16
E20K S **S** **22 24 41.9 +1.1**
baz=251
**D20K Etivluk River 57.56 22** P **P** **22 16 46.0 +1.4**
baz=250,SNR=49
D20K S **S** **22 24 40.9 +0.1**
baz=250
**CNPM China Poot 57.61 33** IAmb IAmb 22 16 55.8
comp=Z,80nm,1.1s
CNPM IAMs_20 IAMs_20 22 39 06.9
comp=Z,4µm,21.0s
**YNG Young 57.67 175** P **P** **22 16 45.8 +0.1**
**KUU Kurty 57.79 308** *e*P **P** **22 16 46.9 +0.2**
comp=Z,66nm,1.2s,baz=308
KUU LR LR 22 42 42.2
comp=Z,2µm,15.2s,baz=308
**KUU Kurty 57.79 308** *e*P **P** **22 16 46.8 +0.2**
KUU pmax pmax
comp=Z,66nm,1.2s
KUU MLR MLR
comp=Z,2µm,15.0s
**IMAR Indian Mountai 57.81 26** P **P** **22 16 46.6 +0.2**
**BRLK Bradley Lake 57.82 33** IAmb IAmb 22 16 56.4
comp=Z,170nm,1.8s
BRLK IAMs_20 IAMs_20 22 39 23.2
comp=Z,3µm,20.0s
**B20K Meade River 57.83 20** IAmb IAmb 22 17 08.7
comp=Z,78nm,0.8s
**B20K Meade River 57.83 20** P **P** **22 16 47.9 +1.4**
baz=249,SNR=24
B20K S **S** **22 24 45.5 +1.3**
baz=249
**CAPN Captain Cook N 57.84 32** IAMs_20 IAMs_20 22 38 20.1
comp=Z,2µm,21.0s
**SKT Skwentna 57.88 30** IAmb IAmb 22 17 01.8
comp=Z,57nm,1.1s
SKT IAMs_20 IAMs_20 22 42 35.8
comp=Z,2µm,20.0s
**SKT Skwentna 57.88 30** P **P** **22 16 46.9 0.0**
baz=260,SNR=22
SKT S **S** **22 24 44.1 -1.0**
baz=260
**BRSE Bradley Lake S 57.89 33** P **P** **22 16 46.6 -0.5**
baz=262,SNR=8.3
BRSE S **S** **22 24 42.8 -2.6**
baz=262
**ULHL Ulahol 57.95 306** P **P** **22 16 49.3 +1.2**
SNR=60
**G21K Allakaket 58.04 25** IAmb IAmb 22 17 09.8
comp=Z,46nm,1.0s
**G21K Allakaket 58.04 25** P **P** **22 16 49.3 +1.3**
baz=255,SNR=19
G21K S **S** **22 24 49.0 +1.9**
baz=255
**H21K Melozitna Rive 58.10 26** P **P** **22 16 49.2 +0.7**
H21K IAmb IAmb 22 17 04.2
comp=Z,140nm,1.4s
**H21K Melozitna Rive 58.10 26** P **P** **22 16 50.1 +1.7**
baz=256,SNR=40
H21K S **S** **22 24 50.0 +2.1**
baz=256
H21K S **S** **22 24 50.0 +2.1**
baz=256
**SUA Susitna One 58.15 31** P **P** **22 16 49.3 +0.3**
SUA IAmb IAmb 22 17 03.0
comp=Z,176nm,1.8s
**SUA Susitna One 58.15 31** P **P** **22 16 48.9 -0.1**
baz=261
SUA S **S** **22 24 46.5 -2.5**
baz=261
**BOOM Boomskoye usch 58.16 306** P **P** **22 16 50.0 +0.5**
**BOOM Boomskoye usch 58.16 306** P **P** **22 16 50.0 +0.5**
BOOM pmax pmax
comp=Z,253nm,1.4s
**NRN Naryn 58.19 305** P **P** **22 16 49.2 -0.7**
**NRN Naryn 58.19 305** P **P** **22 16 49.2 -0.7**
NRN pmax pmax
comp=Z,165nm,1.3s
**F21K Alatna River 58.24 24** P **P** **22 16 50.6 +1.2**
baz=254,SNR=14
F21K S **S** **22 24 51.8 +2.2**
baz=254
**KMBL Kambalda 58.29 202** P **P** **22 16 49.7 -0.5**
**C21K Knifeblade Rid 58.33 22** P **P** **22 16 51.6 +1.6**
baz=252,SNR=14
C21K S **S** **22 24 51.9 +1.1**
baz=252
**KSH Kashi 58.38 303** P **P** **22 16 55.1 +4.1**
KSH pP sP 22 16 58.8 -0.7
KSH sP pwP 22 17 03.3 +0.1
KSH S **S** **22 24 59.4 +6.9**
KSH ScS **ScS** **22 26 39.3 -0.2**
KSH pmax pmax
comp=Z,180nm,1.2s
KSH LR LR
comp=Z,3µm,17.9s
KSH LR LR
comp=Z,4µm,18.6s
KSH LR LR
comp=Z,3µm,18.2s
**TKM2 Tokmak 2 58.38 307** P **P** **22 16 52.2 +1.1**
SNR=82
**TKM2 Tokmak 2 58.38 307** *i* P **P** **22 16 51.6 +0.5**
TKM2 pmax pmax
comp=Z,133nm,1.1s
**E21K Killik River 58.40 23** P **P** **22 16 51.9 +1.4**
baz=253
E21K S **S** **22 24 51.9 +0.2**
baz=253
**A21K Barrow 58.47 19** P **P** **22 16 52.2 +1.3**
baz=249
A21K S **S** **22 24 53.2 +0.8**
baz=249
**MORW Morawa 58.49 208** P **P** **22 16 51.9 +0.3**
**M22K Willow 58.50 31** P **P** **22 16 51.5 +0.3**
M22K IAMs_20 IAMs_20 22 39 58.3
comp=Z,2µm,21.0s
**M22K Willow 58.50 31** P **P** **22 16 51.2 0.0**
baz=261
M22K S **S** **22 24 52.2 -0.9**
baz=261
**O22K Cooper Landing 58.50 32** P **P** **22 16 51.4 +0.2**
O22K IAMs_20 IAMs_20 22 38 53.4
comp=Z,4µm,22.0s
**O22K Cooper Landing 58.50 32** P **P** **22 16 51.2 -0.1**
baz=262
O22K S **S** **22 24 49.5 -3.7**
baz=262
**BPAW Bear Paw Mtn. 58.52 28** IAmb IAmb 22 16 55.0
comp=Z,110nm,1.3s
BPAW IAMs_20 IAMs_20 22 43 08.8
comp=Z,2µm,19.0s
**BPAW Bear Paw Mtn. 58.52 28** P **P** **22 16 52.5 +1.1**
baz=259,SNR=18
BPAW S **S** **22 24 54.4 +1.0**
baz=259
**CUT Chulitna 58.53 30** P **P** **22 16 52.1 +0.6**
CUT IAMs_20 IAMs_20 22 39 22.3
comp=Z,3µm,21.0s
**CUT Chulitna 58.53 30** P **P** **22 16 51.4 -0.1**
baz=260
CUT S **S** **22 24 52.0 -1.5**
baz=260
**B21K Ikpikpuk River 58.53 21** P **P** **22 16 52.8 +1.4**
**B21K Ikpikpuk River 58.53 21** P **P** **22 16 52.8 +1.4**
baz=252,SNR=19
B21K S **S** **22 24 54.5 +1.2**
baz=252
**RC01 Rabbit Creek A 58.58 32** P **P** **22 16 52.4 +0.5**
RC01 IAmb IAmb 22 17 13.5
comp=Z,71nm,1.1s
**RC01 Rabbit Creek A 58.58 32** P **P** **22 16 51.6 -0.2**
baz=262,SNR=5.7
RC01 S **S** **22 24 50.9 -3.4**
baz=262
**SEW Seward 58.58 33** P **P** **22 16 51.7 -0.1**
baz=263,SNR=6.7
SEW S **S** **22 24 51.5 -2.7**
baz=263
**H22K Ishtalitna Cre 58.73 26** P **P** **22 16 54.6 +1.7**
baz=257,SNR=26
H22K S **S** **22 24 59.0 +2.9**
baz=257
H22K S **S** **22 24 59.0 +2.9**
baz=257
**CAN Canberra 58.73 175** P **P** **22 16 54.8 +1.6**
**CAN Canberra 58.73 175** IAmb IAmb 22 17 09.3
comp=Z,67nm,1.2s
**CNB Canberra Magne 58.76 174** P **P** **22 16 54.7 +1.3**
**F22K John River 58.80 24** P **P** **22 16 55.2 +1.9**
baz=256
F22K S **S** **22 24 59.2 +2.3**
baz=256
**MLY Manley 58.81 27** IAmb IAmb 22 17 09.5
comp=Z,95nm,1.2s
**MLY Manley 58.81 27** P **P** **22 16 54.8 +1.3**
baz=258,SNR=26
MLY S **S** **22 24 58.3 +1.1**
baz=258
**A22K Sinclair Lake 58.86 20** P **P** **22 16 55.4 +1.8**
baz=251
A22K S **S** **22 24 59.1 +1.5**
baz=251
**KBK Karagaybulak 58.88 307** P **P** **22 16 55.8 +1.3**
SNR=52
**G22K Bettles 58.91 25** P **P** **22 16 55.0 +1.0**
baz=257
G22K S **S** **22 25 00.2 +1.9**
baz=257
**PMR Palmer 58.94 31** P **P** **22 16 54.9 +0.6**
**PMR Palmer 58.94 31** IAMs_20 IAMs_20 22 39 52.0
comp=Z,3µm,21.0s
**PMR Palmer 58.94 31** P **P** **22 16 54.2 -0.1**
baz=262,SNR=10
PMR S **S** **22 24 56.3 -2.5**
baz=262
**D22K Ayikyak River 58.98 22** IAMs_20 IAMs_20 22 43 19.0
comp=Z,3µm,19.0s
**D22K Ayikyak River 58.98 22** P **P** **22 16 56.4 +1.9**
baz=254,SNR=37
D22K S **S** **22 25 00.5 +1.3**
baz=254
**CHMS Chumysh 59.00 307** P **P** **22 16 56.2 +1.1**
SNR=56
**GHO Glory Hole Cre 59.06 31** IAmb IAmb 22 17 06.0
comp=Z,69nm,1.0s
GHO IAMs_20 IAMs_20 22 39 38.2
comp=Z,3µm,21.0s
**FRU1 Bishkek 59.10 307** P **P** **22 16 56.0 +0.1**
**FRU1 Bishkek 59.10 307** P **P** **22 16 56.0 +0.1**
FRU1 pmax pmax
comp=Z,220nm,1.2s
FRU1 MLR MLR
comp=Z,4µm,18.0s
**B22K Teshekpuk Lake 59.14 21** P **P** **22 16 57.0 +1.5**
**B22K Teshekpuk Lake 59.14 21** P **P** **22 16 57.1 +1.5**
baz=253,SNR=18
B22K S **S** **22 25 03.1 +1.9**
baz=253
**USP Ospenovka 59.16 307** P **P** **22 16 57.1 +0.9**
SNR=40
**BWN Browne 59.19 28** IAMs_20 IAMs_20 22 39 09.4
comp=Z,2µm,21.0s
**AAK Ala-Archa 59.21 307** P **P** **22 16 57.8 +0.9**
SNR=18
**AAK Ala-Archa 59.21 307** P **P** **22 16 58.0 +1.2**
**AAK Ala-Archa 59.21 307** *i* P **P** **22 16 57.6 +0.8**
SNR=27
**AAK Ala-Archa 59.21 307** LR LR 22 45 06.8
comp=Z,4µm,18.7s,baz=84,slow=39
**AAK Ala-Archa 59.21 307** P **P** **22 16 57.7 +0.9**
AAK P **P** **22 16 57.7 +0.9**
AAK S **S** **22 25 03.4 0.0**
AAK S **S** **22 25 03.4 0.0**
**AAK Ala-Archa 59.21 307** *c i* P **P** **22 16 57.7 +0.9**
AAK pmax pmax
comp=Z,70nm,1.2s
AAK MLR MLR
comp=Z,4µm,18.0s
**PWL Port Wells 59.23 32** IAMs_20 IAMs_20 22 39 38.6
comp=Z,4µm,21.0s
**PWL Port Wells 59.23 32** P **P** **22 16 56.7 +0.3**
baz=263,SNR=18
PWL S **S** **22 25 01.4 -1.3**
baz=263
**UCH Uchtor 59.23 306** P **P** **22 16 59.4 +2.1**
SNR=24
**KNK Knik Glacier 59.23 31** IAmb IAmb 22 17 17.8
comp=Z,68nm,1.0s
KNK IAMs_20 IAMs_20 22 38 57.8
comp=Z,3µm,22.0s
**KNK Knik Glacier 59.23 31** P **P** **22 16 56.6 +0.2**
baz=263,SNR=15
KNK S **S** **22 25 01.0 -1.8**
baz=263
**RND Reindeer 59.33 29** IAmb IAmb 22 17 07.6
comp=Z,54nm,1.0s
**SML Sawmill 59.34 31** IAMs_20 IAMs_20 22 40 03.7
comp=Z,3µm,22.0s
**SML Sawmill 59.34 31** P **P** **22 16 57.5 +0.2**
baz=263,SNR=38
SML S **S** **22 25 02.8 -1.5**
baz=263
**MCK McKinley 59.35 29** P **P** **22 16 57.3 +0.1**
baz=261,SNR=22
MCK S **S** **22 25 02.2 -2.0**
baz=261
**BTLS Baital 59.37 310** ⇑ *i* P **P** **22 16 58.2 +0.6**
comp=Z,34nm,1.1s,baz=310
**BTLS Baital 59.37 310** *c i* P **P** **22 16 58.2 +0.6**
BTLS pmax pmax
comp=Z,33nm,1.1s
**WAT1 Susitna Watana 59.38 30** P **P** **22 16 57.7 +0.3**
baz=262
WAT1 S **S** **22 25 03.1 -1.6**
baz=262
**I23K Minto, Yukon-K 59.40 27** IAmb IAmb 22 17 12.9
comp=Z,68nm,1.2s
I23K IAMs_20 IAMs_20 22 41 07.1
comp=Z,2µm,20.0s
**I23K Minto, Yukon-K 59.40 27** P **P** **22 16 58.6 +1.1**
baz=260,SNR=25
I23K S **S** **22 25 05.9 +1.2**
baz=260
I23K S **S** **22 25 05.9 +1.2**
baz=260
**NEA2 Nenana 59.43 28** P **P** **22 16 58.2 +0.5**
baz=260,SNR=13
NEA2 S **S** **22 25 04.4 -0.7**
baz=260
**G23K Bananza Creek 59.44 25** P **P** **22 16 59.6 +1.8**
baz=258,SNR=34
G23K S **S** **22 25 07.8 +2.5**
baz=258
**H23K Yukon River 59.45 26** IAmb IAmb 22 17 13.6
comp=Z,78nm,1.1s
**H23K Yukon River 59.45 26** P **P** **22 16 59.6 +1.7**
baz=259,SNR=25
H23K S **S** **22 25 08.3 +2.8**
baz=259
H23K S **S** **22 25 08.3 +2.8**
baz=259
**COLD Coldfoot 59.48 24** P **P** **22 16 59.6 +1.6**
baz=258,SNR=5.7
COLD S **S** **22 25 08.3 +2.6**
baz=258
**BLDU Ballidu 59.56 207** P **P** **22 16 58.2 -0.8**
**P23K Montague Islan 59.59 33** P **P** **22 16 59.7 +0.9**
baz=264,SNR=9.6
P23K S **S** **22 25 08.5 +1.1**
baz=264
P23K S **S** **22 25 08.5 +1.1**
baz=264
**M23K Glacier View 59.63 31** P **P** **22 16 59.6 +0.5**
baz=263,SNR=11
M23K S **S** **22 25 07.7 -0.2**
baz=263
**D23K Nanushuk River 59.70 22** IAMs_20 IAMs_20 22 43 53.1
comp=Z,3µm,20.0s
**D23K Nanushuk River 59.70 22** P **P** **22 17 01.5 +2.0**
baz=256
D23K S **S** **22 25 10.8 +2.3**
baz=256
**WAT6 Susitna Watana 59.72 30** P **P** **22 17 00.3 +0.4**
baz=263,SNR=59
WAT6 S **S** **22 25 08.7 -0.6**
baz=263
**EKS2 Erkin-Say 59.74 307** P **P** **22 17 01.4 +1.0**
SNR=62
**SCM Sheep Creek Mo 59.82 31** IAMs_20 IAMs_20 22 38 41.3
comp=Z,2µm,22.0s
**SCM Sheep Creek Mo 59.82 31** P **P** **22 17 01.1 +0.6**
baz=264,SNR=28
SCM S **S** **22 25 10.4 0.0**
baz=264
**WRH Wood River Hil 59.83 28** IAmb IAmb 22 17 17.6
comp=Z,52nm,1.0s
WRH IAMs_20 IAMs_20 22 39 26.4
comp=Z,2µm,21.0s
**GLI Glacier Island 59.83 32** IAmb IAmb 22 17 15.7
comp=Z,66nm,0.8s
**GLI Glacier Island 59.83 32** P **P** **22 17 01.0 +0.4**
baz=264,SNR=12
GLI S **S** **22 25 10.5 +0.1**
baz=264
**MDM Murphy Dome 59.84 27** IAmb IAmb 22 17 23.4
comp=Z,100nm,1.5s
**AML Almayashu 59.85 306** P **P** **22 17 03.1 +1.6**
SNR=70
**E23K Chandalar 59.87 24** P **P** **22 17 02.7 +1.9**
baz=258,SNR=51
E23K S **S** **22 25 13.5 +2.5**
baz=258
**C23K Itkillik River 59.93 21** IAMs_20 IAMs_20 22 43 01.0
comp=Z,2µm,19.0s
**C23K Itkillik River 59.93 21** P **P** **22 17 02.9 +1.8**
baz=256,SNR=38
C23K S **S** **22 25 13.7 +2.3**
baz=256
**DHY Denali Highway 59.95 29** P **P** **22 17 01.7 +0.2**
baz=263,SNR=7.8
DHY S **S** **22 25 11.1 -1.1**
baz=263
**ARPS Mount Arapiles 59.95 181** P **P** **22 17 01.6 +0.1**
**CCB Clear Creek Bu 59.98 28** IAmb IAmb 22 17 19.7
comp=Z,121nm,1.8s
**COLA College 59.99 27** P **P** **22 17 02.6 +1.1**
**COLA College 59.99 27** P **P** **22 17 01.0 -0.5**
COLA IAmb IAmb 22 17 32.8
comp=Z,88nm,1.4s
**COLA College 59.99 27** IAMs_20 IAMs_20 22 39 10.5

comp=Z,2µm,22.0s
**COLA College 59.99 27** P **P** **22 17 01.7 +0.2**
baz=261
**COLA College 59.99 27** *d i*P **P** **22 17 01.4 -0.1**
COLA pmax pmax
comp=Z,7.0nm,1.1s
**KLBR Kellerberrin 60.00 205** P **P** **22 17 02.1 +0.1**
**TOLK Toolik Lake Re 60.02 23** P **P** **22 17 03.0 +1.3**
**TOLK Toolik Lake Re 60.02 23** P **P** **22 17 03.1 +1.3**
baz=258,SNR=13
TOLK S **S** **22 25 16.3 +3.6**
baz=258
**Q23K Middleton Isla 60.08 34** IAMs_20 IAMs_20 22 41 16.3
comp=Z,2µm,19.0s
**Q23K Middleton Isla 60.08 34** P **P** **22 17 03.4 +1.3**
baz=266
Q23K S **S** **22 25 15.5 +2.0**
baz=266
Q23K S **S** **22 25 15.5 +2.0**
baz=266
**MID Middleton Isla 60.08 34** IAMs_20 IAMs_20 22 41 16.3
comp=Z,2µm,19.0s
**H24K Noodor Dome 60.13 26** P **P** **22 17 04.0 +1.3**
H24K IAmb IAmb 22 17 18.6
comp=Z,55nm,0.9s
**H24K Noodor Dome 60.13 26** P **P** **22 17 03.9 +1.3**
baz=261,SNR=21
H24K S **S** **22 25 17.1 +2.9**
baz=261
H24K S **S** **22 25 17.1 +2.9**
baz=261
**POKR Poker Plat Res 60.20 27** IAmb IAmb 22 17 15.1
comp=Z,48nm,1.0s
POKR IAMs_20 IAMs_20 22 41 31.3
comp=Z,3µm,21.0s
**POKR Poker Plat Res 60.20 27** P **P** **22 17 03.5 +0.5**
baz=262,SNR=8.0
POKR S **S** **22 25 15.1 0.0**
baz=262
**E24K Your Creek 60.29 24** P **P** **22 17 04.9 +1.3**
E24K IAmb IAmb 22 17 19.6
comp=Z,95nm,1.2s
**E24K Your Creek 60.29 24** P **P** **22 17 05.6 +1.9**
baz=259,SNR=32
E24K S **S** **22 25 19.1 +2.8**
baz=259
**HDA Harding Lake 60.31 28** IAmb IAmb 22 17 17.4
comp=Z,83nm,1.4s
HDA IAMs_20 IAMs_20 22 39 50.1
comp=Z,2µm,21.0s
**HDA Harding Lake 60.31 28** P **P** **22 17 03.5 -0.3**
baz=262,SNR=18
HDA S **S** **22 25 14.2 -2.3**
baz=262
**IL31 60.38 28** IAmb IAmb 22 17 18.6
comp=Z,84nm,1.1s
**ILAR Eielson Array 60.38 28** P **P** **22 17 03.3 -0.9**
**ILAR Eielson Array 60.38 28** P **P** **22 17 03.7 -0.6**
comp=Z,23nm,0.9s,baz=262,slow=5.1,SNR=88
ILAR S **S** **22 25 15.4 -2.0**
comp=Z,0.2nm,0.7s,baz=178,slow=5.9,SNR=1.5
ILAR LR LR 22 41 16.6
comp=Z,2µm,20.8s,baz=243,slow=34
ILAR PKPPKP P'P'df 22 46 24.4 -7.0
comp=Z,2.0nm,1.1s,baz=63,slow=1.7,SNR=6.9
comp=Z,23nm,0.9s
**D24K Happy Valley 60.39 22** P **P** **22 17 05.6 +1.4**
D24K IAMs_20 IAMs_20 22 44 06.1
comp=Z,3µm,20.0s
**D24K Happy Valley 60.39 22** P **P** **22 17 06.2 +2.0**
baz=258,SNR=14
D24K S **S** **22 25 19.1 +1.7**
baz=258
**M24K Tolsona, Glenn 60.39 31** P **P** **22 17 06.0 +1.6**
**M24K Tolsona, Glenn 60.39 31** P **P** **22 17 05.4 +1.0**
baz=264,SNR=7.3
M24K S **S** **22 25 19.5 +1.8**
baz=264
**F24K Squaw Lake 60.41 24** P **P** **22 17 06.3 +1.8**
F24K IAmb IAmb 22 17 20.5
comp=Z,60nm,1.1s
**F24K Squaw Lake 60.41 24** P **P** **22 17 06.2 +1.7**
baz=260,SNR=14
F24K S **S** **22 25 20.5 +2.7**
baz=260
**G24K Hadweenzic Riv 60.43 25** P **P** **22 17 04.9 +0.3**
**G24K Hadweenzic Riv 60.43 25** P **P** **22 17 06.2 +1.6**
baz=261,SNR=5.9
G24K S **S** **22 25 20.6 +2.6**
baz=261
**KLU Klutina 60.45 31** P **P** **22 17 05.8 +0.9**
KLU IAmb IAmb 22 17 40.2
comp=Z,66nm,1.0s
KLU IAMs_20 IAMs_20 22 40 40.0
comp=Z,4µm,21.0s
**KLU Klutina 60.45 31** P **P** **22 17 05.7 +0.8**
baz=265,SNR=16
KLU S **S** **22 25 19.1 +0.5**
baz=265
**ARSB Arslanbob 60.46 305** P **P** **22 17 06.5 +1.1**
**ARSB Arslanbob 60.46 305** P **P** **22 17 06.5 +1.1**
ARSB pmax pmax
comp=Z,117nm,1.3s
ARSB MLR MLR
comp=Z,700nm,20.0s
**EYAK Cordova Ski Ar 60.46 32** P **P** **22 17 06.0 +1.2**
**EYAK Cordova Ski Ar 60.46 32** P **P** **22 17 05.7 +0.9**
baz=266,SNR=12
EYAK S **S** **22 25 19.4 +0.9**
baz=266
**MILA Mila 60.47 175** P **P** **22 17 06.6 +1.5**
**C24K Franklin Bluff 60.55 22** P **P** **22 17 05.3 0.0**
C24K IAmb IAmb 22 17 18.7
comp=Z,62nm,1.0s
**C24K Franklin Bluff 60.55 22** P **P** **22 17 06.8 +1.5**
baz=258
C24K S **S** **22 25 21.2 +1.9**
baz=258
**HYB Hyderabad 60.58 277** *e*P **P** **22 17 06.7 +0.2**
HYB *e* 22 17 19.7
HYB IAmb IAmb 22 17 20.7
comp=Z,153nm,1.2s
HYB *e*PcP **PcP** **22 17 50.6 -0.1**
HYB *e* 22 21 53.4
HYB *e*S **S** **22 25 20.9 -0.5**
**BRAT Ballarat 60.72 179** P **P** **22 17 08.0 +1.3**
**K24K Donnelly Dome 60.75 29** P **P** **22 17 07.1 +0.3**
baz=264
K24K S **S** **22 25 20.5 -1.7**
baz=264
K24K S **S** **22 25 20.5 -1.7**
baz=264
**TOO Toolangi 60.77 178** P **P** **22 17 08.6 +1.5**
**TOO Toolangi 60.77 178** P **P** **22 17 07.4 +0.3**
TOO IAmb IAmb 22 17 22.6
comp=Z,98nm,1.2s
TOO IAMs_20 IAMs_20 22 42 40.6
comp=Z,2µm,19.0s
**TOO Toolangi 60.77 178** P **P** **22 17 07.4 +0.3**
TOO pmax pmax
comp=Z,98nm,1.2s
TOO MLR MLR
comp=Z,2µm,19.0s
**PAX Paxson 60.80 30** P **P** **22 17 07.9 +0.6**
baz=265,SNR=26
PAX S **S** **22 25 22.1 -0.9**
baz=265
**HARP HAARP 60.89 30** P **P** **22 17 08.7 +1.0**
baz=265
HARP S **S** **22 25 24.2 +0.1**
baz=265
**MUN Mundaring 60.96 206** P **P** **22 17 08.3 -0.2**
**G25K Bearman Lake 60.98 25** P **P** **22 17 10.1 +1.9**
baz=262
G25K S **S** **22 25 28.5 +3.6**
baz=262
**RAGM Ragged Mountai 60.98 33** P **P** **22 17 08.9 +0.5**
RAGM IAmb IAmb 22 17 24.3
comp=Z,62nm,1.0s
RAGM IAMs_20 IAMs_20 22 45 27.0
comp=Z,3µm,19.0s
**J25K Salcha River, 61.01 28** IAMs_20 IAMs_20 22 40 21.7
comp=Z,2µm,22.0s
**J25K Salcha River, 61.01 28** P **P** **22 17 07.9 -0.7**
baz=264,SNR=22
J25K S **S** **22 25 22.5 -3.1**
baz=264
J25K S **S** **22 25 22.5 -3.1**
baz=264
**H25L Birch Creek 61.02 26** P **P** **22 17 10.4 +1.9**
baz=262,SNR=11
H25L S **S** **22 25 29.0 +3.5**
baz=262
**PRP Porcupine Dome 61.05 27** P **P** **22 17 09.1 +0.2**
PRP IAMs_20 IAMs_20 22 42 05.7
comp=Z,2µm,20.0s
**PRP Porcupine Dome 61.05 27** P **P** **22 17 09.6 +0.7**
baz=263
PRP S **S** **22 25 24.0 -2.2**
baz=263
**BMRM Bremner River 61.05 32** P **P** **22 17 09.8 +0.9**
baz=266,SNR=19
BMRM S **S** **22 25 26.7 +0.5**
baz=266
**XMAS Kiritimati 61.06 101** IAMs_20 IAMs_20 22 38 29.6
comp=Z,2µm,20.0s
**KAIM Kayak Island 61.09 33** P **P** **22 17 09.9 +0.8**
KAIM IAMs_20 IAMs_20 22 45 19.8
comp=Z,2µm,19.0s
**KAIM Kayak Island 61.09 33** P **P** **22 17 10.3 +1.2**
baz=267,SNR=14
KAIM S **S** **22 25 29.4 +2.9**
baz=267
**N25K Chitina, Valde 61.09 31** IAmb IAmb 22 17 24.4
comp=Z,136nm,1.8s
N25K IAMs_20 IAMs_20 22 40 60.0
comp=Z,3µm,20.0s
**N25K Chitina, Valde 61.09 31** P **P** **22 17 10.3 +1.1**
baz=266,SNR=12
N25K S **S** **22 25 27.0 +0.2**
baz=266
**MTKN Mount Kenneth 61.10 207** P **P** **22 17 11.9 +2.5**
**HMT Hamilton 61.19 33** IAmb IAmb 22 17 25.5
comp=Z,49nm,1.0s
HMT IAMs_20 IAMs_20 22 40 59.4
comp=Z,3µm,21.0s
**F25K Christian Rive 61.28 24** P **P** **22 17 12.8 +2.4**
baz=262,SNR=29
F25K S **S** **22 25 32.6 +3.7**
baz=262
**D25K Kavik River 61.28 22** IAmb IAmb 22 17 22.4
comp=Z,50nm,0.8s
D25K IAMs_20 IAMs_20 22 44 53.6
comp=Z,2µm,20.0s
**D25K Kavik River 61.28 22** P **P** **22 17 12.1 +1.7**
baz=260,SNR=16
D25K S **S** **22 25 30.7 +1.9**
baz=260
**FYU Fort Yukon 61.30 26** P **P** **22 17 12.3 +1.9**
**NIL Nilore 61.36 297** P **P** **22 17 12.9 +1.4**
**NIL Nilore 61.36 297** P **P** **22 17 13.4 +1.9**
NIL P **P** **22 17 13.4 +1.9**
**NIL Nilore 61.36 297** P **P** **22 17 12.9 +1.4**
NIL pmax pmax
comp=Z,525nm,1.3s
NIL MLR MLR
comp=Z,2µm,20.0s
**GEXS Deakin Univers 61.37 179** P **P** **22 17 12.7 +1.6**
**NWAO Narrogin (SRO) 61.39 205** P **P** **22 17 11.7 +0.3**
**NWAO Narrogin (SRO) 61.39 205** P **P** **22 17 11.8 +0.3**
**NWAO Narrogin (SRO) 61.39 205** P **P** **22 17 11.6 +0.3**
**NWAO Narrogin (SRO) 61.39 205** LR LR 22 42 38.2
comp=Z,844nm,21.9s,baz=25,slow=35
**NWAO Narrogin (SRO) 61.39 205** P **P** **22 17 11.4 0.0**
**NWAO Narrogin (SRO) 61.39 205** P **P** **22 17 11.6 +0.2**
NWAO pmax pmax
comp=Z,263nm,1.3s
**SUCK Suckling Hills 61.41 33** P **P** **22 17 12.4 +1.1**
SUCK IAmb IAmb 22 17 27.5
comp=Z,68nm,1.1s
SUCK IAMs_20 IAMs_20 22 45 51.5
comp=Z,3µm,18.0s
**BVAR Borovoye Array 61.42 319** P **P** **22 17 11.5 0.0**
comp=Z,77nm,0.5s,baz=90,slow=6.5,SNR=410
BVAR S **S** **22 25 27.8 -3.2**
comp=Z,0.3nm,0.5s,baz=300,slow=39,SNR=2.0
BVAR LR LR 22 44 17.4
comp=Z,1µm,18.9s,baz=85,slow=36
BVAR PKPPKP **P'P'df** **22 46 26.6 -3.2**
comp=Z,1.3nm,1.0s,baz=249,slow=7.6,SNR=4.0
comp=Z,77nm,0.5s
**GLB Gilahina Butte 61.46 32** P **P** **22 17 11.5 -0.2**
GLB IAmb IAmb 22 17 27.4
comp=Z,86nm,1.2s
GLB IAMs_20 IAMs_20 22 41 02.7
comp=Z,4µm,21.0s
**BRVK Borovoye 61.49 319** P **P** **22 17 12.4 +0.5**
**BRVK Borovoye 61.49 319** P **P** **22 17 12.9 +1.0**
BRVK P **P** **22 17 12.9 +1.0**
BRVK S **S** **22 25 30.8 -1.0**
BRVK S **S** **22 25 30.8 -1.0**
**BRVK Borovoye 61.49 319** *c i*P **P** **22 17 12.3 +0.4**
BRVK pmax pmax
comp=Z,294nm,1.2s
BRVK MLR MLR
comp=Z,1µm,16.0s
**SCRK Sand Creek 61.55 29** P **P** **22 17 12.7 +0.4**
SCRK IAMs_20 IAMs_20 22 40 41.9
comp=Z,3µm,22.0s
**SCRK Sand Creek 61.55 29** P **P** **22 17 12.8 +0.4**
baz=265,SNR=68
SCRK S **S** **22 25 31.5 -1.1**
baz=265
**VRDI Verde Repeater 61.62 32** IAmb IAmb 22 17 27.7
comp=Z,129nm,1.6s
VRDI IAMs_20 IAMs_20 22 40 56.0
comp=Z,4µm,22.0s
**BMAR Burnt Mountain 61.66 25** P **P** **22 17 14.6 +1.7**
**BGLC Bering Glacier 61.66 33** P **P** **22 17 14.5 +1.6**
baz=268
**L26K Log Cabin Wild 61.77 30** IAmb IAmb 22 17 33.0
comp=Z,58nm,1.4s
**L26K Log Cabin Wild 61.77 30** P **P** **22 17 14.5 +0.8**
baz=266,SNR=11
L26K S **S** **22 25 36.1 +0.9**
baz=266
L26K S **S** **22 25 36.1 +0.9**
baz=266
**J26L Joseph Creek 61.78 28** IAmb IAmb 22 17 28.2
comp=Z,84nm,1.1s
**J26L Joseph Creek 61.78 28** P **P** **22 17 14.0 +0.2**
baz=266,SNR=9.3
J26L S **S** **22 25 34.7 -0.7**
baz=266
J26L S **S** **22 25 34.7 -0.7**
baz=266
**CRQE Cirque 61.78 32** P **P** **22 17 14.6 +0.7**
baz=268,SNR=21
CRQE S **S** **22 25 36.4 +0.8**
baz=268
**MCARA McCarthy VSAT 61.84 32** IAmb IAmb 22 17 36.4
comp=Z,62nm,1.0s
MCARA IAMs_20 IAMs_20 22 41 03.6
comp=Z,3µm,21.0s
**MCARA McCarthy VSAT 61.84 32** P **P** **22 17 15.1 +0.9**
baz=268,SNR=8.5
MCARA S **S** **22 25 36.1 +0.1**
baz=268
**F26K Sheenjek River 61.86 24** IAmb IAmb 22 17 30.5
comp=Z,96nm,1.4s
F26K IAMs_20 IAMs_20 22 48 31.9
comp=Z,2µm,19.0s
**F26K Sheenjek River 61.86 24** P **P** **22 17 16.4 +2.2**
baz=263,SNR=23
F26K S **S** **22 25 40.0 +3.8**
baz=263
**C26K Camden Bay 61.88 22** P **P** **22 17 16.7 +2.4**
baz=261,SNR=6.2
C26K S **S** **22 25 39.5 +3.3**
baz=261
**SNH Sunshine Point 61.89 33** P **P** **22 17 16.2 +1.6**
SNH IAmb IAmb 22 17 30.7
comp=Z,82nm,1.1s
SNH IAMs_20 IAMs_20 22 46 26.0
comp=Z,3µm,19.0s
**WAX Waxell Ridge 61.89 33** P **P** **22 17 15.8 +1.1**
**M26K Nabesna, AK 61.90 30** IAmb IAmb 22 17 29.7
comp=Z,75nm,1.4s
**M26K Nabesna, AK 61.90 30** P **P** **22 17 15.6 +0.9**
baz=267,SNR=10
M26K S **S** **22 25 37.2 +0.3**
baz=267
M26K S **S** **22 25 37.2 +0.3**
baz=267
**TGL Tana Glacier 61.91 32** P **P** **22 17 15.3 +0.6**
TGL IAmb IAmb 22 17 28.2
comp=Z,72nm,1.2s
TGL IAMs_20 IAMs_20 22 41 58.5
comp=Z,2µm,20.0s
**G26K Porcupine Rive 61.91 25** P **P** **22 17 16.6 +2.0**
baz=264,SNR=16
G26K S **S** **22 25 40.2 +3.4**
baz=264
**I26K Coal Creek Min 62.02 27** IAmb IAmb 22 17 28.9
comp=Z,64nm,1.6s
I26K IAMs_20 IAMs_20 22 42 46.3
comp=Z,2µm,20.0s
**I26K Coal Creek Min 62.02 27** P **P** **22 17 14.9 -0.4**
baz=265
I26K S **S** **22 25 36.9 -1.2**
baz=265
I26K S **S** **22 25 36.9 -1.2**
baz=265
**AUHAR St Anne's Scho 62.06 206** P **P** **22 17 17.2 +1.3**
**PALK Pallekele 62.08 266** P **P** **22 17 17.7 +1.2**
**PALK Pallekele 62.08 266** IAMs_20 IAMs_20 22 44 08.3
comp=Z,2µm,20.0s
**PALK Pallekele 62.08 266** LR LR 22 44 29.4
comp=Z,2µm,19.3s,baz=176,slow=36
**PALK Pallekele 62.08 266** P **P** **22 17 17.1 +0.6**
PALK P **P** **22 17 17.1 +0.6**
**PALK Pallekele 62.08 266** ‖ *e*P **P** **22 17 16.6 0.0**
PALK pmax pmax
comp=Z,112nm,1.6s
PALK MLR MLR
comp=Z,2µm,19.0s
**KK31 Karatay Array 62.08 308** P **P** **22 17 17.0 +0.9**
**KK31 Karatay Array 62.08 308** P **P** **22 17 17.0 +0.9**
KK31 pmax pmax
comp=Z,249nm,1.2s
**KKAR Karatay Array 62.08 308** P **P** **22 17 16.7 +0.6**
**KKAR Karatay Array 62.08 308** IAmb IAmb 22 17 18.5
comp=Z,247nm,1.1s
**KKAR Karatay Array 62.08 308** P **P** **22 17 16.7 +0.6**
**ISLE Juniper Island 62.15 32** P **P** **22 17 17.5 +1.1**
ISLE IAmb IAmb 22 17 38.2
comp=Z,101nm,1.4s
**C27K Jago River 62.25 22** P **P** **22 17 18.7 +1.9**
baz=263,SNR=13
C27K S **S** **22 25 43.3 +2.2**
baz=263
**MESA MESA 62.33 33** P **P** **22 17 19.1 +1.4**
MESA IAMs_20 IAMs_20 22 46 38.7
comp=Z,2µm,19.0s
**MESA MESA 62.33 33** P **P** **22 17 18.7 +0.9**
baz=269
MESA S **S** **22 25 44.0 +1.3**
baz=269
**K27K Chicken 62.40 29** IAmb IAmb 22 17 36.5
comp=Z,42nm,1.1s
K27K IAMs_20 IAMs_20 22 42 34.4
comp=Z,3µm,21.0s
**K27K Chicken 62.40 29** P **P** **22 17 19.2 +1.3**
baz=267
K27K S **S** **22 25 43.0 0.0**
baz=267
K27K S **S** **22 25 43.0 0.0**
baz=267
**M27K Edge Creek, AK 62.42 31** IAmb IAmb 22 17 33.9
comp=Z,42nm,1.1s
**M27K Edge Creek, AK 62.42 31** P **P** **22 17 19.0 +0.8**
baz=268,SNR=13
M27K S **S** **22 25 44.4 +0.8**
baz=268
M27K S **S** **22 25 44.4 +0.8**
baz=268
**GRNC Granite Creek 62.44 32** IAmb IAmb 22 17 33.2
comp=Z,74nm,1.4s
GRNC IAMs_20 IAMs_20 22 41 31.5
comp=Z,2µm,21.0s
**L27K Beaver Creek, 62.46 30** IAmb IAmb 22 18 14.1
comp=Z,140nm,1.9s
**L27K Beaver Creek, 62.46 30** P **P** **22 17 19.1 +0.7**
baz=268,SNR=27
L27K S **S** **22 25 44.7 +0.7**
baz=268
**BCAR Beaver Creek A 62.48 30** P **P** **22 17 19.2 +0.6**
**BRLS Borolday 62.58 308** *i*P **P** **22 17 21.0 +1.4**
comp=Z,23nm,1.2s,baz=307
**BRLS Borolday 62.58 308** *c i*P **P** **22 17 20.9 +1.4**
BRLS pmax pmax
comp=Z,23nm,1.2s
**CTG Chitna Glacier 62.64 32** P **P** **22 17 20.5 +0.8**
baz=269,SNR=10
**CTGM Chitina Glacie 62.65 32** IAmb IAmb 22 17 34.7
comp=Z,88nm,1.4s
CTGM IAMs_20 IAMs_20 22 41 37.9
comp=Z,3µm,21.0s
**I27K Kandik River 62.68 27** P **P** **22 17 20.6 +0.8**
baz=267,SNR=13
I27K S **S** **22 25 46.7 +0.1**
baz=267
I27K S **S** **22 25 46.7 +0.1**
baz=267
**TABL Table Mountain 62.74 33** P **P** **22 17 21.6 +1.1**
TABL IAmb IAmb 22 17 53.6
comp=Z,43nm,0.9s
TABL IAMs_20 IAMs_20 22 46 55.4
comp=Z,2µm,19.0s
**G27K Doyon Strip 62.74 25** IAmb IAmb 22 17 31.3
comp=Z,105nm,1.9s
**G27K Doyon Strip 62.74 25** P **P** **22 17 21.6 +1.4**
baz=266,SNR=14
G27K S **S** **22 25 50.9 +3.6**
baz=266
**H27K Steamboat Moun 62.75 26** P **P** **22 17 21.9 +1.6**
baz=266,SNR=32
H27K S **S** **22 25 50.8 +3.2**
baz=266
**LOGN Logan Glacier 62.81 32** IAmb IAmb 22 17 35.8
comp=Z,106nm,1.6s
LOGN IAMs_20 IAMs_20 22 42 35.2
comp=Z,2µm,20.0s
**EGAK Eagle 62.83 28** IAmb IAmb 22 17 38.5
comp=Z,35nm,0.9s
**EGAK Eagle 62.83 28** P **P** **22 17 21.2 +0.5**
baz=268
EGAK S **S** **22 25 48.4 0.0**
baz=268
**E27K Coleen River 62.87 24** IAmb IAmb 22 17 41.9
comp=Z,81nm,1.6s
**E27K Coleen River 62.87 24** P **P** **22 17 22.5 +1.6**
baz=265,SNR=9.7
E27K S **S** **22 25 51.7 +2.9**
baz=265
**RKGY Rocky Gully 62.98 204** P **P** **22 17 22.3 +0.3**
**YUK3 Moose Creek 63.07 31** P **P** **22 17 23.2 +0.6**
baz=270,SNR=16
YUK3 S **S** **22 25 53.3 +1.3**
baz=270
**D27M Malcolm River 63.18 23** P **P** **22 17 24.5 +1.4**
D27M IAMs_20 IAMs_20 22 46 14.8
comp=Z,2µm,19.0s
**D27M Malcolm River 63.18 23** P **P** **22 17 25.0 +1.9**
baz=265,SNR=7.5
D27M S **S** **22 25 55.2 +2.4**
baz=265
**PCA Pinnacle 63.18 33** P **P** **22 17 23.5 +0.2**
PCA IAmb IAmb 22 17 38.1
comp=Z,55nm,1.1s
**PINM Pinnacle 63.18 33** P **P** **22 17 24.3 +1.1**
baz=271,SNR=11
PINM S **S** **22 25 54.9 +1.7**
baz=271
**O28M Mount Upton 63.20 32** P **P** **22 17 24.6 +1.0**
baz=270,SNR=18
O28M S **S** **22 25 54.6 +0.8**
baz=270
**I28M Miner Creek 63.37 27** IAmb IAmb 22 17 41.6
comp=Z,43nm,1.1s
I28M IAMs_20 IAMs_20 22 45 50.0
comp=Z,2µm,20.0s
**I28M Miner Creek 63.37 27** P **P** **22 17 25.4 +1.0**
baz=268,SNR=22
I28M S **S** **22 25 55.5 +0.1**
baz=268
**YUK8 Steele Glacier 63.41 32** P **P** **22 17 25.8 +0.8**
baz=271,SNR=16
**F28M Old Crow 63.48 25** P **P** **22 17 26.6 +1.5**
F28M IAmb IAmb 22 17 41.5
comp=Z,56nm,1.1s

**F28M Old Crow** 63.48 25 P P 22 17 26.7 +1.7
baz=267,SNR=19
F28M S S 22 25 59.5 +3.0
baz=267
**BCPM Bancas Point** 63.49 33 P P 22 17 26.4 +1.2
BCPM IAMs_20 IAMs_20 22 41 05.4
comp=Z,2µm,22.0s
**DAWY Dawson** 63.58 29 IAmb IAmb 22 17 41.0
comp=Z,93nm,1.4s
DAWY IAMs_20 IAMs_20 22 42 57.5
comp=Z,2µm,21.0s
**DAWY Dawson** 63.58 29 P P 22 17 26.9 +1.1
baz=270,SNR=8.3
DAWY S S 22 25 58.7 +0.8
baz=270
**PNL Peninsula** 63.62 34 P P 22 17 27.4 +1.3
**PNL Peninsula** 63.62 34 P P 22 17 27.2 +1.1
baz=272,SNR=10
PNL S S 22 25 59.4 +0.9
baz=272
**E28M Babbage River** 63.65 24 P P 22 17 28.1 +1.9
**E28M Babbage River** 63.65 24 P P 22 17 28.1 +1.9
baz=267,SNR=22
E28M S S 22 26 01.7 +3.1
baz=267
**SIMJ Simiganj** 63.86 303 P P 22 17 29.0 +0.8
SIMJ IAMs_20 IAMs_20 22 48 53.3
comp=Z,2µm,20.0s
**YUK4 Talbot Arm** 63.95 32 P P 22 17 30.3 +1.9
baz=272,SNR=24
YUK4 S S 22 26 05.8 +2.9
baz=272
**M29M Somme Creek** 64.01 30 IAmb IAmb 22 17 44.3
comp=Z,54nm,1.1s
**M29M Somme Creek** 64.01 30 P P 22 17 30.3 +1.6
baz=271,SNR=31
M29M S S 22 26 06.3 +2.9
baz=271
**O29M Mount Kennedy** 64.01 33 IAmb IAmb 22 17 45.4
comp=Z,60nm,1.0s
O29M IAMs_20 IAMs_20 22 42 54.2
comp=Z,3µm,21.0s
**O29M Mount Kennedy** 64.01 33 P P 22 17 30.6 +1.8
baz=272,SNR=18
O29M S S 22 26 06.1 +2.6
baz=272
**H29M Whitestone** 64.03 26 IAmb IAmb 22 17 54.3
comp=Z,72nm,1.1s
**H29M Whitestone** 64.03 26 P P 22 17 30.0 +1.3
baz=269,SNR=16
H29M S S 22 26 05.8 +2.5
baz=269
**I29M Ogilvie Camp,** 64.05 27 IAmb IAmb 22 17 43.9
comp=Z,70nm,1.2s
I29M IAMs_20 IAMs_20 22 43 49.0
comp=Z,3µm,21.0s
**I29M Ogilvie Camp,** 64.05 27 P P 22 17 29.6 +0.7
baz=270
I29M S S 22 26 04.5 +0.8
baz=270
**J29N Klondike Camp** 64.09 28 P P 22 17 30.4 +1.2
J29N IAmb IAmb 22 17 44.6
comp=Z,68nm,1.3s
J29N IAMs_20 IAMs_20 22 43 36.1
comp=Z,2µm,22.0s
**J29N Klondike Camp** 64.09 28 P P 22 17 30.5 +1.3
baz=270
J29N S S 22 26 05.8 +1.5
baz=270
**YUK6 Outpost Mounta** 64.09 32 P P 22 17 30.9 +1.4
baz=272,SNR=14
YUK6 S S 22 26 07.3 +2.5
baz=272
**G29M Pine Creek** 64.18 25 P P 22 17 31.5 +1.9
**G29M Pine Creek** 64.18 25 P P 22 17 31.4 +1.7
baz=269,SNR=19
G29M S S 22 26 08.2 +3.0
baz=269
**E29M Blow River** 64.25 24 P P 22 17 31.4 +1.4
**E29M Blow River** 64.25 24 P P 22 17 31.7 +1.6
baz=269,SNR=15
E29M S S 22 26 08.1 +2.1
baz=269
**RAO Raoul Island** 64.33 143 LR LR 22 42 24.3
comp=Z,1µm,20.7s,baz=344,slow=33
**K29M Barlow Dome** 64.41 29 P P 22 17 32.6 +1.3
K29M IAmb IAmb 22 17 34.3
comp=Z,111nm,1.7s
K29M IAMs_20 IAMs_20 22 43 56.4
comp=Z,3µm,20.0s
**K29M Barlow Dome** 64.41 29 P P 22 17 32.7 +1.4
baz=271,SNR=19
K29M S S 22 26 10.6 +2.2
baz=271
**P29M Windy Craggy** 64.47 34 IAMs_20 IAMs_20 22 43 42.1
comp=Z,3µm,20.0s
**P29M Windy Craggy** 64.47 34 P P 22 17 33.1 +1.4
baz=273,SNR=23
P29M S S 22 26 11.4 +2.4
baz=273
**KBL Kabul** 64.62 298 P P 22 17 33.4 +0.1
**KBL Kabul** 64.62 298 P P 22 17 34.1 +0.7
SNR=158
KBL P P 22 17 34.1 +0.7
SNR=158
KBL P P 22 17 34.1 +0.7
SNR=158
KBL S S 22 26 11.9 -0.2
KBL S S 22 26 11.9 -0.2
KBL S S 22 26 11.9 -0.2
**KBL Kabul** 64.62 298 P P 22 17 33.4 +0.1
KBL pmax pmax
comp=Z,465nm,1.1s
**N30M Aishikik Lake** 64.69 31 IAmb IAmb 22 17 48.6
comp=Z,62nm,1.4s
**N30M Aishikik Lake** 64.69 31 P P 22 17 34.5 +1.3
baz=273,SNR=25
N30M S S 22 26 13.7 +1.9
baz=273
**EPYK Eagle Plains** 64.70 26 IAmb IAmb 22 17 59.2
comp=Z,80nm,1.1s
**EPYK Eagle Plains** 64.70 26 P P 22 17 34.2 +1.1
baz=271,SNR=24
EPYK S S 22 26 12.9 +1.2
baz=271
**P30M Million Dollar** 64.83 33 P P 22 17 35.7 +1.6
baz=274
P30M S S 22 26 16.9 +3.3
baz=274
**I30M Mount Dempster** 64.86 27 IAMs_20 IAMs_20 22 46 56.5
comp=Z,2µm,20.0s
**I30M Mount Dempster** 64.86 27 P P 22 17 35.2 +0.9
baz=272,SNR=16
I30M S S 22 26 14.8 +0.9
baz=272
**G30M tAoh Zraii Nji** 64.89 25 P P 22 17 35.4 +1.1
baz=271,SNR=8.9
G30M S S 22 26 15.1 +1.2
baz=271
**J30M Hart River** 64.90 28 IAmb IAmb 22 17 52.1
comp=Z,40nm,1.1s
**J30M Hart River** 64.90 28 P P 22 17 35.6 +1.1
baz=272,SNR=18
J30M S S 22 26 15.5 +1.0
baz=272
**F30M Barrier River** 65.04 25 P P 22 17 36.9 +1.7
baz=271,SNR=9.4
F30M S S 22 26 17.4 +1.6
baz=271
**PLBC Pleasant Camp** 65.17 34 P P 22 17 37.5 +1.3
baz=274,SNR=24
**O30N Mendenhall** 65.22 32 P P 22 17 37.5 +0.9
**O30N Mendenhall** 65.22 32 P P 22 17 37.7 +1.2
baz=274,SNR=13
O30N S S 22 26 19.4 +1.1
baz=274
**N31M Braeburn, Yuko** 65.32 31 P P 22 17 39.1 +1.9
N31M IAmb IAmb 22 17 52.9
comp=Z,84nm,1.2s
**N31M Braeburn, Yuko** 65.32 31 P P 22 17 38.5 +1.4
baz=274,SNR=15
N31M S S 22 26 22.5 +3.1
baz=274
**S31K Pelican** 65.37 35 P P 22 17 39.1 +1.7
S31K IAMs_20 IAMs_20 22 42 09.1
comp=Z,2µm,22.0s
**S31K Pelican** 65.37 35 P P 22 17 38.5 +1.0
baz=275
S31K S S 22 26 22.4 +2.4
baz=275
S31K S S 22 26 22.4 +2.4
baz=275
**R31K City Hall, Gus** 65.59 35 P P 22 17 39.8 +0.9
baz=275
**G31M Satah River** 65.66 25 IAmb IAmb 22 17 50.6
comp=Z,68nm,0.9s
**G31M Satah River** 65.66 25 P P 22 17 40.1 +1.0
baz=273,SNR=17
G31M S S 22 26 23.8 +0.6
baz=273
**SKAG Skagway** 65.70 34 P P 22 17 40.7 +1.1
**SKAG Skagway** 65.70 34 P P 22 17 41.0 +1.5
SKAG IAmb IAmb 22 17 55.1
comp=Z,92nm,1.7s
SKAG IAMs_20 IAMs_20 22 43 47.8
comp=Z,2µm,20.0s
**SKAG Skagway** 65.70 34 P P 22 17 41.1 +1.5
baz=275
SKAG S S 22 26 27.7 +3.6
baz=275
**WHY Whitehorse** 65.82 32 P P 22 17 41.6 +1.1
WHY IAmb IAmb 22 17 56.0
comp=Z,82nm,1.5s
**WHY Whitehorse** 65.82 32 P P 22 17 41.7 +1.2
baz=275,SNR=14
WHY S S 22 26 28.6 +2.9
baz=275
**F31M Tsiigehtchic** 65.83 25 P P 22 17 41.0 +0.7
**F31M Tsiigehtchic** 65.83 25 P P 22 17 40.8 +0.5
baz=273
F31M S S 22 26 24.8 -0.6
baz=273
**INK Inuvik** 65.87 24 IAMs_20 IAMs_20 22 47 46.0
comp=Z,2µm,21.0s
**INK Inuvik** 65.87 24 P P 22 17 41.4 +0.9
baz=273,SNR=8.0
INK S S 22 26 25.4 -0.4
baz=273
**M31M Drury Creek, Y** 65.92 31 P P 22 17 42.0 +1.0
M31M IAmb IAmb 22 17 56.8
comp=Z,52nm,1.2s
M31M IAMs_20 IAMs_20 22 44 33.5
comp=Z,2µm,21.0s
**M31M Drury Creek, Y** 65.92 31 P P 22 17 41.9 +0.8
baz=275,SNR=13
M31M S S 22 26 28.9 +2.1
baz=275
**SIT Sitka** 65.95 36 P P 22 17 42.3 +1.1
baz=276
SIT S S 22 26 30.3 +3.2
baz=276
**TAU Tasmania Unive** 66.17 177 P P 22 17 44.3 +1.6
**R32K Eaglecrest** 66.24 35 P P 22 17 43.7 +0.5
R32K IAmb IAmb 22 18 16.5
comp=Z,64nm,1.4s
**R32K Eaglecrest** 66.24 35 P P 22 17 44.3 +1.2
baz=276
**S32K Killisnoo** 66.30 36 P 22 17 44.2 +0.7
S32K IAmb IAmb 22 18 05.4
comp=Z,76nm,1.6s
**S32K Killisnoo** 66.30 36 P P 22 17 43.8 +0.3
baz=277
**JIS Juneau Island** 66.31 35 P P 22 17 45.5 +2.0
**FARO Faro, Yukon** 66.40 31 P P 22 17 45.2 +1.1
FARO IAmb IAmb 22 18 03.4
comp=Z,56nm,1.4s
FARO IAMs_20 IAMs_20 22 45 41.2
comp=Z,2µm,20.0s
**FARO Faro, Yukon** 66.40 31 P P 22 17 45.1 +1.0
baz=276,SNR=6.3
**P32M Atlin** 66.51 33 P P 22 17 45.6 +0.8
P32M IAmb IAmb 22 18 04.3
comp=Z,46nm,1.2s
**P32M Atlin** 66.51 33 P P 22 17 46.1 +1.2
baz=276,SNR=6.5
P32M S S 22 26 36.0 +2.0
baz=276
**N32M Quiet Lake** 66.64 32 IAmb IAmb 22 18 04.3
comp=Z,39nm,0.9s
N32M IAMs_20 IAMs_20 22 44 16.0
comp=Z,3µm,21.0s
**N32M Quiet Lake** 66.64 32 P P 22 17 46.8 +1.0
baz=276,SNR=10
N32M S S 22 26 37.9 +2.2
baz=276
**SVE Sverdlovsk** 66.73 324 *de*P P 22 17 46.8 +0.5
SVE *e*S S 22 26 35.6 -1.1
SVE pmax pmax
comp=Z,216nm,1.4s
SVE MLR MLR
comp=Z,3µm,19.0s
**P33M Teslin, Yukon** 66.88 33 IAmb IAmb 22 18 02.6
comp=Z,70nm,1.5s
P33M IAMs_20 IAMs_20 22 49 15.0
comp=Z,3µm,20.0s
**P33M Teslin, Yukon** 66.88 33 P P 22 17 48.4 +1.1
baz=277,SNR=18
P33M S S 22 26 40.0 +1.4
baz=277
**T33K Petersburg** 67.27 36 P P 22 17 51.0 +1.3
baz=278
**U33K Whale Pass** 67.28 37 P P 22 17 51.2 +1.5
baz=278
U33K S S 22 26 46.5 +3.2
baz=278
U33K S S 22 26 46.5 +3.2
baz=278
**MMPY Sheldon Lake,** 67.32 30 P P 22 17 51.7 +1.6
MMPY IAmb IAmb 22 18 05.5
comp=Z,105nm,1.6s
**MMPY Sheldon Lake,** 67.32 30 P P 22 17 51.6 +1.6
baz=277,SNR=7.0
MMPY S S 22 26 45.3 +1.5
baz=277
**Q32M Nakina River** 67.32 34 P P 22 17 51.4 +1.1
Q32M IAmb IAmb 22 18 06.2
comp=Z,107nm,1.7s
**Q32M Nakina River** 67.32 34 P P 22 17 51.9 +1.6
baz=278,SNR=7.8
Q32M S S 22 26 46.5 +2.3
baz=278
**CRAG Craig** 67.37 38 P P 22 17 51.7 +1.3
baz=279
CRAG S S 22 26 47.1 +2.7
baz=279
**WRAK Wrangell Islan** 67.66 37 P P 22 17 53.0 +0.9
baz=279
WRAK S S 22 26 49.7 +1.9
baz=279
**R33M Jennings River** 67.92 33 P P 22 17 55.4 +1.4
baz=279,SNR=7.7
R33M S S 22 26 53.2 +2.0
baz=279
**ARU Arti** 67.92 323 P P 22 17 53.9 0.0
ARU IAMs_20 IAMs_20 22 49 54.8
comp=Z,2µm,19.0s
**ARU Arti** 67.92 323 LR LR 22 49 58.9
comp=Z,2µm,19.5s,baz=82,slow=38
**ARU Arti** 67.92 323 *c i*P P 22 17 53.9 0.0
ARU 22 18 20.2
ARU PPP PPP 22 21 58.9
ARU S S 22 26 54.7 +3.7
ARU 22 27 44.8
ARU SS SS 22 31 10.5 -2.1
ARU pmax pmax
comp=Z,214nm,1.3s
ARU MLR MLR
comp=Z,2µm,16.0s
**ARU Arti** 67.92 323 P P 22 17 53.9 0.0
comp=Z,196nm,1.4s,comp=Z,2µm
**TOZ Tahuroa Road** 67.99 153 IAMs_20 IAMs_20 22 45 42.8
comp=Z,3µm,21.0s
**TOZ Tahuroa Road** 67.99 153 P P 22 17 59.6 +5.3
**S34M Telegraph Cree** 68.07 35 IAmb IAmb 22 18 24.7
comp=Z,52nm,1.2s
**S34M Telegraph Cree** 68.07 35 P P 22 17 56.3 +1.5
baz=279,SNR=11
S34M S S 22 26 55.2 +2.4
baz=279
**H02S1 DAWSON INLET T** 68.12 40 T T 23 32 24.3
SNR=10
**V35K Ketchikan** 68.25 38 P P 22 17 55.5 -0.3
V35K IAmb IAmb 22 18 54.2
comp=Z,51nm,1.4s
**V35K Ketchikan** 68.25 38 P P 22 17 56.7 +0.9
baz=280
V35K S S 22 26 56.5 +1.6
baz=280
V35K S S 22 26 56.5 +1.6
baz=280
**A36M Sachs Harbour** 68.31 20 P P 22 17 56.4 +0.5
baz=279
A36M S S 22 26 55.2 +0.1
baz=279
**ABKAR Akbulak array** 68.38 316 P P 22 17 56.5 -0.4
**DLBC Dease Lake** 68.56 34 P P 22 17 59.6 +1.7
DLBC IAmb IAmb 22 18 01.2
comp=Z,87nm,1.4s
DLBC IAMs_20 IAMs_20 22 46 17.5
comp=Z,2µm,20.0s
**DLBC Dease Lake** 68.56 34 LR LR 22 46 18.9
comp=Z,1µm,20.6s,baz=290,slow=34
**DLBC Dease Lake** 68.56 34 P P 22 17 59.4 +1.5
baz=280,SNR=21
DLBC S S 22 27 01.4 +2.6
baz=280
**T35M Bob Quinn** 68.70 36 P P 22 18 00.2 +1.4
**T35M Bob Quinn** 68.70 36 P P 22 18 00.1 +1.3
baz=280,SNR=13
T35M S S 22 27 04.3 +3.9
baz=280
**VRZ Vera Road** 68.87 154 P P 22 18 01.0 +1.1
**TGTN Hyland Airport** 68.88 31 P P 22 18 01.2 +1.4
baz=280,SNR=8.7
TGTN S S 22 27 03.5 +1.1
baz=280
**WTLY Watson Lake, Y** 68.88 32 P P 22 18 00.2 +0.3
WTLY IAmb IAmb 22 18 20.4
comp=Z,110nm,1.5s
WTLY IAMs_20 IAMs_20 22 45 43.9
comp=Z,3µm,20.0s
**WTLY Watson Lake, Y** 68.88 32 P P 22 18 00.8 +0.9
baz=280
**HAZ Te Kaha** 68.99 151 P P 22 18 00.3 -0.3
**U35K Hyder** 69.02 37 P P 22 18 01.7 +1.0
baz=281
**HG4B Hotspring** 69.06 41 P P 22 18 01.4 +0.4
HG4B IAmb IAmb 22 18 32.6
comp=Z,46nm,1.2s
**MXZ Matakaoa Point** 69.06 151 P P 22 18 00.3 -0.7
**TWVZ Taurewa** 69.10 154 P P 22 18 00.4 -1.0
**URZ Urewera** 69.11 152 LR LR 22 47 21.8
comp=Z,1µm,19.6s,baz=60,slow=35
**URZ Urewera** 69.11 152 P P 22 18 00.4 -1.0
**RUGZ Raukumara Rang** 69.11 152 P P 22 17 59.7 -1.9
**KATZ Kakaramea** 69.12 153 P P 22 18 02.9 +1.3
**C36M Paulatuk** 69.15 22 P P 22 18 01.5 +0.2
baz=281
C36M S S 22 27 04.2 -1.0
baz=281
**RUBB Prince Rupert** 69.21 39 P P 22 18 02.6 +0.8
RUBB IAmb IAmb 22 18 34.3
comp=Z,89nm,1.7s
**OTVZ Oturere** 69.27 154 P P 22 18 03.6 +1.1
**MWZ Matawai** 69.36 152 P P 22 18 02.2 -0.8
**RTZ Ruatahuna** 69.36 152 P P 22 18 02.2 -0.8
**AKTO Aktyubinsk** 69.36 317 LR LR 22 50 47.5
comp=Z,3µm,18.6s,baz=82,slow=38
**RAGZ Rawiri** 69.44 152 P P 22 18 03.5 -0.1
**GRNB Grenville Isla** 69.47 39 P P 22 18 03.7 +0.1
GRNB IAmb IAmb 22 18 18.6
comp=Z,124nm,1.9s
**MTHZ Maungataniwha** 69.50 153 P P 22 18 03.0 -0.8
**QRZ Quartz Range** 69.50 157 P P 22 18 04.2 +0.4
**MOVZ Moawhango** 69.51 154 P P 22 18 03.7 -0.3
**BKZ Black Stump Fm** 69.61 153 P P 22 18 04.4 -0.1
**BKZ Black Stump Fm** 69.61 153 IAmb IAmb 22 18 33.0
comp=Z,66nm,0.9s
BKZ IAMs_20 IAMs_20 22 45 09.9
comp=Z,3µm,21.0s
**BKZ Black Stump Fm** 69.61 153 P P 22 18 03.1 -1.4
**NMHZ Naumai** 69.69 153 P P 22 18 05.4 +0.3
**KWHZ Kaweka Forest** 69.80 153 P P 22 18 05.9 +0.2
**KRHZ Kereru** 69.97 153 P P 22 18 06.2 -0.5
**DSZ Denniston Nort** 70.05 158 IAMs_20 IAMs_20 22 45 24.4
comp=Z,3µm,20.0s
**HRA Herat** 70.11 300 P P 22 18 08.0 -0.1
**PNHZ Pukenui** 70.12 154 P P 22 18 07.7 0.0
**LIRD Liard River Hi** 70.36 33 P P 22 18 10.1 +1.2
baz=283
LIRD S S 22 27 21.0 +1.2
baz=283
**THZ Tophouse** 70.46 157 P P 22 18 10.9 +1.2
THZ IAmb IAmb 22 18 32.4
comp=Z,43nm,0.8s
**MRZ Mangatainoka R** 70.51 155 P P 22 18 10.3 +0.4
MRZ IAMs_20 IAMs_20 22 47 14.6
comp=Z,2µm,21.0s
**TUWZ Tuamarina** 70.55 156 P P 22 18 10.3 +0.2
**HOWZ Holdsworth Sta** 70.69 155 P P 22 18 11.2 +0.1
**CAW Cannon Point** 70.69 155 P P 22 18 11.4 +0.4
**WRGLY Wrigley** 70.72 29 P P 22 18 12.5 +1.5
WRGLY IAmb IAmb 22 18 38.3
comp=Z,74nm,1.0s
WRGLY IAMs_20 IAMs_20 22 46 00.3
comp=Z,3µm,22.0s
**WRGLY Wrigley** 70.72 29 P P 22 18 12.0 +1.0
baz=284
WRGLY S S 22 27 24.1 +0.4
baz=284
**SNZO South Karori** 70.73 155 P P 22 18 09.5 -1.7
**BFZ Birch Farm** 70.80 154 IAMs_20 IAMs_20 22 47 08.1
comp=Z,2µm,21.0s
**BFZ Birch Farm** 70.80 154 P P 22 18 11.2 -0.5
**INZ Inchbonnie** 70.80 158 P P 22 18 12.7 +1.1
INZ IAmb IAmb 22 18 25.9
comp=Z,70nm,1.1s
INZ IAMs_20 IAMs_20 22 46 00.1
comp=Z,2µm,19.0s
**TOAD Toad River Com** 70.93 33 P P 22 18 13.2 +0.8
baz=284,SNR=17
TOAD S S 22 27 26.7 +0.2
baz=284
**BBB Bella Bella** 70.93 41 P P 22 18 13.7 +1.3
**BBB Bella Bella** 70.93 41 LR LR 22 44 51.1
comp=Z,870nm,20.6s,baz=298,slow=32
**FOZ Fox Glacier** 70.99 160 P P 22 18 13.3 +0.5
**RAR Rarotonga** 71.00 124 P P 22 18 14.4 +1.1
**RAR Rarotonga** 71.00 124 P P 22 18 14.0 +0.7
RAR IAmb IAmb 22 18 35.0
comp=Z,96nm,1.4s
**RAR Rarotonga** 71.00 124 LR LR 22 45 11.2
comp=Z,2µm,19.9s,baz=303,slow=32
**RAR Rarotonga** 71.00 124 P P 22 18 14.0 +0.7
RAR pmax pmax
comp=Z,96nm,1.4s
**LTZ Lake Taylor** 71.13 158 P P 22 18 13.9 +0.2
LTZ IAmb IAmb 22 18 24.0
comp=Z,50nm,1.0s
**KOTAN Kotaneelee Air** 71.20 32 P P 22 18 14.6 +0.6
baz=284
KOTAN S S 22 27 31.6 +2.1
baz=284
**HOLB Holberg** 71.29 42 P P 22 18 15.1 +0.3
HOLB IAmb IAmb 22 18 18.2
comp=Z,58nm,1.3s
**OXZ Oxford** 71.53 158 P P 22 18 16.1 +0.1
OXZ IAmb IAmb 22 18 33.0
comp=Z,52nm,0.9s
**RPZ Rata Peaks** 71.55 159 P P 22 18 15.7 -0.5
**RPZ Rata Peaks** 71.55 159 LR LR 22 48 51.6
comp=Z,614nm,18.9s,baz=338,slow=35
**GVZ Greta Valley S** 71.56 157 IAMs_20 IAMs_20 22 48 03.3
comp=Z,3µm,20.0s
**LBZ Lake Benmore** 71.87 160 P P 22 18 18.5 +0.4
LBZ IAmb IAmb 22 18 32.8
comp=Z,50nm,0.9s
**KIRV Kirov** 72.27 327 LR LR 22 52 40.6
comp=Z,5µm,19.0s,baz=69,slow=38
**KIRV Kirov** 72.27 327 *c i*P P 22 18 20.6 +0.2
**CBB Campbell River** 73.16 42 IAMs_20 IAMs_20 22 44 34.6
comp=Z,2µm,21.0s
**OZB Mount Ozzard** 73.39 43 IAMs_20 IAMs_20 22 43 57.6
comp=Z,2µm,21.0s
**HOPEN Hopen** 73.57 348 *e*P P 22 18 28.6 +0.7
HOPEN IAmb IAmb 22 18 31.8
comp=Z,138nm,1.1s
HOPEN *e*S SKiKP 22 27 60.0 +3.5
HOPEN IAMs_20 IAMs_20 22 53 55.1
comp=Z,3µm,17.5s
**NGCH Negor - Chabah** 73.66 291 P P 22 18 30.6 +1.3

NGCH S **S** **22 28 01.9 +3.1**
**SPA0 Spitsbergen Ar 74.10 350** *e*P **P** **22 18 32.3 +1.3**
SPA0 *e*S **S** **22 28 04.2 +2.0**
SPA0 IAMs_20 IAMs_20 22 54 20.6
comp=Z,2µm,17.3s
**SPITS Spitsbergen Ar 74.10 350** P **P** **22 18 32.3 +1.3**
comp=Z,6.6nm,0.7s,baz=81,slow=7.7,SNR=7.4
SPITS LR LR 22 53 38.8
comp=Z,1µm,18.2s,baz=8.0,slow=38
comp=Z,6.6nm,0.7s
**KBS Kingsbay 74.25 351** IAMs_20 IAMs_20 22 53 39.2
comp=Z,1µm,19.0s
**KBS Kingsbay 74.25 351** *e*P **P** **22 18 32.8 +1.0**
KBS IAmb IAmb 22 18 36.2
comp=Z,94nm,1.6s
KBS *e*S **S** **22 28 06.9 +3.1**
KBS IAMs_20 IAMs_20 22 54 34.1
comp=Z,2µm,16.2s
**KBS Kingsbay 74.25 351**⇑ *e*P **P** **22 18 32.6 +0.8**
KBS pmax pmax
comp=Z,16nm,0.9s
KBS MLR MLR
comp=Z,1µm,16.0s
**KBS Kingsbay 74.25 351** *i* P **P** **22 18 32.7 +0.8**
**CLRS Cowichan Lake 74.29 43** P **P** **22 18 34.1 +1.6**
CLRS IAMs_20 IAMs_20 22 44 27.5
comp=Z,2µm,21.0s
**NOR Nord 74.63 357** *i* P **P** **22 18 35.0 +1.0**
NOR IAmb IAmb 22 19 12.8
comp=Z,79nm,1.6s
**PGC Sidney 74.77 43** P **P** **22 18 35.5 +0.2**
PGC IAMs_20 IAMs_20 22 44 19.2
comp=Z,2µm,22.0s
**YKA Yellowknife Ar 74.81 28** P **P** **22 18 35.2 -0.1**
comp=Z,11nm,0.9s,baz=296,slow=5.8,SNR=20
YKA LR LR 22 50 35.5
comp=Z,2µm,21.3s,baz=298,slow=35
comp=Z,11nm,0.9s
**YKA Yellowknife Ar 74.81 28** *i* P **P** **22 18 36.0 +0.7**
YKA pmax pmax
comp=Z,8.0nm,0.7s
**YKAB2 New Yellowknif 74.83 28** P **P** **22 18 36.3 +0.9**
**NLWA Neilton Lookou 74.90 45** P **P** **22 18 36.8 +0.6**
**B04A Port Angeles 74.92 44** P **P** **22 18 37.1 +0.9**
**HSPB Hornsund (broa 75.01 349** *e*P **P** **22 18 37.9 +1.6**
HSPB *e*L L 22 54 03.9
comp=Z,2µm,19.1s
**HSPB Hornsund (broa 75.01 349** *e*P **P** **22 18 37.7 +1.5**
**WISH Wishkah 75.05 45** P **P** **22 18 37.8 +0.9**
WISH IAmb IAmb 22 18 40.7
comp=Z,98nm,1.4s
WISH IAMs_20 IAMs_20 22 47 07.6
comp=Z,2µm,20.0s
**BELG Belogornoye 75.11 321** LR LR 22 53 26.4
comp=Z,2µm,19.9s,baz=70,slow=37
**BELG Belogornoye 75.11 321** *c i* P **P** **22 18 37.2 0.0**
BELG pmax pmax
comp=Z,24nm,1.1s
BELG MLR MLR
comp=Z,366nm,19.0s
**LVZ Lovozero 75.20 338** P **P** **22 18 38.1 +0.5**
LVZ IAmb IAmb 22 18 46.6
comp=Z,55nm,1.1s
LVZ IAMs_20 IAMs_20 22 55 10.5
comp=Z,2µm,20.0s
**LVZ Lovozero 75.20 338** P **P** **22 18 38.1 +0.5**
LVZ pmax pmax
comp=Z,55nm,1.1s
LVZ MLR MLR
comp=Z,2µm,20.0s
**LVZ Lovozero 75.20 338** P **P** **22 18 38.2 +0.7**
comp=Z,47nm,1.1s
**RADR Rader Ridge 75.25 46** P **P** **22 18 39.1 +0.9**
RADR IAMs_20 IAMs_20 22 44 39.0
comp=Z,2µm,21.0s
**RES Resolute Bay 75.31 14** P **P** **22 18 37.9 0.0**
**RES Resolute Bay 75.31 14** P **P** **22 18 37.9 0.0**
RES pmax pmax
comp=Z,47nm,1.1s
**E03A Lebam 75.36 45** P **P** **22 18 39.9 +1.1**
E03A IAmb IAmb 22 18 58.3
comp=Z,70nm,1.1s
E03A IAMs_20 IAMs_20 22 44 21.0
comp=Z,2µm,22.0s
**GNW Green Mountain 75.51 44** P **P** **22 18 40.5 +0.9**
GNW IAmb IAmb 22 18 43.5
comp=Z,49nm,1.1s
**ADZR Andozero 75.52 334**⇓ *i* P **P** **22 18 40.2 +0.9**
ADZR pmax pmax
comp=Z,83nm,1.3s
**F03A Seaside 75.56 46** P **P** **22 18 41.1 +1.1**
F03A IAMs_20 IAMs_20 22 47 00.4
comp=Z,2µm,20.0s
**HEBO Mount Hebo 75.67 47** IAMs_20 IAMs_20 22 45 42.1
comp=Z,2µm,21.0s
**APA Apatity 75.77 338**⇓ *i* P **P** **22 18 39.6 -1.2**
APA *i* 22 18 52.0
APA *i* PPP PPP 22 23 24.0
APA *i* S **S** **22 28 19.0 -1.9**
APA *i* SSS SSS 22 36 32.0
APA pmax pmax
comp=Z,64nm,1.0s
**VADS Vadso 75.83 341** *e*P **P** **22 18 42.0 +0.9**
VADS IAmb IAmb 22 18 42.8
comp=Z,98nm,1.1s
VADS *e*S **S** **22 28 21.9 +0.3**
VADS IAMs_20 IAMs_20 22 56 26.0
comp=Z,3µm,18.0s
**F04D Rainier, OR 75.88 46** IAMs_20 IAMs_20 22 44 47.6
comp=Z,2µm,22.0s
**BJO1 Bjornoya 75.97 347** *e*P **P** **22 18 44.1 +2.4**
BJO1 *e*S **S** **22 28 25.6 +2.7**
BJO1 IAMs_20 IAMs_20 22 55 12.6
comp=Z,3µm,16.6s
**G03D McMinnville, O 76.00 47** IAmb IAmb 22 19 06.0
comp=Z,157nm,1.8s
G03D IAMs_20 IAMs_20 22 46 01.8
comp=Z,3µm,21.0s
**COR Corvallis 76.17 47** IAMs_20 IAMs_20 22 49 26.5
comp=Z,2µm,19.0s
**D05A Enumclaw 76.17 44** IAmb IAmb 22 19 01.4
comp=Z,66nm,1.2s
D05A IAMs_20 IAMs_20 22 45 33.4
comp=Z,2µm,21.0s
**JLN Jalan Bani Buh 76.21 288** P **P** **22 18 44.9 +0.8**
JLN P **P** **22 18 44.9 +0.8**
**J01E Myrtle Point 76.22 49** IAmb IAmb 22 19 19.1
comp=Z,56nm,1.0s
J01E IAMs_20 IAMs_20 22 45 21.7
comp=Z,2µm,21.0s
**JASK Jask - Hormozg 76.29 292** P **P** **22 18 45.7 +1.2**
SNR=12
JASK S **S** **22 28 30.0 +1.9**
**F04A Amboy 76.31 46** P **P** **22 18 45.4 +1.1**
F04A IAmb IAmb 22 18 47.6
comp=Z,74nm,1.1s
F04A IAMs_20 IAMs_20 22 45 22.2
comp=Z,2µm,22.0s
**KBO Bosley Butte 76.32 50** IAMs_20 IAMs_20 22 43 28.6
comp=Z,2µm,22.0s
**WBK Wadi Bani Khal 76.43 289** P **P** **22 18 46.7 +1.3**
WBK P **P** **22 18 46.7 +1.3**
**I03D Drain, OR 76.44 48** IAmb IAmb 22 19 20.4
comp=Z,58nm,1.1s
**LON Longmire 76.44 45** IAMs_20 IAMs_20 22 45 19.4
comp=Z,2µm,22.0s
**BUCK Buck Mountain 76.52 48** P **P** **22 18 45.8 +0.2**
BUCK IAmb IAmb 22 18 49.5
comp=Z,99nm,1.1s
BUCK IAMs_20 IAMs_20 22 49 55.7
comp=Z,2µm,20.0s
**H04D Lebanon 76.58 47** P **P** **22 18 46.6 +0.8**
H04D IAmb IAmb 22 18 50.4
comp=Z,52nm,0.7s
**KSXB Camp Six Broad 76.69 50** P **P** **22 18 47.5 +0.8**
KSXB IAmb IAmb 22 19 02.2
comp=Z,52nm,1.2s
**DBO Dodson Butte 76.70 49** P **P** **22 18 47.3 +0.6**
DBO IAMs_20 IAMs_20 22 45 46.6
comp=Z,2µm,21.0s
**KEV Kevo 76.72 341** P **P** **22 18 46.5 +0.4**
KEV IAmb IAmb 22 18 55.6
comp=Z,94nm,1.2s
**KEV Kevo 76.72 341** P **P** **22 18 46.5 +0.4**
KEV pmax pmax
comp=Z,94nm,1.2s
KEV MLR MLR
comp=Z,5µm,19.0s
**L02F Cave Junction 76.81 50** P **P** **22 18 47.5 +0.3**
**KRPM Rodgers 76.82 51** IAMs_20 IAMs_20 22 46 18.8
comp=Z,2µm,21.0s
**BIDO Bidbid 76.85 290** P **P** **22 18 48.6 +0.8**
SNR=12
BIDO P **P** **22 18 48.6 +0.8**
SNR=12
**H04A Detroit Lake 76.89 47** P **P** **22 18 48.4 +0.7**
H04A IAmb IAmb 22 19 08.4
comp=Z,76nm,1.1s
H04A IAMs_20 IAMs_20 22 45 56.5
comp=Z,2µm,21.0s
**JCC Jacoby Creek,** **76.93 51** IAMs_20 IAMs_20 22 45 25.7
comp=Z,2µm,20.0s
**KMPM Mount Pierce 77.00 52** P **P** **22 18 49.2 +0.8**
KMPM IAmb IAmb 22 19 26.9
comp=Z,64nm,1.2s
**LTY Liberty 77.00 44** P **P** **22 18 48.3 0.0**
**HOOD Mount Hood Mea 77.03 46** P **P** **22 18 49.7 +1.1**
HOOD IAmb IAmb 22 18 51.9
comp=Z,87nm,1.2s
HOOD IAMs_20 IAMs_20 22 46 36.1
comp=Z,2µm,20.0s
**I04A Tendick Farm,** **77.05 48** P **P** **22 18 48.8 +0.3**
I04A IAmb IAmb 22 18 51.6
comp=Z,68nm,1.3s
I04A IAMs_20 IAMs_20 22 47 26.6
comp=Z,1µm,21.0s
**HUMO Hull Mountain 77.08 49** IAMs_20 IAMs_20 22 45 26.5
comp=Z,2µm,22.0s
**SMDO Samad 77.08 290** P **P** **22 18 49.9 +0.7**
SMDO P **P** **22 18 49.9 +0.7**
**KHMM Horse Mountain 77.12 51** P **P** **22 18 50.2 +1.0**
KHMM IAmb IAmb 22 19 10.1
comp=Z,60nm,1.2s
KHMM IAMs_20 IAMs_20 22 46 47.8
comp=Z,2µm,21.0s
**PPT Papeete 77.16 116** P **P** **22 18 50.4 +1.0**
comp=Z,9.5nm,0.3s,baz=81,slow=23,SNR=4.3
PPT LR LR 22 49 02.5
comp=Z,938nm,18.7s,baz=327,slow=33
comp=Z,9.5nm,0.3s
**PPT2 Papeete2 77.17 116** *e*PKP1 **P** **22 18 48.1 -1.4**
comp=Z,128nm,24.8s
**PPT2 Papeete2 77.17 116** *e*PP PP 22 21 34.4 -9.3
comp=Z,108nm,30.0s
PPT2 *e*S **S** **22 28 36.5 -1.3**
comp=Z,410nm,29.2s
PPT2 *e*SS **SS** **22 33 34.3 -1.9**
comp=Z,423nm,22.8s
PPT2 *e*LQ LQ 22 38 55.2
comp=Z,1µm,29.8s
PPT2 *e*LR LR 22 42 15.0
comp=Z,1µm,36.0s
PPT2 *e*LR LR 22 42 31.0
comp=Z,2µm,23.8s
**HAMF Hammerfest 77.17 343** *e*P **P** **22 18 49.0 +0.4**
HAMF IAmb IAmb 22 18 50.9
comp=Z,104nm,1.3s
HAMF *e*S **S** **22 28 36.7 +0.6**
HAMF *e*SS **SS** **22 33 37.8 +4.8**
HAMF IAMs_20 IAMs_20 22 55 35.3
comp=Z,2µm,19.2s
**PPTF Pamatai, Papee 77.18 116** P **P** **22 18 50.6 +1.0**
**PPTF Pamatai, Papee 77.18 116** P **P** **22 18 49.5 0.0**
PPTF IAmb IAmb 22 19 07.8
comp=Z,93nm,1.0s
**JMDO Jabal Madar 77.27 289** P **P** **22 18 50.9 +0.8**
JMDO P **P** **22 18 50.9 +0.8**
**G05A Wamic 77.28 46** P **P** **22 18 50.5 +0.7**
G05A IAmb IAmb 22 19 32.7
comp=Z,72nm,1.3s
G05A IAMs_20 IAMs_20 22 46 43.7
comp=Z,2µm,21.0s
**ARA0 ARCESS Array S 77.28 341** *e*P **P** **22 18 50.0 +0.7**
ARA0 *e*S **S** **22 28 37.7 +0.2**
**ARCES ARCESS Array B 77.28 341** P **P** **22 18 50.3 +1.0**
**ARCES ARCESS Array B 77.28 341** P **P** **22 18 49.6 +0.3**
comp=Z,63nm,1.1s,baz=72,slow=8.0,SNR=61
ARCES PP **PP** **22 21 42.8 -0.2**
comp=Z,5.8nm,1.0s,baz=28,slow=5.5,SNR=2.2
ARCES LR LR 22 57 35.8
comp=Z,4µm,19.4s,baz=72,slow=39
comp=Z,63nm,1.1s
**ARCES ARCESS Array B 77.28 341** P **P** **22 18 50.3 +1.0**
ARCES pmax pmax
comp=Z,136nm,1.3s
**KMRM Mail Ridge 77.36 52** **P** **22 18 50.7 +0.3**
KMRM IAmb IAmb 22 19 12.1
comp=Z,118nm,1.6s
**MXC Moxie City 77.48 45** P **P** **22 18 52.3 +1.4**
MXC IAMs_20 IAMs_20 22 46 35.8
comp=Z,2µm,21.0s
**HOQ Hoqain 77.54 290** P **P** **22 18 52.4 +0.8**
SNR=23
**YBH Yreka Blue Hor 77.55 50** P **P** **22 18 52.3 +0.9**
**YBH Yreka Blue Hor 77.55 50** LR LR 22 50 41.5
comp=Z,664nm,18.4s,baz=280,slow=34
**YBH Yreka Blue Hor 77.55 50** P **P** **22 18 52.3 +0.9**
YBH pmax pmax
comp=Z,38nm,1.2s
YBH MLR MLR
comp=Z,1µm,20.0s
**I05D Terrebonne, OR 77.58 47** P **P** **22 18 52.5 +1.0**
I05D IAmb IAmb 22 19 11.9
comp=Z,86nm,1.4s
I05D IAMs_20 IAMs_20 22 50 21.8
comp=Z,1µm,20.0s
**KCPM Cahto Peak 77.63 52** P **P** **22 18 52.5 +0.5**
KCPM IAmb IAmb 22 19 30.2
comp=Z,52nm,1.0s
KCPM IAMs_20 IAMs_20 22 48 05.5
comp=Z,2µm,20.0s
**SHME Shamm 77.68 293** *i* P **P** **22 18 52.7 +0.3**
SNR=11
**SHME Shamm 77.68 293** P **P** **22 18 53.9 +1.5**
SNR=13
SHME P **P** **22 18 53.9 +1.5**
SNR=13
**G06A Carlson Farm,** **77.73 46** P **P** **22 18 53.3 +1.0**
G06A IAmb IAmb 22 19 12.6
comp=Z,82nm,1.5s
G06A IAMs_20 IAMs_20 22 46 05.7
comp=Z,2µm,21.0s
**E07A Sunnyside 77.77 45** P **P** **22 18 53.5 +1.0**
E07A IAmb IAmb 22 19 07.9
comp=Z,71nm,1.4s
E07A IAMs_20 IAMs_20 22 47 26.5
comp=Z,2µm,20.0s
**MDH Madha 77.81 292** P **P** **22 18 52.7 -0.4**
**MHTO MHTO 77.87 288** P **P** **22 18 54.2 +0.8**
SNR=12
MHTO P **P** **22 18 54.2 +0.8**
SNR=12
**K04D Chiloquin, OR 77.90 49** IAmb IAmb 22 18 56.8
comp=Z,97nm,1.2s
K04D IAMs_20 IAMs_20 22 48 46.4
comp=Z,2µm,20.0s
**MASF Masafi 77.90 292** P **P** **22 18 55.3 +1.6**
SNR=9.7
MASF P **P** **22 18 55.3 +1.6**
SNR=9.7
MASF S **S** **22 28 46.2 +0.4**
MASF S **S** **22 28 46.2 +0.4**
**MSFE Esma-Masafi 77.91 292** *i* P **P** **22 18 54.4 +0.7**
SNR=7.8
**BSY Bisya 77.92 290** P **P** **22 18 54.5 +0.8**
SNR=6.9
BSY P **P** **22 18 54.5 +0.8**
SNR=6.9
**F07A Phinny Hill Vi 77.96 45** IAmb IAmb 22 19 12.8
comp=Z,118nm,1.9s
F07A IAMs_20 IAMs_20 22 45 43.7
comp=Z,2µm,22.0s
**SOHO SOHO 78.01 291** *i* P **P** **22 18 54.3 +0.1**
SNR=30
**SOHO SOHO 78.01 291** P **P** **22 18 54.9 +0.7**
SOHO P **P** **22 18 54.9 +0.7**
SOHO S **S** **22 28 48.1 +1.2**
SOHO S **S** **22 28 48.1 +1.2**
**UOSS Minazif 78.01 292** P **P** **22 18 54.8 +0.6**
UOSS IAmb IAmb 22 19 09.1
comp=Z,106nm,1.2s
**UOSS Minazif 78.01 292** *i* P **P** **22 18 53.9 -0.3**
SNR=13
**UOSS Minazif 78.01 292** P **P** **22 18 55.0 +0.8**
UOSS P **P** **22 18 55.0 +0.8**
UOSS S **S** **22 28 46.2 -0.7**
UOSS S **S** **22 28 46.2 -0.7**
**J05D Fort Rock, OR 78.02 48** IAmb IAmb 22 18 57.7
comp=Z,84nm,1.2s
J05D IAMs_20 IAMs_20 22 49 48.6
comp=Z,2µm,19.0s
**O02D Mt. Diablo Mer 78.03 51** P **P** **22 18 55.6 +1.4**
O02D IAmb IAmb 22 19 32.6
comp=Z,72nm,1.3s
**HATD Hatta, Dubai 78.11 292** *i* P **P** **22 18 55.2 +0.4**
SNR=14
**HATD Hatta, Dubai 78.11 292** P **P** **22 18 55.7 +0.9**
SNR=11
HATD P **P** **22 18 55.7 +0.9**
SNR=11
**D08A Wollman Farm,** **78.18 44** IAMs_20 IAMs_20 22 47 19.5
comp=Z,2µm,20.0s
**ASHO Ashiyiah 78.23 292** *i* P **P** **22 18 55.6 +0.2**
SNR=6.7
**ASHO Ashiyiah 78.23 292** P **P** **22 18 56.2 +0.8**
SNR=12
ASHO P **P** **22 18 56.2 +0.8**
SNR=12
ASHO S **S** **22 28 49.0 -0.2**
ASHO S **S** **22 28 49.0 -0.2**
**KTK1 Kautokeino 78.24 341** *e*P **P** **22 18 55.3 +0.6**
KTK1 IAmb IAmb 22 18 56.2
comp=Z,72nm,1.2s
KTK1 *e*S **S** **22 28 48.2 +0.4**
KTK1 IAMs_20 IAMs_20 22 55 33.0
comp=Z,2µm,18.4s
**HOPS Hopland Field 78.25 53** IAMs_20 IAMs_20 22 46 00.7
comp=Z,2µm,21.0s
**TULEG Thule 78.28 7** P **P** **22 18 56.1 +1.4**
TULEG IAmb IAmb 22 19 10.7
comp=Z,115nm,1.2s
**ARQ Araqi 78.30 290** P **P** **22 18 56.8 +0.9**
SNR=10
ARQ P **P** **22 18 56.8 +0.9**
SNR=10
**E08A Dider Farm, El 78.30 44** P **P** **22 18 56.2 +0.8**
**MAK Makhachkala 78.44 312** *e*P **P** **22 18 54.5 -1.7**
MAK *e* 22 21 49.6
MAK *e*PPP PPP 22 23 37.2
MAK *e*S **S** **22 28 48.2 -2.6**
MAK *e*SS **SS** **22 33 52.2 -1.2**
MAK pmax pmax
comp=Z,137nm,1.4s
MAK MLR MLR
comp=Z,4µm,18.0s
**NAZ Nazwa, Dubai 78.46 292** *i* P **P** **22 18 57.2 +0.6**
SNR=5.9
**NAZ Nazwa, Dubai 78.46 292** P **P** **22 18 57.3 +0.6**
SNR=13
NAZ P **P** **22 18 57.3 +0.6**
SNR=13
NAZ S **S** **22 28 51.7 0.0**
NAZ S **S** **22 28 51.7 0.0**
**GDXM Geysers 78.51 53** P **P** **22 18 57.8 +1.0**
**FAQ Al Faqa, Dubai 78.60 292** *i* P **P** **22 18 57.5 0.0**
SNR=9.8
**FAQ Al Faqa, Dubai 78.60 292** P **P** **22 18 57.9 +0.4**
SNR=8.3
FAQ P **P** **22 18 57.9 +0.4**
SNR=8.3
**DQM DQM 78.62 287** P **P** **22 18 58.3 +0.7**
DQM P **P** **22 18 58.3 +0.7**
**ALNE Al Ain 78.71 291** *i* P **P** **22 18 58.4 +0.3**
SNR=23
**ALNE Al Ain 78.71 291** P **P** **22 18 58.9 +0.8**
SNR=16
ALNE P **P** **22 18 58.9 +0.8**
SNR=16
**HATC Hat Creek Radi 78.75 50** P **P** **22 18 59.4 +1.3**
HATC IAmb IAmb 22 19 24.4
comp=Z,110nm,1.2s
HATC IAMs_20 IAMs_20 22 47 33.3
comp=Z,2µm,21.0s
**JOF Joensuu 78.77 334** *e*P **P** **22 18 57.9 +0.2**
**NEW Newport 78.85 42** LR LR 22 47 43.6
comp=Z,1µm,20.8s,baz=302,slow=31
**NEW Newport 78.85 42** P **P** **22 18 59.1 +0.6**
baz=293,SNR=21
NEW S **S** **22 28 53.6 -1.6**
baz=293
**ASUD Al Ashush, Dub 78.87 292** *i* P **P** **22 18 59.3 +0.4**
SNR=7.8
**ASUD Al Ashush, Dub 78.87 292** P **P** **22 18 59.7 +0.8**
SNR=6.9
ASUD P **P** **22 18 59.7 +0.8**
SNR=6.9
**E09A Wood Farm, Sta 78.88 44** P **P** **22 18 59.3 +0.7**
**NEEM North Greenlan 78.92 3** *i* P **P** **22 18 58.6 0.0**
NEEM IAmb IAmb 22 19 14.6
comp=Z,109nm,1.2s
**VRH Novokhopyorsk 78.95 321** *e*P **P** **22 18 58.7 -0.2**
VRH pmax pmax
comp=Z,40nm,0.9s
**LKRN Lenkeran, Azer 79.07 307** P **P** **22 18 59.0 -0.8**
**TRO Tromso 79.08 343** *e*P **P** **22 18 59.6 +0.5**
TRO IAmb IAmb 22 19 01.5
comp=Z,101nm,1.3s
TRO *e*S **S** **22 28 56.6 0.0**
TRO IAMs_20 IAMs_20 22 52 59.6
comp=Z,988nm,18.9s
**AJN Ajban 79.18 292** *i* P **P** **22 19 00.5 -0.2**
SNR=7.6
**AJN Ajban 79.18 292** P **P** **22 19 01.3 +0.7**
SNR=11
AJN P **P** **22 19 01.3 +0.7**
SNR=11
**MOS Moscow 79.27 326** *e*P **P** **22 19 00.0 -0.5**
MOS *e* 22 21 58.0
MOS *e*S **S** **22 28 55.4 -3.8**
MOS pmax pmax
comp=Z,200nm,1.5s
MOS pmax pmax
comp=Z,75nm,1.3s
MOS MLR MLR
comp=Z,4µm,17.0s
**SEKA Sheki 79.29 310** P **P** **22 18 59.8 -1.2**
**DAG Danmarks Havn 79.36 356** *i* P **P** **22 19 01.0 +0.3**
DAG IAmb IAmb 22 19 15.8
comp=Z,167nm,1.7s
**MNGR Mingechevir, A 79.53 310** P **P** **22 19 01.5 -0.7**
**UMZA Um Al Zommool 79.69 290** P **P** **22 19 04.0 +0.6**
**VALR Valaam 79.73 333** *de*P **P** **22 19 03.2 +0.3**
VALR pmax pmax
comp=Z,77nm,1.1s
**J08A Circle Bar Ran 79.87 47** IAmb IAmb 22 19 19.4
comp=Z,54nm,1.2s
**LPSR Galich'ya Gora 79.95 323** *e*P **P** **22 19 03.7 -0.6**
LPSR pmax pmax
comp=Z,70nm,1.2s
**BMO Blue Mountains 80.06 45** IAMs_20 IAMs_20 22 47 20.7
comp=Z,1µm,21.0s
**OBN Obninsk 80.09 326** P **P** **22 19 05.4 +0.4**
**OBN Obninsk 80.09 326** LR LR 22 57 25.9
comp=Z,5µm,19.6s,baz=51,slow=38
**OBN Obninsk 80.09 326** *c i* P **P** **22 19 04.6 -0.4**
OBN *e**PP **pP** **22 19 09.3 -2.1**
OBN *e* 22 22 06.7
OBN *e*PPP PPP 22 23 55.1
OBN pmax pmax
comp=Z,35nm,1.1s
OBN MLR MLR
comp=Z,5µm,20.0s
**OBN Obninsk 80.09 326** P **P** **22 19 04.8 -0.2**
comp=Z,48nm,1.3s,comp=Z,778nm
**WVOR Wild Horse Val 80.11 48** IAMs_20 IAMs_20 22 50 19.2
comp=Z,2µm,20.0s
**GANJ Ganja 80.12 310** P **P** **22 19 04.6 -0.9**
**TBI Tubuai 80.16 121** *e*P **P** **22 19 09.1 +3.3**
comp=Z,482nm,25.8s
TBI *e*S **S** **22 29 06.5 -3.0**
comp=Z,2µm,27.2s
TBI *e*SS **SS** **22 34 18.7 -2.1**
comp=Z,1µm,25.2s
TBI *e*LQ LQ 22 40 18.2
comp=Z,9µm,31.2s
**VORR Voronezh 80.19 322** *e*P **P** **22 19 04.2 -1.4**
VORR pmax pmax
comp=Z,50nm,1.0s

SAO **San Andreas Ge** 80.25 54 P **P** 22 19 07.3 +1.0
SAO **San Andreas Ge** 80.25 54 P **P** 22 19 07.3 +1.0
SAO pmax pmax
comp=Z,40nm,1.3s
SAO MLR MLR
comp=Z,4µm,20.0s
**EMB Emerald Bay** 80.41 52 P **P** 22 19 08.0 +0.6
**VSR Storozhevoye** 80.41 322 eP **P** 22 19 06.3 -0.5
VSR pmax pmax
comp=Z,70nm,1.1s
**MZWR Madinat Zayed** 80.41 292 P **P** 22 19 07.9 +0.6
MZWR P **P** 22 19 07.9 +0.6
**VORD Divnogorie** 80.44 322 eP **P** 22 19 06.6 -0.4
VORD pmax pmax
comp=Z,50nm,1.2s
**CMB Columbia Colle** 80.56 53 IAmb IAmb 22 19 28.7
comp=Z,49nm,1.1s
**GOF Gofitskoye** 80.61 315c iP **P** 22 19 08.2 +0.2
**BBGB Big Mountain B** 80.62 54 P **P** 22 19 09.1 +0.7
BBGB IAmb IAmb 22 19 29.0
comp=Z,116nm,1.2s
**PAHR Pah Rah Range** 80.64 51 P **P** 22 19 08.9 +0.5
**PNTR Pine Nut** 80.72 51 P **P** 22 19 09.7 +0.6
**NCK Nalchik** 80.87 313ceP **P** 22 19 09.7 +0.2
NCK pmax pmax
comp=Z,19nm,1.0s
NCK MLR MLR
comp=Z,2µm,19.0s
**PMPB Monarch Peak** 80.94 55 P **P** 22 19 11.1 +1.1
**YERR Yerington** 81.02 51 P **P** 22 19 11.7 +1.1
YERR IAmb IAmb 22 19 13.0
comp=Z,74nm,1.4s
**MZR Muzera** 81.03 291 i P **P** 22 19 10.8 +0.1
SNR=28
**MZR Muzera** 81.03 291 P **P** 22 19 11.1 +0.4
SNR=22
MZR P **P** 22 19 11.1 +0.4
SNR=22
**GHWR Ruwais** 81.19 292 P **P** 22 19 12.2 +0.7
GHWR P **P** 22 19 12.2 +0.7
**STEI Steigen** 81.21 342 eP **P** 22 19 11.1 +0.4
**KBZ Khabaz** 81.24 314 P **P** 22 19 12.1 +0.7
comp=Z,31nm,0.9s,baz=101,slow=2.4,SNR=60
KBZ S **S** 22 29 18.1 -2.3
comp=Z,0.8nm,0.6s,baz=74,slow=22,SNR=5.9
KBZ LR LR 22 58 41.6
comp=Z,3µm,18.8s,baz=70,slow=38
comp=Z,31nm,0.9s
**KBZ Khabaz** 81.24 314c iP **P** 22 19 11.9 +0.5
KBZ pmax pmax
comp=Z,43nm,1.0s
KBZ MLR MLR
comp=Z,3µm,18.0s
**KULLO Kullorsuaq** 81.26 5 i P **P** 22 19 10.0 -0.9
KULLO IAmb IAmb 22 19 43.7
comp=Z,99nm,1.4s
**KVAR Kislovodsk Arr** 81.28 314 LR LR 22 58 19.1
comp=Z,2µm,18.6s,baz=266,slow=38
**KIV Kislovodsk** 81.29 314 P **P** 22 19 12.5 +0.7
KIV IAmb IAmb 22 19 38.4
comp=Z,89nm,1.0s
**KIV Kislovodsk** 81.29 314 i P **P** 22 19 12.3 +0.5
SNR=17
**KIV Kislovodsk** 81.29 314 P **P** 22 19 13.1 +1.3
KIV P **P** 22 19 13.1 +1.3
KIV S **S** 22 29 20.4 -0.7
KIV S **S** 22 29 20.4 -0.7
**KIV Kislovodsk** 81.29 314 ⇓P **P** 22 19 13.2 +1.4
**KIV Kislovodsk** 81.29 314 eP **P** 22 19 12.1 +0.3
KIV eS **S** 22 29 20.1 -1.0
KIV eSS **SS** 22 34 40.1 +3.8
KIV pmax pmax
comp=Z,42nm,1.0s
KIV pmax pmax
comp=Z,84nm,3.8s
KIV MLR MLR
comp=Z,2µm,19.0s
**KIV Kislovodsk** 81.29 314 P **P** 22 19 12.1 +0.3
comp=Z,82nm,1.2s,comp=Z,1µm
**TAOE Nuku Hiva Isla** 81.30 104 eP **P** 22 19 09.2 -3.1
comp=Z,127nm,25.2s
**TAOE Nuku Hiva Isla** 81.30 104 eS **S** 22 29 18.3 -3.8
comp=Z,370nm,29.1s
TAOE eSS SS 22 34 27.4 -11
comp=Z,221nm,27.6s
TAOE eLR LR 22 44 16.1
comp=Z,2µm,26.2s
**SHA1 Shidzhatmaz** 81.40 314ceP **P** 22 19 12.8 +0.2
**MSO Missoula** 81.41 43 IAMs_20 IAMs_20 22 49 41.0
comp=Z,2µm,20.0s
**MSO Missoula** 81.41 43 P **P** 22 19 11.9 -0.5
baz=295,SNR=10
MSO S **S** 22 29 20.8 -1.4
baz=295
**GNI Garni** 81.42 310 P **P** 22 19 13.0 +0.3
GNI IAmb IAmb 22 19 27.8
comp=Z,103nm,1.4s
**GNI Garni** 81.42 310 P **P** 22 19 13.6 +1.0
**GNI Garni** 81.42 310 LR LR 22 59 49.8
comp=Z,793nm,18.0s,baz=76,slow=39
**GNI Garni** 81.42 310 P **P** 22 19 13.7 +1.0
GNI P **P** 22 19 13.7 +1.0
GNI S **S** 22 29 23.6 +0.8
GNI S **S** 22 29 23.6 +0.8
**GNI Garni** 81.42 310 P **P** 22 19 13.0 +0.3
GNI pmax pmax
comp=Z,103nm,1.4s
GNI MLR MLR
comp=Z,1µm,19.0s
**LOF Lofoten** 81.53 343 eP **P** 22 19 14.2 +1.7
**FAUS Fauske** 81.57 342 eP **P** 22 19 12.7 0.0
FAUS IAmb IAmb 22 19 15.0
comp=Z,66nm,1.0s
FAUS eS **S** 22 29 21.7 -1.2
**MFID Camas Ranch** 81.62 46 P **P** 22 19 13.7 +0.2
MFID IAmb IAmb 22 19 16.7
comp=Z,58nm,1.1s
MFID IAMs_20 IAMs_20 22 54 34.8
comp=Z,1µm,19.0s
**FIA1 FINESS Array S** 81.64 334 IAmb IAmb 22 19 35.8
comp=Z,80nm,0.9s
**FINES FINESS Array B** 81.64 334 P **P** 22 19 12.9 -0.2
**FINES FINESS Array B** 81.64 334 P **P** 22 19 12.7 -0.4
comp=Z,11nm,0.6s,baz=66,slow=4.9,SNR=63
FINES PP **PP** 22 22 19.0 -0.4
comp=Z,14nm,1.1s,baz=61,slow=12,SNR=3.5
FINES LR LR 22 58 55.9
comp=Z,870nm,19.1s,baz=52,slow=38
comp=Z,11nm,0.6s
**FINES FINESS Array B** 81.64 334 i P **P** 22 19 12.6 -0.5
FINES pmax pmax
comp=Z,11nm,0.6s
**MDPB Devils Postpil** 81.67 53 P **P** 22 19 15.0 +0.8
**KEF Keuruu** 81.69 335 eP **P** 22 19 12.9 -0.5
**DMTO DMTO** 81.71 286 P **P** 22 19 15.2 +0.9
**OMMB Old Mammoth Mi** 81.73 53 P **P** 22 19 15.3 +0.8
**KVN Kaiserville** 81.81 51 IAmb IAmb 22 19 17.8
comp=Z,55nm,1.3s
**LHV Little Huntoon** 81.84 52 P **P** 22 19 16.0 +1.4
LHV IAmb IAmb 22 19 35.4
comp=Z,71nm,1.3s
**NVAR Mina Array Bea** 81.91 52 P **P** 22 19 15.8 +0.4
**NVAR Mina Array Bea** 81.91 52 P **P** 22 19 16.1 +0.7
comp=Z,15nm,0.9s,baz=270,slow=4.6,SNR=80
NVAR PP **PP** 22 22 23.6 +0.9
comp=Z,0.1nm,0.3s,baz=283,slow=8.2,SNR=2.8
NVAR PKKPbc **PKKPbc** 22 37 46.6 +1.0
comp=Z,0.5nm,0.7s,baz=132,slow=3.2,SNR=3.9
NVAR LR LR 22 48 48.7
comp=Z,2µm,21.5s,baz=284,slow=31
comp=Z,15nm,0.9s
**ERBR Yeremizino-Bor** 81.98 316 eP **P** 22 19 14.6 -0.7
ERBR eS **S** 22 29 25.3 -2.7
ERBR pmax pmax
comp=Z,160nm,1.3s
ERBR MLR MLR
comp=Z,2µm,18.0s
**VAF Ylistaro** 82.00 337 eP **P** 22 19 15.2 +0.2
**NV11 Mina Array Sit** 82.02 52 P **P** 22 19 16.3 +0.4
**DOK Doka** 82.09 287 P **P** 22 19 17.2 +0.9
DOK P **P** 22 19 17.2 +0.9
**SHMA Al-Shehemyia** 82.10 295 P **P** 22 19 16.9 +0.7
SNR=8.2
**SLWR Sila** 82.16 293 P **P** 22 19 17.3 +0.7
SLWR P **P** 22 19 17.3 +0.7

**LABN Labinsk** 82.28 315 eP **P** 22 19 17.0 +0.1
LABN eS **S** 22 29 26.9 -4.3
LABN pmax pmax
comp=Z,60nm,1.4s
LABN MLR MLR
comp=Z,3µm,17.0s
**TRNA Turayna** 82.31 294 P **P** 22 19 17.8 +0.4
SNR=9.6
**KARS Kars** 82.39 311 P **P** 22 19 18.5 +0.8
**KARS Kars** 82.39 311 P **P** 22 19 18.5 +0.8
KARS pmax pmax
comp=Z,1µm,2.0s
**SAKB Bahrain** 82.41 295 P **P** 22 19 18.4 +0.5
**RBK Rabkut** 82.44 286 P **P** 22 19 19.1 +0.9
RBK P **P** 22 19 19.1 +0.9
**BCW Bitter Crk WRg** 82.47 55 P **P** 22 19 18.5 +0.3
BCW IAmb IAmb 22 19 41.4
comp=Z,55nm,1.1s
**HLID Hailey** 82.49 46 IAMs_20 IAMs_20 22 51 19.9
comp=Z,1µm,20.0s
**HLID Hailey** 82.49 46 P **P** 22 19 19.0 +0.8
baz=295
HLID S **S** 22 29 31.7 -1.9
baz=295
**Q09A Carvers** 82.56 51 **P** 22 19 19.1 +0.4
Q09A IAmb IAmb 22 21 13.9
comp=Z,41nm,0.8s
**DSP Deep Springs** 82.58 53 IAmb IAmb 22 19 21.4
comp=Z,58nm,1.5s
**SMRA Abu-Samra** 82.64 294 P **P** 22 19 19.5 +0.4
SNR=13
**MOR8 Moi Rana** 82.66 341 eP **P** 22 19 16.6 -1.8
**WHFO Wadi Hawf** 82.67 286 P **P** 22 19 19.9 +0.5
WHFO P **P** 22 19 19.9 +0.5
**HRY Holter Researc** 82.76 42 P **P** 22 19 21.0 +1.5
**LRM Limekiln Ridge** 82.77 43 P **P** 22 19 20.8 +1.0
**ARBE Arbavere** 82.82 333 eP **P** 22 19 19.8 +0.5
**TPH Tonopah** 82.84 52 P **P** 22 19 20.7 +0.5
**TPH Tonopah** 82.84 52 P **P** 22 19 20.7 +0.5
TPH pmax pmax
comp=Z,176nm,1.3s
**DLMT Dillon** 82.88 44 IAmb IAmb 22 19 40.8
comp=Z,52nm,1.4s
DLMT IAMs_20 IAMs_20 22 51 37.2
comp=Z,2µm,20.0s
**STOK Stokkvaagen** 82.95 342 eP **P** 22 19 21.5 +1.6
STOK IAmb IAmb 22 19 28.1
comp=Z,129nm,1.6s
STOK eS **S** 22 29 36.4 -0.7
**MCMT McKenzie Canyo** 82.96 44 P **P** 22 19 21.9 +1.1
**MEF Metsahovi** 83.02 334 eP **P** 22 19 20.3 -0.1
**BCA Borcka** 83.05 312 ⇓P **P** 22 19 21.8 +0.9
**VSU Vasula** 83.05 332deP **P** 22 19 20.8 +0.2
VSU pmax pmax
comp=Z,42nm,1.0s
VSU MLR MLR
comp=Z,1µm,17.0s
**GRAC Grapevine Rang** 83.17 53 P **P** 22 19 23.5 +1.8
GRAC IAmb IAmb 22 19 46.6
comp=Z,69nm,1.4s
**ABTO Aybut** 83.30 286 P **P** 22 19 23.4 +0.7
ABTO P **P** 22 19 23.4 +0.7
**GEVA Gevas** 83.36 309 P **P** 22 19 23.7 +0.8
GEVA IAmb IAmb 22 19 40.3
comp=Z,111nm,1.5s
**BOZ Bozeman (W)** 83.39 43 IAmb IAmb 22 19 51.7
comp=Z,56nm,1.8s
BOZ IAMs_20 IAMs_20 22 51 04.5
comp=Z,1µm,20.0s
**BOZ Bozeman (W)** 83.39 43 P **P** 22 19 23.5 +0.7
baz=297,SNR=17
BOZ S **S** 22 29 40.7 -2.0
baz=297
**SOC Sochi** 83.40 315 eP **P** 22 19 22.2 -0.5
SOC e 22 22 31.9
SOC eS **S** 22 29 44.0 +1.5
SOC eSS **SS** 22 35 06.3 -1.1
SOC eSSS SSS 22 38 39.4
SOC pmax pmax
comp=Z,66nm,1.1s
SOC MLR MLR
comp=Z,2µm,19.0s
**EGMT Eagleton** 83.42 40 IAmb IAmb 22 19 54.6
comp=Z,38nm,1.2s
**EGMT Eagleton** 83.42 40 P **P** 22 19 23.1 +0.2
baz=298
EGMT S **S** 22 29 41.4 -1.3
baz=298
**CCAC Calif City Air** 83.44 55 P **P** 22 19 23.8 +0.6
**KBD Kabd** 83.51 299 P **P** 22 19 24.1 +0.5
**RAF Rauma** 83.57 335 eP **P** 22 19 23.8 +0.6
**PASC Pasadena Art C** 83.71 56 P **P** 22 19 25.0 +0.5
PASC IAmb IAmb 22 19 44.9
comp=Z,45nm,1.2s
**JMIC Jan Mayen** 83.74 351 eP **P** 22 19 25.1 +1.3
JMIC eSKSac **SKSac** 22 29 46.9 +2.0
**JMIC Jan Mayen** 83.74 351 LR LR 22 59 25.1
comp=Z,259nm,18.1s,baz=36,slow=38
**JMI Jan Mayen** 83.82 351 eP **P** 22 19 26.0 +1.7
JMI eSKSac **S** 22 29 47.9 +2.2
**QLMT Earthquake Lak** 83.86 44 P **P** 22 19 26.5 +1.2
**R11B Troy Canyon, C** 83.89 51 IAmb IAmb 22 19 28.0
comp=Z,36nm,1.3s
R11B IAMs_20 IAMs_20 22 50 34.5
comp=Z,2µm,21.0s
**R11B Troy Canyon, C** 83.89 51 P **P** 22 19 25.9 +0.3
baz=295
R11B S **SKSac** 22 29 46.5 -1.0
baz=295
**GURO Gurymak-BITLI** 83.99 309 IAmb IAmb 22 19 43.8
comp=Z,84nm,1.3s
**TPNV Topopah Spring** 84.00 52 P **P** 22 19 26.7 +0.5
baz=295
TPNV S **SKSac** 22 29 48.2 -0.1
baz=295
**YHL Hebgen Lake** 84.01 44 IAmb IAmb 22 19 29.2
comp=Z,62nm,1.3s
**GWY Greenwater Val** 84.02 53 IAmb IAmb 22 20 09.9
comp=Z,70nm,1.2s
**Q12A Willow Creek R** 84.14 50 IAmb IAmb 22 20 01.5
comp=Z,59nm,1.1s
**MTSE Matsula** 84.15 333 eP **P** 22 19 26.0 -0.2
**SUMG Summit** 84.18 1 IAmb IAmb 22 19 41.6
comp=Z,36nm,1.1s
**SUMG Summit** 84.18 1 i P **P** 22 19 26.5 -0.1
SUMG IAmb IAmb 22 19 41.3
comp=Z,36nm,1.1s
**FFC Flin Flon** 84.23 32 P **P** 22 19 27.7 +1.0
FFC IAmb IAmb 22 19 29.8
comp=Z,71nm,1.1s
**FFC Flin Flon** 84.23 32 P **P** 22 19 27.7 +1.0
FFC pmax pmax
comp=Z,71nm,1.1s
**GSC Goldstone, Bar** 84.28 54 IAmb IAmb 22 19 29.7
comp=Z,58nm,1.4s
**ANN Anapa** 84.32 317 eP **P** 22 19 26.1 -1.2
ANN e*SP **PcP** 22 19 29.9 -1.1
ANN eS **SKSac** 22 29 48.8 -0.8
ANN pmax pmax
comp=Z,67nm,1.4s
ANN MLR MLR
comp=Z,1µm,17.0s
ANN MLR MLR
comp=N,1µm,15.0s
**HVU Hansel Valley** 84.35 47 IAmb IAmb 22 19 30.5
comp=Z,57nm,1.4s
**ELS Elsinore Mount** 84.50 56 IAmb IAmb 22 19 30.6
comp=Z,42nm,1.4s
**SPR3 Spring Creek 3** 84.50 50 IAmb IAmb 22 20 06.7
comp=Z,67nm,1.9s
**YPP Pitchstone Pla** 84.51 44 IAmb IAmb 22 19 41.1
comp=Z,53nm,1.5s
**NSS Namsos** 84.56 341 eP **P** 22 19 27.7 -0.5
NSS eSKSac **S** 22 29 53.9 +0.6
**H17A Grant Village** 84.60 44 IAmb IAmb 22 19 53.9
comp=Z,79nm,1.4s
**H17A Grant Village** 84.60 44 P **P** 22 19 31.7 +2.5
baz=298,SNR=17
**FLWY Flagg Ranch** 84.67 44 IAmb IAmb 22 19 45.4
comp=Z,57nm,1.2s
**MNK Minsk** 84.74 328 i P **P** 22 19 29.1 -0.2
MNK i 22 19 32.5
MNK 22 22 45.3
MNK i PPP PPP 22 24 38.1
MNK i S **SKSac** 22 29 52.7 +0.8

MNK i SS **SS** 22 35 31.5 +5.0
MNK pmax pmax
comp=N,8.0nm,0.7s
MNK pmax pmax
comp=Z,38nm,0.9s
MNK pmax pmax
comp=E,10.0nm,0.7s
MNK MLR MLR
comp=N,3µm,18.0s
MNK MLR MLR
comp=Z,4µm,18.0s
MNK MLR MLR
comp=E,2µm,18.0s
**SPUT South Promonto** 84.78 47 IAmb IAmb 22 19 45.1
comp=Z,46nm,1.3s
**IZAR Zarasai** 84.81 330 eP **P** 22 19 30.5 +0.8
**SNOW Snow King Moun** 84.92 45 IAmb IAmb 22 20 07.8
comp=Z,122nm,2.0s
**ISAL Salakas** 84.97 330 eP **P** 22 19 31.1 +0.7
**AHID Auburn Hatcher** 85.02 45 IAMs_20 IAMs_20 22 50 33.7
comp=Z,1µm,21.0s
**DUG Dugway, Tooele** 85.03 48 IAmb IAmb 22 19 33.5
comp=Z,36nm,1.1s
**DUG Dugway, Tooele** 85.03 48 P **P** 22 19 31.9 +0.6
baz=297
DUG S **SKSac** 22 29 58.5 +3.7
baz=297
**IIGN Ignalina** 85.06 329 eP **P** 22 19 29.8 -1.0
**109C Camp Elliot, M** 85.06 56 IAMs_20 IAMs_20 22 55 56.7
comp=Z,2µm,18.0s
**109C Camp Elliot, M** 85.06 56 P **P** 22 19 31.6 +0.3
baz=295
**RLMT Red Lodge** 85.08 43 IAmb IAmb 22 19 34.6
comp=Z,43nm,1.1s
RLMT IAMs_20 IAMs_20 22 57 14.3
comp=Z,1µm,21.0s
**RLMT Red Lodge** 85.08 43 P **P** 22 19 33.0 +1.5
baz=298,SNR=27
**HWUT Hardware Ranch** 85.24 47 IAmb IAmb 22 19 35.3
comp=Z,38nm,1.1s
HWUT IAMs_20 IAMs_20 22 51 27.7
comp=Z,2µm,21.0s
**PFO Pinyon Flats O** 85.25 56 P **P** 22 19 32.3 -0.2
PFO IAmb IAmb 22 20 12.3
comp=Z,49nm,1.1s
**PFO Pinyon Flats O** 85.25 56 LR LR 22 49 48.9
comp=Z,2µm,21.9s,baz=312,slow=30
**PFO Pinyon Flats O** 85.25 56 P **P** 22 19 32.6 +0.1
baz=295,SNR=13
PFO S **SKSac** 22 29 59.9 +3.6
baz=295
**PFO Pinyon Flats O** 85.25 56deP **P** 22 19 33.1 +0.6
PFO pmax pmax
comp=Z,64nm,1.3s
PFO MLR MLR
comp=Z,2µm,19.0s
**TPFO Pinon Flats** 85.25 56 P **P** 22 19 32.6 +0.1
baz=295,SNR=15
TPFO S **SKSac** 22 30 00.1 +3.8
baz=295
**SLIT Slitere, Latvi** 85.45 332 eP **P** 22 19 32.3 -0.5
**CTU Camp Tracy** 85.53 47 IAmb IAmb 22 19 41.4
comp=Z,44nm,1.3s
**MONP2 Monument Peak** 85.58 56 P **P** 22 19 34.4 +0.2
baz=295,SNR=12
MONP2 S **S** 22 30 04.0 -1.1
baz=295
**CBX Cerro Bola** 85.64 57 IAmb IAmb 22 19 36.3
comp=Z,41nm,1.3s
**JLU Jordanelle** 85.78 47 IAmb IAmb 22 19 37.4
comp=Z,86nm,1.5s
**TCRU Three Creeks R** 86.00 50 IAmb IAmb 22 19 43.3
comp=Z,63nm,1.5s
**PABE Paberze** 86.01 330 IAmb IAmb 22 19 44.4
comp=Z,38nm,0.7s
**PABE Paberze** 86.01 330 eP **P** 22 19 35.6 0.0
**TBLU Trondheim** 86.01 341 eP **P** 22 19 34.8 -0.6
TBLU eSKSac **SKSac** 22 30 00.7 +1.1
**BW06 Boulder Array** 86.02 45 P **P** 22 19 36.0 -0.3
baz=298,SNR=10
BW06 S **SKSac** 22 30 06.0 +4.9
baz=298
**PDAR Pinedale Array** 86.02 45 P **P** 22 19 36.2 -0.1
**PDAR Pinedale Array** 86.02 45 P **P** 22 19 36.0 -0.3
comp=Z,3.4nm,0.7s,baz=259,slow=2.4,SNR=22
PDAR PP **PP** 22 22 56.8 +0.8
comp=Z,0.2nm,0.3s,baz=287,slow=6.2,SNR=1.9
PDAR PKKPbc **PKKPbc** 22 37 35.8 -0.5
comp=Z,0.2nm,0.3s,baz=89,slow=4.6,SNR=3.9
PDAR LR LR 22 52 32.8
comp=Z,2µm,20.8s,baz=302,slow=32
comp=Z,3.4nm,0.7s
**YUH Yuha Desert** 86.06 56 IAmb IAmb 22 19 38.3
comp=Z,49nm,1.4s
**AKASG Malin Array Be** 86.15 324 P **P** 22 19 35.8 -0.6
**AKASG Malin Array Be** 86.15 324 P **P** 22 19 34.5 -1.8
comp=Z,1.2nm,0.4s,baz=47,slow=5.4,SNR=21
AKASG LR LR 23 00 38.3
comp=Z,3µm,20.8s,baz=50,slow=37
comp=Z,1.2nm,0.4s
**AKASG Malin Array Be** 86.15 324 i P **P** 22 19 35.2 -1.2
AKASG pmax pmax
comp=Z,3.0nm,0.4s
**AKBB Malin Array Si** 86.15 324 IAmb IAmb 22 19 52.3
comp=Z,39nm,1.1s
**AKBB Malin Array Si** 86.15 324deP **P** 22 19 35.9 -0.5
**LCMT Little Creek M** 86.15 51 IAmb IAmb 22 19 39.4
comp=Z,35nm,1.2s
**KIEV Kiev** 86.16 324 P **P** 22 19 35.4 -1.1
KIEV IAmb IAmb 22 19 52.3
comp=Z,35nm,1.1s
**KIEV Kiev** 86.16 324 i P **P** 22 19 35.1 -1.3
SNR=9.5
**KIEV Kiev** 86.16 324 ⇑P **P** 22 19 36.2 -0.2
**KIEV Kiev** 86.16 324 P **P** 22 19 35.4 -1.1
KIEV pmax pmax
comp=Z,35nm,1.1s
KIEV MLR MLR
comp=Z,3µm,21.0s
**KIEV Kiev** 86.16 324 P **P** 22 19 35.3 -1.1
comp=Z,145nm,1.1s,comp=Z,2µm
**LAO LASA Array** 86.17 40 P **P** 22 19 37.7 +1.0
baz=300
LAO S **S** 22 30 08.5 -1.6
baz=300
**SIM Simferopol'** 86.32 318 eP **P** 22 19 37.2 -0.2
SIM eS **S** 22 30 09.8 -1.7
SIM pmax pmax
comp=Z,17nm,0.8s
**ARPR Arapgir-MALATY** 86.34 311 IAmb IAmb 22 19 59.0
comp=Z,48nm,1.0s
**DGMT Dagmar** 86.42 38 IAMs_20 IAMs_20 22 56 32.3
comp=Z,1µm,20.0s
**DGMT Dagmar** 86.42 38 P **P** 22 19 37.6 -0.3
baz=302
**KNB Kanab** 86.45 51 IAmb IAmb 22 19 41.8
comp=Z,76nm,1.1s
**PBUR Paburge** 86.60 331 eP **P** 22 19 37.6 -0.9
**BLYC Blythe** 86.65 55 IAmb IAmb 22 19 41.6
comp=Z,44nm,1.3s
**GLA Glamis** 86.72 55 P **P** 22 19 40.5 +0.9
GLA IAmb IAmb 22 19 54.7
comp=Z,38nm,1.0s
**GLA Glamis** 86.72 55 P **P** 22 19 40.5 +0.9
GLA pmax pmax
comp=Z,39nm,1.0s
**Q16A Castle Valley** 86.74 49 IAmb IAmb 22 19 42.3
comp=Z,44nm,1.1s
**P17A Butcher Ranch,** 86.78 48 IAmb IAmb 22 19 42.9
comp=Z,38nm,1.2s
**RDMU Red Mountain** 87.06 47 IAmb IAmb 22 19 43.5
comp=Z,51nm,1.3s
**SRU San Rafael Swe** 87.10 48 IAmb IAmb 22 19 56.1
comp=Z,30nm,1.0s
**HFS Hagfors** 87.14 337 P **P** 22 19 39.5 -1.6
comp=Z,4.6nm,0.6s,baz=73,slow=5.1,SNR=5.0
HFS PP **PP** 22 23 03.6 -0.5
comp=Z,19nm,1.1s,baz=54,slow=7.3,SNR=5.8
HFS LR LR 23 02 50.8
comp=Z,2µm,18.9s,baz=44,slow=38
comp=Z,4.6nm,0.6s
**NC303 NORSAR Array S** 87.15 339 IAmb IAmb 22 19 55.4
comp=Z,42nm,1.1s
**SUW Suwalki** 87.27 329 eP **P** 22 19 40.7 -1.1
SUW eL L 23 00 38.6
comp=Z,2µm,20.4s
**SUW Suwalki** 87.27 329 IAMs_20 IAMs_20 23 00 41.1

comp=Z,2µm,20.0s
**SUW Suwalki 87.27 329** *e*P **P 22 19 40.7 -1.1**
**DOMB Dombas 87.28 340** *e*P **P 22 19 41.4 -0.4**
DOMB IAmb IAmb 22 19 46.5
comp=Z,18nm,0.7s
DOMB *e*SKSac **SKSac 22 30 09.9 +2.3**
**NB201 NORSAR Array S 87.31 339** IAmb IAmb 22 19 55.4
comp=Z,74nm,1.2s
**NC204 NORSAR Array S 87.31 339** IAmb IAmb 22 20 00.7
comp=Z,48nm,0.9s
**NB2 NORSAR Subarra 87.34 339** P **P 22 19 40.8 -1.3**
comp=Z,53nm,1.4s,baz=42,slow=5.1
**NB2 NORSAR Subarra 87.34 339** P **P 22 19 40.8 -1.3**
baz=42,slow=5.1
**NB2 NORSAR Subarra 87.34 339** P **P 22 19 40.7 -1.3**
**NOA NORSAR Array B 87.34 339** P **P 22 19 40.6 -1.4**
comp=Z,28nm,1.3s,baz=47,slow=4.8,SNR=10
NOA PP **PP 22 23 04.3 -1.4**
comp=Z,1.0nm,1.0s,baz=44,slow=7.9,SNR=5.5
NOA LR LR 23 02 38.0
comp=Z,1µm,20.4s,baz=60,slow=38
comp=Z,28nm,1.3s
**NC602 NORSAR Array S 87.45 338** *e*P **P 22 19 42.8 +0.3**
NC602 IAmb IAmb 22 19 46.9
comp=Z,21nm,1.2s
NC602 *e*SKSac **SKSac 22 30 10.5 +1.9**
NC602 *e*SS **SS 22 36 07.4 +1.5**
**NBO00 NORSAR Array S 87.49 339** IAmb IAmb 22 19 57.5
comp=Z,43nm,1.2s
**RAYN Ar Rayn 87.58 294** P **P 22 19 43.9 -0.1**
**RAYN Ar Rayn 87.58 294** *i* P **P 22 19 43.7 -0.3**
SNR=37
**RAYN Ar Rayn 87.58 294** P **P 22 19 44.4 +0.4**
**RAYN Ar Rayn 87.58 294** P **P 22 19 43.9 -0.1**
RAYN pmax pmax
comp=Z,99nm,1.0s
RAYN MLR MLR
comp=Z,1µm,21.0s
**113A Mohawk Valley, 87.65 55** IAmb IAmb 22 19 46.3
comp=Z,43nm,1.3s
**ICESG Greenland Ices 87.67 1** *i* P **P 22 19 41.8 -2.1**
ICESG IAmb IAmb 22 19 59.3
comp=Z,207nm,1.6s
**Y14A Wickenburg 87.70 54** IAmb IAmb 22 19 46.8
comp=Z,47nm,1.2s
**BZK Bozkurt 87.87 315** IAMs_20 IAMs_20 23 04 06.9
comp=Z,2µm,20.0s
**PURM Purcari 88.04 321** ⇓P **P 22 19 46.0 +0.3**
**RWWY Rawlins 88.07 45** IAmb IAmb 22 20 04.2
comp=Z,28nm,1.1s
RWWY IAMs_20 IAMs_20 22 58 59.4
comp=Z,2µm,20.0s
**O20A White River Ci 88.16 47** IAMs_20 IAMs_20 22 54 02.9
comp=Z,2µm,20.0s
**WUAZ Wupatki 88.17 52** IAmb IAmb 22 20 02.0
comp=Z,42nm,1.2s
**WUAZ Wupatki 88.17 52** P **P 22 19 47.4 +0.6**
baz=298
WUAZ S **S 22 30 29.8 -0.2**
baz=298
**KIS Kishinev 88.40 321** *e*P **P 22 19 45.0 -2.3**
comp=Z,200nm,5.7s
KIS *e*S **S 22 30 27.0 -4.3**
KIS *e*L L 23 00 00.0
KIS LRM MLR 23 05 03.0
comp=Z,500nm,15.5s
**KIS Kishinev 88.40 321** *e*P **P 22 19 45.0 -2.3**
KIS *e*S **S 22 30 27.0 -4.3**
KIS MLR MLR
comp=E,500nm,15.5s
**MILM Milestii Mici 88.44 321** *e*P **P 22 19 45.0 -2.5**
MILM *e*S **S 22 30 26.0 -5.8**
MILM *e*L L 22 55 09.0
MILM LRM MLR 23 04 42.0
comp=E,1µm,16.0s
**MILM Milestii Mici 88.44 321** *e*P **P 22 19 45.0 -2.5**
MILM *e*S **S 22 30 26.0 -5.8**
**SKAR Skarslia 88.56 340** *e*P **P 22 19 49.2 +1.3**
SKAR IAmb IAmb 22 19 50.9
comp=Z,239nm,2.4s
SKAR *e*SKSac **SKSac 22 30 17.6 +2.2**
SKAR IAMs_20 IAMs_20 22 54 47.2
comp=Z,1µm,24.1s
**X16A Lo Mia Camp, P 88.63 53** IAmb IAmb 22 19 55.2
comp=Z,44nm,1.7s
**214A Organ Pipe Nat 88.73 56** IAmb IAmb 22 19 57.4
comp=Z,77nm,1.6s
**214A Organ Pipe Nat 88.73 56** P **P 22 19 50.2 +0.9**
baz=297,SNR=14
214A S **S 22 30 34.9 -0.4**
baz=297
**RSSD Black Hills 88.81 42** P **P 22 19 50.3 +0.6**
**RSSD Black Hills 88.81 42** IAMs_20 IAMs_20 22 55 20.0
comp=Z,1µm,20.0s
**RSSD Black Hills 88.81 42** P **P 22 19 50.0 +0.3**
baz=302
**RSSD Black Hills 88.81 42** P **P 22 19 50.3 +0.6**
RSSD pmax pmax
comp=Z,16nm,1.1s
RSSD MLR MLR
comp=Z,1µm,20.0s
**HYA Hoyanger 88.84 341** *e*P **P 22 19 50.8 +1.7**
HYA IAmb IAmb 22 19 54.6
comp=Z,66nm,1.4s
HYA *e*SKSac **SKSac 22 30 19.1 +2.2**
HYA *e*SS **SS 22 36 30.9 +4.9**
HYA IAMs_20 IAMs_20 22 53 49.4
comp=Z,818nm,29.0s
**KONO Kongsberg 88.91 338** IAMs_20 IAMs_20 23 04 19.9
comp=Z,1µm,20.0s
**KONO Kongsberg 88.91 338** *e*P **P 22 19 50.4 +0.9**
KONO *e*SS SS 22 36 31.4 +4.3
**SFJD Kangerlussuaq 89.18 5** LR LR 22 59 59.0
comp=Z,510nm,21.9s,baz=348,slow=36
**BR131 Keskin Array S 89.23 313** *d* P **P 22 19 50.6 -1.0**
**BRTR Keskin Array B 89.23 313** P **P 22 19 50.1 -1.5**
comp=Z,6.2nm,1.0s,baz=95,slow=3.0,SNR=27
BRTR LR LR 23 05 21.2
comp=Z,724nm,18.6s,baz=56,slow=39
comp=Z,6.2nm,1.0s
**BRTR Keskin Array B 89.23 313** *i* P **P 22 19 50.7 -0.9**
BRTR pmax pmax
comp=Z,6.0nm,1.0s
**N23A Red Feather La 89.29 45** IAmb IAmb 22 20 07.6
comp=Z,62nm,1.4s
**N23A Red Feather La 89.29 45** P **P 22 19 53.1 +1.0**
baz=301,SNR=11
**MDND Maddock 89.33 37** IAMs_20 IAMs_20 22 58 28.1
comp=Z,2µm,22.0s
**KIRS Kirsehir-Merke 89.34 313** ⇑P **P 22 19 51.9 -0.2**
**LVV L'vov 89.39 326** *e*P **P 22 19 51.7 -0.2**
LVV *e* 22 23 28.5
LVV *e* 22 30 14.1
LVV *e*S **S 22 30 39.1 -1.5**
LVV MLR MLR
comp=Z,4µm,19.0s
**MVCO Mesa Verde 89.41 49** P **P 22 19 53.1 +0.4**
baz=299
MVCO S **S 22 30 39.6 -2.2**
baz=299
**E28A Huff 89.44 38** IAmb IAmb 22 20 07.4
comp=Z,76nm,1.3s
E28A IAMs_20 IAMs_20 22 58 24.4
comp=Z,1µm,21.0s
**VLDR Vladesti 89.46 321** ⇑P **P 22 19 52.3 -0.1**
**SMCO Snowmass 89.48 47** IAMs_20 IAMs_20 22 53 41.0
comp=Z,2µm,20.0s
**FRB Frobisher Bay 89.52 14** LR LR 23 00 46.3
comp=Z,1µm,22.0s,baz=336,slow=36
**W18A Petrified Fore 89.54 52** P **P 22 19 54.2 +0.9**
baz=299
W18A S **S 22 30 41.7 -1.4**
baz=299
**ANTO Ankara 89.72 314** IAMs_20 IAMs_20 23 06 20.9
comp=Z,1µm,19.0s
**BEL Belsk 89.76 328** *e*P **P 22 19 53.7 0.0**
BEL *e*L L 23 03 38.1
comp=Z,4µm,18.5s
**TPGR Topolog 89.81 320** ⇑P **P 22 19 54.2 +0.2**
**ULM Lac du Bonnet 89.87 33** P **P 22 19 52.7 -1.5**
comp=Z,11nm,1.1s,baz=306,slow=5.4,SNR=7.0
ULM LR LR 22 57 53.2
comp=Z,943nm,21.0s,baz=320,slow=34
comp=Z,11nm,1.1s
**ULM Lac du Bonnet 89.87 33** *d* **e P 22 19 54.5 +0.3**
**TESR Tescani 89.90 322** ⇓P **P 22 19 53.7 -0.8**

**BURAR Bucovina Array 90.06 323** P **P 22 19 54.4 -0.9**
**BURAR Bucovina Array 90.06 323** ⇑P **P 22 19 55.1 -0.2**
**BURAR Bucovina Array 90.06 323** P **P 22 19 55.0 -0.2**
**ISCO Idaho Springs 90.07 46** IAmb IAmb 22 20 11.1
comp=Z,52nm,1.7s
**ISCO Idaho Springs 90.07 46** P **P 22 19 56.2 +0.4**
baz=301,SNR=6.0
ISCO S **S 22 30 46.9 -1.1**
baz=301
**TUC Tucson 90.10 55** P **P 22 19 56.9 +1.2**
**TUC Tucson 90.10 55** P **P 22 19 56.7 +0.9**
baz=298
TUC S **S 22 30 47.2 -0.8**
baz=298
**TUC Tucson 90.10 55** P **P 22 19 56.9 +1.2**
TUC pmax pmax
comp=Z,22nm,1.3s
TUC MLR MLR
comp=Z,2µm,22.0s
**KWP Kalwaria Pacla 90.18 326** *e*P **P 22 19 55.2 -0.5**
KWP *e*L L 23 03 30.8
comp=Z,5µm,18.8s
**KWP Kalwaria Pacla 90.18 326** P **P 22 19 55.4 -0.3**
comp=Z,67nm,1.1s,comp=Z,824nm
**VRI Vrincioaia 90.23 321** ⇓P **P 22 19 56.7 +0.6**
**VRI Vrincioaia 90.23 321** P **P 22 19 56.6 +0.6**
**VRI Vrincioaia 90.23 321** P **P 22 19 55.7 -0.3**
comp=Z,12nm,1.4s,comp=Z,129nm
**PLOR Plostina 90.28 321** ⇓P **P 22 19 56.0 -0.3**
**PLOR Plostina 90.28 321** P **P 22 19 56.0 -0.3**
**S22A 4UR Ranch, Cre 90.30 48** P **P 22 19 57.5 +0.6**
baz=300,SNR=17
S22A S **S 22 30 50.9 +0.8**
baz=300
**BRIGG Briggsdale 90.51 45** IAMs_20 IAMs_20 22 54 01.1
comp=Z,2µm,22.0s
**TURR Turia 90.53 322** ⇑P **P 22 19 57.9 +0.5**
**OZUR 90.63 322** ⇑P **P 22 19 58.4 +0.5**
**Q24A Divide 90.81 47** P **P 22 19 58.5 -0.8**
baz=301
Q24A S **S 22 30 54.1 -0.8**
baz=301
**KOLS Kolonicke sedl 90.84 326** *e*P **P 22 19 58.9 +0.1**
KOLS pmax pmax
comp=Z,7.0nm,1.0s
**KOLS Kolonicke sedl 90.84 326** *e*P **P 22 19 58.9 +0.1**
**ARCR ARCALIA 90.85 323** ⇑P **P 22 19 59.5 +0.7**
**MLR Muntele Rosu 90.89 321** IAMs_20 IAMs_20 23 04 26.3
comp=Z,2µm,19.0s
**MLR Muntele Rosu 90.89 321** LR LR 23 04 47.1
comp=Z,986nm,18.2s,baz=56,slow=38
**MLR Muntele Rosu 90.89 321** ⇑P **P 22 19 59.0 -0.3**
**MLR Muntele Rosu 90.89 321** P **P 22 19 58.9 -0.3**
**AGMN Agassiz Nation 91.08 35** IAmb IAmb 22 20 14.3
comp=Z,27nm,1.0s
AGMN IAMs_20 IAMs_20 23 03 12.3
comp=Z,1µm,20.0s
**AGMN Agassiz Nation 91.08 35** P **P 22 20 00.0 +0.2**
baz=308
**SDCO Great Sand Dun 91.20 48** P **P 22 20 01.6 +0.6**
baz=301,SNR=11
**BORG Borgarnes 91.25 353** LR LR 23 01 42.7
comp=Z,242nm,21.7s,baz=19,slow=36
**CRVS Cervenica-Dubn 91.28 326** *e*P **P 22 20 00.4 -0.4**
CRVS pmax pmax
comp=Z,51nm,1.3s
**CRVS Cervenica-Dubn 91.28 326** *e*P **P 22 20 00.4 -0.4**
**OJC Ojcow 91.28 328** *e*P **P 22 19 59.9 -0.8**
OJC *e*L L 23 04 22.2
comp=Z,4µm,18.6s
**OJC Ojcow 91.28 328** P **P 22 20 00.0 -0.8**
comp=Z,21nm,1.1s,comp=Z,404nm
**SRIG Santa Rosalia 91.28 60** P **P 22 20 02.0 +0.8**
**MMAI Mount Meron Ar 91.31 307** P **P 22 19 59.8 -1.5**
comp=Z,14nm,1.3s,baz=48,slow=2.1,SNR=4.9
MMAI LR LR 23 06 36.8
comp=Z,552nm,18.6s,baz=12,slow=39
comp=Z,14nm,1.3s
**VOIR 91.44 322** ⇓P **P 22 20 02.2 +0.4**
**VOIR 91.44 322** P **P 22 20 02.1 +0.4**
**NIE Niedzica 91.54 327** *e*P **P 22 20 01.8 -0.3**
**NIE Niedzica 91.54 327** P **P 22 20 01.8 -0.3**
comp=Z,9.7nm,1.2s
NIE pP **sP 22 20 09.5 -1.4**
comp=Z,9.7nm,1.2s
**319A Douglas 91.67 55** P **P 22 20 03.9 +0.8**
**SUSD Miller 91.67 39** IAMs_20 IAMs_20 23 01 57.2
comp=Z,2µm,20.0s
**ARR Arges 91.71 322** ⇑P **P 22 20 03.7 +0.7**
**OGNE Ogallala 91.78 44** P **P 22 20 03.5 +0.1**
OGNE IAmb IAmb 22 20 17.7
comp=Z,19nm,0.8s
OGNE IAMs_20 IAMs_20 22 55 36.5
comp=Z,1µm,21.0s
**OGNE Ogallala 91.78 44** P **P 22 20 03.1 -0.3**
baz=304
**CSS Mathiatis 91.84 309** IAMs_20 IAMs_20 23 07 24.4
comp=Z,2µm,20.0s
**RKT Rikitea 91.85 114** *e*P **P 22 20 07.7 +3.9**
comp=Z,932nm,41.0s
**RKT Rikitea 91.85 114** *e*S **S 22 30 57.1 -6.8**
RKT comp=Z,2µm,28.0s
comp=Z,2µm,27.5s
**RKT Rikitea 91.85 114** *e*LR LR 22 49 28.1
comp=Z,4µm,30.5s
**DRGR 91.92 324** ⇑P **P 22 20 04.1 +0.1**
**DRGR 91.92 324** P **P 22 20 04.0 +0.1**
**ANMO Albuquerque 91.97 50** P **P 22 20 05.3 +0.8**
**ANMO Albuquerque 91.97 50** IAMs_20 IAMs_20 22 56 39.1
comp=Z,2µm,20.0s
**ANMO Albuquerque 91.97 50** LR LR 22 57 29.0
comp=Z,2µm,19.5s,baz=14,slow=33
**ANMO Albuquerque 91.97 50** P **P 22 20 05.4 +0.8**
baz=300
**ANMO Albuquerque 91.97 50** P **P 22 20 05.3 +0.8**
ANMO pmax pmax
comp=Z,21nm,1.2s
ANMO MLR MLR
comp=Z,2µm,20.0s
**GHAJ Ghor Haditha 92.01 305** IAMs_20 IAMs_20 23 08 53.4
comp=Z,1µm,20.0s
**Y22D IRIS PASSCAL I 92.08 51** P **P 22 20 06.2 +1.2**
baz=300
**LANS Liptovska Anna 92.13 327** *e*P **P 22 20 05.5 +0.7**
LANS pmax pmax
comp=Z,7.0nm,1.5s
**LANS Liptovska Anna 92.13 327** *e*P **P 22 20 05.5 +0.7**
LANS *e*PP **PP 22 23 44.1 -0.1**
**121A Cookes Peak, D 92.21 53** P **P 22 20 06.8 +1.0**
121A IAmb IAmb 22 20 45.2
comp=Z,24nm,1.1s
**121A Cookes Peak, D 92.21 53** P **P 22 20 07.0 +1.3**
baz=300,SNR=9.1
**T25A Trinidad 92.26 48** P **P 22 20 06.4 +0.5**
T25A IAmb IAmb 22 20 21.1
comp=Z,30nm,1.1s
**T25A Trinidad 92.26 48** P **P 22 20 06.7 +0.8**
baz=302,SNR=13
**K30B Basset 92.30 41** P **P 22 20 05.9 +0.2**
K30B IAMs_20 IAMs_20 22 58 22.1
comp=Z,2µm,21.0s
**OKC Ostrava-Krasne 92.33 328** AMS AMS 23 04 40.0
comp=Z,3µm,18.2s
**F33A 5 Mile Ranch, 92.35 37** IAmb IAmb 22 20 08.4
comp=Z,28nm,1.1s
**ELND Elena 92.42 319** ⇑P **P 22 20 06.5 +0.3**
**KSCO Kaye Shedlock' 92.45 45** IAMs_20 IAMs_20 22 56 32.4
comp=Z,2µm,20.0s
**KSP Ksiaz 92.54 330** *e*P **P 22 20 06.1 -0.5**
KSP *e*L L 23 07 39.6
comp=Z,2µm,18.8s
**KSP Ksiaz 92.54 330** P **P 22 20 05.9 -0.7**
comp=Z,25nm,1.3s
KSP pP **sP 22 20 13.9 -1.5**
comp=Z,25nm,1.3s
**MORC Moravsky Berou 92.67 328** *e*P **P 22 20 05.9 -1.4**
**MORC Moravsky Berou 92.67 328** ⇓P **P 22 20 06.9 -0.4**
**MORC Moravsky Berou 92.67 328** P **P 22 20 06.8 -0.4**
**PSZ Piszkesteto 92.71 326** IAmb IAmb 22 20 21.5
comp=Z,32nm,1.3s
**PSZ Piszkesteto 92.71 326** ⇑P **P 22 20 07.8 +0.2**
**PSZ Piszkesteto 92.71 326** P **P 22 20 07.7 +0.2**
**OSTC Ostas 92.77 329** AMS AMS 23 07 10.0
comp=Z,2µm,17.3s
**SIRR Siria 92.82 324** ⇓P **P 22 20 07.7 -0.3**

**CHVC Chvalec 92.82 329** *e*SKS S 22 31 04.1 -7.8
CHVC AMS AMS 23 07 30.0
comp=Z,2µm,17.7s
**KRLC Kraliky 92.83 329** *e*P **P 22 20 08.1 +0.1**
KRLC AMS AMS 23 07 00.0
comp=Z,3µm,16.7s
**KRLC Kraliky 92.83 329** *e*P **P 22 20 08.1 +0.1**
KRLC MLR MLR
comp=Z,3µm,16.7s
**DPC Dobruska-Polom 92.86 329** *e*P **P 22 20 07.8 -0.3**
DPC *e*pP **sP 22 20 15.2 -1.8**
DPC *e*S **S 22 31 06.1 -6.2**
DPC AMS AMS 23 07 10.0
comp=Z,3µm,17.0s
**DPC Dobruska-Polom 92.86 329** *e*P **P 22 20 07.8 -0.3**
DPC *e* 22 20 15.2
DPC *e* 22 31 06.1
DPC MLR MLR
comp=Z,3µm,17.0s
**DPC Dobruska-Polom 92.86 329** P **P 22 20 07.3 -0.8**
comp=Z,15nm,1.3s
DPC pP **pP 22 20 14.7 0.0**
comp=Z,15nm,1.3s
**VYHS Vyhne 92.87 327** *e*P **P 22 20 07.4 -0.8**
VYHS pmax pmax
comp=Z,19nm,1.3s
**VYHS Vyhne 92.87 327** *e*P **P 22 20 07.4 -0.8**
**CASY Casey 92.88 193** P **P 22 20 08.2 +0.7**
**SURR Surduc 92.88 323** ⇓P **P 22 20 07.6 -0.7**
**UPC Upice 92.90 329** *e*P **P 22 20 08.0 -0.3**
UPC AMS AMS 23 07 30.0
comp=Z,2µm,16.6s
**UPC Upice 92.90 329** *e*P **P 22 20 08.0 -0.3**
UPC MLR MLR
comp=Z,2µm,16.6s
**JAVC Velka Javorina 93.21 328** *e*P **P 22 20 09.7 -0.1**
**EIL Elat 93.27 304** LR LR 23 06 01.5
comp=Z,449nm,21.1s,baz=73,slow=38
**VRAC Vranov 93.44 328** *e*P **P 22 20 10.0 -0.8**
**VRAC Vranov 93.44 328** LR LR 23 06 08.7
comp=Z,3µm,18.0s,baz=43,slow=38
**VRAC Vranov 93.44 328** ⇑P **P 22 20 11.0 +0.1**
**VRAC Vranov 93.44 328** P **P 22 20 10.9 +0.1**
**ECSD EROS Data Cent 93.44 39** IAmb IAmb 22 20 25.3
comp=Z,41nm,1.3s
**ECSD EROS Data Cent 93.44 39** IAMs_20 IAMs_20 23 02 32.3
comp=Z,1µm,21.0s
**ECSD EROS Data Cent 93.44 39** P **P 22 20 11.0 +0.1**
baz=307
**ALN Alexandroupoli 93.49 318** IAMs_20 IAMs_20 23 05 58.4
comp=Z,1µm,20.0s
**EPT El Paso 93.53 53** IAMs_20 IAMs_20 22 56 36.8
comp=Z,2µm,20.0s
**PVCC Panska Ves 93.55 330** AMS AMS 23 09 10.0
comp=Z,2µm,15.8s
**EYMN Ely 93.56 33** P **P 22 20 11.6 +0.3**
baz=311
**SRO Srobarova 93.58 326** *e*PP PP 22 23 55.5 -0.1
**BRG Berggiesshubel 93.59 331** *e*P **P 22 20 10.8 -0.6**
BRG Amp 22 20 12.5
comp=Z,3.0nm,0.8s
**BRG Berggiesshubel 93.59 331** P P 22 20 18.5 +7.0
BRG Amp 22 20 19.4
comp=Z,6.5nm,1.0s
**KRUC Moravsky 93.70 328** *e*P **P 22 20 10.8 -1.2**
**CLL Collm 93.70 331** *e*P **P 22 20 11.0 -0.9**
CLL *e**PP **pP 22 20 18.0 -0.4**
CLL *e*S **S 22 31 18.0 -1.6**
CLL pmax pmax
comp=Z,16nm,1.6s
CLL MLR MLR
comp=Z,2µm,19.8s
**RTBA Rita Blanca 93.77 48** P **P 22 20 12.2 -0.5**
**GOPC GO Pecny, Ondr 93.88 330** AMS AMS 23 08 40.0
comp=Z,3µm,16.9s
**BGNE Belgrade 93.92 42** IAMs_20 IAMs_20 23 00 24.1
comp=Z,2µm,20.0s
**PRA Prague 93.93 330** *ex* x 22 31 14.0
PRA AMS AMS 23 09 10.0
comp=Z,3µm,15.6s
**PRU Pruhonice 93.94 330** AMS AMS 23 09 00.0
comp=Z,3µm,16.3s
**TREC Trest 93.98 329** AMS AMS 23 07 50.0
comp=Z,3µm,17.3s
**HSKC Hora Svate Kat 94.01 331** AMS AMS 23 08 50.0
comp=Z,2µm,16.1s
**MNTX Cornudas Mount 94.39 53** P **P 22 20 16.1 +0.6**
baz=301,SNR=14
**MPLH Magyarpolny 94.40 326** P **P 22 20 13.5 -1.7**
comp=Z,35nm,1.2s
MPLH pP **pwP 22 20 25.0 -2.5**
comp=Z,35nm,1.2s
**E38A The Farm, Brul 94.41 34** P **P 22 20 15.3 0.0**
E38A IAMs_20 IAMs_20 23 09 36.4
comp=Z,946nm,18.0s
**CBKS Cedar Bluff 94.43 44** P **P 22 20 15.6 0.0**
CBKS IAmb IAmb 22 20 29.5
comp=Z,17nm,0.9s
CBKS IAMs_20 IAMs_20 22 58 02.8
comp=Z,2µm,20.0s
**CBKS Cedar Bluff 94.43 44** P **P 22 20 15.2 -0.4**
baz=305
**CBKS Cedar Bluff 94.43 44** P **P 22 20 15.6 0.0**
CBKS pmax pmax
comp=Z,17nm,1.0s
CBKS MLR MLR
comp=Z,2µm,20.0s
**MORH Mrgy, Hungar 94.46 325** ⇑P **P 22 20 15.2 -0.3**
**ZVC Zvikov 94.49 329** *e*P **P 22 20 15.3 -0.3**
ZVC AMS AMS 23 08 10.0
comp=Z,3µm,17.1s
**SPMN Marine on St. 94.64 36** IAMs_20 IAMs_20 22 59 41.8
comp=Z,2µm,21.0s
**L34A Svendsen Farm, 94.65 40** IAMs_20 IAMs_20 23 01 46.4
comp=Z,1µm,21.0s
**RONA Rosalia, Austr 94.67 327** *e*P **P 22 20 15.9 -0.6**
comp=Z,13nm,1.1s
RONA *e*PP **PP 22 24 02.4 -1.7**
comp=Z,7.1nm,1.2s
RONA *i* PKKP **PKKPdf 22 37 08.2 -5.0**
comp=Z,4.9nm,1.6s
**CONA Conrad Observa 94.73 328** *e*PcP **P 22 20 16.6 -0.3**
comp=Z,6.7nm,1.4s
CONA PP **PP 22 24 00.6 -4.1**
comp=Z,7.7nm,1.3s
CONA *e*PKKP PKKPdf 22 37 06.1 -7.1
comp=Z,0.5nm,0.8s
**SLBS Sierra La Lagu 94.80 62** P **P 22 20 17.7 +0.1**
**SLBS Sierra La Lagu 94.80 62** IAMs_20 IAMs_20 23 04 59.0
comp=Z,1µm,19.0s
**CKRC Cesky Krumlov 94.86 329** *e*P **P 22 20 18.3 +0.9**
CKRC AMS AMS 23 08 20.0
comp=Z,3µm,17.0s
**CKRC Cesky Krumlov 94.86 329** *e*P **P 22 20 18.3 +0.9**
CKRC MLR MLR
comp=Z,3µm,17.0s
**ATD Arta Tunnel 94.90 285** LR LR 23 01 30.6
comp=Z,20nm,21.9s,baz=62,slow=34
**KHC Kasperske Hory 94.99 330** *e*P **P 22 20 16.3 -1.6**
KHC *e*pP **pP 22 20 23.7 -0.8**
KHC *ex* x 22 31 07.2
KHC AMS AMS 23 08 30.0
comp=Z,3µm,17.9s
**KHC Kasperske Hory 94.99 330** *ce*P **P 22 20 16.7 -1.2**
KHC pmax pmax
comp=Z,17nm,1.4s
**I37A Lemond, Waseca 95.09 37** P **P 22 20 18.9 +0.4**
I37A IAmb IAmb 22 20 20.6
comp=Z,35nm,1.3s
I37A IAMs_20 IAMs_20 23 06 59.7
comp=Z,2µm,19.0s
**GERES GERESS Array B 95.13 329** P **P 22 20 16.9 -1.7**
comp=Z,1.2nm,0.9s,baz=153,slow=9.0,SNR=7.5
GERES PP **PP 22 24 01.8 -5.9**
comp=Z,1.1nm,0.9s,baz=41,slow=7.8,SNR=2.6
GERES LR LR 23 06 39.1
comp=Z,2µm,19.0s,baz=46,slow=38
comp=Z,1.2nm,0.9s
**GERES GERESS Array B 95.13 329** P **P 22 20 17.0 -1.7**
**VHRN Van Horn 95.15 53** P **P 22 20 19.7 +0.5**
**R32A Long Quarter, 95.31 44** P **P 22 20 19.2 -0.5**
R32A IAMs_20 IAMs_20 22 57 16.2
comp=Z,2µm,20.0s
**AMTX Amarillo 95.33 48** P **P 22 20 20.1 +0.2**
**AMTX Amarillo 95.33 48** P **P 22 20 19.5 -0.4**
baz=303

**ARSA Arzberg** 95.36 327 *e*P P 22 20 19.1 -0.6
comp=Z,7.6nm,1.4s
ARSA *e*PP **PP** **22 24 08.4 -1.1**
comp=Z,6.4nm,1.5s
**MOA Molln** 95.56 328 *e*P P 22 20 17.3 -3.3
comp=Z,4.3nm,1.6s
MOA *e*PP **PP** **22 24 10.6 -0.4**
comp=Z,4.0nm,1.1s
MOA *e*PKKP **PKKPdf** **22 37 11.5 -0.1**
comp=Z,2.9nm,1.4s
**GRA1 Grafenberg Arr** 95.66 331 IAMs_20 IAMs_20 23 07 37.6
comp=Z,1µm,18.0s
**GRF Grafenberg Arr** 95.66 331 *e*P P 22 20 16.3 -4.7
comp=Z,11nm,1.2s,baz=43,slow=4.2
GRF *e*PP **PP** **22 24 12.5 +0.8**
baz=35,slow=6.8
**GRFO Grafenberg** 95.66 331 IAMs_20 IAMs_20 23 07 37.6
comp=Z,1µm,18.0s
**PECS Pecos** 95.67 52 P P **22 20 21.4 -0.1**
**N35A Tabor** 95.76 41 P P **22 20 21.7 0.0**
N35A IAmb IAmb 22 20 35.8
comp=Z,20nm,1.0s
N35A IAMs_20 IAMs_20 23 02 57.8
comp=Z,2µm,20.0s
**BIOA Bad Ischl, Aus** 95.98 328 *e*PcP P **22 20 22.5 0.0**
comp=Z,8.8nm,1.0s
BIOA *e*PP PP 22 24 07.0 -7.2
comp=Z,8.8nm,1.4s
**COWI Conover** 95.99 34 IAMs_20 IAMs_20 23 06 09.2
comp=Z,1µm,19.0s
**SOKA Soboth** 96.00 327 *i* P P **22 20 21.7 -0.9**
comp=Z,3.5nm,1.1s
SOKA *i* PP **PP** **22 24 15.0 +0.5**
comp=Z,13nm,1.3s
SOKA *e*PKKP **PKKPdf** **22 37 10.7 -0.2**
comp=Z,0.7nm,0.7s
**G40A Rib Lake** 96.00 35 P P **22 20 22.6 0.0**
**SMWD Samnorwood** 96.19 48 P P **22 20 22.6 -1.1**
**NOKA Waynoka** 96.20 46 P P **22 20 24.1 +0.4**
NOKA IAmb IAmb 22 20 46.2
comp=Z,10nm,0.5s
**ELIS Ellis County** 96.20 46 P P **22 20 24.4 +0.6**
ELIS IAmb IAmb 22 20 31.6
comp=Z,23nm,1.2s
**KSU1 Kansas State U** 96.24 43 P P **22 20 24.2 +0.4**
KSU1 IAmb IAmb 22 20 37.6
comp=Z,17nm,0.9s
KSU1 IAMs_20 IAMs_20 23 04 04.6
comp=Z,1µm,20.0s
**KSU1 Kansas State U** 96.24 43 P P **22 20 23.6 -0.2**
baz=307
**ALPN Alpine** 96.36 53 P P **22 20 24.0 -0.7**
**OBKA Obir** 96.36 327 *i* PcP P **22 20 24.4 +0.1**
comp=Z,2.5nm,0.9s
OBKA *e*PP **PP** **22 24 17.2 -0.1**
comp=Z,15nm,1.5s
OBKA *e*PKKP **PKKPbc** **22 37 10.5 +0.2**
comp=Z,2.4nm,1.0s
**OK038 West end E0370** 96.42 46 P P **22 20 25.2 +0.6**
OK038 IAMs_20 IAMs_20 22 56 59.5
comp=Z,2µm,21.0s
**EKA Eskdalemuir Ar** 96.45 342 P P **22 20 23.6 -0.7**
comp=Z,2.4nm,0.9s,baz=30,slow=9.1,SNR=2.4
EKA PP **PP** **22 24 14.6 -2.9**
comp=Z,1.5nm,0.8s,baz=44,slow=7.2,SNR=2.2
comp=Z,2.4nm,0.9s
**PUK Puka** 96.47 321 IAMs_20 IAMs_20 23 06 16.8
comp=Z,2µm,22.0s
**KBA Koelnbreinsper** 96.55 328 *e*PcP P **22 20 25.5 +0.3**
comp=Z,5.0nm,1.2s
KBA *i* PP **PP** **22 24 18.9 0.0**
comp=Z,15nm,1.3s
KBA *e*PKKP **PKKPdf** **22 37 11.2 +1.2**
comp=Z,3.2nm,1.4s
**PDG Podgorica** 96.58 322 IAMs_20 IAMs_20 23 07 39.7
comp=Z,1µm,20.0s
**LESA Schwarzleotal** 96.63 329 *i* P P **22 20 22.4 -3.1**
comp=Z,2.6nm,1.3s
LESA *e*PP **PP** **22 24 17.9 -1.4**
comp=Z,4.3nm,1.1s
LESA *e*PKKP **PKKPbc** **22 37 07.8 -1.7**
comp=Z,1.0nm,0.7s
**MYKA Terra Mystica** 96.72 328 *e*PcP **PcP** **22 20 27.2 +1.2**
comp=Z,4.2nm,0.9s
MYKA *e*PP **PP** **22 24 18.6 -1.5**
comp=Z,10nm,1.2s
**F42A Maple Grove Fa** 96.73 33 IAMs_20 IAMs_20 23 09 28.9
comp=Z,1µm,19.0s
**KBN Korca** 96.84 320 IAMs_20 IAMs_20 23 10 54.8
comp=Z,1µm,18.0s
**TX31 Lajitas Ar. Si** 96.88 54 IAmb IAmb 22 20 38.5
comp=Z,26nm,1.6s
**TXAR Lajitas Array** 96.88 54 P P **22 20 28.3 +1.3**
**TXAR Lajitas Array** 96.88 54 P P **22 20 27.8 +0.7**
comp=Z,1.0nm,0.6s,baz=279,slow=2.4,SNR=15
TXAR PP **PP** **22 24 23.2 +1.2**
comp=Z,0.9nm,1.0s,baz=318,slow=5.4,SNR=3.5
TXAR PKKP **PKKPbc** **22 37 08.8 +0.4**
comp=Z,1.2nm,0.8s,baz=130,slow=5.2,SNR=9.7
comp=Z,1.0nm,0.6s
**ABTA Abfaltersbach** 97.19 328 *i* P P **22 20 26.2 -1.8**
comp=Z,2.9nm,1.1s
ABTA *e*PP **PP** **22 24 22.7 -0.9**
comp=Z,5.4nm,1.4s
ABTA *e*PKKP **PKKPbc** **22 37 07.4 -0.6**
comp=Z,2.3nm,1.0s
**SABO M.te Sabotino** 97.20 327 IAMs_20 IAMs_20 23 10 17.1
comp=Z,3µm,18.0s
**WATA Walderalm** 97.21 329 *e*P P **22 20 27.4 -0.8**
comp=Z,3.3nm,0.8s
WATA *i* PP **PP** **22 24 22.5 -1.3**
comp=Z,6.3nm,0.9s
**WTTA Wattenberg** 97.23 329 *e*P P **22 20 26.9 -1.5**
comp=Z,7.0nm,1.1s
WTTA *e*PP **PP** **22 24 21.7 -2.3**
comp=Z,4.0nm,1.1s
WTTA *i* PKKP **PKKPbc** **22 37 06.3 -1.7**
comp=Z,6.9nm,1.2s
**N38A Joes South For** 97.23 40 IAMs_20 IAMs_20 22 58 37.7
comp=Z,2µm,22.0s
**WMOK Wichita Mounta** 97.39 47 P P **22 20 28.4 -0.7**
baz=305
**MOTA Moosalm** 97.42 329 *e*P P **22 20 27.2 -2.0**
comp=Z,1.9nm,1.0s
MOTA *e*PP **PP** **22 24 23.1 -2.3**
comp=Z,9.4nm,1.3s
MOTA *e*PKKP **PKKPbc** **22 37 06.6 -0.9**
comp=Z,5.0nm,1.3s
**SQTA Sankt Quirin** 97.47 329 *e*P P **22 20 28.1 -1.2**
comp=Z,4.6nm,1.1s
SQTA *e*PP **PP** **22 24 20.2 -5.5**
comp=Z,8.7nm,1.4s
SQTA *i* PKKP **PKKPbc** **22 37 06.6 -0.7**
comp=Z,4.6nm,1.1s
**IDI Anoyia** 97.47 314 LR LR 23 10 11.1
comp=Z,510nm,18.6s,baz=46,slow=39
**RETA Reutte** 97.48 330 *e*PcP P **22 20 29.1 -0.3**
comp=Z,2.7nm,1.0s
RETA *e*PP **PP** **22 24 21.4 -4.4**
comp=Z,7.1nm,1.4s
RETA *e*PKKP **PKKPbc** **22 37 06.3 -1.0**
comp=Z,3.9nm,1.1s
**JFWS Jewell Farm** 97.55 37 IAMs_20 IAMs_20 23 04 35.7
comp=Z,1µm,20.0s
**JFWS Jewell Farm** 97.55 37 P P **22 20 29.3 -0.4**
baz=312
**L40A Anamosa** 97.57 38 IAMs_20 IAMs_20 23 03 41.4
comp=Z,1µm,20.0s
**I42A Draeger Farm,** 97.61 35 IAMs_20 IAMs_20 23 03 28.2
comp=Z,1µm,20.0s
**OK029 Liberty Lake** 97.66 46 P P **22 20 30.4 +0.1**
**SAND Sanderson** 97.69 53 P P **22 20 30.6 0.0**
**VLO Vlora** 97.70 320 IAMs_20 IAMs_20 23 10 55.6
comp=Z,1µm,20.0s
**P38A Dawn** 97.80 41 P P **22 20 27.8 -3.1**
P38A IAmb IAmb 22 20 35.6
comp=Z,21nm,1.3s
P38A IAMs_20 IAMs_20 23 08 29.6
comp=Z,1µm,19.0s
**SCHQ Schefferville** 97.81 17 LR LR 23 07 07.2
comp=Z,1µm,20.5s,baz=309,slow=37
**FETA Feichten** 97.83 329 *i* PcP P **22 20 30.6 -0.5**
comp=Z,2.2nm,1.2s
FETA *e*PP **PP** **22 24 28.1 -0.5**
comp=Z,9.6nm,1.3s
FETA *i* PKKP **PKKPbc** **22 37 05.2 -1.2**
comp=Z,3.7nm,1.0s
**WLF Walferdange** 97.84 334 IAMs_20 IAMs_20 23 09 20.3
comp=Z,2µm,20.0s
**DAVA Damuels** 98.03 330 *e*PcP P **22 20 31.5 -0.4**
comp=Z,7.6nm,1.0s
DAVA *e*PP **PP** **22 24 25.5 -4.7**
comp=Z,3.7nm,0.9s
DAVA *e*PKKP **PKKPbc** **22 37 04.3 -1.5**
comp=Z,3.3nm,1.1s
**E46A Sault Ste Mari** 98.18 31 P P **22 20 32.0 -0.4**
E46A IAMs_20 IAMs_20 23 08 23.0
comp=Z,1µm,19.0s
**FUORN Ofenpass-Fuorn** 98.35 329 IAmb IAmb 22 20 48.6
comp=Z,20nm,1.6s
**DAVOX Davos/Dischmat** 98.41 330 LR LR 23 09 21.7
comp=Z,1µm,19.0s,baz=37,slow=38
**L42A Oliver, Polo** 98.48 37 IAMs_20 IAMs_20 23 04 46.3
comp=Z,1µm,20.0s
**ECH Echery** 98.54 332 IAMs_20 IAMs_20 23 11 18.8
comp=Z,1µm,19.0s
**SCTE Santa Cesarea** 98.56 320 IAMs_20 IAMs_20 23 11 34.2
comp=Z,1µm,20.0s
**TEOL Teolo** 98.59 328 P P **22 20 33.3 -1.0**
**N41A Harden Midland** 98.67 39 IAMs_20 IAMs_20 23 09 07.5
comp=Z,1µm,19.0s
**K43A Burlington** 98.73 36 IAMs_20 IAMs_20 23 02 26.9
comp=Z,2µm,22.0s
**P40A Paris** 98.74 40 IAMs_20 IAMs_20 23 00 34.6
comp=Z,2µm,22.0s
**I45A Fountain** 98.90 34 IAMs_20 IAMs_20 23 10 44.3
comp=Z,1µm,19.0s
**DRIO Del Rio** 99.08 53 P **Pdif** **22 20 37.3 +0.4**
**JCT Junction City** 99.09 51 P **Pdif** **22 20 37.4 +0.5**
**JCT Junction City** 99.09 51 P **Pdif** **22 20 37.4 +0.5**
JCT pmax pmax
comp=Z,16nm,1.5s
JCT MLR MLR
comp=Z,800nm,21.0s
**S39A Bolivar** 99.14 42 IAMs_20 IAMs_20 23 06 23.3
comp=Z,1µm,20.0s
**GLMI Grayling** 99.15 32 IAMs_20 IAMs_20 23 12 40.7
comp=Z,1µm,18.0s
**BRDY Brady** 99.20 50 P **Pdif** **22 20 36.7 -0.6**
**U38A Gravette** 99.25 44 IAMs_20 IAMs_20 23 05 00.5
comp=Z,1µm,21.0s
**L44A Lake County Fo** 99.32 36 IAMs_20 IAMs_20 23 02 55.5
comp=Z,2µm,21.0s
**GUMA Gualdo di Mace** 99.38 325 IAMs_20 IAMs_20 23 09 54.6
comp=Z,3µm,20.0s
**R40A Maddies Statio** 99.40 41 IAMs_20 IAMs_20 23 14 51.2
comp=Z,1µm,19.0s
**HQIL Hanson Quary C** 99.61 36 IAMs_20 IAMs_20 23 00 44.2
comp=Z,1µm,22.0s
**HDIL Hopedale** 99.66 38 IAMs_20 IAMs_20 23 05 37.4
comp=Z,1µm,20.0s
**HDIL Hopedale** 99.66 38 P **Pdif** **22 20 38.0 -1.1**
baz=312
**PAOL Paolisi** 100.13 323 IAMs_20 IAMs_20 23 10 46.6
comp=Z,1µm,20.0s
**CCM Cathedral Cave** 100.17 41 IAMs_20 IAMs_20 23 04 49.5
comp=Z,924nm,20.0s
**CCM Cathedral Cave** 100.17 41 P **Pdif** **22 20 40.7 -0.8**
baz=311
**J47A Sunmer** 100.19 34 IAMs_20 IAMs_20 23 08 54.4
comp=Z,1µm,20.0s
**L46A Eue Claire** 100.30 35 IAMs_20 IAMs_20 23 05 10.3
comp=Z,1µm,20.0s
**I49A Point Hope** 100.67 32 IAMs_20 IAMs_20 23 08 37.0
comp=Z,1µm,19.0s
**CLF Chambon-Foret** 100.71 335 IAMs_20 IAMs_20 23 09 40.1
comp=Z,1µm,20.0s
**Q44A Meyer Farm, Va** 100.92 39 IAMs_20 IAMs_20 23 01 48.3
comp=Z,2µm,22.0s
**T42A Van Buren** 100.93 42 IAMs_20 IAMs_20 23 06 16.6
comp=Z,1µm,20.0s
**BNI Bardonecchia** 101.18 330 IAMs_20 IAMs_20 23 10 02.7
comp=Z,1µm,20.0s
**CEL Celeste** 101.25 320 IAMs_20 IAMs_20 23 10 12.6
comp=Z,1µm,22.0s
**L48A N Adams** 101.32 34 IAMs_20 IAMs_20 23 15 11.3
comp=Z,960nm,18.0s
**N47A Urbana** 101.42 36 IAMs_20 IAMs_20 23 03 47.0
comp=Z,1µm,22.0s
**735A Kenedy** 101.43 52 IAMs_20 IAMs_20 23 01 45.9
comp=Z,1µm,20.0s
**AAM Ann Arbor** 101.46 34 IAMs_20 IAMs_20 23 10 11.0
comp=Z,923nm,19.0s
**S44A Carbondale** 101.59 40 IAMs_20 IAMs_20 23 10 39.1
comp=Z,1µm,20.0s
**K50A Casco** 101.63 33 IAMs_20 IAMs_20 23 12 30.5
comp=Z,1µm,18.0s
**KVTX Kingsville** 102.11 53 IAMs_20 IAMs_20 23 13 31.0
comp=Z,1µm,18.0s
**N49A Columbus Grove** 102.19 35 IAMs_20 IAMs_20 23 06 16.3
comp=Z,901nm,20.0s
**T45A Paducah** 102.41 40 IAMs_20 IAMs_20 23 03 06.6
comp=Z,1µm,21.0s
**P48A Milroy** 102.56 37 IAMs_20 IAMs_20 23 04 25.4
comp=Z,1µm,21.0s
**O49A Covington** 102.64 35 IAMs_20 IAMs_20 23 13 19.2
comp=Z,1µm,20.0s
**WCI Wyandotte Cave** 102.94 38 IAMs_20 IAMs_20 23 05 31.6
comp=Z,2µm,21.0s
**N51A Ashland** 103.13 34 IAMs_20 IAMs_20 23 09 31.1
comp=Z,947nm,20.0s
**J54A Appleton** 103.16 30 IAMs_20 IAMs_20 23 05 44.7
comp=Z,1µm,21.0s
**M52A Chesterland** 103.18 33 IAMs_20 IAMs_20 23 11 23.4
comp=Z,1µm,19.0s
**ACSO Alum Creek Sta** 103.32 35 IAMs_20 IAMs_20 23 14 20.2
comp=Z,827nm,19.0s
**T47A Sharon Grove** 103.33 39 IAMs_20 IAMs_20 23 03 10.0
comp=Z,2µm,22.0s
**ERPA Erie** 103.42 32 IAMs_20 IAMs_20 23 09 50.5
comp=Z,1µm,20.0s
**ERPA Erie** 103.42 32 P **Pdif** **22 20 54.3 -1.5**
baz=320
**WVT Waverly** 103.49 40 IAMs_20 IAMs_20 23 07 30.3
comp=Z,1µm,20.0s
**R49A Shelbyville** 103.53 37 IAMs_20 IAMs_20 23 07 34.0
comp=Z,1µm,21.0s
**J55A Hilton** 103.55 30 IAMs_20 IAMs_20 23 06 07.8
comp=Z,1µm,21.0s
**M53A WI Miller and** 103.59 33 IAMs_20 IAMs_20 23 13 40.3
comp=Z,1µm,18.0s
**OXF Oxford** 103.61 43 IAMs_20 IAMs_20 23 07 32.6
comp=Z,1µm,20.0s
**LONY Lake Ozonia** 103.87 27 IAMs_20 IAMs_20 23 07 04.2
comp=Z,1µm,21.0s
**J56A Wolcott** 103.97 29 IAMs_20 IAMs_20 23 06 20.9
comp=Z,906nm,21.0s
**N53A Lisbon** 103.99 33 IAMs_20 IAMs_20 23 11 56.8
comp=Z,1µm,19.0s
**O52A Adamsville** 104.00 34 IAMs_20 IAMs_20 23 15 20.1
comp=Z,1µm,18.0s
**R50A Paris** 104.00 37 IAMs_20 IAMs_20 23 11 43.5
comp=Z,1µm,20.0s
**VSL Villasalto** 104.02 325 IAMs_20 IAMs_20 23 12 37.3
comp=Z,1µm,20.0s
**PLAL Pickwick Lake** 104.11 41 IAMs_20 IAMs_20 23 05 37.9
comp=Z,903nm,20.0s
**O53A New Philadelph** 104.22 34 IAMs_20 IAMs_20 23 10 41.9
comp=Z,1µm,20.0s
**O53A New Philadelph** 104.22 34 P **Pdif** **22 20 58.2 -1.2**
baz=318
**J57A Williamstown** 104.24 28 IAMs_20 IAMs_20 23 07 25.2
comp=Z,1µm,21.0s
**V48A Smith Brothers** 104.35 40 IAMs_20 IAMs_20 23 09 41.1
comp=Z,1µm,20.0s
**K57A Scipio Center** 104.55 29 IAMs_20 IAMs_20 23 06 39.4
comp=Z,1µm,20.0s
**F62A Pittston Farm,** 104.60 23 IAMs_20 IAMs_20 23 12 05.3
comp=Z,1µm,19.0s
**Q52A Bidwell** 104.62 35 IAMs_20 IAMs_20 23 12 16.8
comp=Z,1µm,19.0s
**P53A Whipple** 104.69 34 IAMs_20 IAMs_20 23 17 29.6
comp=Z,1µm,19.0s
**J59A Piesco** 104.84 28 IAMs_20 IAMs_20 23 08 36.7
comp=Z,1µm,21.0s
**S51A Beattyville** 104.87 37 IAMs_20 IAMs_20 23 13 08.4
comp=Z,876nm,20.0s
**KIBK Kibwezi** 104.97 274 IAMs_20 IAMs_20 23 06 18.1
comp=Z,870nm,20.0s
**G62A West of Eustis** 104.97 24 IAMs_20 IAMs_20 23 10 35.1
comp=Z,2µm,21.0s
**F63A Nahmakanta, Br** 105.08 23 IAMs_20 IAMs_20 23 07 18.9
comp=Z,1µm,22.0s
**X48A Hartselle** 105.10 41 IAMs_20 IAMs_20 23 07 36.0
comp=Z,1µm,20.0s
**F64A Sherman** 105.21 22 IAMs_20 IAMs_20 23 10 27.3
comp=Z,1µm,19.0s
**BINY Binghamton** 105.21 29 IAMs_20 IAMs_20 23 07 21.9
comp=Z,1µm,21.0s
**LBNH Lisbon** 105.26 25 P **Pdif** **22 21 02.8 -1.2**
baz=327
**MCWV Mont Chateau** 105.35 33 P **PKiKP** **22 25 18.2 -0.1**
baz=319
**Q54A Coxs Mills** 105.36 34 IAMs_20 IAMs_20 23 05 55.1
comp=Z,1µm,21.0s
**M57A Sunshine Farm,** 105.37 30 IAMs_20 IAMs_20 23 09 03.3
comp=Z,1µm,20.0s
**PKME Peaks-Kenny Pk** 105.39 23 IAMs_20 IAMs_20 23 06 41.1
comp=Z,1µm,22.0s
**PKME Peaks-Kenny Pk** 105.39 23 P **PKiKP** **22 25 18.3 +0.1**
baz=329
**CEST Esterri de Car** 105.52 332 IAMs_20 IAMs_20 23 12 38.6
comp=Z,1µm,20.0s
**SSPA Standing Stone** 105.56 31 P **PKiKP** **22 25 18.8 +0.1**
baz=321
**L59A Walton** 105.64 29 IAMs_20 IAMs_20 23 12 54.1
comp=Z,1µm,20.0s
**TZTN Tazewell** 105.68 38 IAMs_20 IAMs_20 23 08 08.0
comp=Z,1µm,21.0s
**TZTN Tazewell** 105.68 38 P **PKiKP** **22 25 19.0 -0.1**
baz=316
**Y49A Blount Mountai** 105.89 41 IAMs_20 IAMs_20 23 04 52.8
comp=Z,1µm,22.0s
**N58A Sunbury** 105.96 31 IAMs_20 IAMs_20 23 09 18.7
comp=Z,1µm,19.0s
**S54A Dingess, Beckl** 105.99 35 IAMs_20 IAMs_20 23 08 43.9
comp=Z,1µm,20.0s
**G65A Princeton** 106.06 22 IAMs_20 IAMs_20 23 12 19.8
comp=Z,1µm,20.0s
**LRAL Lakeview Retre** 106.09 42 IAMs_20 IAMs_20 23 05 07.1
comp=Z,1µm,22.0s
**LRAL Lakeview Retre** 106.09 42 P **PKiKP** **22 25 19.9 +0.1**
baz=313
**Q56A Snyder Ridge,** 106.15 33 IAMs_20 IAMs_20 23 08 57.1
comp=Z,1µm,20.0s
**X51A Calhoun** 106.33 40 IAMs_20 IAMs_20 23 12 06.3
comp=Z,999nm,20.0s
**P57A Homestead Farm** 106.40 32 IAMs_20 IAMs_20 23 10 38.5
comp=Z,1µm,20.0s
**K62A Royalston** 106.45 27 IAMs_20 IAMs_20 23 08 42.3
comp=Z,1µm,22.0s
**EMMW East Machias** 106.53 22 IAMs_20 IAMs_20 23 07 54.1
comp=Z,1µm,22.0s
**U54A Nelsons Funny** 106.65 37 IAMs_20 IAMs_20 23 15 25.7
comp=Z,1µm,19.0s
**V53A Saluda** 106.72 38 IAMs_20 IAMs_20 23 06 24.6
comp=Z,2µm,22.0s
**HRV Adam Dziewonsk** 106.86 26 IAMs_20 IAMs_20 23 10 28.1
comp=Z,1µm,21.0s
**HRV Adam Dziewonsk** 106.86 26 P **PKiKP** **22 25 21.2 +0.2**
baz=327
**BLA Blacksburg** 106.90 35 IAMs_20 IAMs_20 23 09 20.0
comp=Z,1µm,20.0s
**WES Weston** 107.05 26 IAMs_20 IAMs_20 23 10 34.3
comp=Z,1µm,20.0s
**S57A Dark Hollow, R** 107.25 34 IAMs_20 IAMs_20 23 13 14.2
comp=Z,1µm,19.0s
**Y52A Lilburn** 107.29 40 IAMs_20 IAMs_20 23 14 36.8
comp=Z,1µm,20.0s
**N62A Caumsett State** 107.35 28 IAMs_20 IAMs_20 23 14 45.4
comp=Z,1µm,20.0s
**V55A Taylorsville** 107.47 37 IAMs_20 IAMs_20 23 09 13.5
comp=Z,978nm,20.0s
**U56A King** 107.56 36 IAMs_20 IAMs_20 23 07 50.6
comp=Z,963nm,22.0s
**L64A Middleborough** 107.62 26 IAMs_20 IAMs_20 23 09 28.5
comp=Z,1µm,20.0s
**152A Waverly Hall** 107.73 41 IAMs_20 IAMs_20 23 10 02.7
comp=Z,1µm,20.0s
**P61A Hammonton** 107.78 30 IAMs_20 IAMs_20 23 13 10.8
comp=Z,1µm,20.0s
**KMSC Kings Mountain** 107.93 37 IAMs_20 IAMs_20 23 05 50.5
comp=Z,1µm,22.0s
**MAW Mawson** 107.93 203 PP **PP** **22 25 44.2 -0.3**
comp=Z,2.4nm,0.9s,baz=75,slow=8.7,SNR=2.8
**GOGA Godfrey** 107.96 40 IAMs_20 IAMs_20 23 08 35.5
comp=Z,1µm,20.0s
**352A Blakely** 108.43 42 IAMs_20 IAMs_20 23 06 27.2
comp=Z,1µm,21.0s
**451A Vernon** 108.51 43 IAMs_20 IAMs_20 23 06 27.4
comp=Z,1µm,22.0s
**R61A Willards** 108.59 31 IAMs_20 IAMs_20 23 13 26.5
comp=Z,1µm,19.0s
**V58A Windy Hill, Pi** 108.65 35 IAMs_20 IAMs_20 23 08 32.5
comp=Z,1µm,21.0s
**S61A Accomac** 108.95 32 IAMs_20 IAMs_20 23 13 10.0
comp=Z,1µm,20.0s
**TIGA Tifton** 109.27 41 IAMs_20 IAMs_20 23 15 26.5
comp=Z,1µm,20.0s
**Y57A Sumter** 109.28 37 IAMs_20 IAMs_20 23 08 02.4
comp=Z,2µm,22.0s
**X58A Rowland** 109.47 36 IAMs_20 IAMs_20 23 12 47.1
comp=Z,904nm,19.0s
**W59A Clinton** 109.48 35 IAMs_20 IAMs_20 23 09 15.5
comp=Z,1µm,20.0s
**Y58A Scranton** 109.77 37 IAMs_20 IAMs_20 23 08 38.2
comp=Z,1µm,21.0s
**V61A Roper** 109.98 34 IAMs_20 IAMs_20 23 11 22.4
comp=Z,1µm,21.0s
**ESDC Sonseca Array** 110.14 334 PP PP 22 25 51.7 -8.4
comp=Z,3.5nm,1.1s,baz=18,slow=6.6,SNR=8.0
ESDC PKKPbc **PKKPbc** **22 36 28.8 -0.7**
comp=Z,1.1nm,1.1s,baz=220,slow=2.0,SNR=5.7
ESDC PKKP **PKKPab** **22 36 41.4 -1.2**
comp=Z,4.1nm,1.1s,baz=233,slow=4.0,SNR=10
**PAB San Pablo** 110.41 334 IAMs_20 IAMs_20 23 19 17.9
comp=Z,1µm,20.0s
**Y60A Bolivia** 110.49 36 IAMs_20 IAMs_20 23 13 55.2
comp=Z,901nm,19.0s
**CART Cartagena** 110.61 330 IAMs_20 IAMs_20 23 20 51.3
comp=Z,1µm,21.0s
**456A Hilliard** 110.73 41 IAMs_20 IAMs_20 23 11 52.0
comp=Z,1µm,20.0s
**COI Coimbra** 111.38 337 IAMs_20 IAMs_20 23 17 39.4
comp=Z,1µm,19.0s
**QSPA South Pole Qui** 113.28 180 IAMs_20 IAMs_20 23 11 04.8
comp=Z,1µm,22.0s
**QSPA South Pole Qui** 113.28 180 PKiKP **PKiKP** **22 25 31.2 -1.1**
comp=Z,2.3nm,0.5s,baz=256,slow=0.7,SNR=21
QSPA PP **PP** **22 26 23.0 -0.1**
comp=Z,3.5nm,1.1s,baz=16,slow=2.6,SNR=1.4
QSPA PKKPbc **PKKPbc** **22 36 17.8 -2.6**
comp=Z,2.3nm,1.1s,baz=177,slow=1.5,SNR=2.9
**061Z Ochoppi** 114.86 44 IAMs_20 IAMs_20 23 11 28.8
comp=Z,1µm,22.0s
**BBSR BB Station** 118.33 27 IAMs_20 IAMs_20 23 15 03.8
comp=Z,838nm,21.0s
**TAM Tamanrasset** 118.38 315 IAMs_20 IAMs_20 23 23 59.5
comp=Z,854nm,19.0s
**LSZ Lusaka** 118.72 265 PKPdf **PKiKP** **22 25 44.6 +0.2**
**LSZ Lusaka** 118.72 265 PKiKP **PKiKP** **22 25 44.6 +0.2**
LSZ MLR MLR
comp=Z,2µm,20.0s
**ELIB Princess Elisa** 121.31 198 *d*PKPdf **PKPdf** **22 25 47.2 -0.5**
ELIB *d*PKP **sPKPdf** **22 26 00.9 +4.5**
**GRTK Grand Turk** 124.07 40 IAMs_20 IAMs_20 23 17 18.3
comp=Z,980nm,20.0s
**BOSA Boshof** 124.68 251 PKP **PKPdf** **22 25 54.4 -1.1**
comp=Z,4.4nm,0.8s,baz=176,slow=0.9,SNR=8.4
**SOE Somerset East** 125.03 246 IAMs_20 IAMs_20 23 02 55.4
comp=Z,1µm,20.0s
**NVL N'lazarevskaya** 125.14 198 *e*PKIKP **PKPdf** **22 25 53.6 -1.3**
NVL *e*SSS SSS 22 49 23.8
**BELA Belgrano 2** 125.54 181 IAMs_20 IAMs_20 23 21 45.9
comp=Z,1µm,20.0s
**TROLL Troll, Antarti** 126.72 194 ⇑PKPdf **PKPdf** **22 25 57.7 -0.4**
comp=Z,855nm,1.2s
TROLL ⇑x x 22 25 57.7
comp=Z,855nm,1.2s
**TORD Torodi Ar. Bea** 127.72 310 PKP **PKPdf** **22 26 01.1 -0.4**
comp=Z,5.6nm,1.1s,baz=17,slow=2.8,SNR=15
TORD PP **PP** **22 28 00.8 -1.6**
comp=Z,4.3nm,1.1s,baz=26,slow=6.6,SNR=5.5
**SNAA Sanae** 128.12 193 PKPdf **PKPdf** **22 26 00.3 -0.4**
**SNAA Sanae** 128.12 193 ⇑PKPdf **PKPdf** **22 26 00.4 -0.4**
comp=Z,114nm,0.8s
SNAA ⇑SKPdf SKPdf 22 29 22.6 -12
comp=Z,33nm,0.8s
SNAA ⇑x x 22 29 22.6
comp=Z,33nm,0.8s
**SNAA Sanae** 128.12 193 PKP **PKPdf** **22 26 00.2 -0.5**
comp=Z,14nm,1.2s,baz=131,slow=4.3,SNR=5.6
**SNAA Sanae** 128.12 193 PKiKP **PKPdf** **22 26 00.3 -0.4**
SNAA MLR MLR

comp=Z,1μm,20.0s
**VNA2 Neumayer--Watz 129.62 192** ⇑PKPdf **PKPdf 22 26 03.2 -0.3**
comp=Z,9.6nm,0.6s,baz=158,slow=1.7
VNA2 ⇑SKPdf SKPab 22 29 21.2 -2.1
comp=Z,2.7nm,0.9s,baz=112,slow=1.7
VNA2 ⇑x x 22 29 21.2
comp=Z,2.7nm,0.9s,baz=112,slow=1.7
**VNA3 Neumayer Olymp 129.77 191** ⇑PKPdf **PKPdf 22 26 03.7 -0.1**
comp=Z,3.0nm,0.5s
VNA3 ⇑SKPbc SKPab 22 29 22.0 -2.0
comp=Z,4.2nm,1.0s
VNA3 ⇑x x 22 29 22.0
comp=Z,4.2nm,1.0s
**VNA1 Neumayer--Stat 130.01 192** ⇑PKPdf **PKPdf 22 26 04.0 -0.2**
comp=Z,9.0nm,1.2s
VNA1 ⇑SKPbc **SKPab 22 29 22.9 -2.0**
comp=Z,10nm,1.3s
VNA1 ⇑x x 22 29 22.9
comp=Z,10nm,1.3s
**ROSC El Rosal 133.71 57** PKP **PKPdf 22 26 12.8 -0.6**
comp=Z,5.5nm,0.4s,baz=4.3,slow=19,SNR=3.5
**SDV Santo Domingo 133.75 50** *eP* **PKiKP 22 26 15.3 +0.8**
**BAUV El Baul 135.49 47** PKPdf **PKPdf 22 26 15.6 -0.6**
**DBIC Dimbokro 136.84 310** PKhKP PKPpre 22 26 15.1
comp=Z,3.2nm,0.7s,baz=86,slow=12,SNR=1.9
**PLCA Paso Flores 146.79 129** PKPbc **PKPbc 22 26 37.5 -0.1**
comp=Z,31nm,0.8s,baz=242,slow=3.7,SNR=29
**PLCA Paso Flores 146.79 129** *eP* **PKPbc 22 26 37.3 -0.2**
**EFI East Falkland 147.39 155** **PKPbc 22 26 39.5 +0.7**
**EFI East Falkland 147.39 155** PKP2 **PKPbc 22 26 39.5 +0.7**
**LCO Las Campanas 149.04 108** **PKPbc 22 26 44.4 +0.2**
**LCO Las Campanas 149.04 108** PKP2 **PKPbc 22 26 44.4 +0.2**
LCO MLR MLR
comp=Z,4μm,20.0s
**HOPE Hope Point 149.25 180** **PKPbc 22 26 44.1 +0.6**
**HOPE Hope Point 149.25 180** PKP2 **PKPbc 22 26 44.1 +0.6**
**LPAZ La Paz 149.59 82** PKP **PKPdf 22 26 42.4 +0.7**
comp=Z,9.8nm,0.8s,baz=340,slow=4.4,SNR=15
LPAZ PKPbc **PKiKP 22 26 47.3 -0.1**
comp=Z,24nm,0.8s,baz=353,slow=4.1,SNR=31
**LPAZ La Paz 149.59 82** *eP* **PKPdf 22 26 42.1 +0.3**
**LVC Limon Verde 150.33 95** *eP* **PKPdf 22 26 44.4 +1.9**
**SAML Samuel 150.78 65** PKPdf **PKPdf 22 26 43.1 +0.2**
**SAML Samuel 150.78 65** PKIKP **PKPdf 22 26 43.1 +0.2**
SAML MLR MLR
comp=Z,16μm,18.0s
**MCPB Macapa, AP 152.57 35** *eP* **PKPdf 22 26 47.7 +2.0**
**TRQA Tornquist 153.94 130** **PKPbc 22 26 55.0 0.0**
**TRQA Tornquist 153.94 130** PKIKP **PKPbc 22 26 55.0 0.0**
TRQA MLR MLR
comp=Z,3μm,21.0s
**VILB Vilhena 155.34 69** PKPab **PKPab 22 27 13.6 -1.2**
**CLDB Colider 157.85 59** *eP* **PKPdf 22 26 53.1 +0.3**
**AQDB Aquidauana 162.08 84** *eP* **PKPdf 22 26 56.8 -0.5**
**ALGR Alto Alegre (B 164.37 113** *eP* **PKPdf 22 27 01.8 +2.4**
**TRCB Terra Rica 165.28 90** *eP* **PKPdf 22 27 00.8 +0.5**
**CNLB Canela 166.02 118** *eP* **PKPdf 22 27 01.9 +1.2**
**PCMB Pacaembu 166.37 85** *eP* **PKPdf 22 27 02.1 +0.9**
**BDFB Brasilia 166.75 56** PKP **PKPdf 22 27 02.4 +0.6**
comp=Z,2.1nm,0.5s,baz=59,slow=5.5,SNR=4.7
**PARB Paraibuna 171.76 91** *eP* **PKPdf 22 27 06.3 +1.6**
**BSCB Bom Sucesso 172.08 73** *eP* **PKPdf 22 27 06.8 +1.9**
**SJMB Sao Joao De Ma 173.63 42** *eP* **PKPdf 22 27 07.2 +1.8**

*NEIC* ***17*** *22:10:39.6±1.3, 41.°15N±0.°02×124.°03W±0.°07, h27km±6km, Error ellipse: s-maj=7.6km s-min=2.8km az=106.0*
**NCEDC 17 22:10:40.6±2.3, 41.°15N±0.°02×123.°98W±0.°05, h23km±7km, ML3.2/16, ML2.9/70**(NEIC)**, Error ellipse: s-maj=5.2km s-min=3.5km az=92.0, Northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRPM** | **Rodgers** | **0.03** | **293** | Pg | Pb | 22 10 44.5 | -0.2 |
| KRPM | | | | Sg | Sb | 22 10 47.7 | +0.2 |
| **JCC** | **Jacoby Creek,** | **0.33** | **186** | | Pb | 22 10 47.7 | -0.2 |
| JCC | | | | Sg | Sb | 22 10 53.4 | +0.5 |
| JCC | | | | IAML | | 22 10 54.6 | |
| | comp=N,2μm,0.6s | | | | | | |
| **KHMM** | **Horse Mountain** | **0.33** | **145** | | Pb | 22 10 48.2 | +0.1 |
| KHMM | | | | Sg | Sb | 22 10 54.2 | +1.0 |
| **KRMB** | **Red Mountain** | **0.38** | **9** | | Pb | 22 10 48.4 | -0.5 |
| KRMB | | | | Sg | Sb | 22 10 54.5 | 0.0 |
| **KOMM** | **Orleans Mounta** | **0.42** | **71** | | Pb | 22 10 49.3 | -0.2 |
| KOMM | | | | | Sb | 22 10 56.1 | +0.4 |
| **KSXB** | **Camp Six Broad** | **0.69** | **7** | | Pb | 22 10 53.0 | -1.0 |
| KSXB | | | | Sg | Sb | 22 11 02.5 | -0.7 |
| **KCTM** | **Capetown** | **0.72** | **202** | | Pb | 22 10 53.7 | -0.7 |
| **KCRM** | **Chalk Rock** | **0.73** | **170** | | Pb | 22 10 53.8 | -0.9 |
| **KMPM** | **Mount Pierce** | **0.73** | **188** | | Pb | 22 10 53.8 | -1.0 |
| KMPM | | | | Sg | Sb | 22 11 04.2 | -0.3 |
| **KHBM** | **Hayfork Bally** | **0.76** | **130** | | Pb | 22 10 53.9 | -1.3 |
| **M02C** | **Callahan** | **0.89** | **74** | | Pb | 22 10 55.8 | -1.6 |
| M02C | | | | | Sb | 22 11 08.1 | -0.7 |
| **LGPM** | **Granite Peak** | **0.90** | **105** | | Pb | 22 10 56.1 | -1.6 |
| **KPPM** | **Pickett Peak** | **0.93** | **149** | | Pb | 22 10 57.1 | -1.1 |
| **KMRM** | **Mail Ridge** | **0.95** | **167** | | Pb | 22 10 57.2 | -1.2 |
| **KMRM** | **Mail Ridge** | **0.95** | **167** | IAML | | 22 11 22.2 | |
| | comp=N,432nm,1.1s | | | | | | |
| KMRM | | | | IAML | | 22 11 24.0 | |
| | comp=E,631nm,1.1s | | | | | | |
| **KSMM** | **Slide Mountain** | **0.97** | **189** | | Pb | 22 10 57.0 | -1.7 |
| **N02D** | **Trinity Center** | **0.98** | **100** | | Pb | 22 10 57.2 | -1.7 |
| **LBKM** | **Bonanza King** | **1.00** | **93** | | Pn | 22 10 57.7 | -1.6 |
| **L02F** | **Cave Junction** | **1.02** | **17** | | Pn | 22 10 57.7 | -1.8 |
| L02F | | | | IAML | | 22 11 17.7 | |
| | comp=N,489nm,0.4s | | | | | | |
| L02F | | | | IAML | | 22 11 19.0 | |
| | comp=E,571nm,0.5s | | | | | | |
| **KBO** | **Bosley Butte** | **1.08** | **350** | | Pn | 22 10 58.7 | -1.7 |
| **KBO** | **Bosley Butte** | **1.08** | **350** | IAML | | 22 11 23.1 | |
| | comp=N,516nm,0.8s | | | | | | |
| **LAMM** | **Antelope Mount** | **1.12** | **65** | | Pn | 22 10 59.8 | -1.2 |
| **YBH** | **Yreka Blue Hor** | **1.12** | **58** | | Pn | 22 10 59.9 | -1.0 |
| **LBPM** | **Beegum Peak** | **1.18** | **134** | | Pn | 22 11 00.1 | -1.6 |
| **LCSM** | **College of the** | **1.23** | **77** | | Pn | 22 11 01.6 | -0.8 |
| **O02D** | **Mt. Diablo Mer** | **1.33** | **136** | | Pn | 22 11 02.3 | -1.5 |
| **O02D** | **Mt. Diablo Mer** | **1.33** | **136** | IAML | | 22 11 33.3 | |
| | comp=N,116nm,0.8s | | | | | | |
| O02D | | | | IAML | | 22 11 36.0 | |
| | comp=E,125nm,0.8s | | | | | | |
| **B040** | **Montague** | **1.36** | **59** | | Pn | 22 11 03.6 | -0.6 |
| **LGBM** | **Gray Butte** | **1.36** | **81** | | Pn | 22 11 04.0 | -0.4 |
| **KBNM** | **Bluenose Ridge** | **1.39** | **154** | | Pn | 22 11 03.5 | -1.1 |
| **KIPM** | **Iron Peak** | **1.39** | **164** | | Pn | 22 11 03.4 | -1.3 |
| **M03C** | **McCloud** | **1.41** | **84** | | Pn | 22 11 04.5 | -0.4 |
| **LHEM** | **Herd Peak** | **1.41** | **69** | | Pn | 22 11 04.8 | -0.3 |
| **LMPM** | **Military Pass** | **1.41** | **75** | | Pn | 22 11 05.0 | -0.1 |
| **KCPM** | **Cahto Peak** | **1.49** | **168** | | Pn | 22 11 04.6 | -1.4 |
| **KCPM** | **Cahto Peak** | **1.49** | **168** | IAML | | 22 11 24.3 | |
| | comp=N,272nm,0.3s | | | | | | |
| KCPM | | | | IAML | | 22 11 29.1 | |
| | comp=E,275nm,0.3s | | | | | | |
| **LSHM** | **Sage Hen Hill** | **1.51** | **103** | | Pn | 22 11 05.2 | -1.1 |
| **KFPM** | **Farley Peak** | **1.56** | **164** | | Pn | 22 11 05.5 | -1.5 |
| **K02D** | **Willamette Mer** | **1.57** | **9** | IAML | | 22 11 38.0 | |
| | comp=N,198nm,0.9s | | | | | | |
| K02D | | | | IAML | | 22 11 40.9 | |
| | comp=E,152nm,0.7s | | | | | | |
| **GROM** | **Round Mountain** | **1.58** | **140** | | Pn | 22 11 06.1 | -1.2 |
| **HUMO** | **Hull Mountain** | **1.65** | **27** | | Pn | 22 11 06.8 | -1.3 |
| **LGMM** | **Garner Mountai** | **1.68** | **74** | | Pn | 22 11 08.4 | -0.3 |
| **GVV** | **Valley View** | **1.69** | **143** | | Pn | 22 11 07.8 | -1.0 |
| **LTCM** | **Tuscan Springs** | **1.70** | **123** | | Pn | 22 11 07.7 | -1.1 |
| **DCMP** | **DeCamp, Califo** | **1.75** | **163** | | Pn | 22 11 07.3 | -2.1 |
| **GTC** | **Three Chop Rid** | **1.77** | **169** | | Pn | 22 11 07.9 | -2.0 |
| **LDBM** | **Digger Butte** | **1.81** | **112** | | Pn | 22 11 09.4 | -1.1 |
| **O03E** | **Paynes Creek** | **1.86** | **116** | | Pn | 22 11 09.7 | -1.4 |
| **HATC** | **Hat Creek Radi** | **1.94** | **99** | | Pn | 22 11 11.3 | -0.9 |
| **GCK** | **Clark Valley** | **1.99** | **143** | | Pn | 22 11 12.9 | +0.1 |
| **GWRM** | **Wonder Ranch** | **2.01** | **165** | | Pn | 22 11 11.2 | -1.9 |
| **J01E** | **Myrtle Point** | **2.02** | **1** | | Pn | 22 11 12.3 | -0.8 |
| J01E | | | | IAML | | 22 11 56.6 | |
| | comp=E,153nm,0.8s | | | | | | |
| J01E | | | | IAML | | 22 11 57.2 | |
| | comp=N,104nm,1.2s | | | | | | |
| **LRDM** | **Redding Peak** | **2.03** | **109** | | Pn | 22 11 14.1 | +0.7 |
| **LRDM** | **Redding Peak** | **2.03** | **109** | IAML | | 22 11 58.3 | |
| | comp=N,158nm,0.8s | | | | | | |
| **DBO** | **Dodson Butte** | **2.05** | **15** | | Pn | 22 11 12.9 | -0.7 |
| **K04D** | **Chiloquin, OR** | **2.23** | **48** | | Pn | 22 11 15.0 | -1.2 |
| **GFC** | **Funks Creek** | **2.23** | **144** | | Pn | 22 11 15.8 | -0.3 |
| **HOPS** | **Hopland Field** | **2.26** | **162** | Pn | Pn | 22 11 15.0 | -1.5 |
| HOPS | | | | IAML | | 22 12 16.0 | |
| | comp=E,42nm,3.1s | | | | | | |
| HOPS | | | | IAML | | 22 12 16.0 | |
| | comp=N,42nm,2.5s | | | | | | |
| **GSNM** | **Snow Mountain** | **2.29** | **164** | | Pn | 22 11 15.5 | -1.4 |
| **GGUM** | **Gualala** | **2.32** | **171** | | Pn | 22 11 15.3 | -2.0 |
| **ORV** | **Oroville** | **2.48** | **129** | | Pn | 22 11 18.8 | -0.7 |
| **I04A** | **Tendick Farm,** | **2.89** | **23** | | Pn | 22 11 25.1 | -0.1 |
| I04A | | | | IAML | | 22 12 05.0 | |
| | comp=E,25nm,0.2s | | | | | | |
| I04A | | | | IAML | | 22 12 22.8 | |
| | comp=N,25nm,0.9s | | | | | | |
| **J05D** | **Fort Rock, OR** | **2.96** | **43** | | Pn | 22 11 25.7 | -0.5 |
| J05D | | | | IAML | | 22 12 28.2 | |
| | comp=N,24nm,1.2s | | | | | | |
| J05D | | | | IAML | | 22 12 30.4 | |
| | comp=E,27nm,1.4s | | | | | | |
| **MCCM** | **Marconi Confer** | **3.12** | **164** | Pn | Pn | 22 11 27.3 | -0.9 |
| MCCM | | | | IAML | | 22 13 02.5 | |
| | comp=E,41nm,2.1s | | | | | | |
| MCCM | | | | IAML | | 22 13 23.8 | |
| | comp=N,38nm,2.8s | | | | | | |
| **BUCK** | **Buck Mountain** | **3.14** | **13** | Pn | Pn | 22 11 26.5 | -2.2 |
| BUCK | | | | IAML | | 22 12 34.8 | |
| | comp=E,37nm,2.0s | | | | | | |
| BUCK | | | | IAML | | 22 12 44.5 | |
| | comp=N,29nm,2.8s | | | | | | |
| **AFDM** | **Forest Hills D** | **3.19** | **133** | | Pn | 22 11 28.6 | -0.7 |
| **PINE** | **Pine Mountain** | **3.47** | **39** | | Pn | 22 11 32.7 | -0.7 |
| **H04D** | **Lebanon** | **3.50** | **15** | Pn | Pn | 22 11 34.0 | +0.5 |
| H04D | | | | IAML | | 22 12 32.1 | |
| | comp=E,25nm,2.1s | | | | | | |
| H04D | | | | IAML | | 22 12 57.8 | |
| | comp=N,26nm,1.9s | | | | | | |
| **EMB** | **Emerald Bay** | **3.68** | **125** | Pn | Pn | 22 11 37.1 | +0.8 |
| EMB | | | | IAML | | 22 12 15.2 | |
| | comp=N,28nm,0.8s | | | | | | |
| EMB | | | | IAML | | 22 12 21.4 | |
| | comp=E,30nm,0.8s | | | | | | |
| **H04A** | **Detroit Lake** | **3.77** | **20** | Pn | Pn | 22 11 36.7 | -0.7 |
| H04A | | | | IAML | | 22 12 23.5 | |
| | comp=E,13nm,0.4s | | | | | | |
| H04A | | | | IAML | | 22 13 07.0 | |
| | comp=N,13nm,0.9s | | | | | | |
| **CMB** | **Columbia Colle** | **4.17** | **137** | Pn | Pn | 22 11 41.0 | -1.8 |
| **YERR** | **Yerington** | **4.23** | **119** | | Pn | 22 11 43.4 | -0.4 |
| YERR | | | | IAML | | 22 12 58.9 | |
| | comp=N,12nm,0.8s | | | | | | |
| YERR | | | | IAML | | 22 13 04.2 | |
| | comp=E,17nm,0.8s | | | | | | |
| **J08A** | **Circle Bar Ran** | **4.65** | **60** | Pn | Pn | 22 11 47.9 | -1.6 |
| J08A | | | | IAML | | 22 13 14.7 | |
| | comp=N,6.1nm,2.5s | | | | | | |
| **SAO** | **San Andreas Ge** | **4.80** | **155** | Pn | Pn | 22 11 50.1 | -1.4 |

*IDC* ***17*** *22:12:13.9±0.6, 23.°44N×143.°43E, h0km, mb4.3/20, mbtmp4.3/23, ML3.6/3, Error ellipse: s-maj=21.6km s-min=14.2km az=74.0*
*NEIC* ***17*** *22:12:17.3±1.6, 23.°35N±0.°08×143.°3E±0.°1, h10km±1km, mb4.9/62, Error ellipse: s-maj=19.1km s-min=14.3km az=92.0*
**ISC 17 22:12:19.5±0.5, 23.°51N±0.°06×143.°32E±0.°09, h31km, n103, σ1956/104, mb4.8/53, 1D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.72** | **344** | Pn | **Pn** | **22 13 17.8** | **+3.0** |
| JCJ | | | | Sn | **Sn** | **22 13 58.3** | **+0.8** |
| **JCJ** | **Chichijima** | **3.72** | **344** | Pn | **Pn** | **22 13 11.3** | **-3.5** |
| | 21nm,0.3s,baz=95,slow=20,SNR=1.5 | | | | | | |
| JCJ | | | | Sn | **Sn** | **22 13 53.0** | **-4.6** |
| | 124nm,0.3s,baz=282,slow=23,SNR=9.2 | | | | | | |
| **JMZ** | **Minamidaito 2** | **11.24** | **284** | Pn | **Pn** | **22 14 59.4** | **+1.4** |
| **MJAR** | **Matsushiro Arr** | **13.72** | **342** | Pn | **Pn** | **22 15 28.9** | **-3.0** |
| | 0.1nm,0.3s,baz=161,slow=11,SNR=2.3 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **JOW** | **Kunigami** | **14.02** | **287** | Pn | **P** | **22 15 41.1** | **-2.4** |
| | 1.5nm,0.3s,baz=104,slow=24,SNR=1.7 | | | | | | |
| **JNU** | **Nakatsue** | **14.54** | **314** | Pn | **Pn** | **22 15 44.6** | **+1.5** |
| | 0.2nm,0.3s,baz=23,slow=15,SNR=1.7 | | | | | | |
| | 7.9nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **19.18** | **320** | P | **P** | **22 16 40.8** | **+0.3** |
| | 0.6nm,0.3s,baz=134,slow=11,SNR=5.6 | | | | | | |
| | 4.5nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **20.57** | **359** | P | Pn | 22 16 59.6 | +1.6 |
| | 14nm,1.1s,baz=111,slow=16,SNR=1.1 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **20.57** | **359** | P | Pn | 22 17 01.2 | +3.3 |
| JKA | | | | IAmb | IAmb | 22 17 14.9 | |
| | comp=Z,98nm,1.5s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **22.64** | **338** | P | **P** | **22 17 18.4** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **22.64** | **338** | P | **P** | **22 17 17.0** | **-0.9** |
| | comp=Z,5.2nm,0.8s,baz=159,slow=8.9,SNR=5.5 | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **XAN** | **Xi'an** | **31.79** | **297** ⇓ | P | **P** | **22 18 43.3** | **+2.0** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,14nm,1.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,3μm,15.1s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,2μm,14.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,3μm,14.4s | | | | | | |
| **SONM** | **Songino Array** | **38.05** | **319** | P | **P** | **22 19 34.4** | **-0.7** |
| | comp=Z,1.7nm,1.0s,baz=120,slow=8.5,SNR=2.1 | | | | | | |
| | comp=Z,1.7nm,1.0s | | | | | | |
| **YAK** | **Yakutsk** | **39.61** | **350** | P | **P** | **22 19 46.7** | **-1.2** |
| YAK | | | | IAmb | IAmb | 22 19 47.8 | |
| | comp=Z,32nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.62** | **272** | P | **P** | **22 20 05.7** | **+0.7** |
| | comp=Z,2.3nm,0.5s,baz=60,slow=7.5,SNR=7.4 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.88** | **192** | P | **P** | **22 20 22.5** | **-0.8** |
| **WRA** | **Warramunga Arr** | **44.06** | **192** | P | **P** | **22 20 23.1** | **-1.7** |
| | comp=Z,5.4nm,0.5s,baz=16,slow=9.4,SNR=22 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 22 10.3** | **+0.5** |
| | comp=Z,3.9nm,0.9s,baz=5.9,slow=3.6,SNR=3.4 | | | | | | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.81** | **204** | P | **P** | **22 20 30.4** | **-0.2** |
| **KULM** | **Kulim** | **44.89** | **253** | P | **P** | **22 20 32.4** | **+0.9** |
| **LSA** | **Lhasa** | **46.73** | **289** | P | **P** | **22 20 48.4** | **+1.9** |
| **AS31** | **Alice Springs** | **47.77** | **192** | P | **P** | **22 20 53.2** | **-0.7** |
| **ASAR** | **Alice Springs** | **47.77** | **192** | P | **P** | **22 20 53.0** | **-1.0** |
| **ASAR** | **Alice Springs** | **47.77** | **192** | P | **P** | **22 20 52.1** | **-1.8** |
| | comp=Z,1.0nm,0.4s,baz=11,slow=11,SNR=9.4 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **GSI** | **Gumungsitoli** | **49.50** | **250** | P | **P** | **22 21 07.0** | **-0.4** |
| **MBWA** | **Marble Bar** | **49.99** | **209** | P | **P** | **22 21 09.5** | **-1.5** |
| MBWA | | | | IAmb | IAmb | 22 21 24.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **52.88** | **321** | P | **P** | **22 21 32.2** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **52.88** | **321** | P | **P** | **22 21 32.5** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **52.88** | **321** | P | **P** | **22 21 32.0** | **-0.3** |
| | comp=Z,1.8nm,0.5s,baz=111,slow=7.9,SNR=8.1 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **N15K** | **Kwethluk River** | **53.40** | **31** | P | **P** | **22 21 38.1** | **+2.1** |
| N15K | | | | IAmb | IAmb | 22 21 51.5 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **53.58** | **312** | P | **P** | **22 21 39.0** | **+1.4** |
| **MKAR** | **Makanchi Array** | **53.58** | **312** | P | **P** | **22 21 38.6** | **+1.0** |
| **MKAR** | **Makanchi Array** | **53.58** | **312** | P | **P** | **22 21 38.1** | **+0.5** |
| | comp=Z,3.7nm,0.8s,baz=92,slow=8.7,SNR=14 | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **53.80** | **312** | P | **P** | **22 21 40.5** | **+1.3** |
| MAKZ | | | | IAmb | IAmb | 22 21 44.2 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **55.10** | **182** | P | **P** | **22 21 46.6** | **-2.0** |
| | comp=Z,2.6nm,0.4s,baz=50,slow=7.5,SNR=6.0 | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **N19K** | **Bonanza Creek** | **56.25** | **31** | P | **P** | **22 21 58.4** | **+1.6** |
| **KURBB** | **Kurchatov Arra** | **56.30** | **316** | P | **P** | **22 21 57.5** | **+0.3** |
| | comp=Z,17nm,0.9s,baz=92,slow=7.8,SNR=21 | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | |
| **PRZ** | **Przheval'sk** | **56.31** | **306** | P | **P** | **22 21 59.2** | **+1.6** |
| **J19K** | **Poorman** | **56.51** | **28** | P | **P** | **22 21 59.8** | **+1.4** |
| J19K | | | | IAmb | IAmb | 22 22 14.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **56.69** | **21** | P | **P** | **22 22 01.2** | **+1.5** |
| C19K | | | | IAmb | IAmb | 22 22 14.3 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **J20K** | **Nowinta River** | **57.18** | **28** | P | **P** | **22 22 04.7** | **+1.5** |
| J20K | | | | IAmb | IAmb | 22 22 20.5 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **57.34** | **24** | P | **P** | **22 22 05.9** | **+1.7** |
| **IMAR** | **Indian Mountai** | **57.80** | **26** | P | **P** | **22 22 08.3** | **+0.7** |
| **B20K** | **Meade River** | **57.82** | **20** | P | **P** | **22 22 09.0** | **+1.5** |
| B20K | | | | IAmb | IAmb | 22 22 20.5 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **G21K** | **Allakaket** | **58.04** | **25** | P | **P** | **22 22 10.8** | **+1.6** |
| **H21K** | **Melozitna Rive** | **58.10** | **26** | P | **P** | **22 22 11.5** | **+1.9** |
| **BOOM** | **Boomskoye usch** | **58.12** | **306** | P | **P** | **22 22 12.2** | **+1.8** |
| BOOM | | | | IAmb | IAmb | 22 22 13.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **58.23** | **24** | P | **P** | **22 22 11.6** | **+1.0** |
| **KSH** | **Kashi** | **58.34** | **303** | P | **P** | **22 22 16.6** | **+4.7** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,25nm,0.8s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=N,1μm,15.1s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,1μm,15.5s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,2μm,14.1s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **59.14** | **21** | P | **P** | **22 22 18.0** | **+1.3** |
| B22K | | | | IAmb | IAmb | 22 22 30.0 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **RND** | **Reindeer** | **59.33** | **29** | P | **P** | **22 22 21.1** | **+2.8** |
| RND | | | | IAmb | IAmb | 22 22 33.2 | |
| | comp=Z,9.1nm,0.6s | | | | | | |
| **SML** | **Sawmill** | **59.34** | **31** | P | **P** | **22 22 19.1** | **+0.6** |
| SML | | | | IAmb | IAmb | 22 22 34.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **59.82** | **31** | P | **P** | **22 22 22.4** | **+0.7** |
| SCM | | | | IAmb | IAmb | 22 22 30.0 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **E23K** | **Chandalar** | **59.87** | **24** | P | **P** | **22 22 24.6** | **+2.6** |
| E23K | | | | IAmb | IAmb | 22 22 42.7 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **59.92** | **21** | P | **P** | **22 22 23.6** | **+1.4** |
| C23K | | | | IAmb | IAmb | 22 22 33.8 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **HIN** | **Hinchinbrook I** | **60.08** | **33** | P | **P** | **22 22 24.3** | **+0.9** |
| HIN | | | | IAmb | IAmb | 22 22 38.5 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **60.38** | **28** | P | **P** | **22 22 25.0** | **-0.5** |
| **ILAR** | **Eielson Array** | **60.38** | **28** | P | **P** | **22 22 24.3** | **-1.1** |
| | comp=Z,2.2nm,0.8s,baz=259,slow=5.7,SNR=6.9 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **ARSB** | **Arslanbob** | **60.43** | **305** | P | **P** | **22 22 27.9** | **+1.6** |
| ARSB | | | | IAmb | IAmb | 22 22 29.2 | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **KLU** | **Klutina** | **60.45** | **31** | P | **P** | **22 22 27.7** | **+1.7** |
| **RAGM** | **Ragged Mountai** | **60.98** | **33** | P | **P** | **22 22 32.2** | **+2.6** |
| RAGM | | | | IAmb | IAmb | 22 22 48.6 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **KAIM** | **Kayak Island** | **61.09** | **33** | P | **P** | **22 22 31.6** | **+1.4** |
| KAIM | | | | IAmb | IAmb | 22 22 34.3 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **D25K** | **Kavik River** | **61.27** | **22** | P | **P** | **22 22 33.1** | **+1.6** |
| D25K | | | | IAmb | IAmb | 22 22 48.6 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.39** | **319** | P | **P** | **22 22 33.1** | **+0.7** |
| | comp=Z,20nm,0.5s,baz=84,slow=6.8,SNR=42 | | | | | | |
| **BRVK** | **Borovoye** | **61.45** | **319** | P | **P** | **22 22 33.4** | **+0.5** |
| **SCRK** | **Sand Creek** | **61.55** | **29** | P | **P** | **22 22 34.5** | **+1.0** |
| SCRK | | | | IAmb | IAmb | 22 22 49.4 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **62.05** | **308** | P | **P** | **22 22 38.2** | **+1.1** |
| **KKAR** | **Karatay Array** | **62.05** | **308** | P | **P** | **22 22 38.5** | **+1.4** |
| **KKAR** | **Karatay Array** | **62.05** | **308** | P | **P** | **22 22 37.8** | **+0.7** |
| KKAR | | | | IAmb | IAmb | 22 22 39.4 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **GARM** | **Garm** | **62.76** | **303** | P | **P** | **22 22 43.4** | **+1.3** |
| **I28M** | **Miner Creek** | **63.37** | **27** | P | **P** | **22 22 47.3** | **+1.7** |
| I28M | | | | IAmb | IAmb | 22 23 05.7 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **CHGR** | **Chuyangaron** | **63.71** | **303** | P | **P** | **22 22 49.7** | **+1.3** |
| **SIMJ** | **Simiganj** | **63.83** | **303** | P | **P** | **22 22 50.1** | **+0.9** |
| **H29M** | **Whitestone** | **64.03** | **26** | P | **P** | **22 22 51.3** | **+1.5** |
| H29M | | | | IAmb | IAmb | 22 22 58.2 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **K29M** | **Barlow Dome** | **64.40** | **29** | P | **P** | **22 22 53.9** | **+1.5** |
| K29M | | | | IAmb | IAmb | 22 23 01.3 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| **KBL** | **Kabul** | **64.58** | **298** | P | **P** | **22 22 55.5** | **+1.2** |
| **J30M** | **Hart River** | **64.90** | **28** | P | **P** | **22 22 56.8** | **+1.0** |
| J30M | | | | IAmb | IAmb | 22 23 06.6 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **G31M** | **Satah River** | **65.65** | **25** | P | **P** | **22 23 01.4** | **+1.0** |
| **ARU** | **Arti** | **67.89** | **323** | P | **P** | **22 23 15.0** | **+0.2** |
| **ABKAR** | **Akbulak array** | **68.35** | **316** | P | **P** | **22 23 18.2** | **+0.4** |
| ABKAR | | | | IAmb | IAmb | 22 23 20.4 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.81** | **28** | P | **P** | **22 23 56.8** | **+0.3** |
| | comp=Z,1.6nm,0.8s,baz=295,slow=5.7,SNR=3.3 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.25** | **341** | P | **P** | **22 24 10.6** | **+0.3** |
| | comp=Z,4.2nm,0.8s,baz=74,slow=8.5,SNR=8.0 | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **B08A** | **Colville Reser** | **77.45** | **43** | P | **P** | **22 24 12.6** | **+0.7** |
| **J05D** | **Fort Rock, OR** | **78.03** | **48** | P | **P** | **22 24 17.9** | **+2.6** |
| J05D | | | | IAmb | IAmb | 22 24 19.6 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **BMO** | **Blue Mountains** | **80.07** | **45** | P | **P** | **22 24 28.8** | **+2.3** |
| **CMB** | **Columbia Colle** | **80.57** | **53** | P | **P** | **22 24 30.1** | **+0.9** |
| **KBZ** | **Khabaz** | **81.21** | **314** | P | **P** | **22 24 32.9** | **+0.5** |
| | comp=Z,9.7nm,0.9s,baz=88,slow=3.3,SNR=6.2 | | | | | | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | | | | PcP | PcP | 22 35 23.9 | 0.0 | |
| | 0.5nm,0.9s,baz=8.5,slow=3.5,SNR=2.7 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| ASAR | Alice Springs | 48.00 | 192 | P | P | 22 34 07.1 | -1.9 | |
| | 0.2nm,0.4s,baz=17,slow=9.7,SNR=2.5 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| MKAR | Makanchi Array | 53.86 | 312 | P | P | 22 34 53.1 | +0.2 | |
| | 0.5nm,0.8s,baz=92,slow=9.6,SNR=4.8 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |
| KURBB | Kurchatov Area | 56.55 | 316 | P | P | 22 35 12.2 | 0.0 | |
| | 1.9nm,0.8s,baz=94,slow=7.8,SNR=16 | | | | | | | |
| | 1.9nm,0.8s | | | | | | | |
| BVAR | Borovoye Array | 61.61 | 319 | P | P | 22 35 47.8 | +0.5 | |
| | 4.7nm,0.7s,baz=88,slow=6.9,SNR=26 | | | | | | | |
| | 4.7nm,0.7s | | | | | | | |
| KBZ | Khabaz | 81.47 | 314 | P | P | 22 37 47.2 | +0.2 | |
| | 1.5nm,0.9s,baz=136,slow=4.0,SNR=3.8 | | | | | | | |
| | 1.5nm,0.9s | | | | | | | |
| FINES | FINESS Array B | 81.70 | 335 | P | P | 22 37 48.2 | +0.3 | |
| | 3.7nm,1.0s,baz=57,slow=5.1,SNR=2.1 | | | | | | | |
| | 3.7nm,1.0s | | | | | | | |

*IDC* ***17*** *22:33:55.3±12.0, 24.˚77N×141.˚14E, h267km±120km, mb3.1/7, mbtmp3.8/7, Error ellipse: s-maj=33.4km s-min=17.9km az=76.0*

**ISC 17 22:33:46.3±1.0, 24.˚8N±0.˚2×141.˚2E±0.˚2, h181km, n7, σ0°92/8, mb3.4/7, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| WRA | | | | P | | P | | 22 41 44.0 | +0.5 |
| | 2.0nm,0.6s,baz=8.0,slow=8.7,SNR=31 | | | | | | | | |
| WRA | | | | PcP | | PcP | | 22 43 20.7 | -0.9 |
| | 0.6nm,1.0s,baz=355,slow=3.2,SNR=4.6 | | | | | | | | |
| | 2.0nm,0.6s | | | | | | | | |
| MKAR | Makanchi Array | 51.29 | 311 | P | | P | | 22 42 32.7 | +0.9 |
| | 0.3nm,0.4s,baz=90,slow=9.1,SNR=9.0 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| KURBB | Kurchatov Arra | 54.04 | 316 | P | | P | | 22 42 51.8 | 0.0 |
| | 0.2nm,0.3s,baz=93,slow=8.2,SNR=1.8 | | | | | | | | |
| | 0.2nm,0.3s | | | | | | | | |
| BVAR | Borovoye Array | 59.16 | 318 | P | | P | | 22 43 27.1 | -0.8 |
| | 0.3nm,0.4s,baz=82,slow=7.2,SNR=2.4 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| ILAR | Eielson Array | 60.16 | 28 | P | | P | | 22 43 35.5 | +1.0 |
| | 0.2nm,0.6s,baz=240,slow=6.8,SNR=2.2 | | | | | | | | |
| | 0.2nm,0.6s | | | | | | | | |
| FINES | FINESS Array B | 79.62 | 334 | P | | P | | 22 45 32.3 | -0.8 |
| | 3.0nm,1.1s,baz=25,slow=4.5,SNR=1.6 | | | | | | | | |
| | 3.0nm,1.1s | | | | | | | | |
| NVAR | Mina Array Bea | 82.64 | 51 | P | | P | | 22 45 49.4 | -0.5 |
| | 0.4nm,0.3s,baz=234,slow=4.1,SNR=6.4 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |

*CATAC* ***17*** *22:41:08.3±0.6, 12.˚85N×88.˚87W, h31km±6km, ML3.6*
*SNET* ***17*** *22:41:08.6±0.7, 12.˚85N×88.˚86W, h38km, ML3.6*

**ISC 17 22:41:07.8±1.5, 12.˚81N±0.˚06×88.˚89W±0.˚03, h32km±12km, n47, σ0°59/82, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| TECO | Alcaldia de Te | 0.73 | 8 | eP | | Pb | | 22 41 22.2 | 0.0 |
| TECO | | | | eS | | Sb | | 22 41 32.2 | +0.3 |
| TECO | Alcaldia de Te | 0.73 | 8 | iP | | Pb | | 22 41 22.4 | +0.2 |
| TECO | | | | iS | | Sb | | 22 41 31.7 | -0.3 |
| TECO | | | | | IAML | | | 22 41 33.1 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| JUCU | Jucuarįn | 0.77 | 55 | eP | | Pn | | 22 41 22.5 | +0.1 |
| JUCU | | | | eS | | Sb | | 22 41 33.1 | +0.1 |
| JUCU | Jucuarįn | 0.77 | 55 | iP | | Pn | | 22 41 22.6 | +0.1 |
| JUCU | | | | iS | | Sb | | 22 41 33.5 | +0.5 |
| JUCU | | | | | IAML | | | 22 41 35.8 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| TECA | Tecapa | 0.78 | 29 | eP | | Pb | | 22 41 23.1 | 0.0 |
| TECA | | | | eS | | Sb | | 22 41 33.7 | +0.2 |
| LALI | Alcalda de L | 0.79 | 328 | eP | | Pb | | 22 41 23.4 | +0.1 |
| LALI | | | | eS | | Sb | | 22 41 33.8 | +0.1 |
| LALI | Alcalda de L | 0.79 | 328 | iP | | Pn | | 22 41 19.2 | -3.6 |
| LALI | | | | iS | | Sn | | 22 41 33.4 | -0.1 |
| SNVI | San Vicente | 0.80 | 4 | eP | | Pn | | 22 41 23.1 | +0.1 |
| SNVI | | | | eS | | Sb | | 22 41 34.1 | +0.1 |
| COEG | Centro de Oper | 0.80 | 1 | eP | | Pn | | 22 41 23.2 | +0.2 |
| COEG | | | | eS | | Sb | | 22 41 34.0 | -0.1 |
| COEG | Centro de Oper | 0.80 | 1 | iP | | Pb | | 22 41 23.3 | -0.2 |
| COEG | | | | iS | | Sb | | 22 41 34.6 | +0.5 |
| COEG | | | | | IAML | | | 22 41 38.6 | |
| | comp=Z,790nm,1.0s | | | | | | | | |
| LFRS | El Faro | 0.82 | 348 | eP | | Pn | | 22 41 23.6 | +0.3 |
| LFRS | | | | eS | | Sb | | 22 41 34.8 | 0.0 |
| UESV | Universidad de | 0.83 | 7 | iP | | Pb | | 22 41 23.8 | 0.0 |
| UESV | | | | | IAML | | | 22 41 32.6 | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| UESV | | | | iS | | Sb | | 22 41 35.1 | +0.4 |
| LCY | Lacayo | 0.84 | 44 | eP | | Pb | | 22 41 23.9 | -0.2 |
| PANCS | Alcalda de | 0.84 | 341 | iP | | Pn | | 22 41 17.8 | -5.8 |
| PANCS | | | | iS | | Sb | | 22 41 35.3 | +0.1 |
| PACA | Pacayal | 0.86 | 40 | eP | | Pb | | 22 41 24.3 | 0.0 |
| PACA | | | | eS | | Sb | | 22 41 35.9 | +0.3 |
| PACA | Pacayal | 0.86 | 40 | iP | | Pn | | 22 41 10.9 | -13 |
| PACA | | | | iS | | Sb | | 22 41 35.9 | +0.3 |
| VSM | San Miguel | 0.86 | 44 | eP | | Pb | | 22 41 24.4 | -0.1 |
| PQSS | Presa 15 de Se | 0.87 | 22 | eP | | Pb | | 22 41 23.7 | -0.1 |
| PQSS | | | | eS | | Sb | | 22 41 35.3 | -0.6 |
| PQSS | Presa 15 de Se | 0.87 | 22 | iP | | Pb | | 22 41 24.5 | 0.0 |
| PQSS | | | | iS | | Sb | | 22 41 36.4 | +0.5 |
| PQSS | | | | | IAML | | | 22 41 38.8 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| LOMA | Loma Larga | 0.87 | 342 | eP | | Pn | | 22 41 24.3 | +0.2 |
| LOMA | | | | eS | | Sb | | 22 41 35.9 | -0.1 |
| LOMA | Loma Larga | 0.87 | 342 | iP | | Pn | | 22 41 24.2 | +0.2 |
| LOMA | | | | iS | | Sn | | 22 41 34.1 | -1.6 |
| LOMA | | | | | IAML | | | 22 41 38.5 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| BLLM | Bellamira | 0.89 | 45 | eP | | Pn | | 22 41 24.4 | +0.2 |
| BLLM | | | | eS | | Sb | | 22 41 36.2 | -0.4 |
| SCLA | Alcaldia de Sa | 0.90 | 10 | eP | | Pb | | 22 41 24.9 | -0.2 |
| SCLA | | | | eS | | Sb | | 22 41 37.2 | +0.4 |
| LFU | La Fuente | 0.96 | 347 | eP | | Pb | | 22 41 25.7 | -0.3 |
| LFU | | | | eS | | Sb | | 22 41 38.4 | 0.0 |
| PMON | Piamonte | 0.99 | 335 | iP | | Pn | | 22 41 25.4 | -0.2 |
| PMON | | | | iS | | Sb | | 22 41 39.2 | -0.1 |
| PMON | | | | | IAML | | | 22 41 44.0 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| BOQS | Boqueron | 0.99 | 338 | eP | | Pb | | 22 41 26.6 | -0.1 |
| BOQS | | | | eS | | Sb | | 22 41 39.9 | +0.3 |
| JAYA | Jayaque - finc | 1.00 | 327 | eP | | Pn | | 22 41 25.9 | +0.2 |
| JAYA | | | | eS | | Sb | | 22 41 39.6 | -0.2 |
| JAYA | Jayaque - finc | 1.00 | 327 | iP | | Pn | | 22 41 25.7 | -0.1 |
| JAYA | | | | iS | | Sb | | 22 41 39.5 | -0.2 |
| JAYA | | | | | IAML | | | 22 41 40.9 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| LCND | La Caada | 1.09 | 63 | eP | | Pn | | 22 41 27.1 | +0.2 |
| LCND | | | | eS | | Sb | | 22 41 41.2 | -1.0 |
| LCND | La Caada | 1.09 | 63 | iP | | Pn | | 22 41 27.2 | +0.3 |
| LCND | | | | iS | | Sb | | 22 41 41.2 | -1.0 |
| LCND | | | | | IAML | | | 22 41 42.6 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| CNCH | Conchagua | 1.13 | 66 | eP | | Pn | | 22 41 27.7 | +0.2 |
| CNCH | Conchagua | 1.13 | 66 | iP | | Pn | | 22 41 27.7 | +0.2 |
| CNCH | | | | iS | | Sb | | 22 41 42.7 | -0.7 |
| CNCH | | | | | IAML | | | 22 41 46.0 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| CEVE | Cerro Verde | 1.24 | 325 | eP | | Pn | | 22 41 30.2 | +1.0 |
| CEVE | | | | eS | | Sb | | 22 41 46.8 | +0.2 |
| SBLS | San Blas | 1.25 | 325 | eP | | Pn | | 22 41 30.2 | +0.9 |
| SNJE | San Jose | 1.26 | 327 | eP | | Pn | | 22 41 30.0 | +0.6 |
| RTR | El Retiro | 1.31 | 326 | eP | | Pn | | 22 41 30.5 | +0.4 |
| LLGN | La Laguna | 1.34 | 358 | | IAML | | | 22 41 29.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| LLGN | | | | iP | | Pn | | 22 41 30.9 | +0.4 |
| LLGN | | | | iS | | Sn | | 22 41 47.4 | +0.1 |
| NUBE | Las Nubes | 1.39 | 322 | eP | | Pn | | 22 41 31.6 | +0.5 |
| NUBE | | | | eS | | Sn | | 22 41 48.6 | +0.2 |
| NUBE | Las Nubes | 1.39 | 322 | iP | | Pn | | 22 41 31.8 | +0.7 |
| NUBE | | | | iS | | Sn | | 22 41 49.0 | +0.6 |
| NUBE | | | | | IAML | | | 22 41 50.6 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| MTO3 | Montecristo | 1.64 | 344 | iP | | Pn | | 22 41 35.0 | +0.3 |
| MTO3 | | | | iS | | Sn | | 22 41 54.8 | -0.1 |
| MTO3 | | | | | IAML | | | 22 41 59.9 | |
| | comp=Z,160nm,1.0s | | | | | | | | |
| CRIN | San Cristobal | 1.80 | 93 | iP | | Pn | | 22 41 37.4 | +0.7 |
| CRIN | | | | iS | | Sn | | 22 41 58.8 | +0.3 |
| CRIN | | | | | IAML | | | 22 42 09.2 | |
| | comp=Z,840nm,1.0s | | | | | | | | |
| QUEN | Al S del Volca | 2.00 | 96 | iP | | Pn | | 22 41 40.0 | +0.5 |
| QUEN | | | | | IAML | | | 22 41 40.4 | |
| | comp=Z,650nm,1.0s | | | | | | | | |
| TEL3 | Telica 3 | 2.01 | 97 | iP | | Pn | | 22 41 40.1 | +0.5 |
| HERN | Volcan Telica | 2.02 | 95 | iP | | Pn | | 22 41 39.9 | +0.2 |
| HERN | | | | iS | | Sn | | 22 42 03.3 | -0.7 |
| HERN | | | | | IAML | | | 22 42 10.6 | |
| | comp=Z,370nm,1.0s | | | | | | | | |
| TELN | Telica | 2.02 | 96 | iP | | Pn | | 22 41 39.9 | +0.1 |
| TELN | | | | iS | | Sn | | 22 42 04.7 | +0.7 |
| TELN | | | | | IAML | | | 22 42 06.5 | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| ROCN | Rota Cerro Neg | 2.12 | 98 | iP | | Pn | | 22 41 40.2 | -0.8 |
| COPN | Copaltepe | 2.33 | 105 | iP | | Pn | | 22 41 44.1 | +0.1 |

*IDC* ***17*** *22:44:44.4±0.5, 23.˚41N×143.˚36E, h0km, mb4.4/20, mbtmp4.4/23, ML3.7/3, MS4.4/18, Error ellipse: s-maj=18.7km s-min=11.8km az=74.0*
*BJI* ***17*** *22:44:44.0±0.0, 23.˚50N×143.˚40E, h10km, mb4.8/67, mB5.3/16, Ms4.8/21, Ms7 4.6/21*
*MOS* ***17*** *22:44:44.6±0.8, 23.˚42N×143.˚37E, h11km, mb5.1/64, Error ellipse: s-maj=8.7km s-min=5.0km az=123.2*
*NEIC* ***17*** *22:44:47.1±1.4, 23.˚49N±0.˚07×143.˚44E±0.˚10, h10km±1km, mb5.0/248, Error ellipse: s-maj=15.1km s-min=12.3km az=84.0*

**ISC 17 22:44:46.5±0.3, 23.˚42N±0.˚05×143.˚47E±0.˚06, h10km, n521, σ1°14/515, mb4.9/212, MS4.4/23, 33C-14D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| JCJ | Chichijima | 3.84 | 343 | Pn | | Pn | | 22 45 44.6 | -1.1 |
| JCJ | Chichijima | 3.84 | 343 | Pn | | Pn | | 22 45 42.1 | -3.6 |
| | 28nm,0.3s,baz=98,slow=24,SNR=8.9 | | | | | | | | |
| JCJ | | | | Sn | | Sn | | 22 46 23.6 | -7.3 |
| | 149nm,0.3s,baz=253,slow=23,SNR=13 | | | | | | | | |
| JMZ | Minamidaito 2 | 11.39 | 285 | Pn | | Pn | | 22 47 28.6 | -0.7 |
| INU | Inuyama | 13.15 | 336 | Pn | | Pn | | 22 47 52.1 | -1.2 |
| JGF | Kuroka | 13.25 | 338 | Pn | | Pn | | 22 47 53.8 | -0.9 |
| JMN | Monobe | 13.28 | 323 | Pn | | Pn | | 22 47 55.0 | -0.1 |
| MJAR | Matsushiro Arr | 13.85 | 342 | Pn | | Pn | | 22 48 00.6 | -2.2 |
| | 0.2nm,0.3s,baz=161,slow=11,SNR=12 | | | | | | | | |
| | 0.0nm,0.7s | | | | | | | | |
| MAJO | Matsushiro | 13.85 | 342 | | | Pn | | 22 48 01.3 | -1.6 |
| MAJO | Matsushiro | 13.85 | 342 | ⇑eP | | Pn | | 22 48 01.2 | -1.6 |
| MJB9 | Matsu-Tunnel | 13.85 | 342 | | | Pn | | 22 48 00.8 | -2.1 |
| JOW | Kunigami | 14.18 | 287 | Pn | | Pn | | 22 48 08.4 | +1.0 |
| JOW | Kunigami | 14.18 | 287 | Pn | | Pn | | 22 48 11.5 | +4.1 |
| | 0.4nm,0.3s,baz=90,slow=15,SNR=2.4 | | | | | | | | |
| JOW | | | | LR | | LR | | 22 53 07.1 | |
| | comp=Z,2μm,19.6s,baz=126,slow=36 | | | | | | | | |
| JMM | Marumori | 14.58 | 352 | Pn | | Pn | | 22 48 12.3 | -0.6 |
| JNU | Nakatsue | 14.70 | 314 | | | Pn | | 22 48 15.2 | +0.6 |
| JNU | Nakatsue | 14.70 | 314 | Pn | | Pn | | 22 48 14.9 | +0.3 |
| | 0.2nm,0.3s,baz=123,slow=6.1,SNR=4.3 | | | | | | | | |
| JNU | | | | LR | | LR | | 22 52 39.9 | |
| | comp=Z,990nm,21.0s,baz=123,slow=32 | | | | | | | | |
| | 9.5nm,0.8s | | | | | | | | |
| JTM | Tenmabayashi | 17.44 | 354 | Pn | | Pn | | 22 48 46.2 | -3.6 |
| YOJ | Yonaguni jima | 18.73 | 277 | P | | P | | 22 49 06.0 | +0.6 |
| YOJ | Yonaguni jima | 18.73 | 277 | P | | P | | 22 49 06.0 | +0.6 |
| YOJ | | | | pmax | | pmax | | | |
| | comp=Z,260nm,1.3s | | | | | | | | |
| TJN | Taejon | 18.98 | 317 | ⇑eP | | P | | 22 49 07.2 | -0.9 |
| KSRS | Korea Array | 19.34 | 320 | P | | P | | 22 49 11.4 | -0.5 |
| | comp=Z,0.6nm,0.3s,baz=130,slow=12,SNR=20 | | | | | | | | |
| KSRS | | | | LR | | LR | | 22 56 20.7 | |
| | comp=Z,957nm,18.4s,baz=100,slow=36 | | | | | | | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| KSAR | Wonju Array Be | 19.35 | 320 | P | | P | | 22 49 11.6 | -0.5 |
| KSAR | Wonju Array Be | 19.35 | 320 | P | | P | | 22 49 11.6 | -0.5 |
| KS19 | Wonju Array Si | 19.40 | 320 | P | | P | | 22 49 12.0 | -0.7 |
| NACB | Ninganchiao | 20.03 | 277 | P | | P | | 22 49 19.8 | +0.2 |
| YHNB | Yeheng | 20.21 | 278 | P | | P | | 22 49 22.7 | +0.9 |
| YHNB | | | | | IAmb | IAmb | | 22 49 36.3 | |
| | comp=Z,112nm,1.4s | | | | | | | | |
| YULB | Yu-li | 20.35 | 274 | P | | P | | 22 49 24.3 | +1.2 |
| TWG | Pinlang | 20.61 | 273 | P | | P | | 22 49 27.3 | +1.4 |
| TWG | | | | | IAmb | IAmb | | 22 49 42.5 | |
| | comp=Z,102nm,1.4s | | | | | | | | |
| SSLB | Suanglung | 20.63 | 276 | P | | P | | 22 49 26.7 | +0.4 |
| SSLB | | | | | IAmb | IAmb | | 22 49 38.5 | |
| | comp=Z,49nm,0.8s | | | | | | | | |
| ASAJ | Asahikawa | 20.66 | 358 | P | | P | | 22 49 29.2 | +2.9 |
| | comp=Z,7.5nm,0.6s,baz=245,slow=12,SNR=2.3 | | | | | | | | |
| ASAJ | | | | LR | | LR | | 23 00 31.6 | |
| | comp=Z,427nm,18.0s,baz=184,slow=46 | | | | | | | | |
| TPUB | Ta-pu | 20.97 | 274 | P | | P | | 22 49 29.9 | 0.0 |
| TPUB | | | | | IAmb | IAmb | | 22 49 39.3 | |
| | comp=Z,63nm,1.0s | | | | | | | | |
| MSHR | Mys Shultsa | 21.68 | 335 | ⇓eP | | P | | 22 49 39.0 | +1.7 |
| MSHR | | | | pmax | | pmax | | | |
| | comp=Z,27nm,1.0s | | | | | | | | |
| PATS | Pohnpei | 21.81 | 137 | P | | P | | 22 49 39.7 | +0.8 |
| PSTR | Posyet | 21.88 | 334 | ⇑eP | | P | | 22 49 39.7 | +0.3 |
| H11N1 | WAKE ISLAND Hy | 22.09 | 95 | T | | T | | 23 13 44.8 | |
| | baz=283 | | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 22.09 | 95 | T | | T | | 23 13 47.9 | |
| | baz=283,slow=74 | | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 22.10 | 95 | T | | T | | 23 13 46.5 | |
| | baz=283,slow=74 | | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 22.22 | 98 | T | | T | | 23 13 12.9 | |
| | baz=289 | | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 22.23 | 98 | T | | T | | 23 13 09.6 | |
| | baz=289 | | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 22.24 | 98 | T | | T | | 23 13 08.8 | |
| | baz=289 | | | | | | | | |
| TEY | Ternei | 22.28 | 347 | eP | | P | | 22 49 43.4 | -0.4 |
| USA0B | Ussuriysk Arra | 22.77 | 338 | P | | P | | 22 49 48.3 | -0.8 |
| USA0B | Ussuriysk Arra | 22.77 | 338 | deP | | P | | 22 49 48.2 | -0.8 |
| USRK | Ussuriysk Ar. | 22.77 | 338 | P | | P | | 22 49 48.0 | -1.0 |
| | comp=Z,17nm,0.9s,baz=160,slow=8.6,SNR=21 | | | | | | | | |
| USRK | | | | LR | | LR | | 22 58 08.6 | |
| | comp=Z,792nm,20.4s,baz=152,slow=35 | | | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| NJ2 | Nanjing | 23.38 | 297 | eP | | P | | 22 49 55.6 | +0.2 |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,29nm,0.7s | | | | | | | | |
| YSS | Yuzh-Sakhalins | 23.49 | 359 | P | | P | | 22 49 55.9 | -0.4 |
| YSS | | | | | IAmb | IAmb | | 22 50 01.5 | |
| | comp=Z,100nm,1.8s | | | | | | | | |
| YSS | Yuzh-Sakhalins | 23.49 | 359 | ⇑eP | | P | | 22 49 56.8 | +0.5 |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.8s | | | | | | | | |
| DAV | Davao City (W) | 23.66 | 229 | LR | | LR | | 22 57 23.2 | |
| | comp=Z,1μm,21.1s,baz=105,slow=32 | | | | | | | | |
| MDJ | Mudanjiang | 24.00 | 335 | P | | P | | 22 50 01.3 | 0.0 |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.5s | | | | | | | | |
| MDJ | Mudanjiang | 24.00 | 335 | P | | P | | 22 50 00.3 | -1.0 |
| MDJ | | | | | IAmb | IAmb | | 22 50 04.8 | |
| | comp=Z,41nm,1.1s | | | | | | | | |
| SNY | Shenyang | 24.75 | 323 | ⇓P | | P | | 22 50 06.8 | -1.4 |
| SNY | | | | pmax | | pmax | | | |
| | comp=Z,31nm,1.1s | | | | | | | | |
| CN2 | Changchun | 25.17 | 328 | P | | P | | 22 50 11.5 | -0.4 |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| MANU | Manus Island | 25.59 | 171 | P | | P | | 22 50 17.1 | +1.1 |
| BNX | BinXian | 25.80 | 334 | ⇓P | | P | | 22 50 17.3 | -0.4 |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| TIA | Tai'an | 26.08 | 305 | P | | P | | 22 50 19.0 | -1.3 |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,50nm,0.9s | | | | | | | | |
| WHN | Wuhan | 26.85 | 292 | ⇑P | | P | | 22 50 29.8 | +2.5 |
| KLR | Kul'dur | 27.37 | 343 | LR | | LR | | 23 01 45.3 | |
| | comp=Z,701nm,18.4s,baz=154,slow=37 | | | | | | | | |
| KLR | Kul'dur | 27.37 | 343 | ⇑eP | | P | | 22 50 31.9 | +0.1 |
| KLR | | | | pmax | | pmax | | | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| HNS | HongShan | 28.32 | 306 | ⇓P | | P | | 22 50 39.1 | -1.3 |
| HNS | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,1μm,15.1s | | | | | | | | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,630nm,11.9s | | | | | | | | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,810nm,14.7s | | | | | | | | |
| LYN | LuoYang | 29.19 | 299 | eP | | P | | 22 50 48.1 | -0.1 |
| LYN | | | | sP | | sP | | 22 50 52.8 | +2.5 |
| LYN | | | | S | | S | | 22 55 38.3 | -2.3 |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,23nm,0.7s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,1μm,14.9s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,1μm,16.6s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,2μm,15.1s | | | | | | | | |
| HEH | HeiHe | 29.58 | 339 | eP | | P | | 22 50 51.8 | +0.4 |
| HEH | | | | pmax | | pmax | | | |
| | comp=Z,60nm,1.1s | | | | | | | | |
| MYLDM | Lahad Datu | 30.14 | 237 | P | | P | | 22 50 58.2 | +1.5 |
| XLT | XiLinHaoTe | 30.38 | 319 | eP | | P | | 22 50 58.4 | -0.4 |
| XLT | | | | pP | | pP | | 22 51 02.9 | +2.6 |
| XLT | | | | sP | | sP | | 22 51 04.8 | +3.9 |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| PETK | Petropavlovsk- | 31.56 | 16 | LR | | LR | | 23 01 58.7 | |
| | comp=Z,508nm,20.1s,baz=196,slow=33 | | | | | | | | |
| HHC | Hu-ho-hao-te | 31.89 | 311 | eP | | P | | 22 51 11.8 | -0.3 |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,280nm,5.7s | | | | | | | | |
| XAN | Xi'an | 31.95 | 297 | ⇓P | | P | | 22 51 12.3 | -0.4 |
| XAN | | | | pP | | pP | | 22 51 16.3 | +2.1 |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,860nm,14.4s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,470nm,11.7s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,560nm,14.4s | | | | | | | | |
| ZEA | Zeya | 32.66 | 342 | eP | | P | | 22 51 18.3 | -0.3 |
| ZEA | | | | pmax | | pmax | | | |
| | comp=N,20nm,0.7s | | | | | | | | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| BTO | Baotou | 32.88 | 309 | eP | | P | | 22 51 23.3 | +2.5 |
| BTO | | | | pP | | sP | | 22 51 27.5 | +4.5 |
| BTO | | | | sP | | pwP | | 22 51 30.0 | +0.9 |
| BTO | | | | SS | | SS | | 22 58 37.8 | -22 |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,600nm,8.8s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,2μm,16.9s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,1μm,16.3s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,2μm,16.5s | | | | | | | | |
| CD2 | Chengdu | 35.97 | 291 | P | | P | | 22 51 47.0 | -0.6 |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| LZH | Lanzhou | 36.40 | 299 | eP | | P | | 22 51 45.1 | -6.3 |
| LZH | | | | pP | | pP | | 22 51 53.3 | +0.4 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| HNR | Honiara | 36.41 | 152 | LR | | LR | | 23 06 41.3 | |
| | comp=Z,7μm,19.3s,baz=330,slow=36 | | | | | | | | |
| KAPI | Kappang | 36.53 | 222 | P | | P | | 22 51 51.3 | -1.2 |
| KAPI | | | | IAmb | | IAmb | | 22 52 15.1 | |
| | comp=Z,45nm,1.2s | | | | | | | | |
| KAPI | Kappang | 36.53 | 222 | LR | | LR | | 23 05 38.1 | |
| | comp=Z,252nm,20.2s,baz=43,slow=34 | | | | | | | | |
| KAPI | Kappang | 36.53 | 222 | deP | | P | | 22 51 52.9 | +0.5 |
| KAPI | | | | pmax | | pmax | | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| SLVN | Son La | 36.57 | 275 | P | | P | | 22 51 52.6 | -0.2 |
| UBPT | Khong Chiam | 36.67 | 264 | P | | P | | 22 51 52.8 | -0.9 |
| SBUM | Sibu | 36.73 | 240 | P | | P | | 22 51 54.7 | +0.5 |
| KMI | Kunming | 37.07 | 281 | ⇑P | | P | | 22 51 57.3 | 0.0 |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| COEN | Coen | 37.15 | 180 | P | | P | | 22 51 58.7 | +1.0 |
| SHEM | Shemya Is, Ala | 37.40 | 31 | LR | | LR | | 23 05 50.4 | |
| | comp=Z,335nm,19.1s,baz=250,slow=34 | | | | | | | | |
| ULN | Ulaanbaatar | 37.82 | 319 | P | | P | | 22 52 01.8 | -1.5 |
| ULN | Ulaanbaatar | 37.82 | 319 | P | | P | | 22 52 02.5 | -0.8 |
| ULN | Ulaanbaatar | 37.82 | 319 | deP | | P | | 22 52 02.3 | -1.0 |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.3s | | | | | | | | |
| PZH | PanZhiHua | 37.84 | 284 | P | | P | | 22 52 03.8 | +0.1 |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,410nm,19.1s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,580nm,19.6s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,910nm,19.6s | | | | | | | | |
| MMRI | Maumere | 38.03 | 216 | P | | P | | 22 52 04.9 | -0.2 |
| SONM | Songino Array | 38.20 | 319 | P | | P | | 22 52 05.1 | -1.4 |
| SONM | Songino Array | 38.20 | 319 | P | | P | | 22 52 05.0 | -1.4 |
| | comp=Z,4.1nm,0.9s,baz=126,slow=8.3,SNR=20 | | | | | | | | |
| SONM | | | | LR | | LR | | 23 08 50.3 | |
| | comp=Z,569nm,18.4s,baz=112,slow=38 | | | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | | | |
| SONM | Songino Array | 38.20 | 319 | P | | P | | 22 52 05.1 | -1.4 |
| SONM | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| YAK | Yakutsk | 39.73 | 350 | P | | P | | 22 52 17.9 | -0.9 |
| YAK | | | | IAmb | | IAmb | | 22 52 37.2 | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| YAK | Yakutsk | 39.73 | 350 | eP | | P | | 22 52 18.9 | +0.1 |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=N,5.0nm,1.0s | | | | | | | | |
| SEY | Seymchan | 39.95 | 6 | ⇑eP | | P | | 22 52 24.3 | +3.6 |
| SEY | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| CRAI | Chiangrai | 40.03 | 274 | P | | P | | 22 52 22.0 | +0.1 |
| CRAI | | | | IAmb | | IAmb | | 22 52 23.6 | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| GTA | Gaotai | 40.11 | 304 | P | | P | | 22 52 23.4 | +0.8 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| PHRA | Phrae | 40.56 | 271 | P | | P | | 22 52 25.8 | -0.6 |
| TNCH | TengChong | 40.88 | 282 | eP | | P | | 22 52 29.3 | +0.1 |
| TNCH | | | | sP | | sP | | 22 52 33.8 | +2.5 |
| TNCH | | | | PP | | PnPn | | 22 54 09.9 | +2.3 |
| TNCH | | | | pmax | | pmax | | | |
| | comp=Z,

**WR0 Warramunga Arr 43.98 192** P **P** **22 52 53.2 -0.9**
**WRAB Tennant Creek 44.00 192** P **P** **22 52 53.2 -1.0**
WRAB IAmb IAmb 22 53 09.2
comp=Z,13nm,0.8s
**WRAB Tennant Creek 44.00 192***d iP* **P** **22 52 53.5 -0.7**
WRAB pmax pmax
comp=Z,11nm,0.6s
**WB2 Warramunga Arr 44.01 192** P **P** **22 52 53.0 -1.3**
WB2 IAmb IAmb 22 53 09.3
comp=Z,14nm,0.8s
**WRA Warramunga Arr 44.01 192** P **P** **22 52 53.8 -0.6**
**WRA Warramunga Arr 44.01 192** P **P** **22 52 53.5 -0.8**
comp=Z,9.5nm,0.7s,baz=12,slow=8.3,SNR=74
WRA PcP **PP** **22 54 39.9 +2.8**
comp=Z,5.1nm,0.9s,baz=3.6,slow=3.6,SNR=6.6
WRA LR LR 23 12 32.4
comp=Z,399nm,18.2s,baz=28,slow=38
comp=Z,9.5nm,0.7s
**FITZ Fitzroy Crossi 44.79 204** P **P** **22 53 00.0 -0.5**
**SHL Shillong 46.75 284** P **P** **22 53 15.0 -1.4**
**SHL Shillong 46.75 284** P **P** **22 53 15.9 -0.5**
**SHL Shillong 46.75 284** P **P** **22 53 15.0 -1.4**
SHL pmax pmax
comp=Z,25nm,0.7s
**BILL Bilibino 46.79 12** *eP* **P** **22 53 17.5 +1.6**
BILL *e* 22 54 50.0
BILL *e* 22 55 06.0
BILL pmax pmax
comp=Z,13nm,1.4s
**LSA Lhasa 46.89 289** P **P** **22 53 17.5 -0.3**
**LSA Lhasa 46.89 289** P **P** **22 53 19.0 +1.2**
**LSA Lhasa 46.89 289** P **P** **22 53 19.4 +1.6**
**LSA Lhasa 46.89 289** P **P** **22 53 17.5 -0.3**
LSA pmax pmax
comp=Z,30nm,1.1s
**BKNI Bangkinang 47.13 247** P **P** **22 53 18.5 -0.8**
**PSI Prapat 47.69 251** P **P** **22 53 23.2 -0.6**
PSI pmax pmax
comp=Z,19nm,0.8s
**AS31 Alice Springs 47.71 192** P **P** **22 53 23.4 -0.2**
**ASAR Alice Springs 47.72 192** P **P** **22 53 22.5 -1.1**
comp=Z,2.2nm,0.5s,baz=13,slow=10.0,SNR=35
ASAR PcP **PcP** **22 54 52.5 -0.4**
comp=Z,1.0nm,0.8s,baz=23,slow=4.1,SNR=4.2
ASAR LR LR 23 12 16.5
comp=Z,451nm,20.2s,baz=44,slow=35
comp=Z,2.2nm,0.5s
**RPSI Rantau Prapat 47.74 251** P **P** **22 53 23.2 -0.8**
**WMQ Urumqi 49.71 308** *eP* **P** **22 53 38.6 -0.3**
WMQ pmax pmax
comp=Z,17nm,1.1s
**MBWA Marble Bar 49.98 209** P **P** **22 53 39.6 -1.3**
MBWA IAmb IAmb 22 53 41.4
comp=Z,25nm,1.0s
**MBWA Marble Bar 49.98 209** P **P** **22 53 40.5 -0.5**
**PSA00 Pilbara Seismi 50.29 209** P **P** **22 53 42.0 -1.4**
**PSA00 Pilbara Seismi 50.29 209** P **P** **22 53 43.1 -0.3**
PSA00 IAmb IAmb 22 53 43.7
comp=Z,15nm,1.0s
**DZM Mont Dzumac 50.44 152** P **P** **22 53 44.4 -0.2**
DZM IAmb IAmb 22 54 08.1
comp=Z,26nm,1.6s
**DZM Mont Dzumac 50.44 152** LR LR 23 12 35.1
comp=Z,645nm,20.3s,baz=32,slow=33
**DGZ Jazzator, Alta 50.67 316***c iP* **P** **22 53 45.9 -0.3**
DGZ pmax pmax
comp=Z,16nm,1.0s
**ZSN Zaisan 52.05 313** *eP* **P** **22 53 56.0 -0.4**
comp=Z,15nm,1.3s,baz=313
**ZSN Zaisan 52.05 313** *eP* **P** **22 53 56.0 -0.4**
ZSN pmax pmax
comp=Z,15nm,1.3s
**ZAA0 Zalesovo Array 53.04 321** P **P** **22 54 02.4 -1.2**
**ZALV Zalesovo Beam 53.04 321** P **P** **22 54 02.1 -1.5**
**ZALV Zalesovo Beam 53.04 321** P **P** **22 54 02.5 -1.0**
comp=Z,2.9nm,0.5s,baz=101,slow=7.5,SNR=15
ZALV PcP **PcP** **22 55 10.6 -1.5**
comp=Z,1.7nm,0.6s,baz=127,slow=4.4,SNR=1.7
ZALV LR LR 23 17 11.5
comp=Z,336nm,18.5s,baz=94,slow=37
comp=Z,2.9nm,0.5s
**MK31 Makanchi Array 53.74 312** P **P** **22 54 08.5 -0.4**
MK31 IAmb IAmb 22 54 09.6
comp=Z,15nm,1.0s
**MK31 Makanchi Array 53.74 312***c iP* **P** **22 54 08.1 -0.8**
**MKAR Makanchi Array 53.74 312** P **P** **22 54 07.8 -1.1**
**MKAR Makanchi Array 53.74 312** P **P** **22 54 08.5 -0.5**
comp=Z,10nm,0.9s,baz=93,slow=9.1,SNR=59
MKAR LR LR 23 18 03.8
comp=Z,337nm,18.7s,baz=44,slow=37
comp=Z,10nm,0.9s
**MKAR Makanchi Array 53.74 312** P **P** **22 54 07.8 -1.1**
**MAKZ Makanchi 53.96 312** P **P** **22 54 09.8 -0.7**
**MAKZ Makanchi 53.96 312** P **P** **22 54 09.8 -0.7**
MAKZ pmax pmax
comp=Z,30nm,1.1s
**O16K Kokwok River B 54.21 32** P **P** **22 54 12.1 +0.1**
O16K IAmb IAmb 22 54 40.1
comp=Z,9.4nm,1.0s
**N17K Nushagak Hills 54.89 31** P **P** **22 54 17.2 +0.2**
**K17K Iditarod 55.00 29** P **P** **22 54 18.4 +0.6**
K17K IAmb IAmb 22 54 36.9
comp=Z,18nm,1.0s
**STKA Stephens Creek 55.01 182** P **P** **22 54 17.1 -1.0**
**STKA Stephens Creek 55.01 182** P **P** **22 54 18.7 +0.5**
comp=Z,5.6nm,0.7s,baz=7.7,slow=6.6,SNR=7.8
comp=Z,5.6nm,0.7s
**STKA Stephens Creek 55.01 182** P **P** **22 54 17.1 -1.0**
STKA pmax pmax
comp=Z,12nm,1.8s
**H17K Granite Mounta 55.05 26** P **P** **22 54 17.1 -1.0**
H17K IAmb IAmb 22 54 22.1
comp=Z,14nm,1.2s
**N18K Kilae Creek 55.55 31** P **P** **22 54 21.3 -0.5**
**L18K Granite Mounta 55.57 29** P **P** **22 54 21.6 -0.3**
L18K IAmb IAmb 22 54 56.8
comp=Z,31nm,1.9s
**SHLS Shalkode 55.67 307** *eP* P 22 54 20.5 -2.6
comp=Z,11nm,1.0s,baz=307
**SHLS Shalkode 55.67 307** *eP* P 22 54 20.5 -2.6
SHLS pmax pmax
comp=Z,11nm,1.0s
**O18K Koktuh Hills 55.69 32** P **P** **22 54 23.1 +0.3**
O18K IAmb IAmb 22 54 34.0
comp=Z,24nm,1.2s
**E18K Tukpahlearik C 55.72 23** P **P** **22 54 22.7 -0.2**
E18K IAmb IAmb 22 54 48.0
comp=Z,13nm,1.1s
**G18K Tagagawik 55.88 25** P **P** **22 54 23.9 -0.2**
**UZB Uzynbulak 55.99 307** *eP* **P** **22 54 25.0 -0.4**
comp=Z,8.7nm,1.0s,baz=307
**UZB Uzynbulak 55.99 307** *eP* **P** **22 54 25.0 -0.4**
UZB pmax pmax
comp=Z,9.0nm,1.0s
**KPKS Kokpek 56.23 308** *eP* **P** **22 54 26.7 -0.4**
comp=Z,8.9nm,0.9s,baz=308
**KPKS Kokpek 56.23 308** *eP* **P** **22 54 26.7 -0.4**
KPKS pmax pmax
comp=Z,9.0nm,0.9s
**N19K Bonanza Creek 56.26 31** P **P** **22 54 26.9 -0.1**
**L19K White Mountain 56.40 30** P **P** **22 54 27.9 0.0**
**TDK Taldyqorghan 56.41 309** *eP* **P** **22 54 28.0 -0.3**
comp=Z,9.5nm,0.6s,baz=309
**TDK Taldyqorghan 56.41 309** *eP* **P** **22 54 27.9 -0.3**
TDK pmax pmax
comp=Z,10.0nm,0.6s
**KURK Kurchatov 56.41 316** P **P** **22 54 26.9 -1.2**
**KURK Kurchatov 56.41 316** P **P** **22 54 27.3 -0.7**
**KURK Kurchatov 56.41 316***c iP* **P** **22 54 27.2 -0.9**
KURK pmax pmax
comp=Z,58nm,1.0s
**ZHN Zhinishke 56.42 307** *eP* **P** **22 54 28.0 -0.5**
comp=Z,10nm,1.0s,baz=307
**ZHN Zhinishke 56.42 307** *eP* **P** **22 54 28.0 -0.5**
ZHN pmax pmax
comp=Z,10.0nm,1.0s
**SATY Saty 56.45 307** *eP* **P** **22 54 28.4 -0.2**
comp=Z,8.9nm,1.0s,baz=307
**SATY Saty 56.45 307** *eP* **P** **22 54 28.4 -0.2**
SATY pmax pmax
comp=Z,9.0nm,1.0s
**KURBB Kurchatov Arra 56.46 316** P **P** **22 54 27.6 -0.9**
comp=Z,38nm,0.9s,baz=93,slow=7.6,SNR=182
KURBB LR LR 23 19 59.5
comp=Z,571nm,18.5s,baz=174,slow=38
comp=Z,38nm,0.9s
**PRZ Przheval'sk 56.47 306** P **P** **22 54 28.9 0.0**
**PRZ Przheval'sk 56.47 306** P **P** **22 54 28.9 0.0**
PRZ pmax pmax
comp=Z,67nm,1.0s
**J19K Poorman 56.52 28** P **P** **22 54 28.8 +0.1**
J19K IAmb IAmb 22 54 39.6
comp=Z,13nm,1.1s
**G19K Purcell Mounta 56.57 25** P **P** **22 54 29.2 +0.2**
G19K IAmb IAmb 22 56 05.7
comp=Z,26nm,1.8s
**H19K Roundabout Mou 56.63 26** P **P** **22 54 29.5 +0.2**
H19K IAmb IAmb 22 54 44.3
comp=Z,14nm,1.0s
**LHI Lord Howe Isla 56.63 164** P **P** **22 54 30.8 +1.1**
**MLH Mauna Loa 56.68 81** P **P** **22 54 30.5 -0.3**
**C19K Lookout Ridge 56.73 21** P **P** **22 54 30.7 +0.6**
C19K IAmb IAmb 22 54 54.2
comp=Z,18nm,0.9s
**E19K Redstone River 56.95 23** P **P** **22 54 31.2 -0.5**
**D19K Kuna River 56.99 22** P **P** **22 54 32.6 +0.6**
**K20K Telida 57.03 28** P **P** **22 54 32.8 +0.5**
**J20K Nowinta River 57.20 27** P **P** **22 54 34.0 +0.5**
J20K IAmb IAmb 22 54 58.2
comp=Z,20nm,0.9s
**F20K Avaraart Lake 57.37 24** P **P** **22 54 34.8 +0.2**
**MDOK Medeo 57.44 307** *eP* **P** **22 54 35.4 -0.4**
baz=307
**MDOK Medeo 57.44 307** *eP* **P** **22 54 35.3 -0.4**
**CHKK Chushkaly 57.45 308** *eP* **P** **22 54 35.4 -0.2**
baz=308
**CHKK Chushkaly 57.45 308** *eP* **P** **22 54 35.4 -0.2**
**TNSS Tian-Shan 57.52 307** *eP* **P** **22 54 36.0 -0.6**
baz=307
**TNSS Tian-Shan 57.52 307** *eP* **P** **22 54 35.9 -0.6**
**AAA Alma-Ata 57.53 307** *eP* **P** **22 54 36.1 -0.2**
baz=307
**AAA Alma-Ata 57.53 307** *eP* **P** **22 54 36.0 -0.2**
**B20K Meade River 57.86 20** P **P** **22 54 38.9 +0.9**
B20K IAmb IAmb 22 54 52.1
comp=Z,17nm,0.9s
**KUU Kurty 57.92 308** *eP* **P** **22 54 38.9 -0.1**
comp=Z,13nm,0.7s,baz=308
**KUU Kurty 57.92 308** *eP* **P** **22 54 38.8 -0.1**
KUU pmax pmax
comp=Z,13nm,0.7s
**G21K Allakaket 58.06 25** P **P** **22 54 39.5 0.0**
G21K IAmb IAmb 22 54 59.4
comp=Z,28nm,1.7s
**ULHL Ulahol 58.08 306** P **P** **22 54 40.8 +0.4**
SNR=18
**H21K Melozitna Rive 58.12 26** P **P** **22 54 39.9 0.0**
H21K IAmb IAmb 22 54 55.1
comp=Z,9.2nm,0.9s
**E21K Killik River 58.42 23** IAmb IAmb 22 55 29.7
comp=Z,16nm,1.2s
**MORW Morawa 58.48 208** P **P** **22 54 42.1 -0.7**
**KSH Kashi 58.51 303** P **P** **22 54 46.8 +3.6**
KSH pP sP 22 54 50.6 +5.2
KSH pmax pmax
comp=Z,62nm,1.0s
**TKM2 Tokmak 2 58.51 307** P **P** **22 54 43.9 +0.5**
SNR=35
**B21K Ikpikpuk River 58.56 21** P **P** **22 54 43.5 +0.6**
B21K IAmb IAmb 22 55 08.0
comp=Z,19nm,1.2s
**MLY Manley 58.82 27** P **P** **22 54 45.4 +0.5**
MLY IAmb IAmb 22 55 09.7
comp=Z,13nm,1.1s
**PMR Palmer 58.94 31** **P** **22 54 45.6 -0.1**
PMR IAmb IAmb 22 55 09.2
comp=Z,11nm,0.6s
**PMR Palmer 58.94 31** P **P** **22 54 45.6 -0.1**
PMR pmax pmax
comp=Z,11nm,0.6s
**D22K Ayikyak River 59.00 22** P **P** **22 54 46.6 +0.6**
D22K IAmb IAmb 22 55 01.9
comp=Z,18nm,1.0s
**KBK Karagaybulak 59.01 307** P **P** **22 54 47.0 +0.2**
SNR=18
**GHO Glory Hole Cre 59.07 31** P **P** **22 54 47.0 +0.3**
GHO IAmb IAmb 22 54 54.2
comp=Z,12nm,1.0s
**E22K Anaktuvuk Pass 59.11 23** P **P** **22 54 46.7 -0.2**
**CHMS Chumysh 59.12 307** P **P** **22 54 47.5 +0.2**
SNR=11
**B22K Teshekpuk Lake 59.17 21** P **P** **22 54 47.4 +0.2**
B22K IAmb IAmb 22 55 01.2
comp=Z,12nm,0.9s
**FRU1 Bishkek 59.23 307** P **P** **22 54 48.2 +0.1**
**FRU1 Bishkek 59.23 307** P **P** **22 54 48.2 +0.1**
FRU1 pmax pmax
comp=Z,37nm,0.9s
**USP Ospenovka 59.29 308** P **P** **22 54 48.8 +0.3**
SNR=16
**AAK Ala-Archa 59.34 307** P **P** **22 54 49.7 +0.6**
SNR=6.0
**AAK Ala-Archa 59.34 307** P **P** **22 54 47.6 -1.5**
AAK IAmb IAmb 22 54 50.3
comp=Z,19nm,1.1s
**AAK Ala-Archa 59.34 307** P **P** **22 54 49.3 +0.3**
**AAK Ala-Archa 59.34 307** P **P** **22 54 49.2 +0.1**
**AAK Ala-Archa 59.34 307***c iP* **P** **22 54 49.1 +0.1**
AAK pmax pmax
comp=Z,32nm,1.7s
**SML Sawmill 59.35 31** P **P** **22 54 48.7 +0.1**
**UCH Uchtor 59.36 306** P **P** **22 54 50.8 +1.2**
SNR=6.2
**I23K Minto, Yukon-K 59.42 27** P **P** **22 54 49.7 +0.7**
I23K IAmb IAmb 22 55 07.0
comp=Z,21nm,1.6s
**NEA2 Nenana 59.44 28** P **P** **22 54 49.1 0.0**
NEA2 IAmb IAmb 22 54 57.9
comp=Z,6.9nm,0.9s
**G23K Bananza Creek 59.46 25** P **P** **22 54 49.1 -0.2**
G23K IAmb IAmb 22 55 00.8
comp=Z,13nm,1.2s
**H23K Yukon River 59.47 26** P **P** **22 54 49.3 0.0**
H23K IAmb IAmb 22 55 04.9
comp=Z,10nm,0.9s
**BTLS Baital 59.50 310**⇑*iP* **P** **22 54 49.7 -0.2**
comp=Z,9.0nm,0.9s,baz=310
**BTLS Baital 59.50 310***c iP* **P** **22 54 49.6 -0.2**
BTLS pmax pmax
comp=Z,9.0nm,0.9s
**D23K Nanushuk River 59.72 22** P **P** **22 54 50.5 -0.5**
D23K IAmb IAmb 22 55 39.4
comp=Z,21nm,1.4s
**SCM Sheep Creek Mo 59.83 31** P **P** **22 54 51.3 -0.7**
**SCM Sheep Creek Mo 59.83 31** P **P** **22 54 51.3 -0.7**
SCM pmax pmax
comp=Z,21nm,0.9s
**GLI Glacier Island 59.83 32** P **P** **22 54 52.2 +0.3**
GLI IAmb IAmb 22 54 55.0
comp=Z,11nm,0.7s
**MDM Murphy Dome 59.86 27** P **P** **22 54 51.2 -0.9**
**EKS2 Erkin-Say 59.87 307** P **P** **22 54 52.2 -0.4**
SNR=25
**E23K Chandalar 59.90 24** P **P** **22 54 53.0 +0.7**
E23K IAmb IAmb 22 55 12.7
comp=Z,20nm,1.1s
**DHY Denali Highway 59.96 29** P **P** **22 54 52.4 -0.5**
**C23K Itkillik River 59.96 21** P **P** **22 54 52.4 -0.2**
**AML Almayashu 59.98 306** P **P** **22 54 54.4 +0.6**
SNR=44
**CCB Clear Creek Bu 59.99 28** P **P** **22 54 53.8 +0.9**
CCB IAmb IAmb 22 55 45.0
comp=Z,13nm,1.5s
**COLA College 60.00 27**⇑*eP* **P** **22 54 53.0 0.0**
COLA pmax pmax
comp=Z,2.0nm,0.7s
**TOLK Toolik Lake Re 60.04 23** P **P** **22 54 53.6 +0.4**
**H24K Noodor Dome 60.15 26** P **P** **22 54 54.5 +0.5**
H24K IAmb IAmb 22 54 58.5
comp=Z,10nm,1.1s
**POKR Poker Plat Res 60.22 27** P **P** **22 54 55.5 +1.0**
POKR IAmb IAmb 22 55 51.3
comp=Z,7.4nm,0.8s
**E24K Your Creek 60.31 24** P **P** **22 54 56.0 +0.8**
E24K IAmb IAmb 22 55 10.5
comp=Z,30nm,1.7s
**HDA Harding Lake 60.32 28** P **P** **22 54 54.9 -0.3**
**IL31 60.40 28** P **P** **22 54 55.0 -0.6**
IL31 IAmb IAmb 22 55 08.7
comp=Z,20nm,1.4s
**ILAR Eielson Array 60.40 28** P **P** **22 54 54.7 -1.0**
**ILAR Eielson Array 60.40 28** P **P** **22 54 55.2 -0.5**
comp=Z,4.1nm,1.0s,baz=257,slow=5.8,SNR=29
comp=Z,4.1nm,1.0s
**ILAR Eielson Array 60.40 28** P **P** **22 54 54.7 -1.0**
**D24K Happy Valley 60.41 22** P **P** **22 54 56.5 +0.7**
**F24K Squaw Lake 60.43 24** P **P** **22 54 56.9 +0.9**
**KLU Klutina 60.46 31** P **P** **22 54 56.0 -0.3**
KLU IAmb IAmb 22 55 04.9
comp=Z,19nm,1.2s
**C24K Franklin Bluff 60.58 22** P **P** **22 54 57.8 +0.9**
**ARSB Arslanbob 60.59 305** P **P** **22 54 58.0 +0.4**
ARSB IAmb IAmb 22 54 59.3
comp=Z,17nm,1.0s
**ARSB Arslanbob 60.59 305** P **P** **22 54 58.0 +0.4**
ARSB pmax pmax
comp=Z,17nm,1.0s
**HYB Hyderabad 60.70 277** *eP* **P** **22 54 57.9 -0.7**
HYB IVmB_BB 22 54 59.6
comp=Z,1μm,3.6s
**J25K Salcha River, 61.02 28** P **P** **22 54 59.6 -0.5**
**F25K Christian Rive 61.30 24** P **P** **22 55 02.9 +1.1**
F25K IAmb IAmb 22 55 16.7
comp=Z,12nm,1.2s
**D25K Kavik River 61.30 22** P **P** **22 55 02.8 +1.0**
D25K IAmb IAmb 22 55 17.3
comp=Z,9.6nm,0.7s
**GLB Gilahina Butte 61.47 31** P **P** **22 55 03.3 +0.2**
GLB IAmb IAmb 22 55 18.1
comp=Z,21nm,1.4s
**NIL Nilore 61.49 297** P **P** **22 55 04.0 +0.3**
**NIL Nilore 61.49 297** P **P** **22 55 04.2 +0.5**
**NIL Nilore 61.49 297** P **P** **22 55 04.0 +0.3**
NIL pmax pmax
comp=Z,90nm,1.1s
**BVAR Borovoye Array 61.55 319** P **P** **22 55 03.3 -0.4**
comp=Z,62nm,0.9s,baz=91,slow=7.6,SNR=174
**SCRK Sand Creek 61.56 29** P **P** **22 55 03.4 -0.4**
SCRK IAmb IAmb 22 55 25.9
comp=Z,11nm,0.8s
**BRVK Borovoye 61.61 319** P **P** **22 55 03.0 -1.1**
**BRVK Borovoye 61.61 319** P **P** **22 55 03.9 -0.2**
**BRVK Borovoye 61.61 319***c iP* **P** **22 55 03.6 -0.5**
BRVK pmax pmax
comp=Z,70nm,1.0s
**VRDI Verde Repeater 61.63 32** P **P** **22 55 05.1 +0.7**
VRDI IAmb IAmb 22 55 23.2
comp=Z,14nm,1.3s
**BMAR Burnt Mountain 61.68 25** **P** **22 55 05.7 +1.2**
**CRQM Cirque 61.76 32** P **P** **22 55 05.2 -0.1**
CRQM IAmb IAmb 22 55 14.0
comp=Z,14nm,1.0s
**J26L Joseph Creek 61.79 28** P **P** **22 55 05.5 +0.2**
J26L IAmb IAmb 22 55 31.6
comp=Z,14nm,1.1s
**MCARA McCarthy VSAT 61.84 32** P **P** **22 55 05.7 +0.1**
MCARA IAmb IAmb 22 55 33.7
comp=Z,16nm,1.1s
**F26K Sheenjek River 61.88 24** P **P** **22 55 06.6 +0.8**
F26K IAmb IAmb 22 55 20.6
comp=Z,18nm,1.5s
**KK31 Karatay Array 62.21 308** P **P** **22 55 08.1 -0.3**
**KK31 Karatay Array 62.21 308** P **P** **22 55 08.1 -0.3**
KK31 pmax pmax
comp=Z,47nm,1.0s
**KKAR Karatay Array 62.21 308** P **P** **22 55 07.5 -0.9**
**KKAR Karatay Array 62.21 308** P **P** **22 55 08.1 -0.3**
**KKAR Karatay Array 62.21 308** P **P** **22 55 08.1 -0.3**
**BTK Batken 62.38 304** P **P** **22 55 09.1 -0.6**
**BTK Batken 62.38 304** P **P** **22 55 09.1 -0.6**
BTK pmax pmax
comp=Z,43nm,1.3s
**K27K Chicken 62.41 29** P **P** **22 55 09.2 -0.1**
K27K IAmb IAmb 22 55 24.5
comp=Z,6.4nm,1.0s
**M27K Edge Creek, AK 62.42 30** P **P** **22 55 10.1 +0.5**
M27K IAmb IAmb 22 56 04.8
comp=Z,8.4nm,1.2s
**GRNC Granite Creek 62.44 32** P **P** **22 55 09.2 -0.7**
GRNC IAmb IAmb 22 55 13.9
comp=Z,7.7nm,1.1s
**L27K Beaver Creek, 62.47 30** P **P** **22 55 09.4 -0.5**
L27K IAmb IAmb 22 55 37.6
comp=Z,11nm,1.4s
**BCAR Beaver Creek A 62.49 30** P **P** **22 55 10.5 +0.5**
**CTGM Chitina Glacie 62.65 32** P **P** **22 55 12.2 +1.0**
CTGM IAmb IAmb 22 55 14.8
comp=Z,16nm,1.6s
**BRLS Boroldav 62.71 308**⇑*iP* **P** **22 55 12.5 +0.7**
comp=Z,6.0nm,1.1s,baz=307
**BRLS Boroldav 62.71 308***c iP* **P** **22 55 12.4 +0.7**
BRLS pmax pmax
comp=Z,6.0nm,1.1s
**TABL Table Mountain 62.74 33** P **P** **22 55 10.6 -1.2**
TABL IAmb IAmb 22 55 50.4
comp=Z,11nm,1.0s
**E27K Coleen River 62.89 24** P **P** **22 55 12.9 +0.4**
E27K IAmb IAmb 22 55 21.8
comp=Z,9.3nm,1.3s
**GAR Garm 62.93 303** P **P** **22 55 13.3 -0.1**
**D27M Malcolm River 63.20 23** P **P** **22 55 15.0 +0.4**
D27M IAmb IAmb 22 55 29.2
comp=Z,11nm,1.0s
**I28M Miner Creek 63.38 27** P **P** **22 55 15.8 -0.1**
I28M IAmb IAmb 22 55 42.3
comp=Z,5.8nm,0.8s
**F28M Old Crow 63.50 25** P **P** **22 55 17.4 +0.9**
F28M IAmb IAmb 22 55 31.5
comp=Z,9.9nm,0.9s
**DAWY Dawson 63.59 29** P **P** **22 55 17.6 +0.4**
DAWY IAmb IAmb 22 55 48.5
comp=Z,6.9nm,1.0s
**E28M Babbage River 63.68 24** **P** **22 55 18.8 +1.2**
**CHGR Chuyangaron 63.87 303** P **P** **22 55 19.4 -0.2**
**CHGR Chuyangaron 63.87 303** P **P** **22 55 19.4 -0.2**
CHGR pmax pmax
comp=Z,258nm,1.0s
**SIMJ Simiganj 63.99 303** P **P** **22 55 20.1 -0.4**
**M29M Somme Creek 64.01 30** P **P** **22 55 20.4 +0.3**
M29M IAmb IAmb 22 55 34.4
comp=Z,6.9nm,0.9s
**O29M Mount Kennedy 64.02 33** P **P** **22 55 21.0 +0.8**
O29M IAmb IAmb 22 55 34.8
comp=Z,9.5nm,0.9s
**H29M Whitestone 64.05 26** P **P** **22 55 21.0 +0.9**
H29M IAmb IAmb 22 55 36.3
comp=Z,16nm,1.1s
**I29M Ogilvie Camp, 64.06 27** P **P** **22 55 21.2 +0.9**
I29M IAmb IAmb 22 55 34.6
comp=Z,22nm,1.5s
**J29N Klondike Camp 64.10 28** P **P** **22 55 21.0 +0.3**
**G29M Pine Creek 64.19 25** P **P** **22 55 21.1 0.0**
**K29M Barlow Dome 64.42 29** P **P** **22 55 22.4 -0.4**
K29M IAmb IAmb 22 55 58.0
comp=Z,8.6nm,1.1s
**P29M Windy Craggy 64.46 34** P **P** **22 55 23.4 +0.4**
P29M IAmb IAmb 22 55 37.5
comp=Z,10nm,0.8s
**EPYK Eagle Plains 64.71 26** P **P** **22 55 25.0 +0.4**
**KBL Kabul 64.75 298** P **P** **22 55 25.0 -0.6**
**KBL Kabul 64.75 298** P **P** **22 55 25.9 +0.3**
**KBL Kabul 64.75 298** P **P** **22 55 25.0 -0.6**
KBL pmax pmax
comp=Z,69nm,1.0s
**G30M tAoh Zraii Nji 64.90 25** P **P** **22 55 25.5 -0.3**
**J30M Hart River 64.92 28** P **P** **22 55 25.9 -0.1**
J30M IAmb IAmb 22 55 47.1
comp=Z,24nm,1.9s
**O30N Mendenhall 65.22 32** P **P** **22 55 29.0 +1.1**
O30N IAmb IAmb 22 56 12.3
comp=Z,9.7nm,1.3s
**N31M Braeburn, Yuko 65.32 31** P **P** **22 55 28.9 +0.3**
N31M IAmb IAmb 22 55 44.2
comp=Z,15nm,1.1s
**G31M Satah River 65.67 25** P **P** **22 55 31.2 +0.5**
G31M IAmb IAmb 22 55 44.2
comp=Z,14nm,0.9s
**SVE Sverdlovsk 66.85 324**⇓*eP* **P** **22 55 38.1 -0.3**
SVE pmax pmax
comp=Z,29nm,1.1s
**ARU Arti 68.04 323** P **P** **22 55 44.8 -1.2**
**ARU Arti 68.04 323***c iP* **P** **22 55 45.0 -1.0**
ARU 22 56 07.7
ARU S **S** **23 04 45.6 +0.3**

ARU SS **SS** **23 09 08.2 +1.1**
ARU pmax pmax
comp=Z,29nm,0.8s
**ARU Arti** **68.04 323** P **P** **22 55 45.0 -1.0**
comp=Z,36nm,0.9s
**ABKAR Akbulak array** **68.50 316** P **P** **22 55 47.7 -1.3**
ABKAR IAmb IAmb 22 55 54.0
comp=Z,9.6nm,0.8s
**ABKAR Akbulak array** **68.50 316** P **P** **22 55 48.0 -1.1**
**DLBC Dease Lake** **68.56 34** P **P** **22 55 49.0 -0.3**
DLBC IAmb IAmb 22 55 53.6
comp=Z,11nm,1.2s
**RTZ Ruatahuna** **69.24 152** P **P** **22 55 52.6 -1.1**
**BKZ Black Stump Fm** **69.50 153** P **P** **22 55 55.5 +0.2**
**HRA Herat** **70.24 300** P **P** **22 56 00.0 -0.3**
**KIRV Kirov** **72.38 327** *de*P **P** **22 56 12.2 -0.3**
**YKA Yellowknife Ar** **74.82 28** P **P** **22 56 27.9 +1.1**
comp=Z,2.4nm,0.8s,baz=298,slow=6.0,SNR=5.5
comp=Z,2.4nm,0.8s
**YKA Yellowknife Ar** **74.82 28** *i* P **P** **22 56 28.1 +1.3**
YKA pmax pmax
comp=Z,2.0nm,0.6s
**JLN Jalan Bani Buh** **76.33 288** P **P** **22 56 36.0 -0.2**
**WBK Wadi Bani Khal** **76.56 289** P **P** **22 56 37.7 +0.1**
**BIDO Bidbid** **76.98 290** P **P** **22 56 40.3 +0.5**
**SMDO Samad** **77.20 290** P **P** **22 56 41.1 -0.2**
**ARCES ARCESS Array B** **77.38 341** P **P** **22 56 40.7 -0.6**
**ARCES ARCESS Array B** **77.38 341** P **P** **22 56 40.7 -0.6**
comp=Z,13nm,1.0s,baz=54,slow=6.2,SNR=10
comp=Z,13nm,1.0s
**ARCES ARCESS Array B** **77.38 341** P **P** **22 56 40.7 -0.6**
ARCES pmax pmax
comp=Z,60nm,1.6s
**JMDO Jabal Madar** **77.39 289** P **P** **22 56 41.3 -0.9**
**B08A Colville Reser** **77.43 43** P **P** **22 56 42.1 +0.1**
**MXC Moxie City** **77.45 45** P **P** **22 56 42.3 +0.2**
MXC IAmb IAmb 22 58 20.9
comp=Z,23nm,1.8s
**YBH Yreka Blue Hor** **77.51 50** P **P** **22 56 42.3 -0.4**
**YBH Yreka Blue Hor** **77.51 50** P **P** **22 56 42.3 -0.4**
YBH pmax pmax
comp=Z,5.0nm,0.9s
**HOQ Hoqain** **77.66 290** P **P** **22 56 43.8 +0.1**
SNR=14
**SHME Shamm** **77.81 293** P **P** **22 56 45.2 +0.7**
**MDH Madha** **77.94 292** P **P** **22 56 44.3 -0.9**
**MHTO MHTO** **77.99 288** P **P** **22 56 44.7 -0.9**
**J05D Fort Rock, OR** **77.99 48** P **P** **22 56 45.8 +0.4**
J05D IAmb IAmb 22 56 50.1
comp=Z,28nm,1.7s
**O02D Mt. Diablo Mer** **78.00 51** P **P** **22 56 45.4 0.0**
O02D IAmb IAmb 22 56 59.4
comp=Z,10nm,1.1s
**HAWA Hanford** **78.01 45** P **P** **22 56 45.0 -0.2**
**PINE Pine Mountain** **78.01 47** P **P** **22 56 46.0 +0.5**
PINE IAmb IAmb 22 57 02.9
comp=Z,13nm,0.9s
**MASF Masafi** **78.03 293** P **P** **22 56 44.9 -0.9**
**MSFE Esma-Masafi** **78.03 293** P **P** **22 56 44.2 -1.6**
**BSY Bisya** **78.05 290** P **P** **22 56 44.9 -1.0**
SNR=7.1
**SOHO SOHO** **78.14 291** P **P** **22 56 45.2 -1.1**
**SOHO SOHO** **78.14 291** P **P** **22 56 46.1 -0.2**
**UOSS Minazif** **78.14 292** P P 22 56 43.9 -2.4
UOSS IAmb IAmb 22 57 03.2
comp=Z,12nm,0.9s
**UOSS Minazif** **78.14 292** P **P** **22 56 45.2 -1.1**
**UOSS Minazif** **78.14 292** P **P** **22 56 46.2 -0.1**
**HATD Hatta, Dubai** **78.24 292** P **P** **22 56 47.2 +0.3**
**HATD Hatta, Dubai** **78.24 292** P **P** **22 56 47.1 +0.2**
**C09A Chrisman Ranch** **78.29 43** P **P** **22 56 46.7 -0.1**
**ASHO Ashiyiah** **78.35 292** P **P** **22 56 47.0 -0.6**
**ASHO Ashiyiah** **78.35 292** P **P** **22 56 48.0 +0.4**
**ARQ Araqi** **78.42 290** P **P** **22 56 48.1 +0.2**
**FAQ Al Faqa, Dubai** **78.73 292** P **P** **22 56 48.2 -1.4**
**FAQ Al Faqa, Dubai** **78.73 292** P **P** **22 56 49.2 -0.4**
**G08A Pilot Rock** **78.79 46** P **P** **22 56 49.3 -0.4**
**NEW Newport** **78.83 42** P **P** **22 56 50.5 +0.8**
NEW IAmb IAmb 22 57 25.6
comp=Z,17nm,1.8s
**NEW Newport** **78.83 42** P **P** **22 56 50.6 +0.8**
NEW pmax pmax
comp=Z,17nm,1.8s
**ALNE Al Ain** **78.83 291** P **P** **22 56 50.2 0.0**
**ALNE Al Ain** **78.83 291** P **P** **22 56 50.6 +0.4**
**E09A Wood Farm, Sta** **78.86 44** P **P** **22 56 49.7 -0.2**
**ASUD Al Ashush, Dub** **78.99 292** P **P** **22 56 50.9 -0.1**
**ASUD Al Ashush, Dub** **78.99 292** P **P** **22 56 50.6 -0.5**
**VRH Novokhopyorsk** **79.08 321** *e*P **P** **22 56 49.8 -1.2**
VRH pmax pmax
comp=Z,14nm,0.8s
**ORV Oroville** **79.14 52** P **P** **22 56 51.5 -0.1**
ORV IAmb IAmb 22 56 54.9
comp=Z,30nm,1.9s
**ORV Oroville** **79.14 52** P **P** **22 56 51.5 -0.1**
ORV pmax pmax
comp=Z,30nm,1.9s
**MOS Moscow** **79.39 326** *e*P P 22 56 57.7 +5.1
MOS pmax pmax
comp=Z,200nm,1.9s
MOS pmax pmax
comp=Z,55nm,1.4s
**SEKA Sheki** **79.42 310** P **P** **22 56 51.5 -1.7**
**AFDM Forest Hills D** **79.75 52** P **P** **22 56 55.2 +0.2**
**J08A Circle Bar Ran** **79.84 47** P **P** **22 56 55.8 +0.3**
**BMO Blue Mountains** **80.04 45** P **P** **22 56 56.0 -0.5**
**BMO Blue Mountains** **80.04 45** P **P** **22 56 56.0 -0.5**
BMO pmax pmax
comp=Z,6.0nm,1.1s
**LPSR Galich'ya Gora** **80.07 323** *e*P **P** **22 56 54.5 -1.8**
LPSR pmax pmax
comp=Z,10.0nm,1.1s
**WVOR Wild Horse Val** **80.08 48** P **P** **22 56 57.0 +0.2**
**WVOR Wild Horse Val** **80.08 48** P **P** **22 56 57.0 +0.2**
WVOR pmax pmax
comp=Z,10.0nm,1.2s
**OBN Obninsk** **80.21 326** *e*P **P** **22 56 56.6 -0.4**
OBN *e* 22 59 56.4
OBN *e*PPP PPP 23 01 43.9
OBN pmax pmax
comp=Z,5.0nm,0.4s
**GANJ Ganja** **80.24 310** P **P** **22 56 56.3 -1.3**
**VORR Voronezh** **80.31 322** *e*P **P** **22 56 56.7 -1.0**
VORR pmax pmax
comp=Z,42nm,0.5s
**CMB Columbia Colle** **80.51 53** P **P** **22 56 58.4 -0.8**
CMB IAmb IAmb 22 57 15.7
comp=Z,9.1nm,0.9s
**CMB Columbia Colle** **80.51 53** P **P** **22 56 58.4 -0.8**
CMB pmax pmax
comp=Z,9.0nm,0.9s
**VSR Storozhevoye** **80.53 322** *e*P P 22 56 56.2 -2.7
VSR pmax pmax
comp=Z,10.0nm,1.2s
**VORD Divnogorie** **80.57 322** *e*P **P** **22 56 57.1 -2.0**
VORD pmax pmax
comp=Z,10.0nm,0.8s
**BBGB Big Mountain B** **80.58 54** P **P** **22 56 59.0 -0.6**
**PAHR Pah Rah Range** **80.60 51** P **P** **22 56 59.2 -0.5**
**PNTR Pine Nut** **80.68 52** P **P** **22 56 59.7 -0.6**
PNTR IAmb IAmb 22 57 14.2
comp=Z,12nm,0.9s
**GOF Gofitskoye** **80.74 315** *ce*P P 22 56 56.3 -3.8
**YERR Yerington** **80.98 52** P **P** **22 57 01.6 -0.3**
YERR IAmb IAmb 22 57 22.0
comp=Z,16nm,1.5s
**NCK Nalchik** **81.00 313** *e*P **P** **22 57 01.3 -0.3**
NCK pmax pmax
comp=Z,8.0nm,1.0s
**WAKR Walker** **81.03 52** P **P** **22 57 00.9 -1.1**
**MZR Muzera** **81.16 291** P **P** **22 57 02.1 -0.7**
**MZR Muzera** **81.16 291** P **P** **22 57 02.4 -0.4**
**GHWR Ruwais** **81.32 292** P **P** **22 57 04.3 +0.7**
**KBZ Khabaz** **81.37 314** P **P** **22 57 03.1 -0.3**
comp=Z,20nm,0.9s,baz=145,slow=2.8,SNR=26
**KBZ Khabaz** **81.37 314** *ce*P **P** **22 57 03.2 -0.3**
KBZ pmax pmax
comp=Z,23nm,0.9s
**KIV Kislovodsk** **81.42 314** P **P** **22 57 03.7 -0.2**
**KIV Kislovodsk** **81.42 314** P **P** **22 57 03.8 -0.1**
**KIV Kislovodsk** **81.42 314** P **P** **22 57 04.7 +0.8**
**KIV Kislovodsk** **81.42 314** *e*P **P** **22 57 04.5 +0.6**
KIV pmax pmax
comp=Z,11nm,1.0s

**SHA1 Shidzhatmaz** **81.53 314** *e*P **P** **22 57 04.3 -0.4**
**MFID Camas Ranch** **81.59 46** P **P** **22 57 04.6 -0.3**
MFID IAmb IAmb 22 57 19.8
comp=Z,14nm,1.2s
**RYN Ryan** **81.64 52** P **P** **22 57 05.3 0.0**
**OMMB Old Mammoth Mi** **81.69 53** P **P** **22 57 05.0 -0.7**
**FINES FINESS Array B** **81.75 334** P **P** **22 57 03.8 -1.4**
comp=Z,0.9nm,0.3s,baz=78,slow=4.4,SNR=14
comp=Z,0.9nm,0.3s
**KVN Kaiserville** **81.77 51** P **P** **22 57 06.0 0.0**
**KVN Kaiserville** **81.77 51** P **P** **22 57 06.0 0.0**
KVN pmax pmax
comp=Z,8.0nm,1.3s
**LHV Little Huntoon** **81.80 52** P **P** **22 57 06.4 +0.6**
**DMTO DMTO** **81.83 286** P **P** **22 57 08.1 +1.7**
**BMN Battle Mountai** **81.84 50** P **P** **22 57 05.8 -0.5**
**BMN Battle Mountai** **81.84 50** P **P** **22 57 05.8 -0.5**
BMN pmax pmax
comp=Z,6.0nm,1.3s
**NVAR Mina Array Bea** **81.87 52** P **P** **22 57 06.0 -0.6**
**NVAR Mina Array Bea** **81.87 52** P **P** **22 57 07.5 +0.9**
comp=Z,1.8nm,0.8s,baz=279,slow=4.6,SNR=13
comp=Z,1.8nm,0.8s
**NV11 Mina Array Sit** **81.98 52** P **P** **22 57 06.3 -0.8**
**DOK Doka** **82.22 287** P **P** **22 57 08.0 -0.5**
**TRNA Turayna** **82.44 294** P **P** **22 57 09.1 -0.4**
**HLID Hailey** **82.46 46** P **P** **22 57 09.7 +0.2**
**DSP Deep Springs** **82.54 53** P **P** **22 57 09.5 -0.3**
**RBK Rabkut** **82.56 286** P **P** **22 57 10.3 0.0**
**SMRA Abu-Samra** **82.76 294** P **P** **22 57 10.7 -0.5**
**WHFO Wadi Hawf** **82.79 286** P **P** **22 57 10.5 -1.0**
**MZP Montezuma Peak** **82.83 52** P **P** **22 57 11.1 -0.5**
**ISA Isabella, Lake** **82.85 54** P **P** **22 57 11.2 -0.3**
ISA IAmb IAmb 22 57 25.6
comp=Z,7.8nm,1.1s
**ISA Isabella, Lake** **82.85 54** P **P** **22 57 11.3 -0.3**
ISA pmax pmax
comp=Z,8.0nm,1.2s
**HEL Helsinki** **82.93 334** P **P** **22 57 15.0 +3.7**
HEL pmax pmax
comp=Z,5.0nm,1.0s
**GMN Gold Mountain** **83.08 52** P **P** **22 57 12.9 -0.1**
**ELK Elko** **83.09 49** P **P** **22 57 11.8 -1.1**
**ELK Elko** **83.09 49** P **P** **22 57 11.8 -1.1**
ELK pmax pmax
comp=Z,9.0nm,1.5s
**VSU Vasula** **83.17 332** *e*P **P** **22 57 11.9 -0.7**
VSU pmax pmax
comp=Z,12nm,1.1s
**BOZ Bozeman (W)** **83.37 43** P **P** **22 57 14.1 0.0**
BOZ IAmb IAmb 22 58 56.7
comp=Z,14nm,2.0s
**BOZ Bozeman (W)** **83.37 43** P **P** **22 57 14.1 0.0**
**ABTO Aybut** **83.42 286** P **P** **22 57 13.9 -0.9**
**WCT Wildcat Mounta** **83.75 53** P **P** **22 57 15.4 -0.9**
**R11B Troy Canyon, C** **83.86 51** P **P** **22 57 15.5 -1.4**
**GWY Greenwater Val** **83.97 53** P **P** **22 57 16.5 -1.0**
GWY IAmb IAmb 22 57 36.8
comp=Z,7.4nm,0.9s
**YHL Hebgen Lake** **83.98 44** P **P** **22 57 17.2 -0.3**
YHL IAmb IAmb 22 57 38.4
comp=Z,6.4nm,1.0s
**GURO Guroymak-BITLI** **84.12 309** P **P** **22 57 17.2 -0.9**
GURO IAmb IAmb 22 57 42.6
comp=Z,8.2nm,1.0s
**YHH Holmes Hill** **84.22 44** P **P** **22 57 19.1 +0.3**
**FFC Flin Flon** **84.23 32** P **P** **22 57 18.3 +0.1**
FFC IAmb IAmb 22 57 35.1
comp=Z,14nm,1.0s
**FFC Flin Flon** **84.23 32** P **P** **22 57 18.3 +0.1**
FFC pmax pmax
comp=Z,14nm,1.0s
**GSC Goldstone, Bar** **84.24 54** P **P** **22 57 18.7 0.0**
GSC IAmb IAmb 22 57 33.0
comp=Z,7.5nm,1.1s
**GSC Goldstone, Bar** **84.24 54** P **P** **22 57 18.7 0.0**
GSC pmax pmax
comp=Z,7.0nm,1.1s
**HVU Hansel Valley** **84.32 47** P **P** **22 57 19.5 +0.4**
HVU IAmb IAmb 22 57 34.3
comp=Z,6.1nm,1.0s
**HVU Hansel Valley** **84.32 47** P **P** **22 57 19.5 +0.4**
HVU pmax pmax
comp=Z,6.0nm,1.0s
**YNR Norris Junctio** **84.36 44** P **P** **22 57 19.4 0.0**
**FXWY Fox Creek** **84.64 45** P **P** **22 57 20.9 +0.1**
**PRN Pahroc Range** **84.64 52** P **P** **22 57 19.7 -1.1**
PRN IAmb IAmb 22 57 46.5
comp=Z,8.6nm,1.3s
**FLWY Flagg Ranch** **84.64 44** P **P** **22 57 20.3 -0.5**
FLWY IAmb IAmb 22 57 36.0
comp=Z,7.8nm,1.0s
**YMP Mirror Lake Pl** **84.68 43** P **P** **22 57 20.9 -0.1**
**SPUT South Promonto** **84.75 47** P **P** **22 57 20.3 -1.0**
SPUT IAmb IAmb 22 57 35.7
comp=Z,5.8nm,1.0s
**TPAW Teton Pass** **84.75 45** P **P** **22 57 21.6 +0.2**
TPAW IAmb IAmb 22 57 35.2
comp=Z,6.3nm,1.1s
**MNK Minsk** **84.86 328** *i* P **P** **22 57 20.0 -1.4**
comp=E,8.0nm,0.9s
MNK *i* P **P** **22 57 20.0 -1.4**
comp=N,8.0nm,0.9s
MNK *i* P **P** **22 57 20.0 -1.4**
comp=Z,9.0nm,0.9s,baz=57
MNK *i* PP **PP** **23 00 36.1 -1.0**
MNK *i* PPP PPP 23 02 28.9
MNK *i* S **SKSac** **23 07 43.5 -2.2**
MNK *i* SS **SS** **23 13 22.3 +1.4**
MNK *i* LQ LQ 23 29 41.5
MNK *i* LR LR 23 35 41.4
MNK *i* LRM MLR 23 39 55.7
comp=Z,514nm,16.9s
MNK *i* LRM MLR 23 39 59.8
comp=N,338nm,16.9s
MNK *i* LRM MLR 23 41 04.9
comp=E,244nm,16.5s
**MNK Minsk** **84.86 328** *i* P **P** **22 57 19.9 -1.4**
MNK *i* 23 00 36.1
MNK *i* PPP PPP 23 02 28.9
MNK *i* S **SKSac** **23 07 43.5 -2.2**
MNK *i* SS **SS** **23 13 22.3 +1.4**
MNK pmax pmax
comp=E,8.0nm,0.9s
MNK pmax pmax
comp=Z,9.0nm,0.9s
MNK pmax pmax
comp=N,8.0nm,0.9s
**REDW Red Top Meadow** **84.88 45** P **P** **22 57 22.1 +0.1**
**DUG Dugway, Tooele** **85.00 48** P **P** **22 57 21.4 -1.1**
DUG IAmb IAmb 22 57 36.3
comp=Z,7.6nm,0.9s
**DUG Dugway, Tooele** **85.00 48** P **P** **22 57 21.4 -1.1**
DUG pmax pmax
comp=Z,8.0nm,1.0s
**PSUT Pine Spring** **85.00 50** P **P** **22 57 21.8 -0.9**
PSUT IAmb IAmb 22 57 31.7
comp=Z,5.6nm,0.9s
**RLMT Red Lodge** **85.06 43** P **P** **22 57 22.7 -0.2**
RLMT IAmb IAmb 22 57 25.8
comp=Z,5.7nm,0.7s
**PFO Pinyon Flats O** **85.20 56** P **P** **22 57 24.2 +0.5**
PFO IAmb IAmb 22 57 37.6
comp=Z,10nm,1.0s
**PFO Pinyon Flats O** **85.20 56** P **P** **22 57 24.2 +0.5**
PFO pmax pmax
comp=Z,10.0nm,1.0s
**HWUT Hardware Ranch** **85.21 47** P **P** **22 57 23.8 +0.1**
HWUT IAmb IAmb 22 57 38.4
comp=Z,7.8nm,0.9s
**CTU Camp Tracy** **85.50 48** P **P** **22 57 24.9 -0.2**
CTU IAmb IAmb 22 57 40.0
comp=Z,6.6nm,0.8s
**JLU Jordanelle** **85.75 47** P **P** **22 57 25.7 -0.7**
JLU IAmb IAmb 22 57 40.5
comp=Z,7.0nm,0.9s
**PDAR Pinedale Array** **85.99 45** P **P** **22 57 27.7 +0.2**
comp=Z,0.4nm,0.4s,baz=212,slow=1.4,SNR=4.7
comp=Z,0.4nm,0.4s
**LAO LASA Array** **86.15 40** P **P** **22 57 27.6 -0.4**
**AKASG Malin Array Be** **86.27 324** P **P** **22 57 26.6 -1.8**
comp=Z,1.4nm,0.7s,baz=50,slow=5.1,SNR=4.1
comp=Z,1.4nm,0.7s
**AKASG Malin Array Be** **86.27 324** *i* P **P** **22 57 29.8 +1.4**
AKASG pmax pmax
comp=Z,1.0nm,0.5s
**SIM Simferopol'** **86.44 318** *e*P P 22 57 38.7 +9.3
SIM *e*S **S** **23 08 12.3 +6.7**
SIM pmax pmax
comp=Z,8.0nm,0.7s
**ARPR Arapgir-MALATY** **86.47 311** P **P** **22 57 28.8 -1.1**
**W13A Hualapai Mount** **86.49 53** P **P** **22 57 30.2 +0.1**
**P17A Butcher Ranch,** **86.75 48** P **P** **22 57 31.6 +0.3**
P17A IAmb IAmb 22 57 50.0
comp=Z,11nm,1.3s
**P18A Preston Nutter** **87.01 48** P 22 57 30.7 -2.0
P18A IAmb IAmb 22 57 40.6
comp=Z,6.3nm,0.8s
**HFS Hagfors** **87.25 337** P **P** **22 57 31.9 -1.1**
comp=Z,1.4nm,0.7s,baz=104,slow=1.8,SNR=6.6
comp=Z,1.4nm,0.7s
**NB2 NORSAR Subarra** **87.44 339** P **P** **22 57 32.6 -1.4**
comp=Z,6.2nm,1.1s,baz=44,slow=5.1
NB2 PP PP 23 01 21.9 +24
comp=Z,2.0nm,0.7s,baz=45,slow=4.6
**NOA NORSAR Array B** **87.44 339** P **P** **22 57 33.1 -0.9**
comp=Z,1.4nm,0.7s,baz=45,slow=4.7,SNR=5.0
comp=Z,1.4nm,0.7s
**RAYN Ar Rayn** **87.71 295** P **P** **22 57 35.0 -1.0**
**RAYN Ar Rayn** **87.71 295** P **P** **22 57 35.0 -1.0**
**RAYN Ar Rayn** **87.71 295** P **P** **22 57 35.5 -0.5**
**RAYN Ar Rayn** **87.71 295** P **P** **22 57 35.0 -1.0**
RAYN pmax pmax
comp=Z,18nm,1.0s
**BRTR Keskin Array B** **89.36 313** pP 22 57 47.8 +2.5
**BRTR Keskin Array B** **89.36 313** P **P** **22 57 42.0 -1.6**
comp=Z,0.9nm,0.9s,baz=85,slow=4.3,SNR=4.9
comp=Z,0.9nm,0.9s
**BRTR Keskin Array B** **89.36 313** *i* P **P** **22 57 44.0 +0.3**
BRTR pmax pmax
comp=Z,1.0nm,0.8s
**KWP Kalwaria Pacla** **90.30 326** P **P** **22 57 45.8 -1.9**
KWP IAmb IAmb 22 57 48.8
comp=Z,12nm,1.0s
**KWP Kalwaria Pacla** **90.30 326** P **P** **22 57 45.8 -1.9**
KWP pmax pmax
comp=Z,12nm,1.0s
**KWP Kalwaria Pacla** **90.30 326** P **P** **22 57 46.6 -1.1**
**SDCO Great Sand Dun** **91.17 48** P P 22 57 50.3 -2.1
**CRVS Cervenica-Dubn** **91.39 326** *e*P **P** **22 57 55.8 +3.0**
**CRVS Cervenica-Dubn** **91.39 326** *e*P **P** **22 57 55.8 +3.0**
**ANMO Albuquerque** **91.93 51** P **P** **22 57 55.1 -0.7**
ANMO IAmb IAmb 22 58 10.3
comp=Z,4.8nm,1.1s
**ANMO Albuquerque** **91.93 51** P **P** **22 57 55.1 -0.7**
ANMO 22 57 56.1
ANMO pmax pmax
comp=Z,5.0nm,1.1s
**T25A Trinidad** **92.23 48** P **P** **22 57 57.4 +0.3**
T25A IAmb IAmb 22 58 12.1
comp=Z,5.6nm,0.9s
**VYHS Vyhne** **92.99 327** *e*P **P** **22 58 04.4 +4.2**
**VYHS Vyhne** **92.99 327** *e*P **P** **22 58 04.3 +4.1**
**CLL Collm** **93.82 331** *e*P **P** **22 58 05.0 +1.1**
CLL *e*PP **PP** **23 01 48.0 -0.6**
**CLL Collm** **93.82 331** *e*P **P** **22 58 08.0 +4.1**
**TXAR Lajitas Array** **96.84 54** P **P** **22 58 19.0 +0.7**
comp=Z,0.2nm,0.6s,baz=284,slow=3.6,SNR=1.8
comp=Z,0.2nm,0.6s
**QSPA South Pole Qui** **113.20 180** PKiKP **PKiKP** **23 03 21.7 -2.0**
comp=Z,0.5nm,0.5s,baz=294,slow=1.5,SNR=7.5
**ELIB Princess Elisa** **121.28 198** *d*PKPdf **PKPdf** **23 03 39.5 +0.4**
ELIB *d*PKP **sPKPdf** **23 03 52.0 +11**
**BOSA Boshof** **124.75 251** PKP **PKPdf** **23 03 45.9 -1.2**
comp=Z,2.6nm,0.8s,baz=138,slow=1.9,SNR=1.7
**TROLL Troll, Antarti** **126.67 194** ⇑PKPdf **PKPdf** **23 03 48.4 -1.1**
comp=Z,24nm,0.4s
TROLL ⇑x x 23 03 48.4
comp=Z,24nm,0.4s
**TORD Torodi Ar. Bea** **127.85 310** PKP **PKPdf** **23 03 52.0 -1.3**
comp=Z,0.7nm,0.8s,baz=1,slow=2.3,SNR=4.7
**SNAA Sanae** **128.07 193** ⇑PKPdf **PKPdf** **23 03 50.9 -1.2**
comp=Z,50nm,1.4s
SNAA ⇑x x 23 03 50.9
comp=Z,50nm,1.4s
**SNAA Sanae** **128.07 193** PKP **PKPdf** **23 03 51.1 -1.0**
comp=Z,1.8nm,1.0s,baz=137,slow=3.7,SNR=5.2
**VNA2 Neumayer--Watz** **129.57 192** ⇑PKPdf **PKPdf** **23 03 54.2 -0.7**
comp=Z,2.1nm,0.6s,baz=138,slow=1.6
VNA2 ⇑SKPdf SKPab 23 07 15.0 -1.2
comp=Z,0.6nm,0.6s,baz=170,slow=1.9
VNA2 ⇑x x 23 07 15.0
comp=Z,0.6nm,0.6s,baz=170,slow=1.9
**VNA3 Neumayer Olymp** **129.72 191** ⇑PKPdf **PKPdf** **23 03 53.9 -1.3**
comp=Z,1.2nm,0.6s
VNA3 ⇑SKPbc SKPab 23 07 13.0 -3.9
comp=Z,2.3nm,0.9s
VNA3 ⇑x x 23 07 13.0
comp=Z,2.3nm,0.9s
**PLCA Paso Flores** **146.66 129** PKPbc **PKPdf** **23 04 27.4 +0.3**
comp=Z,4.1nm,0.6s,baz=199,slow=2.7,SNR=8.9
**LPAZ La Paz** **149.49 82** PKP **PKPdf** **23 04 31.3 -1.8**
comp=Z,3.5nm,0.9s,baz=43,slow=5.3,SNR=4.3
LPAZ PKPbc **pPKPdf** **23 04 37.5 +2.7**
comp=Z,5.6nm,0.8s,baz=340,slow=2.7,SNR=11

*IDC* ***17*** *22:44:54.2±2.9, 61.°76N×174.°94E, h0km, mb3.5/6, mbtmp3.5/7, ML2.6/1, Error ellipse: s-maj=94.7km s-min=27.1km az=7.0*
*NERS* ***17*** *22:45:11.8, 62.°22N×174.°95E, h33km*
**ISC 17 22:44:57.7±1.1, 62.°32N±0.°09×175.°74E±0.°07, h10km, n13, σ1s 76/15, mb3.6/6, Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANDR** | **Anadyr'** | **2.54** | **17** | *e* | **Pn** | **22 45 39.0** | **0.0** |
| ANDR | | | | *e*P | **Pb** | **22 45 40.6** | **-2.8** |
| ANDR | | | | *e*Pg | **Pg** | **22 45 46.7** | **+0.3** |
| ANDR | | | | Pgmax | | 22 45 48.5 | |
| | 640nm,0.7s | | | | | | |
| ANDR | | | | *e*Sg | **Sb** | **22 46 14.3** | **-0.4** |
| ANDR | | | | Sgmax | | 22 46 17.7 | |
| | 1um,0.7s | | | | | | |
| **PVDR** | **Provideniya** | **5.39** | **62** | *e*S | Sg | 22 48 38.3 | +48 |
| PVDR | | | | Sgmax | | 22 48 45.7 | |
| | 100nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **6.98** | **329** | *e*P | **Pn** | **22 46 40.5** | **+0.7** |
| BILL | | | | *e*S | **Sn** | **22 48 01.2** | **+2.1** |
| BILL | | | | *e*Sg | **Sb** | **22 48 23.3** | **+1.2** |
| BILL | | | | Sgmax | | 22 49 05.1 | |
| | 20nm,0.6s | | | | | | |
| **EVEN** | **Evensk** | **7.75** | **274** | *e*Sg | **Sg** | **22 49 06.1** | **-0.1** |
| **OMS** | **Omsukchan** | **9.26** | **280** | *e*Sg | Sn | 22 49 50.9 | +56 |
| **SUUS** | **Susuman** | **12.69** | **284** | *e*P | Pn | 22 48 07.7 | +10 |
| SUUS | | | | *e* | | 22 51 58.7 | |
| SUUS | | | | *e*max | | 22 52 30.8 | |
| **ILAR** | **Eielson Array** | **16.66** | **65** | P | **P** | **22 48 54.7** | **+1.3** |
| | baz=271,slow=11,SNR=4.5 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.88** | **304** | P | **P** | **22 53 49.0** | **-1.8** |
| | 0.9nm,0.7s,baz=41,slow=7.7,SNR=11 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **50.95** | **311** | P | **P** | **22 53 57.0** | **-1.7** |
| | 0.5nm,0.6s,baz=48,slow=8.6,SNR=3.0 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.45** | **299** | P | **P** | **22 53 59.7** | **-3.0** |
| | 0.4nm,0.6s,baz=49,slow=6.8,SNR=4.6 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **60.15** | **83** | P | **P** | **22 55 06.7** | **+1.4** |
| | 0.1nm,0.4s,baz=323,slow=7.3,SNR=2.0 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **GERES** | **GERESS Array B** | **68.26** | **347** | P | **P** | **22 55 59.3** | **+1.1** |
| | 0.3nm,0.6s,baz=355,slow=9.9,SNR=2.3 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **78.35** | **360** | P | **P** | **22 56 59.7** | **+1.9** |
| | 0.3nm,0.8s,baz=347,slow=5.8,SNR=1.6 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

*BJI* ***17*** *22:48:19.4±0.0, 23.°40N×143.°38E, h9km, mb4.7/48, mB5.3/11, Ms4.6/10, Ms7 4.4/9*
*IDC* ***17*** *22:48:19.0±0.5, 23.°42N×143.°42E, h0km, mb4.4/21, mbtmp4.5/25, ML3.8/4, Error ellipse: s-maj=19.3km s-min=13.0km az=74.0*
*NEIC* ***17*** *22:48:22.3±1.9, 23.°46N±0.°07×143.°36E±0.°09, h12km±4km, mb4.8/155, Error ellipse: s-maj=12.3km s-min=8.2km az=121.0*

*JMA 17 22:48:28.6±0.2,24˚N±2˚×14˚4E±˚, h121km, MV4.9/17, IOTO ISLANDS REGION*

**ISC 17 22:48:24.4±0.4, 23˚50N±0˚05×143˚44E±0˚07, h31km, n191, σ2.09/149, mb4.8/112, MS4.6/3, 2C-2D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **3.33** | **340** | P | **Pn** | | **22 49 15.7** | **+1.4** |
| JHH2 | | | | S | **Sn** | | 22 49 52.2 | -0.5 |
| **JHH2** | **Haha-jima-NKT2** | **3.33** | **340** | A | A | | 22 49 15.7 | |
| | comp=E,8.0nm,2.1s,comp=N,9.0nm,2.9s | | | | | | | |
| **CBIJ** | **Chichi jima** | **3.76** | **343** | P | **Pn** | | **22 49 21.6** | **+1.4** |
| CBIJ | | | | S | **Sn** | | 22 50 01.8 | -1.7 |
| **JCJ** | **Chichijima** | **3.76** | **343** | Pn | **Pn** | | **22 49 19.9** | **-0.3** |
| JCJ | | | | Sn | **Sn** | | 22 50 02.7 | -0.7 |
| **JCJ** | **Chichijima** | **3.76** | **343** | Pn | Pn | | 22 49 16.3 | -4.0 |
| | comp=N,24nm,0.3s,baz=134,slow=23,SNR=2.9 | | | | | | | |
| JCJ | | | | Sn | **Sn** | | **22 49 56.7** | **-6.8** |
| | comp=N,346nm,0.3s,baz=74,slow=23,SNR=17 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **10.11** | **342** | Pn | **Pn** | | **22 50 46.9** | **-0.5** |
| | comp=N,16nm,0.3s,baz=207,slow=19,SNR=2.2 | | | | | | | |
| JHJ | | | | Sn | **Sn** | | **22 52 33.2** | **-6.6** |
| | comp=N,7.8nm,0.3s,baz=228,slow=21,SNR=1.5 | | | | | | | |
| | comp=N,218nm,0.8s | | | | | | | |
| **JMZ** | **Minamidaito 2** | **11.35** | **284** | P | **Pn** | | **22 51 08.5** | **+4.1** |
| **JOD2** | **Odawara 2** | **12.32** | **343** | P | **Pn** | | **22 51 16.7** | **-1.0** |
| **INU** | **Inuyama** | **13.06** | **336** | Pn | **Pn** | | **22 51 27.3** | **-0.5** |
| **JRY** | **Ryogami san** | **13.08** | **344** | P | **Pn** | | **22 51 26.0** | **-2.1** |
| JRY | | | | S | **Sn** | | **22 53 46.0** | **-6.6** |
| **JGF** | **Kuroka** | **13.17** | **338** | Pn | **Pn** | | **22 51 28.9** | **-0.4** |
| **JHO** | **Hitachi** | **13.30** | **350** | S | Sn | | 22 53 48.3 | -10 |
| **JAG** | **Ashikaga** | **13.34** | **346** | P | **Pn** | | **22 51 29.2** | **-2.3** |
| JAG | | | | S | Sn | | 22 53 48.6 | -10 |
| **MJAR** | **Matsushiro Arr** | **13.76** | **342** | Pn | **Pn** | | **22 51 34.0** | **-3.4** |
| | comp=N,0.3nm,0.3s,baz=164,slow=11,SNR=11 | | | | | | | |
| | comp=N,4.5nm,0.6s | | | | | | | |
| **MAJO** | **Matsushiro** | **13.77** | **342** | | **Pn** | | **22 51 35.9** | **-1.5** |
| **JOW** | **Kunigami** | **14.13** | **287** | Pn | **Pn** | | **22 51 46.2** | **+3.8** |
| | comp=N,1.1nm,0.3s,baz=96,slow=28,SNR=2.4 | | | | | | | |
| **JMM** | **Marumori** | **14.50** | **352** | Pn | **Pn** | | **22 51 45.7** | **-1.7** |
| **JNU** | **Nakatsue** | **14.63** | **314** | Pn | **Pn** | | **22 51 49.8** | **+0.6** |
| **JNU** | **Nakatsue** | **14.63** | **314** | Pn | **Pn** | | **22 51 48.6** | **-0.6** |
| | comp=N,0.2nm,0.3s,baz=163,slow=23,SNR=2.7 | | | | | | | |
| | comp=N,9.8nm,0.9s | | | | | | | |
| **JTM** | **Tenmabayashi** | **17.36** | **354** | Pn | **Pn** | | **22 52 23.5** | **-0.7** |
| **KSRS** | **Korea Array** | **19.26** | **320** | P | **P** | | **22 52 46.2** | **-0.1** |
| | comp=N,0.7nm,0.3s,baz=129,slow=12,SNR=12 | | | | | | | |
| | comp=N,8.7nm,0.7s | | | | | | | |
| **YULB** | **Yu-li** | **20.32** | **274** | P | **P** | | **22 52 58.2** | **+0.3** |
| **ASAJ** | **Asahikawa** | **20.58** | **358** | P | Pn | | 22 53 03.7 | +0.7 |
| | comp=N,7.0nm,0.8s,baz=257,slow=19,SNR=1.4 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **20.58** | **358** | P | **P** | | **22 53 01.4** | **+0.8** |
| **SSLB** | **Suanglung** | **20.60** | **275** | P | **P** | | **22 53 01.0** | **-0.1** |
| **PATS** | **Pohnpei** | **21.88** | **137** | P | **P** | | **22 53 14.0** | **-0.8** |
| **USA0B** | **Ussuriysk Arra** | **22.69** | **338** | P | **P** | | **22 53 22.3** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **22.69** | **338** | P | **P** | | **22 53 23.0** | **-0.3** |
| | comp=N,11nm,0.9s,baz=160,slow=9.8,SNR=12 | | | | | | | |
| | comp=N,11nm,0.9s | | | | | | | |
| **NJ2** | **Nanjing** | **23.32** | **297** | *e*P | **P** | | **22 53 29.8** | **-0.1** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=N,13nm,0.5s | | | | | | | |
| **MDJ** | **Mudanjiang** | **23.92** | **335** | P | **P** | | **22 53 36.8** | **+1.3** |
| MDJ | | | | pmax | pmax | | | |
| | comp=N,16nm,1.0s | | | | | | | |
| **BNX** | **BinXian** | **25.72** | **334** | ⇓P | **P** | | **22 53 52.8** | **+0.9** |
| BNX | | | | pmax | pmax | | | |
| | comp=N,16nm,0.8s | | | | | | | |
| **HNS** | **HongShan** | **28.25** | **306** | ⇓P | **P** | | **22 54 13.6** | **-1.1** |
| HNS | | | | pmax | pmax | | | |
| | comp=N,12nm,0.8s | | | | | | | |
| **LYN** | **LuoYang** | **29.13** | **299** | *e*P | **P** | | **22 54 22.6** | **0.0** |
| LYN | | | | sP | pP | | 22 54 29.3 | -0.9 |
| LYN | | | | pmax | pmax | | | |
| | comp=N,12nm,0.8s | | | | | | | |
| **HEH** | **HeiHe** | **29.50** | **339** | *e*P | **P** | | **22 54 26.3** | **+0.7** |
| HEH | | | | pmax | pmax | | | |
| | comp=N,31nm,0.9s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **30.31** | **319** | *e*P | **P** | | **22 54 34.3** | **+1.3** |
| XLT | | | | pP | pP | | 22 54 38.9 | -1.8 |
| XLT | | | | S | **S** | | **22 59 34.0** | **+2.9** |
| XLT | | | | sS | sS | | 22 59 43.4 | -0.2 |
| XLT | | | | SS | **ScP** | | **23 01 11.8** | **-1.3** |
| XLT | | | | pmax | pmax | | | |
| | comp=N,17nm,0.9s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=N,670nm,12.0s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=N,420nm,16.6s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=N,420nm,14.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.82** | **311** | *e*P | **P** | | **22 54 47.0** | **+0.6** |
| HHC | | | | pmax | pmax | | | |
| | comp=N,17nm,0.7s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=N,300nm,5.9s | | | | | | | |
| **XAN** | **Xi'an** | **31.89** | **297** | ⇑P | **P** | | **22 54 47.4** | **+0.3** |
| XAN | | | | pmax | pmax | | | |
| | comp=N,11nm,1.6s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=N,490nm,16.5s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=N,740nm,13.1s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=N,840nm,13.1s | | | | | | | |
| **KMI** | **Kunming** | **37.03** | **281** | ⇑P | **P** | | **22 55 33.8** | **+2.0** |
| KMI | | | | pmax | pmax | | | |
| | comp=N,11nm,1.0s | | | | | | | |
| **COEN** | **Coen** | **37.22** | **180** | P | **P** | | **22 55 32.1** | **-1.1** |
| **PZH** | **PanZhiHua** | **37.79** | **283** | P | **P** | | **22 55 38.4** | **+0.2** |
| PZH | | | | pmax | pmax | | | |
| | comp=N,40nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **38.13** | **319** | P | **P** | | **22 55 39.7** | **-1.0** |
| | comp=N,3.0nm,0.8s,baz=133,slow=6.0,SNR=8.2 | | | | | | | |
| | comp=N,3.0nm,0.8s | | | | | | | |
| **CRAI** | **Chiangrai** | **39.99** | **274** | | **P** | | **22 55 56.2** | **-0.4** |
| CRAI | | | | IAmb | IAmb | | 22 56 10.8 | |
| | comp=Z,38nm,1.5s | | | | | | | |
| **PHRA** | **Phrae** | **40.54** | **271** | P | **P** | | **22 56 00.3** | **-0.7** |
| **KNRA** | **Kununurra** | **41.49** | **202** | P | **P** | | **22 56 07.0** | **-1.8** |
| KNRA | | | | IAmb | IAmb | | 22 56 08.1 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **41.73** | **272** | P | **P** | | **22 56 09.8** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **41.73** | **272** | P | **P** | | **22 56 10.5** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **41.73** | **272** | P | **P** | | **22 56 10.8** | **-0.1** |
| | comp=Z,4.0nm,0.6s,baz=61,slow=7.6,SNR=14 | | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **CTAO** | **Charters Tower** | **43.41** | **176** | P | **P** | | **22 56 23.5** | **-0.8** |
| **GOMU** | **GeErMu** | **43.62** | **298** | P | **P** | | **22 56 28.9** | **+2.5** |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.90** | **192** | | **P** | | **22 56 26.2** | **-2.1** |
| **WR0** | **Warramunga Arr** | **44.06** | **192** | P | **P** | | **22 56 27.8** | **-1.8** |
| **WRAB** | **Tennant Creek** | **44.07** | **192** | P | **P** | | **22 56 28.4** | **-1.2** |
| WRAB | | | | IAmb | IAmb | | 22 56 47.6 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.08** | **192** | P | **P** | | **22 56 28.4** | **-1.3** |
| WB2 | | | | IAmb | IAmb | | 22 56 44.4 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.08** | **192** | P | **P** | | **22 56 28.4** | **-1.3** |
| | comp=Z,8.0nm,0.6s,baz=9.6,slow=8.2,SNR=20 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **22 58 14.5** | **-0.2** |
| | comp=Z,4.1nm,0.7s,baz=2.7,slow=3.5,SNR=5.7 | | | | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.85** | **204** | P | **P** | | **22 56 34.6** | **-1.3** |
| **KULM** | **Kulim** | **44.99** | **253** | P | **P** | | **22 56 36.6** | **-0.6** |
| KULM | | | | IAmb | IAmb | | 22 56 38.5 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **SHL** | **Shillong** | **46.71** | **284** | P | **P** | | **22 56 50.3** | **-0.6** |
| **BILL** | **Bilibino** | **46.72** | **12** | P | **P** | | **22 56 51.3** | **+1.2** |
| **LSA** | **Lhasa** | **46.84** | **289** | P | **P** | | **22 56 51.7** | **-0.6** |
| LSA | | | | IAmb | IAmb | | 22 56 54.7 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **47.79** | **192** | P | **P** | | **22 56 57.5** | **-1.5** |
| **ASAR** | **Alice Springs** | **47.79** | **192** | P | **P** | | **22 56 57.4** | **-1.6** |
| | comp=Z,3.0nm,0.7s,baz=16,slow=9.9,SNR=16 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **22 58 27.3** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=18,slow=3.2,SNR=1.6 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **48.27** | **153** | P | **P** | | **22 57 02.0** | **-0.7** |
| **EIDS** | **Eidsvold** | **49.14** | **171** | P | **P** | | **22 57 08.9** | **-0.3** |
| EIDS | | | | IAmb | IAmb | | 22 58 57.4 | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **GSI** | **Gunungsitoli** | **49.60** | **250** | P | **P** | | **22 57 11.5** | **-1.6** |
| **WMQ** | **Urumqi** | **49.64** | **308** | *e*P | **P** | | **22 57 14.3** | **+1.1** |
| WMQ | | | | PP | **PP** | | **22 59 10.1** | **+2.5** |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,440nm,13.9s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,330nm,14.9s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,380nm,16.9s | | | | | | | |
| **LIFNC** | **LIFOU** | **49.74** | **150** | P | **P** | | **22 57 14.0** | **0.0** |
| LIFNC | | | | IAmb | IAmb | | 22 57 22.4 | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **MBWA** | **Marble Bar** | **50.03** | **209** | P | **P** | | **22 57 14.8** | **-1.4** |
| MBWA | | | | IAmb | IAmb | | 22 57 16.1 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **50.34** | **209** | P | **P** | | **22 57 17.0** | **-1.6** |
| PSA00 | | | | IAmb | IAmb | | 22 57 18.4 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **50.52** | **152** | P | **P** | | **22 57 20.3** | **+0.3** |
| DZM | | | | IAmb | IAmb | | 22 57 41.3 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **M14K** | **Bethel** | **52.66** | **30** | P | **P** | | **22 57 36.6** | **+1.2** |
| M14K | | | | IAmb | IAmb | | 22 57 52.9 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.96** | **321** | P | **P** | | **22 57 36.9** | **-0.8** |
| **ZALV** | **Zalesovo Beam** | **52.96** | **321** | P | **P** | | **22 57 37.3** | **-0.5** |
| | comp=Z,2.7nm,0.5s,baz=110,slow=8.2,SNR=8.3 | | | | | | | |
| ZALV | | | | PcP | **PcP** | | **22 58 46.0** | **-0.3** |
| | comp=Z,1.3nm,0.6s,baz=98,slow=2.9,SNR=1.6 | | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **53.67** | **312** | P | **P** | | **22 57 43.4** | **+0.2** |
| MK31 | | | | IAmb | IAmb | | 22 57 44.2 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.67** | **312** | P | **P** | | **22 57 43.1** | **-0.1** |
| | comp=Z,6.4nm,0.8s,baz=92,slow=9.2,SNR=20 | | | | | | | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **53.89** | **312** | P | **P** | | **22 57 45.2** | **+0.4** |
| MAKZ | | | | IAmb | IAmb | | 22 57 45.9 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **55.09** | **182** | P | **P** | | **22 57 51.9** | **-1.6** |
| | comp=Z,4.0nm,0.6s,baz=336,slow=9.5,SNR=4.8 | | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **O18K** | **Koktuh Hills** | **55.64** | **32** | P | **P** | | **22 57 58.4** | **+1.2** |
| O18K | | | | IAmb | IAmb | | 22 58 02.1 | |
| | comp=Z,21nm,1.2s | | | | | | | |
| **KURK** | **Kurchatov** | **56.34** | **316** | P | **P** | | **22 58 02.3** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **56.39** | **316** | P | **P** | | **22 58 02.7** | **0.0** |
| | comp=Z,27nm,0.8s,baz=94,slow=7.7,SNR=48 | | | | | | | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **J19K** | **Poorman** | **56.47** | **28** | IAmb | IAmb | | 22 58 12.2 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **H19K** | **Roundabout Mou** | **56.57** | **26** | P | **P** | | **22 58 04.3** | **+0.6** |
| H19K | | | | IAmb | IAmb | | 22 58 08.1 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **K20K** | **Telida** | **56.97** | **28** | IAmb | IAmb | | 22 58 11.3 | |
| | comp=Z,7.9nm,1.0s | | | | | | | |
| **J20K** | **Nowinta River** | **57.14** | **28** | P | **P** | | **22 58 09.8** | **+2.0** |
| J20K | | | | IAmb | IAmb | | 22 58 13.0 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **ULHL** | **Ulahol** | **58.01** | **306** | P | **P** | | **22 58 15.9** | **+1.3** |
| | SNR=9.9 | | | | | | | |
| **KSH** | **Kashi** | **58.44** | **303** | P | **P** | | **22 58 21.9** | **+4.4** |
| KSH | | | | pP | pP | | 22 58 26.4 | +1.0 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,53nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **58.44** | **307** | P | **P** | | **22 58 18.5** | **+0.9** |
| | SNR=14 | | | | | | | |
| **KBK** | **Karagaybulak** | **58.94** | **307** | P | **P** | | **22 58 22.3** | **+1.3** |
| | SNR=13 | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **59.05** | **23** | IAmb | IAmb | | 22 58 41.8 | |
| | comp=Z,28nm,1.9s | | | | | | | |
| **CHMS** | **Chumysh** | **59.06** | **307** | P | **P** | | **22 58 22.2** | **+0.6** |
| | SNR=6.3 | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **59.11** | **21** | IAmb | IAmb | | 22 58 39.5 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **USP** | **Ospenovka** | **59.22** | **307** | P | **P** | | **22 58 23.7** | **+0.9** |
| | SNR=9.9 | | | | | | | |
| **AAK** | **Ala-Archa** | **59.27** | **307** | P | **P** | | **22 58 24.4** | **+1.1** |
| AAK | | | | IAmb | IAmb | | 22 58 24.9 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **SML** | **Sawmill** | **59.30** | **31** | P | **P** | | **22 58 23.9** | **+1.0** |
| **I23K** | **Minto, Yukon-K** | **59.36** | **27** | IAmb | IAmb | | 22 58 27.5 | |
| | comp=Z,7.1nm,0.9s | | | | | | | |
| **NEA2** | **Nenana** | **59.38** | **28** | IAmb | IAmb | | 22 58 28.0 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **G23K** | **Bananza Creek** | **59.40** | **25** | IAmb | IAmb | | 22 58 28.3 | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| **H23K** | **Yukon River** | **59.41** | **26** | IAmb | IAmb | | 22 58 28.3 | |
| | comp=Z,6.6nm,0.9s | | | | | | | |
| **GLI** | **Glacier Island** | **59.78** | **32** | IAmb | IAmb | | 22 58 27.4 | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| **EKS2** | **Erkin-Say** | **59.80** | **307** | P | **P** | | **22 58 27.9** | **+1.0** |
| | SNR=14 | | | | | | | |
| **E23K** | **Chandalar** | **59.83** | **24** | IAmb | IAmb | | 22 58 31.6 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **C23K** | **Itkillik River** | **59.90** | **21** | IAmb | IAmb | | 22 58 31.5 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **AML** | **Almayashu** | **59.91** | **306** | P | **P** | | **22 58 29.5** | **+1.5** |
| | SNR=23 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **59.93** | **28** | P | **P** | | **22 58 30.2** | **+2.9** |
| **H24K** | **Noodor Dome** | **60.09** | **26** | IAmb | IAmb | | 22 58 33.2 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **IL31** | | **60.34** | **28** | IAmb | IAmb | | 22 58 32.7 | |
| | comp=Z,7.9nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.34** | **28** | P | **P** | | **22 58 29.6** | **-0.5** |
| **ILAR** | **Eielson Array** | **60.34** | **28** | P | **P** | | **22 58 29.8** | **-0.3** |
| | comp=Z,4.3nm,0.8s,baz=258,slow=5.9,SNR=13 | | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **KLU** | **Klutina** | **60.41** | **31** | P | **P** | | **22 58 31.9** | **+1.2** |
| KLU | | | | IAmb | IAmb | | 22 58 39.5 | |
| | comp=Z,8.3nm,0.8s | | | | | | | |
| **ARSB** | **Arslanbob** | **60.52** | **305** | IAmb | IAmb | | 22 58 33.9 | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **GLB** | **Gilahina Butte** | **61.41** | **32** | P | **P** | | **22 58 40.6** | **+3.1** |
| GLB | | | | IAmb | IAmb | | 22 59 19.9 | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| **NIL** | **Nilore** | **61.43** | **297** | P | **P** | | **22 58 39.3** | **+1.2** |
| **BVAR** | **Borovoye Array** | **61.47** | **319** | P | **P** | | **22 58 37.9** | **0.0** |
| | comp=Z,39nm,0.6s,baz=84,slow=6.6,SNR=62 | | | | | | | |
| **SCRK** | **Sand Creek** | **61.51** | **29** | P | **P** | | **22 58 38.8** | **+0.6** |
| SCRK | | | | IAmb | IAmb | | 22 58 42.0 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **61.53** | **319** | P | **P** | | **22 58 38.4** | **+0.1** |
| **J26L** | **Joseph Creek** | **61.73** | **28** | IAmb | IAmb | | 22 58 46.7 | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **62.14** | **308** | P | **P** | | **22 58 43.6** | **+0.9** |
| **KKAR** | **Karatay Array** | **62.14** | **308** | P | **P** | | **22 58 42.8** | **+0.1** |
| **KKAR** | **Karatay Array** | **62.14** | **308** | IAmb | IAmb | | 22 58 44.1 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **L27K** | **Beaver Creek,** | **62.42** | **30** | | pwP | | 22 58 53.1 | -5.4 |
| **BCAR** | **Beaver Creek A** | **62.44** | **30** | P | **P** | | **22 58 47.5** | **+3.2** |
| **I28M** | **Miner Creek** | **63.33** | **27** | IAmb | IAmb | | 22 58 54.1 | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| **SIMJ** | **Simiganj** | **63.92** | **303** | P | **P** | | **22 58 55.5** | **+0.8** |
| **M29M** | **Somme Creek** | **63.96** | **30** | IAmb | IAmb | | 22 59 09.7 | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **H29M** | **Whitestone** | **63.99** | **26** | IAmb | IAmb | | 22 59 13.4 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **P29M** | **Windy Craggy** | **64.41** | **34** | IAmb | IAmb | | 22 59 15.6 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **N30M** | **Aishikik Lake** | **64.64** | **32** | IAmb | IAmb | | 22 59 03.3 | |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| **KBL** | **Kabul** | **64.69** | **298** | P | **P** | | **22 59 00.4** | **+0.6** |
| **G31M** | **Satah River** | **65.61** | **25** | IAmb | IAmb | | 22 59 08.9 | |
| | comp=Z,9.6nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **67.97** | **323** | P | **P** | | **22 59 19.7** | **-0.5** |
| **ABKAR** | **Akbulak array** | **68.43** | **316** | P | **P** | | **22 59 22.6** | **-0.7** |
| **ABKAR** | **Akbulak array** | **68.43** | **316** | IAmb | IAmb | | 22 59 24.6 | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **RTZ** | **Ruahuna** | **69.33** | **152** | P | **P** | | **22 59 28.5** | **-0.4** |
| **HRA** | **Herat** | **70.18** | **300** | IAmb | IAmb | | 22 59 49.2 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.76** | **28** | P | **P** | | **23 00 01.4** | **+0.3** |
| | comp=Z,2.2nm,0.8s,baz=299,slow=5.5,SNR=5.5 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **LON** | **Longmire** | **76.38** | **45** | IAmb | IAmb | | 23 00 17.2 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **HOOD** | **Mount Hood Mea** | **76.97** | **46** | P | **P** | | **23 00 14.8** | **+0.5** |
| HOOD | | | | IAmb | IAmb | | 23 00 19.5 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.30** | **341** | P | **P** | | **23 00 16.2** | **+0.7** |
| | comp=Z,5.4nm,0.8s,baz=67,slow=9.3,SNR=7.3 | | | | | | | |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **J05D** | **Fort Rock, OR** | **77.96** | **48** | IAmb | IAmb | | 23 00 34.5 | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **J08A** | **Circle Bar Ran** | **79.80** | **47** | IAmb | IAmb | | 23 00 44.7 | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **BMO** | **Blue Mountains** | **80.00** | **45** | IAmb | IAmb | | 23 00 35.4 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **CMB** | **Columbia Colle** | **80.49** | **53** | IAmb | IAmb | | 23 00 48.1 | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | **81.30** | **314** | P | **P** | | **23 00 38.4** | **+0.6** |
| | comp=Z,12nm,0.8s,baz=145,slow=3.6,SNR=10 | | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **MFID** | **Camas Ranch** | **81.55** | **46** | IAmb | IAmb | | 23 00 53.9 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **81.66** | **53** | P | **P** | | **23 00 41.0** | **+0.8** |
| **FINES** | **FINESS Array B** | **81.67** | **334** | P | **P** | | **23 00 38.4** | **-0.9** |
| | comp=Z,1.2nm,0.5s,baz=84,slow=5.5,SNR=5.7 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.85** | **52** | P | **P** | | **23 00 42.1** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **81.85** | **52** | P | **P** | | **23 00 40.9** | **-0.2** |
| | comp=Z,6.9nm,1.1s,baz=265,slow=5.2,SNR=11 | | | | | | | |
| | comp=Z,6.9nm,1.1s | | | | | | | |
| **DSP** | **Deep Springs** | **82.51** | **53** | IAmb | IAmb | | 23 00 48.5 | |
| | comp=Z,7.7nm,1.3s | | | | | | | |
| **ISA** | **Isabella, Lake** | **82.82** | **54** | IAmb | IAmb | | 23 00 50.2 | |
| | comp=Z,6.8nm,1.1s | | | | | | | |
| **YHL** | **Hebgen Lake** | **83.94** | **44** | IAmb | IAmb | | 23 01 06.6 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **GWY** | **Greenwater Val** | **83.95** | **53** | P | **P** | | **23 00 53.7** | **+1.8** |
| GWY | | | | IAmb | IAmb | | 23 01 06.2 | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **84.05** | **309** | P | **P** | | **23 00 52.7** | **+0.3** |
| GURO | | | | IAmb | IAmb | | 23 01 17.1 | |
| | comp=Z,4.7nm,1.0s | | | | | | | |
| **FFC** | **Flin Flon** | **84.18** | **32** | P | **P** | | **23 00 55.4** | **+2.9** |
| **YHH** | **Holmes Hill** | **84.18** | **44** | P | **P** | | **23 00 54.9** | **+1.8** |
| **GSC** | **Goldstone, Bar** | **84.21** | **54** | P | **P** | | **23 00 53.8** | **+0.6** |
| GSC | | | | IAmb | IAmb | | 23 00 56.9 | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| **SPR3** | **Spring Creek 3** | **84.44** | **50** | IAmb | IAmb | | 23 01 08.9 | |
| | comp=Z,6.6nm,1.4s | | | | | | | |
| **IMW** | **Indian Meadow** | **84.54** | **44** | P | **P** | | **23 00 55.7** | **+0.7** |
| IMW | | | | IAmb | IAmb | | 23 01 10.2 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **FXWY** | **Fox Creek** | **84.60** | **45** | IAmb | IAmb | | 23 01 00.1 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **TPAW** | **Teton Pass** | **84.72** | **45** | IAmb | IAmb | | 23 01 12.6 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **SPUT** | **South Promonto** | **84.72** | **47** | IAmb | IAmb | | 23 01 00.2 | |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **84.97** | **48** | P | **P** | | **23 00 57.9** | **+0.9** |
| DUG | | | | IAmb | IAmb | | 23 01 01.3 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **PSUT** | **Pine Spring** | **84.97** | **50** | IAmb | IAmb | | 23 01 11.4 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **RLMT** | **Red Lodge** | **85.02** | **43** | IAmb | IAmb | | 23 01 12.4 | |
| | comp=Z,8.4nm,0.7s | | | | | | | |
| **NACGM** | **Naroch** | **85.08** | **329** | *e*P | **P** | | **23 00 56.5** | **-0.5** |
| | comp=Z,571nm,0.8s,baz=55 | | | | | | | |
| **HWUT** | **Hardware Ranch** | **85.17** | **47** | IAmb | IAmb | | 23 01 02.4 | |
| | comp=Z,8.4nm,1.2s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.18** | **56** | P | **P** | | **23 01 01.5** | **+3.4** |
| PFO | | | | IAmb | IAmb | | 23 01 12.7 | |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| **NLU** | **North Lily Min** | **85.58** | **48** | IAmb | IAmb | | 23 01 14.0 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.96** | **45** | P | **P** | | **23 01 03.2** | **+1.2** |
| | comp=Z,0.4nm,0.5s,baz=262,slow=4.0,SNR=4.0 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **LCMT** | **Little Creek M** | **86.08** | **51** | IAmb | IAmb | | 23 01 43.1 | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **86.19** | **324** | P | **P** | | **23 01 01.6** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=52,slow=5.3,SNR=1.7 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **TMUT** | **Trail Mountain** | **86.48** | **49** | IAmb | IAmb | | 23 01 27.0 | |
| | comp=Z,6.5nm,1.3s | | | | | | | |
| **Q16A** | **Castle Valley** | **86.68** | **49** | IAmb | IAmb | | 23 01 20.2 | |
| | comp=Z,6.6nm,0.7s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **86.72** | **48** | IAmb | IAmb | | 23 01 20.1 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **P18A** | **Preston Nutter** | **86.98** | **48** | IAmb | IAmb | | 23 01 21.4 | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **U15A** | **North Rim** | **87.03** | **52** | IAmb | IAmb | | 23 01 22.1 | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **SRU** | **San Rafael Swe** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VRAC | | | | *e*Sg | | **Sb** | **22 52 12.3** | **+0.1** |
| | comp=Z,19nm,0.7s,baz=352 | | | | | | | |
| **VRAC** | **Vranov** | **2.42** | **171** | *e*PN | | **Pn** | **22 51 38.6** | **+0.3** |
| VRAC | | | | *e*SG | | **Sb** | **22 52 12.4** | **+0.2** |
| **TREC** | **Trest** | **2.43** | **189** | *e*SG | | **Sb** | **22 52 13.2** | **+0.6** |
| **ZVC** | **Zvikov** | **2.55** | **208** | *e*PN | | **Pn** | **22 51 40.2** | **+0.1** |
| ZVC | | | | *e*PG | | **Pb** | **22 51 45.2** | **+1.1** |
| **KRUC** | **Moravsky** baz=356 | **2.65** | **175** | *e*Pn | | **Pn** | **22 51 41.8** | **+0.4** |
| KRUC | | | | *e*SG | | **Sb** | **22 52 20.0** | **+1.2** |
| | comp=Z,15nm,0.5s,baz=356 | | | | | | | |
| **KRUC** | **Moravsky** | **2.65** | **175** | *e*PN | | **Pn** | **22 51 41.9** | **+0.5** |
| KRUC | | | | *e*SG | | **Sb** | **22 52 20.1** | **+1.2** |
| **OJC** | **Ojcow** | **2.80** | **120** | *e*PG | | **Pg** | **22 51 52.0** | **+0.9** |
| OJC | | | | *e*Sg | | **Sg** | **22 52 28.4** | **+1.0** |
| **KHC** | **Kasperske Hory** | **3.02** | **212** | *e*PN | | **Pn** | **22 51 46.7** | **+0.2** |
| KHC | | | | *e*PG | | **Pb** | **22 51 53.4** | **+1.4** |
| KHC | | | | *e*SG | | **Sb** | **22 52 31.8** | **+2.4** |
| | comp=Z,12nm,0.8s | | | | | | | |
| **JAVC** | **Velka Javorina** baz=341 | **3.03** | **159** | *e*Pn | | **Pn** | **22 51 46.9** | **+0.2** |
| **CKRC** | **Cesky Krumlov** | **3.09** | **202** | *e*PG | | **Pb** | **22 51 54.0** | **+0.7** |
| CKRC | | | | *e*SG | | **Sb** | **22 52 31.9** | **+0.4** |
| | comp=Z,14nm,0.5s | | | | | | | |
| **LANS** | **Liptovska Anna** | **3.36** | **138** | *e*SG | | **Sg** | **22 52 44.1** | **-1.4** |
| **BSD** | **Bornholm Skovb** | **3.49** | **349** | *i* P | | **Pn** | **22 51 54.0** | **+1.1** |
| BSD | | | | *i* S | | **Sn** | **22 52 33.5** | **-1.3** |
| BSD | | | | IAML | | | 22 52 40.7 | |
| | comp=Z,1.7nm,0.2s | | | | | | | |
| **NIE** | **Niedzica** | **3.55** | **128** | *e*Pg | | **Pg** | **22 52 06.0** | **+0.6** |
| NIE | | | | *e*Sg | | **Sg** | **22 52 51.7** | **+0.3** |
| **ZST** | **Bratislava** | **3.57** | **169** | *e*SG | | **Sg** | **22 52 51.2** | **-1.0** |
| **LUNU** | **Lund** | **4.23** | **340** | *i* P | | **Pn** | **22 52 04.0** | **+0.9** |
| LUNU | | | | *i* S | | **Sn** | **22 52 52.0** | **-1.2** |
| **BJUU** | **Bjuv** | **4.73** | **339** | *i* P | | **Pn** | **22 52 10.2** | **+0.2** |
| BJUU | | | | *i* S | | **Sn** | **22 53 02.5** | **-3.0** |
| **DEL** | **Delary** | **4.95** | **346** | *i* P | | **Pn** | **22 52 13.6** | **+0.6** |
| DEL | | | | *i* S | | **Sn** | **22 53 09.1** | **-1.8** |
| **FABU** | **Falkenberg** | **5.66** | **341** | *i* P | | **Pn** | **22 52 23.4** | **+0.7** |

*IDC* ***17*** *22:52:32.3ₛ1.0, 23°.39N×143°.60E, h0ᵏᵐ, mb3.8/11, mbtmp3.7/12, ML3.5/1, Error ellipse: s-maj=31.6km s-min=20.7km az=84.0*

*NEIC* ***17*** *22:52:33.8ₛ1.4, 23°.47N±0°.07×143°.8E±0°.3, h10ᵏᵐ±1ᵏᵐ, mb4.2/3, Error ellipse: s-maj=46.8km s-min=9.9km az=261.0*

**ISC 17 22:52:37.1**±0.9**, 23°.4N**±0°.1×**143°.6E**±0°.2**, h31**km**, n18,** σ1**9**08**/17, mb3.8**/14**, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.86** | **341** | Pn | | **Pn** | **22 53 32.7** | **-1.6** |
| **JCJ** | **Chichijima** | **3.86** | **341** | Pn | | Pn | 22 53 30.4 | -3.9 |
| | 6.9nm,0.3s,baz=50,slow=9.0,SNR=2.1 | | | | | | | |
| JCJ | | | | Sn | | Sn | 22 54 09.4 | -9.3 |
| | 10nm,0.3s,baz=270,slow=20,SNR=1.7 | | | | | | | |
| **KSRS** | **Korea Array** | **19.41** | **320** | P | | **P** | **22 57 01.1** | **+0.5** |
| | 0.1nm,0.3s,baz=145,slow=13,SNR=2.5 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.80** | **338** | P | | **P** | **22 57 38.7** | **+1.5** |
| | 0.7nm,0.6s,baz=180,slow=12,SNR=1.7 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.90** | **272** | P | | **P** | **23 00 25.5** | **+0.6** |
| | 0.4nm,0.3s,baz=66,slow=7.4,SNR=2.1 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.88** | **193** | P | | **P** | **23 00 39.8** | **-1.1** |
| WB0 | | | | IAmb | | IAmb | 23 00 56.1 | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.06** | **193** | P | | **P** | **23 00 41.7** | **-0.7** |
| WB2 | | | | IAmb | | IAmb | 23 00 51.8 | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.06** | **193** | P | | **P** | **23 00 41.2** | **-1.1** |
| | comp=Z,1.0nm,0.8s,baz=16,slow=9.2,SNR=9.1 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.77** | **192** | P | | **P** | **23 01 11.4** | **-0.2** |
| | comp=Z,0.2nm,0.6s,baz=16,slow=10,SNR=1.0 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.83** | **312** | P | | **P** | **23 01 56.2** | **-0.8** |
| | comp=Z,0.2nm,0.4s,baz=91,slow=10,SNR=4.1 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.54** | **316** | P | | **P** | **23 02 15.3** | **-1.2** |
| | comp=Z,1.1nm,0.7s,baz=93,slow=7.4,SNR=4.6 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.31** | **28** | P | | **P** | **23 02 43.2** | **+0.7** |
| | comp=Z,1.0nm,1.0s,baz=260,slow=6.0,SNR=4.1 | | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.62** | **319** | P | | **P** | **23 02 51.2** | **-0.5** |
| | comp=Z,3.1nm,0.6s,baz=84,slow=7.5,SNR=5.4 | | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| **H29M** | **Whitestone** | **63.96** | **26** | P | | **P** | **23 03 06.0** | **-1.0** |
| H29M | | | | IAmb | | IAmb | 23 03 17.1 | |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.59** | **316** | P | | **P** | **23 03 37.5** | **+0.6** |
| **KBZ** | **Khabaz** | **81.46** | **314** | P | | **P** | **23 04 53.2** | **+1.9** |
| | comp=Z,0.3nm,0.4s,baz=134,slow=2.7,SNR=1.1 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.74** | **52** | P | | **P** | **23 04 53.6** | **+0.4** |
| | comp=Z,0.5nm,0.8s,baz=229,slow=9.5,SNR=2.4 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **81.79** | **335** | P | | **P** | **23 04 52.5** | **-0.2** |
| | comp=Z,2.6nm,0.9s,baz=111,slow=7.6,SNR=1.3 | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | |

*ISK* ***17*** *23:16:37.5, 35°.96N×32°.69E, h26ᵏᵐ, ML3.2/29*

*AFAD* ***17*** *23:16:38.3ₛ0.0, 36°.03N×32°.70E, h25ᵏᵐ±2ᵏᵐ, ML2.6*

*GII* ***17*** *23:16:39.9ₛ0.8, 36°.03N×32°.70E, h25ᵏᵐ, Mws2.7, confirmed*

*NIC* ***17*** *23:16:39.6, 35°.81N×32°.80E, h22ᵏᵐ±1ᵏᵐ, Ml2.5/7*

**ISC 17 23:16:38.8**±0.9**, 35°.99N**±0°.02×**32°.69E**±0°.02**, h29**km±7km**, n111,** σ1**9**72**/**137**, 2C-1D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BOZY** | **Bozyazi-Mersin** | **0.26** | **64** | Pg | | **Pb** | **23 16 45.7** | **0.0** |
| BOZY | | | | Sg | | **Sb** | **23 16 50.3** | **0.0** |
| **GAZI** | **Gazipasa** | **0.39** | **309** | Pg | | **Pb** | **23 16 47.4** | **-0.1** |
| GAZI | | | | Sg | | **Sb** | **23 16 53.3** | **0.0** |
| **GAZI** | **Gazipasa** | **0.39** | **309** | P | | **Pb** | **23 16 47.3** | **-0.1** |
| GAZI | | | | S | | **Sb** | **23 16 52.8** | **-0.5** |
| GAZI | | | | *i* AML | | AML | 23 16 54.0 | |
| | comp=Z,620nm,0.2s | | | | | | | |
| GAZI | | | | *i* AML | | AML | 23 16 54.0 | |
| | comp=N,1μm,0.2s | | | | | | | |
| GAZI | | | | *i* AML | | AML | 23 16 54.0 | |
| | comp=E,692nm,0.5s | | | | | | | |
| **YORU** | **Yoruktepe-Mers** | **0.60** | **74** | Pg | | **Pb** | **23 16 50.4** | **-0.6** |
| YORU | | | | Sg | | **Sb** | **23 16 59.8** | **+0.6** |
| **OREN** | **Orenkoy-Mersin** | **0.66** | **71** | Pg | | **Pb** | **23 16 51.2** | **-0.7** |
| **ERMK** | **Ermenek** | **0.67** | **16** | P | | **Pb** | **23 16 51.2** | **-1.0** |
| ERMK | | | | S | | **Sb** | **23 17 00.1** | **-1.2** |
| ERMK | | | | *i* AML | | AML | 23 17 02.0 | |
| | comp=Z,256nm,0.2s | | | | | | | |
| ERMK | | | | *i* AML | | AML | 23 17 02.0 | |
| | comp=N,443nm,0.3s | | | | | | | |
| ERMK | | | | *i* AML | | AML | 23 17 03.0 | |
| | comp=E,234nm,0.4s | | | | | | | |
| **AKK1** | **Akkuyu-Mersin** | **0.71** | **77** | Pg | | **Pb** | **23 16 52.3** | **-0.3** |
| **AKKU** | **Akkuyu-Mersin** | **0.72** | **76** | Pg | | **Pb** | **23 16 52.4** | **-0.5** |
| **GULN** | **MERSIN_Gulnar** | **0.72** | **74** | P | | **Pb** | **23 16 52.1** | **-0.7** |
| GULN | | | | S | | **Sb** | **23 17 02.2** | **-0.2** |
| GULN | | | | *i* AML | | AML | 23 17 03.0 | |
| | comp=N,477nm,0.3s | | | | | | | |
| GULN | | | | *i* AML | | AML | 23 17 04.0 | |
| | comp=Z,247nm,0.2s | | | | | | | |
| GULN | | | | *i* AML | | AML | 23 17 05.0 | |
| | comp=E,292nm,0.4s | | | | | | | |
| **TEVE** | **Tevekalti-Mers** | **0.76** | **54** | Pg | | **Pb** | **23 16 52.7** | **-0.8** |
| **ALAN** | **Alanya-ANTALYA** | **0.77** | **317** | Pg | | **Pb** | **23 16 53.2** | **-0.5** |
| **YESI** | **Yesilovacik-Me** | **0.80** | **75** | Pg | | **Pb** | **23 16 53.6** | **-0.6** |
| **TISA** | **Tisan-Mersin** | **0.82** | **78** | Pg | | **Pb** | **23 16 53.9** | **-0.7** |
| TISA | | | | Sg | | **Sb** | **23 17 05.7** | **+0.4** |
| **IKL** | **Isikli** | **0.85** | **73** | Pg | | **Pb** | **23 16 54.4** | **-0.6** |
| **LEF** | **Lefka** | **0.89** | **169** | Pg | | **Pb** | **23 16 54.3** | **-1.4** |
| **LEF** | **Lefka** | **0.89** | **169** | P | | **Pb** | **23 16 55.9** | **+0.2** |
| LEF | | | | S | | **Sb** | **23 17 07.0** | **-0.1** |
| **KEBE** | **Keben-Mersin** | **0.95** | **61** | Pg | | **Pb** | **23 16 56.0** | **-0.7** |
| KEBE | | | | Sg | | **Sn** | **23 17 09.2** | **+0.4** |
| **HDMB** | **Hadim** | **0.98** | **351** | Pg | | **Pb** | **23 16 56.5** | **-0.9** |
| **AKMS** | **Akamas** | **1.01** | **197** | P | | **Pn** | **23 16 56.4** | **-0.7** |
| AKMS | | | | S | | **Sb** | **23 17 08.9** | **-1.9** |
| AKMS | | | | AML | | AML | 23 17 12.5 | |
| | 0.3nm,0.3s | | | | | | | |
| AKMS | | | | AML | | AML | 23 17 13.4 | |
| | 0.2nm,0.2s | | | | | | | |
| **ATHAL** | **Athalassa** | **1.03** | **146** | ⇑*i* P | | **Pn** | **23 16 56.9** | **-0.4** |
| ATHAL | | | | S | | **Sb** | **23 17 07.7** | **-3.5** |
| ATHAL | | | | AML | | AML | 23 17 11.7 | |
| | 1.3nm,0.2s | | | | | | | |
| ATHAL | | | | AML | | AML | 23 17 23.6 | |
| | 0.7nm,0.4s | | | | | | | |
| **TROD** | **Troodos** | **1.05** | **172** | P | | **Pn** | **23 16 56.7** | **-1.1** |
| TROD | | | | S | | **Sb** | **23 17 08.7** | **-3.4** |
| TROD | | | | AML | | AML | 23 17 19.5 | |
| | 0.2nm,0.3s | | | | | | | |
| TROD | | | | AML | | AML | 23 17 21.5 | |
| | 0.2nm,0.3s | | | | | | | |
| **SILI** | **Silifke-Mersin** | **1.07** | **69** | Pn | | **Pn** | **23 16 57.5** | **-0.3** |
| **SLFK** | **Silifke-Mersin** | **1.09** | **68** | Pn | | **Pn** | **23 16 57.8** | **-0.4** |
| **CSS** | **Mathiatis** | **1.16** | **153** | Pn | | **Pn** | **23 16 57.7** | **-1.3** |
| **CSS** | **Mathiatis** | **1.16** | **153** | P | | **Pn** | **23 16 57.7** | **-1.3** |
| CSS | | | | S | | **Sn** | **23 17 11.3** | **-2.6** |
| **CSS** | **Mathiatis** | **1.16** | **153** | ⇓*i* P | | **Pn** | **23 16 57.8** | **-1.3** |
| CSS | | | | S | | **Sn** | **23 17 11.3** | **-2.6** |
| CSS | | | | AML | | AML | 23 17 12.3 | |
| | 1.1nm,0.3s | | | | | | | |
| CSS | | | | AML | | AML | 23 17 12.4 | |
| | 1.0nm,0.2s | | | | | | | |
| **AKIN** | **Akıncılar- Kıb** | **1.16** | **147** | Pn | | **Pn** | **23 16 58.0** | **-1.2** |
| **NATA** | **Nata** | **1.22** | **185** | P | | **Pn** | **23 16 59.2** | **-0.7** |
| NATA | | | | S | | **Sn** | **23 17 14.1** | **-1.3** |
| NATA | | | | AML | | AML | 23 17 21.6 | |
| | 0.3nm,0.6s | | | | | | | |
| NATA | | | | AML | | AML | 23 17 29.2 | |
| | 0.6nm,0.6s | | | | | | | |
| **KKBE** | **Karaman, Kazim** | **1.24** | **9** | P | | **Pn** | **23 17 00.6** | **+0.3** |
| KKBE | | | | S | | **Sn** | **23 17 15.3** | **-0.9** |
| **MVOU** | **Mavrovouni** | **1.24** | **141** | ⇑*i* P | | **Pn** | **23 16 58.9** | **-1.3** |
| MVOU | | | | S | | **Sn** | **23 17 13.3** | **-2.7** |
| MVOU | | | | AML | | AML | 23 17 13.4 | |
| | 0.5nm,0.3s | | | | | | | |
| MVOU | | | | AML | | AML | 23 17 14.3 | |
| | 1.0nm,0.3s | | | | | | | |
| **KRMN** | **Karaman** | **1.27** | **21** | Pn | | **Pn** | **23 17 00.7** | **0.0** |
| **KIZK** | **Mersin** | **1.27** | **67** | Pn | | **Pn** | **23 17 00.6** | **0.0** |
| **KIZK** | **Mersin** | **1.27** | **67** | P | | **Pn** | **23 17 00.7** | **0.0** |
| KIZK | | | | S | | **Sn** | **23 17 16.2** | **-0.6** |
| KIZK | | | | *i* AML | | AML | 23 17 18.0 | |
| | comp=E,122nm,0.4s | | | | | | | |
| KIZK | | | | *i* AML | | AML | 23 17 19.0 | |
| | comp=N,116nm,0.4s | | | | | | | |
| KIZK | | | | *i* AML | | AML | 23 17 21.0 | |
| | comp=Z,107nm,0.5s | | | | | | | |
| **ASGA** | **Asgata** | **1.29** | **159** | P | | **Pn** | **23 16 59.8** | **-1.1** |
| ASGA | | | | S | | **Sn** | **23 17 14.4** | **-2.7** |
| ASGA | | | | AML | | AML | 23 17 15.8 | |
| | 0.4nm,0.3s | | | | | | | |
| ASGA | | | | AML | | AML | 23 17 17.1 | |
| | 0.2nm,0.2s | | | | | | | |
| **EREN** | **Erenkoy** | **1.29** | **110** | Pn | | **Pn** | **23 17 00.5** | **-0.4** |
| **EREN** | **Erenkoy** | **1.29** | **110** | P | | **Pn** | **23 16 58.5** | **-2.4** |
| EREN | | | | S | | **Sn** | **23 17 16.3** | **-0.9** |
| **MNVG** | **Manavgat-Antal** | **1.30** | **308** | Pn | | **Pn** | **23 17 00.9** | **-0.1** |
| **PARAL** | **Paralimni** | **1.49** | **132** | S | | **Sn** | **23 17 19.3** | **-2.7** |
| **SEYD** | **Seydisehir-KON** | **1.57** | **334** | Pn | | **Pn** | **23 17 04.9** | **+0.1** |
| **SEDI** | **Konya, Seydise** | **1.64** | **333** | P | | **Pb** | **23 17 07.7** | **-0.7** |
| SEDI | | | | S | | **Sb** | **23 17 28.0** | **-0.7** |
| **KMER** | **Konya-Meram** | **1.79** | **352** | P | | **Pb** | **23 17 10.1** | **-0.9** |
| KMER | | | | S | | **Sn** | **23 17 30.7** | **+1.0** |
| **ANTB** | **Antalya** | **1.87** | **300** | Pn | | **Pn** | **23 17 08.8** | **-0.1** |
| **AKUM** | **Antalya-Kumluc** | **1.92** | **281** | P | | **Pn** | **23 17 10.5** | **+0.9** |
| AKUM | | | | S | | **Sb** | **23 17 37.2** | **+0.3** |
| AKUM | | | | *i* AML | | AML | 23 17 46.0 | |
| | comp=N,47nm,0.6s | | | | | | | |
| AKUM | | | | *i* AML | | AML | 23 17 47.0 | |
| | comp=E,61nm,0.6s | | | | | | | |
| **KONT** | **Konya--Tatoy** | **1.97** | **352** | Pn | | **Pn** | **23 17 10.6** | **+0.4** |
| **KONT** | **Konya--Tatoy** | **1.97** | **352** | P | | **Pn** | **23 17 10.8** | **+0.5** |
| KONT | | | | S | | **Sb** | **23 17 36.7** | **-1.4** |
| **KORT** | **Korkueli** | **2.13** | **299** | Pn | | **Pn** | **23 17 12.7** | **+0.1** |
| **KORT** | **Korkueli** | **2.13** | **299** | P | | **Pn** | **23 17 10.7** | **-1.9** |
| KORT | | | | S | | **Sn** | **23 17 36.0** | **-2.2** |
| **LADK** | **Ladik-KONYA** | **2.22** | **353** | Pn | | **Pn** | **23 17 14.1** | **+0.3** |
| **KARA** | **Karaisali** | **2.29** | **56** | Pn | | **Pn** | **23 17 15.4** | **+0.8** |
| **ELL** | **Elmali** | **2.37** | **289** | Pn | | **Pn** | **23 17 16.5** | **+0.7** |
| **ELL** | **Elmali** | **2.37** | **289** | P | | **Pn** | **23 17 18.6** | **+2.8** |
| **HNTI** | **Hanita** | **3.56** | **144** | P | | **Pn** | **23 17 35.3** | **+3.2** |
| **HNTI** | **Hanita** | **3.56** | **144** | S | | **Sn** | **23 18 14.5** | **+1.4** |
| **HNTI** | **Hanita** | **3.56** | **144** | P | | **Pn** | **23 17 33.7** | **+1.6** |
| **GEM** | **Giv'at Ha'Em** | **3.71** | **138** | P | | **Pn** | **23 17 36.2** | **+2.1** |
| **GEM** | **Giv'at Ha'Em** | **3.71** | **138** | P | | **Pn** | **23 17 35.6** | **+1.5** |
| **GEM** | **Giv'at Ha'Em** | **3.71** | **138** | S | | **Sn** | **23 18 17.8** | **+1.0** |
| **NATI** | **Neve Ativ** | **3.71** | **136** | P | | **Pn** | **23 17 35.3** | **+1.2** |
| **NATI** | **Neve Ativ** | **3.71** | **136** | S | | **Sn** | **23 18 18.4** | **+1.6** |
| **MMA1** | **Mount Meron ar** | **3.72** | **142** | P | | **Pn** | **23 17 35.5** | **+1.1** |
| **MMA1** | **Mount Meron ar** | **3.72** | **142** | S | | **Sn** | **23 18 18.7** | **+1.4** |
| **MMA0B** | **Mount Meron ar** | **3.72** | **142** | P | | **Pn** | **23 17 36.2** | **+1.7** |
| **MMA0B** | **Mount Meron ar** | **3.72** | **142** | S | | **Sn** | **23 18 19.2** | **+1.8** |
| **BLGI** | **Bet Lehem HaGe** | **3.85** | **147** | S | | **Sn** | **23 18 22.1** | **+1.6** |
| **BLGI** | **Bet Lehem HaGe** | **3.85** | **147** | P | | **Pn** | **23 17 38.0** | **+1.8** |
| **OFRI** | **`Ofer** | **3.86** | **150** | S | | **Sn** | **23 18 22.1** | **+1.3** |
| **OFRI** | **`Ofer** | **3.86** | **150** | P | | **Pn** | **23 17 37.9** | **+1.5** |
| **KSHT** | **Keshet** | **3.96** | **138** | S | | **Sn** | **23 18 24.4** | **+1.2** |
| **KSHT** | **Keshet** | **3.96** | **138** | P | | **Pn** | **23 17 39.5** | **+1.8** |
| **MMLI** | **Mount Malkishu** | **4.21** | **147** | S | | **Sn** | **23 18 30.8** | **+1.5** |
| **MMLI** | **Mount Malkishu** | **4.21** | **147** | P | | **Pn** | **23 17 42.8** | **+1.7** |
| **SLTI** | **Sal'it** | **4.22** | **152** | P | | **Pn** | **23 17 44.0** | **+2.8** |
| **SLTI** | **Sal'it** | **4.22** | **152** | P | | **Pn** | **23 17 43.2** | **+1.9** |
| **SLTI** | **Sal'it** | **4.22** | **152** | S | | **Sn** | **23 18 31.3** | **+1.8** |
| **QRNJ** | **Al-Qirein** | **4.36** | **146** | P | | **Pn** | **23 17 46.5** | **+3.4** |
| QRNJ | | | | S | | **Sn** | **23 18 31.9** | **-1.1** |
| **HMDT** | **Nahal Hemdat** | **4.41** | **147** | P | | **Pn** | **23 17 46.8** | **+3.0** |
| HMDT | | | | S | | **Sn** | **23 18 27.5** | **-6.7** |
| **HMDT** | **Nahal Hemdat** | **4.41** | **147** | S | | **Sn** | **23 18 36.1** | **+1.9** |
| **HMDT** | **Nahal Hemdat** | **4.41** | **147** | P | | **Pn** | **23 17 45.2** | **+1.4** |
| **SALP** | **Salfit** | **4.43** | **151** | P | | **Pn** | **23 17 46.5** | **+2.4** |
| **SALP** | **Salfit** | **4.43** | **151** | P | | **Pn** | **23 17 45.5** | **+1.4** |
| **SALP** | **Salfit** | **4.43** | **151** | S | | **Sn** | **23 18 36.5** | **+1.8** |
| **UJAP** | **Al Uja** | **4.64** | **149** | P | | **Pn** | **23 17 49.1** | **+2.1** |
| **UJAP** | **Al Uja** | **4.64** | **149** | S | | **Sn** | **23 18 41.6** | **+1.7** |
| **AMAZ** | **Amatzia** | **4.82** | **157** | S | | **Sn** | **23 18 46.0** | **+1.7** |
| **AMAZ** | **Amatzia** | **4.82** | **157** | P | | **Pn** | **23 17 51.0** | **+1.5** |
| **DSI** | **Dead Sea** | **4.95** | **152** | P | | **Pn** | **23 17 54.1** | **+2.9** |
| **DSI** | **Dead Sea** | **4.95** | **152** | P | | **Pn** | **23 17 52.8** | **+1.6** |
| **DSI** | **Dead Sea** | **4.95** | **152** | S | | **Sn** | **23 18 49.5** | **+2.1** |
| **YTIR** | **Yattir** | **5.04** | **156** | P | | **Pn** | **23 17 54.1** | **+1.6** |
| **YTIR** | **Yattir** | **5.04** | **156** | S | | **Sn** | **23 18 51.9** | **+2.0** |
| **MSBI** | **Mazada** | **5.17** | **154** | P | | **Pn** | **23 17 56.2** | **+2.0** |
| **MSBI** | **Mazada** | **5.17** | **154** | S | | **Sn** | **23 18 54.5** | **+1.6** |
| **GHAJ** | **Ghor Haditha** | **5.26** | **152** | P | | Pb | 23 18 04.3 | -5.7 |
| **GHAJ** | **Ghor Haditha** | **5.26** | **152** | P | | **Pn** | **23 17 57.1** | **+1.7** |
| **GHAJ** | **Ghor Haditha** | **5.26** | **152** | S | | **Sn** | **23 18 56.9** | **+1.9** |
| **KZIT** | **Kziot** | **5.27** | **164** | P | | **Pn** | **23 17 57.5** | **+1.9** |
| **KZIT** | **Kziot** | **5.27** | **164** | S | | **Sn** | **23 18 57.4** | **+2.0** |
| **ZFRI** | **Zfri** | **5.81** | **158** | P | | **Pn** | **23 18 06.3** | **+3.3** |
| **ZFRI** | **Zfri** | **5.81** | **158** | P | | **Pn** | **23 18 04.8** | **+1.8** |
| **ZFRI** | **Zfri** | **5.81** | **158** | S | | **Sn** | **23 19 09.9** | **+1.2** |
| **PRNI** | **Paran** | **5.95** | **160** | P | | **Pn** | **23 18 07.3** | **+2.3** |
| **PRNI** | **Paran** | **5.95** | **160** | P | | **Pn** | **23 18 06.9** | **+1.9** |
| **PRNI** | **Paran** | **5.95** | **160** | S | | **Sn** | **23 19 13.9** | **+1.7** |
| **HRFI** | **Mount Harif** | **6.26** | **161** | P | | **Pn** | **23 18 11.4** | **+2.2** |
| **HRFI** | **Mount Harif** | **6.26** | **161** | S | | **Sn** | **23 19 21.2** | **+1.4** |
| **HRFI** | **Mount Harif** | **6.26** | **161** | P | | **Pn** | **23 18 11.0** | **+1.7** |
| **MBRI** | **Mt Berech** | **6.46** | **163** | P | | **Pn** | **23 18 14.2** | **+2.2** |
| **MBRI** | **Mt Berech** | **6.46** | **163** | S | | **Sn** | **23 19 27.2** | **+2.4** |
| **AQBJ** | **Aqaba** | **6.56** | **162** | P | | **Pn** | **23 18 16.8** | **+3.5** |
| **EIL** | **Elat** | **6.59** | **163** | P | | **Pn** | **23 18 15.8** | **+2.0** |
| **EIL** | **Elat** | **6.59** | **163** | S | | **Sn** | **23 19 29.6** | **+1.7** |

*IDC* ***17*** *23:22:20.4ₛ0.3, 8°.72N×83°.04W, h0ᵏᵐ, mb5.5/29, mbtmp5.5/33, ML5.2/3, MS5.7/63, Error ellipse: s-maj=10.9km s-min=7.2km az=53.0*

*MOS* ***17*** *23:22:21.1±1.0, 8°.69N×83°.14W, h11ᵏᵐ, mb6.1/63, MS5.8/38, Error ellipse: s-maj=6.3km s-min=4.7km az=91.8*

*UCR* ***17*** *23:22:22.7±0.9, 8°.56N×83°.21W, h22ᵏᵐ±1ᵏᵐ, MW6.1, Fault plane solution: NP1:ϕₛ109.41000°, δ25.46000°, λ78.30000°.*

*BJI* ***17*** *23:22:22.0±0.0, 8°.69N×83°.18W, h10ᵏᵐ, mB6.3/60, Ms6.4/65, Ms7 6.3/65*

*UPA* ***17*** *23:22:23.0±1.5, 8°.66N×83°.17W, h5ᵏᵐ, MW5.9, Fault plane solution: NP1:ϕₛ0.00000°, δ5.00000°, λ-53.00000°.*

*CATAC* ***17*** *23:22:23.4±0.5, 8°.60N×83°.08W, h10ᵏᵐ, MB6.4, mb6.4, ML6.2*

*NEIC* ***17*** *23:22:24.9ₛ2.3, 8°.78N±0°.06×83°.15W±0°.05, h15ᵏᵐ±1ᵏᵐ, mb6.0/999, Ms_20 5.8/776, Mwb5.9/46, Mww6.1/36, Error ellipse: s-maj=10.5km s-min=7.8km az=215.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr9.80; Mθθ-6.60; Mϕϕ-3.21; Mrθ1.51; Mθϕ1.46; Mrϕ-0.36; Fault plane solution: Mo8.92000×10¹⁷ NP1: ϕₛ109.43000°, δ50.17000°, λ88.93000°. NP2: ϕₛ291.10000°, δ39.84000°, λ91.28000°. Principal axes: T 9.9456, Plg85.0000°, Azm11.0000°; N -2.6649, Plg1.0000°, Azm110.0000°; P -7.2807, Plg5.0000°, Azm200.0000°;*

*NEIC* ***17*** *23:22:25.4, 8°.69N×83°.14W, h26ᵏᵐ, Moment Tensor Solution. Duration: 5ₛ2 Moment tensor: Scale 10¹⁸Nm; Mrr1.52; Mθθ-1.28; Mϕϕ-0.25; Mrθ0.47; Mθϕ0.74; Mrϕ-0.05; Fault plane solution: Mo1.66000×10¹⁸ NP1: ϕₛ110.80000°, δ53.09000°, λ81.63000°. NP2: ϕₛ304.57000°, δ37.71000°, λ100.97000°. Principal axes: T 1.6006, Plg80.0000°, Azm345.0000°; N 0.1175, Plg7.0000°, Azm116.0000°; P -1.7181, Plg8.0000°, Azm207.0000°;*

*NEIC* ***17*** *23:22:25.4, 8°.79N×83°.14W, h26ᵏᵐ*

*NEIC* ***17*** *23:22:25.3, 8°.79N×83°.14W, h16ᵏᵐ*

*RSNC* ***17*** *23:22:25.2ₛ0.2, 9°N±2°×8°3W±°, h19ᵏᵐ, M5.9, mB6.2, mb5.8, ML5.9, Mw(mB)5.9, MwMwp6.0, Mwp6.1*

*IPGP* ***17*** *23:22:25.0, 8°.77N×83°.14W, h18ᵏᵐ, Mw6.1, Fault plane solution: NP1:ϕₛ119.00000°, δ52.00000°, λ86.00000°. NP2:ϕₛ305.00000°, δ38.00000°, λ95.00000°.*

*BGR* ***17*** *23:22:25.9, 8°.06N×82°.14W, h33ᵏᵐ, mb6.1, Ms6.2*

*SNET* ***17*** *23:22:27.5±0.6, 8°.54N×83°.55W, h15ᵏᵐ±999ᵏᵐ, ML6.3*

*GCMT* ***17*** *23:22:28.0±0.1, 8°.64N×83°.19W, h22ᵏᵐ, MW6.1/160, Moment Tensor Solution. s149,c366; s160,c605; Duration: 2ₛ7 Moment tensor: Scale 10¹⁸Nm; Mrr1.69±.01; Mθθ-1.34±.01; Mϕϕ-0.35±.01; Mrθ0.28±.01; Mθϕ0.75±.01; Mrϕ-0.14±.01; Best double couple: Mo1.74700×10¹⁸ NP1:ϕₛ118.00000°, δ50.00000°, λ90.00000°. NP2:ϕₛ299.00000°, δ40.00000°, λ90.00000°. Principal axes: T 1.7190, Plg85.0000°, Azm26.0000°; N 0.0510, Plg0.0000°, Azm118.0000°; P -1.7760, Plg5.0000°, Azm208.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*GCG* ***17*** *23:24:24.0ₛ0.4, 14°.44N×89°.77W, h34ᵏᵐ, MD4.1*

**ISC 17 23:22:23.1**±0.5**, 8°.62N**±0°.02×**83°.17W**±0°.02**, h16**km±2km**, n2545,** σ1**9**65**/**2543**, mb6.0/**655**, MS5.9/**490**, 221C-110D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.02** | **87** | ⇑*e*P | | **Pg** | **23 22 25.8** | **0.0** |
| **EDAD** | **Golfito** | **0.03** | **11** | ⇑*e*P | | **Pg** | **23 22 26.0** | **0.0** |
| **JIME** | **Puerto Jimenez** | **0.17** | **241** | ⇑*e*P | | **Pg** | **23 22 27.1** | **-0.3** |
| JIME | | | | *e*S | | **Sb** | **23 22 31.5** | **+0.2** |
| **NELY** | **Ciudad Neily** | **0.22** | **83** | ⇓*e*P | | **Pb** | **23 22 29.1** | **+0.2** |
| NELY | | | | *e*S | | **Sb** | **23 22 34.5** | **+1.8** |
| **VITO** | **San Vito** | **0.28** | **46** | ⇓*e*P | | **Pb** | **23 22 30.2** | **+0.4** |
| **MLIR3** | **Monte Lirio, C** | **0.38** | **64** | ⇑*e*P | | **Pb** | **23 22 32.0** | **+0.5** |
| MLIR3 | | | | *e*S | | **Sb** | **

TCS1 Tacares 1.80 322 *i* P Pn 23 22 53.5 -0.1
TCS1 Tacares 1.80 322⇓ *e*P Pn 23 22 53.0 -0.6
TRB2 Turrubares 1.80 316 *e*P Pn 23 22 52.6 -0.9
GREC Grecia 1.83 322 *e*P Pn 23 22 54.6 +0.6
SARCI Sarchi 1.86 322 *e*P Pn 23 22 54.7 +0.2
VPS6 Volcano Poas 1.88 326⇓ *e*P Pn 23 22 54.6 -0.3
RAMO San Ramon 1.94 319 *e*P Pn 23 22 56.1 +0.6
SRA1 San Ramn 1.94 318⇓ *e*P Pn 23 22 55.0 -0.6
ARZA Esparza 2.01 313 *e*P Pn 23 22 56.9 +0.5
MESA3 La Mesa, Verag 2.02 103 *e*P Pn 23 22 57.0 +0.4
GMAL Guarumal, Vera 2.10 114 P Pn 23 22 56.6 -1.1
GMAL Guarumal, Vera 2.10 114⇓ *i*P Pn 23 22 57.5 -0.1
GMAL Guarumal, Vera 2.10 114 *e*P Pn 23 22 56.0 -1.7
ITAL Pital 2.12 329 *e*P Pn 23 22 57.9 0.0
CBL1 Cabuya 2.12 297⇓ *e*P Pn 23 22 56.4 -1.7
SOCE Pocosol 2.26 321 P Pn 23 22 60.0 +0.1
SOCE Pocosol 2.26 321 *i* P Pn 23 00 3.3 +0.4
SOCE *i* S Sb 23 22 32.9 +1.6
SOCE IAML 23 23 39.3
comp=Z,240µm,1.0s
SOCE Pocosol 2.26 321⇓ *e*P Pn 23 22 60.0 +0.1
VACR Volcan Arenal 2.36 321⇓ *e*P Pn 23 23 01.6 +0.3
MARI3 Mariato, Verag 2.37 114 *e*P Pn 23 23 02.8 +1.4
ARE1 Arenal 1 2.38 320⇓ *e*P Pn 23 23 02.0 +0.5
CEDE Laguna Cedeo 2.39 321⇓ *e*P Pn 23 23 01.7 0.0
COVE Coope Vega, Sa 2.41 330 *i* P Pn 23 23 02.9 +1.0
COVE IAML 23 23 52.4
comp=Z,120µm,1.0s
JTS Las Juntas de 2.42 313 Pn Pn 23 23 01.8 -0.3
JTS Las Juntas de 2.42 313 ⇑P Pn 23 23 01.7 -0.3
JTS Las Juntas de 2.42 313 Pn Pn 23 23 02.7 +0.7
comp=Z,678nm,0.3s,baz=117,slow=3.5,SNR=381
JTS Sn Sn 23 23 30.7 -0.7
comp=Z,2µm,0.3s,baz=315,slow=23,SNR=5.7
JTS LR LR 23 23 33.6
comp=Z,60µm,18.0s,baz=102,slow=30
comp=Z,9µm,0.8s
JTS Las Juntas de 2.42 313 P Pn 23 23 02.0 0.0
JTS Las Juntas de 2.42 313 *c i*P Pn 23 23 01.5 -0.5
JTS pmax pmax
comp=Z,7µm,1.8s
JTS Las Juntas de 2.42 313⇑ *e*P Pn 23 23 01.7 -0.3
JTS *i* S Sn 23 23 32.8 +1.4
JTS Las Juntas de 2.42 313⇑ *e*P Pn 23 23 01.6 -0.5
CRIS3 El Cristo, Coc 2.55 98⇑ *i*P Pn 23 23 05.3 +1.4
CNAS Canas 2.61 314 *e*P Pn 23 23 05.7 +1.1
INDI Punta indio, G 2.61 298 *i* P Pn 23 23 03.5 -1.2
INDI *i* S Sg 23 23 52.2 +5.1
CACAO El Cacao, Vera 2.62 119 P Pn 23 23 06.3 +1.5
CACAO El Cacao, Vera 2.62 119 *e*P Pn 23 23 05.5 +0.8
CACAO *e*S Sn 23 23 38.9 +2.6
VERA Finca Concepci 2.78 323 *e*P Pn 23 23 07.6 +0.6
JUD3 Juan Diaz 3 2.79 303 Pn Pn 23 23 06.9 -0.4
BAGA Bagaces 2.80 313 *e*P Pn 23 23 08.0 +0.7
CHIT3 Chitre 2.81 103 *e*P Pn 23 23 07.7 +0.3
CHIT3 *e*S Sn 23 23 43.5 +2.6
PNME Penonome 2.82 93⇓ *e*P Pn 23 23 09.0 +1.4
PNME *e*S Sn 23 23 43.0 +1.8
DELF Filadelfia 2.97 308 *e*P Pb 23 23 12.9 -2.8
AZU Azuero 2.98 106 P Pn 23 23 10.6 +0.8
AZU Azuero 2.98 106⇓ *e*P Pn 23 23 10.8 +0.9
AZU *e*S Sn 23 23 47.0 +1.7
AZU Azuero 2.98 106⇓ *e*P Pn 23 23 09.8 0.0
ERIA Liberia 3.00 312 *e*P Pn 23 23 12.9 +2.9
VRLE La Escondida, 3.05 315⇑ *e*P Pn 23 23 11.6 +0.8
VORI VORI 3.06 316⇑ *e*P Pn 23 23 11.0 0.0
PCRI3 Pocri, Los San 3.17 107⇑ *e*P Pn 23 23 15.0 +2.6
ACHO3 Achotines, Los 3.20 112⇓ *e*P Pn 23 23 14.8 +2.0
MLIR Monte Lirio 3.33 79 *e*P Pn 23 23 15.7 +1.0
BCIP Isla Barro Col 3.34 80 P Pn 23 23 15.4 +0.7
BCIP Isla Barro Col 3.34 80 ⇑P Pn 23 23 14.0 -0.7
BCIP Isla Barro Col 3.34 80 P Pn 23 23 15.0 +0.3
BCIP Isla Barro Col 3.34 80 *i* P Pn 23 23 15.3 +0.7
BCIP *i* S Sb 23 24 04.6 +2.2
BCIP IAML 23 24 33.1
comp=Z,48µm,1.0s
BCIP Isla Barro Col 3.34 80 P Pn 23 23 15.4 +0.7
BCIP Isla Barro Col 3.34 80 ⇓ *i*P Pn 23 23 15.4 +0.7
BCIP ⇓ *i*P Pb 23 23 15.4 -6.6
BCIP *e*S Sb 23 23 58.8 -3.6
BCIP Isla Barro Col 3.34 80⇓ *e*P Pn 23 23 15.0 +0.3
BLUN Bluefields 3.41 350 *i* P Pn 23 23 14.8 -0.9
BLUN *i* S Sb 23 24 03.4 -1.1
FRIJ El Hiral 3.46 80⇑ *e*P Pn 23 23 17.6 +1.3
ARRA3 Arraijan, Pana 3.49 84 *e*P Pn 23 23 18.2 +1.4
FLAM Flamenco Islan 3.60 85 *e*P Pn 23 23 19.9 +1.5
ESPN Las Esperanzas 3.72 343 Pn Pn 23 23 20.0 0.0
ESPN Las Esperanzas 3.72 343 *i* P Pn 23 23 20.2 +0.3
ESPN *i* S Sb 23 24 12.4 -0.9
ESPN IAML 23 24 30.7
comp=Z,37µm,1.0s
ESPN Las Esperanzas 3.72 343⇓ *e*P Pn 23 23 19.9 0.0
MORN Al O del Volca 3.79 320 *i* P Pn 23 23 23.6 +2.6
MORN IAML 23 23 45.2
comp=Z,17µm,1.0s
MORN *i* S Sb 23 24 17.2 +1.7
JAPN Al SSO del Vol 3.80 320 *i* P Pn 23 23 22.8 +1.8
JAPN IAML 23 23 41.9
comp=Z,6µm,1.0s
ARIN Rivas 3.85 317 *i* P Pn 23 23 24.0 +2.3
ARIN IAML 23 24 29.6
comp=Z,21µm,1.0s
ACON Acoyapa 3.86 329 Pn Pn 23 23 21.6 -0.3
ACON Acoyapa 3.86 329 P Pn 23 23 22.7 +0.8
ACON Acoyapa 3.86 329 *i* P Pn 23 23 22.4 +0.5
ACON *i* S Sb 23 24 13.3 -4.2
ACON IAML 23 24 50.2
comp=Z,23µm,1.0s
ACON Acoyapa 3.86 329⇓ *e*P Pn 23 23 21.5 -0.5
CHPO Chepo, Panama 4.04 82⇑ *e*P Pn 23 23 26.2 +1.8
NADN Granada 4.19 318 *i* P Pn 23 23 28.8 +2.3
CNTA3 Canitas, Panam 4.27 82⇑ *e*P Pn 23 23 29.0 +1.5
MASN Masaya 4.45 319 *i* P Pn 23 23 32.5 +2.5
MASN IAML 23 24 40.0
comp=Z,2µm,1.0s
BOAB BOACO BROADBAN 4.52 327 Pn Pn 23 23 31.0 0.0
BOAB BOACO BROADBAN 4.52 327 P Pn 23 23 31.8 +0.8
BOAB BOACO BROADBAN 4.52 327 ⇑P Pn 23 23 30.3 -0.7
BOAB BOACO BROADBAN 4.52 327 *i* P Pn 23 23 31.6 +0.6
BOAB IAML 23 24 52.7
comp=Z,18µm,1.0s
CRUN El Crucero 4.54 318 *i* P Pn 23 23 34.6 +3.2
CRUN IAML 23 24 49.5
comp=Z,14nm,1.0s
RA5A7 El Crucero 4.55 318 *i* P Pn 23 23 34.3 +2.8
RA5A7 IAML 23 24 49.4
comp=Z,28µm,1.0s
WILN Americas 2 4.60 320 *i* P Pn 23 23 33.7 +1.6
WILN IAML 23 25 00.4
comp=Z,7µm,1.0s
UNAN Cigeo UNAN 4.62 319 *i* P Pn 23 23 34.1 +1.8
UNAN IAML 23 25 06.2
comp=Z,55µm,1.0s
R4DEC Barrio San Lui 4.63 319 *i* P Pb 23 23 36.2 -7.8
R4DEC *i* P Pn 23 23 34.5 +2.0
R4DEC IAML 23 25 15.1
comp=Z,14µm,1.0s
SBEN San Benito 4.63 322 *i* P Pn 23 23 36.4 +3.9
SBEN IAML 23 25 39.8
comp=Z,19µm,1.0s
ABCN Banco Central 4.65 319 *i* P Pn 23 23 35.1 +2.3
ABCN IAML 23 24 42.5
comp=Z,18µm,1.0s
APQ2 Apoyeque 4.71 319 *i* P Pn 23 23 36.4 +2.7
APQ2 IAML 23 24 55.9
comp=Z,8µm,1.0s
HUEN 4.72 322 *i* P Pn 23 23 36.1 +2.3
HUEN IAML 23 25 35.9
comp=Z,11µm,1.0s
SAPS Ciudad Sandino 4.75 318 *i* P Pn 23 23 36.1 +2.0
SAPS IAML 23 24 54.5
comp=Z,8µm,1.0s
COPN Copaltepe 4.88 317 *i* P Pn 23 23 38.5 +2.6
COPN IAML 23 25 11.6
comp=Z,4µm,1.0s
BC86 Nagarote 4.92 318 *i* P Pn 23 23 39.7 +3.2
BC86 IAML 23 25 02.1
comp=Z,12µm,1.0s
MOM2 El Cardon 5.00 320 *i* P Pn 23 23 40.1 +2.6
MOM2 IAML 23 24 07.5
comp=Z,6µm,1.0s
MOM2 IVmB_BB 23 24 07.5
comp=Z,50µm,1.0s
MOM2 IAmb IAmb 23 24 07.9
comp=Z,4µm,1.0s
PRVC Isla de Provid 5.04 20 Pn Pn 23 23 38.1 -0.1
PRVC Isla de Provid 5.04 20 P Pn 23 23 37.7 -0.5
PRVC Isla de Provid 5.04 20 ⇓ *i*P Pn 23 23 37.6 -0.6
LEVN Ruinas Leon Vi 5.06 318 *i* P Pn 23 23 41.5 +3.2
LEVN IAML IAmb 23 23 47.9
comp=Z,3µm,0.6s
LEVN IVmB_BB 23 23 57.7
comp=Z,32µm,1.0s
LEVN IAML 23 25 04.3
comp=Z,5µm,1.0s
CNGA Al SSO del Vol 5.18 318 *i* P Pn 23 23 40.9 +0.8
CNGN Cerro Negro 5.18 318 Pn Pn 23 23 41.4 +1.3
CNGN Cerro Negro 5.18 318 P Pn 23 23 41.7 +1.6
comp=Z,3µm,0.8s,comp=Z,67µmcomp=Z,844µm
CNGN Cerro Negro 5.18 318 *i* P Pn 23 23 42.1 +2.0
CNGN IAmb IAmb 23 23 59.5
comp=Z,2µm,0.8s
CNGN IVmB_BB 23 24 13.7
comp=Z,59µm,1.0s
CNGN IAML 23 25 54.9
comp=Z,7µm,1.0s
CNGN Cerro Negro 5.18 318⇑ *e*P Pn 23 23 40.4 +0.3
ROCN Rota Cerro Neg 5.23 318 *i* P Pn 23 23 41.9 +1.2
ROCN IAML 23 23 59.3
comp=Z,3µm,1.0s
ROCN IVmB_BB 23 23 59.3
comp=Z,19µm,1.0s
ROCN IAmb IAmb 23 23 59.4
comp=Z,2µm,0.7s
QUEN Al S del Volca 5.35 318 *i* P Pn 23 23 46.2 +3.8
QUEN IVmB_BB 23 23 49.7
comp=Z,18µm,1.0s
QUEN IAML 23 23 49.8
comp=Z,2µm,1.0s
QUEN IAmb IAmb 23 23 49.9
comp=Z,1µm,0.5s
LIMN Finca el Limon 5.41 325 *i* P Pn 23 23 44.2 +0.9
LIMN IAmb IAmb 23 24 04.4
comp=Z,5µm,0.8s
LIMN IVmB_BB 23 24 11.2
comp=Z,48µm,1.0s
LIMN IAML 23 25 37.6
comp=Z,10µm,1.0s
PTAC Punta Ardita, 5.51 105 P Pn 23 23 45.5 +0.9
comp=Z,975nm,1.1s,comp=Z,19µmcomp=Z,100µm
PTAC Punta Ardita, 5.51 105 *e*P Pn 23 23 46.0 +1.4
CRIN San Cristobal 5.56 317 P Pn 23 23 46.1 +0.8
CRIN San Cristobal 5.56 317 P Pn 23 23 46.2 +0.8
comp=Z,10µm,0.8s,comp=Z,88µmcomp=Z,583µm
CRIN San Cristobal 5.56 317 *i* P Pn 23 23 48.3 +2.9
CRIN IVmB_BB 23 23 57.5
comp=Z,87µm,1.0s
CRIN IAML 23 23 57.9
comp=Z,12µm,1.0s
CRIN IAmb IAmb 23 23 58.0
comp=Z,10µm,0.8s
CRIN San Cristobal 5.56 317⇑ *e*P Pn 23 23 46.4 +1.0
CAPC Capurgana 5.75 89 P Pn 23 23 50.5 +2.5
comp=Z,1µm,1.2s,comp=Z,33µmcomp=Z,171µm
SOLC Bahia Solano 6.19 112 P Pn 23 23 54.1 +0.1
comp=Z,2µm,0.5s
CNCH Conchagua 6.51 316 *e*P Pn 23 24 00.2 +1.8
CNCH IAML 23 25 22.0
comp=Z,4µm,0.4s
APAC Apartado, Choc 6.56 96 P Pn 23 24 01.6 +2.5
comp=Z,2µm,2.3s,comp=Z,44µmcomp=Z,164µm
LCND La Caada 6.57 316 *e*P Pn 23 24 01.3 +2.2
LCND *e*S Sn 23 25 14.7 +0.9
LCBC Los crdobas, 6.73 88 P Pn 23 24 04.7 +3.4
comp=Z,1µm,1.0s,comp=Z,34µmcomp=Z,208µm
TGUH Tegucigalpa,Un 6.73 324 Pn Pn 23 24 02.7 +1.2
TGUH Tegucigalpa,Un 6.73 324 ⇑P Pn 23 24 03.7 +2.2
TGUH Tegucigalpa,Un 6.73 324 P Pn 23 24 03.6 +2.1
comp=Z,3µm,0.9s,comp=Z,36µmcomp=Z,119µm
JUCU Jucuarįn 6.78 313 *e*P Pn 23 24 04.4 +2.2
JUCU *e*S Sn 23 25 20.0 +0.8
PIZC Pizarro, Choco 6.82 122 P Pn 23 24 07.1 +4.5
comp=Z,415nm,0.8s,comp=Z,17µm
BLLM Bellamira 6.90 314 *e*P Pn 23 24 06.2 +2.4
VSM San Miguel 6.92 314 *e*P Pn 23 24 06.7 +2.5
LCY Lacayo 6.93 314 *e*P Pn 23 24 06.5 +2.3
PACA Pacayal 6.98 314 *e*P Pn 23 24 07.3 +2.3
PACA IAML 23 25 40.5
comp=Z,9µm,0.6s
DBBC Dabeiba 7.08 103 P Pn 23 24 07.8 +1.5
TECA Tecapa 7.13 313 *e*P Pn 23 24 09.6 +2.6
PQSS Presa 15 de Se 7.26 314 *e*P Pn 23 24 10.8 +2.2
TECO Alcaldia de Te 7.36 312 *e*P Pn 23 24 12.3 +2.3
TECO *e*S Sn 23 25 33.5 +0.2
MALC Bahia Malaga 7.39 128 P Pn 23 24 11.0 +0.6
SCLA Alcaldia de Sa 7.43 313 *e*P Pn 23 24 13.3 +2.3
SNVI San Vicente 7.45 312 *e*P Pn 23 24 14.0 +2.6
GR1C Gorgona, Isla 7.48 138 P Pn 23 24 13.3 +1.6
COEG Centro de Oper 7.49 312 *e*P Pn 23 24 13.8 +2.0
COEG *e*S Sn 23 25 37.2 +0.7
UREC San Jos de Ur 7.61 96 P Pn 23 24 15.2 +1.7
comp=Z,669nm,1.2s,comp=Z,11µmcomp=Z,129µm
CBOC Ciudad Bolivar 7.61 111 P Pn 23 24 14.9 +1.2
comp=Z,271nm,1.2s,comp=Z,8µmcomp=Z,89µm
LFRS El Faro 7.62 311 *e*P Pn 23 24 15.4 +1.6
LOMA Loma Larga 7.72 311 *e*P Pn 23 24 17.1 +2.1
LALI Alcalda de L 7.73 309 *e*P Pn 23 24 17.4 +2.3
LFU La Fuente 7.74 312 *e*P Pn 23 24 18.0 +2.7
PLMC San Jos del P 7.77 118 P Pn 23 24 16.0 +0.2
comp=Z,383nm,1.1s,comp=Z,8µm
SNET Serv Nac Est T 7.79 311 Pn 23 24 17.6 +1.6
SNET Serv Nac Est T 7.79 311 *e*P Pn 23 24 18.0 +2.0
UEES Universidad Ev 7.81 311 *e*P Pn 23 24 18.1 +1.7
BOQS Boqueron 7.86 311 *e*P Pn 23 24 19.9 +2.8
JAYA Jayaque - finc 7.93 310 *e*P Pn 23 24 19.7 +1.7
JAYA *e*S Sn 23 25 46.8 -0.9
CEDA San Andres 7.98 311 *e*P Pn 23 24 20.6 +1.9
SJCC San Jacinto, C 7.99 80 P Pn 23 24 20.0 +1.3
comp=Z,1µm,0.7s,comp=Z,19µmcomp=Z,182µm
TUMC Tumaco 8.07 147 Pn Pn 23 24 23.0 +3.2
CEVE Cerro Verde 8.17 310 *e*P Pn 23 24 24.2 +2.8
YOTC Yotoco, Valle 8.20 124 P Pn 23 24 24.0 +2.3
comp=Z,244nm,2.1s,comp=Z,7µmcomp=Z,68µm
RTR El Retiro 8.23 310 *e*P Pn 23 24 25.1 +2.9
ZARC Zaragoza, Cauc 8.31 97 P Pn 23 24 24.1 +1.0
comp=Z,566nm,0.9s,comp=Z,7µmcomp=Z,88µm
MTO3 Montecristo 8.35 314 Pn Pn 23 24 25.4 +1.6
JAMC Jamundi, Valle 8.40 129 P Pn 23 24 25.9 +1.3
comp=Z,351nm,1.6s,comp=Z,6µmcomp=Z,67µm
NORC Norcasia 8.78 110 P Pn 23 24 33.0 +3.4
comp=Z,173nm,0.9s,comp=Z,6µmcomp=Z,56µm
BBAC Balboa, Cauca 8.82 138 P Pn 23 24 32.5 +2.2
comp=Z,533nm,1.2s,comp=Z,9µmcomp=Z,85µm
POPC Popayan, Colom 8.85 133 P Pn 23 24 33.7 +3.0
comp=Z,622nm,1.6s,comp=Z,7µmcomp=Z,61µm
PTBC PUERTO BERRIO, 8.88 103 P Pn 23 24 34.3 +3.3
comp=Z,268nm,1.2s,comp=Z,5µmcomp=Z,62µm
ARGC Ariguani, Magd 8.89 81 P Pn 23 24 33.1 +2.0
comp=Z,719nm,1.3s,comp=Z,12µmcomp=Z,117µm
MRL Marmol 9.04 316 *e*P Pn 23 24 37.3 +4.0
ORTC Ortega, Tolima 9.16 120 P Pn 23 24 37.7 +2.9
comp=Z,754nm,1.2s,comp=Z,12µmcomp=Z,40µm
SMRC Santa Marta, M 9.17 73 P Pn 23 24 34.8 -0.1
comp=Z,692nm,1.4s,comp=Z,11µmcomp=Z,131µm
NBG Las Nubes 9.19 311 *e*P Pn 23 24 39.8 +4.4
PCG Pacaya 9.27 309 *e*P Pn 23 24 39.6 +3.2
CRUC La Cruz 9.35 138 P Pn 23 24 42.6 +4.9
comp=Z,1µm,0.8s,comp=Z,48µm
GCUF Volcan Galeras 9.36 141 P Pn 23 24 41.4 +3.4
comp=Z,1µm,1.8s,comp=Z,19µmcomp=Z,62µm
BRJC Barrancabermej 9.48 99 P Pn 23 24 44.1 +4.9
comp=Z,385nm,0.9s,comp=Z,10µmcomp=Z,65µm
FUG Fuego 3 9.48 308 *e*P Pn 23 24 42.9 +3.5
SPBC San Pablo de B 9.50 108 P Pn 23 24 42.8 +3.3
comp=Z,334nm,1.9s,comp=Z,6µmcomp=Z,53µm
TULM Tulcn-Chalpat 9.51 145 Pn 23 24 44.3 +4.4
TULM Tulcn-Chalpat 9.51 145 P Pn 23 24 44.4 +4.4
comp=Z,814nm,1.1s,comp=Z,12µmcomp=Z,92µm
APG El Apazote 9.55 312 Pn Pn 23 24 43.0 +2.7
comp=Z,4.1nm,0.3s,baz=128,slow=4.0,SNR=308
APG Sn Sn 23 26 28.8 +1.3
baz=101,slow=16
APG LR LR 23 28 46.5
comp=Z,6µm,19.4s,baz=130,slow=40
ROSC El Rosal 9.56 113 Pn Pn 23 24 44.2 +3.6
ROSC El Rosal 9.56 113 Pn Pn 23 24 45.3 +4.8
comp=Z,4.1nm,0.3s,baz=314,slow=3.8,SNR=87
ROSC LR LR 23 29 15.3
comp=Z,61µm,19.7s,baz=332,slow=44
ROSC El Rosal 9.56 113 P Pn 23 24 45.6 +5.0
comp=Z,479nm,1.3s,comp=Z,10µmcomp=Z,56µm
ROSC El Rosal 9.56 113 P Pn 23 24 44.2 +3.6
PRAC Prado 9.57 120 P Pn 23 24 43.3 +2.9
comp=Z,295nm,1.3s,comp=Z,10µmcomp=Z,34µm
IMBA Imbabura, San 9.66 149 Pn 23 24 45.6 +3.6
BETC Betania 9.69 127 P Pn 23 24 46.5 +4.4
PULU Pululahua 9.73 151 Pn 23 24 46.2 +3.3
OCAC Ocana 9.75 92 P Pn 23 24 44.7 +1.7
comp=Z,491nm,0.7s,comp=Z,6µmcomp=Z,91µm
BONI La Bonita 9.87 145 P Pn 23 24 48.5 +3.7
comp=Z,742nm,1.0s,comp=Z,12µmcomp=Z,54µm
GARC Garzon, Huila 9.96 129 P Pn 23 24 50.1 +4.1
comp=Z,277nm,1.1s,comp=Z,6µmcomp=Z,31µm
SULM Suchitepequez, 9.98 305 *e*P Pn 23 24 52.1 +6.2
BARC Barichara 10.11 101 P Pn 23 24 51.4 +3.5
CHIC Chingaza 10.18 112 P Pn 23 24 53.3 +4.2
comp=Z,400nm,1.2s,comp=Z,10µmcomp=Z,52µm
STG3 Santiaguito 3, 10.21 307 *e*P Pn 23 24 52.9 +3.6
FLOC Florencia 10.24 133 P Pn 23 24 53.4 +3.8
comp=Z,372nm,1.1s,comp=Z,7µmcomp=Z,45µm
URMC La Uribe, Meta 10.24 121 P Pn 23 24 52.5 +2.8
comp=Z,427nm,1.1s,comp=Z,5µmcomp=Z,32µm
ANTS Antisana-Sarah 10.34 151 Pn 23 24 55.5 +4.1
RUSC La Rusia 10.37 104 Pn Pn 23 24 54.1 +2.4
RUSC La Rusia 10.37 104 P Pn 23 24 54.0 +2.2
comp=Z,603nm,1.3s,comp=Z,8µmcomp=Z,52µm
CRJC Cerrejon, Guaj 10.41 76 P Pn 23 24 51.8 -0.2
comp=Z,396nm,0.9s,comp=Z,7µmcomp=Z,93µm
VILC Villavicencio, 10.43 115 P Pn 23 24 57.1 +4.8
PAMC Pamplona, Colo 10.45 96 P Pn 23 24 55.9 +3.0
PIAT Ana Tenorio 10.74 153 P Pn 23 25 00.5 +3.8
comp=Z,106nm,1.7s,comp=Z,2µmcomp=Z,16µm
MTDJ Mount Denham 11.01 29 Pn 23 24 59.8 -0.3
MTDJ Mount Denham 11.01 29 *i* P Pn 23 25 01.4 +1.3
MTDJ Mount Denham 11.01 29 ⇑P Pn 23 25 00.6 +0.5
MTDJ Mount Denham 11.01 29 *e*P Pn 23 24 58.2 -1.9
MTDJ Mount Denham 11.01 29 P Pn 23 24 59.6 -0.5
comp=Z,994nm,0.8s,comp=Z,18µmcomp=Z,134µm
STH Stony Hill 11.25 33 *i*P Pn 23 25 03.4 +0.1
URIC Uribia, Colomb 11.42 74 P Pn 23 25 06.0 +0.3
comp=Z,298nm,1.4s,comp=Z,5µmcomp=Z,79µm
TAMC Tame, Arauca 11.49 100 P Pn 23 25 08.8 +2.1
comp=Z,588nm,1.5s,comp=Z,9µmcomp=Z,47µm
CCIG Comitan 11.60 312 Pn Pn 23 25 09.1 +0.8
CCIG Comitan 11.60 312 ⇑P Pn 23 25 10.2 +1.9
I20EC Galapagos 11.64 218 I I 00 33 50.0
baz=36,slow=320,SNR=0.8
PAYG Puerto Ayora 11.64 218 Pn Pn 23 25 12.0 +3.2
PAYG Puerto Ayora 11.64 218 ⇑P Pn 23 25 12.2 +3.4
PAYG Puerto Ayora 11.64 218 P Pn 23 25 10.7 +1.9
comp=Z,599nm,1.8s,comp=Z,21µmcomp=Z,105µm
PTGC Puerto Gaitan, 11.81 111 P Pn 23 25 12.2 +1.1
comp=Z,265nm,1.0s,comp=Z,9µmcomp=Z,34µm
PTLC Puerto Leguiza 11.84 135 P Pn 23 25 18.3 +6.8
comp=Z,710nm,1.4s,comp=Z,14µmcomp=Z,29µm
GUVC San Jose del G 12.10 119 P Pn 23 25 19.0 +3.9
SDV Santo Domingo 12.40 88 Pn 23 25 20.9 +1.6
SDV Santo Domingo 12.40 88 Pn Pn 23 25 20.7 +1.4
comp=Z,3.9nm,0.3s,baz=269,slow=9.8,SNR=21
SDV Sn Sn 23 27 34.1 -3.2
comp=Z,2.2nm,0.3s,baz=125,slow=21,SNR=2.0
SDV LR LR 23 30 45.0
comp=Z,48µm,20.0s,baz=267,slow=41
SDV Santo Domingo 12.40 88 *e*P Pn 23 25 19.9 +0.7
ARNL Arenillas 12.48 166 Pn 23 25 24.3 +4.1
LMGC Las Mercedes 12.84 27 *e*P Pn 23 25 23.9 -1.2
CHIV Chivirico 13.04 29 Pn 23 25 26.9 -1.0
CHIV Chivirico 13.04 29 *e*P Pn 23 25 25.8 -2.1
MCRA Macar, Loja 13.30 166 P Pn 23 25 33.1 +1.6
comp=Z,80nm,1.3s,comp=Z,2µmcomp=Z,14µm
MARVS Santiago de Cu 13.32 31 *e*P Pn 23 25 30.0 -1.6
YAR Yar 13.40 29 *e*P Pn 23 25 32.2 -0.7
RCC Rio Carpintero 13.42 32 *e*P Pn 23 25 32.1 -0.9
GTBY Guantanamo Bay 13.68 34 Pn 23 25 36.3 -0.3
GTBY Guantanamo Bay 13.68 34 ⇑P Pn 23 25 36.9 +0.3
GTBY Guantanamo Bay 13.68 34 *e*P Pn 23 25 36.6 +0.1
GTBY Guantanamo Bay 13.68 34 P Pn 23 25 36.4 -0.2
comp=Z,581nm,1.9s,comp=Z,14µmcomp=Z,47µm
MGV Manicaragua 13.76 13 *e*P Pn 23 25 38.8 +1.2
HLGC Holguin 13.99 29 *e*P Pn 23 25 40.5 -0.4
QMBU Quimbuelo 14.06 34 *e*P Pn 23 25 41.2 -0.7
SOR Soroa 14.09 1 Pn 23 25 43.6 +1.4
SOR Soroa 14.09 1 *e*P Pn 23 25 42.8 +0.7
SOR Soroa 14.09 1 P Pn 23 25 43.6 +1.4
CMIG Matias Romero 14.18 308 Pn Pn 23 25 42.9 -0.5
comp=Z,15nm,0.3s,baz=143,slow=9.0,SNR=49
CMIG Sn Sn 23 28 20.4 -0.2
comp=Z,0.7nm,0.3s,baz=322,slow=18,SNR=1.8
comp=Z,114nm,0.8s
CAIB Caibarien 14.24 14 *e*P Pn 23 25 45.5 +1.3
CAIB IAMs_20 IAMs_20 23 30 59.2
comp=N,50µm,19.2s
CAIB IAMs_20 IAMs_20 23 32 02.1
comp=E,28µm,17.5s
NMDO Nuevo Mundo 14.26 33 Pn 23 25 45.6 +1.1
NMDO Nuevo Mundo 14.26 33 *e*P Pn 23 25 43.0 -1.6
MOAC Moa 14.36 33 *e*P Pn 23 25 45.8 -0.1
MASC Masc 14.37 36 *e*P Pn 23 25 47.4 +1.3
HATO Hato, Curacao 14.42 75 Pn 23 25 46.7 -0.1
CAMR Camarioca 14.46 7 P Pn 23 25 51.5 -2.4
CAMR Camarioca 14.46 7 *e*P Pn 23 25 49.2 +2.0
CAMR IAMs_20 IAMs_20 23 30 42.3
comp=E,82µm,20.3s
CAMR IAMs_20 IAMs_20 23 30 47.4
comp=N,80µm,18.6s
BAUV El Baul 14.96 88 Pn 23 25 53.6 -0.5
BAUV El Baul 14.96 88 *e*P Pn 23 25 55.7 +1.6
SDDR Presa de Saban 15.46 47 P Pn 23 26 00.0 -0.7
SDDR Presa de Saban 15.46 47 ⇑P Pn 23 26 00.9 +0.2
SDDR Presa de Saban 15.46 47 *e*P Pn 23 26 00.0 -0.7
SDDR Presa de Saban 15.46 47 P Pn 23 26 01.1 +0.4
comp=N,517nm,0.8s,comp=N,19µmcomp=N,85µm
ATAH Atahualpa 16.36 163 Pn P 23 26 14.3 -1.3
comp=N,33nm,1.1s,baz=347,slow=12,SNR=30
ATAH Sn Sn 23 29 15.3 +1.0
comp=N,0.3nm,0.3s,baz=108,slow=16,SNR=0.8
ATAH LR LR 23 31 56.1
comp=N,63µm,19.0s,baz=336,slow=35
061Z Ochoppi 17.28 7 Pn 23 26 21.7 -2.1
061Z IAmb IAmb 23 26 30.5
comp=Z,1µm,1.1s
GRTK Grand Turk 17.28 41 Pn 23 26 23.5 -0.4
GRTK Grand Turk 17.28 41 ⇑P P 23 26 28.0 +2.7
GRTK Grand Turk 17.28 41 *e*P Pn 23 26 24.6 +0.6
PCDR Punta Cana, DR 17.40 54 Pn 23 26 25.1 -0.3
TLIG Tlapa 17.42 302 Pn 23 26 26.2 +0.4
TLIG Tlapa 17.42 302 ⇑P P 23 26 26.8 -0.2
CRPR Cabo Rojo, PR 18.19 58 Pn 23 26 33.7 -1.5
MLPR Magueyes Islan 18.22 58 P Pn 23 26 34.4 -1.2
PRSN Puerto Rico Se 18.26 57 P Pn 23 26 35.3 -0.7
PCRV Puerto La Cruz 18.35 84 P Pn 23 26 36.9 -0.3
comp=Z,4.1nm,0.3s,baz=213,slow=6.0,SNR=34
PCRV S Sn 23 30 00.3 -1.8
comp=Z,11nm,0.8s,baz=59,slow=18,SNR=1.3
PCRV LR LR 23 35 27.1
comp=Z,33µm,19.0s,slow=43
comp=Z,123nm,0.7s
PCRV Puerto La Cruz 18.35 84 *e*P Pn 23 26 34.2 -3.0
TBTG Tabatinga, AM 18.35 133 P P 23 26 38.6 +1.4
TBTG IAmb IAmb 23 26 52.4
comp=Z,781nm,1.2s
TBTG Tabatinga, AM 18.35 133 *e*P P 23 26 38.1 +0.9
AGPR Aguadilla, PR 18.41 56 P P 23 26 37.5 -0.3
AGPR IAmb IAmb 23 26 44.9
comp=Z,2µm,1.2s
060A Indiantown 18.51 8 P P 23 26 38.4 -0.3
060A IAmb IAmb 23 26 43.4
comp=Z,709nm,0.9s
OBIP Obispado Ponce 18.62 58 P Pn 23 26 40.6 +0.1
OBIP IAmb IAmb 23 26 52.7
comp=Z,1µm,1.4s
UUPR Utuado, UPR, P 18.63 57 P Pn 23 26 40.7 +0.1
AOPR Arecibo Observ 18.65 57 P Pn 23 26 41.7 +0.9
AOPR IAmb IAmb 23 26 51.3
comp=Z,2µm,1.8s
AOPR Arecibo Observ 18.65 57 *e*P P 23 26 35.8 -4.6
CELP Cerrillos 18.66 58 P Pn 23 26 40.9 0.0
UNM Universidad Na 18.81 306 P Pn 23 26 43.4 +0.4
UNM Universidad Na 18.81 306 ⇑P Pn 23 26 45.1 +2.1
UNM Universidad Na 18.81 306 P Pn 23 26 43.4 +0.4
UNM pmax pmax

comp=Z,496nm,1.0s
**EMPR Esperanza - Ma 18.89 57** P **P** **23 26 43.2 0.0**
**IGPR InterUniversit 19.01 59** P **P** **23 26 44.8 +0.4**
**PDPR Patillas Dam, 19.11 59** P **P** **23 26 44.7 -0.8**
**GCPR Guaynabo City 19.19 58** P **Pn** **23 26 47.1 -0.2**
**CZSB Cruzeiro do Su 19.31 147** **Pn** **23 26 50.2 +1.5**
CZSB IAmb IAmb 23 26 56.7
comp=Z,769nm,1.2s
**CZSB Cruzeiro do Su 19.31 147** P **Pn** **23 26 49.4 +0.6**
comp=Z,689nm,1.3s
**CZSB Cruzeiro do Su 19.31 147** *e*P **Pn** **23 26 48.6 -0.2**
**HUMP Col San Antoni 19.31 59** P **Pn** **23 26 48.4 -0.3**
**DWPF Disney Wildern 19.45 5** P **P** **23 26 49.5 +0.4**
DWPF IAmb IAmb 23 26 58.1
comp=Z,701nm,0.9s
**DWPF Disney Wildern 19.45 5** ⇑P **Pn** **23 26 51.3 +0.9**
**DWPF Disney Wildern 19.45 5** P **Pn** **23 26 51.5 +1.1**
baz=185
**DWPF Disney Wildern 19.45 5** *e*P **P** **23 26 49.5 +0.4**
**JRQG Juriquilla Cam 20.55 308** P Pn 23 27 03.1 -0.6
**MOIG Morelia 20.61 304** P Pn 23 27 03.5 -1.0
MOIG IAmb IAmb 23 27 13.1
comp=Z,1μm,1.9s
**MOIG Morelia 20.61 304** ⇑P Pn 23 27 04.9 +0.4
**656A Willston 20.65 2** P **P** **23 27 02.2 0.0**
656A IAmb IAmb 23 27 09.0
comp=Z,644nm,1.1s
**GRFF Grenada Fort F 21.36 79** *e*P **P** **23 27 11.5 +1.5**
**NNA Nana 21.42 163** P **P** **23 27 12.3 +1.6**
NNA IAmb IAmb 23 27 23.7
comp=Z,638nm,1.4s
**NNA Nana 21.42 163** ⇑P **P** **23 27 11.6 +0.9**
**NNA Nana 21.42 163** P **P** **23 27 11.6 +0.9**
comp=Z,176nm,1.2s,baz=325,slow=8.6,SNR=24
NNA S **S** **23 31 10.1 +2.0**
comp=Z,8.1nm,0.6s,baz=194,slow=23,SNR=1.1
comp=Z,176nm,1.2s
**NNA Nana 21.42 163** P **P** **23 27 12.3 +1.6**
NNA pmax pmax
comp=Z,638nm,1.4s
**GRW Mount Saint Ca 21.44 79** *e*P **P** **23 27 09.7 -1.3**
**GRGR Grenville 21.45 79** P **P** **23 27 12.8 +1.8**
**GRGR Grenville 21.45 79** ⇑P **P** **23 27 12.4 +1.5**
**GRGR Grenville 21.45 79** *e*P **P** **23 27 10.1 -0.9**
**GRHS Sauteurs 21.47 79** *e*P **P** **23 27 09.6 -1.6**
**553A Crawfordville 21.49 357** IAmb IAmb 23 27 17.6
comp=Z,937nm,0.9s
553A IAMs_20 IAMs_20 23 35 42.4
comp=Z,49μm,19.0s
**GRSS Sisters 21.51 78** *e*P **P** **23 27 11.7 +0.1**
**SEUS St. Eustatius 21.53 64** P **P** **23 27 12.9 +1.0**
SEUS IAmb IAmb 23 27 31.8
comp=Z,1μm,1.2s
**TRN Trinidad (W) 21.55 83** *e*P **P** **23 27 06.2 -5.9**
**SMRT St. Maarten 21.66 62** P **P** **23 27 13.7 +0.4**
SMRT IAmb IAmb 23 27 16.6
comp=Z,865nm,1.0s
**GCMP Grenada, Carri 21.71 78** *e*P **P** **23 27 12.9 -0.9**
**MBFL Flemmings, Mon 21.97 66** *e*P **P** **23 27 15.2 -1.3**
**SVT Saint Vincent 22.00 76** *e*P **P** **23 27 18.4 +1.5**
**SVB Belmont 22.00 76** *e*P **P** **23 27 16.3 -0.6**
**451A Vernon 22.01 354** P **P** **23 27 17.2 +0.4**
**SVOC Richmond Hill, 22.01 76** *e*P **P** **23 27 14.2 -2.9**
**456A Hilliard 22.02 3** P **P** **23 27 16.9 0.0**
456A IAmb IAmb 23 27 22.3
comp=Z,767nm,1.0s
456A IAMs_20 IAMs_20 23 35 21.6
comp=Z,34μm,21.0s
**SVV Soufriere Volc 22.05 76** *e*P **P** **23 27 20.6 +3.2**
**TEFE Tefe 22.07 122** *e*P **P** **23 27 17.6 0.0**
**SSV Crater Summit 22.07 76** *e*P **P** **23 27 20.2 +2.4**
**TBG Guadaloupe-3 22.21 69** *e*P **P** **23 27 19.5 +0.3**
**GDHS Morne Mazeau, 22.23 68** P **P** **23 27 20.6 +1.2**
**SLB Belfond 22.31 75** *e*P **P** **23 27 22.7 +2.4**
**CBE Ff, Capester 22.31 69** P **P** **23 27 20.9 +0.6**
**FDF Fort de France 22.39 72** P **P** **23 27 21.7 +0.5**
FDF IAmb IAmb 23 27 30.6
comp=Z,2μm,2.0s
**FDF Fort de France 22.39 72** ⇑P **P** **23 27 21.7 +0.5**
**FDF Fort de France 22.39 72** P **P** **23 27 21.7 +0.5**
FDF pmax pmax
comp=Z,2μm,2.0s
**SVN Savane Anatole 22.40 72** P **P** **23 27 21.6 +0.4**
SVN IAmb IAmb 23 27 41.8
comp=Z,311nm,1.0s
**SVN Savane Anatole 22.40 72** *e*P **P** **23 27 21.1 -0.2**
**SLBI Saint Lucia, B 22.41 74** *e*P **P** **23 27 18.1 -3.2**
**BIM Bigot 22.42 73** P **P** **23 27 22.4 +1.0**
BIM IAmb IAmb 23 27 33.0
comp=Z,1μm,1.5s
**BIM Bigot 22.42 73** *e*P **P** **23 27 19.1 -2.4**
**SLAC Saint Lucia, A 22.46 74** *e*P **P** **23 27 21.3 -0.6**
**ANBD Bethesda, Anti 22.47 66** *e*P **P** **23 27 16.1 -5.8**
**ABD La Joyeuse, An 22.54 68** P **P** **23 27 23.9 +1.3**
ABD IAmb IAmb 23 27 44.6
comp=Z,943nm,1.2s
**MAGL Barre de l'ile 22.58 69** P **P** **23 27 22.6 -0.5**
**MPOM Morne Pois Mar 22.60 73** P **P** **23 27 24.9 +1.5**
MPOM IAmb IAmb 23 27 36.0
comp=Z,739nm,1.3s
**ANWB Willy Bob 22.66 64** P **P** **23 27 23.0 -1.0**
ANWB IAmb IAmb 23 27 40.1
comp=Z,688nm,1.2s
**ANWB Willy Bob 22.66 64** ⇑P **P** **23 27 22.5 -1.4**
**ANWB Willy Bob 22.66 64** P **P** **23 27 22.8 -1.1**
comp=Z,543nm,1.3s,comp=Z,9μmcomp=Z,34μm
**ANWB Willy Bob 22.66 64** *e*P **P** **23 27 16.9 -7.1**
**ILAM Ilet Lapin Mar 22.66 72** P **P** **23 27 24.5 +0.5**
ILAM IAmb IAmb 23 27 36.6
comp=Z,1μm,1.4s
**ILAM Ilet Lapin Mar 22.66 72** *e*P **P** **23 27 19.1 -4.8**
**TIGA Tifton 22.70 359** IAMs_20 IAMs_20 23 36 40.6
comp=Z,41μm,18.0s
**BRAL Brewton 22.72 351** P **P** **23 27 24.4 -0.1**
**BRAL Brewton 22.72 351** ⇑P **P** **23 27 25.8 +1.4**
**BRAL Brewton 22.72 351** P **P** **23 27 26.0 +1.6**
baz=170,SNR=49
BRAL S **S** **23 31 36.6 +4.1**
baz=170
**352A Blakely 22.80 356** P **P** **23 27 24.7 -0.6**
352A IAMs_20 IAMs_20 23 36 23.4
comp=Z,40μm,19.0s
**GDSD La Dsirade Is 22.88 68** P **P** **23 27 26.4 +0.1**
GDSD IAmb IAmb 23 27 40.9
comp=Z,535nm,1.4s
**255A Hazlehurst 23.20 2** P **P** **23 27 29.2 -0.1**
255A IAMs_20 IAMs_20 23 35 46.9
comp=Z,32μm,21.0s
**257A Skidaway Islan 23.32 5** P **P** **23 27 31.3 +0.7**
257A IAMs_20 IAMs_20 23 36 52.4
comp=Z,40μm,19.0s
**ZAIG Zacatecas 23.33 309** P **P** **23 27 32.1 +1.0**
ZAIG IAmb IAmb 23 27 35.8
comp=Z,1μm,1.7s
**ZAIG Zacatecas 23.33 309** ⇑P **P** **23 27 32.5 +1.3**
**BOAV Boa Vista 23.37 104** P **P** **23 27 30.8 -0.5**
**BOAV Boa Vista 23.37 104** P **P** **23 27 30.9 -0.4**
**BOAV Boa Vista 23.37 104** *e*P **P** **23 27 31.4 +0.1**
**346A Big Creek Wild 23.40 346** P **P** **23 27 32.0 +0.6**
346A IAmb IAmb 23 27 41.6
comp=Z,1μm,1.6s
**KVTX Kingsville 23.41 325** P **P** **23 27 30.7 -0.8**
**KVTX Kingsville 23.41 325** ⇑P **P** **23 27 30.7 -0.8**
**250A Grady 23.42 353** P **P** **23 27 32.3 +0.7**
**HBVL Hebbronville 23.49 323** P **P** **23 27 31.4 -1.0**
HBVL IAmb IAmb 23 27 38.7
comp=Z,441nm,1.6s
**BCHC Barbados, Cave 23.54 77** *e*P **P** **23 27 27.3 -5.6**
**BBGH Gun Hill 23.61 77** P **P** **23 27 33.5 -0.2**
BBGH IAMs_20 IAMs_20 23 33 04.5
comp=Z,46μm,18.0s
**BBGH Gun Hill 23.61 77** *e*P **P** **23 27 30.8 -2.9**
**154A Montrose 23.87 0** P **P** **23 27 36.5 +0.6**
154A IAMs_20 IAMs_20 23 36 28.0
comp=Z,32μm,21.0s
**152A Waverly Hall 23.97 357** IAmb IAmb 23 27 39.7
comp=Z,487nm,0.8s
152A IAMs_20 IAMs_20 23 37 55.7
comp=Z,46μm,18.0s
**HKT Hockley 24.31 332** **P** **23 27 40.1 +0.1**
**HKT Hockley 24.31 332** P **P** **23 27 39.9 -0.1**
HKT IAmb IAmb 23 27 42.1
comp=Z,540nm,1.3s
**HKT Hockley 24.31 332** ⇑P **P** **23 27 39.3 -0.7**
**HKT Hockley 24.31 332** *c i*P **P** **23 27 39.7 -0.3**
HKT pmax pmax
comp=Z,248nm,1.3s
**735A Kenedy 24.39 328** P **P** **23 27 40.7 -0.1**
**VBMS Vicksburg 24.45 345** P **P** **23 27 41.3 -0.1**
**VBMS Vicksburg 24.45 345** ⇑P **P** **23 27 42.1 +0.8**
**VBMS Vicksburg 24.45 345** P **P** **23 27 42.3 +1.0**
baz=162,SNR=47
VBMS S **S** **23 32 03.6 +2.7**
baz=162
**146A Union 24.51 348** P **P** **23 27 42.5 +0.6**
**NHSC New Hope 24.52 6** P **P** **23 27 43.0 +1.0**
**NHSC New Hope 24.52 6** ⇑P **P** **23 27 43.5 +1.5**
**NHSC New Hope 24.52 6** P **P** **23 27 43.9 +2.0**
baz=187,SNR=194
NHSC S **S** **23 32 05.5 +3.5**
baz=187
**LRAL Lakeview Retre 24.55 352** P **P** **23 27 42.0 -0.2**
**LRAL Lakeview Retre 24.55 352** ⇑P **P** **23 27 43.4 +1.1**
**LRAL Lakeview Retre 24.55 352** P **P** **23 27 43.5 +1.2**
baz=171,SNR=338
LRAL S **S** **23 32 04.8 +2.4**
baz=171
**GOGA Godfrey 24.67 359** P **P** **23 27 43.7 +0.4**
GOGA IAmb IAmb 23 27 47.7
comp=Z,585nm,0.9s
**GOGA Godfrey 24.67 359** IAMs_20 IAMs_20 23 37 43.2
comp=Z,38μm,19.0s
**GOGA Godfrey 24.67 359** ⇑P **P** **23 27 44.1 +0.8**
**GOGA Godfrey 24.67 359** P **P** **23 27 44.4 +1.1**
baz=179,SNR=448
GOGA S **S** **23 32 06.6 +2.2**
baz=179
**GOGA Godfrey 24.67 359** P **P** **23 27 43.7 +0.4**
GOGA pmax pmax
comp=Z,585nm,0.9s
GOGA MLR MLR
comp=Z,38μm,19.0s
**MLDN Muldoon 24.75 330** P **P** **23 27 43.6 -0.6**
MLDN IAmb IAmb 23 27 47.5
comp=Z,248nm,0.8s
**HNVL Huntsville, TX 24.83 334** P **P** **23 27 44.5 -0.4**
**833A Chaparral WMA, 24.86 324** P **P** **23 27 44.8 -0.2**
833A IAmb IAmb 23 27 51.9
comp=Z,224nm,1.0s
**833A Chaparral WMA, 24.86 324** P **P** **23 27 44.1 -1.0**
baz=139,SNR=48
**Z47A Carrollton 24.87 350** P **P** **23 27 45.6 +0.4**
**ETMB Extrema 24.91 137** IAmb IAmb 23 27 47.5
comp=Z,268nm,1.3s
**ETMB Extrema 24.91 137** *e*P **P** **23 27 45.7 0.0**
**Y52A Lilburn 25.13 358** P **P** **23 27 47.6 +0.1**
Y52A IAMs_20 IAMs_20 23 37 46.5
comp=Z,45μm,20.0s
**143A Socs Landing, 25.15 343** P **P** **23 27 47.8 +0.2**
143A IAmb IAmb 23 27 52.9
comp=Z,938nm,1.4s
**Y49A Blount Mountai 25.29 354** IAmb IAmb 23 27 53.4
comp=Z,324nm,0.9s
**MACA Manacapuru-AM 25.30 117** **P** **23 27 50.4 +1.2**
**MACA Manacapuru-AM 25.30 117** *e*P **P** **23 27 49.6 +0.5**
**Y58A Scranton 25.37 7** P **P** **23 27 50.4 +0.8**
Y58A IAMs_20 IAMs_20 23 39 06.0
comp=Z,33μm,18.0s
**NATX Nacogdoches 25.38 337** P **P** **23 27 49.2 -0.5**
NATX IAmb IAmb 23 27 51.7
comp=Z,187nm,0.8s
**NATX Nacogdoches 25.38 337** ⇑P **P** **23 27 49.3 -0.5**
**NATX Nacogdoches 25.38 337** P **P** **23 27 49.3 -0.5**
baz=153,SNR=9.0
NATX S **S** **23 32 17.7 +1.8**
baz=153
**Y57A Sumter 25.40 5** P **P** **23 27 50.6 +0.7**
Y57A IAMs_20 IAMs_20 23 37 36.9
comp=Z,36μm,20.0s
**HODGE Hodges 25.50 2** P **P** **23 27 51.6 +0.8**
**JSC Jenkinsville 25.60 4** P **P** **23 27 52.5 +0.8**
**JSC Jenkinsville 25.60 4** P **P** **23 27 52.5 +0.8**
JSC pmax pmax
comp=Z,757nm,1.0s
**Y60A Bolivia 25.67 10** P **P** **23 27 52.5 +0.1**
**Y45A Yeager Farm, C 25.80 348** P **P** **23 27 54.1 +0.6**
**435B Jarrell 25.83 331** P **P** **23 27 53.3 -0.6**
435B IAmb IAmb 23 27 57.1
comp=Z,241nm,0.8s
435B **PcP** **23 31 25.2 +1.9**
**435B Jarrell 25.83 331** P **P** **23 27 53.1 -0.8**
baz=146
435B S **S** **23 32 28.0 +5.0**
baz=146
**X51A Calhoun 25.86 357** P **P** **23 27 54.5 +0.3**
X51A IAmb IAmb 23 27 56.7
comp=Z,419nm,0.8s
X51A IAMs_20 IAMs_20 23 38 46.9
comp=Z,40μm,18.0s
**FPAL Fort Paine 25.89 355** P **P** **23 27 54.5 +0.1**
FPAL IAmb IAmb 23 27 56.8
comp=Z,320nm,1.0s
**X48A Hartselle 25.95 353** P **P** **23 27 54.9 0.0**
X48A IAmb IAmb 23 27 59.6
comp=Z,403nm,1.1s
**BIRD Birdtown, Kers 26.02 5** P **P** **23 27 56.2 +0.6**
BIRD IAMs_20 IAMs_20 23 37 55.9
comp=Z,33μm,20.0s
**X58A Rowland 26.05 7** P **P** **23 27 56.3 +0.5**
X58A IAmb IAmb 23 28 01.3
comp=Z,636nm,1.0s
**237A Washetta, Mont 26.06 335** P **P** **23 27 55.7 -0.2**
237A IAmb IAmb 23 27 59.1
comp=Z,1μm,1.6s
**PAULI Pauline 26.10 3** P **P** **23 27 57.4 +1.1**
PAULI IAmb IAmb 23 27 59.4
comp=Z,661nm,1.2s
PAULI IAMs_20 IAMs_20 23 38 48.5
comp=Z,35μm,19.0s
**BG3 Lake Jocassee 26.25 0** P **P** **23 27 58.4 +0.8**
BG3 IAmb IAmb 23 28 00.7
comp=Z,416nm,0.9s
BG3 IAMs_20 IAMs_20 23 39 10.0
comp=Z,30μm,18.0s
**W52A Murphy 26.36 359** P **P** **23 27 59.5 +0.9**
W52A IAmb IAmb 23 28 01.4
comp=Z,293nm,0.8s
W52A IAMs_20 IAMs_20 23 38 25.2
comp=Z,42μm,20.0s
**CCAR Cane Creek 26.39 344** P **P** **23 27 59.3 +0.4**
**OXF Oxford 26.39 348** P **P** **23 27 58.4 -0.5**
**OXF Oxford 26.39 348** ⇑P **P** **23 27 58.5 -0.5**
**OXF Oxford 26.39 348** P **P** **23 27 58.7 -0.2**
baz=166,SNR=70
OXF S **S** **23 32 33.2 +1.4**
baz=166
**OXF Oxford 26.39 348** P **P** **23 27 58.4 -0.5**
OXF pmax pmax
comp=Z,1μm,1.4s
**KMSC Kings Mountain 26.45 3** IAMs_20 IAMs_20 23 37 57.7
comp=Z,38μm,21.0s
**SAML Samuel 26.48 131** P **P** **23 27 58.9 -1.0**
SAML IAmb IAmb 23 28 39.8
comp=Z,273nm,1.4s
**SAML Samuel 26.48 131** P **P** **23 27 58.9 -1.0**
SAML pmax pmax
comp=Z,273nm,1.5s
**SAML Samuel 26.48 131** *e*P **P** **23 27 58.9 -1.0**
**W50A Signal Mountai 26.52 356** P **P** **23 28 00.1 -0.1**
W50A IAmb IAmb 23 28 02.6
comp=Z,256nm,1.1s
W50A IAMs_20 IAMs_20 23 39 07.7
comp=Z,33μm,19.0s
**W57A Gilead 26.57 6** P **P** **23 28 00.7 +0.3**
W57A IAMs_20 IAMs_20 23 39 43.7
comp=Z,36μm,18.0s
**SWET Sewanee 26.59 355** IAmb IAmb 23 28 02.9
comp=Z,510nm,1.4s
**PLAL Pickwick Lake 26.62 351** IAmb IAmb 23 28 02.8
comp=Z,321nm,1.4s
**CPCT Cooper Cave 26.73 358** P **P** **23 28 02.6 +0.7**
CPCT IAMs_20 IAMs_20 23 38 36.2
comp=Z,42μm,20.0s
**JCT Junction City 26.73 327** P **P** **23 28 01.3 -0.8**
JCT IAmb IAmb 23 28 06.0
comp=Z,570nm,1.8s
**JCT Junction City 26.73 327** ⇑P **P** **23 28 00.9 -1.2**
**JCT Junction City 26.73 327** P **P** **23 28 01.0 -1.2**
baz=141,SNR=38
JCT S **S** **23 32 37.5 +0.1**
baz=141
**JCT Junction City 26.73 327** P **P** **23 28 01.3 -0.8**
JCT pmax pmax
comp=Z,570nm,1.8s
**W59A Clinton 26.77 9** P **P** **23 28 02.9 +0.5**
W59A IAmb IAmb 23 28 08.4
comp=Z,308nm,0.8s
**TREL Terrell 26.81 335** P **P** **23 28 02.0 -0.7**
TREL IAmb IAmb 23 28 07.0
comp=Z,357nm,0.9s
**Z38A Mt. Pleasant 26.84 338** P **P** **23 28 02.7 -0.3**
Z38A IAmb IAmb 23 28 10.1
comp=Z,339nm,1.1s
**TKL Tuckaleechee C 26.91 359** P **P** **23 28 04.0 +0.4**
TKL IAmb IAmb 23 28 11.1
comp=Z,359nm,1.1s
**TKL Tuckaleechee C 26.91 359** P **P** **23 28 03.6 0.0**
comp=Z,158nm,1.1s,baz=178,slow=8.6,SNR=95
TKL S **S** **23 32 40.1 +0.1**
comp=Z,10nm,1.0s,baz=264,slow=21,SNR=1.4
TKL LR LR 23 39 22.8
comp=Z,40μm,18.6s,baz=174,slow=38
comp=Z,158nm,1.1s
**TKL Tuckaleechee C 26.91 359** P **P** **23 28 04.0 +0.4**
TKL pmax pmax
comp=Z,359nm,1.2s
**V53A Saluda 26.92 1** IAmb IAmb 23 28 06.9
comp=Z,814nm,1.8s
V53A IAMs_20 IAMs_20 23 38 45.2
comp=Z,28μm,20.0s
**CNNC Cliffs of the 26.93 10** P **P** **23 28 04.4 +0.7**
CNNC IAmb IAmb 23 28 10.0
comp=Z,341nm,0.9s
**CNNC Cliffs of the 26.93 10** ⇑P **P** **23 28 04.5 +0.7**
**CNNC Cliffs of the 26.93 10** P **P** **23 28 05.0 +1.2**
baz=192,SNR=12
CNNC S **S** **23 32 42.6 +2.4**
baz=192
**FW16 Waxahatchie 26.94 334** P **P** **23 28 03.4 -0.4**
FW16 IAmb IAmb 23 28 09.3
comp=Z,346nm,1.3s
**FW14 Alvarado 27.00 333** P **P** **23 28 03.8 -0.6**
FW14 IAmb IAmb 23 28 22.9
comp=Z,381nm,1.8s
**FW13 Cleburne 27.06 333** P **P** **23 28 04.9 -0.2**
FW13 IAmb IAmb 23 28 09.8
comp=Z,588nm,1.8s
**MET Memphis--Engin 27.09 348** P **P** **23 28 04.7 -0.5**
**V52A Sevierville 27.09 359** P **P** **23 28 05.2 -0.1**
V52A IAmb IAmb 23 28 08.0
comp=Z,884nm,1.8s
**HDBT Hernando Brdge 27.15 348** P **P** **23 28 06.3 +0.5**
**V55A Taylorsville 27.16 3** P **P** **23 28 06.5 +0.6**
V55A IAmb IAmb 23 28 09.0
comp=Z,463nm,1.3s
V55A IAMs_20 IAMs_20 23 38 19.5
comp=Z,37μm,21.0s
**V48A Smith Brothers 27.20 353** P **P** **23 28 06.1 -0.1**
V48A IAmb IAmb 23 28 12.3
comp=Z,291nm,1.1s
**X40A Basin Creek Fa 27.23 342** IAmb IAmb 23 28 07.7
comp=Z,313nm,1.4s
**V58A Windy Hill, Pi 27.30 7** P **P** **23 28 07.4 +0.4**
V58A IAMs_20 IAMs_20 23 39 24.1
comp=Z,37μm,19.0s
**UALR University of 27.36 343** IAmb IAmb 23 28 08.8
comp=Z,656nm,1.2s
**CLTN Cedars of Leba 27.49 354** IAmb IAmb 23 28 15.2
comp=Z,587nm,1.7s
**MIAR Mount Ida 27.51 341** IAmb IAmb 23 28 10.9
comp=Z,623nm,1.2s
**MIAR Mount Ida 27.51 341** ⇑P **P** **23 28 08.2 -0.8**
**MIAR Mount Ida 27.51 341** P **P** **23 28 08.3 -0.8**
baz=157,SNR=319
MIAR S **S** **23 32 49.6 +0.1**
baz=157
**V61A Roper 27.70 12** P **P** **23 28 12.0 +1.3**
V61A IAMs_20 IAMs_20 23 40 11.9
comp=Z,35μm,18.0s
**WVT Waverly 27.71 352** P **P** **23 28 10.0 -0.7**
**WVT Waverly 27.71 352** ⇑P **P** **23 28 10.1 -0.7**
**WVT Waverly 27.71 352** P **P** **23 28 10.3 -0.5**
baz=170
WVT S **S** **23 32 53.3 +0.8**
baz=170
**WVT Waverly 27.71 352** P **P** **23 28 10.0 -0.7**
WVT pmax pmax
comp=Z,113nm,0.9s
**U56A King 27.71 5** P **P** **23 28 11.2 +0.4**
U56A IAMs_20 IAMs_20 23 38 25.1
comp=Z,35μm,22.0s
**HALT Halls 27.74 349** P **P** **23 28 10.7 -0.4**
**TZTN Tazewell 27.80 359** P **P** **23 28 11.5 0.0**
TZTN IAmb IAmb 23 28 14.2
comp=Z,969nm,1.8s
TZTN IAMs_20 IAMs_20 23 39 57.3
comp=Z,34μm,19.0s
**TZTN Tazewell 27.80 359** ⇑P **P** **23 28 12.2 +0.7**
**TZTN Tazewell 27.80 359** P **P** **23 28 12.5 +1.0**
baz=179,SNR=81
TZTN S **S** **23 32 56.1 +2.2**
baz=179
**U54A Nelsons Funny 27.80 2** P **P** **23 28 12.4 +0.8**
U54A IAMs_20 IAMs_20 23 38 50.4
comp=Z,34μm,21.0s
**Z35A Perchaven, San 27.82 334** P **P** **23 28 10.6 -1.1**
Z35A IAmb IAmb 23 28 41.5
comp=Z,232nm,1.4s
**PLPT Palo Pinto 27.86 332** IAmb IAmb 23 28 15.2
comp=Z,258nm,1.1s
**U49A Red Boiling Sp 27.86 356** IAmb IAmb 23 28 14.3
comp=Z,259nm,1.0s
U49A IAMs_20 IAMs_20 23 39 50.2
comp=Z,21μm,19.0s
**GNAR Gosnell 27.92 348** P **P** **23 28 13.2 +0.6**
**LNXT Lenox 27.95 349** P **P** **23 28 12.8 -0.2**
**HPIG 28.03 313** P **P** **23 28 14.5 +0.6**
**HPIG 28.03 313** ⇑P **P** **23 28 14.6 +0.6**
**UTMT University of 28.07 350** P **P** **23 28 14.1 0.0**
**GLAT Glass 28.08 349** P **P** **23 28 13.7 -0.4**
**X37A Clayton 28.17 338** IAmb IAmb 23 28 20.7
comp=Z,290nm,1.4s
**TXAR Lajitas Array 28.19 320** P **P** **23 28 14.6 -0.7**
**TXAR Lajitas Array 28.19 320** P **P** **23 28 15.0 -0.3**
comp=Z,7.3nm,0.7s,baz=134,slow=9.5,SNR=86
TXAR PcP **PcP** **23 31 30.3 +1.2**
comp=Z,9.4nm,0.7s,baz=156,slow=5.5,SNR=12
TXAR ScP **ScP** **23 35 12.1 +2.4**
comp=Z,7.0nm,1.2s,baz=148,slow=7.4,SNR=6.5
TXAR P3KPbc 00 00 31.3
comp=Z,0.1nm,0.7s,baz=304,slow=2.1,SNR=1.4
comp=Z,7.3nm,0.7s
**PVMO Portageville 28.30 349** P **P** **23 28 16.7 +0.8**
**T50A Nancy 28.31 357** P **P** **23 28 16.0 -0.2**
T50A IAmb IAmb 23 28 18.3
comp=Z,200nm,1.1s
**HICK Hickman 28.33 350** P **P** **23 28 15.8 -0.5**
**LOOK Love County 28.35 335** IAmb IAmb 23 28 19.5
comp=Z,228nm,0.9s
**T47A Sharon Grove 28.46 353** IAmb IAmb 23 28 19.1
comp=Z,326nm,1.2s
**T57A Hurt 28.47 7** IAmb IAmb 23 28 20.2
comp=Z,363nm,0.9s
**PARMO Parma 28.55 349** P **P** **23 28 18.3 +0.1**
**SGCY Sterling City 28.56 327** **PcP** **23 31 31.6 +1.7**
**BLA Blacksburg 28.57 5** P **P** **23 28 19.7 +1.2**
BLA IAMs_20 IAMs_20 23 39 13.8
comp=Z,33μm,21.0s
**BLA Blacksburg 28.57 5** ⇑P **P** **23 28 19.9 +1.4**
**BLA Blacksburg 28.57 5** P **P** **23 28 20.0 +1.5**
baz=186,SNR=128
BLA S **S** **23 33 08.9 +2.8**
baz=186
**BLA Blacksburg 28.57 5** P **P** **23 28 19.7 +1.2**
BLA pmax pmax
comp=Z,545nm,1.0s
BLA MLR MLR
comp=Z,33μm,21.0s
**T59A Double "B" Far 28.68 9** P **P** **23 28 20.0 +0.7**
**T45A Paducah 28.70 351** P **P** **23 28 19.3 -0.3**
T45A IAmb IAmb 23 28 20.9
comp=Z,380nm,0.8s
**PBMO Poplar Bluff 28.79 348** IAmb IAmb 23 28 21.8
comp=Z,342nm,1.2s
**LPAZ La Paz 28.88 149** ⇑P **P** **23 28 22.4 +0.4**

**LPAZ La Paz 28.88 149** P **P** **23 28 22.5 +0.4**
comp=Z,20nm,1.0s,baz=340,slow=8.8,SNR=56
LPAZ S **S** **23 33 14.3 +1.8**
comp=Z,1.5nm,0.8s,baz=175,slow=25,SNR=0.7
LPAZ LR LR 23 41 02.5
comp=Z,14µm,19.4s,baz=310,slow=39
comp=Z,20nm,1.0s
**LPAZ La Paz 28.88 149** P **P** **23 28 22.3 +0.2**
**LPAZ La Paz 28.88 149** *e*P **P** **23 28 22.6 +0.5**
**S51A Beattyville 28.89 359** IAmb IAmb 23 28 23.7
comp=Z,264nm,0.8s
S51A IAMs_20 IAMs_20 23 39 55.3
comp=Z,31µm,20.0s
**S54A Dingess, Beckl 29.09 3** P **P** **23 28 23.3 +0.1**
S54A IAmb IAmb 23 28 25.9
comp=Z,536nm,1.3s
**CGM3 Cape Girardeau 29.14 349** IAmb IAmb 23 28 25.1
comp=Z,484nm,1.2s
**X34A Smith Ranch, M 29.15 335** IAmb IAmb 23 28 31.3
comp=Z,392nm,1.6s
**T42A Van Buren 29.18 347** IAmb IAmb 23 28 24.8
comp=Z,444nm,0.9s
**BBSR BB Station 29.19 33** P **P** **23 28 24.6 +0.6**
BBSR IAmb IAmb 23 28 45.8
comp=Z,362nm,2.0s
**BBSR BB Station 29.19 33** IAMs_20 IAMs_20 23 38 49.7
comp=Z,17µm,20.0s
**BBSR BB Station 29.19 33** ⇑P **P** **23 28 25.2 +1.2**
**HHAR Hobbs 29.23 342** IAmb IAmb 23 28 25.2
comp=Z,263nm,1.4s
**S57A Dark Hollow, R 29.26 7** P **P** **23 28 24.7 +0.2**
S57A IAmb IAmb 23 28 27.1
comp=Z,186nm,0.8s
S57A IAMs_20 IAMs_20 23 40 41.0
comp=Z,24µm,18.0s
**SN07 Snyder 07 29.35 329** P **P** **23 28 24.2 -1.3**
**S44A Carbondale 29.46 350** IAmb IAmb 23 28 27.9
comp=Z,330nm,1.2s
**RLO Rose Lookout 29.47 340** IAmb IAmb 23 28 27.2
comp=Z,394nm,2.0s
RLO IAMs_20 IAMs_20 23 40 26.2
comp=Z,10µm,22.0s
**SIUC Southern Illin 29.47 350** IAmb IAmb 23 28 28.0
comp=Z,351nm,1.2s
**USIN University of 29.49 353** IAmb IAmb 23 28 28.1
comp=Z,383nm,1.0s
**U38A Gravette 29.51 341** IAmb IAmb 23 28 27.6
comp=Z,336nm,1.4s
**R50A Paris 29.55 358** P **P** **23 28 27.4 +0.4**
R50A IAmb IAmb 23 28 29.4
comp=Z,300nm,0.9s
**R58B Mineral 29.60 8** P **P** **23 28 28.0 +0.5**
R58B IAmb IAmb 23 28 30.5
comp=Z,208nm,0.8s
**WCI Wyandotte Cave 29.61 355** P **P** **23 28 27.7 0.0**
WCI IAmb IAmb 23 28 29.4
comp=Z,501nm,1.1s
**WCI Wyandotte Cave 29.61 355** IAMs_20 IAMs_20 23 41 12.4
comp=Z,24µm,18.0s
**WCI Wyandotte Cave 29.61 355** ⇑P **P** **23 28 27.4 -0.2**
**WCI Wyandotte Cave 29.61 355** P **P** **23 28 27.7 0.0**
baz=174
WCI S **S** **23 33 24.2 +1.8**
baz=174
**WCI Wyandotte Cave 29.61 355** P **P** **23 28 27.7 0.0**
WCI pmax pmax
comp=Z,501nm,1.1s
WCI MLR MLR
comp=Z,24µm,18.0s
**R55A Marlinton 29.66 5** P **P** **23 28 29.0 +0.8**
R55A IAmb IAmb 23 28 31.4
comp=Z,465nm,1.1s
R55A IAMs_20 IAMs_20 23 39 47.6
comp=Z,36µm,22.0s
**SLBS Sierra La Lagu 29.68 303** P **P** **23 28 30.1 +1.6**
SLBS IAmb IAmb 23 28 47.2
comp=Z,390nm,1.6s
**SLBS Sierra La Lagu 29.68 303** ⇑P **P** **23 28 30.8 +2.2**
**WMOK Wichita Mounta 29.68 333** ⇑P **P** **23 28 26.3 -2.1**
**WMOK Wichita Mounta 29.68 333** P **P** **23 28 26.5 -1.9**
baz=147,SNR=61
WMOK S **S** **23 33 22.1 -1.6**
baz=147
**OKCSW OKLAHOMA CITY 29.68 336** **P** **23 28 27.1 -1.3**
OKCSW IAmb IAmb 23 29 34.2
comp=Z,502nm,1.6s
**DEOK Depew 29.70 338** **P** **23 28 27.0 -1.5**
**S61A Accomac 29.71 12** P **P** **23 28 27.7 -0.9**
S61A IAmb IAmb 23 28 32.2
comp=Z,435nm,0.9s
**DKNS Dickens 29.82 329** IAmb IAmb 23 28 32.2
comp=Z,204nm,1.5s
**CBN Corbin Frederi 29.91 9** ⇑P **P** **23 28 31.8 +1.5**
**CBN Corbin Frederi 29.91 9** P **P** **23 28 32.0 +1.7**
baz=192,SNR=19
CBN S **S** **23 33 30.5 +3.4**
baz=192
**OK031 S. Brethren Rd 29.93 337** IAmb IAmb 23 28 31.7
comp=Z,160nm,1.0s
**SSFO Shawnee State 29.94 360** IAmb IAmb 23 28 33.1
comp=Z,530nm,1.3s
**OK052 Battle Ridge R 29.95 337** IAmb IAmb 23 28 31.9
comp=Z,241nm,1.2s
**VHRN Van Horn 30.01 320** IAmb IAmb 23 28 35.3
comp=Z,239nm,1.6s
**LPIG La Paz 30.16 304** P **P** **23 28 32.7 0.0**
comp=Z,29nm,0.3s,baz=269,slow=1.4,SNR=10
LPIG S **S** **23 33 32.7 +1.4**
comp=Z,16nm,0.3s,baz=170,slow=5.6,SNR=1.1
comp=Z,29nm,0.3s
**CCM Cathedral Cave 30.20 347** P **P** **23 28 32.1 -0.7**
**CCM Cathedral Cave 30.20 347** ⇑P **P** **23 28 32.1 -0.7**
**CCM Cathedral Cave 30.20 347** P **P** **23 28 32.3 -0.6**
baz=164
CCM S **S** **23 33 29.0 -2.6**
baz=164
**CCM Cathedral Cave 30.20 347** P **P** **23 28 32.1 -0.7**
CCM pmax pmax
comp=Z,532nm,0.9s
**Q52A Bidwell 30.22 1** IAMs_20 IAMs_20 23 40 16.5
comp=Z,33µm,22.0s
**Q54A Coxs Mills 30.30 4** IAMs_20 IAMs_20 23 40 18.6
comp=Z,30µm,21.0s
**OK051 E0350 and S346 30.41 338** IAmb IAmb 23 28 43.0
comp=Z,189nm,1.4s
**Q56A Snyder Ridge, 30.50 6** IAMs_20 IAMs_20 23 41 20.8
comp=Z,28µm,19.0s
**MPGF Montagnes des 30.50 95** ⇑P **P** **23 28 37.0 +1.1**
**MDP Montagnes des 30.50 95** LR LR 23 41 27.3
comp=Z,28µm,19.0s,baz=292,slow=38
**BLO Bloomington 30.57 355** IAmb IAmb 23 28 37.6
comp=Z,312nm,0.8s
BLO IAMs_20 IAMs_20 23 42 01.7
comp=Z,22µm,18.0s
**Q44A Meyer Farm, Va 30.60 351** IAmb IAmb 23 28 37.8
comp=Z,242nm,1.0s
**R40A Maddies Statio 30.66 346** IAmb IAmb 23 28 37.8
comp=Z,270nm,1.1s
**T35A Sooner Cattle 30.66 339** IAmb IAmb 23 28 38.6
comp=Z,552nm,1.9s
**MAL2 Monte Alegre, 30.77 109** P **P** **23 28 39.9 +1.6**
MAL2 IAmb IAmb 23 28 45.6
comp=Z,337nm,1.1s
MAL2 IAMs_20 IAMs_20 23 42 37.8
comp=Z,19µm,19.0s
**BLOK Blackwell 30.78 338** IAmb IAmb 23 28 46.4
comp=Z,329nm,1.7s
**P49A Miami Univ. Ec 30.81 358** IAmb IAmb 23 28 39.6
comp=Z,298nm,0.9s
**P49A Miami Univ. Ec 30.81 358** P **P** **23 28 37.8 -0.4**
baz=177,SNR=78
P49A S **S** **23 33 41.8 +0.6**
baz=177
**MNTX Cornudas Mount 30.88 321** ⇑P **P** **23 28 38.0 -1.0**
**MNTX Cornudas Mount 30.88 321** P **P** **23 28 38.3 -0.7**
baz=133,SNR=58
MNTX S **S** **23 33 43.9 +1.3**
baz=133
**P52A Corning 30.89 2** P **P** **23 28 39.8 +0.8**
baz=182,SNR=79
P52A S **S** **23 33 43.8 +1.3**
baz=182
**MCWV Mont Chateau 31.05 5** P **P** **23 28 41.0 +0.6**
**MCWV Mont Chateau 31.05 5** ⇑P **P** **23 28 41.5 +1.2**
**MCWV Mont Chateau 31.05 5** P **P** **23 28 41.6 +1.2**
baz=186,SNR=82
MCWV S **S** **23 33 47.5 +2.6**
baz=186
**P46A Rosedale 31.07 354** IAmb IAmb 23 28 41.7
comp=Z,261nm,0.9s
**P57A Homestead Farm 31.07 8** P **P** **23 28 41.5 +0.9**
**GC02 Grant County # 31.11 337** P **P** **23 28 39.6 -1.3**
GC02 **PcP** **23 31 37.5 +1.2**
**AMTX Amarillo 31.16 330** ⇑P **P** **23 28 39.8 -1.7**
**AMTX Amarillo 31.16 330** P **P** **23 28 39.9 -1.7**
baz=143
AMTX S **S** **23 33 48.4 +1.4**
baz=143
**SDMD Soldier's Deli 31.18 9** IAmb IAmb 23 28 44.4
comp=Z,199nm,0.8s
**KAN17 Caldwell West 31.24 337** IAmb IAmb 23 29 51.6
comp=Z,311nm,1.7s
**KAN09 Caldwell North 31.26 337** IAmb IAmb 23 28 50.4
comp=Z,269nm,1.7s
**GO01 Chusmiza 31.30 154** IAmb IAmb 23 28 48.7
comp=Z,136nm,1.1s
GO01 IAMs_20 IAMs_20 23 42 40.8
comp=Z,17µm,18.0s
**VILB Vilhena 31.31 133** IAmb IAmb 23 28 44.4
comp=Z,389nm,1.4s
**VILB Vilhena 31.31 133** *e*P **P** **23 28 43.0 0.0**
**KAN01 Argonia South 31.33 337** IAmb IAmb 23 29 50.8
comp=Z,243nm,1.6s
**NOKA Waynoka 31.35 335** IAmb IAmb 23 28 44.4
comp=Z,178nm,0.9s
**KS21 Milan North St 31.41 337** P **P** **23 28 43.0 -0.6**
**O49A Covington 31.45 358** IAmb IAmb 23 28 45.4
comp=Z,265nm,0.8s
**ACSO Alum Creek Sta 31.48 0** IAMs_20 IAMs_20 23 41 16.7
comp=Z,31µm,20.0s
**ACSO Alum Creek Sta 31.48 0** ⇑P **P** **23 28 44.2 +0.1**
**ACSO Alum Creek Sta 31.48 0** P **P** **23 28 44.7 +0.6**
baz=180,SNR=108
ACSO S **S** **23 33 52.6 +1.0**
baz=180
**O53A New Philadelph 31.54 3** P **P** **23 28 45.6 +0.9**
O53A IAMs_20 IAMs_20 23 40 57.5
comp=Z,29µm,22.0s
**O53A New Philadelph 31.54 3** P **P** **23 28 45.5 +0.8**
baz=184,SNR=65
O53A S **S** **23 33 54.5 +1.8**
baz=184
**HMBC Humberstone 31.55 156** IAMs_20 IAMs_20 23 43 29.3
comp=Z,15µm,18.0s
**EPT El Paso 31.64 320** P **P** **23 28 45.7 -0.1**
**TA01 Diego Aracena 31.70 156** IAmb IAmb 23 29 00.6
comp=Z,170nm,1.4s
**P40A Paris 31.79 347** IAMs_20 IAMs_20 23 42 30.2
comp=Z,16µm,18.0s
**NPGB Novo Progresso 31.80 118** *e*P **P** **23 28 46.8 -0.5**
**P61A Hammonton 31.81 12** IAMs_20 IAMs_20 23 42 14.7
comp=Z,26µm,19.0s
**SFIN Lafayette 31.82 354** IAMs_20 IAMs_20 23 42 24.9
comp=Z,14µm,19.0s
**WUPA West Chester U 31.90 11** IAmb IAmb 23 28 50.9
comp=Z,194nm,0.9s
**N53A Lisbon 32.12 3** IAmb IAmb 23 28 52.0
comp=Z,470nm,1.4s
N53A IAMs_20 IAMs_20 23 41 16.7
comp=Z,34µm,22.0s
**N49A Columbus Grove 32.18 359** IAmb IAmb 23 28 51.9
comp=Z,219nm,0.9s
**SSPA Standing Stone 32.22 8** P **P** **23 28 52.0 +1.3**
**SSPA Standing Stone 32.22 8** ⇑P **P** **23 28 51.9 +1.2**
**SSPA Standing Stone 32.22 8** P **P** **23 28 52.1 +1.5**
baz=190
SSPA S **S** **23 34 06.1 +2.8**
baz=190
**P38A Dawn 32.23 345** IAmb IAmb 23 28 51.5
comp=Z,239nm,0.8s
**MCPB Macapa, AP 32.26 105** *e*P **P** **23 28 52.0 +0.6**
**HDIL Hopedale 32.26 351** P **P** **23 28 50.4 -0.6**
baz=169
HDIL S **S** **23 34 01.3 -2.5**
baz=169
**KSU1 Kansas State U 32.66 340** IAmb IAmb 23 28 55.8
comp=Z,291nm,0.8s
**KSU1 Kansas State U 32.66 340** ⇑P **P** **23 28 53.2 -1.3**
**KSU1 Kansas State U 32.66 340** P **P** **23 28 53.5 -1.0**
baz=155,SNR=74
KSU1 S **S** **23 34 10.8 +0.7**
baz=155
**M53A WI Miller and 32.76 3** P **P** **23 28 56.0 +0.6**
baz=184,SNR=49
M53A S **S** **23 34 11.7 +0.1**
baz=184
**R32A Long Quarter, 32.81 337** IAmb IAmb 23 28 58.2
comp=Z,193nm,0.9s
**SIV San Ignacio 32.82 138** LR LR 23 43 36.1
comp=Z,16µm,18.1s,baz=330,slow=39
**M52A Chesterland 32.82 3** IAMs_20 IAMs_20 23 42 55.4
comp=Z,23µm,18.0s
**RTBA Rita Blanca 32.92 330** IAmb IAmb 23 28 59.2
comp=Z,122nm,0.9s
**121A Cookes Peak, D 32.95 320** IAmb IAmb 23 29 01.7
comp=Z,142nm,0.9s
**121A Cookes Peak, D 32.95 320** P **P** **23 28 58.4 +1.0**
baz=131,SNR=92
121A S **S** **23 34 16.9 +1.7**
baz=131
**ALLY Alegheny Colle 33.00 4** IAmb IAmb 23 28 59.8
comp=Z,499nm,1.4s
**CPNY Central Park 33.06 13** IAmb IAmb 23 29 01.1
comp=Z,620nm,1.7s
**PDRB Porto dos Gac 33.10 127** *e*P **P** **23 28 57.6 -1.1**
**PB09 IPOC Station P 33.18 156** IAmb IAmb 23 29 12.4
comp=Z,242nm,1.3s
**SRIG Santa Rosalia 33.18 308** ⇑P **P** **23 29 01.2 +2.0**
**ODNJ Ogdensburg 33.21 12** IAmb IAmb 23 29 02.2
comp=Z,163nm,0.9s
ODNJ IAMs_20 IAMs_20 23 42 29.6
comp=Z,23µm,19.0s
**319A Douglas 33.21 317** IAmb IAmb 23 29 03.6
comp=Z,320nm,1.1s
**N38A Joes South For 33.26 346** IAMs_20 IAMs_20 23 43 19.3
comp=Z,14µm,20.0s
**PAL Palisades 33.28 13** IAmb IAmb 23 29 03.7
comp=Z,345nm,1.0s
PAL IAMs_20 IAMs_20 23 42 29.5
comp=Z,19µm,21.0s
**PAL Palisades 33.28 13** P **P** **23 29 01.1 +1.2**
baz=197,SNR=32
PAL S **S** **23 34 22.9 +3.2**
baz=197
**N62A Caumsett State 33.31 13** IAMs_20 IAMs_20 23 43 50.3
comp=Z,23µm,18.0s
**PB04 IPOC Station P 33.31 158** IAmb IAmb 23 29 05.4
comp=Z,200nm,1.4s
**TRNY Table Rock, Ra 33.35 12** IAMs_20 IAMs_20 23 42 34.3
comp=Z,25µm,20.0s
**L46A Eue Claire 33.37 356** IAmb IAmb 23 29 00.8
comp=Z,298nm,1.0s
**CLDB Colider 33.42 125** *e*P **P** **23 29 00.4 -1.1**
**Y22D IRIS PASSCAL I 33.45 323** P **P** **23 29 02.3 +0.6**
baz=134
**ERPA Erie 33.48 4** ⇑P **P** **23 29 02.0 +0.3**
**ERPA Erie 33.48 4** P **P** **23 29 01.9 +0.2**
baz=186,SNR=12
ERPA S **S** **23 34 22.8 +0.1**
baz=186
**AAM Ann Arbor 33.55 359** ⇑P **P** **23 29 02.2 0.0**
**AAM Ann Arbor 33.55 359** P **P** **23 29 02.2 0.0**
baz=179,SNR=10
AAM S **S** **23 34 21.6 -2.2**
baz=179
**CBKS Cedar Bluff 33.55 336** ⇑P **P** **23 29 01.3 -1.1**
**CBKS Cedar Bluff 33.55 336** P **P** **23 29 01.4 -0.9**
baz=149,SNR=9.6
CBKS S **S** **23 34 24.0 0.0**
baz=149
**L44A Lake County Fo 33.68 354** IAmb IAmb 23 29 03.5
comp=Z,261nm,0.9s
L44A IAMs_20 IAMs_20 23 43 50.2
comp=Z,13µm,18.0s
**L44A Lake County Fo 33.68 354** P **P** **23 29 01.8 -1.6**
baz=172,SNR=12
L44A S **S** **23 34 23.4 -2.5**
baz=172
**PTLB Pontes e Lacer 33.75 135** P **P** **23 29 03.7 -0.6**
PTLB IAmb IAmb 23 29 05.4
comp=Z,162nm,1.4s
PTLB IAMs_20 IAMs_20 23 44 15.5
comp=Z,13µm,19.0s
**PTLB Pontes e Lacer 33.75 135** *e*P **P** **23 29 03.8 -0.6**
**ANMO Albuquerque 33.79 324** P **P** **23 29 04.5 -0.2**
**ANMO Albuquerque 33.79 324** ⇑P **P** **23 29 03.8 -1.0**
**ANMO Albuquerque 33.79 324** P **P** **23 29 03.9 -0.8**
comp=Z,17nm,1.0s,baz=229,slow=11,SNR=43
ANMO PP **PnPn** **23 30 15.7 -1.4**
comp=Z,3.1nm,0.9s,baz=249,slow=8.4,SNR=3.1
ANMO PcP **PcP** **23 31 44.5 +0.6**
comp=Z,7.1nm,0.7s,baz=170,slow=1.3,SNR=10
ANMO S **S** **23 34 27.6 -0.6**
comp=Z,1.0nm,0.6s,baz=196,slow=15,SNR=1.0
ANMO LR LR 23 46 44.1
comp=Z,6µm,18.9s,baz=223,slow=43
comp=Z,17nm,1.0s
**ANMO Albuquerque 33.79 324** P **P** **23 29 04.4 -0.3**
baz=135
ANMO S **S** **23 34 29.6 +1.5**
baz=135
**ANMO Albuquerque 33.79 324** P **P** **23 29 04.5 -0.2**
ANMO pmax pmax
comp=Z,68nm,1.5s
**WVNY West Valley, N 33.89 6** IAMs_20 IAMs_20 23 41 57.5
comp=Z,27µm,22.0s
**BBSD Serra de San D 33.99 139** *e*P **P** **23 29 06.0 -0.4**
**BINY Binghamton 34.04 10** ⇑P **P** **23 29 07.8 +1.2**
**BINY Binghamton 34.04 10** P **P** **23 29 07.9 +1.4**
baz=193,SNR=162
BINY S **S** **23 34 33.1 +1.6**
baz=193
**LVC Limon Verde 34.04 156** P **P** **23 29 09.2 +2.1**
LVC IAmb IAmb 23 29 20.4
comp=Z,208nm,1.4s
**LVC Limon Verde 34.04 156** IAMs_20 IAMs_20 23 44 19.4
comp=Z,9µm,19.0s
**LVC Limon Verde 34.04 156** ⇑P **P** **23 29 09.0 +1.9**
**LVC Limon Verde 34.04 156** LR LR 23 44 21.4
comp=Z,9µm,18.7s,baz=318,slow=39
**LVC Limon Verde 34.04 156** P **P** **23 29 09.2 +2.1**
LVC pmax pmax
comp=Z,208nm,1.4s
LVC MLR MLR
comp=Z,9µm,19.0s
**LVC Limon Verde 34.04 156** *e*P **P** **23 29 09.5 +2.3**
**L40A Anamosa 34.05 349** IAMs_20 IAMs_20 23 44 48.2
comp=Z,16µm,19.0s
**M63A Gales Ferry 34.10 15** IAmb IAmb 23 29 10.4
comp=Z,350nm,1.1s
M63A IAMs_20 IAMs_20 23 44 10.3
comp=Z,15µm,19.0s
**L59A Walton 34.19 11** IAMs_20 IAMs_20 23 41 34.6
comp=Z,24µm,22.0s
**K43A Burlington 34.25 353** IAmb IAmb 23 29 08.5
comp=Z,350nm,1.2s
**MMNY Mt. Morris Dam 34.29 7** IAmb IAmb 23 29 10.9
comp=Z,134nm,0.9s
**T25A Trinidad 34.30 329** IAmb IAmb 23 29 13.0
comp=Z,160nm,1.4s
**T25A Trinidad 34.30 329** P **P** **23 29 09.0 -0.1**
baz=140,SNR=46
**SCIA State Center 34.32 347** ⇑P **P** **23 29 08.6 -0.3**
**SCIA State Center 34.32 347** P **P** **23 29 08.4 -0.5**
baz=162,SNR=20
**UCCT U. Connecticut 34.42 15** IAmb IAmb 23 29 12.9
comp=Z,514nm,1.7s
UCCT IAMs_20 IAMs_20 23 44 43.8
comp=Z,24µm,18.0s
**J47A Sunmer 34.51 358** IAmb IAmb 23 29 12.1
comp=Z,156nm,0.7s
**AF01 San Pedro de A 34.65 155** IAmb IAmb 23 29 59.3
comp=Z,297nm,1.2s
**MEDO Medina 34.65 6** IAmb IAmb 23 29 14.0
comp=Z,164nm,1.0s
**JFWS Jewell Farm 34.72 351** IAmb IAmb 23 29 13.0
comp=Z,262nm,0.9s
**JFWS Jewell Farm 34.72 351** ⇑P **P** **23 29 11.0 -1.4**
**JFWS Jewell Farm 34.72 351** P **P** **23 29 11.2 -1.1**
baz=168,SNR=73
JFWS S **S** **23 34 39.0 -2.9**
baz=168
**J54A Appleton 34.74 6** IAmb IAmb 23 29 14.7
comp=Z,288nm,0.9s
J54A IAMs_20 IAMs_20 23 43 08.1
comp=Z,24µm,21.0s
**TUC Tucson 34.80 317** P **P** **23 29 14.4 +1.1**
TUC IAmb IAmb 23 29 16.8
comp=Z,140nm,1.2s
**TUC Tucson 34.80 317** ⇑P **P** **23 29 14.2 +0.9**
**TUC Tucson 34.80 317** P **P** **23 29 14.7 +1.4**
baz=126
**TUC Tucson 34.80 317** P **P** **23 29 14.4 +1.1**
TUC pmax pmax
comp=Z,140nm,1.2s
TUC MLR MLR
comp=Z,6µm,18.0s
**J55A Hilton 34.82 7** IAmb IAmb 23 29 15.3
comp=Z,315nm,1.1s
**L64A Middleborough 34.92 16** IAmb IAmb 23 29 17.1
comp=Z,486nm,1.9s
L64A IAMs_20 IAMs_20 23 43 53.9
comp=Z,16µm,18.0s
**L61B Northampton 34.94 14** IAMs_20 IAMs_20 23 44 48.3
comp=Z,17µm,18.0s
**L61B Northampton 34.94 14** P **P** **23 29 15.2 +0.9**
baz=198,SNR=30
L61B S **S** **23 34 48.1 +2.8**
baz=198
**TRY Troy 34.98 12** IAMs_20 IAMs_20 23 43 32.6
comp=Z,26µm,20.0s
**L34A Svendsen Farm, 35.20 343** IAmb IAmb 23 29 17.4
comp=Z,323nm,1.1s
**BCX Boston College 35.20 16** IAmb IAmb 23 29 19.8
comp=Z,452nm,1.5s
BCX IAMs_20 IAMs_20 23 45 11.4
comp=Z,23µm,18.0s
**WES Weston 35.21 15** IAmb IAmb 23 29 19.7
comp=Z,127nm,1.1s
WES IAMs_20 IAMs_20 23 45 11.6
comp=Z,23µm,18.0s
**J57A Williamstown 35.22 9** IAmb IAmb 23 29 18.9
comp=Z,422nm,1.1s
**K62A Royalston 35.24 14** IAmb IAmb 23 29 19.9
comp=Z,357nm,1.4s
K62A IAMs_20 IAMs_20 23 45 05.5
comp=Z,20µm,18.0s
**HRV Adam Dziewonsk 35.26 15** P **P** **23 29 18.3 +1.2**
**HRV Adam Dziewonsk 35.26 15** IAMs_20 IAMs_20 23 45 02.0
comp=Z,15µm,19.0s
**HRV Adam Dziewonsk 35.26 15** ⇑P **P** **23 29 18.2 +1.2**
**HRV Adam Dziewonsk 35.26 15** P **P** **23 29 18.5 +1.4**
baz=200
HRV S **S** **23 34 52.1 +1.8**
baz=200
**HRV Adam Dziewonsk 35.26 15** P **P** **23 29 18.3 +1.2**
HRV pmax pmax
comp=Z,130nm,1.2s
HRV MLR MLR
comp=Z,15µm,19.0s
**PB14 IPOC Station P 35.32 160** IAmb IAmb 23 29 24.8
comp=Z,226nm,1.3s
**PB14 IPOC Station P 35.32 160** P **P** **23 29 20.6 +2.4**
**SDCO Great Sand Dun 35.32 329** ⇑P **P** **23 29 17.8 -0.3**
**SDCO Great Sand Dun 35.32 329** P **P** **23 29 18.1 0.0**
baz=139,SNR=91
SDCO S **S** **23 34 52.0 0.0**
baz=139
**I45A Fountain 35.38 356** IAmb IAmb 23 29 18.2
comp=Z,192nm,0.9s
I45A IAMs_20 IAMs_20 23 43 54.1
comp=Z,26µm,20.0s
**J59A Piesco 35.52 11** IAmb IAmb 23 29 21.8
comp=Z,267nm,0.9s
J59A IAMs_20 IAMs_20 23 44 36.6
comp=Z,22µm,18.0s
**ACCN Adirondack Com 35.61 12** IAmb IAmb 23 29 23.0
comp=Z,207nm,0.9s
**J61A Chester 35.81 13** IAmb IAmb 23 29 25.1
comp=Z,315nm,1.1s
J61A IAMs_20 IAMs_20 23 42 38.6
comp=Z,13µm,21.0s
**W18A Petrified Fore 35.87 321** IAmb IAmb 23 29 26.8
comp=Z,460nm,1.4s
**W18A Petrified Fore 35.87 321** P **P** **23 29 24.0 +1.3**
baz=131,SNR=23
W18A S **S** **23 35 06.3 +6.1**
baz=131
**214A Organ Pipe Nat 36.00 314** IAmb IAmb 23 29 27.4
comp=Z,353nm,1.1s
**214A Organ Pipe Nat 36.00 314** P **P** **23 29 25.2 +1.6**

214A S **S** 23 35 08.0 +6.0
baz=124,SNR=125

**S22A 4UR Ranch, Cre** 36.02 327 P **P** 23 29 24.2 +0.2
baz=124
**NCB Newcomb** 36.07 11 IAmb IAmb 23 29 26.6
baz=138,SNR=60
NCB IAMs_20 IAMs_20 23 44 44.3
comp=Z,302nm,1.3s
**DELO Deloro Mine** 36.08 7 IAmb IAmb 23 29 26.6
comp=Z,25µm,19.0s
**Q24A Divide** 36.08 330 P **P** 23 29 24.3 -0.3
comp=Z,508nm,1.5s
Q24A S **S** 23 35 02.7 -0.9
baz=141
**GLMI Grayling** 36.09 358 IAmb IAmb 23 29 24.9
baz=141
**GLMI Grayling** 36.09 358 ⇑P **P** 23 29 23.2 -0.9
comp=Z,269nm,0.8s
**GLMI Grayling** 36.09 358 P **P** 23 29 23.2 -0.9
baz=178,SNR=19
**GO02 Mina Guanaco** 36.09 159 IAmb IAmb 23 29 31.8
comp=Z,215nm,1.4s
**GO02 Mina Guanaco** 36.09 159 ⇑P **P** 23 29 25.9 +1.1
**SADO Sadowa** 36.18 5 ⇑P **P** 23 29 24.5 -0.5
**SADO Sadowa** 36.18 5 P **P** 23 29 24.1 -0.9
comp=Z,82nm,0.7s,baz=202,slow=8.2,SNR=79
SADO S **S** 23 35 01.4 -2.9
comp=Z,3.6nm,0.9s,baz=304,slow=20,SNR=1.3
SADO LR LR 23 45 14.6
comp=Z,17µm,18.2s,baz=202,slow=38
**HNH Hanover** 36.22 13 IAmb IAmb 23 29 28.5
comp=Z,82nm,0.7s
comp=Z,170nm,0.9s
HNH IAMs_20 IAMs_20 23 44 44.2
comp=Z,15µm,19.0s
**PIX Pinacate** 36.25 313 IAmb IAmb 23 29 28.9
comp=Z,158nm,1.2s
**OGNE Ogallala** 36.28 336 ⇑P **P** 23 29 25.8 -0.2
**OGNE Ogallala** 36.28 336 P **P** 23 29 25.8 -0.2
baz=147,SNR=111
OGNE S **S** 23 35 08.1 +1.9
baz=147
**PRPB Parauapebas** 36.36 113 *e*P **P** 23 29 26.6 -0.3
**I37A Lemond, Waseca** 36.37 348 IAmb IAmb 23 29 26.7
comp=Z,447nm,1.4s
**SALV Santo Antonio** 36.53 132 *e*P **P** 23 29 27.3 -0.9
**MVCO Mesa Verde** 36.55 325 ⇑P **P** 23 29 28.3 -0.3
**MVCO Mesa Verde** 36.55 325 P **P** 23 29 28.6 +0.1
baz=135,SNR=47
**I62A Tamworth** 36.60 14 IAmb IAmb 23 29 31.8
comp=Z,192nm,1.3s
I62A IAMs_20 IAMs_20 23 45 02.4
comp=Z,15µm,19.0s
**LONY Lake Ozonia** 36.63 10 ⇑P **P** 23 29 28.4 -0.4
**LONY Lake Ozonia** 36.63 10 P **P** 23 29 29.4 +0.7
baz=194,SNR=75
LONY S **S** 23 35 13.5 +2.3
baz=194
**TMAB Tom-Au,PA,Br** 36.63 106 *e*P **P** 23 29 30.4 +1.2
**VT1 Waterbury** 36.71 13 IAmb IAmb 23 29 32.2
comp=Z,449nm,1.1s
VT1 IAMs_20 IAMs_20 23 44 02.0
comp=Z,19µm,21.0s
**LBNH Lisbon** 36.81 14 IAmb IAmb 23 29 33.5
comp=Z,350nm,1.2s
LBNH IAMs_20 IAMs_20 23 45 00.8
comp=Z,16µm,19.0s
**LBNH Lisbon** 36.81 14 ⇑P **P** 23 29 31.5 +1.2
**LBNH Lisbon** 36.81 14 P **P** 23 29 31.7 +1.4
baz=199,SNR=55
LBNH S **S** 23 35 17.0 +3.1
baz=199
**WBO Williamsburg** 36.88 9 IAmb IAmb 23 29 33.1
comp=Z,404nm,1.0s
**ECSD EROS Data Cent** 36.89 344 IAmb IAmb 23 29 31.3
comp=Z,576nm,1.4s
**ECSD EROS Data Cent** 36.89 344 IAMs_20 IAMs_20 23 45 39.5
comp=Z,13µm,20.0s
**ECSD EROS Data Cent** 36.89 344 ⇑P **P** 23 29 29.3 -1.8
**ECSD EROS Data Cent** 36.89 344 P **P** 23 29 29.4 -1.6
baz=158,SNR=225
ECSD S **S** 23 35 13.1 -2.2
baz=158
**I63A Otisfield** 36.96 15 IAmb IAmb 23 29 34.8
comp=Z,254nm,1.1s
I63A IAMs_20 IAMs_20 23 42 19.9
comp=Z,16µm,22.0s
**ISCO Idaho Springs** 36.96 331 ⇑P **P** 23 29 31.5 -0.6
**ISCO Idaho Springs** 36.96 331 P **P** 23 29 31.9 -0.2
baz=141,SNR=31
ISCO S **S** 23 35 16.3 -0.7
baz=141
**BRIGG Briggsdale** 36.97 333 IAmb IAmb 23 29 35.2
comp=Z,185nm,1.1s
**SFX San Felipe** 36.99 311 P **P** 23 29 33.3 +1.2
SFX IAmb IAmb 23 29 35.9
comp=Z,500nm,1.6s
**G40A Rib Lake** 37.01 352 IAmb IAmb 23 29 32.4
comp=Z,230nm,1.1s
**113A Mohawk Valley,** 37.12 315 IAmb IAmb 23 29 36.8
comp=Z,640nm,1.5s
**WUAZ Wupatki** 37.15 320 P **P** 23 29 34.8 +1.3
WUAZ IAMs_20 IAMs_20 23 47 32.5
comp=Z,12µm,18.0s
**WUAZ Wupatki** 37.15 320 ⇑P **P** 23 29 34.6 +1.1
**WUAZ Wupatki** 37.15 320 P **P** 23 29 34.7 +1.1
baz=129,SNR=29
WUAZ S **S** 23 35 20.8 +1.1
baz=129
**SMCO Snowmass** 37.16 329 ⇑P **P** 23 29 33.7 -0.2
**H62A Milan** 37.30 14 IAmb IAmb 23 29 37.6
comp=Z,705nm,1.8s
H62A IAMs_20 IAMs_20 23 43 40.0
comp=Z,13µm,20.0s
**E46A Sault Ste Mari** 37.62 359 IAmb IAmb 23 29 38.0
comp=Z,264nm,1.5s
**WVL Waterville** 37.68 16 IAmb IAmb 23 29 41.4
comp=Z,625nm,1.6s
**COWI Conover** 37.69 353 IAMs_20 IAMs_20 23 44 19.4
comp=Z,12µm,20.0s
**COWI Conover** 37.69 353 ⇑P **P** 23 29 36.3 -1.5
**SNDB Serra Nova Dou** 37.72 122 *e*P **P** 23 29 38.3 -0.2
**VTX Valle De La Tr** 37.86 311 IAmb IAmb 23 29 43.4
comp=Z,355nm,1.5s
**PANT Pantanal (Braz** 37.93 137 *e*P **P** 23 29 39.7 -0.4
**N23A Red Feather La** 37.97 332 P **P** 23 29 40.6 0.0
baz=142,SNR=45
**CPBX Cerro Prieto** 38.03 313 IAmb IAmb 23 29 44.8
comp=Z,515nm,1.2s
**G62A West of Eustis** 38.06 15 IAmb IAmb 23 29 44.3
comp=Z,304nm,0.9s
G62A IAMs_20 IAMs_20 23 44 12.1
comp=Z,15µm,20.0s
**TRQ Mont Tremblant** 38.19 10 IAmb IAmb 23 29 43.9
comp=Z,344nm,0.9s
TRQ IAMs_20 IAMs_20 23 45 59.2
comp=Z,20µm,19.0s
**BLYC Blythe** 38.19 315 IAmb IAmb 23 29 45.9
comp=Z,314nm,1.1s
**ESJX Sierra Juarez** 38.29 312 IAmb IAmb 23 29 47.4
comp=Z,455nm,1.5s
**PKME Peaks-Kenny Pk** 38.42 16 IAmb IAmb 23 29 47.2
comp=Z,221nm,0.9s
**PKME Peaks-Kenny Pk** 38.42 16 ⇑P **P** 23 29 45.3 +1.4
**PKME Peaks-Kenny Pk** 38.42 16 P **P** 23 29 45.6 +1.6
baz=202,SNR=62
PKME S **S** 23 35 41.9 +3.5
baz=202
**AC04 Llanos de Chal** 38.44 163 P **P** 23 29 47.7 +3.4
**EMMW East Machias** 38.45 18 IAMs_20 IAMs_20 23 44 50.3
comp=Z,18µm,20.0s
**E38A The Farm, Brul** 38.52 351 IAmb IAmb 23 29 45.1
comp=Z,235nm,1.3s
**YUH Yuha Desert** 38.59 313 IAmb IAmb 23 29 49.7
comp=Z,623nm,1.5s
**RMX La Rumorosa** 38.68 313 IAmb IAmb 23 29 50.0
comp=Z,434nm,1.3s
**CCX Cicese** 38.75 311 IAmb IAmb 23 29 57.8
comp=Z,672nm,1.8s
**F33A 5 Mile Ranch,** 38.76 345 IAmb IAmb 23 29 46.6
comp=Z,359nm,1.1s
**F62A Pittston Farm,** 38.84 15 IAMs_20 IAMs_20 23 44 00.6
comp=Z,12µm,21.0s
**G65A Princeton** 38.86 18 IAMs_20 IAMs_20 23 44 33.2
comp=Z,18µm,20.0s
**F63A Nahmakanta, Br** 38.88 16 IAmb IAmb 23 29 50.7
comp=Z,310nm,1.6s

F63A IAMs_20 IAMs_20 23 47 20.8
comp=Z,15µm,19.0s
**PKCU Pink Cliffs** 38.96 322 IAmb IAmb 23 29 53.2
comp=Z,327nm,1.5s
**GGN Saint George** 39.01 18 IAmb IAmb 23 29 52.0
comp=Z,262nm,1.5s
**TKX Tecate** 39.05 312 IAmb IAmb 23 29 53.3
comp=Z,586nm,1.5s
**MONP2 Monument Peak** 39.08 313 P **P** 23 29 51.9 +2.0
baz=121,SNR=75
MONP2 S **S** 23 35 53.8 +4.6
baz=121
**MURT Porto Murtinho** 39.18 141 *e*P **P** 23 29 49.6 -1.0
**F64A Sherman** 39.23 16 IAmb IAmb 23 29 53.7
comp=Z,194nm,0.9s
**LCO Las Campanas** 39.30 163 P **P** 23 29 53.6 +1.7
**LCO Las Campanas** 39.30 163 ⇑P **P** 23 29 53.1 +1.2
**LCO Las Campanas** 39.30 163 P **P** 23 29 53.6 +1.7
LCO pmax pmax
comp=Z,128nm,1.2s
**ARAG Araguaiana, MT** 39.36 128 *e*P **P** 23 29 51.3 -0.9
**TPFO Pinon Flats** 39.47 314 P **P** 23 29 55.2 +2.1
baz=121,SNR=109
TPFO S **S** 23 35 55.7 +0.8
baz=121
**SMTB Santa Maria do** 39.47 115 *e*P **P** 23 29 53.3 +0.1
**PFO Pinyon Flats O** 39.48 314 P **P** 23 29 54.9 +1.8
PFO IAmb IAmb 23 29 56.8
comp=Z,240nm,1.1s
**PFO Pinyon Flats O** 39.48 314 P **P** 23 29 55.2 +2.1
baz=121,SNR=102
PFO S **S** 23 35 56.6 +1.7
baz=121
**PFO Pinyon Flats O** 39.48 314*c i*P **P** 23 29 54.7 +1.5
PFO pmax pmax
comp=Z,270nm,1.0s
PFO MLR MLR
comp=Z,11µm,19.0s
**109C Camp Elliot, M** 39.57 313 IAmb IAmb 23 29 57.4
comp=Z,465nm,1.1s
**109C Camp Elliot, M** 39.57 313 P **P** 23 29 55.9 +2.1
baz=120,SNR=31
109C S **S** 23 35 59.1 +3.0
baz=120
**AQDB Aquidauana** 39.58 137 *e*P **P** 23 29 53.1 -0.9
**MVU Marysvale** 39.59 323 IAmb IAmb 23 29 59.2
comp=Z,1µm,1.9s
MVU IAMs_20 IAMs_20 23 47 42.9
comp=Z,19µm,18.0s
**K22A Casper** 39.62 333 IAMs_20 IAMs_20 23 48 15.0
comp=Z,11µm,22.0s
**VLDQ Val d'Or** 39.65 6 IAmb IAmb 23 29 55.6
comp=Z,262nm,1.1s
**HAL Halifax** 39.70 22 IAMs_20 IAMs_20 23 43 32.5
comp=Z,16µm,22.0s
**RSSD Black Hills** 39.75 336 P **P** 23 29 55.3 -0.1
**RSSD Black Hills** 39.75 336 ⇑P **P** 23 29 55.2 -0.1
**RSSD Black Hills** 39.75 336 P **P** 23 29 55.5 +0.1
baz=147
RSSD S **S** 23 36 00.0 +1.1
baz=147
**RSSD Black Hills** 39.75 336 P **P** 23 29 55.3 -0.1
RSSD pmax pmax
comp=Z,197nm,1.2s
**TCRU Three Creeks R** 39.80 323 IAMs_20 IAMs_20 23 48 33.4
comp=Z,9µm,18.0s
**EYMN Ely** 39.82 351 IAmb IAmb 23 29 55.7
comp=Z,301nm,1.6s
**EYMN Ely** 39.82 351 ⇑P **P** 23 29 53.7 -1.9
**EYMN Ely** 39.82 351 P **P** 23 29 53.8 -1.8
baz=167,SNR=14
EYMN S **S** 23 35 54.9 -4.5
baz=167
**PQI Presque Isle** 40.07 16 IAmb IAmb 23 30 00.7
comp=Z,222nm,1.1s
**D62A Allapoint, All** 40.17 15 IAmb IAmb 23 30 01.4
comp=Z,186nm,0.9s
D62A IAMs_20 IAMs_20 23 44 40.9
comp=Z,15µm,22.0s
**SHPR Sheep Range** 40.19 319 P **P** 23 30 00.3 +1.2
**ELS Elsinore Mount** 40.19 313 P **P** 23 30 00.8 +1.8
ELS IAmb IAmb 23 30 01.9
comp=Z,399nm,1.6s
**MPU Maple Canyon** 40.27 326 IAMs_20 IAMs_20 23 49 50.7
comp=Z,10µm,20.0s
**LMQ La Malbaie** 40.30 13 IAmb IAmb 23 30 01.9
comp=Z,277nm,0.9s
**LMN Caledonia Moun** 40.32 20 P **P** 23 30 01.1 +1.3
LMN IAmb IAmb 23 30 02.4
comp=Z,193nm,1.0s
**LDAQ Lac Daran** 40.49 12 P **P** 23 30 01.5 +0.2
LDAQ IAmb IAmb 23 30 03.2
comp=Z,287nm,0.9s
LDAQ IAMs_20 IAMs_20 23 45 21.2
comp=Z,17µm,22.0s
**CO06 Fray Jorge** 40.61 165 P **P** 23 30 04.0 +1.6
**GSC Goldstone, Bar** 40.61 316 IAmb IAmb 23 30 06.3
comp=Z,365nm,1.2s
**PAPY Pozo Azul** 40.62 144 *e*P **P** 23 30 02.6 0.0
**PRN Pahroc Range** 40.65 320 ⇑P **P** 23 30 04.1 +1.2
**E28A Huff** 40.68 341 IAmb IAmb 23 30 04.3
comp=Z,512nm,0.9s
**AGMN Agassiz Nation** 40.97 347 P **P** 23 30 03.5 -1.6
AGMN IAmb IAmb 23 30 05.4
comp=Z,720nm,1.4s
**AGMN Agassiz Nation** 40.97 347 ⇑P **P** 23 30 03.5 -1.6
**AGMN Agassiz Nation** 40.97 347 P **P** 23 30 03.5 -1.6
baz=161,SNR=119
AGMN S **S** 23 36 13.4 -3.1
baz=161
**GWY Greenwater Val** 41.00 317 P **P** 23 30 07.2 +1.3
**CO03 El Pedregal** 41.02 164 P **P** 23 30 07.5 +1.6
**DUG Dugway, Tooele** 41.05 325 P **P** 23 30 06.7 +0.5
**DUG Dugway, Tooele** 41.05 325 P **P** 23 30 06.5 +0.3
baz=132,SNR=57
DUG S **S** 23 36 21.5 +3.1
baz=132
**DUG Dugway, Tooele** 41.05 325 P **P** 23 30 06.7 +0.5
DUG pmax pmax
comp=Z,134nm,1.5s
DUG MLR MLR
comp=Z,6µm,19.0s
**GBN Guysborough** 41.14 23 IAMs_20 IAMs_20 23 45 27.6
comp=Z,16µm,20.0s
**BW06 Boulder Array** 41.14 330 ⇑P **P** 23 30 06.0 -0.9
**BW06 Boulder Array** 41.14 330 P **P** 23 30 06.4 -0.6
baz=138,SNR=40
BW06 S **S** 23 36 18.7 -1.1
baz=138
**PDAR Pinedale Array** 41.14 330 P **P** 23 30 05.7 -1.2
**PDAR Pinedale Array** 41.14 330 P **P** 23 30 06.0 -0.9
comp=Z,33nm,1.0s,baz=133,slow=6.3,SNR=71
PDAR PcP **PcP** 23 32 06.5 +0.3
comp=Z,19nm,0.9s,baz=144,slow=5.5,SNR=7.7
PDAR S **S** 23 36 17.7 -2.1
comp=Z,0.3nm,0.4s,baz=231,slow=40,SNR=1.5
PDAR LR LR 23 51 15.0
comp=Z,5µm,18.5s,baz=120,slow=42
comp=Z,33nm,1.0s
**TPNV Topopah Spring** 41.15 318 P **P** 23 30 08.8 +1.7
baz=125,SNR=88
TPNV S **S** 23 36 25.3 +5.3
baz=125
**BATG Bathurst New B** 41.18 18 P **P** 23 30 08.6 +1.7
BATG IAmb IAmb 23 30 09.8
comp=Z,171nm,1.0s
BATG IAMs_20 IAMs_20 23 46 03.7
comp=Z,20µm,20.0s
**CO02 Combarbal** 41.28 164 P **P** 23 30 09.4 +1.4
CO02 IAmb IAmb 23 30 14.3
comp=Z,239nm,1.2s
**CO02 Combarbal** 41.28 164 ⇑P **P** 23 30 09.3 +1.3
**WCT Wildcat Mounta** 41.31 318 IAmb IAmb 23 30 12.3
comp=Z,274nm,1.6s
**HWUT Hardware Ranch** 41.33 327 P **P** 23 30 08.0 -0.5
**HWUT Hardware Ranch** 41.33 327 ⇑P **P** 23 30 07.9 -0.5
**SNCC San Nicolas Is** 41.53 311 IAmb IAmb 23 30 13.7
comp=Z,976nm,1.7s
**R11B Troy Canyon, C** 41.55 321 IAMs_20 IAMs_20 23 50 30.9
comp=Z,9µm,18.0s
**R11B Troy Canyon, C** 41.55 321 P **P** 23 30 11.6 +1.3
baz=127,SNR=54
R11B S **S** 23 36 29.4 +3.6
baz=127
**AHID Auburn Hatcher** 41.91 329 ⇑P **P** 23 30 12.3 -0.9
**GRAC Grapevine Rang** 41.92 318 IAmb IAmb 23 30 17.2
comp=Z,858nm,1.7s

**ISA Isabella, Lake** 41.96 315 IAmb IAmb 23 30 17.3
comp=Z,472nm,1.4s
**H03N2 Juan Fernandez** 42.02 175 T T 00 14 45.2
baz=354,slow=76,SNR=144
**H03N1 Juan Fernandez** 42.03 175 T T 00 14 50.1
baz=354,slow=76,SNR=120
**H03N3 Juan Fernandez** 42.04 175 T T 00 14 47.1
baz=354,slow=76,SNR=144
**ZON Zonda** 42.28 161 ⇑P **P** 23 30 17.7 +1.6
**BDFB Brasilia** 42.35 125 P **P** 23 30 16.8 -0.3
comp=Z,54nm,1.0s,baz=291,slow=11,SNR=50
BDFB S **S** 23 36 34.9 -3.2
comp=Z,6.7nm,1.1s,baz=232,slow=26,SNR=1.2
BDFB LR LR 23 48 27.0
comp=Z,9µm,18.6s,baz=307,slow=37
comp=Z,54nm,1.0s
**TPH Tonopah** 42.43 319 IAmb IAmb 23 30 21.4
comp=Z,380nm,0.9s
**DSP Deep Springs** 42.53 318 IAmb IAmb 23 30 21.9
comp=Z,288nm,1.3s
**SJPY San Joaquin** 42.57 142 *e*P **P** 23 30 17.5 -1.1
**LAO LASA Array** 42.74 337 ⇑P **P** 23 30 18.8 -0.9
**LAO LASA Array** 42.74 337 P **P** 23 30 19.0 -0.8
baz=145,SNR=24
LAO S **S** 23 36 42.3 -0.7
baz=145
**RLMT Red Lodge** 42.78 333 IAMs_20 IAMs_20 23 49 40.9
comp=Z,10µm,22.0s
**RLMT Red Lodge** 42.78 333 ⇑P **P** 23 30 19.4 -0.9
**RLMT Red Lodge** 42.78 333 P **P** 23 30 19.7 -0.6
baz=140,SNR=61
RLMT S **S** 23 36 43.5 -0.5
baz=140
**ELK Elko** 42.82 324 ⇑P **P** 23 30 20.7 0.0
**ELK Elko** 42.82 324 LR LR 23 50 57.3
comp=Z,8µm,18.3s,baz=130,slow=40
**ULM Lac du Bonnet** 42.82 348 IAmb IAmb 23 30 20.7
comp=Z,410nm,1.0s
**ULM Lac du Bonnet** 42.82 348 ⇑P **P** 23 30 18.1 -2.1
**ULM Lac du Bonnet** 42.82 348 P **P** 23 30 18.2 -2.1
comp=Z,207nm,0.8s,baz=148,slow=7.9,SNR=242
ULM PcP **PcP** 23 32 10.6 -0.7
comp=Z,19nm,0.7s,baz=176,slow=4.5,SNR=2.3
ULM S **S** 23 36 39.1 -4.7
comp=Z,4.6nm,1.1s,baz=56,slow=22,SNR=1.2
ULM ScS **ScS** 23 40 18.8 -2.0
comp=Z,3.4nm,1.0s,baz=74,slow=20,SNR=1.9
ULM LR LR 23 49 25.2
comp=Z,6µm,19.5s,baz=163,slow=38
comp=Z,207nm,0.8s
**H17A Grant Village** 42.85 331 IAMs_20 IAMs_20 23 50 48.6
comp=Z,15µm,21.0s
**H17A Grant Village** 42.85 331 P **P** 23 30 21.1 +0.2
baz=138,SNR=16
H17A S **S** 23 36 50.9 +5.9
baz=138
**ITRB Iturama** 42.85 131 *e*P **P** 23 30 20.0 -1.0
**YPP Pitchstone Pla** 42.86 331 IAMs_20 IAMs_20 23 50 49.1
comp=Z,12µm,22.0s
**CPUP Villa Florida** 42.87 145 ⇑P **P** 23 30 20.0 -0.9
**CPUP Villa Florida** 42.87 145 P **P** 23 30 19.9 -0.9
comp=Z,11nm,0.9s,baz=336,slow=8.8,SNR=25
CPUP S **S** 23 36 42.6 -2.4
comp=Z,0.6nm,0.4s,baz=83,slow=15,SNR=1.5
CPUP LR LR 23 50 01.5
comp=Z,9µm,19.6s,baz=326,slow=39
comp=Z,11nm,0.9s
**CPUP Villa Florida** 42.87 145 P **P** 23 30 20.0 -0.9
**CPUP Villa Florida** 42.87 145 *e*P **P** 23 30 20.3 -0.6
**ICQ Pointe Anglais** 42.88 15 IAmb IAmb 23 30 22.4
comp=Z,150nm,0.8s
ICQ IAMs_20 IAMs_20 23 49 27.6
comp=Z,16µm,18.0s
**LKWY Lake** 42.89 331 IAMs_20 IAMs_20 23 49 51.7
comp=Z,11µm,22.0s
**LKWY Lake** 42.89 331 ⇑P **P** 23 30 21.7 +0.4
**YMP Mirror Lake Pl** 42.90 332 IAMs_20 IAMs_20 23 50 25.1
comp=Z,9µm,22.0s
**MT02 Curacav** 43.20 165 IAmb IAmb 23 30 32.2
comp=Z,288nm,1.8s
**PEL Peldehue** 43.20 165 ⇑P **P** 23 30 25.1 +1.5
**TRCB Terra Rica** 43.23 137 *e*P **P** 23 30 22.5 -1.5
**NVAR Mina Array Bea** 43.33 319 P **P** 23 30 25.8 +0.9
**NVAR Mina Array Bea** 43.33 319 P **P** 23 30 26.1 +1.2
comp=Z,53nm,0.8s,baz=124,slow=7.0,SNR=208
NVAR PcP **PcP** 23 32 15.3 +1.7
comp=Z,14nm,0.7s,baz=132,slow=4.0,SNR=7.3
NVAR S **S** 23 36 52.5 +0.2
comp=Z,0.1nm,0.4s,baz=21,slow=39,SNR=1.0
NVAR LR LR 23 51 53.5
comp=Z,6µm,19.5s,baz=111,slow=41
comp=Z,53nm,0.8s
**OMMB Old Mammoth Mi** 43.35 317 IAmb IAmb 23 30 28.6
comp=Z,539nm,1.6s
**LHV Little Huntoon** 43.37 318 IAmb IAmb 23 30 28.9
comp=Z,212nm,1.1s
**SDBA SAO DESIDERIO** 43.39 118 *e*P **P** 23 30 24.2 -1.2
**MDPB Devils Postpil** 43.41 317 IAmb IAmb 23 30 29.0
comp=Z,292nm,1.2s
**IPMB Ipameri, GO** 43.48 128 *e*P **P** 23 30 24.5 -1.6
**DGMT Dagmar** 43.49 340 IAmb IAmb 23 30 28.1
comp=Z,245nm,0.9s
**DGMT Dagmar** 43.49 340 ⇑P **P** 23 30 25.1 -0.6
**DGMT Dagmar** 43.49 340 P **P** 23 30 25.3 -0.4
baz=149,SNR=45
DGMT S **S** 23 36 55.9 +2.0
baz=149
**MT03 Universidad Ad** 43.58 165 IAmb IAmb 23 30 36.5
comp=Z,657nm,1.9s
**MT08 Bocatoma Ro** 43.67 164 IAmb IAmb 23 30 37.4
comp=Z,138nm,0.9s
**MT09 Talagante** 43.73 165 IAmb IAmb 23 30 36.4
comp=Z,366nm,1.6s
**PMPB Monarch Peak** 43.87 315 IAmb IAmb 23 30 32.0
comp=Z,510nm,1.2s
**WAKR Walker** 44.12 318 IAmb IAmb 23 30 34.7
comp=Z,223nm,1.1s
WAKR IAMs_20 IAMs_20 23 52 02.2
comp=Z,9µm,21.0s
**HLID Hailey** 44.20 327 ⇑P **P** 23 30 31.4 -0.3
**HLID Hailey** 44.20 327 P **P** 23 30 31.7 0.0
baz=133,SNR=75
HLID S **S** 23 37 06.6 +1.9
baz=133
**BBGB Big Mountain B** 44.21 315 IAmb IAmb 23 30 38.5
comp=Z,222nm,1.0s
**BOZ Bozeman (W)** 44.24 331 ⇑P **P** 23 30 31.7 -0.3
**BOZ Bozeman (W)** 44.24 331 P **P** 23 30 31.8 -0.1
baz=138,SNR=91
BOZ S **S** 23 37 08.1 +3.0
baz=138
**YERR Yerington** 44.25 319 IAmb IAmb 23 30 35.4
comp=Z,130nm,1.0s
**BO01 Tunca** 44.29 166 IAmb IAmb 23 31 01.9
comp=Z,244nm,1.7s
**CMB Columbia Colle** 44.50 317 IAmb IAmb 23 30 36.9
comp=Z,270nm,1.6s
**DLMT Dillon** 44.53 330 IAmb IAmb 23 30 43.1
comp=Z,170nm,1.2s
**SAO San Andreas Ge** 44.59 315 IAmb IAmb 23 30 37.6
comp=Z,633nm,1.8s
**SAO San Andreas Ge** 44.59 315 ⇑P **P** 23 30 35.5 +0.8
**LDASE Londrina, Braz** 44.67 136 *e*P **P** 23 30 33.5 -2.0
**GO05 Huala** 44.68 167 ⇑P **P** 23 30 35.5 +0.1
**PAHR Pah Rah Range** 44.74 320 IAmb IAmb 23 30 39.2
comp=Z,410nm,1.9s
**EMB Emerald Bay** 44.81 318 IAMs_20 IAMs_20 23 52 22.5
comp=Z,8µm,20.0s
**BB19B Bebedouro** 45.04 131 *e*P **P** 23 30 37.4 -1.1
**JANB Januaria** 45.14 121 *e*P **P** 23 30 38.5 -0.9
**PMNB Patos De Minas** 45.19 127 *e*P **P** 23 30 40.2 +0.4
**EGMT Eagleton** 45.25 335 IAmb IAmb 23 30 50.6
comp=Z,367nm,1.8s
**EGMT Eagleton** 45.25 335 ⇑P **P** 23 30 39.4 -0.5
**EGMT Eagleton** 45.25 335 P **P** 23 30 39.6 -0.3
baz=141,SNR=30
EGMT S **S** 23 37 20.4 +0.8
baz=141
**AFDM Forest Hills D** 45.37 318 IAmb IAmb 23 30 43.6
comp=Z,193nm,1.8s
**ML02 Panimavida** 45.52 167 IAmb IAmb 23 30 47.5
comp=Z,272nm,1.4s
**CRSM Crissiumal (Br** 45.66 143 *e*P **P** 23 30 42.5 -0.8
**NBPB Pedra_Branca-C** 45.68 106 *e*P **P** 23 30 43.6 -0.2
**FRTB Fartura** 45.71 135 *e*P **P** 23 30 42.5 -1.4
**DRLN Deer Lake** 45.85 23 IAmb IAmb 23 30 46.5
comp=Z,186nm,0.9s

**DRLN Deer Lake 45.85 23** ⇑P **P** **23 30 44.8 +0.3**
**ITQB Itaqui 45.85 147** IAmb IAmb 23 30 53.2
comp=Z,235nm,1.0s
ITQB IAMs_20 IAMs_20 23 52 34.8
comp=Z,8µm,18.0s
**ITQB Itaqui 45.85 147** *e*P **P** **23 30 44.7 -0.1**
**WVOR Wild Horse Val 45.86 323** IAmb IAmb 23 30 49.3
comp=Z,184nm,1.1s
**WVOR Wild Horse Val 45.86 323** ⇑P **P** **23 30 44.8 -0.1**
**MSO Missoula 46.24 331** ⇑P **P** **23 30 46.9 -0.9**
**MSO Missoula 46.24 331** P **P** **23 30 47.1 -0.7**
baz=136,SNR=43
MSO S **S** **23 37 35.7 +1.8**
baz=136
**MCCM Marconi Confer 46.26 316** ⇑P **P** **23 30 49.1 +1.2**
**PSAL Palomas, Salto 46.47 149** *e*P **P** **23 30 50.0 +0.5**
**NBCL Cascavel-CE 46.54 104** *e*P **P** **23 30 51.2 +0.7**
**RCLB Rio Claro- Sao 46.60 132** *e*P **P** **23 30 50.9 0.0**
**BMO Blue Mountains 46.62 327** ⇑P **P** **23 30 49.0 -1.7**
**ITAB Concordia 46.64 141** *e*P **P** **23 30 50.3 -0.7**
**HATC Hat Creek Radi 46.68 320** IAmb IAmb 23 30 53.8
comp=Z,267nm,1.3s
**HOPS Hopland Field 46.80 317** IAmb IAmb 23 30 55.4
comp=Z,242nm,1.4s
**RODS Rosario do Sul 47.15 146** *e*P **P** **23 30 54.8 -0.2**
**ALGR Alto Alegre (B 47.22 143** *e*P **P** **23 30 54.3 -1.4**
**DIAM Diamantina, MG 47.28 125** *e*P **P** **23 30 55.9 -0.4**
**F10A Beach Ranch, E 47.30 328** IAMs_20 IAMs_20 23 53 25.8
comp=Z,9µm,21.0s
**VAO Valinhos 47.37 132** IAmb IAmb 23 30 57.6
comp=Z,180nm,1.6s
VAO IAMs_20 IAMs_20 23 53 03.1
comp=Z,13µm,18.0s
**VAO Valinhos 47.37 132** *e*P **P** **23 30 55.9 -0.9**
**SPB Sao Paulo 47.39 133** IAMs_20 IAMs_20 23 52 54.8
comp=Z,14µm,18.0s
**SPB Sao Paulo 47.39 133** *e*P **P** **23 30 56.5 -0.4**
**TBOT Tacuaremb 47.80 148** *e*P **P** **23 31 00.2 +0.2**
**BSCB Bom Sucesso 47.85 128** *e*P **P** **23 31 00.5 -0.2**
**K04D Chiloquin, OR 47.85 322** IAmb IAmb 23 31 18.4
comp=Z,103nm,0.9s
**SCHQ Schefferville 47.89 13** P **P** **23 30 59.6 -0.9**
comp=Z,223nm,1.0s,baz=206,slow=6.1,SNR=69
SCHQ PcP **PcP** **23 32 28.5 -0.3**
comp=Z,20nm,0.7s,baz=210,slow=2.2,SNR=2.6
SCHQ S **S** **23 37 54.1 -3.0**
comp=Z,5.3nm,0.9s,baz=224,slow=14,SNR=2.1
SCHQ LR LR 23 52 08.8
comp=Z,14µm,18.9s,baz=199,slow=37
comp=Z,223nm,1.0s
**J05D Fort Rock, OR 47.91 323** IAmb IAmb 23 32 37.7
comp=Z,128nm,1.6s
**PET01 Itanhaem-SP 47.93 134** *e*P **P** **23 31 00.6 -0.5**
**YBH Yreka Blue Hor 47.97 320** LR LR 23 55 43.2
comp=Z,5µm,18.8s,baz=150,slow=42
**E09A Wood Farm, Sta 48.14 328** IAmb IAmb 23 31 03.4
comp=Z,101nm,1.0s
**CPSB Cacapava Do Su 48.18 145** *e*P **P** **23 31 02.6 -0.3**
**KHMM Horse Mountain 48.18 319** IAmb IAmb 23 31 05.6
comp=Z,214nm,1.0s
KHMM IAMs_20 IAMs_20 23 54 08.7
comp=Z,10µm,20.0s
**KMPM Mount Pierce 48.21 318** IAmb IAmb 23 31 06.3
comp=Z,206nm,1.1s
**FFC Flin Flon 48.37 346** P **P** **23 31 03.3 -0.8**
FFC IAmb IAmb 23 31 05.1
comp=Z,142nm,0.9s
**FFC Flin Flon 48.37 346** P **P** **23 31 03.3 -0.8**
FFC pmax pmax
comp=Z,142nm,0.9s
**KRPM Rodgers 48.51 319** IAMs_20 IAMs_20 23 54 27.5
comp=Z,8µm,19.0s
**PARB Paraiuna 48.55 132** *e*P **P** **23 31 05.4 -0.6**
**HUMO Hull Mountain 48.59 321** ⇑P **P** **23 31 04.8 -1.3**
**KRMB Red Mountain 48.62 319** IAmb IAmb 23 31 09.6
comp=Z,364nm,1.4s
KRMB IAMs_20 IAMs_20 23 55 04.4
comp=Z,8µm,20.0s
**G06A Carlson Farm, 48.70 325** IAmb IAmb 23 31 11.8
comp=Z,248nm,1.5s
**L02F Cave Junction 48.72 320** IAmb IAmb 23 32 40.5
comp=Z,157nm,1.8s
L02F IAMs_20 IAMs_20 23 55 36.8
comp=Z,10µm,21.0s
**KSXB Camp Six Broad 48.76 320** IAmb IAmb 23 31 10.4
comp=Z,174nm,1.2s
**NEW Newport 48.78 330** ⇑P **P** **23 31 06.4 -1.1**
**NEW Newport 48.78 330** LR LR 23 56 54.6
comp=Z,5µm,18.1s,baz=134,slow=42
**NEW Newport 48.78 330** P **P** **23 31 06.5 -0.9**
baz=133,SNR=32
NEW S **S** **23 38 09.9 -0.1**
baz=133
**HAWA Hanford 48.80 327** IAmb IAmb 23 31 09.8
comp=Z,171nm,1.6s
**HAWA Hanford 48.80 327** ⇑P **P** **23 31 06.6 -1.0**
**D08A Wollman Farm, 48.90 328** IAmb IAmb 23 32 35.5
comp=Z,299nm,1.9s
**CNLB Canela 48.91 142** *e*P **P** **23 31 08.4 -0.3**
**DBO Dodson Butte 49.04 321** IAmb IAmb 23 32 36.2
comp=Z,244nm,1.9s
**K02D Willamette Mer 49.08 321** IAmb IAmb 23 31 11.7
comp=Z,281nm,1.8s
**E07A Sunnyside 49.08 327** IAmb IAmb 23 31 12.4
comp=Z,122nm,1.3s
**LR04 Corral 49.10 170** IAmb IAmb 23 31 15.8
comp=Z,384nm,1.4s
**PLTB Pedras Altas 49.11 146** IAmb IAmb 23 31 16.8
comp=Z,418nm,1.7s
**PLTB Pedras Altas 49.11 146** *e*P **P** **23 31 10.3 +0.2**
**GO06 Curarrehue 49.17 168** ⇑P **P** **23 31 10.9 +0.3**
**NBLA Lagarto - SE 49.18 113** *e*P **P** **23 31 10.2 -0.7**
**RCBR Riachuelo 49.27 105** P **P** **23 31 12.0 +0.3**
RCBR IAmb IAmb 23 31 13.3
comp=Z,156nm,1.6s
**RCBR Riachuelo 49.27 105** IAMs_20 IAMs_20 23 53 16.7
comp=Z,13µm,19.0s
**RCBR Riachuelo 49.27 105** ⇑P **P** **23 31 11.5 -0.2**
**RCBR Riachuelo 49.27 105** LR LR 23 53 56.3
comp=Z,6µm,18.1s,baz=333,slow=39
**RCBR Riachuelo 49.27 105** P **P** **23 31 12.0 +0.3**
RCBR pmax pmax
comp=Z,156nm,1.7s
RCBR MLR MLR
comp=Z,13µm,19.0s
**RCBR Riachuelo 49.27 105** *e*P **P** **23 31 11.4 -0.2**
**I03D Drain, OR 49.42 322** IAmb IAmb 23 31 14.0
comp=Z,265nm,1.9s
**LPA La Plata 49.44 153** *d i*P **P** **23 31 11.1 -1.4**
LPA PP **PP** **23 33 03.5 -3.4**
LPA S **S** **23 38 15.5 -3.8**
LPA PKIKP **PKiKP** **23 39 29.2 +6.9**
LPA SS SS 23 42 10.5 +19
**BUCK Buck Mountain 49.47 323** IAmb IAmb 23 31 18.1
comp=Z,103nm,1.2s
**J01E Myrtle Point 49.49 321** IAmb IAmb 23 31 15.5
comp=Z,182nm,1.0s
**SJMB Sao Joao De Ma 49.52 124** *e*P **P** **23 31 13.0 -0.5**
**VAS01 Vassouras-RJ 49.59 129** *e*P **P** **23 31 14.3 +0.3**
**GUA01 Guaratinga, BA 49.68 120** *e*P **P** **23 31 14.4 -0.3**
**LR05 Currie 49.69 169** IAmb IAmb 23 31 22.5
comp=Z,249nm,1.4s
LR05 IAMs_20 IAMs_20 23 49 06.2
comp=Z,8µm,18.0s
**COR Corvallis 49.88 323** P **P** **23 31 16.8 +1.0**
COR IAmb IAmb 23 32 44.8
comp=Z,396nm,1.7s
**COR Corvallis 49.88 323** IAMs_20 IAMs_20 23 55 43.3
comp=Z,8µm,20.0s
**COR Corvallis 49.88 323** ⇑P **P** **23 31 15.6 -0.2**
**COR Corvallis 49.88 323** P **P** **23 31 16.8 +1.0**
COR pmax pmax
comp=Z,397nm,1.7s
COR MLR MLR
comp=Z,8µm,20.0s
**NBCA Caruaru-PE 49.88 108** *e*P **P** **23 31 16.5 +0.1**
**LTY Liberty 49.95 327** IAmb IAmb 23 31 21.2
comp=Z,163nm,1.6s
**G03D McMinnville, O 50.20 324** IAmb IAmb 23 31 23.0
comp=Z,140nm,1.2s
**DUB01 Friburgo-RJ 50.31 128** *e*P **P** **23 31 19.6 +0.1**
**RIB01 Linhares ES 50.47 124** *e*P **P** **23 31 20.3 -0.4**
**PLCA Paso Flores 50.47 168** IAmb IAmb 23 31 24.0
comp=Z,120nm,1.0s
**PLCA Paso Flores 50.47 168** ⇑P **P** **23 31 20.6 +0.2**
**PLCA Paso Flores 50.47 168** P **P** **23 31 20.6 +0.2**
comp=Z,58nm,0.8s,baz=343,slow=9.0,SNR=53
PLCA S **S** **23 38 34.7 +1.0**
comp=Z,0.9nm,0.8s,baz=356,slow=22,SNR=1.1
PLCA LR LR 23 48 59.4
comp=Z,3µm,18.3s,baz=18,slow=32
comp=Z,58nm,0.8s
**PLCA Paso Flores 50.47 168** *e*P **P** **23 31 21.0 +0.6**
**TRQA Tornquist 50.48 158** P **P** **23 31 20.3 -0.1**
**TRQA Tornquist 50.48 158** P **P** **23 31 20.3 -0.1**
TRQA pmax pmax
comp=Z,107nm,1.4s
**F04D Rainier, OR 50.55 325** IAmb IAmb 23 31 25.5
comp=Z,196nm,1.3s
**D05A Enumclaw 50.62 326** IAmb IAmb 23 31 25.2
comp=Z,104nm,1.0s
D05A IAMs_20 IAMs_20 23 55 45.7
comp=Z,8µm,21.0s
**FCC Fort Churchill 50.72 353** IAmb IAmb 23 31 34.7
comp=Z,120nm,1.1s
FCC IAMs_20 IAMs_20 23 53 14.9
comp=Z,13µm,21.0s
**F03A Seaside 50.78 324** IAmb IAmb 23 31 27.4
comp=Z,138nm,1.0s
F03A IAMs_20 IAMs_20 23 56 13.0
comp=Z,7µm,19.0s
**ALF01 Guarapari-ES 50.85 125** *e*P **P** **23 31 23.9 +0.5**
**E03A Lebam 51.13 325** IAmb IAmb 23 31 33.9
comp=Z,280nm,1.8s
**RADR Rader Ridge 51.19 325** IAMs_20 IAMs_20 23 56 01.9
comp=Z,9µm,21.0s
**ABR01 Abrolhos, BA 51.25 121** *e*P **P** **23 31 27.3 +0.8**
**WISH Wishkah 51.57 325** IAmb IAmb 23 31 37.7
comp=Z,355nm,1.8s
**NLWA Neilton Lookou 51.78 326** IAMs_20 IAMs_20 23 56 18.4
comp=Z,9µm,21.0s
**NLWA Neilton Lookou 51.78 326** ⇑P **P** **23 31 30.5 +0.3**
**B04A Port Angeles 51.96 327** IAmb IAmb 23 31 41.6
comp=Z,321nm,2.0s
**LL07 Hotel Espejo d 51.97 171** IAMs_20 IAMs_20 23 49 55.5
comp=Z,6µm,18.0s
**GO07 Milladeo Hill, 52.21 171** IAmb IAmb 23 31 49.9
comp=Z,577nm,1.8s
GO07 IAMs_20 IAMs_20 23 48 15.0
comp=Z,10µm,20.0s
**LL02 Futaleuf 52.59 170** IAmb IAmb 23 31 39.9
comp=Z,155nm,1.1s
**LL02 Futaleuf 52.59 170** ⇑P **P** **23 31 36.5 +0.3**
**COYC Coyhaique 54.86 170** IAmb IAmb 23 32 15.6
comp=Z,309nm,1.9s
**COYC Coyhaique 54.86 170** IAMs_20 IAMs_20 23 51 36.0
comp=Z,6µm,18.0s
**COYC Coyhaique 54.86 170** ⇑P **P** **23 31 53.5 +0.9**
**HOLB Holberg 55.92 327** IAmb IAmb 23 33 01.6
comp=Z,286nm,1.7s
**FRB Frobisher Bay 56.02 8** LR LR 23 56 22.7
comp=Z,15µm,19.0s,baz=196,slow=36
**AY03 Cochrane 56.42 171** IAmb IAmb 23 32 10.3
comp=Z,190nm,1.6s
**BBB Bella Bella 56.75 329** IAmb IAmb 23 32 16.2
comp=Z,300nm,1.8s
**BBB Bella Bella 56.75 329** LR LR 00 00 35.9
comp=Z,5µm,19.1s,baz=124,slow=40
**CALA Caldeira 57.12 49** *e*P **P** **23 32 10.8 +1.6**
comp=Z,521nm,1.9s
**PCED Cedros 57.13 49** *e*P **P** **23 32 10.8 +1.6**
**PCAN Candelaria 57.25 50** *e*P **P** **23 32 10.4 +0.3**
comp=Z,500nm,2.1s
**PICO Pico 57.30 50** *e*P **P** **23 32 12.4 +1.9**
comp=Z,724nm,1.4s
**PPNO Prainha do Nor 57.42 50** *e*P **P** **23 32 12.4 +1.1**
comp=Z,588nm,1.1s
**ROSA Rosais 57.50 49** *e*P **P** **23 32 12.9 +1.1**
comp=Z,728nm,1.6s
**PMAN Manadas 57.59 50** *e*P **P** **23 32 13.4 +0.9**
comp=Z,800nm,2.0s
**GO08 Villa O'Higgin 57.61 172** IAmb IAmb 23 32 22.2
comp=Z,264nm,1.8s
**PSBA Serra de Santa 58.20 50** *e*P **P** **23 32 17.3 +0.5**
comp=Z,372nm,1.2s
**PAGU Agualva, Azore 58.31 50** *e*P **P** **23 32 18.2 +0.7**
comp=Z,397nm,1.1s
**PSCM Serra do Cume 58.34 50** *e*P **P** **23 32 19.5 +1.7**
comp=Z,231nm,1.5s
**YKA Yellowknife Ar 58.42 343** P **P** **23 32 16.6 -1.2**
**YKA Yellowknife Ar 58.42 343** P **P** **23 32 16.8 -1.0**
comp=Z,69nm,0.7s,baz=139,slow=6.9,SNR=159
YKA PcP **PcP** **23 33 08.6 +0.2**
comp=Z,13nm,0.8s,baz=151,slow=4.7,SNR=4.7
YKA S **S** **23 40 17.7 -2.4**
comp=Z,0.9nm,0.7s,baz=221,slow=14,SNR=1.7
YKA LR LR 23 58 51.5
comp=Z,8µm,18.6s,baz=145,slow=38
comp=Z,69nm,0.7s
**IVI Ivigtut 58.50 19** IAmb IAmb 23 32 18.5
comp=Z,121nm,1.3s
**GRNB Grenville Isla 58.59 330** IAmb IAmb 23 32 22.0
comp=Z,215nm,1.7s
**PSET Sete Cidades 59.18 51** *e*P **P** **23 32 24.2 +0.6**
comp=Z,491nm,1.7s
**CMLA Cha da Macela 59.32 51** P **P** **23 32 26.1 +1.5**
**CMLA Cha da Macela 59.32 51** IAMs_20 IAMs_20 23 55 34.3
comp=Z,6µm,20.0s
**CMLA Cha da Macela 59.32 51** P **P** **23 32 26.1 +1.5**
CMLA pmax pmax
comp=Z,523nm,1.7s
CMLA MLR MLR
comp=Z,6µm,20.0s
**TAOE Nuku Hiva Isla 59.35 254** *e*PKIKP **P** **23 32 22.0 -3.2**
comp=Z,1µm,25.7s
TAOE *e*S **S** **23 40 32.4 -1.5**
comp=Z,3µm,27.1s
TAOE *e*SS **SS** **23 44 31.3 +2.3**
comp=Z,2µm,27.4s
TAOE *e*LQ LQ 23 47 24.1
comp=Z,16µm,30.8s
TAOE *e*LR LR 23 49 42.3
comp=Z,5µm,23.6s
**TOAD Toad River Com 59.41 336** P **P** **23 32 23.9 -0.9**
baz=130,SNR=33
**PGRON Lagoa das Cont 59.44 51** *e*P **P** **23 32 24.4 -1.0**
comp=Z,556nm,1.9s
**PSMN Pico do Norte, 59.50 52** *e*P **P** **23 32 25.7 -0.1**
comp=Z,354nm,1.8s
**DIB Dawson Inlet, 59.55 328** IAmb IAmb 23 32 35.7
comp=Z,165nm,1.8s
**BART Pico Bartolome 59.60 51** *e*P **P** **23 32 26.6 0.0**
comp=Z,35nm,0.8s
**RKT Rikitea 59.68 237** *e*P **P** **23 32 29.2 +2.0**
comp=Z,5µm,27.0s
**RKT Rikitea 59.68 237** *e*PP **PP** **23 34 40.9 +1.7**
comp=Z,2µm,33.8s
RKT *e*S **S** **23 40 32.4 -5.2**
comp=Z,20µm,30.8s
RKT *e*SS **SS** **23 44 32.5 -1.3**
comp=Z,15µm,31.0s
RKT *e*LQ LQ 23 47 40.0
comp=Z,34µm,29.8s
RKT *e*LR LR 23 50 07.2
comp=Z,32µm,23.2s
**U35K Hyder 59.75 332** IAMs_20 IAMs_20 00 02 51.7
comp=Z,8µm,19.0s
**U35K Hyder 59.75 332** P **P** **23 32 27.5 +0.4**
baz=123
**KOTAN Kotaneelee Air 59.79 338** P **P** **23 32 27.1 -0.3**
baz=132,SNR=7.2
**LIRD Liard River Hi 60.11 336** P **P** **23 32 29.1 -0.5**
baz=129,SNR=10
**V35K Ketchikan 60.19 330** IAmb IAmb 23 32 37.5
comp=Z,193nm,1.9s
**V35K Ketchikan 60.19 330** P **P** **23 32 30.7 +0.6**
baz=121
V35K S **S** **23 40 48.4 +5.2**
baz=121
V35K S **S** **23 40 48.4 +5.2**
baz=121
**GO09 Cerro Castillo 60.38 172** P **P** **23 32 35.0 +3.5**
GO09 IAmb IAmb 23 32 37.1
comp=Z,287nm,1.8s
**T35M Bob Quinn 60.44 333** IAmb IAmb 23 32 34.6
comp=Z,273nm,1.7s
T35M IAMs_20 IAMs_20 00 00 52.9
comp=Z,7µm,19.0s
**T35M Bob Quinn 60.44 333** P **P** **23 32 32.8 +0.9**
baz=124,SNR=38
T35M S **S** **23 40 52.2 +5.7**
baz=124
**CRAG Craig 61.00 330** P **P** **23 32 37.5 +1.8**
**CRAG Craig 61.00 330** P **P** **23 32 36.5 +0.8**
baz=120
**WRAK Wrangell Islan 61.11 331** IAMs_20 IAMs_20 00 03 45.2
comp=Z,6µm,20.0s
**WRAK Wrangell Islan 61.11 331** P **P** **23 32 36.6 +0.2**
baz=121
WRAK S **S** **23 40 58.5 +3.6**
baz=121
**DLBC Dease Lake 61.16 334** IAmb IAmb 23 32 39.2
comp=Z,147nm,1.1s
DLBC IAMs_20 IAMs_20 00 02 25.9
comp=Z,8µm,20.0s
**DLBC Dease Lake 61.16 334** LR LR 00 02 27.1
comp=Z,8µm,18.9s,baz=118,slow=39
**DLBC Dease Lake 61.16 334** P **P** **23 32 37.4 +0.5**
baz=124,SNR=86
DLBC S **S** **23 40 58.8 +3.1**
baz=124
**U33K Whale Pass 61.33 331** IAmb IAmb 23 32 40.1
comp=Z,107nm,1.4s
U33K IAMs_20 IAMs_20 00 02 44.6
comp=Z,5µm,18.0s
**U33K Whale Pass 61.33 331** P **P** **23 32 38.3 +0.4**
baz=120,SNR=8.0
U33K S **S** **23 41 01.4 +3.8**
baz=120
U33K S **S** **23 41 01.4 +3.8**
baz=120
**S34M Telegraph Cree 61.35 333** IAMs_20 IAMs_20 00 01 36.0
comp=Z,7µm,20.0s
**S34M Telegraph Cree 61.35 333** P **P** **23 32 38.6 +0.6**
baz=123,SNR=23
S34M S **S** **23 41 02.6 +4.6**
baz=123
**T33K Petersburg 61.60 331** P **P** **23 32 40.0 +0.2**
baz=121
**WTLY Watson Lake, Y 61.62 336** IAmb IAmb 23 32 41.5
comp=Z,218nm,1.1s
WTLY IAMs_20 IAMs_20 00 01 59.0
comp=Z,10µm,19.0s
**WTLY Watson Lake, Y 61.62 336** P **P** **23 32 40.0 +0.1**
baz=126,SNR=14
WTLY S **S** **23 41 02.9 +1.5**
baz=126
**WRGLY Wrigley 61.68 341** IAmb IAmb 23 32 41.1
comp=Z,167nm,0.9s
WRGLY IAMs_20 IAMs_20 23 59 40.2
comp=Z,6µm,20.0s
**WRGLY Wrigley 61.68 341** P **P** **23 32 39.6 -0.5**
baz=133,SNR=5.3
WRGLY S **S** **23 41 02.1 +0.2**
baz=133
**R33M Jennings River 62.10 335** IAmb IAmb 23 32 46.8
comp=Z,118nm,1.1s
R33M IAMs_20 IAMs_20 00 04 40.8
comp=Z,9µm,19.0s
**R33M Jennings River 62.10 335** P **P** **23 32 43.5 +0.2**
baz=124,SNR=72
R33M S **S** **23 41 10.1 +2.4**
baz=124
**TGTN Hyland Airport 62.27 337** P **P** **23 32 44.8 +0.5**
baz=128,SNR=12
TGTN S **S** **23 41 11.0 +1.3**
baz=128
**SFJD Kangerlussuaq 62.32 14** P **P** **23 32 42.3 -2.0**
SFJD IAmb IAmb 23 32 43.9
comp=Z,136nm,0.9s
**SFJD Kangerlussuaq 62.32 14** LR LR 23 59 31.5
comp=Z,13µm,20.9s,baz=224,slow=36
**SFJD Kangerlussuaq 62.32 14** P **P** **23 32 42.3 -2.0**
SFJD pmax pmax
comp=Z,136nm,1.0s
SFJD MLR MLR
comp=Z,15µm,19.0s
**SFJD Kangerlussuaq 62.32 14** *i*P **P** **23 32 42.0 -2.4**
SFJD IAmb IAmb 23 32 44.2
comp=Z,51nm,0.8s
**Q32M Nakina River 62.42 334** IAmb IAmb 23 32 48.0
comp=Z,93nm,1.1s
Q32M IAMs_20 IAMs_20 00 03 59.3
comp=Z,7µm,19.0s
**Q32M Nakina River 62.42 334** P **P** **23 32 46.4 +0.8**
baz=122,SNR=29
Q32M S **S** **23 41 14.3 +2.3**
baz=122
**S32K Killisnoo 62.70 332** IAMs_20 IAMs_20 00 02 08.8
comp=Z,6µm,19.0s
**S32K Killisnoo 62.70 332** P **P** **23 32 47.7 +0.6**
baz=120,SNR=13
**SIT Sitka 62.85 331** P **P** **23 32 49.7 +1.6**
**SIT Sitka 62.85 331** P **P** **23 32 50.1 +2.0**
SIT IAMs_20 IAMs_20 00 03 36.9
comp=Z,6µm,18.0s
**SIT Sitka 62.85 331** P **P** **23 32 48.2 +0.1**
baz=119
SIT S **S** **23 41 21.1 +4.1**
baz=119
**SIT Sitka 62.85 331** P **P** **23 32 50.1 +2.0**
SIT pmax pmax
comp=Z,100nm,1.7s
SIT MLR MLR
comp=Z,6µm,18.0s
**DY2G Dye2 63.01 16** *i*P **P** **23 32 46.7 -2.6**
DY2G IAmb IAmb 23 32 48.8
comp=Z,47nm,0.7s
**JIS Juneau Island 63.01 332** P **P** **23 32 50.1 +0.9**
**R32K Eaglecrest 63.07 332** IAMs_20 IAMs_20 00 02 43.6
comp=Z,9µm,21.0s
**R32K Eaglecrest 63.07 332** P **P** **23 32 49.9 +0.3**
baz=120,SNR=9.7
**MG03 Isla Dawson 63.16 172** IAmb IAmb 23 33 07.3
comp=Z,215nm,1.4s
**P33M Teslin, Yukon 63.34 335** IAmb IAmb 23 32 53.2
comp=Z,86nm,1.1s
P33M IAMs_20 IAMs_20 00 03 08.3
comp=Z,9µm,19.0s
**P33M Teslin, Yukon 63.34 335** P **P** **23 32 51.4 0.0**
baz=122,SNR=62
P33M S **S** **23 41 26.5 +3.4**
baz=122
**P32M Atlin 63.39 334** IAmb IAmb 23 32 53.7
comp=Z,148nm,1.5s
P32M IAMs_20 IAMs_20 00 05 26.8
comp=Z,10µm,19.0s
**P32M Atlin 63.39 334** P **P** **23 32 52.0 +0.2**
baz=121,SNR=16
P32M S **S** **23 41 25.8 +2.1**
baz=121
**R31K City Hall, Gus 63.70 332** P **P** **23 32 54.1 +0.4**
baz=119
**S31K Pelican 63.72 332** IAmb IAmb 23 32 56.2
comp=Z,95nm,1.1s
S31K IAMs_20 IAMs_20 00 05 04.7
comp=Z,8µm,20.0s
**S31K Pelican 63.72 332** P **P** **23 32 54.5 +0.7**
baz=118,SNR=20
S31K S S 23 41 16.2 -11
baz=118
S31K S S 23 41 16.2 -11
baz=118
**EFI East Falkland 63.83 163** IAMs_20 IAMs_20 00 03 32.2
comp=Z,5µm,19.0s
**EFI East Falkland 63.83 163** ⇑*e*P **P** **23 32 54.9 +0.3**
EFI pmax pmax
comp=Z,50nm,1.7s
EFI MLR MLR
comp=Z,2µm,19.0s
**N32M Quiet Lake 63.95 336** IAmb IAmb 23 32 57.2
comp=Z,118nm,1.1s
N32M IAMs_20 IAMs_20 00 03 22.4
comp=Z,8µm,21.0s
**N32M Quiet Lake 63.95 336** P **P** **23 32 55.6 +0.2**
baz=123
N32M S **S** **23 41 30.3 -0.4**
baz=123
**SKAG Skagway 64.03 333** P **P** **23 32 57.0 +1.1**
**SKAG Skagway 64.03 333** IAmb IAmb 23 32 57.9
comp=Z,196nm,1.8s
SKAG IAMs_20 IAMs_20 00 05 26.9
comp=Z,7µm,20.0s
**SKAG Skagway 64.03 333** P **P** **23 32 56.3 +0.4**
baz=120,SNR=7.2
SKAG S **S** **23 41 34.8 +3.2**
baz=120
**MMPY Sheldon Lake, 64.06 338** IAmb IAmb 23 32 58.1
comp=Z,163nm,1.0s
MMPY IAMs_20 IAMs_20 00 02 27.2
comp=Z,8µm,22.0s
**MMPY Sheldon Lake, 64.06 338** P **P** **23 32 56.6 +0.4**

baz=125,SNR=57
MMPY S **S** **23 41 33.5 +1.5**
baz=125
**USHA Ushuaia 64.42 171** LR LR 23 57 19.5
comp=Z,3µm,18.2s,baz=355,slow=32
**WHY Whitehorse 64.44 335** IAmb IAmb 23 33 07.2
comp=Z,147nm,1.9s
WHY IAMs_20 IAMs_20 00 03 42.6
comp=Z,8µm,20.0s
**WHY Whitehorse 64.44 335** P **P** **23 32 58.5 -0.2**
baz=121,SNR=14
WHY S **S** **23 41 38.0 +1.1**
baz=121
**PLBC Pleasant Camp 64.49 333** P **P** **23 32 59.5 +0.6**
baz=119,SNR=14
PLBC S **S** **23 41 42.2 +4.9**
baz=119
**ISOG Isortoq, Green 64.50 19** *i* P **P** **23 32 56.3 -2.5**
ISOG IAmb IAmb 23 32 58.7
comp=Z,47nm,0.9s
**FARO Faro, Yukon 64.64 337** IAmb IAmb 23 33 01.6
comp=Z,89nm,1.3s
FARO IAMs_20 IAMs_20 00 04 33.8
comp=Z,8µm,19.0s
**FARO Faro, Yukon 64.64 337** P **P** **23 33 00.1 +0.1**
baz=123,SNR=20
**ANGG Ammassalik, Gr 64.97 19** IAmb IAmb 23 33 01.2
comp=Z,133nm,1.1s
ANGG IAMs_20 IAMs_20 23 59 22.6
comp=Z,7µm,20.0s
**ANGG Ammassalik, Gr 64.97 19** *i* P **P** **23 32 59.0 -2.9**
ANGG IAmb IAmb 23 33 01.5
comp=Z,37nm,0.9s
**UMMG Uummannaq 65.01 11** *i* P **P** **23 33 00.3 -1.7**
UMMG IAmb IAmb 23 33 01.9
comp=Z,28nm,0.7s
**O30N Mendenhall 65.01 334** IAmb IAmb 23 33 04.3
comp=Z,84nm,1.0s
O30N IAMs_20 IAMs_20 00 04 11.7
comp=Z,10µm,20.0s
**O30N Mendenhall 65.01 334** P **P** **23 33 02.4 +0.1**
baz=120,SNR=37
O30N S **S** **23 41 45.4 +1.6**
baz=120
**M31M Drury Creek, Y 65.04 336** IAmb IAmb 23 33 09.5
comp=Z,85nm,1.1s
M31M IAMs_20 IAMs_20 00 03 42.4
comp=Z,7µm,19.0s
**M31M Drury Creek, Y 65.04 336** P **P** **23 33 02.6 +0.1**
baz=122,SNR=30
M31M S **S** **23 41 45.6 +1.5**
baz=122
**P30M Million Dollar 65.08 334** P **P** **23 33 03.5 +0.7**
baz=118
P30M S **S** **23 41 47.0 +2.4**
baz=118
**P29M Windy Craggy 65.19 333** IAmb IAmb 23 33 05.8
comp=Z,126nm,1.0s
P29M IAMs_20 IAMs_20 00 06 47.5
comp=Z,7µm,20.0s
**P29M Windy Craggy 65.19 333** P **P** **23 33 04.1 +0.6**
baz=117,SNR=45
P29M S **S** **23 41 47.0 +1.0**
baz=117
**PMOZ Porto Moniz, M 65.21 58** *e* P **P** **23 33 04.8 +0.6**
comp=Z,242nm,1.4s
PMOZ *e* S **S** **23 41 51.2 +3.9**
**PMOZ Porto Moniz, M 65.21 58** *e* LR LR 23 54 07.7
comp=Z,2µm,18.0s
**PMOZ Porto Moniz, M 65.21 58** P **P** **23 33 03.7 -0.5**
**N31M Braeburn, Yuko 65.24 335** IAmb IAmb 23 33 05.7
comp=Z,96nm,1.0s
N31M IAMs_20 IAMs_20 00 04 14.6
comp=Z,8µm,18.0s
**N31M Braeburn, Yuko 65.24 335** P **P** **23 33 04.0 +0.2**
baz=120,SNR=31
N31M S **S** **23 41 48.3 +1.8**
baz=120
**BBTS Babate 65.36 78** LR LR 00 00 32.1
comp=Z,3µm,20.3s,baz=147,slow=35
**PMAR Madeira 65.43 58** *e* P **P** **23 33 05.9 +0.1**
comp=Z,247nm,1.8s
**MACI Morro de la Ar 65.44 63** P **P** **23 33 07.4 +1.5**
**FUL Funchal 65.44 58** *e* P **P** **23 33 05.8 +0.2**
comp=Z,153nm,1.9s
**NUUG Nuugaatsiaq 65.54 10** *i* P **P** **23 33 04.0 -1.5**
NUUG IAmb IAmb 23 33 06.0
comp=Z,72nm,0.7s
**N30M Aishikik Lake 65.77 335** IAmb IAmb 23 33 09.6
comp=Z,98nm,1.1s
**N30M Aishikik Lake 65.77 335** P **P** **23 33 07.9 +0.6**
baz=119,SNR=47
N30M S **S** **23 41 53.7 +0.6**
baz=119
**O29M Mount Kennedy 65.87 333** IAMs_20 IAMs_20 00 07 04.6
comp=Z,9µm,20.0s
**O29M Mount Kennedy 65.87 333** P **P** **23 33 08.3 +0.3**
baz=117,SNR=13
O29M S **S** **23 41 57.1 +2.6**
baz=117
**PMPS Porto Santo 65.95 58** *e* P **P** **23 33 09.7 +0.8**
comp=Z,516nm,1.8s
**PMPST Porto Santo, M 65.95 58** *e* P **P** **23 33 09.5 +0.6**
comp=Z,389nm,1.6s
**PNL Peninsula 65.96 332** P **P** **23 33 09.6 +1.1**
**PNL Peninsula 65.96 332** P **P** **23 33 09.0 +0.5**
baz=116,SNR=14
PNL S **S** **23 41 58.4 +3.0**
baz=116
**YUK6 Outpost Mounta 66.07 334** P **P** **23 33 10.3 +0.8**
baz=117,SNR=29
YUK6 S **S** **23 42 00.6 +3.5**
baz=117
**UPNV Upernavik 66.14 9** *i* P **P** **23 33 07.0 -2.4**
UPNV IAmb IAmb 23 33 11.0
comp=Z,54nm,0.7s
**C36M Paulatuk 66.14 345** P **P** **23 33 07.9 -1.6**
baz=135
C36M S **S** **23 41 55.6 -1.6**
baz=135
**BCPM Bancas Point 66.19 333** IAmb IAmb 23 33 12.4
comp=Z,88nm,1.0s
BCPM IAMs_20 IAMs_20 00 04 35.1
comp=Z,8µm,20.0s
**EOSO Osorio 66.27 63** P **P** **23 33 11.4 +0.2**
**RES Resolute Bay 66.36 357** LR LR 00 03 13.0
comp=Z,13µm,18.5s,baz=162,slow=37
**YUK4 Talbot Arm 66.38 334** P **P** **23 33 11.9 +0.5**
baz=117,SNR=18
YUK4 S **S** **23 42 03.3 +2.5**
baz=117
**PINM Pinnacle 66.53 333** P **P** **23 33 13.0 +0.8**
baz=115,SNR=18
PINM S **S** **23 42 05.5 +3.1**
baz=115
**ICESG Greenland Ices 66.64 16** *i* P **P** **23 33 10.7 -2.4**
ICESG IAmb IAmb 23 33 12.8
comp=Z,113nm,0.7s
**O28M Mount Upton 66.80 333** P **P** **23 33 15.0 +0.8**
baz=116,SNR=28
O28M S **S** **23 42 06.5 +0.4**
baz=116
**M29M Somme Creek 66.81 335** IAmb IAmb 23 33 16.2
comp=Z,160nm,1.1s
M29M IAMs_20 IAMs_20 00 07 29.2
comp=Z,7µm,19.0s
**M29M Somme Creek 66.81 335** P **P** **23 33 14.5 +0.5**
baz=118,SNR=128
M29M S **S** **23 42 07.6 +1.7**
baz=118
**YUK8 Steele Glacier 66.83 334** P **P** **23 33 15.0 +0.6**
baz=116,SNR=34
**J30M Hart River 67.03 338** IAMs_20 IAMs_20 00 03 23.7
comp=Z,9µm,21.0s
**J30M Hart River 67.03 338** P **P** **23 33 15.8 +0.4**
baz=121,SNR=109
J30M S **S** **23 42 10.1 +1.8**
baz=121
**TABL Table Mountain 67.08 333** IAmb IAmb 23 33 20.2
comp=Z,110nm,0.9s
TABL IAMs_20 IAMs_20 00 07 56.6
comp=Z,7µm,20.0s
**K29M Barlow Dome 67.11 337** IAMs_20 IAMs_20 00 04 22.9
comp=Z,7µm,21.0s
**K29M Barlow Dome 67.11 337** P **P** **23 33 15.9 +0.1**
baz=119,SNR=90
K29M S **S** **23 42 10.2 +0.8**
baz=119
**LOGN Logan Glacier 67.18 333** IAmb IAmb 23 33 18.9
comp=Z,131nm,1.2s
LOGN IAMs_20 IAMs_20 00 07 46.1
comp=Z,6µm,19.0s
**MESA MESA 67.34 332** IAmb IAmb 23 33 20.3
comp=Z,138nm,1.1s
**MESA MESA 67.34 332** P **P** **23 33 18.5 +1.0**
baz=114,SNR=19
MESA S **S** **23 42 15.6 +3.1**
baz=114
**YUK3 Moose Creek 67.35 334** P **P** **23 33 18.0 +0.4**
baz=116,SNR=14
YUK3 S **S** **23 42 13.4 +0.9**
baz=116
**I30M Mount Dempster 67.38 339** P **P** **23 33 18.1 +0.5**
baz=121,SNR=183
I30M S **S** **23 42 14.6 +2.0**
baz=121
**CTGM Chitina Glacie 67.39 333** IAmb IAmb 23 33 21.7
comp=Z,74nm,0.9s
CTGM IAMs_20 IAMs_20 00 07 51.6
comp=Z,7µm,19.0s
**CTG Chitna Glacier 67.39 333** P **P** **23 33 18.5 +0.7**
baz=114,SNR=33
**GRNC Granite Creek 67.48 333** IAmb IAmb 23 33 20.8
comp=Z,95nm,1.0s
GRNC IAMs_20 IAMs_20 00 08 06.9
comp=Z,6µm,19.0s
**G31M Satah River 67.56 341** IAMs_20 IAMs_20 00 07 21.6
comp=Z,7µm,19.0s
**G31M Satah River 67.56 341** P **P** **23 33 18.7 +0.2**
baz=124,SNR=111
G31M S **S** **23 42 15.0 +0.6**
baz=124
**KULLO Kullorsuaq 67.58 7** *i* P **P** **23 33 17.0 -1.5**
KULLO IAmb IAmb 23 33 19.6
comp=Z,88nm,1.1s
**J29N Klondike Camp 67.67 337** IAmb IAmb 23 33 21.4
comp=Z,152nm,0.9s
J29N IAMs_20 IAMs_20 00 04 31.8
comp=Z,7µm,21.0s
**J29N Klondike Camp 67.67 337** P **P** **23 33 19.8 +0.4**
baz=119,SNR=16
**F31M Tsiigehtchic 67.68 341** IAMs_20 IAMs_20 00 04 28.8
comp=Z,7µm,19.0s
**F31M Tsiigehtchic 67.68 341** P **P** **23 33 19.4 +0.2**
baz=124,SNR=53
F31M S **S** **23 42 16.7 +0.9**
baz=124
**ISLE Juniper Island 67.69 333** IAmb IAmb 23 33 21.9
comp=Z,113nm,1.1s
ISLE IAMs_20 IAMs_20 00 08 26.6
comp=Z,8µm,20.0s
**SNH Sunshine Point 67.75 332** IAmb IAmb 23 33 23.0
comp=Z,178nm,1.1s
**BGLC Bering Glacier 67.94 332** P **P** **23 33 22.6 +1.6**
baz=112
**DAWY Dawson 67.94 337** IAmb IAmb 23 33 22.4
comp=Z,93nm,0.9s
DAWY IAMs_20 IAMs_20 00 05 08.0
comp=Z,6µm,20.0s
**DAWY Dawson 67.94 337** P **P** **23 33 21.0 -0.1**
baz=118,SNR=31
DAWY S **S** **23 42 18.4 -0.8**
baz=118
**TGL Tana Glacier 67.97 333** IAmb IAmb 23 33 23.7
comp=Z,126nm,1.0s
TGL IAMs_20 IAMs_20 00 08 44.1
comp=Z,7µm,19.0s
**CRQE Cirque 68.09 333** P **P** **23 33 23.0 +0.8**
baz=113,SNR=22
**EPYK Eagle Plains 68.09 340** P **P** **23 33 22.4 +0.4**
baz=121,SNR=72
EPYK S **S** **23 42 22.5 +1.6**
baz=121
**INK Inuvik 68.11 342** LR LR 00 06 21.2
comp=Z,12µm,18.2s,baz=122,slow=39
**INK Inuvik 68.11 342** P **P** **23 33 22.2 +0.3**
baz=125,SNR=60
INK S **S** **23 42 22.1 +1.3**
baz=125
**CRQM Cirque 68.11 333** IAmb IAmb 23 33 24.5
comp=Z,106nm,1.0s
CRQM IAMs_20 IAMs_20 00 08 39.2
comp=Z,8µm,19.0s
**I29M Ogilvie Camp, 68.15 338** P **P** **23 33 22.5 +0.2**
baz=119,SNR=136
I29M S **S** **23 42 23.4 +1.8**
baz=119
**M27K Edge Creek, AK 68.20 335** IAmb IAmb 23 33 25.2
comp=Z,116nm,1.0s
**M27K Edge Creek, AK 68.20 335** P **P** **23 33 23.4 +0.6**
baz=114,SNR=89
M27K S **S** **23 42 24.5 +1.9**
baz=114
M27K S **S** **23 42 24.5 +1.9**
baz=114
**G30M tAoh Zraii Nji 68.24 340** P **P** **23 33 22.8 0.0**
baz=122,SNR=12
G30M S **S** **23 42 23.7 +1.0**
baz=122
**A36M Sachs Harbour 68.29 347** P **P** **23 33 22.0 -1.0**
baz=134,SNR=6.1
A36M S **S** **23 42 21.8 -1.2**
baz=134
**MCARA McCarthy VSAT 68.31 333** IAmb IAmb 23 33 26.1
comp=Z,188nm,1.1s
MCARA IAMs_20 IAMs_20 00 08 21.8
comp=Z,7µm,20.0s
**MCARA McCarthy VSAT 68.31 333** P **P** **23 33 24.4 +1.1**
baz=113,SNR=31
MCARA S **S** **23 42 26.9 +3.3**
baz=113
**TULEG Thule 68.33 4** *i* P **P** **23 33 21.2 -2.0**
**KAIM Kayak Island 68.39 332** IAmb IAmb 23 33 26.9
comp=Z,170nm,1.0s
KAIM IAMs_20 IAMs_20 00 07 16.3
comp=Z,6µm,20.0s
**KAIM Kayak Island 68.39 332** P **P** **23 33 25.0 +1.1**
baz=111,SNR=21
KAIM S **S** **23 42 28.4 +3.8**
baz=111
**F30M Barrier River 68.43 341** P **P** **23 33 24.6 +0.6**
baz=122,SNR=140
F30M S **S** **23 42 27.4 +2.5**
baz=122
**VRDI Verde Repeater 68.44 333** IAmb IAmb 23 33 26.7
comp=Z,108nm,1.0s
VRDI IAMs_20 IAMs_20 00 08 26.3
comp=Z,6µm,19.0s
**BCAR Beaver Creek A 68.46 335** P **P** **23 33 24.6 +0.2**
**HMT Hamilton 68.47 332** IAmb IAmb 23 33 27.0
comp=Z,128nm,0.9s
**L27K Beaver Creek, 68.48 335** IAMs_20 IAMs_20 00 05 53.2
comp=Z,6µm,19.0s
**L27K Beaver Creek, 68.48 335** P **P** **23 33 25.1 +0.6**
baz=115,SNR=244
L27K S **S** **23 42 26.9 +1.3**
baz=115
**H29M Whitestone 68.59 339** IAmb IAmb 23 33 27.3
comp=Z,141nm,0.9s
**H29M Whitestone 68.59 339** P **P** **23 33 25.7 +0.7**
baz=119,SNR=68
H29M S **S** **23 42 29.9 +3.0**
baz=119
**GLB Gilahina Butte 68.68 333** IAmb IAmb 23 33 28.2
comp=Z,154nm,1.0s
GLB IAMs_20 IAMs_20 00 08 32.7
comp=Z,7µm,19.0s
**RAGM Ragged Mountai 68.68 332** IAmb IAmb 23 33 28.4
comp=Z,146nm,1.0s
**M26K Nabesna, AK 68.70 334** IAmb IAmb 23 33 28.1
comp=Z,71nm,1.1s
M26K IAMs_20 IAMs_20 00 06 24.1
comp=Z,9µm,20.0s
**M26K Nabesna, AK 68.70 334** P **P** **23 33 26.3 +0.4**
baz=113,SNR=45
M26K S **S** **23 42 31.0 +2.7**
baz=113
M26K S **S** **23 42 31.0 +2.7**
baz=113
**I28M Miner Creek 68.79 338** P **P** **23 33 26.7 +0.3**
baz=117,SNR=124
I28M S **S** **23 42 31.6 +2.2**
baz=117
**G29M Pine Creek 68.81 340** P **P** **23 33 26.9 +0.5**
baz=120,SNR=138
G29M S **S** **23 42 31.7 +2.3**
baz=120
**BMRM Bremner River 68.86 333** P **P** **23 33 27.7 +0.8**
baz=111,SNR=39
BMRM S **S** **23 42 32.0 +1.8**
baz=111
**EGAK Eagle 68.95 337** IAmb IAmb 23 33 29.0
comp=Z,132nm,1.0s
EGAK IAMs_20 IAMs_20 00 04 29.5
comp=Z,6µm,21.0s
**EGAK Eagle 68.95 337** P **P** **23 33 27.5 +0.3**
baz=116,SNR=80
EGAK S **S** **23 42 31.1 0.0**
baz=116
**K27K Chicken 68.98 336** IAmb IAmb 23 33 30.1
comp=Z,83nm,0.8s
K27K IAMs_20 IAMs_20 00 05 43.5
comp=Z,6µm,19.0s
**K27K Chicken 68.98 336** P **P** **23 33 28.6 +1.1**
baz=115
K27K S **S** **23 42 34.8 +3.2**
baz=115
K27K S **S** **23 42 34.8 +3.2**
baz=115
**N25K Chitina, Valde 69.09 333** IAMs_20 IAMs_20 00 08 45.6
comp=Z,6µm,19.0s
**N25K Chitina, Valde 69.09 333** P **P** **23 33 29.3 +1.0**
baz=112,SNR=30
N25K S **S** **23 42 35.2 +2.2**
baz=112
**L26K Log Cabin Wild 69.09 335** IAmb IAmb 23 33 30.7
comp=Z,149nm,1.1s
L26K IAMs_20 IAMs_20 00 06 24.6
comp=Z,8µm,20.0s
**L26K Log Cabin Wild 69.09 335** P **P** **23 33 29.0 +0.7**
baz=113,SNR=35
L26K S **S** **23 42 36.0 +3.0**
baz=113
L26K S **S** **23 42 36.0 +3.0**
baz=113
**MID Middleton Isla 69.13 331** P **P** **23 33 30.4 +1.9**
**Q23K Middleton Isla 69.14 331** P **P** **23 33 29.3 +0.8**
baz=109
Q23K S **S** **23 42 35.7 +2.3**
baz=109
Q23K S **S** **23 42 35.7 +2.3**
baz=109
**MENT Mentasta 69.22 335** P **P** **23 33 30.0 +1.0**
**MENT Mentasta 69.22 335** IAmb IAmb 23 33 31.2
comp=Z,68nm,0.8s
**EYAK Cordova Ski Ar 69.23 332** P **P** **23 33 30.1 +1.0**
**EYAK Cordova Ski Ar 69.23 332** P **P** **23 33 29.9 +0.8**
baz=110,SNR=42
EYAK S **S** **23 42 37.1 +2.6**
baz=110
**SUMG Summit 69.28 13** P **P** **23 33 28.5 -1.2**
**SUMG Summit 69.28 13** P **P** **23 33 28.5 -1.2**
SUMG pmax pmax
comp=Z,545nm,1.0s
**SUMG Summit 69.28 13** *i* P **P** **23 33 27.7 -2.0**
SUMG IAmb IAmb 23 33 30.7
comp=Z,230nm,0.8s
**I27K Kandik River 69.48 338** P **P** **23 33 31.4 +0.8**
baz=116,SNR=283
I27K S **S** **23 42 39.6 +2.1**
baz=116
I27K S **S** **23 42 39.6 +2.1**
baz=116
**E29M Blow River 69.52 341** IAmb IAmb 23 33 32.9
comp=Z,253nm,1.4s
**E29M Blow River 69.52 341** P **P** **23 33 31.1 +0.4**
baz=120,SNR=50
E29M S **S** **23 42 39.3 +1.6**
baz=120
**HIN Hinchinbrook I 69.53 332** IAmb IAmb 23 33 33.2
comp=Z,211nm,1.2s
**HARP HAARP 69.63 334** P **P** **23 33 31.9 +0.4**
baz=111,SNR=17
HARP S **S** **23 42 41.7 +2.5**
baz=111
**KLU Klutina 69.64 333** P **P** **23 33 32.3 +0.6**
baz=110,SNR=16
KLU S **S** **23 42 40.8 +1.3**
baz=110
**H27K Steamboat Moun 69.73 338** P **P** **23 33 32.6 +0.4**
baz=116,SNR=72
H27K S **S** **23 42 41.3 +1.0**
baz=116
**SCRK Sand Creek 69.73 336** IAMs_20 IAMs_20 00 08 03.4
comp=Z,5µm,19.0s
**SCRK Sand Creek 69.73 336** P **P** **23 33 32.9 +0.6**
baz=113,SNR=75
SCRK S **S** **23 42 42.6 +2.0**
baz=113
**J26L Joseph Creek 69.77 336** IAMs_20 IAMs_20 00 09 34.4
comp=Z,7µm,18.0s
**J26L Joseph Creek 69.77 336** P **P** **23 33 33.4 +0.8**
baz=114,SNR=174
J26L S **S** **23 42 42.8 +1.8**
baz=114
J26L S **S** **23 42 42.8 +1.8**
baz=114
**F28M Old Crow 69.78 340** IAmb IAmb 23 33 34.3
comp=Z,110nm,0.8s
F28M IAMs_20 IAMs_20 00 06 01.4
comp=Z,7µm,18.0s
**F28M Old Crow 69.78 340** P **P** **23 33 32.8 +0.3**
baz=118,SNR=46
F28M S **S** **23 42 43.2 +2.3**
baz=118
**P23K Montague Islan 69.83 331** P **P** **23 33 32.8 +0.1**
baz=108,SNR=13
P23K S **S** **23 42 43.7 +2.1**
baz=108
P23K S **S** **23 42 43.7 +2.1**
baz=108
**I26K Coal Creek Min 69.94 337** IAMs_20 IAMs_20 00 05 08.7
comp=Z,8µm,21.0s
**I26K Coal Creek Min 69.94 337** P **P** **23 33 33.8 +0.4**
baz=114
I26K S **S** **23 42 44.4 +1.6**
baz=114
I26K S **S** **23 42 44.4 +1.6**
baz=114
**M24K Tolsona, Glenn 69.97 334** IAMs_20 IAMs_20 00 07 23.8
comp=Z,7µm,20.0s
**M24K Tolsona, Glenn 69.97 334** P **P** **23 33 34.4 +0.7**
baz=110,SNR=15
M24K S **S** **23 42 46.3 +3.0**
baz=110
**GLI Glacier Island 69.97 332** IAmb IAmb 23 33 57.5
comp=Z,126nm,1.6s
GLI IAMs_20 IAMs_20 00 08 44.9
comp=Z,8µm,19.0s
**GLI Glacier Island 69.97 332** P **P** **23 33 33.6 -0.1**
baz=109,SNR=6.5
GLI S **S** **23 42 43.3 +0.1**
baz=109
**PAX Paxson 69.97 334** P **P** **23 33 34.0 +0.2**
baz=111,SNR=41
PAX S **S** **23 42 43.8 +0.4**
baz=111
**RIDG Independent Ri 69.99 335** IAMs_20 IAMs_20 00 06 40.2
comp=Z,5µm,21.0s
**RIDG Independent Ri 69.99 335** P **P** **23 33 34.6 +0.7**
baz=112,SNR=150
RIDG S **S** **23 42 46.7 +3.1**
baz=112
**G27K Doyon Strip 70.03 339** P **P** **23 33 34.0 0.0**
baz=116,SNR=50
G27K S **S** **23 42 45.9 +2.1**
baz=116
**JOKA Jonika Flow 70.11 288** IAmb IAmb 23 33 37.6
comp=Z,81nm,0.8s
JOKA IAMs_20 IAMs_20 23 59 07.5
comp=Z,3µm,18.0s
**E28M Babbage River 70.15 341** IAmb IAmb 23 33 36.1
comp=Z,156nm,0.9s
**E28M Babbage River 70.15 341** P **P** **23 33 34.5 -0.2**
baz=119,SNR=62
E28M S **S** **23 42 47.6 +2.5**
baz=119
**STCH Steam Cracks 70.22 287** IAmb IAmb 23 33 38.4
comp=Z,185nm,0.9s
**D28M Stokes Point 70.26 342** P **P** **23 33 35.8 +0.6**
baz=120
D28M S **S** **23 42 49.8 +3.5**
baz=120
**PUH Pauahi 70.31 287** IAMs_20 IAMs_20 23 59 12.9

baz=108
**HATHI Halema'uma'u T** 70.35 288 IAMs_20 IAMs_20 23 59 15.0
comp=Z,4µm,19.0s
**UWE Uwekahuna** 70.38 288 IAmb IAmb 23 33 39.4
comp=Z,232nm,1.1s
UWE IAMs_20 IAMs_20 23 59 14.7
comp=Z,4µm,18.0s
**SCM Sheep Creek Mo** 70.39 333 IAmb IAmb 23 33 38.2
comp=Z,168nm,0.9s
**SCM Sheep Creek Mo** 70.39 333 P **P** **23 33 36.7 +0.4**
baz=109,SNR=38
SCM S **S** **23 42 50.8 +2.6**
baz=109
**HLP Hilina Pali** 70.40 287 IAMs_20 IAMs_20 23 59 16.3
comp=Z,3µm,18.0s
**K24K Donnelly Dome** 70.40 335 P **P** **23 33 36.9 +0.6**
baz=111,SNR=23
K24K S **S** **23 42 50.9 +2.6**
baz=111
K24K S **S** **23 42 50.9 +2.6**
baz=111
**BORG Borgarnes** 70.44 24 LR LR 00 01 51.6
comp=Z,9µm,19.6s,baz=234,slow=34
**MLH Mauna Loa** 70.47 288 IAMs_20 IAMs_20 23 59 18.0
comp=Z,4µm,19.0s
**ASCN Ascension** 70.51 102 P **P** **23 33 39.7 +1.9**
**J25K Salcha River,** 70.53 336 P **P** **23 33 37.8 +0.6**
baz=112,SNR=218
J25K S **S** **23 42 51.2 +1.3**
baz=112
J25K S **S** **23 42 51.2 +1.3**
baz=112
**PWL Port Wells** 70.54 332 IAmb IAmb 23 33 38.6
comp=Z,84nm,0.8s
PWL IAMs_20 IAMs_20 00 07 25.9
comp=Z,8µm,21.0s
**PWL Port Wells** 70.54 332 P **P** **23 33 37.0 -0.1**
baz=108,SNR=26
PWL S **S** **23 42 52.7 +2.8**
baz=108
**PPTF Pamatai, Papee** 70.55 248 IAMs_20 IAMs_20 23 56 53.6
comp=Z,5µm,19.0s
**HMH Humu'ula Sheep** 70.55 288 IAmb IAmb 23 33 40.2
comp=Z,116nm,1.0s
HMH IAMs_20 IAMs_20 23 59 23.3
comp=Z,5µm,18.0s
**M23K Glacier View** 70.55 333 P **P** **23 33 37.3 +0.1**
baz=109,SNR=38
M23K S **S** **23 42 53.1 +3.0**
baz=109
**PPT Papeete** 70.56 248 LR LR 23 57 15.1
comp=Z,4µm,18.1s,baz=38,slow=30
**PPT2 Papeete2** 70.56 248 *e*PKIKP **P** **23 33 36.0 -2.1**
comp=Z,1µm,24.5s
**PPT2 Papeete2** 70.56 248 *e*PP **PP** **23 36 15.0 +0.4**
comp=Z,314nm,24.0s
PPT2 *e*S **S** **23 42 49.9 -1.8**
comp=Z,3µm,27.8s
PPT2 *e*SS **SS** **23 47 19.9 -3.6**
comp=Z,3µm,28.2s
PPT2 *e*LQ LQ 23 52 08.8
comp=Z,4µm,32.2s
PPT2 *e*LR LR 23 55 04.7
comp=Z,2µm,22.5s
PPT2 *e*LR LR 23 55 11.3
comp=Z,3µm,21.5s
**POHA Pohakuloa** 70.59 288 P **P** **23 33 40.3 +1.7**
**POHA Pohakuloa** 70.59 288 P **P** **23 33 39.9 +1.4**
POHA IAmb IAmb 23 33 40.6
comp=Z,116nm,0.9s
**POHA Pohakuloa** 70.59 288 IAMs_20 IAMs_20 23 59 22.3
comp=Z,4µm,18.0s
**E27K Coleen River** 70.63 340 IAmb IAmb 23 33 39.5
comp=Z,108nm,0.9s
**E27K Coleen River** 70.63 340 P **P** **23 33 37.9 +0.3**
baz=117,SNR=61
E27K S **S** **23 42 52.0 +1.2**
baz=117
**KHU Kahuku** 70.69 287 IAMs_20 IAMs_20 23 59 15.0
comp=Z,3µm,18.0s
**HPAH Hawaii Prepara** 70.74 288 IAMs_20 IAMs_20 23 58 49.1
comp=Z,3µm,18.0s
**KNK Knik Glacier** 70.77 332 IAMs_20 IAMs_20 00 10 13.9
comp=Z,6µm,19.0s
**KNK Knik Glacier** 70.77 332 P **P** **23 33 38.9 +0.3**
baz=108,SNR=43
KNK S **S** **23 42 54.6 +2.0**
baz=108
**WAT6 Susitna Watana** 70.81 334 P **P** **23 33 39.0 0.0**
baz=109,SNR=74
WAT6 S **S** **23 42 55.4 +2.0**
baz=109
**NEEM North Greenlan** 70.82 7 *i* P **P** **23 33 38.0 -0.9**
NEEM IAmb IAmb 23 33 40.0
comp=Z,201nm,0.9s
**DHY Denali Highway** 70.82 334 IAMs_20 IAMs_20 00 07 48.3
comp=Z,5µm,18.0s
**DHY Denali Highway** 70.82 334 P **P** **23 33 38.8 -0.3**
baz=109,SNR=26
DHY S **S** **23 42 54.4 +1.0**
baz=109
**SML Sawmill** 70.83 333 P **P** **23 33 39.0 0.0**
baz=108,SNR=45
SML S **S** **23 42 56.7 +3.3**
baz=108
**SEW Seward** 70.84 331 P **P** **23 33 39.0 0.0**
baz=106,SNR=12
SEW S **S** **23 42 56.6 +3.2**
baz=106
**G26K Porcupine Rive** 70.85 339 P **P** **23 33 39.1 +0.2**
baz=114,SNR=26
G26K S **S** **23 42 55.1 +1.8**
baz=114
**HUH Hualalai** 70.88 288 IAMs_20 IAMs_20 23 59 13.0
comp=Z,5µm,18.0s
**D27M Malcolm River** 70.91 341 IAmb IAmb 23 33 41.4
comp=Z,122nm,0.9s
**D27M Malcolm River** 70.91 341 P **P** **23 33 39.7 +0.3**
baz=118,SNR=22
D27M S **S** **23 42 56.2 +2.1**
baz=118
**PRP Porcupine Dome** 70.94 337 IAmb IAmb 23 33 41.5
comp=Z,125nm,1.1s
PRP IAMs_20 IAMs_20 00 05 50.1
comp=Z,8µm,21.0s
**PRP Porcupine Dome** 70.94 337 P **P** **23 33 39.8 +0.1**
baz=112,SNR=14
PRP S **S** **23 42 55.9 +1.2**
baz=112
**O22K Cooper Landing** 71.08 331 IAmb IAmb 23 33 46.4
comp=Z,160nm,0.8s
O22K IAMs_20 IAMs_20 00 07 24.3
comp=Z,8µm,20.0s
**O22K Cooper Landing** 71.08 331 P **P** **23 33 40.5 +0.1**
baz=106
O22K S **S** **23 42 56.3 +0.1**
baz=106
**HDA Harding Lake** 71.10 336 IAMs_20 IAMs_20 00 09 24.5
comp=Z,7µm,19.0s
**HDA Harding Lake** 71.10 336 P **P** **23 33 40.5 0.0**
baz=110,SNR=217
HDA S **S** **23 42 57.1 +0.8**
baz=110
**PMR Palmer** 71.13 333 P **P** **23 33 41.2 +0.5**
**PMR Palmer** 71.13 333 IAmb IAmb 23 33 46.4
comp=Z,192nm,1.6s
PMR IAMs_20 IAMs_20 00 08 15.5
comp=Z,5µm,19.0s
**PMR Palmer** 71.13 333 P **P** **23 33 40.8 +0.1**
baz=107,SNR=13
PMR S **S** **23 42 57.3 +0.7**
baz=107
**IL31** 71.20 336 IAmb IAmb 23 33 42.8
comp=Z,170nm,0.8s
**ILAR Eielson Array** 71.20 336 P **P** **23 33 40.9 -0.2**
comp=Z,100nm,0.7s,baz=116,slow=4.1,SNR=583
ILAR PP **PP** **23 36 15.6 -3.3**
comp=Z,18nm,1.2s,baz=104,slow=5.8,SNR=6.6
ILAR S **S** **23 42 57.8 +0.3**
comp=Z,0.1nm,0.3s,baz=89,slow=12,SNR=1.4
ILAR LR LR 00 09 53.6
comp=Z,5µm,18.0s,baz=100,slow=40
comp=Z,100nm,0.7s
**FYU Fort Yukon** 71.23 338 IAmb IAmb 23 33 43.4
comp=Z,233nm,1.1s
**WAT1 Susitna Watana** 71.25 334 P **P** **23 33 41.5 0.0**
baz=108
WAT1 S **S** **23 43 01.5 +3.3**
baz=108
**RC01 Rabbit Creek A** 71.26 332 IAMs_20 IAMs_20 00 07 59.1
comp=Z,7µm,20.0s
**RC01 Rabbit Creek A** 71.26 332 P **P** **23 33 41.9 +0.4**
baz=107,SNR=18
RC01 S **S** **23 42 59.1 +0.8**
baz=107
**F26K Sheenjek River** 71.29 339 IAmb IAmb 23 33 43.8
comp=Z,88nm,0.8s
**F26K Sheenjek River** 71.29 339 P **P** **23 33 42.2 +0.6**
baz=114,SNR=64
F26K S **S** **23 43 02.2 +3.7**
baz=114
**H25L Birch Creek** 71.33 338 P **P** **23 33 42.7 +0.9**
baz=112,SNR=26
H25L S **S** **23 43 03.7 +4.8**
baz=112
**BMAR Burnt Mountain** 71.33 339 P **P** **23 33 42.3 +0.4**
**BRSE Bradley Lake S** 71.37 330 P **P** **23 33 42.6 +0.4**
baz=105,SNR=31
BRSE S **S** **23 43 01.2 +1.6**
baz=105
**BRLK Bradley Lake** 71.44 330 IAMs_20 IAMs_20 00 07 01.2
comp=Z,4µm,21.0s
**FIS Fire Island** 71.50 332 IAMs_20 IAMs_20 00 09 22.3
comp=Z,7µm,19.0s
**CCB Clear Creek Bu** 71.53 336 IAmb IAmb 23 33 44.5
comp=Z,116nm,1.4s
CCB IAMs_20 IAMs_20 00 09 44.8
comp=Z,7µm,19.0s
**POKR Poker Plat Res** 71.54 336 IAmb IAmb 23 33 44.9
comp=Z,99nm,0.8s
POKR IAMs_20 IAMs_20 00 06 00.1
comp=Z,7µm,21.0s
**POKR Poker Plat Res** 71.54 336 P **P** **23 33 43.4 +0.2**
baz=110,SNR=46
POKR S **S** **23 43 03.2 +1.8**
baz=110
**CNPM China Poot** 71.55 330 IAmb IAmb 23 33 45.3
comp=Z,118nm,0.8s
CNPM IAMs_20 IAMs_20 00 06 51.0
comp=Z,4µm,21.0s
**RND Reindeer** 71.56 334 IAMs_20 IAMs_20 00 06 55.9
comp=Z,7µm,21.0s
**WRH Wood River Hil** 71.58 336 IAmb IAmb 23 33 50.6
comp=Z,76nm,0.9s
WRH IAMs_20 IAMs_20 00 09 48.4
comp=Z,5µm,19.0s
**COLA College** 71.62 336 P **P** **23 33 43.9 +0.3**
**COLA College** 71.62 336 P **P** **23 33 44.2 +0.6**
COLA IAmb IAmb 23 33 45.1
comp=Z,142nm,0.8s
**COLA College** 71.62 336 IAMs_20 IAMs_20 00 10 04.4
comp=Z,5µm,18.0s
**COLA College** 71.62 336 P **P** **23 33 43.5 -0.1**
baz=110
COLA S **S** **23 43 03.5 +1.2**
baz=110
**COLA College** 71.62 336 *c i* P **P** **23 33 43.1 -0.5**
COLA pmax pmax
comp=Z,95nm,0.9s
COLA MLR MLR
comp=Z,5µm,18.0s
**G25K Bearman Lake** 71.62 338 P **P** **23 33 44.6 +1.0**
baz=112,SNR=28
G25K S **S** **23 43 06.9 +4.7**
baz=112
**M22K Willow** 71.62 333 IAmb IAmb 23 33 45.4
comp=Z,178nm,1.0s
M22K IAMs_20 IAMs_20 00 08 31.7
comp=Z,7µm,20.0s
**M22K Willow** 71.62 333 P **P** **23 33 43.9 +0.2**
baz=106,SNR=7.7
M22K S **S** **23 43 03.5 +1.1**
baz=106
**MCK McKinley** 71.70 335 P **P** **23 33 44.5 +0.3**
baz=108,SNR=70
MCK S **S** **23 43 04.4 +1.1**
baz=108
**F25K Christian Rive** 71.77 339 IAmb IAmb 23 33 47.1
comp=Z,111nm,0.9s
**F25K Christian Rive** 71.77 339 P **P** **23 33 45.5 +0.9**
baz=112,SNR=82
F25K S **S** **23 43 06.3 +2.2**
baz=112
**HOM Homer** 71.79 330 P **P** **23 33 45.4 +0.7**
baz=104,SNR=5.5
HOM S **S** **23 43 09.0 +4.6**
baz=104
**MDM Murphy Dome** 71.80 336 IAmb IAmb 23 33 46.4
comp=Z,133nm,1.0s
**KDAK Kodiak Island** 71.82 328 P **P** **23 33 45.3 +0.4**
**KDAK Kodiak Island** 71.82 328 IAMs_20 IAMs_20 00 11 14.1
comp=Z,5µm,19.0s
**KDAK Kodiak Island** 71.82 328 LR LR 00 07 15.2
comp=Z,3µm,20.7s,baz=124,slow=38
**KDAK Kodiak Island** 71.82 328 P **P** **23 33 45.5 +0.6**
baz=103
KDAK S **S** **23 43 05.2 +0.4**
baz=103
**KDAK Kodiak Island** 71.82 328 *c i* P **P** **23 33 45.0 +0.1**
KDAK pmax pmax
comp=Z,122nm,1.0s
**SUA Susitna One** 71.83 332 IAmb IAmb 23 33 47.0
comp=Z,134nm,0.7s
SUA IAMs_20 IAMs_20 00 11 08.2
comp=Z,5µm,19.0s
**SUA Susitna One** 71.83 332 P **P** **23 33 45.5 +0.3**
baz=106,SNR=14
SUA S **S** **23 43 05.2 +0.1**
baz=106
**CAPN Captain Cook N** 71.84 331 IAMs_20 IAMs_20 00 07 57.3
comp=Z,8µm,21.0s
**CAPN Captain Cook N** 71.84 331 P **P** **23 33 46.6 +1.6**
baz=105
CAPN S **S** **23 43 07.5 +2.7**
baz=105
**CUT Chulitna** 71.88 333 IAMs_20 IAMs_20 00 09 57.3
comp=Z,7µm,19.0s
**CUT Chulitna** 71.88 333 P **P** **23 33 45.6 +0.4**
baz=106,SNR=19
CUT S **S** **23 43 08.7 +3.4**
baz=106
**SYI Shuyak Island** 71.91 329 IAMs_20 IAMs_20 00 08 58.5
comp=Z,6µm,19.0s
**Q20K Shuyak Island** 71.91 329 P **P** **23 33 46.2 +0.7**
baz=103,SNR=20
Q20K S **S** **23 43 07.2 +1.4**
baz=103
**C27K Jago River** 71.95 341 P **P** **23 33 46.1 +0.5**
baz=115,SNR=61
C27K S **S** **23 43 08.9 +2.9**
baz=115
**H24K Noodor Dome** 71.96 337 IAmb IAmb 23 33 47.8
comp=Z,146nm,0.9s
H24K IAMs_20 IAMs_20 00 06 31.1
comp=Z,9µm,21.0s
**H24K Noodor Dome** 71.96 337 P **P** **23 33 46.1 +0.3**
baz=110,SNR=120
H24K S **S** **23 43 08.0 +1.6**
baz=110
H24K S **S** **23 43 08.0 +1.6**
baz=110
**NEA2 Nenana** 72.03 336 IAmb IAmb 23 33 47.6
comp=Z,142nm,0.8s
NEA2 IAMs_20 IAMs_20 00 10 20.0
comp=Z,6µm,19.0s
**NEA2 Nenana** 72.03 336 P **P** **23 33 46.1 0.0**
baz=108,SNR=88
NEA2 S **S** **23 43 07.9 +0.9**
baz=108
**BWN Browne** 72.06 335 IAMs_20 IAMs_20 00 09 08.1
comp=Z,6µm,18.0s
**OHAK Old Harbor** 72.06 327 P **P** **23 33 47.0 +0.6**
**OHAK Old Harbor** 72.06 327 IAmb IAmb 23 33 48.6
comp=Z,157nm,1.0s
**OHAK Old Harbor** 72.06 327 P **P** **23 33 47.2 +0.8**
baz=102,SNR=35
**G24K Hadweenzic Riv** 72.11 338 IAmb IAmb 23 33 49.2
comp=Z,282nm,1.2s
**G24K Hadweenzic Riv** 72.11 338 P **P** **23 33 47.4 +0.9**
baz=110,SNR=63
G24K S **S** **23 43 09.6 +1.7**
baz=110
**TBI Tubuai** 72.14 242 *e*PKP1 **P** **23 33 49.9 +2.4**
comp=Z,3µm,25.5s
**TBI Tubuai** 72.14 242 *e*PP **PP** **23 36 24.0 -4.0**
comp=Z,2µm,28.2s
TBI *e*S **S** **23 43 09.4 -0.2**
comp=Z,17µm,30.0s
TBI *e*SS **SS** **23 47 45.7 -1.7**
comp=Z,5µm,30.0s
TBI *e*LQ LQ 23 52 47.2
comp=Z,20µm,32.2s
TBI *e*LR LR 23 55 47.5
comp=Z,3µm,24.8s
TBI *e*LR LR 23 55 53.8
comp=Z,10µm,23.5s
**LIS Lisbon** 72.20 52 *e*P **P** **23 33 48.2 +0.6**
LIS IAmb IAmb 23 33 49.9
comp=Z,243nm,1.3s
LIS *e*S **S** **23 43 10.5 +0.7**
**LIS Lisbon** 72.20 52 *e*P **P** **23 33 48.2 +0.6**
LIS *e*S **S** **23 43 10.5 +0.7**
**I23K Minto, Yukon-K** 72.32 336 IAMs_20 IAMs_20 00 06 24.7
comp=Z,6µm,21.0s
**I23K Minto, Yukon-K** 72.32 336 P **P** **23 33 48.2 +0.4**
baz=108,SNR=183
I23K S **S** **23 43 10.9 +0.6**
baz=108
I23K S **S** **23 43 10.9 +0.6**
baz=108
**SKT Skwentna** 72.33 333 P **P** **23 33 48.3 +0.3**
baz=105,SNR=35
SKT S **S** **23 43 10.7 +0.1**
baz=105
**SPU Mount Spurr** 72.37 332 IAmb IAmb 23 33 49.9
comp=Z,158nm,1.3s
SPU IAMs_20 IAMs_20 00 08 57.4
comp=Z,4µm,20.0s
**O20K Slope Mountain** 72.37 330 P **P** **23 33 48.7 +0.4**
baz=104,SNR=24
O20K S **S** **23 43 12.7 +1.4**
baz=104
O20K S **S** **23 43 12.7 +1.4**
baz=104
**PFVI Vila Bisbo** 72.37 54 IAmb IAmb 23 33 51.1
comp=Z,266nm,1.3s
PFVI IAMs_20 IAMs_20 23 59 18.1
comp=Z,8µm,21.0s
**PFVI Vila Bisbo** 72.37 54 *e*P **P** **23 33 48.7 0.0**
comp=Z,332nm,1.4s
**PFVI Vila Bisbo** 72.37 54 P **P** **23 33 48.9 +0.1**
**SII Sitkinak Islan** 72.41 327 P **P** **23 33 50.3 +1.7**
**SII Sitkinak Islan** 72.41 327 IAMs_20 IAMs_20 00 11 47.0
comp=Z,4µm,19.0s
**SII Sitkinak Islan** 72.41 327 P **P** **23 33 49.2 +0.6**
baz=101,SNR=9.0
**N20K Mount Spurr** 72.44 332 P **P** **23 33 48.8 0.0**
baz=104,SNR=19
N20K S **S** **23 43 11.9 -0.2**
baz=104
**C26K Camden Bay** 72.45 341 P **P** **23 33 49.5 +1.0**
baz=114,SNR=29
C26K S **S** **23 43 14.1 +2.4**
baz=114
**PTEO Sao Teotonio** 72.47 53 *e*P **P** **23 33 49.8 +0.5**
comp=Z,329nm,2.0s
**PSBE So Bento** 72.52 51 *e*P **P** **23 33 49.4 -0.2**
comp=Z,299nm,1.4s
**MORF Marmelete** 72.52 54 IAmb IAmb 23 33 51.9
comp=Z,260nm,1.1s
**MORF Marmelete** 72.52 54 *e*P **P** **23 33 50.0 +0.4**
comp=Z,464nm,1.5s
**MORF Marmelete** 72.52 54 *e*P **P** **23 33 50.2 +0.6**
MORF IAmb IAmb 23 33 51.7
comp=Z,353nm,1.3s
MORF *e*S **S** **23 43 14.4 +0.7**
**MORF Marmelete** 72.52 54 *e*P **P** **23 33 50.2 +0.6**
MORF *e*S **S** **23 43 14.4 +0.7**
**SCO Scoresbysund** 72.53 18 IAmb IAmb 23 33 49.4
comp=Z,125nm,1.1s
**F24K Squaw Lake** 72.55 339 IAmb IAmb 23 33 52.0
comp=Z,266nm,1.6s
**F24K Squaw Lake** 72.55 339 P **P** **23 33 50.2 +1.0**
baz=110,SNR=39
F24K S **S** **23 43 14.2 +1.2**
baz=110
**P19K Oil Pt** 72.57 330 IAmb IAmb 23 33 51.2
comp=Z,111nm,0.8s
**P19K Oil Pt** 72.57 330 P **P** **23 33 49.7 +0.3**
baz=103,SNR=20
P19K S **S** **23 43 13.7 +0.3**
baz=103
**ILSW Iliamna Southw** 72.60 330 IAmb IAmb 23 33 51.2
comp=Z,135nm,0.9s
**H23K Yukon River** 72.61 337 IAmb IAmb 23 33 50.9
comp=Z,382nm,1.8s
H23K IAMs_20 IAMs_20 00 06 52.2
comp=Z,8µm,22.0s
**H23K Yukon River** 72.61 337 P **P** **23 33 49.8 +0.2**
baz=108,SNR=66
H23K S **S** **23 43 13.8 +0.1**
baz=108
H23K S **S** **23 43 13.8 +0.1**
baz=108
**Q19K Cape Douglas,** 72.61 329 IAmb IAmb 23 33 51.5
comp=Z,158nm,0.8s
Q19K IAMs_20 IAMs_20 00 09 29.1
comp=Z,4µm,18.0s
**Q19K Cape Douglas,** 72.61 329 P **P** **23 33 50.0 +0.3**
baz=102,SNR=20
Q19K S **S** **23 43 14.4 +0.4**
baz=102
Q19K S **S** **23 43 14.4 +0.4**
baz=102
**PNCL Nicolau / Gran** 72.65 53 *e*P **P** **23 33 50.9 +0.6**
comp=Z,224nm,1.6s
**PNCL Nicolau / Gran** 72.65 53 P **P** **23 33 49.6 -0.8**
**BPAW Bear Paw Mtn.** 72.67 335 IAmb IAmb 23 33 51.6
comp=Z,181nm,0.9s
BPAW IAMs_20 IAMs_20 00 10 56.2
comp=Z,7µm,19.0s
**BPAW Bear Paw Mtn.** 72.67 335 P **P** **23 33 50.0 0.0**
baz=106,SNR=63
BPAW S **S** **23 43 13.7 -0.8**
baz=106
**D25K Kavik River** 72.69 341 IAMs_20 IAMs_20 00 09 06.1
comp=Z,7µm,19.0s
**D25K Kavik River** 72.69 341 P **P** **23 33 50.4 +0.4**
baz=112,SNR=157
D25K S **S** **23 43 17.0 +2.4**
baz=112
**VAL Valentia** 72.74 38 P **P** **23 33 50.7 +0.2**
**VAL Valentia** 72.74 38 P **P** **23 33 50.6 +0.1**
**R18K Karluk** 72.75 328 P **P** **23 33 50.8 +0.3**
baz=101
R18K S **S** **23 43 16.2 +0.7**
baz=101
R18K S **S** **23 43 16.2 +0.7**
baz=101
**PCAS Casmilo, Conde** 72.78 51 *e*P **P** **23 33 51.8 +0.7**
comp=Z,480nm,1.4s
**MLY Manley** 72.84 336 IAmb IAmb 23 33 52.8
comp=Z,178nm,0.8s
MLY IAMs_20 IAMs_20 00 10 51.6
comp=Z,6µm,18.0s
**MLY Manley** 72.84 336 P **P** **23 33 51.1 +0.1**
baz=107,SNR=94
MLY S **S** **23 43 16.9 +0.5**
baz=107
**KIP Kipapa** 72.84 290 P **P** **23 33 53.6 +1.8**
**KIP Kipapa** 72.84 290 P **P** **23 33 54.2 +2.5**
KIP IAmb IAmb 23 33 54.6
comp=Z,402nm,1.6s
**KIP Kipapa** 72.84 290 ‖ *e*P **P** **23 33 53.2 +1.4**
KIP pmax pmax
comp=Z,53nm,1.6s
KIP MLR MLR
comp=Z,743nm,16.0s
**COI Coimbra** 72.85 51 *e*P **P** **23 33 52.0 +0.5**
comp=Z,534nm,1.4s
**MESJ Messejana** 72.89 53 IAmb IAmb 23 33 53.7
comp=Z,409nm,1.8s
**MESJ Messejana** 72.89 53 *e*P **P** **23 33 51.8 0.0**
comp=Z,187nm,1.4s
**MESJ Messejana** 72.89 53 *e*P **P** **23 33 52.1 +0.3**
MESJ IAmb IAmb 23 33 52.7
comp=Z,186nm,1.4s
MESJ *e*S **S** **23 43 18.5 +0.7**
**MESJ Messejana** 72.89 53 *e*P **P** **23 33 52.1 +0.3**
MESJ *e*S **S** **23 43 18.5 +0.7**
**PMTG Montargil** 72.94 52 *e*P **P** **23 33 50.9 -1.1**
comp=Z,260nm,1.5s
**E24K Your Creek** 72.95 339 P **P** **23 33 52.5 +0.9**

baz=110
E24K S **S** **23 43 20.0 +2.4**
baz=110
**PCVE Castro Verde** **73.02 53** *e*P **P** **23 33 52.4 -0.2**
comp=Z,208nm,1.6s
**PCVE Castro Verde** **73.02 53** P **P** **23 33 52.1 -0.4**
**M20K Styx River** **73.04 332** IAmb IAmb 23 33 53.2
comp=Z,93nm,0.8s
M20K IAMs_20 IAMs_20 00 09 26.4
comp=Z,6µm,19.0s
**M20K Styx River** **73.04 332** P **P** **23 33 52.2 -0.1**
baz=104,SNR=69
M20K S **S** **23 43 19.3 +0.5**
baz=104
M20K S **S** **23 43 19.3 +0.5**
baz=104
**PGAV Gavieira, Arco** **73.06 49** *e*P **P** **23 33 53.0 +0.2**
comp=Z,270nm,1.6s
PGAV *e*S **S** **23 43 21.2 +1.3**
**PGAV Gavieira, Arco** **73.06 49** *e*LR LR 23 57 28.9
comp=Z,4µm,20.0s
**CHIR Chirikof Islan** **73.07 326** IAMs_20 IAMs_20 00 09 35.4
comp=Z,4µm,18.0s
**CHIR Chirikof Islan** **73.07 326** P **P** **23 33 53.5 +1.0**
baz=100,SNR=8.5
**G23K Bananza Creek** **73.07 338** IAmb IAmb 23 33 54.9
comp=Z,181nm,0.9s
G23K IAMs_20 IAMs_20 00 08 37.4
comp=Z,5µm,19.0s
**G23K Bananza Creek** **73.07 338** P **P** **23 33 53.2 +0.9**
baz=108,SNR=165
G23K S **SKiKP** **23 43 22.9 -1.5**
baz=108
**EVO Evora** **73.08 52** *e*P **P** **23 33 52.6 -0.3**
comp=Z,188nm,1.4s
**EVO Evora** **73.08 52** P **P** **23 33 52.1 -0.8**
**PBDV Barranco-do-Ve** **73.09 54** *e*P **P** **23 33 52.8 -0.2**
comp=Z,312nm,1.3s
**PBDV Barranco-do-Ve** **73.09 54** P **P** **23 33 53.3 +0.2**
**PBEJ Beja** **73.17 53** *e*P **P** **23 33 53.0 -0.5**
comp=Z,167nm,1.5s
**O19K Port Alsworth** **73.22 330** IAmb IAmb 23 33 54.4
comp=Z,115nm,0.8s
**O19K Port Alsworth** **73.22 330** P **P** **23 33 52.8 -0.4**
baz=102
O19K S **S** **23 43 20.2 -0.5**
baz=102
O19K S **S** **23 43 20.2 -0.5**
baz=102
**PCAB Cabril** **73.23 49** *e*P **P** **23 33 53.4 -0.3**
comp=Z,152nm,1.4s
**Q18K Katmai Hardscr** **73.25 329** P **P** **23 33 53.6 -0.1**
baz=101,SNR=23
Q18K S **S** **23 43 21.4 -0.1**
baz=101
**PVAQ Vaqueiros** **73.27 54** IAmb IAmb 23 33 56.3
comp=Z,280nm,1.6s
PVAQ IAMs_20 IAMs_20 00 00 05.8
comp=Z,6µm,20.0s
**PVAQ Vaqueiros** **73.27 54** *e*P **P** **23 33 53.9 -0.1**
comp=Z,262nm,1.5s
PVAQ *e*S **S** **23 43 23.7 +1.5**
**PVAQ Vaqueiros** **73.27 54** *e*LR LR 23 56 22.9
comp=Z,8µm,22.0s
**PVAQ Vaqueiros** **73.27 54** P **P** **23 33 53.7 -0.3**
**PVIS Viseu** **73.27 50** *e*P **P** **23 33 53.9 -0.2**
comp=Z,226nm,1.4s
**COLD Coldfoot** **73.30 338** P **P** **23 33 54.9 +1.3**
baz=108,SNR=47
COLD S **SKiKP** **23 43 23.5 -1.1**
baz=108
**ACHA Angle Creek He** **73.33 328** IAmb IAmb 23 33 56.2
comp=Z,222nm,1.6s
ACHA IAMs_20 IAMs_20 00 11 18.3
comp=Z,3µm,18.0s
**H22K Ishtalitna Cre** **73.34 337** P **P** **23 33 53.9 0.0**
baz=106,SNR=94
H22K S **S** **23 43 23.1 +1.0**
baz=106
H22K S **S** **23 43 23.1 +1.0**
baz=106
**E23K Chandalar** **73.35 339** IAmb IAmb 23 33 56.5
comp=Z,208nm,0.8s
E23K IAMs_20 IAMs_20 00 08 23.7
comp=Z,7µm,20.0s
**E23K Chandalar** **73.35 339** P **P** **23 33 54.9 +0.9**
baz=109,SNR=140
E23K S **SKiKP** **23 43 24.1 -0.8**
baz=109
**POLO Lamas de Olo** **73.38 49** *e*P **P** **23 33 54.1 -0.6**
comp=Z,112nm,1.4s
**PESTR Estremoz** **73.42 52** IAmb IAmb 23 33 56.7
comp=Z,321nm,1.3s
PESTR IAMs_20 IAMs_20 00 00 23.6
comp=Z,4µm,20.0s
**PESTR Estremoz** **73.42 52** *e*P **P** **23 33 54.7 -0.2**
comp=Z,373nm,1.4s
**PESTR Estremoz** **73.42 52** P **P** **23 33 54.1 -0.8**
**AVE Averroes** **73.43 58** IAMs_20 IAMs_20 00 01 05.6
comp=Z,5µm,22.0s
**AVE Averroes** **73.43 58** P **P** **23 33 54.5 -0.5**
**N19K Bonanza Creek** **73.43 331** P **P** **23 33 54.4 -0.3**
baz=102,SNR=74
N19K S **S** **23 43 23.4 0.0**
baz=102
N19K S **S** **23 43 23.4 0.0**
baz=102
**PVRL Vila Real** **73.44 50** *e*P **P** **23 33 54.9 -0.1**
comp=Z,236nm,1.5s
**D24K Happy Valley** **73.44 340** IAmb IAmb 23 33 56.4
comp=Z,117nm,1.1s
**D24K Happy Valley** **73.44 340** P **P** **23 33 54.6 +0.2**
baz=110,SNR=25
D24K S **S** **23 43 23.9 +0.9**
baz=110
**EGRO El Granado** **73.46 53** P **P** **23 33 55.1 0.0**
**IGLA Glengowla, Co** **73.47 37** P **P** **23 33 54.5 -0.3**
**IGLA Glengowla, Co** **73.47 37** *e*P **P** **23 33 54.5 -0.3**
**P18K Big Mountain,** **73.51 329** P **P** **23 33 54.6 -0.4**
baz=101,SNR=15
P18K S **S** **23 43 23.1 -1.1**
baz=101
**L20K Farewell, AK** **73.52 333** P **P** **23 33 54.8 -0.3**
baz=103,SNR=116
L20K S **S** **23 43 23.9 -0.3**
baz=103
L20K S **S** **23 43 23.9 -0.3**
baz=103
**MTE Manteigas** **73.52 50** IAmb IAmb 23 33 57.0
comp=Z,153nm,1.2s
MTE IAMs_20 IAMs_20 00 02 35.2
comp=Z,7µm,20.0s
**MTE Manteigas** **73.52 50** *e*P **P** **23 33 54.7 -0.9**
comp=Z,211nm,1.5s
MTE *e*S **SKiKP** **23 43 25.7 -0.2**
**MTE Manteigas** **73.52 50** *e*LR LR 23 56 50.6
comp=Z,7µm,20.0s
**TOLK Toolik Lake Re** **73.52 340** IAmb IAmb 23 33 56.8
comp=Z,70nm,0.8s
**TOLK Toolik Lake Re** **73.52 340** P **P** **23 33 55.2 +0.2**
baz=109,SNR=37
TOLK S **S** **23 43 24.1 +0.1**
baz=109
**PCBR Castelo Branco** **73.55 51** *e*P **P** **23 33 55.6 0.0**
comp=Z,209nm,1.3s
**TIO Tiouine** **73.56 60** P **P** **23 33 56.5 +0.5**
**O18K Koktuh Hills** **73.59 330** IAmb IAmb 23 33 56.9
comp=Z,157nm,0.8s
**O18K Koktuh Hills** **73.59 330** P **P** **23 33 55.4 -0.1**
baz=101,SNR=60
O18K S **S** **23 43 25.1 0.0**
baz=101
O18K S **S** **23 43 25.1 0.0**
baz=101
**C24K Franklin Bluff** **73.59 341** IAMs_20 IAMs_20 00 11 00.9
comp=Z,6µm,19.0s
**C24K Franklin Bluff** **73.59 341** P **P** **23 33 56.0 +0.8**
baz=110
C24K S **SKiKP** **23 43 26.8 +1.7**
baz=110
**PMRV Marv??o** **73.60 52** *e*P **P** **23 33 55.8 -0.2**
comp=Z,191nm,1.5s
PMRV *e*S **S** **23 43 25.3 -0.6**
**PMRV Marv??o** **73.60 52** *e*LR LR 23 56 55.9
comp=Z,5µm,24.0s
**M19K Big River Lodg** **73.62 332** IAmb IAmb 23 33 56.7
comp=Z,75nm,0.8s
M19K IAMs_20 IAMs_20 00 11 40.6
comp=Z,6µm,19.0s
**M19K Big River Lodg** **73.62 332** P **P** **23 33 55.7 +0.1**
baz=103,SNR=63
M19K S **SKiKP** **23 43 25.8 +0.4**
baz=103
M19K S **SKiKP** **23 43 25.8 +0.4**
baz=103
**Q17K Contact Creek** **73.64 328** P **P** **23 33 56.1 +0.2**
baz=100,SNR=40
Q17K S **S** **23 43 26.3 +0.6**
baz=100
**G22K Bettles** **73.69 338** P **P** **23 33 56.8 +0.9**
baz=107
G22K S **S** **23 43 29.1 +3.2**
baz=107
**R17L Mt. Peulik Vol** **73.77 328** P **P** **23 33 57.2 +0.6**
baz=100,SNR=24
R17L S **S** **23 43 29.1 +1.9**
baz=100
**K20K Telida** **73.81 334** IAMs_20 IAMs_20 00 09 35.2
comp=Z,7µm,18.0s
**K20K Telida** **73.81 334** P **P** **23 33 56.5 -0.2**
baz=103,SNR=71
K20K S **S** **23 43 28.5 +1.2**
baz=103
K20K S **S** **23 43 28.5 +1.2**
baz=103
**PBAR Barrancos** **73.83 53** *e*P **P** **23 33 57.5 +0.2**
comp=Z,291nm,1.3s
**PBAR Barrancos** **73.83 53** P **P** **23 33 56.8 -0.5**
**H21K Melozitna Rive** **73.85 336** IAmb IAmb 23 33 58.3
comp=Z,186nm,1.6s
H21K IAMs_20 IAMs_20 00 07 21.0
comp=Z,8µm,21.0s
**H21K Melozitna Rive** **73.85 336** P **P** **23 33 56.6 -0.3**
baz=105,SNR=42
H21K S **S** **23 43 30.2 +2.5**
baz=105
H21K S **S** **23 43 30.2 +2.5**
baz=105
**EBAD Badajoz** **73.87 52** P **P** **23 33 56.8 -0.7**
**L19K White Mountain** **73.90 332** P **P** **23 33 56.9 -0.3**
baz=102,SNR=33
L19K S **S** **23 43 30.1 +1.6**
baz=102
L19K S **S** **23 43 30.1 +1.6**
baz=102
**RTC Rabat Centre** **73.90 57** P **P** **23 33 57.1 -0.7**
**HOPE Hope Point** **73.91 154** P **P** **23 33 58.1 +0.8**
HOPE IAmb IAmb 23 34 05.2
comp=Z,170nm,1.2s
**HOPE Hope Point** **73.91 154** P **P** **23 33 58.1 +0.8**
HOPE pmax pmax
comp=Z,170nm,1.2s
**MVO Moncorvo** **73.95 50** *e*P **P** **23 33 57.5 -0.5**
comp=Z,251nm,1.3s
MVO *e*S **S** **23 43 29.9 0.0**
**MVO Moncorvo** **73.95 50** *e*LR LR 23 57 51.5
comp=Z,3µm,20.0s
**D23K Nanushuk River** **74.01 340** IAmb IAmb 23 34 00.5
comp=Z,287nm,1.2s
D23K IAMs_20 IAMs_20 00 10 14.9
comp=Z,7µm,20.0s
**D23K Nanushuk River** **74.01 340** P **P** **23 33 58.8 +1.0**
baz=108
D23K S **S** **23 43 31.9 +2.5**
baz=108
**J20K Nowinta River** **74.03 334** IAMs_20 IAMs_20 00 11 50.1
comp=Z,7µm,18.0s
**J20K Nowinta River** **74.03 334** P **P** **23 33 57.8 -0.1**
baz=103,SNR=62
J20K S **S** **23 43 29.1 -0.7**
baz=103
J20K S **S** **23 43 29.1 -0.7**
baz=103
**ARNO Arenosillo** **74.05 54** P **P** **23 33 59.8 +1.2**
**N18K Kilae Creek** **74.08 331** IAMs_20 IAMs_20 00 10 18.7
comp=Z,5µm,19.0s
**N18K Kilae Creek** **74.08 331** P **P** **23 33 58.2 -0.2**
baz=101,SNR=94
N18K S **S** **23 43 30.4 -0.1**
baz=101
N18K S **S** **23 43 30.4 -0.1**
baz=101
**P17K Kvichak River** **74.08 329** P **P** **23 33 58.4 +0.1**
baz=100
P17K S **S** **23 43 30.7 +0.2**
baz=100
P17K S **S** **23 43 30.7 +0.2**
baz=100
**EMIN Mina Concepcio** **74.11 53** P **P** **23 33 58.5 -0.4**
**F22K John River** **74.11 338** P **P** **23 33 59.3 +0.9**
baz=106
F22K S **S** **23 43 33.5 +2.9**
baz=106
**XMAS Kiritimati** **74.15 270** IAMs_20 IAMs_20 23 57 44.5
comp=Z,5µm,20.0s
**E22K Anaktuvuk Pass** **74.16 339** IAmb IAmb 23 34 00.7
comp=Z,131nm,1.0s
E22K IAMs_20 IAMs_20 00 08 50.4
comp=Z,8µm,22.0s
**E22K Anaktuvuk Pass** **74.16 339** P **P** **23 33 59.0 +0.3**
baz=107
E22K S **S** **23 43 33.5 +2.3**
baz=107
**PBRG Braganca** **74.19 49** *e*P **P** **23 33 59.2 -0.2**
comp=Z,254nm,1.4s
**ECAL Calabor** **74.20 49** P **P** **23 33 59.8 +0.3**
**M18K Stony River** **74.21 332** P **P** **23 33 58.7 -0.3**
baz=101,SNR=109
M18K S **S** **23 43 30.6 -1.2**
baz=101
**C23K Itkillik River** **74.26 341** P **P** **23 33 59.9 +0.7**
baz=108,SNR=140
C23K S **S** **23 43 33.9 +1.7**
baz=108
**IMAR Indian Mountai** **74.31 336** P **P** **23 33 59.0 -0.5**
**I20K Naaghedeneel** **74.32 335** IAmb IAmb 23 34 01.2
comp=Z,326nm,1.2s
I20K IAMs_20 IAMs_20 00 11 41.5
comp=Z,5µm,18.0s
**I20K Naaghedeneel** **74.32 335** P **P** **23 33 59.4 -0.1**
baz=103,SNR=11
I20K S **S** **23 43 33.7 +0.8**
baz=103
**G21K Allakaket** **74.34 337** IAMs_20 IAMs_20 00 07 54.1
comp=Z,6µm,22.0s
**G21K Allakaket** **74.34 337** P **P** **23 34 00.5 +0.8**
baz=105,SNR=171
G21K S **S** **23 43 36.9 +3.6**
baz=105
**R16K Pilot Point** **74.41 327** P **P** **23 34 01.0 +0.7**
baz=98
**SFS San Fernando** **74.46 55** IAMs_20 IAMs_20 00 00 18.4
comp=Z,4µm,21.0s
**SFS San Fernando** **74.46 55** P **P** **23 34 02.1 +1.1**
**O17K Koliganek Bris** **74.51 330** P **P** **23 34 01.1 +0.3**
baz=100
O17K S **S** **23 43 35.6 +0.3**
baz=100
**F21K Alatna River** **74.52 338** IAmb IAmb 23 34 03.4
comp=Z,239nm,0.9s
F21K IAMs_20 IAMs_20 00 09 24.7
comp=Z,4µm,20.0s
**F21K Alatna River** **74.52 338** P **P** **23 34 01.6 +0.9**
baz=105,SNR=208
F21K S **S** **23 43 37.6 +2.4**
baz=105
**PMSA Palmer Station** **74.59 172** P **P** **23 34 02.0 +1.0**
**PMSA Palmer Station** **74.59 172** LR LR 00 01 11.7
comp=Z,2µm,20.1s,baz=338,slow=31
**PMSA Palmer Station** **74.59 172** *e*P **P** **23 34 00.5 -0.5**
**J19K Poorman** **74.62 334** IAmb IAmb 23 34 02.7
comp=Z,390nm,1.9s
J19K IAMs_20 IAMs_20 00 11 39.7
comp=Z,7µm,18.0s
**J19K Poorman** **74.62 334** P **P** **23 34 00.9 -0.5**
baz=102,SNR=39
J19K S **S** **23 43 37.5 +1.0**
baz=102
J19K S **S** **23 43 37.5 +1.0**
baz=102
**H20K Anotleneega Mo** **74.64 336** P **P** **23 34 01.6 +0.1**
baz=103,SNR=57
H20K S **S** **23 43 38.6 +1.9**
baz=103
**D22K Ayikyak River** **74.67 339** IAmb IAmb 23 34 03.9
comp=Z,107nm,0.8s
**D22K Ayikyak River** **74.67 339** P **P** **23 34 02.3 +0.7**
baz=106,SNR=62
D22K S **S** **23 43 38.5 +1.6**
baz=106
**N17K Nushagak Hills** **74.68 330** IAMs_20 IAMs_20 00 13 00.7
comp=Z,5µm,20.0s
**N17K Nushagak Hills** **74.68 330** P **P** **23 34 01.9 +0.1**
baz=100,SNR=60
N17K S **S** **23 43 38.1 +0.9**
baz=100
**CHGN Chignik** **74.69 326** P **P** **23 34 02.1 +0.2**
baz=97,SNR=19
**ESPR Espera** **74.74 54** P **P** **23 34 02.5 -0.2**
**L18K Granite Mounta** **74.75 332** IAmb IAmb 23 34 03.7
comp=Z,251nm,1.6s
L18K IAMs_20 IAMs_20 00 12 43.2
comp=Z,6µm,18.0s
**L18K Granite Mounta** **74.75 332** P **P** **23 34 02.0 -0.1**
baz=101,SNR=46
L18K S **S** **23 43 39.5 +1.6**
baz=101
L18K S **S** **23 43 39.5 +1.6**
baz=101
**IDGL Inch Island, C** **74.77 35** P **P** **23 34 01.8 -0.6**
**P16K Nushagak River** **74.85 329** P **P** **23 34 02.9 +0.2**
baz=98,SNR=8.4
P16K S **S** **23 43 41.8 +2.7**
baz=98
P16K S **S** **23 43 41.8 +2.7**
baz=98
**IWEX Carrickbyrne,** **74.91 38** P **P** **23 34 02.5 -0.8**
**IWEX Carrickbyrne,** **74.91 38** *e*P **P** **23 34 03.0 -0.3**
**M17K Holitna River** **74.95 331** IAmb IAmb 23 34 04.8
comp=Z,87nm,0.8s
M17K IAMs_20 IAMs_20 00 12 35.7
comp=Z,6µm,20.0s
**M17K Holitna River** **74.95 331** P **P** **23 34 03.0 -0.4**
baz=100,SNR=33
M17K S **S** **23 43 41.1 +0.9**
baz=100
**O16K Kokwok River B** **74.98 329** IAmb IAmb 23 34 05.1
comp=Z,299nm,1.5s
**O16K Kokwok River B** **74.98 329** P **P** **23 34 03.1 -0.4**
baz=99,SNR=34
O16K S **S** **23 43 40.6 0.0**
baz=99
**J18K Innoko River** **75.00 334** IAMs_20 IAMs_20 00 12 11.6
comp=Z,7µm,18.0s
**J18K Innoko River** **75.00 334** P **P** **23 34 03.4 -0.2**
baz=101,SNR=33
J18K S **S** **23 43 40.3 -0.3**
baz=101
**E21K Killik River** **75.01 339** IAmb IAmb 23 34 05.5
comp=Z,132nm,1.1s
E21K IAMs_20 IAMs_20 00 09 27.1
comp=Z,7µm,22.0s
**E21K Killik River** **75.01 339** P **P** **23 34 03.8 +0.1**
baz=105
E21K S **S** **23 43 42.9 +2.2**
baz=105
**ECAB El Cabril** **75.11 53** P **P** **23 34 04.2 -0.6**
**LIJA Lijar** **75.11 54** P **P** **23 34 04.8 -0.1**
**CHNA Chernabura Isl** **75.18 324** P **P** **23 34 05.0 +0.3**
baz=96,SNR=12
CHNA S **S** **23 43 44.2 +1.3**
baz=96
**DSB Dublin** **75.24 37** P **P** **23 34 04.4 -0.8**
**DSB Dublin** **75.24 37** IAMs_20 IAMs_20 00 03 10.2
comp=Z,7µm,19.0s
**DSB Dublin** **75.24 37** P **P** **23 34 07.5 +2.4**
**H19K Roundabout Mou** **75.29 336** IAMs_20 IAMs_20 00 08 18.2
comp=Z,7µm,22.0s
**H19K Roundabout Mou** **75.29 336** P **P** **23 34 05.5 +0.4**
baz=102,SNR=64
H19K S **S** **23 43 45.5 +1.8**
baz=102
**GCSA Galena City Sc** **75.31 335** P **P** **23 34 05.6 +0.3**
baz=101
GCSA S **S** **23 43 46.6 +2.6**
baz=101
**S14K Fog Glacier** **75.32 326** P **P** **23 34 06.7 +1.0**
baz=96,SNR=20
**F20K Avaraart Lake** **75.33 337** IAmb IAmb 23 34 07.5
comp=Z,411nm,1.8s
F20K IAMs_20 IAMs_20 00 10 44.5
comp=Z,5µm,18.0s
**F20K Avaraart Lake** **75.33 337** P **P** **23 34 05.9 +0.5**
baz=103,SNR=79
F20K S **S** **23 43 45.7 +1.6**
baz=103
**B22K Teshekpuk Lake** **75.33 341** P **P** **23 34 05.8 +0.4**
baz=106,SNR=79
B22K S **S** **23 43 45.2 +1.2**
baz=106
**ILTH Belurgan, Co L** **75.34 36** P **P** **23 34 04.8 -0.9**
**ILTH Belurgan, Co L** **75.34 36** *e*P **P** **23 34 05.3 -0.3**
**N16K Nishlik Lake** **75.45 330** P **P** **23 34 06.5 +0.3**
baz=98,SNR=33
N16K S **S** **23 43 46.7 +0.9**
baz=98
**L17K Donlin** **75.48 332** P **P** **23 34 06.4 +0.1**
baz=99,SNR=46
L17K S **S** **23 43 45.4 -0.6**
baz=99
**C21K Knifeblade Rid** **75.48 339** P **P** **23 34 06.8 +0.6**
baz=104,SNR=36
C21K S **S** **23 43 47.1 +1.3**
baz=104
**B21K Ikpikpuk River** **75.54 340** P **P** **23 34 06.8 +0.3**
baz=104,SNR=87
B21K S **S** **23 43 48.1 +1.8**
baz=104
**K17K Iditarod** **75.57 333** P **P** **23 34 06.9 0.0**
baz=99,SNR=31
K17K S **S** **23 43 49.4 +2.3**
baz=99
**M16K Timber Creek** **75.62 331** IAmb IAmb 23 34 09.6
comp=Z,322nm,1.8s
M16K IAMs_20 IAMs_20 00 11 57.4
comp=Z,6µm,19.0s
**M16K Timber Creek** **75.62 331** P **P** **23 34 07.9 +0.6**
baz=98,SNR=29
M16K S **S** **23 43 49.7 +2.0**
baz=98
**G19K Purcell Mounta** **75.67 336** IAMs_20 IAMs_20 00 10 25.2
comp=Z,7µm,19.0s
**G19K Purcell Mounta** **75.67 336** P **P** **23 34 08.0 +0.6**
baz=101,SNR=87
G19K S **S** **23 43 50.2 +2.1**
baz=101
**SDPT Sand Point** **75.74 325** P **P** **23 34 09.9 +2.0**
**SDPT Sand Point** **75.74 325** P **P** **23 34 08.7 +0.7**
baz=95,SNR=15
SDPT S **S** **23 43 53.3 +4.3**
baz=95
**E20K Nigu River** **75.77 338** P **P** **23 34 08.9 +0.8**
baz=103,SNR=146
E20K S **S** **23 43 51.7 +2.5**
baz=103
**MDT Midelt** **75.79 58** LR LR 00 02 41.7
comp=Z,3µm,20.7s,baz=299,slow=32
**O15K Ungalikthiuk R** **75.80 329** P **P** **23 34 07.3 -1.0**
baz=97,SNR=19
O15K S **S** **23 43 51.7 +2.0**
baz=97
**DAG Danmarks Havn** **75.94 12** P **P** **23 34 05.6 -3.2**
**DAG Danmarks Havn** **75.94 12** *i* P **P** **23 34 07.0 -1.7**
DAG IAmb IAmb 23 34 09.0
comp=Z,59nm,0.8s
**PAB San Pablo** **75.95 51** P **P** **23 34 09.5 -0.2**
PAB IAmb IAmb 23 34 11.6
comp=Z,277nm,1.5s
**PAB San Pablo** **75.95 51** IAMs_20 IAMs_20 00 04 09.6
comp=Z,6µm,20.0s
**PAB San Pablo** **75.95 51** P **P** **23 34 09.5 -0.2**
PAB pmax pmax
comp=Z,277nm,1.5s
**L16K Owhat River** **75.97 332** IAmb IAmb 23 34 11.5
comp=Z,142nm,0.9s
L16K IAMs_20 IAMs_20 00 13 36.4
comp=Z,7µm,19.0s
**L16K Owhat River** **75.97 332** P **P** **23 34 09.7 +0.6**
baz=98,SNR=72
L16K S **S** **23 43 52.9 +1.5**
baz=98
**E19K Redstone River** **75.99 338** IAmb IAmb 23 34 11.9
comp=Z,91nm,0.8s
E19K IAMs_20 IAMs_20 00 11 07.5

comp=Z,4µm,19.0s
**E19K Redstone River 75.99 338 P P 23 34 09.4 +0.2**
baz=101,SNR=87
E19K S S **23 43 52.2 +0.7**
baz=101
**A22K Sinclair Lake 76.00 341 P P 23 34 09.9 +0.7**
baz=104,SNR=26
A22K S S **23 43 52.0 +0.6**
baz=104
**H18K Honhosa River 76.01 335** IAMs_20 IAMs_20 00 10 26.2
comp=Z,6µm,22.0s
**H18K Honhosa River 76.01 335 P P 23 34 10.4 +1.1**
baz=100,SNR=37
H18K S S **23 43 53.6 +1.8**
baz=100
**D20K Etivluk River 76.02 339 P P 23 34 10.0 +0.6**
baz=102,SNR=132
D20K S S **23 43 53.1 +1.3**
baz=102
**J17K VABM Dome 76.03 333** IAmb IAmb 23 34 12.6
comp=Z,120nm,0.8s
J17K IAMs_20 IAMs_20 00 12 04.0
comp=Z,5µm,19.0s
**J17K VABM Dome 76.03 333 P P 23 34 10.2 +0.7**
baz=99,SNR=61
J17K S S **23 43 53.5 +1.4**
baz=99
J17K S S **23 43 53.5 +1.4**
baz=99
**KPL Plockton 76.05 33** *e*P P **23 34 08.6 -1.1**
**N15K Kwethluk River 76.06 330** IAMs_20 IAMs_20 00 11 25.1
comp=Z,6µm,20.0s
**N15K Kwethluk River 76.06 330 P P 23 34 10.0 +0.2**
baz=97,SNR=13
N15K S S **23 43 55.9 +3.3**
baz=97
**F19K Shaleruckik Mo 76.07 337** IAmb IAmb 23 34 11.5
comp=Z,125nm,0.8s
F19K IAMs_20 IAMs_20 00 09 08.7
comp=Z,7µm,21.0s
**F19K Shaleruckik Mo 76.07 337 P P 23 34 09.8 +0.1**
baz=101
F19K S S **23 43 55.7 +3.3**
baz=101
**G18K Tagagawik 76.25 336** IAmb IAmb 23 34 13.2
comp=Z,180nm,1.0s
G18K IAMs_20 IAMs_20 00 08 56.7
comp=Z,7µm,22.0s
**G18K Tagagawik 76.25 336 P P 23 34 11.5 +0.7**
baz=100,SNR=85
G18K S S **23 43 58.2 +3.7**
baz=100
**ESDC Sonseca Array 76.25 51 P P 23 34 11.4 +0.1**
comp=Z,75nm,0.8s,baz=277,slow=4.9,SNR=311
ESDC S S **23 43 55.5 -0.1**
comp=Z,0.4nm,0.8s,baz=67,slow=38,SNR=2.5
ESDC LR LR 00 04 39.1
comp=Z,5µm,18.9s,baz=265,slow=33
comp=Z,75nm,0.8s
**ESBB Sonseca Array 76.25 51** IAmb IAmb 23 34 13.2
comp=Z,154nm,1.0s
**WIM Isle of Man 76.32 36** *e*P P **23 34 11.0 -0.4**
**M15K Kasigluk River 76.42 330** P P **23 34 12.3 +0.5**
baz=97,SNR=61
M15K S S **23 43 59.1 +2.7**
baz=97
**B20K Meade River 76.49 340** IAmb IAmb 23 34 14.3
comp=Z,244nm,1.1s
**B20K Meade River 76.49 340 P P 23 34 12.7 +0.8**
baz=102,SNR=56
B20K S S **23 43 58.5 +1.7**
baz=102
**D19K Kuna River 76.52 339** IAmb IAmb 23 34 14.5
comp=Z,136nm,0.9s
D19K IAMs_20 IAMs_20 00 10 26.4
comp=Z,7µm,22.0s
**D19K Kuna River 76.52 339 P P 23 34 12.8 +0.5**
baz=101,SNR=67
**O14K Tigyukauivet M 76.55 329** IAMs_20 IAMs_20 00 13 02.1
comp=Z,4µm,20.0s
**O14K Tigyukauivet M 76.55 329 P P 23 34 12.1 -0.4**
baz=96,SNR=6.1
O14K S S **23 43 57.7 -0.2**
baz=96
**PGBU Glenifferbraes 76.56 35** *e*P P **23 34 11.6 -1.0**
PGBU IAmb IAmb 23 34 12.9
comp=Z,290nm,1.3s
**A21K Barrow 76.60 341 P P 23 34 13.1 +0.6**
baz=103,SNR=9.2
A21K S S **23 43 58.6 +0.6**
baz=103
**H17K Granite Mounta 76.62 335** IAMs_20 IAMs_20 00 08 51.5
comp=Z,4µm,22.0s
**H17K Granite Mounta 76.62 335 P P 23 34 13.7 +0.9**
baz=98,SNR=18
H17K S S **23 44 00.3 +1.7**
baz=98
**NEWG New Galloway 76.65 35** *e*P P **23 34 12.1 -1.1**
NEWG IAmb IAmb 23 34 13.5
comp=Z,105nm,0.9s
**S12K Black Hills 76.66 325** IAmb IAmb 23 34 15.5
comp=Z,182nm,0.9s
**S12K Black Hills 76.66 325 P P 23 34 14.1 +0.8**
baz=94,SNR=13
S12K S S **23 44 00.1 +0.7**
baz=94
**J16K Anvik River 76.69 333** IAMs_20 IAMs_20 00 12 34.6
comp=Z,6µm,19.0s
**J16K Anvik River 76.69 333 P P 23 34 14.6 +1.3**
baz=97,SNR=24
J16K S S **23 44 00.7 +1.3**
baz=97
**F18K Selawik 76.77 336 P P 23 34 14.2 +0.6**
baz=99,SNR=32
F18K S S **23 43 59.4 -0.6**
baz=99
**I17K Unalakleet 76.81 334** IAmb IAmb 23 34 16.2
comp=Z,299nm,1.7s
I17K IAMs_20 IAMs_20 00 13 39.6
comp=Z,5µm,18.0s
**I17K Unalakleet 76.81 334 P P 23 34 15.2 +1.3**
baz=97,SNR=6.2
I17K S S **23 44 02.1 +1.5**
baz=97
**JMI Jan Mayen 76.83 19** *e*P P **23 34 14.2 +0.3**
JMI *e*PP PP **23 37 06.9 +0.3**
**N14K Kuskokwak Cree 76.83 330** P P **23 34 14.6 +0.5**
baz=96,SNR=33
N14K S S **23 44 01.5 +0.6**
baz=96
**INVG Invergeldie, C 76.85 34** *e*P P **23 34 13.2 -1.1**
**ROSF Rostrenen 76.90 42** P P **23 34 13.7 -1.0**
**JMIC Jan Mayen 76.91 19** IVmB_BB 23 34 14.6
comp=Z,4µm,1.9s
JMIC *e*P P **23 34 15.6 +1.2**
JMIC *e*S S **23 44 02.9 +1.4**
JMIC IVMs_BB IVMs_BB 00 07 40.4
comp=Z,2µm,3.3s
**JMIC Jan Mayen 76.91 19** LR LR 00 08 18.5
comp=Z,3µm,19.3s,baz=266,slow=36
**L15K Ungalak Mounta 76.91 331 P P 23 34 15.4 +0.9**
baz=96,SNR=73
L15K S S **23 44 04.4 +2.6**
baz=96
**QUIF Quistinic 76.96 43 P P 23 34 14.1 -1.0**
**K15K Wolf Creek Mou 77.00 332** IAMs_20 IAMs_20 00 11 48.7
comp=Z,7µm,21.0s
**K15K Wolf Creek Mou 77.00 332 P P 23 34 16.3 +1.3**
baz=96,SNR=47
K15K S S **23 44 06.4 +3.6**
baz=96
**G17K Kiwalik Mounta 77.01 335 P P 23 34 15.8 +0.8**
baz=98,SNR=26
G17K S S **23 44 04.7 +1.9**
baz=98
**M14K Bethel 77.05 330** IAMs_20 IAMs_20 00 12 54.1
comp=Z,5µm,18.0s
**M14K Bethel 77.05 330 P P 23 34 16.2 +1.0**
baz=96,SNR=95
M14K S S **23 44 05.9 +2.7**
baz=96
**FOEL Foel Wylfa 77.12 38** *e*P P **23 34 14.6 -1.3**
FOEL IAmb IAmb 23 34 16.0
comp=Z,58nm,0.9s
**C19K Lookout Ridge 77.15 339 P P 23 34 16.8 +1.0**
baz=100,SNR=50
C19K S S **23 44 05.4 +1.2**
baz=100

**ESK Eskdalemuir 77.25 35 P P 23 34 15.7 -0.8**
ESK IAmb IAmb 23 34 17.0
comp=Z,272nm,1.6s
**ESK Eskdalemuir 77.25 35** IAMs_20 IAMs_20 00 04 20.3
comp=Z,4µm,20.0s
**ESK Eskdalemuir 77.25 35** *e*P P **23 34 15.2 -1.3**
**ESK Eskdalemuir 77.25 35** P P **23 34 15.7 -0.8**
ESK pmax pmax
comp=Z,272nm,1.7s
**E18K Tukpahlearik C 77.26 337** IAmb IAmb 23 34 18.1
comp=Z,72nm,0.8s
E18K IAMs_20 IAMs_20 00 09 48.2
comp=Z,6µm,21.0s
**E18K Tukpahlearik C 77.26 337 P P 23 34 16.7 +0.3**
baz=98,SNR=26
E18K S S **23 44 06.6 +1.2**
baz=98
**EKA Eskdalemuir Ar 77.28 35** P P **23 34 15.6 -1.1**
comp=Z,36nm,0.8s,baz=262,slow=5.5,SNR=39
comp=Z,36nm,0.8s
**HLM1 Long Mynd 77.30 38** *e*P P **23 34 15.6 -1.4**
HLM1 IAmb IAmb 23 34 17.2
comp=Z,120nm,1.1s
**MONM Monmouth 77.32 39** *e*P P **23 34 15.6 -1.4**
MONM IAmb IAmb 23 34 17.3
comp=Z,82nm,0.9s
**TIC Toumodi 77.36 85** ⇑*i*P P **23 34 18.7 +0.7**
comp=Z,574nm,1.4s
**F17K Baldwin Pennin 77.38 336** IAmb IAmb 23 34 19.1
comp=Z,121nm,0.9s
F17K IAMs_20 IAMs_20 00 11 28.3
comp=Z,5µm,20.0s
**F17K Baldwin Pennin 77.38 336** P P **23 34 17.7 +0.7**
baz=97
F17K S S **23 44 08.2 +1.6**
baz=97
**FALS False Pass 77.39 324** P P **23 34 18.7 +1.4**
**FALS False Pass 77.39 324** P P **23 34 17.9 +0.6**
baz=93,SNR=15
FALS S S **23 44 09.6 +2.4**
baz=93
**LIC Lamto 77.41 86** ⇑*i*P P **23 34 18.9 +0.6**
comp=Z,822nm,1.3s
**SMAI San Martin Ant 77.42 174** IAmb IAmb 23 34 19.6
comp=Z,192nm,1.3s
**L14K Kuka Creek 77.45 331** IAmb IAmb 23 34 19.6
comp=Z,143nm,1.3s
**L14K Kuka Creek 77.45 331** P P **23 34 17.8 +0.3**
baz=95,SNR=22
L14K S S **23 44 08.2 +0.6**
baz=95
**DBIC Dimbokro 77.52 85** P P **23 34 19.1 +0.2**
comp=Z,138nm,1.1s,baz=278,slow=5.9,SNR=48
DBIC S S **23 44 09.1 -0.9**
comp=Z,2.3nm,0.8s,baz=288,slow=5.2,SNR=1.5
DBIC LR LR 00 08 21.6
comp=Z,2µm,20.3s,baz=250,slow=36
comp=Z,138nm,1.1s
**H16K Elim 77.57 334** P P **23 34 19.2 +1.0**
baz=96,SNR=9.2
H16K S S **23 44 10.3 +1.4**
baz=96
**ESY Stoneypath 77.62 35** *e*P P **23 34 17.4 -1.2**
**JSA Saint Aubin 77.65 42** *e*P P **23 34 18.0 -0.9**
JSA IAmb IAmb 23 34 19.7
comp=Z,280nm,1.8s
**C18K Utukok River 77.66 338** IAmb IAmb 23 34 20.7
comp=Z,228nm,1.2s
**C18K Utukok River 77.66 338** P P **23 34 19.3 +0.6**
baz=98,SNR=34
C18K S S **23 44 09.7 -0.1**
baz=98
**KIC Kosan Boka 77.67 85** ⇑*i*P P **23 34 20.4 +0.7**
comp=Z,459nm,1.2s
**E17K Hotham Inlet 77.69 337** P P **23 34 19.4 +0.6**
baz=97,SNR=76
E17K S S **23 44 10.2 +0.2**
baz=97
**JLP Les Platons 77.69 42** *e*P P **23 34 19.1 -0.1**
**M13K Dall Lake 77.70 330** IAMs_20 IAMs_20 00 13 17.4
comp=Z,5µm,18.0s
**M13K Dall Lake 77.70 330** P P **23 34 20.1 +1.1**
baz=94,SNR=44
M13K S S **23 44 12.3 +1.9**
baz=94
**G16K Koyuk River 77.70 335** IAmb IAmb 23 34 21.7
comp=Z,460nm,1.8s
G16K IAMs_20 IAMs_20 00 11 27.0
comp=Z,5µm,19.0s
**G16K Koyuk River 77.70 335** P P **23 34 20.0 +1.1**
baz=96,SNR=14
G16K S S **23 44 11.0 +0.8**
baz=96
**STRD Stroud 77.72 39** *e*P P **23 34 18.2 -1.0**
STRD IAmb IAmb 23 34 20.1
comp=Z,112nm,0.9s
**STNC Stoke 77.73 38** *e*P P **23 34 18.6 -0.8**
STNC IAmb IAmb 23 34 19.9
comp=Z,522nm,1.8s
**JQE Queens East 77.74 42** *e*P P **23 34 19.0 -0.4**
**A19K Wainwright 77.84 340** P P **23 34 20.6 +1.0**
baz=98,SNR=16
A19K S S **23 44 13.5 +2.0**
baz=98
**EDMD Edmundbyers 77.94 36** *e*P P **23 34 19.2 -1.2**
**B18K Kokolik River 77.97 339** P P **23 34 21.4 +1.1**
baz=98,SNR=34
B18K S S **23 44 14.5 +1.4**
baz=98
**J14K Nanvaranak Lak 77.98 332** IAMs_20 IAMs_20 00 11 55.5
comp=Z,7µm,20.0s
**J14K Nanvaranak Lak 77.98 332** P P **23 34 22.0 +1.6**
baz=94,SNR=49
J14K S S **23 44 16.8 +3.5**
baz=94
**LBWR Ladybower, Pea 78.03 37** *e*P P **23 34 19.6 -1.3**
LBWR IAmb IAmb 23 34 21.6
comp=Z,131nm,1.0s
**NOR Nord 78.15 8** *i*P P **23 34 19.3 -1.8**
NOR IAmb IAmb 23 34 22.5
comp=Z,25nm,1.2s
**RDOG Red Dog Mine 78.21 338** IAmb IAmb 23 34 23.6
comp=Z,148nm,0.9s
RDOG IAMs_20 IAMs_20 00 11 57.3
comp=Z,6µm,22.0s
**RDOG Red Dog Mine 78.21 338** P P **23 34 22.1 +0.4**
baz=96,SNR=20
**D17K Noatak River 78.24 337** P P **23 34 22.5 +0.6**
baz=96,SNR=31
D17K S S **23 44 17.2 +1.2**
baz=96
**CWF Charnwood Fore 78.27 38** *e*P P **23 34 20.7 -1.6**
**WOL Wolverton 78.29 39** *e*P P **23 34 21.3 -1.1**
**C17K DeLong Mountai 78.36 338** P P **23 34 23.1 +0.6**
baz=96,SNR=30
C17K S S **23 44 18.3 +1.0**
baz=96
**G15K Niukluk 78.37 335** P P **23 34 23.7 +1.1**
baz=94,SNR=18
G15K S S **23 44 19.9 +2.4**
baz=94
**K13K Kusilvak Mount 78.43 331** IAmb IAmb 23 34 25.5
comp=Z,207nm,1.2s
K13K IAMs_20 IAMs_20 00 15 12.1
comp=Z,6µm,18.0s
**K13K Kusilvak Mount 78.43 331** P P **23 34 23.9 +0.9**
baz=93
K13K S S **23 44 18.5 +0.3**
baz=93
**LRW Lerwick 78.59 30** *e*P P **23 34 23.0 -0.8**
**GDLE Glaisdale, N Y 78.59 36** *e*P P **23 34 23.1 -0.9**
**CART Cartagena 78.61 53** P P **23 34 23.8 -0.7**
**F15K North Star Dit 78.68 335** IAMs_20 IAMs_20 00 11 54.8
comp=Z,6µm,20.0s
**F15K North Star Dit 78.68 335** P P **23 34 25.7 +1.4**
baz=94
F15K S S **23 44 23.1 +2.3**
baz=94
**LVA Lava Point 78.89 324** P P **23 34 26.7 +1.0**
**ANM Nome 78.91 334** IAMs_20 IAMs_20 00 12 42.1
comp=Z,7µm,20.0s
**ANM Nome 78.91 334** P P **23 34 26.7 +1.0**
baz=93,SNR=5.3
ANM S S **23 44 25.4 +2.1**
baz=93
**M11K Mekoryuk 79.11 330** P P **23 34 27.9 +1.2**
baz=92,SNR=8.6

M11K S S **23 44 27.7 +2.2**
baz=92
**C16K Lisburne Hills 79.14 338** P P **23 34 27.0 +0.2**
C16K IAMs_20 IAMs_20 00 15 37.8
comp=Z,5µm,19.0s
**C16K Lisburne Hills 79.14 338** P P **23 34 27.6 +0.8**
baz=94,SNR=31
C16K S S **23 44 28.1 +2.5**
baz=94
**UNV Unalaska Valle 79.16 323** P P **23 34 29.0 +1.8**
**UNV Unalaska Valle 79.16 323** P P **23 34 28.0 +0.9**
baz=90,SNR=25
UNV S S **23 44 28.8 +2.5**
baz=90
**F14K Arctic Creek 79.36 335** P P **23 34 29.5 +1.4**
baz=92,SNR=11
F14K S S **23 44 31.3 +3.2**
baz=92
**WACR West Acre 79.44 38** *e*P P **23 34 27.1 -1.6**
WACR IAmb IAmb 23 34 28.9
comp=Z,198nm,1.0s
**ELMS Elmsett, Ipswi 79.67 39** *e*P P **23 34 28.4 -1.6**
**ELSH Elham, Standar 79.78 40** *e*P P **23 34 29.4 -1.2**
**TNA Tin City 80.03 335** P P **23 34 32.8 +1.1**
baz=91,SNR=5.4
TNA S S **23 44 36.4 +1.3**
baz=91
**CEST Esterri de Car 80.13 48** IAmb IAmb 23 34 34.3
comp=Z,285nm,1.8s
CEST IAMs_20 IAMs_20 00 06 28.8
comp=Z,4µm,21.0s
**SHEL Horse Pasture 80.42 108** P P **23 34 36.2 +1.4**
**SHEL Horse Pasture 80.42 108** IAMs_20 IAMs_20 00 07 50.6
comp=Z,6µm,22.0s
**SHEL Horse Pasture 80.42 108** P P **23 34 36.2 +1.4**
SHEL pmax pmax
comp=Z,796nm,1.9s
**NIKH Nikolski High 80.58 322** P P **23 34 36.3 +1.4**
**NIKH Nikolski High 80.58 322** P P **23 34 35.8 +0.9**
baz=88,SNR=8.6
**CLF Chambon-Foret 80.60 43** P P **23 34 35.1 0.0**
CLF IAmb IAmb 23 34 36.4
comp=Z,414nm,1.4s
**RAR Rarotonga 80.78 247** P P **23 34 37.6 +1.1**
RAR IAmb IAmb 23 34 39.1
comp=Z,169nm,1.9s
**RAR Rarotonga 80.78 247** LR LR 00 02 16.9
comp=Z,5µm,18.1s,baz=76,slow=30
**RAR Rarotonga 80.78 247** P P **23 34 37.6 +1.1**
RAR pmax pmax
comp=Z,169nm,1.9s
**P08K Saint George I 80.87 326** P P **23 34 37.8 +1.4**
baz=88,SNR=5.5
**CLES Cleveland East 81.22 322** P P **23 34 39.5 +1.2**
**SPIA Saint Paul Isl 81.23 327** P P **23 34 40.5 +2.2**
**SPIA Saint Paul Isl 81.23 327** P P **23 34 39.7 +1.5**
baz=88,SNR=13
SPIA S **SKSac 23 44 52.0 -4.9**
baz=88
**AVF Avril sur Loir 81.41 44** *e*P P **23 34 37.7 -1.7**
**SUE Sulen 81.52 29** *e*P P **23 34 39.4 -0.3**
SUE IVmBBB 23 34 41.1
comp=Z,2µm,2.1s
SUE *e*pP **PcP 23 34 46.0 +0.4**
SUE *e*S S **23 44 43.7 -7.0**
SUE *e*SS **SS 23 50 03.7 -3.4**
SUE IVMs_BB IVMs_BB 00 09 51.9
comp=Z,4µm,18.6s
**FOO Floro 81.63 29** *e*P P **23 34 40.0 -0.2**
FOO IVmBBB 23 34 41.5
comp=Z,1µm,2.1s
FOO *e*S S **23 44 51.4 -0.5**
FOO *e*SS SS **23 50 08.9 +0.1**
**GAMB Gambell 81.68 333** P P **23 34 41.5 +1.0**
baz=87,SNR=8.1
GAMB S **SKSac 23 44 55.3 -4.3**
baz=87
**ASK Askoy 81.76 30** *e*P P **23 34 40.7 -0.2**
ASK *e*S S **23 44 53.4 +0.2**
**BAIF Baives 81.78 41** *e*P P **23 34 39.8 -1.5**
**BER Bergen 81.83 30** *e*P P **23 34 41.0 -0.4**
BER IVmB_BB 23 34 41.5
comp=Z,3µm,2.0s
BER *e*S S **23 44 52.8 -1.1**
BER *e*SS SS **23 50 16.0 +4.2**
BER IVMs_BB IVMs_BB 00 08 12.0
comp=Z,3µm,19.6s
**KMY Karmoy 81.85 31** *e*P P **23 34 40.4 -1.1**
KMY IVmB_BB 23 34 40.9
comp=Z,2µm,1.9s
KMY *e*S S **23 44 53.5 -0.7**
KMY *e*SS SS **23 50 12.6 +0.4**
**DOU Dourbes 82.02 41** *d*P P **23 34 41.3 -1.3**
comp=Z,24nm,1.5s
**BMRD Maredsous 82.12 40** *d*P P **23 34 42.5 -0.6**
comp=Z,14nm,0.0s
**HYA Hoyanger 82.20 29** *e*P P **23 34 42.6 -0.6**
HYA IVmBBB 23 34 44.6
comp=Z,2µm,1.6s
HYA *e*S S **23 44 58.7 +0.9**
HYA *e*SS SS **23 50 17.9 +0.6**
**BGES Gesves 82.32 40** *d*P P **23 34 43.5 -0.7**
comp=Z,24nm,1.5s
**SSB Saint Sauveur 82.34 45** P P **23 34 43.9 -0.6**
SSB IAmb IAmb 23 34 46.0
comp=Z,144nm,1.8s
**SSB Saint Sauveur 82.34 45** IAMs_20 IAMs_20 00 04 20.9
comp=Z,5µm,22.0s
**SSB Saint Sauveur 82.34 45** P P **23 34 43.9 -0.6**
SSB pmax pmax
comp=Z,144nm,1.8s
**RCHB Rochefort 82.42 40** *d*P P **23 34 43.2 -1.5**
comp=Z,21nm,1.5s
**BCLA Clavier 82.45 40** *d*P P **23 34 43.8 -1.0**
comp=Z,24nm,1.5s
BCLA *dx* x 23 34 49.7
**BLS5 Blasjo 82.45 31** *e*P P **23 34 44.4 -0.3**
BLS5 IVmB_BB 23 34 45.2
comp=Z,2µm,2.0s
BLS5 *e*S **SKSac 23 45 02.0 -3.1**
**ODD1 Odda 82.51 31** *e*P P **23 34 44.2 -0.8**
ODD1 IVmB_BB 23 34 45.6
comp=Z,2µm,2.0s
ODD1 *e*S S **23 44 56.2 -4.9**
**KBS Kingsbay 82.58 11** P P **23 34 46.0 +1.0**
**KBS Kingsbay 82.58 11** *e*P P **23 34 45.7 +0.7**
KBS IVmB_BB 23 34 46.4
comp=Z,3µm,1.7s
KBS *e*S **SKSac 23 45 02.9 -2.4**
KBS IVMs_BB IVMs_BB 00 09 25.4
comp=Z,4µm,20.4s
**KBS Kingsbay 82.58 11** *c i*P P **23 34 45.3 +0.3**
KBS pmax pmax
comp=Z,347nm,1.3s
**KBS Kingsbay 82.58 11** ⇓*i*P P **23 34 44.4 -0.7**
**BSTI Sart Tilman 82.61 40** *d*P P **23 34 44.7 -1.0**
comp=Z,8.5nm,1.3s
**BEBN Eben Emael 82.66 40** *d*P P **23 34 45.2 -0.7**
**MOL Molde 82.75 28** *e*P P **23 34 45.6 -0.5**
MOL IVmBBB 23 34 47.8
comp=Z,1µm,2.8s
MOL *e*S **SKSac 23 45 04.5 -2.4**
MOL *e*SS SS **23 50 28.2 +2.9**
MOL IVMs_BB IVMs_BB 00 03 52.3
comp=Z,3µm,25.1s
**MEM Membach 82.89 40** *d*P P **23 34 45.8 -1.3**
comp=Z,29nm,1.4s
**BHOU Houvegnez 82.91 40** *d*P P **23 34 46.8 -0.5**
comp=Z,29nm,1.5s
**SNART Snartemo 82.93 32** *e*P P **23 34 47.0 -0.1**
SNART *e*PP **PP 23 37 55.4 -2.1**
SNART *e*S **SKSac 23 45 07.0 -1.3**
**BTNL Ternell 82.97 40** *d*P P **23 34 47.0 -0.6**
comp=Z,21nm,1.4s
**WLF Walferdange 83.06 41** P P **23 34 48.2 +0.2**
WLF IAmb IAmb 23 34 49.4
comp=Z,188nm,1.5s
**WLF Walferdange 83.06 41** P P **23 34 47.3 -0.7**
**WLF Walferdange 83.06 41** *d*P P **23 34 47.7 -0.3**
comp=Z,33nm,1.4s
**WLF Walferdange 83.06 41** P P **23 34 48.2 +0.2**
WLF pmax pmax
comp=Z,188nm,1.5s
**WLF Walferdange 83.06 41** *e*P P **23 34 47.3 -0.7**
comp=Z,204nm,1.6s,baz=278,slow=5.0

**TORD Torodi Ar. Bea 83.12 78** P **P** **23 34 48.4 -0.6**
**TORD Torodi Ar. Bea 83.12 78** P **P** **23 34 48.5 -0.6**
comp=Z,20nm,0.8s,baz=310,slow=5.4,SNR=104
TORD PP **PP** **23 37 59.8 -0.5**
comp=Z,5.0nm,1.2s,baz=246,slow=4.5,SNR=3.3
TORD S **S** **23 45 08.6 -0.3**
comp=Z,0.2nm,0.8s,baz=80,slow=36,SNR=2.4
TORD PKKPbc **PKKPbc** **23 53 11.2 +1.1**
comp=Z,2.2nm,0.8s,baz=38,slow=2.7,SNR=14
TORD PKPPKP **P'P'df** **00 01 14.6 -3.3**
comp=Z,1.3nm,0.8s,baz=38,slow=2.2,SNR=5.0
TORD LR LR 00 11 33.7
comp=Z,3µm,20.5s,baz=273,slow=36
comp=Z,20nm,0.8s
**SKAR Skarslia 83.27 30** *e*P **P** **23 34 48.9 -0.1**
SKAR IVmB_BB 23 34 49.3
comp=Z,2µm,3.0s
SKAR *e*S **SKSac** **23 45 08.7 -1.9**
SKAR *e*SS **SS** **23 50 35.3 +2.0**
SKAR IVMs_BB IVMs_BB 00 08 29.4
comp=Z,2µm,17.3s
**ORIF Oris-en-Rattie 83.31 46** *e*P **P** **23 34 49.2 -0.4**
**DOMB Dombas 83.50 28** *e*P **P** **23 34 49.7 -0.4**
DOMB IVmBBB 23 34 52.1
comp=Z,2µm,3.3s
DOMB *e*PP **PP** **23 38 01.9 -0.2**
DOMB *e*SKSac **S** **23 45 10.4 -0.7**
DOMB *e*SS **SS** **23 50 38.0 +1.4**
DOMB IVMs_BB IVMs_BB 00 04 26.5
comp=Z,2µm,27.6s
**AHRW Bad Neuenahr-A 83.57 40** *e*P **P** **23 34 49.7 -0.9**
baz=278,slow=5.0
AHRW *e*S **S** **23 45 11.2 -1.0**
baz=282,slow=6.9
**SPA0 Spitsbergen Ar 83.57 12** *e*P **P** **23 34 49.4 -0.8**
SPA0 IVmBBB 23 34 51.5
comp=Z,3µm,1.6s
SPA0 *e*SKSac **S** **23 45 10.8 -0.6**
SPA0 IVMs_BB IVMs_BB 00 12 44.6
comp=Z,5µm,19.0s
**SPITS Spitsbergen Ar 83.57 12** P **P** **23 34 49.5 -0.7**
comp=Z,23nm,0.7s,baz=224,slow=3.5,SNR=13
SPITS LR LR 00 13 27.6
comp=Z,12µm,19.6s,baz=231,slow=37
comp=Z,23nm,0.7s
**SPITS Spitsbergen Ar 83.57 12** P **P** **23 34 50.6 +0.4**
SPITS pmax pmax
comp=Z,442nm,1.5s
**BUG Bochum-Univer 83.60 39** *e*P **P** **23 34 50.0 -0.8**
comp=Z,190nm,1.5s,baz=278,slow=5.0
BUG *e*S **S** **23 45 10.9 -1.6**
baz=282,slow=6.9
BUG *e*SS **SS** **23 50 39.7 +1.2**
**HSPB Hornsund (broa 83.61 13** *i*P **P** **23 34 51.0 +0.7**
HSPB *e*S **SKSac** **23 45 13.2 +1.1**
HSPB *e*SS SS 23 51 18.6 +41
HSPB *e*L L 00 09 44.6
comp=Z,11µm,22.0s
**HSPB Hornsund (broa 83.61 13** *e*P **P** **23 34 50.9 +0.5**
**HOMB Homborsund 83.62 32** *e*P **P** **23 34 50.2 -0.5**
HOMB IVmBBB 23 34 52.2
comp=Z,2µm,2.1s
HOMB *e*PP **PP** **23 38 02.0 -1.1**
HOMB *e*SKSac **SKSac** **23 45 13.1 +0.3**
HOMB *e*SS **SS** **23 50 38.9 +0.5**
HOMB IVMs_BB IVMs_BB 00 07 08.9
comp=Z,2µm,23.4s
**IBBN Ibbenburen 83.81 38** *e*P **P** **23 34 51.1 -0.7**
comp=Z,224nm,1.6s,baz=278,slow=5.0
IBBN *e*S **S** **23 45 12.3 -2.3**
baz=282,slow=6.9
**LPL La Plagne 83.85 45** *e*P **P** **23 34 51.7 -0.8**
**ECH Echery 83.86 42** IAmb IAmb 23 34 53.3
comp=Z,187nm,1.5s
**BNI Bardonecchia 83.86 45** P **P** **23 34 52.9 +0.4**
BNI IAmb IAmb 23 34 53.5
comp=Z,104nm,1.8s
BNI IAMs_20 IAMs_20 00 08 40.2
comp=Z,6µm,20.0s
**BNI Bardonecchia 83.86 45** P **P** **23 34 52.9 +0.4**
BNI pmax pmax
comp=Z,104nm,1.8s
**LPG La Plagne 83.87 45** *e*P **P** **23 34 52.1 -0.6**
**TBLU Trondheim 83.91 27** *e*P **P** **23 34 52.1 -0.1**
TBLU IVmB_BB 23 34 52.6
comp=Z,2µm,1.9s
TBLU *e*PP **PP** **23 38 08.5 +3.1**
TBLU *e*SKSac **SKSac** **23 45 14.8 +0.3**
TBLU *e*SS **SS** **23 50 45.0 +2.5**
TBLU IVMs_BB IVMs_BB 00 05 49.8
comp=Z,2µm,26.8s
**KONO Kongsberg 84.03 31** IAMs_20 IAMs_20 00 09 30.1
comp=Z,5µm,21.0s
**KONO Kongsberg 84.03 31** *e*P **P** **23 34 52.5 -0.2**
KONO IVmB_BB 23 34 53.2
comp=Z,2µm,2.8s
KONO *e*SKSac **SKSac** **23 45 14.6 -0.8**
KONO *e*SS **SS** **23 50 46.6 +2.2**
KONO IVMs_BB IVMs_BB 00 09 38.4
comp=Z,2µm,24.3s
**KONO Kongsberg 84.03 31**⇑ *e*P **P** **23 34 52.4 -0.4**
KONO pmax pmax
comp=Z,134nm,1.7s
**JOHN Johnston Islan 84.10 286** IAMs_20 IAMs_20 00 07 22.3
comp=Z,4µm,18.0s
**SENIN Lac Senin/Sane 84.16 44** P **P** **23 34 53.0 -1.0**
**MUD Monsted U'grnd 84.18 34** *i*P **P** **23 34 51.9 -1.7**
**KASTN Kahler Asten 84.34 39** *e*P **P** **23 34 53.6 -1.1**
comp=Z,133nm,1.6s,baz=278,slow=5.0
KASTN *e*S **SKSac** **23 45 15.3 -2.6**
baz=282,slow=6.9
**TNS Taunus Mts 84.48 40** *e*P **P** **23 34 55.0 -0.3**
comp=Z,242nm,1.6s,baz=278,slow=5.0
TNS *e*S **SKSac** **23 45 17.0 -1.8**
baz=282,slow=6.9
**NSS Namsos 84.49 26** *e*P **P** **23 34 54.4 -0.6**
NSS IVmBBB 23 34 56.7
comp=Z,2µm,2.9s
NSS *e*PP **PP** **23 38 09.6 -0.5**
NSS *e*SKSac **SKSac** **23 45 15.8 -2.3**
NSS *e*SS **SS** **23 50 56.3 +5.3**
NSS IVMs_BB IVMs_BB 00 11 09.7
comp=Z,1µm,11.9s
**SSRD Sdr. Stenderup 84.55 35** *i*P **P** **23 34 54.4 -1.1**
SSRD IAmb IAmb 23 34 58.0
comp=Z,35nm,0.7s
**OSL Oslo 84.55 30** *e*P **P** **23 34 55.2 -0.3**
OSL IVmB_BB 23 34 55.9
comp=Z,4µm,1.9s
OSL *e*SKSac **SKSac** **23 45 19.1 +0.4**
OSL *e*SS **SS** **23 50 55.1 +3.0**
OSL IVMs_BB IVMs_BB 00 10 05.7
comp=Z,2µm,17.9s
**LOF Lofoten 84.56 22** *e*P **P** **23 34 54.7 -0.6**
LOF IVmB_BB 23 35 03.7
comp=Z,3µm,2.3s
LOF *e*PP **PP** **23 38 11.0 +0.4**
LOF *e*SKSac **SKSac** **23 45 18.7 +0.2**
LOF *e*SS **SS** **23 50 55.1 +3.3**
LOF IVMs_BB IVMs_BB 00 12 23.3
comp=Z,2µm,21.0s
**BFO Black Forest 84.63 42** P **P** **23 34 54.9 -1.2**
BFO IAmb IAmb 23 34 56.8
comp=Z,99nm,1.5s
**BFO Black Forest 84.63 42** P **P** **23 34 54.9 -1.2**
BFO pmax pmax
comp=Z,99nm,1.5s
**BFO Black Forest 84.63 42** *e*P **P** **23 34 54.5 -1.6**
comp=Z,86nm,1.4s,baz=278,slow=5.0
**OVD Ostervraa, Den 84.63 33** *i*P **P** **23 34 55.0 -0.9**
**NB2 NORSAR Subarra 84.64 29** P **P** **23 34 55.8 -0.2**
comp=Z,724nm,1.7s,baz=277,slow=5.1
**NB2 NORSAR Subarra 84.64 29** P **P** **23 34 55.8 -0.2**
baz=277,slow=5.1
**NB2 NORSAR Subarra 84.64 29** *e*P **P** **23 34 54.9 -1.1**
**NOA NORSAR Array B 84.64 29** P **P** **23 34 55.4 -0.6**
comp=Z,39nm,1.0s,baz=277,slow=5.0,SNR=53
NOA LR LR 00 12 44.7
comp=Z,3µm,18.3s,baz=280,slow=36
comp=Z,39nm,1.0s
**STOK Stokkvaagen 84.65 24** *e*P **P** **23 34 55.4 -0.4**
STOK IVmB_BB 23 35 04.3
comp=Z,3µm,3.6s
STOK *e*SKSac **SKSac** **23 45 20.0 +0.9**
STOK *e*SS **SS** **23 50 47.6 -5.6**
STOK IVMs_BB IVMs_BB 00 06 31.6
comp=Z,3µm,26.7s
**KONS Konsvik 84.66 24** *e*P **P** **23 34 56.4 +0.5**
**RETH Rethem/Aller, 84.74 38** *e*P **P** **23 34 56.3 -0.2**
comp=Z,399nm,1.7s,baz=278,slow=5.0
**NC602 NORSAR Array S 84.85 29** *e*P **P** **23 34 56.4 -0.5**
NC602 IVmB_BB 23 34 57.5
comp=Z,3µm,2.2s
NC602 *e*SKSac **SKSac** **23 45 21.2 +0.6**
NC602 IVMs_BB IVMs_BB 00 10 14.6
comp=Z,2µm,15.9s
**BJO1 Bjornoya 84.98 15** *e*P **P** **23 34 57.2 -0.1**
BJO1 IVmB_BB 23 34 58.1
comp=Z,4µm,1.5s
BJO1 *e*PP **PP** **23 38 13.1 -0.8**
BJO1 *e*SKSac **SKSac** **23 45 20.3 -0.7**
BJO1 *e*SS **SS** **23 50 59.3 +1.4**
BJO1 IVMs_BB IVMs_BB 00 10 28.8
comp=Z,3µm,16.5s
**STU Stuttgart 85.14 42** IAmb IAmb 23 34 59.7
comp=Z,243nm,1.5s
**STU Stuttgart 85.14 42** *e*P **P** **23 34 57.8 -0.9**
comp=Z,579nm,1.5s,baz=278,slow=5.0
**BSEG Bad Segeberg 85.15 36** *e*P **P** **23 34 58.2 -0.3**
comp=Z,389nm,1.8s,baz=278,slow=5.0
BSEG *e*S **SKSac** **23 45 21.3 -1.5**
baz=282,slow=6.9
**NRDL Niedersach Rie 85.22 38** *e*P **P** **23 34 58.6 -0.3**
comp=Z,234nm,1.5s,baz=278,slow=5.0
NRDL *e*S **SKSac** **23 45 20.9 -2.3**
baz=282,slow=6.9
**STEI Steigen 85.22 22** *e*P **P** **23 34 58.3 -0.3**
STEI *e*PP **PP** **23 38 17.5 +1.5**
**MOR8 Moi Rana 85.25 24** *e*P **P** **23 34 58.3 -0.5**
MOR8 IVmBBB 23 35 00.6
comp=Z,3µm,2.0s
MOR8 *e*SKSac **SKSac** **23 45 23.9 +0.9**
MOR8 *e*SS **SS** **23 51 06.4 +4.3**
MOR8 IVMs_BB IVMs_BB 00 07 17.3
comp=Z,3µm,15.2s
**GTTG Gottingen 85.26 39** *e*P **P** **23 34 58.7 -0.5**
comp=Z,284nm,1.7s,baz=278,slow=5.0
GTTG *e*S **SKSac** **23 45 24.1 +0.4**
baz=282,slow=6.9
**FAUS Fauske 85.35 23** *e*P **P** **23 34 58.4 -0.9**
FAUS IVmBBB 23 35 00.5
comp=Z,3µm,1.6s
FAUS *e*PP **PP** **23 38 17.8 +0.8**
FAUS *e*SKSac **SKSac** **23 45 22.5 -1.0**
FAUS *e*SS **SS** **23 51 05.4 +1.9**
**UBBA Unterbreizbach 85.39 39** *e*P **P** **23 34 58.7 -1.0**
comp=Z,226nm,1.8s,baz=278,slow=5.0
UBBA *e*S **SKSac** **23 45 24.1 -0.1**
baz=282,slow=6.9
UBBA *e*SS **SS** **23 51 12.9 +8.2**
**CLZ Clausthal 85.47 38** *e*P **P** **23 34 59.8 -0.5**
comp=Z,319nm,1.6s,baz=278,slow=5.0
**TAM Tamanrasset 85.52 68** IAmb IAmb 23 35 04.0
comp=Z,304nm,1.8s
TAM IAMs_20 IAMs_20 00 10 45.6
comp=Z,4µm,20.0s
**DAVA Damuels 85.80 43** *i*P **P** **23 35 01.8 -0.4**
comp=Z,141nm,1.4s,SNR=56
**HOPEN Hopen 85.85 13** *e*P **P** **23 35 00.9 -0.7**
HOPEN IVmB_BB 23 35 01.9
comp=Z,5µm,1.7s
HOPEN *e*PP **PP** **23 38 21.5 +0.7**
HOPEN *e*SKSac **SKSac** **23 45 25.3 -1.2**
HOPEN *e*SS **SS** **23 51 13.0 +2.5**
HOPEN IVMs_BB IVMs_BB 00 10 49.3
comp=Z,4µm,21.2s
**DAVOX Davos/Dischmat 85.87 43** LR LR 00 07 36.4
comp=Z,7µm,20.1s,baz=293,slow=32
**GORT1 Trebel 85.87 37** *e*P **P** **23 35 01.9 -0.3**
comp=Z,415nm,1.9s,baz=278,slow=5.0
**UBR Ueberruh 85.89 43** *e*P **P** **23 35 01.7 -0.8**
comp=Z,301nm,1.6s,baz=278,slow=5.0
**FLTG Flechtingen 85.93 38** *e*P **P** **23 35 01.9 -0.5**
comp=Z,301nm,1.6s,baz=278,slow=5.0
FLTG *e*S **SKSac** **23 45 27.1 -0.6**
baz=282,slow=6.9
FLTG *e*SS **SS** **23 51 22.8 +10**
**MSSA Maissana 85.96 46** IAmb IAmb 23 35 03.4
comp=Z,167nm,1.6s
MSSA IAMs_20 IAMs_20 00 07 09.6
comp=Z,3µm,22.0s
**HFS Hagfors 86.00 30** P **P** **23 35 02.1 -0.6**
comp=Z,29nm,0.8s,baz=242,slow=3.2,SNR=30
HFS LR LR 00 10 42.6
comp=Z,5µm,20.0s,baz=282,slow=34
comp=Z,29nm,0.8s
**COP Copenhagen 86.09 34** *i*P **P** **23 35 02.0 -1.2**
COP IAmb IAmb 23 35 04.3
comp=Z,52nm,0.8s
**FUORN Ofenpass-Fuorn 86.15 44** IAmb IAmb 23 35 05.7
comp=Z,105nm,1.4s
FUORN IAMs_20 IAMs_20 00 09 43.4
comp=Z,6µm,20.0s
**TRO Tromso 86.16 20** *e*P **P** **23 35 02.8 -0.5**
TRO IVmB_BB 23 35 03.6
comp=Z,4µm,1.8s
TRO *e*PP **PP** **23 38 26.3 +2.8**
TRO *e*SKSac **SKSac** **23 45 29.0 +0.4**
TRO *e*SS **SS** **23 51 19.1 +3.8**
**GRA1 Grafenberg Arr 86.33 40** IAmb IAmb 23 35 06.0
comp=Z,200nm,1.4s
**GRF Grafenberg Arr 86.33 40** *e*P **P** **23 35 03.8 -0.8**
comp=Z,215nm,1.4s,baz=278,slow=5.0
GRF *e*S **SKSac** **23 45 32.9 +2.5**
baz=282,slow=6.9
GRF *e*L L 00 07 35.5
comp=Z,15µm,21.8s
**GRFO Grafenberg 86.33 40** P **P** **23 35 04.9 +0.3**
GRFO IAmb IAmb 23 35 05.9
comp=Z,202nm,1.4s
**GRFO Grafenberg 86.33 40** P **P** **23 35 04.9 +0.3**
GRFO pmax pmax
comp=Z,202nm,1.4s
**RETA Reutte 86.36 43** *i*P **P** **23 35 04.1 -0.7**
comp=Z,79nm,1.4s,SNR=54
**FETA Feichten 86.41 43** *e*P **P** **23 35 05.0 -0.2**
comp=Z,89nm,1.4s,SNR=46
**MOX Moxa 86.43 39** *e*P **P** **23 35 04.2 -0.8**
comp=Z,216nm,1.7s,baz=278,slow=5.0
MOX *e*S **SKSac** **23 45 32.2 +1.2**
baz=282,slow=6.9
MOX *e*L L 00 07 51.4
comp=Z,7µm,21.2s
**NEUB Neuenburg 86.44 39** *e*P **P** **23 35 04.4 -0.6**
comp=Z,337nm,1.7s,baz=278,slow=5.0
NEUB *e*S **SKSac** **23 45 30.7 -0.3**
baz=282,slow=6.9
NEUB *e*SS **SS** **23 51 29.2 +8.9**
**VSL Villasalto 86.54 51** IAMs_20 IAMs_20 00 10 09.5
comp=Z,4µm,20.0s
**FUR Furstenfeldbru 86.60 42** *e*S **SKSac** **23 45 33.3 +1.0**
baz=282,slow=6.9
**VLC Villacollemand 86.60 46** P **P** **23 35 03.6 -2.4**
**MOTA Moosalm 86.61 43** *i*P **P** **23 35 05.7 -0.5**
comp=Z,84nm,1.5s
**SQTA Sankt Quirin 86.70 43** *i*P **P** **23 35 05.9 -0.7**
comp=Z,89nm,1.4s,SNR=44
**PLN Plauen 86.79 40** *e*P **P** **23 35 05.8 -1.0**
comp=Z,291nm,1.6s,baz=278,slow=5.0
PLN *e*S **SKSac** **23 45 32.4 -0.9**
baz=282,slow=6.9
**RGN Rugen 86.79 35** IAMs_20 IAMs_20 00 12 12.4
comp=Z,4µm,20.0s
**RGN Rugen 86.79 35** *e*P **P** **23 35 06.4 -0.3**
**RGN Rugen 86.79 35** *e*P **P** **23 35 06.5 -0.3**
comp=Z,503nm,1.3s,baz=278,slow=5.0
**MANZ Manzenberg 86.84 40** *e*P **P** **23 35 06.5 -0.6**
comp=Z,65nm,1.9s,baz=278,slow=5.0
MANZ *e*S **SKSac** **23 45 34.4 +0.7**
baz=282,slow=6.9
**WATA Walderalm 86.93 43** *i*P **P** **23 35 07.4 -0.4**
comp=Z,63nm,1.6s,SNR=26
**ROTZ Rotzenmuhle 86.94 40** *e*P **P** **23 35 06.5 -1.1**
comp=Z,62nm,1.9s,baz=278,slow=5.0
**WTTA Wattenberg 86.98 43** *i*P **P** **23 35 07.3 -0.8**
comp=Z,83nm,1.5s,SNR=45
**ZCCA Zocca 86.99 46** IAMs_20 IAMs_20 00 18 14.8
comp=Z,5µm,19.0s
**TANN Tannenbergstha 87.00 40** *e*P **P** **23 35 07.3 -0.6**
comp=Z,310nm,1.6s,baz=278,slow=5.0
TANN *e*S **SKSac** **23 45 34.6 -0.1**
baz=282,slow=6.9
**KEST Kesra 87.06 54** IAmb IAmb 23 35 15.4
comp=Z,115nm,1.4s
**KEST Kesra 87.06 54** P **P** **23 35 08.2 -0.4**
comp=Z,24nm,1.2s,baz=175,slow=3.4,SNR=26
KEST S **SKSac** **23 45 37.8 +2.0**
comp=Z,1.8nm,0.9s,baz=98,slow=24,SNR=11
KEST LR LR 00 09 56.3
comp=Z,2µm,20.4s,baz=248,slow=33
comp=Z,24nm,1.2s
**CLL Collm 87.18 39** IAMs_20 IAMs_20 00 13 57.0
comp=Z,4µm,20.0s
**CLL Collm 87.18 39**⇑ *i*P **P** **23 35 08.0 -0.7**
CLL *i* 23 35 13.1
CLL *e* 23 45 34.0
CLL *e*S **S** **23 45 47.0 -0.8**
CLL pmax pmax
comp=Z,310nm,1.6s
**CLL Collm 87.18 39** P **P** **23 35 08.0 -0.7**
comp=Z,132nm,1.6s,comp=Z,3µm
**CLL Collm 87.18 39** *e*P **P** **23 35 08.0 -0.7**
comp=Z,306nm,1.6s,baz=278,slow=5.0
CLL *e*S **SKSac** **23 45 34.5 -1.0**
baz=282,slow=6.9
**CTI Castel Tesino 87.19 44** IAmb IAmb 23 35 09.9
comp=Z,210nm,1.5s
**TEOL Teolo 87.32 45** IAmb IAmb 23 35 10.6
comp=Z,207nm,1.3s
**HAMF Hammerfest 87.43 19** *e*P **P** **23 35 08.3 -1.1**
HAMF IVmB_BB 23 35 09.3
comp=Z,2µm,2.0s
HAMF *e*PP **PP** **23 38 35.2 +1.5**
HAMF *e*SKSac **SKSac** **23 45 36.9 +0.6**
HAMF *e*SS **SS** **23 51 34.5 +0.6**
HAMF IVMs_BB IVMs_BB 00 14 05.7
comp=Z,2µm,20.8s
**RUE Ruedersdorf 87.44 37** *e*P **P** **23 35 09.7 -0.1**
**RUE Ruedersdorf 87.44 37** *e*P **P** **23 35 09.7 -0.1**
comp=Z,243nm,1.5s,baz=278,slow=5.0
**WET Wettzell 87.48 41** *e*P **P** **23 35 09.6 -0.6**
comp=Z,341nm,1.5s,baz=278,slow=5.0
WET *e*S **SKSac** **23 45 36.3 -1.3**
baz=282,slow=6.9
**HSKC Hora Svate Kat 87.57 39** *e*P **P** **23 35 11.0 +0.4**
HSKC AMS AMS 00 09 30.0
comp=Z,6µm,20.8s
**BSD Bornholm Skovb 87.59 35** *e*P **P** **23 35 10.3 -0.2**
**BSD Bornholm Skovb 87.59 35** *i*P **P** **23 35 08.7 -1.9**
BSD IAmb IAmb 23 35 12.9
comp=Z,17nm,1.0s
**LESA Schwarzleotal 87.65 43** *i*P **P** **23 35 10.8 -0.3**
comp=Z,98nm,1.4s
**ABTA Abfaltersbach 87.66 43** *i*P **P** **23 35 10.6 -0.7**
comp=Z,130nm,1.3s,SNR=76
**RJOB Jochberg 87.68 42** *e*P **P** **23 35 10.1 -1.1**
comp=Z,155nm,1.4s,baz=278,slow=5.0
**KTK1 Kautokeino 87.80 20** *e*P **P** **23 35 10.2 -1.1**
KTK1 IVmB_BB 23 35 11.1
comp=Z,3µm,1.7s
KTK1 *e*PP **PP** **23 38 37.3 +0.6**
KTK1 *e*SKSac **SKSac** **23 45 38.0 -0.8**
KTK1 *e*SS **SS** **23 51 40.9 +1.5**
KTK1 IVMs_BB IVMs_BB 00 15 15.7
comp=Z,1µm,22.3s
**BRG Berggiesshubel 87.84 39**⇑ *i*P **P** **23 35 11.6 -0.3**
BRG Amp 23 35 14.2
comp=Z,189nm,1.5s
**BRG Berggiesshubel 87.84 39** P P 23 35 17.0 +5.1
BRG Amp 23 35 18.4
comp=Z,84nm,1.4s
BRG PP **PP** **23 38 37.9 +0.4**
BRG Amp 23 38 46.1
comp=Z,6.5nm,1.2s
**BRG Berggiesshubel 87.84 39** S **SKSac** **23 45 39.0 -0.7**
**BRG Berggiesshubel 87.84 39** *e*P **P** **23 35 11.3 -0.6**
comp=Z,285nm,1.6s,baz=278,slow=5.0
BRG *e*SS SS 23 51 42.0 +1.2
**STAL STALIGIAL 87.88 44** IAmb IAmb 23 35 13.2
comp=Z,224nm,1.5s
**KHC Kasperske Hory 87.94 41** IAmb IAmb 23 35 14.0
comp=Z,243nm,1.6s
**KHC Kasperske Hory 87.94 41** *e*P **P** **23 35 12.8 +0.4**
KHC *e*SKS **SKSac** **23 45 36.2 -4.2**
KHC AMS AMS 00 08 00.0
comp=Z,14µm,21.6s
**KHC Kasperske Hory 87.94 41** *e*P **P** **23 35 12.8 +0.4**
KHC *e* 23 45 36.2
KHC MLR MLR
comp=Z,14µm,21.6s
**KHC Kasperske Hory 87.94 41** P **P** **23 35 12.0 -0.4**
comp=Z,92nm,1.7s,comp=Z,2µm
**RICC Richard 88.00 39** *e*P **P** **23 35 13.5 +0.9**
RICC AMS AMS 00 09 40.0
comp=Z,6µm,21.5s
**GEC2 GERESS Array S 88.07 41** IAmb IAmb 23 35 14.4
comp=Z,194nm,1.5s
**GEC2 GERESS Array S 88.07 41** *e*P **P** **23 35 12.7 -0.5**
comp=Z,200nm,1.5s,baz=278,slow=5.0
GEC2 *e*SS SS 23 51 44.0 -0.5
**GERES GERESS Array B 88.07 41** P **P** **23 35 12.2 -0.9**
**GERES GERESS Array B 88.07 41** P **P** **23 35 12.4 -0.7**
comp=Z,39nm,1.2s,baz=202,slow=10,SNR=74
GERES PP **PP** **23 38 36.4 -3.3**
comp=Z,0.5nm,0.6s,baz=206,slow=8.9,SNR=4.2
GERES S **SKSac** **23 45 41.1 -0.3**
comp=Z,0.4nm,0.4s,baz=250,slow=43,SNR=2.0
GERES LR LR 00 08 47.2
comp=Z,11µm,21.6s,baz=274,slow=32
comp=Z,39nm,1.2s
**KBA Koelnbreinsper 88.16 43** *i*P **P** **23 35 13.0 -0.7**
comp=Z,165nm,1.4s,SNR=97
**BIOA Bad Ischl, Aus 88.25 42** *i*P **P** **23 35 13.8 -0.2**
comp=Z,123nm,1.5s,SNR=72
**ZVC Zvikov 88.27 40** *e*P **P** **23 35 14.2 +0.2**
ZVC AMS AMS 00 08 20.0
comp=Z,15µm,21.7s
**PVCC Panska Ves 88.30 39** AMS AMS 00 09 30.0
comp=Z,6µm,20.0s
**PRA Prague 88.30 40** AMS AMS 00 08 30.0
comp=Z,12µm,22.2s
**PRU Pruhonice 88.39 40** *e*P **P** **23 35 14.7 +0.2**
PRU AMS AMS 00 08 40.0
comp=Z,13µm,21.2s
**PRU Pruhonice 88.39 40** *e*P **P** **23 35 14.7 +0.2**
PRU MLR MLR
comp=Z,13µm,21.2s
**ARA0 ARCESS Array S 88.39 19** *e*P **P** **23 35 12.9 -1.2**
ARA0 *e*PP **PP** **23 38 42.5 +1.0**
ARA0 *e*SKSac **SKSac** **23 45 42.9 +0.6**
**ARCES ARCESS Array B 88.39 19** P **P** **23 35 13.3 -0.8**
ARCES IAmb IAmb 23 35 14.6
comp=Z,172nm,1.4s
**ARCES ARCESS Array B 88.39 19** P **P** **23 35 12.8 -1.3**
comp=Z,79nm,1.2s,baz=292,slow=3.8,SNR=36
ARCES PP **PP** **23 38 42.7 +1.3**
comp=Z,3.1nm,0.7s,baz=322,slow=7.7,SNR=4.2
ARCES S **SKSac** **23 45 42.2 -0.1**
comp=Z,2.9nm,1.0s,baz=326,slow=15,SNR=1.5
ARCES LR LR 00 12 41.2
comp=Z,2µm,21.1s,baz=288,slow=34
comp=Z,79nm,1.2s
**ARCES ARCESS Array B 88.39 19** P **P** **23 35 13.3 -0.8**
ARCES pmax pmax
comp=Z,172nm,1.4s
**CESX Cesi 88.43 47** IAmb IAmb 23 35 15.8
comp=Z,154nm,1.5s
CESX IAMs_20 IAMs_20 00 10 11.3
comp=Z,3µm,20.0s
**MYKA Terra Mystica 88.45 43** *i*P **P** **23 35 14.6 -0.3**
comp=Z,109nm,1.4s,SNR=38
**CKRC Cesky Krumlov 88.47 41** *e*P **P** **23 35 15.3 +0.4**
CKRC AMS AMS 00 08 20.0
comp=Z,11µm,21.9s
**CKRC Cesky Krumlov 88.47 41** *e*P **P** **23 35 14.2 -0.7**
CKRC MLR MLR
comp=Z,15µm,21.7s
**SABO M.te Sabotino 88.54 44** IAmb IAmb 23 35 17.1
comp=Z,378nm,1.9s
SABO IAMs_20 IAMs_20 00 11 49.1
comp=Z,6µm,19.0s
**GOPC GO Pecny, Ondr 88.56 40** AMS AMS 00 08 30.0
comp=Z,14µm,22.0s
**CADS Cadrg 88.59 44** *i*P **P** **23 35 14.8 -0.7**
CADS *i*PP **PP** **23 38 47.0 +3.2**
CADS *i*SKSac **SKSac** **23 45 44.3 -0.1**
**MOA Molln 88.63 42** *i*P **P** **23 35 15.2 -0.6**
comp=Z,57nm,1.4s,SNR=30

**FDMO Fiordimonte 88.72 47** IAMs_20 IAMs_20 00 13 25.8
comp=Z,5µm,20.0s
**KEV Kevo 88.80 19** P **P 23 35 14.7 -1.3**
KEV IAMs_20 IAMs_20 00 14 39.1
comp=Z,4µm,20.0s
**KEV Kevo 88.80 19** P **P 23 35 14.7 -1.3**
KEV pmax pmax
comp=Z,308nm,1.8s
KEV MLR MLR
comp=Z,4µm,20.0s
**GUMA Gualdo di Mace 88.90 47** IAmb IAmb 23 35 22.0
comp=Z,101nm,1.5s
**SKDS Skadanscina 88.91 44**⇑*iP* **P 23 35 16.1 -1.0**
**CAMP Campotosto 89.05 47** IAmb IAmb 23 35 27.3
comp=Z,101nm,1.7s
**OBKA Obir 89.08 43** *i* P **P 23 35 17.8 -0.2**
comp=Z,81nm,1.6s,SNR=38
**OBKA Obir 89.08 43**⇑*iP* **P 23 35 17.0 -1.0**
**TREC Trest 89.13 40** *eP* **P 23 35 18.4 +0.4**
TREC *e*SKS **SKSac 23 45 49.5 +2.0**
TREC AMS AMS 00 09 00.0
comp=Z,14µm,21.4s
**TREC Trest 89.13 40** *eP* **P 23 35 18.4 +0.4**
TREC *e* 23 45 49.5
TREC MLR MLR
comp=Z,14µm,21.4s
**CEY Cerknica 89.15 44**⇑*iP* **P 23 35 17.6 -0.6**
**LJU Ljubljana 89.16 44** *i* P **P 23 35 18.1 -0.2**
LJU *e*PP **PP 23 38 52.4 +4.1**
LJU *e*SKSac **SKSac 23 45 48.0 +0.2**
**UPC Upice 89.20 39** *eP* **P 23 35 18.7 +0.4**
UPC AMS AMS 00 10 30.0
comp=Z,5µm,20.7s
**UPC Upice 89.20 39** *eP* **P 23 35 18.7 +0.4**
UPC MLR MLR
comp=Z,5µm,20.7s
**CHVC Chvalec 89.21 39** *eP* **P 23 35 18.7 +0.3**
CHVC *eP* **P 23 35 18.8 +0.3**
CHVC AMS AMS 00 10 10.0
comp=Z,4µm,19.9s
**CHVC Chvalec 89.21 39** *eP* **P 23 35 18.7 +0.3**
CHVC *e* 23 35 18.8
CHVC MLR MLR
comp=Z,4µm,19.9s
**KSP Ksiaz 89.31 39** *i* P **P 23 35 18.5 -0.2**
KSP *e*PP **PP 23 38 47.1 -2.2**
KSP *e*SKS **SKSac 23 45 49.2 +0.8**
KSP *e*L L 00 12 59.5
comp=Z,3µm,19.8s
**KSP Ksiaz 89.31 39** P **P 23 35 18.6 -0.2**
comp=Z,68nm,2.0s,comp=Z,2µm
**OSTC Ostas 89.32 39** AMS AMS 00 09 00.0
comp=Z,4µm,22.6s
**GKP Gorka Klasztor 89.32 36** *eP* **P 23 35 19.2 +0.4**
**GKP Gorka Klasztor 89.32 36** *eP* **P 23 35 19.0 +0.2**
**SOKA Soboth 89.38 43** *i* P **P 23 35 18.1 -1.2**
comp=Z,74nm,1.8s,SNR=68
**VADS Vadso 89.41 18** *eP* **P 23 35 17.9 -0.9**
VADS IVmB_BB 23 35 18.6
comp=Z,2µm,3.4s
VADS *e*SKSac **SKSac 23 45 49.7 +1.5**
VADS *e*SS **SS 23 52 03.5 +1.0**
**DPC Dobruska-Polom 89.43 39** *eP* **P 23 35 19.7 +0.2**
DPC AMS AMS 00 10 20.0
comp=Z,6µm,19.7s
**DPC Dobruska-Polom 89.43 39** *eP* **P 23 35 19.7 +0.2**
DPC MLR MLR
comp=Z,6µm,19.7s
**VAF Ylistaro 89.45 26** *eP* **P 23 35 19.0 -0.2**
**INTR Introdacqua 89.51 48** IAmb IAmb 23 35 28.1
comp=Z,113nm,2.0s
**BILL Bilibino 89.58 339** P **P 23 35 20.5 +0.8**
BILL IAMs_20 IAMs_20 00 22 11.3
comp=Z,4µm,20.0s
**BILL Bilibino 89.58 339***c iP* **P 23 35 20.3 +0.6**
BILL *e**PP **pP 23 35 23.4 -1.5**
BILL *e* 23 38 50.3
BILL *e*PPP PPP 23 40 46.8
BILL *e*S **SKSac 23 45 49.1 -0.2**
BILL *e*SS **SS 23 52 12.2 +7.1**
BILL pmax pmax
comp=Z,558nm,1.7s
**ARSA Arzberg 89.59 42** *i* P **P 23 35 19.6 -0.6**
comp=Z,36nm,1.5s,SNR=26
**MIDW Midway 89.65 298** P **P 23 35 20.7 -0.1**
**RAF Rauma 89.66 28** *eP* **P 23 35 19.7 -0.4**
**CONA Conrad Observa 89.67 42** *i* P **P 23 35 20.3 -0.4**
comp=Z,62nm,1.2s,SNR=71
**NIUE Niue 89.74 251** P **P 23 35 22.8 +1.4**
**KRUC Moravsky 89.76 40** *eP* **P 23 35 20.1 -0.9**
KRUC *e* 23 45 53.9
**BOJS Bojanci 89.77 44**⇑*iP* **P 23 35 20.6 -0.5**
**KRLC Kraliky 89.78 39** *eP* **P 23 35 21.6 +0.5**
KRLC AMS AMS 00 10 30.0
comp=Z,8µm,20.2s
**KRLC Kraliky 89.78 39** *eP* **P 23 35 21.6 +0.5**
KRLC *e* 23 35 21.7
KRLC MLR MLR
comp=Z,8µm,20.2s
**CLTB Caltabellotta 89.82 52** IAmb IAmb 23 35 23.4
comp=Z,292nm,1.7s
**VRAC Vranov 89.84 40** *eP* **P 23 35 20.8 -0.5**
VRAC *e* 23 45 53.7
**VRAC Vranov 89.84 40** LR LR 00 10 25.9
comp=Z,14µm,21.0s,baz=282,slow=32
**VRAC Vranov 89.84 40**⇑P **P 23 35 21.1 -0.2**
**VRAC Vranov 89.84 40** P **P 23 35 21.1 -0.2**
**RONA Rosalia, Austr 90.00 42** *i* P **P 23 35 21.6 -0.5**
comp=Z,102nm,1.5s,SNR=72
**PAOL Paolisi 90.19 49** P **P 23 35 22.4 -0.8**
PAOL IAMs_20 IAMs_20 00 12 02.8
comp=Z,3µm,21.0s
**KOGS Kog 90.25 43** *i* P **P 23 35 22.6 -0.7**
**MORC Moravsky Berou 90.33 40** IAmb IAmb 23 35 25.6
comp=Z,203nm,1.7s
**MORC Moravsky Berou 90.33 40** *eP* **P 23 35 23.3 -0.4**
MORC *e* 23 45 57.0
**MORC Moravsky Berou 90.33 40**⇓P **P 23 35 24.1 +0.4**
**MORC Moravsky Berou 90.33 40** P **P 23 35 24.1 +0.4**
**BELA Belgrano 2 90.41 171** P **P 23 35 23.3 -0.1**
BELA IAmb IAmb 23 35 24.4
comp=Z,61nm,1.3s
**ZST Bratislava 90.42 41** *eP* **P 23 35 24.0 0.0**
ZST pmax pmax
comp=Z,638nm,1.7s
**ZST Bratislava 90.42 41** *eP* **P 23 35 24.0 0.0**
**SMOL Smolenice 90.56 41** *eP* **P 23 35 25.3 +0.6**
SMOL pmax pmax
comp=Z,55nm,1.4s
**JAVC Velka Javorina 90.63 40** *eP* **P 23 35 25.9 +0.8**
JAVC *e* 23 45 58.7
**OKC Ostrava-Krasne 90.69 39** AMS AMS 00 12 20.0
comp=Z,9µm,18.7s
**KEF Keuruu 90.70 27** *eP* **P 23 35 24.5 -0.6**
**AFI Afiamalu 90.70 256** IAMs_20 IAMs_20 00 08 58.9
comp=Z,2µm,18.0s
**VAE Valguarnera 90.78 52** LR LR 00 10 23.3
comp=Z,9µm,21.6s,baz=325,slow=32
**A050A Klekovaca 90.88 45**⇑*iP* **P 23 35 26.1 -0.3**
**SLIT Slitere, Latvi 90.93 31** *eP* **P 23 35 25.5 -0.6**
**MPLH Magyarpolny 90.94 42** P **P 23 35 25.8 -0.7**
comp=Z,145nm,2.0s,comp=Z,4µm
**A051A Mrakovica 91.02 44**⇑*iP* **P 23 35 26.7 -0.3**
**MEF Metsahovi 91.14 28** *eP* **P 23 35 27.3 +0.2**
**PBUR Paburge 91.22 33** *eP* **P 23 35 26.9 -0.7**
**BLY Banja Luka 91.27 45**⇑*iP* **P 23 35 27.6 -0.5**
**SRO Srobarova 91.30 41** *eP* **P 23 35 28.3 +0.2**
SRO pmax pmax
comp=Z,90nm,1.5s
**SRO Srobarova 91.30 41** *eP* **P 23 35 28.3 +0.2**
**MTSE Matsula 91.36 30** *eP* **P 23 35 28.1 0.0**
**VYHS Vyhne 91.47 41** *eP* **P 23 35 28.9 0.0**
VYHS pmax pmax
comp=Z,148nm,1.7s
**VYHS Vyhne 91.47 41** *eP* **P 23 35 28.9 0.0**
**FINES FINESS Array B 91.49 27** P **P 23 35 27.5 -1.2**
comp=Z,54nm,1.1s,baz=298,slow=4.1,SNR=37
FINES LR LR 00 11 35.1
comp=Z,6µm,22.0s,baz=279,slow=32
comp=Z,54nm,1.1s
**OJC Ojcow 91.63 39** *i* P **P 23 35 29.2 -0.4**
OJC *e*PP **PP 23 39 07.1 -0.6**
OJC *e*SKS **SKSac 23 46 02.6 +0.8**
OJC *e*S **ScS 23 46 31.9 -0.2**
OJC *e*SS SS 23 52 48.8 +13
OJC *e*L L 00 10 30.2
comp=Z,6µm,22.8s
**OJC Ojcow 91.63 39** IAmb IAmb 23 35 31.2
comp=Z,136nm,1.4s
**OJC Ojcow 91.63 39** P **P 23 35 29.1 -0.5**
comp=Z,75nm,1.6s,comp=Z,2µm
**LANS Liptovska Anna 91.70 40** *eP* **P 23 35 31.7 +1.6**
LANS pmax pmax
comp=Z,60nm,1.6s
**LANS Liptovska Anna 91.70 40** *eP* **P 23 35 31.7 +1.6**
**CEL Celeste 91.76 51** P **P 23 35 29.6 -1.0**
CEL IAMs_20 IAMs_20 00 12 24.7
comp=Z,4µm,21.0s
**BEL Belsk 91.79 37** *eP* **P 23 35 30.3 0.0**
BEL *e*PP **PP 23 39 05.4 -3.5**
BEL *e*SKS **SKSac 23 46 02.7 +0.1**
BEL *e*L L 00 14 57.5
comp=Z,8µm,20.0s
**APA Apatity 91.85 20**⇓*iP* **P 23 35 27.5 -2.7**
APA *i* 23 39 07.0
APA *i* 23 45 58.0
APA *i* S **S 23 46 25.0 -5.7**
APA PS **PnS 23 47 44.0 +1.3**
APA pmax pmax
comp=Z,17nm,1.2s
**MORH Mrgy, Hungar 91.91 43**⇓P **P 23 35 31.0 0.0**
**MORH Mrgy, Hungar 91.91 43** P **P 23 35 30.1 -0.9**
comp=Z,41nm,1.8s,comp=Z,1µm
**STON Ston 92.07 46**⇑*iP* **P 23 35 31.1 -0.7**
**LVZ Lovozero 92.11 20** P **P 23 35 31.0 -0.5**
LVZ IAmb IAmb 23 35 32.7
comp=Z,146nm,1.3s
LVZ IAMs_20 IAMs_20 00 14 40.6
comp=Z,3µm,20.0s
**LVZ Lovozero 92.11 20***ceP* **P 23 35 29.8 -1.7**
LVZ pmax pmax
comp=Z,91nm,1.2s
LVZ MLR MLR
comp=Z,3µm,20.0s
**LVZ Lovozero 92.11 20** P **P 23 35 30.3 -1.2**
comp=Z,98nm,1.4s,comp=Z,2µm
**NIE Niedzica 92.16 39** *i* P **P 23 35 32.8 +0.6**
NIE *e*PP **PP 23 39 09.5 -2.5**
NIE *e*S **S 23 46 39.2 +4.9**
NIE *e*SS SS 23 53 00.6 +17
NIE *e*L L 00 10 44.4
comp=Z,6µm,22.9s
**NIE Niedzica 92.16 39** P **P 23 35 32.1 0.0**
comp=Z,26nm,1.6s,comp=Z,713nm
**ARBE Arbavere 92.16 29** *eP* **P 23 35 31.3 -0.6**
**TIP Timpagrande 92.22 50**⇑P **P 23 35 32.6 -0.1**
**TIP Timpagrande 92.22 50** P **P 23 35 31.6 -1.1**
comp=Z,18nm,2.2s,comp=Z,613nm
**PSZ Piszkesteto 92.30 41**⇓P **P 23 35 33.5 +0.5**
**PSZ Piszkesteto 92.30 41** P **P 23 35 33.4 +0.5**
**VSVD Vaisvydziai 92.31 33** *eP* **P 23 35 32.4 -0.2**
**PABE Paberze 92.48 33** IAmb IAmb 23 35 33.8
comp=Z,110nm,1.3s
**PABE Paberze 92.48 33** *eP* **P 23 35 33.6 +0.2**
**SUW Suwalki 92.53 35** *i* P **P 23 35 32.3 -1.3**
SUW *e*SKS **SKSac 23 46 03.8 -2.9**
SUW *e*S **S 23 46 36.2 -1.0**
SUW *e*L L 00 13 36.6
comp=Z,4µm,22.0s
**SUW Suwalki 92.53 35** IAmb IAmb 23 35 34.1
comp=Z,124nm,1.2s
SUW IAMs_20 IAMs_20 00 17 58.9
comp=Z,4µm,19.0s
**SUW Suwalki 92.53 35** *eP* **P 23 35 33.0 -0.7**
**HAPS Han Pijesak,Bl 92.66 45**⇑*iP* **P 23 35 34.5 -0.2**
**BRY Bratogost 92.66 46** *eP* **P 23 35 33.7 -1.1**
**BRY Bratogost 92.66 46**⇑*iP* **P 23 35 33.9 -0.9**
**BSZH Besenyszg 92.71 42**⇓P **P 23 35 35.4 +0.7**
**UPM Unac-Piva 92.85 46** *eP* **P 23 35 34.9 -0.7**
**UPM Unac-Piva 92.85 46**⇑*iP* **P 23 35 35.0 -0.7**
**VNA3 Neumayer Olymp 92.87 162**⇑P **P 23 35 34.3 -0.5**
comp=Z,20nm,1.0s
VNA3 ⇑PP **PP 23 39 20.8 +3.5**
comp=Z,0.0nm,0.1s
VNA3 ⇑x x 23 39 20.8
comp=Z,0.0nm,0.1s
**VSU Vasula 92.88 30***ceP* **P 23 35 33.4 -1.8**
VSU pmax pmax
comp=Z,108nm,1.4s
**TEKS Tekeris 92.94 44** *eP* **P 23 35 36.3 +0.5**
**FRGS Fruska Gora 92.97 44**⇑*iP* **P 23 35 35.4 -0.6**
**CEME Cevo 93.02 46**⇑*iP* **P 23 35 35.7 -0.6**
**BBLS Lazi&#263i 93.03 45**⇑*iP* **P 23 35 36.2 -0.1**
**CRVS Cervenica-Dubn 93.03 40** *eP* **P 23 35 36.6 +0.4**
CRVS pmax pmax
comp=Z,223nm,1.7s
**CRVS Cervenica-Dubn 93.03 40** *eP* **P 23 35 36.6 +0.4**
**BUM Brajici-Budva 93.06 47**⇑*iP* **P 23 35 36.2 -0.3**
**RUDO Rudo 93.07 45** *eP* **P 23 35 35.4 -1.1**
**VNA1 Neumayer--Stat 93.13 161**⇑P **P 23 35 36.0 0.0**
comp=Z,29nm,1.2s
VNA1 ⇑x x 23 35 36.0
comp=Z,29nm,1.2s
**PLE Pljevlja 93.16 46**⇑*iP* **P 23 35 36.0 -1.0**
**JOF Joensuu 93.16 25** *eP* **P 23 35 35.7 -0.7**
**PDG Podgorica 93.29 46** IAmb IAmb 23 35 39.2
comp=Z,83nm,1.6s
PDG IAMs_20 IAMs_20 00 13 52.8
comp=Z,3µm,20.0s
**PDG Podgorica 93.29 46**⇑*iP* **P 23 35 37.2 -0.2**
**PDG Podgorica 93.29 46**⇓P **P 23 35 38.1 +0.7**
**PDG Podgorica 93.29 46**⇑*iP* **P 23 35 37.2 -0.2**
**SCTE Santa Cesarea 93.30 49** P **P 23 35 37.8 +0.2**
SCTE IAmb IAmb 23 35 39.4
comp=Z,61nm,1.1s
SCTE IAMs_20 IAMs_20 00 14 51.2
comp=Z,3µm,20.0s
**DRME Dracevica, Mon 93.30 47**⇑*iP* **P 23 35 37.5 0.0**
**DRME Dracevica, Mon 93.30 47**⇑*iP* **P 23 35 37.5 0.0**
**KOME Kolasin 93.37 46**⇑*iP* **P 23 35 37.7 -0.3**
**VNA2 Neumayer--Watz 93.49 161**⇑P **P 23 35 36.8 -0.9**
comp=Z,9.6nm,1.0s,baz=293,slow=4.8
VNA2 ⇓PP **PP 23 39 24.6 +2.4**
comp=Z,154nm,2.9s,baz=274,slow=11
VNA2 ⇓x x 23 39 24.6
comp=Z,154nm,2.9s,baz=274,slow=11
**KOLS Kolonicke sedl 93.53 40** *eP* **P 23 35 39.3 +0.8**
KOLS pmax pmax
comp=Z,36nm,1.4s
**KOLS Kolonicke sedl 93.53 40** *eP* **P 23 35 39.3 +0.8**
**SJES Sjenica 93.59 45**⇑*iP* **P 23 35 38.8 -0.2**
**KWP Kalwaria Pacla 93.60 39** *i* P **P 23 35 39.0 +0.3**
KWP *e*PP **PP 23 39 17.0 -6.2**
KWP *e*SKS **SKSac 23 46 13.3 +0.4**
KWP *e*SS **SS 23 53 13.1 +9.1**
KWP *e*L L 00 12 55.9
comp=Z,4µm,21.9s
**KWP Kalwaria Pacla 93.60 39** IAMs_20 IAMs_20 00 14 52.9
comp=Z,5µm,21.0s
**KWP Kalwaria Pacla 93.60 39** P **P 23 35 38.0 -0.7**
comp=Z,78nm,1.7s,comp=Z,2µm
**ISAL Salakas 93.61 32** *eP* **P 23 35 37.4 -1.3**
**VALR Valaam 93.65 26***d iP* **P 23 35 37.9 -0.8**
VALR pmax pmax
comp=Z,159nm,1.1s
**HOLU Holmets 93.73 40** P **P 23 35 39.3 0.0**
**IIGN Ignalina 93.74 33** *eP* **P 23 35 37.7 -1.6**
**LTVH Ltavrtes, Hu 93.75 41**⇓P **P 23 35 40.2 +0.7**
**PUK Puka 93.85 47** IAmb IAmb 23 35 42.1
comp=Z,63nm,1.6s
PUK IAMs_20 IAMs_20 00 22 40.5
comp=Z,3µm,19.0s
**SIRR Siria 93.92 42**⇓P **P 23 35 40.5 +0.2**
**MUKU Mukachevo 93.94 40** P **P 23 35 40.4 +0.1**
**VLO Vlora 93.96 48** IAMs_20 IAMs_20 00 12 20.7
comp=Z,4µm,22.0s
**BERU Beregovo 93.98 40** P **P 23 35 40.4 -0.1**
**TIR Tirane 94.01 47** P **P 23 35 40.7 -0.1**
TIR IAmb IAmb 23 35 42.9
comp=Z,119nm,1.7s
TIR IAMs_20 IAMs_20 00 19 32.8
comp=Z,3µm,20.0s
**TIR Tirane 94.01 47** P **P 23 35 40.7 -0.1**
TIR pmax pmax
comp=Z,119nm,1.7s
TIR MLR MLR
comp=Z,3µm,20.0s
**PUL Pulkovo 94.07 28**⇓*eP* **P 23 35 39.9 -0.7**
PUL pmax pmax
comp=Z,107nm,1.0s
**BZS Buzias 94.07 43**⇓P **P 23 35 41.0 0.0**
**BZS Buzias 94.07 43** P **P 23 35 40.7 -0.3**
**SHIU Shidnytsya 94.13 39** P **P 23 35 41.5 +0.3**
**BRIU Brid 94.19 40** P **P 23 35 41.7 +0.3**
**LVV L'vov 94.36 38** *eP* **P 23 35 40.7 -1.5**
LVV *e* 23 39 27.4
LVV *e* 23 46 08.0
LVV *e*S **S 23 46 56.3 +2.7**
LVV MLR MLR
comp=Z,3µm,18.0s
**SURR Surduc 94.37 43**⇓P **P 23 35 42.3 0.0**
**MDVR Moldovita 94.38 44**⇓P **P 23 35 42.5 0.0**
**KEK Kerkira 94.38 49** P **P 23 35 41.9 -0.7**
KEK IAMs_20 IAMs_20 00 16 11.8
comp=Z,3µm,19.0s
**MEZ Mezhgor'ye 94.45 40** P **P 23 35 42.8 +0.1**
**DRGR 94.46 42**⇓P **P 23 35 42.7 -0.2**
**DRGR 94.46 42** P **P 23 35 42.6 -0.2**
**MORS Morshin 94.49 39** P **P 23 35 43.0 +0.2**
**BMR Baia Mare 94.70 41**⇓P **P 23 35 44.3 +0.5**
**BMR Baia Mare 94.70 41** P **P 23 35 44.3 +0.5**
**BOVS Bovan 94.70 45**⇓P **P 23 35 43.8 -0.1**
**OHR Ohrid 94.75 47**⇑*iP* **P 23 35 45.3 +1.0**
**HERR Herculane 94.83 43**⇓P **P 23 35 44.6 +0.1**
**KBN Korca 94.87 48** P **P 23 35 44.8 -0.1**
KBN IAmb IAmb 23 35 47.3
comp=Z,72nm,1.4s
KBN IAMs_20 IAMs_20 00 24 16.8
comp=Z,5µm,18.0s
**KBN Korca 94.87 48** P **P 23 35 44.8 -0.1**
KBN pmax pmax
comp=Z,72nm,1.4s
**GZR Gura Zlata 94.92 43**⇓P **P 23 35 45.2 +0.2**
**GZR Gura Zlata 94.92 43** P **P 23 35 44.5 -0.5**
**RNPP9 Sopachiv 94.94 36** P **P 23 35 44.5 -0.3**
**MNK Minsk 94.94 33** *i* P **P 23 35 43.1 -1.7**
MNK *i* 23 39 32.0
MNK *i* PPP PPP 23 41 34.0
MNK *i* S **SKSac 23 46 14.9 -5.0**
MNK *i* PS **PS 23 48 23.9 +7.3**
MNK *i* SS **SS 23 53 20.4 -2.4**
MNK pmax pmax
comp=Z,32nm,1.0s
MNK pmax pmax
comp=N,10.0nm,0.9s
MNK pmax pmax
comp=E,9.0nm,0.9s
MNK MLR MLR
comp=N,3µm,19.0s
MNK MLR MLR
comp=Z,4µm,18.0s
**RNPP8 Varash 94.94 37** P **P 23 35 44.4 -0.5**
**CJR Cluj-Napoca 95.06 41**⇑P **P 23 35 46.4 +0.7**
**CJR Cluj-Napoca 95.06 41** P **P 23 35 46.3 +0.7**
**SNAA Sanae 95.09 162** P **P 23 35 45.1 0.0**
SNAA IAmb IAmb 23 35 46.0
comp=Z,50nm,1.3s
**SNAA Sanae 95.09 162**⇑P **P 23 35 44.5 -0.6**
comp=Z,269nm,1.1s
SNAA ⇑PP **PP 23 39 32.1 -2.6**
comp=Z,15µm,5.2s
SNAA ⇑x x 23 39 32.1
comp=Z,15µm,5.2s
**SNAA Sanae 95.09 162** P **P 23 35 44.4 -0.7**
comp=Z,16nm,1.1s,baz=264,slow=3.9,SNR=32
SNAA PP **PP 23 39 34.6 -0.1**
comp=Z,6.4nm,1.2s,baz=304,slow=8.5,SNR=4.2
SNAA LR LR 00 18 00.1
comp=Z,1µm,19.7s,baz=291,slow=35
comp=Z,16nm,1.1s
**SNAA Sanae 95.09 162***c iP* **P 23 35 44.2 -0.9**
SNAA pmax pmax
comp=Z,26nm,1.2s
SNAA MLR MLR
comp=Z,1µm,20.0s
**FNA Florina 95.26 48** P **P 23 35 46.8 +0.1**
FNA IAmb IAmb 23 35 48.1
comp=Z,54nm,1.6s
FNA IAMs_20 IAMs_20 00 19 23.1
comp=Z,4µm,20.0s
**FNA Florina 95.26 48** P **P 23 35 46.8 +0.1**
FNA pmax pmax
comp=Z,54nm,1.6s
FNA MLR MLR
comp=Z,4µm,20.0s
**ADZR Andozero 95.42 22**⇑*iP* **P 23 35 44.9 -1.8**
ADZR *e* 23 39 35.0
ADZR pmax pmax
comp=Z,91nm,1.4s
**ARCR ARCALIA 95.44 41**⇑P **P 23 35 47.9 +0.7**
**LOT Lotru 95.57 43**⇑P **P 23 35 47.8 -0.3**
**BUR08 Bucovina Ar. S 95.80 40** P **P 23 35 48.7 -0.3**
**BURAR Bucovina Array 95.82 40** P **P 23 35 48.2 -0.9**
**BURAR Bucovina Array 95.82 40**⇑P **P 23 35 49.4 +0.3**
**BURAR Bucovina Array 95.82 40** P **P 23 35 49.4 +0.3**
**MI28 Mi28,Pidlybu 96.16 37** P **P 23 35 50.0 -0.4**
**ARR Arges 96.17 42**⇓P **P 23 35 51.0 +0.3**
**KMPD K-Podol'skiy 96.28 39** P **PcP 23 35 49.5 -1.6**
KMPD P **P 23 35 49.0 -2.0**
**VOIR 96.42 42**⇓P **P 23 35 51.7 -0.2**
**VOIR 96.42 42** P **P 23 35 51.6 -0.2**
**VOIR 96.42 42** P **P 23 35 51.9 0.0**
comp=Z,11nm,1.4s,comp=Z,782nm
**DOPR Dopca 96.47 42**⇑P **P 23 35 52.7 +0.6**
**LUBAR Lubar, Ukraine 96.58 37** P **P 23 35 51.0 -1.4**
**HUMR Humele 96.67 43**⇑P **P 23 35 53.1 +0.2**
**OZUR 96.69 42**⇑P **P 23 35 53.5 +0.4**
**TROLL Troll, Antarti 96.81 162**⇑P **P 23 35 52.7 -0.3**
comp=Z,985nm,1.1s
TROLL ⇑x x 23 35 52.7
comp=Z,985nm,1.1s
**TURR Turia 96.86 41**⇓P **P 23 35 54.3 +0.5**
**COPA Copaceanca 96.96 44**⇑P **P 23 35 54.5 +0.3**
**MLR Muntele Rosu 97.00 42** LR LR 00 17 22.6
comp=Z,5µm,19.3s,baz=295,slow=34
**MLR Muntele Rosu 97.00 42**⇓P Pdif 23 35 54.9 +0.2
**MLR Muntele Rosu 97.00 42** P Pdif 23 35 54.9 +0.2
**MLR Muntele Rosu 97.00 42** P Pdif 23 35 54.6 -0.1
comp=Z,61nm,1.5s,comp=Z,1µm
**AK20 Malin Array Si 97.02 36** P **P 23 35 52.6 -1.7**
**AK21 Malin Array Si 97.02 36** P **P 23 35 52.4 -1.9**
**COVR Voineasa-Covas 97.05 42**⇓P Pdif 23 35 54.8 +0.1
**SEY Seymchan 97.09 338***ceP* Pdif 23 35 54.5 +0.1
SEY pmax pmax
comp=Z,21nm,1.0s
**AK04 Malin Array Si 97.12 36** P **P 23 35 53.2 -1.5**
**TIXI Tiksi 97.14 350** P **P 23 35 54.3 -0.1**
TIXI IAmb IAmb 23 35 55.0
comp=Z,41nm,0.9s
**TIXI Tiksi 97.14 350** LR LR 00 23 27.8
comp=Z,5µm,19.1s,baz=36,slow=38
**TIXI Tiksi 97.14 350***ceP* **P 23 35 53.6 -0.8**
TIXI pmax pmax
comp=Z,42nm,1.0s
TIXI MLR MLR
comp=Z,5µm,19.0s
**KIEV Kiev 97.15 36** P **P 23 35 53.5 -1.4**
**KIEV Kiev 97.15 36** P **P 23 35 52.5 -2.4**
**KIEV Kiev 97.15 36**⇑P **P 23 35 54.0 -0.9**
**KIEV Kiev 97.15 36** P **P 23 35 53.5 -1.4**
KIEV pmax pmax
comp=Z,14nm,1.3s
KIEV MLR MLR
comp=Z,8µm,20.0s
**KIEV Kiev 97.15 36** P **P 23 35 52.7 -2.2**
**AKASG Malin Array Be 97.16 36** P **P 23 35 53.0 -2.0**
comp=Z,0.7nm,0.5s,baz=274,slow=4.5,SNR=9.4
AKASG PP **PP 23 39 48.4 -2.3**
comp=Z,0.9nm,0.7s,baz=285,slow=7.2,SNR=4.3
AKASG LR LR 00 17 49.3
comp=Z,8µm,19.5s,baz=271,slow=34
**AKASG Malin Array Be 97.16 36***ceP* **P 23 35 53.5 -1.4**
AKASG pmax pmax
comp=Z,1.0nm,0.5s
**AKBB Malin Array Si 97.16 36***c iP* **P 23 35 52.8 -2.2**
**AKBB Malin Array Si 97.16 36** P **P 23 35 52.7 -2.2**
**AK05 Malin Array Si 97.18 36** P **P 23 35 53.0 -2.0**
**PLOR Plostina 97.34 42**⇑P Pdif 23 35 56.6 +0.6
**PLOR Plostina 97.34 42** P Pdif 23 35 56.6 +0.6
**VRI Vrincioaia 97.39 41**⇓P Pdif 23 35 56.5 +0.3
**VRI Vrincioaia 97.39 41** P Pdif 23 35 56.4 +0.2
**SORM Soroca 97.61 39**⇑P **P 23 35 56.7 -0.3**

**SORM Soroca 97.61 39** P **P** 23 35 56.9 -0.1
**ELND Elena 97.81 44** ⇑P Pdif 23 35 58.7 +0.5
**RAO Raoul Island 98.28 242** LR LR 00 10 19.1
comp=Z,913nm,20.4s,baz=90,slow=29
**KIS Kishinev 98.33 40***c i*P **P** 23 35 58.8 -1.5
KIS pmax pmax
comp=Z,200nm,5.7s
**MILM Milestii Mici 98.35 40**⇑ *i*P **P** 23 35 58.0 -2.4
comp=Z,200nm,2.3s
**MILM Milestii Mici 98.35 40** ⇑P **P** 23 35 59.9 -0.5
**MILM Milestii Mici 98.35 40***c i*P **P** 23 35 58.0 -2.4
MILM pmax pmax
comp=Z,200nm,2.3s
**MILM Milestii Mici 98.35 40** *e*L L 00 08 18.0
**MILM Milestii Mici 98.35 40** LRM MLR 00 14 32.0
comp=Z,8μm,22.5s
**CFR Carcaliu 98.56 42** ⇑P **P** 23 36 00.6 -0.7
**CFR Carcaliu 98.56 42** P **P** 23 36 00.6 -0.7
**ALN Alexandroupoli 98.60 46** P **P** 23 36 01.2 -0.5
ALN IAMs_20 IAMs_20 00 19 25.4
comp=Z,4μm,19.0s
**ALN Alexandroupoli 98.60 46** P **P** 23 36 01.2 -0.5
ALN pmax pmax
comp=Z,36nm,1.8s
ALN MLR MLR
comp=Z,4μm,19.0s
**QSPA South Pole Qui 98.62 180** P Pdif 23 36 01.9 +0.7
QSPA IAmb IAmb 23 36 11.9
comp=Z,81nm,1.8s
**QSPA South Pole Qui 98.62 180** P **P** 23 36 01.2 0.0
comp=Z,7.1nm,0.9s,baz=146,slow=1.3,SNR=15
QSPA PP **PP** 23 40 04.9 +3.0
comp=Z,2.5nm,1.1s,baz=134,slow=1.2,SNR=4.8
QSPA S **SKSac** 23 46 37.4 -1.1
comp=Z,0.7nm,0.9s,baz=197,slow=20,SNR=6.4
QSPA LR LR 00 13 47.3
comp=Z,2μm,19.0s,baz=157,slow=31
comp=Z,7.1nm,0.9s
**PURM Purcari 99.18 40** ⇑P **Pdif** 23 36 04.1 0.0
**OBN Obninsk 99.20 30** P **Pdif** 23 36 03.0 -1.0
OBN IAMs_20 IAMs_20 00 19 16.1
comp=Z,4μm,20.0s
**OBN Obninsk 99.20 30** LR LR 00 19 20.0
comp=Z,4μm,18.9s,baz=314,slow=34
**OBN Obninsk 99.20 30** ⇓P **Pdif** 23 36 04.0 +0.1
**OBN Obninsk 99.20 30***c i*P **Pdif** 23 36 02.1 -1.9
OBN *e**PP **pP** 23 36 07.0 -2.3
OBN *e* 23 40 04.6
OBN *e*PPP PPP 23 42 10.5
OBN *i* S **SKSac** 23 46 40.6 -1.2
OBN *i* 23 49 01.0
OBN *e*SS **SS** 23 54 22.1 -0.5
OBN pmax pmax
comp=Z,55nm,1.4s
OBN MLR MLR
comp=Z,4μm,19.0s
**PET Petropavlovsk 99.40 327** *e*P **Pdif** 23 35 53.2 -12
PET *e* 23 40 03.5
PET *e*SS SS 23 54 28.8 +3.2
PET pmax pmax
comp=Z,600nm,14.2s
PET pmax pmax
comp=Z,600nm,11.7s
PET pmax pmax
comp=Z,400nm,12.7s
**IDI Anoyia 99.50 52** P **Pdif** 23 36 05.5 -0.4
IDI IAmb IAmb 23 36 07.5
comp=Z,47nm,1.3s
**IDI Anoyia 99.50 52** P **Pdif** 23 36 04.0 -2.0
**IDI Anoyia 99.50 52** LR LR 00 17 24.5
comp=Z,1μm,22.0s,baz=316,slow=33
**MA2 Magadan 99.67 335** P **Pdif** 23 36 07.0 +1.0
**MA2 Magadan 99.67 335** P **Pdif** 23 36 05.7 -0.3
MA2 IAMs_20 IAMs_20 00 26 15.6
comp=Z,5μm,20.0s
**MA2 Magadan 99.67 335** LR LR 00 28 11.2
comp=Z,3μm,19.2s,baz=46,slow=40
**MA2 Magadan 99.67 335***de*P **Pdif** 23 36 06.5 +0.5
MA2 pmax pmax
comp=Z,14nm,0.9s
MA2 MLR MLR
comp=Z,2μm,20.0s
**NVL N'lazarevskaya 99.74 160** *e*P **Pdif** 23 36 04.0 -2.0
NVL *e*S **SKSac** 23 46 38.2 -5.5
NVL *e*SS SS 23 54 43.0 +13
NVL pmax pmax
comp=Z,8.0nm,1.0s
NVL MLR MLR
comp=Z,3μm,19.0s
**PETK Petropavlovsk- 99.87 328** Pdif **Pdif** 23 36 06.1 -1.0
**PETK Petropavlovsk- 99.87 328** PP **PP** 23 40 12.0 +0.6
comp=Z,1.5nm,0.6s,baz=72,slow=14,SNR=2.5
**PETK Petropavlovsk- 99.87 328** *i* P **Pdif** 23 36 06.1 -1.0
**BORA Eskisehir 102.11 46** Pdif **Pdif** 23 36 16.4 -1.1
**TSUM Tsumeb 102.89 108** Pdif **Pdif** 23 36 21.3 -0.1
**TSUM Tsumeb 102.89 108** IAMs_20 IAMs_20 00 19 30.7
comp=Z,5μm,20.0s
**RTZ Ruatahuna 103.01 232** IAMs_20 IAMs_20 00 13 08.3
comp=Z,5μm,21.0s
**ELIB Princess Elisa 103.25 162** *d*PP **PP** 23 40 32.7 -4.2
**BKZ Black Stump Fm 103.39 232** IAMs_20 IAMs_20 00 17 50.4
comp=Z,2μm,20.0s
**BFZ Birch Farm 103.58 230** IAMs_20 IAMs_20 00 16 58.4
comp=Z,4μm,18.0s
**ANTO Ankara 103.77 45** IAMs_20 IAMs_20 00 22 21.0
comp=Z,3μm,19.0s
**MRZ Mangatainoka R 104.09 230** IAMs_20 IAMs_20 00 14 17.9
comp=Z,3μm,20.0s
**TOZ Tahuroa Road 104.17 233** IAMs_20 IAMs_20 00 13 48.0
comp=Z,4μm,21.0s
**BR131 Keskin Array S 104.43 45** Pdif **Pdif** 23 36 26.7 -1.1
**BR131 Keskin Array S 104.43 45** *i* P **Pdif** 23 36 26.7 -1.1
**BRTR Keskin Array B 104.43 45** Pdif **Pdif** 23 36 26.2 -1.7
**BRTR Keskin Array B 104.43 45** Pdiff **Pdif** 23 36 26.8 -1.1
comp=Z,0.7nm,0.8s,baz=264,slow=2.4,SNR=4.4
BRTR PP **PP** 23 40 43.9 -2.4
comp=Z,1.6nm,1.0s,baz=260,slow=2.8,SNR=5.6
**BRTR Keskin Array B 104.43 45** *i* P **Pdif** 23 36 26.2 -1.7
**BHW Baring Head 104.61 230** IAMs_20 IAMs_20 00 15 54.6
comp=Z,3μm,18.0s
**SNZO South Karori 104.74 230** IAMs_20 IAMs_20 00 14 06.0
comp=Z,4μm,21.0s
**YAK Yakutsk 105.08 345** IAMs_20 IAMs_20 00 29 09.8
comp=Z,4μm,20.0s
**OUZ Omahuta 105.72 236** IAMs_20 IAMs_20 00 18 55.0
comp=Z,3μm,18.0s
**NNZ Nelson 105.74 230** IAMs_20 IAMs_20 00 17 17.5
comp=Z,3μm,18.0s
**H11S2 WAKE ISLAND Hyl 106.02 292** T T 01 35 09.8
baz=77,slow=75,SNR=11
**H11S1 WAKE ISLAND Hyl 106.02 292** T T 01 35 05.9
baz=77,slow=75,SNR=4.7
**H11S3 WAKE ISLAND Hyl 106.03 292** T T 01 35 11.0
baz=77,slow=75,SNR=6.6
**QRZ Quartz Range 106.40 230** IAMs_20 IAMs_20 00 16 47.0
comp=Z,3μm,20.0s
**SOC Sochi 106.73 40** *i* P **Pdif** 23 36 33.9 -3.9
SOC *e* 23 40 59.5
SOC *e*PPP PPP 23 43 14.9
SOC *e*PS **PS** 23 50 18.6 -4.2
SOC *e*SS SS 23 56 09.3 +2.2
SOC *e*SSS SSS 00 00 05.0
SOC MLR MLR
comp=Z,2μm,17.0s
**DSZ Denniston Nort 106.90 229** IAMs_20 IAMs_20 00 17 02.1
comp=Z,4μm,20.0s
**ODZ Otahua Downs 107.48 226** IAMs_20 IAMs_20 00 15 39.5
comp=Z,3μm,20.0s
**ARU Arti 107.91 21** IAMs_20 IAMs_20 00 26 30.4
comp=Z,4μm,21.0s
**ARU Arti 107.91 21** P **Pdif** 23 36 43.9 +1.2
ARU S **SKSac** 23 47 23.6 +1.4
**KIV Kislovodsk 108.38 38** IAMs_20 IAMs_20 00 22 20.8
comp=Z,4μm,21.0s
**KBZ Khabaz 108.63 38** PKiKP **PKiKP** 23 40 51.9 +0.3
comp=Z,1.0nm,0.6s,baz=52,slow=3.7,SNR=3.5
**WHZ Wether Hill Ro 109.28 224** IAMs_20 IAMs_20 00 18 44.9
comp=Z,3μm,19.0s
**DCZ Deep Cove 109.89 225** IAMs_20 IAMs_20 00 26 47.0
comp=Z,3μm,19.0s
**BOSA Boshof 110.23 117** PKiKP **PKiKP** 23 40 54.7 -0.5
comp=Z,2.5nm,0.8s,baz=188,slow=4.6,SNR=3.9
**YSS Yuzh-Sakhalins 111.26 328** IAMs_20 IAMs_20 00 33 52.9
comp=Z,3μm,20.0s
**GNI Garni 111.72 41** IAMs_20 IAMs_20 00 28 19.6
comp=Z,3μm,20.0s

**MAK Makhachkala 111.84 37** *e*P **Pdif** 23 36 59.1 -1.4
MAK *i* 23 40 53.8
MAK *e* 23 41 36.0
MAK *e*PPP PPP 23 43 59.5
MAK *e* 23 47 34.6
MAK *e*PS **PS** 23 51 08.1 -5.0
MAK *e*SS SS 23 57 10.0 -5.6
MAK *e*SSS SSS 00 01 21.3
MAK pmax pmax
comp=Z,54nm,1.0s
**DZM Mont Dzumac 112.03 250** *e*P **Pdif** 23 36 59.6 -2.3
comp=Z,180nm,25.6s
**DZM Mont Dzumac 112.03 250** *e*PP **PP** 23 41 41.0 -1.7
comp=Z,524nm,25.9s
**DZM Mont Dzumac 112.03 250** *e*SS SS 23 57 18.6 -2.2
comp=Z,1μm,28.3s
**DZM Mont Dzumac 112.03 250** *e*LQ LQ 00 09 31.2
comp=Z,8μm,36.8s
DZM *e*LR LR 00 14 23.4
comp=Z,1μm,24.7s
**LSZ Lusaka 112.74 103** IAMs_20 IAMs_20 00 24 54.6
comp=Z,3μm,21.0s
**JKA Kamikawa-asahi 113.17 326** IAMs_20 IAMs_20 00 33 14.9
comp=Z,3μm,20.0s
**MBAR Mbarara 113.72 87** IAMs_20 IAMs_20 00 28 12.3
comp=Z,4μm,19.0s
**KOUNC Koumac, New Ca 114.03 251** IAMs_20 IAMs_20 00 19 39.3
comp=Z,2μm,20.0s
**ERM Erimo 114.17 324** IAMs_20 IAMs_20 00 38 23.9
comp=Z,2μm,21.0s
**JEM Erimo 114.17 324** IAMs_20 IAMs_20 00 38 15.9
comp=Z,2μm,20.0s
**BRVK Borovoye 114.53 17**⇑ *i*PKIKP PKPdf 23 41 02.7 +0.1
BRVK pmax pmax
comp=Z,6.0nm,1.7s
**BVAR Borovoye Array 114.59 17** PKP **PKiKP** 23 41 02.3 -0.4
comp=Z,2.4nm,0.9s,baz=316,slow=4.1,SNR=5.2
BVAR PP **PP** 23 41 52.6 -6.2
comp=Z,9.3nm,1.1s,baz=336,slow=3.3,SNR=8.8
**KLR Kul'dur 114.77 336** PKP **PKiKP** 23 41 01.3 -1.8
comp=Z,1.2nm,0.6s,baz=62,slow=6.1,SNR=4.7
**KLR Kul'dur 114.77 336***d i*PKIKP **PKiKP** 23 41 02.5 -0.6
KLR pmax pmax
comp=Z,18nm,2.5s
**HEH HeiHe 115.61 339** PKP **PKPdf** 23 41 09.6 +4.9
HEH PP **PP** 23 42 05.8 -0.3
HEH AMB AMB
comp=Z,1μm,9.4s
HEH LR LR
comp=Z,2μm,22.2s
HEH LR LR
comp=Z,2μm,22.9s
HEH LR LR
comp=Z,3μm,22.6s
**ZALV Zalesovo Beam 116.84 8** **PKPdf** 23 41 05.9 -1.1
**ZALV Zalesovo Beam 116.84 8** PKP **PKPdf** 23 41 05.4 -1.6
comp=Z,6.5nm,1.1s,baz=299,slow=3.1,SNR=11
ZALV PP **PP** 23 42 11.3 -3.1
comp=Z,43nm,1.2s,baz=336,slow=6.8,SNR=19
**MAW Mawson 116.86 166** **PKPdf** 23 41 05.9 -0.7
comp=Z,2.6nm,0.8s,baz=268,slow=13,SNR=4.3
**LODK Lodwar 117.56 82** IAMs_20 IAMs_20 00 37 56.5
comp=Z,2μm,19.0s
**HNR Honiara 117.74 264** IAMs_20 IAMs_20 00 21 50.0
comp=Z,3μm,19.0s
**LHI Lord Howe Isla 118.09 239** IAMs_20 IAMs_20 00 27 33.9
comp=Z,2μm,18.0s
**USRK Ussuriysk Ar. 118.55 332** PKP **PKPdf** 23 41 09.9 -0.7
comp=Z,5.7nm,0.8s,baz=200,slow=1.9,SNR=8.2
USRK PP **PP** 23 42 27.1 +0.2
comp=Z,1.1nm,0.6s,baz=22,slow=11,SNR=4.5
**KURK Kurchatov 118.83 13** **PKPdf** 23 41 10.3 -0.6
**KURK Kurchatov 118.83 13***c i*PKIKP **PKPdf** 23 41 09.7 -1.2
KURK pmax pmax
comp=Z,18nm,1.7s
**KURBB Kurchatov Arra 118.89 13** PKP **PKPdf** 23 41 10.4 -0.7
comp=Z,3.0nm,0.7s,baz=327,slow=2.3,SNR=15
KURBB PP **PP** 23 42 26.4 -2.4
comp=Z,4.5nm,0.9s,baz=342,slow=5.9,SNR=6.2
**BNX BinXian 119.33 336** PKP **PKPdf** 23 41 11.0 -1.0
BNX PP **PP** 23 42 32.1 0.0
**SEM Semipalatinsk 119.47 12** *e*PKP **PKPdf** 23 41 10.3 -2.2
baz=12
SEM *e*PP **PP** 23 42 31.1 -2.0
baz=12
SEM LR LR 00 31 40.2
comp=Z,2μm,18.6s,baz=12
**SEM Semipalatinsk 119.47 12** *e*PKIKP **PKPdf** 23 41 10.2 -2.2
SEM *e* 23 42 31.0
**FURI Furi 119.52 75** IAMs_20 IAMs_20 00 30 04.6
comp=Z,2μm,21.0s
**KMBO Kilima Mbogo 120.23 86** IAMs_20 IAMs_20 00 31 44.8
comp=Z,3μm,20.0s
**RAYN Ar Rayn 120.53 56** **PKPdf** 23 41 14.9 -0.2
**RAYN Ar Rayn 120.53 56** IAMs_20 IAMs_20 00 32 40.6
comp=Z,2μm,20.0s
**RAYN Ar Rayn 120.53 56** PKPdf **PKPdf** 23 41 13.1 -1.9
**RAYN Ar Rayn 120.53 56** PKiKP **PKPdf** 23 41 14.9 -0.2
RAYN MLR MLR
comp=Z,2μm,20.0s
**MAJO Matsushiro 120.61 322** P **PKPdf** 23 41 14.8 -0.1
**MAJO Matsushiro 120.61 322** **PKPdf** 23 41 14.7 -0.1
**MAJO Matsushiro 120.61 322** PKiKP **PKPdf** 23 41 14.7 -0.1
**MJAR Matsushiro Arr 120.61 322** PKP **PKPdf** 23 41 14.3 -0.5
comp=Z,8.8nm,0.7s,baz=87,slow=1.4,SNR=26
**ZAK Zakamensk 120.97 355** *e*PKiKP **PKPdf** 23 41 10.8 -4.4
ZAK pmax pmax
comp=Z,8.0nm,1.6s
**KIBK Kibwezi 121.21 88** IAMs_20 IAMs_20 00 33 42.8
comp=Z,2μm,20.0s
**CASY Casey 121.66 186** **PKPdf** 23 41 15.7 -0.1
**CN2 Changchun 121.72 336** PKP **PKPdf** 23 41 15.0 -1.7
CN2 PP **PP** 23 42 49.8 +1.4
CN2 AMB AMB
comp=Z,500nm,4.0s
CN2 LR LR
comp=Z,3μm,18.0s
CN2 LR LR
comp=Z,2μm,18.0s
CN2 LR LR
comp=Z,4μm,18.0s
**JSG Sagara 121.83 320** IAMs_20 IAMs_20 00 25 46.1
comp=Z,2μm,22.0s
**INU Inuyama 122.12 321** IAMs_20 IAMs_20 00 42 24.4
comp=Z,2μm,22.0s
**ATD Arta Tunnel 122.70 70** IAMs_20 IAMs_20 00 40 54.4
comp=Z,1μm,19.0s
**BTLS Baital 122.77 19** *e*PKP **PKPdf** 23 41 17.2 -1.5
baz=19
BTLS *e*PP **PP** 23 42 53.9 -1.6
baz=19
**BTLS Baital 122.77 19** *e*PKIKP **PKPdf** 23 41 17.1 -1.5
BTLS *e* 23 42 53.8
**BRLS Borolday 123.01 23** *e*PKP **PKPdf** 23 41 17.7 -1.6
baz=24
BRLS *e*PP **PP** 23 42 56.2 -1.0
baz=24
**BRLS Borolday 123.01 23** *e*PKIKP **PKPdf** 23 41 17.6 -1.6
BRLS *e* 23 42 56.2
**ULN Ulaanbaatar 123.03 352** **PKPdf** 23 41 19.3 0.0
**ULN Ulaanbaatar 123.03 352***c i*PKIKP **PKPdf** 23 41 18.5 -0.8
ULN pmax pmax
comp=Z,28nm,1.7s
**SONM Songino Array 123.15 352** **PKPdf** 23 41 18.0 -1.5
**SONM Songino Array 123.15 352** PKP **PKPdf** 23 41 19.0 -0.5
comp=Z,6.8nm,0.8s,baz=330,slow=1.0,SNR=36
SONM PP **PP** 23 42 53.7 -4.3
comp=Z,4.8nm,1.1s,baz=349,slow=2.6,SNR=4.7
**SONM Songino Array 123.15 352** PKiKP **PKPdf** 23 41 18.0 -1.5
**ZSN Zaisan 123.17 10** *e*PKP **PKPdf** 23 41 17.8 -1.6
baz=9.8
ZSN *e*PP **PP** 23 42 56.6 -1.4
baz=9.8
**ZSN Zaisan 123.17 10** *e*PKIKP **PKPdf** 23 41 17.8 -1.6
ZSN *e* 23 42 56.5
**KKAR Karatay Array 123.21 23** **PKPdf** 23 41 18.4 -1.2
**KKAR Karatay Array 123.21 23** PKiKP **PKPdf** 23 41 18.4 -1.2
**MAKZ Makanchi 123.25 12** **PKPdf** 23 41 18.4 -1.2
**MAKZ Makanchi 123.25 12** PKiKP **PKPdf** 23 41 18.4 -1.2
**MK31 Makanchi Array 123.33 12***c i*PKIKP **PKPdf** 23 41 18.2 -1.5
**MKAR Makanchi Array 123.33 12** PKP **PKPdf** 23 41 18.6 -1.1
comp=Z,2.4nm,0.7s,baz=358,slow=2.5,SNR=19
**TDK Taldyqorghan 124.10 16** *e*PKP **PKPdf** 23 41 19.5 -1.8
baz=16
TDK *e*PP **PP** 23 43 02.3 -2.0
baz=16
TDK LR LR 00 34 28.8
comp=Z,2μm,21.5s,baz=16
**TDK Taldyqorghan 124.10 16** *e*PKIKP **PKPdf** 23 41 19.4 -1.8
TDK *e* 23 43 02.3
TDK MLR MLR
comp=Z,2μm,22.0s
**SNY Shenyang 124.12 336**⇓ PKP **PKPdf** 23 41 13.6 -7.7
SNY PP PP 23 42 54.5 -10
SNY SKS **SKSac** 23 48 15.8 -7.9
**ARMA Armidale 124.57 239** IAMs_20 IAMs_20 00 26 24.4
comp=Z,3μm,19.0s
**RABL Rabaul 124.87 271** IAMs_20 IAMs_20 00 25 20.6
comp=Z,2μm,20.0s
**XLT XiLinHaoTe 124.88 343** *e*PKP **PKPdf** 23 41 21.5 -1.4
XLT sPKP 23 41 30.6
XLT SS SS 00 00 02.6 -1.1
XLT AMB AMB
comp=Z,1μm,9.8s
XLT LR LR
comp=Z,440nm,20.4s
XLT LR LR
comp=Z,2μm,20.4s
XLT LR LR
comp=Z,5μm,20.4s
**AAK Ala-Archa 125.06 20** **PKiKP** 23 41 24.5 +0.8
**AAK Ala-Archa 125.06 20** PKP **PKPdf** 23 41 23.1 -0.3
comp=Z,7.1nm,0.8s,baz=142,slow=0.7,SNR=3.2
AAK PP **PP** 23 43 08.3 -2.8
comp=Z,1.6nm,0.3s,baz=304,slow=4.2,SNR=1.8
**AAK Ala-Archa 125.06 20** PKiKP **PKiKP** 23 41 24.5 +0.8
**JMN Monobe 125.13 322** P **PKiKP** 23 41 25.0 +1.1
**JMN Monobe 125.13 322** IAMs_20 IAMs_20 00 40 11.1
comp=Z,2μm,21.0s
**AAA Alma-Ata 125.32 18** *e*PKP **PKPdf** 23 41 21.5 -2.2
baz=18
AAA *e*PP **PP** 23 43 10.6 -2.0
baz=18
AAA LR LR 00 35 19.3
comp=Z,2μm,17.7s,baz=18
**AAA Alma-Ata 125.32 18** *e*PKIKP **PKPdf** 23 41 21.5 -2.2
AAA *e* 23 43 10.6
AAA MLR MLR
comp=Z,2μm,18.0s
**MDOK Medeo 125.40 18** *e*PKP **PKPdf** 23 41 21.7 -2.3
baz=18
MDOK *e*PP **PP** 23 43 11.4 -1.9
baz=18
MDOK LR LR 00 35 18.2
comp=Z,2μm,20.3s,baz=18
**MDOK Medeo 125.40 18** *e*PKIKP **PKPdf** 23 41 21.7 -2.3
MDOK *e* 23 43 11.3
MDOK MLR MLR
comp=Z,2μm,20.0s
**TNSS Tian-Shan 125.49 18** *e*PKP **PKPdf** 23 41 22.1 -2.4
baz=18
TNSS *e*PP **PP** 23 43 11.7 -2.4
baz=18
**TNSS Tian-Shan 125.49 18** *e*PKIKP **PKPdf** 23 41 22.0 -2.4
TNSS *e* 23 43 11.7
**KPKS Kokpek 125.59 16** *e*PKP **PKPdf** 23 41 22.1 -2.2
baz=16
KPKS *e*PP **PP** 23 43 12.8 -1.6
baz=16
**KPKS Kokpek 125.59 16** *e*PKIKP **PKPdf** 23 41 22.0 -2.2
KPKS *e* 23 43 12.8
**KSRS Korea Array 125.71 330** PKP **PKPdf** 23 41 24.5 0.0
comp=Z,34nm,0.8s,baz=7.6,slow=1.4,SNR=85
**KSAR Wonju Array Be 125.74 330** **PKPdf** 23 41 23.5 -1.1
**KSAR Wonju Array Be 125.74 330** PKiKP **PKPdf** 23 41 23.5 -1.1
**ZHN Zhinishke 125.80 17** *e*PKP **PKPdf** 23 41 22.6 -2.1
baz=17
ZHN *e*PP **PP** 23 43 13.8 -2.1
baz=17
**ZHN Zhinishke 125.80 17** *e*PKIKP **PKPdf** 23 41 22.6 -2.1
ZHN *e* 23 43 13.7
**SATY Saty 125.89 17** *e*PKP **PKPdf** 23 41 23.0 -1.9
baz=17
SATY *e*PP **PP** 23 43 14.5 -2.0
baz=17
**SATY Saty 125.89 17** *e*PKIKP **PKPdf** 23 41 23.0 -1.9
SATY *e* 23 43 14.4
**UZB Uzunbulak 125.98 16** *e*PKP **PKPdf** 23 41 23.2 -2.0
baz=16
UZB *e*PP **PP** 23 43 15.2 -1.9
baz=16
**UZB Uzunbulak 125.98 16** *e*PKIKP **PKPdf** 23 41 23.1 -2.0
UZB *e* 23 43 15.2
**SHLS Shalkode 126.09 16** *e*PKP **PKPdf** 23 41 23.4 -1.9
baz=16
SHLS *e*PP **PP** 23 43 16.7 -1.1
baz=16
**SHLS Shalkode 126.09 16** *e*PKIKP **PKPdf** 23 41 23.3 -1.9
SHLS *e* 23 43 16.7
**SIMJ Simiganj 126.30 27** **PKiKP** 23 41 26.1 -0.2
**INCN Inchon 126.32 331** IAMs_20 IAMs_20 00 42 21.5
comp=Z,3μm,21.0s
**RK1H Rockhampton Ha 126.66 247** P **PKiKP** 23 41 28.1 +1.0
**AUDCS Dubbo College 126.68 236** P **PKiKP** 23 41 28.2 +1.2
**TJN Taejon 126.83 329** P **PKiKP** 23 41 29.4 +2.3
**TJN Taejon 126.83 329**⇑ *i*PKIKP **PKPdf** 23 41 26.9 +0.2
**WMQ Urumqi 127.15 8** PKP **PKPdf** 23 41 26.8 -0.4
WMQ PP **PP** 23 43 27.4 +2.8
WMQ AMB AMB
comp=Z,680nm,6.7s
WMQ LR LR
comp=Z,5μm,19.9s
WMQ LR LR
comp=Z,4μm,19.9s
WMQ LR LR
comp=Z,7μm,24.1s
**MZR Muzera 127.21 53** *i* PKiKP **PKPdf** 23 41 27.7 -0.1
SNR=22
**JNU Nakatsue 127.34 324** PKP **PKPdf** 23 41 27.1 -0.8
comp=Z,19nm,0.8s,baz=87,slow=6.4,SNR=5.4
**DL2 Dalian 127.39 336** PKP PKPdf 23 41 19.8 -7.9
**DL2 Dalian 127.39 336** PP PP 23 43 29.0 +2.6
DL2 AMB AMB
comp=Z,1μm,8.8s
DL2 LR LR
comp=N,2μm,20.8s
DL2 LR LR
comp=E,4μm,18.9s
DL2 LR LR
comp=Z,4μm,19.6s
**GUMO Guam 127.45 294** **PKPdf** 23 41 28.4 0.0
**GUMO Guam 127.45 294** PKiKP **PKPdf** 23 41 28.4 0.0
**AJN Ajban 127.53 50** *i* PKiKP **PKPdf** 23 41 27.4 -0.9
SNR=8.5
**TOO Toolangi 127.55 229** IAMs_20 IAMs_20 00 26 11.7
comp=Z,3μm,20.0s
**SHME Shamm 127.55 48** *i* PKPdf **PKPdf** 23 41 27.0 -1.4
SNR=11
**ASUD Al Ashush, Dub 127.76 50** *i* PKiKP **PKPdf** 23 41 29.0 +0.2
SNR=20
**NAZ Nazwa, Dubai 127.80 49** PKiKP **PKPdf** 23 41 27.8 -1.0
**AULRC Lightning Ridg 127.87 239** P **PKiKP** 23 41 30.0 +0.6
**FAQ Al Faqa, Dubai 127.89 49** *i* PKiKP **PKPdf** 23 41 27.8 -1.2
SNR=11
**MSFE Esma-Masafi 127.96 48** *i* PKiKP **PKPdf** 23 41 28.3 -0.9
SNR=11
**MDH Madha 128.10 48** *i* PKPdf **PKPdf** 23 41 27.8 -1.6
SNR=7.6
**UOSS Minazif 128.23 49** **PKPdf** 23 41 28.8 -0.9
**UOSS Minazif 128.23 49** IAMs_20 IAMs_20 00 38 48.2
comp=Z,2μm,21.0s
**UOSS Minazif 128.23 49** *i* PKPdf **PKPdf** 23 41 27.7 -2.0
SNR=6.2
**HATD Hatta, Dubai 128.25 49** *i* PKPdf **PKPdf** 23 41 28.4 -1.3
SNR=17
**ASHO Ashiyiah 128.27 49** *i* PKiKP **PKPdf** 23 41 28.7 -1.2
SNR=5.2
**KSH Kashi 128.34 21** PKP **PKiKP** 23 41 30.4 +0.1
KSH PP **PP** 23 43 33.8 +1.0
KSH AMB AMB
comp=Z,990nm,9.6s
KSH LR LR
comp=Z,3μm,22.7s
KSH LR LR
comp=Z,3μm,22.7s
KSH LR LR
comp=Z,5μm,19.9s
**BJI Beijing 128.38 341** PKP **PKPdf** 23 41 28.8 -0.7
BJI AMB AMB
comp=Z,430nm,4.5s
BJI LR LR
comp=Z,2μm,20.1s

BJI LR LR
comp=Z,880nm,19.0s
BJI LR LR
comp=Z,3μm,20.2s
**ALNE Al Ain 128.39 50** *i* PKiKP **PKPdf 23 41 28.9 -1.2**
SNR=15
**HHC Hu-ho-hao-te 128.93 346** *e*PKP **PKPdf 23 41 29.4 -1.3**
HHC PP **PP 23 43 36.6 +0.1**
HHC SKS **SKSac 23 48 35.8 -2.9**
HHC LR LR
comp=Z,5μm,19.9s
HHC LR LR
comp=Z,1μm,18.3s
HHC LR LR
comp=Z,7μm,17.6s
**SOHO SOHO 128.94 49** *i* PKPdf **PKPdf 23 41 29.6 -1.4**
SNR=12
**CMSA Cobar Meteorol 129.27 236** P **PKiKP 23 41 31.9 -0.3**
**MANU Manus Island 129.30 274** IAMs_20 IAMs_20 00 27 59.6
comp=Z,2μm,20.0s
**BTO Baotou 129.53 347** *e*PKP **PKPdf 23 41 30.8 -1.1**
BTO SKS **SKSac 23 48 37.9 -2.5**
BTO LR LR
comp=Z,4μm,20.3s
BTO LR LR
comp=Z,5μm,21.7s
BTO LR LR
comp=Z,5μm,23.9s
**KBL Kabul 129.65 30 PKPdf 23 41 31.8 -0.6**
**KBL Kabul 129.65 30** PKIKP **PKPdf 23 41 31.8 -0.6**
**VOI Vohitsoka 130.17 111 PKPdf 23 41 33.9 +0.4**
**PMG Port Moresby 130.32 265***c i*PKIKP **PKPdf 23 41 34.2 +0.3**
PMG pmax pmax
comp=Z,50nm,2.5s
**TV1H Townsville Har 130.52 252** P **PKiKP 23 41 36.8 +1.8**
**CTAO Charters Tower 130.95 251** P **PKiKP 23 41 35.5 -0.4**
**CTAO Charters Tower 130.95 251** PKPpre 23 41 27.5
**CTAO Charters Tower 130.95 251** IAMs_20 IAMs_20 00 33 09.5
comp=Z,2μm,18.0s
**CTAO Charters Tower 130.95 251** PKIKP **PKPdf 23 41 27.5 -7.5**
**HNS HongShan 131.25 341** ⇑PKP **PKPdf 23 41 34.9 -0.2**
HNS AMB AMB
comp=Z,830nm,6.2s
HNS LR LR
comp=Z,4μm,17.5s
HNS LR LR
comp=Z,1μm,21.5s
HNS LR LR
comp=Z,5μm,17.9s
**TIA Tai'an 131.49 338** PKP **PKPdf 23 41 35.6 0.0**
**TIY Taiyuan 131.65 343** *e*PKP **PKPdf 23 41 35.3 -0.6**
TIY PP **PP 23 43 56.6 +2.5**
TIY AMB AMB
comp=Z,1μm,9.0s
TIY LR LR
comp=Z,2μm,20.6s
TIY LR LR
comp=Z,2μm,19.2s
TIY LR LR
comp=Z,4μm,24.7s
**QLP Quilpie 131.73 242** P **PKiKP 23 41 37.3 +0.1**
**GTA Gaotai 132.13 357** PKP **PKPdf 23 41 36.3 -0.6**
GTA PP **PP 23 43 56.6 -0.5**
GTA AMB AMB
comp=Z,2μm,9.1s
GTA LR LR
comp=Z,5μm,21.1s
GTA LR LR
comp=Z,2μm,20.4s
GTA LR LR
comp=Z,6μm,21.5s
**NIL Nilore 132.36 27 PKPdf 23 41 37.5 +0.2**
**NIL Nilore 132.36 27** PKIKP **PKPdf 23 41 37.5 +0.2**
**STKA Stephens Creek 132.50 234** P **PKiKP 23 41 38.7 0.0**
**STKA Stephens Creek 132.50 234 PKPdf 23 41 37.9 +0.3**
**STKA Stephens Creek 132.50 234** PKP **PKPdf 23 41 37.3 -0.2**
comp=Z,9.5nm,0.7s,baz=94,slow=4.0,SNR=11
**MTSU Mount Surprise 132.96 253** P **PKiKP 23 41 39.6 -0.4**
**JOW Kunigami 133.39 320** P **PKiKP 23 41 41.5 +0.9**
**SSE Sheshan 134.12 330** PKP **PKPdf 23 41 41.0 +0.3**
**SSE Sheshan 134.12 330** PP PP 23 44 13.3 +3.0
SSE AMB AMB
comp=Z,530nm,9.3s
SSE LR LR
comp=N,2μm,20.9s
SSE LR LR
comp=E,980nm,21.1s
**COEN Coen 134.30 259** P **PKiKP 23 41 42.4 -0.3**
**COEN Coen 134.30 259** IAMs_20 IAMs_20 00 39 25.2
comp=Z,2μm,20.0s
**NJ2 Nanjing 134.41 334** *e*PKP **PKPdf 23 41 41.1 -0.1**
NJ2 AMB AMB
comp=Z,960nm,4.7s
**LYN LuoYang 134.58 342** PKP **PKPdf 23 41 41.3 -0.1**
LYN PKS **PKSdf 23 45 12.1 -5.7**
LYN AMB AMB
comp=Z,2μm,8.7s
LYN LR LR
comp=Z,7μm,18.5s
LYN LR LR
comp=Z,3μm,17.6s
LYN LR LR
comp=Z,8μm,18.8s
**DHRM DHARAMSHALA 134.88 25** *e*P **PKPdf 23 41 40.9 -1.5**
DHRM IAmb IAmb 23 41 49.4
comp=Z,23nm,0.8s
**LZH Lanzhou 135.04 352** ⇑PKP **PKPdf 23 41 42.3 -0.2**
LZH PKS **PKSdf 23 45 12.3 -6.7**
LZH AMB AMB
comp=Z,410nm,5.8s
LZH LR LR
comp=Z,5μm,17.2s
LZH LR LR
comp=Z,3μm,16.5s
LZH LR LR
comp=Z,6μm,16.1s
**WHYH Whyalla 135.25 231** P **PKiKP 23 41 44.0 -0.2**
**GOMU GeErMu 135.38 2** PKP **PKPdf 23 41 43.1 -0.3**
GOMU PP **PP 23 44 17.4 -0.7**
GOMU SS SS 00 02 19.1 +6.2
GOMU AMB AMB
comp=Z,2μm,8.5s
GOMU LR LR
comp=Z,5μm,20.7s
GOMU LR LR
comp=Z,3μm,20.2s
GOMU LR LR
comp=Z,8μm,21.4s
**HNLY HANLEY 135.45 22** *e*P **PKPdf 23 41 43.3 -0.6**
**TABU Tabubil 135.82 271** P **PKPdf 23 41 44.8 +0.4**
**XAN Xi'an 136.05 345** ⇑PKP **PKPdf 23 41 43.8 -0.5**
XAN PP **PP 23 44 24.3 +2.2**
XAN PKS **PKSdf 23 45 16.8 -3.9**
XAN AMB AMB
comp=Z,2μm,9.1s
XAN LR LR
comp=Z,7μm,20.6s
XAN LR LR
comp=Z,2μm,18.5s
XAN LR LR
comp=Z,7μm,19.9s
**SMLA Simla 136.21 25** *e*P **PKPdf 23 41 41.3 -3.3**
SMLA IAmb IAmb 23 41 50.0
comp=Z,34nm,1.0s
**KLP Kalpa 136.29 23** *e*P **PKPdf 23 41 45.2 0.0**
**QIS Mount Isa 137.07 249** P **PKPdf 23 41 44.8 -1.6**
**WHN Wuhan 137.58 337** PKP **PKPdf 23 41 47.0 -0.1**
WHN PP **PP 23 44 34.3 +2.5**
WHN PKS **PKSdf 23 45 23.3 -0.1**
WHN LR LR
comp=Z,8μm,13.7s
WHN LR LR
comp=Z,3μm,12.9s
WHN LR LR
comp=Z,12μm,18.6s
**KUDL Kundal 138.49 28** *e*P **PKPdf 23 41 45.3 -3.5**
KUDL IAmb IAmb 23 41 52.3
comp=Z,116nm,1.5s
**SSLB Suanglung 140.08 324** P **PKiKP 23 41 54.4 0.0**
**SSLB Suanglung 140.08 324** P **PKPdf 23 41 51.0 -0.9**
**CD2 Chengdu 140.13 351** PKP **PKPdf 23 41 51.0 -0.9**
CD2 sPKP 23 41 58.6
CD2 AMB AMB
comp=Z,930nm,9.2s
CD2 LR LR
comp=Z,4μm,22.4s
CD2 LR LR
comp=Z,4μm,20.6s
CD2 LR LR
comp=Z,3μm,21.4s
**CNSH ChangSha 140.24 337** PKP **PKPdf 23 41 52.0 0.0**
CNSH PP **PP 23 44 50.3 +2.1**
CNSH AMB AMB
comp=Z,1μm,4.7s
CNSH LR LR
comp=Z,2μm,17.2s
CNSH LR LR
comp=Z,2μm,17.6s
CNSH LR LR
comp=Z,4μm,21.1s
**QZH Quanzhou 140.46 328** PKP **PKPdf 23 41 46.6 -5.9**
QZH PP **PP 23 44 49.6 -0.3**
QZH SS SS 00 03 18.5 +4.9
QZH AMB AMB
comp=Z,940nm,10.9s
QZH LR LR
comp=Z,2μm,17.9s
QZH LR LR
comp=Z,3μm,16.5s
QZH LR LR
comp=Z,3μm,18.2s
**TWG Pinlang 140.75 323** IAMs_20 IAMs_20 00 56 21.7
comp=Z,3μm,20.0s
**KNMB Chin-men Tao 140.96 328** IAMs_20 IAMs_20 00 49 20.4
comp=Z,2μm,22.0s
**LSA Lhasa 141.51 8** PKP **PKPdf 23 41 49.8 -5.1**
LSA PP **PP 23 44 58.8 +2.5**
LSA LR LR
comp=Z,3μm,21.0s
LSA LR LR
comp=Z,1μm,22.4s
LSA LR LR
comp=Z,3μm,19.4s
**ASAR Alice Springs 141.52 243** PKPpre 23 41 47.8
**ASAR Alice Springs 141.52 243** PKhKP PKPpre 23 41 48.6
comp=Z,13nm,0.8s,baz=113,slow=3.1,SNR=67
ASAR PKP **PKPdf 23 41 54.9 +0.4**
comp=Z,27nm,0.9s,baz=119,slow=2.9,SNR=38
**JHNI Jhansi 141.72 27** *e*P **PKPdf 23 41 52.2 -2.6**
JHNI IAmb IAmb 23 41 58.3
comp=Z,35nm,1.2s
**WRAB Tennant Creek 142.03 249** PKPpre 23 41 50.3
**WRAB Tennant Creek 142.03 249** PKHKP PKPpre 23 41 50.3
**WRA Warramunga Arr 142.04 249** PKPpre 23 41 49.9
**WRA Warramunga Arr 142.04 249** PKhKP PKPpre 23 41 50.1
comp=Z,29nm,0.9s,baz=103,slow=3.0,SNR=108
WRA PKP **PKPdf 23 41 55.1 -0.4**
comp=Z,23nm,0.9s,baz=98,slow=2.9,SNR=14
**BHPL Bhopal 143.08 31** IAmb IAmb 23 41 53.0
comp=Z,106nm,1.3s
BHPL *e*P PKPbc 23 41 55.6 +1.5
**GTK Tadong 143.39 12** *e*P PKPbc 23 41 54.6 -0.3
GTK IAmb IAmb 23 41 55.5
comp=Z,296nm,1.3s
**FORT Forrest 143.47 229** P **PKPdf 23 41 59.2 +1.5**
**GULI GuiLin 143.80 339** ⇓PKP PKPbc 23 41 56.5 +0.5
GULI PP **PP 23 45 14.0 +4.1**
GULI LR LR
comp=Z,3μm,18.9s
GULI LR LR
comp=Z,2μm,18.1s
GULI LR LR
comp=Z,5μm,19.0s
**GYA Guiyang 143.84 345** ⇓PKP PKPbc 23 41 56.0 -0.3
GYA PKPab **PKiKP 23 42 01.8 -0.4**
GYA PP **PP 23 45 16.8 +6.7**
GYA AMB AMB
comp=Z,1μm,11.2s
GYA LR LR
comp=Z,1μm,24.7s
GYA LR LR
comp=Z,1μm,26.1s
GYA LR LR
comp=Z,2μm,25.8s
**ZIRO ZIRO 143.95 4** *e*P PKPab 23 41 55.9 -0.2
**LKP Lekhapani 144.24 1** *e*P **PKPab 23 41 56.0 -0.9**
**JORH JORHAT 144.75 4** *e*P **PKPab 23 41 57.1 -1.7**
**POO Poona 144.76 40** *e*P **PKPab 23 41 56.7 -2.4**
POO IAmb IAmb 23 42 00.3
comp=Z,303nm,1.6s
**PZH PanZhiHua 144.76 352** PKP **PKPab 23 41 58.3 -0.7**
PZH pPKP **PKiKP 23 42 04.3 +0.3**
PZH PP **PP 23 45 14.5 -1.0**
PZH PKS **PKSdf 23 45 38.0 +1.9**
PZH SKKS 23 52 04.0
PZH AMB AMB
comp=Z,610nm,11.2s
PZH LR LR
comp=Z,3μm,20.6s
PZH LR LR
comp=Z,2μm,19.6s
PZH LR LR
comp=Z,4μm,21.1s
**KDU Kakadu 144.76 260** P PKPbc 23 41 59.4 +0.1
**KDU Kakadu 144.76 260** P **PKPab 23 41 58.9 -0.3**
**SWI Sorong 144.86 281** PKP **PKPdf 23 42 00.4 -0.2**
**HKPS Hong Kong Po S 144.91 331** P **PKPdf 23 42 01.0 +0.5**
**HKPS Hong Kong Po S 144.91 331** P PKPbc 23 41 59.9 +0.3
**SHL Shillong 145.68 8** *e*P **PKPdf 23 42 00.0 -2.0**
SHL IAmb IAmb 23 42 01.4
comp=Z,237nm,1.1s
**KOHI KOHIMA 145.76 4** *e*P **PKPdf 23 42 01.8 -0.3**
KOHI IAmb IAmb 23 42 04.5
comp=Z,290nm,0.8s
**KAD Karad 145.87 41** *e*P **PKPdf 23 42 00.8 -1.5**
KAD IAmb IAmb 23 42 08.4
comp=Z,250nm,1.3s
**WRKA Warakurna 145.87 238** P **PKPbc 23 42 02.5 -0.2**
**WRKA Warakurna 145.87 238** P **PKPdf 23 42 02.2 +0.1**
**KMI Kunming 145.97 350** ⇑PKPbc **PKPdf 23 42 02.0 -0.5**
KMI AMB AMB
comp=Z,470nm,7.4s
KMI LR LR
comp=Z,980nm,24.2s
KMI LR LR
comp=Z,2μm,20.0s
KMI LR LR
comp=Z,3μm,18.6s
**BOK Bokaro 146.05 18** *e*P **PKPdf 23 42 01.9 -0.5**
BOK IAmb IAmb 23 42 03.6
comp=Z,1μm,1.8s
**MTN Manton Dam 146.06 260** P **PKPbc 23 42 03.1 -0.3**
**MTN Manton Dam 146.06 260** P **PKPbc 23 42 03.5 +0.1**
**MTN Manton Dam 146.06 260** IAMs_20 IAMs_20 00 39 58.6
comp=Z,2μm,20.0s
**BLSP Bilaspur 146.21 25** *e*P **PKPdf 23 42 02.3 -0.5**
BLSP IAmb IAmb 23 42 09.4
comp=Z,353nm,1.3s
**DRS Darwin Rock St 146.31 261** P **PKPbc 23 42 03.9 -0.3**
**TNCH TengChong 146.51 357** PKPbc **PKPdf 23 42 02.8 -0.6**
TNCH PKPab **PKPab 23 42 05.8 +0.2**
TNCH pPKP pPKPbc 23 42 09.8 -0.3
TNCH SKKS 23 52 15.1
TNCH SS **SS 00 04 25.8 +3.3**
TNCH AMB AMB
comp=Z,1μm,9.8s
TNCH LR LR
comp=Z,2μm,18.3s
TNCH LR LR
comp=Z,1μm,17.0s
TNCH LR LR
comp=Z,6μm,20.3s
**IMP Imphal 146.63 5** *e*P **PKPdf 23 42 02.1 -1.4**
IMP IAmb IAmb 23 42 07.3
comp=Z,109nm,0.8s
**GOA Goa 146.93 44** *e*P **PKPdf 23 42 04.4 +0.4**
GOA IAmb IAmb 23 42 08.6
comp=Z,284nm,1.5s
**JHSG JHARSUGUGA 147.20 23** *e*P **PKPbc 23 42 05.7 -0.9**
JHSG IAmb IAmb 23 42 09.3
comp=Z,784nm,1.6s
**AGT Agartala 147.24 9** *e*P **PKPdf 23 42 03.5 -0.9**
**KMBL Kambalda 147.50 222** P **PKPbc 23 42 06.4 -0.8**
**TNTI Ternate 148.17 286** P **PKPbc 23 42 09.0 -0.5**
**TNTI Ternate 148.17 286** PKP **PKPbc 23 42 09.7 +0.2**
**RKGY Rocky Gully 148.20 213** P **PKPdf 23 42 07.1 +1.4**
**LBMI Labuha 148.44 283** PKP **PKPab 23 42 17.8 +4.3**
**HYB Hyderabad 148.44 35** *e*PKPdf **PKPdf 23 42 06.8 +0.2**
HYB *e*PKPbc **PKPbc 23 42 09.4 -0.7**
**NWAO Narrogin (SRO) 149.32 215** P **PKPdf 23 42 08.4 +0.8**
**NWAO Narrogin (SRO) 149.32 215 PKPdf 23 42 08.3 +0.7**
**NWAO Narrogin (SRO) 149.32 215** PKIKP **PKPdf 23 42 08.3 +0.7**
**MNGI Mangalore 149.39 46** *e*P **PKPdf 23 42 07.4 -0.7**
**H01W1 Cape Leeuwin H 149.41 209** T T 02 30 11.8
baz=149
**H01W2 Cape Leeuwin H 149.41 209** T T 02 30 10.6
baz=149
**H01W3 Cape Leeuwin H 149.42 209** T T 02 30 18.5
baz=149
**NLAI Namlea 149.43 278** PKP **PKiKP 23 42 13.6 -0.2**
**QIZ Qiongzhong 149.67 335** PKPbc **PKPdf 23 42 09.3 +0.8**
QIZ PP **PP 23 45 46.8 +2.2**
QIZ SS SS 00 05 00.6 +2.0
QIZ AMB AMB
comp=Z,3μm,8.3s
QIZ LR LR
comp=Z,3μm,17.6s
QIZ LR LR
comp=Z,1μm,14.7s
QIZ LR LR
comp=Z,5μm,17.5s
**KLBR Kellerberrin 149.98 218** P **PKPdf 23 42 10.0 +1.3**
**KLBR Kellerberrin 149.98 218** P **PKPdf 23 42 09.6 +0.9**
**SANI Sanana 150.26 281** P **PKPdf 23 42 08.6 -1.0**
**SANI Sanana 150.26 281** PKP **PKPdf 23 42 07.5 -2.1**
**SANI Sanana 150.26 281** PKP **PKiKP 23 42 15.5 0.0**
**MUN Mundaring 150.60 215** P **PKPdf 23 42 10.5 +0.9**
**MUN Mundaring 150.60 215** P **PKPdf 23 42 08.2 -1.4**
**MEEK Meekatharra 152.66 226** P **PKPdf 23 42 11.4 -1.5**
**MORW Morawa 152.81 219** P **PKPdf 23 42 13.7 +0.7**
**MORW Morawa 152.81 219** P **PKPdf 23 42 12.9 -0.1**
**MDRS Chennai 152.88 38** *e*P **PKPdf 23 42 14.1 +0.6**
MDRS IAmb IAmb 23 42 21.2
comp=Z,83nm,0.7s
**SOEI Soe 152.89 265** P **PKPdf 23 42 15.0 +1.3**
**SOEI Soe 152.89 265** PKP **PKPdf 23 42 13.9 +0.2**
**SOEI Soe 152.89 265** PKP **PKPbc 23 42 19.9 -1.0**
**CMAR Chiang Mai Arr 153.01 356 PKPdf 23 42 12.9 -0.7**
**CMAR Chiang Mai Arr 153.01 356** PKP **PKPdf 23 42 14.4 +0.8**
comp=Z,9.1nm,0.7s,baz=311,slow=2.0,SNR=56
CMAR PKPbc **pPKPdf 23 42 19.8 +0.8**
comp=Z,32nm,0.9s,baz=338,slow=2.0,SNR=18
CMAR PP **PP 23 46 04.6 +1.3**
comp=Z,5.1nm,1.0s,baz=345,slow=6.0,SNR=5.3
**LUWI Luwuk 153.09 285** P **PKPdf 23 42 12.8 -1.0**
**LUWI Luwuk 153.09 285** PKP **PKPdf 23 42 12.2 -1.7**
**LUWI Luwuk 153.09 285** PKP **PKPbc 23 42 20.4 -0.8**
**BATI Baunata 153.48 264** PKP **PKiKP 23 42 25.7 +3.5**
**TRD Trivandrum 153.89 50** *e*P **PKPdf 23 42 15.1 +0.2**
TRD IAmb IAmb 23 42 23.8
comp=Z,270nm,1.6s
**TOLI2 Tolitoli 154.24 291** P **PKPdf 23 42 15.9 +0.4**
**PSA00 Pilbara Seismi 154.37 237** P **PKPdf 23 42 16.1 +0.7**
**MBWA Marble Bar 154.65 238** P **PKPdf 23 42 15.2 -0.6**
**MBWA Marble Bar 154.65 238 PKPdf 23 42 15.7 -0.1**
MBWA **PKPab 23 42 39.4 +0.4**
**UBPT Khong Chiam 154.75 340** P **PKPdf 23 42 16.0 -0.1**
**MMRI Maumere 154.88 268** IAMs_20 IAMs_20 01 07 55.0
comp=Z,1μm,20.0s
**MPSI Mapaga 155.35 290** PKP **PKPdf 23 42 16.7 -0.3**
**EDFI Ende, Flores 155.42 268** PKP **PKPdf 23 42 16.0 -1.2**
**NAYO Nakonayok 156.78 349** P **PKPdf 23 42 20.4 +1.6**
**KAPI Kappang 156.96 277** IAMs_20 IAMs_20 01 00 05.3
comp=Z,1μm,20.0s
**SRDT SRDT 157.06 354** P **PKPdf 23 42 20.6 +1.4**
**SRDT SRDT 157.06 354** P **PKPdf 23 42 18.9 -0.3**
**WBSI Waikabubak, Su 157.70 266** PKP **PKPdf 23 42 21.9 +1.8**
**PBA Port Blair 159.45 11**⇑*e*P **PKPdf 23 42 23.2 +1.1**
**TWSI Taliwang, Sumb 160.18 268** PKP **PKPdf 23 42 22.2 -0.8**
**SBUM Sibu 161.12 305 PKPdf 23 42 23.9 -0.1**
**SRIT Nakonsritamara 162.67 351** P **PKPdf 23 42 27.3 +1.7**
**SRIT Nakonsritamara 162.67 351** P **PKPdf 23 42 25.6 0.0**
**STKI Sintang 163.04 300** PKP **PKPdf 23 42 27.0 +1.0**
**KSM Kuching 163.23 306** P **PKPdf 23 42 27.5 +1.3**
**KSM Kuching 163.23 306** P **PKPdf 23 42 26.6 +0.4**
**PWJI Pagerwojo 165.17 271** PKP **PKPdf 23 42 28.1 +0.2**
**KULM Kulim 165.66 344** PKPdf **PKPdf 23 42 27.8 -0.6**
**PSI Prapat 168.46 349** P **PKPdf 23 42 30.0 -0.5**
**PPBI Pangkal Pinang 168.73 304** PKP **PKPdf 23 42 30.7 +0.1**
**SBSI Sibolga 169.69 348** PKP **PKPdf 23 42 30.7 -0.5**
**GSI Gunungsitoli 170.11 356** P **PKPdf 23 42 32.4 +1.0**
**GSI Gunungsitoli 170.11 356** P **PKPdf 23 42 31.2 -0.2**
**GSI Gunungsitoli 170.11 356** PKP **PKPdf 23 42 31.8 +0.4**
**BKNI Bangkinang 170.17 335** PKP **PKPdf 23 42 27.1 -4.4**
**PDSI Padang 171.53 335** PKP **PKPdf 23 42 30.9 -1.3**

*IDC **17**23:22:41.8±0.8,23°.4N×143°.27E,h0km,mb4.0/11, mbtmp3.9/13,ML3.8/1,Error ellipse: s-maj=38.1km s-min=15.9km az=77.0*
*NEIC **17**23:22:43.6±0.7,23°.42N±0°.09×143°.5E±0°.1,h10km±2km, mb4.2/9,Error ellipse: s-maj=22.1km s-min=13.4km az=119.0*

**ISC 17 23:22:46.4±0.8,23°.4N±0°.1×143°.3E±0°.2,h31km,n25, σ0879/27,mb4.1/15,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.78** | **345** | Pn | **Pn** | **23 23 42.8** | **+0.3** |
| **JCJ** | **Chichijima** | **3.78** | **345** | Pn | Pn | 23 23 38.0 | -4.5 |
| | 4.6nm,0.3s,baz=301,slow=22,SNR=0.9 | | | | | | |
| JCJ | | | | Sn | Sn | 23 24 14.5 | -11 |
| | 7.9nm,0.3s,baz=126,slow=23,SNR=1.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.78** | **342** | Pn | **Pn** | **23 25 58.6** | **-1.1** |
| | 0.5nm,0.3s,baz=134,slow=10,SNR=1.3 | | | | | | |
| **KSRS** | **Korea Array** | **19.22** | **320** | P | **P** | **23 27 07.0** | **-0.9** |
| | 0.3nm,0.3s,baz=114,slow=5.2,SNR=2.3 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.70** | **339** | P | **P** | **23 27 46.8** | **+1.4** |
| | 1.2nm,0.7s,baz=150,slow=46,SNR=2.9 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **27.30** | **343** | P | **P** | **23 28 29.3** | **+1.1** |
| | 0.9nm,0.6s,baz=142,slow=7.5,SNR=4.8 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.82** | **192** | P | **P** | **23 30 49.2** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 23 31 06.1 | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.98** | **192** | P | **P** | **23 30 50.2** | **-0.8** |
| **WB2** | **Warramunga Arr** | **44.00** | **192** | P | **P** | **23 30 51.0** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 23 31 03.3 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.00** | **192** | P | **P** | **23 30 50.8** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.00** | **192** | P | **P** | **23 30 50.6** | **-0.6** |
| | comp=Z,2.2nm,0.6s,baz=13,slow=8.4,SNR=34 | | | | | | |
| WRA | | | | PcP | **PcP** | **23 32 36.6** | **+0.1** |
| | comp=Z,1.2nm,0.8s,baz=357,slow=3.6,SNR=6.9 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **47.71** | **192** | P | **P** | **23 31 20.1** | **-0.4** |
| | comp=Z,0.6nm,0.6s,baz=17,slow=11,SNR=14 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 32 50.1** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=2.9,slow=4.6,SNR=2.1 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.93** | **321** | P | **P** | **23 31 59.0** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=97,slow=12,SNR=1.8 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.62** | **312** | P | **P** | **23 32 03.5** | **-1.4** |
| | comp=Z,0.5nm,0.7s,baz=91,slow=12,SNR=5.3 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.34** | **316** | P | **P** | **23 32 24.3** | **-0.1** |
| | comp=Z,2.2nm,0.2s,baz=93,slow=7.9,SNR=11 | | | | | | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| **ILAR** | **Eielson Array** | **60.44** | **28** | P | **P** | **23 32 52.1** | **-0.7** |
| | comp=Z,0.4nm,0.9s,baz=251,slow=5.6,SNR=2.8 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| **ARSB** | **Arslanbob** | **60.46** | **305** | P | **P** | **23 32 54.6** | **+1.0** |
| ARSB | | | | IAmb | IAmb | 23 32 56.0 | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.43** | **319** | P | **P** | **23 33 00.6** | **+0.8** |
| | comp=Z,6.7nm,0.7s,baz=92,slow=8.0,SNR=40 | | | | | | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **61.49** | **319** | P | **P** | **23 33 00.3** | **+0.1** |
| **KK31** | **Karatay Array** | **62.08** | **308** | P | **P** | **23 33 05.2** | **+0.9** |
| **KKAR** | **Karatay Array** | **62.08** | **308** | P | **P** | **23 33 05.8** | **+1.5** |
| **ABKAR** | **Akbulak array** | **68.39** | **316** | P | **P** | **23 33 45.0** | **-0.1** |
| ABKAR | | | | IAmb | IAmb | 23 33 46.7 | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **81.25** | **314** | P | **P** | **23 35 00.0** | **+0.5** |
| | comp=Z,1.9nm,0.8s,baz=207,slow=2.1,SNR=5.9 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **81.66** | **334** | P | **P** | **23 35 01.5** | **+0.1** |
| | comp=Z,1.7nm,0.9s,baz=54,slow=7.1,SNR=3.4 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **149.63** | **82** | PKP | **PKPdf** | **23 42 30.1** | **+0.3** |
| | comp=Z,0.4nm,0.4s,baz=46,slow=17,SNR=1.5 | | | | | | |

LPAZ PKPbc **PKPbc** **23 42 34.8 +0.3**
comp=Z,0.8nm,0.6s,baz=60,slow=7.1,SNR=3.5

*UPP **17** 23:23:02.1±0.1, 67.85N×20.22E, h0km, ML2.4, Unknown*
*IDC **17** 23:23:02.2±1.1, 67.88N×20.52E, h0km, mbtmp3.0/4, ML2.3/4, Error ellipse: s-maj=20.1km s-min=6.5km az=125.0*
**ISC 17 23:23:02.2±0.9, 67.85N±0.04×20.20E±0.04, h10km, n9, σ1§10/15, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOVU** | **Salmi** | **0.38** | **358** | P | **Pg** | **23 23 09.3** | **-0.3** |
| KOVU | | | | S | **Sg** | **23 23 14.0** | **-0.6** |
| **LANU** | **Lannavaara** | **0.71** | **73** | P | **Pg** | **23 23 15.2** | **-0.6** |
| LANU | | | | S | **Sg** | **23 23 24.1** | **-0.9** |
| **DUNU** | **Dundret** | **0.74** | **169** | S | **Sg** | **23 23 25.5** | **-0.7** |
| **MASU** | **Masugnsbyn** | **0.79** | **119** | P | **Pg** | **23 23 16.9** | **-0.5** |
| **SALU** | **Saltoluokta** | **0.80** | **235** | P | **Pg** | **23 23 17.2** | **-0.4** |
| SALU | | | | S | **Sg** | **23 23 28.2** | **+0.2** |
| **ARCES** | **ARCESS Array B** 1.3nm,0.3s,baz=227,slow=15,SNR=6.1 | **2.57** | **46** | Pn | **Pn** | **23 23 45.3** | **+1.5** |
| ARCES | | | | Lg | Lg | 23 24 18.6 | |
| **FINES** | **FINESS Array B** 0.1nm,0.3s,baz=342,slow=12,SNR=4.1 | **6.90** | **156** | Pn | **Pn** | **23 24 45.1** | **+1.8** |
| FINES | | | | Sn | **Sn** | **23 26 02.2** | **+0.5** |
| FINES | 0.5nm,0.3s,baz=349,slow=21,SNR=5.6 | | | Lg | Lg | 23 26 34.0 | |
| **NOA** | 1.0nm,0.3s,baz=345,slow=26,SNR=11 0.9nm,0.6s **NORSAR Array B** baz=24,slow=11,SNR=1.4 | **7.85** | **214** | Pn | **Pn** | **23 24 56.8** | **+0.5** |
| NOA | | | | Sn | **Sn** | **23 26 25.2** | **+0.1** |
| NOA | baz=131,slow=20,SNR=4.5 0.1nm,0.3s,baz=35,slow=22,SNR=6.6 0.8nm,1.0s | | | Lg | Lg | 23 27 12.0 | |
| **HFS** | **Hagfors** 0.1nm,0.3s,baz=13,slow=13,SNR=1.5 | **8.25** | **203** | Pn | **Pn** | **23 25 01.9** | **+0.2** |
| HFS | | | | Sn | **Sn** | **23 26 32.4** | **-2.4** |
| HFS | 0.2nm,0.3s,baz=34,slow=27,SNR=1.9 0.3nm,0.3s,baz=26,slow=25,SNR=3.5 0.7nm,0.5s | | | Lg | Lg | 23 27 20.9 | |

*UPA **17** 23:27:09.3±0.9, 8.59N×83.17W, h10km±3km, MW3.4*
*UCR **17** 23:27:10.0±0.8, 8.56N×83.20W, h19km±3km, MW4.2*
**ISC 17 23:27:09.5±1.2, 8.58N±0.06×83.18W±0.04, h19km±3km, n19, σ0§60/26, 2C-3D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EDAD** | **Golfito** | **0.08** | **8** | ↑*e*P | **Pg** | **23 27 13.1** | **-0.1** |
| EDAD | | | | *e*S | **Sg** | **23 27 15.6** | **-0.1** |
| **JIME** | **Puerto Jimenez** | **0.15** | **255** | ↑*e*P | **Pg** | **23 27 14.3** | **+0.4** |
| **MLIR3** | **Monte Lirio, C** | **0.41** | **58** | *e*P | **Pb** | **23 27 18.9** | **+0.6** |
| **EDP2** | **Potrero Grande** | **0.44** | **0** | ↓*e*P | **Pb** | **23 27 19.0** | **+0.3** |
| **EDPN** | **Palmar Norte** | **0.47** | **324** | *e*P | **Pg** | **23 27 19.1** | **-0.1** |
| EDPN | | | | *e*S | **Sb** | **23 27 26.1** | **+0.2** |
| **PTPM** | **Petroterminale** | **0.47** | **141** | *e*P | **Pg** | **23 27 18.9** | **-0.2** |
| **BRU2** | **Volcan** | **0.53** | **66** | *e*P | **Pb** | **23 27 20.3** | **+0.1** |
| BRU2 | | | | *e*S | **Sb** | **23 27 28.9** | **+1.4** |
| **BRU2** | **Volcan** | **0.53** | **66** | ↓*e*P | **Pb** | **23 27 20.4** | **+0.2** |
| **EDBA** | **Buenos Aires** | **0.59** | **351** | *e*P | **Pb** | **23 27 21.6** | **+0.4** |
| **BURE** | **Buenos Aires** | **0.61** | **345** | *e*P | **Pb** | **23 27 21.5** | **-0.1** |
| **BCO2** | **Palmira** | **0.66** | **78** | *e*P | **Pg** | **23 27 22.7** | **+0.1** |
| BCO2 | | | | *e*S | **Sg** | **23 27 32.4** | **+1.0** |
| **DRK0** | **Durika** | **0.69** | **354** | *e*P | **Pb** | **23 27 22.7** | **-0.3** |
| **DRK0** | **Durika** | **0.69** | **354** | ↓*e*P | **Pb** | **23 27 22.6** | **-0.3** |
| **DVD** | **David** | **0.73** | **101** | *e*P | **Pg** | **23 27 24.0** | **0.0** |
| DVD | | | | *e*S | **Sn** | **23 27 34.9** | **-0.6** |
| **LNBQ3** | **Los Naranjos,** | **0.76** | **74** | *e*P | **Pb** | **23 27 23.7** | **-0.5** |
| **CHGR2** | **Aguacate** | **1.08** | **71** | *e*P | **Pb** | **23 27 28.9** | **-0.8** |
| CHGR2 | | | | *e*S | **Sb** | **23 27 43.4** | **0.0** |
| **CNI2** | **El Empalme, Bo** | **1.09** | **40** | *e*P | **Pb** | **23 27 28.4** | **-1.4** |
| CNI2 | | | | *e*S | **Sb** | **23 27 43.1** | **-0.6** |
| **NANC3** | **Nancito, Chiri** | **1.47** | **103** | *e*P | **Pn** | **23 27 35.1** | **+0.1** |
| **BELE** | **Belen** | **1.71** | **324** | *e*P | **Pb** | **23 27 39.9** | **-0.5** |

*UCR **17** 23:30:59.6±0.7, 8.57N×83.17W, h22km±2km, MW3.6*
**UPA 17 23:30:59.7±0.4, 8.62N×83.17W, h19km±2km, MW3.0, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.01** | **70** | *e*P | Pg | 23 31 02.6 | -0.4 |
| FITO | | | | *e*S | Sg | 23 31 05.1 | -0.1 |
| **EDAD** | **Golfito** | **0.03** | **4** | *e*P | Pg | 23 31 02.9 | -0.3 |
| EDAD | | | | *e*S | Sg | 23 31 05.6 | +0.2 |
| **JIME** | **Puerto Jimenez** | **0.17** | **242** | *e*P | Pg | 23 31 04.1 | -0.2 |
| JIME | | | | *e*S | Sg | 23 31 08.5 | +0.9 |
| **NELY** | **Ciudad Neily** | **0.22** | **82** | *e*P | Pg | 23 31 05.6 | +0.5 |
| NELY | | | | *e*S | Sg | 23 31 10.2 | +1.5 |
| **VITO** | **San Vito** | **0.28** | **45** | *e*P | Pb | 23 31 07.0 | +0.8 |
| VITO | | | | *e*S | Sn | 23 31 13.1 | -1.6 |
| **MLIR3** | **Monte Lirio, C** | **0.38** | **63** | *e*P | Pb | 23 31 08.3 | +0.2 |
| **EDP2** | **Potrero Grande** | **0.39** | **359** | *e*P | Pb | 23 31 08.7 | +0.4 |
| **BRU2** | **Volcan** | **0.50** | **70** | *e*P | Pb | 23 31 10.1 | +0.1 |
| BRU2 | | | | *e*S | Sb | 23 31 18.4 | +1.3 |
| **BRU2** | **Volcan** | **0.50** | **70** | *e*P | Pb | 23 31 10.1 | 0.0 |
| **PTPM** | **Petroterminale** | **0.50** | **145** | *e*P | Pg | 23 31 09.9 | 0.0 |
| **BCO2** | **Palmira** | **0.64** | **81** | *e*P | Pb | 23 31 12.3 | -0.1 |
| BCO2 | | | | *e*S | Sg | 23 31 21.9 | +0.8 |
| **DRK0** | **Durika** | **0.64** | **353** | *e*P | Pb | 23 31 12.2 | -0.2 |
| **DRK0** | **Durika** | **0.64** | **353** | *e*P | Pb | 23 31 12.2 | -0.2 |
| **DVD** | **David** | **0.73** | **104** | *e*P | Pb | 23 31 13.7 | -0.2 |
| **LNBQ3** | **Los Naranjos,** | **0.74** | **77** | *e*P | Pb | 23 31 13.4 | -0.7 |
| **CHGR2** | **Aguacate** | **1.06** | **73** | *e*P | Pb | 23 31 18.2 | -1.3 |
| CHGR2 | | | | *e*S | Sb | 23 31 32.6 | -0.4 |

*AFAD **17** 23:33:20.4±0.0, 39.15N×32.29E, h7km, ML1.8*
**ISK 17 23:33:19.9, 39.16N×32.85E, h8km, ML1.6/9, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KKUL** | **Konya-Kulu** | **0.05** | **77** | P | Pg | 23 33 21.6 | -0.1 |
| KKUL | | | | *i* AML | AML | 23 33 23.0 | |
| KKUL | comp=Z,677nm,0.3s | | | *i* AML | AML | 23 33 23.0 | |
| KKUL | comp=N,837nm,0.2s | | | *i* AML | AML | 23 33 23.0 | |
| KKUL | comp=E,1μm,0.1s | | | S | Sg | 23 33 23.0 | 0.0 |
| **KULU** | **Kulu** | **0.17** | **134** | Pg | Pg | 23 33 23.9 | +0.5 |
| KULU | | | | Sg | Sg | 23 33 27.2 | +1.4 |
| **AFSR** | **Afar-Bala (An** | **0.33** | **31** | Pg | Pg | 23 33 27.2 | +0.7 |
| AFSR | | | | Sg | Sb | 23 33 32.4 | -1.4 |
| **BBAL** | **Bala** | **0.44** | **29** | P | Pg | 23 33 28.9 | +0.5 |
| BBAL | | | | S | Sg | 23 33 35.0 | +0.8 |
| **CBEY** | **Konya-Cihanbey** | **0.47** | **186** | P | Pg | 23 33 29.7 | +0.6 |
| CBEY | | | | S | Sb | 23 33 37.5 | -0.2 |
| **CHBY** | **Cihanbeyli** | **0.58** | **177** | Pg | Pg | 23 33 31.5 | +0.4 |
| **SERE** | **Sereflikochisa** | **0.59** | **111** | Pg | Pg | 23 33 31.7 | +0.3 |
| **KAMT** | **Kaman** | **0.70** | **72** | Pg | Pg | 23 33 33.9 | +0.5 |
| KAMT | | | | Sg | Sb | 23 33 43.9 | -0.5 |
| **KESK** | **Krkkale-Ke** | **0.74** | **50** | P | Pg | 23 33 34.4 | +0.2 |
| KESK | | | | S | Sg | 23 33 44.4 | +0.6 |
| **YAYX** | **Yaylak** | **0.78** | **106** | Pg | Pg | 23 33 34.9 | 0.0 |
| **KIRS** | **Kirsehir-Merke** | **0.83** | **91** | P | Pg | 23 33 35.4 | -0.5 |
| KIRS | | | | S | Sg | 23 33 47.1 | +0.4 |
| **BR131** | **Keskin Array S** | **0.83** | **47** | Pg | Pg | 23 33 35.8 | -0.1 |
| **ALIN** | **Konya, Altinte** | **0.86** | **178** | P | Pb | 23 33 36.8 | -0.4 |
| ALIN | | | | *i* AML | AML | 23 33 49.0 | |
| **AKSY** | comp=E,100nm,1.7s **AKSARAY - Alti** | **0.87** | **125** | P | Pb | 23 33 37.2 | -0.2 |
| AKSY | | | | S | Sg | 23 33 47.3 | -0.8 |
| **AKPI** | **Kirsehir/Akpin** | **0.95** | **68** | P | Pg | 23 33 37.7 | -0.5 |
| AKPI | | | | S | Sg | 23 33 47.9 | -2.7 |
| **LADK** | **Ladik-KONYA** | **1.03** | **202** | Pg | Pb | 23 33 40.2 | +0.1 |
| **SVRH** | **Sivrihisar-ESK** | **1.07** | **286** | Pg | Pb | 23 33 40.6 | -0.1 |
| **KOZK** | **Kozakli-Nevseh** | **1.57** | **88** | Pn | Pb | 23 33 49.0 | -0.3 |

*SOME **17** 23:43:24.2, 43.70N×86.20E, h10km, MS4.5*
*IDC **17** 23:43:25.7±0.5, 43.88N×86.47E, h0km, mb4.5/38, mbtmp4.5/43, ML4.3/5, MS5.1/4, Error ellipse:*
*s-maj=13.6km s-min=8.6km az=36.0*
*MOS **17** 23:43:25.9±0.9, 43.83N×86.38E, h11km, mb5.0/52, MS4.4/6, Error ellipse: s-maj=5.1km s-min=3.7km az=30.4*
*BJI **17** 23:43:26.7±0.0, 43.83N×86.37E, h8km, mb4.6/45, mB5.0/15, ML5.1/11, Ms4.6/37, Ms7 4.5/36*
*NNC **17** 23:43:27.7±1.2, 43.97N×86.36E, h0km, mb5.4, mpv5.2, Error ellipse: s-maj=9.6km s-min=6.1km az=106.0*
*NEIC **17** 23:43:27.8±1.5, 43.89N±0.07×86.46E±0.10, h10km±1km, mb5.0/214, Error ellipse: s-maj=12.1km s-min=11.5km az=59.0*
*BGR **17** 23:43:37.0, 44.26N×85.50E, h21km, mb5.2*
**ISC 17 23:43:27.6±0.4, 43.76N±0.03×86.18E±0.02, h10km±2km, h10km:pP-P, n642, σ2§03/695, mb4.9/230, MS4.6/19, 64C-53D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WMQ** | **Urumqi** | **1.10** | **86** | Pg | **Pg** | **23 43 47.0** | **-1.7** |
| WMQ | | | | Sg | **Sg** | **23 44 01.3** | **-1.7** |
| WMQ | comp=N,5μm,0.9s | | | smax | smax | | |
| WMQ | comp=E,6μm,1.1s | | | smax | smax | | |
| **ZSN** | **Zaisan** 2μm,0.7s | **3.80** | **346** | *e*P | **Pg** | **23 44 39.8** | **-0.6** |
| ZSN | 2μm,0.8s | | | *e*S | **Sg** | **23 45 34.3** | **+4.7** |
| **MK31** | **Makanchi Array** | **4.09** | **319** | | **Pn** | **23 44 31.9** | **+1.7** |
| **MK31** | **Makanchi Array** 188nm,0.5s,baz=132,slow=14,SNR=3108 | **4.09** | **319** | ↑Pn | **Pn** | **23 44 32.0** | **+1.8** |
| MK31 | 414nm,0.5s,baz=131,slow=16,SNR=9.9 | | | Pg | **Pb** | **23 44 42.4** | **+2.8** |
| MK31 | 88nm,0.3s,baz=122,slow=27,SNR=5.0 | | | ↓Sn | **Sn** | **23 45 18.1** | **0.0** |
| MK31 | 2μm,0.7s,baz=133,slow=28,SNR=8.7 | | | Lg | Lg | 23 45 38.8 | |
| **MK31** | **Makanchi Array** | **4.09** | **319** | *d* iP | **Pn** | **23 44 32.3** | **+2.1** |
| **MKAR** | **Makanchi Array** | **4.09** | **319** | | **Pn** | **23 44 31.9** | **+1.7** |
| **MKAR** | **Makanchi Array** 86nm,0.3s,baz=132,slow=13,SNR=2952 | **4.09** | **319** | Pn | **Pn** | **23 44 32.4** | **+2.2** |
| MKAR | 84nm,0.3s,baz=134,slow=16,SNR=22 | | | Pg | **Pb** | **23 44 41.5** | **+1.8** |
| MKAR | 96nm,0.3s,baz=120,slow=17,SNR=3.6 | | | Sn | **Sn** | **23 45 16.5** | **-1.6** |
| MKAR | 301nm,0.3s,baz=124,slow=26,SNR=7.5 397nm,0.5s | | | Lg | Lg | 23 45 35.4 | |
| **MAKZ** | **Makanchi** | **4.25** | **317** | | **Pn** | **23 44 34.0** | **+1.6** |
| **MAKZ** | **Makanchi** 438nm,0.5s | **4.25** | **317** | ↑Pn | **Pn** | **23 44 34.7** | **+2.3** |
| MAKZ | 770nm,0.6s | | | ↑Sn | **Sn** | **23 45 24.2** | **+2.1** |
| MAKZ | 2μm,0.8s | | | ↓Lg | Lg | 23 45 42.5 | |
| **MAKZ** | **Makanchi** | **4.25** | **317** | P | **Pn** | **23 44 34.0** | **+1.6** |
| **DJR** | **Jarkent** 50nm,0.2s | **4.64** | **279** | *e*P | **Pb** | **23 44 50.2** | **+1.1** |
| DJR | 4μm,0.5s | | | *e*S | **Sg** | **23 45 52.2** | **-4.4** |
| **PDGK** | **Podgornoye** 81nm,0.5s | **4.88** | **267** | ↓Pn | **Pn** | **23 44 44.2** | **+3.0** |
| PDGK | 783nm,0.9s | | | ↑Pg | **Pg** | **23 44 59.3** | **-1.8** |
| PDGK | 1μm,0.6s | | | ↑Sn | **Sn** | **23 45 44.2** | **+6.4** |
| PDGK | 3μm,0.6s | | | ↓Lg | Lg | 23 46 06.5 | |
| **SHLS** | **Shalkode** 21nm,0.4s,baz=263 | **4.93** | **265** | *e*P | **Pn** | **23 44 41.1** | **-0.7** |
| SHLS | baz=263 | | | *e*S | **Sn** | **23 45 37.4** | **-1.6** |
| **SHLS** | **Shalkode** 997nm,0.5s | **4.93** | **265** | *e*P | **Pb** | **23 44 50.6** | **-3.4** |
| SHLS | 4μm,0.6s | | | *e*S | **Sb** | **23 45 52.9** | **-0.5** |
| **SHLS** | **Shalkode** | **4.93** | **265** | *e*P | **Pn** | **23 44 41.1** | **-0.7** |
| SHLS | | | | *e*S | **Sn** | **23 45 37.3** | **-1.6** |
| SHLS | comp=Z,21nm,0.4s | | | pmax | pmax | | |
| **UZB** | **Uzynbulak** baz=264 | **5.25** | **266** | *e*P | **Pn** | **23 44 49.1** | **+2.9** |
| UZB | baz=264 | | | *e*S | **Sn** | **23 45 52.6** | **+5.7** |
| **UZB** | **Uzynbulak** comp=Z,148nm,0.5s | **5.25** | **266** | *e*P | **Pb** | **23 45 01.3** | **+1.8** |
| UZB | comp=Z,3μm,6.6s | | | *e*S | **Sg** | **23 46 10.8** | **-5.2** |
| **UZB** | **Uzynbulak** | **5.25** | **266** | *e*P | **Pn** | **23 44 49.1** | **+2.9** |
| UZB | | | | *e*S | **Sn** | **23 45 52.5** | **+5.7** |
| **KPKS** | **Kokpek** baz=268 | **5.45** | **269** | *e*P | **Pn** | **23 44 51.7** | **+2.7** |
| **KPKS** | **Kokpek** comp=Z,178nm,0.5s | **5.45** | **269** | *e*P | **Pb** | **23 45 06.0** | **+3.1** |
| KPKS | comp=Z,2μm,0.6s | | | *e*S | **Sg** | **23 46 19.0** | **-3.5** |
| **KPKS** | **Kokpek** | **5.45** | **269** | *e*P | **Pn** | **23 44 51.6** | **+2.7** |
| **ZHN** | **Zhinishke** comp=Z,10nm,0.6s,baz=265 | **5.67** | **267** | *e*P | **Pn** | **23 44 54.6** | **+2.6** |
| **ZHN** | **Zhinishke** comp=Z,110nm,0.5s | **5.67** | **267** | *e*P | **Pb** | **23 45 10.1** | **+3.5** |
| ZHN | comp=Z,688nm,0.3s | | | *e*S | **Sg** | **23 46 26.0** | **-3.5** |
| **ZHN** | **Zhinishke** | **5.67** | **267** | *e*P | **Pn** | **23 44 54.6** | **+2.6** |
| ZHN | comp=Z,10.0nm,0.6s | | | pmax | pmax | | |
| **SATY** | **Saty** comp=Z,15nm,0.6s,baz=264 | **5.71** | **266** | *e*P | **Pn** | **23 44 55.4** | **+2.9** |
| **SATY** | **Saty** comp=Z,168nm,0.4s | **5.71** | **266** | *e*P | **Pb** | **23 45 10.5** | **+3.3** |
| SATY | comp=Z,1μm,0.5s | | | *e*S | **Sg** | **23 46 27.1** | **-3.7** |
| **SATY** | **Saty** | **5.71** | **266** | *e*P | **Pn** | **23 44 55.4** | **+2.9** |
| SATY | comp=Z,15nm,0.6s | | | pmax | pmax | | |
| **TDK** | **Taldyqorghan** baz=283 | **5.71** | **285** | *e*P | **Pn** | **23 44 54.9** | **+2.4** |
| TDK | baz=283 | | | *e*S | **Sn** | **23 46 02.5** | **+4.5** |
| **TDK** | **Taldyqorghan** comp=Z,620nm,0.4s | **5.71** | **285** | *e*P | **Pg** | **23 45 12.3** | **-4.5** |
| TDK | comp=Z,7μm,0.7s | | | *e*S | **Sg** | **23 46 30.2** | **-0.5** |
| **TDK** | **Taldyqorghan** | **5.71** | **285** | *e*P | **Pn** | **23 44 54.8** | **+2.4** |
| TDK | | | | *e*S | **Sn** | **23 46 02.4** | **+4.5** |
| **PRZ** | **Przheval'sk** | **5.83** | **260** | | **Pn** | **23 44 57.5** | **+3.2** |
| **PRZ** | **Przheval'sk** | **5.83** | **260** | P | **Pn** | **23 44 57.5** | **+3.2** |
| **DGZ** | **Jazzator, Alta** | **6.00** | **8** | *d* iP | **Pn** | **23 44 57.9** | **+1.3** |
| **ARXS** | **Arharly** comp=Z,122nm,0.6s | **6.04** | **277** | *e*P | **Pb** | **23 45 17.4** | **+4.4** |
| ARXS | comp=Z,1μm,0.5s | | | *e*S | **Sg** | **23 46 39.6** | **-1.9** |
| **KOTS** | **Kotyrbulak** comp=Z,112nm,0.4s | **6.62** | **269** | *e*P | **Pb** | **23 45 26.6** | **+3.8** |
| KOTS | comp=Z,2μm,0.7s | | | *e*S | **Sg** | **23 46 55.4** | **-4.5** |
| **CHKK** | **Chushkaly** baz=272 | **6.65** | **274** | *e*P | **Pn** | **23 45 07.5** | **+2.1** |
| **CHKK** | **Chushkaly** comp=Z,98nm,0.6s | **6.65** | **274** | *e*P | **Pb** | **23 45 27.9** | **+4.6** |
| CHKK | comp=Z,548nm,0.3s | | | *e*S | **Sg** | **23 46 57.2** | **-3.8** |
| **CHKK** | **Chushkaly** | **6.65** | **274** | *e*P | **Pn** | **23 45 07.5** | **+2.1** |
| **MDOK** | **Medeo** comp=Z,84nm,0.6s | **6.67** | **268** | *e*P | **Pn** | **23 45 08.5** | **+2.7** |
| MDOK | comp=Z,257nm,0.6s | | | Sn | **Sn** | **23 46 27.8** | **+5.9** |
| MDOK | comp=Z,750nm,0.7s | | | Lg | Lg | 23 47 04.6 | |
| **MDOK** | **Medeo** | **6.67** | **268** | *e*P | **Pn** | **23 45 08.4** | **+2.7** |
| **KNDC** | **Almaty** comp=Z,227nm,0.7s | **6.72** | **269** | ↓Pn | **Pn** | **23 45 09.5** | **+3.1** |
| KNDC | comp=Z,430nm,0.7s | | | ↑Sn | **Sn** | **23 46 29.7** | **+6.6** |
| KNDC | comp=Z,1μm,0.8s | | | ↓Lg | Lg | 23 47 06.6 | |
| **AAA** | **Alma-Ata** baz=267 | **6.76** | **269** | *e*P | **Pn** | **23 45 09.9** | **+2.9** |
| **AAA** | **Alma-Ata** comp=Z,96nm,0.5s | **6.76** | **269** | *e*P | **Pb** | **23 45 29.8** | **+4.6** |
| AAA | | | | *e*S | **Sg** | **23 47 00.2** | **-4.4** |
| | comp=Z,536nm,0.8s | | | | | | |
| **AAA** | **Alma-Ata** | **6.76** | **269** | *e*P | **Pn** | **23 45 09.8** | **+2.9** |
| **TNSS** | **Tian-Shan** baz=266 | **6.76** | **267** | *e*P | **Pn** | **23 45 10.3** | **+3.0** |
| **TNSS** | **Tian-Shan** comp=Z,59nm,0.3s | **6.76** | **267** | *e*P | Pb | 23 45 30.6 | +5.1 |
| TNSS | comp=Z,236nm,0.5s | | | *e*S | **Sg** | **23 47 01.5** | **-3.2** |
| **TNSS** | **Tian-Shan** | **6.76** | **267** | *e*P | **Pn** | **23 45 10.2** | **+3.0** |
| **KTBS** | **Karatobe** comp=Z,80nm,0.5s | **6.88** | **273** | *e*P | Pb | 23 45 32.0 | +4.8 |
| KTBS | comp=Z,1μm,0.5s | | | *e*S | **Sg** | **23 47 04.2** | **-4.2** |
| **KASK** | **Kaskelen** | **6.96** | **269** | ↓Pn | **Pn** | **23 45 14.4** | **+4.7** |
| KASK | | | | ↓Pg | **Pg** | **23 45 37.2** | **-3.6** |
| KASK | | | | ↓Lg | Lg | 23 47 14.7 | |
| **KUU** | **Kurty** baz=273 | **7.12** | **274** | *e*P | **Pn** | **23 45 14.6** | **+2.8** |
| **KUU** | **Kurty** comp=Z,85nm,0.7s | **7.12** | **274** | *e*P | Pb | 23 45 36.2 | +4.9 |
| KUU | comp=Z,940nm,0.6s | | | *e*S | **Sg** | **23 47 10.9** | **-5.0** |
| **KUU** | **Kurty** | **7.12** | **274** | *e*P | **Pn** | **23 45 14.6** | **+2.8** |
| **MTBS** | **Maitube** comp=Z,65nm,0.3s | **7.13** | **268** | *e*P | Pg | 23 45 38.2 | -5.7 |
| MTBS | comp=Z,815nm,0.5s | | | *e*S | **Sg** | **23 47 14.1** | **-2.1** |
| **ULHL** | **Ulahol** SNR=29 | **7.44** | **262** | P | **Pn** | **23 45 18.3** | **+1.9** |
| **KST** | **Kastek** comp=Z,60nm,0.5s | **7.48** | **268** | *e*P | Pb | 23 45 42.6 | +5.2 |
| KST | comp=Z,545nm,0.8s | | | *e*S | **Sg** | **23 47 22.1** | **-5.4** |
| **DGS** | **Degeres** comp=Z,66nm,0.4s | **7.59** | **270** | *e*P | Pb | 23 45 45.2 | +5.9 |
| DGS | comp=Z,431nm,0.6s | | | *e*S | **Sg** | **23 47 26.8** | **-4.2** |
| **BOOM** | **Boomskoye usch** | **7.60** | **264** | | **Pn** | **23 45 21.3** | **+2.8** |
| **BOOM** | **Boomskoye usch** | **7.60** | **264** | P | **Pn** | **23 45 21.3** | **+2.8** |
| **TKM2** | **Tokmak 2** SNR=77 | **7.76** | **267** | P | **Pn** | **23 45 24.1** | **+3.3** |
| **TKM2** | **Tokmak 2** comp=Z,63nm,0.6s | **7.76** | **267** | ↑Pn | **Pn** | **23 45 24.2** | **+3.4** |
| TKM2 | comp=Z,330nm,0.8s | | | ↑Sn | **Sn** | **23 46 56.8** | **+8.0** |
| TKM2 | comp=Z,363nm,0.7s | | | ↑Lg | Lg | 23 47 36.1 | |
| **SEM** | **Semipalatinsk** baz=329 | **7.78** | **331** | *e*P | **Pn** | **23 45 20.1** | **-1.0** |
| **SEM** | **Semipalatinsk** | **7.78** | **331** | *e*P | **Pn** | **23 45 20.0** | **-1.0** |
| **NRN** | **Naryn** | **7.86** | **256** | Pn | **Pn** | **23 45 25.5** | **+3.2** |
| **NRN** | **Naryn** | **7.86** | **256** | P | **Pn** | **23 45 25.5** | **+3.2** |
| **KBK** | **Karagaybulak** SNR=24 | **8.28** | **266** | P | **Pn** | **23 45 31.5** | **+3.6** |
| **CHMS** | **Chumysh** SNR=7.2 | **8.36** | **269** | P | **Pn** | **23 45 31.8** | **+3.0** |
| **CHMS** | **Chumysh** comp=Z,49nm,0.9s | **8.36** | **269** | ↓Pn | **Pn** | **23 45 31.3** | **+2.4** |
| CHMS | | | | ↑Pg | **Pg** | **23 46 03.4** | **-4.2** |
| CHMS | comp=Z,237nm,0.7s | | | ↑Lg | Lg | 23 47 56.3 | |
| **FRU1** | **Bishkek** | **8.48** | **268** | Pn | **Pn** | **23 45 33.2** | **+2.7** |
| **FRU1** | **Bishkek** | **8.48** | **268** | P | **Pn** | **23 45 33.2** | **+2.7** |
| **USP** | **Ospenovka** SNR=10 | **8.51** | **271** | P | **Pn** | **23 45 34.0** | **+3.2** |
| **AAK** | **Ala-Archa** | **8.61** | **267** | Pn | **Pn** | **23 45 35.4** | **+3.0** |
| **AAK** | **Ala-Archa** comp=Z,2.9nm,0.3s,baz=83,slow=15,SNR=9.7 | **8.61** | **267** | Pn | **Pn** | **23 45 34.9** | **+2.6** |
| AAK | comp=Z,6.4nm,0.3s,baz=320,slow=18,SNR=1.9 | | | Lg | Lg | 23 47 57.0 | |
| AAK | comp=Z,319nm,19.0s,baz=77,slow=37 | | | LR | LR | 23 48 53.2 | |
| **AAK** | comp=Z,15nm,0.7s **Ala-Archa** comp=Z,36nm,0.8s | **8.61** | **267** | Pn | **Pn** | **23 45 36.9** | **+4.6** |
| AAK | comp=Z,104nm,0.9s | | | Pg | **Pg** | **23 46 07.8** | **-4.6** |
| AAK | comp=Z,600nm,1.3s | | | Lg | Lg | 23 48 08.6 | |
| **AAK** | **Ala-Archa** | **8.61** | **267** | *de*P | Pn | 23 45 37.2 | +4.8 |
| AAK | comp=Z,18nm,0.8s | | | pmax | pmax | | |
| **KURBB** | **Kurchatov Arra** comp=Z,2.9nm,0.3s,baz=134,slow=13,SNR=156 | **8.61** | **326** | Pn | **Pn** | **23 45 31.8** | **-0.4** |
| KURBB | comp=Z,3.9nm,0.3s,baz=121,slow=18,SNR=5.4 | | | Sn | **Sn** | **23 47 07.7** | **-1.6** |
| KURBB | comp=Z,5.8nm,0.3s,baz=90,slow=30,SNR=6.1 | | | Lg | Lg | 23 47 54.5 | |
| KURBB | comp=Z,2μm,18.8s,baz=150,slow=41 | | | LR | LR | 23 49 21.0 | |
| **KURBB** | comp=Z,80nm,1.0s **Kurchatov Arra** comp=Z,118nm,0.7s | **8.61** | **326** | ↓Pn | **Pn** | **23 45 32.1** | **-0.1** |
| KURBB | comp=Z,933nm,0.7s | | | ↓Lg | Lg | 23 47 56.0 | |
| **KURK** | **Kurchatov** | **8.65** | **326** | Pn | **Pn** | **23 45 31.8** | **-0.9** |
| **KURK** | **Kurchatov** comp=Z,181nm,1.0s | **8.65** | **326** | ↓Pn | **Pn** | **23 45 31.3** | **-1.4** |
| KURK | comp=Z,260nm,1.1s | | | ↑Sn | **Sn** | **23 47 11.0** | **+0.9** |
| KURK | comp=Z,513nm,0.6s | | | ↓Lg | Lg | 23 47 57.2 | |
| **KURK** | **Kurchatov** | **8.65** | **326** | *d* iP | **Pn** | **23 45 31.9** | **-0.8** |
| KURK | comp=Z,91nm,1.0s | | | pmax | pmax | | |
| **UCH** | **Uchtor** SNR=9.4 | **8.69** | **264** | P | **Pn** | **23 45 34.6** | **+0.9** |
| **KSH** | **Kashi** | **8.74** | **244** | P | Pn | 23 45 45.9 | +12 |
| KSH | | | | S | Sn | 23 47 29.4 | +17 |
| KSH | comp=Z,49nm,0.7s | | | pmax | pmax | | |
| KSH | comp=Z,3μm,9.6s | | | LR | LR | | |
| KSH | comp=Z,3μm,10.3s | | | LR | LR | | |
| KSH | comp=Z,2μm,12.7s | | | LR | LR | | |
| **EKS2** | **Erkin-Say** SNR=15 | **9.13** | **267** | P | **Pn** | **23 45 42.4** | **+3.0** |
| **AML** | **Almayashu** SNR=12 | **9.30** | **264** | P | Pn | 23 45 47.5 | +5.5 |
| **ARSB** | **Arslanbob** | **10.04** | **260** | | **Pn** | **23 45 54.8** | **+2.8** |
| **ARSB** | **Arslanbob** | **10.04** | **260** | P | **Pn** | **23 45 54.8** | **+2.8** |
| **GOMU** | **GeErMu** | **10.04** | **136** | P | **Pn** | **23 45 52.0** | **-0.2** |
| GOMU | comp=Z,84nm,0.7s | | | pmax | pmax | | |
| GOMU | comp=Z,6μm,11.8s | | | LR | LR | | |
| GOMU | comp=Z,3μm,10.3s | | | LR | LR | | |
| GOMU | comp=Z,9μm,12.4s | | | LR | LR | | |
| **ZAA0** | **Zalesovo Array** | **10.23** | **355** | | **Pn** | **23 45 52.0** | **-2.4** |
| **ZALV** | **Zalesovo Beam** | **10.23** | **355** | | **Pn** | **23 45 52.2** | **-2.2** |
| **ZALV** | **Zalesovo Beam** comp=Z,9.7nm,0.3s,baz=175,slow=14,SNR=255 | **10.23** | **355** | Pn | **Pn** | **23 45 52.4** | **-2.0** |
| ZALV | comp=Z,8.8nm,0.3s,baz=176,slow=24,SNR=4.7 | | | Sn | **Sn** | **23 47 46.8** | **-2.3** |
| ZALV | comp=Z,3.5nm,0.3s,baz=176,slow=26,SNR=1.2 | | | Lg | Lg | 23 48 46.1 | |
| **OTUK** | comp=Z,98nm,0.6s **Ortayu** comp=Z,27nm,0.7s | **10.62** | **300** | ↑Pn | **Pn** | **23 45 59.7** | **0.0** |
| OTUK | comp=Z,125nm,0.8s | | | ↑Sn | **Sn** | **23 48 03.4** | **+4.7** |
| OTUK | comp=Z,466nm,0.8s | | | ↑Lg | Lg | 23 49 06.2 | |
| **GTA** | **Gaotai** | **11.10** | **108** | P | **Pn** | **23 46 05.8** | **-0.6** |
| GTA | comp=Z,1μm,9.1s | | | LR | LR | | |
| GTA | comp=Z,2μm,8.4s | | | LR | LR | | |
| GTA | comp=Z,2μm,10.5s | | | LR | LR | | |
| **KK31** | **Karatay Array** | **11.42** | **272** | Pn | **Pn** | **23 46 13.2** | **+2.6** |
| **KK31** | **Karatay Array** comp=Z,7.4nm,0.5s,baz=76,slow=12,SNR=47 

**BTK Batken 12.03 257** P **Pn** **23 46 21.8 +2.7**
**GAR Garm 12.82 254** Pn **Pn** **23 46 32.3 +2.3**
**ZAK Zakamensk 13.39 54** *e*P **Pn** **23 46 37.2 -0.4**
ZAK pmax pmax
comp=Z,16nm,1.1s
**CHGR Chuyangaron 13.79 254** Pn **Pn** **23 46 44.0 +0.9**
**CHGR Chuyangaron 13.79 254** P **Pn** **23 46 44.0 +0.9**
**SIMJ Simiganj 13.89 254** **Pn** **23 46 45.9 +1.4**
**BVA0 Borovoye Array 13.97 317** ⇓Pn **Pn** **23 46 44.0 -1.4**
comp=Z,34nm,0.8s,baz=128,slow=15,SNR=89
BVA0 ⇑Sn **Sn** **23 49 21.9 +1.5**
comp=Z,37nm,0.8s,baz=121,slow=21,SNR=2.9
BVA0 ⇓Lg Lg 23 50 49.3
comp=Z,190nm,0.8s
**BVAR Borovoye Array 13.97 317** Pn **Pn** **23 46 44.7 -0.7**
comp=Z,0.9nm,0.3s,baz=129,slow=14,SNR=73
BVAR Sn **Sn** **23 49 13.8 -6.7**
comp=Z,0.6nm,0.3s,baz=102,slow=27,SNR=5.2
BVAR Lg Lg 23 50 42.0
comp=Z,0.3nm,0.3s,baz=131,slow=22,SNR=1.3
comp=Z,19nm,0.6s
**BRVK Borovoye 14.04 317** Pn **Pn** **23 46 45.2 -1.2**
**BRVK Borovoye 14.04 317** ⇑Pn **Pn** **23 46 44.6 -1.8**
comp=Z,50nm,0.9s
BRVK ⇑Sn **Sn** **23 49 21.6 -0.6**
comp=Z,58nm,0.7s
BRVK ⇓Lg Lg 23 50 52.9
comp=Z,160nm,1.0s
**BRVK Borovoye 14.04 317***d* *i*P **Pn** **23 46 44.8 -1.6**
BRVK pmax pmax
comp=Z,38nm,1.0s
**NIL Nilore 14.26 229** **Pn** **23 46 50.1 +0.5**
**NIL Nilore 14.26 229** P **Pn** **23 46 50.1 +0.5**
**LSA Lhasa 14.59 163** Pn **Pn** **23 46 53.6 -0.8**
**LSA Lhasa 14.59 163** P **Pn** **23 46 53.6 -0.8**
**SONM Songino Array 14.67 67** **Pn** **23 46 53.4 -1.8**
**SONM Songino Array 14.67 67** Pn **Pn** **23 46 54.1 -1.1**
baz=264,slow=10
SONM Lg Lg 23 50 52.4
comp=Z,0.1nm,0.3s,baz=268,slow=30,SNR=3.4
**SONM Songino Array 14.67 67** P **Pn** **23 46 53.4 -1.8**
**IRK Irkutsk 14.76 49** *e*P **Pn** **23 46 56.1 -0.1**
**ULN Ulaanbaatar 15.11 67** **Pn** **23 46 57.8 -3.3**
ULN P P 23 46 58.3 -8.2
**ULN Ulaanbaatar 15.11 67** ⇓*e*P **Pn** **23 46 59.7 -1.5**
ULN pmax pmax
comp=Z,5.0nm,1.1s
**LZH Lanzhou 15.55 114** *e*P Pn 23 46 58.8 -8.2
LZH sP pP 23 47 13.8 -1.2
LZH pmax pmax
comp=Z,16nm,1.4s
LZH LR LR
comp=N,2μm,9.6s
LZH LR LR
comp=E,2μm,10.0s
LZH LR LR
comp=Z,2μm,10.7s
**KBL Kabul 16.14 241** **Pn** **23 47 15.4 +0.6**
**KBL Kabul 16.14 241** P **Pn** **23 47 15.4 +0.6**
KBL pmax pmax
comp=Z,69nm,1.0s
**BTO Baotou 17.93 92** *e*P **Pn** **23 47 35.0 -2.1**
BTO pP **P** **23 47 38.8 +1.1**
BTO sP **sP** **23 47 42.1 -0.4**
BTO PP **PnPn** **23 47 50.3 +2.5**
BTO S **Sn** **23 50 53.8 -3.3**
BTO SS **SnSn** **23 51 17.3 +6.9**
BTO pmax pmax
comp=Z,25nm,0.7s
BTO pmax pmax
comp=Z,420nm,6.0s
BTO LR LR
comp=Z,1μm,7.1s
BTO LR LR
comp=Z,2μm,10.1s
BTO LR LR
comp=Z,2μm,11.4s
**SHL Shillong 18.74 164** P **Pn** **23 47 46.9 -0.2**
SHL lAmb lAmb 23 47 47.9
comp=Z,66nm,1.0s
**SHL Shillong 18.74 164** P **Pn** **23 47 46.9 -0.2**
SHL pmax pmax
comp=Z,66nm,1.0s
**AB31 Akbulak array 18.83 296** ⇑Pn **P** **23 47 47.3 0.0**
comp=Z,17nm,0.6s,baz=96,slow=11,SNR=235
AB31 ⇑Lg Lg 23 53 28.0
comp=Z,68nm,1.1s
**ABKAR Akbulak array 18.83 296** P **P** **23 47 47.5 +0.2**
**ABKAR Akbulak array 18.83 296** P **Pn** **23 47 47.6 -0.2**
**XAN Xi'an 20.13 111** ⇑P **P** **23 48 02.0 +0.3**
XAN pP sP 23 48 06.4 -0.6
XAN pmax pmax
comp=Z,19nm,1.0s
XAN LR LR
comp=Z,2μm,11.7s
XAN LR LR
comp=Z,1μm,12.4s
XAN LR LR
comp=Z,2μm,12.9s
**AKTO Aktyubinsk 20.22 299** P **P** **23 48 02.7 +0.1**
comp=Z,11nm,0.8s,baz=118,slow=13,SNR=25
AKTO S **S** **23 51 42.1 -7.1**
comp=Z,5.0nm,0.6s,baz=169,slow=7.7,SNR=1.7
AKTO Lg Lg 23 54 01.8
comp=Z,0.3nm,0.3s,baz=165,slow=16,SNR=2.1
comp=Z,11nm,0.8s
**HRA Herat 20.75 251** P Pn 23 48 10.7 -0.3
**SVE Sverdlovsk 20.75 318** *e*P **P** **23 48 08.6 +0.4**
SVE *e*S **S** **23 52 00.6 +0.9**
SVE pmax pmax
comp=Z,73nm,0.9s
SVE MLR MLR
comp=Z,1μm,12.0s
**TNCH TengChong 21.24 148** ⇑P **P** **23 48 14.8 +0.9**
TNCH pP sP 23 48 18.6 -0.5
TNCH sP pP 23 48 23.0 +5.5
TNCH PP **PnPn** **23 48 39.8 +6.5**
TNCH sS sS 23 52 13.8 -1.6
TNCH pmax pmax
comp=Z,97nm,1.1s
TNCH LR LR
comp=Z,700nm,11.4s
TNCH LR LR
comp=Z,280nm,4.2s
TNCH LR LR
comp=Z,1μm,11.8s
**PZH PanZhiHua 21.35 139** P **P** **23 48 18.3 +3.3**
PZH S **S** **23 52 07.5 -4.7**
PZH pmax pmax
comp=Z,50nm,0.9s
PZH pmax pmax
comp=Z,780nm,12.0s
PZH LR LR
comp=Z,720nm,13.0s
PZH LR LR
comp=Z,410nm,12.2s
PZH LR LR
comp=Z,1μm,14.5s
**XLT XiLinHaoTe 21.52 79** *e*P **P** **23 48 19.8 +3.1**
XLT pP sP 23 48 23.8 +2.1
XLT sP pP 23 48 29.5 +9.4
XLT PP **PnPn** **23 48 41.8 +4.9**
XLT pmax pmax
comp=Z,28nm,1.1s
XLT pmax pmax
comp=Z,200nm,5.1s
XLT LR LR
comp=Z,1μm,11.9s
XLT LR LR
comp=Z,1μm,11.1s
**ARU Arti 21.61 316** P **P** **23 48 17.1 -0.4**
ARU lAmb lAmb 23 48 28.0
comp=Z,50nm,0.8s
**ARU Arti 21.61 316** P **P** **23 48 17.4 -0.1**
comp=Z,32nm,0.7s,baz=126,slow=8.0,SNR=26
ARU S **S** **23 52 12.2 -4.3**
comp=Z,7.7nm,0.8s,baz=308,slow=22,SNR=1.7
comp=Z,32nm,0.7s
**ARU Arti 21.61 316***d* *i*P **P** **23 48 17.3 -0.1**
ARU 23 48 36.1
ARU S **S** **23 52 17.6 +1.1**
ARU pmax pmax
comp=Z,32nm,0.7s
ARU MLR MLR
comp=Z,1μm,14.0s
**ARU Arti 21.61 316** P **P** **23 48 17.0 -0.4**
comp=Z,71nm,0.8s,comp=Z,592nm
ARU pP **sP** **23 48 22.5 0.0**
comp=Z,71nm,0.8s,comp=Z,592nm
**LYN LuoYang 22.29 105** P **P** **23 48 28.4 +3.5**
LYN pmax pmax
comp=Z,44nm,1.1s
LYN LR LR
comp=Z,2μm,16.5s
LYN LR LR
comp=Z,1μm,16.4s
LYN LR LR
comp=Z,2μm,18.6s
**BOD Bodaibo 22.31 41** *e*P **P** **23 48 22.8 -2.2**
BOD pmax pmax
comp=Z,50nm,1.2s
**HNS HongShan 22.51 97** ⇑P **P** **23 48 27.3 0.0**
HNS pmax pmax
comp=Z,10.0nm,0.9s
HNS LR LR
comp=Z,1μm,20.7s
HNS LR LR
comp=Z,630nm,14.3s
HNS LR LR
comp=Z,1μm,15.1s
**BJT Baijiatuan 22.57 89** P **P** **23 48 26.2 -1.8**
**BJT Baijiatuan 22.57 89** P **P** **23 48 26.2 -1.8**
BJT pmax pmax
comp=Z,52nm,1.9s
**ENH Enshi 22.87 118** P **P** **23 48 30.0 -1.3**
**KMI Kunming 22.99 139** ⇑P **P** **23 48 32.4 -0.3**
KMI pmax pmax
comp=Z,11nm,0.8s
KMI LR LR
comp=Z,610nm,10.3s
KMI LR LR
comp=Z,580nm,12.1s
KMI LR LR
comp=Z,780nm,18.1s
**HIA Hailar 23.61 65** P **P** **23 48 36.6 -2.0**
**HIA Hailar 23.61 65**⇑*e*P **P** **23 48 37.9 -0.7**
HIA pmax pmax
comp=Z,10.0nm,1.1s
**GYA Guiyang 23.95 129** P **P** **23 48 42.3 +0.2**
GYA pmax pmax
comp=Z,26nm,1.6s
GYA LR LR
comp=Z,1μm,14.1s
**WHN Wuhan 25.90 111** ⇑P **P** **23 48 59.3 -0.3**
WHN sP **sP** **23 49 05.3 +0.2**
WHN pmax pmax
comp=Z,50nm,0.7s
**CRAI Chiangrai 26.29 149** P **P** **23 49 04.4 +1.1**
**CNSH ChangSha 26.50 117** P **P** **23 49 11.9 +6.8**
CNSH pmax pmax
comp=Z,40nm,0.9s
**BELG Belogornoye 26.89 302***de*P **P** **23 49 09.1 +0.7**
BELG pmax pmax
comp=Z,6.0nm,0.9s
**GULI GuiLin 26.98 125** P **P** **23 49 15.9 +6.4**
GULI pmax pmax
comp=Z,20nm,1.1s
**KIRV Kirov 26.98 316***ce*P **P** **23 49 09.1 0.0**
**HYB Hyderabad 27.04 196** *e*P **P** **23 49 11.1 +1.0**
**CM31 Chiang Mai Arr 27.42 153** P **P** **23 49 13.7 +0.3**
CM31 lAmb lAmb 23 49 21.1
comp=Z,46nm,1.1s
**CMAR Chiang Mai Arr 27.42 153** P **P** **23 49 14.1 +0.6**
comp=Z,8.9nm,0.9s,baz=332,slow=9.1,SNR=30
comp=Z,8.9nm,0.9s
**PHRA Phrae 27.83 150** P **P** **23 49 17.2 +0.2**
**MAK Makhachkala 27.96 282** *e*P **P** **23 49 14.3 -3.8**
MAK *e*S **S** **23 53 56.9 -5.0**
MAK pmax pmax
comp=Z,51nm,1.0s
MAK MLR MLR
comp=Z,1μm,16.0s
**NJ2 Nanjing 28.13 103** *e*P **P** **23 49 18.3 -1.4**
NJ2 pmax pmax
comp=Z,13nm,1.1s
**LKRN Lenkeran, Azer 28.41 273** P **P** **23 49 23.3 +1.2**
**HEH HeiHe 28.57 62** *e*P P 23 49 28.8 +5.4
HEH pmax pmax
comp=Z,7.0nm,0.8s
HEH LR LR
comp=Z,430nm,11.6s
HEH LR LR
comp=Z,1μm,11.3s
HEH LR LR
comp=Z,2μm,13.1s
**SEKA Sheki 28.68 279** P **P** **23 49 25.1 +0.4**
**MNGR Mingechevir, A 28.90 278** P **P** **23 49 27.9 +1.4**
**GANJ Ganja 29.49 278** P **P** **23 49 32.9 +1.1**
**VRH Novokhopyorsk 30.56 300** *e*P **P** **23 49 40.9 -0.2**
VRH pmax pmax
comp=Z,15nm,0.7s
**GOF Gofitskoye 30.58 288***ce*P P 23 49 49.2 +7.9
**NCK Nalchik 30.58 285**⇑*e*P **P** **23 49 41.6 +0.2**
NCK pmax pmax
comp=Z,4.0nm,0.8s
**GNI Garni 30.80 278** P **P** **23 49 45.8 +2.3**
GNI lAmb lAmb 23 50 06.2
comp=Z,26nm,0.8s
**GNI Garni 30.80 278** P **P** **23 49 45.7 +2.3**
comp=Z,6.1nm,0.6s,baz=322,slow=17,SNR=3.7
comp=Z,6.1nm,0.6s
**GNI Garni 30.80 278** P **P** **23 49 45.8 +2.3**
GNI pmax pmax
comp=Z,26nm,0.9s
**MDJ Mudanjiang 30.87 73** P P 23 49 50.8 +6.9
MDJ pmax pmax
comp=Z,8.0nm,1.0s
**KBZ Khabaz 31.00 285** P **P** **23 49 47.0 +1.9**
comp=Z,3.6nm,0.9s,baz=103,slow=4.9,SNR=5.6
comp=Z,3.6nm,0.9s
**KBZ Khabaz 31.00 285**⇑*e*P **P** **23 49 46.6 +1.5**
KBZ pmax pmax
comp=Z,5.0nm,0.8s
**KIV Kislovodsk 31.09 286** P **P** **23 49 47.9 +1.9**
KIV lAmb lAmb 23 50 54.5
comp=Z,14nm,0.8s
**KIV Kislovodsk 31.09 286** *e*P **P** **23 49 49.7 +3.7**
KIV pmax pmax
comp=Z,8.0nm,1.0s
**SHA1 Shidzhatmaz 31.17 285**⇑*e*P **P** **23 49 49.1 +2.3**
**YAK Yakutsk 31.17 39** P **P** **23 49 44.5 -1.9**
**YAK Yakutsk 31.17 39***de*P **P** **23 49 44.3 -2.1**
YAK pmax pmax
comp=Z,18nm,1.0s
**KLR Kul'dur 31.46 64**⇑*e*P **P** **23 49 48.0 -1.1**
KLR pmax pmax
comp=Z,3.0nm,1.0s
**QIZ Qiongzhong 31.66 134** P **P** **23 49 53.0 +1.9**
QIZ S **S** **23 55 05.3 +5.0**
QIZ pmax pmax
comp=Z,13nm,1.4s
QIZ LR LR
comp=Z,520nm,12.2s
QIZ LR LR
comp=Z,330nm,14.7s
QIZ LR LR
comp=Z,620nm,16.7s
**KARS Kars 31.82 279** P **P** **23 49 54.1 +1.6**
**KARS Kars 31.82 279** P **P** **23 49 54.1 +1.6**
KARS pmax pmax
comp=Z,59nm,1.0s
**KSRS Korea Array 32.05 87** P **P** **23 49 52.1 -2.2**
comp=Z,2.3nm,0.8s,baz=289,slow=9.3,SNR=5.8
comp=Z,2.3nm,0.8s
**VORR Voronezh 32.10 301** *e*P **P** **23 49 55.3 +0.7**
VORR pmax pmax
comp=Z,21nm,0.4s
**VORD Divnogorie 32.11 300** *e*P **P** **23 49 53.5 -1.2**
VORD pmax pmax
comp=Z,10.0nm,0.7s
**VSR Storozhevoye 32.16 300** *e*P **P** **23 49 53.5 -1.7**
VSR pmax pmax
comp=Z,10.0nm,0.6s
**LPSR Galich'ya Gora 32.20 303** *e*P **P** **23 49 54.7 -0.8**
LPSR pmax pmax
comp=Z,40nm,0.8s
**BCA Borcka 32.58 282** ⇓P **P** **23 50 02.8 +3.8**
**MOS Moscow 32.90 309** *e*P **P** **23 50 00.8 -0.8**
MOS *e* 23 51 10.1
MOS *e*S **S** **23 55 17.4 -1.6**
MOS MLR MLR
comp=Z,800nm,18.0s
**SOC Sochi 33.26 286** *e*P **P** **23 50 06.0 +1.1**
SOC *e* 23 51 12.4
SOC *e*S **S** **23 55 29.1 +4.1**
SOC *e*SS **SnSn** **23 57 29.2 +4.4**
SOC *e*SSS SSS 23 57 46.0
SOC pmax pmax
comp=Z,16nm,0.6s
SOC MLR MLR
comp=Z,503nm,16.0s
**GURO Guroymak-BITLI 33.34 276** P **P** **23 50 08.2 +2.3**
**OBN Obninsk 33.50 308** P **P** **23 50 06.6 -0.2**
comp=Z,5.4nm,0.4s,baz=137,slow=9.1,SNR=3.5
comp=Z,5.4nm,0.4s
**OBN Obninsk 33.50 308** *e*P **P** **23 50 06.9 +0.1**
OBN *e**PP **pP** **23 50 11.1 +0.5**
OBN *e* 23 52 47.1
OBN pmax pmax
comp=Z,9.0nm,0.9s
**TIXI Tiksi 34.67 22**⇑*e*P **P** **23 50 15.1 -1.7**
TIXI pmax pmax
comp=Z,10.0nm,1.1s
**ARPR Arapgir-MALATY 35.78 279** P **P** **23 50 29.5 +2.5**
ARPR lAmb lAmb 23 50 37.0
comp=Z,20nm,0.8s
**LVZ Lovozero 36.05 330** P **P** **23 50 30.6 +1.9**
**LVZ Lovozero 36.05 330** P **P** **23 50 30.6 +1.9**
LVZ pmax pmax
comp=Z,87nm,1.6s
**JOF Joensuu 36.52 321** *e*P **P** **23 50 33.0 +0.2**
**PALK Pallekele 36.66 189** P **P** **23 50 35.8 +1.3**
PALK lAmb lAmb 23 50 42.5
comp=Z,46nm,1.4s
**PALK Pallekele 36.66 189** P **P** **23 50 35.8 +1.3**
PALK pmax pmax
comp=Z,47nm,1.4s
**SIM Simferopol' 36.72 290** *e*P **P** **23 50 35.6 +0.9**
SIM *e*S **S** **23 56 18.8 +0.7**
SIM pmax pmax
comp=Z,22nm,0.8s
**GAZ Gaziantep 37.38 277** P **P** **23 50 42.5 +2.0**
GAZ lAmb lAmb 23 50 51.3
comp=Z,34nm,1.0s
**BNN Bunyan 37.65 280** P **P** **23 50 44.8 +1.9**
BNN lAmb lAmb 23 51 04.0
comp=Z,25nm,0.8s
**BZK Bozkurt 37.77 286** P **P** **23 50 45.6 +2.0**
**AK09 Malin Array Si 38.43 301** P **P** **23 50 49.4 +0.3**
**AK08 Malin Array Si 38.44 301** P **P** **23 50 49.3 +0.1**
**AK03 Malin Array Si 38.45 301** P **P** **23 50 49.3 +0.1**
**AKASG Malin Array Be 38.45 301** P **P** **23 50 50.7 +1.4**
**AKASG Malin Array Be 38.45 301** P **P** **23 50 49.7 +0.4**
comp=Z,5.2nm,0.7s,baz=65,slow=8.4,SNR=15
comp=Z,5.2nm,0.7s
**AKASG Malin Array Be 38.45 301** P **P** **23 50 50.7 +1.4**
AKASG pmax pmax
comp=Z,3.0nm,0.8s
**AKBB Malin Array Si 38.45 301** P **P** **23 50 49.6 +0.3**
**AKBB Malin Array Si 38.45 301** P **P** **23 50 49.6 +0.3**
AKBB pmax pmax
comp=Z,13nm,0.7s
**AKBB Malin Array Si 38.45 301** P **P** **23 50 49.4 +0.1**
**AK10 Malin Array Si 38.45 301** P **P** **23 50 49.5 +0.2**
**KIEV Kiev 38.46 301** P **P** **23 50 49.4 0.0**
**KIEV Kiev 38.46 301** P **P** **23 50 49.4 0.0**
KIEV pmax pmax
comp=Z,12nm,0.7s
**MNK Minsk 38.56 307** *i* P P 23 50 56.4 +6.3
comp=E,3.0nm,0.7s
MNK *i* P P 23 50 56.4 +6.3
comp=N,10.0nm,0.9s
MNK *i* P P 23 50 56.4 +6.3
comp=Z,18nm,0.8s,baz=81
MNK *i* PP **PnPn** **23 52 24.6 +4.5**
MNK *i* PPP PPP 23 52 44.3
MNK *i* S **S** **23 56 54.2 +8.4**
MNK *i* SS **SS** **23 59 41.6 +6.4**
MNK *i* LQ LQ 00 06 50.9
MNK *i* LR LR 00 11 18.4
MNK *i* LRM MLR 00 12 11.8
comp=E,1μm,18.6s
MNK *i* LRM MLR 00 13 51.7
comp=Z,4μm,17.4s
MNK *i* LRM MLR 00 13 57.6
comp=N,3μm,18.5s
**MNK Minsk 38.56 307** *i* P P 23 50 56.4 +6.2
MNK *i* 23 52 24.6
MNK *i* PPP PPP 23 52 44.2
MNK *i* 23 53 08.5
MNK *i* S **S** **23 56 54.2 +8.4**
MNK pmax pmax
comp=E,3.0nm,0.7s
MNK pmax pmax
comp=N,10.0nm,0.9s
MNK pmax pmax
comp=Z,18nm,0.8s
**VSU Vasula 38.74 314***d* *i*P **P** **23 50 51.7 +0.1**
VSU pmax pmax
comp=Z,34nm,0.8s
**BR131 Keskin Array S 38.87 283** P **P** **23 50 54.4 +1.3**
**BR131 Keskin Array S 38.87 283** P **P** **23 50 54.4 +1.3**
BR131 pmax pmax
comp=Z,14nm,0.8s
**BRTR Keskin Array B 38.87 283** P **P** **23 50 54.7 +1.6**
**BRTR Keskin Array B 38.87 283** P **P** **23 50 55.0 +1.9**
comp=Z,4.8nm,0.7s,baz=100,slow=7.5,SNR=20
comp=Z,4.8nm,0.7s
**BRTR Keskin Array B 38.87 283** P **P** **23 50 54.7 +1.6**
**BR104 Keskin Array S 38.87 283** P **P** **23 50 54.9 +1.7**
comp=Z,11nm,0.9s,comp=Z,79nm
**BR106 Keskin Array S 38.88 283** P **P** **23 50 55.3 +2.1**
comp=Z,15nm,0.8s,comp=Z,97nm
**BR105 Keskin Array S 38.89 283** P **P** **23 50 55.0 +1.7**
comp=Z,17nm,0.8s,comp=Z,106nm
**KIRS Kirsehir-Merke 38.91 282** ⇓P **P** **23 50 55.4 +1.9**
**FIA1 FINESS Array S 38.92 318** P **P** **23 50 52.6 -0.5**
FIA1 lAmb lAmb 23 51 00.8
comp=Z,40nm,0.9s
**FINES FINESS Array B 38.92 318** P **P** **23 50 53.0 -0.1**
comp=Z,5.5nm,0.7s,baz=77,slow=8.1,SNR=25
comp=Z,5.5nm,0.7s
**FINES FINESS Array B 38.92 318** P **P** **23 50 53.0 -0.1**
**RAYN Ar Rayn 38.93 252** P **P** **23 50 54.6 +0.9**
**RAYN Ar Rayn 38.93 252** P **P** **23 50 54.6 +0.9**
**ARBE Arbavere 39.06 315** *e*P **P** **23 50 55.1 +0.8**
**NACGM Naroch 39.13 308** LQ LQ 00 04 40.8
**KEV Kevo 39.16 332** P **P** **23 50 54.5 -0.5**
**KEV Kevo 39.16 332** P **P** **23 50 54.5 -0.5**
KEV pmax pmax
comp=Z,131nm,2.0s
**MI28 Mi28,Pidlybu 39.36 302** P **P** **23 50 57.1 +0.2**
**IIGN Ignalina 39.38 309** *e*P **P** **23 50 56.5 -0.5**
**ISAL Salakas 39.40 309** *e*P **P** **23 50 57.4 +0.2**
**ANTO Ankara 39.41 283** P **P** **23 50 59.3 +1.8**
**ANTO Ankara 39.41 283** P **P** **23 50 59.3 +1.8**
ANTO pmax pmax
comp=Z,12nm,0.8s
**BR231 Keskin MP Arra 39.43 283** P **P** **23 50 59.7 +1.9**
**KEF Keuruu 39.48 320** *e*P **P** **23 50 57.8 +0.1**
**LUBAR Lubar, Ukraine 39.54 300** P **P** **23 50 58.3 -0.2**
**SORM Soroca 39.63 297** P **P** **23 50 59.2 0.0**
comp=Z,9.7nm,0.6s
**ARCES ARCESS Array B 39.65 331** P **P** **23 50 58.8 -0.2**
ARCES lAmb lAmb 23 51 01.8
comp=Z,84nm,1.9s
**ARCES ARCESS Array B 39.65 331** P **P** **23 50 58.9 -0.2**
comp=Z,7.4nm,0.9s,baz=80,slow=8.6,SNR=14
comp=Z,7.4nm,0.9s
**ARCES ARCESS Array B 39.65 331** P **P** **23 50 58.8 -0.2**
ARCES pmax pmax
comp=Z,85nm,2.0s
**MEF Metsahovi 39.81 317** *e*P **P** **23 51 01.1 +0.6**
**MJAR Matsushiro Arr 39.86 82** P **P** **23 50 59.9 -1.4**
comp=Z,0.9nm,0.4s,baz=293,slow=5.7,SNR=4.0
comp=Z,0.9nm,0.4s
**ASF Jabal al Asfar 40.00 270** P **P** **23 51 04.7 +2.1**
comp=Z,7.4nm,0.8s,baz=36,slow=0.0,SNR=8.7
comp=Z,7.4nm,0.8s
**NDNU Novodnistrovsk 40.14 298** P **P** **23 51 03.8 +0.4**
**MTSE Matsula 40.24 314** *e*P **P** **23 51 05.1 +1.0**
**MDUB Mudurnu 40.29 285** P **P** **23 51 05.7 +0.8**
**RNPP9 Sopachiv 40.34 303** P **P** **23 51 05.6 +0.6**
**RNPP8 Varash 40.38 303** P **P** **23 51 06.0 +0.6**
**KULM Kulim 40.38 157** P **P** **23 51 06.0 +0.3**
**RNPP5 Staryi Chortor 40.39 303** P **P** **23 51 05.6 +0.2**

VAF **Ylistaro** 40.47 321 *e*P P 23 51 06.7 +0.8
VSVD **Vaisvydziai** 40.56 310 *e*P P 23 51 08.1 +1.3
TPGR **Topolog** 40.59 292 ⇑P P 23 51 08.2 +1.0
PABE **Paberze** 40.62 309 P P 23 51 07.6 +0.3
PABE IAmb IAmb 23 51 09.3
comp=Z,30nm,0.8s
PABE **Paberze** 40.62 309 *e*P P 23 51 08.6 +1.3
MMAI **Mount Meron Ar** 40.65 272 P P 23 51 09.1 +1.2
comp=Z,3.3nm,0.6s,baz=57,slow=8.1,SNR=14
comp=Z,3.3nm,0.6s
CFR **Carcaliu** 40.67 293 ⇑P P 23 51 08.8 +1.0
CFR **Carcaliu** 40.67 293 P P 23 51 08.8 +1.0
KMPD **K-Podol'skiy** 40.72 298 P P 23 51 08.8 +0.6
KMPD P P 23 51 08.0 -0.2
RAF **Rauma** 41.03 318 *e*P P 23 51 10.8 +0.3
CSS **Mathiatis** 41.19 276 P P 23 51 13.9 +1.6
CSS IAmb IAmb 23 51 28.7
comp=Z,28nm,0.9s
TESR **Tescani** 41.22 295 ⇑P P 23 51 13.3 +0.9
ICOR **Ion Corvin** 41.26 292 ⇓P P 23 51 14.6 +1.9
IPM **Ipoh** 41.26 157 P P 23 51 12.2 -0.8
IPM IAmb IAmb 23 51 13.0
comp=Z,20nm,0.7s
MA2 **Magadan** 41.28 44⇑*e*P P 23 51 11.2 -1.5
MA2 pmax pmax
comp=Z,11nm,1.1s
SUW **Suwalki** 41.36 307 P P 23 51 13.4 0.0
SUW **Suwalki** 41.36 307 *e*P P 23 51 14.2 +0.8
SUW **Suwalki** 41.36 307 P P 23 51 13.4 0.0
SUW pmax pmax
comp=Z,55nm,1.0s
VRI **Vrincioaia** 41.38 294 ⇓P P 23 51 15.0 +1.2
VRI **Vrincioaia** 41.38 294 P P 23 51 14.9 +1.2
GHAJ **Ghor Haditha** 41.42 270 P P 23 51 15.5 +1.3
GHAJ IAmb IAmb 23 51 35.3
comp=Z,20nm,0.8s
PLOR5 **Plostina Array** 41.43 294 P P 23 51 16.4 +2.3
comp=Z,24nm,0.7s
PLOR **Plostina** 41.43 294 ⇓P P 23 51 16.6 +2.4
PLOR **Plostina** 41.43 294 P P 23 51 16.6 +2.4
PLOR3 **Plostina Array** 41.44 294 P P 23 51 16.3 +2.1
comp=Z,13nm,1.2s
PBUR **Paburge** 41.66 310 *e*P P 23 51 17.0 +1.2
SEY **Seymchan** 41.70 39⇑*e*P P 23 51 14.9 -1.2
SEY pmax pmax
comp=Z,3.0nm,1.0s
COVR **Voineasa-Covas** 41.73 295 ⇑P P 23 51 18.1 +1.5
ISR **Istrita** 41.75 293 ⇓P P 23 51 19.4 +2.6
ISR **Istrita** 41.75 293 P P 23 51 19.4 +2.6
TURR **Turia** 41.78 295 ⇑P P 23 51 18.8 +1.8
BURAR **Bucovina Array** 41.80 297 P P 23 51 17.6 +0.4
BURAR **Bucovina Array** 41.80 297 ⇑P P 23 51 18.4 +1.1
BURAR **Bucovina Array** 41.80 297 P P 23 51 18.3 +1.1
BUR08 **Bucovina Ar. S** 41.80 297 P P 23 51 18.3 +1.0
MLR **Muntele Rosu** 42.02 294 P P 23 51 20.1 +1.0
MLR **Muntele Rosu** 42.02 294 P P 23 51 20.2 +1.1
comp=Z,4.0nm,0.7s,baz=147,slow=7.6,SNR=8.6
comp=Z,4.0nm,0.7s
MLR **Muntele Rosu** 42.02 294 ⇑P P 23 51 21.0 +1.9
MLR **Muntele Rosu** 42.02 294 P P 23 51 20.1 +1.0
MLR pmax pmax
comp=Z,11nm,0.7s
MLR **Muntele Rosu** 42.02 294 P P 23 51 20.8 +1.7
comp=Z,17nm,0.8s
MORS **Morshin** 42.18 300 P P 23 51 20.7 +0.5
DOPR **Dopca** 42.22 295 ⇑P P 23 51 22.5 +1.8
PSI **Prapat** 42.33 161 P P 23 51 22.8 +1.0
PSI pmax pmax
comp=Z,31nm,1.4s
RPSI **Rantau Prapat** 42.43 161 P P 23 51 22.8 +0.3
RPSI IAmb IAmb 23 51 59.9
comp=Z,31nm,1.4s
ARCR **ARCALIA** 42.53 297 ⇑P P 23 51 25.4 +2.3
VOIR 42.63 294 ⇑P P 23 51 26.2 +2.2
VOIR 42.63 294 P P 23 51 26.2 +2.2
VOIR 42.63 294 P P 23 51 24.7 +0.7
comp=Z,5.3nm,0.9s
EIL **Elat** 42.75 268 P P 23 51 26.5 +1.4
comp=Z,12nm,0.9s,baz=48,slow=3.4,SNR=8.1
comp=Z,12nm,0.9s
KWP **Kalwaria Pacla** 42.77 301 P P 23 51 26.3 +1.3
comp=Z,59nm,1.0s
ARR **Arges** 42.93 294 ⇑P P 23 51 28.3 +1.9
KOLS **Kolonicke sedl** 43.26 300 *e*P P 23 51 30.1 +1.1
KOLS pmax pmax
comp=Z,4.0nm,0.8s
KOLS **Kolonicke sedl** 43.26 300 *e*P P 23 51 30.1 +1.1
LOT **Lotru** 43.47 295 ⇑P P 23 51 32.6 +1.7
GSI **Gunungsitoli** 43.48 163 P P 23 51 30.9 -0.1
GSI **Gunungsitoli** 43.48 163 P P 23 51 39.5 +8.5
DRGR 43.69 297 ⇑P P 23 51 33.1 +0.6
DRGR 43.69 297 P P 23 51 33.1 +0.6
ALN **Alexandroupoli** 43.70 288 P P 23 51 35.2 +2.6
ALN **Alexandroupoli** 43.70 288 P P 23 51 35.2 +2.6
ALN pmax pmax
comp=Z,16nm,1.2s
CRVS **Cervenica-Dubn** 43.77 300 *e*P P 23 51 34.0 +0.8
CRVS pmax pmax
comp=Z,5.0nm,0.9s
CRVS **Cervenica-Dubn** 43.77 300 *e*P P 23 51 34.0 +0.8
GZR **Gura Zlata** 44.14 295 ⇓P P 23 51 37.7 +1.5
GZR **Gura Zlata** 44.14 295 P P 23 51 37.6 +1.5
NIE **Niedzica** 44.33 301 P P 23 51 39.0 +1.4
comp=Z,13nm,0.9s
OJC **Ojcow** 44.38 303 P P 23 51 38.0 0.0
OJC **Ojcow** 44.38 303 P P 23 51 38.0 0.0
OJC pmax pmax
comp=Z,24nm,0.7s
OJC **Ojcow** 44.38 303 P P 23 51 38.4 +0.4
comp=Z,34nm,0.9s
SURR **Surduc** 44.43 296 ⇑P P 23 51 40.4 +2.0
SIRR **Siria** 44.55 297 ⇓P P 23 51 41.1 +1.7
HERR **Herculane** 44.57 295 ⇓P P 23 51 40.8 +1.3
BZS **Buzias** 44.82 296 ⇑P P 23 51 42.7 +1.1
BZS **Buzias** 44.82 296 P P 23 51 42.6 +1.1
GKP **Gorka Klasztor** 44.97 308 *e*P P 23 51 43.7 +1.0
MDVR **Moldovita** 45.07 295 ⇑P P 23 51 45.0 +1.4
PSZ **Piszkesteto** 45.09 300 P P 23 51 44.1 +0.4
PSZ **Piszkesteto** 45.09 300 ⇓P P 23 51 45.0 +1.2
PSZ **Piszkesteto** 45.09 300 P P 23 51 44.2 +0.4
PSZ pmax pmax
comp=Z,7.0nm,0.9s
HFS **Hagfors** 45.10 318 P P 23 51 43.6 0.0
comp=Z,8.1nm,0.6s,baz=81,slow=9.2,SNR=11
comp=Z,8.1nm,0.6s
BOVS **Bovan** 45.52 293 ⇑P P 23 51 48.0 +0.8
VYHS **Vyhne** 45.55 301 *e*P P 23 51 48.8 +1.5
VYHS pmax pmax
comp=Z,4.0nm,0.9s
VYHS **Vyhne** 45.55 301 *e*P P 23 51 48.8 +1.5
BSD **Bornholm Skovb** 45.75 311 *e*P P 23 51 48.9 +0.2
BSD **Bornholm Skovb** 45.75 311 *i*P P 23 51 47.8 -0.9
BSD IAmb IAmb 23 51 48.9
comp=Z,33nm,0.9s
NC405 **NORSAR Array S** 45.83 319 P P 23 51 49.0 -0.4
MORC **Moravsky Berou** 45.90 303 P P 23 51 50.9 +0.8
MORC IAmb IAmb 23 51 58.0
comp=Z,9.3nm,0.8s
MORC **Moravsky Berou** 45.90 303 *e*P P 23 51 51.0 +0.8
MORC **Moravsky Berou** 45.90 303 ⇑P P 23 51 51.6 +1.5
MORC **Moravsky Berou** 45.90 303 P P 23 51 50.9 +0.8
MORC pmax pmax
comp=Z,9.0nm,0.8s
DEL **Delary** 45.93 313 *i*P P 23 51 50.0 -0.1
NC602 **NORSAR Array S** 46.00 319 P P 23 51 50.2 -0.5
NB201 **NORSAR Array S** 46.05 319 P P 23 51 50.5 -0.6
NB2 **NORSAR Subarra** 46.05 319 P P 23 51 51.0 -0.4
comp=Z,3.6nm,0.6s,baz=74,slow=7.9
NB2 **NORSAR Subarra** 46.09 319 P P 23 51 48.5 -2.9
NOA **NORSAR Array B** 46.09 319 P P 23 51 51.0 -0.4
comp=Z,9.2nm,0.8s,baz=76,slow=7.7,SNR=29
comp=Z,9.2nm,0.8s
SRO **Srobarova** 46.12 300 *e*P P 23 51 53.8 +2.0
SRO pmax pmax
comp=Z,10.0nm,0.7s
SRO **Srobarova** 46.12 300 *e*P P 23 51 53.8 +2.0
JAVC **Velka Javorina** 46.14 302 *e*P P 23 51 54.2 +2.1
BORU **Boraas** 46.19 314 *i*P P 23 51 52.4 +0.3
NC204 **NORSAR Array S** 46.24 320 P P 23 51 52.5 -0.2
KRLC **Kraliky** 46.26 303 *e*P P 23 51 54.0 +1.0
KRLC *e*pP sP 23 51 59.4 +1.2
KRLC **Kraliky** 46.26 303 *e*P P 23 51 54.0 +1.0
KRLC *e**PP sP 23 51 59.4 +1.2

PDSI **Padang** 46.28 160 P P 23 51 58.5 +5.2
NAO01 **NORSAR Array S** 46.29 319 P P 23 51 52.1 -0.8
KSP **Ksiaz** 46.29 305 P P 23 51 53.8 +0.7
comp=Z,19nm,0.9s
NBO00 **NORSAR Array S** 46.30 319 P P 23 51 53.1 +0.1
NBO00 IAmb IAmb 23 51 59.5
comp=Z,15nm,0.8s
FABU **Falkenberg** 46.39 314 *i*P P 23 51 53.5 -0.3
LUNU **Lund** 46.40 312 *i*P P 23 51 54.0 +0.2
OSTC **Ostas** 46.44 304 *e*P P 23 51 55.2 +0.9
OSTC **Ostas** 46.44 304 *e*P P 23 51 55.2 +0.9
DPC **Dobruska-Polom** 46.44 304 *e*P P 23 51 55.4 +1.0
DPC *e*pP sP 23 52 01.8 +2.1
DPC **Dobruska-Polom** 46.44 304 *e*P P 23 51 55.4 +1.0
DPC *e**PP sP 23 52 01.8 +2.1
BJUU **Bjuv** 46.49 312 *i*P P 23 51 54.0 -0.6
PETK **Petropavlovsk-** 46.50 52 P P 23 51 52.8 -2.0
comp=Z,2.3nm,0.8s,baz=83,slow=36,SNR=1.6
comp=Z,2.3nm,0.8s
MORH **Mrgy, Hungar** 46.51 298 ⇑P P 23 51 55.9 +1.0
MORH **Mrgy, Hungar** 46.51 298 P P 23 51 55.8 +0.9
comp=Z,7.1nm,1.4s
UPC **Upice** 46.58 304 *e*P P 23 51 56.2 +0.8
UPC *e*pP sP 23 52 02.7 +2.1
UPC **Upice** 46.58 304 *e*P P 23 51 56.2 +0.8
UPC *e**PP sP 23 52 02.7 +2.1
VRAC **Vranov** 46.65 302 *e*P P 23 51 57.2 +1.3
VRAC **Vranov** 46.65 302 P P 23 51 57.3 +1.3
comp=Z,6.2nm,0.7s,baz=65,slow=8.9,SNR=15
comp=Z,6.2nm,0.7s
VRAC **Vranov** 46.65 302 ⇓P P 23 51 57.3 +1.3
TJOU **Tjoern** 46.66 315 *i*P P 23 51 57.0 +1.1
ONAU **Onsala** 46.70 314 *i*P P 23 51 55.4 -0.8
BILL **Bilibino** 46.72 31 *e*P P 23 51 55.5 -0.8
BILL *e**PP pP 23 51 59.0 -1.1
BILL pmax pmax
comp=Z,7.0nm,1.3s
RGN **Rugen** 46.80 310 P P 23 51 57.9 +0.9
MPLH **Magyarpolny** 46.85 299 P P 23 51 58.5 +1.0
comp=Z,25nm,0.9s
FNA **Florina** 46.95 290 P P 23 51 59.6 +1.2
FNA IAmb IAmb 23 52 05.4
comp=Z,6.1nm,0.7s
FNA **Florina** 46.95 290 P P 23 51 59.6 +1.2
FNA pmax pmax
comp=Z,6.0nm,0.7s
IDI **Anoyia** 47.07 281 P P 23 51 59.6 +0.2
IDI **Anoyia** 47.07 281 P P 23 52 00.0 +0.5
comp=Z,17nm,0.7s,baz=344,slow=8.3,SNR=11
comp=Z,17nm,0.7s
SBUM **Sibu** 47.18 143 P P 23 51 60.0 -0.5
SBUM IAmb IAmb 23 52 08.3
comp=Z,13nm,1.1s
RUE **Ruedersdorf** 47.21 307 *e*P P 23 52 01.6 +1.3
KONO **Kongsberg** 47.22 318 P P 23 51 60.0 -0.3
KONO **Kongsberg** 47.22 318⇑*e*P P 23 52 01.0 +0.7
KONO pmax pmax
comp=Z,42nm,1.9s
PUK **Puka** 47.40 292 P P 23 52 03.3 +1.3
PUK IAmb IAmb 23 52 09.8
comp=Z,13nm,0.7s
RONA **Rosalia, Austr** 47.42 301 *i*pP P 23 52 03.6 +1.6
comp=Z,10nm,0.9s,SNR=11
PVCC **Panska Ves** 47.43 305 *e*P P 23 52 03.6 +1.6
PVCC *e*pP sP 23 52 09.6 +2.3
PVCC **Panska Ves** 47.43 305 *e*P P 23 52 03.6 +1.6
PVCC *e**PP sP 23 52 09.6 +2.3
GOPC **GO Pecny, Ondr** 47.52 304 *e*P P 23 52 04.0 +1.2
GOPC **GO Pecny, Ondr** 47.52 304 *e*P P 23 52 04.0 +1.2
CONA **Conrad Observa** 47.61 301 *i*pP P 23 52 05.2 +1.6
comp=Z,9.2nm,0.8s,SNR=9.6
PRU **Pruhonice** 47.64 304 *e*P P 23 52 05.0 +1.3
PRU *e*pP sP 23 52 10.9 +1.9
PRU **Pruhonice** 47.64 304 *e*P P 23 52 05.0 +1.3
PRU *e**PP sP 23 52 10.9 +1.9
PDG **Podgorica** 47.66 293 IAmb IAmb 23 52 24.1
comp=Z,7.8nm,0.6s
PDG **Podgorica** 47.66 293 ⇓P P 23 52 05.3 +1.4
BRG **Berggiesshubel** 47.68 305 *i*P P 23 52 05.1 +1.2
BRG Amp 23 52 05.9
comp=Z,7.5nm,0.9s
BRG **Berggiesshubel** 47.68 305 P P 23 52 10.9 +7.0
BRG Amp 23 52 11.8
comp=Z,12nm,0.8s
MYLDM **Lahad Datu** 47.81 134 P P 23 52 04.6 -0.7
ZVC **Zvikov** 48.06 303 *e*P P 23 52 08.2 +1.3
CLL **Collm** 48.07 306 P P 23 52 07.2 +0.2
CLL **Collm** 48.07 306⇓*i*P P 23 52 07.6 +0.6
comp=Z,25nm,0.8s
CLL *i* x x 23 52 13.5
comp=Z,35nm,0.8s
CLL *e*PP PP 23 53 58.0 -0.9
CLL *e*PPPP 23 54 59.0
CLL **Collm** 48.07 306⇓*i*P P 23 52 07.6 +0.6
CLL *i* 23 52 13.5
CLL pmax pmax
comp=Z,25nm,0.8s
CLL **Collm** 48.07 306 P P 23 52 07.7 +0.7
comp=Z,46nm,0.9s
ARSA **Arzberg** 48.08 300 *e*P P 23 52 07.9 +0.7
comp=Z,2.3nm,0.7s,SNR=4.8
CKRC **Cesky Krumlov** 48.22 303 *e*P P 23 52 09.5 +1.3
CKRC **Cesky Krumlov** 48.22 303 *e*P P 23 52 09.5 +1.3
KHC **Kasperske Hory** 48.55 303 *e*P P 23 52 11.9 +1.2
KHC *e*pP sP 23 52 18.1 +2.1
KHC **Kasperske Hory** 48.55 303 *e*P P 23 52 11.9 +1.2
KHC *e**PP sP 23 52 18.1 +2.1
KHC **Kasperske Hory** 48.55 303 P P 23 52 11.4 +0.7
comp=Z,8.3nm,0.9s
GEC2 **GERESS Array S** 48.58 303 P P 23 52 11.2 +0.1
GEC2 IAmb IAmb 23 52 36.0
comp=Z,27nm,2.0s
GERES **GERESS Array B** 48.58 303 P P 23 52 10.4 -0.7
GERES **GERESS Array B** 48.58 303 P P 23 52 12.4 +1.3
comp=Z,2.3nm,0.8s,baz=134,slow=9.6,SNR=15
comp=Z,2.3nm,0.8s
SOKA **Soboth** 48.62 300 *i*P P 23 52 12.2 +0.8
comp=Z,5.9nm,0.7s,SNR=10
MOA **Molln** 48.63 301 *i*P P 23 52 12.3 +1.0
comp=Z,3.9nm,0.9s
OBKA **Obir** 48.99 300 *i*P P 23 52 15.4 +1.1
comp=Z,6.8nm,0.7s
BIOA **Bad Ischl, Aus** 49.08 301 *i*pP P 23 52 16.4 +1.6
comp=Z,3.9nm,1.0s
SCTE **Santa Cesarea** 49.25 290 P P 23 52 17.9 +1.7
KBA **Koelnbreinsper** 49.51 301 *i*P P 23 52 19.1 +0.7
comp=Z,3.6nm,0.6s
MYKA **Terra Mystica** 49.51 300 *i*P P 23 52 19.1 +0.8
comp=Z,2.3nm,0.4s
GRA1 **Grafenberg Arr** 49.74 305 P P 23 52 20.5 +0.6
GRF **Grafenberg Arr** 49.74 305 P P 23 52 20.5 +0.6
GRF pmax pmax
comp=Z,28nm,0.8s
GRF **Grafenberg Arr** 49.74 305 *e*P P 23 52 21.3 +1.5
comp=Z,20nm,0.8s,baz=68,slow=6.6
GRF *e*pP sP 23 52 26.9 +1.8
GRFO **Grafenberg** 49.74 305 P P 23 52 20.9 +1.1
GRFO **Grafenberg** 49.74 305 P P 23 52 20.9 +1.1
GRFO pmax pmax
comp=Z,26nm,0.8s
LESA **Schwarzleotal** 49.78 302 *i*pP P 23 52 21.6 +1.3
comp=Z,15nm,0.9s
SABO **M.te Sabotino** 49.81 299 P P 23 52 19.9 -0.6
SABO IAmb IAmb 23 52 27.2
comp=Z,15nm,0.7s
ABTA **Abfaltersbach** 50.17 301 *i*P P 23 52 23.4 +0.1
comp=Z,4.3nm,1.5s
STAL **STALIGIAL** 50.25 300 P P 23 52 23.3 -0.5
WTTA **Wattenberg** 50.49 302 *i*pP P 23 52 27.1 +1.3
comp=Z,34nm,0.9s,SNR=21
WATA **Walderalm** 50.50 302 *i*P P 23 52 26.4 +0.6
comp=Z,16nm,0.9s,SNR=10.0
SQTA **Sankt Quirin** 50.77 302 *i*P P 23 52 28.7 +0.8
comp=Z,17nm,0.8s,SNR=13
MOTA **Moosalm** 50.79 302 *i*P P 23 52 28.5 +0.6
comp=Z,14nm,1.1s
TIP **Timpagrande** 50.83 290 P P 23 52 29.6 +1.3
TIP IAmb IAmb 23 52 36.8
comp=Z,17nm,1.2s
TIP **Timpagrande** 50.83 290 ⇓P P 23 52 29.3 +1.0
RETA **Reutte** 50.93 302 *i*P P 23 52 30.1 +1.1
comp=Z,8.5nm,0.8s,SNR=7.3
CTI **Castel Tesino** 51.01 300 P P 23 52 30.0 +0.4
CTI **Castel Tesino** 51.01 300 P P 23 52 30.0 +0.4

CTI pmax pmax
comp=Z,9.0nm,1.0s
FETA **Feichten** 51.16 302 *i*P P 23 52 31.5 +0.7
comp=Z,14nm,0.9s,SNR=14
GUMA **Gualdo di Mace** 51.28 296 IAmb IAmb 23 53 11.3
comp=Z,20nm,0.8s
STU **Stuttgart** 51.33 304 P P 23 52 32.5 +0.6
STU IAmb IAmb 23 52 49.8
comp=Z,14nm,0.8s
STU **Stuttgart** 51.33 304 P P 23 52 32.5 +0.6
STU pmax pmax
comp=Z,14nm,0.8s
INTR **Introdacqua** 51.39 295 IAmb IAmb 23 52 40.7
comp=Z,12nm,0.8s
PAOL **Paolisi** 51.42 293 IAmb IAmb 23 52 40.7
comp=Z,16nm,1.1s
FDMO **Fiordimonte** 51.45 296 IAmb IAmb 23 52 43.7
comp=Z,19nm,0.8s
CAMP **Campotosto** 51.47 296 P P 23 52 33.9 +0.7
CAMP IAmb IAmb 23 52 56.7
comp=Z,16nm,1.1s
NRCA **Norcia** 51.53 296 IAmb IAmb 23 52 42.3
comp=Z,18nm,0.8s
DAVA **Damuels** 51.56 302 *e*P P 23 52 34.6 +0.8
comp=Z,5.0nm,0.9s
FUORN **Ofenpass-Fuorn** 51.62 301 IAmb IAmb 23 52 42.2
comp=Z,14nm,0.7s
DAVOX **Davos/Dischmat** 51.78 302 P P 23 52 36.3 +0.8
comp=Z,11nm,0.8s,baz=95,slow=7.0,SNR=37
comp=Z,11nm,0.8s
CEL **Celeste** 51.87 290 P P 23 52 37.2 +1.1
CEL IAmb IAmb 23 52 44.2
comp=Z,26nm,1.0s
BFO **Black Forest** 52.04 304 P P 23 52 38.1 +0.9
BFO IAmb IAmb 23 52 44.7
comp=Z,12nm,0.9s
BFO **Black Forest** 52.04 304 P P 23 52 38.1 +0.9
BFO pmax pmax
comp=Z,12nm,0.9s
ZCCA **Zocca** 52.20 299 P P 23 52 39.9 +1.5
ZCCA IAmb IAmb 23 52 55.6
comp=Z,20nm,0.8s
BTNL **Ternell** 52.35 308 *dx* P 23 52 44.9 +5.5
MEM **Membach** 52.41 308 *dx* P 23 52 46.4 +6.5
BSTI **Sart Tilman** 52.67 308 *dP* P 23 52 43.2 +1.4
BSTI *dx* x 23 52 49.0
BSTI *d*PcP PcP 23 53 51.9 +0.3
ECH **Echery** 52.79 304 P P 23 52 42.9 +0.1
ECH **Echery** 52.79 304 P P 23 52 42.9 +0.1
ECH pmax pmax
comp=Z,10.0nm,0.9s
BCLA **Clavier** 52.90 308 *dx* P 23 52 50.6 +7.1
CASP **Castiglione de** 53.01 297 P P 23 52 43.7 -0.7
BGES **Gesves** 53.04 308 *dP* P 23 52 44.9 +0.4
BGES *dx* x 23 53 11.8
MSSA **Maissana** 53.14 299 P P 23 52 46.0 +0.6
MSSA IAmb IAmb 23 53 05.9
comp=Z,15nm,0.9s
BMRD **Maredsous** 53.26 308 *dx* P 23 52 53.2 +7.1
VAE **Valguarnera** 53.28 289 P P 23 52 48.6 +2.0
comp=Z,3.3nm,0.5s,baz=17,slow=4.8,SNR=2.0
comp=Z,3.3nm,0.5s
BNI **Bardonecchia** 54.57 301 P P 23 52 55.9 -0.1
BNI IAmb IAmb 23 53 15.2
comp=Z,12nm,0.7s
BNI **Bardonecchia** 54.57 301 P P 23 52 55.9 -0.1
EKA **Eskdalemuir Ar** 55.22 316 P P 23 52 60.0 -0.4
comp=Z,4.7nm,0.7s,baz=62,slow=6.2,SNR=9.1
comp=Z,4.7nm,0.7s
EKA **Eskdalemuir Ar** 55.22 316 P P 23 53 00.0 -0.4
VSL **Villasalto** 55.62 294 P P 23 53 03.9 +0.4
CLF **Chambon-Foret** 55.78 306 P P 23 53 05.2 +0.7
XMIS **Christmas Isla** 56.82 157 P P 23 53 12.8 +0.6
B20K **Meade River** 57.63 21 P P 23 53 15.8 -1.4
B20K IAmb IAmb 23 53 24.6
comp=Z,14nm,0.8s
KEST **Kesra** 57.66 290 P P 23 53 19.8 +1.7
comp=Z,4.3nm,0.8s,baz=16,slow=20,SNR=2.7
comp=Z,4.3nm,0.8s
SUMG **Summit** 57.78 343 P P 23 53 18.0 -0.8
SUMG IAmb IAmb 23 53 19.4
comp=Z,41nm,1.8s
SUMG **Summit** 57.78 343 P P 23 53 18.0 -0.8
SUMG pmax pmax
comp=Z,41nm,1.8s
D19K **Kuna River** 58.34 23 P P 23 53 21.9 -0.5
D19K IAmb IAmb 23 53 28.6
comp=Z,20nm,1.1s
B22K **Teshekpuk Lake** 58.37 20 P P 23 53 21.4 -1.0
B22K IAmb IAmb 23 53 29.2
comp=Z,17nm,0.9s
B21K **Ikpikpuk River** 58.55 21 P P 23 53 22.9 -0.9
B21K IAmb IAmb 23 53 30.8
comp=Z,14nm,0.9s
TATN **Tataouine** 58.60 287 P P 23 53 25.9 +1.2
E19K **Redstone River** 59.28 24 P P 23 53 27.6 -1.3
E19K IAmb IAmb 23 54 13.2
comp=Z,9.0nm,1.1s
C23K **Itkillik River** 59.41 20 P P 23 53 29.1 -0.6
C23K IAmb IAmb 23 53 36.8
comp=Z,12nm,0.9s
E21K **Killik River** 59.52 22 P P 23 53 29.6 -1.0
E21K IAmb IAmb 23 53 37.2
comp=Z,14nm,1.0s
F19K **Shaleruckik Mo** 59.53 24 P P 23 53 28.7 -1.8
F19K IAmb IAmb 23 53 29.9
comp=Z,10nm,1.3s
D22K **Ayikyak River** 59.56 21 P P 23 53 30.3 -0.5
D22K IAmb IAmb 23 53 37.8
comp=Z,12nm,0.9s
D23K **Nanushuk River** 60.02 20 P P 23 53 33.3 -0.6
D23K IAmb IAmb 23 53 41.3
comp=Z,7.9nm,0.9s
H17K **Granite Mounta** 60.10 27 P P 23 53 33.3 -1.2
H17K IAmb IAmb 23 53 42.3
comp=Z,14nm,0.9s
E22K **Anaktuvuk Pass** 60.32 21 P P 23 53 34.6 -1.4
E22K IAmb IAmb 23 54 05.0
comp=Z,20nm,1.4s
F21K **Alatna River** 60.51 23 P P 23 53 36.2 -1.1
F21K IAmb IAmb 23 53 46.8
comp=Z,25nm,1.6s
TOLK **Toolik Lake Re** 60.53 20 P P 23 53 36.8 -0.7
TOLK IAmb IAmb 23 53 57.6
comp=Z,11nm,0.8s
H19K **Roundabout Mou** 60.80 25 P P 23 53 36.8 -2.5
H19K IAmb IAmb 23 53 46.9
comp=Z,7.5nm,0.8s
E23K **Chandalar** 60.95 21 P P 23 53 39.1 -1.3
E23K IAmb IAmb 23 54 02.4
comp=Z,12nm,1.1s
E24K **Your Creek** 61.22 20 P P 23 53 40.1 -2.1
E24K IAmb IAmb 23 54 19.2
comp=Z,6.8nm,0.8s
IMAR **Indian Mountai** 61.30 24 P P 23 53 40.9 -1.8
J17K **VABM Dome** 61.39 28 P P 23 53 42.0 -1.3
J17K IAmb IAmb 23 53 44.4
comp=Z,22nm,1.2s
F24K **Squaw Lake** 61.79 21 P P 23 53 44.8 -1.2
H21K **Melozitna Rive** 61.80 24 P P 23 53 45.8 -0.3
H21K IAmb IAmb 23 53 57.7
comp=Z,20nm,1.6s
K17K **Iditarod** 62.10 28 P P 23 53 47.4 -0.8
J19K **Poorman** 62.11 26 P P 23 53 48.1 -0.1
J19K IAmb IAmb 23 54 15.3
comp=Z,16nm,1.2s
J18K **Innoko River** 62.13 27 P P 23 53 47.1 -1.2
J18K IAmb IAmb 23 53 48.5
comp=Z,12nm,1.1s
F25K **Christian Rive** 62.30 20 P P 23 53 48.2 -1.2
J20K **Nowinta River** 62.45 25 P P 23 53 49.7 -0.7
J20K IAmb IAmb 23 53 51.5
comp=Z,10nm,1.2s
F26K **Sheenjek River** 62.58 19 P P 23 53 49.5 -1.9
H23K **Yukon River** 62.61 23 IAmb IAmb 23 54 11.1
comp=Z,8.7nm,1.1s
BMAR **Burnt Mountain** 62.68 20 P P 23 53 51.5 -0.5
E27K **Coleen River** 62.79 18 P P 23 53 51.8 -0.9
E27K IAmb IAmb 23 53 59.5
comp=Z,10nm,0.8s
MLY **Manley** 62.86 24 P P 23 53 52.6 -0.6
MLY IAmb IAmb 23 54 07.6
comp=Z,17nm,1.5s
L18K **Granite Mounta** 62.99 28 P P 23 53 53.7 -0.4
H24K **Noodor Dome** 63.06 22 P P 23 53 54.0 -0.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **I23K** | **Minto, Yukon-K** | **63.17** | **23** | P | **P** | **23 53 54.5** | **-0.6** |
| I23K | | | | IAmb | IAmb | 23 53 56.0 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **M17K** | **Holitna River** | **63.30** | **29** | P | **P** | **23 53 55.4** | **-0.8** |
| M17K | | | | IAmb | IAmb | 23 54 04.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **63.42** | **17** | P | **P** | **23 53 56.1** | **-0.8** |
| **MDM** | **Murphy Dome** | **63.63** | **23** | P | **P** | **23 53 57.9** | **-0.4** |
| **L19K** | **White Mountain** | **63.64** | **27** | P | **P** | **23 53 58.1** | **-0.3** |
| L19K | | | | IAmb | IAmb | 23 54 14.2 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **63.64** | **18** | P | **P** | **23 53 58.0** | **-0.3** |
| F28M | | | | IAmb | IAmb | 23 54 34.8 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **NEA2** | **Nenana** | **63.66** | **23** | P | **P** | **23 53 57.1** | **-1.4** |
| NEA2 | | | | IAmb | IAmb | 23 54 08.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **POKR** | **Poker Plat Res** | **63.73** | **22** | P | **P** | **23 53 58.0** | **-1.0** |
| POKR | | | | IAmb | IAmb | 23 54 15.1 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **COLA** | **College** | **63.80** | **23** | P | **P** | **23 53 58.7** | **-0.6** |
| **COLA** | **College** | **63.80** | **23** | ⇑*e*P | **P** | **23 53 59.0** | **-0.3** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **G27K** | **Doyon Strip** | **63.88** | **19** | P | **P** | **23 53 58.6** | **-1.3** |
| G27K | | | | IAmb | IAmb | 23 54 20.5 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **63.93** | **21** | P | **P** | **23 54 00.1** | **-0.4** |
| PRP | | | | IAmb | IAmb | 23 54 37.3 | |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **63.98** | **23** | P | **P** | **23 53 59.1** | **-1.5** |
| **ESDC** | **Sonseca Array** | **64.09** | **301** | P | **P** | **23 54 02.3** | **+0.5** |
| | comp=Z,1.4nm,0.6s,baz=50,slow=6.6,SNR=21 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **IL31** | | **64.14** | **22** | P | **P** | **23 54 00.2** | **-1.4** |
| **ILAR** | **Eielson Array** | **64.14** | **22** | P | **P** | **23 54 00.2** | **-1.5** |
| **ILAR** | **Eielson Array** | **64.14** | **22** | P | **P** | **23 54 00.3** | **-1.4** |
| | comp=Z,2.3nm,0.9s,baz=304,slow=4.4,SNR=16 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **64.37** | **15** | P | **P** | **23 54 03.0** | **0.0** |
| INK | | | | IAmb | IAmb | 23 54 09.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **64.37** | **15** | P | **P** | **23 54 03.0** | **0.0** |
| INK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **M20K** | **Styx River** | **64.42** | **27** | P | **P** | **23 54 03.4** | **-0.2** |
| **G29M** | **Pine Creek** | **64.63** | **18** | P | **P** | **23 54 03.0** | **-1.8** |
| G29M | | | | IAmb | IAmb | 23 54 11.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **64.71** | **21** | P | **P** | **23 54 04.2** | **-1.1** |
| **N19K** | **Bonanza Creek** | **64.74** | **28** | P | **P** | **23 54 04.7** | **-1.0** |
| **H29M** | **Whitestone** | **65.12** | **18** | P | **P** | **23 54 07.9** | **-0.2** |
| H29M | | | | IAmb | IAmb | 23 54 23.8 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **O18K** | **Koktuh Hills** | **65.17** | **29** | P | **P** | **23 54 07.5** | **-1.0** |
| O18K | | | | IAmb | IAmb | 23 54 15.3 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **DHY** | **Denali Highway** | **65.31** | **24** | P | **P** | **23 54 07.8** | **-1.7** |
| DHY | | | | IAmb | IAmb | 23 54 24.6 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **65.37** | **18** | P | **P** | **23 54 08.7** | **-1.0** |
| EPYK | | | | IAmb | IAmb | 23 54 16.3 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **65.40** | **19** | P | **P** | **23 54 09.9** | **0.0** |
| I28M | | | | IAmb | IAmb | 23 54 25.4 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **65.41** | **16** | P | **P** | **23 54 08.5** | **-1.4** |
| **EGAK** | **Eagle** | **65.65** | **20** | IAmb | IAmb | 23 54 25.9 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **SML** | **Sawmill** | **66.00** | **25** | P | **P** | **23 54 13.0** | **-0.8** |
| **MBAR** | **Mbarara** | **66.19** | **244** | LR | LR | 00 28 32.2 | |
| | comp=Z,4µm,18.7s,baz=270,slow=41 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **66.28** | **25** | P | **P** | **23 54 14.4** | **-1.3** |
| **SCM** | **Sheep Creek Mo** | **66.28** | **25** | P | **P** | **23 54 14.4** | **-1.3** |
| SCM | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **66.41** | **18** | P | **P** | **23 54 14.9** | **-1.6** |
| I30M | | | | IAmb | IAmb | 23 54 22.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **DAWY** | **Dawson** | **66.67** | **20** | P | **P** | **23 54 16.9** | **-1.2** |
| **L27K** | **Beaver Creek,** | **66.87** | **22** | P | **P** | **23 54 18.4** | **-0.9** |
| L27K | | | | IAmb | IAmb | 23 54 33.4 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **BCAR** | **Beaver Creek A** | **66.88** | **22** | P | **P** | **23 54 18.9** | **-0.5** |
| **N25K** | **Chitina, Valde** | **67.27** | **24** | P | **P** | **23 54 21.0** | **-1.0** |
| N25K | | | | IAmb | IAmb | 23 54 37.2 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **K29M** | **Barlow Dome** | **67.31** | **19** | P | **P** | **23 54 21.7** | **-0.6** |
| **M27K** | **Edge Creek, AK** | **67.43** | **22** | P | **P** | **23 54 22.7** | **-0.4** |
| M27K | | | | IAmb | IAmb | 23 54 30.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **67.90** | **23** | P | **P** | **23 54 24.8** | **-1.0** |
| MCARA | | | | IAmb | IAmb | 23 54 42.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **VRDI** | **Verde Repeater** | **67.90** | **23** | IAmb | IAmb | 23 54 41.8 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **TAM** | **Tamanrasset** | **68.03** | **281** | P | **P** | **23 54 28.6** | **+1.1** |
| **TAM** | **Tamanrasset** | **68.03** | **281** | P | **P** | **23 54 28.6** | **+1.1** |
| TAM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **M29M** | **Somme Creek** | **68.26** | **21** | P | **P** | **23 54 26.6** | **-1.7** |
| M29M | | | | IAmb | IAmb | 23 54 35.7 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **GRNC** | **Granite Creek** | **68.79** | **23** | P | **P** | **23 54 31.0** | **-0.7** |
| GRNC | | | | IAmb | IAmb | 23 54 32.4 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **M31M** | **Drury Creek, Y** | **69.46** | **19** | P | **P** | **23 54 33.8** | **-1.9** |
| M31M | | | | IAmb | IAmb | 23 54 49.6 | |
| | comp=Z,25nm,1.6s | | | | | | |
| **FARO** | **Faro, Yukon** | **69.68** | **19** | P | **P** | **23 54 34.8** | **-2.2** |
| **N31M** | **Braeburn, Yuko** | **69.75** | **20** | P | **P** | **23 54 35.7** | **-1.7** |
| N31M | | | | IAmb | IAmb | 23 55 15.4 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **O29M** | **Mount Kennedy** | **70.03** | **22** | P | **P** | **23 54 38.0** | **-1.3** |
| **P33M** | **Teslin, Yukon** | **71.58** | **19** | P | **P** | **23 54 46.9** | **-1.7** |
| **R33M** | **Jennings River** | **72.74** | **19** | P | **P** | **23 54 54.0** | **-1.7** |
| **YKA** | **Yellowknife Ar** | **72.79** | **10** | P | **P** | **23 54 54.8** | **-0.9** |
| | comp=Z,3.8nm,0.9s,baz=338,slow=6.8,SNR=7.3 | | | | | | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **Q32M** | **Nakina River** | **72.81** | **20** | P | **P** | **23 54 54.5** | **-1.8** |
| Q32M | | | | IAmb | IAmb | 23 54 56.2 | |
| | comp=Z,22nm,1.6s | | | | | | |
| **S34M** | **Telegraph Cree** | **74.02** | **20** | P | **P** | **23 55 01.4** | **-1.6** |
| S34M | | | | IAmb | IAmb | 23 55 10.5 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **VOI** | **Vohitsoka** | **74.67** | **218** | P | **P** | **23 55 07.8** | **+0.5** |
| **PMG** | **Port Moresby** | **76.41** | **117** | LR | LR | 00 30 57.0 | |
| | comp=Z,3µm,18.1s,baz=104,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.08** | **276** | P | **P** | **23 55 21.3** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **77.08** | **276** | P | **P** | **23 55 21.0** | **-0.3** |
| | comp=Z,2.8nm,0.6s,baz=39,slow=5.5,SNR=24 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **77.23** | **134** | *de*P | **P** | **23 55 21.1** | **-0.8** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **77.23** | **134** | P | **P** | **23 55 20.9** | **-1.0** |
| | comp=Z,6.5nm,0.7s,baz=332,slow=5.6,SNR=7.9 | | | | | | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **SCHQ** | **Schefferville** | **79.13** | **344** | P | **P** | **23 55 30.9** | **-1.2** |
| | comp=Z,3.9nm,0.7s,baz=37,slow=7.4,SNR=3.8 | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **80.11** | **136** | P | **P** | **23 55 37.0** | **-0.7** |
| **ASAR** | **Alice Springs** | **80.11** | **136** | P | **P** | **23 55 36.6** | **-1.1** |
| | comp=Z,3.1nm,0.8s,baz=340,slow=6.4,SNR=5.8 | | | | | | |
| ASAR | | | | LR | LR | 00 34 30.4 | |
| | comp=Z,939nm,20.7s,baz=118,slow=38 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **80.11** | **136** | P | **P** | **23 55 37.0** | **-0.7** |
| **FFC** | **Flin Flon** | **81.64** | **5** | P | **P** | **23 55 44.2** | **-1.3** |
| FFC | | | | IAmb | IAmb | 23 58 20.6 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **FFC** | **Flin Flon** | **81.64** | **5** | P | **P** | **23 55 44.2** | **-1.3** |
| FFC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **B08A** | **Colville Reser** | **85.56** | **17** | P | **P** | **23 56 05.0** | **-0.9** |
| B08A | | | | IAmb | IAmb | 23 56 06.3 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **NEW** | **Newport** | **86.09** | **15** | P | **P** | **23 56 07.1** | **-1.4** |
| **NEW** | **Newport** | **86.09** | **15** | P | **P** | **23 56 07.1** | **-1.4** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **DBIC** | **Dimbokro** | **86.19** | **276** | P | **P** | **23 56 08.8** | **-0.6** |
| | comp=Z,7.0nm,0.6s,baz=34,slow=6.5,SNR=10 | | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **C09A** | **Chrisman Ranch** | **86.31** | **16** | P | **P** | **23 56 08.3** | **-1.2** |
| C09A | | | | IAmb | IAmb | 23 56 10.1 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **KIC** | **Kosan Boka** | **86.31** | **275** | ⇑*i*P | **P** | **23 56 09.4** | **-0.6** |
| | comp=Z,13nm,0.6s | | | | | | |
| **TIC** | **Toumodi** | **86.32** | **276** | ⇑*i*P | **P** | **23 56 08.9** | **-1.2** |
| | comp=Z,2.5nm,0.2s | | | | | | |
| **LIC** | **Lamto** | **86.61** | **275** | ⇑*e*P | **P** | **23 56 10.6** | **-0.9** |
| | comp=Z,15nm,0.6s | | | | | | |
| **MXC** | **Moxie City** | **87.04** | **18** | P | **P** | **23 56 12.0** | **-1.1** |
| MXC | | | | IAmb | IAmb | 23 56 14.0 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **OVMT** | **Ovando** | **87.98** | **13** | P | **P** | **23 56 16.4** | **-1.5** |
| **F10A** | **Beach Ranch, E** | **88.27** | **16** | P | **P** | **23 56 18.2** | **-0.9** |
| F10A | | | | IAmb | IAmb | 23 58 41.4 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **BPMT** | **Black Pine Rid** | **88.52** | **13** | P | **P** | **23 56 18.8** | **-1.8** |
| **PINE** | **Pine Mountain** | **89.52** | **19** | P | **P** | **23 56 23.6** | **-1.7** |
| PINE | | | | IAmb | IAmb | 23 56 26.8 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **I07A** | **Izee** | **89.58** | **18** | P | **P** | **23 56 24.3** | **-1.1** |
| I07A | | | | IAmb | IAmb | 23 56 34.2 | |
| | comp=Z,9.6nm,1.2s | | | | | | |
| **BOZ** | **Bozeman (W)** | **89.63** | **12** | P | **P** | **23 56 24.6** | **-1.0** |
| **BOZ** | **Bozeman (W)** | **89.63** | **12** | P | **P** | **23 56 24.6** | **-1.0** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **J05D** | **Fort Rock, OR** | **89.93** | **20** | P | **P** | **23 56 26.4** | **-0.6** |
| J05D | | | | IAmb | IAmb | 23 56 54.0 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **LONY** | **Lake Ozonia** | **90.35** | **346** | P | **P** | **23 56 28.7** | **-0.1** |
| **J08A** | **Circle Bar Ran** | **90.50** | **18** | P | **P** | **23 56 28.6** | **-1.1** |
| **STKA** | **Stephens Creek** | **90.71** | **136** | P | **P** | **23 56 29.1** | **-1.3** |
| | comp=Z,2.1nm,0.6s,baz=330,slow=6.5,SNR=5.0 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **91.08** | **230** | P | **P** | **23 56 32.4** | **0.0** |
| | comp=Z,2.8nm,1.0s,baz=290,slow=17,SNR=1.1 | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **J61A** | **Chester** | **91.21** | **345** | P | **P** | **23 56 31.9** | **-0.9** |
| **FLWY** | **Flagg Ranch** | **91.25** | **12** | P | **P** | **23 56 33.1** | **-0.2** |
| FLWY | | | | IAmb | IAmb | 23 57 52.4 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **G40A** | **Rib Lake** | **91.30** | **357** | P | **P** | **23 56 32.0** | **-1.2** |
| **WVOR** | **Wild Horse Val** | **91.35** | **18** | P | **P** | **23 56 31.9** | **-1.7** |
| **WVOR** | **Wild Horse Val** | **91.35** | **18** | P | **P** | **23 56 31.9** | **-1.7** |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **ACCN** | **Adirondack Com** | **91.38** | **345** | P | **P** | **23 56 31.9** | **-1.8** |
| **IMW** | **Indian Meadow** | **91.39** | **12** | P | **P** | **23 56 32.1** | **-2.0** |
| **GLMI** | **Grayling** | **91.42** | **353** | P | **P** | **23 56 31.9** | **-1.9** |
| **FXWY** | **Fox Creek** | **91.63** | **12** | P | **P** | **23 56 34.3** | **-0.8** |
| **J58A** | **Remsen** | **91.69** | **347** | P | P | 23 56 29.3 | -5.7 |
| **H43A** | **Windswept, Lux** | **91.99** | **356** | P | **P** | **23 56 32.9** | **-3.5** |
| **PDAR** | **Pinedale Array** | **92.71** | **12** | P | **P** | **23 56 38.6** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=5.2,slow=3.3,SNR=3.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **HWUT** | **Hardware Ranch** | **93.53** | **13** | P | **P** | **23 56 42.9** | **-0.9** |
| **ELK** | **Elko** | **93.69** | **16** | P | **P** | **23 56 43.8** | **-0.8** |
| **ELK** | **Elko** | **93.69** | **16** | P | **P** | **23 56 43.8** | **-0.8** |
| ELK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **PHWY** | **Pilot Hill** | **94.67** | **9** | P | **P** | **23 56 47.8** | **-1.4** |
| PHWY | | | | IAmb | IAmb | 23 59 09.2 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **DUG** | **Dugway, Tooele** | **94.69** | **14** | P | **P** | **23 56 48.4** | **-0.7** |
| DUG | | | | IAmb | IAmb | 23 57 20.2 | |
| | comp=Z,7.6nm,1.5s | | | | | | |
| **DUG** | **Dugway, Tooele** | **94.69** | **14** | P | **P** | **23 56 48.4** | **-0.7** |
| DUG | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **95.23** | **19** | P | **P** | **23 56 49.7** | **-2.0** |
| | comp=Z,1.3nm,0.9s,baz=316,slow=3.3,SNR=6.9 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **ELIB** | **Princess Elisa** | **123.49** | **199** | *d*PKPdf | **PKPdf** | **00 02 23.0** | **-0.9** |
| **TROLL** | **Troll, Antarti** | **129.07** | **203** | ⇑PKPdf | **PKPdf** | **00 02 34.7** | **+0.2** |
| | comp=Z,224nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **130.53** | **205** | ⇑PKPdf | **PKPdf** | **00 02 36.5** | **-0.7** |
| | comp=Z,20nm,0.7s | | | | | | |
| SNAA | | | | SKPbc | **SKPbc** | **00 05 59.7** | **-1.0** |
| | comp=Z,33nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **130.53** | **205** | PKP | **PKPdf** | **00 02 37.4** | **+0.2** |
| | comp=Z,0.9nm,0.8s,baz=115,slow=0.8,SNR=4.0 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **131.74** | **206** | ⇑PKPdf | **PKPdf** | **00 02 39.7** | **+0.2** |
| | comp=Z,2.4nm,0.6s,baz=14,slow=2.1 | | | | | | |
| VNA2 | | | | SKPbc | **SKPbc** | **00 06 02.7** | **-2.3** |
| | comp=Z,0.6nm,0.6s,baz=319,slow=2.8 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **131.95** | **207** | PKPdf | **PKPdf** | **00 02 38.9** | **-0.9** |
| | comp=Z,1.8nm,0.8s | | | | | | |
| VNA1 | | | | SKPbc | **SKPbc** | **00 06 05.1** | **-0.6** |
| | comp=Z,2.5nm,1.2s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **132.54** | **206** | ⇑PKPdf | **PKPdf** | **00 02 40.3** | **-0.7** |
| | comp=Z,1.8nm,0.6s | | | | | | |
| VNA3 | | | | SKPbc | **SKPbc** | **00 06 07.8** | **-0.1** |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **133.53** | **180** | PKP | **PKPdf** | **00 02 43.1** | **0.0** |
| | comp=Z,1.2nm,0.8s,baz=91,slow=15,SNR=2.7 | | | | | | |
| **LPAZ** | **La Paz** | **145.00** | **313** | PKPbc | **PKPab** | **00 03 04.5** | **-0.8** |
| | comp=Z,8.6nm,0.8s,baz=13,slow=2.6,SNR=9.8 | | | | | | |
| **NNA** | **Nana** | **145.11** | **330** | PKPbc | **PKPbc** | **00 03 04.5** | **-0.6** |
| | comp=Z,3.7nm,0.3s,baz=96,slow=6.7,SNR=1.8 | | | | | | |
| **CPUP** | **Villa Florida** | **145.77** | **288** | PKPbc | **PKPdf** | **00 03 06.0** | **-0.4** |
| | comp=Z,3.7nm,0.8s,baz=45,slow=2.8,SNR=8.8 | | | | | | |

**IDC 17 23:47:30.8±2.1, 6°33S×129°58E, h0km, mb4.0/1, mbtmp4.0/3, ML4.3/2, Error ellipse: s-maj=109.9km s-min=31.4km az=69.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.30** | **162** | Pn | Pn | 23 50 53.7 | -1.0 |
| | 1.5nm,0.3s,baz=340,slow=14,SNR=38 | | | | | | |
| WRA | | | | Sn | Sn | 23 53 23.4 | -11 |
| | 2.4nm,0.3s,baz=348,slow=23,SNR=7.8 | | | | | | |
| | 2.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **17.73** | **167** | P | P | 23 51 39.8 | -0.4 |
| | 0.9nm,0.3s,baz=360,slow=11,SNR=22 | | | | | | |
| ASAR | | | | S | Sn | 23 54 45.1 | -12 |
| | 1.1nm,0.5s,baz=353,slow=26,SNR=2.6 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.44** | **327** | P | P | 23 58 28.4 | 0.0 |
| | 1.3nm,0.8s,baz=118,slow=7.9,SNR=5.2 | | | | | | |
| | 1.3nm,0.8s | | | | | | |

*IDC **17** 23:49:31.2±0.6, 8°68N×83°10W, h0km, mb4.5/20, mbtmp4.4/26, ML3.3/4, Error ellipse: s-maj=21.3km s-min=11.3km az=49.0*
*UCR **17** 23:49:33.7±0.8, 8°55N×83°19W, h22km±1km, MW5.1, Fault plane solution: NP1:φs287.15000°, δ55.61000°, λ77.85000°.*
*UPA **17** 23:49:34.2±2.6, 8°65N×83°14W, h4km±5km, MD4.7, MW5.1*
*CATAC **17** 23:49:34.9±0.3, 8°63N×83°17W, h5km±1km, MB5.7, mb5.6, ML5.2*
*RSNC **17** 23:49:36.6±0.3, 9°N±5°×8°3W±°, h14km, M4.7, mb4.7, mB5.9, ML4.6, Mw(mB)5.5*
*NEIC **17** 23:49:36.7±1.7, 8°79N±0°07×83°12W±0°06, h18km±4km, mb4.8/381, Mwr4.6/15, Error ellipse: s-maj=12.2km s-min=7.0km az=217.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr0.35; Mθθ-0.13; Mφφ-0.22; Mrθ0.90; Mrφ0.18; Mθφ-0.53; Fault plane solution: M₀1.11000×10¹⁶ NP1:φs121.97000°, δ81.02000°, λ83.62000°. NP2:φs337.58000°, δ11.00000°, λ125.11000°. Principal axes: T 1.1213, Plg54.0000°, Azm224.0000°; N -0.0321, Plg6.0000°, Azm123.0000°; P -1.0892, Plg36.0000°, Azm218.0000°;*
*NEIC **17** 23:49:36.5, 8°80N×83°11W, h13km*
*SNET **17** 23:49:40.6±0.5, 9°24N×83°20W, h250km±87km, ML5.0*
**ISC 17 23:49:34.3±0.7, 8°61N±0°02×83°15W±0°02, h17km±4km, n880,σ1°§14/915, mb4.8/217, 12C-56D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.01** | **335** | ⇑*e*P | **Pg** | **23 49 36.8** | **-0.5** |
| **EDAD** | **Golfito** | **0.04** | **336** | ⇑*e*P | **Pg** | **23 49 37.1** | **-0.4** |
| **PTJ1** | **Puerto Jimnez** | **0.17** | **244** | *i* P | **Pg** | **23 49 37.9** | **-0.8** |
| PTJ1 | | | | IAML | | 23 49 38.7 | |
| | comp=Z,1200µm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | **Sb** | **23 49 42.4** | **+0.3** |
| **PTJ1** | **Puerto Jimnez** | **0.17** | **244** | ⇑*i*P | **Pg** | **23 49 38.1** | **-0.7** |
| PTJ1 | | | | *i* S | **Sb** | **23 49 43.4** | **+1.3** |
| **PTJ1** | **Puerto Jimnez** | **0.17** | **244** | ⇑*e*P | **Pg** | **23 49 38.0** | **-0.7** |
| PTJ1 | | | | *e*S | **Sb** | **23 49 42.0** | **-0.2** |
| **JIME** | **Puerto Jimenez** | **0.19** | **247** | ⇑*e*P | **Pg** | **23 49 38.2** | **-0.8** |
| JIME | | | | *e*S | **Sg** | **23 49 42.1** | **-0.1** |
| **NELY** | **Ciudad Neily** | **0.20** | **79** | ⇓*e*P | **Pb** | **23 49 39.9** | **+0.3** |
| NELY | | | | *e*S | **Sb** | **23 49 44.5** | **+1.4** |
| **VITO** | **San Vito** | **0.27** | **40** | ⇓*e*P | **Pb** | **23 49 41.4** | **+0.6** |
| **CDITO** | **Canoas** | **0.28** | **98** | *i* P | **Pb** | **23 49 40.6** | **-0.2** |
| CDITO | | | | *i* S | **Sb** | **23 49 46.2** | **+1.0** |
| CDITO | | | | IAML | | 23 50 01.9 | |
| | comp=Z,91µm,1.0s | | | | | | |
| **MLIR3** | **Monte Lirio, C** | **0.37** | **61** | ⇓*i*P | **Pb** | **23 49 43.0** | **+0.6** |
| MLIR3 | | | | *i* S | **Sb** | **23 49 49.4** | **+1.4** |
| **EDP2** | **Potrero Grande** | **0.40** | **356** | ⇓*e*P | **Pb** | **23 49 43.1** | **+0.1** |
| EDP2 | | | | *e*S | **Sb** | **23 49 50.3** | **+1.5** |
| **EDPN** | **Palmar Norte** | **0.46** | **319** | ⇓*e*P | **Pg** | **23 49 43.0** | **-0.6** |
| EDPN | | | | *e*S | **Sg** | **23 49 50.1** | **+0.1** |
| **PTPM** | **Petroterminale** | **0.48** | **147** | ⇑*i*P | **Pg** | **23 49 43.9** | **-0.1** |
| PTPM | | | | *i* S | **Sb** | **23 49 52.4** | **+1.2** |
| **BRU2** | **Volcan** | **0.49** | **68** | Pg | **Pb** | **23 49 44.6** | **+0.1** |
| **BRU2** | **Volcan** | **0.49** | **68** | *i* P | **Pb** | **23 49 44.6** | **+0.1** |
| BRU2 | | | | *i* S | **Sb** | **23 49 52.9** | **+1.5** |
| BRU2 | | | | IAML | | 23 49 58.4 | |
| | comp=Z,75µm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.49** | **68** | ⇓*i*P | **Pb** | **23 49 44.6** | **+0.1** |
| BRU2 | | | | *i* S | **Sb** | **23 49 53.0** | **+1.6** |
| **BRU2** | **Volcan** | **0.49** | **68** | ⇓*e*P | **Pb** | **23 49 44.5** | **+0.1** |
| BRU2 | | | | *e*S | **Sb** | **23 49 52.6** | **+1.2** |
| **EDBA** | **Buenos Aires** | **0.56** | **347** | ⇓*e*P | **Pg** | **23 49 45.5** | **0.0** |
| EDBA | | | | *e*S | **Sb** | **23 49 54.8** | **+1.3** |
| **BURE** | **Buenos Aires** | **0.59** | **341** | ⇓*e*P | **Pg** | **23 49 45.8** | **-0.2** |
| BURE | | | | *e*S | **Sb** | **23 49 55.2** | **+0.9** |
| **BCO2** | **Palmira** | **0.62** | **80** | ⇓*i*P | **Pb** | **23 49 46.8** | **0.0** |
| BCO2 | | | | *i* S | **Sb** | **23 49 56.1** | **+0.8** |
| **DRK0** | **Durika** | **0.65** | **352** | *i* P | **Pg** | **23 49 46.8** | **-0.5** |
| DRK0 | | | | IAML | | 23 49 56.9 | |
| | comp=Z,160µm,1.0s | | | | | | |
| DRK0 | | | | *i* S | **Sn** | **23 49 57.7** | **-1.3** |
| **DRK0** | **Durika** | **0.65** | **352** | ⇓*i*P | **Pg** | **23 49 46.8** | **-0.5** |
| DRK0 | | | | *i* S | **Sg** | **23 49 55.3** | **-0.7** |
| **DRK0** | **Durika** | **0.65** | **352** | ⇓*e*P | **Pg** | **23 49 46.7** | **-0.6** |
| **OCHAL** | **Ojochal** | **0.69** | **314** | *i* P | **Pg** | **23 49 46.5** | **-1.4** |
| OCHAL | | | | *i* S | **Sg** | **23 49 56.7** | **-0.4** |
| OCHAL | | | | IAML | | 23 50 01.2 | |
| | comp=Z,57µm,1.0s | | | | | | |
| **DVD** | **David** | **0.71** | **104** | ⇓*i*P | **Pb** | **23 49 47.7** | **-0.6** |
| DVD | | | | *i* S | **Sn** | **23 49 59.9** | **-0.2** |
| **LNBQ3** | **Los Naranjos,** | **0.72** | **76** | ⇓*i*P | **Pg** | **23 49 47.8** | **-0.7** |
| LNBQ3 | | | | *i* S | **Sb** | **23 49 58.9** | **+0.7** |
| **LOCO3** | **Loma Colorada,** | **0.75** | **105** | ⇓*i*P | **Pb** | **23 49 48.3** | **-0.6** |
| LOCO3 | | | | *i* S | **Sg** | **23 49 59.0** | **+0.1** |
| **PEDE3** | **Pedregal, Chir** | **0.75** | **107** | ⇓*i*P | **Pb** | **23 49 48.2** | **-0.7** |
| PEDE3 | | | | *i* S | **Sg** | **23 49 59.1** | **0.0** |
| **LOMA3** | **Las Lomas, Chi** | **0.77** | **103** | ⇓*i*P | **Pb** | **23 49 48.5** | **-0.7** |
| LOMA3 | | | | *i* S | **Sg** | **23 49 59.5** | **-0.1** |
| **ZELE** | **Perez Zeledon** | **0.94** | **324** | ⇓*e*P | **Pb** | **23 49 51.1** | **-1.1** |
| ZELE | | | | *e*S | **Sb** | **23 50 04.5** | **+0.2** |
| **CHGR2** | **Aguacate** | **1.04** | **72** | ⇓*i*P | **Pb** | **23 49 52.8** | **-1.2** |
| CHGR2 | | | | *i* S | **Sb** | **23 50 06.9** | **-0.4** |
| **CNI2** | **El Empalme, Bo** | **1.05** | **40** | ⇓*i*P | **Pb** | **23 49 53.3** | **-0.7** |
| CNI2 | | | | *i* S | **Sb** | **23 50 07.9** | **+0.5** |
| **BUI1** | **Rivas** | **1.11** | **328** | ⇓*e*P | **Pb** | **23 49 53.6** | **-1.7** |
| **LLNJ** | **Naranjito** | **1.27** | **312** | *e*P | **Pn** | **23 49 55.6** | **-1.7** |
| **RAZU** | **San Marcos de** | **1.35** | **320** | *e*P | **Pn** | **23 49 57.8** | **-0.8** |
| **TURIB** | **Turrialba** | **1.39** | **338** | ⇓*e*P | **Pn** | **23 49 58.1** | **-0.9** |
| **REPA** | **Paraso** | **1.40** | **330** | *e*P | **Pn** | **23 49 58.9** | **-0.4** |
| **VINA** | **Juan Vinas** | **1.41** | **335** | ⇓*e*P | **Pn** | **23 49 58.4** | **-0.9** |
| **LCR2** | **La Lucha 2** | **1.41** | **323** | Pn | **Pn** | **23 49 57.9** | **-1.5** |
| **LCR2** | **La Lucha 2** | **1.41** | **323** | *i* P | **Pn** | **23 49 58.7** | **-0.7** |
| LCR2 | | | | *i* S | **Sb** | **23 50 18.5** | **+0.5** |
| LCR2 | | | | IAML | | 23 50 21.0 | |
| | comp=Z,41µm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.41** | **323** | ⇓*e*P | **Pn** | **23 49 57.8** | **-1.5** |
| **ABE2** | **San Pablo** | **1.41** | **321** | *e*P | **Pn** | **23 49 58.8** |

AZU *i* S **Sb** **23 50 59.3 -3.2**
**AZU Azuero 2.96 106** *e*P **Pn** **23 50 22.2 +1.7**
**PCRI3 Pocri, Los San 3.15 107**‖ *e*P **Pn** **23 50 26.1 +3.1**
**ACHO3 Achotines, Los 3.18 112** *e*P **Pn** **23 50 23.8 +0.3**
ACHO3 *i* S **Sb** **23 51 07.5 -1.3**
**ZANG Zanguenga, Cho 3.26 84** *e*P **Pn** **23 50 26.2 +1.6**
ZANG *e*S **Sb** **23 51 12.3 +1.1**
**ZANG Zanguenga, Cho 3.26 84**‖ *e*P **Pn** **23 50 26.5 +1.8**
ZANG *i* S **Sb** **23 51 13.1 +1.9**
**PEDA3 Pedasi 3.27 109** *e*P **Pn** **23 50 27.3 +2.4**
**MLIR Monte Lirio 3.31 79**‖ *e*P **Pn** **23 50 27.0 +1.6**
**BCIP Isla Barro Col 3.32 80** **Pn** **23 50 26.6 +1.1**
**BCIP Isla Barro Col 3.32 80** P **Pn** **23 50 26.7 +1.2**
**BCIP Isla Barro Col 3.32 80** *i* P **Pn** **23 50 26.6 +1.1**
BCIP *i* S **Sg** **23 51 18.9 -2.1**
BCIP IAML 23 51 41.7
comp=Z,2µm,1.0s
**BCIP Isla Barro Col 3.32 80** *e*S **Sb** **23 51 13.4 +0.6**
**BCIP Isla Barro Col 3.32 80**‖ *i*P **Pn** **23 50 26.5 +1.1**
BCIP *i* S **Sg** **23 51 17.2 -3.8**
**BCIP Isla Barro Col 3.32 80**‖ *e*P **Pn** **23 50 25.9 +0.4**
**BLUN Bluefields 3.43 350** *i* P **Pn** **23 50 26.2 -0.8**
BLUN *i* S **Sb** **23 51 14.8 -1.2**
**FRIJ El Hiral 3.44 80** *e*P **Pn** **23 50 28.6 +1.5**
FRIJ *e*S **Sb** **23 51 17.2 +1.0**
**FRIJ El Hiral 3.44 80**‖ *i*P **Pn** **23 50 28.4 +1.3**
FRIJ *i* S **Sn** **23 51 09.7 +2.3**
**LCRUZ La Cruz 3.46 315**‖ *e*P **Pn** **23 50 30.1 +2.7**
**ARRA3 Arraijan, Pana 3.47 84** *i* P **Pn** **23 50 29.2 +1.7**
ARRA3 *i* S **Sb** **23 51 20.8 +3.6**
**TABO3 Taboga, Panama 3.56 87** *e*S **Pn** **23 50 29.2 +0.5**
**FLAM Flamenco Islan 3.58 85** *e*S **Sb** **23 51 23.3 +2.8**
**FLAM Flamenco Islan 3.58 85** *e*P **Pn** **23 50 31.2 +2.1**
**UPA Univ. de Panam 3.59 84** *e*P **Pn** **23 50 30.5 +1.3**
UPA *e*S **Sb** **23 51 22.2 +1.5**
**UPA Univ. de Panam 3.59 84** *i* P **Pn** **23 50 30.7 +1.5**
**ESPN Las Esperanzas 3.74 342** **Pn** **23 50 31.0 -0.2**
**ESPN Las Esperanzas 3.74 342** *i* P **Pn** **23 50 31.7 +0.5**
ESPN *i* S **Sb** **23 51 23.1 -1.8**
ESPN IAML 23 51 41.3
comp=Z,2µm,1.0s
**ESPN Las Esperanzs 3.74 342**‖ *e*P **Pn** **23 50 31.4 +0.2**
**JAPN Al SSO del Vol 3.82 319** *i* P **Pn** **23 50 35.4 +3.0**
JAPN IAML 23 50 45.4
comp=Z,960nm,1.0s
**ACON Acoyapa 3.89 329** **Pn** **23 50 33.1 -0.1**
**ACON Acoyapa 3.89 329** P **Pn** **23 50 34.8 +1.5**
**ACON Acoyapa 3.89 329** *i* P **Pn** **23 50 34.8 +1.5**
ACON IAML 23 50 36.5
comp=Z,2µm,1.0s
**ACON Acoyapa 3.89 329** *e*P **Pn** **23 50 33.2 -0.1**
**CHPO Chepo, Panama 4.02 82** *e*S **Sb** **23 51 30.9 -2.2**
**CHPO Chepo, Panama 4.02 82**‖ *i*P **Pn** **23 50 37.0 +1.9**
CHPO *i* S **Sb** **23 51 33.1 -0.1**
**CNTA3 Canitas, Panam 4.25 82** *e*P **Pn** **23 50 41.5 +3.2**
**BOAB BOACO BROADBAN 4.55 327** **Pn** **23 50 42.3 -0.1**
**BOAB BOACO BROADBAN 4.55 327** *i* P **Pn** **23 50 42.9 +0.5**
BOAB IAML 23 52 12.2
comp=Z,860nm,1.0s
**SAPS Ciudad Sandino 4.77 318** *i* P **Pn** **23 50 48.3 +2.8**
SAPS IAML 23 52 32.5
comp=Z,600nm,1.0s
**TOTI Torti 4.79 86** *e*P **Pn** **23 50 48.6 +2.8**
**TOTI Torti 4.79 86** *e*P **Pn** **23 50 47.8 +2.0**
**COPN Copaltepe 4.90 317** *i* P **Pn** **23 50 50.2 +2.9**
COPN IAML 23 51 08.2
comp=Z,350nm,1.0s
**PRVC Isla de Provid 5.05 20** P **Pn** **23 50 49.1 -0.2**
**PRVC Isla de Provid 5.05 20** *i* P **Pn** **23 50 49.1 -0.2**
**PRVC Isla de Provid 5.05 20** *i* P **Pn** **23 50 48.8 -0.5**
**UPD2 Meteti 5.08 90** *e*P **Pn** **23 50 52.1 +2.4**
UPD2 *e*S **Sb** **23 52 01.1 -2.4**
**UPD2 Meteti 5.08 90**‖ *i*P **Pn** **23 50 51.8 +2.1**
**CNGA Al SSO del Vol 5.21 318** *i* P **Pn** **23 50 51.7 +0.2**
CNGA IAML 23 50 53.6
comp=Z,350nm,1.0s
CNGA IVmB_BB 23 50 56.1
comp=Z,5µm,1.0s
**CNGN Cerro Negro 5.21 318** Pn **Pn** **23 50 52.9 +1.4**
**CNGN Cerro Negro 5.21 318** P **Pn** **23 50 53.9 +2.4**
comp=Z,267nm,0.6s
**CNGN Cerro Negro 5.21 318** *i* P **Pn** **23 50 54.6 +3.1**
**CNGN Cerro Negro 5.21 318**‖ *e*P **Pn** **23 50 54.2 +2.6**
**ROCN Rota Cerro Neg 5.25 318** *i* P **Pn** **23 50 53.8 +1.7**
ROCN IAmb IAmb 23 50 57.5
comp=Z,180nm,0.6s
ROCN IAML 23 51 03.4
comp=Z,270nm,1.0s
ROCN IVmB_BB 23 51 03.4
comp=Z,5µm,1.0s
**LIMN Finca el Limon 5.44 325** *i* P **Pn** **23 50 55.6 +0.9**
LIMN IAML 23 50 58.1
comp=Z,820nm,1.0s
LIMN IVmB_BB 23 50 58.1
comp=Z,7µm,1.0s
LIMN IAmb IAmb 23 50 58.5
comp=Z,800nm,0.8s
**PTAC Punta Ardita, 5.49 105** *e*P **Pn** **23 50 56.1 +0.8**
**PTAC Punta Ardita, 5.49 105** *e*P **Pn** **23 50 55.7 +0.4**
**CRIN San Cristobal 5.59 317** **Pn** **23 50 58.3 +1.6**
**CRIN San Cristobal 5.59 317** P **Pn** **23 50 59.1 +2.3**
comp=Z,795nm,0.8s,comp=Z,8µm
**SOMN Somoto 5.87 325** *i* P **Pn** **23 51 03.7 +3.0**
SOMN IAML 23 51 05.9
comp=Z,160nm,1.0s
SOMN IAmb IAmb 23 51 06.0
comp=Z,100nm,0.5s
SOMN IVmB_BB 23 51 06.3
comp=Z,2µm,1.0s
**CNCH Conchagua 6.53 316** *e*P **Pn** **23 51 12.6 +2.8**
CNCH IAML 23 51 41.2
comp=Z,336nm,0.5s
**CNCH Conchagua 6.53 316** *i* P **Pn** **23 51 12.6 +2.8**
CNCH IAML 23 51 13.6
comp=Z,380nm,1.0s
CNCH IAmb IAmb 23 51 21.9
comp=Z,310nm,0.6s
**APAC Apartado, Choc 6.54 96** P **Pn** **23 51 12.9 +3.1**
comp=Z,66nm,1.2s
**LCND La Caada 6.59 315** *e*P **Pn** **23 51 12.9 +2.4**
LCND *e*S **Sn** **23 52 25.1 -0.3**
LCND IAML 23 52 32.0
comp=Z,186nm,0.3s
**INTP Intipuca 6.63 314** *e*P **Pn** **23 51 13.6 +2.6**
**TGUH Tegucigalpa,Un 6.76 324** Pn **Pn** **23 51 14.7 +1.8**
**TGUH Tegucigalpa,Un 6.76 324** P **Pn** **23 51 15.2 +2.3**
comp=Z,230nm,0.7s,comp=Z,5µm
**JUCU Jucuarįn 6.81 313** *e*P **Pn** **23 51 16.1 +2.6**
JUCU *e*S **Sn** **23 52 31.5 +0.8**
**BLLM Bellamira 6.93 314** *e*P **Pn** **23 51 17.6 +2.4**
**PACA Pacayal 7.01 314** *i* P **Pn** **23 51 19.0 +2.7**
PACA IVmB_BB 23 51 21.6
comp=Z,16µm,1.0s
PACA IAmb IAmb 23 51 22.3
comp=Z,2µm,0.7s
PACA IAML 23 51 23.8
comp=Z,2µm,1.0s
**DBBC Dabeiba 7.05 102** P **Pn** **23 51 19.4 +2.5**
**CAHU Cacacuatique 7.14 316** *e*P **Pn** **23 51 21.0 +2.8**
**UREC San Jos de Ur 7.59 96** P **Pn** **23 51 25.5 +1.3**
comp=Z,46nm,0.8s
**UREC San Jos de Ur 7.59 96** *e*P **Pn** **23 51 25.9 +1.7**
**UREC San Jos de Ur 7.59 96** *e*P **Pn** **23 51 26.0 +1.7**
**PLMC San Jos del P 7.75 118** P **Pn** **23 51 26.2 -0.3**
comp=Z,29nm,1.0s
**SNET Serv Nac Est T 7.81 311** **Pn** **23 51 28.8 +1.4**
**BOQS Boqueron 7.88 311** *e*P **Pn** **23 51 31.4 +3.0**
**PMON Piamonte 7.89 311** *i* P **Pn** **23 51 31.2 +2.7**
PMON IAML 23 51 37.2
comp=Z,560nm,1.0s
PMON IAmb IAmb 23 51 37.3
comp=Z,400nm,0.5s
PMON IVmB_BB 23 51 40.5
comp=Z,4µm,1.0s
**JAYA Jayaque - finc 7.96 310** *i* P **Pn** **23 51 31.8 +2.4**
JAYA IAML 23 51 34.1
comp=Z,760nm,1.0s
JAYA IAmb IAmb 23 51 34.2
comp=Z,590nm,0.7s
**SJCC San Jacinto, C 7.97 80** P **Pn** **23 51 30.2 +0.7**
comp=Z,76nm,0.8s
**YOTC Yotoco, Valle 8.18 124** P **Pn** **23 51 33.1 +0.7**
comp=Z,14nm,0.8s

**CEVE Cerro Verde 8.20 310** *e*P **Pn** **23 51 36.0 +3.3**
CEVE IAML 23 51 50.0
comp=Z,223nm,0.5s
CEVE *e*S **Sn** **23 53 05.0 -0.2**
**CEVE Cerro Verde 8.20 310** *i* P **Pn** **23 51 36.1 +3.3**
**ZARC Zaragoza, Cauc 8.28 97** P **Pn** **23 51 34.6 +0.8**
comp=Z,33nm,0.7s
**NUBE Las Nubes 8.36 310** *i* P **Pn** **23 51 37.7 +2.7**
NUBE IAmb IAmb 23 51 42.0
comp=Z,170nm,0.6s
NUBE IVmB_BB 23 52 26.8
comp=Z,14µm,1.0s
**MTO3 Montecristo 8.37 314** Pn **Pn** **23 51 36.0 +0.8**
**NORC Norcasia 8.76 110** P **Pn** **23 51 43.6 +3.3**
comp=Z,13nm,1.2s
**BBAC Balboa, Cauca 8.79 138** P **Pn** **23 51 44.3 +3.3**
comp=Z,24nm,1.2s
**POPC Popayan, Colom 8.82 133** P **Pn** **23 51 41.7 +0.3**
comp=Z,36nm,1.4s
**PTBC PUERTO BERRIO, 8.86 103** P **Pn** **23 51 44.3 +2.6**
comp=Z,14nm,1.1s
**ORTC Ortega, Tolima 9.14 120** P **Pn** **23 51 48.7 +3.2**
comp=Z,28nm,0.8s
**GCUF Volcan Galeras 9.34 141** P **Pn** **23 51 50.4 +1.7**
comp=Z,43nm,1.2s
**TULM Tulcn-Chalpat 9.49 145** **Pn** **23 51 55.3 +4.6**
**ROSC El Rosal 9.53 113** Pn **Pn** **23 51 55.1 +3.9**
**ROSC El Rosal 9.53 113** Pn **Pn** **23 51 51.3 +0.1**
comp=Z,0.8nm,0.3s,baz=339,slow=23,SNR=1.4
comp=Z,5.3nm,0.5s
**APG El Apazote 9.57 312** Pn **Pn** **23 51 53.5 +1.9**
comp=Z,0.4nm,0.3s,baz=130,slow=6.2,SNR=78
**IMBA Imbabura, San 9.64 149** Pn **Pn** **23 51 57.3 +4.6**
**PULU Pululahua 9.71 151** Pn **Pn** **23 51 56.9 +3.2**
**CHIC Chingaza 10.15 112** P **Pn** **23 52 04.0 +4.2**
comp=Z,24nm,1.2s
**ANTS Antisana-Sarah 10.32 151** **Pn** **23 52 05.6 +3.4**
**RUSC La Rusia 10.34 104** P **Pn** **23 52 05.1 +2.7**
**CCIG Comitan 11.62 312** Pn **Pn** **23 52 20.7 +1.0**
**SDV Santo Domingo 12.37 88** Pn **Pn** **23 52 29.6 -0.3**
comp=Z,1.1nm,0.3s,baz=179,slow=11,SNR=3.7
comp=Z,9.5nm,0.5s
**SDV Santo Domingo 12.37 88** *e*P **Pn** **23 52 32.8 +2.8**
**CMIG Matias Romero 14.20 308** Pn **Pn** **23 52 54.6 -0.2**
comp=Z,1.3nm,0.3s,baz=121,slow=8.4,SNR=12
CMIG Sn **Sn** **23 55 32.7 +0.6**
comp=Z,0.2nm,0.3s,baz=334,slow=14,SNR=1.7
comp=Z,12nm,0.9s
**BAUV El Baul 14.93 88** Pn **Pn** **23 53 05.2 +0.4**
**SDDR Presa de Saban 15.45 47** **Pn** **23 53 10.1 -1.5**
SDDR IAmb IAmb 23 53 25.1
comp=Z,31nm,0.9s
**ATAH Atahualpa 16.34 163** Pn **Pn** **23 53 23.7 +0.2**
comp=Z,2.8nm,0.9s,baz=19,slow=15,SNR=1.1
**TLIG Tlapa 17.44 302** **P** **23 53 38.5 +0.2**
**PCRV Puerto La Cruz 18.33 84** P **Pn** **23 53 46.9 -1.1**
comp=Z,0.3nm,0.3s,baz=358,slow=23,SNR=3.0
comp=Z,16nm,0.9s
**OBIP Obispado Ponce 18.61 58** **P** **23 53 50.7 -0.3**
OBIP IAmb IAmb 23 54 00.5
comp=Z,53nm,1.1s
**UUPR Utuado, UPR, P 18.62 57** **Pn** **23 53 52.0 +0.6**
**AOPR Arecibo Observ 18.63 57** **P** **23 53 51.3 0.0**
AOPR IAmb IAmb 23 54 08.9
comp=Z,56nm,1.2s
**CELP Cerrillos 18.65 58** **Pn** **23 53 52.0 +0.1**
**IGPR InterUniversit 19.00 59** P **Pn** **23 53 56.5 +0.5**
**PDPR Patillas Dam, 19.09 59** P **Pn** **23 53 57.6 +0.4**
**GCPR Guaynabo City 19.17 58** P **Pn** **23 53 58.4 +0.3**
GCPR IAmb IAmb 23 54 02.9
comp=Z,62nm,1.0s
**CZSB Cruzeiro do Su 19.28 147** P **Pn** **23 54 03.2 +3.7**
CZSB IAmb IAmb 23 54 17.9
comp=Z,68nm,1.4s
**CZSB Cruzeiro do Su 19.28 147** *e*P **Pn** **23 54 03.1 +3.6**
**HUMP Col San Antoni 19.30 59** P **P** **23 53 57.9 -0.7**
**DWPF Disney Wildern 19.46 5** P **Pn** **23 54 01.1 -0.4**
baz=185
**656A Willston 20.66 2** P **P** **23 54 12.3 -1.0**
656A IAmb IAmb 23 54 19.6
comp=Z,32nm,0.7s
**NNA Nana 21.40 163** P **P** **23 54 20.4 -1.0**
comp=Z,7.1nm,0.6s,baz=314,slow=9.3,SNR=2.1
comp=Z,7.1nm,0.6s
**SMRT St. Maarten 21.65 62** P **P** **23 54 25.6 +1.5**
SMRT IAmb IAmb 23 54 26.8
comp=Z,52nm,0.8s
**TEFE Tefe 22.04 122** *e*P **P** **23 54 28.8 +0.5**
**GDHS Morne Mazeau, 22.21 68** P **P** **23 54 29.2 -1.0**
**BRAL Brewton 22.74 351** P **P** **23 54 37.0 +1.4**
baz=170
**352A Blakely 22.81 356** P **P** **23 54 36.0 -0.4**
**255A Hazlehurst 23.21 1** P **P** **23 54 40.4 -0.1**
255A IAmb IAmb 23 54 45.1
comp=Z,31nm,0.8s
**BOAV Boa Vista 23.34 104** P **P** **23 54 42.8 +0.8**
BOAV IAmb IAmb 23 55 01.1
comp=Z,30nm,1.5s
**BOAV Boa Vista 23.34 104** *e*P **P** **23 54 42.1 0.0**
**ZAIG Zacatecas 23.36 309** P **P** **23 54 43.6 +1.2**
ZAIG IAmb IAmb 23 54 46.5
comp=Z,22nm,1.2s
**346A Big Creek Wild 23.41 346** P **P** **23 54 43.0 +0.5**
346A IAmb IAmb 23 54 47.5
comp=Z,25nm,0.8s
**250A Grady 23.43 353** P **P** **23 54 42.9 +0.2**
250A IAmb IAmb 23 54 45.7
comp=Z,60nm,1.1s
**HBVL Hebbronville 23.51 323** P **P** **23 54 42.8 -0.8**
**154A Montrose 23.88 0** P **P** **23 54 47.6 +0.5**
**441A DeRidder 23.94 338** P **P** **23 54 48.5 +0.8**
**152A Waverly Hall 23.98 357** P **P** **23 54 48.4 +0.4**
152A IAmb IAmb 23 54 50.2
comp=Z,36nm,0.8s
**HKT Hockley 24.33 332** P **P** **23 54 51.3 +0.1**
HKT IAmb IAmb 23 54 52.8
comp=Z,22nm,1.1s
**HKT Hockley 24.33 332** **P** **23 54 51.9 +0.7**
**VBMS Vicksburg 24.47 345** P **P** **23 54 53.0 +0.6**
**VBMS Vicksburg 24.47 345** P **P** **23 54 54.2 +1.7**
baz=162
**146A Union 24.53 348** P **P** **23 54 53.5 +0.5**
**NHSC New Hope 24.53 6** P **P** **23 54 53.9 +0.9**
**NHSC New Hope 24.53 6** P **P** **23 54 54.8 +1.8**
baz=187
**LRAL Lakeview Retre 24.56 352** P **P** **23 54 54.1 +0.7**
LRAL IAmb IAmb 23 54 56.3
comp=Z,41nm,1.1s
**LRAL Lakeview Retre 24.56 352** P **P** **23 54 55.2 +1.8**
baz=171
**GOGA Godfrey 24.68 359** P **P** **23 54 55.1 +0.7**
GOGA IAmb IAmb 23 54 58.2
comp=Z,47nm,0.9s
**GOGA Godfrey 24.68 359** P **P** **23 54 55.9 +1.5**
baz=179
**MLDN Muldoon 24.78 330** P **P** **23 54 56.7 +1.4**
MLDN IAmb IAmb 23 54 58.0
comp=Z,24nm,0.7s
**HNVL Huntsville, TX 24.86 334** P **P** **23 54 56.5 +0.4**
HNVL IAmb IAmb 23 54 58.1
comp=Z,40nm,1.1s
**833A Chaparral WMA, 24.88 324** P **P** **23 54 55.6 -0.6**
833A IAmb IAmb 23 54 57.0
comp=Z,15nm,0.8s
**833A Chaparral WMA, 24.88 324** P **P** **23 54 56.2 0.0**
baz=139
**ETMB Extrema 24.89 137** P **P** **23 54 55.9 -0.5**
**ETMB Extrema 24.89 137** *e*P **P** **23 54 55.9 -0.5**
**Z47A Carrollton 24.89 350** P **P** **23 54 56.7 +0.4**
**Y52A Lilburn 25.14 358** P **P** **23 54 58.7 +0.1**
**143A Socs Landing, 25.16 343** P **P** **23 54 58.3 -0.5**
143A IAmb IAmb 23 55 03.5
comp=Z,26nm,0.8s
**Y49A Blount Mountai 25.30 354** P **P** **23 54 59.9 -0.2**
Y49A IAmb IAmb 23 55 03.8
comp=Z,42nm,1.1s
**Y58A Scranton 25.38 7** P **P** **23 55 00.6 -0.1**
**NATX Nacogdoches 25.40 337** P **P** **23 55 01.4 +0.4**
baz=152
**Y57A Sumter 25.41 5** P **P** **23 55 00.5 -0.5**
**HODGE Hodges 25.51 2** P **P** **23 55 02.8 +0.9**
**JSC Jenkinsville 25.61 4** P **P** **23 55 03.7 +0.9**
**HNDO Hondo 25.73 326** P **P** **23 55 03.7 -0.3**
**Y45A Yeager Farm, C 25.82 348** P **P** **23 55 05.0 +0.3**
**435B Jarrell 25.85 331** P **P** **23 55 06.0 +0.9**

435B IAmb IAmb 23 55 07.7
comp=Z,38nm,1.1s
**435B Jarrell 25.85 331** P **P** **23 55 06.0 +0.9**
baz=145
**X51A Calhoun 25.88 357** P **P** **23 55 05.8 +0.5**
X51A IAmb IAmb 23 55 08.4
comp=Z,36nm,0.9s
**FPAL Fort Paine 25.91 355** P **P** **23 55 05.9 +0.3**
FPAL IAmb IAmb 23 55 07.3
comp=Z,19nm,0.9s
**X48A Hartselle 25.97 353** P **P** **23 55 06.3 +0.2**
X48A IAmb IAmb 23 55 10.2
comp=Z,19nm,0.8s
**BIRD Birdtown, Kers 26.03 5** P **P** **23 55 07.1 +0.5**
**X58A Rowland 26.06 7** P **P** **23 55 07.6 +0.7**
**237A Washetta, Mont 26.08 335** P **P** **23 55 08.7 +1.6**
237A IAmb IAmb 23 55 10.4
comp=Z,33nm,1.1s
**PAULI Pauline 26.11 2** P **P** **23 55 08.1 +0.7**
**BG3 Lake Jocassee 26.26 0** P **P** **23 55 09.6 +0.8**
BG3 IAmb IAmb 23 55 13.9
comp=Z,25nm,0.8s
**W52A Murphy 26.37 359** P **P** **23 55 10.4 +0.6**
W52A IAmb IAmb 23 55 12.0
comp=Z,20nm,0.8s
**CCAR Cane Creek 26.41 344** P **P** **23 55 10.5 +0.4**
**DRIO Del Rio 26.41 324** P **P** **23 55 09.3 -0.9**
**OXF Oxford 26.41 348** P **P** **23 55 10.1 0.0**
**OXF Oxford 26.41 348** P **P** **23 55 11.1 +1.0**
baz=166
**SAML Samuel 26.45 131** P **P** **23 55 10.9 +0.2**
**SAML Samuel 26.45 131** *e*P **P** **23 55 08.6 -2.1**
**W50A Signal Mountai 26.54 356** P **P** **23 55 11.5 +0.2**
W50A IAmb IAmb 23 55 13.2
comp=Z,13nm,0.8s
**W57A Gilead 26.57 6** P **P** **23 55 11.4 -0.1**
**WLAR White Oak Lake 26.59 341** P **P** **23 55 12.3 +0.5**
**SWET Sewanee 26.60 355** P **P** **23 55 11.5 -0.4**
SWET IAmb IAmb 23 55 17.6
comp=Z,16nm,0.8s
**PLAL Pickwick Lake 26.63 351** P **P** **23 55 12.1 0.0**
**CPCT Cooper Cave 26.74 358** P **P** **23 55 14.0 +1.0**
CPCT IAmb IAmb 23 55 18.1
comp=Z,12nm,0.8s
**JCT Junction City 26.75 327** P **P** **23 55 12.3 -1.0**
JCT IAmb IAmb 23 55 16.0
comp=Z,25nm,1.5s
**JCT Junction City 26.75 327** P **P** **23 55 14.0 +0.7**
baz=141
**TREL Terrell 26.83 335** P **P** **23 55 14.3 +0.5**
TREL IAmb IAmb 23 55 17.6
comp=Z,26nm,0.9s
**Z38A Mt. Pleasant 26.86 338** P **P** **23 55 14.0 -0.1**
Z38A IAmb IAmb 23 55 21.3
comp=Z,18nm,0.9s
**TKL Tuckaleechee C 26.93 359** P **P** **23 55 15.3 +0.5**
TKL IAmb IAmb 23 55 20.4
comp=Z,21nm,1.1s
**V53A Saluda 26.93 1** P **P** **23 55 15.8 +0.9**
V53A IAmb IAmb 23 55 20.8
comp=Z,11nm,0.8s
**CNNC Cliffs of the 26.94 10** P **P** **23 55 15.9 +1.1**
CNNC IAmb IAmb 23 55 20.4
comp=Z,26nm,0.8s
**BRDY Brady 26.96 329** P **P** **23 55 14.3 -0.9**
BRDY IAmb IAmb 23 55 19.2
comp=Z,11nm,0.8s
**V52A Sevierville 27.11 359** P **P** **23 55 16.5 +0.2**
V52A IAmb IAmb 23 55 18.6
comp=Z,32nm,1.4s
**V55A Taylorsville 27.17 3** P **P** **23 55 17.7 +0.8**
V55A IAmb IAmb 23 55 19.4
comp=Z,15nm,1.1s
**V48A Smith Brothers 27.21 353** P **P** **23 55 17.6 +0.3**
V48A IAmb IAmb 23 55 18.8
comp=Z,14nm,0.9s
**X40A Basin Creek Fa 27.25 342** P **P** **23 55 17.6 0.0**
**V58A Windy Hill, Pi 27.31 7** P **P** **23 55 18.2 +0.1**
**UALR University of 27.37 343** P **P** **23 55 17.9 -0.9**
UALR IAmb IAmb 23 55 20.0
comp=Z,31nm,1.0s
**CLTN Cedars of Leba 27.51 354** P **P** **23 55 19.8 -0.1**
**MIAR Mount Ida 27.53 341** P **P** **23 55 20.0 -0.2**
MIAR IAmb IAmb 23 55 21.5
comp=Z,36nm,1.2s
**MIAR Mount Ida 27.53 341** P **P** **23 55 20.1 0.0**
baz=157
**HBAR Harrisburg 27.68 347** P **P** **23 55 21.2 -0.3**
**SAND Sanderson 27.69 323** P **P** **23 55 21.5 -0.3**
**WVT Waverly 27.72 352** P **P** **23 55 21.2 -0.7**
**WVT Waverly 27.72 352** P **P** **23 55 22.1 +0.2**
baz=170
**U56A King 27.72 5** P **P** **23 55 22.4 +0.5**
**TZTN Tazewell 27.81 359** P **P** **23 55 23.1 +0.4**
TZTN IAmb IAmb 23 55 25.6
comp=Z,25nm,1.3s
**TZTN Tazewell 27.81 359** P **P** **23 55 23.6 +1.0**
baz=179
**U54A Nelsons Funny 27.81 2** P **P** **23 55 23.3 +0.6**
U54A IAmb IAmb 23 55 25.1
comp=Z,27nm,1.0s
**OZNA Ozona 27.82 325** P **P** **23 55 22.9 0.0**
**WHAR Wooly Hollow 27.84 344** P **P** **23 55 22.1 -0.9**
**U49A Red Boiling Sp 27.88 355** P **P** **23 55 23.7 +0.4**
U49A IAmb IAmb 23 55 24.8
comp=Z,17nm,0.9s
**PLPT Palo Pinto 27.88 332** P **P** **23 55 22.7 -0.6**
PLPT IAmb IAmb 23 55 25.1
comp=Z,19nm,1.0s
**GNAR Gosnell 27.94 348** P **P** **23 55 24.2 +0.4**
**FW03 Perrin-Whitt E 27.95 333** P **P** **23 55 24.1 +0.1**
FW03 IAmb IAmb 23 55 29.7
comp=Z,9.9nm,0.7s
**LNXT Lenox 27.97 349** P **P** **23 55 24.5 +0.4**
**X37A Clayton 28.19 338** **P** **23 55 26.5 +0.4**
**TXAR Lajitas Array 28.21 320** P **P** **23 55 25.6 -0.9**
comp=Z,0.5nm,0.7s,baz=136,slow=9.5,SNR=6.1
TXAR PcP **PcP** **23 58 40.5 +0.5**
comp=Z,1.1nm,0.8s,baz=142,slow=6.3,SNR=5.1
comp=Z,0.5nm,0.7s
**T50A Nancy 28.32 357** P **P** **23 55 27.3 +0.1**
T50A IAmb IAmb 23 55 28.8
comp=Z,11nm,0.9s
**HICK Hickman 28.35 350** P **P** **23 55 27.0 -0.4**
HICK IAmb IAmb 23 55 36.6
comp=Z,27nm,0.8s
**FCAR Ozark Folk Cen 28.36 345** IAmb IAmb 23 55 28.6
comp=Z,31nm,1.0s
**LOOK Love County 28.37 335** P **P** **23 55 28.4 +0.6**
LOOK IAmb IAmb 23 55 30.0
comp=Z,31nm,1.0s
**T47A Sharon Grove 28.48 353** P **P** **23 55 28.4 -0.2**
T47A IAmb IAmb 23 55 30.2
comp=Z,18nm,1.0s
**T57A Hurt 28.48 7** P **P** **23 55 29.3 +0.7**
T57A IAmb IAmb 23 55 30.7
comp=Z,22nm,0.9s
**PARMO Parma 28.56 349** P **P** **23 55 28.9 -0.5**
**BLA Blacksburg 28.58 5** P **P** **23 55 30.0 +0.5**
**BLA Blacksburg 28.58 5** P **P** **23 55 30.5 +0.9**
baz=186
**SGCY Sterling City 28.58 327** **PcP** **23 58 42.3 +1.4**
**T59A Double "B" Far 28.68 9** P **P** **23 55 30.9 +0.5**
T59A IAmb IAmb 23 55 32.7
comp=Z,30nm,1.2s
**PBMO Poplar Bluff 28.81 348** P **P** **23 55 30.9 -0.6**
PBMO IAmb IAmb 23 55 32.4
comp=Z,11nm,0.9s
**LPAZ La Paz 28.86 149** P **P** **23 55 34.8 +1.9**
**LPAZ La Paz 28.86 149** P **P** **23 55 33.0 +0.2**
comp=Z,2.5nm,0.9s,baz=309,slow=7.2,SNR=7.4
comp=Z,2.5nm,0.9s
**LPAZ La Paz 28.86 149** *e*P **P** **23 55 33.1 +0.2**
**S51A Beattyville 28.90 359** P **P** **23 55 31.8 -0.6**
S51A IAmb IAmb 23 55 34.2
comp=Z,12nm,0.8s
**ALPN Alpine 28.91 321** P **P** **23 55 32.2 -0.6**
**MNHN Monahans 29.07 324** P **P** **23 55 34.2 +0.2**
**S54A Dingess, Beckl 29.11 3** **P** **23 55 34.8 +0.5**
S54A IAmb IAmb 23 55 36.4
comp=Z,22nm,0.9s
**CGM3 Cape Girardeau 29.16 349** P **P** **23 55 34.4 -0.2**
CGM3 IAmb IAmb 23 55 35.6
comp=Z,31nm,1.2s
**APMT Aspermont 29.17 330** P **P** **23 55 34.3 -0.5**

**X34A Smith Ranch, M 29.17 335 P P 23 55 35.1 +0.3**
X34A IAmb IAmb 23 55 44.9
comp=Z,12nm,1.1s
**T42A Van Buren 29.20 347 IAmb IAmb** 23 55 35.4
comp=Z,28nm,0.9s
**HHAR Hobbs 29.25 342 P P 23 55 34.6 -0.9**
HHAR IAmb IAmb 23 55 35.8
comp=Z,16nm,1.4s
**S57A Dark Hollow, R 29.27 7 P P 23 55 35.4 -0.2**
S57A IAmb IAmb 23 55 37.5
comp=Z,12nm,0.8s
**S44A Carbondale 29.48 350 P P 23 55 37.1 -0.3**
S44A IAmb IAmb 23 55 38.4
comp=Z,21nm,1.2s
**SIUC Southern Illin 29.49 350 P P 23 55 37.3 -0.2**
SIUC IAmb IAmb 23 55 38.5
comp=Z,26nm,1.2s
**USIN University of 29.51 353 P P 23 55 37.8 0.0**
USIN IAmb IAmb 23 55 38.6
comp=Z,22nm,0.9s
**U38A Gravette 29.53 341 P P 23 55 36.8 -1.2**
U38A IAmb IAmb 23 55 38.2
comp=Z,25nm,1.5s
**R50A Paris 29.56 358 P P 23 55 38.4 +0.2**
R50A IAmb IAmb 23 55 40.0
comp=Z,19nm,1.0s
**MGMO Mountain Grove 29.59 345 P P 23 55 37.4 -1.2**
**R49A Shelbyville 29.61 357 P P 23 55 39.0 +0.4**
**R58B Mineral 29.61 8 P P 23 55 39.4 +0.8**
R58B IAmb IAmb 23 55 41.0
comp=Z,12nm,0.7s
**WCI Wyandotte Cave 29.62 355 P P 23 55 39.3 +0.5**
WCI IAmb IAmb 23 55 40.5
comp=Z,33nm,1.0s
**WCI Wyandotte Cave 29.62 355 P P 23 55 38.9 +0.2**
baz=174
**R55A Marlinton 29.67 5 IAmb IAmb** 23 55 41.9
comp=Z,29nm,0.9s
**WMOK Wichita Mounta 29.70 333 P P 23 55 39.5 -0.1**
baz=147
**DEOK Depew 29.72 338 IAmb IAmb** 23 55 40.0
comp=Z,11nm,0.9s
**CBN Corbin Frederi 29.92 9 P P 23 55 42.4 +1.0**
CBN IAmb IAmb 23 55 44.5
comp=Z,22nm,0.8s
**CBN Corbin Frederi 29.92 9 P P 23 55 42.6 +1.2**
baz=192
**OK031 S. Brethren Rd 29.95 337 IAmb IAmb** 23 55 41.9
comp=Z,18nm,0.7s
**SSFO Shawnee State 29.95 360 P P 23 55 41.3 -0.4**
SSFO IAmb IAmb 23 55 43.7
comp=Z,27nm,1.2s
**OK052 Battle Ridge R 29.97 337 IAmb IAmb** 23 55 42.1
comp=Z,16nm,0.7s
**FVM French Village 29.97 348 IAmb IAmb** 23 55 43.3
comp=Z,24nm,1.4s
**VHRN Van Horn 30.04 320 P P 23 55 42.7 0.0**
**QUOK Quay 30.09 338 P 23 55 41.6 -1.4**
QUOK IAmb IAmb 23 55 43.7
comp=Z,18nm,1.2s
**CCM Cathedral Cave 30.21 347 P P 23 55 43.5 -0.5**
**CCM Cathedral Cave 30.21 347 P P 23 55 43.6 -0.3**
baz=164
**Q52A Bidwell 30.23 1 P P 23 55 44.3 +0.2**
**Q54A Coxs Mills 30.31 4 P P 23 55 45.5 +0.6**
**Q56A Snyder Ridge, 30.51 6 P P 23 55 47.5 +0.9**
**SLM Saint Louis 30.57 349 P P 23 55 46.9 -0.2**
**Q44A Meyer Farm, Va 30.62 351 P P 23 55 47.0 -0.5**
Q44A IAmb IAmb 23 55 48.3
comp=Z,15nm,0.9s
**SMWD Samnorwood 30.67 332 P P 23 55 48.5 +0.3**
SMWD IAmb IAmb 23 55 49.4
comp=Z,9.1nm,0.8s
**R40A Maddies Statio 30.67 346 P P 23 55 46.9 -1.2**
R40A IAmb IAmb 23 55 48.4
comp=Z,14nm,1.1s
**MAL2 Monte Alegre, 30.75 109 P P 23 55 50.3 +1.3**
MAL2 IAmb IAmb 23 55 55.8
comp=Z,24nm,1.1s
**P53A Whipple 30.78 3 P P 23 55 49.6 +0.6**
**P48A Milroy 30.79 357 P P 23 55 48.4 -0.6**
**P49A Miami Univ. Ec 30.82 358 P P 23 55 48.4 -1.0**
P49A IAmb IAmb 23 55 50.2
comp=Z,10nm,0.7s
**P49A Miami Univ. Ec 30.82 358 P P 23 55 49.4 +0.1**
baz=177
**P52A Corning 30.90 2 P P 23 55 50.4 +0.4**
P52A IAmb IAmb 23 55 51.9
comp=Z,23nm,1.1s
**P52A Corning 30.90 2 P P 23 55 51.6 +1.5**
baz=182
**MNTX Cornudas Mount 30.91 321 P P 23 55 51.1 +0.9**
baz=133
**MCWV Mont Chateau 31.05 5 P P 23 55 52.3 +0.9**
MCWV IAmb IAmb 23 55 54.5
comp=Z,32nm,1.1s
**MCWV Mont Chateau 31.05 5 P P 23 55 52.4 +1.0**
baz=186
**P57A Homestead Farm 31.08 8 P P 23 55 52.2 +0.6**
**ELIS Ellis County 31.09 334 P P 23 55 51.6 -0.2**
ELIS IAmb IAmb 23 55 53.3
comp=Z,18nm,0.8s
**SDMD Soldier's Deli 31.18 9 P P 23 55 53.3 +0.7**
SDMD IAmb IAmb 23 55 54.8
comp=Z,12nm,0.9s
**AMTX Amarillo 31.19 330 P P 23 55 53.2 +0.5**
**AMTX Amarillo 31.19 330 P P 23 55 53.6 +0.9**
baz=142
**VILB Vilhena 31.28 133 P P 23 55 53.4 -0.4**
VILB IAmb IAmb 23 55 54.4
comp=Z,9.3nm,0.9s
**ACSO Alum Creek Sta 31.49 0 P P 23 55 55.5 +0.2**
**ACSO Alum Creek Sta 31.49 0 P P 23 55 55.6 +0.4**
baz=180
**O54A Avella 31.54 4 P P 23 55 56.5 +0.9**
**O53A New Philadelph 31.55 3 P P 23 55 55.6 -0.2**
**O53A New Philadelph 31.55 3 P P 23 55 56.6 +0.8**
baz=184
**P40A Paris 31.80 347 P P 23 55 56.3 -1.7**
**MVL Millersville 31.84 10 P P 23 55 58.9 +0.6**
**WUPA West Chester U 31.91 11 P P 23 55 58.8 -0.1**
WUPA IAmb IAmb 23 56 01.3
comp=Z,13nm,0.9s
**N51A Ashland 32.18 1 P P 23 56 01.1 -0.2**
**N49A Columbus Grove 32.19 359 P P 23 56 01.1 -0.3**
N49A IAmb IAmb 23 56 02.4
comp=Z,26nm,1.2s
**N47A Urbana 32.22 356 P P 23 56 00.5 -1.1**
N47A IAmb IAmb 23 56 01.9
comp=Z,20nm,1.1s
**SSPA Standing Stone 32.23 8 P P 23 56 01.8 +0.1**
**SSPA Standing Stone 32.23 8 P P 23 56 02.8 +1.0**
baz=190
**P38A Dawn 32.25 345 P P 23 56 01.2 -0.7**
P38A IAmb IAmb 23 56 02.0
comp=Z,23nm,1.0s
**HDIL Hopedale 32.28 351 P 23 56 01.1 -1.1**
**HDIL Hopedale 32.28 351 P P 23 56 02.2 +0.1**
baz=168
**N58A Sunbury 32.60 9 P P 23 56 04.9 -0.1**
**KSU1 Kansas State U 32.67 340 P P 23 56 04.4 -1.2**
**KSU1 Kansas State U 32.67 340 P P 23 56 05.9 +0.2**
baz=155
**N41A Harden Midland 32.69 349 P P 23 56 04.5 -1.3**
**M53A WI Miller and 32.77 3 P P 23 56 05.7 -0.7**
M53A IAmb IAmb 23 56 08.1
comp=Z,22nm,0.9s
**M53A WI Miller and 32.77 3 P P 23 56 07.1 +0.7**
baz=184
**R32A Long Quarter, 32.83 337 P P 23 56 06.8 -0.3**
R32A IAmb IAmb 23 56 08.8
comp=Z,21nm,1.0s
**RTBA Rita Blanca 32.94 330 P P 23 56 08.1 -0.1**
RTBA IAmb IAmb 23 56 10.2
comp=Z,13nm,1.1s
**121A Cookes Peak, D 32.98 320 P P 23 56 10.3 +1.6**
121A IAmb IAmb 23 56 12.3
comp=Z,9.3nm,0.8s
**121A Cookes Peak, D 32.98 320 P P 23 56 10.5 +1.9**
baz=131
**ALLY Alegheny Colle 33.01 4 P 23 56 08.4 -0.2**
**M57A Sunshine Farm, 33.03 8 P P 23 56 09.1 +0.3**
**PDRB Porto dos Gac 33.07 127 eP P 23 56 07.8 -1.6**
**L48A N Adams 33.22 358 P 23 56 08.8 -1.5**
L48A IAmb IAmb 23 56 10.9
comp=Z,35nm,1.5s
**319A Douglas 33.24 317 P P 23 56 11.8 +0.9**
319A IAmb IAmb 23 56 14.2
comp=Z,19nm,1.0s
**PAL Palisades 33.29 13 P P 23 56 12.0 +1.1**
PAL IAmb IAmb 23 56 14.7
comp=Z,27nm,1.1s
**PAL Palisades 33.29 13 P P 23 56 12.5 +1.5**
baz=147
**KSPA Keystone Colle 33.46 10 P P 23 56 13.1 +0.6**
**PTLB Pontes e Lacer 33.73 135 eP P 23 56 14.1 -1.0**
**L56A Greenwood 33.75 7 P P 23 56 14.7 -0.4**
**L42A Oliver, Polo 33.75 351 P P 23 56 13.7 -1.3**
**ANMO Albuquerque 33.81 324 P P 23 56 16.6 +0.7**
**ANMO Albuquerque 33.81 324 P P 23 56 16.3 +0.4**
baz=135
**DUN6 Lazy B Ranch 33.84 318 P P 23 56 17.4 +1.3**
**WVNY West Valley, N 33.90 6 P P 23 56 16.4 +0.1**
**LVC Limon Verde 34.02 156 P P 23 56 20.6 +2.6**
**BINY Binghamton 34.04 10 P P 23 56 17.9 +0.3**
**BINY Binghamton 34.04 10 P P 23 56 18.9 +1.3**
baz=193
**L59A Walton 34.20 11 P P 23 56 19.4 +0.5**
**MMNY Mt. Morris Dam 34.30 7 P P 23 56 20.3 +0.5**
MMNY IAmb IAmb 23 56 21.4
comp=Z,9.4nm,1.0s
**T25A Trinidad 34.32 329 P P 23 56 20.7 +0.4**
T25A IAmb IAmb 23 56 24.2
comp=Z,12nm,1.4s
**T25A Trinidad 34.32 329 P P 23 56 21.5 +1.1**
baz=140
**K57A Scipio Center 34.48 9 P P 23 56 21.0 -0.3**
**JFWS Jewell Farm 34.73 351 IAmb IAmb** 23 56 23.5
comp=Z,14nm,0.7s
**JFWS Jewell Farm 34.73 351 P P 23 56 23.2 -0.3**
baz=168
**TUC Tucson 34.82 317 P P 23 56 26.0 +1.5**
**TUC Tucson 34.82 317 P P 23 56 26.1 +1.5**
baz=126
**J55A Hilton 34.83 7 P P 23 56 24.5 +0.2**
J55A IAmb IAmb 23 56 25.3
comp=Z,19nm,1.0s
**J56A Wolcott 34.97 8 P P 23 56 25.5 0.0**
**TRY Troy 34.99 12 P P 23 56 26.1 +0.3**
TRY IAmb IAmb 23 56 28.4
comp=Z,20nm,1.0s
**L34A Svendsen Farm, 35.21 343 IAmb IAmb** 23 56 47.4
comp=Z,23nm,1.0s
**J57A Williamstown 35.22 9 P P 23 56 28.2 +0.4**
J57A IAmb IAmb 23 56 29.4
comp=Z,23nm,1.1s
**J58A Remsen 35.29 10 IAmb IAmb** 23 56 30.3
comp=Z,35nm,0.9s
**SDCO Great Sand Dun 35.35 329 P P 23 56 31.1 +1.8**
baz=139
**J59A Piesco 35.53 11 IAmb IAmb** 23 56 32.3
comp=Z,18nm,1.1s
**PECO Prince Edward 35.59 8 P P 23 56 31.1 +0.2**
**ACCN Adirondack Com 35.62 12 P P 23 56 31.3 +0.2**
ACCN IAmb IAmb 23 56 32.9
comp=Z,11nm,0.9s
**X18A Snowflake 35.65 320 P P 23 56 32.7 +1.0**
**J61A Chester 35.82 13 IAmb IAmb** 23 56 35.6
comp=Z,14nm,0.9s
**W18A Petrified Fore 35.89 321 P P 23 56 34.7 +0.8**
W18A IAmb IAmb 23 56 37.4
comp=Z,18nm,1.1s
**W18A Petrified Fore 35.89 321 P P 23 56 35.9 +2.0**
baz=131
**H43A Windswept, Lux 35.95 354 IAmb IAmb** 23 56 34.2
comp=Z,33nm,0.8s
**214A Organ Pipe Nat 36.02 314 P P 23 56 35.7 +0.9**
214A IAmb IAmb 23 56 38.0
comp=Z,17nm,1.0s
**214A Organ Pipe Nat 36.02 314 P P 23 56 36.9 +2.0**
baz=124
**S22A 4UR Ranch, Cre 36.04 327 P P 23 56 36.9 +1.7**
baz=138
**NCB Newcomb 36.07 11 P P 23 56 35.8 +0.7**
NCB IAmb IAmb 23 56 53.4
comp=Z,9.2nm,1.1s
**DELO Deloro Mine 36.09 7 IAmb IAmb** 23 56 36.2
comp=Z,21nm,1.3s
**Q24A Divide 36.10 330 P P 23 56 36.9 +1.1**
baz=141
**SADO Sadowa 36.19 5 P P 23 56 35.5 -0.5**
SADO IAmb IAmb 23 56 36.2
comp=Z,7.9nm,0.8s
**HNH Hanover 36.22 13 P P 23 56 37.1 +0.8**
HNH IAmb IAmb 23 56 38.4
comp=Z,13nm,1.0s
**PIX Pinacate 36.27 313 P P 23 56 37.3 +0.4**
PIX IAmb IAmb 23 56 39.5
comp=Z,9.9nm,1.1s
**OGNE Ogallala 36.31 336 P P 23 56 38.8 +1.6**
baz=147
**SALV Santo Antonio 36.50 132 eP P 23 56 38.3 -0.7**
**X16A Lo Mia Camp, P 36.53 319 P P 23 56 39.9 +0.6**
X16A IAmb IAmb 23 56 42.4
comp=Z,7.1nm,0.8s
**MVCO Mesa Verde 36.58 325 P P 23 56 40.7 +1.0**
baz=135
**LONY Lake Ozonia 36.63 10 P P 23 56 41.0 +1.2**
baz=194
**VT1 Waterbury 36.72 13 P P 23 56 40.9 +0.4**
VT1 IAmb IAmb 23 56 42.7
comp=Z,28nm,1.2s
**LBNH Lisbon 36.81 14 P P 23 56 43.2 +1.9**
baz=199
**WBO Williamsburg 36.89 9 IAmb IAmb** 23 56 43.5
comp=Z,30nm,1.1s
**ECSD EROS Data Cent 36.91 344 P P 23 56 39.5 -2.7**
ECSD IAmb IAmb 23 56 41.7
comp=Z,34nm,1.4s
**I63A Otisfield 36.96 15 P P 23 56 43.2 +0.6**
I63A IAmb IAmb 23 56 45.1
comp=Z,18nm,1.2s
**ISCO Idaho Springs 36.98 331 P P 23 56 43.7 +0.5**
baz=141
**G40A Rib Lake 37.03 352 IAmb IAmb** 23 56 44.1
comp=Z,17nm,1.1s
**113A Mohawk Valley, 37.15 315 P P 23 56 46.1 +1.8**
113A IAmb IAmb 23 56 48.2
comp=Z,12nm,1.1s
**WUAZ Wupatki 37.17 320 P P 23 56 45.9 +1.2**
**WUAZ Wupatki 37.17 320 P P 23 56 46.0 +1.3**
baz=129
**Y14A Wickenburg 37.28 317 P P 23 56 46.5 +0.9**
Y14A IAmb IAmb 23 56 48.3
comp=Z,8.4nm,0.9s
**PV02 Paradox Valley 37.42 326 P P 23 56 47.3 +0.4**
**PV19 Morning Glory 37.63 326 P P 23 56 48.8 +0.1**
**PV04 Paradox Valley 37.64 326 P P 23 56 49.0 +0.3**
**MNTQ Montreal, Queb 37.66 11 P P 23 56 49.2 +0.7**
MNTQ IAmb IAmb 23 56 50.1
comp=Z,14nm,1.0s
**PV22 Blue Mesa, Par 37.68 326 P P 23 56 49.3 +0.3**
**SNDB Serra Nova Dou 37.70 122 eP P 23 56 48.5 -0.7**
**PV10 Paradox Valley 37.70 326 P P 23 56 48.9 -0.4**
**N23A Red Feather La 37.99 331 P P 23 56 52.3 +0.6**
**N23A Red Feather La 37.99 331 P P 23 56 52.3 +0.6**
baz=141
**GLA Glamis 38.05 314 P P 23 56 53.6 +1.5**
**G62A West of Eustis 38.07 14 P P 23 56 53.1 +1.1**
G62A IAmb IAmb 23 56 54.6
comp=Z,14nm,0.9s
**TRQ Mont Tremblant 38.20 10 P P 23 56 53.5 +0.4**
TRQ IAmb IAmb 23 56 54.4
comp=Z,20nm,0.9s
**BLYC Blythe 38.22 315 P P 23 56 55.0 +1.6**
BLYC IAmb IAmb 23 56 56.5
comp=Z,16nm,0.9s
**ESJX Sierra Juarez 38.31 312 P P 23 56 55.3 +0.8**
**U15A North Rim 38.32 321 P P 23 56 55.4 +0.7**
**HMU Henry Mountain 38.37 324 P P 23 56 55.6 +0.6**
**PKME Peaks-Kenny Pk 38.43 16 P P 23 56 56.8 +1.8**
baz=202
**W13A Hualapai Mount 38.55 318 P P 23 56 58.6 +2.1**
**YUH Yuha Desert 38.62 313 P P 23 56 58.5 +1.7**
YUH IAmb IAmb 23 57 00.2
comp=Z,15nm,1.1s
**RMX La Rumorosa 38.71 313 P P 23 56 58.4 +0.7**
RMX IAmb IAmb 23 57 00.6
comp=Z,16nm,1.1s
**F33A 5 Mile Ranch, 38.78 345 IAmb IAmb** 23 56 57.0
comp=Z,46nm,1.4s
**PKCU Pink Cliffs 38.98 322 P P 23 57 00.9 +0.7**
**CBX Cerro Bola 38.99 312 P P 23 57 01.6 +1.5**
CBX IAmb IAmb 23 57 03.7
comp=Z,44nm,1.4s
**KNB Kanab 39.02 321 P P 23 57 01.5 +1.1**
**TKX Tecate 39.08 312 P P 23 57 02.0 +1.3**
TKX IAmb IAmb 23 57 03.9
comp=Z,15nm,0.8s
**MONP2 Monument Peak 39.10 313 P P 23 57 02.8 +1.7**
baz=120
**RWWY Rawlins 39.21 331 P P 23 57 02.0 +0.1**
**F64A Sherman 39.24 16 P P 23 57 02.2 +0.4**
F64A IAmb IAmb 23 57 04.0
comp=Z,15nm,1.1s
**Q16A Castle Valley 39.28 325 P P 23 57 03.9 +1.3**
**MTPU Mount Pierson 39.29 323 P P 23 57 04.0 +1.2**
**ARAG Araguaiana, MT 39.33 128 eP P 23 57 01.2 -1.7**
**SMTB Santa Maria do 39.45 115 eP P 23 57 03.1 -0.8**
**TPFO Pinon Flats 39.49 314 P P 23 57 06.1 +1.8**
baz=121
**PFO Pinyon Flats O 39.50 314 P P 23 57 05.5 +1.1**
PFO IAmb IAmb 23 57 07.4
comp=Z,16nm,1.0s
**PFO Pinyon Flats O 39.50 314 P P 23 57 06.1 +1.8**
baz=121
**TMUT Trail Mountain 39.56 325 P P 23 57 04.7 -0.3**
**109C Camp Elliot, M 39.60 312 P P 23 57 06.1 +1.1**
109C IAmb IAmb 23 57 07.9
comp=Z,25nm,1.1s
**109C Camp Elliot, M 39.60 312 P P 23 57 06.8 +1.8**
baz=120
**VLDQ Val d'Or 39.66 6 P P 23 57 05.0 -0.2**
VLDQ IAmb IAmb 23 57 06.1
comp=Z,22nm,1.1s
**RSSD Black Hills 39.77 336 P P 23 57 07.9 +1.4**
**RSSD Black Hills 39.77 336 P P 23 57 08.0 +1.4**
baz=146
**D62A Allapoint, All 40.18 15 P P 23 57 10.4 +0.8**
**SHPR Sheep Range 40.21 319 P P 23 57 11.3 +1.0**
**ELS Elsinore Mount 40.21 313 P P 23 57 11.2 +1.0**
**MPU Maple Canyon 40.29 325 P P 23 57 11.0 +0.1**
**LMQ La Malbaie 40.30 13 P 23 57 10.9 +0.3**
LMQ IAmb IAmb 23 57 11.8
comp=Z,13nm,0.8s
**LDAQ Lac Daran 40.49 12 P P 23 57 12.4 +0.1**
LDAQ IAmb IAmb 23 57 13.1
comp=Z,11nm,0.7s
**PSUT Pine Spring 40.62 322 P P 23 57 13.8 +0.1**
**GSC Goldstone, Bar 40.64 316 P P 23 57 15.2 +1.5**
GSC IAmb IAmb 23 57 16.8
comp=Z,14nm,0.9s
**PRN Pahroc Range 40.67 320 P P 23 57 14.4 +0.4**
**E28A Huff 40.70 341 P P 23 57 14.0 0.0**
E28A IAmb IAmb 23 57 14.9
comp=Z,38nm,1.1s
**CTU Camp Tracy 40.82 326 P P 23 57 15.8 +0.5**
**TCUT Toone Canyon 40.93 327 P P 23 57 16.4 +0.2**
**AGMN Agassiz Nation 40.99 347 IAmb IAmb** 23 57 16.1
comp=Z,34nm,1.4s
**AGMN Agassiz Nation 40.99 347 P P 23 57 15.6 -0.6**
baz=161
**GWY Greenwater Val 41.03 317 P P 23 57 17.7 +0.7**
**BW06 Boulder Array 41.16 330 P P 23 57 18.4 +0.3**
baz=138
**PD31 Pinedale Array 41.16 330 P P 23 57 17.0 -1.1**
**PDAR Pinedale Array 41.16 330 P P 23 57 17.7 -0.4**
**PDAR Pinedale Array 41.16 330 P P 23 57 17.0 -1.1**
comp=Z,1.3nm,0.8s,baz=134,slow=7.7,SNR=7.6
PDAR PcP PcP 23 59 17.1 -0.2
comp=Z,1.6nm,0.9s,baz=159,slow=5.6,SNR=4.5
comp=Z,1.3nm,0.8s
**TPNV Topopah Spring 41.18 318 P P 23 57 20.4 +2.2**
baz=125
**SPR3 Spring Creek 3 41.20 322 P P 23 57 19.1 +0.6**
**S11A Rachel 41.26 320 P P 23 57 19.4 +0.5**
**WCT Wildcat Mounta 41.34 318 P P 23 57 20.9 +1.4**
**CCAC Calif City Air 41.40 315 P P 23 57 21.5 +1.5**
**Q12A Willow Creek R 41.53 322 P P 23 57 21.4 +0.3**
**R11B Troy Canyon, C 41.57 321 P P 23 57 22.2 +0.7**
baz=127
**SPUT South Promonto 41.63 326 P P 23 57 22.1 +0.3**
**BGU Big Grassy Mou 41.69 325 P P 23 57 21.8 -0.5**
**ISA Isabella, Lake 41.98 315 IAmb IAmb** 23 57 27.8
comp=Z,15nm,1.1s
**H03N2 Juan Fernandez 42.01 175 T T** 00 42 08.1
baz=354,slow=76,SNR=8.4
**H03N1 Juan Fernandez 42.01 175 T T** 00 42 06.6
baz=354,slow=76,SNR=11
**H03N3 Juan Fernandez 42.03 175 T T** 00 42 00.3
baz=354,slow=76,SNR=15
**GMN Gold Mountain 42.04 318 P P 23 57 26.5 +1.1**
**REDW Red Top Meadow 42.24 330 P P 23 57 26.6 -0.4**
**SNOW Snow King Moun 42.27 330 P P 23 57 26.6 -0.6**
**BCW Bitter Crk WRg 42.28 314 P P 23 57 27.5 +0.2**
BCW IAmb IAmb 23 57 30.2
comp=Z,17nm,0.9s
**BDFB Brasilia 42.33 125 P P 23 57 27.8 0.0**
**BDFB Brasilia 42.33 125 P P 23 57 27.3 -0.5**
comp=Z,5.6nm,1.0s,baz=313,slow=9.7,SNR=5.7
comp=Z,5.6nm,1.0s
**MZP Montezuma Peak 42.35 319 P P 23 57 28.2 +0.3**
**TPH Tonopah 42.46 319 P P 23 57 29.2 +0.4**
**SJPY San Joaquin 42.55 142 eP P 23 57 27.9 -1.5**
**DSP Deep Springs 42.55 318 P P 23 57 30.6 +1.3**
**LAO LASA Array 42.76 337 P P 23 57 31.3 +0.4**
baz=145
**RLMT Red Lodge 42.81 333 P P 23 57 31.5 0.0**
**RLMT Red Lodge 42.81 333 P P 23 57 31.8 +0.3**
baz=140
**ULM Lac du Bonnet 42.84 348 IAmb IAmb** 23 57 31.2
comp=Z,28nm,1.1s
**ULM Lac du Bonnet 42.84 348 P P 23 57 29.4 -1.9**
comp=Z,13nm,0.6s,baz=166,slow=7.5,SNR=24
ULM PcP PcP 23 59 22.1 -0.2
comp=Z,5.4nm,0.9s,baz=124,slow=1.3,SNR=3.7
comp=Z,13nm,0.6s
**ELK Elko 42.84 324 P P 23 57 32.1 +0.2**
**CPUP Villa Florida 42.84 145 PcP PcP 23 59 22.0 -0.7**
comp=Z,1.7nm,0.8s,baz=327,slow=1.7,SNR=3.5
**NV11 Mina Array Sit 43.26 319 P P 23 57 35.5 +0.2**
**NVAR Mina Array Bea 43.36 319 P P 23 57 37.1 +1.0**
**NVAR Mina Array Bea 43.36 319 P P 23 57 37.0 +0.9**
comp=Z,5.7nm,0.7s,baz=124,slow=6.5,SNR=27
NVAR PcP PcP 23 59 25.4 +0.7
comp=Z,0.3nm,0.5s,baz=149,slow=1.9,SNR=4.4
comp=Z,5.7nm,0.7s
**OMMB Old Mammoth Mi 43.37 317 P P 23 57 37.7 +1.4**
OMMB IAmb IAmb 23 57 39.1
comp=Z,15nm,1.4s
**LHV Little Huntoon 43.39 318 P P 23 57 36.9 +0.9**
LHV IAmb IAmb 23 57 44.7
comp=Z,13nm,1.0s
**MDPB Devils Postpil 43.44 317 IAmb IAmb** 23 57 39.5
comp=Z,15nm,1.0s
**IPMB Ipameri, GO 43.45 128 eP P 23 57 34.9 -2.0**
**DGMT Dagmar 43.51 340 P P 23 57 37.6 +0.6**
baz=149
**RYN Ryan 43.61 319 P P 23 57 38.9 +0.8**
**PMPB Monarch Peak 43.89 315 P P 23 57 41.8 +1.6**
PMPB IAmb IAmb 23 57 42.5
comp=Z,20nm,1.0s
**WAKR Walker 44.14 318 P P 23 57 44.0 +1.6**
WAKR IAmb IAmb 23 57 45.3
comp=Z,14nm,1.0s
**HLID Hailey 44.23 327 P P 23 57 43.4 +0.4**
baz=133
**BBGB Big Mountain B 44.24 315 P P 23 57 42.7 -0.3**
BBGB IAmb IAmb 23 57 47.2
comp=Z,12nm,0.8s
**BOZ Bozeman (W) 44.26 331 P P 23 57 43.8 +0.6**
baz=137
**YERR Yerington 44.28 319 P P 23 57 43.9 +0.5**
**CMB Columbia Colle 44.53 317 P P 23 57 45.5 +0.3**
**DLMT Dillon 44.55 330 P P 23 57 45.9 +0.4**
DLMT IAmb IAmb 23 57 54.3
comp=Z,12nm,1.3s
**MFID Camas Ranch 44.90 326 P P 23 57 48.5 +0.4**
**EGMT Eagleton 45.27 335 P P 23 57 50.9 -0.2**
baz=141
**LYMT Lyon Mountain 45.58 332 P P 23 57 52.4 -1.4**
**CRSM Crissiumal (Br 45.64 143 eP P 23 57 52.6 -1.5**
**BPMT Black Pine Rid 45.74 331 P P 23 57 54.4 -0.7**
**ITQB Itaqui 45.83 147 eP P 23 57 55.6 +0.1**
**WVOR Wild Horse Val 45.89 323 IAmb IAmb** 23 57 57.2

comp=Z,12nm,1.1s
**ORV Oroville 46.06 318 P P 23 57 59.1 +1.7**
ORV IAmb IAmb 23 58 00.7
comp=Z,19nm,1.1s
**MSO Missoula 46.26 331 P P 23 57 58.3 -0.6**
baz=135
**PSAL Palomas, Salto 46.44 149 eP P 23 58 00.0 -0.4**
**DIAM Diamantina, MG 47.25 125 eP P 23 58 05.6 -1.5**
**SCHQ Schefferville 47.90 13 P P 23 58 09.9 -1.6**
comp=Z,8.9nm,0.8s,baz=211,slow=6.3,SNR=4.2
comp=Z,8.9nm,0.8s
**NEW Newport 48.80 330 P P 23 58 18.6 -0.1**
baz=133
**RIB01 Linhares ES 50.44 124 eP P 23 58 29.8 -1.6**
**PLCA Paso Flores 50.45 168 P P 23 58 31.1 -0.1**
comp=Z,5.3nm,0.8s,baz=342,slow=9.3,SNR=9.3
comp=Z,5.3nm,0.8s
**PLCA Paso Flores 50.45 168 eP P 23 58 31.0 -0.2**
**YKA Yellowknife Ar 58.44 343 P P 23 59 27.9 -1.0**
comp=Z,5.4nm,0.8s,baz=139,slow=7.1,SNR=13
comp=Z,5.4nm,0.8s
**DLBC Dease Lake 61.18 334 P P 23 59 48.5 +0.6**
DLBC IAmb IAmb 23 59 56.9
comp=Z,9.7nm,1.2s
**DLBC Dease Lake 61.18 334 P P 23 59 48.6 +0.6**
baz=124
**U33K Whale Pass 61.35 331 P P 23 59 49.7 +0.7**
baz=120
**R33M Jennings River 62.12 335 P P 23 59 54.9 +0.5**
baz=124
**Q32M Nakina River 62.45 334 P P 23 59 56.7 +0.1**
baz=122
**S32K Killisnoo 62.72 332 P P 23 59 59.3 +1.1**
baz=120
**R32K Eaglecrest 63.10 332 P P 00 00 00.0 -0.7**
baz=120
**P33M Teslin, Yukon 63.36 335 P P 00 00 02.2 -0.3**
baz=122
**O30N Mendenhall 65.03 334 P P 00 00 13.4 -0.1**
baz=119
**P30M Million Dollar 65.10 334 P P 00 00 14.5 +0.6**
baz=118
**P29M Windy Craggy 65.21 333 IAmb IAmb** 00 00 16.2
comp=Z,7.0nm,0.8s
**P29M Windy Craggy 65.21 333 P P 00 00 15.0 +0.4**
baz=117
**N30M Aishikik Lake 65.79 335 P P 00 00 18.8 +0.4**
baz=119
**O29M Mount Kennedy 65.89 333 P P 00 00 20.1 +1.0**
baz=117
**PNL Peninsula 65.98 332 P P 00 00 20.4 +0.7**
baz=116
**YUK4 Talbot Arm 66.40 334 P P 00 00 22.9 +0.4**
baz=117
**O28M Mount Upton 66.82 333 P P 00 00 25.5 +0.2**
baz=115
**J30M Hart River 67.05 338 P P 00 00 27.2 +0.8**
baz=121
**K29M Barlow Dome 67.13 337 P P 00 00 27.0 0.0**
baz=119
**I30M Mount Dempster 67.40 339 P P 00 00 29.6 +0.9**
baz=121,SNR=8.1
**G31M Satah River 67.58 341 P P 00 00 30.2 +0.6**
baz=124,SNR=5.5
**F31M Tsiigehtchic 67.70 341 P P 00 00 31.2 +0.9**
baz=124
**BGLC Bering Glacier 67.96 332 P P 00 00 32.9 +0.8**
baz=112
**DAWY Dawson 67.96 337 P P 00 00 32.6 +0.4**
baz=117
**EPYK Eagle Plains 68.11 340 P P 00 00 33.5 +0.4**
baz=121
**CRQE Cirque 68.11 333 P P 00 00 33.6 +0.3**
baz=113
**INK Inuvik 68.13 342 P P 00 00 33.7 +0.7**
baz=125
**I29M Ogilvie Camp, 68.17 338 P P 00 00 34.1 +0.7**
baz=119,SNR=5.5
**G30M tAoh Zraii Nji 68.26 340 P P 00 00 35.2 +1.2**
baz=122
**MCARA McCarthy VSAT 68.33 333 P P 00 00 36.2 +1.8**
baz=113
**KAIM Kayak Island 68.41 332 P P 00 00 36.7 +1.7**
baz=111
**F30M Barrier River 68.45 341 P P 00 00 36.1 +1.0**
baz=122,SNR=6.2
**BCAR Beaver Creek A 68.48 335 P P 00 00 36.4 +1.0**
**L27K Beaver Creek, 68.50 335 P P 00 00 36.7 +1.1**
L27K IAmb IAmb 00 00 37.3
comp=Z,14nm,0.9s
**L27K Beaver Creek, 68.50 335 P P 00 00 36.3 +0.8**
baz=115
**H29M Whitestone 68.61 339 P P 00 00 37.3 +1.1**
baz=119
**GLB Gilahina Butte 68.70 333 P P 00 00 37.5 +0.7**
GLB IAmb IAmb 00 00 38.6
comp=Z,9.4nm,0.9s
**M26K Nabesna, AK 68.72 334 P P 00 00 38.0 +1.0**
baz=113
**I28M Miner Creek 68.81 338 P P 00 00 38.2 +0.6**
baz=117
**G29M Pine Creek 68.83 340 P P 00 00 39.3 +1.8**
baz=120,SNR=5.3
**BMRM Bremner River 68.88 333 P P 00 00 39.0 +1.0**
baz=111
**EGAK Eagle 68.97 337 P P 00 00 39.6 +1.3**
baz=116
**K27K Chicken 69.01 336 P P 00 00 39.6 +1.0**
baz=115
**N25K Chitina, Valde 69.11 333 P P 00 00 40.2 +0.8**
baz=112
**EYAK Cordova Ski Ar 69.26 332 P P 00 00 40.6 +0.4**
EYAK IAmb IAmb 00 00 42.1
comp=Z,8.9nm,0.9s
**EYAK Cordova Ski Ar 69.26 332 P P 00 00 41.4 +1.2**
baz=110
**SUMG Summit 69.29 13 P P 00 00 39.7 -1.0**
**I27K Kandik River 69.50 338 P P 00 00 43.0 +1.3**
baz=116,SNR=9.4
**E29M Blow River 69.54 341 P P 00 00 42.7 +0.8**
baz=120
**KLU Klutina 69.66 333 P P 00 00 43.5 +0.6**
baz=110
**H27K Steamboat Moun 69.75 338 P P 00 00 44.0 +0.7**
baz=116
**SCRK Sand Creek 69.75 336 P P 00 00 43.5 +0.1**
SCRK IAmb IAmb 00 00 44.6
comp=Z,6.8nm,0.8s
**SCRK Sand Creek 69.75 336 P P 00 00 44.3 +0.8**
baz=113
**J26L Joseph Creek 69.79 336 P P 00 00 44.0 +0.4**
**J26L Joseph Creek 69.79 336 P P 00 00 45.0 +1.4**
baz=114,SNR=5.3
**F28M Old Crow 69.80 340 P P 00 00 44.3 +0.8**
baz=118
**I26K Coal Creek Min 69.96 337 P P 00 00 44.6 +0.1**
**I26K Coal Creek Min 69.96 337 P P 00 00 45.0 +0.5**
baz=114
**M24K Tolsona, Glenn 69.99 334 P P 00 00 45.4 +0.5**
baz=110
**PAX Paxson 69.99 334 P P 00 00 44.3 -0.6**
PAX IAmb IAmb 00 00 53.9
comp=Z,6.3nm,1.0s
**PAX Paxson 69.99 334 P P 00 00 45.4 +0.5**
baz=111
**RIDG Independent Ri 70.01 335 P P 00 00 46.0 +1.1**
baz=112,SNR=5.5
**G27K Doyon Strip 70.05 339 P P 00 00 45.3 +0.2**
baz=116
**E28M Babbage River 70.17 341 P P 00 00 46.0 +0.2**
baz=119
**SCM Sheep Creek Mo 70.41 333 P P 00 00 47.5 +0.1**
baz=109
**K24K Donnelly Dome 70.42 335 P P 00 00 47.9 +0.5**
baz=111
**J25K Salcha River, 70.56 336 P P 00 00 49.0 +0.8**
baz=112,SNR=9.5
**PWL Port Wells 70.56 332 P P 00 00 48.2 -0.1**
baz=108
**M23K Glacier View 70.57 333 P P 00 00 48.8 +0.5**
baz=109
**E27K Coleen River 70.65 340 P P 00 00 49.2 +0.5**
baz=117
**KNK Knik Glacier 70.79 332 P P 00 00 50.1 +0.5**
baz=108
**WAT6 Susitna Watana 70.84 334 P P 00 00 50.6 +0.5**
baz=109,SNR=5.5
**DHY Denali Highway 70.84 334 P P 00 00 50.7 +0.5**
baz=109
**SML Sawmill 70.85 333 P P 00 00 50.2 +0.1**
baz=108
**G26K Porcupine Rive 70.87 339 P P 00 00 50.4 +0.3**
baz=114
**HDA Harding Lake 71.12 336 P P 00 00 52.2 +0.6**
baz=110,SNR=10.0
**ILAR Eielson Array 71.22 336 P P 00 00 51.8 -0.4**
**ILAR Eielson Array 71.22 336 P P 00 00 52.1 -0.1**
comp=Z,8.1nm,0.7s,baz=115,slow=4.6,SNR=13
comp=Z,8.1nm,0.7s
**RC01 Rabbit Creek A 71.28 332 P P 00 00 53.3 +0.7**
baz=106
**F26K Sheenjek River 71.31 339 P P 00 00 53.4 +0.7**
baz=114
**BMAR Burnt Mountain 71.35 339 P P 00 00 53.2 +0.2**
**H25L Birch Creek 71.35 338 P P 00 00 53.7 +0.8**
baz=112
**BRSE Bradley Lake S 71.39 330 P P 00 00 53.7 +0.3**
baz=105
**POKR Poker Plat Res 71.56 336 P P 00 00 54.8 +0.5**
baz=110
**MCK McKinley 71.72 335 P P 00 00 56.1 +0.8**
baz=108
**F25K Christian Rive 71.79 339 P P 00 00 56.6 +0.9**
baz=112
**HOM Homer 71.81 330 P P 00 00 56.5 +0.7**
baz=104
**KDAK Kodiak Island 71.84 328 P P 00 00 56.6 +0.6**
baz=103
**SUA Susitna One 71.85 332 P P 00 00 57.0 +0.8**
baz=106
**CUT Chulitna 71.90 333 P P 00 00 56.9 +0.6**
baz=106
**C27K Jago River 71.97 341 P P 00 00 57.5 +0.9**
baz=115
**H24K Noodor Dome 71.98 337 P P 00 00 57.4 +0.6**
baz=110,SNR=5.0
**NEA2 Nenana 72.05 336 P P 00 00 57.6 +0.4**
baz=108
**OHAK Old Harbor 72.09 327 P P 00 00 58.2 +0.7**
baz=102
**G24K Hadweenzic Riv 72.13 338 P P 00 00 58.4 +0.7**
baz=110
**I23K Minto, Yukon-K 72.34 336 P P 00 00 59.5 +0.6**
baz=108,SNR=9.4
**SKT Skwentna 72.35 333 P P 00 00 59.2 +0.1**
baz=105
**MORF Marmelete 72.51 54 eP P 00 01 01.7 +1.2**
**F24K Squaw Lake 72.57 339 P P 00 01 01.1 +0.8**
baz=110
**P19K Oil Pt 72.59 330 P P 00 01 01.2 +0.6**
baz=103
**ILSW Iliamna Southw 72.62 330 P P 00 01 00.8 0.0**
ILSW IAmb IAmb 00 01 01.2
comp=Z,8.4nm,0.9s
**H23K Yukon River 72.62 337 P P 00 01 01.4 +0.7**
baz=108
**BPAW Bear Paw Mtn. 72.69 335 P P 00 01 01.1 0.0**
baz=106,SNR=7.1
**D25K Kavik River 72.71 341 P P 00 01 01.8 +0.7**
baz=112
**MLY Manley 72.86 336 P P 00 01 02.8 +0.7**
baz=107
**E24K Your Creek 72.97 339 P P 00 01 03.2 +0.5**
baz=110
**M20K Styx River 73.06 332 P P 00 01 03.3 -0.1**
baz=104
**G23K Bananza Creek 73.09 338 P P 00 01 04.7 +1.3**
baz=108,SNR=7.8
**PVIS Viseu 73.26 50 eP P 00 01 05.4 +0.4**
**COLD Coldfoot 73.31 338 P P 00 01 05.6 +1.0**
baz=108,SNR=5.1
**H22K Klhtaia Cre 73.36 337 P P 00 01 05.0 0.0**
baz=106
**E23K Chandalar 73.37 339 P P 00 01 06.0 +0.9**
baz=109
**PESTR Estremoz 73.41 52 eP P 00 01 06.3 +0.5**
**N19K Bonanza Creek 73.45 331 P P 00 01 05.1 -0.6**
N19K IAmb IAmb 00 01 07.3
comp=Z,6.5nm,0.8s
**N19K Bonanza Creek 73.45 331 P P 00 01 05.6 -0.1**
baz=102
**PCBR Caleb Branco 73.54 51 eP P 00 01 07.0 +0.5**
**L20K Farewell, AK 73.54 333 P P 00 01 05.8 -0.3**
baz=103,SNR=5.1
**TOLK Toolik Lake Re 73.54 340 P P 00 01 06.2 +0.1**
baz=109
**O18K Koktuh Hills 73.61 330 P P 00 01 06.8 +0.3**
O18K IAmb IAmb 00 01 07.4
comp=Z,9.3nm,0.8s
**O18K Koktuh Hills 73.61 330 P P 00 01 06.9 +0.3**
baz=101
**M19K Big River Lodg 73.65 332 P P 00 01 07.0 +0.2**
baz=102
**Q17K Contact Creek 73.66 328 P P 00 01 07.4 +0.4**
baz=100
**G22K Bettles 73.71 338 P P 00 01 07.7 +0.8**
baz=107
**R17L Mt. Peulik Vol 73.80 328 P P 00 01 08.3 +0.6**
baz=100
**PBAR Barrancos 73.82 53 eP P 00 01 08.6 +0.4**
**K20K Telida 73.83 334 P P 00 01 08.2 +0.4**
K20K IAmb IAmb 00 01 13.5
comp=Z,8.0nm,0.9s
**K20K Telida 73.83 334 P P 00 01 07.6 -0.2**
baz=103
**H21K Melozitna Rive 73.87 336 P P 00 01 07.9 -0.1**
baz=105
**L19K White Mountain 73.92 332 P P 00 01 09.1 +0.8**
baz=102
**D23K Nanushuk River 74.03 340 P P 00 01 08.9 +0.1**
D23K IAmb IAmb 00 01 15.4
comp=Z,15nm,1.1s
**D23K Nanushuk River 74.03 340 P P 00 01 09.8 +1.0**
baz=108
**J20K Nowinta River 74.05 334 P P 00 01 09.2 +0.2**
J20K IAmb IAmb 00 01 09.3
comp=Z,14nm,1.2s
**J20K Nowinta River 74.05 334 P P 00 01 09.2 +0.2**
baz=103
**N18K Kilae Creek 74.10 331 IAmb IAmb** 00 01 09.8
comp=Z,7.7nm,0.8s
**N18K Kilae Creek 74.10 331 P P 00 01 09.6 +0.2**
baz=101
**P17K Kvichak River 74.11 329 P P 00 01 10.6 +1.2**
baz=100
**F22K John River 74.13 338 P P 00 01 10.5 +1.0**
baz=106
**E22K Anaktuvuk Pass 74.18 339 P P 00 01 10.6 +0.8**
baz=107
**M18K Stony River 74.23 332 P P 00 01 10.1 0.0**
baz=101
**C23K Itkillik River 74.28 341 P P 00 01 10.8 +0.6**
baz=108
**I20K Naaghedeneel 74.34 335 P P 00 01 11.0 +0.3**
baz=103
**G21K Allakaket 74.37 337 P P 00 01 11.8 +0.9**
baz=105
**O17K Koliganek Bris 74.53 330 P P 00 01 12.3 +0.3**
baz=100
**F21K Alatna River 74.54 338 P P 00 01 12.7 +0.8**
baz=105
**J19K Poorman 74.64 334 P P 00 01 12.5 0.0**
baz=102
**H20K Anotleneega Mo 74.66 336 P P 00 01 12.7 +0.1**
baz=103
**D22K Ayikyak River 74.69 339 P P 00 01 13.5 +0.7**
baz=106
**N17K Nushagak Hills 74.71 330 IAmb IAmb** 00 01 14.8
comp=Z,9.0nm,1.1s
**N17K Nushagak Hills 74.71 330 P P 00 01 13.2 +0.3**
baz=100
**CHGN Chignik 74.71 326 P P 00 01 13.2 +0.2**
baz=97
**M17K Holitna River 74.97 331 P P 00 01 14.4 -0.1**
baz=100
**O16K Kokwok River B 75.01 329 P P 00 01 14.9 +0.2**
baz=99
**J18K Innoko River 75.02 334 P P 00 01 14.9 +0.2**
baz=101
**E21K Killik River 75.03 339 P P 00 01 15.4 +0.7**
baz=105
**H19K Roundabout Mou 75.31 336 P P 00 01 17.1 +0.9**
baz=102
**S14K Fog Glacier 75.34 326 P P 00 01 17.4 +0.6**
baz=96
**F20K Avaraart Lake 75.35 337 P P 00 01 17.0 +0.5**
baz=103
**B22K Teshekpuk Lake 75.35 341 P P 00 01 17.3 +0.9**
baz=106
**C21K Knifeblade Rid 75.50 339 P P 00 01 18.5 +1.2**
baz=104
**L17K Donlin 75.50 332 P P 00 01 17.4 -0.1**
baz=99
**B21K Ikpikpuk River 75.56 340 P P 00 01 18.2 +0.6**
baz=104
**K17K Iditarod 75.59 333 P P 00 01 18.6 +0.6**
baz=99
**M16K Timber Creek 75.64 331 P P 00 01 19.1 +0.8**
baz=98
**G19K Purcell Mounta 75.69 336 P P 00 01 18.4 -0.1**
G19K IAmb IAmb 00 01 19.5
comp=Z,9.0nm,0.8s
**G19K Purcell Mounta 75.69 336 P P 00 01 19.4 +0.9**
baz=101
**E20K Nigu River 75.79 338 P P 00 01 20.0 +0.9**
baz=103
**L16K Owhat River 75.99 332 P P 00 01 20.5 +0.3**
L16K IAmb IAmb 00 01 22.0
comp=Z,7.6nm,0.8s
**L16K Owhat River 75.99 332 P P 00 01 20.9 +0.7**
baz=98
**E19K Redstone River 76.01 338 P P 00 01 20.6 +0.4**
E19K IAmb IAmb 00 01 23.4
comp=Z,8.1nm,0.8s
**E19K Redstone River 76.01 338 P P 00 01 20.8 +0.5**
baz=101
**A22K Sinclair Lake 76.02 341 P P 00 01 21.2 +0.9**
baz=104
**H18K Honhosa River 76.03 335 P P 00 01 21.7 +1.2**
baz=100
**D20K Etivluk River 76.04 339 P P 00 01 21.4 +0.9**
baz=102
**J17K VABM Dome 76.05 333 P P 00 01 21.2 +0.6**
J17K IAmb IAmb 00 01 23.5
comp=Z,14nm,0.9s
**J17K VABM Dome 76.05 333 P P 00 01 20.9 +0.3**
baz=99
**F19K Shaleruckik Mo 76.09 337 P P 00 01 20.7 0.0**
F19K IAmb IAmb 00 01 21.9
comp=Z,8.4nm,0.8s
**F19K Shaleruckik Mo 76.09 337 P P 00 01 21.4 +0.6**
baz=101
**ESDC Sonseca Array 76.24 51 P P 00 01 21.9 -0.3**
ESDC IAmb IAmb 00 01 23.7
comp=Z,12nm,1.1s
**ESDC Sonseca Array 76.24 51 P P 00 01 22.2 -0.1**
comp=Z,8.4nm,1.0s,baz=278,slow=6.0,SNR=30
comp=Z,8.4nm,1.0s
**ESBB Sonseca Array 76.24 51 P P 00 01 22.0 -0.3**
ESBB IAmb IAmb 00 01 28.7
comp=Z,12nm,1.1s
**G18K Tagagawik 76.27 336 P P 00 01 22.3 +0.5**
G18K IAmb IAmb 00 01 23.6
comp=Z,9.8nm,0.9s
**G18K Tagagawik 76.27 336 P P 00 01 22.7 +0.9**
baz=100
**M15K Kasigluk River 76.44 330 P P 00 01 23.6 +0.8**
baz=96
**B20K Meade River 76.50 340 P P 00 01 23.9 +0.9**
baz=102
**D19K Kuna River 76.53 339 P P 00 01 24.1 +0.7**
D19K IAmb IAmb 00 01 24.5
comp=Z,9.9nm,0.9s
**D19K Kuna River 76.53 339 P P 00 01 24.0 +0.7**
baz=101
**O14K Tigyukauivet M 76.57 329 P P 00 01 25.6 +2.0**
baz=96
**H17K Granite Mounta 76.64 335 P P 00 01 24.9 +1.0**
baz=98
**S12K Black Hills 76.69 325 P P 00 01 25.1 +0.7**
baz=94
**J16K Anvik River 76.72 333 P P 00 01 25.1 +0.8**
baz=97
**F18K Selawik 76.79 336 P P 00 01 25.3 +0.6**
baz=99
**N14K Kuskokwak Cree 76.85 330 P P 00 01 26.4 +1.2**
baz=96
**L15K Ungalak Mounta 76.93 331 P P 00 01 26.7 +1.1**
baz=96
**K15K Wolf Creek Mou 77.02 332 P P 00 01 26.9 +0.8**
K15K IAmb IAmb 00 01 27.8
comp=Z,16nm,1.0s
**K15K Wolf Creek Mou 77.02 332 P P 00 01 27.1 +1.0**
baz=96
**M14K Bethel 77.07 330 P P 00 01 26.8 +0.4**
**M14K Bethel 77.07 330 P P 00 01 27.6 +1.3**
baz=95
**C19K Lookout Ridge 77.17 339 P P 00 01 27.8 +0.9**
baz=100
**EKA Eskdalemuir Ar 77.27 35 P P 00 01 26.1 -1.6**
comp=Z,6.6nm,1.1s,baz=246,slow=4.2,SNR=4.3
comp=Z,6.6nm,1.1s
**E18K Tukpahlearik C 77.28 337 P P 00 01 27.9 +0.5**
baz=98
**TIC Toumodi 77.34 85⇑ iP P 00 01 28.1 -0.8**
comp=Z,4.4nm,0.3s
**LIC Lamto 77.38 86⇑ iP P 00 01 29.3 +0.2**
comp=Z,44nm,0.8s
**F17K Baldwin Pennin 77.40 336 P P 00 01 29.2 +1.1**
baz=97
**L14K Kuka Creek 77.47 331 P P 00 01 29.1 +0.5**
baz=95
**DBIC Dimbokro 77.50 85 P P 00 01 29.9 +0.2**
**DBIC Dimbokro 77.50 85 P P 00 01 29.9 +0.2**
comp=Z,18nm,1.0s,baz=301,slow=4.9,SNR=6.9
comp=Z,18nm,1.0s
**KIC Kosan Boka 77.65 85⇑ iP P 00 01 30.8 +0.2**
comp=Z,29nm,0.9s
**C18K Utukok River 77.68 338 P P 00 01 30.4 +0.6**
baz=98
**E17K Hotham Inlet 77.71 337 P P 00 01 30.7 +0.8**
baz=97
**M13K Dall Lake 77.72 330 P P 00 01 31.2 +1.2**
baz=94
**B18K Kokolik River 77.99 339 P P 00 01 32.3 +0.9**
baz=98
**J14K Nanvaranak Lak 78.00 332 P P 00 01 32.9 +1.4**
baz=94
**RDOG Red Dog Mine 78.23 338 P P 00 01 33.6 +0.8**
baz=96
**D17K Noatak River 78.26 337 P P 00 01 33.8 +0.9**
baz=96
**C17K DeLong Mountai 78.38 338 P P 00 01 34.5 +0.9**
baz=96
**K13K Kusilvak Mount 78.45 331 P P 00 01 35.1 +1.0**
baz=93
**F15K North Star Dit 78.70 335 P P 00 01 36.4 +1.0**
baz=94
**ANM Nome 78.93 334 P P 00 01 37.8 +1.1**
baz=93
**C16K Lisburne Hills 79.16 338 P P 00 01 38.8 +0.9**
baz=94
**UNV Unalaska Valle 79.19 323 P P 00 01 38.7 +0.5**
baz=90
**SPIA Saint Paul Isl 81.26 327 P P 00 01 50.0 +0.7**
baz=88
**TORD Torodi Ar. Bea 83.09 78 P P 00 01 58.9 -1.0**
comp=Z,1.3nm,0.9s,baz=287,slow=4.0,SNR=6.7
comp=Z,1.3nm,0.9s
**NB2 NORSAR Subarra 84.64 29 P P 00 02 06.5 -0.4**
comp=Z,19nm,1.4s,baz=273,slow=5.3
**NOA NORSAR Array B 84.64 29 P P 00 02 06.8 -0.1**
comp=Z,3.0nm,1.0s,baz=276,slow=5.2,SNR=3.7
comp=Z,3.0nm,1.0s
**TAM Tamanrasset 85.50 68 P P 00 02 12.5 +0.3**
TAM IAmb IAmb 00 02 14.2
comp=Z,10nm,1.5s
**DAVA Damuels 85.79 43 iP P 00 02 12.8 -0.3**
comp=Z,11nm,1.1s
**HFS Hagfors 86.00 30 P P 00 02 12.0 -1.6**
comp=Z,2.2nm,0.8s,baz=245,slow=6.0,SNR=4.2
comp=Z,2.2nm,0.8s
**RETA Reutte 86.36 43 eP P 00 02 15.5 -0.3**
comp=Z,6.5nm,1.2s
**FETA Feichten 86.40 43 iP P 00 02 16.1 0.0**
comp=Z,4.5nm,1.0s
**SQTA Sankt Quirin 86.69 43 iP P 00 02 17.6 0.0**
comp=Z,4.7nm,1.2s
**WTTA Wattenberg 86.98 43 eP P 00 02 19.1 +0.1**
comp=Z,2.3nm,1.0s
**CLL Collm 87.17 39 iP P 00 02 19.2 -0.4**
comp=Z,12nm,1.2s
CLL ix x 00 02 41.3
**CTI Castel Tesino 87.18 44 P P 00 02 19.8 -0.2**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CTI | | | | | IAmb | IAmb | 00 02 20.2 | |
| | comp=Z,8.3nm,1.3s | | | | | | | |
| **TEOL** | **Teolo** | **87.31** | **45** | P | **P** | | **00 02 19.5** | **-0.9** |
| TEOL | | | | | IAmb | IAmb | 00 02 20.9 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **LESA** | **Schwarzleotal** | **87.65** | **43** | *i* P | **P** | | **00 02 22.0** | **-0.1** |
| | comp=Z,3.8nm,1.0s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **87.65** | **43** | *i* P | **P** | | **00 02 21.7** | **-0.5** |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **BRG** | **Berggiesshubel** | **87.84** | **39** | *eP* | **P** | | **00 02 22.8** | **-0.1** |
| BRG | | | | Amp | | | 00 02 23.8 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **STAL** | **STALIGIAL** | **87.87** | **44** | P | **P** | | **00 02 22.8** | **-0.4** |
| STAL | | | | IAmb | IAmb | | 00 02 24.2 | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **KHC** | **Kasperske Hory** | **87.93** | **41** | P | **P** | | **00 02 22.5** | **-0.9** |
| KHC | | | | IAmb | IAmb | | 00 02 24.4 | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **KHC** | **Kasperske Hory** | **87.93** | **41** | *eP* | **P** | | **00 02 23.6** | **+0.2** |
| **GEC2** | **GERESS Array S** | **88.06** | **41** | P | **P** | | **00 02 24.2** | **+0.1** |
| GEC2 | | | | IAmb | IAmb | | 00 02 24.7 | |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| **GERES** | **GERESS Array B** | **88.06** | **41** | P | **P** | | **00 02 23.0** | **-1.1** |
| **GERES** | **GERESS Array B** | **88.06** | **41** | P | **P** | | **00 02 23.2** | **-0.9** |
| | comp=Z,1.1nm,0.9s,baz=178,slow=12,SNR=8.6 | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **88.16** | **43** | *i* P | **P** | | **00 02 24.8** | **+0.1** |
| | comp=Z,8.5nm,1.2s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **88.24** | **42** | *eP* | **P** | | **00 02 25.1** | **+0.2** |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **CESX** | **Cesi** | **88.42** | **47** | P | **P** | | **00 02 25.6** | **-0.2** |
| CESX | | | | IAmb | IAmb | | 00 02 26.0 | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **MYKA** | **Terra Mystica** | **88.44** | **43** | *i* P | **P** | | **00 02 25.8** | **-0.1** |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **MOA** | **Molln** | **88.62** | **42** | *eP* | **P** | | **00 02 26.8** | **+0.1** |
| | comp=Z,3.3nm,1.1s | | | | | | | |
| **OBKA** | **Obir** | **89.08** | **43** | *i* P | **P** | | **00 02 28.5** | **-0.4** |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **SOKA** | **Soboth** | **89.37** | **43** | *i* P | **P** | | **00 02 30.2** | **-0.1** |
| | comp=Z,3.9nm,1.5s | | | | | | | |
| **ARSA** | **Arzberg** | **89.58** | **42** | *i* P | **P** | | **00 02 31.1** | **-0.1** |
| | comp=Z,2.4nm,1.6s | | | | | | | |
| **CONA** | **Conrad Observa** | **89.66** | **42** | *i* P | **P** | | **00 02 31.1** | **-0.5** |
| | comp=Z,4.6nm,1.3s | | | | | | | |
| **KRUC** | **Moravsky** | **89.76** | **40** | *eP* | **P** | | **00 02 31.0** | **-0.9** |
| **VRAC** | **Vranov** | **89.83** | **40** | *eP* | **P** | | **00 02 32.0** | **-0.3** |
| **RONA** | **Rosalia, Austr** | **90.00** | **42** | *i* P | **P** | | **00 02 33.0** | **-0.1** |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **MORC** | **Moravsky Berou** | **90.32** | **40** | *eP* | **P** | | **00 02 33.5** | **-1.1** |
| **JAVC** | **Velka Javorina** | **90.62** | **40** | *eP* | **P** | | **00 02 36.0** | **0.0** |
| **FINES** | **FINESS Array B** | **91.49** | **27** | P | **P** | | **00 02 38.4** | **-1.3** |
| | comp=Z,3.4nm,0.9s,baz=125,slow=3.0,SNR=4.8 | | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **95.08** | **162** | P | **P** | | **00 02 55.2** | **-0.8** |
| | comp=Z,1.9nm,0.9s,baz=334,slow=4.7,SNR=4.9 | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **123.17** | **352** | PKP | **PKPdf** | | **00 08 28.3** | **-2.2** |
| | comp=Z,0.7nm,0.7s,baz=242,slow=3.1,SNR=2.3 | | | | | | | |
| **KSRS** | **Korea Array** | **125.73** | **330** | PKP | **PKPdf** | | **00 08 32.8** | **-2.7** |
| | comp=Z,3.3nm,0.8s,baz=1.1,slow=1.8,SNR=8.7 | | | | | | | |
| **NJ2** | **Nanjing** | **134.43** | **334** | *eP* | **PKiKP** | | **00 08 54.3** | **+0.8** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **141.53** | **243** | PKhKP | PKPpre | | 00 08 57.7 | |
| | comp=Z,3.0nm,0.9s,baz=117,slow=3.2,SNR=7.4 | | | | | | | |
| ASAR | | | | PKP | **PKPdf** | | **00 09 04.4** | **-1.1** |
| | comp=Z,2.8nm,0.9s,baz=111,slow=2.0,SNR=17 | | | | | | | |
| **WRA** | **Warramunga Arr** | **142.06** | **249** | PKhKP | PKPpre | | 00 09 00.5 | |
| | comp=Z,2.8nm,0.9s,baz=105,slow=2.9,SNR=18 | | | | | | | |
| **PZH** | **PanZhiHua** | **144.77** | **352** | PKP | **PKPab** | | **00 09 09.0** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **153.02** | **356** | PKP | **PKPdf** | | **00 09 23.8** | **-0.8** |
| | comp=Z,0.9nm,0.6s,baz=323,slow=0.9,SNR=6.5 | | | | | | | |
| CMAR | | | | PKPbc | **PKPbc** | | **00 09 31.5** | **-0.4** |
| | comp=Z,2.3nm,0.8s,baz=339,slow=2.9,SNR=9.6 | | | | | | | |

**GII 17 23:51:47.4±0.3, 31°.807N±0°.001×35°.125E±0°.001, h15km, Mws1.7,1C, confirmed, Dead Sea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VJRH** | **Vered Jericho** | **0.27** | **86** | P | Pb | 23 51 53.5 | -0.4 |
| VJRH | | | | S | Sb | 23 51 58.1 | -0.2 |
| **SALP** | **Salfit** | **0.27** | **12** | P | Pg | 23 51 53.6 | +0.4 |
| **SALP** | **Salfit** | **0.27** | **12** | S | Sb | 23 51 58.6 | +0.2 |
| **YITV** | **Yitav** | **0.29** | **61** | P | Pg | 23 51 53.8 | +0.2 |
| YITV | | | | S | Sb | 23 51 58.8 | -0.2 |
| **DSI** | **Dead Sea** | **0.32** | **137** | P | Pg | 23 51 54.2 | +0.1 |
| **DSI** | **Dead Sea** | **0.32** | **137** | S | Sb | 23 51 59.4 | -0.5 |
| **UJAP** | **Al Uja** | **0.32** | **63** | P | Pg | 23 51 54.3 | +0.1 |
| **AMAZ** | **Amatzia** | **0.33** | **213** | P | Pb | 23 51 54.8 | -0.2 |
| **AMAZ** | **Amatzia** | **0.33** | **213** | S | Sb | 23 52 00.3 | +0.2 |
| **SLTI** | **Sal'it** | **0.44** | **351** | S | Sb | 23 52 03.3 | 0.0 |
| **SLTI** | **Sal'it** | **0.44** | **351** | P | Pg | 23 51 56.3 | +0.1 |
| **YTIR** | **Yattir** | **0.44** | **181** | S | Sb | 23 52 03.2 | -0.3 |
| **YTIR** | **Yattir** | **0.44** | **181** | P | Pg | 23 51 56.4 | +0.1 |
| **MSBI** | **Mazada** | **0.53** | **158** | P | Pg | 23 51 58.0 | 0.0 |
| **MSBI** | **Mazada** | **0.53** | **158** | S | Sg | 23 52 05.0 | -0.1 |
| **HMDT** | **Nahal Hemdat** | **0.56** | **37** | ⇑*iP* | Pg | 23 51 58.2 | -0.3 |
| **HMDT** | **Nahal Hemdat** | **0.56** | **37** | S | Sb | 23 52 06.4 | -0.4 |
| **MMLI** | **Mount Malkishu** | **0.68** | **22** | S | Sb | 23 52 10.0 | -0.2 |
| **MMLI** | **Mount Malkishu** | **0.68** | **22** | P | Pg | 23 51 60.0 | -0.8 |
| **OFRI** | **`Ofer** | **0.82** | **352** | S | Sb | 23 52 14.5 | +0.2 |
| **OFRI** | **`Ofer** | **0.82** | **352** | P | Pg | 23 52 03.4 | -0.1 |
| **KZIT** | **Kziot** | **1.09** | **215** | S | Sb | 23 52 22.4 | +0.3 |
| **KZIT** | **Kziot** | **1.09** | **215** | P | Pb | 23 52 07.2 | -0.8 |
| **RMOT** | **Ramot** | **1.14** | **24** | P | Pb | 23 52 08.4 | -0.5 |
| RMOT | | | | S | Sn | 23 52 24.0 | -0.1 |
| **KNHM** | **Kefar Nahum** | **1.14** | **20** | P | Pb | 23 52 07.8 | -1.1 |
| KNHM | | | | S | Sb | 23 52 23.9 | +0.3 |
| **MMA0B** | **Mount Meron ar** | **1.23** | **11** | P | Pn | 23 52 09.2 | -1.0 |
| **MMA0B** | **Mount Meron ar** | **1.23** | **11** | S | Sb | 23 52 26.2 | +0.1 |
| **MMC7** | **Mount Meron ar** | **1.23** | **11** | P | Pn | 23 52 09.5 | -0.7 |
| **ZFRI** | **Zfri** | **1.25** | **178** | P | Pn | 23 52 09.7 | -0.6 |
| **ZFRI** | **Zfri** | **1.25** | **178** | S | Sb | 23 52 26.7 | 0.0 |
| **HNTI** | **Hanita** | **1.27** | **2** | S | Sb | 23 52 27.3 | 0.0 |
| **HNTI** | **Hanita** | **1.27** | **2** | P | Pn | 23 52 09.8 | -0.9 |
| **KSHT** | **Keshet** | **1.31** | **26** | S | Sb | 23 52 28.4 | 0.0 |
| **KSHT** | **Keshet** | **1.31** | **26** | P | Pn | 23 52 10.8 | -0.4 |
| **PRNI** | **Paran** | **1.46** | **184** | S | Sn | 23 52 32.0 | 0.0 |
| **PRNI** | **Paran** | **1.46** | **184** | P | Pn | 23 52 12.5 | -0.7 |
| **GEM** | **Giv'at Ha'Em** | **1.47** | **18** | S | Sb | 23 52 32.6 | -0.2 |
| **GEM** | **Giv'at Ha'Em** | **1.47** | **18** | P | Pn | 23 52 13.1 | -0.3 |
| **KRMI** | **Paran Flat** | **1.72** | **192** | P | Pn | 23 52 16.1 | -0.8 |
| **HRFI** | **Mount Harif** | **1.77** | **182** | S | Sn | 23 52 39.3 | -0.5 |
| **HRFI** | **Mount Harif** | **1.77** | **182** | P | Pn | 23 52 16.8 | -0.7 |

**IDC 17 23:52:40.7±2.5, 18°.40S×177°.13W, h0km, mb3.5/4, mbtmp3.5/4, Error ellipse: s-maj=149.1km s-min=31.3km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.74** | **260** | P | P | 00 01 04.1 | -0.1 |
| | 0.2nm,0.8s,baz=99,slow=8.0,SNR=2.2 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **45.83** | **255** | P | P | 00 01 04.8 | -0.1 |
| | 0.6nm,0.5s,baz=90,slow=8.5,SNR=9.7 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.24** | **57** | P | P | 00 05 20.2 | +0.4 |
| | 0.4nm,0.7s,baz=234,slow=7.6,SNR=3.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.10** | **12** | P | P | 00 05 22.5 | -0.6 |
| | 0.2nm,0.4s,baz=216,slow=4.9,SNR=1.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*UPA 17 23:55:04.4±1.0, 8°.58N×83°.14W, h8km±6km, MW3.8*
*UCR 17 23:55:04.6±0.8, 8°.58N×83°.18W, h20km±2km, MW4.0*
**ISC 17 23:55:04.5±0.9, 8°.59N±0°.04×83°.17W±0°.03, h18km±5km, n35, σ0°.74/47, 4C-7D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.04** | **28** | ⇑*eP* | **Pg** | **23 55 07.3** | **-0.4** |
| FITO | | | | *eS* | **Sg** | **23 55 10.0** | **+0.1** |
| **EDAD** | **Golfito** | **0.06** | **6** | ⇑*eP* | **Pg** | **23 55 07.6** | **-0.3** |
| EDAD | | | | *eS* | **Sg** | **23 55 10.2** | **0.0** |
| **PTJ1** | **Puerto Jimnez** | **0.14** | **247** | ⇑*eP* | **Pg** | **23 55 08.6** | **0.0** |
| PTJ1 | | | | *eS* | **Sg** | **23 55 12.6** | **+1.2** |
| **JIME** | **Puerto Jimenez** | **0.16** | **251** | ⇑*eP* | **Pg** | **23 55 08.7** | **-0.1** |
| JIME | | | | *eS* | **Sg** | **23 55 12.8** | **+1.0** |
| **NELY** | **Ciudad Neily** | **0.23** | **75** | ⇓*eP* | **Pb** | **23 55 10.3** | **+0.1** |
| NELY | | | | *eS* | **Sg** | **23 55 15.2** | **+1.5** |
| **VITO** | **San Vito** | **0.30** | **41** | ⇓*eP* | **Pb** | **23 55 11.8** | **+0.3** |
| **MLIR3** | **Monte Lirio, C** | **0.40** | **60** | *eP* | **Pg** | **23 55 13.0** | **+0.1** |
| **EDP2** | **Potrero Grande** | **0.42** | **359** | *eP* | **Pg** | **23 55 13.5** | **+0.3** |
| **EDPN** | **Palmar Norte** | **0.46** | **323** | ⇓*eP* | **Pb** | **23 55 13.5** | **-0.7** |
| EDPN | | | | *eS* | **Sg** | **23 55 20.6** | **+0.3** |
| **PTPM** | **Petroterminale** | **0.48** | **143** | *eP* | **Pb** | **23 55 14.3** | **-0.2** |
| **BRU2** | **Volcan** | **0.52** | **67** | *eP* | **Pb** | **23 55 14.9** | **-0.3** |
| BRU2 | | | | *eS* | **Sg** | **23 55 23.2** | **+1.2** |
| **BRU2** | **Volcan** | **0.52** | **67** | ⇓*eP* | **Pb** | **23 55 14.9** | **-0.3** |
| BRU2 | | | | *eS* | **Sg** | **23 55 23.0** | **+0.9** |
| **EDBA** | **Buenos Aires** | **0.58** | **350** | *eP* | **Pb** | **23 55 15.9** | **-0.3** |
| **BURE** | **Buenos Aires** | **0.60** | **344** | *eP* | **Pb** | **23 55 16.2** | **-0.3** |
| **BCO2** | **Palmira** | **0.65** | **79** | *eP* | **Pb** | **23 55 17.1** | **-0.4** |
| BCO2 | | | | *eS* | **Sg** | **23 55 27.0** | **+0.9** |
| **DRK0** | **Durika** | **0.67** | **354** | *eP* | **Pb** | **23 55 17.2** | **-0.6** |
| **DRK0** | **Durika** | **0.67** | **354** | ⇓*eP* | **Pb** | **23 55 17.1** | **-0.8** |
| **DVD** | **David** | **0.73** | **102** | *eP* | **Pb** | **23 55 18.0** | **-0.8** |
| DVD | | | | *eS* | **Sb** | **23 55 28.3** | **-0.2** |
| **LNBQ3** | **Los Naranjos,** | **0.75** | **75** | *eP* | **Pb** | **23 55 18.4** | **-0.8** |
| **CHGR2** | **Aguacate** | **1.07** | **71** | *eP* | **Pn** | **23 55 23.9** | **-0.9** |
| CHGR2 | | | | *eS* | **Sb** | **23 55 37.9** | **-0.4** |
| **CNI2** | **El Empalme, Bo** | **1.08** | **40** | *eP* | **Pn** | **23 55 23.7** | **-1.1** |
| CNI2 | | | | *eS* | **Sb** | **23 55 38.2** | **-0.3** |
| **BUS1** | **Rivas** | **1.11** | **329** | ⇓*eP* | **Pb** | **23 55 23.9** | **-1.6** |
| **ABE2** | **San Pablo** | **1.41** | **322** | *eP* | **Pn** | **23 55 29.5** | **0.0** |
| **LCR2** | **La Lucha 2** | **1.41** | **324** | *eP* | **Pn** | **23 55 28.8** | **-0.8** |
| **NANC3** | **Nancito, Chiri** | **1.47** | **104** | *eP* | **Pn** | **23 55 29.9** | **-0.3** |
| **VTCV** | **VTCV, Calle Va** | **1.49** | **338** | *eP* | **Pn** | **23 55 30.6** | **-0.1** |
| **TAAN** | **Batan** | **1.49** | **353** | *eP* | **Pn** | **23 55 30.9** | **+0.3** |
| **CVTV** | **Tajo** | **1.52** | **338** | *eP* | **Pb** | **23 55 31.8** | **-0.6** |
| **CVTG** | **Turrialba Volc** | **1.52** | **337** | *eP* | **Pb** | **23 55 31.9** | **-0.6** |
| **VTLA** | **Turrialba Volc** | **1.52** | **337** | *eP* | **Pn** | **23 55 31.8** | **+0.6** |
| **LCOCO** | **El Coco** | **1.53** | **346** | *eP* | **Pn** | **23 55 31.5** | **+0.4** |
| **CVTR** | **Volcan Turrial** | **1.53** | **338** | ⇓*eP* | **Pb** | **23 55 32.2** | **-0.6** |
| **VICA** | **Volcano Irazu** | **1.54** | **334** | *eP* | **Pn** | **23 55 31.2** | **-0.3** |
| **JTS** | **Las Juntas de** | **2.44** | **314** | *eP* | **Pn** | **23 55 44.7** | **+1.1** |
| **ACON** | **Acoyapa** | **3.89** | **330** | *eP* | **Pn** | **23 56 05.2** | **+1.7** |

*AEIC 17 23:55:53.5±2.4, 69°.51N±0°.04×144°.59W±0°.04, h8km±6km, Error ellipse: s-maj=6.3km s-min=2.3km az=180.0*
**NEIC 17 23:55:53.7±2.2, 69°.63N±0°.05×144°.51W±0°.09, h3km±7km, ML3.5/58, ML3.4(AEIC), Error ellipse: s-maj=7.6km s-min=4.0km az=196.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **91** | | Pg | 23 56 00.1 | +1.0 |
| C27K | | | | | Sg | 23 56 03.9 | +1.2 |
| **C26K** | **Camden Bay** | **0.32** | **334** | | Pb | 23 56 01.3 | -0.8 |
| C26K | | | | | Sb | 23 56 07.0 | -0.7 |
| **D25K** | **Kavik River** | **0.73** | **246** | Pg | Pg | 23 56 05.7 | -1.9 |
| D25K | | | | | Sg | 23 56 14.8 | -2.2 |
| **D27M** | **Malcolm River** | **1.31** | **106** | | Pg | 23 56 17.3 | -1.5 |
| D27M | | | | | Sn | 23 56 37.0 | 0.0 |
| D27M | | | | IAML | | 23 56 40.4 | |
| | comp=N,582nm,0.9s | | | | | | |
| D27M | | | | IAML | | 23 56 41.8 | |
| | comp=E,508nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.47** | **275** | | Pn | 23 56 20.2 | -0.8 |
| C24K | | | | | Sb | 23 56 40.5 | -0.1 |
| **D24K** | **Happy Valley** | **1.60** | **255** | | Pn | 23 56 22.8 | -0.1 |
| D24K | | | | | Sg | 23 56 45.7 | +0.6 |
| D24K | | | | IAML | | 23 56 49.8 | |
| | comp=E,737nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.79** | **143** | | Pn | 23 56 25.5 | -0.1 |
| E27K | | | | | Sb | 23 56 50.1 | 0.0 |
| E27K | | | | IAML | | 23 56 52.2 | |
| | comp=E,306nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.95** | **176** | | Pn | 23 56 26.5 | -1.2 |
| F26K | | | | | Sn | 23 56 53.5 | +0.7 |
| F26K | | | | IAML | | 23 56 59.2 | |
| | comp=N,454nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.06** | **118** | | Pn | 23 56 30.3 | +1.1 |
| E28M | | | | | Sg | 23 56 59.0 | -0.8 |
| **TOLK** | **Toolik Lake Re** | **2.07** | **244** | | Pn | 23 56 27.9 | -1.4 |
| TOLK | | | | IAML | | 23 57 02.4 | |
| | comp=E,398nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 23 57 10.8 | |
| | comp=N,217nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **2.09** | **192** | | Pn | 23 56 28.0 | -1.7 |
| F25K | | | | IAML | | 23 57 01.9 | |
| | comp=N,422nm,0.7s | | | | | | |
| F25K | | | | IAML | | 23 57 02.8 | |
| | comp=E,429nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **225** | | Pn | 23 56 28.6 | -1.6 |
| E24K | | | | IAML | | 23 57 08.5 | |
| | comp=E,212nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.13** | **278** | | Pn | 23 56 30.9 | +0.7 |
| **BMAR** | **Burnt Mountain** | **2.21** | **181** | | Pn | 23 56 31.7 | +0.3 |
| **D23K** | **Nanushuk River** | **2.29** | **256** | | Pn | 23 56 32.2 | -0.2 |
| D23K | | | | IAML | | 23 57 12.7 | |
| | comp=N,181nm,0.8s | | | | | | |
| D23K | | | | IAML | | 23 57 22.9 | |
| | comp=E,168nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **232** | | Pn | 23 56 34.5 | +0.1 |
| E23K | | | | IAML | | 23 57 15.1 | |
| | comp=E,206nm,0.8s | | | | | | |
| E23K | | | | IAML | | 23 57 18.1 | |
| | comp=N,171nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **2.46** | **212** | | Pn | 23 56 34.5 | -0.2 |
| F24K | | | | IAML | | 23 57 11.8 | |
| | comp=E,173nm,0.5s | | | | | | |
| F24K | | | | IAML | | 23 57 20.3 | |
| | comp=N,190nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.65** | **138** | | Pn | 23 56 37.5 | +0.3 |
| F28M | | | | IAML | | 23 57 20.8 | |
| | comp=E,170nm,0.7s | | | | | | |
| F28M | | | | IAML | | 23 57 23.4 | |
| | comp=N,171nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.69** | **115** | | Pn | 23 56 39.1 | +1.3 |
| E29M | | | | IAML | | 23 57 24.1 | |
| | comp=N,160nm,0.9s | | | | | | |
| E29M | | | | IAML | | 23 57 29.9 | |
| | comp=E,174nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.71** | **174** | | Pn | 23 56 38.2 | +0.1 |
| **D22K** | **Ayikyak River** | **3.00** | **259** | | Pn | 23 56 42.3 | +0.1 |
| D22K | | | | IAML | | 23 57 40.9 | |
| | comp=N,164nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **3.03** | **158** | | Pn | 23 56 42.6 | +0.1 |
| **E22K** | **Anaktuvuk Pass** | **3.04** | **244** | | Pn | 23 56 42.2 | -0.6 |
| E22K | | | | IAML | | 23 57 37.0 | |
| | comp=N,100nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.15** | **287** | | Pn | 23 56 44.5 | +0.5 |
| **B21K** | **Ikpikpuk River** | **3.53** | **275** | Pn | Pn | 23 56 49.3 | -0.1 |
| B21K | | | | IAML | | 23 57 57.7 | |
| | comp=E,115nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.78** | **118** | | Pn | 23 56 55.1 | +2.2 |
| **A22K** | **Sinclair Lake** | **3.80** | **296** | | Pn | 23 56 54.2 | +1.2 |
| **H24K** | **Noodor Dome** | **4.02** | **200** | Pn | Pn | 23 56 55.5 | -0.7 |
| H24K | | | | IAML | | 23 58 02.6 | |
| | comp=E,78nm,0.8s | | | | | | |
| H24K | | | | IAML | | 23 58 06.0 | |
| | comp=N,58nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.10** | **238** | Pn | Pn | 23 56 56.0 | -1.3 |
| F21K | | | | IAML | | 23 58 14.8 | |
| | comp=E,48nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **4.40** | **281** | | Pn | 23 57 01.6 | +0.3 |
| **G21K** | **Allakaket** | **4.60** | **231** | Pn | Pn | 23 57 03.4 | -0.6 |
| G21K | | | | IAML | | 23 58 33.9 | |
| | comp=N,42nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.88** | **205** | | Pn | 23 57 07.8 | -0.1 |
| I23K | | | | IAML | | 23 58 38.6 | |
| | comp=E,44nm,0.9s | | | | | | |
| **MDM** | **Murphy Dome** | **4.91** | **199** | | Pn | 23 57 08.1 | -0.3 |
| MDM | | | | IAML | | 23 58 36.4 | |
| | comp=E,40nm,1.1s | | | | | | |
| MDM | | | | IAML | | 23 58 37.0 | |
| | comp=N,44nm,0.7s | | | | | | |
| **DOT** | **Dot Lake** | **6.01** | **178** | | Pn | 23 57 24.3 | +0.8 |
| **YUK2** | **White River** | **8.02** | **167** | | Pn | 23 57 51.7 | +0.6 |

**UCR 17 23:59:43.4±1.0, 8°.58N×83°.18W, h21km±3km, MW3.5, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.05** | **25** | *eP* | Pb | 23 59 46.3 | -0.9 |
| FITO | | | | *eS* | Sb | 23 59 48.7 | -1.1 |
| **EDAD** | **Golfito** | **0.08** | **8** | *eP* | Pb | 23 59 46.5 | -0.9 |
| EDAD | | | | *eS* | Sb | 23 59 49.2 | -1.0 |
| **PTJ1** | **Puerto Jimnez** | **0.13** | **252** | *eP* | Pb | 23 59 47.6 | -2.0 |
| PTJ1 | | | | *eS* | Sb | 23 59 51.7 | -2.3 |
| **JIME** | **Puerto Jimenez** | **0.15** | **256** | *eP* | Pb | 23 59 47.8 | -1.6 |
| JIME | | | | *eS* | Sb | 23 59 52.2 | -1.4 |
| **NELY** | **Ciudad Neily** | **0.24** | **72** | *eP* | Pb | 23 59 49.2 | -0.3 |
| NELY | | | | *eS* | Sb | 23 59 54.1 | +0.4 |
| **EDP2** | **Potrero Grande** | **0.44** | **0** | *eP* | Pb | 23 59 52.1 | -0.2 |
| **BRU2** | **Volcan** | **0.53** | **66** | *eP* | Pb | 23 59 53.8 | -0.4 |
| BRU2 | | | | *eS* | Sb | 00 00 01.8 | +0.4 |
| **DRK0** | **Durika** | **0.69** | **354** | *eP* | Pb | 23 59 55.8 | -1.1 |

*UCR 18 00:08:32.7±0.7, 8°.54N×83°.21W, h16km±2km, MW3.5*
**CATAC 18 00:08:32.4±0.8, 8°.51N×83°.18W, h9km±3km, ML3.2, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.12** | **12** | *eP* | Pg | 00 08 35.4 | +0.2 |
| FITO | | | | *eS* | Sg | 00 08 38.0 | +0.8 |
| **PTJ1** | **Puerto Jimnez** | **0.12** | **284** | *i* P | Pg | 00 08 35.8 | +0.5 |
| PTJ1 | | | | IAML | | 00 08 36.0 | |
| | comp=Z,23μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | Sg | 00 08 39.3 | +2.0 |
| **PTJ1** | **Puerto Jimnez** | **0.12** | **284** | *eP* | Pg | 00 08 35.9 | +0.6 |
| PTJ1 | | | | *eS* | Sg | 00 08 39.3 | +2.0 |
| **EDAD** | **Golfito** | **0.15** | **5** | *eP* | Pg | 00 08 35.7 | +0.1 |
| **JIME** | **Puerto Jimenez** | **0.15** | **283** | *eP* | Pg | 00 08 36.0 | +0.4 |
| JIME | | | | *eS* | Sg | 00 08 39.6 | +1.8 |
| **NELY** | **Ciudad Neily** | **0.27** | **58** | *eP* | Pb | 00 08 38.8 | -0.7 |
| NELY | | | | *eS* | Sb | 00 08 44.0 | -0.2 |
| **CDITO** | **Canoas** | **0.31** | **77** | *i* P | Pb | 00 08 39.5 | -0.6 |
| CDITO | | | | *i* S | Sb | 00 08 45.1 | -0.2 |
| CDITO | | | | IAML | | 00 08 49.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **VITO** | **San Vito** | **0.37** | **34** | *eP* | Pb | 00 08 40.6 | -0.7 |
| **EDP2** | **Potrero Grande** | **0.51** | **0** | *eP* | Pg | 00 08 42.0 | -0.2 |
| **EDPN** | **Palmar Norte** | **0.53** | **329** | *eP* | Pg | 00 08 41.7 | -1.0 |
| **BRU2** | **Volcan** | **0.56** | **59** | *i* P | Pg | 00 08 43.8 | +0.5 |
| BRU2 | | | | *i* S | Sb | 00 08 52.4 | -0.3 |
| BRU2 | | | | IAML | | 00 08 55.2 | |
| | comp=Z,650nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.56** | **59** | *eP* | Pg | 00 08 43.7 | +0.4 |
| **EDBA** | **Buenos Aires** | **0.66** | **352** | *eP* | Pg | 00 08 44.6 | -0.6 |
| **DRK0** | **Durika** | **0.76** | **355** | *i* P | Pg | 00 08 45.9 | -1.1 |
| DRK0 | | | | IAML | | 00 08 46.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| DRK0 | | | | *i* S | Sb | 00 08 57.9 | -0.5 |
| **DRK0** | **Durika** | **0.76** | **355** | *eP* | Pg | 00 08 45.9 | -1.2 |
| **BUS1** | **Rivas** | **1.18** | **332** | *eP* | Pg | 00 08 53.0 | -2.2 |
| **ABE2** | **San Pablo** | **1.47** | **324** | *eP* | Pn | 00 08 58.4 | -0.9 |
| **LCR2** | **La Lucha 2** | **1.48** | **326** | *i* P | Pn | 00 08 58.2 | -1.2 |
| LCR2 | | | | *i* S | Sg | 00 09 20.1 | +0.2 |
| LCR2 | | | | IAML | | 00 09 20.3 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **VTCV** | **VTCV, Calle Va** | **1.56** | **340** | *eP* | Pn | 00 08 59.6 | -1.0 |
| **CVTV** | **Tajo** | **1.59** | **339** | *eP* | Pn | 00 09 00.5 | -0.6 |
| **CVTR** | **Volcan Turrial** | **1.61** | **339** | *eP* | Pn | 00 08 34.5 | -27 |

*NNC 18 00:11:11.0±1.4, 43°.84N×85°.77E, h4km±5km, mb3.7, mpv3.5, Error ellipse: s-maj=9.7km s-min=6.2km az=116.0*
*SOME 18 00:11:13.2, 44°.27N×85°.65E, h0km*
**ISC 18 00:11:13.0±2.3, 43°.95N±0°.08×85°.7E±0°.1, h10km, n26, σ2°.43/40, 12C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZSN** | **Zaisan** | **3.55** | **351** | *eP* | **Pb** | **00 12 15.8** | **-0.1** |
| | 8.9nm,0.5s | | | | | | |
| ZSN | | | | *eS* | **Sb** | **00 13 00.6** | **+1.6** |
| | 9.6nm,0.8s | | | | | | |
| **ZSN** | **Zaisan** | **3.55** | **351** | Pg | **Pb** | **00 12 15.8** | **-0.1** |
| | 9.2nm,0.5s | | | | | | |
| ZSN | | | | Lg | Lg | 00 13 00.7 | |
| | 11nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **3.70** | **321** | ⇓Pn | **Pn** | **00 12 10.6** | **+0.3** |
| | 0.9nm,0.3s,baz=153,slow=13,SNR=43 | | | | | | |
| MK31 | | | | ⇑Pg | **Pb** | **00 12 20.0** | **+1.5** |
| | 5.1nm,0.6s,baz=126,slow=15,SNR=12 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **00 12 58.0** | **+4.1** |
| | 4.0nm,0.4s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 00 13 12.4 | |
| | 15nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **3.86** | **319** | ⇑Pn | **Pn** | **00 12 12.7** | **+0.3** |
| | 2.5nm,0.4s | | | | |

| | | | | | |
|---|---|---|---|---|---|
| KURBB | | | ⇑Lg | Lg | 00 15 36.9 |
| | 20nm,0.8s | | | | |
| **KURK** | **Kurchatov** | **8.28 327** | Pn | **Pn** | **00 13 12.7 -0.4** |
| | 5.4nm,1.6s | | | | |
| KURK | | | ⇑Sn | **Sn** | **00 14 43.6 -3.0** |
| | 0.6nm,0.4s | | | | |
| KURK | | | ⇑Lg | Lg | 00 15 34.1 |
| | 5.5nm,0.8s | | | | |

*BJI* ***18*** *00:15:16.5±0.0,24.°08N×120.°99E,h8km,mb4.5/57, mB4.9/15,ML5.0/11,Ms4.9/50,Ms7 4.8/47*

*NIED* ***18*** *00:15:17.0,24.°02N×120.°95E,h9km,MW4.7,Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁶Nm; Mrr0.25; Mθθ0.89; Mϕϕ -1.14; Mrθ-0.45; Mθϕ0.22; Mϕr-0.86; Fault plane solution: M₀1.41000×10¹⁶ NP1: ϕs214.00000°,δ85.00000°,λ135.00000°. NP2: ϕs309.00000°,δ45.00000°,λ7.00000°.*

*JMA* ***18*** *00:15:17.0±0.3,24.°0N±0.°6×12.°1E±,h9km,MD4.8/15, MV4.8/15,TAIWAN REGION*

*NEIC* ***18*** *00:15:17.6±1.3,24.°01N±0.°04×120.°99E±0.°02,h20km±4km, mb4.9/127,Mwr4.6/27,Error ellipse: s-maj=5.6km s-min=2.9km az=159.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr0.76; Mθθ0.23; Mϕϕ-0.99; Mrθ-0.49; Mθϕ0.31; Mϕr-0.45; Fault plane solution: M₀1.16000×10¹⁶ NP1:ϕs317.74000°,δ43.90000°, λ40.69000°. NP2:ϕs195.97000°,δ63.13000°,λ126.12000°. Principal axes: T 1.1881, Plg56.0000°, Azm154.0000°; N -0.0643, Plg32.0000°, Azm358.0000°; P -1.1238, Plg11.0000°, Azm261.0000°;*

*BGR* ***18*** *00:15:17.3,23.°37N×121.°49E,h22km,mb5.0*

*NEIC* ***18*** *00:15:17.8,23.°98N×121.°00E,h21km*

*ASIES* ***18*** *00:15:17.2,24.°02N×121.°00E,h19km,ML5.2,Mw4.7, Moment Tensor Solution. Moment tensor: Scale 10²²Nm; Mrr9.50; Mθθ-0.42; Mϕϕ-9.08; Mrθ-2.88; Mθϕ1.03; Mϕr-7.07; Fault plane solution: M₀12.07270×10²² NP1: ϕs190.05000°,δ64.74000°,λ103.99000°. NP2: ϕs339.78000°,δ28.65000°,λ62.87000°. Principal axes: T Plg67.2580°, Azm126.3040°; N Plg12.6290°, Azm3.9910°; P Plg18.5910°, Azm269.6690°;*

*TAP* ***18*** *00:15:17.3,24.°02N×121.°00E,h18km,ML5.2,B*

*IDC* ***18*** *00:15:20.3±2.7,23.°93N×121.°22E,h45km±25km,mb4.1/24, mbtmp4.3/26,ML4.0/2,MS3.8/1,Error ellipse: s-maj=16.3km s-min=11.2km az=57.0*

**ISC 18 00:15:17.8±0.5,24.°012N±0.°010×121.°02E±0.°01, h19km±2km,n506,σ1s18/657,mb4.8/113,MS4.8/4,55C-82D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WPL** | **Puli Township** | **0.06** | **270** | ⇑e | P | | **Pg** | **00 15 22.8** | **+1.5** |
| | baz=267 | | | | | | | | |
| **DPDB** | **Guoxing** | **0.09** | **284** | ⇑i | P | | **Pg** | **00 15 21.1** | **-0.5** |
| | baz=285 | | | | | | | | |
| DPDB | | | | i | S | | **Sg** | **00 15 23.6** | **-0.5** |
| | baz=285 | | | | | | | | |
| **WUSB** | **Renai** | **0.09** | **102** | ⇑i | P | | **Pg** | **00 15 21.4** | **-0.3** |
| | baz=102 | | | | | | | | |
| WUSB | | | | | S | | **Sg** | **00 15 23.9** | **-0.4** |
| | baz=102 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **295** | ⇑i | P | | **Pg** | **00 15 21.3** | **-0.4** |
| | baz=297 | | | | | | | | |
| WCS | | | | i | S | | **Sg** | **00 15 23.8** | **-0.5** |
| | baz=297 | | | | | | | | |
| **CHGB** | **Renai** | **0.15** | **71** | ⇓i | P | | **Pg** | **00 15 22.3** | **-0.1** |
| | baz=74 | | | | | | | | |
| CHGB | | | | i | S | | **Sg** | **00 15 25.6** | **+0.1** |
| | baz=74 | | | | | | | | |
| **OWD** | **Renai** | **0.15** | **112** | ⇓i | P | | **Pg** | **00 15 22.3** | **-0.1** |
| | baz=111 | | | | | | | | |
| OWD | | | | | S | | **Sg** | **00 15 25.6** | **+0.1** |
| | baz=111 | | | | | | | | |
| **TYC** | **Yuchr** | **0.18** | **234** | ⇑i | P | | **Pb** | **00 15 22.1** | **+0.4** |
| | baz=225 | | | | | | | | |
| TYC | | | | i | S | | **Sb** | **00 15 25.2** | **+1.0** |
| | baz=225 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.23** | **195** | | P | | **Pg** | **00 15 22.7** | **-0.7** |
| **SSLB** | **Suanglung** | **0.23** | **195** | | | | **Pg** | **00 15 22.8** | **-0.7** |
| SSLB | | | | | Sg | | **Sg** | **00 15 25.9** | **-1.2** |
| **SSLB** | **Suanglung** | **0.23** | **195** | ⇑i | P | | **Pg** | **00 15 22.7** | **-0.7** |
| | baz=185 | | | | | | | | |
| SSLB | | | | i | S | | **Sg** | **00 15 26.1** | **-1.1** |
| | baz=185 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.26** | **59** | ⇓i | P | | **Pb** | **00 15 24.4** | **+0.3** |
| | baz=71 | | | | | | | | |
| WHF | | | | i | S | | **Sg** | **00 15 28.8** | **+0.4** |
| | baz=71 | | | | | | | | |
| **TDCB** | **Techi** | **0.27** | **28** | ⇓ | P | | **Pg** | **00 15 23.8** | **-0.3** |
| | baz=27 | | | | | | | | |
| TDCB | | | | i | S | | **Sg** | **00 15 27.6** | **-0.8** |
| | baz=27 | | | | | | | | |
| **WHP** | **Taichung City** | **0.27** | **346** | ⇑i | P | | **Pg** | **00 15 23.8** | **-0.3** |
| | baz=350 | | | | | | | | |
| WHP | | | | | S | | **Sb** | **00 15 28.6** | **+0.2** |
| | baz=350 | | | | | | | | |
| **TWT** | **Tachien** | **0.28** | **31** | ⇓i | P | | **Pg** | **00 15 23.8** | **-0.5** |
| | baz=33 | | | | | | | | |
| TWT | | | | i | S | | **Sg** | **00 15 27.8** | **-0.9** |
| | baz=33 | | | | | | | | |
| **VWDT** | **VWDT** | **0.28** | **156** | ⇓i | P | | **Pg** | **00 15 24.0** | **-0.1** |
| | baz=154 | | | | | | | | |
| VWDT | | | | | S | | **Sb** | **00 15 28.4** | **0.0** |
| | baz=154 | | | | | | | | |
| **WWF** | **Wufeng** | **0.29** | **276** | ⇓e | P | | **Pb** | **00 15 24.9** | **+0.4** |
| | baz=276 | | | | | | | | |
| **FUSS** | **Fushou** | **0.31** | **41** | ⇓i | P | | **Pg** | **00 15 24.5** | **-0.3** |
| | baz=44 | | | | | | | | |
| FUSS | | | | | S | | **Sg** | **00 15 28.9** | **-0.6** |
| | baz=44 | | | | | | | | |
| **WJS** | **Zhushan** | **0.33** | **235** | ⇓i | P | | **Pb** | **00 15 25.2** | **0.0** |
| | baz=232 | | | | | | | | |
| WJS | | | | | S | | **Sb** | **00 15 30.5** | **+0.5** |
| | baz=232 | | | | | | | | |
| **WNT1** | **Nantou City** | **0.33** | **251** | ⇓ | P | | **Pb** | **00 15 25.4** | **+0.3** |
| | baz=250 | | | | | | | | |
| **WNT** | **Mingjian** | **0.33** | **247** | ⇓i | P | | **Pb** | **00 15 25.4** | **+0.1** |
| | baz=244 | | | | | | | | |
| WNT | | | | e | S | | **Sb** | **00 15 31.1** | **+0.8** |
| | baz=244 | | | | | | | | |
| **TCU** | **Taichung** | **0.34** | **293** | ⇓ | P | | **Pb** | **00 15 25.6** | **+0.2** |
| | baz=294 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.35** | **206** | e | P | | **Pg** | **00 15 24.9** | **-0.4** |
| | baz=198 | | | | | | | | |
| WHYT | | | | | S | | **Sb** | **00 15 30.6** | **-0.2** |
| | baz=198 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.36** | **88** | ⇓i | P | | **Pg** | **00 15 25.5** | **0.0** |
| | baz=85 | | | | | | | | |
| LXIB | | | | | S | | **Sb** | **00 15 31.9** | **+0.7** |
| | baz=85 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.40** | **326** | ⇑i | P | | **Pb** | **00 15 26.8** | **+0.3** |
| | baz=329 | | | | | | | | |
| TWQ1 | | | | | S | | **Sb** | **00 15 33.1** | **+0.8** |
| | baz=329 | | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **0.41** | **263** | ⇓i | P | | **Pb** | **00 15 26.7** | **+0.2** |
| | baz=262 | | | | | | | | |
| WYL | | | | e | S | | **Sb** | **00 15 33.2** | **+0.9** |
| | baz=262 | | | | | | | | |
| **ESL** | **Shilin** | **0.43** | **117** | ⇓i | P | | **Pb** | **00 15 26.7** | **-0.2** |
| | baz=117 | | | | | | | | |
| ESL | | | | | S | | **Sb** | **00 15 32.9** | **0.0** |
| | baz=117 | | | | | | | | |
| **WCHH** | **Zhanghua** | **0.43** | **279** | ⇓i | P | | **Pb** | **00 15 26.9** | **+0.1** |
| | baz=278 | | | | | | | | |
| WCHH | | | | | S | | **Sb** | **00 15 33.1** | **+0.2** |
| | baz=278 | | | | | | | | |
| **ETM** | **Tongmen** | **0.44** | **96** | ⇓i | P | | **Pg** | **00 15 26.6** | **-0.2** |
| | baz=102 | | | | | | | | |
| ETM | | | | | S | | **Sg** | **00 15 32.8** | **0.0** |
| | baz=102 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.45** | **131** | ⇓i | P | | **Pg** | **00 15 26.8** | **-0.2** |
| | baz=124 | | | | | | | | |
| WARBT | | | | | S | | **Sg** | **00 15 32.8** | **-0.3** |
| | baz=124 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.47** | **65** | ⇓i | P | | **Pg** | **00 15 27.2** | **-0.2** |
| | baz=63 | | | | | | | | |
| ETLH | | | | e | S | | **Sb** | **00 15 34.0** | **-0.2** |
| | baz=63 | | | | | | | | |
| **NSY** | **Sanyi** | **0.47** | **330** | ⇑i | P | | **Pb** | **00 15 28.2** | **+0.7** |
| | baz=332 | | | | | | | | |
| NSY | | | | e | S | | **Sb** | **00 15 35.6** | **+1.5** |
| | baz=332 | | | | | | | | |
| **WDJ** | **Dajia District** | **0.48** | **314** | ⇓i | P | | **Pb** | **00 15 28.6** | **+0.9** |
| | baz=316 | | | | | | | | |
| WDJ | | | | e | S | | **Sn** | **00 15 36.1** | **-1.5** |
| | baz=316 | | | | | | | | |
| **EGFH** | **Guangfu** | **0.51** | **132** | ⇑ | P | | **Pg** | **00 15 27.7** | **-0.3** |
| | baz=126 | | | | | | | | |
| EGFH | | | | e | S | | **Sb** | **00 15 35.3** | **+0.2** |
| | baz=126 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.52** | **187** | | P | | **Pg** | **00 15 28.1** | **-0.5** |
| | baz=177 | | | | | | | | |
| YUS | | | | | S | | **Sb** | **00 15 36.1** | **+0.1** |
| | baz=177 | | | | | | | | |
| **NNSB** | **Datong** | **0.53** | **39** | ⇓i | P | | **Pg** | **00 15 27.9** | **-0.7** |
| | baz=41 | | | | | | | | |
| NNSB | | | | | S | | **Sg** | **00 15 34.9** | **-0.9** |
| | baz=41 | | | | | | | | |
| **NNSH** | **Datong** | **0.53** | **39** | ⇓ | P | | **Pg** | **00 15 27.9** | **-0.8** |
| | baz=35 | | | | | | | | |
| NNSH | | | | | S | | **Sg** | **00 15 35.8** | **-0.1** |
| | baz=35 | | | | | | | | |
| **TWD** | **Chiawan** | **0.53** | **83** | ⇓i | P | | **Pg** | **00 15 28.2** | **-0.3** |
| | baz=91 | | | | | | | | |
| TWD | | | | e | S | | **Sb** | **00 15 36.8** | **+1.0** |
| | baz=91 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.54** | **37** | ⇓i | P | | **Pg** | **00 15 28.1** | **-0.6** |
| | baz=40 | | | | | | | | |
| NNS | | | | e | S | | **Sg** | **00 15 35.1** | **-0.8** |
| | baz=40 | | | | | | | | |
| **HWA** | **Hwalien** | **0.54** | **94** | ⇓ | P | | **Pb** | **00 15 28.9** | **+0.3** |
| | baz=94 | | | | | | | | |
| HWA | | | | e | S | | **Sb** | **00 15 37.2** | **+1.3** |
| | baz=94 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.55** | **114** | ⇓i | P | | **Pb** | **00 15 29.1** | **+0.4** |
| | baz=114 | | | | | | | | |
| SHUL | | | | i | S | | **Sb** | **00 15 37.3** | **+1.2** |
| | baz=114 | | | | | | | | |
| **WDLH** | **Douliu** | **0.55** | **234** | ⇓ | P | | **Pb** | **00 15 29.0** | **+0.3** |
| | baz=231 | | | | | | | | |
| WDLH | | | | e | S | | **Sn** | **00 15 38.0** | **-1.2** |
| | baz=231 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.55** | **105** | ⇓ | P | | **Pb** | **00 15 29.0** | **+0.2** |
| | baz=101 | | | | | | | | |
| TEYL | | | | | S | | **Sb** | **00 15 37.8** | **+1.6** |
| | baz=101 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.55** | **73** | | P | | **Pg** | **00 15 28.4** | **-0.5** |
| **NACB** | **Ninganchiao** | **0.55** | **73** | | | | **Pg** | **00 15 28.4** | **-0.5** |
| NACB | | | | | Sg | | **Sb** | **00 15 37.8** | **+1.5** |
| **NACB** | **Ninganchiao** | **0.55** | **73** | ⇓i | P | | **Pg** | **00 15 28.6** | **-0.3** |
| | baz=81 | | | | | | | | |
| NACB | | | | | S | | **Sb** | **00 15 36.4** | **+0.2** |
| | baz=81 | | | | | | | | |
| **NMLH** | **Miaoli** | **0.56** | **338** | ⇑e | P | | **Pn** | **00 15 30.2** | **-0.7** |
| | baz=339 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.56** | **122** | e | P | | **Pb** | **00 15 29.5** | **+0.5** |
| | baz=116 | | | | | | | | |
| TEGC | | | | e | S | | **Sb** | **00 15 37.1** | **+0.5** |
| | baz=116 | | | | | | | | |
| **ETL** | **Fush Village** | **0.57** | **75** | ⇓ | P | | **Pg** | **00 15 28.8** | **-0.5** |
| | baz=85 | | | | | | | | |
| ETL | | | | e | S | | **Sb** | **00 15 37.6** | **+0.7** |
| | baz=85 | | | | | | | | |
| **EHY** | **Hungye** | **0.57** | **151** | ⇓ | P | | **Pg** | **00 15 29.1** | **-0.3** |
| | baz=145 | | | | | | | | |
| EHY | | | | e | S | | **Sb** | **00 15 37.4** | **+0.4** |
| | baz=145 | | | | | | | | |
| **EHYH** | **Wanrong** | **0.60** | **150** | e | P | | **Pg** | **00 15 29.4** | **-0.3** |
| | baz=144 | | | | | | | | |
| EHYH | | | | e | S | | **Sb** | **00 15 37.8** | **+0.3** |
| | baz=144 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.60** | **260** | e | P | | **Pb** | **00 15 29.7** | **+0.1** |
| | baz=258 | | | | | | | | |
| WRL | | | | e | S | | **Sn** | **00 15 39.3** | **-1.2** |
| | baz=258 | | | | | | | | |
| **RLNB** | **Erlin** | **0.61** | **259** | ⇓ | P | | **Pb** | **00 15 29.8** | **-0.1** |
| | baz=258 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.62** | **358** | ⇑i | P | | **Pg** | **00 15 30.4** | **+0.3** |
| | baz=348 | | | | | | | | |
| NSTT | | | | i | S | | **Sb** | **00 15 38.7** | **+0.5** |
| | baz=348 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.62** | **8** | ⇑i | P | | **Pg** | **00 15 30.0** | **-0.3** |
| | baz=18 | | | | | | | | |
| NFF | | | | e | S | | **Sg** | **00 15 38.4** | **-0.3** |
| | baz=18 | | | | | | | | |
| **LIOB** | **Emei** | **0.63** | **360** | ⇑i | P | | **Pg** | **00 15 30.8** | **+0.4** |
| | baz=9.0 | | | | | | | | |
| LIOB | | | | i | S | | **Sb** | **00 15 39.5** | **+0.9** |
| | baz=9.0 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.64** | **144** | ⇓i | P | | **Pg** | **00 15 30.6** | **+0.1** |
| | baz=144 | | | | | | | | |
| HGSD | | | | | S | | **Sb** | **00 15 38.9** | **+0.2** |
| | baz=144 | | | | | | | | |
| **YULB** | **Yu-li** | **0.67** | **157** | | P | | **Pb** | **00 15 30.7** | **-0.1** |
| **YULB** | **Yu-li** | **0.67** | **157** | | | | **Pb** | **00 15 30.5** | **-0.3** |
| YULB | | | | | Sg | | **Sb** | **00 15 39.3** | **-0.4** |
| **YULB** | **Yu-li** | **0.67** | **157** | ⇓i | P | | **Pb** | **00 15 30.5** | **-0.3** |
| | baz=148 | | | | | | | | |
| YULB | | | | e | S | | **Sg** | **00 15 40.1** | **+0.1** |
| | baz=148 | | | | | | | | |
| **NJN** | **Zhunan** | **0.68** | **349** | e | P | | **Pn** | **00 15 32.0** | **-0.5** |
| | baz=351 | | | | | | | | |
| NJN | | | | e | S | | **Sg** | **00 15 40.9** | **+0.4** |
| | baz=351 | | | | | | | | |
| **WCKO** | **Fanlu** | **0.69** | **214** | ⇓ | P | | **Pb** | **00 15 31.0** | **-0.1** |
| | baz=211 | | | | | | | | |
| WCKO | | | | i | S | | **Sg** | **00 15 40.9** | **+0.4** |
| | baz=211 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.69** | **226** | ⇓i | P | | **Pg** | **00 15 31.5** | **0.0** |
| | baz=224 | | | | | | | | |
| CHN2 | | | | i | S | | **Sn** | **00 15 42.1** | **-0.7** |
| | baz=224 | | | | | | | | |
| **LATG** | **Datong** | **0.70** | **41** | ⇓i | P | | **Pb** | **00 15 30.9** | **-0.6** |
| | baz=35 | | | | | | | | |
| LATG | | | | e | S | | **Sb** | **00 15 40.1** | **-0.6** |
| | baz=35 | | | | | | | | |
| **TWF1** | **Yuli** | **0.70** | **159** | ⇓i | P | | **Pb** | **00 15 31.3** | **-0.2** |
| | baz=149 | | | | | | | | |
| TWF1 | | | | e | S | | **Sg** | **00 15 41.2** | **+0.1** |
| | baz=149 | | | | | | | | |
| **EYUL** | **Yuli** | **0.72** | **157** | ⇓ | P | | **Pb** | **00 15 31.6** | **0.0** |
| | baz=157 | | | | | | | | |
| EYUL | | | | | S | | **Sb** | **00 15 41.2** | **+0.1** |
| | baz=157 | | | | | | | | |
| **EHP** | **Heping Village** | **0.72** | **66** | e | P | | **Pg** | **00 15 32.0** | **-0.1** |
| | baz=67 | | | | | | | | |
| EHP | | | | e | S | | **Sg** | **00 15 41.6** | **-0.2** |
| | baz=67 | | | | | | | | |
| **NJD** | **Zhudong** | **0.72** | **5** | e | P | | **Pn** | **00 15 32.6** | **-0.5** |
| | baz=354 | | | | | | | | |
| **EAHA** | **Aohua** | **0.73** | **64** | ⇓ | P | | **Pb** | **00 15 31.6** | **-0.3** |
| | baz=65 | | | | | | | | |
| EAHA | | | | e | S | | **Sg** | **00 15 42.7** | **+0.7** |
| | baz=65 | | | | | | | | |
| **NSK** | **Sanguang** | **0.73** | **25** | ⇓i | P | | **Pb** | **00 15 31.8** | **-0.2** |
| | baz=34 | | | | | | | | |
| NSK | | | | e | S | | **Sb** | **00 15 40.6** | **-1.1** |
| | baz=34 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.73** | **26** | | P | | **Pb** | **00 15 31.7** | **-0.3** |
| **YHNB** | **Yeheng** | **0.73** | **26** | | | | **Pb** | **00 15 31.7** | **-0.3** |
| YHNB | | | | | Sg | | **Sb** | **00 15 40.4** | **-1.3** |
| **YHNB** | **Yeheng** | **0.73** | **26** | ⇓i | P | | **Pb** | **00 15 31.7** | **-0.3** |
| | baz=34 | | | | | | | | |
| YHNB | | | | e | S | | **Sb** | **00 15 40.0** | **-1.7** |
| | baz=34 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.74** | **37** | ⇓i | P | | **Pb** | **00 15 31.6** | **-0.6** |
| | baz=33 | | | | | | | | |
| NDT | | | | e | S | | **Sb** | **00 15 41.9** | **-0.1** |
| | baz=33 | | | | | | | | |
| **CHY** | **Chiayi** | **0.75** | **227** | e | P | | **Pb** | **00 15 32.2** | **0.0** |
| | baz=224 | | | | | | | | |
| CHY | | | | i | S | | **Sg** | **00 15 43.2** | **+0.7** |
| | baz=224 | | | | | | | | |
| **HSN1** | **Hsinchu** | **0.76** | **360** | e | P | | **Pn** | **00 15 33.3** | **-0.3** |
| | baz=2.0 | | | | | | | | |
| HSN1 | | | | e | S | | **Sn** | **00 15 44.6** | **-0.1** |
| | baz=2.0 | | | | | | | | |
| **SBCB** | **Hsinchu** | **0.78** | **358** | ⇑ | P | | **Pn** | **00 15 33.7** | **-0.1** |
| | baz=360 | | | | | | | | |
| SBCB | | | | i | S | | **Sn** | **00 15 44.8** | **-0.2** |
| | baz=360 | | | | | | | | |
| **ENA** | **Nanau** | **0.78** | **58** | ⇓i | P | | **Pb** | **00 15 32.5** | **-0.3** |
| | baz=59 | | | | | | | | |
| ENA | | | | i | S | | **Sb** | **00 15 42.8** | **-0.2** |
| | baz=59 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.79** | **357** | e | P | | **Pn** | **00 15 34.2** | **+0.2** |
| | baz=1.0 | | | | | | | | |
| HSN | | | | e | S | | **Sn** | **00 15 45.9** | **+0.7** |
| | baz=1.0 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.79** | **207** | | P | | **Pb** | **00 15 32.8** | **-0.2** |
| **TPUB** | **Ta-pu** | **0.79** | **207** | | | | **Pb** | **00 15 32.6** | **-0.4** |
| TPUB | | | | | | | **Sg** | **00 15 43.9** | **0.0** |
| **TPUB** | **Ta-pu** | **0.79** | **207** | ⇓i | P | | **Pb** | **00 15 32.6** | **-0.4** |
| | baz=205 | | | | | | | | |
| TPUB | | | | | S | | **Sg** | **00 15 43.8** | **-0.1** |
| | baz=205 | | | | | | | | |
| **ECBN** | **Changbin** | **0.80** | **150** | e | P | | **Pn** | **00 15 34.0** | **-0.1** |
| | baz=150 | | | | | | | | |
| ECBN | | | | | S | | **Sn** | **00 15 46.0** | **+0.6** |
| | baz=150 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.80** | **38** | ⇓i | P | | **Pb** | **00 15 32.7** | **-0.5** |
| | baz=35 | | | | | | | | |
| ENTT | | | | e | S | | **Sb** | **00 15 43.8** | **+0.2** |
| | baz=35 | | | | | | | | |
| **EWUT** | **Wuta** | **0.82** | **58** | ⇓ | P | | **Pb** | **00 15 33.2** | **-0.2** |
| | baz=59 | | | | | | | | |
| EWUT | | | | e | S | | **Sb** | **00 15 44.2** | **+0.1** |
| | baz=59 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.82** | **180** | e | P | | **Pb** | **00 15 33.0** | **-0.5** |
| | baz=184 | | | | | | | | |
| ELDTW | | | | | S | | **Sn** | **00 15 45.6** | **-0.6** |
| | baz=184 | | | | | | | | |
| **WSF** | **Szhu** | **0.82** | **243** | ⇓e | P | | **Pb** | **00 15 33.0** | **-0.5** |
| | baz=241 | | | | | | | | |
| WSF | | | | i | S | | **Sn** | **00 15 45.4** | **-0.6** |
| | baz=241 | | | | | | | | |
| **FULB** | **Fuli** | **0.85** | **163** | ⇑ | P | | **Pn** | **00 15 34.8** | **0.0** |
| | baz=162 | | | | | | | | |
| FULB | | | | e | S | | **Sn** | **00 15 47.7** | **+0.9** |
| | baz=162 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.85** | **206** | ⇓ | P | | **Pb** | **00 15 33.5** | **-0.4** |
| | baz=203 | | | | | | | | |
| WTP | | | | e | S | | **Sg** | **00 15 45.6** | **-0.1** |
| | baz=203 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.87** | **236** | ⇑ | P | | **Pb** | **00 15 34.1** | **-0.3** |
| | baz=235 | | | | | | | | |
| WSL | | | | e | S | | **Sn** | **00 15 47.1** | **-0.2** |
| | baz=235 | | | | | | | | |
| **EHD** | **Haiduan** | **0.88** | **169** | ⇑ | P | | **Pb** | **00 15 34.6** | **+0.1** |
| | baz=178 | | | | | | | | |
| EHD | | | | i | S | | **Sg** | **00 15 46.1** | **-0.4** |
| | baz=178 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.88** | **196** | | P | | **Pb** | **00 15 34.4** | **-0.1** |
| | baz=194 | | | | | | | | |
| STYT | | | | | S | | **Sb** | **00 15 46.1** | **+0.2** |
| | baz=194 | | | | | | | | |
| **NWLT** | **Wulai** | **0.88** | **30** | ⇓ | P | | **Pb** | **00 15 34.3** | **-0.3** |
| | baz=37 | | | | | | | | |
| NWLT | | | | e | S | | **Sb** | **00 15 45.2** | **-0.8** |
| | baz=37 | | | | | | | | |
| **CHKH** | **Chenggong** | **0.89** | **157** | ⇑i | P | | **Pg** | **00 15 35.1** | **0.0** |
| | baz=157 | | | | | | | | |
| CHKH | | | | | S | | **Sn** | **00 15 48.5** | **+0.8** |
| | baz=157 | | | | | | | | |
| **NDS** | **Dongshan** | **0.89** | **46** | e | P | | **Pb** | **00 15 34.5** | **-0.2** |
| | baz=47 | | | | | | | | |
| NDS | | | | e | S | | **Sn** | **00 15 47.3** | **-0.4** |
| | baz=47 | | | | | | | | |
| **TWK** | **Hsinying** | **0.89** | **213** | ⇓i | P | | **Pb** | **00 15 34.4** | **-0.3** |
| | baz=211 | | | | | | | | |
| TWK | | | | | S | | **Sg** | **00 15 47.0** | **+0.1** |
| | baz=211 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.91** | **35** | ⇓i | P | | **Pb** | **00 15 34.5** | **-0.5** |
| | baz=31 | | | | | | | | |
| FUSB | | | | | S | | **Sb** | **00 15 46.9** | **+0.1** |
| | baz=31 | | | | | | | | |
| **TWE** | **Neicheng** | **0.92** | **40** | ⇓i | P | | **Pb** | **00 15 35.2** | **0.0** |
| | baz=38 | | | | | | | | |
| TWE | | | | | S | | **Sg** | **00 15 48.0** | **0.0** |
| | baz=38 | | | | | | | | |
| **SNST** | **Tainan City** | **0.92** | **211** | e | P | | **Pb** | **00 15 35.0** | **-0.2** |
| | baz=209 | | | | | | | | |
| SNST | | | | e | S | | **Sn** | **00 15 48.6** | **+0.1** |
| | baz=209 | | | | | | | | |
| **ECS** | **Chishang** | **0.93** | **169** | ⇑ | P | | **Pg** | **00 15 35.8** | **-0.1** |
| | baz=177 | | | | | | | | |
| ECS | | | | e | S | | **Sn** | **00 15 49.5** | **+0.8** |
| | baz=177 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.94** | **209** | ⇓i | P | | **Pb** | **00 15 35.2** | **-0.4** |
| | baz=207 | | | | | | | | |
| CHN1 | | | | i | S | | **Sg** | **00 15 48.5** | **0.0** |
| | baz=207 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.94** | **226** | ⇓ | P | | **Pb** | **00 15 35.3** | **-0.2** |
| | baz=236 | | | | | | | | |
| ICHU | | | | e | S | | **Sn** | **00 15 48.9** | **0.0** |
| | baz=236 | | | | | | | | |
| **ESAO** | **Su ao** | **0.94** | **53** | ⇓e | P | | **Pb** | **00 15 35.4** | **-0.1** |
| | baz=54 | | | | | | | | |
| ESAO | | | | e | S | | **Sg** | **00 15 48.0** | **-0.5** |
| | baz=54 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.96** | **161** | ⇑i | P | | **Pn** | **00 15 36.4** | **0.0** |
| | baz=161 | | | | | | | | |
| CHKT | | | | | S | | **Sn** | **00 15 50.8** | **+1.3** |
| | baz=161 | | | | | | | | |
| **TWC** | **Suao** | **0.96** | **52** | ⇓i | P | | **Pb** | **00 15 35.8** | **-0.1** |
| | baz=53 | | | | | | | | |
| TWC | | | | | S | | **Sb** | **00 15 48.4** | **+0.1** |
| | baz=53 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.96** | **9** | e | P | | **Pg** | **00 15 36.7** | **0.0** |
| | baz=10.0 | | | | | | | | |
| NCUH | | | | e | S | | **Sn** | **00 15 50.3** | **+0.7** |
| | baz=10.0 | | | | | | | | |
| **NHW** | **Xinwu Township** | **0.99** | **1** | e | P | | **Pn** | **00 15 36.7** | **0.0** |
| | baz=3.0 | | | | | | | | |
| NHW | | | | e | S | | **Sn** | **00 15 50.3** | **0.0** |
| | baz=3.0 | | | | | | | | |
| **CHN8** | **Yiju** | **0.99** | **228** | ⇓ | P | | **Pb** | **00 15 36.0** | **-0.5** |
| | baz=237 | | | | | | | | |
| CHN8 | | | | i | S | | **Sn** | **00 15 50.6** | **+0.3** |
| | baz=237 | | | | | | | | |
| **ILA** | **Ilan** | **1.00** | **41** | e | P | | **Pn** | **00 15 36.9** | **0.0** |
| | baz=43 | | | | | | | | |
| ILA | | | | e | S | | **Sg** | **00 15 50.3** | **-0.3** |
| | baz=43 | | | | | | | | |
| **SGST** | **Jiashian** | **1.01** | **203** | e | P | | **Pb** | **00 15 36.4** | **-0.3** |
| | baz=210 | | | | | | | | |
| SGST | | | | e | S | | **Sn** | **00 15 50.8** | **+0.1** |
| | baz=210 | | | | | | | | |
| **NTY** | **Taoyuan** | **1.02** | **14** | e | P | | **Pg** | **00 15 37.6** | **0.0** |
| | baz=14 | | | | | | | | |
| **TATO** | **Taipei** | **1.05** | **24** | | | | **Pn** | **00 15 37.5** | **-0.1** |
| **TATO** | **Taipei** | **1.05** | **24** | e | P | | **Pn** | **00 15 37.7** | **+0.1** |
| | baz=25 | | | | | | | | |
| **BACT** | **New Taipei Cit** | **1.05** | **21** | e | P | | **Pg** | **00 15 38.5** | **+0.2** |
| | baz=21 | | | | | | | | |
| **EDH** | **Donghe** | **1.07** | **166** | ⇑e | P | | **Pn** | **00 15 37.9** | **+0.1** |
| | baz=151 | | | | | | | | |
| EDH | | | | | S | | **Sg** | **00 15 53.1** | **+0.5** |
| | baz=151 | | | | | | | | |
| **SLGT** | **Liugui** | **1.07** | **199** | e | P | | **Pb** | **00 15 37.6** | **-0.1** |
| | baz=197 | | | | | | | | |
| SLGT | | | | i | S | | **Sg** | **00 15 53.0** | **+0.3** |
| | baz=197 | | | | | | | | |
| **TWA** | **Mucha** | **1.09** | **28** | ⇓ | P | | **Pg** | **00 15 38.7** | **-0.4** |
| | baz=30 | | | | | | | | |
| TWA | | | | | S | | **Sg** | **00 15 54.2** | **+0.8** |
| | baz=30 | | | | | | | | |
| **LONT** | **Longtian** | **1.10** | **175** | ⇑e | P | | **Pn** | **00 15 38.6** | **+0.3** |
| | baz=175 | | | | | | | | |
| LONT | | | | e | S | | **Sg** | **00 15 53.4** | **-0.4** |
| | baz=175 | | | | | | | | |
| **CHN3** | **Shinhua** | **1.11** | **213** | e | P | | **Pg** | **00 15 39.0** | **-0.4** |
| | baz=222 | | | | | | | | |
| CHN3 | | | | i | S | | **Sg** | **00 15 55.6** | **+1.7** |
| | baz=222 | | | | | | | | |
| **TAP** | **Taipei** | **1.11** | **23** | e | P | | **Pb** | **00 15 38.5** | **0.0** |
| | baz=25 | | | | | | | | |
| TAP | | | | e | S | | **Sg** | **00 15 54.6** | **+0.5** |
| | baz=25 | | | | | | | | |
| **NTC** | **Toucheng** | **1.12** | **41** | e | P | | **Pg** | **00 15 39.4** | **-0.1** |
| | baz=35 | | | | | | | | |
| **SCLT** | **Jiali** | **1.12** | **222** | e | P | | **Pn** | **00 15 38.5** | **-0.1** |
| | baz=220 | | | | |

EOS2 **EOS2** 1.18 70⇓*e*P Pg 00 15 40.8 +0.2
baz=70
TWG **Pinlang** 1.19 178 Pn 00 15 38.5 -1.0
TWG **Pinlang** 1.19 178 ⇑P Pb 00 15 39.9 +0.2
baz=171
TWG *i* S Sg 00 15 56.8 +0.4
baz=171
TWGBT **Beinan** 1.19 177 P Pg 00 15 40.3 -0.6
TWGBT **Beinan** 1.19 177⇑*i*P Pb 00 15 39.8 0.0
baz=171
TWGBT S Sn 00 15 55.8 +0.6
baz=171
EOS4 **EOS4** 1.19 85 *e*P Pb 00 15 39.5 -0.1
baz=99
EOS4 *e*S Sg 00 15 55.9 -0.5
baz=99
TIPB **Shuangxi** 1.21 37 ⇓P Pb 00 15 40.1 0.0
baz=21
TIPB *e*S Sb 00 15 55.4 +0.1
baz=21
TAI1 **Yung-k'ang** 1.21 217 *e*P Pb 00 15 40.4 +0.3
baz=215
TAI1 *e*S Sg 00 15 57.4 +0.3
baz=215
NTST **Danshui** 1.21 19 *e*P Pb 00 15 40.3 +0.1
baz=19
NTST *e*S Sn 00 15 55.7 0.0
baz=19
TSCK **Chigu Township** 1.21 225⇓*e*P Pn 00 15 39.5 -0.3
baz=235
TSCK *e*S Sg 00 15 57.2 0.0
baz=235
EOS3 **EOS3** 1.22 77 *e*P Pg 00 15 40.9 -0.4
baz=92
SCST **Cishan** 1.22 203 ⇓P Pg 00 15 40.9 -0.5
baz=203
SCST *e*S Sg 00 15 57.2 -0.3
baz=203
YM01 **YM01** 1.24 24 *e*P Pn 00 15 40.2 +0.1
baz=24
YM01 S Sb 00 15 56.1 -0.1
baz=24
ANP **Anpu** 1.25 21 *e*P Pn 00 15 40.5 0.0
baz=22
ANP *e*S Sn 00 15 57.1 +0.2
baz=22
TTN **Taitung** 1.26 175⇑*e*P Pg 00 15 41.5 -0.7
baz=175
TTN *e*S Sg 00 15 59.4 +0.8
baz=175
TAI **Tainan** 1.26 217 *e*P Pn 00 15 40.7 +0.2
baz=228
NWF **Wu-fen Shan** 1.26 33 *e*P Pb 00 15 41.1 0.0
baz=34
NWF *e*S Sn 00 15 57.2 +0.2
baz=34
WFSB **Wu-fen Shan** 1.26 33 *e*P Pb 00 15 41.0 -0.1
baz=34
WFSB *e*S Sb 00 15 56.9 0.0
baz=34
YM08 **YM08** 1.28 24⇑*e*P Pn 00 15 40.7 -0.1
baz=24
YM08 *e*S Sn 00 15 57.8 +0.3
baz=24
TWM1 **Shoushan** 1.30 205 *e*P Pg 00 15 42.4 -0.7
baz=204
SSD **Sandimen** 1.31 196 *e*P Pn 00 15 41.4 +0.3
baz=187
NWRT **Kuosheng** 1.32 26 *e*P Pn 00 15 41.1 -0.2
baz=28
TNOU **National Taiwa** 1.32 31 *e*P Pn 00 15 41.2 -0.1
baz=15
TNOU *e*S Sb 00 15 59.0 +0.3
baz=15
TWB1 **Santiao Chiao** 1.33 41⇓*e*P Pb 00 15 42.2 0.0
baz=42
TWB1 *e*S Sg 00 16 00.2 -0.7
baz=42
SXI1 **Grass Mountain** 1.33 36⇑*e*P Pb 00 15 42.1 -0.1
baz=37
SXI1 *e*S Sg 00 16 00.4 -0.6
baz=37
TSMG **Majia** 1.34 195⇑*e*P Pb 00 15 42.2 -0.3
baz=194
TSMG S Sg 00 16 00.7 -0.7
baz=194
TWY **Chenhua** 1.36 23 *e*P Pb 00 15 42.3 -0.4
baz=4.0
SGLT **Jiouru** 1.37 201 *e*P Pb 00 15 43.4 +0.5
baz=200
SGLT S Sg 00 16 04.5 +2.3
baz=200
LDUT **Ludao** 1.40 163⇑*e*P Pn 00 15 41.9 -0.4
baz=164
LDUT *e*S Sn 00 16 00.2 0.0
baz=164
ECL **Taimali** 1.41 182⇑*e*P Pb 00 15 43.0 -0.5
baz=168
ECL *e*S Sb 00 16 02.1 +1.0
baz=168
PNG **Penghu** 1.41 252 ⇓P Pn 00 15 41.6 -0.9
baz=251
PNG *e*S Sn 00 16 00.6 0.0
baz=251
TSPT **Pingtung City** 1.41 200 *e*P Pb 00 15 43.5 -0.1
baz=201
PHUB **P'eng-hu** 1.42 250 ⇓P Pn 00 15 41.5 -1.0
baz=249
PHUB S Sn 00 15 59.6 -1.1
baz=249
MASBT **Mashibuluo** 1.44 194⇑*i*P Pb 00 15 43.5 -0.5
baz=194
MASBT *e*S Sb 00 16 02.5 +0.5
baz=194
WDGT **Dungji** 1.45 239⇓*i*P Pn 00 15 42.7 -0.4
baz=248
WDGT *e*S Sn 00 16 01.8 +0.2
baz=248
WSSB **Gushan** 1.53 207 *e*P Pb 00 15 45.0 -0.6
baz=207
EAST **Anshuo** 1.63 186 *e*P Pb 00 15 46.5 -0.8
baz=185
EAST *e*S Sb 00 16 08.7 +1.2
baz=185
TAW **Tawu** 1.65 184 *e*P Pb 00 15 47.0 -0.6
baz=173
VCHM **Qimei** 1.66 242 ⇓P Pn 00 15 45.5 -0.5
baz=240
VCHM *e*S Sn 00 16 07.0 +0.2
baz=240
TAWH **Dawu Township** 1.67 184 *e*P Pb 00 15 47.6 -0.4
baz=203
TAWH S Sb 00 16 10.1 +1.5
baz=203
SCZT **Fangliau** 1.67 193⇑*e*P Pn 00 15 46.8 +0.7
baz=193
SCZT *e*S Sb 00 16 08.8 0.0
baz=193
VWUC **VWUC** 1.73 305 *e*P Pn 00 15 45.2 -1.7
baz=304
TWP **Hsiaoliuchiu** 1.77 200 *e*P Pb 00 15 48.7 -0.9
baz=202
SLIU **Shizi** 1.80 187 *e*P Pn 00 15 48.6 +0.8
baz=187
SLIU S Sb 00 16 13.6 +1.2
baz=187
JYNG **Yonagunijimaku** 1.81 76 *e*P Pn 00 15 48.9 +0.8
JYNG *e*S Sb 00 16 12.0 -0.7
JYNG **Yonagunijimaku** 1.81 76 A A 00 15 48.9
comp=E,12nm,1.6s,comp=N,16nm,2.1s
PCYT **Pengchaiyu** 1.87 30 *e*P Pn 00 15 49.4 +0.5
baz=32
YOJ **Yonaguni jima** 1.87 76 P Pn 00 15 50.0 +1.1
YOJ **Yonaguni jima** 1.87 76 Pn Pn 00 15 49.5 +0.7
YOJ **Yonaguni jima** 1.87 76 *e*P Pn 00 15 49.8 +0.9
baz=77
YOJ **Yonaguni jima** 1.87 76 *e*P Pn 00 15 49.9 +1.0
YOJ S Sb 00 16 14.8 +0.3
YOJ **Yonaguni jima** 1.87 76 A A 00 15 49.9
comp=E,11nm,3.5s,comp=N,15nm,1.7s
SMST **Manzhou Townsh** 1.99 185 *e*P Pn 00 15 51.7 +1.2
baz=203
PTMZ **Houxiangcun** 2.01 301⇓*e*P Pn 00 15 49.3 -1.5
baz=300
HEN **Hengchun** 2.01 187 *e*P Pn 00 15 51.7 +0.9
baz=204
LAY **Lan-yu** 2.02 166 *e*P Pn 00 15 51.0 0.0
baz=154
LYUB **Lan-yu** 2.07 165⇑*e*P Pn 00 15 50.4 -1.1
baz=157
LYUB S Sn 00 16 17.3 +0.5
baz=157
TWK1 **Hengchun** 2.07 186 *e*P Pn 00 15 52.2 +0.6
baz=202
TWKBT **Hengchun** 2.07 185 *e*P Pn 00 15 52.2 +0.6
baz=202
MATB **Ma-tsu** 2.34 336 *e*P Pn 00 15 54.0 -1.3
baz=332
KNM **Kinmen** 2.40 280 *e*P Pn 00 15 56.5 +0.5
baz=279
QZH **Quanzhou** 2.40 293 Pn Pn 00 15 54.8 -1.3
QZH Sn Sn 00 16 22.6 -2.4
QZH smax smax
comp=N,5μm,0.9s
QZH smax smax
comp=N,4μm,0.8s
KNMB **Chin-men Tao** 2.44 281 Pn 00 15 55.8 -0.9
KNMB **Chin-men Tao** 2.44 281⇓*e*P Pn 00 15 55.5 -1.2
baz=280
IRIF **Iriomote-Funau** 2.50 82 *e*P Pn 00 15 58.7 +1.2
IRIF *e*S Sn 00 16 28.6 +1.2
HATJ **Hateruma jima** 2.55 88 *e*P Pn 00 15 59.6 +1.5
HATJ *e*S Sn 00 16 30.6 +1.9
HATJ **Hateruma jima** 2.55 88 A A 00 15 59.6
comp=E,24nm,2.8s,comp=N,14nm,2.4s
JKRS **Kuro-shima** 2.74 85 *e*P Pn 00 16 02.2 +1.4
JKRS *e*S Sn 00 16 34.7 +1.2
JKRS **Kuro-shima** 2.74 85 A A 00 16 02.2
comp=E,20nm,3.4s,comp=N,15nm,2.4s
MHZQ **Yeshan** 2.75 319 *e*P Pn 00 15 59.6 -1.4
baz=317
LYJJ **Jianjiangzhen** 2.77 336 *e*P Pn 00 15 60.0 -1.3
baz=332
JIJ **Ishigaki jima** 2.87 82 *e*P Pn 00 16 03.4 +0.7
JIJ *e*S Sn 00 16 37.2 +0.5
ZPLA **Ao Xicun** 2.99 269⇓*e*P Pn 00 16 03.2 -1.0
baz=268
XPSS **Dashiqiu** 3.00 346 *e*P Pn 00 16 03.1 -1.3
baz=341
JISG **Ishigakijimahi** 3.06 79 *e*P Pn 00 16 06.1 +0.9
JISG *e*S Sn 00 16 41.6 +0.4
JTJ **Tarama** 3.42 79 *e*P Pn 00 16 12.2 +2.1
JTJ *e*S Sn 00 16 51.0 +0.9
SXFK **Yanhouchang** 3.87 309 *e*P Pn 00 16 15.1 -1.3
baz=307
JIKM **Ikemajima** 3.96 76 *e*P Pn 00 16 19.9 +2.3
JIKM *e*S Sn 00 17 05.6 +2.1
JMJ **Miyako jima 2** 3.98 78 *e*P Pn 00 16 19.2 +1.4
baz=74
JMJ *e*S Sn 00 17 04.1 +0.1
baz=74
VDOS **Pratas Island** 5.16 231 *e*P Pn 00 16 35.0 +0.9
baz=235
HKPS **Hong Kong Po S** 6.56 256 P Pn 00 16 53.3 -0.1
HKPS **Hong Kong Po S** 6.56 256 Pn Pn 00 16 52.4 -1.0
JOW **Kunigami** 7.13 65 P Pn 00 17 01.5 +0.2
JOW **Kunigami** 7.13 65 Pn Pn 00 17 00.8 -0.5
JOW **Kunigami** 7.13 65 P Pn 00 17 01.5 +0.2
comp=N,15nm,0.3s,baz=124,slow=18,SNR=43
JOW S Sn 00 18 20.9 -0.9
comp=N,18nm,0.7s,baz=45,slow=14,SNR=1.5
comp=N,54nm,0.4s
JOW **Kunigami** 7.13 65 *e*P Pn 00 17 01.3 +0.1
baz=68
NJ2 **Nanjing** 8.23 347 ⇑P Pn 00 17 19.0 +2.7
NJ2 pmax pmax
comp=N,44nm,0.7s
NJ2 smax smax
comp=N,360nm,0.9s
NJ2 smax smax
comp=N,410nm,1.0s
CNSH **ChangSha** 8.37 301 P Pn 00 17 16.0 -2.2
CNSH smax smax
comp=N,2μm,1.1s
CNSH smax smax
comp=N,2μm,1.2s
WHN **Wuhan** 8.80 319 P Pn 00 17 22.0 -2.1
WHN LR LR
comp=N,11μm,12.1s
WHN LR LR
comp=N,6μm,11.1s
WHN LR LR
comp=N,11μm,10.5s
GULI **GuiLin** 9.77 280 P Pn 00 17 36.5 -1.0
GULI pmax pmax
comp=N,30nm,0.9s
GULI LR LR
comp=N,2μm,9.2s
GULI LR LR
comp=N,4μm,11.4s
GULI LR LR
comp=N,5μm,13.0s
QIZ **Qiongzhong** 11.52 247 P Pn 00 18 02.0 +0.6
QIZ S Sn 00 20 13.1 +3.5
QIZ LR LR
comp=N,880nm,12.6s
QIZ LR LR
comp=N,560nm,17.7s
QIZ LR LR
comp=N,1μm,16.8s
ENH **Enshi** 12.01 304 P Pn 00 18 10.2 +2.1
JNU **Nakatsue** 12.54 41 P Pn 00 18 18.1 +2.8
JNU **Nakatsue** 12.54 41 P Pn 00 18 18.2 +2.9
comp=N,12nm,0.8s,baz=236,slow=13,SNR=2.6
LYN **LuoYang** 12.88 327 *e*P Pn 00 18 22.8 +2.9
LYN PP P 00 18 33.6 +3.1
LYN pmax pmax
comp=N,15nm,0.8s
LYN pmax pmax
comp=N,380nm,10.4s
LYN LR LR
comp=N,5μm,10.0s
LYN LR LR
comp=N,3μm,10.0s
LYN LR LR
comp=N,6μm,11.0s
GYA **Guiyang** 13.22 284 P Pn 00 18 23.5 -1.2
GYA pmax pmax
comp=N,18nm,0.8s
GYA LR LR
comp=N,4μm,11.7s
HNS **HongShan** 14.40 339 ⇓P P 00 18 44.9 -2.6
HNS pmax pmax
comp=N,11nm,1.2s
HNS LR LR
comp=N,2μm,13.9s
HNS LR LR
comp=N,1μm,13.9s
HNS LR LR
comp=N,2μm,15.1s
XAN **Xi'an** 14.54 316 ⇑P P 00 18 46.4 -2.7
XAN pP Pn 00 18 52.6 +10
XAN sP 00 18 56.3
XAN ScP **ScP** 00 27 31.4 +1.9
XAN pmax pmax
comp=N,12nm,0.9s
XAN LR LR
comp=N,2μm,11.0s
XAN LR LR
comp=N,3μm,10.7s
XAN LR LR
comp=N,4μm,11.7s
KSAR **Wonju Array Be** 14.62 22 P P 00 18 49.6 -0.4
KSRS **Korea Array** 14.65 22 P Pn 00 18 47.1 +3.1
comp=N,10nm,0.8s,baz=207,slow=14,SNR=7.7
KSRS LR LR 00 24 57.2
comp=N,424nm,21.4s,baz=30,slow=39
KS19 **Wonju Array Si** 14.67 22 P P 00 18 49.4 -1.1
SLVN **Son La** 16.02 264 Pn Pn 00 19 00.9 -1.4
BJT **Baijiatuan** 16.48 347 P P 00 19 12.1 +1.6
BJT **Baijiatuan** 16.48 347 Pn 00 19 06.4 -1.5
KMI **Kunming** 16.67 278 ⇑P P 00 19 15.0 +2.0
KMI pP sP 00 19 21.3 -0.3
KMI pmax pmax
comp=N,29nm,0.8s
KMI LR LR
comp=N,830nm,10.2s
KMI LR LR
comp=N,4μm,10.4s
KMI LR LR
comp=N,4μm,11.1s
PZH **PanZhiHua** 17.61 282 P Pn 00 19 22.4 0.0
PZH S Sn 00 22 35.8 -2.5
PZH pmax pmax
comp=N,20nm,0.8s
PZH LR LR
comp=N,790nm,11.3s
PZH LR LR
comp=N,2μm,11.8s
PZH LR LR
comp=N,2μm,12.6s
NONG **Nongkai** 17.70 254 P P 00 19 25.8 +1.6
KKM **Kota Kinabalu** 18.45 195 P Pn 00 19 34.2 +1.5
KKM **Kota Kinabalu** 18.45 195 P P 00 19 31.7 -1.0
KKM IAmb IAmb 00 19 37.6
comp=Z,81nm,1.0s
HHC **Hu-ho-hao-te** 18.57 337 *e*P Pn 00 19 34.6 +0.6
HHC pmax pmax
comp=Z,12nm,0.6s
HHC pmax pmax
comp=Z,210nm,5.5s
MYLDM **Lahad Datu** 18.88 188 P P 00 19 36.4 -0.8
MYLDM IAmb IAmb 00 19 43.1
comp=Z,79nm,1.2s
BTO **Baotou** 18.95 333 *e*P Pn 00 19 42.8 +4.1
BTO pP sP 00 19 49.4 +2.9
BTO PP PnPn 00 20 00.3 +9.1
BTO pmax pmax
comp=Z,14nm,0.7s
BTO pmax pmax
comp=Z,770nm,8.8s
BTO LR LR
comp=Z,6μm,11.6s
BTO LR LR
comp=Z,3μm,11.2s
BTO LR LR
comp=Z,6μm,11.7s
LZH **Lanzhou** 19.09 313 *e*P Pn 00 19 42.3 +1.8
LZH sP sP 00 19 48.6 +0.2
LZH pmax pmax
comp=Z,33nm,1.4s
LZH LR LR
comp=Z,1μm,10.3s
LZH LR LR
comp=Z,2μm,11.0s
LZH LR LR
comp=Z,3μm,11.3s
MJAR **Matsushiro Arr** 19.36 46 P P 00 19 42.6 +0.2
comp=Z,0.1nm,0.3s,baz=245,slow=9.9,SNR=5.4
comp=Z,1.8nm,0.7s
CRAI **Chiangrai** 19.49 263 P P 00 19 43.5 -0.5
CN2 **Changchun** 20.07 9 P Pn 00 19 52.0 +0.1
CN2 pP sP 00 19 57.8 -0.6
CN2 pmax pmax
comp=Z,10.0nm,0.6s
PHRA **Phrae** 20.13 258 P P 00 19 50.1 -0.8
XLT **XiLinHaoTe** 20.25 350 *e*P Pn 00 19 54.4 +0.3
XLT pP sP 00 20 01.9 +1.4
XLT PP PnPn 00 20 15.4 +6.4
XLT pmax pmax
comp=Z,20nm,0.9s
XLT LR LR
comp=Z,890nm,19.0s
XLT LR LR
comp=Z,1μm,16.0s
TNCH **TengChong** 20.50 277 P Pn 00 20 00.3 +3.0
TNCH pP sP 00 20 05.3 +1.6
TNCH S **S** 00 23 40.9 -3.0
TNCH sS Sn 00 23 50.0 +2.0
TNCH pmax pmax
comp=Z,260nm,2.1s
TNCH LR LR
comp=Z,810nm,7.3s
TNCH LR LR
comp=Z,2μm,10.3s
TNCH LR LR
comp=Z,3μm,10.6s
CMAR **Chiang Mai Arr** 21.30 259 P P 00 20 03.5 -0.1
CMAR **Chiang Mai Arr** 21.30 259 P P 00 20 05.0 +1.5
comp=Z,2.6nm,0.8s,baz=61,slow=8.0,SNR=10
CMAR PcP PcP 00 24 08.7 +0.7
comp=Z,1.0nm,0.4s,baz=196,slow=0.3,SNR=6.0
comp=Z,2.6nm,0.8s
MDJ **Mudanjiang** 21.71 17 P P 00 20 09.6 +1.8
MDJ **Mudanjiang** 21.71 17 P P 00 20 09.9 +2.1
MDJ pmax pmax
comp=Z,16nm,1.2s
MDJ pmax pmax
comp=Z,470nm,11.0s
USRK **Ussuriysk Ar.** 22.05 21 P P 00 20 09.8 -1.6
comp=Z,3.3nm,0.8s,baz=186,slow=5.8,SNR=4.5
comp=Z,3.3nm,0.8s
BNX **BinXian** 22.29 12 ⇓P P 00 20 14.5 +0.6
BNX pmax pmax
comp=Z,7.0nm,1.1s
TOLI2 **Tolitoli** 22.77 181 P P 00 20 17.6 -1.6
TOLI2 **Tolitoli** 22.77 181 P P 00 20 17.2 -2.0
TOLI2 IAmb IAmb 00 20 20.6
comp=Z,25nm,0.8s
SBUM **Sibu** 23.06 203 P P 00 20 21.2 -1.1
MPSI **Mapaga** 23.56 183 P P 00 20 26.8 -0.5
comp=Z,45nm,1.1s
GTA **Gaotai** 23.60 316 P P 00 20 33.5 +5.8
GTA pmax pmax
comp=Z,7.0nm,1.1s
GTA LR LR
comp=Z,550nm,13.4s
GTA LR LR
comp=Z,2μm,12.7s
GTA LR LR
comp=Z,2μm,13.5s
LUWI **Luwuk** 24.96 176 P P 00 20 39.2 -1.1
LUWI **Luwuk** 24.96 176 P P 00 20 37.5 -2.7
LUWI **Luwuk** 24.96 176 P P 00 20 43.9 +3.6
HIA **Hailar** 25.23 358 P P 00 20 41.9 -0.6
BKB **Balikpapan** 25.44 190 P P 00 20 41.9 -2.7
MTKI **Muara Teweh, K** 25.51 194 P P 00 20 33.6 -12
STKI **Sintang** 25.54 203 P P 00 20 47.0 +1.5
comp=Z,85nm,1.3s
GOMU **GeErMu** 25.63 304 P P 00 20 50.9 +4.2
GOMU pmax pmax
comp=Z,15nm,0.7s
ULN **Ulaanbaatar** 26.27 338 P P 00 20 51.8 -0.3
SONM **Songino Array** 26.47 338 P P 00 20 53.3 -0.6
SONM **Songino Array** 26.47 338 P P 00 20 54.3 +0.4
comp=Z,6.0nm,0.9s,baz=155,slow=9.4,SNR=21
comp=Z,6.0nm,0.9s
SHL **Shillong** 26.48 279 P P 00 20 53.2 -1.0
SHL IAmb IAmb 00 21 02.5
comp=Z,31nm,1.1s
HEH **HeiHe** 26.66 9 *e*P P 00 20 57.0 +1.6
HEH pmax pmax
comp=Z,14nm,0.7s
NLAI **Namlea** 27.73 167 P P 00 21 07.7 +2.5
MMRI **Maumere** 32.47 178 P P 00 21 44.8 -2.5
EDFI **Ende, Flores** 32.57 179 P P 00 21 45.9 -2.3
TWSI **Taliwang, Sumb** 32.80 188 P P 00 21 50.8 +0.7
comp=Z,52nm,1.3s
PWJI **Pagerwojo** 33.09 197 P P 00 21 53.4 +0.8
KPJI **Karang Pucung** 33.31 202 P P 00 21 57.1 +2.5
comp=Z,39nm,1.6s
WMQ **Urumqi** 33.67 314 *e*P P 00 21 59.3 +1.7
WMQ LR LR
comp=Z,7μm,18.1s
WMQ LR LR
comp=Z,3μm,18.1s
WMQ LR LR
comp=Z,7μm,20.5s
SOEI **Soe** 33.71 174 P P 00 21 56.7 -1.5
SOEI IAmb IAmb 00 22 08.7
comp=Z,25nm,1.1s
MTN **Manton Dam** 37.94 164 P P 00 22 31.1 -3.3
MTN IAmb IAmb 00 22 32.2
comp=Z,29nm,1.2s
MK31 **Makanchi Array** 38.36 316 P P 00 22 37.8 +0.1
MKAR **Makanchi Array** 38.36 316 P P 00 22 37.6 -0.1
MKAR **Makanchi Array** 38.36 316 P P 00 22 38.6 +0.9
comp=Z,6.7nm,0.6s,baz=112,slow=9.7,SNR=71
MKAR PcP PcP 00 24 51.1 -0.1
comp=Z,0.8nm,0.6s,baz=103,slow=2.1,SNR=2.7
comp=Z,6.7nm,0.6s
MAKZ **Makanchi** 38.56 316 P P 00 22 39.9 +0.5
ZAA0 **Zalesovo Array** 40.31 327 P P 00 22 53.4 -0.4
ZALV **Zalesovo Beam** 40.31 327 P P 00 22 53.2 -0.5
ZALV **Zalesovo Beam** 40.31 327 P P 00 22 53.6 -0.2
comp=Z,11nm,0.7s,baz=114,slow=8.3,SNR=51
comp=Z,11nm,0.7s
KSH **Kashi** 40.87 303 P P 00 23 01.8 +3.0
KSH pP sP 00 23 07.6 -0.1
KSH sP pP 00 23 10.8 +5.9

KSH pmax pmax
comp=Z,2.0nm,1.1s
**KURK Kurchatov 42.13 320 P P 00 23 08.2 -0.5**
**KURBB Kurchatov Arra 42.14 320** P P 00 23 09.4 +0.5
comp=Z,1.6nm,0.6s,baz=313,slow=3.0,SNR=24
comp=Z,1.6nm,0.6s
**H11N1 WAKE ISLAND Hy 42.65 87** T T 01 08 22.4
baz=283,slow=75,SNR=15
**H11N2 WAKE ISLAND Hy 42.65 86** T T 01 08 22.5
baz=283,slow=75,SNR=14
**H11N3 WAKE ISLAND Hy 42.66 86** T T 01 08 23.8
baz=283,slow=75,SNR=17
**H11S3 WAKE ISLAND Hy 42.77 88** T T 01 08 30.9
baz=284,SNR=16
**H11S1 WAKE ISLAND Hy 42.78 88** T T 01 08 31.5
baz=284,slow=74,SNR=9.5
**H11S2 WAKE ISLAND Hy 42.79 88** T T 01 08 28.0
baz=284,slow=74,SNR=12
**ARSB Arslanbob 43.39 305** P P 00 23 20.3 +0.9
**COEN Coen 43.51 148** P P 00 23 19.9 -0.4
**COEN Coen 43.51 148** P P 00 23 19.0 -1.4
COEN IAmb IAmb 00 23 20.1
comp=Z,16nm,0.8s
**BTK Batken 44.87 303** P P 00 23 30.4 -0.8
**MBWA Marble Bar 44.92 182** P P 00 23 29.8 -1.7
**MBWA Marble Bar 44.92 182** P P 00 23 29.2 -2.3
**GAR Garm 45.18 302** P P 00 23 32.9 -0.9
GAR IAmb IAmb 00 23 43.3
comp=Z,24nm,1.3s
**PSA00 Pilbara Seismi 45.33 182** P P 00 23 32.9 -1.9
**PSA00 Pilbara Seismi 45.33 182** P P 00 23 32.0 -2.8
**PSA00 Pilbara Seismi 45.33 182** P P 00 23 32.4 -2.4
PSA00 IAmb IAmb 00 23 33.6
comp=Z,20nm,0.8s
**WB0 Warramunga Arr 45.42 162** P P 00 23 33.1 -2.5
WB0 IAmb IAmb 00 23 34.1
comp=Z,20nm,1.4s
**KK31 Karatay Array 45.45 308** P P 00 23 35.3 -0.4
**KKAR Karatay Array 45.45 308** P P 00 23 34.6 -1.1
**KKAR Karatay Array 45.45 308** P P 00 23 35.2 -0.5
**WRAB Tennant Creek 45.57 162** P P 00 23 34.1 -2.6
WRAB IAmb IAmb 00 23 36.0
comp=Z,16nm,1.1s
**WRA Warramunga Arr 45.58 162** P P 00 23 34.4 -2.4
**WRA Warramunga Arr 45.58 162** P P 00 23 34.1 -2.7
comp=Z,7.6nm,0.7s,baz=344,slow=8.5,SNR=50
WRA PcP PcP 00 25 13.3 -1.9
comp=Z,3.1nm,0.7s,baz=344,slow=3.6,SNR=9.5
comp=Z,7.6nm,0.7s
**WB2 Warramunga Arr 45.58 162** P P 00 23 34.4 -2.4
WB2 IAmb IAmb 00 23 36.0
comp=Z,16nm,1.0s
**WR0 Warramunga Arr 45.65 162** P P 00 23 34.4 -3.0
WR0 IAmb IAmb 00 23 36.5
comp=Z,13nm,1.1s
**KBL Kabul 46.10 296** P P 00 23 39.2 -1.9
KBL IAmb IAmb 00 23 49.6
comp=Z,9.0nm,1.1s
**MTSU Mount Surprise 47.66 149** P P 00 23 53.0 -0.2
**BVAR Borovoye Array 47.71 321** P P 00 23 54.0 +0.8
comp=Z,5.5nm,0.7s,baz=99,slow=8.9,SNR=25
BVAR PcP PcP 00 25 21.9 -0.5
comp=Z,1.5nm,0.5s,baz=134,slow=4.2,SNR=3.3
comp=Z,5.5nm,0.7s
**BRVK Borovoye 47.78 321** P P 00 23 53.6 -0.2
BRVK IAmb IAmb 00 24 01.8
comp=Z,9.9nm,1.0s
**QIS Mount Isa 47.86 156** P P 00 23 53.4 -1.3
**AS31 Alice Springs 49.02 164** P P 00 24 02.0 -1.6
**ASAR Alice Springs 49.02 164** P P 00 24 01.1 -2.5
**ASAR Alice Springs 49.02 164** P P 00 24 01.5 -2.1
comp=Z,2.2nm,0.3s,baz=341,slow=7.2,SNR=24
ASAR PcP PcP 00 25 25.5 -1.9
comp=Z,2.4nm,0.6s,baz=342,slow=3.1,SNR=9.3
comp=Z,2.2nm,0.3s
**AS01 Alice Springs 49.03 164** P P 00 24 03.3 -0.4
**CTA Charters Tower 50.26 149** P P 00 24 12.2 -0.8
**CTAO Charters Tower 50.26 149** P P 00 24 12.3 -0.8
**CTAO Charters Tower 50.26 149** P P 00 24 11.6 -1.5
CTAO IAmb IAmb 00 24 13.0
comp=Z,14nm,1.1s
**ABKAR Akbulak array 53.45 314** P P 00 24 36.8 +0.1
**ABKAR Akbulak array 53.45 314** P P 00 24 36.5 -0.2
ABKAR IAmb IAmb 00 24 45.0
comp=Z,9.4nm,1.1s
**AKTO Aktyubinsk 54.79 316** P P 00 24 47.0 +0.6
comp=Z,2.6nm,0.8s,baz=30,slow=2.8,SNR=10
comp=Z,2.6nm,0.8s
**QLP Quilpie 55.08 154** P P 00 24 47.4 -1.2
**ARU Arti 55.15 323** P P 00 24 48.2 -0.7
**ARU Arti 55.15 323** P P 00 24 48.7 -0.2
comp=Z,4.0nm,0.6s,baz=104,slow=5.3,SNR=11
comp=Z,4.0nm,0.6s
**ARU Arti 55.15 323** P P 00 24 49.0 +0.1
comp=Z,22nm,1.2s
**STKA Stephens Creek 58.95 160** P P 00 25 13.9 -2.1
comp=Z,4.1nm,0.7s,baz=342,slow=6.4,SNR=8.9
comp=Z,4.1nm,0.7s
**CMSA Cobar Meteorol 60.07 156** P P 00 25 23.3 -0.4
**D19K Kuna River 64.55 24** P P 00 25 53.3 -0.1
D19K IAmb IAmb 00 25 53.7
comp=Z,6.2nm,0.7s
**K17K Iditarod 64.70 30** P P 00 25 54.8 +0.4
K17K IAmb IAmb 00 26 09.4
comp=Z,17nm,1.3s
**KBZ Khabaz 65.47 309** P P 00 26 00.2 +0.6
comp=Z,2.5nm,0.8s,baz=101,slow=6.5,SNR=7.9
comp=Z,2.5nm,0.8s
**KIV Kislovodsk 65.58 309** P P 00 26 00.2 -0.4
**KIV Kislovodsk 65.58 309** ⇑P P 00 26 02.2 +1.6
**KIV Kislovodsk 65.58 309** P P 00 26 01.7 +1.1
comp=Z,29nm,1.3s
**B21K Ikpikpuk River 65.77 22** P P 00 26 00.8 -0.4
B21K IAmb IAmb 00 26 08.2
comp=Z,9.0nm,0.8s
**J19K Poorman 65.81 29** P P 00 26 01.1 -0.4
J19K IAmb IAmb 00 26 13.9
comp=Z,8.6nm,1.1s
**KARS Kars 65.93 305** P P 00 26 01.8 -1.2
**N18K Kilae Creek 66.02 32** P P 00 26 02.4 -0.6
N18K IAmb IAmb 00 26 10.6
comp=Z,9.9nm,1.2s
**I20K Naaghedeneel 66.22 28** P P 00 26 03.4 -0.8
**L19K White Mountain 66.34 31** P P 00 26 04.2 -0.9
L19K IAmb IAmb 00 26 16.5
comp=Z,6.3nm,1.0s
**F21K Alatna River 66.38 25** P P 00 26 04.2 -1.1
**H21K Melozitna Rive 66.83 27** P P 00 26 07.4 -0.7
H21K IAmb IAmb 00 26 09.2
comp=Z,5.5nm,0.8s
**GURO Guroymak-BITLI 67.16 303** P P 00 26 10.0 -0.9
GURO IAmb IAmb 00 26 19.5
comp=Z,9.5nm,1.2s
**D23K Nanushuk River 67.22 23** P P 00 26 09.1 -1.4
D23K IAmb IAmb 00 26 20.9
comp=Z,11nm,0.8s
**KDAK Kodiak Island 68.13 35** P P 00 26 14.1 -2.3
comp=Z,9.6nm,1.0s,baz=300,slow=9.6,SNR=7.0
comp=Z,9.6nm,1.0s
**H23K Yukon River 68.13 26** P P 00 26 17.0 +0.6
H23K IAmb IAmb 00 26 23.8
comp=Z,6.9nm,0.8s
**RAYN Ar Rayn 68.25 287** P P 00 26 17.2 -0.7
**NEA2 Nenana 68.55 28** P P 00 26 18.1 -0.9
NEA2 IAmb IAmb 00 26 25.5
comp=Z,6.6nm,0.8s
**M22K Willow 68.62 31** P P 00 26 18.0 -1.4
**H24K Noodor Dome 68.81 26** P P 00 26 20.0 -0.6
H24K IAmb IAmb 00 26 36.7
comp=Z,9.4nm,1.3s
**MDM Murphy Dome 68.83 27** P P 00 26 19.8 -1.0
MDM IAmb IAmb 00 26 27.5
comp=Z,7.4nm,0.9s
**RND Reindeer 68.87 29** P P 00 26 19.7 -1.4
**ILAR Eielson Array 69.44 27** P P 00 26 22.8 -1.6
comp=Z,0.6nm,0.7s,baz=300,slow=8.0,SNR=6.5
comp=Z,0.6nm,0.7s
**SML Sawmill 69.44 30** P P 00 26 23.5 -1.1
SML IAmb IAmb 00 26 26.2
comp=Z,6.3nm,0.8s
**KNK Knik Glacier 69.47 31** P P 00 26 24.4 -0.4
KNK IAmb IAmb 00 26 30.8
comp=Z,11nm,0.9s
**DHY Denali Highway 69.60 29** P P 00 26 25.2 -0.5
**SPITS Spitsbergen Ar 69.62 348** P P 00 26 25.7 +0.3
comp=Z,5.1nm,0.7s,baz=106,slow=5.6,SNR=4.8
comp=Z,5.1nm,0.7s
**ARCES ARCESS Array B 69.64 338** P P 00 26 25.6 0.0
comp=Z,3.9nm,0.7s,baz=62,slow=6.0,SNR=14
comp=Z,3.9nm,0.7s
**PWL Port Wells 69.65 31** P P 00 26 24.3 -1.6
PWL IAmb IAmb 00 26 31.1
comp=Z,16nm,1.1s
**BMAR Burnt Mountain 69.75 24** P P 00 26 26.0 -0.3
**SCM Sheep Creek Mo 69.90 30** P P 00 26 26.1 -1.4
**J25K Salcha River, 70.11 27** P P 00 26 26.6 -2.0
**FINES FINESS Array B 71.52 330** P P 00 26 37.0 -0.2
comp=Z,5.1nm,0.7s,baz=57,slow=5.1,SNR=33
comp=Z,5.1nm,0.7s
**GLB Gilahina Butte 71.62 30** P P 00 26 37.2 -0.7
GLB IAmb IAmb 00 26 44.5
comp=Z,9.3nm,1.0s
**K27K Chicken 71.64 27** P P 00 26 37.4 -0.6
**M26K Nabesna, AK 71.72 29** P P 00 26 37.5 -0.9
M26K IAmb IAmb 00 26 45.0
comp=Z,11nm,1.1s
**L27K Beaver Creek, 72.04 28** P P 00 26 39.9 -0.5
L27K IAmb IAmb 00 26 47.6
comp=Z,9.6nm,1.1s
**BCAR Beaver Creek A 72.06 28** P P 00 26 40.0 -0.5
**I28M Miner Creek 72.09 26** P P 00 26 40.0 -0.7
**CRQM Cirque 72.13 31** P P 00 26 40.0 -1.1
CRQM IAmb IAmb 00 26 53.6
comp=Z,8.6nm,1.0s
**G29M Pine Creek 72.34 24** P P 00 26 41.4 -0.8
G29M IAmb IAmb 00 26 56.4
comp=Z,10nm,0.9s
**DAWY Dawson 72.76 27** P P 00 26 43.8 -0.9
**AK09 Malin Array Si 72.89 318** P P 00 26 44.8 -0.8
**AKASG Malin Array Be 72.90 318** P P 00 26 45.0 -0.6
AKASG IAmb IAmb 00 26 52.6
comp=Z,8.4nm,1.2s
**AKASG Malin Array Be 72.90 318** P P 00 26 45.1 -0.6
comp=Z,0.3nm,0.3s,baz=62,slow=6.2,SNR=3.3
comp=Z,0.3nm,0.3s
**AKBB Malin Array Si 72.90 318** P P 00 26 44.4 -1.3
AKBB IAmb IAmb 00 26 53.1
comp=Z,14nm,1.2s
**AKBB Malin Array Si 72.90 318** P P 00 26 45.1 -0.5
**AK08 Malin Array Si 72.90 318** P P 00 26 45.6 0.0
**KIEV Kiev 72.91 318** P P 00 26 45.0 -0.6
KIEV IAmb IAmb 00 26 53.1
comp=Z,12nm,1.2s
**KIEV Kiev 72.91 318** ⇓P P 00 26 47.3 +1.6
**KIEV Kiev 72.91 318** P P 00 26 45.1 -0.6
comp=Z,41nm,1.2s
**AK10 Malin Array Si 72.91 318** P P 00 26 45.4 -0.3
**CTGM Chitina Glacie 72.91 30** P P 00 26 44.8 -0.9
CTGM IAmb IAmb 00 26 52.5
comp=Z,12nm,1.0s
**LOGN Logan Glacier 73.11 30** P P 00 26 46.0 -0.9
LOGN IAmb IAmb 00 26 55.9
comp=Z,9.8nm,1.2s
**BR131 Keskin Array S 73.15 306** P P 00 26 47.0 -0.6
BR131 IAmb IAmb 00 26 55.1
comp=Z,11nm,1.1s
**BRTR Keskin Array B 73.15 306** P P 00 26 47.2 -0.4
**BRTR Keskin Array B 73.15 306** P P 00 26 48.5 +0.9
comp=Z,1.4nm,0.7s,baz=90,slow=5.4,SNR=12
comp=Z,1.4nm,0.7s
**K29M Barlow Dome 73.61 27** P P 00 26 49.4 -0.4
**M29M Somme Creek 73.70 28** P P 00 26 49.9 -0.5
**G31M Satah River 73.72 23** P P 00 26 50.7 +0.6
G31M IAmb IAmb 00 27 03.0
comp=Z,7.3nm,0.9s
**MI28 Mi28,Pidlybu 73.77 319** P P 00 26 50.7 -0.1
**LUBAR Lubar, Ukraine 74.03 318** P P 00 26 51.7 -0.6
**N30M Aishikik Lake 74.67 29** P P 00 26 55.5 -0.4
N30M IAmb IAmb 00 27 03.2
comp=Z,12nm,1.5s
**RNPP9 Sopachiv 74.68 320** P P 00 26 55.7 -0.4
**MDUB Mudurnu 74.70 308** P P 00 26 56.2 -0.4
**P29M Windy Craggy 75.05 31** P P 00 26 57.6 -0.5
P29M IAmb IAmb 00 27 05.4
comp=Z,7.6nm,1.0s
**N31M Braeburn, Yuko 75.24 29** P P 00 26 58.8 -0.4
N31M IAmb IAmb 00 27 06.4
comp=Z,22nm,1.4s
**CFR Carcaliu 75.31 313** ⇑P P 00 27 02.2 +2.3
**SUW Suwalki 75.34 323** P P 00 26 59.4 -0.4
**O30N Mendenhall 75.38 30** P P 00 26 59.5 -0.6
**TESR Tescani 75.85 315** ⇑P P 00 27 05.7 +2.8
**VRI Vrincioaia 76.02 314** ⇑P P 00 27 05.4 +1.4
**PLOR Plostina 76.07 314** ⇑P P 00 27 07.5 +3.2
**BUR08 Bucovina Ar. S 76.38 316** P P 00 27 05.0 -1.2
**BURAR Bucovina Array 76.38 316** P P 00 27 05.5 -0.5
**TURR Turia 76.42 314** ⇓P P 00 27 07.4 +1.2
**OZUR 76.55 315** ⇓P P 00 27 09.2 +2.2
**MLR Muntele Rosu 76.66 314** ⇑P P 00 27 08.1 +0.4
**KWP Kalwaria Pacla 77.20 319** P P 00 27 09.2 -1.3
KWP IAmb IAmb 00 27 28.2
comp=Z,21nm,1.2s
**KWP Kalwaria Pacla 77.20 319** P P 00 27 11.4 +0.8
comp=Z,18nm,1.6s
**ARR Arges 77.57 314** ⇑P P 00 27 13.9 +1.1
**ELND Elena 77.62 312** ⇓P P 00 27 14.6 +1.5
**HFS Hagfors 77.64 331** P P 00 27 12.7 -0.1
comp=Z,3.1nm,0.7s,baz=90,slow=4.6,SNR=9.9
comp=Z,3.1nm,0.7s
**KOLS Kolonicke sedl 77.73 318** *e*P P 00 27 14.8 +1.3
**NC405 NORSAR Array S 78.06 332** P P 00 27 14.3 -0.8
**CRVS Cervenica-Dubn 78.24 318** *e*P P 00 27 18.6 +2.3
**DRGR 78.28 316** ⇓P P 00 27 17.4 +0.7
**NB2 NORSAR Subarra 78.31 332** P P 00 27 15.9 -0.6
comp=Z,21nm,1.7s,baz=62,slow=5.6
**NOA NORSAR Array B 78.31 332** P P 00 27 15.8 -0.8
comp=Z,3.5nm,0.8s,baz=61,slow=5.5,SNR=9.6
comp=Z,3.5nm,0.8s
**OJC Ojcow 78.71 320** P P 00 27 18.1 -0.8
OJC IAmb IAmb 00 27 27.4
comp=Z,25nm,1.5s
**GZR Gura Zlata 78.77 315** ⇑P P 00 27 19.9 +0.4
**SURR Surduc 79.05 315** ⇓P P 00 27 20.7 -0.2
**SIRR Siria 79.15 316** ⇑P P 00 27 20.6 -0.8
**DLBC Dease Lake 79.17 30** P P 00 27 20.5 -0.8
comp=Z,1.0nm,0.7s,baz=219,slow=14,SNR=2.1
comp=Z,1.0nm,0.7s
**HERR Herculane 79.20 314** ⇓P P 00 27 22.4 +0.7
**MDVR Moldovita 79.70 314** ⇑P P 00 27 24.8 +0.3
**VYHS Vyhne 79.99 319** *e*P P 00 27 26.8 +0.8
**BOVS Bovan 80.17 313** ⇑P P 00 27 27.4 +0.4
**MORC Moravsky Berou 80.22 320** P P 00 27 26.3 -0.9
MORC IAmb IAmb 00 27 35.0
comp=Z,9.7nm,1.3s
**MORC Moravsky Berou 80.22 320** *e*P P 00 27 27.6 +0.4
MORC *e* 00 27 33.6
**MORC Moravsky Berou 80.22 320** ⇑P P 00 27 27.8 +0.6
**KSP Ksiaz 80.47 322** P P 00 27 28.5 0.0
comp=Z,11nm,1.3s
**JAVC Velka Javorina 80.54 319** *e*P P 00 27 30.4 +1.5
**DPC Dobruska-Polom 80.67 321** *e*P P 00 27 30.3 +0.7
**VRAC Vranov 80.98 320** *e*P P 00 27 31.7 +0.5
VRAC *e* 00 27 38.0
**VRAC Vranov 80.98 320** ⇑P P 00 27 30.7 -0.6
**MORH Mrgy, Hungar 81.08 317** ⇓P P 00 27 30.0 -1.7
**MORH Mrgy, Hungar 81.08 317** P P 00 27 32.0 +0.2
comp=Z,7.0nm,1.4s
**KRUC Moravsky 81.20 320** *e*P P 00 27 32.6 +0.2
KRUC *e* 00 27 39.1
**MPLH Magyarpolny 81.35 318** P P 00 27 33.8 +0.6
comp=Z,34nm,1.4s
**FNA Florina 81.55 311** P P 00 27 33.2 -1.2
**BRG Berggiesshubel 81.78 322** *e*P P 00 27 35.6 +0.2
BRG Amp 00 27 36.0
comp=Z,1.2nm,0.8s
**BRG Berggiesshubel 81.78 322** P P 00 27 42.7 +7.3
BRG Amp 00 27 44.0
comp=Z,2.7nm,0.9s
**RONA Rosalia, Austr 81.87 319** *e*P P 00 27 35.8 -0.3
comp=Z,2.9nm,1.2s
**KBN Korca 82.02 311** P P 00 27 36.4 -0.7
KBN IAmb IAmb 00 27 43.9
comp=Z,16nm,1.0s
**CONA Conrad Observa 82.03 319** *i* PcP P 00 27 38.5 +1.5
comp=Z,4.2nm,1.4s
**CLL Collm 82.10 323** P P 00 27 35.8 -1.3
CLL IAmb IAmb 00 27 44.3
comp=Z,12nm,1.4s
**CLL Collm 82.10 323** *i* P P 00 27 36.8 -0.3
comp=Z,3.0nm,0.8s
CLL *i* pP PcP 00 27 42.6 +0.1
comp=Z,9.0nm,1.2s
CLL *i* pPcP 00 27 48.6
comp=Z,5.0nm,0.9s
**ZVC Zvikov 82.31 321** *e*P P 00 27 38.5 +0.2
ZVC *e*pP pP 00 27 44.6 -0.2
**CKRC Cesky Krumlov 82.54 320** *e*P P 00 27 40.5 +1.0
**ARSA Arzberg 82.54 319** *i* P P 00 27 39.9 +0.4
comp=Z,0.7nm,0.6s
**KHC Kasperske Hory 82.81 321** *e*P P 00 27 41.0 +0.1
**GEC2 GERESS Array S 82.88 321** P P 00 27 40.1 -1.3
GEC2 IAmb IAmb 00 27 48.9
comp=Z,7.3nm,1.1s
**GERES GERESS Array B 82.88 321** P P 00 27 40.3 -1.1
**GERES GERESS Array B 82.88 321** P P 00 27 41.6 +0.3
comp=Z,1.5nm,0.9s,baz=123,slow=4.9,SNR=7.7
comp=Z,1.5nm,0.9s
**MOA Molln 83.02 319** *i* P P 00 27 42.4 +0.3
comp=Z,4.7nm,1.1s
**SOKA Soboth 83.11 318** *e*P P 00 27 42.0 -0.6
comp=Z,2.9nm,1.1s
**BIOA Bad Ischl, Aus 83.47 320** *i* PcP P 00 27 44.9 +0.6
comp=Z,8.4nm,1.2s
**OBKA Obir 83.48 318** *i* P P 00 27 42.9 -1.6
comp=Z,4.9nm,1.4s
**VISS Visnje 83.63 317** *i* P P 00 27 45.4 +0.2
**GBRS Gornja Briga 83.78 317** *i* P P 00 27 46.4 +0.4
**GRF Grafenberg Arr 83.88 322** *e*P P 00 27 47.0 +0.6
comp=Z,12nm,1.2s,baz=66,slow=4.9
GRF *e*pP pP 00 27 53.3 +0.5
**CEY Cerknica 83.92 318** *i* P P 00 27 46.7 0.0
**KBA Koelnbreinsper 83.94 319** *i* P P 00 27 46.4 -0.6
comp=Z,3.4nm,0.8s
**MYKA Terra Mystica 83.97 319** *e*PcP PcP 00 27 49.3 -1.7
comp=Z,1.0nm,0.4s
**LESA Schwarzleotal 84.17 320** *i* P P 00 27 48.0 0.0
comp=Z,6.2nm,1.2s
**SABO M.te Sabotino 84.31 318** P P 00 27 48.0 -0.7
SABO IAmb IAmb 00 27 55.5
comp=Z,16nm,1.2s
**ABTA Abfaltersbach 84.60 319** *i* P P 00 27 49.1 -1.0
comp=Z,3.2nm,0.7s
**STAL STALIGIAL 84.72 319** P P 00 27 49.4 -1.3
STAL IAmb IAmb 00 27 57.7
comp=Z,9.5nm,1.1s
**MCQ Macquarie Isla 84.72 159** P P 00 27 49.7 -0.4
**WATA Walderalm 84.86 320** *i* P P 00 27 51.3 -0.3
comp=Z,2.8nm,0.7s
**WTTA Wattenberg 84.86 320** *e*PcP P 00 27 51.6 -0.1
comp=Z,7.0nm,0.8s
**MOTA Moosalm 85.13 320** *i* P P 00 27 52.1 -0.8
comp=Z,4.2nm,1.2s
**SQTA Sankt Quirin 85.13 320** *i* P P 00 27 52.6 -0.3
comp=Z,4.2nm,0.9s
**RETA Reutte 85.26 320** *i* PcP P 00 27 53.3 -0.2
comp=Z,6.2nm,1.3s
**TIP Timpagrande 85.44 311** P P 00 27 52.2 -2.4
TIP IAmb IAmb 00 28 02.1
comp=Z,15nm,1.2s
**CTI Castel Tesino 85.46 319** P P 00 27 53.6 -1.0
CTI IAmb IAmb 00 28 01.8
comp=Z,6.3nm,1.2s
**FETA Feichten 85.52 320** *i* P P 00 27 54.2 -0.7
comp=Z,3.1nm,1.0s
**TEOL Teolo 85.79 318** P P 00 27 55.3 -0.8
**DAVA Damuels 85.88 320** *i* PcP P 00 27 56.4 -0.3
comp=Z,7.4nm,1.6s
**GUMA Gualdo di Mace 85.89 316** P P 00 27 56.2 -0.5
GUMA IAmb IAmb 00 28 04.7
comp=Z,29nm,1.2s
**FUORN Ofenpass-Fuorn 86.00 320** P P 00 27 56.7 -0.7
FUORN IAmb IAmb 00 28 04.9
comp=Z,6.6nm,1.2s
**INTR Introdacqua 86.03 314** P P 00 27 56.6 -0.8
INTR IAmb IAmb 00 28 12.5
comp=Z,6.6nm,1.1s
**FDMO Fiordimonte 86.06 316** P P 00 27 57.3 -0.2
**CAMP Campotosto 86.10 315** P P 00 27 56.8 -1.0
CAMP IAmb IAmb 00 28 05.5
comp=Z,17nm,1.3s
**NRCA Norcia 86.14 315** P P 00 27 57.4 -0.6
**CEL Celeste 86.46 310** P P 00 27 59.1 -0.5
**WLF Walfordange 86.69 324** P P 00 27 59.0 -1.4
**BORG Borgarnes 86.85 345** P P 00 27 58.2 -2.7
**CASY Casey 90.36 184** P P 00 28 15.5 -1.6
CASY IAmb IAmb 00 28 16.8
comp=Z,6.3nm,0.8s
**MXC Moxie City 90.56 37** P P 00 28 17.6 -1.2
MXC IAmb IAmb 00 28 32.6
comp=Z,9.9nm,1.4s
**PINE Pine Mountain 91.85 40** P P 00 28 23.9 -1.2
PINE IAmb IAmb 00 28 26.9
comp=Z,9.5nm,1.2s
**PMPB Monarch Peak 96.38 46** P P 00 28 45.2 -0.8
**NVAR Mina Array Bea 96.66 43** P P 00 28 45.7 -1.6
**TROLL Troll, Antarti 121.34 199** ⇑PKiKP PKPdf 00 34 06.7 -2.4
comp=Z,67nm,0.5s
**SNAA Sanae 123.03 198** ⇑PKiKP PKPdf 00 34 10.2 -2.1
comp=Z,14nm,0.6s
**SNAA Sanae 123.03 198** PKP PKPdf 00 34 11.0 -1.3
comp=Z,0.4nm,0.5s,baz=90,slow=5.1,SNR=9.3
**VNA2 Neumayer--Watz 124.68 198** ⇑PKiKP PKPdf 00 34 14.0 -1.4
comp=Z,6.1nm,0.6s,baz=98,slow=0.7
**VNA1 Neumayer--Stat 125.06 198** ⇑PKiKP PKPdf 00 34 14.5 -1.6
comp=Z,2.7nm,0.9s
**VNA3 Neumayer Olymp 125.15 197** ⇑PKiKP PKPdf 00 34 14.9 -1.4
comp=Z,2.7nm,0.6s
**LPAZ La Paz 168.48 50** PKP PKPdf 00 35 24.4 -0.6
comp=Z,2.6nm,1.0s,baz=7.1,slow=3.7,SNR=7.9

**TAP 18 00:16:57.5, 24.01N×121.01E, h18km, ML3.6, 5C-5D, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WPL** | **Puli Township** | **0.04** | **270** | ⇑*e*P | P | Pg | 00 17 03.0 | +2.2 |
| | baz=270 | | | | | | | |
| **DPDB** | **Guoxing** | **0.08** | **286** | ⇑*i*P | P | Pg | 00 17 01.4 | +0.3 |
| | baz=286 | | | | | | | |
| DPDB | | | | *i* S | | Sg | 00 17 04.1 | +0.5 |
| | baz=286 | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.10** | **298** | ⇑*i*P | P | Pg | 00 17 01.6 | +0.4 |
| | baz=297 | | | | | | | |
| WCS | | | | S | | Sg | 00 17 04.2 | +0.5 |
| | baz=297 | | | | | | | |
| **WUSB** | **Renai** | **0.10** | **101** | ⇓*i*P | P | Pg | 00 17 01.7 | +0.3 |
| | baz=101 | | | | | | | |
| WUSB | | | | S | | Sg | 00 17 04.2 | +0.2 |
| | baz=101 | | | | | | | |
| **CHGB** | **Renai** | **0.16** | **73** | ⇓P | P | Pg | 00 17 02.6 | +0.4 |
| | baz=73 | | | | | | | |
| CHGB | | | | *i* S | | Sg | 00 17 05.7 | +0.4 |
| | baz=73 | | | | | | | |
| **OWD** | **Renai** | **0.17** | **110** | ⇓*i*P | P | Pg | 00 17 02.5 | +0.4 |
| | baz=110 | | | | | | | |
| OWD | | | | S | | Sg | 00 17 05.6 | +0.3 |
| | baz=110 | | | | | | | |
| **TYC** | **Yuchr** | **0.17** | **232** | ⇑*i*P | P | Pg | 00 17 02.3 | +0.2 |
| | baz=227 | | | | | | | |
| TYC | | | | *e*S | | Sg | 00 17 05.3 | +0.1 |
| | baz=227 | | | | | | | |
| **SSLB** | **Suanglung** | **0.23** | **192** | ⇑*i*P | P | Pb | 00 17 02.9 | 0.0 |
| | baz=187 | | | | | | | |
| SSLB | | | | S | | Sb | 00 17 06.1 | -0.3 |
| | baz=187 | | | | | | | |
| **WHP** | **Taichung City** | **0.27** | **348** | *e*P | P | Pb | 00 17 04.3 | +0.5 |
| | baz=349 | | | | | | | |
| WHP | | | | *e*S | | Sb | 00 17 09.3 | +1.3 |
| | baz=349 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.27** | **61** | *e*P | P | Pb | 00 17 04.8 | +0.8 |
| | baz=70 | | | | | | | |
| WHF | | | | S | | Sb | 00 17 09.0 | +0.7 |
| | baz=70 | | | | | | | |
| **TDCB** | **Techi** | **0.28** | **30** | ⇓*i*P | P | Pb | 00 17 04.1 | +0.2 |
| | baz=25 | | | | | | | |
| TDCB | | | | *i* S | | Sg | 00 17 08.0 | -0.1 |
| | baz=25 | | | | | | | |
| **WWF** | **Wufeng** | **0.28** | **276** | *e*P | P | Pb | 00 17 05.2 | +1.2 |
| | baz=276 | | | | | | | |
| WWF | | | | *e*S | | Sb | 00 17 10.2 | +1.9 |
| | baz=276 | | | | | | | |
| **VWDT** | **VWDT** | **0.28** | **154** | *e*P | P | Pb | 00 17 04.3 | +0.3 |
| | baz=155 | | | | | | | |
| VWDT | | | | *e*S | | Sb | 00 17 08.4 | 0.0 |
| | baz=155 | | | | | | | |
| **TWT** | **Tachien** | **0.29** | **33** | *e*P | P | Pb | 00 17 04.1 | 0.0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=26 | | | | | | | | |
| TWT | | | | *i* | S | Sg | 00 17 08.1 | -0.3 | |
| | baz=26 | | | | | | | | |
| **WNT1** | **Nantou City** | **0.32** | **251** | *e* | P | Pb | 00 17 05.7 | +1.0 | |
| | baz=250 | | | | | | | | |
| WNT1 | | | | | *e*S | Sb | 00 17 11.4 | +1.9 | |
| | baz=250 | | | | | | | | |
| **WJS** | **Zhushan** | **0.32** | **233** | *e* | P | Pb | 00 17 05.5 | +0.8 | |
| | baz=233 | | | | | | | | |
| WJS | | | | | *e*S | Sb | 00 17 11.2 | +1.7 | |
| | baz=233 | | | | | | | | |
| **FUSS** | **Fushou** | **0.32** | **43** | ⇓ | *i* P | Pb | 00 17 04.9 | +0.1 | |
| | baz=43 | | | | | | | | |
| FUSS | | | | | *e*S | Sg | 00 17 09.3 | -0.1 | |
| | baz=43 | | | | | | | | |
| **WNT** | **Mingjian** | **0.32** | **246** | | P | Pb | 00 17 05.6 | +0.8 | |
| | baz=244 | | | | | | | | |
| WNT | | | | | *e*S | Sb | 00 17 11.4 | +1.7 | |
| | baz=244 | | | | | | | | |
| **TCU** | **Taichung** | **0.33** | **294** | *e* | P | Pb | 00 17 05.9 | +1.0 | |
| | baz=294 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.34** | **204** | *e* | P | Pb | 00 17 05.4 | +0.3 | |
| | baz=200 | | | | | | | | |
| WHYT | | | | | *e*S | Sb | 00 17 11.0 | +0.7 | |
| | baz=200 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.37** | **89** | *e* | P | Pb | 00 17 05.8 | 0.0 | |
| | baz=85 | | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **0.39** | **263** | *e* | P | Pb | 00 17 06.9 | +0.9 | |
| | baz=262 | | | | | | | | |
| WYL | | | | | *e*S | Sn | 00 17 13.8 | -1.5 | |
| | baz=262 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.40** | **328** | *e* | P | Pn | 00 17 07.3 | -1.0 | |
| | baz=328 | | | | | | | | |
| **WCHH** | **Zhanghua** | **0.41** | **279** | *e* | P | Pb | 00 17 06.9 | +0.5 | |
| | baz=278 | | | | | | | | |
| WCHH | | | | | *e*S | Sn | 00 17 14.1 | -1.7 | |
| | baz=278 | | | | | | | | |
| **ESL** | **Shilin** | **0.44** | **117** | *e* | P | Pb | 00 17 06.9 | +0.2 | |
| | baz=117 | | | | | | | | |
| ESL | | | | | *e*S | Sg | 00 17 12.2 | -0.3 | |
| | baz=117 | | | | | | | | |
| **ETM** | **Tongmen** | **0.45** | **96** | *e* | P | Pg | 00 17 06.8 | +0.1 | |
| | baz=102 | | | | | | | | |
| ETM | | | | | *e*S | Sg | 00 17 13.0 | +0.2 | |
| | baz=102 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.46** | **130** | | P | Pb | 00 17 07.1 | 0.0 | |
| | baz=124 | | | | | | | | |
| WARBT | | | | | *e*S | Sg | 00 17 12.7 | -0.3 | |
| | baz=124 | | | | | | | | |
| **NSY** | **Sanyi** | **0.46** | **331** | *e* | P | Pn | 00 17 08.9 | -0.3 | |
| | baz=332 | | | | | | | | |
| **WDJ** | **Dajia District** | **0.47** | **315** | *e* | P | Pn | 00 17 08.9 | -0.5 | |
| | baz=315 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.48** | **66** | *e* | P | Pb | 00 17 07.6 | +0.1 | |
| | baz=63 | | | | | | | | |
| ETLH | | | | | *i* S | Sb | 00 17 14.3 | +0.2 | |
| | baz=63 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.52** | **185** | *e* | P | Pb | 00 17 08.6 | +0.2 | |
| | baz=185 | | | | | | | | |
| YUS | | | | | *e*S | Sb | 00 17 15.8 | +0.1 | |
| | baz=185 | | | | | | | | |
| **WDLH** | **Douliu** | **0.54** | **233** | *e* | P | Pb | 00 17 09.1 | +0.8 | |
| | baz=232 | | | | | | | | |
| WDLH | | | | | *e*S | Sn | 00 17 17.9 | -0.9 | |
| | baz=232 | | | | | | | | |
| **NNSB** | **Datong** | **0.54** | **40** | *e* | P | Pg | 00 17 08.3 | -0.1 | |
| | baz=39 | | | | | | | | |
| NNSB | | | | | *e*S | Sg | 00 17 15.6 | -0.1 | |
| | baz=39 | | | | | | | | |
| **NNSH** | **Datong** | **0.54** | **40** | *e* | P | Pg | 00 17 08.4 | 0.0 | |
| | baz=33 | | | | | | | | |
| NNSH | | | | | *e*S | Sg | 00 17 15.5 | -0.2 | |
| | baz=33 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.54** | **38** | *e* | P | Pb | 00 17 08.8 | +0.3 | |
| | baz=39 | | | | | | | | |
| NNS | | | | | *e*S | Sg | 00 17 15.9 | +0.1 | |
| | baz=39 | | | | | | | | |
| **TWD** | **Chiawan** | **0.54** | **83** | *e* | P | Pb | 00 17 08.7 | +0.2 | |
| | baz=91 | | | | | | | | |
| TWD | | | | | *e*S | Sb | 00 17 15.9 | 0.0 | |
| | baz=91 | | | | | | | | |
| **HWA** | **Hwalien** | **0.55** | **94** | *e* | P | Pb | 00 17 09.2 | +0.6 | |
| | baz=94 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.56** | **114** | *e* | P | Pb | 00 17 09.5 | +0.8 | |
| | baz=114 | | | | | | | | |
| SHUL | | | | | *e*S | Sb | 00 17 17.2 | +0.9 | |
| | baz=114 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.56** | **105** | *e* | P | Pn | 00 17 09.7 | -0.8 | |
| | baz=101 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.56** | **73** | *e* | P | Pb | 00 17 09.1 | +0.4 | |
| | baz=81 | | | | | | | | |
| NACB | | | | | S | Sb | 00 17 16.9 | +0.5 | |
| | baz=81 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.57** | **122** | *e* | P | Pg | 00 17 09.8 | +0.9 | |
| | baz=119 | | | | | | | | |
| TEGC | | | | | *e*S | Sn | 00 17 18.2 | -1.5 | |
| | baz=119 | | | | | | | | |
| **EHY** | **Hungye** | **0.58** | **150** | *e* | P | Pg | 00 17 09.7 | +0.6 | |
| | baz=145 | | | | | | | | |
| EHY | | | | | *e*S | Sg | 00 17 16.9 | 0.0 | |
| | baz=145 | | | | | | | | |
| **ETL** | **Fush Village** | **0.58** | **75** | *e* | P | Pg | 00 17 09.2 | 0.0 | |
| | baz=85 | | | | | | | | |
| ETL | | | | | *e*S | Sb | 00 17 17.3 | +0.2 | |
| | baz=85 | | | | | | | | |
| **EHYH** | **Wanrong** | **0.60** | **149** | *e* | P | Pg | 00 17 09.7 | +0.2 | |
| | baz=144 | | | | | | | | |
| EHYH | | | | | *e*S | Sg | 00 17 18.1 | +0.5 | |
| | baz=144 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.62** | **360** | *e* | P | Pn | 00 17 11.2 | -0.2 | |
| **NFF** | **Wufeng Townshi** | **0.63** | **9** | *e* | P | Pn | 00 17 11.4 | -0.1 | |
| | baz=16 | | | | | | | | |
| NFF | | | | | S | Sn | 00 17 20.5 | -0.7 | |
| | baz=16 | | | | | | | | |
| **LIOB** | **Emei** | **0.63** | **1** | *e* | P | Pn | 00 17 11.6 | 0.0 | |
| | baz=1.0 | | | | | | | | |
| **YULB** | **Yu-li** | **0.67** | **157** | *e* | P | Pg | 00 17 11.3 | +0.5 | |
| | baz=148 | | | | | | | | |
| YULB | | | | | *e*S | Sg | 00 17 20.9 | +1.1 | |
| | baz=148 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.68** | **226** | *e* | P | Pn | 00 17 11.8 | -0.4 | |
| | baz=225 | | | | | | | | |
| **LATG** | **Datong** | **0.70** | **42** | *e* | P | Pg | 00 17 11.6 | +0.2 | |
| | baz=34 | | | | | | | | |
| LATG | | | | | *e*S | Sb | 00 17 20.7 | 0.0 | |
| | baz=34 | | | | | | | | |
| **TWF1** | **Yuli** | **0.71** | **158** | *e* | P | Pg | 00 17 11.7 | +0.2 | |
| | baz=149 | | | | | | | | |
| TWF1 | | | | | *e*S | Sg | 00 17 21.5 | +0.6 | |
| | baz=149 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.74** | **27** | *e* | P | Pg | 00 17 12.3 | +0.3 | |
| | baz=33 | | | | | | | | |
| YHNB | | | | | *i* S | Sb | 00 17 21.6 | 0.0 | |
| | baz=33 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.75** | **38** | *e* | P | Pg | 00 17 12.3 | +0.1 | |
| | baz=39 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.79** | **206** | *e* | P | Pg | 00 17 13.3 | +0.4 | |
| | baz=206 | | | | | | | | |
| TPUB | | | | | *e*S | Sg | 00 17 23.8 | +0.3 | |
| | baz=206 | | | | | | | | |
| **ENA** | **Nanau** | **0.79** | **58** | *e* | P | Pg | 00 17 13.1 | +0.1 | |
| | baz=58 | | | | | | | | |
| ENA | | | | | *e*S | Sg | 00 17 23.6 | +0.1 | |
| | baz=58 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.81** | **39** | *e* | P | Pn | 00 17 13.7 | -0.3 | |
| | baz=41 | | | | | | | | |
| **WSF** | **Szhu** | **0.81** | **243** | *e* | P | Pg | 00 17 13.4 | +0.1 | |
| | baz=242 | | | | | | | | |
| WSF | | | | | *e*S | Sn | 00 17 25.2 | -0.3 | |
| | baz=242 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.82** | **179** | *e* | P | Pg | 00 17 13.7 | +0.1 | |
| | baz=185 | | | | | | | | |
| ELDTW | | | | | *e*S | Sg | 00 17 24.6 | +0.1 | |
| | baz=185 | | | | | | | | |
| **EWUT** | **Wuta** | **0.83** | **58** | *e* | P | Pb | 00 17 13.4 | +0.1 | |
| | baz=58 | | | | | | | | |
| EWUT | | | | | *e*S | Sg | 00 17 24.9 | +0.3 | |
| | baz=58 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.84** | **205** | *e* | P | Pn | 00 17 14.4 | -0.1 | |
| | baz=204 | | | | | | | | |
| WTP | | | | | *e*S | Sg | 00 17 25.7 | +0.5 | |
| | baz=204 | | | | | | | | |
| **FULB** | **Fuli** | **0.85** | **162** | *e* | P | Pn | 00 17 14.8 | +0.2 | |
| | baz=162 | | | | | | | | |
| FULB | | | | | *e*S | Sn | 00 17 27.3 | +0.6 | |
| | baz=162 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.88** | **195** | *e* | P | Pn | 00 17 14.9 | -0.1 | |
| | baz=195 | | | | | | | | |
| STYT | | | | | *e*S | Sg | 00 17 26.1 | -0.1 | |
| | baz=195 | | | | | | | | |
| **EHD** | **Haiduan** | **0.88** | **168** | *e* | P | Pn | 00 17 14.8 | -0.1 | |
| | baz=168 | | | | | | | | |
| EHD | | | | | *e*S | Sn | 00 17 27.2 | -0.1 | |
| | baz=168 | | | | | | | | |
| **TWK** | **Hsinying** | **0.88** | **213** | *e* | P | Pb | 00 17 14.4 | +0.1 | |
| | baz=212 | | | | | | | | |
| **NDS** | **Dongshan** | **0.90** | **46** | *e* | P | Pg | 00 17 14.9 | -0.1 | |
| | baz=56 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.91** | **35** | *e* | P | Pg | 00 17 15.2 | -0.2 | |
| | baz=37 | | | | | | | | |
| **TWE** | **Neicheng** | **0.93** | **40** | *e* | P | Pn | 00 17 16.1 | +0.5 | |
| | baz=41 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.93** | **226** | *e* | P | Pg | 00 17 15.6 | -0.1 | |
| | baz=236 | | | | | | | | |
| ICHU | | | | | *e*S | Sn | 00 17 29.0 | +0.5 | |
| | baz=236 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.93** | **208** | *e* | P | Pn | 00 17 15.9 | +0.2 | |
| | baz=208 | | | | | | | | |
| CHN1 | | | | | *e*S | Sn | 00 17 28.5 | -0.1 | |
| | baz=208 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.97** | **160** | *e* | P | Pb | 00 17 15.9 | +0.2 | |
| | baz=144 | | | | | | | | |
| **TWC** | **Suao** | **0.97** | **52** | *e* | P | Pg | 00 17 16.4 | 0.0 | |
| | baz=52 | | | | | | | | |
| TWC | | | | | *e*S | Sn | 00 17 30.1 | +0.5 | |
| | baz=52 | | | | | | | | |
| **CHN8** | **Yiju** | **0.98** | **228** | *e* | P | Pg | 00 17 16.7 | 0.0 | |
| | baz=237 | | | | | | | | |
| CHN8 | | | | | *e*S | Sn | 00 17 30.6 | +0.7 | |
| | baz=237 | | | | | | | | |
| **NHW** | **Xinwu Township** | **0.99** | **2** | *e* | P | Pg | 00 17 16.9 | +0.1 | |
| | baz=2.0 | | | | | | | | |

*IDC* ***18*** *00:24:35.0±1.1, 43.˚76N×86.˚40E, h0km, mb3.7/5, mbtmp3.7/10, ML3.4/5, Error ellipse: s-maj=37.2km s-min=13.3km az=49.0*

*NNC* ***18*** *00:24:39.4±2.2, 43.˚91N×86.˚18E, h0km, mb4.3, mpv4.1, Error ellipse: s-maj=16.5km s-min=10.0km az=116.0*

*SOME* ***18*** *00:24:44.8, 44.˚20N×85.˚75E, h10km*

**ISC 18 00:24:37.1±0.9, 43.˚84N±0.˚05×86.˚22E±0.˚05, h10km, n51, σ3°19/72, mb3.6/5, 11C-9D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **ZSN** | **Zaisan** | **3.73** | **346** | *e*P | **Pg** | **00 25 47.6** | | **-1.0** |
| | 43nm,0.4s | | | | | | | |
| ZSN | | | | *e*S | **Sg** | **00 26 33.0** | | **-3.9** |
| | 63nm,0.9s | | | | | | | |
| **ZSN** | **Zaisan** | **3.73** | **346** | Lg | Lg | 00 26 33.0 | | |
| | 69nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **4.05** | **318** | ⇑Pn | **Pn** | **00 25 42.7** | | **+3.6** |
| | 6.7nm,0.4s,baz=133,slow=14,SNR=12 | | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **00 26 31.3** | | **+4.7** |
| | 14nm,0.3s,baz=149,slow=13 | | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 00 26 46.9 | | |
| | 83nm,0.6s,baz=132,slow=26 | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.05** | **318** | Pn | **Pn** | **00 25 42.8** | | **+3.7** |
| | 4.4nm,0.3s,baz=133,slow=14,SNR=119 | | | | | | | |
| MKAR | | | | Pg | **Pb** | **00 25 51.3** | | **+2.8** |
| | 9.0nm,0.3s,baz=132,slow=15,SNR=16 | | | | | | | |
| MKAR | | | | Sn | **Sn** | **00 26 31.0** | | **+4.4** |
| | 9.8nm,0.3s,baz=126,slow=27,SNR=5.2 | | | | | | | |
| MKAR | | | | Lg | Lg | 00 26 47.2 | | |
| | 14nm,0.3s,baz=132,slow=30,SNR=8.1 | | | | | | | |
| | 13nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **4.21** | **316** | ⇓Pn | **Pn** | **00 25 44.8** | | **+3.4** |
| | 13nm,0.4s | | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | **00 26 34.4** | | **+3.8** |
| | 54nm,0.5s | | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 00 26 49.9 | | |
| | 170nm,1.4s | | | | | | | |
| **DJR** | **Jarkent** | **4.66** | **278** | *e*P | Pb | 00 26 04.0 | | +5.0 |
| | 12nm,0.4s | | | | | | | |
| DJR | | | | *e*S | **Sb** | **00 27 01.2** | | **+6.0** |
| | 64nm,0.4s | | | | | | | |
| **DJR** | **Jarkent** | **4.66** | **278** | Pg | Pb | 00 26 04.0 | | +5.0 |
| | 25nm,0.4s | | | | | | | |
| **PDGK** | **Podgornoye** | **4.92** | **266** | Pg | **Pg** | **00 26 09.2** | | **-2.0** |
| | 8.8nm,0.5s | | | | | | | |
| **PDGK** | **Podgornoye** | **4.92** | **266** | ⇑Pn | **Pn** | **00 25 54.9** | | **+3.7** |
| PDGK | | | | ⇓Sn | **Sn** | **00 26 52.1** | | **+3.9** |
| | 20nm,0.5s | | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 00 27 15.6 | | |
| **SHLS** | **Shalkode** | **4.97** | **264** | *e*P | **Pb** | **00 26 05.5** | | **+1.3** |
| | 43nm,0.5s | | | | | | | |
| SHLS | | | | *e*S | **Sb** | **00 27 03.8** | | **-0.2** |
| | 169nm,0.4s | | | | | | | |
| **SHLS** | **Shalkode** | **4.97** | **264** | Lg | Lg | 00 27 03.8 | | |
| | 160nm,0.5s | | | | | | | |
| **KNOS** | **Konyrlen** | **5.10** | **278** | Pg | Pb | 00 26 11.5 | | +5.0 |
| | 16nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **5.29** | **265** | *e*P | **Pg** | **00 26 16.6** | | **-1.8** |
| | 5.3nm,0.3s | | | | | | | |
| UZB | | | | *e*S | **Sg** | **00 27 22.5** | | **-4.3** |
| | 29nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **5.29** | **265** | Pg | **Pg** | **00 26 16.6** | | **-1.8** |
| | 9.1nm,0.4s | | | | | | | |
| UZB | | | | Lg | Lg | 00 27 22.5 | | |
| | 40nm,0.5s | | | | | | | |
| **KPKS** | **Kokpek** | **5.48** | **269** | *e*P | **Pg** | **00 26 19.9** | | **-2.2** |
| | 8.1nm,0.3s | | | | | | | |
| KPKS | | | | *e*S | **Sg** | **00 27 28.3** | | **-4.8** |
| | 63nm,0.5s | | | | | | | |
| **KPKS** | **Kokpek** | **5.48** | **269** | Pg | **Pg** | **00 26 19.9** | | **-2.2** |
| | 11nm,0.5s | | | | | | | |
| **BLB** | **Baldybastay** | **5.60** | **275** | Pg | **Pg** | **00 26 21.5** | | **-2.7** |
| | 69nm,0.3s | | | | | | | |
| **TDK** | **Taldyqorghan** | **5.72** | **284** | *e*P | **Pg** | **00 26 23.4** | | **-3.1** |
| | 25nm,0.4s | | | | | | | |
| TDK | | | | *e*S | **Sg** | **00 27 34.3** | | **-6.3** |
| | 150nm,0.5s | | | | | | | |
| **TDK** | **Taldyqorghan** | **5.72** | **284** | Pg | **Pg** | **00 26 23.4** | | **-3.1** |
| | 66nm,0.6s | | | | | | | |
| **SATY** | **Saty** | **5.74** | **265** | *e*P | **Pg** | **00 26 26.0** | | **-1.1** |
| | 9.1nm,0.3s | | | | | | | |
| SATY | | | | *e*S | **Sg** | **00 27 38.8** | | **-2.7** |
| | 28nm,0.3s | | | | | | | |
| **SATY** | **Saty** | **5.74** | **265** | Lg | Lg | 00 27 38.8 | | |
| | 64nm,0.6s | | | | | | | |
| **ARXS** | **Arharly** | **6.07** | **276** | *e*P | **Pg** | **00 26 30.7** | | **-2.5** |
| | 7.6nm,0.4s | | | | | | | |
| ARXS | | | | *e*S | **Sg** | **00 27 47.2** | | **-4.6** |
| | 38nm,0.3s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **6.65** | **268** | *e*P | **Pg** | **00 26 42.5** | | **-2.0** |
| | 5.9nm,0.5s | | | | | | | |
| KOTS | | | | *e*S | **Sg** | **00 28 07.3** | | **-3.3** |
| | 59nm,0.7s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **6.65** | **268** | Pg | **Pg** | **00 26 42.5** | | **-2.0** |
| | 10nm,0.6s | | | | | | | |
| KOTS | | | | Lg | Lg | 00 28 07.3 | | |
| | 38nm,0.8s | | | | | | | |
| **CHKK** | **Chushkaly** | **6.68** | **273** | *e*P | **Pg** | **00 26 42.1** | | **-2.8** |
| | 5.2nm,0.4s | | | | | | | |
| CHKK | | | | *e*S | **Sg** | **00 28 06.5** | | **-4.8** |
| | 13nm,0.5s | | | | | | | |
| **CHKK** | **Chushkaly** | **6.68** | **273** | Pg | **Pg** | **00 26 42.1** | | **-2.8** |
| | 5.4nm,0.3s | | | | | | | |
| CHKK | | | | Lg | Lg | 00 28 06.5 | | |
| | 24nm,0.5s | | | | | | | |
| **MDOK** | **Medeo** | **6.71** | **267** | *e*P | **Pg** | **00 26 43.4** | | **-2.1** |
| | 3.4nm,0.3s | | | | | | | |
| MDOK | | | | *e*S | **Sg** | **00 28 08.7** | | **-3.6** |
| | 30nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **6.71** | **267** | ⇑Pn | **Pn** | **00 26 19.7** | | **+3.9** |
| | 5.2nm,0.8s | | | | | | | |
| MDOK | | | | Pg | **Pg** | **00 26 43.4** | | **-2.1** |
| | 6.3nm,0.7s | | | | | | | |
| MDOK | | | | Sn | **Sn** | **00 27 36.2** | | **+3.9** |
| MDOK | | | | Lg | Lg | 00 28 08.7 | | |
| | 30nm,0.6s | | | | | | | |
| MDOK | | | | Lg | Lg | 00 28 12.2 | | |
| | 30nm,0.6s | | | | | | | |
| **TNSS** | **Tian-Shan** | **6.80** | **266** | *e*P | **Pg** | **00 26 45.4** | | **-1.9** |
| | 3.8nm,0.4s | | | | | | | |
| TNSS | | | | *e*S | **Sg** | **00 28 12.4** | | **-3.0** |
| | 7.1nm,0.7s | | | | | | | |
| **TNSS** | **Tian-Shan** | **6.80** | **266** | Pg | **Pg** | **00 26 45.4** | | **-1.9** |
| | 6.3nm,0.6s | | | | | | | |
| TNSS | | | | Lg | Lg | 00 28 12.4 | | |
| | 13nm,0.6s | | | | | | | |
| **KTBS** | **Karatobe** | **6.91** | **272** | *e*P | **Pg** | **00 26 46.6** | | **-2.7** |
| | 3.2nm,0.7s | | | | | | | |
| KTBS | | | | *e*S | **Sg** | **00 28 14.3** | | **-4.5** |
| | 16nm,0.6s | | | | | | | |
| **KTBS** | **Karatobe** | **6.91** | **272** | Pg | **Pg** | **00 26 46.6** | | **-2.7** |
| | 4.3nm,0.8s | | | | | | | |
| KTBS | | | | Lg | Lg | 00 28 14.3 | | |
| | 33nm,0.8s | | | | | | | |
| **KST** | **Kastek** | **7.51** | **267** | *e*P | **Pg** | **00 26 58.1** | | **-2.7** |
| | 3.5nm,0.6s | | | | | | | |
| KST | | | | *e*S | **Sg** | **00 28 34.2** | | **-3.8** |
| | 15nm,0.7s | | | | | | | |
| **KST** | **Kastek** | **7.51** | **267** | Pg | **Pg** | **00 26 58.2** | | **-2.7** |
| | 5.6nm,0.7s | | | | | | | |
| KST | | | | Lg | Lg | 00 28 34.2 | | |
| | 18nm,0.9s | | | | | | | |
| **DGS** | **Degeres** | **7.62** | **269** | *e*P | **Pg** | **00 27 00.1** | | **-2.8** |
| | 2.8nm,0.5s | | | | | | | |
| DGS | | | | *e*S | **Sg** | **00 28 37.5** | | **-4.0** |
| | 11nm,0.6s | | | | | | | |
| **DGS** | **Degeres** | **7.62** | **269** | Pg | **Pg** | **00 27 00.1** | | **-2.8** |
| | 4.2nm,0.5s | | | | | | | |
| DGS | | | | Lg | Lg | 00 28 37.5 | | |
| | 27nm,0.6s | | | | | | | |
| **SEM** | **Semipalatinsk** | **7.72** | **330** | *e*P | Pg | 00 27 00.2 | | -4.7 |
| | 4.4nm,0.3s | | | | | | | |
| SEM | | | | *e*S | **Sg** | **00 28 37.6** | | **-7.3** |
| | 23nm,0.7s | | | | | | | |
| **SEM** | **Semipalatinsk** | **7.72** | **330** | Pg | Pg | 00 27 00.2 | | -4.7 |
| | 6.6nm,0.4s | | | | | | | |
| SEM | | | | Lg | Lg | 00 28 37.6 | | |
| | 32nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.80** | **267** | ⇑Pn | **Pn** | **00 26 33.7** | | **+2.9** |
| | 5.8nm,1.4s | | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 00 28 47.3 | | |
| | 19nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.56** | **325** | Pn | **Pn** | **00 26 42.1** | | **+1.1** |
| | 0.3nm,0.3s,baz=132,slow=13,SNR=15 | | | | | | | |
| KURBB | | | | Sn | **Sn** | **00 28 17.4** | | **-0.2** |
| | 0.4nm,0.3s,baz=127,slow=18,SNR=4.6 | | | | | | | |
| KURBB | | | | Lg | Lg | 00 29 06.2 | | |
| | 0.5nm,0.3s,baz=129,slow=34,SNR=5.5 | | | | | | | |
| | 0.9nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.56** | **325** | ⇑Pn | **Pn** | **00 26 42.0** | | **+1.0** |
| | 6.3nm,0.7s | | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **00 28 19.9** | | **+2.3** |
| | 13nm,0.6s | | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 00 29 08.8 | | |
| | 116nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **8.60** | **326** | ⇓Pn | **Pn** | **00 26 42.5** | | **+1.0** |
| | 6.2nm,0.9s | | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **00 28 21.0** | | **+2.6** |
| | 4.3nm,0.4s | | | | | | | |
| KURK | | | | ⇓Lg | Lg | 00 29 10.3 | | |
| | 32nm,0.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **10.16** | **355** | ⇓Pn | **Pn** | **00 27 04.0** | | **+1.1** |
| | 1.1nm,0.8s,baz=176,slow=13 | | | | | | | |
| ZAA0 | | | | ⇓Sn | **Sn** | **00 28 59.0** | | **+2.3** |
| | 0.5nm,0.3s,baz=176,slow=28 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **10.16** | **355** | Pn | **Pn** | **00 27 02.1** | | **-0.7** |
| | 1.5nm,0.3s,baz=175,slow=14,SNR=24 | | | | | | | |
| ZALV | | | | Sn | **Sn** | **00 28 51.5** | | **-5.2** |
| | 1.5nm,0.3s,baz=171,slow=25,SNR=6.5 | | | | | | | |
| | 5.0nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **13.93** | **317** | Pn | **Pn** | **00 27 55.1** | | **+0.7** |
| | 0.1nm,0.3s,baz=106,slow=15,SNR=3.4 | | | | | | | |
| BVAR | | | | Sn | **Sn** | **00 30 25.6** | | **-3.5** |
| | 0.1nm,0.3s,baz=112,slow=23,SNR=3.1 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **14.61** | **67** | Pn | **Pn** | **00 28 02.1** | | **-1.8** |
| | 0.2nm,0.3s,baz=253,slow=9.9,SNR=1.6 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **ARU** | **Arti** | **21.57** | **315** | P | **P** | **00 29 26.7** | | **+0.2** |
| | 0.8nm,0.3s,baz=132,slow=12,SNR=1.4 | | | | | | | |
| | 0.8nm,0.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **38.88** | **283** | P | **P** | **00 32 04.5** | | **+1.8** |
| | 0.3nm,0.5s,baz=70,slow=8.0,SNR=4.3 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **38.88** | **318** | P | **P** | **00 32 02.7** | | **+0.4** |
| | 1.0nm,0.8s,baz=96,slow=8.5,SNR=4.5 | | | | | | | |
| | 1.0nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.10** | **276** | P | **P** | **00 36 29.7** | | **-1.2** |
| | 0.4nm,0.6s,baz=43,slow=5.8,SNR=7.0 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.27** | **134** | P | **P** | **00 36 30.8** | | **-0.8** |
| | 0.9nm,0.8s,baz=333,slow=5.1,SNR=11 | | | | | | | |
| | 0.9nm,0.8s | | | | | | | |

*CATAC* ***18*** *00:25:51.9±0.4, 8.˚67N×83.˚21W, h5km±3km, ML3.9*

*UCR* ***18*** *00:25:51.3±0.8, 8.˚60N×83.˚22W, h19km±2km, MW4.1*

**ISC 18 00:25:51.8±0.9, 8.˚66N±0.˚04×83.˚22W±0.˚03, h15km±6km, n29, σ0°77/42, 8C-4D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **EDAD** | **Golfito** | **0.05** | **97** | *e*P | **Pg** | **00 25 54.3** | | **-0.4** |
| EDAD | | | | *e*S | **Sg** | **00 25 56.7** | | **+0.1** |
| **FITO** | **Golfito** | **0.07** | **118** | ⇑*e*P | **Pg** | **00 25 54.2** | | **-0.6** |
| FITO | | | | *e*S | **Sg** | **00 25 56.5** | | **-0.2** |
| **PTJ1** | **Puerto Jimnez** | **0.15** | **215** | *i* P | **Pg** | **00 25 55.2** | | **-0.5** |
| PTJ1 | | | | IAML | | 00 25 55.5 | | |
| | comp=Z,95μm,1.0s | | | | | | | |
| PTJ1 | | | | *i* S | **Sg** | **00 25 59.4** | | **+1.1** |
| **PTJ1** | **Puerto Jimnez** | **0.15** | **215** | ⇓*e*P | **Pg** | **00 25 55.2** | | **-0.5** |
| PTJ1 | | | | *e*S | **Sg** | **00 25 59.0** | | **+0.8** |
| **JIME** | **Puerto Jimenez** | **0.16** | **222** | ⇓*e*P | **Pg** | **00 25 55.3** | | **-0.6** |
| **NELY** | **Ciudad Neily** | **0.27** | **92** | ⇑*e*P | **Pg** | **00 25 57.5** | | **-0.1** |
| NELY | | | | *e*S | **Sb** | **00 26 02.6** | | **-0.2** |
| **VITO** | **San Vito** | **0.29** | **57** | ⇑*e*P | **Pb** | **00 25 58.6** | | **-0.3** |
| VITO | | | | *e*S | **Sb** | **00 26 04.5** | | **+1.0** |
| **CDITO** | **Canoas** | **0.35** | **104** | *i* P | **Pg** | **00 25 58.2** | | **-0.8** |
| CDITO | | | | *i* S | **Sg** | **00 26 04.5** | | **+0.6** |
| CDITO | | | | IAML | | 00 26 09.2 | | |
| | comp=Z,8μm,1.0s | | | | | | | |
| **EDP2** | **Potrero Grande** | **0.36** | **6** | ⇑*e*P | **Pb** | **00 25 59.8** | | **-0.2** |
| **EDPN** | **Palmar Norte** | **0.39** | **322** | ⇑*e*P | **Pg** | **00 25 59.6** | | **-0.1** |
| EDPN | | | | *e*S | **Sb** | **00 26 06.1** | | **0.0** |
| **EDBA** | **Buenos Aires** | **0.51** | **353** | *e*P | **Pg** | **00 26 01.8** | | **-0.1** |
| **BURE** | **Buenos Aires** | **0.53** | **347** | *e*P | **Pg** | **00 26 02.3** | | **0.0** |
| **BRU2** | **Volcan** | **0.54** | **75** | *i* P | **Pg** | **00 26 02.0** | | **-0.5** |
| BRU2 | | | | *i* S | **Sb** | **00 26 10.7** | | **0.0** |
| BRU2 | | | | IAML | | 00 26 20.7 | | |
| | comp=Z,5μm,1.0s | | | | | | | |
| **BRU2** | **Volcan** | **0.54** | **75** | ⇑*e*P | **Pg** | **00 26 02.0** | | **-0.5** |
| BRU2 | | | | *e*S | **Sb** | **00 26 10.4** | | **-0.3** |
| **DRK0** | **Durika** | **0.60** | **357** | *i* P | **Pg** | **00 26 03.5** | | **-0.3** |
| DRK0 | | | | *i* S | **Sb** | **00 26 13.0** | | **+0.4** |
| DRK0 | | | | IAML | | 00 26 16.7 | | |
| | comp=Z,12μm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **0.60** | **357** | ⇑*e*P | **Pg** | **00 26 03.4** | | **-0.3** |
| **OCHAL** | **Ojochal** | **0.61** | **316** | *i* P | **Pg** | **00 26 03.0** | | **-0.8** |
| OCHAL | | | | *i* S | **Sg** | **00 26 12.3** | | **+0.4** |
| OCHAL | | | | IAML | | 00 26 15.3 | | |
| | comp

108nm,0.4s,baz=25,slow=23,SNR=7.1
**JOW Kunigami 18.64 304 P P 00 42 23.2 +0.5**
20nm,0.4s,baz=120,slow=18,SNR=11
**JMM Marumori 20.92 349 P P 00 42 44.5 -1.6**
**NACB Ninganchiao 23.46 291 P P 00 43 09.3 -0.2**
**YHNB Yeheng 23.77 292 P P 00 43 13.3 +1.0**
**SSLB Suanglung 23.96 290 P P 00 43 15.2 +1.1**
**KSRS Korea Array 25.41 326 P P 00 43 26.4 -0.4**
2.3nm,0.6s,baz=145,slow=9.1,SNR=8.2
2.3nm,0.6s
**COEN Coen 31.16 185 P P 00 44 18.6 +0.7**
**MTN Manton Dam 33.20 206 P P 00 44 36.3 +0.8**
**WB0 Warramunga Arr 38.45 197 P P 00 45 21.2 +1.3**
**WR0 Warramunga Arr 38.60 197 P P 00 45 22.4 +1.3**
WR0 lAmb lAmb 00 45 48.0
comp=Z,7.0nm,1.1s
**WB2 Warramunga Arr 38.63 197 P P 00 45 22.6 +1.3**
WB2 lAmb lAmb 00 45 23.6
comp=Z,12nm,1.2s
**WRA Warramunga Arr 38.64 197 P P 00 45 22.4 +1.0**
**WRA Warramunga Arr 38.64 197 P P 00 45 22.6 +1.1**
comp=Z,2.0nm,0.3s,baz=16,slow=8.5,SNR=44
comp=Z,2.0nm,0.3s
**FITZ Fitzroy Crossi 40.30 210 P P 00 45 36.7 +1.6**
**AS31 Alice Springs 42.30 196 P P 00 45 52.2 +1.0**
**ASAR Alice Springs 42.30 196 P P 00 45 52.2 +1.1**
**ASAR Alice Springs 42.30 196 P P 00 45 52.6 +1.5**
comp=Z,0.9nm,0.5s,baz=21,slow=9.9,SNR=17
comp=Z,0.9nm,0.5s
**DZM Mont Dzumac 44.13 152 P P 00 46 06.9 +1.1**
**SONM Songino Array 44.19 322 P P 00 46 06.0 0.0**
**SONM Songino Array 44.19 322 P P 00 46 05.4 -0.6**
comp=Z,0.6nm,0.5s,baz=138,slow=8.4,SNR=4.3
comp=Z,0.6nm,0.5s
**CMAR Chiang Mai Arr 44.34 279 P P 00 46 09.3 +1.8**
comp=Z,3.0nm,0.8s,baz=74,slow=6.4,SNR=12
comp=Z,3.0nm,0.8s
**KIWB Kanaga Island 45.28 32 P P 00 46 14.1 -0.3**
**ARMA Armidale 47.80 173 P P 00 46 34.1 0.0**
ARMA lAmb lAmb 00 47 17.2
comp=Z,10nm,1.3s
**K13K Kusilvak Mount 56.46 26 P P 00 47 37.0 +0.1**
**O14K Tigyukauivet M 56.76 29 P P 00 47 39.2 +0.1**
**N15K Kwethluk River 57.67 29 P P 00 47 45.8 +0.4**
N15K lAmb lAmb 00 47 46.8
comp=Z,7.4nm,0.8s
**K15K Wolf Creek Mou 57.93 26 P P 00 47 46.4 -0.8**
**O16K Kokwok River B 58.38 30 P P 00 47 50.4 0.0**
O16K lAmb lAmb 00 48 17.9
comp=Z,10nm,1.4s
**M16K Timber Creek 58.52 28 P P 00 47 51.1 -0.2**
M16K lAmb lAmb 00 47 56.6
comp=Z,9.5nm,1.4s
**L16K Owhat River 58.56 27 P P 00 47 51.5 0.0**
L16K lAmb lAmb 00 48 10.0
comp=Z,7.7nm,1.4s
**J16K Anvik River 58.75 25 P P 00 47 53.0 +0.2**
**ZAA0 Zalesovo Array 59.07 323 P P 00 47 55.5 +0.3**
**ZALV Zalesovo Beam 59.07 323 P P 00 47 54.5 -0.7**
comp=Z,0.6nm,0.4s,baz=111,slow=7.2,SNR=5.0
comp=Z,0.6nm,0.4s
**N17K Nushagak Hills 59.14 29 P P 00 47 56.3 +0.7**
N17K lAmb lAmb 00 47 56.9
comp=Z,3.5nm,0.7s
**M17K Holitna River 59.34 28 P P 00 47 57.5 +0.6**
M17K lAmb lAmb 00 47 58.7
comp=Z,9.1nm,1.1s
**MK31 Makanchi Array 59.37 314 P P 00 47 57.4 0.0**
**MKAR Makanchi Array 59.37 314 P P 00 47 57.7 +0.3**
**MKAR Makanchi Array 59.37 314 P P 00 47 57.6 +0.1**
comp=Z,1.1nm,0.4s,baz=88,slow=8.8,SNR=23
comp=Z,1.1nm,0.4s
**J17K VABM Dome 59.42 25 P P 00 47 57.5 +0.1**
**K17K Iditarod 59.47 26 P P 00 47 58.7 +0.9**
K17K lAmb lAmb 00 47 59.9
comp=Z,8.2nm,1.1s
**MAKZ Makanchi 59.59 314 P P 00 47 58.9 0.0**
**H17K Granite Mounta 59.74 24 P P 00 47 58.0 -1.5**
H17K lAmb lAmb 00 48 15.5
comp=Z,13nm,1.4s
**N18K Kilae Creek 59.80 29 P P 00 48 00.2 +0.2**
N18K lAmb lAmb 00 48 01.1
comp=Z,6.0nm,1.3s
**O18K Koktuh Hills 59.85 30 P P 00 47 59.9 -0.5**
O18K lAmb lAmb 00 48 01.0
comp=Z,10nm,1.4s
**F17K Baldwin Pennin 59.93 22 P P 00 48 01.0 +0.3**
**L18K Granite Mounta 59.98 27 P P 00 48 02.2 +1.0**
L18K lAmb lAmb 00 48 05.9
comp=Z,7.9nm,1.4s
**OHAK Old Harbor 60.05 33 P P 00 48 00.9 -0.8**
OHAK lAmb lAmb 00 48 27.6
comp=Z,8.8nm,1.1s
**J18K Innoko River 60.42 26 P P 00 48 02.7 -1.5**
**H18K Honhosa River 60.43 24 P P 00 48 04.0 -0.2**
**N19K Bonanza Creek 60.49 29 P P 00 48 05.3 +0.4**
N19K lAmb lAmb 00 48 06.6
comp=Z,4.5nm,0.8s
**KDAK Kodiak Island 60.56 33 P P 00 48 05.1 -0.1**
KDAK lAmb lAmb 00 48 11.1
comp=Z,8.3nm,1.1s
**E18K Tukpahlearik C 60.62 21 P P 00 48 05.3 -0.1**
E18K lAmb lAmb 00 48 15.8
comp=Z,10.0nm,1.3s
**P19K Oil Pt 60.74 31 P P 00 48 06.1 -0.4**
**SYI Shuyak Island 60.88 32 P P 00 48 06.0 -1.2**
**J19K Poorman 61.07 26 P P 00 48 08.7 +0.2**
J19K lAmb lAmb 00 48 41.3
comp=Z,5.6nm,1.3s
**G19K Purcell Mounta 61.31 23 P P 00 48 10.1 0.0**
G19K lAmb lAmb 00 48 11.0
comp=Z,4.3nm,0.8s
**M20K Styx River 61.44 28 P P 00 48 10.8 -0.4**
**K20K Telida 61.50 26 P P 00 48 12.1 +0.7**
K20K lAmb lAmb 00 48 12.9
comp=Z,3.4nm,0.8s
**CNPM China Poot 61.69 31 P P 00 48 12.3 -0.4**
CNPM lAmb lAmb 00 48 12.9
comp=Z,6.3nm,0.7s
**C19K Lookout Ridge 61.74 19 P P 00 48 13.3 +0.4**
C19K lAmb lAmb 00 48 21.8
comp=Z,12nm,1.4s
**J20K Nowinta River 61.74 26 P P 00 48 13.8 +0.9**
**E19K Redstone River 61.80 22 P P 00 48 13.9 +0.5**
**BRLK Bradley Lake 61.92 31 P P 00 48 13.2 -1.0**
BRLK lAmb lAmb 00 48 14.8
comp=Z,5.9nm,0.9s
**D19K Kuna River 61.94 20 P P 00 48 13.8 -0.5**
**F20K Avaraart Lake 62.17 22 P P 00 48 15.4 -0.3**
F20K lAmb lAmb 00 48 16.9
comp=Z,2.8nm,0.7s
**SKT Skwentna 62.20 28 P P 00 48 14.2 -1.9**
SKT lAmb lAmb 00 48 17.2
comp=Z,7.1nm,1.3s
**KURK Kurchatov 62.26 319 P P 00 48 16.0 -0.6**
**KURBB Kurchatov Arra 62.30 318 P P 00 48 16.5 -0.4**
comp=Z,3.7nm,0.4s,baz=97,slow=7.4,SNR=65
comp=Z,3.7nm,0.4s
**IMAR Indian Mountai 62.52 24 P P 00 48 18.4 +0.3**
**H21K Melozitna Rive 62.77 24 P P 00 48 20.2 +0.4**
**G21K Allakaket 62.80 23 P P 00 48 19.4 -0.5**
G21K lAmb lAmb 00 48 59.2
comp=Z,6.8nm,1.3s
**RC01 Rabbit Creek A 62.80 30 P P 00 48 19.4 -0.6**
**B20K Meade River 62.91 19 P P 00 48 20.6 +0.1**
**BPAW Bear Paw Mtn. 63.03 26 P P 00 48 21.0 -0.6**
BPAW lAmb lAmb 00 48 45.1
comp=Z,3.9nm,0.8s
**F21K Alatna River 63.05 22 P P 00 48 21.5 -0.1**
**E21K Killik River 63.32 21 P P 00 48 22.5 -0.9**
**PWL Port Wells 63.41 30 P P 00 48 23.9 -0.1**
**B21K Ikpikpuk River 63.55 20 P P 00 48 24.5 -0.2**
B21K lAmb lAmb 00 48 55.8
comp=Z,11nm,1.5s
**SML Sawmill 63.62 29 P P 00 48 25.3 -0.1**
SML lAmb lAmb 00 48 26.9
comp=Z,7.3nm,0.9s
**D22K Ayikyak River 63.92 21 P P 00 48 27.8 +0.6**
D22K lAmb lAmb 00 48 28.4
comp=Z,3.2nm,0.6s
**E22K Anaktuvuk Pass 63.96 22 P P 00 48 27.3 -0.2**
E22K lAmb lAmb 00 48 28.6
comp=Z,2.4nm,0.8s
**I23K Minto, Yukon-K 64.00 25 P P 00 48 27.9 +0.2**
I23K lAmb lAmb 00 48 28.8
comp=Z,7.1nm,1.3s
**GLI Glacier Island 64.01 30 P P 00 48 27.1 -0.8**
GLI lAmb lAmb 00 48 40.4
comp=Z,5.4nm,0.9s
**SCM Sheep Creek Mo 64.09 29 P P 00 48 27.6 -0.9**
**G23K Bananza Creek 64.17 23 P P 00 48 27.6 -1.3**
G23K lAmb lAmb 00 48 57.2
comp=Z,4.7nm,1.4s
**HIN Hinchinbrook I 64.20 31 P P 00 48 29.1 -0.1**
**B22K Teshekpuk Lake 64.21 19 P P 00 48 28.9 -0.1**
**MDM Murphy Dome 64.41 26 P P 00 48 31.0 +0.5**
MDM lAmb lAmb 00 48 31.7
comp=Z,2.4nm,0.6s
**CCB Clear Creek Bu 64.51 26 P P 00 48 29.7 -1.3**
**D23K Nanushuk River 64.63 21 P P 00 48 32.8 +1.1**
D23K lAmb lAmb 00 48 34.3
comp=Z,6.2nm,1.4s
**KLU Klutina 64.68 30 P P 00 48 32.6 +0.3**
KLU lAmb lAmb 00 48 34.0
comp=Z,6.9nm,1.2s
**H24K Noodor Dome 64.77 25 P P 00 48 32.9 0.0**
**ILAR Eielson Array 64.92 26 P P 00 48 32.1 -1.6**
**ILAR Eielson Array 64.92 26 P P 00 48 32.2 -1.5**
comp=Z,1.4nm,0.4s,baz=249,slow=5.9,SNR=29
comp=Z,1.4nm,0.4s
**IL03 Eielson Array 64.94 26 P P 00 48 32.4 -1.5**
**KAIM Kayak Island 65.15 31 P P 00 48 36.2 +1.0**
**PAX Paxson 65.17 28 P P 00 48 35.4 -0.1**
PAX lAmb lAmb 00 48 36.0
comp=Z,3.3nm,0.6s
**BMRM Bremner River 65.22 30 P P 00 48 36.0 +0.3**
BMRM lAmb lAmb 00 48 37.5
comp=Z,3.9nm,0.7s
**HMT Hamilton 65.29 31 P P 00 48 36.3 +0.1**
HMT lAmb lAmb 00 49 00.7
comp=Z,7.9nm,1.2s
**N25K Chitina, Valde 65.33 30 P P 00 48 36.6 +0.2**
N25K lAmb lAmb 00 48 37.6
comp=Z,2.4nm,0.8s
**SUCK Suckling Hills 65.49 31 P P 00 48 38.0 +0.5**
**J25K Salcha River, 65.53 26 P P 00 48 36.6 -1.1**
J25K lAmb lAmb 00 48 37.3
comp=Z,2.3nm,0.4s
**RIDG Independent Ri 65.59 27 P P 00 48 37.7 -0.4**
RIDG lAmb lAmb 00 48 38.4
comp=Z,3.6nm,0.7s
**GLB Gilahina Butte 65.67 30 P P 00 48 38.5 -0.2**
GLB lAmb lAmb 00 48 40.3
comp=Z,3.2nm,0.9s
**VRDI Verde Repeater 65.81 30 P P 00 48 39.5 -0.2**
VRDI lAmb lAmb 00 48 40.4
comp=Z,3.4nm,1.0s
**CRQM Cirque 65.90 31 P P 00 48 40.6 +0.4**
CRQM lAmb lAmb 00 48 41.2
comp=Z,4.4nm,0.7s
**SCRK Sand Creek 66.00 27 P P 00 48 40.3 -0.5**
SCRK lAmb lAmb 00 48 41.6
comp=Z,3.2nm,1.0s
**MCARA McCarthy VSAT 66.04 30 P P 00 48 40.6 -0.2**
MCARA lAmb lAmb 00 48 42.3
comp=Z,6.4nm,0.9s
**GRNC Granite Creek 66.57 31 P P 00 48 44.4 -0.1**
GRNC lAmb lAmb 00 48 45.5
comp=Z,4.3nm,0.7s
**M27K Edge Creek, AK 66.71 29 P P 00 48 45.5 +0.3**
**L27K Beaver Creek, 66.82 28 P P 00 48 45.6 -0.2**
**TABL Table Mountain 66.84 31 P P 00 48 46.7 +0.5**
**K27K Chicken 66.84 27 P P 00 48 46.3 +0.4**
K27K lAmb lAmb 00 48 56.9
comp=Z,5.3nm,1.5s
**BVAR Borovoye Array 67.50 321 P P 00 48 49.8 -0.4**
comp=Z,4.3nm,0.4s,baz=95,slow=7.4,SNR=27
comp=Z,4.3nm,0.4s
**BRVK Borovoye 67.56 321 P P 00 48 50.7 +0.1**
BRVK lAmb lAmb 00 48 51.5
comp=Z,3.6nm,0.8s
**KKAR Karatay Array 67.59 310 P P 00 48 51.1 +0.1**
**I28M Miner Creek 67.94 26 P P 00 48 52.0 -0.8**
**M29M Somme Creek 68.30 29 P P 00 48 56.1 +1.0**
M29M lAmb lAmb 00 48 56.6
comp=Z,3.4nm,0.8s
**K29M Barlow Dome 68.82 28 P P 00 48 58.4 0.0**
**N30M Aishikik Lake 68.89 30 P P 00 48 59.6 +1.0**
N30M lAmb lAmb 00 49 00.2
comp=Z,3.0nm,0.7s
**S31K Pelican 69.23 34 P P 00 48 59.2 -1.4**
S31K lAmb lAmb 00 49 31.2
comp=Z,7.9nm,1.1s
**EPYK Eagle Plains 69.34 25 P P 00 49 01.6 +0.2**
**O30N Mendenhall 69.35 31 P P 00 49 01.5 0.0**
O30N lAmb lAmb 00 49 02.2
comp=Z,5.0nm,1.4s
**J30M Hart River 69.39 27 P P 00 49 02.2 +0.4**
J30M lAmb lAmb 00 49 17.7
comp=Z,4.6nm,1.2s
**I30M Mount Dempster 69.41 26 P P 00 49 01.9 0.0**
**N31M Braeburn, Yuko 69.52 30 P P 00 49 03.2 +0.7**
N31M lAmb lAmb 00 49 03.7
comp=Z,2.6nm,0.7s
**M31M Drury Creek, Y 70.19 29 P P 00 49 06.6 +0.1**
**G31M Satah River 70.34 24 P P 00 49 07.2 -0.1**
G31M lAmb lAmb 00 49 07.9
comp=Z,3.5nm,0.7s
**Q32M Nakina River 71.29 33 P P 00 49 13.7 +0.3**
**R33M Jennings River 71.94 32 P P 00 49 17.7 +0.5**
**DLBC Dease Lake 72.49 33 P P 00 49 21.2 +0.8**
DLBC lAmb lAmb 00 50 04.0
comp=Z,7.9nm,1.4s
**ARU Arti 74.15 325 P P 00 49 29.6 -0.3**
ARU lAmb lAmb 00 49 30.0
comp=Z,4.5nm,0.6s
**ARU Arti 74.15 325 P P 00 49 29.6 -0.3**
comp=Z,3.4nm,0.4s,baz=91,slow=3.2,SNR=6.7
comp=Z,3.4nm,0.4s
**ABKAR Akbulak array 74.30 317 P P 00 49 30.6 -0.4**
**WRGLY Wrigley 75.13 28 P P 00 49 36.7 +1.3**
**HUMO Hull Mountain 79.52 49 P P 00 50 01.5 +1.3**
HUMO lAmb lAmb 00 50 35.4
comp=Z,7.3nm,1.3s
**B08A Colville Reser 80.55 42 P P 00 50 05.2 -0.3**
**J05D Fort Rock, OR 80.58 48 P P 00 50 06.4 +0.5**
J05D lAmb lAmb 00 50 07.4
comp=Z,2.9nm,0.6s
**UOSS Minazif 82.36 294 P P 00 50 16.1 +0.7**
**ARCES ARCESS Array B 83.79 342 P P 00 50 20.7 -1.0**
comp=Z,2.2nm,0.8s,baz=90,slow=9.7,SNR=6.0
comp=Z,2.2nm,0.8s
**KVN Kaiserville 84.03 51 P P 00 50 24.5 +0.7**
**NVAR Mina Array Bea 84.06 52 P P 00 50 24.2 +0.2**
comp=Z,0.8nm,0.7s,baz=266,slow=7.4,SNR=7.5
comp=Z,0.8nm,0.7s
**ELK Elko 85.59 49 P P 00 50 31.6 0.0**
**LRM Limekiln Ridge 85.80 43 P P 00 50 32.6 +0.1**
**KBZ Khabaz 87.07 315 P P 00 50 37.8 -0.4**
comp=Z,2.1nm,1.0s,baz=107,slow=4.9,SNR=3.7
comp=Z,2.1nm,1.0s
**DUG Dugway, Tooele 87.52 49 P P 00 50 41.4 +0.7**
**FINES FINESS Array B 88.11 335 P P 00 50 40.2 -2.6**
comp=Z,1.2nm,0.7s,baz=67,slow=5.0,SNR=5.1
comp=Z,1.2nm,0.7s
**TCRU Three Creeks R 88.34 50 P P 00 50 42.7 -2.1**

*NEIC **18** 00:47:26.4±1.3, 4°.04S±0°.10×152°.78E±0°.03, h65km±9km, mb4.9/33, Error ellipse: s-maj=14.3km s-min=2.9km az=191.0*
*IDC **18** 00:47:31.9±7.3, 4°.41S×152°.60E, h100km±55km, mb4.1/4, mbtmp4.4/5, MS4.3/2, Error ellipse: s-maj=55.9km s-min=34.4km az=82.0*
**ISC 18 00:47:25.5±0.5, 4°.19S±0°.06×152°.82E±0°.07, h50km, n78, σ1§16/74, mb4.8/27, MS4.5/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.66** | **270** | | | | **Pn** | **00 47 39.3** | **+0.5** |
| RABL | | | | | | | **Sn** | **00 47 50.5** | **+2.2** |
| **KAVG** | **Kavieng** | **2.57** | **308** | P | | Pn | | 00 48 09.9 | +5.2 |
| **MISM** | **Misima Island** | **6.46** | **180** | P | | Pn | | 00 49 07.1 | +9.0 |
| | 108nm,0.6s | | | | | | | | |
| **PMG** | **Port Moresby** | **7.65** | **227** | Pn | | | **Pn** | **00 49 15.5** | **+1.0** |
| **PMG** | **Port Moresby** | **7.65** | **227** | P | | | **Pn** | **00 49 16.4** | **+2.0** |
| | 17nm,0.5s,baz=33,slow=12,SNR=6.2 | | | | | | | | |
| PMG | | | | S | | | **Sn** | **00 50 38.4** | **-1.4** |
| | 9.9nm,0.5s,baz=163,slow=20,SNR=1.4 | | | | | | | | |

**HNR Honiara 8.79 127 Pn Pn 00 49 33.0 +2.9**
**PATS Pohnpei 12.24 27 Pn Pn 00 50 16.5 -0.8**
**COEN Coen 13.60 224 Pn Pn 00 50 37.1 +1.2**
COEN P P 00 50 44.2 +0.8
**CTA Charters Tower 17.05 202 P Pn 00 51 21.3 +0.7**
0.1nm,0.3s,baz=23,slow=13,SNR=2.5
**KOUNC Koumac, New Ca 19.72 147 P P 00 51 50.1 -1.0**
**QIS Mount Isa 20.74 217 P P 00 52 02.4 +0.2**
**EIDS Eidsvold 21.13 184 P P 00 52 07.3 +1.0**
**SAUI Saumlaki 21.73 259 P P 00 52 12.4 -0.4**
**KDU Kakadu 21.81 246 P P 00 52 13.2 -0.5**
**DZM Mont Dzumac 22.15 145 P P 00 52 16.0 -1.4**
**DZM Mont Dzumac 22.15 145 P P 00 52 16.3 -1.1**
**MTN Manton Dam 23.09 247 P P 00 52 27.3 +0.1**
**WB0 Warramunga Arr 23.72 228 P P 00 52 32.2 -1.0**
WB0 lAmb lAmb 00 52 34.3
comp=Z,32nm,0.7s
**WR0 Warramunga Arr 23.73 227 P P 00 52 32.4 -0.9**
WR0 lAmb lAmb 00 52 34.0
comp=Z,29nm,0.8s
**WRAB Tennant Creek 23.86 227 P P 00 52 33.6 -0.8**
WRAB lAmb lAmb 00 52 35.5
comp=Z,40nm,0.7s
**WB2 Warramunga Arr 23.86 227 P P 00 52 33.7 -0.8**
WB2 lAmb lAmb 00 52 35.6
comp=Z,37nm,0.7s
**WRA Warramunga Arr 23.87 227 P P 00 52 33.1 -1.5**
**WRA Warramunga Arr 23.87 227 P P 00 52 33.8 -0.8**
comp=Z,26nm,0.5s,baz=53,slow=9.7,SNR=172
**ARMA Armidale 26.12 182 P P 00 52 53.8 -1.3**
**KNRA Kununurra 26.27 243 P P 00 52 57.4 +0.9**
KNRA lAmb lAmb 00 52 58.7
comp=Z,24nm,0.7s
**AS01 Alice Springs 26.59 222 P P 00 52 58.3 -1.0**
**AS31 Alice Springs 26.62 222 P P 00 52 58.5 -1.1**
**ASAR Alice Springs 26.62 222 P P 00 52 59.3 -0.2**
**ASAR Alice Springs 26.62 222 P P 00 52 58.6 -0.9**
comp=Z,6.7nm,0.5s,baz=56,slow=8.7,SNR=44
comp=Z,6.7nm,0.5s
**OOD Oodnadatta 28.60 213 P P 00 53 16.5 -0.7**
**STKA Stephens Creek 29.50 200 P P 00 53 24.2 -0.9**
comp=Z,2.9nm,0.7s,baz=20,slow=15,SNR=5.0
comp=Z,2.9nm,0.7s
**FITZ Fitzroy Crossi 29.97 240 P P 00 53 27.9 -1.6**
**FITZ Fitzroy Crossi 29.97 240 P P 00 53 28.7 -0.8**
**WRKA Warakurna 31.39 226 P P 00 53 40.8 -1.2**
**MULG Mulgathing 31.43 212 P P 00 53 41.0 -1.2**
**FORT Forrest 35.28 219 P P 00 54 14.5 -1.2**
**MBWA Marble Bar 36.30 239 P P 00 54 23.6 -1.0**
**MBWA Marble Bar 36.30 239 P P 00 54 23.9 -0.7**
MBWA lAmb lAmb 00 54 24.1
comp=Z,14nm,0.7s
**MBWA Marble Bar 36.30 239 P P 00 54 23.4 -1.1**
**PSA00 Pilbara Seismi 36.36 239 P P 00 54 23.9 -1.3**
PSA00 lAmb lAmb 00 54 24.7
comp=Z,21nm,1.1s
**TAU Tasmania Unive 38.87 186 P P 00 54 46.3 +0.3**
TAU lAmb lAmb 00 55 04.0
comp=Z,22nm,1.0s
**QRZ Quartz Range 40.56 157 P P 00 55 00.3 +0.2**
QRZ lAmb lAmb 00 55 01.0
comp=Z,20nm,1.0s
**DSZ Denniston Nort 41.07 158 P P 00 55 05.8 +1.4**
**MRNZ Matariki Terra 41.14 157 P P 00 55 05.5 +0.6**
**NNZ Nelson 41.23 156 P P 00 55 06.8 +1.2**
**THZ Tophouse 41.50 157 P P 00 55 07.8 -0.1**
THZ lAmb lAmb 00 55 17.6
comp=Z,23nm,1.1s
**GIRL Giralia 41.59 240 P P 00 55 08.0 -0.8**
**TCW Tory Channel 41.59 155 P P 00 55 09.0 +0.5**
**TUWZ Tuamarina 41.63 156 P P 00 55 08.2 -0.7**
**MRZ Mangatainoka R 41.69 154 P P 00 55 08.0 -1.4**
MRZ lAmb lAmb 00 55 18.2
comp=Z,18nm,1.2s
**TATO Taipei 42.04 315 P P 00 55 12.7 +0.2**
**LTZ Lake Taylor 42.14 159 P P 00 55 13.9 +0.7**
LTZ lAmb lAmb 00 55 14.9
comp=Z,12nm,0.8s
**KHZ Kahutara 42.31 157 P P 00 55 13.9 -0.5**
KHZ lAmb lAmb 00 55 29.9
comp=Z,17nm,1.1s
**RPZ Rata Peaks 42.54 160 P P 00 55 16.2 -0.1**
RPZ lAmb lAmb 00 55 23.9
comp=Z,22nm,1.2s
**GVZ Greta Valley S 42.59 158 P P 00 55 16.5 -0.2**
**MORW Morawa 42.75 231 P P 00 55 16.9 -1.3**
MORW lAmb lAmb 00 55 18.0
comp=Z,16nm,1.1s
**LBZ Lake Benmore 42.85 162 P P 00 55 18.6 -0.3**
LBZ lAmb lAmb 00 55 24.9
comp=Z,15nm,1.2s
**MQZ McQueen's Vall 43.09 159 P P 00 55 20.8 +0.2**
**MLZ Mavora Lakes 43.15 164 P P 00 55 21.2 0.0**
MLZ lAmb lAmb 00 55 32.8
comp=Z,15nm,1.2s
**WHZ Wether Hill Ro 43.59 165 P P 00 55 25.1 +0.3**
**NJ2 Nanjing 48.39 321 eP P 00 56 00.4 -2.3**
NJ2 pmax pmax
comp=Z,12nm,0.5s
**RAR Rarotonga 49.01 114 LR LR** 01 15 27.6
comp=Z,218nm,20.1s,baz=352,slow=34
**LYN LuoYang 54.10 319 eP P 00 56 44.8 -0.7**
LYN pmax pmax
comp=Z,12nm,0.6s
**PZH PanZhiHua 58.04 305 P P 00 57 12.9 -1.1**
PZH pmax pmax
comp=Z,20nm,0.6s
**HHC Hu-ho-hao-te 58.57 324 eP P 00 57 15.6 -1.8**
HHC pmax pmax
comp=Z,7.0nm,0.6s
HHC pmax pmax
comp=Z,790nm,4.7s
HHC LR LR
comp=N,160nm,17.6s
HHC LR LR
comp=E,410nm,17.6s
HHC LR LR
comp=Z,360nm,18.3s
**BTO Baotou 59.33 323 eP P 00 57 23.8 +1.2**
BTO pP **pP 00 57 36.3 -0.5**
BTO sP **sP 00 57 45.5 +2.9**
BTO PP **PP 00 59 33.9 -0.3**
BTO S **S 01 05 30.8 +3.1**
**BTO Baotou 59.33 323** SS SS 01 09 23.4 +0.1
**BTO Baotou 59.33 323 LR LR**
comp=Z,710nm,16.3s
**BTO Baotou 59.33 323 LR LR**
comp=E,270nm,12.7s
**BTO Baotou 59.33 323 LR LR**
comp=N,1μm,19.1s
**BTO Baotou 59.33 323 pmax pmax**
comp=Z,1μm,8.9s
**BTO Baotou 59.33 323 pmax pmax**
comp=Z,16nm,0.5s
**DRV Dumont d'Urvil 63.00 186 P P 00 57 46.4 -0.5**
**SONM Songino Array 65.82 328 LR LR** 01 25 51.0
comp=Z,350nm,21.5s,baz=187,slow=35
**QSPA South Pole Qui 85.77 180 P P 00 59 58.7 -0.6**
comp=Z,1.8nm,0.6s,baz=326,slow=1.1,SNR=20
comp=Z,1.8nm,0.6s
**BVAR Borovoye Array 88.77 323 P P 01 00 14.2 +0.3**
comp=Z,0.8nm,0.7s,baz=95,slow=7.4,SNR=4.3
comp=Z,0.8nm,0.7s
**MDPB Devils Postpil 91.02 53 P P** 01 00 19.6 -5.5
**TORD Torodi Ar. Bea 150.13 289 PKPbc PKPbc 01 07 11.7 -0.3**
comp=Z,2.8nm,0.4s,baz=67,slow=2.6,SNR=56

*IDC **18** 01:01:23.0±1.0, 23°.87N×121°.01E, h0km, mb3.7/7, mbtmp3.8/8, ML3.8/1, MS4.3/3, Error ellipse: s-maj=42.2km s-min=18.9km az=61.0*
*TAP **18** 01:01:25.8, 24°.01N×121°.00E, h18km, ML4.3, B*
*ASIES **18** 01:01:25.8, 24°.01N×121°.00E, h17km, ML4.3, Mw3.9, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; $M_{rr}$5.21; $M_{\theta\theta}$1.42; $M_{\phi\phi}$-6.63; $M_{r\theta}$-4.95; $M_{\theta\phi}$-0.01; $M_{\phi r}$-5.67; Fault plane solution: $M_0$9.65442×$10^{21}$ NP1: $\phi_s$209.81000°, δ72.87000°, λ112.91000°. NP2: $\phi_s$334.68000°, δ28.33000°, λ38.36000°. Principal axes: T Plg56.1670°, Azm149.4540°; N Plg21.8460°, Azm22.7200°; P Plg24.4670°, Azm282.2090°;*
*JMA **18** 01:01:26.1±0.3, 24°.0N±0°.3×121°.0E±0°.8, h7km±4km, MV3.9/12, TAIWAN REGION*

ISC 18 01:01:26.2±0.7, 24°01N±0°01×121°01E±0°01, h17km±4km, n177, σ0665/298, mb3.8/7, MS4.4/3, 15C-36D, Taiwan

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res | ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WPL** | **Puli Township** | **0.05** | **279** | ⇑ | *e* | **P** | **01 01 31.2** | **+1.8** | |
| | baz=277 | | | | | | | | |
| **DPDB** | **Guoxing** | **0.08** | **290** | ⇑ | *i* | **P** | **01 01 29.6** | **-0.1** | |
| | baz=291 | | | | | | | | |
| DPDB | | | | | | S | **01 01 32.0** | **+0.1** | |
| | baz=291 | | | | | | | | |
| **WUSB** | **Renai** | **0.10** | **97** | ⇓ | *i* | **P** | **01 01 29.9** | **0.0** | |
| | baz=98 | | | | | | | | |
| WUSB | | | | | | S | **01 01 32.5** | **+0.1** | |
| | baz=98 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.10** | **300** | ⇑ | *i* | **P** | **01 01 29.7** | **-0.1** | |
| | baz=302 | | | | | | | | |
| WCS | | | | | *i* | S | **01 01 32.3** | **+0.1** | |
| | baz=302 | | | | | | | | |
| **CHGB** | **Renai** | **0.16** | **70** | ⇓ | *i* | **P** | **01 01 30.8** | **0.0** | |
| | baz=72 | | | | | | | | |
| CHGB | | | | | *i* | S | **01 01 34.0** | **0.0** | |
| | baz=72 | | | | | | | | |
| **OWD** | **Renai** | **0.16** | **108** | ⇓ | *i* | **P** | **01 01 30.8** | **0.0** | |
| | baz=108 | | | | | | | | |
| OWD | | | | | | S | **01 01 33.9** | **+0.1** | |
| | baz=108 | | | | | | | | |
| **TYC** | **Yuchr** | **0.17** | **235** | ⇑ | *i* | **P** | **01 01 30.4** | **-0.2** | |
| | baz=226 | | | | | | | | |
| TYC | | | | | *i* | S | **01 01 33.2** | **-0.4** | |
| | baz=226 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.22** | **193** | | | **P** | **01 01 31.0** | **-0.4** | |
| **SSLB** | **Suanglung** | **0.22** | **193** | ⇑ | *i* | **P** | **01 01 31.0** | **-0.4** | |
| | baz=183 | | | | | | | | |
| SSLB | | | | | | S | **01 01 34.1** | **-0.8** | |
| | baz=183 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.27** | **59** | ⇓ | *i* | **P** | **01 01 33.0** | **+0.1** | |
| | baz=70 | | | | | | | | |
| WHF | | | | | | S | **01 01 37.6** | **+0.2** | |
| | baz=70 | | | | | | | | |
| **VWDT** | **VWDT** | **0.28** | **154** | ⇓ | *i* | **P** | **01 01 32.5** | **-0.2** | |
| | baz=152 | | | | | | | | |
| VWDT | | | | | | S | **01 01 36.5** | **+0.1** | |
| | baz=152 | | | | | | | | |
| **WHP** | **Taichung City** | **0.28** | **348** | ⇑ | *i* | **P** | **01 01 32.4** | **+0.1** | |
| | baz=356 | | | | | | | | |
| WHP | | | | | | S | **01 01 37.5** | **+0.3** | |
| | baz=356 | | | | | | | | |
| **TDCB** | **Techi** | **0.28** | **29** | ⇑ | *i* | **P** | **01 01 32.4** | **-0.1** | |
| | baz=32 | | | | | | | | |
| TDCB | | | | | *i* | S | **01 01 36.4** | **-0.4** | |
| | baz=32 | | | | | | | | |
| **TWT** | **Tachien** | **0.29** | **31** | | *e* | **P** | **01 01 32.4** | **-0.2** | |
| | baz=33 | | | | | | | | |
| TWT | | | | | *i* | S | **01 01 36.5** | **-0.5** | |
| | baz=33 | | | | | | | | |
| **WJS** | **Zhushan** | **0.32** | **235** | ⇓ | *i* | **P** | **01 01 33.5** | **+0.2** | |
| | baz=232 | | | | | | | | |
| WJS | | | | | *e* | S | **01 01 38.9** | **+0.7** | |
| | baz=232 | | | | | | | | |
| **FUSS** | **Fushou** | **0.32** | **41** | ⇓ | *i* | **P** | **01 01 33.1** | **-0.1** | |
| | baz=44 | | | | | | | | |
| FUSS | | | | | | S | **01 01 37.6** | **-0.4** | |
| | baz=44 | | | | | | | | |
| **WNT** | **Mingjian** | **0.32** | **247** | ⇓ | *i* | **P** | **01 01 33.8** | **+0.2** | |
| | baz=244 | | | | | | | | |
| WNT | | | | | | S | **01 01 39.5** | **+1.1** | |
| | baz=244 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.34** | **205** | ⇑ | *e* | **P** | **01 01 33.3** | **-0.1** | |
| | baz=198 | | | | | | | | |
| WHYT | | | | | *e* | S | **01 01 38.8** | **-0.1** | |
| | baz=198 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.37** | **87** | ⇓ | *i* | **P** | **01 01 34.1** | **+0.2** | |
| | baz=84 | | | | | | | | |
| LXIB | | | | | *e* | S | **01 01 39.8** | **-0.1** | |
| | baz=84 | | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **0.40** | **264** | | *e* | **P** | **01 01 34.9** | **+0.1** | |
| | baz=262 | | | | | | | | |
| WYL | | | | | *e* | S | **01 01 41.8** | **+1.3** | |
| | baz=262 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.41** | **328** | ⇑ | | **P** | **01 01 35.3** | **+0.3** | |
| | baz=331 | | | | | | | | |
| TWQ1 | | | | | *e* | S | **01 01 41.6** | **+0.8** | |
| | baz=331 | | | | | | | | |
| **WCHH** | **Zhanghua** | **0.42** | **280** | ⇓ | *e* | **P** | **01 01 35.4** | **+0.3** | |
| | baz=279 | | | | | | | | |
| WCHH | | | | | *e* | S | **01 01 41.9** | **+0.6** | |
| | baz=279 | | | | | | | | |
| **ESL** | **Shilin** | **0.43** | **116** | ⇓ | *i* | **P** | **01 01 35.2** | **-0.2** | |
| | baz=110 | | | | | | | | |
| ESL | | | | | | S | **01 01 41.2** | **+0.3** | |
| | baz=110 | | | | | | | | |
| **ETM** | **Tongmen** | **0.44** | **95** | ⇓ | *i* | **P** | **01 01 35.2** | **0.0** | |
| | baz=101 | | | | | | | | |
| ETM | | | | | | S | **01 01 41.7** | **-0.2** | |
| | baz=101 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.45** | **130** | ⇓ | *i* | **P** | **01 01 35.3** | **0.0** | |
| | baz=123 | | | | | | | | |
| WARBT | | | | | | S | **01 01 41.3** | **0.0** | |
| | baz=123 | | | | | | | | |
| **NSY** | **Sanyi** | **0.47** | **331** | ⇓ | | **P** | **01 01 36.9** | **+0.9** | |
| | baz=333 | | | | | | | | |
| NSY | | | | | *e* | S | **01 01 44.1** | **+1.4** | |
| | baz=333 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.47** | **65** | ⇓ | *i* | **P** | **01 01 35.9** | **+0.1** | |
| | baz=63 | | | | | | | | |
| ETLH | | | | | | S | **01 01 42.6** | **-0.3** | |
| | baz=63 | | | | | | | | |
| **WDJ** | **Dajia District** | **0.48** | **315** | ⇓ | | **P** | **01 01 37.0** | **+0.8** | |
| | baz=316 | | | | | | | | |
| **EGFH** | **Guangfu** | **0.51** | **131** | | *e* | **P** | **01 01 36.4** | **0.0** | |
| | baz=126 | | | | | | | | |
| EGFH | | | | | *e* | S | **01 01 43.5** | **-0.2** | |
| | baz=126 | | | | | | | | |
| **WDLH** | **Douliu** | **0.54** | **234** | ⇓ | *e* | **P** | **01 01 37.3** | **+0.2** | |
| | baz=231 | | | | | | | | |
| WDLH | | | | | *e* | S | **01 01 45.3** | **+0.8** | |
| | baz=231 | | | | | | | | |
| **TWD** | **Chiawan** | **0.54** | **82** | ⇓ | | **P** | **01 01 36.9** | **0.0** | |
| | baz=90 | | | | | | | | |
| TWD | | | | | *e* | S | **01 01 44.1** | **-0.1** | |
| | baz=90 | | | | | | | | |
| **NNSB** | **Datong** | **0.54** | **39** | ⇓ | *i* | **P** | **01 01 36.6** | **-0.5** | |
| | baz=41 | | | | | | | | |
| NNSB | | | | | | S | **01 01 43.7** | **-0.7** | |
| | baz=41 | | | | | | | | |
| **NNSH** | **Datong** | **0.54** | **39** | | *e* | **P** | **01 01 36.5** | **-0.5** | |
| | baz=35 | | | | | | | | |
| NNSH | | | | | *e* | S | **01 01 44.3** | **-0.1** | |
| | baz=35 | | | | | | | | |
| **HWA** | **Hwalien** | **0.54** | **93** | ⇓ | *e* | **P** | **01 01 37.5** | **+0.3** | |
| | baz=93 | | | | | | | | |
| HWA | | | | | *e* | S | **01 01 45.8** | **+1.0** | |
| | baz=93 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.55** | **37** | ⇓ | | **P** | **01 01 36.8** | **-0.3** | |
| | baz=40 | | | | | | | | |
| NNS | | | | | | S | **01 01 43.8** | **-0.7** | |
| | baz=40 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.55** | **113** | ⇓ | | **P** | **01 01 37.6** | **+0.2** | |
| | baz=113 | | | | | | | | |
| SHUL | | | | | *e* | S | **01 01 45.3** | **+0.4** | |
| | baz=113 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.55** | **104** | | *e* | **P** | **01 01 37.6** | **+0.2** | |
| | baz=106 | | | | | | | | |
| TEYL | | | | | *e* | S | **01 01 45.8** | **+0.7** | |
| | baz=106 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.56** | **72** | | | **P** | **01 01 37.0** | **-0.3** | |
| **NACB** | **Ninganchiao** | **0.56** | **72** | ⇓ | *i* | **P** | **01 01 37.2** | **-0.2** | |
| | baz=81 | | | | | | | | |
| NACB | | | | | | S | **01 01 44.6** | **-0.2** | |
| | baz=81 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.57** | **121** | | *e* | **P** | **01 01 38.0** | **+0.3** | |
| | baz=116 | | | | | | | | |
| TEGC | | | | | *e* | S | **01 01 46.1** | **+0.7** | |
| | baz=116 | | | | | | | | |
| **EHY** | **Hungye** | **0.57** | **150** | ⇓ | *i* | **P** | **01 01 37.5** | **-0.1** | |
| | baz=144 | | | | | | | | |
| EHY | | | | | *e* | S | **01 01 44.6** | **-0.6** | |
| | baz=144 | | | | | | | | |
| **ETL** | **Fush Village** | **0.58** | **75** | | *e* | **P** | **01 01 37.5** | **-0.2** | |
| | baz=85 | | | | | | | | |
| ETL | | | | | *e* | S | **01 01 46.4** | **+0.5** | |
| | baz=85 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.59** | **260** | | *e* | **P** | **01 01 38.1** | **+0.1** | |
| | baz=259 | | | | | | | | |
| WRL | | | | | *e* | S | **01 01 46.5** | **+0.5** | |
| | baz=259 | | | | | | | | |
| **EHYH** | **Wanrong** | **0.59** | **149** | ⇓ | | **P** | **01 01 37.8** | **-0.2** | |
| | baz=143 | | | | | | | | |
| EHYH | | | | | *e* | S | **01 01 45.8** | **-0.2** | |
| | baz=143 | | | | | | | | |
| **RLNB** | **Erlin** | **0.61** | **259** | | *e* | **P** | **01 01 38.2** | **-0.2** | |
| | baz=259 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.62** | **359** | ⇑ | *i* | **P** | **01 01 39.0** | **+0.4** | |
| | baz=348 | | | | | | | | |
| NSTT | | | | | *i* | S | **01 01 47.7** | **+0.6** | |
| | baz=348 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.63** | **9** | | *e* | **P** | **01 01 38.7** | **-0.1** | |
| | baz=18 | | | | | | | | |
| NFF | | | | | *e* | S | **01 01 48.2** | **+0.8** | |
| | baz=18 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.64** | **143** | ⇓ | | **P** | **01 01 39.0** | **+0.2** | |
| | baz=143 | | | | | | | | |
| HGSD | | | | | *i* | S | **01 01 48.0** | **+0.6** | |
| | baz=143 | | | | | | | | |
| **LIOB** | **Emei** | **0.64** | **0** | ⇑ | | **P** | **01 01 39.4** | **+0.5** | |
| | baz=10.0 | | | | | | | | |
| LIOB | | | | | *e* | S | **01 01 48.4** | **+0.8** | |
| | baz=10.0 | | | | | | | | |
| **YULB** | **Yu-li** | **0.66** | **157** | | | P | **01 01 38.8** | **-0.5** | |
| **YULB** | **Yu-li** | **0.66** | **157** | ⇓ | *i* | **P** | **01 01 39.0** | **-0.3** | |
| | baz=147 | | | | | | | | |
| YULB | | | | | | S | **01 01 48.5** | **+0.3** | |
| | baz=147 | | | | | | | | |
| **WCKO** | **Fanlu** | **0.68** | **214** | | *e* | **P** | **01 01 39.4** | **-0.1** | |
| | baz=211 | | | | | | | | |
| WCKO | | | | | *e* | S | **01 01 49.3** | **+0.7** | |
| | baz=211 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.68** | **226** | ⇓ | | **P** | **01 01 39.9** | **+0.3** | |
| | baz=224 | | | | | | | | |
| CHN2 | | | | | | S | **01 01 50.3** | **-0.9** | |
| | baz=224 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.68** | **258** | | *e* | **P** | **01 01 39.4** | **-0.3** | |
| | baz=256 | | | | | | | | |
| WTCT | | | | | *e* | S | **01 01 49.4** | **+0.7** | |
| | baz=256 | | | | | | | | |
| **TWF1** | **Yuli** | **0.70** | **158** | ⇓ | | **P** | **01 01 39.8** | **-0.2** | |
| | baz=157 | | | | | | | | |
| TWF1 | | | | | *i* | S | **01 01 49.6** | **+0.3** | |
| | baz=157 | | | | | | | | |
| **LATG** | **Datong** | **0.71** | **42** | ⇓ | *i* | **P** | **01 01 39.5** | **-0.6** | |
| | baz=35 | | | | | | | | |
| LATG | | | | | *e* | S | **01 01 49.0** | **-0.6** | |
| | baz=35 | | | | | | | | |
| **EYUL** | **Yuli** | **0.71** | **157** | ⇓ | | **P** | **01 01 40.0** | **-0.1** | |
| | baz=156 | | | | | | | | |
| EYUL | | | | | | S | **01 01 49.9** | **+0.2** | |
| | baz=156 | | | | | | | | |
| **NJD** | **Zhudong** | **0.73** | **6** | | *e* | **P** | **01 01 40.4** | **-0.1** | |
| | baz=355 | | | | | | | | |
| **EHP** | **Heping Village** | **0.73** | **65** | | *e* | **P** | **01 01 40.9** | **+0.3** | |
| | baz=67 | | | | | | | | |
| EHP | | | | | *e* | S | **01 01 51.3** | **+1.0** | |
| | baz=67 | | | | | | | | |
| **CHY** | **Chiayi** | **0.74** | **227** | | *e* | **P** | **01 01 40.7** | **0.0** | |
| | baz=224 | | | | | | | | |
| CHY | | | | | *e* | S | **01 01 51.4** | **-1.2** | |
| | baz=224 | | | | | | | | |
| **EAHA** | **Aohua** | **0.74** | **64** | | *e* | **P** | **01 01 40.5** | **-0.1** | |
| | baz=65 | | | | | | | | |
| EAHA | | | | | *e* | S | **01 01 50.3** | **-0.1** | |
| | baz=65 | | | | | | | | |
| **NSK** | **Sanguang** | **0.74** | **25** | | *e* | **P** | **01 01 40.4** | **-0.2** | |
| | baz=34 | | | | | | | | |
| NSK | | | | | *e* | S | **01 01 49.7** | **-0.9** | |
| | baz=34 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.74** | **27** | | | P | **01 01 40.4** | **-0.3** | |
| **YHNB** | **Yeheng** | **0.74** | **27** | ⇓ | | **P** | **01 01 40.4** | **-0.3** | |
| | baz=36 | | | | | | | | |
| YHNB | | | | | | S | **01 01 49.3** | **-1.3** | |
| | baz=36 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.75** | **37** | ⇓ | *e* | **P** | **01 01 40.5** | **-0.3** | |
| | baz=33 | | | | | | | | |
| NDT | | | | | *e* | S | **01 01 50.0** | **-0.8** | |
| | baz=33 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.78** | **207** | | | P | **01 01 41.1** | **-0.3** | |
| **TPUB** | **Ta-pu** | **0.78** | **207** | ⇑ | | **P** | **01 01 41.1** | **-0.3** | |
| | baz=205 | | | | | | | | |
| TPUB | | | | | | S | **01 01 52.2** | **+0.3** | |
| | baz=205 | | | | | | | | |
| **ENA** | **Nanau** | **0.79** | **58** | ⇓ | *i* | **P** | **01 01 41.4** | **-0.1** | |
| | baz=59 | | | | | | | | |
| ENA | | | | | *i* | S | **01 01 52.3** | **+0.2** | |
| | baz=59 | | | | | | | | |
| **ECBN** | **Changbin** | **0.80** | **149** | | *e* | **P** | **01 01 42.4** | **-0.2** | |
| | baz=150 | | | | | | | | |
| ECBN | | | | | *e* | S | **01 01 54.3** | **+0.2** | |
| | baz=150 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.80** | **357** | | *e* | **P** | **01 01 42.8** | **+0.1** | |
| | baz=1.0 | | | | | | | | |
| HSN | | | | | *e* | S | **01 01 54.4** | **+0.3** | |
| | baz=1.0 | | | | | | | | |
| **WSF** | **Szhu** | **0.81** | **243** | | *e* | **P** | **01 01 41.4** | **-0.4** | |
| | baz=241 | | | | | | | | |
| WSF | | | | | *e* | S | **01 01 53.4** | **-1.0** | |
| | baz=241 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.81** | **39** | | *e* | **P** | **01 01 41.6** | **-0.3** | |
| | baz=41 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.81** | **180** | | *e* | **P** | **01 01 41.7** | **-0.2** | |
| | baz=183 | | | | | | | | |
| ELDTW | | | | | *e* | S | **01 01 52.8** | **0.0** | |
| | baz=183 | | | | | | | | |
| **EWUT** | **Wuta** | **0.83** | **58** | ⇓ | *e* | **P** | **01 01 41.9** | **-0.2** | |
| | baz=59 | | | | | | | | |
| EWUT | | | | | | S | **01 01 53.1** | **-0.1** | |
| | baz=59 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.84** | **206** | | *e* | **P** | **01 01 42.0** | **-0.3** | |
| | baz=203 | | | | | | | | |
| WTP | | | | | *e* | S | **01 01 53.7** | **+0.1** | |
| | baz=203 | | | | | | | | |
| **FULB** | **Fuli** | **0.84** | **162** | ⇓ | | **P** | **01 01 43.1** | **-0.2** | |
| | baz=161 | | | | | | | | |
| FULB | | | | | *e* | S | **01 01 54.8** | **-0.5** | |
| | baz=161 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.86** | **236** | | *e* | **P** | **01 01 42.6** | **-0.1** | |
| | baz=235 | | | | | | | | |
| WSL | | | | | *e* | S | **01 01 55.3** | **-0.4** | |
| | baz=235 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.87** | **196** | ⇑ | *e* | **P** | **01 01 42.8** | **-0.1** | |
| | baz=193 | | | | | | | | |
| STYT | | | | | *e* | S | **01 01 54.1** | **-0.1** | |
| | baz=193 | | | | | | | | |
| **EHD** | **Haiduan** | **0.87** | **168** | | *e* | **P** | **01 01 42.9** | **+0.1** | |
| | baz=167 | | | | | | | | |
| EHD | | | | | *e* | S | **01 01 55.0** | **+0.4** | |
| | baz=167 | | | | | | | | |
| **TWK** | **Hsinying** | **0.88** | **213** | | *e* | **P** | **01 01 42.9** | **-0.1** | |
| | baz=210 | | | | | | | | |
| TWK | | | | | *e* | S | **01 01 55.0** | **+0.1** | |
| | baz=210 | | | | | | | | |
| **CHKH** | **Chenggong** | **0.88** | **156** | ⇑ | *e* | **P** | **01 01 43.7** | **-0.2** | |
| | baz=156 | | | | | | | | |
| CHKH | | | | | *e* | S | **01 01 55.7** | **-0.5** | |
| | baz=156 | | | | | | | | |
| **NWLT** | **Wulai** | **0.89** | **30** | | *e* | **P** | **01 01 43.0** | **-0.3** | |
| | baz=32 | | | | | | | | |
| NWLT | | | | | *e* | S | **01 01 55.0** | **+0.2** | |
| | baz=32 | | | | | | | | |
| **NDS** | **Dongshan** | **0.90** | **46** | | *e* | **P** | **01 01 43.5** | **-0.1** | |
| | baz=47 | | | | | | | | |
| NDS | | | | | | S | **01 01 55.6** | **+0.1** | |
| | baz=47 | | | | | | | | |
| **SNST** | **Tainan City** | **0.91** | **211** | | *e* | **P** | **01 01 43.6** | **+0.1** | |
| | baz=209 | | | | | | | | |
| SNST | | | | | *e* | S | **01 01 56.5** | **-0.4** | |
| | baz=209 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.92** | **35** | | | P | **01 01 43.4** | **-0.3** | |
| | baz=32 | | | | | | | | |
| FUSB | | | | | *e* | S | **01 01 54.9** | **-0.8** | |
| | baz=32 | | | | | | | | |
| **ECS** | **Chishang** | **0.93** | **168** | | *e* | **P** | **01 01 44.2** | **0.0** | |
| | baz=177 | | | | | | | | |
| ECS | | | | | *e* | S | **01 01 57.2** | **-0.1** | |
| | baz=177 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.93** | **209** | | *e* | **P** | **01 01 43.7** | **-0.2** | |
| | baz=207 | | | | | | | | |
| CHN1 | | | | | *e* | S | **01 01 56.7** | **+0.3** | |
| | baz=207 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.93** | **226** | | *e* | **P** | **01 01 43.6** | **-0.2** | |
| | baz=236 | | | | | | | | |
| ICHU | | | | | *e* | S | **01 01 57.1** | **-0.2** | |
| | baz=236 | | | | | | | | |
| **TWE** | **Neicheng** | **0.93** | **40** | | *e* | **P** | **01 01 43.9** | **0.0** | |
| | baz=39 | | | | | | | | |
| TWE | | | | | *e* | S | **01 01 57.2** | **-0.2** | |
| | baz=39 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.96** | **160** | | *e* | **P** | **01 01 44.9** | **+0.1** | |
| | baz=161 | | | | | | | | |
| CHKT | | | | | *e* | S | **01 01 59.3** | **+1.2** | |
| | baz=161 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.97** | **9** | | *e* | **P** | **01 01 45.6** | **+0.5** | |
| | baz=11 | | | | | | | | |
| NCUH | | | | | *e* | S | **01 01 58.7** | **+0.2** | |
| | baz=11 | | | | | | | | |
| **TWC** | **Suao** | **0.97** | **52** | | *i* | **P** | **01 01 44.8** | **-0.3** | |
| | baz=53 | | | | | | | | |
| TWC | | | | | *e* | S | **01 01 57.5** | **-0.4** | |
| | baz=53 | | | | | | | | |
| **CHN8** | **Yiju** | **0.98** | **228** | | *e* | **P** | **01 01 44.5** | **-0.3** | |
| | baz=237 | | | | | | | | |
| CHN8 | | | | | *e* | S | **01 01 58.6** | **-0.1** | |
| | baz=237 | | | | | | | | |
| **NHW** | **Xinwu Township** | **1.00** | **2** | | *e* | **P** | **01 01 46.0** | **+0.4** | |
| | baz=3.0 | | | | | | | | |
| **SGST** | **Jiashian** | **1.00** | **203** | | *e* | **P** | **01 01 44.5** | **-0.5** | |
| | baz=211 | | | | | | | | |
| SGST | | | | | *e* | S | **01 01 59.0** | **-0.2** | |
| | baz=211 | | | | | | | | |
| **NTY** | **Taoyuan** | **1.02** | **15** | | *e* | **P** | **01 01 46.1** | **0.0** | |
| | baz=14 | | | | | | | | |
| **TATO** | **Taipei** | **1.06** | **24** | | | P | **01 01 47.2** | **+0.5** | |
| **TATO** | **Taipei** | **1.06** | **24** | | *e* | **P** | **01 01 46.5** | **-0.2** | |
| | baz=18 | | | | | | | | |
| TATO | | | | | *e* | S | **01 02 02.4** | **+1.7** | |
| | baz=18 | | | | | | | | |
| **SLGT** | **Liugui** | **1.06** | **198** | | *e* | **P** | **01 01 46.7** | **-0.1** | |
| | baz=188 | | | | | | | | |
| SLGT | | | | | *e* | S | **01 02 01.5** | **+0.8** | |
| | baz=188 | | | | | | | | |
| **EDH** | **Donghe** | **1.06** | **165** | | *e* | **P** | **01 01 46.3** | **0.0** | |
| | baz=151 | | | | | | | | |
| EDH | | | | | *e* | S | **01 02 01.7** | **+1.0** | |
| | baz=151 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.06** | **26** | | *e* | **P** | **01 01 47.2** | **+0.4** | |
| | baz=39 | | | | | | | | |
| **CHN3** | **Shinhua** | **1.10** | **213** | | *e* | **P** | **01 01 47.5** | **+0.1** | |
| | baz=222 | | | | | | | | |
| CHN3 | | | | | *e* | S | **01 02 03.9** | **+2.0** | |
| | baz=222 | | | | | | | | |
| **LONT** | **Longtian** | **1.10** | **174** | ⇑ | *e* | **P** | **01 01 47.1** | **-0.4** | |
| | baz=174 | | | | | | | | |
| LONT | | | | | | S | **01 02 02.1** | **+0.2** | |
| | baz=174 | | | | | | | | |
| **TWA** | **Mucha** | **1.10** | **28** | | *e* | **P** | **01 01 47.3** | **-0.2** | |
| | baz=30 | | | | | | | | |
| TWA | | | | | | S | **01 02 03.4** | **+1.3** | |
| | baz=30 | | | | | | | | |
| **SCLT** | **Jiali** | **1.11** | **222** | | *e* | **P** | **01 01 47.0** | **0.0** | |
| | baz=220 | | | | | | | | |
| SCLT | | | | | *e* | S | **01 02 04.0** | **+1.6** | |
| | baz=220 | | | | | | | | |
| **TAP** | **Taipei** | **1.12** | **24** | | *e* | **P** | **01 01 46.2** | **-0.9** | |
| | baz=25 | | | | | | | | |
| TAP | | | | | *e* | S | **01 02 04.1** | **+1.4** | |
| | baz=25 | | | | | | | | |
| **SHHT** | **Tainan City** | **1.15** | **212** | | *e* | **P** | **01 01 48.7** | **+0.2** | |
| | baz=210 | | | | | | | | |
| SHHT | | | | | *e* | S | **01 02 05.3** | **+1.7** | |
| | baz=210 | | | | | | | | |
| **TWG** | **Pinlang** | **1.18** | **177** | | *e* | **P** | **01 01 48.7** | **-0.3** | |
| | baz=170 | | | | | | | | |
| TWG | | | | | *e* | S | **01 02 03.9** | **+0.3** | |
| | baz=170 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.18** | **177** | | | P | **01 01 48.8** | **-0.3** | |
| **TWGBT** | **Beinan** | **1.18** | **177** | | *e* | **P** | **01 01 48.4** | **+0.2** | |
| | baz=170 | | | | | | | | |
| TWGBT | | | | | | S | **01 02 04.0** | **+0.4** | |
| | baz=170 | | | | | | | | |
| **EGS** | | **1.19** | **45** | | *e* | **P** | **01 01 49.0** | **-0.1** | |
| | baz=58 | | | | | | | | |
| EGS | | | | | *e* | S | **01 02 05.6** | **+0.9** | |
| | baz=58 | | | | | | | | |
| **EOS2** | **EOS2** | **1.19** | **69** | | *e* | **P** | **01 01 49.7** | **+0.5** | |
| | baz=69 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.20** | **217** | | *e* | **P** | **01 01 48.1** | **0.0** | |
| | baz=215 | | | | | | | | |
| TAI1 | | | | | *e* | S | **01 02 05.8** | **+0.8** | |
| | baz=215 | | | | | | | | |
| **EOS4** | **EOS4** | **1.20** | **84** | | *e* | **P** | **01 01 48.5** | **+0.2** | |
| | baz=99 | | | | | | | | |
| EOS4 | | | | | *i* | S | **01 02 05.3** | **+0.3** | |
| | baz=99 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.20** | **225** | | *e* | **P** | **01 01 47.9** | **-0.3** | |
| | baz=234 | | | | | | | | |
| TSCK | | | | | *e* | S | **01 02 05.9** | **+0.7** | |
| | baz=234 | | | | | | | | |
| **SCST** | **Cishan** | **1.21** | **203** | | *e* | **P** | **01 01 49.1** | **-0.5** | |
| | baz=202 | | | | | | | | |
| SCST | | | | | *e* | S | **01 02 06.6** | **+1.2** | |
| | baz=202 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.22** | **37** | | *e* | **P** | **01 01 48.8** | **0.0** | |
| | baz=39 | | | | | | | | |
| **NTST** | **Danshui** | **1.22** | **19** | | *e* | **P** | **01 01 50.7** | **+0.9** | |
| **EOS3** | **EOS3** | **1.23** | **77** | | *e* | **P** | **01 01 49.3** | **+0.5** | |
| | baz=77 | | | | | | | | |
| **YM01** | **YM01** | **1.25** | **24** | | *e* | **P** | **01 01 49.0** | **-0.3** | |
| | baz=24 | | | | | | | | |
| YM01 | | | | | *e* | S | **01 02 06.2** | **-0.4** | |
| | baz=24 | | | | | | | | |
| **TTN** | **Taitung** | **1.25** | **174** | | *e* | **P** | **01 01 49.7** | **+0.4** | |
| | baz=174 | | | | | | | | |
| **ANP** | **Anpu** | **1.27** | **21** | | *e* | **P** | **01 01 50.9** | **+0.2** | |
| | baz=22 | | | | | | | | |
| ANP | | | | | *e* | S | **01 02 06.4** | **+0.6** | |
| | baz=22 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.27** | **33** | | *e* | **P** | **01 01 50.5** | **-0.3** | |
| | baz=34 | | | | | | | | |
| WFSB | | | | | *e* | S | **01 02 05.9** | **+0.1** | |
| | baz=34 | | | | | | | | |
| **YM08** | **YM08** | **1.29** | **24** | | *e* | **P** | **01 01 50.7** | **-0.4** | |
| | baz=24 | | | | | | | | |
| YM08 | | | | | *e* | S | **01 02 06.1** | **-0.2** | |
| | baz=24 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.29** | **205** | | *e* | **P** | **01 01 50.4** | **+0.3** | |
| | baz=204 | | | | | | | | |
| **TNOU** | **National Taiwa** | **1.33** | **31** | | *e* | **P** | **01 01 50.6** | **-0.2** | |
| | baz=15 | | | | | | | | |
| TNOU | | | | | *e* | S | **01 02 07.8** | **+0.2** | |
| | baz=15 | | | | | | | | |
| **TSMG** | **Majia** | **1.34** | **195** | | *e* | **P** | **01 01 50.1** | **+0.1** | |
| | baz=203 | | | | | | | | |
| TSMG | | | | | *e* | S | **01 02 08.4** | **+0.8** | |
| | baz=203 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.34** | **42** | | *e* | **P** | **01 01 51.3** | **+0.5** | |
| | baz=54 | | | | | | | | |
| TWB1 | | | | | *e* | S | **01 02 08.0** | **+0.3** | |
| | baz=54 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.34** | **36** | | *e* | **P** | **01 01 51.1** | **+0.2** | |
| | baz=37 | | | | | | | | |
| SXI1 | | | | | *e* | S | **01 02 07.3** | **-0.3** | |
| | baz=37 | | | | | | | | |
| **TWY** | **Chenhua** | **1.37** | **23** | | *e* | **P** | **01 01 50.5** | **-0.1** | |
| | baz=23 | | | | | | | | |
| TWY | | | | | *e* | S | **01 02 08.9** | **+0.2** | |
| | baz=23 | | | | | | | | |
| **LDUT** | **Ludao** | **1.39** | **162** | | *e* | **P** | **01 01 50.4** | **-0.4** | |
| | baz=164 | | | | | | | | |
| LDUT | | | | | *e* | S | **01 02 08.9** | **+0.1** | |
| | baz=164 | | | | | | | | |
| **ECL** | **Taimali** | **1.40** | **182** | | *e* | **P** | **01 01 51.9** | **0.0** | |
| | baz=168 | | | | | | | | |
| ECL | | | | | *i* | S | **01 02 10.7** | **-0.8** | |
| | baz=168 | | | | | | | | |
| **PNG** | **Penghu** | **1.40** | **252** | | *e* | **P** | **01 01 50.1** | **-0.9** | |
| | baz=250 | | | | | | | | |
| PNG | | | | | *e* | S | **01 02 08.6** | **-0.4** | |
| | baz=250 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.41** | **250** | | *e* | **P** | **01 01 50.0** | **-1.0** | |
| | baz=249 | | | | | | | | |
| PHUB | | | | | *e* | S | **01 02 08.3** | **-0.8** | |
| | baz=249 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.43** | **194** | | *e* | **P** | **01 01 52.1** | **-0.2** | |
| | baz=194 | | | | | | | | |
| MASBT | | | | | *e* | S | **01 02 10.8** | **+0.5** | |
| | baz=194 | | | | | | | | |
| **WDGT** | **Dungji** | **1.44** | **239** | | *i* | **P** | **01 01 51.8** | **+0.3** | |
| | baz=248 | | | | | | | | |
| WDGT | | | | | *i* | S | **01 02 11.2** | **+0.6** | |
| | baz=248 | | | | | | | | |
| **WSSB** | **Gushan** | **1.52** | **207** | | *e* | **P** | **01 01 53.1** | **+0.5** | |
| | baz=207 | | | | | | | | |
| **EAST** | **Anshuo** | **1.62** | **185** | | *e* | **P** | **01 01 55.1** | **-0.5** | |
| | baz=203 | | | | | | | | |
| EAST | | | | | *e* | S | **01 02 16.7** | **+0.9** | |
| | baz=203 | | | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **TAW** | **Tawu** | **1.64** | **184** | *e*P | **Pn** | **01 01 54.9 +0.6** |
| | baz=173 | | | | | |
| **VCHM** | **Qimei** | **1.65** | **242** | *e*P | **Pn** | **01 01 54.1 -0.3** |
| | baz=241 | | | | | |
| **TAWH** | **Dawu Township** | **1.66** | **184** | *e*P | **Pb** | **01 01 55.9 -0.4** |
| | baz=202 | | | | | |
| **SCZT** | **Fangliau** | **1.66** | **193** | *e*P | **Pb** | **01 01 55.4 -0.9** |
| | baz=192 | | | | | |
| SCZT | | | | *e*S | **Sb** | **01 02 18.2 +1.1** |
| | baz=192 | | | | | |
| **VWUC** | **VWUC** | **1.73** | **305** | *e*P | **Pn** | **01 01 53.5 -1.9** |
| | baz=304 | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.75** | **200** | *e*P | **Pn** | **01 01 56.0 +0.2** |
| | baz=201 | | | | | |
| **SLIU** | **Shizi** | **1.79** | **186** | *e*P | **Pb** | **01 01 57.5 -1.1** |
| | baz=203 | | | | | |
| **YOJ** | **Yonaguni jima** | **1.88** | **76** | P | **Pb** | **01 01 58.9 -1.2** |
| **YOJ** | **Yonaguni jima** | **1.88** | **76** | *e*P | **Pn** | **01 01 58.3 +0.7** |
| | baz=77 | | | | | |
| **YOJ** | **Yonaguni jima** | **1.88** | **76** | *e*P | **Pn** | **01 01 58.7 +1.2** |
| YOJ | | | | *e*S | **Sb** | **01 02 22.6 -0.8** |
| **PCYT** | **Pengchaiyu** | **1.88** | **31** | *e*P | **Pn** | **01 01 58.4 +0.8** |
| | baz=32 | | | | | |
| **PTMZ** | **Houxiangcun** | **2.01** | **301** | *e*P | **Pn** | **01 01 57.6 -1.7** |
| | baz=300 | | | | | |
| **LAY** | **Lan-yu** | **2.02** | **166** | *e*P | **Pn** | **01 01 59.5 0.0** |
| | baz=154 | | | | | |
| **TWK1** | **Hengchun** | **2.06** | **185** | *e*P | **Pn** | **01 01 59.0 -1.1** |
| | baz=201 | | | | | |
| **LYUB** | **Lan-yu** | **2.06** | **165** | *e*P | **Pn** | **01 01 59.0 -1.1** |
| | baz=155 | | | | | |
| **MATB** | **Ma-tsu** | **2.35** | **336** | *e*P | **Pn** | **01 02 02.5 -1.4** |
| | baz=332 | | | | | |
| **KNM** | **Kinmen** | **2.39** | **280** | *e*P | **Pn** | **01 02 05.1 +0.5** |
| | baz=279 | | | | | |
| **KNMB** | **Chin-men Tao** | **2.44** | **281** | *e*P | **Pn** | **01 02 03.5 -1.7** |
| | baz=281 | | | | | |
| **IRIF** | **Iriomote-Funau** | **2.50** | **82** | *e*P | **Pn** | **01 02 07.8 +1.7** |
| IRIF | | | | *e*S | **Sn** | **01 02 36.7 +0.4** |
| **HATJ** | **Hateruma jima** | **2.56** | **88** | *e*P | **Pn** | **01 02 08.8 +2.0** |
| HATJ | | | | *e*S | **Sn** | **01 02 39.3 +1.8** |
| **JKRS** | **Kuro-shima** | **2.75** | **85** | *e*P | **Pn** | **01 02 11.3 +1.8** |
| JKRS | | | | *e*S | **Sn** | **01 02 43.4 +1.1** |
| **MHZQ** | **Yeshan** | **2.75** | **320** | *e*P | **Pn** | **01 02 08.2 -1.3** |
| | baz=318 | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.78** | **336** | *e*P | **Pn** | **01 02 09.1 -0.8** |
| | baz=333 | | | | | |
| **JIJ** | **Ishigaki jima** | **2.88** | **82** | *e*P | **Pn** | **01 02 11.9 +0.6** |
| JIJ | | | | *e*S | **Sn** | **01 02 45.9 +0.2** |
| **ZPLA** | **Ao Xicun** | **2.98** | **269** | *e*P | **Pn** | **01 02 11.7 -1.0** |
| | baz=268 | | | | | |
| **XPSS** | **Dashiqiu** | **3.01** | **346** | *e*P | **Pn** | **01 02 12.1 -1.0** |
| | baz=341 | | | | | |
| **JISG** | **Ishigakijimahi** | **3.07** | **78** | *e*P | **Pn** | **01 02 14.8 +1.0** |
| JISG | | | | *e*S | **Sn** | **01 02 49.7 -0.5** |
| **JOW** | **Kunigami** | **7.14** | **65** | P | **Pn** | **01 03 10.3 +0.3** |
| **JOW** | **Kunigami** | **7.14** | **65** | Pn | **Pn** | **01 03 09.9 0.0** |
| | 3.7nm,0.3s,baz=165,slow=11,SNR=17 | | | | | |
| | 9.0nm,0.3s | | | | | |
| **KSRS** | **Korea Array** | **14.66** | **22** | Pn | **P** | **01 04 59.5 +0.6** |
| | 0.3nm,0.3s,baz=202,slow=12,SNR=2.5 | | | | | |
| **SONM** | **Songino Array** | **26.47** | **338** | P | **P** | **01 07 02.4 -0.1** |
| | 0.4nm,0.6s,baz=155,slow=10,SNR=1.8 | | | | | |
| | 0.4nm,0.6s | | | | | |
| **MKAR** | **Makanchi Array** | **38.36** | **316** | P | **P** | **01 08 47.2 +0.9** |
| | 1.2nm,0.7s,baz=112,slow=10,SNR=11 | | | | | |
| | 1.2nm,0.7s | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.31** | **327** | P | **P** | **01 09 03.0 +0.5** |
| | 1.1nm,0.4s,baz=110,slow=11,SNR=3.9 | | | | | |
| ZALV | | | | LR | LR | 01 27 05.2 |
| | comp=Z,205nm,20.2s,baz=206,slow=38 | | | | | |
| | 1.1nm,0.4s | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.14** | **320** | P | **P** | **01 09 16.6 -0.9** |
| | 0.5nm,0.9s,baz=106,slow=9.4,SNR=3.7 | | | | | |
| | 0.5nm,0.9s | | | | | |
| **WRA** | **Warramunga Arr** | **45.57** | **162** | P | **P** | **01 09 42.8 -2.6** |
| | 0.8nm,0.7s,baz=344,slow=8.8,SNR=7.3 | | | | | |
| | 0.8nm,0.7s | | | | | |
| **ASAR** | **Alice Springs** | **49.01** | **164** | P | **P** | **01 10 11.6 -0.6** |
| | 0.3nm,0.3s,baz=342,slow=6.9,SNR=5.9 | | | | | |
| | 0.3nm,0.3s | | | | | |
| **DZM** | **Mont Dzumac** | **63.63** | **132** | LR | LR | 01 36 46.1 |
| | comp=Z,464nm,20.4s,baz=298,slow=33 | | | | | |
| **ARCES** | **ARCESS Array B** | **69.64** | **338** | LR | LR | 01 48 33.9 |
| | comp=Z,212nm,18.5s,baz=106,slow=41 | | | | | |
| **FINES** | **FINESS Array B** | **71.52** | **330** | P | **P** | **01 12 46.6 +0.8** |
| | 1.0nm,0.8s,baz=61,slow=6.5,SNR=4.0 | | | | | |
| | 1.0nm,0.8s | | | | | |

*DRS **18** 01:03:45.6, 43˚.01N×45˚.96E, h6km*
*NORS **18** 01:03:45.7, 43˚.00N×45˚.87E, h16km, MPVA4.0*
**MOS 18 01:03:44.5, 43˚.02N×45˚.86E, h7km, MPVA3.9, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVE** | **Vedeno** | **0.21** | **107** | *i* Pg | Pg | 01 03 51.2 | +2.5 |
| DVE | | | | *e*Sg | Sg | 01 03 55.4 | +3.9 |
| **BTLR** | **Botlikh** | **0.45** | **143** | *i* Pg | Pb | 01 03 55.5 | +0.8 |
| | 160nm,0.2s | | | | | | |
| BTLR | | | | *e*Sg | Sb | 01 04 02.9 | +1.4 |
| | 600nm,1.0s | | | | | | |
| **DLMR** | **Dylym** | **0.57** | **85** | *e*Pg | Pb | 01 03 57.6 | +0.8 |
| | 160nm,0.1s | | | | | | |
| DLMR | | | | *e*Sg | Sb | 01 04 06.5 | +1.4 |
| | 400nm,0.6s | | | | | | |
| **DBC** | **Dubki** | **0.71** | **90** | *e*Pg | Pb | 01 03 59.9 | +0.6 |
| | 150nm,0.0s | | | | | | |
| DBC | | | | *e*Sg | Sb | 01 04 10.6 | +1.3 |
| | 300nm,0.1s | | | | | | |
| **KMGR** | **Komgaron** | **0.73** | **273** | *e*Pg | Pn | 01 04 01.2 | 0.0 |
| KMGR | | | | *e*Sg | Sn | 01 04 12.8 | +0.2 |
| **UNCR** | **Uncukul** | **0.75** | **113** | *i* Pg | Pn | 01 04 01.0 | -0.6 |
| | 160nm,0.1s | | | | | | |
| UNCR | | | | *e*Sg | Sn | 01 04 12.3 | -0.9 |
| | 360nm,0.3s | | | | | | |
| **XNZR** | **Khunzakh** | **0.79** | **127** | *e*Pg | Pn | 01 04 01.9 | -0.2 |
| | 280nm,0.0s | | | | | | |
| XNZR | | | | *e*Sg | Sn | 01 04 13.7 | -0.5 |
| | 360nm,0.1s | | | | | | |
| **KRNR** | **Karanay** | **0.80** | **104** | *e*Pg | Pn | 01 04 01.8 | -0.4 |
| KRNR | | | | *e*Sg | Sn | 01 04 13.3 | -1.0 |
| **VLKR** | **Vladikavkaz** | **0.86** | **272** | *e*Pg | Pn | 01 04 03.5 | +0.4 |
| VLKR | | | | *e*Sg | Sn | 01 04 17.2 | +1.2 |
| **ARKR** | **Arakani** | **0.94** | **116** | *e*Pg | Pn | 01 04 04.5 | +0.5 |
| ARKR | | | | *e*Sg | Sn | 01 04 18.1 | +0.4 |
| **BUJR** | **Buynaksk** | **0.94** | **101** | *e*Pg | Pn | 01 04 05.4 | +1.3 |
| BUJR | | | | *e*Sg | Sn | 01 04 19.7 | +2.0 |
| **BTKR** | **Batakoyurt** | **1.02** | **291** | *e*Pg | Pn | 01 04 06.8 | +1.5 |
| BTKR | | | | *e*Sg | Sn | 01 04 22.7 | +2.8 |
| **GNBR** | **Gunib** | **1.03** | **127** | *e*Pg | Pn | 01 04 06.9 | +1.5 |
| GNBR | | | | *e*Sg | Sn | 01 04 21.8 | +1.7 |
| **TRKR** | **Terskaya** | **1.08** | **311** | *e*Pg | Pn | 01 04 07.9 | +1.8 |
| TRKR | | | | *e*Sg | Sn | 01 04 23.3 | +2.1 |
| **GUDG** | **Gudauri** | **1.16** | **242** | *i* Pg | Pn | 01 04 07.9 | +0.6 |
| GUDG | | | | *e*Sg | Sb | 01 04 22.6 | +0.5 |
| **LACR** | **Lac** | **1.16** | **261** | *e*Pg | Pn | 01 04 08.0 | +0.7 |
| LACR | | | | *e*Sg | Sn | 01 04 23.8 | +0.4 |
| **ARNR** | **Ardon** | **1.16** | **279** | *e*Pg | Pn | 01 04 08.9 | +1.7 |
| ARNR | | | | *e*Sg | Sn | 01 04 26.4 | +3.1 |
| **MAK** | **Makhachkala** | **1.21** | **92** | *e*Pg | Pn | 01 04 11.9 | +4.1 |
| MAK | | | | *e*Sg | Sn | 01 04 29.0 | +4.6 |
| **KMKR** | **Kumukh** | **1.28** | **134** | *e*Pg | Pg | 01 04 11.2 | +2.2 |
| KMKR | | | | *e*Sg | Sn | 01 04 29.0 | +2.7 |
| **KORR** | **Kora** | **1.31** | **274** | *e*Pg | Pg | 01 04 11.1 | +1.4 |
| KORR | | | | *e*Sg | Sn | 01 04 30.4 | +3.3 |
| **STDR** | **Stavd-Durt** | **1.36** | **286** | *e*Pg | Pg | 01 04 12.2 | +1.7 |
| STDR | | | | *e*Sg | Sg | 01 04 32.2 | +4.1 |
| **PRTR** | **Priterechnaya** | **1.36** | **303** | *e*Pg | Pg | 01 04 12.1 | +1.5 |
| PRTR | | | | *e*Sg | Sg | 01 04 32.3 | +4.0 |
| **SGKR** | **Sergokala** | **1.44** | **112** | *e*Pg | Pg | 01 04 14.4 | +2.3 |
| SGKR | | | | *i* Sg | Sg | 01 04 34.2 | +3.5 |
| **LSNR** | **Lesken** | **1.51** | **281** | *e*Pg | Pg | 01 04 14.2 | +0.8 |
| LSNR | | | | *e*Sg | Sg | 01 04 35.7 | +2.7 |
| **URKR** | **Urkarakh** | **1.56** | **122** | *e*Pg | Pg | 01 04 16.1 | +1.6 |
| URKR | | | | *e*Sg | Sg | 01 04 38.2 | +3.5 |
| **DIGR** | **Digorskoe uzhe** | **1.68** | **267** | *e*Pg | Pb | 01 04 16.0 | +0.2 |
| DIGR | | | | *e*Sg | Sb | 01 04 37.3 | +0.2 |
| **NCK** | **Nalchik** | **1.72** | **287** | *e*Pg | Pg | 01 04 17.9 | +0.4 |
| NCK | | | | *i* Sg | Sg | 01 04 42.1 | +2.4 |
| **KBTC** | **Kuba-Taba** | **1.95** | **295** | *e*Pg | Pb | 01 04 19.5 | -1.0 |
| KBTC | | | | *e*Sg | Sb | 01 04 44.6 | -0.4 |
| **AKT** | **Akhty** | **2.07** | **137** | *e*Pg | Pb | 01 04 22.6 | +0.2 |
| AKT | | | | *e*Sg | Sg | 01 04 51.7 | +0.6 |
| **DRN** | **Derbent** | **2.08** | **118** | *e*Pg | Pb | 01 04 23.3 | +0.8 |
| DRN | | | | *e*Sg | Sg | 01 04 51.6 | +0.3 |
| **KSMR** | **Kasumkent** | **2.20** | **129** | *e*Pg | Pg | 01 04 27.2 | +0.6 |
| KSMR | | | | *e*Sg | Sg | 01 04 54.4 | -0.7 |
| **PYA1** | **Pyatigorsk** | **2.26** | **298** | *e*Pn | Pn | 01 04 22.7 | +0.4 |
| PYA1 | | | | *e*Sn | Sn | 01 04 50.0 | -0.4 |
| **KBZ** | **Khabaz** | **2.27** | **289** | *e*Pn | Pn | 01 04 22.7 | +0.3 |
| KBZ | | | | *e*Sn | Sn | 01 04 51.1 | +0.5 |
| **BEYR** | **Belyy Ugol+** | **2.42** | **295** | *e*Pn | Pn | 01 04 25.3 | +0.8 |
| BEYR | | | | *e*Sn | Sn | 01 04 53.6 | -0.8 |
| **SHA1** | **Shidzhatmaz** | **2.44** | **288** | *e*Pn | Pn | 01 04 24.8 | -0.1 |
| SHA1 | | | | *e*Sn | Sn | 01 04 54.5 | -0.6 |
| **KIV0** | **Kislovodsk Arr** | **2.48** | **293** | *e*Pn | Pn | 01 04 23.8 | -1.7 |
| KIV0 | | | | *e*Sn | Sn | 01 04 55.5 | -0.6 |
| **KIV** | **Kislovodsk** | **2.49** | **293** | *e*Pn | Pn | 01 04 26.4 | +0.9 |
| KIV | | | | *e*Sn | Sn | 01 04 55.3 | -0.8 |
| **ALER** | **Alexandrovskoy** | **2.75** | **310** | *e*Pn | Pn | 01 04 30.2 | +1.2 |
| ALER | | | | *e*Sn | Sn | 01 05 03.2 | +0.8 |
| **GNI** | **Garni** | **2.99** | **197** | *e*Pn | Pb | 01 04 37.6 | -0.5 |
| GNI | | | | *e*Sn | Sb | 01 05 12.9 | -1.9 |

*UCR **18** 01:18:17.5±1.0, 8˚.54N×83˚.23W, h17km±3km, MW3.5*
**CATAC 18 01:18:18.4±0.4, 8˚.60N×83˚.20W, h5km±2km, ML3.3, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.05** | **64** | *e*P | Pg | 01 18 20.6 | +0.9 |
| FITO | | | | *e*S | Sg | 01 18 23.0 | +2.4 |
| **EDAD** | **Golfito** | **0.06** | **34** | *e*P | Pg | 01 18 20.8 | +0.9 |
| EDAD | | | | *e*S | Sg | 01 18 23.4 | +2.5 |
| **PTJ1** | **Puerto Jimnez** | **0.12** | **237** | *i* P | Pg | 01 18 20.8 | -0.1 |
| PTJ1 | | | | IAML | | 01 18 21.0 | |
| | comp=Z,22μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | Sg | 01 18 24.2 | +1.6 |
| **PTJ1** | **Puerto Jimnez** | **0.12** | **237** | *e*P | Pg | 01 18 20.9 | -0.1 |
| **JIME** | **Puerto Jimenez** | **0.14** | **242** | *e*P | Pg | 01 18 21.0 | -0.2 |
| JIME | | | | *e*S | Sg | 01 18 24.6 | +1.4 |
| **NELY** | **Ciudad Neily** | **0.25** | **80** | *e*P | Pg | 01 18 24.1 | +0.7 |
| NELY | | | | *e*S | Sb | 01 18 29.4 | -0.8 |
| **CDITO** | **Canoas** | **0.32** | **95** | *i* P | Pg | 01 18 24.6 | -0.1 |
| CDITO | | | | *i* S | Sg | 01 18 30.3 | +1.3 |
| CDITO | | | | IAML | | 01 18 33.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **EDP2** | **Potrero Grande** | **0.41** | **3** | *e*P | Pg | 01 18 27.0 | +0.6 |
| EDP2 | | | | *e*S | Sb | 01 18 33.7 | -1.0 |
| **BRU2** | **Volcan** | **0.54** | **69** | *i* P | Pg | 01 18 28.8 | +0.1 |
| BRU2 | | | | *i* S | Sb | 01 18 37.6 | -0.9 |
| BRU2 | | | | IAML | | 01 18 43.5 | |
| | comp=Z,760nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.54** | **69** | *e*P | Pg | 01 18 28.7 | 0.0 |
| BRU2 | | | | *e*S | Sb | 01 18 37.5 | -1.0 |
| **DRK0** | **Durika** | **0.66** | **356** | *i* P | Pg | 01 18 30.7 | -0.4 |
| DRK0 | | | | IAML | | 01 18 31.7 | |
| | comp=Z,3μm,1.0s | | | | | | |
| DRK0 | | | | *i* S | Sg | 01 18 40.1 | +0.5 |
| **DRK0** | **Durika** | **0.66** | **356** | *e*P | Pg | 01 18 30.7 | -0.4 |
| **OCHAL** | **Ojochal** | **0.66** | **318** | *i* P | Pg | 01 18 31.0 | -0.1 |
| OCHAL | | | | *i* S | Sb | 01 18 41.5 | -0.4 |
| OCHAL | | | | IAML | | 01 18 43.5 | |
| | comp=Z,350nm,1.0s | | | | | | |
| **BUS1** | **Rivas** | **1.09** | **330** | *e*P | Pg | 01 18 37.5 | -1.8 |
| **ABE2** | **San Pablo** | **1.38** | **322** | *e*P | Pn | 01 18 43.3 | -1.3 |
| **LCR2** | **La Lucha 2** | **1.38** | **325** | *i* P | Pn | 01 18 43.7 | -0.9 |
| LCR2 | | | | *i* S | Sg | 01 19 02.7 | -0.2 |
| LCR2 | | | | IAML | | 01 19 04.8 | |
| | comp=Z,150nm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.48** | **336** | *i* P | Pn | 01 18 46.0 | 0.0 |
| RAFA | | | | *i* S | Sb | 01 19 04.6 | -1.1 |
| RAFA | | | | IAML | | 01 19 09.7 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **HDC3** | **Heredia 3** | **1.66** | **327** | *i* P | Pn | 01 18 48.1 | -0.2 |
| HDC3 | | | | *i* S | Sn | 01 19 10.1 | +0.1 |
| HDC3 | | | | IAML | | 01 19 18.3 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **2.25** | **322** | *i* P | Pn | 01 18 56.9 | +0.5 |
| SOCE | | | | *i* S | Sn | 01 19 24.3 | -0.4 |
| SOCE | | | | IAML | | 01 19 39.7 | |
| | comp=Z,570nm,1.0s | | | | | | |

*AEIC **18** 01:26:20.1±1.1, 69˚.58N±0˚.02×144˚.80W±0˚.10, h13km±5km, ML3.6, ML3.7/102(NEIC), Mwr3.8/14(NEIC), Error ellipse: s-maj=4.9km s-min=3.3km az=105.0*
*IDC **18** 01:26:20.6±1.3, 69˚.65N×144˚.55W, h0km, mb3.8/4, mbtmp3.7/6, ML3.6/2, MS3.5/1, Error ellipse: s-maj=31.5km s-min=19.2km az=86.0*
*NEIC **18** 01:26:21.4±1.0, 69˚.61N±0˚.05×144˚.7W±0˚.1, h10km±2km, Error ellipse: s-maj=9.7km s-min=5.5km az=27.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; $M_{rr}$=1.35; $M_{\theta\theta}$=1.11; $M_{\phi\phi}$=0.24; $M_{r\theta}$=1.79; $M_{\theta\phi}$=-6.05; $M_{r\phi}$=1.79; Fault plane solution: $M_o$=6.68000×10¹⁴ NP1: $\phi_s$=270.90000°, δ72.70000°, λ-160.71000°. NP2: $\phi_s$=174.96000°, δ71.61000°, λ-18.27000°. Principal axes: T 6.7446, Plg1.0000°, Azm43.0000°; N -0.1342, Plg64.0000°, Azm311.0000°; P -6.6104, Plg26.0000°, Azm133.0000°;*
*NEIC **18** 01:26:21.5, 69˚.59N×144˚.67W, h10km*
**ISC 18 01:26:20.5±1.2, 69˚.59N±0˚.04×144˚.68W±0˚.02, h6km±9km, n82, σ0˚89/90, mb4.0/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.34** | **346** | | **Pg** | **01 26 27.8** | **+0.7** |
| **C27K** | **Jago River** | **0.34** | **84** | | **Pg** | **01 26 27.0** | **-0.1** |
| C27K | | | | | **Sg** | **01 26 31.8** | **+0.2** |
| C27K | | | | IAML | | 01 26 33.6 | |
| | comp=N,6μm,0.5s | | | | | | |
| C27K | | | | IAML | | 01 26 33.8 | |
| | comp=E,7μm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **0.66** | **246** | | **Pg** | **01 26 31.6** | **-1.5** |
| **D27M** | **Malcolm River** | **1.36** | **103** | | **Pn** | **01 26 44.9** | **-1.1** |
| D27M | | | | IAML | | 01 27 07.0 | |
| | comp=N,1μm,0.8s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.41** | **277** | | **Pn** | **01 26 46.9** | **+0.3** |
| C24K | | | | | **Sg** | **01 27 06.1** | **+0.3** |
| C24K | | | | IAML | | 01 27 08.6 | |
| | comp=E,1μm,1.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.53** | **255** | | **Pn** | **01 26 48.4** | **+0.1** |
| D24K | | | | | **Sg** | **01 27 11.0** | **+1.3** |
| D24K | | | | IAML | | 01 27 13.5 | |
| | comp=N,1μm,1.1s | | | | | | |
| D24K | | | | IAML | | 01 27 16.0 | |
| | comp=E,1μm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.80** | **140** | | **Pn** | **01 26 52.5** | **+0.4** |
| E27K | | | | | **Sb** | **01 27 18.0** | **+1.4** |
| E27K | | | | IAML | | 01 27 23.3 | |
| | comp=E,622nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.92** | **174** | Pn | **Pn** | **01 26 54.5** | **+0.9** |
| F26K | | | | | **Sn** | **01 27 18.6** | **+0.6** |
| F26K | | | | IAML | | 01 27 23.2 | |
| | comp=E,801nm,0.7s | | | | | | |
| F26K | | | | IAML | | 01 27 23.3 | |
| | comp=N,598nm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.00** | **244** | | **Pn** | **01 26 55.2** | **+0.5** |
| TOLK | | | | | **Sg** | **01 27 25.3** | **+0.7** |
| TOLK | | | | IAML | | 01 27 28.0 | |
| | comp=E,582nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 01 27 34.4 | |
| | comp=N,534nm,1.0s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **190** | Pn | **Pn** | **01 26 56.0** | **+0.6** |
| F25K | | | | IAML | | 01 27 29.3 | |
| | comp=E,633nm,1.4s | | | | | | |
| F25K | | | | IAML | | 01 27 30.0 | |
| | comp=N,556nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.06** | **224** | | **Pn** | **01 26 55.9** | **+0.3** |
| E24K | | | | | **Sb** | **01 27 25.1** | **+1.1** |
| **C23K** | **Itkillik River** | **2.08** | **280** | Pn | **Pn** | **01 26 57.1** | **+1.2** |
| **C23K** | **Itkillik River** | **2.08** | **280** | | **Sb** | **01 27 25.2** | **+0.5** |
| **E28M** | **Babbage River** | **2.10** | **116** | Pn | **Pn** | **01 26 57.2** | **+1.2** |
| E28M | | | | | **Sb** | **01 27 26.0** | **+1.0** |
| **BMAR** | **Burnt Mountain** | **2.17** | **179** | Pn | **Pn** | **01 26 58.1** | **+0.9** |
| **D23K** | **Nanushuk River** | **2.23** | **256** | | **Pn** | **01 26 58.5** | **+0.7** |
| D23K | | | | IAML | | 01 27 37.3 | |
| | comp=E,464nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.36** | **232** | Pn | **Pn** | **01 27 00.7** | **+0.9** |
| **F24K** | **Squaw Lake** | **2.39** | **211** | Pn | **Pn** | **01 27 00.8** | **+0.7** |
| **F28M** | **Old Crow** | **2.66** | **136** | | **Pn** | **01 27 04.3** | **+0.5** |
| F28M | | | | IAML | | 01 27 55.1 | |
| | comp=E,247nm,0.9s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **E29M** | **Blow River** | **2.73** | **113** | | **Pn** | **01 27 05.9 +1.1** |
| E29M | | | | IAML | | 01 27 55.2 |
| | comp=N,317nm,1.5s | | | | | |
| E29M | | | | IAML | | 01 27 59.1 |
| | comp=E,251nm,0.7s | | | | | |
| **D22K** | **Ayikyak River** | **2.94** | **260** | Pn | **Pn** | **01 27 07.9 +0.2** |
| D22K | | | | IAML | | 01 28 06.2 |
| | comp=E,339nm,1.3s | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.97** | **244** | | **Pn** | **01 27 07.9 -0.2** |
| E22K | | | | IAML | | 01 28 02.9 |
| | comp=N,222nm,0.7s | | | | | |
| **G27K** | **Doyon Strip** | **3.02** | **157** | | **Pn** | **01 27 08.8 +0.1** |
| **FYU** | **Fort Yukon** | **3.05** | **184** | Pn | **Pn** | **01 27 10.5 +1.4** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **201** | | **Pn** | **01 27 09.9 +0.3** |
| **B22K** | **Teshekpuk Lake** | **3.10** | **288** | | **Pn** | **01 27 10.8 +1.0** |
| **F22K** | **John River** | **3.46** | **236** | | **Pn** | **01 27 15.4 +0.6** |
| **B21K** | **Ikpikpuk River** | **3.48** | **275** | Pn | **Pn** | **01 27 15.6 +0.6** |
| **G23K** | **Bananza Creek** | **3.52** | **217** | | **Pn** | **01 27 15.4 -0.2** |
| G23K | | | | IAML | | 01 28 20.3 |
| | comp=N,139nm,0.9s | | | | | |
| G23K | | | | IAML | | 01 28 20.7 |
| | comp=E,149nm,0.8s | | | | | |
| **E21K** | **Killik River** | **3.54** | **255** | | **Pn** | **01 27 15.7 -0.2** |
| E21K | | | | IAML | | 01 28 21.2 |
| | comp=N,177nm,0.8s | | | | | |
| E21K | | | | IAML | | 01 28 25.8 |
| | comp=E,199nm,1.0s | | | | | |
| **G29M** | **Pine Creek** | **3.66** | **134** | | **Pn** | **01 27 17.9 +0.4** |
| G29M | | | | IAML | | 01 28 06.3 |
| | comp=N,188nm,0.9s | | | | | |
| **A22K** | **Sinclair Lake** | **3.76** | **297** | | **Pn** | **01 27 19.3 +0.4** |
| **F30M** | **Barrier River** | **3.82** | **117** | | **Pn** | **01 27 20.7 +1.0** |
| **H24K** | **Noodor Dome** | **3.96** | **199** | Pn | **Pn** | **01 27 21.9 +0.1** |
| H24K | | | | IAML | | 01 28 30.6 |
| | comp=N,120nm,0.9s | | | | | |
| H24K | | | | IAML | | 01 28 34.9 |
| | comp=E,138nm,1.2s | | | | | |
| **F21K** | **Alatna River** | **4.03** | **238** | | **Pn** | **01 27 23.1 +0.4** |
| **G30M** | **tAoh Zraii Nji** | **4.09** | **126** | | **Pn** | **01 27 24.3 +0.8** |
| G30M | | | | IAML | | 01 28 37.6 |
| | comp=E,91nm,0.9s | | | | | |
| G30M | | | | IAML | | 01 28 54.4 |
| | comp=N,80nm,1.1s | | | | | |
| **PRP** | **Porcupine Dome** | **4.11** | **185** | Pn | **Pn** | **01 27 23.9 +0.1** |
| PRP | | | | IAML | | 01 28 16.6 |
| | comp=N,88nm,0.4s | | | | | |
| PRP | | | | IAML | | 01 28 34.2 |
| | comp=E,79nm,1.1s | | | | | |
| **H29M** | **Whitestone** | **4.14** | **142** | | **Pn** | **01 27 25.1 +0.9** |
| H29M | | | | IAML | | 01 28 21.9 |
| | comp=E,114nm,0.6s | | | | | |
| H29M | | | | IAML | | 01 28 37.7 |
| | comp=N,112nm,1.4s | | | | | |
| **H23K** | **Yukon River** | **4.21** | **208** | | **Pn** | **01 27 25.5 +0.4** |
| H23K | | | | IAML | | 01 28 40.8 |
| | comp=N,76nm,1.4s | | | | | |
| **INK** | **Inuvik** | **4.22** | **103** | Pn | **Pn** | **01 27 26.3 +1.0** |
| **I26K** | **Coal Creek Min** | **4.34** | **172** | | **Pn** | **01 27 27.6 +0.7** |
| **B20K** | **Meade River** | **4.35** | **281** | | **Pn** | **01 27 27.8 +0.9** |
| **A21K** | **Barrow** | **4.37** | **299** | | **Pn** | **01 27 27.8 +0.6** |
| **EPYK** | **Eagle Plains** | **4.41** | **133** | | **Pn** | **01 27 28.1 +0.2** |
| **G21K** | **Allakaket** | **4.53** | **231** | | **Pn** | **01 27 29.3 -0.1** |
| G21K | | | | IAML | | 01 28 53.3 |
| | comp=E,80nm,1.2s | | | | | |
| G21K | | | | IAML | | 01 28 58.0 |
| | comp=N,88nm,1.5s | | | | | |
| **I28M** | **Miner Creek** | **4.54** | **154** | | **Pn** | **01 27 30.9 +1.1** |
| I28M | | | | IAML | | 01 28 51.3 |
| | comp=E,63nm,0.9s | | | | | |
| I28M | | | | IAML | | 01 28 51.5 |
| | comp=N,74nm,1.0s | | | | | |
| **G31M** | **Satah River** | **4.71** | **120** | | **Pn** | **01 27 32.4 +0.6** |
| G31M | | | | IAML | | 01 28 56.4 |
| | comp=N,81nm,1.6s | | | | | |
| G31M | | | | IAML | | 01 28 57.3 |
| | comp=E,78nm,1.4s | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **204** | | **Pn** | **01 27 33.7 +0.3** |
| I23K | | | | IAML | | 01 29 04.6 |
| | comp=E,71nm,1.9s | | | | | |
| **MDM** | **Murphy Dome** | **4.85** | **198** | | **Pn** | **01 27 34.2 +0.3** |
| MDM | | | | IAML | | 01 28 54.9 |
| | comp=E,70nm,0.9s | | | | | |
| MDM | | | | IAML | | 01 29 10.4 |
| | comp=N,54nm,1.3s | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.90** | **147** | Pn | **Pn** | **01 27 35.1 +0.4** |
| I29M | | | | IAML | | 01 29 01.5 |
| | comp=E,65nm,1.4s | | | | | |
| I29M | | | | IAML | | 01 29 03.9 |
| | comp=N,58nm,0.8s | | | | | |
| **IL31** | | **4.92** | **191** | | **Pn** | **01 27 35.8 +1.0** |
| **ILAR** | **Eielson Array** | **4.92** | **191** | | **Pn** | **01 27 35.0 +0.2** |
| **ILAR** | **Eielson Array** | **4.92** | **191** | Pn | **Pn** | **01 27 35.6 +0.8** |
| | comp=N,1.3nm,0.3s,baz=5.7,slow=12,SNR=42 | | | | | |
| ILAR | | | | Sn | **Sn** | **01 28 32.5 +0.6** |
| | comp=N,3.2nm,0.3s,baz=4.6,slow=24,SNR=8.8 | | | | | |
| | comp=N,3.6nm,0.4s | | | | | |
| **D19K** | **Kuna River** | **4.95** | **263** | | **Pn** | **01 27 36.0 +0.8** |
| D19K | | | | IAML | | 01 29 17.1 |
| | comp=E,56nm,1.6s | | | | | |
| **IMAR** | **Indian Mountai** | **4.99** | **228** | | **Pn** | **01 27 35.0 -0.8** |
| **J25K** | **Salcha River,** | **5.01** | **183** | | **Pn** | **01 27 36.6 +0.5** |
| J25K | | | | IAML | | 01 29 04.3 |
| | comp=E,63nm,0.9s | | | | | |
| J25K | | | | IAML | | 01 29 06.6 |
| | comp=N,48nm,1.0s | | | | | |
| **H21K** | **Melozitna Rive** | **5.02** | **222** | | **Pn** | **01 27 36.8 +0.6** |
| H21K | | | | IAML | | 01 29 08.7 |
| | comp=N,59nm,1.2s | | | | | |
| **EGAK** | **Eagle** | **5.03** | **163** | | **Pn** | **01 27 36.7 +0.4** |
| **E19K** | **Redstone River** | **5.08** | **251** | | **Pn** | **01 27 36.8 -0.3** |
| E19K | | | | IAML | | 01 29 14.7 |
| | comp=N,62nm,1.1s | | | | | |
| E19K | | | | IAML | | 01 29 27.1 |
| | comp=E,51nm,1.2s | | | | | |
| **CCB** | **Clear Creek Bu

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTOI** | **Gorontalo** | **0.82** | **339** | P | **Pn** | **01 32 04.9** | **+2.4** |
| GTOI | | | | S | **Sn** | **01 32 23.8** | **+3.4** |
| **KMSI** | **Cibinong** | **0.98** | **44** | P | **Pn** | **01 32 06.2** | **+2.4** |
| **LUWI** | **Luwuk** | **1.04** | **210** | P | **Pn** | **01 32 05.9** | **+1.6** |
| LUWI | | | | S | **Sn** | **01 32 25.4** | **+1.9** |
| **SANI** | **Sanana** | **3.29** | **125** | P | **Pn** | **01 32 31.2** | **+1.0** |
| SANI | | | | S | **Sn** | **01 33 09.1** | **-0.7** |
| **MPSI** | **Mapaga** | **3.43** | **278** | P | **Pn** | **01 32 32.7** | **+0.6** |
| **WRA** | **Warramunga Arr** 2.2nm,0.6s,baz=329,slow=10,SNR=28 2.2nm,0.6s | **22.46** | **152** | P | **P** | **01 36 26.3** | **+0.3** |
| **ASAR** | **Alice Springs** 0.3nm,0.6s,baz=343,slow=15,SNR=5.7 0.3nm,0.6s | **25.55** | **157** | P | **P** | **01 36 57.3** | **+3.0** |
| **SONM** | **Songino Array** 0.3nm,0.5s,baz=161,slow=9.2,SNR=2.1 0.3nm,0.5s | **49.99** | **345** | P | **P** | **01 40 14.7** | **-3.5** |
| **MKAR** | **Makanchi Array** 0.3nm,0.4s,baz=114,slow=8.7,SNR=5.5 0.3nm,0.4s | **58.89** | **328** | P | **P** | **01 41 19.9** | **-2.4** |

*SJA **18** 01:40:45.4±0.8,32°.24S×71°.89W,h40km±999km,ML4.1, MW4.0*
*NEIC **18** 01:40:48.4±1.0,32°.23S±0°.04×71°.69W±0°.03,h53km±7km, mb4.3/9,ML4.2(GUC),Error ellipse: s-maj=6.4km s-min=1.9km az=202.0*
*GUC **18** 01:40:48.1±0.9,32°.28S×71°.60W,h63km±3km,ML4.2*
*IDC **18** 01:40:49.0±0.9,32°.24S×71°.41W,h55km±5km,mb4.1/6, mbtmp4.2/9,Error ellipse: s-maj=31.2km s-min=17.1km az=102.0*

**ISC 18 01:40:47.8**±0.6,**32°.27S**±0°.02×**71°.74W**±0°.04,**h50**km±4km, **n134,σ1§45/176,mb4.4/11,8C-16D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VA06** | **Catapilco** | **0.47** | **128** | | **Pn** | **01 40 59.2** | **+0.5** |
| VA06 | | | | | **Sn** | **01 41 07.1** | **+0.5** |
| **VA06** | **Catapilco** | **0.47** | **128** | *eP* | **Pn** | **01 40 59.4** | **+0.6** |
| VA06 | | | | *eS* | **Sn** | **01 41 06.8** | **+0.3** |
| VA06 | | | | IAML | | 01 41 07.6 | |
| | comp=N,64μm,0.1s | | | | | | |
| **CO04** | **Los Peladeros** | **0.69** | **71** | *eP* | **Pn** | **01 41 01.5** | **-0.2** |
| CO04 | | | | *i* S | **Sn** | **01 41 10.9** | **-0.7** |
| CO04 | | | | IAML | | 01 41 12.3 | |
| | comp=N,39μm,0.1s | | | | | | |
| **VA01** | **Torpederas** | **0.75** | **174** | | **Pn** | **01 41 03.4** | **+1.2** |
| VA01 | | | | Sn | **Sn** | **01 41 14.2** | **+1.5** |
| **ROCH** | **El Roble** | **0.93** | **139** | ⇓*iP* | **Pn** | **01 41 05.0** | **+0.2** |
| ROCH | | | | *i* S | **Sn** | **01 41 16.8** | **-0.4** |
| **MT02** | **Curacav** | **1.11** | **153** | | **Pn** | **01 41 07.4** | **+0.4** |
| MT02 | | | | Sn | **Sn** | **01 41 20.8** | **-0.4** |
| **MT02** | **Curacav** | **1.11** | **153** | *eP* | **Pn** | **01 41 07.2** | **+0.3** |
| MT02 | | | | *eS* | **Sn** | **01 41 20.3** | **-0.9** |
| **MT02** | **Curacav** | **1.11** | **153** | ⇓*iP* | **Pn** | **01 41 07.4** | **+0.4** |
| MT02 | | | | *i* S | **Sn** | **01 41 20.9** | **-0.2** |
| **VA03** | **San Esteban** | **1.12** | **116** | | **Pn** | **01 41 07.0** | **-0.2** |
| **VA03** | **San Esteban** | **1.12** | **116** | *eP* | **Pn** | **01 41 06.9** | **-0.2** |
| VA03 | | | | *eS* | **Sn** | **01 41 20.9** | **-0.7** |
| VA03 | | | | IAML | | 01 41 21.9 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **1.12** | **116** | ⇓*iP* | **Pn** | **01 41 07.0** | **-0.2** |
| VA03 | | | | *i* S | **Sn** | **01 41 20.6** | **-1.0** |
| VA03 | | | | IAML | | 01 41 21.2 | |
| | comp=N,16μm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **1.24** | **31** | | **Pn** | **01 41 09.2** | **+0.3** |
| **CO02** | **Combarbal** | **1.24** | **31** | *eP* | **Pn** | **01 41 08.4** | **-0.4** |
| CO02 | | | | *eS* | **Sn** | **01 41 25.3** | **+0.8** |
| CO02 | | | | IAML | | 01 41 28.5 | |
| | comp=Z,3μm,0.7s | | | | | | |
| **CO02** | **Combarbal** | **1.24** | **31** | *eP* | **Pn** | **01 41 09.1** | **+0.3** |
| CO02 | | | | *i* S | **Sn** | **01 41 24.5** | **0.0** |
| **PEL** | **Peldehue** | **1.24** | **135** | | **Pn** | **01 41 09.2** | **+0.4** |
| **PEL** | **Peldehue** | **1.24** | **135** | *eP* | **Pn** | **01 41 08.3** | **-0.5** |
| PEL | | | | *eS* | **Sn** | **01 41 24.0** | **-0.6** |
| PEL | | | | IAML | | 01 41 25.5 | |
| | comp=E,4μm,0.3s | | | | | | |
| **VA05** | **Santo Domingo** | **1.39** | **176** | | **Pn** | **01 41 11.8** | **+1.1** |
| **VA05** | **Santo Domingo** | **1.39** | **176** | ⇓*iP* | **Pn** | **01 41 11.8** | **+1.1** |
| VA05 | | | | *i* S | **Sn** | **01 41 28.6** | **+0.7** |
| VA05 | | | | IAML | | 01 41 41.0 | |
| | comp=E,3μm,0.3s | | | | | | |
| **MT05** | **Renca** | **1.40** | **143** | | **Pn** | **01 41 13.2** | **+2.2** |
| **MT05** | **Renca** | **1.40** | **143** | *eP* | **Pn** | **01 41 12.5** | **+1.5** |
| MT05 | | | | *eS* | **Sn** | **01 41 30.8** | **+2.4** |
| MT05 | | | | IAML | | 01 41 33.2 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **MT05** | **Renca** | **1.40** | **143** | ⇓*iP* | **Pn** | **01 41 13.2** | **+2.2** |
| MT05 | | | | *i* S | **Sn** | **01 41 29.9** | **+1.6** |
| MT05 | | | | IAML | | 01 41 31.0 | |
| | comp=E,6μm,0.3s | | | | | | |
| **MT10** | **Hacienda Santa** | **1.42** | **135** | ⇓*iP* | **Pn** | **01 41 11.9** | **+0.5** |
| MT10 | | | | *i* S | **Sn** | **01 41 29.2** | **+0.1** |
| **MT14** | **Cerro Cal¡n** | **1.51** | **138** | ⇓*iP* | **Pn** | **01 41 13.2** | **+0.7** |
| MT14 | | | | *i* S | **Sn** | **01 41 30.8** | **-0.3** |
| MT14 | | | | IAML | | 01 41 32.9 | |
| | comp=N,8μm,0.3s | | | | | | |
| **MT16** | **CCHEN** | **1.54** | **139** | | **Pn** | **01 41 13.7** | **+0.7** |
| **MT16** | **CCHEN** | **1.54** | **139** | ⇓*iP* | **Pn** | **01 41 13.6** | **+0.7** |
| MT16 | | | | *eS* | **Sn** | **01 41 31.6** | **-0.2** |
| MT16 | | | | IAML | | 01 41 34.1 | |
| | comp=N,3μm,0.4s | | | | | | |
| **CO06** | **Fray Jorge** | **1.60** | **3** | | **Pn** | **01 41 13.9** | **+0.4** |
| **CO06** | **Fray Jorge** | **1.60** | **3** | *eP* | **Pn** | **01 41 14.0** | **+0.4** |
| CO06 | | | | *i* S | **Sn** | **01 41 32.7** | **-0.4** |
| **MT03** | **Universidad Ad** | **1.60** | **140** | | **Pn** | **01 41 14.1** | **+0.4** |
| **MT03** | **Universidad Ad** | **1.60** | **140** | *eP* | Pn | 01 41 08.8 | -4.9 |
| MT03 | | | | *eP* | | 01 41 13.9 | |
| MT03 | | | | *eS* | **Sn** | **01 41 34.5** | **+1.3** |
| MT03 | | | | IAML | | 01 41 35.3 | |
| | comp=Z,5μm,0.5s | | | | | | |
| **MT03** | **Universidad Ad** | **1.60** | **140** | ⇓*iP* | **Pn** | **01 41 14.5** | **+0.8** |
| MT03 | | | | *i* S | **Sn** | **01 41 33.3** | **0.0** |
| MT03 | | | | IAML | | 01 41 35.3 | |
| | comp=N,9μm,0.2s | | | | | | |
| **FCH** | **Farellones** | **1.61** | **131** | ⇓*iP* | **Pn** | **01 41 14.4** | **+0.3** |
| FCH | | | | *i* S | **Sn** | **01 41 33.4** | **-0.6** |
| FCH | | | | IAML | | 01 41 35.0 | |
| | comp=E,3μm,0.2s | | | | | | |
| **MT09** | **Talagante** | **1.63** | **157** | | **Pn** | **01 41 15.6** | **+1.4** |
| **MT09** | **Talagante** | **1.63** | **157** | *eP* | **Pn** | **01 41 15.5** | **+1.4** |
| MT09 | | | | *i* S | **Sn** | **01 41 34.6** | **+0.5** |
| MT09 | | | | IAML | | 01 41 38.2 | |
| | comp=N,2μm,0.3s | | | | | | |
| **MT01** | **Popeta** | **1.64** | **166** | | **Pn** | **01 41 15.3** | **+1.1** |
| **MT01** | **Popeta** | **1.64** | **166** | *eP* | **Pn** | **01 41 14.6** | **+0.4** |
| MT01 | | | | *eS* | **Sn** | **01 41 34.5** | **+0.4** |
| MT01 | | | | IAML | | 01 41 38.7 | |
| | comp=Z,786nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **1.64** | **166** | ⇓*iP* | **Pn** | **01 41 15.3** | **+1.1** |
| MT01 | | | | *i* S | **Sn** | **01 41 35.4** | **+1.2** |
| **MT15** | **Las Vizcachas** | **1.68** | **142** | *eP* | **Pn** | **01 41 15.5** | **+0.7** |
| MT15 | | | | *i* S | **Sn** | **01 41 35.9** | **+0.7** |
| MT15 | | | | IAML | | 01 41 37.3 | |
| | comp=E,7μm,0.2s | | | | | | |
| **CO03** | **El Pedregal** | **1.69** | **32** | | **Pn** | **01 41 15.2** | **+0.3** |
| **CO03** | **El Pedregal** | **1.69** | **32** | *eP* | **Pn** | **01 41 14.6** | **-0.3** |
| CO03 | | | | *eS* | **Sn** | **01 41 36.0** | **+0.6** |
| CO03 | | | | IAML | | 01 41 44.5 | |
| | comp=Z,884nm,0.3s | | | | | | |
| **CO03** | **El Pedregal** | **1.69** | **32** | ⇓*iP* | **Pn** | **01 41 15.3** | **+0.4** |
| CO03 | | | | *i* S | **Sn** | **01 41 35.3** | **-0.1** |
| CO03 | | | | IAML | | 01 41 37.0 | |
| | comp=E,3μm,0.2s | | | | | | |
| **MT04** | **Ro Olivares** | **1.76** | **130** | *eP* | **Pn** | **01 41 16.6** | **+0.5** |
| MT04 | | | | *eS* | **Sn** | **01 41 38.8** | **+1.4** |
| MT04 | | | | IAML | | 01 41 43.2 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **MT04** | **Ro Olivares** | **1.76** | **130** | ⇓*iP* | **Pn** | **01 41 16.6** | **+0.5** |
| MT04 | | | | *i* S | **Sn** | **01 41 37.8** | **+0.4** |
| MT04 | | | | IAML | | 01 41 40.1 | |
| | comp=E,3μm,0.3s | | | | | | |
| **MT12** | **Pirque** | **1.77** | **146** | ⇑*iP* | **Pn** | **01 41 16.9** | **+0.9** |
| MT12 | | | | *i* S | **Sn** | **01 41 37.1** | **-0.3** |
| MT12 | | | | IAML | | 01 41 39.0 | |
| | comp=E,7μm,0.3s | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.86** | **129** | | **Pn** | **01 41 18.3** | **+0.8** |
| **MT08** | **Bocatoma Ro** | **1.86** | **129** | *eP* | **Pn** | **01 41 17.9** | **+0.5** |
| MT08 | | | | *eS* | **Sn** | **01 41 43.0** | **+3.1** |
| MT08 | | | | IAML | | 01 41 45.1 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.86** | **129** | *eP* | **Pn** | **01 41 18.5** | **+1.0** |
| MT08 | | | | *eS* | **Sn** | **01 41 39.2** | **-0.7** |
| MT08 | | | | IAML | | 01 41 44.4 | |
| | comp=E,1μm,0.3s | | | | | | |
| **BO04** | **La Punta** | **1.96** | **151** | | **Pn** | **01 41 19.8** | **+1.3** |
| **BO04** | **La Punta** | **1.96** | **151** | ⇑*iP* | **Pn** | **01 41 19.6** | **+1.0** |
| BO04 | | | | *i* S | **Sn** | **01 41 42.3** | **+0.3** |
| **LMEL** | **Las Melosas** | **2.03** | **141** | | **Pn** | **01 41 20.8** | **+1.1** |
| **LMEL** | **Las Melosas** | **2.03** | **141** | *eP* | **Pn** | **01 41 20.2** | **+0.5** |
| LMEL | | | | *eS* | **Sn** | **01 41 46.1** | **+2.1** |
| LMEL | | | | IAML | | 01 41 47.7 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **LMEL** | **Las Melosas** | **2.03** | **141** | ⇑*iP* | **Pn** | **01 41 20.9** | **+1.2** |
| LMEL | | | | *i* S | **Sn** | **01 41 44.8** | **+0.8** |
| LMEL | | | | IAML | | 01 41 46.2 | |
| | comp=N,3μm,0.2s | | | | | | |
| **RTLS** | **Leoncito** | **2.13** | **78** | *eP* | **Pn** | **01 41 22.8** | **+1.6** |
| RTLS | | | | *eS* | **Sn** | **01 41 51.2** | **+4.7** |
| RTLS | | | | IAML | | 01 41 55.5 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **BO01** | **Tunca** | **2.18** | **166** | | **Pn** | **01 41 22.7** | **+1.0** |
| **BO01** | **Tunca** | **2.18** | **166** | *eP* | **Pn** | **01 41 22.0** | **+0.4** |
| BO01 | | | | *eS* | **Sn** | **01 41 50.7** | **+3.2** |
| **BO01** | **Tunca** | **2.18** | **166** | *eP* | **Pn** | **01 41 22.7** | **+1.0** |
| BO01 | | | | *eS* | **Sn** | **01 41 48.0** | **+0.5** |
| **BO03** | **Pichilemu** | **2.23** | **185** | ⇓*iP* | **Pn** | **01 41 22.9** | **+0.7** |
| BO03 | | | | *i* S | **Sn** | **01 41 47.8** | **-0.7** |
| **GO04** | **Tololo Observa** | **2.24** | **21** | | **Pn** | **01 41 22.8** | **+0.1** |
| **GO04** | **Tololo Observa** | **2.24** | **21** | *eP* | **Pn** | **01 41 20.3** | **-2.4** |
| GO04 | | | | *eP* | | 01 41 22.5 | |
| GO04 | | | | *eS* | **Sn** | **01 41 55.5** | **+6.2** |
| GO04 | | | | IAML | | 01 41 57.5 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **GO04** | **Tololo Observa** | **2.24** | **21** | *eP* | **Pn** | **01 41 23.0** | **+0.3** |
| GO04 | | | | *i* S | **Sn** | **01 41 49.2** | **-0.1** |
| GO04 | | | | IAML | | 01 41 56.4 | |
| | comp=E,4μm,0.4s | | | | | | |
| **CO05** | **La Serena** | **2.38** | **11** | | **Pn** | **01 41 24.5** | **+0.1** |
| **CO05** | **La Serena** | **2.38** | **11** | *eP* | **Pn** | **01 41 24.7** | **+0.3** |
| CO05 | | | | *i* S | **Sn** | **01 41 52.3** | **-0.1** |
| CO05 | | | | IAML | | 01 42 05.6 | |
| | comp=E,1μm,0.3s | | | | | | |
| **DOCA** | **Reserva Natura** | **2.62** | **61** | *eP* | **Pn** | **01 41 29.5** | **+1.5** |
| DOCA | | | | *eS* | Sn | 01 41 49.5 | -9.3 |
| DOCA | | | | IAML | | 01 41 50.5 | |
| | comp=Z,410nm,0.6s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.64** | **163** | | **Pn** | **01 41 28.8** | **+0.9** |
| **BO02** | **Sierra Bellavi** | **2.64** | **163** | *eP* | **Pn** | **01 41 28.5** | **+0.5** |
| BO02 | | | | *eS* | **Sn** | **01 42 00.6** | **+1.9** |
| BO02 | | | | IAML | | 01 42 08.6 | |
| | comp=Z,619nm,0.1s | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.64** | **163** | *eP* | **Pn** | **01 41 29.1** | **+1.2** |
| BO02 | | | | *i* S | **Sn** | **01 41 59.2** | **+0.5** |
| **CO01** | **Juntas del Tor** | **2.69** | **32** | | **Pn** | **01 41 29.6** | **+0.9** |
| **CO01** | **Juntas del Tor** | **2.69** | **32** | *eP* | **Pn** | **01 41 29.1** | **+0.3** |
| CO01 | | | | *eS* | **Sn** | **01 42 00.9** | **+0.6** |
| CO01 | | | | IAML | | 01 42 15.3 | |
| | comp=Z,571nm,0.6s | | | | | | |
| **CO01** | **Juntas del Tor** | **2.69** | **32** | ⇓*iP* | **Pn** | **01 41 29.6** | **+0.9** |
| **ZON** | **Zonda** | **2.70** | **75** | | **Pn** | **01 41 30.5** | **+1.7** |
| **ZON** | **Zonda** | **2.70** | **75** | *eP* | **Pn** | **01 41 25.3** | **-3.5** |
| ZON | | | | *eP* | | 01 41 30.2 | |
| ZON | | | | *eS* | | 01 41 30.8 | |
| ZON | | | | IAML | | 01 42 05.5 | |
| | comp=Z,472nm,0.5s | | | | | | |
| **GO05** | **Huala** | **2.73** | **183** | | **Pn** | **01 41 29.9** | **+0.7** |
| **GO05** | **Huala** | **2.73** | **183** | *eP* | **Pn** | **01 41 29.1** | **-0.1** |
| GO05 | | | | *eS* | **Sn** | **01 42 01.1** | **0.0** |
| **GO05** | **Huala** | **2.73** | **183** | ⇓*iP* | **Pn** | **01 41 29.9** | **+0.7** |
| GO05 | | | | *i* S | **Sn** | **01 42 00.4** | **-0.7** |
| **RTCV** | **Cerro Valdivia** | **2.75** | **82** | *eP* | **Pn** | **01 41 31.8** | **+2.4** |
| RTCV | | | | *eS* | **Sn** | **01 42 04.5** | **+3.1** |
| **ACCO** | **Cerro Coronel** | **2.84** | **54** | *eP* | **Pn** | **01 41 33.1** | **+2.2** |
| **AROD** | **Rodeo** | **2.86** | **43** | *eP* | **Pn** | **01 41 33.3** | **+2.1** |
| AROD | | | | *eS* | Sn | 01 41 50.9 | -14 |
| **LCO** | **Las Campanas** | **3.37** | **16** | | **Pn** | **01 41 38.6** | **+0.4** |
| **LCO** | **Las Campanas** | **3.37** | **16** | *eS* | **Sn** | **01 42 17.8** | **+0.7** |
| LCO | | | | IAML | | 01 42 41.0 | |
| | comp=Z,506nm,0.7s | | | | | | |
| **ML02** | **Panimavida** | **3.49** | **176** | | **Pn** | **01 41 40.5** | **+1.0** |
| **AC05** | **El Transito** | **3.65** | **21** | | **Pn** | **01 41 42.5** | **+0.6** |
| **RFA** | **San Rafael** | **3.70** | **133** | *eP* | **Pn** | **01 41 43.5** | **+1.0** |
| RFA | | | | *eS* | **Sn** | **01 42 32.3** | **+7.4** |
| RFA | | | | IAML | | 01 42 38.0 | |
| | comp=Z,112nm,0.7s | | | | | | |
| **AC04** | **Llanos de Chal** | **4.09** | **8** | | **Pn** | **01 41 47.3** | **-0.6** |
| **AC04** | **Llanos de Chal** | **4.09** | **8** | *eS* | **Sn** | **01 42 41.8** | **+7.3** |
| AC04 | | | | IAML | | 01 42 59.2 | |
| | comp=Z,140nm,0.5s | | | | | | |
| **BI02** | **San Fabin de** | **4.40** | **175** | | **Pn** | **01 41 53.1** | **+1.1** |
| **GO03** | **Copiap** | **4.84** | **16** | | **Pn** | **01 41 57.7** | **-0.5** |
| **AC06** | **Mina Casimiro** | **5.04** | **14** | | **Pn** | **01 41 59.7** | **-1.2** |
| **VA04** | **Juan Fernndez** | **6.11** | **255** | Pn | **Pn** | **01 42 16.2** | **+0.7** |
| **H03N1** | **Juan Fernandez** baz=85,slow=73,SNR=287 | **6.15** | **257** | T | T | 01 48 59.9 | |
| **H03N3** | **Juan Fernandez** baz=85,slow=73,SNR=431 | **6.16** | **257** | T | T | 01 48 59.4 | |
| **H03N2** | **Juan Fernandez** baz=85,slow=73,SNR=453 | **6.16** | **257** | T | T | 01 49 00.8 | |
| **AC01** | **Pan de Azucar** | **6.18** | **10** | Pn | **Pn** | **01 42 13.6** | **-2.9** |
| **H03S3** | **Juan Fernandez** baz=84,slow=75,SNR=35 | **6.22** | **254** | T | T | 01 48 54.7 | |
| **H03S1** | **Juan Fernandez** baz=84,slow=75,SNR=28 | **6.22** | **253** | T | T | 01 48 48.4 | |
| **H03S2** | **Juan Fernandez** baz=84,slow=75,SNR=41 | **6.23** | **254** | T | T | 01 48 53.2 | |
| **GO06** | **Curarrehue** | **7.30** | **178** | Pn | **Pn** | **01 42 32.8** | **+0.9** |
| **PLCA** | **Paso Flores** | **8.50** | **174** | Pn | **Pn** | **01 42 48.9** | **+0.6** |
| **PLCA** | **Paso Flores** comp=Z,0.6nm,0.3s,baz=334,slow=17,SNR=1.1 | **8.50** | **174** | P | **Pn** | **01 42 49.5** | **+1.2** |
| **TRQA** | **Tornquist** | **9.85** | **129** | Pn | **Pn** | **01 43 06.2** | **-0.6** |
| **ITQB** | **Itaqui** | **13.23** | **83** | Pn | **Pn** | **01 43 51.3** | **-1.6** |
| **CPUP** | **Villa Florida** | **13.89** | **68** | Pn | **Pn** | **01 44 01.1** | **-0.9** |
| **PLTB** | **Pedras Altas** | **15.40** | **93** | | **P** | **01 44 23.6** | **-1.9** |
| PLTB | | | | IAmb | IAmb | 01 44 40.6 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **LPAZ** | **La Paz** | **16.25** | **12** | | **Pn** | **01 44 33.1** | **-0.2** |
| **LPAZ** | **La Paz** comp=Z,2.4nm,0.5s,baz=191,slow=6.9,SNR=13 | **16.25** | **12** | P | **Pn** | **01 44 33.4** | **+0.1** |
| **SIV** | **San Ignacio** comp=Z,1.5nm,0.6s,baz=199,slow=8.9,SNR=9.8 | **18.89** | **33** | P | **P** | **01 45 02.9** | **-1.2** |
| **VILB** | **Vilhena** | **21.95** | **31** | P | **P** | **01 45 37.0** | **-0.2** |
| VILB | | | | IAmb | IAmb | 01 46 01.0 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **ETMB** | **Extrema** | **22.92** | **14** | P | **P** | **01 45 47.9** | **+0.2** |
| **BDFB** | **Brasilia** comp=Z,2.5nm,0.5s,baz=233,slow=7.6,SNR=6.6 | **27.18** | **58** | P | **P** | **01 46 25.5** | **-1.3** |
| BDFB | | | | sP | **sP** | **01 46 45.3** | **-0.5** |
| | comp=Z,3.4nm,0.6s,baz=237,slow=8.1,SNR=4.4 comp=Z,2.5nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** comp=Z,3.7nm,0.6s | **50.86** | **158** | ⇑P | **P** | **01 49 43.6** | **+0.5** |
| **VNA1** | **Neumayer--Stat** comp=Z,3.3nm,0.9s | **51.16** | **157** | ⇑P | **P** | **01 49 45.7** | **+0.4** |
| **VNA2** | **Neumayer--Watz** comp=Z,4.5nm,0.6s,baz=286,slow=9.2 | **51.51** | **158** | ⇑P | **P** | **01 49 48.6** | **+0.7** |
| **SNAA** | **Sanae** | **53.09** | **158** | P | **P** | **01 50 00.2** | **+0.5** |
| SNAA | | | | IAmb | IAmb | 01 50 00.8 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **SNAA** | **Sanae** comp=Z,134nm,1.2s | **53.09** | **158** | ⇑P | **P** | **01 50 00.3** | **+0.6** |
| **SNAA** | **Sanae** comp=Z,3.1nm,0.8s,baz=274,slow=9.2,SNR=23 comp=Z,3.1nm,0.8s | **53.09** | **158** | P | **P** | **01 50 00.3** | **+0.6** |
| **TROLL** | **Troll, Antarti** comp=Z,235nm,0.7s | **54.80** | **159** | ⇑P | **P** | **01 50 12.9** | **+0.6** |
| **QSPA** | **South Pole Qui** | **57.96** | **180** | P | **P** | **01 50 36.0** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 01 50 49.8 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** comp=Z,1.7nm,0.6s,baz=134,slow=1.3,SNR=15 comp=Z,1.7nm,0.6s | **57.96** | **180** | P | **P** | **01 50 36.0** | **+1.1** |
| **TXAR** | **Lajitas Array** comp=Z,0.1nm,0.4s,baz=149,slow=7.2,SNR=1.5 | **68.36** | **330** | P | **P** | **01 51 45.7** | **+1.7** |
| **DBIC** | **Dimbokro** | **74.39** | **72** | P | **P** | **01 52 19.9** | **-0.8** |
| **DBIC** | **Dimbokro** comp=Z,4.3nm,0.6s,baz=240,slow=6.3,SNR=6.1 comp=Z,4.3nm,0.6s | **74.39** | **72** | P | **P** | **01 52 19.9** | **-0.8** |
| **BOSA** | **Boshof** | **80.65** | **118** | P | **P** | **01 52 55.0** | **-0.8** |
| **BOSA** | **Boshof** comp=Z,7.9nm,1.2s,baz=74,slow=3.9,SNR=3.1 comp=Z,7.9nm,1.2s | **80.65** | **118** | P | **P** | **01 52 54.9** | **-0.8** |
| **TORD** | **Torodi Ar. Bea** | **83.39** | **70** | P | **P** | **01 53 09.1** | **-0.9** |
| TORD | | | | IAmb | IAmb | 01 53 10.4 | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** comp=Z,2.0nm,0.7s,baz=285,slow=4.4,SNR=17 | **83.39** | **70** | P | **P** | **01 53 09.1** | **-0.9** |
| TORD | | | | pP | **pP** | **01 53 24.8** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=276,slow=5.7,SNR=3.9 | | | | | | |
| TORD | | | | sP | **sP** | **01 53 31.4** | **+1.2** |
| | comp=Z,1.1nm,0.7s,baz=284,slow=7.4,SNR=4.0 comp=Z,2.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** comp=Z,0.3nm,0.6s,baz=168,slow=1.6,SNR=6.8 | **122.39** | **209** | PKP | **PKPdf** | **01 59 37.1** | **-0.9** |
| **H11S2** | **WAKE ISLAND Hyl** baz=118,slow=75,SNR=106 | **26.03** | **270** | T | T | 04 18 55.2 | |
| **H11S1** | **WAKE ISLAND Hyl** baz=118,slow=75,SNR=144 | **26.04** | **270** | T | T | 04 18 55.5 | |
| **H11S3** | **WAKE ISLAND Hyl** baz=118,slow=75,SNR=102 | **26.05** | **270** | T | T | 04 18 56.6 | |
| **H11N3** | **WAKE ISLAND Hyl** baz=117,slow=75,SNR=28 | **26.40** | **272** | T | T | 04 19 20.9 | |
| **H11N1** | **WAKE ISLAND Hyl** baz=117,slow=75,SNR=11 | **26.42** | **272** | T | T | 04 19 22.7 | |
| **H11N2** | **WAKE ISLAND Hyl** baz=117,slow=75,SNR=37 | **26.42** | **272** | T | T | 04 19 22.3 | |
| **BVAR** | **Borovoye Array** comp=Z,2.0nm,0.5s,baz=312,slow=1.4,SNR=10 | **145.84** | **41** | PKPbc | **PKPab** | **02 00 21.3** | **-0.1** |
| BVAR | | | | pPKPbc | pPKPbc | 02 00 36.7 | +0.9 |
| | comp=Z,1.1nm,0.7s,baz=292,slow=4.7,SNR=4.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** comp=Z,1.9nm,0.5s,baz=300,slow=3.0,SNR=17 | **151.43** | **41** | PKPbc | **PKPbc** | **02 00 35.6** | **0.0** |
| KURBB | | | | pPKPbc | **pPKPbc** | **02 00 52.0** | **+1.5** |
| | comp=Z,0.7nm,0.7s,baz=300,slow=3.1,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** comp=Z,3.2nm,0.5s,baz=286,slow=3.3,SNR=14 | **152.63** | **31** | PKPbc | **PKiKP** | **02 00 38.2** | **-0.2** |
| **MKAR** | **Makanchi Array** comp=Z,0.7nm,0.6s,baz=294,slow=3.9,SNR=6.8 | **155.42** | **46** | PKPab | **PKPab** | **02 01 00.8** | **-0.4** |

*SDD **18** 01:55:21.8±2.2,19°.13N×69°.30W,h20km±19km,MD3.9, ML3.7,MW3.9*
*OSPL **18** 01:55:22.6±3.2,19°.13N×69°.29W,h0km±26km,ML3.7*
*NEIC **18** 01:55:25.3±1.8,19°.06N±0°.09×69°.26W±0°.03,h32km±9km, mb3.9/4,Error ellipse: s-maj=13.0km s-min=2.5km az=193.0*

**ISC 18 01:55:20.0**±1.2,**19°.14N**±0°.03×**69°.27W**±0°.02,**h10**km±9km, **n56,σ1§68/81,22C-7D,Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MIDR** | **Miches** | **0.26** | **127** | ⇑*eP*g | **Pb** | **01 55 26.9** | **+0.1** |
| MIDR | | | | ⇑*eS*g | **Sb** | **01 55 31.7** | **+0.4** |
| MIDR | | | | IAML | | 01 55 31.9 | |
| | comp=N,5μm,0.3s | | | | | | |
| MIDR | | | | IAML | | 01 55 31.9 | |
| | comp=E,4μm,0.7s | | | | | | |
| **HIDR** | **Higuey Centro** | **0.76** | **136** | ⇑*eP*g | **Pn** | **01 55 35.1** | **-1.6** |
| HIDR | | | | ⇑*eS*g | **Sn** | **01 55 46.4** | **-1.8** |
| HIDR | | | | IAML | | 01 55 48.5 | |
| | comp=N,5μm,0.1s | | | | | | |
| HIDR | | | | IAML | | 01 55 48.6 | |
| | comp=N,5μm,0.1s | | | | | | |
| HIDR | | | | IAML | | 01 55 50.6 | |
| | comp=E,4μm,0.2s | | | | | | |
| **CADR** | **Cabrera** | **0.82** | **310** | ⇓*eP*g | **Pg** | **01 55 34.9** | **-0.9** |
| CADR | | | | ⇑*eS*g | **Sb** | **01 55 47.2** | **-0.1** |
| CADR | | | | IAML | | 01 55 50.8 | |
| | comp=N,6μm,0.3s | | | | | | |
| CADR | | | | IAML | | 01 55 50.8 | |
| | comp=N,6μm,0.3s | | | | | | |
| CADR | | | | IAML | | 01 55 54.8 | |
| | comp=E,3μm,0.3s | | | | | | |
| **SDD** | **Santo Domingo** | **0.91** | **222** | ⇓*eP*g | **Pb** | **01 55 37.2** | **-0.6** |
| SDD | | | | ⇑*eS*g | **Sg** | **01 55 48.8** | **-0.6** |
| SDD | | | | IAML | | 01 55 53.0 | |
| | comp=E,181nm,0.5s | | | | | | |
| SDD | | | | IAML | | 01 55 53.1 | |
| | comp=N,204nm,0.3s | | | | | | |
| SDD | | | | IAML | | 01 55 53.2 | |
| | comp=N,204nm,0.3s | | | | | | |
| **SDD** | **Santo Domingo** | **0.91** | **222** | *i* P | **Pb** | **01 55 37.2** | **-0.6** |
| SDD | | | | *eS* | **Sg** | **01 55 49.0** | **-0.4** |
| **PCDR** | **Punta Cana, DR** | **1.05** | **126** | Pn | **Pn** | **01 55 40.2** | **-0.5** |
| PCDR | | | | Sn | **Sn** | **01 55 55.4** | **0.0** |
| **PCDR** | **Punta Cana, DR** | **1.05** | **126** | ⇑*eP*g | **Pn** | **01 55 40.4** | **-0.3** |
| PCDR | | | | ⇑*eS*g | **Sn** | **01 55 53.9** | **-1.5** |
| PCDR | | | | IAML | | 01 56 01.6 | |
| | comp=E,702nm,0.6s | | | | | | |
| PCDR | | | | IAML | | 01 56 09.2 | |
| | comp=N,2μm,0.6s | | | | | | |
| PCDR | | | | IAML | | 01 56 09.2 | |
| | comp=N,2μm,0.6s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.05** | **126** | *i* P | **Pn** | **01 55 40.4** | **-0.3** |
| PCDR | | | | IAML | | 01 56 03.5 | |
| | comp=Z,1μm,0.7s | | | | | | |
| **SADR** | **Isla Saona** | **1.05** | **154** | ⇓*eP*g | **Pn** | **01 55 40.9** | **+0.1** |
| SADR | | | | ⇑*eS*g | **Sn** | **01 55 55.0** | **-0.5** |
| SADR | | | | IAML | | 01 56 07.0 | |
| | comp=E,959nm,0.5s | | | | | | |
| SADR | | | | IAML | | 01 56 09.8 |

comp=N,635nm,0.6s
**PODR Polo 2.14 243** *i* P **Pb 01 55 57.4 -1.4**
PODR IAML 01 56 33.8
comp=Z,696nm,0.8s
**AGPR Aguadilla, PR 2.15 108 Pb 01 55 58.3 -0.7**
AGPR Sn **Sb 01 56 25.7 -0.1**
**AGPR Aguadilla, PR 2.15 108** *i* P **Pb 01 55 58.5 -0.5**
AGPR IAML 01 56 36.1
comp=Z,357nm,0.2s
**PRSN Puerto Rico Se 2.22 114 Pb 01 55 58.6 -1.5**
LODA1 **ITESIL, Dajabo 2.33 280** *i* P **Pb 01 56 00.4 -1.7**
LODA1 IAML 01 56 32.5
comp=Z,1µm,0.9s
**CRPR Cabo Rojo, PR 2.34 118 Pb 01 56 01.2 -1.1**
**CRPR Cabo Rojo, PR 2.34 118** *i* P **Pb 01 56 02.2 -0.1**
CRPR IAML 01 56 43.7
comp=Z,487nm,0.5s
**MCDR Montecristi 2.37 289** ⇑*e*Pg **Pb 01 56 00.8 -1.9**
MCDR ⇓*e*Sg **Sb 01 56 31.9 -0.1**
MCDR IAML 01 56 41.1
comp=E,844nm,0.7s
MCDR IAML 01 56 43.6
comp=N,677nm,0.2s
MCDR IAML 01 56 43.7
comp=N,677nm,0.2s
**MLPR Magueyes Islan 2.41 119 Pb 01 56 01.8 -1.7**
**AOPR Arecibo Observ 2.51 108 Pb 01 56 04.2 -1.0**
**UUPR Utuado, UPR, P 2.58 110 Pb 01 56 03.9 -2.3**
**EMPR Esperanza - Ma 2.68 104 Pb 01 56 06.2 -1.8**
**OBIP Obispado Ponce 2.75 113 Pb 01 56 07.2 -2.1**
**CELP Cerrillos 2.77 112 Pb 01 56 07.3 -2.2**
**GRTK Grand Turk 2.93 324** Pn **Pn 01 56 05.7 -0.9**
**GRTK Grand Turk 2.93 324** *e*P **Pn 01 56 06.1 -0.5**
GRTK *e*S **Sn 01 56 40.2 -1.7**
GRTK IAML 01 56 43.3
comp=N,229nm,0.3s
GRTK IAML 01 56 44.7
comp=N,218nm,0.3s
**GRTK Grand Turk 2.93 324** *i* P **Pn 01 56 06.3 -0.3**
GRTK *e*S **Sn 01 56 42.0 +0.1**
GRTK IAML 01 56 43.4
comp=Z,139nm,0.7s
**GCPR Guaynabo City 3.13 105** Pn **Pn 01 56 11.2 +1.8**
**IGPR InterUniversit 3.22 111 Pb 01 56 13.1 -4.2**
**PDPR Patillas Dam, 3.28 109 Pb 01 56 14.0 -4.3**
**HUMP Col San Antoni 3.39 106 Pn 01 56 15.1 +2.1**
**MASC Masc 4.78 283** *e*P **Pn 01 56 30.6 -1.4**
MASC *e*S **Sn 01 57 26.4 -1.2**
**QMBU Quimbuelo 5.33 282** *e*P **Pn 01 56 38.1 -1.5**
QMBU *e*S **Sn 01 57 38.6 -2.4**
QMBU IAML 01 57 40.6
comp=Z,31nm,0.3s
QMBU IAML 01 57 40.6
comp=N,31nm,0.3s
**NMDO Nuevo Mundo 5.56 286** Pn **Pn 01 56 43.2 +0.5**
**NMDO Nuevo Mundo 5.56 286** *e*P **Pn 01 56 39.9 -2.8**
**GTBY Guantanamo Bay 5.56 279** Pn **Pn 01 56 44.7 +1.9**
**GTBY Guantanamo Bay 5.56 279** *e*P **Pn 01 56 42.0 -0.8**
GTBY *e*S **Sn 01 57 45.7 -1.1**
GTBY IAML 01 57 48.6
comp=N,25nm,0.3s
GTBY IAML 01 57 49.0
comp=N,35nm,0.4s
**RCC Rio Carpintero 6.12 279** *e*P **Pn 01 56 50.0 -0.4**
RCC *e*S **Sn 01 57 55.2 -5.3**
RCC IAML 01 58 01.8
comp=N,9.0nm,0.4s
RCC IAML 01 58 01.8
comp=E,8.3nm,0.4s
**MARVS Santiago de Cu 6.31 279** *e*P **Pn 01 56 53.3 +0.3**
**AUA1 Aruba 6.64 186** Pn **Pn 01 56 57.3 -0.2**
**CHIV Chivirico 6.79 278** Pn **Pn 01 57 12.6 +3.0**
**BAUV El Baul 10.21 173 Pn 01 57 49.1 +2.5**
**255A Hazlehurst 17.41 320 P 01 59 27.1 +2.8**
**W57A Gilead 18.56 331** P **Pn 01 59 37.5 +0.4**
W57A IAmb IAmb 02 00 20.2
comp=Z,5.9nm,0.9s
**BOAV Boa Vista 18.72 152** P **Pn 01 59 40.7 +1.5**
**R58B Mineral 20.20 340** Pn 01 59 59.9 +3.2
R58B IAmb IAmb 02 00 10.6
comp=Z,9.6nm,1.4s

*IDC* ***18*** *02:21:01.2±5.5,34°.53N×24°.61E,h26km±40km,mb3.9/11, mbtmp4.0/19,ML3.4/7,Error ellipse: s-maj=18.4km s-min=13.2km az=165.0*
*NEIC* ***18*** *02:21:01.8±2.2,34°.35N±0°.07×24°.47E±0°.08,h42km±10km, mb4.0/17,Error ellipse: s-maj=10.3km s-min=9.4km az=161.0*
*BEO* ***18*** *02:21:02.9±1.1,34°.18N×23°.82E,h64km±8km,ML3.8/5*
*ATH* ***18*** *02:21:03.5,34°.37N×24°.50E,h26km±2km,ML3.5/9,Error ellipse: s-maj=3.9km s-min=1.8km az=190.0*
*ISK* ***18*** *02:21:03.6,34°.46N×24°.62E,h31km,ML4.0/15*
*THE* ***18*** *02:21:04.4,34°.40N×24°.52E,h55km±5km,ML3.7/4,Error ellipse: s-maj=5.5km s-min=1.5km az=346.0*
*NAO* ***18*** *02:21:07.5,35°.08N×24°.47E,h33km,mb3.9*
*AFAD* ***18*** *02:21:08.6±0.0,34°.87N×25°.27E,h8km±3km,MW3.7*
*GII* ***18*** *02:21:10.2±0.4,34°.49N×25°.44E,h60km,Md3.6/6, Mws3.8/7,confirmed*

**ISC 18 02:21:02.3**±1.6,**34°.27N**±0°.06×**24°.67E**±0°.04,**h38**km±4km, **n244,σ2$41**/273,**mb4.0**/14,**Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **GVD** | **Gavdhos** | **0.74** | **320** | Pg | | **Pn** | **02 21 15.8** | **-0.4** |
| GVD | | | | Sg | | **Sn** | **02 21 24.9** | **-1.3** |
| **GVD** | **Gavdhos** | **0.74** | **320** | P | | **Pn** | **02 21 15.8** | **-0.4** |
| GVD | | | | S | | **Sn** | **02 21 26.3** | **+0.1** |
| | 12µm,0.4s | | | | | | | |
| **GVD** | **Gavdhos** | **0.74** | **320** | P | | **Pn** | **02 21 15.5** | **-0.7** |
| GVD | | | | S | | **Sn** | **02 21 22.7** | **-3.5** |
| GVD | | | | AML | AML | | 02 21 28.9 | |
| | comp=E,25896µm,0.4s | | | | | | | |
| GVD | | | | AML | AML | | 02 21 30.6 | |
| | comp=N,24114µm,0.3s | | | | | | | |
| **TMBK** | **Timbaki Herakl** | **0.80** | **6** | P | | **Pn** | **02 21 17.3** | **+0.3** |
| TMBK | | | | S | | **Sn** | **02 21 27.9** | **+0.1** |
| **TMBK** | **Timbaki Herakl** | **0.80** | **6** | P | | **Pn** | **02 21 17.4** | **+0.4** |
| TMBK | | | | S | | **Sn** | **02 21 27.5** | **-0.3** |
| **IDI** | **Anoyia** | **1.03** | **10** | Pg | | **Pn** | **02 21 20.4** | **+0.2** |
| IDI | | | | Sg | | **Sn** | **02 21 31.5** | **-2.0** |
| **IDI** | **Anoyia** | **1.03** | **10** | Pn | | **Pn** | **02 21 20.3** | **0.0** |
| IDI | | | | Sn | | **Sn** | **02 21 36.2** | **+2.8** |
| **IDI** | **Anoyia** | **1.03** | **10** | P | | **Pn** | **02 21 20.7** | **+0.5** |
| IDI | | | | S | | **Sn** | **02 21 34.1** | **+0.6** |
| | comp=N,1µm,0.3s | | | | | | | |
| **IDI** | **Anoyia** | **1.03** | **10** | Pn | | **Pn** | **02 21 20.8** | **+0.6** |
| | comp=N,93nm,0.3s,baz=194,slow=7.4,SNR=297 | | | | | | | |
| **IDI** | **Anoyia** | **1.03** | **10** | P | | **Pn** | **02 21 20.9** | **+0.6** |
| IDI | | | | S | | **Sn** | **02 21 33.3** | **-0.1** |
| IDI | | | | AML | AML | | 02 21 36.0 | |
| | comp=E,2503µm,0.3s | | | | | | | |
| IDI | | | | AML | AML | | 02 21 37.8 | |
| | comp=N,2668µm,0.3s | | | | | | | |
| **KSTL** | **Kastelli Herak** | **1.08** | **18** | P | | **Pn** | **02 21 23.1** | **+2.3** |
| KSTL | | | | S | | **Sn** | **02 21 36.4** | **+1.8** |
| **KSTL** | **Kastelli Herak** | **1.08** | **18** | P | | **Pn** | **02 21 23.1** | **+2.3** |
| KSTL | | | | S | | **Sn** | **02 21 37.0** | **+2.4** |
| KSTL | | | | AML | AML | | 02 21 38.6 | |
| | comp=N,6021µm,0.7s | | | | | | | |
| KSTL | | | | AML | AML | | 02 21 39.4 | |
| | comp=E,2567µm,0.4s | | | | | | | |
| **IACM** | **Heraklion** | **1.08** | **18** | P | | **Pn** | **02 21 22.4** | **+1.5** |
| IACM | | | | S | | **Sn** | **02 21 36.7** | **+2.1** |
| | comp=E,8µm,0.6s | | | | | | | |
| **IACM** | **Heraklion** | **1.08** | **18** | P | | **Pn** | **02 21 22.5** | **+1.5** |
| IACM | | | | S | | **Sn** | **02 21 35.9** | **+1.2** |
| **KNDR** | **Palaiochora Ch** | **1.25** | **320** | Pn | | **Pn** | **02 21 23.6** | **+0.4** |
| **KNDR** | **Palaiochora Ch** | **1.25** | **320** | P | | **Pn** | **02 21 23.1** | **-0.1** |
| KNDR | | | | S | | **Sn** | **02 21 36.9** | **-1.9** |
| **IMMV** | **Iera Moni Meta** | **1.31** | **335** | Pn | | **Pn** | **02 21 23.6** | **-0.5** |
| IMMV | | | | Sn | | **Sn** | **02 21 38.0** | **-2.3** |
| **IMMV** | **Iera Moni Meta** | **1.31** | **335** | P | | **Pn** | **02 21 23.9** | **-0.2** |
| IMMV | | | | S | | **Sn** | **02 21 39.1** | **-1.2** |
| | comp=E,3µm,0.6s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **1.31** | **335** | P | | **Pn** | **02 21 23.9** | **-0.2** |
| IMMV | | | | S | | **Sn** | **02 21 38.7** | **-1.6** |
| IMMV | | | | AML | AML | | 02 21 49.4 | |
| | comp=E,6542µm,0.8s | | | | | | | |
| IMMV | | | | AML | AML | | 02 21 51.2 | |
| | comp=N,4124µm,0.5s | | | | | | | |
| **CHAN** | **Chania** | **1.34** | **338** | P | | **Pn** | **02 21 24.5** | **0.0** |
| CHAN | | | | S | | **Sn** | **02 21 39.0** | **-2.1** |
| CHAN | | | | AML | AML | | 02 21 51.0 | |
| | comp=E,3972µm,0.7s | | | | | | | |
| CHAN | | | | AML | AML | | 02 21 51.8 | |
| | comp=N,4635µm,0.5s | | | | | | | |
| **RODP** | **Rodopos** | **1.48** | **330** | Pn | | **Pn** | **02 21 26.2** | **-0.2** |
| **RODP** | **Rodopos** | **1.48** | **330** | P | | **Pn** | **02 21 26.6** | **+0.2** |
| **ZKR** | **Zakros** | **1.53** | **56** | Pn | | **Pn** | **02 21 28.7** | **+1.6** |
| **ZKR** | **Zakros** | **1.53** | **56** | P | | **Pn** | **02 21 30.1** | **+3.0** |
| **ZKR** | **Zakros** | **1.53** | **56** | P | | **Pn** | **02 21 30.3** | **+3.2** |
| ZKR | | | | S | | **Sn** | **02 21 49.2** | **+3.5** |
| ZKR | | | | AML | AML | | 02 21 52.5 | |
| | comp=E,1706µm,0.4s | | | | | | | |
| ZKR | | | | AML | AML | | 02 21 55.8 | |
| | comp=N,808µm,0.7s | | | | | | | |
| **ANKY** | **Antikythira Is** | **1.94** | **325** | P | | **Pn** | **02 21 32.9** | **+0.2** |
| **ANKY** | **Antikythira Is** | **1.94** | **325** | P | | **Pn** | **02 21 32.6** | **-0.2** |
| ANKY | | | | AML | AML | | 02 22 11.0 | |
| | comp=E,966µm,0.8s | | | | | | | |
| ANKY | | | | AML | AML | | 02 22 18.3 | |
| | comp=N,897µm,0.9s | | | | | | | |
| **THR9** | **Santorini-Faro** | **2.16** | **15** | P | | **Pn** | **02 21 36.3** | **+0.6** |
| **THR6** | **Thira Island,** | **2.16** | **16** | P | | **Pn** | **02 21 35.9** | **+0.2** |
| **SANT** | **Santorini** | **2.19** | **17** | Pn | | **Pn** | **02 21 36.6** | **+0.4** |
| **SANT** | **Santorini** | **2.19** | **17** | Pn | | **Pn** | **02 21 36.9** | **+0.7** |
| **SANT** | **Santorini** | **2.19** | **17** | P | | **Pn** | **02 21 37.1** | **+0.9** |
| **SNT5** | **Nea Kammeni, S** | **2.21** | **15** | P | | **Pn** | **02 21 36.5** | **+0.1** |
| **THR5** | **Thira Island,** | **2.21** | **14** | P | | **Pn** | **02 21 36.7** | **+0.3** |
| **THR3** | **Thira Island,** | **2.21** | **16** | P | | **Pn** | **02 21 36.5** | **0.0** |
| **THR3** | **Thira Island,** | **2.21** | **16** | P | | **Pn** | **02 21 36.4** | **0.0** |
| **SNT1** | **Gialos, Santor** | **2.23** | **16** | P | | **Pn** | **02 21 36.7** | **+0.1** |
| **SNT1** | **Gialos, Santor** | **2.23** | **16** | P | | **Pn** | **02 21 36.5** | **-0.1** |
| **SAP3** | **Santorini-Thir** | **2.23** | **14** | P | | **Pn** | **02 21 36.8** | **+0.1** |
| **THR8** | **Santorini-Mono** | **2.23** | **17** | P | | **Pn** | **02 21 36.4** | **-0.2** |
| **THR8** | **Santorini-Mono** | **2.23** | **17** | P | | **Pn** | **02 21 36.4** | **-0.2** |
| **THR2** | **Thira Island,** | **2.26** | **16** | P | | **Pn** | **02 21 37.0** | **-0.1** |
| **CMBO** | **Columbo, Santo** | **2.27** | **15** | P | | **Pn** | **02 21 37.8** | **+0.5** |
| **CMBO** | **Columbo, Santo** | **2.27** | **15** | P | | **Pn** | **02 21 37.8** | **+0.5** |
| **KTHA** | **Kythira Island** | **2.37** | **327** | Pn | | **Pn** | **02 21 38.9** | **+0.2** |
| **KTHA** | **Kythira Island** | **2.37** | **327** | P | | **Pn** | **02 21 38.4** | **-0.3** |
| **KTHA** | **Kythira Island** | **2.37** | **327** | P | | **Pn** | **02 21 38.1** | **-0.5** |
| KTHA | | | | S | | **Sn** | **02 22 03.9** | **-2.6** |
| **KARP** | **Karpathos** | **2.41** | **58** | Pn | | **Pn** | **02 21 41.2** | **+2.0** |
| **KARP** | **Karpathos** | **2.41** | **58** | Pn | | **Pn** | **02 21 42.3** | **+3.0** |
| **KARP** | **Karpathos** | **2.41** | **58** | P | | **Pn** | **02 21 42.7** | **+3.5** |
| **KARP** | **Karpathos** | **2.41** | **58** | P | | **Pn** | **02 21 42.8** | **+3.5** |
| **KARP** | **Karpathos** | **2.41** | **58** | P | | **Pn** | **02 21 42.6** | **+3.5** |
| KARP | | | | S | | **Sn** | **02 22 10.4** | **+2.9** |
| KARP | | | | AML | AML | | 02 22 12.7 | |
| | comp=N,2850µm,0.1s | | | | | | | |
| KARP | | | | AML | AML | | 02 22 13.0 | |
| | comp=E,2156µm,0.1s | | | | | | | |
| **MHLO** | **Agia Marina, M** | **2.42** | **355** | P | | **Pn** | **02 21 38.6** | **-0.7** |
| **VLI** | **Veliai** | **2.82** | **330** | P | | **Pn** | **02 21 44.2** | **-0.6** |
| VLI | | | | AML | AML | | 02 22 13.9 | |
| | comp=E,440µm,0.5s | | | | | | | |
| VLI | | | | AML | AML | | 02 22 17.2 | |
| | comp=N,461µm,0.3s | | | | | | | |
| **APE** | **Apeiranthos** | **2.88** | **14** | P | | **Pn** | **02 21 44.7** | **-0.9** |
| **YAZI** | **Mula-Dat§a-** | **3.31** | **43** | P | | **Pn** | **02 21 52.0** | **+0.5** |
| YAZI | | | | S | | **Sn** | **02 22 25.6** | **-4.0** |
| **DAT** | **Datca** | **3.41** | **43** | Pn | | **Pn** | **02 21 54.6** | **+1.6** |
| **DAT** | **Datca** | **3.41** | **43** | P | | **Pn** | **02 21 54.1** | **+1.1** |
| DAT | | | | S | | **Sn** | **02 22 29.7** | **-2.6** |
| **DAT** | **Datca** | **3.41** | **43** | P | | **Pn** | **02 21 54.2** | **+1.2** |
| **BODT** | **Bodrum** | **3.52** | **37** | P | | **Pn** | **02 21 55.2** | **+0.8** |
| **BDRM** | **Kayabasi** | **3.59** | **38** | P | | **Pn** | **02 21 56.2** | **+0.8** |
| BDRM | | | | S | | **Sn** | **02 22 29.7** | **-6.8** |
| **TURN** | **Turunc** | **3.84** | **48** | Pn | | **Pn** | **02 22 01.1** | **+2.3** |
| **TURN** | **Turunc** | **3.84** | **48** | P | | **Pn** | **02 22 00.5** | **+1.7** |
| TURN | | | | S | | **Sn** | **02 22 40.9** | **-1.8** |
| **DION** | **Dionisos Attik** | **3.84** | **351** | P | | **Pn** | **02 21 58.9** | **0.0** |
| **GUR** | **Goura** | **4.11** | **333** | P | | **Pn** | **02 22 01.7** | **-0.9** |
| **DALY** | **Dalyan (Mula)** | **4.12** | **51** | Pn | | **Pn** | **02 22 05.2** | **+2.5** |
| **MULA** | **Mugla, Merkez-** | **4.21** | **44** | P | | **Pn** | **02 22 06.2** | **+2.3** |
| MULA | | | | S | | **Sn** | **02 22 49.1** | **-2.8** |
| **IZZE** | **Mula-Seydike** | **4.31** | **59** | P | | **Pn** | **02 22 06.5** | **+1.2** |
| IZZE | | | | S | | **Sn** | **02 22 50.2** | **-4.0** |
| **FETY** | **Fethiye** | **4.31** | **56** | Pn | | **Pn** | **02 22 07.2** | **+1.9** |
| **FETY** | **Fethiye** | **4.31** | **56** | P | | **Pn** | **02 22 08.8** | **+3.5** |
| FETY | | | | S | | **Sn** | **02 22 51.5** | **-2.8** |
| **SABU** | **Mula-Dalaman** | **4.33** | **53** | P | | **Pn** | **02 22 07.5** | **+1.9** |
| SABU | | | | S | | **Sn** | **02 22 51.1** | **-3.4** |
| **AKAS** | **Kas** | **4.49** | **63** | Pn | | **Pn** | **02 22 10.3** | **+2.4** |
| **AKAS** | **Kas** | **4.49** | **63** | P | | **Pn** | **02 22 10.1** | **+2.2** |
| **ESEN** | **Aydn-Nazilli** | **4.61** | **39** | P | | **Pn** | **02 22 11.5** | **+2.1** |
| **DNZT** | **Denizli-Tavas-** | **4.64** | **49** | P | | **Pn** | **02 22 11.9** | **+1.9** |
| DNZT | | | | S | | **Sn** | **02 22 58.6** | **-4.0** |
| **IZMR** | **zmir-demi** | **4.68** | **34** | P | | **Pn** | **02 22 12.0** | **+1.6** |
| **TAVA** | **DENIZLI_Tavas** | **4.70** | **46** | P | | **Pn** | **02 22 12.7** | **+2.1** |
| TAVA | | | | S | | **Sn** | **02 22 56.8** | **-7.1** |
| **CAEL** | **Denizli, Camel** | **4.74** | **52** | P | | **Pn** | **02 22 13.1** | **+1.8** |
| CAEL | | | | S | | **Sn** | **02 23 00.9** | **-4.0** |
| **KNIK** | **Mula-Seydike** | **4.75** | **56** | P | | **Pn** | **02 22 13.0** | **+1.6** |
| **ELL** | **Elmali** | **4.94** | **59** | Pn | | **Pn** | **02 22 16.4** | **+2.4** |
| **ELL** | **Elmali** | **4.94** | **59** | Pn | | **Pn** | **02 22 15.6** | **+1.6** |
| **KIRA** | **zmir-Kiraz** | **4.94** | **37** | P | | **Pn** | **02 22 15.7** | **+1.6** |
| **GOLH** | **Golhisar** | **4.96** | **52** | P | | **Pn** | **02 22 16.2** | **+1.9** |
| **INCE** | **Denizli-Bozkur** | **5.25** | **48** | P | | **Pn** | **02 22 19.4** | **+1.1** |
| **KEK** | **Kerkira** | **6.68** | **326** | Pn | | **Pn** | **02 22 34.1** | **-3.7** |
| **SRS** | **Serrai** | **6.88** | **353** | *e*Pn | | **Pn** | **02 22 40.3** | **-0.3** |
| **FNA** | **Florina** | **7.00** | **339** | Pn | | **Pn** | **02 22 39.3** | **-3.0** |
| **FNA** | **Florina** | **7.00** | **339** | *e*Pn | | **Pn** | **02 22 39.9** | **-2.4** |
| FNA | | | | *e*Sn | | **Sn** | **02 23 51.7** | **-9.0** |
| **KBN** | **Korca** | **7.05** | **335** | Pn | | **Pn** | **02 22 41.1** | **-1.8** |
| **CSS** | **Mathiatis** | **7.18** | **82** | Pn | | **Pn** | **02 22 44.5** | **-0.2** |
| **CSS** | **Mathiatis** | **7.18** | **82** | S | | **Sn** | **02 23 57.9** | **-7.0** |
| **CSS** | **Mathiatis** | **7.18** | **82** | P | | **Pn** | **02 22 44.2** | **-0.4** |
| **OHR** | **Ohrid** | **7.48** | **337** | *i* Pn | | **Pn** | **02 22 47.4** | **-1.5** |
| OHR | | | | *e*Sg | | **Sn** | **02 24 04.8** | **-7.6** |
| **SCTE** | **Santa Cesarea** | **7.61** | **321** | Pn | | **Pn** | **02 22 47.3** | **-3.3** |
| **TIP** | **Timpagrande** | **8.02** | **310** | Pn | | **Pn** | **02 22 52.9** | **-3.3** |
| **CEL** | **Celeste** | **8.12** | **302** | | | **Pn** | **02 22 54.2** | **-3.5** |
| **WDD** | **Wied Dalam** | **8.46** | **284** | Pn | | **Pn** | **02 22 59.9** | **-2.3** |
| **PUK** | **Puka** | **8.62** | **336** | Pn | | **Pn** | **02 23 00.9** | **-3.6** |
| **OFRI** | **`Ofer** | **8.78** | **98** | P | | **Pn** | **02 23 06.4** | **-0.2** |
| **OFRI** | **`Ofer** | **8.78** | **98** | S | | **Sn** | **02 24 37.8** | **-6.5** |
| **HNTI** | **Hanita** | **8.84** | **95** | P | | **Pn** | **02 23 07.8** | **+0.2** |
| **KZIT** | **Kziot** | **8.87** | **110** | P | | **Pn** | **02 23 08.2** | **+0.3** |
| **KZIT** | **Kziot** | **8.87** | **110** | S | | **Sn** | **02 24 41.7** | **-4.9** |
| **KZIT** | **Kziot** | **8.87** | **110** | P | | **Pn** | **02 23 08.4** | **+0.5** |
| **VAE** | **Valguarnera** | **8.91** | **294** | Pn | | **Pn** | **02 23 08.7** | **+0.2** |
| | comp=N,2.7nm,0.3s,baz=108,slow=5.2,SNR=25 | | | | | | | |
| | comp=N,10nm,0.4s | | | | | | | |
| **SLTI** | **Sal'it** | **8.92** | **100** | P | | **Pn** | **02 23 09.3** | **+0.7** |
| **SLTI** | **Sal'it** | **8.92** | **100** | P | | **Pn** | **02 23 09.1** | **+0.5** |
| **DRME** | **Dracevica, Mon** | **9.00** | **333** | *e*Pn | | **Pn** | **02 23 05.1** | **-4.5** |
| **BRTR** | **Keskin Array B** | **9.01** | **50** | Pn | | **Pn** | **02 23 10.9** | **+1.0** |
| **BRTR** | **Keskin Array B** | **9.01** | **50** | Pn | | **Pn** | **02 23 10.6** | **+0.8** |
| | comp=N,0.1nm,0.3s,baz=219,slow=13,SNR=3.0 | | | | | | | |
| BRTR | | | | Sn | | **Sn** | **02 24 46.0** | **-3.9** |
| | comp=N,0.3nm,0.3s,baz=214,slow=26,SNR=6.6 | | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | | |
| **AMAZ** | **Amatzia** | **9.04** | **105** | P | | **Pn** | **02 23 10.9** | **+0.7** |
| **AMAZ** | **Amatzia** | **9.04** | **105** | S | | **Sn** | **02 24 45.9** | **-4.8** |
| **AMAZ** | **Amatzia** | **9.04** | **105** | P | | **Pn** | **02 23 11.3** | **+1.1** |
| **MMA0** | **Mount Meron ar** | **9.04** | **95** | P | | **Pn** | **02 23 10.4** | **+0.1** |
| **MMA0B** | **Mount Meron ar** | **9.04** | **95** | P | | **Pn** | **02 23 10.4** | **+0.1** |
| **MMAI** | **Mount Meron Ar** | **9.04** | **95** | Pn | | **Pn** | **02 23 10.0** | **-0.3** |
| | comp=N,3.4nm,0.3s,baz=266,slow=12,SNR=18 | | | | | | | |
| MMAI | | | | Sn | | **Sn** | **02 24 46.8** | **-4.0** |
| | comp=N,13nm,0.3s,baz=272,slow=23,SNR=11 | | | | | | | |
| | comp=N,2.4nm,0.3s | | | | | | | |
| **SALP** | **Salfit** | **9.09** | **101** | P | | **Pn** | **02 23 11.3** | **+0.3** |
| **SALP** | **Salfit** | **9.09** | **101** | P | | **Pn** | **02 23 11.2** | **+0.2** |
| **SALP** | **Salfit** | **9.09** | **101** | S | | **Sn** | **02 24 45.9** | **-6.1** |
| **MMLI** | **Mount Malkishu** | **9.18** | **99** | S | | **Sn** | **02 24 47.5** | **-6.8** |
| **MMLI** | **Mount Malkishu** | **9.18** | **99** | P | | **Pn** | **02 23 12.4** | **+0.2** |
| **PDG** | **Podgorica** | **9.18** | **334** | Pn | | **Pn** | **02 23 08.9** | **-3.2** |
| **PDG** | **Podgorica** | **9.18** | **334** | *e*Pn | | **Pn** | **02 23 08.9** | **-3.2** |
| PDG | | | | *e*Sn | | Sn | 02 24 40.7 | -13 |
| **PDG** | **Podgorica** | **9.18** | **334** | *e*Pn | | Pn | 02 23 07.3 | -4.8 |
| **GEM** | **Giv'at Ha'Em** | **9.22** | **94** | S | | **Sn** | **02 24 48.7** | **-6.4** |
| **GEM** | **Giv'at Ha'Em** | **9.22** | **94** | P | | **Pn** | **02 23 12.1** | **-0.6** |
| **YTIR** | **Yattir** | **9.26** | **105** | P | | **Pn** | **02 23 14.4** | **+1.1** |
| **YTIR** | **Yattir** | **9.26** | **105** | P | | **Pn** | **02 23 14.0** | **+0.7** |
| **YTIR** | **Yattir** | **9.26** | **105** | S | | **Sn** | **02 24 51.0** | **-5.2** |
| **NATI** | **Neve Ativ** | **9.27** | **93** | P | | **Pn** | **02 23 13.5** | **+0.1** |
| **NATI** | **Neve Ativ** | **9.27** | **93** | P | | **Pn** | **02 23 13.2** | **-0.2** |
| **HMDT** | **Nahal Hemdat** | **9.31** | **99** | P | | **Pn** | **02 23 15.7** | **+1.7** |
| **HMDT** | **Nahal Hemdat** | **9.31** | **99** | S | | **Sn** | **02 24 51.9** | **-5.6** |
| **HMDT** | **Nahal Hemdat** | **9.31** | **99** | P | | **Pn** | **02 23 14.1** | **+0.1** |
| **QRNJ** | **Al-Qirein** | **9.33** | **99** | P | | **Pn** | **02 23 15.0** | **+0.8** |
| **SELS** | **Selova** | **9.35** | **344** | *e*Pn | | **Pn** | **02 23 11.8** | **-2.6** |
| SELS | | | | *e*Sn | | Sn | 02 24 47.0 | -11 |
| **KSHT** | **Keshet** | **9.38** | **95** | P | | **Pn** | **02 23 15.2** | **+0.3** |
| **SHMJ** | **Saham** | **9.40** | **96** | P | | **Pn** | **02 23 15.3** | **+0.2** |
| **DSI** | **Dead Sea** | **9.40** | **104** | P | | **Pn** | **02 23 15.7** | **+0.5** |
| **DSI** | **Dead Sea** | **9.40** | **104** | P | | **Pn** | **02 23 15.5** | **+0.4** |
| **MSBI** | **Mazada** | **9.47** | **105** | P | | **Pn** | **02 23 17.1** | **+1.0** |
| **MSBI** | **Mazada** | **9.47** | **105** | P | | **Pn** | **02 23 16.3** | **+0.2** |
| **KRMI** | **Paran Flat** | **9.48** | **113** | P | | **Pn** | **02 23 17.8** | **+1.6** |
| **PRNI** | **Paran** | **9.58** | **111** | P | | **Pn** | **02 23 19.1** | **+1.4** |
| **PRNI** | **Paran** | **9.58** | **111** | P | | **Pn** | **02 23 18.7** | **+1.1** |
| **LISJ** | **El Lisan** | **9.60** | **105** | P | | **Pn** | **02 23 19.5** | **+1.7** |
| **ZFRI** | **Zfri** | **9.63** | **110** | P | | **Pn** | **02 23 18.8** | **+0.6** |
| **ZFRI** | **Zfri** | **9.63** | **110** | P | | **Pn** | **02 23 18.5** | **+0.2** |
| **GHAJ** | **Ghor Haditha** | **9.64** | **105** | | | **Pn** | **02 23 19.7** | **+1.3** |
| **GHAJ** | **Ghor Haditha** | **9.64** | **105** | P | | **Pn** | **02 23 19.8** | **+1.3** |
| **SJES** | **Sjenica** | **9.69** | **339** | *e*Pn | | **Pn** | **02 23 15.1** | **-4.1** |
| SJES | | | | *e*Sn | | Sn | 02 24 55.3 | -11 |
| **SJES** | **Sjenica** | **9.69** | **339** | *e*Pn | | **Pn** | **02 23 14.6** | **-4.6** |
| **HRFI** | **Mount Harif** | **9.75** | **113** | P | | **Pn** | **02 23 22.0** | **+2.0** |
| **HRFI** | **Mount Harif** | **9.75** | **113** | S | | **Sn** | **02 25 04.2** | **-4.0** |
| **HRFI** | **Mount Harif** | **9.75** | **113** | P | | **Pn** | **02 23 21.1** | **+1.1** |
| **TREB** | **Trebinje** | **9.77** | **331** | *e*Pn | | Pn | 02 23 13.6 | -6.6 |
| **MBRI** | **Mt Berech** | **9.78** | **114** | P | | **Pn** | **02 23 21.8** | **+1.4** |
| **MBRI** | **Mt Berech** | **9.78** | **114** | P | | **Pn** | **02 23 21.7** | **+1.3** |
| **CLTB** | **Caltabellotta** | **9.85** | **293** | Pn | | **Pn** | **02 23 19.6** | **-1.8** |
| **BRY** | **Bratogost** | **9.86** | **333** | *e*Pn | | **Pn** | **02 23 18.3** | **-3.2** |
| **EIL** | **Elat** | **9.87** | **115** | Pn | | **Pn** | **02 23 22.4** | **+0.9** |
| | comp=N,13nm,0.4s,baz=280,slow=1.7,SNR=74 | | | | | | | |
| EIL | | | | Sn | | **Sn** | **02 25 06.7** | **-4.3** |
| | comp=N,3.7nm,0.3s,baz=5.3,slow=9.8,SNR=7.1 | | | | | | | |
| **EIL** | **Elat** | **9.87** | **115** | P | | **Pn** | **02 23 22.9** | **+1.4** |
| **EIL** | **Elat** | **9.87** | **115** | P | | **Pn** | **02 23 22.4** | **+0.9** |
| **AQBJ** | **Aqaba** | **9.91** | **114** | P | | **Pn** | **02 23 23.5** | **+1.3** |
| **UPM** | **Unac-Piva** | **9.98** | **335** | *e*Pn | | **Pn** | **02 23 19.3** | **-4.0** |
| **BNN** | **Bunyan** | **10.09** | **60** | | | **Pn** | **02 23 25.6** | **+1.0** |
| **STON** | **Ston** | **10.17** | **330** | *e*Pn | | **Pn** | **02 23 21.8** | **-3.7** |
| STON | | | | *e*Sn | | Sn | 02 25 00.7 | -17 |
| **STON** | **Ston** | **10.17** | **330** | *e*Pn | | Pn | 02 23 18.5 | -7.0 |
| **RUDO** | **Rudo** | **10.20** | **338** | *e*Pn | | Pn | 02 23 18.3 | -7.7 |
| **BBLS** | **Lazi&#263i** | **10.41** | **338** | *e*Pn | | **Pn** | **02 23 24.5** | **-4.5** |
| BBLS | | | | *e*Sn | | Sn | 02 25 09.6 | -15 |
| **BBLS** | **Lazi&#263i** | **10.41** | **338** | *e*Pn | | Pn | 02 23 21.5 | -7.5 |
| **DIVS** | **Divibare** | **10.46** | **341** | *e*Pn | | **Pn** | **02 23 26.0** | **-3.6** |
| DIVS | | | | *e*Sn | | Sn | 02 25 11.8 | -14 |
| **ASF** | **Jabal al Asfar** | **10.46** | **98** | Pn | | **Pn** | **02 23 30.0** | **+0.3** |
| | comp=N,0.8nm,0.3s,baz=53,slow=0.0,SNR=6.2 | | | | | | | |
| ASF | | | | Sn | | **Sn** | **02 25 19.9** | **-5.7** |
| | comp=N,0.7nm,0.3s,baz=214,slow=0.1,SNR=6.1 | | | | | | | |
| | comp=N,2.3nm,0.4s | | | | | | | |
| **PAOL** | **Paolisi** | **10.46** | **313** | Pn | | **Pn** | **02 23 26.0** | **-3.7** |
| **HAPS** | **Han Pijesak,Bl** | **10.75** | **337** | *e*Pn | | Pn | 02 23 27.9 | -5.8 |
| **INTR** | **Introdacqua** | **11.46** | **316** | Pn | | **Pn** | **02 23 40.9** | **-2.4** |
| **BLY** | **Banja Luka** | **11.94** | **333** | *e*Pn | | Pn | 02 23 40.9 | -9.0 |
| **A050A** | **Klekovaca** | **11.97** | **331** | *e*Pn | | Pn | 02 23 45.1 | -5.3 |
| **CAMP** | **Campotosto** | **12.07** | **316** | Pn | | **Pn** | **02 23 48.1** | **-3.7** |
| **A051A** | **Mrakovica** | **12.27** | **333** | *e*Pn | | Pn | 02 23 46.4 | -8.0 |
| **NRCA** | **Norcia** | **12.43**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **36.47** | **62** | P | **P** | 02 28 03.7 | **+0.1** | |
| KK31 | | | | IAmb | IAmb | 02 28 06.3 | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **KKAR** | **Karatay Array** | **36.47** | **62** | P | **P** | 02 28 03.5 | **-0.1** | |
| **DBIC** | **Dimbokro** | **38.70** | **232** | P | **P** | 02 28 23.3 | **+0.7** | |
| | comp=Z,2.5nm,0.8s,baz=55,slow=12,SNR=1.7 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.00** | **50** | P | **P** | 02 28 49.3 | **-0.3** | |
| | comp=Z,1.3nm,0.4s,baz=277,slow=8.5,SNR=13 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **44.61** | **56** | P | **P** | 02 29 11.2 | **+0.5** | |
| **MKAR** | **Makanchi Array** | **44.61** | **56** | P | **P** | 02 29 11.4 | **+0.7** | |
| | comp=Z,3.4nm,0.5s,baz=279,slow=6.8,SNR=51 | | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **45.91** | **46** | P | **P** | 02 29 19.5 | **-1.5** | |
| ZAA0 | | | | IAmb | IAmb | 02 29 44.8 | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.91** | **46** | P | **P** | 02 29 19.8 | **-1.2** | |
| **ZALV** | **Zalesovo Beam** | **45.91** | **46** | P | **P** | 02 29 19.9 | **-1.0** | |
| | comp=Z,1.8nm,0.4s,baz=269,slow=9.0,SNR=7.4 | | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **60.36** | **50** | P | **P** | 02 31 07.5 | **-0.1** | |
| | comp=Z,1.0nm,0.5s,baz=293,slow=7.5,SNR=5.8 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **116.89** | **97** | PKP | **PKPdf** | 02 39 42.8 | **-0.4** | |
| | comp=Z,0.3nm,1.0s,baz=316,slow=1.3,SNR=4.8 | | | | | | | |

*ASIES **18** 02:30:05.2,24.02N×121.02E,h19km,ML3.8,Mw3.5, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; $M_{rr}$1.74; $M_{\theta\theta}$0.04; $M_{\phi\phi}$-1.78; $M_{r\theta}$-0.29; $M_{\theta\phi}$0.14; $M_{\phi r}$-1.65; Fault plane solution: $M_o$2.43085×$10^{21}$ NP1: $\phi_s$185.35000°,$\delta$66.87000°,$\lambda$97.94000°. NP2: $\phi_s$345.81000°,$\delta$24.38000°,$\lambda$72.08000°. Principal axes: T Plg67.1870°, Azm109.9450°; N Plg7.2970°, Azm2.2220°; P Plg21.4890°, Azm269.3320°;*

*TAP **18** 02:30:05.2,24.02N×121.01E,h19km,ML3.8,B*

*JMA **18** 02:30:05.6±0.2,24.0N±0.3×121.0E±0.7,h12km±3km, MV3.4/11,TAIWAN REGION*

**ISC 18 02:30:05.4±0.8,24.02N±0.01×121.02E±0.01,h19km±1km, n152,σ0661/262,9C-45D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WPL** | **Puli Township** | **0.06** | **260** | ⇑ | *e* | P | **Pg** | **02 30 10.8** | **+1.9** |
| | baz=259 | | | | | | | | |
| **DPDB** | **Guoxing** | **0.09** | **277** | ⇑ | *i* | P | **Pg** | **02 30 09.2** | **0.0** |
| DPDB | baz=278 | | | | *i* | S | **Sg** | **02 30 11.9** | **+0.2** |
| | baz=278 | | | | | | | | |
| **WUSB** | **Renai** | **0.09** | **109** | ⇓ | *i* | P | **Pg** | **02 30 09.4** | **+0.1** |
| WUSB | baz=108 | | | | *i* | S | **Sg** | **02 30 12.0** | **+0.1** |
| | baz=108 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **289** | ⇑ | *i* | P | **Pg** | **02 30 09.3** | **+0.1** |
| | baz=290 | | | | | | | | |
| WCS | | | | | *i* | S | **Sg** | **02 30 11.9** | **+0.1** |
| | baz=290 | | | | | | | | |
| **CHGB** | **Renai** | **0.14** | **75** | ⇓ | *i* | P | **Pg** | **02 30 10.1** | **+0.2** |
| | baz=76 | | | | | | | | |
| CHGB | | | | | *i* | S | **Sg** | **02 30 12.9** | **-0.1** |
| | baz=76 | | | | | | | | |
| **OWD** | **Renai** | **0.16** | **115** | ⇓ | *i* | P | **Pg** | **02 30 10.2** | **+0.2** |
| | baz=115 | | | | | | | | |
| OWD | | | | | *e* | S | **Sg** | **02 30 13.3** | **+0.2** |
| | baz=115 | | | | | | | | |
| **TYC** | **Yuchr** | **0.19** | **232** | ⇑ | *i* | P | **Pg** | **02 30 10.2** | **0.0** |
| | baz=227 | | | | | | | | |
| TYC | | | | | | S | **Sg** | **02 30 13.4** | **-0.2** |
| | baz=227 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.24** | **195** | P | | P | **Pb** | **02 30 10.5** | **-0.5** |
| **SSLB** | **Suanglung** | **0.24** | **195** | ⇑ | *i* | P | **Pb** | **02 30 10.8** | **-0.2** |
| | baz=188 | | | | | | | | |
| SSLB | | | | | *e* | S | **Sb** | **02 30 14.2** | **-0.4** |
| | baz=188 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.25** | **61** | ⇓ | *i* | P | **Pg** | **02 30 12.2** | **+0.6** |
| | baz=72 | | | | | | | | |
| WHF | | | | | *i* | S | **Sg** | **02 30 16.4** | **+0.6** |
| | baz=72 | | | | | | | | |
| **TDCB** | **Techi** | **0.26** | **29** | ⇓ | *i* | P | **Pb** | **02 30 11.5** | **-0.1** |
| | baz=25 | | | | | | | | |
| TDCB | | | | | *e* | S | **Sb** | **02 30 15.0** | **-0.5** |
| | baz=25 | | | | | | | | |
| **WHP** | **Taichung City** | **0.26** | **345** | ⇑ | *i* | P | **Pb** | **02 30 11.6** | **+0.1** |
| | baz=346 | | | | | | | | |
| WHP | | | | | | S | **Sg** | **02 30 16.4** | **+0.8** |
| | baz=346 | | | | | | | | |
| **TWT** | **Tachien** | **0.27** | **32** | ⇓ | | P | **Pb** | **02 30 11.5** | **-0.2** |
| | baz=26 | | | | | | | | |
| TWT | | | | | *e* | S | **Sb** | **02 30 15.3** | **-0.6** |
| | baz=26 | | | | | | | | |
| **VWDT** | **VWDT** | **0.29** | **158** | ⇓ | *i* | P | **Pb** | **02 30 12.1** | **+0.1** |
| | baz=157 | | | | | | | | |
| VWDT | | | | | *i* | S | **Sb** | **02 30 16.2** | **-0.1** |
| | baz=157 | | | | | | | | |
| **WWF** | **Wufeng** | **0.30** | **274** | ⇓ | *e* | P | **Pb** | **02 30 12.9** | **+0.8** |
| | baz=274 | | | | | | | | |
| **FUSS** | **Fushou** | **0.30** | **42** | ⇓ | *i* | P | **Pb** | **02 30 12.2** | **-0.1** |
| | baz=43 | | | | | | | | |
| FUSS | | | | | | S | **Sb** | **02 30 17.5** | **+0.5** |
| | baz=43 | | | | | | | | |
| **WNT1** | **Nantou City** | **0.33** | **250** | ⇓ | *e* | P | **Pb** | **02 30 13.4** | **+0.6** |
| | baz=249 | | | | | | | | |
| WNT1 | | | | | *e* | S | **Sb** | **02 30 19.3** | **+1.5** |
| | baz=249 | | | | | | | | |
| **WJS** | **Zhushan** | **0.33** | **233** | ⇓ | *e* | P | **Pb** | **02 30 13.2** | **+0.4** |
| | baz=232 | | | | | | | | |
| WJS | | | | | *e* | S | **Sb** | **02 30 18.9** | **+1.0** |
| | baz=232 | | | | | | | | |
| **WNT** | **Mingjian** | **0.34** | **245** | ⇓ | *i* | P | **Pb** | **02 30 13.5** | **+0.5** |
| | baz=243 | | | | | | | | |
| WNT | | | | | *e* | S | **Sb** | **02 30 19.5** | **+1.4** |
| | baz=243 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.36** | **90** | ⇓ | *i* | P | **Pb** | **02 30 13.2** | **-0.2** |
| | baz=86 | | | | | | | | |
| LXIB | | | | | *e* | S | **Sg** | **02 30 18.4** | **+0.1** |
| | baz=86 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.36** | **205** | ⇑ | *i* | P | **Pb** | **02 30 13.0** | **-0.3** |
| | baz=200 | | | | | | | | |
| WHYT | | | | | | S | **Sb** | **02 30 18.9** | **+0.2** |
| | baz=200 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.40** | **325** | ⇑ | | P | **Pb** | **02 30 14.5** | **+0.5** |
| | baz=327 | | | | | | | | |
| TWQ1 | | | | | *e* | S | **Sb** | **02 30 20.6** | **+0.9** |
| | baz=327 | | | | | | | | |
| **WYL** | **Yuanlin Townsh** | **0.41** | **262** | | *e* | P | **Pb** | **02 30 14.7** | **+0.5** |
| | baz=261 | | | | | | | | |
| WYL | | | | | *e* | S | **Sn** | **02 30 21.7** | **-1.7** |
| | baz=261 | | | | | | | | |
| **WCHH** | **Zhanghua** | **0.43** | **278** | ⇓ | *i* | P | **Pb** | **02 30 15.0** | **+0.5** |
| | baz=277 | | | | | | | | |
| **ESL** | **Shilin** | **0.43** | **119** | ⇓ | *i* | P | **Pb** | **02 30 14.5** | **0.0** |
| | baz=118 | | | | | | | | |
| ESL | | | | | *e* | S | **Sg** | **02 30 20.3** | **0.0** |
| | baz=118 | | | | | | | | |
| **ETM** | **Tongmen** | **0.43** | **97** | ⇓ | *i* | P | **Pg** | **02 30 14.3** | **0.0** |
| | baz=103 | | | | | | | | |
| ETM | | | | | *e* | S | **Sb** | **02 30 20.6** | **-0.2** |
| | baz=103 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.45** | **132** | ⇓ | *i* | P | **Pb** | **02 30 14.7** | **-0.2** |
| | baz=126 | | | | | | | | |
| WARBT | | | | | *i* | S | **Sg** | **02 30 20.6** | **-0.3** |
| | baz=126 | | | | | | | | |
| **NSY** | **Sanyi** | **0.46** | **329** | | *e* | P | **Pn** | **02 30 15.8** | **-1.2** |
| | baz=330 | | | | | | | | |
| NSY | | | | | *e* | S | **Sn** | **02 30 22.9** | **-1.8** |
| | baz=330 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.46** | **66** | ⇓ | *i* | P | **Pb** | **02 30 14.8** | **-0.2** |
| | baz=63 | | | | | | | | |
| ETLH | | | | | *e* | S | **Sb** | **02 30 21.4** | **-0.1** |
| | baz=63 | | | | | | | | |
| **WDJ** | **Dajia District** | **0.47** | **313** | ⇓ | *e* | P | **Pn** | **02 30 16.4** | **-0.9** |
| | baz=313 | | | | | | | | |
| **EGFH** | **Guangfu** | **0.51** | **133** | | *e* | P | **Pb** | **02 30 15.7** | **-0.1** |
| | baz=127 | | | | | | | | |
| EGFH | | | | | | S | **Sb** | **02 30 22.8** | **0.0** |
| | baz=127 | | | | | | | | |
| **NNSH** | **Datong** | **0.52** | **39** | ⇓ | *e* | P | **Pg** | **02 30 15.7** | **-0.4** |
| | baz=33 | | | | | | | | |
| NNSH | | | | | *e* | S | **Sg** | **02 30 22.8** | **-0.4** |
| | baz=33 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.53** | **38** | ⇓ | | P | **Pg** | **02 30 15.8** | **-0.3** |
| | baz=34 | | | | | | | | |
| NNS | | | | | *e* | S | **Sg** | **02 30 22.9** | **-0.3** |
| | baz=34 | | | | | | | | |
| **TWD** | **Chiawan** | **0.53** | **84** | ⇓ | *i* | P | **Pb** | **02 30 15.9** | **-0.2** |
| | baz=91 | | | | | | | | |
| TWD | | | | | *e* | S | **Sg** | **02 30 23.2** | **-0.1** |
| | baz=91 | | | | | | | | |
| **YUS** | **Yu-Shan** | **0.53** | **187** | ⇓ | *e* | P | **Pg** | **02 30 16.1** | **-0.3** |
| | baz=182 | | | | | | | | |
| **HWA** | **Hwalien** | **0.54** | **95** | ⇓ | | P | **Pg** | **02 30 16.7** | **+0.5** |
| | baz=95 | | | | | | | | |
| HWA | | | | | *e* | S | **Sn** | **02 30 24.9** | **-1.6** |
| | baz=95 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.55** | **74** | P | | P | **Pb** | **02 30 16.2** | **-0.2** |
| **NACB** | **Ninganchiao** | **0.55** | **74** | ⇓ | *i* | P | **Pb** | **02 30 16.1** | **-0.2** |
| | baz=82 | | | | | | | | |
| NACB | | | | | | S | **Sb** | **02 30 23.6** | **-0.1** |
| | baz=82 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.55** | **115** | ⇓ | *i* | P | **Pg** | **02 30 16.8** | **+0.4** |
| | baz=115 | | | | | | | | |
| SHUL | | | | | | S | **Sg** | **02 30 24.7** | **+0.9** |
| | baz=115 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.55** | **106** | | *e* | P | **Pg** | **02 30 16.6** | **+0.2** |
| | baz=102 | | | | | | | | |
| TEYL | | | | | *e* | S | **Sg** | **02 30 24.8** | **+0.9** |
| | baz=102 | | | | | | | | |
| **WDLH** | **Douliu** | **0.55** | **233** | ⇓ | | P | **Pg** | **02 30 16.9** | **+0.4** |
| | baz=233 | | | | | | | | |
| WDLH | | | | | *e* | S | **Sn** | **02 30 25.8** | **-1.2** |
| | baz=233 | | | | | | | | |
| **ETL** | **Fush Village** | **0.57** | **76** | | *e* | P | **Pb** | **02 30 16.5** | **-0.2** |
| | baz=84 | | | | | | | | |
| ETL | | | | | | S | **Sg** | **02 30 25.3** | **+0.9** |
| | baz=84 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.57** | **123** | ⇓ | | P | **Pg** | **02 30 17.3** | **+0.5** |
| | baz=120 | | | | | | | | |
| TEGC | | | | | *e* | S | **Sg** | **02 30 25.6** | **+1.2** |
| | baz=120 | | | | | | | | |
| **EHY** | **Hungye** | **0.58** | **152** | ⇓ | *i* | P | **Pg** | **02 30 17.0** | **-0.1** |
| | baz=146 | | | | | | | | |
| EHY | | | | | *e* | S | **Sb** | **02 30 24.6** | **-0.2** |
| | baz=146 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.60** | **259** | | *e* | P | **Pg** | **02 30 17.8** | **+0.4** |
| | baz=258 | | | | | | | | |
| **EHYH** | **Wanrong** | **0.60** | **150** | ⇓ | | P | **Pg** | **02 30 17.3** | **-0.2** |
| | baz=145 | | | | | | | | |
| EHYH | | | | | | S | **Sb** | **02 30 25.2** | **-0.2** |
| | baz=145 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.61** | **358** | | *e* | P | **Pg** | **02 30 18.0** | **+0.5** |
| | baz=7.0 | | | | | | | | |
| NSTT | | | | | | S | **Sg** | **02 30 26.5** | **+0.9** |
| | baz=7.0 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.61** | **8** | | *e* | P | **Pg** | **02 30 17.9** | **+0.3** |
| | baz=16 | | | | | | | | |
| NFF | | | | | *e* | S | **Sg** | **02 30 26.7** | **+0.7** |
| | baz=16 | | | | | | | | |
| **RLNB** | **Erlin** | **0.62** | **258** | | *e* | P | **Pg** | **02 30 18.0** | **+0.2** |
| | baz=258 | | | | | | | | |
| **LIOB** | **Emei** | **0.62** | **360** | | *e* | P | **Pn** | **02 30 18.4** | **-0.9** |
| | baz=347 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.64** | **145** | ⇓ | | P | **Pg** | **02 30 18.5** | **+0.3** |
| | baz=145 | | | | | | | | |
| HGSD | | | | | | S | **Sg** | **02 30 27.0** | **+0.2** |
| | baz=145 | | | | | | | | |
| **YULB** | **Yu-li** | **0.68** | **158** | P | | P | **Pg** | **02 30 18.7** | **-0.1** |
| **YULB** | **Yu-li** | **0.68** | **158** | ⇓ | | P | **Pg** | **02 30 18.5** | **-0.3** |
| | baz=149 | | | | | | | | |
| YULB | | | | | *e* | S | **Sb** | **02 30 27.1** | **-0.4** |
| | baz=149 | | | | | | | | |
| **LATG** | **Datong** | **0.69** | **42** | ⇓ | | P | **Pb** | **02 30 18.5** | **-0.4** |
| | baz=34 | | | | | | | | |
| LATG | | | | | *e* | S | **Sb** | **02 30 27.5** | **-0.5** |
| | baz=34 | | | | | | | | |
| **WCKO** | **Fanlu** | **0.69** | **213** | ⇓ | *e* | P | **Pg** | **02 30 19.1** | **-0.1** |
| | baz=213 | | | | | | | | |
| WCKO | | | | | | S | **Sn** | **02 30 29.2** | **-1.3** |
| | baz=213 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.69** | **257** | | *e* | P | **Pg** | **02 30 19.1** | **0.0** |
| | baz=256 | | | | | | | | |
| WTCT | | | | | *e* | S | **Sn** | **02 30 29.8** | **-0.7** |
| | baz=256 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.70** | **226** | | *e* | P | **Pn** | **02 30 19.5** | **-0.8** |
| | baz=226 | | | | | | | | |
| CHN2 | | | | | *e* | S | **Sn** | **02 30 30.1** | **-0.6** |
| | baz=226 | | | | | | | | |
| **TWF1** | **Yuli** | **0.71** | **159** | ⇓ | *i* | P | **Pg** | **02 30 19.3** | **-0.1** |
| | baz=150 | | | | | | | | |
| TWF1 | | | | | | S | **Sg** | **02 30 29.4** | **+0.4** |
| | baz=150 | | | | | | | | |
| **NSK** | **Sanguang** | **0.72** | **25** | ⇓ | *i* | P | **Pg** | **02 30 19.4** | **-0.2** |
| | baz=33 | | | | | | | | |
| NSK | | | | | *i* | S | **Sb** | **02 30 28.4** | **-0.5** |
| | baz=33 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.72** | **27** | P | | P | **Pg** | **02 30 19.5** | **-0.2** |
| **YHNB** | **Yeheng** | **0.72** | **27** | ⇓ | *i* | P | **Pg** | **02 30 19.4** | **-0.2** |
| | baz=33 | | | | | | | | |
| YHNB | | | | | | S | **Sb** | **02 30 28.1** | **-0.9** |
| | baz=33 | | | | | | | | |
| **EAHA** | **Aohua** | **0.72** | **65** | | *e* | P | **Pg** | **02 30 19.5** | **-0.1** |
| | baz=65 | | | | | | | | |
| EAHA | | | | | | S | **Sg** | **02 30 30.0** | **+0.7** |
| | baz=65 | | | | | | | | |
| **EYUL** | **Yuli** | **0.72** | **158** | | *e* | P | **Pg** | **02 30 19.6** | **-0.1** |
| | baz=153 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.73** | **38** | | *e* | P | **Pb** | **02 30 19.3** | **-0.3** |
| | baz=32 | | | | | | | | |
| NDT | | | | | *e* | S | **Sg** | **02 30 29.9** | **+0.3** |
| | baz=32 | | | | | | | | |
| **CHY** | **Chiayi** | **0.76** | **226** | | *e* | P | **Pn** | **02 30 20.4** | **-0.7** |
| | baz=226 | | | | | | | | |
| CHY | | | | | *e* | S | **Sn** | **02 30 31.4** | **-0.6** |
| | baz=226 | | | | | | | | |
| **SBCB** | **Hsinchu** | **0.77** | **358** | | *e* | P | **Pn** | **02 30 21.2** | **-0.1** |
| | baz=358 | | | | | | | | |
| SBCB | | | | | *e* | S | **Sn** | **02 30 32.5** | **+0.1** |
| | baz=358 | | | | | | | | |
| **ENA** | **Nanau** | **0.77** | **58** | ⇓ | | P | **Pg** | **02 30 20.3** | **-0.3** |
| | baz=59 | | | | | | | | |
| ENA | | | | | *e* | S | **Sg** | **02 30 31.0** | **+0.2** |
| | baz=59 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.78** | **357** | | *e* | P | **Pn** | **02 30 21.8** | **+0.4** |
| | baz=359 | | | | | | | | |
| HSN | | | | | *e* | S | **Sn** | **02 30 33.5** | **+0.9** |
| | baz=359 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.79** | **39** | ⇑ | | P | **Pb** | **02 30 20.6** | **0.0** |
| | baz=34 | | | | | | | | |
| ENTT | | | | | *e* | S | **Sg** | **02 30 31.9** | **+0.4** |
| | baz=34 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.80** | **207** | P | | P | **Pg** | **02 30 20.9** | **-0.3** |
| **TPUB** | **Ta-pu** | **0.80** | **207** | ⇓ | *i* | P | **Pg** | **02 30 20.8** | **-0.4** |
| | baz=207 | | | | | | | | |
| TPUB | | | | | | S | **Sn** | **02 30 32.4** | **-0.8** |
| | baz=207 | | | | | | | | |
| **ECBN** | **Changbin** | **0.81** | **151** | | *e* | P | **Pn** | **02 30 21.9** | **+0.2** |
| | baz=150 | | | | | | | | |
| ECBN | | | | | *e* | S | **Sn** | **02 30 33.5** | **+0.3** |
| | baz=150 | | | | | | | | |
| **EWUT** | **Wuta** | **0.81** | **58** | ⇓ | | P | **Pb** | **02 30 20.9** | **0.0** |
| | baz=59 | | | | | | | | |
| EWUT | | | | | *e* | S | **Sb** | **02 30 31.5** | **+0.1** |
| | baz=59 | | | | | | | | |
| **WSF** | **Szhu** | **0.83** | **243** | | *e* | P | **Pb** | **02 30 21.0** | **-0.2** |
| | baz=242 | | | | | | | | |
| WSF | | | | | | S | **Sn** | **02 30 33.4** | **-0.3** |
| | baz=242 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.83** | **180** | | *e* | P | **Pg** | **02 30 21.4** | **-0.3** |
| | baz=185 | | | | | | | | |
| ELDTW | | | | | *e* | S | **Sg** | **02 30 32.9** | **+0.2** |
| | baz=185 | | | | | | | | |
| **FULB** | **Fuli** | **0.86** | **163** | ⇓ | | P | **Pn** | **02 30 22.6** | **+0.1** |
| | baz=163 | | | | | | | | |
| FULB | | | | | *e* | S | **Sn** | **02 30 34.6** | **+0.1** |
| | baz=163 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.86** | **206** | ⇓ | *e* | P | **Pb** | **02 30 21.6** | **-0.2** |
| | baz=205 | | | | | | | | |
| WTP | | | | | *e* | S | **Sg** | **02 30 33.5** | **-0.1** |
| | baz=205 | | | | | | | | |
| **NWLT** | **Wulai** | **0.87** | **30** | ⇓ | *e* | P | **Pb** | **02 30 21.9** | **0.0** |
| | baz=37 | | | | | | | | |
| **NDS** | **Dongshan** | **0.88** | **46** | | *e* | P | **Pg** | **02 30 22.2** | **-0.3** |
| | baz=55 | | | | | | | | |
| NDS | | | | | | S | **Sg** | **02 30 34.4** | **+0.1** |
| | baz=55 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.88** | **236** | | *e* | P | **Pg** | **02 30 22.1** | **-0.5** |
| | baz=236 | | | | | | | | |
| WSL | | | | | *e* | S | **Sn** | **02 30 35.6** | **+0.5** |
| | baz=236 | | | | | | | | |
| **EHD** | **Haiduan** | **0.89** | **169** | | *e* | P | **Pg** | **02 30 22.5** | **-0.2** |
| | baz=169 | | | | | | | | |
| EHD | | | | | *e* | S | **Sg** | **02 30 34.7** | **+0.2** |
| | baz=169 | | | | | | | | |
| **STYT** | **Tauyuan** | **0.89** | **196** | ⇓ | | P | **Pg** | **02 30 22.4** | **-0.4** |
| | baz=195 | | | | | | | | |
| STYT | | | | | | S | **Sg** | **02 30 34.5** | **-0.1** |
| | baz=195 | | | | | | | | |
| **CHKH** | **Chenggong** | **0.90** | **157** | | *e* | P | **Pn** | **02 30 23.0** | **0.0** |
| | baz=157 | | | | | | | | |
| CHKH | | | | | *e* | S | **Sn** | **02 30 35.7** | **+0.2** |
| | baz=157 | | | | | | | | |
| **TWK** | **Hsinying** | **0.90** | **213** | ⇓ | *i* | P | **Pg** | **02 30 22.4** | **-0.5** |
| | baz=212 | | | | | | | | |
| TWK | | | | | *e* | S | **Sn** | **02 30 35.2** | **-0.3** |
| | baz=212 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.90** | **35** | | *e* | P | **Pb** | **02 30 22.4** | **-0.1** |
| | baz=30 | | | | | | | | |
| FUSB | | | | | *e* | S | **Sg** | **02 30 34.9** | **+0.1** |
| | baz=30 | | | | | | | | |
| **TWE** | **Neicheng** | **0.91** | **40** | | *e* | P | **Pn** | **02 30 23.1** | **-0.1** |
| | baz=38 | | | | | | | | |
| TWE | | | | | *e* | S | **Sn** | **02 30 36.5** | **+0.6** |
| | baz=38 | | | | | | | | |
| **ESAO** | **Su ao** | **0.93** | **54** | | *e* | P | **Pn** | **02 30 23.1** | **-0.4** |
| | baz=54 | | | | | | | | |
| ESAO | | | | | *e* | S | **Sg** | **02 30 35.4** | **-0.5** |
| | baz=54 | | | | | | | | |
| **SNST** | **Tainan City** | **0.93** | **211** | | *e* | P | **Pg** | **02 30 23.4** | **-0.2** |
| | baz=211 | | | | | | | | |
| SNST | | | | | *e* | S | **Sn** | **02 30 36.2** | **-0.2** |
| | baz=211 | | | | | | | | |
| **ECS** | **Chishang** | **0.94** | **169** | | *e* | P | **Pg** | **02 30 23.9** | **+0.2** |
| | baz=178 | | | | | | | | |
| ECS | | | | | *e* | S | **Sn** | **02 30 36.9** | **+0.3** |
| | baz=178 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.95** | **226** | | *e* | P | **Pn** | **02 30 23.4** | **-0.3** |
| | baz=237 | | | | | | | | |
| ICHU | | | | | *e* | S | **Sn** | **02 30 37.3** | **+0.6** |
| | baz=237 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.95** | **209** | | *e* | P | **Pn** | **02 30 23.3** | **-0.5** |
| | baz=209 | | | | | | | | |
| CHN1 | | | | | *e* | S | **Sn** | **02 30 36.4** | **-0.4** |
| | baz=209 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.95** | **9** | | *e* | P | **Pg** | **02 30 24.5** | **+0.5** |
| | baz=9.0 | | | | | | | | |
| NCUH | | | | | *e* | S | **Sn** | **02 30 37.2** | **+0.3** |
| | baz=9.0 | | | | | | | | |
| **TWC** | **Suao** | **0.95** | **52** | | *e* | P | **Pn** | **02 30 23.7** | **-0.1** |
| | baz=53 | | | | | | | | |
| TWC | | | | | *e* | S | **Sb** | **02 30 35.8** | **+0.2** |
| | baz=53 | | | | | | | | |
| **NCU** | **National Centr** | **0.96** | **9** | | *e* | P | **Pb** | **02 30 23.4** | **0.0** |
| | baz=9.0 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.97** | **161** | | *e* | P | **Pg** | **02 30 24.2** | **-0.1** |
| | baz=161 | | | | | | | | |
| CHKT | | | | | *e* | S | **Sn** | **02 30 38.0** | **+0.7** |
| | baz=161 | | | | | | | | |
| **NHW** | **Xinwu Township** | **0.98** | **1** | | *e* | P | **Pn** | **02 30 24.0** | **-0.2** |
| | baz=1.0 | | | | | | | | |
| **CHN8** | **Yiju** | **1.00** | **228** | | *e* | P | **Pn** | **02 30 24.2** | **-0.3** |
| | baz=238 | | | | | | | | |
| CHN8 | | | | | *e* | S | **Sn** | **02 30 38.5** | **+0.5** |
| | baz=238 | | | | | | | | |
| **SGST** | **Jiashian** | **1.02** | **203** | | *e* | P | **Pb** | **02 30 24.2** | **-0.3** |
| | baz=212 | | | | | | | | |
| SGST | | | | | | S | **Sg** | **02 30 39.0** | **+0.3** |
| | baz=212 | | | | | | | | |
| **EDH** | **Donghe** | **1.08** | **166** | | *e* | P | **Pg** | **02 30 25.8** | **-0.5** |
| | baz=166 | | | | | | | | |
| EDH | | | | | *e* | S | **Sg** | **02 30 41.7** | **+1.3** |
| | baz=166 | | | | | | | | |
| **SLGT** | **Liugui** | **1.08** | **199** | | *e* | P | **Pg** | **02 30 26.2** | **-0.2** |
| | baz=199 | | | | | | | | |
| SLGT | | | | | *e* | S | **Sg** | **02 30 40.9** | **+0.3** |
| | baz=199 | | | | | | | | |
| **TWA** | **Mucha** | **1.08** | **28** | | *e* | P | **Pg** | **02 30 26.3** | **-0.1** |
| | baz=30 | | | | | | | | |
| TWA | | | | | *e* | S | **Sg** | **02 30 41.4** | **+0.7** |
| | baz=30 | | | | | | | | |
| **LONT** | **Longtian** | **1.11** | **175** | | *e* | P | **Pg** | **02 30 26.6** | **-0.4** |
| | baz=175 | | | | | | | | |
| LONT | | | | | *e* | S | **Sg** | **02 30 41.5** | **-0.2** |
| | baz=175 | | | | | | | | |
| **CHN3** | **Shinhua** | **1.12** | **213** | | *e* | P | **Pg** | **02 30 26.4** | **-0.7** |
| | baz=223 | | | | | | | | |
| CHN3 | | | | | *e* | S | **Sg** | **02 30 43.6** | **+1.8** |
| | baz=223 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.13** | **19** | | *e* | P | **Pg** | **02 30 27.3** | **-0.1** |
| | baz=20 | | | | | | | | |
| TWS1 | | | | | *e* | S | **Sg** | **02 30 41.9** | **-0.4** |
| | baz=20 | | | | | | | | |
| **SCLT** | **Jiali** | **1.13** | **222** | | *e* | P | **Pg** | **02 30 26.8** | **-0.6** |
| | baz=222 | | | | | | | | |
| SCLT | | | | | *e* | S | **Sg** | **02 30 43.5** | **+1.2** |
| | baz=222 | | | | | | | | |
| **EGS** | | **1.17** | **45** | | *e* | P | **Pg** | **02 30 28.4** | **+0.4** |
| | baz=60 | | | | | | | | |
| **SHHT** | **Tainan City** | **1.17** | **212** | | *e* | P | **Pg** | **02 30 28.8** | **+0.6** |
| | baz=222 | | | | | | | | |
| SHHT | | | | | | S | **Sg** | **02 30 45.6** | **+2.1** |
| | baz=222 | | | | | | | | |
| **EOS2** | **EOS2** | **1.17** | **70** | | *e* | P | **Pg** | **02 30 28.3** | **+0.1** |
| | baz=70 | | | | | | | | |
| **EOS4** | **EOS4** | **1.19** | **85** | | *e* | P | **Pb** | **02 30 27.4** | **+0.2** |
| | baz=86 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.20** | **38** | | *e* | P | **Pg** | **02 30 27.9** | **-0.7** |
| | baz=38 | | | | | | | | |
| TIPB | | | | | *e* | S | **Sg** | **02 30 43.5** | **-0.8** |
| | baz=38 | | | | | | | | |
| **TWG** | **Pinlang** | **1.20** | **178** | | *e* | P | **Pb** | **02 30 27.6** | **+0.1** |
| | baz=171 | | | | | | | | |
| TWG | | | | | *e* | S | **Sg** | **02 30 44.4** | **+0.1** |
| | baz=171 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.20** | **177** | P | | P | **Pg** | **02 30 28.2** | **-0.5** |
| **TWGBT** | **Beinan** | **1.20** | **177** | | *e* | P | **Pb** | **02 30 27.4** | **-0.1** |
| | baz=171 | | | | | | | | |
| TWGBT | | | | | *e* | S | **Sg** | **02 30 44.3** | **-0.1** |
| | baz=171 | | | | | | | | |
| **EOS3** | **EOS3** | **1.21** | **77** | | *e* | P | **Pg** | **02 30 28.8** | **0.0** |
| | baz=92 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.22** | **225** | | *e* | P | **Pb** | **02 30 27.8** | **-0.2** |
| | baz=236 | | | | | | | | |
| TSCK | | | | | *e* | S | **Sg** | **02 30 45.4** | **+0.3** |
| | baz=236 | | | | | | | | |
| **YM01** | **YM01** | **1.23** | **24** | | *e* | P | **Pb** | **02 30 27.7** | **-0.4** |
| | baz=25 | | | | | | | | |
| YM01 | | | | | *e* | S | **Sn** | **02 30 44.3** | **+0.6** |
| | baz=25 | | | | | | | | |
| **SCST** | **Cishan** | **1.23** | **203** | | *e* | P | **Pg** | **02 30 28.6** | **-0.7** |
| | baz=204 | | | | | | | | |
| SCST | | | | | *e* | S | **Sg** | **02 30 46.0** | **+0.6** |
| | baz=204 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.25** | **33** | | *e* | P | **Pg** | **02 30 29.5** | **-0.2** |
| | baz=35 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.25** | **33** | | *e* | P | **Pg** | **02 30 29.8** | **+0.1** |
| | baz=35 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.31** | **205** | | *e

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=195 | | | | | | | |
| **WDGT** | **Dungji** | **1.46** | **239** | *e*P | | **Pn** | **02 30 31.0** | **+0.2** |
| | baz=250 | | | | | | | |
| WDGT | | | | *e*S | | **Sb** | **02 30 50.3** | **+0.1** |
| | baz=250 | | | | | | | |
| **WSSB** | **Gushan** | **1.54** | **207** | *e*P | | **Pb** | **02 30 33.2** | **-0.2** |
| | baz=208 | | | | | | | |
| **EAST** | **Anshuo** | **1.64** | **186** | *e*P | | **Pb** | **02 30 34.6** | **-0.5** |
| | baz=187 | | | | | | | |
| EAST | | | | *e*S | | **Sb** | **02 30 56.4** | **+1.0** |
| | baz=187 | | | | | | | |
| **VCHM** | **Qimei** | **1.67** | **241** | *e*P | | **Pn** | **02 30 33.3** | **-0.4** |
| | baz=244 | | | | | | | |
| VCHM | | | | *e*S | | **Sb** | **02 30 55.1** | **-1.1** |
| | baz=244 | | | | | | | |
| **SCZT** | **Fangliau** | **1.68** | **193** | *e*P | | **Pb** | **02 30 34.8** | **-1.0** |
| | baz=210 | | | | | | | |
| **VWUC** | **VWUC** | **1.73** | **304** | *e*P | | **Pn** | **02 30 33.0** | **-1.4** |
| | baz=302 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.87** | **76** | P | | **Pb** | **02 30 37.7** | **-1.3** |
| | baz=87 | | | | | | | |
| YOJ | | | | *e*S | | **Sb** | **02 31 01.3** | **-0.6** |
| | baz=87 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.87** | **76** | *e*P | | **Pb** | **02 30 38.0** | **-1.0** |
| **PTMZ** | **Houxiangcun** | **2.01** | **301** | *e*P | | **Pn** | **02 30 38.4** | **+0.1** |
| | baz=299 | | | | | | | |
| **LYUB** | **Lan-yu** | **2.08** | **165** | *e*P | | **Pn** | **02 30 39.4** | **+0.1** |
| | baz=157 | | | | | | | |
| LYUB | | | | *e*S | | **Sn** | **02 31 04.8** | **+0.2** |
| | baz=157 | | | | | | | |
| **TWKBT** | **Hengchun** | **2.08** | **185** | *e*P | | **Pn** | **02 30 40.1** | **+0.8** |
| | baz=200 | | | | | | | |
| **MATB** | **Ma-tsu** | **2.33** | **336** | *e*P | | **Pn** | **02 30 43.5** | **+0.7** |
| | baz=331 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.44** | **281** | *e*P | | **Pn** | **02 30 43.5** | **-0.8** |
| | baz=279 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **2.49** | **82** | P | | **Pn** | **02 30 46.4** | **+1.4** |
| IRIF | | | | S | | **Sn** | **02 31 16.9** | **+2.0** |
| **JKRS** | **Kuro-shima** | **2.74** | **85** | *e*P | | **Pn** | **02 30 50.2** | **+1.8** |
| **MHZQ** | **Yeshan** | **2.75** | **319** | *e*P | | **Pn** | **02 30 48.6** | **+0.1** |
| | baz=316 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.87** | **83** | *e*P | | **Pn** | **02 30 51.1** | **+0.9** |
| JIJ | | | | *e*S | | **Sn** | **02 31 24.6** | **+0.4** |
| **XPSS** | **Dashiqiu** | **2.99** | **346** | *e*P | | **Pn** | **02 30 51.2** | **-0.6** |
| | baz=341 | | | | | | | |
| **ZPLA** | **Ao Xicun** | **2.99** | **269** | *e*P | | **Pn** | **02 30 51.2** | **-0.7** |
| | baz=269 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.05** | **79** | P | | **Pn** | **02 30 53.8** | **+1.1** |
| JISG | | | | *e*S | | **Sn** | **02 31 28.7** | **0.0** |
| **SXFK** | **Yanhouchang** | **3.87** | **308** | *e*P | | **Pn** | **02 31 04.2** | **+0.2** |
| | baz=306 | | | | | | | |

**TAP 18 02:33:16.2,24°03N×121°03E,h19km,ML1.3,1C-2D,A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WUSB** | **Renai** | **0.09** | **112** | ⇓*i*P | Pg | 02 33 20.5 | +0.4 |
| | baz=111 | | | | | | |
| WUSB | | | | S | Sg | 02 33 23.1 | +0.4 |
| | baz=111 | | | | | | |
| **DPDB** | **Guoxing** | **0.09** | **275** | *e*P | Pg | 02 33 20.2 | +0.2 |
| | baz=274 | | | | | | |
| DPDB | | | | S | Sg | 02 33 23.3 | +0.7 |
| | baz=274 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **287** | ⇑P | Pg | 02 33 20.5 | +0.4 |
| | baz=286 | | | | | | |
| WCS | | | | *e*S | Sg | 02 33 23.2 | +0.4 |
| | baz=286 | | | | | | |
| **CHGB** | **Renai** | **0.14** | **76** | P | Pg | 02 33 21.3 | +0.6 |
| | baz=75 | | | | | | |
| **OWD** | **Renai** | **0.15** | **117** | P | Pg | 02 33 21.3 | +0.5 |
| | baz=117 | | | | | | |
| OWD | | | | S | Sg | 02 33 24.6 | +0.7 |
| | baz=117 | | | | | | |
| **TYC** | **Yuchr** | **0.20** | **232** | P | Pg | 02 33 21.4 | +0.2 |
| | baz=229 | | | | | | |
| TYC | | | | *e*S | Sg | 02 33 24.6 | +0.1 |
| | baz=229 | | | | | | |
| **SSLB** | **Suanglung** | **0.25** | **196** | P | Pg | 02 33 21.9 | 0.0 |
| | baz=195 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.25** | **61** | *e*P | Pg | 02 33 23.4 | +1.1 |
| | baz=62 | | | | | | |
| **TDCB** | **Techi** | **0.26** | **28** | *e*P | Pg | 02 33 22.6 | +0.4 |
| | baz=28 | | | | | | |
| **WHP** | **Taichung City** | **0.26** | **344** | *e*P | Pg | 02 33 23.2 | +1.0 |
| | baz=343 | | | | | | |
| **TWT** | **Tachien** | **0.26** | **31** | P | Pg | 02 33 23.1 | +0.8 |
| | baz=29 | | | | | | |
| TWT | | | | *i* S | Sg | 02 33 27.2 | +0.6 |
| | baz=29 | | | | | | |
| **VWDT** | **VWDT** | **0.29** | **159** | *i* P | Pb | 02 33 23.3 | +0.5 |
| | baz=158 | | | | | | |
| **FUSS** | **Fushou** | **0.30** | **42** | *e*P | Pb | 02 33 23.4 | +0.4 |
| | baz=42 | | | | | | |
| FUSS | | | | *e*S | Sb | 02 33 27.9 | +0.3 |
| | baz=42 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.35** | **91** | ⇓P | Pb | 02 33 24.4 | +0.3 |
| | baz=90 | | | | | | |
| LXIB | | | | S | Sb | 02 33 29.3 | 0.0 |
| | baz=90 | | | | | | |
| **WHYT** | **Xinyi Township** | **0.36** | **206** | *e*P | Pb | 02 33 24.8 | +0.6 |
| | baz=205 | | | | | | |
| WHYT | | | | S | Sb | 02 33 30.4 | +0.8 |
| | baz=205 | | | | | | |
| **ETM** | **Tongmen** | **0.43** | **98** | P | Pb | 02 33 25.8 | +0.5 |
| | baz=98 | | | | | | |
| ETM | | | | *i* S | Sb | 02 33 32.5 | +1.0 |
| | baz=98 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.45** | **133** | *i* P | Pb | 02 33 26.0 | +0.5 |
| | baz=132 | | | | | | |
| WARBT | | | | *e*S | Sb | 02 33 31.8 | -0.1 |
| | baz=132 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.45** | **67** | *e*P | Pb | 02 33 26.1 | +0.4 |
| | baz=66 | | | | | | |
| ETLH | | | | *e*S | Sb | 02 33 32.0 | -0.2 |
| | baz=66 | | | | | | |
| **NNSH** | **Datong** | **0.52** | **39** | *i* P | Pb | 02 33 26.9 | +0.3 |
| | baz=39 | | | | | | |
| NNSH | | | | *e*S | Sb | 02 33 34.2 | +0.4 |
| | baz=39 | | | | | | |
| **SHUL** | **Shoufeng** | **0.55** | **116** | P | Pg | 02 33 27.7 | +0.6 |
| | baz=115 | | | | | | |
| **LATG** | **Datong** | **0.68** | **42** | *e*P | Pg | 02 33 29.9 | +0.2 |
| | baz=42 | | | | | | |
| LATG | | | | *e*S | Sg | 02 33 39.2 | +0.3 |
| | baz=42 | | | | | | |
| **NSK** | **Sanguang** | **0.71** | **25** | *e*P | Pg | 02 33 30.7 | +0.4 |
| | baz=25 | | | | | | |
| NSK | | | | *e*S | Sg | 02 33 40.3 | +0.5 |
| | baz=25 | | | | | | |
| **YHNB** | **Yeheng** | **0.72** | **26** | P | Pg | 02 33 30.5 | +0.2 |
| | baz=26 | | | | | | |
| YHNB | | | | *e*S | Sg | 02 33 40.7 | +0.8 |
| | baz=26 | | | | | | |
| **TPUB** | **Ta-pu** | **0.81** | **207** | *e*P | Pn | 02 33 33.0 | +0.4 |
| | baz=206 | | | | | | |
| TPUB | | | | *e*S | Sn | 02 33 44.6 | +0.6 |
| | baz=206 | | | | | | |

*NEIC **18** 02:50:04.1±1.6,18°.57N±0°.08×145°.7E±0°.1,h206km±7km, mb4.6/66,Error ellipse: s-maj=15.6km s-min=11.0km az=91.0*
*IDC **18** 02:50:05.0±0.7,18°.65N×145°.57E,h221km±6km,mb3.9/19, mbtmp4.4/20,Error ellipse: s-maj=15.6km s-min=9.8km az=78.0*

**ISC 18 02:50:02.9**±0.4,**18°.56N**±0°.05×**145°.68E**±0°.08,**h200**km, **n105**,σ1**922**/119,**mb4.5**/56,**Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.01** | **189** | Pn | **Pn** | **02 51 19.3** | **+1.8** |
| GUMO | | | | Sn | **Sn** | **02 52 15.4** | **-0.9** |
| **GUMO** | **Guam** | **5.01** | **189** | S | **Sn** | **02 52 16.6** | **+0.3** |
| | 134nm,0.3s,baz=2.4,slow=20,SNR=9.6 | | | | | | |
| **PATS** | **Pohnpei** | **16.94** | **132** | P | **P** | **02 53 48.2** | **+0.8** |
| **JOW** | **Kunigami** | **18.04** | **300** | P | **P** | **02 54 00.5** | **+1.3** |
| **JOW** | **Kunigami** | **18.04** | **300** | P | **Pn** | **02 54 02.5** | **+1.1** |
| | 45nm,0.6s,baz=140,slow=12,SNR=14 | | | | | | |
| **JGF** | **Kuroka** | **18.50** | **338** | P | **P** | **02 54 05.5** | **+1.2** |
| JGF | | | | IAmb | IAmb | 02 54 17.4 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.08** | **341** | P | **P** | **02 54 09.8** | **-0.6** |
| | comp=Z,4.5nm,0.8s,baz=167,slow=9.5,SNR=10 | | | | | | |
| **JMM** | **Marumori** | **19.70** | **348** | P | **P** | **02 54 18.2** | **+1.2** |
| JMM | | | | IAmb | IAmb | 02 54 21.2 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **MANU** | **Manus Island** | **20.54** | **175** | P | **P** | **02 54 24.9** | **-1.3** |
| **JTM** | **Tenmabayashi** | **22.50** | **351** | P | **P** | **02 54 46.1** | **+0.4** |
| **YULB** | **Yu-li** | **23.26** | **286** | P | **P** | **02 54 52.0** | **-0.7** |
| YULB | | | | IAmb | IAmb | 02 54 57.5 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **SSLB** | **Suanglung** | **23.62** | **287** | P | **P** | **02 54 55.8** | **-0.3** |
| SSLB | | | | IAmb | IAmb | 02 54 58.6 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **24.42** | **324** | P | **P** | **02 55 01.9** | **-1.2** |
| | comp=Z,2.6nm,0.8s,baz=147,slow=9.7,SNR=7.2 | | | | | | |
| KSRS | | | | pP | **pwP** | **02 55 45.5** | **0.0** |
| | comp=Z,2.8nm,0.8s,baz=143,slow=8.3,SNR=3.8 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **25.11** | **213** | P | **P** | **02 55 09.5** | **-0.1** |
| **NJ2** | **Nanjing** | **27.63** | **304** | *e*P | **P** | **02 55 33.5** | **+1.5** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,24nm,0.5s | | | | | | |
| **PMG** | **Port Moresby** | **27.83** | **177** | P | **P** | **02 55 33.9** | **0.0** |
| PMG | | | | IAmb | IAmb | 02 55 40.0 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **29.68** | **247** | P | **P** | **02 55 51.4** | **+1.1** |
| **TOLI2** | **Tolitoli** | **29.96** | **237** | P | **P** | **02 55 52.8** | **-0.1** |
| TOLI2 | | | | IAmb | IAmb | 02 55 54.5 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **KKM** | **Kota Kinabalu** | **31.30** | **250** | P | **P** | **02 56 04.8** | **+0.1** |
| **COEN** | **Coen** | **32.41** | **185** | P | **P** | **02 56 14.0** | **-0.1** |
| **MTN** | **Manton Dam** | **34.35** | **206** | P | **P** | **02 56 31.0** | **0.0** |
| **HEH** | **HeiHe** | **34.83** | **339** | *e*P | **P** | **02 56 34.6** | **-0.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **SBUM** | **Sibu** | **36.48** | **248** | P | **P** | **02 56 50.0** | **+0.8** |
| SBUM | | | | IAmb | IAmb | 02 56 51.1 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **36.69** | **315** | *e*P | **P** | **02 56 50.1** | **-0.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,76nm,4.7s | | | | | | |
| **KNRA** | **Kununurra** | **37.88** | **207** | P | **P** | **02 57 01.0** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 02 57 03.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **38.41** | **179** | P | **P** | **02 57 04.9** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 02 57 06.0 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **39.67** | **197** | P | **P** | **02 57 16.2** | **+0.5** |
| **WRA** | **Warramunga Arr** | **39.85** | **197** | P | **P** | **02 57 16.6** | **-0.6** |
| **WRA** | **Warramunga Arr** | **39.85** | **197** | P | **P** | **02 57 17.4** | **+0.2** |
| | comp=Z,11nm,0.3s,baz=16,slow=8.7,SNR=223 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 59 18.4** | **-0.7** |
| | comp=Z,2.8nm,0.5s,baz=13,slow=3.1,SNR=6.9 | | | | | | |
| | comp=Z,11nm,0.3s | | | | | | |
| **PZH** | **PanZhiHua** | **41.19** | **289** | P | **P** | **02 57 28.0** | **-0.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,130nm,4.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.42** | **210** | P | **P** | **02 57 30.6** | **+0.5** |
| **ULN** | **Ulaanbaatar** | **42.87** | **322** | P | **P** | **02 57 41.1** | **-0.5** |
| **KOUNC** | **Koumac, New Ca** | **42.94** | **154** | P | **P** | **02 57 42.8** | **+0.6** |
| **SONM** | **Songino Array** | **43.24** | **321** | P | **P** | **02 57 44.1** | **-0.5** |
| **SONM** | **Songino Array** | **43.24** | **321** | P | **P** | **02 57 44.1** | **-0.5** |
| | comp=Z,2.0nm,0.6s,baz=139,slow=9.2,SNR=9.7 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **43.52** | **196** | P | **P** | **02 57 47.4** | **+0.5** |
| **ASAR** | **Alice Springs** | **43.52** | **196** | P | **P** | **02 57 47.1** | **+0.2** |
| **ASAR** | **Alice Springs** | **43.52** | **196** | P | **P** | **02 57 47.4** | **+0.5** |
| | comp=Z,1.7nm,0.3s,baz=14,slow=6.3,SNR=65 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 59 31.1** | **0.0** |
| | comp=Z,1.7nm,0.7s,baz=17,slow=5.4,SNR=5.8 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **UGM** | **Wanagama** | **43.53** | **236** | P | **P** | **02 57 47.1** | **-0.1** |
| **EIDS** | **Eidsvold** | **43.98** | **173** | P | **P** | **02 57 49.7** | **-0.8** |
| EIDS | | | | IAmb | IAmb | 02 58 19.1 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **KIWB** | **Kanaga Island** | **44.19** | **33** | P | **P** | **02 57 51.4** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **44.22** | **278** | P | **P** | **02 57 53.5** | **+0.8** |
| | comp=Z,2.9nm,0.8s,baz=68,slow=6.8,SNR=11 | | | | | | |
| CMAR | | | | pP | **pwP** | **02 58 43.0** | **+2.8** |
| | comp=Z,1.6nm,0.7s,baz=78,slow=6.3,SNR=1.9 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **45.20** | **152** | P | **P** | **02 58 00.8** | **+0.5** |
| DZM | | | | IAmb | IAmb | 02 58 02.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KULM** | **Kulim** | **45.85** | **259** | P | **P** | **02 58 06.5** | **+0.9** |
| KULM | | | | IAmb | IAmb | 02 58 21.0 | |
| | comp=Z,47nm,1.4s | | | | | | |
| **PINNC** | **Pines Island,** | **46.12** | **152** | P | **P** | **02 58 07.1** | **-0.3** |
| PINNC | | | | IAmb | IAmb | 02 58 40.9 | |
| | comp=Z,47nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **46.95** | **214** | P | **P** | **02 58 13.9** | **0.0** |
| MBWA | | | | IAmb | IAmb | 02 58 14.7 | |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **47.23** | **214** | P | **P** | **02 58 15.9** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 02 58 17.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **49.03** | **173** | P | **P** | **02 58 29.7** | **-0.1** |
| **GSI** | **Gunungsitoli** | **50.18** | **256** | P | **P** | **02 58 38.8** | **+0.1** |
| **STKA** | **Stephens Creek** | **50.30** | **185** | P | **P** | **02 58 38.9** | **-0.4** |
| **STKA** | **Stephens Creek** | **50.30** | **185** | P | **P** | **02 58 38.5** | **-0.8** |
| | comp=Z,1.5nm,0.3s,baz=339,slow=11,SNR=5.3 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **FORT** | **Forrest** | **51.90** | **199** | P | **P** | **02 58 51.0** | **-0.1** |
| FORT | | | | IAmb | IAmb | 02 59 14.4 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **S12K** | **Black Hills** | **53.87** | **34** | P | **P** | **02 59 05.7** | **+0.3** |
| **MORW** | **Morawa** | **55.33** | **212** | P | **P** | **02 59 15.5** | **-0.6** |
| MORW | | | | IAmb | IAmb | 02 59 17.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **O14K** | **Tigyukauivet M** | **55.64** | **30** | P | **P** | **02 59 18.6** | **+0.7** |
| **TOO** | **Toolangi** | **55.83** | **180** | P | **P** | **02 59 19.5** | **0.0** |
| TOO | | | | IAmb | IAmb | 02 59 54.8 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **M14K** | **Bethel** | **55.93** | **28** | P | **P** | **02 59 21.2** | **+1.2** |
| M14K | | | | IAmb | IAmb | 02 59 54.7 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.11** | **323** | P | **P** | **02 59 34.7** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **58.11** | **323** | P | **P** | **02 59 34.0** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **58.11** | **323** | P | **P** | **02 59 33.5** | **-1.8** |
| | comp=Z,3.6nm,0.6s,baz=109,slow=7.8,SNR=13 | | | | | | |
| ZALV | | | | PcP | **pP** | **03 00 21.9** | **+2.1** |
| | comp=Z,0.7nm,0.3s,baz=131,slow=3.7,SNR=4.5 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **58.55** | **314** | P | **P** | **02 59 38.1** | **-0.5** |
| **MKAR** | **Makanchi Array** | **58.55** | **314** | P | **P** | **02 59 38.1** | **-0.5** |
| **MKAR** | **Makanchi Array** | **58.55** | **314** | P | **P** | **02 59 38.4** | **-0.2** |
| | comp=Z,3.3nm,0.5s,baz=90,slow=7.9,SNR=33 | | | | | | |
| MKAR | | | | PcP | **pP** | **03 00 25.0** | **+2.0** |
| | comp=Z,0.9nm,0.4s,baz=72,slow=5.0,SNR=6.5 | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **58.76** | **314** | P | **P** | **02 59 39.8** | **-0.2** |
| MAKZ | | | | IAmb | IAmb | 02 59 41.1 | |
| | comp=Z,6.5nm,0.5s | | | | | | |
| **OHAK** | **Old Harbor** | **58.97** | **34** | P | **P** | **02 59 42.2** | **+1.0** |
| OHAK | | | | IAmb | IAmb | 03 00 02.0 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **H18K** | **Honhosa River** | **59.26** | **24** | P | **P** | **02 59 43.6** | **+0.5** |
| H18K | | | | IAmb | IAmb | 02 59 47.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **J19K** | **Poorman** | **59.91** | **26** | P | **P** | **02 59 48.2** | **+0.6** |
| J19K | | | | IAmb | IAmb | 03 00 13.1 | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **KURK** | **Kurchatov** | **61.36** | **318** | P | **P** | **02 59 56.6** | **-1.0** |
| KURK | | | | IAmb | IAmb | 02 59 58.2 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.41** | **318** | P | **P** | **02 59 56.6** | **-1.3** |
| | comp=Z,2.3nm,0.3s,baz=97,slow=7.4,SNR=23 | | | | | | |
| KURBB | | | | PcP | **PcP** | **03 00 38.4** | **+0.3** |
| | comp=Z,0.9nm,0.3s,baz=104,slow=3.9,SNR=1.9 | | | | | | |
| KURBB | | | | pP | **pP** | **03 00 46.1** | **+3.4** |
| | comp=Z,1.1nm,0.4s,baz=102,slow=7.4,SNR=2.0 | | | | | | |
| | comp=Z,2.3nm,0.3s | | | | | | |
| **D22K** | **Ayikyak River** | **62.73** | **21** | P | **P** | **03 00 07.5** | **+1.1** |
| D22K | | | | IAmb | IAmb | 03 00 14.2 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **BOOM** | **Boomskoye usch** | **62.88** | **309** | P | **P** | **03 00 08.0** | **0.0** |
| BOOM | | | | IAmb | IAmb | 03 00 09.3 | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **KSH** | **Kashi** | **62.94** | **305** | P | **P** | **03 00 11.8** | **+3.4** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **IL31** | | **63.77** | **26** | P | **P** | **03 00 12.5** | **-0.8** |
| **ILAR** | **Eielson Array** | **63.77** | **26** | P | **P** | **03 00 12.6** | **-0.7** |
| **ILAR** | **Eielson Array** | **63.77** | **26** | P | **P** | **03 00 12.3** | **-0.9** |
| | comp=Z,0.7nm,0.5s,baz=247,slow=5.5,SNR=14 | | | | | | |
| ILAR | | | | pP | **pwP** | **03 01 05.1** | **+2.6** |
| | comp=Z,0.7nm,0.7s,baz=253,slow=5.5,SNR=2.7 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **THZ** | **Tophouse** | **65.09** | **158** | P | **P** | **03 00 22.6** | **+0.4** |
| THZ | | | | IAmb | IAmb | 03 00 53.1 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **TCW** | **Tory Channel** | **65.12** | **157** | P | **P** | **03 00 22.0** | **-0.2** |
| **ARSB** | **Arslanbob** | **65.13** | **308** | P | **P** | **03 00 22.6** | **-0.1** |
| **BVAR** | **Borovoye Array** | **66.57** | **320** | P | **P** | **03 00 30.9** | **-0.6** |
| | comp=Z,16nm,0.5s,baz=94,slow=8.2,SNR=62 | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **66.63** | **320** | P | **P** | **03 00 31.2** | **-0.6** |
| BRVK | | | | IAmb | IAmb | 03 00 32.6 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **66.84** | **310** | P | **P** | **03 00 32.7** | **-0.7** |
| KK31 | | | | IAmb | IAmb | 03 00 34.2 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **66.84** | **310** | P | **P** | **03 00 33.0** | **-0.5** |
| KKAR | | | | IAmb | IAmb | 03 00 34.2 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **GAR** | **Garm** | **67.35** | **305** | P | **P** | **03 00 36.1** | **-0.7** |
| GAR | | | | IAmb | IAmb | 03 00 37.2 | |
| | comp=Z,6.8nm,0.5s | | | | | | |
| **CHGR** | **Chuyangaron** | **68.29** | **305** | P | **P** | **03 00 42.0** | **-0.7** |
| CHGR | | | | IAmb | IAmb | 03 00 43.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **ARU** | **Arti** | **73.17** | **325** | P | **P** | **03 01 10.3** | **-1.3** |
| ARU | | | | IAmb | IAmb | 03 01 11.6 | |
| | comp=Z,6.5nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.43** | **317** | P | **P** | **03 01 11.5** | **-1.8** |
| ABKAR | | | | IAmb | IAmb | 03 01 12.9 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.43** | **317** | P | **P** | **03 01 11.5** | **-1.8** |
| **OZB** | **Mount Ozzard** | **75.47** | **43** | P | **P** | **03 01 26.2** | **+1.1** |
| **ARCES** | **ARCESS Array B** | **82.62** | **342** | P | **P** | **03 02 02.3** | **-1.1** |
| | comp=Z,1.8nm,0.5s,baz=85,slow=8.6,SNR=18 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **KVN** | **Kaiserville** | **83.19** | **51** | P | **P** | **03 02 07.1** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **83.23** | **52** | | **P** | **03 02 07.9** | **+0.4** |
| **NVAR** | **Mina Array Bea** | **83.23** | **52** | P | **P** | **03 02 08.9** | **+1.5** |
| | comp=Z,1.1nm,0.5s,baz=268,slow=5.8,SNR=11 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **GMN** | **Gold Mountain** | **84.38** | **53** | P | **P** | **03 02 13.5** | **+0.2** |
| **TPNV** | **Topopah Spring** | **85.25** | **53** | P | **P** | **03 02 17.8** | **+0.2** |
| **BOZ** | **Bozeman (W)** | **85.47** | **43** | P | **P** | **03 02 18.4** | **0.0** |
| **KBZ** | **Khabaz** | **86.23** | **315** | P | **P** | **03 02 21.1** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=132,slow=5.3,SNR=3.5 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **87.00** | **335** | P | **P** | **03 02 22.9** | **-2.5** |
| | comp=Z,2.4nm,0.3s,baz=64,slow=4.5,SNR=84 | | | | | | |
| FINES | | | | pP | **pP** | **03 03 16.6** | **+3.3** |
| | comp=Z,0.8nm,0.4s,baz=79,slow=4.4,SNR=1.7 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **PD31** | **Pinedale Array** | **87.93** | **45** | P | **P** | **03 02 30.8** | **+0.3** |
| **PDAR** | **Pinedale Array** | **87.93** | **45** | P | **P** | **03 02 30.8** | **+0.3** |
| | comp=Z,0.3nm,0.3s,baz=43,slow=3.7,SNR=3.9 | | | | | | |
| PDAR | | | | pP | **pwP** | **03 03 23.4** | **+0.1** |
| | comp=Z,0.4nm,0.5s,baz=259,slow=3.0,SNR=3.3 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **92.50** | **338** | P | **P** | **03 02 48.5** | **-2.7** |
| | comp=Z,1.0nm,0.3s,baz=108,slow=2.1,SNR=22 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **92.69** | **340** | P | **P** | **03 02 49.6** | **-2.4** |
| | comp=Z,0.6nm,0.7s,baz=28,slow=3.5,SNR=5.1 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **94.20** | **314** | P | **P** | **03 02 57.5** | **-2.1** |
| | comp=Z,1.0nm,0.7s,baz=67,slow=3.2,SNR=8.6 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **123.79** | **191** | PKhKP | PKPpre | 03 08 32.6 | |
| | comp=Z,1.0nm,0.6s,baz=199,slow=7.5,SNR=3.3 | | | | | | |
| SNAA | | | | PKP | **PKPdf** | **03 08 35.1** | **-1.2** |
| | comp=Z,1.0nm,0.6s,baz=203,slow=8.7,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.53** | **309** | PKP | **PKPdf** | **03 08 53.8** | **-0.8** |
| | comp=Z,0.5nm,0.8s,baz=31,slow=1.1,SNR=9.9 | | | | | | |
| TORD | | | | SKPbc | **SKPbc** | **03 11 57.3** | **-5.6** |
| | comp=Z,0.4nm,0.7s,baz=12,slow=4.5,SNR=4.0 | | | | | | |
| **LPAZ** | **La Paz** | **147.68** | **91** | PKP | **PKPdf** | **03 09 23.1** | **+0.6** |
| | comp=Z,4.6nm,0.7s,baz=271,slow=1.7,SNR=16 | | | | | | |
| LPAZ | | | | PKPbc | **PKPbc** | **03 09 26.3** | **+0.8** |
| | comp=Z,4.6nm,0.7s,baz=284,slow=1.8,SNR=17 | | | | | | |

*CATAC **18** 02:50:15.2±0.2,12°.76N×88°.57W,h41km±8km,ML3.8*
*SNET **18** 02:50:15.3±0.9,12°.81N×88°.59W,h59km,ML4.0*

**ISC 18 02:50:11.8**±1.4,**12°.70N**±0°.04×**88°.61W**±0°.03,**h11**km±10km, **n100**,σ0**973**/168,**Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **INTP** | **Intipuca** | **0.73** | **48** | *e*P | **Pn** | **02 50 28.8** | **+0.6** |
| INTP | | | | *e*S | **Sn** | **02 50 39.1** | **-0.3** |
| **LCY** | **Lacayo** | **0.78** | **23** | *e*P | **Pn** | **02 50 29.5** | **+0.6** |
| **RANC** | **El Ranchito** | **0.79** | **23** | *e*P | **Pn** | **02 50 29.7** | **+0.5** |
| RANC | | | | *e*S | **Sn** | **02 50 40.9** | **-0.2** |
| **RANC** | **El Ranchito** | **0.79** | **23** | *i* P | **Pn** | **02 50 29.9** | **+0.7** |
| RANC | | | | *i* S | **Sn** | **02 50 41.5** | **+0.4** |
| RANC | | | | IAML | | 02 50 42.0 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **VSM** | **San Miguel** | **0.79** | **24** | *e*P | **Pn** | **02 50 29.9** | **+0.6** |
| **TECA** | **Tecapa** | **0.79** | **8** | *e*P | **Pn** | **02 50 29.6** | **+0.4** |
| TECA | | | | *e*S | **Sn** | **02 50 40.2** | **-1.0** |
| **PACA** | **Pacayal** | **0.81** | **20** | *e*P | **Pn** | **02 50 30.1** | **+0.6** |
| PACA | | | | *e*S | **Sn** | **02 50 41.0** | **-0.5** |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AMPH** | **Amapala** | **1.09** | **58** | *eP* | **Pn** | **02 50 33.5** | **+0.4** |
| **AMPH** | **Amapala** | **1.09** | **58** | *i* P | **Pn** | **02 50 34.1** | **+0.9** |
| AMPH | | | | *i* S | **Sb** | **02 50 47.5** | **+0.4** |
| **AEIL** | **Aeropuerto Ilo** | **1.10** | **334** | *eP* | **Pn** | **02 50 34.0** | **+0.6** |
| **CAHU** | **Cacacuatique** | **1.13** | **20** | *eP* | **Pn** | **02 50 34.3** | **+0.4** |
| CAHU | | | | *eS* | **Sn** | **02 50 49.4** | **-0.1** |
| **UDBS** | **Universidad Do** | **1.14** | **332** | *eP* | **Pn** | **02 50 34.4** | **+0.6** |
| UDBS | | | | *eS* | **Sb** | **02 50 48.6** | **+0.2** |
| **UDBS** | **Universidad Do** | **1.14** | **332** | *i* P | **Pn** | **02 50 34.4** | **+0.6** |
| UDBS | | | | *i* S | **Sb** | **02 50 48.7** | **+0.2** |
| UDBS | | | | IAML | | 02 50 53.0 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **IGN** | **Direccin Gen** | **1.14** | **332** | *eP* | **Pn** | **02 50 34.4** | **+0.5** |
| **IGN** | **Direccin Gen** | **1.14** | **332** | *i* P | **Pn** | **02 50 34.6** | **+0.7** |
| IGN | | | | IAML | | 02 50 34.8 | |
| | comp=Z,9µm,1.0s | | | | | | |
| IGN | | | | *i* S | **Sg** | **02 50 48.3** | **-0.4** |
| **UTEC** | **Universidad Te** | **1.15** | **330** | *eP* | **Pn** | **02 50 34.6** | **+0.6** |
| **UTEC** | **Universidad Te** | **1.15** | **330** | *i* P | **Pn** | **02 50 34.6** | **+0.6** |
| UTEC | | | | *i* S | **Sb** | **02 50 48.9** | **+0.2** |
| UTEC | | | | IAML | | 02 50 51.6 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **LFU** | **La Fuente** | **1.15** | **335** | *eP* | **Pn** | **02 50 34.7** | **+0.7** |
| LFU | | | | *eS* | **Sb** | **02 50 49.5** | **+0.7** |
| **SNET** | **Serv Nac Est T** | **1.15** | **328** | *i* P | **Pn** | **02 50 34.7** | **+0.7** |
| SNET | | | | *i* S | **Sb** | **02 50 48.8** | **0.0** |
| SNET | | | | IAML | | 02 50 52.7 | |
| | comp=Z,5µm,1.0s | | | | | | |
| **ITCA** | **Escuela Especi** | **1.16** | **326** | *eP* | **Pn** | **02 50 34.7** | **+0.4** |
| **ITCA** | **Escuela Especi** | **1.16** | **326** | *i* P | **Pn** | **02 50 34.9** | **+0.7** |
| ITCA | | | | *i* S | **Sb** | **02 50 49.2** | **-0.1** |
| ITCA | | | | IAML | | 02 50 51.3 | |
| | comp=Z,4µm,1.0s | | | | | | |
| **UESS** | **Universidad de** | **1.16** | **330** | *eP* | **Pn** | **02 50 35.0** | **+0.8** |
| UESS | | | | *eS* | **Sb** | **02 50 50.0** | **+0.8** |
| **UEES** | **Universidad Ev** | **1.18** | **329** | *eP* | **Pn** | **02 50 35.0** | **+0.6** |
| UEES | | | | *eS* | **Sb** | **02 50 49.9** | **+0.2** |
| **UEES** | **Universidad Ev** | **1.18** | **329** | *i* P | **Pn** | **02 50 35.3** | **+0.9** |
| UEES | | | | *i* S | **Sb** | **02 50 49.6** | **-0.1** |
| UEES | | | | IAML | | 02 50 50.8 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **PIC2** | **El Picacho** | **1.21** | **329** | *eP* | **Pn** | **02 50 35.8** | **+0.8** |
| **BOQS** | **Boqueron** | **1.22** | **328** | *eP* | **Pn** | **02 50 35.7** | **+0.6** |
| BOQS | | | | *eS* | **Sb** | **02 50 51.2** | **+0.4** |
| **PMON** | **Piamonte** | **1.22** | **326** | *eP* | **Pn** | **02 50 35.5** | **+0.6** |
| PMON | | | | *eS* | **Sb** | **02 50 51.0** | **+0.2** |
| **PMON** | **Piamonte** | **1.22** | **326** | *i* P | **Pn** | **02 50 35.7** | **+0.8** |
| PMON | | | | *i* S | **Sb** | **02 50 50.9** | **+0.2** |
| PMON | | | | IAML | | 02 50 55.7 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.25** | **319** | *eP* | **Pg** | **02 50 35.8** | **0.0** |
| JAYA | | | | *eS* | **Sg** | **02 50 51.6** | **-0.6** |
| **JAYA** | **Jayaque - finc** | **1.25** | **319** | *i* P | **Pg** | **02 50 35.9** | **0.0** |
| JAYA | | | | *i* S | **Sg** | **02 50 51.5** | **-0.6** |
| JAYA | | | | IAML | | 02 50 54.2 | |
| | comp=Z,6µm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **1.30** | **330** | *eP* | **Pn** | **02 50 36.9** | **+0.9** |
| **CEDA** | **San Andres** | **1.33** | **325** | *eS* | **Sb** | **02 50 54.4** | **+0.3** |
| **CEDA** | **San Andres** | **1.33** | **325** | *i* P | **Pn** | **02 50 37.2** | **+0.7** |
| CEDA | | | | *i* S | **Sg** | **02 50 53.9** | **-0.9** |
| CEDA | | | | IAML | | 02 51 00.5 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **LLGN** | **La Laguna** | **1.49** | **347** | *eP* | **Pn** | **02 50 39.0** | **+0.2** |
| **LLGN** | **La Laguna** | **1.49** | **347** | *i* P | **Pn** | **02 50 38.9** | **+0.2** |
| LLGN | | | | *i* S | **Sb** | **02 50 57.0** | **-1.6** |
| LLGN | | | | IAML | | 02 51 26.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.49** | **319** | *eP* | **Pn** | **02 50 39.9** | **+1.0** |
| **CEVE** | **Cerro Verde** | **1.49** | **319** | *i* P | **Pb** | **02 50 40.1** | **+0.3** |
| CEVE | | | | *i* S | **Sb** | **02 50 58.1** | **-0.7** |
| CEVE | | | | IAML | | 02 51 08.4 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **1.50** | **319** | *eP* | **Pb** | **02 50 40.3** | **+0.4** |
| **SNJE** | **San Jose** | **1.51** | **320** | *eP* | **Pn** | **02 50 39.9** | **+0.8** |
| **CRIN** | **San Cristobal** | **1.52** | **90** | *i* P | **Pn** | **02 50 39.6** | **+0.5** |
| CRIN | | | | *i* S | **Sn** | **02 50 58.6** | **-0.4** |
| CRIN | | | | IAML | | 02 51 02.2 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **MARCA** | **Marcala la Paz** | **1.55** | **21** | *i* P | **Pn** | **02 50 40.2** | **+0.6** |
| MARCA | | | | *i* S | **Sn** | **02 50 58.6** | **-1.2** |
| **RTR** | **El Retiro** | **1.56** | **320** | *eP* | **Pb** | **02 50 40.9** | **+0.1** |
| **UNIC** | **Universidad Ca** | **1.56** | **324** | *eP* | **Pn** | **02 50 40.8** | **+1.1** |
| **UNIC** | **Universidad Ca** | **1.56** | **324** | *i* P | **Pn** | **02 50 40.4** | **+0.7** |
| UNIC | | | | *i* S | **Sn** | **02 50 59.5** | **-0.6** |
| UNIC | | | | IAML | | 02 51 06.9 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **1.65** | **316** | *eP* | **Pn** | **02 50 41.7** | **+0.7** |
| **NUBE** | **Las Nubes** | **1.65** | **316** | *i* P | **Pn** | **02 50 41.6** | **+0.7** |
| NUBE | | | | *i* S | **Sn** | **02 51 01.8** | **-0.5** |
| NUBE | | | | IAML | | 02 51 03.9 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.72** | **319** | *i* P | **Pn** | **02 50 41.9** | **+0.1** |
| LOAL | | | | *i* S | **Sn** | **02 51 03.4** | **-0.5** |
| LOAL | | | | IAML | | 02 51 56.2 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **HERN** | **Volcan Telica** | **1.74** | **93** | *i* P | **Pn** | **02 50 43.2** | **+1.1** |
| HERN | | | | IAML | | 02 50 43.2 | |
| | comp=Z,860nm,1.0s | | | | | | |
| HERN | | | | *i* S | **Sn** | **02 51 03.6** | **-0.8** |
| **TELN** | **Telica** | **1.74** | **93** | *i* P | **Pn** | **02 50 42.6** | **+0.5** |
| TELN | | | | *i* S | **Sn** | **02 51 03.8** | **-0.6** |
| TELN | | | | IAML | | 02 51 05.6 | |
| | comp=Z,85nm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.74** | **319** | *eP* | **Pn** | **02 50 43.2** | **+1.1** |
| **ROCN** | **Rota Cerro Neg** | **1.83** | **96** | *i* P | **Pn** | **02 50 43.4** | **+0.1** |
| ROCN | | | | IAML | | 02 51 02.5 | |
| | comp=Z,36000µm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **1.84** | **337** | *eP* | **Pn** | **02 50 44.0** | **+0.4** |
| **MTO3** | **Montecristo** | **1.84** | **337** | *i* P | **Pn** | **02 50 44.1** | **+0.5** |
| MTO3 | | | | IAML | | 02 50 46.4 | |
| | comp=Z,270nm,1.0s | | | | | | |
| MTO3 | | | | *i* S | **Sn** | **02 51 05.2** | **-1.8** |
| **ILCN** | **San Idelfonso** | **1.87** | **94** | *i* P | **Pn** | **02 50 44.3** | **+0.5** |
| ILCN | | | | *i* S | **Sn** | **02 51 06.3** | **-1.2** |
| ILCN | | | | IAML | | 02 51 15.3 | |
| | comp=Z,160nm,1.0s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **1.87** | **44** | *eP* | **Pn** | **02 50 44.3** | **+0.3** |
| **CNGA** | **Al SSO del Vol** | **1.88** | **96** | *i* P | **Pn** | **02 50 42.7** | **-1.3** |
| CNGA | | | | *i* S | **Sn** | **02 51 06.4** | **-1.3** |
| CNGA | | | | IAML | | 02 51 10.6 | |
| | comp=Z,830nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **1.88** | **96** | *i* P | **Pn** | **02 50 44.9** | **+0.9** |
| CNGN | | | | *i* S | **Sn** | **02 51 06.9** | **-0.9** |
| CNGN | | | | IAML | | 02 51 14.4 | |
| | comp=Z,670nm,1.0s | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **1.97** | **99** | *i* P | **Pn** | **02 50 45.6** | **+0.4** |
| LEVN | | | | *i* S | **Sn** | **02 51 09.6** | **-0.4** |
| LEVN | | | | IAML | | 02 51 14.3 | |
| | comp=Z,540nm,1.0s | | | | | | |
| **ESQI** | **Esquipulas** | **1.98** | **339** | *eP* | **Pn** | **02 50 46.1** | **+0.7** |
| **ESQI** | **Esquipulas** | **1.98** | **339** | *i* P | **Pn** | **02 50 46.6** | **+1.2** |
| ESQI | | | | *i* S | **Sn** | **02 51 10.0** | **-0.3** |
| ESQI | | | | IAML | | 02 51 15.1 | |
| | comp=Z,480nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **2.04** | **105** | *i* P | **Pn** | **02 50 47.3** | **+1.1** |
| COPN | | | | IAML | | 02 51 17.2 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **MOM2** | **El Cardon** | **2.09** | **97** | *i* P | **Pn** | **02 50 47.4** | **+0.5** |
| MOM2 | | | | *i* S | **Sn** | **02 51 11.7** | **-1.3** |
| MOM2 | | | | IAML | | 02 51 18.5 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **YUSH** | **Yuscaran** | **2.12** | **54** | *i* P | **Pn** | **02 50 47.7** | **+0.3** |
| YUSH | | | | *i* S | **Sn** | **02 51 11.5** | **-2.4** |
| **BRAN** | **Las Pilas** | **2.21** | **89** | *i* P | **Pn** | **02 50 50.0** | **+1.5** |
| BRAN | | | | *i* S | **Sn** | **02 51 16.2** | **+0.4** |
| BRAN | | | | IAML | | 02 51 45.1 | |
| | comp=Z,770nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **2.22** | **80** | *i* P | **Pn** | **02 50 49.5** | **+0.8** |
| LIMN | | | | IAML | | 02 50 49.7 | |
| | comp=Z,290nm,1.0s | | | | | | |
| **APQ3** | **Volcan Apoyequ** | **2.23** | **101** | *i* P | **Pn** | **02 50 49.6** | **+0.8** |
| APQ3 | | | | IAML | | 02 50 50.3 | |
| | comp=Z,350nm,1.0s | | | | | | |
| APQ3 | | | | *i* S | **Sn** | **02 51 15.7** | **-0.7** |
| **APQ2** | **Apoyeque** | **2.29** | **102** | *i* P | **Pn** | **02 50 50.2** | **+0.6** |
| APQ2 | | | | *i* S | **Sn** | **02 51 17.2** | **-0.6** |
| APQ2 | | | | IAML | | 02 51 25.3 | |
| | comp=Z,430nm,1.0s | | | | | | |
| **TISN** | **Laguna Tiscapa** | **2.35** | **103** | *i* P | **Pn** | **02 50 51.3** | **+0.8** |
| TISN | | | | IAML | | 02 51 23.8 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **UNAN** | **Cigeo UNAN** | **2.36** | **104** | *i* P | **Pn** | **02 50 51.9** | **+1.3** |
| UNAN | | | | *i* S | **Sn** | **02 51 18.8** | **-0.8** |
| UNAN | | | | IAML | | 02 51 25.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **R4DEC** | **Barrio San Lui** | **2.37** | **103** | *i* P | **Pn** | **02 50 50.8** | **0.0** |
| R4DEC | | | | IAML | | 02 50 56.0 | |
| | comp=Z,290nm,1.0s | | | | | | |
| R4DEC | | | | *i* S | **Sn** | **02 51 18.5** | **-1.4** |
| **HUEN** | | **2.41** | **98** | *i* P | **Pn** | **02 50 52.7** | **+1.4** |
| HUEN | | | | *i* S | **Sn** | **02 51 19.7** | **-1.1** |
| HUEN | | | | IAML | | 02 51 29.2 | |
| | comp=Z,96nm,1.0s | | | | | | |
| **WILN** | **Americas 2** | **2.43** | **103** | *i* P | **Pn** | **02 50 52.5** | **+1.0** |
| WILN | | | | *i* S | **Sn** | **02 51 20.1** | **-1.2** |
| WILN | | | | IAML | | 02 51 24.1 | |
| | comp=Z,180nm,1.0s | | | | | | |
| **CHIHN** | **Chmisales** | **2.46** | **6** | *i* P | **Pn** | **02 50 52.6** | **+0.5** |
| CHIHN | | | | *i* S | **Sn** | **02 51 20.6** | **-1.7** |
| **BOAB** | **BOACO BROADBAN** | **2.89** | **95** | *i* P | **Pn** | **02 50 58.3** | **+0.5** |
| BOAB | | | | IAML | | 02 50 58.6 | |
| | comp=Z,93nm,1.0s | | | | | | |
| BOAB | | | | *i* S | **Sn** | **02 51 32.6** | **0.0** |
| **CHTG** | **Tecpan** | **3.08** | **312** | *i* P | **Pn** | **02 51 01.2** | **+0.4** |
| CHTG | | | | IAML | | 02 51 20.1 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **3.44** | **102** | *i* P | **Pn** | **02 51 05.3** | **-0.1** |
| ACON | | | | *i* S | **Sn** | **02 51 45.3** | **-0.9** |
| ACON | | | | IAML | | 02 52 47.3 | |
| | comp=Z,64nm,1.0s | | | | | | |

*CATAC* ***18*** *02:53:33.4±0.8, 7.°59N×83.°56W, h15km±6km, ML5.0*
*UPA* ***18*** *02:53:47.9±0.8, 8.°66N×83.°17W, h2km±3km, MW3.5*
*UCR* ***18*** *02:53:48.4±0.9, 8.°63N×83.°23W, h21km±2km, MW4.1,*
*Fault plane solution: NP1:φs96.63000°, δ45.86000°, λ76.00000°.*

**ISC 18 02:53:49.0±0.8, 8.°60N±0.°03×83.°24W±0.°02, h18km±2km, n52, σ2s13/69, 8C-15D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDAD** | **Golfito** | **0.09** | **55** | *eP* | **Pb** | **02 53 51.6** | **-1.0** |
| EDAD | | | | *eS* | **Sb** | **02 53 54.1** | **-0.9** |
| **FITO** | **Golfito** | **0.09** | **75** | *eP* | **Pb** | **02 53 51.5** | **-1.1** |
| FITO | | | | *eS* | **Sg** | **02 53 54.0** | **-0.9** |
| **PTJ1** | **Puerto Jimnez** | **0.09** | **224** | *i* P | **Pg** | **02 53 52.6** | **0.0** |
| PTJ1 | | | | *i* S | Sg | 02 54 05.1 | +10 |
| **PTJ1** | **Puerto Jimnez** | **0.09** | **224** | *i* P | **Pg** | **02 53 52.4** | **-0.2** |
| PTJ1 | | | | *eS* | **Sg** | **02 53 56.6** | **+1.6** |
| **PTJ1** | **Puerto Jimnez** | **0.09** | **224** | *eP* | **Pg** | **02 53 52.4** | **-0.2** |
| PTJ1 | | | | *eS* | **Sg** | **02 53 56.3** | **+1.3** |
| **JIME** | **Puerto Jimenez** | **0.11** | **233** | *eP* | **Pg** | **02 53 52.5** | **-0.2** |
| JIME | | | | *eS* | **Sg** | **02 53 56.5** | **+1.3** |
| **NELY** | **Ciudad Neily** | **0.29** | **81** | *eP* | **Pg** | **02 53 54.8** | **-0.7** |
| NELY | | | | *eS* | **Sg** | **02 53 59.9** | **+0.1** |
| **VITO** | **San Vito** | **0.34** | **51** | *eP* | **Pg** | **02 53 55.8** | **-0.6** |
| **CDITO** | **Canoas** | **0.36** | **94** | *i* P | **Pg** | **02 53 55.2** | **-1.4** |
| CDITO | | | | *i* S | **Sn** | **02 54 11.7** | **+5.6** |
| CDITO | | | | IAML | | 02 54 40.9 | |
| | comp=Z,16µm,1.0s | | | | | | |
| **EDP2** | **Potrero Grande** | **0.42** | **8** | *eP* | **Pg** | **02 53 56.7** | **-0.9** |
| **EDPN** | **Palmar Norte** | **0.42** | **329** | *eP* | **Pg** | **02 53 56.4** | **-1.2** |
| EDPN | | | | *eS* | **Sg** | **02 54 02.9** | **-0.5** |
| **PTPM** | **Petroterminale** | **0.53** | **138** | *eP* | **Pb** | **02 53 59.4** | **-0.4** |
| PTPM | | | | *eS* | **Sn** | **02 54 09.1** | **-1.2** |
| **EDBA** | **Buenos Aires** | **0.56** | **356** | *eP* | **Pb** | **02 53 59.0** | **-1.3** |
| **BRU2** | **Volcan** | **0.57** | **71** | *i* P | **Pb** | **02 53 58.8** | **-1.8** |
| BRU2 | | | | *i* S | **Sn** | **02 54 18.8** | **+7.3** |
| BRU2 | | | | IAML | | 02 54 50.1 | |
| | comp=Z,9µm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.57** | **71** | *i* P | **Pb** | **02 53 59.3** | **-1.3** |
| BRU2 | | | | *eS* | **Sb** | **02 54 07.6** | **-0.8** |
| **BRU2** | **Volcan** | **0.57** | **71** | *eP* | **Pb** | **02 53 59.2** | **-1.3** |
| **BURE** | **Buenos Aires** | **0.58** | **350** | *eP* | **Pb** | **02 53 59.3** | **-1.3** |
| **OCHAL** | **Ojochal** | **0.64** | **321** | *i* P | **Pb** | **02 53 59.7** | **-1.9** |
| OCHAL | | | | *i* S | **Sn** | **02 54 19.6** | **+6.8** |
| OCHAL | | | | IAML | | 02 54 45.7 | |
| | comp=Z,6µm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.66** | **359** | *i* P | **Pb** | **02 54 00.4** | **-1.7** |
| DRK0 | | | | *i* S | Sn | 02 54 24.9 | +11 |
| **DRK0** | **Durika** | **0.66** | **359** | *i* P | **Pb** | **02 54 00.3** | **-1.7** |
| DRK0 | | | | *eS* | **Sb** | **02 54 10.4** | **-0.5** |
| **DRK0** | **Durika** | **0.66** | **359** | *eP* | **Pb** | **02 54 00.2** | **-1.8** |
| **BCO2** | **Palmira** | **0.71** | **81** | *eP* | **Pb** | **02 54 01.6** | **-1.4** |
| BCO2 | | | | *eS* | **Sb** | **02 54 12.2** | **-0.3** |
| **DVD** | **David** | **0.80** | **102** | *eP* | **Pb** | **02 54 03.2** | **-1.1** |
| DVD | | | | *eS* | **Sb** | **02 54 15.1** | **+0.3** |
| **PEDE3** | **Pedregal, Chir** | **0.84** | **105** | *eP* | **Pb** | **02 54 03.5** | **-1.5** |
| PEDE3 | | | | *eS* | **Sb** | **02 54 16.0** | **+0.1** |
| **ZELE** | **Perez Zeledon** | **0.90** | **329** | *eP* | **Pb** | **02 54 04.5** | **-1.6** |
| **BUS1** | **Rivas** | **1.07** | **332** | *eP* | **Pb** | **02 54 07.0** | **-2.3** |
| **BRIBI** | **Bribri** | **1.09** | **21** | *eP* | **Pn** | **02 54 08.4** | **-0.9** |
| **CNI2** | **El Empalme, Bo** | **1.11** | **43** | *eP* | **Pn** | **02 54 07.8** | **-1.9** |
| CNI2 | | | | *eS* | **Sb** | **02 54 22.0** | **-1.9** |
| **LLNJ** | **Naranjito** | **1.22** | **316** | *eP* | **Pn** | **02 54 09.1** | **-2.1** |
| **ABE2** | **San Pablo** | **1.36** | **324** | *eP* | **Pn** | **02 54 12.0** | **-1.4** |
| **LCR2** | **La Lucha 2** | **1.36** | **326** | *i* P | Pn | 02 54 09.5 | -3.8 |
| LCR2 | | | | *i* S | **Sg** | **02 54 36.2** | **+3.0** |
| LCR2 | | | | IAML | | 02 55 07.5 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.36** | **326** | *eP* | **Pn** | **02 54 11.2** | **-2.2** |
| **VERB** | **Verbena** | **1.41** | **341** | *eP* | **Pn** | **02 54 12.3** | **-1.6** |
| **VTCV** | **VTCV, Calle Va** | **1.46** | **341** | *eP* | **Pn** | **02 54 13.1** | **-1.5** |
| **RAFA** | **San Farael, Vo** | **1.46** | **337** | *i* P | **Pn** | **02 54 12.0** | **-2.8** |
| RAFA | | | | *i* S | **Sg** | **02 54 42.0** | **+5.6** |
| RAFA | | | | IAML | | 02 55 14.2 | |
| | comp=Z,13µm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.46** | **337** | *eP* | **Pn** | **02 54 13.2** | **-1.6** |
| **CVTV** | **Tajo** | **1.48** | **340** | *eP* | **Pn** | **02 54 13.6** | **-1.4** |
| **CVTR** | **Volcan Turrial** | **1.50** | **340** | *eP* | **Pn** | **02 54 14.2** | **-1.2** |
| **LCOCO** | **El Coco** | **1.51** | **348** | *eP* | **Pn** | **02 54 14.3** | **-0.8** |
| **IRES** | **Siquirres** | **1.51** | **350** | *eP* | **Pn** | **02 54 14.3** | **-0.9** |
| **RVLA** | **Villa Bonita** | **1.54** | **347** | *eP* | **Pn** | **02 54 14.7** | **-0.9** |
| **HDC** | **Heredia** | **1.64** | **328** | *eP* | **Pn** | **02 54 16.6** | **-0.4** |
| **HDC3** | **Heredia 3** | **1.64** | **328** | *i* P | Pn | 02 54 13.3 | -3.7 |
| HDC3 | | | | *i* S | **Sg** | **02 54 43.7** | **+1.8** |
| HDC3 | | | | IAML | | 02 55 17.8 | |
| | comp=Z,5µm,1.0s | | | | | | |
| **BELE** | **Belen** | **1.66** | **326** | *eP* | **Pn** | **02 54 16.5** | **-0.8** |
| **TRB2** | **Turrubares** | **1.77** | **318** | *eP* | **Pn** | **02 54 17.8** | **-0.9** |
| **TCS1** | **Tacares** | **1.77** | **324** | *i* P | Pn | 02 54 14.4 | -4.5 |
| TCS1 | | | | IAML | | 02 55 24.8 | |
| | comp=Z,25µm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **2.23** | **323** | *i* P | Pn | 02 54 19.8 | -5.4 |
| SOCE | | | | *i* S | **Sb** | **02 54 55.7** | **-0.5** |
| SOCE | | | | IAML | | 02 55 35.9 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **JTS** | **Las Juntas de** | **2.38** | **315** | *eP* | **Pn** | **02 54 28.0** | **+0.8** |
| **JTS** | **Las Juntas de** | **2.38** | **315** | *eP* | **Pn** | **02 54 27.7** | **+0.5** |
| **COVE** | **Coope Vega, Sa** | **2.40** | **331** | *i* P | Pn | 02 54 24.1 | -3.3 |
| COVE | | | | *i* S | **Sb** | **02 55 02.2** | **+1.3** |
| COVE | | | | IAML | | 02 55 50.8 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **INDI** | **Punta indio, G** | **2.56** | **300** | *i* P | Pn | 02 54 20.2 | -9.5 |
| INDI | | | | *i* S | **Sn** | **02 54 55.7** | **-4.7** |
| INDI | | | | IAML | | 02 55 51.1 | |
| | comp=Z,780nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **3.85** | **331** | *eP* | **Pn** | **02 54 47.9** | **+0.6** |

*IDC* ***18*** *02:54:21.7±3.7, 9.°11N×82.°94W, h0km, mb3.9/3, mbtmp3.9/5, ML3.3/2, Error ellipse: s-maj=101.8km s-min=27.4km az=17.0*
*UPA* ***18*** *02:54:22.7±1.2, 8.°66N×83.°17W, h9km±4km, MW4.3*
*UCR* ***18*** *02:54:22.4±0.7, 8.°63N×83.°22W, h20km±2km, MW4.4,*
*Fault plane solution: NP1:φs81.51000°, δ55.15000°, λ83.90000°.*

**ISC 18 02:54:22.3±0.8, 8.°64N±0.°03×83.°19W±0.°02, h18km±3km, n36, σ0s85/52, mb3.9/3, 7C-8D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDAD** | **Golfito** | **0.03** | **71** | *eP* | **Pg** | **02 54 25.5** | **0.0** |
| EDAD | | | | *eS* | **Sg** | **02 54 28.1** | **+0.4** |
| **FITO** | **Golfito** | **0.04** | **115** | *eP* | **Pg** | **02 54 25.4** | **-0.1** |
| FITO | | | | *eS* | **Sg** | **02 54 28.0** | **+0.3** |
| **PTJ1** | **Puerto Jimnez** | **0.15** | **226** | *i* P | **Pg** | **02 54 26.4** | **-0.2** |
| PTJ1 | | | | *i* S | **Sg** | **02 54 30.5** | **+1.1** |
| **PTJ1** | **Puerto Jimnez** | **0.15** | **226** | *eP* | **Pg** | **02 54 26.3** | **-0.2** |
| PTJ1 | | | | *eS* | **Sg** | **02 54 30.4** | **+1.0** |
| **JIME** | **Puerto Jimenez** | **0.17** | **231** | *eP* | **Pb** | **02 54 26.4** | **+0.1** |
| JIME | | | | *eS* | **Sg** | **02 54 30.4** | **+0.6** |
| **NELY** | **Ciudad Neily** | **0.24** | **88** | *eP* | **Pg** | **02 54 28.8** | **+0.9** |
| NELY | | | | *eS* | **Sg** | **02 54 34.0** | **+2.3** |
| **VITO** | **San Vito** | **0.28** | **51** | *eP* | **Pb** | **02 54 29.7** | **+0.9** |
| **EDP2** | **Potrero Grande** | **0.37** | **2** | *eP* | **Pb** | **02 54 30.6** | **+0.2** |
| **EDPN** | **Palmar Norte** | **0.41** | **321** | *eP* | **Pg** | **02 54 30.3** | **-0.4** |
| EDPN | | | | *eS* | **Sg** | **02 54 36.8** | **+0.3** |
| **BRU2** | **Volcan** | **0.52** | **73** | *i* P | **Pb** | **02 54 33.2** | **+0.3** |
| BRU2 | | | | *eS* | **Sn** | **02 54 41.6** | **-1.8** |
| **BRU2** | **Volcan** | **0.52** | **73** | *eP* | **Pb** | **02 54 33.0** | **+0.1** |
| **EDBA** | **Buenos Aires** | **0.52** | **351** | *eP* | **Pg** | **02 54 32.5** | **-0.3** |
| **PTPM** | **Petroterminale** | **0.54** | **145** | *i* P | **Pb** | **02 54 33.4** | **+0.3** |
| PTPM | | | | *eS* | **Sn** | **02 54 42.8** | **-0.8** |
| **BURE** | **Buenos Aires** | **0.55** | **345** | *eP* | **Pg** | **02 54 33.2** | **-0.1** |
| **DRK0** | **Durika** | **0.62** | **355** | *i* P | **Pb** | **02 54 34.2** | **-0.4** |
| DRK0 | | | | *eS* | **Sb** | **02 54 44.2** | **+1.2** |
| **DRK0** | **Durika** | **0.62** | **355** | *eP* | **Pb** | **02 54 34.1** | **-0.5** |
| **BCO2** | **Palmira** | **0.66** | **83** | *i* P | **Pg** | **02 54 35.6** | **+0.2** |
| BCO2 | | | | *i* S | **Sn** | **02 54 45.9** | **-1.0** |
| **DVD** | **David** | **0.76** | **106** | *eP* | **Pg** | **02 54 37.3** | **+0.1** |
| DVD | | | | *eS* | **Sn** | **02 54 48.2** | **-0.9** |
| **ZELE** | **Perez Zeledon** | **0.89** | **325** | *eP* | **Pb** | **02 54 38.7** | **-0.5** |
| **BRIBI** | **Bribri** | **1.03** | **19** | *eP* | **Pg** | **02 54 42.5** | **+0.2** |
| **CNI2** | **El Empalme, Bo** | **1.05** | **43** | *i* P | **Pb** | **02 54 41.7** | **-0.3** |
| CNI2 | | | | *eS* | **Sn** | **02 54 56.0** | **-0.4** |
| **BUS1** | **Rivas** | **1.06** | **329** | *eP* | **Pb** | **02 54 41.2** | **-1.1** |
| **CHGR2** | **Aguacate** | **1.08** | **74** | *eP* | **Pn** | **02 54 42.1** | **-0.4** |
| CHGR2 | | | | *eS* | **Sb** | **02 54 56.0** | **-0.1** |
| **LCR2** | **La Lucha 2** | **1.35** | **324** | *eP* | **Pn** | **02 54 45.8** | **-0.7** |
| **RAFA** | **San Farael, Vo** | **1.44** | **335** | *eP* | **Pn** | **02 54 47.9** | **+0.1** |
| **LCOCO** | **El Coco** | **1.48** | **346** | *eP* | **Pn** | **02 54 48.3** | **+0.3** |
| **RVLA** | **Villa Bonita** | **1.51** | **345** | *eP* | **Pn** | **02 54 48.6** | **+0.2** |
| **HDC** | **Heredia** | **1.63** | **326** | *eP* | **Pn** | **02 54 50.7** | **+0.5** |
| **GMAL** | **Guarumal, Vera** | **2.13** | **114** | *eP* | **Pn** | **02 54 56.1** | **-0.8** |
| **JTS** | **Las Juntas de** | **2.39** | **313** | Pn | **Pn** | **02 55 01.6** | **+1.1** |
| | 34nm,0.3s,baz=306,slow=21,SNR=7.9 | | | | | | |
| JTS | | | | Sn | **Sn** | **02 55 30.7** | **+1.4** |
| | 28nm,0.3s,baz=28,slow=21,SNR=8.2 134nm,0.4s | | | | | | |
| **JTS** | **Las Juntas de** | **2.39** | **313** | *eP* | **Pn** | **02 55 02.0** | **+1.4** |
| JTS | | | | *eS* | **Sn** | **02 55 31.4** | **+2.1** |
| **APG** | **El Apazote** | **9.52** | **312** | Pn | **Pn** | **02 56 40.0** | **+1.2** |
| | 0.1nm,0.3s,baz=87,slow=3.5,SNR=8.9 1.0nm,0.7s | | | | | | |
| **ULM** | **Lac du Bonnet** | **42.80** | **348** | P | **P** | **03 02 17.4** | **-1.4** |
| | 2.1nm,0.6s,baz=168,slow=7.6,SNR=4.5 2.1nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **71.17** | **336** | P | **P** | **03 05 39.6** | **-0.1** |
| | 0.7nm,0.7s,baz=115,slow=4.4,SNR=11 0.7nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **76.26** | **51** | P | **P** | **03 06 10.4** | **+0.2** |
| | 1.0nm,0.9s,baz=296,slow=4.1,SNR=4.8 1.0nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **142.03** | **249** | PKP | **PKiKP** | **03 13 56.5** | **-0.7** |
| | 0.3nm,0.8s,baz=101,slow=3.4,SNR=2.3 | | | | | | |

*UPA* ***18*** *03:05:04.2±1.6, 8.°62N×83.°15W, h0km±5km, MW4.2*
*UCR* ***18*** *03:05:04.8±0.7, 8.°56N×83.°22W, h16km±2km, MW4.3,*
*Fault plane solution: NP1:φs269.00000°, δ33.23000°, λ61.81000°.*
*CATAC* ***18*** *03:05:05.1±0.3, 8.°68N×83.°21W, h2km±1km, ML4.3*

**ISC 18 03:05:05.0±0.8, 8.°61N±0.°03×83.°21W±0.°02, h15km±5km, n57, σ1s100/83, 5C-16D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.06** | **74** | *eP* | **Pg** | **03 05 07.5** | **-0.4** |
| **EDAD** | **Golfito** | **0.06** | **45** | *eP* | **Pg** | **03 05 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| INDI | | | | | IAML | | | 03 06 38.0 | | |
| | comp=Z,500nm,1.0s | | | | | | | | | |
| **AZU** | **Azuero** | **3.02** | **105** | *eP* | | **Pn** | | **03 05 54.3** | **+2.1** |
| **MLIR** | **Monte Lirio** | **3.37** | **79** | *eP* | | **Pn** | | **03 05 57.8** | **+0.6** |
| **BCIP** | **Isla Barro Col** | **3.38** | **80** | *i* P | | **Pn** | | **03 05 59.4** | **+2.2** |
| BCIP | | | | *i* S | | **Sn** | | **03 06 40.2** | **+3.2** |
| BCIP | | | | | IAML | | | 03 06 56.4 | | |
| | comp=Z,340nm,1.0s | | | | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.38** | **80** | *eP* | | **Pn** | | **03 05 57.7** | **+0.5** |
| **BLUN** | **Bluefields** | **3.42** | **351** | *i* P | | **Pn** | | **03 05 58.0** | **+0.2** |
| BLUN | | | | *i* S | | **Sn** | | **03 06 39.4** | **+1.3** |
| BLUN | | | | | IAML | | | 03 06 46.3 | | |
| | comp=Z,180nm,1.0s | | | | | | | | | |
| **ACON** | **Acoyapa** | **3.86** | **330**⇑ | *eP* | | **Pn** | | **03 06 06.3** | **+2.5** |

*IGQ* ***18*** *03:16:34.0±0.2,1˝S±1˝×8˝1W±˝, h8km, M4.2/21*
*RSNC* ***18*** *03:16:35.5±0.5,1˝S±3˝×8˝0W±˝, h0km, M4.3, mb4.6, mB4.8, ML4.0, Mw(mB)4.0*

**ISC 18 03:16:33.3**±1.2,**1˝28S**±0˝02×**80˝52W**±0˝04,**h4**km±12km, **n83**,σ1s**72**/102,**Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ISPT** | **Isla de la Pla** | **0.56** | **272** | P | **Pg** | **03 16 44.1** | **+0.1** |
| ISPT | | | | S | **Sg** | **03 16 51.9** | **+0.8** |
| **CAB1** | **Cabo Pasado-Ma** | **0.89** | **6** | P | **Pg** | **03 16 50.5** | **+0.1** |
| CAB1 | | | | S | **Sb** | **03 17 03.5** | **-0.1** |
| **SALI** | **Salinas** | **1.02** | **208** | P | **Pg** | **03 16 53.4** | **+0.6** |
| SALI | | | | S | **Sg** | **03 17 06.8** | **+0.9** |
| **AQUE** | **Quevedo** | **1.05** | **77** | P | **Pg** | **03 16 53.6** | **+0.2** |
| AQUE | | | | S | **Sb** | **03 17 08.1** | **-0.2** |
| **ABAB** | **Ecuador-Univer** | **1.13** | **117** | P | **Pg** | **03 16 54.8** | **-0.2** |
| ABAB | | | | S | **Sb** | **03 17 10.6** | **0.0** |
| **MORR** | **Playas El Morr** | **1.36** | **172** | P | **Pg** | **03 16 60.0** | **+0.5** |
| **MILO** | **Milagro-Astudi** | **1.38** | **136** | P | **Pn** | **03 16 57.6** | **-1.8** |
| MILO | | | | S | **Sb** | **03 17 16.1** | **-1.7** |
| **PU07** | **PU07** | **1.51** | **135** | P | **Pn** | **03 16 59.0** | **-2.2** |
| PU07 | | | | S | **Sn** | **03 17 19.5** | **-1.8** |
| **PU01** | **PU01** | **1.54** | **169** | P | **Pn** | **03 17 02.2** | **+0.6** |
| **AGRD** | **Ecuador-Guaran** | **1.54** | **101** | P | **Pn** | **03 17 01.3** | **-0.7** |
| **JSCH** | **Cashca Totoras** | **1.60** | **106** | P | **Pn** | **03 17 02.0** | **-0.7** |
| **PU02** | **PU02** | **1.60** | **163** | P | **Pg** | **03 17 04.5** | **+0.5** |
| **PU05** | **PU05** | **1.61** | **141** | P | **Pn** | **03 17 01.9** | **-0.7** |
| **CHSH** | **Refugio Sur-Vo** | **1.66** | **97** | P | **Pn** | **03 17 04.2** | **+0.3** |
| **PU04** | **PU04** | **1.68** | **146** | P | **Pn** | **03 17 02.7** | **-0.7** |
| **ISPG** | **Isla Puna-Puer** | **1.71** | **168** | P | **Pg** | **03 17 08.6** | **+2.4** |
| **ASDO** | **Santo Domingo** | **1.72** | **54** | P | **Pb** | **03 17 05.3** | **-0.3** |
| **PORT** | **Chimborazo Vol** | **1.75** | **96** | P | **Pn** | **03 17 04.9** | **-0.2** |
| **TAMH** | **Tambohuasha Ch** | **1.76** | **99** | P | **Pn** | **03 17 05.1** | **+0.1** |
| **PU03** | **PU03** | **1.77** | **156** | P | **Pn** | **03 17 05.5** | **+0.8** |
| **IGUA** | **Igualata** | **1.89** | **96** | P | **Pn** | **03 17 07.9** | **+1.0** |
| **PAST** | **Pastocalle** | **1.96** | **73** | P | **Pn** | **03 17 08.6** | **+0.7** |
| **BBIL** | **Ulba Tungurahu** | **2.04** | **95** | P | **Pb** | **03 17 10.5** | **-0.6** |
| **TUYU** | **Q. Yuibug Volc** | **2.06** | **96** | P | **Pn** | **03 17 10.4** | **+1.3** |
| **BPAT** | **Tungurahua Vol** | **2.10** | **96** | P | **Pb** | **03 17 11.2** | **-1.0** |
| **CAMI** | **Rancho Maria** | **2.10** | **73** | P | **Pn** | **03 17 10.1** | **+0.4** |
| **PTGL** | **Punta Galera** | **2.11** | **13** | P | **Pn** | **03 17 09.9** | **+0.5** |
| **BUB** | **Ulba Tungurahu** | **2.11** | **94** | P | **Pb** | **03 17 11.7** | **-0.8** |
| **BNAS** | **Cotopaxi Volca** | **2.13** | **73** | P | **Pn** | **03 17 11.3** | **+1.2** |
| **BMOR** | **Cotopaxi Volca** | **2.13** | **75** | P | **Pn** | **03 17 10.2** | **0.0** |
| **BREF** | **Cotopaxi Volca** | **2.17** | **74** | P | **Pn** | **03 17 11.4** | **+0.6** |
| **GGPT** | **Toaza - Volcan** | **2.17** | **61** | P | **Pn** | **03 17 09.3** | **-1.3** |
| **JUA2** | **San Juan 2** | **2.19** | **61** | P | **Pn** | **03 17 10.2** | **-0.8** |
| **BVC2** | **Cotopaxi Volca** | **2.20** | **74** | P | **Pn** | **03 17 11.7** | **+0.6** |
| **BTAM** | **Cotopaxi Volca** | **2.21** | **74** | P | **Pn** | **03 17 11.6** | **+0.3** |
| **PITA** | **Cotopaxi Volc** | **2.21** | **71** | P | **Pn** | **03 17 11.8** | **+0.6** |
| **GGPC** | **Guagua Pichinc** | **2.21** | **60** | P | **Pn** | **03 17 11.0** | **-0.4** |
| **PINO** | **Pino** | **2.21** | **60** | P | **Pn** | **03 17 10.8** | **-0.6** |
| **TAMB** | **Tambo** | **2.23** | **75** | P | **Pn** | **03 17 12.2** | **+0.6** |
| **YANA** | **Yana** | **2.26** | **59** | P | **Pn** | **03 17 11.3** | **-0.7** |
| **PIAT** | **Ana Tenorio** | **2.27** | **83** | P | **Pn** | **03 17 12.9** | **+0.8** |
| PIAT | | | | S | **Sn** | **03 17 40.5** | **-0.3** |
| **ARNL** | **Arenillas** | **2.30** | **169** | P | **Pn** | **03 17 12.9** | **+0.9** |
| **PAC1** | **Pacto, Paraso** | **2.31** | **48** | P | **Pn** | **03 17 10.5** | **-1.9** |
| PAC1 | | | | S | **Sn** | **03 17 41.3** | **-0.1** |
| **PAC1** | **Pacto, Paraso** | **2.31** | **48** | P | **Pn** | **03 17 10.9** | **-1.5** |
| PAC1 | | | | S | **Sn** | **03 17 41.8** | **+0.4** |
| **PULU** | **Pululahua** | **2.40** | **57** | P | **Pn** | **03 17 14.1** | **+0.3** |
| **ANTS** | **Antisana-Sarah** | **2.47** | **72** | P | **Pn** | **03 17 16.9** | **+1.9** |
| **ANTI** | **Antisana** | **2.50** | **71** | P | **Pn** | **03 17 16.7** | **+1.4** |
| **PUYO** | **Puyo, Santa Ro** | **2.50** | **95** | P | **Pb** | **03 17 18.4** | **-0.5** |
| **RVRD** | **Rio Verde** | **2.59** | **26** | P | **Pn** | **03 17 15.0** | **-1.1** |
| **CUIC** | **Cuicocha-Domo** | **2.67** | **54** | P | **Pn** | **03 17 18.8** | **+1.3** |
| **COTA** | **Cotacachi** | **2.71** | **54** | P | **Pn** | **03 17 20.2** | **+2.1** |
| **ARDO** | **Archidona, Ten** | **2.73** | **84** | P | **Pb** | **03 17 21.2** | **-1.6** |
| **BOSC** | **San Juan Bosco** | **2.75** | **133** | P | **Pb** | **03 17 21.5** | **-1.7** |
| **IMBA** | **Imbabura, San** | **2.79** | **56** | P | **Pn** | **03 17 20.2** | **+1.0** |
| **URCU** | **Urcuqui** | **2.83** | **53** | P | **Pn** | **03 17 20.0** | **+0.2** |
| **ANGU** | **Angureal** | **2.84** | **62** | P | **Pn** | **03 17 21.3** | **+1.4** |
| **YAHU** | **Yahuarcocha** | **2.95** | **56** | P | **Pn** | **03 17 22.9** | **+1.7** |
| **MCRA** | **Macar, Loja** | **3.12** | **170** | P | **Pn** | **03 17 25.3** | **+1.9** |
| MCRA | | | | S | **Sn** | **03 18 02.3** | **+1.1** |
| **REVS** | **Reventador Sur** | **3.12** | **68** | P | **Pb** | **03 17 28.5** | **-1.1** |
| **REVN** | **San Rafael** | **3.13** | **68** | P | **Pb** | **03 17 29.3** | **-0.4** |
| **TAIS** | **Taisha** | **3.21** | **110** | P | **Pb** | **03 17 29.1** | **-1.9** |
| **LNGL** | **El Angel-Carch** | **3.22** | **51** | P | **Pb** | **03 17 29.9** | **-1.5** |
| **CHL2** | **Volcɲn Chiles** | **3.32** | **52** | P | **Pn** | **03 17 28.3** | **+1.7** |
| **TULM** | **Tulcn-Chalpat** | **3.38** | **54** | P | **Pb** | **03 17 31.6** | **-2.4** |
| TULM | | | | S | **Sb** | **03 18 18.0** | **+2.3** |
| **TULM** | **Tulcn-Chalpat** | **3.38** | **54** | P | **Pb** | **03 17 31.7** | **-2.3** |
| **BONI** | **La Bonita** | **3.45** | **60** | P | **Pn** | **03 17 30.9** | **+2.8** |
| BONI | | | | S | **Sb** | **03 18 17.4** | **-0.2** |
| **BONI** | **La Bonita** | **3.45** | **60** | P | **Pb** | **03 17 31.8** | **-3.4** |
| **CMBC** | **Cumbal** | **3.48** | **51** | P | **Pb** | **03 17 32.7** | **-3.1** |
| **TUMC** | **Tumaco** | **3.57** | **30** | P | **Pn** | **03 17 27.4** | **-2.1** |
| TUMC | | | | S | **Sb** | **03 18 23.1** | **+2.4** |
| **ZUMB** | **Zumba** | **3.81** | **159** | P | **Pn** | **03 17 36.6** | **+3.6** |
| **CRUC** | **La Cruz** | **4.55** | **52** | P | **Pn** | **03 17 46.8** | **+3.4** |
| CRUC | | | | S | **Sb** | **03 18 46.0** | **-3.5** |
| **BBAC** | **Balboa, Cauca** | **4.63** | **45** | P | **Pn** | **03 17 45.1** | **+0.7** |
| BBAC | | | | S | **Sn** | **03 18 40.4** | **+1.6** |
| **BBAC** | **Balboa, Cauca** | **4.63** | **45** | P | **Pn** | **03 17 44.4** | **0.0** |
| **GR1C** | **Gorgona, Isla** | **4.86** | **29** | P | **Pn** | **03 17 49.1** | **+1.8** |
| GR1C | | | | S | **Sb** | **03 18 52.0** | **-6.0** |
| **POPC** | **Popayan, Colom** 37nm,0.7s | **5.40** | **45** | P | **Pn** | **03 17 54.9** | **0.0** |
| POPC | 37nm,0.7s | | | S | **Sn** | **03 18 56.1** | **-1.7** |
| **FLOC** | **Florencia** 36nm,1.0s,321nm | **5.64** | **60** | P | **Pn** | **03 17 59.8** | **+1.8** |
| FLOC | 36nm,1.0s,321nm | | | S | **Sb** | **03 19 20.5** | **+0.1** |
| **JAMC** | **Jamundi, Valle** 53nm,0.8s,514nm | **5.89** | **41** | P | **Pn** | **03 18 02.4** | **+0.7** |
| JAMC | 53nm,0.8s,514nm | | | S | **Sn** | **03 19 16.5** | **+6.6** |
| **PTLC** | **Puerto Leguiza** 73nm,1.1s,719nm | **5.90** | **76** | P | **Pn** | **03 18 02.7** | **+1.1** |
| **MALC** | **Bahia Malaga** | **6.15** | **31** | P | Pn | 03 18 10.8 | +5.8 |
| **ORTC** | **Ortega, Tolima** 43nm,1.1s,512nm | **7.37** | **46** | P | **Pn** | **03 18 25.4** | **+3.5** |
| **PLMC** | **San Jos del P** 15nm,1.0s | **7.46** | **35** | P | **Pn** | **03 18 22.7** | **-0.4** |
| **PRAC** | **Prado** 25nm,0.8s | **7.50** | **49** | P | **Pn** | **03 18 25.2** | **+1.5** |
| **CBOC** | **Ciudad Bolivar** | **8.40** | **32** | P | **Pn** | **03 18 38.4** | **+2.2** |

*BEO* ***18*** *03:25:06.8±1.2,41˝67N×14˝08E, h77km±8km, ML2.8/9*
*ROM* ***18*** *03:25:09.4±0.1,41˝862N±0˝007×14˝863E±0˝007, h23km±1km, ML2.9/164, Error ellipse: s-maj=0.8km s-min=0.1km az=22.0*

**ISC 18 03:25:09.9**±0.9,**41˝90N**±0˝02×**14˝84E**±0˝02,**h23**km±5km, **n80**,σ1s**56**/105,**8C-10D, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FRES** | **Fresagrandinar** | **0.15** | **300** | ⇓P | **Pb** | **03 25 15.0** | **+0.1** |
| FRES | | | | S | **Sb** | **03 25 17.7** | **-0.4** |
| FRES | | | | AML | AML | | |
| | comp=E,8425µm,1.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,4945µm,0.5s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,4260µm,0.2s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,7955µm,0.4s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.25** | **169** | ⇓P | **Pb** | **03 25 15.1** | **-0.9** |
| CIGN | | | | S | **Sb** | **03 25 18.7** | **-1.5** |
| CIGN | | | | AML | AML | | |
| | comp=N,3870µm,0.3s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,2785µm,0.4s | | | | | | |
| **TRIV** | **Trivento** | **0.25** | **239** | ⇑P | **Pb** | **03 25 15.9** | **-0.2** |
| TRIV | | | | S | **Sn** | **03 25 21.8** | **-1.7** |
| TRIV | | | | AML | AML | | |
| | comp=E,3450µm,1.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,4970µm,1.1s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,3720µm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,5195µm,1.1s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,4965µm,1.1s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,5115µm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,4895µm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,3385µm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,3720µm,0.3s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.29** | **132** | ⇓P | **Pb** | **03 25 15.7** | **-0.9** |
| MELA | | | | S | **Sb** | **03 25 20.2** | **-1.0** |
| MELA | | | | AML | AML | | |
| | comp=N,7840µm,1.0s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,8480µm,1.0s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,12400µm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,13350µm,0.3s | | | | | | |
| **GATE** | **Gambatesa** | **0.39** | **172** | ⇓P | **Pb** | **03 25 18.0** | **-0.2** |
| GATE | | | | AML | AML | | |
| | comp=E,2175µm,1.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,2185µm,1.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,1575µm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,2175µm,1.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,1730µm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,2180µm,1.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,2168µm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,1575µm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,2168µm,1.5s | | | | | | |
| **BSSO** | **Busso** | **0.40** | **208** | ⇑P | **Pb** | **03 25 18.0** | **-0.4** |
| BSSO | | | | S | **Sb** | **03 25 24.4** | **+0.2** |
| BSSO | | | | AML | AML | | |
| | comp=E,1545µm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,1010µm,0.2s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,638µm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,426µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,1545µm,1.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,1011µm,0.2s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,638µm,0.9s | | | | | | |
| **MIDA** | **Miranda** | **0.51** | **240** | ⇑P | **Pb** | **03 25 19.6** | **-0.6** |
| MIDA | | | | S | **Sb** | **03 25 27.2** | **0.0** |
| MIDA | | | | AML | AML | | |
| | comp=E,1675µm,0.8s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,1765µm,0.5s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,1860µm,0.8s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,1755µm,1.4s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,1770µm,0.5s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,1738µm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,1755µm,0.6s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,1675µm,1.2s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.51** | **287** | P | **Pb** | **03 25 20.6** | **+0.3** |
| LPEL | | | | S | **Sb** | **03 25 28.7** | **+1.3** |
| LPEL | | | | AML | AML | | |
| | comp=N,2105µm,1.2s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,2105µm,0.8s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,2075µm,0.7s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.51** | **191** | ⇓P | **Pb** | **03 25 19.4** | **-0.9** |
| SACR | | | | S | **Sb** | **03 25 26.7** | **-0.7** |
| SACR | | | | AML | AML | | |
| | comp=E,2300µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2215µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,1150µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2305µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2305µm,1.7s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,1205µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2215µm,1.7s | | | | | | |
| **APRC** | **Apricena** | **0.54** | **105** | P | **Pb** | **03 25 19.8** | **-1.1** |
| APRC | | | | AML | AML | | |
| | comp=E,1855µm,0.4s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,2085µm,0.9s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,1893µm,0.2s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.55** | **249** | ⇑P | **Pb** | **03 25 20.7** | **-0.3** |
| RNI2 | | | | S | **Sb** | **03 25 29.1** | **+0.7** |
| RNI2 | | | | AML | AML | | |
| | comp=E,3150µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2740µm,1.0s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2960µm,1.0s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,3420µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2960µm,1.0s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.58** | **156** | ⇓P | **Pb** | **03 25 20.7** | **-0.8** |
| MOCO | | | | AML | AML | | |
| | comp=N,319µm,0.2s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,592µm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,554µm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,292µm,0.6s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.62** | **214** | ⇑P | **Pb** | **03 25 21.0** | **-1.1** |
| SGG | | | | AML | AML | | |
| | comp=N,2.0nm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,683µm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,586µm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,683µm,1.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,2.2nm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,2.2nm,1.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,2.0nm,0.4s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.66** | **223** | ⇑P | **Pb** | **03 25 21.9** | **-1.0** |
| VAGA | | | | AML | AML | | |
| | comp=E,622µm,1.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,1400µm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,622µm,1.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,660µm,1.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,622µm,0.7s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,1325µm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,660µm,0.7s | | | | | | |
| **CERA** | **Filignano** | **0.68** | **244** | ⇑P | **Pb** | **03 25 22.3** | **-0.9** |
| CERA | | | | AML | AML | | |
| | comp=E,650µm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,642µm,0.6s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,618µm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,604µm,0.6s | | | | | | |
| **SGRT** | **San Giovanni R** | **0.69** | **102** | P | **Pb** | **03 25 22.2** | **-1.2** |
| SGRT | | | | AML | AML | | |
| | comp=E,1565µm,0.2s | | | | | | |
| SGRT | | | | AML | AML | | |
| | comp=N,1550µm,0.3s | | | | | | |
| SGRT | | | | AML | AML | | |
| | comp=N,1550µm,1.7s | | | | | | |
| **INTR** | **Introdacqua** | **0.71** | **279** | ⇓P | **Pb** | **03 25 23.4** | **-0.2** |
| INTR | | | | S | **Sb** | **03 25 34.0** | **+1.1** |
| INTR | | | | AML | AML | | |
| | comp=E,1340µm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,1915µm,1.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,1955µm,1.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,936µm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,1345µm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,1915µm,0.7s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,1955µm,0.7s | | | | | | |
| **MRB1** | **Monte Rocchett** | **0.78** | **173** | P | **Pb** | **03 25 23.9** | **-0.9** |
| MRB1 | | | | AML | AML | | |
| | comp=N,1410µm,0.5s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=E,1150µm,1.5s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=E,1090µm,1.5s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=N,1415µm,0.5s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=N,1412µm,0.5s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=N,1412µm,1.5s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=N,1410µm,1.5s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.82** | **103** | P | **Pn** | **03 25 25.3** | **-0.8** |
| MSAG | | | | AML | AML | | |
| | comp=E,1240µm,0.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,1235µm,0.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,2450µm,0.3s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,486µm,0.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,1064µm,0.3s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,486µm,1.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,1235µm,1.5s | | | | | | |
| **T0110** | **Collepietro** | **0.85** | **293** | P | **Pb** | **03 25 26.0** | **-0.2** |
| T0110 | | | | AML | AML | | |
| | comp=E,1018µm,0.5s | | | | | | |
| T0110 | | | | AML | AML | | |
| | comp=N,1185µm,0.7s | | | | | | |
| **PIGN** | **Pignataro Magg** | **0.86** | **216** | P | **Pb** | **03 25 24.9** | **-1.1** |
| PIGN | | | | AML | AML | | |
| | comp=N,296µm,0.8s | | | | | | |
| PIGN | | | | AML | AML | | |
| | comp=E,346µm,0.3s | | | | | | |
| **SGTA** | **Sant Agata di** | **0.86** | **152** | ⇓P | **Pb** | **03 25 24.8** | **-1.4** |
| SGTA | | | | AML | AML | | |
| | comp=E,1150µm,0.7s | | | | | | |
| SGTA | | | | AML | AML | | |
| | comp=N,858µm,0.9s | | | | | | |
| SGTA | | | | AML | AML | | |
| | comp=E,1140µm,0.7s | | | | | | |
| SGTA | | | | AML | AML | | |
| | comp=E,1145µm,0.7s | | | | | | |
| SGTA | | | | AML | AML | | |
| | comp=N,764µm,0.9s | | | | | | |
| SGTA | | | | AML | AML | | |
| | comp=N,858µm,0.9s | | | | | | |
| **POFI** | **Posta Fibreno** | **0.86** | **258** | ⇑P | **Pb** | **03 25 25.4** | **-0.8** |
| POFI | | | | AML | AML | | |
| | comp=E,414µm,1.4s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,403µm,1.4s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=N,308µm,0.6s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,403µm,0.6s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,414µm,0.6s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=N,292µm,0.6s | | | | | | |
| **MCI** | **Monte Cassino** | **0.87** | **242** | P | **Pb** | **03 25 25.6** | **-0.7** |
| MCI | | | | AML | AML | | |
| | comp=E,774µm,0.6s | | | | | | |
| MCI | | | | AML | AML | | |
| | comp=N,618µm,0.2s | | | | | | |
| MCI | | | | AML | AML | | |
| | comp=E,774µm,1.4s | | | | | | |
| **PAOL** | **Paolisi** | **0.89** | **193** | P | **Pb** | **03 25 25.3** | **-1.4** |
| PAOL | | | | AML | AML | | |
| | comp=E,1165µm,0.6s | | | | | | |
| PAOL | | | | AML | AML | | |
| | comp=E,1185µm,0.6s | | | | | | |
| PAOL | | | | AML | AML | | |
| | comp=N,800µm,0.3s | | | | | | |
| PAOL | | | | AML | AML | | |
| | comp=N,786µm,0.3s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.89** | **304** | P | **Pb** | **03 25 26.9** | **+0.2** |
| VCEL | | | | AML | AML | | |
| | comp=E,1410µm,0.7s | | | | | | |
| VCEL | | | | AML | AML | | |
| | comp=N,1480µm,0.3s | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.91** | **269** | P | **Pb** | **03 25 26.2** | **-0.8** |
| VVLD | | | | AML | AML | | |
| | comp=E,579µm,0.6s | | | | | | |
| VVLD | | | | AML | AML | | |
| | comp=N,422µm,1.2s | | | | | | |
| VVLD | | | | AML | AML | | |
| | comp=N,422µm,0.8s | | | | | | |
| VVLD | | | | AML | AML | | |
| | comp=E,579µm,1.4s | | | | | | |
| **CAFE** | **Carife** | **0.92** | **161** | ⇓P | **Pb** | **03 25 25.9** | **-1.4** |
| CAFE | | | | AML | AML | | |
| | comp=E,1028µm,0.3s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=E,1029µm,0.3s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=E,1065µm,0.3s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=E,1029µm,1.7s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=E,1065µm,1.7s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=N,648µm,0.3s | | | | | | |
| CAFE | | | | AML | AML | | |
| | comp=N,656µm,0.3s | | | | | | |
| **LRP** | **Arpino** | **0.97** | **255** | P | **Pb** | **03 25 27.2** | **-0.9** |
| **MTMR** | **Montemarano** | **0.99** | **173** | P | **Pb** | **03 25 27.0** | **-1.4** |
| MTMR | | | | AML | AML | | |
| | comp=N,1655µm,0.6s | | | | | | |
| MTMR | | | | AML | AML | | |
| | comp=N,1655µm,1.4s | | | | | | |
| MTMR | | | | AML | AML | | |
| | comp=E,1655µm,0.8s | | | | | | |
| MTMR | | | | AML | AML | | |
| | comp=N,786µm,0.6s | | | | | | |
| MTMR | | | | AML | AML | | |
| | comp=E,912µm,0.8s | | | | | | |
| **FAGN** | **Fagnano** | **1.00** | **292** | P | **Pn** | **03 25 28.5** | **-0.1** |
| FAGN | | | | AML | AML | | |
| | comp=N,828µm,0.4s | | | | | | |
| FAGN | | | | AML | AML | | |
| | comp=E,1305µm,0.4s | | | | | | |
| **SNAL** | **S. Angelo Dei** | **1.01** | **164** | ⇓P | **Pb** | **03 25 27.0** | **-1.8** |
| SNAL | | | | AML | AML | | |
| | comp=E,688µm,1.2s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=N,587µm,1.2s | | | | | | |
| SNAL | | | | AML | AML | | |

comp=E,690μm,1.5s
SNAL AML AML
comp=E,690μm,0.5s
SNAL AML AML
comp=E,688μm,0.8s
SNAL AML AML
comp=N,596μm,1.2s
**LIK San Giovanni I 1.04 248** AML AML
comp=N,578μm,0.4s
LIK AML AML
comp=E,736μm,0.6s
**CRTO Cratere Ovest, 1.12 196** AML AML
comp=E,3030μm,0.3s
CRTO AML AML
comp=N,1385μm,0.6s
**MCRV Calabrutti - M 1.14 167** P **Pn** **03 25 29.1 -1.5**
MCRV AML AML
comp=E,669μm,0.8s
MCRV AML AML
comp=N,700μm,1.0s
**GIUL Giuliano Di Ro 1.23 255** P **Pn** **03 25 31.6 -0.1**
GIUL AML AML
comp=E,132μm,0.9s
GIUL AML AML
comp=N,158μm,1.1s
GIUL AML AML
comp=E,132μm,1.1s
**PALZ Palazzo San Ge 1.27 138** P **Pb** **03 25 32.9 -0.3**
PALZ AML AML
comp=N,541μm,0.9s
PALZ AML AML
comp=N,541μm,1.1s
PALZ AML AML
comp=E,616μm,0.9s
**ACER Acerenza 1.39 143** P **Pb** **03 25 34.5 -0.7**
ACER AML AML
comp=N,374μm,0.6s
ACER AML AML
comp=N,370μm,0.6s
ACER AML AML
comp=N,370μm,1.4s
ACER AML AML
comp=E,328μm,0.6s
ACER AML AML
comp=E,291μm,0.6s
**CERT Cerreto 1.39 273** P **Pn** **03 25 34.1 +0.2**
CERT AML AML
comp=E,234μm,0.5s
CERT AML AML
comp=N,108μm,1.3s
CERT AML AML
comp=N,108μm,0.7s
**LATB Latina 1.46 255** AML AML
comp=N,23μm,0.9s
LATB AML AML
comp=E,32μm,1.4s
LATB AML AML
comp=N,23μm,1.1s
**STON Ston 2.33 64** *e*Pn **Pb** **03 25 49.5 -1.7**
STON *e*Sn **Sb** **03 26 19.3 -0.2**
**STON Ston 2.33 64** *e*Pn **Pb** **03 25 51.2 0.0**
**TREB Trebinje 2.73 71** *e*Pn **Pn** **03 25 54.4 +2.1**
**A050A Klekovaca 2.86 25** *e*Pn **Pb** **03 25 59.4 -0.9**
**BRY Bratogost 2.92 69** *e*Pn **Pn** **03 25 57.4 +2.4**
**DRME Dracevica, Mon 3.25 83** *e*Pn **Pn** **03 26 02.0 +2.6**
**UPM Unac-Piva 3.27 65** *e*Pn **Pb** **03 26 04.3 -3.1**
**BLY Banja Luka 3.32 30** *e*Pn **Pb** **03 26 06.0 -2.1**
**PDG Podgorica 3.33 79** *e*Pn **Pn** **03 26 02.9 +2.5**
PDG *e*Sn **Sn** **03 26 42.3 +3.1**
**PDG Podgorica 3.33 79** *e*Pn **Pn** **03 26 02.8 +2.4**
**A051A Mrakovica 3.46 25** *e*Pn **Pb** **03 26 08.4 -2.0**
**BOJS Bojanci 3.62 5** *e*Pn **Pb** **03 26 09.0 -4.1**
**SKDS Skadanscina 3.69 351** *e*Pn **Pn** **03 26 06.7 +1.1**
**HAPS Han Pijesak,BI 3.73 53** *e*Pn **Pb** **03 26 10.3 -4.7**
**RUDO Rudo 3.75 61** *e*Pn **Pn** **03 26 08.3 +2.0**
**BBLS Lazi&#263i 3.89 58** *e*Pn **Pn** **03 26 12.2 +3.9**
**BBLS Lazi&#263i 3.89 58** *e*Pn Pb 03 26 12.7 -5.1
**SJES Sjenica 4.03 69** *e*Pn **Pn** **03 26 13.6 +3.4**
SJES *e*Sn **Sn** **03 26 59.2 +2.5**
**SJES Sjenica 4.03 69** *e*Pn Pb 03 26 14.9 -5.3
**OBKA Obir 4.61 358** *i* Pn **Pn** **03 26 19.1 +0.8**
comp=N,0.6nm,0.2s
OBKA *i* Sn **Sn** **03 27 12.1 +1.0**
comp=N,1.2nm,0.3s
**TRUS Trudelj 4.69 58** *e*Pn **Pn** **03 26 20.8 +1.6**
**GRUS Gruza 4.75 63** *e*Pn **Pn** **03 26 21.6 +1.5**
**SOKA Soboth 4.78 2** *i* Pn **Pn** **03 26 20.8 +0.3**
comp=N,0.4nm,0.2s
SOKA *e*Sn **Sn** **03 27 13.1 -2.1**
comp=N,0.5nm,0.3s
**MYKA Terra Mystica 4.81 350** *i* Pn **Pn** **03 26 22.3 +1.4**
comp=N,1.3nm,0.3s
MYKA *i* Sn **Sn** **03 27 17.7 +1.9**
comp=N,1.0nm,0.3s
**SELS Selova 4.82 72** *e*Pn **Pn** **03 26 24.5 +3.5**
SELS *e*Sn **Sn** **03 27 18.1 +1.9**
**ABTA Abfaltersbach 5.13 342** *i* Pn **Pn** **03 26 24.4 -0.9**
comp=N,0.6nm,0.2s
ABTA *i* Sn **Sn** **03 27 24.6 +0.9**
comp=N,3.3nm,0.6s
**BARS Barje 5.25 78** *e*Pn **Pn** **03 26 29.5 +2.6**
BARS *e*Sn **Sn** **03 27 27.7 +1.0**
**KBA Koelnbreinsper 5.29 349** *i* Pn **Pn** **03 26 27.8 +0.2**
comp=N,2.6nm,0.5s
**ARSA Arzberg 5.37 5** *i* Pn **Pn** **03 26 29.0 +0.4**
comp=N,0.5nm,0.2s
ARSA *e*Sn **Sn** **03 27 29.0 -0.7**
comp=N,0.6nm,0.3s
**LESA Schwarzleotal 5.74 345** *e*Pn **Pn** **03 26 34.0 +0.4**
comp=N,0.4nm,0.2s
LESA *e*Sn **Sn** **03 27 40.3 +1.6**
comp=N,1.2nm,0.3s
**WTTA Wattenberg 5.83 338** *i* Pn **Pn** **03 26 35.1 0.0**
comp=N,0.2nm,0.3s
WTTA *i* Sn **Sn** **03 27 41.5 +0.3**
comp=N,4.8nm,0.6s
**FETA Feichten 5.91 332** *i* Pn **Pn** **03 26 37.1 +1.0**
comp=N,0.4nm,0.3s
FETA *i* Sn **Sn** **03 27 43.4 +0.4**
comp=N,15nm,0.0s
**WATA Walderalm 5.91 338** *i* Pn **Pn** **03 26 33.7 -2.5**
comp=N,1.3nm,0.4s
WATA *i* Sn **Sn** **03 27 44.8 +1.6**
comp=N,0.8nm,0.2s
**ZAPS Zavoj 5.92 74** *e*Pn **Pn** **03 26 36.8 +0.7**
ZAPS *e*Sn **Sn** **03 27 43.6 +0.5**
**SQTA Sankt Quirin 5.92 335** *i* Pn **Pn** **03 26 36.9 +0.7**
comp=N,0.4nm,0.2s
SQTA *i* Sn **Sn** **03 27 43.6 +0.3**
comp=N,3.3nm,0.5s
**MOA Molln 5.96 356** *e*Pn **Pn** **03 26 37.8 +1.1**
comp=N,0.3nm,0.2s
MOA *e*Sn **Sn** **03 27 44.8 +0.5**
comp=N,0.1nm,0.1s
**MOTA Moosalm 6.06 335** *e*Pn **Pn** **03 26 37.3 -0.9**
comp=N,0.4nm,0.2s
MOTA *i* Sn **Sn** **03 27 47.5 +0.6**
comp=N,3.9nm,0.7s
**CONA Conrad Observa 6.07 7** *i* Pn **Pn** **03 26 37.0 -1.2**
comp=N,0.3nm,0.3s
CONA *i* Sn **Sn** **03 27 48.4 +1.4**
comp=N,0.4nm,0.2s
**RETA Reutte 6.30 334** *e*Sn **Sn** **03 27 52.4 -0.2**
comp=N,1.2nm,0.3s
**DAVA Damuels 6.45 328** *e*Pn **Pn** **03 26 43.1 -0.4**
comp=N,0.3nm,0.2s
DAVA *i* Sn **Sn** **03 27 53.6 -2.7**
comp=N,0.9nm,0.4s

*IDC* ***18*** *03:26:48.9±0.9,38°.56N×21°.82E,h0km,mb3.9/12, mbtmp3.8/14,ML2.2/2,MS3.0/5,Error ellipse: s-maj=19.7km s-min=17.7km az=25.0*
*BEO* ***18*** *03:26:49.0±1.8,37°.93N×21°.88E,h68km±2km,ML3.6/17*
*ATH* ***18*** *03:26:49.2,38°.37N×21°.81E,h11km±1km,ML3.7/18, Manual Solution by A.Fokaefs This location: 2020/07/02 13:36:17 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 0 km; Longitude uncertainty: 0 km*
*PDG* ***18*** *03:26:49.6±0.2,38°.41N×21°.77E,h11km±2km,ML3.6/10, Error ellipse: s-maj=3.2km s-min=1.2km az=90.0*
*THE* ***18*** *03:26:50.3,38°.41N×21°.82E,h5km±1km,ML3.6/17, Error ellipse: s-maj=1.2km s-min=0.5km az=279.0*
*NEIC* ***18*** *03:26:51±2.5,38°.41N±0°.06×21°.81E±0°.02,h10km±1km,*

*mb4.2/6, Error ellipse: s-maj=9.9km s-min=3.1km az=178.0*
*NAO* ***18*** *03:27:06.6,40°.42N×24°.57E,h33km,mb3.3*
**ISC 18 03:26:49.8**±0.7,**38°.41N**±0°.02×**21°.80E**±0°.02,**h10**km±4km, **n202**,σ1°§69/272,**mb4.1**/14,**MS2.8**/4,**18C-13D**,**Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EFP** | **Efpalio** | **0.09** | **76** | P | **Pg** | **03 26 51.8** | **-0.4** |
| EFP | | | | S | **Sg** | **03 26 53.6** | **-0.5** |
| | 77μm,0.6s | | | | | | |
| **EFP** | **Efpalio** | **0.09** | **76** | P | **Pg** | **03 26 51.9** | **-0.4** |
| EFP | | | | S | **Sg** | **03 26 53.5** | **-0.5** |
| **UPR** | **University Cam** | **0.12** | **184** | P | **Pg** | **03 26 52.8** | **+0.1** |
| UPR | | | | S | **Sg** | **03 26 55.1** | **+0.3** |
| **ANX** | **Ano Chora** | **0.21** | **27** | P | **Pg** | **03 26 54.0** | **-0.2** |
| ANX | | | | S | **Sg** | **03 26 57.6** | **+0.3** |
| | 80μm,0.4s | | | | | | |
| **ANX** | **Ano Chora** | **0.21** | **27** | P | **Pg** | **03 26 54.1** | **-0.2** |
| ANX | | | | S | **Sg** | **03 26 57.5** | **+0.1** |
| **ALIK** | **Aliki, Aigiali** | **0.29** | **120** | P | **Pg** | **03 26 55.4** | **-0.1** |
| ALIK | | | | S | **Sb** | **03 27 00.2** | **-1.6** |
| **MSL1** | **Messolongi** | **0.29** | **264** | P | **Pg** | **03 26 55.4** | **-0.3** |
| **PVO** | **Paravola** | **0.30** | **315** | P | **Pg** | **03 26 55.9** | **+0.1** |
| PVO | | | | S | **Sb** | **03 27 01.6** | **-0.6** |
| | 52μm,0.4s | | | | | | |
| **PVO** | **Paravola** | **0.30** | **315** | P | **Pg** | **03 26 55.9** | **+0.1** |
| PVO | | | | S | **Sb** | **03 27 01.3** | **-1.0** |
| **KLV1** | **Kalavrita** | **0.45** | **146** | P | **Pg** | **03 26 57.8** | **-0.8** |
| **KLV** | **Kalavryta, Ach** | **0.46** | **142** | P | **Pg** | **03 26 58.1** | **-0.6** |
| KLV | | | | S | **Sb** | **03 27 05.7** | **-1.1** |
| **KLV** | **Kalavryta, Ach** | **0.46** | **142** | P | **Pg** | **03 26 58.1** | **-0.6** |
| KLV | | | | S | **Sg** | **03 27 04.7** | **-0.1** |
| **EVR** | **Evrytania** | **0.51** | **1** | P | **Pb** | **03 27 00.2** | **-0.7** |
| EVR | | | | S | **Sb** | **03 27 08.2** | **-0.2** |
| | 15μm,0.4s | | | | | | |
| **EVR** | **Evrytania** | **0.51** | **1** | P | **Pb** | **03 27 00.5** | **-0.4** |
| EVR | | | | S | **Sb** | **03 27 07.8** | **-0.7** |
| **GUR** | **Goura** | **0.64** | **137** | P | **Pg** | **03 27 01.0** | **-1.1** |
| GUR | | | | S | **Sb** | **03 27 11.1** | **-0.9** |
| | 7μm,0.5s | | | | | | |
| **GUR** | **Goura** | **0.64** | **137** | P | **Pg** | **03 27 01.1** | **-1.0** |
| GUR | | | | S | **Sg** | **03 27 10.4** | **0.0** |
| **MAKR** | **Makrakomi, Fth** | **0.66** | **23** | P | **Pg** | **03 27 02.1** | **-0.5** |
| MAKR | | | | S | **Sb** | **03 27 12.6** | **-0.1** |
| | 44μm,0.2s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.66** | **23** | P | **Pg** | **03 27 02.1** | **-0.5** |
| MAKR | | | | S | **Sb** | **03 27 12.0** | **-0.7** |
| **AXAR** | **Agios Charalam** | **0.77** | **62** | P | **Pg** | **03 27 03.5** | **-1.1** |
| AXAR | | | | S | **Sb** | **03 27 15.3** | **-0.4** |
| | 11μm,0.4s | | | | | | |
| **AXAR** | **Agios Charalam** | **0.77** | **62** | P | **Pg** | **03 27 03.4** | **-1.2** |
| AXAR | | | | S | **Sb** | **03 27 15.0** | **-0.7** |
| **RTZL** | **Ratzakli, Kefa** | **0.87** | **248** | P | **Pg** | **03 27 06.7** | **+0.1** |
| RTZL | | | | S | **Sn** | **03 27 20.8** | **0.0** |
| | 3μm,0.6s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.92** | **290** | P | **Pg** | **03 27 07.2** | **-0.2** |
| NYDR | | | | S | **Sn** | **03 27 22.0** | **+0.2** |
| | 1μm,0.6s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.92** | **290** | P | **Pb** | **03 27 07.6** | **-0.1** |
| NYDR | | | | S | **Sg** | **03 27 19.4** | **+0.1** |
| **SMHA** | **Samh** | **0.92** | **261** | P | **Pg** | **03 27 06.8** | **-0.7** |
| SMHA | | | | S | **Sg** | **03 27 19.5** | **+0.1** |
| **EVGl** | **Lefkada island** | **0.92** | **284** | P | **Pg** | **03 27 07.5** | **0.0** |
| **EVGl** | **Lefkada island** | **0.92** | **284** | P | **Pg** | **03 27 07.7** | **+0.2** |
| **FSK** | **Fiskardo** | **0.97** | **274** | P | **Pg** | **03 27 08.3** | **-0.1** |
| **FSK** | **Fiskardo** | **0.97** | **274** | P | **Pg** | **03 27 08.3** | **-0.1** |
| FSK | | | | S | **Sg** | **03 27 21.5** | **+0.4** |
| **LKD2** | **Lefkada island** | **0.97** | **294** | P | **Pg** | **03 27 08.4** | **-0.1** |
| **TSLK** | **Tsoukalades, L** | **0.99** | **295** | P | **Pg** | **03 27 08.7** | **-0.1** |
| **PSDA** | **Pessada-Kefalo** | **1.00** | **253** | P | **Pg** | **03 27 08.1** | **-0.8** |
| **PSDA** | **Pessada-Kefalo** | **1.00** | **253** | P | **Pg** | **03 27 08.1** | **-0.8** |
| PSDA | | | | S | **Sg** | **03 27 22.1** | **+0.1** |
| **LOUT** | **Loutraki** | **1.02** | **114** | P | **Pn** | **03 27 09.9** | **-0.2** |
| **LTHK** | **Lithakia** | **1.03** | **228** | P | **Pg** | **03 27 08.9** | **-0.6** |
| LTHK | | | | S | **Sn** | **03 27 25.5** | **+0.9** |
| | 2μm,0.6s | | | | | | |
| **ARG2** | **Argostoli** | **1.05** | **258** | P | **Pb** | **03 27 09.4** | **-0.7** |
| **ARS1** | **Argos** | **1.06** | **136** | P | **Pb** | **03 27 09.4** | **-0.9** |
| **KRI1** | **kERI** | **1.07** | **227** | P | **Pb** | **03 27 09.4** | **-0.9** |
| **AIDA** | **Aidipsos** | **1.08** | **65** | P | **Pg** | **03 27 10.1** | **-0.5** |
| **DMLN** | **Damoulianata-K** | **1.13** | **262** | P | **Pb** | **03 27 10.7** | **-0.7** |
| DMLN | | | | S | **Sn** | **03 27 28.9** | **+1.6** |
| | 3μm,0.5s | | | | | | |
| **VIL2** | **Platees** | **1.17** | **99** | P | **Pg** | **03 27 12.1** | **-0.3** |
| **VILL** | **Villia** | **1.22** | **101** | P | **Pg** | **03 27 12.8** | **-0.3** |
| VILL | | | | S | **Sn** | **03 27 29.9** | **+0.5** |
| | 3μm,0.7s | | | | | | |
| **TYRN** | **Tyrnavos** | **1.35** | **14** | P | **Pb** | **03 27 15.0** | **-0.1** |
| TYRN | | | | S | **Sg** | **03 27 33.5** | **+0.3** |
| | 4μm,0.6s | | | | | | |
| **KLMT** | **Kalamata** | **1.36** | **171** | P | **Pn** | **03 27 13.5** | **-1.2** |
| **KRND** | **KRANIDI** | **1.48** | **133** | P | **Pb** | **03 27 17.1** | **-0.2** |
| KRND | | | | S | **Sg** | **03 27 37.7** | **+0.4** |
| | 1μm,0.7s | | | | | | |
| **PYL** | **PYLOS** | **1.51** | **182** | P | **Pb** | **03 27 17.6** | **-0.2** |
| **ATHU** | **Athens Univers** | **1.63** | **105** | P | **Pn** | **03 27 18.7** | **+0.2** |
| ATHU | | | | S | **Sb** | **03 27 39.8** | **-0.6** |
| | 285nm,0.8s | | | | | | |
| **ATHU** | **Athens Univers** | **1.63** | **105** | P | **Pn** | **03 27 17.9** | **-0.6** |
| **DION** | **Dionisos Attik** | **1.71** | **100** | P | **Pb** | **03 27 20.9** | **-0.5** |
| DION | | | | S | **Sb** | **03 27 42.2** | **-0.7** |
| | 1μm,0.8s | | | | | | |
| **DION** | **Dionisos Attik** | **1.71** | **100** | P | **Pb** | **03 27 20.4** | **-0.9** |
| **KYMI** | **Kymi, Euboea I** | **1.82** | **82** | P | **Pn** | **03 27 20.8** | **-0.3** |
| KYMI | | | | S | **Sb** | **03 27 46.3** | **+0.3** |
| | 390nm,1.2s | | | | | | |
| **VLI** | **Veliai** | **1.91** | **151** | P | **Pn** | **03 27 23.1** | **+0.7** |
| **KEK** | **Kerkira** | **2.03** | **311** | | **Pb** | **03 27 25.8** | **-0.9** |
| KEK | | | | Sn | **Sb** | **03 27 51.6** | **-0.5** |
| **KBN** | **Korca** | **2.35** | **341** | | **Pb** | **03 27 30.4** | **-1.9** |
| **FNA** | **Florina** | **2.40** | **352** | Pn | **Pb** | **03 27 31.5** | **-1.6** |
| **FNA** | **Florina** | **2.40** | **352** | *e*Pn | **Pb** | **03 27 31.4** | **-1.6** |
| FNA | | | | *e*Sn | **Sb** | **03 28 01.1** | **-1.6** |
| **VLO** | **Vlora** | **2.73** | **320** | | **Pn** | **03 27 34.2** | **+0.6** |
| **OHR** | **Ohrid** | **2.81** | **344** | *e*Pn | **Pb** | **03 27 38.5** | **-1.6** |
| OHR | | | | *i* Sg | **Sg** | **03 27 39.9** | **-0.1** |
| **VAY** | **Valandovo** | **2.97** | **11** | *e*Pn | **Pn** | **03 27 36.4** | **-0.5** |
| VAY | | | | *i* Sg | **Sn** | **03 28 14.9** | **+2.2** |
| **SRS** | **Serrai** | **3.04** | **26** | *e*Pn | **Pn** | **03 27 38.0** | **+0.1** |
| SRS | | | | *e*Sn | **Sn** | **03 28 15.3** | **+0.9** |
| **SCTE** | **Santa Cesarea** | **3.08** | **304** | | **Pn** | **03 27 39.6** | **+1.2** |
| **APE** | **Apeiranthos** | **3.25** | **113** | ⇑P | **Pn** | **03 27 39.9** | **-0.9** |
| APE | | | | ⇑S | **Sn** | **03 28 17.6** | **-1.9** |
| **TIR** | **Tirane** | **3.29** | **334** | | **Pn** | **03 27 43.8** | **+2.4** |
| **SANT** | **Santorini** | **3.55** | **124** | Pn | **Pn** | **03 27 46.6** | **+1.6** |
| **PUK** | **Puka** | **3.92** | **339** | Pn | **Pn** | **03 27 52.0** | **+2.0** |
| **IDI** | **Anoyia** | **3.98** | **140** | Pn | **Pn** | **03 27 52.8** | **+2.0** |
| **IDI** | **Anoyia** | **3.98** | **140** | Pn | **Pn** | **03 27 54.0** | **+3.1** |
| | 1.2nm,0.3s,baz=25,slow=14,SNR=7.5 | | | | | | |
| IDI | | | | Sn | **Sn** | **03 28 39.8** | **+2.2** |
| | 1.9nm,0.3s,baz=250,slow=18,SNR=4.1 | | | | | | |
| | 6.1nm,0.5s | | | | | | |
| **TIP** | **Timpagrande** | **4.01** | **283** | Pn | **Pn** | **03 27 52.1** | **+0.7** |
| **TIP** | **Timpagrande** | **4.01** | **283** | ⇑P | **Pn** | **03 27 55.4** | **+4.1** |
| **ALN** | **Alexandroupoli** | **4.12** | **51** | Pn | **Pn** | **03 27 52.8** | **+0.2** |
| **DRME** | **Dracevica, Mon** | **4.27** | **333** | *e*Pn | **Pn** | **03 27 57.1** | **+2.3** |
| **DRME** | **Dracevica, Mon** | **4.27** | **333** | *e*Pn | **Pn** | **03 27 55.8** | **+1.0** |
| DRME | | | | *i* Sn | **Sn** | **03 28 46.2** | **+1.5** |
| **BARS** | **Barje** | **4.41** | **0** | *e*Pn | **Pn** | **03 27 59.6** | **+2.9** |
| BARS | | | | *e*Sn | **Sn** | **03 28 48.1** | **0.0** |
| **PDG** | **Podgorica** | **4.46** | **335** | | **Pn** | **03 27 59.2** | **+1.7** |
| **PDG** | **Podgorica** | **4.46** | **335** | *e*Pn | **Pn** | **03 28 00.4** | **+3.0** |
| PDG | | | | *e*Sn | **Sn** | **03 28 48.8** | **-0.6** |
| **PDG** | **Podgorica** | **4.46** | **335** | *e*Pn | Pn | 03 28 02.6 | +5.2 |
| **PDG** | **Podgorica** | **4.46** | **335** | ⇓P | Pn | 03 28 02.2 | +4.7 |
| **PDG** | **Podgorica** | **4.46** | **335** | *e*Pn | **Pn** | **03 27 58.5** | **+1.1** |
| PDG | | | | *i* Sn | **Sn** | **03 28 50.7** | **+1.3** |
| **BUM** | **Brajici-Budva** | **4.48** | **331** | ⇑*i*Pn | **Pn** | **03 27 58.7** | **+1.0** |
| BUM | | | | *i* Sn | **Sn** | **03 28 50.9** | **+1.0** |
| **CEL** | **Celeste** | **4.64** | **270** | Pn | **Pn** | **03 28 01.4** | **+1.4** |
| **CEME** | **Cevo** | **4.68** | **333** | ⇑*i*Pn | **Pn** | **03 28 01.6** | **+1.1** |
| CEME | | | | *i* Sn | **Sn** | **03 28 55.9** | **+0.9** |
| **IVA** | **Berane** | **4.69** | **343** | *e*Pn | **Pn** | **03 28 01.9** | **+1.2** |
| IVA | | | | *i* Sn | **Sn** | **03 28 56.5** | **+1.3** |
| **KOME** | **Kolasin** | **4.77** | **339** | *e*Pn | **Pn** | **03 28 02.8** | **+1.1** |
| KOME | | | | *i* Sn | **Sn** | **03 28 58.1** | **+1.0** |
| **SELS** | **Selova** | **4.84** | **354** | *e*Pn | **Pn** | **03 28 05.0** | **+2.4** |
| SELS | | | | *e*Sn | **Sn** | **03 28 58.8** | **+0.1** |
| **NKME** | **Niksic** | **4.87** | **334** | *e*Pn | **Pn** | **03 28 04.2** | **+1.2** |
| NKME | | | | *i* Sn | **Sn** | **03 29 00.3** | **+0.9** |
| **ZAPS** | **Zavoj** | **4.91** | **7** | *e*Pn | **Pn** | **03 28 05.7** | **+2.1** |
| ZAPS | | | | *e*Sn | **Sn** | **03 28 59.2** | **-1.2** |
| **TREB** | **Trebinje** | **5.04** | **330** | *e*Pn | **Pn** | **03 28 06.1** | **+0.7** |
| **SJES** | **Sjenica** | **5.04** | **345** | *e*Pn | **Pn** | **03 28 08.1** | **+2.5** |
| SJES | | | | *e*Sn | **Sn** | **03 29 03.2** | **-0.7** |
| **SJES** | **Sjenica** | **5.04** | **345** | *e*Pn | Pb | 03 28 12.7 | -5.5 |
| **BRY** | **Bratogost** | **5.13** | **332** | *e*Pn | **Pn** | **03 28 08.5** | **+1.8** |
| **BRY** | **Bratogost** | **5.13** | **332** | ⇑*i*Pn | **Pn** | **03 28 07.7** | **+1.0** |
| BRY | | | | *i* Sn | **Sn** | **03 29 06.6** | **+0.5** |
| **BOVS** | **Bovan** | **5.23** | **359** | *e*Pn | **Pn** | **03 28 10.2** | **+2.3** |
| BOVS | | | | *e*Sn | **Sn** | **03 29 07.4** | **-0.8** |
| **BOVS** | **Bovan** | **5.23** | **359** | ⇑P | **Pn** | **03 28 11.2** | **+3.2** |
| **PLE** | **Pljevlja** | **5.25** | **340** | ⇓*i*Pn | **Pn** | **03 28 09.6** | **+1.3** |
| PLE | | | | *i* Sn | **Sn** | **03 29 09.7** | **+0.8** |
| **UPM** | **Unac-Piva** | **5.27** | **336** | *e*Pn | **Pn** | **03 28 11.9** | **+3.2** |
| **UPM** | **Unac-Piva** | **5.27** | **336** | *e*Pn | **Pn** | **03 28 09.8** | **+1.1** |
| UPM | | | | *i* Sn | **Sn** | **03 29 10.1** | **+0.5** |
| **ZAGS** | **Zajecar** | **5.41** | **3** | *e*Pn | **Pn** | **03 28 10.8** | **+0.3** |
| **STON** | **Ston** | **5.44** | **326** | *e*Pn | **Pn** | **03 28 11.0** | **+0.1** |
| STON | | | | *e*Sn | **Sn** | **03 29 12.0** | **-1.5** |
| **STON** | **Ston** | **5.44** | **326** | *e*Pn | **Pn** | **03 28 10.6** | **-0.3** |
| **ELND** | **Elena** | **5.48** | **33** | ⇑P | **Pn** | **03 28 13.4** | **+2.0** |
| ELND | | | | ⇓S | **Sn** | **03 29 17.1** | **+2.6** |
| **RUDO** | **Rudo** | **5.52** | **341** | *e*Pn | **Pn** | **03 28 12.4** | **+0.4** |
| **GRUS** | **Gruza** | **5.54** | **352** | *e*Pn | **Pn** | **03 28 14.5** | **+2.3** |
| GRUS | | | | *e*Sn | **Sn** | **03 29 15.8** | **-0.1** |
| **SGRT** | **San Giovanni R** | **5.72** | **308** | | **Pn** | **03 28 14.8** | **0.0** |
| **BBLS** | **Lazi&#263i** | **5.75** | **342** | *e*Pn | **Pn** | **03 28 16.7** | **+1.5** |
| BBLS | | | | *e*Sn | **Sn** | **03 29 19.9** | **-1.3** |
| **BBLS** | **Lazi&#263i** | **5.75** | **342** | *e*Pn | **Pn** | **03 28 16.2** | **+1.0** |
| **DIVS** | **Divibare** | **5.85** | **347** | *e*Pn | **Pn** | **03 28 18.1** | **+1.5** |
| DIVS | | | | *e*Sn | **Sn** | **03 29 21.7** | **-2.0** |
| **TRUS** | **Trudelj** | **5.91** | **350** | *e*Pn | **Pn** | **03 28 19.7** | **+2.4** |
| **HAPS** | **Han Pijesak,BI** | **6.07** | **340** | *e*Pn | **Pn** | **03 28 21.5** | **+1.9** |
| **PAOL** | **Paolisi** | **6.16** | **297** | | **Pn** | **03 28 22.6** | **+1.8** |
| **TEKS** | **Tekeris** | **6.37** | **345** | *e*Pn | **Pn** | **03 28 25.1** | **+1.4** |
| TEKS | | | | *e*Sn | **Sn** | **03 29 34.4** | **-2.0** |
| **TEKS** | **Tekeris** | **6.37** | **345** | *e*Pn | **Pn** | **03 28 23.7** | **0.0** |
| **MDVR** | **Moldovita** | **6.37** | **359** | ⇓P | Pn | 03 28 28.5 | +4.8 |
| MDVR | | | | ⇑S | **Sn** | **03 29 44.0** | **+7.5** |
| **HERR** | **Herculane** | **6.49** | **4** | ⇓P | **Pn** | **03 28 28.5** | **+3.2** |
| **FRGS** | **Fruska Gora** | **6.91** | **348** | *e*Pn | **Pn** | **03 28 31.3** | **+0.2** |
| FRGS | | | | *e*Sn | **Sn** | **03 29 48.7** | **-1.0** |
| **FRGS** | **Fruska Gora** | **6.91** | **348** | *e*Pn | **Pn** | **03 28 32.6** | **+1.5** |
| **GZR** | **Gura Zlata** | **7.02** | **6** | ⇑P | **Pn** | **03 28 36.3** | **+3.6** |
| **INTR** | **Introdacqua** | **7.03** | **303** | Pn | **Pn** | **03 28 35.0** | **+2.1** |
| **BZS** | **Buzias** | **7.21** | **359** | ⇓P | **Pn** | **03 28 38.9** | **+3.7** |
| **BLY** | **Banja Luka** | **7.22** | **333** | *e*Pn | **Pn** | **03 28 36.9** | **+1.6** |
| **A050A** | **Klekovaca** | **7.25** | **329** | *e*Pn | **Pn** | **03 28 37.7** | **+2.0** |
| **ARR** | **Arges** | **7.27** | **16** | ⇓P | **Pn** | **03 28 40.0** | **+3.9** |
| **SURR** | **Surduc** | **7.35** | **2** | ⇓P | Pn | 03 28 41.8 | +4.7 |
| **VOIR** | | **7.43** | **18** | ⇓P | **Pn** | **03 28 42.3** | **+3.9** |
| **A051A** | **Mrakovica** | **7.55** | **333** | *e*Pn | **Pn** | **03 28 39.7** | **-0.1** |
| **CAMP** | **Campotosto** | **7.61** | **305** | | **Pn** | **03 28 42.8** | **+2.0** |
| **MLR** | **Muntele Rosu** | **7.72** | **22** | Pn | **Pn** | **03 28 44.7** | **+2.4** |
| **MLR** | **Muntele Rosu** | **7.72** | **22** | Pn | **Pn** | **03 28 46.8** | **+4.4** |
| | 0.9nm,0.3s,baz=275,slow=9.1,SNR=11 | | | | | | |
| **MLR** | **Muntele Rosu** | **7.72** | **22** | ⇓P | **Pn** | **03 28 46.0** | **+3.7** |
| **NEHR** | **Nehoiu** | **7.78** | **24** | ⇑P | **Pn** | **03 28 45.7** | **+2.8** |
| **GUMA** | **Gualdo di Mace** | **7.93** | **309** | Pn | **Pn** | **03 28 45.4** | **+0.3** |
| **NRCA** | **Norcia** | **7.95** | **307** | | **Pn** | **03 28 47.0** | **+1.6** |
| **DOPR** | **Dopca** | **8.01** | **18** | ⇓P | **Pn** | **03 28 49.3** | **+3.0** |
| **FDMO** | **Fiordimonte** | **8.07** | **308** | | **Pn** | **03 28 48.5** | **+1.5** |
| **COVR** | **Voineasa-Covas** | **8.12** | **22** | ⇑P | **Pn** | **03 28 50.5** | **+2.8** |
| **MORH** | **Mrgy, Hungar** | **8.15** | **344** | ⇓P | Pn | 03 28 52.7 | +4.7 |
| **CESI** | **Cesi** | **8.18** | **304** | Pn | **Pn** | **03 28 49.7** | **+1.2** |
| **SPBR** | **Spulber** | **8.21** | **25** | ⇑P | **Pn** | **03 28 52.4** | **+3.5** |
| **OZUR** | | **8.23** | **20** | ⇓P | **Pn** | **03 28 53.1** | **+3.9** |
| **TURR** | **Turia** | **8.26** | **21** | ⇑P | **Pn** | **03 28 53.4** | **+3.8** |
| **PLOR** | **Plostina** | **8.27** | **24** | ⇑P | **Pn** | **03 28 53.6** | **+3.9** |
| **VRI** | **Vrincioaia** | **8.30** | **25** | ⇑P | **Pn** | **03 28 52.7** | **+2.5** |
| **BOJS** | **Bojanci** | **8.61** | **328** | *e*Pn | **Pn** | **03 28 53.2** | **-1.1** |
| **CEY** | **Cerknica** | **9.15** | **326** | *e*Pn | **Pn** | **03 29 01.5** | **-0.3** |
| **SKDS** | **Skadanscina** | **9.19** | **323** | *e*Pn | **Pn** | **03 29 01.3** | **-1.0** |
| **BR131** | **Keskin Array S** | **9.31** | **78** | Pn | **Pn** | **03 29 05.4** | **+1.3** |
| **BRTR** | **Keskin Array B** | **9.31** | **78** | Pn | **Pn** | **03 29 06.0** | **+1.9** |
| **BRTR** | **Keskin Array B** | **9.31** | **78** | Pn | **Pn** | **03 29 06.3** | **+2.3** |
| | 0.2nm,0.3s,baz=260,slow=13,SNR=6.6 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **BURAR** | **Bucovina Array** | **9.54** | **14** | ⇑P | **Pn** | **03 29 10.4** | **+3.3** |
| **BUR08** | **Bucovina Ar. S** | **9.56** | **14** | Pn | **Pn** | **03 29 09.2** | **+1.7** |
| **PSZ** | **Piszkesteto** | **9.61** | **352** | Pn | **Pn** | **03 29 09.4** | **+1.3** |
| **PSZ** | **Piszkesteto** | **9.61** | **352** | ⇑P | **Pn** | **03 29 11.6** | **+3.5** |
| **SOKA** | **Soboth** | **9.65** | **331** | *i* Pn | **Pn** | **03 29 09.8** | **+1.0** |
| | 0.6nm,0.3s | | | | | | |
| SOKA | | | | *i* Sn | **Sn** | **03 30 53.3** | **-3.9** |
| | 1.0nm,0.5s | | | | | | |
| **OBKA** | **Obir** | **9.71** | **329** | *i* Pn | **Pn** | **03 29 11.2** | **+1.7** |
| | 3.5nm,0.6s | | | | | | |
| OBKA | | | | *i* Sn | **Sn** | **03 30 56.5** | **-2.0** |
| | 3.8nm,0.6s | | | | | | |
| **OBKA** | **Obir** | **9.71** | **329** | *e*Pn | **Pn** | **03 29 11.6** | **+2.1** |
| **SABO** | **M.te Sabotino** | **9.71** | **324** | Pn | **Pn** | **03 29 09.2** | **-0.2** |
| **ARSA** | **Arzberg** | **9.96** | **335** | *e*Pn | **Pn** | **03 29 15.4** | **+2.4** |
| | 1.2nm,0.4s | | | | | | |
| ARSA | | | | *e*Sn | **Sn** | **03 31 08.5** | **+3.7** |
| | 1.1nm,0.4s | | | | | | |
| **TEOL** | **Teolo** | **10.26** | **316** | Pn | **Pn** | **03 29 16.8** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **23.22** | **5** | P | | **P** | **03 31 54.5** | **-2.2** |
| | 2.1nm,0.8s,baz=191,slow=5.8,SNR=5.5 | | | | | | | |
| FINES | | | | LR | | LR | 03 40 44.0 | |
| | comp=Z,22nm,18.3s,baz=241,slow=36 | | | | | | | |
| | 2.1nm,0.8s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **23.61** | **347** | P | | **P** | **03 31 59.7** | **-0.9** |
| | comp=Z,1.3nm,0.8s,baz=152,slow=11 | | | | | | | |
| **NOA** | **NORSAR Array B** | **23.61** | **347** | P | | **P** | **03 31 59.2** | **-1.4** |
| | comp=Z,0.8nm,0.7s,baz=153,slow=9.5,SNR=5.2 | | | | | | | |
| NOA | | | | LR | | LR | 03 41 36.0 | |
| | comp=Z,11nm,19.9s,baz=355,slow=38 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **NC303** | **NORSAR Array S** | **23.75** | **347** | P | | **P** | **03 32 01.3** | **-0.7** |
| NC303 | | | | IAmb | | IAmb | 03 32 08.2 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.83** | **323** | P | | **P** | **03 32 03.0** | **+0.2** |
| | comp=Z,5.5nm,0.8s,baz=122,slow=11,SNR=8.1 | | | | | | | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.85** | **221** | P | | **P** | **03 33 05.8** | **-0.3** |
| TORD | | | | IAmb | | IAmb | 03 33 17.9 | |
| | comp=Z,3.1nm,1.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.85** | **221** | P | | **P** | **03 33 07.3** | **+1.1** |
| | comp=Z,0.9nm,0.7s,baz=28,slow=9.0,SNR=6.5 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **31.25** | **3** | P | | **P** | **03 33 08.8** | **-0.5** |
| **ARCES** | **ARCESS Array B** | **31.25** | **3** | P | | **P** | **03 33 07.3** | **-1.9** |
| | comp=Z,3.2nm,0.9s,baz=185,slow=8.6,SNR=4.5 | | | | | | | |
| ARCES | | | | LR | | LR | 03 45 22.8 | |
| | comp=Z,31nm,20.9s,baz=8.0,slow=36 | | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **36.78** | **67** | P | | **P** | **03 33 57.2** | **-0.4** |
| **KKAR** | **Karatay Array** | **36.78** | **67** | P | | **P** | **03 33 57.0** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **41.29** | **54** | P | | **P** | **03 34 35.5** | **+0.5** |
| | comp=Z,0.8nm,0.3s,baz=277,slow=9.0,SNR=7.6 | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **44.33** | **59** | P | | **P** | **03 34 59.8** | **-0.1** |
| MK31 | | | | IAmb | | IAmb | 03 35 01.2 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.33** | **59** | P | | **P** | **03 34 60.0** | **+0.1** |
| **MKAR** | **Makanchi Array** | **44.33** | **59** | P | | **P** | **03 35 00.3** | **+0.5** |
| | comp=Z,2.9nm,0.5s,baz=276,slow=7.3,SNR=20 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **03 36 44.0** | **+0.1** |
| | comp=Z,0.3nm,0.7s,baz=291,slow=4.0,SNR=2.4 | | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **44.79** | **48** | P | | **P** | **03 35 03.1** | **-0.3** |
| ZAA0 | | | | IAmb | | IAmb | 03 35 03.9 | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.79** | **48** | P | | **P** | **03 35 03.0** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **44.79** | **48** | P | | **P** | **03 35 03.2** | **-0.1** |
| | comp=Z,3.2nm,0.7s,baz=282,slow=8.1,SNR=11 | | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **59.54** | **51** | P | | **P** | **03 36 52.2** | **-1.1** |
| | comp=Z,0.5nm,0.3s,baz=302,slow=8.3,SNR=2.6 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.92** | **326** | P | | **P** | **03 39 40.7** | **+0.7** |
| | comp=Z,0.3nm,0.8s,baz=4.1,slow=3.8,SNR=2.2 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **98.53** | **326** | LR | | LR | 04 27 09.2 | |
| | comp=Z,40nm,18.1s,baz=102,slow=37 | | | | | | | |

*RSNC **18** 03:30:24.9±0.0, 11°N±1°×7°1W±°, h-1km±1km, M3.5, mb3.5, mB5.0, ML3.4, Mw(mB)4.3, MwMwp5.5, Mwp5.6*
*FUNV **18** 03:30:25.1, 10°.93N×71°.25W, h31km, MW3.7*

**ISC 18 03:30:24.4±1.4, 10°.86N±0°.03×71°.21W±0°.03, h34km±3km, n30, σ1§72/58, 2C-1D, Lake Maracaibo**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **URIC** | **Uridia, Colomb** | **1.14** | **317** | P | | | **Pn** | **03 30 43.8** | **-0.1** |
| URIC | | | | S | | | **Sn** | **03 30 58.7** | **+0.3** |
| **MCQV** | **Machiques** | **1.54** | **238** | *e*P | | | **Pn** | **03 30 49.6** | **+0.2** |
| MCQV | | | | *e*S | | | **Sn** | **03 31 08.5** | **+0.2** |
| **CRJC** | **Cerrejon, Guaj** | **1.65** | **276** | P | | | **Pn** | **03 30 50.9** | **-0.2** |
| CRJC | | | | S | | | **Sn** | **03 31 11.9** | **+0.6** |
| **AUA1** | **Aruba** | **2.01** | **36** | P | | | **Pb** | **03 30 59.2** | **-1.1** |
| AUA1 | | | | S | | | **Sb** | **03 31 26.8** | **+1.8** |
| **SDV** | **Santo Domingo** | **2.04** | **164** | P | | | **Pb** | **03 30 59.6** | **-1.4** |
| SDV | | | | S | | | **Sn** | **03 31 22.8** | **+1.7** |
| **TEPV** | **Terepaima** | **2.17** | **114** | *e*P | | | **Pn** | **03 30 59.3** | **+1.0** |
| TEPV | | | | *e*S | | | **Sn** | **03 31 24.4** | **+0.3** |
| **JACV** | **Jacura** | **2.34** | **84** | *e*P | | | **Pn** | **03 31 01.7** | **+1.1** |
| JACV | | | | *e*S | | | **Sn** | **03 31 28.5** | **+0.2** |
| **SOCV** | **Socops** | **2.59** | **172** | *i*P | | | **Pn** | **03 31 04.8** | **+0.8** |
| SOCV | | | | *e*S | | | **Sn** | **03 31 34.4** | **+0.2** |
| **SMRC** | **Santa Marta, M** | **2.98** | **276** | P | | | **Pn** | **03 31 09.9** | **+0.6** |
| SMRC | | | | S | | | **Sn** | **03 31 41.1** | **-2.8** |
| **ARGC** | **Ariguani, Magd** | **3.15** | **252** | P | | | **Pn** | **03 31 11.8** | **+0.1** |
| ARGC | | | | S | | | **Sn** | **03 31 48.0** | **-0.2** |
| **CAPV** | **Capacho** | **3.17** | **200** | *e*P | | | **Pn** | **03 31 12.1** | **-0.1** |
| CAPV | | | | *e*S | | | **Sn** | **03 31 48.2** | **-0.8** |
| **OCAC** | **Ocana** | **3.34** | **219** | P | | | **Pn** | **03 31 14.2** | **-0.2** |
| OCAC | | | | S | | | **Sn** | **03 31 53.1** | **+0.1** |
| **BAUV** | **El Baul** | **3.66** | **121** | *e*P | | | **Pn** | **03 31 19.7** | **+1.1** |
| BAUV | | | | *e*S | | | **Sn** | **03 31 59.5** | **-1.1** |
| **BENV** | **Beln** | **3.66** | **104** | *e*P | | | **Pn** | **03 31 19.7** | **+0.9** |
| BENV | | | | *e*S | | | **Sn** | **03 31 59.3** | **-1.5** |
| **PAMC** | **Pamplona, Colo** | **3.80** | **203** | P | | | **Pn** | **03 31 20.8** | **-0.2** |
| PAMC | | | | S | | | **Sn** | **03 32 04.3** | **-0.5** |
| **SJCC** | **San Jacinto, C** | **4.03** | **257** | P | | | **Pn** | **03 31 24.7** | **+0.9** |
| SJCC | | | | S | | | **Sn** | **03 32 11.7** | **+1.9** |
| **TACV** | **Tcata** | **4.17** | **100** | *e*P | | | **Pn** | **03 31 26.0** | **+0.2** |
| TACV | | | | *e*S | | | **Sn** | **03 32 10.7** | **-2.8** |
| **TAMC** | **Tame, Arauca** | **4.44** | **188** | P | | | **Pn** | **03 31 29.1** | **-0.3** |
| TAMC | | | | S | | | **Sn** | **03 32 20.5** | **+0.5** |
| **BARC** | **Barichara** | **4.67** | **205** | P | | | **Pn** | **03 31 33.5** | **+0.7** |
| BARC | | | | S | | | **Sb** | **03 32 43.2** | **+1.5** |
| **ZARC** | **Zaragoza, Cauc** | **4.92** | **227** | P | | | **Pn** | **03 31 35.3** | **-0.7** |
| ZARC | | | | S | | | **Sn** | **03 32 28.6** | **-3.3** |
| **UREC** | **San Jos de Ur** | **5.27** | **234** | P | | | **Pn** | **03 31 43.3** | **+2.4** |
| | 5.1nm,0.6s,1μm | | | | | | | | |
| **RUSC** | **La Rusia** | **5.28** | **201** | P | | | **Pn** | **03 31 41.4** | **0.0** |
| | 3.2nm,0.8s | | | | | | | | |
| RUSC | | | | S | | | **Sn** | **03 32 39.3** | **-2.0** |
| | 3.2nm,0.8s | | | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **5.36** | **217** | P | | | **Pn** | **03 31 40.7** | **-1.4** |
| | 5.9nm,1.7s | | | | | | | | |
| PTBC | | | | S | | | **Sn** | **03 32 42.8** | **0.0** |
| | 5.9nm,1.7s | | | | | | | | |
| **CACV** | **CAICARA DEL OR** | **5.65** | **125** | *e*P | | | Pn | 03 31 52.4 | +6.3 |
| CACV | | | | *e*S | | | **Sn** | **03 32 57.6** | **+7.7** |
| **SPBC** | **San Pablo de B** | **5.90** | **209** | P | | | **Pn** | **03 31 51.3** | **+1.7** |
| SPBC | | | | S | | | **Sn** | **03 32 56.3** | **+0.1** |
| **APAC** | **Apartado, Choc** | **6.06** | **241** | P | | | **Pn** | **03 31 52.8** | **+1.0** |
| | 9.6nm,1.4s,1μm | | | | | | | | |
| APAC | | | | S | | | **Sn** | **03 32 59.3** | **-0.8** |
| | 9.6nm,1.4s,1μm | | | | | | | | |
| **NORC** | **Norcasia** | **6.39** | **215** | P | | | **Pn** | **03 31 57.4** | **+1.1** |
| NORC | | | | S | | | **Sn** | **03 33 08.1** | **-0.1** |
| **PCRV** | **Puerto La Cruz** | **6.50** | **95** | *e*P | | | **Pn** | **03 31 57.9** | **+0.1** |
| PCRV | | | | *e*S | | | **Sn** | **03 33 06.3** | **-4.5** |
| **PTGC** | **Puerto Gaitan,** | **6.68** | **188** | P | | | **Pn** | **03 31 59.2** | **-1.1** |
| PTGC | | | | S | | | **Sn** | **03 33 12.6** | **-2.8** |
| **PRAC** | **Prado** | **7.99** | **207** | P | | | **Pn** | **03 32 18.8** | **+0.6** |
| PRAC | | | | S | | | **Sn** | **03 33 47.7** | **+0.3** |

*SOME **18** 03:33:44.1, 42°.97N×78°.28E, h20km*

**ISC 18 03:33:43.9±1.1, 42°.99N±0°.06×78°.27E±0°.03, h10km±7km, n20, σ0§41/36, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SATY** | **Saty** | **0.12** | **57** | *e*P | | | **Pg** | **03 33 47.0** | **+0.1** |
| | 39nm,0.1s | | | | | | | | |
| SATY | | | | *e*S | | | **Sg** | **03 33 48.9** | **-0.1** |
| | 420nm,0.1s | | | | | | | | |
| **SATY** | **Saty** | **0.12** | **57** | P | | | **Pg** | **03 33 47.0** | **+0.1** |
| | 39nm,0.1s | | | | | | | | |
| SATY | | | | S | | | **Sg** | **03 33 48.9** | **-0.1** |
| | 420nm,0.1s | | | | | | | | |
| **KPKS** | **Kokpek** | **0.56** | **33** | *e*P | | | **Pg** | **03 33 54.9** | **0.0** |
| | 2.8nm,0.1s | | | | | | | | |
| KPKS | | | | *e*S | | | **Sg** | **03 34 02.4** | **+0.1** |
| | 8.9nm,0.1s | | | | | | | | |
| **KPKS** | **Kokpek** | **0.56** | **33** | S | | | **Sg** | **03 34 02.4** | **+0.1** |
| | 8.9nm,0.1s | | | | | | | | |
| **UZB** | **Uzynbulak** | **0.57** | **74** | *e*P | | | **Pg** | **03 33 55.1** | **0.0** |
| | 4.9nm,0.1s | | | | | | | | |
| UZB | | | | *e*S | | | **Sg** | **03 34 02.8** | **+0.1** |
| | 8.2nm,0.1s | | | | | | | | |
| **UZB** | **Uzynbulak** | **0.57** | **74** | P | | | **Pg** | **03 33 55.1** | **0.0** |
| | 4.9nm,0.1s | | | | | | | | |
| UZB | | | | S | | | **Sg** | **03 34 02.8** | **+0.1** |
| | 8.2nm,0.1s | | | | | | | | |
| **PDGK** | **Podgornoye** | **0.96** | **69** | P | | | **Pg** | **03 34 01.4** | **-1.0** |
| | 1.7nm,0.2s | | | | | | | | |
| PDGK | | | | S | | | **Sg** | **03 34 13.6** | **-1.1** |
| | 1.1nm,0.2s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **0.97** | **273** | *e*P | | | **Pg** | **03 34 02.2** | **-0.3** |
| | 1.3nm,0.1s | | | | | | | | |
| TNSS | | | | *e*S | | | **Sg** | **03 34 15.0** | **-0.2** |
| | 3.6nm,0.2s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **0.97** | **273** | P | | | **Pg** | **03 34 02.2** | **-0.3** |
| | 1.3nm,0.1s | | | | | | | | |
| TNSS | | | | S | | | **Sg** | **03 34 15.0** | **-0.2** |
| | 3.6nm,0.2s | | | | | | | | |
| **BLB** | **Baldybastay** | **1.11** | **8** | P | | | **Pb** | **03 34 04.9** | **-0.5** |
| | 3.4nm,0.1s | | | | | | | | |
| BLB | | | | S | | | **Sg** | **03 34 19.6** | **-0.2** |
| | 3.3nm,0.2s | | | | | | | | |
| **ARXS** | **Arharly** | **1.26** | **346** | *e*P | | | **Pn** | **03 34 07.5** | **-0.1** |
| | 1.2nm,0.2s | | | | | | | | |
| ARXS | | | | *e*S | | | **Sb** | **03 34 24.2** | **0.0** |
| | 4.8nm,0.2s | | | | | | | | |
| **ARXS** | **Arharly** | **1.26** | **346** | P | | | **Pn** | **03 34 07.6** | **-0.1** |
| | 1.2nm,0.2s | | | | | | | | |
| ARXS | | | | S | | | **Sb** | **03 34 24.2** | **0.0** |
| | 4.8nm,0.2s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.36** | **302** | *e*P | | | **Pn** | **03 34 09.3** | **+0.3** |
| | 1.0nm,0.3s | | | | | | | | |
| KTBS | | | | *e*S | | | **Sb** | **03 34 27.2** | **+0.2** |
| | 5.1nm,0.4s | | | | | | | | |
| **KTBS** | **Karatobe** | **1.36** | **302** | P | | | **Pn** | **03 34 09.3** | **+0.3** |
| | 1.0nm,0.3s | | | | | | | | |
| KTBS | | | | S | | | **Sb** | **03 34 27.2** | **+0.2** |
| | 5.1nm,0.4s | | | | | | | | |
| **KNOS** | **Konyrlen** | **1.52** | **26** | P | | | **Pb** | **03 34 12.3** | **+0.1** |
| | 1.6nm,0.1s | | | | | | | | |
| KNOS | | | | S | | | **Sb** | **03 34 32.3** | **+0.6** |
| | 4.1nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **1.74** | **39** | *e*P | | | **Pb** | **03 34 16.1** | **+0.2** |
| | 2.0nm,0.1s | | | | | | | | |
| DJR | | | | *e*S | | | **Sb** | **03 34 38.7** | **+0.9** |
| | 2.3nm,0.2s | | | | | | | | |
| **DGS** | **Degeres** | **1.84** | **279** | *e*P | | | **Pb** | **03 34 17.7** | **0.0** |
| | 1.2nm,0.4s | | | | | | | | |
| DGS | | | | *e*S | | | **Sb** | **03 34 41.5** | **+0.6** |
| | 3.1nm,0.3s | | | | | | | | |
| **DGS** | **Degeres** | **1.84** | **279** | S | | | **Sb** | **03 34 41.5** | **+0.6** |
| | 3.1nm,0.3s | | | | | | | | |
| **KRBS** | **Karabastau** | **2.02** | **291** | *e*P | | | **Pb** | **03 34 20.6** | **-0.1** |
| | 0.7nm,0.3s | | | | | | | | |
| KRBS | | | | *e*S | | | **Sb** | **03 34 46.5** | **+0.6** |
| | 2.3nm,0.2s | | | | | | | | |
| **KRBS** | **Karabastau** | **2.02** | **291** | Lg | | | Lg | 03 34 46.5 | |
| | 2.3nm,0.2s | | | | | | | | |

**UCR 18 03:43:59.8±0.6, 8°.59N×83°.20W, h19km±2km, MW3.6, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.05** | **55** | *e*P | | | Pg | 03 44 02.6 | -0.8 |
| FITO | | | | *e*S | | | Sg | 03 44 04.8 | -1.0 |
| **EDAD** | **Golfito** | **0.07** | **30** | *e*P | | | Pg | 03 44 02.7 | -0.8 |
| EDAD | | | | *e*S | | | Sg | 03 44 05.2 | -0.8 |
| **JIME** | **Puerto Jimenez** | **0.14** | **246** | *e*P | | | Pg | 03 44 03.8 | -0.3 |
| JIME | | | | *e*S | | | Sg | 03 44 07.9 | +0.9 |
| **NELY** | **Ciudad Neily** | **0.26** | **77** | *e*P | | | Pg | 03 44 05.8 | +0.1 |
| NELY | | | | *e*S | | | Sg | 03 44 10.9 | +1.1 |
| **EDP2** | **Potrero Grande** | **0.42** | **3** | *e*P | | | Pg | 03 44 08.4 | -0.2 |
| **BRU2** | **Volcan** | **0.54** | **68** | *e*P | | | Pb | 03 44 10.4 | -0.3 |
| **DRK0** | **Durika** | **0.67** | **356** | *e*P | | | Pb | 03 44 12.1 | -0.8 |
| **BUS1** | **Rivas** | **1.10** | **330** | *e*P | | | Pb | 03 44 19.1 | -1.3 |

**IDC 18 04:17:57.7±2.0, 1°.65N×128°.33E, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=154.6km s-min=22.5km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.25** | **165** | P | | P | P | 04 22 56.9 | +0.5 |
| | 3.2nm,0.8s,baz=345,slow=11,SNR=22 | | | | | | | | |
| | 3.2nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.74** | **168** | P | | P | P | 04 23 29.6 | -0.5 |
| | 0.6nm,0.8s,baz=340,slow=10,SNR=6.2 | | | | | | | | |
| | 0.6nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.17** | **325** | P | | P | P | 04 28 07.7 | +0.3 |
| | 0.3nm,0.3s,baz=120,slow=8.4,SNR=5.8 | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.35** | **327** | P | | P | P | 04 28 34.9 | -0.3 |
| | 0.3nm,0.5s,baz=126,slow=6.4,SNR=2.4 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |

**IDC 18 04:20:16.2±3.9, 29°.91S×178°.19W, h0km, mb3.3/2, mbtmp3.3/2, Error ellipse: s-maj=99.7km s-min=17.7km az=129.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.70** | **20** | Pn | | Pn | Pn | 04 20 33.6 | +0.2 |
| | 51nm,0.3s,baz=21,slow=22,SNR=5.2 | | | | | | | | |
| RAO | | | | Sn | | Sn | Sn | 04 20 45.5 | +0.6 |
| | 208nm,0.3s,baz=65,slow=21,SNR=9.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.97** | **267** | P | | P | P | 04 28 18.1 | +0.8 |
| | 0.2nm,0.4s,baz=111,slow=7.2,SNR=4.1 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.91** | **272** | P | | P | P | 04 28 24.2 | -0.8 |
| | 0.4nm,0.6s,baz=110,slow=8.1,SNR=11 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |
| **FINES** | **FINESS Array B** | **144.63** | **340** | PKP | | | PKPbc | 04 39 53.2 | +0.4 |
| | 1.8nm,0.8s,baz=72,slow=6.0,SNR=4.7 | | | | | | | | |

*MOS **18** 04:27:26.9±1.1, 47°.59N×146°.85E, h419km, mb4.0/17, Error ellipse: s-maj=9.8km s-min=7.6km az=67.9*
*SKHL **18** 04:27:27.7±0.9, 47°.50N×147°.00E, h423km±10km, mb4.8/12, msha4.8/4*
*JMA **18** 04:27:28.1±0.5, 47°.N±3°×147°.7E±°, h449km, MV3.4/28, SOUTHERN SEA OF OKHOTSK*
*NEIC **18** 04:27:28.6±1.6, 47°.6N±0°.1×146°.8E±0°.2, h422km±9km, mb4.0/101, Error ellipse: s-maj=18.9km s-min=14.3km az=148.0*
*IDC **18** 04:27:29.0±1.4, 47°.69N×146°.76E, h426km±16km, mb3.2/16, mbtmp4.1/24, Error ellipse: s-maj=13.0km s-min=10.6km az=153.0*

**ISC 18 04:27:26.4±0.4, 47°.42N±0°.05×147°.00E±0°.05, h403km, n231, σ1§92/249, mb4.0/76, 7C-9D, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.27** | **164** | *e*P | | | **P** | **04 28 28.2** | **+3.8** |
| KUR | | | | AMB | | AMB | AMB | 04 28 30.2 | |
| | 60nm,0.6s | | | | | | | | |
| KUR | | | | *e*S | | | **S** | **04 29 17.8** | **+6.5** |
| KUR | | | | A | | | A | 04 29 20.4 | |
| | 40nm,0.6s | | | | | | | | |
| KUR | | | | A | | | A | 04 29 20.4 | |
| | 40nm,0.6s | | | | | | | | |
| **KUR** | **Kuril'sk** | **2.27** | **164** | *e*PN | | | **P** | **04 28 23.2** | **-1.2** |
| **YSS** | **Yuzh-Sakhalins** | **2.93** | **262** | P | | | **P** | **04 28 32.7** | **+3.5** |
| **YSS** | **Yuzh-Sakhalins** | **2.93** | **262** | *e*P | | | P | 04 28 33.4 | +4.2 |
| YSS | | | | AMB | | AMB | AMB | 04 28 34.2 | |
| | 80nm,0.6s | | | | | | | | |
| YSS | | | | *e*S | | | **S** | **04 29 24.9** | **+4.7** |
| **YSS** | **Yuzh-Sakhalins** | **2.93** | **262** | *i*PN | | | P | 04 28 33.6 | +4.4 |
| YSS | | | | *e*S | | | **S** | **04 29 26.7** | **+6.5** |
| YSS | | | | pmax | | pmax | pmax | | |
| | comp=Z,120nm,0.9s | | | | | | | | |
| YSS | | | | smax | | smax | smax | | |
| | comp=E,20nm,0.8s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.48** | **194** | *e*P | | | **P** | **04 28 37.9** | **+4.1** |
| YUK | | | | AMB | | AMB | AMB | 04 28 38.7 | |
| | comp=E,80nm,0.4s | | | | | | | | |
| YUK | | | | *e*S | | | **S** | **04 29 32.8** | **+4.2** |
| YUK | | | | A | | | A | 04 29 33.8 | |
| | comp=E,130nm,0.5s | | | | | | | | |
| YUK | | | | A | | | A | 04 29 33.8 | |
| | comp=E,100nm,0.5s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.48** | **194** | *i*PN | | | **P** | **04 28 34.0** | **+0.2** |
| **SHO** | **Shikotan** | **3.55** | **182** | *e*P | | | **P** | **04 28 36.5** | **+2.0** |
| SHO | | | | AMB | | AMB | AMB | 04 28 37.7 | |
| | comp=E,60nm,0.3s | | | | | | | | |
| SHO | | | | *i*S | | | **S** | **04 29 30.7** | **+1.0** |
| SHO | | | | A | | | A | 04 29 32.3 | |
| | comp=E,210nm,0.6s | | | | | | | | |
| SHO | | | | A | | | A | 04 29 32.3 | |
| | comp=E,270nm,0.6s | | | | | | | | |
| **SHO** | **Shikotan** | **3.55** | **182** | *e*PN | | | **P** | **04 28 36.5** | **+2.0** |
| SHO | | | | *i*S | | | **S** | **04 29 30.8** | **+1.0** |
| SHO | | | | smax | | smax | smax | | |
| | comp=N,102nm,0.4s | | | | | | | | |
| SHO | | | | smax | | smax | smax | | |
| | comp=E,254nm,0.5s | | | | | | | | |
| **UGL** | **Uglegorsk** | **3.69** | **299** | *e*P | | | **P** | **04 28 38.5** | **+3.0** |
| UGL | | | | AMB | | AMB | AMB | 04 28 39.0 | |
| | comp=E,70nm,0.4s | | | | | | | | |
| **JSE** | **Soyaes** | **3.93** | **233** | *e*P | | | **P** | **04 28 42.4** | **+4.5** |
| **JTKR** | **Abashiri--Toko** | **4.07** | **213** | *e*P | | | **P** | **04 28 43.3** | **+4.1** |
| **JWK2** | **Keihoku** | **4.11** | **241** | *e*P | | | P | 04 28 44.6 | +5.1 |
| **NEM2** | **Nemuro 2** | **4.15** | **193** | *e*P | | | **P** | **04 28 41.9** | **+1.9** |
| NEM2 | | | | *e*S | | | **S** | **04 29 40.4** | **+0.5** |
| **JNK** | **Nakash** | **4.15** | **204** | *e*P | | | **P** | **04 28 43.4** | **+3.4** |
| **JMP** | **Maruseppu** | **4.26** | **218** | *e*P | | | **P** | **04 28 45.7** | **+4.6** |
| JMP | | | | *e*S | | | **S** | **04 29 46.9** | **+5.0** |
| **TYV** | **Tymovskoe** | **4.47** | **322** | *e*P | | | **P** | **04 28 44.9** | **+2.0** |
| TYV | | | | AMB | | AMB | AMB | 04 28 45.2 | |
| | comp=E,20nm,0.5s | | | | | | | | |
| **TYV** | **Tymovskoe** | **4.47** | **322** | *e*PN | | | **P** | **04 28 44.9** | **+2.0** |
| TYV | | | | *e*S | | | **S** | **04 29 46.3** | **+0.8** |
| TYV | | | | pmax | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| TYV | | | | pmax | | pmax | pmax | | |
| | comp=Z,100nm,2.5s | | | | | | | | |
| TYV | | | | smax | | smax | smax | | |
| | comp=N,11nm,1.4s | | | | | | | | |
| TYV | | | | smax | | smax | smax | | |
| | comp=E,10.0nm,1.4s | | | | | | | | |
| TYV | | | | smax | | smax | smax | | |
| | comp=E,100nm,3.3s | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **4.51** | **225** | P | | | **P** | **04 28 47.2** | **+3.7** |
| **JKA** | **Kamikawa-asahi** | **4.51** | **225** | *e*P | | | **P** | **04 28 47.2** | **+3.7** |
| **ASAJ** | **Asahikawa** | **4.51** | **225** | P | | | **P** | **04 28 47.5** | **+4.0** |
| | comp=E,4.1nm,0.4s,baz=45,slow=7.3,SNR=5.0 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.51** | **225** | PN | | | **P** | **04 28 47.2** | **+3.7** |
| **JRBN** | **Rebuntou** | **4.56** | **246** | P | | | **P** | **04 28 47.6** | **+3.7** |
| **JSS** | **Shosan** | **4.69** | **232** | *e*P | | | **P** | **04 28 49.7** | **+4.5** |
| **JAR** | **Ashorobuto** | **4.71** | **210** | *e*P | | | **P** | **04 28 49.0** | **+3.5** |
| JAR | | | | *e*S | | | **S** | **04 29 52.9** | **+2.9** |
| **JAK** | **Akkeshi** | **4.71** | **201** | *e*P | | | **P** | **04 28 47.6** | **+2.1** |
| JAK | | | | S | | | **S** | **04 29 50.5** | **+0.4** |
| **JFR** | **Furan** | **5.27** | **218** | *e*P | | | **P** | **04 28 55.4** | **+4.2** |
| **JCH** | **Churui** | **5.45** | **210** | *e*P | | | **P** | **04 28 54.9** | **+1.8** |
| JCH | | | | *e*S | | | **S** | **04 30 03.0** | **-1.0** |
| **JBT2** | **Biratori 2** | **5.68** | **217** | *e*P | | | **P** | **04 28 58.8** | **+3.3** |
| JBT2 | | | | *e*S | | | **S** | **04 30 09.6** | **+1.1** |
| **JNBK** | **Urakawa-nobuka** | **5.96** | **212** | *e*P | | | **P** | **04 29 00.1** | **+1.6** |
| JNBK | | | | *e*S | | | **S** | **04 30 13.1** | **-0.8** |
| **ERM** | **Erimo** | **6.05** | **208** | P | | | **P** | **04 29 02.4** | **+2.9** |
| **ERM** | **Erimo** | **6.05** | **208** | *de*PN | | | **P** | **04 29 02.0** | **+2.5** |
| **SKR** | **Severo-Kuril's** | **6.82** | **58** | *e*P | | | **P** | **04 29 10.1** | **+1.6** |
| SKR | | | | AMB | | AMB | AMB | 04 29 11.4 | |
| | comp=E,80nm,0.6s | | | | | | | | |
| **JOT** | **Ohata** | **7.38** | **217** | *e*P | | | **P** | **04 29 16.1** | **+1.1** |
| JOT | | | | *e*S | | | **S** | **04 30 38.4** | **-4.4** |
| **JOSM** | **Okushiri--Mats** | **7.56** | **228** | *e*P | | | **P** | **04 29 19.6** | **+2.7** |
| JOSM | | | | *e*S | | | **S** | **04 30 46.0** | **-0.4** |
| **TEY** | **Ternei** | **7.59** | **256** | *e*P | | | **P** | **04 29 19.9** | **+2.7** |
| TEY | | | | AMB | | AMB | AMB | 04 29 20.6 | |
| | comp=E,20nm,0.9s | | | | | | | | |
| **TEY** | **Ternei** | **7.59** | **256** | *i*PN | | | **P** | **04 29 19.9** | **+2.7** |
| TEY | | | | pmax | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | | | |
| TEY | | | | pmax | | pmax | pmax | | |
| | comp=E,20nm,0.8s | | | | | | | | |
| TEY | | | | pmax | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **JTM** | **Tenmabayashi** | **7.88** | **215** | P | | | **P** | **04 29 21.6** | **+1.1** |
| **JSI2** | **Shiura 2** | **7.92** | **219** | *e*P | | | **P** | **04 29 22.2** | **+1.2** |
| JSI2 | | | | *e*S | | | **S** | **04 30 50.0** | **-4.0** |
| **JANG** | **Nango** | **8.08** | **211** | *e*P | | | **P** | **04 29 24.2** | **+1.5** |
| JANG | | | | *e*S | | | **S** | **04 30 53.5** | **-3.8** |
| **KDTR** | **Khodutka, Kamc** | **8.43** | **54** | *e*P | | | **P** | **04 29 27.0** | **+0.7** |
| KDTR | | | | AMB | | AMB | AMB | 04 29 27.7 | |
| | comp=E,80nm,0.6s | | | | | | | | |
| **JIW** | **Iwasaki** | **8.48** | **219** | *e*P | | | **P** | **04 29 28.8** | **+1.7** |
| JIW | | | | *e*S | | | **S** | **04 31 02.2** | **-3.6** |
| **PEA0B** | **Petropavlovsk-** | **8.91** | **46** | P | | | **P** | **04 29 33.0** | **+1.4** |
| **PEA0B** | **Petropavlovsk-** | **8.91** | **46** | PN | | | **P** | **04 29 33.0** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **8.91** | **46** | P | | | **P** | **04 29 32.3** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **8.91** | **46** | P | | | **P** | **04 29 32.0** | **+0.4** |
| | comp=Z,5.5nm,0.9s,baz=46,slow=4.3,SNR=3.9 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **8.91** | **46** | PN | | | **P** | **04 29 32.3** | **+0.7** |
| **KLR** | **Kul'dur** | **10.32** | **286** | P | | | **P** | **04 29 49.3** | **+1.9** |
| | comp=Z,5.2nm,0.5s,baz=79,slow=9.7,SNR=26 | | | | | | | | |
| **KLR** | **Kul'dur** | **10.32** | **286

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IMAR | Indian Mountai | 35.72 | 37 | P | | P | 04 33 47.1 | -1.3 |
| M20K | Styx River | 36.10 | 44 | P | | P | 04 33 52.0 | +0.2 |
| D22K | Ayikyak River | 36.29 | 32 | P | | P | 04 33 52.7 | -0.5 |
| D22K | | | | IAmb | | IAmb | 04 34 08.4 | |
| | comp=Z,7.3nm,1.4s | | | | | | | |
| CNPM | China Poot | 37.32 | 48 | P | | P | 04 34 00.5 | -1.3 |
| CNPM | | | | IAmb | | IAmb | 04 34 27.9 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| I23K | Minto, Yukon-K | 37.56 | 38 | P | | P | 04 34 03.3 | -0.4 |
| CCB | Clear Creek Bu | 38.26 | 39 | P | | P | 04 34 08.8 | -0.7 |
| SML | Sawmill | 38.38 | 44 | P | | P | 04 34 08.8 | -1.7 |
| D25K | Kavik River | 38.57 | 32 | P | | P | 04 34 11.0 | -1.0 |
| D25K | | | | IAmb | | IAmb | 04 34 12.1 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| DGZ | Jazzator, Alta | 38.59 | 296 | ⫰eP | | P | 04 34 12.3 | -0.3 |
| DGZ | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| DHY | Denali Highway | 38.63 | 42 | P | | P | 04 34 11.9 | -0.8 |
| IL31 | | 38.64 | 39 | P | | P | 04 34 12.3 | -0.2 |
| ILAR | Eielson Array | 38.64 | 39 | P | | P | 04 34 11.9 | -0.7 |
| | comp=Z,1.5nm,0.9s,baz=273,slow=7.7,SNR=14 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| ZALV | Zalesovo Beam | 38.80 | 303 | P | | P | 04 34 11.7 | -2.3 |
| | comp=Z,0.7nm,0.3s,baz=65,slow=7.5,SNR=5.1 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| ZALV | Zalesovo Beam | 38.80 | 303 | eP | | P | 04 34 12.1 | -1.9 |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| RIDG | Independent Ri | 39.66 | 40 | P | | P | 04 34 19.9 | -1.1 |
| GOMU | GeErMu | 39.79 | 273 | P | | P | 04 34 23.6 | +0.8 |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| RAGM | Ragged Mountai | 40.39 | 45 | P | | P | 04 34 26.9 | 0.0 |
| RAGM | | | | IAmb | | IAmb | 04 34 28.0 | |
| | comp=Z,8.4nm,1.3s | | | | | | | |
| VRDI | Verde Repeater | 40.78 | 44 | P | | P | 04 34 30.3 | 0.0 |
| K27K | Chicken | 40.82 | 40 | P | | P | 04 34 30.0 | -0.3 |
| K27K | | | | IAmb | | IAmb | 04 34 31.6 | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| EGAK | Eagle | 41.07 | 38 | P | | P | 04 34 31.3 | -1.0 |
| L27K | Beaver Creek, | 41.12 | 41 | P | | P | 04 34 33.3 | +0.5 |
| BCAR | Beaver Creek A | 41.14 | 41 | P | | P | 04 34 33.1 | +0.2 |
| I28M | Miner Creek | 41.45 | 37 | P | | P | 04 34 35.4 | 0.0 |
| E29M | Blow River | 41.71 | 33 | P | | P | 04 34 36.9 | -0.4 |
| E29M | | | | IAmb | | IAmb | 04 34 57.7 | |
| | comp=Z,8.3nm,1.5s | | | | | | | |
| H29M | Whitestone | 41.93 | 36 | P | | P | 04 34 38.2 | -0.9 |
| MK31 | Makanchi Array | 42.89 | 294 | P | | P | 04 34 45.8 | -1.3 |
| MK31 | | | | IAmb | | IAmb | 04 34 46.8 | |
| | comp=Z,2.7nm,0.5s | | | | | | | |
| MK31 | Makanchi Array | 42.89 | 294 | *d iP | | P | 04 34 45.8 | -1.3 |
| MKAR | Makanchi Array | 42.89 | 294 | P | | P | 04 34 45.9 | -1.2 |
| MKAR | Makanchi Array | 42.89 | 294 | P | | P | 04 34 46.2 | -0.8 |
| | comp=Z,1.9nm,0.5s,baz=71,slow=7.6,SNR=24 | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| MKAR | Makanchi Array | 42.89 | 294 | eP | | P | 04 34 46.1 | -1.0 |
| MKAR | Makanchi Array | 42.89 | 294 | eP | | P | 04 34 46.1 | -1.0 |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| I30M | Mount Dempster | 42.96 | 37 | P | | P | 04 34 46.5 | -0.9 |
| I30M | | | | IAmb | | IAmb | 04 34 48.6 | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| INK | Inuvik | 43.32 | 32 | P | | P | 04 34 49.4 | -0.7 |
| INK | | | | IAmb | | IAmb | 04 34 50.0 | |
| | comp=Z,4.4nm,0.5s | | | | | | | |
| INK | Inuvik | 43.32 | 32 | P | | P | 04 34 49.4 | -0.7 |
| INK | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | | |
| G31M | Satah River | 43.37 | 34 | P | | P | 04 34 49.7 | -0.8 |
| G31M | | | | IAmb | | IAmb | 04 34 50.5 | |
| | comp=Z,6.8nm,0.9s | | | | | | | |
| KURK | Kurchatov | 43.48 | 301 | P | | P | 04 34 50.0 | -1.5 |
| KURK | | | | IAmb | | IAmb | 04 34 50.8 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| KURK | Kurchatov | 43.48 | 301 | ceP | | P | 04 34 49.2 | -2.4 |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| KURBB | Kurchatov Arra | 43.56 | 301 | P | | P | 04 34 51.1 | -1.2 |
| | comp=Z,3.2nm,0.6s,baz=70,slow=8.7,SNR=22 | | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | | |
| O30N | Mendenhall | 44.35 | 43 | P | | P | 04 34 58.7 | +0.3 |
| BVAR | Borovoye Array | 47.16 | 307 | P | | P | 04 35 19.1 | -0.9 |
| | comp=Z,0.5nm,0.3s,baz=80,slow=7.9,SNR=2.9 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| BOOM | Boomskoye usch | 48.93 | 292 | P | | P | 04 35 33.9 | +0.1 |
| BOOM | Boomskoye usch | 48.93 | 292 | P | | P | 04 35 33.9 | +0.1 |
| GRNB | Grenville Isla | 50.20 | 50 | P | | P | 04 35 44.5 | +1.6 |
| GRNB | | | | IAmb | | IAmb | 04 36 15.7 | |
| | comp=Z,21nm,1.5s | | | | | | | |
| ARU | Arti | 51.64 | 315 | d iP | | P | 04 35 51.6 | -1.8 |
| ARU | | | | *PP | | pP | 04 37 18.2 | +3.3 |
| ARU | | | | | | | 04 37 50.4 | |
| ARU | | | | S | | S | 04 42 44.3 | +1.7 |
| ARU | | | | SS | | SS | 04 46 26.5 | +2.0 |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| KK31 | Karatay Array | 51.98 | 295 | P | | P | 04 35 54.9 | -1.2 |
| KK31 | Karatay Array | 51.98 | 295 | P | | P | 04 35 54.9 | -1.2 |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| KKAR | Karatay Array | 51.98 | 295 | P | | P | 04 35 54.8 | -1.3 |
| KKAR | Karatay Array | 51.98 | 295 | P | | P | 04 35 54.8 | -1.3 |
| GAR | Garm | 54.41 | 291 | P | | P | 04 36 12.7 | -1.1 |
| ABKAR | Akbulak array | 54.73 | 307 | | | P | 04 36 14.4 | -1.3 |
| ABKAR | | | | IAmb | | IAmb | 04 36 15.0 | |
| | comp=Z,2.9nm,0.5s | | | | | | | |
| CHGR | Chuyangaron | 55.35 | 291 | P | | P | 04 36 19.4 | -0.9 |
| CHGR | Chuyangaron | 55.35 | 291 | P | | P | 04 36 19.4 | -0.9 |
| CHGR | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | | |
| SIMJ | Simiganj | 55.44 | 292 | P | | P | 04 36 20.2 | -0.8 |
| SIMJ | | | | IAmb | | IAmb | 04 36 21.4 | |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| ARCES | ARCESS Array B | 55.78 | 339 | P | | P | 04 36 21.4 | -1.4 |
| | comp=Z,3.6nm,1.0s,baz=21,slow=7.7,SNR=1.7 | | | | | | | |
| | comp=Z,3.6nm,1.0s | | | | | | | |
| NLWA | Neilton Lookou | 56.94 | 54 | P | | P | 04 36 32.2 | +1.0 |
| NLWA | | | | IAmb | | IAmb | 04 36 51.4 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| I04A | Tendick Farm, | 59.92 | 57 | P | | P | 04 36 53.3 | +1.7 |
| I04A | | | | IAmb | | IAmb | 04 37 23.1 | |
| | comp=Z,15nm,1.5s | | | | | | | |
| HUMO | Hull Mountain | 60.35 | 58 | P | | P | 04 36 55.9 | +1.4 |
| HUMO | | | | IAmb | | IAmb | 04 37 30.5 | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| PINE | Pine Mountain | 60.76 | 56 | P | | P | 04 36 59.0 | +1.6 |
| PINE | | | | IAmb | | IAmb | 04 37 00.3 | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| YBH | Yreka Blue Hor | 61.04 | 59 | P | | P | 04 37 01.1 | +1.9 |
| YBH | | | | IAmb | | IAmb | 04 37 08.4 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| YBH | Yreka Blue Hor | 61.04 | 59 | P | | P | 04 37 01.1 | +1.9 |
| YBH | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.5s | | | | | | | |
| FINES | FINESS Array B | 61.57 | 332 | P | | P | 04 36 59.7 | -2.5 |
| FINES | FINESS Array B | 61.57 | 332 | P | | P | 04 36 60.0 | -2.2 |
| | comp=Z,0.8nm,0.5s,baz=46,slow=8.2,SNR=11 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| FINES | FINESS Array B | 61.57 | 332 | eP | | P | 04 37 00.3 | -1.9 |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| O02D | Mt. Diablo Mer | 61.98 | 60 | P | | P | 04 37 06.9 | +1.5 |
| FFC | Flin Flon | 62.83 | 37 | P | | P | 04 37 10.6 | 0.0 |
| FFC | | | | IAmb | | IAmb | 04 37 38.2 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| FFC | Flin Flon | 62.83 | 37 | P | | P | 04 37 10.6 | 0.0 |
| FFC | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.5s | | | | | | | |
| OVMT | Ovando | 62.93 | 49 | P | | P | 04 37 11.9 | +0.4 |
| BPMT | Black Pine Rid | 63.11 | 50 | P | | P | 04 37 13.0 | +0.1 |
| DLMT | Dillon | 64.27 | 50 | P | | P | 04 37 20.9 | +0.6 |
| DLMT | | | | IAmb | | IAmb | 04 37 22.2 | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| BOZ | Bozeman (W) | 64.61 | 50 | P | | P | 04 37 22.9 | +0.5 |
| BOZ | | | | IAmb | | IAmb | 04 37 23.8 | |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| BOZ | Bozeman (W) | 64.61 | 50 | P | | P | 04 37 22.9 | +0.5 |
| BOZ | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| KVN | Kaiserville | 65.45 | 59 | P | | P | 04 37 29.3 | +1.4 |
| KVN | | | | IAmb | | IAmb | 04 37 30.1 | |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| KVN | Kaiserville | 65.45 | 59 | P | | P | 04 37 29.3 | +1.4 |
| KVN | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| NVAR | Mina Array Bea | 65.75 | 59 | P | | P | 04 37 31.7 | +1.8 |
| | comp=Z,1.5nm,0.7s,baz=294,slow=7.0,SNR=11 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| ELK | Elko | 65.95 | 56 | P | | P | 04 37 31.7 | +0.6 |
| ELK | Elko | 65.95 | 56 | P | | P | 04 37 31.7 | +0.6 |
| ELK | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| NC405 | NORSAR Array S | 65.96 | 338 | P | | P | 04 37 28.1 | -2.5 |
| NB2 | NORSAR Subarra | 66.15 | 338 | P | | P | 04 37 29.9 | -1.8 |
| | comp=Z,0.7nm,0.5s,baz=28,slow=6.9 | | | | | | | |
| NOA | NORSAR Array B | 66.15 | 338 | P | | P | 04 37 30.0 | -1.8 |
| | comp=Z,0.5nm,0.4s,baz=31,slow=6.7,SNR=11 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| RLMT | Red Lodge | 66.16 | 49 | P | | P | 04 37 33.0 | +0.8 |
| RLMT | | | | IAmb | | IAmb | 04 37 35.0 | |
| | comp=Z,2.9nm,1.1s | | | | | | | |
| HFS | Hagfors | 66.28 | 337 | P | | P | 04 37 30.4 | -2.0 |
| | comp=Z,1.1nm,0.3s,baz=36,slow=5.4,SNR=16 | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| TPH | Tonopah | 66.62 | 59 | P | | P | 04 37 35.7 | +0.4 |
| TPH | Tonopah | 66.62 | 59 | P | | P | 04 37 35.7 | +0.4 |
| TPH | | | | pmax | | pmax | | |
| | comp=Z,28nm,1.5s | | | | | | | |
| GRAC | Grapevine Rang | 67.27 | 60 | P | | P | 04 37 40.0 | +0.9 |
| GRAC | | | | IAmb | | IAmb | 04 37 41.4 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| KIV | Kislovodsk | 67.27 | 311 | eP | | P | 04 37 35.0 | -4.1 |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| KBZ | Khabaz | 67.32 | 310 | ⫰eP | | P | 04 37 34.2 | -5.0 |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| R11B | Troy Canyon, C | 67.38 | 58 | P | | P | 04 37 40.8 | +0.8 |
| PDAR | Pinedale Array | 67.64 | 51 | P | | P | 04 37 41.4 | -0.2 |
| PDAR | Pinedale Array | 67.64 | 51 | P | | P | 04 37 42.1 | +0.5 |
| | comp=Z,2.4nm,0.6s,baz=342,slow=0.5,SNR=26 | | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| SPR3 | Spring Creek 3 | 67.65 | 56 | P | | P | 04 37 42.8 | +1.0 |
| SPR3 | | | | IAmb | | IAmb | 04 37 44.0 | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| DUG | Dugway, Tooele | 67.67 | 55 | P | | P | 04 37 42.4 | +0.7 |
| DUG | | | | IAmb | | IAmb | 04 37 43.9 | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| DUG | Dugway, Tooele | 67.67 | 55 | P | | P | 04 37 42.4 | +0.7 |
| DUG | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| WR0 | Warramunga Arr | 67.99 | 193 | P | | P | 04 37 44.4 | +0.8 |
| WR0 | | | | IAmb | | IAmb | 04 38 03.5 | |
| | comp=Z,5.2nm,1.2s | | | | | | | |
| WRA | Warramunga Arr | 68.01 | 193 | P | | P | 04 37 44.8 | +1.1 |
| | comp=Z,0.3nm,0.5s,baz=8.3,slow=6.4,SNR=7.1 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| ULM | Lac du Bonnet | 68.65 | 38 | P | | P | 04 37 46.2 | -1.1 |
| | comp=Z,1.8nm,0.7s,baz=316,slow=9.9,SNR=4.0 | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| TMUT | Trail Mountain | 69.19 | 54 | P | | P | 04 37 51.8 | +0.6 |
| TMUT | | | | IAmb | | IAmb | 04 37 52.9 | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| MTPU | Mount Pierson | 69.52 | 56 | P | | P | 04 37 54.9 | +1.6 |
| MTPU | | | | IAmb | | IAmb | 04 37 56.1 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| SRU | San Rafael Swe | 69.69 | 54 | P | | P | 04 37 54.9 | +0.8 |
| SRU | | | | IAmb | | IAmb | 04 37 56.2 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| SRU | San Rafael Swe | 69.69 | 54 | P | | P | 04 37 54.9 | +0.8 |
| SRU | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| HMU | Henry Mountain | 70.40 | 55 | P | | P | 04 37 59.4 | +0.9 |
| U15A | North Rim | 70.60 | 57 | P | | P | 04 38 00.3 | +0.6 |
| U15A | | | | IAmb | | IAmb | 04 38 02.0 | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| SMCO | Snowmass | 71.57 | 52 | P | | P | 04 38 06.2 | +0.6 |
| SMCO | | | | IAmb | | IAmb | 04 38 07.0 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| ASAR | Alice Springs | 71.73 | 193 | P | | P | 04 38 08.2 | +2.1 |
| | comp=Z,0.2nm,0.6s,baz=8.1,slow=6.4,SNR=1.7 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| Y14A | Wickenburg | 71.94 | 59 | P | | P | 04 38 08.7 | +1.3 |
| Y14A | | | | IAmb | | IAmb | 04 38 09.3 | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| EYMN | Ely | 72.25 | 37 | P | | P | 04 38 08.0 | -0.9 |
| X16A | Lo Mia Camp, P | 72.51 | 58 | P | | P | 04 38 11.6 | +0.7 |
| SDCO | Great Sand Dun | 73.41 | 52 | P | | P | 04 38 16.1 | -0.1 |
| COWI | Conover | 74.70 | 37 | P | | P | 04 38 21.9 | -1.1 |
| L34A | Svendsen Farm, | 74.81 | 44 | P | | P | 04 38 22.2 | -1.5 |
| I40A | Norwalk | 75.87 | 39 | P | | P | 04 38 29.1 | -0.5 |
| I42A | Draeger Farm, | 76.59 | 38 | P | | P | 04 38 32.5 | -1.1 |
| VLDQ | Val d'Or | 77.29 | 29 | P | | P | 04 38 35.7 | -1.7 |
| ELIS | Ellis County | 77.87 | 49 | P | | P | 04 38 41.0 | +0.1 |
| P40A | Paris | 78.74 | 43 | P | | P | 04 38 45.8 | +0.3 |
| P40A | | | | IAmb | | IAmb | 04 38 46.0 | |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| HDIL | Hopedale | 79.15 | 40 | P | | P | 04 38 47.6 | 0.0 |
| WMOK | Wichita Mounta | 79.22 | 50 | P | | P | 04 38 48.4 | +0.2 |
| WMOK | Wichita Mounta | 79.22 | 50 | P | | P | 04 38 48.4 | +0.2 |
| WMOK | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| S39A | Bolivar | 79.62 | 44 | P | | P | 04 38 49.6 | -0.6 |
| S39A | | | | IAmb | | IAmb | 04 38 50.1 | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| TUL3 | Leonard | 79.83 | 47 | P | | P | 04 38 49.9 | -1.4 |
| TUL3 | | | | IAmb | | IAmb | 04 38 51.8 | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| U38A | Gravette | 80.11 | 46 | P | | P | 04 38 52.6 | -0.2 |
| U38A | | | | IAmb | | IAmb | 04 38 53.1 | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| N47A | Urbana | 80.42 | 38 | P | | P | 04 38 53.3 | -1.0 |
| TX31 | Lajitas Ar. Si | 80.71 | 57 | P | | P | 04 38 56.8 | +0.6 |
| TXAR | Lajitas Array | 80.71 | 57 | P | | P | 04 38 56.4 | +0.2 |
| TXAR | Lajitas Array | 80.71 | 57 | P | | P | 04 38 57.0 | +0.9 |
| | comp=Z,1.7nm,0.5s,baz=289,slow=3.7,SNR=48 | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| TXAR | Lajitas Array | 80.71 | 57 | P | | P | 04 38 56.4 | +0.2 |
| T42A | Van Buren | 81.20 | 43 | P | | P | 04 38 57.9 | -0.6 |
| T42A | | | | IAmb | | IAmb | 04 38 58.4 | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| BATG | Bathurst New B | 81.37 | 22 | P | | P | 04 38 57.4 | -1.8 |
| FCAR | Ozark Folk Cen | 81.64 | 45 | P | | P | 04 38 59.7 | -1.1 |
| FCAR | | | | IAmb | | IAmb | 04 39 00.6 | |
| | comp=Z,2.4nm,0.5s | | | | | | | |
| BRDY | Brady | 81.79 | 52 | P | | P | 04 39 01.5 | -0.2 |
| BRDY | | | | IAmb | | IAmb | 04 39 02.8 | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| WHAR | Wooly Hollow | 82.04 | 45 | P | | P | 04 39 02.5 | -0.4 |
| WHAR | | | | IAmb | | IAmb | 04 39 03.3 | |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| DRIO | Del Rio | 82.35 | 54 | P | | P | 04 39 05.5 | +1.0 |
| DRIO | | | | IAmb | | IAmb | 04 39 05.9 | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| H62A | Milan | 82.43 | 26 | P | | P | 04 39 04.1 | -0.6 |
| H62A | | | | IAmb | | IAmb | 04 39 04.8 | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| M57A | Sunshine Farm, | 83.34 | 32 | P | | P | 04 39 08.5 | -0.8 |
| WVT | Waverly | 83.44 | 42 | P | | P | 04 39 09.5 | -0.4 |
| WVT | Waverly | 83.44 | 42 | P | | P | 04 39 09.5 | -0.4 |
| WVT | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| T50A | Nancy | 84.02 | 39 | P | | P | 04 39 11.5 | -1.3 |
| PLAL | Pickwick Lake | 84.28 | 43 | P | | P | 04 39 13.0 | -1.1 |
| PLAL | | | | IAmb | | IAmb | 04 39 14.0 | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| TZTN | Tazewell | 84.97 | 39 | P | | P | 04 39 17.2 | -0.4 |
| SWET | Sewanee | 85.05 | 41 | P | | P | 04 39 17.1 | -0.9 |
| BDFB | Brasilia | 145.96 | 26 | PKPbc | | PKPbc | 04 46 19.9 | 0.0 |
| | comp=Z,1.6nm,0.5s,baz=304,slow=4.7,SNR=3.4 | | | | | | | |
| SNAA | Sanae | 151.90 | 200 | PKPbc | | PKPbc | 04 46 32.8 | -0.2 |
| | comp=Z,1.1nm,1.0s,baz=279,slow=3.1,SNR=10 | | | | | | | |
| PLCA | Paso Flores | 152.41 | 90 | PKPbc | | PKiKP | 04 46 35.2 | -0.1 |
| | comp=Z,1.7nm,0.6s,baz=299,slow=1.1,SNR=5.4 | | | | | | | |

*IDC **18** 04:39:36.9±0.6,69.68N×144.19W,h0km,mb4.0/19, mbtmp4.1/23,ML4.5/4,MS3.3/18,Error ellipse: s-maj=15.8km s-min=10.2km az=43.0*

*AEIC **18** 04:39:36.5±2.2,69.48N±0.04×144.30W±0.09,h15km±4km, ML4.5,mb4.5/90(NEIC),ML4.6/120(NEIC), Mwr4.2/45(NEIC),Error ellipse: s-maj=5.2km s-min=4.6km az=211.0*

*NEIC **18** 04:39:37.9±1.7,69.56N±0.02×144.2W±0.1,h10km±2km, Error ellipse: s-maj=5.9km s-min=1.6km az=59.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr0.82; Mθθ-2.06; Mφφ1.24; Mrθ0.72; Mθφ-1.40; Mφr-0.46; Fault plane solution: M0 2.43000×10¹⁵ NP1: ϕs207.53000°,δ63.55000°,λ15.02000°. NP2: ϕs110.71000°,δ76.58000°,λ152.74000°. Principal axes: T 2.1228, Plg29.0000°, Azm66.0000°; N 0.5283, Plg60.0000°, Azm266.0000°; P -2.6510, Plg9.0000°, Azm161.0000°;*

*NEIC **18** 04:39:37.2,69.57N×144.28W,h6km*

**ISC 18 04:39:37.2±1.1,69.51N±0.04×144.27W±0.03,h6km±7km, n624,σ1ǂ21/618,mb4.5/72,MS3.3/14,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| C27K | Jago River | 0.23 | 59 | Pg | | Pg | 04 39 42.0 | +0.4 |
| C27K | | | | Sg | | Sg | 04 39 45.3 | +0.6 |
| C27K | Jago River | 0.23 | 59 | P | | Pg | 04 39 42.1 | +0.4 |
| | baz=235,SNR=1000 | | | | | | | |
| C26K | Camden Bay | 0.47 | 332 | | | Pg | 04 39 46.4 | +0.2 |
| C26K | | | | | | Sg | 04 39 52.7 | +0.5 |
| C26K | | | | IAML | | | 04 39 56.1 | |
| | comp=N,36μm,0.3s | | | | | | | |
| C26K | Camden Bay | 0.47 | 332 | P | | Pg | 04 39 46.5 | +0.3 |
| | baz=154 | | | | | | | |
| D25K | Kavik River | 0.77 | 257 | | | Pg | 04 39 50.8 | -1.2 |
| D25K | Kavik River | 0.77 | 257 | P | | Pg | 04 39 50.7 | -1.2 |
| | baz=77 | | | | | | | |
| D27M | Malcolm River | 1.20 | 101 | | | Pb | 04 39 59.0 | -1.3 |
| D27M | | | | | | Sg | 04 40 15.6 | -0.2 |
| D27M | | | | IAML | | | 04 40 20.3 | |
| | comp=N,9μm,0.3s | | | | | | | |
| D27M | Malcolm River | 1.20 | 101 | P | | Pb | 04 39 59.0 | -1.3 |
| | baz=283 | | | | | | | |
| C24K | Franklin Bluff | 1.57 | 280 | | | Pn | 04 40 05.5 | +0.1 |
| C24K | | | | IAML | | | 04 40 30.6 | |
| | comp=E,8μm,0.9s | | | | | | | |
| C24K | Franklin Bluff | 1.57 | 280 | P | | Pn | 04 40 05.6 | +0.1 |
| | baz=97 | | | | | | | |
| E27K | Coleen River | 1.65 | 143 | Pn | | Pn | 04 40 07.4 | +0.8 |
| E27K | | | | Sn | | Sb | 04 40 29.4 | +0.5 |
| E27K | | | | IAML | | | 04 40 31.1 | |
| | comp=N,6μm,1.1s | | | | | | | |
| E27K | Coleen River | 1.65 | 143 | P | | Pn | 04 40 07.4 | +0.8 |
| | baz=324,SNR=1000 | | | | | | | |
| D24K | Happy Valley | 1.66 | 260 | | | Pn | 04 40 06.8 | +0.2 |
| D24K | | | | IAML | | | 04 40 31.5 | |
| | comp=E,8μm,0.6s | | | | | | | |
| D24K | | | | IAML | | | 04 40 31.5 | |
| | comp=N,8μm,0.5s | | | | | | | |
| D24K | Happy Valley | 1.66 | 260 | P | | Pn | 04 40 06.8 | +0.2 |
| | baz=76,SNR=1000 | | | | | | | |
| F26K | Sheenjek River | 1.82 | 179 | | | Pn | 04 40 10.1 | +1.1 |
| F26K | | | | Sn | | Sn | 04 40 32.5 | +0.1 |
| F26K | | | | IAML | | | 04 40 40.5 | |
| | comp=E,8μm,0.7s | | | | | | | |
| F26K | Sheenjek River | 1.82 | 179 | P | | Pn | 04 40 10.2 | +1.1 |
| | baz=358,SNR=1000 | | | | | | | |
| E28M | Babbage River | 1.93 | 116 | Pn | | Pn | 04 40 11.1 | +0.7 |
| E28M | | | | IAML | | | 04 40 45.0 | |
| | comp=N,4μm,0.8s | | | | | | | |
| E28M | Babbage River | 1.93 | 116 | P | | Pn | 04 40 11.2 | +0.7 |
| | baz=300,SNR=682 | | | | | | | |
| D28M | Stokes Point | 1.96 | 93 | P | | Pn | 04 40 11.5 | +0.6 |
| | baz=277,SNR=936 | | | | | | | |
| F25K | Christian Rive | 1.99 | 195 | Pn | | Pn | 04 40 12.2 | +0.8 |
| F25K | | | | IAML | | | 04 40 42.4 | |
| | comp=E,5μm,0.7s | | | | | | | |
| F25K | | | | IAML | | | 04 40 42.5 | |
| | comp=N,6μm,0.6s | | | | | | | |
| F25K | Christian Rive | 1.99 | 195 | P | | Pn | 04 40 12.2 | +0.8 |
| | baz=14,SNR=1000 | | | | | | | |
| BMAR | Burnt Mountain | 2.10 | 183 | Pn | | Pn | 04 40 13.6 | +0.8 |
| TOLK | Toolik Lake Re | 2.10 | 248 | Pn | | Pn | 04 40 12.5 | -0.3 |
| TOLK | | | | IAML | | | 04 40 45.3 | |
| | comp=E,3μm,0.5s | | | | | | | |
| TOLK | Toolik Lake Re | 2.10 | 248 | P | | Pn | 04 40 13.1 | +0.3 |
| | baz=64,SNR=790 | | | | | | | |
| E24K | Your Creek | 2.10 | 229 | | | Pn | 04 40 13.7 | +0.8 |
| E24K | | | | IAML | | | 04 40 47.4 | |
| | comp=E,3μm,0.8s | | | | | | | |
| E24K | | | | IAML | | | 04 40 49.2 | |
| | comp=N,4μm,1.0s | | | | | | | |
| E24K | Your Creek | 2.10 | 229 | P | | Pn | 04 40 13.9 | +1.0 |
| | baz=45 | | | | | | | |
| C23K | Itkillik River | 2.24 | 281 | Pn | | Pn | 04 40 14.8 | +0.1 |
| C23K | Itkillik River | 2.24 | 281 | P | | Pn | 04 40 14.4 | -0.3 |
| | baz=96,SNR=984 | | | | | | | |
| D23K | Nanushuk River | 2.35 | 260 | | | Pn | 04 40 16.6 | +0.3 |
| D23K | Nanushuk River | 2.35 | 260 | P | | Pn | 04 40 16.5 | +0.3 |
| | baz=74,SNR=414 | | | | | | | |
| F24K | Squaw Lake | 2.40 | 215 | Pn | | Pn | 04 40 17.6 | +0.6 |
| F24K | | | | IAML | | | 04 40 55.9 | |
| | comp=E,4μm,0.6s | | | | | | | |
| F24K | Squaw Lake | 2.40 | 215 | P | | Pn | 04 40 17.7 | +0.6 |
| | baz=32,SNR=200 | | | | | | | |
| E23K | Chandalar | 2.43 | 236 | Pn | | Pn | 04 40 17.9 | +0.5 |
| E23K | | | | IAML | | | 04 40 56.4 | |
| | comp=N,2μm,0.6s | | | | | | | |
| E23K | Chandalar | 2.43 | 236 | P | | Pn | 04 40 18.0 | +0.5 |
| | baz=51,SNR=994 | | | | | | | |
| F28M | Old Crow | 2.50 | 138 | | | Pn | 04 40 19.0 | +0.7 |
| F28M | | | | Sn | | Sn | 04 40 46.3 | -2.7 |
| F28M | | | | IAML | | | 04 41 01.8 | |
| | comp=N,4μm,0.5s | | | | | | | |
| F28M | Old Crow | 2.50 | 138 | P | | Pn | 04 40 18.9 | +0.6 |
| | baz=321,SNR=651 | | | | | | | |
| E29M | Blow River | 2.56 | 113 | Pn | | Pn | 04 40 19.6 | +0.4 |
| E29M | | | | IAML | | | 04 41 04.1 | |
| | comp=E,3μm,0.7s | | | | | | | |
| E29M | Blow River | 2.56 | 113 | P | | Pn | 04 40 19.1 | 0.0 |
| | baz=298,SNR=1000 | | | | | | | |
| G26K | Porcupine Rive | 2.58 | 176 | | | Pn | 04 40 19.9 | +0.5 |
| G26K | Porcupine Rive | 2.58 | 176 | P | | Pn | 04 40 20.0 | +0.7 |
| | baz=356,SNR=1000 | | | | | | | |
| G25K | Bearman Lake | 2.84 | 195 | | | Pn | 04 40 24.1 | +1.1 |
| G25K | Bearman Lake | 2.84 | 195 | P | | Pn | 04 40 23.9 | +0.9 |
| | baz=13,SNR=140 | | | | | | | |
| G27K | Doyon Strip | 2.88 | 159 | | | Pn | 04 40 24.0 | +0.4 |
| G27K | Doyon Strip | 2.88 | 159 | P | | Pn | 04 40 23.9 | +0.4 |
| | baz=341,SNR=149 | | | | | | | |
| FYU | Fort Yukon | 2.98 | 187 | Pn | | Pn | 04 40 25.6 | +0.8 |
| E22K | Anaktuvuk Pass | 3.07 | 247 | | | Pn | 04 40 26.0 | -0.1 |
| E22K | Anaktuvuk Pass | 3.07 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **F30M** | **Barrier River** | **3.65 117** | P | | **Pn** | **04 40 35.7** | **+1.6** |
| | baz=305,SNR=685 | | | | | | |
| **E21K** | **Killik River** | **3.66 258** | | | **Pn** | **04 40 34.0** | **-0.3** |
| E21K | | | IAML | | | 04 41 42.6 | |
| | comp=E,1µm,0.7s | | | | | | |
| E21K | | | IAML | | | 04 41 49.2 | |
| | comp=N,790nm,1.5s | | | | | | |
| **E21K** | **Killik River** | **3.66 258** | P | | **Pn** | **04 40 33.9** | **-0.3** |
| | baz=69 | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.74 269** | | | **Pn** | **04 40 35.6** | **+0.2** |
| **C21K** | **Knifeblade Rid** | **3.74 269** | P | | **Pn** | **04 40 35.4** | **0.0** |
| | baz=80,SNR=188 | | | | | | |
| **G22K** | **Bettles** | **3.75 229** | | | **Pn** | **04 40 36.2** | **+0.8** |
| **G22K** | **Bettles** | **3.75 229** | P | | **Pn** | **04 40 35.4** | **0.0** |
| | baz=43 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.93 126** | Pn | | **Pn** | **04 40 38.6** | **+0.7** |
| G30M | | | IAML | | | 04 41 46.8 | |
| | comp=N,805nm,0.9s | | | | | | |
| G30M | | | IAML | | | 04 41 57.2 | |
| | comp=E,768nm,0.7s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.93 126** | P | | **Pn** | **04 40 37.8** | **-0.1** |
| | baz=314,SNR=24 | | | | | | |
| **A22K** | **Sinclair Lake** | **3.93 297** | | | **Pn** | **04 40 37.9** | **0.0** |
| **A22K** | **Sinclair Lake** | **3.93 297** | P | | **Pn** | **04 40 37.1** | **-0.7** |
| | baz=108 | | | | | | |
| **H24K** | **Noodor Dome** | **3.94 202** | Pn | | **Pn** | **04 40 38.2** | **+0.1** |
| **H24K** | **Noodor Dome** | **3.94 202** | P | | **Pn** | **04 40 38.4** | **+0.3** |
| | baz=19,SNR=114 | | | | | | |
| **H29M** | **Whitestone** | **3.99 143** | Pn | | **Pn** | **04 40 39.8** | **+1.1** |
| **H29M** | **Whitestone** | **3.99 143** | P | | **Pn** | **04 40 39.8** | **+1.1** |
| | baz=328,SNR=607 | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04 187** | Pn | | **Pn** | **04 40 40.4** | **+0.9** |
| PRP | | | IAML | | | 04 41 31.8 | |
| | comp=E,593nm,0.5s | | | | | | |
| PRP | | | IAML | | | 04 41 45.3 | |
| | comp=N,663nm,1.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04 187** | P | | **Pn** | **04 40 40.5** | **+0.9** |
| | baz=6.2,SNR=66 | | | | | | |
| **I27K** | **Kandik River** | **4.05 164** | | | **Pn** | **04 40 40.7** | **+1.1** |
| **I27K** | **Kandik River** | **4.05 164** | P | | **Pn** | **04 40 40.8** | **+1.1** |
| | baz=346,SNR=449 | | | | | | |
| **INK** | **Inuvik** | **4.07 102** | Pn | | **Pn** | **04 40 39.8** | **0.0** |
| **INK** | **Inuvik** | **4.07 102** | Pn | | **Pn** | **04 40 39.7** | **0.0** |
| | comp=N,13nm,0.3s,baz=313,slow=16,SNR=128 | | | | | | |
| INK | | | Sn | | **Sn** | **04 41 25.8** | **-1.8** |
| | comp=N,30nm,0.3s,baz=187,slow=16,SNR=4.3 | | | | | | |
| INK | | | Lg | Lg | | 04 41 44.6 | |
| | comp=N,27nm,0.3s,baz=190,slow=30,SNR=3.7 | | | | | | |
| INK | | | LR | | LR | 04 42 49.8 | |
| | comp=N,298nm,19.5s,baz=282,slow=47 | | | | | | |
| | comp=N,101nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **4.07 102** | P | | **Pn** | **04 40 39.4** | **-0.4** |
| | baz=292,SNR=64 | | | | | | |
| **F21K** | **Alatna River** | **4.11 240** | Pn | | **Pn** | **04 40 40.8** | **+0.4** |
| F21K | | | IAML | | | 04 41 52.3 | |
| | comp=E,652nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **4.11 240** | P | | **Pn** | **04 40 40.7** | **+0.2** |
| | baz=52,SNR=104 | | | | | | |
| **H23K** | **Yukon River** | **4.21 211** | Pn | | **Pn** | **04 40 42.0** | **+0.1** |
| H23K | | | IAML | | | 04 42 00.0 | |
| | comp=N,720nm,1.2s | | | | | | |
| H23K | | | IAML | | | 04 42 02.4 | |
| | comp=E,872nm,1.2s | | | | | | |
| **H23K** | **Yukon River** | **4.21 211** | P | | **Pn** | **04 40 42.5** | **+0.7** |
| | baz=26,SNR=78 | | | | | | |
| **I26K** | **Coal Creek Min** | **4.25 174** | | | **Pn** | **04 40 42.9** | **+0.7** |
| **I26K** | **Coal Creek Min** | **4.25 174** | P | | **Pn** | **04 40 43.3** | **+1.0** |
| | baz=354 | | | | | | |
| **EPYK** | **Eagle Plains** | **4.25 134** | | | **Pn** | **04 40 42.7** | **+0.3** |
| **EPYK** | **Eagle Plains** | **4.25 134** | P | | **Pn** | **04 40 42.6** | **+0.3** |
| | baz=321,SNR=101 | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.40 113** | Pn | | **Pn** | **04 40 44.5** | **+0.1** |
| F31M | | | IAML | | | 04 42 04.1 | |
| | comp=N,616nm,0.8s | | | | | | |
| F31M | | | IAML | | | 04 42 05.9 | |
| | comp=E,496nm,1.1s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.40 113** | P | | **Pn** | **04 40 44.3** | **0.0** |
| | baz=303,SNR=58 | | | | | | |
| **I28M** | **Miner Creek** | **4.41 156** | Pn | | **Pn** | **04 40 45.5** | **+0.9** |
| I28M | | | IAML | | | 04 41 38.9 | |
| | comp=N,703nm,0.6s | | | | | | |
| I28M | | | IAML | | | 04 42 07.7 | |
| | comp=E,815nm,1.3s | | | | | | |
| **I28M** | **Miner Creek** | **4.41 156** | P | | **Pn** | **04 40 45.6** | **+1.1** |
| | baz=340,SNR=837 | | | | | | |
| **D20K** | **Etivluk River** | **4.49 266** | | | **Pn** | **04 40 46.7** | **+1.0** |
| **D20K** | **Etivluk River** | **4.49 266** | P | | **Pn** | **04 40 45.7** | **+0.1** |
| | baz=74,SNR=196 | | | | | | |
| **E20K** | **Nigu River** | **4.49 259** | | | **Pn** | **04 40 46.5** | **+0.8** |
| **E20K** | **Nigu River** | **4.49 259** | P | | **Pn** | **04 40 45.5** | **-0.2** |
| | baz=69 | | | | | | |
| **B20K** | **Meade River** | **4.50 282** | | | **Pn** | **04 40 46.2** | **+0.4** |
| **B20K** | **Meade River** | **4.50 282** | P | | **Pn** | **04 40 46.1** | **+0.4** |
| | baz=91 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.53 220** | | | **Pn** | **04 40 46.3** | **+0.2** |
| **H22K** | **Ishtalitna Cre** | **4.53 220** | P | | **Pn** | **04 40 46.3** | **+0.2** |
| | baz=34,SNR=40 | | | | | | |
| **A21K** | **Barrow** | **4.53 299** | | | **Pn** | **04 40 46.4** | **+0.2** |
| **A21K** | **Barrow** | **4.53 299** | P | | **Pn** | **04 40 45.3** | **-0.8** |
| | baz=108,SNR=56 | | | | | | |
| **G31M** | **Satah River** | **4.54 120** | Pn | | **Pn** | **04 40 46.5** | **+0.3** |
| **G31M** | **Satah River** | **4.54 120** | P | | **Pn** | **04 40 46.5** | **+0.3** |
| | baz=309,SNR=398 | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58 197** | | | **Pn** | **04 40 48.1** | **+1.2** |
| POKR | | | IAML | | | 04 41 43.9 | |
| | comp=N,446nm,0.3s | | | | | | |
| POKR | | | IAML | | | 04 42 16.2 | |
| | comp=E,728nm,1.1s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58 197** | P | | **Pn** | **04 40 47.9** | **+1.0** |
| | baz=14,SNR=55 | | | | | | |
| **G21K** | **Allakaket** | **4.59 233** | Pn | | **Pn** | **04 40 46.8** | **-0.2** |
| G21K | | | IAML | | | 04 42 10.4 | |
| | comp=N,678nm,1.2s | | | | | | |
| G21K | | | IAML | | | 04 42 12.2 | |
| | comp=E,735nm,1.1s | | | | | | |
| **G21K** | **Allakaket** | **4.59 233** | P | | **Pn** | **04 40 46.7** | **-0.2** |
| | baz=45,SNR=23 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.76 148** | | | **Pn** | **04 40 50.0** | **+0.7** |
| I29M | | | IAML | | | 04 41 58.5 | |
| | comp=N,459nm,0.4s | | | | | | |
| I29M | | | IAML | | | 04 42 17.5 | |
| | comp=E,621nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.76 148** | P | | **Pn** | **04 40 50.1** | **+0.7** |
| | baz=334,SNR=84 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.80 207** | | | **Pn** | **04 40 50.3** | **+0.5** |
| I23K | | | IAML | | | 04 42 20.2 | |
| | comp=N,571nm,1.3s | | | | | | |
| I23K | | | IAML | | | 04 42 30.8 | |
| | comp=E,493nm,1.2s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.80 207** | P | | **Pn** | **04 40 50.7** | **+0.8** |
| | baz=22,SNR=82 | | | | | | |
| **MDM** | **Murphy Dome** | **4.82 200** | | | **Pn** | **04 40 50.9** | **+0.7** |
| MDM | | | IAML | | | 04 42 10.8 | |
| | comp=E,336nm,1.0s | | | | | | |
| MDM | | | IAML | | | 04 42 20.1 | |
| | comp=N,400nm,0.9s | | | | | | |
| **COLA** | **College** | **4.86 198** | | | **Pn** | **04 40 51.9** | **+1.2** |
| **COLA** | **College** | **4.86 198** | P | | **Pn** | **04 40 51.7** | **+1.0** |
| | baz=15 | | | | | | |
| **IL31** | | **4.87 193** | | | **Pn** | **04 40 51.8** | **+1.0** |
| **ILAR** | **Eielson Array** | **4.87 193** | Pn | | **Pn** | **04 40 51.4** | **+0.6** |
| | comp=N,19nm,0.3s,baz=5.1,slow=12,SNR=440 | | | | | | |
| ILAR | | | Sn | | **Sn** | **04 41 47.3** | **0.0** |
| | comp=N,15nm,0.3s,baz=13,slow=17,SNR=5.9 | | | | | | |
| ILAR | | | LR | | LR | 04 42 41.1 | |
| | comp=N,124nm,21.4s,baz=88,slow=36 | | | | | | |
| | comp=N,63nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **4.91 164** | | | **Pn** | **04 40 52.1** | **+0.8** |
| EGAK | | | IAML | | | 04 42 26.9 | |
| | comp=N,432nm,1.0s | | | | | | |
| EGAK | | | IAML | | | 04 42 33.3 | |
| | comp=N,379nm,1.3s | | | | | | |
| **EGAK** | **Eagle** | **4.91 164** | P | | **Pn** | **04 40 52.1** | **+0.8** |
| | baz=347,SNR=253 | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92 245** | | | **Pn** | **04 40 52.0** | **+0.6** |
| F20K | | | IAML | | | 04 42 30.1 | |
| | comp=N,371nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92 245** | P | | **Pn** | **04 40 52.0** | **+0.6** |
| | baz=55 | | | | | | |
| **J25K** | **Salcha River,** | **4.94 186** | | | **Pn** | **04 40 52.8** | **+1.0** |
| J25K | | | IAML | | | 04 42 15.3 | |
| | comp=E,367nm,0.6s | | | | | | |
| J25K | | | IAML | | | 04 42 21.0 | |
| | comp=N,313nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **4.94 186** | P | | **Pn** | **04 40 52.9** | **+1.1** |
| | baz=4.4,SNR=191 | | | | | | |
| **J26L** | **Joseph Creek** | **5.04 177** | | | **Pn** | **04 40 54.2** | **+1.0** |
| J26L | | | IAML | | | 04 41 56.4 | |
| | comp=E,502nm,0.5s | | | | | | |
| J26L | | | IAML | | | 04 42 03.9 | |
| | comp=N,277nm,0.6s | | | | | | |
| **J26L** | **Joseph Creek** | **5.04 177** | P | | **Pn** | **04 40 54.3** | **+1.0** |
| | baz=357,SNR=331 | | | | | | |
| **IMAR** | **Indian Mountai** | **5.05 230** | | | **Pn** | **04 40 52.9** | **-0.3** |
| **H21K** | **Melozitna Rive** | **5.06 224** | Pn | | **Pn** | **04 40 53.7** | **+0.3** |
| H21K | | | IAML | | | 04 42 26.8 | |
| | comp=N,313nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.06 224** | P | | **Pn** | **04 40 54.0** | **+0.6** |
| | baz=36,SNR=44 | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08 197** | Pn | | **Pn** | **04 40 54.1** | **+0.4** |
| **D19K** | **Kuna River** | **5.08 265** | Pn | | **Pn** | **04 40 54.0** | **+0.3** |
| D19K | | | IAML | | | 04 42 38.5 | |
| | comp=E,273nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.08 265** | P | | **Pn** | **04 40 53.9** | **+0.1** |
| | baz=72,SNR=424 | | | | | | |
| **MLY** | **Manley** | **5.15 212** | Pn | | **Pn** | **04 40 55.3** | **+0.6** |
| **MLY** | **Manley** | **5.15 212** | P | | **Pn** | **04 40 55.4** | **+0.7** |
| | baz=26,SNR=47 | | | | | | |
| **E19K** | **Redstone River** | **5.20 253** | | | **Pn** | **04 40 54.9** | **-0.4** |
| E19K | | | IAML | | | 04 41 55.6 | |
| | comp=N,315nm,0.6s | | | | | | |
| E19K | | | IAML | | | 04 42 34.0 | |
| | comp=E,453nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **5.20 253** | P | | **Pn** | **04 40 54.6** | **-0.7** |
| | baz=61,SNR=71 | | | | | | |
| **HDA** | **Harding Lake** | **5.23 193** | | | **Pn** | **04 40 56.7** | **+0.9** |
| **HDA** | **Harding Lake** | **5.23 193** | P | | **Pn** | **04 40 56.8** | **+1.0** |
| | baz=10,SNR=157 | | | | | | |
| **I30M** | **Mount Dempster** | **5.27 141** | Pn | | **Pn** | **04 40 57.2** | **+0.7** |
| **I30M** | **Mount Dempster** | **5.27 141** | P | | **Pn** | **04 40 56.9** | **+0.5** |
| | baz=328,SNR=1000 | | | | | | |
| **WRH** | **Wood River Hil** | **5.28 198** | | | **Pn** | **04 40 57.2** | **+0.8** |
| WRH | | | IAML | | | 04 42 27.3 | |
| | comp=N,310nm,0.9s | | | | | | |
| WRH | | | IAML | | | 04 42 33.7 | |
| | comp=E,350nm,1.5s | | | | | | |
| **NEA2** | **Nenana** | **5.28 203** | | | **Pn** | **04 40 56.9** | **+0.4** |
| **NEA2** | **Nenana** | **5.28 203** | P | | **Pn** | **04 40 57.0** | **+0.4** |
| | baz=19,SNR=58 | | | | | | |
| **C19K** | **Lookout Ridge** | **5.45 273** | Pn | | **Pn** | **04 40 59.1** | **+0.3** |
| **C19K** | **Lookout Ridge** | **5.45 273** | P | | **Pn** | **04 40 58.9** | **+0.1** |
| | baz=79,SNR=67 | | | | | | |
| **SCRK** | **Sand Creek** | **5.56 179** | Pn | | **Pn** | **04 41 01.7** | **+1.3** |
| **SCRK** | **Sand Creek** | **5.56 179** | P | | **Pn** | **04 41 01.8** | **+1.4** |
| | baz=359,SNR=321 | | | | | | |
| **K27K** | **Chicken** | **5.57 170** | | | **Pn** | **04 41 01.6** | **+1.1** |
| **K27K** | **Chicken** | **5.57 170** | P | | **Pn** | **04 41 01.7** | **+1.2** |
| | baz=352 | | | | | | |
| **J29N** | **Klondike Camp** | **5.61 152** | Pn | | **Pn** | **04 41 02.2** | **+1.3** |
| **J29N** | **Klondike Camp** | **5.61 152** | P | | **Pn** | **04 41 02.3** | **+1.3** |
| | baz=338,SNR=17 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.71 248** | | | **Pn** | **04 41 02.0** | **-0.2** |
| **F19K** | **Shaleruckik Mo** | **5.71 248** | P | | **Pn** | **04 41 01.9** | **-0.3** |
| | baz=56 | | | | | | |
| **H20K** | **Anotleneega Mo** | **5.73 230** | | | **Pn** | **04 41 02.5** | **-0.1** |
| **H20K** | **Anotleneega Mo** | **5.73 230** | P | | **Pn** | **04 41 02.4** | **-0.2** |
| | baz=41,SNR=17 | | | | | | |
| **BWN** | **Browne** | **5.74 203** | | | **Pn** | **04 41 02.9** | **+0.1** |
| **K24K** | **Donnelly Dome** | **5.76 187** | | | **Pn** | **04 41 04.6** | **+1.4** |
| **K24K** | **Donnelly Dome** | **5.76 187** | P | | **Pn** | **04 41 04.5** | **+1.4** |
| | baz=5.2,SNR=215 | | | | | | |
| **DAWY** | **Dawson** | **5.80 158** | | | **Pn** | **04 41 04.5** | **+1.0** |
| **DAWY** | **Dawson** | **5.80 158** | P | | **Pn** | **04 41 04.7** | **+1.1** |
| | baz=343,SNR=34 | | | | | | |
| **RIDG** | **Independent Ri** | **5.80 183** | Pn | | **Pn** | **04 41 04.8** | **+1.2** |
| **RIDG** | **Independent Ri** | **5.80 183** | P | | **Pn** | **04 41 05.0** | **+1.3** |
| | baz=1.9,SNR=228 | | | | | | |
| **A19K** | **Wainwright** | **5.84 285** | | | **Pn** | **04 41 04.7** | **+0.6** |
| **A19K** | **Wainwright** | **5.84 285** | P | | **Pn** | **04 41 03.7** | **-0.4** |
| | baz=89,SNR=19 | | | | | | |
| **J30M** | **Hart River** | **5.84 144** | Pn | | **Pn** | **04 41 05.0** | **+0.7** |
| **J30M** | **Hart River** | **5.84 144** | P | | **Pn** | **04 41 05.1** | **+0.8** |
| | baz=331,SNR=465 | | | | | | |
| **DOT** | **Dot Lake** | **5.89 179** | | | **Pn** | **04 41 06.0** | **+1.2** |
| **G19K** | **Purcell Mounta** | **5.91 241** | | | **Pn** | **04 41 04.4** | **-0.7** |
| **G19K** | **Purcell Mounta** | **5.91 241** | P | | **Pn** | **04 41 04.2** | **-0.8** |
| | baz=50,SNR=32 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **6.04 209** | | | **Pn** | **04 41 07.6** | **+0.6** |
| **BPAW** | **Bear Paw Mtn.** | **6.04 209** | P | | **Pn** | **04 41 07.8** | **+0.8** |
| | baz=23,SNR=48 | | | | | | |
| **MCK** | **McKinley** | **6.09 200** | | | **Pn** | **04 41 08.5** | **+0.9** |
| **MCK** | **McKinley** | **6.09 200** | P | | **Pn** | **04 41 08.5** | **+0.9** |
| | baz=16,SNR=47 | | | | | | |
| **C18K** | **Utukok River** | **6.12 270** | Pn | | **Pn** | **04 41 07.8** | **-0.2** |
| **C18K** | **Utukok River** | **6.12 270** | P | | **Pn** | **04 41 07.8** | **-0.2** |
| | baz=74 | | | | | | |
| **H19K** | **Roundabout Mou** | **6.14 235** | Pn | | **Pn** | **04 41 08.4** | **+0.2** |
| **H19K** | **Roundabout Mou** | **6.14 235** | P | | **Pn** | **04 41 08.3** | **0.0** |
| | baz=44,SNR=16 | | | | | | |
| **B18K** | **Kokolik River** | **6.17 277** | | | **Pn** | **04 41 09.0** | **+0.3** |
| **B18K** | **Kokolik River** | **6.17 277** | P | | **Pn** | **04 41 08.7** | **0.0** |
| | baz=81 | | | | | | |
| **I20K** | **Naaghedeneel** | **6.17 225** | | | **Pn** | **04 41 09.6** | **+0.9** |
| **I20K** | **Naaghedeneel** | **6.17 225** | P | | **Pn** | **04 41 09.5** | **+0.9** |
| | baz=36 | | | | | | |
| **K29M** | **Barlow Dome** | **6.29 152** | Pn | | **Pn** | **04 41 11.7** | **+1.3** |
| **K29M** | **Barlow Dome** | **6.29 152** | P | | **Pn** | **04 41 12.1** | **+1.7** |
| | baz=338,SNR=405 | | | | | | |
| **E18K** | **Tukpahlearik C** | **6.36 259** | Pn | | **Pn** | **04 41 11.5** | **+0.3** |
| **E18K** | **Tukpahlearik C** | **6.36 259** | P | | **Pn** | **04 41 11.5** | **+0.3** |
| | baz=64,SNR=153 | | | | | | |
| **RND** | **Reindeer** | **6.40 199** | | | **Pn** | **04 41 13.0** | **+1.1** |
| **F18K** | **Selawik** | **6.46 250** | | | **Pn** | **04 41 12.9** | **+0.5** |
| **F18K** | **Selawik** | **6.46 250** | P | | **Pn** | **04 41 13.1** | **+0.5** |
| | baz=56,SNR=117 | | | | | | |
| **L26K** | **Log Cabin Wild** | **6.53 176** | Pn | | **Pn** | **04 41 14.9** | **+1.4** |
| **L26K** | **Log Cabin Wild** | **6.53 176** | P | | **Pn** | **04 41 14.8** | **+1.2** |
| | baz=357,SNR=31 | | | | | | |
| **BCAR** | **Beaver Creek A** | **6.55 170** | Pn | | **Pn** | **04 41 15.0** | **+1.1** |
| **L27K** | **Beaver Creek,** | **6.55 170** | Pn | | **Pn** | **04 41 15.0** | **+1.1** |
| **L27K** | **Beaver Creek,** | **6.55 170** | P | | **Pn** | **04 41 15.2** | **+1.3** |
| | baz=352,SNR=180 | | | | | | |
| **G18K** | **Tagagawik** | **6.56 243** | Pn | | **Pn** | **04 41 14.6** | **+0.6** |
| **G18K** | **Tagagawik** | **6.56 243** | P | | **Pn** | **04 41 14.2** | **+0.2** |
| | baz=50,SNR=39 | | | | | | |
| **DHY** | **Denali Highway** | **6.58 192** | Pn | | **Pn** | **04 41 16.3** | **+1.8** |
| **DHY** | **Denali Highway** | **6.58 192** | P | | **Pn** | **04 41 15.9** | **+1.4** |
| | baz=9.5,SNR=155 | | | | | | |
| **PAX** | **Paxson** | **6.59 185** | | | **Pn** | **04 41 16.1** | **+1.6** |
| **PAX** | **Paxson** | **6.59 185** | P | | **Pn** | **04 41 15.9** | **+1.5** |
| | baz=3.6,SNR=337 | | | | | | |
| **MENT** | **Mentasta** | **6.61 178** | Pn | | **Pn** | **04 41 16.1** | **+1.4** |
| **J20K** | **Nowinta River** | **6.61 221** | Pn | | **Pn** | **04 41 14.9** | **+0.2** |
| **J20K** | **Nowinta River** | **6.61 221** | P | | **Pn** | **04 41 15.3** | **+0.6** |
| | baz=32,SNR=14 | | | | | | |
| **A36M** | **Sachs Harbour** | **6.75 60** | Pn | | **Pn** | **04 41 15.0** | **-1.5** |
| **A36M** | **Sachs Harbour** | **6.75 60** | P | | **Pn** | **04 41 15.4** | **-1.1** |
| | baz=258,SNR=44 | | | | | | |
| **C17K** | **DeLong Mountai** | **6.87 270** | | | **Pn** | **04 41 17.6** | **-0.7** |
| **C17K** | **DeLong Mountai** | **6.87 270** | P | | **Pn** | **04 41 17.4** | **-0.8** |
| | baz=73,SNR=14 | | | | | | |
| **RDOG** | **Red Dog Mine** | **6.91 267** | Pn | | **Pn** | **04 41 18.3** | **-0.5** |
| **RDOG** | **Red Dog Mine** | **6.91 267** | P | | **Pn** | **04 41 18.2** | **-0.6** |
| | baz=70,SNR=62 | | | | | | |
| **WAT1** | **Susitna Watana** | **6.93 197** | | | **Pn** | **04 41 20.6** | **+1.6** |
| **WAT1** | **Susitna Watana** | **6.93 197** | P | | **Pn** | **04 41 20.5** | **+1.4** |
| | baz=13 | | | | | | |
| **E17K** | **Hotham Inlet** | **6.94 258** | | | **Pn** | **04 41 19.2** | **0.0** |
| **E17K** | **Hotham Inlet** | **6.94 258** | P | | **Pn** | **04 41 19.0** | **-0.2** |
| | baz=62 | | | | | | |
| **WAT7** | **Susitna Watana** | **6.96 198** | | | **Pn** | **04 41 21.4** | **+1.8** |
| **H18K** | **Honhosa River** | **6.97 238** | Pn | | **Pn** | **04 41 19.8** | **+0.1** |
| **H18K** | **Honhosa River** | **6.97 238** | P | | **Pn** | **04 41 19.8** | **+0.1** |
| | baz=45,SNR=14 | | | | | | |
| **F17K** | **Baldwin Pennin** | **7.08 252** | Pn | | **Pn** | **04 41 20.4** | **-0.6** |
| **F17K** | **Baldwin Pennin** | **7.08 252** | P | | **Pn** | **04 41 20.5** | **-0.6** |
| | baz=57 | | | | | | |
| **WAT6** | **Susitna Watana** | **7.10 193** | | | **Pn** | **04 41 23.0** | **+1.4** |
| **WAT6** | **Susitna Watana** | **7.10 193** | P | | **Pn** | **04 41 23.2** | **+1.6** |
| | baz=9.9,SNR=44 | | | | | | |
| **D17K** | **Noatak River** | **7.11 264** | | | **Pn** | **04 41 20.6** | **-0.9** |
| **D17K** | **Noatak River** | **7.11 264** | P | | **Pn** | **04 41 20.3** | **-1.1** |
| | baz=67 | | | | | | |
| **C36M** | **Paulatuk** | **7.11 82** | Pn | | **Pn** | **04 41 19.3** | **-2.2** |
| **C36M** | **Paulatuk** | **7.11 82** | P | | **Pn** | **04 41 19.5** | **-2.0** |
| | baz=281,SNR=33 | | | | | | |
| **J19K** | **Poorman** | **7.12 224** | Pn | | **Pn** | **04 41 21.8** | **+0.1** |
| **J19K** | **Poorman** | **7.12 224** | P | | **Pn** | **04 41 21.9** | **+0.1** |
| | baz=34,SNR=7.9 | | | | | | |
| **HARP** | **HAARP** | **7.15 183** | | | **Pn** | **04 41 24.2** | **+2.0** |
| **HARP** | **HAARP** | **7.15 183** | P | | **Pn** | **04 41 24.4** | **+2.2** |
| | baz=2.4,SNR=69 | | | | | | |
| **M26K** | **Nabesna, AK** | **7.16 175** | Pn | | **Pn** | **04 41 23.6** | **+1.4** |
| **M26K** | **Nabesna, AK** | **7.16 175** | P | | **Pn** | **04 41 24.1** | **+1.8** |
| | baz=356,SNR=51 | | | | | | |
| **M27K** | **Edge Creek, AK** | **7.25 171** | | | **Pn** | **04 41 25.0** | **+1.4** |
| **M27K** | **Edge Creek, AK** | **7.25 171** | P | | **Pn** | **04 41 25.1** | **+1.4** |
| | baz=353,SNR=205 | | | | | | |
| **K20K** | **Telida** | **7.31 217** | Pn | | **Pn** | **04 41 24.5** | **+0.2** |
| **K20K** | **Telida** | **7.31 217** | P | | **Pn** | **04 41 24.3** | **0.0** |
| | baz=28 | | | | | | |
| **G17K** | **Kiwalik Mounta** | **7.45 245** | | | **Pn** | **04 41 26.2** | **+0.1** |
| **G17K** | **Kiwalik Mounta** | **7.45 245** | P | | **Pn** | **04 41 26.0** | **-0.2** |
| | baz=50,SNR=24 | | | | | | |
| **WAZA** | **Wrangell Mount** | **7.47 180** | | | **Pn** | **04 41 28.2** | **+1.5** |
| **M24K** | **Tolsona, Glenn** | **7.48 187** | Pn | | **Pn** | **04 41 27.7** | **+1.1** |
| **M24K** | **Tolsona, Glenn** | **7.48 187** | P | | **Pn** | **04 41 28.7** | **+2.0** |
| | baz=5.1,SNR=26 | | | | | | |
| **M29M** | **Somme Creek** | **7.48 159** | Pn | | **Pn** | **04 41 27.7** | **+1.0** |
| **M29M** | **Somme Creek** | **7.48 159** | P | | **Pn** | **04 41 28.0** | **+1.3** |
| | baz=344,SNR=362 | | | | | | |
| **CUT** | **Chulitna** | **7.54 202** | Pn | | **Pn** | **04 41 29.7** | **+2.3** |
| **CUT** | **Chulitna** | **7.54 202** | P | | **Pn** | **04 41 29.0** | **+1.6** |
| | baz=16 | | | | | | |
| **WACK** | **Wrangell Chich** | **7.56 180** | | | **Pn** | **04 41 29.5** | **+1.6** |
| **H17K** | **Granite Mounta** | **7.59 240** | Pn | | **Pn** | **04 41 28.6** | **+0.4** |
| **H17K** | **Granite Mounta** | **7.59 240** | P | | **Pn** | **04 41 28.5** | **+0.4** |
| | baz=46,SNR=19 | | | | | | |
| **WASW** | **Wrangell South** | **7.62 180** | | | **Pn** | **04 41 30.1** | **+1.4** |
| **C16K** | **Lisburne Hills** | **7.69 271** | Pn | | **Pn** | **04 41 29.1** | **-0.4** |
| **C16K** | **Lisburne Hills** | **7.69 271** | P | | **Pn** | **04 41 28.3** | **-1.2** |
| | baz=71,SNR=10 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **7.81 191** | Pn | | **Pn** | **04 41 33.4** | **+2.2** |
| **SCM** | **Sheep Creek Mo** | **7.81 191** | P | | **Pn** | **04 41 34.0** | **+2.8** |
| | baz=7.9,SNR=54 | | | | | | |
| **J18K** | **Innoko River** | **7.83 225** | Pn | | **Pn** | **04 41 30.5** | **-1.0** |
| **J18K** | **Innoko River** | **7.83 225** | P | | **Pn** | **04 41 31.6** | **+0.2** |
| | baz=34 | | | | | | |
| **M23K** | **Glacier View** | **7.88 192** | P | | **Pn** | **04 41 34.8** | **+2.7** |
| | baz=8.9,SNR=51 | | | | | | |
| **YUK2** | **White River** | **7.88 168** | | | **Pn** | **04 41 33.9** | **+1.6** |
| **SML** | **Sawmill** | **7.91 194** | Pn | | **Pn** | **04 41 34.0** | **+1.3** |
| **SML** | **Sawmill** | **7.91 194** | P | | **Pn** | **04 41 34.1** | **+1.5** |
| | baz=10,SNR=27 | | | | | | |
| **YUK3** | **Moose Creek** | **7.92 167** | | | **Pn** | **04 41 34.4** | **+1.5** |
| **YUK3** | **Moose Creek** | **7.92 167** | P | | **Pn** | **04 41 34.4** | **+1.5** |
| | baz=350,SNR=28 | | | | | | |
| **N25K** | **Chitina, Valde** | **7.94 181** | Pn | | **Pn** | **04 41 33.8** | **+0.8** |
| **N25K** | **Chitina, Valde** | **7.94 181** | P | | **Pn** | **04 41 34.9** | **+1.9** |
| | baz=0.8,SNR=42 | | | | | | |
| **GHO** | **Glory Hole Cre** | **8.00 196** | Pn | | **Pn** | **04 41 34.9** | **+1.0** |
| **L20K** | **Farewell, AK** | **8.06 214** | | | **Pn** | **04 41 35.0** | **+0.4** |
| **L20K** | **Farewell, AK** | **8.06 214** | P | | **Pn** | **04 41 35.4** | **+0.8** |
| | baz=25,SNR=12 | | | | | | |
| **G16K** | **Koyuk River** | **8.06 248** | Pn | | **Pn** | **04 41 33.5** | **-1.1** |
| **G16K** | **Koyuk River** | **8.06 248** | P | | **Pn** | **04 41 34.1** | **-0.5** |
| | baz=51 | | | | | | |
| **KLU** | **Klutina** | **8.08 186** | Pn | | **Pn** | **04 41 37.0** | **+2.0** |
| **KLU** | **Klutina** | **8.08 186** | P | | **Pn** | **04 41 36.7** | **+1.7** |
| | baz=4.1,SNR=20 | | | | | | |
| **GLB** | **Gilahina Butte** | **8.11 178** | Pn | | **Pn** | **04 41 36.7** | **+1.5** |
| **SKT** | **Skwentna** | **8.12 205** | Pn | | **Pn** | **04 41 36.5** | **+1.1** |
| **SKT** | **Skwentna** | **8.12 205** | P | | **Pn** | **04 41 36.5** | **+1.1** |
| | baz=18,SNR=11 | | | | | | |
| **M22K** | **Willow** | **8.15 200** | P | | **Pn** | **04 41 37.3** | **+1.5** |
| | baz=15 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **8.18 176** | Pn | | **Pn** | **04 41 38.0** | **+1.8** |
| **MCARA** | **McCarthy VSAT** | **8.18 176** | P | | **Pn** | **04 41 38.7** | **+2.5** |
| | baz=357,SNR=29 | | | | | | |
| **PMR** | **Palmer** | **8.20 197** | Pn | | **Pn** | **04 41 38.3** | **+1.8** |
| **PMR** | **Palmer** | **8.20 197** | P | | **Pn** | **04 41 38.9** | **+2.4** |
| | baz=12,SNR=27 | | | | | | |
| **KNK** | **Knik Glacier** | **8.31 194** | Pn | | **Pn** | **04 41 41.2** | **+3.2** |
| **KNK** | **Knik Glacier** | **8.31 194** | P | | **Pn** | **04 41 41.0** | **+2.9** |
| | baz=10,SNR=30 | | | | | | |
| **M31M** | **Drury Creek, Y** | **8.37 146** | P | | **Pn** | **04 41 39.0** | **+0.2** |
| | baz=335 | | | | | | |
| **PTPK** | **Patty Peak** | **8.39 174** | | | **Pn** | **04 41 41.9** | **+2.6** |
| **YUK8** | **Steele Glacier** | **8.47 165** | | | **Pn** | **04 41 42.1** | **+1.7** |
| **YUK8** | **Steele Glacier** | **8.47 165** | P | | **Pn** | **04 41 42.1** | **+1.7** |
| | baz=349,SNR=8.0 | | | | | | |
| **M20K** | **Styx River** | **8.47 210** | Pn | | **Pn** | **04 41 41.0** | **+0.7** |
| **M20K** | **Styx River** | **8.47 210** | P | | **Pn** | **04 41 41.9** | **+1.5** |
| | baz=22 | | | | | | |
| **J17K** | **VABM Dome** | **8.51 231** | Pn | | **Pn** | **04 41 39.7** | **-1.0**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F14K | Arctic Creek | 9.34 | 255 | P | | Pn | 04 41 51.8 | -0.3 | |
| | baz=55 | | | | | | | | |
| L17K | Donlin | 9.35 | 225 | | | Pn | 04 41 52.6 | +0.4 | |
| L17K | Donlin | 9.35 | 225 | P | | Pn | 04 41 52.4 | +0.2 | |
| | baz=32 | | | | | | | | |
| O22K | Cooper Landing | 9.35 | 197 | P | | Pn | 04 41 54.0 | +1.7 | |
| | baz=12 | | | | | | | | |
| M18K | Stony River | 9.35 | 216 | | | Pn | 04 41 52.5 | +0.2 | |
| M18K | Stony River | 9.35 | 216 | P | | Pn | 04 41 53.2 | +1.0 | |
| | baz=26,SNR=8.9 | | | | | | | | |
| YUK7 | Dusty Glacier | 9.38 | 161 | | | Pn | 04 41 54.5 | +1.8 | |
| O30N | Mendenhall | 9.41 | 155 | Pn | | Pn | 04 41 54.1 | +1.0 | |
| O30N | Mendenhall | 9.41 | 155 | P | | Pn | 04 41 54.1 | +1.0 | |
| | baz=342,SNR=56 | | | | | | | | |
| MESA | MESA | 9.42 | 173 | P | | Pn | 04 41 56.5 | +3.1 | |
| | baz=355,SNR=16 | | | | | | | | |
| BGLC | Bering Glacier | 9.44 | 177 | P | | Pn | 04 41 58.3 | +4.9 | |
| | baz=358 | | | | | | | | |
| SAMH | Samovar Hills | 9.53 | 169 | | | Pn | 04 41 54.6 | -0.2 | |
| O29M | Mount Kennedy | 9.55 | 163 | P | | Pn | 04 41 58.0 | +2.9 | |
| | baz=348,SNR=18 | | | | | | | | |
| N32M | Quiet Lake | 9.59 | 146 | | | Pn | 04 41 55.7 | +0.2 | |
| N32M | Quiet Lake | 9.59 | 146 | P | | Pn | 04 41 56.0 | +0.5 | |
| | baz=336 | | | | | | | | |
| PCA | Pinnacle | 9.60 | 168 | | | Pn | 04 41 57.3 | +1.5 | |
| PINM | Pinnacle | 9.61 | 168 | P | | Pn | 04 41 58.0 | +2.2 | |
| | baz=351,SNR=15 | | | | | | | | |
| KAIM | Kayak Island | 9.62 | 180 | P | | Pn | 04 41 58.9 | +2.9 | |
| | baz=0.3 | | | | | | | | |
| P23K | Montague Islan | 9.64 | 189 | | | Pn | 04 41 57.3 | +1.0 | |
| P23K | Montague Islan | 9.64 | 189 | P | | Pn | 04 41 58.9 | +2.7 | |
| | baz=6.6 | | | | | | | | |
| SEW | Seward | 9.69 | 196 | P | | Pn | 04 41 59.2 | +2.3 | |
| | baz=11 | | | | | | | | |
| N19K | Bonanza Creek | 9.71 | 211 | P | | Pn | 04 41 59.4 | +2.1 | |
| | baz=22 | | | | | | | | |
| WHY | Whitehorse | 9.71 | 152 | Pn | | Pn | 04 41 56.8 | -0.5 | |
| WHY | Whitehorse | 9.71 | 152 | P | | Pn | 04 41 57.5 | +0.2 | |
| | baz=340,SNR=18 | | | | | | | | |
| M17K | Holitna River | 9.78 | 220 | P | | Pn | 04 41 59.0 | +0.9 | |
| | baz=28 | | | | | | | | |
| P30M | Million Dollar | 9.92 | 158 | P | | Pn | 04 42 01.8 | +1.8 | |
| | baz=345 | | | | | | | | |
| L16K | Owhat River | 10.00 | 226 | P | | Pn | 04 42 02.7 | +1.6 | |
| | baz=32 | | | | | | | | |
| K15K | Wolf Creek Mou | 10.07 | 232 | P | | Pn | 04 42 03.2 | +1.1 | |
| | baz=37 | | | | | | | | |
| PNL | Peninsula | 10.10 | 166 | P | | Pn | 04 42 05.4 | +3.0 | |
| | baz=350 | | | | | | | | |
| O20K | Slope Mountain | 10.10 | 205 | P | | Pn | 04 42 05.2 | +2.6 | |
| | baz=17 | | | | | | | | |
| N18K | Kilae Creek | 10.10 | 214 | Pn | | Pn | 04 42 04.0 | +1.4 | |
| N18K | Kilae Creek | 10.10 | 214 | P | | Pn | 04 42 04.2 | +1.6 | |
| | baz=24 | | | | | | | | |
| Q23K | Middleton Isla | 10.16 | 186 | P | | Pn | 04 42 05.4 | +2.1 | |
| | baz=4.1 | | | | | | | | |
| O19K | Port Alsworth | 10.26 | 209 | P | | Pn | 04 42 06.7 | +2.0 | |
| | baz=20 | | | | | | | | |
| J14K | Nanvaranak Lak | 10.30 | 238 | Pn | | Pn | 04 42 05.1 | 0.0 | |
| J14K | Nanvaranak Lak | 10.30 | 238 | P | | Pn | 04 42 06.1 | +0.9 | |
| | baz=41 | | | | | | | | |
| P29M | Windy Craggy | 10.30 | 161 | P | | Pn | 04 42 08.0 | +2.7 | |
| | baz=347 | | | | | | | | |
| WRGLY | Wrigley | 10.41 | 117 | Pn | | Pn | 04 42 06.6 | -0.1 | |
| WRGLY | Wrigley | 10.41 | 117 | P | | Pn | 04 42 05.9 | -0.8 | |
| | baz=316,SNR=8.5 | | | | | | | | |
| M16K | Timber Creek | 10.47 | 223 | Pn | | Pn | 04 42 07.7 | +0.2 | |
| M16K | Timber Creek | 10.47 | 223 | P | | Pn | 04 42 08.5 | +0.9 | |
| | baz=29 | | | | | | | | |
| P33M | Teslin, Yukon | 10.50 | 147 | Pn | | Pn | 04 42 07.4 | -0.7 | |
| P33M | Teslin, Yukon | 10.50 | 147 | P | | Pn | 04 42 08.5 | +0.4 | |
| | baz=337,SNR=24 | | | | | | | | |
| N17K | Nushagak Hills | 10.51 | 217 | Pn | | Pn | 04 42 08.8 | +0.7 | |
| N17K | Nushagak Hills | 10.51 | 217 | P | | Pn | 04 42 09.6 | +1.5 | |
| | baz=26 | | | | | | | | |
| L15K | Ungalak Mounta | 10.56 | 230 | P | | Pn | 04 42 09.2 | +0.4 | |
| | baz=35 | | | | | | | | |
| PLBC | Pleasant Camp | 10.64 | 158 | P | | Pn | 04 42 11.5 | +1.6 | |
| | baz=345 | | | | | | | | |
| O18K | Koktuh Hills | 10.74 | 211 | P | | Pn | 04 42 12.5 | +1.2 | |
| | baz=21 | | | | | | | | |
| SKAG | Skagway | 10.78 | 155 | Pn | | Pn | 04 42 13.9 | +2.1 | |
| SKAG | Skagway | 10.78 | 155 | P | | Pn | 04 42 13.1 | +1.3 | |
| | baz=343 | | | | | | | | |
| N16K | Nishlik Lake | 10.91 | 221 | P | | Pn | 04 42 14.8 | +1.3 | |
| | baz=28 | | | | | | | | |
| O17K | Koliganek Bris | 11.18 | 215 | P | | Pn | 04 42 18.0 | +0.8 | |
| | baz=24 | | | | | | | | |
| M15K | Kasigluk River | 11.18 | 226 | P | | Pn | 04 42 18.3 | +1.1 | |
| | baz=31 | | | | | | | | |
| M14K | Bethel | 11.46 | 229 | P | | Pn | 04 42 21.5 | +0.4 | |
| | baz=33 | | | | | | | | |
| N15K | Kwethluk River | 11.49 | 223 | P | | Pn | 04 42 22.3 | +0.8 | |
| | baz=29 | | | | | | | | |
| O16K | Kokwok River B | 11.55 | 217 | P | | Pn | 04 42 22.9 | +0.6 | |
| | baz=25 | | | | | | | | |
| P17K | Kvichak River | 11.58 | 213 | P | | Pn | 04 42 23.5 | +0.7 | |
| | baz=22 | | | | | | | | |
| R33M | Jennings River | 11.62 | 144 | P | | Pn | 04 42 24.4 | +0.9 | |
| | baz=336 | | | | | | | | |
| Q32M | Nakina River | 11.77 | 148 | P | | Pn | 04 42 26.7 | +1.2 | |
| | baz=339,SNR=19 | | | | | | | | |
| R32K | Eaglecrest | 12.04 | 155 | Pn | | Pn | 04 42 30.5 | +1.4 | |
| S31K | Pelican | 12.11 | 159 | Pn | | Pn | 04 42 32.5 | +2.6 | |
| S31K | Pelican | 12.11 | 159 | P | | Pn | 04 42 32.2 | +2.2 | |
| | baz=346 | | | | | | | | |
| GAMB | Gambell | 12.22 | 255 | P | | Pn | 04 42 31.6 | +0.3 | |
| | baz=50 | | | | | | | | |
| O15K | Ungalikthiuk R | 12.31 | 220 | P | | Pn | 04 42 34.5 | +1.8 | |
| | baz=26 | | | | | | | | |
| KDAK | Kodiak Island | 12.32 | 201 | Pn | | Pn | 04 42 33.4 | +0.6 | |
| | comp=E,0.2nm,0.3s,baz=253,slow=19,SNR=1.9 | | | | | | | | |
| KDAK | | | | | LR | LR | 04 47 32.1 | | |
| | comp=E,144nm,19.8s,baz=42,slow=38 | | | | | | | | |
| KDAK | Kodiak Island | 12.32 | 201 | P | | Pn | 04 42 33.9 | +1.1 | |
| | baz=14 | | | | | | | | |
| Q17K | Contact Creek | 12.36 | 210 | P | | Pn | 04 42 34.0 | +0.5 | |
| | baz=19 | | | | | | | | |
| O14K | Tigyukauivet M | 12.58 | 224 | P | | Pn | 04 42 37.1 | +0.7 | |
| | baz=28 | | | | | | | | |
| KOTAN | Kotaneelee Air | 12.67 | 128 | P | | Pn | 04 42 37.2 | -0.4 | |
| | baz=326 | | | | | | | | |
| DLBC | Dease Lake | 12.70 | 144 | Pn | | Pn | 04 42 38.5 | +0.4 | |
| | comp=E,1.5nm,0.3s,baz=354,slow=8.8,SNR=16 | | | | | | | | |
| DLBC | | | | | LR | LR | 04 46 57.1 | | |
| | comp=E,80nm,21.2s,baz=92,slow=34 | | | | | | | | |
| | comp=E,5.3nm,0.4s | | | | | | | | |
| DLBC | Dease Lake | 12.70 | 144 | P | | Pn | 04 42 39.5 | +1.4 | |
| | baz=337 | | | | | | | | |
| R18K | Karluk | 12.79 | 205 | P | | Pn | 04 42 41.0 | +1.8 | |
| | baz=16 | | | | | | | | |
| S32K | Killisnoo | 12.81 | 156 | P | | Pn | 04 42 41.7 | +2.2 | |
| | baz=344 | | | | | | | | |
| M11K | Mekoryuk | 12.95 | 236 | P | | Pn | 04 42 41.3 | 0.0 | |
| | baz=36 | | | | | | | | |
| S34M | Telegraph Cree | 12.97 | 147 | Pn | | Pn | 04 42 43.2 | +1.6 | |
| S34M | Telegraph Cree | 12.97 | 147 | P | | Pn | 04 42 43.0 | +1.3 | |
| | baz=339 | | | | | | | | |
| SIT | Sitka | 13.11 | 158 | P | | Pn | 04 42 44.2 | +0.6 | |
| | baz=346 | | | | | | | | |
| YKA | Yellowknife Ar | 13.83 | 106 | Pn | | Pn | 04 42 49.6 | -3.8 | |
| YKA | Yellowknife Ar | 13.83 | 106 | Pn | | Pn | 04 42 48.4 | -5.0 | |
| | comp=E,2.9nm,0.3s,baz=112,slow=2.7,SNR=33 | | | | | | | | |
| YKA | | | | | Sn | Sn | 04 45 14.2 | -13 | |
| | comp=E,3.0nm,0.3s,baz=38,slow=21,SNR=7.6 | | | | | | | | |
| | comp=E,7.8nm,0.5s | | | | | | | | |
| T35M | Bob Quinn | 14.01 | 147 | | | Pn | 04 42 57.6 | +1.7 | |
| T35M | Bob Quinn | 14.01 | 147 | P | | Pn | 04 42 57.0 | +1.1 | |
| | baz=339 | | | | | | | | |
| WRAK | Wrangell Islan | 14.17 | 152 | P | | Pn | 04 43 00.4 | +2.4 | |
| | baz=343 | | | | | | | | |
| FCC | Fort Churchill | 23.61 | 92 | | | P | 04 44 47.3 | -1.0 | |
| FCC | | | | | IAmb | IAmb | 04 44 52.9 | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| FFC | Flin Flon | 24.01 | 106 | P | | P | 04 44 49.5 | -2.7 | |
| NEW | Newport | 25.08 | 134 | LR | | LR | 04 55 35.4 | | |
| | comp=Z,107nm,21.5s,baz=335,slow=38 | | | | | | | | |
| NEW | Newport | 25.08 | 134 | P | | P | 04 45 03.8 | +1.8 | |
| | baz=338 | | | | | | | | |
| LTY | Liberty | 25.17 | 140 | P | | P | 04 45 01.5 | -1.5 | |
| LON | Longmire | 25.40 | 142 | P | | P | 04 45 06.3 | +1.3 | |
| F10A | Beach Ranch, E | 27.19 | 136 | P | | P | 04 45 22.0 | +0.8 | |
| MSO | Missoula | 27.23 | 131 | P | | P | 04 45 22.9 | +1.3 | |
| MSO | | | | | IAmb | IAmb | 04 45 24.3 | | |
| | comp=Z,11nm,1.5s | | | | | | | | |
| MSO | Missoula | 27.23 | 131 | P | | P | 04 45 21.4 | -0.2 | |
| | baz=337 | | | | | | | | |
| LYMT | Lyon Mountain | 27.55 | 128 | P | | P | 04 45 25.8 | +1.1 | |
| MA2 | Magadan | 28.17 | 282 | LR | | LR | 04 57 13.4 | | |
| | comp=Z,57nm,20.5s,baz=71,slow=38 | | | | | | | | |
| I07A | Izee | 28.44 | 141 | P | | P | 04 45 34.6 | +2.1 | |
| FRB | Frobisher Bay | 28.73 | 64 | LR | | LR | 04 57 31.0 | | |
| | comp=Z,104nm,21.8s,baz=2.5,slow=38 | | | | | | | | |
| BOZ | Bozeman (W) | 29.00 | 129 | P | | P | 04 45 38.0 | +0.6 | |
| | baz=337 | | | | | | | | |
| LAO | LASA Array | 29.57 | 121 | P | | P | 04 45 43.9 | +1.6 | |
| | baz=334 | | | | | | | | |
| ULM | Lac du Bonnet | 29.81 | 105 | P | | P | 04 45 44.1 | -0.2 | |
| | comp=Z,2.0nm,0.7s,baz=347,slow=12,SNR=2.2 | | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| YBH | Yreka Blue Hor | 30.03 | 147 | LR | | LR | 04 58 18.3 | | |
| | comp=Z,48nm,18.4s,baz=336,slow=37 | | | | | | | | |
| RLMT | Red Lodge | 30.09 | 126 | P | | P | 04 45 48.2 | +1.0 | |
| | baz=336 | | | | | | | | |
| HLID | Hailey | 30.15 | 134 | P | | P | 04 45 49.4 | +1.7 | |
| HLID | Hailey | 30.15 | 134 | P | | P | 04 45 49.4 | +1.7 | |
| | baz=340 | | | | | | | | |
| H17A | Grant Village | 30.39 | 128 | P | | P | 04 45 51.2 | +1.3 | |
| | baz=337 | | | | | | | | |
| PETK | Petropavlovsk- | 30.78 | 268 | LR | | LR | 04 58 19.8 | | |
| | comp=Z,43nm,20.9s,baz=16,slow=36 | | | | | | | | |
| AGMN | Agassiz Nation | 31.48 | 107 | P | | P | 04 45 58.7 | -0.5 | |
| | baz=330 | | | | | | | | |
| BW06 | Boulder Array | 32.18 | 128 | P | | P | 04 46 07.7 | +2.0 | |
| | baz=338,SNR=6.2 | | | | | | | | |
| PD31 | Pinedale Array | 32.18 | 128 | P | | P | 04 46 06.6 | +1.0 | |
| PDAR | Pinedale Array | 32.18 | 128 | P | | P | 04 46 06.6 | +1.0 | |
| PDAR | Pinedale Array | 32.18 | 128 | P | | P | 04 46 07.7 | +2.0 | |
| | comp=Z,2.3nm,0.8s,baz=7.9,slow=5.5,SNR=25 | | | | | | | | |
| PDAR | | | | | LR | LR | 05 00 18.5 | | |
| | comp=Z,69nm,19.0s,baz=340,slow=38 | | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| RSSD | Black Hills | 32.55 | 120 | P | | P | 04 46 10.0 | +1.2 | |
| | baz=335 | | | | | | | | |
| ELK | Elko | 32.60 | 137 | LR | | LR | 05 00 05.3 | | |
| | comp=Z,74nm,20.9s,baz=302,slow=38 | | | | | | | | |
| HWUT | Hardware Ranch | 32.72 | 131 | P | | P | 04 46 10.9 | +0.6 | |
| HWUT | | | | | IAmb | IAmb | 04 46 13.3 | | |
| | comp=Z,3.2nm,0.7s | | | | | | | | |
| YAK | Yakutsk | 33.19 | 301 | LR | | LR | 05 01 53.0 | | |
| | comp=Z,34nm,19.4s,baz=18,slow=40 | | | | | | | | |
| EYMN | Ely | 33.27 | 103 | P | | P | 04 46 15.6 | +0.7 | |
| EYMN | | | | | IAmb | IAmb | 04 46 34.1 | | |
| | comp=Z,5.1nm,0.9s | | | | | | | | |
| EYMN | Ely | 33.27 | 103 | P | | P | 04 46 15.9 | +1.0 | |
| | baz=329 | | | | | | | | |
| DUG | Dugway, Tooele | 33.72 | 134 | P | | P | 04 46 20.2 | +1.2 | |
| | baz=341 | | | | | | | | |
| RWWY | Rawlins | 33.84 | 126 | P | | P | 04 46 20.8 | +0.7 | |
| RWWY | | | | | IAmb | IAmb | 04 46 22.5 | | |
| | comp=Z,4.5nm,0.9s | | | | | | | | |
| NVAR | Mina Array Bea | 34.11 | 142 | P | | P | 04 46 25.1 | +2.7 | |
| | comp=Z,1.5nm,0.9s,baz=327,slow=8.6,SNR=8.2 | | | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | | | |
| NLU | North Lily Min | 34.13 | 133 | P | | P | 04 46 23.4 | +0.7 | |
| TPH | Tonopah | 34.69 | 141 | P | | P | 04 46 28.9 | +1.5 | |
| R11B | Troy Canyon, C | 34.80 | 139 | P | | P | 04 46 30.0 | +1.6 | |
| | baz=343 | | | | | | | | |
| N23A | Red Feather La | 34.94 | 125 | P | | P | 04 46 30.5 | +0.9 | |
| | baz=338 | | | | | | | | |
| ECSD | EROS Data Cent | 35.25 | 112 | P | | P | 04 46 32.9 | +0.9 | |
| | baz=333 | | | | | | | | |
| SRU | San Rafael Swe | 35.33 | 132 | P | | P | 04 46 34.6 | +1.6 | |
| SRU | | | | | IAmb | IAmb | 04 46 36.2 | | |
| | comp=Z,3.4nm,0.6s | | | | | | | | |
| MTPU | Mount Pierson | 35.91 | 134 | P | | P | 04 46 39.0 | +0.8 | |
| TPNV | Topopah Spring | 35.98 | 140 | P | | P | 04 46 40.1 | +1.6 | |
| | baz=344 | | | | | | | | |
| ISCO | Idaho Springs | 36.04 | 125 | P | | P | 04 46 39.8 | +0.6 | |
| | baz=338 | | | | | | | | |
| CCUT | Cedar City | 36.09 | 136 | P | | P | 04 46 41.2 | +1.7 | |
| CCUT | | | | | IAmb | IAmb | 04 46 43.2 | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| SCHQ | Schefferville | 36.13 | 73 | P | | P | 04 46 38.8 | -0.6 | |
| | comp=Z,8.7nm,0.8s,baz=322,slow=6.5,SNR=6.2 | | | | | | | | |
| | comp=Z,8.7nm,0.8s | | | | | | | | |
| KNB | Kanab | 36.73 | 136 | P | | P | 04 46 46.4 | +1.5 | |
| Q24A | Divide | 36.95 | 125 | P | | P | 04 46 47.5 | +0.5 | |
| | baz=338 | | | | | | | | |
| S22A | 4UR Ranch, Cre | 37.61 | 128 | P | | P | 04 46 53.9 | +1.3 | |
| S22A | 4UR Ranch, Cre | 37.61 | 128 | P | | P | 04 46 53.8 | +1.3 | |
| | baz=340 | | | | | | | | |
| MVCO | Mesa Verde | 37.66 | 130 | P | | P | 04 46 54.1 | +1.2 | |
| | baz=340 | | | | | | | | |
| SDCO | Great Sand Dun | 37.98 | 126 | P | | P | 04 46 56.2 | +0.5 | |
| SDCO | Great Sand Dun | 37.98 | 126 | P | | P | 04 46 56.7 | +1.0 | |
| | baz=339 | | | | | | | | |
| JFWS | Jewell Farm | 38.10 | 106 | P | | P | 04 46 56.5 | +0.2 | |
| JFWS | Jewell Farm | 38.10 | 106 | P | | P | 04 46 57.1 | +0.8 | |
| | baz=332,SNR=5.6 | | | | | | | | |
| N35A | Tabor | 38.14 | 113 | P | | P | 04 46 55.7 | -1.0 | |
| WUAZ | Wupatki | 38.51 | 135 | P | | P | 04 47 00.3 | +0.3 | |
| WUAZ | Wupatki | 38.51 | 135 | P | | P | 04 47 00.7 | +0.7 | |
| | baz=342 | | | | | | | | |
| L42A | Oliver, Polo | 39.10 | 106 | P | | P | 04 47 05.1 | +0.4 | |
| L42A | | | | | IAmb | IAmb | 04 47 05.9 | | |
| | comp=Z,9.2nm,0.8s | | | | | | | | |
| W18A | Petrified Fore | 39.30 | 133 | P | | P | 04 47 07.9 | +1.2 | |
| | baz=342 | | | | | | | | |
| KSU1 | Kansas State U | 39.43 | 115 | P | | P | 04 47 08.3 | +0.8 | |
| | baz=336 | | | | | | | | |
| SADO | Sadowa | 40.32 | 93 | P | | P | 04 47 14.7 | -0.2 | |
| SADO | | | | | IAmb | IAmb | 04 47 35.9 | | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| ANMO | Albuquerque | 40.34 | 129 | P | | P | 04 47 16.5 | +1.2 | |
| ANMO | Albuquerque | 40.34 | 129 | P | | P | 04 47 16.8 | +1.5 | |
| | baz=341 | | | | | | | | |
| LDAQ | Lac Daran | 40.35 | 83 | P | | P | 04 47 14.3 | -0.8 | |
| ICQ | Pointe Anglais | 40.40 | 78 | P | | P | 04 47 14.7 | -0.7 | |
| HDIL | Hopedale | 40.52 | 106 | P | | P | 04 47 14.8 | -1.7 | |
| HDIL | | | | | IAmb | IAmb | 04 47 17.8 | | |
| | comp=Z,9.7nm,0.8s | | | | | | | | |
| HDIL | Hopedale | 40.52 | 106 | P | | P | 04 47 16.0 | -0.5 | |
| | baz=334 | | | | | | | | |
| KEV | Kevo | 40.86 | 5 | P | | P | 04 47 18.5 | -0.4 | |
| LMQ | La Malbaie | 41.02 | 83 | P | | P | 04 47 20.3 | -0.3 | |
| LMQ | | | | | IAmb | IAmb | 04 47 21.2 | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| ARCES | ARCESS Array B | 41.04 | 5 | P | | P | 04 47 20.4 | -0.1 | |
| ARCES | | | | | IAmb | IAmb | 04 47 41.3 | | |
| | comp=Z,10.0nm,1.4s | | | | | | | | |
| ARCES | ARCESS Array B | 41.04 | 5 | P | | P | 04 47 19.8 | -0.7 | |
| | comp=Z,2.5nm,0.9s,baz=354,slow=7.8,SNR=7.1 | | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| R40A | Maddies Statio | 41.57 | 111 | P | | P | 04 47 24.0 | -1.2 | |
| TUC | Tucson | 41.71 | 135 | P | | P | 04 47 25.9 | -0.6 | |
| | baz=343 | | | | | | | | |
| OK051 | E0350 and S346 | 41.73 | 117 | P | | P | 04 47 25.6 | -0.9 | |
| OK051 | | | | | IAmb | IAmb | 04 47 26.9 | | |
| | comp=Z,5.3nm,0.7s | | | | | | | | |
| AMTX | Amarillo | 41.76 | 123 | P | | P | 04 47 27.4 | +0.5 | |
| | baz=339 | | | | | | | | |
| S39A | Bolivar | 41.77 | 112 | P | | P | 04 47 26.4 | -0.5 | |
| LONY | Lake Ozonia | 42.06 | 89 | P | | P | 04 47 28.5 | -0.6 | |
| LONY | | | | | IAmb | IAmb | 04 47 29.6 | | |
| | comp=Z,8.8nm,0.9s | | | | | | | | |
| LONY | Lake Ozonia | 42.06 | 89 | P | | P | 04 47 29.0 | -0.1 | |
| | baz=330 | | | | | | | | |
| P46A | Rosedale | 42.07 | 105 | P | | P | 04 47 28.6 | -0.6 | |
| P46A | | | | | IAmb | IAmb | 04 47 30.2 | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| Q44A | Meyer Farm, Va | 42.10 | 107 | P | | P | 04 47 29.0 | -0.5 | |
| Q44A | | | | | IAmb | IAmb | 04 47 30.8 | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| CCM | Cathedral Cave | 42.12 | 110 | P | | P | 04 47 30.2 | +0.5 | |
| | baz=335 | | | | | | | | |
| 121A | Cookes Peak, D | 42.26 | 132 | P | | P | 04 47 33.1 | +2.0 | |
| | baz=342 | | | | | | | | |
| MSTX | Muleshoe | 42.29 | 125 | P | | P | 04 47 31.6 | +0.4 | |
| OLIL | Olney | 42.56 | 106 | P | | P | 04 47 32.6 | -0.6 | |
| MGMO | Mountain Grove | 42.60 | 112 | P | | P | 04 47 33.1 | -0.5 | |
| MGMO | | | | | IAmb | IAmb | 04 47 35.2 | | |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| M53A | WI Miller and | 42.71 | 97 | P | | P | 04 47 34.6 | +0.1 | |
| | baz=332 | | | | | | | | |
| WMOK | Wichita Mounta | 42.76 | 120 | P | | P | 04 47 35.7 | +0.7 | |
| | baz=338 | | | | | | | | |
| ACSO | Alum Creek Sta | 42.98 | 100 | P | | P | 04 47 36.8 | +0.2 | |
| | baz=333 | | | | | | | | |
| K57A | Scipio Center | 43.03 | 92 | P | | P | 04 47 36.9 | -0.1 | |
| J59A | Piesco | 43.09 | 90 | P | | P | 04 47 37.3 | -0.3 | |
| J59A | | | | | IAmb | IAmb | 04 47 38.2 | | |
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| F64A | Sherman | 43.16 | 82 | P | | P | 04 47 37.1 | -0.9 | |
| F64A | | | | | IAmb | IAmb | 04 47 43.3 | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| L56A | Greenwood | 43.18 | 93 | P | | P | 04 47 37.6 | -0.7 | |
| LBNH | Lisbon | 43.32 | 87 | P | | P | 04 47 39.4 | 0.0 | |
| | baz=331 | | | | | | | | |
| PKME | Peaks-Kenny Pk | 43.36 | 83 | P | | P | 04 47 39.6 | -0.1 | |
| | baz=330 | | | | | | | | |
| PBMO | Poplar Bluff | 43.55 | 110 | P | | P | 04 47 40.9 | -0.3 | |
| PBMO | | | | | IAmb | IAmb | 04 47 41.7 | | |
| | comp=Z,6.2nm,0.7s | | | | | | | | |
| O53A | New Philadelph | 43.58 | 98 | P | | P | 04 47 40.7 | -0.8 | |
| O53A | | | | | IAmb | IAmb | 04 47 43.3 | | |
| | comp=Z,8.7nm,1.0s | | | | | | | | |
| O53A | New Philadelph | 43.58 | 98 | P | | P | 04 47 41.0 | -0.5 | |
| | baz=333 | | | | | | | | |
| WCI | Wyandotte Cave | 43.63 | 105 | P | | P | 04 47 41.9 | 0.0 | |
| | baz=334 | | | | | | | | |
| BINY | Binghamton | 43.68 | 92 | P | | P | 04 47 41.8 | -0.6 | |
| BINY | | | | | IAmb | IAmb | 04 47 43.1 | | |
| | comp=Z,8.6nm,0.7s | | | | | | | | |
| BINY | Binghamton | 43.68 | 92 | P | | P | 04 47 42.2 | -0.1 | |
| | baz=332 | | | | | | | | |
| MNTX | Cornudas Mount | 43.70 | 129 | P | | P | 04 47 43.9 | +1.3 | |
| | baz=341 | | | | | | | | |
| O54A | Avella | 43.93 | 97 | P | | P | 04 47 43.2 | -1.1 | |
| O54A | | | | | IAmb | IAmb | 04 48 08.4 | | |
| | comp=Z,8.7nm,1.1s | | | | | | | | |
| P53A | Whipple | 44.19 | 99 | P | | P | 04 47 45.1 | -1.3 | |
| P53A | | | | | IAmb | IAmb | 04 47 46.7 | | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| SSFO | Shawnee State | 44.27 | 101 | P | | P | 04 47 46.4 | -0.7 | |
| SSFO | | | | | IAmb | IAmb | 04 47 48.2 | | |
| | comp=Z,8.2nm,0.7s | | | | | | | | |
| WHAR | Wooly Hollow | 44.30 | 113 | P | | P | 04 47 46.5 | -0.8 | |
| WHAR | | | | | IAmb | IAmb | 04 48 03.1 | | |
| | comp=Z,7.2nm,1.2s | | | | | | | | |
| GGN | Saint George | 44.34 | 81 | P | | P | 04 47 47.1 | -0.4 | |
| GGN | | | | | IAmb | IAmb | 04 47 48.2 | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| SSPA | Standing Stone | 44.40 | 95 | P | | P | 04 47 46.8 | -1.2 | |
| SSPA | | | | | IAmb | IAmb | 04 47 56.3 | | |
| | comp=Z,7.8nm,1.2s | | | | | | | | |
| SSPA | Standing Stone | 44.40 | 95 | P | | P | 04 47 48.0 | 0.0 | |
| | baz=333 | | | | | | | | |
| T47A | Sharon Grove | 44.47 | 106 | P | | P | 04 47 48.6 | -0.1 | |
| MIAR | Mount Ida | 44.57 | 114 | P | | P | 04 47 50.4 | +0.9 | |
| MIAR | | | | | IAmb | IAmb | 04 47 53.9 | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| MIAR | Mount Ida | 44.57 | 114 | P | | P | 04 47 49.6 | +0.1 | |
| | baz=337 | | | | | | | | |
| MCWV | Mont Chateau | 44.58 | 97 | P | | P | 04 47 49.1 | -0.4 | |
| | baz=333 | | | | | | | | |
| L61B | Northampton | 44.63 | 89 | P | | P | 04 47 50.4 | +0.5 | |
| | baz=332 | | | | | | | | |
| N58A | Sunbury | 44.63 | 93 | P | | P | 04 47 48.8 | -1.1 | |
| N58A | | | | | IAmb | IAmb | 04 47 50.3 | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| VHRN | Van Horn | 44.66 | 129 | P | | P | 04 47 51.6 | +1.1 | |
| Q54A | Coxs Mills | 44.84 | 99 | P | | P | 04 47 50.6 | -0.9 | |
| Q54A | | | | | IAmb | IAmb | 04 47 57.4 | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| HRV | Adam Dziewonsk | 44.97 | 87 | P | | P | 04 47 53.1 | +0.5 | |
| | baz=332 | | | | | | | | |
| WVT | Waverly | 45.01 | 107 | P | | P | 04 47 53.1 | +0.2 | |
| WVT | Waverly | 45.01 | 107 | P | | P | 04 47 53.6 | +0.7 | |
| | baz=336 | | | | | | | | |
| Q56A | Snyder Ridge, | 45.36 | 97 | P | | P | 04 47 55.2 | -0.6 | |
| Q56A | | | | | IAmb | IAmb | 04 48 10.5 | | |
| | comp=Z,9.2nm,1.1s | | | | | | | | |
| PAL | Palisades | 45.47 | 91 | P | | P | 04 47 56.8 | +0.3 | |
| | baz=332 | | | | | | | | |
| CLTN | Cedars of Leba | 45.55 | 106 | P | | P | 04 47 57.6 | +0.3 | |
| V48A | Smith Brothers | 45.70 | 107 | P | | P | 04 47 57.8 | -0.6 | |
| V48A | | | | | IAmb | IAmb | 04 47 59.4 | | |
| | comp=Z,8.6nm,1.0s | | | | | | | | |
| BRDY | Brady | 45.91 | 122 | P | | P | 04 47 59.9 | -0.2 | |
| OXF | Oxford | 45.95 | 110 | P | | P | 04 48 00.7 | +0.2 | |
| OXF | Oxford | 45.95 | 110 | P | | P | 04 48 01.1 | +0.7 | |
| | baz=336 | | | | | | | | |
| PLAL | Pickwick Lake | 45.97 | 108 | P | | P | 04 48 00.1 | -0.5 | |
| PLAL | | | | | IAmb | IAmb | 04 48 01.4 | | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| TZTN | Tazewell | 46.09 | 103 | P | | P | 04 48 01.7 | +0.1 | |
| TZTN | | | | | IAmb | IAmb | 04 48 02.6 | | |
| | comp=Z,5.4nm,0.8s | | | | | | | | |
| TZTN | Tazewell | 46.09 | 103 | P | | P | 04 48 01.6 | +0.1 | |
| | baz=335 | | | | | | | | |
| TX31 | Lajitas Ar. Si | 46.40 | 128 | P | | P | 04 48 05.0 | +0.8 | |
| TXAR | Lajitas Array | 46.40 | 128 | P | | P | 04 48 04.8 | +0.7 | |
| TXAR | Lajitas Array | 46.40 | 128 | P | | P | 04 48 05.5 | +1.3 | |
| | comp=Z,0.6nm,0.6s,baz=345,slow=5.4,SNR=11 | | | | | | | | |
| TXAR | | | | | LR | LR | 05 09 21.6 | | |
| | comp=Z,47nm,21.8s,baz=328,slow=38 | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | |
| JCT | Junction City | 46.42 | 123 | P | | P | 04 48 04.8 | +0.5 | |
| | baz=340 | | | | | | | | |
| Y45A | Yeager Farm, C | 46.50 | 111 | P | | P | 04 48 05.8 | +1.0 | |
| BLA | Blacksburg | 46.57 | 99 | P | | P | 04 48 05.2 | -0.1 | |
| | baz=334 | | | | | | | | |
| CBN | Corbin Frederi | 46.74 | 96 | P | | P | 04 48 06.7 | +0.1 | |
| | baz=334 | | | | | | | | |
| R58B | Mineral | 46.78 | 96 | P | | P | 04 48 06.5 | -0.4 | |
| R58B | | | | | IAmb | IAmb | 04 48 36.0 | | |
| | comp=Z,6.2nm,1.2s | | | | | | | | |
| NATX | Nacogdoches | 46.79 | 117 | P | | P | 04 48 07.1 | 0.0 | |
| | baz=338 | | | | | | | | |
| X48A | Hartselle | 46.80 | 108 | P | | P | 04 48 07.0 | -0.1 | |
| TKL | Tuckaleechee C | 46.81 | 104 | P | | P | 04 48 06.7 | -0.5 | |
| TKL | | | | | IAmb | IAmb | 04 48 07.7 | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| TKL | Tuckaleechee C | 46.81 | 104 | LR | | LR | 05 

KURBB **Kurchatov Arra** 56.15 329 P **P** 04 49 16.8 -0.2
comp=Z,2.8nm,0.8s,baz=14,slow=7.1,SNR=14
comp=Z,2.8nm,0.8s
**HHC** **Hu-ho-hao-te** 57.01 299 *e*P **P** 04 49 22.8 -0.5
HHC pmax pmax
comp=Z,10.0nm,0.6s
HHC pmax pmax
comp=Z,61nm,4.5s
**CLL** **Collm** 58.35 17 *e*P **P** 04 49 33.0 +0.6
**MK31** **Makanchi Array** 59.09 324 P **P** 04 49 36.6 -1.1
**MKAR** **Makanchi Array** 59.09 324 P **P** 04 49 36.0 -1.7
**MKAR** **Makanchi Array** 59.09 324 P **P** 04 49 36.8 -0.8
comp=Z,0.6nm,0.4s,baz=47,slow=8.0,SNR=7.4
MKAR LR LR 05 18 10.0
comp=Z,16nm,18.4s,baz=352,slow=39
MKAR PKP2bc **P'P'bc** **05 19 28.1 +1.0**
comp=Z,0.2nm,0.7s,baz=116,slow=3.4,SNR=3.9
comp=Z,0.6nm,0.4s
AKASG **Malin Array Be** 60.01 5 P **P** 04 49 43.3 -0.6
comp=Z,1.3nm,0.5s,baz=358,slow=7.0,SNR=6.1
comp=Z,1.3nm,0.5s
ABKAR **Akbulak array** 60.22 342 P **P** 04 49 45.0 -0.4
ABKAR **Akbulak array** 60.22 342 P **P** 04 49 44.5 -0.9
ABKAR IAmb IAmb 04 50 05.3
comp=Z,3.2nm,1.2s
**MOTA** **Moosalm** 62.06 19 *e*pP **P** 04 49 58.6 +0.5
comp=Z,4.8nm,1.5s
**LESA** **Schwarzleotal** 62.15 18 *i* pP pP 04 50 00.5 -0.3
comp=Z,1.7nm,0.7s
**RONA** **Rosalia, Austr** 62.23 15 *e*pP pP 04 50 03.9 +2.6
comp=Z,2.2nm,1.2s
**FETA** **Feichten** 62.34 19 *e*pP **P** 04 50 00.2 +0.3
comp=Z,3.2nm,1.3s
**KBA** **Koelnbreinsper** 62.56 17 *i* pP pP 04 50 03.9 +0.2
comp=Z,3.3nm,0.8s
**ARSA** **Arzberg** 62.61 15 *e*P **P** 04 49 59.5 -2.1
comp=Z,1.0nm,0.5s
**NJ2** **Nanjing** 62.71 288 *e*P **P** 04 50 03.1 +0.7
NJ2 pmax pmax
comp=Z,13nm,0.6s
**ABTA** **Abfaltersbach** 62.80 18 *e*pP **P** 04 50 03.0 0.0
comp=Z,1.6nm,1.0s
**OBKA** **Obir** 63.25 16 *i* pP **P** 04 50 06.8 +0.9
comp=Z,6.0nm,1.2s
**BOOM** **Boomskoye usch** 64.47 328 P **P** 04 50 13.9 -0.3
BOOM IAmb IAmb 04 50 16.9
comp=Z,2.4nm,0.8s
**KK31** **Karatay Array** 64.82 333 P **P** 04 50 15.7 -0.6
KK31 IAmb IAmb 04 50 24.9
comp=Z,3.3nm,1.4s
**KKAR** **Karatay Array** 64.82 333 P **P** 04 50 16.2 0.0
**ESDC** **Sonseca Array** 67.29 32 P **P** 04 50 32.0 -0.2
comp=Z,0.8nm,0.7s,baz=344,slow=7.3,SNR=7.9
comp=Z,0.8nm,0.7s
**GNI** **Garni** 70.45 353 LR LR 05 24 01.4
comp=Z,7.5nm,20.4s,baz=112,slow=38
**BRTR** **Keskin Array B** 71.07 2 P **P** 04 50 58.5 +2.8
comp=Z,0.4nm,0.4s,baz=352,slow=2.7,SNR=4.1
**CMAR** **Chiang Mai Arr** 81.72 301 P **P** 04 51 56.4 +0.1
comp=Z,0.8nm,0.3s,baz=1.6,slow=7.1,SNR=4.7
comp=Z,0.8nm,0.3s

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**UCR 18 04:49:22.1±0.7, 8°62'N×83°22'W, h22km±2km, MW3.6, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EDAD** | **Golfito** | **0.07** | **59** | *e*P | Pb | 04 49 25.5 | -0.7 |
| EDAD | | | | *e*S | Sb | 04 49 28.1 | -0.9 |
| **FITO** | **Golfito** | **0.07** | **84** | *e*P | Pb | 04 49 25.5 | -0.7 |
| FITO | | | | *e*S | Sb | 04 49 27.9 | -0.9 |
| **JIME** | **Puerto Jimenez** | **0.13** | **232** | *e*P | Pb | 04 49 26.6 | -0.4 |
| JIME | | | | *e*S | Sb | 04 49 30.5 | +0.3 |
| **NELY** | **Ciudad Neily** | **0.28** | **83** | *e*P | Pb | 04 49 28.7 | +0.1 |
| NELY | | | | *e*S | Sb | 04 49 34.0 | +1.0 |
| **VITO** | **San Vito** | **0.32** | **51** | *e*P | Pb | 04 49 29.6 | +0.3 |
| **EDP2** | **Potrero Grande** | **0.40** | **7** | *e*P | Pb | 04 49 30.6 | +0.1 |
| **EDPN** | **Palmar Norte** | **0.41** | **326** | *e*P | Pb | 04 49 30.3 | -0.4 |
| EDPN | | | | *e*S | Sb | 04 49 36.8 | +0.2 |
| **EDBA** | **Buenos Aires** | **0.54** | **355** | *e*P | Pb | 04 49 32.9 | -0.1 |
| **BRU2** | **Volcan** | **0.55** | **72** | *e*P | Pb | 04 49 33.1 | -0.2 |
| **BURE** | **Buenos Aires** | **0.56** | **348** | *e*P | Pb | 04 49 33.2 | -0.2 |
| BURE | | | | *e*S | Sb | 04 49 41.7 | +0.7 |
| **DRK0** | **Durika** | **0.64** | **358** | *e*P | Pb | 04 49 34.1 | -0.7 |
| **BUS1** | **Rivas** | **1.06** | **331** | *e*P | Pn | 04 49 40.9 | -1.3 |
| **BRIBI** | **Bribri** | **1.06** | **20** | *e*P | Pb | 04 49 42.1 | +0.2 |
| **LCR2** | **La Lucha 2** | **1.36** | **325** | *e*P | Pn | 04 49 45.3 | -0.6 |

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**IDC 18 04:49:35.0±3.4, 4°63S×153°85E, h0km, mb4.0/3, mbtmp4.1/3, Error ellipse: s-maj=94.9km s-min=40.9km az=105.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.35** | **230** | P | P | 04 54 53.8 | -1.1 |
| | 2.5nm,0.5s,baz=53,slow=9.7,SNR=43 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **26.99** | **224** | P | P | 04 55 19.8 | +1.1 |
| | 0.7nm,0.5s,baz=55,slow=8.7,SNR=14 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.76** | **295** | P | P | 04 59 36.4 | +1.1 |
| | 1.1nm,0.3s,baz=118,slow=7.6,SNR=2.5 | | | | | | |
| | 1.1nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.25** | **289** | PKPbc | PKPbc | 05 09 30.4 | -1.2 |
| | 0.2nm,0.3s,baz=48,slow=2.2,SNR=6.7 | | | | | | |

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*AEIC* ***18*** *04:52:57.4±1.5, 69°64N±0°05×145°26W±0°08, h14km±4km, ML4.1, mb4.3/11(NEIC), ML4.2/120(NEIC), Mwr4.0/35(NEIC), Error ellipse: s-maj=7.8km s-min=4.0km az=177.0*

*NEIC* ***18*** *04:52:58.3±1.3, 69°67N±0°05×145°31W±0°06, h7km±4km, Error ellipse: s-maj=7.8km s-min=2.9km az=175.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr0.29; Mθθ-0.46; Mφφ0.17; Mrθ0.00; Mθφ-1.37; Mφr0.28; Fault plane solution: M₀1.46000×10¹⁵ NP1: φs276.05000°, δ77.44000°, λ175.06000°. NP2:φs7.12000°, δ85.18000°, λ12.61000°. Principal axes: T 1.3085, Plg12.0000°, Azm232.0000°; N 0.2614, Plg77.0000°, Azm28.0000°; P -1.5699, Plg5.0000°, Azm141.0000°;*

*NEIC* ***18*** *04:52:58.8, 69°62N×145°28W, h9km*

*IDC* ***18*** *04:52:59.6±1.0, 69°69N×144°79W, h0km, mb3.7/7, mbtmp3.8/10, ML3.9/3, MS3.1/8, Error ellipse: s-maj=24.9km s-min=15.5km az=59.0*

**ISC 18 04:52:59.0±0.5, 69°65N±0°05×145°27W±0°03, h10km, n192, σ1°11/191, mb4.1/12, MS3.2/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.30** | **25** | | **Pb** | **04 53 05.3** | **-1.2** |
| C26K | | | | Sg | **Sb** | **04 53 10.3** | **-1.1** |
| **D25K** | **Kavik River** | **0.51** | **230** | Pg | **Pg** | **04 53 06.9** | **-2.1** |
| D25K | | | | | **Sg** | **04 53 13.9** | **-1.8** |
| **C27K** | **Jago River** | **0.55** | **92** | Pg | **Pg** | **04 53 08.5** | **-1.1** |
| C27K | | | | Sg | **Sg** | **04 53 15.6** | **-1.2** |
| C27K | | | | IAML | | 04 53 17.2 | |
| | comp=N,13μm,0.5s | | | | | | |
| C27K | | | | IAML | | 04 53 18.6 | |
| | comp=E,15μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.20** | **275** | | **Pb** | **04 53 20.8** | **-1.1** |
| C24K | | | | Sg | **Sg** | **04 53 37.2** | **-0.4** |
| C24K | | | | IAML | | 04 53 39.8 | |
| | comp=E,5μm,1.3s | | | | | | |
| **D24K** | **Happy Valley** | **1.35** | **250** | | **Pn** | **04 53 22.9** | **-1.0** |
| D24K | | | | IAML | | 04 53 44.2 | |
| | comp=N,3μm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.57** | **103** | | **Pn** | **04 53 26.2** | **-0.9** |
| D27M | | | | IAML | | 04 53 50.4 | |
| | comp=N,3μm,0.6s | | | | | | |
| D27M | | | | IAML | | 04 53 51.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.84** | **239** | | **Pn** | **04 53 30.1** | **-0.6** |
| **C23K** | **Itkillik River** | **1.87** | **278** | | **Pn** | **04 53 30.5** | **-0.5** |
| C23K | | | | IAML | | 04 54 05.2 | |
| | comp=E,2μm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **1.96** | **218** | | **Pn** | **04 53 32.2** | **-0.2** |
| **E27K** | **Coleen River** | **1.98** | **136** | | **Pn** | **04 53 32.5** | **-0.1** |
| E27K | | | | IAML | | 04 54 05.1 | |
| | comp=E,1μm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **2.01** | **168** | | **Pn** | **04 53 32.8** | **-0.2** |
| F26K | | | | IAML | | 04 54 02.4 | |
| | comp=N,2μm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.04** | **253** | | **Pn** | **04 53 32.8** | **-0.6** |
| **F25K** | **Christian Rive** | **2.07** | **184** | | **Pn** | **04 53 33.8** | **-0.1** |
| F25K | | | | IAML | | 04 54 04.4 | |
| | comp=E,2μm,0.8s | | | | | | |
| F25K | | | | IAML | | 04 54 05.9 | |
| | comp=N,2μm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.25** | **173** | | **Pn** | **04 53 36.1** | **-0.2** |
| **E23K** | **Chandalar** | **2.25** | **227** | | **Pn** | **04 53 35.9** | **-0.4** |
| **E28M** | **Babbage River** | **2.31** | **114** | | **Pn** | **04 53 37.2** | **+0.2** |
| E28M | | | | IAML | | 04 54 15.8 | |
| | comp=N,1μm,0.8s | | | | | | |
| E28M | | | | IAML | | 04 54 20.8 | |
| | comp=E,945nm,1.1s | | | | | | |
| **D28M** | **Stokes Point** | **2.32** | **95** | Pn | **Pn** | **04 53 36.3** | **-1.0** |
| **F24K** | **Squaw Lake** | **2.35** | **205** | | **Pn** | **04 53 36.9** | **-0.7** |
| F24K | | | | IAML | | 04 54 14.8 | |
| | comp=E,1μm,0.7s | | | | | | |
| F24K | | | | IAML | | 04 54 15.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **D22K** | **Ayikyak River** | **2.75** | **257** | Pn | **Pn** | **04 53 42.2** | **-0.9** |
| D22K | | | | IAML | | 04 54 37.6 | |
| | comp=E,766nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.77** | **168** | | **Pn** | **04 53 43.6** | **+0.3** |
| **E22K** | **Anaktuvuk Pass** | **2.81** | **240** | | **Pn** | **04 53 43.3** | **-0.8** |
| **F28M** | **Old Crow** | **2.84** | **133** | | **Pn** | **04 53 44.0** | **-0.4** |
| F28M | | | | IAML | | 04 54 30.8 | |
| | comp=E,648nm,0.9s | | | | | | |
| F28M | | | | IAML | | 04 54 34.9 | |
| | comp=N,977nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.89** | **288** | | **Pn** | **04 53 44.7** | **-0.3** |
| **G25K** | **Bearman Lake** | **2.91** | **187** | | **Pn** | **04 53 45.5** | **+0.2** |
| **E29M** | **Blow River** | **2.94** | **112** | Pn | **Pn** | **04 53 45.5** | **-0.3** |
| E29M | | | | IAML | | 04 54 38.4 | |
| | comp=E,721nm,1.1s | | | | | | |
| E29M | | | | IAML | | 04 54 39.1 | |
| | comp=N,872nm,0.7s | | | | | | |
| **COLD** | **Coldfoot** | **3.04** | **219** | Pn | **Pn** | **04 53 46.9** | **-0.2** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **197** | | **Pn** | **04 53 46.7** | **-0.9** |
| G24K | | | | IAML | | 04 54 42.3 | |
| | comp=E,682nm,1.1s | | | | | | |
| **FYU** | **Fort Yukon** | **3.10** | **180** | Pn | **Pn** | **04 53 48.4** | **+0.5** |
| FYU | | | | IAML | | 04 54 40.6 | |
| | comp=E,770nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **3.15** | **153** | | **Pn** | **04 53 47.9** | **-0.9** |
| **B21K** | **Ikpikpuk River** | **3.27** | **274** | Pn | **Pn** | **04 53 50.0** | **-0.2** |
| B21K | | | | IAML | | 04 54 51.6 | |
| | comp=E,486nm,1.1s | | | | | | |
| **F22K** | **John River** | **3.32** | **233** | | **Pn** | **04 53 50.5** | **-0.6** |
| **E21K** | **Killik River** | **3.35** | **253** | | **Pn** | **04 53 51.0** | **-0.5** |
| E21K | | | | IAML | | 04 54 54.3 | |
| | comp=N,415nm,1.1s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.40** | **266** | | **Pn** | **04 53 51.7** | **-0.3** |
| **H25L** | **Birch Creek** | **3.41** | **184** | | **Pn** | **04 53 51.7** | **-0.4** |
| **G23K** | **Bananza Creek** | **3.44** | **213** | Pn | **Pn** | **04 53 51.7** | **-1.0** |
| G23K | | | | IAML | | 04 54 50.1 | |
| | comp=N,393nm,1.4s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.55** | **297** | | **Pn** | **04 53 54.1** | **0.0** |
| **H27K** | **Steamboat Moun** | **3.71** | **156** | | **Pn** | **04 53 57.4** | **+1.0** |
| **G29M** | **Pine Creek** | **3.85** | **132** | | **Pn** | **04 53 58.0** | **-0.2** |
| **F21K** | **Alatna River** | **3.89** | **235** | | **Pn** | **04 53 58.1** | **-0.7** |
| **H24K** | **Noodor Dome** | **3.96** | **196** | Pn | **Pn** | **04 53 58.9** | **-0.9** |
| H24K | | | | IAML | | 04 55 09.6 | |
| | comp=N,282nm,0.9s | | | | | | |
| H24K | | | | IAML | | 04 55 14.6 | |
| | comp=E,347nm,1.3s | | | | | | |
| **F30M** | **Barrier River** | **4.03** | **116** | | **Pn** | **04 54 01.5** | **+0.8** |
| **B20K** | **Meade River** | **4.13** | **281** | | **Pn** | **04 54 01.8** | **-0.3** |
| **PRP** | **Porcupine Dome** | **4.15** | **181** | | **Pn** | **04 54 02.4** | **-0.2** |
| PRP | | | | IAML | | 04 55 06.6 | |
| | comp=E,201nm,0.8s | | | | | | |
| **D20K** | **Etivluk River** | **4.16** | **262** | | **Pn** | **04 54 02.8** | **+0.4** |
| **A21K** | **Barrow** | **4.16** | **299** | | **Pn** | **04 54 02.8** | **+0.4** |
| **H23K** | **Yukon River** | **4.17** | **205** | Pn | **Pn** | **04 54 01.9** | **-0.8** |
| H23K | | | | IAML | | 04 55 15.3 | |
| | comp=N,321nm,0.9s | | | | | | |
| **E20K** | **Nigu River** | **4.18** | **256** | | **Pn** | **04 54 03.4** | **+0.6** |
| **G30M** | **tAoh Zraii Nji** | **4.29** | **124** | Pn | **Pn** | **04 54 04.3** | **-0.1** |
| G30M | | | | IAML | | 04 55 30.5 | |
| | comp=N,281nm,0.9s | | | | | | |
| G30M | | | | IAML | | 04 55 31.9 | |
| | comp=E,199nm,0.9s | | | | | | |
| **I27K** | **Kandik River** | **4.30** | **159** | | **Pn** | **04 54 04.8** | **+0.3** |
| **H29M** | **Whitestone** | **4.32** | **140** | Pn | **Pn** | **04 54 04.9** | **+0.2** |
| **G21K** | **Allakaket** | **4.41** | **228** | Pn | **Pn** | **04 54 04.5** | **-1.4** |
| G21K | | | | IAML | | 04 55 25.7 | |
| | comp=E,245nm,0.9s | | | | | | |
| G21K | | | | IAML | | 04 55 27.8 | |
| | comp=N,203nm,1.1s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.43** | **214** | | **Pn** | **04 54 06.2** | **0.0** |
| **I26K** | **Coal Creek Min** | **4.44** | **168** | | **Pn** | **04 54 05.8** | **-0.5** |
| **INK** | **Inuvik** | **4.44** | **102** | | **Pn** | **04 54 06.1** | **-0.2** |
| **INK** | **Inuvik** | **4.44** | **102** | Pn | **Pn** | **04 54 05.8** | **-0.4** |
| | comp=N,2.8nm,0.3s,baz=308,slow=13,SNR=268 | | | | | | |
| INK | | | | Sn | **Sn** | **04 54 54.6** | **-3.3** |
| | comp=N,7.5nm,0.3s,baz=2.1,slow=5.0,SNR=4.8 | | | | | | |
| INK | | | | LR | LR | 04 56 17.9 | |
| | comp=N,72nm,18.6s,baz=195,slow=46 | | | | | | |
| | comp=N,14nm,0.2s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.60** | **132** | | **Pn** | **04 54 08.0** | **-0.5** |
| **POKR** | **Poker Plat Res** | **4.63** | **191** | | **Pn** | **04 54 08.7** | **-0.2** |
| POKR | | | | IAML | | 04 55 27.3 | |
| | comp=N,142nm,1.0s | | | | | | |
| POKR | | | | IAML | | 04 55 43.8 | |
| | comp=E,211nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.67** | **241** | | **Pn** | **04 54 09.0** | **-0.5** |
| F20K | | | | IAML | | 04 55 43.2 | |
| | comp=N,170nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.69** | **152** | Pn | **Pn** | **04 54 09.6** | **-0.2** |
| I28M | | | | IAML | | 04 55 31.9 | |
| | comp=N,163nm,0.7s | | | | | | |
| I28M | | | | IAML | | 04 55 36.4 | |
| | comp=E,193nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **4.75** | **262** | | **Pn** | **04 54 10.1** | **-0.5** |
| **F31M** | **Tsiigehtchic** | **4.78** | **112** | Pn | **Pn** | **04 54 10.6** | **-0.4** |
| F31M | | | | IAML | | 04 55 40.6 | |
| | comp=E,157nm,1.2s | | | | | | |
| F31M | | | | IAML | | 04 55 43.9 | |
| | comp=N,162nm,1.5s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **201** | | **Pn** | **04 54 10.7** | **-0.4** |
| **MDM** | **Murphy Dome** | **4.85** | **195** | | **Pn** | **04 54 11.4** | **-0.6** |
| MDM | | | | IAML | | 04 55 33.9 | |
| | comp=N,191nm,0.9s | | | | | | |
| MDM | | | | IAML | | 04 55 45.9 | |
| | comp=N,150nm,1.1s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.88** | **225** | | **Pn** | **04 54 10.9** | **-1.5** |
| **E19K** | **Redstone River** | **4.91** | **249** | | **Pn** | **04 54 12.3** | **-0.5** |
| E19K | | | | IAML | | 04 55 15.2 | |
| | comp=N,146nm,0.7s | | | | | | |
| E19K | | | | IAML | | 04 55 46.4 | |
| | comp=E,156nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.91** | **119** | Pn | **Pn** | **04 54 12.1** | **-0.7** |
| **H21K** | **Melozitna Rive** | **4.93** | **219** | Pn | **Pn** | **04 54 12.7** | **-0.4** |
| H21K | | | | IAML | | 04 55 43.7 | |
| | comp=N,120nm,1.4s | | | | | | |
| H21K | | | | IAML | | 04 55 44.0 | |
| | comp=E,119nm,1.4s | | | | | | |
| **IL31** | | **4.94** | **188** | | **Pn** | **04 54 12.6** | **-0.6** |
| **ILAR** | **Eielson Array** | **4.94** | **188** | | **Pn** | **04 54 12.8** | **-0.4** |
| **ILAR** | **Eielson Array** | **4.94** | **188** | Pn | **Pn** | **04 54 13.3** | **+0.1** |
| | comp=E,2.1nm,0.3s,baz=2.8,slow=14,SNR=86 | | | | | | |
| ILAR | | | | Sn | **Sn** | **04 55 10.6** | **+0.3** |
| | comp=E,6.5nm,0.3s,baz=4.4,slow=23,SNR=8.8 | | | | | | |
| ILAR | | | | Lg | Lg | 04 55 32.9 | |
| | comp=E,8.2nm,0.3s,baz=160,slow=11,SNR=5.5 | | | | | | |
| ILAR | | | | LR | LR | 04 56 26.8 | |
| | comp=E,140nm,19.4s,baz=52,slow=41 | | | | | | |
| | comp=E,7.7nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **5.06** | **180** | | **Pn** | **04 54 14.8** | **-0.2** |
| J25K | | | | IAML | | 04 55 44.8 | |
| | comp=N,122nm,0.8s | | | | | | |
| J25K | | | | IAML | | 04 55 50.1 | |
| | comp=E,148nm,1.2s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.07** | **145** | Pn | **Pn** | **04 54 14.4** | **-0.6** |
| I29M | | | | IAML | | 04 55 40.3 | |
| | comp=N,147nm,0.7s | | | | | | |
| I29M | | | | IAML | | 04 55 43.0 | |
| | comp=E,156nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.09** | **271** | Pn | **Pn** | **04 54 14.8** | **-0.5** |
| C19K | | | | IAML | | 04 55 55.6 | |
| | comp=N,104nm,1.2s | | | | | | |
| **MLY** | **Manley** | **5.10** | **207** | Pn | **Pn** | **04 54 14.9** | **-0.5** |
| MLY | | | | IAML | | 04 55 41.1 | |
| | comp=E,101nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.12** | **192** | Pn | **Pn** | **04 54 15.2** | **-0.4** |
| CCB | | | | IAML | | 04 55 43.1 | |
| | comp=E,124nm,1.3s | | | | | | |
| **EGAK** | **Eagle** | **5.15** | **160** | | **Pn** | **04 54 15.5** | **-0.5** |
| EGAK | | | | IAML | | 04 55 47.4 | |
| | comp=E,167nm,0.9s | | | | | | |
| EGAK | | | | IAML | | 04 55 55.2 | |
| | comp=E,150nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.21** | **172** | | **Pn** | **04 54 16.7** | **-0.4** |
| J26L | | | | IAML | | 04 55 43.7 | |
| | comp=E,143nm,1.2s | | | | | | |
| J26L | | | | IAML | | 04 55 57.4 | |
| | comp=N,108nm,1.4s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **198** | | **Pn** | **04 54 17.0** | **-1.0** |
| **HDA** | **Harding Lake** | **5.30** | **188** | | **Pn** | **04 54 18.1** | **-0.1** |
| HDA | | | | IAML | | 04 55 57.0 | |
| | comp=N,140nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **5.32** | **193** | | **Pn** | **04 54 18.1** | **-0.3** |
| WRH | | | | IAML | | 04 55 48.1 | |
| | comp=E,144nm,1.0s | | | | | | |
| WRH | | | | IAML | | 04 55 50.6 | |
| | comp=N,138nm,1.1s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.44** | **245** | Pn | **Pn** | **04 54 19.1** | **-0.9** |
| **A19K** | **Wainwright** | **5.47** | **283** | | **Pn** | **04 54 20.5** | **+0.1** |
| **H20K** | **Anotleneega Mo** | **5.56** | **226** | | **Pn** | **04 54 20.8** | **-1.0** |
| **I30M** | **Mount Dempster** | **5.61** | **138** | Pn | **Pn** | **04 54 22.0** | **-0.5** |
| **G19K** | **Purcell Mounta** | **5.68** | **237** | Pn | **Pn** | **04 54 22.4** | **-0.9** |
| **SCRK** | **Sand Creek** | **5.72** | **174** | Pn | **Pn** | **04 54 24.1** | **0.0** |
| **BWN** | **Browne** | **5.74** | **199** | Pn | **Pn** | **04 54 23.3** | **-0.9** |
| **C18K** | **Utukok River** | **5.77** | **268** | Pn | **Pn** | **04 54 23.9** | **-0.7** |
| **K27K** | **Chicken** | **5.78** | **166** | Pn | **Pn** | **04 54 25.8** | **+1.0** |
| **B18K** | **Kokolik River** | **5.81** | **275** | | **Pn** | **04 54 24.7** | **-0.4** |
| **K24K** | **Donnelly Dome** | **5.88** | **182** | | **Pn** | **04 54 26.6** | **+0.5** |
| **J29N** | **Klondike Camp** | **5.90** | **149** | Pn | **Pn** | **04 54 28.4** | **+2.0** |
| **RIDG** | **Independent Ri** | **5.94** | **178** | Pn | **Pn** | **04 54 27.3** | **+0.4** |
| **H19K** | **Roundabout Mou** | **5.94** | **231** | Pn | **Pn** | **04 54 25.9** | **-1.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **205** | Pn | **Pn** | **04 54 26.4** | **-1.5** |
| **I20K** | **Maaghedeneel** | **6.04** | **221** | Pn | **Pn** | **04 54 28.8** | **+0.6** |
| **DOT** | **Dot Lake** | **6.05** | **175** | | **Pn** | **04 54 28.6** | **+0.2** |
| **E18K** | **Tukpahlearik C** | **6.05** | **256** | Pn | **Pn** | **04 54 28.1** | **-0.3** |
| **DAWY** | **Dawson** | **6.07** | **155** | | **Pn** | **04 54 28.6** | **-0.1** |
| **MCK** | **McKinley** | **6.12** | **195** | | **Pn** | **04 54 29.4** | **0.0** |
| **J30M** | **Hart River** | **6.17** | **141** | Pn | **Pn** | **04 54 29.7** | **-0.5** |
| **F18K** | **Selawik** | **6.18** | **247** | | **Pn** | **04 54 29.5** | **-0.6** |
| **G18K** | **Tagagawik** | **6.32** | **240** | Pn | **Pn** | **04 54 32.0** | **-0.1** |
| **RND** | **Reindeer** | **6.43** | **195** | Pn | **Pn** | **04 54 33.5** | **-0.2** |
| **J20K** | **Nowinta River** | **6.50** | **217** | Pn | **Pn** | **04 54 34.1** | **-0.6** |
| **C17K** | **DeLong Mountai** | **6.52** | **268** | | **Pn** | **04 54 33.6** | **-1.3** |
| **RDOG** | **Red Dog Mine** | **6.57** | **264** | Pn | **Pn** | **04 54 34.4** | **-1.2** |
| **K29M** | **Barlow Dome** | **6.58** | **149** | Pn | **Pn** | **04 54 35.8** | **-0.1** |
| **E17K** | **Hotham Inlet** | **6.63** | **255** | | **Pn** | **04 54 35.5** | **-0.9** |
| **DHY** | **Denali Highway** | **6.66** | **188** | Pn | **Pn** | **04 54 37.9** | **+1.0** |
| **L26K** | **Log Cabin Wild** | **6.70** | **172** | Pn | **Pn** | **04 54 37.2** | **-0.1** |
| **PAX** | **Paxson** | **6.71** | **181** | | **Pn** | **04 54 37.8** | **+0.3** |
| **BCAR** | **Beaver Creek A** | **6.76** | **166** | Pn | **Pn** | **04 54 38.1** | **-0.1** |
| **L27K** | **Beaver Creek,** | **6.76** | **167** | Pn | **Pn** | **04 54 38.8** | **+0.6** |
| **H18K** | **Honhosa River** | **6.76** | **234** | Pn | **Pn** | **04 54 37.9** | **-0.2** |
| **MENT** | **Mentasta** | **6.77** | **174** | Pn | **Pn** | **04 54 38.6** | **+0.3** |
| **D17K** | **Noatak River** | **6.78** | **262** | | **Pn** | **04 54 36.8** | **-1.6** |
| **A36M** | **Sachs Harbour** | **6.98** | **61** | Pn | **Pn** | **04 54 40.3** | **-0.8** |
| **J19K** | **Poorman** | **6.99** | **221** | Pn | **Pn** | **04 54 39.9** | **-1.4** |
| **WAT7** | **Susitna Watana** | **7.00** | **194** | | **Pn** | **04 54 41.7** | **+0.2** |
| **WAT6** | **Susitna Watana** | **7.17** | **189** | | **Pn** | **04 54 44.0** | **+0.1** |
| **G17K** | **Kiwalik Mounta** | **7.19** | **242** | | **Pn** | **04 54 43.8** | **-0.3** |
| **K20K** | **Telida** | **7.22** | **213** | | **Pn** | **04 54 43.8** | **-0.7** |
| **HARP** | **HAARP** | **7.28** | **180** | | **Pn** | **04 54 46.3** | **+0.9** |
| **H17K** | **Granite Mounta** | **7.37** | **237** | Pn | **Pn** | **04 54 45.5** | **-1.0** |
| **C36M** | **Paulatuk** | **7.44** | **82** | Pn | **Pn** | **04 54 44.4** | **-3.0** |
| **M27K** | **Edge Creek, AK** | **7.45** | **168** | Pn | **Pn** | **04 54 48.5** | **+0.8** |
| **WAZA** | **Wrangell Mount** | **7.62** | **176** | | **Pn** | **04 54 51.5** | **+1.2** |
| **J18K** | **Innoko River** | **7.69** | **222** | Pn | **Pn** | **04 54 50.1** | **-0.8** |
| **WACK** | **Wrangell Chich** | **7.71** | **177** | | **Pn** | **04 54 51.8** | **+0.4** |
| **M29M** | **Sommet Creek** | **7.74** | **156** | Pn | **Pn** | **04 54 51.6** | **-0.1** |
| **G16K** | **Koyuk River** | **7.80** | **245** | Pn | **Pn** | **04 54 51.1** | **-1.3** |
| **L20K** | **Farewell, AK** | **8.00** | **210** | | **Pn** | **04 54 54.5** | **-0.7** |
| **YUK2** | **White River** | **8.10** | **165** | | **Pn** | **04 54 57.0** | **+0.4** |
| **SKT** | **Skwentna** | **8.11** | **201** | Pn | **Pn** | **04 54 56.4** | **-0.3** |
| **J17K** | **VABM Dome** | **8.33** | **228** | Pn | **Pn** | **04 54 58.3** | **-1.4** |
| **M20K** | **Styx River** | **8.43** | **206** | Pn | **Pn** | **04 55 00.8** | **-0.4** |
| **L19K** | **White Mountain** | **8.45** | **212** | Pn | **Pn** | **04 55 00.7** | **-0.7** |
| **PTPK** | **Patty Peak** | **8.58** | **171** | | **Pn** | **04 55 05.3** | **+2.1** |
| **STLK** | **Strandline Lak** | **8.62** | **201** | | **Pn** | **04 55 05.0** | **+1.3** |
| **BMRM** | **Bremner River** | **8.72** | **178** | | **Pn** | **04 55 07.8** | **+2.7** |
| **L18K** | **Granite Mounta** | **8.78** | **217** | Pn | **Pn** | **04 55 04.5** | **-1.3** |
| **RC01** | **Rabbit Creek A** | **8.79** | **194** | Pn | **Pn** | **04 55 06.6** | **+0.6** |
| **KIAG** | **Kiagna River** | **8.85** | **171** | | **Pn** | **04 55 09.8** | **+2.8** |
| **N30M** | **Aishikik Lake** | **8.88** | **154** | Pn | **Pn** | **04 55 07.2** | **-0.1** |
| **CRQM** | **Cirque** | **8.97** | **173** | Pn | **Pn** | **04 55 10.2** | **+1.5** |
| **YUK5** | **Granite Creek** | **9.09** | **157** | | **Pn** | **04 55 12.3** | **+2.1** |
| **D28M** | **Mount Upton** | **9.16** | **164** | | **Pn** | **04 55 14.3** | **+2.3** |
| **ISLE** | **Kuiper Island** | **9.17** | **171** | Pn | **Pn** | **04 55 13.6** | **+2.3** |
| **YUK6** | **Outpost Mounta** | **9.20** | **158** | | **Pn** | **04 55 14.8** | **+2.9** |
| **L17K** | **Donlin** | **9.21** | **221** | | **Pn** | **04 55 12.2** | **+0.5** |
| **BAGL** | **Bagley Icefiel** | **9.29** | **170** | | **Pn** | **04 55 15.6** | **+2.7** |
| **BARK** | **Barkley Ridge** | **9.36** | **171** | | **Pn** | **04 55 16.2** | **+2.4** |
| **TABL** | **Table Mountain** | **9.41** | **167** | Pn | **Pn** | **04 55 16.9** | **+2.3** |
| **RKAV** | **Rock Avalanche** | **9.53** | **168** | | **Pn** | **04 55 19.3** | **+3.0** |
| **O30N** | **Mendenhall** | **9.70** | **152** | Pn | **Pn** | **04 55 18.1** | **-0.3** |
| **SAMH** | **Samovar Hills** | **9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HHC | | | | pmax | pmax | | | |
| | comp=Z,75nm,4.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.77** | **324** | P | **P** | **05** | **02** | **56.2 -0.5** |
| **MKAR** | **Makanchi Array** | **58.77** | **324** | P | **P** | **05** | **02** | **59.1 +2.4** |
| | comp=Z,0.2nm,0.5s,baz=31,slow=9.2,SNR=1.5 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **59.98** | **341** | P | **P** | **05** | **03** | **06.9 +1.9** |
| ABKAR | | | | IAmb | IAmb | 05 | 03 | 27.6 |
| | comp=Z,3.3nm,1.4s | | | | | | | |

*SOME **18** 04:55:32.9,40˚.02N×77˚.45E,h0km*
*KRNET **18** 04:55:32.5±0.1,39˚.70N×77˚.06E,mb2.8*
*NNC **18** 04:55:39.8±4.0,39˚.70N×77˚.16E,h0km,mb3.6,mpv3.3,*
*Error ellipse: s-maj=33.1km s-min=19.7km az=3.0*

**ISC 18 04:55:30.8±1.8,39˚.78N±0˚.08×77˚.25E±0˚.05,h10km,n41,**
**σ2s31/66,15C-9D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NRN** | **Naryn** | **1.90** | **330** | ⇑*e*P | **Pb** | **04 56 06.1** | **+0.3** |
| | baz=34 | | | | | | |
| NRN | | | | ⇑*e*S | **Sb** | **04 56 30.6** | **+0.8** |
| | baz=34 | | | | | | |
| **KDJ** | **Kajisay** | **2.34** | **359** | ⇑*e*P | **Pb** | **04 56 13.2** | **0.0** |
| | baz=2.0 | | | | | | |
| KDJ | | | | ⇑*e*S | **Sb** | **04 56 42.9** | **+0.6** |
| | baz=2.0 | | | | | | |
| **ULHL** | **Ulahol** | **2.58** | **343** | ⇓*e*P | **Pb** | **04 56 15.9** | **-1.3** |
| | baz=46 | | | | | | |
| ULHL | | | | ⇓*e*S | **Sb** | **04 56 47.6** | **-1.4** |
| | baz=46 | | | | | | |
| **PRZ** | **Przheval'sk** | **2.83** | **17** | ⇑*e*P | **Pb** | **04 56 20.8** | **-0.8** |
| | baz=20 | | | | | | |
| PRZ | | | | ⇑*e*S | **Sb** | **04 56 56.3** | **-0.1** |
| | baz=20 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.88** | **340** | ⇑*e*P | **Pb** | **04 56 20.0** | **-2.4** |
| | baz=43 | | | | | | |
| BOOM | | | | ⇑*e*S | **Sn** | **04 56 54.7** | **+3.0** |
| | baz=43 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.89** | **276** | ⇑*e*P | **Pn** | **04 56 18.3** | **+1.2** |
| | baz=77 | | | | | | |
| SFK | | | | ⇑*e*S | **Sn** | **04 56 51.8** | **-0.3** |
| | baz=77 | | | | | | |
| **TNSS** | **Tian-Shan** | **3.26** | **356** | *e*P | **Pb** | **04 56 30.1** | **+1.2** |
| | 5.3nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **04 57 11.6** | **+2.8** |
| | 5.9nm,0.7s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.26** | **356** | Pg | **Pb** | **04 56 30.1** | **+1.2** |
| | 5.3nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 04 57 11.6 | |
| | 5.9nm,0.7s | | | | | | |
| **KBK** | **Karagaybulak** | **3.35** | **330** | ⇓*e*P | **Pn** | **04 56 26.2** | **+2.8** |
| | baz=32 | | | | | | |
| KBK | | | | ⇓*e*S | **Sn** | **04 57 05.3** | **+1.9** |
| | baz=32 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.37** | **339** | ⇑P | **Pg** | **04 56 34.2** | **-1.2** |
| | 3.7nm,1.0s | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **04 57 16.3** | **-2.9** |
| | 3.2nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.37** | **339** | ⇓*e*P | **Pb** | **04 56 26.8** | **-4.0** |
| | baz=41 | | | | | | |
| TKM2 | | | | ⇓*e*S | **Sn** | **04 57 06.4** | **+2.5** |
| | baz=41 | | | | | | |
| **MDOK** | **Medeo** | **3.38** | **357** | *e*P | **Pb** | **04 56 32.2** | **+1.3** |
| | 3.9nm,0.4s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **04 57 15.2** | **+3.1** |
| | 19nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **3.38** | **357** | Pg | **Pb** | **04 56 32.2** | **+1.3** |
| | 3.9nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 04 57 15.2 | |
| | 19nm,0.6s | | | | | | |
| **SATY** | **Saty** | **3.39** | **14** | *e*P | **Pb** | **04 56 31.5** | **+0.5** |
| | 4.8nm,0.5s | | | | | | |
| SATY | | | | *e*S | **Sb** | **04 57 13.8** | **+1.6** |
| | 12nm,0.5s | | | | | | |
| **SATY** | **Saty** | **3.39** | **14** | Pg | **Pb** | **04 56 31.5** | **+0.5** |
| | 7.7nm,0.6s | | | | | | |
| SATY | | | | Lg | Lg | 04 57 13.8 | |
| | 13nm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.40** | **344** | *e*P | **Pb** | **04 56 32.7** | **+1.6** |
| | 3.4nm,0.6s | | | | | | |
| KST | | | | *e*S | **Sb** | **04 57 16.0** | **+3.4** |
| | 9.3nm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.40** | **344** | Pg | **Pb** | **04 56 32.7** | **+1.6** |
| | 3.4nm,0.6s | | | | | | |
| KST | | | | Lg | Lg | 04 57 16.0 | |
| | 9.3nm,0.6s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.45** | **358** | *e*P | **Pb** | **04 56 33.2** | **+1.1** |
| | 4.5nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **04 57 16.9** | **+2.8** |
| | 28nm,0.7s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.45** | **358** | Pg | **Pb** | **04 56 33.2** | **+1.1** |
| | 4.5nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 04 57 16.9 | |
| | 29nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.53** | **325** | ⇓P | **Pg** | **04 56 36.7** | **-1.7** |
| | 1.3nm,0.3s | | | | | | |
| AAK | | | | ⇓S | **Sg** | **04 57 20.9** | **-3.3** |
| | 13nm,0.8s | | | | | | |
| **AML** | **Almayashu** | **3.57** | **312** | ⇑*e*P | **Pn** | **04 56 28.8** | **+2.2** |
| | baz=14 | | | | | | |
| AML | | | | ⇑*e*S | **Sn** | **04 57 09.7** | **+0.6** |
| | baz=14 | | | | | | |
| **UZB** | **Uzynbulak** | **3.61** | **21** | *e*P | **Pb** | **04 56 35.0** | **+0.2** |
| | 3.0nm,0.6s | | | | | | |
| UZB | | | | *e*S | **Sb** | **04 57 19.9** | **+1.1** |
| | 11nm,0.8s | | | | | | |
| **UZB** | **Uzynbulak** | **3.61** | **21** | Pg | **Pb** | **04 56 35.0** | **+0.2** |
| | 3.0nm,0.6s | | | | | | |
| UZB | | | | Lg | Lg | 04 57 19.9 | |
| | 11nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **3.63** | **343** | *e*P | **Pg** | **04 56 37.4** | **-2.9** |
| | 3.2nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **04 57 24.3** | **-3.1** |
| | 5.6nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **3.63** | **343** | Pg | **Pg** | **04 56 37.4** | **-2.9** |
| | 3.2nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 04 57 24.3 | |
| | 5.8nm,0.7s | | | | | | |
| **KPKS** | **Kokpek** | **3.83** | **16** | *e*P | **Pb** | **04 56 39.0** | **+0.4** |
| | 5.6nm,0.4s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **04 57 26.8** | **+1.7** |
| | 12nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **3.83** | **16** | Pg | **Pb** | **04 56 39.0** | **+0.4** |
| | 5.6nm,0.4s | | | | | | |
| KPKS | | | | Lg | Lg | 04 57 26.8 | |
| | 12nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **3.92** | **25** | Pg | **Pb** | **04 56 40.8** | **+0.7** |
| | 1.6nm,0.4s | | | | | | |
| PDGK | | | | Lg | Lg | 04 57 29.9 | |
| | 4.5nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **3.92** | **25** | ⇑P | **Pg** | **04 56 42.4** | **-3.4** |
| | 2.4nm,0.6s | | | | | | |
| PDGK | | | | ⇓S | **Sg** | **04 57 32.2** | **-4.4** |
| | 8.2nm,0.7s | | | | | | |
| **KTBS** | **Karatobe** | **3.95** | **354** | *e*P | **Pb** | **04 56 42.4** | **+1.9** |
| | 1.7nm,0.3s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **04 57 32.6** | **+4.3** |
| | 10nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **3.95** | **354** | Pg | **Pb** | **04 56 42.4** | **+1.9** |
| | 1.8nm,0.6s | | | | | | |
| KTBS | | | | Lg | Lg | 04 57 32.6 | |
| | 10nm,0.8s | | | | | | |
| **CHKK** | **Chushkaly** | **4.07** | **357** | *e*P | **Pb** | **04 56 45.0** | **+2.4** |
| | 3.3nm,0.3s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **04 57 37.1** | **-4.4** |
| | 7.6nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **4.07** | **357** | Pg | **Pb** | **04 56 45.0** | **+2.4** |
| | 3.3nm,0.3s | | | | | | |
| CHKK | | | | Lg | Lg | 04 57 37.1 | |
| | 7.9nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **4.08** | **344** | *e*P | **Pg** | **04 56 45.6** | **-3.4** |
| | 1.9nm,0.4s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **04 57 38.3** | **-3.6** |
| | 5.5nm,0.8s | | | | | | |
| **KRBS** | **Karabastau** | **4.08** | **344** | Pg | **Pg** | **04 56 45.6** | **-3.4** |
| | 1.9nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 04 57 38.3 | |
| | 5.5nm,0.7s | | | | | | |
| **MRKS** | **Merke** | **4.24** | **316** | *e*P | **Pg** | **04 56 50.0** | **-1.9** |
| | 1.3nm,0.1s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **04 57 45.7** | **-1.1** |
| | 3.8nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **4.24** | **316** | Pg | **Pg** | **04 56 50.0** | **-1.9** |
| | 2.6nm,0.6s | | | | | | |
| MRKS | | | | Lg | Lg | 04 57 45.7 | |
| | 3.8nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **4.41** | **12** | Pg | **Pb** | **04 56 50.3** | **+2.0** |
| | 9.1nm,0.5s | | | | | | |
| BLB | | | | Lg | Lg | 04 57 46.3 | |
| | 6.1nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.45** | **5** | *e*P | **Pb** | **04 56 50.9** | **+1.8** |
| | 1.3nm,0.6s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **04 57 47.2** | **+4.6** |
| | 4.3nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.45** | **5** | Pg | **Pb** | **04 56 50.8** | **+1.8** |
| | 2.0nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 04 57 47.3 | |
| | 4.3nm,0.5s | | | | | | |
| **KNOS** | **Konyrlen** | **4.79** | **17** | Pg | **Pb** | **04 56 57.2** | **+2.2** |
| | 4.1nm,0.3s | | | | | | |
| KNOS | | | | Lg | Lg | 04 57 58.2 | |
| | 3.1nm,0.6s | | | | | | |

*IDC **18** 04:58:30.9±1.1,23˚.40N×143˚.46E,h0km,mb4.0/12,*
*mbtmp4.0/13,ML3.8/1,MS3.1/1,Error ellipse:*
*s-maj=41.8km s-min=18.6km az=81.0*
*NEIC **18** 04:58:33.5±1.7,23˚.3N±0˚.1×143˚.48E±0˚.09,h10km±1km,*
*mb4.5/20,Error ellipse: s-maj=19.1km s-min=11.3km*
*az=28.0*

**ISC 18 04:58:35.6±1.0,23˚.35N±0˚.10×143˚.5E±0˚.2,h31km,n40,**
**σ0s96/40,mb4.3/22,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.92** | **342** | Pn | **Pn** | **04 59 35.5** | **+1.8** |
| **MAJO** | **Matsushiro** | **13.93** | **342** | Pn | **Pn** | **05 01 51.8** | **+0.9** |
| **MJB9** | **Matsu-Tunnel** | **13.94** | **342** | Pn | **Pn** | **05 01 51.4** | **+0.5** |
| **JOW** | **Kunigami** | **14.25** | **287** | P | **P** | **05 02 03.5** | **+1.3** |
| **JMM** | **Marumori** | **14.66** | **351** | Pn | **Pn** | **05 01 58.6** | **-2.2** |
| **JTM** | **Tenmabayashi** | **17.51** | **354** | | **P** | **05 02 38.4** | **+0.2** |
| JTM | | | | IAmb | IAmb | 05 02 43.3 | |
| | comp=Z,74nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **19.43** | **320** | P | **P** | **05 02 59.1** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=120,slow=12,SNR=2.7 | | | | | | |
| KSRS | | | | LR | LR | 05 10 16.9 | |
| | comp=Z,55nm,19.1s,baz=20,slow=36 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.86** | **338** | P | **P** | **05 03 36.7** | **+0.4** |
| | comp=Z,2.4nm,0.8s,baz=165,slow=8.1,SNR=4.9 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **38.29** | **319** | P | **P** | **05 05 51.1** | **-2.3** |
| | comp=Z,0.4nm,0.7s,baz=126,slow=9.7,SNR=1.9 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **41.39** | **202** | P | **P** | **05 06 20.0** | **+0.9** |
| KNRA | | | | IAmb | IAmb | 05 06 41.8 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.77** | **192** | P | **P** | **05 06 38.9** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 05 07 05.9 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.93** | **192** | P | **P** | **05 06 39.9** | **+0.1** |
| **WRAB** | **Tennant Creek** | **43.94** | **192** | P | **P** | **05 06 39.1** | **-0.8** |
| WRAB | | | | IAmb | IAmb | 05 06 55.0 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.95** | **192** | P | **P** | **05 06 39.7** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 05 06 42.3 | |
| | comp=Z,8.9nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.95** | **193** | P | **P** | **05 06 40.2** | **+0.3** |
| | comp=Z,1.2nm,0.6s,baz=15,slow=9.2,SNR=14 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.75** | **205** | P | **P** | **05 06 46.4** | **+0.1** |
| **AS31** | **Alice Springs** | **47.66** | **192** | P | **P** | **05 07 10.5** | **+1.3** |
| **ASAR** | **Alice Springs** | **47.66** | **192** | P | **P** | **05 07 09.5** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=14,slow=12,SNR=5.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.13** | **321** | P | **P** | **05 07 48.9** | **-1.3** |
| | comp=Z,0.9nm,0.5s,baz=113,slow=9.5,SNR=4.1 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **53.83** | **312** | P | **P** | **05 07 55.4** | **-0.2** |
| **MKAR** | **Makanchi Array** | **53.83** | **312** | P | **P** | **05 07 55.5** | **-0.1** |
| **MKAR** | **Makanchi Array** | **53.83** | **312** | P | **P** | **05 07 55.1** | **-0.4** |
| | comp=Z,0.7nm,0.5s,baz=93,slow=9.6,SNR=10 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **54.05** | **312** | P | **P** | **05 07 56.4** | **-0.7** |
| MAKZ | | | | IAmb | IAmb | 05 07 58.4 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **56.50** | **316** | P | **P** | **05 08 13.8** | **-0.8** |
| KURK | | | | IAmb | IAmb | 05 08 15.0 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.55** | **316** | P | **P** | **05 08 14.2** | **-0.8** |
| | comp=Z,4.5nm,0.7s,baz=93,slow=7.7,SNR=26 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **J20K** | **Nowinta River** | **57.23** | **27** | P | **P** | **05 08 21.1** | **+1.4** |
| J20K | | | | IAmb | IAmb | 05 08 34.0 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **BOOM** | **Boomskoye usch** | **58.37** | **307** | P | **P** | **05 08 29.0** | **+0.7** |
| BOOM | | | | IAmb | IAmb | 05 08 29.9 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **59.04** | **22** | P | **P** | **05 08 32.4** | **+0.1** |
| D22K | | | | IAmb | IAmb | 05 08 52.2 | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **60.43** | **28** | P | **P** | **05 08 41.8** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=274,slow=4.6,SNR=4.8 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.64** | **319** | P | **P** | **05 08 50.6** | **+0.3** |
| | comp=Z,11nm,0.7s,baz=88,slow=7.9,SNR=22 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **61.70** | **319** | P | **P** | **05 08 50.6** | **-0.1** |
| **KK31** | **Karatay Array** | **62.30** | **308** | P | **P** | **05 08 54.2** | **-0.7** |
| **KKAR** | **Karatay Array** | **62.30** | **308** | P | **P** | **05 08 54.9** | **0.0** |
| **CHGR** | **Chuyangaron** | **63.96** | **303** | P | **P** | **05 09 06.4** | **+0.3** |
| **SIMJ** | **Simiganj** | **64.08** | **303** | P | **P** | **05 09 07.3** | **+0.4** |
| **K29M** | **Barlow Dome** | **64.45** | **29** | P | **P** | **05 09 11.2** | **+2.3** |
| K29M | | | | IAmb | IAmb | 05 09 30.9 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.59** | **316** | P | **P** | **05 09 34.6** | **-0.9** |
| **ARCES** | **ARCESS Array B** | **77.47** | **341** | P | **P** | **05 10 27.8** | **+0.2** |
| | comp=Z,1.5nm,0.8s,baz=72,slow=9.6,SNR=4.0 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **81.46** | **314** | P | **P** | **05 10 49.0** | **-0.8** |
| | comp=Z,1.3nm,0.5s,baz=62,slow=0.7,SNR=4.7 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **81.83** | **334** | P | **P** | **05 10 50.6** | **-0.9** |
| | comp=Z,1.1nm,0.8s,baz=177,slow=5.6,SNR=5.8 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |

*CATAC **18** 05:22:48.0±0.6,8˚.51N×83˚.21W,h2km±3km,ML3.4*
*UCR **18** 05:22:48.0±0.9,8˚.54N×83˚.18W,h15km±3km,MW3.6*

**ISC 18 05:22:48.9±1.0,8˚.60N±0˚.05×83˚.19W±0˚.03,h11km±6km,**
**n30,σ1s02/42,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.04** | **57** | *e*P | **Pg** | **05 22 50.7** | **-0.3** |
| FITO | | | | *e*S | **Sg** | **05 22 53.0** | **+0.6** |
| **JIME** | **Puerto Jimenez** | **0.15** | **245** | *e*P | **Pg** | **05 22 51.6** | **-0.7** |
| JIME | | | | *e*S | **Sg** | **05 22 55.4** | **+0.7** |
| **CDITO** | **Canoas** | **0.31** | **95** | *i* P | **Pg** | **05 22 54.5** | **-0.7** |
| CDITO | | | | *i* S | **Sg** | **05 22 59.4** | **0.0** |
| CDITO | | | | IAML | | 05 23 09.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **EDPN** | **Palmar Norte** | **0.45** | **323** | *e*P | **Pg** | **05 22 57.1** | **-0.5** |
| **BRU2** | **Volcan** | **0.53** | **69** | *i* P | **Pg** | **05 22 58.8** | **-0.4** |
| BRU2 | | | | *i* S | **Sb** | **05 23 07.6** | **-0.3** |
| BRU2 | | | | IAML | | 05 23 17.9 | |
| | comp=Z,540nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.53** | **69** | *e*P | **Pg** | **05 22 58.5** | **-0.7** |
| **DRK0** | **Durika** | **0.66** | **355** | *i* P | **Pg** | **05 23 01.7** | **0.0** |
| DRK0 | | | | IAML | | 05 23 02.1 | |
| | comp=Z,7μm,1.0s | | | | | | |
| DRK0 | | | | *i* S | **Sb** | **05 23 12.2** | **+0.4** |
| **DRK0** | **Durika** | **0.66** | **355** | *e*P | **Pg** | **05 23 01.1** | **-0.6** |
| **OCHAL** | **Ojochal** | **0.67** | **317** | *i* P | **Pg** | **05 23 02.0** | **+0.1** |
| OCHAL | | | | *i* S | **Sb** | **05 23 11.7** | **-0.2** |
| OCHAL | | | | IAML | | 05 23 15.5 | |
| | comp=Z,400nm,1.0s | | | | | | |
| **ZELE** | **Perez Zeledon** | **0.92** | **326** | *e*P | **Pg** | **05 23 05.5** | **-1.2** |
| **BRIBI** | **Bribri** | **1.07** | **18** | *e*P | **Pb** | **05 23 09.4** | **0.0** |
| **BUS1** | **Rivas** | **1.09** | **330** | *e*P | **Pg** | **05 23 08.3** | **-1.7** |
| **LLNJ** | **Naranjito** | **1.25** | **314** | *e*P | **Pn** | **05 23 10.7** | **-1.6** |
| **ABE2** | **San Pablo** | **1.39** | **322** | *e*P | **Pn** | **05 23 12.9** | **-1.5** |
| **LCR2** | **La Lucha 2** | **1.39** | **325** | *i* P | **Pn** | **05 23 14.1** | **-0.3** |
| LCR2 | | | | *i* S | **Sg** | **05 23 34.5** | **+0.8** |
| LCR2 | | | | IAML | | 05 23 36.1 | |
| | comp=Z,310nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.39** | **325** | *e*P | **Pn** | **05 23 12.9** | **-1.6** |
| **REPA** | **Paraso** | **1.39** | **331** | *e*P | **Pn** | **05 23 14.6** | **+0.2** |
| **VERB** | **Verbena** | **1.42** | **339** | *e*P | **Pn** | **05 23 13.6** | **-1.2** |
| **RAFA** | **San Farael, Vo** | **1.48** | **335** | *i* P | **Pn** | **05 23 15.9** | **+0.1** |
| RAFA | | | | *i* S | **Sg** | **05 23 37.2** | **+0.6** |
| RAFA | | | | IAML | | 05 23 40.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.48** | **335** | *e*P | **Pn** | **05 23 15.1** | **-0.7** |
| **HDC** | **Heredia** | **1.66** | **327** | *e*P | **Pn** | **05 23 18.8** | **+0.7** |
| **HDC3** | **Heredia 3** | **1.66** | **327** | *i* P | **Pb** | **05 23 19.4** | **-0.2** |
| HDC3 | | | | *i* S | **Sg** | **05 23 42.1** | **-0.3** |
| HDC3 | | | | IAML | | 05 23 50.4 | |
| | comp=Z,240nm,1.0s | | | | | | |
| **TCS1** | **Tacares** | **1.80** | **323** | *i* P | **Pn** | **05 23 21.1** | **+1.1** |
| TCS1 | | | | IAML | | 05 23 50.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **TCS1** | **Tacares** | **1.80** | **323** | *e*P | **Pn** | **05 23 20.8** | **+0.7** |
| **SRA1** | **San Ramn** | **1.95** | **319** | *e*P | **Pn** | **05 23 20.0** | **-2.0** |
| **SOCE** | **Pocosol** | **2.26** | **322** | *i* P | **Pn** | **05 23 27.9** | **+1.6** |
| SOCE | | | | *i* S | **Sb** | **05 23 57.0** | **-0.9** |
| SOCE | | | | IAML | | 05 24 04.3 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **ARE1** | **Arenal 1** | **2.38** | **321** | *e*P | **Pn** | **05 23 28.4** | **+0.4** |
| **JTS** | **Las Juntas de** | **2.42** | **314** | *e*P | **Pn** | **05 23 29.8** | **+1.4** |
| **COVE** | **Coope Vega, Sa** | **2.42** | **330** | *i* P | **Pn** | **05 23 29.8** | **+1.4** |
| COVE | | | | *i* S | **Sb** | **05 24 01.0** | **-1.3** |
| COVE | | | | IAML | | 05 24 11.6 | |
| | comp=Z,100nm,1.0s | | | | | | |
| **INDI** | **Punta indio, G** | **2.61** | **299** | *i* P | **Pn** | **05 23 31.0** | **0.0** |
| INDI | | | | *i* S | **Sn** | **05 24 05.1** | **+2.4** |
| INDI | | | | IAML | | 05 25 34.5 | |
| | comp=Z,88nm,1.0s | | | | | | |

**IDC 18 05:28:25.1±1.6,28˚.23N×101˚.99E,h0km,mb3.3/3,**
**mbtmp3.3/3,Error ellipse: s-maj=82.2km s-min=29.0km**
**az=59.0,Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **10.12** | **197** | Pg | Pn | 05 31 29.8 | +38 |
| | 0.2nm,0.3s,baz=3.5,slow=16,SNR=4.6 | | | | | | |
| CMAR | | | | Lg | Lg | 05 33 36.8 | |
| | 0.2nm,0.3s,baz=2.4,slow=28,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.13** | **325** | P | P | 05 33 42.8 | +0.1 |
| | 0.4nm,0.7s,baz=127,slow=10,SNR=3.8 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.19** | **143** | P | P | 05 38 14.1 | -0.1 |
| | 0.6nm,0.7s,baz=330,slow=8.0,SNR=8.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **60.07** | **146** | P | P | 05 38 34.0 | -0.2 |
| | 0.1nm,0.4s,baz=322,slow=7.2,SNR=1.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **18** 05:37:58.2±0.8,11˚.69N×125˚.53E,h0km,mb4.0/11,*
*mbtmp4.0/11,MS3.0/3,Error ellipse: s-maj=62.5km*
*s-min=17.3km az=68.0*

**ISC 18 05:38:05.4±0.8,11˚.6N±0˚.2×125˚.4E±0˚.4,h53km,n15,**
**σ0s49/14,mb4.3/11,Samar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **4.54** | **178** | LR | LR | 05 41 31.0 | |
| | comp=Z,163nm,20.8s,baz=348,slow=46 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.58** | **164** | P | **P** | **05 44 31.4** | **-0.6** |
| | 0.3nm,0.8s,baz=343,slow=9.6,SNR=1.9 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **35.58** | **21** | LR | LR | 05 58 25.9 | |
| | comp=Z,15nm,20.5s,baz=81,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **36.05** | **167** | P | **P** | **05 45 02.4** | **+0.3** |
| | 0.3nm,0.6s,baz=341,slow=7.3,SNR=7.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 47 27.6** | **+0.1** |
| | 0.4nm,0.4s,baz=343,slow=3.0,SNR=4.4 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **39.46** | **340** | P | **P** | **05 45 30.9** | **+0.2** |
| | 0.5nm,0.4s,baz=154,slow=9.0,SNR=3.4 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.45** | **322** | P | **P** | **05 46 58.5** | **+0.5** |
| | 3.1nm,0.8s,baz=121,slow=8.3,SNR=24 | | | | | | |
| MKAR | | | | PcP | **PcP** | **05 48 15.2** | **-0.4** |
| | 0.3nm,0.5s,baz=108,slow=4.7,SNR=1.8 | | | | | | |
| | 3.1nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.04** | **331** | P | **P** | **05 47 16.9** | **-0.1** |
| | 2.1nm,0.6s,baz=126,slow=7.8,SNR=8.6 | | | | | | |
| | 2.1nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.49** | **325** | P | **P** | **05 47 28.0** | **+0.3** |
| | 4.0nm,0.4s,baz=127,slow=7.2,SNR=17 | | | | | | |
| | 4.0nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **60.08** | **325** | P | **P** | **05 48 06.8** | **-0.3** |
| | 1.9nm,0.8s,baz=112,slow=11,SNR=7.4 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **78.57** | **26** | P | **P** | **05 50 01.2** | **+0.1** |
| | 0.3nm,0.8s,baz=261,slow=3.6,SNR=4.2 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.64** | **340** | P | **P** | **05 50 22.9** | **+0.1** |
| | 3.5nm,0.7s,baz=71,slow=6.5,SNR=18 | | | | | | |
| | 3.5nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **84.31** | **332** | P | **P** | **05 50 31.6** | **+0.1** |
| | 3.5nm,0.9s,baz=65,slow=5.6,SNR=11 | | | | | | |
| | 3.5nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **90.47** | **332** | P | **P** | **05 51 00.4** | **-0.9** |
| | 0.9nm,0.5s,baz=95,slow=7.8,SNR=6.0 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **91.18** | **334** | LR | LR | 06 35 54.7 | |
| | comp=Z,11nm,18.6s,baz=325,slow=38 | | | | | | |
| **PLCA** | **Paso Flores** | **147.78** | **157** | PKPbc | **PKPbc** | **05 57 45.6** | **+0.8** |
| | 2.5nm,1.1s,baz=304,slow=4.7,SNR=3.1 | | | | | | |

*IDC **18** 05:37:18.0±1.7,17˚.77S×177˚.34W,h0km,mb4.5/4,*
*mbtmp4.6/4,Error ellipse: s-maj=49.1km s-min=33.1km*
*az=151.0*
*NEIC **18** 05:38:13.9±1.0,19˚.3S±0˚.1×177˚.3W±0˚.1,h590km±12km,*
*mb4.4/19,Error ellipse: s-maj=21.7km s-min=18.4km*
*az=144.0*

**ISC 18 05:38:14.5±0.6,19˚.2S±0˚.1×177˚.41W±0˚.10,h600km,n31,**
**σ1s37/31,mb4.3/13,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---

PSA00 IAmb IAmb 05 47 26.2
comp=Z,19nm,1.4s
**CASY Casey 65.34 205** P **P** **05 47 58.3 0.0**
**JAGI Jajag, Banyuwa 66.96 269** P **P** **05 48 10.4 +1.1**
**PEA0B Petropavlovsk- 75.20 345** P **P** **05 48 57.0 +0.5**
**PLK4 Peulik 4 78.56 11** P **P** **05 49 15.5 +0.8**
PLK4 IAmb IAmb 05 49 34.1
comp=Z,52nm,1.4s
**TXAR Lajitas Array 85.91 57** P **P** **05 49 56.1 +3.7**
comp=Z,0.1nm,0.6s,baz=198,slow=5.7,SNR=2.1
**CCB Clear Creek Bu 86.67 12** P **P** **05 49 55.4 +0.3**
**LL05 Los Muermos 87.44 133** P **P** **05 49 59.2 -0.2**

**UCR 18 05:50:07.2±0.9, 8°58'N×83°22'W, h16km±2km, MW4.0, 2C-10D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.08** | **54**↓ | *eP* | | Pg | 05 50 09.8 | -0.7 |
| FITO | | | | *eS* | | Sg | 05 50 12.0 | -0.5 |
| **EDAD** | **Golfito** | **0.09** | **36**↓ | *eP* | | Pg | 05 50 10.1 | -0.5 |
| EDAD | | | | *eS* | | Sg | 05 50 12.6 | -0.2 |
| **JIME** | **Puerto Jimenez** | **0.11** | **250**↑ | *eP* | | Pg | 05 50 10.3 | -0.4 |
| JIME | | | | *eS* | | Sb | 05 50 13.8 | +0.3 |
| **NELY** | **Ciudad Neily** | **0.28** | **75**↓ | *eP* | | Pg | 05 50 13.2 | -0.1 |
| NELY | | | | *eS* | | Sb | 05 50 18.3 | -0.1 |
| **VITO** | **San Vito** | **0.34** | **46**↓ | *eP* | | Pb | 05 50 14.8 | -0.3 |
| **EDP2** | **Potrero Grande** | **0.44** | **6** | *eP* | | Pg | 05 50 16.3 | +0.2 |
| **EDPN** | **Palmar Norte** | **0.45** | **329**↓ | *eP* | | Pg | 05 50 15.9 | -0.4 |
| EDPN | | | | *eS* | | Sg | 05 50 22.4 | 0.0 |
| **BRU2** | **Volcan** | **0.57** | **68**↓ | *eP* | | Pg | 05 50 18.0 | -0.5 |
| BRU2 | | | | *eS* | | Sg | 05 50 26.0 | 0.0 |
| **BURE** | **Buenos Aires** | **0.60** | **349**↓ | *eP* | | Pg | 05 50 19.1 | -0.1 |
| **DRK0** | **Durika** | **0.68** | **358**↓ | *eP* | | Pg | 05 50 20.0 | -0.6 |
| **ZELE** | **Perez Zeledon** | **0.93** | **329** | *eP* | | Pb | 05 50 24.1 | -0.8 |
| **BUS1** | **Rivas** | **1.10** | **332**↓ | *eP* | | Pb | 05 50 26.9 | -1.3 |
| **BRIBI** | **Bribri** | **1.10** | **19**↓ | *eP* | | Pn | 05 50 28.2 | +0.1 |
| **LCR2** | **La Lucha 2** | **1.39** | **326**↑ | *eP* | | Pn | 05 50 31.5 | -0.7 |
| **VTCV** | **VTCV, Calle Va** | **1.48** | **340** | *eP* | | Pn | 05 50 33.4 | 0.0 |
| **RAFA** | **San Farael, Vo** | **1.49** | **337** | *eP* | | Pn | 05 50 33.6 | 0.0 |
| **CVTV** | **Tajo** | **1.51** | **340** | *eP* | | Pn | 05 50 34.2 | +0.3 |
| **LCOCO** | **El Coco** | **1.53** | **347** | *eP* | | Pn | 05 50 34.4 | +0.4 |
| **JTS** | **Las Juntas de** | **2.41** | **315** | *eP* | | Pn | 05 50 46.1 | +0.1 |

*UCR 18 06:09:48.2±0.6, 8°54'N×83°21'W, h16km±1km, MW3.7*
*CATAC 18 06:09:48.1±0.6, 8°56'N×83°22'W, h4km±2km, ML3.5*
**ISC 18 06:09:49.0±1.0, 8°59'N±0°04×83°22'W±0°03, h12km±5km, n29, σ0°95/44, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.07** | **66** | *eP* | | **Pg** | **06 09 51.0** | **-0.5** |
| FITO | | | | *eS* | | **Sg** | **06 09 53.4** | **0.0** |
| **EDAD** | **Golfito** | **0.08** | **45** | *eP* | | **Pg** | **06 09 51.3** | **-0.4** |
| EDAD | | | | *eS* | | **Sg** | **06 09 53.9** | **+0.2** |
| **JIME** | **Puerto Jimenez** | **0.12** | **241** | *eP* | | **Pg** | **06 09 51.6** | **-0.4** |
| JIME | | | | *eS* | | **Sg** | **06 09 55.1** | **+0.9** |
| **NELY** | **Ciudad Neily** | **0.28** | **79** | *eP* | | **Pg** | **06 09 54.4** | **-0.4** |
| NELY | | | | *eS* | | **Sb** | **06 09 59.5** | **-1.2** |
| **CDITO** | **Canoas** | **0.35** | **93** | *iP* | | **Pg** | **06 09 55.2** | **-0.8** |
| CDITO | | | | *iS* | | **Sg** | **06 10 00.8** | **+0.1** |
| CDITO | | | | IAML | | | 06 10 05.6 | |
| comp=Z,3μm,1.0s | | | | | | | | |
| **EDP2** | **Potrero Grande** | **0.42** | **6** | *eP* | | **Pg** | **06 09 57.6** | **+0.2** |
| **EDPN** | **Palmar Norte** | **0.43** | **328** | *eP* | | **Pg** | **06 09 57.1** | **-0.4** |
| **BRU2** | **Volcan** | **0.56** | **69** | *iP* | | **Pg** | **06 09 59.2** | **-0.8** |
| BRU2 | | | | *iS* | | **Sg** | **06 10 07.5** | **-0.1** |
| BRU2 | | | | IAML | | | 06 10 13.9 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **BRU2** | **Volcan** | **0.56** | **69** | *eP* | | **Pg** | **06 09 59.3** | **-0.8** |
| **OCHAL** | **Ojochal** | **0.65** | **320** | *iP* | | **Pg** | **06 10 00.7** | **-1.0** |
| OCHAL | | | | *iS* | | **Sb** | **06 10 11.2** | **-0.2** |
| OCHAL | | | | IAML | | | 06 10 14.5 | |
| comp=Z,690nm,1.0s | | | | | | | | |
| **DRK0** | **Durika** | **0.67** | **358** | *iP* | | **Pg** | **06 10 01.1** | **-0.9** |
| DRK0 | | | | IAML | | | 06 10 01.7 | |
| comp=Z,6μm,1.0s | | | | | | | | |
| DRK0 | | | | *iS* | | **Sg** | **06 10 10.8** | **0.0** |
| **DRK0** | **Durika** | **0.67** | **358** | *eP* | | **Pg** | **06 10 01.2** | **-0.8** |
| **BUS1** | **Rivas** | **1.08** | **332** | *eP* | | **Pg** | **06 10 08.2** | **-1.8** |
| **BRIBI** | **Bribri** | **1.09** | **20** | *eP* | | **Pg** | **06 10 09.6** | **-0.3** |
| **LLNJ** | **Naranjito** | **1.23** | **315** | *eP* | | **Pg** | **06 10 10.6** | **-2.1** |
| **ABE2** | **San Pablo** | **1.37** | **323** | *eP* | | **Pn** | **06 10 13.8** | **-0.5** |
| **LCR2** | **La Lucha 2** | **1.38** | **326** | *iP* | | **Pn** | **06 10 14.5** | **+0.2** |
| LCR2 | | | | *iS* | | **Sg** | **06 10 32.9** | **-0.6** |
| LCR2 | | | | IAML | | | 06 10 35.7 | |
| comp=Z,320nm,1.0s | | | | | | | | |
| **LCR2** | **La Lucha 2** | **1.38** | **326** | *eP* | | **Pn** | **06 10 12.8** | **-1.5** |
| **VERB** | **Verbena** | **1.42** | **341** | *eP* | | **Pn** | **06 10 13.9** | **-0.9** |
| **RAFA** | **San Farael, Vo** | **1.47** | **337** | *iP* | | **Pn** | **06 10 15.8** | **+0.1** |
| RAFA | | | | *iS* | | **Sb** | **06 10 35.5** | **+0.1** |
| RAFA | | | | IAML | | | 06 10 44.9 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.47** | **337** | *eP* | | **Pn** | **06 10 15.0** | **-0.8** |
| **HDC3** | **Heredia 3** | **1.65** | **328** | *iP* | | **Pn** | **06 10 18.2** | **+0.2** |
| HDC3 | | | | *iS* | | **Sb** | **06 10 41.0** | **+0.6** |
| HDC3 | | | | IAML | | | 06 10 45.8 | |
| comp=Z,320nm,1.0s | | | | | | | | |
| **HDC** | **Heredia** | **1.65** | **328** | *eP* | | **Pn** | **06 10 17.4** | **-0.6** |
| **TCS1** | **Tacares** | **1.79** | **324** | *iP* | | **Pn** | **06 10 20.6** | **+0.7** |
| TCS1 | | | | IAML | | | 06 10 52.3 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| **SOCE** | **Pocosol** | **2.25** | **322** | *iP* | | **Pn** | **06 10 26.3** | **+0.2** |
| SOCE | | | | IAML | | | 06 10 30.0 | |
| comp=Z,460nm,1.0s | | | | | | | | |
| SOCE | | | | *iS* | | **Sn** | **06 10 55.9** | **+2.0** |
| **JTS** | **Las Juntas de** | **2.40** | **315** | *eP* | | **Pn** | **06 10 27.5** | **-0.7** |
| **COVE** | **Coope Vega, Sa** | **2.41** | **331** | *iP* | | **Pn** | **06 10 28.7** | **+0.4** |
| COVE | | | | IAML | | | 06 10 34.6 | |
| comp=Z,160nm,1.0s | | | | | | | | |
| COVE | | | | *iS* | | **Sn** | **06 11 00.1** | **+2.3** |
| **INDI** | **Punta indio, G** | **2.58** | **300** | *iP* | | **Pn** | **06 10 30.5** | **-0.2** |
| INDI | | | | *iS* | | **Sn** | **06 11 03.0** | **+1.0** |
| INDI | | | | IAML | | | 06 11 30.5 | |
| comp=Z,85nm,1.0s | | | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.39** | **80** | *iP* | | **Pn** | **06 10 41.1** | **-0.8** |
| BCIP | | | | IAML | | | 06 10 50.2 | |
| comp=Z,91nm,1.0s | | | | | | | | |
| BCIP | | | | *iS* | | **Sn** | **06 11 24.0** | **+1.9** |

*UCR 18 06:13:16.8±0.8, 8°52'N×83°20'W, h15km±3km, MW3.7*
**ISC 18 06:13:16.9±1.1, 8°55'N±0°06×83°22'W±0°03, h14km±6km, n27, σ0°71/31, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.10** | **40** | *eP* | | **Pg** | **06 13 19.7** | **-0.3** |
| FITO | | | | *eS* | | **Sg** | **06 13 21.9** | **-0.2** |
| **JIME** | **Puerto Jimenez** | **0.11** | **264** | *eP* | | **Pg** | **06 13 20.5** | **+0.4** |
| JIME | | | | *eS* | | **Sb** | **06 13 24.0** | **+0.6** |
| **EDAD** | **Golfito** | **0.11** | **27** | *eP* | | **Pg** | **06 13 20.0** | **-0.2** |
| EDAD | | | | *eS* | | **Sg** | **06 13 22.5** | **0.0** |
| **NELY** | **Ciudad Neily** | **0.29** | **70** | *eP* | | **Pg** | **06 13 23.1** | **+0.1** |
| NELY | | | | *eS* | | **Sb** | **06 13 28.1** | **-0.5** |
| **CDITO** | **Canoas** | **0.34** | **86** | *iP* | | **Pg** | **06 13 23.4** | **-0.5** |
| CDITO | | | | IVmB_BB | | | 06 13 29.4 | |
| comp=Z,42μm,1.0s | | | | | | | | |
| CDITO | | | | IAmb | IAmb | | 06 13 35.5 | |
| comp=Z,2μm,0.6s | | | | | | | | |
| **EDP2** | **Potrero Grande** | **0.46** | **5** | *eP* | | **Pg** | **06 13 26.5** | **+0.3** |
| **EDPN** | **Palmar Norte** | **0.47** | **330** | *eP* | | **Pg** | **06 13 25.9** | **-0.4** |
| **BRU2** | **Volcan** | **0.57** | **65** | *iP* | | **Pg** | **06 13 28.0** | **-0.3** |
| BRU2 | | | | IVmB_BB | | | 06 13 39.2 | |
| comp=Z,24μm,1.0s | | | | | | | | |
| **BRU2** | **Volcan** | **0.57** | **65** | *eP* | | **Pg** | **06 13 27.9** | **-0.3** |
| **BURE** | **Buenos Aires** | **0.63** | **349** | *eP* | | **Pg** | **06 13 29.2** | **-0.1** |
| **OCHAL** | **Ojochal** | **0.69** | **322** | *iP* | | **Pg** | **06 13 29.7** | **-0.7** |
| OCHAL | | | | IVmB_BB | | | 06 13 43.7 | |
| comp=Z,7μm,1.0s | | | | | | | | |
| **DRK0** | **Durika** | **0.71** | **358** | *iP* | | **Pg** | **06 13 30.5** | **-0.3** |
| DRK0 | | | | IVmB_BB | | | 06 13 43.8 | |
| comp=Z,79μm,1.0s | | | | | | | | |
| DRK0 | | | | IAmb | IAmb | | 06 13 51.6 | |
| comp=Z,850nm,0.5s | | | | | | | | |
| **DRK0** | **Durika** | **0.71** | **358** | *eP* | | **Pg** | **06 13 30.3** | **-0.6** |
| **BUS1** | **Rivas** | **1.13** | **332** | *eP* | | **Pb** | **06 13 37.6** | **-1.0** |
| **BRIBI** | **Bribri** | **1.13** | **19** | *eP* | | **Pn** | **06 13 38.3** | **-0.1** |
| BRIBI | | | | *eS* | | **Sg** | **06 13 56.2** | **+2.8** |
| **LLNJ** | **Naranjito** | **1.27** | **317** | *eP* | | **Pn** | **06 13 40.0** | **-0.3** |
| **LCR2** | **La Lucha 2** | **1.42** | **327** | *iP* | | **Pn** | **06 13 43.0** | **+0.4** |
| LCR2 | | | | IVmB_BB | | | 06 14 04.9 | |
| comp=Z,5μm,1.0s | | | | | | | | |
| LCR2 | | | | IAmb | IAmb | | 06 14 05.0 | |
| comp=Z,240nm,0.5s | | | | | | | | |
| **LCR2** | **La Lucha 2** | **1.42** | **327** | *eP* | | **Pn** | **06 13 42.0** | **-0.5** |
| **VERB** | **Verbena** | **1.46** | **341** | *eP* | | **Pn** | **06 13 43.3** | **+0.2** |
| **RAFA** | **San Farael, Vo** | **1.52** | **337** | *iP* | | **Pn** | **06 13 44.4** | **+0.3** |
| RAFA | | | | IVmB_BB | | | 06 14 11.6 | |
| comp=Z,21μm,1.0s | | | | | | | | |
| **ACOS** | **Acosta** | **1.55** | **323** | *eP* | | **Pn** | **06 13 44.8** | **+0.4** |
| **HDC3** | **Heredia 3** | **1.69** | **329** | *iP* | | **Pn** | **06 13 47.2** | **+0.9** |
| HDC3 | | | | IVmB_BB | | | 06 13 48.7 | |
| comp=Z,4μm,1.0s | | | | | | | | |
| HDC3 | | | | IAmb | IAmb | | 06 14 15.4 | |
| comp=Z,240nm,0.6s | | | | | | | | |
| **HDC** | **Heredia** | **1.69** | **329** | *eP* | | **Pb** | **06 13 47.5** | **-0.5** |
| **TRB2** | **Turrubares** | **1.82** | **318** | *eP* | | **Pb** | **06 13 47.9** | **0.0** |
| **JTS** | **Las Juntas de** | **2.43** | **315** | *eP* | | **Pn** | **06 13 56.5** | **+0.1** |
| **BCIP** | **Isla Barro Col** | **3.40** | **79** | *eP* | | **Pn** | **06 14 10.3** | **+0.7** |
| **BLUN** | **Bluefields** | **3.48** | **351** | *iP* | | Pn | 06 13 59.8 | -11 |
| BLUN | | | | IVmB_BB | | | 06 14 17.6 | |
| comp=Z,1μm,1.0s | | | | | | | | |

**IDC 18 06:20:56.2±46.0, 15°29'S×171°47'W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=897.4km s-min=190.1km az=79.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **45.70** | **240** | P | | P | 06 29 19.2 | -0.1 |
| 1.6nm,0.4s,baz=82,slow=7.1,SNR=3.4 | | | | | | | | |
| 1.6nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **51.68** | **257** | P | | P | 06 30 05.1 | -0.4 |
| 0.5nm,0.5s,baz=93,slow=6.8,SNR=19 | | | | | | | | |
| 0.5nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **51.91** | **252** | P | | P | 06 30 07.3 | +0.1 |
| 6.4nm,0.5s,baz=89,slow=8.2,SNR=125 | | | | | | | | |
| 6.4nm,0.5s | | | | | | | | |

*SNET 18 06:32:25.5±0.8, 11°.83N×87°.85W, h17km±4km, ML3.8*
*CATAC 18 06:32:26.8±0.5, 11°.87N×87°.77W, h26km±5km, mb5.0, ML3.8*
*IDC 18 06:32:28.4±2.8, 12°.31N×87°.29W, h38km±30km, mb3.7/5, mbtmp3.8/7, ML3.2/2, MS3.0/5, Error ellipse: s-maj=82.8km s-min=16.7km az=45.0*
**ISC 18 06:32:24.0±1.4, 11°.85N±0°.04×87°.77W±0°.03, h13km±9km, n75, σ1°21/112, mb3.9/5, MS3.0/3, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **CRIN** | **San Cristobal** | **1.10** | **40** | *eP* | | **Pn** | **06 32 46.6** | **+1.4** |
| **CRIN** | **San Cristobal** | **1.10** | **40** | *iP* | | **Pn** | **06 32 46.1** | **+0.9** |
| CRIN | | | | *iS* | | **Sn** | **06 33 00.9** | **+0.7** |
| CRIN | | | | IAML | | | 06 33 18.2 | |
| comp=Z,5μm,1.0s | | | | | | | | |
| **QUEN** | **Al S del Volca** | **1.16** | **51** | *iP* | | **Pn** | **06 32 47.6** | **+1.6** |
| QUEN | | | | IAML | | | 06 32 57.6 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| QUEN | | | | *iS* | | **Sn** | **06 33 02.7** | **+1.0** |
| **TELN** | **Telica** | **1.18** | **51** | *iP* | | **Pn** | **06 32 47.1** | **+0.8** |
| TELN | | | | *iS* | | **Sn** | **06 33 02.9** | **+0.5** |
| TELN | | | | IAML | | | 06 33 15.9 | |
| comp=Z,97nm,1.0s | | | | | | | | |
| **HERN** | **Volcan Telica** | **1.19** | **51** | *iP* | | **Pn** | **06 32 47.5** | **+1.1** |
| HERN | | | | *iS* | | **Sn** | **06 33 03.3** | **+0.8** |
| HERN | | | | IAML | | | 06 33 17.7 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| **COPN** | **Copaltepe** | **1.20** | **74** | *iP* | | **Pn** | **06 32 47.8** | **+1.3** |
| COPN | | | | IAML | | | 06 32 58.2 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **ROCN** | **Rota Cerro Neg** | **1.20** | **56** | *iP* | | **Pn** | **06 32 47.2** | **+0.7** |
| ROCN | | | | IAML | | | 06 33 03.3 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| ROCN | | | | *iS* | | **Sn** | **06 33 03.4** | **+0.6** |
| **CNGA** | **Al SSO del Vol** | **1.22** | **59** | *iP* | | **Pn** | **06 32 47.6** | **+0.7** |
| CNGA | | | | *iS* | | **Sn** | **06 33 04.2** | **+0.9** |
| CNGA | | | | IAML | | | 06 33 09.2 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.23** | **58** | *eP* | | **Pn** | **06 32 48.0** | **+1.1** |
| **CNGN** | **Cerro Negro** | **1.23** | **58** | *iP* | | **Pn** | **06 32 48.3** | **+1.4** |
| CNGN | | | | IAML | | | 06 32 58.2 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| CNGN | | | | *iS* | | **Sn** | **06 33 04.1** | **+0.6** |
| **LEVN** | **Ruinas Leon Vi** | **1.25** | **64** | *iP* | | **Pn** | **06 32 48.3** | **+1.1** |
| LEVN | | | | *iS* | | **Sn** | **06 33 05.1** | **+1.1** |
| LEVN | | | | IAML | | | 06 33 25.5 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| **ILCN** | **San Idelfonso** | **1.27** | **55** | *iP* | | **Pn** | **06 32 48.9** | **+1.4** |
| ILCN | | | | *iS* | | **Sn** | **06 33 05.4** | **+1.0** |
| ILCN | | | | IAML | | | 06 33 20.6 | |
| comp=Z,450nm,1.0s | | | | | | | | |
| **INTP** | **Intipuca** | **1.36** | **348** | *eP* | | **Pn** | **06 32 49.4** | **+0.6** |
| INTP | | | | *eS* | | **Sn** | **06 33 08.3** | **+1.5** |
| **MOM2** | **El Cardon** | **1.38** | **65** | *iP* | | **Pg** | **06 32 50.5** | **-0.1** |
| MOM2 | | | | *iS* | | **Sb** | **06 33 07.7** | **+0.3** |
| MOM2 | | | | IAML | | | 06 33 24.1 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **CNCH** | **Conchagua** | **1.42** | **357** | *eP* | | **Pn** | **06 32 50.4** | **+0.9** |
| CNCH | | | | *eS* | | **Sn** | **06 33 10.8** | **+2.6** |
| CNCH | | | | IAML | | | 06 33 14.7 | |
| comp=Z,4μm,0.5s | | | | | | | | |
| **CNCH** | **Conchagua** | **1.42** | **357** | *iP* | | **Pn** | **06 32 50.5** | **+0.9** |
| CNCH | | | | *iS* | | **Sn** | **06 33 09.1** | **+0.9** |
| CNCH | | | | IAML | | | 06 33 14.1 | |
| comp=Z,4μm,1.0s | | | | | | | | |
| **AMPH** | **Amapala** | **1.43** | **4** | *eP* | | **Pb** | **06 32 50.6** | **+0.1** |
| AMPH | | | | *eS* | | **Sg** | **06 33 10.5** | **+0.5** |
| **APQ3** | **Volcan Apoyequ** | **1.43** | **73** | *iP* | | **Pg** | **06 32 51.3** | **-0.2** |
| APQ3 | | | | IAML | | | 06 32 54.9 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| APQ3 | | | | *iS* | | **Sg** | **06 33 09.7** | **-0.4** |
| **RA5A7** | **El Crucero** | **1.43** | **84** | *iP* | | **Pg** | **06 32 51.8** | **+0.2** |
| RA5A7 | | | | IAML | | | 06 33 32.9 | |
| comp=Z,4μm,1.0s | | | | | | | | |
| **APYN** | **Apoyeque** | **1.44** | **75** | *iP* | | **Pn** | **06 32 50.8** | **+1.0** |
| APYN | | | | IAML | | | 06 33 19.4 | |
| comp=Z,23nm,1.0s | | | | | | | | |
| **LCND** | **La Caada** | **1.45** | **355** | *eP* | | **Pn** | **06 32 50.7** | **+0.8** |
| LCND | | | | *eS* | | **Sg** | **06 33 10.5** | **-0.3** |
| LCND | | | | IAML | | | 06 33 20.0 | |
| comp=Z,1μm,0.4s | | | | | | | | |
| **LCND** | **La Caada** | **1.45** | **355** | *iP* | | **Pb** | **06 32 51.4** | **+0.5** |
| LCND | | | | *iS* | | **Sb** | **06 33 09.2** | **-0.1** |
| LCND | | | | IAML | | | 06 33 19.7 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **APQ2** | **Apoyeque** | **1.45** | **76** | *iP* | | **Pb** | **06 32 51.4** | **+0.5** |
| APQ2 | | | | *iS* | | **Sb** | **06 33 09.4** | **0.0** |
| APQ2 | | | | IAML | | | 06 33 23.3 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| **UNAN** | **Cigeo UNAN** | **1.49** | **80** | *iP* | | **Pg** | **06 32 52.3** | **-0.3** |
| UNAN | | | | *iS* | | **Sg** | **06 33 11.2** | **-0.8** |
| UNAN | | | | IAML | | | 06 33 31.2 | |
| comp=Z,6μm,1.0s | | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.50** | **79** | *iP* | | **Pb** | **06 32 51.9** | **+0.3** |
| TISN | | | | IAML | | | 06 33 21.2 | |
| comp=Z,150nm,1.0s | | | | | | | | |
| **R4DEC** | **Barrio San Lui** | **1.52** | **79** | *iP* | | **Pb** | **06 32 52.2** | **+0.2** |
| R4DEC | | | | *iP* | | **Pg** | **06 32 52.5** | **-0.6** |
| R4DEC | | | | *iS* | | **Sg** | **06 33 12.0** | **-0.9** |
| R4DEC | | | | IAML | | | 06 33 20.3 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| R4DEC | | | | IAML | | | 06 33 20.6 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **R0529** | **La Mascota** | **1.52** | **80** | *iP* | | **Pb** | **06 32 52.5** | **+0.4** |
| R0529 | | | | IAML | | | 06 33 24.3 | |
| comp=Z,1μm,1.0s | | | | | | | | |
| **WILN** | **Americas 2** | **1.58** | **79** | *iP* | | **Pb** | **06 32 53.3** | **+0.3** |
| WILN | | | | *iS* | | **Sb** | **06 33 13.4** | **+0.5** |
| WILN | | | | IAML | | | 06 33 27.8 | |
| comp=Z,900nm,1.0s | | | | | | | | |
| **BRAN** | **Las Pilas** | **1.63** | **58** | *iP* | | **Pn** | **06 32 51.1** | **-1.4** |
| BRAN | | | | *iS* | | **Sn** | **06 33 09.0** | **-4.4** |
| BRAN | | | | IAML | | | 06 33 24.3 | |
| comp=Z,900nm,1.0s | | | | | | | | |
| **HUEN** | | **1.64** | **73** | *iP* | | **Pn** | **06 32 53.7** | **+1.2** |
| HUEN | | | | *iS* | | **Sb** | **06 33 15.1** | **+0.5** |
| HUEN | | | | IAML | | | 06 33 25.4 | |
| comp=Z,750nm,1.0s | | | | | | | | |
| **VSM** | **San Miguel** | **1.64** | **343** | *eP* | | **Pn** | **06 32 53.6** | **+0.8** |
| **LCY** | **Lacayo** | **1.64** | **342** | *eP* | | **Pn** | **06 32 53.6** | **+0.9** |
| **RANC** | **El Ranchito** | **1.65** | **342** | *eP* | | **Pn** | **06 32 53.6** | **+0.8** |
| **PACA** | **Pacayal** | **1.69** | **341** | *eP* | | **Pn** | **06 32 54.6** | **+1.1** |
| **PACA** | **Pacayal** | **1.69** | **341** | *iP* | | **Pn** | **06 32 54.9** | **+1.5** |
| PACA | | | | *iS* | | **Sn** | **06 33 15.6** | **+0.5** |
| PACA | | | | IAML | | | 06 33 21.4 | |
| comp=Z,5μm,1.0s | | | | | | | | |
| **NADN** | **Granada** | **1.70** | **93** | *iP* | | **Pn** | **06 32 54.5** | **+1.1** |
| NADN | | | | *iS* | | **Sn** | **06 33 16.3** | **+1.2** |
| NADN | | | | IAML | | | 06 33 24.0 | |
| comp=Z,2μm,1.0s | | | | | | | | |
| **TECA** | **Tecapa** | **1.78** | **336** | *eP* | | **Pn** | **06 32 55.5** | **+0.8** |
| **PQSS** | **Presa 15 de Se** | **1.92** | **336** | *eP* | | **Pn** | **06 32 57.6** | **+1.2** |
| **PQSS** | **Presa 15 de Se** | **1.92** | **336** | *iP* | | **Pn** | **06 32 58.0** | **+1.6** |
| PQSS | | | | *iS* | | **Sn** | **06 33 21.3** | **+0.8** |
| PQSS | | | | IAML | | | 06 33 31.3 | |
| comp=Z,240nm,1.0s | | | | | | | | |
| **TECO** | **Alcaldia de Te** | **1.94** | **330** | *eP* | | **Pn** | **06 32 57.5** | **+0.8** |
| **SCLA** | **Alcaldia de Sa** | **2.06** | **333** | *eP* | | **Pn** | **06 32 59.5** | **+1.0** |
| **SCLA** | **Alcaldia de Sa** | **2.06** | **333** | *iP* | | **Pn** | **06 33 00.2** | **+1.8** |
| SCLA | | | | *iS* | | **Sn** | **06 33 25.6** | **+1.6** |
| SCLA | | | | IAML | | | 06 33 38.1 | |
| comp=Z,430nm,1.0s | | | | | | | | |
| **COEG** | **Centro de Oper** | **2.06** | **328** | *eP* | | **Pn** | **06 32 59.1** | **+0.6** |
| **COEG** | **Centro de Oper** | **2.06** | **328** | *iP* | | **Pn** | **06 32 59.5** | **+1.0** |
| COEG | | | | *iS* | | **Sn** | **06 33 25.1** | **+1.0** |
| COEG | | | | IAML | | | 06 33 44.9 | |
| comp=Z,260nm,1.0s | | | | | | | | |
| **JAPN** | **Al SSO del Vol** | **2.07** | **99** | *iP* | | **Pn** | **06 32 59.9** | **+1.4** |
| JAPN | | | | IAML | | | 06 33 19.6 | |
| comp=Z,480nm,1.0s | | | | | | | | |
| JAPN | | | | *iS* | | **Sn** | **06 33 25.9** | **+1.6** |
| **BOAB** | **BOACO BROADBAN** | **2.14** | **74** | *iP* | | **Pn** | **06 33 01.2** | **+1.8** |
| BOAB | | | | *iS* | | **Sn** | **06 33 26.9** | **+1.0** |
| BOAB | | | | IAML | | | 06 33 34.8 | |
| comp=Z,340nm,1.0s | | | | | | | | |
| **PAVA** | **Las Pavas** | **2.17** | **328** | *eP* | | **Pn** | **06 33 01.2** | **+1.2** |
| **TGUH** | **Tegucigalpa,Un** | **2.24** | **12** | *eP* | | **Pn** | **06 33 02.6** | **+1.7** |
| **TGUH** | **Tegucigalpa,Un** | **2.24** | **12** | *iP* | | **Pn** | **06 33 02.9** | **+1.0** |
| TGUH | | | | *iS* | | **Sn** | **06 33 29.4** | **+0.8** |
| TGUH | | | | IAML | | | 06 33 31.5 | |
| comp=Z,430nm,1.0s | | | | | | | | |
| **LOMA** | **Loma Larga** | **2.25** | **323** | *eP* | | **Pn** | **06 33 01.5** | **+0.5** |
| **LOMA** | **Loma Larga** | **2.25** | **323** | *iP* | | **Pn** | **06 33 02.0** | **+1.0** |
| LOMA | | | | *iS* | | **Sn** | **06 33 29.9** | **+1.2** |
| LOMA | | | | IAML | | | 06 33 33.5 | |
| comp=Z,300nm,1.0s | | | | | | | | |
| **PIC2** | **El Picacho** | **2.37** | **323** | *eP* | | **Pn** | **06 33 04.3** | **+1.4** |
| **JAYA** | **Jayaque - finc** | **2.43** | **318** | *eP* | | **Pn** | **06 33 03.9** | **+0.4** |
| JAYA | | | | *eS* | | **Sn** | **06 33 33.0** | **-0.2** |
| JAYA | | | | IAML | | | 06 33 41.1 | |
| comp=Z,277nm,0.2s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.43** | **318** | *iP* | | **Pn** | **06 33 04.7** | **+1.2** |
| JAYA | | | | *iS* | | **Sn** | **06 33 34.2** | **+1.0** |
| JAYA | | | | IAML | | | 06 33 41.0 | |
| comp=Z,800nm,1.0s | | | | | | | | |
| **ACON** | **Acoyapa** | **2.54** | **87** | *iP* | | **Pn** | **06 33 05.6** | **+0.6** |
| ACON | | | | *iS* | | **Sn** | **06 33 37.8** | **+1.9** |
| ACON | | | | IAML | | | 06 33 54.1 | |
| comp=Z,250nm,1.0s | | | | | | | | |
| **SNJE** | **San Jose** | **2.69** | **318** | *eP* | | **Pn** | **06 33 08.3** | **+1.1** |
| **NUBE** | **Las Nubes** | **2.83** | **316** | *eP* | | **Pn** | **06 33 09.3** | **+0.2** |
| **NUBE** | **Las Nubes** | **2.83** | **316** | *iP* | | **Pn** | **06 33 10.4** | **+1.4** |
| NUBE | | | | *iS* | | **Sn** | **06 33 42.4** | **-0.7** |
| NUBE | | | | IAML | | | 06 33 51.9 | |
| comp=Z,250nm,1.0s | | | | | | | | |
| **INDI** | **Punta indio, G** | **2.98** | **131** | *iP* | | **Pn** | **06 33 11.8** | **+0.9** |
| INDI | | | | *iS* | | **Sn** | **06 33 48.1** | **+1.5** |
| INDI | | | | IAML | | | 06 34 18.4 | |
| comp=Z,350nm,1.0s | | | | | | | | |
| **JTS** | **Las Juntas de** | **3.17** | **119** | Pn | | **Pn** | **06 33 14.8** | **+1.1** |
| comp=Z,2.4nm,0.3s,baz=293,slow=23,SNR=19 | | | | | | | | |
| JTS | | | | | Sn | **Sn** | **06 33 48.9** | **-2.6** |
| comp=Z,12nm,0.3s,baz=221,slow=20,SNR=7.4 | | | | | | | | |
| JTS | | | | | LR | LR | 06 34 07.4 | |
| comp=Z,57nm,20.3s,baz=291,slow=32 | | | | | | | | |
| comp=Z,3.7nm,0.3s | | | | | | | | |
| **APG** | **El Apazote** | **4.08** | **320** | Pn | | **Pn** | **06 33 28.9** | **+2.5** |
| baz=322,slow=17,SNR=2.3 | | | | | | | | |
| **LCR2** | **La Lucha 2** | **4.25** | **119** | *iP* | | **Pn** | **06 33 29.8** | **+1.1** |
| LCR2 | | | | *iS* | | **Sn** | **06 34 20.1** | **+1.7** |
| LCR2 | | | | IAML | | | 06 34 43.9 | |
| comp=Z,87nm,1.0s | | | | | | | | |
| **OCHAL** | **Ojochal** | **4.89** | **124** | *iP* | | **Pn** | **06 33 38.8** | **+1.5** |
| OCHAL | | | | IAML | | | 06 33 55.8 | |
| comp=Z,82nm,1.0s | | | | | | | | |
| **DRK0** | **Durika** | **5.14** | **120** | *iP*

comp=E,26nm,1.3s
**F24K Squaw Lake 2.32 210 Pb** 06 43 04.8 -1.3
F24K IAML 06 44 18.9
comp=N,27nm,0.5s
**F28M Old Crow 2.66 134** Pn Pn 06 43 09.5 +2.4
**E29M Blow River 2.76 111** Pn Pb 06 43 11.6 -2.0
**D22K Ayikyak River 2.87 260** Pn Pn 06 43 11.5 +1.6
**E22K Anaktuvuk Pass 2.89 244** Pn 06 43 11.7 +1.4
**E22K Anaktuvuk Pass 2.89 244** IAML 06 44 37.1
comp=N,19nm,0.7s
**G27K Doyon Strip 2.99 155** Pn Pn 06 43 14.3 +2.7
**B22K Teshekpuk Lake 3.06 289** Pn Pn 06 43 13.9 +1.5
**B21K Ikpikpuk River 3.42 276** Pn Pn 06 43 19.1 +1.7
**H24K Noodor Dome 3.90 199** Pn Pn 06 43 26.0 +2.0
**F21K Alatna River 3.95 238** Pn Pn 06 43 26.4 +1.6
**H23K Yukon River 4.14 208** Pn Pn 06 43 29.9 +2.6
**H29M Whitestone 4.14 141** Pn Pn 06 43 31.4 +4.0
**INK Inuvik 4.27 102** Pn Pn 06 43 31.4 +2.3
INK IAML 06 45 24.4
comp=E,4.2nm,2.6s
**B20K Meade River 4.30 282** Pn Pn 06 43 31.2 +1.8
**I28M Miner Creek 4.52 153** Pn Pn 06 43 35.9 +3.2
**G31M Satah River 4.73 119** Pn Pn 06 43 37.7 +2.3
**F20K Avaraart Lake 4.75 243** Pn Pn 06 43 38.5 +2.9
**D19K Kuna River 4.88 264** Pn Pn 06 43 39.1 +1.5
D19K IAML 06 45 34.5
comp=E,4.0nm,2.9s
**I30M Mount Dempster 5.43 139** Pn 06 43 48.2 +3.1

**IDC 18 07:06:02.5±447.0,0˚03N×77˚36W,h0km,Error ellipse: s-maj=253.7km s-min=158.8km az=15.0, Colombia-Ecuador border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I20EC** | **Galapagos** | **13.03** | **267** | I | I | 08 23 30.0 | |
| | baz=89,slow=315,SNR=1.3 | | | | | | |
| **I08BO** | **LAS PENAS INFR** | **18.38** | **152** | I | I | 08 59 00.0 | |
| | baz=330,slow=327,SNR=3.5 | | | | | | |
| **I09BR** | **BRASILIA INFRA** | **32.89** | **120** | I | I | 10 26 00.0 | |
| | baz=297,slow=320,SNR=2.2 | | | | | | |

*AEIC **18** 07:06:01.6±1.6,69˚51N±0˚06×144˚2W±0˚1,h12km±6km, ML4.2,ML4.3/122(NEIC),Mwr4.2/30(NEIC), Error ellipse: s-maj=8.4km s-min=5.3km az=188.0*

*IDC **18** 07:06:02.9±0.7,69˚75N×144˚38W,h0km,mb3.9/13, mbtmp3.9/17,ML3.9/4,MS3.4/16,Error ellipse: s-maj=21.7km s-min=12.0km az=58.0*

*NEIC **18** 07:06:02.8±1.4,69˚58N±0˚05×144˚23W±0˚09,h8km±1km, Error ellipse: s-maj=8.7km s-min=5.1km az=4.0,Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-0.27; $M_{\theta\theta}$-0.44; $M_{\phi\phi}$0.71; $M_{r\theta}$-0.01; $M_{\theta\phi}$-1.92; $M_{\phi r}$1.01; Fault plane solution: $M_0$2.26000×$10^{15}$ NP1: $\phi_s$187.24000°,$\delta$88.50000°,$\lambda$-26.85000°. NP2: $\phi_s$277.99000°,$\delta$63.16000°,$\lambda$-178.32000°. Principal axes: T 2.4021, Plg18.0000°, Azm236.0000°; N -0.3173, Plg63.0000°, Azm4.0000°; P -2.0848, Plg20.0000°, Azm139.0000°;*

*NEIC **18** 07:06:02,69˚57N×144˚34W,h0km*

**ISC 18 07:06:03.1±0.5,69˚56N±0˚03×144˚26W±0˚02,h10km, n169,σ1§02/161,mb4.0/15,MS3.3/13,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.20** | **70** | Pg | **Pg** | **07 06 05.4** | **-1.9** |
| **C26K** | **Camden Bay** | **0.43** | **328** | | **Pb** | **07 06 10.9** | **-1.8** |
| C26K | | | | | **Sb** | **07 06 18.5** | **-0.7** |
| **D25K** | **Kavik River** | **0.79** | **254** | Pg | **Pg** | **07 06 15.3** | **-2.9** |
| D25K | | | | | **Sg** | **07 06 27.0** | **-1.4** |
| **D27M** | **Malcolm River** | **1.21** | **104** | | **Pb** | **07 06 23.5** | **-2.5** |
| D27M | | | | IAML | | 07 06 48.4 | |
| | comp=N,4μm,1.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.56** | **278** | | **Pn** | **07 06 30.3** | **-0.5** |
| C24K | | | | | **Sg** | **07 06 53.0** | **-0.3** |
| C24K | | | | IAML | | 07 06 56.7 | |
| | comp=N,3μm,1.0s | | | | | | |
| C24K | | | | IAML | | 07 07 02.2 | |
| | comp=E,4μm,1.0s | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **258** | | **Pn** | **07 06 31.8** | **-0.5** |
| D24K | | | | | **Sg** | **07 06 56.7** | **0.0** |
| D24K | | | | IAML | | 07 07 01.2 | |
| | comp=E,4μm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **144** | | **Pn** | **07 06 31.9** | **-0.7** |
| E27K | | | | | **Sg** | **07 06 55.1** | **-1.9** |
| **F26K** | **Sheenjek River** | **1.87** | **179** | | **Pn** | **07 06 35.2** | **+0.1** |
| F26K | | | | | **Sb** | **07 06 59.9** | **-0.8** |
| F26K | | | | IAML | | 07 07 04.4 | |
| | comp=N,2μm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.95** | **117** | | **Pn** | **07 06 36.1** | **-0.1** |
| E28M | | | | | **Sb** | **07 07 02.1** | **-0.8** |
| **D28M** | **Stokes Point** | **1.96** | **94** | | **Pb** | **07 06 37.2** | **-1.6** |
| D28M | | | | IAML | | 07 07 15.1 | |
| | comp=E,3μm,1.3s | | | | | | |
| **F25K** | **Christian Rive** | **2.04** | **195** | | **Pn** | **07 06 37.1** | **-0.3** |
| F25K | | | | | **Sb** | **07 07 04.4** | **-1.2** |
| F25K | | | | IAML | | 07 07 08.9 | |
| | comp=N,3μm,1.1s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.12** | **247** | | **Pn** | **07 06 38.0** | **-0.5** |
| TOLK | | | | IAML | | 07 07 14.4 | |
| | comp=E,2μm,1.1s | | | | | | |
| TOLK | | | | IAML | | 07 07 21.9 | |
| | comp=N,2μm,1.8s | | | | | | |
| **E24K** | **Your Creek** | **2.14** | **228** | | **Pb** | **07 06 39.7** | **-2.2** |
| **E24K** | **Your Creek** | **2.14** | **228** | | **Sb** | **07 07 09.1** | **+0.6** |
| **BMAR** | **Burnt Mountain** | **2.14** | **183** | | **Pn** | **07 06 38.8** | **-0.1** |
| **C23K** | **Itkillik River** | **2.24** | **280** | | **Pb** | **07 06 41.0** | **-2.5** |
| **D23K** | **Nanushuk River** | **2.36** | **258** | | **Pn** | **07 06 42.6** | **+0.7** |
| **D23K** | **Nanushuk River** | **2.36** | **258** | IAML | | 07 07 33.3 | |
| | comp=N,1μm,1.2s | | | | | | |
| D23K | | | | IAML | | 07 07 34.5 | |
| | comp=E,1μm,1.2s | | | | | | |
| **F24K** | **Squaw Lake** | **2.44** | **215** | | **Pn** | **07 06 42.8** | **-0.3** |
| **E23K** | **Chandalar** | **2.46** | **235** | | **Pn** | **07 06 43.4** | **0.0** |
| **F28M** | **Old Crow** | **2.53** | **138** | | **Pn** | **07 06 43.9** | **-0.3** |
| F28M | | | | IAML | | 07 07 31.9 | |
| | comp=E,1μm,1.1s | | | | | | |
| **E29M** | **Blow River** | **2.58** | **114** | | **Pn** | **07 06 45.1** | **+0.3** |
| E29M | | | | IAML | | 07 07 31.3 | |
| | comp=N,1μm,1.1s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.62** | **176** | | **Pn** | **07 06 45.4** | **0.0** |
| **G25K** | **Bearman Lake** | **2.89** | **195** | | **Pn** | **07 06 49.5** | **+0.4** |
| **G27K** | **Doyon Strip** | **2.93** | **159** | | **Pn** | **07 06 49.2** | **-0.4** |
| **FYU** | **Fort Yukon** | **3.03** | **187** | | **Pn** | **07 06 51.2** | **+0.3** |
| **D22K** | **Ayikyak River** | **3.08** | **261** | Pn | **Pn** | **07 06 51.7** | **-0.1** |
| D22K | | | | IAML | | 07 07 51.7 | |
| | comp=E,882nm,1.5s | | | | | | |
| D22K | | | | IAML | | 07 07 59.9 | |
| | comp=N,892nm,1.5s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **246** | | **Pn** | **07 06 51.8** | **-0.1** |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **246** | IAML | | 07 07 48.1 | |
| | comp=N,645nm,1.2s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.11** | **204** | | **Pn** | **07 06 51.6** | **-0.5** |
| G24K | | | | IAML | | 07 07 45.7 | |
| | comp=E,891nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.21** | **226** | | **Pn** | **07 06 53.9** | **+0.3** |
| **B22K** | **Teshekpuk Lake** | **3.25** | **288** | | **Pn** | **07 06 54.4** | **+0.3** |
| **H25L** | **Birch Creek** | **3.36** | **191** | | **Pn** | **07 06 55.7** | **+0.2** |
| **H27K** | **Steamboat Moun** | **3.50** | **162** | | **Pn** | **07 06 57.8** | **+0.3** |
| **G29M** | **Pine Creek** | **3.53** | **136** | | **Pn** | **07 06 57.9** | **0.0** |
| G29M | | | | IAML | | 07 08 10.5 | |
| | comp=N,703nm,0.9s | | | | | | |
| **F22K** | **John River** | **3.57** | **239** | | **Pn** | **07 06 59.2** | **+0.8** |
| **G23K** | **Bananza Creek** | **3.58** | **220** | | **Pn** | **07 06 58.1** | **-0.5** |
| G23K | | | | IAML | | 07 08 00.2 | |
| | comp=E,534nm,1.0s | | | | | | |
| G23K | | | | IAML | | 07 08 03.1 | |
| | comp=N,449nm,1.6s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.63** | **276** | | **Pn** | **07 06 58.7** | **-0.5** |
| **F30M** | **Barrier River** | **3.67** | **118** | | **Pn** | **07 07 01.1** | **+1.3** |
| **E21K** | **Killik River** | **3.67** | **257** | | **Pn** | **07 06 59.9** | **0.0** |
| **E21K** | **Killik River** | **3.67** | **257** | IAML | | 07 08 02.7 | |
| | comp=E,391nm,0.9s | | | | | | |
| E21K | | | | IAML | | 07 08 18.4 | |
| | comp=N,649nm,1.2s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.75** | **269** | | **Pn** | **07 07 01.2** | **+0.3** |
| **G22K** | **Bettles** | **3.78** | **229** | | **Pn** | **07 07 01.7** | **+0.4** |
| **G30M** | **tAoh Zraii Nji** | **3.95** | **127** | | **Pn** | **07 07 03.7** | **0.0** |
| G30M | | | | IAML | | 07 08 14.1 | |
| | comp=N,313nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | **3.98** | **202** | | **Pn** | **07 07 03.3** | **-0.9** |
| H24K | | | | IAML | | 07 08 15.4 | |
| | comp=E,468nm,1.6s | | | | | | |
| H24K | | | | IAML | | 07 08 15.5 | |
| | comp=N,367nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **4.02** | **144** | | **Pn** | **07 07 05.0** | **+0.4** |
| H29M | | | | IAML | | 07 08 23.8 | |
| | comp=E,513nm,1.4s | | | | | | |
| H29M | | | | IAML | | 07 08 27.6 | |
| | comp=N,412nm,1.6s | | | | | | |
| **INK** | **Inuvik** | **4.07** | **103** | Pn | **Pn** | **07 07 06.6** | **+1.3** |
| **INK** | **Inuvik** | **4.07** | **103** | Pn | **Pn** | **07 07 05.6** | **+0.3** |
| | comp=N,3.2nm,0.3s,baz=302,slow=13,SNR=98 | | | | | | |
| INK | | | | Sn | **Sn** | **07 07 49.8** | **-3.1** |
| | comp=N,3.8nm,0.3s,baz=54,slow=22,SNR=6.9 | | | | | | |
| | comp=N,12nm,0.5s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.09** | **187** | | **Pn** | **07 07 06.0** | **+0.4** |
| PRP | | | | IAML | | 07 08 12.1 | |
| | comp=E,388nm,1.2s | | | | | | |
| PRP | | | | IAML | | 07 08 14.1 | |
| | comp=N,414nm,1.2s | | | | | | |
| **I27K** | **Kandik River** | **4.10** | **164** | | **Pn** | **07 07 06.0** | **+0.2** |
| **F21K** | **Alatna River** | **4.14** | **240** | | **Pn** | **07 07 06.3** | **0.0** |
| F21K | | | | IAML | | 07 08 21.4 | |
| | comp=N,316nm,2.3s | | | | | | |
| **H23K** | **Yukon River** | **4.25** | **211** | | **Pn** | **07 07 07.1** | **-0.8** |
| H23K | | | | IAML | | 07 08 25.4 | |
| | comp=N,335nm,1.6s | | | | | | |
| H23K | | | | IAML | | 07 08 27.6 | |
| | comp=E,402nm,1.9s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.28** | **135** | | **Pn** | **07 07 08.4** | **+0.2** |
| **I26K** | **Coal Creek Min** | **4.29** | **174** | | **Pn** | **07 07 08.1** | **-0.2** |
| **F31M** | **Tsiigehtchic** | **4.41** | **114** | | **Pn** | **07 07 09.9** | **0.0** |
| F31M | | | | IAML | | 07 08 30.3 | |
| | comp=E,238nm,1.5s | | | | | | |
| F31M | | | | IAML | | 07 08 33.4 | |
| | comp=N,231nm,1.4s | | | | | | |
| **I28M** | **Miner Creek** | **4.45** | **156** | | **Pn** | **07 07 11.5** | **+0.9** |
| I28M | | | | IAML | | 07 08 06.0 | |
| | comp=N,278nm,0.7s | | | | | | |
| I28M | | | | IAML | | 07 08 42.1 | |
| | comp=E,292nm,1.4s | | | | | | |
| **D20K** | **Etivluk River** | **4.50** | **265** | | **Pn** | **07 07 12.1** | **+0.9** |
| **B20K** | **Meade River** | **4.50** | **282** | | **Pn** | **07 07 11.6** | **+0.5** |
| **E20K** | **Nigu River** | **4.50** | **259** | | **Pn** | **07 07 12.4** | **+1.1** |
| **A21K** | **Barrow** | **4.52** | **299** | | **Pn** | **07 07 11.9** | **+0.5** |
| **G31M** | **Satah River** | **4.56** | **121** | | **Pn** | **07 07 11.9** | **0.0** |
| G31M | | | | IAML | | 07 08 35.7 | |
| | comp=E,314nm,1.4s | | | | | | |
| G31M | | | | IAML | | 07 08 35.8 | |
| | comp=N,279nm,1.2s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.57** | **220** | | **Pn** | **07 07 11.5** | **-0.6** |
| **G21K** | **Allakaket** | **4.62** | **233** | | **Pn** | **07 07 11.9** | **-1.0** |
| G21K | | | | IAML | | 07 08 38.0 | |
| | comp=E,304nm,1.3s | | | | | | |
| G21K | | | | IAML | | 07 08 48.6 | |
| | comp=N,258nm,1.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.62** | **197** | | **Pn** | **07 07 12.8** | **-0.1** |
| POKR | | | | IAML | | 07 08 42.4 | |
| | comp=N,234nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.79** | **149** | | **Pn** | **07 07 15.6** | **+0.3** |
| I29M | | | | IAML | | 07 08 35.2 | |
| | comp=E,268nm,1.0s | | | | | | |
| I29M | | | | IAML | | 07 08 51.1 | |
| | comp=N,216nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.85** | **206** | | **Pn** | **07 07 15.8** | **-0.1** |
| I23K | | | | IAML | | 07 08 42.5 | |
| | comp=N,239nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.87** | **200** | | **Pn** | **07 07 16.1** | **-0.2** |
| MDM | | | | IAML | | 07 08 39.3 | |
| | comp=N,197nm,0.6s | | | | | | |
| MDM | | | | IAML | | 07 08 47.8 | |
| | comp=E,215nm,0.9s | | | | | | |
| **COLA** | **College** | **4.91** | **198** | | **Pn** | **07 07 16.8** | **+0.1** |
| **IL31** | | **4.92** | **193** | | **Pn** | **07 07 16.8** | **0.0** |
| **ILAR** | **Eielson Array** | **4.92** | **193** | | **Pn** | **07 07 16.8** | **-0.1** |
| **ILAR** | **Eielson Array** | **4.92** | **193** | Pn | **Pn** | **07 07 17.4** | **+0.5** |
| | comp=E,5.9nm,0.3s,baz=5.2,slow=13,SNR=255 | | | | | | |
| ILAR | | | | Sn | **Sn** | **07 08 14.8** | **+1.0** |
| | comp=E,14nm,0.3s,baz=8.7,slow=22,SNR=7.4 | | | | | | |
| ILAR | | | | Lg | Lg | 07 08 31.3 | |
| | comp=E,15nm,0.3s,baz=11,slow=29,SNR=6.4 | | | | | | |
| | comp=E,25nm,0.5s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.94** | **245** | | **Pn** | **07 07 18.1** | **+0.9** |
| **F20K** | **Avaraart Lake** | **4.94** | **245** | IAML | | 07 08 54.6 | |
| | comp=N,200nm,1.3s | | | | | | |
| **EGAK** | **Eagle** | **4.95** | **164** | | **Pn** | **07 07 17.5** | **+0.1** |
| EGAK | | | | IAML | | 07 08 19.4 | |
| | comp=N,262nm,0.9s | | | | | | |
| EGAK | | | | IAML | | 07 08 19.6 | |
| | comp=N,239nm,1.2s | | | | | | |
| **J25K** | **Salcha River,** | **4.99** | **186** | | **Pn** | **07 07 17.9** | **-0.1** |
| J25K | | | | IAML | | 07 08 50.6 | |
| | comp=N,164nm,1.0s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.08** | **230** | | **Pn** | **07 07 18.6** | **-0.6** |
| **J26L** | **Joseph Creek** | **5.09** | **177** | | **Pn** | **07 07 20.1** | **+0.8** |
| **J26L** | **Joseph Creek** | **5.09** | **177** | IAML | | 07 08 47.0 | |
| | comp=E,181nm,0.9s | | | | | | |
| J26L | | | | IAML | | 07 08 48.4 | |
| | comp=N,164nm,0.7s | | | | | | |
| **D19K** | **Kuna River** | **5.09** | **264** | | **Pn** | **07 07 19.9** | **+0.6** |
| D19K | | | | IAML | | 07 08 59.6 | |
| | comp=E,169nm,1.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.10** | **224** | | **Pn** | **07 07 19.3** | **-0.2** |
| H21K | | | | IAML | | 07 08 54.4 | |
| | comp=E,226nm,1.3s | | | | | | |
| H21K | | | | IAML | | 07 09 03.2 | |
| | comp=N,167nm,2.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.12** | **197** | Pn | **Pn** | **07 07 19.7** | **-0.1** |
| CCB | | | | IAML | | 07 08 50.8 | |
| | comp=E,123nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.19** | **212** | | **Pn** | **07 07 20.6** | **-0.1** |
| MLY | | | | IAML | | 07 08 57.4 | |
| | comp=N,143nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **5.21** | **252** | | **Pn** | **07 07 20.3** | **-0.7** |
| **HDA** | **Harding Lake** | **5.28** | **193** | Pn | **Pn** | **07 07 22.2** | **+0.4** |
| **I30M** | **Mount Dempster** | **5.30** | **141** | | **Pn** | **07 07 22.7** | **+0.3** |
| I30M | | | | IAML | | 07 08 24.0 | |
| | comp=E,156nm,0.5s | | | | | | |
| I30M | | | | IAML | | 07 08 24.3 | |
| | comp=N,143nm,0.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.32** | **198** | Pn | **Pn** | **07 07 23.1** | **+0.5** |
| WRH | | | | IAML | | 07 08 58.1 | |
| | comp=N,148nm,0.8s | | | | | | |
| **NEA2** | **Nenana** | **5.33** | **203** | Pn | **Pn** | **07 07 22.2** | **-0.3** |
| NEA2 | | | | IAML | | 07 08 55.7 | |
| | comp=E,111nm,0.9s | | | | | | |
| NEA2 | | | | IAML | | 07 09 11.1 | |
| | comp=N,108nm,1.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.45** | **272** | | **Pn** | **07 07 24.3** | **0.0** |
| **SCRK** | **Sand Creek** | **5.61** | **179** | Pn | **Pn** | **07 07 27.4** | **+0.8** |
| **K27K** | **Chicken** | **5.62** | **170** | Pn | **Pn** | **07 07 27.1** | **+0.6** |
| **F19K** | **Shaleruckik Mo** | **5.73** | **248** | Pn | **Pn** | **07 07 27.7** | **-0.3** |
| **H20K** | **Anotleneega Mo** | **5.76** | **230** | | **Pn** | **07 07 28.1** | **-0.4** |
| **BWN** | **Browne** | **5.78** | **203** | | **Pn** | **07 07 28.8** | **0.0** |
| **K24K** | **Donnelly Dome** | **5.81** | **187** | | **Pn** | **07 07 29.5** | **+0.3** |
| **A19K** | **Wainwright** | **5.84** | **284** | | **Pn** | **07 07 30.1** | **+0.6** |
| **DAWY** | **Dawson** | **5.84** | **158** | | **Pn** | **07 07 30.0** | **+0.4** |
| **RIDG** | **Independent Ri** | **5.85** | **183** | Pn | **Pn** | **07 07 30.6** | **+0.8** |
| **J30M** | **Hart River** | **5.88** | **144** | Pn | **Pn** | **07 07 30.4** | **+0.2** |
| **G19K** | **Purcell Mounta** | **5.93** | **241** | Pn | **Pn** | **07 07 29.6** | **-1.3** |
| **DOT** | **Dot Lake** | **5.94** | **179** | | **Pn** | **07 07 31.5** | **+0.5** |
| **BPAW** | **Bear Paw Mtn.** | **6.09** | **209** | | **Pn** | **07 07 32.4** | **-0.6** |
| **C18K** | **Utukok River** | **6.12** | **269** | Pn | **Pn** | **07 07 33.7** | **+0.2** |
| **MCK** | **McKinley** | **6.14** | **200** | | **Pn** | **07 07 34.2** | **+0.5** |
| **H19K** | **Roundabout Mou** | **6.17** | **235** | | **Pn** | **07 07 33.6** | **-0.6** |
| **B18K** | **Kokolik River** | **6.17** | **276** | | **Pn** | **07 07 34.9** | **+0.7** |
| **K29M** | **Barlow Dome** | **6.33** | **152** | | **Pn** | **07 07 37.0** | **+0.7** |
| **E18K** | **Tukpahlearik C** | **6.38** | **258** | Pn | **Pn** | **07 07 36.9** | **0.0** |
| **RND** | **Reindeer** | **6.44** | **199** | | **Pn** | **07 07 38.5** | **+0.5** |
| **F18K** | **Selawik** | **6.47** | **250** | | **Pn** | **07 07 38.1** | **-0.2** |
| **L26K** | **Log Cabin Wild** | **6.57** | **176** | | **Pn** | **07 07 40.2** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **6.59** | **170** | Pn | **Pn** | **07 07 40.6** | **+0.6** |
| **L27K** | **Beaver Creek,** | **6.60** | **170** | Pn | **Pn** | **07 07 40.5** | **+0.5** |
| **DHY** | **Denali Highway** | **6.63** | **192** | Pn | **Pn** | **07 07 41.8** | **+1.2** |
| **PAX** | **Paxson** | **6.63** | **185** | | **Pn** | **07 07 41.6** | **+1.0** |
| **J20K** | **Nowinta River** | **6.65** | **220** | | **Pn** | **07 07 39.7** | **-1.0** |
| **C17K** | **DeLong Mountai** | **6.87** | **270** | | **Pn** | **07 07 43.4** | **-0.4** |
| **E17K** | **Hotham Inlet** | **6.96** | **257** | | **Pn** | **07 07 44.6** | **-0.3** |
| **WAT1** | **Susitna Watana** | **6.97** | **196** | | **Pn** | **07 07 46.1** | **+0.9** |
| **WAT7** | **Susitna Watana** | **7.00** | **198** | | **Pn** | **07 07 46.7** | **+1.0** |
| **D17K** | **Noatak River** | **7.12** | **264** | | **Pn** | **07 07 46.1** | **-1.0** |
| **WAT6** | **Susitna Watana** | **7.15** | **193** | | **Pn** | **07 07 47.9** | **+0.2** |
| **J19K** | **Poorman** | **7.16** | **224** | | **Pn** | **07 07 47.4** | **-0.2** |
| **HARP** | **HAARP** | **7.20** | **183** | | **Pn** | **07 07 49.9** | **+1.7** |
| **M26K** | **Nabesna, AK** | **7.21** | **175** | Pn | **Pn** | **07 07 49.2** | **+0.8** |
| **M27K** | **Edge Creek, AK** | **7.29** | **171** | | **Pn** | **07 07 50.1** | **+0.4** |
| **G17K** | **Kiwalik Mounta** | **7.47** | **245** | | **Pn** | **07 07 51.6** | **-0.3** |
| **M29M** | **Somme Creek** | **7.52** | **159** | Pn | **Pn** | **07 07 53.2** | **+0.5** |
| **WACK** | **Wrangell Chich** | **7.60** | **180** | | **Pn** | **07 07 55.2** | **+1.2** |
| **SCM** | **Sheep Creek Mo** | **7.86** | **191** | | **Pn** | **07 07 59.5** | **+2.1** |
| **J18K** | **Innoko River** | **7.87** | **225** | | **Pn** | **07 07 56.4** | **-1.1** |
| **YUK2** | **White River** | **7.93** | **168** | | **Pn** | **07 07 59.4** | **+1.0** |
| **L20K** | **Farewell, AK** | **8.10** | **213** | | **Pn** | **07 08 00.6** | **0.0** |
| **PTPK** | **Patty Peak** | **8.44** | **174** | | **Pn** | **07 08 07.5** | **+2.1** |
| **M20K** | **Styx River** | **8.52** | **210** | | **Pn** | **07 08 07.1** | **+0.7** |
| **J17K** | **VABM Dome** | **8.54** | **231** | | **Pn** | **07 08 05.8** | **-0.8** |
| **H16K** | **Elim** | **8.55** | **243** | | **Pn** | **07 08 06.4** | **-0.3** |
| **N30M** | **Aishikik Lake** | **8.65** | **157** | | **Pn** | **07 08 07.6** | **-0.6** |
| **STLK** | **Strandline Lak** | **8.67** | **205** | | **Pn** | **07 08 09.3** | **+0.8** |
| **L18K** | **Granite Mounta** | **8.93** | **221** | | **Pn** | **07 08 11.5** | **-0.5** |
| **KDAK** | **Kodiak Island** | **12.36** | **201** | LR | LR | 07 14 06.2 | |
| | comp=N,346nm,19.4s,baz=47,slow=39 | | | | | | |
| **DLBC** | **Dease Lake** | **12.73** | **144** | Pn | **Pn** | **07 09 04.5** | **+0.5** |
| | comp=N,0.4nm,0.3s,baz=322,slow=9.7,SNR=12 | | | | | | |
| DLBC | | | | LR | LR | 07 14 34.7 | |
| | comp=N,172nm,18.9s,baz=304,slow=40 | | | | | | |
| | comp=N,5.0nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.84** | **106** | Pn | **Pn** | **07 09 15.7** | **-3.2** |
| | comp=N,0.7nm,0.3s,baz=315,slow=13,SNR=9.9 | | | | | | |
| | comp=N,3.1nm,0.6s | | | | | | |
| **BBB** | **Bella Bella** | **19.00** | **148** | LR | LR | 07 18 31.2 | |
| | comp=N,26nm,19.0s,baz=314,slow=39 | | | | | | |
| **NEW** | **Newport** | **25.11** | **134** | LR | LR | 07 22 01.0 | |
| | comp=N,165nm,19.8s,baz=335,slow=38 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.46** | **250** | LR | LR | 07 22 15.5 | |
| | comp=N,61nm,18.6s,baz=60,slow=38 | | | | | | |
| **TIXI** | **Tiksi** | **26.61** | **315** | LR | LR | 07 24 15.9 | |
| | comp=N,54nm,20.2s,baz=83,slow=41 | | | | | | |
| **MA2** | **Magadan** | **28.17** | **282** | LR | LR | 07 23 15.6 | |
| | comp=N,66nm,21.4s,baz=26,slow=37 | | | | | | |
| **FRB** | **Frobisher Bay** | **28.70** | **64** | LR | LR | 07 24 17.8 | |
| | comp=N,159nm,20.1s,baz=342,slow=38 | | | | | | |
| **ULM** | **Lac du Bonnet** | **29.81** | **105** | P | **P** | **07 12 11.9** | **+2.1** |
| | comp=N,2.3nm,0.8s,baz=326,slow=3.6,SNR=2.5 | | | | | | |
| | comp=N,2.3nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.06** | **147** | LR | LR | 07 24 29.9 | |
| | comp=N,79nm,18.6s,baz=332,slow=37 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **31.55** | **49** | LR | LR | 07 26 56.6 | |
| | comp=N,29nm,20.6s,baz=327,slow=40 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.21** | **128** | P | **P** | **07 12 34.5** | **+3.3** |
| | comp=N,0.8nm,0.6s,baz=2.4,slow=3.6,SNR=8.5 | | | | | | |
| PDAR | | | | LR | LR | 07 25 09.3 | |
| | comp=N,30nm,18.9s,baz=326,slow=35 | | | | | | |
| | comp=N,0.8nm,0.6s | | | | | | |
| **ELK** | **Elko** | **32.63** | **137** | LR | LR | 07 24 46.7 | |
| | comp=N,60nm,21.6s,baz=342,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.14** | **142** | P | **P** | **07 12 51.6** | **+3.5** |
| | comp=N,2.4nm,0.9s,baz=332,slow=7.9,SNR=13 | | | | | | |
| NVAR | | | | LR | LR | 07 27 45.5 | |
| | comp=N,159nm,19.0s,baz=275,slow=38 | | | | | | |
| | comp=N,2.4nm,0.9s | | | | | | |
| **SCHQ** | **Schefferville** | **36.11** | **73** | LR | LR | 07 31 00.6 | |
| | comp=N,39nm,18.6s,baz=280,slow=42 | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.17** | **142** | LR | LR | 07 31 01.1 | |
| | comp=N,59nm,20.7s,baz=322,slow=38 | | | | | | |
| **BORG** | **Borgarnes** | **40.20** | **34** | LR | LR | 07 33 30.1 | |
| | comp=N,39nm,18.2s,baz=335,slow=41 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **5** | P | **P** | **07 13 46.5** | **+1.0** |
| | comp=N,2.0nm,0.8s,baz=345,slow=6.5,SNR=1.4 | | | | | | |
| | comp=N,2.0nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.42** | **128** | P | **P** | **07 14 32.7** | **+3.0** |
| | comp=N,0.7nm,0.6s,baz=347,slow=6.5,SNR=14 | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **49.11** | **6** | P | **P** | **07 14 49.5** | **-0.5** |
| | comp=N,3.5nm,1.1s,baz=22,slow=8.5,SNR=8.1 | | | | | | |
| | comp=N,3.5nm,1.1s | | | | | | |
| **HFS** | **Hagfors** | **49.64** | **14** | P | **P** | **07 14 53.7** | **-0.4** |
| | comp=N,1.2nm,0.7s,baz=332,slow=8.4,SNR=7.3 | | | | | | |
| | comp=N,1.2nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **52.16** | **306** | P | **P** | **07 15 14.9** | **+1.5** |
| | comp=N,0.6nm,0.7s,baz=36,slow=7.7,SNR=3.6 | | | | | | |
| | comp=N,0.6nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **54.72** | **283** | P | **P** | **07 15 32.8** | **+0.8** |
| | comp=N,1.0nm,0.7s,baz=17,slow=6.3,SNR=2.5 | | | | | | |
| | comp=N,1.0nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **55.14** | **335** | P | **P** | **07 15 34.0** | **-1.0** |
| | comp=N,0.2nm,0.3s,baz=27,slow=3.5,SNR=1.9 | | | | | | |
| | comp=N,0.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.12** | **329** | P | **P** | **07 15 42.3** | **+0.3** |
| | comp=N,1.3nm,0.8s,baz=13,slow=7.2,SNR=7.2 | | | | | | |
| | comp=N,1.3nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.99** | **299** | *eP* | **P** | **07 15 48.4** | **-0.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,99nm,3.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.05** | **324** | P | **P** | **07 16 02.3** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=40,slow=7.8,SNR=6.8 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **59.96** | **5** | P | **P** | **07 16 08.2** | **-0.7** |
| | comp=Z,0.7nm,0.5s,baz=358,slow=7.3,SNR=4.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **PZH** | **PanZhiHua** | **73.29** | **301** | P | **P** | **07 17 36.3** | **+1.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | |

**JGF Kuroka 13.20 338** P **Pn** **07 31 36.5 -0.3**
**JGF Kuroka 13.20 338** Pn **Pn** **07 31 35.3 -1.5**
**JMN Monobe 13.23 323** P **Pn** **07 31 40.1 +2.7**
**JMN Monobe 13.23 323** Pn **Pn** **07 31 37.8 +0.5**
**MJAR Matsushiro Arr 13.79 342** Pn **Pn** **07 31 42.3 -2.6**
0.3nm,0.3s,baz=159,slow=11,SNR=19
MJAR LR LR 07 36 25.7
comp=Z,3µm,20.1s,baz=160,slow=34
MJAR ScP **ScP** **07 40 37.5 -2.2**
4.7nm,1.1s,baz=141,slow=2.7,SNR=6.3
**MAJO Matsushiro 13.79 342** P **Pn** **07 31 45.2 +0.3**
**MAJO Matsushiro 13.79 342** Pn **Pn** **07 31 44.2 -0.7**
**MAJO Matsushiro 13.79 342** *i* P **Pn** **07 31 44.7 -0.2**
**MJB9 Matsu-Tunnel 13.80 342** Pn **Pn** **07 31 43.8 -1.2**
**JOW Kunigami 14.17 287** P **P** **07 31 59.1 +1.7**
**JOW Kunigami 14.17 287** **Pn** **07 31 49.8 -0.3**
**JOW Kunigami 14.17 287** Pn **Pn** **07 31 48.7 -1.5**
0.4nm,0.3s,baz=68,slow=22,SNR=1.2
JOW LR LR 07 37 02.1
comp=Z,11µm,18.7s,baz=110,slow=36
6.9nm,0.7s
**JMM Marumori 14.52 351** P **Pn** **07 31 54.2 -0.7**
**JMM Marumori 14.52 351** **Pn** **07 31 53.1 -1.7**
**JNU Nakatsue 14.67 314** P **P** **07 32 00.0 -2.9**
**JNU Nakatsue 14.67 314** Pn **Pn** **07 31 58.0 +1.1**
0.2nm,0.3s,baz=126,slow=7.7,SNR=4.2
JNU LR LR 07 37 28.8
comp=Z,3µm,18.2s,baz=118,slow=37
14nm,1.0s
**JSD Sado 15.18 344** Pn **Pn** **07 32 03.0 -0.8**
**JTM Tenmabayashi 17.37 354** Pn **Pn** **07 32 31.9 +0.2**
**ERM Erimo 18.48 359** *i* P **Pn** **07 32 45.6 +0.3**
**YOJ Yonaguni jima 18.74 277** P **Pn** **07 32 50.8 +2.3**
**YOJ Yonaguni jima 18.74 277** P **Pn** **07 32 48.5 0.0**
YOJ IAmb IAmb 07 32 58.1
comp=Z,194nm,1.0s
**YOJ Yonaguni jima 18.74 277** P **Pn** **07 32 48.5 0.0**
YOJ pmax pmax
comp=Z,194nm,1.0s
**TJN Taejon 18.95 316** P **Pn** **07 32 51.1 +0.1**
**TJN Taejon 18.95 316** *ce* P **P** **07 32 49.8 -0.4**
**KSRS Korea Array 19.30 320** P **P** **07 32 54.1 +0.1**
comp=Z,0.5nm,0.3s,baz=130,slow=11,SNR=27
KSRS LR LR 07 40 16.3
comp=Z,3µm,18.4s,baz=130,slow=36
KSRS ScP **ScP** **07 40 49.8 -0.8**
comp=Z,4.1nm,0.9s,baz=175,slow=2.7,SNR=10
comp=Z,20nm,1.0s
**KSAR Wonju Array Be 19.31 320** P **P** **07 32 53.9 -0.3**
**KSAR Wonju Array Be 19.31 320** P **P** **07 32 53.9 -0.3**
**KS19 Wonju Array Si 19.36 320** P **Pn** **07 32 55.5 -0.4**
**NACB Ninganchiao 20.04 276** P Pn 07 33 07.0 +2.9
**NACB Ninganchiao 20.04 276** P Pn 07 33 03.8 -0.3
**INCN Inchon 20.10 318** S **S** **07 36 43.1 -4.4**
**YHNB Yeheng 20.22 278** P Pn 07 33 08.5 +2.1
**YHNB Yeheng 20.22 278** P Pn 07 33 06.4 +0.1
**YULB Yu-li 20.36 274** P Pn 07 33 09.3 +1.4
**YULB Yu-li 20.36 274** P **P** **07 33 06.1 +0.3**
YULB IAmb IAmb 07 33 18.1
comp=Z,334nm,2.0s
**ASAJ Asahikawa 20.59 358** P Pn 07 33 10.1 -0.4
comp=Z,15nm,0.8s,baz=196,slow=12,SNR=8.2
ASAJ LR LR 07 44 20.8
comp=Z,2µm,18.1s,baz=198,slow=46
comp=Z,15nm,0.8s
**ASAJ Asahikawa 20.59 358** P **P** **07 33 09.0 +0.9**
ASAJ pmax pmax
comp=Z,93nm,1.1s
**JKA Kamikawa-asahi 20.59 358** P **P** **07 33 09.0 +0.9**
JKA IAmb IAmb 07 33 24.7
comp=Z,93nm,1.1s
**TWGBT Beinan 20.61 273** P Pn 07 33 12.6 +1.7
**TWG Pinlang 20.62 273** P **P** **07 33 07.8 -0.7**
TWG IAmb IAmb 07 33 20.8
comp=Z,166nm,1.5s
**SSLB Suanglung 20.64 275** P Pn 07 33 12.3 +1.0
**TPUB Ta-pu 20.98 274** P Pn 07 33 16.7 +1.5
**TPUB Ta-pu 20.98 274** P **P** **07 33 13.1 +0.6**
TPUB IAmb IAmb 07 33 29.6
comp=Z,174nm,1.3s
**SSE Sheshan 21.20 296** P **P** **07 33 13.6 -1.1**
SSE S **S** **07 37 09.0 -0.3**
SSE pmax pmax
comp=Z,39nm,1.1s
SSE pmax pmax
comp=Z,520nm,6.3s
SSE LR LR
comp=Z,1µm,16.1s
SSE LR LR
comp=Z,2µm,16.2s
**MSHR Mys Shultsa 21.62 335** *i* P **P** **07 33 19.6 +0.4**
MSHR pmax pmax
comp=Z,32nm,1.0s
**PSTR Posyet 21.82 334** *i* P **P** **07 33 21.6 +0.3**
**PATS Pohnpei 21.84 137** P **P** **07 33 22.9 +1.1**
**PATS Pohnpei 21.84 137** P **P** **07 33 22.6 +0.8**
**PATS Pohnpei 21.84 137** P **P** **07 33 22.8 +1.1**
comp=Z,342nm,1.2s
**H11N1 WAKE ISLAND Hy 22.08 95** T T 07 55 56.3
baz=283,slow=74,SNR=14
**H11N2 WAKE ISLAND Hy 22.08 95** T T 07 56 06.6
baz=283,slow=74,SNR=22
**H11N3 WAKE ISLAND Hy 22.09 95** T T 07 55 59.8
baz=283,slow=74,SNR=16
**H11S3 WAKE ISLAND Hy 22.21 99** T T 07 56 59.5
baz=284
**H11S1 WAKE ISLAND Hy 22.22 98** T T 07 56 16.2
baz=284,slow=74
**TEY Ternei 22.22 347** ⇑ *eP* **P** **07 33 27.2 +1.6**
TEY *e* 07 37 26.5
TEY pmax pmax
comp=E,10.0nm,1.3s
TEY pmax pmax
comp=N,10.0nm,1.5s
TEY pmax pmax
comp=Z,20nm,1.3s
**H11S2 WAKE ISLAND Hy 22.23 99** T T 07 57 00.9
baz=284,slow=74
**USA0B Ussuriysk Arra 22.72 338** P **P** **07 33 31.1 +0.2**
USA0B IAmb IAmb 07 33 49.0
comp=Z,109nm,1.4s
**USA0B Ussuriysk Arra 22.72 338** *i* P **P** **07 33 31.4 +0.5**
**USRK Ussuriysk Ar. 22.72 338** P **P** **07 33 29.9 -1.0**
**USRK Ussuriysk Ar. 22.72 338** P **P** **07 33 31.0 +0.1**
comp=Z,24nm,0.9s,baz=171,slow=11,SNR=20
USRK LR LR 07 41 52.1
comp=Z,5µm,20.5s,baz=153,slow=35
comp=Z,24nm,0.9s
**USRK Ussuriysk Ar. 22.72 338** P **P** **07 33 31.0 +0.1**
**QZH Quanzhou 22.75 279** P **P** **07 33 31.5 +0.1**
QZH S **S** **07 37 36.4 -2.4**
QZH pmax pmax
comp=Z,920nm,7.8s
QZH LR LR
comp=Z,2µm,15.7s
QZH LR LR
comp=Z,4µm,18.2s
QZH LR LR
comp=Z,6µm,20.2s
**KNMB Chin-men Tao 22.95 278** P **P** **07 33 33.9 +0.4**
KNMB IAmb IAmb 07 33 54.1
comp=Z,46nm,0.8s
**NJ2 Nanjing 23.37 297** *eP* **P** **07 33 41.5 +3.8**
NJ2 S **S** **07 37 50.4 +1.2**
NJ2 sS **sS** **07 37 59.0 0.0**
NJ2 pmax pmax
comp=Z,40nm,2.4s
NJ2 LR LR
comp=Z,2µm,15.2s
NJ2 LR LR
comp=Z,4µm,15.6s
NJ2 LR LR
comp=Z,5µm,16.6s
**YSS Yuzh-Sakhalins 23.43 359** P **P** **07 33 38.5 +0.4**
YSS IAmb IAmb 07 33 56.5
comp=Z,171nm,1.6s
**YSS Yuzh-Sakhalins 23.43 359** *eP* **P** **07 33 40.0 +1.9**
YSS *e* 07 34 03.6
YSS *eS* **S** **07 37 51.8 +2.0**
YSS *eSS* SnSn 07 38 53.0 +27
YSS pmax pmax
comp=Z,30nm,1.1s
YSS pmax pmax
comp=Z,800nm,3.3s
YSS smax smax
comp=N,1µm,7.0s
YSS smax smax
comp=E,2µm,7.0s
YSS MLR MLR
comp=N,3µm,15.0s
YSS MLR MLR
comp=E,2µm,15.0s
YSS MLR MLR
comp=Z,3µm,15.0s
**DAV Davao City (W) 23.71 229** LR LR 07 41 07.9
comp=Z,9µm,21.1s,baz=74,slow=32
**MDJ Mudanjiang 23.95 335** P **P** **07 33 45.3 +2.1**
MDJ pP sP 07 33 52.0 +0.7
MDJ sP pwP 07 33 53.8 -1.9
MDJ pmax pmax
comp=E,67nm,1.1s
MDJ pmax pmax
comp=Z,590nm,4.0s
MDJ LR LR
comp=Z,4µm,18.6s
MDJ LR LR
comp=Z,4µm,18.6s
MDJ LR LR
comp=Z,9µm,18.5s
**MDJ Mudanjiang 23.95 335** P **P** **07 33 43.5 +0.4**
MDJ IAmb IAmb 07 34 00.4
comp=Z,147nm,1.3s
**DL2 Dalian 24.12 315** P **P** **07 33 42.3 -2.5**
DL2 S **S** **07 37 59.1 -2.0**
DL2 pmax pmax
comp=Z,27nm,1.4s
DL2 pmax pmax
comp=Z,460nm,7.1s
DL2 LR LR
comp=Z,2µm,12.8s
DL2 LR LR
comp=Z,3µm,16.7s
DL2 LR LR
comp=Z,4µm,14.7s
**SNY Shenyang 24.71 322** ⇑ P **P** **07 33 50.4 +0.3**
SNY S **S** **07 38 10.4 -0.1**
SNY pmax pmax
comp=Z,40nm,1.4s
SNY pmax pmax
comp=Z,230nm,3.5s
SNY LR LR
comp=Z,4µm,14.1s
SNY LR LR
comp=Z,2µm,12.8s
SNY LR LR
comp=Z,2µm,17.0s
**CN2 Changchun 25.12 328** P **P** **07 33 53.4 -0.4**
CN2 S **S** **07 38 15.8 -1.4**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 pmax pmax
comp=Z,400nm,4.0s
CN2 LR LR
comp=Z,4µm,15.0s
CN2 LR LR
comp=Z,4µm,15.0s
CN2 LR LR
comp=Z,4µm,16.0s
**UGL Uglegorsk 25.57 358** *eP* **P** **07 34 02.1 +4.3**
UGL *eS* **S** **07 38 24.4 +0.3**
UGL pmax pmax
comp=Z,600nm,3.5s
UGL MLR MLR
comp=E,3µm,15.0s
UGL MLR MLR
comp=N,2µm,14.0s
**MANU Manus Island 25.65 171** P **P** **07 33 58.5 -0.4**
MANU IAmb IAmb 07 34 01.4
comp=Z,47nm,0.9s
**BNX BinXian 25.75 333** ⇓ P **P** **07 34 01.0 +1.4**
BNX S **S** **07 38 30.3 +3.2**
BNX sS **sS** **07 38 35.4 -1.4**
BNX pmax pmax
comp=Z,32nm,0.6s
BNX pmax pmax
comp=Z,470nm,4.6s
BNX LR LR
comp=Z,5µm,16.8s
BNX LR LR
comp=Z,3µm,16.8s
BNX LR LR
comp=Z,7µm,18.4s
**TIA Tai'an 26.06 305** P **P** **07 34 02.4 0.0**
TIA S **S** **07 38 33.3 +1.1**
TIA sS **sS** **07 38 45.9 +3.9**
TIA SS **SnSn** **07 39 40.0 +9.3**
TIA pmax pmax
comp=Z,57nm,1.0s
TIA pmax pmax
comp=Z,710nm,8.9s
TIA LR LR
comp=Z,2µm,15.7s
TIA LR LR
comp=Z,4µm,16.6s
TIA LR LR
comp=Z,4µm,16.7s
**WHN Wuhan 26.84 292** ⇑ P **P** **07 34 12.5 +2.9**
WHN LR LR
comp=Z,7µm,12.2s
WHN LR LR
comp=Z,13µm,20.2s
WHN LR LR
comp=Z,13µm,17.8s
**KLR Kul'dur 27.31 343** LR LR 07 45 30.7
comp=Z,3µm,18.8s,baz=156,slow=37
**KLR Kul'dur 27.31 343** *ce* P **P** **07 34 13.7 +0.1**
KLR pmax pmax
comp=Z,20nm,0.7s
**TYV Tymovskoe 27.34 359** *eP* **P** **07 34 15.7 +1.9**
TYV *eS* **S** **07 38 57.9 +5.9**
TYV pmax pmax
comp=Z,200nm,4.9s
TYV pmax pmax
comp=Z,12nm,1.2s
TYV smax smax
comp=N,900nm,11.5s
TYV smax smax
comp=E,600nm,11.5s
**GRNR Gornyy 27.79 350** ⇓ *i* P **P** **07 34 19.6 +1.8**
GRNR pmax pmax
comp=Z,4.0nm,0.6s
GRNR MLR MLR
comp=N,910nm,15.0s
**CNSH ChangSha 27.86 286** P **P** **07 34 22.5 +3.8**
CNSH pmax pmax
comp=N,19nm,1.1s
**HNS HongShan 28.30 306** ⇑ P **P** **07 34 21.5 -1.0**
HNS sP **sP** **07 34 30.0 -0.8**
HNS PP **PnPn** **07 35 12.6 +1.2**
HNS S **S** **07 39 03.8 -3.6**
HNS pmax pmax
comp=N,19nm,0.9s
HNS LR LR
comp=N,5µm,16.7s
HNS LR LR
comp=N,950nm,18.3s
HNS LR LR
comp=N,5µm,15.9s
**BJT Baijiatuau 28.33 312** P **P** **07 34 20.8 -2.0**
**LYN LuoYang 29.17 299** P **P** **07 34 30.4 0.0**
LYN pP pP 07 34 34.9 -1.3
LYN S **S** **07 39 20.8 -0.5**
LYN pmax pmax
comp=N,32nm,0.5s
LYN pmax pmax
comp=N,430nm,5.5s
LYN LR LR
comp=N,3µm,18.9s
LYN LR LR
comp=N,4µm,17.9s
LYN LR LR
comp=N,7µm,19.9s
**HEH HeiHe 29.52 339** *eP* **P** **07 34 33.8 +0.5**
HEH sP **sP** **07 34 42.4 +0.9**
HEH S **S** **07 39 25.5 -0.9**
HEH pmax pmax
comp=N,65nm,1.0s
HEH LR LR
comp=N,3µm,17.9s
HEH LR LR
comp=N,6µm,16.8s
HEH LR LR
comp=N,8µm,17.8s
**NKL Nikolayevsk 29.70 357** *eP* **P** **07 34 35.7 +0.9**
NKL *eS* **S** **07 39 28.6 -0.5**
NKL pmax pmax
comp=E,74nm,1.0s
NKL pmax pmax
comp=N,77nm,0.9s
NKL pmax pmax
comp=Z,136nm,1.2s
NKL MLR MLR
comp=E,21µm,21.0s
NKL MLR MLR
comp=N,2µm,10.0s
NKL MLR MLR
comp=Z,7µm,19.0s
**TIY Taiyuan 30.10 305** *eP* **P** **07 34 42.8 +4.2**
TIY S **S** **07 39 36.6 +0.6**
TIY pmax pmax
comp=Z,350nm,3.8s
TIY LR LR
comp=Z,1µm,16.5s
TIY LR LR
comp=Z,3µm,15.8s
TIY LR LR
comp=Z,3µm,16.5s
**GTOI Gorontalo 30.18 224** P **P** **07 34 39.9 +0.5**
comp=Z,32nm,1.1s
**GULI GuiLin 30.18 280** *eP* **P** **07 34 41.3 +1.9**
GULI S **S** **07 39 37.5 +0.2**
GULI pmax pmax
comp=Z,10.0nm,1.0s
GULI pmax pmax
comp=Z,480nm,5.6s
GULI LR LR
comp=Z,920nm,18.1s
GULI LR LR
comp=Z,2µm,19.7s
GULI LR LR
comp=Z,3µm,21.9s
**MYLDM Lahad Datu 30.18 237** P **P** **07 34 40.8 +1.3**
**XLT XiLinHaoTe 30.34 319** *eP* **P** **07 34 41.3 +0.6**
XLT PP **PnPn** **07 35 39.1 -0.2**
XLT S **S** **07 39 37.9 -1.8**
XLT SS **ScP** **07 41 21.3 -0.1**
XLT pmax pmax
comp=Z,130nm,6.8s
XLT LR LR
comp=Z,330nm,16.1s
XLT LR LR
comp=Z,3µm,15.9s
XLT LR LR
comp=Z,4µm,15.4s
**TOLI2 Tolitoli 31.30 228** P **P** **07 34 48.6 -0.7**
TOLI2 IAmb IAmb 07 35 05.5
comp=Z,27nm,1.0s
**KKM Kota Kinabalu 31.45 241** P **P** **07 34 50.2 -0.6**
KKM IAmb IAmb 07 35 12.5
comp=Z,79nm,1.2s
**PETK Petropavlovsk- 31.49 16** P **P** **07 34 50.7 0.0**
comp=Z,3.7nm,1.0s,baz=195,slow=9.0,SNR=1.8
PETK LR LR 07 46 02.1
comp=Z,3µm,21.8s,baz=200,slow=33
comp=Z,3.7nm,1.0s
**QIZ Qiongzhong 31.62 268** P **P** **07 34 53.6 +1.4**
QIZ PP **PP** **07 36 00.4 -3.4**
QIZ S **S** **07 40 04.8 +4.8**
QIZ PcS **PcS** **07 41 32.6 +3.7**
QIZ pmax pmax
comp=Z,340nm,9.2s
QIZ LR LR
comp=Z,1µm,16.8s
QIZ LR LR
comp=Z,2µm,18.5s
QIZ LR LR
comp=Z,3µm,23.5s
**PET Petropavlovsk 31.67 18** *eP* **P** **07 34 51.9 -0.3**
PET *e* 07 36 01.8
PET *eS* **S** **07 40 00.6 +0.6**
PET pmax pmax
comp=Z,100nm,14.5s
PET pmax pmax
comp=Z,57nm,1.3s
PET pmax pmax
comp=Z,300nm,14.1s
**HHC Hu-ho-hao-te 31.86 311** *eP* **P** **07 34 54.5 +0.3**
HHC sP sP 07 35 01.8 -0.7
HHC PP **PP** **07 36 02.6 -3.7**
HHC S **S** **07 40 02.1 -1.4**
HHC SS **SnSn** **07 41 48.8 -3.5**
HHC pmax pmax
comp=Z,27nm,0.6s
HHC pmax pmax
comp=Z,100nm,4.8s
HHC LR LR
comp=Z,2µm,16.0s
HHC LR LR
comp=Z,2µm,17.6s
HHC LR LR
comp=Z,3µm,16.8s
**XAN Xi'an 31.94 297** ⇑ P **P** **07 34 55.8 +0.9**
XAN sP pwP 07 35 04.3 -2.8
XAN PP **PP** **07 36 03.9 -3.3**
XAN S **S** **07 40 09.8 +5.0**
XAN sS sS 07 40 17.4 +2.5
XAN pmax pmax
comp=Z,22nm,1.0s
XAN pmax pmax
comp=Z,480nm,9.9s
XAN LR LR
comp=Z,2µm,15.8s
XAN LR LR
comp=Z,4µm,16.5s
XAN LR LR
comp=Z,5µm,15.8s
**ZEA Zeya 32.60 342** *eP* **P** **07 35 01.4 +1.0**
ZEA *eS* **S** **07 40 11.4 -3.2**
ZEA pmax pmax
comp=N,40nm,1.1s
ZEA pmax pmax
comp=Z,60nm,0.9s
ZEA pmax pmax
comp=E,100nm,4.8s
ZEA pmax pmax
comp=Z,200nm,4.4s
ZEA smax smax
comp=N,300nm,14.8s
ZEA smax smax
comp=E,500nm,8.9s
**BTO Baotou 32.86 309** *eP* **P** **07 35 04.4 +1.5**
BTO pP **pP** **07 35 08.8 0.0**
BTO sP **sP** **07 35 12.0 +0.7**
BTO PP **PnPn** **07 36 10.3 -1.5**
BTO SS **SnSn** **07 42 17.6 +1.2**
BTO pmax pmax
comp=E,15nm,0.5s
BTO pmax pmax
comp=E,240nm,3.9s
BTO LR LR
comp=E,7µm,15.7s
BTO LR LR
comp=E,4µm,17.3s
BTO LR LR
comp=E,7µm,16.5s
**PMG Port Moresby 32.88 173** P **P** **07 35 03.1 -0.1**
**PMG Port Moresby 32.88 173** P **P** **07 35 03.0 -0.1**
**PMG Port Moresby 32.88 173** P **P** **07 35 01.9 -1.2**
PMG IAmb IAmb 07 35 33.0
comp=Z,37nm,0.9s
**PMG Port Moresby 32.88 173** *i* P **P** **07 35 02.7 -0.5**
PMG pmax pmax
comp=Z,29nm,0.9s
**GYA Guiyang 33.44 283** P **P** **07 35 10.8 +2.6**
GYA S **S** **07 40 29.4 +0.9**
GYA pmax pmax
comp=Z,25nm,1.4s
GYA LR LR
comp=Z,2µm,15.5s
GYA LR LR
comp=Z,3µm,21.5s
GYA LR LR
comp=Z,5µm,20.7s
**CD2 Chengdu 35.96 291** P **P** **07 35 30.4 +0.6**
CD2 pP pP 07 35 35.5 -0.3
CD2 S **S** **07 41 04.3 -2.7**
CD2 pmax pmax

CD2 pmax pmax
comp=Z,260nm,6.5s
CD2 LR LR
comp=Z,3µm,15.7s
CD2 LR LR
comp=Z,4µm,17.0s
CD2 LR LR
comp=Z,4µm,16.0s
**LZH Lanzhou 36.39 299** *e*P **P 07 35 29.8 -3.8**
LZH PP **PP 07 36 58.3 +1.8**
LZH S **S 07 41 09.8 -3.9**
LZH pmax pmax
comp=Z,310nm,5.8s
LZH LR LR
comp=Z,2µm,15.5s
LZH LR LR
comp=Z,3µm,16.8s
LZH LR LR
comp=Z,3µm,15.8s
**MA2 Magadan 36.43 6** P P 07 35 26.4 -7.0
**MA2 Magadan 36.43 6** P **P 07 35 34.8 +1.4**
**MA2 Magadan 36.43 6** LR LR 07 48 52.3
comp=Z,1µm,21.8s,baz=196,slow=33
**MA2 Magadan 36.43 6** *i* P **P 07 35 34.2 +0.8**
MA2 pmax pmax
comp=Z,57nm,2.2s
**MA2 Magadan 36.43 6** P **P 07 35 35.7 +2.3**
comp=Z,32nm,1.6s,comp=Z,609nm
**HNR Honiara 36.46 152** LR LR 07 51 41.2
comp=Z,25µm,18.3s,baz=322,slow=38
**CIT Chita 36.56 329** *e*P **P 07 35 37.5 +2.8**
CIT *e* 07 35 46.0
CIT *e* 07 36 57.7
CIT *e* 07 37 21.0
**KAPI Kappang 36.59 222** P **P 07 35 35.3 0.0**
**KAPI Kappang 36.59 222** LR LR 07 49 32.4
comp=Z,2µm,20.5s,baz=53,slow=35
**KAPI Kappang 36.59 222** P **P 07 35 36.1 +0.8**
KAPI P **pP 07 35 36.3 -4.9**
**KAPI Kappang 36.59 222** *i* P **P 07 35 35.2 0.0**
KAPI pmax pmax
comp=Z,40nm,1.0s
**UBPT Khong Chiam 36.69 264** P **P 07 35 37.5 +1.4**
**SBUM Sibu 36.78 240** P **P 07 35 37.0 +0.1**
**KMI Kunming 37.07 281** ⇑P **P 07 35 40.8 +1.2**
KMI pP sP 07 35 47.8 -0.2
KMI PP **PnPn 07 37 08.3 +3.6**
KMI S **S 07 41 23.0 -1.6**
KMI pmax pmax
comp=Z,24nm,1.4s
KMI pmax pmax
comp=Z,440nm,7.1s
KMI LR LR
comp=Z,980nm,15.2s
KMI LR LR
comp=Z,2µm,18.8s
KMI LR LR
comp=Z,2µm,20.5s
**COEN Coen 37.21 180** P **P 07 35 42.5 +2.0**
**COEN Coen 37.21 180** P **P 07 35 40.7 +0.2**
COEN IAmb IAmb 07 35 44.0
comp=Z,34nm,0.8s
**COEN Coen 37.21 180** P **P 07 35 39.8 -0.7**
comp=Z,48nm,0.8s
**SHEM Shemya Is, Ala 37.34 31** LR LR 07 48 28.1
comp=Z,2µm,21.9s,baz=272,slow=32
**KDU Kakadu 37.53 198** P **P 07 35 42.6 -0.5**
**KDU Kakadu 37.53 198** P **P 07 35 40.8 -2.3**
comp=Z,15nm,0.9s
**ULN Ulaanbaatar 37.78 319** P **P 07 35 43.8 -1.5**
**ULN Ulaanbaatar 37.78 319** P **P 07 35 45.9 +0.7**
ULN P **P 07 35 45.9 +0.7**
ULN S **S 07 41 34.8 +0.1**
ULN S **S 07 41 34.8 +0.1**
**ULN Ulaanbaatar 37.78 319** *ce*P **P 07 35 43.9 -1.4**
ULN pmax pmax
comp=Z,21nm,1.3s
**PZH PanZhiHua 37.84 283** P **P 07 35 46.9 +0.9**
PZH PcP **PcP 07 38 05.3 +3.1**
PZH S **S 07 41 36.1 +0.2**
PZH SS **SnSn 07 44 13.6 -3.9**
PZH pmax pmax
comp=Z,70nm,0.8s
PZH pmax pmax
comp=Z,390nm,7.5s
PZH LR LR
comp=Z,2µm,19.1s
PZH LR LR
comp=Z,3µm,21.0s
PZH LR LR
comp=Z,4µm,20.6s
**SOEI Soe 38.01 212** P **P 07 35 51.1 +3.7**
**SOEI Soe 38.01 212** P **P 07 35 47.4 0.0**
**NONG Nongkai 38.01 270** P **P 07 35 49.0 +1.7**
**MTN Manton Dam 38.07 200** P **P 07 35 47.5 -0.3**
**MMRI Maumere 38.09 216** P **P 07 35 48.8 +0.8**
**SONM Songino Array 38.16 319** P **P 07 35 47.9 -0.6**
**SONM Songino Array 38.16 319** P **P 07 35 47.4 -1.1**
comp=Z,6.0nm,0.8s,baz=122,slow=8.1,SNR=27
SONM ScP **ScP 07 41 49.4 +0.2**
comp=Z,1.8nm,1.1s,baz=155,slow=4.4,SNR=5.2
SONM LR LR 07 52 35.6
comp=Z,3µm,18.2s,baz=92,slow=38
comp=Z,6.0nm,0.8s
**SONM Songino Array 38.16 319** P **P 07 35 47.9 -0.6**
SONM pmax pmax
comp=Z,20nm,1.4s
**AMKA Amchitka 39.16 36** P **P 07 35 57.7 +1.1**
**YAK Yakutsk 39.66 350** P **P 07 36 00.9 +0.3**
YAK IAmb IAmb 07 36 16.0
comp=Z,59nm,0.7s
**YAK Yakutsk 39.66 350** LR LR 07 52 50.6
comp=Z,2µm,18.6s,baz=158,slow=37
**YAK Yakutsk 39.66 350** *eP* **P 07 35 59.4 -1.2**
YAK *e**PP **pP 07 36 05.8 -0.7**
YAK *e* 07 37 29.7
YAK *e*PPP PPP 07 37 53.7
YAK *e*S **S 07 42 01.6 -0.7**
YAK *e*SS **SnSn 07 44 59.6 -0.8**
YAK *e* 07 46 04.4
YAK pmax pmax
comp=Z,27nm,0.7s
YAK pmax pmax
comp=N,6.0nm,1.6s
YAK pmax pmax
comp=E,3.0nm,0.8s
YAK pmax pmax
comp=Z,140nm,3.8s
YAK pmax pmax
comp=N,100nm,3.7s
YAK pmax pmax
comp=E,125nm,4.8s
YAK smax smax
comp=E,408nm,5.1s
YAK smax smax
comp=N,369nm,6.8s
YAK MLR MLR
comp=Z,3µm,24.0s
YAK MLR MLR
comp=N,2µm,25.0s
YAK MLR MLR
comp=E,650nm,12.0s
**SEY Seymchan 39.89 6** *ce*P **P 07 36 02.8 +0.3**
SEY pmax pmax
comp=Z,27nm,2.5s
**CRAI Chiangrai 40.04 274** P **P 07 36 04.3 0.0**
**GTA Gaotai 40.09 304** P **P 07 36 07.0 +2.3**
GTA S **S 07 42 10.3 +0.7**
GTA sS sS 07 42 20.6 +0.9
GTA pmax pmax
comp=Z,9.0nm,0.8s
GTA pmax pmax
comp=Z,270nm,10.9s
GTA LR LR
comp=Z,1µm,15.3s
GTA LR LR
comp=Z,2µm,17.1s
GTA LR LR
comp=Z,2µm,17.8s
**PHRA Phrae 40.58 271** P **P 07 36 10.0 +1.2**
**TNCH TengChong 40.88 282** ⇑P **P 07 36 11.3 -0.2**
TNCH sP pP 07 36 16.9 -0.6
TNCH pmax pmax
comp=Z,300nm,3.6s

TNCH LR LR
comp=Z,940nm,11.3s
TNCH LR LR
comp=Z,1µm,17.7s
TNCH LR LR
comp=Z,1µm,16.3s
**ZAK Zakamensk 41.12 321** *e*P **P 07 36 11.8 -1.2**
ZAK pmax pmax
comp=Z,21nm,1.2s
**MTSU Mount Surprise 41.37 179** P **P 07 36 16.3 +1.1**
**IRK Irkutsk 41.42 324** *e*P **P 07 36 14.2 -1.1**
IRK pmax pmax
comp=Z,45nm,2.0s
**KNRA Kununurra 41.50 202** P **P 07 36 14.7 -1.5**
KNRA IAmb IAmb 07 36 16.9
comp=Z,46nm,0.8s
**KNRA Kununurra 41.50 202** P **P 07 36 13.8 -2.4**
**CMAR Chiang Mai Arr 41.77 272** P **P 07 36 18.4 -0.2**
**CMAR Chiang Mai Arr 41.77 272** P **P 07 36 19.5 +0.9**
comp=Z,8.1nm,0.9s,baz=56,slow=8.5,SNR=36
CMAR PcP **PcP 07 38 14.2 -0.6**
comp=Z,1.9nm,0.8s,baz=46,slow=3.9,SNR=2.0
CMAR ScP **ScP 07 42 03.6 +0.1**
comp=Z,0.5nm,0.3s,baz=46,slow=3.9,SNR=1.3
CMAR LR LR 07 52 49.6
comp=Z,3µm,20.2s,baz=75,slow=35
comp=Z,8.1nm,0.9s
**CMAR Chiang Mai Arr 41.77 272** *ce*P **P 07 36 19.6 +1.0**
CMAR pmax pmax
comp=Z,8.0nm,0.8s
**TV1H Townsville Har 42.61 175** P **P 07 36 26.2 +1.0**
**JAGI Jajag, Banyuwa 42.79 226** P **P 07 36 27.9 +1.0**
**JAGI Jajag, Banyuwa 42.79 226** P **P 07 36 27.5 +0.6**
**MOY Mondy 42.98 322** *e*P **P 07 36 27.8 -0.3**
MOY pmax pmax
comp=Z,27nm,2.9s
**CTAO Charters Tower 43.39 176** P **P 07 36 31.0 -0.6**
**CTAO Charters Tower 43.39 176** P **P 07 36 30.6 -1.0**
**CTAO Charters Tower 43.39 176** P **P 07 36 30.6 -1.0**
CTAO pmax pmax
comp=Z,26nm,0.9s
**GOMU GeErMu 43.66 298** P **P 07 36 36.0 +1.8**
GOMU S **S 07 43 02.3 -0.7**
GOMU pmax pmax
comp=Z,67nm,0.8s
GOMU LR LR
comp=Z,2µm,16.0s
GOMU LR LR
comp=Z,840nm,15.7s
GOMU LR LR
comp=Z,2µm,16.4s
**WB0 Warramunga Arr 43.89 192** P **P 07 36 35.0 -0.7**
**QIS Mount Isa 43.94 185** P **P 07 36 35.6 -0.4**
**QIS Mount Isa 43.94 185** P **P 07 36 34.9 -1.1**
comp=Z,15nm,1.5s
**WRAB Tennant Creek 44.06 192** *i* P **P 07 36 37.0 0.0**
WRAB pmax pmax
comp=Z,13nm,0.9s
**WRA Warramunga Arr 44.07 192** P **P 07 36 36.5 -0.6**
**WRA Warramunga Arr 44.07 192** P **P 07 36 36.4 -0.8**
comp=Z,8.9nm,0.4s,baz=16,slow=9.2,SNR=143
WRA PcP **PP 07 38 20.6 +0.4**
comp=Z,12nm,0.9s,baz=4.2,slow=3.4,SNR=6.3
WRA ScP **ScP 07 42 11.6 -1.0**
comp=Z,3.4nm,1.0s,baz=3.6,slow=4.4,SNR=4.8
WRA S **S 07 43 03.7 -4.6**
comp=Z,2.7nm,1.1s,baz=13,slow=13,SNR=3.3
WRA LR LR 07 55 04.0
comp=Z,1µm,19.4s,baz=7.5,slow=36
comp=Z,8.9nm,0.4s
**WRA Warramunga Arr 44.07 192** *i* P **P 07 36 36.0 -1.1**
WRA pmax pmax
comp=Z,6.0nm,0.3s
**KULM Kulim 45.03 253** P **P 07 36 44.8 -0.1**
KULM IAmb IAmb 07 37 02.0
comp=Z,28nm,0.9s
**IPM Ipoh 45.09 252** P **P 07 36 46.2 +0.8**
**NIKH Nikolski High 46.41 38** P **P 07 36 55.7 +0.4**
baz=250
**BILL Bilibino 46.72 12** ⇑*eP* **P 07 36 59.6 +2.0**
BILL *e* 07 38 46.1
BILL pmax pmax
comp=Z,14nm,1.3s
**SHL Shillong 46.75 284** P **P 07 36 57.9 -0.8**
**SHL Shillong 46.75 284** P **P 07 36 59.4 +0.7**
**SHL Shillong 46.75 284** P **P 07 36 57.9 -0.8**
**LSA Lhasa 46.89 289** P **P 07 37 02.5 +2.5**
LSA S **S 07 43 50.4 +0.5**
LSA LR LR
comp=Z,1µm,18.4s
LSA LR LR
comp=Z,1µm,17.5s
LSA LR LR
comp=Z,2µm,18.4s
**LSA Lhasa 46.89 289** P **P 07 37 01.1 +1.1**
LSA IAmb IAmb 07 37 03.5
comp=Z,34nm,0.9s
**LSA Lhasa 46.89 289** P **P 07 37 00.1 +0.1**
LSA P **P 07 37 00.1 +0.1**
**LSA Lhasa 46.89 289** P **P 07 37 01.1 +1.1**
LSA pmax pmax
comp=Z,34nm,0.9s
**RK1H Rockhampton Ha 47.09 171** P **P 07 37 00.3 -0.6**
**SPIA Saint Paul Isl 47.31 32** P **P 07 37 02.8 +0.5**
baz=244
**PSI Prapat 47.73 251** P **P 07 37 07.6 +1.3**
**PSI Prapat 47.73 251** P **P 07 37 06.1 -0.2**
PSI pmax pmax
comp=Z,33nm,0.9s
**AS01 Alice Springs 47.77 192** P **P 07 37 05.7 -0.6**
**AS31 Alice Springs 47.78 192** P **P 07 37 05.9 -0.5**
**AS31 Alice Springs 47.78 192** P **P 07 37 05.6 -0.7**
comp=Z,4.6nm,0.6s
**RPSI Rantau Prapat 47.78 251** P **P 07 37 06.1 -0.4**
RPSI IAmb IAmb 07 37 08.5
comp=Z,33nm,0.9s
**ASAR Alice Springs 47.78 192** P **P 07 37 05.5 -0.9**
comp=Z,1.6nm,0.5s,baz=12,slow=7.4,SNR=25
ASAR PcP **PcP 07 38 34.9 -0.3**
comp=Z,2.7nm,0.8s,baz=0.6,slow=3.0,SNR=4.7
ASAR ScP **ScP 07 42 27.6 -0.4**
comp=Z,0.9nm,0.8s,baz=12,slow=4.0,SNR=4.2
ASAR S **S 07 43 59.1 -2.6**
comp=Z,3.0nm,1.2s,baz=18,slow=20,SNR=5.5
ASAR LR LR 07 55 49.5
comp=Z,2µm,22.0s,baz=7.5,slow=34
comp=Z,1.6nm,0.5s
**UNV Unalaska Valle 48.02 38** P **P 07 37 08.4 +0.5**
baz=251
**TIXI Tiksi 48.91 354** LR LR 07 59 42.6
comp=Z,561nm,21.1s,baz=177,slow=38
**TIXI Tiksi 48.91 354** *i* P **P 07 37 16.1 +1.6**
TIXI pmax pmax
comp=Z,18nm,0.9s
**EIDS Eidsvold 49.12 171** P **P 07 37 15.2 -1.3**
**EIDS Eidsvold 49.12 171** P **P 07 37 11.8 -4.7**
**WMQ Urumqi 49.68 308** *eP* **P 07 37 23.0 +2.1**
WMQ pP sP 07 37 27.8 -1.7
WMQ S **S 07 44 26.6 -1.7**
WMQ ScS **ScS 07 47 09.6 -1.5**
WMQ pmax pmax
comp=Z,42nm,0.9s
WMQ pmax pmax
comp=Z,240nm,5.7s
WMQ LR LR
comp=Z,2µm,16.9s
WMQ LR LR
comp=Z,2µm,16.9s
WMQ LR LR
comp=Z,1µm,20.9s
**QLP Quilpie 49.78 179** P **P 07 37 22.9 +1.3**
**GAMB Gambell 49.88 24** P **P 07 37 22.7 +0.7**
baz=238
**MBWA Marble Bar 50.04 209** P **P 07 37 23.2 -0.5**
**MBWA Marble Bar 50.04 209** P **P 07 37 23.1 -0.5**
**MBWA Marble Bar 50.04 209** P **P 07 37 21.9 -1.9**
comp=Z,63nm,1.0s
**MBWA Marble Bar 50.04 209** P **P 07 37 23.4 -0.3**
MBWA P **P 07 37 23.4 -0.3**
**FALS False Pass 50.05 37** P **P 07 37 23.9 +0.5**
baz=253
**PSA00 Pilbara Seismi 50.35 209** P **P 07 37 26.0 -0.1**
**PSA00 Pilbara Seismi 50.35 209** P **P 07 37 25.7 -0.3**
**PSA00 Pilbara Seismi 50.35 209** P **P 07 37 25.2 -0.8**
PSA00 IAmb IAmb 07 37 27.3
comp=Z,36nm,0.9s
**PSA00 Pilbara Seismi 50.35 209** P **P 07 37 25.5 -0.6**
comp=Z,74nm,1.0s
**WRKA Warakurna 50.43 198** P **P 07 37 26.5 -0.1**
**WRKA Warakurna 50.43 198** P **P 07 37 25.3 -1.3**
comp=Z,24nm,0.9s
**NOUC Port Laguerre 50.46 152** P **P 07 37 26.6 -0.2**
**DZM Mont Dzumac 50.49 152** P **P 07 37 26.8 -0.4**
**DZM Mont Dzumac 50.49 152** *eP* **P 07 37 27.7 +0.5**
comp=Z,80nm,1.4s
**DZM Mont Dzumac 50.49 152** *e*PP **PP 07 39 19.8 -3.5**
comp=Z,52nm,21.8s
DZM *e*S **S 07 44 41.0 +1.1**
comp=Z,236nm,26.1s
DZM *e*SS **SS 07 48 16.5 +2.1**
comp=Z,352nm,24.2s
DZM *e*LR LR 07 51 54.2
comp=Z,4µm,25.1s
**DZM Mont Dzumac 50.49 152** P **P 07 37 27.7 +0.5**
DZM IAmb IAmb 07 37 44.5
comp=Z,25nm,0.9s
**DZM Mont Dzumac 50.49 152** LR LR 07 56 38.7
comp=Z,2µm,20.6s,baz=348,slow=33
**M11K Mekoryuk 50.57 30** P **P 07 37 27.8 +0.6**
baz=246
**DGZ Jazzator, Alta 50.64 316** *i* P **P 07 37 28.3 +0.1**
DGZ pmax pmax
comp=Z,35nm,1.1s
**YATNC Mamie plateau, 50.67 152** P **P 07 37 26.6 -1.9**
**INKA Innaminka 50.99 183** P **P 07 37 30.4 -0.3**
**S12K Black Hills 51.04 36** P **P 07 37 31.5 +0.6**
baz=254
**AUWSH Wavell State H 51.42 169** P **P 07 37 33.4 -0.6**
**OOD Oodnadatta 51.53 189** P **P 07 37 34.0 -0.8**
**SDPT Sand Point 51.81 37** P **P 07 37 36.5 -0.1**
baz=256
**K13K Kusilvak Mount 51.88 28** P **P 07 37 37.8 +0.7**
baz=247
**M13K Dall Lake 51.89 30** P **P 07 37 37.4 +0.3**
baz=249
**ZSN Zaisan 52.01 313** *eP* **P 07 37 38.8 +0.4**
comp=Z,31nm,1.2s,baz=313
**ZSN Zaisan 52.01 313** *eP* **P 07 37 38.7 +0.4**
ZSN pmax pmax
comp=Z,31nm,1.2s
**CHNA Chernabura Isl 52.19 38** P **P 07 37 39.2 -0.3**
baz=257
**TNA Tin City 52.20 23** P **P 07 37 40.0 +0.7**
baz=241
**O14K Tigyukauivet M 52.50 32** P **P 07 37 42.3 +0.6**
baz=252
**N14K Kuskokwak Cree 52.51 31** P **P 07 37 42.5 +0.8**
baz=251
**L14K Kuka Creek 52.53 29** P **P 07 37 43.7 +1.8**
L14K IAmb IAmb 07 37 56.0
comp=Z,97nm,1.9s
**L14K Kuka Creek 52.53 29** P **P 07 37 42.1 +0.3**
baz=249,SNR=5.9
**S14K Fog Glacier 52.55 36** P **P 07 37 42.4 +0.1**
baz=256
**M14K Bethel 52.65 30** P **P 07 37 43.9 +1.1**
M14K IAmb IAmb 07 37 57.8
comp=Z,48nm,1.1s
**M14K Bethel 52.65 30** P **P 07 37 43.4 +0.6**
baz=250,SNR=9.0
**J14K Nanvaranak Lak 52.67 28** P **P 07 37 43.8 +0.9**
baz=247
**ANM Nome 52.69 25** P **P 07 37 43.8 +0.7**
baz=244
**F14K Arctic Creek 52.74 24** P **P 07 37 44.8 +1.4**
baz=242
**AULRC Lightning Rdg 52.78 175** P **P 07 37 44.9 +0.8**
**ZAA0 Zalesovo Array 53.00 321** P **P 07 37 45.0 -0.5**
**ZALV Zalesovo Beam 53.00 321** P **P 07 37 45.1 -0.4**
comp=Z,5.8nm,0.7s,baz=101,slow=7.9,SNR=23
ZALV LR LR 08 00 56.9
comp=Z,1µm,19.8s,baz=98,slow=37
comp=Z,5.8nm,0.7s
**ZALV Zalesovo Beam 53.00 321** *i* P **P 07 37 45.5 0.0**
ZALV pmax pmax
comp=Z,7.0nm,0.8s
**MSVF Nonsavu 53.08 137** *i* P **P 07 37 48.3 +1.7**
**CHGN Chignik 53.17 36** P **P 07 37 48.1 +1.4**
baz=257
**O15K Ungalikthiuk R 53.18 33** P **P 07 37 47.5 +0.8**
baz=253
**L15K Ungalak Mounta 53.18 29** P **P 07 37 47.6 +0.9**
baz=250
**M15K Kasigluk River 53.23 31** P **P 07 37 48.1 +1.0**
baz=252
**N15K Kwethluk River 53.34 31** P **P 07 37 48.8 +0.9**
baz=252,SNR=7.7
**K15K Wolf Creek Mou 53.38 28** P **P 07 37 49.8 +1.6**
K15K IAmb IAmb 07 37 51.1
comp=Z,19nm,0.9s
**K15K Wolf Creek Mou 53.38 28** P **P 07 37 49.0 +0.8**
baz=250,SNR=6.3
**F15K North Star Dit 53.47 24** P **P 07 37 48.9 +0.2**
baz=244
**MK31 Makanchi Array 53.71 312** P **P 07 37 50.9 -0.1**
MK31 IAmb IAmb 07 37 52.8
comp=Z,21nm,0.9s
**MK31 Makanchi Array 53.71 312** *i* P **P 07 37 50.6 -0.3**
MK31 pmax pmax
comp=Z,27nm,0.9s
**MKAR Makanchi Array 53.71 312** P **P 07 37 50.6 -0.3**
**MKAR Makanchi Array 53.71 312** P **P 07 37 51.0 +0.1**
comp=Z,17nm,0.8s,baz=92,slow=8.9,SNR=77
MKAR LR LR 08 00 56.1
comp=Z,864nm,20.6s,baz=150,slow=36
comp=Z,17nm,0.8s
**MKAR Makanchi Array 53.71 312** P **P 07 37 51.0 +0.1**
**LCRK Leigh Creek 53.86 186** P **P 07 37 51.3 -0.7**
**R16K Pilot Point 53.91 35** P **P 07 37 52.4 +0.3**
baz=257
**MAKZ Makanchi 53.93 312** P **P 07 37 52.3 -0.2**
MAKZ IAmb IAmb 07 37 54.5
comp=Z,38nm,0.9s
**MAKZ Makanchi 53.93 312** P **P 07 37 52.3 -0.2**
MAKZ pmax pmax
comp=Z,38nm,1.0s
**H16K Elim 53.95 26** P **P 07 37 53.0 +0.7**
baz=247
**P16K Nushagak River 54.05 33** P **P 07 37 53.7 +0.6**
baz=255
**N16K Nishlik Lake 54.06 31** P **P 07 37 54.1 +0.8**
baz=254,SNR=12
**L16K Owhat River 54.10 30** P **P 07 37 54.1 +0.7**
baz=252
**J16K Anvik River 54.12 28** P **P 07 37 54.5 +0.9**
baz=250
**M16K Timber Creek 54.13 30** P **P 07 37 54.3 +0.6**
baz=253,SNR=7.0
**O16K Kokwok River B 54.15 32** P **P 07 37 54.3 +0.5**
baz=255,SNR=6.4
**G16K Koyuk River 54.20 25** P **P 07 37 54.4 +0.3**
baz=247
**MULG Mulgathing 54.22 190** P **P 07 37 54.4 -0.2**
**I17K Unalakleet 54.30 27** P **P 07 37 55.3 +0.5**
baz=249
**C16K Lisburne Hills 54.40 21** P **P 07 37 56.0 +0.4**
baz=242
**R17L Mt. Peulik Vol 54.56 35** P **P 07 37 57.1 +0.2**
baz=258
**CHIR Chirikof Islan 54.61 37** P **P 07 37 57.6 +0.3**
baz=260
**O17K Koliganek Bris 54.68 32** P **P 07 37 58.0 +0.3**
baz=256
**AUPHS Peel High Scho 54.73 172** P **P 07 37 56.9 -1.5**
**CMSA Cobar Meteorol 54.75 178** P **P 07 37 59.1 +0.7**
**CMSA Cobar Meteorol 54.75 178** P **P 07 37 58.5 +0.1**
comp=Z,17nm,1.2s
**L17K Donlin 54.76 29** P **P 07 37 57.4 -0.8**
baz=253,SNR=9.1
**J17K VABM Dome 54.81 28** P **P 07 37 60.0 +1.4**
**J17K VABM Dome 54.81 28** P **P 07 37 58.6 0.0**
baz=251
**N17K Nushagak Hills 54.83 31** P **P 07 37 59.9 +1.1**
N17K IAmb IAmb 07 38 02.4
comp=Z,22nm,1.0s
**N17K Nushagak Hills 54.83 31** P **P 07 37 59.3 +0.5**
baz=255,SNR=7.2
**P17K Kvichak River 54.87 33** P **P 07 38 00.2 +1.1**
baz=257
**D17K Noatak River 54.90 22** P **P 07 37 59.5 +0.4**
baz=244
**G17K Kiwalik Mounta 54.90 25** P **P 07 38 00.5 +1.3**

baz=248
**K17K Iditarod 54.93 29 P P 07 38 00.1 +0.6**
baz=252,SNR=11
**Q17K Contact Creek 54.94 34 P P 07 38 00.1 +0.3**
baz=258
**M17K Holitna River 54.95 30 P P 07 37 59.9 +0.3**
baz=254,SNR=6.2
**H17K Granite Mounta 54.99 26 P P 07 38 00.9 +1.0**
baz=249,SNR=6.5
**F17K Baldwin Pennin 55.03 24 P P 07 38 01.1 +1.0**
baz=247
**STKA Stephens Creek 55.08 182 P P 07 38 00.4 -0.4**
**STKA Stephens Creek 55.08 182 P P 07 37 58.5 -2.3**
comp=Z,3.9nm,0.9s
**STKA Stephens Creek 55.08 182 P P 07 37 59.8 -1.0**
comp=Z,11nm,0.7s,baz=4.7,slow=7.1,SNR=12
STKA LR LR 08 02 09.0
comp=Z,1µm,21.1s,baz=359,slow=37
comp=Z,11nm,0.7s
**E17K Hotham Inlet 55.08 23 P P 07 38 01.9 +1.4**
baz=246
**RDOG Red Dog Mine 55.11 22 P P 07 38 01.3 +0.6**
baz=244
**C17K DeLong Mountai 55.21 21 P P 07 38 01.3 -0.1**
baz=244
**MEEK Meekatharra 55.33 207 P P 07 38 01.6 -1.2**
**MEEK Meekatharra 55.33 207 P P 07 38 01.0 -1.7**
comp=Z,41nm,1.0s
**Q18K Katmai Hardscr 55.48 34 P P 07 38 03.6 0.0**
baz=258
**N18K Kilae Creek 55.49 31 P P 07 38 05.0 +1.5**
N18K IAmb IAmb 07 38 17.9
comp=Z,20nm,1.1s
**N18K Kilae Creek 55.49 31 P P 07 38 04.3 +0.8**
baz=256
**L18K Granite Mounta 55.51 29 P P 07 38 03.4 -0.3**
baz=254,SNR=8.2
**P18K Big Mountain, 55.52 33 P P 07 38 04.3 +0.5**
baz=258
**SII Sitkinak Islan 55.53 36 P P 07 38 04.1 +0.2**
baz=260
**R18K Karluk 55.56 35 P P 07 38 04.3 +0.3**
baz=260
**PDGK Podgornoye 55.62 307 P P 07 38 04.7 -0.3**
**O18K Koktuh Hills 55.63 32 P P 07 38 05.8 +1.2**
**O18K Koktuh Hills 55.63 32 P P 07 38 05.1 +0.6**
baz=257,SNR=8.2
**SHLS Shalkode 55.65 307** *eP* **P 07 38 03.0 -2.2**
comp=Z,12nm,1.0s,baz=307
**SHLS Shalkode 55.65 307** *eP* **P 07 38 02.9 -2.2**
SHLS pmax pmax
comp=Z,12nm,1.0s
**E18K Tukpahlearik C 55.65 23 P P 07 38 06.3 +1.7**
E18K IAmb IAmb 07 38 21.4
comp=Z,31nm,1.1s
**E18K Tukpahlearik C 55.65 23 P P 07 38 05.5 +0.9**
baz=247,SNR=7.2
**H18K Honhosa River 55.68 26 P P 07 38 05.7 +0.9**
baz=251
**F18K Selawik 55.69 24 P P 07 38 05.2 +0.4**
baz=249
**M18K Stony River 55.72 30 P P 07 38 05.8 +0.6**
baz=256,SNR=7.2
**G18K Tagagawik 55.81 25 P P 07 38 06.7 +0.9**
G18K IAmb IAmb 07 38 18.2
comp=Z,24nm,1.1s
**G18K Tagagawik 55.81 25 P P 07 38 06.7 +0.9**
baz=250,SNR=7.8
**J18K Innoko River 55.84 28 P P 07 38 06.7 +0.6**
baz=254
**C18K Utukok River 55.94 21 P P 07 38 06.2 -0.6**
baz=246
**FORT Forrest 55.95 196 P P 07 38 06.7 -0.4**
**FORT Forrest 55.95 196 P P 07 38 04.9 -2.1**
**UZB Uzynbulak 55.97 307** *eP* **P 07 38 07.6 +0.1**
comp=Z,10nm,1.1s,baz=307
**UZB Uzynbulak 55.97 307** *eP* **P 07 38 07.6 +0.1**
UZB pmax pmax
comp=Z,10.0nm,1.1s
**B18K Kokolik River 56.05 20 P P 07 38 07.8 +0.4**
baz=245
**OHAK Old Harbor 56.12 36 P P 07 38 08.3 +0.2**
baz=261
**O19K Port Alsworth 56.14 32 P P 07 38 09.0 +0.8**
baz=258
**GCSA Galena City Sc 56.15 26 P P 07 38 08.5 +0.3**
baz=252
**N19K Bonanza Creek 56.19 31 P P 07 38 09.0 +0.3**
baz=257,SNR=8.0
**KPKS Kokpek 56.21 308** *eP* **P 07 38 09.3 +0.2**
comp=Z,8.9nm,0.9s,baz=308
**KPKS Kokpek 56.21 308** *eP* **P 07 38 09.3 +0.2**
KPKS pmax pmax
comp=Z,9.0nm,0.9s
**Q19K Cape Douglas, 56.23 34 P P 07 38 09.2 +0.3**
baz=259
**L19K White Mountain 56.33 30 P P 07 38 10.4 +0.8**
baz=256,SNR=12
**KURK Kurchatov 56.37 316 P P 07 38 09.4 -0.6**
**KURK Kurchatov 56.37 316 P P 07 38 10.5 +0.4**
KURK P P **07 38 10.5 +0.4**
KURK S S **07 45 56.4 -2.6**
KURK S S **07 45 56.4 -2.6**
**KURK Kurchatov 56.37 316** *ceP* **P 07 38 09.8 -0.2**
KURK pmax pmax
comp=Z,80nm,1.0s
**TDK Taldyqorghan 56.38 309** *eP* **P 07 38 10.6 +0.4**
baz=309
**TDK Taldyqorghan 56.38 309** *eP* **P 07 38 10.6 +0.4**
**ZHN Zhinishke 56.40 307** *eP* **P 07 38 10.8 +0.3**
comp=Z,9.0nm,1.0s,baz=307
**ZHN Zhinishke 56.40 307** *eP* **P 07 38 10.7 +0.3**
ZHN pmax pmax
comp=Z,9.0nm,1.0s
**SATY Saty 56.42 307** *eP* **P 07 38 11.0 +0.2**
comp=Z,13nm,1.0s,baz=307
**SATY Saty 56.42 307** *eP* **P 07 38 10.9 +0.2**
SATY pmax pmax
comp=Z,13nm,1.0s
**KURBB Kurchatov Arra 56.43 316 P P 07 38 10.3 -0.1**
comp=Z,64nm,0.9s,baz=94,slow=7.6,SNR=226
KURBB LR LR 08 03 44.3
comp=Z,2µm,18.0s,baz=128,slow=37
KURBB PKPPKP **P'P'df 08 08 10.1 -1.1**
comp=Z,0.1nm,0.3s,baz=252,slow=3.5,SNR=4.1
comp=Z,64nm,0.9s
**PRZ Przheval'sk 56.45 306 P P 07 38 11.4 +0.5**
**PRZ Przheval'sk 56.45 306 P P 07 38 11.4 +0.5**
PRZ pmax pmax
comp=Z,75nm,0.8s
**J19K Poorman 56.46 28 P P 07 38 11.1 +0.7**
J19K IAmb IAmb 07 38 25.1
comp=Z,25nm,1.0s
**J19K Poorman 56.46 28 P P 07 38 11.3 +0.8**
baz=254,SNR=16
**F19K Shaleruckik Mo 56.47 24 P P 07 38 11.2 +0.8**
baz=250
**M19K Big River Lodg 56.48 30 P P 07 38 11.1 +0.5**
baz=257
**G19K Purcell Mounta 56.50 25 P P 07 38 11.0 +0.3**
baz=251,SNR=6.4
**H19K Roundabout Mou 56.56 26 P P 07 38 11.9 +0.8**
baz=252,SNR=12
**P19K Oil Pt 56.57 33 P P 07 38 11.4 +0.1**
baz=259
**KDAK Kodiak Island 56.58 35 LR LR** 07 59 39.7
comp=Z,2µm,21.7s,baz=269,slow=33
**KDAK Kodiak Island 56.58 35 P P 07 38 11.3 -0.1**
baz=261
**KDAK Kodiak Island 56.58 35** *i* **P P 07 38 12.4 +1.0**
KDAK pmax pmax
comp=Z,17nm,0.9s
**A19K Wainwright 56.64 20 P P 07 38 11.7 +0.1**
baz=245
**C19K Lookout Ridge 56.66 21 P P 07 38 12.0 +0.2**
baz=247,SNR=6.2
**HTT Hallett 56.76 185 P P 07 38 11.6 -1.4**
comp=Z,37nm,1.3s
**ARXS Arharly 56.81 308** *eP* **P 07 38 13.6 +0.3**
**Q20K Shuyak Island 56.81 34 P P 07 38 12.9 -0.1**
baz=261
**L20K Farewell, AK 56.84 30 P P 07 38 13.4 +0.2**
baz=257
**E19K Redstone River 56.88 23 P P 07 38 14.2 +0.9**
baz=250,SNR=8.5
**D19K Kuna River 56.93 22 P P 07 38 14.3 +0.6**
baz=249
**O20K Slope Mountain 56.95 32 P P 07 38 13.9 -0.1**
baz=260
**K20K Telida 56.96 28 P P 07 38 15.2 +1.1**
baz=256,SNR=13
**M20K Styx River 57.06 30 P P 07 38 15.6 +0.8**
baz=258
**J20K Nowinta River 57.13 28 P P 07 38 15.6 +0.4**
baz=256,SNR=28
**I20K Naaghedeneel 57.15 27 P P 07 38 15.9 +0.7**
baz=255,SNR=5.6
**H20K Anotleneega Mo 57.18 26 P P 07 38 16.2 +0.7**
baz=254,SNR=18
**F20K Avaraart Lake 57.30 24 P P 07 38 17.1 +0.8**
baz=252,SNR=11
**N20K Mount Spurr 57.35 31 P P 07 38 17.9 +1.0**
baz=259
**SPCR Spurr Chakacha 57.35 31 P P 07 38 17.9 +1.0**
baz=259
**HOM Homer 57.36 33 P P 07 38 17.2 +0.3**
baz=261
**MDOK Medeo 57.41 307** *eP* **P 07 38 17.9 +0.1**
baz=307
**MDOK Medeo 57.41 307 P P 07 38 17.8 +0.1**
**CHKK Chushkaly 57.42 308** *eP* **P 07 38 17.8 +0.1**
baz=308
**CHKK Chushkaly 57.42 308** *eP* **P 07 38 17.7 +0.1**
**TNSS Tian-Shan 57.49 307** *eP* **P 07 38 18.4 -0.3**
baz=307
**TNSS Tian-Shan 57.49 307** *eP* **P 07 38 18.3 -0.3**
**AAA Alma-Ata 57.51 307** *eP* **P 07 38 18.7 +0.3**
baz=307
**AAA Alma-Ata 57.51 307** *eP* **P 07 38 18.6 +0.3**
**E20K Nigu River 57.52 23 P P 07 38 18.7 +0.8**
baz=251,SNR=8.2
**D20K Etivluk River 57.52 22 P P 07 38 18.6 +0.7**
baz=250,SNR=12
**IMAR Indian Mountai 57.76 25 P P 07 38 21.0 +1.4**
**B20K Meade River 57.79 20 P P 07 38 20.4 +0.7**
baz=249,SNR=8.1
**SKT Skwentna 57.82 30 P P 07 38 20.6 +0.5**
**SKT Skwentna 57.82 30 P P 07 38 20.9 +0.8**
baz=259,SNR=10
**BRSE Bradley Lake S 57.83 33 P P 07 38 20.4 +0.2**
baz=262
**KUU Kurty 57.89 308** *eP* **P 07 38 21.3 +0.3**
comp=Z,23nm,1.2s,baz=308
**KUU Kurty 57.89 308** *eP* **P 07 38 21.2 +0.3**
KUU pmax pmax
comp=Z,23nm,1.2s
**G21K Allakaket 57.99 25 P P 07 38 22.5 +1.3**
G21K IAmb IAmb 07 38 45.9
comp=Z,19nm,1.0s
**G21K Allakaket 57.99 25 P P 07 38 22.1 +0.8**
baz=255,SNR=7.8
**H21K Melozitna Rive 58.05 26 P P 07 38 23.5 +1.8**
H21K IAmb IAmb 07 38 36.3
comp=Z,39nm,1.2s
**H21K Melozitna Rive 58.05 26 P P 07 38 22.5 +0.8**
baz=256,SNR=16
**ULHL Ulahol 58.05 306 P P 07 38 23.4 +1.1**
SNR=6.3
**SUA Susitna One 58.09 31 P P 07 38 22.8 +0.6**
baz=260
**F21K Alatna River 58.19 24 P P 07 38 23.1 +0.5**
baz=254
**C21K Knifeblade Rid 58.29 22 P P 07 38 24.4 +1.1**
baz=252,SNR=6.5
**KMBL Tambalda 58.33 202 P P 07 38 22.4 -1.6**
comp=Z,24nm,0.9s
**E21K Killik River 58.36 23 P P 07 38 24.1 +0.4**
baz=253
**A21K Barrow 58.44 19 P P 07 38 24.7 +0.5**
baz=249
**M22K Willow 58.44 31 P P 07 38 24.7 +0.4**
baz=261,SNR=5.5
**O22K Cooper Landing 58.44 32 P P 07 38 24.8 +0.5**
baz=262
**BPAW Bear Paw Mtn. 58.47 28 P P 07 38 26.1 +1.5**
BPAW IAmb IAmb 07 38 38.7
comp=Z,42nm,1.2s
**BPAW Bear Paw Mtn. 58.47 28 P P 07 38 24.8 +0.2**
baz=259,SNR=11
**CUT Chulitna 58.48 30 P P 07 38 24.9 +0.3**
baz=260
**KSH Kashi 58.48 303 P P 07 38 29.3 +4.0**
KSH pP sP 07 38 34.3 +0.4
KSH sP pwP 07 38 37.8 +0.1
KSH S S **07 46 34.4 +6.9**
KSH pmax pmax
comp=Z,89nm,0.8s
KSH LR LR
comp=Z,1µm,18.9s
KSH LR LR
comp=Z,2µm,18.2s
KSH LR LR
comp=Z,2µm,19.2s
**TKM2 Tokmak 2 58.49 307 P P 07 38 26.5 +1.1**
SNR=37
**TKM2 Tokmak 2 58.49 307** *i* **P P 07 38 24.3 -1.0**
TKM2 pmax pmax
comp=Z,45nm,1.0s
**B21K Ikpikpuk River 58.49 21 P P 07 38 24.7 +0.1**
baz=252,SNR=8.0
**RC01 Rabbit Creek A 58.52 32 P P 07 38 25.5 +0.5**
baz=262
**SEW Seward 58.52 33 P P 07 38 25.7 +0.7**
baz=262,SNR=8.7
**MORW Morawa 58.55 208 P P 07 38 24.7 -0.8**
**MORW Morawa 58.55 208 P P 07 38 23.2 -2.3**
**H22K Ishtalitna Cre 58.68 26 P P 07 38 27.2 +1.1**
baz=257,SNR=8.9
**F22K John River 58.75 24 P P 07 38 27.2 +0.7**
baz=256
**MLY Manley 58.76 27 P P 07 38 27.7 +1.1**
baz=258,SNR=12
**A22K Sinclair Lake 58.83 20 P P 07 38 27.8 +0.9**
baz=251
**G22K Bettles 58.87 25 P P 07 38 28.1 +0.9**
baz=256
**PMR Palmer 58.88 31 P P 07 38 27.6 +0.1**
baz=262,SNR=17
**D22K Ayikyak River 58.93 22 P P 07 38 28.1 +0.4**
baz=254,SNR=11
**KBK Karagaybulak 58.98 307 P P 07 38 30.2 +1.5**
SNR=13
**E22K Anaktuvuk Pass 59.05 23 P P 07 38 29.4 +0.8**
baz=256
**CHMS Chumysh 59.10 307 P P 07 38 30.6 +1.2**
SNR=9.9
**B22K Teshekpuk Lake 59.11 21 P P 07 38 29.5 +0.6**
baz=253
**PWL Port Wells 59.17 32 P P 07 38 30.0 +0.5**
baz=263,SNR=11
**KNK Knik Glacier 59.17 31 P P 07 38 29.7 +0.1**
baz=263,SNR=9.1
**USP Ospenovka 59.26 308 P P 07 38 31.1 +0.6**
SNR=18
**RND Reindeer 59.28 29 P P 07 38 30.2 -0.1**
RND IAmb IAmb 07 39 32.5
comp=Z,18nm,0.9s
**RND Reindeer 59.28 29 P P 07 38 30.2 -0.1**
RND pmax pmax
comp=Z,18nm,0.9s
**SML Sawmill 59.29 31 P P 07 38 30.7 +0.3**
**SML Sawmill 59.29 31 P P 07 38 30.7 +0.3**
baz=262,SNR=20
**MCK McKinley 59.29 29 P P 07 38 30.9 +0.6**
baz=261,SNR=11
**AAK Ala-Archa 59.32 307 P P 07 38 32.6 +1.5**
SNR=7.2
**AAK Ala-Archa 59.32 307 P P 07 38 31.8 +0.8**
comp=Z,12nm,0.7s,baz=90,slow=7.3,SNR=17
AAK LR LR 08 06 43.1
comp=Z,3µm,18.2s,baz=84,slow=39
comp=Z,12nm,0.7s
**AAK Ala-Archa 59.32 307 P P 07 38 32.6 +1.5**
AAK P P **07 38 32.6 +1.5**
AAK S S **07 46 40.0 +1.7**
AAK S S **07 46 40.0 +1.7**
**AAK Ala-Archa 59.32 307** *ceP* **P 07 38 32.2 +1.1**
AAK pmax pmax
comp=Z,39nm,1.7s
**UCH Uchtor 59.34 306 P P 07 38 34.3 +2.7**
SNR=8.3
**I23K Minto, Yukon-K 59.35 27 P P 07 38 31.4 +0.7**
baz=260,SNR=7.9
**NEA2 Nenana 59.38 28 P P 07 38 31.6 +0.7**
baz=260,SNR=8.6
**G23K Bananza Creek 59.39 25 P P 07 38 32.1 +1.1**
baz=258,SNR=15
**H23K Yukon River 59.40 26 P P 07 38 31.9 +0.8**
baz=259,SNR=11
**COLD Coldfoot 59.43 24 P P 07 38 32.3 +1.1**
baz=258
**BTLS Baital 59.47 310** *eP* **P 07 38 32.2 +0.4**
comp=Z,14nm,0.8s,baz=310
**BTLS Baital 59.47 310** *eP* **P 07 38 32.2 +0.4**
BTLS pmax pmax
comp=Z,14nm,0.8s
**P23K Montague Islan 59.53 33 P P 07 38 32.5 +0.5**
baz=264,SNR=5.7
**M23K Glacier View 59.57 31 P P 07 38 33.2 +0.9**
baz=263,SNR=10
**BLDU Ballidu 59.61 207 P P 07 38 32.1 -0.8**
**BLDU Ballidu 59.61 207 P P 07 38 31.3 -1.6**
comp=Z,61nm,1.1s
**D23K Nanushuk River 59.66 22 P P 07 38 33.3 +0.6**
baz=256
**WAT6 Susitna Watana 59.66 30 P P 07 38 33.0 -0.1**
baz=263,SNR=24
**SCM Sheep Creek Mo 59.76 31 P P 07 38 34.1 +0.4**
**SCM Sheep Creek Mo 59.76 31 P P 07 38 34.0 +0.3**
baz=263,SNR=22
**SCM Sheep Creek Mo 59.76 31 P P 07 38 34.1 +0.4**
SCM pmax pmax
comp=Z,130nm,1.3s
**GLI Glacier Island 59.77 32 P P 07 38 34.5 +0.8**
baz=264,SNR=12
**WRH Wood River Hil 59.77 28 P P 07 38 34.9 +1.3**
WRH IAmb IAmb 07 39 36.9
comp=Z,39nm,1.6s
**E23K Chandalar 59.83 24 P P 07 38 35.1 +1.0**
baz=258,SNR=15
**EKS2 Erkin-Say 59.84 307 P P 07 38 35.6 +0.9**
SNR=18
**C23K Itkillik River 59.89 21 P P 07 38 35.2 +0.9**
baz=256
**DHY Denali Highway 59.89 29 P P 07 38 34.9 +0.3**
baz=263
**COLA College 59.94 27 P P 07 38 35.5 +0.8**
baz=261
**COLA College 59.94 27** *i* **P P 07 38 35.9 +1.2**
COLA pmax pmax
comp=Z,5.0nm,0.7s
**ARPS Mount Arapiles 59.95 182 P P 07 38 35.0 0.0**
**ARPS Mount Arapiles 59.95 182 P P 07 38 34.3 -0.8**
comp=Z,58nm,0.9s
**AML Almayashu 59.95 306 P P 07 38 37.2 +1.4**
SNR=38
**TOLK Toolik Lake Re 59.97 23 P P 07 38 35.7 +0.8**
baz=257
**Q23K Middleton Isla 60.01 34 P P 07 38 36.0 +0.7**
baz=266
**HIN Hinchinbrook I 60.02 33 P P 07 38 36.4 +1.0**
**KLBR Kellerberrin 60.05 205 P P 07 38 35.1 -0.8**
**KLBR Kellerberrin 60.05 205 P P 07 38 33.0 -2.8**
comp=Z,110nm,0.9s
**H24K Noodor Dome 60.08 26 P P 07 38 36.6 +0.8**
baz=261,SNR=14
**POKR Poker Flat Res 60.15 27 P P 07 38 37.3 +1.0**
baz=261
**E24K Your Creek 60.25 24 P P 07 38 38.2 +1.3**
baz=259,SNR=8.3
**HDA Harding Lake 60.26 28 P P 07 38 37.2 +0.3**
baz=262,SNR=5.7
**IL31 60.33 28 P P 07 38 37.4 0.0**
IL31 IAmb IAmb 07 38 48.0
comp=Z,25nm,1.0s
**ILAR Eielson Array 60.33 28 P P 07 38 37.9 +0.5**
**ILAR Eielson Array 60.33 28 P P 07 38 36.7 -0.7**
comp=Z,12nm,0.9s,baz=272,slow=28,SNR=37
ILAR LR LR 08 02 37.6
comp=Z,805nm,20.8s,baz=249,slow=34
ILAR PKPPKP **P'P'df 08 08 06.5 +1.5**
comp=Z,0.6nm,1.0s,baz=42,slow=2.2,SNR=4.0
comp=Z,12nm,0.9s
**ILAR Eielson Array 60.33 28 P P 07 38 37.9 +0.5**
**M24K Tolsona, Glenn 60.33 31 P P 07 38 37.4 -0.2**
baz=264
**D24K Happy Valley 60.35 22 P P 07 38 37.2 -0.3**
baz=258
**F24K Squaw Lake 60.37 24 P P 07 38 37.9 +0.2**
baz=260,SNR=6.6
**G24K Hadweenzic Riv 60.38 25 P P 07 38 38.3 +0.5**
baz=260
**KLU Klutina 60.40 31 P P 07 38 39.3 +1.3**
KLU IAmb IAmb 07 38 51.9
comp=Z,37nm,1.0s
**KLU Klutina 60.40 31 P P 07 38 38.8 +0.7**
baz=265,SNR=13
**EYAK Cordova Ski Ar 60.40 32 P P 07 38 38.6 +0.6**
baz=266
**OTUK Ortayu 60.46 313 P P 07 38 37.8 -0.9**
**C24K Franklin Bluff 60.51 22 P P 07 38 40.0 +1.4**
baz=258
**K24K Donnelly Dome 60.69 29 P P 07 38 40.3 +0.4**
baz=264
**HYB Hyderabad 60.71 277** *eP* **P 07 38 41.3 +0.5**
HYB IVmB_BB 07 38 45.0
comp=Z,606nm,3.0s
**PAX Paxson 60.74 30 P P 07 38 40.7 +0.3**
baz=264,SNR=12
**HARP HAARP 60.84 30 P P 07 38 41.6 +0.7**
baz=265
**G25K Bearman Lake 60.93 25 P P 07 38 41.7 +0.2**
baz=262
**J25K Salcha River, 60.96 28 P P 07 38 41.8 0.0**
baz=264,SNR=7.5
**H25L Birch Creek 60.98 26 P P 07 38 42.9 +1.2**
baz=262,SNR=5.1
**BMRM Bremner River 60.99 32 P P 07 38 42.2 +0.2**
baz=266,SNR=12
**PRP Porcupine Dome 61.00 27 P P 07 38 42.1 -0.1**
baz=263
**KAIM Kayak Island 61.02 33 P P 07 38 42.7 +0.5**
baz=267,SNR=10
**N25K Chitina, Valde 61.04 31 P P 07 38 42.8 +0.4**
baz=266,SNR=9.1
**RIDG Independent Ri 61.10 29 P P 07 38 43.7 +0.9**
baz=265,SNR=14
**F25K Christian River 61.23 24 P P 07 38 44.2 +0.6**
baz=262,SNR=7.1
**NWAO Narrogin (SRO) 61.43 205 P P 07 38 44.6 -0.7**
**NWAO Narrogin (SRO) 61.43 205 P P 07 38 44.5 -0.7**
**NWAO Narrogin (SRO) 61.43 205 LR LR** 08 07 46.5
comp=Z,317nm,18.4s,baz=34,slow=38
**NIL Nilore 61.48 297 P P 07 38 47.7 +1.9**
NIL P P **07 38 47.7 +1.9**
**SCRK Sand Creek 61.50 29 P P 07 38 46.1 +0.6**
SCRK IAmb IAmb 07 38 47.4
comp=Z,20nm,0.8s
**SCRK Sand Creek 61.50 29 P P 07 38 45.8 +0.2**
baz=265,SNR=28
**BVA0 Borovoye Array 61.51 319** *i* **P P 07 38 43.8 -1.9**
**BVAR Borovoye Array 61.51 319 P P 07 38 45.7 0.0**
comp=Z,76nm,0.7s,baz=90,slow=8.0,SNR=232
BVAR LR LR 08 06 43.8
comp=Z,1µm,18.6s,baz=84,slow=37
**BRVK Borovoye 61.57 319 P P 07 38 46.8 +0.8**
BRVK P P **07 38 46.8 +0.8**
BRVK S S **07 47 06.0 -0.5**
BRVK S S **07 47 06.0 -0.5**
**BRVK Borovoye 61.57 319** *ceP* **P 07 38 46.3 +0.2**
BRVK pmax pmax
comp=Z,119nm,1.3s
**BGLC Bering Glacier 61.60 33 P P 07 38 46.6 +0.5**
baz=268
**CRQM Cirque 61.70 32 P P 07 38 48.4 +1.4**
**L26K Log Cabin Wild 61.71 30 P P 07 38 47.2 +0.3**
baz=266,SNR=7.3
**CRQE Cirque 61.72 32 P P 07 38 47.6 +0.5**
baz=268,SNR=12
**J26L Joseph Creek 61.73 28 P P 07 38 47.4 +0.3**
**J26L Joseph Creek 61.73 28 P P 07 38 47.7 +0.7**
baz=265,SNR=20
**MCARA McCarthy VSAT 61.78 32 P P 07 38 48.2 +0.9**
baz=268,SNR=5.0
**F26K Sheenjek River 61.81 24 P P 07 38 48.3 +0.8**
baz=263,SNR=6.7
**M26K Nabesna, AK 61.84 30 P P 07 38 48.6 +0.9**
baz=267
**G26K Porcupine Rive 61.87 25 P P 07 38 48.6 +0.8**
baz=264
**I26K Coal Creek Min 61.97 27 P P 07 38 49.1 +0.6**

baz=265
**KK31 Karatay Array 62.18 308** *i* P **P 07 38 50.1 -0.3**
**KKAR Karatay Array 62.18 308** P **P 07 38 50.7 +0.3**
**KKAR Karatay Array 62.18 308** P **P 07 38 50.4 0.0**
KKAR IAmb IAmb 07 38 57.1
comp=Z,50nm,1.0s
**KKAR Karatay Array 62.18 308** P **P 07 38 50.4 0.0**
KKAR pmax pmax
comp=Z,50nm,1.0s
**PALK Pallekele 62.20 266** LR LR 08 05 47.2
comp=Z,805nm,19.2s,baz=176,slow=36
**MESA MESA 62.27 33** P **P 07 38 51.2 +0.3**
baz=269
**K27K Chicken 62.34 29** P **P 07 38 52.0 +0.9**
baz=267
**M27K Edge Creek, AK 62.36 31** P **P 07 38 51.7 +0.3**
baz=268,SNR=5.6
**L27K Beaver Creek, 62.41 30** P **P 07 38 52.6 +1.1**
L27K IAmb IAmb 07 39 07.6
comp=Z,16nm,1.1s
**L27K Beaver Creek, 62.41 30** P **P 07 38 52.0 +0.4**
baz=268,SNR=9.6
**CTG Chitna Glacier 62.58 32** P **P 07 38 53.1 +0.2**
baz=269
**I27K Kandik River 62.63 27** P **P 07 38 53.4 +0.4**
baz=267,SNR=6.3
**TABL Table Mountain 62.67 33** P **P 07 38 54.4 +0.8**
**BRLS Boroldaу 62.68 308** *e*P **P 07 38 55.1 +1.4**
comp=Z,8.5nm,1.1s,baz=307
**BRLS Boroldaу 62.68 308** *e*P **P 07 38 55.1 +1.4**
BRLS pmax pmax
comp=Z,8.0nm,1.1s
**G27K Doyon Strip 62.69 25** P **P 07 38 54.2 +0.8**
baz=266
**H27K Steamboat Moun 62.70 26** P **P 07 38 54.0 +0.6**
baz=266,SNR=12
**EGAK Eagle 62.78 28** P **P 07 38 55.0 +1.0**
EGAK IAmb IAmb 07 39 13.0
comp=Z,14nm,0.9s
**EGAK Eagle 62.78 28** P **P 07 38 54.9 +1.0**
baz=267,SNR=7.1
**E27K Coleen River 62.82 24** P **P 07 38 54.9 +0.7**
baz=265
**YUK3 Moose Creek 63.01 31** P **P 07 38 56.3 +0.4**
baz=270
**RKGY Rocky Gully 63.02 204** P **P 07 38 55.7 -0.1**
comp=Z,74nm,0.9s
**PINM Pinnacle 63.12 33** P **P 07 38 56.4 0.0**
baz=271
**D27M Malcolm River 63.14 23** P **P 07 38 56.8 +0.4**
baz=265
**O28M Mount Upton 63.14 32** P **P 07 38 57.5 +0.7**
baz=270,SNR=9.4
**I28M Miner Creek 63.32 27** P **P 07 38 58.5 +0.8**
baz=268,SNR=14
**YUK8 Steele Glacier 63.35 32** P **P 07 38 59.0 +0.9**
baz=270,SNR=9.2
**F28M Old Crow 63.43 25** P **P 07 38 59.4 +1.2**
baz=267,SNR=7.0
**DAWY Dawson 63.52 29** P **P 07 39 00.2 +1.2**
DAWY IAmb IAmb 07 39 10.4
comp=Z,26nm,1.2s
**DAWY Dawson 63.52 29** P **P 07 38 59.7 +0.7**
baz=269,SNR=11
**PNL Peninsula 63.56 34** P **P 07 38 60.0 +0.7**
baz=272,SNR=5.2
**E28M Babbage River 63.61 24** P **P 07 39 00.4 +1.0**
baz=267
**YUK4 Talbot Arm 63.89 32** P **P 07 39 03.3 +1.7**
baz=272,SNR=14
**D28M Stokes Point 63.93 23** P **P 07 39 02.3 +0.8**
baz=267
**M29M Somme Creek 63.95 30** P **P 07 39 03.2 +1.3**
baz=271,SNR=17
**O29M Mount Kennedy 63.95 33** P **P 07 39 03.0 +1.1**
baz=272,SNR=12
**SIMJ Simiganj 63.97 303** P **P 07 39 02.7 +0.2**
**H29M Whitestone 63.98 26** P **P 07 39 03.8 +1.9**
baz=269,SNR=11
**I29M Ogilvie Camp, 64.00 27** P **P 07 39 03.2 +1.2**
baz=270,SNR=11
**YUK6 Outpost Mounta 64.03 32** P **P 07 39 03.0 +0.4**
baz=272
**J29N Klondike Camp 64.04 28** P **P 07 39 02.7 +0.3**
baz=270
**G29M Pine Creek 64.13 25** P **P 07 39 04.8 +1.9**
**G29M Pine Creek 64.13 25** P **P 07 39 03.6 +0.7**
baz=269,SNR=7.5
**E29M Blow River 64.20 24** P **P 07 39 04.1 +0.7**
baz=269
**K29M Barlow Dome 64.35 29** P **P 07 39 05.1 +0.6**
baz=271,SNR=14
**P29M Windy Craggy 64.40 34** P **P 07 39 05.4 +0.6**
baz=273,SNR=12
**N30M Aishikik Lake 64.63 32** P **P 07 39 06.8 +0.5**
baz=273,SNR=10
**EPYK Eagle Plains 64.65 26** P **P 07 39 07.1 +0.8**
baz=271,SNR=11
**KBL Kabul 64.73 298** P **P 07 39 08.7 +1.1**
KBL P **P 07 39 08.7 +1.1**
KBL S **S 07 47 48.1 +1.1**
KBL S **S 07 47 48.1 +1.1**
**P30M Million Dollar 64.77 33** P **P 07 39 08.2 +1.0**
baz=274
**I30M Mount Dempster 64.81 27** P **P 07 39 08.3 +0.8**
baz=272,SNR=7.5
**G30M tAoh Zrail Nji 64.84 25** P **P 07 39 08.3 +0.8**
baz=271,SNR=6.5
**J30M Hart River 64.85 28** P **P 07 39 08.5 +0.7**
baz=272,SNR=9.1
**F30M Barrier River 65.00 25** P **P 07 39 09.6 +1.0**
baz=271,SNR=5.1
**PLBC Pleasant Camp 65.11 34** P **P 07 39 10.1 +0.8**
baz=274,SNR=16
**O30N Mendenhall 65.15 32** P **P 07 39 09.7 0.0**
baz=274
**N31M Braeburn, Yuko 65.26 31** P **P 07 39 10.7 +0.4**
baz=274,SNR=8.5
**S31K Pelican 65.30 35** P **P 07 39 10.8 +0.2**
baz=275
**R31K City Hall, Gus 65.52 35** P **P 07 39 12.1 +0.1**
baz=275
**G31M Satah River 65.61 25** P **P 07 39 13.2 +0.7**
baz=273,SNR=13
**SKAG Skagway 65.64 34** P **P 07 39 13.9 +1.1**
baz=275,SNR=5.2
**WHY Whitehorse 65.76 32** P **P 07 39 14.4 +0.7**
baz=275,SNR=5.5
**F31M Tsiigehtchic 65.79 25** P **P 07 39 14.2 +0.6**
baz=273
**INK Inuvik 65.83 24** P **P 07 39 14.2 +0.3**
comp=Z,5.9nm,0.8s,baz=270,slow=7.9,SNR=6.1
comp=Z,5.9nm,0.8s
**INK Inuvik 65.83 24** P **P 07 39 14.7 +0.9**
baz=273,SNR=5.3
**M31M Drury Creek, Y 65.86 31** P **P 07 39 14.4 +0.1**
baz=275,SNR=9.6
**SIT Sitka 65.88 36** P **P 07 39 15.0 +0.6**
baz=276
**R32K Eaglecrest 66.17 35** P **P 07 39 17.0 +0.7**
baz=276
**S32K Killisnoo 66.23 36** P **P 07 39 17.5 +0.9**
baz=277
**FARO Faro, Yukon 66.34 31** P **P 07 39 17.2 -0.1**
baz=276
**N32M Quiet Lake 66.58 32** P **P 07 39 19.6 +0.7**
baz=276,SNR=5.7
**SVE Sverdlovsk 66.81 324** *de*P **P 07 39 20.6 +0.3**
SVE *e*S **S 07 48 11.0 -0.1**
SVE pmax pmax
comp=Z,45nm,1.0s
SVE MLR MLR
comp=Z,2µm,19.0s
**P33M Teslin, Yukon 66.82 33** P **P 07 39 21.0 +0.5**
baz=277,SNR=8.2
**U33K Whale Pass 67.21 37** P **P 07 39 22.0 -0.9**
baz=278
**Q32M Nakina River 67.26 34** P **P 07 39 23.1 -0.4**
baz=278
**CRAG Craig 67.30 38** P **P 07 39 23.5 0.0**
baz=279
**WRAK Wrangell Islan 67.59 37** P **P 07 39 25.6 +0.4**
baz=279
**R33M Jennings River 67.86 33** P **P 07 39 27.2 +0.1**
baz=279
**TOZ Tahuroa Road 67.93 153** P **P 07 39 29.7 +2.2**
**ARU Arti 68.00 323** P **P 07 39 27.6 -0.4**
comp=Z,29nm,0.5s,baz=88,slow=3.3,SNR=53
ARU LR LR 08 11 53.6
comp=Z,2µm,18.5s,baz=78,slow=38
comp=Z,29nm,0.5s
**ARU Arti 68.00 323** *c i*P **P 07 39 27.7 -0.2**
ARU 07 39 51.8
ARU 07 41 55.9
ARU S **S 07 48 28.4 +2.9**
ARU 07 49 24.2
ARU SS **SS 07 52 48.4 +1.1**
ARU pmax pmax
comp=Z,40nm,0.7s
ARU MLR MLR
comp=Z,1µm,18.0s
**ARU Arti 68.00 323** P **P 07 39 27.5 -0.4**
comp=Z,57nm,0.7s,comp=Z,610nm
**S34M Telegraph Cree 68.01 35** P **P 07 39 28.5 +0.6**
baz=279,SNR=7.1
**V35K Ketchikan 68.17 38** P **P 07 39 28.7 -0.3**
baz=280
**A36M Sachs Harbour 68.27 20** P **P 07 39 29.2 -0.1**
baz=279
**AB31 Akbulak array 68.47 316** *i* P **P 07 39 30.1 -0.9**
**DLBC Dease Lake 68.50 34** P **P 07 39 32.0 +1.0**
comp=Z,10nm,0.9s,baz=273,slow=6.2,SNR=20
DLBC LR LR 08 07 28.9
comp=Z,697nm,21.0s,baz=287,slow=34
comp=Z,10nm,0.9s
**DLBC Dease Lake 68.50 34** P **P 07 39 31.3 +0.2**
baz=280,SNR=13
**T35M Bob Quinn 68.64 36** P **P 07 39 31.6 -0.3**
baz=280
**TGTN Hyland Airport 68.82 31** P **P 07 39 33.3 +0.3**
baz=280
**WTLY Watson Lake, Y 68.82 32** P **P 07 39 33.8 +0.7**
baz=280,SNR=5.2
**U35K Hyder 68.95 37** P **P 07 39 34.1 +0.3**
baz=281
**URZ Urewera 69.05 152** LR LR 08 09 11.7
comp=Z,520nm,18.8s,baz=56,slow=35
**C36M Paulatuk 69.11 22** P **P 07 39 34.1 -0.4**
baz=281
**NNVZ North Ngauruho 69.16 154** P **P 07 39 36.5 +1.0**
**MWZ Matawai 69.29 152** P **P 07 39 36.8 +0.7**
**WNVZ Wahianoa 69.32 154** P **P 07 39 37.2 +0.7**
**QRZ Quartz Range 69.44 157** P **P 07 39 37.4 +0.5**
**AKTO Aktyubinsk 69.45 317** P **P 07 39 36.7 -0.4**
comp=Z,3.7nm,0.7s,baz=87,slow=5.3,SNR=12
comp=Z,3.7nm,0.7s
**MOVZ Moawhango 69.45 154** P **P 07 39 37.5 +0.3**
**BKZ Black Stump Fm 69.55 153** P **P 07 39 37.0 -0.7**
**DUWZ D'Urville Isla 69.94 156** P **P 07 39 39.6 -0.5**
**MRNZ Matariki Terra 70.03 157** P **P 07 39 41.6 +1.0**
**NNZ Nelson 70.10 156** P **P 07 39 41.1 +0.2**
**LIRD Liard River Hi 70.30 33** P **P 07 39 42.0 -0.2**
baz=283
**THZ Tophouse 70.40 157** P **P 07 39 43.2 +0.3**
**MRZ Mangatainoka R 70.45 155** P **P 07 39 43.3 +0.2**
**WRGLY Wrigley 70.66 29** P **P 07 39 44.3 0.0**
baz=284
**BBB Bella Bella 70.85 41** P **P 07 39 45.4 -0.1**
comp=Z,5.1nm,0.8s,baz=279,slow=6.1,SNR=4.8
BBB LR LR 08 06 11.5
comp=Z,378nm,20.7s,baz=300,slow=32
comp=Z,5.1nm,0.8s
**TOAD Toad River Com 70.86 33** P **P 07 39 45.2 -0.4**
baz=284
**RAR Rarotonga 70.89 124** LR LR 08 06 42.2
comp=Z,799nm,19.8s,baz=301,slow=32
**MSWZ Moikau Station 70.97 155** P **P 07 39 45.9 -0.4**
**LTZ Lake Taylor 71.08 158** P **P 07 39 46.7 -0.2**
**PLWZ Pelliser 71.11 155** P **P 07 39 45.6 -1.5**
**KOTAN Kotaneelee Air 71.14 32** P **P 07 39 47.3 +0.1**
baz=284
**KHZ Kahutara 71.20 157** P **P 07 39 46.6 -1.0**
**GVZ Greta Valley S 71.51 158** P **P 07 39 48.5 -1.0**
**KIRV Kirov 72.34 327** P **P 07 39 54.7 +0.3**
comp=Z,27nm,0.8s,baz=66,slow=3.1,SNR=11
KIRV LR LR 08 14 24.2
comp=Z,3µm,18.2s,baz=71,slow=38
comp=Z,27nm,0.8s
**KIRV Kirov 72.34 327** *ce*P **P 07 39 54.3 -0.1**
**SPITS Spitsbergen Ar 74.13 350** LR LR 08 15 14.4
comp=Z,560nm,18.1s,baz=6.5,slow=38
**YKA Yellowknife Ar 74.75 28** P **P 07 40 09.1 +0.6**
comp=Z,6.2nm,0.7s,baz=296,slow=6.2,SNR=12
YKA LR LR 08 12 05.8
comp=Z,988nm,21.1s,baz=295,slow=35
comp=Z,6.2nm,0.7s
**BELG Belogornoye 75.19 321** LR LR 08 15 12.5
comp=Z,1µm,19.8s,baz=68,slow=37
**BELG Belogornoye 75.19 321** *i* P **P 07 40 11.4 +0.2**
BELG pmax pmax
comp=Z,4.0nm,0.8s
**APA Apatity 75.82 338** ⇓ *i*P **P 07 40 14.5 -0.1**
APA *i* 07 40 27.0
APA *i* 07 43 06.2
APA *i* S **S 07 49 55.0 0.0**
APA *i* PS **PnS 07 50 22.0 -11**
APA pmax pmax
comp=Z,24nm,0.8s
**JLN Jalan Bani Buh 76.33 288** P **P 07 40 18.0 -0.3**
**JASK Jask - Hormozg 76.40 292** P **P 07 40 21.4 +2.7**
**WBK Wadi Bani Khal 76.55 289** P **P 07 40 20.5 +0.8**
WBK P **P 07 40 20.5 +0.8**
**BIDO Bidbid 76.97 290** P **P 07 40 23.4 +1.4**
**PPT Papeete 77.04 116** LR LR 08 10 23.6
comp=Z,484nm,18.4s,baz=300,slow=33
**PPT2 Papeete2 77.05 116** *e*PKP1 **P 07 40 23.1 +0.6**
comp=Z,67nm,23.8s
**PPT2 Papeete2 77.05 116** *e*PP **PP 07 43 18.9 +2.6**
comp=Z,50nm,26.0s
PPT2 *e*S **S 07 50 09.8 -0.3**
comp=Z,158nm,25.8s
PPT2 *e*SS **SS 07 55 05.2 -2.8**
comp=Z,274nm,23.2s
PPT2 *e*LR LR 08 03 44.9
comp=Z,641nm,23.0s
PPT2 *e*LR LR 08 04 11.5
comp=Z,784nm,22.2s
**SMDO Samad 77.20 290** P **P 07 40 24.5 +1.1**
SMDO P **P 07 40 24.5 +1.1**
**ARCES ARCESS Array B 77.33 341** P **P 07 40 24.3 +1.2**
**ARCES ARCESS Array B 77.33 341** P **P 07 40 23.4 +0.3**
comp=Z,12nm,0.8s,baz=72,slow=9.1,SNR=19
ARCES LR LR 08 19 30.1
comp=Z,2µm,18.5s,baz=72,slow=40
comp=Z,12nm,0.8s
**ARCES ARCESS Array B 77.33 341** P **P 07 40 24.3 +1.2**
ARCES pmax pmax
comp=Z,97nm,1.6s
**JMDO Jabal Madar 77.39 289** P **P 07 40 24.7 +0.4**
JMDO P **P 07 40 24.7 +0.4**
**YBH Yreka Blue Hor 77.46 50** P **P 07 40 25.7 +1.2**
YBH IAmb IAmb 07 40 55.2
comp=Z,37nm,1.6s
**YBH Yreka Blue Hor 77.46 50** LR LR 08 12 21.0
comp=Z,437nm,18.5s,baz=282,slow=34
**YBH Yreka Blue Hor 77.46 50** P **P 07 40 25.7 +1.2**
YBH pmax pmax
comp=Z,37nm,1.6s
**HOQ Hoqain 77.65 290** P **P 07 40 26.9 +1.1**
HOQ P **P 07 40 26.9 +1.1**
**SHME Shamm 77.80 293** P **P 07 40 28.3 +1.8**
SHME P **P 07 40 28.3 +1.8**
SHME S **S 07 50 18.7 +0.7**
SHME S **S 07 50 18.7 +0.7**
**PINE Pine Mountain 77.96 47** P **P 07 40 28.8 +1.4**
PINE IAmb IAmb 07 40 45.0
comp=Z,37nm,0.8s
**MHTO MHTO 77.99 288** P **P 07 40 28.3 +0.6**
SNR=7.1
MHTO P **P 07 40 28.3 +0.6**
SNR=7.1
**MASF Masafi 78.02 293** P **P 07 40 29.1 +1.3**
MASF P **P 07 40 29.1 +1.3**
MASF S **S 07 50 22.1 +1.5**
MASF S **S 07 50 22.1 +1.5**
**BSY Bisya 78.04 290** P **P 07 40 29.0 +1.0**
BSY P **P 07 40 29.0 +1.0**
**UOSS Minazif 78.13 292** P **P 07 40 29.4 +1.0**
UOSS P **P 07 40 29.4 +1.0**
UOSS S **S 07 50 22.0 +0.3**
UOSS S **S 07 50 22.0 +0.3**
**SOHO SOHO 78.13 291** P **P 07 40 29.2 +0.8**
SOHO P **P 07 40 29.2 +0.8**
**HATD Hatta, Dubai 78.23 292** P **P 07 40 30.4 +1.4**
SNR=6.8
HATD P **P 07 40 30.4 +1.4**
SNR=6.8
HATD S **S 07 50 23.9 +1.2**
HATD S **S 07 50 23.9 +1.2**
**ASHO Ashiyiah 78.34 292** P **P 07 40 30.5 +0.9**
SNR=6.8
ASHO P **P 07 40 30.5 +0.9**
SNR=6.8
**ARQ Araqi 78.42 290** P **P 07 40 31.2 +1.2**
ARQ P **P 07 40 31.2 +1.2**
**MAK Makhachkala 78.53 312** *e*P **P 07 40 26.4 -3.9**
MAK *e*S **S 07 50 20.2 -5.1**
MAK *e*SS **SS 07 55 26.2 -2.2**
MAK pmax pmax
comp=Z,248nm,1.7s
MAK MLR MLR
comp=Z,4µm,16.0s
**FAQ Al Faqa, Dubai 78.72 292** P **P 07 40 33.0 +1.4**
**DQM DQM 78.74 287** P **P 07 40 32.1 +0.3**
DQM P **P 07 40 32.1 +0.3**
**NEW Newport 78.77 42** P **P 07 40 32.5 +0.9**
NEW IAmb IAmb 07 40 34.4
comp=Z,17nm,0.9s
**NEW Newport 78.77 42** LR LR 08 08 53.1
comp=Z,652nm,21.6s,baz=304,slow=31
**NEW Newport 78.77 42** P **P 07 40 31.3 -0.3**
baz=293
**NEW Newport 78.77 42** P **P 07 40 32.5 +0.9**
NEW pmax pmax
comp=Z,17nm,1.0s
**ALNE Al Ain 78.83 291** P **P 07 40 33.2 +0.9**
ALNE P **P 07 40 33.2 +0.9**
**JOF Joensuu 78.83 334** *e*P **P 07 40 31.3 -0.3**
**NEEM North Greenlan 78.92 3** *i* P **P 07 40 33.4 +1.2**
NEEM IAmb IAmb 07 40 46.9
comp=Z,24nm,0.9s
**VRH Novokhopyorsk 79.03 321** *e*P **P 07 40 32.1 -0.8**
VRH pmax pmax
comp=Z,22nm,0.7s
**AJN Ajban 79.30 292** P **P 07 40 35.6 +0.7**
AJN P **P 07 40 35.6 +0.7**
**MOS Moscow 79.35 326** *e*P P 07 40 40.6 +6.1
MOS *e*S **SKSac 07 50 45.1 -4.0**
MOS MLR MLR
comp=Z,3µm,17.0s
MOS MLR MLR
comp=E,2µm,19.0s
MOS MLR MLR
comp=N,1µm,16.0s
**DAG Danmarks Havn 79.38 356** *i* P **P 07 40 33.4 -0.9**
DAG IAML 07 41 11.4
comp=Z,5.1nm,0.8s
DAG IAmb IAmb 07 41 11.4
comp=Z,5.1nm,0.8s
**OUL Oulu 79.70 338** P **P 07 40 37.2 +1.0**
**LPSR Galich'ya Gora 80.03 323** *e*P **P 07 40 36.3 -1.9**
LPSR pmax pmax
comp=Z,20nm,0.9s
**TBI Tubuai 80.05 121** *e*P P 07 40 32.7 -6.1
comp=Z,416nm,41.2s
**TBI Tubuai 80.05 121** *e*PP **PP 07 43 45.0 +3.8**
comp=Z,548nm,37.8s
TBI *e*S **S 07 50 40.1 -1.7**
comp=Z,612nm,24.2s
TBI *e*SS **SS 07 55 55.7 +3.0**
comp=Z,592nm,27.5s
TBI *e*LQ LQ 08 01 48.7
comp=Z,4µm,31.2s
TBI *e*LR LR 08 05 33.7
comp=Z,3µm,22.5s
TBI *e*LR LR 08 05 40.9
comp=Z,1µm,27.5s
**OBN Obninsk 80.17 326** LR LR 08 19 09.5
comp=Z,3µm,18.4s,baz=39,slow=38
**OBN Obninsk 80.17 326** *ce*P **P 07 40 38.6 -0.3**
OBN *e* 07 40 44.7
OBN *e* 07 43 41.3
OBN *e*PPP PPP 07 45 29.8
OBN pmax pmax
comp=Z,11nm,1.1s
OBN MLR MLR
comp=Z,3µm,18.0s
**VORR Voronezh 80.27 322** *e*P **P 07 40 38.9 -0.7**
VORR pmax pmax
comp=Z,20nm,0.9s
**VSR Storozhevoye 80.49 322** *e*P **P 07 40 38.7 -2.1**
VSR pmax pmax
comp=Z,10.0nm,0.7s
**VORD Divnogorie 80.53 322** *e*P **P 07 40 39.1 -1.9**
VORD pmax pmax
comp=Z,30nm,1.1s
**PNTR Pine Nut 80.63 52** P **P 07 40 43.6 +1.5**
PNTR IAmb IAmb 07 40 59.3
comp=Z,21nm,0.8s
**MZR Muzera 81.15 291** P **P 07 40 45.7 +0.8**
MZR P **P 07 40 45.7 +0.8**
**TAOE Nuku Hiva Isla 81.18 104** *e*P **P 07 40 46.6 +1.4**
comp=Z,41nm,27.6s
**TAOE Nuku Hiva Isla 81.18 104** *e*S **S 07 50 51.7 -2.6**
comp=Z,171nm,27.5s
TAOE *e*SS **SS 07 56 05.2 -4.9**
comp=Z,102nm,29.9s
TAOE *e*LR LR 08 06 03.3
comp=Z,969nm,26.4s
**MSO Missoula 81.33 43** P **P 07 40 44.2 -1.3**
baz=295
**KBZ Khabaz 81.34 314** P **P 07 40 46.0 +0.5**
comp=Z,23nm,0.8s,baz=71,slow=4.6,SNR=34
KBZ LR LR 08 20 37.0
comp=Z,1µm,19.1s,baz=64,slow=38
comp=Z,23nm,0.8s
**KBZ Khabaz 81.34 314** *ce*P **P 07 40 45.4 0.0**
KBZ pmax pmax
comp=Z,23nm,0.9s
**KIV Kislovodsk 81.38 314** P **P 07 40 49.4 +3.5**
KIV P **P 07 40 49.4 +3.5**
**KIV Kislovodsk 81.38 314** *e*P **P 07 40 46.2 +0.4**
KIV *e*S **S 07 50 56.0 +0.4**
KIV pmax pmax
comp=Z,14nm,1.0s
KIV MLR MLR
comp=Z,720nm,19.0s
**KIV Kislovodsk 81.38 314** P **P 07 40 46.7 +0.9**
comp=Z,28nm,1.8s,comp=Z,482nm
**SHA1 Shidzhatmaz 81.49 314** *i* P **P 07 40 46.7 +0.1**
**GNI Garni 81.52 310** LR LR 08 20 37.1
comp=Z,268nm,18.6s,baz=66,slow=38
**GNI Garni 81.52 310** *ce*P **P 07 40 48.1 +1.4**
GNI pmax pmax
comp=Z,16nm,1.3s
**FINES FINESS Array B 81.70 334** P **P 07 40 46.3 -0.7**
comp=Z,1.7nm,0.4s,baz=79,slow=4.9,SNR=21
FINES LR LR 08 19 37.7
comp=Z,515nm,18.4s,baz=48,slow=38
comp=Z,1.7nm,0.4s
**FINES FINESS Array B 81.70 334** *ce*P **P 07 40 47.4 +0.4**
FINES pmax pmax
comp=Z,2.0nm,0.4s
**KVN Kaiserville 81.72 51** P **P 07 40 48.1 +0.3**
**KVN Kaiserville 81.72 51** P **P 07 40 48.1 +0.3**
KVN pmax pmax
comp=Z,17nm,1.2s
**KEF Keuruu 81.75 335** *e*P **P 07 40 47.9 +0.7**
**NVAR Mina Array Bea 81.82 52** P **P 07 40 49.5 +1.1**
comp=Z,7.5nm,0.8s,baz=272,slow=5.8,SNR=57
NVAR LR LR 08 10 50.4
comp=Z,1µm,20.7s,baz=278,slow=31
comp=Z,7.5nm,0.8s
**DMTO DMTO 81.83 286** P **P 07 40 48.6 +0.1**
**VAF Ylistaro 82.05 337** *e*P **P 07 40 49.9 +1.1**
**BCW Bitter Crk WRg 82.38 55** P **P 07 40 52.7 +1.4**
BCW IAmb IAmb 07 40 54.5
comp=Z,24nm,1.1s
**HLID Hailey 82.40 46** P **P 07 40 51.1 -0.3**
baz=295
**WHFO Wadi Hawf 82.79 286** P **P 07 40 53.4 -0.2**
**HEL Helsinki 82.88 334** P **P 07 40 57.3 +4.1**
HEL pmax pmax
comp=Z,16nm,0.9s
**GMN Gold Mountain 83.03 52** P **P 07 40 55.9 +1.1**
**ELK Elko 83.04 49** LR LR 08 18 03.5
comp=Z,623nm,18.2s,baz=294,slow=36
**MEF Metsahovi 83.08 334** *e*P **P 07 40 55.2 +1.0**
**VSU Vasula 83.12 332** *i* P **P 07 40 54.1 -0.3**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VSU | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **83.31** | **43** | P | **P** | **07 40 56.8** | **+0.8** | |
| **BOZ** | **Bozeman (W)** | **83.31** | **43** | P | **P** | **07 40 55.7** | **-0.3** | |
| | baz=297 | | | | | | | |
| **BOZ** | **Bozeman (W)** | **83.31** | **43** | P | **P** | **07 40 56.8** | **+0.8** | |
| BOZ | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **EGMT** | **Eagleton** | **83.34** | **40** | P | **P** | **07 40 55.5** | **-0.5** | |
| | baz=298 | | | | | | | |
| **SOC** | **Sochi** | **83.49** | **315** | *e*P | **P** | **07 40 54.6** | **-2.1** | |
| SOC | | | | *e*S | **S** | **07 51 14.5** | **-2.4** | |
| SOC | | | | *e*SS | **SS** | **07 56 46.5** | **+4.2** | |
| SOC | | | | *e*SSS | SSS | 08 00 09.7 | | |
| SOC | | | | MLR | MLR | | | |
| | comp=Z,824nm,19.0s | | | | | | | |
| **RAF** | **Rauma** | **83.63** | **335** | *e*P | **P** | **07 40 58.6** | **+1.5** | |
| **JMIC** | **Jan Mayen** | **83.76** | **351** | LR | LR | 08 21 58.9 | | |
| | comp=Z,101nm,18.5s,baz=51,slow=38 | | | | | | | |
| **R11B** | **Troy Canyon, C** | **83.80** | **51** | P | **P** | **07 40 59.4** | **+0.7** | |
| **R11B** | **Troy Canyon, C** | **83.80** | **51** | P | **P** | **07 40 58.9** | **+0.2** | |
| | baz=295 | | | | | | | |
| **TPNV** | **Topopah Spring** | **83.91** | **52** | P | **P** | **07 40 59.2** | **0.0** | |
| | baz=295 | | | | | | | |
| **SUMG** | **Summit** | **84.18** | **1** | *i* P | **P** | **07 40 58.3** | **-1.9** | |
| SUMG | | | | IAmb | IAmb | 07 41 24.0 | | |
| | comp=Z,210nm,2.7s | | | | | | | |
| **H17A** | **Grant Village** | **84.52** | **44** | P | **P** | **07 41 01.3** | **-1.0** | |
| | baz=298 | | | | | | | |
| **MNK** | **Minsk** | **84.81** | **328** | *e*P | **P** | **07 41 02.4** | **-0.8** | |
| **DUG** | **Dugway, Tooele** | **84.94** | **48** | P | **P** | **07 41 03.7** | **-0.7** | |
| | baz=296 | | | | | | | |
| **109C** | **Camp Elliot, M** | **84.96** | **56** | P | **P** | **07 41 03.8** | **-0.6** | |
| | baz=295 | | | | | | | |
| **RLMT** | **Red Lodge** | **85.00** | **43** | P | **P** | **07 41 04.6** | **-0.1** | |
| | baz=298 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.15** | **56** | LR | LR | 08 11 29.4 | | |
| | comp=Z,940nm,21.8s,baz=317,slow=30 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.15** | **56** | P | **P** | **07 41 05.0** | **-0.5** | |
| | baz=295 | | | | | | | |
| **TPFO** | **Pinon Flats** | **85.16** | **56** | P | **P** | **07 41 05.4** | **-0.2** | |
| | baz=295 | | | | | | | |
| **MONP2** | **Monument Peak** | **85.48** | **56** | P | **P** | **07 41 06.8** | **-0.5** | |
| | baz=295 | | | | | | | |
| **BW06** | **Boulder Array** | **85.94** | **45** | P | **P** | **07 41 08.4** | **-1.0** | |
| | baz=298 | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.94** | **45** | P | **P** | **07 41 10.1** | **+0.7** | |
| | comp=Z,2.5nm,0.9s,baz=270,slow=4.4,SNR=13 | | | | | | | |
| PDAR | | | | LR | LR | 08 14 03.1 | | |
| | comp=Z,762nm,20.8s,baz=302,slow=32 | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| **YUH** | **Yuha Desert** | **85.97** | **56** | P | **P** | **07 41 10.0** | **+0.6** | |
| **LAO** | **LASA Array** | **86.09** | **40** | P | **P** | **07 41 09.1** | **-0.7** | |
| | baz=300 | | | | | | | |
| **MSU** | **Marysvale** | **86.14** | **50** | P | **P** | **07 41 12.2** | **+1.7** | |
| **MSU** | **Marysvale** | **86.14** | **50** | P | **P** | **07 41 12.2** | **+1.7** | |
| **AKASG** | **Malín Array Be** | **86.22** | **324** | P | **P** | **07 41 08.9** | **-1.4** | |
| | comp=Z,1.5nm,0.6s,baz=49,slow=5.2,SNR=4.6 | | | | | | | |
| AKASG | | | | LR | LR | 08 22 52.0 | | |
| | comp=Z,2μm,18.1s,baz=53,slow=38 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **AKASG** | **Malín Array Be** | **86.22** | **324** | *ce*P | **P** | **07 41 09.5** | **-0.8** | |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **AK01** | **Malin Array Si** | **86.23** | **324** | P | **P** | **07 41 09.6** | **-0.8** | |
| **AK11** | **Malin Array Si** | **86.27** | **324** | P | **P** | **07 41 09.4** | **-1.1** | |
| **DGMT** | **Dagmar** | **86.35** | **38** | P | **P** | **07 41 10.0** | **-1.0** | |
| | baz=302 | | | | | | | |
| **SIM** | **Simferopol'** | **86.40** | **318** | *e*P | P | 07 41 05.8 | -5.5 | |
| SIM | | | | *e*S | **SKSac** | **07 51 36.3** | **0.0** | |
| SIM | | | | smax | smax | | | |
| | comp=N,180nm,15.5s | | | | | | | |
| **MI28** | **Mi28,Pidlybu** | **86.92** | **325** | P | **P** | **07 41 12.9** | **-0.8** | |
| **SRU** | **San Rafael Swe** | **87.01** | **48** | P | **P** | **07 41 15.2** | **+0.5** | |
| SRU | | | | IAmb | IAmb | 07 41 32.9 | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **SRU** | **San Rafael Swe** | **87.01** | **48** | P | **P** | **07 41 15.2** | **+0.5** | |
| SRU | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **87.20** | **337** | P | **P** | **07 41 13.7** | **-1.2** | |
| | comp=Z,2.3nm,0.6s,baz=57,slow=5.5,SNR=5.7 | | | | | | | |
| HFS | | | | LR | LR | 08 24 25.5 | | |
| | comp=Z,942nm,18.2s,baz=44,slow=38 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **NC303** | **NORSAR Array S** | **87.20** | **339** | P | **P** | **07 41 16.0** | **+1.1** | |
| NC303 | | | | IAmb | IAmb | 07 41 32.7 | | |
| | comp=Z,32nm,1.1s | | | | | | | |
| **SUW** | **Suwalki** | **87.34** | **329** | *e*P | **P** | **07 41 15.8** | **+0.1** | |
| SUW | | | | *e*S | **S** | **07 51 56.9** | **+2.4** | |
| SUW | | | | *e*L | L | 08 26 30.5 | | |
| | comp=Z,1μm,17.5s | | | | | | | |
| **NC204** | **NORSAR Array S** | **87.36** | **339** | P | **P** | **07 41 15.9** | **+0.1** | |
| **NB2** | **NORSAR Subarra** | **87.39** | **339** | P | **P** | **07 41 14.4** | **-1.5** | |
| | comp=Z,28nm,1.1s,baz=44,slow=5.1 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.39** | **339** | P | **P** | **07 41 14.4** | **-1.5** | |
| | baz=44,slow=5.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **87.39** | **339** | P | **P** | **07 41 14.6** | **-1.3** | |
| | comp=Z,5.3nm,1.0s,baz=52,slow=4.4,SNR=6.6 | | | | | | | |
| NOA | | | | LR | LR | 08 24 44.7 | | |
| | comp=Z,909nm,19.9s,baz=50,slow=39 | | | | | | | |
| | comp=Z,5.3nm,1.0s | | | | | | | |
| **LUBAR** | **Lubar, Ukraine** | **87.44** | **324** | P | **P** | **07 41 14.7** | **-1.6** | |
| **Y14A** | **Wickenburg** | **87.60** | **54** | P | **P** | **07 41 18.2** | **+0.7** | |
| Y14A | | | | IAmb | IAmb | 07 41 36.3 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **RNPP8** | **Varash** | **87.62** | **326** | P | **P** | **07 41 16.5** | **-0.6** | |
| **ICESG** | **Greenland Ices** | **87.67** | **1** | *i* P | **P** | **07 41 17.3** | **-0.2** | |
| ICESG | | | | IAmb | IAmb | 07 41 31.5 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **RAYN** | **Ar Rayn** | **87.70** | **295** | P | **P** | **07 41 18.5** | **+0.4** | |
| **WUAZ** | **Wupatki** | **88.08** | **52** | P | **P** | **07 41 19.2** | **-0.7** | |
| | baz=298 | | | | | | | |
| **NDNU** | **Novodnistrovsk** | **88.40** | **323** | P | **P** | **07 41 19.9** | **-1.0** | |
| **MILM** | **Milestii Mici** | **88.52** | **321** | *e*P | **P** | **07 41 21.0** | **-0.5** | |
| MILM | | | | *e*S | **S** | **07 52 02.0** | **-4.1** | |
| MILM | | | | *e*L | L | 08 22 36.0 | | |
| MILM | | | | LRM | MLR | 08 24 16.0 | | |
| | comp=Z,1μm,15.5s | | | | | | | |
| **MILM** | **Milestii Mici** | **88.52** | **321** | *e*P | **P** | **07 41 21.0** | **-0.5** | |
| MILM | | | | *e*S | **S** | **07 52 02.0** | **-4.1** | |
| MILM | | | | MLR | MLR | | | |
| | comp=Z,1μm,15.5s | | | | | | | |
| **214A** | **Organ Pipe Nat** | **88.64** | **56** | P | **P** | **07 41 22.5** | **+0.1** | |
| | baz=297 | | | | | | | |
| **RSSD** | **Black Hills** | **88.74** | **42** | P | **P** | **07 41 22.1** | **-0.8** | |
| | baz=302 | | | | | | | |
| **KMPD** | **K-Podol'skiy** | **88.91** | **324** | P | **PcP** | **07 41 22.1** | **-2.7** | |
| KMPD | | | | P | **P** | **07 41 21.7** | **-1.6** | |
| **SFJD** | **Kangerlussuaq** | **89.18** | **5** | LR | LR | 08 21 31.6 | | |
| | comp=Z,256nm,21.6s,baz=348,slow=36 | | | | | | | |
| **N23A** | **Red Feather La** | **89.21** | **45** | P | **P** | **07 41 25.0** | **-0.3** | |
| | baz=301 | | | | | | | |
| **MVCO** | **Mesa Verde** | **89.32** | **49** | P | **P** | **07 41 25.9** | **+0.1** | |
| | baz=299 | | | | | | | |
| **BRTR** | **Keskin Array B** | **89.32** | **313** | P | **P** | **07 41 24.9** | **-0.7** | |
| | comp=Z,1.9nm,0.7s,baz=93,slow=2.5,SNR=11 | | | | | | | |
| BRTR | | | | LR | LR | 08 26 46.3 | | |
| | comp=Z,392nm,18.1s,baz=48,slow=39 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **BR104** | **Keskin Array S** | **89.33** | **313** | P | **P** | **07 41 25.0** | **-0.6** | |
| **W18A** | **Petrified Fore** | **89.45** | **52** | P | **P** | **07 41 25.9** | **-0.4** | |
| | baz=299 | | | | | | | |
| **FRB** | **Frobisher Bay** | **89.50** | **14** | LR | LR | 08 24 48.6 | | |
| | comp=Z,549nm,20.1s,baz=341,slow=38 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **89.81** | **34** | LR | LR | 08 23 32.2 | | |
| | comp=Z,426nm,18.6s,baz=314,slow=37 | | | | | | | |
| **ISCO** | **Idaho Springs** | **89.98** | **46** | P | **P** | **07 41 29.2** | **+0.2** | |
| | baz=301 | | | | | | | |
| **TUC** | **Tucson** | **90.00** | **55** | P | **P** | **07 41 28.6** | **-0.3** | |
| | baz=298 | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **90.21** | **48** | P | **P** | **07 41 30.2** | **+0.3** | |
| | baz=300 | | | | | | | |
| **Q24A** | **Divide** | **90.72** | **47** | P | **P** | **07 41 32.3** | **-0.1** | |
| | baz=301 | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **90.91** | **326** | *e*P | **P** | **07 41 33.2** | **+0.5** | |
| **KOLS** | **Kolonicke sedl** | **90.91** | **326** | *e*P | **P** | **07 41 33.2** | **+0.5** | |
| **MLR** | **Muntele Rosu** | **90.97** | **321** | LR | LR | 08 25 28.7 | | |
| | comp=Z,747nm,18.3s,baz=54,slow=38 | | | | | | | |
| **AGMN** | **Agassiz Nation** | **91.01** | **35** | P | **P** | **07 41 33.7** | **+0.6** | |
| | baz=308 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **91.11** | **48** | P | **P** | **07 41 34.7** | **+0.5** | |
| **SDCO** | **Great Sand Dun** | **91.11** | **48** | P | **P** | **07 41 34.8** | **+0.5** | |
| | baz=301 | | | | | | | |
| **BORG** | **Borgarnes** | **91.27** | **354** | LR | LR | 08 23 04.3 | | |
| | comp=Z,140nm,21.8s,baz=17,slow=36 | | | | | | | |
| **OJC** | **Ojcow** | **91.35** | **328** | *e*P | **P** | **07 41 34.6** | **0.0** | |
| OJC | | | | *e*L | L | 08 25 57.9 | | |
| | comp=Z,2μm,18.6s | | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **91.35** | **326** | *e*P | **P** | **07 41 35.0** | **+0.3** | |
| CRVS | | | | *e* | | 07 41 40.7 | | |
| **CRVS** | **Cervenica-Dubn** | **91.35** | **326** | *e*P | **P** | **07 41 35.0** | **+0.3** | |
| CRVS | | | | *e* | | 07 41 40.7 | | |
| **MMAI** | **Mount Meron Ar** | **91.41** | **307** | LR | LR | 08 26 12.3 | | |
| | comp=Z,262nm,19.9s,baz=16,slow=38 | | | | | | | |
| **NIE** | **Niedzica** | **91.61** | **327** | *e*P | **P** | **07 41 35.8** | **-0.1** | |
| NIE | | | | *e*L | L | 08 26 29.6 | | |
| | comp=Z,683nm,16.6s | | | | | | | |
| **RKT** | **Rikitea** | **91.74** | **114** | *e*S | **S** | **07 52 37.1** | **+0.7** | |
| | comp=Z,773nm,24.8s | | | | | | | |
| RKT | | | | *e*SS | **SS** | **07 58 43.4** | **-1.2** | |
| | comp=Z,761nm,26.0s | | | | | | | |
| **RKT** | **Rikitea** | **91.74** | **114** | *e*LR | LR | 08 10 36.3 | | |
| | comp=Z,2μm,34.5s | | | | | | | |
| **ANMO** | **Albuquerque** | **91.88** | **51** | LR | LR | 08 18 19.7 | | |
| | comp=Z,842nm,19.8s,baz=24,slow=32 | | | | | | | |
| **ANMO** | **Albuquerque** | **91.88** | **51** | P | **P** | **07 41 37.6** | **-0.1** | |
| | baz=300 | | | | | | | |
| **121A** | **Cookes Peak, D** | **92.12** | **53** | P | **P** | **07 41 39.0** | **+0.2** | |
| | baz=300 | | | | | | | |
| **T25A** | **Trinidad** | **92.17** | **48** | P | **P** | **07 41 38.9** | **-0.1** | |
| | baz=302 | | | | | | | |
| **KSP** | **Ksiaz** | **92.61** | **330** | *e*P | **P** | **07 41 40.1** | **-0.4** | |
| KSP | | | | *e*L | L | 08 29 18.7 | | |
| | comp=Z,1μm,17.5s | | | | | | | |
| **MORC** | **Moravsky Berou** | **92.73** | **328** | *e*P | **P** | **07 41 40.2** | **-0.9** | |
| MORC | | | | *e*PP | **PP** | **07 45 21.9** | **-0.6** | |
| **VYHS** | **Vyhne** | **92.95** | **327** | *e*P | **P** | **07 41 42.0** | **-0.1** | |
| VYHS | | | | *e* | | 07 41 48.1 | | |
| **VYHS** | **Vyhne** | **92.95** | **327** | *e*P | **P** | **07 41 42.0** | **-0.1** | |
| VYHS | | | | *e* | | 07 41 48.1 | | |
| **ECSD** | **EROS Data Cent** | **93.37** | **39** | P | **P** | **07 41 43.9** | **-0.3** | |
| | baz=307 | | | | | | | |
| **EIL** | **Elat** | **93.38** | **304** | LR | LR | 08 29 38.9 | | |
| | comp=Z,191nm,18.1s,baz=74,slow=39 | | | | | | | |
| **EYMN** | **Ely** | **93.49** | **33** | P | **P** | **07 41 44.8** | **+0.2** | |
| | baz=311 | | | | | | | |
| **VRAC** | **Vranov** | **93.51** | **328** | *e*P | **P** | **07 41 44.4** | **-0.3** | |
| VRAC | | | | *e*PP | **PP** | **07 45 26.0** | **-2.5** | |
| **VRAC** | **Vranov** | **93.51** | **328** | LR | LR | 08 28 04.0 | | |
| | comp=Z,1μm,18.5s,baz=48,slow=38 | | | | | | | |
| **BRG** | **Berggiesshubel** | **93.66** | **331** | S | **S** | **07 52 55.0** | **+2.3** | |
| **CLL** | **Collm** | **93.77** | **331** | *i* P | **P** | **07 41 45.1** | **-0.7** | |
| CLL | | | | *e*S | **S** | **07 52 49.0** | **-4.7** | |
| CLL | | | | MLR | MLR | | | |
| | comp=Z,1μm,18.9s | | | | | | | |
| **KRUC** | **Moravsky** | **93.77** | **328** | *e*P | **P** | **07 41 45.4** | **-0.4** | |
| **LPIG** | **La Paz** | **94.20** | **62** | LR | LR | 08 17 15.4 | | |
| | comp=Z,558nm,20.0s,baz=284,slow=31 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **94.30** | **53** | P | **P** | **07 41 48.4** | **-0.3** | |
| | baz=301 | | | | | | | |
| **CBKS** | **Cedar Bluff** | **94.35** | **44** | P | **P** | **07 41 48.1** | **-0.7** | |
| | baz=305 | | | | | | | |
| **RONA** | **Rosalia, Austr** | **94.75** | **327** | *e*pP | **pP** | **07 41 56.2** | **-0.6** | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| RONA | | | | *e*PP | **PP** | **07 45 36.8** | **-1.4** | |
| | comp=Z,6.8nm,1.4s | | | | | | | |
| **CONA** | **Conrad Observa** | **94.80** | **328** | *e*pP | **pP** | **07 41 58.2** | **+1.1** | |
| | comp=Z,5.7nm,1.9s | | | | | | | |
| CONA | | | | *e*PP | **PP** | **07 45 34.7** | **-4.0** | |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| **ATD** | **Arta Tunnel** | **95.02** | **285** | LR | LR | 08 23 06.9 | | |
| | comp=Z,9.7nm,21.6s,baz=178,slow=34 | | | | | | | |
| **KHC** | **Kasperske Hory** | **95.06** | **330** | *e*P | P | 07 41 57.5 | +5.7 | |
| **KHC** | **Kasperske Hory** | **95.06** | **330** | *e*P | P | 07 41 57.5 | +5.7 | |
| **GERES** | **GERESS Array B** | **95.20** | **329** | P | **P** | **07 41 52.0** | **-0.5** | |
| | comp=Z,0.2nm,0.3s,baz=80,slow=31,SNR=1.9 | | | | | | | |
| GERES | | | | LR | LR | 08 28 12.0 | | |
| | comp=Z,577nm,18.2s,baz=48,slow=38 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **AMTX** | **Amarillo** | **95.25** | **49** | P | **P** | **07 41 52.3** | **-0.8** | |
| | baz=303 | | | | | | | |
| **ARSA** | **Arzberg** | **95.44** | **327** | *i* pP | **pP** | **07 41 59.3** | **-0.7** | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| ARSA | | | | *i* PP | **PP** | **07 45 41.5** | **-2.1** | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **MOA** | **Molln** | **95.63** | **328** | *i* pP | **pP** | **07 41 60.0** | **-0.9** | |
| | comp=Z,3.2nm,1.0s | | | | | | | |
| MOA | | | | *i* PP | **PP** | **07 45 42.2** | **-2.9** | |
| | comp=Z,6.1nm,1.3s | | | | | | | |
| **GRF** | **Grafenberg Arr** | **95.72** | **331** | *e*PP | **PP** | **07 45 45.1** | **-0.6** | |
| **BIOA** | **Bad Ischl, Aus** | **96.05** | **329** | *e*PP | **PP** | **07 45 47.8** | **-0.5** | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **SOKA** | **Soboth** | **96.07** | **327** | *e*pP | pP | 07 42 01.9 | -1.1 | |
| | comp=Z,2.9nm,1.0s | | | | | | | |
| **KSU1** | **Kansas State U** | **96.16** | **43** | P | **P** | **07 41 56.6** | **-0.4** | |
| | baz=307 | | | | | | | |
| **OBKA** | **Obir** | **96.43** | **327** | *i* pP | **pP** | **07 42 04.6** | **-0.1** | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| OBKA | | | | *i* PP | **PP** | **07 45 50.7** | **-0.7** | |
| | comp=Z,7.9nm,1.2s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **96.62** | **328** | *e*pP | **pP** | **07 42 05.3** | **-0.3** | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| KBA | | | | *i* PP | **PP** | **07 45 52.2** | **-0.7** | |
| | comp=Z,5.5nm,1.2s | | | | | | | |
| **LESA** | **Schwarzleotal** | **96.69** | **329** | *e*pP | **P** | **07 42 02.0** | **+2.6** | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| LESA | | | | *i* PP | **PP** | **07 45 53.0** | **-0.3** | |
| | comp=Z,7.9nm,1.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **96.79** | **54** | P | **P** | **07 42 01.2** | **+1.1** | |
| | comp=Z,0.5nm,0.7s,baz=305,slow=2.5,SNR=9.6 | | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **07 58 41.4** | **-0.8** | |
| | comp=Z,1.1nm,0.8s,baz=140,slow=4.8,SNR=13 | | | | | | | |
| TXAR | | | | LR | LR | 08 18 49.5 | | |
| | comp=Z,532nm,22.0s,baz=312,slow=31 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **MYKA** | **Terra Mystica** | **96.79** | **328** | *i* PP | **PP** | **07 45 55.6** | **+1.5** | |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **97.26** | **328** | *e*PcP | **PcP** | **07 42 02.2** | **+0.2** | |
| | comp=Z,2.3nm,1.4s | | | | | | | |
| ABTA | | | | *i* PP | **PP** | **07 45 57.1** | **-0.6** | |
| | comp=Z,4.3nm,1.4s | | | | | | | |
| **WATA** | **Walderalm** | **97.28** | **329** | *e*PcP | **P** | **07 42 01.9** | **-0.2** | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| WATA | | | | *e*PP | **PP** | **07 45 56.6** | **-1.3** | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| **WTTA** | **Wattenberg** | **97.30** | **329** | *e*PP | **PP** | **07 45 56.3** | **-1.9** | |
| | comp=Z,5.6nm,1.2s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **97.30** | **47** | P | Pdif | 07 42 02.6 | +0.2 | |
| | baz=305 | | | | | | | |
| **JFWS** | **Jewell Farm** | **97.48** | **37** | P | **P** | **07 42 02.8** | **-0.1** | |
| | baz=312 | | | | | | | |
| **MOTA** | **Moosalm** | **97.49** | **330** | *i* PP | **PP** | **07 45 57.3** | **-2.2** | |
| | comp=Z,9.8nm,1.4s | | | | | | | |
| **SQTA** | **Sank Quirin** | **97.53** | **329** | *i* pP | **pP** | **07 42 07.9** | **-1.8** | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| SQTA | | | | *e*PP | **PP** | **07 45 58.8** | **-1.0** | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **RETA** | **Reutte** | **97.55** | **330** | *e*PP | **PP** | **07 46 01.2** | **+1.3** | |
| | comp=Z,6.4nm,1.4s | | | | | | | |
| **SCHQ** | **Schefferville** | **97.78** | **17** | LR | LR | 08 28 39.7 | | |
| | comp=Z,489nm,20.5s,baz=288,slow=37 | | | | | | | |
| **FETA** | **Feichten** | **97.90** | **330** | *i* P | **P** | **07 42 02.7** | **-2.2** | |
| | comp=Z,2.5nm,1.1s | | | | | | | |
| FETA | | | | *i* PP | **PP** | **07 46 02.9** | **+0.1** | |
| | comp=Z,4.5nm,1.2s | | | | | | | |
| **DAVA** | **Damuels** | **98.10** | **330** | *e*PP | **PP** | **07 46 02.1** | **-2.1** | |
| | comp=Z,9.1nm,1.3s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **98.47** | **330** | LR | LR | 08 31 28.3 | | |
| | comp=Z,946nm,19.1s,baz=39,slow=38 | | | | | | | |
| **JCT** | **Junction City** | **98.99** | **51** | P | **P** | **07 42 09.9** | **0.0** | |
| | baz=304 | | | | | | | |
| **GLMI** | **Gerling** | **99.09** | **32** | P | **Pdif** | **07 42 10.1** | **0.0** | |
| | baz=316 | | | | | | | |
| **HDIL** | **Hopedale** | **99.59** | **38** | P | **Pdif** | **07 42 12.3** | **-0.1** | |
| | baz=312 | | | | | | | |
| **CCM** | **Cathedral Cave** | **100.10** | **41** | P | **Pdif** | **07 42 14.2** | **-0.5** | |
| | baz=310 | | | | | | | |
| **LONY** | **Lake Ozonia** | **103.82** | **27** | P | **Pdif** | **07 42 30.2** | **-1.0** | |
| | baz=324 | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **109.83** | **338** | *e*LR | LR | 08 26 29.0 | | |
| | comp=Z,415nm,16.0s | | | | | | | |
| **MVO** | **Moncorvo** | **110.10** | **337** | *e*LR | LR | 08 27 43.5 | | |
| | comp=Z,832nm,18.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **110.20** | **334** | PP | **PP** | **07 47 31.7** | **-2.4** | |
| | comp=Z,1.0nm,0.9s,baz=16,slow=5.5,SNR=3.3 | | | | | | | |
| **MTE** | **Manteigas** | **110.96** | **337** | *e*LR | LR | 08 28 07.1 | | |
| | comp=Z,656nm,18.0s | | | | | | | |
| **PMRV** | **Marv??o** | **111.75** | **336** | *e*LR | LR | 08 28 14.3 | | |
| | comp=Z,797nm,20.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **113.27** | **180** | PKiKP | **PKiKP** | **07 47 05.1** | **-0.8** | |
| | comp=Z,1.0nm,0.5s,baz=223,slow=0.4,SNR=14 | | | | | | | |
| **PVAQ** | **Vaqueiros** | **113.65** | **335** | *e*LR | LR | 08 29 18.6 | | |
| | comp=Z,621nm,18.0s | | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **121.05** | **341** | A | A | 08 44 42.3 | | |
| | comp=Z,310nm,18.0s | | | | | | | |
| **ELIB** | **Princess Elisa** | **121.35** | **198** | *d*PKPdf | **PKPdf** | **07 47 20.3** | **-1.0** | |
| ELIB | | | | *d*PKP | **sPKPdf** | **07 47 28.6** | **-1.5** | |
| **NVL** | **N'lazarevskaya** | **125.17** | **198** | *e*PKIKP | **PKiKP** | **07 47 35.6** | **+6.8** | |
| NVL | | | | *e*SS | SS | 08 06 10.1 | -3.1 | |
| NVL | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **126.74** | **194** | ⇑PKPdf | **PKPdf** | **07 47 31.8** | **+0.1** | |
| | comp=Z,375nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.82** | **310** | PKP | **PKPdf** | **07 47 34.6** | **-0.6** | |
| | comp=Z,1.4nm,0.9s,baz=24,slow=2.5,SNR=7.0 | | | | | | | |
| TORD | | | | PP | **PP** | **07 49 36.4** | **-0.2** | |
| | comp=Z,1.6nm,0.9s,baz=25,slow=7.1,SNR=3.5 | | | | | | | |
| **SNAA** | **Sanae** | **128.14** | **193** | ⇑PKPdf | **PKPdf** | **07 47 33.9** | **-0.4** | |
| | comp=Z,46nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **128.14** | **193** | PKP | **PKPdf** | **07 47 33.5** | **-0.8** | |
| | comp=Z,2.3nm,0.8s,baz=124,slow=7.3,SNR=13 | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **129.63** | **192** | ⇑PKPdf | **PKPdf** | **07 47 37.0** | **0.0** | |
| | comp=Z,6.4nm,0.6s,baz=170,slow=0.8 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **129.79** | **191** | ⇑PKPdf | **PKPdf** | **07 47 37.2** | **-0.1** | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **130.03** | **192** | ⇑PKPdf | **PKPdf** | **07 47 37.8** | **0.0** | |
| | comp=Z,4.9nm,1.3s | | | | | | | |
| **PLCA** | **Paso Flores** | **146.69** | **129** | PKPbc | **PKPab** | **07 48 11.5** | **-0.5** | |
| | comp=Z,6.0nm,0.6s,baz=244,slow=3.8,SNR=41 | | | | | | | |
| **LPAZ** | **La Paz** | **149.47** | **82** | PKPbc | **PKiKP** | **07 48 20.3** | **-0.4** | |
| | comp=Z,5.9nm,0.7s,baz=264,slow=2.0,SNR=13 | | | | | | | |

*IDC **18** 07:38:20.7±3.0,23°.37N×142°.97E,h0km,mb4.0/7, mbtmp3.9/9,ML3.0/2,Error ellipse: s-maj=128.8km s-min=21.0km az=77.0*
*NEIC **18** 07:38:22.2±2.1,23°.4N±0°.1×142°.7E±0°.1,h10km±1km, mb4.3/7,Error ellipse: s-maj=22.4km s-min=8.3km az=139.0*

**ISC 18 07:38:22.1±1.0,23°.52N±0°.08×142°.9E±0°.2,h10km,n23, σ1$75/24,mb4.3/12,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **JCJ** | **Chichijima** | **3.61** | **351** | Pn | **Pn** | **07** | **39** | **18.6 +0.5** |
| **JCJ** | **Chichijima** | **3.61** | **351** | Pn | **Pn** | **07** | **39** | **14.4 -3.7** |
| | 6.2nm,0.3s,baz=292,slow=19,SNR=1.1 | | | | | | | |
| JCJ | | | | Sn | **Sn** | **07** | **39** | **57.6 -3.1** |
| | 25nm,0.3s,baz=106,slow=23,SNR=7.1 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.58** | **344** | Pn | **Pn** | **07** | **41** | **36.3 +1.5** |
| | 0.1nm,0.3s,baz=160,slow=11,SNR=2.5 | | | | | | | |
| | 1.1nm,0.8s | | | | | | | |
| **MAJO** | **Matsushiro** | **13.58** | **344** | Pn | **Pn** | **07** | **41** | **34.2 -0.6** |
| **MJB9** | **Matsu-Tunnel** | **13.58** | **344** | Pn | **Pn** | **07** | **41** | **33.9 -1.0** |
| **JMM** | **Marumori** | **14.40** | **353** | Pn | **Pn** | **07** | **41** | **46.4 +0.3** |
| **KSRS** | **Korea Array** | **18.89** | **321** | P | **Pn** | **07** | **42** | **45.1 +1.8** |
| | 0.1nm,0.3s,baz=125,slow=11,SNR=2.1 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.81** | **192** | P | **P** | **07** | **46** | **27.2 -1.1** |
| WB0 | | | | IAmb | IAmb | 07 | 46 | 51.0 |
| | comp=Z,9.6nm,1.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.99** | **192** | P | **P** | **07** | **46** | **26.9 -2.9** |
| WB2 | | | | IAmb | IAmb | 07 | 47 | 07.3 |
| | comp=Z,6.4nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.99** | **192** | P | **P** | **07** | **46** | **28.5 -1.3** |
| | comp=Z,0.3nm,0.4s,baz=7.9,slow=8.0,SNR=8.8 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.65** | **204** | P | **P** | **07** | **46** | **33.4 -1.7** |
| **ASAR** | **Alice Springs** | **47.71** | **191** | P | **P** | **07** | **46** | **58.7 -0.5** |
| | comp=Z,0.4nm,0.6s,baz=14,slow=12,SNR=2.5 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **50.11** | **208** | P | **P** | **07** | **47** | **15.9 -1.7** |
| PSA00 | | | | IAmb | IAmb | 07 | 47 | 37.7 |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **53.25** | **312** | P | **P** | **07** | **47** | **40.4 -0.5** |
| **MKAR** | **Makanchi Array** | **53.25** | **312** | P | **P** | **07** | **47** | **40.1 -0.8** |
| **MKAR** | **Makanchi Array** | **53.25** | **312** | P | **P** | **07** | **47** | **42.2 +1.2** |
| | comp=Z,0.4nm,0.4s,baz=88,slow=8.6,SNR=6.4 | | | | | | | |
| | comp=Z,0.4nm,0.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FYU | Fort Yukon | 3.01 | 188 | | | Pn | 07 41 32.6 0.0 |
| D22K | Ayikyak River | 3.09 | 262 | Pn | | Pn | 07 41 34.0 +0.3 |
| D22K | | | | IAML | | | 07 42 34.4 |
| | comp=N,330nm,0.9s | | | | | | |
| E22K | Anaktuvuk Pass | 3.09 | 246 | Pn | | Pn | 07 41 33.9 +0.1 |
| E22K | | | | IAML | | | 07 42 30.3 |
| | comp=N,204nm,1.2s | | | | | | |
| G24K | Hadweenzic Riv | 3.10 | 205 | | | Pn | 07 41 34.1 +0.2 |
| G24K | | | | IAML | | | 07 42 26.8 |
| | comp=N,305nm,1.3s | | | | | | |
| G24K | | | | IAML | | | 07 42 33.4 |
| | comp=E,263nm,1.0s | | | | | | |
| B22K | Teshekpuk Lake | 3.27 | 288 | Pn | | Pn | 07 41 36.5 +0.4 |
| H27K | Steamboat Moun | 3.48 | 162 | | | Pn | 07 41 41.7 +2.6 |
| G29M | Pine Creek | 3.51 | 136 | | | Pn | 07 41 39.9 +0.4 |
| G29M | | | | IAML | | | 07 42 52.5 |
| | comp=N,250nm,0.8s | | | | | | |
| G23K | Bananza Creek | 3.58 | 220 | | | Pn | 07 41 40.3 -0.1 |
| G23K | | | | IAML | | | 07 42 49.3 |
| | comp=E,173nm,0.8s | | | | | | |
| G23K | | | | IAML | | | 07 42 53.1 |
| | comp=N,139nm,1.2s | | | | | | |
| B21K | Ikpikpuk River | 3.64 | 276 | | | Pn | 07 41 41.9 +0.7 |
| F30M | Barrier River | 3.65 | 118 | | | Pn | 07 41 43.8 +2.3 |
| E21K | Killik River | 3.68 | 257 | Pn | | Pn | 07 41 42.1 +0.3 |
| E21K | | | | IAML | | | 07 42 44.7 |
| | comp=E,176nm,0.9s | | | | | | |
| C21K | Knifeblade Rid | 3.76 | 269 | | | Pn | 07 41 44.6 +1.7 |
| G30M | tAoh Zraii Nji | 3.93 | 127 | Pn | | Pn | 07 41 45.4 +0.1 |
| G30M | | | | IAML | | | 07 42 56.2 |
| | comp=N,114nm,1.0s | | | | | | |
| H24K | Noodor Dome | 3.97 | 202 | Pn | | Pn | 07 41 45.9 0.0 |
| H24K | | | | IAML | | | 07 42 57.7 |
| | comp=N,141nm,0.7s | | | | | | |
| H24K | | | | IAML | | | 07 43 00.7 |
| | comp=E,143nm,1.6s | | | | | | |
| H29M | Whitestone | 4.00 | 144 | Pn | | Pn | 07 41 47.1 +0.8 |
| H29M | | | | IAML | | | 07 42 57.6 |
| | comp=N,123nm,1.1s | | | | | | |
| INK | Inuvik | 4.06 | 103 | | | Pn | 07 41 47.4 +0.4 |
| INK | Inuvik | 4.06 | 103 | Pn | | Pn | 07 41 48.0 +1.1 |
| | comp=N,1.7nm,0.3s,baz=310,slow=10,SNR=28 | | | | | | |
| INK | | | | Sn | | Sn | 07 42 35.5 +1.0 |
| | comp=N,3.4nm,0.3s,baz=178,slow=16,SNR=2.8 | | | | | | |
| | comp=N,6.5nm,0.4s | | | | | | |
| PRP | Porcupine Dome | 4.07 | 188 | Pn | | Pn | 07 41 47.8 +0.5 |
| PRP | | | | IAML | | | 07 42 57.1 |
| | comp=E,117nm,0.9s | | | | | | |
| PRP | | | | IAML | | | 07 42 57.6 |
| | comp=N,137nm,0.7s | | | | | | |
| I27K | Kandik River | 4.08 | 165 | | | Pn | 07 41 48.6 +1.3 |
| F21K | Alatna River | 4.14 | 240 | Pn | | Pn | 07 41 48.3 +0.1 |
| F21K | | | | IAML | | | 07 43 03.5 |
| | comp=E,114nm,1.0s | | | | | | |
| F21K | | | | IAML | | | 07 43 04.3 |
| | comp=N,106nm,1.0s | | | | | | |
| H23K | Yukon River | 4.25 | 211 | Pn | | Pn | 07 41 49.8 +0.2 |
| H23K | | | | IAML | | | 07 43 03.3 |
| | comp=E,104nm,0.9s | | | | | | |
| H23K | | | | IAML | | | 07 43 11.9 |
| | comp=N,119nm,0.8s | | | | | | |
| EPYK | Eagle Plains | 4.26 | 135 | | | Pn | 07 41 49.8 0.0 |
| I26K | Coal Creek Min | 4.28 | 174 | Pn | | Pn | 07 41 50.2 +0.3 |
| F31M | Tsiigehtchic | 4.40 | 114 | Pn | | Pn | 07 41 51.1 -0.5 |
| F31M | | | | IAML | | | 07 43 15.6 |
| | comp=N,76nm,1.4s | | | | | | |
| I28M | Miner Creek | 4.43 | 156 | Pn | | Pn | 07 41 53.1 +0.9 |
| I28M | | | | IAML | | | 07 42 50.4 |
| | comp=N,88nm,0.5s | | | | | | |
| I28M | | | | IAML | | | 07 43 13.9 |
| | comp=E,133nm,1.0s | | | | | | |
| D20K | Etivluk River | 4.51 | 265 | | | Pn | 07 41 54.3 +1.1 |
| E20K | Nigu River | 4.51 | 259 | | | Pn | 07 41 54.4 +1.1 |
| B20K | Meade River | 4.51 | 282 | Pn | | Pn | 07 41 53.6 +0.4 |
| G31M | Satah River | 4.54 | 121 | Pn | | Pn | 07 41 54.3 +0.7 |
| G31M | | | | IAML | | | 07 43 13.7 |
| | comp=N,88nm,0.9s | | | | | | |
| G31M | | | | IAML | | | 07 43 17.7 |
| | comp=E,88nm,1.2s | | | | | | |
| H22K | Ishtalitna Cre | 4.56 | 220 | | | Pn | 07 41 54.0 +0.1 |
| POKR | Poker Plat Res | 4.61 | 197 | | | Pn | 07 41 55.8 +1.2 |
| POKR | | | | IAML | | | 07 43 21.6 |
| | comp=E,90nm,1.8s | | | | | | |
| POKR | | | | IAML | | | 07 43 24.6 |
| | comp=N,76nm,0.9s | | | | | | |
| G21K | Allakaket | 4.62 | 233 | Pn | | Pn | 07 41 54.4 -0.3 |
| G21K | | | | IAML | | | 07 43 26.8 |
| | comp=N,74nm,0.9s | | | | | | |
| I29M | Ogilvie Camp, | 4.78 | 149 | | | Pn | 07 41 56.9 +0.1 |
| I29M | | | | IAML | | | 07 43 04.8 |
| | comp=N,73nm,0.5s | | | | | | |
| I29M | | | | IAML | | | 07 43 17.4 |
| | comp=E,82nm,0.7s | | | | | | |
| I23K | Minto, Yukon-K | 4.84 | 207 | | | Pn | 07 41 57.7 +0.1 |
| I23K | | | | IAML | | | 07 43 24.6 |
| | comp=N,79nm,1.1s | | | | | | |
| I23K | | | | IAML | | | 07 43 27.3 |
| | comp=E,77nm,1.3s | | | | | | |
| MDM | Murphy Dome | 4.86 | 201 | | | Pn | 07 41 58.4 +0.4 |
| MDM | | | | IAML | | | 07 43 19.6 |
| | comp=E,81nm,0.7s | | | | | | |
| MDM | | | | IAML | | | 07 43 21.4 |
| | comp=N,86nm,0.6s | | | | | | |
| COLA | College | 4.90 | 198 | | | Pn | 07 41 59.4 +1.0 |
| IL31 | | 4.90 | 193 | | | Pn | 07 41 59.1 +0.5 |
| ILAR | Eielson Array | 4.90 | 193 | Pn | | Pn | 07 41 59.3 +0.7 |
| | comp=N,3.0nm,0.3s,baz=4.9,slow=12,SNR=75 | | | | | | |
| ILAR | | | | Sn | | Sn | 07 42 55.4 +0.1 |
| | comp=N,4.5nm,0.3s,baz=24,slow=7.0,SNR=6.9 | | | | | | |
| ILAR | | | | Lg | | Lg | 07 43 16.2 |
| | comp=N,6.5nm,0.3s,baz=12,slow=29,SNR=5.8 | | | | | | |
| | comp=N,12nm,0.6s | | | | | | |
| EGAK | Eagle | 4.93 | 165 | | | Pn | 07 41 59.5 +0.5 |
| EGAK | | | | IAML | | | 07 42 58.8 |
| | comp=N,83nm,0.9s | | | | | | |
| EGAK | | | | IAML | | | 07 43 35.3 |
| | comp=N,75nm,1.5s | | | | | | |
| F20K | Avaraart Lake | 4.95 | 245 | Pn | | Pn | 07 42 00.0 +0.9 |
| F20K | | | | IAML | | | 07 43 32.2 |
| | comp=E,49nm,0.7s | | | | | | |
| F20K | | | | IAML | | | 07 43 41.5 |
| | comp=N,56nm,1.1s | | | | | | |
| J25K | Salcha River, | 4.97 | 186 | | | Pn | 07 42 00.1 +0.5 |
| J25K | | | | IAML | | | 07 43 23.6 |
| | comp=N,54nm,0.8s | | | | | | |
| J26L | Joseph Creek | 5.07 | 177 | | | Pn | 07 42 01.8 +0.8 |
| J26L | | | | IAML | | | 07 43 29.1 |
| | comp=E,68nm,0.9s | | | | | | |
| J26L | | | | IAML | | | 07 43 30.6 |
| | comp=N,66nm,0.7s | | | | | | |
| IMAR | Indian Mountai | 5.08 | 230 | | | Pn | 07 42 01.0 -0.1 |
| H21K | Melozitna Rive | 5.09 | 224 | Pn | | Pn | 07 42 01.4 +0.1 |
| H21K | | | | IAML | | | 07 43 32.4 |
| | comp=E,62nm,1.5s | | | | | | |
| H21K | | | | IAML | | | 07 43 44.5 |
| | comp=N,46nm,2.3s | | | | | | |
| D19K | Kuna River | 5.10 | 265 | Pn | | Pn | 07 42 02.0 +0.7 |
| D19K | | | | IAML | | | 07 43 41.6 |
| | comp=E,61nm,1.4s | | | | | | |
| CCB | Clear Creek Bu | 5.11 | 198 | Pn | | Pn | 07 42 01.8 +0.3 |
| CCB | | | | IAML | | | 07 43 33.0 |
| | comp=E,43nm,1.0s | | | | | | |
| MLY | Manley | 5.18 | 212 | Pn | | Pn | 07 42 03.0 +0.5 |
| E19K | Redstone River | 5.22 | 253 | | | Pn | 07 42 02.8 -0.2 |
| HDA | Harding Lake | 5.26 | 193 | | | Pn | 07 42 04.6 +1.0 |
| I30M | Mount Dempster | 5.29 | 141 | Pn | | Pn | 07 42 04.0 0.0 |
| I30M | | | | IAML | | | 07 43 07.8 |
| | comp=N,50nm,0.4s | | | | | | |
| I30M | | | | IAML | | | 07 43 10.2 |
| | comp=E,63nm,0.5s | | | | | | |
| WRH | Wood River Hil | 5.31 | 198 | | | Pn | 07 42 05.2 +1.0 |
| WRH | | | | IAML | | | 07 43 39.0 |
| | comp=N,47nm,1.4s | | | | | | |
| WRH | | | | IAML | | | 07 43 43.0 |
| | comp=E,69nm,1.2s | | | | | | |
| NEA2 | Nenana | 5.32 | 203 | | | Pn | 07 42 04.5 +0.2 |
| NEA2 | | | | IAML | | | 07 43 44.2 |
| | comp=E,38nm,1.7s | | | | | | |
| C19K | Lookout Ridge | 5.46 | 273 | Pn | | Pn | 07 42 07.4 +1.2 |
| SCRK | Sand Creek | 5.59 | 179 | Pn | | Pn | 07 42 09.1 +0.9 |
| F19K | Shaleruckik Mo | 5.73 | 248 | Pn | | Pn | 07 42 10.2 +0.3 |
| BWN | Browne | 5.77 | 203 | Pn | | Pn | 07 42 11.4 +0.9 |
| DAWY | Dawson | 5.82 | 159 | | | Pn | 07 42 12.1 +0.9 |
| RIDG | Independent Ri | 5.83 | 183 | Pn | | Pn | 07 42 12.7 +1.3 |
| J30M | Hart River | 5.86 | 144 | Pn | | Pn | 07 42 11.9 +0.1 |
| G19K | Purcell Mounta | 5.94 | 241 | Pn | | Pn | 07 42 12.3 -0.5 |
| BPAW | Bear Paw Mtn. | 6.08 | 209 | | | Pn | 07 42 14.5 -0.2 |
| C18K | Utukok River | 6.13 | 270 | Pn | | Pn | 07 42 15.5 0.0 |
| H19K | Roundabout Mou | 6.17 | 235 | Pn | | Pn | 07 42 15.7 -0.2 |
| I20K | Naaghedeneel | 6.21 | 225 | | | Pn | 07 42 17.5 +1.0 |
| K29M | Barlow Dome | 6.31 | 152 | Pn | | Pn | 07 42 18.7 +0.7 |
| E18K | Tukpahlearik C | 6.38 | 258 | Pn | | Pn | 07 42 19.3 +0.4 |
| RND | Reindeer | 6.43 | 199 | | | Pn | 07 42 19.8 +0.1 |
| L26K | Log Cabin Wild | 6.55 | 176 | | | Pn | 07 42 21.7 +0.4 |
| BCAR | Beaver Creek A | 6.58 | 170 | Pn | | Pn | 07 42 21.9 +0.3 |
| L27K | Beaver Creek, | 6.58 | 170 | Pn | | Pn | 07 42 22.4 +0.7 |
| G18K | Tagagawik | 6.58 | 243 | Pn | | Pn | 07 42 21.9 +0.2 |
| RDOG | Red Dog Mine | 6.93 | 266 | Pn | | Pn | 07 42 26.0 -0.4 |
| H18K | Honhosa River | 7.00 | 238 | Pn | | Pn | 07 42 27.2 -0.2 |
| J19K | Poorman | 7.15 | 224 | Pn | | Pn | 07 42 29.2 -0.2 |
| M26K | Nabesna, AK | 7.19 | 175 | Pn | | Pn | 07 42 31.5 +1.5 |
| M27K | Edge Creek, AK | 7.28 | 171 | | | Pn | 07 42 33.0 +1.7 |
| M29M | Somme Creek | 7.50 | 159 | Pn | | Pn | 07 42 35.5 +1.2 |
| SCM | Sheep Creek Mo | 7.85 | 191 | | | Pn | 07 42 41.5 +2.5 |
| M20K | Styx River | 8.51 | 210 | Pn | | Pn | 07 42 49.1 +1.0 |
| FARO | Faro, Yukon | 8.57 | 144 | | | Pn | 07 42 48.9 0.0 |
| DLBC | Dease Lake | 12.72 | 144 | Pn | | Pn | 07 43 44.9 -0.8 |
| | comp=E,0.2nm,0.3s,baz=344,slow=9.7,SNR=6.0 | | | | | | |
| | comp=E,2.0nm,0.7s | | | | | | |
| YKA | Yellowknife Ar | 13.82 | 106 | Pn | | Pn | 07 43 57.2 -3.3 |
| | comp=E,0.5nm,0.3s,baz=317,slow=3.0,SNR=10 | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | |
| PDAR | Pinedale Array | 32.19 | 128 | P | | P | 07 47 16.5 +3.6 |
| | comp=E,0.3nm,0.5s,baz=340,slow=7.8,SNR=2.9 | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 34.12 | 142 | P | | P | 07 47 34.1 +4.3 |
| | comp=E,0.3nm,0.6s,baz=354,slow=7.3,SNR=3.0 | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 46.41 | 128 | P | | P | 07 49 14.1 +2.7 |
| | comp=E,0.3nm,0.5s,baz=334,slow=4.3,SNR=8.5 | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | |
| FINES | FINESS Array B | 49.12 | 6 | P | | P | 07 49 31.9 0.0 |
| | comp=E,1.7nm,0.8s,baz=359,slow=9.5,SNR=4.5 | | | | | | |
| | comp=E,1.7nm,0.8s | | | | | | |
| HFS | Hagfors | 49.66 | 14 | P | | P | 07 49 36.8 +0.8 |
| | comp=E,1.5nm,0.8s,baz=0.9,slow=9.2,SNR=1.3 | | | | | | |
| | comp=E,1.5nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 56.13 | 329 | P | | P | 07 50 23.0 -0.9 |
| | comp=E,0.5nm,0.7s,baz=15,slow=7.7,SNR=2.8 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 59.07 | 324 | P | | P | 07 50 43.7 -1.1 |
| | comp=E,0.2nm,0.4s,baz=355,slow=8.7,SNR=2.2 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| AKASG | Malin Array Be | 59.98 | 5 | P | | P | 07 50 51.7 +0.9 |
| | comp=E,0.2nm,0.3s,baz=357,slow=7.2,SNR=2.3 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |

*DJA **18** 07:50:03.5±0.3,1°N±4°×12°6E±°, h10km, M4.7/13, mb5.0/3, mB5.3/1, MLv4.5/13, Mw(mB)4.7/1*
*IDC **18** 07:50:05.3±2.5, 0.81N×126.08E, h43km±23km, mb4.2/21, mbtmp4.4/22, ML4.4/1, Error ellipse: s-maj=21.1km s-min=9.8km az=82.0*
*NEIC **18** 07:50:05.8±1.8, 0.75N±0.07×126.19E±0.06, h39km±7km, mb4.8/45, Error ellipse: s-maj=10.3km s-min=8.0km az=165.0*

**ISC 18 07:50:05.6±0.3, 0.76N±0.04×126.14E±0.05, h44km, n133, σ1°9'15/147, mb4.7/50, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TNTI | Ternate | 1.22 | 89 | P | Pn | 07 50 25.5 | -0.7 |
| TNTI | Ternate | 1.22 | 89 | | Pn | 07 50 25.0 | -1.2 |
| TNTI | Ternate | 1.22 | 89 | P | Pn | 07 50 25.5 | -0.7 |
| LBMI | Labuha | 1.94 | 136 | P | Pn | 07 50 39.0 | +2.9 |
| KMSI | Cibinong | 2.17 | 265 | P | Pn | 07 50 38.4 | -0.8 |
| KMSI | | | | S | Sn | 07 51 05.4 | +0.5 |
| SANI | Sanana | 2.80 | 183 | P | Pn | 07 50 47.9 | +0.1 |
| SANI | Sanana | 2.80 | 183 | P | Pn | 07 50 47.8 | 0.0 |
| SGSI | Sangihe | 2.97 | 348 | P | Pn | 07 50 54.9 | +4.7 |
| GTOI | Gorontalo | 3.13 | 268 | P | Pn | 07 50 53.6 | +1.1 |
| LUWI | Luwuk | 3.82 | 242 | P | Pn | 07 51 04.0 | +2.1 |
| LUWI | Luwuk | 3.82 | 242 | Pn | Pn | 07 51 03.1 | +1.2 |
| LUWI | Luwuk | 3.82 | 242 | P | Pn | 07 51 03.4 | +1.5 |
| NLAI | Namlea | 4.09 | 166 | P | Pn | 07 51 07.2 | +1.6 |
| TOLI2 | Tolitoli | 5.37 | 274 | Pn | Pn | 07 51 21.5 | -1.8 |
| SPSI | Sidrap Palu | 7.91 | 234 | P | Pn | 07 52 00.7 | +2.6 |
| | 83nm,0.5s,2µm0.4nm | | | | | | |
| BNSI | Bone | 7.92 | 230 | P | Pn | 07 51 59.6 | +1.4 |
| KAPI | Kappang | 8.58 | 228 | Pn | Pn | 07 52 08.1 | +0.8 |
| KAPI | Kappang | 8.58 | 228 | P | Pn | 07 52 08.8 | +1.4 |
| | 4.2nm,0.3s,baz=18,slow=2.6,SNR=7.3 | | | | | | |
| KAPI | | | | S | Sn | 07 53 43.0 | +0.1 |
| | 7.1nm,0.5s,baz=152,slow=19,SNR=1.0 | | | | | | |
| | 17nm,0.5s | | | | | | |
| MYLDM | Lahad Datu | 8.80 | 300 | Pn | Pn | 07 52 11.5 | +1.2 |
| SOEI | Soe | 10.61 | 190 | Pn | Pn | 07 52 34.0 | -1.3 |
| SOEI | Soe | 10.61 | 190 | P | Pn | 07 52 48.2 | +13 |
| SBUM | Sibu | 14.02 | 277 | Pn | Pn | 07 53 24.3 | +2.6 |
| MTN | Manton Dam | 14.39 | 160 | Pn | Pn | 07 53 24.8 | -1.9 |
| KDU | Kakadu | 14.76 | 155 | P | Pn | 07 53 29.6 | -2.0 |
| KSM | Kuching | 15.85 | 273 | Pn | Pn | 07 53 46.7 | +1.0 |
| KNRA | Kununurra | 16.54 | 171 | Pn | Pn | 07 53 54.2 | -0.3 |
| BBJI | Bungbulang | 20.17 | 246 | P | Pn | 07 54 38.7 | -0.1 |
| WB0 | Warramunga Arr | 21.95 | 159 | P | P | 07 54 54.6 | -1.0 |
| WB0 | | | | IAmb | IAmb | 07 54 59.8 | |
| | comp=E,65nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 22.09 | 159 | P | P | 07 54 55.1 | -2.1 |
| WRA | Warramunga Arr | 22.09 | 159 | P | P | 07 54 56.4 | -0.7 |
| | comp=E,14nm,0.5s,baz=338,slow=11,SNR=165 | | | | | | |
| WRA | | | | S | S | 07 58 58.1 | -0.3 |
| | comp=E,0.6nm,0.6s,baz=336,slow=19,SNR=2.9 | | | | | | |
| | comp=E,14nm,0.5s | | | | | | |
| COEN | Coen | 22.33 | 132 | P | P | 07 54 59.4 | -0.4 |
| COEN | Coen | 22.33 | 132 | P | P | 07 54 58.5 | -1.2 |
| COEN | | | | IAmb | IAmb | 07 55 07.1 | |
| | comp=E,19nm,0.8s | | | | | | |
| MBWA | Marble Bar | 22.67 | 196 | P | P | 07 55 02.0 | -1.4 |
| PSA00 | Pilbara Seismi | 23.03 | 195 | P | P | 07 55 06.5 | -0.6 |
| TPUB | Ta-pu | 23.04 | 347 | P | P | 07 55 08.7 | +1.6 |
| QIS | Mount Isa | 24.95 | 149 | P | P | 07 55 25.8 | +0.7 |
| AS31 | Alice Springs | 25.43 | 163 | P | P | 07 55 28.8 | -0.6 |
| ASAR | Alice Springs | 25.43 | 163 | P | P | 07 55 28.9 | -0.5 |
| ASAR | Alice Springs | 25.43 | 163 | P | P | 07 55 29.3 | 0.0 |
| | comp=E,11nm,0.7s,baz=344,slow=8.1,SNR=89 | | | | | | |
| ASAR | | | | PcP | PcP | 07 59 00.6 | -0.3 |
| | comp=E,1.3nm,0.6s,baz=346,slow=2.0,SNR=8.9 | | | | | | |
| ASAR | | | | S | S | 07 59 55.7 | +2.4 |
| | comp=E,0.6nm,0.8s,baz=347,slow=19,SNR=3.4 | | | | | | |
| | comp=E,11nm,0.7s | | | | | | |
| AS01 | Alice Springs | 25.44 | 163 | P | P | 07 55 30.0 | +0.5 |
| WRKA | Warakurna | 25.73 | 175 | P | P | 07 55 32.5 | +0.4 |
| JOW | Kunigami | 26.00 | 4 | P | P | 07 55 35.0 | +0.5 |
| | comp=E,24nm,0.8s,baz=166,slow=8.3,SNR=4.5 | | | | | | |
| | comp=E,24nm,0.8s | | | | | | |
| MEEK | Meekatharra | 28.19 | 194 | P | P | 07 55 54.1 | -0.1 |
| OOD | Oodnadatta | 29.84 | 163 | P | P | 07 56 09.3 | +0.6 |
| MORW | Morawa | 31.20 | 197 | P | P | 07 56 20.4 | -0.3 |
| MORW | Morawa | 31.20 | 197 | P | P | 07 56 20.5 | -0.3 |
| MORW | | | | IAmb | IAmb | 07 57 01.7 | |
| | comp=Z,44nm,1.7s | | | | | | |
| FORT | Forrest | 31.42 | 177 | P | P | 07 56 22.8 | +0.1 |
| FORT | Forrest | 31.42 | 177 | P | P | 07 56 21.9 | -0.7 |
| MULG | Mulgathing | 31.78 | 167 | P | P | 07 56 26.3 | +0.4 |
| NJ2 | Nanjing | 31.88 | 348 | eP | P | 07 56 28.6 | +1.9 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CMAR | Chiang Mai Arr | 31.97 | 305 | P | P | 07 56 27.2 | -0.5 |
| | comp=Z,0.7nm,0.4s,baz=137,slow=8.3,SNR=1.3 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| LCRK | Leigh Creek | 33.10 | 161 | P | P | 07 56 37.7 | +0.3 |
| KLBR | Kellerberrin | 33.15 | 193 | P | P | 07 56 38.5 | +0.7 |
| NWAO | Narrogin (SRO) | 34.55 | 193 | P | P | 07 56 50.9 | +0.9 |
| BBOO | Buckleboo | 34.68 | 165 | P | P | 07 56 51.3 | +0.2 |
| BBOO | Buckleboo | 34.68 | 165 | P | P | 07 56 51.3 | +0.2 |
| PZH | PanZhiHua | 34.73 | 319 | P | P | 07 56 55.3 | +3.5 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| STKA | Stephens Creek | 35.61 | 157 | P | P | 07 56 59.9 | +0.7 |
| STKA | Stephens Creek | 35.61 | 157 | P | P | 07 56 58.7 | -0.4 |
| STKA | Stephens Creek | 35.61 | 157 | P | P | 07 56 59.4 | +0.2 |
| | comp=Z,11nm,0.7s,baz=332,slow=8.6,SNR=16 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| JGF | Kuroka | 36.20 | 16 | P | P | 07 57 03.6 | -0.6 |
| KSRS | Korea Array | 36.55 | 2 | P | P | 07 57 07.2 | +0.1 |
| | comp=Z,2.2nm,0.6s,baz=182,slow=9.5,SNR=10 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| MJAR | Matsushiro Arr | 37.32 | 16 | P | P | 07 57 12.6 | -1.1 |
| | comp=Z,1.8nm,0.5s,baz=187,slow=8.8,SNR=11 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| MAJO | Matsushiro | 37.32 | 16 | P | P | 07 57 13.0 | -0.7 |
| JMM | Marumori | 39.31 | 18 | P | P | 07 57 30.4 | 0.0 |
| JMM | | | | IAmb | IAmb | 07 57 32.5 | |
| | comp=Z,19nm,0.7s | | | | | | |
| ARMA | Armidale | 39.37 | 144 | P | P | 07 57 31.5 | +0.3 |
| ARMA | Armidale | 39.37 | 144 | P | P | 07 57 32.1 | +0.9 |
| ARMA | | | | IAmb | IAmb | 07 58 59.6 | |
| | comp=Z,40nm,1.7s | | | | | | |
| BJT | Baijiatuau | 40.12 | 348 | P | P | 07 57 37.4 | +0.4 |
| BJT | | | | pP | pP | 07 57 47.5 | -1.3 |
| CAN | Canberra | 41.77 | 152 | P | P | 07 57 51.6 | +0.8 |
| CAN | | | | IAmb | IAmb | 07 57 52.6 | |
| | comp=Z,26nm,1.1s | | | | | | |
| CAN | Canberra | 41.77 | 152 | P | P | 07 57 51.9 | +1.1 |
| CAN | | | | pP | pP | 07 58 02.5 | +0.3 |
| CAN | | | | sP | sP | 07 58 07.6 | +0.6 |
| HHC | Hu-ho-hao-te | 42.04 | 343 | eP | P | 07 57 54.6 | +1.6 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,680nm,4.7s | | | | | | |
| USA0B | Ussuriysk Arra | 43.56 | 6 | P | P | 07 58 05.3 | +0.1 |
| USA0B | | | | IAmb | IAmb | 07 58 06.9 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| USRK | Ussuriysk Ar. | 43.56 | 6 | P | P | 07 58 05.3 | +0.1 |
| USRK | Ussuriysk Ar. | 43.56 | 6 | P | P | 07 58 05.7 | +0.6 |
| | comp=Z,7.5nm,0.6s,baz=193,slow=6.2,SNR=22 | | | | | | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| MDJ | Mudanjiang | 43.77 | 4 | P | P | 07 58 07.5 | +0.6 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| NOUC | Port Laguerre | 45.27 | 123 | P | P | 07 58 19.8 | +0.6 |
| DZM | Mont Dzumac | 45.38 | 123 | P | P | 07 58 20.8 | +0.6 |
| DZM | | | | pP | pP | 07 58 31.2 | -0.5 |
| DZM | | | | sP | pwP | 07 58 36.2 | +1.5 |
| JKA | Kamikawa-asahi | 45.59 | 17 | P | P | 07 58 21.5 | +0.2 |
| HEH | HeiHe | 49.32 | 1 | eP | P | 07 58 50.3 | +0.1 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| SONM | Songino Array | 49.92 | 343 | P | P | 07 58 54.2 | -0.9 |
| | comp=Z,1.8nm,0.7s,baz=156,slow=9.5,SNR=6.1 | | | | | | |
| SONM | | | | PcP | PcP | 08 00 14.6 | -0.3 |
| | comp=Z,1.9nm,0.7s,baz=157,slow=2.8,SNR=5.3 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| PETK | Petropavlovsk- | 58.38 | 22 | P | P | 07 59 57.1 | +0.7 |
| PETK | Petropavlovsk- | 58.38 | 22 | P | P | 07 59 56.6 | +0.2 |
| | comp=Z,4.7nm,0.6s,baz=161,slow=3.0,SNR=5.5 | | | | | | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| MLZ | Mavora Lakes | 59.02 | 147 | P | P | 08 00 02.0 | +0.9 |
| LBZ | Lake Benmore | 59.59 | 145 | P | P | 08 00 05.2 | +0.2 |
| MK31 | Makanchi Array | 59.67 | 327 | | P | 08 00 03.6 | -1.9 |
| MKAR | Makanchi Array | 59.67 | 327 | P | P | 08 00 04.0 | -1.5 |
| | comp=Z,2.6nm,0.6s,baz=121,slow=8.3,SNR=24 | | | | | | |
| MKAR | | | | PcP | PcP | 08 00 51.7 | -0.5 |
| | comp=Z,1.5nm,0.7s,baz=119,slow=4.3,SNR=2.0 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| KSH | Kashi | 59.75 | 317 | P | P | 08 00 07.1 | +0.8 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| MAKZ | Makanchi | 59.85 | 326 | P | P | 08 00 05.7 | -1.1 |
| MAKZ | | | | IAmb | IAmb | 08 00 11.5 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| MAKZ | Makanchi | 59.85 | 326 | P | P | 08 00 05.9 | -0.9 |
| MAKZ | | | | pP | pP | 08 00 16.5 | -2.3 |
| MAKZ | | | | sP | pwP | 08 00 21.2 | +0.1 |
| TUWZ | Tuamarina | 60.24 | 140 | P | P | 08 00 09.8 | +0.3 |
| GVZ | Greta Valley S | 60.49 | 142 | P | P | 08 00 11.5 | +0.3 |
| RTZ | Ruatahuna | 60.89 | 136 | P | P | 08 00 13.5 | -0.5 |
| YAK | Yakutsk | 61.17 | 2 | P | P | 08 00 15.6 | +0.2 |
| ZAA0 | Zalesovo Array | 62.97 | 334 | P | P | 08 00 27.4 | -0.2 |
| ZALV | Zalesovo Beam | 62.97 | 334 | P | P | 08 00 26.6 | -1.0 |
| ZALV | Zalesovo Beam | 62.97 | 334 | P | P | 08 00 26.3 | -1.3 |
| | comp=Z,1.1nm,0.5s,baz=136,slow=6.1,SNR=5.0 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 63.92 | 328 | P | P | 08 00 32.4 | -1.6 |
| | comp=Z,4.1nm,0.6s,baz=130,slow=6.2,SNR=27 | | | | | | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| KURK | Kurchatov | 63.93 | 329 | | P | 08 00 33.4 | -0.7 |
| KURK | | | | IAmb | IAmb | 08 00 38.5 | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| KURK | Kurchatov | 63.93 | 329 | P | P | 08 00 33.1 | -1.0 |
| KK31 | Karatay Array | 65.01 | 318 | P | P | 08 00 41.0 | -0.3 |
| KKAR | Karatay Array | 65.01 | 318 | | P | 08 00 40.2 | -1.1 |
| CASY | Casey | 67.82 | 187 | P | P | 08 00 58.5 | -0.2 |
| CASY | | | | IAmb | IAmb | 08 01 06.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| DRV | Dumont d'Urvil | 68.00 | 174 | P | P | 08 00 59.7 | -0.1 |
| BVAR | Borovoye Array | 69.49 | 328 | P | P | 08 01 08.4 | -1.1 |
| | comp=Z,2.0nm,0.5s,baz=126,slow=9.7,SNR=9.6 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| BRVK | Borovoye | 69.56 | 328 | | P | 08 01 09.6 | -0.3 |
| BRVK | Borovoye | 69.56 | 328 | P | P | 08 01 10.0 | +0.1 |
| BRVK | | | | pP | pP | 08 01 21.5 | -0.6 |
| TIXI | Tiksi | 70.80 | 1 | P | P | 08 01 16.7 | -0.4 |
| TIXI | | | | pP | pP | 08 01 28.2 | -1.3 |
| ABKAR | Akbulak array | 74.08 | 321 | | P | 08 01 36.1 | -1.0 |
| ARU | Arti | 77.12 | 328 | | P | 08 01 52.7 | -1.7 |
| ARU | | | | IAmb | IAmb | 08 01 53.7 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| M14K | Bethel | 80.56 | 28 | P | P | 08 02 13.9 | +0.8 |
| M14K | | | | IAmb | IAmb | 08 02 14.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| MAW | Mawson | 80.78 | 200 | P | P | 08 02 15.4 | +1.2 |
| | comp=Z,4.9nm,1.1s,baz=98,slow=0.7,SNR=4.2 | | | | | | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| K15K | Wolf Creek Mou | 81.17 | 27 | P | P | 08 02 17.7 | +1.3 |
| M16K | Timber Creek | 82.05 | 28 | P | P | 08 02 21.8 | +0.8 |
| M16K | | | | IAmb | IAmb | 08 03 54.0 | |
| | comp=Z,22nm,1.4s | | | | | | |
| J

*UCR **18** 07:55:31.3±0.8, 8°.53N×83°.20W, h15km±3km, MW3.7*
*CATAC **18** 07:55:33.0±0.4, 8°.71N×83°.13W, h5km±2km, ML3.5*
**ISC 18 07:55:32.3**±0.9, **8°.63N**±0°.05×**83°.20W**±0°.03, **h9**km±6km, **n31**, σ0°.93/48, **Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.04** | **101** | *eP* | **Pg** | **07 55 34.0** | **-0.2** |
| FITO | | | | *eS* | **Sg** | **07 55 36.3** | **+0.8** |
| **JIME** | **Puerto Jimenez** | **0.16** | **233** | *eP* | **Pg** | **07 55 34.7** | **-1.0** |
| JIME | | | | *eS* | **Sg** | **07 55 38.4** | **+0.3** |
| **CDITO** | **Canoas** | **0.33** | **101** | *i* P | **Pg** | **07 55 38.5** | **-0.3** |
| CDITO | | | | *i* S | **Sg** | **07 55 43.5** | **+0.3** |
| CDITO | | | | IAML | | 07 55 47.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **EDPN** | **Palmar Norte** | **0.42** | **322** | *eP* | **Pg** | **07 55 40.4** | **-0.1** |
| EDPN | | | | *eS* | **Sb** | **07 55 48.1** | **-0.2** |
| **BRU2** | **Volcan** | **0.53** | **72** | *i* P | **Pg** | **07 55 42.2** | **-0.4** |
| BRU2 | | | | *i* S | **Sg** | **07 55 49.1** | **-0.4** |
| BRU2 | | | | IAML | | 07 55 53.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.53** | **72** | *eP* | **Pg** | **07 55 42.1** | **-0.5** |
| BRU2 | | | | *eS* | **Sb** | **07 55 50.6** | **-0.9** |
| **DRK0** | **Durika** | **0.63** | **356** | *i* P | **Pg** | **07 55 44.5** | **-0.1** |
| DRK0 | | | | IAML | | 07 55 46.1 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.63** | **356** | *eP* | **Pg** | **07 55 44.5** | **-0.1** |
| **OCHAL** | **Ojochal** | **0.64** | **316** | *i* P | **Pg** | **07 55 44.8** | **0.0** |
| OCHAL | | | | *i* S | **Sb** | **07 55 54.8** | **0.0** |
| OCHAL | | | | IAML | | 07 55 57.7 | |
| | comp=Z,650nm,1.0s | | | | | | |
| **ZELE** | **Perez Zeledon** | **0.89** | **326** | *eP* | **Pg** | **07 55 48.5** | **-1.0** |
| **BRIBI** | **Bribri** | **1.04** | **19** | *eP* | **Pb** | **07 55 52.6** | **+0.1** |
| **BUS1** | **Rivas** | **1.06** | **329** | *eP* | **Pg** | **07 55 51.7** | **-1.2** |
| **LLNJ** | **Naranjito** | **1.22** | **313** | *eP* | **Pn** | **07 55 53.8** | **-1.8** |
| **ABE2** | **San Pablo** | **1.36** | **322** | *eP* | **Pn** | **07 55 57.0** | **-0.7** |
| **LCR2** | **La Lucha 2** | **1.36** | **324** | *i* P | **Pn** | **07 55 57.4** | **-0.3** |
| LCR2 | | | | *i* S | **Sg** | **07 56 16.2** | **0.0** |
| LCR2 | | | | IAML | | 07 56 19.2 | |
| | comp=Z,440nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.36** | **324** | *eP* | **Pn** | **07 55 56.2** | **-1.5** |
| **REPA** | **Paraso** | **1.36** | **331** | *eP* | **Pn** | **07 55 57.4** | **-0.3** |
| **VERB** | **Verbena** | **1.39** | **339** | *eP* | **Pn** | **07 55 57.2** | **-0.9** |
| **RITA** | **Parrita** | **1.43** | **308** | *eP* | **Pn** | **07 55 58.2** | **-0.2** |
| **RAFA** | **San Farael, Vo** | **1.45** | **335** | *i* P | **Pn** | **07 55 58.9** | **-0.1** |
| RAFA | | | | *i* S | **Sn** | **07 56 17.4** | **-0.9** |
| RAFA | | | | IAML | | 07 56 23.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.45** | **335** | *eP* | **Pn** | **07 55 57.9** | **-1.2** |
| **TRIO** | **Tres Rios** | **1.49** | **328** | *eP* | **Pn** | **07 55 59.1** | **-0.3** |
| **HDC3** | **Heredia 3** | **1.63** | **326** | *i* P | **Pb** | **07 56 02.4** | **-0.3** |
| HDC3 | | | | *i* S | **Sn** | **07 56 22.9** | **+0.3** |
| HDC3 | | | | IAML | | 07 56 37.1 | |
| | comp=Z,430nm,1.0s | | | | | | |
| **TCS1** | **Tacares** | **1.77** | **322** | *i* P | **Pn** | **07 56 03.7** | **+0.4** |
| TCS1 | | | | IAML | | 07 56 33.4 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **2.23** | **321** | *i* P | **Pn** | **07 56 11.1** | **+1.5** |
| SOCE | | | | IAML | | 07 56 13.4 | |
| | comp=Z,460nm,1.0s | | | | | | |
| SOCE | | | | *i* S | **Sn** | **07 56 38.8** | **+1.5** |
| **COVE** | **Coope Vega, Sa** | **2.39** | **330** | *i* P | **Pn** | **07 56 12.2** | **+0.5** |
| COVE | | | | *i* S | **Sn** | **07 56 41.9** | **+0.8** |
| COVE | | | | IAML | | 07 57 10.9 | |
| | comp=Z,150nm,1.0s | | | | | | |
| **INDI** | **Punta indio, G** | **2.58** | **298** | *i* P | **Pn** | **07 56 16.5** | **+2.1** |
| INDI | | | | *i* S | **Sb** | **07 56 49.3** | **-1.5** |
| INDI | | | | IAML | | 07 57 09.1 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.36** | **81** | *i* P | **Pn** | **07 56 25.3** | **+0.3** |
| BCIP | | | | *i* S | **Sn** | **07 57 05.5** | **+0.4** |
| BCIP | | | | IAML | | 07 57 36.3 | |
| | comp=Z,78nm,1.0s | | | | | | |
| **BLUN** | **Bluefields** | **3.40** | **350** | *i* P | **Pn** | **07 56 25.0** | **-0.6** |
| BLUN | | | | IAML | | 07 56 33.9 | |
| | comp=Z,48nm,1.0s | | | | | | |
| BLUN | | | | *i* S | **Sn** | **07 57 06.9** | **+0.9** |
| **ACON** | **Acoyapa** | **3.84** | **330** | *i* P | **Pn** | **07 56 31.6** | **-0.1** |
| ACON | | | | IAML | | 07 56 34.3 | |
| | comp=Z,53nm,1.0s | | | | | | |
| ACON | | | | *i* S | **Sn** | **07 57 17.8** | **+0.8** |
| **BOAB** | **BOACO BROADBAN** | **4.50** | **328** | *i* P | **Pn** | **07 56 42.3** | **+1.5** |
| BOAB | | | | IAML | | 07 56 46.8 | |
| | comp=Z,24nm,1.0s | | | | | | |
| BOAB | | | | *i* S | **Sn** | **07 57 35.7** | **+2.4** |

*DJA **18** 08:02:46.1±0.5, 10°S±5°×11°9E±°, h10km, M3.7/7, MLv3.7/7*
*IDC **18** 08:02:47.9±9.3, 9°.85S×119°.03E, h57km±87km, mb3.3/1, mbtmp3.3/4, ML3.1/3, Error ellipse: s-maj=106.4km s-min=20.7km az=66.0*
**ISC 18 08:02:46.7**±0.9, **9°.91S**±0°.08×**118°.99E**±0°.05, **h33**km, **n12**, σ1§27/17, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **0.47** | **56** | P | **Pb** | **08 02 56.2** | **-0.7** |
| WBSI | | | | S | **Sb** | **08 03 03.5** | **-0.5** |
| **BASI** | **Baing, Sumba** | **1.59** | **101** | P | **Pb** | **08 03 16.2** | **+0.7** |
| **PLAI** | **Plampang** | **1.61** | **312** | P | **Pn** | **08 03 13.9** | **+1.1** |
| PLAI | | | | S | **Sn** | **08 03 33.3** | **+0.8** |
| **TWSI** | **Taliwang, Sumb** | **2.38** | **299** | P | **Pn** | **08 03 25.4** | **+1.9** |
| TWSI | | | | S | **Sn** | **08 03 52.8** | **+1.2** |
| **EDFI** | **Ende, Flores** | **2.90** | **67** | P | **Pn** | **08 03 32.4** | **+1.7** |
| **IGBI** | **Denpasar** | **3.95** | **286** | P | **Pn** | **08 03 44.9** | **-0.1** |
| IGBI | | | | S | **Sn** | **08 04 31.8** | **+1.6** |
| **BSSI** | **Bau Bau, Buton** | **4.03** | **22** | P | **Pn** | **08 03 47.7** | **+1.6** |
| **KAPI** | **Kappang** | **4.92** | **9** | P | **Pn** | **08 03 59.4** | **+1.1** |
| | 1.5nm,0.3s,baz=213,slow=11,SNR=2.6 | | | | | | |
| KAPI | | | | S | **Sn** | **08 04 53.9** | **-0.3** |
| | 10nm,0.4s,baz=163,slow=24,SNR=7.7 4.2nm,0.2s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **4.99** | **286** | P | **Pn** | **08 03 59.5** | **+0.2** |
| **WRA** | **Warramunga Arr** | **17.86** | **126** | P | **Pn** | **08 06 51.7** | **-1.1** |
| | baz=295,slow=14,SNR=1.7 | | | | | | |
| WRA | | | | S | Sn | 08 09 55.6 | -15 |
| | 0.4nm,0.9s,baz=333,slow=14,SNR=2.5 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **19.75** | **136** | P | **P** | **08 07 14.1** | **+0.2** |
| | 0.1nm,0.3s,baz=323,slow=12,SNR=8.4 0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.26** | **333** | P | **P** | **08 13 23.2** | **-1.9** |
| | 0.4nm,0.6s,baz=149,slow=7.8,SNR=3.5 0.4nm,0.6s | | | | | | |

*IDC **18** 08:08:03.1±2.1, 5°.82S×129°.94E, h0km, mb3.7/1, mbtmp4.0/3, ML3.9/2, MS3.9/1, Error ellipse: s-maj=102.2km s-min=31.0km az=69.0*
**ISC 18 08:08:18.7**±1.0, **6°.24S**±0°.08×**130°.4E**±0°.2, **h146**km, **n13**, σ1§82/13, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.78** | **343** | P | **Pn** | **08 08 52.7** | **+1.6** |
| **FAKI** | **Fak Fak** | **3.76** | **29** | P | **Pn** | **08 09 15.4** | **-0.4** |
| **DRS** | **Darwin Rock St** | **6.17** | **176** | P | **Pn** | **08 09 49.8** | **+2.1** |
| **WRA** | **Warramunga Arr** | **14.14** | **165** | Pn | **Pn** | **08 11 32.7** | **0.0** |
| | 0.3nm,0.3s,baz=343,slow=11,SNR=16 | | | | | | |
| WRA | | | | Sn | Sn | 08 13 59.9 | -10 |
| | 0.7nm,0.3s,baz=331,slow=24,SNR=11 1.8nm,0.7s | | | | | | |
| **COEN** | **Coen** | **14.70** | **122** | P | **P** | **08 11 43.1** | **+1.1** |
| **QIS** | **Mount Isa** | **16.79** | **149** | P | **Pn** | **08 12 07.1** | **+1.7** |
| **ASAR** | **Alice Springs** | **17.65** | **169** | P | **Pn** | **08 12 16.4** | **+0.7** |
| | 1.6nm,0.3s,baz=349,slow=10,SNR=97 | | | | | | |
| ASAR | | | | S | **S** | **08 15 26.5** | **-4.2** |
| | 0.4nm,0.4s,baz=359,slow=27,SNR=6.3 3.8nm,0.3s | | | | | | |
| **AS01** | **Alice Springs** | **17.66** | **169** | P | **Pn** | **08 12 16.7** | **+0.9** |
| **WRKA** | **Warakurna** | **18.80** | **186** | P | **Pn** | **08 12 28.7** | **-0.6** |
| **OOD** | **Oodnadatta** | **22.01** | **167** | P | **P** | **08 13 01.9** | **+0.5** |
| **LCRK** | **Leigh Creek** | **25.17** | **164** | P | **P** | **08 13 30.5** | **-0.1** |
| **RAO** | **Raoul Island** | **53.74** | **122** | LR | LR | 08 40 07.9 | |
| | comp=Z,96nm,18.5s,baz=272,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.83** | **326** | P | **P** | **08 18 59.3** | **-1.8** |
| | 0.4nm,0.4s,baz=133,slow=5.3,SNR=5.4 0.4nm,0.4s | | | | | | |

*NEIC **18** 08:17:29.4±1.8, 69°.59N±0°.07×144°.65W±0°.09, h10km±2km, Error ellipse: s-maj=12.4km s-min=5.0km az=11.0*
**AEIC 18 08:17:27.5**±2.6, **69°.49N**±0°.06×**144°.65W**±0°.09, **h6**km±5km, **ML2.5, ML2.6**/74(NEIC), **Error ellipse: s-maj=9.3km s-min=3.8km az=198.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.36** | **67** | Pg | Pb | 08 17 35.4 | -0.9 |
| C27K | | | | Sg | Sg | 08 17 39.9 | +0.8 |
| **C26K** | **Camden Bay** | **0.44** | **348** | | Pg | 08 17 35.8 | -0.1 |
| C26K | | | | | Sg | 08 17 41.7 | 0.0 |
| **C26K** | **Camden Bay** | **0.44** | **348** | IAML | | 08 17 43.5 | |
| | comp=E,150nm,0.4s | | | | | | |
| C26K | | | | IAML | | 08 17 43.8 | |
| | comp=N,114nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.63** | **255** | Pg | Pg | 08 17 39.6 | 0.0 |
| D25K | | | | Sg | Sg | 08 17 47.5 | -0.3 |
| **D27M** | **Malcolm River** | **1.33** | **99** | | Pg | 08 17 53.0 | +0.1 |
| D27M | | | | Sg | Sn | 08 18 12.3 | +1.6 |
| **C24K** | **Franklin Bluff** | **1.44** | **281** | | Pg | 08 17 55.1 | 0.0 |
| C24K | | | | | Sg | 08 18 13.8 | +0.2 |
| **C24K** | **Franklin Bluff** | **1.44** | **281** | IAML | | 08 18 14.6 | |
| | comp=N,68nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.52** | **259** | Pn | Pg | 08 17 56.9 | +0.3 |
| **E27K** | **Coleen River** | **1.72** | **138** | Pn | Pg | 08 18 00.6 | +0.3 |
| E27K | | | | IAML | | 08 18 55.1 | |
| | comp=N,53nm,0.3s | | | | | | |
| E27K | | | | IAML | | 08 18 56.8 | |
| | comp=E,90nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.72** | **138** | | Sg | 08 18 24.9 | +2.4 |
| **F26K** | **Sheenjek River** | **1.81** | **174** | Pn | Pg | 08 18 02.8 | +0.6 |
| F26K | | | | IAML | | 08 19 01.8 | |
| | comp=N,63nm,0.9s | | | | | | |
| F26K | | | | IAML | | 08 19 02.2 | |
| | comp=E,82nm,0.4s | | | | | | |
| **F25K** | **Christian Rive** | **1.94** | **191** | | Pg | 08 18 05.0 | +0.4 |
| **F25K** | **Christian Rive** | **1.94** | **191** | | Sg | 08 18 31.6 | +1.9 |
| **F25K** | **Christian Rive** | **1.94** | **191** | IAML | | 08 19 04.2 | |
| | comp=E,66nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96** | **247** | | Pb | 08 18 04.2 | +0.6 |
| TOLK | | | | IAML | | 08 19 15.2 | |
| | comp=E,54nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 08 19 15.4 | |
| | comp=N,56nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **1.99** | **226** | | Pg | 08 18 05.0 | -0.7 |
| E24K | | | | IAML | | 08 19 13.5 | |
| | comp=E,37nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.04** | **113** | | Pg | 08 18 05.8 | -0.7 |
| E28M | | | | IAML | | 08 19 02.3 | |
| | comp=N,49nm,0.8s | | | | | | |
| E28M | | | | IAML | | 08 19 05.1 | |
| | comp=E,39nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.07** | **179** | | Pg | 08 18 06.8 | -0.3 |
| **C23K** | **Itkillik River** | **2.11** | **282** | | Pb | 08 18 06.5 | +0.3 |
| **D23K** | **Nanushuk River** | **2.21** | **259** | | Pb | 08 18 08.6 | +0.7 |
| D23K | | | | IAML | | 08 19 27.2 | |
| | comp=E,28nm,0.6s | | | | | | |
| D23K | | | | IAML | | 08 19 27.9 | |
| | comp=N,30nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.31** | **234** | Pn | Pb | 08 18 09.7 | +0.2 |
| **F24K** | **Squaw Lake** | **2.31** | **213** | | Pb | 08 18 09.8 | +0.2 |
| F24K | | | | IAML | | 08 19 30.4 | |
| | comp=N,26nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.57** | **172** | | Pb | 08 18 12.2 | -1.8 |
| **F28M** | **Old Crow** | **2.58** | **135** | Pn | Pb | 08 18 12.1 | -2.0 |
| **E29M** | **Blow River** | **2.68** | **111** | Pn | Pb | 08 18 14.3 | -1.5 |
| E29M | | | | IAML | | 08 19 27.0 | |
| | comp=E,23nm,0.7s | | | | | | |
| E29M | | | | IAML | | 08 19 33.4 | |
| | comp=N,36nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **2.92** | **156** | Pn | Pb | 08 18 17.6 | -2.3 |
| **G23K** | **Bananza Creek** | **3.44** | **218** | Pn | Pb | 08 18 27.8 | -1.0 |
| G23K | | | | IAML | | 08 20 03.8 | |
| | comp=N,11nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.50** | **277** | Pn | Pn | 08 18 24.6 | +2.2 |
| B21K | | | | IAML | | 08 20 07.6 | |
| | comp=E,17nm,1.1s | | | | | | |
| B21K | | | | IAML | | 08 20 14.2 | |
| | comp=N,17nm,1.6s | | | | | | |
| **G29M** | **Pine Creek** | **3.58** | **133** | Pn | Pn | 08 18 25.8 | +2.3 |
| **C21K** | **Knifeblade Rid** | **3.61** | **269** | | Pn | 08 18 25.9 | +2.0 |
| **H24K** | **Noodor Dome** | **3.87** | **200** | Pn | Pn | 08 18 29.3 | +1.8 |
| H24K | | | | IAML | | 08 19 51.0 | |
| | comp=N,14nm,0.7s | | | | | | |
| H24K | | | | IAML | | 08 20 13.1 | |
| | comp=E,8.4nm,1.1s | | | | | | |
| **F21K** | **Alatna River** | **3.98** | **239** | Pn | Pn | 08 18 30.9 | +1.8 |
| F21K | | | | IAML | | 08 20 13.7 | |
| | comp=E,8.7nm,0.7s | | | | | | |
| F21K | | | | IAML | | 08 20 15.2 | |
| | comp=N,8.6nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **4.05** | **141** | Pn | Pn | 08 18 32.8 | +2.7 |
| **H23K** | **Yukon River** | **4.13** | **209** | Pn | Pn | 08 18 34.3 | +3.3 |
| H23K | | | | IAML | | 08 20 18.8 | |
| | comp=E,8.8nm,0.8s | | | | | | |
| H23K | | | | IAML | | 08 20 19.9 | |
| | comp=N,9.9nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **4.19** | **101** | | Pn | 08 18 33.6 | +1.7 |
| **INK** | **Inuvik** | **4.19** | **101** | IAML | | 08 20 32.6 | |
| | comp=N,5.8nm,3.5s | | | | | | |
| **B20K** | **Meade River** | **4.38** | **283** | Pn | Pn | 08 18 35.2 | +0.8 |
| **I28M** | **Miner Creek** | **4.45** | **154** | Pn | Pn | 08 18 38.3 | +2.8 |
| **G31M** | **Satah River** | **4.65** | **119** | Pn | Pn | 08 18 40.0 | +1.9 |
| **I23K** | **Minto, Yukon-K** | **4.73** | **205** | Pn | Pn | 08 18 40.8 | +1.6 |
| **F20K** | **Avaraart Lake** | **4.79** | **244** | Pn | Pn | 08 18 41.7 | +1.6 |
| F20K | | | | IAML | | 08 20 59.3 | |
| | comp=E,4.6nm,3.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.81** | **146** | Pn | Pn | 08 18 42.9 | +2.4 |
| **EGAK** | **Eagle** | **4.92** | **162** | Pn | Pn | 08 18 44.5 | +2.5 |
| **D19K** | **Kuna River** | **4.95** | **265** | | Pn | 08 18 43.4 | +1.1 |
| **H21K** | **Melozitna Rive** | **4.95** | **223** | Pn | Pn | 08 18 47.5 | +5.1 |
| H21K | | | | IAML | | 08 20 06.4 | |
| | comp=E,4.9nm,3.1s | | | | | | |
| H21K | | | | IAML | | 08 20 25.2 | |
| | comp=N,6.1nm,3.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.02** | **196** | Pn | Pn | 08 18 45.3 | +2.1 |
| CCB | | | | IAML | | 08 20 18.7 | |
| | comp=N,4.1nm,0.9s | | | | | | |
| CCB | | | | IAML | | 08 21 00.2 | |
| | comp=E,4.1nm,3.5s | | | | | | |

*NEIC **18** 08:18:01.1±1.6, 69°.51N±0°.05×144°.11W±0°.07, h3km±9km, Error ellipse: s-maj=7.9km s-min=2.8km az=199.0*
**AEIC 18 08:18:00.2**±1.8, **69°.48N**±0°.08×**144°.1W**±0°.1, **h7**km±6km, **ML2.5, ML2.7**/54(NEIC), **Error ellipse: s-maj=13.0km s-min=3.3km az=206.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **44** | | Pg | 08 18 04.1 | -0.2 |
| C27K | | | | | Sg | 08 18 06.8 | -0.2 |
| **C27K** | **Jago River** | **0.20** | **44** | IAML | | 08 18 07.6 | |
| | comp=E,913nm,0.6s | | | | | | |
| C27K | | | | IAML | | 08 18 10.7 | |
| | comp=N,699nm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.52** | **328** | | Pg | 08 18 10.6 | +0.3 |
| C26K | | | | | Sg | 08 18 17.9 | +0.9 |
| **D25K** | **Kavik River** | **0.82** | **260** | | Sg | 08 18 26.7 | +0.3 |
| **D25K** | **Kavik River** | **0.82** | **260** | Pg | Pg | 08 18 14.8 | -1.0 |
| **D25K** | **Kavik River** | **0.82** | **260** | IAML | | 08 18 28.8 | |
| | comp=N,174nm,0.4s | | | | | | |
| D25K | | | | IAML | | 08 18 30.6 | |
| | comp=E,170nm,0.5s | | | | | | |
| **D27M** | **Malcolm River** | **1.14** | **101** | | Sn | 08 18 38.3 | -0.3 |
| **C24K** | **Franklin Bluff** | **1.63** | **281** | | Pn | 08 18 29.2 | -0.1 |
| C24K | | | | IAML | | 08 18 54.2 | |
| | comp=N,117nm,0.4s | | | | | | |
| C24K | | | | IAML | | 08 18 56.6 | |
| | comp=E,123nm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.71** | **261** | | Sg | 08 18 56.6 | +1.7 |
| **D24K** | **Happy Valley** | **1.71** | **261** | Pn | Pb | 08 18 32.2 | +0.3 |
| **D24K** | **Happy Valley** | **1.71** | **261** | IAML | | 08 18 58.4 | |
| | comp=E,249nm,0.7s | | | | | | |
| D24K | | | | IAML | | 08 18 59.9 | |
| | comp=N,185nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.87** | **116** | | Pn | 08 18 31.7 | -0.9 |
| **F24K** | **Squaw Lake** | **2.41** | **217** | | Pn | 08 18 41.9 | +1.8 |
| **F28M** | **Old Crow** | **2.44** | **138** | Pn | Pn | 08 18 41.5 | +1.0 |
| F28M | | | | IAML | | 08 19 21.9 | |
| | comp=N,39nm,0.5s | | | | | | |
| F28M | | | | IAML | | 08 19 27.2 | |
| | comp=E,31nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.83** | **196** | | Pn | 08 18 48.1 | +2.4 |
| **G24K** | **Hadweenzic Riv** | **3.06** | **206** | Pn | Pn | 08 18 48.7 | -0.3 |
| G24K | | | | IAML | | 08 19 43.9 | |
| | comp=N,26nm,0.9s | | | | | | |
| G24K | | | | IAML | | 08 19 48.1 | |
| | comp=E,22nm,1.2s | | | | | | |
| **D22K** | **Ayikyak River** | **3.12** | **263** | | Pn | 08 18 51.4 | +1.7 |
| **D22K** | **Ayikyak River** | **3.12** | **263** | IAML | | 08 19 47.0 | |
| | comp=E,24nm,0.7s | | | | | | |
| D22K | | | | IAML | | 08 19 48.7 | |
| | comp=N,30nm,1.0s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.33** | **289** | | Pn | 08 18 54.5 | +1.9 |
| **G23K** | **Bananza Creek** | **3.56** | **221** | Pn | Pn | 08 18 56.5 | +0.7 |
| G23K | | | | IAML | | 08 20 01.9 | |
| | comp=E,14nm,1.1s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.69** | **277** | | Pn | 08 18 59.5 | +1.9 |
| **E21K** | **Killik River** | **3.71** | **258** | | Pn | 08 19 00.5 | +2.6 |
| **E21K** | **Killik River** | **3.71** | **258** | IAML | | 08 20 01.2 | |
| | comp=N,13nm,1.1s | | | | | | |
| E21K | | | | IAML | | 08 20 07.2 | |
| | comp=E,14nm,0.6s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.80** | **270** | | Pn | 08 19 01.7 | +2.6 |
| **H24K** | **Noodor Dome** | **3.93** | **203** | | Pn | 08 19 02.7 | +1.7 |
| **H29M** | **Whitestone** | **3.93** | **144** | Pn | Pn | 08 19 02.3 | +1.3 |
| **I26K** | **Coal Creek Min** | **4.21** | **174** | Pn | Pn | 08 19 05.7 | +0.9 |
| **H23K** | **Yukon River** | **4.22** | **212** | | Pn | 08 19 06.8 | +1.9 |
| **I28M** | **Miner Creek** | **4.36** | **156** | Pn | Pn | 08 19 08.5 | +1.7 |
| I28M | | | | IAML | | 08 20 02.7 | |
| | comp=N,8.2nm,0.8s | | | | | | |
| I28M | | | | IAML | | 08 20 31.3 | |
| | comp=E,8.3nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **4.48** | **120** | Pn | Pn | 08 19 09.9 | +1.5 |
| **B20K** | **Meade River** | **4.56** | **283** | Pn | Pn | 08 19 10.6 | +1.0 |
| **J25K** | **Salcha River,** | **4.92** | **186** | Pn | Pn | 08 19 16.9 | +2.4 |
| J25K | | | | IAML | | 08 20 21.9 | |
| | comp=N,5.5nm,3.1s | | | | | | |
| J25K | | | | IAML | | 08 20 36.2 | |
| | comp=E,7.0nm,1.4s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.96** | **246** | Pn | Pn | 08 19 16.9 | +1.9 |
| F20K | | | | IAML | | 08 20 56.2 | |
| | comp=N,6.8nm,2.0s | | | | | | |
| F20K | | | | IAML | | 08 20 57.3 | |
| | comp=E,4.6nm,2.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.01** | **177** | Pn | Pn | 08 19 18.0 | +2.2 |
| J26L | | | | IAML | | 08 19 53.7 | |
| | comp=N,5.5nm,3.6s | | | | | | |
| J26L | | | | IAML | | 08 20 41.2 | |
| | comp=E,5.4nm,1.0s | | | | | | |
| **D19K** | **Kuna River** | **5.13** | **265** | | Pn | 08 19 18.5 | +1.1 |
| D19K | | | | IAML | | 08 20 18.9 | |
| | comp=E,4.7nm,1.0s | | | | | | |
| **I30M** | **Mount Dempster** | **5.21** | **141** | | Pn | 08 19 19.8 | +1.1 |
| I30M | | | | IAML | | 08 19 57.4 | |
| | comp=N,4.7nm,3.4s | | | | | | |
| **NEA2** | **Nenana** | **5.28** | **204** | Pn | Pn | 08 19 20.6 | +1.2 |
| NEA2 | | | | IAML | | 08 20 22.1 | |
| | comp=N,4.1nm,0.7s | | | | | | |
| NEA2 | | | | IAML | | 08 22 46.7 | |
| | comp=E,4.6nm,4.7s | | | | | | |
| **K27K** | **Chicken** | **5.54** | **171** | Pn | Pn | 08 19 25.1 | +2.2 |
| **DAWY** | **Dawson** | **5.75** | **159** | | Pn | 08 19 28.2 | +2.3 |
| **J30M** | **Hart River** | **5.79** | **145** | | Pn | 08 19 27.6 | +1.1 |

*UCR **18** 08:24:45.3±0.9, 8°.62N×83°.22W, h21km±2km, MW3.9*
*CATAC **18** 08:24:45.8±0.4, 8°.66N×83°.24W, h3km±2km, ML3.5*
**ISC 18 08:24:46.4**±0.9, **8°.69N**±0°.04×**83°.24W**±0°.03, **h9**km±7km, **n30**, σ1§06/47, **Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDAD** | **Golfito** | **0.08** | **119** | *eP* | **Pg** | **08 24 48.5** | **-0.3** |
| EDAD | | | | *eS* | **Sg** | **08 24 50.9** | **+0.5** |
| **FITO** | **Golfito** | **0.11** | **129** | *eP* | **Pg** | **08 24 48.4** | **-0.7** |
| FITO | | | | *eS* | **Sg** | **08 24 50.9** | **0.0** |
| **JIME** | **Puerto Jimenez** | **0.18** | **209** | *eP* | **Pg** | **08 24 49.4** | **-0.8** |
| JIME | | | | *eS* | **Sg** | **08 24 53.6** | **+0.9** |
| **NELY** | **Ciudad Neily** | **0.29** | **98** | *eP* | **Pg** | **08 24 51.7** | **-0.6** |
| NELY | | | | *eS* | **Sg** | **08 24 56.9** | **+0.6** |
| **EDPN** | **Palmar Norte** | **0.34** | **321** | *eP* | **Pg** | **08 24 53.4** | **+0.1** |
| EDPN | | | | *eS* | **Sb** | **08 25 00.0** | **-0.3** |
| **CDITO** | **Canoas** | **0.38** | **108** | *i* P | **Pg** | **08 24 52.4** | **-1.5** |
| CDITO | | | | *i* S | **Sg** | **08 24 58.7** | **-0.3** |
| CDITO | | | | IAML | | 08 25 03.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **EDBA** | **Buenos Aires** | **0.47** | **356** | *eP* | **Pg** | **08 24 56.0** | **+0.4** |
| **BRU2** | **Volcan** | **0.55** | **79** | *i* P | **Pg** | **08 24 56.2** | **-1.0** |
| BRU2 | | | | *i* S | **Sg** | **08 25 04.6** | **+0.2** |
| **DRK0** | **Durika** | **0.57** | **359** | *i* P | **Pg** | **08 24 57.1** | **-0.3** |
| DRK0 | | | | IAML | | 08 24 57.5 | |
| | comp=Z,6μm,1.0s | | | | | | |
| DRK0 | | | | *i* S | **Sg** | **08 25 05.3** | **+0.3** |
| **DRK0** | **Durika** | **0.57** | **359** | *eP* | **Pg** | **08 24 57.2** | **-0.3** |
| **OCHAL** | **Ojochal** | **0.57** | **315** | *i* P | **Pg** | **08 24 56.8** | **-0.7** |
| OCHAL | | | | *i* S | **Sg** | **08 25 06.2** | **+1.2** |
| OCHAL | | | | IAML | | 08 25 10.5 | |
| | comp=Z,580nm,1.0s | | | | | | |
| **ZELE** | **Perez Zeledon** | **0.82** | **326** | *eP* | **Pg** | **08 25 01.5** | **-0.7** |
| **BUS1** | **Rivas** | **0.99** | **330** | *eP* | **Pg** | **08 25 04.0** | **-1.6** |
| **BRIBI** | **Bribri** | **1.00** | **23** | *eP* | **Pg** | **08 25 05.4** | **-0.4** |
| **LLNJ** | **Naranjito** | **1.15** | **312** | *eP* | **Pn** | **08 25 06.2** | **-2.4** |
| **LCR2** | **La Lucha 2** | **1.29** | **324** | *i* P | **Pg** | **08 25 10.0** | **-1.2** |
| LCR2 | | | | *i* S | **Sg** | **08 25 27.5** | **-0.5** |
| LCR2 | | | | IAML | | 08 25 30.6 | |
| | comp=Z,410nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.29** | **324** | *eP* | **Pg** | **08 25 09.1** | **-2.1** |
| **REPA** | **Paraso** | **1.29** | **331** | *eP* | **Pg** | **08 25 10.6** | **-0.6** |
| **VERB** | **Verbena** | **1.32** | **340** | *eP* | **Pn** | **08 25 09.4** | **-1.8** |
| **RAFA** | **San Farael, Vo** | **1.38** | **336** | *i* P | **Pn** | **08 25 11.8** | **-0.3** |
| RAFA | | | | *i* S | **Sg** | **08 25 30.4** | **-0.5** |
| RAFA | | | | IAML | | 08 25 35.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.38** | **336** | *eP* | **Pn** | **08 25 10.4** | **-1.8** |
| **LCOCO** | **El Coco** | **1.42** | **347** | *eP* | **Pn** | **08 25 11.1** | **-1.3** |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=N,44nm,0.4s | | | | | | | | |
| CNPM | | | | | IAML | | 09 05 07.5 | | |
| | comp=E,48nm,0.5s | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **4.24** | **327** | | Pn | Pn | 09 04 15.6 | 0.0 | |
| Q19K | | | | | IAML | | 09 05 07.7 | | |
| | comp=E,170nm,0.7s | | | | | | | | |
| **MID** | **Middleton Isla** | **4.29** | **20** | | Pn | Pn | 09 04 15.2 | -1.1 | |
| MID | | | | | IAML | | 09 05 02.5 | | |
| | comp=N,36nm,1.0s | | | | | | | | |
| MID | | | | | IAML | | 09 05 04.8 | | |
| | comp=E,38nm,1.0s | | | | | | | | |
| **Q23K** | **Middleton Isla** | **4.29** | **20** | | Pn | Pn | 09 04 15.3 | -1.0 | |
| Q23K | | | | | IAML | | 09 04 49.9 | | |
| | comp=N,37nm,0.9s | | | | | | | | |
| Q23K | | | | | IAML | | 09 05 03.2 | | |
| | comp=E,42nm,0.7s | | | | | | | | |
| **ACHA** | **Angle Creek He** | **4.34** | **312** | | | Pn | 09 04 18.1 | +1.0 | |
| **BRSE** | **Bradley Lake S** | **4.39** | **350** | | | Pn | 09 04 16.4 | -1.2 | |
| BRSE | | | | | | Sn | 09 05 04.4 | -4.3 | |
| **HOM** | **Homer** | **4.42** | **344** | | Pn | Pn | 09 04 20.2 | +3.0 | |
| HOM | | | | | IAML | | 09 05 12.4 | | |
| | comp=E,149nm,0.7s | | | | | | | | |
| HOM | | | | | IAML | | 09 05 17.4 | | |
| | comp=N,127nm,0.6s | | | | | | | | |
| **BRLK** | **Bradley Lake** | **4.42** | **349** | | Pn | Pn | 09 04 17.3 | -0.8 | |
| BRLK | | | | | IAML | | 09 05 10.6 | | |
| | comp=E,61nm,0.5s | | | | | | | | |
| BRLK | | | | | IAML | | 09 05 11.7 | | |
| | comp=N,50nm,0.4s | | | | | | | | |
| **PLK4** | **Peulik 4** | **4.51** | **302** | | Pn | Pn | 09 04 20.2 | +0.8 | |
| PLK4 | | | | | IAML | | 09 05 16.9 | | |
| | comp=E,48nm,1.0s | | | | | | | | |
| PLK4 | | | | | IAML | | 09 05 22.8 | | |
| | comp=N,43nm,1.1s | | | | | | | | |
| **CNTC** | **Contact Creek** | **4.61** | **311** | | | Pn | 09 04 20.4 | -0.4 | |
| **PLK1** | **Peulik 1** | **4.70** | **303** | | | Pn | 09 04 22.4 | +0.5 | |
| **P19K** | **Oil Pt** | **4.74** | **335** | | Pn | Pn | 09 04 21.7 | -0.8 | |
| **O20K** | **Slope Mountain** | **4.99** | **340** | | | Pn | 09 04 25.6 | -0.4 | |
| **O22K** | **Cooper Landing** | **5.06** | **357** | | Pn | Pn | 09 04 26.0 | -0.8 | |
| **SLKM** | **Skilak Lake** | **5.11** | **355** | | | Pn | 09 04 26.6 | -0.9 | |
| **HIN** | **Hinchinbrook I** | **5.18** | **15** | | | Pn | 09 04 27.7 | -0.8 | |
| HIN | | | | | IAML | | 09 05 27.1 | | |
| | comp=E,54nm,0.9s | | | | | | | | |
| **KAIM** | **Kayak Island** | **5.19** | **28** | | Pn | Pn | 09 04 27.9 | -0.7 | |
| KAIM | | | | | IAML | | 09 05 29.3 | | |
| | comp=E,53nm,0.6s | | | | | | | | |
| KAIM | | | | | IAML | | 09 05 29.9 | | |
| | comp=N,45nm,0.7s | | | | | | | | |
| **CHGN** | **Chignik** | **5.24** | **283** | | Pn | Pn | 09 04 28.1 | -1.1 | |
| **RSO** | **Redoubt South** | **5.37** | **341** | | Pn | Pn | 09 04 33.3 | +2.0 | |
| **CAPN** | **Captain Cook N** | **5.44** | **350** | | Pn | Pn | 09 04 34.1 | +2.1 | |
| **PWL** | **Port Wells** | **5.45** | **5** | | Pn | Pn | 09 04 31.8 | -0.5 | |
| **O18K** | **Koktuh Hills** | **5.46** | **327** | | Pn | Pn | 09 04 32.3 | -0.1 | |
| **SUCK** | **Suckling Hills** | **5.49** | **30** | | | Pn | 09 04 32.4 | -0.4 | |
| **RAGM** | **Ragged Mountai** | **5.52** | **24** | | | Pn | 09 04 32.8 | -0.4 | |
| **GLI** | **Glacier Island** | **5.57** | **11** | | Pn | Pn | 09 04 33.1 | -0.7 | |
| **HMT** | **Hamilton** | **5.58** | **26** | | | Pn | 09 04 33.8 | -0.2 | |
| **BGLC** | **Bering Glacier** | **5.67** | **32** | | | Pn | 09 04 35.4 | +0.2 | |
| **RC01** | **Rabbit Creek A** | **5.67** | **358** | | Pn | Pn | 09 04 34.2 | -1.0 | |
| **SNH** | **Sunshine Point** | **5.85** | **33** | | | Pn | 09 04 37.5 | -0.3 | |
| **SPU** | **Mount Spurr** | **5.94** | **347** | | Pn | Pn | 09 04 39.3 | +0.3 | |
| **KNK** | **Knik Glacier** | **6.00** | **4** | | Pn | Pn | 09 04 40.1 | +0.3 | |
| **BMRM** | **Bremner River** | **6.06** | **22** | | | Pn | 09 04 40.3 | -0.3 | |
| **N19K** | **Bonanza Creek** | **6.06** | **335** | | Pn | Pn | 09 04 40.0 | -0.6 | |
| **WAX** | **Waxell Ridge** | **6.06** | **31** | | | Pn | 09 04 40.0 | -0.7 | |
| **SUA** | **Susitna One** | **6.09** | **353** | | Pn | Pn | 09 04 40.0 | -1.1 | |
| **MESA** | **MESA** | **6.14** | **36** | | Pn | Pn | 09 04 41.5 | -0.3 | |
| **PMR** | **Palmer** | **6.17** | **0** | | Pn | Pn | 09 04 41.9 | -0.1 | |
| **CRQM** | **Cirque** | **6.23** | **29** | | | Pn | 09 04 42.7 | -0.4 | |
| **KLU** | **Klutina** | **6.31** | **15** | | | Pn | 09 04 44.0 | -0.1 | |
| **TGL** | **Tana Glacier** | **6.32** | **30** | | Pn | Pn | 09 04 43.9 | -0.3 | |
| **N18K** | **Kilae Creek** | **6.32** | **329** | | Pn | Pn | 09 04 43.1 | -1.2 | |
| **O16K** | **Kokwok River B** | **6.33** | **315** | | Pn | Pn | 09 04 44.3 | +0.1 | |
| **ISLE** | **Juniper Island** | **6.34** | **32** | | Pn | Pn | 09 04 44.1 | -0.4 | |
| **GHO** | **Glory Hole Cre** | **6.35** | **1** | | Pn | Pn | 09 04 44.2 | -0.4 | |
| **SML** | **Sawmill** | **6.40** | **4** | | | Pn | 09 04 45.5 | +0.1 | |
| **SCM** | **Sheep Creek Mo** | **6.49** | **8** | | Pn | Pn | 09 04 47.3 | +0.8 | |
| **VRDI** | **Verde Repeater** | **6.55** | **25** | | Pn | Pn | 09 04 48.2 | +0.7 | |
| **YKU2** | **Yakutat** | **6.58** | **48** | | Pn | Pn | 09 04 47.3 | -0.3 | |
| **TABL** | **Table Mountain** | **6.61** | **37** | | | Pn | 09 04 48.5 | +0.2 | |
| **GRNC** | **Granite Creek** | **6.62** | **34** | | | Pn | 09 04 48.6 | +0.1 | |
| **N25K** | **Chitina, Valde** | **6.64** | **20** | | | Pn | 09 04 48.8 | +0.1 | |
| **GLB** | **Gilahina Butte** | **6.66** | **23** | | Pn | Pn | 09 04 48.5 | -0.2 | |
| **PCA** | **Pinnacle** | **6.70** | **42** | | | Pn | 09 04 49.4 | 0.0 | |
| **MCARA** | **McCarthy VSAT** | **6.79** | **26** | | | Pn | 09 04 51.9 | +1.2 | |
| **BCPM** | **Bancas Point** | **6.85** | **45** | | | Pn | 09 04 51.6 | +0.2 | |
| **M24K** | **Tolsona, Glenn** | **6.87** | **12** | | Pn | Pn | 09 04 53.5 | +1.8 | |
| **CTGM** | **Chitina Glacie** | **6.93** | **34** | | | Pn | 09 04 52.5 | -0.2 | |
| **LOGN** | **Logan Glacier** | **6.94** | **36** | | | Pn | 09 04 52.3 | -0.5 | |
| **M19K** | **Big River Lodg** | **7.01** | **348** | | Pn | Pn | 09 04 54.9 | +1.3 | |
| **O28M** | **Mount Upton** | **7.17** | **38** | | | Pn | 09 04 56.4 | +0.3 | |
| **L19K** | **White Mountain** | **7.36** | **339** | | Pn | Pn | 09 04 56.8 | -1.6 | |
| **M17K** | **Holitna River** | **7.36** | **328** | | | Pn | 09 04 57.5 | -0.8 | |
| **P29M** | **Windy Craggy** | **7.48** | **51** | | Pn | Pn | 09 04 59.9 | -0.1 | |
| **N15K** | **Kwethluk River** | **7.48** | **314** | | Pn | Pn | 09 05 00.6 | +0.5 | |
| **O29M** | **Mount Kennedy** | **7.48** | **45** | | | Pn | 09 05 00.6 | +0.3 | |
| **O14K** | **Tigyukauivet M** | **7.54** | **305** | | Pn | Pn | 09 05 00.8 | 0.0 | |
| **M16K** | **Timber Creek** | **7.58** | **321** | | Pn | Pn | 09 05 01.9 | +0.4 | |
| **S31K** | **Pelican** | **7.59** | **65** | | Pn | Pn | 09 04 59.6 | -1.9 | |
| **YUK8** | **Steele Glacier** | **7.69** | **36** | | | Pn | 09 05 02.9 | -0.2 | |
| **M26K** | **Nabesna, AK** | **7.69** | **22** | | Pn | Pn | 09 05 04.0 | +1.1 | |
| **DHY** | **Denali Highway** | **7.72** | **6** | | | Pn | 09 05 04.3 | +0.9 | |
| **M27K** | **Edge Creek, AK** | **7.91** | **26** | | Pn | Pn | 09 05 07.5 | +1.4 | |
| **YUK6** | **Outpost Mounta** | **7.96** | **42** | | | Pn | 09 05 07.7 | +0.8 | |
| **K20K** | **Telida** | **8.31** | **345** | | Pn | Pn | 09 05 11.1 | -0.3 | |
| **SKAG** | **Skagway** | **8.51** | **56** | | | Pn | 09 05 14.7 | +0.5 | |
| **L27K** | **Beaver Creek,** | **8.53** | **23** | | Pn | Pn | 09 05 14.7 | +0.3 | |
| **BCAR** | **Beaver Creek A** | **8.54** | **23** | | Pn | Pn | 09 05 14.6 | 0.0 | |
| **BPAW** | **Bear Paw Mtn.** | **8.73** | **355** | | | Pn | 09 05 15.5 | -1.7 | |
| **N30M** | **Aishikik Lake** | **8.76** | **42** | | Pn | Pn | 09 05 18.2 | +0.5 | |
| **O30N** | **Mendenhall** | **8.77** | **47** | | | Pn | 09 05 18.2 | +0.4 | |
| **M29M** | **Somme Creek** | **8.95** | **34** | | | Pn | 09 05 20.7 | +0.4 | |
| **CRAG** | **Craig** | **9.16** | **83** | | Pn | Pn | 09 05 23.4 | +0.4 | |
| **L14K** | **Kuka Creek** | **9.20** | **315** | | Pn | Pn | 09 05 23.6 | +0.1 | |
| **WHY** | **Whitehorse** | **9.23** | **50** | | Pn | Pn | 09 05 25.2 | +1.1 | |
| **CCB** | **Clear Creek Bu** | **9.26** | **4** | | Pn | Pn | 09 05 24.6 | +0.2 | |
| **N31M** | **Braeburn, Yuko** | **9.29** | **44** | | | Pn | 09 05 25.9 | +1.0 | |
| **IL31** | | **9.43** | **6** | | Pn | Pn | 09 05 27.0 | +0.3 | |
| **ILAR** | **Eielson Array** | **9.43** | **6** | | Pn | Pn | 09 05 27.0 | +0.2 | |
| **Q32M** | **Nakina River** | **9.86** | **62** | | Pn | Pn | 09 05 33.0 | +0.2 | |
| **H24K** | **Noodor Dome** | **10.45** | **3** | | Pn | Pn | 09 05 39.8 | -1.0 | |
| **R33M** | **Jennings River** | **10.61** | **61** | | Pn | Pn | 09 05 43.2 | +0.1 | |
| **J30M** | **Hart River** | **11.18** | **30** | | Pn | Pn | 09 05 51.0 | +0.2 | |

*IDC **18** 09:03:18.1±1.0,23°.34N×143°.65E, h0km, mb3.6/8, mbtmp3.6/8, Error ellipse: s-maj=38.1km s-min=20.9km az=88.0*

**ISC 18 09:03:23.0**±1.0,**23°.6N**±0°.1×**143°.4E**±0°.2,**h31**km,**n9,**
σ2S**11**/10,**mb3.5/8,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.71** | **342** | Pn | | **Pn** | **09 04 16.5** | **-1.7** |
| JCJ | 8.7nm,0.3s,baz=280,slow=20,SNR=2.0 | | | Sn | | **Sn** | **09 04 58.8** | **-2.2** |
| | 12nm,0.3s,baz=247,slow=22,SNR=1.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.64** | **338** | P | | **P** | **09 08 23.7** | **+2.2** |
| | 1.2nm,0.6s,baz=168,slow=15,SNR=2.7 | | | | | | | |
| | 1.2nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.13** | **192** | P | | **P** | **09 11 27.0** | **-1.8** |
| | 0.4nm,0.5s,baz=16,slow=9.3,SNR=24 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.84** | **192** | P | | **P** | **09 11 56.5** | **-1.5** |
| | 0.2nm,0.4s,baz=4.8,slow=7.6,SNR=4.5 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.64** | **312** | P | | **P** | **09 12 44.8** | **+3.2** |
| | 0.2nm,0.5s,baz=88,slow=6.6,SNR=2.8 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.35** | **316** | P | | **P** | **09 13 02.3** | **+1.2** |
| | 1.6nm,0.2s,baz=90,slow=5.6,SNR=1.7 | | | | | | | |
| | 1.6nm,0.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.29** | **28** | P | | **P** | **09 13 28.4** | **0.0** |
| | 0.5nm,0.8s,baz=262,slow=4.4,SNR=4.7 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.43** | **319** | P | | **P** | **09 13 37.2** | **+0.9** |
| | 1.1nm,0.6s,baz=85,slow=7.7,SNR=4.4 | | | | | | | |
| | 1.1nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.81** | **52** | P | | **P** | **09 15 40.1** | **+0.6** |
| | 0.1nm,0.5s,baz=270,slow=5.4,SNR=1.7 | | | | | | | |
| | 0.1nm,0.5s | | | | | | | |

*IDC **18** 09:07:21.3±0.8,8°.16N×38°.83W, h0km, mb4.2/9, mbtmp4.2/10, ML4.2/1, MS3.6/10, Error ellipse: s-maj=22.0km s-min=21.3km az=136.0*
*NEIC **18** 09:07:25.0±1.4,7°.8N±0°.1×38°.9W±0°.1, h10km±1km, mb4.6/79, Error ellipse: s-maj=20.8km s-min=18.8km az=21.0*

**ISC 18 09:07:24.0**±0.6,**7°.99N**±0°.08×**38°.92W**±0°.09,**h12**km,**n116,**
σ1S**32**/75,**mb4.6/48,MS3.7**/10,**Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TMAB** | **Tom-Au,PA,Br** | **13.77** | **222** | *e*P | | **Pn** | **09 10 39.3** | **+0.1** |
| **MDP** | **Montagnes des** | **13.93** | **259** | Pn | | **Pn** | **09 10 38.4** | **-2.9** |
| | 0.5nm,0.3s,baz=64,slow=12,SNR=4.5 | | | | | | | |
| MDP | | | | Sn | | Sn | 09 13 00.2 | -16 |
| | 1.0nm,0.3s,baz=183,slow=5.2,SNR=7.5 | | | | | | | |
| **RCBR** | **Riachuelo** | **14.05** | **168** | Pn | | **Pn** | **09 10 41.0** | **-2.0** |
| **RCBR** | **Riachuelo** | **14.05** | **168** | Pn | | **Pn** | **09 10 44.1** | **+1.1** |
| | 1.2nm,0.3s,baz=63,slow=15,SNR=12 | | | | | | | |
| RCBR | | | | Sn | | Sn | 09 13 09.1 | -10 |
| | 0.2nm,0.3s,baz=243,slow=21,SNR=2.1 | | | | | | | |
| | 3.2nm,0.4s | | | | | | | |
| **RCBR** | **Riachuelo** | **14.05** | **168** | *e*P | | **Pn** | **09 10 44.9** | **+1.9** |
| **MCPB** | **Macapa, AP** | **15.50** | **238** | *e*P | | **Pn** | **09 11 00.0** | **-2.6** |
| **NBCA** | **Caruaru-PE** | **16.36** | **170** | *e*P | | **P** | **09 11 15.6** | **-1.1** |
| **PRPB** | **Parauapebas** | **17.77** | **218** | *e*P | | **Pn** | **09 11 31.9** | **+0.4** |
| **SMTB** | **Santa Maria do** | **18.83** | **207** | *e*P | | **Pn** | **09 11 44.8** | **+0.3** |
| **SDBA** | **SAO DESIDERIO** | **21.11** | **196** | *e*P | | **P** | **09 12 10.3** | **+1.5** |
| **NPGB** | **Novo Progresso** | **22.17** | **228** | *e*P | | **P** | **09 12 21.2** | **+1.1** |
| **BOAV** | **Boa Vista** | **22.21** | **257** | P | | **P** | **09 12 20.0** | **-0.6** |
| BOAV | | | | IAmb | | IAmb | 09 12 25.0 | |
| | comp=Z,36nm,1.1s | | | | | | | |
| **BOAV** | **Boa Vista** | **22.21** | **257** | *e*P | | **P** | **09 12 19.8** | **-0.8** |
| **H05S1** | **Guadeloupe/Mar** | **22.42** | **289** | T | | T | 09 35 18.0 | |
| | SNR=12 | | | | | | | |
| **BBTS** | **Babate** | **22.92** | **71** | LR | | LR | 09 19 23.7 | |
| | comp=Z,262nm,19.8s,baz=118,slow=32 | | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **23.15** | **293** | T | | T | 09 36 03.5 | |
| | SNR=6.4 | | | | | | | |
| **CMC01** | **Camacan, BA** | **23.20** | **181** | *e*P | | **P** | **09 12 32.5** | **+1.5** |
| **SNDB** | **Serra Nova Dou** | **23.34** | **212** | *e*P | | **P** | **09 12 33.2** | **+0.9** |
| **JANB** | **Januaria** | **23.51** | **193** | *e*P | | **P** | **09 12 35.9** | **+1.8** |
| **BDFB** | **Brasilia** | **25.14** | **201** | P | | **P** | **09 12 48.7** | **-0.6** |
| **BDFB** | **Brasilia** | **25.14** | **201** | P | | **P** | **09 12 50.0** | **+0.7** |
| | comp=Z,2.8nm,0.6s,baz=22,slow=14,SNR=5.4 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **25.48** | **277** | LR | | LR | 09 21 48.0 | |
| | comp=Z,179nm,21.9s,slow=34 | | | | | | | |
| **PDRB** | **Porto dos Gac** | **26.32** | **223** | *e*P | | **P** | **09 13 00.2** | **+0.2** |
| **DIAM** | **Diamantina, MG** | **26.53** | **190** | *e*P | | **P** | **09 13 02.7** | **+0.8** |
| **ARAG** | **Araguaiana, MT** | **26.78** | **208** | *e*P | | **P** | **09 13 05.0** | **+1.0** |
| **CELP** | **Cerrillos** | **28.71** | **293** | P | | **P** | **09 13 20.7** | **-0.7** |
| **BAUV** | **El Baul** | **28.82** | **274** | P | | **P** | **09 13 22.0** | **-0.4** |
| BAUV | | | | IAmb | | IAmb | 09 13 22.7 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **SALV** | **Santo Antonio** | **28.97** | **215** | *e*P | | **P** | **09 13 24.5** | **+0.9** |
| **H10N3** | **ASCENSION HYDR** | **28.98** | **122** | T | | T | 09 43 47.7 | |
| | baz=303,slow=75,SNR=50 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **28.98** | **122** | T | | T | 09 43 47.7 | |
| | baz=303,slow=75,SNR=44 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **29.00** | **122** | T | | T | 09 43 48.3 | |
| | baz=303,slow=75,SNR=34 | | | | | | | |
| **AGPR** | **Aguadilla, PR** | **29.31** | **294** | P | | **P** | **09 13 27.5** | **+0.8** |
| **H10S3** | **ASCENSION HYDR** | **29.45** | **124** | T | | T | 09 44 23.4 | |
| | baz=299,slow=74,SNR=26 | | | | | | | |
| **SAML** | **Samuel** | **29.45** | **236** | P | | **P** | **09 13 28.7** | **+0.7** |
| SAML | | | | IAmb | | IAmb | 09 13 29.5 | |
| | comp=Z,9.8nm,1.1s | | | | | | | |
| **SAML** | **Samuel** | **29.45** | **236** | *e*P | | **P** | **09 13 28.4** | **+0.4** |
| **H10S2** | **ASCENSION HYDR** | **29.47** | **124** | T | | T | 09 44 24.6 | |
| | baz=281,slow=74,SNR=29 | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **30.71** | **221** | P | | **P** | **09 13 40.1** | **+1.0** |
| **PTLB** | **Pontes e Lacer** | **30.71** | **221** | *e*P | | **P** | **09 13 40.2** | **+1.1** |
| **SDV** | **Santo Domingo** | **31.38** | **274** | P | | **P** | **09 13 44.2** | **-1.0** |
| SDV | | | | IAmb | | IAmb | 09 13 56.1 | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **31.88** | **36** | *e*T | | T | 09 46 30.4 | |
| **PMAR** | **Madeira** | **31.98** | **37** | *e*T | | T | 09 46 36.5 | |
| **PANT** | **Pantanal (Braz** | **31.98** | **213** | *e*P | | **P** | **09 13 51.7** | **+1.4** |
| **SIV** | **San Ignacio** | **32.38** | **223** | P | | **P** | **09 13 55.0** | **+1.2** |
| | comp=Z,7.5nm,0.9s,baz=60,slow=8.5,SNR=37 | | | | | | | |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **ETMB** | **Extrema** | **32.43** | **237** | P | | **P** | **09 13 54.6** | **+0.4** |
| ETMB | | | | IAmb | | IAmb | 09 13 55.3 | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| **ETMB** | **Extrema** | **32.43** | **237** | *e*P | | **P** | **09 13 54.4** | **+0.1** |
| **BBSD** | **Serra de San D** | **32.95** | **221** | *e*P | | **P** | **09 14 00.1** | **+1.4** |
| **MURT** | **Porto Murtinho** | **34.70** | **212** | *e*P | | **P** | **09 14 15.0** | **+1.1** |
| **ROSC** | **El Rosal** | **35.31** | **267** | P | | **P** | **09 14 20.3** | **+0.6** |
| **CZSB** | **Cruzeiro do Su** | **37.12** | **246** | P | | **P** | **09 14 33.9** | **-1.0** |
| CZSB | | | | IAmb | | IAmb | 09 14 34.2 | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **37.12** | **246** | *e*P | | **P** | **09 14 34.0** | **-0.8** |
| **LPAZ** | **La Paz** | **37.65** | **230** | P | | **P** | **09 14 40.3** | **+0.4** |
| LPAZ | | | | IAmb | | IAmb | 09 14 41.8 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **LPAZ** | **La Paz** | **37.65** | **230** | P | | **P** | **09 14 40.6** | **+0.6** |
| | comp=Z,5.1nm,0.9s,baz=55,slow=6.9,SNR=15 | | | | | | | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **LPAZ** | **La Paz** | **37.65** | **230** | *e*P | | **P** | **09 14 41.0** | **+1.1** |
| **TULM** | **Tulcn-Chalpat** | **39.39** | **261** | P | | **P** | **09 14 54.8** | **+0.2** |
| **PB18** | **Visviri** | **39.46** | **230** | P | | **P** | **09 14 54.9** | **-0.2** |
| PB18 | | | | IAmb | | IAmb | 09 15 33.4 | |
| | comp=Z,33nm,1.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **40.22** | **79** | P | | **P** | **09 14 59.6** | **-1.3** |
| **TORD** | **Torodi Ar. Bea** | **40.22** | **79** | P | | **P** | **09 14 59.2** | **-1.7** |
| | comp=Z,2.6nm,0.7s,baz=269,slow=5.9,SNR=16 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **ESDC** | **Sonseca Array** | **44.42** | **39** | LR | | LR | 09 33 29.5 | |
| | comp=Z,79nm,18.2s,baz=202,slow=36 | | | | | | | |
| **WES** | **Weston** | **44.58** | **326** | P | | **P** | **09 15 37.9** | **+1.8** |
| WES | | | | IAmb | | IAmb | 09 16 05.0 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **KSPA** | **Keystone Colle** | **46.68** | **322** | P | | **P** | **09 15 54.2** | **+1.5** |
| **JSC** | **Jenkinsville** | **46.88** | **310** | P | | **P** | **09 15 56.1** | **+1.8** |
| JSC | | | | IAmb | | IAmb | 09 16 31.5 | |
| | comp=Z,8.5nm,1.1s | | | | | | | |
| **352A** | **Blakely** | **48.74** | **305** | P | | **P** | **09 16 10.3** | **+1.5** |
| **N53A** | **Lisbon** | **49.51** | **318** | P | | **P** | **09 16 16.9** | **+2.2** |
| N53A | | | | IAmb | | IAmb | 09 16 25.1 | |
| | comp=Z,7.9nm,1.0s | | | | | | | |
| **Q52A** | **Bidwell** | **49.61** | **315** | P | | **P** | **09 16 17.7** | **+2.3** |
| **LRAL** | **Lakeview Retre** | **50.90** | **306** | P | | **P** | **09 16 26.9** | **+1.6** |
| LRAL | | | | IAmb | | IAmb | 09 16 29.0 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **X48A** | **Hartselle** | **51.39** | **308** | P | | **P** | **09 16 30.6** | **+1.7** |
| X48A | | | | IAmb | | IAmb | 09 16 31.5 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **MT09** | **Talagante** | **51.48** | **214** | P | | **P** | **09 16 28.9** | **-0.8** |
| **T47A** | **Sharon Grove** | **52.31** | **311** | P | | **P** | **09 16 37.2** | **+1.5** |
| T47A | | | | IAmb | | IAmb | 09 16 40.2 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **CCIG** | **Comitan** | **52.55** | **284** | P | | **P** | **09 16 37.3** | **-0.8** |
| **OLIL** | **Olney** | **53.67** | **313** | P | | **P** | **09 16 48.0** | **+2.2** |
| **143A** | **Socs Landing,** | **54.35** | **305** | P | | **P** | **09 16 52.1** | **+1.3** |
| **WLAR** | **White Oak Lake** | **55.99** | **305** | P | | **P** | **09 17 03.9** | **+1.2** |
| **MGMO** | **Mountain Grove** | **56.26** | **310** | IAmb | | IAmb | 09 17 06.7 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **PLCA** | **Paso Flores** | **56.55** | **209** | P | | **P** | **09 17 06.3** | **-0.2** |
| **MIAR** | **Mount Ida** | **56.58** | **306** | P | | **P** | **09 17 09.2** | **+2.4** |
| MIAR | | | | IAmb | | IAmb | 09 17 10.1 | |
| | comp=Z,4.3nm,1.0s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **56.73** | **38** | LR | | LR | 09 37 14.9 | |
| | comp=Z,70nm,21.5s,baz=262,slow=32 | | | | | | | |
| **P40A** | **Paris** | **56.83** | **312** | IAmb | | IAmb | 09 17 10.9 | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **237A** | **Washetta, Mont** | **57.83** | **303** | P | | **P** | **09 17 16.6** | **+0.9** |
| **Z35A** | **Perchaven, San** | **59.28** | **304** | P | | **P** | **09 17 26.5** | **+0.6** |
| **FNO** | **Franklin** | **59.80** | **306** | P | | **P** | **09 17 30.7** | **+1.3** |
| FNO | | | | IAmb | | IAmb | 09 17 31.0 | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **PLPT** | **Palo Pinto** | **60.06** | **303** | IAmb | | IAmb | 09 17 34.1 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **BRDY** | **Brady** | **60.38** | **301** | IAmb | | IAmb | 09 17 34.7 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **60.80** | **305** | P | | **P** | **09 17 36.9** | **+0.6** |
| WMOK | | | | IAmb | | IAmb | 09 17 38.6 | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **JCT** | **Junction City** | **60.94** | **300** | P | | **P** | **09 17 38.1** | **+0.8** |
| JCT | | | | IAmb | | IAmb | 09 17 38.9 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **DRIO** | **Del Rio** | **61.50** | **299** | IAmb | | IAmb | 09 17 45.5 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **APMT** | **Aspermont** | **61.64** | **304** | IAmb | | IAmb | 09 17 44.9 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **TSUM** | **Tsumeb** | **61.87** | **117** | LR | | LR | 09 38 24.1 | |
| | comp=Z,153nm,19.9s,baz=328,slow=30 | | | | | | | |
| **SMWD** | **Samnorwood** | **62.05** | **305** | IAmb | | IAmb | 09 17 45.9 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **SN07** | **Snyder 07** | **62.24** | **303** | IAmb | | IAmb | 09 17 48.9 | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **DKNS** | **Dickens** | **62.36** | **304** | IAmb | | IAmb | 09 17 50.3 | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| **SAND** | **Sanderson** | **62.87** | **299** | IAmb | | IAmb | 09 17 52.9 | |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **63.09** | **323** | P | | **P** | **09 17 48.9** | **-2.5** |
| | comp=Z,4.1nm,0.9s,baz=88,slow=8.7,SNR=4.0 | | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **64.14** | **299** | P | | **P** | **09 17 57.3** | **-1.6** |
| | comp=Z,0.8nm,0.6s,baz=99,slow=6.6,SNR=17 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **64.14** | **299** | IAmb | | IAmb | 09 18 27.3 | |
| | comp=Z,4.6nm,1.4s | | | | | | | |
| **ALPN** | **Alpine** | **64.22** | **300** | IAmb | | IAmb | 09 18 01.6 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **NOA** | **NORSAR Array B** | **64.56** | **24** | LR | | LR | 09 41 02.0 | |
| | comp=Z,27nm,21.8s,baz=230,slow=31 | | | | | | | |
| **VHRN** | **Van Horn** | **65.41** | **300** | IAmb | | IAmb | 09 18 13.6 | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **T25A** | **Trinidad** | **65.71** | **307** | IAmb | | IAmb | 09 18 13.3 | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **66.66** | **308** | IAmb | | IAmb | 09 18 17.9 | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **X18A** | **Snowflake** | **69.90** | **304** | IAmb | | IAmb | 09 18 40.0 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.06** | **39** | LR | | LR | 09 46 09.9 | |
| | comp=Z,37nm,21.7s,baz=240,slow=33 | | | | | | | |
| **PDAR** | **Pinedale Array** | **70.42** | **312** | LR | | LR | 09 46 04.6 | |
| | comp=Z,16nm,21.5s,baz=89,slow=33 | | | | | | | |
| **WUAZ** | **Wupatki** | **71.13** | **305** | P | | **P** | **09 18 42.8** | **-0.2** |
| **YMR** | **Madison River** | **71.67** | **314** | IAmb | | IAmb | 09 18 49.4 | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| **BOSA** | **Boshof** | **71.73** | **124** | P | | **P** | **09 18 45.1** | **-1.5** |
| | comp=Z,4.7nm,1.1s,baz=306,slow=8.3,SNR=3.8 | | | | | | | |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **71.77** | **311** | IAmb | | IAmb | 09 18 50.5 | |
| | comp=Z,6.7nm,1.0s | | | | | | | |
| **EIL** | **Elat** | **72.10** | **61** | LR | | LR | 09 48 45.9 | |
| | comp=Z,67nm,21.6s,baz=251,slow=34 | | | | | | | |
| **BGU** | **Big Grassy Mou** | **72.81** | **310** | IAmb | | IAmb | 09 18 55.7 | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **DLMT** | **Dillon** | **72.89** | **315** | IAmb | | IAmb | 09 18 56.5 | |
| | comp=Z,5.3nm,1.2s | | | | | | | |
| **ELK** | **Elko** | **74.47** | **310** | P | | **P** | **09 19 04.2** | **+1.4** |
| **S11A** | **Rachel** | **74.75** | **307** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **47.73** | **191** | P | **P** | **09** | **16** | **38.5 +0.7** |
| **ASAR** | **Alice Springs** | **47.73** | **191** | P | **P** | **09** | **16** | **37.1 -0.7** |
| | comp=Z,0.4nm,0.6s,baz=17,slow=9.4,SNR=7.6 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.67** | **321** | P | **P** | **09** | **17** | **16.3 +1.3** |
| | comp=Z,0.6nm,0.4s,baz=114,slow=9.7,SNR=2.4 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **53.34** | **312** | P | **P** | **09** | **17** | **20.5 +0.5** |
| **MKAR** | **Makanchi Array** | **53.34** | **312** | P | **P** | **09** | **17** | **20.6 +0.5** |
| **MKAR** | **Makanchi Array** | **53.34** | **312** | P | **P** | **09** | **17** | **22.8 +2.7** |
| | comp=Z,0.4nm,0.4s,baz=91,slow=10,SNR=8.4 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **53.55** | **312** | P | **P** | **09** | **17** | **21.4 -0.2** |
| MAKZ | | | | IAmb | IAmb | 09 | 17 | 25.3 |
| | comp=Z,2.9nm,1.0s | | | | | | | |
| **G18K** | **Tagagawik** | **55.98** | **25** | P | **P** | **09** | **17** | **38.6 -0.3** |
| G18K | | | | IAmb | IAmb | 09 | 17 | 55.8 |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **KURK** | **Kurchatov** | **56.02** | **316** | P | **P** | **09** | **17** | **39.1 -0.3** |
| KURK | | | | IAmb | IAmb | 09 | 17 | 42.3 |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.07** | **316** | P | **P** | **09** | **17** | **41.7 +1.9** |
| | comp=Z,3.6nm,0.8s,baz=93,slow=7.7,SNR=24 | | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **58.07** | **303** | P | P | 09 | 18 | 01.3 +7.0 |
| KSH | | | | pP | pwP | 09 | 18 | 05.6 +4.7 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **H21K** | **Melozitna Rive** | **58.22** | **26** | P | **P** | **09** | **17** | **55.8 +1.0** |
| H21K | | | | IAmb | IAmb | 09 | 18 | 04.5 |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **C23K** | **Itkillik River** | **60.03** | **22** | P | **P** | **09** | **18** | **07.8 +0.6** |
| C23K | | | | IAmb | IAmb | 09 | 18 | 20.4 |
| | comp=Z,2.5nm,1.0s | | | | | | | |
| **E24K** | **Your Creek** | **60.40** | **24** | P | **P** | **09** | **18** | **11.2 +1.3** |
| E24K | | | | IAmb | IAmb | 09 | 18 | 21.0 |
| | comp=Z,1.7nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.51** | **28** | P | **P** | **09** | **18** | **08.7 -2.0** |
| | comp=Z,0.6nm,0.8s,baz=262,slow=5.3,SNR=4.6 | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.17** | **319** | P | **P** | **09** | **18** | **17.3 +2.0** |
| | comp=Z,7.0nm,0.6s,baz=90,slow=7.8,SNR=33 | | | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **61.24** | **319** | P | **P** | **09** | **18** | **16.1 +0.3** |
| BRVK | | | | IAmb | IAmb | 09 | 18 | 18.9 |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **61.77** | **25** | P | **P** | **09** | **18** | **19.6 +0.4** |
| **KK31** | **Karatay Array** | **61.79** | **308** | P | **P** | **09** | **18** | **19.3 -0.4** |
| KK31 | | | | IAmb | IAmb | 09 | 18 | 23.5 |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **61.79** | **308** | P | **P** | **09** | **18** | **19.2 -0.5** |
| KKAR | | | | IAmb | IAmb | 09 | 18 | 23.5 |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **SIMJ** | **Simiganj** | **63.55** | **303** | P | **P** | **09** | **18** | **31.7 0.0** |
| **DAWY** | **Dawson** | **63.71** | **29** | P | **P** | **09** | **18** | **32.6 +0.5** |
| **E28M** | **Babbage River** | **63.76** | **24** | P | **P** | **09** | **18** | **33.4 +1.1** |
| E28M | | | | IAmb | IAmb | 09 | 18 | 54.2 |
| | comp=Z,1.4nm,1.0s | | | | | | | |
| **G31M** | **Satah River** | **65.77** | **25** | P | **P** | **09** | **18** | **45.2 -0.2** |
| G31M | | | | IAmb | IAmb | 09 | 19 | 04.6 |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| **ARU** | **Arti** | **67.69** | **323** | P | **P** | **09** | **18** | **58.7 +0.8** |
| **ABKAR** | **Akbulak array** | **68.12** | **316** | P | **P** | **09** | **19** | **00.7 0.0** |
| ABKAR | | | | IAmb | IAmb | 09 | 19 | 03.1 |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.14** | **341** | P | **P** | **09** | **19** | **55.1 +1.1** |
| | comp=Z,1.7nm,0.7s,baz=52,slow=6.3,SNR=4.9 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **80.97** | **314** | P | **P** | **09** | **20** | **17.1 +1.7** |
| | comp=Z,2.4nm,0.8s,baz=72,slow=3.2,SNR=4.8 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **81.46** | **334** | P | **P** | **09** | **20** | **17.7 -0.1** |
| | comp=Z,0.7nm,0.4s,baz=67,slow=6.4,SNR=6.3 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.16** | **52** | P | **P** | **09** | **20** | **21.0 -1.2** |
| | comp=Z,0.5nm,0.7s,baz=273,slow=5.5,SNR=5.0 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **86.24** | **45** | P | **P** | **09** | **20** | **41.5 -1.4** |
| | comp=Z,0.3nm,0.7s,baz=283,slow=5.5,SNR=2.1 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **KNB** | **Kanab** | **86.69** | **51** | P | **P** | **09** | **20** | **45.1 -0.1** |
| KNB | | | | IAmb | IAmb | 09 | 20 | 45.2 |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **PLCA** | **Paso Flores** | **147.08** | **129** | PKPbc | **PKPdf** | **09** | **27** | **43.0 +1.0** |
| | comp=Z,1.3nm,0.8s,baz=260,slow=4.6,SNR=3.1 | | | | | | | |
| **LPAZ** | **La Paz** | **149.92** | **82** | PKPbc | **PKPdf** | **09** | **27** | **49.4 +1.5** |
| | comp=Z,0.9nm,0.6s,baz=249,slow=1.0,SNR=4.5 | | | | | | | |

*IDC **18** 09:20:25.3±1.0, 23.°46N×143.°50E, h0km, mb3.8/8, mbtmp3.8/8, MS3.0/3, Error ellipse: s-maj=35.8km s-min=22.8km az=83.0*

**ISC 18 09:20:30.0±1.0, 23.°4N±0.°2×143.°5E±0.°2, h31km, n11, σ0s71/8, mb3.6/8, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **JOW** | **Kunigami** | **14.20** | **287** | LR | LR | 09 | 28 | 03.3 |
| | comp=Z,68nm,22.0s,baz=174,slow=32 | | | | | | | |
| **JNU** | **Nakatsue** | **14.71** | **314** | LR | LR | 09 | 29 | 32.1 |
| | comp=Z,60nm,18.1s,baz=153,slow=37 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.78** | **272** | LR | LR | 09 | 45 | 51.9 |
| | comp=Z,20nm,18.8s,baz=220,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.03** | **192** | P | **P** | **09** | **28** | **35.1 +0.2** |
| | 0.5nm,0.6s,baz=14,slow=8.8,SNR=8.6 | | | | | | | |
| | 0.5nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.73** | **192** | P | **P** | **09** | **29** | **03.8 -0.5** |
| | 0.2nm,0.7s,baz=9.6,slow=8.3,SNR=2.1 | | | | | | | |
| | 0.2nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.76** | **312** | P | **P** | **09** | **29** | **48.7 -0.8** |
| | 0.7nm,0.8s,baz=94,slow=7.7,SNR=4.7 | | | | | | | |
| | 0.7nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.47** | **316** | P | **P** | **09** | **30** | **08.5 -0.4** |
| | 2.2nm,0.9s,baz=93,slow=7.9,SNR=13 | | | | | | | |
| | 2.2nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.37** | **28** | P | **P** | **09** | **30** | **35.4 -0.6** |
| | 0.4nm,0.9s,baz=243,slow=5.1,SNR=3.2 | | | | | | | |
| | 0.4nm,0.9s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.56** | **319** | P | **P** | **09** | **30** | **44.3 +0.2** |
| | 4.5nm,0.7s,baz=96,slow=9.1,SNR=17 | | | | | | | |
| | 4.5nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **81.38** | **314** | P | **P** | **09** | **32** | **44.8 +1.0** |
| | 1.6nm,0.7s,baz=117,slow=4.5,SNR=4.0 | | | | | | | |
| | 1.6nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.84** | **52** | P | **P** | **09** | **32** | **47.2 +0.4** |
| | 0.3nm,0.6s,baz=255,slow=3.5,SNR=4.2 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |

**IDC 18 09:58:19.1±4.0, 23.°41N×143.°51E, h0km, mb3.7/5, mbtmp3.7/5, Error ellipse: s-maj=174.1km s-min=23.7km az=75.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **WRA** | **Warramunga Arr** | **44.00** | **192** | P | P | 10 | 06 | 28.4 -0.1 |
| | 0.3nm,0.6s,baz=16,slow=9.0,SNR=10 | | | | | | | |
| WRA | | | | PcP | PcP | 10 | 08 | 14.6 +0.3 |
| | 0.3nm,0.8s,baz=8.0,slow=3.7,SNR=2.1 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.71** | **192** | P | P | 10 | 06 | 57.4 -0.4 |
| | 0.2nm,0.8s,baz=4.9,slow=8.1,SNR=1.8 | | | | | | | |
| | 0.2nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.78** | **312** | P | P | 10 | 07 | 42.4 -1.0 |
| | 0.2nm,0.6s,baz=98,slow=7.4,SNR=2.3 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.49** | **316** | P | P | 10 | 08 | 02.8 -0.1 |
| | 2.2nm,0.2s,baz=92,slow=7.5,SNR=5.5 | | | | | | | |
| | 2.2nm,0.2s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.58** | **319** | P | P | 10 | 08 | 38.6 +0.4 |
| | 1.3nm,0.5s,baz=96,slow=9.4,SNR=6.5 | | | | | | | |
| | 1.3nm,0.5s | | | | | | | |

**TRN 18 09:59:11.7, 17.°73N×59.°91W, h70km, MD3.5, Far East of Barbuda., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **ANWB** | **Willy Bob** | **1.79** | **268** | *e*P | Pn | 09 | 59 | 41.6 +1.2 |
| ANWB | | | | *e*S | Sn | 10 | 00 | 04.4 +2.1 |
| **ANBD** | **Bethesda, Anti** | **1.89** | **249** | *e*P | Pn | 09 | 59 | 43.5 +1.6 |
| ANBD | | | | *e*S | Sn | 10 | 00 | 06.8 +1.9 |

*IDC **18** 10:15:13.8±1.7, 23.°45N×143.°28E, h0km, mb3.9/7, mbtmp3.8/9, ML2.7/2, Error ellipse: s-maj=75.3km s-min=20.0km az=74.0*

**ISC 18 10:15:17.6±1.4, 23.°5N±0.°2×143.°5E±0.°4, h31km, n10, σ0s30/10, mb3.6/7, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **MJAR** | **Matsushiro Arr** | **13.78** | **342** | Pn | **Pn** | **10** | **18** | **30.8 0.0** |
| | baz=164,slow=9.9,SNR=1.8 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **KSRS** | **Korea Array** | **19.31** | **320** | P | **P** | **10** | **19** | **39.5 -0.4** |
| | baz=145,slow=13,SNR=2.3 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.71** | **338** | P | **P** | **10** | **20** | **16.4 -0.3** |
| | 1.2nm,0.8s,baz=157,slow=7.8,SNR=2.6 | | | | | | | |
| | 1.2nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.10** | **192** | P | **P** | **10** | **23** | **22.9 -0.2** |
| | 0.6nm,0.6s,baz=6.3,slow=9.3,SNR=5.2 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.81** | **192** | P | **P** | **10** | **23** | **52.4 0.0** |
| | 0.1nm,0.5s,baz=20,slow=11,SNR=1.6 | | | | | | | |
| | 0.1nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.73** | **312** | P | **P** | **10** | **24** | **37.0 +0.3** |
| | 0.5nm,0.8s,baz=103,slow=8.7,SNR=3.8 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.44** | **316** | P | **P** | **10** | **24** | **56.4 +0.2** |
| | 2.1nm,0.2s,baz=95,slow=7.6,SNR=4.8 | | | | | | | |
| | 2.1nm,0.2s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.52** | **319** | P | **P** | **10** | **25** | **31.5 +0.1** |
| | 2.7nm,0.5s,baz=98,slow=7.6,SNR=14 | | | | | | | |
| | 2.7nm,0.5s | | | | | | | |
| **ARU** | **Arti** | **68.01** | **323** | P | **P** | **10** | **26** | **14.0 +0.4** |
| | 2.0nm,0.3s,baz=309,slow=3.2,SNR=3.4 | | | | | | | |
| | 2.0nm,0.3s | | | | | | | |
| **PLCA** | **Paso Flores** | **146.68** | **129** | PKPbc | **PKPab** | **10** | **34** | **57.6 0.0** |
| | 2.9nm,1.0s,baz=262,slow=7.1,SNR=3.1 | | | | | | | |

*IDC **18** 10:27:00.7±4.6, 23.°45N×143.°25E, h0km, mb3.6/6, mbtmp3.7/6, MS2.9/1, Error ellipse: s-maj=193.7km s-min=21.3km az=78.0*

**ISC 18 10:26:58.6±5.5, 23.°7N±0.°3×14.°4E±.°, h10km, n7, σ0s91/6, mb3.6/6, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **USRK** | **Ussuriysk Ar.** | **22.86** | **337** | P | **P** | **10** | **32** | **01.6 -0.5** |
| | 0.7nm,0.7s,baz=161,slow=14,SNR=1.9 | | | | | | | |
| | 0.7nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.55** | **272** | LR | LR | 10 | 52 | 02.1 |
| | comp=Z,17nm,19.8s,baz=225,slow=36 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.42** | **194** | P | **P** | **10** | **35** | **10.2 +0.3** |
| | 0.5nm,0.8s,baz=6.5,slow=9.5,SNR=14 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **48.13** | **193** | P | **P** | **10** | **35** | **38.4 -0.6** |
| | 0.1nm,0.4s,baz=18,slow=9.3,SNR=1.3 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.19** | **312** | P | **P** | **10** | **36** | **23.8 -0.5** |
| | 0.5nm,0.7s,baz=88,slow=7.4,SNR=4.6 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.85** | **316** | P | **P** | **10** | **36** | **42.7 -0.6** |
| | 1.5nm,0.7s,baz=92,slow=7.7,SNR=14 | | | | | | | |
| | 1.5nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.90** | **319** | P | **P** | **10** | **37** | **19.3 +1.1** |
| | 2.8nm,0.5s,baz=90,slow=8.0,SNR=14 | | | | | | | |
| | 2.8nm,0.5s | | | | | | | |

*WEL **18** 10:37:44.9, 39.°S±24.°×17.°6E±1.°5, h94km±27km, M2.4/10, ML1.8/1, MLv2.4/10, Error ellipse: s-maj=0.0km s-min=0.0km az=2.8*

**ISC 18 10:37:17.8±3.0, 37.°5S±0.°2×176.°9E±0.°1, h200km, n39, σ1s74/37, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **URZ** | **Urewera** | **0.83** | **166** | P | **Pn** | **10** | **37** | **44.4 -2.0** |
| **BKZ** | **Black Stump Fm** | **1.73** | **189** | P | **Pn** | **10** | **37** | **55.2 +1.5** |
| **BKZ** | **Black Stump Fm** | **1.73** | **189** | P | **Pn** | **10** | **37** | **55.1 +1.5** |
| **OTVZ** | **Oturere** | **1.95** | **208** | P | **Pn** | **10** | **37** | **58.8 +2.9** |
| **SNVZ** | **South Ngauruho** | **1.98** | **209** | P | **Pn** | **10** | **37** | **59.2 +3.0** |
| **KWHZ** | **Kaweka Forest** | **2.00** | **190** | P | **Pn** | **10** | **37** | **58.3 +2.0** |
| **TRVZ** | **Turoa** | **2.11** | **209** | P | Pn | 10 | 38 | 05.6 +8.0 |
| **WNVZ** | **Wahianoa** | **2.12** | **207** | P | **Pn** | **10** | **38** | **00.2 +2.6** |
| **KRHZ** | **Kereru** | **2.22** | **190** | P | **Pn** | **10** | **38** | **00.2 +1.6** |
| **KAHZ** | **Kahuranaki** | **2.34** | **180** | P | **Pn** | **10** | **38** | **01.4 +1.5** |
| **VRZ** | **Vera Road** | **2.35** | **224** | P | **Pn** | **10** | **38** | **03.9 +4.0** |
| **PNHZ** | **Pukenui** | **2.51** | **192** | P | **Pn** | **10** | **38** | **03.3 +1.5** |
| **PKE** | **Pukeiti** | **2.85** | **232** | P | Pn | 10 | 38 | 10.3 +4.7 |
| **BFZ** | **Birch Farm** | **3.26** | **188** | P | **Pn** | **10** | **38** | **12.8 +2.4** |
| **BFZ** | **Birch Farm** | **3.26** | **188** | P | **Pn** | **10** | **38** | **11.6 +1.2** |
| **MRZ** | **Mangatainoka R** | **3.35** | **197** | P | **Pn** | **10** | **38** | **12.4 +0.8** |
| **HOWZ** | **Holdsworth Sta** | **3.59** | **196** | P | **Pn** | **10** | **38** | **15.3 +0.8** |
| **OGWZ** | **Otaki Gorge** | **3.61** | **201** | P | **Pn** | **10** | **38** | **15.3 +0.6** |
| **KIW** | **Kapiti Island** | **3.73** | **203** | P | **Pn** | **10** | **38** | **17.2 +1.1** |
| **MTW** | **Mount Morrison** | **3.85** | **195** | P | **Pn** | **10** | **38** | **18.3 +0.7** |
| **CAW** | **Cannon Point** | **3.91** | **200** | P | **Pn** | **10** | **38** | **18.7 +0.4** |
| **DUWZ** | **D'Urville Isla** | **4.05** | **213** | P | **Pn** | **10** | **38** | **21.0 +0.9** |
| **MSWZ** | **Moikau Station** | **4.15** | **197** | P | **Pn** | **10** | **38** | **22.4 +1.0** |
| **TCW** | **Tory Channel** | **4.25** | **207** | P | **Pn** | **10** | **38** | **23.7 +1.0** |
| **PLWZ** | **Palliser** | **4.29** | **196** | P | **Pn** | **10** | **38** | **23.9 +0.7** |
| **TUWZ** | **Tuamarina** | **4.57** | **209** | P | **Pn** | **10** | **38** | **27.3 +0.8** |
| **NNZ** | **Nelson** | **4.63** | **215** | P | **Pn** | **10** | **38** | **27.2 -0.2** |
| **QRZ** | **Quartz Range** | **4.76** | **224** | P | **Pn** | **10** | **38** | **29.4 +0.3** |
| **QRZ** | **Quartz Range** | **4.76** | **224** | P | **Pn** | **10** | **38** | **28.5 -0.6** |
| **MRNZ** | **Matariki Terra** | **5.06** | **218** | P | **Pn** | **10** | **38** | **32.5 -0.4** |
| **THZ** | **Tophouse** | **5.28** | **214** | P | **Pn** | **10** | **38** | **35.5 -0.2** |
| **KHZ** | **Kahutara** | **5.58** | **206** | P | **Pn** | **10** | **38** | **39.2 -0.3** |
| **KHZ** | **Kahutara** | **5.58** | **206** | P | **Pn** | **10** | **38** | **39.1 -0.3** |
| **GVZ** | **Greta Valley S** | **6.24** | **207** | P | **Pn** | **10** | **38** | **47.0 -1.0** |
| **LTZ** | **Lake Taylor** | **6.38** | **212** | P | **Pn** | **10** | **38** | **47.9 -2.0** |
| **INZ** | **Inchbonnie** | **6.70** | **217** | P | **Pn** | **10** | **38** | **52.0 -2.1** |
| **MQZ** | **McQueen's Vall** | **7.02** | **206** | P | **Pn** | **10** | **38** | **55.9 -2.2** |
| **MHCZ** | **Mount Hutt** | **7.29** | **212** | P | **Pn** | **10** | **38** | **59.2 -2.5** |
| **TMZ** | **Timaru** | **8.22** | **211** | P | **Pn** | **10** | **39** | **10.9 -2.8** |

*IDC **18** 10:41:32.2±1.2, 59.°37S×25.°11W, h0km, mb4.1/4, mbtmp4.1/5, ML3.8/1, Error ellipse: s-maj=37.9km s-min=28.4km az=90.0*

*NEIC **18** 10:41:33.0±1.3, 59.°3S±0.°1×25.°0W±0.°2, h10km±1km, mb4.4/21, Error ellipse: s-maj=23.8km s-min=9.4km az=137.0*

**ISC 18 10:41:35.2±0.7, 59.°4S±0.°1×25.°0W±0.°1, h27km, n31, σ1s12/31, mb4.4/13, 7C-2D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **VNA1** | **Neumayer--Stat** | **13.25** | **155** | ⇑P | **Pn** | **10** | **44** | **39.5 -1.7** |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| VNA1 | | | | ⇓S | Sn | 10 | 46 | 55.1 -12 |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **13.44** | **158** | ⇑P | **Pn** | **10** | **44** | **41.7 -2.0** |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| VNA3 | | | | ⇑S | Sn | 10 | 46 | 53.3 -19 |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **13.65** | **155** | ⇑P | **Pn** | **10** | **44** | **44.7 -1.9** |
| | comp=Z,4.8nm,0.5s,baz=316,slow=14 | | | | | | | |
| VNA2 | | | | ⇑S | Sn | 10 | 46 | 58.4 -19 |
| | comp=Z,1.3nm,0.6s,baz=310,slow=15 | | | | | | | |
| **SNAA** | **Sanae** | **15.21** | **153** | ⇑P | **Pn** | **10** | **45** | **06.2 -1.6** |
| | comp=Z,48nm,0.4s | | | | | | | |
| SNAA | | | | ⇓S | Sn | 10 | 47 | 39.5 -16 |
| | comp=Z,21nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **15.21** | **153** | Pn | **Pn** | **10** | **45** | **07.5 -0.3** |
| | comp=Z,0.4nm,0.3s,baz=319,slow=14,SNR=4.7 | | | | | | | |
| SNAA | | | | Sn | Sn | 10 | 47 | 40.1 -15 |
| | comp=Z,0.1nm,0.3s,baz=36,slow=19,SNR=1.6 | | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **16.74** | **150** | ⇑P | **Pn** | **10** | **45** | **26.6 -0.8** |
| | comp=Z,52nm,0.6s | | | | | | | |
| **PMSA** | **Palmer Station** | **18.79** | **237** | P | **P** | **10** | **45** | **52.5 +0.5** |
| **BELA** | **Belgrano 2** | **18.83** | **186** | P | **P** | **10** | **45** | **53.0 +0.6** |
| **EFI** | **East Falkland** | **20.05** | **278** | P | **P** | **10** | **46** | **05.6 -0.2** |
| **QSPA** | **South Pole Qui** | **30.84** | **180** | P | **P** | **10** | **47** | **50.8 +2.2** |
| **QSPA** | **South Pole Qui** | **30.84** | **180** | P | **P** | **10** | **47** | **50.4 +1.8** |
| | comp=Z,1.0nm,0.7s,baz=324,slow=2.8,SNR=5.9 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **TRQA** | **Tornquist** | **31.77** | **296** | P | **P** | **10** | **47** | **55.8 -1.0** |
| TRQA | | | | IAmb | IAmb | 10 | 48 | 19.6 |
| | comp=Z,4.6nm,1.1s | | | | | | | |
| **PLTB** | **Pedras Altas** | **33.61** | **313** | P | **P** | **10** | **48** | **11.7 -1.3** |
| PLTB | | | | IAmb | IAmb | 10 | 48 | 31.3 |
| | comp=Z,7.4nm,1.1s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **38.57** | **289** | P | **P** | **10** | **48** | **55.4 -0.1** |
| BO02 | | | | IAmb | IAmb | 10 | 48 | 58.7 |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **BO04** | **La Punta** | **39.13** | **290** | P | **P** | **10** | **48** | **59.9 -0.3** |
| BO04 | | | | IAmb | IAmb | 10 | 49 | 18.5 |
| | comp=Z,8.6nm,1.1s | | | | | | | |
| **MT03** | **Universidad Ad** | **39.49** | **290** | P | **P** | **10** | **49** | **03.2 0.0** |
| **MT09** | **Talagante** | **39.49** | **290** | P | **P** | **10** | **49** | **03.2 0.0** |
| **MT01** | **Popeta** | **39.55** | **289** | P | **P** | **10** | **49** | **03.7 +0.1** |
| MT01 | | | | IAmb | IAmb | 10 | 49 | 14.8 |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| **MT16** | **CCHEN** | **39.55** | **291** | P | **P** | **10** | **49** | **04.2 +0.6** |
| **MT02** | **Curacav** | **39.98** | **290** | P | **P** | **10** | **49** | **06.3 -0.9** |
| MT02 | | | | IAmb | IAmb | 10 | 49 | 21.7 |
| | comp=Z,10nm,1.1s | | | | | | | |
| **SUR** | **Sutherland** | **40.58** | **69** | P | **P** | **10** | **49** | **10.8 -1.6** |
| SUR | | | | IAmb | IAmb | 10 | 49 | 23.1 |
| | comp=Z,12nm,1.1s | | | | | | | |
| **VA06** | **Catapilco** | **40.63** | **290** | P | **P** | **10** | **49** | **11.9 -0.6** |
| **CO02** | **Combarbal** | **41.61** | **292** | P | **P** | **10** | **49** | **21.1 +0.4** |
| **CO03** | **El Pedregal** | **41.77** | **293** | P | **P** | **10** | **49** | **21.4 -0.7** |
| CO03 | | | | IAmb | IAmb | 10 | 49 | 25.7 |
| | comp=Z,11nm,1.1s | | | | | | | |
| **AC05** | **El Transito** | **43.25** | **295** | P | **P** | **10** | **49** | **34.7 +0.6** |
| AC05 | | | | IAmb | IAmb | 10 | 49 | 54.4 |
| | comp=Z,10nm,0.9s | | | | | | | |
| **BOSA** | **Boshof** | **45.84** | **71** | P | **P** | **10** | **49** | **55.3 +0.6** |
| BOSA | | | | IAmb | IAmb | 10 | 49 | 55.8 |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **BOSA** | **Boshof** | **45.84** | **71** | P | **P** | **10** | **49** | **55.5 +0.7** |
| | comp=Z,1.9nm,0.6s,baz=199,slow=9.0,SNR=4.6 | | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| **LPAZ** | **La Paz** | **53.26** | **305** | P | **P** | **10** | **50** | **51.1 -0.9** |
| **LPAZ** | **La Paz** | **53.26** | **305** | P | **P** | **10** | **50** | **52.0 +0.1** |
| | comp=Z,0.5nm,0.5s,baz=200,slow=12,SNR=2.2 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.47** | **27** | P | **P** | **10** | **53** | **18.4 +1.8** |
| | comp=Z,3.4nm,0.6s,baz=199,slow=5.3,SNR=15 | | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **149.66** | **91** | PKPbc | **PKiKP** | **11** | **01** | **22.2 -0.1** |
| | comp=Z,1.0nm,0.6s,baz=246,slow=1.8,SNR=4.9 | | | | | | | |

**IDC 18 10:47:12.2±14.0, 22.°90S×69.°67E, h0km, mb3.9/4, mbtmp3.9/4, MS3.4/14, Error ellipse: s-maj=493.1km s-min=33.3km az=52.0, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **H08S1** | **Diego Carcia H** | **15.40** | **11** | T | T | 11 | 06 | 37.4 |
| | baz=192,slow=76,SNR=105 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **15.40** | **11** | T | T | 11 | 06 | 34.3 |
| | baz=192,slow=76,SNR=267 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **15.42** | **11** | T | T | 11 | 06 | 35.5 |
| | baz=192,slow=76,SNR=357 | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **27.36** | **208** | T | T | 11 | 21 | 25.0 |
| | baz=37,slow=75,SNR=102 | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **27.37** | **208** | T | T | 11 | 21 | 27.1 |
| | baz=37,slow=75,SNR=59 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **27.38** | **208** | T | T | 11 | 21 | 25.0 |
| | baz=37,slow=75,SNR=100 | | | | | | | |
| **PALK** | **Pallekele** | **31.87** | **21** | LR | LR | 11 | 03 | 20.3 |
| | comp=Z,104nm,18.1s,baz=324,slow=30 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **38.20** | **300** | LR | LR | 11 | 06 | 44.2 |
| | comp=Z,83nm,18.7s,baz=98,slow=31 | | | | | | | |
| **LBTB** | **Lobatse** | **40.20** | **258** | LR | LR | 11 | 07 | 36.3 |
| | comp=Z,47nm,20.8s,baz=132,slow=30 | | | | | | | |
| **BOSA** | **Boshof** | **40.23** | **252** | LR | LR | 11 | 08 | 26.9 |
| | comp=Z,74nm,19.4s,baz=72,slow=32 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.42** | **117** | T | T | 11 | 38 | 21.2 |
| | baz=275,slow=75,SNR=12 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.42** | **117** | T | T | 11 | 38 | 21.1 |
| | baz=275,slow=75,SNR=9.6 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.44** | **117** | T | T | 11 | 38 | 22.5 |
| | baz=275,slow=75,SNR=11 | | | | | | | |
| **FURI** | **Furi** | **43.81** | **313** | LR | LR | 11 | 09 | 59.6 |
| | comp=Z,63nm,18.7s,baz=225,slow=31 | | | | | | | |
| **MBAR** | **Mbarara** | **43.84** | **295** | LR | LR | 11 | 11 | 24.2 |
| | comp=Z,51nm,19.0s,baz=146,slow=33 | | | | | | | |
| **MAW

TSMG S Sb 10 48 02.0 -0.5
baz=278
**MASBT Mashibuluo 0.57 269** *i* P Pb 10 47 54.6 -0.2
baz=268
MASBT *eS* Sn 10 48 03.5 -0.7
baz=268
**FULB Fuli 0.57 4** *i* P Pb 10 47 54.8 -0.1
baz=352
FULB *i* S Sn 10 48 04.1 -0.2
baz=352
**CHKH Chenggong 0.58 13** *i* P Pb 10 47 54.7 -0.2
baz=12
CHKH *i* S Sb 10 48 02.8 0.0
baz=12
**SLIU Shizi 0.58 226** *i* P Pb 10 47 54.5 -0.5
baz=217
SLIU S Sb 10 48 01.8 -1.2
baz=217
**ELDTW Lidau 0.60 339** *i* P Pb 10 47 54.4 -1.0
baz=346
ELDTW *eS* Sb 10 48 02.5 -1.1
baz=346
**SCZT Fangliau 0.64 247** *i* P Pb 10 47 56.0 0.0
baz=243
SCZT *eS* Sb 10 48 04.8 +0.4
baz=243
**LAY Lan-yu 0.65 154** P Pb 10 47 55.1 -1.0
baz=155
LAY *eS* Sb 10 48 05.3 +0.5
baz=155
**SLGT Liugui 0.67 303** *i* P Pb 10 47 56.7 +0.3
baz=303
SLGT *eS* Sn 10 48 07.4 +0.8
baz=303
**STYT Tauyuan 0.70 320** P Pb 10 47 55.9 -1.2
baz=326
STYT S Sb 10 48 06.4 0.0
baz=326
**ECBN Changbin 0.71 15** *eP* Pb 10 47 56.1 -1.1
baz=4.0
ECBN S Sn 10 48 07.5 -0.2
baz=4.0
**EYUL Yuli 0.72 5** *i* P Pb 10 47 56.4 -1.0
baz=354
EYUL *eS* Sb 10 48 06.7 -0.2
baz=354
**TWF1 Yuli 0.72 3** *i* P Pb 10 47 55.8 -1.6
baz=353
TWF1 *eS* Sb 10 48 05.6 -1.4
baz=353
**SCST Cishan 0.74 290** *i* P Pn 10 47 58.7 +0.6
baz=290
SCST *eS* Sn 10 48 11.2 +2.7
baz=290
**YULB Yu-li 0.76 3** P Pb 10 47 56.7 -1.4
**YULB Yu-li 0.76 3** *i* P Pb 10 47 56.3 -1.8
baz=353
YULB *eS* Sb 10 48 07.2 -1.0
baz=353
**SGST Jiashian 0.77 307** P Pn 10 47 58.5 +0.1
baz=306
SGST *eS* Sn 10 48 09.6 +0.5
baz=306
**HEN Hengchun 0.78 218** *eP* Pb 10 47 57.7 -0.6
baz=207
HEN *i* S Sb 10 48 08.8 +0.3
baz=207
**TWM1 Shoushan 0.79 285** *eP* Pn 10 48 00.1 +1.4
baz=278
**TWKBT Hengchun 0.79 211** *eP* Pb 10 47 57.3 -1.3
baz=204
TWKBT *eS* Sb 10 48 06.3 -2.7
baz=204
**TWK1 Hengchun 0.80 211** *eP* Pb 10 47 57.7 -0.9
baz=204
TWK1 *eS* Sn 10 48 09.6 -0.2
baz=204
**WTP Ta-pu 0.85 317** *i* P Pn 10 47 59.8 +0.2
baz=326
WTP *i* S Sn 10 48 13.0 +1.8
baz=326
**CHN1 Nanshi 0.87 310** *i* P Pn 10 47 59.1 -0.7
baz=319
CHN1 *i* S Sn 10 48 14.2 +2.6
baz=319
**HGSD Ruisui 0.88 10** *i* P Pn 10 47 58.9 -1.1
baz=20
HGSD *eS* Sn 10 48 12.2 +0.4
baz=20
**EHY Hungye 0.88 4** *i* P Pn 10 47 58.3 -1.6
baz=355
EHY *eS* Sb 10 48 10.6 -0.8
baz=355
**TPUB Ta-pu 0.88 320** P Pb 10 48 00.9 +0.8
**TPUB Ta-pu 0.88 320** *i* P Pb 10 48 00.6 +0.5
baz=319
TPUB S Sn 10 48 12.9 +0.9
baz=319
**YUS Yu-Shan 0.90 342** *i* P Pn 10 47 59.6 -1.1
baz=347
YUS *eS* Sb 10 48 11.6 -0.9
baz=347
**SNST Tainan City 0.91 311** *eP* Pb 10 48 00.8 +0.2
baz=319
SNST *i* S Sn 10 48 15.0 +2.4
baz=319
**TWK Hsinying 0.95 312** *i* P Pn 10 48 00.1 -0.8
baz=321
TWK *i* S Sn 10 48 15.4 +1.7
baz=321
**WCKO Fanlu 1.00 324** P Pb 10 48 02.5 +0.4
baz=323
WCKO S Sb 10 48 16.9 +1.9
baz=323
**WARBT Fenglin Townsh 1.09 7** P Pn 10 47 59.9 -3.1
baz=5.0
WARBT *eS* Sn 10 48 15.2 -1.9
baz=5.0
**WHYT Xinyi Township 1.13 341** *i* P Pb 10 48 04.2 0.0
baz=344
WHYT S Sb 10 48 18.9 +0.4
baz=344
**VWDT VWDT 1.13 355** P Pn 10 48 03.2 -0.2
baz=358
**SSLB Suanglung 1.19 347** P Pb 10 48 05.5 +0.2
**SSLB Suanglung 1.19 347** P Pn 10 48 04.8 +0.5
baz=355
SSLB *eS* Sb 10 48 20.7 +0.4
baz=355
**SHUL Shoufeng 1.19 14** *eP* Pn 10 48 03.3 -1.0
SHUL *eS* Sn 10 48 19.9 +0.4
**ESL Shilin 1.19 8** P Pn 10 48 02.6 -1.7
baz=359
ESL *eS* Sn 10 48 17.8 -1.8
baz=359
**SMLT Sun Moon Lake 1.29 346** P Pn 10 48 05.3 -0.4
baz=353
SMLT *eS* Sb 10 48 23.9 +0.6
baz=353
**TYC Yuchr 1.32 344** *i* P Pb 10 48 08.1 +0.6
baz=343
TYC S Sb 10 48 26.2 +2.2
baz=343
**LXIB Xiulin Townshi 1.40 6** *i* P Pn 10 48 05.7 -1.5
baz=15
LXIB *eS* Sn 10 48 24.4 -0.5
baz=15
**CHGB Renai 1.43 357** P Pn 10 48 07.3 -0.4
baz=4.0
CHGB *eS* Sb 10 48 26.6 -0.8
baz=4.0
**WCS Beigang Elemen 1.46 348** *i* P Pb 10 48 09.6 -0.2
baz=346
WCS *eS* Sb 10 48 29.2 +1.2
baz=346
**WHF Hehuan Shan 1.51 1** P Pn 10 48 08.4 -0.7
baz=9.0
WHF *eS* Sn 10 48 28.2 +0.1
baz=9.0
**NACB Ninganchiao 1.57 12** *eP* Pn 10 48 08.4 -1.1
baz=9.0
NACB *eS* Sn 10 48 27.5 -1.5
baz=9.0
**ETLH Xiulin Townshi 1.59 8** *eP* Pn 10 48 08.4 -1.4
baz=16
ETLH *eS* Sn 10 48 28.9 -0.5
baz=16
**FUSS Fushou 1.61 360** P Pn 10 48 10.6 +0.3
baz=8.0
FUSS *eS* Sn 10 48 30.9 +0.6
baz=8.0
**TWT Tachien 1.62 358** P Pb 10 48 12.0 -0.8
baz=5.0
TWT *eS* Sn 10 48 31.2 +0.8
baz=5.0
**TDCB Techi 1.62 357** *eP* Pn 10 48 10.1 -0.2
baz=5.0
TDCB *eS* Sn 10 48 31.3 +0.9
baz=5.0
**WHP Taichung City 1.67 350** *i* P Pb 10 48 13.6 +0.1
baz=348
WHP *eS* Sb 10 48 35.5 +1.4
baz=348
**EOS4 EOS4 1.78 33** *eP* Pn 10 48 11.7 -0.3
baz=32
EOS4 *i* S Sn 10 48 33.7 +0.1
baz=32
**NNSB Datong 1.80 4** *eP* Pb 10 48 14.5 -1.2
baz=11
NNSB *eS* Sn 10 48 34.0 -0.7
baz=11
**LATG Datong 1.92 8** *eP* Pn 10 48 15.0 +0.6
baz=17
LATG *eS* Sn 10 48 37.4 -0.3
baz=17
**NDT Datong Townshi 1.98 7** P Pn 10 48 15.7 +0.5
baz=15
NDT *eS* Sn 10 48 38.9 -0.2
baz=15
**ENTT Nioudou 2.03 8** P Pn 10 48 15.5 -0.2
baz=15
ENTT *eS* Sn 10 48 40.1 0.0
baz=15
**YHNB Yeheng 2.04 3** P Pb 10 48 18.6 -1.2
**YHNB Yeheng 2.04 3** P Pn 10 48 16.9 +0.9
baz=13
YHNB *eS* Sb 10 48 42.9 -1.8
baz=13
**NSK Sanguang 2.04 3** P Pn 10 48 17.4 +1.4
baz=13
NSK *eS* Sb 10 48 43.3 -1.5
baz=13
**FUSB Fushanzhiwuyua 2.15 8** P Pn 10 48 18.1 +0.6
baz=15
FUSB *eS* Sn 10 48 43.7 +0.4
baz=15
**NWLT Wulai 2.15 6** *eP* Pn 10 48 17.4 -0.1
baz=13
NWLT *eS* Sn 10 48 42.6 -0.7
baz=13
**TIPB Shuangxi 2.39 13** P Pn 10 48 21.4 +0.6
baz=10.0
TIPB *eS* Sn 10 48 49.4 +0.1
baz=10.0

*HEL **18** 11:06:39.6±0.2, 67°.64N×30°.68E, h0km, ML1.9, Suspected explosion*
*KOLA **18** 11:06:43.1, 67°.51N×30°.54E, h0km, ML2.5, Error ellipse: s-maj=10.2km s-min=3.3km az=10.0, Kovdor City, Mines*
*IDC **18** 11:06:44.8±2.7, 67°.62N×30°.20E, h0km, mbtmp2.5/2, ML1.7/2, Error ellipse: s-maj=42.2km s-min=11.5km az=81.0*

**ISC 18 11:06:39.9±0.8, 67°.68N±0°.03×30°.38E±0°.03, h0km, n29, σ1§36/46, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **VRF** | **Varrio** | **0.30** | **284** | PG | | **Pb** | **11 06 47.6** | **-0.6** |
| VRF | | | | SG | | **Sb** | **11 06 53.3** | **-0.4** |
| **APA0** | **Apatity Array** | **1.00** | **93** | P | | **Pg** | **11 06 59.4** | **+0.3** |
| APA0 | | | | S | | **Sg** | **11 07 12.6** | **+0.5** |
| **RAJF** | **Raja-Jooseppi** | **1.11** | **317** | PN | | **Pn** | **11 07 03.7** | **+1.0** |
| RAJF | | | | SN | | **Sn** | **11 07 22.2** | **+3.4** |
| **APA** | **Apatity** | **1.16** | **94** | P | | **Pg** | **11 07 02.6** | **+0.4** |
| **OLKF** | **Oulanka, Finla** | **1.42** | **196** | PG | | **Pn** | **11 07 05.7** | **-1.2** |
| OLKF | | | | MSG | | | 11 07 22.1 | |
| | comp=Z,16nm,0.2s | | | | | | | |
| OLKF | | | | SN | | **Sn** | **11 07 26.2** | **-0.1** |
| **SGF** | **Sodankyl** | **1.50** | **263** | PG | | **Pn** | **11 07 07.9** | **-0.1** |
| SGF | | | | SN | | **Sn** | **11 07 30.7** | **+2.5** |
| **LVZ** | **Lovozero** | **1.64** | **80** | P | | **Pg** | **11 07 11.7** | **+0.4** |
| LVZ | | | | S | | **Sg** | **11 07 32.8** | **+0.3** |
| **LVZ** | **Lovozero** | **1.64** | **80** | PG | | **Pn** | **11 07 07.0** | **-3.0** |
| **KU6** | **Riekki** | **1.67** | **187** | PN | | **Pn** | **11 07 09.8** | **-0.6** |
| KU6 | | | | MSG | | | 11 07 28.9 | |
| | comp=Z,6.6nm,0.2s | | | | | | | |
| KU6 | | | | SG | | **Sn** | **11 07 30.2** | **-2.3** |
| **MSF** | **Maaselka** | **1.85** | **197** | PG | | **Pn** | **11 07 12.7** | **-0.2** |
| MSF | | | | SN | | **Sn** | **11 07 36.1** | **-0.9** |
| **RNF** | **Rovaniemi** | **2.02** | **240** | PG | | **Pb** | **11 07 16.9** | **-0.5** |
| baz=58 | | | | | | | | |
| RNF | | | | SG | | **Sg** | **11 07 43.5** | **-1.1** |
| **RANF** | **Ranua** | **2.19** | **222** | PB | | **Pn** | **11 07 18.2** | **+0.6** |
| RANF | | | | SG | | **Sb** | **11 07 47.9** | **-0.1** |
| **KEV** | **Kevo** | **2.42** | **331** | *eP* | | **Pb** | **11 07 24.5** | **+0.2** |
| **KEV** | **Kevo** | **2.42** | **331** | PG | | **Pb** | **11 07 24.9** | **+0.6** |
| KEV | | | | MSG | | | 11 07 54.0 | |
| | comp=Z,5.5nm,0.2s | | | | | | | |
| KEV | | | | SG | | **Sg** | **11 07 57.7** | **+0.1** |
| **VADS** | **Vadso** | **2.48** | **352** | P | | **Pg** | **11 07 26.1** | **-1.3** |
| VADS | | | | S | | **Sg** | **11 07 59.5** | **-0.1** |
| **VADS** | **Vadso** | **2.48** | **352** | *eP* | | **Pb** | **11 07 24.5** | **-0.8** |
| **KLF** | **Kolari** | **2.51** | **263** | PB | | **Pb** | **11 07 24.1** | **-1.7** |
| KLF | | | | MSG | | | 11 07 56.8 | |
| | comp=Z,4.2nm,0.2s | | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.58** | **318** | PG | | **Pb** | **11 07 27.3** | **+0.3** |
| baz=136 | | | | | | | | |
| ARA0 | | | | SG | | **Sg** | **11 08 02.1** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **2.58** | **318** | P | | **Pb** | **11 07 27.6** | **+0.6** |
| ARCES | | | | S | | **Sg** | **11 08 01.3** | **-1.5** |
| **ARCES** | **ARCESS Array B** | **2.58** | **318** | Pn | | **Pb** | **11 07 27.3** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=136,slow=16,SNR=15 | | | | | | | |
| ARCES | | | | Sn | | **Sg** | **11 08 01.2** | **-1.5** |
| | comp=Z,0.3nm,0.3s,baz=140,slow=26,SNR=9.6 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **HEF** | **Hetta** | **2.63** | **289** | PB | | **Pb** | **11 07 27.1** | **-0.7** |
| HEF | | | | MSG | | | 11 08 00.7 | |
| | comp=Z,3.0nm,0.2s | | | | | | | |
| HEF | | | | SG | | **Sg** | **11 08 02.7** | **-1.5** |
| **TOF** | **Tornio** | **2.88** | **239** | MSG | | | 11 08 06.4 | |
| | comp=Z,1.8nm,0.2s | | | | | | | |
| TOF | | | | SB | | **Sb** | **11 08 07.7** | **-0.1** |
| **KTK1** | **Kautokeino** | **2.97** | **300** | PB | | **Pb** | **11 07 32.9** | **-0.7** |
| **OUL** | **Oulu** | **3.17** | **217** | PG | | **Pb** | **11 07 37.7** | **+0.7** |
| baz=30 | | | | | | | | |
| OUL | | | | SG | | **Sb** | **11 08 17.8** | **+1.7** |
| **LANU** | **Lannavaara** | **3.20** | **281** | PB | | **Pb** | **11 07 34.9** | **-2.6** |
| **RMF** | **Romuvaara** | **3.48** | **183** | PN | | **Pn** | **11 07 36.2** | **+0.9** |
| **I37NO** | **I37NO** | **4.57** | **293** | I | | I | 11 37 50.0 | |
| | baz=104,slow=319,SNR=1.7 | | | | | | | |
| **FAUS** | **Fauske** | **5.79** | **274** | S | | **Sn** | **11 09 15.5** | **+1.5** |
| **FINES** | **FINESS Array B** | **6.53** | **198** | Pn | | **Pn** | **11 08 20.7** | **+3.7** |
| | comp=Z,0.1nm,0.3s,baz=22,slow=12,SNR=1.1 | | | | | | | |
| FINES | | | | Sn | | **Sn** | **11 09 32.0** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=19,slow=22,SNR=1.5 | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | |

**KRSC 18 11:06:52.5±1.7, 50°.19N×157°.42E, h42km±22km, Ml3.8, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **0.97** | **301** | *eP* | | Pn | 11 07 10.0 | +0.3 |
| SKR | | | | *eS* | | Sn | 11 07 22.4 | +0.2 |
| **KDTR** | **Khodutka, Kamc** | **1.68** | **14** | *eP* | | Pn | 11 07 20.3 | +1.0 |
| KDTR | | | | *eS* | | Sn | 11 07 41.7 | +2.2 |
| **ASAK** | **Asacha** | **2.22** | **8** | *eP* | | Pn | 11 07 29.4 | +2.5 |
| ASAK | | | | *eS* | | Sn | 11 07 56.7 | +3.6 |
| **MTVR** | **Mutnovka** | **2.35** | **11** | *eP* | | Pn | 11 07 31.1 | +2.5 |
| MTVR | | | | *eS* | | Sn | 11 07 59.1 | +2.8 |
| **GRL** | **Gorelyy** | **2.40** | **9** | *eP* | | Pn | 11 07 32.2 | +2.8 |
| GRL | | | | *eS* | | Sn | 11 08 01.2 | +3.5 |
| **KRMR** | **Karymshinskiy** | **2.68** | **9** | *eP* | | Pn | 11 07 36.2 | +3.0 |
| KRMR | | | | *eS* | | Sn | 11 08 08.9 | +4.6 |
| **APC** | **Apacha** | **2.75** | **357** | *eP* | | Pn | 11 07 37.1 | +3.1 |
| **PET** | **Petropavlovsk** | **2.94** | **15** | *eP* | | Pn | 11 07 40.1 | +3.4 |
| PET | | | | *eS* | | Sn | 11 08 14.3 | +3.6 |
| **DALK** | **Dalny** | **2.97** | **16** | *eP* | | Pn | 11 07 40.2 | +3.2 |
| DALK | | | | *eS* | | Sn | 11 08 14.4 | +3.1 |
| **UGLR** | **Uglovaya** | **3.15** | **16** | *eP* | | Pn | 11 07 44.0 | +4.4 |
| **AVH** | **Avacha** | **3.19** | **14** | *eP* | | Pn | 11 07 44.8 | +4.6 |
| AVH | | | | *eS* | | Sn | 11 08 22.9 | +6.0 |
| **SMAR** | **Somma** | **3.20** | **15** | *eP* | | Pn | 11 07 45.2 | +4.8 |
| **KOK** | **Koryaka** | **3.20** | **13** | *eP* | | Pn | 11 07 44.6 | +4.3 |
| KOK | | | | *eS* | | Sn | 11 08 22.6 | +5.4 |
| **SPN** | **Mys Shipunski** | **3.33** | **28** | *eS* | | Sn | 11 08 23.9 | +3.5 |
| **GNL** | **Ganaly** | **3.53** | **5** | *eP* | | Pn | 11 07 49.2 | +4.4 |
| **TUMD** | **Tumrok D** | **5.34** | **19** | *eS* | | Sn | 11 09 13.1 | +3.3 |
| **TUMR** | **Tumrok** | **5.37** | **17** | *eP* | | Pn | 11 08 14.2 | +4.1 |

*IDC **18** 11:14:35.5±1.1, 10°.27N×124°.28E, h0km, mb3.9/6, mbtmp3.9/6, Error ellipse: s-maj=85.9km s-min=20.7km az=67.0*

**ISC 18 11:14:40.6±1.1, 10°.2N±0°.3×124°.2E±0°.5, h35km, n6, σ1§14/6, mb4.0/6, Leyte**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **31.59** | **161** | P | | **P** | **11 21 00.3** | **+0.1** |
| | 0.3nm,0.6s,baz=344,slow=9.3,SNR=7.0 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **34.99** | **164** | P | | **P** | **11 21 29.9** | **+0.1** |
| | 0.2nm,0.4s,baz=345,slow=7.0,SNR=12 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **50.83** | **324** | P | | **P** | **11 23 38.9** | **+1.1** |
| | 0.5nm,0.6s,baz=118,slow=8.4,SNR=7.2 | | | | | | | |
| | 0.5nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.96** | **326** | P | | **P** | **11 24 08.6** | **+0.5** |
| | 0.9nm,0.2s,baz=127,slow=6.3,SNR=4.5 | | | | | | | |
| | 0.9nm,0.2s | | | | | | | |
| **FINES** | **FINESS Array B** | **84.96** | **331** | P | | **P** | **11 27 10.5** | **-1.5** |
| | 1.5nm,0.7s,baz=98,slow=10.0,SNR=4.4 | | | | | | | |
| | 1.5nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.66** | **23** | P | | **P** | **11 27 58.2** | **+0.4** |
| | 1.5nm,0.8s,baz=311,slow=4.6,SNR=4.5 | | | | | | | |
| | 1.5nm,0.8s | | | | | | | |

*WEL **18** 11:33:30.5, 42°.5S±5°×17°.4E±°, h15km±6km, M2.6/25, ML2.8/24, MLv2.6/25, Error ellipse: s-maj=0.0km s-min=0.0km az=125.6*
*NOU **18** 11:33:34.5, 42°.05S×173°.92E, h72km, MLv3.5/6, South Island, New Zealand*

**ISC 18 11:33:30.6±1.5, 41°.75S±0°.05×174°.37E±0°.03, h14km±16km, n52, σ1§00/52, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CMWZ** | **Cape Campbell** | **0.12** | **272** | P | | **Pb** | **11 33 34.7** | **0.0** |
| **BSWZ** | **Blackbirch Sta** | **0.38** | **276** | P | | **Pb** | **11 33 38.7** | **-0.3** |
| **TUWZ** | **Tuamarina** | **0.46** | **315** | P | | **Pb** | **11 33 40.4** | **0.0** |
| **BHW** | **Baring Head** | **0.51** | **48** | P | | **Pb** | **11 33 40.8** | **-0.5** |
| **TCW** | **Tory Channel** | **0.55** | **352** | P | | **Pg** | **11 33 40.9** | **-0.4** |
| **WEL** | **Wellington** | **0.55** | **32** | P | | **Pg** | **11 33 41.5** | **0.0** |
| **PLWZ** | **Palliser** | **0.69** | **75** | P | | **Pn** | **11 33 45.0** | **-1.0** |
| **MSWZ** | **Moikau Station** | **0.74** | **63** | P | | **Pb** | **11 33 45.4** | **+0.2** |
| **CAW** | **Cannon Point** | **0.83** | **39** | P | | **Pg** | **11 33 46.1** | **-0.6** |
| **PAWZ** | **Paruwai Farm** | **0.87** | **65** | P | | **Pb** | **11 33 47.4** | **-0.1** |
| **KHZ** | **Kahutara** | **0.91** | **223** | P | | **Pn** | **11 33 48.8** | **-0.2** |
| **KHZ** | **Kahutara** | **0.91** | **223** | P | | **Pn** | **11 33 48.7** | **-0.2** |
| **NNZ** | **Nelson** | **0.92** | **305** | P | | **Pg** | **11 33 47.8** | **-0.5** |
| **KIW** | **Kapiti Island** | **0.98** | **25** | P | | **Pb** | **11 33 48.6** | **-0.7** |
| **DUWZ** | **D'Urville Isla** | **1.01** | **340** | P | | **Pb** | **11 33 49.2** | **-0.7** |
| **MTW** | **Mount Morrison** | **1.03** | **55** | P | | **Pb** | **11 33 49.7** | **-0.6** |
| **TRWZ** | **Traveller** | **1.05** | **71** | P | | **Pb** | **11 33 49.1** | **-1.4** |
| **THZ** | **Tophouse** | **1.10** | **269** | P | | **Pg** | **11 33 51.7** | **-0.1** |
| **OGWZ** | **Otaki Gorge** | **1.11** | **33** | P | | **Pb** | **11 33 51.0** | **-0.6** |
| **HOWZ** | **Holdsworth Sta** | **1.21** | **46** | P | | **Pn** | **11 33 52.2** | **-0.9** |
| **MRNZ** | **Matariki Terra** | **1.26** | **286** | P | | **Pb** | **11 33 54.4** | **+0.2** |
| **TKNZ** | **Takaka Hill** | **1.28** | **304** | P | | **Pn** | **11 33 53.9** | **-0.2** |
| **TMWZ** | **Te Maipa** | **1.31** | **61** | P | | **Pn** | **11 33 53.2** | **-1.3** |
| **MRZ** | **Mangatainoka R** | **1.42** | **40** | P | | **Pn** | **11 33 55.2** | **-0.8** |
| **GVZ** | **Greta Valley S** | **1.57** | **219** | P | | **Pn** | **11 33 57.7** | **-0.3** |
| **QRZ** | **Quartz Range** | **1.67** | **303** | P | | **Pb** | **11 34 00.6** | **-0.5** |
| **QRZ** | **Quartz Range** | **1.67** | **303** | P | | **Pb** | **11 34 00.7** | **-0.5** |
| **PRWZ** | **Pori Road** | **1.70** | **46** | P | | **Pg** | **11 34 02.8** | **-0.4** |
| **BFZ** | **Birch Farm** | **1.77** | **53** | P | | **Pg** | **11 34 08.7** | **+4.1** |
| **BFZ** | **Birch Farm** | **1.77** | **53** | P | | **Pn** | **11 33 59.5** | **-1.4** |
| **LTZ** | **Lake Taylor** | **1.87** | **236** | P | | **Pn** | **11 34 02.0** | **-0.2** |
| **DSZ** | **Denniston Nort** | **1.92** | **269** | P | | **Pb** | **11 34 05.1** | **-0.3** |
| **WAZ** | **Wanganui** | **2.05** | **13** | P | | **Pb** | **11 34 08.0** | **+0.4** |
| **INZ** | **Inchbonnie** | **2.38** | **245** | P | | **Pn** | **11 34 09.8** | **+0.6** |
| **KHEZ** | **Kahui Hut** | **2.47** | **354** | P | | **Pb** | **11 34 16.4** | **+1.6** |
| **KHEZ** | **Kahui Hut** | **2.47** | **354** | P | | **Pb** | **11 34 16.3** | **+1.5** |
| **NEZ** | **North Egmont** | **2.49** | **355** | P | | **Pb** | **11 34 16.6** | **+1.5** |
| **MOVZ** | **Moawhango** | **2.57** | **25** | P | | **Pb** | **11 34 16.2** | **-0.3** |
| **PKE** | **Pukeiti** | **2.57** | **353** | P | | **Pb** | **11 34 18.2** | **+1.7** |
| **WNVZ** | **Wahianoa** | **2.60** | **21** | P | | **Pb** | **11 34 18.1** | **+1.1** |
| **VRZ** | **Vera Road** | **2.64** | **7** | P | | **Pb** | **11 34 18.5** | **+0.9** |
| **NGZ** | **Ngauruhoe** | **2.74** | **20** | P | | **Pb** | **11 34 19.9** | **+0.5** |
| **SNVZ** | **South Ngauruho** | **2.74** | **21** | P | | **Pb** | **11 34 19.9** | **+0.4** |
| **OTVZ** | **Oturere** | **2.77** | **21** | P | | **Pb** | **11 34 20.0** | **+0.1** |
| **NNVZ** | **North Ngauruho** | **2.78** | **20** | P | | **Pb** | **11 34 21.2** | **+1.0** |
| **WTVZ** | **West Tongariro** | **2.79** | **20** | P | | **Pb** | **11 34 20.7** | **+0.4** |
| **ETVZ** | **East Tongariro** | **2.81** | **22** | P | | **Pb** | **11 34 21.0** | **+0.4** |
| **KRVZ** | **Karewarewa** | **2.83** | **20** | P | | **Pb** | **11 34 21.1** | **+0.2** |
| **NTVZ** | **North Tongarir** | **2.83** | **21** | P | | **Pb** | **11 34 21.8** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **3.05** | **33** | P | | **Pb** | **11 34 26.7** | **+2.1** |
| **HIZ** | **Hauiti** | **3.26** | **7** | P | | **Pb** | **11 34 28.2** | **0.0** |
| **HIZ** | **Hauiti** | **3.26** | **7** | P | | **Pb** | **11 34 27.8** | **-0.4** |

**IDC 18 11:37:38.4±4.0, 21°.98N×12°.69W, h0km, mbtmp3.6/2, ML3.3/2, Error ellipse: s-maj=151.2km s-min=63.6km az=59.0, Mauritania**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TORD** | **Torodi Ar. Bea** | **16.28** | **120** | Pn | | Pn | 11 41 28.3 | -0.3 |
| | 0.1nm,0.3s,baz=309,slow=11,SNR=2.3 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **DBIC** | **Dimbokro** | **17.00** | **152** | Pn | | Pn | 11 41 38.0 | +0.2 |
| | 0.2nm,0.3s,baz=342,slow=9.6,SNR=2.1 | | | | | | | |
| | 2.8nm,0.7s | | | | | | | |
| **I42PT** | **GRACIOSA ISLAN** | **21.47** | **326** | I | | I | 13 44 40.0 | |
| | baz=139,slow=315,SNR=1.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **149.18** | **92** | PKPbc | | PKPbc | 11 57 29.1 | -0.5 |
| | 0.4nm,1.0s,baz=286,slow=4.1,SNR=2.2 | | | | | | | |

*JMA **18** 12:02:49.8±0.2, 43°.2N±0°.9×146°.6E±°, h60km±1km, MV2.5/30, OFF NEMURO PENINSULA*
*SKHL **18** 12:02:49.8±0.4, 43°.10N×146°.60E, h45km±2km, mb3.7/3*

**ISC 18 12:02:49.6±1.9, 43°.18N±0°.10×146°.55E±0°.08, h52km±21km, n14, σ0§44/25, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **NEM2** | **Nemuro 2** | **0.62** | **288** | *i* P | | **Pn** | **12 03 02.7** | **+0.2** |
| NEM2 | | | | *eS* | | **Sn** | **12 03 11.8** | **+0.1** |
| **SHO** | **Shikotan** | **0.72** | **16** | *eP* | | **Pn** | **12 03 03.8** | **0.0** |
| SHO | | | | AMB | | AMB | 12 03 04.0 | |
| | 20nm,0.2s | | | | | | | |
| SHO | | | | *eS* | | **Sn** | **12 03 14.0** | **0.0** |
| SHO | | | | A | | A | 12 03 14.8 | |
| | 70nm,0.3s | | | | | | | |
| SHO | | | | A | | A | 12 03 14.8 | |
| | 130nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.00** | **330** | *eP* | | **Pn** | **12 03 07.0** | **-0.3** |
| YUK | | | | AMB | | AMB | 12 03 07.5 | |
| | 30nm,0.3s | | | | | | | |
| YUK | | | | S | | **Sn** | **12 03 19.9** | **-0.5** |
| YUK | | | | A | | A | 12 03 22.8 | |
| | 90nm,0.3s | | | | | | | |
| YUK | | | | A | | A | 12 03 22.8 | |
| | 150nm,0.3s | | | | | | | |
| **JKHN** | **Kushirohamanak** | **1.02** | **265** | P | | **Pn** | **12 03 08.2** | **+0.5** |
| JKHN | | | | *eS* | | **Sn** | **12 03 21.1** | **+0.1** |
| **JNSB** | **Nemuroshibetsu** | **1.28** | **299** | P | | **Pn** | **12 03 11.1** | **0.0** |
| **JRA** | **Rausu** | **1.29** | **307** | P | | **Pn** | **12 03 11.4** | **+0.1** |
| JRA | | | | S | | **Sn** | **12 03 27.7** | **+0.3** |
| **JAK** | **Akkeshi** | **1.37** | **263** | P | | **Pn** | **12 03 12.3** | **-0.1** |
| JAK | | | | *eS* | | **Sn** | **12 03 29.4** | **-0.1** |
| **JNK** | **Nakash** | **1.40** | **288** | *i* P | | **Pn** | **12 03 12.5** | **-0.3** |
| JNK | | | | *eS* | | **Sn** | **12 03 29.2** | **-0.9** |
| **JOB** | **Onbets** | **2.01** | **263** | P | | **Pn** | **12 03 21.2** | **+0.1** |
| JOB | | | | S | | **Sn** | **12 03 44.5** | **-0.5** |
| **JAR** | **Ashorobuto** | **2.04** | **274** | *eP* | | **Pn** | **12 03 21.9** | **+0.4** |
| JAR | | | | *eS* | | **Sn** | **12 03 46.0** | **+0.3** |
| **JTKR** | **Abashiri--Toko** | **2.08** | **293** | *eP* | | **Pn** | **12 03 22.7** | **+0.7** |
| **KUR** | **Kuril'sk** | **2.26** | **24** | *eP* | | **Pn** | **12 03 24.7** | **+0.1** |
| KUR | | | | AMB | | AMB | 12 03 24.7 | |

20nm,0.6s
KUR eS Sn 12 03 51.2 -0.1
KUR A A 12 03 56.4
50nm,0.5s
KUR A A 12 03 56.4
50nm,0.5s
**JCH Churui 2.41 258** eP Pn **12 03 26.6 +0.1**
JCH eS Sn **12 03 54.0 -0.9**
**JMP Maruseppu 2.46 291** P Pn **12 03 28.2 +0.8**

*BJI **18** 12:03:48.4±0.0,24°.73N×94°.74E,h84km,mb4.2/15, mB4.7/5*
*NDI **18** 12:03:49.5±3.8,24°.77N×94°.84E,h83km±29km,ML4.2, MW3.8,mb4.5(NEIC)*
*NEIC **18** 12:03:49.5±2.5,24°.68N±0°.09×94°.8E±0°.1,h85km±8km, mb4.5/21, Error ellipse: s-maj=16.7km s-min=9.3km az=49.0*
*IDC **18** 12:03:51.1±3.5,24°.65N×94°.89E,h108km±33km,mb3.7/15, mbtmp4.1/16,MS3.6/1, Error ellipse: s-maj=35.2km s-min=11.7km az=60.0*
**ISC 18 12:03:50.3±0.6,24°.70N±0°.07×94°.72E±0°.05,h100km,n56, σ1°56/60,mb4.2/26,Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IMP** | **Imphal** | **0.72** | **280** | *eP* | **Pn** | **12 04 06.5** | **-1.4** |
| IMP | | | | *eS* | **Sn** | **12 04 19.4** | **-1.8** |
| IMP | | | | IAML | | 12 04 20.2 | |
| | comp=N,4μm,0.3s | | | | | | |
| IMP | | | | IAML | | 12 04 23.7 | |
| | comp=E,2μm,0.4s | | | | | | |
| **KOHI** | **KOHIMA** | **1.16** | **331** | *eP* | **Pn** | **12 04 11.0** | **-1.6** |
| KOHI | | | | *eS* | **Sn** | **12 04 27.2** | **-2.2** |
| KOHI | | | | *eS* | | 12 04 27.7 | |
| KOHI | | | | IAML | | 12 04 28.4 | |
| | comp=E,1μm,0.3s | | | | | | |
| KOHI | | | | IAML | | 12 04 28.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **JORH** | **JORHAT** | **2.08** | **348** | *ex* | x | 12 04 55.4 | |
| JORH | | | | IAML | | 12 04 57.3 | |
| | comp=N,5μm,0.5s | | | | | | |
| JORH | | | | IAML | | 12 04 57.9 | |
| | comp=E,3μm,0.2s | | | | | | |
| **SHL** | **Shillong** | **2.71** | **289** | | **Pn** | **12 04 30.6** | **-1.8** |
| **SHL** | **Shillong** | **2.71** | **289** | *eP* | **Pn** | **12 04 31.1** | **-1.3** |
| SHL | | | | *eS* | **Sn** | **12 05 01.6** | **-3.2** |
| SHL | | | | IAML | | 12 05 03.6 | |
| | comp=E,2μm,0.2s | | | | | | |
| SHL | | | | IAML | | 12 05 03.6 | |
| | comp=N,2μm,0.2s | | | | | | |
| **ZIRO** | **ZIRO** | **2.92** | **345** | *eP* | **Pn** | **12 04 32.7** | **-2.4** |
| ZIRO | | | | *eS* | **Sn** | **12 05 04.6** | **-5.0** |
| ZIRO | | | | IAML | | 12 05 07.2 | |
| | comp=N,3μm,0.3s | | | | | | |
| ZIRO | | | | IAML | | 12 05 07.3 | |
| | comp=E,3μm,0.3s | | | | | | |
| **TNCH** | **TengChong** | **3.46** | **84** | P | **Pn** | **12 04 41.9** | **-0.5** |
| TNCH | | | | S | **Sn** | **12 05 21.8** | **-0.9** |
| **LSA** | **Lhasa** | **5.91** | **328** | P | **Pn** | **12 05 17.1** | **+1.4** |
| **LSA** | **Lhasa** | **5.91** | **328** | Pn | **Pn** | **12 05 16.5** | **+0.8** |
| **GTK** | **Tadong** | **6.09** | **297** | *eP* | **Pn** | **12 05 19.3** | **+1.3** |
| GTK | | | | *eS* | **Sn** | **12 06 22.7** | **-3.7** |
| GTK | | | | *eS* | | 12 06 24.7 | |
| GTK | | | | IAML | | 12 06 27.0 | |
| | comp=N,82nm,0.4s | | | | | | |
| GTK | | | | IAML | | 12 06 29.5 | |
| | comp=E,119nm,0.3s | | | | | | |
| **PZH** | **PanZhiHua** | **6.58** | **73** | P | **Pn** | **12 05 26.9** | **+2.3** |
| PZH | | | | pmax | pmax | | |
| | comp=E,20nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=E,100nm,5.3s | | | | | | |
| **CRAI** | **Chiangrai** | **6.86** | **129** | Pn | **Pn** | **12 05 28.6** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **7.35** | **147** | P | **Pn** | **12 05 33.9** | **-1.1** |
| | comp=E,2.4nm,0.7s,baz=321,slow=14,SNR=12 | | | | | | |
| **UBPT** | **Khong Chiam** | **13.77** | **131** | Pn | **Pn** | **12 06 59.1** | **-2.2** |
| **WMQ** | **Urumqi** | **19.92** | **345** | *eP* | **Pn** | **12 08 17.8** | **+1.2** |
| **NIL** | **Nilore** | **20.73** | **300** | P | **P** | **12 08 23.2** | **+0.4** |
| NIL | | | | IAmb | IAmb | 12 08 25.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **21.38** | **37** | *eP* | **P** | **12 08 30.4** | **+0.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,22nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,4.9s | | | | | | |
| **KSH** | **Kashi** | **21.62** | **318** | P | **P** | **12 08 34.1** | **+1.6** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **24.18** | **339** | P | **P** | **12 08 58.8** | **+1.6** |
| MK31 | | | | IAmb | IAmb | 12 08 59.4 | |
| | comp=Z,9.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.18** | **339** | P | **P** | **12 08 58.4** | **+1.2** |
| **MKAR** | **Makanchi Array** | **24.18** | **339** | P | **P** | **12 08 58.6** | **+1.4** |
| | comp=Z,9.9nm,0.5s,baz=153,slow=8.6,SNR=105 | | | | | | |
| | comp=Z,9.9nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **24.30** | **338** | P | **P** | **12 08 59.7** | **+1.4** |
| **SONM** | **Songino Array** | **24.87** | **19** | P | **P** | **12 09 03.5** | **-0.1** |
| | comp=Z,0.7nm,0.5s,baz=210,slow=9.0,SNR=4.2 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **GAR** | **Garm** | **25.06** | **311** | P | **P** | **12 09 06.4** | **+1.0** |
| **KURBB** | **Kurchatov Arra** | **28.75** | **338** | P | **P** | **12 09 39.4** | **+1.2** |
| | comp=Z,2.2nm,0.6s,baz=146,slow=9.4,SNR=15 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **28.80** | **339** | P | **P** | **12 09 39.0** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **30.14** | **348** | P | **P** | **12 09 51.3** | **+0.9** |
| | comp=Z,1.2nm,0.4s,baz=173,slow=8.2,SNR=8.9 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **33.72** | **333** | P | **P** | **12 10 22.8** | **+1.0** |
| | comp=Z,1.6nm,0.5s,baz=139,slow=10,SNR=8.1 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **33.78** | **333** | P | **P** | **12 10 24.9** | **+2.5** |
| **ABKAR** | **Akbulak array** | **36.54** | **321** | P | **P** | **12 10 48.0** | **+1.9** |
| ABKAR | | | | IAmb | IAmb | 12 10 48.5 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **36.54** | **321** | P | **P** | **12 10 47.8** | **+1.7** |
| **AKTO** | **Aktyubinsk** | **38.20** | **322** | P | **P** | **12 11 01.6** | **+1.5** |
| | comp=Z,1.1nm,0.3s,baz=106,slow=8.6,SNR=3.8 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **ARU** | **Arti** | **41.10** | **330** | P | **P** | **12 11 25.4** | **+1.3** |
| | comp=Z,3.6nm,0.5s,baz=135,slow=6.8,SNR=6.1 | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **46.24** | **308** | LR | LR | 12 33 34.6 | |
| | comp=Z,66nm,18.1s,baz=2.0,slow=38 | | | | | | |
| **KNRA** | **Kununurra** | **52.09** | **137** | P | **P** | **12 12 49.3** | **-1.0** |
| KNRA | | | | IAmb | IAmb | 12 13 02.1 | |
| | comp=Z,6.9nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.13** | **142** | P | **P** | **12 12 49.4** | **-1.1** |
| **BRTR** | **Keskin Array B** | **52.86** | **302** | P | **P** | **12 12 56.8** | **+0.8** |
| **AKASG** | **Malin Array Be** | **55.90** | **316** | P | **P** | **12 13 17.5** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=79,slow=7.1,SNR=4.7 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **55.90** | **316** | P | **P** | **12 13 17.4** | **-0.2** |
| AKBB | | | | IAmb | IAmb | 12 13 46.9 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **KIEV** | **Kiev** | **55.91** | **316** | P | **P** | **12 13 17.2** | **-0.4** |
| KIEV | | | | IAmb | IAmb | 12 13 46.9 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **FINES** | **FINESS Array B** | **58.42** | **328** | P | **P** | **12 13 36.2** | **+1.0** |
| **FINES** | **FINESS Array B** | **58.42** | **328** | P | **P** | **12 13 35.7** | **+0.5** |
| | comp=Z,1.7nm,0.8s,baz=90,slow=7.6,SNR=4.8 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **58.69** | **135** | P | **P** | **12 13 36.2** | **-1.4** |
| WB0 | | | | IAmb | IAmb | 12 13 36.9 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.78** | **135** | P | **P** | **12 13 37.1** | **-1.2** |
| | comp=Z,0.9nm,0.6s,baz=322,slow=7.4,SNR=28 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **58.79** | **135** | P | **P** | **12 13 37.6** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 12 14 13.4 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **58.93** | **135** | P | **P** | **12 13 38.0** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 12 13 39.2 | |
| | comp=Z,5.4nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.83** | **338** | P | **P** | **12 13 44.1** | **-0.7** |
| **AS31** | **Alice Springs** | **61.28** | **139** | P | **P** | **12 13 54.1** | **-1.1** |
| **ASAR** | **Alice Springs** | **61.28** | **139** | P | **P** | **12 13 54.1** | **-1.1** |
| **ASAR** | **Alice Springs** | **61.28** | **139** | P | **P** | **12 13 54.5** | **-0.8** |
| | comp=Z,1.3nm,0.6s,baz=317,slow=6.6,SNR=23 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **64.48** | **327** | P | **P** | **12 14 16.7** | **+0.7** |
| | comp=Z,1.1nm,0.4s,baz=123,slow=5.5,SNR=11 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **NC602** | **NORSAR Array S** | **65.48** | **328** | P | **P** | **12 14 23.2** | **+0.8** |
| NC602 | | | | IAmb | IAmb | 12 15 07.0 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **65.60** | **328** | P | **P** | **12 14 23.6** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=99,slow=5.8,SNR=1.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **NC204** | **NORSAR Array S** | **65.79** | **328** | P | **P** | **12 14 25.0** | **+0.5** |
| **ESDC** | **Sonseca Array** | **80.89** | **309** | P | **P** | **12 15 54.3** | **+0.7** |
| | comp=Z,0.2nm,0.4s,baz=55,slow=4.4,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **BOSA** | **Boshof** | **85.27** | **236** | P | **P** | **12 16 17.1** | **+0.8** |
| | comp=Z,2.1nm,0.9s,baz=102,slow=5.5,SNR=4.5 | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | |

*IDC **18** 12:05:22.8±4.3,1°.45S×100°.13E,h0km,mb3.6/4, mbtmp3.6/4,Error ellipse: s-maj=217.5km s-min=23.9km az=54.0*
*DJA **18** 12:05:25.7±1.4,2°.5S±6°×10°.0E±°,h81km±27km,M3.9/5, MLv3.9/5*
**ISC 18 12:05:25.2±1.0,1°.80S±0°.06×99°.97E±0°.09,h34km,n18, σ2°25/8,mb3.5/4,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.96** | **178** | P | **Pb** | **12 05 43.7** | **+0.3** |
| **SISI** | **Saibi** | **1.00** | **298** | P | **Pn** | **12 05 40.1** | **-2.7** |
| **PDSI** | **Padang** | **1.01** | **29** | P | **Pb** | **12 05 44.3** | **-0.1** |
| **PBSI** | **Pulau Batu** | **2.42** | **316** | P | **Pb** | **12 06 10.3** | **+2.1** |
| **H08S2** | **Diego Garcia H** | **27.98** | **257** | T | T | 12 39 54.2 | |
| | baz=79 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.98** | **257** | T | T | 12 39 55.1 | |
| | baz=79 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.00** | **257** | T | T | 12 39 57.1 | |
| | baz=79 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.12** | **121** | P | **P** | **12 12 44.0** | **+2.5** |
| | 0.5nm,0.5s,baz=297,slow=8.6,SNR=17 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **39.39** | **126** | P | P | 12 12 55.4 | +3.3 |
| | 0.5nm,0.6s,baz=300,slow=7.9,SNR=17 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.83** | **344** | P | **P** | **12 14 23.2** | **+0.6** |
| | 0.2nm,0.4s,baz=167,slow=9.2,SNR=3.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.97** | **349** | P | **P** | **12 15 07.5** | **+0.3** |
| | 0.5nm,0.5s,baz=163,slow=5.4,SNR=1.9 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **60.94** | **216** | T | T | 13 21 11.0 | |
| | baz=58,slow=75,SNR=9.1 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.95** | **216** | T | T | 13 21 07.8 | |
| | baz=58,slow=75,SNR=7.6 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.95** | **216** | T | T | 13 21 06.6 | |
| | baz=58,slow=75,SNR=7.1 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **61.23** | **216** | T | T | 13 21 29.7 | |
| | baz=57 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **61.24** | **216** | T | T | 13 21 30.8 | |
| | baz=57 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **61.25** | **216** | T | T | 13 21 32.2 | |
| | baz=57 | | | | | | |
| **TXAR** | **Lajitas Array** | **144.56** | **37** | PKP | **PKiKP** | **12 25 00.3** | **-2.5** |
| | 0.3nm,0.8s,baz=241,slow=1.9,SNR=3.9 | | | | | | |

*IDC **18** 12:08:31.6±1.0,59°.34S×25°.21W,h0km,mb4.2/3, mbtmp4.2/3,MS2.9/1,Error ellipse: s-maj=49.5km s-min=32.6km az=116.0*
**ISC 18 12:08:33.1±1.2,59°.55S±0°.1×24°.8W±0°.3,h10km,n12, σ1°20/11,mb4.1/3,7C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNA1** | **Neumayer--Stat** | **13.16** | **155** | ⇑P | **Pn** | **12 11 39.5** | **-0.2** |
| | comp=Z,8.7nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **13.35** | **159** | ⇑P | **Pn** | **12 11 41.5** | **-0.9** |
| | comp=Z,6.4nm,0.6s | | | | | | |
| VNA3 | | | | ⇑S | Sn | 12 13 56.1 | -14 |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **13.55** | **155** | ⇑P | **Pn** | **12 11 44.4** | **-0.8** |
| | comp=Z,3.1nm,0.4s,baz=314,slow=15 | | | | | | |
| VNA2 | | | | ⇑S | Sn | 12 14 02.6 | -13 |
| | comp=Z,1.2nm,0.7s,baz=295,slow=11 | | | | | | |
| **SNAA** | **Sanae** | **15.11** | **153** | ⇑P | **Pn** | **12 12 05.6** | **-0.8** |
| | comp=Z,109nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **15.11** | **153** | LR | LR | 12 17 07.1 | |
| | comp=Z,50nm,20.4s,baz=261,slow=34 | | | | | | |
| **TROLL** | **Troll, Antarti** | **16.64** | **150** | ⇑P | **Pn** | **12 12 25.9** | **-0.3** |
| | comp=Z,145nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **30.79** | **180** | P | **P** | **12 14 50.4** | **+1.8** |
| | comp=Z,1.1nm,0.6s,baz=288,slow=3.2,SNR=3.3 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **45.74** | **70** | P | **P** | **12 16 54.5** | **0.0** |
| | comp=Z,1.6nm,0.8s,baz=190,slow=7.7,SNR=4.2 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.46** | **27** | P | **P** | **12 20 18.2** | **+1.1** |
| | comp=Z,4.7nm,0.7s,baz=203,slow=5.9,SNR=24 | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **123.82** | **289** | PKP | **PKPdf** | **12 27 28.6** | **-2.1** |
| | comp=Z,0.1nm,0.2s,baz=152,slow=4.3,SNR=8.9 | | | | | | |
| **SONM** | **Songino Array** | **149.54** | **90** | PKPbc | **PKiKP** | **12 28 22.0** | **-0.7** |
| | comp=Z,1.1nm,0.9s,baz=248,slow=1.6,SNR=6.4 | | | | | | |
| **ILAR** | **Eielson Array** | **153.25** | **306** | PKPbc | **PKiKP** | **12 28 29.4** | **-0.4** |
| | comp=Z,1.6nm,0.9s,baz=119,slow=1.5,SNR=15 | | | | | | |

**KRSC 18 12:32:10.4±1.0,51°.80N×159°.13E,h39km±13km,MI3.8, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDTR** | **Khodutka, Kamc** | **0.66** | **272** | *eP* | Pn | 12 32 24.3 | +1.0 |
| KDTR | | | | *eS* | Sn | 12 32 33.2 | +0.8 |
| **MTVR** | **Mutnovka** | **0.90** | **320** | *eP* | Pn | 12 32 28.1 | +1.3 |
| MTVR | | | | *eS* | Sn | 12 32 39.4 | +0.7 |
| **ASAK** | **Asacha** | **0.96** | **308** | *eP* | Pn | 12 32 29.2 | +1.7 |
| ASAK | | | | *eS* | Sn | 12 32 41.3 | +1.3 |
| **GRL** | **Gorelyy** | **1.00** | **320** | *eP* | Pn | 12 32 29.8 | +1.7 |
| GRL | | | | *eS* | Sn | 12 32 42.3 | +1.3 |
| **KRMR** | **Karymshinskiy** | **1.21** | **330** | *eS* | Sn | 12 32 47.0 | +1.2 |
| **PET** | **Petropavlovsk** | **1.27** | **347** | *eP* | Pn | 12 32 32.9 | +1.3 |
| PET | | | | *eS* | Sn | 12 32 48.7 | +1.4 |
| **NLC** | **Nalytchevo** | **1.38** | **5** | *eP* | Pn | 12 32 33.7 | +0.5 |
| NLC | | | | *eS* | Sn | 12 32 50.3 | +0.1 |
| **SPN** | **Mys Shipunski** | **1.41** | **22** | *eP* | Pn | 12 32 36.0 | +2.4 |
| SPN | | | | *eS* | Sn | 12 32 53.6 | +2.7 |
| **UGLR** | **Uglovaya** | **1.43** | **352** | *eP* | Pn | 12 32 35.6 | +1.7 |
| UGLR | | | | *eS* | Sn | 12 32 52.8 | +1.3 |
| **SMAR** | **Somma** | **1.48** | **352** | *eP* | Pn | 12 32 36.3 | +1.5 |
| **AVH** | **Avacha** | **1.49** | **351** | *eP* | Pn | 12 32 36.8 | +2.0 |
| **KOK** | **Koryaka** | **1.53** | **349** | *eP* | Pn | 12 32 37.2 | +1.9 |
| KOK | | | | *eS* | Sn | 12 32 56.9 | +2.9 |
| **APC** | **Apacha** | **1.66** | **314** | *eP* | Pn | 12 32 39.3 | +2.4 |
| APC | | | | *eS* | Sn | 12 33 00.1 | +3.1 |
| **GNL** | **Ganaly** | **2.04** | **340** | *eP* | Pn | 12 32 44.7 | +2.4 |
| GNL | | | | *eS* | Sn | 12 33 09.8 | +3.3 |
| **SKR** | **Severo-Kuril's** | **2.20** | **241** | *eP* | Pn | 12 32 46.9 | +2.5 |
| SKR | | | | *eS* | Sn | 12 33 12.4 | +2.1 |
| **TUMD** | **Tumrok D** | **3.50** | **12** | *eP* | Pn | 12 33 05.9 | +3.6 |
| TUMD | | | | *eS* | Sn | 12 33 46.6 | +4.3 |
| **TUMR** | **Tumrok** | **3.55** | **9** | *eP* | Pn | 12 33 06.8 | +3.8 |
| **KMNR** | **Kamenistaya** | **4.02** | **9** | *eP* | Pn | 12 33 14.9 | +5.3 |
| **ESO** | **Esso** | **4.15** | **357** | *eP* | Pn | 12 33 14.4 | +3.3 |
| **BZMR** | **Bezymyannaya** | **4.22** | **10** | *eP* | Pn | 12 33 18.1 | +5.7 |
| **BZGR** | **Bezymyannyi-Gr** | **4.25** | **12** | *eP* | Pn | 12 33 17.3 | +4.5 |

*IDC **18** 12:33:55.6±1.2,57°.02S×27°.07W,h0km,mb4.0/3, mbtmp3.9/4,ML3.1/1,MS3.4/2,Error ellipse: s-maj=51.3km s-min=26.4km az=75.0*
**ISC 18 12:33:56.8±1.0,57°.1S±0°.2×26°.8W±0°.3,h10km,n12, σ1°66/10,mb4.2/3,5C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNA1** | **Neumayer--Stat** | **15.72** | **157** | ⇑P | **Pn** | **12 37 37.2** | **-0.7** |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **15.90** | **160** | ⇑P | **Pn** | **12 37 40.9** | **+0.5** |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **16.11** | **157** | ⇑P | **Pn** | **12 37 40.7** | **-2.3** |
| | comp=Z,1.0nm,0.6s,baz=326,slow=15 | | | | | | |
| **SNAA** | **Sanae** | **17.67** | **155** | ⇑P | **P** | **12 38 04.4** | **+0.7** |
| | comp=Z,14nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **17.67** | **155** | P | **P** | **12 38 04.3** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=312,slow=14,SNR=2.2 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **19.19** | **152** | ⇑P | **P** | **12 38 18.6** | **-1.8** |
| | comp=Z,30nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **33.13** | **180** | P | **P** | **12 40 34.7** | **+1.8** |
| | comp=Z,1.8nm,0.6s,baz=205,slow=1.4,SNR=28 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **46.02** | **74** | LR | LR | 12 58 09.7 | |
| | comp=Z,50nm,20.8s,baz=131,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **49.10** | **72** | LR | LR | 12 59 49.9 | |
| | comp=Z,30nm,19.2s,baz=154,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **51.19** | **305** | P | **P** | **12 43 00.5** | **-0.3** |
| | comp=Z,1.6nm,0.4s,baz=169,slow=3.7,SNR=6.2 | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.87** | **29** | P | **P** | **12 45 32.8** | **+1.1** |
| | comp=Z,0.2nm,0.4s,baz=198,slow=6.2,SNR=4.0 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **150.99** | **310** | PKPbc | **PKPbc** | **12 53 46.2** | **-2.1** |
| | comp=Z,1.0nm,0.9s,baz=116,slow=2.1,SNR=7.9 | | | | | | |

*NNC **18** 12:44:20.2±1.4,44°.71N×81°.59E,h0km,mb2.8,mpv2.6, Error ellipse: s-maj=24.4km s-min=7.0km az=122.0*
**SOME 18 12:44:07.9,44°.18N×82°.35E,h5km,3C-2D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **1.62** | **244** | *eP* | Pb | 12 44 38.1 | -0.3 |
| | 2.3nm,0.1s | | | | | | |
| KTMS | | | | *eS* | Sg | 12 45 00.2 | +0.2 |
| | 9.1nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **1.84** | **276** | *eP* | Pg | 12 44 43.7 | +0.5 |
| | 1.4nm,0.2s | | | | | | |
| DJR | | | | *eS* | Sg | 12 45 09.8 | +2.7 |
| | 12nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **2.24** | **249** | Pg | Pg | 12 44 49.9 | -0.9 |
| | 1.0nm,0.4s | | | | | | |
| PDGK | | | | Lg | Lg | 12 45 20.5 | |
| | 6.1nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **2.24** | **249** | ⇑P | Pg | 12 44 57.1 | +6.3 |
| | 0.4nm,0.2s | | | | | | |
| PDGK | | | | ⇑S | Sg | 12 45 23.1 | +3.2 |
| | 4.0nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **2.29** | **276** | Pg | Pg | 12 44 51.2 | -0.5 |
| | 1.2nm,0.3s | | | | | | |
| KNOS | | | | Lg | Lg | 12 45 22.7 | |
| | 13nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **2.33** | **245** | *eP* | Pn | 12 44 46.4 | -0.7 |
| | 4.1nm,0.0s | | | | | | |
| SHLS | | | | *eS* | Sn | 12 45 14.5 | -1.6 |
| | 25nm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **2.33** | **245** | Pg | Pn | 12 44 46.4 | -0.7 |
| | 4.1nm,0.0s | | | | | | |
| **MK31** | **Makanchi Array** | **2.61** | **359** | Pn | Pg | 12 44 57.0 | -1.0 |
| | 0.1nm,0.2s,baz=196,slow=15,SNR=14 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 12 45 27.7 | |
| | 0.4nm,0.2s,baz=191,slow=28 | | | | | | |
| **UZB** | **Uzynbulak** | **2.63** | **248** | *eP* | Pb | 12 44 56.0 | +0.4 |
| | 2.3nm,0.4s | | | | | | |
| UZB | | | | *eS* | Sg | 12 45 31.1 | -1.2 |
| | 2.8nm,0.1s | | | | | | |
| **UZB** | **Uzynbulak** | **2.63** | **248** | Lg | Lg | 12 45 31.1 | |
| | 2.8nm,0.1s | | | | | | |
| **MAKZ** | **Makanchi** | **2.64** | **354** | ⇓Pn | Pg | 12 44 57.5 | -0.9 |
| | 0.7nm,0.5s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 12 45 26.5 | |
| | 1.6nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **2.75** | **256** | *eP* | Pb | 12 44 58.5 | +1.0 |
| | 1.9nm,0.2s | | | | | | |
| KPKS | | | | *eS* | Sg | 12 45 35.5 | -0.7 |
| | 17nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **2.75** | **256** | Lg | Lg | 12 45 35.5 | |
| | 17nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **2.79** | **270** | Lg | Lg | 12 45 37.2 | |
| | 16nm,0.2s | | | | | | |
| **SATY** | **Saty** | **3.08** | **250** | *eP* | Pb | 12 45 04.8 | +1.6 |
| | 1.8nm,0.3s | | | | | | |
| SATY | | | | *eS* | Sg | 12 45 46.1 | -0.6 |
| | 9.6nm,0.1s | | | | | | |
| **SATY** | **Saty** | **3.08** | **250** | Lg | Lg | 12 45 46.1 | |
| | 9.6nm,0.1s | | | | | | |
| **ARXS** | **Arharly** | **3.25** | **272** | *eP* | Pb | 12 45 07.5 | +1.3 |
| | 0.5nm,0.2s | | | | | | |
| ARXS | | | | *eS* | Sg | 12 45 50.7 | -1.6 |
| | 3.0nm,0.3s | | | | | | |
| **ZSN** | **Zaisan** | **3.71** | **27** | *eP* | Pb | 12 45 13.0 | -0.9 |
| | 3.9nm,0.2s | | | | | | |
| ZSN | | | | *eS* | Sb | 12 46 00.3 | +1.1 |
| | 6.6nm,1.0s | | | | | | |
| **ZSN** | **Zaisan** | **3.71** | **27** | Pg | Pb | 12 45 13.0 | -0.9 |
| | 3.9nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **4.12** | **265** | *eP* | Pg | 12 45 25.0 | -1.9 |
| | 1.3nm,0.8s | | | | | | |
| KTBS | | | | *eS* | Sg | 12 46 20.8 | +0.6 |
| | 3.7nm,0.5s | | | | | | |

*IDC **18** 12:45:38.9±1.9,32°.57N×136°.13E,h449km±25km,mb2.6/3, mbtmp3.4/5,Error ellipse: s-maj=31.0km s-min=23.4km az=74.0*
*JMA **18** 12:45:40.9±0.2,33°.N±3°×13°.6E±°,h436km,MV2.9/15,S OFF KII PENINSULA*
**ISC 18 12:45:38.9±1.0,32°.6N±0°.1×136°.2E±0°.1,h450km,n15, σ0°58/16,mb2.8/3,Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTNC** | **Tanabenakahech** | **1.36** | **339** | P | **P** | **12 46 36.5** | **+0.2** |
| **JWY** | **Kouya** | **1.74** | **343** | P | **P** | **12 46 38.6** | **+0.6** |
| **JIE** | **Ise** | **1.89** | **13** | P | **P** | **12 46 39.3** | **+0.6** |
| **JAI** | **Aioi** | **1.92** | **311** | P | **P** | **12 46 39.1** | **+0.3** |
| **JMN** | **Monobe** | **2.27** | **302** | P | **P** | **12 46 41.4** | **+0.5** |
| **JWT** | **Wachi** | **2.81** | **347** | P | **P** | **12 46 44.5** | **+0.1** |
| **JTO** | **Tosashimizu** | **2.88** | **277** | P | **P** | **12 46 45.4** | **+0.4** |
| **JNA** | **Nagahama** | **3.28** | **289** | P | **P** | **12 46 48.3** | **+0.3** |
| **JRY** | **Ryogami san** | **4.12** | **32** | P | **P** | **12 46 56.1** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **4.32** | **22** | P | **P** | **12 46 56.8** | **+0.1** |
| | 1.3nm,0.4s,baz=190,slow=7.9,SNR=6.7 | | | | | | |
| **BSO1** | **Boso 1** | **4.51** | **61** | P | **P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KURBB | **Kurchatov Arra** | **54.11** | **314** | P | | **P** | **13 42 00.2** | **+1.8** |
| | 0.7nm,0.5s,baz=90,slow=7.8,SNR=5.1 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| BVAR | **Borovoye Array** | **59.06** | **318** | P | | **P** | **13 42 35.1** | **+1.5** |
| | 0.4nm,0.4s,baz=78,slow=5.8,SNR=2.5 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| LPAZ | **La Paz** | **148.63** | **77** | PKPbc | | **PKPbc** | **13 52 21.2** | **-0.8** |
| | 1.0nm,0.8s,baz=0.0,slow=0.0,SNR=4.1 | | | | | | | |

*RSPR **18** 13:38:38.6, 19°.42N×64°.84W, h100km±7km, MD3.5/11*
**NEIC 18 13:38:37.6±0.8, 19°.6N±0°.1×64°.76W±0°.08, h35km±2km, ML2.9/26, Md3.6/11(RSPR), 9C-4D, Error ellipse: s-maj=21.9km s-min=3.2km az=144.0, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUMP** | **Col San Antoni** | **1.75 217** | | ⇑*e*P | Pn | 13 39 05.3 | -0.1 |
| **HUMP** | **Col San Antoni** | **1.75 217** | | *e*S | Sn | 13 39 25.0 | -1.5 |
| **HUMP** | **Col San Antoni** | **1.75 217** | | | Pn | 13 39 05.3 | -0.1 |
| HUMP | | | | | Sn | 13 39 25.0 | -1.5 |
| **HUMP** | **Col San Antoni** | **1.75 217** | | IAML | | 13 39 32.6 | |
| | comp=N,93nm,0.2s | | | | | | |
| HUMP | | | | IAML | | 13 39 32.8 | |
| | comp=E,112nm,0.2s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.77 226** | | ⇓*e*P | Pn | 13 39 05.5 | -0.2 |
| **GCPR** | **Guaynabo City** | **1.77 226** | | *e*S | Sn | 13 39 27.0 | 0.0 |
| **GCPR** | **Guaynabo City** | **1.77 226** | | | Pn | 13 39 05.5 | -0.2 |
| GCPR | | | | | Sn | 13 39 27.0 | 0.0 |
| **PDPR** | **Patillas Dam,** | **1.95 218** | | ⇑*e*P | Pn | 13 39 08.4 | +0.2 |
| **PDPR** | **Patillas Dam,** | **1.95 218** | | | Pn | 13 39 08.1 | -0.1 |
| **EMPR** | **Esperanza - Ma** | **1.99 238** | | ⇑*e*P | Pn | 13 39 09.0 | +0.2 |
| **EMPR** | **Esperanza - Ma** | **1.99 238** | | *e*S | Sn | 13 39 33.1 | +0.6 |
| **EMPR** | **Esperanza - Ma** | **1.99 238** | | | Pn | 13 39 09.0 | +0.2 |
| EMPR | | | | | Sn | 13 39 33.1 | +0.6 |
| **EMPR** | **Esperanza - Ma** | **1.99 238** | | IAML | | 13 39 42.3 | |
| | comp=N,95nm,1.0s | | | | | | |
| EMPR | | | | IAML | | 13 39 44.9 | |
| | comp=E,144nm,0.6s | | | | | | |
| **IGPR** | **InterUniversit** | **2.04 219** | | ⇑*e*P | Pn | 13 39 09.6 | +0.2 |
| **IGPR** | **InterUniversit** | **2.04 219** | | *e*S | Sn | 13 39 34.2 | +0.7 |
| **IGPR** | **InterUniversit** | **2.04 219** | | | Pn | 13 39 09.6 | +0.2 |
| IGPR | | | | | Sn | 13 39 34.2 | +0.7 |
| **IGPR** | **InterUniversit** | **2.04 219** | | IAML | | 13 39 43.8 | |
| | comp=N,128nm,0.2s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.24 238** | | ⇑*e*P | Pn | 13 39 12.0 | -0.3 |
| **AOPR** | **Arecibo Observ** | **2.24 238** | | *e*S | Sn | 13 39 38.4 | -0.4 |
| **AOPR** | **Arecibo Observ** | **2.24 238** | | | Pn | 13 39 12.0 | -0.3 |
| AOPR | | | | | Sn | 13 39 38.4 | -0.4 |
| **AOPR** | **Arecibo Observ** | **2.24 238** | | IAML | | 13 39 46.7 | |
| | comp=N,107nm,0.4s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **2.27 235** | | ⇑*e*P | Pn | 13 39 12.1 | -0.5 |
| **UUPR** | **Utuado, UPR, P** | **2.27 235** | | *e*S | Sn | 13 39 38.7 | -0.7 |
| **UUPR** | **Utuado, UPR, P** | **2.27 235** | | | Pn | 13 39 12.1 | -0.5 |
| UUPR | | | | | Sn | 13 39 38.7 | -0.7 |
| **CELP** | **Cerrillos** | **2.27 230** | | ⇓*e*P | Pn | 13 39 12.8 | +0.1 |
| **CELP** | **Cerrillos** | **2.27 230** | | *e*S | Sn | 13 39 38.8 | -0.6 |
| **CELP** | **Cerrillos** | **2.27 230** | | | Pn | 13 39 12.8 | +0.1 |
| CELP | | | | | Sn | 13 39 38.8 | -0.6 |
| **CELP** | **Cerrillos** | **2.27 230** | | IAML | | 13 39 56.6 | |
| | comp=N,42nm,0.5s | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.31 230** | | ⇑*e*P | Pn | 13 39 12.7 | -0.4 |
| **OBIP** | **Obispado Ponce** | **2.31 230** | | *e*S | Sn | 13 39 39.5 | -0.9 |
| **OBIP** | **Obispado Ponce** | **2.31 230** | | | Pn | 13 39 12.7 | -0.4 |
| OBIP | | | | | Sn | 13 39 39.5 | -0.9 |
| **OBIP** | **Obispado Ponce** | **2.31 230** | | IAML | | 13 39 51.8 | |
| | comp=E,42nm,0.8s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.48 244** | | ⇓*e*P | Pn | 13 39 15.8 | +0.4 |
| **AGPR** | **Aguadilla, PR** | **2.48 244** | | *e*S | Sn | 13 39 43.9 | -0.6 |
| **AGPR** | **Aguadilla, PR** | **2.48 244** | | | Sn | 13 39 43.9 | -0.6 |
| **AGPR** | **Aguadilla, PR** | **2.48 244** | | | Pn | 13 39 15.3 | -0.2 |
| AGPR | | | | IAML | | 13 39 35.7 | |
| | comp=E,75nm,2.4s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.48 244** | | IAML | | 13 40 46.7 | |
| | comp=N,64nm,2.1s | | | | | | |
| **LSP** | **Las Mesas** | **2.60 238** | | ⇑*e*P | Pn | 13 39 17.0 | -0.1 |
| **LSP** | **Las Mesas** | **2.60 238** | | | Pn | 13 39 17.0 | -0.1 |
| **PRSN** | **Puerto Rico Se** | **2.63 240** | | Pn | Pn | 13 39 17.1 | -0.4 |
| **MLPR** | **Magueyes Islan** | **2.68 234** | | ⇓*e*P | Pn | 13 39 17.4 | -0.8 |
| **MLPR** | **Magueyes Islan** | **2.68 234** | | *e*S | Sn | 13 39 50.2 | +0.6 |
| **MLPR** | **Magueyes Islan** | **2.68 234** | | | Pn | 13 39 17.4 | -0.8 |
| MLPR | | | | | Sn | 13 39 50.2 | +0.6 |
| **MLPR** | **Magueyes Islan** | **2.68 234** | | IAML | | 13 39 55.4 | |
| | comp=E,28nm,1.2s | | | | | | |
| MLPR | | | | IAML | | 13 40 05.3 | |
| | comp=N,31nm,1.2s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.71 236** | | ⇑*e*P | Pn | 13 39 18.9 | +0.3 |
| **CRPR** | **Cabo Rojo, PR** | **2.71 236** | | *e*S | Sn | 13 39 49.5 | -0.7 |
| **CRPR** | **Cabo Rojo, PR** | **2.71 236** | | | Pn | 13 39 18.9 | +0.3 |
| CRPR | | | | | Sn | 13 39 49.5 | -0.7 |
| **CRPR** | **Cabo Rojo, PR** | **2.71 236** | | IAML | | 13 40 13.2 | |
| | comp=E,28nm,2.0s | | | | | | |
| CRPR | | | | IAML | | 13 40 13.7 | |
| | comp=N,30nm,1.4s | | | | | | |

*JMA **18** 13:50:07.5±0.5, 34°.N±2°.×13°.8E±°, h279km±4km, MV3.4/36, FAR S OFF TOKAI DISTRICT*
*IDC **18** 13:50:09.6±0.6, 33°.65N×138°.33E, h265km±5km, mb3.5/19, mbtmp4.1/25, Error ellipse: s-maj=14.7km s-min=8.7km az=70.0*
**ISC 18 13:50:09.5±0.7, 33°.71N±0°.06×138°.42E±0°.06, h266km±5km, n58, σ1s27/68, mb3.9/25, 1C, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKO** | **Kozu shima** | **0.76** | **51** | *e*P | **Pn** | **13 50 45.2** | **+0.2** |
| **TTO4** | **TONANKAI O.B.S** | **0.79** | **292** | *e*P | **Pn** | **13 50 45.0** | **+0.2** |
| TTO4 | | | | *e*S | **S** | **13 51 13.1** | **+0.3** |
| **TTO5** | **TONANKAI O.B.S** | **0.80** | **313** | *e*P | **Pn** | **13 50 45.4** | **+0.4** |
| TTO5 | | | | *e*S | **S** | **13 51 14.0** | **+1.0** |
| **TTO3** | **TONANKAI O.B.S** | **0.87** | **281** | *e*P | **Pn** | **13 50 45.6** | **+0.3** |
| **JSG** | **Sagara** | **0.98** | **349** | *e*S | **S** | **13 51 16.6** | **+1.6** |
| **JMKN** | **Mikurajimanish** | **0.99** | **79** | P | **Pn** | **13 50 45.6** | **-0.5** |
| **JHJ** | **Hachijo jima 2** | **1.28** | **117** | P | **Pn** | **13 50 47.5** | **-0.4** |
| | 409nm,0.4s,baz=309,slow=14,SNR=26 | | | | | | |
| JHJ | | | | S | **S** | **13 51 20.4** | **+2.2** |
| | 110nm,0.6s,baz=76,slow=21,SNR=1.1 | | | | | | |
| **JHJ2** | **Mitsune** | **1.31** | **117** | P | **Pn** | **13 50 47.5** | **-0.5** |
| **TTO1** | **TONANKAI O.B.S** | **1.37** | **267** | P | **Pn** | **13 50 48.0** | **0.0** |
| **JIE** | **Ise** | **1.58** | **296** | P | **Pn** | **13 50 49.7** | **-0.1** |
| **JOD2** | **Odawara 2** | **1.65** | **19** | P | **Pn** | **13 50 50.9** | **+0.5** |
| JOD2 | | | | *e*S | **S** | **13 51 25.4** | **+2.6** |
| **JYN** | **Shimob** | **1.79** | **3** | P | **Pn** | **13 50 52.6** | **+1.1** |
| **BSO1** | **Boso 1** | **2.32** | **65** | P | **Pn** | **13 50 54.1** | **-1.4** |
| BSO1 | | | | *e*S | **S** | **13 51 30.0** | **-2.1** |
| **JRY** | **Ryogami san** | **2.34** | **10** | P | **Pn** | **13 50 57.4** | **+1.1** |
| **JYTA** | **Yamagatataniai** | **2.34** | **324** | P | **Pn** | **13 50 56.8** | **+0.5** |
| **JTNC** | **Tanabenakahech** | **2.34** | **273** | P | **Pn** | **13 50 55.8** | **-0.6** |
| JTNC | | | | *e*S | **S** | **13 51 32.1** | **-1.4** |
| **JWY** | **Kouya** | **2.40** | **283** | *e*P | **Pn** | **13 50 56.9** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **2.83** | **357** | P | **Pn** | **13 51 01.8** | **+0.6** |
| | 3.3nm,0.3s,baz=164,slow=9.2,SNR=53 | | | | | | |
| MJAR | | | | S | **S** | **13 51 41.9** | **-0.4** |
| | 4.8nm,0.6s,baz=164,slow=3.1,SNR=5.7 | | | | | | |
| **MAT** | **Matsushiro** | **2.83** | **357** | P | **Pn** | **13 51 02.3** | **+1.1** |
| **JAG** | **Ashikaga** | **2.84** | **17** | P | **Pn** | **13 51 00.7** | **-0.5** |
| **JWT** | **Wachi** | **2.95** | **303** | P | **Pn** | **13 51 02.5** | **+0.2** |
| **JKG** | **Kaga** | **3.08** | **327** | *e*P | **Pn** | **13 51 04.6** | **+0.8** |
| **JAI** | **Aioi** | **3.31** | **273** | P | **Pn** | **13 51 05.5** | **-0.7** |
| **JNU** | **Nakatsue** | **6.33** | **267** | P | **Pn** | **13 51 42.1** | **0.0** |
| | 7.5nm,0.4s,baz=99,slow=1.2,SNR=16 | | | | | | |
| **JCJ** | **Chichijima** | **7.35** | **153** | S | S | 13 53 01.6 | -18 |
| | 66nm,0.4s,baz=263,slow=20,SNR=1.8 | | | | | | |
| **KSRS** | **Korea Array** | **9.33** | **297** | P | **Pn** | **13 52 20.8** | **+1.4** |
| | 12nm,0.8s,baz=113,slow=13,SNR=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **10.89** | **16** | P | **Pn** | **13 52 38.4** | **-0.4** |
| | 2.1nm,0.4s,baz=274,slow=9.9,SNR=9.8 | | | | | | |
| ASAJ | | | | S | **S** | **13 54 33.1** | **-7.5** |
| | 2.6nm,0.5s,baz=305,slow=9.9,SNR=1.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.61** | **336** | P | **Pn** | **13 52 47.8** | **+0.1** |
| | 16nm,1.1s,baz=160,slow=13,SNR=8.1 | | | | | | |
| **CN2** | **Changchun** | **14.27** | **319** | P | **P** | **13 53 20.1** | **-0.1** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **BNX** | **BinXian** | **14.69** | **328** | ⇑P | **P** | **13 53 24.8** | **0.0** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **KLR** | **Kul'dur** | **16.28** | **344** | P | **P** | **13 53 41.9** | **-0.3** |
| | comp=Z,4.9nm,0.7s,baz=145,slow=7.5,SNR=16 | | | | | | |
| **SONM** | **Songino Array** | **27.83** | **310** | P | **P** | **13 55 35.1** | **+0.5** |
| | comp=Z,1.4nm,0.3s,baz=118,slow=8.8,SNR=13 | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **PZH** | **PanZhiHua** | **32.41** | **267** | P | **P** | **13 56 14.6** | **-0.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,6.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.32** | **257** | P | **P** | **13 57 03.9** | **-1.2** |
| | comp=Z,0.7nm,0.5s,baz=46,slow=7.8,SNR=2.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.44** | **315** | P | **P** | **13 57 38.2** | **0.0** |
| | comp=Z,0.8nm,0.3s,baz=107,slow=7.2,SNR=4.0 | | | | | | |
| ZALV | | | | PcP | **PcP** | **13 59 25.5** | **-0.3** |
| | comp=Z,2.4nm,0.4s,baz=122,slow=2.9,SNR=6.4 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.90** | **305** | P | **P** | **13 57 50.2** | **+0.1** |
| | comp=Z,3.6nm,0.5s,baz=90,slow=10.0,SNR=53 | | | | | | |
| MKAR | | | | PcP | **PcP** | **13 59 30.7** | **-0.3** |
| | comp=Z,0.3nm,0.4s,baz=87,slow=11,SNR=3.7 | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.20** | **310** | P | **P** | **13 58 07.5** | **-0.4** |
| | comp=Z,3.4nm,0.5s,baz=92,slow=7.1,SNR=59 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **51.05** | **314** | P | **P** | **13 58 44.4** | **-0.3** |
| | comp=Z,1.0nm,0.3s,baz=99,slow=7.8,SNR=10 | | | | | | |
| BVAR | | | | PcP | **PcP** | **13 59 56.7** | **+0.2** |
| | comp=Z,1.9nm,0.5s,baz=94,slow=4.4,SNR=7.3 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.49** | **185** | P | **P** | **13 59 01.5** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=360,slow=7.6,SNR=18 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **53.60** | **31** | P | **P** | **13 59 03.8** | **+0.6** |
| | comp=Z,0.3nm,0.7s,baz=284,slow=9.1,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **57.22** | **185** | P | **P** | **13 59 28.6** | **-0.8** |
| | comp=Z,0.3nm,0.7s,baz=21,slow=11,SNR=12 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **66.24** | **339** | P | **P** | **14 00 29.4** | **+0.7** |
| | comp=Z,1.3nm,0.5s,baz=66,slow=7.2,SNR=12 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **70.60** | **332** | P | **P** | **14 00 55.9** | **+0.2** |
| | comp=Z,4.4nm,0.6s,baz=59,slow=5.7,SNR=38 | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **71.20** | **310** | P | **P** | **14 01 00.2** | **+0.6** |
| | comp=Z,1.9nm,0.6s,baz=140,slow=1.7,SNR=4.7 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **75.40** | **322** | P | **P** | **14 01 23.9** | **0.0** |
| | comp=Z,2.7nm,0.4s,baz=51,slow=6.0,SNR=14 | | | | | | |
| | comp=Z,2.7nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **76.08** | **335** | P | **P** | **14 01 27.8** | **+0.2** |
| | comp=Z,1.0nm,0.4s,baz=57,slow=7.1,SNR=9.3 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **NB2** | **NORSAR Subarra** | **76.28** | **336** | P | **P** | **14 01 29.0** | **+0.2** |
| | comp=Z,2.7nm,0.7s,baz=44,slow=5.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **76.28** | **336** | P | **P** | **14 01 29.0** | **+0.2** |
| | comp=Z,1.9nm,0.8s,baz=42,slow=5.4,SNR=6.1 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.96** | **51** | P | **P** | **14 01 46.0** | **+1.8** |
| | comp=Z,0.5nm,0.7s,baz=291,slow=4.7,SNR=4.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **79.19** | **311** | P | **P** | **14 01 45.9** | **+0.6** |
| | comp=Z,1.3nm,0.8s,baz=107,slow=4.9,SNR=6.2 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **CLL** | **Collm** | **82.72** | **329** | *i* PKPbc | **P** | **14 02 03.1** | **-0.3** |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **RONA** | **Rosalia, Austr** | **83.81** | **325** | *e*PcP | **P** | **14 02 10.3** | **+1.1** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **CONA** | **Conrad Observa** | **83.85** | **325** | *i* PcP | **P** | **14 02 10.3** | **+0.9** |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **KHC** | **Kasperske Hory** | **84.05** | **327** | *e*P | **P** | **14 02 11.0** | **+0.7** |
| **SOKA** | **Soboth** | **85.14** | **325** | *i* PcP | **P** | **14 02 15.6** | **-0.3** |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **85.40** | **339** | P | **P** | **14 02 17.5** | **+0.6** |
| | comp=Z,1.1nm,0.6s,baz=39,slow=5.4,SNR=4.3 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **LESA** | **Schwarzleotal** | **85.71** | **326** | *e*PcP | **P** | **14 02 18.9** | **+0.3** |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **94.10** | **51** | P | **P** | **14 02 59.2** | **+1.0** |
| | comp=Z,0.5nm,0.8s,baz=251,slow=3.8,SNR=3.6 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |

**IDC 18 14:12:10.0±6.4, 23°.79N×145°.32E, h0km, mb3.6/3, mbtmp3.6/4, ML2.6/1, Error ellipse: s-maj=244.8km s-min=31.1km az=78.0, North Pacific Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **14.11** | **336** | Pn | Pn | 14 15 30.5 | -0.7 |
| | baz=160,slow=11,SNR=4.8 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.77** | **195** | P | P | 14 20 25.5 | -0.1 |
| | 0.5nm,0.8s,baz=18,slow=8.8,SNR=4.7 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.76** | **311** | P | P | 14 21 40.4 | -1.1 |
| | 0.5nm,0.7s,baz=97,slow=7.9,SNR=4.5 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.38** | **319** | P | P | 14 22 35.5 | +1.0 |
| | 0.7nm,0.5s,baz=79,slow=7.7,SNR=4.0 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

*AFAD **18** 14:13:33.8±0.0, 40°.79N×37°.48E, h7km±2km, ML2.4*
*ISK **18** 14:13:34.1, 40°.82N×37°.45E, h5km, ML2.5/9*
**ISC 18 14:13:33.6±1.4, 40°.87N±0°.04×37°.53E±0°.03, h0km±16km, n15, σ0s48/22, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ORDU** | **Ordu-Boztepe** | **0.28** | **65** | P | **Pb** | **14 13 41.6** | **+0.1** |
| ORDU | | | | S | **Sb** | **14 13 46.1** | **-0.6** |
| **RSDY** | **Resadiye-TOKAT** | **0.50** | **198** | Pg | **Pg** | **14 13 43.1** | **-0.1** |
| RSDY | | | | Sg | **Sg** | **14 13 49.4** | **-0.2** |
| **SUSE** | **Susehri** | **0.84** | **142** | P | **Pg** | **14 13 49.6** | **-0.1** |
| SUSE | | | | S | **Sg** | **14 14 01.3** | **+0.7** |
| SUSE | | | | *i* AML | AML | 14 14 02.0 | |
| | comp=E,149nm,0.4s | | | | | | |
| **ESPY** | **Espiye-Giresun** | **0.91** | **87** | Pg | **Pn** | **14 13 52.8** | **-0.9** |
| **TOKT** | **Tokat** | **0.93** | **234** | Pg | **Pg** | **14 13 51.1** | **-0.3** |
| TOKT | | | | Sg | **Sg** | **14 14 02.9** | **-0.5** |
| **SVSK** | **Karacayir** | **1.04** | **203** | Pg | **Pg** | **14 13 53.2** | **-0.3** |
| SVSK | | | | Sg | **Sg** | **14 14 06.9** | **0.0** |
| **ALUC** | **Giresun/Alucra** | **1.08** | **119** | P | **Pg** | **14 13 54.6** | **+0.2** |
| **SAMS** | **Samsun-Alacam** | **1.12** | **296** | P | **Pg** | **14 13 54.8** | **-0.3** |
| SAMS | | | | S | **Sb** | **14 14 11.6** | **+0.7** |
| SAMS | | | | *i* AML | AML | 14 14 16.0 | |
| | comp=N,110nm,0.2s | | | | | | |
| SAMS | | | | *i* AML | AML | 14 14 16.0 | |
| | comp=E,68nm,0.2s | | | | | | |
| **KVT** | **Kavak** | **1.14** | **281** | Pn | **Pg** | **14 13 55.4** | **0.0** |
| **KELT** | **Kelkit** | **1.50** | **118** | P | **Pn** | **14 14 01.4** | **-0.6** |
| **MACK** | **Trabzon** | **1.70** | **87** | P | **Pg** | **14 14 06.1** | **-0.1** |
| MACK | | | | S | **Sg** | **14 14 29.0** | **+0.8** |
| MACK | | | | *i* AML | AML | 14 14 31.0 | |
| | comp=N,252nm,0.2s | | | | | | |
| **DIKM** | **Dikmen** | **1.88** | **295** | Pn | **Pn** | **14 14 07.3** | **+0.4** |
| **ARPR** | **Arapgir-MALATY** | **1.89** | **160** | Pn | **Pn** | **14 14 07.5** | **+0.3** |
| **YOZ** | **Yozgat** | **2.09** | **235** | Pn | **Pn** | **14 14 09.7** | **-0.3** |
| **DARE** | **Darende-Malaty** | **2.30** | **181** | Pn | **Pn** | **14 14 13.3** | **+0.5** |

*ISN **18** 14:16:49.1±0.7, 34°.77N×45°.93E, h10km±74km, ML2.4*
*TEH **18** 14:16:53.5, 34°.79N×45°.95E, h10km±22km, ML2.8*
**ISC 18 14:16:52.3±1.0, 34°.80N±0°.05×45°.90E±0°.05, h10km, n13, σ1s46/17, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KGS1** | **Ghasr-e-Shirin** | **0.39** | **221** | Sg | **Sg** | **14 17 08.2** | **+2.9** |
| **IDHR** | **Dehrash** | **0.41** | **104** | Pg | **Pg** | **14 17 01.2** | **+0.7** |
| **GLG1** | **Gilan-e-Gharb** | **0.69** | **179** | Pg | **Pg** | **14 17 06.5** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **0.73** | **130** | Pg | **Pg** | **14 17 07.3** | **+0.9** |
| **ILIN** | **Lien** | **0.88** | **82** | Pg | **Pb** | **14 17 09.8** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **1.08** | **119** | Pg | **Pb** | **14 17 13.8** | **+0.6** |
| **ILBA** | **Ilam Banvizeh** | **1.20** | **168** | Pg | **Pn** | **14 17 16.0** | **+0.7** |
| **IKRK** | **Kirkuk** | **1.41** | **295** | *e*Pg | **Pn** | **14 17 16.8** | **-1.3** |
| IKRK | | | | *e*Sg | **Sn** | **14 17 37.0** | **+0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.42** | **87** | Pg | **Pg** | **14 17 20.5** | **+0.8** |
| **IBDR** | **Badra** | **1.69** | **179** | *e*Pn | **Pn** | **14 17 19.6** | **-2.3** |
| IBDR | | | | *e*Sn | **Sn** | **14 17 42.0** | **-1.6** |
| IBDR | | | | AML | AML | 14 17 56.6 | |
| | comp=N,51nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 14 17 59.1 | |
| | comp=E,60nm,0.6s | | | | | | |
| **BHD** | **Baghdad** | **1.98** | **220** | *e*Pn | **Pn** | **14 17 24.5** | **-1.4** |
| BHD | | | | *e*Sn | **Sn** | **14 17 50.0** | **-0.8** |
| **IKFM** | **Kafar-mosalman** | **2.06** | **128** | Pn | **Pb** | **14 17 29.8** | **0.0** |
| **RAFI** | **Al-Rafai** | **3.08** | **177** | *e*Pn | **Pn** | **14 17 39.5** | **-1.5** |
| RAFI | | | | *e*Sn | **Sn** | **14 18 16.0** | **-1.8** |

*IDC **18** 14:22:16.3±1.1, 0°.47S×24°.15W, h0km, mb3.8/5, mbtmp3.9/5, MS4.0/67, Error ellipse: s-maj=58.8km s-min=24.6km az=146.0*
*GCMT **18** 14:22:25.0±0.2, 1°.03S±0°.01×23°.70W±0°.01, h17km±1km, MW5.1/112, Moment Tensor Solution. s60,c85; s112,c174; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr-0.76±.11; Mθθ1.19±.11; Mϕϕ-0.42±.11; Mrθ2.22±.30; Mθϕ-4.40±.11; Mϕr-0.08±.27; Best double couple: Mo4.99500×10^16 NP1:ϕs266.00000°, δ87.00000°, λ-153.00000°. NP2:ϕs175.00000°, δ63.00000°, λ-3.00000°. Principal axes: T 5.3750, Plg16.0000°, Azm37.0000°; N -0.7530, Plg63.0000°, Azm272.0000°; P -4.6160, Plg21.0000°, Azm134.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*
**ISC 18 14:22:17.0±1.1, 0°.8S±0°.3×24°.0W±0°.2, h10km, n72, σ1s04/7, mb3.8/4, MS4.0/65, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **1.82** | **127** | T | T | 14 37 06.4 | |
| | baz=305,slow=74,SNR=288 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **1.82** | **127** | T | T | 14 36 57.0 | |
| | baz=305,slow=74,SNR=367 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **1.84** | **127** | T | T | 14 37 00.5 | |
| | baz=305,slow=74,SNR=380 | | | | | | |
| **RCBR** | **Riachuelo** | | **12.89** | **247** | LR | LR | 14 29 04.9 |
| | comp=Z,328nm,20.5s,baz=138,slow=32 | | | | | | |
| **BBTS** | **Babate** | | **17.01** | **26** | LR | LR | 14 31 29.5 |
| | comp=Z,880nm,19.4s,baz=100,slow=33 | | | | | | |
| **DBIC** | **Dimbokro** | | **20.50** | **69** | P | **P** | **14 26 55.1** | **-0.3** |
| | 15nm,1.2s,baz=245,slow=12,SNR=4.5 | | | | | | |
| DBIC | | | | | LR | LR | 14 33 22.0 |
| | comp=Z,582nm,19.5s,baz=233,slow=32 | | | | | | |
| | 15nm,1.2s | | | | | | |
| **BDFB** | **Brasilia** | | **27.92** | **237** | LR | LR | 14 38 04.9 |
| | comp=Z,868nm,20.7s,baz=103,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | **29.00** | **61** | P | **P** | **14 28 16.1** | **-1.1** |
| | 1.2nm,0.9s,baz=236,slow=11,SNR=4.6 | | | | | | |
| TORD | | | | | LR | LR | 14 38 51.9 |
| | comp=Z,390nm,18.8s,baz=231,slow=34 | | | | | | |
| | 1.2nm,0.9s | | | | | | |
| **MDP** | **Montagnes des** | | **29.17** | **282** | LR | LR | 14 37 36.5 |
| | comp=Z,179nm,20.7s,baz=104,slow=32 | | | | | | |
| **MDT** | **Midelt** | | **38.08** | **27** | LR | LR | 14 43 58.9 |
| | comp=Z,480nm,20.6s,baz=224,slow=34 | | | | | | |
| **SIV** | **San Ignacio** | | **39.55** | **246** | LR | LR | 14 45 53.5 |
| | comp=Z,288nm,18.4s,baz=112,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | | **40.92** | **229** | LR | LR | 14 46 17.0 |
| | comp=Z,325nm,19.1s,baz=42,slow=35 | | | | | | |
| **PCRV** | **Puerto La Cruz** | | **41.84** | **286** | LR | LR | 14 45 05.0 |
| | comp=Z,41nm,19.3s,slow=33 | | | | | | |
| **ESDC** | **Sonseca Array** | | **44.22** | **22** | P | **P** | **14 30 27.1** | **+0.5** |
| | 0.7nm,0.9s,baz=236,slow=9.1,SNR=2.8 | | | | | | |
| ESDC | | | | | LR | LR | 14 47 24.8 |
| | comp=Z,108nm,20.7s,baz=221,slow=34 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **TSUM** | **Tsumeb** | | **44.70** | **117** | LR | LR | 14 45 44.5 |
| | comp=Z,364nm,18.4s,baz=327,slow=31 | | | | | | |
| **LPAZ** | **La Paz** | | **46.12** | **248** | P | **P** | **14 30 42.0** | **-0.7** |
| | 1.4nm,0.6s,baz=100,slow=2.2,SNR=6.1 | | | | | | |
| LPAZ | | | | | LR | LR | 14 49 08.7 |
| | comp=Z,155nm,21.8s,baz=78,slow=35 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| **SDV** | **Santo Domingo** | | **47.41** | **283** | LR | LR | 14 49 12.1 |
| | comp=Z,100nm,21.0s,baz=78,slow=34 | | | | | | |
| **KEST** | **Kesra** | | **47.78** | **37** | LR | LR | 14 52 01.4 |
| | comp=Z,264nm,18.5s,baz=201,slow=38 | | | | | | |
| **LVC** | **Limon Verde** | | **48.73** | **240** | LR | LR | 14 52 23.4 |
| | comp=Z,165nm,19.3s,baz=72,slow=37 | | | | | | |
| **ROSC** | **El Rosal** | | **50.55** | **277** | LR | LR | 14 51 10.5 |
| | comp=Z,189nm,19.1s,baz=97,slow=34 | | | | | | |
| **VAE** | **Valguarnera** | | **52.03** | **39** | LR | LR |

comp=Z,39nm,18.4s,baz=278,slow=37
**NVAR Mina Array Bea 93.82 308** LR LR 15 12 31.9
comp=Z,58nm,21.9s,baz=89,slow=32
**AAK Ala-Archa 96.78 47** LR LR 15 25 18.4
comp=Z,76nm,18.1s,baz=264,slow=39
**YBH Yreka Blue Hor 96.99 312** LR LR 15 15 00.7
comp=Z,95nm,18.8s,baz=85,slow=33
**INK Inuvik 97.83 339** LR LR 15 19 03.7
comp=Z,86nm,18.0s,baz=38,slow=35
**KURBB Kurchatov Arra 98.53 39** LR LR 15 23 43.9
comp=Z,37nm,19.6s,baz=176,slow=38
**ASAR Alice Springs 147.61 140** PKPbc **PKPab 14 42 05.2 +0.5**
1.3nm,0.7s,baz=211,slow=2.6,SNR=8.0
**WRA Warramunga Arr 150.46 135** PKPbc **PKiKP 14 42 12.1 +1.3**
0.8nm,1.0s,baz=239,slow=1.9,SNR=3.3

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*IDC **18** 14:30:10.7±1.2,43.35N×12.83E,h0km,mb3.5/4, mbtmp3.6/9,ML3.3/4, Error ellipse: s-maj=29.7km s-min=13.6km az=91.0*
*PDG **18** 14:30:11.7±1.1,43.33N×12.69E,h13km±1km,ML3.7/9, Error ellipse: s-maj=0.8km s-min=1.0km az=0.0*
*ROM **18** 14:30:11.4±0.0,43.317N±0.002×12.679E±0.003, h8km,ML3.4/228,Mw3.4, Error ellipse: s-maj=0.2km s-min=0.2km az=18.0,Moment Tensor Solution. Moment tensor: Scale 10^14^Nm; Mrr=0.48; Mθθ0.58; Mϕϕ-0.09; Mrθ1.03; Mθϕ-0.17; Mϕr-1.08; Fault plane solution: M0 1.59181×10^14^ NP1:ϕs79.00000°,δ15.00000°, λ-144.00000°. NP2:ϕs314.00000°,δ81.00000°, λ-78.00000°.*
*LDG **18** 14:30:12.9±0.2,43.26N×12.66E,h8km,Ml3.0/24 Error ellipse: s-maj=5.0km s-min=2.1km az=42.0*
*PRU **18** 14:30:13.4,43.32N×12.99E,h10km*
*STR **18** 14:30:16.4±1.2,43°N±7.×1.2E±°,h10km,MLv3.4/37,Error ellipse: s-maj=0.0km s-min=0.0km az=120.4,preliminary*
**ISC 18 14:30:12.1±0.7,43.32N±0.02×12.60E±0.01,h17km±3km, n213,σ1s74/321,mb3.6/4,44C-4D,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATFO** | **Monte Foce - G** | **0.06** | **335** | ⇑P | **Pg** | **14 30 14.3** | **-1.2** |
| ATFO | | | | S | **Sg** | **14 30 16.1** | **-1.6** |
| ATFO | | | | AML | AML | | |
| | comp=N,48550μm,0.4s | | | | | | |
| ATFO | | | | AML | AML | | |
| | comp=E,49500μm,0.6s | | | | | | |
| **MURB** | **Monte Urbino** | **0.08** | **228** | ⇑P | **Pg** | **14 30 15.0** | **-0.6** |
| MURB | | | | S | **Sg** | **14 30 17.5** | **-0.3** |
| MURB | | | | AML | AML | | |
| MURB | | | | AML | AML | | |
| MURB | | | | AML | AML | | |
| MURB | | | | AML | AML | | |
| MURB | | | | AML | AML | | |
| MURB | | | | AML | AML | | |
| MURB | | | | AML | AML | | |
| MURB | | | | AML | AML | | |
| **FOSV** | **Fossato di Vic** | **0.12** | **100** | ⇓P | **Pg** | **14 30 13.8** | **-2.1** |
| FOSV | | | | S | **Sg** | **14 30 15.3** | **-3.1** |
| FOSV | | | | AML | AML | | |
| FOSV | | | | AML | AML | | |
| **ATSC** | **Scheggia e Pas** | **0.12** | **29** | ⇓P | **Pg** | **14 30 14.5** | **-1.6** |
| ATSC | | | | S | **Sg** | **14 30 16.4** | **-2.3** |
| **ATCC** | **AVT- Casa Cast** | **0.13** | **169** | ⇑P | **Pg** | **14 30 15.2** | **-0.9** |
| ATCC | | | | S | **Sg** | **14 30 18.0** | **-0.8** |
| ATCC | | | | AML | AML | | |
| ATCC | | | | AML | AML | | |
| **ATLO** | **AVT- Montelove** | **0.14** | **270** | ⇑P | **Pg** | **14 30 16.1** | **-0.1** |
| ATLO | | | | S | **Sg** | **14 30 19.4** | **+0.4** |
| **ATVO** | **AVT- Monte Val** | **0.16** | **295** | ⇑P | **Pg** | **14 30 16.2** | **-0.2** |
| ATVO | | | | S | **Sg** | **14 30 19.7** | **+0.3** |
| ATVO | | | | AML | AML | | |
| | comp=E,16200μm,0.4s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=N,11850μm,1.2s | | | | | | |
| **ATBU** | **Serra di Buran** | **0.17** | **346** | ⇑P | **Pg** | **14 30 16.0** | **-0.6** |
| ATBU | | | | S | **Sg** | **14 30 19.4** | **-0.2** |
| **SSFR** | **Montelago di S** | **0.18** | **47** | ⇑P | **Pg** | **14 30 15.0** | **-1.7** |
| SSFR | | | | S | **Sg** | **14 30 17.5** | **-2.3** |
| SSFR | | | | AML | AML | | |
| SSFR | | | | AML | AML | | |
| SSFR | | | | AML | AML | | |
| SSFR | | | | AML | AML | | |
| SSFR | | | | AML | AML | | |
| SSFR | | | | AML | AML | | |
| SSFR | | | | AML | AML | | |
| **ATPC** | **Poggio Castell** | **0.20** | **327** | ⇑P | **Pg** | **14 30 16.6** | **-0.3** |
| **ATPI** | **Pietralunga -** | **0.20** | **313** | ⇑P | **Pg** | **14 30 16.9** | **-0.2** |
| ATPI | | | | S | **Sg** | **14 30 21.0** | **+0.6** |
| **ATTE** | **AVT- Monte Tez** | **0.22** | **237** | ⇑P | **Pg** | **14 30 17.3** | **0.0** |
| ATTE | | | | S | **Sg** | **14 30 21.7** | **+0.9** |
| ATTE | | | | AML | AML | | |
| | comp=E,14100μm,0.2s | | | | | | |
| ATTE | | | | AML | AML | | |
| | comp=N,13000μm,0.4s | | | | | | |
| ATTE | | | | AML | AML | | |
| | comp=E,14100μm,1.8s | | | | | | |
| ATTE | | | | AML | AML | | |
| | comp=N,13000μm,1.6s | | | | | | |
| **PIEI** | **Pieia** | **0.23** | **347** | ⇑P | **Pg** | **14 30 16.7** | **-0.7** |
| PIEI | | | | S | **Sg** | **14 30 20.8** | **-0.2** |
| PIEI | | | | AML | AML | | |
| | comp=E,20500μm,0.1s | | | | | | |
| PIEI | | | | AML | AML | | |
| | comp=N,17400μm,0.9s | | | | | | |
| PIEI | | | | AML | AML | | |
| | comp=N,17400μm,1.1s | | | | | | |
| **ATVA** | **AVT- Monte Val** | **0.23** | **261** | P | **Pg** | **14 30 17.6** | **0.0** |
| **ATMI** | **Monte Miggiano** | **0.25** | **275** | ⇑P | **Pg** | **14 30 17.9** | **+0.2** |
| ATMI | | | | S | **Sg** | **14 30 23.1** | **+1.6** |
| ATMI | | | | AML | AML | | |
| | comp=E,8360μm,1.4s | | | | | | |
| ATMI | | | | AML | AML | | |
| | comp=N,9630μm,0.9s | | | | | | |
| ATMI | | | | AML | AML | | |
| | comp=N,9630μm,1.1s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.25** | **104** | ⇑P | **Pg** | **14 30 16.2** | **-1.6** |
| SNTG | | | | S | **Sg** | **14 30 19.7** | **-2.0** |
| SNTG | | | | AML | AML | | |
| | comp=E,50150μm,0.3s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,96000μm,0.3s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,99600μm,0.3s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=E,26150μm,0.3s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,96000μm,0.3s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=E,50150μm,0.2s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=E,26150μm,1.7s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,96000μm,1.7s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,99600μm,1.7s | | | | | | |
| **FIU1** | **Fiuminata** | **0.27** | **118** | P | **Pg** | **14 30 16.6** | **-1.6** |
| FIU1 | | | | S | **Sg** | **14 30 20.4** | **-1.9** |
| **APEC** | **Apecchio** | **0.28** | **331** | ⇑P | **Pb** | **14 30 18.0** | **-0.6** |
| APEC | | | | S | **Sb** | **14 30 23.6** | **+0.5** |
| APEC | | | | AML | AML | | |
| | comp=N,16400μm,0.2s | | | | | | |
| APEC | | | | AML | AML | | |
| | comp=E,14300μm,0.7s | | | | | | |
| APEC | | | | AML | AML | | |
| | comp=N,13700μm,0.3s | | | | | | |
| APEC | | | | AML | AML | | |
| | comp=E,11750μm,0.4s | | | | | | |
| **MTL1** | **Matelica** | **0.30** | **101** | P | **Pg** | **14 30 17.1** | **-1.5** |
| MTL1 | | | | S | **Sg** | **14 30 21.5** | **-1.6** |
| **SEF1** | **Sefro** | **0.30** | **124** | P | **Pg** | **14 30 17.2** | **-1.4** |
| SEF1 | | | | S | **Sg** | **14 30 21.7** | **-1.4** |
| SEF1 | | | | AML | AML | | |
| | comp=E,47150μm,0.2s | | | | | | |
| SEF1 | | | | AML | AML | | |
| | comp=N,42800μm,0.2s | | | | | | |
| SEF1 | | | | AML | AML | | |
| | comp=E,47150μm,0.2s | | | | | | |
| SEF1 | | | | AML | AML | | |
| | comp=N,42800μm,0.3s | | | | | | |
| **CDCA** | **Citt' di Caste** | **0.31** | **298** | P | **Pb** | **14 30 19.4** | **+0.3** |
| **ARVD** | **Arcevia** | **0.31** | **53** | ⇑P | **Pg** | **14 30 17.2** | **-1.5** |
| ARVD | | | | S | **Sg** | **14 30 21.6** | **-1.6** |
| ARVD | | | | AML | AML | | |
| | comp=N,20300μm,0.5s | | | | | | |
| ARVD | | | | AML | AML | | |
| | comp=E,23750μm,0.5s | | | | | | |
| ARVD | | | | AML | AML | | |
| | comp=N,20300μm,1.5s | | | | | | |
| **MMUR** | **Monte Murano** | **0.31** | **66** | ⇑P | **Pg** | **14 30 17.2** | **-1.7** |
| MMUR | | | | S | **Sg** | **14 30 21.6** | **-1.9** |
| MMUR | | | | AML | AML | | |
| MMUR | | | | AML | AML | | |
| | comp=E,67050μm,0.4s | | | | | | |
| MMUR | | | | AML | AML | | |
| **BADI** | **Badiali** | **0.33** | **307** | ⇑P | **Pb** | **14 30 19.3** | **-0.2** |
| BADI | | | | S | **Sb** | **14 30 25.5** | **+1.1** |
| BADI | | | | AML | AML | | |
| | comp=E,7205μm,0.8s | | | | | | |
| BADI | | | | AML | AML | | |
| | comp=E,7205μm,1.2s | | | | | | |
| BADI | | | | AML | AML | | |
| | comp=N,12370μm,0.4s | | | | | | |
| **ATMC** | **Monte Cedrone** | **0.33** | **294** | ⇑P | **Pb** | **14 30 19.3** | **-0.3** |
| **MPAG** | **Monte Paganucc** | **0.33** | **20** | ⇑P | **Pg** | **14 30 18.2** | **-1.0** |
| MPAG | | | | S | **Sg** | **14 30 23.3** | **-0.8** |
| MPAG | | | | AML | AML | | |
| | comp=E,7675μm,0.8s | | | | | | |
| MPAG | | | | AML | AML | | |
| | comp=N,8505μm,0.8s | | | | | | |
| MPAG | | | | AML | AML | | |
| | comp=N,8505μm,1.2s | | | | | | |
| **MML1** | **Montelago di S** | **0.34** | **127** | ⇑P | **Pg** | **14 30 17.8** | **-1.4** |
| MML1 | | | | S | **Sg** | **14 30 22.9** | **-1.2** |
| **GAG1** | **Gagliole** | **0.35** | **103** | ⇑P | **Pg** | **14 30 18.0** | **-1.4** |
| **EL6** | **Elcito** | **0.36** | **88** | ⇑P | **Pg** | **14 30 18.1** | **-1.6** |
| EL6 | | | | S | **Sg** | **14 30 23.3** | **-1.7** |
| EL6 | | | | AML | AML | | |
| | comp=E,58750μm,0.4s | | | | | | |
| EL6 | | | | AML | AML | | |
| | comp=N,46400μm,1.1s | | | | | | |
| EL6 | | | | AML | AML | | |
| | comp=N,46400μm,0.9s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.38** | **145** | ⇑P | **Pg** | **14 30 18.8** | **-1.2** |
| CESI | | | | S | **Sg** | **14 30 24.5** | **-0.9** |
| CESI | | | | AML | AML | | |
| | comp=E,9530μm,1.2s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=N,9440μm,0.4s | | | | | | |
| **PE3** | **Peglio** | **0.39** | **348** | ⇑P | **Pb** | **14 30 19.9** | **-0.6** |
| PE3 | | | | S | **Sb** | **14 30 27.2** | **+0.9** |
| PE3 | | | | AML | AML | | |
| | comp=E,21800μm,0.6s | | | | | | |
| PE3 | | | | AML | AML | | |
| | comp=N,25550μm,0.4s | | | | | | |
| PE3 | | | | AML | AML | | |
| | comp=N,25500μm,0.4s | | | | | | |
| PE3 | | | | AML | AML | | |
| | comp=E,21750μm,0.6s | | | | | | |
| **MDAR** | **Monte D'Aria** | **0.41** | **107** | P | **Pg** | **14 30 19.0** | **-1.6** |
| MDAR | | | | S | **Sg** | **14 30 25.0** | **-1.3** |
| **PARC** | **Parchiule** | **0.43** | **322** | ⇑P | **Pb** | **14 30 20.8** | **-0.4** |
| PARC | | | | S | **Sb** | **14 30 28.5** | **+1.1** |
| PARC | | | | AML | AML | | |
| | comp=N,3380μm,1.6s | | | | | | |
| PARC | | | | AML | AML | | |
| | comp=E,3505μm,0.8s | | | | | | |
| PARC | | | | AML | AML | | |
| | comp=N,3380μm,0.4s | | | | | | |
| **SSM1** | **San Severino M** | **0.43** | **101** | P | **Pg** | **14 30 19.2** | **-1.6** |
| SSM1 | | | | S | **Sg** | **14 30 25.4** | **-1.3** |
| **COR1** | **Corinaldo** | **0.43** | **42** | ⇑P | **Pg** | **14 30 20.2** | **-0.6** |
| COR1 | | | | S | **Sb** | **14 30 27.5** | **+0.1** |
| **SSP9** | **Sansepolcro** | **0.43** | **307** | P | **Pb** | **14 30 21.1** | **-0.1** |
| SSP9 | | | | S | **Sb** | **14 30 28.6** | **+1.2** |
| SSP9 | | | | AML | AML | | |
| | comp=E,2335μm,1.1s | | | | | | |
| SSP9 | | | | AML | AML | | |
| | comp=N,2730μm,0.6s | | | | | | |
| SSP9 | | | | AML | AML | | |
| | comp=E,2330μm,1.1s | | | | | | |
| SSP9 | | | | AML | AML | | |
| | comp=N,2735μm,0.6s | | | | | | |
| SSP9 | | | | AML | AML | | |
| | comp=E,2330μm,0.9s | | | | | | |
| SSP9 | | | | AML | AML | | |
| | comp=N,2735μm,1.4s | | | | | | |
| **CING** | **Cingoli** | **0.44** | **82** | ⇑P | **Pg** | **14 30 19.4** | **-1.6** |
| CING | | | | S | **Sg** | **14 30 25.6** | **-1.4** |
| CING | | | | AML | AML | | |
| | comp=E,18050μm,0.2s | | | | | | |
| CING | | | | AML | AML | | |
| | comp=N,15450μm,0.2s | | | | | | |
| CING | | | | AML | AML | | |
| | comp=N,15450μm,1.8s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.45** | **128** | ⇑P | **Pg** | **14 30 19.8** | **-1.4** |
| FDMO | | | | S | **Sg** | **14 30 26.6** | **-0.8** |
| FDMO | | | | AML | AML | | |
| | comp=E,7455μm,1.5s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=E,7455μm,0.5s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=N,8185μm,0.1s | | | | | | |
| **PF6** | **Pievefavera** | **0.46** | **111** | ⇑P | **Pg** | **14 30 19.9** | **-1.5** |
| PF6 | | | | S | **Sg** | **14 30 26.7** | **-1.1** |
| **CAFI** | **Castiglion Fio** | **0.47** | **272** | ⇑P | **Pb** | **14 30 22.0** | **+0.1** |
| CAFI | | | | S | **Sb** | **14 30 29.8** | **+1.3** |
| CAFI | | | | AML | AML | | |
| | comp=E,2150μm,0.2s | | | | | | |
| CAFI | | | | AML | AML | | |
| | comp=E,2250μm,0.2s | | | | | | |
| CAFI | | | | AML | AML | | |
| | comp=N,1935μm,0.5s | | | | | | |
| CAFI | | | | AML | AML | | |
| | comp=N,2035μm,0.5s | | | | | | |
| **FEMA** | **Monte Fema** | **0.48** | **137** | P | **Pg** | **14 30 20.5** | **-1.3** |
| FEMA | | | | S | **Sg** | **14 30 27.9** | **-0.5** |
| FEMA | | | | AML | AML | | |
| | comp=E,19400μm,0.3s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,11385μm,0.5s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,11380μm,0.5s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,11380μm,1.5s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=E,19400μm,0.3s | | | | | | |
| **CSP1** | **Cessapalombo** | **0.49** | **117** | ⇑P | **Pg** | **14 30 20.6** | **-1.5** |
| CSP1 | | | | S | **Sg** | **14 30 28.0** | **-0.7** |
| CSP1 | | | | AML | AML | | |
| | comp=N,17050μm,0.3s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=E,10900μm,1.6s | | | | | | |
| **MOMA** | **Monte Martano** | **0.51** | **183** | ⇑P | **Pg** | **14 30 21.8** | **-0.6** |
| MOMA | | | | S | **Sb** | **14 30 30.3** | **+0.4** |
| MOMA | | | | AML | AML | | |
| | comp=N,7085μm,0.3s | | | | | | |
| MOMA | | | | AML | AML | | |
| | comp=E,9610μm,0.2s | | | | | | |
| MOMA | | | | AML | AML | | |
| | comp=E,10010μm,0.2s | | | | | | |
| MOMA | | | | AML | AML | | |
| | comp=N,7310μm,0.3s | | | | | | |
| MOMA | | | | AML | AML | | |
| | comp=N,7080μm,0.3s | | | | | | |
| **TRE1** | **Treia** | **0.52** | **90** | P | **Pg** | **14 30 21.5** | **-1.0** |
| TRE1 | | | | S | **Sg** | **14 30 29.4** | **0.0** |
| **CPGN** | **Carpegna, Ital** | **0.53** | **337** | ⇑P | **Pb** | **14 30 23.1** | **+0.1** |
| CPGN | | | | AML | AML | | |
| | comp=E,3870μm,0.8s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=N,4215μm,0.7s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=N,4175μm,1.0s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=E,3865μm,0.8s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=N,4175μm,1.0s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=N,4215μm,1.3s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=E,4575μm,1.2s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=E,3865μm,1.2s | | | | | | |
| **MC2** | **Monte Cornacci** | **0.59** | **133** | P | **Pg** | **14 30 22.4** | **-1.5** |
| MC2 | | | | S | **Sg** | **14 30 31.9** | **+0.1** |
| **GUMA** | **Gualdo di Mace** | **0.59** | **115** | ⇑P | **Pg** | **14 30 22.6** | **-1.2** |
| GUMA | | | | S | **Sg** | **14 30 31.7** | **-0.1** |
| GUMA | | | | AML | AML | | |
| | comp=E,21000μm,1.5s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=N,16450μm,0.4s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=N,13700μm,0.4s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=E,23150μm,0.3s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=E,23150μm,1.7s | | | | | | |
| **SENI** | **Senigallia** | **0.60** | **49** | P | **Pg** | **14 30 23.7** | **-0.3** |
| SENI | | | | AML | AML | | |
| | comp=E,5165μm,1.5s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=E,5160μm,1.5s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=N,4500μm,1.3s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=N,4500μm,0.7s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=E,5160μm,0.5s | | | | | | |
| **NRCA** | **Norcia** | **0.61** | **142** | ⇑P | **Pg** | **14 30 22.7** | **-1.5** |
| NRCA | | | | S | **Sg** | **14 30 31.6** | **-0.7** |
| NRCA | | | | AML | AML | | |
| | comp=E,11050μm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,10150μm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,11000μm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,9960μm,0.1s | | | | | | |
| **RSM** | **Repubblica di** | **0.62** | **350** | ⇑P | **Pb** | **14 30 24.8** | **+0.2** |
| RSM | | | | AML | AML | | |
| | comp=E,3225μm,1.0s | | | | | | |
| RSM | | | | AML | AML | | |
| | comp=N,2810μm,1.0s | | | | | | |
| RSM | | | | AML | AML | | |
| | comp=E,3225μm,1.0s | | | | | | |
| RSM | | | | AML | AML | | |
| | comp=N,2810μm,1.0s | | | | | | |
| **GAVE** | **Gavelli** | **0.66** | **161** | AML | AML | | |
| | comp=N,15350μm,0.6s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=E,16900μm,0.4s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=E,15950μm,0.4s | | | | | | |
| GAVE | | | | AML | AML | | |
| | comp=N,4280μm,0.6s | | | | | | |
| **MMO1** | **Montemonaco** | **0.67** | **128** | ⇑P | **Pg** | **14 30 23.8** | **-1.6** |
| MMO1 | | | | S | **Sg** | **14 30 33.9** | **-0.4** |
| **SACS** | **San Casciano d** | **0.69** | **228** | ⇑P | **Pb** | **14 30 25.8** | **+0.1** |
| SACS | | | | S | **Sn** | **14 30 37.4** | **-0.1** |
| SACS | | | | AML | AML | | |
| | comp=E,2970μm,0.6s | | | | | | |
| SACS | | | | AML | AML | | |
| | comp=E,2795μm,0.5s | | | | | | |
| SACS | | | | AML | AML | | |
| | comp=N,5825μm,0.8s | | | | | | |
| SACS | | | | AML | AML | | |
| | comp=N,5810μm,0.7s | | | | | | |
| **CESX** | **Cesi** | **0.70** | **181** | ⇑P | **Pg** | **14 30 25.0** | **-0.9** |
| CESX | | | | S | **Sb** | **14 30 36.1** | **+0.8** |
| CESX | | | | AML | AML | | |
| | comp=N,5930μm,0.9s | | | | | | |
| CESX | | | | AML | AML | | |
| | comp=E,6260μm,1.3s | | | | | | |
| CESX | | | | AML | AML | | |
| | comp=E,6260μm,0.7s | | | | | | |
| **MF5** | **Montefalcone A** | **0.71** | **117** | ⇑P | **Pg** | **14 30 24.8** | **-1.1** |
| MF5 | | | | AML | AML | | |
| | comp=E,9720μm,0.4s | | | | | | |
| MF5 | | | | AML | AML | | |
| | comp=N,5935μm,0.7s | | | | | | |
| MF5 | | | | AML | AML | | |
| | comp=E,9710μm,0.4s | | | | | | |
| **ARRO** | **Arrone** | **0.74** | **171** | ⇑P | **Pg** | **14 30 25.7** | **-1.0** |
| ARRO | | | | S | **Sb** | **14 30 37.3** | **+0.9** |
| ARRO | | | | AML | AML | | |
| | comp=E,3375μm,0.6s | | | | | | |
| ARRO | | | | AML | AML | | |
| | comp=N,3420μm,0.3s | | | | | | |
| **ASQU** | **Asqua** | **0.76** | **309** | P | **Pb** | **14 30 26.9** | **0.0** |
| ASQU | | | | AML | AML | | |
| | comp=E,1260μm,0.9s | | | | | | |
| ASQU | | | | AML | AML | | |
| | comp=N,1349μm,0.8s | | | | | | |
| ASQU | | | | AML | AML | | |
| | comp=N,1349μm,1.2s | | | | | | |
| **ASQU** | **Asqua** | **0.76** | **309** | P | **Pb** | **14 30 27.0** | **0.0** |
| **AOI** | **Ancona** | **0.76** | **72** | ⇑P | **Pg** | **14 30 25.5** | **-1.6** |
| AOI | | | | S | **Sg** | **14 30 37.0** | **-0.2** |
| AOI | | | | AML | AML | | |
| | comp=N,4065μm,0.2s | | | | | | |
| AOI | | | | AML | AML | | |
| | comp=E,3095μm,0.3s | | | | | | |
| **LNSS** | **Leonessa** | **0.78** | **156** | P | **Pg** | **14 30 25.8** | **-1.6** |
| LNSS | | | | S | **Sg** | **14 30 37.8** | **0.0** |
| LNSS | | | | AML | AML | | |
| | comp=N,5380μm,0.9s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=E,6635μm,1.2s | | | | | | |
| **MTRA** | **Matera** | **0.81** | **134** | ⇑P | **Pg** | **14 30 26.0** | **-1.9** |
| MTRA | | | | S | **Sg** | **14 30 38.2** | **-0.3** |
| MTRA | | | | AML | AML | | |
| | comp=E,3740μm,0.6s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,3960μm,0.6s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,5510μm,0.4s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,5710μm,0.4s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,5505μm,0.4s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,3960μm,1.4s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,3740μm,1.4s | | | | | | |
| **SFI** | **Santa Sofia** | **0.81** | **317** | P | **Pb** | **14 30 27.6** | **-0.1** |
| SFI | | | | AML | AML | | |
| | comp=E,1120μm,0.8s | | | | | | |
| SFI | | | | AML | AML | | |
| | comp=N,914μm,1.2s | | | | | | |
| SFI | | | | AML | AML | | |
| | comp=N,905μm,1.1s | | | | | | |
| SFI | | | | AML | AML | | |
| | comp=E,1065μm,0.8s | | | | | | |
| **BLLA** | **Bellaria** | **0.83** | **353** | P | **Pn** | **14 30 29.1** | **+0.1** |
| BLLA | | | | AML | AML | | |
| | comp=E,2215μm,1.3s | | | | | | |
| BLLA | | | | AML | AML | | |
| | comp=N,2850μm,1.3s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.87** | **142** | P | **Pg** | **14 30 27.3** | **-1.7** |
| SMA1 | | | | AML | AML | | |
| | comp=N,3495μm,0.5s | | | | | | |
| SMA1 | | | | AML | AML | | |
| | comp=E,4140μm,0.5s | | | | | | |
| **RUFI** | **Rufina** | **0.95** | **304** | P | **Pn** | **14 30 30.6** | **-0.1** |
| **CSNT** | **Castellina Chi** | **0.97** | **280** | P | **Pn** | **14 30 31.4** | **+0.5** |
| **LMD** | **Lutirano** | **1.00** | **320** | P | **Pb** | **14 30 31.1** | **+0.1** |
| **TERO** | **Teramo** | **1.01** | **133** | AML | AML | | |
| | comp=E,1110μm,0.4s | | | | | | |
| TERO | | | | AML | AML | | |
| | comp=N,2795μm,1.5s | | | | | | |
| TERO | | | | AML | AML | | |
| | comp=N,1440μm,1.5s | | | | | | |
| TERO | | | | AML | AML | | |
| | comp=E,2375μm,0.5s | | | | | | |
| TERO | | | | AML | AML | | |
| | comp=N,1440μm,0.5s | | | | | | |
| TERO | | | | AML | AML | | |
| | comp=E,1111μm,0.3s | | | | | | |
| TERO | | | | AML | AML | | |
| | comp=N,2795μm,0.5s | | | | | | |
| **FROS** | **Frosini** | **1.06** | **265** | P | **Pn** | **14 30 33.1** | **+0.9** |
| **IMOL** | **Imola, Italy** | **1.22** | **329** | P | **Pn** | **14 30 37.0** | **+2.7** |
| **MTCR** | **Monte La Croce** | **1.37** | **302** | P | **Pn** | **14 30 36.7** | **+0.3** |
| **BDI** | **Bagni Di Lucca** | **1.64** | **298** | P | **Pn** | **14 30 40.5** | **+0.3** |
| **MAIM** | **Mastiano** | **1.65** | **292** | P | **Pn** | **14 30 40.8** | **+0.6** |
| **CARD** | **Cardoso** | **1.70** | **296** | P | **Pn** | **14 30 41.4** | **+0.5** |
| **VLC** | **Villacollemand** | **1.82** | **298** | P | **Pn** | **14 30 42.9** | **+0.3** |
| **MORSI** | **Morsiglia** | **2.40** | **262** | P | **Pn** | **14 30 51.6** | **+1.1** |
| **VITU** | **Vitulano (BN)** | **2.61** | **144** | AML | AML | | |
| | comp=N,162μm,0.6s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,206μm,0.6s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,206μm,1.4s | | | | | | |

**GORR Gorreto 2.72 300** P Pn 14 30 56.3 +1.4
**GBRS Gornja Briga 2.72 35** *i* Pn Pn 14 30 55.6 +0.6
**SMPL Sampolo 2.73 245** P Pn 14 30 57.4 +2.2
**PGF Pioggiola 2.76 255** *e*Pn Pn 14 30 56.7 +1.1
PGF *e*Sn Sn 14 31 28.2 -0.3
**PGF Pioggiola 2.76 255** AML AML
comp=E,36µm,0.9s
PGF AML AML
comp=E,36µm,1.1s
PGF AML AML
comp=N,39µm,1.2s
**PGF Pioggiola 2.76 255** P Pn 14 30 56.6 +1.1
**CADS Cadrg 3.02 15** *i* Pn Pn 14 30 59.5 +0.3
**PCP Piancastagn 3.18 294** P Pn 14 31 01.3 0.0
**PCP Piancastagn 3.18 294** S Sn 14 31 38.5 -0.3
**PDKS Podkum 3.23 31** *e*Pn Pn 14 31 03.0 +0.9
**LEGS Legarje 3.27 35** *i* Pn Pn 14 31 03.3 +0.8
**CANO Canova, Maglio 3.29 287** P Pn 14 31 03.5 +0.7
**RORO Rocca Rossa 3.38 285** P Pn 14 31 04.4 +0.3
**MYKA Terra Mystica 3.40 12** *i* Pn Pn 14 31 05.4 +1.1
comp=N,9.2nm,0.7s,SNR=9.4
MYKA *i* Sn Sn 14 31 46.9 +2.6
comp=N,15nm,0.4s
**ABTA Abfaltersbach 3.43 359** *i* Pn Pn 14 31 06.8 +1.9
comp=N,43nm,0.7s,SNR=22
ABTA *i* Sn Sn 14 31 47.6 +2.4
comp=N,14nm,0.3s
**OBKA Obir 3.48 23** *i* Pn Pn 14 31 05.8 +0.3
comp=N,4.4nm,0.6s
OBKA *i* Sn Sn 14 31 47.8 +1.5
comp=N,18nm,0.5s
**GBOS Grotte di Boss 3.57 287** P Pn 14 31 07.3 +0.5
**GBOS Grotte di Boss 3.57 287** S Sn 14 31 48.8 +0.2
**PIAF les Granges de 3.70 284** P Pn 14 31 09.7 +1.1
PIAF S Sn 14 31 52.3 +0.5
**SAOF Saorge 3.73 282** P Pn 14 31 09.6 +0.7
**SOKA Soboth 3.78 26** *i* Pn Pn 14 31 11.4 +1.8
comp=N,4.4nm,0.5s
SOKA *i* Sn Sn 14 31 55.0 +1.4
comp=N,11nm,0.9s
**SBF Sospel 3.79 280** *e*Pn Pn 14 31 10.6 +0.8
**SBF Sospel 3.79 280** *e*Pg Pg 14 31 23.1 -1.7
SBF *e*Sn Sn 14 31 53.5 -0.6
SBF *e*Sg Sg 14 32 12.8 -1.1
comp=N,22nm,0.5s
**KBA Koelnbreinsper 3.80 8** *i* Pn Pn 14 31 11.7 +1.8
comp=N,21nm,0.5s,SNR=27
KBA *i* Sn Sn 14 31 55.9 +1.5
comp=N,7.7nm,0.3s
**TURF col de Turini 3.84 282** P Pn 14 31 13.5 +2.9
**ENR Entracque 3.86 285** P Pn 14 31 12.5 +1.7
**STV Sant Anna di V 3.93 285** P Pn 14 31 13.3 +1.6
**FETA Feichten 3.94 341** *i* Pn Pn 14 31 14.8 +2.9
comp=N,9.2nm,0.9s,SNR=10
FETA *i* Sn Sn 14 32 00.7 +3.0
comp=N,2.8nm,0.4s
**SPIF crte de Spivo 3.96 283** P Pn 14 31 14.1 +2.0
**DAVOX Davos/Dischmat 3.97 332** Pn Pn 14 31 15.4 +3.2
comp=N,2.8nm,0.3s,baz=157,slow=16,SNR=32
DAVOX Sn Sn 14 32 03.1 +4.6
comp=N,2.6nm,0.3s,baz=112,slow=19,SNR=4.2
comp=N,7.6nm,0.3s
**MVIF Mont Vial 4.00 280** P Pn 14 31 15.2 +2.5
**WTTA Wattenberg 4.01 351** *i* Pn Pn 14 31 16.3 +3.5
comp=N,16nm,1.0s,SNR=5.6
WTTA *i* Sn Sn 14 32 01.5 +2.1
comp=N,11nm,0.4s
**SQTA Sankt Quirin 4.03 346** *i* Pn Pn 14 31 15.0 +2.0
comp=N,5.9nm,0.3s,SNR=12
SQTA *i* Sn Sn 14 32 02.7 +2.9
comp=N,5.2nm,0.3s
**WATA Walderalm 4.09 350** *i* Pn Pn 14 31 17.4 +3.5
comp=N,17nm,0.5s
WATA *i* Sn Sn 14 32 04.3 +2.9
comp=N,10nm,0.4s
**LESA Schwarzleotal 4.11 1** *i* Pn Pn 14 31 16.0 +1.8
comp=N,9.0nm,0.6s
LESA *e*Sn Sn 14 32 04.6 +2.7
comp=N,12nm,0.3s
**TRAV Traversella 4.12 304** P Pn 14 31 14.0 -0.2
**ISO Isola 4.12 284** P Pn 14 31 16.6 +2.3
**PZZ Stroppo 4.14 289** P Pn 14 31 15.9 +1.3
**MOTA Moosalm 4.17 346** *i* Pn Pn 14 31 18.5 +3.5
comp=N,15nm,0.8s
MOTA *i* Sn Sn 14 32 07.1 +3.7
comp=N,4.9nm,0.5s
**RSP Reno Superiore 4.25 297** P Pn 14 31 19.5 +3.4
**ENAUX Enaux 4.30 283** P Pn 14 31 18.9 +2.1
**SALSA La sagne 4.33 280** P Pn 14 31 19.5 +2.3
**BRY Bratogost 4.37 93** *e*Pn Pn 14 31 18.7 +1.0
BRY *i* Sn Sn 14 32 09.3 +1.1
**RETA Reutte 4.37 343** *i* Pn Pn 14 31 20.7 +3.0
comp=N,3.7nm,0.4s
RETA *i* Sn Sn 14 32 10.8 +2.6
comp=N,1.5nm,0.3s
**JAUF Jausiers 4.38 287** P Pn 14 31 19.5 +1.6
**DAVA Damuels 4.41 335** *i* Pn Pn 14 31 22.4 +4.0
comp=N,16nm,0.5s,SNR=11
DAVA *i* Sn Sn 14 32 13.1 +3.7
comp=N,12nm,0.5s
**BIOA Bad Ischl, Aus 4.44 9** *i* Pn Pn 14 31 20.5 +1.9
comp=N,18nm,0.5s,SNR=18
BIOA *i* Sn Sn 14 32 12.8 +3.0
comp=N,26nm,0.6s
**MBDF Montbardon 4.44 291** *e*Pn Pn 14 31 19.5 +0.8
MBDF *e*Sn Sn 14 32 08.1 -1.9
MBDF *e*Sg Sg 14 32 32.5 -2.0
comp=N,13nm,0.6s
**ARSA Arzberg 4.44 27** *i* Pn Pn 14 31 19.6 +0.9
comp=N,3.1nm,0.4s
ARSA *e*Sn Sn 14 32 10.7 +0.7
comp=N,5.9nm,0.4s
**ARSA Arzberg 4.44 27** AML AML
comp=E,33µm,1.3s
ARSA AML AML
comp=N,28µm,1.4s
ARSA AML AML
comp=N,28µm,0.6s
**LMR La Mourre 4.45 272** *e*Pn Pn 14 31 19.2 +0.5
**LMR La Mourre 4.45 272** *e*Pg Pg 14 31 35.0 -2.2
LMR *e*Sn Sn 14 32 08.3 -1.7
LMR *e*Sg Sg 14 32 33.0 -1.8
comp=N,10nm,0.5s
**LSD Lago del Serru 4.47 301** P Pn 14 31 19.5 +0.3
**CREF Crivoux 4.49 288** P Pn 14 31 21.7 +2.2
**TRIGF Trigance 4.53 278** P Pn 14 31 21.7 +1.8
**OGAG Argentiere 4.53 287** P Pb 14 31 25.7 -5.4
**UPM Unac-Piva 4.60 89** *e*Pn Pn 14 31 22.3 +1.3
UPM *i* Sn Sn 14 32 15.5 +1.3
**DIX Grande Dixence 4.62 309** P Pn 14 31 24.4 +3.0
**REMY Saint-Rhmy-en 4.64 305** P Pn 14 31 25.7 +4.2
**MOA Molln 4.68 14** *i* Pn Pn 14 31 23.5 +1.5
comp=N,6.8nm,0.4s,SNR=9.6
MOA *e*Sn Sn 14 32 15.9 0.0
comp=N,5.5nm,0.4s
**NKME Niksic 4.69 95** *e*Pn Pn 14 31 22.9 +0.9
NKME *i* Sn Sn 14 32 16.9 +0.9
**CEME Cevo 4.70 97**⇑ *i*Pn Pn 14 31 22.8 +0.6
CEME *i* Sn Sn 14 32 16.7 +0.3
**LPG La Plagne 4.73 300** *e*Pn Pn 14 31 23.2 +0.4
**LPG La Plagne 4.73 300** *e*Pg Pg 14 31 40.0 -2.6
LPG *e*Sg Sg 14 32 41.7 -2.1
comp=N,6.0nm,0.4s
**BUM Brajici-Budva 4.74 100**⇓ *i*Pn Pn 14 31 23.2 +0.4
BUM *i* Sn Sn 14 32 17.3 0.0
**LPL La Plagne 4.75 300** *e*Pn Pn 14 31 23.9 +0.9
**LPL La Plagne 4.75 300** *e*Pg Pg 14 31 40.1 -2.9
LPL *e*Sn Sn 14 32 15.4 -2.4
LPL *e*Sg Sg 14 32 42.1 -2.4
comp=N,6.3nm,0.6s
**RSL Roselend 4.89 301** P Pn 14 31 28.4 +3.5
**PDG Podgorica 4.97 98** *e*Pn Pn 14 31 26.6 +0.8
PDG *i* Sn Sn 14 32 23.1 +0.3
**DRME Dracevica, Mon 4.97 101** *e*Pn Pn 14 31 26.5 +0.5
DRME *i* Sn Sn 14 32 23.5 +0.4
**KOME Kolasin 5.08 93** *e*Pn Pn 14 31 28.5 +1.0
KOME *i* Sn Sn 14 32 26.3 +0.4
**RONA Rosalia, Austr 5.09 29** *i* Pn Pn 14 31 28.3 +0.6
comp=N,10nm,0.7s,SNR=7.6
RONA *i* Sn Sn 14 32 26.9 +0.9
comp=N,0.5nm,0.2s
**ORIF Oris-en-Rattie 5.10 291** *e*Pn Pn 14 31 29.9 +2.1
**ORIF Oris-en-Rattie 5.10 291** *e*Pg Pg 14 31 46.9 -2.8
ORIF *e*Sn Sn 14 32 23.9 -2.4
ORIF *e*Sg Sg 14 32 52.7 -3.0
comp=N,7.4nm,0.6s
**ORIF Oris-en-Rattie 5.10 291** P Pn 14 31 30.6 +2.8
**SMRF Simiane la Rot 5.14 280** *e*Pn Pn 14 31 28.2 -0.1
**SMRF Simiane la Rot 5.14 280** *e*Pg Pg 14 31 47.8 -2.8
SMRF *e*Sg Sg 14 32 52.9 -4.3
comp=N,2.7nm,0.4s
**CONA Conrad Observa 5.15 25** *i* Pn Pn 14 31 28.9 +0.4
comp=N,1.6nm,0.5s
CONA *i* Sn Sn 14 32 28.2 +0.8
comp=N,5.3nm,0.5s
**RUSF Rustrel 5.21 279** P Pn 14 31 31.8 +2.6
**TORNY Torny/Romont 5.29 313** P Pn 14 31 32.7 +2.4
**SLE Schleitheim 5.30 328** P Pn 14 31 32.3 +1.8
**IVA Berane 5.36 92**⇓ *i*Pn Pn 14 31 32.2 +0.9
IVA *i* Sn Sn 14 32 32.9 +0.3
**PVY Plav 5.45 95** *e*Pn Pn 14 31 33.2 +0.6
PVY *i* Sn Sn 14 32 34.9 +0.1
**GIMEL St. Georges / 5.53 308** P Pn 14 31 36.4 +2.7
**BOURR Bourrignon 5.56 319** P Pn 14 31 36.4 +2.3
**ENDD Endenburg 5.57 324** P Pn 14 31 36.4 +2.2
**GERES GERESS Array B 5.58 7** Pn Pn 14 31 34.7 +0.3
comp=N,1.2nm,0.3s,baz=179,slow=14,SNR=21
GERES Sn Sn 14 32 36.8 -1.4
comp=N,1.5nm,0.3s,baz=181,slow=24,SNR=7.1
comp=N,2.5nm,0.4s
**FELD Feldberg im Sc 5.59 326** P Pn 14 31 36.4 +1.9
**CKRC Cesky Krumlov 5.63 12** *e*PN Pn 14 31 35.1 +0.1
CKRC *e*SN Sn 14 32 38.8 -0.5
**BRANT Les Verrieres 5.65 312** P Pn 14 31 37.7 +2.4
**CABF La Chapelle 5.68 308** *e*Pn Pn 14 31 37.1 +1.4
CABF *e*Sn Sn 14 32 39.9 -0.6
comp=N,3.9nm,0.5s
**KIZ Kirchzarten 5.69 326** P Pn 14 31 37.7 +1.9
**KIZ Kirchzarten 5.69 326** S Sn 14 32 40.4 -0.2
**OG35 Corcelles 5.71 301** P Pn 14 31 38.3 +2.2
**CHMF Charmoille 5.75 315** P Pn 14 31 38.9 +2.2
CHMF S Sn 14 32 43.6 +1.3
**ZST Bratislava 5.81 31** *e*PN Pn 14 31 38.0 +0.6
**KHC Kasperske Hory 5.86 6** *e*PN Pn 14 31 38.1 0.0
KHC *e*SN Sn 14 32 43.5 -1.3
**VOGT Vogtsburg - To 5.89 326** P Pn 14 31 40.7 +2.2
**VIVF Saint-Julien-l 5.92 288** *e*Pn Pn 14 31 38.4 -0.5
**VIVF Saint-Julien-l 5.92 288** *e*Pg Pg 14 32 02.5 -2.8
VIVF *e*Sg Sg 14 33 18.5 -3.4
comp=N,1.6nm,0.4s
**MOF Molkenrain 5.94 322** P Pn 14 31 41.7 +2.4
MOF S Sn 14 32 49.9 +2.9
**BOUC Bouclans 5.96 313** P Pn 14 31 41.8 +2.3
**WALT Westhalten 5.96 323** P Pn 14 31 41.7 +2.1
**HINF Hinteralfeld 6.05 320** *e*Pn Pn 14 31 41.9 +1.2
HINF *e*Sn Sn 14 32 49.5 0.0
comp=N,7.5nm,0.4s
**RONF Ronchamp 6.07 318** P Pn 14 31 42.8 +1.9
**ECH Echery 6.21 324** P Pn 14 31 44.6 +1.7
**WLS Welschbruch 6.28 326** P Pn 14 31 45.9 +2.0
**CDF Champ du Feu 6.31 326** *e*Pn Pn 14 31 45.3 +0.9
CDF *e*Sn Sn 14 32 53.0 -3.0
comp=N,10nm,0.5s
**KRUC Moravsky 6.32 23** *e*PN Pn 14 31 44.7 +0.3
**HAU Haudompre 6.42 319** *e*Pn Pn 14 31 46.9 +1.1
HAU *e*Sn Sn 14 32 54.8 -3.8
comp=N,5.1nm,0.3s
**OHR Ohrid 6.47 107** *i* Pn Pn 14 31 48.2 +1.7
OHR *i* Sn Sn 14 32 58.9 -1.0
**JAVC Velka Javorina 6.57 31** *e*PN Pn 14 31 49.3 +1.4
**VRAC Vranov 6.60 23** *e*PN Pn 14 31 48.3 0.0
**VRAC Vranov 6.60 23** Pn Pn 14 31 53.3 +5.0
comp=N,0.4nm,0.3s,baz=231,slow=11,SNR=4.5
VRAC Sn Sn 14 33 06.0 +2.9
comp=N,0.3nm,0.3s,baz=300,slow=17,SNR=1.6
**VYHS Vyhne 6.76 38** *e*PN Pn 14 31 51.0 +0.5
VYHS *e*SN Sn 14 33 02.8 -4.2
**GOPC GO Pecny, Ondr 6.77 12** *e*PN Pn 14 31 49.9 -0.7
**PRU Pruhonice 6.81 11** *e*PN Pn 14 31 50.7 -0.4
**SMF Signal de Mont 7.05 301** *e*Pn Pn 14 31 55.8 +1.4
SMF *e*Sn Sn 14 33 11.4 -2.7
comp=N,2.1nm,0.2s
**PAGF Fort de Pagny 7.10 320** *e*Pn Pn 14 31 57.8 +2.6
PAGF *e*Sn Sn 14 33 10.9 -4.5
comp=N,5.1nm,0.6s
**MORC Moravsky Berou 7.30 26** *e*PN Pn 14 31 59.1 +1.1
**LOR Lormes 7.32 306** *e*Pn Pn 14 31 58.5 +0.3
LOR *e*Sn Sn 14 33 17.6 -3.3
comp=N,3.2nm,0.4s
LOR *e*Sg Sg 14 34 02.1 -4.9
comp=N,1.4nm,0.3s
**AVF Avril sur Loir 7.42 301** *e*Pn Pn 14 32 00.0 +0.6
AVF *e*Sn Sn 14 33 20.5 -2.6
comp=N,1.3nm,0.5s
**SSF Saint Saulge 7.44 303** *e*Pn Pn 14 31 59.2 -0.6
SSF *e*Sn Sn 14 33 20.3 -3.4
comp=N,0.9nm,0.3s
**MTLF Montolieu 7.58 274** *e*Pn Pn 14 32 01.5 -0.2
MTLF *e*Sn Sn 14 33 23.3 -3.8
comp=N,2.0nm,0.3s
**BGF Bois d'Agland 7.64 298** *e*Pn Pn 14 32 02.9 +0.3
BGF *e*Sn Sn 14 33 25.5 -3.3
comp=N,6.7nm,0.5s
**OSTC Ostas 7.65 18** *e*PN Pn 14 32 01.5 -1.2
**CAF Calviac 7.75 286** *e*Pn Pn 14 32 04.7 +0.6
CAF *e*Sn Sn 14 33 27.8 -3.7
comp=N,1.7nm,0.5s
**TCF Toulx Ste Croi 7.97 295** *e*Pn Pn 14 32 08.2 +1.1
**KEST Kesra 7.98 199** Pn Pn 14 32 08.7 +1.3
comp=N,0.3nm,0.3s,baz=232,slow=12,SNR=2.7
comp=N,1.6nm,0.6s
**CLL Collm 8.00 2** *e*Pn Pn 14 32 08.0 +0.5
comp=Z,4.0nm,0.5s
CLL *e*Sn Sn 14 33 36.0 -1.5
CLL *e*Sg 14 34 26.0
comp=Z,12nm,1.1s
**IDI Anoyia 12.43 126** Pn Pn 14 33 07.2 -1.0
comp=Z,8.3nm,0.9s,baz=322,slow=15,SNR=1.7
**FINES FINESS Array B 19.86 19** P P 14 34 43.5 +1.6
comp=Z,0.1nm,0.3s,baz=209,slow=11,SNR=3.3
comp=Z,2.4nm,0.8s
**TORD Torodi Ar. Bea 31.50 201** P P 14 36 34.5 +1.5
comp=Z,0.7nm,0.7s,baz=14,slow=7.6,SNR=4.7
comp=Z,0.7nm,0.7s
**BVAR Borovoye Array 38.76 55** P P 14 37 36.6 +1.4
comp=Z,0.4nm,0.4s,baz=284,slow=6.0,SNR=3.9
comp=Z,0.4nm,0.4s
**MKAR Makanchi Array 47.87 60** P P 14 38 48.5 -0.4
comp=Z,0.4nm,0.9s,baz=326,slow=7.5,SNR=2.3
comp=Z,0.4nm,0.9s
**SONM Songino Array 61.80 50** P P 14 40 29.6 -0.3
comp=Z,0.2nm,0.3s,baz=306,slow=7.6,SNR=2.3
comp=Z,0.2nm,0.3s

**ROM 18 14:32:06.1±0.0, 43°324N±0'003×12°679E±0'004, h9km, ML2.1/30, 7C-1D, Error ellipse: s-maj=0.3km s-min=0.2km az=216.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FOSV** | **Fossato di Vic** | **0.07** | **116** | P | Pg | 14 32 08.5 | +0.4 |
| FOSV | | | | S | Sg | 14 32 09.9 | +0.4 |
| FOSV | comp=E,2840µm,0.3s | | | AML | AML | | |
| FOSV | comp=N,2140µm,0.5s | | | AML | AML | | |
| **ATFO** | **Monte Foce - G** | **0.09** | **299** | ⇓P | Pg | 14 32 08.9 | +0.5 |
| ATFO | | | | S | Sg | 14 32 10.7 | +0.5 |
| ATFO | | | | AML | AML | | |
| ATFO | comp=E,1550µm,0.6s | | | AML | AML | | |
| ATFO | comp=E,1550µm,1.4s | | | AML | AML | | |
| ATFO | comp=N,1345µm,0.4s | | | AML | AML | | |
| **ATSC** | **Scheggia e Pas** | **0.10** | **3** | P | Pg | 14 32 09.1 | +0.4 |
| ATSC | | | | S | Sg | 14 32 11.1 | +0.6 |
| **MURB** | **Monte Urbino** | **0.13** | **242** | ⇑P | Pg | 14 32 09.6 | +0.6 |
| MURB | | | | S | Sg | 14 32 12.1 | +1.0 |
| MURB | | | | AML | AML | | |
| MURB | comp=N,1935µm,0.4s | | | AML | AML | | |
| MURB | comp=E,3570µm,0.4s | | | AML | AML | | |
| MURB | comp=N,2300µm,0.3s | | | AML | AML | | |
| MURB | comp=N,1930µm,0.4s | | | AML | AML | | |
| MURB | comp=E,3660µm,0.4s | | | AML | AML | | |
| **SSFR** | **Montelago di S** | **0.14** | **34** | P | Pg | 14 32 09.6 | +0.5 |
| SSFR | | | | S | Sg | 14 32 12.2 | +0.9 |
| SSFR | | | | AML | AML | | |
| SSFR | comp=N,2675µm,0.6s | | | AML | AML | | |
| SSFR | comp=N,2575µm,0.2s | | | AML | AML | | |
| SSFR | comp=E,2790µm,0.2s | | | AML | AML | | |
| SSFR | comp=E,2355µm,0.2s | | | AML | AML | | |
| SSFR | comp=N,2675µm,1.4s | | | AML | AML | | |
| **ATCC** | **AVT- Casa Cast** | **0.14** | **192** | ⇑P | Pg | 14 32 09.8 | +0.6 |
| ATCC | | | | S | Sg | 14 32 12.5 | +1.2 |
| ATCC | | | | AML | AML | | |
| ATCC | comp=N,2275µm,0.5s | | | AML | AML | | |
| ATCC | comp=E,1960µm,0.2s | | | AML | AML | | |
| ATCC | comp=E,1960µm,1.8s | | | AML | AML | | |
| **ATBU** | **Serra di Buran** | **0.18** | **328** | P | Pg | 14 32 10.6 | +0.7 |
| ATBU | | | | S | Sg | 14 32 14.0 | +1.5 |
| **FRON** | **Frontone** | **0.20** | **10** | P | Pg | 14 32 10.6 | +0.5 |
| FRON | | | | S | Sg | 14 32 14.0 | +1.1 |
| **SNTG** | **Esanatoglia** | **0.20** | **110** | ⇑P | Pg | 14 32 10.9 | +0.6 |
| SNTG | | | | S | Sg | 14 32 14.4 | +1.3 |
| SNTG | | | | AML | AML | | |
| SNTG | comp=N,1340µm,0.3s | | | AML | AML | | |
| SNTG | comp=E,998µm,1.1s | | | AML | AML | | |
| SNTG | comp=E,618µm,0.2s | | | AML | AML | | |
| SNTG | comp=N,1440µm,0.3s | | | AML | AML | | |
| SNTG | comp=E,998µm,0.9s | | | AML | AML | | |
| **ATVO** | **AVT- Monte Val** | **0.21** | **286** | ⇑P | Pg | 14 32 10.8 | +0.5 |
| ATVO | | | | S | Sg | 14 32 14.4 | +1.2 |
| ATVO | | | | AML | AML | | |
| ATVO | comp=N,456µm,0.6s | | | AML | AML | | |
| ATVO | comp=E,450µm,0.5s | | | AML | AML | | |
| ATVO | comp=N,456µm,1.4s | | | AML | AML | | |
| **PIEI** | **Pieia** | **0.24** | **334** | P | Pg | 14 32 11.4 | +0.5 |
| PIEI | | | | S | Sg | 14 32 15.4 | +1.3 |
| PIEI | | | | AML | AML | | |
| PIEI | comp=N,148µm,1.6s | | | AML | AML | | |
| PIEI | comp=N,148µm,0.4s | | | AML | AML | | |
| PIEI | comp=E,264µm,0.9s | | | AML | AML | | |
| **ATPI** | **Pietralunga -** | **0.24** | **302** | P | Pg | 14 32 11.5 | +0.6 |
| ATPI | | | | S | Sg | 14 32 15.7 | +1.5 |
| ATPI | | | | AML | AML | | |
| ATPI | comp=E,264µm,0.5s | | | AML | AML | | |
| ATPI | comp=N,197µm,0.5s | | | AML | AML | | |
| ATPI | comp=E,264µm,1.5s | | | AML | AML | | |
| **ARVD** | **Arcevia** | **0.26** | **48** | ⇑P | Pg | 14 32 11.9 | +0.6 |
| ARVD | | | | S | Sb | 14 32 16.3 | -1.3 |
| ARVD | | | | AML | AML | | |
| ARVD | comp=E,232µm,1.3s | | | AML | AML | | |
| ARVD | comp=N,183µm,0.4s | | | AML | AML | | |
| **ATTE** | **AVT- Monte Tez** | **0.27** | **242** | P | Pg | 14 32 11.9 | +0.4 |
| ATTE | | | | S | Sb | 14 32 16.6 | -1.3 |
| **EL6** | **Elcito** | **0.31** | **89** | ⇑P | Pg | 14 32 12.8 | +0.5 |
| EL6 | | | | S | Sb | 14 32 17.9 | -1.2 |
| EL6 | | | | AML | AML | | |
| EL6 | comp=N,825µm,1.0s | | | AML | AML | | |
| EL6 | comp=E,722µm,0.2s | | | AML | AML | | |
| **MPAG** | **Monte Paganucc** | **0.31** | **11** | P | Pb | 14 32 13.6 | -0.3 |
| MPAG | | | | S | Sb | 14 32 17.9 | -1.2 |
| **CESI** | **CESI - Serrava** | **0.36** | **152** | P | Pg | 14 32 13.9 | +0.7 |
| CESI | | | | S | Sb | 14 32 19.6 | -0.9 |
| **BADI** | **Badiali** | **0.37** | **301** | P | Pg | 14 32 13.9 | +0.6 |
| **CING** | **Cingoli** | **0.38** | **82** | P | Pg | 14 32 14.1 | +0.5 |
| CING | | | | S | Sb | 14 32 20.5 | -0.6 |
| CING | | | | AML | AML | | |
| CING | comp=N,476µm,0.2s | | | AML | AML | | |
| CING | comp=E,271µm,0.2s | | | AML | AML | | |
| CING | comp=N,476µm,1.8s | | | AML | AML | | |
| **COR1** | **Corinaldo** | **0.39** | **37** | ⇑P | Pb | 14 32 14.9 | -0.2 |
| COR1 | | | | S | Sb | 14 32 22.1 | +0.8 |
| **FDMO** | **Fiordimonte** | **0.41** | **134** | P | Pg | 14 32 14.5 | +0.4 |
| FDMO | | | | S | Sb | 14 32 21.8 | -0.3 |
| **CAFI** | **Castiglion Fio** | **0.52** | **271** | P | Pg | 14 32 16.6 | +0.5 |
| CAFI | | | | S | Sb | 14 32 24.4 | -0.7 |
| **MOMA** | **Monte Martano** | **0.53** | **189** | P | Pg | 14 32 16.7 | +0.4 |
| MOMA | | | | S | Sb | 14 32 24.9 | -0.4 |
| **SACS** | **San Casciano d** | **0.74** | **230** | P | Pg | 14 32 20.5 | +0.3 |

**ROM 18 14:32:44.4±0.0, 43°322N±0'003×12°681E±0'003, h10km, ML1.6/12, 4C-1D, Error ellipse: s-maj=0.3km s-min=0.2km az=183.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FOSV** | **Fossato di Vic** | **0.06** | **115** | ⇓P | Pg | 14 32 46.8 | +0.3 |
| FOSV | | | | S | Sg | 14 32 48.2 | +0.1 |
| FOSV | | | | AML | AML | | |
| FOSV | comp=E,317µm,0.4s | | | AML | AML | | |
| FOSV | comp=N,258µm,0.6s | | | AML | AML | | |
| **ATFO** | **Monte Foce - G** | **0.09** | **299** | ⇑P | Pg | 14 32 47.4 | +0.4 |
| ATFO | | | | S | Sg | 14 32 49.3 | +0.5 |
| ATFO | | | | AML | AML | | |
| ATFO | comp=E,350µm,0.6s | | | AML | AML | | |
| ATFO | comp=N,329µm,0.4s | | | AML | AML | | |
| **MURB** | **Monte Urbino** | **0.13** | **243** | ⇑P | Pg | 14 32 48.0 | +0.6 |
| MURB | | | | S | Sg | 14 32 50.8 | +1.2 |
| **SSFR** | **Montelago di S** | **0.14** | **33** | P | Pg | 14 32 48.1 | +0.5 |
| SSFR | | | | S | Sg | 14 32 50.6 | +0.8 |
| SSFR | | | | AML | AML | | |
| SSFR | comp=E,1540µm,0.2s | | | AML | AML | | |
| SSFR | comp=N,1890µm,0.3s | | | AML | AML | | |
| SSFR | comp=E,918µm,0.3s | | | AML | AML | | |
| SSFR | comp=N,868µm,0.2s | | | AML | AML | | |
| SSFR | comp=N,868µm,1.8s | | | AML | AML | | |
| SSFR | comp=N,1890µm,1.7s | | | AML | AML | | |
| SSFR | comp=E,1540µm,1.8s | | | AML | AML | | |
| **ATCC** | **AVT- Casa Cast** | **0.14** | **192** | ⇑P | Pg | 14 32 48.2 | +0.6 |
| ATCC | | | | S | Sg | 14 32 50.8 | +1.0 |
| ATCC | | | | AML | AML | | |
| ATCC | comp=E,336µm,0.3s | | | AML | AML | | |
| ATCC | comp=N,378µm,0.2s | | | AML | AML | | |
| ATCC | comp=E,336µm,1.7s | | | AML | AML | | |
| ATCC | comp=N,378µm,1.8s | | | AML | AML | | |
| **SNTG** | **Esanatoglia** | **0.20** | **109** | P | Pg | 14 32 49.2 | +0.6 |
| SNTG | | | | S | Sg | 14 32 52.7 | +1.2 |
| SNTG | | | | AML | AML | | |
| SNTG | comp=N,300µm,0.2s | | | AML | AML | | |
| SNTG | comp=E,107µm,1.3s | | | AML | AML | | |
| SNTG | comp=E,107µm,0.7s | | | AML | AML | | |
| **ATVO** | **AVT- Monte Val** | **0.21** | **287** | P | Pg | 14 32 49.3 | +0.5 |
| ATVO | | | | S | Sg | 14 32 52.8 | +1.1 |
| **PIEI** | **Pieia** | **0.24** | **334** | P | Pg | 14 32 49.9 | +0.6 |
| PIEI | | | | S | Sg | 14 32 54.1 | +1.4 |
| **ATPI** | **Pietralunga -** | **0.24** | **303** | P | Pg | 14 32 50.2 | +0.8 |
| ATPI | | | | S | Sg | 14 32 54.3 | +1.6 |
| **ARVD** | **Arcevia** | **0.26** | **47** | ⇑P | Pg | 14 32 50.3 | +0.6 |
| ARVD | | | | S | Sb | 14 32 55.1 | -0.6 |
| **ATTE** | **AVT- Monte Tez** | **0.27** | **243** | P | Pg | 14 32 50.3 | +0.5 |
| ATTE | | | | S | Sg | 14 32 54.7 | +1.2 |
| **EL6** | **Elcito** | **0.31** | **88** | P | Pg | 14 32 51.1 | +0.6 |
| EL6 | | | | S | Sb | 14 32 56.3 | -0.9 |
| **FDMO** | **Fiordimonte** | **0.41** | **134** | P | Pg | 14 32 53.1 | +0.6 |

*UCR **18** 14:47:54.8±0.6, 11°.55N×86°.09W, h137km±27km, MW3.5*
*CATAC **18** 14:47:56.8±0.4, 11°.41N×86°.19W, h99km±4km, ML3.5*
**ISC 18 14:47:57.3±1.7, 11°.48N±0°.06×86°.19W±0°.07, h111km±11km, n55, σ0.87/69, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NADN** | **Granada** | **0.31** | **29** | *i* P | **Pn** | **14 48 12.4** | **-0.8** |
| NADN | | | | *i* S | **Sn** | **14 48 25.2** | **+0.1** |
| NADN | | | | IAML | | 14 48 26.3 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **JAPN** | **Al SSO del Vol** | **0.50** | **84** | *i* P | **Pn** | **14 48 14.0** | **-0.2** |
| JAPN | | | | IAML | | 14 48 39.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **MASN** | **Masaya** | **0.51** | **4** | *i* P | **Pn** | **14 48 13.6** | **-0.8** |
| MASN | | | | IAML | | 14 48 33.9 | |
| | comp=Z,870nm,1.0s | | | | | | |
| **CRUN** | **El Crucero** | **0.51** | **348** | *i* P | **Pn** | **14 48 14.6** | **+0.1** |
| CRUN | | | | IAML | | 14 48 32.8 | |
| | comp=Z,9.2nm,1.0s | | | | | | |
| **RA5A7** | **El Crucero** | **0.53** | **347** | *i* P | **Pn** | **14 48 14.5** | **-0.1** |
| RA5A7 | | | | *i* S | **Sn** | **14 48 29.0** | **+1.5** |
| RA5A7 | | | | IAML | | 14 48 32.9 | |
| | comp=Z,10μm,1.0s | | | | | | |
| **MORN** | **Al O del Volca** | **0.53** | **83** | *i* P | **Pn** | **14 48 14.4** | **-0.1** |
| MORN | | | | IAML | | 14 49 03.4 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **UNAN** | **Cigeo UNAN** | **0.64** | **353** | *i* P | **Pn** | **14 48 14.5** | **-0.8** |
| UNAN | | | | *i* S | **Sn** | **14 48 29.0** | **+0.3** |
| UNAN | | | | IAML | | 14 48 31.2 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **ENAN** | **Enatrel Managu** | **0.64** | **353** | *i* P | **Pn** | **14 48 14.7** | **-0.6** |
| ENAN | | | | IAML | | 14 48 16.2 | |
| | comp=Z,11μm,1.0s | | | | | | |
| **USIM** | **UNAN** | **0.64** | **352** | *i* P | **Pn** | **14 48 14.2** | **-1.1** |
| USIM | | | | *i* S | **Sn** | **14 48 28.8** | **0.0** |
| USIM | | | | IAML | | 14 48 38.7 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **R0529** | **La Mascota** | **0.64** | **356** | *i* P | **Pn** | **14 48 14.5** | **-0.8** |
| R0529 | | | | IAML | | 14 48 37.4 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **ABCN** | **Banco Central** | **0.65** | **349** | *i* P | Pn | 14 48 08.9 | -6.5 |
| **TISN** | **Laguna Tiscapa** | **0.67** | **353** | *i* P | **Pn** | **14 48 14.9** | **-0.6** |
| TISN | | | | *i* S | **Sn** | **14 48 29.9** | **+0.8** |
| TISN | | | | IAML | | 14 48 33.0 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **R4DEC** | **Barrio San Lui** | **0.67** | **355** | *i* P | **Pn** | **14 48 15.0** | **-0.5** |
| R4DEC | | | | *i* S | **Sn** | **14 48 29.2** | **0.0** |
| R4DEC | | | | IAML | | 14 48 33.3 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **ALLN** | **Telcor Managua** | **0.68** | **353** | *i* P | **Pn** | **14 48 14.5** | **-1.1** |
| ALLN | | | | *i* S | **Sn** | **14 48 28.6** | **-0.7** |
| ALLN | | | | IAML | | 14 49 10.0 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **WILN** | **Americas 2** | **0.68** | **360** | *i* P | **Pn** | **14 48 15.0** | **-0.6** |
| WILN | | | | IAML | | 14 48 17.1 | |
| | comp=Z,800nm,1.0s | | | | | | |
| WILN | | | | *i* S | **Sn** | **14 48 30.4** | **+1.1** |
| **SAPS** | **Ciudad Sandino** | **0.72** | **343** | *i* P | **Pn** | **14 48 15.5** | **-0.4** |
| SAPS | | | | *i* S | **Sn** | **14 48 30.8** | **+0.9** |
| SAPS | | | | IAML | | 14 48 33.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **APQ2** | **Apoyeque** | **0.73** | **349** | *i* P | **Pn** | **14 48 16.6** | **+0.6** |
| APQ2 | | | | *i* S | **Sn** | **14 48 31.4** | **+1.4** |
| APQ2 | | | | IAML | | 14 48 35.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **APYN** | **Apoyeque** | **0.77** | **348** | *i* P | **Pn** | **14 48 15.8** | **-0.6** |
| APYN | | | | IAML | | 14 48 34.0 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **0.80** | **330** | *i* P | **Pn** | **14 48 16.2** | **-0.5** |
| COPN | | | | IAML | | 14 48 38.8 | |
| | comp=Z,590nm,1.0s | | | | | | |
| **HUEN** | | **0.85** | **1** | *i* P | **Pn** | **14 48 17.2** | **+0.1** |
| HUEN | | | | *i* S | **Sn** | **14 48 33.1** | **+1.0** |
| HUEN | | | | IAML | | 14 48 43.4 | |
| | comp=Z,320nm,1.0s | | | | | | |
| **BC86** | **Nagarote** | **0.86** | **335** | *i* P | **Pn** | **14 48 16.7** | **-0.5** |
| BC86 | | | | IAML | | 14 48 43.3 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **MOM2** | **El Cardon** | **1.00** | **343** | *i* P | **Pn** | **14 48 18.3** | **-0.2** |
| MOM2 | | | | *i* S | **Sn** | **14 48 35.0** | **+0.4** |
| MOM2 | | | | IAML | | 14 48 39.9 | |
| | comp=Z,540nm,1.0s | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **1.01** | **335** | *i* P | **Pn** | **14 48 18.0** | **-0.7** |
| LEVN | | | | IAML | | 14 48 41.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **VORI** | **VORI** | **1.05** | **128** | *eP* | **Pn** | **14 48 19.9** | **+0.6** |
| **VRLE** | **La Escondida,** | **1.06** | **130** | *eP* | **Pn** | **14 48 19.2** | **-0.1** |
| **GPS3** | **Bodega del ICE** | **1.08** | **132** | *eP* | **Pn** | **14 48 19.8** | **+0.3** |
| **ALIBA** | **Liberia Airpor** | **1.08** | **144** | *eP* | **Pn** | **14 48 21.0** | **+1.5** |
| **GPS2** | **Hotel Rincn d** | **1.09** | **131** | *eP* | **Pn** | **14 48 19.4** | **-0.2** |
| **MACN** | **El Madrono** | **1.09** | **334** | *i* P | **Pn** | **14 48 19.4** | **-0.2** |
| MACN | | | | IAML | | 14 48 41.7 | |
| | comp=Z,660nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **1.10** | **64** | *i* P | **Pn** | **14 48 19.0** | **-0.7** |
| ACON | | | | IAML | | 14 48 19.3 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **1.10** | **64** | *eP* | **Pn** | **14 48 19.0** | **-0.7** |
| **CNGA** | **Al SSO del Vol** | **1.13** | **334** | *i* P | **Pn** | **14 48 17.2** | **-2.8** |
| CNGA | | | | *i* S | **Sn** | **14 48 35.0** | **-2.1** |
| CNGA | | | | IAML | | 14 48 43.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **1.13** | **334** | *i* P | **Pn** | **14 48 20.0** | **0.0** |
| CNGN | | | | *i* S | **Sn** | **14 48 37.9** | **+0.7** |
| CNGN | | | | IAML | | 14 48 40.0 | |
| | comp=Z,800nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **1.13** | **334** | *eP* | **Pn** | **14 48 19.8** | **-0.3** |
| **ROCN** | **Rota Cerro Neg** | **1.17** | **332** | *i* P | **Pn** | **14 48 19.4** | **-1.0** |
| ROCN | | | | IAML | | 14 48 40.8 | |
| | comp=Z,740nm,1.0s | | | | | | |
| **DELF** | **Filadelfia** | **1.20** | **149** | *eP* | **Pn** | **14 48 22.0** | **+1.3** |
| **BRAN** | **Las Pilas** | **1.25** | **353** | *i* P | Pn | 14 48 15.6 | -5.6 |
| BRAN | | | | IAML | | 14 48 35.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **COLC** | **Colonia** | **1.26** | **130** | *eP* | **Pn** | **14 48 21.6** | **+0.2** |
| **TEL3** | **Telica 3** | **1.26** | **329** | *i* P | **Pn** | **14 48 20.9** | **-0.6** |
| **QUEN** | **Al S del Volca** | **1.28** | **330** | *i* P | **Pn** | **14 48 22.3** | **+0.6** |
| QUEN | | | | IAML | | 14 48 43.5 | |
| | comp=Z,720nm,1.0s | | | | | | |
| **TELN** | **Telica** | **1.28** | **331** | *i* P | **Pn** | **14 48 21.7** | **-0.1** |
| TELN | | | | IAML | | 14 48 43.6 | |
| | comp=Z,61nm,1.0s | | | | | | |
| **HERN** | **Volcan Telica** | **1.29** | **331** | *i* P | **Pn** | **14 48 21.8** | **0.0** |
| HERN | | | | *i* S | **Sn** | **14 48 41.0** | **+0.7** |
| HERN | | | | IAML | | 14 48 44.9 | |
| | comp=Z,580nm,1.0s | | | | | | |
| **CUI** | **Cuipilapa** | **1.29** | **129** | *eP* | **Pn** | **14 48 21.6** | **-0.2** |
| **TENO** | **El Achiote** | **1.41** | **123** | *eP* | **Pn** | **14 48 22.8** | **-0.4** |
| **CRIN** | **San Cristobal** | **1.48** | **325** | *i* P | **Pn** | **14 48 23.4** | **-0.6** |
| CRIN | | | | *i* S | **Sn** | **14 48 44.3** | **0.0** |
| CRIN | | | | IAML | | 14 48 48.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CRIN** | **San Cristobal** | **1.48** | **325** | *eP* | **Pn** | **14 48 23.8** | **-0.2** |
| **NICO** | **Nicoya** | **1.52** | **151** | *eP* | **Pn** | **14 48 24.4** | **-0.1** |
| **JTS** | **Las Juntas de** | **1.69** | **134** | *eP* | **Pn** | **14 48 26.0** | **-0.5** |
| **INDI** | **Punta indio, G** | **1.74** | **157** | *i* P | **Pn** | **14 48 26.9** | **-0.2** |
| INDI | | | | IAML | | 14 48 27.0 | |
| | comp=Z,570nm,1.0s | | | | | | |
| INDI | | | | *i* S | **Sn** | **14 48 47.1** | **-2.6** |
| **ARE1** | **Arenal 1** | **1.76** | **125** | *eP* | **Pn** | **14 48 27.1** | **-0.3** |
| **SOMN** | **Somoto** | **1.98** | **348** | *i* P | **Pn** | **14 48 31.1** | **+0.9** |
| SOMN | | | | IAML | | 14 48 31.8 | |
| | comp=Z,65nm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **1.98** | **69** | *i* P | **Pn** | **14 48 29.4** | **-0.7** |
| ESPN | | | | IAML | | 14 49 06.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CBL1** | **Cabuya** | **2.16** | **150** | *eP* | **Pn** | **14 48 32.1** | **-0.4** |
| **RAFA** | **San Farael, Vo** | **2.78** | **123** | *eP* | Pn | 14 48 08.3 | -33 |
| **BUS1** | **Rivas** | **3.07** | **128** | *eP* | **Pn** | **14 48 46.3** | **+1.6** |

**DJA 18 15:12:37.2±0.3, 8°S±6°×11°6E±°, h10km, M3.9/9, mb4.1/2, MLv3.8/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **0.83** | **283** | P | Pg | 15 12 53.2 | 0.0 |
| SRBI | | | | S | Sb | 15 13 04.7 | -0.3 |
| **DNP** | **Denpasar** | **0.91** | **243** | P | Pb | 15 12 55.2 | +0.2 |
| **TWSI** | **Taliwang, Sumb** | **0.96** | **119** | P | Pg | 15 12 55.2 | -0.6 |
| **PLAI** | **Plampang** | **1.81** | **108** | P | Pn | 15 13 08.7 | +0.2 |
| **JAGI** | **Jajag, Banyuwa** | **1.87** | **264** | P | Pn | 15 13 08.6 | -0.7 |
| **WBSI** | **Waikabubak, Su** | **3.59** | **113** | P | Pn | 15 13 33.1 | +0.1 |
| **NGJI** | **Ngawi** | **4.62** | **281** | P | Pn | 15 13 39.1 | -8.0 |
| **BSSI** | **Bau Bau, Buton** | **4.90** | **65** | P | Pn | 15 13 51.0 | -0.1 |
| **UGM** | **Wanagama** | **5.46** | **273** | P | Pn | 15 13 59.0 | +0.2 |
| | 131nm,1.8s | | | | | | |
| **EDFI** | **Ende, Flores** | **5.62** | **95** | P | Pn | 15 14 01.1 | +0.1 |

*NEIC **18** 15:16:29.0±1.4, 69°.64N±0°.05×144°.39W±0°.07, h10km±2km, Error ellipse: s-maj=8.8km s-min=4.3km az=9.0*
**AEIC 18 15:16:27.3±1.6, 69°.51N±0°.06×144°.48W±0°.08, h4km±6km, ML2.7, ML2.9/92(NEIC), Error ellipse: s-maj=8.3km s-min=3.8km az=190.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.30** | **66** | | Pg | 15 16 33.0 | +0.1 |
| C27K | | | | IAML | | 15 16 39.6 | |
| | comp=N,1μm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.44** | **340** | | Pg | 15 16 35.4 | -0.2 |
| C26K | | | | | Sg | 15 16 41.9 | +0.6 |
| **C26K** | **Camden Bay** | **0.44** | **340** | IAML | | 15 16 42.8 | |
| | comp=N,427nm,0.6s | | | | | | |
| C26K | | | | IAML | | 15 16 43.3 | |
| | comp=E,327nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.69** | **255** | | Pg | 15 16 39.9 | -0.7 |
| **D25K** | **Kavik River** | **0.69** | **255** | | Sg | 15 16 50.1 | +0.6 |
| **D27M** | **Malcolm River** | **1.27** | **100** | | Pg | 15 16 51.3 | -0.3 |
| **D27M** | **Malcolm River** | **1.27** | **100** | | Sn | 15 17 09.6 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.49** | **280** | Pn | Pg | 15 16 56.0 | +0.2 |
| C24K | | | | IAML | | 15 17 17.2 | |
| | comp=N,147nm,0.8s | | | | | | |
| C24K | | | | IAML | | 15 17 17.6 | |
| | comp=E,179nm,1.0s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.49** | **280** | | Sg | 15 17 16.1 | +1.0 |
| **D24K** | **Happy Valley** | **1.58** | **259** | | Pg | 15 16 57.7 | +0.2 |
| D24K | | | | IAML | | 15 17 22.0 | |
| | comp=E,161nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.58** | **259** | | Sg | 15 17 18.9 | +1.0 |
| **E27K** | **Coleen River** | **1.69** | **140** | | Pg | 15 16 59.5 | -0.1 |
| **E27K** | **Coleen River** | **1.69** | **140** | | Sg | 15 17 22.3 | +0.8 |
| **F26K** | **Sheenjek River** | **1.83** | **176** | | Pg | 15 17 02.1 | -0.2 |
| **F26K** | **Sheenjek River** | **1.83** | **176** | | Sg | 15 17 26.8 | +1.0 |
| **F25K** | **Christian Rive** | **1.97** | **193** | | Pb | 15 17 03.6 | -0.1 |
| F25K | | | | IAML | | 15 17 35.8 | |
| | comp=N,76nm,0.7s | | | | | | |
| F25K | | | | IAML | | 15 17 35.8 | |
| | comp=E,86nm,1.1s | | | | | | |
| **F25K** | **Christian Rive** | **1.97** | **193** | | Sg | 15 17 29.9 | -0.6 |
| **E28M** | **Babbage River** | **2.00** | **115** | | Pb | 15 17 04.0 | -0.1 |
| **TOLK** | **Toolik Lake Re** | **2.02** | **247** | | Pg | 15 17 05.9 | -0.1 |
| TOLK | | | | IAML | | 15 17 39.0 | |
| | comp=E,72nm,1.1s | | | | | | |
| TOLK | | | | IAML | | 15 17 42.0 | |
| | comp=N,80nm,1.0s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.02** | **247** | | Sg | 15 17 32.1 | -0.1 |
| **D28M** | **Stokes Point** | **2.04** | **92** | | Pb | 15 17 04.4 | -0.4 |
| **E24K** | **Your Creek** | **2.05** | **227** | | Pb | 15 17 04.7 | -0.4 |
| **BMAR** | **Burnt Mountain** | **2.09** | **181** | Pn | Pb | 15 17 06.4 | +0.7 |
| **C23K** | **Itkillik River** | **2.17** | **282** | Pn | Pn | 15 17 05.4 | +1.4 |
| C23K | | | | IAML | | 15 17 47.4 | |
| | comp=E,82nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.27** | **259** | | Pb | 15 17 09.4 | +0.6 |
| D23K | | | | IAML | | 15 17 54.2 | |
| | comp=E,47nm,0.9s | | | | | | |
| D23K | | | | IAML | | 15 17 55.2 | |
| | comp=N,54nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.36** | **214** | Pn | Pb | 15 17 08.7 | -1.6 |
| F24K | | | | IAML | | 15 17 54.1 | |
| | comp=N,43nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.37** | **234** | | Pb | 15 17 09.6 | -0.9 |
| E23K | | | | IAML | | 15 17 50.8 | |
| | comp=N,56nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.55** | **136** | | Pn | 15 17 11.0 | +1.7 |
| **E29M** | **Blow River** | **2.63** | **112** | | Pb | 15 17 12.9 | -2.0 |
| E29M | | | | IAML | | 15 17 59.1 | |
| | comp=E,34nm,0.9s | | | | | | |
| E29M | | | | IAML | | 15 18 00.6 | |
| | comp=N,36nm,0.7s | | | | | | |
| **G25K** | **Bearman Lake** | **2.82** | **193** | | Pb | 15 17 15.8 | -2.3 |
| **G27K** | **Doyon Strip** | **2.91** | **157** | | Pn | 15 17 16.9 | +2.6 |
| **D22K** | **Ayikyak River** | **2.99** | **262** | | Pb | 15 17 19.0 | -2.1 |
| **E22K** | **Anaktuvuk Pass** | **3.00** | **246** | | Pn | 15 17 17.1 | +1.6 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **203** | | Pn | 15 17 17.6 | +1.6 |
| G24K | | | | IAML | | 15 18 11.2 | |
| | comp=E,40nm,0.7s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19** | **289** | Pn | Pn | 15 17 19.1 | +1.0 |
| B22K | | | | IAML | | 15 18 16.2 | |
| | comp=N,34nm,1.2s | | | | | | |
| **G29M** | **Pine Creek** | **3.55** | **134** | | Pn | 15 17 25.2 | +2.1 |
| **G29M** | **Pine Creek** | **3.55** | **134** | IAML | | 15 18 36.8 | |
| | comp=N,26nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.56** | **277** | Pn | Pn | 15 17 24.8 | +1.7 |
| B21K | | | | IAML | | 15 18 08.2 | |
| | comp=E,21nm,1.4s | | | | | | |
| B21K | | | | IAML | | 15 18 43.8 | |
| | comp=N,26nm,1.2s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.67** | **269** | | Pn | 15 17 26.4 | +1.7 |
| **H24K** | **Noodor Dome** | **3.91** | **201** | Pn | Pn | 15 17 29.3 | +1.2 |
| H24K | | | | IAML | | 15 18 35.9 | |
| | comp=N,13nm,1.0s | | | | | | |
| H24K | | | | IAML | | 15 18 41.9 | |
| | comp=E,15nm,1.8s | | | | | | |
| **H29M** | **Whitestone** | **4.03** | **142** | | Pn | 15 17 31.6 | +1.8 |
| **H29M** | **Whitestone** | **4.03** | **142** | IAML | | 15 18 22.7 | |
| | comp=E,17nm,0.7s | | | | | | |
| H29M | | | | IAML | | 15 18 42.3 | |
| | comp=N,17nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.05** | **240** | | Pn | 15 17 31.7 | +1.7 |
| **F21K** | **Alatna River** | **4.05** | **240** | IAML | | 15 18 41.3 | |
| | comp=N,14nm,1.0s | | | | | | |
| F21K | | | | IAML | | 15 18 43.7 | |
| | comp=E,17nm,1.1s | | | | | | |
| **H23K** | **Yukon River** | **4.17** | **210** | | Pn | 15 17 33.8 | +2.1 |
| **I26K** | **Coal Creek Min** | **4.25** | **172** | Pn | Pn | 15 17 35.8 | +3.0 |
| **I28M** | **Miner Creek** | **4.44** | **155** | Pn | Pn | 15 17 37.9 | +2.6 |
| **G31M** | **Satah River** | **4.61** | **119** | Pn | Pn | 15 17 39.7 | +2.2 |
| G31M | | | | IAML | | 15 19 00.4 | |
| | comp=E,12nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.77** | **206** | Pn | Pn | 15 17 42.6 | +2.8 |
| **I29M** | **Ogilvie Camp,** | **4.80** | **147** | IAML | | 15 19 06.7 | |
| | comp=N,11nm,0.7s | | | | | | |
| **MDM** | **Murphy Dome** | **4.80** | **199** | | Pn | 15 17 41.9 | +1.6 |
| MDM | | | | IAML | | 15 19 11.3 | |
| | comp=E,10nm,2.5s | | | | | | |
| MDM | | | | IAML | | 15 19 20.8 | |
| | comp=N,7.7nm,4.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.85** | **245** | Pn | Pn | 15 17 44.2 | +3.3 |
| F20K | | | | IAML | | 15 19 19.2 | |
| | comp=E,7.4nm,1.2s | | | | | | |
| F20K | | | | IAML | | 15 19 24.6 | |
| | comp=N,9.7nm,2.5s | | | | | | |
| **IL31** | | **4.85** | **192** | Pn | Pn | 15 17 44.3 | +3.4 |
| **EGAK** | **Eagle** | **4.93** | **163** | | Pn | 15 17 45.4 | +3.5 |
| EGAK | | | | IAML | | 15 18 45.9 | |
| | comp=N,9.1nm,3.7s | | | | | | |
| EGAK | | | | IAML | | 15 19 22.7 | |
| | comp=N,9.6nm,2.6s | | | | | | |
| **J25K** | **Salcha River,** | **4.93** | **184** | Pn | Pn | 15 17 46.6 | +4.5 |
| J25K | | | | IAML | | 15 19 27.6 | |
| | comp=N,6.6nm,3.5s | | | | | | |
| J25K | | | | IAML | | 15 19 51.0 | |
| | comp=E,8.9nm,3.2s | | | | | | |
| **IMAR** | **Indian Mountai** | **4.99** | **229** | Pn | Pn | 15 17 45.1 | +2.3 |
| **D19K** | **Kuna River** | **5.01** | **265** | IAML | | 15 19 16.2 | |
| | comp=E,7.2nm,2.5s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.01** | **223** | Pn | Pn | 15 17 44.9 | +1.8 |
| H21K | | | | IAML | | 15 19 19.3 | |
| | comp=N,8.2nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.04** | **175** | IAML | | 15 18 51.0 | |
| | comp=N,6.4nm,0.6s | | | | | | |
| J26L | | | | IAML | | 15 19 14.7 | |
| | comp=E,8.5nm,1.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05** | **196** | Pn | Pn | 15 17 46.1 | +2.4 |
| CCB | | | | IAML | | 15 20 00.5 | |
| | comp=E,6.4nm,4.6s | | | | | | |
| CCB | | | | IAML | | 15 20 31.9 | |
| | comp=N,6.0nm,4.5s | | | | | | |
| **E19K** | **Redstone River** | **5.12** | **252** | Pn | Pn | 15 17 46.3 | +1.6 |
| E19K | | | | IAML | | 15 19 26.4 | |
| | comp=E,8.0nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.32** | **140** | Pn | Pn | 15 17 49.6 | +2.1 |
| I30M | | | | IAML | | 15 18 53.3 | |
| | comp=N,7.0nm,2.1s | | | | | | |
| **SCRK** | **Sand Creek** | **5.56** | **178** | Pn | Pn | 15 17 53.9 | +3.1 |
| **K27K** | **Chicken** | **5.59** | **169** | Pn | Pn | 15 17 54.5 | +3.5 |
| **F19K** | **Shaleruckik Mo** | **5.63** | **248** | Pn | Pn | 15 17 53.3 | +1.6 |
| **G19K** | **Purcell Mounta** | **5.84** | **241** | Pn | Pn | 15 17 56.6 | +2.0 |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **208** | Pn | Pn | 15 17 59.4 | +2.5 |
| **E18K** | **Tukpahlearik C** | **6.29** | **258** | Pn | Pn | 15 18 02.0 | +1.4 |
| **K29M** | **Barlow Dome** | **6.32** | **151** | Pn | Pn | 15 18 03.5 | +2.3 |
| **BCAR** | **Beaver Creek A** | **6.56** | **169** | Pn | Pn | 15 18 07.8 | +3.3 |
| **L27K** | **Beaver Creek,** | **6.56** | **169** | Pn | Pn | 15 18 08.4 | +3.9 |
| **J20K** | **Nowinta River** | **6.56** | **220** | Pn | Pn | 15 18 06.5 | +2.1 |
| **M27K** | **Edge Creek, AK** | **7.26** | **170** | Pn | Pn | 15 18 18.1 | +4.0 |
| **M29M** | **Somme Creek** | **7.50** | **158** | Pn | Pn | 15 18 20.5 | +3.0 |

*NEIC **18** 15:17:15.7±2.3, 69°.47N±0°.01×144°.03W±0°.03, h10km±1km, Error ellipse: s-maj=3.3km s-min=2.1km az=4.0*
**AEIC 18 15:17:15.3±3.3, 69°.43N±0°.02×144°.11W±0°.04, h5km±5km, ML2.2, ML2.6/30(NEIC), Error ellipse: s-maj=2.3km s-min=2.1km az=158.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.24** | **35** | | Pg | 15 17 19.7 | -0.3 |
| C27K | | | | | Sg | 15 17 22.6 | -0.6 |
| **C27K** | **Jago River** | **0.24** | **35** | IAML | | 15 17 23.2 | |
| | comp=N,1μm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.56** | **331** | | Pg | 15 17 26.4 | +0.3 |
| C26K | | | | | Sg | 15 17 34.5 | +1.1 |
| **C26K** | **Camden Bay** | **0.56** | **331** | IAML | | 15 17 35.0 | |
| | comp=E,184nm,0.6s | | | | | | |
| C26K | | | | IAML | | 15 17 35.7 | |
| | comp=N,367nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.81** | **263** | | Pg | 15 17 30.5 | -0.2 |
| D25K | | | | | Sb | 15 17 42.3 | -0.8 |
| **D27M** | **Malcolm River** | **1.13** | **98** | | Pg | 15 17 36.9 | 0.0 |
| D27M | | | | | Sb | 15 17 52.5 | +0.1 |
| **D27M** | **Malcolm River** | **1.13** | **98** | IAML | | 15 17 57.6 | |
| | comp=N,122nm,0.2s | | | | | | |
| **E27K** | **Coleen River** | **1.55** | **143** | | Pg | 15 17 44.8 | -0.1 |
| E27K | | | | | Sg | 15 18 05.5 | +0.6 |
| **E27K** | **Coleen River** | **1.55** | **143** | IAML | | 15 18 07.1 | |
| | comp=E,68nm,0.7s | | | | | | |
| E27K | | | | IAML | | 15 18 08.5 | |
| | comp=N,62nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.64** | **282** | | Sg | 15 18 08.8 | +1.0 |
| **F26K** | **Sheenjek River** | **1.74** | **180** | | Pb | 15 17 48.1 | +0.4 |
| F26K | | | | | Sg | 15 18 10.8 | -0.4 |
| **F26K** | **Sheenjek River** | **1.74** | **180** | IAML | | 15 18 16.4 | |
| | comp=E,61nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.84** | **115** | | Pg | 15 17 50.0 | -0.5 |
| **E28M** | **Babbage River** | **1.84** | **115** | IAML | | 15 18 22.7 | |
| | comp=N,29nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **1.93** | **198** | | Pb | 15 17 51.5 | +0.6 |
| **F25K** | **Christian Rive** | **1.93** | **198** | IAML | | 15 18 20.3 | |
| | comp=N,50nm,0.4s | | | | | | |
| F25K | | | | IAML | | 15 18 20.8 | |
| | comp=E,59nm,0.3s | | | | | | |
| **FYU** | **Fort Yukon** | **2.91** | **189** | Pn | Pn | 15 18 01.1 | -1.0 |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **249** | Pn | Pn | 15 18 03.6 | -1.1 |
| E22K | | | | IAML | | 15 18 25.2 | |
| | comp=E,11nm,1.0s | | | | | | |
| E22K | | | | IAML | | 15 18 26.4 | |
| | comp=N,13nm,1.2s | | | | | | |
| **D22K** | **Ayikyak River** | **3.12** | **264** | Pn | Pn | 15 18 05.3 | +0.3 |
| D22K | | | | IAML | | 15 18 31.7 | |
| | comp=N,30nm,1.3s | | | | | | |
| D22K | | | | IAML | | 15 18 46.2 | |
| | comp=E,21nm,1.6s | | | | | | |
| **I28M** | **Miner Creek** | **4.31** | **156** | Pn | Pn | 15 18 22.5 | +1.1 |
| I28M | | | | IAML | | 15 19 00.3 | |
| | comp=E,11nm,1.0s | | | | | | |
| I28M | | | | IAML | | 15 19 18.3 | |
| | comp=N,9.5nm,3.6s | | | | | | |
| **EGAK** | **Eagle** | **4.81** | **165** | Pn | Pn | 15 18 30.1 | +1.8 |
| **D19K** | **Kuna River** | **5.13** | **266** | Pn | Pn | 15 18 34.0 | +1.3 |
| **I30M** | **Mount Dempster** | **5.17** | **141** | Pn | Pn | 15 18 34.7 | +1.4 |
| I30M | | | | IAML | | 15 19 48.4 | |
| | comp=N,5.8nm,2.7s | | | | | | |

*IDC **18** 15:28:34.4±8.8, 4°.02N×124°.23E, h326km±99km, mb3.4/11, mbtmp4.1/11, Error ellipse: s-maj=37.8km s-min=12.4km az=82.0*
*DJA **18** 15:28:36.5±0.8, 4°N±7°×12°4E±°, h356km±11km, M4.3/11, mb4.3/7, mB4.7/5, MLv4.5/11, Mw(mB)3.9/5*
*NEIC **18** 15:28:37.4±1.3, 4°.1N±0°.1×124°.5E±0°.1, h358km±14km, mb4.1/13, Error ellipse: s-maj=17.7km s-min=12.7km az=223.0*
**ISC 18 15:28:35.9±0.6, 4°.05N±0°.07×124°.31E±0°.09, h339km, n55, σ1.22/54, mb3.8/15, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **3.47** | **185** | P | **Pn** | **15 29 40.8** | **+1.9** |
| **GTOI** | **Gorontalo** | **3.63** | **201** | P | **Pn** | **15 29 42.2** | **+1.6** |
| **MRSI** | **Marisa** | **4.27** | **214** | P | **Pn** | **15 29 44.5** | **-2.6** |
| **TNTI** | **Ternate** | **4.47** | **137** | | **Pn** | **15 29 50.4** | **+1.1** |
| **TNTI** | **Ternate** | **4.47** | **137** | P | **Pn** | **15 29 50.7** | **+1.5** |
| **TOLI2** | **Tolitoli** | **4.58** | **230** | | **Pn** | **15 29 53.1** | **+2.7** |
| **LUWI** | **Luwuk** | **5.29** | **197** | Pn | Pn | 15 30 02.2 | +3.9 |
| **LUWI** | **Luwuk** | **5.29** | **197** | P | **Pn** | **15 29 59.7** | **+1.4** |
| | 50nm,0.9s,2μm0.5nm | | | | | | |
| **LBMI** | **Labuha** | **5.65** | **146** | P | **Pn** | **15 30 02.9** | **+0.5** |
| **MYLDM** | **Lahad Datu** | **5.90** | **281** | Pn | **Pn** | **15 30 08.4** | **+3.2** |
| **SANI** | **Sanana** | **6.29** | **164** | P | **Pn** | **15 30 08.9** | **-0.9** |
| | 53nm,0.5s,0.7nm | | | | | | |
| **NLAI** | **Namlea** | **7.76** | **159** | P | **Pn** | **15 30 27.0** | **-0.1** |
| | 29nm,0.9s,901nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.30** | **284** | | **P** | **15 30 36.2** | **-0.8** |
| **FAKI** | **Fak Fak** | **10.53** | **131** | P | **P** | **15 31 02.3** | **+0.5** |
| **FAKI** | **Fak Fak** | **10.53** | **131** | P | **P** | **15 31 01.8** | **0.0** |
| **SBUM** | **Sibu** | **12.17** | **263** | P | **Pn** | **15 31 24.0** | **+4.1** |
| **SOEI** | **Soe** | **13.72** | **180** | P | P | 15 31 27.5 | -10 |

comp=Z,6.0nm,0.8s
**SONM Songino Array 46.26 343** P **P** **15 36 27.4 -1.1**
comp=Z,1.5nm,0.8s,baz=166,slow=8.9,SNR=6.6
comp=Z,1.5nm,0.8s
**MKAR Makanchi Array 55.93 326** P **P** **15 37 40.2 +0.5**
comp=Z,0.8nm,0.3s,baz=122,slow=7.4,SNR=28
MKAR PcP **PcP** **15 38 32.1 -1.7**
comp=Z,0.5nm,0.6s,baz=146,slow=3.3,SNR=5.0
comp=Z,0.8nm,0.3s
**PETK Petropavlovsk- 56.07 24** P **P** **15 37 41.8 +1.3**
comp=Z,3.8nm,0.9s,baz=214,slow=5.0,SNR=1.7
comp=Z,3.8nm,0.9s
**ZALV Zalesovo Beam 59.22 334** P **P** **15 38 01.5 -0.8**
comp=Z,0.4nm,0.4s,baz=129,slow=6.8,SNR=2.2
comp=Z,0.4nm,0.4s
**KURBB Kurchatov Arra 60.18 328** P **P** **15 38 08.2 -0.6**
comp=Z,1.9nm,0.2s,baz=128,slow=6.1,SNR=14
comp=Z,1.9nm,0.2s
**KURK Kurchatov 60.19 328** P **P** **15 38 08.5 -0.3**
KURK IAmb IAmb 15 38 10.1
comp=Z,5.4nm,0.8s
**BVAR Borovoye Array 65.74 328** P **P** **15 38 44.8 -0.3**
comp=Z,1.7nm,0.9s,baz=123,slow=5.3,SNR=5.6
comp=Z,1.7nm,0.9s

*IDC **18** 15:55:50.8±1.2,58°.71S×25°.15W,h0km,mb4.1/3,*
*mbtmp4.1/3,Error ellipse: s-maj=52.6km s-min=43.2km az=53.0*
**ISC 18 15:55:55.1±1.0,58°.7S±0°.2×25°.2W±0°.3,h28km,n13,**
**σ0s66/10,mb4.0/3,5C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **13.97** | **156** | ⇑P | **Pn** | **15 59 11.1** | **+0.3** |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **14.16** | **159** | ⇑P | **Pn** | **15 59 13.9** | **+0.4** |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **14.36** | **156** | ⇑P | **Pn** | **15 59 16.2** | **-0.1** |
| | comp=Z,1.1nm,0.3s,baz=327,slow=15 | | | | | | |
| **SNAA** | **Sanae** | **15.92** | **154** | ⇑P | **Pn** | **15 59 36.5** | **-0.3** |
| | comp=Z,46nm,0.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **17.43** | **151** | ⇑P | **P** | **15 59 56.8** | **-0.2** |
| | comp=Z,110nm,0.6s | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **45.57** | **110** | T | T | 16 53 45.1 | |
| | baz=225,slow=75,SNR=5.1 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **45.58** | **110** | T | T | 16 53 48.0 | |
| | baz=225,slow=75,SNR=6.5 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **45.59** | **110** | T | T | 16 53 44.2 | |
| | baz=225,slow=75,SNR=4.6 | | | | | | |
| **LPAZ** | **La Paz** | **52.75** | **305** | P | **P** | **16 05 07.8** | **-0.3** |
| | comp=Z,0.7nm,0.4s,baz=150,slow=3.2,SNR=2.6 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.86** | **27** | P | **P** | **16 07 33.4** | **+0.5** |
| | comp=Z,1.6nm,0.6s,baz=196,slow=5.3,SNR=8.3 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **96.17** | **161** | P | **P** | **16 09 20.4** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=173,slow=4.5,SNR=7.0 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **149.76** | **89** | PKPbc | **PKPbc** | **16 15 40.0** | **-1.3** |
| | comp=Z,0.4nm,0.4s,baz=232,slow=1.6,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **152.61** | **308** | PKPbc | **PKiKP** | **16 15 48.1** | **+0.7** |
| | comp=Z,2.2nm,0.8s,baz=146,slow=2.1,SNR=18 | | | | | | |

*NEIC **18** 16:02:04.5±0.8,34°.299N×0°.009×116°.94W±0°.01,*
*h5km±7km,Error ellipse: s-maj=1.8km s-min=0.9km az=49.0*
**PAS 18 16:02:05.1±0.9,34°.30N±0°.01×116°.93W±0°.01,h4km±5km,**
**ML3.2**/287,**ML3.0**/58(NEIC),**Error ellipse: s-maj=2.1km**
**s-min=1.3km az=182.0,Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BBRC** | **Big Bear Solar** | **0.04** | **163** | | Sg | 16 02 08.0 | +0.8 |
| **SVD** | **Seven Oaks Dam** | **0.23** | **215** | | Pg | 16 02 09.7 | 0.0 |
| SVD | | | | | Sg | 16 02 13.3 | +0.5 |
| **HLNC** | **Highland** | **0.29** | **233** | | Pg | 16 02 10.9 | +0.1 |
| HLNC | | | | | Sg | 16 02 15.4 | +0.8 |
| **CFT** | **Crafton Hills** | **0.30** | **209** | | Pg | 16 02 11.1 | +0.1 |
| CFT | | | | | Sg | 16 02 15.7 | +0.8 |
| **CFSC** | **Central Fire S** | **0.35** | **236** | | Pg | 16 02 12.0 | +0.2 |
| **CSP** | **Cedar Springs** | **0.35** | **270** | | Pg | 16 02 11.8 | -0.2 |
| **BBSC** | **Beaumont Base** | **0.38** | **186** | | Pg | 16 02 12.6 | +0.2 |
| **CLTC** | **Calectric** | **0.38** | **237** | | Pg | 16 02 12.8 | +0.4 |
| **VTV** | **Victorville** | **0.42** | **309** | | Pg | 16 02 12.9 | -0.2 |
| **PEC** | **Perris** | **0.45** | **205** | | Sg | 16 02 19.7 | +0.2 |
| **RSBC** | **Riverside Bore** | **0.46** | **225** | | Pg | 16 02 13.9 | -0.1 |
| RSBC | | | | | Sg | 16 02 20.4 | +0.4 |
| **FON** | **Fontana** | **0.46** | **245** | | Pg | 16 02 14.1 | 0.0 |
| FON | | | | | Sg | 16 02 20.6 | +0.6 |
| **RVR** | **Riverside** | **0.48** | **230** | | Sg | 16 02 20.6 | +0.1 |
| **GTM** | **Goat Mountain** | **0.48** | **90** | | Pg | 16 02 13.7 | -0.6 |
| GTM | | | | | Sg | 16 02 19.9 | -0.6 |
| **ADO** | **Adelanto Recei** | **0.48** | **301** | | Pg | 16 02 14.5 | +0.1 |
| **BLAC** | **Blackrock camp** | **0.51** | **117** | | Pg | 16 02 14.9 | +0.1 |
| BLAC | | | | | Sg | 16 02 21.8 | +0.3 |
| **EW2** | **E Wide Canyon** | **0.56** | **129** | | Sg | 16 02 23.7 | +0.4 |
| **RRX** | **Edison Barstow** | **0.58** | **355** | | Pg | 16 02 16.1 | -0.1 |
| **MLSC** | **Mira Loma** | **0.60** | **241** | | Sg | 16 02 24.4 | +0.1 |
| **POB** | **Polly Butte** | **0.61** | **179** | | Pg | 16 02 16.6 | -0.2 |
| POB | | | | | Sg | 16 02 24.8 | +0.1 |
| **DGR** | **Domenigoni Val** | **0.65** | **186** | | Sg | 16 02 25.8 | -0.2 |
| **GVDA** | **Garner Valley** | **0.66** | **161** | | Pg | 16 02 17.4 | -0.4 |
| GVDA | | | | | Sg | 16 02 26.3 | -0.1 |
| **CRNC** | **Corona** | **0.67** | **231** | | Pg | 16 02 17.4 | -0.5 |
| **CHNC** | **Chino** | **0.69** | **244** | | Sg | 16 02 17.7 | -0.6 |
| **BACC** | **Bachelor Mtn.** | **0.69** | **187** | | Sg | 16 02 26.9 | -0.5 |
| **HEC** | **Hector,Ludlow** | **0.72** | **43** | | Pg | 16 02 18.7 | -0.3 |
| HEC | | | | | Sg | 16 02 28.7 | +0.2 |
| **MURC** | **Murrieta** | **0.73** | **197** | | Pg | 16 02 18.6 | -0.5 |
| **PSRC** | **Puddingstone R** | **0.75** | **254** | | Sg | 16 02 29.5 | +0.2 |
| **TPC** | **Twentynine Pal** | **0.76** | **104** | | Pg | 16 02 19.3 | -0.3 |
| **ELS** | **Elsinore Mount** | **0.77** | **212** | Pg | Pg | 16 02 19.2 | -0.7 |
| ELS | | | | IAML | | 16 02 29.5 | |
| | comp=E,673nm,0.3s | | | | | | |
| ELS | | | | IAML | | 16 02 30.7 | |
| | comp=N,483nm,0.3s | | | | | | |
| **ELS** | **Elsinore Mount** | **0.77** | **212** | | Sg | 16 02 29.2 | -0.5 |
| **HOLC** | **Holcomb Ridge** | **0.77** | **282** | | Pg | 16 02 19.4 | -0.5 |
| HOLC | | | | | Sg | 16 02 29.8 | -0.1 |
| **HYS** | **Haystack Butte** | **0.77** | **317** | | Pg | 16 02 19.4 | -0.5 |
| HYS | | | | | Sg | 16 02 29.8 | -0.1 |
| **PFO** | **Pinyon Flats O** | **0.79** | **150** | | Pg | 16 02 19.7 | -0.6 |
| PFO | | | | IAML | | 16 02 34.9 | |
| | comp=N,382nm,0.3s | | | | | | |
| PFO | | | | IAML | | 16 02 35.0 | |
| | comp=N,493nm,0.3s | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.79** | **150** | | Sg | 16 02 29.9 | -0.7 |
| **PMD** | **Palm Desert** | **0.80** | **144** | | Sg | 16 02 30.0 | -0.7 |
| **BELC** | **Belle Mtn. Jos** | **0.83** | **111** | | Pg | 16 02 20.7 | -0.3 |
| **SBB** | **Saddle Back Bu** | **0.83** | **298** | | Pg | 16 02 20.4 | -0.6 |
| **BZNA** | **Buzz No.'s Pla** | **0.83** | **164** | | Sg | 16 02 31.9 | -0.1 |
| **FRD** | **Ford Ranch, An** | **0.85** | **161** | | Sg | 16 02 32.2 | -0.2 |
| **CHFC** | **Chilao Flat St** | **0.90** | **273** | | Sg | 16 02 33.6 | -0.6 |
| **LRRC** | **Littlerock Res** | **0.93** | **284** | | Pg | 16 02 22.3 | -0.6 |
| LRRC | | | | | Sg | 16 02 34.9 | -0.2 |
| **MWC** | **Mount Wilson** | **0.93** | **266** | | Sg | 16 02 35.0 | -0.1 |
| **RHC** | **Rose Hills Cem** | **0.94** | **252** | | Pg | 16 02 23.0 | -0.2 |
| **GSC** | **Goldstone, Bar** | **1.01** | **6** | Pg | Pg | 16 02 23.8 | -0.6 |
| GSC | | | | IAML | | 16 02 42.8 | |
| | comp=N,449nm,0.4s | | | | | | |
| **CTCC** | **Cactus City** | **1.01** | **129** | | Pg | 16 02 24.1 | -0.4 |
| **CJV** | **Casa Juvan** | **1.03** | **283** | | Sg | 16 02 37.6 | -0.5 |
| **PASC** | **Pasadena Art C** | **1.04** | **263** | Pg | Pg | 16 02 24.1 | -1.0 |
| **PASC** | **Pasadena Art C** | **1.04** | **263** | | Sg | 16 02 38.1 | -0.6 |
| **PASC** | **Pasadena Art C** | **1.04** | **263** | IAML | | 16 02 41.7 | |
| | comp=N,558nm,0.3s | | | | | | |
| PASC | | | | IAML | | 16 02 42.2 | |
| | comp=E,443nm,0.4s | | | | | | |
| **EDW2** | **Edwards Air Fo** | **1.05** | **304** | | Pg | 16 02 24.4 | -0.8 |
| **BORC** | **Borrego Spring** | **1.11** | **157** | | Sg | 16 02 39.9 | -1.0 |
| **DECC** | **Green Verdugo** | **1.16** | **268** | | Pg | 16 02 26.4 | -1.0 |
| **CCAC** | **Calif City Air** | **1.23** | **314** | | Pg | 16 02 27.6 | -1.1 |
| CCAC | | | | IAML | | 16 02 47.6 | |
| | comp=N,455nm,0.6s | | | | | | |
| **109C** | **Camp Elliot, M** | **1.41** | **186** | | Pn | 16 02 30.0 | -1.6 |
| **TKX** | **Tecate** | **1.75** | **171** | | Pn | 16 02 35.5 | -0.8 |
| TKX | | | | IAML | | 16 03 00.5 | |
| | comp=N,246nm,0.2s | | | | | | |
| **RMX** | **La Rumorosa** | **1.84** | **157** | Pn | Pn | 16 02 37.2 | -0.4 |
| RMX | | | | IAML | | 16 03 06.5 | |
| | comp=E,68nm,0.5s | | | | | | |
| **YUH** | **Yuha Desert** | **1.85** | **153** | | Pn | 16 02 36.1 | -1.6 |
| **ISA** | **Isabella, Lake** | **1.86** | **318** | | Pn | 16 02 38.6 | +0.8 |
| ISA | | | | IAML | | 16 03 05.1 | |
| | comp=E,64nm,0.7s | | | | | | |
| **GWY** | **Greenwater Val** | **1.90** | **7** | | Pn | 16 02 39.2 | +0.8 |
| **CBX** | **Cerro Bola** | **1.99** | **173** | Pn | Pn | 16 02 39.8 | +0.1 |
| **BLYC** | **Blythe** | **2.08** | **105** | Pn | Pn | 16 02 38.9 | -1.9 |
| BLYC | | | | IAML | | 16 03 13.3 | |
| | comp=E,118nm,0.5s | | | | | | |
| BLYC | | | | IAML | | 16 03 14.3 | |
| | comp=N,110nm,0.5s | | | | | | |
| **BCW** | **Bitter Crk WRg** | **2.14** | **288** | | Pn | 16 02 43.1 | +1.3 |
| **GLA** | **Glamis** | **2.15** | **125** | | Pn | 16 02 40.7 | -1.1 |
| GLA | | | | IAML | | 16 03 19.5 | |
| | comp=E,152nm,0.6s | | | | | | |
| GLA | | | | IAML | | 16 03 21.1 | |
| | comp=N,126nm,0.6s | | | | | | |
| **ESJX** | **Sierra Juarez** | **2.43** | **160** | | Pn | 16 02 45.2 | -0.6 |
| ESJX | | | | IAML | | 16 03 14.1 | |
| | comp=N,76nm,0.1s | | | | | | |
| ESJX | | | | IAML | | 16 03 14.1 | |
| | comp=E,77nm,0.1s | | | | | | |
| **SHPR** | **Sheep Range** | **2.64** | **33** | | Pn | 16 02 47.9 | -0.7 |
| **W13A** | **Hualapai Mount** | **2.64** | **72** | | Pn | 16 02 47.1 | -1.5 |
| W13A | | | | IAML | | 16 03 32.3 | |
| | comp=N,28nm,0.4s | | | | | | |
| **TPNV** | **Topopah Spring** | **2.70** | **12** | Pn | Pn | 16 02 48.7 | -0.8 |
| TPNV | | | | IAML | | 16 03 33.5 | |
| | comp=N,78nm,0.4s | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.71** | **353** | | Pn | 16 02 49.8 | +0.3 |
| GRAC | | | | IAML | | 16 03 36.1 | |
| | comp=E,82nm,0.6s | | | | | | |
| GRAC | | | | IAML | | 16 03 36.5 | |
| | comp=N,83nm,0.6s | | | | | | |
| **GMN** | **Gold Mountain** | **3.01** | **355** | | Pn | 16 02 53.9 | +0.1 |
| **113A** | **Mohawk Valley,** | **3.05** | **119** | | Pn | 16 02 51.8 | -2.3 |
| **VTX** | **Valle De La Tr** | **3.06** | **161** | Pn | Pn | 16 02 54.0 | -0.3 |
| VTX | | | | IAML | | 16 04 38.7 | |
| | comp=N,22nm,0.1s | | | | | | |
| **DSP** | **Deep Springs** | **3.18** | **345** | | Pn | 16 02 56.3 | +0.4 |
| **Y14A** | **Wickenburg** | **3.28** | **95** | | Pn | 16 02 56.1 | -1.2 |
| Y14A | | | | IAML | | 16 03 50.3 | |
| | comp=N,33nm,0.3s | | | | | | |
| Y14A | | | | IAML | | 16 03 51.4 | |
| | comp=E,28nm,0.4s | | | | | | |
| **PRN** | **Pahroc Range** | **3.46** | **26** | Pn | Pn | 16 03 00.1 | +0.2 |
| **LCMT** | **Little Creek M** | **4.04** | **47** | | Pn | 16 03 07.6 | -0.3 |
| **KNB** | **Kanab** | **4.31** | **50** | Pn | Pn | 16 03 11.3 | -0.2 |
| **U15A** | **North Rim** | **4.35** | **59** | Pn | Pn | 16 03 12.0 | -0.3 |
| **CCUT** | **Cedar City** | **4.35** | **41** | Pn | Pn | 16 03 12.5 | +0.2 |
| **PSUT** | **Pine Spring** | **4.90** | **30** | | Pn | 16 03 20.2 | +0.4 |

*DJA **18** 16:06:45.0±0.7,8°.5±9°×11°.6E±°,h14km±6km,M3.7/7,*
*mb3.9/1,MLv3.5/7*
*IDC **18** 16:06:52.8±3.6,9°.01S×116°.88E,h0km,mb3.1/3,*
*mbtmp3.2/3,Error ellipse: s-maj=259.5km s-min=28.8km az=49.0*
**ISC 18 16:06:44.2±1.2,8°.2S±0°.1×116°.24E±0°.05,h10km,n10,**
**σ0s50/11,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRBI** | **Singaraja** | **1.03** | **278** | P | **Pn** | **16 07 05.1** | **+0.4** |
| SRBI | | | | S | **Sb** | **16 07 18.4** | **+0.7** |
| **DNP** | **Denpasar** | **1.12** | **246** | P | **Pb** | **16 07 05.4** | **-0.2** |
| **PLAI** | **Plampang** | **1.63** | **112** | P | **Pn** | **16 07 13.8** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.08** | **263** | P | **Pn** | **16 07 19.0** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **3.42** | **115** | P | **Pn** | **16 07 37.8** | **+0.2** |
| **PWJI** | **Pagerwojo** | **4.40** | **272** | P | **Pn** | **16 07 51.2** | **+0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.69** | **64** | P | **Pn** | **16 07 55.1** | **0.0** |
| **EDFI** | **Ende, Flores** | **5.41** | **96** | P | **Pn** | **16 08 05.1** | **0.0** |
| **WRA** | **Warramunga Arr** | **21.04** | **126** | P | **P** | **16 11 27.9** | **-0.5** |
| | 0.6nm,0.6s,baz=300,slow=12,SNR=8.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.85** | **134** | P | **P** | **16 11 47.4** | **-0.5** |
| | 0.4nm,0.7s,baz=308,slow=8.7,SNR=12 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*ISK **18** 16:07:55.8,36°.88N×27°.57E,h6km,ML2.7/14*
*AFAD **18** 16:07:55.9±0.0,36°.86N×27°.57E,h10km±1km,ML2.7*
*THE **18** 16:07:56.1,36°.88N×27°.59E,h6km±3km,ML2.8/1,Error ellipse: s-maj=3.4km s-min=0.4km az=204.0*
**ISC 18 16:07:56.3±0.8,36°.88N±0°.02×27°.57E±0°.02,h9km±7km,**
**n34,σ0s62/58,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAT** | **Datca** | **0.15** | **177** | Pg | **Pg** | **16 07 59.4** | **-0.2** |
| DAT | | | | Sg | **Sg** | **16 08 01.9** | **0.0** |
| **DAT** | **Datca** | **0.15** | **177** | P | **Pg** | **16 07 59.6** | **0.0** |
| DAT | | | | S | **Sg** | **16 08 02.0** | **0.0** |
| DAT | | | | *i* AML | AML | 16 08 02.0 | |
| | comp=N,2μm,0.2s | | | | | | |
| DAT | | | | *i* AML | AML | 16 08 02.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **DAT** | **Datca** | **0.15** | **177** | P | **Pg** | **16 07 59.6** | **0.0** |
| DAT | | | | S | **Sg** | **16 08 01.9** | **0.0** |
| **BDRM** | **Kayabasi** | **0.21** | **332** | P | **Pg** | **16 08 00.7** | **+0.1** |
| BDRM | | | | S | **Sg** | **16 08 04.2** | **+0.6** |
| BDRM | | | | *i* AML | AML | 16 08 05.0 | |
| | comp=E,1000nm,0.2s | | | | | | |
| **YAZI** | **Mula-Dat§a-** | **0.22** | **205** | P | **Pg** | **16 08 01.0** | **+0.3** |
| YAZI | | | | S | **Sg** | **16 08 04.1** | **+0.3** |
| **BODT** | **Bodrum** | **0.28** | **311** | Pg | **Pg** | **16 08 01.9** | **+0.1** |
| BODT | | | | Sg | **Sg** | **16 08 06.2** | **+0.7** |
| **BODT** | **Bodrum** | **0.28** | **311** | P | **Pg** | **16 08 02.0** | **+0.1** |
| BODT | | | | S | **Sg** | **16 08 06.4** | **+0.9** |
| **YKAV** | **Yalikavak-Bodr** | **0.34** | **317** | Pg | **Pg** | **16 08 02.4** | **-0.5** |
| YKAV | | | | Sg | **Sg** | **16 08 07.8** | **+0.4** |
| **NISR** | **Nisiros** | **0.44** | **233** | P | **Pb** | **16 08 05.4** | **-0.8** |
| NISR | | | | S | **Sb** | **16 08 12.0** | **-0.9** |
| | 2μm,0.3s | | | | | | |
| **MLSB** | **Milas** | **0.45** | **22** | Pg | **Pg** | **16 08 05.2** | **+0.2** |
| MLSB | | | | Sg | **Sb** | **16 08 11.9** | **-1.2** |
| **TURN** | **Turunc** | **0.55** | **101** | Pg | **Pg** | **16 08 06.5** | **-0.5** |
| TURN | | | | Sg | **Sb** | **16 08 15.0** | **-1.1** |
| **TURN** | **Turunc** | **0.55** | **101** | P | **Pg** | **16 08 06.6** | **-0.4** |
| TURN | | | | S | **Sg** | **16 08 14.4** | **+0.1** |
| TURN | | | | *i* AML | AML | 16 08 17.0 | |
| | comp=E,457nm,0.3s | | | | | | |
| **YER** | **Yerkesik** | **0.63** | **66** | Pg | **Pg** | **16 08 08.6** | **+0.2** |
| **YER** | **Yerkesik** | **0.63** | **66** | P | **Pg** | **16 08 08.2** | **-0.2** |
| YER | | | | S | **Sg** | **16 08 17.2** | **+0.6** |
| **DDIM** | **Aydin, Didim** | **0.63** | **336** | P | **Pg** | **16 08 08.3** | **-0.2** |
| DDIM | | | | S | **Sb** | **16 08 17.6** | **-0.8** |
| DDIM | | | | *i* AML | AML | 16 08 22.0 | |
| | comp=N,323nm,0.5s | | | | | | |
| **MULA** | **Mugla, Merkez-** | **0.71** | **58** | P | **Pb** | **16 08 10.2** | **-0.6** |
| MULA | | | | S | **Sg** | **16 08 19.3** | **0.0** |
| **GCAM** | **G?zelcaml?** | **0.86** | **342** | Pg | **Pb** | **16 08 12.9** | **-0.5** |
| **GCAM** | **G?zelcaml?** | **0.86** | **342** | P | **Pb** | **16 08 13.7** | **+0.4** |
| GCAM | | | | S | **Sb** | **16 08 24.7** | **-0.3** |
| **DALY** | **Dalyan (Mula)** | **0.87** | **94** | Pg | **Pb** | **16 08 13.2** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.09** | **13** | Pn | **Pb** | **16 08 17.4** | **0.0** |
| **ESEN** | **Aydn-Nazilli** | **1.11** | **34** | P | **Pg** | **16 08 16.7** | **-0.8** |
| ESEN | | | | S | **Sg** | **16 08 31.5** | **-0.4** |
| **SABU** | **Mula-Dalaman** | **1.12** | **92** | P | **Pg** | **16 08 17.5** | **-0.4** |
| SABU | | | | S | **Sb** | **16 08 32.8** | **+0.2** |
| **TAVA** | **DENIZLI_Tavas** | **1.22** | **61** | P | **Pb** | **16 08 19.5** | **-0.1** |
| TAVA | | | | S | **Sn** | **16 08 36.6** | **+0.3** |
| **NAZL** | **Nazilli-Aydin** | **1.23** | **28** | Pn | **Pg** | **16 08 19.1** | **-0.7** |
| **DNZT** | **Denizli-Tavas-** | **1.23** | **71** | P | **Pn** | **16 08 19.9** | **+0.2** |
| DNZT | | | | S | **Sg** | **16 08 35.1** | **-0.8** |
| **FETY** | **Fethiye** | **1.24** | **101** | Pn | **Pn** | **16 08 20.3** | **+0.5** |
| **IZMR** | **zmir-demi** | **1.29** | **14** | P | **Pn** | **16 08 19.6** | **-0.9** |
| IZMR | | | | S | **Sn** | **16 08 39.2** | **+1.4** |
| **DNIZ** | **Denizli-Tavas-** | **1.39** | **57** | P | **Pn** | **16 08 21.9** | **0.0** |
| DNIZ | | | | S | **Sn** | **16 08 42.4** | **+2.0** |
| DNIZ | | | | *i* AML | AML | 16 08 47.0 | |
| | comp=N,89nm,0.3s | | | | | | |
| DNIZ | | | | *i* AML | AML | 16 08 48.0 | |
| | comp=E,122nm,0.3s | | | | | | |
| **CAME** | **Cameli-Denizli** | **1.39** | **87** | Pn | **Pg** | **16 08 22.6** | **-0.4** |
| **IZZE** | **Mula-Seydike** | **1.40** | **108** | P | **Pn** | **16 08 22.1** | **+0.1** |
| IZZE | | | | S | **Sg** | **16 08 41.6** | **+0.2** |
| IZZE | | | | *i* AML | AML | 16 08 46.0 | |
| | comp=E,121nm,0.4s | | | | | | |
| **ODEM** | **Odemis-Izmir** | **1.45** | **16** | Pn | **Pn** | **16 08 22.4** | **-0.3** |
| **APMY** | **Acipayam-Deniz** | **1.50** | **66** | Pn | **Pb** | **16 08 24.3** | **-0.1** |
| **KNIK** | **Mula-Seydike** | **1.61** | **91** | P | **Pg** | **16 08 27.7** | **+0.6** |
| KNIK | | | | S | **Sg** | **16 08 49.3** | **+1.3** |
| **AKAS** | **Kas** | **1.76** | **111** | Pn | **Pn** | **16 08 27.6** | **+0.6** |

*DJA **18** 16:08:01.4±0.7,1°.N±7°×12°.4E±°,h273km±7km,M3.2/11,*
*MLv3.2/11*
**ISC 18 16:07:59.7±1.2,0°.7N±0°.2×123°.57E±0°.09,h300km,n9,**
**σ1s10/9,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.42** | **103** | P | **Pn** | **16 08 37.3** | **-0.8** |
| **GTOI** | **Gorontalo** | **0.56** | **266** | P | **Pn** | **16 08 38.2** | **-0.2** |
| GTOI | | | | S | **S** | **16 09 07.0** | **-2.2** |
| **MRSI** | **Marisa** | **1.64** | **263** | P | **Pn** | **16 08 43.7** | **-0.1** |
| **LUWI** | **Luwuk** | **1.88** | **205** | P | **Pn** | **16 08 46.0** | **+0.4** |
| **SANI** | **Sanana** | **3.63** | **138** | P | **Pn** | **16 09 02.0** | **+0.1** |
| **MPSI** | **Mapaga** | **3.69** | **265** | P | **Pn** | **16 09 02.9** | **+0.4** |
| **TNTI** | **Ternate** | **3.80** | **88** | P | **Pn** | **16 09 04.1** | **+0.4** |
| **MKAR** | **Makanchi Array** | **58.35** | **328** | | | | |
| | 0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.35** | **328** | P | **P** | **16 17 25.1** | **+1.1** |
| | 0.1nm,0.4s,baz=127,slow=6.8,SNR=1.8 | | | | | | |

*WEL **18** 16:09:48.1±1.6,47°.S±8°×16°.6E±1°.0,h12km,M3.4/6,*
*ML3.6/6,MLv3.4/6,Error ellipse: s-maj=0.0km*
*s-min=0.0km az=74.4,confirmed*
*NOU **18** 16:09:56.9,46°.27S×167°.01E,h0km,MLv3.6/6,Off W.*
*Coast of S. Island, N.Z.*
**ISC 18 16:09:47.2±2.9,46°.75S±0°.09×166°.1E±0°.1,h10km,n37,**
**σ1s90/40,Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.71** | **36** | P | **Pb** | **16 10 01.7** | **0.0** |
| **PYZ** | **Puysegur Point** | **0.71** | **36** | P | **Pb** | **16 10 01.8** | **+0.2** |
| PYZ | | | | S | **Sb** | **16 10 12.1** | **+0.6** |
| **RRKS** | **Rarakau** | **1.13** | **59** | P | **Pn** | **16 10 09.5** | **+0.4** |
| **ORPS** | **Orepuki** | **1.25** | **69** | P | **Pb** | **16 10 10.8** | **-0.1** |
| **APZ** | **The Paps** | **1.31** | **94** | P | **Pn** | **16 10 12.1** | **+0.5** |
| APZ | | | | S | **Sb** | **16 10 27.4** | **-1.4** |
| **DCZ** | **Deep Cove** | **1.48** | **30** | P | **Pn** | **16 10 12.3** | **-1.6** |
| **WHZ** | **Wether Hill Ro** | **1.55** | **57** | P | **Pn** | **16 10 15.1** | **+0.2** |
| WHZ | | | | S | **Sg** | **16 10 37.4** | **+0.5** |
| **ICCS** | **Invercargill C** | **1.59** | **79** | P | **Pn** | **16 10 16.0** | **+0.6** |
| **MOSS** | **Mossburn Schoo** | **1.84** | **55** | P | **Pn** | **16 10 19.6** | **+0.7** |
| **MLZ** | **Mavora Lakes** | **1.98** | **46** | P | **Pn** | **16 10 21.8** | **+1.0** |
| **SYZ** | **Scrubby Hill** | **2.11** | **85** | P | **Pb** | **16 10 24.7** | **-0.9** |
| **SYZ** | **Scrubby Hill** | **2.11** | **85** | P | **Pn** | **16 10 24.5** | **+1.9** |
| **MSZ** | **Milford Sound** | **2.44** | **33** | P | **Pn** | **16 10 27.6** | **+0.6** |
| **TUZ** | **Tuapeka** | **2.58** | **73** | P | **Pn** | **16 10 30.4** | **+1.4** |
| **EAZ** | **Earnscleugh** | **2.71** | **57** | P | **Pn** | **16 10 31.7** | **+0.9** |
| **WKZ** | **Wanaka** | **2.81** | **48** | P | **Pn** | **16 10 34.0** | **+1.8** |
| **HHSZ** | **Highcliff Hill** | **3.24** | **76** | P | **Pn** | **16 10 39.5** | **+1.3** |
| **JCZ** | **Jackson Bay** | **3.28** | **36** | P | **Pn** | **16 10 40.4** | **+1.7** |
| **JCZ** | **Jackson Bay** | **3.28** | **36** | P | **Pn** | **16 10 39.9** | **+1.1** |
| **ODZ** | **Otahua Downs** | **3.61** | **64** | P | **Pn** | **16 10 42.3** | **-0.8** |
| **ODZ** | **Otahua Downs** | **3.61** | **64** | P | **Pn** | **16 10 42.4** | **-0.8** |
| **LBZ** | **Lake Benmore** | **3.72** | **52** | P | **Pn** | **16 10 44.2** | **-0.5** |
| **FOZ** | **Fox Glacier** | **4.16** | **41** | P | **Pn** | **16 10 51.2** | **+0.5** |
| **TMZ** | **Timaru** | **4.18** | **57** | P | **Pn** | **16 10 50.3** | **-0.8** |
| **ARCZ** | **Arundel** | **4.55** | **54** | P | **Pn** | **16 10 54.5** | **-1.7** |
| **GCSZ** | **Gaunt Creek Bo** | **4.56** | **43** | P | **Pn** | **16 10 56.7** | **+0.4** |
| **RPZ** | **Rata Peaks** | **4.63** | **51** | P | **Pn** | **16 10 56.7** | **-0.6** |
| **RPZ** | **Rata Peaks** | **4.63** | **51** | P | **Pn** | **16 10 55.5** | **-1.8** |
| **WVZ** | **Waitaha Valley** | **4.94** | **44** | P | **Pn** | **16 11 02.1** | **+0.7** |
| **OXZ** | **Oxford** | **5.43** | **53** | P | **Pn** | **16 11 07.4** | **-0.8** |
| **MQZ** | **McQueen's Vall** | **5.54** | **59** | P | **Pn** | **16 11 10.6** | **+0.9** |
| **LTZ** | **Lake Taylor** | **5.92** | **50** | P | **Pn** | **16 11 14.8** | **-0.2** |
| **DSZ** | **Denniston Nort** | **6.47** | **41** | P | **Pn** | **16 11 21.2** | **-1.3** |
| **THZ** | **Tophouse** | **6.98** | **47** | P | **Pn** | **16 11 30.2** | **+0.6** |
| **MRNZ** | **Matariki Terra** | **7.18** | **44** | P | **Pn** | **16 11 32.4** | **+0.1** |
| **QRZ** | **Quartz Range** | **7.53** | **41** | P | **Pn** | **16 11 36.9** | **-0.2** |
| **QRZ** | **Quartz Range** | **7.53** | **41** | P | **Pn** | **16 11 36.8** | **-0.2** |

*IDC **18** 16:15:30.2±1.0,23°.22N×143°.37E,h0km,mb3.6/9,*
*mbtmp3.5/11,ML3.0/2,MS2.8/1,Error ellipse:*
*s-maj=37.2km s-min=20.5km az=76.0*
**ISC 18 16:15:31.7±1.1,23°.3N±0°.1×143°.4E±0°.3,h10km,n11,**
**σ1s08/11,mb3.7/9,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **13.94** | **343** | Pn | **Pn** | **16 18 48.5** | **-0.9** |
| | baz=147,slow=12,SNR=2.2 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **19.38** | **320** | P | **Pn** | **16 19 59.5** | **+0.8** |
| | 0.1nm,0.3s,baz=134,slow=14,SNR=1.8 | | | | | | |
| KSRS | | | | LR | LR |

1.8nm,0.9s,baz=353,slow=3.9,SNR=1.4
1.8nm,0.9s
**WRA Warramunga Arr 44.47 259** P **P** **16 35 52.9 -0.2**
0.7nm,0.7s,baz=91,slow=7.2,SNR=14
WRA PcP **PcP** **16 37 24.4 -0.3**
0.2nm,0.6s,baz=94,slow=3.9,SNR=2.6
0.7nm,0.7s
**ASAR Alice Springs 44.66 254** P **P** **16 35 54.9 +0.4**
5.6nm,0.6s,baz=88,slow=8.1,SNR=166
ASAR PcP **PcP** **16 37 25.0 -0.3**
0.4nm,0.5s,baz=103,slow=4.0,SNR=6.9
5.6nm,0.6s
**MJAR Matsushiro Arr 67.62 323** P **P** **16 38 32.3 -0.2**
0.6nm,0.6s,baz=135,slow=6.0,SNR=5.2
0.6nm,0.6s
**QSPA South Pole Qui 72.35 180** P **P** **16 38 59.8 -0.6**
0.6nm,0.9s,baz=315,slow=7.1,SNR=1.4
0.6nm,0.9s
**SEY Seymchan 83.53 347** P **P** **16 39 59.9 -0.2**
1.2nm,0.6s,baz=180,slow=3.0,SNR=3.3
1.2nm,0.6s
**TXAR Lajitas Array 86.05 58** P **P** **16 40 14.0 +0.7**
0.3nm,0.7s,baz=256,slow=1.9,SNR=2.9
0.3nm,0.7s
**BRTR Keskin Array B 144.50 315** PKP **PKPdf** **16 47 04.6 0.0**
1.1nm,0.8s,baz=90,slow=2.5,SNR=5.4
**MMAI Mount Meron Ar 145.86 303** PKPbc **PKPbc** **16 47 09.3 +0.4**
3.3nm,0.8s,baz=64,slow=4.0,SNR=3.8
**GERES GERESS Array B 147.36 345** PKPbc **PKPbc** **16 47 11.9 -0.5**
0.6nm,0.6s,baz=34,slow=3.5,SNR=3.3

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*BGR **18** 16:41:45.8, 44˚.09N× 148˚.74E, h33km, mb4.4*
*MOS **18** 16:41:50.2±0.8, 44˚.65N× 148˚.75E, h69km, mb4.8/11, Error ellipse: s-maj=7.5km s-min=6.2km az=93.9*
*BJI **18** 16:41:50.1±0.0, 44˚.60N× 148˚.64E, h64km, mb4.5/30, mB4.9/16, Ms3.8/6, Ms7 3.6/7*
*SKHL **18** 16:41:51.0±0.1, 44˚.60N× 148˚.70E, h68km±2km, mb5.2/13*
*JMA **18** 16:41:51.9±0.8, 45˚.N×3˚×14˚.9E±˚, h30km, MD4.7/19, MW4.4/19, SE OFF ETOROFU*
*NIED **18** 16:41:51.9, 44˚.76N× 148˚.51E, h30km, MW4.4, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$4.64; $M_{\theta\theta}$-1.78; $M_{\phi\phi}$-2.86; $M_{r\theta}$-0.07; $M_{\theta\phi}$-1.15; $M_{\phi r}$-2.00; Fault plane solution: $M_0$4.55000×$10^{15}$ NP1: $\phi_s$201.00000°, $\delta$57.00000°, $\lambda$80.00000°. NP2:$\phi_s$39.00000°, $\delta$34.00000°, $\lambda$105.00000°*
*NEIC **18** 16:41:53.1±1.4, 44˚.76N±0˚.10× 148˚.6E±0˚.1, h70km±6km, mb4.6/180 Error ellipse: s-maj=14.5km s-min=12.7km az=140.0*
*IDC **18** 16:41:54.9±2.0, 44˚.81N× 148˚.55E, h92km±17km, mb4.0/21, mbtmp4.3/29, MS3.4/31, Error ellipse: s-maj=15.1km s-min=10.6km az=137.0*

**ISC 18 16:41:50.8±0.6, 44˚.62N±0˚.04× 148˚.81E±0˚.05, h63km±5km, n567, σ1§28/495, mb4.6/137, 13C-4D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **0.91** | **313** | *i* P | | **Pn** | **16 42 06.5** | **-1.3** |
| KUR | | | | AMB | | AMB | 16 42 07.6 | |
| | 2μm,0.3s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **16 42 18.2** | **-2.2** |
| KUR | | | | A | | A | 16 42 18.8 | |
| | 61μm,2.0s | | | | | | | |
| KUR | | | | A | | A | 16 42 18.8 | |
| | 40μm,2.0s | | | | | | | |
| KUR | | | | A | | A | 16 42 20.8 | |
| | 19μm,0.8s | | | | | | | |
| KUR | | | | A | | A | 16 42 20.8 | |
| | 27μm,0.8s | | | | | | | |
| **KUR** | **Kuril'sk** | **0.91** | **313** | *d* iPN | | **Pn** | **16 42 06.5** | **-1.3** |
| KUR | | | | *i* S | | **Sn** | **16 42 17.5** | **-2.9** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,2μm,0.5s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,29μm,0.4s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,13μm,0.4s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,61μm,1.5s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,40μm,1.1s | | | | | | | |
| **SHO** | **Shikotan** | **1.61** | **243** | *i* P | | **Pn** | **16 42 15.3** | **-1.7** |
| SHO | | | | AMB | | AMB | 16 42 17.5 | |
| | comp=E,210nm,0.3s | | | | | | | |
| SHO | | | | *i* S | | **Sn** | **16 42 33.5** | **-3.2** |
| SHO | | | | A | | A | 16 42 36.2 | |
| | comp=E,4μm,0.4s | | | | | | | |
| SHO | | | | A | | A | 16 42 36.2 | |
| | comp=E,4μm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **1.61** | **243** | ⇑*i* PN | | **Pn** | **16 42 15.3** | **-1.7** |
| SHO | | | | *i* S | | **Sn** | **16 42 32.1** | **-4.6** |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,206nm,0.3s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=E,64nm,0.2s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,2μm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,5μm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.20** | **256** | *i* P | | **Pn** | **16 42 24.6** | **-0.3** |
| YUK | | | | AMB | | AMB | 16 42 26.0 | |
| | comp=E,1μm,0.2s | | | | | | | |
| YUK | | | | *i* S | | **Sn** | **16 42 48.5** | **-2.5** |
| YUK | | | | A | | A | 16 42 51.3 | |
| | comp=E,3μm,0.5s | | | | | | | |
| YUK | | | | A | | A | 16 42 51.3 | |
| | comp=E,10μm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.20** | **256** | *c i* PN | | **Pn** | **16 42 24.6** | **-0.3** |
| YUK | | | | *i* S | | **Sn** | **16 42 48.2** | **-2.8** |
| YUK | | | | pmax | | pmax | | |
| | comp=N,258nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=E,164nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,1μm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,3μm,0.3s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,10μm,0.6s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.54** | **242** | P | | **Pn** | **16 42 28.3** | **-1.4** |
| NEM2 | | | | S | | **Sn** | **16 42 56.2** | **-3.3** |
| **JRA** | **Rausu** | **2.73** | **257** | P | | **Pn** | **16 42 32.5** | **+0.2** |
| JRA | | | | *e*S | | **Sn** | **16 43 02.2** | **-1.9** |
| **JNSB** | **Nemuroshibetsu** | **2.86** | **254** | A | | A | 16 42 32.3 | |
| | comp=E,5.0nm,0.8s,comp=N,6.0nm,5.4s | | | | | | | |
| **JKHN** | **Kushirohamanak** | **3.05** | **241** | A | | A | 16 42 35.7 | |
| | comp=E,7.0nm,5.6s,comp=N,4.0nm,0.7s | | | | | | | |
| **JNK** | **Nakash** | **3.12** | **252** | P | | **Pn** | **16 42 38.0** | **+0.4** |
| JNK | | | | S | | **Sn** | **16 43 11.9** | **-1.8** |
| **JAK** | **Akkeshi** | **3.39** | **243** | P | | **Pn** | **16 42 40.3** | **-0.9** |
| JAK | | | | S | | **Sn** | **16 43 17.2** | **-3.0** |
| **JAK** | **Akkeshi** | **3.39** | **243** | A | | A | 16 42 40.3 | |
| | comp=E,7.0nm,0.8s,comp=N,6.0nm,7.5s | | | | | | | |
| **JTKR** | **Abashiri--Toko** | **3.58** | **261** | P | | **Pn** | **16 42 43.9** | **+0.1** |
| **JAR** | **Ashorobuto** | **3.87** | **252** | P | | **Pn** | **16 42 48.8** | **+1.0** |
| JAR | | | | S | | **Sn** | **16 43 31.3** | **-0.7** |
| **JAR** | **Ashorobuto** | **3.87** | **252** | A | | A | 16 42 48.8 | |
| | comp=E,4.0nm,0.6s,comp=N,3.0nm,0.8s | | | | | | | |
| **JOB** | **Onbets** | **3.99** | **246** | P | | **Pn** | **16 42 49.7** | **+0.3** |
| JOB | | | | *e*S | | **Sn** | **16 43 31.9** | **-3.0** |
| **JKK2** | **Kamakawa 2** | **4.42** | **262** | P | | **Pn** | **16 42 56.9** | **+1.6** |
| **JCH** | **Churui** | **4.43** | **245** | P | | **Pn** | **16 42 55.4** | **-0.1** |
| JCH | | | | S | | **Sn** | **16 43 43.3** | **-2.4** |
| **JKA** | **Kamikawa-asahi** | **4.48** | **266** | Pn | | **Pn** | **16 42 57.7** | **+1.6** |
| **JKA** | **Kamikawa-asahi** | **4.48** | **266** | *e*P | | **Pn** | **16 42 57.6** | **+1.4** |
| **ASAJ** | **Asahikawa** | **4.48** | **266** | P | | **Pn** | **16 42 57.6** | **+1.4** |
| | comp=N,38nm,0.4s,baz=56,slow=15,SNR=70 | | | | | | | |
| ASAJ | | | | S | | **Sn** | **16 43 49.9** | **+2.9** |
| | comp=N,54nm,0.5s,baz=80,slow=19,SNR=2.1 | | | | | | | |
| ASAJ | | | | LR | | LR | 16 44 48.6 | |
| | comp=N,484nm,20.8s,baz=137,slow=40 | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.48** | **266** | PN | | **Pn** | **16 42 57.6** | **+1.4** |
| ASAJ | | | | S | | **Sn** | **16 43 49.9** | **+2.9** |
| **YSS** | **Yuzh-Sakhalins** | **4.84** | **301** | Pn | | **Pn** | **16 43 00.7** | **-0.2** |
| **YSS** | **Yuzh-Sakhalins** | **4.84** | **301** | *e*P | | **Pn** | **16 43 00.8** | **-0.2** |
| YSS | | | | AMB | | AMB | 16 43 02.3 | |
| | comp=N,130nm,0.7s | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **16 43 52.3** | **-3.4** |
| YSS | | | | A | | A | 16 43 57.6 | |
| | comp=N,120nm,0.8s | | | | | | | |
| YSS | | | | A | | A | 16 43 57.6 | |
| | comp=N,180nm,0.8s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.84** | **301** | *e*PN | | **Pn** | **16 43 01.1** | **+0.1** |
| YSS | | | | *e*S | | **Sn** | **16 43 52.9** | **-2.8** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,150nm,0.5s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=E,500nm,15.0s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,500nm,15.0s | | | | | | | |
| **JEM** | **Erimo** | **4.88** | **240** | A | | A | 16 43 00.9 | |
| | comp=E,7.0nm,2.5s,comp=N,7.0nm,1.4s | | | | | | | |
| **ERM** | **Erimo** | **4.88** | **240** | | | **Pn** | **16 43 03.6** | **+2.0** |
| **ERM** | **Erimo** | **4.88** | **240** | *ce*PN | | **Pn** | **16 43 03.1** | **+1.6** |
| ERM | | | | pmax | | pmax | | |
| | comp=Z,97nm,0.7s | | | | | | | |
| **JAB** | **Ashibetsu** | **4.88** | **259** | P | | **Pn** | **16 43 04.9** | **+3.3** |
| **JWK2** | **Keihoku** | **4.96** | **281** | *e*P | | **Pn** | **16 43 05.0** | **+2.4** |
| **JNBK** | **Urakawa-nobuka** | **4.99** | **244** | P | | **Pn** | **16 43 02.8** | **-0.3** |
| **JNBK** | **Urakawa-nobuka** | **4.99** | **244** | A | | A | 16 43 02.8 | |
| | comp=E,6.0nm,0.7s,comp=N,6.0nm,1.6s | | | | | | | |
| **JRBN** | **Rebuntou** | **5.55** | **281** | P | | **Pn** | **16 43 12.1** | **+1.3** |
| **UGL** | **Uglegorsk** | **6.43** | **316** | *e*P | | **Pn** | **16 43 24.6** | **+1.9** |
| UGL | | | | AMB | | AMB | 16 43 25.7 | |
| | comp=N,70nm,0.7s | | | | | | | |
| UGL | | | | *e*S | | **Sn** | **16 44 33.2** | **-1.4** |
| UGL | | | | A | | A | 16 44 35.8 | |
| | comp=N,140nm,0.7s | | | | | | | |
| UGL | | | | A | | A | 16 44 35.8 | |
| | comp=N,80nm,0.7s | | | | | | | |
| **UGL** | **Uglegorsk** | **6.43** | **316** | ⇓*e*PN | | **Pn** | **16 43 24.6** | **+1.9** |
| UGL | | | | pmax | | pmax | | |
| | comp=Z,70nm,0.7s | | | | | | | |
| **JANG** | **Nango** | **6.86** | **234** | P | | **Pn** | **16 43 27.2** | **-1.4** |
| JANG | | | | *e*S | | **Sn** | **16 44 38.3** | **-7.0** |
| **JTM** | **Tenmabayashi** | **6.87** | **239** | Pn | | **Pn** | **16 43 28.2** | **-0.6** |
| **JTH** | **Tanohata** | **6.96** | **230** | *e*S | | **Sn** | **16 44 41.4** | **-6.2** |
| **TYV** | **Tymovskoe** | **7.50** | **329** | *e*P | | **Pn** | **16 43 38.6** | **+1.2** |
| TYV | | | | AMB | | AMB | 16 43 40.3 | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| TYV | | | | *e*S | | **Sn** | **16 44 59.2** | **-1.7** |
| TYV | | | | A | | A | 16 45 04.7 | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| TYV | | | | A | | A | 16 45 04.7 | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **TYV** | **Tymovskoe** | **7.50** | **329** | *e*PN | | **Pn** | **16 43 38.7** | **+1.3** |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.3s | | | | | | | |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.82** | **36** | *e*P | | **Pn** | **16 43 43.4** | **+1.7** |
| SKR | | | | AMB | | AMB | 16 43 44.2 | |
| | comp=Z,100nm,0.4s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **16 45 06.6** | **-2.1** |
| SKR | | | | A | | A | 16 45 13.6 | |
| | comp=E,60nm,0.6s | | | | | | | |
| SKR | | | | A | | A | 16 45 13.6 | |
| | comp=Z,50nm,0.6s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.82** | **36** | *e*PN | | **Pn** | **16 43 43.8** | **+2.1** |
| SKR | | | | pmax | | pmax | | |
| | comp=Z,102nm,0.4s | | | | | | | |
| **TEY** | **Ternei** | **8.69** | **277** | *e*P | | **Pn** | **16 43 56.6** | **+2.9** |
| **TEY** | **Ternei** | **8.69** | **277** | ⇑*e*PN | | **Pn** | **16 43 56.6** | **+2.9** |
| TEY | | | | pmax | | pmax | | |
| | comp=E,40nm,1.0s | | | | | | | |
| TEY | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **JMM** | **Marumori** | **9.05** | **225** | Pn | | **Pn** | **16 43 56.6** | **-2.1** |
| **OKH** | **Okha** | **9.73** | **339** | *e*P | | **Pn** | **16 44 09.5** | **+1.6** |
| OKH | | | | AMB | | AMB | 16 44 11.1 | |
| | comp=Z,90nm,0.9s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **10.31** | **31** | Pn | | **Pn** | **16 44 17.5** | **+1.7** |
| **PEA0B** | **Petropavlovsk-** | **10.31** | **31** | *i* PN | | **Pn** | **16 44 18.1** | **+2.3** |
| **PETK** | **Petropavlovsk-** | **10.31** | **31** | Pn | | **Pn** | **16 44 17.7** | **+1.9** |
| **PETK** | **Petropavlovsk-** | **10.31** | **31** | P | | **Pn** | **16 44 16.9** | **+1.1** |
| | comp=Z,11nm,0.6s,baz=203,slow=11,SNR=14 | | | | | | | |
| PETK | | | | LR | | LR | 16 48 44.5 | |
| | comp=Z,95nm,18.8s,baz=207,slow=40 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **10.31** | **31** | PN | | **Pn** | **16 44 17.7** | **+1.9** |
| **GRNR** | **Gornyy** | **10.37** | **311** | *e*P | | **Pn** | **16 44 18.1** | **+1.5** |
| GRNR | | | | AMB | | AMB | 16 44 19.7 | |
| | comp=Z,50nm,0.7s | | | | | | | |
| **GRNR** | **Gornyy** | **10.37** | **311** | ⇓*i* PN | | **Pn** | **16 44 18.1** | **+1.5** |
| GRNR | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| GRNR | | | | MLR | | MLR | | |
| | comp=Z,160nm,14.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **10.62** | **34** | *e*P | | **Pn** | **16 44 20.8** | **+0.9** |
| **MAJO** | **Matsushiro** | **11.39** | **229** | Pn | | **Pn** | **16 44 29.2** | **-1.5** |
| **MAJO** | **Matsushiro** | **11.39** | **229** | *i* PN | | **Pn** | **16 44 31.4** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **11.39** | **229** | P | | **Pn** | **16 44 29.9** | **-0.9** |
| | comp=Z,1.5nm,0.6s,baz=25,slow=14,SNR=9.0 | | | | | | | |
| MJAR | | | | S | | **Sn** | **16 46 42.9** | **+6.5** |
| | comp=Z,1.9nm,0.5s,baz=140,slow=18,SNR=4.3 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **12.04** | **274** | Pn | | **Pn** | **16 44 40.9** | **+1.4** |
| **USA0B** | **Ussuriysk Arra** | **12.04** | **274** | *i* PN | | **Pn** | **16 44 40.7** | **+1.2** |
| **USRK** | **Ussuriysk Ar.** | **12.04** | **274** | Pn | | **Pn** | **16 44 41.2** | **+1.8** |
| **USRK** | **Ussuriysk Ar.** | **12.04** | **274** | P | | **Pn** | **16 44 40.9** | **+1.4** |
| | comp=Z,15nm,0.6s,baz=87,slow=13,SNR=36 | | | | | | | |
| USRK | | | | LR | | LR | 16 49 01.5 | |
| | comp=Z,121nm,20.4s,baz=22,slow=36 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.04** | **274** | PN | | **Pn** | **16 44 41.3** | **+1.8** |
| **KLR** | **Kul'dur** | **12.54** | **298** | P | | **Pn** | **16 44 48.2** | **+2.0** |
| | comp=Z,7.4nm,0.8s,baz=104,slow=16,SNR=18 | | | | | | | |
| KLR | | | | LR | | LR | 16 49 31.1 | |
| | comp=Z,147nm,21.9s,baz=106,slow=37 | | | | | | | |
| **KLR** | **Kul'dur** | **12.54** | **298** | *e*P | | **Pn** | **16 44 46.5** | **+0.3** |
| **KLR** | **Kul'dur** | **12.54** | **298** | *ce*PN | | **Pn** | **16 44 46.3** | **+0.1** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **PSTR** | **Posyet** | **13.19** | **268** | *i* PN | | **Pn** | **16 44 56.2** | **+1.1** |
| **JHJ** | **Hachijo jima 2** | **13.45** | **214** | LR | | LR | 16 50 33.3 | |
| | comp=Z,24nm,18.8s,baz=302,slow=38 | | | | | | | |
| **MDJ** | **Mudanjiang** | **13.70** | **277** | P | | **Pn** | **16 45 03.3** | **+1.4** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **KBG** | **Krutoberegovo** | **14.60** | **32** | *e*P | | **Pn** | **16 45 11.7** | **-1.9** |
| KBG | | | | AMB | | AMB | 16 45 13.2 | |
| | comp=Z,40nm,0.5s | | | | | | | |
| **MA2** | **Magadan** | **15.03** | **4** | P | | **Pn** | **16 45 18.4** | **-0.8** |
| | comp=Z,2.7nm,0.6s,baz=260,slow=9.1,SNR=1.2 | | | | | | | |
| MA2 | | | | LR | | LR | 16 51 15.5 | |
| | comp=Z,65nm,18.5s,baz=188,slow=38 | | | | | | | |
| **MA2** | **Magadan** | **15.03** | **4** | *e*P | | **Pn** | **16 45 18.4** | **-0.8** |
| **MA2** | **Magadan** | **15.03** | **4** | P | | **Pn** | **16 45 18.4** | **-0.8** |
| **BNX** | **BinXian** | **15.14** | **282** | ⇑P | | **Pn** | **16 45 20.8** | **+0.1** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **HEH** | **HeiHe** | **15.52** | **299** | *e*P | | **P** | **16 45 25.8** | **-2.9** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **ZEA** | **Zeya** | **16.74** | **311** | *e*P | | **Pn** | **16 45 40.0** | **-0.9** |
| ZEA | | | | AMB | | AMB | 16 45 42.0 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **ZEA** | **Zeya** | **16.74** | **311** | *e*P | | **P** | **16 45 40.8** | **-1.4** |
| ZEA | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **17.28** | **253** | P | | **P** | **16 45 47.7** | **-0.6** |
| | comp=Z,5.5nm,0.8s,baz=61,slow=12,SNR=21 | | | | | | | |
| KSRS | | | | LR | | LR | 16 52 12.3 | |
| | comp=Z,87nm,18.1s,baz=45,slow=36 | | | | | | | |
| **KSRS** | **Korea Array** | **17.28** | **253** | P | | **P** | **16 45 47.7** | **-0.6** |
| **JNU** | **Nakatsue** | **18.03** | **237** | P | | **Pn** | **16 45 59.0** | **+2.1** |
| | comp=Z,5.4nm,0.7s,baz=66,slow=20,SNR=2.0 | | | | | | | |
| JNU | | | | LR | | LR | 16 52 16.4 | |
| | comp=Z,52nm,18.5s,baz=65,slow=35 | | | | | | | |
| **TJN** | **Taejon** | **18.23** | **251** | *ce*P | | **Pn** | **16 45 59.7** | **+0.4** |
| **SEY** | **Seymchan** | **18.47** | **5** | P | | **P** | **16 45 59.8** | **-1.4** |
| | comp=Z,6.0nm,0.8s,baz=175,slow=11,SNR=14 | | | | | | | |
| **SEY** | **Seymchan** | **18.47** | **5** | *i* P | | **P** | **16 46 00.5** | **-0.7** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **YAK** | **Yakutsk** | **20.71** | **334** | P | | **P** | **16 46 23.8** | **-1.8** |
| YAK | | | | IAmb | | IAmb | 16 46 30.3 | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **YAK** | **Yakutsk** | **20.71** | **334** | P | | **P** | **16 46 25.2** | **-0.4** |
| | comp=Z,27nm,0.7s,baz=116,slow=1.6,SNR=2.5 | | | | | | | |
| YAK | | | | LR | | LR | 16 54 58.9 | |
| | comp=Z,85nm,19.2s,baz=135,slow=38 | | | | | | | |
| | comp=Z,27nm,0.7s | | | | | | | |
| **YAK** | **Yakutsk** | **20.71** | **334** | *e*P | | **P** | **16 46 23.2** | **-2.3** |
| YAK | | | | *e* | | | 16 46 44.6 | |
| YAK | | | | *e*S | | **S** | **16 50 10.0** | **-3.0** |
| YAK | | | | *e**SS | | **sS** | **16 50 30.5** | **-4.5** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,36nm,1.0s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,10.0nm,1.4s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,5.0nm,1.6s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,92nm,2.5s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,75nm,3.3s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,116nm,5.4s | | | | | | | |
| YAK | | | | smax | | smax | | |
| | comp=N,151nm,6.2s | | | | | | | |
| YAK | | | | smax | | smax | | |
| | comp=E,123nm,4.8s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **23.37** | **280** | *e*P | | **P** | **16 46 52.9** | **-1.0** |
| XLT | | | | pmax | | pmax | | |
| | comp=E,8.0nm,0.7s | | | | | | | |
| **JOW** | **Kunigami** | **24.24** | **230** | LR | | LR | 16 56 35.4 | |
| | comp=E,43nm,21.6s,baz=264,slow=36 | | | | | | | |
| **BILL** | **Bilibino** | **25.20** | **15** | *e*P | | **P** | **16 47 11.2** | **+1.1** |
| **BILL** | **Bilibino** | **25.20** | **15** | ⇑*e*P | | **P** | **16 47 11.2** | **+1.1** |
| BILL | | | | *e* | | | 16 47 50.0 | |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,12nm,2.3s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,48nm,19.0s | | | | | | | |
| **NJ2** | **Nanjing** | **26.48** | **252** | *e*P | | **P** | **16 47 22.0** | **0.0** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,130nm,3.5s | | | | | | | |
| **HNS** | **HongShan** | **26.59** | **266** | ⇑P | | **P** | **16 47 25.3** | **+2.4** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,120nm,15.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **27.46** | **275** | *e*P | | **P** | **16 47 30.0** | **-0.9** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,150nm,4.6s | | | | | | | |
| **BTO** | **Baotou** | **28.64** | **276** | *e*P | | **P** | **16 47 43.3** | **+1.9** |
| BTO | | | | pP | | **pP** | **16 47 59.8** | **+3.1** |
| BTO | | | | sP | | **sP** | **16 48 09.3** | **+5.2** |
| BTO | | | | S | | **S** | **16 52 28.0** | **+2.4** |
| BTO | | | | SS | | **SnSn** | **16 53 56.0** | **+5.0** |
| BTO | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | | |
| BTO | | | | pmax | | pmax | | |
| | comp=Z,100nm,5.2s | | | | | | | |
| BTO | | | | LR | | LR | | |
| | comp=Z,130nm,4.0s | | | | | | | |
| BTO | | | | LR | | LR | | |
| | comp=Z,230nm,4.0s | | | | | | | |
| BTO | | | | LR | | LR | | |
| | comp=Z,150nm,5.3s | | | | | | | |
| **NIKH** | **Nikolski High** | **28.75** | **58** | P | | **P** | **16 47 41.0** | **-1.1** |
| | baz=271 | | | | | | | |
| **TIXI** | **Tiksi** | **28.77** | **347** | LR | | LR | 17 01 34.2 | |
| | comp=Z,37nm,18.1s,baz=189,slow=41 | | | | | | | |
| **TIXI** | **Tiksi** | **28.77** | **347** | *e*P | | **P** | **16 47 44.0** | **+1.9** |
| **TIXI** | **Tiksi** | **28.77** | **347** | *i* P | | **P** | **16 47 44.0** | **+1.9** |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.81** | **291** | *e*P | | **P** | **16 47 44.5** | **+1.6** |
| **ULN** | **Ulaanbaatar** | **28.81** | **291** | *i* P | | **P** | **16 47 44.5** | **+1.6** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.02** | **143** | T | | T | 17 18 41.9 | |
| | baz=334,slow=76,SNR=1247 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.04** | **143** | T | | T | 17 18 37.8 | |
| | baz=334,slow=76,SNR=1428 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.04** | **143** | T | | T | 17 18 38.5 | |
| | baz=334,slow=76,SNR=1589 | | | | | | | |
| **SONM** | **Songino Array** | **29.25** | **292** | LR | | LR | 17 00 33.8 | |
| | comp=Z,111nm,18.1s,baz=66,slow=39 | | | | | | | |
| **GAMB** | **Gambell** | **29.31** | **35** | P | | **P** | **16 47 46.0** | **-1.0** |
| | baz=248 | | | | | | | |
| **LYN** | **LuoYang** | **29.54** | **263** | P | | **P** | **16 47 49.6** | **+0.3** |
| LYN | | | | pP | | pP | 16 48 07.6 | +3.0 |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,26nm,0.5s | | | | | | | |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,130nm,5.1s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.03** | **144** | T | | T | 17 19 54.6 | |
| | baz=334,slow=76,SNR=1976 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.03** | **144** | T | | T | 17 19 56.4 | |
| | baz=334,slow=76,SNR=1058 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.04** | **144** | T | | T | 17 19 58.2 | |
| | baz=334,slow=76,SNR=983 | | | | | | | |
| **GUMO** | **Guam** | **31.11** | **187** | LR | | LR | 16 58 07.3 | |
| | comp=Z,24nm,20.7s,baz=251,slow=31 | | | | | | | |
| **TNA** | **Tin City** | **31.48** | **33** | P | | **P** | **16 48 05.6** | **-0.4** |
| | baz=250 | | | | | | | |
| **K13K** | **Kusilvak Mount** | **31.89** | **41** | P | | **P** | **16 48 09.2** | **-0.5** |
| | baz=259 | | | | | | | |
| **M13K** | **Dall Lake** | **32.27** | **44** | P | | **P** | **16 48 12.2** | **-0.8** |
| | baz=263 | | | | | | | |
| **L14K** | **Kuka Creek** | **32.72** | **42** | P | | **P** | **16 48 18.5** | **+1.6** |
| L14K | | | | IAmb | | IAmb | 16 48 19.7 | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **L14K** | **Kuka Creek** | **32.72** | **42** | P | | **P** | **16 48 17.0** | **+0.1** |
| | baz=262 | | | | | | | |
| **F15K** | **North Star Dit** | **32.81** | **34** | P | | **P** | **16 48 18.0** | **+0.3** |
| | baz=253 | | | | | | | |
| **M14K** | **Bethel** | **32.99** | **43** | P | | **P** | **16 48 20.1** | **+0.8** |
| **M14K** | **Bethel** | **32.99** | **43** | P | | **P** | **16 48 20.1** | **+0.8** |
| | baz=264 | | | | | | | |
| **M15K** | **Kasigluk River** | **33.60** | **43** | P | | **P** | **16 48 25.2** | **+0.5** |
| | baz=265 | | | | | | | |
| **N15K** | **Kwethluk River** | **33.86** | **44** | P | | **P** | **16 48 26.3** | **-0.6** |
| | baz=266 | | | | | | | |
| **D17K** | **Noatak River** | **34.01** | **31** | P | | **P** | **16 48 28.4** | **+0.3** |
| | baz=252 | | | | | | | |
| **S14K** | **Fog Glacier** | **34.09** | **51** | P | | **P** | **16 48 28.9** | **-0.2** |
| | baz=273 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **34.18** | **30** | P | | **P** | **16 48 29.6** | **0.0** |
| | baz=252 | | | | | | | |
| **L16K** | **Owhat River** | **34.29** | **42** | P | | **P** | **16 48 31.7** | **+1.1** |
| L16K | | | | IAmb | | IAmb | 16 48 34.4 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **L16K** | **Owhat River** | **34.29** | **42** | P | | **P** | **16 48 31.0** | **+0.4** |
| | baz=265 | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **34.36** | **35** | P | | **P** | **16 48 32.0** | **+0.8** |
| | baz=258 | | | | | | | |
| **M16K** | **Timber Creek** | **34.48** | **43** | P | | **P** | **16 48 33.1** | **+0.8** |
| **M16K** | **Timber Creek** | **34.48** | **43** | P | | **P** | **16 48 32.4** | **+0.2** |
| | baz=266 | | | | | | | |
| **N16K** | **Nishlik Lake** | **34.53** | **44** | P | | **P** | **16 48 32.1** | **-0.7** |
| | baz=267 | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| C19K | Lookout Ridge | 35.66 | 29 | P | P | 16 48 42.8 | +0.4 | |
| C19K | | | | IAmb | IAmb | 16 48 43.7 | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| C19K | Lookout Ridge | 35.66 | 29 | P | P | 16 48 42.3 | -0.1 | |
| | baz=254 | | | | | | | |
| J18K | Innoko River | 35.73 | 39 | P | P | 16 48 43.5 | +0.5 | |
| | baz=265 | | | | | | | |
| F19K | Shaleruckik Mo | 35.78 | 33 | P | P | 16 48 44.4 | +1.1 | |
| | baz=259 | | | | | | | |
| G19K | Purcell Mounta | 35.93 | 34 | P | P | 16 48 45.4 | +0.8 | |
| | baz=261 | | | | | | | |
| N18K | Kilae Creek | 35.96 | 44 | P | P | 16 48 45.7 | +0.7 | |
| N18K | Kilae Creek | 35.96 | 44 | P | P | 16 48 45.8 | +0.7 | |
| | baz=269 | | | | | | | |
| M18K | Stony River | 36.01 | 42 | P | P | 16 48 46.3 | +0.9 | |
| | baz=268 | | | | | | | |
| D19K | Kuna River | 36.02 | 30 | P | P | 16 48 46.4 | +0.9 | |
| | baz=256 | | | | | | | |
| H19K | Roundabout Mou | 36.09 | 35 | P | P | 16 48 47.5 | +1.5 | |
| H19K | Roundabout Mou | 36.09 | 35 | P | P | 16 48 46.4 | +0.4 | |
| | baz=262,SNR=8.0 | | | | | | | |
| E19K | Redstone River | 36.11 | 32 | P | P | 16 48 47.4 | +1.2 | |
| E19K | | | | IAmb | IAmb | 16 48 48.8 | | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| E19K | Redstone River | 36.11 | 32 | P | P | 16 48 46.5 | +0.3 | |
| | baz=259 | | | | | | | |
| J19K | Poorman | 36.26 | 38 | P | P | 16 48 47.7 | +0.1 | |
| | baz=265 | | | | | | | |
| O18K | Koktuh Hills | 36.30 | 45 | P | P | 16 48 48.5 | +0.5 | |
| | baz=271 | | | | | | | |
| GTA | Gaotai | 36.33 | 279 | P | P | 16 48 50.0 | +1.4 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| Q18K | Katmai Hardscr | 36.44 | 47 | P | P | 16 48 49.8 | +0.6 | |
| | baz=273 | | | | | | | |
| L19K | White Mountain | 36.50 | 41 | P | P | 16 48 50.4 | +0.8 | |
| | baz=268 | | | | | | | |
| D20K | Etivluk River | 36.60 | 30 | P | P | 16 48 51.0 | +0.6 | |
| | baz=258 | | | | | | | |
| F20K | Avaraart Lake | 36.61 | 33 | P | P | 16 48 51.5 | +1.0 | |
| | baz=261 | | | | | | | |
| N19K | Bonanza Creek | 36.65 | 43 | P | P | 16 48 51.5 | +0.5 | |
| | baz=270 | | | | | | | |
| E20K | Nigu River | 36.66 | 31 | P | P | 16 48 51.5 | +0.5 | |
| | baz=259 | | | | | | | |
| B20K | Meade River | 36.72 | 28 | P | P | 16 48 51.9 | +0.6 | |
| B20K | Meade River | 36.72 | 28 | P | P | 16 48 51.4 | 0.0 | |
| | baz=256 | | | | | | | |
| H20K | Anotleneega Mo | 36.73 | 35 | P | P | 16 48 52.2 | +0.6 | |
| | baz=264 | | | | | | | |
| I20K | Naaghedeneel | 36.83 | 37 | P | P | 16 48 52.9 | +0.6 | |
| | baz=265 | | | | | | | |
| K20K | Telida | 36.91 | 39 | P | P | 16 48 53.7 | +0.7 | |
| | baz=267 | | | | | | | |
| J20K | Nowinta River | 36.92 | 38 | IAmb | IAmb | 16 48 55.6 | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| J20K | Nowinta River | 36.92 | 38 | P | P | 16 48 53.7 | +0.6 | |
| | baz=266,SNR=5.6 | | | | | | | |
| L20K | Farewell, AK | 36.96 | 41 | P | P | 16 48 54.3 | +0.8 | |
| | baz=269 | | | | | | | |
| IMAR | Indian Mountai | 37.25 | 35 | P | P | 16 48 56.8 | +0.8 | |
| M20K | Styx River | 37.30 | 42 | P | P | 16 48 57.3 | +0.8 | |
| | baz=270 | | | | | | | |
| C21K | Knifeblade Rid | 37.34 | 29 | P | P | 16 48 56.9 | +0.2 | |
| | baz=259 | | | | | | | |
| G21K | Allakaket | 37.41 | 34 | IAmb | IAmb | 16 49 00.3 | | |
| | comp=Z,9.4nm,1.0s | | | | | | | |
| G21K | Allakaket | 37.41 | 34 | P | P | 16 48 57.9 | +0.6 | |
| | baz=264 | | | | | | | |
| B21K | Ikpikpuk River | 37.49 | 29 | P | P | 16 48 58.4 | +0.5 | |
| | baz=259 | | | | | | | |
| F21K | Alatna River | 37.51 | 33 | P | P | 16 48 58.6 | +0.5 | |
| | baz=263,SNR=5.6 | | | | | | | |
| O20K | Slope Mountain | 37.59 | 45 | P | P | 16 48 58.8 | -0.1 | |
| | baz=273 | | | | | | | |
| H21K | Melozitna Rive | 37.61 | 35 | P | P | 16 48 58.7 | -0.3 | |
| | baz=266 | | | | | | | |
| A22K | Sinclair Lake | 37.68 | 26 | P | P | 16 48 59.1 | -0.4 | |
| | baz=256 | | | | | | | |
| N20K | Mount Spurr | 37.76 | 43 | P | P | 16 49 00.2 | -0.1 | |
| | baz=272 | | | | | | | |
| I21K | Tanana | 37.92 | 36 | P | P | 16 49 00.8 | -0.7 | |
| | baz=267 | | | | | | | |
| D22K | Ayikyak River | 38.04 | 30 | P | P | 16 49 03.1 | +0.5 | |
| D22K | | | | IAmb | IAmb | 16 49 37.9 | | |
| | comp=Z,18nm,1.5s | | | | | | | |
| D22K | Ayikyak River | 38.04 | 30 | P | P | 16 49 02.0 | -0.5 | |
| | baz=262 | | | | | | | |
| F22K | John River | 38.04 | 32 | P | P | 16 49 02.3 | -0.3 | |
| | baz=264,SNR=5.1 | | | | | | | |
| HOM | Homer | 38.11 | 45 | P | P | 16 49 02.8 | -0.4 | |
| | baz=274 | | | | | | | |
| H22K | Ishtalitna Cre | 38.22 | 35 | P | P | 16 49 03.2 | -0.9 | |
| | baz=267 | | | | | | | |
| G22K | Bettles | 38.24 | 33 | P | P | 16 49 03.9 | -0.3 | |
| | baz=265 | | | | | | | |
| E22K | Anaktuvuk Pass | 38.25 | 31 | IAmb | IAmb | 16 49 06.8 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| E22K | Anaktuvuk Pass | 38.25 | 31 | P | P | 16 49 04.2 | -0.2 | |
| | baz=263,SNR=5.6 | | | | | | | |
| BPAW | Bear Paw Mtn. | 38.31 | 38 | P | P | 16 49 05.0 | +0.1 | |
| | baz=269 | | | | | | | |
| MLY | Manley | 38.44 | 36 | P | P | 16 49 05.5 | -0.5 | |
| | baz=268 | | | | | | | |
| SUA | Susitna One | 38.45 | 42 | P | P | 16 49 05.5 | -0.7 | |
| | baz=273 | | | | | | | |
| COLD | Coldfoot | 38.78 | 33 | P | P | 16 49 07.6 | -1.2 | |
| | baz=266 | | | | | | | |
| G23K | Bananza Creek | 38.81 | 34 | P | P | 16 49 07.3 | -1.8 | |
| | baz=267 | | | | | | | |
| C23K | Itkillik River | 38.91 | 29 | P | P | 16 49 08.3 | -1.4 | |
| | baz=262 | | | | | | | |
| RC01 | Rabbit Creek A | 38.96 | 43 | P | P | 16 49 09.5 | -0.8 | |
| | baz=274 | | | | | | | |
| H23K | Yukon River | 38.97 | 35 | P | P | 16 49 09.7 | -0.6 | |
| | baz=268,SNR=5.2 | | | | | | | |
| O22K | Cooper Landing | 39.01 | 44 | P | P | 16 49 10.4 | -0.3 | |
| | baz=275 | | | | | | | |
| I23K | Minto, Yukon-K | 39.02 | 36 | P | P | 16 49 11.8 | +1.0 | |
| I23K | Minto, Yukon-K | 39.02 | 36 | P | P | 16 49 10.3 | -0.5 | |
| | baz=269 | | | | | | | |
| E23K | Chandalar | 39.07 | 32 | IAmb | IAmb | 16 49 13.9 | | |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| E23K | Chandalar | 39.07 | 32 | P | P | 16 49 11.0 | -0.3 | |
| | baz=266,SNR=5.6 | | | | | | | |
| TOLK | Toolik Lake Re | 39.13 | 31 | P | P | 16 49 11.6 | -0.1 | |
| | baz=265 | | | | | | | |
| NEA2 | Nenana | 39.15 | 37 | IAmb | IAmb | 16 49 15.2 | | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| NEA2 | Nenana | 39.15 | 37 | P | P | 16 49 11.5 | -0.4 | |
| | baz=270,SNR=6.2 | | | | | | | |
| SEW | Seward | 39.18 | 44 | P | P | 16 49 11.9 | -0.2 | |
| | baz=276 | | | | | | | |
| MCK | McKinley | 39.21 | 39 | P | P | 16 49 11.8 | -0.7 | |
| | baz=272 | | | | | | | |
| WAT1 | Susitna Watana | 39.42 | 40 | P | P | 16 49 13.9 | -0.3 | |
| | baz=273 | | | | | | | |
| D24K | Happy Valley | 39.45 | 30 | P | P | 16 49 14.1 | -0.2 | |
| | baz=265 | | | | | | | |
| E24K | Your Creek | 39.49 | 32 | IAmb | IAmb | 16 49 34.8 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| E24K | Your Creek | 39.49 | 32 | P | P | 16 49 14.4 | -0.4 | |
| | baz=267,SNR=6.2 | | | | | | | |
| KNK | Knik Glacier | 39.55 | 42 | P | P | 16 49 15.2 | -0.1 | |
| | baz=275 | | | | | | | |
| C24K | Franklin Bluff | 39.55 | 29 | P | P | 16 49 14.6 | -0.5 | |
| | baz=264 | | | | | | | |
| SML | Sawmill | 39.58 | 42 | P | P | 16 49 16.7 | +1.1 | |
| SML | Sawmill | 39.58 | 42 | P | P | 16 49 15.2 | -0.4 | |
| | baz=274,SNR=7.6 | | | | | | | |
| H24K | Noodor Dome | 39.65 | 35 | P | P | 16 49 16.3 | +0.2 | |
| | baz=270 | | | | | | | |
| PWL | Port Wells | 39.66 | 43 | P | P | 16 49 16.4 | +0.3 | |
| | baz=276 | | | | | | | |
| COLA | College | 39.67 | 37 | P | P | 16 49 16.3 | +0.2 | |
| | baz=271 | | | | | | | |
| COLA | College | 39.67 | 37 | *i* P | P | 16 49 17.7 | +1.6 | |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| F24K | Squaw Lake | 39.69 | 33 | P | P | 16 49 17.3 | +0.9 | |
| F24K | | | | PcP | PcP | 16 51 24.0 | +2.2 | |
| F24K | Squaw Lake | 39.69 | 33 | P | P | 16 49 16.4 | 0.0 | |
| | baz=268 | | | | | | | |
| WAT6 | Susitna Watana | 39.80 | 40 | P | P | 16 49 17.5 | -0.1 | |
| | baz=274 | | | | | | | |
| G24K | Hadweenzic Riv | 39.83 | 34 | P | P | 16 49 16.8 | -0.7 | |
| | baz=269 | | | | | | | |
| POKR | Poker Plat Res | 39.84 | 36 | P | P | 16 49 16.7 | -1.0 | |
| | baz=271 | | | | | | | |
| M23K | Glacier View | 39.87 | 42 | P | P | 16 49 17.9 | 0.0 | |
| | baz=275 | | | | | | | |
| DHY | Denali Highway | 39.94 | 40 | P | P | 16 49 18.1 | -0.5 | |
| | baz=274 | | | | | | | |
| SCM | Sheep Creek Mo | 40.05 | 41 | P | P | 16 49 19.4 | -0.1 | |
| | baz=275 | | | | | | | |
| IL31 | | 40.08 | 37 | IAmb | IAmb | 16 49 21.9 | | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| ILAR | Eielson Array | 40.08 | 37 | P | P | 16 49 20.2 | +0.6 | |
| | comp=Z,4.4nm,1.0s,baz=265,slow=6.5,SNR=27 | | | | | | | |
| | comp=Z,4.4nm,1.0s | | | | | | | |
| ILAR | Eielson Array | 40.08 | 37 | P | P | 16 49 20.2 | +0.6 | |
| GLI | Glacier Island | 40.26 | 43 | P | P | 16 49 20.9 | -0.2 | |
| | baz=277 | | | | | | | |
| G25K | Bearman Lake | 40.37 | 34 | P | P | 16 49 21.8 | -0.2 | |
| | baz=270 | | | | | | | |
| F25K | Christian Rive | 40.55 | 32 | P | P | 16 49 25.2 | +1.6 | |
| F25K | Christian Rive | 40.55 | 32 | P | P | 16 49 22.8 | -0.8 | |
| | baz=270 | | | | | | | |
| M24K | Tolsona, Glenn | 40.57 | 41 | P | P | 16 49 25.4 | +1.6 | |
| M24K | | | | IAmb | IAmb | 16 49 26.4 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| M24K | Tolsona, Glenn | 40.57 | 41 | P | P | 16 49 23.1 | -0.7 | |
| | baz=276 | | | | | | | |
| K24K | Donnelly Dome | 40.61 | 38 | P | P | 16 49 23.6 | -0.4 | |
| | baz=274 | | | | | | | |
| KLU | Klutina | 40.76 | 42 | IAmb | IAmb | 16 49 27.7 | | |
| | comp=Z,8.1nm,1.0s | | | | | | | |
| KLU | Klutina | 40.76 | 42 | P | P | 16 49 24.8 | -0.6 | |
| | baz=277 | | | | | | | |
| PAX | Paxson | 40.82 | 40 | P | P | 16 49 25.4 | -0.4 | |
| | baz=276 | | | | | | | |
| C26K | Camden Bay | 40.88 | 29 | P | P | 16 49 25.8 | -0.3 | |
| | baz=268 | | | | | | | |
| BMAR | Burnt Mountain | 40.96 | 33 | P | P | 16 49 28.5 | +1.6 | |
| HARP | HAARP | 41.02 | 40 | P | P | 16 49 26.5 | -0.9 | |
| | baz=276 | | | | | | | |
| RIDG | Independent Ri | 41.03 | 38 | P | P | 16 49 26.7 | -0.8 | |
| | baz=275 | | | | | | | |
| F26K | Sheenjek River | 41.12 | 32 | P | P | 16 49 27.8 | -0.4 | |
| | baz=271 | | | | | | | |
| G26K | Porcupine Rive | 41.28 | 33 | P | P | 16 49 28.6 | -0.9 | |
| | baz=272,SNR=5.3 | | | | | | | |
| N25K | Chitina, Valde | 41.37 | 42 | P | P | 16 49 29.1 | -1.3 | |
| | baz=278 | | | | | | | |
| SCRK | Sand Creek | 41.39 | 38 | P | P | 16 49 29.7 | -0.8 | |
| | baz=276,SNR=8.1 | | | | | | | |
| ZALV | Zalesovo Beam | 41.44 | 307 | LR | LR | 17 07 08.5 | | |
| | comp=Z,52nm,20.6s,baz=70,slow=37 | | | | | | | |
| BMRM | Bremner River | 41.45 | 43 | P | P | 16 49 30.1 | -0.9 | |
| | baz=278 | | | | | | | |
| J26L | Joseph Creek | 41.52 | 37 | P | P | 16 49 31.3 | -0.3 | |
| | baz=275 | | | | | | | |
| PZH | PanZhiHua | 41.70 | 260 | P | P | 16 49 33.1 | -0.5 | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,120nm,4.5s | | | | | | | |
| L26K | Log Cabin Wild | 41.77 | 39 | P | P | 16 49 33.6 | 0.0 | |
| | baz=277 | | | | | | | |
| VRDI | Verde Repeater | 41.97 | 42 | P | P | 16 49 36.7 | +1.3 | |
| M26K | Nabesna, AK | 42.01 | 40 | P | P | 16 49 38.0 | +2.4 | |
| M26K | | | | IAmb | IAmb | 16 49 38.6 | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| M26K | Nabesna, AK | 42.01 | 40 | P | P | 16 49 35.2 | -0.4 | |
| | baz=278,SNR=10.0 | | | | | | | |
| G27K | Doyon Strip | 42.13 | 34 | P | P | 16 49 36.1 | -0.3 | |
| | baz=274 | | | | | | | |
| MCARA | McCarthy VSAT | 42.15 | 42 | P | P | 16 49 36.0 | -0.6 | |
| | baz=279 | | | | | | | |
| CRQE | Cirque | 42.22 | 43 | P | P | 16 49 37.2 | -0.2 | |
| | baz=280,SNR=6.0 | | | | | | | |
| K27K | Chicken | 42.22 | 38 | IAmb | IAmb | 16 49 39.7 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| K27K | Chicken | 42.22 | 38 | P | P | 16 49 36.5 | -0.7 | |
| | baz=277,SNR=17 | | | | | | | |
| H27K | Steamboat Moun | 42.23 | 34 | P | P | 16 49 36.7 | -0.6 | |
| | baz=275 | | | | | | | |
| I27K | Kandik River | 42.25 | 35 | P | P | 16 49 36.8 | -0.7 | |
| | baz=276 | | | | | | | |
| L27K | Beaver Creek, | 42.46 | 39 | IAmb | IAmb | 16 49 42.0 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| L27K | Beaver Creek, | 42.46 | 39 | P | P | 16 49 39.0 | -0.2 | |
| | baz=278,SNR=16 | | | | | | | |
| BCAR | Beaver Creek A | 42.48 | 39 | P | P | 16 49 40.5 | +1.2 | |
| EGAK | Eagle | 42.53 | 37 | IAmb | IAmb | 16 49 41.9 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| EGAK | Eagle | 42.53 | 37 | P | P | 16 49 39.6 | 0.0 | |
| | baz=277,SNR=9.3 | | | | | | | |
| M27K | Edge Creek, AK | 42.54 | 40 | IAmb | IAmb | 16 49 42.9 | | |
| | comp=Z,8.4nm,0.9s | | | | | | | |
| M27K | Edge Creek, AK | 42.54 | 40 | P | P | 16 49 39.5 | -0.4 | |
| | baz=275,SNR=6.3 | | | | | | | |
| F28M | Old Crow | 42.76 | 32 | P | P | 16 49 41.4 | -0.1 | |
| | baz=275 | | | | | | | |
| E28M | Babbage River | 42.81 | 31 | P | P | 16 49 41.4 | -0.5 | |
| | baz=274 | | | | | | | |
| GRNC | Granite Creek | 42.87 | 43 | IAmb | IAmb | 16 49 45.4 | | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| I28M | Miner Creek | 42.96 | 35 | P | P | 16 49 44.7 | +1.4 | |
| I28M | | | | IAmb | IAmb | 16 49 46.6 | | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| I28M | Miner Creek | 42.96 | 35 | P | P | 16 49 43.3 | 0.0 | |
| | baz=277,SNR=8.4 | | | | | | | |
| CTG | Chitna Glacier | 43.03 | 42 | P | P | 16 49 43.8 | -0.2 | |
| | baz=281,SNR=5.3 | | | | | | | |
| CTGM | Chitina Glacie | 43.03 | 42 | IAmb | IAmb | 16 49 46.7 | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| D28M | Stokes Point | 43.05 | 30 | P | P | 16 49 44.0 | +0.3 | |
| | baz=274 | | | | | | | |
| E29M | Blow River | 43.43 | 31 | IAmb | IAmb | 16 49 49.5 | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| E29M | Blow River | 43.43 | 31 | P | P | 16 49 46.3 | -0.6 | |
| | baz=276 | | | | | | | |
| H29M | Whitestone | 43.50 | 34 | P | P | 16 49 47.1 | -0.5 | |
| | baz=278 | | | | | | | |
| G29M | Pine Creek | 43.55 | 33 | IAmb | IAmb | 16 49 51.7 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| G29M | Pine Creek | 43.55 | 33 | P | P | 16 49 47.7 | -0.3 | |
| | baz=278 | | | | | | | |
| O28M | Mcd Upton | 43.62 | 42 | P | P | 16 49 48.4 | -0.5 | |
| | baz=282 | | | | | | | |
| I29M | Ogilvie Camp, | 43.65 | 35 | IAmb | IAmb | 16 49 51.1 | | |
| | comp=Z,23nm,1.4s | | | | | | | |
| I29M | Ogilvie Camp, | 43.65 | 35 | P | P | 16 49 48.7 | 0.0 | |
| | baz=279,SNR=12 | | | | | | | |
| YUK8 | Steele Glacier | 43.71 | 41 | P | P | 16 49 48.9 | -0.7 | |
| | baz=282 | | | | | | | |
| M29M | Somme Creek | 44.09 | 40 | P | P | 16 49 52.3 | -0.1 | |
| | baz=282 | | | | | | | |
| EPYK | Eagle Plains | 44.14 | 34 | IAmb | IAmb | 16 49 55.7 | | |
| | comp=Z,18nm,1.2s | | | | | | | |
| EPYK | Eagle Plains | 44.14 | 34 | P | P | 16 49 52.8 | +0.2 | |
| | baz=279 | | | | | | | |
| YUK4 | Talbot Arm | 44.23 | 41 | P | P | 16 49 53.7 | 0.0 | |
| | baz=283 | | | | | | | |
| K29M | Barlow Dome | 44.24 | 38 | P | P | 16 49 53.1 | -0.5 | |
| | baz=281 | | | | | | | |
| G30M | tAoh Zraii Nji | 44.24 | 33 | P | P | 16 49 53.5 | 0.0 | |
| | baz=279 | | | | | | | |
| PNL | Peninsula | 44.24 | 44 | P | P | 16 49 53.4 | -0.2 | |
| | baz=284 | | | | | | | |
| F30M | Barrier River | 44.31 | 32 | P | P | 16 49 54.3 | +0.3 | |
| | baz=279 | | | | | | | |
| YUK6 | Outpost Mounta | 44.45 | 42 | P | P | 16 49 55.6 | +0.1 | |
| | baz=283 | | | | | | | |
| I30M | Mount Dempster | 44.47 | 35 | IAmb | IAmb | 16 49 58.4 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| I30M | Mount Dempster | 44.47 | 35 | P | P | 16 49 55.5 | +0.1 | |
| | baz=281,SNR=11 | | | | | | | |
| O29M | Mount Kennedy | 44.50 | 43 | P | P | 16 49 56.4 | +0.6 | |
| | baz=284 | | | | | | | |
| J30M | Hart River | 44.61 | 36 | IAmb | IAmb | 16 49 59.7 | | |
| | comp=Z,10nm,1.3s | | | | | | | |
| J30M | Hart River | 44.61 | 36 | P | P | 16 49 56.6 | +0.1 | |
| | baz=281 | | | | | | | |
| TNCH | TengChong | 44.89 | 261 | P | P | 16 49 51.8 | -7.6 | |
| TNCH | | | | pP | pP | 16 50 06.9 | -8.4 | |
| TNCH | | | | sP | sP | 16 50 16.4 | -6.1 | |
| TNCH | | | | PP | PP | 16 51 45.6 | +0.5 | |
| TNCH | | | | S | S | 16 56 18.8 | -14 | |
| TNCH | | | | sS | sS | 16 56 51.6 | -8.1 | |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,61nm,5.1s | | | | | | | |
| N30M | Aishikik Lake | 44.93 | 41 | P | P | 16 49 59.2 | +0.1 | |
| | baz=284 | | | | | | | |
| G31M | Satah River | 45.01 | 33 | P | P | 16 50 00.9 | +1.4 | |
| G31M | Satah River | 45.01 | 33 | P | P | 16 49 59.5 | 0.0 | |
| | baz=281 | | | | | | | |
| INK | Inuvik | 45.05 | 31 | P | P | 16 49 59.4 | -0.4 | |
| | baz=280 | | | | | | | |
| P29M | Windy Craggy | 45.07 | 43 | P | P | 16 49 60.0 | -0.2 | |
| | baz=285,SNR=9.5 | | | | | | | |
| F31M | Tsiigehtchic | 45.12 | 32 | P | P | 16 50 00.3 | 0.0 | |
| | baz=281 | | | | | | | |
| MK31 | Makanchi Array | 45.24 | 297 | P | P | 16 50 01.4 | -0.4 | |
| MK31 | Makanchi Array | 45.24 | 297 | *i* P | P | 16 50 01.5 | -0.2 | |
| MKAR | Makanchi Array | 45.24 | 297 | P | P | 16 50 00.3 | -1.4 | |
| | comp=Z,0.5nm,0.6s,baz=72,slow=8.2,SNR=8.6 | | | | | | | |
| MKAR | | | | PcP | PcP | 16 51 40.5 | -0.2 | |
| | comp=Z,0.7nm,0.7s,baz=57,slow=4.5,SNR=2.6 | | | | | | | |
| MKAR | | | | LR | LR | 17 10 10.3 | | |
| | comp=Z,112nm,18.1s,baz=67,slow=38 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| MKAR | Makanchi Array | 45.24 | 297 | P | P | 16 50 00.3 | -1.4 | |
| MKAR | | | | | | 16 51 40.5 | | |
| P30M | Million Dollar | 45.32 | 43 | P | P | 16 50 01.7 | -0.5 | |
| | baz=285 | | | | | | | |
| N31M | Braeburn, Yuko | 45.54 | 41 | IAmb | IAmb | 16 50 07.3 | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| N31M | Braeburn, Yuko | 45.54 | 41 | P | P | 16 50 02.9 | -0.9 | |
| | baz=285,SNR=5.0 | | | | | | | |
| O30N | Mendenhall | 45.57 | 42 | P | P | 16 50 05.4 | +1.2 | |
| | baz=285 | | | | | | | |
| PLBC | Pleasant Camp | 45.79 | 43 | P | P | 16 50 06.1 | +0.3 | |
| | baz=286 | | | | | | | |
| M31M | Drury Creek, Y | 45.99 | 39 | IAmb | IAmb | 16 50 10.3 | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| M31M | Drury Creek, Y | 45.99 | 39 | P | P | 16 50 07.0 | -0.4 | |
| | baz=285,SNR=7.8 | | | | | | | |
| KURK | Kurchatov | 46.04 | 304 | *e* P | P | 16 50 06.9 | -1.0 | |
| KURK | Kurchatov | 46.04 | 304 | P | P | 16 50 06.9 | -1.0 | |
| KURBB | Kurchatov Arra | 46.13 | 304 | P | P | 16 50 06.9 | -1.7 | |
| | comp=Z,0.7nm,0.6s,baz=71,slow=8.4,SNR=5.0 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| WHY | Whitehorse | 46.18 | 42 | P | P | 16 50 08.8 | -0.1 | |
| | baz=286 | | | | | | | |
| S31K | Pelican | 46.29 | 45 | P | P | 16 50 09.7 | 0.0 | |
| | baz=288 | | | | | | | |
| SKAG | Skagway | 46.30 | 43 | P | P | 16 50 09.6 | -0.1 | |
| | baz=287 | | | | | | | |
| FARO | Faro, Yukon | 46.46 | 39 | P | P | 16 50 10.9 | -0.2 | |
| | baz=286 | | | | | | | |
| MMPY | Sheldon Lake, | 47.28 | 38 | P | P | 16 50 17.0 | -0.5 | |
| | baz=287 | | | | | | | |
| P33M | Teslin, Yukon | 47.29 | 42 | P | P | 16 50 17.5 | -0.1 | |
| | baz=288,SNR=8.1 | | | | | | | |
| S32K | Killisnoo | 47.29 | 46 | P | P | 16 50 17.8 | +0.3 | |
| | baz=289 | | | | | | | |
| Q32M | Nakina River | 47.95 | 43 | P | P | 16 50 23.2 | +0.3 | |
| | baz=290 | | | | | | | |
| R33M | Jennings River | 48.44 | 42 | P | P | 16 50 27.0 | +0.5 | |
| | baz=290,SNR=5.5 | | | | | | | |
| U33K | Whale Pass | 48.50 | 47 | P | P | 16 50 26.5 | -0.4 | |
| | baz=291 | | | | | | | |
| S34M | Telegraph Cree | 48.87 | 44 | P | P | 16 50 29.1 | -0.7 | |
| | baz=291 | | | | | | | |
| CMAR | Chiang Mai Arr | 48.91 | 254 | P | P | 16 50 31.0 | +0.5 | |
| | comp=Z,0.7nm,0.4s,baz=27,slow=8.1,SNR=2.6 | | | | | | | |
| CMAR | | | | LR | LR | 17 12 51.4 | | |
| | comp=Z,28nm,18.0s,baz=125,slow=38 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| CMAR | Chiang Mai Arr | 48.91 | 254 | P | P | 16 50 31.0 | +0.5 | |
| TGTN | Hyland Airport | 48.96 | 39 | P | P | 16 50 30.3 | -0.2 | |
| | baz=290 | | | | | | | |
| DLBC | Dease Lake | 49.23 | 43 | IAmb | IAmb | 16 50 36.2 | | |
| | comp=Z,10nm,1.3s | | | | | | | |
| DLBC | Dease Lake | 49.23 | 43 | P | P | 16 50 32.7 | +0.1 | |
| | baz=292 | | | | | | | |
| T35M | Bob Quinn | 49.66 | 45 | P | P | 16 50 35.7 | -0.2 | |
| | baz=293,SNR=8.1 | | | | | | | |
| BVAR | Borovoye Array | 49.88 | 309 | LR | LR | 17 15 02.4 | | |
| | comp=Z,32nm,18.4s,baz=104,slow=40 | | | | | | | |
| TOAD | Toad River Com | 51.38 | 42 | P | P | 16 50 48.7 | 0.0 | |
| | baz=295,SNR=5.0 | | | | | | | |
| AAK | Ala-Archa | 52.06 | 296 | LR | LR | 17 12 59.5 | | |
| | comp=Z,43nm,18.7s,baz=110,slow=36 | | | | | | | |
| YKA | Yellowknife Ar | 54.41 | 35 | P | P | 16 51 12.0 | +1.0 | |
| | comp=Z,4.1nm,0.7s,baz=302,slow=8.0,SNR=7.7 | | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| YKA | Yellowknife Ar | 54.41 | 35 | P | P | 16 51 12.0 | +1.0 | |
| ARU | Arti | 54.53 | 317 | LR | LR | 17 16 55.8 | | |
| | comp=Z,59nm,18.5s,baz=73,slow=39 | | | | | | | |
| ARU | Arti | 54.53 | 317 | *e* P | P | 16 51 11.8 | -0.1 | |
| ARU | Arti | 54.53 | 317 | *c i* P | P | 16 51 11.8 | -0.1 | |
| ARU | | | | | | 16 53 12.2 | | |
| ARU | | | | S | S | 16 58 48.4 | +2.3 | |
| ARU | | | | SS | SS | 17 02 30.0 | +1.3 | |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,2.9s | | | | | | | |
| KIRV | Kirov | 57.64 | 322 | LR | LR | 17 18 22.3 | | |
| | comp=Z,55nm,18.1s,baz=56,slow=38 | | | | | | | |
| AKTO | Aktyubinsk | 57.87 | 311 | LR | LR | 17 17 37.5 | | |
| | comp=Z,42nm,20.9s,baz=164,slow=37 | | | | | | | |
| ARCES | ARCESS Array B | 58.85 | 340 | LR | LR | 17 21 12.6 | | |
| | comp=Z,26nm,19.1s,baz=136,slow=40 | | | | | | | |
| C09A | Chrisman Ranch | 60.50 | 51 | IAmb | IAmb | 16 51 56.4 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| HAWA | Hanford | 60.60 | 53 | IAmb | IAmb | 16 51 57.7 | | |
| | comp=Z,6.7nm,1.0s | | | | | | | |
| NEW | Newport | 60.86 | 50 | IAmb | IAmb | 16 51 59.6 | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| NEW | Newport | 60.86 | 50 | P | P | 16 51 56.6 | 0.0 | |
| | baz=306,SNR=5.6 | | | | | | | |
| G08A | Pilot Rock | 61.56 | 53 | IAmb | IAmb | 16 52 04.3 | | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| I07A | Izee | 61.96 | 55 | IAmb | IAmb | 16 52 07.1 | | |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| BELG | Belogornoye | 62.08 | 317 | LR | LR | 17 19 52.1 | | |
| | comp=Z,46nm,19.5s,baz=16,slow=37 | | | | | | | |
| F10A | Beach Ranch, E | 62.15 | 52 | IAmb | IAmb | 16 52 08.8 | | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| BMO | Blue Mountains | 62.77 | 53 | IAmb | IAmb | 16 52 12.5 | | |
| | comp=Z,10nm,1.4s | | | | | | | |
| J08A | Circle Bar Ran | 62.99 | 55 | IAmb | IAmb | 16 52 14.2 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| WVOR | Wild Horse Val | 63.45 | 56 | IAmb | IAmb | 16 52 17.0 | | |
| | comp=Z,8.1nm,1.0s | | | | | | | |
| MSO | Missoula | 63.45 | 50 | P | P | 16 52 14.1 | +0.2 | |
| | baz=308,SNR=11 | | | | | | | |
| FFC | Flin Flon | 64.29 | 37 | P | P | 16 52 20.7 | +1.5 | |
| FFC | | | | IAmb | IAmb | 16 52 20.8 | | |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| FFC | Flin Flon | 64.29 | 37 | P | P | 16 52 20.7 | +1.5 | |
| FFC | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| FINES | FINESS Array B | 64.64 | 333 | P | P | 16 52 19.8 | -1.5 | |
| | comp=Z,3.3nm,0.7s,baz=38,slow=9.6,SNR=12 | | | | | | | |
| FINES | | | | LR | LR | 17 22 19.5 | | |
| | comp=Z,38nm,19.6s,baz=56,slow=38 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| FINES | FINESS Array B | 64.64 | 333 | P | P | 16 52 19.8 | -1.5 | |
| PAHR | Pah Rah Range | 64.66 | 59 | IAmb | IAmb | 16 52 24.9 | | |
| | comp=Z,9.2nm,1.0s | | | | | | | |
| EGMT | Eagleton | 64.93 | 47 | P | P | 16 52 23.2 | -0.3 | |
| | baz=310,SNR=5.3 | | | | | | | |
| CMB | Columbia Colle | 65.07 | 61 | IAmb | IAmb | 16 52 27.5 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| DLMT | Dillon | 65.09 | 50 | IAmb | IAm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NVAR | Mina Array Bea | 66.11 | 59 | P | P | 16 52 33.5 | +2.0 | |
| | comp=Z,6.6nm,0.7s,baz=293,slow=6.9,SNR=63 | | | | | | | |
| | comp=Z,6.6nm,0.7s | | | | | | | |
| MDPB | Devils Postpil | 66.13 | 60 | IAmb | IAmb | 16 52 34.7 | | |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| YHL | Hebgen Lake | 66.19 | 50 | IAmb | IAmb | 16 52 34.9 | | |
| | comp=Z,8.5nm,1.0s | | | | | | | |
| NV11 | Mina Array Sit | 66.20 | 59 | IAmb | IAmb | 16 52 35.1 | | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| H17A | Grant Village | 66.81 | 50 | IAmb | IAmb | 16 52 40.4 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| H17A | Grant Village | 66.81 | 50 | P | P | 16 52 36.2 | +0.2 | |
| | baz=310,SNR=5.2 | | | | | | | |
| IMW | Indian Meadow | 66.94 | 51 | IAmb | IAmb | 16 52 40.3 | | |
| | comp=Z,8.9nm,1.0s | | | | | | | |
| DSP | Deep Springs | 66.98 | 60 | IAmb | IAmb | 16 52 40.2 | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| RLMT | Red Lodge | 67.05 | 49 | IAmb | IAmb | 16 52 39.9 | | |
| | comp=Z,3.9nm,0.6s | | | | | | | |
| RLMT | Red Lodge | 67.05 | 49 | P | P | 16 52 37.0 | -0.5 | |
| | baz=311,SNR=5.2 | | | | | | | |
| FXWY | Fox Creek | 67.05 | 51 | IAmb | IAmb | 16 52 40.8 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| DGMT | Dagmar | 67.45 | 44 | P | P | 16 52 38.6 | -1.0 | |
| | baz=313 | | | | | | | |
| R11B | Troy Canyon, C | 67.81 | 58 | P | P | 16 52 42.0 | -0.3 | |
| | baz=310,SNR=13 | | | | | | | |
| HWUT | Hardware Ranch | 68.07 | 53 | IAmb | IAmb | 16 52 46.3 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| SPR3 | Spring Creek 3 | 68.14 | 56 | P | P | 16 52 46.8 | +2.2 | |
| DUG | Dugway, Tooele | 68.27 | 55 | IAmb | IAmb | 16 52 48.0 | | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| DUG | Dugway, Tooele | 68.27 | 55 | P | P | 16 52 44.9 | -0.1 | |
| | baz=311,SNR=9.5 | | | | | | | |
| DZM | Mont Dzumac | 68.29 | 162 | eLR | LR | 17 13 21.2 | | |
| | comp=Z,48nm,25.4s | | | | | | | |
| TPNV | Topopah Spring | 68.30 | 59 | P | P | 16 52 44.9 | -0.5 | |
| | baz=310,SNR=17 | | | | | | | |
| BW06 | Boulder Array | 68.44 | 51 | P | P | 16 52 44.8 | -1.4 | |
| | baz=312,SNR=8.8 | | | | | | | |
| PD31 | Pinedale Array | 68.44 | 51 | IAmb | IAmb | 16 52 48.5 | | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| PDAR | Pinedale Array | 68.44 | 51 | P | P | 16 52 46.7 | +0.5 | |
| PDAR | Pinedale Array | 68.44 | 51 | P | P | 16 52 47.9 | +1.7 | |
| | comp=Z,3.9nm,0.6s,baz=265,slow=1.9,SNR=48 | | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | | |
| TCUT | Toone Canyon | 68.48 | 53 | IAmb | IAmb | 16 52 49.3 | | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| GWY | Greenwater Val | 68.54 | 60 | IAmb | IAmb | 16 52 49.5 | | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| NB2 | NORSAR Subarra | 69.22 | 339 | P | P | 16 52 49.4 | -1.0 | |
| | comp=Z,3.4nm,0.8s,baz=31,slow=6.5 | | | | | | | |
| NOA | NORSAR Array B | 69.22 | 339 | P | P | 16 52 49.5 | -1.0 | |
| | comp=Z,1.0nm,0.6s,baz=31,slow=6.6,SNR=7.0 | | | | | | | |
| NOA | | | | LR | LR | 17 28 05.9 | | |
| | comp=Z,16nm,18.2s,baz=35,slow=40 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| NOA | NORSAR Array B | 69.22 | 339 | P | P | 16 52 49.5 | -1.0 | |
| ASAR | Alice Springs | 69.31 | 195 | P | P | 16 52 53.1 | +1.7 | |
| ASAR | Alice Springs | 69.31 | 195 | P | P | 16 52 52.8 | +1.4 | |
| | comp=Z,1.1nm,0.5s,baz=12,slow=6.8,SNR=47 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| ASAR | Alice Springs | 69.31 | 195 | P | P | 16 52 53.1 | +1.7 | |
| HFS | Hagfors | 69.35 | 338 | P | P | 16 52 49.9 | -1.3 | |
| | comp=Z,2.3nm,0.6s,baz=31,slow=5.1,SNR=8.0 | | | | | | | |
| HFS | | | | LR | LR | 17 27 39.3 | | |
| | comp=Z,26nm,18.6s,baz=40,slow=40 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| HFS | Hagfors | 69.35 | 338 | P | P | 16 52 49.9 | -1.3 | |
| CCUT | Cedar City | 69.67 | 57 | IAmb | IAmb | 16 52 56.9 | | |
| | comp=Z,11nm,1.5s | | | | | | | |
| P17A | Butcher Ranch, | 69.94 | 54 | IAmb | IAmb | 16 52 58.3 | | |
| | comp=Z,9.4nm,1.0s | | | | | | | |
| KVAR | Kislovodsk Arr | 70.06 | 312 | LR | LR | 17 28 35.2 | | |
| | comp=Z,88nm,18.3s,baz=282,slow=40 | | | | | | | |
| KIV | Kislovodsk | 70.07 | 312 | eP | P | 16 52 55.9 | -0.2 | |
| KIV | Kislovodsk | 70.07 | 312 | eP | P | 16 52 55.9 | -0.2 | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| KIV | | | | MLR | MLR | | | |
| | comp=Z,51nm,17.0s | | | | | | | |
| ULM | Lac du Bonnet | 70.08 | 38 | P | P | 16 52 56.4 | +0.5 | |
| ULM | | | | IAmb | IAmb | 16 52 56.8 | | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| ULM | Lac du Bonnet | 70.08 | 38 | P | P | 16 52 56.2 | +0.3 | |
| | comp=Z,4.3nm,0.6s,baz=295,slow=5.7,SNR=7.8 | | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | | |
| ULM | Lac du Bonnet | 70.08 | 38 | P | P | 16 52 56.4 | +0.5 | |
| ULM | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| KBZ | Khabaz | 70.11 | 312 | LR | LR | 17 28 04.5 | | |
| | comp=Z,67nm,18.6s,baz=60,slow=40 | | | | | | | |
| KBZ | Khabaz | 70.11 | 312 | eP | P | 16 52 55.2 | -1.0 | |
| KBZ | Khabaz | 70.11 | 312 | ceP | P | 16 52 56.2 | 0.0 | |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,2.3s | | | | | | | |
| P18A | Preston Nutter | 70.13 | 54 | IAmb | IAmb | 16 52 59.6 | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| PFO | Pinyon Flats O | 70.33 | 62 | P | P | 16 52 57.0 | -0.9 | |
| | baz=311 | | | | | | | |
| KNB | Kanab | 70.34 | 57 | IAmb | IAmb | 16 53 01.3 | | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| TPFO | Pinon Flats | 70.34 | 62 | P | P | 16 52 57.5 | -0.5 | |
| | baz=311 | | | | | | | |
| RWWY | Rawlins | 70.45 | 50 | IAmb | IAmb | 16 53 00.9 | | |
| | comp=Z,7.2nm,0.9s | | | | | | | |
| RSSD | Black Hills | 70.49 | 47 | P | P | 16 52 58.2 | -0.6 | |
| | baz=314 | | | | | | | |
| MONP2 | Monument Peak | 70.83 | 63 | P | P | 16 53 00.5 | -0.6 | |
| | baz=311 | | | | | | | |
| AGMN | Agassiz Nation | 71.52 | 40 | P | P | 16 53 03.8 | -0.8 | |
| | baz=317 | | | | | | | |
| AKASG | Malin Array Be | 71.58 | 324 | P | P | 16 53 03.5 | -1.5 | |
| | comp=Z,0.6nm,0.3s,baz=38,slow=6.5,SNR=4.2 | | | | | | | |
| AKASG | | | | LR | LR | 17 25 20.7 | | |
| | comp=Z,28nm,20.8s,baz=27,slow=36 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| AKASG | Malin Array Be | 71.58 | 324 | P | P | 16 53 03.5 | -1.5 | |
| AKBB | Malin Array Si | 71.58 | 324 | ceP | P | 16 53 05.2 | +0.2 | |
| N23A | Red Feather La | 71.69 | 50 | P | P | 16 53 04.1 | -2.1 | |
| | baz=314,SNR=5.8 | | | | | | | |
| WUAZ | Wupatki | 72.21 | 58 | P | P | 16 53 07.4 | -1.9 | |
| | baz=313 | | | | | | | |
| SMCO | Snowmass | 72.30 | 52 | IAmb | IAmb | 16 53 12.5 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| ISCO | Idaho Springs | 72.63 | 51 | IAmb | IAmb | 16 53 14.7 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| ISCO | Idaho Springs | 72.63 | 51 | P | P | 16 53 10.6 | -1.2 | |
| | baz=314,SNR=7.2 | | | | | | | |
| MVCO | Mesa Verde | 72.77 | 55 | IAmb | IAmb | 16 53 15.2 | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| MVCO | Mesa Verde | 72.77 | 55 | P | P | 16 53 11.7 | -1.0 | |
| | baz=314,SNR=5.4 | | | | | | | |
| X16A | Lo Mia Camp, P | 72.91 | 58 | IAmb | IAmb | 16 53 16.7 | | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| S22A | 4UR Ranch, Cre | 73.36 | 53 | P | P | 16 53 14.7 | -1.5 | |
| | baz=314 | | | | | | | |
| Q24A | Divide | 73.47 | 51 | P | P | 16 53 15.7 | -1.1 | |
| | baz=315 | | | | | | | |
| EYMN | Ely | 73.72 | 37 | P | P | 16 53 17.8 | 0.0 | |
| EYMN | | | | IAmb | IAmb | 16 53 19.1 | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| EYMN | Ely | 73.72 | 37 | P | P | 16 53 17.0 | -0.8 | |
| | baz=320 | | | | | | | |
| 214A | Organ Pipe Nat | 73.73 | 61 | P | P | 16 53 17.9 | -0.2 | |
| | baz=313 | | | | | | | |
| OGNE | Ogallala | 73.77 | 48 | P | P | 16 53 17.1 | -1.3 | |
| | baz=316 | | | | | | | |
| SDCO | Great Sand Dun | 74.12 | 53 | P | P | 16 53 19.7 | -0.9 | |
| | baz=315 | | | | | | | |
| ECSD | EROS Data Cent | 74.52 | 43 | IAmb | IAmb | 16 53 24.1 | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| ECSD | EROS Data Cent | 74.52 | 43 | P | P | 16 53 21.7 | -0.8 | |
| | baz=318,SNR=7.5 | | | | | | | |
| TUC | Tucson | 74.75 | 60 | P | P | 16 53 23.7 | -0.4 | |
| | baz=314 | | | | | | | |
| KWP | Kalwaria Pacla | 75.04 | 327 | P | P | 16 53 24.5 | -0.9 | |
| KWP | Kalwaria Pacla | 75.04 | 327 | P | P | 16 53 24.5 | -0.9 | |
| KWP | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.4s | | | | | | | |
| T25A | Trinidad | 75.16 | 52 | IAmb | IAmb | 16 53 29.0 | | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| T25A | Trinidad | 75.16 | 52 | P | P | 16 53 25.2 | -1.4 | |
| | baz=315,SNR=5.3 | | | | | | | |
| ANMO | Albuquerque | 75.53 | 55 | P | P | 16 53 27.9 | -0.8 | |
| | baz=315 | | | | | | | |
| KOLS | Kolonicke sedl | 75.77 | 327 | eP | P | 16 53 30.3 | +0.7 | |
| KOLS | Kolonicke sedl | 75.77 | 327 | eP | P | 16 53 30.3 | +0.7 | |
| 319A | Douglas | 76.31 | 59 | IAmb | IAmb | 16 53 36.0 | | |
| | comp=Z,8.3nm,0.8s | | | | | | | |
| SCHQ | Schefferville | 76.40 | 20 | P | P | 16 53 33.2 | +0.2 | |
| | comp=Z,4.3nm,0.7s,baz=308,slow=8.4,SNR=4.9 | | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| 121A | Cookes Peak, D | 76.42 | 58 | P | P | 16 53 33.1 | -0.7 | |
| | baz=315 | | | | | | | |
| LANS | Liptovska Anna | 76.66 | 329 | eP | P | 16 53 35.0 | +0.3 | |
| LANS | Liptovska Anna | 76.66 | 329 | eP | P | 16 53 35.0 | +0.3 | |
| MORC | Moravsky Berou | 76.85 | 330 | eP | P | 16 53 35.4 | -0.3 | |
| KRLC | Kraliky | 76.87 | 331 | eP | P | 16 53 35.8 | 0.0 | |
| KRLC | Kraliky | 76.87 | 331 | eP | P | 16 53 35.8 | 0.0 | |
| CLL | Collm | 77.09 | 333 | IAmb | IAmb | 16 53 37.3 | | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| CLL | Collm | 77.09 | 333 | i P | P | 16 53 36.2 | -0.8 | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| CLL | Collm | 77.09 | 333 | i P | P | 16 53 36.2 | -0.8 | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| JAVC | Velka Javorina | 77.57 | 329 | eP | P | 16 53 40.7 | +0.9 | |
| VRAC | Vranov | 77.58 | 330 | eP | P | 16 53 39.7 | -0.1 | |
| VRAC | Vranov | 77.58 | 330 | LR | LR | 17 30 11.1 | | |
| | comp=Z,16nm,19.8s,baz=92,slow=38 | | | | | | | |
| EKA | Eskdalemuir Ar | 77.63 | 344 | P | P | 16 53 39.4 | -0.5 | |
| | comp=Z,1.9nm,0.6s,baz=25,slow=5.1,SNR=7.7 | | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| EKA | Eskdalemuir Ar | 77.63 | 344 | P | P | 16 53 39.4 | -0.5 | |
| BRTR | Keskin Array B | 77.80 | 314 | P | P | 16 53 41.1 | -0.2 | |
| | comp=Z,0.9nm,0.7s,baz=120,slow=2.7,SNR=5.8 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| BRTR | Keskin Array B | 77.80 | 314 | P | P | 16 53 41.2 | -0.2 | |
| KRUC | Moravsky | 77.86 | 330 | eP | P | 16 53 41.3 | 0.0 | |
| KSU1 | Kansas State U | 77.96 | 46 | P | P | 16 53 42.1 | 0.0 | |
| | baz=319 | | | | | | | |
| JFWS | Jewell Farm | 78.16 | 40 | P | P | 16 53 43.0 | -0.2 | |
| | baz=322 | | | | | | | |
| ZVC | Zvikov | 78.30 | 332 | eP | P | 16 53 38.3 | -5.5 | |
| AMTX | Amarillo | 78.32 | 52 | P | P | 16 53 44.0 | -0.2 | |
| | baz=317 | | | | | | | |
| MNTX | Cornudas Mount | 78.45 | 57 | P | P | 16 53 44.7 | -0.3 | |
| | baz=316,SNR=6.1 | | | | | | | |
| KHC | Kasperske Hory | 78.77 | 332 | P | P | 16 53 46.5 | 0.0 | |
| KHC | | | | IAmb | IAmb | 16 53 47.0 | | |
| | comp=Z,5.8nm,0.7s | | | | | | | |
| KHC | Kasperske Hory | 78.77 | 332 | eP | P | 16 53 46.3 | -0.1 | |
| KHC | Kasperske Hory | 78.77 | 332 | ceP | P | 16 53 46.7 | +0.3 | |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| CKRC | Cesky Krumlov | 78.79 | 331 | eP | P | 16 53 46.2 | -0.3 | |
| CKRC | Cesky Krumlov | 78.79 | 331 | eP | P | 16 53 46.2 | -0.3 | |
| GERES | GERESS Array B | 78.97 | 332 | P | P | 16 53 47.0 | -0.6 | |
| | comp=Z,1.7nm,0.7s,baz=15,slow=8.1,SNR=8.5 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| GERES | GERESS Array B | 78.97 | 332 | P | P | 16 53 47.0 | -0.6 | |
| CONA | Conrad Observa | 79.00 | 330 | i P | P | 16 53 48.0 | +0.2 | |
| | comp=Z,2.5nm,0.7s,SNR=5.5 | | | | | | | |
| RONA | Rosalia, Austr | 79.04 | 330 | i P | P | 16 53 48.0 | +0.1 | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| GRF | Grafenberg Arr | 79.06 | 334 | eP | P | 16 53 47.8 | -0.1 | |
| | comp=Z,4.4nm,0.8s,baz=29,slow=4.8 | | | | | | | |
| GLMI | Greyling | 79.11 | 36 | P | P | 16 53 48.0 | -0.3 | |
| | baz=325 | | | | | | | |
| MOA | Molln | 79.64 | 331 | eP | P | 16 53 50.9 | -0.2 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| BIOA | Bad Ischl, Aus | 79.99 | 331 | eP | P | 16 53 52.5 | -0.5 | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| WMOK | Wichita Mounta | 80.05 | 51 | P | P | 16 53 53.7 | +0.1 | |
| | baz=318,SNR=6.2 | | | | | | | |
| SOKA | Soboth | 80.36 | 330 | eP | P | 16 53 55.2 | 0.0 | |
| | comp=Z,4.2nm,0.8s,SNR=4.8 | | | | | | | |
| HDIL | Hopedale | 80.45 | 41 | P | P | 16 53 55.3 | -0.4 | |
| | baz=322 | | | | | | | |
| LESA | Schwarzleotal | 80.55 | 332 | i P | P | 16 53 56.2 | 0.0 | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| RAR | Rarotonga | 80.57 | 132 | LR | LR | 17 28 58.0 | | |
| | comp=Z,18nm,19.0s,baz=23,slow=35 | | | | | | | |
| KBA | Koelnbreinsper | 80.62 | 331 | i P | P | 16 53 56.9 | +0.3 | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| OBKA | Obir | 80.68 | 330 | eP | P | 16 53 56.4 | -0.5 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| R40A | Maddies Statio | 80.78 | 44 | IAmb | IAmb | 16 53 58.9 | | |
| | comp=Z,9.9nm,0.9s | | | | | | | |
| WATA | Walderalm | 81.00 | 332 | i P | P | 16 53 58.5 | -0.1 | |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| WTTA | Wattenberg | 81.04 | 332 | i P | P | 16 53 58.7 | -0.1 | |
| | comp=Z,3.1nm,0.5s,SNR=5.4 | | | | | | | |
| RETA | Reutte | 81.13 | 333 | eP | P | 16 53 59.5 | +0.3 | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| MOTA | Mosalm | 81.15 | 332 | eP | P | 16 53 59.4 | 0.0 | |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| TXAR | Lajitas Array | 81.17 | 57 | P | P | 16 54 01.3 | +1.4 | |
| TXAR | Lajitas Array | 81.17 | 57 | P | P | 16 54 01.6 | +1.8 | |
| | comp=Z,5.2nm,0.6s,baz=302,slow=4.1,SNR=75 | | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | | |
| TXAR | Lajitas Array | 81.17 | 57 | P | P | 16 54 01.6 | +1.8 | |
| ABTA | Abfaltersbach | 81.19 | 331 | eP | P | 16 53 57.4 | -2.2 | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| SQTA | Sankt Quirin | 81.22 | 332 | i P | P | 16 53 59.6 | -0.1 | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| CCM | Cathedral Cave | 81.47 | 44 | P | P | 16 54 01.3 | +0.2 | |
| CCM | | | | IAmb | IAmb | 16 54 02.8 | | |
| | comp=Z,10nm,0.8s | | | | | | | |
| CCM | Cathedral Cave | 81.47 | 44 | P | P | 16 54 00.7 | -0.4 | |
| | baz=322 | | | | | | | |
| CCM | Cathedral Cave | 81.47 | 44 | P | P | 16 54 01.3 | +0.2 | |
| CCM | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| FETA | Feichten | 81.55 | 332 | eP | P | 16 54 01.4 | -0.2 | |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| DAVA | Damuels | 81.60 | 333 | i P | P | 16 54 01.1 | -0.7 | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| MGMO | Mountain Grove | 81.66 | 45 | IAmb | IAmb | 16 54 03.4 | | |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| MMAI | Mount Meron Ar | 81.88 | 309 | P | P | 16 54 04.0 | +0.5 | |
| | comp=Z,2.9nm,0.6s,baz=48,slow=8.0,SNR=5.9 | | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| FUORN | Grenpass-Fuorn | 82.06 | 333 | P | P | 16 54 03.8 | -0.6 | |
| JCT | Junction City | 82.62 | 54 | P | P | 16 54 07.7 | +0.4 | |
| | baz=318 | | | | | | | |
| DRIO | Del Rio | 82.92 | 55 | IAmb | IAmb | 16 54 11.1 | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| MIAR | Mount Ida | 83.00 | 47 | P | P | 16 54 08.9 | -0.3 | |
| | baz=321,SNR=9.4 | | | | | | | |
| WHAR | Wooly Hollow | 83.10 | 46 | IAmb | IAmb | 16 54 11.3 | | |
| | comp=Z,10nm,0.9s | | | | | | | |
| LONY | Lake Ozonia | 83.14 | 30 | P | P | 16 54 08.5 | -1.2 | |
| | baz=331 | | | | | | | |
| P49A | Miami Univ. Ec | 83.37 | 39 | P | P | 16 54 09.8 | -1.1 | |
| | baz=325 | | | | | | | |
| PPT2 | Papeete2 | 83.47 | 122 | eLR | LR | 17 20 20.9 | | |
| | comp=Z,88nm,29.8s | | | | | | | |
| M53A | WI Miller and | 83.53 | 35 | P | P | 16 54 11.1 | -0.7 | |
| | baz=327 | | | | | | | |
| ACSO | Alum Creek Sta | 83.56 | 37 | P | P | 16 54 11.8 | -0.2 | |
| | baz=326 | | | | | | | |
| WCI | Wyandotte Cave | 83.71 | 41 | P | P | 16 54 12.5 | -0.2 | |
| | baz=324 | | | | | | | |
| O53A | New Philadelph | 84.30 | 36 | P | P | 16 54 15.4 | -0.3 | |
| | baz=327 | | | | | | | |
| NATX | Nacogdoches | 84.55 | 50 | P | P | 16 54 17.0 | -0.1 | |
| | baz=320 | | | | | | | |
| WVT | Waverly | 84.67 | 43 | P | P | 16 54 17.2 | -0.4 | |
| | baz=324 | | | | | | | |
| BINY | Binghamton | 84.73 | 32 | P | P | 16 54 17.5 | -0.4 | |
| | baz=330 | | | | | | | |
| OXF | Oxford | 85.17 | 45 | P | P | 16 54 19.7 | -0.4 | |
| | baz=323 | | | | | | | |
| SSPA | Standing Stone | 85.33 | 34 | P | P | 16 54 20.7 | -0.2 | |
| | baz=329 | | | | | | | |
| TZTN | Tazewell | 86.34 | 40 | P | P | 16 54 26.1 | +0.1 | |
| | baz=326 | | | | | | | |
| BLA | Blacksburg | 87.18 | 37 | P | P | 16 54 29.4 | -0.7 | |
| | baz=328 | | | | | | | |
| LRAL | Lakeview Retre | 87.56 | 44 | P | P | 16 54 31.0 | -0.9 | |
| | baz=324 | | | | | | | |
| TBI | Tubuai | 87.99 | 126 | eLR | LR | 17 22 40.4 | | |
| | comp=Z,341nm,30.5s | | | | | | | |
| QSPA | South Pole Qui | 134.35 | 180 | PKP | PKiKP | 17 01 02.1 | +0.4 | |
| | comp=Z,1.8nm,0.8s,baz=27,slow=2.3,SNR=12 | | | | | | | |
| H03N2 | Juan Fernandez | 141.76 | 90 | T | T | 19 39 44.8 | | |
| | baz=304,slow=77,SNR=27 | | | | | | | |
| H03N3 | Juan Fernandez | 141.78 | 90 | T | T | 19 39 29.2 | | |
| | baz=304,slow=77,SNR=23 | | | | | | | |
| H03N1 | Juan Fernandez | 141.78 | 90 | T | T | 19 39 31.7 | | |
| | baz=304,slow=77,SNR=24 | | | | | | | |
| LCO | Las Campanas | 145.12 | 77 | | PKPdf | 17 01 22.6 | +1.4 | |
| LCO | Las Campanas | 145.12 | 77 | PKIKP | PKPdf | 17 01 22.7 | +1.4 | |
| AC05 | El Transito | 145.31 | 76 | PKPdf | PKPab | 17 01 23.3 | +1.8 | |
| BDFB | Brasilia | 147.80 | 32 | PKPbc | PKPbc | 17 01 28.6 | -0.3 | |
| | comp=Z,2.0nm,0.3s,baz=276,slow=3.0,SNR=5.7 | | | | | | | |
| BDFB | Brasilia | 147.80 | 32 | PKP2 | PKPbc | 17 01 28.6 | -0.3 | |
| SNAA | Sanae | 149.64 | 197 | PKPbc | PKPbc | 17 01 31.8 | -0.1 | |
| | comp=Z,2.4nm,0.9s,baz=160,slow=4.3,SNR=8.4 | | | | | | | |
| SNAA | Sanae | 149.64 | 197 | PKP2 | PKPbc | 17 01 31.8 | -0.1 | |
| PLCA | Paso Flores | 151.00 | 96 | PKPbc | PKiKP | 17 01 36.8 | +0.1 | |
| | comp=Z,5.2nm,1.0s,baz=356,slow=2.8,SNR=5.6 | | | | | | | |
| PLCA | Paso Flores | 151.00 | 96 | PKiKP | PKiKP | 17 01 36.8 | +0.1 | |
| CPUP | Villa Florida | 152.15 | 58 | PKPbc | PKiKP | 17 01 39.6 | +0.2 | |
| | comp=Z,2.0nm,0.9s,baz=15,slow=9.2,SNR=3.6 | | | | | | | |
| CPUP | Villa Florida | 152.15 | 58 | PKIKP | PKiKP | 17 01 39.6 | +0.2 | |

*IDC **18** 17:03:34.6±2.7,35°.68N×142°.07E,h0km,mb3.3/3, mbtmp3.4/5,ML2.6/1,Error ellipse: s-maj=68.5km s-min=25.1km az=53.0*
*JMA **18** 17:03:39.7±0.3,36°.2N±0°.6×14°2E±°,h35km,MV3.1/36, FAR E OFF IBARAKI PREF*

**ISC 18 17:03:35.5±1.5,36°.11N±0°.08×142°.3E±0°.1,h18km,n25, σ1§00/19,mb3.4/3,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JHYU | Hitachinakayam | 1.41 | 280 | eP | Pn | 17 03 59.8 | -0.4 |
| JIHU | Itakohorinouch | 1.45 | 265 | eP | Pb | 17 04 01.4 | -0.5 |
| JHO | Hitachi | 1.49 | 290 | eP | Pn | 17 04 00.3 | -1.0 |
| ONAJ | Iwakimizuishiy | 1.56 | 310 | eP | Pn | 17 04 02.1 | -0.4 |
| JFK | Kawauchi | 1.70 | 318 | P | Pn | 17 04 04.7 | +0.3 |
| BSO1 | Boso 1 | 1.81 | 217 | eP | Pb | 17 04 08.2 | +0.4 |
| BSO3 | Boso 3 | 1.96 | 229 | eP | Pb | 17 04 10.5 | 0.0 |
| JMM | Marumori | 2.13 | 326 | eP | Pn | 17 04 10.8 | +0.6 |
| JOTO | OTAMA OYAMA | 2.14 | 313 | eP | Pn | 17 04 11.6 | +1.2 |
| JAG | Ashikaga | 2.33 | 279 | eP | Pn | 17 04 12.7 | -0.2 |
| JFY | Yanaizu | 2.46 | 303 | eP | Pn | 17 04 15.5 | +0.8 |
| JKT | Katashina | 2.55 | 286 | eP | Pn | 17 04 16.7 | +0.6 |
| JOD2 | Odawara 2 | 2.75 | 253 | eP | Pn | 17 04 20.2 | +1.5 |
| JRY | Ryogami san | 2.76 | 269 | P | Pn | 17 04 19.2 | +0.3 |
| MJAR | Matsushiro Arr | 3.33 | 279 | Pn | Pn | 17 04 27.8 | +1.0 |
| | 0.6nm,0.3s,baz=108,slow=19,SNR=82 | | | | | | |
| MJAR | | | | Sn | Sn | 17 05 06.0 | +0.1 |
| | 0.3nm,0.3s,baz=80,slow=15,SNR=5.7 | | | | | | |
| | 5.4nm,0.5s | | | | | | |
| USRK | Ussuriysk Ar. | 11.29 | 319 | Pn | Pn | 17 06 21.3 | +5.5 |
| | 1.3nm,0.6s,baz=138,slow=15,SNR=3.4 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.06 | 120 | T | T | 17 37 57.9 | |
| | baz=313,slow=75,SNR=5.3 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 27.07 | 121 | T | T | 17 37 58.5 | |
| | baz=313,slow=75,SNR=3.5 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 27.08 | 120 | T | T | 17 37 58.8 | |
| | baz=313,slow=75,SNR=4.9 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 27.76 | 123 | T | T | 17 38 45.8 | |
| | baz=317 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 27.76 | 123 | T | T | 17 38 50.0 | |
| | baz=317 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 27.77 | 123 | T | T | 17 38 46.4 | |
| | baz=317 | | | | | | |
| MKAR | Makanchi Array | 45.22 | 303 | P | P | 17 11 52.3 | +0.8 |
| | 0.3nm,0.6s,baz=84,slow=8.2,SNR=2.3 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 56.26 | 189 | P | P | 17 13 12.2 | -2.7 |
| | 0.2nm,0.8s,baz=0.5,slow=7.5,SNR=1.6 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| ASAR | Alice Springs | 59.98 | 189 | P | P | 17 13 41.4 | +0.4 |
| | 0.8nm,1.3s,baz=16,slow=8.5,SNR=1.3 | | | | | | |
| | 0.8nm,1.3s | | | | | | |

*IDC **18** 17:12:00.8±4.6,19°.45S×177°.40W,h510km±46km,mb2.8/5, mbtmp3.8/6,Error ellipse: s-maj=46.8km s-min=23.6km az=47.0*
*NEIC **18** 17:12:08.7±2.0,19°.9S±0°.1×177°.7W±0°.1,h576km±12km, mb4.2/16,Error ellipse: s-maj=22.3km s-min=18.0km az=152.0*

**ISC 18 17:12:07.3±0.8,19°.9S±0°.1×177°.7W±0°.1,h550km,n29, σ1§67/30,mb3.8/10,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 4.57 | 298 | P | P | 17 13 37.9 | +4.2 |
| NIUE | Niue | 7.38 | 85 | P | P | 17 14 00.4 | +1.3 |
| AFI | Afiamalu | 8.24 | 44 | P | P | 17 14 06.5 | -1.1 |
| RAO | Raoul Island | 9.29 | 181 | P | P | 17 14 15.6 | -2.3 |
| | 150nm,0.3s,baz=90,slow=18,SNR=3.8 | | | | | | |
| PINNC | Pines Island, | 14.10 | 256 | P | P | 17 15 08.5 | +1.0 |
| DZM | Mont Dzumac | 14.96 | 259 | P | P | 17 15 18.3 | +1.8 |
| DZM | | | | IAmb | IAmb | 17 15 56.9 | |
| | comp=Z,12nm,1.3s | | | | | | |
| DZM | Mont Dzumac | 14.96 | 259 | P | P | 17 15 18.4 | +2.0 |
| | comp=Z,1.9nm,0.5s,baz=99,slow=19,SNR=6.3 | | | | | | |
| KOUNC | Koumac, New Ca | 16.91 | 265 | P | P | 17 15 37.0 | +1.7 |
| KOUNC | | | | IAmb | IAmb | 17 15 39.0 | |
| | comp=Z,12nm,1.0s | | | | | | |
| URZ | Urewera | 18.82 | 193 | P | P | 17 15 52.4 | 0.0 |
| | comp=Z,5.7nm,0.7s,baz=360,slow=2.1,SNR=8.6 | | | | | | |
| RTZ | Ruatahuna | 19.19 | 193 | P | P | 17 15 56.5 | +0.6 |
| MRZ | Mangatainoka R | 21.46 | 194 | P | P | 17 16 17.0 | +0.6 |
| THZ | Tophouse | 23.19 | 198 | P | P | 17 16 32.8 | +0.9 |
| WHZ | Wether Hill Ro | 28.47 | 201 | P | P | 17 17 21.1 | +2.8 |
| CTA | Charters Tower | 33.83 | 263 | P | P | 17 18 03.8 | -0.7 |
| | comp=Z,0.1nm,0.3s,baz=93,slow=9.8,

**ISC 18 17:15:43.6**±0.4,**13°86S**±0.08×**65°97E**±0.06,**h10**km,**n177**, σ1831/136,**mb4.4**/69,**MS3.9**/56,**5C-2D, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **8.88** | **47** | T | T | 17 26 44.3 | |
| | baz=226,slow=76,SNR=3822 | | | | | | |
| **H08S2** | **Diego Garcia H** | **8.90** | **47** | T | T | 17 26 43.9 | |
| | baz=226,slow=76,SNR=6177 | | | | | | |
| **H08S3** | **Diego Garcia H** | **8.90** | **47** | T | T | 17 26 45.3 | |
| | baz=226,slow=76,SNR=6273 | | | | | | |
| **OPO** | **Ambohidratompo** | **18.63** | **253** | P | **Pn** | **17 20 04.3** | **+2.3** |
| | 0.2nm,0.3s,baz=76,slow=16,SNR=13 | | | | | | |
| OPO | | | | S | **Sn** | **17 23 25.0** | **-5.6** |
| | 3.3nm,1.0s,baz=75,slow=20,SNR=1.6 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| **ABPO** | **Ambohimpanom** | **18.69** | **252** | P | **Pn** | **17 20 04.4** | **+1.7** |
| **VOI** | **Vohitsoka** | **19.91** | **244** | P | **P** | **17 20 15.9** | **+0.2** |
| **PALK** | **Pallekele** | **25.59** | **36** | LR | LR | 17 27 33.3 | |
| | comp=Z,149nm,19.4s,baz=315,slow=28 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **31.10** | **292** | P | **P** | **17 22 04.2** | **+1.4** |
| | 3.5nm,0.9s,baz=64,slow=11,SNR=6.0 | | | | | | |
| KMBO | | | | LR | LR | 17 32 49.0 | |
| | comp=Z,181nm,18.2s,baz=94,slow=33 | | | | | | |
| | 3.5nm,0.9s | | | | | | |
| **ATD** | **Arta Tunnel** | **34.09** | **317** | LR | LR | 17 35 36.3 | |
| | comp=Z,7.7nm,18.2s,baz=152,slow=35 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **34.34** | **198** | T | T | 17 59 01.3 | |
| | baz=25,slow=75,SNR=48 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **34.35** | **198** | T | T | 17 59 02.2 | |
| | baz=25,slow=75,SNR=33 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **34.36** | **198** | T | T | 17 59 03.4 | |
| | baz=25,slow=75,SNR=38 | | | | | | |
| **LODK** | **Lodwar** | **34.89** | **297** | P | **P** | **17 22 36.0** | **+0.3** |
| **FURI** | **Furi** | **35.29** | **308** | LR | LR | 17 35 10.8 | |
| | comp=Z,311nm,21.7s,baz=140,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **36.57** | **263** | P | **P** | **17 22 51.0** | **+0.8** |
| LSZ | | | | IAmb | IAmb | 17 22 52.9 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **MBAR** | **Mbarara** | **37.27** | **288** | LR | LR | 17 36 39.4 | |
| | comp=Z,278nm,18.4s,baz=89,slow=34 | | | | | | |
| **LBTB** | **Lobatse** | **39.52** | **247** | LR | LR | 17 38 09.4 | |
| | comp=Z,230nm,18.1s,baz=84,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **40.48** | **242** | P | **P** | **17 23 24.5** | **+1.6** |
| | comp=Z,2.6nm,0.9s,baz=61,slow=10.0,SNR=2.6 | | | | | | |
| BOSA | | | | LR | LR | 17 37 37.0 | |
| | comp=Z,110nm,19.6s,baz=84,slow=32 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **RAYN** | **Ar Rayn** | **42.21** | **331** | P | **P** | **17 23 36.4** | **-0.6** |
| **SUR** | **Sutherland** | **45.06** | **238** | LR | LR | 17 38 41.4 | |
| | comp=Z,157nm,19.7s,baz=98,slow=30 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.69** | **46** | P | **P** | **17 24 03.9** | **-1.1** |
| | comp=Z,0.5nm,0.6s,baz=241,slow=10,SNR=4.3 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **GIRL** | **Giralia** | **46.49** | **108** | P | **P** | **17 24 10.9** | **-0.4** |
| **KSM** | **Kuching** | **46.50** | **74** | P | **P** | **17 24 11.4** | **-0.1** |
| **TSUM** | **Tsumeb** | **46.58** | **257** | P | **P** | **17 24 11.0** | **-1.2** |
| TSUM | | | | IAmb | IAmb | 17 24 37.7 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **TSUM** | **Tsumeb** | **46.58** | **257** | LR | LR | 17 42 59.1 | |
| | comp=Z,362nm,18.3s,baz=100,slow=35 | | | | | | |
| **SHL** | **Shillong** | **46.62** | **33** | P | **P** | **17 24 10.3** | **-2.1** |
| **JAGI** | **Jajag, Banyuwa** | **47.51** | **89** | P | **P** | **17 24 18.1** | **-1.3** |
| **CRAI** | **Chiangrai** | **47.88** | **46** | P | **P** | **17 24 20.6** | **-1.5** |
| CRAI | | | | IAmb | IAmb | 17 24 36.5 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **48.08** | **125** | T | T | 18 15 56.2 | |
| | baz=284,slow=75,SNR=50 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **48.08** | **125** | T | T | 18 15 50.0 | |
| | baz=284,slow=75,SNR=75 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **48.09** | **125** | T | T | 18 15 52.9 | |
| | baz=284,slow=75,SNR=80 | | | | | | |
| **SBUM** | **Sibu** | **48.63** | **74** | P | **P** | **17 24 27.6** | **-0.4** |
| **UBPT** | **Khong Chiam** | **48.63** | **55** | P | **P** | **17 24 27.5** | **-0.5** |
| **NWAO** | **Narrogin (SRO)** | **50.21** | **121** | LR | LR | 17 40 43.6 | |
| | comp=Z,221nm,21.4s,baz=104,slow=30 | | | | | | |
| **SLVN** | **Son La** | **51.09** | **47** | P | **P** | **17 24 45.1** | **-1.6** |
| **EIL** | **Elat** | **52.62** | **326** | LR | LR | 17 45 01.4 | |
| | comp=Z,109nm,18.2s,baz=92,slow=33 | | | | | | |
| **GAR** | **Garm** | **52.74** | **4** | P | **P** | **17 24 56.4** | **-2.4** |
| GAR | | | | IAmb | IAmb | 17 25 09.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **PZH** | **PanZhiHua** | **53.09** | **41** | P | **P** | **17 25 04.9** | **+3.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.2s | | | | | | |
| **KAPI** | **Kappang** | **53.67** | **86** | LR | LR | 17 44 39.5 | |
| | comp=Z,164nm,20.8s,baz=268,slow=32 | | | | | | |
| **MAW** | **Mawson** | **53.73** | **181** | LR | LR | 17 42 01.7 | |
| | comp=Z,149nm,20.6s,baz=353,slow=29 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **55.01** | **329** | P | **P** | **17 25 15.9** | **+0.4** |
| | comp=Z,0.7nm,0.5s,baz=131,slow=8.0,SNR=1.7 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **56.75** | **338** | P | **P** | **17 25 27.5** | **-0.5** |
| GURO | | | | IAmb | IAmb | 17 25 41.5 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **56.76** | **8** | P | **P** | **17 25 27.1** | **-0.8** |
| **AAK** | **Ala-Archa** | **56.76** | **8** | LR | LR | 17 48 12.6 | |
| | comp=Z,73nm,19.7s,baz=178,slow=34 | | | | | | |
| **KK31** | **Karatay Array** | **56.84** | **4** | P | **P** | **17 25 28.3** | **0.0** |
| **KKAR** | **Karatay Array** | **56.84** | **4** | P | **P** | **17 25 28.7** | **+0.4** |
| **GNI** | **Garni** | **57.25** | **341** | LR | LR | 17 50 47.5 | |
| | comp=Z,51nm,18.4s,baz=168,slow=37 | | | | | | |
| **CASY** | **Casey** | **60.15** | **161** | P | **P** | **17 25 51.9** | **+0.8** |
| CASY | | | | IAmb | IAmb | 17 26 07.5 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **ENH** | **Enshi** | **60.66** | **43** | P | **P** | **17 25 55.1** | **-0.1** |
| **WMQ** | **Urumqi** | **60.74** | **18** | eP | **P** | **17 25 57.3** | **+1.8** |
| WMQ | | | | LR | LR | | |
| | comp=N,250nm,15.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,210nm,16.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,220nm,22.1s | | | | | | |
| **KBZ** | **Khabaz** | **61.07** | **341** | P | **P** | **17 25 56.9** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=243,slow=2.3,SNR=1.8 | | | | | | |
| KBZ | | | | LR | LR | 17 52 15.8 | |
| | comp=Z,49nm,18.9s,baz=172,slow=36 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **BR131** | **Keskin Array S** | **61.23** | **332** | P | **P** | **17 25 57.7** | **-1.3** |
| BR131 | | | | IAmb | IAmb | 17 26 11.9 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **61.23** | **332** | P | **P** | **17 25 58.5** | **-0.5** |
| **BRTR** | **Keskin Array B** | **61.23** | **332** | P | **P** | **17 25 58.4** | **-0.6** |
| | comp=Z,1.1nm,0.9s,baz=164,slow=6.4,SNR=6.0 | | | | | | |
| BRTR | | | | LR | LR | 17 50 40.1 | |
| | comp=Z,50nm,19.8s,baz=125,slow=34 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **61.68** | **29** | eP | **P** | **17 26 02.5** | **+0.5** |
| GTA | | | | sP | pwP | 17 26 17.8 | +9.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **62.13** | **13** | P | **P** | **17 26 04.3** | **-0.4** |
| MK31 | | | | IAmb | IAmb | 17 26 06.9 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.13** | **13** | P | **P** | **17 26 03.9** | **-0.9** |
| **MKAR** | **Makanchi Array** | **62.13** | **13** | P | **P** | **17 26 04.2** | **-0.6** |
| | comp=Z,2.9nm,1.0s,baz=206,slow=8.1,SNR=17 | | | | | | |
| MKAR | | | | LR | LR | 17 51 42.3 | |
| | comp=Z,68nm,18.3s,baz=146,slow=35 | | | | | | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **DAV** | **Davao City (W)** | **62.70** | **74** | LR | LR | 17 50 48.7 | |
| | comp=Z,79nm,21.4s,baz=240,slow=34 | | | | | | |
| **XAN** | **Xi'an** | **62.76** | **40** | ⇓P | **P** | **17 26 11.0** | **+1.7** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| **ABKAR** | **Akbulak array** | **63.07** | **356** | P | **P** | **17 26 10.1** | **-0.9** |
| ABKAR | | | | IAmb | IAmb | 17 26 20.4 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **63.07** | **356** | P | **P** | **17 26 10.4** | **-0.5** |
| **ELIB** | **Princess Elisa** | **63.32** | **194** | dP | **P** | **17 26 13.4** | **+0.8** |
| **AKTO** | **Aktyubinsk** | **64.40** | **354** | LR | LR | 17 53 42.6 | |
| | comp=Z,48nm,18.4s,baz=229,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **64.56** | **110** | P | **P** | **17 26 21.3** | **-0.2** |
| | comp=Z,2.2nm,0.8s,baz=269,slow=5.5,SNR=27 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **64.56** | **110** | P | **P** | **17 26 21.1** | **-0.4** |
| **KURBB** | **Kurchatov Arra** | **65.15** | **9** | P | **P** | **17 26 25.7** | **+1.1** |
| | comp=Z,1.0nm,0.7s,baz=209,slow=6.7,SNR=7.0 | | | | | | |
| KURBB | | | | LR | LR | 17 52 19.9 | |
| | comp=Z,76nm,21.6s,baz=162,slow=34 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **65.25** | **9** | P | **P** | **17 26 24.7** | **-0.6** |
| KURK | | | | IAmb | IAmb | 17 26 33.7 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.32** | **106** | P | **P** | **17 26 26.0** | **-0.4** |
| **WRA** | **Warramunga Arr** | **65.32** | **106** | P | **P** | **17 26 26.3** | **-0.1** |
| | comp=Z,3.2nm,0.8s,baz=272,slow=5.9,SNR=20 | | | | | | |
| WRA | | | | LR | LR | 17 51 27.5 | |
| | comp=Z,136nm,21.5s,baz=16,slow=33 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **65.33** | **106** | P | **P** | **17 26 26.3** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 17 26 29.3 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **65.33** | **106** | P | **P** | **17 26 25.6** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 17 26 31.3 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **65.50** | **106** | P | **P** | **17 26 27.1** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 17 26 49.2 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **YULB** | **Yu-li** | **65.56** | **56** | P | **P** | **17 26 27.5** | **-0.3** |
| **ALN** | **Alexandroupoli** | **65.84** | **328** | P | **P** | **17 26 27.4** | **-1.8** |
| **YHNB** | **Yeheng** | **66.24** | **55** | P | **P** | **17 26 30.9** | **-1.4** |
| **BVAR** | **Borovoye Array** | **66.72** | **3** | LR | LR | 17 55 24.7 | |
| | comp=Z,68nm,18.9s,baz=183,slow=36 | | | | | | |
| **BRVK** | **Borovoye** | **66.75** | **3** | P | **P** | **17 26 35.0** | **+0.1** |
| BRVK | | | | IAmb | IAmb | 17 26 37.9 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **BELG** | **Belogornoye** | **67.87** | **348** | LR | LR | 17 56 12.3 | |
| | comp=Z,40nm,19.4s,baz=166,slow=36 | | | | | | |
| **NJ2** | **Nanjing** | **68.16** | **47** | eP | **P** | **17 26 45.9** | **+1.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,280nm,3.6s | | | | | | |
| **HNS** | **HongShan** | **68.52** | **40** | eP | **P** | **17 26 49.9** | **+3.6** |
| HNS | | | | LR | LR | | |
| | comp=N,180nm,16.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **68.82** | **197** | ⇑P | P | 17 26 55.9 | +8.0 |
| | comp=Z,59nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **68.87** | **36** | eP | **P** | **17 26 50.4** | **+1.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,70nm,4.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.10** | **290** | P | **P** | **17 26 50.9** | **+0.5** |
| | comp=Z,3.3nm,1.0s,baz=58,slow=3.7,SNR=10 | | | | | | |
| TORD | | | | LR | LR | 17 56 03.1 | |
| | comp=Z,87nm,18.1s,baz=118,slow=35 | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **69.43** | **12** | P | **P** | **17 26 51.0** | **-0.7** |
| ZAA0 | | | | IAmb | IAmb | 17 26 59.6 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.43** | **12** | P | **P** | **17 26 51.1** | **-0.5** |
| | comp=Z,4.0nm,0.9s,baz=216,slow=5.6,SNR=14 | | | | | | |
| ZALV | | | | LR | LR | 17 55 16.8 | |
| | comp=Z,88nm,19.0s,baz=206,slow=34 | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **PUK** | **Puka** | **69.94** | **325** | P | **P** | **17 26 54.9** | **-0.3** |
| **ARU** | **Arti** | **70.30** | **356** | P | **P** | **17 26 57.0** | **+0.1** |
| ARU | | | | IAmb | IAmb | 17 27 00.4 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **ARU** | **Arti** | **70.30** | **356** | LR | LR | 17 57 34.6 | |
| | comp=Z,38nm,19.4s,baz=150,slow=36 | | | | | | |
| **SNAA** | **Saue** | **70.31** | **198** | ⇑P | **P** | **17 26 57.4** | **+0.4** |
| | comp=Z,18nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **70.31** | **198** | P | **P** | **17 26 57.5** | **+0.4** |
| | comp=Z,0.9nm,0.9s,baz=56,slow=21,SNR=2.9 | | | | | | |
| SNAA | | | | LR | LR | 17 49 43.6 | |
| | comp=Z,56nm,20.6s,baz=92,slow=29 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **70.71** | **119** | LR | LR | 17 52 49.3 | |
| | comp=Z,211nm,21.2s,baz=217,slow=32 | | | | | | |
| **BURAR** | **Bucovina Array** | **71.19** | **332** | P | **P** | **17 27 02.1** | **-0.6** |
| **SONM** | **Songino Array** | **71.20** | **27** | P | **P** | **17 27 02.1** | **-0.7** |
| SONM | | | | IAmb | IAmb | 17 27 11.9 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **71.20** | **27** | P | **P** | **17 27 01.9** | **-0.9** |
| | comp=Z,2.5nm,0.9s,baz=241,slow=8.3,SNR=4.1 | | | | | | |
| SONM | | | | LR | LR | 17 57 31.9 | |
| | comp=Z,112nm,19.6s,baz=246,slow=35 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Vatz** | **71.56** | **199** | ⇑P | **P** | **17 27 06.0** | **+1.4** |
| | comp=Z,1.7nm,0.8s,baz=82,slow=8.0 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **71.79** | **200** | ⇑P | **P** | **17 27 02.3** | **-3.6** |
| | comp=Z,0.9nm,0.2s | | | | | | |
| **AKASG** | **Malin Array Be** | **71.87** | **336** | P | **P** | **17 27 07.6** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=138,slow=5.3,SNR=1.8 | | | | | | |
| AKASG | | | | LR | LR | 17 57 30.1 | |
| | comp=Z,33nm,20.7s,baz=134,slow=35 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **72.35** | **199** | ⇑P | **P** | **17 27 06.0** | **-3.4** |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **JOW** | **Kunigami** | **72.75** | **56** | LR | LR | 17 59 57.8 | |
| | comp=Z,43nm,18.7s,baz=230,slow=37 | | | | | | |
| **KEST** | **Kesra** | **72.77** | **315** | LR | LR | 17 57 47.2 | |
| | comp=Z,114nm,21.5s,baz=272,slow=35 | | | | | | |
| **DBIC** | **Dimbokro** | **73.18** | **281** | P | **P** | **17 27 15.3** | **+0.1** |
| | comp=Z,9.6nm,1.0s,baz=99,slow=7.6,SNR=4.0 | | | | | | |
| DBIC | | | | LR | LR | 17 58 19.4 | |
| | comp=Z,49nm,18.2s,baz=89,slow=35 | | | | | | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **INTR** | **Introdacqua** | **73.37** | **322** | P | **P** | **17 27 14.8** | **-1.1** |
| **KIRV** | **Kirov** | **73.45** | **351** | LR | LR | 17 59 24.1 | |
| | comp=Z,50nm,20.0s,baz=159,slow=36 | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **73.85** | **331** | eP | **P** | **17 27 19.7** | **+1.2** |
| **NRCA** | **Norcia** | **74.33** | **322** | P | **P** | **17 27 20.8** | **-0.7** |
| NRCA | | | | IAmb | IAmb | 17 27 24.9 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **VYHS** | **Vyhne** | **74.83** | **330** | eP | **P** | **17 27 27.3** | **+3.1** |
| **RONA** | **Rosalia, Austr** | **75.58** | **328** | i P | **P** | **17 27 29.5** | **+0.9** |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **SOKA** | **Soboth** | **75.60** | **326** | i P | **P** | **17 27 30.2** | **+1.4** |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **ARSA** | **Arzberg** | **75.70** | **327** | i P | **P** | **17 27 29.9** | **+0.7** |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **OBKA** | **Obir** | **75.75** | **326** | eP | **P** | **17 27 30.9** | **+1.2** |
| | comp=Z,3.8nm,1.2s | | | | | | |
| **CONA** | **Conrad Observa** | **75.95** | **328** | i P | **P** | **17 27 30.9** | **+0.2** |
| | comp=Z,4.2nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **76.21** | **180** | P | **P** | **17 27 32.9** | **+0.8** |
| **QSPA** | **South Pole Qui** | **76.21** | **180** | P | **P** | **17 27 31.9** | **-0.2** |
| | comp=Z,4.0nm,1.1s,baz=257,slow=2.9,SNR=5.9 | | | | | | |
| QSPA | | | | LR | LR | 17 56 56.1 | |
| | comp=Z,97nm,19.9s,baz=265,slow=32 | | | | | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **MORC** | **Moravsky Berou** | **76.32** | **330** | P | **P** | **17 27 32.1** | **-0.6** |
| MORC | | | | IAmb | IAmb | 17 27 34.0 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **MYKA** | **Terra Mystica** | **76.32** | **326** | eP | **P** | **17 27 34.4** | **+1.5** |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **CTA** | **Charters Tower** | **76.38** | **108** | LR | LR | 17 59 05.7 | |
| | comp=Z,16nm,18.9s,baz=265,slow=34 | | | | | | |
| **VRAC** | **Vranov** | **76.48** | **329** | LR | LR | 18 01 27.7 | |
| | comp=Z,15nm,19.5s,baz=142,slow=36 | | | | | | |
| **MOA** | **Molln** | **76.74** | **327** | eP | **P** | **17 27 35.8** | **+0.7** |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **KBA** | **Koelnbreinsper** | **76.76** | **326** | i P | **P** | **17 27 36.2** | **+0.7** |
| | comp=Z,4.4nm,1.3s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **76.97** | **327** | eP | **P** | **17 27 37.2** | **+0.7** |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **ABTA** | **Abfaltersbach** | **77.01** | **325** | i P | **P** | **17 27 38.1** | **+1.3** |
| | comp=Z,5.1nm,1.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **77.33** | **326** | i P | **P** | **17 27 38.6** | **0.0** |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **77.33** | **46** | P | **P** | **17 27 38.6** | **-0.1** |
| | comp=Z,1.3nh,1.0s,baz=252,slow=6.7,SNR=4.0 | | | | | | |
| KSRS | | | | LR | LR | 18 01 03.4 | |
| | comp=Z,54nm,20.7s,baz=250,slow=35 | | | | | | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **GERES** | **GERESS Array B** | **77.65** | **328** | P | **P** | **17 27 39.4** | **-0.9** |
| **GERES** | **GERESS Array B** | **77.65** | **328** | P | **P** | **17 27 42.0** | **+1.7** |
| | comp=Z,0.2nm,0.3s,baz=166,slow=5.0,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **77.80** | **326** | i P | **P** | **17 27 42.1** | **+0.8** |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **WATA** | **Walderalm** | **77.88** | **326** | eP | **P** | **17 27 41.9** | **+0.2** |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **77.89** | **328** | P | **P** | **17 27 41.0** | **-0.6** |
| KHC | | | | IAmb | IAmb | 17 27 58.3 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **77.89** | **328** | eP | **P** | **17 27 41.0** | **-0.6** |
| **SQTA** | **Sankt Quirin** | **78.01** | **325** | eP | **P** | **17 27 43.7** | **+1.3** |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **MOTA** | **Moosalm** | **78.14** | **325** | i P | **P** | **17 27 44.1** | **+1.0** |
| | comp=Z,5.3nm,1.3s | | | | | | |
| **FETA** | **Feichten** | **78.16** | **325** | eP | **P** | **17 27 44.0** | **+0.7** |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **RETA** | **Reutte** | **78.41** | **325** | i P | **P** | **17 27 45.1** | **+0.6** |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **78.50** | **324** | LR | LR | 18 02 48.0 | |
| | comp=Z,36nm,19.8s,baz=80,slow=36 | | | | | | |
| **DAVA** | **Damuels** | **78.79** | **325** | i P | **P** | **17 27 46.8** | **+0.1** |
| | comp=Z,4.7nm,1.2s | | | | | | |
| **PMG** | **Port Moresby** | **79.31** | **97** | LR | LR | 17 57 35.1 | |
| | comp=Z,70nm,21.1s,baz=270,slow=32 | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **79.75** | **323** | P | **P** | **17 27 50.5** | **-1.6** |
| **FINES** | **FINESS Array B** | **81.42** | **342** | P | **P** | **17 28 00.3** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=130,slow=6.0,SNR=1.9 | | | | | | |
| FINES | | | | LR | LR | 18 04 38.2 | |
| | comp=Z,34nm,18.7s,baz=76,slow=36 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **MDT** | **Midelt** | **81.75** | **307** | LR | LR | 18 05 22.6 | |
| | comp=Z,101nm,18.1s,baz=160,slow=36 | | | | | | |
| **GUMO** | **Guam** | **82.74** | **74** | LR | LR | 18 01 14.6 | |
| | comp=Z,21nm,20.9s,baz=238,slow=33 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **83.19** | **41** | P | **P** | **17 28 10.4** | **+0.3** |
| | comp=Z,1.3nm,0.7s,baz=208,slow=4.6,SNR=2.4 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **83.93** | **313** | P | **P** | **17 28 13.8** | **-0.3** |
| ESDC | | | | IAmb | IAmb | 17 28 16.0 | |
| | comp=Z,5.3nm,1.2s | | | | | | |
| **ESDC** | **Sonseca Array** | **83.93** | **313** | P | **P** | **17 28 14.8** | **+0.7** |
| | comp=Z,3.0nm,1.1s,baz=89,slow=3.6,SNR=12 | | | | | | |
| ESDC | | | | LR | LR | 18 06 17.0 | |
| | comp=Z,80nm,18.8s,baz=118,slow=36 | | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **84.41** | **50** | P | **P** | **17 28 17.7** | **+1.2** |
| | comp=Z,1.5nm,0.8s,baz=237,slow=7.4,SNR=4.5 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **84.76** | **337** | P | **P** | **17 28 18.5** | **+0.7** |
| | comp=Z,2.8nm,0.8s,baz=165,slow=7.4,SNR=2.4 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **85.33** | **37** | LR | LR | 18 07 23.1 | |
| | comp=Z,42nm,20.4s,baz=234,slow=36 | | | | | | |
| **BBTS** | **Babate** | **86.41** | **286** | LR | LR | 18 05 54.7 | |
| | comp=Z,144nm,19.5s,baz=340,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.88** | **347** | P | **P** | **17 28 34.1** | **+1.3** |
| | comp=Z,1.8nm,0.9s,baz=108,slow=5.8,SNR=3.7 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **90.41** | **25** | LR | LR | 18 09 13.2 | |
| | comp=Z,85nm,19.1s,baz=233,slow=36 | | | | | | |
| **HNR** | **Honiara** | **91.58** | **100** | LR | LR | 18 11 06.1 | |
| | comp=Z,591nm,18.0s,baz=199,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **94.29** | **114** | eLR | LR | 17 59 23.8 | |
| | comp=Z,146nm,24.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **94.29** | **114** | LR | LR | 18 08 44.9 | |
| | comp=Z,88nm,20.0s,baz=207,slow=34 | | | | | | |
| **TIXI** | **Tiksi** | **94.91** | **16** | LR | LR | 18 11 37.9 | |
| | comp=Z,140nm,20.6s,baz=217,slow=35 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **95.92** | **351** | LR | LR | 18 16 37.8 | |
| | comp=Z,30nm,18.0s,baz=106,slow=38 | | | | | | |
| **URZ** | **Urewera** | **97.41** | **132** | LR | LR | 18 06 34.6 | |
| | comp=Z,85nm,18.7s,baz=353,slow=31 | | | | | | |
| **MA2** | **Magadan** | **99.21** | **31** | LR | LR | 18 15 02.0 | |
| | comp=Z,60nm,18.9s,baz=243,slow=36 | | | | | | |
| **PPT2** | **Papeete2** | **133.02** | **131** | eLR | LR | 18 17 13.9 | |
| | comp=Z,49nm,23.5s | | | | | | |
| **NEW** | **Newport** | **145.60** | **4** | | **PKPdf** | **17 35 21.4** | **-0.9** |
| **NEW** | **Newport** | **145.60** | **4** | PKPbc | **PKPab** | **17 35 23.3** | **+0.5** |
| | comp=Z,5.6nm,1.0s,baz=338,slow=4.8,SNR=8.7 | | | | | | |
| **OVMT** | **Ovando** | **146.89** | **359** | | **PKPdf** | **17 35 23.6** | **-1.0** |
| **F10A** | **Beach Ranch, E** | **147.88** | **4** | PKPdf | **PKPdf** | **17 35 25.6** | **-0.6** |
| **DLMT** | **Dillon** | **148.58** | **358** | | **PKPdf** | **17 35 26.6** | **-1.0** |
| **RLMT** | **Red Lodge** | **148.58** | **354** | | **PKPdf** | **17 35 27.2** | **-0.5** |
| **YHL** | **Hebgen Lake** | **149.02** | **356** | | **PKiKP** | **17 35 34.0** | **+0.2** |
| **YHH** | **Holmes Hill** | **149.06** | **356** | PKPdf | **PKPdf** | **17 35 26.9** | **-1.7** |
| YHH | | | | | **pPKPbc** | **17 35 35.0** | **+0.1** |
| **I07A** | **Izee** | **149.52** | **8** | | **PKiKP** | **17 35 36.3** | **+1.7** |
| **MGMO** | **Mountain Grove** | **149.76** | **324** | PKPdf | **PKPdf** | **17 35 26.2** | **-3.3** |
| MGMO | | | | | **PKPbc** | **17 35 34.1** | **-0.1** |
| **J05D** | **Fort Rock, OR** | **150.03** | **11** | | **PKiKP** | **17 35 37.5** | **+1.7** |
| **HUMO** | **Hull Mountain** | **150.34** | **13** | | **PKPbc** | **17 35 36.1** | **+0.7** |
| **HLID** | **Hailey** | **150.40** | **1** | | **PKPbc** | **17 35 36.0** | **+0.2** |
| **PD31** | **Pinedale Array** | **150.94** | **353** | PKPdf | **PKPdf** | **17 35 29.7** | **-1.8** |
| PD31 | | | | | **PKPbc** | **17 35 36.4** | **-0.8** |
| **PDAR** | **Pinedale Array** | **150.94** | **353** | PKPdf | **PKPdf** | **17 35 30.2** | **-1.3** |
| PDAR | | | | | **PKPbc** | **17 35 36.5** | **-0.7** |
| **PDAR** | **Pinedale Array** | **150.94** | **353** | PKP | **PKPdf** | **17 35 32.4** | **+0.9** |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RVLA | Villa Bonita | 1.59 | 347 | *e*P | | Pn | 17 19 15.0 | +0.6 |
| CVIMO | Finca Echandi | 1.63 | 334 | *e*P | | Pn | 17 19 15.7 | +0.6 |
| SANTA | Santa Ana | 1.68 | 325 | *e*P | | Pb | 17 19 17.3 | -0.1 |
| HDC | Heredia | 1.69 | 328 | *i* P | | Pb | 17 19 18.2 | +0.5 |
| HDC | | | | *i* S | | Sg | 17 19 40.8 | -0.8 |
| HDC | | | | IAML | | | 17 19 45.1 | |
| | comp=Z,800nm,1.0s | | | | | | | |
| HDC | Heredia | 1.69 | 328 | *e*P | | Pb | 17 19 18.3 | +0.5 |
| HDC3 | Heredia 3 | 1.69 | 328 | *i* P | | Pb | 17 19 18.3 | +0.6 |
| HDC3 | | | | *i* S | | Sg | 17 19 40.9 | -0.6 |
| HDC3 | | | | IAML | | | 17 19 45.1 | |
| | comp=Z,890nm,1.0s | | | | | | | |
| BELE | Belen | 1.71 | 326 | *e*P | | Pb | 17 19 18.3 | +0.2 |
| TCS1 | Tacares | 1.83 | 324 | *i* P | | Pb | 17 19 19.3 | -0.7 |
| TCS1 | | | | IAML | | | 17 19 52.4 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| TCS1 | Tacares | 1.83 | 324 | *e*P | | Pb | 17 19 19.8 | -0.2 |
| SRA1 | San Ramn | 1.97 | 321 | *e*P | | Pb | 17 19 21.8 | -0.7 |
| GMAL | Guarumal, Vera | 2.11 | 112 | *e*P | | Pn | 17 19 21.6 | +0.1 |
| SAFE3 | Santa Fe, Vera | 2.11 | 91 | *e*P | | Pn | 17 19 22.2 | +0.7 |
| CBL1 | Cabuya | 2.12 | 299 | *e*P | | Pn | 17 19 22.3 | +0.6 |
| SOCE | Pocosol | 2.29 | 323 | *i* P | | Pn | 17 19 25.9 | +1.9 |
| SOCE | | | | IAML | | | 17 19 29.0 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| SOCE | | | | *i* S | | Sb | 17 19 56.4 | +0.5 |
| VACR | Volcan Arenal | 2.40 | 323 | *e*P | | Pb | 17 19 28.8 | -0.9 |
| ARE1 | Arenal 1 | 2.41 | 322 | *e*P | | Pb | 17 19 29.1 | -0.8 |
| CEDE | Laguna Cedeo | 2.42 | 323 | *e*P | | Pb | 17 19 29.3 | -0.9 |
| JTS | Las Juntas de | 2.44 | 315 | *e*P | | Pn | 17 19 26.6 | +0.6 |
| COVE | Coope Vega, Sa | 2.45 | 332 | *i* P | | Pb | 17 19 28.9 | -1.7 |
| COVE | | | | IAML | | | 17 20 10.6 | |
| | comp=Z,320nm,1.0s | | | | | | | |
| INDI | Punta indio, G | 2.61 | 300 | *i* P | | Pn | 17 19 30.1 | +1.7 |
| INDI | | | | IAML | | | 17 20 24.7 | |
| | comp=Z,220nm,1.0s | | | | | | | |
| CACAO | El Cacao, Vera | 2.62 | 117 | *e*P | | Pn | 17 19 29.5 | +1.0 |
| TENO | El Achiote | 2.76 | 321 | *e*P | | Pb | 17 19 34.9 | -1.0 |
| CHIT3 | Chitre | 2.83 | 102 | *e*P | | Pn | 17 19 32.1 | +0.8 |
| CUI | Cuipilapa | 2.84 | 318 | *e*P | | Pb | 17 19 34.9 | -2.4 |
| COLC | Colonia | 2.88 | 317 | *e*P | | Pb | 17 19 35.9 | -1.9 |
| AZU | Azuero | 3.00 | 104 | *e*P | | Pn | 17 19 34.4 | +0.6 |
| AZU | Azuero | 3.00 | 104 | *e*P | | Pb | 17 19 38.5 | -1.6 |
| BCIP | Isla Barro Col | 3.39 | 79 | *i* P | | Pn | 17 19 41.1 | +2.0 |
| BCIP | | | | IAML | | | 17 20 38.0 | |
| | comp=Z,100nm,1.0s | | | | | | | |
| ESPN | Las Esperanzas | 3.78 | 344 | *i* P | | Pn | 17 19 46.6 | +2.2 |
| ESPN | | | | IAML | | | 17 19 49.8 | |
| | comp=Z,170nm,1.0s | | | | | | | |
| ACON | Acoyapa | 3.91 | 331 | *i* P | | Pn | 17 19 48.1 | +1.9 |
| ACON | | | | IAML | | | 17 21 53.8 | |
| | comp=Z,130nm,1.0s | | | | | | | |
| ACON | Acoyapa | 3.91 | 331 | *e*P | | Pn | 17 19 48.1 | +1.9 |
| BOAB | BOACO BROADBAN | 4.56 | 328 | *i* P | | Pn | 17 19 57.3 | +2.0 |
| BOAB | | | | IAML | | | 17 21 19.7 | |
| | comp=Z,28nm,1.0s | | | | | | | |

*BER* ***18*** *17:19:57.8±1.6,81.˚15N×3.˚75W, h10km, mb(Pn)3.6, ML2.4(DNK), Confirmed Earthquake*
*DNK* ***18*** *17:19:59.4±1.5,81.˚17N×3.˚15W, h36km±12km, ML2.4*
**ISC 18 17:19:55.2**±1.3**, 81.˚05N**±0.˚08×**3.˚76W**±0.˚05**, h10km, n14, σ1§81/21, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NOR** | **Nord** | **2.03** | **292** | *i* P | | **Pn** | **17 20 31.2** | **+1.9** |
| NOR | | | | *i* S | | **Sn** | **17 20 52.9** | **-1.9** |
| NOR | | | | IAML | | | 17 21 01.6 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **NOR** | **Nord** | **2.03** | **292** | *i* P | | **Pn** | **17 20 31.2** | **+1.9** |
| NOR | | | | *i* S | | **Sn** | **17 20 52.9** | **-1.9** |
| NOR | | | | IAML | | | 17 21 01.6 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **KBS** | **Kingsbay** | **3.46** | **120** | *e*P | | **Pn** | **17 20 49.6** | **+0.6** |
| KBS | | | | *e* | | | 17 21 26.1 | |
| KBS | | | | *e*S | | **Sn** | **17 21 29.3** | **-0.7** |
| KBS | | | | IAML | | | 17 21 43.1 | |
| | comp=Z,4.7nm,0.9s | | | | | | | |
| **KBS** | **Kingsbay** | **3.46** | **120** | *i* P | | **Pn** | **17 20 49.6** | **+0.6** |
| KBS | | | | *i* S | | **Sn** | **17 21 26.0** | **-4.0** |
| **BRBB** | **Barentsburg B** | **4.39** | **123** | *e*P | | **Pn** | **17 21 03.6** | **+1.8** |
| **BRBA** | **Barentsburg A** | **4.42** | **123** | *e*P | | **Pn** | **17 21 04.3** | **+2.2** |
| **SPA0** | **Spitsbergen Ar** | **4.62** | **118** | *e*P | | **Pn** | **17 21 05.8** | **+0.9** |
| SPA0 | | | | IAML | | | 17 21 53.4 | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| SPA0 | | | | *e*S | | **Sn** | **17 21 56.8** | **-1.7** |
| **DAG** | **Danmarks Havn** | **5.15** | **221** | *i* P | | **Pn** | **17 21 14.0** | **+1.8** |
| DAG | | | | *i* S | | **Sn** | **17 22 09.9** | **-1.6** |
| DAG | | | | IAML | | | 17 22 43.8 | |
| | comp=Z,20nm,2.0s | | | | | | | |
| **DAG** | **Danmarks Havn** | **5.15** | **221** | *i* P | | **Pn** | **17 21 14.0** | **+1.8** |
| DAG | | | | *i* S | | **Sn** | **17 22 09.9** | **-1.6** |
| DAG | | | | IAML | | | 17 22 43.8 | |
| | comp=Z,20nm,2.0s | | | | | | | |
| **HSPB** | **Hornsund (broa** | **5.45** | **128** | *e*P | | **Pn** | **17 21 18.0** | **+1.7** |
| **DBG** | **Daneborg** | **7.59** | **216** | *i* P | | **Pn** | **17 21 46.4** | **+0.8** |
| DBG | | | | *i* S | | Sn | 17 23 06.0 | -5.4 |
| DBG | | | | IAML | | | 17 23 34.7 | |
| | comp=Z,36nm,2.4s | | | | | | | |
| **DBG** | **Daneborg** | **7.59** | **216** | *i* P | | **Pn** | **17 21 46.4** | **+0.8** |
| DBG | | | | *i* S | | Sn | 17 23 06.0 | -5.4 |
| DBG | | | | IAML | | | 17 23 34.7 | |
| | comp=Z,36nm,2.4s | | | | | | | |
| **NEEM** | **North Greenlan** | **9.26** | **272** | *i* P | | **Pn** | **17 22 08.5** | **-0.2** |
| NEEM | | | | *i* S | | Sn | 17 23 44.1 | -8.8 |
| NEEM | | | | IAML | | | 17 24 10.2 | |
| | comp=Z,12nm,2.1s | | | | | | | |
| **NEEM** | **North Greenlan** | **9.26** | **272** | *i* P | | **Pn** | **17 22 08.5** | **-0.2** |
| NEEM | | | | *i* S | | Sn | 17 23 44.1 | -8.8 |
| NEEM | | | | IAML | | | 17 24 10.2 | |
| | comp=Z,12nm,2.1s | | | | | | | |

**JMA 18 17:29:20.2**±0.3**, 28.˚0N**±1.˚0×**12.˚9E**±.˚**, h25**km±3km**, MV0.2**/4,
**NEAR AMAMI-OSHIMA ISLAND, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JTK** | **Tokunoshima** | **0.18** | **156** | P | | Pb | 17 29 25.4 | -0.1 |
| JTK | | | | *e*S | | Sb | 17 29 28.8 | -0.4 |
| **JAMN** | **Amaminishikomi** | **0.40** | **43** | *e*P | | Pb | 17 29 28.4 | -0.3 |
| JAMN | | | | *e*S | | Sb | 17 29 34.8 | +0.3 |
| **JYRO** | **Yoronjima** | **1.00** | **202** | *e*S | | Sn | 17 29 52.1 | +0.2 |

*JMA* ***18*** *17:30:51.8±0.1,24.˚1N×122.˚8E±0.˚5, h20km±2km, MV2.6/12, NW OFF ISHIGAKIJIMA IS*
*TAP* ***18*** *17:30:51.3,24.˚21N×122.˚76E, h15km, ML2.7, D*
**ISC 18 17:30:50.9**±1.0**, 24.˚15N**±0.˚03×**122.˚79E**±0.˚02**, h17**km±7km**, n90, σ0§68/134, 1C-3D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.33** | **25** | P | | **Pb** | **17 30 58.2** | **-0.2** |
| JYNG | | | | *e*S | | **Sg** | **17 31 02.8** | **0.0** |
| **YOJ** | **Yonaguni jima** | **0.37** | **33** | P | | **Pb** | **17 30 58.9** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **0.37** | **33** | ⇓*i* P | | **Pb** | **17 30 59.0** | **-0.1** |
| | baz=48 | | | | | | | |
| YOJ | | | | *i* S | | **Sg** | **17 31 04.0** | **+0.1** |
| | baz=48 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.37** | **33** | P | | **Pb** | **17 30 59.0** | **-0.1** |
| YOJ | | | | *e*S | | **Sg** | **17 31 04.1** | **+0.1** |
| **EOS4** | **EOS4** | **0.43** | **266** | ⇓*i* P | | **Pg** | **17 30 59.5** | **0.0** |
| | baz=262 | | | | | | | |
| EOS4 | | | | S | | **Sg** | **17 31 05.6** | **+0.3** |
| | baz=262 | | | | | | | |
| **EOS3** | **EOS3** | **0.45** | **288** | ⇓*i* P | | **Pg** | **17 31 00.0** | **+0.1** |
| | baz=280 | | | | | | | |
| EOS3 | | | | *i* S | | **Sb** | **17 31 06.5** | **-0.1** |
| | baz=280 | | | | | | | |
| **EOS2** | **EOS2** | **0.57** | **298** | ⇓*i* P | | **Pb** | **17 31 02.6** | **+0.2** |
| | baz=298 | | | | | | | |
| EOS2 | | | | *e*S | | **Sb** | **17 31 10.9** | **+0.6** |
| | baz=298 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.88** | **78** | P | | **Pg** | **17 31 08.2** | **+0.2** |
| **HATJ** | **Hateruma jima** | **0.93** | **95** | *e*P | | **Pn** | **17 31 09.3** | **+0.2** |
| **ESAO** | **Su ao** | **0.96** | **297** | P | | **Pb** | **17 31 08.7** | **-0.4** |
| | baz=294 | | | | | | | |
| ESAO | | | | S | | **Sb** | **17 31 20.8** | **-0.7** |
| | baz=294 | | | | | | | |
| **EWUT** | **Wuta** | **0.97** | **288** | P | | **Pb** | **17 31 08.8** | **-0.4** |
| | baz=285 | | | | | | | |
| EWUT | | | | S | | **Sb** | **17 31 21.5** | **-0.2** |
| | baz=285 | | | | | | | |
| **TWC** | **Suao** | **0.97** | **298** | *e*P | | **Pb** | **17 31 08.8** | **-0.5** |
| | baz=309 | | | | | | | |
| TWC | | | | S | | **Sb** | **17 31 21.1** | **-0.6** |
| | baz=309 | | | | | | | |
| **EAHA** | **Aohua** | **0.97** | **281** | *i* P | | **Pb** | **17 31 09.2** | **0.0** |
| | baz=278 | | | | | | | |
| EAHA | | | | *i* S | | **Sg** | **17 31 22.5** | **-0.2** |
| | baz=278 | | | | | | | |
| **ENA** | **Nanau** | **0.99** | **286** | *i* P | | **Pb** | **17 31 09.1** | **-0.5** |
| | baz=284 | | | | | | | |
| ENA | | | | *e*S | | **Sb** | **17 31 21.7** | **-0.7** |
| | baz=284 | | | | | | | |
| **ETL** | **Fush Village** | **1.06** | **271** | *e*P | | **Pn** | **17 31 11.2** | **+0.1** |
| | baz=268 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.09** | **272** | P | | **Pb** | **17 31 11.3** | **0.0** |
| **NACB** | **Ninganchiao** | **1.09** | **272** | P | | **Pb** | **17 31 11.2** | **0.0** |
| | baz=269 | | | | | | | |
| NACB | | | | S | | **Sg** | **17 31 27.8** | **+1.5** |
| | baz=269 | | | | | | | |
| **NDS** | **Dongshan** | **1.09** | **297** | P | | **Pb** | **17 31 11.2** | **-0.1** |
| | baz=295 | | | | | | | |
| NDS | | | | S | | **Sg** | **17 31 26.2** | **-0.1** |
| | baz=295 | | | | | | | |
| **TWD** | **Chiawan** | **1.09** | **267** | P | | **Pb** | **17 31 10.9** | **-0.4** |
| | baz=264 | | | | | | | |
| **HWA** | **Hwalien** | **1.09** | **261** | *e*P | | **Pb** | **17 31 11.3** | **0.0** |
| | baz=258 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.12** | **85** | *e*P | | **Pg** | **17 31 12.6** | **+0.1** |
| **TEYL** | **Yanliau Villag** | **1.12** | **256** | *e*P | | **Pn** | **17 31 11.4** | **-0.3** |
| | baz=255 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.12** | **320** | *i* P | | **Pg** | **17 31 12.3** | **-0.4** |
| | baz=333 | | | | | | | |
| TWB1 | | | | *i* S | | **Sb** | **17 31 26.0** | **-0.2** |
| | baz=333 | | | | | | | |
| **ILA** | **Ilan** | **1.13** | **303** | *e*P | | **Pg** | **17 31 12.7** | **0.0** |
| | baz=302 | | | | | | | |
| ILA | | | | *e*S | | **Sg** | **17 31 28.4** | **+0.8** |
| | baz=302 | | | | | | | |
| **TWE** | **Neicheng** | **1.17** | **299** | *i* P | | **Pb** | **17 31 12.5** | **-0.1** |
| | baz=298 | | | | | | | |
| TWE | | | | S | | **Sb** | **17 31 27.3** | **-0.2** |
| | baz=298 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.18** | **252** | *e*P | | **Pb** | **17 31 13.2** | **+0.5** |
| | baz=249 | | | | | | | |
| SHUL | | | | S | | **Sg** | **17 31 28.9** | **-0.1** |
| | baz=249 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.19** | **273** | *i* P | | **Pb** | **17 31 13.2** | **+0.1** |
| | baz=271 | | | | | | | |
| ETLH | | | | *e*S | | **Sg** | **17 31 31.0** | **+1.4** |
| | baz=271 | | | | | | | |
| **ETM** | **Tongmen** | **1.20** | **262** | *e*P | | **Pn** | **17 31 12.5** | **-0.3** |
| | baz=259 | | | | | | | |
| ETM | | | | S | | **Sb** | **17 31 27.9** | **-0.4** |
| | baz=259 | | | | | | | |
| **TIPB** | **Shuangxi** | **1.20** | **313** | *e*P | | **Pg** | **17 31 13.6** | **-0.5** |
| | baz=313 | | | | | | | |
| TIPB | | | | S | | **Sg** | **17 31 29.5** | **-0.3** |
| | baz=313 | | | | | | | |
| **LATG** | **Datong** | **1.21** | **289** | *e*P | | **Pb** | **17 31 13.3** | **-0.1** |
| | baz=287 | | | | | | | |
| LATG | | | | S | | **Sn** | **17 31 29.5** | **+0.3** |
| | baz=287 | | | | | | | |
| **ENTT** | **Nioudou** | **1.22** | **294** | *e*P | | **Pb** | **17 31 13.6** | **+0.1** |
| | baz=292 | | | | | | | |
| ENTT | | | | S | | **Sg** | **17 31 29.8** | **-0.6** |
| | baz=292 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.25** | **292** | *i* P | | **Pb** | **17 31 14.2** | **+0.3** |
| | baz=290 | | | | | | | |
| NDT | | | | S | | **Sb** | **17 31 29.6** | **-0.1** |
| | baz=290 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.25** | **299** | P | | **Pb** | **17 31 14.3** | **+0.2** |
| | baz=312 | | | | | | | |
| FUSB | | | | *e*S | | **Sg** | **17 31 30.9** | **-0.5** |
| | baz=312 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.26** | **80** | *e*P | | **Pn** | **17 31 13.9** | **+0.2** |
| JIJ | | | | *e*S | | **Sn** | **17 31 30.2** | **+0.1** |
| **SXI1** | **Grass Mountain** | **1.26** | **319** | *e*P | | **Pn** | **17 31 13.5** | **-0.2** |
| | baz=332 | | | | | | | |
| SXI1 | | | | *e*S | | **Sg** | **17 31 31.5** | **-0.1** |
| | baz=332 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.26** | **265** | *i* P | | **Pn** | **17 31 13.7** | **-0.2** |
| | baz=262 | | | | | | | |
| LXIB | | | | S | | **Sg** | **17 31 31.8** | **0.0** |
| | baz=262 | | | | | | | |
| **ESL** | **Shilin** | **1.28** | **255** | P | | **Pn** | **17 31 13.1** | **-0.9** |
| | baz=239 | | | | | | | |
| ESL | | | | S | | **Sb** | **17 31 30.1** | **-0.6** |
| | baz=239 | | | | | | | |
| **NNSB** | **Datong** | **1.31** | **283** | P | | **Pb** | **17 31 15.3** | **+0.2** |
| | baz=281 | | | | | | | |
| NNSB | | | | *i* S | | **Sb** | **17 31 31.8** | **+0.1** |
| | baz=281 | | | | | | | |
| **NNS** | **Nan Shan** | **1.32** | **283** | *e*P | | **Pb** | **17 31 15.5** | **+0.2** |
| | baz=281 | | | | | | | |
| NNS | | | | *e*S | | **Sb** | **17 31 32.1** | **+0.1** |
| | baz=281 | | | | | | | |
| **NWLT** | **Wulai** | **1.33** | **298** | *e*P | | **Pg** | **17 31 16.4** | **-0.2** |
| | baz=289 | | | | | | | |
| NWLT | | | | *e*S | | **Sb** | **17 31 31.9** | **-0.2** |
| | baz=289 | | | | | | | |
| **EGFH** | **Guangfu** | **1.33** | **249** | *e*P | | **Pb** | **17 31 15.9** | **+0.5** |
| | baz=246 | | | | | | | |
| EGFH | | | | *e*S | | **Sn** | **17 31 32.2** | **+0.2** |
| | baz=246 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.35** | **252** | *e*P | | **Pn** | **17 31 13.7** | **-1.3** |
| | baz=235 | | | | | | | |
| WARBT | | | | *e*S | | **Sb** | **17 31 33.3** | **+0.5** |
| | baz=235 | | | | | | | |
| **TNOU** | **National Taiwa** | **1.36** | **317** | *e*P | | **Pg** | **17 31 16.5** | **-0.6** |
| | baz=316 | | | | | | | |
| **TWA** | **Mucha** | **1.37** | **307** | P | | **Pb** | **17 31 16.4** | **+0.3** |
| | baz=307 | | | | | | | |
| TWA | | | | *e*S | | **Sb** | **17 31 33.8** | **+0.4** |
| | baz=307 | | | | | | | |
| **YHNB** | **Yeheng** | **1.39** | **292** | P | | **Pg** | **17 31 17.1** | **-0.6** |
| **YHNB** | **Yeheng** | **1.39** | **292** | *e*P | | **Pb** | **17 31 16.9** | **+0.5** |
| | baz=291 | | | | | | | |
| YHNB | | | | *e*S | | **Sg** | **17 31 34.9** | **-1.0** |
| | baz=291 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.39** | **270** | *e*P | | **Pn** | **17 31 16.3** | **+0.4** |
| | baz=268 | | | | | | | |
| **NSK** | **Sanguang** | **1.41** | **292** | *e*P | | **Pb** | **17 31 17.1** | **+0.4** |
| | baz=291 | | | | | | | |
| NSK | | | | S | | **Sg** | **17 31 35.5** | **-0.9** |
| | baz=291 | | | | | | | |
| **HGSD** | **Ruisui** | **1.41** | **243** | *e*P | | **Pn** | **17 31 15.1** | **-0.6** |
| | baz=240 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.46** | **72** | *e*P | | **Pn** | **17 31 16.3** | **-0.1** |
| JISG | | | | *e*S | | **Sn** | **17 31 34.3** | **-0.7** |
| **TAP** | **Taipei** | **1.47** | **308** | *e*S | | **Sg** | **17 31 37.0** | **-1.3** |
| | baz=323 | | | | | | | |
| **CHGB** | **Renai** | **1.48** | **267** | *e*P | | **Pn** | **17 31 17.4** | **+0.5** |
| | baz=265 | | | | | | | |
| CHGB | | | | *e*S | | **Sg** | **17 31 37.9** | **-0.8** |
| | baz=265 | | | | | | | |
| **ECBN** | **Changbin** | **1.48** | **236** | *e*P | | **Pb** | **17 31 17.5** | **-0.4** |
| | baz=234 | | | | | | | |
| **EHY** | **Hungye** | **1.49** | **245** | *e*P | | **Pn** | **17 31 16.4** | **-0.4** |
| | baz=242 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **17 31 35.8** | **0.0** |
| | baz=242 | | | | | | | |
| **OWD** | **Renai** | **1.49** | **263** | *e*P | | **Pn** | **17 31 17.4** | **+0.5** |
| | baz=261 | | | | | | | |
| **YM01** | **YM01** | **1.49** | **312** | *e*P | | **Pb** | **17 31 18.1** | **0.0** |
| | baz=312 | | | | | | | |
| YM01 | | | | *e*S | | **Sb** | **17 31 36.1** | **-0.6** |
| | baz=312 | | | | | | | |
| **WUSB** | **Renai** | **1.53** | **265** | P | | **Pn** | **17 31 18.1** | **+0.6** |
| | baz=262 | | | | | | | |
| WUSB | | | | *e*S | | **Sb** | **17 31 39.1** | **+0.9** |
| | baz=262 | | | | | | | |
| **ANP** | **Anpu** | **1.55** | **312** | *e*P | | **Pb** | **17 31 19.3** | **+0.1** |
| | baz=311 | | | | | | | |
| **VWDT** | **VWDT** | **1.56** | **256** | *e*P | | **Pn** | **17 31 18.0** | **+0.2** |
| | baz=253 | | | | | | | |
| VWDT | | | | *e*S | | **Sn** | **17 31 37.6** | **+0.1** |
| | baz=253 | | | | | | | |
| **YULB** | **Yu-li** | **1.56** | **241** | P | | **Pn** | **17 31 17.3** | **-0.5** |
| **YULB** | **Yu-li** | **1.56** | **241** | P | | **Pn** | **17 31 17.1** | **-0.7** |
| | baz=239 | | | | | | | |
| YULB | | | | *e*S | | **Sn** | **17 31 37.4** | **-0.2** |
| | baz=239 | | | | | | | |
| **EYUL** | **Yuli** | **1.56** | **240** | *e*P | | **Pn** | **17 31 17.3** | **-0.5** |
| | baz=237 | | | | | | | |
| **TWF1** | **Yuli** | **1.58** | **240** | *e*P | | **Pn** | **17 31 17.9** | **-0.2** |
| | baz=238 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.61** | **336** | *e*P | | **Pn** | **17 31 18.8** | **+0.3** |
| | baz=336 | | | | | | | |
| **FULB** | **Fuli** | **1.66** | **236** | *e*P | | **Pn** | **17 31 18.3** | **-1.0** |
| | baz=234 | | | | | | | |
| **WHP** | **Taichung City** | **1.69** | **275** | *e*P | | **Pg** | **17 31 23.0** | **-0.4** |
| | baz=259 | | | | | | | |
| **LIOB** | **Emei** | **1.69** | **287** | *e*P | | **Pb** | **17 31 21.9** | **+0.3** |
| | baz=286 | | | | | | | |
| **SSLB** | **Suanglung** | **1.71** | **258** | P | | **Pb** | **17 31 21.2** | **-0.8** |
| **SSLB** | **Suanglung** | **1.71** | **258** | *e*P | | **Pn** | **17 31 21.1** | **+1.1** |
| | baz=256 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.72** | **267** | *e*P | | **Pb** | **17 31 21.3** | **-0.7** |
| | baz=265 | | | | | | | |
| **TYC** | **Yuchr** | **1.78** | **263** | *e*P | | **Pb** | **17 31 23.1** | **+0.1** |
| | baz=261 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.83** | **256** | *e*P | | **Pn** | **17 31 22.8** | **+1.2** |
| | baz=254 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.85** | **277** | *e*P | | **Pb** | **17 31 23.1** | **-1.1** |
| | baz=261 | | | | | | | |
| **ELDTW** | **Lidau** | **1.88** | **240** | *e*P | | **Pn** | **17 31 22.0** | **-0.3** |
| | baz=238 | | | | | | | |
| **WNT** | **Mingjian** | **1.94** | **262** | *e*P | | **Pb** | **17 31 25.5** | **-0.3** |
| | baz=261 | | | | | | | |
| **TWGBT** | **Beinan** | **2.05** | **230** | *e*P | | **Pn** | **17 31 23.8** | **-0.8** |
| | baz=217 | | | | | | | |
| **TWG** | **Pinlang** | **2.06** | **230** | *e*P | | **Pn** | **17 31 24.8** | **+0.2** |
| | baz=217 | | | | | | | |
| **WDLH** | **Douliu** | **2.11** | **258** | *e*P | | **Pn** | **17 31 26.8** | **+1.5** |
| | baz=256 | | | | | | | |
| **WCKO** | **Fanlu** | **2.12** | **251** | *e*P | | **Pb** | **17 31 28.0** | **-0.9** |
| | baz=249 | | | | | | | |
| **TPUB** | **Ta-pu** | **2.15** | **247** | P | | **Pn** | **17 31 27.6** | **+1.6** |
| **TPUB** | **Ta-pu** | **2.15** | **247** | *e*P | | **Pn** | **17 31 26.7** | **+0.8** |
| | baz=246 | | | | | | | |
| **CHN1** | **Nanshi** | **2.28** | **246** | *e*P | | **Pn** | **17 31 29.5** | **+1.7** |
| | baz=244 | | | | | | | |
| **TWK** | **Hsinying** | **2.28** | **248** | *e*P | | **Pb** | **17 31 30.1** | **-1.6** |
| | baz=246 | | | | | | | |
| **SNST** | **Tainan City** | **2.29** | **247** | *e*P | | **Pb** | **17 31 30.6** | **-1.2** |
| | baz=245 | | | | | | | |
| **TSMG** | **Majia** | **2.44** | **234** | *e*P | | **Pn** | **17 31 31.1** | **+1.2** |
| | baz=223 | | | | | | | |
| **SCST** | **Cishan** | **2.45** | **240** | *e*P | | **Pn** | **17 31 32.5** | **+2.4** |
| | baz=238 | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.50** | **233** | *e*P | | **Pn** | **17 31 31.2** | **+0.4** |
| | baz=222 | | | | | | | |
| **SCZT** | **Fangliau** | **2.66** | **229** | *e*P | | **Pn** | **17 31 35.0** | **+2.0** |
| | baz=220 | | | | | | | |
| **TSCK** | **Chigu Township** | **2.67** | **249** | *e*P | | **Pn** | **17 31 34.5** | **+1.4** |
| | baz=247 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.46** | **286** | *e*P | | **Pn** | **17 31 45.1** | **+1.2** |
| | baz=285 | | | | | | | |
| PTMZ | | | | S | | **Sn** | **17 32 25.5** | **+1.1** |
| | baz=285 | | | | | | | |

**IDC 18 17:54:22.4**±2.9**, 15.˚50S**×**173.˚06W, h0**km**, mb3.6**/5,
**mbtmp3.6**/5**, Error ellipse: s-maj=178.1km**
**s-min=25.7km az=148.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **H11S2** | **WAKE ISLAND Hy** | **39.22** | **329** | T | | T | 18 42 15.1 | |
| | baz=146,slow=76,SNR=15 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.23** | **329** | T | | T | 18 42 31.1 | |
| | baz=146,slow=76,SNR=8.1 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.23** | **329** | T | | T | 18 42 15.9 | |
| | baz=146,slow=76,SNR=6.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.14** | **257** | P | | P | 18 03 19.9 | -0.1 |
| | 0.4nm,0.6s,baz=91,slow=6.9,SNR=10 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **50.39** | **252** | P | | P | 18 03 21.8 | -0.1 |
| | 0.6nm,0.5s,baz=89,slow=7.9,SNR=31 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.18** | **42** | P | | P | 18 06 03.0 | +1.7 |
| | 0.3nm,0.7s,baz=231,slow=5.6,SNR=2.7 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.12** | **42** | P | | P | 18 06 43.5 | -1.8 |
| | 0.3nm,0.5s,baz=236,slow=6.4,SNR=1.8 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.48** | **11** | P | | P | 18 06 46.4 | +0.1 |
| | 0.4nm,0.8s,baz=201,slow=4.7,SNR=2.3 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |

*IDC* ***18*** *18:07:44.4±1.2,36.˚19N×142.˚04E, h0km, mb3.7/9, mbtmp3.7/14, ML3.3/5, MS3.3/4, Error ellipse: s-maj=25.0km s-min=19.5km az=82.0*
*JMA* ***18*** *18:07:48.9±0.3,36.˚3N±0.˚5×14.˚2E±.˚, h47km, MV3.7/35, FAR E OFF IBARAKI PREF*
*NIED* ***18*** *18:07:48.9,36.˚25N×141.˚88E, h47km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr2.63; Mθθ0.03; Mϕϕ-2.66; Mrθ1.62; Mθϕ-2.80; Mϕr2.61; Fault plane solution: M₀4.68000×10¹⁴ NP1:φs32.00000°, δ66.00000°, λ89.00000°. NP2:φs213.00000°, δ24.00000°, λ91.00000°.*
**ISC 18 18:07:48.8**±0.9**, 36.˚19N**±0.˚05×**142.˚09E**±0.˚08**, h35**km**, n39, σ1§23/39, mb3.6/9, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JHYU** | **Hitachinakayam** | **1.23** | **278** | P | | **Pn** | **18 08 07.5** | **-1.9** |
| **JIHU** | **Itakohorinouch** | **1.29** | **261** | P | | **Pn** | **18 08 09.2** | **-1.1** |
| **JHO** | **Hitachi** | **1.30** | **289** | P | | **Pn** | **18 08 08.2** | **-2.3** |
| **ONAJ** | **Iwakimizuishiy** | **1.38** | **312** | P | | **Pn** | **18 08 09.7** | **-1.9** |
| **JFK** | **Kawauchi** | **1.53** | **321** | P | | **Pn** | **18 08 12.5** | **-1.1** |
| **BSO1** | **Boso 1** | **1.78** | **211** | *e*P | | **Pn** | **18 08 16.5** | **-0.1** |
| **BSO3** | **Boso 3** | **1.89** | **223** | P | | **Pn** | **18 08 18.3** | **0.0** |
| **JOTO** | **OTAMA OYAMA** | **1.96** | **315** | P | | **Pn** | **18 08 19.4** | **-0.2** |
| **JMM** | **Marumori** | **1.97** | **329** | P | | **Pn** | **18 08 19.3** | **-0.3** |
| **JMM** | **Marumori** | **1.97** | **329** | P | | **Pn** | **18 08 18.6** | **-1.0** |
| **JAG** | **Ashikaga** | **2.14** | **277** | P | | **Pn** | **18 08 20.6** | **-1.5** |
| **JFY** | **Yanaizu** | **2.27** | **303** | P | | **Pn** | **18 08 23.2** | **-0.5** |
| **JKT** | **Katashina** | **2.36** | **285** | P | | **Pn** | **18 08 24.5** | **-0.6** |
| **JRY** | **Ryogami san** | **2.59** | **267** | P | | **Pn** | **18 08 26.9** | **-1.3** |
| **MJAR** | **Matsushiro Arr** | **3.15** | **278** | Pn | | **Pn** | **18 08 34.9** | **-1.1** |
| | 2.8nm,0.3s,baz=104,slow=8.9,SNR=327 | | | | | | | |
| MJAR | | | | Sn | | **Sn** | **18 09 13.0** | **+0.6** |
| | 1.4nm,0.3s,baz=104,slow=10,SNR=5.5 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **46.95** | **309** | P | **P** | **18 16 16.2** | **+0.2** |
| | 1.6nm,0.5s,baz=85,slow=8.1,SNR=6.6 | | | | | | |
| KURBB | | | | LR | LR | 18 37 24.6 | |
| | comp=Z,52nm,18.1s,baz=166,slow=38 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **49.92** | **32** | P | **P** | **18 16 40.0** | **+1.4** |
| | 0.4nm,0.8s,baz=267,slow=5.4,SNR=2.4 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **51.55** | **313** | P | **P** | **18 16 51.4** | **+0.4** |
| | 0.3nm,0.4s,baz=50,slow=7.7,SNR=1.8 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **56.30** | **189** | P | **P** | **18 17 26.7** | **+0.7** |
| | 0.2nm,0.4s,baz=2.0,slow=7.4,SNR=1.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **60.03** | **189** | P | **P** | **18 17 53.4** | **+1.3** |
| | 0.2nm,0.7s,baz=4.3,slow=7.0,SNR=1.5 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

*DJA **18** 18:09:05.6±0.6,7°S±4°×12°5E±°, h496km±9km, M4.1/17, mb4.3/11, mB4.6/7, MLv4.3/17, Mw(mB)3.8/7*
*IDC **18** 18:09:06.3±1.5, 6°.99S×125°.32E, h496km±18km, mb3.2/9, mbtmp4.1/12, Error ellipse: s-maj=37.5km s-min=9.5km az=63.0*
*NEIC **18** 18:09:06.3±1.3, 7°.2S±0°.1×125°.1E±0°.1, h482km±9km, mb4.3/14, Error ellipse: s-maj=21.6km s-min=11.8km az=61.0*

**ISC 18 18:09:06.7**±0.5,**7°.17S**±0°.07×**125°.06E**±0°.09,**h500**km,**n65**, σ1°**25**/**68**,**mb3.7**/12,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **2.68** | **197** | P | **P** | **18 10 14.7** | **-1.0** |
| **SOEI** | **Soe** | **2.68** | **197** | | **P** | **18 10 13.0** | **-2.8** |
| **SOEI** | **Soe** | **2.68** | **197** | P | **P** | **18 10 14.3** | **-1.4** |
| **BBSI** | **Bau Bau** | **2.98** | **304** | P | **P** | **18 10 17.8** | **+0.2** |
| **MMRI** | **Maumere** | **3.15** | **242** | P | **P** | **18 10 17.0** | **-1.7** |
| **MMRI** | **Maumere** | **3.15** | **242** | P | **P** | **18 10 16.3** | **-2.4** |
| **MMRI** | **Maumere** | **3.15** | **242** | P | **P** | **18 10 16.8** | **-1.9** |
| **BATI** | **Baumata** | **3.31** | **204** | P | **P** | **18 10 18.8** | **-1.1** |
| **EDFI** | **Ende, Flores** | **3.68** | **245** | P | **P** | **18 10 20.6** | **-2.1** |
| **NLAI** | **Namlea** | **4.41** | **28** | P | **P** | **18 10 28.0** | **-0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.65** | **282** | P | **P** | **18 10 30.4** | **-0.2** |
| **SANI** | **Sanana** | **5.17** | **10** | P | **P** | **18 10 34.3** | **-1.0** |
| | 21nm,0.6s,0.1nm | | | | | | |
| **BASI** | **Baing, Sumba** | **5.36** | **235** | P | **P** | **18 10 35.2** | **-1.8** |
| **BNSI** | **Bone** | **5.64** | **299** | P | **P** | **18 10 40.4** | **+0.8** |
| | 96nm,0.9s,835nm0.3nm | | | | | | |
| **KAPI** | **Kappang** | **5.69** | **292** | P | **P** | **18 10 38.8** | **-1.3** |
| **KAPI** | **Kappang** | **5.69** | **292** | P | **P** | **18 10 40.7** | **+0.7** |
| | 31nm,0.8s,baz=103,slow=7.5,SNR=14 | | | | | | |
| **WBSI** | **Waikabubak, Su** | **6.12** | **246** | P | **P** | **18 10 41.2** | **-3.0** |
| | 52nm,0.7s | | | | | | |
| **SAUI** | **Saumlaki** | **6.24** | **98** | P | **P** | **18 10 44.1** | **-1.2** |
| **LUWI** | **Luwuk** | **6.50** | **339** | P | **P** | **18 10 48.3** | **+0.4** |
| **LUWI** | **Luwuk** | **6.50** | **339** | P | **P** | **18 10 47.8** | **-0.2** |
| **LUWI** | **Luwuk** | **6.50** | **339** | P | **P** | **18 10 48.3** | **+0.4** |
| | 90nm,1.2s,968nm0.4nm | | | | | | |
| **KMSI** | **Cibinong** | **7.77** | **352** | P | **P** | **18 11 00.3** | **-0.5** |
| | 151nm,0.8s | | | | | | |
| **DRS** | **Darwin Rock St** | **7.78** | **133** | P | **P** | **18 11 00.6** | **-0.2** |
| **GTOI** | **Gorontalo** | **8.02** | **345** | P | **P** | **18 11 05.4** | **+2.1** |
| | 36nm,1.1s,596nm | | | | | | |
| **MTN** | **Manton Dam** | **8.22** | **134** | P | **P** | **18 11 04.9** | **-0.5** |
| **MTN** | **Manton Dam** | **8.22** | **134** | P | **P** | **18 11 04.5** | **-0.9** |
| **KDU** | **Kakadu** | **9.13** | **127** | P | **P** | **18 11 13.9** | **-1.0** |
| **KNRA** | **Kununurra** | **9.20** | **157** | | **P** | **18 11 15.4** | **-0.2** |
| **TOLI2** | **Tolitoli** | **9.27** | **332** | P | **P** | **18 11 17.0** | **+0.6** |
| **TOLI2** | **Tolitoli** | **9.27** | **332** | P | **P** | **18 11 15.9** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **10.88** | **177** | P | **P** | **18 11 33.1** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **10.88** | **177** | P | **P** | **18 11 33.1** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **10.88** | **262** | | **P** | **18 11 31.5** | **-1.9** |
| **WB0** | **Warramunga Arr** | **15.46** | **145** | P | **P** | **18 12 20.5** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 18 12 29.2 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.56** | **146** | P | **P** | **18 12 21.4** | **-1.4** |
| WRAB | | | | IAmb | IAmb | 18 12 25.0 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.57** | **146** | P | **P** | **18 12 21.1** | **-1.7** |
| **WRA** | **Warramunga Arr** | **15.57** | **146** | P | **P** | **18 12 21.4** | **-1.4** |
| | comp=Z,4.3nm,0.7s,baz=315,slow=12,SNR=61 | | | | | | |
| **WB2** | **Warramunga Arr** | **15.57** | **146** | P | **P** | **18 12 22.1** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 18 12 22.5 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **15.69** | **145** | P | **P** | **18 12 23.1** | **-1.0** |
| **KKM** | **Kota Kinabalu** | **15.82** | **326** | P | **P** | **18 12 25.1** | **-0.5** |
| KKM | | | | IAmb | IAmb | 18 12 26.1 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **SBUM** | **Sibu** | **15.98** | **306** | P | **P** | **18 12 26.4** | **-0.8** |
| **WRKA** | **Warakurna** | **18.04** | **170** | P | **P** | **18 12 48.3** | **+0.9** |
| **AS31** | **Alice Springs** | **18.47** | **154** | P | **P** | **18 12 51.8** | **+0.4** |
| AS31 | | | | IAmb | IAmb | 18 12 53.3 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **18.47** | **154** | P | **P** | **18 12 51.7** | **+0.3** |
| ASAR | | | | | **S** | **18 15 55.6** | **+1.0** |
| ASAR | | | | PcP | **PcP** | **18 16 53.2** | **-2.3** |
| **ASAR** | **Alice Springs** | **18.47** | **154** | P | **P** | **18 12 52.0** | **+0.5** |
| | comp=Z,7.2nm,0.5s,baz=328,slow=8.8,SNR=186 | | | | | | |
| ASAR | | | | S | **S** | **18 15 56.1** | **+1.5** |
| | comp=Z,5.7nm,0.9s,baz=346,slow=23,SNR=19 | | | | | | |
| ASAR | | | | ScP | **ScP** | **18 19 43.9** | **+0.1** |
| | comp=Z,0.9nm,0.8s,baz=351,slow=2.6,SNR=6.7 | | | | | | |
| **GIRL** | **Giralia** | **18.58** | **213** | P | **P** | **18 12 53.9** | **+1.6** |
| **COEN** | **Coen** | **19.04** | **112** | P | **P** | **18 12 56.3** | **-0.4** |
| COEN | | | | IAmb | IAmb | 18 12 57.9 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **FORT** | **Forrest** | **23.65** | **174** | P | **P** | **18 13 38.4** | **+0.3** |
| **BBOO** | **Buckleboo** | **27.48** | **160** | P | **P** | **18 14 12.4** | **+0.3** |
| **STKA** | **Stephens Creek** | **29.02** | **150** | P | **P** | **18 14 26.2** | **+0.7** |
| **STKA** | **Stephens Creek** | **29.02** | **150** | P | **P** | **18 14 26.2** | **+0.7** |
| | comp=Z,5.3nm,0.6s,baz=321,slow=11,SNR=10 | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.22** | **315** | P | **P** | **18 15 27.9** | **+0.9** |
| | comp=Z,0.8nm,0.7s,baz=136,slow=5.3,SNR=5.2 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **LYN** | **LuoYang** | **43.17** | **345** | P | P | 18 16 29.3 | +6.7 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,25nm,0.5s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,140nm,4.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **45.20** | **15** | P | **P** | **18 16 36.3** | **-2.1** |
| | comp=Z,1.2nm,0.9s,baz=185,slow=10,SNR=3.6 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.37** | **347** | *eP* | **P** | **18 17 13.1** | **+3.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,96nm,4.0s | | | | | | |
| **SONM** | **Songino Array** | **57.20** | **345** | P | **P** | **18 18 05.1** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=164,slow=5.7,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **65.77** | **329** | P | **P** | **18 19 02.5** | **+0.8** |
| MK31 | | | | IAmb | IAmb | 18 19 02.9 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.77** | **329** | P | **P** | **18 19 02.1** | **+0.4** |
| **MKAR** | **Makanchi Array** | **65.77** | **329** | P | **P** | **18 19 01.7** | **0.0** |
| | comp=Z,2.0nm,0.6s,baz=125,slow=8.0,SNR=16 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **66.12** | **21** | P | **P** | **18 19 04.6** | **+0.9** |
| **ZALV** | **Zalesovo Beam** | **69.65** | **336** | P | **P** | **18 19 24.0** | **-1.2** |
| | comp=Z,1.2nm,0.7s,baz=107,slow=5.0,SNR=7.0 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.17** | **331** | P | **P** | **18 19 28.3** | **0.0** |
| | comp=Z,0.6nm,0.3s,baz=137,slow=5.0,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **75.65** | **329** | P | **P** | **18 19 59.4** | **-0.5** |
| | comp=Z,2.3nm,0.8s,baz=111,slow=7.9,SNR=4.6 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.81** | **180** | P | **P** | **18 20 38.6** | **+0.8** |
| | comp=Z,1.2nm,1.0s,baz=309,slow=3.6,SNR=1.9 | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.03** | **281** | PKP | **PKiKP** | **18 27 08.8** | **-0.3** |
| | comp=Z,0.6nm,0.8s,baz=69,slow=4.8,SNR=3.4 | | | | | | |

*SOME **18** 18:15:33.8, 43°.37N×75°.47E, h15km*
*KRNET **18** 18:15:33.0±0.1, 43°.39N×75°.43E, h12km, mb2.6*
*NNC **18** 18:15:33.1±0.3, 43°.39N×75°.45E, h0km, mb2.4, mpv2.9, Error ellipse: s-maj=2.4km s-min=1.6km az=159.0*
*KNET **18** 18:15:34.1±0.6, 43°.33N×75°.42E, h12km±2km, ml1.5, Error ellipse: s-maj=4.2km s-min=1.9km az=21.0*

**ISC 18 18:15:33.4**±0.9,**43°.39N**±0°.02×**75°.45E**±0°.01,**h10**km±8km, **n61**,σ0°**61**/118,**27C-20D**,**Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DGS** | **Degeres** | **0.28** | **122** | *eP* | **Pg** | **18 15 39.1** | **0.0** |
| | 43nm,0.3s | | | | | | |
| DGS | | | | *eS* | **Sg** | **18 15 43.0** | **+0.2** |
| | 111nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.28** | **122** | P | **Pg** | **18 15 39.1** | **0.0** |
| | 43nm,0.3s | | | | | | |
| DGS | | | | S | **Sg** | **18 15 43.1** | **+0.2** |
| | 111nm,0.2s | | | | | | |
| **DGS** | **Degeres** | **0.28** | **122** | *eP* | **Pg** | **18 15 39.1** | **0.0** |
| | baz=19 | | | | | | |
| DGS | | | | *eS* | **Sg** | **18 15 43.0** | **+0.2** |
| | baz=19 | | | | | | |
| **KRBS** | **Karabastau** | **0.35** | **28** | *eP* | **Pg** | **18 15 40.2** | **-0.2** |
| | 13nm,0.1s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **18 15 44.7** | **-0.3** |
| | 3.3nm,0.1s | | | | | | |
| **KRBS** | **Karabastau** | **0.35** | **28** | P | **Pg** | **18 15 40.2** | **-0.2** |
| | 13nm,0.1s | | | | | | |
| KRBS | | | | S | **Sg** | **18 15 44.7** | **-0.3** |
| | 3.3nm,0.1s | | | | | | |
| **KRBS** | **Karabastau** | **0.35** | **28** | *eP* | **Pg** | **18 15 40.2** | **-0.2** |
| | baz=30 | | | | | | |
| KRBS | | | | *eS* | **Sg** | **18 15 44.7** | **-0.3** |
| | baz=30 | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **167** | ⇓P | **Pg** | **18 15 42.8** | **-0.1** |
| | 16nm,0.1s,SNR=26 | | | | | | |
| TKM2 | | | | ⇓S | **Sg** | **18 15 49.2** | **0.0** |
| | 79nm,0.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **167** | ⇑P | **Pg** | **18 15 42.5** | **-0.4** |
| | 7.8nm,0.3s,baz=82,slow=29 | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **18 15 49.3** | **0.0** |
| | 6.2nm,0.1s,baz=82,slow=29 | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **167** | ⇑*iP* | **Pg** | **18 15 42.5** | **-0.4** |
| | baz=65 | | | | | | |
| TKM2 | | | | ⇑*iS* | **Sg** | **18 15 49.0** | **-0.2** |
| | baz=65 | | | | | | |
| **KST** | **Kastek** | **0.51** | **132** | *eP* | **Pg** | **18 15 43.4** | **0.0** |
| | 18nm,0.2s | | | | | | |
| KST | | | | *eS* | **Sg** | **18 15 50.5** | **+0.3** |
| | 27nm,0.1s | | | | | | |
| **KST** | **Kastek** | **0.51** | **132** | P | **Pg** | **18 15 43.4** | **0.0** |
| | 18nm,0.2s | | | | | | |
| KST | | | | S | **Sg** | **18 15 50.5** | **+0.3** |
| | 27nm,0.1s | | | | | | |
| **KST** | **Kastek** | **0.51** | **132** | *eP* | **Pg** | **18 15 43.4** | **0.0** |
| | baz=31 | | | | | | |
| KST | | | | *eS* | **Sg** | **18 15 50.5** | **+0.3** |
| | baz=31 | | | | | | |
| **CHMS** | **Chumysh** | **0.64** | **233** | ⇑P | **Pg** | **18 15 45.8** | **0.0** |
| | 3.7nm,0.1s,SNR=12 | | | | | | |
| CHMS | | | | ⇑S | **Sg** | **18 15 54.4** | **+0.2** |
| | 28nm,0.2s | | | | | | |
| **CHMS** | **Chumysh** | **0.64** | **233** | ⇓P | **Pg** | **18 15 45.9** | **0.0** |
| | 1.6nm,0.3s,baz=82,slow=29 | | | | | | |
| CHMS | | | | ⇑S | **Sg** | **18 15 54.5** | **+0.2** |
| | 5.6nm,0.2s,baz=82,slow=29 | | | | | | |
| **CHMS** | **Chumysh** | **0.64** | **233** | ⇓*iP* | **Pg** | **18 15 45.0** | **-0.9** |
| | baz=32 | | | | | | |
| CHMS | | | | ⇓*iS* | **Sg** | **18 15 53.4** | **-0.9** |
| | baz=32 | | | | | | |
| **USP** | **Ospenovka** | **0.70** | **260** | ⇓P | **Pg** | **18 15 46.9** | **-0.1** |
| | 3.4nm,0.1s,SNR=8.9 | | | | | | |
| USP | | | | ⇑S | **Sg** | **18 15 56.4** | **+0.2** |
| | 18nm,0.2s | | | | | | |
| **USP** | **Ospenovka** | **0.70** | **260** | ⇑*iP* | **Pg** | **18 15 46.5** | **-0.5** |
| | baz=60 | | | | | | |
| USP | | | | ⇑*iS* | **Sg** | **18 15 55.6** | **-0.6** |
| | baz=60 | | | | | | |
| **MTBS** | **Maitube** | **0.76** | **110** | *eP* | **Pg** | **18 15 47.9** | **-0.2** |
| | 6.0nm,0.1s | | | | | | |
| MTBS | | | | *eS* | **Sg** | **18 15 58.1** | **0.0** |
| | 19nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **0.76** | **110** | P | **Pg** | **18 15 47.9** | **-0.2** |
| | 6.0nm,0.1s | | | | | | |
| MTBS | | | | S | **Sg** | **18 15 58.1** | **0.0** |
| | 19nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **0.76** | **110** | *eP* | **Pg** | **18 15 47.9** | **-0.2** |
| | baz=9.0 | | | | | | |
| MTBS | | | | *eS* | **Sg** | **18 15 58.1** | **0.0** |
| | baz=9.0 | | | | | | |
| **KBK** | **Karagaybulak** | **0.82** | **207** | ⇓P | **Pg** | **18 15 49.4** | **+0.1** |
| | 5.0nm,0.1s,SNR=9.6 | | | | | | |
| KBK | | | | ⇑S | **Sb** | **18 16 01.2** | **+0.1** |
| | 18nm,0.2s | | | | | | |
| **KBK** | **Karagaybulak** | **0.82** | **207** | ⇓*iP* | **Pg** | **18 15 48.3** | **-0.9** |
| | baz=6.0 | | | | | | |
| KBK | | | | ⇓*iS* | **Sg** | **18 15 59.6** | **-0.3** |
| | baz=6.0 | | | | | | |
| **KUU** | **Kurty** | **0.82** | **52** | *eP* | **Pg** | **18 15 48.6** | **-0.6** |
| | 5.3nm,0.1s | | | | | | |
| KUU | | | | *eS* | **Sg** | **18 15 59.3** | **-0.6** |
| | 73nm,0.1s | | | | | | |
| **KUU** | **Kurty** | **0.82** | **52** | P | **Pg** | **18 15 48.6** | **-0.6** |
| | 5.3nm,0.1s | | | | | | |
| KUU | | | | S | **Sg** | **18 15 59.3** | **-0.6** |
| | 73nm,0.1s | | | | | | |
| **KTBS** | **Karatobe** | **0.95** | **70** | *eP* | **Pg** | **18 15 51.2** | **-0.5** |
| | 6.4nm,0.2s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **18 16 03.8** | **-0.4** |
| | 15nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **0.95** | **70** | P | **Pg** | **18 15 51.2** | **-0.5** |
| | 6.4nm,0.2s | | | | | | |
| KTBS | | | | S | **Sg** | **18 16 03.8** | **-0.4** |
| | 15nm,0.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **0.97** | **158** | *eP* | **Pg** | **18 15 51.6** | **-0.5** |
| | baz=57 | | | | | | |
| BOOM | | | | ⇑*iS* | **Sg** | **18 16 04.8** | **+0.1** |
| | baz=57 | | | | | | |
| **AAK** | **Ala-Archa** | **1.03** | **223** | ⇓P | **Pb** | **18 15 53.7** | **+0.3** |
| | 1.3nm,0.3s,baz=82,slow=29 | | | | | | |
| AAK | | | | ⇑S | **Sg** | **18 16 05.9** | **-0.7** |
| | 2.9nm,0.4s,baz=82,slow=29 | | | | | | |
| **TNSS** | **Tian-Shan** | **1.15** | **107** | *eP* | **Pb** | **18 15 55.3** | **-0.4** |
| | 3.7nm,0.2s | | | | | | |
| TNSS | | | | *eS* | **Sb** | **18 16 10.8** | **-0.1** |
| | 9.3nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.15** | **107** | P | **Pb** | **18 15 55.3** | **-0.4** |
| | 3.7nm,0.2s | | | | | | |
| TNSS | | | | S | **Sb** | **18 16 10.8** | **-0.1** |
| | 9.3nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.15** | **107** | *eP* | **Pb** | **18 15 55.3** | **-0.4** |
| | baz=7.0 | | | | | | |
| TNSS | | | | *eS* | **Sb** | **18 16 10.8** | **-0.1** |
| | baz=7.0 | | | | | | |
| **MDOK** | **Medeo** | **1.19** | **100** | *eP* | **Pb** | **18 15 56.0** | **-0.2** |
| | 3.6nm,0.2s | | | | | | |
| MDOK | | | | *eS* | **Sg** | **18 16 12.0** | **+0.2** |
| | 22nm,0.1s | | | | | | |
| **MDOK** | **Medeo** | **1.19** | **100** | P | **Pb** | **18 15 55.5** | **-0.7** |
| | 2.4nm,0.4s,baz=82,slow=29 | | | | | | |
| MDOK | | | | Pg | **Pb** | **18 15 56.0** | **-0.2** |
| | 3.6nm,0.2s | | | | | | |
| MDOK | | | | ⇑S | **Sb** | **18 16 11.7** | **-0.1** |
| | 3.6nm,0.2s,baz=82,slow=29 | | | | | | |
| **MDOK** | **Medeo** | **1.19** | **100** | *eP* | **Pb** | **18 15 56.0** | **-0.2** |
| | baz=0.0 | | | | | | |
| MDOK | | | | *eS* | **Sg** | **18 16 12.0** | **+0.2** |
| | baz=0.0 | | | | | | |
| **CHKK** | **Chushkaly** | **1.21** | **67** | *eP* | **Pb** | **18 15 56.7** | **+0.2** |
| | 3.6nm,0.2s | | | | | | |
| CHKK | | | | *eS* | **Sn** | **18 16 13.0** | **-0.1** |
| | 29nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **1.21** | **67** | *eP* | **Pb** | **18 15 56.7** | **+0.2** |
| | baz=67 | | | | | | |
| CHKK | | | | *eS* | **Sn** | **18 16 13.0** | **-0.1** |
| | baz=67 | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.23** | **97** | *eP* | **Pn** | **18 15 56.7** | **-0.2** |
| | 4.8nm,0.1s | | | | | | |
| KOTS | | | | *eS* | **Sg** | **18 16 13.2** | **+0.3** |
| | 20nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.23** | **97** | P | **Pn** | **18 15 56.7** | **-0.2** |
| | 4.8nm,0.1s | | | | | | |
| KOTS | | | | S | **Sg** | **18 16 13.2** | **+0.3** |
| | 20nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.23** | **97** | *eP* | **Pn** | **18 15 56.7** | **-0.2** |
| | baz=96 | | | | | | |
| KOTS | | | | *eS* | **Sg** | **18 16 13.2** | **+0.3** |
| | baz=96 | | | | | | |
| **ULHL** | **Ulahol** | **1.28** | **153** | ⇓P | **Pn** | **18 15 57.4** | **-0.4** |
| | 2.8nm,0.1s,SNR=18 | | | | | | |
| **ULHL** | **Ulahol** | **1.28** | **153** | ⇓*iP* | **Pn** | **18 15 57.3** | **-0.4** |
| | baz=52 | | | | | | |
| ULHL | | | | ⇓*iS* | **Sn** | **18 16 14.7** | **-0.4** |
| | baz=52 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.43** | **240** | ⇑P | **Pb** | **18 16 00.5** | **+0.3** |
| | 2.9nm,0.1s,SNR=14 | | | | | | |
| EKS2 | | | | ⇑S | **Sg** | **18 16 19.9** | **+0.6** |
| | 12nm,0.2s | | | | | | |
| **EKS2** | **Erkin-Say** | **1.43** | **240** | ⇑*iP* | **Pn** | **18 15 59.4** | **-0.2** |
| | baz=40 | | | | | | |
| EKS2 | | | | ⇑*iS* | **Sb** | **18 16 18.5** | **0.0** |
| | baz=40 | | | | | | |
| **ARLS** | **Aral** | **1.74** | **209** | ⇓*iP* | **Pb** | **18 16 05.0** | **-0.6** |
| | baz=8.0 | | | | | | |
| ARLS | | | | ⇓*iS* | **Sb** | **18 16 28.4** | **+0.8** |
| | baz=8.0 | | | | | | |
| **MRKS** | **Merke** | **1.75** | **249** | *eP* | **Pg** | **18 16 06.7** | **-0.3** |
| | 1.4nm,0.3s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **18 16 30.2** | **+0.5** |
| | 12nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **1.75** | **249** | P | **Pg** | **18 16 06.7** | **-0.3** |
| | 1.4nm,0.3s | | | | | | |
| MRKS | | | | S | **Sg** | **18 16 30.2** | **+0.5** |
| | 12nm,0.3s | | | | | | |
| **KDJ** | **Kajisay** | **1.79** | **134** | ⇓*eP* | **Pb** | **18 16 06.8** | **+0.3** |
| | baz=33 | | | | | | |
| KDJ | | | | ⇓*eS* | **Sg** | **18 16 30.9** | **-0.2** |
| | baz=33 | | | | | | |
| **AML** | **Almayashu** | **1.80** | **226** | ⇑P | **Pb** | **18 16 07.3** | **+0.5** |
| | 5.3nm,0.3s | | | | | | |
| **AML** | **Almayashu** | **1.80** | **226** | ⇑*iP* | **Pb** | **18 16 06.3** | **-0.5** |
| | baz=26 | | | | | | |
| AML | | | | ⇑*iS* | **Sb** | **18 16 30.4** | **+0.8** |
| | baz=26 | | | | | | |
| **ARXS** | **Arharly** | **1.91** | **64** | *eP* | **Pb** | **18 16 08.5** | **0.0** |
| | 4.6nm,0.3s | | | | | | |
| ARXS | | | | *eS* | **Sb** | **18 16 33.3** | **+0.9** |
| | 30nm,0.3s | | | | | | |
| **BTLS** | **Baital** | **1.93** | **329** | *eP* | **Pb** | **18 16 09.4** | **+0.6** |
| | 4.6nm,0.1s | | | | | | |
| BTLS | | | | *eS* | **Sg** | **18 16 34.9** | **-0.7** |
| | 25nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **1.98** | **86** | *eP* | **Pb** | **18 16 10.0** | **+0.3** |
| | 1.5nm,0.3s | | | | | | |
| KURS | | | | *eS* | **Sb** | **18 16 35.8** | **+1.2** |
| | 7.9nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.98** | **86** | *eP* | **Pb** | **18 16 10.0** | **+0.3** |
| | baz=86 | | | | | | |
| KURS | | | | *eS* | **Sb** | **18 16 35.8** | **+1.2** |
| | baz=86 | | | | | | |
| **NRN** | **Naryn** | **2.00** | **168** | ⇓*eP* | **Pb** | **18 16 09.6** | **-0.5** |
| | baz=68 | | | | | | |
| NRN | | | | ⇓*eS* | **Sb** | **18 16 36.2** | **+1.0** |
| | baz=68 | | | | | | |
| **SATY** | **Saty** | **2.19** | **98** | *eP* | **Pb** | **18 16 13.8** | **+0.5** |
| | 4.6nm,0.4s | | | | | | |
| SATY | | | | *eS* | **Sg** | **18 16 42.3** | **-1.5** |
| | 20nm,0.1s | | | | | | |
| **MNAS** | **Manas** | **2.34** | **248** | ⇑*iP* | **Pb** | **18 16 14.3** | **-1.6** |
| | baz=48 | | | | | | |
| MNAS | | | | ⇑*iS* | **Sb** | **18 16 43.7** | **-1.2** |
| | baz=48 | | | | | | |
| **PRZ** | **Przheval'sk** | **2.35** | **112** | ⇑*eP* | **Pb** | **18 16 15.2** | **-0.8** |
| | baz=11 | | | | | | |
| PRZ | | | | ⇑*eS* | **Sb** | **18 16 45.0** | **-0.2** |
| | baz=11 | | | | | | |
| **UZB** | **Uzynbulak** | **2.62** | **94** | *eP* | **Pb** | **18 16 20.8** | **+0.2** |
| | 2.0nm,0.2s | | | | | | |
| UZB | | | | *eS* | **Sb** | **18 16 54.7** | **+1.8** |
| | 9.3nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **3.28** | **72** | *eP* | **Pb** | **18 16 33.4** | **+1.6** |
| | 0.9nm,0.3s | | | | | | |
| DJR | | | | *eS* | **Sg** | **18 17 16.4** | **-2.4** |
| | 2.2nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **3.28** | **72** | Lg | Lg | 18 17 16.3 | |
| | 2.2nm,0.4s | | | | | | |
| **KK31** | **Karatay Array** | **3.62** | **267** | ⇓Pn | **Pn** | **18 16 31.5** | **+1.9** |
| | 0.3nm,0.3s,baz=82,slow=16,SNR=6.6 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 18 17 27.4 | |
| | 1.1nm,0.3s,baz=82,slow=29 | | | | | | |

*UPA **18** 18:17:17.8±1.0,8°.89N×82°.82W, h21km±5km, ML4.1, MW3.7*
*UCR **18** 18:17:18.2±0.6,8°.84N×82°.84W, h22km±1km, MW4.3*

**ISC 18 18:17:18.3**±1.0,**8°.85N**±0°.04×**82°.84W**±0°.03,**h20**km±1km, **n47**,σ0°**65**/61,**19C-4D**,**Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLIR3** | **Monte Lirio, C** | **0.06** | **163** | ⇑*iP* | **Pb** | **18 17 22.6** | **+0.4** |
| MLIR3 | | | | AMP | | 18 17 22.7 | |
| | comp=Z,46μm,0.2s | | | | | | |
| **VITO** | **San Vito** | **0.13** | **256** | *eP* | **Pb** | **18 17 23.2** | **+0.4** |
| VITO | | | | *eS* | **Sb** | **18 17 27.4** | **+1.6** |
| **BRU2** | **Volcan** | **0.16** | **110** | ⇑*iP* | **Pb** | **18 17 23.1** | **0.0** |
| BRU2 | | | | AMP | | 18 17 23.3 | |
| | comp=Z,27μm,0.1s | | | | | | |
| BRU2 | | | | *eS* | **Sb** | **18 17 27.2** | **+0.8** |
| **BRU2** | **Volcan** | **0.16** | **110** | ⇑*eP* | **Pb** | **18 17 23.1** | **0.0** |
| BRU2 | | | | *eS* | **Sb** | **18 17 26.9** | **+0.6** |
| **NELY** | **Ciudad Neily** | **0.22** | **207** | ⇑*eP* | **Pb** | **18 17 24.0** | **+0.1** |
| NELY | | | | *eS* | **Sb** | **18 17 29.0** | **+1.4** |
| **BCO2** | **Palmira** | **0.34** | **113** | ⇑*iP* | **Pb** | **18 17 25.6** | **-0.2** |
| BCO2 | | | | *eS* | **Sb** | **18 17 31.4** | **+0.6** |
| **EDP2** | **Potrero Grande** | **0.37** | **297** | ⇑*eP* | **Pb** | **18 17 26.2** | **0.0** |
| EDP2 | | | | *eS* | **Sb** | **18 17 32.7** | **+1.1** |
| **EDAD** | **Golfito** | **0.38** | **238** | ⇓*eP* | **Pb** | **18 17 25.4** | **-1.0** |
| **FITO** | **Golfito** | **0.38** | **234** | ⇓*eP* | **Pb** | **18 17 25.4** | **-1.0** |
| **LNBQ3** | **Los Naranjos,** | **0.40** | **98** | *eP* | **Pb** | **18 17 26.1** | **-0.7** |
| LNBQ3 | | | | *eS* | **Sb** | **18 17 32.1** | **-0.5** |
| **EDBA** | **Buenos Aires** | **0.53** | **306** | ⇑*eP* | **Pb** | **18 17 29.2** | **+0.2** |
| EDBA | | | | *eS* | **Sb** | **18 17 37.5** | **+1.3** |
| **DVD** | **David** | **0.56** | **137** | *eP* | **Pb** | **18 17 29.1** | **-0.5** |
| DVD | | | | AMP | | 18 17 29.6 | |
| | comp=Z,9μm,0.1s | | | | | | |
| DVD | | | | *eS* |

**ISC 18 18:18:29.1±0.9, 8°89N±0°02×82°85W±0°02, h16$^{km}_{\pm 6km}$, n79, σ0°83/99, MS3.5/4, 23C-5D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MLIR3 | Monte Lirio, C | 0.10 | 168 | *i*P | Pg | 18 18 33.7 | +1.0 |
| VITO | San Vito | 0.14 | 239 | *e*P | Pb | 18 18 34.3 | +0.8 |
| VITO | | | | *e*S | Sb | 18 18 38.7 | +2.3 |
| BRU2 | Volcan | 0.18 | 123 | *i* P | Pb | 18 18 34.4 | +0.2 |
| BRU2 | | | | *i* S | Sb | 18 18 38.0 | +0.5 |
| BRU2 | | | | IAML | | 18 18 41.2 | |
| | comp=Z,170μm,1.0s | | | | | | |
| BRU2 | Volcan | 0.18 | 123 | *i*P | Pb | 18 18 34.3 | +0.2 |
| BRU2 | | | | *e*S | Sb | 18 18 38.4 | +0.8 |
| BRU2 | Volcan | 0.18 | 123 | *e*P | Pb | 18 18 34.3 | +0.2 |
| BRU2 | | | | *e*S | Sb | 18 18 38.3 | +0.7 |
| NELY | Ciudad Neily | 0.26 | 202 | *e*P | Pb | 18 18 35.1 | -0.4 |
| CDITO | Canoas | 0.32 | 185 | *i* P | Pg | 18 18 35.9 | 0.0 |
| CDITO | | | | *i* S | Sg | 18 18 40.5 | 0.0 |
| CDITO | | | | IAML | | 18 18 45.8 | |
| | comp=Z,69μm,1.0s | | | | | | |
| EDP2 | Potrero Grande | 0.35 | 290 | *e*P | Pb | 18 18 37.4 | +0.4 |
| EDP2 | | | | *e*S | Sb | 18 18 43.9 | +1.7 |
| BCO2 | Palmira | 0.36 | 119 | *i*P | Pg | 18 18 36.7 | +0.1 |
| BCO2 | | | | *e*S | Sb | 18 18 42.5 | -0.1 |
| EDAD | Golfito | 0.40 | 233 | *e*P | Pg | 18 18 36.5 | -0.8 |
| FITO | Golfito | 0.41 | 229 | *e*P | Pg | 18 18 36.5 | -0.9 |
| LNBQ3 | Los Naranjos, | 0.41 | 104 | *e*P | Pg | 18 18 37.3 | -0.3 |
| EDBA | Buenos Aires | 0.50 | 302 | *e*P | Pb | 18 18 40.3 | +0.7 |
| EDBA | | | | *e*S | Sn | 18 18 48.8 | -1.2 |
| DRK0 | Durika | 0.54 | 313 | *i* P | Pg | 18 18 39.9 | -0.1 |
| DRK0 | | | | *i* S | Sg | 18 18 46.8 | -0.4 |
| DRK0 | | | | IAML | | 18 18 48.5 | |
| | comp=Z,260μm,1.0s | | | | | | |
| DRK0 | Durika | 0.54 | 313 | *i*P | Pg | 18 18 40.0 | +0.1 |
| DRK0 | | | | *e*S | Sb | 18 18 48.3 | +0.4 |
| DRK0 | Durika | 0.54 | 313 | *e*P | Pg | 18 18 39.8 | -0.1 |
| BURE | Buenos Aires | 0.56 | 300 | *e*P | Pb | 18 18 40.7 | +0.2 |
| BURE | | | | *e*S | Sb | 18 18 49.3 | +0.9 |
| JIME | Puerto Jimenez | 0.59 | 233 | *e*P | Pg | 18 18 39.8 | -1.0 |
| DVD | David | 0.60 | 139 | *i*P | Pg | 18 18 40.3 | -0.7 |
| DVD | | | | *e*S | Sg | 18 18 48.6 | -0.4 |
| EDPN | Palmar Norte | 0.61 | 276 | *e*P | Pg | 18 18 40.6 | -0.5 |
| LOCO3 | Loma Colorada, | 0.64 | 139 | *e*P | Pg | 18 18 41.0 | -0.8 |
| CNI2 | El Empalme, Bo | 0.64 | 35 | *e*P | Pg | 18 18 41.7 | -0.1 |
| CNI2 | | | | *e*S | Sb | 18 18 51.7 | +1.0 |
| LOMA3 | Las Lomas, Chi | 0.64 | 136 | *e*P | Pg | 18 18 40.9 | -0.9 |
| CHGR2 | Aguacate | 0.69 | 86 | *e*P | Pg | 18 18 42.2 | -0.5 |
| CHGR2 | | | | *e*S | Sg | 18 18 51.6 | -0.4 |
| OCHAL | Ojochal | 0.82 | 284 | *i* P | Pb | 18 18 44.6 | -0.3 |
| OCHAL | | | | *i* S | Sb | 18 18 55.1 | -0.6 |
| OCHAL | | | | IAML | | 18 19 04.3 | |
| | comp=Z,14μm,1.0s | | | | | | |
| ZELE | Perez Zeledon | 0.97 | 299 | *e*P | Pb | 18 18 47.1 | -0.6 |
| BUS1 | Rivas | 1.11 | 306 | *e*P | Pb | 18 18 49.2 | -1.0 |
| VINA | Juan Vinas | 1.33 | 318 | *e*P | Pn | 18 18 53.4 | +0.2 |
| RVSTA | Santa Teresita | 1.33 | 324 | *e*P | Pb | 18 18 53.7 | -0.2 |
| VERB | Verbena | 1.34 | 321 | *e*P | Pn | 18 18 53.5 | +0.2 |
| IRES | Siquirres | 1.36 | 331 | *e*P | Pb | 18 18 54.2 | 0.0 |
| LLNJ | Naranjito | 1.37 | 295 | *e*P | Pn | 18 18 52.9 | -0.6 |
| REPA | Paraso | 1.37 | 313 | *e*P | Pb | 18 18 54.5 | 0.0 |
| LCOCO | El Coco | 1.38 | 329 | *e*P | Pb | 18 18 54.3 | -0.2 |
| VTCV | VTCV, Calle Va | 1.39 | 321 | *e*P | Pn | 18 18 54.4 | +0.4 |
| RAZU | San Marcos de | 1.39 | 303 | *e*P | Pn | 18 18 53.8 | -0.2 |
| CVTV | Tajo | 1.42 | 321 | *e*P | Pn | 18 18 54.9 | +0.4 |
| RAFA | San Farael, Vo | 1.42 | 318 | *i* P | Pg | 18 18 56.6 | 0.0 |
| RAFA | | | | *i* S | Sb | 18 19 14.1 | +0.6 |
| RAFA | | | | IAML | | 18 19 16.2 | |
| | comp=Z,59μm,1.0s | | | | | | |
| RAFA | San Farael, Vo | 1.42 | 318 | *e*P | Pn | 18 18 54.8 | +0.2 |
| CVTQ | Turrialba Volc | 1.43 | 321 | *e*P | Pn | 18 18 55.2 | +0.5 |
| VTLA | Turrialba Volc | 1.43 | 320 | *e*P | Pn | 18 18 55.2 | +0.4 |
| VTR0 | Volcan Turrial | 1.44 | 321 | *e*P | Pb | 18 18 55.3 | -0.4 |
| CVTR | Volcan Turrial | 1.44 | 321 | *e*P | Pn | 18 18 55.2 | +0.3 |
| TAGO | Cartago | 1.44 | 312 | *e*P | Pn | 18 18 54.8 | +0.2 |
| ABE2 | San Pablo | 1.44 | 304 | *e*P | Pn | 18 18 54.5 | -0.2 |
| VICA | Volcano Irazu | 1.47 | 318 | *e*P | Pn | 18 18 55.2 | -0.1 |
| TRIO | Tres Rios | 1.52 | 312 | *e*P | Pn | 18 18 55.6 | -0.1 |
| CORON | Coronado | 1.57 | 313 | *e*P | Pn | 18 18 57.1 | +0.7 |
| SJS3 | Mercedes San J | 1.58 | 311 | *e*P | Pn | 18 18 56.9 | +0.3 |
| HDC3 | Heredia 3 | 1.67 | 311 | *i* P | Pb | 18 18 59.6 | +0.1 |
| HDC3 | | | | *i* S | Sb | 18 19 20.1 | -0.2 |
| HDC3 | | | | IAML | | 18 19 31.0 | |
| | comp=Z,6μm,1.0s | | | | | | |
| HDC | Heredia | 1.67 | 311 | *i* P | Pb | 18 18 59.7 | +0.2 |
| HDC | | | | *i* S | Sb | 18 19 19.9 | -0.4 |
| HDC | | | | IAML | | 18 19 31.0 | |
| | comp=Z,6μm,1.0s | | | | | | |
| HDC | Heredia | 1.67 | 311 | *e*P | Pn | 18 18 57.5 | -0.2 |
| SANTA | Santa Ana | 1.68 | 308 | *e*P | Pn | 18 18 57.9 | 0.0 |
| TCS1 | Tacares | 1.83 | 309 | *i* P | Pb | 18 19 01.4 | -0.9 |
| TCS1 | | | | *i* S | Sb | 18 19 25.6 | +0.5 |
| TCS1 | | | | IAML | | 18 19 29.4 | |
| | comp=Z,34μm,1.0s | | | | | | |
| GMAL | Guarumal, Vera | 1.95 | 125 | *e*P | Pn | 18 19 00.7 | -0.8 |
| MARI3 | Mariato, Verag | 2.21 | 124 | *e*P | Pn | 18 19 04.8 | -0.3 |
| SOCE | Pocosol | 2.29 | 310 | *i* P | Pb | 18 19 09.0 | -1.1 |
| SOCE | | | | *i* S | Sb | 18 19 38.0 | -0.2 |
| SOCE | | | | IAML | | 18 19 45.7 | |
| | comp=Z,3μm,1.0s | | | | | | |
| SOCE | Pocosol | 2.29 | 310 | *e*P | Pn | 18 19 07.0 | +0.7 |
| CRIS3 | El Cristo, Coc | 2.29 | 106 | *e*P | Pn | 18 19 07.0 | +0.8 |
| CBL1 | Cabuya | 2.32 | 287 | *e*P | Pn | 18 19 06.1 | -0.6 |
| COVE | Coope Vega, Sa | 2.38 | 320 | *i* P | Pb | 18 19 09.6 | -1.9 |
| COVE | | | | *i* S | Sb | 18 19 40.1 | -0.5 |
| COVE | | | | IAML | | 18 19 47.6 | |
| | comp=Z,3μm,1.0s | | | | | | |
| ARE1 | Arenal 1 | 2.42 | 310 | *e*P | Pn | 18 19 09.2 | +1.2 |
| CACAO | El Cacao, Vera | 2.50 | 128 | *e*P | Pn | 18 19 09.6 | +0.6 |
| JTS | Las Juntas de | 2.50 | 304 | *e*P | Pn | 18 19 09.6 | +0.5 |
| CHIT3 | Chitre | 2.58 | 111 | *e*P | Pn | 18 19 10.6 | +0.4 |
| CHIT3 | | | | *e*S | Sn | 18 19 41.4 | +0.3 |
| AZU | Azuero | 2.77 | 113 | *e*P | Pn | 18 19 12.8 | 0.0 |
| AZU | | | | *e*S | Sn | 18 19 47.3 | +1.4 |
| INDI | Punta indio, G | 2.79 | 290 | *i* P | Pb | 18 19 16.0 | -2.7 |
| INDI | | | | IAML | | 18 20 06.7 | |
| | comp=Z,550nm,1.0s | | | | | | |
| BCIP | Isla Barro Col | 2.98 | 85 | *i* P | Pb | 18 19 19.3 | -2.6 |
| BCIP | | | | *i* S | Sb | 18 19 57.4 | -0.7 |
| BCIP | | | | IAML | | 18 20 14.0 | |
| | comp=Z,340nm,1.0s | | | | | | |
| BCIP | Isla Barro Col | 2.98 | 85 | *e*P | Pn | 18 19 16.9 | +1.2 |
| BCIP | | | | *e*S | Sn | 18 19 53.2 | +2.0 |
| ACHO3 | Achotines, Los | 3.03 | 119 | *e*P | Pn | 18 19 17.3 | +0.9 |
| APG | El Apazote | 9.61 | 310 | Pn | Pn | 18 20 48.0 | +0.9 |
| | baz=111,slow=17,SNR=6.9 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| CMIG | Matias Romero | 14.28 | 306 | Pn | Pn | 18 21 49.8 | -0.9 |
| | comp=Z,0.2nm,0.3s,baz=110,slow=14,SNR=1.9 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| SADO | Sadowa | 35.88 | 5 | LR | LR | 18 40 47.2 | |
| | comp=Z,43nm,18.6s,baz=17,slow=37 | | | | | | |
| BDFB | Brasilia | 42.24 | 125 | LR | LR | 18 44 15.3 | |
| | comp=Z,74nm,18.4s,baz=137,slow=36 | | | | | | |
| FRB | Frobisher Bay | 55.71 | 8 | LR | LR | 18 52 37.0 | |
| | comp=Z,30nm,18.2s,baz=207,slow=36 | | | | | | |
| BBB | Bella Bella | 56.69 | 328 | LR | LR | 18 56 26.1 | |
| | comp=Z,39nm,18.6s,baz=188,slow=40 | | | | | | |
| ILAR | Eielson Array | 71.09 | 336 | P | P | 18 29 52.5 | +6.2 |
| | comp=Z,0.6nm,0.8s,baz=99,slow=5.8,SNR=5.1 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| ASAR | Alice Springs | 141.93 | 243 | PKP | PKiKP | 18 38 06.2 | +2.1 |
| | comp=Z,0.2nm,0.7s,baz=99,slow=2.2,SNR=4.9 | | | | | | |
| WRA | Warramunga Arr | 142.44 | 249 | PKP | PKiKP | 18 38 05.5 | +0.4 |
| | comp=Z,0.3nm,0.8s,baz=108,slow=3.0,SNR=1.5 | | | | | | |

*UCR* ***18*** *18:28:27.1±0.7, 8°01N×82°75W, h24$^{km}_{\pm 2km}$, MW4.2*
*UPA* ***18*** *18:28:27.7±1.2, 8°09N×82°85W, h13$^{km}_{\pm 2km}$, MD3.7, ML3.8, MW3.7*
*CATAC* ***18*** *18:28:27.4±1.0, 8°05N×82°90W, h5$^{km}_{\pm 4km}$, ML4.2*

**ISC 18 18:28:28.6±1.2, 8°07N±0°05×82°81W±0°03, h24$^{km}_{\pm 7km}$, n52, σ1°07/80, 2C, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PTPM | Petroterminale | 0.15 | 335 | *e*P | Pb | 18 28 33.2 | -0.5 |
| PTPM | | | | *e*S | Sb | 18 28 38.0 | +1.0 |
| PEDE3 | Pedregal, Chir | 0.50 | 51 | *e*P | Pb | 18 28 37.9 | -0.9 |
| CDITO | Canoas | 0.51 | 353 | *i* P | Pb | 18 28 37.4 | -1.6 |
| CDITO | | | | *i* S | Sb | 18 28 45.9 | -0.1 |
| CDITO | | | | IAML | | 18 28 51.5 | |
| | comp=Z,4μm,1.0s | | | | | | |
| DVD | David | 0.52 | 44 | *e*P | Pb | 18 28 38.3 | -0.8 |
| DVD | | | | AMP | | 18 28 39.4 | |
| | comp=Z,6μm,0.1s | | | | | | |
| DVD | | | | *e*S | Sb | 18 28 46.0 | -0.1 |
| LOCO3 | Loma Colorada, | 0.52 | 49 | *e*P | Pb | 18 28 38.3 | -0.9 |
| LOMA3 | Las Lomas, Chi | 0.55 | 49 | *e*P | Pb | 18 28 39.2 | -0.6 |
| FITO | Golfito | 0.65 | 329 | *e*P | Pb | 18 28 39.8 | -1.5 |
| FITO | | | | *e*S | Sb | 18 28 49.2 | -0.8 |
| JIME | Puerto Jimenez | 0.69 | 313 | *e*P | Pb | 18 28 41.5 | -0.5 |
| JIME | | | | *e*S | Sn | 18 28 52.9 | 0.0 |
| BCO2 | Palmira | 0.71 | 24 | *e*P | Pb | 18 28 41.5 | -0.9 |
| BCO2 | | | | *e*S | Sb | 18 28 52.3 | +0.5 |
| MLIR3 | Monte Lirio, C | 0.72 | 359 | *e*P | Pb | 18 28 42.2 | -0.4 |
| BRU2 | Volcan | 0.73 | 10 | *i* P | Pb | 18 28 41.9 | -1.0 |
| BRU2 | | | | IAML | | 18 28 42.3 | |
| | comp=Z,4μm,1.0s | | | | | | |
| BRU2 | | | | *i* S | Sb | 18 28 53.1 | +0.5 |
| BRU2 | Volcan | 0.73 | 10 | *i*P | Pb | 18 28 41.9 | -1.0 |
| BRU2 | | | | *e*S | Sb | 18 28 53.1 | +0.5 |
| BRU2 | Volcan | 0.73 | 10 | *e*P | Pb | 18 28 41.8 | -1.1 |
| LNBQ3 | Los Naranjos, | 0.81 | 27 | *e*P | Pb | 18 28 42.7 | -1.4 |
| CHGR2 | Aguacate | 1.09 | 37 | *e*P | Pn | 18 28 46.6 | -1.9 |
| CHGR2 | | | | *e*S | Sb | 18 29 02.3 | -0.4 |
| EDPN | Palmar Norte | 1.09 | 325 | *e*P | Pn | 18 28 47.4 | -1.1 |
| EDPN | | | | *e*S | Sb | 18 29 02.7 | -0.1 |
| DRK0 | Durika | 1.26 | 340 | *i* P | Pn | 18 28 51.3 | +0.3 |
| DRK0 | | | | *i* S | Sn | 18 29 07.5 | +0.2 |
| DRK0 | | | | IAML | | 18 29 09.5 | |
| | comp=Z,22μm,1.0s | | | | | | |
| DRK0 | Durika | 1.26 | 340 | *i*P | Pn | 18 28 50.3 | -0.7 |
| DRK0 | | | | *e*S | Sn | 18 29 06.7 | -0.6 |
| DRK0 | Durika | 1.26 | 340 | *e*P | Pn | 18 28 50.0 | -1.0 |
| DRK0 | | | | *e*S | Sn | 18 29 07.5 | +0.2 |
| OCHAL | Ojochal | 1.31 | 321 | *i* P | Pn | 18 28 50.9 | -0.6 |
| OCHAL | | | | *i* S | Sb | 18 29 09.3 | +0.2 |
| OCHAL | | | | IAML | | 18 29 10.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| CNI2 | El Empalme, Bo | 1.39 | 14 | *e*P | Pn | 18 28 52.2 | -0.4 |
| CNI2 | | | | *e*S | Sb | 18 29 11.0 | -0.3 |
| ZELE | Perez Zeledon | 1.57 | 326 | *e*P | Pn | 18 28 54.5 | -0.7 |
| GMAL | Guarumal, Vera | 1.59 | 101 | *e*P | Pn | 18 28 54.9 | -0.5 |
| GMAL | | | | *e*S | Sn | 18 29 15.8 | +0.6 |
| BUS1 | Rivas | 1.74 | 328 | *e*P | Pn | 18 28 57.5 | -0.3 |
| BUS1 | | | | *e*S | Sn | 18 29 20.3 | +0.8 |
| MARI3 | Mariato, Verag | 1.85 | 103 | *e*P | Pn | 18 28 59.2 | +0.3 |
| LLNJ | Naranjito | 1.89 | 318 | *e*P | Pn | 18 28 58.9 | -0.6 |
| ABE2 | San Pablo | 2.04 | 323 | *e*P | Pn | 18 29 02.5 | +0.8 |
| VERB | Verbena | 2.06 | 335 | *e*P | Pn | 18 29 02.8 | +0.8 |
| CACAO | El Cacao, Vera | 2.06 | 110 | *e*P | Pn | 18 29 01.1 | -0.7 |
| CACAO | | | | *e*S | Sn | 18 29 28.0 | +1.2 |
| RAFA | San Farael, Vo | 2.12 | 332 | *i* P | Pn | 18 29 03.4 | +0.5 |
| RAFA | | | | *i* S | Sn | 18 29 30.6 | +1.9 |
| RAFA | | | | IAML | | 18 29 32.5 | |
| | comp=Z,6μm,1.0s | | | | | | |
| RAFA | San Farael, Vo | 2.12 | 332 | *e*P | Pn | 18 29 03.9 | +1.0 |
| LCOCO | El Coco | 2.14 | 340 | *e*P | Pn | 18 29 03.6 | +0.8 |
| VTR0 | Volcan Turrial | 2.15 | 334 | *e*P | Pn | 18 29 04.5 | +1.1 |
| VICA | Volcano Irazu | 2.16 | 332 | *e*P | Pn | 18 29 04.2 | +0.6 |
| HDC3 | Heredia 3 | 2.31 | 326 | *i* P | Pn | 18 29 05.5 | +0.1 |
| HDC3 | | | | IAML | | 18 29 06.8 | |
| | comp=Z,880nm,1.0s | | | | | | |
| HDC3 | | | | *i* S | Sn | 18 29 35.4 | +2.2 |
| HDC | Heredia | 2.31 | 326 | *i* P | Pn | 18 29 05.6 | +0.2 |
| HDC | | | | *i* S | Sn | 18 29 35.0 | +1.8 |
| HDC | | | | IAML | | 18 29 43.5 | |
| | comp=Z,720nm,1.0s | | | | | | |
| HDC | Heredia | 2.31 | 326 | *e*P | Pn | 18 29 06.1 | +0.8 |
| CHIT3 | Chitre | 2.38 | 92 | *e*P | Pn | 18 29 06.6 | +0.4 |
| CHIT3 | | | | *e*S | Sn | 18 29 34.4 | +1.9 |
| TCS1 | Tacares | 2.45 | 323 | *i* P | Pn | 18 29 08.0 | +0.7 |
| TCS1 | | | | IAML | | 18 29 45.4 | |
| | comp=Z,8μm,1.0s | | | | | | |
| AZU | Azuero | 2.53 | 96 | *e*P | Pn | 18 29 08.7 | +0.4 |
| AZU | | | | *e*S | Sn | 18 29 39.4 | +1.1 |
| CBL1 | Cabuya | 2.71 | 304 | *e*P | Pn | 18 29 09.2 | -1.6 |
| SOCE | Pocosol | 2.91 | 322 | *i* P | Pn | 18 29 14.2 | +0.7 |
| SOCE | | | | IAML | | 18 29 19.8 | |
| | comp=Z,780nm,1.0s | | | | | | |
| SOCE | | | | *i* S | Sn | 18 29 50.0 | +2.2 |
| SOCE | Pocosol | 2.91 | 322 | *e*P | Pn | 18 29 14.4 | +0.9 |
| ARE1 | Arenal 1 | 3.03 | 322 | *e*P | Pn | 18 29 16.8 | +1.6 |
| JTS | Las Juntas de | 3.06 | 316 | *e*P | Pn | 18 29 15.1 | -0.5 |
| JTS | | | | *e*S | Sn | 18 29 50.2 | -1.2 |
| JTS | Las Juntas de | 3.06 | 316 | *e*P | Pn | 18 29 14.7 | -0.8 |
| COVE | Coope Vega, Sa | 3.07 | 329 | *i* P | Pn | 18 29 16.5 | +0.9 |
| COVE | | | | *i* S | Sn | 18 29 54.1 | +2.5 |
| COVE | | | | IAML | | 18 30 07.7 | |
| | comp=Z,330nm,1.0s | | | | | | |
| BCIP | Isla Barro Col | 3.14 | 69 | *i* P | Pn | 18 29 19.0 | +2.4 |
| BCIP | | | | *i* S | Sb | 18 29 59.0 | -2.7 |
| BCIP | | | | IAML | | 18 30 15.9 | |
| | comp=Z,150nm,1.0s | | | | | | |
| BCIP | Isla Barro Col | 3.14 | 69 | *e*P | Pn | 18 29 17.5 | +0.9 |
| BCIP | | | | *e*S | Sn | 18 29 53.9 | +0.5 |
| INDI | Punta indio, G | 3.20 | 304 | *i* P | Pn | 18 29 17.0 | -0.5 |
| INDI | | | | IAML | | 18 30 20.8 | |
| | comp=Z,130nm,1.0s | | | | | | |
| NICO | Nicoya | 3.31 | 309 | *e*P | Pn | 18 29 19.2 | +0.1 |
| COLC | Colonia | 3.50 | 318 | *e*P | Pn | 18 29 22.9 | +1.2 |

*KRSC* ***18*** *18:41:36.5±0.5, 55°69N×160°56E, h3$^{km}_{\pm 7km}$, Ml3.7*
*IDC* ***18*** *18:41:43.7±3.6, 55°52N×160°48E, h55$^{km}_{\pm 36km}$, mb3.2/8, mbtmp3.5/10, ML2.9/2, MS3.1/2, Error ellipse: s-maj=33.1km s-min=19.6km az=155.0*

**ISC 18 18:41:37.7±1.1, 55°69N±0°03×160°55E±0°04, h9$^{km}_{\pm 7km}$, n30, σ1°03/37, mb3.5/8, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KMNR | Kamenistaya | 0.19 | 290 | *e*P | Pg | 18 41 41.2 | -0.5 |
| BZP | Bezymyannyi-Pe | 0.22 | 358 | *e*P | Pg | 18 41 41.3 | -0.9 |
| BZP | | | | *e*S | Sg | 18 41 44.9 | -0.5 |
| BZMR | Bezymyannaya | 0.25 | 352 | *e*P | Pg | 18 41 42.0 | -0.7 |
| BZGR | Bezymyannyi-Gr | 0.26 | 18 | *e*P | Pg | 18 41 42.5 | -0.5 |
| BZGR | | | | *e*S | Sg | 18 41 47.0 | +0.4 |
| BZWR | Bezymyannyi-We | 0.28 | 353 | *e*P | Pg | 18 41 42.6 | -0.7 |
| KIRR | Kirishev | 0.29 | 336 | *e*P | Pg | 18 41 43.0 | -0.5 |
| KIRR | | | | *e*S | Sg | 18 41 48.4 | +1.0 |
| KPT | Kopyto | 0.33 | 326 | *e*P | Pg | 18 41 43.9 | -0.4 |
| ZLN | Zelenaya | 0.36 | 23 | *e*P | Pg | 18 41 44.7 | 0.0 |
| LGNR | Loginova | 0.40 | 11 | *e*P | Pg | 18 41 45.6 | 0.0 |
| LGNR | | | | *e*S | Sg | 18 41 51.0 | +0.1 |
| CIRR | Tsirk | 0.44 | 14 | *e*P | Pg | 18 41 46.3 | 0.0 |
| TUMR | Tumrok | 0.47 | 210 | *e*P | Pg | 18 41 46.8 | 0.0 |
| TUMD | Tumrok D | 0.50 | 190 | *e*P | Pg | 18 41 46.9 | -0.4 |
| TUMD | | | | *e*S | Sg | 18 41 54.5 | +0.7 |
| KRSR | Krestovskiy | 0.53 | 1 | *e*P | Pg | 18 41 46.9 | -1.0 |
| KOZ | Kozyrevsk | 0.53 | 314 | *e*P | Pg | 18 41 48.1 | +0.1 |
| KOZ | | | | *e*S | Sg | 18 41 57.4 | +2.4 |
| KLY | Klyuchi | 0.63 | 5 | *e*P | Pg | 18 41 49.3 | -0.5 |
| KLY | | | | *e*S | Sb | 18 41 58.8 | -0.9 |
| SRDR | Sredinnyy | 0.78 | 324 | *e*P | Pg | 18 41 52.0 | -0.8 |
| SRDR | | | | *e*S | Sg | 18 42 04.0 | +0.9 |
| ESO | Esso | 1.07 | 283 | *e*P | Pg | 18 41 56.0 | -2.2 |
| ESO | | | | *e*S | Sg | 18 42 11.3 | -0.9 |
| KBTR | Krutoberegovo | 1.38 | 67 | *e*P | Pg | 18 42 02.1 | -1.9 |
| PETK | Petropavlovsk- | 3.08 | 214 | P | Pn | 18 42 27.0 | +0.5 |
| | 1.4nm,0.3s,baz=58,slow=15,SNR=6.6 | | | | | | |
| | 3.3nm,0.5s | | | | | | |
| MA2 | Magadan | 6.54 | 311 | LR | LR | 18 45 57.6 | |
| | comp=Z,67nm,21.2s,baz=151,slow=38 | | | | | | |
| ASAJ | Asahikawa | 16.31 | 232 | P | P | 18 45 28.6 | -1.2 |
| | 0.2nm,0.3s,baz=23,slow=15,SNR=2.7 | | | | | | |
| | 5.1nm,1.0s | | | | | | |
| ILAR | Eielson Array | 26.84 | 49 | P | P | 18 47 20.1 | +2.0 |
| | 0.4nm,0.7s,baz=267,slow=7.9,SNR=3.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 46.73 | 300 | P | P | 18 50 07.1 | +0.5 |
| | 0.5nm,0.9s,baz=57,slow=7.7,SNR=3.2 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 47.31 | 294 | P | P | 18 50 11.3 | 0.0 |
| | 0.3nm,0.8s,baz=62,slow=11,SNR=3.5 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| ARU | Arti | 51.69 | 316 | LR | LR | 19 15 15.9 | |
| | comp=Z,47nm,19.7s,baz=48,slow=39 | | | | | | |
| NVAR | Mina Array Bea | 54.64 | 72 | P | P | 18 51 07.5 | +0.7 |
| | 1.1nm,0.7s,baz=307,slow=7.5,SNR=8.8 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| PDAR | Pinedale Array | 56.05 | 63 | P | P | 18 51 17.9 | +1.0 |
| | 0.3nm,0.6s,baz=296,slow=4.6,SNR=2.3 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 69.39 | 68 | P | P | 18 52 46.0 | 0.0 |
| | 0.4nm,0.6s,baz=302,slow=5.2,SNR=4.5 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 78.55 | 205 | P | P | 18 53 38.8 | -0.4 |
| | 0.3nm,0.6s,baz=22,slow=5.7,SNR=2.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| ASAR | Alice Springs | 82.24 | 205 | P | P | 18 53 57.1 | -1.9 |
| | 0.4nm,0.8s,baz=354,slow=4.7,SNR=4.1 | | | | | | |
| | 0.4nm,0.8s | | | | | | |

*INMG* ***18*** *19:02:49.7±1.0, 41°67N×8°47W, h2$^{km}_{\pm 3km}$, ML1.1, Error ellipse: s-maj=2.6km s-min=2.1km az=78.0*

**MDD 18 19:02:50.6±1.1, 41°71N×8°41W, h13$^{km}_{\pm 29km}$, mb_Lg1.9/4, 2C, Error ellipse: s-maj=10.6km s-min=4.3km az=42.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PGAV | Gavieira, Arco | 0.27 | 23 | *i*Pg | Pg | 19 02 56.1 | -0.2 |
| PGAV | | | | *e*Sg | Sg | 19 03 00.6 | +0.4 |
| PGAV | | | | A | A | 19 03 01.4 | |
| | 13nm,0.2s | | | | | | |
| PCAB | Cabril | 0.29 | 91 | *i*Pg | Pg | 19 02 56.2 | -0.4 |
| PCAB | | | | *e*Sg | Sg | 19 03 00.7 | +0.1 |
| PCAB | | | | A | A | 19 03 01.4 | |
| | 14nm,0.3s | | | | | | |
| ELOB | Lobios | 0.30 | 60 | Pg | Pg | 19 02 56.6 | -0.3 |
| ELOB | | | | Sg | Sg | 19 03 01.2 | +0.1 |
| ELOB | | | | *i* Vmb_Lg | | 19 03 02.4 | |
| EZAM | Zamans | 0.48 | 334 | Pg | Pg | 19 02 58.8 | -1.3 |
| EZAM | | | | Sg | Sg | 19 03 05.8 | -0.8 |
| EZAM | | | | *i* Vmb_Lg | | 19 03 07.1 | |
| POLO | Lamas de Olo | 0.57 | 126 | *e*Pg | Pg | 19 03 00.7 | -1.1 |
| POLO | | | | *e*Sg | Sg | 19 03 08.1 | -1.4 |
| POLO | | | | A | A | 19 03 08.5 | |
| | 1.3nm,0.3s | | | | | | |
| PVRL | Vila Real | 0.68 | 130 | *e*P | Pg | 19 03 02.5 | -1.3 |
| PVRL | | | | *e*S | Sg | 19 03 11.4 | -1.4 |
| PVRL | | | | A | A | 19 03 13.7 | |
| | 6.2nm,0.1s | | | | | | |
| PVIS | Viseu | 1.07 | 158 | *e*P | Pb | 19 03 09.1 | -1.9 |
| PVIS | | | | *e*S | Sb | 19 03 23.3 | -1.6 |
| PVIS | | | | A | A | 19 03 24.2 | |
| | 6.7nm,0.3s | | | | | | |
| EAGO | Agolada(Pontev | 1.11 | 12 | Pg | Pb | 19 03 10.7 | -1.0 |
| MVO | Moncorvo | 1.18 | 117 | *e*P | Pb | 19 03 12.0 | -0.8 |
| MVO | | | | *e*S | Sb | 19 03 27.4 | -0.6 |
| MVO | | | | A | A | 19 03 28.4 | |
| | 3.5nm,0.2s | | | | | | |
| PBRG | Braganca | 1.25 | 85 | *e*P | Pn | 19 03 13.8 | -0.1 |
| PBRG | | | | *e*S | Sn | 19 03 30.6 | 0.0 |
| PBRG | | | | A | A | 19 03 31.4 | |
| | 1.9nm,0.1s | | | | | | |
| ECAL | Calabor | 1.27 | 79 | Pg | Pn | 19 03 14.0 | -0.1 |
| ECAL | | | | Sg | Sb | 19 03 28.8 | -2.0 |
| ECAL | | | | *i* Vmb_Lg | | 19 03 58.1 | |
| MTE | Manteigas | 1.47 | 153 | *e*Sg | Sn | 19 03 35.5 | -0.4 |
| PCAS | Casmilo, Conde | 1.66 | 182 | *e*Sg | Sn | 19 03 40.8 | +0.2 |

*NEIC* ***18*** *19:04:00.2±0.6, 17°95S×178°6W±0°2, h582$^{km}_{\pm 9km}$, mb4.2/17, Error ellipse: s-maj=28.1km s-min=25.0km az=172.0*
*IDC* ***18*** *19:04:02.3±16.0, 17°65S×178°83W, h606$^{km}_{\pm 158km}$, mb3.5/3, mbtmp4.6/3, Error ellipse: s-maj=132.5km s-min=84.1km az=106.0*

**ISC 18 19:04:00.5±1.1, 17.7°S±0°2×178.7°W±0°2, h600$^{km}$, n34, σ0°56/35, mb4.2/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.13 | 269 | P | P | 19 05 19.1 | -1.5 |
| PINNC | Pines Island, | 13.91 | 247 | P | P | 19 06 57.9 | -0.7 |
| DZM | Mont Dzumac | 14.65 | 250 | P | P | 19 07 04.6 | -1.1 |
| KOUNC | Koumac, New Ca | 16.35 | 257 | P | P | 19 07 22.0 | +0.8 |
| KOUNC | | | | IAmb | IAmb | 19 07 40.6 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| TCW | Tory Channel | 24.18 | 193 | P | P | 19 08 31.1 | -0.2 |
| ARMA | Armidale | 29.82 | 239 | P | P | 19 09 20.9 | 0.0 |
| CTAO | Charters Tower | 33.23 | 260 | P | P | 19 09 50.0 | +0.1 |
| CTAO | | | | IAmb | IAmb | 19 10 10.3 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| CAN | Canberra | 33.62 | 232 | P | P | 19 09 52.6 | -0.3 |
| CAN | | | | IAmb | IAmb | 19 10 18.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| COEN | Coen | 36.86 | 270 | P | P | 19 10 20.1 | +0.2 |
| STKA | Stephens Creek | 38.50 | 241 | P | P | 19 10 34.2 | +1.1 |
| STKA | Stephens Creek | 38.50 | 241 | P | P | 19 10 33.7 | +0.7 |
| | comp=Z,2.3nm,0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LVC | | | | *e*S | **Sn** | **19 05 31.7** | **+0.7** |
| LVC | | | | IAML | | 19 05 35.1 | |
| | comp=Z,52nm,1.2s | | | | | | |
| **LVC** | **Limon Verde** | **2.31** | **311** | P | **Pn** | **19 04 59.1** | **+0.5** |
| | comp=Z,30nm,0.2s,baz=126,slow=8.5,SNR=199 | | | | | | |
| LVC | | | | S | **Sn** | **19 05 31.4** | **+0.4** |
| | comp=Z,50nm,0.3s,baz=306,slow=21,SNR=42 | | | | | | |
| **LVC** | **Limon Verde** | **2.31** | **311** | ⇑*i*P | **Pn** | **19 04 59.4** | **+0.8** |
| LVC | | | | *e*S | **Sn** | **19 05 31.2** | **+0.2** |
| LVC | | | | IAML | | 19 05 33.0 | |
| | comp=Z,522nm,0.4s | | | | | | |
| **YJA** | **Yavi** | **2.41** | **36** | *e*P | **Pn** | **19 05 00.3** | **+0.4** |
| YJA | | | | *e*S | **Sn** | **19 05 33.4** | **+0.1** |
| **GO02** | **Mina Guanaco** | **2.53** | **246** | *e*P | **Pn** | **19 05 01.7** | **+0.7** |
| GO02 | | | | *e*S | **Sn** | **19 05 36.3** | **+0.8** |
| **GO02** | **Mina Guanaco** | **2.53** | **246** | ⇑*i*P | **Pn** | **19 05 01.7** | **+0.7** |
| GO02 | | | | *e*S | **Sn** | **19 05 36.0** | **+0.5** |
| GO02 | | | | IAML | | 19 05 37.1 | |
| | comp=E,535nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **3.10** | **319** | *e*P | **Pn** | **19 05 08.3** | **+0.8** |
| PB09 | | | | *e*S | **Sn** | **19 05 46.7** | **-0.5** |
| PB09 | | | | IAML | | 19 05 54.2 | |
| | comp=Z,89nm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **3.10** | **319** | *e*P | **Pn** | **19 05 08.6** | **+1.0** |
| PB09 | | | | *e*S | **Sn** | **19 05 46.9** | **-0.3** |
| PB09 | | | | IAML | | 19 05 48.7 | |
| | comp=N,90nm,0.4s | | | | | | |
| **PB14** | **IPOC Station P** | **3.11** | **261** | *e*P | **Pn** | **19 05 08.2** | **+0.5** |
| PB14 | | | | IAML | | 19 05 47.5 | |
| | comp=Z,52nm,0.2s | | | | | | |
| PB14 | | | | *e*S | **Sn** | **19 05 47.7** | **+0.2** |
| **PB14** | **IPOC Station P** | **3.11** | **261** | *e*P | **Pn** | **19 05 07.8** | **+0.1** |
| PB14 | | | | *i* S | **Sn** | **19 05 45.8** | **-1.7** |
| **PB04** | **IPOC Station P** | **3.39** | **302** | *e*P | **Pn** | **19 05 11.5** | **+0.6** |
| PB04 | | | | *e*S | **Sn** | **19 05 53.0** | **-0.3** |
| PB04 | | | | IAML | | 19 05 55.5 | |
| | comp=Z,90nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **3.39** | **302** | *e*P | **Pn** | **19 05 11.1** | **+0.2** |
| PB04 | | | | *i* S | **Sn** | **19 05 51.1** | **-2.3** |
| **AC01** | **Pan de Azucar** | **3.79** | **238** | *e*P | **Pn** | **19 05 15.1** | **-0.7** |
| AC01 | | | | *e*S | **Sn** | **19 05 59.9** | **-2.1** |
| AC01 | | | | IAML | | 19 06 03.6 | |
| | comp=Z,35nm,1.6s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.79** | **238** | *e*P | **Pn** | **19 05 15.0** | **-0.7** |
| AC01 | | | | *i* S | **Sn** | **19 05 59.9** | **-2.1** |
| **PB01** | **IPOC Station P** | **3.83** | **323** | *e*P | **Pn** | **19 05 16.2** | **-0.2** |
| PB01 | | | | *e*S | **Sn** | **19 06 01.7** | **-1.4** |
| PB01 | | | | IAML | | 19 06 07.3 | |
| | comp=Z,40nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **3.83** | **323** | *e*P | **Pn** | **19 05 16.0** | **-0.4** |
| PB01 | | | | *e*S | **Sn** | **19 06 00.7** | **-2.5** |
| **AC06** | **Mina Casimiro** | **4.38** | **222** | *e*P | **Pn** | **19 05 22.0** | **-1.1** |
| AC06 | | | | *i* S | **Sn** | **19 06 13.6** | **-1.7** |
| **GO03** | **Copiap** | **4.48** | **219** | *e*P | **Pn** | **19 05 23.4** | **-1.0** |
| GO03 | | | | *e*S | **Sn** | **19 06 15.2** | **-2.5** |
| **GO03** | **Copiap** | **4.48** | **219** | *e*P | **Pn** | **19 05 23.6** | **-0.8** |
| GO03 | | | | *i* S | **Sn** | **19 06 15.4** | **-2.3** |
| **TA01** | **Diego Aracena** | **4.60** | **320** | *e*P | **Pn** | **19 05 25.9** | **-0.1** |
| TA01 | | | | *i* S | **Sn** | **19 06 17.2** | **-3.2** |
| **HMBC** | **Humberstone** | **4.67** | **325** | *e*P | **Pn** | **19 05 25.8** | **-1.2** |
| HMBC | | | | *e*S | **Sn** | **19 06 18.9** | **-3.4** |
| HMBC | | | | IAML | | 19 06 24.6 | |
| | comp=Z,66nm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **4.67** | **325** | *e*P | **Pn** | **19 05 25.4** | **-1.6** |
| HMBC | | | | *i* S | **Sn** | **19 06 19.0** | **-3.2** |
| **AC04** | **Llanos de Chal** | **5.43** | **221** | *e*P | **Pn** | **19 05 35.0** | **-1.6** |
| AC04 | | | | *i* S | **Sn** | **19 06 36.5** | **-3.0** |
| **LPAZ** | **La Paz** | **7.89** | **352** | P | **Pn** | **19 06 09.9** | **+0.7** |
| | comp=Z,0.7nm,0.3s,baz=159,slow=8.3,SNR=7.3 | | | | | | |
| LPAZ | | | | S | **Sn** | **19 07 37.8** | **-0.7** |
| | comp=Z,0.6nm,0.4s,baz=23,slow=22,SNR=1.4 | | | | | | |
| **SIV** | **San Ignacio** | **9.86** | **36** | P | **Pn** | **19 06 34.8** | **+0.4** |
| | comp=Z,0.9nm,0.3s,baz=225,slow=13,SNR=1.9 | | | | | | |
| **PLCA** | **Paso Flores** | **16.80** | **189** | P | **Pn** | **19 08 01.5** | **+0.6** |
| | comp=Z,1.6nm,0.8s,baz=39,slow=6.5,SNR=1.6 | | | | | | |
| **BDFB** | **Brasilia** | **19.77** | **68** | P | **P** | **19 08 31.2** | **-1.2** |
| | comp=Z,1.8nm,0.5s,baz=212,slow=15,SNR=3.4 | | | | | | |
| **SNAA** | **Sanae** | **59.22** | **161** | P | **P** | **19 13 57.6** | **+0.4** |
| | comp=Z,1.0nm,1.1s,baz=274,slow=11,SNR=5.2 | | | | | | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.78** | **324** | P | **P** | **19 14 30.0** | **+1.7** |
| | comp=Z,0.2nm,0.6s,baz=137,slow=9.8,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.06** | **180** | P | **P** | **19 14 43.3** | **+0.8** |
| | comp=Z,0.7nm,0.5s,baz=115,slow=5.3,SNR=18 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.65** | **69** | P | **P** | **19 15 46.2** | **-0.4** |
| | comp=Z,1.0nm,0.4s,baz=236,slow=5.6,SNR=1.2 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **146.66** | **40** | PKPbc | **PKPbc** | **19 23 36.0** | **+0.5** |
| | comp=Z,0.4nm,0.4s,baz=314,slow=2.3,SNR=6.3 | | | | | | |

*ATH **18** 19:10:26.2,38˚.76N×25˚.99E,h11km±1km, ML2.5/4, Error ellipse: s-maj=2.3km s-min=0.9km az=106.0*
*ISK **18** 19:10:26.0,38˚.78N×25˚.98E,h7km, ML2.5/12*
*THE **18** 19:10:26.4,38˚.78N×25˚.96E,h8km±1km, ML2.6/5, Error ellipse: s-maj=2.6km s-min=0.6km az=93.0*
*AFAD **18** 19:10:27.0±0.0,38˚.73N×26˚.02E,h7km±3km, ML2.1*

**ISC 18 19:10:26.3±0.9,38˚.78N±0˚.02×25˚.96E±0˚.03,h10km±9km, n34,σ0°57/53,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EAG2** | **Marmaro, Chios** | **0.26** | **154** | P | **Pg** | **19 10 31.3** | **-0.3** |
| EAG2 | | | | S | **Sg** | **19 10 33.6** | **-1.6** |
| **KARB** | **zmir-Karabur** | **0.37** | **108** | P | **Pg** | **19 10 33.7** | **+0.1** |
| KARB | | | | S | **Sg** | **19 10 38.9** | **+0.4** |
| KARB | | | | *i* AML | AML | 19 10 39.0 | |
| | comp=E,358nm,0.3s | | | | | | |
| KARB | | | | *i* AML | AML | 19 10 41.0 | |
| | comp=N,186nm,0.4s | | | | | | |
| **PSRA** | **Psara** | **0.39** | **233** | P | **Pg** | **19 10 34.2** | **+0.2** |
| PSRA | | | | S | **Sg** | **19 10 39.4** | **+0.2** |
| **CHOS** | **Chios island** | **0.40** | **170** | Pg | **Pg** | **19 10 34.5** | **+0.3** |
| CHOS | | | | Sg | **Sg** | **19 10 40.0** | **+0.5** |
| **CHOS** | **Chios island** | **0.40** | **170** | P | **Pg** | **19 10 34.4** | **+0.3** |
| CHOS | | | | S | **Sg** | **19 10 39.7** | **+0.2** |
| | 3µm,0.3s | | | | | | |
| **CHOS** | **Chios island** | **0.40** | **170** | P | **Pg** | **19 10 34.3** | **+0.1** |
| CHOS | | | | S | **Sg** | **19 10 39.0** | **-0.5** |
| CHOS | | | | AML | AML | 19 10 41.5 | |
| | comp=E,7950µm,0.3s | | | | | | |
| CHOS | | | | AML | AML | 19 10 41.5 | |
| | comp=N,2696µm,0.3s | | | | | | |
| **SIGR** | **SIGRI** | **0.44** | **349** | Pg | **Pg** | **19 10 35.2** | **+0.3** |
| SIGR | | | | Sg | **Sg** | **19 10 41.4** | **+0.7** |
| **SIGR** | **SIGRI** | **0.44** | **349** | P | **Pg** | **19 10 35.2** | **+0.3** |
| SIGR | | | | S | **Sg** | **19 10 41.3** | **+0.7** |
| | comp=N,538nm,0.4s | | | | | | |
| **SIGR** | **SIGRI** | **0.44** | **349** | P | **Pg** | **19 10 35.2** | **+0.3** |
| SIGR | | | | S | **Sg** | **19 10 41.4** | **+0.7** |
| SIGR | | | | AML | AML | 19 10 41.8 | |
| | comp=E,1140µm,0.4s | | | | | | |
| SIGR | | | | AML | AML | 19 10 42.3 | |
| | comp=N,1027µm,0.3s | | | | | | |
| **PRK** | **Paraskevi** | **0.52** | **27** | P | **Pg** | **19 10 36.6** | **+0.1** |
| PRK | | | | S | **Sb** | **19 10 44.5** | **-0.7** |
| | comp=N,540nm,0.4s | | | | | | |
| **PRK** | **Paraskevi** | **0.52** | **27** | P | **Pg** | **19 10 36.7** | **+0.2** |
| PRK | | | | S | **Sg** | **19 10 43.4** | **0.0** |
| PRK | | | | AML | AML | 19 10 45.8 | |
| | comp=N,1240µm,0.3s | | | | | | |
| PRK | | | | AML | AML | 19 10 46.1 | |
| | comp=E,919µm,0.5s | | | | | | |
| **FOCM** | **Foa** | **0.60** | **96** | Pg | **Pg** | **19 10 37.7** | **-0.3** |
| **URLA** | **Izmir** | **0.65** | **130** | Pg | **Pg** | **19 10 38.9** | **0.0** |
| **URLA** | **Izmir** | **0.65** | **130** | P | **Pg** | **19 10 38.5** | **-0.4** |
| URLA | | | | S | **Sb** | **19 10 50.2** | **+1.3** |
| URLA | | | | *i* AML | AML | 19 10 52.0 | |
| | comp=E,165nm,0.2s | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **0.69** | **11** | Pg | **Pg** | **19 10 39.6** | **0.0** |
| **ZEYE** | **Izmir, Urla-Ze** | **0.69** | **142** | P | **Pb** | **19 10 40.8** | **+0.5** |
| ZEYE | | | | S | **Sg** | **19 10 48.0** | **-0.5** |
| **IZMD** | **zmir-Dikili-** | **0.78** | **75** | P | **Pg** | **19 10 41.4** | **+0.1** |
| IZMD | | | | S | **Sb** | **19 10 52.1** | **-0.6** |
| IZMD | | | | *i* AML | AML | 19 10 55.0 | |
| | comp=E,62nm,0.9s | | | | | | |
| **DKL** | **Dikili** | **0.79** | **68** | Pg | **Pb** | **19 10 42.0** | **-0.1** |
| DKL | | | | Sg | **Sb** | **19 10 52.6** | **-0.3** |
| **EZN** | **Ezine** | **1.08** | **15** | Pg | **Pg** | **19 10 46.7** | **-0.4** |
| EZN | | | | Sg | **Sn** | **19 11 02.7** | **+0.2** |
| **EZN** | **Ezine** | **1.08** | **15** | P | **Pg** | **19 10 46.5** | **-0.6** |
| EZN | | | | S | **Sb** | **19 11 01.8** | **+0.6** |
| | comp=E,325nm,0.5s | | | | | | |
| **SKY** | **Skiros Island** | **1.11** | **275** | P | **Pg** | **19 10 47.5** | **0.0** |
| **LIA** | **Limnos Island** | **1.27** | **332** | P | **Pn** | **19 10 49.8** | **-0.3** |
| LIA | | | | S | **Sb** | **19 11 06.8** | **+0.2** |
| | comp=E,225nm,0.7s | | | | | | |
| **LIA** | **Limnos Island** | **1.27** | **332** | P | **Pn** | **19 10 49.6** | **-0.5** |
| LIA | | | | S | **Sb** | **19 11 05.6** | **-1.0** |
| LIA | | | | AML | AML | 19 11 10.2 | |
| | comp=N,512µm,0.3s | | | | | | |
| LIA | | | | AML | AML | 19 11 10.4 | |
| | comp=E,453µm,0.3s | | | | | | |
| **SOMA** | **Soma-Manisa** | **1.28** | **73** | Pn | **Pg** | **19 10 50.9** | **0.0** |
| **GCAM** | **G?zelcaml?** | **1.47** | **137** | Pn | **Pb** | **19 10 53.6** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **1.72** | **349** | P | **Pn** | **19 10 55.9** | **-0.4** |
| **SMTH** | **Samothraki Isl** | **1.72** | **349** | P | **Pn** | **19 10 55.3** | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.73** | **118** | Pn | **Pn** | **19 10 57.3** | **+0.8** |
| **ODEM** | **Odemis-Izmir** | **1.73** | **106** | Pn | **Pn** | **19 10 56.5** | **0.0** |
| **GORD** | **Gordes-Manisa** | **1.73** | **85** | Pn | **Pn** | **19 10 57.2** | **+0.7** |
| **DION** | **Dionisos Attik** | **1.74** | **247** | P | **Pn** | **19 10 56.6** | **0.0** |
| **APE** | **Apeiranthos** | **1.74** | **191** | Pn | **Pn** | **19 10 57.4** | **+0.8** |
| **APE** | **Apeiranthos** | **1.74** | **191** | P | **Pn** | **19 10 55.2** | **-1.4** |
| **ALN** | **Alexandroupoli** | **2.11** | **2** | P | **Pn** | **19 11 01.1** | **-0.6** |

*IDC **18** 19:11:19.8±1.3,22˚.55S×66˚.18W,h253km±20km, mb3.5/1, mbtmp4.0/5, Error ellipse: s-maj=31.0km s-min=19.1km az=123.0*
*GUC **18** 19:11:20.9±0.4,22˚.56S×66˚.57W,h302km±9km, ML4.0*
*NEIC **18** 19:11:20.2±1.6,22˚.55S±0˚.10×66˚.2W±0˚.1,h267km±12km, mb4.0/4, Error ellipse: s-maj=17.9km s-min=12.3km az=123.0*

**ISC 18 19:11:19.6±0.8,22˚.55S±0˚.05×66˚.27W±0˚.10, h271km±12km,n38,σ1°21/51,2C,Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **1.80** | **257** | | **Pn** | **19 12 04.1** | **+1.5** |
| **LVC** | **Limon Verde** | **2.44** | **268** | | **Pn** | **19 12 09.5** | **+1.2** |
| LVC | | | | Sn | **S** | **19 12 46.1** | **-0.6** |
| **LVC** | **Limon Verde** | **2.44** | **268** | P | **Pn** | **19 12 09.6** | **+1.4** |
| | 35nm,0.4s,baz=125,slow=4.8,SNR=108 | | | | | | |
| LVC | | | | S | **S** | **19 12 45.7** | **-1.1** |
| | 17nm,0.4s,baz=127,slow=20,SNR=20 | | | | | | |
| **LVC** | **Limon Verde** | **2.44** | **268** | ⇑*i*P | **Pn** | **19 12 09.6** | **+1.4** |
| LVC | | | | *e*S | **S** | **19 12 46.5** | **-0.3** |
| LVC | | | | IAML | | 19 12 49.6 | |
| | comp=Z,209nm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **2.85** | **285** | | **Pn** | **19 12 13.9** | **+1.8** |
| PB09 | | | | Sn | **S** | **19 12 53.8** | **-0.1** |
| **PB09** | **IPOC Station P** | **2.85** | **285** | *e*P | **Pn** | **19 12 13.8** | **+1.7** |
| PB09 | | | | *i* S | **S** | **19 12 53.6** | **-0.2** |
| **PB01** | **IPOC Station P** | **3.34** | **296** | | **Pn** | **19 12 18.6** | **+1.4** |
| **PB01** | **IPOC Station P** | **3.34** | **296** | ⇑*i*P | **Pn** | **19 12 18.4** | **+1.2** |
| PB01 | | | | *e*S | **S** | **19 13 02.1** | **-1.0** |
| **PB04** | **IPOC Station P** | **3.59** | **273** | Pn | **Pn** | **19 12 21.4** | **+1.4** |
| **PB04** | **IPOC Station P** | **3.59** | **273** | *e*P | **Pn** | **19 12 20.9** | **+0.9** |
| PB04 | | | | *i* S | **S** | **19 13 06.5** | **-1.5** |
| **PX03** | **IPOC Station P** | **3.79** | **304** | *i* S | **S** | **19 13 10.9** | **-1.1** |
| **GO01** | **Chusmiza** | **3.96** | **316** | | **Pn** | **19 12 26.2** | **+1.7** |
| **GO01** | **Chusmiza** | **3.96** | **316** | *e*P | **Pn** | **19 12 26.0** | **+1.5** |
| GO01 | | | | *e*S | **S** | **19 13 17.6** | **+1.5** |
| **GO02** | **Mina Guanaco** | **4.00** | **229** | Pn | **Pn** | **19 12 26.2** | **+1.5** |
| **GO02** | **Mina Guanaco** | **4.00** | **229** | *i* P | **Pn** | **19 12 26.1** | **+1.4** |
| GO02 | | | | *e*S | **S** | **19 13 16.3** | **-0.2** |
| **PATCX** | **Punta Patache** | **4.00** | **295** | | **Pn** | **19 12 25.6** | **+1.1** |
| **HMBC** | **Humberstone** | **4.06** | **303** | | **Pn** | **19 12 25.7** | **+0.5** |
| **HMBC** | **Humberstone** | **4.06** | **303** | *e*P | **Pn** | **19 12 25.7** | **+0.5** |
| HMBC | | | | *i* S | **S** | **19 13 15.2** | **-2.3** |
| **TA01** | **Diego Aracena** | **4.14** | **298** | | **Pn** | **19 12 26.7** | **+0.6** |
| **TA01** | **Diego Aracena** | **4.14** | **298** | *e*P | **Pn** | **19 12 26.6** | **+0.6** |
| **TA02** | **Huaiquique** | **4.25** | **302** | Pn | **Pn** | **19 12 27.8** | **+0.4** |
| **PB14** | **IPOC Station P** | **4.32** | **241** | Pn | **Pn** | **19 12 29.3** | **+1.0** |
| **PB14** | **IPOC Station P** | **4.32** | **241** | *e*P | **Pn** | **19 12 29.7** | **+1.3** |
| PB14 | | | | *i* S | **S** | **19 13 21.6** | **-1.6** |
| **AC01** | **Pan de Azucar** | **5.33** | **227** | Pn | **Pn** | **19 12 40.3** | **+0.3** |
| **AC01** | **Pan de Azucar** | **5.33** | **227** | *e*P | **Pn** | **19 12 40.5** | **+0.5** |
| AC01 | | | | *i* S | **S** | **19 13 42.1** | **-2.3** |
| **GO03** | **Copiap** | **6.17** | **215** | Pn | **Pn** | **19 12 50.9** | **+0.5** |
| **LPAZ** | **La Paz** | **6.47** | **344** | Pn | **Pn** | **19 12 55.2** | **+0.5** |
| **LPAZ** | **La Paz** | **6.47** | **344** | P | **Pn** | **19 12 56.2** | **+1.5** |
| | 2.3nm,0.3s,baz=157,slow=9.6,SNR=17 | | | | | | |
| LPAZ | | | | S | **S** | **19 14 10.6** | **-0.5** |
| | 4.0nm,0.7s,baz=336,slow=16,SNR=7.1 | | | | | | |
| **SIV** | **San Ignacio** | **8.17** | **38** | P | **Pn** | **19 13 14.0** | **-1.2** |
| | 13nm,0.8s,baz=237,slow=7.3,SNR=18 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **9.77** | **45** | Pn | **Pn** | **19 13 33.8** | **-1.4** |
| **ITAB** | **Concordia** | **13.65** | **113** | | **Pn** | **19 14 19.5** | **+0.1** |
| **VAO** | **Valinhos** | **17.81** | **95** | P | **P** | **19 15 08.2** | **-0.9** |
| **BDFB** | **Brasilia** | **18.56** | **71** | P | **P** | **19 15 16.6** | **-0.7** |
| BDFB | | | | IAmb | IAmb | 19 15 19.5 | |
| | comp=Z,9.5nm,1.2s | | | | | | |
| **BDFB** | **Brasilia** | **18.56** | **71** | P | **P** | **19 15 18.5** | **+1.2** |
| | comp=Z,3.7nm,0.6s,baz=239,slow=12,SNR=6.5 | | | | | | |
| **QSPA** | **South Pole Qui** | **67.65** | **180** | P | **P** | **19 21 48.8** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **75.43** | **69** | P | **P** | **19 22 34.4** | **0.0** |
| TORD | | | | IAmb | IAmb | 19 22 41.9 | |
| | comp=Z,3.9nm,1.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.43** | **69** | P | **P** | **19 22 35.0** | **+0.6** |
| | comp=Z,0.8nm,0.4s,baz=260,slow=5.2,SNR=12 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **144.98** | **39** | PKP | **PKiKP** | **19 30 27.8** | **-0.7** |
| | comp=Z,0.7nm,0.7s,baz=288,slow=3.5,SNR=8.4 | | | | | | |

*UPA **18** 19:14:08.7±0.8,8˚.89N×82˚.82W, h21km±4km, ML4.1, MW3.6*
*UCR **18** 19:14:09.1±0.8,8˚.85N×82˚.84W, h22km±2km, MW3.9*

**ISC 18 19:14:08.9±0.9,8˚.85N±0˚.03×82˚.84W±0˚.03,h28km±5km, n34,σ0°74/47,10C-3D,Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MLIR3** | **Monte Lirio, C** | **0.06** | **160** | ⇑*i*P | **Pb** | **19 14 13.4** | **-0.4** |
| MLIR3 | | | | AMP | | 19 14 13.6 | |
| | comp=Z,37µm,0.2s | | | | | | |
| **VITO** | **San Vito** | **0.13** | **258** | *e*P | **Pb** | **19 14 14.0** | **-0.3** |
| VITO | | | | *e*S | **Sb** | **19 14 18.4** | **+0.4** |
| **BRU2** | **Volcan** | **0.16** | **109** | ⇑*i*P | **Pb** | **19 14 14.0** | **-0.6** |
| BRU2 | | | | *e*S | **Sb** | **19 14 18.2** | **-0.3** |
| **BRU2** | **Volcan** | **0.16** | **109** | ⇑*e*P | **Pb** | **19 14 14.0** | **-0.6** |
| BRU2 | | | | *e*S | **Sb** | **19 14 18.0** | **-0.5** |
| **NELY** | **Ciudad Neily** | **0.22** | **207** | *e*P | **Pb** | **19 14 14.8** | **-0.3** |
| NELY | | | | *e*S | **Sb** | **19 14 20.0** | **+0.7** |
| **BCO2** | **Palmira** | **0.34** | **112** | ⇑*i*P | **Pb** | **19 14 16.2** | **-0.4** |
| BCO2 | | | | *e*S | **Sb** | **19 14 22.3** | **+0.1** |
| **EDP2** | **Potrero Grande** | **0.37** | **297** | *e*P | **Pb** | **19 14 17.0** | **-0.2** |
| EDP2 | | | | *e*S | **Sb** | **19 14 23.5** | **+0.6** |
| **EDAD** | **Golfito** | **0.37** | **239** | ⇓*e*P | **Pb** | **19 14 16.2** | **-1.1** |
| **FITO** | **Golfito** | **0.38** | **234** | ⇓*e*P | **Pb** | **19 14 16.1** | **-1.2** |
| FITO | | | | *e*S | **Sb** | **19 14 22.1** | **-0.9** |
| **EDBA** | **Buenos Aires** | **0.53** | **306** | *e*P | **Pb** | **19 14 20.1** | **+0.3** |
| EDBA | | | | *e*S | **Sn** | **19 14 28.3** | **-0.5** |
| **DVD** | **David** | **0.56** | **136** | ⇑*i*P | **Pb** | **19 14 20.0** | **-0.3** |
| DVD | | | | AMP | | 19 14 20.1 | |
| | comp=Z,12µm,0.1s | | | | | | |
| DVD | | | | *e*S | **Sb** | **19 14 27.8** | **-0.2** |
| **JIME** | **Puerto Jimenez** | **0.57** | **237** | ⇓*e*P | **Pb** | **19 14 19.5** | **-0.9** |
| **DRK0** | **Durika** | **0.57** | **316** | ⇑*i*P | **Pb** | **19 14 19.7** | **-1.0** |
| DRK0 | | | | *e*S | **Sb** | **19 14 27.9** | **-0.7** |
| **DRK0** | **Durika** | **0.57** | **316** | ⇑*e*P | **Pb** | **19 14 19.6** | **-1.0** |
| **BURE** | **Buenos Aires** | **0.59** | **304** | *e*P | **Pb** | **19 14 20.3** | **-0.4** |
| BURE | | | | *e*S | **Sb** | **19 14 28.8** | **+0.1** |
| **LOMA3** | **Las Lomas, Chi** | **0.61** | **133** | *e*P | **Pb** | **19 14 20.8** | **-0.3** |
| **EDPN** | **Palmar Norte** | **0.62** | **281** | *e*P | **Pb** | **19 14 20.4** | **-0.8** |
| **PEDE3** | **Pedregal, Chir** | **0.62** | **138** | *e*P | **Pb** | **19 14 21.0** | **-0.3** |
| **PTPM** | **Petroterminale** | **0.64** | **183** | *e*P | **Pb** | **19 14 21.3** | **-0.3** |
| PTPM | | | | *e*S | **Sn** | **19 14 31.8** | **+0.3** |
| **CHGR2** | **Aguacate** | **0.70** | **82** | *e*P | **Pb** | **19 14 21.6** | **-0.9** |
| CHGR2 | | | | *e*S | **Sb** | **19 14 31.2** | **-0.7** |
| **BUS1** | **Rivas** | **1.14** | **308** | ⇑*e*P | **Pn** | **19 14 28.9** | **-0.5** |
| **VERB** | **Verbena** | **1.38** | **322** | *e*P | **Pn** | **19 14 33.5** | **+1.0** |
| **IRES** | **Siquirres** | **1.40** | **332** | *e*P | **Pb** | **19 14 34.0** | **-0.5** |
| **LCOCO** | **El Coco** | **1.42** | **330** | *e*P | **Pb** | **19 14 34.1** | **-0.6** |
| **CVTV** | **Tajo** | **1.46** | **322** | ⇑*e*P | **Pn** | **19 14 34.7** | **+0.9** |
| **RAFA** | **San Farael, Vo** | **1.46** | **319** | *e*P | **Pn** | **19 14 34.9** | **+1.1** |
| **ABE2** | **San Pablo** | **1.47** | **306** | *e*P | **Pn** | **19 14 34.2** | **+0.3** |
| **CVTQ** | **Turrialba Volc** | **1.47** | **322** | *e*P | **Pn** | **19 14 35.1** | **+1.1** |
| **VTLA** | **Turrialba Volc** | **1.47** | **321** | *e*P | **Pn** | **19 14 35.0** | **+1.0** |
| **VTR0** | **Volcan Turrial** | **1.47** | **322** | *e*P | **Pn** | **19 14 35.0** | **+1.0** |
| **CVTR** | **Volcan Turrial** | **1.48** | **322** | ⇑*e*P | **Pn** | **19 14 35.0** | **+0.9** |
| **VICA** | **Volcano Irazu** | **1.50** | **319** | *e*P | **Pn** | **19 14 35.2** | **+0.7** |
| **HDC** | **Heredia** | **1.70** | **313** | *e*P | **Pn** | **19 14 38.1** | **+1.1** |
| **JTS** | **Las Juntas de** | **2.53** | **305** | *e*P | **Pn** | **19 14 49.5** | **+1.2** |

**UCR 18 19:15:00.2±0.8,8˚.85N×82˚.84W,h22km±2km, MW3.5, 2C-4D,Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VITO** | **San Vito** | **0.13** | **257** | *e*P | **Pb** | **19 15 05.0** | **-0.3** |
| VITO | | | | *e*S | **Sb** | **19 15 09.4** | **+0.5** |
| **BRU2** | **Volcan** | **0.16** | **109** | ⇑*e*P | **Pb** | **19 15 05.1** | **-0.5** |
| BRU2 | | | | *e*S | **Sb** | **19 15 09.1** | **-0.2** |
| **NELY** | **Ciudad Neily** | **0.22** | **207** | *e*P | **Pb** | **19 15 05.9** | **-0.1** |
| NELY | | | | *e*S | **Sb** | **19 15 11.0** | **+1.2** |
| **EDP2** | **Potrero Grande** | **0.37** | **297** | *e*P | **Pb** | **19 15 08.1** | **0.0** |
| EDP2 | | | | *e*S | **Sb** | **19 15 14.6** | **+1.1** |
| **EDAD** | **Golfito** | **0.37** | **239** | ⇓*e*P | **Pb** | **19 15 07.3** | **-0.9** |
| **FITO** | **Golfito** | **0.38** | **234** | *e*P | **Pb** | **19 15 07.2** | **-1.1** |
| FITO | | | | *e*S | **Sb** | **19 15 13.0** | **-0.7** |
| **EDBA** | **Buenos Aires** | **0.53** | **306** | ⇓*e*P | **Pb** | **19 15 11.2** | **+0.3** |
| EDBA | | | | *e*S | **Sb** | **19 15 19.3** | **+1.2** |
| **JIME** | **Puerto Jimenez** | **0.57** | **237** | ⇓*e*P | **Pb** | **19 15 10.6** | **-0.9** |
| **DRK0** | **Durika** | **0.57** | **316** | *e*P | **Pb** | **19 15 10.6** | **-1.1** |
| DRK0 | | | | *e*S | **Sb** | **19 15 18.7** | **-0.8** |
| **BURE** | **Buenos Aires** | **0.59** | **304** | *e*P | **Pb** | **19 15 11.4** | **-0.5** |
| BURE | | | | *e*S | **Sb** | **19 15 19.9** | **+0.1** |
| **EDPN** | **Palmar Norte** | **0.62** | **281** | ⇓*e*P | **Pb** | **19 15 11.4** | **-0.9** |
| **BUS1** | **Rivas** | **1.14** | **308** | ⇑*e*P | **Pn** | **19 15 20.0** | **-1.2** |
| **VERB** | **Verbena** | **1.38** | **322** | *e*P | **Pn** | **19 15 24.3** | **+0.1** |
| **IRES** | **Siquirres** | **1.40** | **332** | *e*P | **Pb** | **19 15 25.0** | **+0.6** |
| **LCOCO** | **El Coco** | **1.42** | **330** | *e*P | **Pn** | **19 15 25.2** | **+0.6** |
| **CVTV** | **Tajo** | **1.46** | **322** | *e*P | **Pn** | **19 15 25.9** | **+0.4** |
| **RAFA** | **San Farael, Vo** | **1.46** | **319** | *e*P | **Pn** | **19 15 25.9** | **+0.3** |
| **CVTQ** | **Turrialba Volc** | **1.47** | **322** | *e*P | **Pn** | **19 15 26.1** | **+0.4** |
| **VTLA** | **Turrialba Volc** | **1.47** | **321** | *e*P | **Pn** | **19 15 26.0** | **+0.3** |
| **VTR0** | **Volcan Turrial** | **1.47** | **322** | *e*P | **Pn** | **19 15 26.0** | **+0.5** |
| **CVTR** | **Volcan Turrial** | **1.47** | **322** | *e*P | **Pn** | **19 15 26.3** | **+0.4** |
| **VICA** | **Volcano Irazu** | **1.50** | **319** | *e*P | **Pn** | **19 15 26.4** | **+0.2** |

**IDC 18 19:18:55.6±0.6,5˚.58S×150˚.35E,h65km±58km,mb3.2/3, mbtmp3.5/4,ML1.3/1,Error ellipse: s-maj=127.8km s-min=38.6km az=125.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.94** | **220** | P | **Pn** | **19 20 08.4** | **+1.1** |
| | 0.9nm,0.3s,baz=37,slow=20,SNR=2.1 | | | | | | |
| PMG | | | | S | Sn | 19 21 03.1 | -0.1 |
| | 14nm,0.9s,baz=193,slow=15,SNR=2.0 | | | | | | |
| | 5.6nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.12** | **226** | P | P | 19 23 35.5 | +0.3 |
| | 1.1nm,0.5s,baz=52,slow=10,SNR=22 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **23.96** | **220** | P | P | 19 24 04.2 | +0.1 |
| | 0.4nm,0.5s,baz=54,slow=8.9,SNR=12 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **83.80** | **23** | P | P | 19 31 17.2 | -0.3 |
| | 0.3nm,0.6s,baz=252,slow=5.5,SNR=2.1 | | | | | | |
| | 0.3n

**MBWA Marble Bar 32.77 240** P **P** 19 32 16.4 -1.3
MBWA IAmb IAmb 19 32 17.9
comp=Z,14nm,1.2s
**SSLB Suanglung 40.85 318** P **P** 19 33 26.7 +0.3
SSLB IAmb IAmb 19 33 52.4
comp=Z,16nm,1.2s
**JNU Nakatsue 42.86 336** P **P** 19 33 42.3 -0.5
JNU IAmb IAmb 19 33 58.7
comp=Z,15nm,1.1s
**MJAR Matsushiro Arr 43.70 346** P **P** 19 33 48.6 -0.8
comp=Z,1.5nm,0.8s,baz=174,slow=7.5,SNR=3.9
MJAR LR LR 19 49 16.1
comp=Z,43nm,18.9s,baz=166,slow=32
comp=Z,1.5nm,0.8s
**JTM Tenmabayashi 47.26 351** P **P** 19 34 17.3 -0.1
**KSRS Korea Array 47.81 336** P **P** 19 34 22.1 +0.3
comp=Z,0.8nm,0.5s,baz=155,slow=9.2,SNR=4.6
comp=Z,0.8nm,0.5s
**PEA0B Petropavlovsk- 59.28 6** P **P** 19 35 45.8 +0.2
**PETK Petropavlovsk- 59.28 6** P **P** 19 35 45.2 -0.3
comp=Z,2.1nm,0.5s,baz=161,slow=6.1,SNR=8.2
comp=Z,2.1nm,0.5s
**SONM Songino Array 65.79 330** P **P** 19 36 29.5 +0.3
**SONM Songino Array 65.79 330** P **P** 19 36 30.8 +1.5
comp=Z,0.7nm,0.4s,baz=141,slow=4.9,SNR=7.8
comp=Z,0.7nm,0.4s
**CASY Casey 66.00 196** P **P** 19 36 30.4 +0.3
CASY IAmb IAmb 19 36 56.7
comp=Z,2.6nm,0.9s
**MK31 Makanchi Array 79.28 320** P **P** 19 37 49.1 -0.3
**MKAR Makanchi Array 79.28 320** P **P** 19 37 48.9 -0.6
**MKAR Makanchi Array 79.28 320** P **P** 19 37 49.2 -0.2
comp=Z,0.1nm,0.5s,baz=102,slow=7.4,SNR=2.1
comp=Z,0.1nm,0.5s
**L18K Granite Mounta 79.34 23** P **P** 19 37 49.2 -0.1
L18K IAmb IAmb 19 37 49.3
comp=Z,13nm,1.5s
**ZALV Zalesovo Beam 80.51 327** P **P** 19 37 55.4 -0.4
**ZALV Zalesovo Beam 80.51 327** P **P** 19 37 55.7 -0.1
comp=Z,0.6nm,0.5s,baz=111,slow=6.1,SNR=4.1
comp=Z,0.6nm,0.5s
**BPAW Bear Paw Mtn. 82.53 22** P **P** 19 38 05.4 -1.0
BPAW IAmb IAmb 19 38 31.6
comp=Z,4.9nm,1.2s
**IMAR Indian Mountai 82.54 20** P **P** 19 38 06.2 -0.1
**QSPA South Pole Qui 83.95 180** P **P** 19 38 13.6 -0.3
QSPA IAmb IAmb 19 38 15.2
comp=Z,3.8nm,0.8s
**QSPA South Pole Qui 83.95 180** P **P** 19 38 13.5 -0.3
comp=Z,3.0nm,0.8s,baz=342,slow=1.7,SNR=16
comp=Z,3.0nm,0.8s
**ILAR Eielson Array 84.42 23** P **P** 19 38 13.0 -3.0
comp=Z,0.9nm,0.7s,baz=249,slow=5.3,SNR=5.7
**BVAR Borovoye Array 88.42 324** P **P** 19 38 35.4 -0.4
comp=Z,0.3nm,0.3s,baz=109,slow=6.3,SNR=2.2
comp=Z,0.3nm,0.3s
**CPUP Villa Florida 138.46 142** PKP **PKPdf** 19 45 10.4 +0.4
comp=Z,1.2nm,0.6s,baz=235,slow=3.2,SNR=4.1
**TORD Torodi Ar. Bea 147.77 285** PKPbc **PKPbc** 19 45 28.8 -0.7
comp=Z,1.4nm,0.7s,baz=94,slow=2.4,SNR=8.6
**BDFB Brasilia 152.18 141** PKPbc **PKPbc** 19 45 40.4 0.0
comp=Z,7.7nm,0.7s,baz=182,slow=4.3,SNR=13

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*DJA **18** 19:32:52.2±0.7, 9°S±8′×11°6E±°, h11km±6km, M3.1/6, MLv3.1/6*
*IDC **18** 19:33:40.0±12.0, 10°.00S×118°.74E, h210km±111km, mb3.0/1,mbtmp3.3/4, Error ellipse: s-maj=235.8km s-min=19.5km az=58.0*
**ISC 18 19:32:52.4±1.0,8°.6S±0°.1×116°.10E±0°.06,h10km,n9, σ0§63/9,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DNP** | **Denpasar** | **0.88** | **266** | P | | **Pg** | | **19 33 09.1** | **-0.3** |
| **SRBI** | **Singaraja** | **1.03** | **301** | P | | **Pg** | | **19 33 11.8** | **-0.4** |
| SRBI | | | | S | | **Sb** | | **19 33 26.6** | **+0.8** |
| **PLAI** | **Plampang** | **1.67** | **97** | P | | **Pn** | | **19 33 21.3** | **-0.4** |
| PLAI | | | | S | | **Sn** | | **19 33 43.4** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **1.93** | **274** | P | | **Pn** | | **19 33 25.0** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **3.40** | **108** | P | | **Pn** | | **19 33 45.3** | **-0.3** |
| **KAPI** | **Kappang** | **5.10** | **46** | P | | Pg | | 19 34 55.3 | +25 |
| | 1.4nm,0.3s,baz=137,slow=20,SNR=1.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.93** | **124** | P | | | | **19 37 35.3** | **-0.2** |
| | 0.9nm,0.9s,baz=301,slow=12,SNR=2.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.68** | **133** | P | | **P** | | **19 37 55.3** | **+1.1** |
| | 0.4nm,0.9s,baz=310,slow=9.2,SNR=4.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.85** | **335** | P | | P | | 19 43 59.0 | +41 |
| | 0.4nm,0.6s,baz=156,slow=8.3,SNR=4.3 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |

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*SNET **18** 19:39:02.4±0.7, 12°.28N×76°.27W, h0km±999km, ML5.5*
*MOS **18** 19:39:06.0±0.9, 8°.72N×77°.40W, h15km, mb5.9/66, MS5.1/66, Error ellipse: s-maj=6.4km s-min=4.6km az=91.0*
*IPGP **18** 19:39:07.0, 8°.83N×77°.29W, h23km, Mw5.5, Fault plane solution: NP1:φs278.00000°, δ70.00000°, λ89.00000°. NP2:φs101.00000°, δ20.00000°, λ93.00000°.*
*NEIC **18** 19:39:07.2, 8°.80N×77°.25W, h30km*
*NEIC **18** 19:39:07.2±1.6, 8°.80N±0°.06×77°.25W±0°.05, h10km±1km, mb5.7/263,Ms_20 5.2/679,Mww5.6/42, Error ellipse: s-maj=10.1km s-min=7.5km az=202.0*
*NEIC **18** 19:39:07.2, 8°.80N×77°.25W, h30km, Moment Tensor Solution. Duration: 3§5 Moment tensor: Scale 10^17^Nm; Mrr2.22; Mθθ-1.87; Mφφ-0.35; Mrθ-2.15; Mrφ1.63; Mθφ0.07; Fault plane solution: M0 3.39000×10^17^ NP1: φs281.68000°, δ66.37000°, λ68.59000°. NP2: φs146.05000°, δ31.47000°, λ129.84000°. Principal axes: T 3.2499, Plg62.0000°, Azm158.0000°; N 0.2871, Plg20.0000°, Azm291.0000°; P -3.5370, Plg19.0000°, Azm27.0000°;*
*UPA **18** 19:39:08.5±2.4, 8°.83N×77°.14W, h22km±62km, MW6.0*
*IDC **18** 19:39:09.8±2.2, 8°.65N×77°.30W, h33km±16km, mb4.8/36, mbtmp5.0/40, ML3.7/3, MS5.0/59, Error ellipse: s-maj=13.0km s-min=8.7km az=49.0*
*RSNC **18** 19:39:09.4±0.0, 9°N±1′×7°.7W±°, h14km±1km, M5.8, mB6.2, mb6.0, ML5.6, Mw(mB)5.9, MwMwp5.6, Mwp5.8*
*VAO **18** 19:39:10.6±0.7, 8°.47N×77°.25W, h39km±6km, mb5.5*
*GCMT **18** 19:39:12.2±0.1, 8°.76N±0°.01×77°.29W±0°.01, h22km, MW5.6/145, Moment Tensor Solution. s123,c242; s145,c304; Duration: 1§6 Moment tensor: Scale 10^17^ Nm; Mrr2.24±.04; Mθθ-1.98±.03; Mφφ-0.25±.03; Mrθ-2.29±.06; Mθφ1.30±.02; Mrφ-0.07±.06; Best double couple: M0 3.38200×10^17^ NP1:φs278.00000°, δ67.00000°, λ71.00000°. NP2:φs139.00000°, δ29.00000°, λ128.00000°. Principal axes: T 3.3440, Plg63.0000°, Azm158.0000°; N 0.0790, Plg17.0000°, Azm285.0000°; P -3.4190, Plg20.0000°, Azm22.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*CATAC **18** 19:39:12.6±0.3, 9°.14N×77°.30W, h62km±29km, MB6.0, mb5.9, ML6.1*
*BGR **18** 19:39:18.8, 10°.00N×76°.38W, h23km±2km, mb5.8, Ms5.1*
**ISC 18 19:39:06.9±0.4,8°.66N±0°.02×77°.28W±0°.02,h15km±2km, h15km:pP-P,n1760,σ1§61/1602,mb5.7/294,MS5.2/439, 52C-48D,Panama-Colombia border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CAPC** | **Capurgana** | **0.07** | **249** | P | | **Pg** | | **19 39 11.8** | **+1.8** |
| **LCBC** | **Los crdobas,** | **0.92** | **78** | P | | **Pn** | | **19 39 27.3** | **+1.9** |
| LCBC | | | | S | | **Sn** | | **19 39 42.5** | **+4.1** |
| **APAC** | **Apartado, Choc** | **1.03** | **137** | P | | **Pg** | | **19 39 28.5** | **+1.7** |
| APAC | | | | S | | **Sn** | | **19 39 47.4** | **+6.5** |
| **PTAC** | **Punta Ardita,** | **1.59** | **199** | P | | **Pn** | | **19 39 34.5** | **-0.1** |
| PTAC | | | | S | | **Sn** | | **19 39 52.5** | **-2.4** |
| **CNTA3** | **Canitas, Panam** | **1.68** | **289** | *eP* | | **Pb** | | **19 39 37.8** | **+0.2** |
| CNTA3 | | | | *eS* | | **Sb** | | **19 39 58.9** | **+0.3** |
| **CHPO** | **Chepo, Panama** | **1.88** | **286** | *eP* | | **Pb** | | **19 39 40.1** | **-0.9** |
| CHPO | | | | *eS* | | **Sb** | | **19 40 03.9** | **-0.5** |
| **DBBC** | **Dabeiba** | **1.95** | **147** | P | | **Pn** | | **19 39 40.7** | **+1.1** |
| DBBC | | | | S | | **Sg** | | **19 40 09.7** | **0.0** |
| **UREC** | **San Jos de Ur** | **1.95** | **117** | P | | **Pn** | | **19 39 40.1** | **+0.5** |
| UREC | | | | S | | **Sn** | | **19 40 02.6** | **-1.2** |
| **FLAM** | **Flamenco Islan** | **2.24** | **277** | *eP* | | **Pn** | | **19 39 45.0** | **+1.5** |
| FLAM | | | | *eS* | | **Sb** | | **19 40 13.0** | **-1.8** |
| **TABO3** | **Taboga, Panama** | **2.25** | **273** | *eP* | | **Pb** | | **19 39 46.6** | **-0.7** |
| TABO3 | | | | *eS* | | **Sb** | | **19 40 15.3** | **+0.3** |
| **ARRA3** | **Arraijan, Pana** | **2.37** | **277** | *eP* | | **Pn** | | **19 39 47.2** | **+2.0** |
| ARRA3 | | | | *eS* | | **Sb** | | **19 40 18.7** | **+0.4** |
| **SJCC** | **San Jacinto, C** | **2.41** | **59** | P | | **Pn** | | **19 39 46.3** | **+0.4** |
| SJCC | | | | S | | **Sn** | | **19 40 14.0** | **-1.2** |
| **SOLC** | **Bahia Solano** | **2.42** | **183** | P | | **Pn** | | **19 39 47.7** | **+1.7** |
| SOLC | | | | S | | **Sb** | | **19 40 18.2** | **-1.8** |
| **FRIJ** | **El Hiral** | **2.48** | **283** | *eP* | | **Pn** | | **19 39 48.3** | **+1.5** |
| FRIJ | | | | *eS* | | **Sb** | | **19 40 21.5** | **-0.1** |
| **BCIP** | **Isla Barro Col** | **2.58** | **281** | Pn | | **Pn** | | **19 39 49.2** | **+1.1** |
| BCIP | | | | Sn | | **Sn** | | **19 40 19.7** | **+0.5** |
| **BCIP** | **Isla Barro Col** | **2.58** | **281** | P | | **Pn** | | **19 39 49.2** | **+1.1** |
| BCIP | | | | S | | **Sn** | | **19 40 19.7** | **+0.5** |
| **BCIP** | **Isla Barro Col** | **2.58** | **281** | *i* P | | **Pn** | | **19 39 50.3** | **+2.2** |
| BCIP | | | | *i* S | | **Sn** | | **19 40 20.3** | **+1.1** |
| BCIP | | | | IAML | | | | 19 40 36.6 | |
| | comp=Z,37μm,1.0s | | | | | | | | |
| **BCIP** | **Isla Barro Col** | **2.58** | **281** | P | | **Pn** | | **19 39 49.2** | **+1.1** |
| BCIP | | | | | | | | 19 40 19.7 | |
| **BCIP** | **Isla Barro Col** | **2.58** | **281** | *eP* | | **Pn** | | **19 39 49.6** | **+1.5** |
| BCIP | | | | *eS* | | **Sn** | | **19 40 20.5** | **+1.3** |
| **MLIR** | **Monte Lirio** | **2.61** | **283** | *eP* | | **Pn** | | **19 39 50.8** | **+2.3** |
| MLIR | | | | *eS* | | **Sn** | | **19 40 20.8** | **+0.9** |
| **ZARC** | **Zaragoza, Cauc** | **2.67** | **116** | P | | **Pn** | | **19 39 50.3** | **+0.9** |
| ZARC | | | | S | | **Sn** | | **19 40 20.2** | **-1.3** |
| **PEDA3** | **Pedasi** | **2.94** | **248** | *eP* | | **Pb** | | **19 39 56.8** | **-2.3** |
| **PCRI3** | **Pocri, Los San** | **2.98** | **251** | *eP* | | **Pn** | | **19 39 55.3** | **+1.6** |
| **PNME** | **Penonome** | **3.02** | **267** | *eP* | | **Pn** | | **19 39 55.5** | **+1.3** |
| PNME | | | | *eS* | | **Sn** | | **19 40 32.2** | **+2.1** |
| **CBOC** | **Ciudad Bolivar** | **3.05** | **156** | P | | **Pn** | | **19 39 57.4** | **+2.6** |
| CBOC | | | | S | | **Sg** | | **19 40 42.6** | **-2.5** |
| **AZU** | **Azuero** | **3.09** | **254** | P | | **Pn** | | **19 39 56.0** | **+0.9** |
| AZU | | | | S | | **Sn** | | **19 40 30.5** | **-1.3** |
| **AZU** | **Azuero** | **3.09** | **254** | *eP* | | **Pn** | | **19 39 56.3** | **+1.2** |
| AZU | | | | *eS* | | **Sb** | | **19 40 36.1** | **-3.0** |
| **ACHO3** | **Achotines, Los** | **3.12** | **247** | *eP* | | **Pn** | | **19 39 58.4** | **+2.8** |
| ACHO3 | | | | *eS* | | **Sb** | | **19 40 41.7** | **+1.6** |
| **CHIT3** | **Chitre** | **3.18** | **257** | *eP* | | **Pn** | | **19 39 57.5** | **+1.1** |
| CHIT3 | | | | *eS* | | **Sn** | | **19 40 35.2** | **+1.0** |
| **ARGC** | **Ariguani, Magd** | **3.22** | **68** | P | | **Pn** | | **19 39 57.9** | **+0.9** |
| ARGC | | | | S | | **Sn** | | **19 40 33.0** | **-2.2** |
| **CRIS3** | **El Cristo, Coc** | **3.33** | **263** | *eP* | | **Pn** | | **19 39 59.6** | **+1.1** |
| CRIS3 | | | | *eS* | | **Sn** | | **19 40 41.7** | **+4.0** |
| **TOSI3** | **Tonosi** | **3.37** | **248** | *eP* | | **Pb** | | **19 40 03.0** | **-3.4** |
| **PTBC** | **PUERTO BERRIO,** | **3.50** | **127** | P | | **Pn** | | **19 40 01.4** | **+0.5** |
| PTBC | | | | S | | **Sn** | | **19 40 40.8** | **-1.4** |
| **PIZC** | **Pizarro, Choco** | **3.67** | **181** | P | | **Pn** | | **19 40 05.7** | **+2.5** |
| **STIA3** | **Santiago, Vera** | **3.69** | **262** | *eP* | | **Pn** | | **19 40 06.3** | **+2.7** |
| STIA3 | | | | *eS* | | **Sg** | | **19 41 07.7** | **+2.0** |
| **SAFE3** | **Santa Fe, Vera** | **3.76** | **268** | *eP* | | **Pn** | | **19 40 06.7** | **+2.2** |
| **CACAO** | **El Cacao, Vera** | **3.78** | **250** | P | | **Pn** | | **19 40 05.8** | **+1.1** |
| **CACAO** | **El Cacao, Vera** | **3.78** | **250** | *eP* | | **Pn** | | **19 40 07.7** | **+3.0** |
| CACAO | | | | *eS* | | **Sb** | | **19 40 56.7** | **-2.3** |
| **MARI3** | **Mariato, Verag** | **3.81** | **255** | *eP* | | **Pb** | | **19 40 15.1** | **+1.2** |
| **PLMC** | **San Jos del P** | **3.86** | **165** | P | | **Pn** | | **19 40 06.6** | **+0.7** |
| **BRJC** | **Barrancabermej** | **3.88** | **115** | P | | **Pn** | | **19 40 08.4** | **+2.3** |
| BRJC | | | | S | | **Sn** | | **19 40 50.2** | **-1.4** |
| **NORC** | **Norcasia** | **3.90** | **142** | P | | **Pn** | | **19 40 08.0** | **+1.6** |
| NORC | | | | S | | **Sn** | | **19 40 56.0** | **+4.0** |
| **SMRC** | **Santa Marta, M** | **3.90** | **50** | P | | **Pn** | | **19 40 07.5** | **+1.1** |
| SMRC | | | | S | | **Sn** | | **19 40 49.7** | **-2.3** |
| **OCAC** | **Ocana** | **3.94** | **96** | P | | **Pn** | | **19 40 07.9** | **+0.8** |
| OCAC | | | | S | | **Sn** | | **19 40 52.5** | **-0.7** |
| **GMAL** | **Guarumal, Vera** | **4.01** | **257** | P | | **Pn** | | **19 40 09.8** | **+1.9** |
| **GMAL** | **Guarumal, Vera** | **4.01** | **257** | *eP* | | **Pn** | | **19 40 11.4** | **+3.5** |
| GMAL | | | | *eS* | | **Sn** | | **19 40 59.8** | **+5.1** |
| **SPBC** | **San Pablo de B** | **4.37** | **133** | P | | **Pn** | | **19 40 19.1** | **+2.2** |
| **NANC3** | **Nancito, Chiri** | **4.42** | **265** | *eP* | | **Pb** | | **19 40 22.6** | **-1.8** |
| **BARC** | **Barichara** | **4.55** | **117** | P | | **Pn** | | **19 40 17.5** | **+1.9** |
| **MALC** | **Bahia Malaga** | **4.62** | **181** | P | | **Pn** | | **19 40 21.1** | **+4.8** |
| **PAMC** | **Pamplona, Colo** | **4.72** | **106** | P | | **Pn** | | **19 40 19.7** | **+1.6** |
| **YOTC** | **Yotoco, Valle** | **4.74** | **169** | P | | **Pn** | | **19 40 19.4** | **+1.4** |
| **ROSC** | **El Rosal** | **4.80** | **142** | | | **Pn** | | **19 40 21.9** | **+2.8** |
| **ROSC** | **El Rosal** | **4.80** | **142** | Pn | | **Pn** | | **19 40 22.2** | **+3.1** |
| | comp=Z,50nm,0.3s,baz=14,slow=3.1,SNR=70 | | | | | | | | |
| ROSC | | | | Sn | | **Sn** | | **19 41 16.3** | **+1.6** |
| | comp=Z,48nm,0.3s,baz=186,slow=8.1,SNR=4.2 | | | | | | | | |
| ROSC | | | | LR | | LR | | 19 42 35.4 | |
| | comp=Z,72μm,21.5s,baz=335,slow=43 | | | | | | | | |
| | comp=Z,179nm,0.3s | | | | | | | | |
| **ROSC** | **El Rosal** | **4.80** | **142** | P | | **Pn** | | **19 40 22.8** | **+3.7** |
| **CHGR2** | **Aguacate** | **4.81** | **274** | *eP* | | **Pn** | | **19 40 23.4** | **+4.5** |
| **CRJC** | **Cerrejon, Guaj** | **4.93** | **61** | P | | **Pn** | | **19 40 21.2** | **+0.6** |
| **RUSC** | **La Rusia** | **4.99** | **123** | P | | **Pn** | | **19 40 22.8** | **+1.0** |
| | comp=Z,2μm,1.2s,comp=Z,34μmcomp=Z,25μm | | | | | | | | |
| **RUSI** | **La Rusia** | **4.99** | **123** | *i* P | | Pn | | 19 40 28.1 | +6.3 |
| RUSI | | | | | IAmb | IAmb | | 19 40 40.0 | |
| | comp=Z,2μm,1.2s | | | | | | | | |
| RUSI | | | | | IVmB_BB | | | 19 41 27.3 | |
| | comp=Z,59μm,1.0s | | | | | | | | |
| RUSI | | | | | IAML | | | 19 41 56.8 | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| **LOMA3** | **Las Lomas, Chi** | **5.06** | **268** | *eP* | | Pb | | 19 40 29.5 | -5.7 |
| **LOCO3** | **Loma Colorada,** | **5.09** | **268** | *eP* | | Pb | | 19 40 29.6 | -6.1 |
| LOCO3 | | | | *eS* | | **Sb** | | **19 41 35.2** | **-1.5** |
| **LNBQ3** | **Los Naranjos,** | **5.10** | **272** | *eP* | | **Pn** | | **19 40 26.1** | **+3.1** |
| **DVD** | **David** | **5.12** | **268** | *eP* | | **Pn** | | **19 40 26.1** | **+3.0** |
| DVD | | | | *eS* | | **Sb** | | **19 41 31.1** | **-6.5** |
| **ORTC** | **Ortega, Tolima** | **5.14** | **157** | P | | Pn | | 19 40 28.3 | +4.9 |
| | comp=Z,4μm,1.2s,comp=Z,55μmcomp=Z,32μm | | | | | | | | |
| **BCO2** | **Palmira** | **5.19** | **271** | *eP* | | **Pn** | | **19 40 26.6** | **+2.3** |
| BCO2 | | | | *eS* | | **Sn** | | **19 41 28.7** | **+4.7** |
| **CHIC** | **Chingaza** | **5.34** | **138** | P | | **Pn** | | **19 40 29.0** | **+2.5** |
| | comp=Z,1μm,0.7s,comp=Z,20μmcomp=Z,31μm | | | | | | | | |
| **BRU2** | **Volcan** | **5.35** | **272** | | | **Pn** | | **19 40 27.7** | **+1.2** |
| **BRU2** | **Volcan** | **5.35** | **272** | *i* P | | **Pn** | | **19 40 29.3** | **+2.9** |
| BRU2 | | | | | IAmb | IAmb | | 19 40 51.2 | |
| | comp=Z,2μm,0.9s | | | | | | | | |
| BRU2 | | | | | IVmB_BB | | | 19 41 17.9 | |
| | comp=Z,23μm,1.0s | | | | | | | | |
| BRU2 | | | | *i* S | | **Sn** | | **19 41 31.6** | **+3.7** |
| BRU2 | | | | | IAML | | | 19 42 01.3 | |
| | comp=Z,11μm,1.0s | | | | | | | | |
| **BRU2** | **Volcan** | **5.35** | **272** | *eP* | | **Pn** | | **19 40 28.8** | **+2.3** |
| BRU2 | | | | *eS* | | **Sg** | | **19 41 54.0** | **-4.8** |
| **JAMC** | **Jamundi, Valle** | **5.45** | **174** | P | | **Pn** | | **19 40 29.9** | **+2.1** |
| | comp=Z,2μm,1.3s,comp=Z,23μmcomp=Z,46μm | | | | | | | | |
| **PRAC** | **Prado** | **5.46** | **154** | P | | **Pn** | | **19 40 31.8** | **+3.9** |
| | comp=Z,2μm,1.1s,comp=Z,39μmcomp=Z,57μm | | | | | | | | |
| **MLIR3** | **Monte Lirio, C** | **5.48** | **272** | *eP* | | **Pn** | | **19 40 32.2** | **+4.0** |
| **CDITO** | **Canoas** | **5.53** | **269** | *i* P | | **Pn** | | **19 40 32.3** | **+3.5** |
| CDITO | | | | | IAmb | IAmb | | 19 40 57.3 | |
| | comp=Z,2μm,0.8s | | | | | | | | |
| CDITO | | | | | IVmB_BB | | | 19 41 17.2 | |
| | comp=Z,41μm,1.0s | | | | | | | | |
| CDITO | | | | *i* S | | **Sn** | | **19 41 36.5** | **+4.3** |
| CDITO | | | | | IAML | | | 19 42 41.0 | |
| | comp=Z,12μm,1.0s | | | | | | | | |
| **PTPM** | **Petroterminale** | **5.56** | **266** | *eP* | | **Pg** | | **19 40 49.2** | **-4.2** |
| PTPM | | | | *eS* | | **Sg** | | **19 42 10.6** | **+5.1** |
| **GR1C** | **Gorgona, Isla** | **5.69** | **189** | P | | **Pn** | | **19 40 35.4** | **+4.4** |
| **VILC** | **Villavicencio,** | **5.76** | **142** | P | | **Pn** | | **19 40 35.0** | **+3.0** |
| **TAMC** | **Tame, Arauca** | **5.88** | **112** | P | | **Pn** | | **19 40 34.7** | **+1.1** |
| | comp=Z,2μm,1.1s,comp=Z,24μmcomp=Z,32μm | | | | | | | | |
| **URIC** | **Uribia, Colomb** | **6.02** | **59** | P | | **Pn** | | **19 40 35.9** | **+0.4** |
| | comp=Z,1μm,0.8s,comp=Z,14μmcomp=Z,25μm | | | | | | | | |
| **URI** | **Uribia** | **6.02** | **59** | *i* P | | **Pn** | | **19 40 37.6** | **+2.1** |
| URI | | | | | IVmB_BB | | | 19 40 38.5 | |
| | comp=Z,11μm,1.0s | | | | | | | | |
| URI | | | | | IAmb | IAmb | | 19 40 41.4 | |
| | comp=Z,950nm,1.0s | | | | | | | | |
| URI | | | | *i* S | | **Sn** | | **19 41 41.5** | **-2.7** |
| URI | | | | | IAML | | | 19 41 48.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **POPC** | **Popayan, Colom** | **6.11** | **174** | P | | **Pn** | | **19 40 41.1** | **+4.1** |
| | comp=Z,2μm,1.3s,comp=Z,29μmcomp=Z,42μm | | | | | | | | |
| **PRVC** | **Isla de Provid** | **6.16** | **320** | *i* P | | **Pn** | | **19 40 36.1** | **-1.4** |
| PRVC | | | | | IAmb | IAmb | | 19 40 54.3 | |
| | comp=Z,140nm,0.9s | | | | | | | | |
| PRVC | | | | | IVmB_BB | | | 19 41 09.1 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| PRVC | | | | *i* S | | **Sn** | | **19 41 42.8** | **-5.0** |
| PRVC | | | | | IAML | | | 19 42 03.4 | |
| | comp=Z,550nm,1.0s | | | | | | | | |
| **PRVC** | **Isla de Provid** | **6.16** | **320** | *eP* | | **Pn** | | **19 40 35.6** | **-1.9** |
| PRVC | | | | *eS* | | **Sn** | | **19 41 53.5** | **+5.8** |
| **BETC** | **Betania** | **6.22** | **163** | P | | Pn | | 19 40 43.6 | +5.3 |
| **OCHAL** | **Ojochal** | **6.30** | **274** | *i* P | | **Pn** | | **19 40 42.2** | **+2.8** |
| OCHAL | | | | | IAmb | IAmb | | 19 41 10.8 | |
| | comp=Z,540nm,0.9s | | | | | | | | |
| OCHAL | | | | | IVmB_BB | | | 19 41 28.4 | |
| | comp=Z,11μm,1.0s | | | | | | | | |
| OCHAL | | | | *i* S | | **Sn** | | **19 41 54.3** | **+3.0** |
| | | | | | IAML | | | 19 42 38.4 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **SDV** | **Santo Domingo** | **6.57** | **88** | Pn | | **Pn** | | **19 40 43.9** | **+0.6** |
| **SDV** | **Santo Domingo** | **6.57** | **88** | Pn | | **Pn** | | **19 40 44.0** | **+0.8** |
| | comp=Z,19nm,0.3s,baz=249,slow=8.5,SNR=80 | | | | | | | | |
| SDV | | | | | Sn | | **Sn** | | **19 41 56.9** | **-1.3** |
| | comp=Z,1μm,0.3s,baz=17,slow=14,SNR=35 | | | | | | | | |
| SDV | | | | | LR | | LR | 19 44 10.9 | |
| | comp=Z,20μm,19.3s,baz=262,slow=46 | | | | | | | | |
| | comp=Z,597nm,0.8s | | | | | | | | |
| **SDV** | **Santo Domingo** | **6.57** | **88** | P | | **Pn** | | **19 40 44.2** | **+0.9** |
| **SDV** | **Santo Domingo** | **6.57** | **88** | *eP* | | **Pn** | | **19 40 44.1** | **+0.8** |
| **BBAC** | **Balboa, Cauca** | **6.60** | **180** | P | | **Pn** | | **19 40 47.7** | **+4.0** |
| | comp=Z,2μm,1.1s,comp=Z,23μmcomp=Z,51μm | | | | | | | | |
| **GARC** | **Garzon, Huila** | **6.67** | **164** | P | | **Pn** | | **19 40 48.4** | **+3.7** |
| **LCR2** | **La Lucha 2** | **6.72** | **280** | | | **Pn** | | **19 40 46.9** | **+1.5** |
| **LCR2** | **La Lucha 2** | **6.72** | **280** | *i* P | | **Pn** | | **19 40 48.4** | **+3.0** |
| LCR2 | | | | | IAmb | IAmb | | 19 41 07.6 | |
| | comp=Z,1μm,0.8s | | | | | | | | |
| LCR2 | | | | | IVmB_BB | | | 19 41 10.1 | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| LCR2 | | | | *i* S | | **Sn** | | **19 42 03.0** | **+1.1** |
| LCR2 | | | | | IAML | | | 19 43 13.9 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **PTGC** | **Puerto Gaitan,** | **6.77** | **131** | P | | **Pn** | | **19 40 46.0** | **+0.2** |
| | comp=Z,648nm,0.9s,comp=Z,9μmcomp=Z,29μm | | | | | | | | |
| **HDC3** | **Heredia 3** | **6.87** | **282** | *i* P | | **Pn** | | **19 40 50.0** | **+2.7** |
| HDC3 | | | | | IVmB_BB | | | 19 41 04.5 | |
| | comp=Z,14μm,1.0s | | | | | | | | |
| HDC3 | | | | | IAmb | IAmb | | 19 41 11.6 | |
| | comp=Z,1μm,0.9s | | | | | | | | |
| HDC3 | | | | *i* S | | **Sn** | | **19 42 05.0** | **-0.4** |
| HDC3 | | | | | IAML | | | 19 43 13.0 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **HDC** | **Heredia** | **6.87** | **282** | | | **Pn** | | **19 40 48.2** | **+0.9** |
| **HDC** | **Heredia** | **6.87** | **282** | *i* P | | **Pn** | | **19 40 49.1** | **+1.7** |
| HDC | | | | | IAmb | IAmb | | 19 41 11.7 | |
| | comp=Z,1μm,0.7s | | | | | | | | |
| HDC | | | | | IVmB_BB | | | 19 41 34.0 | |
| | comp=Z,13μm,1.0s | | | | | | | | |
| HDC | | | | *i* S | | **Sn** | | **19 42 05.7** | **+0.2** |
| HDC | | | | | IAML | | | 19 43 13.1 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **HDC** | **Heredia** | **6.87** | **282** | *eP* | | **Pn** | | **19 40 50.8** | **+3.4** |
| **TUMC** | **Tumaco** | **6.95** | **192** | P | | Pn | | 19 40 53.7 | +5.5 |
| | comp=Z,1μm,1.4s,comp=Z,23μmcomp=Z,54μm | | | | | | | | |
| **CRUC** | **La Cruz** | **7.06** | **177** | P | | Pn | | 19 40 55.1 | +5.0 |
| **TCS1** | **Tacares** | **7.06** | **282** | *i* P | | **Pn** | | **19 40 53.7** | **+3.8** |
| TCS1 | | | | | IAmb | IAmb | | 19 41 21.2 | |
| | comp=Z,4μm,0.8s | | | | | | | | |
| TCS1 | | | | | IVmB_BB | | | 19 41 43.2 | |
| | comp=Z,55μm,1.0s | | | | | | | | |
| TCS1 | | | | | IAML | | | 19 43 13.6 | |
| | comp=Z,8μm,1.0s | | | | | | | | |
| **BLUN** | **Bluefields** | **7.20** | **298** | *eP* | | **Sn** | | **19 42 09.4** | **-3.9** |
| **FLOC** | **Florencia** | **7.22** | **167** | P | | **Pn** | | **19 40 55.9** | **+3.9** |
| | comp=Z,801nm,1.6s,comp=Z,12μmcomp=Z,27μm | | | | | | | | |
| **COVE** | **Coope Vega, Sa** | **7.31** | **287** | *i* P | | **Pn** | | **19 40 55.4** | **+2.1** |
| COVE | | | | | IAmb | IAmb | | 19 41 02.1 | |
| | comp=Z,3μm,1.1s | | | | | | | | |
| COVE | | | | | IVmB_BB | | | 19 41 10.0 | |
| | comp=Z,23μm,1.0s | | | | | | | | |
| COVE | | | | *i* S | | **Sn** | | **19 42 14.6** | **-1.5** |
| COVE | | | | | IAML | | | 19 42 40.9 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **GCUF** | **Volcan Galeras** | **7.39** | **180** | P | | Pn | | 19 40 59.8 | +5.0 |
| **SOCE** | **Pocosol** | **7.44** | **284** | | | **Pn** | | **19 40 55.2** | **+0.2** |
| **SOCE** | **Pocosol** | **7.44** | **284** | *i* P | | **Pn** | | **19 40 57.3** | **+2.3** |
| SOCE | | | | | IAmb | IAmb | | 19 41 17.2 | |
| | comp=Z,1μm,0.8s | | | | | | | | |
| SOCE | | | | | IAML | | | 19 41 20.7 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| SOCE | | | | | IVmB_BB | | | 19 41 20.7 | |
| | comp=Z,12μm,1.0s | | | | | | | | |
| SOCE | | | | *i* S | | **Sn** | | **19 42 19.6** | **+0.4** |
| **GUVC** | **San Jose del G** | **7.64** | **142** | P | | **Pn** | | **19 40 59.4** | **+1.6** |
| **CMBC** | **Cumbal** | **7.69** | **184** | P | | **Pn** | | **19 41 03.2** | **+4.3** |
| **JTS** | **Las Juntas de** | **7.74** | **283** | | | **Pn** | | **19 41 00.6** | **+1.5** |
| **JTS** | **Las Juntas de** | **7.74** | **283** | Pn | | **Pn** | | **19 41 00.8** | **+1.6** |
| | comp=Z,384nm,1.1s,baz=74,slow=11,SNR=49 | | | | | | | | |
| JTS | | |

**UUPR Utuado, UPR, P 14.01 46 Pn 19 42 20.2 -4.7**
**AOPR Arecibo Observ 14.04 46** *eP* Pn 19 42 20.5 -5.0
**GRTK Grand Turk 14.08 24 Pn 19 42 23.9 -2.1**
**IGPR InterUniversit 14.27 48** Pn 19 42 23.4 -5.1
**EMPR Esperanza - Ma 14.29 46 Pn 19 42 25.1 -3.8**
**APG El Apazote 14.36 297** Pn **Pn 19 42 30.4 +0.4**
baz=116,slow=6.9,SNR=19
APG LR LR 19 48 51.2
comp=Z,880nm,19.4s,baz=128,slow=40
**PDPR Patillas Dam, 14.36 49** Pn 19 42 24.6 -5.2
**GCPR Guaynabo City 14.50 47** Pn 19 42 26.9 -4.9
**TBTG Tabatinga, AM 14.73 150** Pn **Pn 19 42 35.2 +0.3**
**PETF Flores 14.76 305 Pn 19 42 34.4 -0.9**
**CAMR Camarioca 14.84 345 Pn 19 42 35.0 -1.4**
**SOR Soroa 15.09 339 Pn 19 42 36.3 -3.4**
**SOR Soroa 15.09 339** P **Pn 19 42 36.3 -3.4**
**RTAL Retalhuleu 15.27 294 Pn 19 42 41.8 -0.4**
**HUEH Huehuetenango 15.40 297 Pn 19 42 43.6 -0.4**
**GRFF Grenada Fort F 15.65 76** *eP* **P 19 42 51.5 +0.3**
**ATAH Atahualpa 15.73 184** Pn **Pn 19 42 50.7 +2.1**
comp=Z,0.5nm,0.3s,baz=352,slow=9.3,SNR=34
comp=Z,36nm,1.1s
**GRW Mount Saint Ca 15.75 76** *eP* Pn 19 42 35.6 -13
**GRGR Grenville 15.75 76** *eP* **P 19 42 50.7 -1.6**
**TRN Trinidad (W) 15.78 82** *eP* **Pn 19 42 49.7 +1.0**
**GRHS Sauteurs 15.78 76** *eP* Pn 19 42 38.4 -10
**PAYG Puerto Ayora 15.94 235 P 19 42 53.0 -1.4**
**GCMP Grenada, Carri 16.04 75** *eP* **Pn 19 42 48.9 -3.2**
**TBH Brigand Hill 16.09 82** *eP* **Pn 19 42 49.7 -3.1**
**CCIG Comitan 16.36 299 Pn 19 42 55.7 -0.7**
**SVT Saint Vincent 16.37 73** *eP* Pn 19 42 46.9 -9.5
**SVB Belmont 16.39 72** *eP* **Pn 19 42 50.4 -6.2**
**SEUS St. Eustatius 16.45 56 Pn 19 42 56.1 -1.2**
SEUS IAmb IAmb 19 43 04.0
comp=Z,466nm,1.1s
**SKI Saint Kitts 16.57 57** *eP* **P 19 43 01.5 +0.1**
**SMRT St. Maarten 16.66 55 Pn 19 42 57.1 -3.0**
SMRT IAmb IAmb 19 43 06.6
comp=Z,488nm,1.1s
**MBFL Flemmings, Mon 16.74 60** *eP* **P 19 43 05.0 +1.6**
**MBWH 16.76 60** *eP* **Pn 19 42 58.5 -2.8**
**SLBI Saint Lucia, B 16.85 70** *eP* **Pn 19 43 01.7 -0.7**
**TBG Guadaloupe-3 16.86 63** *eP* **P 19 43 06.8 +2.2**
**SLAC Saint Lucia, A 16.89 71** *eP* **P 19 43 06.9 +2.0**
**BIM Bigot 16.91 68** Pn **Pn 19 43 02.9 -0.3**
**BIM Bigot 16.91 68** *eP* **Pn 19 42 56.2 -7.0**
**CZSB Cruzeiro do Su 16.91 164** P **Pn 19 43 03.3 +0.1**
**CZSB Cruzeiro do Su 16.91 164** *eP* **Pn 19 43 03.3 +0.1**
**GDHS Morne Mazeau, 16.92 62 Pn 19 43 02.2 -1.2**
GDHS IAmb IAmb 19 43 11.1
comp=Z,648nm,1.8s
**CBE Ff, Capester 16.98 63 Pn 19 43 03.5 -0.6**
CBE IAmb IAmb 19 43 12.6
comp=Z,460nm,1.0s
**CBE Ff, Capester 16.98 63** *eP* **P 19 43 10.2 +4.3**
**MAGL Barre de l'ile 17.22 64 Pn 19 43 05.4 -1.7**
MAGL IAmb IAmb 19 43 13.5
comp=Z,548nm,1.0s
**ANBD Bethesda, Anti 17.26 60** *eP* Pn 19 42 57.2 -10
**061Z Ochoppi 17.45 349 Pn 19 43 07.4 -2.5**
**TEFE Tefe 17.47 133** *eP* **Pn 19 43 08.1 -2.2**
**ANWB Willy Bob 17.53 58 Pn 19 43 09.8 -1.2**
ANWB IAmb IAmb 19 43 18.3
comp=Z,503nm,1.0s
**ANWB Willy Bob 17.53 58** *eP* **Pn 19 43 07.1 -3.9**
**GDSD La Dsirade Is 17.55 63** P **Pn 19 43 10.7 -0.6**
**BOAV Boa Vista 17.80 110 P 19 43 12.7 -1.6**
**BOAV Boa Vista 17.80 110** *eP* **Pn 19 43 12.8 -1.6**
**CMIG Matias Romero 19.08 298** P **P 19 43 26.7 -2.4**
comp=Z,23nm,0.9s,baz=93,slow=11,SNR=6.1
CMIG LR LR 19 51 41.9
comp=Z,6µm,20.4s,baz=114,slow=39
**DWPF Disney Wildern 19.74 349** P **P 19 43 35.9 -0.3**
DWPF IAmb IAmb 19 43 40.8
comp=Z,727nm,1.4s
**DWPF Disney Wildern 19.74 349** P **Pn 19 43 37.6 -0.1**
baz=168
**MACA Manacapuru-AM 20.29 125** P **P 19 43 42.2 -0.2**
MACA IAmb IAmb 19 43 52.3
comp=Z,228nm,0.8s
**MACA Manacapuru-AM 20.29 125** *eP* **P 19 43 42.3 -0.2**
**NNA Nana 20.52 179** P Pn 19 43 46.2 -0.8
NNA IAmb IAmb 19 43 57.4
comp=Z,763nm,1.4s
**NNA Nana 20.52 179** P Pn 19 43 46.5 -0.5
comp=Z,39nm,1.0s,baz=341,slow=13,SNR=11
NNA LR LR 19 53 26.8
comp=Z,12µm,19.3s,baz=346,slow=42
comp=Z,39nm,1.0s
**NNA Nana 20.52 179** *i* P **P 19 43 46.1 +1.2**
NNA pmax pmax
comp=Z,402nm,1.1s
**656A Willston 21.18 347** IAMs_20 IAMs_20 19 51 59.1
comp=Z,7µm,20.0s
**ETMB Extrema 21.41 149** P **P 19 43 53.9 -0.5**
ETMB IAmb IAmb 19 43 57.7
comp=Z,643nm,1.6s
**ETMB Extrema 21.41 149** *eP* **P 19 43 53.7 -0.7**
**456A Hilliard 22.39 349** IAMs_20 IAMs_20 19 52 48.4
comp=Z,6µm,20.0s
**SAML Samuel 22.43 141** P **P 19 44 04.2 -1.2**
**SAML Samuel 22.43 141** P **P 19 44 04.2 -1.2**
SAML pmax pmax
comp=Z,1µm,1.2s
SAML MLR MLR
comp=Z,17µm,20.0s
**SAML Samuel 22.43 141** *eP* **P 19 44 04.5 -1.0**
**TLIG Tlapa 22.52 295** P **P 19 44 05.8 -0.7**
**451A Vernon 23.23 341** IAMs_20 IAMs_20 19 52 16.6
comp=Z,8µm,22.0s
**TIGA Tifton 23.41 346** IAMs_20 IAMs_20 19 53 19.2
comp=Z,6µm,20.0s
**257A Skidaway Islan 23.46 352** IAMs_20 IAMs_20 19 53 01.5
comp=Z,6µm,21.0s
**255A Hazlehurst 23.65 349** IAMs_20 IAMs_20 19 53 35.6
comp=Z,6µm,20.0s
**352A Blakely 23.79 344** P **P 19 44 18.6 -0.6**
352A IAMs_20 IAMs_20 19 53 11.5
comp=Z,6µm,21.0s
**BRAL Brewton 24.18 339** P **P 19 44 23.2 +0.5**
**BRAL Brewton 24.18 339** P **P 19 44 24.4 +1.6**
baz=156,SNR=9.3
**154A Montrose 24.44 348** IAMs_20 IAMs_20 19 53 50.7
comp=Z,6µm,20.0s
**NHSC New Hope 24.47 354** IAMs_20 IAMs_20 19 53 47.4
comp=Z,10µm,22.0s
**NHSC New Hope 24.47 354** P **P 19 44 27.0 +1.5**
baz=173,SNR=11
**250A Grady 24.66 341** IAMs_20 IAMs_20 19 53 12.7
comp=Z,7µm,22.0s
**MDP Montagnes des 24.71 97** LR LR 19 55 31.2
comp=Z,9µm,18.8s,baz=281,slow=40
**152A Waverly Hall 24.86 345** IAMs_20 IAMs_20 19 54 15.0
comp=Z,5µm,20.0s
**Y60A Bolivia 25.24 358** IAMs_20 IAMs_20 19 55 09.8
comp=Z,10µm,19.0s
**GOGA Godfrey 25.28 348** P **P 19 44 32.5 -0.3**
GOGA IAmb IAmb 19 44 41.3
comp=Z,227nm,1.4s
**GOGA Godfrey 25.28 348** IAMs_20 IAMs_20 19 54 26.1
comp=Z,6µm,20.0s
**GOGA Godfrey 25.28 348** P **P 19 44 34.3 +1.5**
baz=166,SNR=57
**GOGA Godfrey 25.28 348** P **P 19 44 32.5 -0.3**
GOGA pmax pmax
comp=Z,227nm,1.4s
GOGA MLR MLR
comp=Z,6µm,20.0s
**MAL2 Monte Alegre, 25.36 114** P **P 19 44 33.0 -0.7**
MAL2 IAmb IAmb 19 44 45.1
comp=Z,226nm,0.9s
**JRQG Juriquilla Cam 25.36 301** P **P 19 44 33.6 -0.4**
**Y57A Sumter 25.39 354** IAMs_20 IAMs_20 19 54 25.1
comp=Z,10µm,21.0s
**MOIG Morelia 25.60 298** P **P 19 44 36.0 -0.1**
MOIG IAMs_20 IAMs_20 19 55 37.1
comp=Z,5µm,21.0s
**Y52A Lilburn 25.85 347** IAMs_20 IAMs_20 19 54 44.1
comp=Z,6µm,20.0s
**LRAL Lakeview Retre 25.86 341** P **P 19 44 38.4 +0.3**
LRAL IAmb IAmb 19 44 46.6
comp=Z,146nm,0.9s
LRAL IAMs_20 IAMs_20 19 54 31.8
comp=Z,5µm,20.0s
**LRAL Lakeview Retre 25.86 341** P **P 19 44 39.7 +1.6**
baz=157,SNR=35
**BBSR BB Station 26.32 25** P **P 19 44 40.9 -1.3**
**PAULI Pauline 26.36 352** IAMs_20 IAMs_20 19 56 06.8
comp=Z,7µm,19.0s
**LPAZ La Paz 26.39 160** P **P 19 44 43.6 -0.1**
LPAZ IAmb IAmb 19 45 19.4
comp=Z,401nm,1.6s
**LPAZ La Paz 26.39 160** P **P 19 44 43.7 -0.1**
comp=Z,22nm,0.8s,baz=339,slow=7.2,SNR=29
comp=Z,22nm,0.8s
**LPAZ La Paz 26.39 160** P **P 19 44 43.6 -0.1**
LPAZ pmax pmax
comp=Z,401nm,1.6s
**LPAZ La Paz 26.39 160** *eP* **P 19 44 43.3 -0.4**
**Y49A Blount Mountai 26.45 343** IAMs_20 IAMs_20 19 54 18.8
comp=Z,7µm,22.0s
**CNNC Cliffs of the 26.46 359** IAMs_20 IAMs_20 19 55 47.2
comp=Z,7µm,19.0s
**CNNC Cliffs of the 26.46 359** P **P 19 44 44.7 +1.3**
baz=179
**VBMS Vicksburg 26.46 334** P **P 19 44 44.0 +0.4**
**VBMS Vicksburg 26.46 334** P **P 19 44 45.0 +1.5**
baz=149,SNR=7.3
**441A DeRidder 26.52 328** IAMs_20 IAMs_20 19 56 14.2
comp=Z,6µm,22.0s
**KMSC Kings Mountain 26.62 353** IAMs_20 IAMs_20 19 56 22.0
comp=Z,9µm,19.0s
**MCPB Macapa, AP 26.68 108** *eP* **P 19 44 45.4 -0.4**
**X51A Macapa 26.70 346** IAMs_20 IAMs_20 19 55 12.5
comp=Z,5µm,20.0s
**NPGB Novo Progresso 26.85 125** *eP* **P 19 44 46.6 -0.6**
**FPAL Fort Paine 26.87 345** P **P 19 44 47.2 0.0**
FPAL IAMs_20 IAMs_20 19 55 18.2
comp=Z,7µm,21.0s
**W52A Murphy 27.00 348** IAMs_20 IAMs_20 19 55 28.9
comp=Z,6µm,20.0s
**KVTX Kingsville 27.06 317** IAMs_20 IAMs_20 19 55 47.1
comp=Z,5µm,20.0s
**X48A Hartsdale 27.19 342** IAMs_20 IAMs_20 19 55 03.4
comp=Z,6µm,21.0s
**PB18 Visviri 27.20 164** P **P 19 44 50.9 +0.1**
PB18 IAMs_20 IAMs_20 19 57 39.6
comp=Z,7µm,19.0s
**HBVL Hebbronville 27.29 315** P **P 19 44 50.6 -0.4**
**V55A Taylorsville 27.30 353** IAMs_20 IAMs_20 19 56 50.7
comp=Z,6µm,18.0s
**V53A Saluda 27.35 350** IAMs_20 IAMs_20 19 55 51.1
comp=Z,5µm,20.0s
**VILB Vilhena 27.37 141** P **P 19 44 51.7 -0.1**
**VILB Vilhena 27.37 141** *eP* **P 19 44 52.0 +0.1**
**HKT Hockley 27.39 323** P **P 19 44 51.0 -0.9**
**HKT Hockley 27.39 323** *i* P **P 19 44 51.4 -0.5**
HKT pmax pmax
comp=Z,26nm,1.1s
**CPCT Cooper Cave 27.47 347** IAMs_20 IAMs_20 19 55 44.8
comp=Z,5µm,20.0s
**TKL Tuckaleechee C 27.52 349** P **P 19 44 52.7 -0.3**
**TKL Tuckaleechee C 27.52 349** P **P 19 44 53.5 +0.5**
comp=Z,30nm,1.1s,baz=152,slow=8.8,SNR=10
TKL LR LR 19 56 06.4
comp=Z,5µm,19.6s,baz=162,slow=37
comp=Z,30nm,1.1s
**TKL Tuckaleechee C 27.52 349** P **P 19 44 52.7 -0.3**
TKL pmax pmax
comp=Z,102nm,1.2s
**SWET Sewanee 27.59 345** IAMs_20 IAMs_20 19 55 50.0
comp=Z,7µm,20.0s
**V52A Sevierville 27.66 349** IAMs_20 IAMs_20 19 56 41.3
comp=Z,5µm,19.0s
**AP01 Chanalita 27.72 166** P **P 19 44 56.4 +1.5**
**PLAL Pickwick Lake 28.00 341** P **P 19 44 57.0 -0.3**
PLAL IAmb IAmb 19 45 05.5
comp=Z,343nm,1.8s
PLAL IAMs_20 IAMs_20 19 55 15.0
comp=Z,5µm,22.0s
**ZAIG Zacatecas 28.02 303** P **P 19 44 57.5 -0.5**
**OXF Oxford 28.04 338** P **P 19 44 58.1 +0.5**
baz=154
**U54A Nelsons Funny 28.04 352** IAMs_20 IAMs_20 19 57 16.2
comp=Z,7µm,19.0s
**NATX Hartsgdoches 28.09 327** P **P 19 44 58.7 +0.5**
baz=141
**T59A Double "B" Far 28.18 360** IAMs_20 IAMs_20 19 56 58.1
comp=Z,4µm,18.0s
**V48A Smith Brothers 28.33 343** IAMs_20 IAMs_20 19 55 51.0
comp=Z,7µm,21.0s
**TZTN Tazewell 28.33 349** IAMs_20 IAMs_20 19 56 12.6
comp=Z,5µm,20.0s
**TZTN Tazewell 28.33 349** P **P 19 45 01.4 +1.1**
baz=167,SNR=17
**CCAR Cane Creek 28.46 334** P **P 19 45 01.6 +0.2**
**CLTN Cedars of Leba 28.52 345** IAMs_20 IAMs_20 19 56 19.2
comp=Z,6µm,20.0s
**BLA Blacksburg 28.56 355** P **P 19 45 03.8 +1.5**
baz=173,SNR=28
**833A Chaparral WMA, 28.58 316** P **P 19 45 01.9 -0.6**
**833A Chaparral WMA, 28.58 316** P **P 19 45 02.1 -0.4**
baz=129,SNR=6.4
**U49A Red Boiling Sp 28.78 346** IAMs_20 IAMs_20 19 56 17.0
comp=Z,7µm,20.0s
**CLDB Colider 28.87 132** *eP* **P 19 45 04.6 -0.7**
**WVT Waverly 28.98 342** P **P 19 45 05.6 -0.4**
**WVT Waverly 28.98 342** IAMs_20 IAMs_20 19 55 46.4
comp=Z,6µm,22.0s
**WVT Waverly 28.98 342** P **P 19 45 06.7 +0.7**
baz=158
**WVT Waverly 28.98 342** P **P 19 45 05.6 -0.4**
WVT pmax pmax
comp=Z,75nm,1.1s
WVT MLR MLR
comp=Z,6µm,22.0s
**435B Jarrell 29.04 322** P **P 19 45 06.8 +0.1**
baz=135
**T50A Nancy 29.05 347** IAMs_20 IAMs_20 19 57 39.1
comp=Z,5µm,19.0s
**R58B Mineral 29.18 359** IAMs_20 IAMs_20 19 57 37.4
comp=Z,7µm,18.0s
**GO01 Chusmiza 29.26 164** P **P 19 45 09.6 +0.4**
GO01 IAmb IAmb 19 45 22.5
comp=Z,164nm,1.0s
**S51A Beattyville 29.41 350** IAMs_20 IAMs_20 19 56 56.5
comp=Z,6µm,19.0s
**CBN Corbin Frederi 29.41 360** P **P 19 45 11.5 +1.7**
baz=180
**UTMT University of 29.50 341** IAMs_20 IAMs_20 19 57 58.3
comp=Z,4µm,19.0s
**T47A Sharon Grove 29.57 344** IAMs_20 IAMs_20 19 57 01.0
comp=Z,7µm,21.0s
**R61A Willards 29.59 3** IAMs_20 IAMs_20 19 58 25.4
comp=Z,4µm,18.0s
**TA02 Huaiquique 29.60 166** P **P 19 45 12.4 +0.8**
**HMBC Humberstone 29.66 166** P **P 19 45 12.8 +0.5**
**MIAR Mount Ida 29.79 332** P **P 19 45 12.6 -0.7**
**MIAR Mount Ida 29.79 332** P **P 19 45 13.4 +0.1**
baz=146,SNR=11
**MIAR Mount Ida 29.79 332** P **P 19 45 12.6 -0.7**
MIAR pmax pmax
comp=Z,27nm,1.1s
MIAR MLR MLR
comp=Z,2µm,21.0s
**TA01 Diego Aracena 29.87 167** P **P 19 45 15.3 +1.3**
TA01 IAmb IAmb 19 45 27.8
comp=Z,166nm,1.2s
**PTLB Pontes e Lacer 29.95 143** P **P 19 45 14.2 -0.6**
PTLB IAmb IAmb 19 45 24.5
comp=Z,176nm,1.2s
**PTLB Pontes e Lacer 29.95 143** *eP* **P 19 45 14.2 -0.6**
**T45A Paducah 30.05 342** IAMs_20 IAMs_20 19 56 28.7
comp=Z,5µm,22.0s
**PATCX Punta Patache 30.12 167** P **P 19 45 17.5 +1.1**
**R50A Paris 30.17 349** IAMs_20 IAMs_20 19 57 29.6
comp=Z,5µm,20.0s
**JCT Junction City 30.23 319** P **P 19 45 15.9 -1.4**
**JCT Junction City 30.23 319** P **P 19 45 17.8 +0.6**
baz=131
**JCT Junction City 30.23 319** P **P 19 45 15.9 -1.4**
JCT pmax pmax
comp=Z,29nm,1.1s
JCT MLR MLR
comp=Z,1µm,22.0s
**R49A Shelbyville 30.34 348** IAMs_20 IAMs_20 19 58 27.4
comp=Z,4µm,18.0s
**PB01 IPOC Station P 30.50 166** P **P 19 45 20.2 +0.5**
**Q52A Bidwell 30.50 352** IAMs_20 IAMs_20 19 57 02.4
comp=Z,4µm,22.0s
**BBSD Serra de San D 30.52 147** *eP* **P 19 45 18.3 -1.5**
**WCI Wyandotte Cave 30.54 346** P **P 19 45 19.6 -0.2**
WCI IAmb IAmb 19 45 27.8
comp=Z,172nm,1.2s
**WCI Wyandotte Cave 30.54 346** IAMs_20 IAMs_20 19 57 31.5
comp=Z,7µm,20.0s
**WCI Wyandotte Cave 30.54 346** P **P 19 45 21.1 +1.3**
baz=162
**WCI Wyandotte Cave 30.54 346** P **P 19 45 19.6 -0.2**
WCI pmax pmax
comp=Z,172nm,1.2s
WCI MLR MLR
comp=Z,7µm,20.0s
**USIN University of 30.64 344** IAMs_20 IAMs_20 19 57 44.3
comp=Z,6µm,20.0s
**X37A Clayton 30.69 330 P 19 45 20.2 -0.9**
X37A IAmb IAmb 19 45 48.8
comp=Z,91nm,1.2s
**P57A Homestead Farm 30.70 359** IAMs_20 IAMs_20 19 58 24.6
comp=Z,6µm,19.0s
**Z35A Perchaven, San 30.70 326** IAMs_20 IAMs_20 19 58 00.3
comp=Z,4µm,22.0s
**Q51A Peebles 30.72 351** IAMs_20 IAMs_20 19 58 48.2
comp=Z,6µm,20.0s
**S44A Carbondale 30.86 341** IAMs_20 IAMs_20 19 57 04.2
comp=Z,4µm,21.0s
**SIUC Southern Illin 30.87 341** IAMs_20 IAMs_20 19 57 04.4
comp=Z,4µm,21.0s
**MCWV Mont Chateau 30.95 356** P **P 19 45 24.9 +1.5**
baz=175,SNR=5.3
**P61A Hammonton 30.96 4** IAMs_20 IAMs_20 19 58 59.6
comp=Z,4µm,20.0s
**TMAB Tom-Au,PA,Br 31.09 109** *eP* **P 19 45 25.4 +0.4**
**PRPB Parauapebas 31.10 117** *eP* **P 19 45 24.7 -0.3**
**P51A Williamsport 31.12 351** IAMs_20 IAMs_20 19 58 53.5
comp=Z,7µm,19.0s
**P52A Corning 31.14 353** IAMs_20 IAMs_20 19 57 21.1
comp=Z,6µm,22.0s
**P52A Corning 31.14 353** P **P 19 45 26.1 +1.0**
baz=171,SNR=14
**WUPA West Chester U 31.17 2** P **P 19 45 25.1 -0.2**
**PB09 IPOC Station P 31.28 166** P **P 19 45 27.7 +1.0**
PB09 IAmb IAmb 19 45 38.8
comp=Z,278nm,1.5s
**HHAR Hobbs 31.40 334** P **P 19 45 27.3 -0.2**
HHAR IAmb IAmb 19 45 34.4
comp=Z,81nm,1.2s
**P49A Miami Univ. Ec 31.45 349** P **P 19 45 27.4 -0.5**
P49A IAmb IAmb 19 45 35.7
comp=Z,166nm,1.4s
P49A IAMs_20 IAMs_20 19 58 09.3
comp=Z,5µm,20.0s
**P49A Miami Univ. Ec 31.45 349** P **P 19 45 28.5 +0.6**
baz=166,SNR=15
**OLIL Olney 31.48 344** IAMs_20 IAMs_20 19 58 09.5
comp=Z,6µm,20.0s
**BLO Bloomington 31.49 346** IAMs_20 IAMs_20 19 58 12.3
comp=Z,7µm,20.0s
**P48A Milroy 31.52 348** IAMs_20 IAMs_20 19 59 11.2
comp=Z,4µm,18.0s
**PB04 IPOC Station P 31.59 167** P **P 19 45 30.5 +1.1**
**O53A New Philadelph 31.65 354** P **P 19 45 30.8 +1.2**
baz=172,SNR=21
**SSPA Standing Stone 31.84 359** P **P 19 45 30.8 -0.5**
SSPA IAmb IAmb 19 45 34.8
comp=Z,69nm,1.1s
**SSPA Standing Stone 31.84 359** IAMs_20 IAMs_20 19 59 01.7
comp=Z,5µm,19.0s
**SSPA Standing Stone 31.84 359** P **P 19 45 33.4 +2.1**
baz=179
**ACSO Alum Creek Sta 31.85 352** IAMs_20 IAMs_20 19 59 14.7
comp=Z,5µm,19.0s
**ACSO Alum Creek Sta 31.85 352** P **P 19 45 32.7 +1.4**
baz=169,SNR=9.3
**CCM Cathedral Cave 31.86 339** P **P 19 45 31.0 -0.5**
**CCM Cathedral Cave 31.86 339** P **P 19 45 31.8 +0.3**
baz=153
**CCM Cathedral Cave 31.86 339** P **P 19 45 31.0 -0.5**
CCM pmax pmax
comp=Z,196nm,1.0s
CCM MLR MLR
comp=Z,3µm,21.0s
**Q44A Meyer Farm, Va 31.90 343** IAMs_20 IAMs_20 19 57 37.3
comp=Z,5µm,22.0s
**SLM Saint Louis 32.04 341** IAMs_20 IAMs_20 19 57 38.9
comp=Z,3µm,21.0s
**CPNY Central Park 32.13 5** IAMs_20 IAMs_20 19 59 27.3
comp=Z,5µm,20.0s
**LVC Limon Verde 32.14 165** P **P 19 45 35.2 +0.7**
**LVC Limon Verde 32.14 165** IAMs_20 IAMs_20 20 00 38.5
comp=Z,6µm,20.0s
**LVC Limon Verde 32.14 165** LR LR 20 00 50.5
comp=Z,6µm,20.5s,baz=315,slow=40
**LVC Limon Verde 32.14 165** P **P 19 45 35.2 +0.7**
LVC pmax pmax
comp=Z,431nm,1.6s
LVC MLR MLR
comp=Z,6µm,20.0s
**LVC Limon Verde 32.14 165** *eP* **P 19 45 32.9 -1.6**
**TXAR Lajitas Array 32.19 313** P **P 19 45 34.0 -0.6**
**TXAR Lajitas Array 32.19 313** P **P 19 45 34.4 -0.2**
comp=Z,25nm,1.1s,baz=133,slow=8.8,SNR=49
TXAR PcP **PcP 19 48 24.7 +1.3**
comp=Z,12nm,1.1s,baz=123,slow=3.3,SNR=5.4
TXAR ScP **ScP 19 52 06.2 -0.5**
comp=Z,1.9nm,1.0s,baz=126,slow=4.6,SNR=4.0
TXAR LR LR 20 01 13.8
comp=Z,514nm,21.9s,baz=114,slow=41
comp=Z,25nm,1.1s
**N62A Caumsett State 32.31 5** IAMs_20 IAMs_20 20 00 58.2
comp=Z,3µm,18.0s
**PAL Palisades 32.35 5** P **P 19 45 35.5 -0.2**
PAL IAMs_20 IAMs_20 19 59 42.1
comp=Z,5µm,19.0s
**PAL Palisades 32.35 5** P **P 19 45 36.8 +1.1**
baz=186,SNR=7.2
**PAL Palisades 32.35 5** P **P 19 45 35.5 -0.2**
PAL pmax pmax
comp=Z,58nm,1.1s
PAL MLR MLR
comp=Z,5µm,19.0s
**ODNJ Ogdensburg 32.37 4** IAMs_20 IAMs_20 20 00 03.7
comp=Z,3µm,19.0s
**HPIG 32.44 308** P **P 19 45 37.1 +0.1**
**N51A Ashland 32.44 353** IAMs_20 IAMs_20 19 59 04.4
comp=Z,6µm,20.0s
**TRNY Table Rock, Ra 32.46 4** IAMs_20 IAMs_20 20 00 16.1
comp=Z,5µm,19.0s
**WMOK Wichita Mounta 32.59 326** P **P 19 45 38.3 +0.3**
baz=138,SNR=17
**AF01 San Pedro de A 32.66 164** IAMs_20 IAMs_20 20 00 52.1
comp=Z,5µm,20.0s
**P43A Skaggs, Pawnee 32.73 342** IAMs_20 IAMs_20 19 58 02.3
comp=Z,5µm,22.0s
**SFIN Lafayette 32.77 346** IAMs_20 IAMs_20 19 58 53.0
comp=Z,6µm,20.0s
**M53A WI Miller and 32.78 355** P **P 19 45 40.8 +1.3**
baz=174,SNR=14
**KSPA Keystone Colle 32.79 2** IAMs_20 IAMs_20 19 59 08.7
comp=Z,3µm,20.0s
**N47A Urbana 32.94 348** IAMs_20 IAMs_20 20 00 28.8
comp=Z,4µm,18.0s
**SNDB Serra Nova Dou 32.98 128** *eP* **P 19 45 41.0 -0.5**
**M50A Fremont 33.00 352** IAMs_20 IAMs_20 19 59 04.3
comp=Z,6µm,21.0s
**UCCT U. Connecticut 33.30 7** IAMs_20 IAMs_20 20 00 31.3
comp=Z,3µm,20.0s
**L56A Greenwood 33.34 360** IAMs_20 IAMs_20 20 00 07.3
comp=Z,4µm,19.0s
**ERPA Erie 33.41 356** P **P 19 45 44.8 -0.1**
ERPA IAmb IAmb 19 45 54.7
comp=Z,171nm,1.4s
**ERPA Erie 33.41 356** P **P 19 45 46.3 +1.4**
baz=175,SNR=6.8
**BINY Binghamton 33.42 2** IAMs_20 IAMs_20 19 59 38.4
comp=Z,3µm,19.0s
**BINY Binghamton 33.42 2** P **P 19 45 47.3 +2.2**
baz=182,SNR=33
**HDIL Hopedale 33.51 343** P **P 19 45 45.3 -0.6**
HDIL IAmb IAmb 19 45 52.6
comp=Z,148nm,1.0s
HDIL IAMs_20 IAMs_20 19 58 27.6
comp=Z,5µm,22.0s
**HDIL Hopedale 33.51 343** P **P 19 45 46.0 +0.1**
baz=158
**PB14 IPOC Station P 33.76 169** P **P 19 45 49.2 +0.6**
PB14 IAMs_20 IAMs_20 20 00 27.3
comp=Z,4µm,21.0s

**KAN09 Caldwell North** 33.81 330 P P 19 45 48.4 -0.2
KAN09 IAmb IAmb 19 45 55.7
comp=Z,315nm,1.9s
**L61B Northampton** 33.90 6 P P 19 45 50.1 +0.9
baz=188,SNR=6.6
**K57A Scipio Center** 33.94 1 IAMs_20 IAMs_20 20 00 05.2
comp=Z,4µm,19.0s
**BCX Boston College** 33.97 8 IAMs_20 IAMs_20 20 01 48.0
comp=Z,3µm,18.0s
**AAM Ann Arbor** 33.97 352 IAMs_20 IAMs_20 19 58 59.0
comp=Z,5µm,22.0s
**AAM Ann Arbor** 33.97 352 P P 19 45 50.9 +1.0
baz=169
**WES Weston** 33.99 8 P P 19 45 50.1 +0.1
WES IAmb IAmb 19 45 59.5
comp=Z,269nm,1.5s
WES IAMs_20 IAMs_20 20 02 12.7
comp=Z,3µm,18.0s
**WES Weston** 33.99 8 P P 19 45 50.1 +0.1
WES pmax pmax
comp=Z,269nm,1.5s
WES MLR MLR
comp=Z,3µm,18.0s
**TRY Troy** 34.08 5 IAMs_20 IAMs_20 20 01 13.0
comp=Z,4µm,20.0s
**HRV Adam Dziewonsk** 34.08 8 P P 19 45 49.9 -1.0
HRV IAmb IAmb 19 46 00.2
comp=Z,219nm,1.7s
**HRV Adam Dziewonsk** 34.08 8 IAMs_20 IAMs_20 20 00 52.0
comp=Z,3µm,19.0s
**HRV Adam Dziewonsk** 34.08 8 P P 19 45 52.1 +1.3
baz=190
**HRV Adam Dziewonsk** 34.08 8 P P 19 45 49.9 -1.0
HRV pmax pmax
comp=Z,219nm,1.7s
HRV MLR MLR
comp=Z,3µm,19.0s
**N41A Harden Midland** 34.12 341 IAMs_20 IAMs_20 19 58 54.0
comp=Z,4µm,22.0s
**L46A Eue Claire** 34.16 348 IAMs_20 IAMs_20 20 01 05.8
comp=Z,5µm,18.0s
**K62A Royalston** 34.16 7 IAMs_20 IAMs_20 20 00 56.0
comp=Z,3µm,19.0s
**PANT Pantanal (Braz** 34.21 144 *e*P P 19 45 51.5 -0.7
**K50A Casco** 34.30 353 IAMs_20 IAMs_20 19 59 41.6
comp=Z,6µm,21.0s
**SMTB Santa Maria do** 34.32 120 *e*P P 19 45 53.2 -0.1
**AMTX Amarillo** 34.37 323 P P 19 45 53.0 -0.5
baz=134
**MEDO Medina** 34.38 358 P P 19 45 54.0 +0.6
**GO02 Mina Guanaco** 34.45 168 P P 19 45 55.4 +0.9
GO02 IAMs_20 IAMs_20 20 00 32.5
comp=Z,3µm,22.0s
**J55A Hilton** 34.47 359 IAMs_20 IAMs_20 20 01 01.2
comp=Z,4µm,18.0s
**SLBS Sierra La Lagu** 34.63 299 P P 19 45 56.7 +0.8
SLBS IAmb IAmb 19 46 08.7
comp=Z,101nm,1.4s
**J57A Williamstown** 34.63 2 IAMs_20 IAMs_20 20 00 25.4
comp=Z,4µm,20.0s
**L44A Lake County Fo** 34.67 346 P P 19 45 55.9 -0.1
baz=161
**ACCN Adirondack Com** 34.73 5 IAMs_20 IAMs_20 20 01 33.1
comp=Z,5µm,21.0s
**MNTX Cornudas Mount** 34.75 315 P P 19 45 56.2 -0.6
baz=125,SNR=30
**KSU1 Kansas State U** 34.92 333 P P 19 45 57.6 -0.5
KSU1 IAmb IAmb 19 46 04.7
comp=Z,123nm,0.8s
**KSU1 Kansas State U** 34.92 333 P P 19 45 58.2 0.0
baz=145,SNR=20
**L42A Oliver, Polo** 34.96 344 IAMs_20 IAMs_20 20 00 18.2
comp=Z,5µm,20.0s
**ARAG Araguaiana, MT** 34.97 134 *e*P P 19 45 58.0 -0.8
**LPIG La Paz** 35.08 300 P P 19 46 00.9 +1.2
comp=Z,16nm,0.3s,baz=90,slow=5.1,SNR=0.9
LPIG LR LR 20 01 18.9
comp=Z,2µm,18.8s,baz=110,slow=38
comp=Z,16nm,0.3s
**HNH Hanover** 35.18 6 IAMs_20 IAMs_20 20 01 47.0
comp=Z,3µm,19.0s
**AC01 Pan de Azucar** 35.21 170 P P 19 46 02.1 +1.4
AC01 IAMs_20 IAMs_20 20 00 53.6
comp=Z,4µm,20.0s
**NCB Newcomb** 35.27 4 IAMs_20 IAMs_20 20 01 30.5
comp=Z,3µm,19.0s
**I62A Tamworth** 35.46 7 IAMs_20 IAMs_20 20 01 44.4
comp=Z,3µm,19.0s
**L40A Anamosa** 35.47 342 IAMs_20 IAMs_20 19 59 46.6
comp=Z,4µm,21.0s
**LBNH Lisbon** 35.75 7 IAMs_20 IAMs_20 20 02 03.1
comp=Z,3µm,18.0s
**LBNH Lisbon** 35.75 7 P P 19 46 07.3 +2.1
baz=189,SNR=9.7
**VT1 Waterbury** 35.75 6 IAMs_20 IAMs_20 20 00 34.9
comp=Z,3µm,20.0s
**MURT Porto Murinho** 35.79 148 *e*P P 19 46 03.6 -2.1
**LONY Lake Ozonia** 35.90 3 P P 19 46 06.7 +0.2
LONY IAmb IAmb 19 46 09.5
comp=Z,107nm,1.0s
**LONY Lake Ozonia** 35.90 3 P P 19 46 08.3 +1.8
baz=184,SNR=55
**AQDB Aquidauana** 35.90 144 P P 19 46 05.9 -0.8
AQDB IAmb IAmb 19 46 16.2
comp=Z,113nm,1.0s
**AQDB Aquidauana** 35.90 144 *e*P P 19 46 05.8 -1.0
**JFWS Jewell Farm** 35.97 344 IAMs_20 IAMs_20 20 00 48.8
comp=Z,5µm,21.0s
**JFWS Jewell Farm** 35.97 344 P P 19 46 06.8 -0.3
baz=158,SNR=22
**SCIA State Center** 35.98 340 IAMs_20 IAMs_20 20 02 29.1
comp=Z,2µm,18.0s
**SCIA State Center** 35.98 340 P P 19 46 06.8 -0.4
baz=152,SNR=8.7
**SADO Sadowa** 36.01 358 P P 19 46 07.7 +0.3
SADO IAmb IAmb 19 46 15.1
comp=Z,118nm,0.9s
**SADO Sadowa** 36.01 358 P P 19 46 08.7 +1.3
comp=Z,80nm,0.9s,baz=194,slow=8.5,SNR=40
SADO LR LR 20 01 51.2
comp=Z,8µm,18.1s,baz=190,slow=38
comp=Z,80nm,0.9s
**I45A Fountain** 36.09 349 IAMs_20 IAMs_20 20 01 20.1
comp=Z,5µm,20.0s
**CBKS Cedar Bluff** 36.17 330 P P 19 46 08.3 -0.7
CBKS IAmb IAmb 19 46 20.9
comp=Z,71nm,0.9s
**CBKS Cedar Bluff** 36.17 330 P P 19 46 09.1 +0.1
baz=140,SNR=6.4
**CBKS Cedar Bluff** 36.17 330 P P 19 46 08.3 -0.7
CBKS pmax pmax
comp=Z,71nm,0.9s
CBKS MLR MLR
comp=Z,2µm,19.0s
**H62A Milan** 36.17 7 IAMs_20 IAMs_20 20 02 06.3
comp=Z,3µm,18.0s
**WBO Williamsburg** 36.24 2 P P 19 46 08.6 -0.8
**WVL Waterville** 36.38 9 IAMs_20 IAMs_20 20 01 16.7
comp=Z,2µm,19.0s
**AC06 Mina Casimiro** 36.43 170 P P 19 46 12.8 +1.6
AC06 IAmb IAmb 19 46 23.3
comp=Z,244nm,1.4s
AC06 IAMs_20 IAMs_20 20 01 40.0
comp=Z,4µm,22.0s
**GLMI Grayling** 36.58 351 IAMs_20 IAMs_20 20 00 41.1
comp=Z,3µm,21.0s
**GLMI Grayling** 36.58 351 P P 19 46 13.0 +0.7
baz=168
**GO03 Copiap** 36.68 169 P P 19 46 13.9 +0.5
GO03 IAMs_20 IAMs_20 20 01 01.7
comp=Z,3µm,22.0s
**MNTQ Montreal, Queb** 36.84 4 P P 19 46 15.0 +0.5
MNTQ IAmb IAmb 19 46 18.2
comp=Z,215nm,0.9s
MNTQ IAMs_20 IAMs_20 20 02 25.9
comp=Z,4µm,19.0s
**G62A West of Eustis** 36.88 8 IAMs_20 IAMs_20 19 59 28.2
comp=Z,3µm,22.0s
**121A Cookes Peak, D** 36.90 314 P P 19 46 16.2 +0.8
baz=123,SNR=18
**EMMW East Machias** 36.91 12 IAMs_20 IAMs_20 20 02 13.9
comp=Z,3µm,19.0s
**PKME Peaks-Kenny Pk** 37.12 9 P P 19 46 17.3 +0.5
PKME IAmb IAmb 19 46 26.1
comp=Z,139nm,1.6s
PKME IAMs_20 IAMs_20 20 01 48.3
comp=Z,3µm,19.0s
**PKME Peaks-Kenny Pk** 37.12 9 P P 19 46 17.9 +1.1
baz=193,SNR=6.5
**AC04 Llanos de Chal** 37.14 171 IAMs_20 IAMs_20 20 02 13.8
comp=Z,4µm,20.0s
**Y22D IRIS PASSCAL I** 37.18 317 P P 19 46 18.1 +0.4
baz=126
**G65A Princeton** 37.36 11 IAMs_20 IAMs_20 20 02 28.8
comp=Z,3µm,19.0s
**319A Douglas** 37.37 312 P P 19 46 19.9 +0.5
**ANMO Albuquerque** 37.39 319 P P 19 46 19.5 -0.1
**ANMO Albuquerque** 37.39 319 P P 19 46 19.5 -0.1
comp=Z,29nm,0.9s,baz=232,slow=12,SNR=24
ANMO LR LR 20 06 33.1
comp=Z,1µm,19.1s,baz=216,slow=44
comp=Z,29nm,0.9s
**ANMO Albuquerque** 37.39 319 P P 19 46 20.2 +0.6
baz=127
**ANMO Albuquerque** 37.39 319 *d* P P 19 46 19.7 +0.1
ANMO pmax pmax
comp=Z,19nm,1.0s
**GGN Saint George** 37.43 12 IAMs_20 IAMs_20 20 02 28.6
comp=Z,3µm,19.0s
**T25A Trinidad** 37.52 323 IAMs_20 IAMs_20 20 03 28.6
comp=Z,3µm,22.0s
**T25A Trinidad** 37.52 323 P P 19 46 21.8 +1.1
baz=132,SNR=22
**F62A Pittston Farm,** 37.63 8 IAMs_20 IAMs_20 20 01 37.9
comp=Z,2µm,18.0s
**BDFB Brasilia** 37.73 130 P P 19 46 22.4 -0.2
BDFB IAmb IAmb 19 46 35.2
comp=Z,163nm,1.2s
**BDFB Brasilia** 37.73 130 P P 19 46 23.0 +0.5
comp=Z,63nm,1.1s,baz=294,slow=9.3,SNR=34
BDFB LR LR 20 03 34.1
comp=Z,8µm,18.3s,baz=301,slow=39
comp=Z,63nm,1.1s
**BDFB Brasilia** 37.73 130 P P 19 46 22.4 -0.2
BDFB pmax pmax
comp=Z,163nm,1.2s
**F64A Sherman** 37.85 10 IAMs_20 IAMs_20 19 59 51.9
comp=Z,3µm,21.0s
**SRIG Santa Rosalia** 37.88 304 P P 19 46 23.9 +0.3
SRIG IAmb IAmb 19 46 32.0
comp=Z,202nm,1.6s
**AC05 El Transito** 37.89 170 P P 19 46 25.0 +1.3
AC05 IAmb IAmb 19 46 35.9
comp=Z,255nm,1.2s
AC05 IAMs_20 IAMs_20 20 02 33.7
comp=Z,3µm,21.0s
**I37A Lemond, Waseca** 37.91 341 IAMs_20 IAMs_20 20 00 49.4
comp=Z,3µm,22.0s
**LCO Las Campanas** 37.99 171 P P 19 46 25.4 +0.7
LCO IAmb IAmb 19 46 36.8
comp=Z,397nm,1.6s
**LCO Las Campanas** 37.99 171 IAMs_20 IAMs_20 20 02 52.3
comp=Z,3µm,20.0s
**LCO Las Campanas** 37.99 171 P P 19 46 25.4 +0.7
LCO pmax pmax
comp=Z,397nm,1.6s
LCO MLR MLR
comp=Z,4µm,20.0s
**SDBA SAO DESIDERIO** 38.39 123 *e*P P 19 46 27.8 -0.3
**SDCO Great Sand Dun** 38.57 323 P P 19 46 29.5 -0.1
SDCO IAMs_20 IAMs_20 20 03 40.4
comp=Z,5µm,22.0s
**SDCO Great Sand Dun** 38.57 323 P P 19 46 30.9 +1.2
baz=131,SNR=64
**LMN Caledonia Moun** 38.58 14 IAMs_20 IAMs_20 20 00 22.2
comp=Z,3µm,20.0s
**PQI Presque Isle** 38.69 10 IAMs_20 IAMs_20 20 02 35.1
comp=Z,3µm,19.0s
**ITRB Iturama** 38.70 137 *e*P P 19 46 30.1 -0.5
**CO05 La Serena** 38.80 172 IAMs_20 IAMs_20 20 03 08.7
comp=Z,3µm,20.0s
**ECSD EROS Data Cent** 38.80 337 P P 19 46 29.9 -1.2
**ECSD EROS Data Cent** 38.80 337 P P 19 46 30.1 -1.1
baz=148,SNR=27
**SPMN Marine on St.** 38.82 342 IAMs_20 IAMs_20 20 03 47.1
comp=Z,4µm,19.0s
**D62A Allapoint, All** 38.92 9 IAMs_20 IAMs_20 20 02 45.1
comp=Z,3µm,19.0s
**OGNE Ogallala** 38.94 330 P P 19 46 31.7 -0.7
baz=139
**TUC Tucson** 38.95 312 P P 19 46 32.8 +0.2
**TUC Tucson** 38.95 312 IAMs_20 IAMs_20 20 05 35.9
comp=Z,2µm,19.0s
**TUC Tucson** 38.95 312 P P 19 46 32.4 -0.2
baz=120
**TUC Tucson** 38.95 312 P P 19 46 32.8 +0.2
TUC pmax pmax
comp=Z,138nm,1.9s
TUC MLR MLR
comp=Z,2µm,19.0s
**CO01 Juntas del Tor** 39.03 170 P P 19 46 34.9 +1.4
CO01 IAmb IAmb 19 46 46.1
comp=Z,292nm,1.6s
CO01 IAMs_20 IAMs_20 20 03 37.0
comp=Z,4µm,20.0s
**IPMB Ipameri, GO** 39.05 133 *e*P P 19 46 33.0 -0.6
**GBN Guysborough** 39.06 18 IAMs_20 IAMs_20 20 03 40.0
comp=Z,3µm,19.0s
**Q24A Divide** 39.18 325 P P 19 46 34.9 +0.2
baz=133
**LMQ La Malbaie** 39.20 7 IAMs_20 IAMs_20 20 03 58.4
comp=Z,3µm,19.0s
**VLDQ Val d'Or** 39.32 360 P P 19 46 35.6 +0.3
VLDQ IAmb IAmb 19 46 44.4
comp=Z,243nm,1.8s
VLDQ IAMs_20 IAMs_20 20 05 43.5
comp=Z,3µm,18.0s
**S22A 4UR Ranch, Cre** 39.37 322 P P 19 46 35.6 -0.8
baz=130,SNR=37
**CO06 Fray Jorge** 39.48 172 IAMs_20 IAMs_20 20 03 15.9
comp=Z,4µm,21.0s
**TRCB Terra Rica** 39.50 143 P P 19 46 35.5 -1.7
TRCB IAmb IAmb 19 46 45.7
comp=Z,123nm,0.9s
**TRCB Terra Rica** 39.50 143 *e*P P 19 46 35.4 -1.8
**LDAQ Lac Daran** 39.50 6 IAMs_20 IAMs_20 20 01 34.3
comp=Z,2µm,20.0s
**BATG Bathurst New B** 39.65 12 IAMs_20 IAMs_20 20 03 56.4
comp=Z,4µm,19.0s
**W18A Petrified Fore** 39.68 316 P P 19 46 39.8 +1.0
baz=124,SNR=40
**CO03 El Pedregal** 39.78 171 P P 19 46 40.6 +1.1
CO03 IAmb IAmb 19 46 51.6
comp=Z,289nm,1.4s
CO03 IAMs_20 IAMs_20 20 03 20.8
comp=Z,4µm,21.0s
**CPUP Villa Florida** 39.82 151 P P 19 46 37.8 -2.0
**CPUP Villa Florida** 39.82 151 P P 19 46 37.1 -2.7
comp=Z,3.1nm,0.9s,baz=340,slow=8.3,SNR=5.2
CPUP PP PP 19 48 11.2 -0.2
comp=Z,5.5nm,0.9s,baz=312,slow=10.0,SNR=2.0
CPUP LR LR 20 03 52.8
comp=Z,2µm,20.7s,baz=328,slow=37
**CPUP Villa Florida** 39.82 151 P P 19 46 37.8 -2.0
CPUP pmax pmax
comp=Z,15nm,1.1s
**ISCO Idaho Springs** 40.02 325 P P 19 46 41.2 -0.5
baz=133,SNR=8.8
**MVCO Mesa Verde** 40.08 320 P P 19 46 42.4 +0.2
baz=127,SNR=15
**CO02 Combarbal** 40.09 172 P P 19 46 42.7 +0.5
CO02 IAmb IAmb 19 46 54.3
comp=Z,377nm,1.4s
CO02 IAMs_20 IAMs_20 20 04 07.1
comp=Z,4µm,21.0s
**NBPB Pedra_Branca-C** 40.15 109 *e*P P 19 46 40.8 -2.0
**214A Organ Pipe Nat** 40.29 310 P P 19 46 44.2 +0.4
baz=117,SNR=21
**JANB Januaria** 40.29 126 *e*P P 19 46 43.5 -0.5
**SMCO Snowmass** 40.38 324 IAMs_20 IAMs_20 20 04 41.3
comp=Z,4µm,22.0s
**F33A 5 Mile Ranch,** 40.49 339 IAMs_20 IAMs_20 20 02 39.7
comp=Z,2µm,19.0s
**PIX Pinacate** 40.60 309 P P 19 46 44.9 -1.4
**PMNB Patos De Minas** 40.70 132 *e*P P 19 46 47.0 -0.4
**ZON Zonda** 40.82 169 P P 19 46 48.8 +0.7
ZON IAMs_20 IAMs_20 20 04 14.2
comp=Z,4µm,22.0s
**ZON Zonda** 40.82 169 P P 19 46 48.8 +0.7
ZON pmax pmax
comp=Z,462nm,1.5s
ZON MLR MLR
comp=Z,4µm,22.0s
**LDASE Londrina, Braz** 40.86 142 *e*P P 19 46 46.7 -1.8
**BB19B Bebedouro** 40.88 137 *e*P P 19 46 47.8 -0.9
**N23A Red Feather La** 40.95 326 P P 19 46 50.3 +0.9
baz=134
**EYMN Ely** 40.96 345 P P 19 46 47.5 -1.5
EYMN IAmb IAmb 19 46 55.7
comp=Z,187nm,1.4s
**EYMN Ely** 40.96 345 P P 19 46 48.6 -0.4
baz=158,SNR=38
**WUAZ Wupatki** 41.02 316 P P 19 46 50.0 +0.1
WUAZ IAMs_20 IAMs_20 20 05 42.6
comp=Z,2µm,21.0s
**WUAZ Wupatki** 41.02 316 P P 19 46 50.4 +0.5
baz=122,SNR=54
**VA06 Catapilco** 41.39 172 IAMs_20 IAMs_20 20 04 02.3
comp=Z,4µm,21.0s
**ICQ Pointe Anglais** 41.58 10 P P 19 46 53.1 -0.9
ICQ IAMs_20 IAMs_20 20 03 47.5
comp=Z,2µm,19.0s
**VA03 San Esteban** 41.69 171 P P 19 46 56.0 +0.8
VA03 IAmb IAmb 19 47 07.6
comp=Z,343nm,1.4s
**FRTB Fartura** 41.80 140 *e*P P 19 46 55.1 -1.2
**HMU Henry Mountain** 41.94 319 P P 19 46 57.3 -0.2
HMU IAmb IAmb 19 47 06.6
comp=Z,152nm,1.0s
**PEL Peldehue** 42.05 172 P P 19 46 59.1 +1.0
PEL IAmb IAmb 19 47 10.2
comp=Z,147nm,1.3s
PEL IAMs_20 IAMs_20 20 05 14.8
comp=Z,3µm,22.0s
**PEL Peldehue** 42.05 172 P P 19 46 59.1 +1.0
PEL pmax pmax
comp=Z,147nm,1.3s
PEL MLR MLR
comp=Z,3µm,22.0s
**MT02 Curacav** 42.10 172 P P 19 46 59.3 +0.8
MT02 IAmb IAmb 19 47 10.7
comp=Z,404nm,1.9s
**RWWY Rawlins** 42.19 326 P P 19 46 59.7 +0.2
**RSSD Black Hills** 42.30 331 P P 19 47 00.2 -0.1
baz=139
**BLYC Blythe** 42.39 312 P P 19 47 00.6 -0.4
**CRSM Crissiumal (Br** 42.41 149 *e*P P 19 46 57.8 -3.3
**MT03 Universidad Ad** 42.41 172 P P 19 47 02.6 +1.4
MT03 IAmb IAmb 19 47 13.4
comp=Z,301nm,1.2s
**MT08 Bocatoma Ro** 42.44 171 P P 19 47 02.7 +1.1
MT08 IAmb IAmb 19 47 14.5
comp=Z,157nm,1.2s
**RCLB Rio Claro- Sao** 42.47 137 *e*P P 19 47 01.0 -0.8
**AGMN Agassiz Nation** 42.51 342 P P 19 47 01.0 -0.6
AGMN IAmb IAmb 19 47 08.3
comp=Z,185nm,1.2s
**AGMN Agassiz Nation** 42.51 342 P P 19 47 01.2 -0.4
baz=152,SNR=17
**MT09 Talagante** 42.63 172 P P 19 47 04.2 +1.2
**DIAM Diamantina, MG** 42.64 129 *e*P P 19 47 03.1 -0.2
**RDMU Red Mountain** 42.81 323 P P 19 47 04.5 0.0
**LMEL Las Melosas** 42.81 171 P P 19 47 05.4 +1.0
LMEL IAmb IAmb 19 47 16.9
comp=Z,238nm,1.4s
**BO04 La Punta** 42.89 172 P P 19 47 06.0 +1.1
BO04 IAmb IAmb 19 47 16.9
comp=Z,370nm,1.4s
**YUH Yuha Desert** 42.96 309 P P 19 47 05.5 -0.1
**ITQB Itaqui** 42.99 153 P P 19 47 02.1 -3.7
**ITQB Itaqui** 42.99 153 *e*P P 19 47 02.9 -2.9
**ITAB Concordia** 43.22 146 P P 19 47 04.1 -3.6
**ITAB Concordia** 43.22 146 *e*P P 19 47 04.9 -2.7
**BO01 Tunca** 43.22 173 P P 19 47 07.3 -0.3
BO01 IAmb IAmb 19 47 20.4
comp=Z,357nm,1.5s
**VAO Valinhos** 43.25 137 P P 19 47 05.5 -2.6
VAO IAmb IAmb 19 47 17.4
comp=Z,105nm,0.9s
**VAO Valinhos** 43.25 137 *e*P P 19 47 07.2 -0.9
**SPB Sao Paulo** 43.35 138 P P 19 47 06.0 -2.8
**SPB Sao Paulo** 43.35 138 *e*P P 19 47 07.5 -1.3
**MONP2 Monument Peak** 43.44 309 P P 19 47 09.5 -0.3
baz=115,SNR=14
**BSCB Bom Sucesso** 43.46 133 *e*P P 19 47 09.5 -0.3
**GDU01 Guandu, BA** 43.53 120 *e*P P 19 47 10.0 -0.5
**BO02 Sierra Bellavi** 43.65 172 P P 19 47 11.9 +0.7
**RCBR Riachuelo** 43.70 108 LR LR 20 07 11.6
comp=Z,3µm,18.9s,baz=333,slow=38
**DRLN Deer Lake** 43.73 19 IAMs_20 IAMs_20 20 06 25.1
comp=Z,4µm,19.0s
**TPFO Pinon Flats** 43.77 310 P P 19 47 12.4 +0.2
baz=115,SNR=23
**PFO Pinyon Flats O** 43.77 310 P P 19 47 11.1 -1.3
**PFO Pinyon Flats O** 43.77 310 P P 19 47 12.6 +0.3
comp=Z,14nm,1.0s,baz=111,slow=8.9,SNR=17
PFO LR LR 20 08 15.3
comp=Z,2µm,20.6s,baz=134,slow=40
comp=Z,14nm,1.0s
**PFO Pinyon Flats O** 43.77 310 P P 19 47 12.3 -0.1
baz=115,SNR=25
**PFO Pinyon Flats O** 43.77 310 *i* P P 19 47 12.7 +0.4
PFO pmax pmax
comp=Z,58nm,1.2s
**PSAL Palomas, Salto** 43.79 155 *e*P P 19 47 10.1 -2.1
**NBLA Lagarto - SE** 43.87 116 *e*P P 19 47 13.2 0.0
**PET01 Itanhaem-SP** 43.94 139 *e*P P 19 47 10.9 -2.7
**109C Camp Elliot, M** 43.96 309 IAMs_20 IAMs_20 20 09 04.6
comp=Z,2µm,18.0s
**109C Camp Elliot, M** 43.96 309 P P 19 47 13.0 -0.7
baz=114
**ALGR Alto Alegre (B** 43.99 149 *e*P P 19 47 10.5 -3.5
**SHPR Sheep Range** 44.16 315 P P 19 47 14.7 -0.7
**BW06 Boulder Array** 44.21 326 P P 19 47 16.1 +0.3
baz=131,SNR=5.7
**PD31 Pinedale Array** 44.21 326 P P 19 47 14.8 -1.0
**PDAR Pinedale Array** 44.21 326 P P 19 47 14.8 -1.0
**PDAR Pinedale Array** 44.21 326 P P 19 47 16.4 +0.6
comp=Z,14nm,1.0s,baz=141,slow=10,SNR=31
PDAR PcP PcP 19 48 59.7 -0.7
comp=Z,5.4nm,0.9s,baz=131,slow=3.7,SNR=2.2
PDAR ScP ScP 19 52 51.1 -0.9
comp=Z,0.9nm,0.9s,baz=125,slow=6.0,SNR=2.4
PDAR LR LR 20 10 12.6
comp=Z,961nm,18.5s,baz=110,slow=42
comp=Z,14nm,1.0s
**RODS Rosario do Sul** 44.21 152 *e*P P 19 47 13.1 -2.6
**ULM Lac du Bonnet** 44.25 343 P P 19 47 14.5 -1.2
ULM IAmb IAmb 19 47 22.0
comp=Z,163nm,1.1s
**ULM Lac du Bonnet** 44.25 343 P P 19 47 14.9 -0.8
comp=Z,46nm,0.9s,baz=150,slow=9.4,SNR=41
ULM LR LR 20 06 52.3
comp=Z,2µm,18.9s,baz=153,slow=38
comp=Z,46nm,0.9s
**CMC01 Camacan, BA** 44.38 122 *e*P P 19 47 16.6 -0.7
**PARB Paraibuna** 44.39 136 *e*P P 19 47 16.6 -0.7
**ML02 Panimavida** 44.53 173 P P 19 47 18.2 +0.1
ML02 IAmb IAmb 19 47 29.5
comp=Z,193nm,1.4s
**DUG Dugway, Tooele** 44.56 321 P P 19 47 18.1 -0.4
DUG IAMs_20 IAMs_20 20 07 24.4
comp=Z,2µm,22.0s
**DUG Dugway, Tooele** 44.56 321 P P 19 47 19.5 +0.9
baz=125,SNR=31
**DUG Dugway, Tooele** 44.56 321 P P 19 47 18.1 -0.4
DUG pmax pmax
comp=Z,58nm,1.0s
DUG MLR MLR
comp=Z,2µm,22.0s
**HWUT Hardware Ranch** 44.63 323 P P 19 47 18.7 -0.5
HWUT IAMs_20 IAMs_20 20 09 00.1
comp=Z,2µm,20.0s
**NBAN Anadia - AL** 44.71 113 *e*P P 19 47 19.5 -0.4
**GUA01 Guaratinga, BA** 44.77 124 *e*P P 19 47 19.5 -0.8
**SJMB Sao Joao De Ma** 44.80 128 *e*P P 19 47 20.6 0.0
**TBOT Tacuaremb** 45.02 154 *e*P P 19 47 18.2 -3.8
**AHID Auburn Hatcher** 45.08 325 P P 19 47 22.0 -0.7
**CPSB Cacapava Do Su** 45.09 150 *e*P P 19 47 19.7 -3.0
**TPNV Topopah Spring** 45.14 315 P P 19 47 24.1 +0.8
baz=119,SNR=32
**NAN01 Guarapari, ES** 45.17 126 *e*P P 19 47 23.9 +0.4
**VAS01 Vassouras-RJ** 45.23 133 *e*P P 19 47 23.8 -0.2
**LAO LASA Array** 45.24 332 IAMs_20 IAMs_20 20 06 27.5
comp=Z,2µm,22.0s
**LAO LASA Array** 45.24 332 P P 19 47 23.3 -0.4
baz=138
**R11B Troy Canyon, C** 45.37 317 P P 19 47 25.6 +0.5
baz=120,SNR=36

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BI02** | **San Fabin de** | **45.44** | **173** | P | **P** | **19 47 26.1** | **+0.7** | | |
| BI02 | | | | IAmb | IAmb | 19 47 37.2 | | | |
| | comp=Z,269nm,1.7s | | | | | | | | |
| **TPAW** | **Teton Pass** | **45.45** | **326** | P | **P** | **19 47 24.1** | **-1.7** | | |
| **RLMT** | **Red Lodge** | **45.62** | **328** | P | **P** | **19 47 26.9** | **-0.1** | | |
| | baz=133,SNR=11 | | | | | | | | |
| **DGMT** | **Dagmar** | **45.70** | **335** | P | **P** | **19 47 26.9** | **-0.5** | | |
| DGMT | | | | IAmb | IAmb | 19 47 34.3 | | | |
| | comp=Z,70nm,0.8s | | | | | | | | |
| **DGMT** | **Dagmar** | **45.70** | **335** | P | **P** | **19 47 27.1** | **-0.2** | | |
| | baz=141 | | | | | | | | |
| **RIB01** | **Linhares ES** | **45.76** | **128** | *e*P | **P** | **19 47 28.2** | **0.0** | | |
| **H17A** | **Grant Village** | **45.83** | **327** | P | **P** | **19 47 28.4** | **-0.3** | | |
| | baz=131 | | | | | | | | |
| **DUB01** | **Friburgo-RJ** | **45.88** | **132** | *e*P | **P** | **19 47 29.5** | **+0.4** | | |
| **TER01** | **Tubaro-SC** | **45.90** | **145** | *e*P | **P** | **19 47 26.8** | **-2.3** | | |
| **YFT** | **Old Faithful** | **46.01** | **327** | P | **P** | **19 47 30.2** | **+0.1** | | |
| **PLTB** | **Pedras Altas** | **46.14** | **152** | P | **P** | **19 47 28.1** | **-2.9** | | |
| PLTB | | | | IAmb | IAmb | 19 47 40.1 | | | |
| | comp=Z,121nm,1.8s | | | | | | | | |
| **ALF01** | **Guarapari-ES** | **46.24** | **129** | *e*P | **P** | **19 47 31.7** | **-0.2** | | |
| **CAM01** | **Campos-RJ** | **46.25** | **131** | *e*P | **P** | **19 47 32.5** | **+0.5** | | |
| **TPH** | **Tonopah** | **46.36** | **316** | P | **P** | **19 47 32.0** | **-0.9** | | |
| **TPH** | **Tonopah** | **46.36** | **316** | P | **P** | **19 47 32.0** | **-0.9** | | |
| TPH | | | | pmax | pmax | | | | |
| | comp=Z,280nm,1.1s | | | | | | | | |
| **ELK** | **Elko** | **46.40** | **320** | P | **P** | **19 47 31.8** | **-1.5** | | |
| **ELK** | **Elko** | **46.40** | **320** | P | **P** | **19 47 33.3** | **+0.1** | | |
| | comp=Z,4.6nm,0.9s,baz=118,slow=8.8,SNR=13 | | | | | | | | |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **ELK** | **Elko** | **46.40** | **320** | P | **P** | **19 47 31.8** | **-1.5** | | |
| ELK | | | | pmax | pmax | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| ELK | | | | MLR | MLR | | | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **SCHQ** | **Schefferville** | **46.80** | **8** | P | **P** | **19 47 35.2** | **-0.6** | | |
| SCHQ | | | | IAmb | IAmb | 19 47 38.2 | | | |
| | comp=Z,82nm,0.9s | | | | | | | | |
| **SCHQ** | **Schefferville** | **46.80** | **8** | P | **P** | **19 47 36.6** | **+0.8** | | |
| | comp=Z,72nm,0.9s,baz=190,slow=7.0,SNR=46 | | | | | | | | |
| SCHQ | | | | LR | LR | 20 08 51.4 | | | |
| | comp=Z,3µm,18.4s,baz=198,slow=38 | | | | | | | | |
| | comp=Z,72nm,0.9s | | | | | | | | |
| **NV11** | **Mina Array Sit** | **47.17** | **316** | P | **P** | **19 47 39.3** | **+0.1** | | |
| NV11 | | | | IAmb | IAmb | 19 47 47.0 | | | |
| | comp=Z,54nm,1.1s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **47.18** | **327** | P | **P** | **19 47 39.1** | **-0.1** | | |
| BOZ | | | | IAmb | IAmb | 19 47 51.8 | | | |
| | comp=Z,38nm,0.9s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **47.18** | **327** | P | **P** | **19 47 39.1** | **-0.1** | | |
| | baz=130,SNR=37 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **47.18** | **327** | P | **P** | **19 47 39.1** | **-0.1** | | |
| BOZ | | | | pmax | pmax | | | | |
| | comp=Z,38nm,0.9s | | | | | | | | |
| **RPN** | **Rapa Nui** | **47.23** | **220** | LR | LR | 20 02 36.6 | | | |
| | comp=Z,3µm,19.1s,baz=58,slow=30 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **47.27** | **315** | P | **P** | **19 47 39.6** | **-0.5** | | |
| NVAR | | | | PcP | **PcP** | **19 49 11.4** | **+0.2** | | |
| **NVAR** | **Mina Array Bea** | **47.27** | **315** | P | **P** | **19 47 40.5** | **+0.4** | | |
| | comp=Z,9.5nm,1.0s,baz=129,slow=7.1,SNR=34 | | | | | | | | |
| NVAR | | | | PcP | **PcP** | **19 49 11.7** | **+0.5** | | |
| | comp=Z,2.1nm,0.6s,baz=130,slow=4.1,SNR=8.6 | | | | | | | | |
| NVAR | | | | LR | LR | 20 09 55.8 | | | |
| | comp=Z,2µm,20.9s,baz=120,slow=39 | | | | | | | | |
| | comp=Z,9.5nm,1.0s | | | | | | | | |
| **HLID** | **Hailey** | **47.49** | **323** | P | **P** | **19 47 40.8** | **-0.8** | | |
| HLID | | | | IAmb | IAmb | 19 47 50.0 | | | |
| | comp=Z,64nm,1.2s | | | | | | | | |
| HLID | | | | IAMs_20 | IAMs_20 | 20 11 24.6 | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **HLID** | **Hailey** | **47.49** | **323** | P | **P** | **19 47 41.6** | **0.0** | | |
| | baz=126,SNR=42 | | | | | | | | |
| **EGMT** | **Eagleton** | **47.87** | **331** | P | **P** | **19 47 43.1** | **-1.3** | | |
| **EGMT** | **Eagleton** | **47.87** | **331** | P | **P** | **19 47 44.5** | **+0.1** | | |
| | baz=134,SNR=16 | | | | | | | | |
| **GO06** | **Curarrehue** | **48.30** | **174** | P | **P** | **19 47 48.3** | **+0.4** | | |
| GO06 | | | | IAmb | IAmb | 19 47 59.2 | | | |
| | comp=Z,226nm,1.6s | | | | | | | | |
| **LR04** | **Corral** | **48.43** | **176** | IAMs_20 | IAMs_20 | 20 06 56.2 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **CMB** | **Columbia Colle** | **48.56** | **314** | P | **P** | **19 47 48.6** | **-1.3** | | |
| **CMB** | **Columbia Colle** | **48.56** | **314** | P | **P** | **19 47 48.6** | **-1.3** | | |
| CMB | | | | pmax | pmax | | | | |
| | comp=Z,29nm,1.5s | | | | | | | | |
| **TRQA** | **Tornquist** | **48.62** | **164** | P | **P** | **19 47 50.0** | **-0.2** | | |
| TRQA | | | | IAmb | IAmb | 19 48 01.0 | | | |
| | comp=Z,222nm,1.6s | | | | | | | | |
| **TRQA** | **Tornquist** | **48.62** | **164** | P | **P** | **19 47 50.0** | **-0.2** | | |
| TRQA | | | | pmax | pmax | | | | |
| | comp=Z,222nm,1.6s | | | | | | | | |
| **SAO** | **San Andreas Ge** | **48.80** | **312** | IAMs_20 | IAMs_20 | 20 12 07.3 | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **LR05** | **Currie** | **48.89** | **175** | P | **P** | **19 47 52.1** | **0.0** | | |
| **MSO** | **Missoula** | **49.20** | **327** | P | **P** | **19 47 54.9** | **+0.2** | | |
| | baz=129,SNR=14 | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **49.46** | **320** | P | **P** | **19 47 56.5** | **-0.3** | | |
| WVOR | | | | IAmb | IAmb | 19 48 05.7 | | | |
| | comp=Z,130nm,1.1s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **49.46** | **320** | P | **P** | **19 47 56.5** | **-0.3** | | |
| WVOR | | | | pmax | pmax | | | | |
| | comp=Z,130nm,1.1s | | | | | | | | |
| WVOR | | | | MLR | MLR | | | | |
| | comp=Z,1µm,22.0s | | | | | | | | |
| **LL04** | **Puerto Octay** | **49.53** | **175** | P | **P** | **19 47 56.2** | **-0.9** | | |
| LL04 | | | | IAmb | IAmb | 19 49 31.0 | | | |
| | comp=Z,108nm,1.2s | | | | | | | | |
| **PLCA** | **Paso Flores** | **49.54** | **173** | P | **P** | **19 47 57.5** | **+0.2** | | |
| **PLCA** | **Paso Flores** | **49.54** | **173** | P | **P** | **19 47 57.7** | **+0.4** | | |
| | comp=Z,15nm,1.0s,baz=350,slow=8.3,SNR=22 | | | | | | | | |
| PLCA | | | | LR | LR | 20 08 28.7 | | | |
| | comp=Z,1µm,20.2s,baz=349,slow=36 | | | | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **PLCA** | **Paso Flores** | **49.54** | **173** | P | **P** | **19 47 57.5** | **+0.2** | | |
| PLCA | | | | pmax | pmax | | | | |
| | comp=Z,355nm,1.7s | | | | | | | | |
| **PLCA** | **Paso Flores** | **49.54** | **173** | *e*P | **P** | **19 47 56.3** | **-0.9** | | |
| **J08A** | **Circle Bar Ran** | **49.83** | **321** | P | **P** | **19 47 58.8** | **-0.8** | | |
| J08A | | | | IAmb | IAmb | 19 48 09.3 | | | |
| | comp=Z,99nm,1.2s | | | | | | | | |
| **FFC** | **Flin Flon** | **49.99** | **342** | P | **P** | **19 47 59.5** | **-0.9** | | |
| FFC | | | | IAmb | IAmb | 19 48 06.7 | | | |
| | comp=Z,62nm,1.1s | | | | | | | | |
| **FFC** | **Flin Flon** | **49.99** | **342** | IAMs_20 | IAMs_20 | 20 10 39.5 | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **FFC** | **Flin Flon** | **49.99** | **342** | P | **P** | **19 47 59.5** | **-0.9** | | |
| FFC | | | | pmax | pmax | | | | |
| | comp=Z,62nm,1.1s | | | | | | | | |
| FFC | | | | MLR | MLR | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **MCCM** | **Marconi Confer** | **50.40** | **313** | IAMs_20 | IAMs_20 | 20 11 46.5 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **HATC** | **Hat Creek Radi** | **50.54** | **317** | IAMs_20 | IAMs_20 | 20 12 37.9 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **HOPS** | **Hopland Field** | **50.88** | **314** | IAMs_20 | IAMs_20 | 20 11 20.1 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **LL01** | **San Ignacio de** | **50.99** | **175** | P | **P** | **19 48 07.9** | **-0.1** | | |
| LL01 | | | | IAmb | IAmb | 19 49 36.2 | | | |
| | comp=Z,113nm,1.3s | | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **51.17** | **315** | IAMs_20 | IAMs_20 | 20 13 08.7 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **51.54** | **320** | P | **P** | **19 48 10.6** | **-1.9** | | |
| **FCC** | **Fort Churchill** | **51.61** | **349** | P | **P** | **19 48 10.5** | **-2.1** | | |
| FCC | | | | IAmb | IAmb | 19 48 19.2 | | | |
| | comp=Z,151nm,1.4s | | | | | | | | |
| **FCC** | **Fort Churchill** | **51.61** | **349** | P | **P** | **19 48 10.5** | **-2.1** | | |
| FCC | | | | pmax | pmax | | | | |
| | comp=Z,151nm,1.4s | | | | | | | | |
| FCC | | | | MLR | MLR | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | |
| **NEW** | **Newport** | **51.79** | **327** | IAMs_20 | IAMs_20 | 20 14 26.1 | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **NEW** | **Newport** | **51.79** | **327** | P | **P** | **19 48 14.1** | **0.0** | | |
| | comp=Z,18nm,1.1s,baz=126,slow=8.0,SNR=18 | | | | | | | | |
| NEW | | | | LR | LR | 20 12 48.7 | | | |
| | comp=Z,1µm,20.9s,baz=130,slow=39 | | | | | | | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **NEW** | **Newport** | **51.79** | **327** | P | **P** | **19 48 14.5** | **+0.4** | | |
| | baz=126,SNR=26 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **51.79** | **317** | P | **P** | **19 48 13.7** | **-0.6** | | |
| | comp=Z,9.3nm,1.0s,baz=128,slow=3.5,SNR=11 | | | | | | | | |
| | comp=Z,9.3nm,1.0s | | | | | | | | |
| **LL02** | **Futaleuf** | **51.84** | **175** | P | **P** | **19 48 14.3** | **-0.1** | | |
| LL02 | | | | IAmb | IAmb | 19 48 25.7 | | | |
| | comp=Z,260nm,1.6s | | | | | | | | |
| **HAWA** | **Hanford** | **52.08** | **324** | P | **P** | **19 48 15.7** | **-0.6** | | |
| **JCC** | **Jacoby Creek,** | **52.29** | **316** | P | **P** | **19 48 17.4** | **-0.6** | | |
| JCC | | | | IAmb | IAmb | 19 48 26.5 | | | |
| | comp=Z,143nm,1.1s | | | | | | | | |
| JCC | | | | IAMs_20 | IAMs_20 | 20 11 04.5 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **CALA** | **Caldeira** | **52.73** | **48** | *e*P | **P** | **19 48 21.8** | **+0.4** | | |
| | comp=Z,121nm,2.0s | | | | | | | | |
| **PCED** | **Cedros** | **52.74** | **48** | *e*P | **P** | **19 48 22.0** | **+0.6** | | |
| | comp=Z,46nm,1.5s | | | | | | | | |
| **PCAN** | **Candelaria** | **52.84** | **48** | *e*P | **P** | **19 48 23.1** | **+1.0** | | |
| | comp=Z,156nm,1.6s | | | | | | | | |
| **PICO** | **Pico** | **52.90** | **48** | *e*P | **P** | **19 48 25.4** | **+2.8** | | |
| | comp=Z,246nm,1.9s | | | | | | | | |
| **PPNO** | **Prainha do Nor** | **53.01** | **48** | *e*P | **P** | **19 48 23.6** | **+0.2** | | |
| | comp=Z,116nm,1.5s | | | | | | | | |
| **PID** | **Ribeirinha** | **53.10** | **48** | *e*P | **P** | **19 48 23.4** | **-0.7** | | |
| | comp=Z,78nm,1.5s | | | | | | | | |
| **ROSA** | **Rosais** | **53.11** | **48** | *e*P | **P** | **19 48 24.8** | **+0.7** | | |
| | comp=Z,199nm,1.8s | | | | | | | | |
| **PMAN** | **Manadas** | **53.19** | **48** | *e*P | **P** | **19 48 25.0** | **+0.3** | | |
| | comp=Z,119nm,1.8s | | | | | | | | |
| **SRBC** | **Serra Branca** | **53.37** | **47** | *e*P | **P** | **19 48 24.4** | **-1.6** | | |
| | comp=Z,339nm,1.6s | | | | | | | | |
| **COR** | **Corvallis** | **53.47** | **320** | IAMs_20 | IAMs_20 | 20 12 48.2 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **COYC** | **Coyhaique** | **54.19** | **175** | P | **P** | **19 48 32.5** | **+0.7** | | |
| COYC | | | | IAmb | IAmb | 19 48 45.7 | | | |
| | comp=Z,83nm,1.1s | | | | | | | | |
| **PCALD** | **Caldeiras da R** | **54.85** | **50** | *e*P | **P** | **19 48 37.9** | **+1.1** | | |
| | comp=Z,457nm,1.9s | | | | | | | | |
| **PSMA** | **Santa Maria** | **54.88** | **51** | *e*P | **P** | **19 48 38.3** | **+1.3** | | |
| | comp=Z,93nm,1.2s | | | | | | | | |
| **PSMN** | **Pico do Norte,** | **54.93** | **51** | *e*P | **P** | **19 48 38.3** | **+0.9** | | |
| | comp=Z,114nm,1.3s | | | | | | | | |
| **AY02** | **Valle Explorad** | **55.02** | **177** | P | **P** | **19 48 39.8** | **+2.0** | | |
| **BART** | **Pico Bartolome** | **55.08** | **50** | *e*P | **P** | **19 48 37.7** | **-0.9** | | |
| | comp=Z,191nm,1.5s | | | | | | | | |
| **NLWA** | **Neilton Lookou** | **55.15** | **323** | P | **P** | **19 48 39.2** | **+0.4** | | |
| NLWA | | | | IAmb | IAmb | 19 48 48.2 | | | |
| | comp=Z,184nm,1.5s | | | | | | | | |
| NLWA | | | | IAMs_20 | IAMs_20 | 20 16 26.4 | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **FRB** | **Frobisher Bay** | **55.34** | **5** | LR | LR | 20 13 09.6 | | | |
| | comp=Z,2µm,18.9s,baz=194,slow=37 | | | | | | | | |
| **PGC** | **Sidney** | **55.52** | **325** | P | **P** | **19 48 41.6** | **+0.2** | | |
| PGC | | | | IAmb | IAmb | 19 48 50.3 | | | |
| | comp=Z,54nm,1.1s | | | | | | | | |
| **IVI** | **Ivigtut** | **56.69** | **16** | *i* P | **P** | **19 48 49.0** | **-0.6** | | |
| IVI | | | | IAmb | IAmb | 19 48 57.1 | | | |
| | comp=Z,121nm,1.7s | | | | | | | | |
| **OZB** | **Mount Ozzard** | **56.85** | **324** | P | **P** | **19 48 50.8** | **-0.3** | | |
| OZB | | | | IAmb | IAmb | 19 49 06.6 | | | |
| | comp=Z,68nm,1.1s | | | | | | | | |
| **BBTS** | **Babate** | **59.65** | **78** | LR | LR | 20 14 55.3 | | | |
| | comp=Z,1µm,19.6s,baz=146,slow=36 | | | | | | | | |
| **BBB** | **Bella Bella** | **59.84** | **326** | P | **P** | **19 49 13.2** | **+1.4** | | |
| | comp=Z,23nm,0.8s,baz=146,slow=5.8,SNR=7.4 | | | | | | | | |
| BBB | | | | LR | LR | 20 17 08.0 | | | |
| | comp=Z,1µm,21.8s,baz=125,slow=38 | | | | | | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| **GO09** | **Cerro Castillo** | **59.84** | **176** | P | **P** | **19 49 12.4** | **+0.7** | | |
| GO09 | | | | IAmb | IAmb | 19 50 10.5 | | | |
| | comp=Z,110nm,1.2s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **60.16** | **341** | P | **P** | **19 49 13.0** | **-0.8** | | |
| **YKA** | **Yellowknife Ar** | **60.16** | **341** | P | **P** | **19 49 13.8** | **+0.1** | | |
| | comp=Z,28nm,1.0s,baz=132,slow=7.0,SNR=41 | | | | | | | | |
| YKA | | | | LR | LR | 20 17 08.8 | | | |
| | comp=Z,1µm,18.4s,baz=136,slow=38 | | | | | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **MACI** | **Morro de la Ar** | **60.24** | **62** | P | **P** | **19 49 14.4** | **-0.8** | | |
| **SFJD** | **Kangerlussuaq** | **60.99** | **12** | P | **P** | **19 49 17.7** | **-1.7** | | |
| **SFJD** | **Kangerlussuaq** | **60.99** | **12** | IAMs_20 | IAMs_20 | 20 14 57.4 | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **60.99** | **12** | LR | LR | 20 15 08.7 | | | |
| | comp=Z,1µm,19.9s,baz=214,slow=35 | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **60.99** | **12** | P | **P** | **19 49 17.7** | **-1.7** | | |
| SFJD | | | | pmax | pmax | | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| SFJD | | | | MLR | MLR | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **60.99** | **12** | *i* P | **P** | **19 49 16.7** | **-2.7** | | |
| SFJD | | | | IAmb | IAmb | 19 49 25.7 | | | |
| | comp=Z,35nm,1.1s | | | | | | | | |
| **DY2G** | **Dye2** | **61.50** | **14** | *i* P | **P** | **19 49 21.7** | **-1.4** | | |
| DY2G | | | | IAmb | IAmb | 19 49 29.6 | | | |
| | comp=Z,115nm,1.1s | | | | | | | | |
| **TOAD** | **Toad River Com** | **61.83** | **334** | P | **P** | **19 49 24.8** | **-0.5** | | |
| | baz=124,SNR=21 | | | | | | | | |
| **RUBB** | **Prince Rupert** | **61.96** | **328** | P | **P** | **19 49 26.4** | **+0.2** | | |
| RUBB | | | | IAmb | IAmb | 19 49 34.0 | | | |
| | comp=Z,143nm,1.6s | | | | | | | | |
| **KOTAN** | **Kotaneelee Air** | **62.06** | **336** | P | **P** | **19 49 27.1** | **+0.4** | | |
| | baz=125,SNR=10 | | | | | | | | |
| **EFI** | **East Falkland** | **62.34** | **167** | P | **P** | **19 49 28.7** | **+0.1** | | |
| **EFI** | **East Falkland** | **62.34** | **167** | *i* P | **P** | **19 49 29.7** | **+1.1** | | |
| EFI | | | | pmax | pmax | | | | |
| | comp=Z,39nm,1.3s | | | | | | | | |
| **LIRD** | **Liard River Hi** | **62.51** | **334** | P | **P** | **19 49 30.1** | **+0.3** | | |
| | baz=123 | | | | | | | | |
| **U35K** | **Hyder** | **62.57** | **330** | P | **P** | **19 49 30.6** | **+0.4** | | |
| | baz=118 | | | | | | | | |
| **DIB** | **Dawson Inlet,** | **62.68** | **326** | P | **P** | **19 49 30.8** | **-0.2** | | |
| DIB | | | | IAmb | IAmb | 19 49 38.9 | | | |
| | comp=Z,59nm,1.2s | | | | | | | | |
| **ISOG** | **Isortoq, Green** | **62.68** | **17** | *i* P | **P** | **19 49 27.7** | **-3.1** | | |
| ISOG | | | | IAmb | IAmb | 19 49 37.4 | | | |
| | comp=Z,91nm,1.0s | | | | | | | | |
| **V35K** | **Ketchikan** | **63.11** | **329** | IAMs_20 | IAMs_20 | 20 20 25.6 | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **V35K** | **Ketchikan** | **63.11** | **329** | P | **P** | **19 49 34.1** | **+0.3** | | |
| | baz=116,SNR=8.6 | | | | | | | | |
| **ANGG** | **Ammassalik, Gr** | **63.11** | **17** | IAMs_20 | IAMs_20 | 20 16 27.7 | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **ANGG** | **Ammassalik, Gr** | **63.11** | **17** | *i* P | **P** | **19 49 35.6** | **+2.0** | | |
| ANGG | | | | IAmb | IAmb | 19 49 40.1 | | | |
| | comp=Z,61nm,1.1s | | | | | | | | |
| **T35M** | **Bob Quinn** | **63.18** | **331** | IAMs_20 | IAMs_20 | 20 22 15.1 | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **T35M** | **Bob Quinn** | **63.18** | **331** | P | **P** | **19 49 35.1** | **+0.8** | | |
| | baz=118,SNR=12 | | | | | | | | |
| **WRGLY** | **Wrigley** | **63.68** | **339** | P | **P** | **19 49 37.4** | **0.0** | | |
| | baz=127 | | | | | | | | |
| **DLBC** | **Dease Lake** | **63.76** | **332** | P | **P** | **19 49 37.7** | **-0.5** | | |
| **DLBC** | **Dease Lake** | **63.76** | **332** | P | **P** | **19 49 38.7** | **+0.5** | | |
| | comp=Z,31nm,0.9s,baz=123,slow=3.8,SNR=4.5 | | | | | | | | |
| DLBC | | | | LR | LR | 20 19 12.1 | | | |
| | comp=Z,2µm,19.9s,baz=104,slow=38 | | | | | | | | |
| | comp=Z,31nm,0.9s | | | | | | | | |
| **DLBC** | **Dease Lake** | **63.76** | **332** | P | **P** | **19 49 38.4** | **+0.2** | | |
| | baz=119,SNR=30 | | | | | | | | |
| **CRAG** | **Craig** | **63.95** | **328** | P | **P** | **19 49 39.6** | **+0.2** | | |
| CRAG | | | | IAmb | IAmb | 19 49 47.1 | | | |
| | comp=Z,101nm,1.4s | | | | | | | | |
| **CRAG** | **Craig** | **63.95** | **328** | P | **P** | **19 49 39.8** | **+0.4** | | |
| | baz=114 | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **63.96** | **330** | P | **P** | **19 49 39.4** | **0.0** | | |
| **WRAK** | **Wrangell Islan** | **63.96** | **330** | IAMs_20 | IAMs_20 | 20 20 51.8 | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **63.96** | **330** | P | **P** | **19 49 39.7** | **+0.3** | | |
| | baz=116 | | | | | | | | |
| **S34M** | **Telegraph Cree** | **64.03** | **331** | IAMs_20 | IAMs_20 | 20 19 44.7 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **S34M** | **Telegraph Cree** | **64.03** | **331** | P | **P** | **19 49 40.4** | **+0.5** | | |
| | baz=117,SNR=36 | | | | | | | | |
| **WTLY** | **Watson Lake, Y** | **64.05** | **334** | P | **P** | **19 49 40.6** | **+0.6** | | |
| | baz=120 | | | | | | | | |
| **U33K** | **Whale Pass** | **64.22** | **329** | IAMs_20 | IAMs_20 | 20 19 59.8 | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **U33K** | **Whale Pass** | **64.22** | **329** | P | **P** | **19 49 41.5** | **+0.4** | | |
| | baz=115,SNR=12 | | | | | | | | |
| **T33K** | **Petersburg** | **64.43** | **330** | P | **P** | **19 49 43.1** | **+0.7** | | |
| | baz=115 | | | | | | | | |
| **TGTN** | **Hyland Airport** | **64.56** | **336** | P | **P** | **19 49 44.3** | **+1.0** | | |
| | baz=122 | | | | | | | | |
| **R33M** | **Jennings River** | **64.65** | **333** | P | **P** | **19 49 45.3** | **+1.2** | | |
| | baz=118,SNR=37 | | | | | | | | |
| **RKT** | **Rikitea** | **64.65** | **239** | *e*P | **P** | **19 49 47.7** | **+3.2** | | |
| | comp=Z,943nm,41.5s | | | | | | | | |
| **RKT** | **Rikitea** | **64.65** | **239** | *e*PP | **PP** | **19 52 07.0** | **0.0** | | |
| | comp=Z,642nm,28.5s | | | | | | | | |
| RKT | | | | *e*S | **S** | **19 58 27.5** | **+3.1** | | |
| | comp=Z,4µm,29.8s | | | | | | | | |
| RKT | | | | *e*SS | **SS** | **20 02 36.3** | **+0.7** | | |
| | comp=Z,2µm,35.2s | | | | | | | | |
| RKT | | | | *e*LQ | LQ | 20 06 20.4 | | | |
| | comp=Z,5µm,41.0s | | | | | | | | |
| RKT | | | | *e*LR | LR | 20 09 04.1 | | | |
| | comp=Z,9µm,30.2s | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **64.99** | **256** | *e*P | **P** | **19 49 43.4** | **-3.6** | | |
| | comp=Z,173nm,25.6s | | | | | | | | |
| TAOE | | | | *e*S | **S** | **19 58 27.9** | **-1.2** | | |
| | comp=Z,277nm,26.0s | | | | | | | | |
| TAOE | | | | *e*SS | **SS** | **20 02 48.0** | **+6.6** | | |
| | comp=Z,228nm,26.7s | | | | | | | | |
| TAOE | | | | *e*LQ | LQ | 20 06 18.0 | | | |
| | comp=Z,1µm,45.6s | | | | | | | | |
| TAOE | | | | *e*LR | LR | 20 09 01.8 | | | |
| | comp=Z,1µm,25.6s | | | | | | | | |
| **Q32M** | **Nakina River** | **65.04** | **332** | IAMs_20 | IAMs_20 | 20 20 46.3 | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **Q32M** | **Nakina River** | **65.04** | **332** | P | **P** | **19 49 48.1** | **+1.4** | | |
| | baz=117,SNR=26 | | | | | | | | |
| **ICESG** | **Greenland Ices** | **65.12** | **14** | *i* P | **P** | **19 49 46.6** | **-0.6** | | |
| ICESG | | | | IAmb | IAmb | 19 49 53.6 | | | |
| | comp=Z,183nm,1.1s | | | | | | | | |
| **S32K** | **Killisnoo** | **65.51** | **330** | IAMs_20 | IAMs_20 | 20 23 47.8 | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **S32K** | **Killisnoo** | **65.51** | **330** | P | **P** | **19 49 50.1** | **+0.7** | | |
| | baz=114,SNR=26 | | | | | | | | |
| **SIT** | **Sitka** | **65.72** | **329** | P | **P** | **19 49 50.5** | **-0.3** | | |
| **SIT** | **Sitka** | **65.72** | **329** | P | **P** | **19 49 51.8** | **+1.0** | | |
| | baz=113 | | | | | | | | |
| **SIT** | **Sitka** | **65.72** | **329** | P | **P** | **19 49 50.5** | **-0.3** | | |
| SIT | | | | pmax | pmax | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| **R32K** | **Eaglecrest** | **65.81** | **331** | IAMs_20 | IAMs_20 | 20 19 10.7 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **R32K** | **Eaglecrest** | **65.81** | **331** | P | **P** | **19 49 52.2** | **+0.7** | | |
| | baz=114 | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **65.86** | **333** | IAMs_20 | IAMs_20 | 20 21 00.7 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **65.86** | **333** | P | **P** | **19 49 52.8** | **+0.9** | | |
| | baz=117,SNR=54 | | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **66.33** | **336** | P | **P** | **19 49 55.8** | **+1.0** | | |
| | baz=119,SNR=19 | | | | | | | | |
| **N32M** | **Quiet Lake** | **66.40** | **334** | P | **P** | **19 49 56.1** | **+0.8** | | |
| | baz=117 | | | | | | | | |
| **R31K** | **City Hall, Gus** | **66.45** | **331** | P | **P** | **19 49 56.4** | **+0.9** | | |
| | baz=113 | | | | | | | | |
| **S31K** | **Pelican** | **66.52** | **330** | IAMs_20 | IAMs_20 | 20 21 38.5 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **S31K** | **Pelican** | **66.52** | **330** | P | **P** | **19 49 57.0** | **+1.0** | | |
| | baz=112,SNR=15 | | | | | | | | |
| **SKAG** | **Skagway** | **66.68** | **332** | P | **P** | **19 49 58.0** | **+1.0** | | |
| | baz=114,SNR=5.8 | | | | | | | | |
| **KULLO** | **Kullorsuaq** | **66.88** | **6** | *i* P | **P** | **19 49 55.9** | **-2.1** | | |
| KULLO | | | | IAmb | IAmb | 19 50 04.9 | | | |
| | comp=Z,91nm,1.4s | | | | | | | | |
| **WHY** | **Whitehorse** | **66.97** | **333** | P | **P** | **19 49 59.5** | **+0.5** | | |
| | baz=115,SNR=17 | | | | | | | | |
| **FARO** | **Faro, Yukon** | **67.00** | **335** | P | **P** | **19 49 59.7** | **+0.6** | | |
| | baz=117 | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **67.16** | **332** | P | **P** | **19 50 01.2** | **+1.1** | | |
| | baz=113,SNR=12 | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **67.43** | **335** | IAMs_20 | IAMs_20 | 20 21 51.1 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **67.43** | **335** | P | **P** | **19 50 02.8** | **+1.1** | | |
| | baz=116,SNR=19 | | | | | | | | |
| **O30N** | **Mendenhall** | **67.56** | **333** | P | **P** | **19 50 03.2** | **+0.6** | | |
| O30N | | | | IAMs_20 | IAMs_20 | 20 22 14.8 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **O30N** | **Mendenhall** | **67.56** | **333** | P | **P** | **19 50 03.7** | **+1.0** | | |
| | baz=114,SNR=46 | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **67.66** | **53** | *e*P | **P** | **19 50 05.7** | **+2.0** | | |
| | comp=Z,119nm,1.8s | | | | | | | | |
| PFVI | | | | *e*S | **S** | **19 59 03.9** | **+3.2** | | |
| **P30M** | **Million Dollar** | **67.70** | **332** | P | **P** | **19 50 04.8** | **+1.2** | | |
| | baz=113 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **67.72** | **334** | P | **P** | **19 50 04.1** | **+0.5** | | |
| **N31M** | **Braeburn, Yuko** | **67.72** | **334** | P | **P** | **19 50 04.7** | **+1.1** | | |
| | baz=114,SNR=26 | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **67.78** | **53** | *e*P | **P** | **19 50 06.5** | **+2.1** | | |
| | comp=Z,71nm,1.3s | | | | | | | | |
| **MORF** | **Marmelete** | **67.81** | **53** | *e*P | **P** | **19 50 06.3** | **+1.5** | | |
| | comp=Z,148nm,1.4s | | | | | | | | |
| MORF | | | | *e*S | **S** | **19 59 06.2** | **+3.6** | | |
| **MORF** | **Marmelete** | **67.81** | **53** | *e*P | **P** | **19 50 06.2** | **+1.5** | | |
| MORF | | | | IAmb | IAmb | 19 50 13.9 | | | |
| | comp=Z,130nm,1.3s | | | | | | | | |
| MORF | | | | *e*S | **S** | **19 59 04.6** | **+2.0** | | |
| **M

comp=Z,79nm,1.6s
POLO eS S 19 59 17.9 +1.8
**PVRL Vila Real 68.99 49** eP P 19 50 13.2 +1.2
**PCBR Castelo Branco 69.00 51** eP P 19 50 13.2 +1.2
comp=Z,125nm,1.5s
**MTE Manteigas 69.02 50** P P 19 50 11.9 -0.3
MTE IAmb IAmb 19 50 20.4
comp=Z,54nm,1.1s
**MTE Manteigas 69.02 50** eP P 19 50 13.2 +1.0
comp=Z,80nm,1.6s
MTE eS S 19 59 19.1 +2.2
**PMRV Marv??o 69.03 51** eP P 19 50 12.8 +0.6
comp=Z,109nm,1.5s
PMRV eS S 19 59 20.8 +3.9
**PBAR Barrancos 69.17 53** eP P 19 50 14.6 +1.5
comp=Z,96nm,1.6s
PBAR eS S 19 59 22.7 +4.0
**J30M Hart River 69.24 337** P P 19 50 13.3 +0.1
J30M IAmb IAmb 19 50 21.6
comp=Z,131nm,1.4s
J30M IAMs_20 IAMs_20 20 20 56.8
comp=Z,2µm,21.0s
**J30M Hart River 69.24 337** P P 19 50 14.6 +1.4
baz=115,SNR=36
**M29M Somme Creek 69.26 334** P P 19 50 14.5 +1.2
baz=112,SNR=45
**K29M Barlow Dome 69.41 336** IAMs_20 IAMs_20 20 22 28.5
comp=Z,1µm,20.0s
**K29M Barlow Dome 69.41 336** P P 19 50 15.1 +0.8
baz=114,SNR=40
**YUK8 Steele Glacier 69.41 333** P P 19 50 15.4 +0.9
baz=110
**O28M Mount Upton 69.43 332** P P 19 50 15.7 +1.0
baz=110,SNR=29
**MVO Moncorvo 69.49 49** eP P 19 50 16.2 +1.1
comp=Z,124nm,1.6s
MVO eS S 19 59 25.7 +3.2
**G31M Satah River 69.52 339** IAMs_20 IAMs_20 20 20 32.1
comp=Z,1µm,21.0s
**G31M Satah River 69.52 339** P P 19 50 15.3 +0.7
baz=118,SNR=20
**I30M Mount Dempster 69.53 337** P P 19 50 15.4 +0.4
baz=115,SNR=55
**F31M Tsiigehtchic 69.58 340** IAMs_20 IAMs_20 20 23 37.7
comp=Z,1µm,21.0s
**F31M Tsiigehtchic 69.58 340** P P 19 50 15.3 +0.2
baz=118,SNR=8.1
**A36M Sachs Harbour 69.62 346** P P 19 50 14.0 -1.2
baz=128
**TABL Table Mountain 69.76 332** P P 19 50 17.3 +0.7
TABL IAmb IAmb 19 50 24.8
comp=Z,111nm,1.0s
TABL IAMs_20 IAMs_20 20 23 34.1
comp=Z,2µm,19.0s
**PBRG Braganca 69.78 49** eP P 19 50 17.9 +1.0
PBRG eS S 19 59 28.9 +3.1
**LOGN Logan Glacier 69.82 332** P P 19 50 17.8 +0.9
LOGN IAMs_20 IAMs_20 20 23 32.7
comp=Z,2µm,20.0s
**YUK3 Moose Creek 69.90 333** P P 19 50 17.9 +0.5
baz=110,SNR=22
**INK Inuvik 69.93 341** P P 19 50 16.9 -0.3
**INK Inuvik 69.93 341** LR LR 20 23 24.1
comp=Z,2µm,18.0s,baz=111,slow=38
**INK Inuvik 69.93 341** P P 19 50 17.4 +0.2
baz=119,SNR=5.8
**INK Inuvik 69.93 341** P P 19 50 16.9 -0.3
INK pmax pmax
comp=Z,184nm,1.5s
**J29N Klondike Camp 69.93 336** P P 19 50 17.8 +0.3
baz=113
**CTGM Chitina Glacie 70.02 332** P P 19 50 18.8 +0.7
CTGM IAMs_20 IAMs_20 20 23 58.0
comp=Z,2µm,20.0s
**CTG Chitina Glacier 70.03 332** P P 19 50 18.9 +0.8
baz=109,SNR=24
**MESA MESA 70.06 331** P P 19 50 18.7 +0.2
baz=108,SNR=15
**NEEM North Greenlan 70.12 6** *i*P P 19 50 18.6 0.0
NEEM IAmb IAmb 19 50 25.9
comp=Z,62nm,0.9s
**GRNC Granite Creek 70.14 332** IAMs_20 IAMs_20 20 23 55.1
comp=Z,2µm,19.0s
**EPYK Eagle Plains 70.15 338** IAMs_20 IAMs_20 20 23 20.7
comp=Z,1µm,18.0s
**EPYK Eagle Plains 70.15 338** P P 19 50 19.4 +0.8
baz=115,SNR=6.2
**G30M tAoh Zraii Nji 70.23 339** IAMs_20 IAMs_20 20 26 39.9
comp=Z,1µm,19.0s
**G30M tAoh Zraii Nji 70.23 339** P P 19 50 19.6 +0.4
baz=116
**DAWY Dawson 70.26 336** P P 19 50 19.0 -0.4
DAWY IAmb IAmb 19 50 26.9
comp=Z,122nm,1.4s
**DAWY Dawson 70.26 336** P P 19 50 19.8 +0.4
baz=112,SNR=24
**I29M Ogilvie Camp, 70.33 337** P P 19 50 20.1 +0.3
baz=113,SNR=25
**F30M Barrier River 70.36 340** P P 19 50 20.1 +0.3
baz=116,SNR=37
**BGLC Bering Glacier 70.68 331** P P 19 50 22.0 +0.1
baz=107
**H29M Whitestone 70.69 338** IAMs_20 IAMs_20 20 23 51.2
comp=Z,2µm,18.0s
**H29M Whitestone 70.69 338** P P 19 50 22.7 +0.7
baz=113,SNR=37
**M27K Edge Creek, AK 70.72 333** P P 19 50 23.4 +1.0
baz=109,SNR=38
**SCO Scoresbysund 70.73 17** IAMs_20 IAMs_20 20 20 46.0
comp=Z,1µm,20.0s
**CRQE Cirque 70.77 332** P P 19 50 23.7 +1.0
baz=107,SNR=21
**CRQM Cirque 70.80 332** P P 19 50 23.3 +0.4
CRQM IAMs_20 IAMs_20 20 24 15.9
comp=Z,2µm,19.0s
**MDT Midelt 70.81 58** LR LR 20 17 56.5
comp=Z,430nm,20.9s,baz=296,slow=33
**G29M Pine Creek 70.85 339** IAMs_20 IAMs_20 20 24 31.2
comp=Z,1µm,18.0s
**G29M Pine Creek 70.85 339** P P 19 50 23.8 +0.9
baz=114,SNR=30
**BCAR Beaver Creek A 70.91 334** P P 19 50 23.8 +0.4
**L27K Beaver Creek, 70.93 334** IAMs_20 IAMs_20 20 23 39.7
comp=Z,1µm,21.0s
**L27K Beaver Creek, 70.93 334** P P 19 50 24.9 +1.4
baz=109,SNR=45
**MCARA McCarthy VSAT 70.93 332** P P 19 50 24.6 +1.2
baz=107,SNR=28
**I28M Miner Creek 70.99 337** IAMs_20 IAMs_20 20 24 18.1
comp=Z,2µm,19.0s
**I28M Miner Creek 70.99 337** P P 19 50 24.5 +0.7
baz=112,SNR=24
**VRDI Verde Repeater 71.08 332** P P 19 50 25.1 +0.5
**KAIM Kayak Island 71.17 331** P P 19 50 25.4 +0.5
**KAIM Kayak Island 71.17 331** P P 19 50 26.2 +1.3
baz=106,SNR=6.5
**HMT Hamilton 71.21 331** IAMs_20 IAMs_20 20 22 21.4
comp=Z,2µm,20.0s
**M26K Nabesna, AK 71.23 333** P P 19 50 26.0 +0.6
baz=108,SNR=21
**EGAK Eagle 71.23 336** P P 19 50 25.2 0.0
EGAK IAmb IAmb 19 50 34.1
comp=Z,89nm,1.2s
EGAK IAMs_20 IAMs_20 20 26 30.6
comp=Z,2µm,19.0s
**EGAK Eagle 71.23 336** P P 19 50 26.2 +1.0
baz=110,SNR=25
**K27K Chicken 71.35 335** P P 19 50 27.0 +1.0
baz=109
**PAB San Pablo 71.38 51** P P 19 50 26.6 -0.2
PAB IAmb IAmb 19 50 35.4
comp=Z,125nm,1.3s
**PAB San Pablo 71.38 51** P P 19 50 26.6 -0.2
PAB pmax pmax
comp=Z,125nm,1.3s
PAB MLR MLR
comp=Z,700nm,21.0s
**E29M Blow River 71.42 340** P P 19 50 26.7 +0.5
baz=115,SNR=21
**BMRM Bremner River 71.55 332** P P 19 50 28.1 +0.9
baz=106,SNR=32
**TIC Toumodi 71.55 86**⇑ *i*P P 19 50 28.6 +0.5
comp=Z,258nm,1.1s
**L26K Log Cabin Wild 71.57 334** IAMs_20 IAMs_20 20 24 00.8
comp=Z,2µm,22.0s
**L26K Log Cabin Wild 71.57 334** P P 19 50 28.4 +1.0
baz=108,SNR=17

**LIC Lamto 71.59 86**⇑ *i*P P 19 50 29.0 +0.6
comp=Z,509nm,1.0s
**ESDC Sonseca Array 71.69 51** P P 19 50 29.3 +0.7
ESDC IAmb IAmb 19 50 37.3
comp=Z,141nm,1.2s
**ESDC Sonseca Array 71.69 51** P P 19 50 29.3 +0.7
comp=Z,31nm,0.9s,baz=272,slow=6.2,SNR=150
ESDC LR LR 20 18 07.9
comp=Z,487nm,21.9s,baz=264,slow=33
comp=Z,31nm,0.9s
**ESBB Sonseca Array 71.69 51** P P 19 50 28.6 +0.1
**DSB Dublin 71.70 37** P P 19 50 27.9 -0.4
DSB IAmb IAmb 19 52 50.9
comp=Z,107nm,1.7s
**I27K Kandik River 71.70 337** P P 19 50 28.8 +0.7
baz=110,SNR=63
**DBIC Dimbokro 71.71 86** P P 19 50 29.6 +0.5
**DBIC Dimbokro 71.71 86** P P 19 50 29.5 +0.5
comp=Z,35nm,0.9s,baz=266,slow=7.9,SNR=21
DBIC LR LR 20 22 49.2
comp=Z,426nm,18.7s,baz=242,slow=36
comp=Z,35nm,0.9s
**DBIC Dimbokro 71.71 86** P P 19 50 29.6 +0.5
DBIC pmax pmax
comp=Z,202nm,1.1s
**N25K Chitina, Valde 71.72 332** P P 19 50 29.6 +1.3
baz=106,SNR=27
**F28M Old Crow 71.79 339** IAMs_20 IAMs_20 20 25 02.0
comp=Z,2µm,18.0s
**F28M Old Crow 71.79 339** P P 19 50 29.4 +0.9
baz=112,SNR=8.5
**KIC Kosan Boka 71.86 86**⇑ *i*P P 19 50 30.7 +0.7
comp=Z,329nm,1.0s
**H27K Steamboat Moun 71.89 337** P P 19 50 30.0 +0.8
baz=110,SNR=6.3
**EYAK Cordova Ski Ar 71.98 331** P P 19 50 30.6 +0.8
baz=105,SNR=22
**Q23K Middleton Isla 71.99 330** P P 19 50 30.9 +1.0
baz=104
**E28M Babbage River 72.06 340** IAMs_20 IAMs_20 20 24 26.0
comp=Z,1µm,20.0s
**E28M Babbage River 72.06 340** P P 19 50 29.9 -0.2
baz=113,SNR=37
**D28M Stokes Point 72.08 341** P P 19 50 30.4 +0.2
baz=114,SNR=5.2
**J26L Joseph Creek 72.12 335** IAMs_20 IAMs_20 20 27 48.1
comp=Z,1µm,18.0s
**J26L Joseph Creek 72.12 335** P P 19 50 31.4 +0.7
baz=108,SNR=20
**SCRK Sand Creek 72.14 335** P P 19 50 30.9 0.0
SCRK IAMs_20 IAMs_20 20 23 58.6
comp=Z,875nm,21.0s
**SCRK Sand Creek 72.14 335** P P 19 50 32.0 +1.2
baz=107,SNR=33
**G27K Doyon Strip 72.14 338** P P 19 50 31.3 +0.6
baz=110
**HARP HAARP 72.19 333** P P 19 50 32.0 +0.9
baz=106
**I26K Coal Creek Min 72.21 336** P P 19 50 32.9 +1.8
baz=108
**KLU Klutina 72.30 332** IAMs_20 IAMs_20 20 25 03.2
comp=Z,1µm,20.0s
**KLU Klutina 72.30 332** P P 19 50 32.6 +0.8
baz=105,SNR=25
**RIDG Independent Ri 72.43 334** IAMs_20 IAMs_20 20 26 06.4
comp=Z,1µm,20.0s
**RIDG Independent Ri 72.43 334** P P 19 50 33.6 +1.1
baz=106,SNR=43
**PAX Paxson 72.49 334** P P 19 50 33.9 +0.9
baz=106,SNR=68
**M24K Tolsona, Glenn 72.57 333** IAMs_20 IAMs_20 20 24 10.3
comp=Z,2µm,21.0s
**M24K Tolsona, Glenn 72.57 333** P P 19 50 34.3 +0.8
baz=105,SNR=18
**E27K Coleen River 72.61 339** IAMs_20 IAMs_20 20 24 36.6
comp=Z,2µm,19.0s
**E27K Coleen River 72.61 339** P P 19 50 33.7 +0.2
baz=111,SNR=20
**P23K Montague Islan 72.64 330** P P 19 50 34.6 +0.8
baz=103
**GLI Glacier Island 72.70 331** IAMs_20 IAMs_20 20 23 17.8
comp=Z,2µm,22.0s
**GLI Glacier Island 72.70 331** P P 19 50 34.3 +0.2
baz=104,SNR=7.0
**D27M Malcolm River 72.78 340** IAMs_20 IAMs_20 20 23 16.1
comp=Z,2µm,22.0s
**D27M Malcolm River 72.78 340** P P 19 50 34.8 +0.3
baz=112,SNR=19
**K24K Donnelly Dome 72.85 334** P P 19 50 35.7 +0.7
baz=106,SNR=25
**J25K Salcha River, 72.90 335** P P 19 50 35.8 +0.5
baz=106,SNR=59
**ROSF Renen 72.95 42** eP P 19 50 36.4 +0.6
**G26K Porcupine Rive 72.98 338** P P 19 50 36.1 +0.5
baz=108,SNR=6.9
**QUIF Quistinic 72.98 43** eP P 19 50 36.6 +0.6
**SCM Sheep Creek Mo 73.03 332** P P 19 50 36.5 +0.3
SCM IAMs_20 IAMs_20 20 25 24.5
comp=Z,2µm,20.0s
**SCM Sheep Creek Mo 73.03 332** P P 19 50 36.8 +0.6
baz=104,SNR=32
**SCM Sheep Creek Mo 73.03 332** P P 19 50 36.5 +0.3
SCM pmax pmax
comp=Z,212nm,1.0s
SCM MLR MLR
comp=Z,2µm,20.0s
**M23K Glacier View 73.21 332** P P 19 50 37.5 +0.3
baz=103,SNR=30
**PRP Porcupine Dome 73.22 336** P P 19 50 37.5 +0.2
baz=106,SNR=6.0
**PWL Port Wells 73.28 331** IAMs_20 IAMs_20 20 26 12.3
comp=Z,2µm,20.0s
**PWL Port Wells 73.28 331** P P 19 50 37.9 +0.3
baz=102,SNR=24
**F26K Sheenjek River 73.35 339** IAMs_20 IAMs_20 20 28 48.2
comp=Z,1µm,18.0s
**F26K Sheenjek River 73.35 339** P P 19 50 38.2 +0.4
baz=108,SNR=21
**DHY Denali Highway 73.35 333** IAMs_20 IAMs_20 20 25 19.9
comp=Z,1µm,21.0s
**DHY Denali Highway 73.35 333** P P 19 50 38.4 +0.3
baz=104,SNR=25
**WAT6 Susitna Watana 73.40 333** P P 19 50 38.8 +0.4
baz=103,SNR=34
**BMAR Burnt Mountain 73.42 338** P P 19 50 38.3 0.0
**KNK Knik Glacier 73.46 332** P P 19 50 38.8 +0.1
**KNK Knik Glacier 73.46 332** P P 19 50 39.2 +0.5
baz=102,SNR=37
**SML Sawmill 73.49 332** P P 19 50 39.6 +0.7
baz=103,SNR=31
**HDA Harding Lake 73.50 335** IAMs_20 IAMs_20 20 27 49.7
comp=Z,1µm,18.0s
**HDA Harding Lake 73.50 335** P P 19 50 39.2 +0.4
baz=105,SNR=41
**H25L Birch Creek 73.55 337** P P 19 50 39.7 +0.7
baz=106
**IL31 73.57 335** P P 19 50 39.1 0.0
IL31 IAmb IAmb 19 50 46.4
comp=Z,58nm,1.0s
**ILAR Eielson Array 73.57 335** P P 19 50 38.7 -0.4
**ILAR Eielson Array 73.57 335** P P 19 50 39.2 0.0
comp=Z,17nm,1.0s,baz=109,slow=4.2,SNR=57
ILAR LR LR 20 28 25.3
comp=Z,920nm,18.1s,baz=96,slow=40
comp=Z,17nm,1.0s
**SEW Seward 73.67 330** P P 19 50 40.5 +0.7
baz=101,SNR=10.0
**G25K Bearman Lake 73.80 337** P P 19 50 41.2 +0.8
baz=106,SNR=6.6
**PMR Palmer 73.82 332** P P 19 50 40.9 +0.3
baz=102,SNR=7.9
**WAT1 Susitna Watana 73.82 333** P P 19 50 41.0 +0.3
baz=103
**C27K Jago River 73.82 340** P P 19 50 41.0 +0.5
baz=109,SNR=5.3
**F25K Christian Rive 73.86 338** IAMs_20 IAMs_20 20 21 58.9
comp=Z,1µm,21.0s
**F25K Christian Rive 73.86 338** P P 19 50 41.8 +0.9
baz=107,SNR=22
**ESK Eskdalemuir 73.87 35** P P 19 50 40.9 -0.2
ESK IAmb IAmb 19 50 48.7
comp=Z,59nm,0.9s
**ESK Eskdalemuir 73.87 35** P P 19 50 40.9 -0.2
ESK pmax pmax
comp=Z,59nm,0.9s
**O22K Cooper Landing 73.88 331** P P 19 50 41.4 +0.4
baz=101
**POKR Poker Plat Res 73.88 336** P P 19 50 41.5 +0.5
baz=104,SNR=5.3
**EKA Eskdalemuir Ar 73.90 35** P P 19 50 41.1 -0.1
comp=Z,21nm,0.8s,baz=257,slow=4.9,SNR=42
comp=Z,21nm,0.8s
**PMSA Palmer Station 73.90 174** P P 19 50 42.1 +1.2
PMSA IAmb IAmb 19 50 52.5
comp=Z,87nm,1.6s
**CCB Clear Creek Bu 73.92 335** IAMs_20 IAMs_20 20 25 44.7
comp=Z,915nm,20.0s
**COLA College 73.99 335** P P 19 50 41.5 -0.1
**COLA College 73.99 335** IAMs_20 IAMs_20 20 25 53.8
comp=Z,1µm,19.0s
**COLA College 73.99 335** P P 19 50 42.2 +0.6
baz=104
**COLA College 73.99 335** *i*P P 19 50 41.8 +0.2
COLA pmax pmax
comp=Z,70nm,1.2s
**WRH Wood River Hil 74.00 335** IAMs_20 IAMs_20 20 28 13.8
comp=Z,1µm,18.0s
**RC01 Rabbit Creek A 74.00 331** IAMs_20 IAMs_20 20 26 34.3
comp=Z,2µm,20.0s
**RC01 Rabbit Creek A 74.00 331** P P 19 50 42.7 +0.9
baz=101,SNR=9.5
**RND Reindeer 74.08 334** IAMs_20 IAMs_20 20 26 04.2
comp=Z,2µm,20.0s
**MCK McKinley 74.19 334** P P 19 50 44.0 +1.1
baz=103,SNR=39
**BRSE Bradley Lake S 74.24 330** P P 19 50 43.9 +0.6
baz=100,SNR=8.9
**H24K Noodor Dome 74.24 336** IAMs_20 IAMs_20 20 29 41.1
comp=Z,1µm,18.0s
**H24K Noodor Dome 74.24 336** P P 19 50 44.2 +1.1
baz=104,SNR=25
**G24K Hadweenzic Riv 74.30 337** IAMs_20 IAMs_20 20 28 28.7
comp=Z,791nm,20.0s
**G24K Hadweenzic Riv 74.30 337** P P 19 50 44.3 +0.8
baz=105,SNR=22
**C26K Camden Bay 74.31 341** P P 19 50 43.8 +0.3
baz=108,SNR=24
**M22K Willow 74.31 332** P P 19 50 43.9 +0.4
baz=101,SNR=8.5
**BRLK Bradley Lake 74.32 330** IAMs_20 IAMs_20 20 28 60.0
comp=Z,1µm,18.0s
**NEA2 Nenana 74.44 335** IAMs_20 IAMs_20 20 28 27.4
comp=Z,1µm,18.0s
**NEA2 Nenana 74.44 335** P P 19 50 44.4 +0.1
baz=103,SNR=59
**CNPM China Poot 74.45 329** IAMs_20 IAMs_20 20 29 06.4
comp=Z,1µm,18.0s
**CUT Chulitna 74.51 332** P P 19 50 44.8 +0.1
CUT IAMs_20 IAMs_20 20 25 19.4
comp=Z,2µm,21.0s
**CUT Chulitna 74.51 332** P P 19 50 44.8 +0.1
baz=101,SNR=9.8
**SUA Susitna One 74.55 331** P P 19 50 45.6 +0.4
**SUA Susitna One 74.55 331** P P 19 50 45.8 +0.6
baz=100,SNR=28
**D25K Kavik River 74.62 340** P P 19 50 45.0 -0.3
D25K IAmb IAmb 19 51 25.5
comp=Z,71nm,0.5s
**D25K Kavik River 74.62 340** P P 19 50 45.6 +0.3
baz=107,SNR=18
**F24K Squaw Lake 74.67 338** IAMs_20 IAMs_20 20 29 35.3
comp=Z,1µm,19.0s
**F24K Squaw Lake 74.67 338** P P 19 50 45.7 +0.1
baz=105,SNR=19
**HOM Homer 74.68 330** P P 19 50 46.2 +0.5
baz=99
**I23K Minto, Yukon-K 74.68 335** IAMs_20 IAMs_20 20 27 00.8
comp=Z,1µm,19.0s
**I23K Minto, Yukon-K 74.68 335** P P 19 50 46.4 +0.8
baz=103,SNR=59
**DAG Danmarks Havn 74.68 12** *i*P P 19 50 44.4 -1.0
DAG IAmb IAmb 19 50 51.4
comp=Z,22nm,1.0s
**KDAK Kodiak Island 74.89 328** LR LR 20 24 44.7
comp=Z,1µm,21.6s,baz=107,slow=36
**KDAK Kodiak Island 74.89 328** *i*P P 19 50 47.1 +0.1
KDAK pmax pmax
comp=Z,64nm,0.9s
**Q20K Shuyak Island 74.90 328** P P 19 50 47.2 +0.2
baz=98
**H23K Yukon River 74.91 336** P P 19 50 48.0 +1.0
baz=103,SNR=30
**JMIC Jan Mayen 75.01 18** LR LR 20 20 12.8
comp=Z,502nm,22.0s,baz=242,slow=33
**SKT Skwentna 75.01 332** IAMs_20 IAMs_20 20 26 34.9
comp=Z,1µm,21.0s
**SKT Skwentna 75.01 332** P P 19 50 48.4 +0.7
baz=100,SNR=45
**E24K Your Creek 75.03 338** IAMs_20 IAMs_20 20 26 02.8
comp=Z,1µm,20.0s
**E24K Your Creek 75.03 338** P P 19 50 48.6 +0.9
baz=104,SNR=5.5
**EPF Esparros 75.10 48** eP P 19 50 49.7 +1.1
**BPAW Bear Paw Mtn. 75.15 334** P P 19 50 48.3 -0.1
BPAW IAMs_20 IAMs_20 20 27 26.4
comp=Z,1µm,18.0s
**BPAW Bear Paw Mtn. 75.15 334** P P 19 50 48.9 +0.5
baz=101,SNR=37
**OHAK Old Harbor 75.19 327** P P 19 50 48.4 -0.3
baz=97
**N20K Mount Spurr 75.20 331** P P 19 50 48.4 -0.5
baz=99,SNR=11
**SPCR Spurr Chakacha 75.20 331** P P 19 50 48.2 -0.7
baz=99
**MLY Manley 75.23 335** P P 19 50 48.8 -0.1
MLY IAmb IAmb 19 50 56.4
comp=Z,130nm,1.1s
MLY IAMs_20 IAMs_20 20 26 33.3
comp=Z,1µm,21.0s
**MLY Manley 75.23 335** P P 19 50 49.0 +0.1
baz=101,SNR=77
**O20K Slope Mountain 75.23 330** P P 19 50 48.3 -0.7
baz=98,SNR=12
**G23K Bananza Creek 75.29 337** IAMs_20 IAMs_20 20 26 12.8
comp=Z,1µm,21.0s
**G23K Bananza Creek 75.29 337** P P 19 50 49.4 +0.2
baz=102,SNR=33
**RSO Redoubt South 75.35 330** P P 19 50 49.9 0.0
**D24K Happy Valley 75.42 339** P P 19 50 50.0 +0.2
baz=104,SNR=6.9
**E23K Chandalar 75.44 338** IAMs_20 IAMs_20 20 28 37.6
comp=Z,1µm,18.0s
**E23K Chandalar 75.44 338** P P 19 50 50.3 +0.2
baz=103,SNR=25
**COLD Coldfoot 75.47 337** P P 19 50 50.6 +0.4
baz=102,SNR=24
**P19K Oil Pt 75.48 329** P P 19 50 50.4 0.0
baz=98,SNR=5.1
**ILSW Iliamna Southw 75.48 330** IAMs_20 IAMs_20 20 28 04.1
comp=Z,1µm,18.0s
**C24K Franklin Bluff 75.52 340** P P 19 50 50.8 +0.5
baz=104
**TOLK Toolik Lake Re 75.56 339** P P 19 50 50.6 -0.1
**TOLK Toolik Lake Re 75.56 339** P P 19 50 50.9 +0.1
baz=103
**Q19K Cape Douglas, 75.59 329** IAMs_20 IAMs_20 20 24 02.5
comp=Z,1µm,21.0s
**Q19K Cape Douglas, 75.59 329** P P 19 50 50.9 -0.2
baz=97,SNR=5.1
**SII Sitkinak Islan 75.60 326** P P 19 50 51.2 0.0
baz=96
**H22K Ishtalitna Cre 75.66 336** P P 19 50 51.0 -0.3
baz=101,SNR=25
**M20K Styx River 75.74 332** IAMs_20 IAMs_20 20 24 31.2
comp=Z,2µm,22.0s
**M20K Styx River 75.74 332** P P 19 50 52.6 +0.7
baz=98,SNR=28
**CEST Esterri de Car 75.76 48** IAMs_20 IAMs_20 20 21 03.2
comp=Z,1µm,19.0s
**KNHH Kane Nui o Ham 75.81 288** P P 19 50 52.2 -1.0
**R18K Karluk 75.86 327** P P 19 50 53.2 +0.7
baz=96
**G22K Bettles 75.91 337** P P 19 50 53.7 +1.0
baz=101
**PPT Papeete 76.00 249** P P 19 50 55.6 +1.4
comp=Z,12nm,0.9s,baz=72,slow=20,SNR=1.7
PPT LR LR 20 16 17.7
comp=Z,553nm,19.3s,baz=57,slow=29
comp=Z,12nm,0.9s
**PPT2 Papeete2 76.00 249** eP P 19 50 52.7 -1.5
comp=Z,158nm,24.0s
**PPT2 Papeete2 76.00 249** ePP PP 19 53 38.8 -6.2
comp=Z,108nm,35.5s
PPT2 eS S 20 00 38.7 +1.2
comp=Z,232nm,31.8s
PPT2 eSS SS 20 05 29.9 -0.7

comp=Z,464nm,27.5s
PPT2 eLQ LQ 20 11 10.8
comp=Z,2µm,28.2s
PPT2 eLR LR 20 14 19.8
comp=Z,878nm,26.5s
PPT2 eLR LR 20 14 21.1
comp=Z,1µm,24.5s
**D23K Nanushuk River 76.02 339** IAMs_20 IAMs_20 20 25 33.8
comp=Z,2µm,22.0s
**D23K Nanushuk River 76.02 339** P **P** **19 50 54.2 +0.9**
baz=102
**O19K Port Alsworth 76.09 330** IAMs_20 IAMs_20 20 23 48.6
comp=Z,1µm,22.0s
**O19K Port Alsworth 76.09 330** P **P** **19 50 53.8 0.0**
baz=97
**L20K Farewell, AK 76.17 332** P **P** **19 50 54.8 +0.5**
baz=98,SNR=28
**C23K Itkillik River 76.19 340** IAMs_20 IAMs_20 20 27 11.3
comp=Z,1µm,19.0s
**C23K Itkillik River 76.19 340** P **P** **19 50 54.8 +0.6**
baz=103,SNR=16
**H21K Melozitna Rive 76.19 336** IAMs_20 IAMs_20 20 27 26.8
comp=Z,1µm,18.0s
**H21K Melozitna Rive 76.19 336** P **P** **19 50 54.3 -0.1**
baz=100,SNR=7.0
**N19K Bonanza Creek 76.25 331** P **P** **19 50 54.5 -0.4**
baz=97,SNR=14
**E22K Anaktuvuk Pass 76.26 338** IAMs_20 IAMs_20 20 27 11.3
comp=Z,1µm,20.0s
**E22K Anaktuvuk Pass 76.26 338** P **P** **19 50 54.7 0.0**
baz=101,SNR=16
**Q18K Katmai Hardscr 76.27 328** P **P** **19 50 54.8 -0.2**
baz=96,SNR=5.7
**F22K John River 76.28 338** P **P** **19 50 54.6 -0.2**
baz=101,SNR=26
**M19K Big River Lodg 76.34 332** P **P** **19 50 54.7 -0.5**
baz=97
**K20K Telida 76.38 333** IAMs_20 IAMs_20 20 27 15.0
comp=Z,1µm,20.0s
**K20K Telida 76.38 333** P **P** **19 50 55.7 +0.2**
baz=98
**P18K Big Mountain, 76.46 329** P **P** **19 50 55.7 -0.3**
baz=96
**O18K Koktuh Hills 76.49 329** P **P** **19 50 56.2 0.0**
O18K IAmb IAmb 19 51 03.1
comp=Z,119nm,0.9s
O18K IAMs_20 IAMs_20 20 27 21.3
comp=Z,1µm,20.0s
**O18K Koktuh Hills 76.49 329** P **P** **19 50 56.0 -0.2**
baz=96,SNR=7.6
**J20K Nowinta River 76.53 334** IAMs_20 IAMs_20 20 31 22.8
comp=Z,854nm,19.0s
**J20K Nowinta River 76.53 334** P **P** **19 50 56.6 +0.3**
baz=98,SNR=39
**L19K White Mountain 76.59 332** IAMs_20 IAMs_20 20 30 29.5
comp=Z,1µm,18.0s
**L19K White Mountain 76.59 332** P **P** **19 50 57.0 +0.3**
baz=97,SNR=16
**G21K Allakaket 76.62 336** IAMs_20 IAMs_20 20 30 27.9
comp=Z,1µm,19.0s
**G21K Allakaket 76.62 336** P **P** **19 50 57.4 +0.7**
baz=99,SNR=40
**CLF Chambon-Foret 76.62 43** P **P** **19 50 57.4 +0.3**
**IMAR Indian Mountai 76.63 336** P **P** **19 50 56.2 -0.6**
**Q17K Contact Creek 76.69 328** P **P** **19 50 58.0 +0.6**
baz=95,SNR=9.8
**D22K Ayikyak River 76.72 339** P **P** **19 50 58.0 +0.7**
baz=100,SNR=24
**F21K Alatna River 76.72 337** IAMs_20 IAMs_20 20 27 07.6
comp=Z,1µm,20.0s
**F21K Alatna River 76.72 337** P **P** **19 50 57.8 +0.5**
baz=99,SNR=28
**I20K Naaghedeneel 76.76 335** P **P** **19 50 57.8 +0.3**
baz=98,SNR=5.1
**R17L Mt. Peulik Vol 76.89 327** P **P** **19 50 58.3 -0.1**
baz=94,SNR=5.8
**N18K Kilae Creek 76.92 330** P **P** **19 50 58.4 -0.2**
baz=96,SNR=12
**SMAI San Martin Ant 76.94 176** P **P** **19 50 59.1 +0.8**
SMAI IAmb IAmb 19 51 10.4
comp=Z,129nm,1.3s
**M18K Stony River 76.97 331** P **P** **19 50 58.8 0.0**
baz=96,SNR=26
**H20K Anotleneega Mo 77.02 335** P **P** **19 50 59.0 0.0**
baz=98,SNR=8.5
**P17K Kvichak River 77.06 329** P **P** **19 50 58.6 -0.7**
baz=95
**E21K Killik River 77.11 338** IAMs_20 IAMs_20 20 27 10.5
comp=Z,1µm,21.0s
**E21K Killik River 77.11 338** P **P** **19 50 59.3 -0.2**
baz=99
**Q16K King Salmon 77.12 328** P **P** **19 50 59.5 -0.1**
baz=94
**J19K Poorman 77.15 334** P **P** **19 50 59.8 0.0**
baz=97,SNR=8.5
**B22K Teshekpuk Lake 77.23 340** IAMs_20 IAMs_20 20 26 22.8
comp=Z,2µm,22.0s
**B22K Teshekpuk Lake 77.23 340** P **P** **19 51 00.1 0.0**
baz=100
**NOR Nord 77.33 8** *i* P **P** **19 50 59.9 -0.6**
NOR IAmb IAmb 19 51 15.9
comp=Z,100nm,1.9s
**AVF Avril sur Loir 77.33 44** *e*P **P** **19 51 01.1 0.0**
**TBI Tubuai 77.34 244** *e*P **P** **19 50 59.6 -2.0**
comp=Z,674nm,25.5s
**TBI Tubuai 77.34 244** *e*PP **PP** **19 53 52.0 -4.1**
comp=Z,285nm,28.5s
TBI *e*S **S** **20 00 56.0 +4.2**
TBI comp=Z,1µm,34.2s *e*SS **SS** **20 05 55.0 +4.4**
comp=Z,2µm,28.0s
TBI eLQ LQ 20 11 39.0
comp=Z,14µm,34.8s
TBI eLR LR 20 14 58.3
comp=Z,9µm,26.2s
TBI eLR LR 20 15 01.5
comp=Z,2µm,25.8s
**TORD Torodi Ar. Bea 77.41 78** P **P** **19 51 01.4 -0.7**
TORD IAmb IAmb 19 51 10.2
comp=Z,151nm,1.9s
**TORD Torodi Ar. Bea 77.41 78** P **P** **19 51 02.1 0.0**
comp=Z,7.3nm,0.9s,baz=291,slow=6.6,SNR=40
TORD LR LR 20 28 00.7
comp=Z,982nm,18.1s,baz=266,slow=38
comp=Z,7.3nm,0.9s
**O17K Koliganek Bris 77.44 329** P **P** **19 51 01.2 -0.3**
baz=94,SNR=16
**L18K Granite Mounta 77.45 332** IAMs_20 IAMs_20 20 25 34.2
comp=Z,2µm,22.0s
**L18K Granite Mounta 77.45 332** P **P** **19 51 01.1 -0.4**
baz=95,SNR=13
**C21K Knifeblade Rid 77.51 339** P **P** **19 51 02.1 +0.4**
baz=98
**B21K Ikpikpuk River 77.52 340** IAMs_20 IAMs_20 20 28 05.5
comp=Z,1µm,20.0s
**B21K Ikpikpuk River 77.52 340** P **P** **19 51 02.3 +0.6**
baz=99,SNR=13
**N17K Nushagak Hills 77.54 330** P **P** **19 51 02.5 +0.5**
baz=94,SNR=11
**F20K Avaraart Lake 77.57 337** IAMs_20 IAMs_20 20 27 33.9
comp=Z,979nm,20.0s
**F20K Avaraart Lake 77.57 337** P **P** **19 51 03.0 +0.9**
baz=97,SNR=18
**J18K Innoko River 77.58 333** IAMs_20 IAMs_20 20 28 11.6
comp=Z,1µm,20.0s
**J18K Innoko River 77.58 333** P **P** **19 51 03.0 +0.7**
baz=96,SNR=11
**H19K Roundabout Mou 77.68 335** IAMs_20 IAMs_20 20 28 23.0
comp=Z,1µm,19.0s
**H19K Roundabout Mou 77.68 335** P **P** **19 51 03.6 +1.0**
baz=96,SNR=32
**M17K Holitna River 77.73 331** P **P** **19 51 03.6 +0.5**
baz=94,SNR=9.7
**GCSA Galena City Sc 77.78 334** P **P** **19 51 03.8 +0.6**
baz=96,SNR=5.9
**P16K Nushagak River 77.84 329** P **P** **19 51 04.0 +0.3**
baz=93,SNR=7.1
**A22K Sinclair Lake 77.86 341** P **P** **19 51 03.9 +0.3**
baz=99
**E20K Nigu River 77.89 338** P **P** **19 51 04.6 +0.6**
baz=97,SNR=24
**CHGN Chignik 77.93 326** P **P** **19 51 04.8 +0.6**
baz=92
**O16K Kokwok River B 77.93 329** IAMs_20 IAMs_20 20 28 14.3
comp=Z,1µm,20.0s
**O16K Kokwok River B 77.93 329** P **P** **19 51 04.4 +0.2**
baz=93
**BAIF Baives 77.95 41** *e*P **P** **19 51 04.8 +0.3**

**G19K Purcell Mounta 78.00 336** IAMs_20 IAMs_20 20 28 22.5
comp=Z,1µm,18.0s
**G19K Purcell Mounta 78.00 336** P **P** **19 51 05.3 +0.8**
baz=96,SNR=20
**D20K Etivluk River 78.10 338** P **P** **19 51 05.5 +0.5**
baz=97,SNR=6.8
**SSB Saint Sauveur 78.16 46** P **P** **19 51 05.1 -0.8**
SSB IAmb IAmb 19 51 14.6
comp=Z,98nm,1.5s
**SSB Saint Sauveur 78.16 46** P **P** **19 51 05.1 -0.8**
SSB pmax pmax
comp=Z,98nm,1.5s
**L17K Donlin 78.19 332** P **P** **19 51 06.0 +0.4**
baz=94,SNR=31
**E19K Redstone River 78.19 337** IAMs_20 IAMs_20 20 31 51.5
comp=Z,772nm,20.0s
**E19K Redstone River 78.19 337** P **P** **19 51 06.2 +0.7**
baz=96,SNR=7.2
**DOU Dourbes 78.20 41** *d*P **P** **19 51 06.8 +0.8**
comp=Z,49nm,1.2s
DOU *dx* x 19 51 13.0
**K17K Iditarod 78.23 332** P **P** **19 51 06.5 +0.6**
baz=94,SNR=15
**VIVF Saint-Julien-I 78.25 46** *e*P **P** **19 51 07.6 +1.2**
**BMRD Maredsous 78.31 40** *d*P **P** **19 51 07.0 +0.4**
comp=Z,34nm,1.3s
BMRD *dx* x 19 51 13.6
**N16K Nishlik Lake 78.32 330** P **P** **19 51 06.8 +0.5**
baz=93
**F19K Shaleruckik Mo 78.34 337** P **P** **19 51 07.1 +0.7**
baz=95
**GIVF Givet 78.35 41** *e*P **P** **19 51 07.2 +0.5**
**H18K Honhosa River 78.44 335** P **P** **19 51 08.1 +1.1**
baz=94,SNR=28
**M16K Timber Creek 78.44 331** P **P** **19 51 08.4 +1.4**
baz=93,SNR=6.2
**B20K Meade River 78.45 340** P **P** **19 51 07.6 +0.8**
baz=96
**BGES Geres 78.52 40** *d*P **P** **19 51 08.5 +0.9**
comp=Z,30nm,1.0s
BGES *dx* x 19 51 14.4
**CHNA Chernabura Isl 78.55 324** P **P** **19 51 08.6 +0.9**
baz=91
**S14K Fog Glacier 78.56 326** P **P** **19 51 09.1 +1.2**
baz=92
**RCHB Rochefort 78.61 41** *d*P **P** **19 51 08.9 +0.7**
comp=Z,45nm,1.2s
RCHB *dx* x 19 51 15.3
**G18K Tagagawik 78.62 336** P **P** **19 51 09.6 +1.7**
baz=94,SNR=27
**D19K Kuna River 78.63 338** P **P** **19 51 09.1 +1.1**
baz=95,SNR=20
**J17K VABM Dome 78.63 333** IAMs_20 IAMs_20 20 26 09.4
comp=Z,1µm,20.0s
**J17K VABM Dome 78.63 333** P **P** **19 51 09.3 +1.3**
baz=93,SNR=12
**BCLA Clavier 78.66 40** *d*P **P** **19 51 09.4 +0.9**
comp=Z,26nm,1.3s
BCLA *dx* x 19 51 15.4
**L16K Owhat River 78.72 331** IAMs_20 IAMs_20 20 27 48.1
comp=Z,1µm,21.0s
**L16K Owhat River 78.72 331** P **P** **19 51 10.1 +1.5**
baz=93,SNR=37
**O15K Ungalikthiuk R 78.79 329** P **P** **19 51 09.8 +0.8**
baz=92
**BSTI Sart Tilman 78.83 40** *d*P **P** **19 51 10.8 +1.5**
comp=Z,16nm,1.3s
BSTI *dx* x 19 51 16.6
**BEBN Eben Emael 78.90 40** *d*P **P** **19 51 10.9 +1.1**
BEBN *dx* x 19 51 16.3
**N15K Kwethluk River 78.96 330** P **P** **19 51 10.5 +0.6**
baz=92
**SDPT Sand Point 79.06 325** P **P** **19 51 11.3 +0.8**
baz=90
**F18K Selawik 79.07 336** P **P** **19 51 11.5 +1.2**
baz=94
**H17K Granite Mounta 79.08 335** P **P** **19 51 12.0 +1.6**
baz=93,SNR=10
**BHOU Houvegnez 79.11 40** *d*P **P** **19 51 11.4 +0.5**
comp=Z,55nm,1.2s
BHOU *dx* x 19 51 18.3
**MEM Membach 79.11 40** *d*P **P** **19 51 11.7 +0.8**
comp=Z,49nm,1.2s
MEM *dx* x 19 51 17.9
**ORIF Oris-en-Rattie 79.11 46** *e*P **P** **19 51 12.4 +1.2**
**BTNL Ternell 79.19 40** *d*P **P** **19 51 12.8 +1.4**
comp=Z,25nm,1.4s
BTNL *dx* x 19 51 18.4
**WLF Walferdange 79.21 41** P **P** **19 51 11.6 +0.1**
WLF IAMs_20 IAMs_20 20 24 01.6
comp=Z,1µm,20.0s
**WLF Walferdange 79.21 41** *d*P **P** **19 51 12.9 +1.4**
comp=Z,96nm,1.0s
WLF *dx* x 19 51 19.3
**WLF Walferdange 79.21 41** P **P** **19 51 11.6 +0.1**
WLF pmax pmax
comp=Z,165nm,1.0s
WLF MLR MLR
comp=Z,1µm,20.0s
**WLF Walferdange 79.21 41** *e*P **P** **19 51 12.2 +0.7**
comp=Z,193nm,1.1s,baz=275,slow=5.3
WLF *ep*P **PcP** **19 51 19.1 -0.7**
**C19K Lookout Ridge 79.21 339** P **P** **19 51 13.2 +2.0**
baz=94,SNR=15
**M15K Kasigluk River 79.27 330** P **P** **19 51 13.8 +2.2**
baz=91,SNR=19
**J16K Anvik River 79.31 333** IAMs_20 IAMs_20 20 29 08.5
comp=Z,1µm,20.0s
**J16K Anvik River 79.31 333** P **P** **19 51 14.0 +2.2**
baz=92,SNR=7.9
**I17K Unalakleet 79.38 333** IAMs_20 IAMs_20 20 28 05.1
comp=Z,782nm,20.0s
**I17K Unalakleet 79.38 333** P **P** **19 51 14.0 +1.9**
baz=92
**G17K Kiwalik Mounta 79.42 335** P **P** **19 51 14.4 +2.1**
baz=92,SNR=10
**E18K Tukpahlearik C 79.49 337** IAMs_20 IAMs_20 20 28 04.7
comp=Z,1µm,22.0s
**E18K Tuahlearik C 79.49 337** P **P** **19 51 14.9 +2.3**
baz=93
**O14K Tigyukauivet M 79.54 329** IAMs_20 IAMs_20 20 32 31.8
comp=Z,1µm,19.0s
**O14K Tigyukauivet M 79.54 329** P **P** **19 51 15.1 +2.1**
baz=91
**BNI Bardonecchia 79.67 46** P **P** **19 51 14.3 0.0**
BNI IAmb IAmb 19 51 23.4
comp=Z,70nm,1.1s
**BNI Bardonecchia 79.67 46** P **P** **19 51 14.3 0.0**
BNI pmax pmax
comp=Z,70nm,1.1s
BNI MLR MLR
comp=Z,600nm,20.0s
**L15K Ungalak Mounta 79.68 331** P **P** **19 51 15.3 +1.5**
baz=91,SNR=7.1
**LPL La Plagne 79.69 45** *e*P **P** **19 51 15.5 +1.0**
**F17K Baldwin Pennin 79.70 336** IAMs_20 IAMs_20 20 29 43.4
comp=Z,1µm,19.0s
**F17K Baldwin Pennin 79.70 336** P **P** **19 51 15.2 +1.4**
baz=92
**LPG La Plagne 79.71 45** *e*P **P** **19 51 15.7 +1.0**
**K15K Wolf Creek Mou 79.71 332** IAMs_20 IAMs_20 20 30 00.2
comp=Z,1µm,19.0s
**K15K Wolf Creek Mou 79.71 332** P **P** **19 51 15.7 +1.7**
baz=91,SNR=5.6
**N14K Kuskokwak Cree 79.76 329** P **P** **19 51 15.5 +1.3**
baz=90,SNR=9.0
**C18K Utukok River 79.77 338** P **P** **19 51 14.8 +0.6**
baz=92
**AHRW Bad Neuenahr-A 79.79 40** *e*P **P** **19 51 15.6 +1.0**
comp=Z,166nm,1.1s,baz=275,slow=5.3
AHRW *ep*P **PcP** **19 51 22.1 -0.1**
**BUG Bochum--Univer 79.89 39** *e*P **P** **19 51 15.6 +0.5**
comp=Z,146nm,1.2s,baz=275,slow=5.3
BUG *ep*P **PcP** **19 51 22.3 -0.3**
**M14K Bethel 79.90 330** IAMs_20 IAMs_20 20 30 01.3
comp=Z,1µm,20.0s
**M14K Bethel 79.90 330** P **P** **19 51 16.0 +1.1**
baz=90,SNR=7.2
**ECH Echery 79.90 43** P **P** **19 51 15.0 -0.3**
ECH IAmb IAmb 19 51 23.6
comp=Z,124nm,1.1s
**ECH Echery 79.90 43** P **P** **19 51 15.0 -0.3**
ECH pmax pmax
comp=Z,124nm,1.1s
**E17K Hotham Inlet 79.95 337** P **P** **19 51 16.4 +1.2**
baz=92,SNR=5.3
**S12K Black Hills 79.96 325** P **P** **19 51 16.3 +0.8**

baz=89
**B18K Kokolik River 80.02 339** P **P** **19 51 16.2 +0.7**
baz=92
**SENIN Lac Senin/Sane 80.06 44** P **P** **19 51 16.1 -0.4**
**H16K Elim 80.07 334** P **P** **19 51 16.7 +0.9**
baz=91,SNR=6.4
**TAM Tamanrasset 80.10 68** P **P** **19 51 17.1 +0.1**
TAM IAmb IAmb 19 51 26.6
comp=Z,69nm,1.2s
TAM IAMs_20 IAMs_20 20 24 11.7
comp=Z,1µm,22.0s
**TAM Tamanrasset 80.10 68** P **P** **19 51 17.2 +0.1**
TAM pmax pmax
comp=Z,69nm,1.2s
TAM MLR MLR
comp=Z,1µm,22.0s
**G16K Koyuk River 80.13 335** IAMs_20 IAMs_20 20 29 42.8
comp=Z,1µm,19.0s
**G16K Koyuk River 80.13 335** P **P** **19 51 17.0 +0.9**
baz=91
**IBBN Ibbenburen 80.18 38** *e*P **P** **19 51 17.2 +0.6**
comp=Z,177nm,1.2s,baz=275,slow=5.3
IBBN *ep*P **PcP** **19 51 23.9 0.0**
**HLG Helgoland 80.21 36** *ep*P pP 19 51 24.2 +2.5
**L14K Kuka Creek 80.25 331** IAMs_20 IAMs_20 20 29 06.5
comp=Z,1µm,20.0s
**L14K Kuka Creek 80.25 331** P **P** **19 51 17.3 +0.4**
baz=90
**RDOG Red Dog Mine 80.39 338** IAMs_20 IAMs_20 20 30 47.4
comp=Z,1µm,18.0s
**RDOG Red Dog Mine 80.39 338** P **P** **19 51 18.3 +0.8**
baz=91
**D17K Noatak River 80.45 337** P **P** **19 51 17.8 0.0**
baz=90
**C17K DeLong Mountai 80.49 338** P **P** **19 51 18.5 +0.4**
baz=90,SNR=5.8
**M13K Dall Lake 80.59 330** P **P** **19 51 18.5 -0.2**
baz=89
**KASTN Kahler Asten 80.62 39** *e*P **P** **19 51 19.6 +0.4**
comp=Z,82nm,1.3s,baz=275,slow=5.3
KASTN *ep*P **PcP** **19 51 26.4 +0.5**
**J14K Nanvaranak Lak 80.65 332** IAMs_20 IAMs_20 20 30 28.9
comp=Z,1µm,19.0s
**J14K Nanvaranak Lak 80.65 332** P **P** **19 51 18.1 -0.8**
baz=89,SNR=21
**TNS Taunus Mts 80.68 40** *e*P **P** **19 51 20.2 +0.7**
comp=Z,148nm,1.2s,baz=275,slow=5.3
TNS *ep*P **sP** **19 51 26.7 +0.4**
**BFO Black Forest 80.68 42** P **P** **19 51 19.1 -0.4**
**BFO Black Forest 80.68 42** P **P** **19 51 19.1 -0.4**
BFO pmax pmax
comp=Z,42nm,1.0s
**BFO Black Forest 80.68 42** *e*P **P** **19 51 19.4 -0.1**
comp=Z,60nm,1.1s,baz=275,slow=5.3
BFO *ep*P **PcP** **19 51 26.2 -0.1**
**FALS False Pass 80.76 324** P **P** **19 51 18.8 -0.9**
baz=88
**G15K Niukluk 80.84 335** P **P** **19 51 19.7 -0.3**
baz=89
**F15K North Star Dit 81.08 335** P **P** **19 51 21.0 -0.3**
baz=89
**RETH Rethem/Aller, 81.14 38** *e*P **P** **19 51 22.8 +1.1**
comp=Z,254nm,1.3s,baz=275,slow=5.3
RETH *ep*P **sP** **19 51 29.1 +0.6**
**K13K Kusilvak Mount 81.18 331** IAMs_20 IAMs_20 20 31 24.1
comp=Z,875nm,20.0s
**K13K Kusilvak Mount 81.18 331** P **P** **19 51 21.3 -0.5**
baz=88,SNR=8.0
**STU Stuttgart 81.23 42** P **P** **19 51 22.4 0.0**
STU IAmb IAmb 19 51 30.6
comp=Z,105nm,1.1s
STU IAMs_20 IAMs_20 20 24 38.3
comp=Z,873nm,20.0s
**STU Stuttgart 81.23 42** P **P** **19 51 22.4 0.0**
STU pmax pmax
comp=Z,105nm,1.1s
STU MLR MLR
comp=Z,900nm,20.0s
**STU Stuttgart 81.23 42** *e*P **P** **19 51 22.7 +0.3**
comp=Z,290nm,1.1s,baz=275,slow=5.3
STU *ep*P **sP** **19 51 29.5 +0.3**
**C16K Lisburne Hills 81.30 338** P **P** **19 51 21.5 -0.8**
baz=88
**ANM Nome 81.42 334** IAMs_20 IAMs_20 20 30 55.1
comp=Z,1µm,18.0s
**ANM Nome 81.42 334** P **P** **19 51 22.0 -1.1**
baz=88
**GTTG Gottingen 81.57 39** *e*P **P** **19 51 24.9 +0.7**
comp=Z,99nm,1.1s,baz=275,slow=5.3
GTTG *ep*P **sP** **19 51 31.5 +0.6**
**NRDL Niedersach Rie 81.61 38** *e*P **P** **19 51 25.3 +1.1**
comp=Z,143nm,1.3s,baz=275,slow=5.3
NRDL *ep*P **sP** **19 51 31.7 +0.7**
**NAO01 NORSAR Array S 81.61 30** P **P** **19 51 24.4 +0.3**
NAO01 IAmb IAmb 19 51 32.7
comp=Z,84nm,1.1s
**UBBA Unterbreizbach 81.64 40** *e*P **P** **19 51 25.2 +0.8**
comp=Z,131nm,1.8s,baz=275,slow=5.3
UBBA *ep*P **sP** **19 51 31.6 +0.5**
**BSEG Bad Segeberg 81.65 37** *e*P **P** **19 51 25.0 +0.6**
comp=Z,86nm,1.3s,baz=275,slow=5.3
BSEG *ep*P **sP** **19 51 31.4 +0.2**
**MSSA Maissana 81.73 46** P **P** **19 51 24.7 -0.5**
MSSA IAmb IAmb 19 51 32.6
comp=Z,49nm,1.0s
**NB2 NORSAR Subarra 81.76 29** P **P** **19 51 25.9 +0.9**
comp=Z,136nm,1.4s,baz=273,slow=5.3
**NB2 NORSAR Subarra 81.76 29** P **P** **19 51 25.9 +0.9**
baz=273,slow=5.3
**NB2 NORSAR Subarra 81.76 29** *e*P **P** **19 51 26.2 +1.2**
**NOA NORSAR Array B 81.76 29** P **P** **19 51 25.5 +0.5**
comp=Z,4.3nm,0.9s,baz=273,slow=5.4,SNR=8.4
NOA LR LR 20 25 50.6
comp=Z,542nm,18.9s,baz=275,slow=34
comp=Z,4.3nm,0.9s
**DAVA Damuels 81.78 43** *i* P **P** **19 51 26.8 +1.2**
comp=Z,50nm,0.9s,SNR=28
**F14K Arctic Creek 81.79 335** P **P** **19 51 23.8 -1.2**
baz=87
**CLZ Clausthal 81.81 39** *e*P **P** **19 51 26.3 +0.8**
comp=Z,139nm,1.2s,baz=275,slow=5.3
CLZ *ep*P **sP** **19 51 32.7 +0.5**
**DAVOX Davos/Dischmat 81.81 44** LR LR 20 27 05.1
comp=Z,519nm,18.2s,baz=280,slow=35
**UBR Ueberruh 81.91 43** *e*P **P** **19 51 26.7 +0.6**
comp=Z,99nm,1.3s,baz=275,slow=5.3
**ASSE Asse, Remlinge 81.98 38** *e*P **P** **19 51 26.8 +0.7**
baz=275,slow=5.3
**VSL Villasalto 81.99 51** P **P** **19 51 27.2 +0.6**
**M11K Mekoryuk 82.00 330** P **P** **19 51 25.1 -1.1**
baz=86
**FUORN Ofenpass-Fuorn 82.09 44** P **P** **19 51 27.5 +0.1**
FUORN IAmb IAmb 19 51 36.0
comp=Z,89nm,1.1s
FUORN IAMs_20 IAMs_20 20 30 58.2
comp=Z,796nm,18.0s
**HSPB Hornsund (broa 82.25 13** *e*P P 19 51 36.5 +9.3
**PRMA PARMA 82.27 46** IAMs_20 IAMs_20 20 26 12.1
comp=Z,871nm,22.0s
**KEST Kesra 82.28 55** P **P** **19 51 28.4 0.0**
KEST IAmb IAmb 19 51 37.1
comp=Z,128nm,1.4s
**KEST Kesra 82.28 55** P **P** **19 51 28.5 +0.1**
comp=Z,19nm,0.9s,baz=238,slow=3.6,SNR=21
comp=Z,19nm,0.9s
**GORT1 Trebel 82.30 38** *e*P **P** **19 51 28.8 +0.9**
comp=Z,164nm,1.5s,baz=275,slow=5.3
GORT1 *ep*P **sP** **19 51 34.8 +0.1**
**FLTG Flechtingen 82.31 38** *e*P **P** **19 51 28.2 +0.3**
comp=Z,113nm,1.1s,baz=275,slow=5.3
FLTG *ep*P **sP** **19 51 35.1 +0.4**
**SPITS Spitsbergen Ar 82.33 12** P **P** **19 51 28.1 +0.4**
comp=Z,10nm,0.9s,baz=236,slow=12,SNR=2.0
SPITS LR LR 20 30 03.1
comp=Z,2µm,18.7s,baz=244,slow=37
comp=Z,10nm,0.9s
**RETA Reutte 82.36 43** *i* P **P** **19 51 29.7 +1.1**
comp=Z,21nm,1.0s,SNR=10.0
**FETA Feichten 82.38 44** *i* P **P** **19 51 29.8 +1.1**
comp=Z,40nm,0.9s,SNR=34
**GRFO Grafenberg 82.50 41** P **P** **19 51 29.3 +0.2**
GRFO IAmb IAmb 19 51 37.5
comp=Z,78nm,1.1s
GRFO IAMs_20 IAMs_20 20 26 10.6
comp=Z,1µm,20.0s
**GRFO Grafenberg 82.50 41** P **P** **19 51 29.3 +0.2**
GRFO pmax pmax

comp=Z,78nm,1.1s
GRFO MLR MLR

comp=Z,1µm,20.0s
**GRA1 Grafenberg Arr 82.50 41** P **P** **19 51 29.7 +0.6**
GRA1 IAmb IAmb 19 51 37.6

comp=Z,80nm,1.1s
GRA1 IAMs_20 IAMs_20 20 26 10.6

comp=Z,1µm,20.0s
**GRF Grafenberg Arr 82.50 41** P **P** **19 51 29.7 +0.6**
GRF pmax pmax

comp=Z,80nm,1.1s
GRF MLR MLR

comp=Z,1µm,20.0s
**GRF Grafenberg Arr 82.50 41** *e*P **P** **19 51 29.8 +0.6**
comp=Z,92nm,1.1s,baz=275,slow=5.3
GRF *e*pP **sP** **19 51 36.4 +0.6**
GRF *e*L L 20 26 21.9

comp=Z,948nm,20.5s
**MOTA Moosalm 82.61 43** *i* P **P** **19 51 30.3 +0.4**
comp=Z,11nm,0.9s
**UNV Unalaska Valle 82.62 323** P **P** **19 51 28.5 -1.1**
baz=85,SNR=5.9
**FUR Furstenfeldbru 82.66 42** *e*P **P** **19 51 30.6 +0.6**
comp=Z,111nm,1.2s,baz=275,slow=5.3
FUR *e*pP **sP** **19 51 37.0 +0.3**
**MOX Moxa 82.67 40** *e*P **P** **19 51 30.6 +0.6**
comp=Z,65nm,1.3s,baz=275,slow=5.3
MOX *e*pP **sP** **19 51 37.1 +0.4**
MOX *e*L L 20 24 04.2

comp=Z,900nm,20.9s
**SQTA Sankt Quirin 82.69 43** *i* P **P** **19 51 31.1 +0.8**
comp=Z,22nm,0.9s,SNR=14
**NEUB Neuenburg 82.73 39** *e*P **P** **19 51 30.9 +0.7**
comp=Z,112nm,1.2s,baz=275,slow=5.3
NEUB *e*pP **sP** **19 51 37.6 +0.7**
**ZCCA Zocca 82.77 46** P **P** **19 51 30.8 +0.1**
ZCCA IAmb IAmb 19 51 39.1

comp=Z,89nm,1.0s
**WATA Walderalm 82.93 43** *i* P **P** **19 51 32.1 +0.6**
comp=Z,6.0nm,0.9s,SNR=15
**WTTA Wattenberg 82.98 43** *i* P **P** **19 51 32.7 +0.9**
comp=Z,9.5nm,0.9s,SNR=11
**PLN Plauen 83.03 40** *e*P **P** **19 51 32.5 +0.6**
comp=Z,85nm,1.1s,baz=275,slow=5.3
PLN *e*pP **sP** **19 51 39.3 +0.7**
**HFS Hagfors 83.04 30** P **P** **19 51 31.9 +0.3**
comp=Z,3.0nm,0.8s,baz=236,slow=4.9,SNR=2.6
HFS LR LR 20 25 10.5

comp=Z,662nm,19.2s,baz=272,slow=33
comp=Z,3.0nm,0.8s
**MANZ Manzenberg 83.05 41** *e*P **P** **19 51 32.8 +0.9**
comp=Z,24nm,1.3s,baz=275,slow=5.3
MANZ *e*pP **sP** **19 51 39.5 +0.7**
**CTI Castel Tesino 83.09 45** IAMs_20 IAMs_20 20 30 35.9
comp=Z,912nm,19.0s
**ROTZ Rotzenmuhle 83.13 41** *e*P **P** **19 51 33.4 +1.0**
comp=Z,23nm,1.4s,baz=275,slow=5.3
ROTZ *e*pP **sP** **19 51 39.9 +0.7**
**TEOL Teolo 83.17 45** P **P** **19 51 31.9 -0.8**
TEOL IAmb IAmb 19 51 40.7

comp=Z,88nm,1.0s
**TANN Tannenbergstha 83.23 40** *e*P **P** **19 51 33.7 +0.7**
comp=Z,99nm,1.2s,baz=275,slow=5.3
TANN *e*pP **sP** **19 51 40.4 +0.7**
**RGN Rugen 83.36 36** P **P** **19 51 33.6 +0.2**
RGN IAMs_20 IAMs_20 20 26 22.8

comp=Z,1µm,21.0s
**RGN Rugen 83.36 36** *e*P **P** **19 51 34.5 +1.1**
comp=Z,139nm,1.0s,baz=275,slow=5.3
RGN *e*pP **sP** **19 51 41.2 +1.1**
**CLL Collm 83.49 39** P **P** **19 51 34.9 +0.8**
CLL IAmb IAmb 19 51 42.6

comp=Z,75nm,1.2s
CLL IAMs_20 IAMs_20 20 30 50.5

comp=Z,797nm,18.0s
**CLL Collm 83.49 39** P **P** **19 51 34.9 +0.8**
CLL pmax pmax

comp=Z,75nm,1.2s
CLL MLR MLR

comp=Z,800nm,18.0s
**CLL Collm 83.49 39** P **P** **19 51 35.2 +1.1**
comp=Z,61nm,1.3s,comp=Z,942nm
**CLL Collm 83.49 39** *e*P **P** **19 51 34.8 +0.6**
comp=Z,94nm,1.2s,baz=275,slow=5.3
CLL *e*pP **sP** **19 51 41.4 +0.5**
**TATN Tataouine 83.56 58** P **P** **19 51 35.0 -0.1**
**ABTA Abfaltersbach 83.62 44** *i* P **P** **19 51 35.9 +0.9**
comp=Z,18nm,0.9s,SNR=14
**WET Wettzell 83.62 41** *e*P **P** **19 51 35.8 +0.8**
comp=Z,116nm,1.2s,baz=275,slow=5.3
WET *e*pP **sP** **19 51 42.4 +0.7**
**LESA Schwarzleotal 83.67 43** *i* P **P** **19 51 36.0 +0.7**
comp=Z,18nm,1.0s
**RJOB Jochberg 83.71 43** *e*P **P** **19 51 36.0 +0.5**
comp=Z,108nm,1.6s,baz=275,slow=5.3
RJOB *e*pP **sP** **19 51 42.4 +0.2**
**STAL STALIGIAL 83.81 44** IAMs_20 IAMs_20 20 32 46.7
comp=Z,1µm,18.0s
**HSKC Hora Svate Kat 83.83 40** AMS AMS 20 31 10.0
comp=Z,1µm,18.5s
**RUE Ruedersdorf 83.85 38** *e*P **P** **19 51 36.4 +0.5**
**RUE Ruedersdorf 83.85 38** *e*P **P** **19 51 36.6 +0.7**
comp=Z,176nm,1.3s,baz=275,slow=5.3
RUE *e*pP **sP** **19 51 43.5 +0.8**
**KHC Kasperske Hory 84.08 41** P **P** **19 51 37.9 +0.5**
KHC IAmb IAmb 19 51 46.0

comp=Z,87nm,1.1s
KHC IAMs_20 IAMs_20 20 27 19.6

comp=Z,848nm,20.0s
**KHC Kasperske Hory 84.08 41** *e*P **P** **19 51 38.6 +1.3**
KHC *e*pP **sP** **19 51 44.6 +0.5**
KHC *e*SKS **SKSac** **20 01 59.9 -0.4**
KHC AMS AMS 20 27 00.0

comp=Z,900nm,18.2s
**KHC Kasperske Hory 84.08 41** *i* P **P** **19 51 38.3 +0.9**
KHC pmax pmax

comp=Z,47nm,1.0s
**KHC Kasperske Hory 84.08 41** P **P** **19 51 38.2 +0.9**
comp=Z,81nm,1.3s,comp=Z,1µm
**NIKH Nikolski High 84.10 323** P **P** **19 51 35.5 -1.7**
baz=83
**CESX Cesi 84.11 48** IAMs_20 IAMs_20 20 26 06.2
comp=Z,756nm,21.0s
**BRG Berggiesshubel 84.12 40** *i* P **P** **19 51 38.9 +1.5**
BRG Amp 19 51 39.8

comp=Z,16nm,1.0s
BRG ⇑PP **sP** **19 51 45.1 +1.0**
BRG Amp 19 51 46.1

comp=Z,66nm,1.1s
**BRG Berggiesshubel 84.12 40** S **S** **20 02 02.0 +0.2**
**BRG Berggiesshubel 84.12 40** SS SS 20 07 33.0 +2.7
BRG Amp 20 20 31.0

comp=N,0.3nm,14.8s
BRG Amp 20 20 41.0

comp=E,0.6nm,17.0s
BRG Amp 20 20 41.0

comp=Z,0.9nm,17.5s
**BRG Berggiesshubel 84.12 40** *e*P **P** **19 51 38.2 +0.8**
comp=Z,91nm,1.2s,baz=275,slow=5.3
BRG *e*pP **sP** **19 51 45.0 +0.8**
**KBA Koelnbreinsper 84.15 43** *i* P **P** **19 51 38.7 +0.8**
comp=Z,32nm,1.0s,SNR=22
**GEC2 GERESS Array S 84.19 42** P **P** **19 51 38.4 +0.5**
GEC2 IAmb IAmb 19 51 46.3

comp=Z,83nm,1.1s
**GEC2 GERESS Array S 84.19 42** *e*P **P** **19 51 38.5 +0.5**
comp=Z,104nm,1.2s,baz=275,slow=5.3
GEC2 *e*pP **sP** **19 51 45.2 +0.5**
**GERES GERESS Array B 84.19 42** P **P** **19 51 38.5 +0.5**
comp=Z,13nm,0.9s,baz=195,slow=11,SNR=66
GERES LR LR 20 27 05.2

comp=Z,745nm,19.2s,baz=293,slow=34
comp=Z,13nm,0.9s
**GAMB Gambell 84.25 334** P **P** **19 51 36.4 -1.3**
baz=82
**RICC Richard 84.26 40** *e*P **P** **19 51 40.0 +1.9**
RICC *e*pP **sP** **19 51 45.4 +0.5**
RICC AMS AMS 20 32 20.0

comp=Z,1µm,17.5s
**BIOA Bad Ischl, Aus 84.28 43** *i* P **P** **19 51 39.5 +1.1**
comp=Z,39nm,1.3s,SNR=18
**PRED Cave del Predi 84.38 44** P **P** **19 51 38.5 -0.4**
**SPIA Saint Paul Isl 84.40 327** P **P** **19 51 37.1 -1.6**
baz=83
**MYKA Terra Mystica 84.41 44** *i* P **P** **19 51 39.9 +0.8**
comp=Z,23nm,1.0s,SNR=13

**FDMO Fiordimonte 84.43 47** IAMs_20 IAMs_20 20 26 21.6
comp=Z,1µm,21.0s
**ZVC Zvikov 84.45 41** *e*P **P** **19 51 40.4 +1.3**
ZVC *e*SKS **SKSac** **20 02 02.0 -0.6**
ZVC AMS AMS 20 31 30.0

comp=Z,1µm,15.6s
**SABO M.te Sabotino 84.45 44** IAMs_20 IAMs_20 20 33 43.4
comp=Z,824nm,18.0s
**PRA Prague 84.53 40** *e*SKS **SKSac** **20 02 03.6 +0.6**
PRA AMS AMS 20 31 30.0

comp=Z,1µm,17.1s
**PVCC Panska Ves 84.56 40** *e*P **P** **19 51 41.2 +1.6**
PVCC *e*pP **sP** **19 51 47.1 +0.7**
PVCC AMS AMS 20 24 30.0

comp=Z,900nm,19.4s
**PVCC Panska Ves 84.56 40** *e*P **P** **19 51 41.2 +1.6**
PVCC *e**PP **sP** **19 51 47.1 +0.7**
PVCC MLR MLR

comp=Z,900nm,19.4s
**CKRC Cesky Krumlov 84.60 42** *e*P **P** **19 51 41.0 +1.1**
CKRC *e*SKS **SKSac** **20 02 02.8 -0.8**
CKRC AMS AMS 20 27 20.0

comp=Z,800nm,19.6s
**CKRC Cesky Krumlov 84.60 42** *e*P **P** **19 51 41.0 +1.1**
CKRC *e* 20 02 02.8
CKRC MLR MLR

comp=Z,800nm,19.6s
**GUMA Gualdo di Mace 84.61 47** IAMs_20 IAMs_20 20 26 37.3
comp=Z,1µm,21.0s
**PRU Pruhonice 84.61 40** *e*P **P** **19 51 41.3 +1.4**
PRU *e*pP **sP** **19 51 47.4 +0.7**
PRU *e*SKS **SKSac** **20 02 03.2 -0.4**
PRU AMS AMS 20 31 40.0

comp=Z,1µm,17.8s
**PRU Pruhonice 84.61 40** *e*P **P** **19 51 41.3 +1.4**
PRU *e**PP **sP** **19 51 47.4 +0.7**
PRU *e* 20 02 03.2
PRU MLR MLR

comp=Z,1µm,17.8s
**MOA Molln 84.69 43** *i* P **P** **19 51 40.9 +0.5**
comp=Z,17nm,0.9s,SNR=17
**CAMP Campotosto 84.72 48** IAMs_20 IAMs_20 20 26 37.4
comp=Z,662nm,20.0s
**GOPC GO Pecny, Ondr 84.77 40** *e*SKS **SKSac** **20 02 05.9 +1.2**
GOPC AMS AMS 20 31 30.0

comp=Z,1µm,17.7s
**JAVS Javornik 84.79 45** *i* P **P** **19 51 42.1 +1.1**
JAVS *e* 19 51 48.2
**SKDS Skadanscina 84.79 45**⇑ *i*P **P** **19 51 41.0 0.0**
**OBKA Obir 85.04 44** *i* P **P** **19 51 43.4 +1.1**
comp=Z,13nm,1.0s,SNR=11
**OBKA Obir 85.04 44** *e*P **P** **19 51 42.5 +0.2**
**CEY Cerknica 85.06 45** *e*P **P** **19 51 43.5 +1.2**
CEY *i* 19 51 49.6
**CEY Cerknica 85.06 45**⇑ *i*P **P** **19 51 43.4 +1.2**
**LJU Ljubljana 85.09 44** *i* P **P** **19 51 43.5 +1.1**
LJU *e* 19 51 49.6
**CLTB Caltabellotta 85.18 53** P **P** **19 51 43.0 -0.1**
**TREC Trest 85.31 41** *e*P **P** **19 51 44.8 +1.3**
TREC *e*SKS **SKSac** **20 02 08.4 +0.3**
TREC AMS AMS 20 33 50.0

comp=Z,900nm,16.8s
**TREC Trest 85.31 41** *e*P **P** **19 51 44.8 +1.3**
TREC *e* 20 02 08.4
TREC MLR MLR

comp=Z,900nm,16.8s
**SOKA Soboth 85.35 44** *i* P **P** **19 51 44.3 +0.5**
comp=Z,17nm,0.8s,SNR=25
**UPC Upice 85.47 40** *e*P **P** **19 51 45.6 +1.3**
UPC *e*pP **sP** **19 51 51.8 +0.8**
UPC AMS AMS 20 33 00.0

comp=Z,1µm,18.4s
**UPC Upice 85.47 40** *e*P **P** **19 51 45.6 +1.3**
UPC *e**PP **sP** **19 51 51.8 +0.8**
UPC MLR MLR

comp=Z,1µm,18.4s
**CHVC Chvalec 85.49 40** *e*P **P** **19 51 45.8 +1.4**
CHVC *e*SKS **SKSac** **20 02 07.1 -2.1**
CHVC AMS AMS 20 33 00.0

comp=Z,800nm,19.0s
**CHVC Chvalec 85.49 40** *e*P **P** **19 51 45.8 +1.4**
CHVC *e* 20 02 07.1
CHVC MLR MLR

comp=Z,800nm,19.0s
**OSTC Ostas 85.60 40** *e*P **P** **19 51 46.3 +1.4**
OSTC *e*pP **sP** **19 51 52.2 +0.5**
OSTC *e*SKS **SKSac** **20 02 10.0 +0.1**
OSTC AMS AMS 20 33 10.0

comp=Z,800nm,18.4s
**OSTC Ostas 85.60 40** *e*P **P** **19 51 46.3 +1.4**
OSTC *e**PP **sP** **19 51 52.2 +0.5**
OSTC *e* 20 02 10.0
OSTC MLR MLR

comp=Z,800nm,18.4s
**KSP Ksiaz 85.60 39** *e*P **P** **19 51 46.7 +1.8**
KSP *e*S **S** **20 02 17.6 +1.1**
**KSP Ksiaz 85.60 39** P **P** **19 51 46.1 +1.2**
comp=Z,61nm,1.2s,comp=Z,978nm
**ARSA Arzberg 85.61 43** *i* P **P** **19 51 45.6 +0.6**
comp=Z,16nm,0.9s,SNR=13
**BOJS Bojanci 85.66 45** *i* P **P** **19 51 46.1 +0.8**
**BOJS Bojanci 85.66 45**⇑ *i*P **P** **19 51 46.1 +0.8**
**DPC Dobruska-Polom 85.69 40** *e*P **P** **19 51 46.7 +1.3**
DPC *e*pP **sP** **19 51 53.3 +1.1**
DPC *e*SKS **SKSac** **20 02 10.8 +0.2**
DPC AMS AMS 20 31 50.0

comp=Z,900nm,16.6s
**DPC Dobruska-Polom 85.69 40** *e*P **P** **19 51 46.7 +1.3**
DPC *e**PP **sP** **19 51 53.3 +1.1**
DPC *e* 20 02 10.8
DPC MLR MLR

comp=Z,900nm,16.6s
**DPC Dobruska-Polom 85.69 40** P **P** **19 51 46.6 +1.2**
comp=Z,70nm,1.0s,comp=Z,972nm
**CONA Conrad Observa 85.74 42** *i* P **P** **19 51 46.7 +1.0**
comp=Z,20nm,0.9s,SNR=18
**GKP Gorka Klasztor 85.82 37** *e*P **P** **19 51 50.0 +4.1**
**GKP Gorka Klasztor 85.82 37** *e*P **P** **19 51 47.0 +1.1**
**KRUC Moravsky 85.93 41** *e*P **P** **19 51 47.4 +0.9**
KRUC *e* 19 51 53.8
**VRAC Vranov 86.02 41** *e*P **P** **19 51 48.1 +1.1**
VRAC *e* 19 51 54.4
**VRAC Vranov 86.02 41** LR LR 20 28 22.0
comp=Z,594nm,18.4s,baz=280,slow=34
**VRAC Vranov 86.02 41** ⇑P **P** **19 51 48.5 +1.5**
**VRAC Vranov 86.02 41** ⇑P **P** **19 51 48.5 +1.5**
**KRLC Kraliky 86.03 40** *e*SKS **SKSac** **20 02 12.1 -0.6**
KRLC AMS AMS 20 33 40.0

comp=Z,1µm,18.8s
**RONA Rosalia, Austr 86.06 43** *i* P **P** **19 51 48.3 +1.0**
comp=Z,19nm,0.9s,SNR=14
**VAE Valguarnera 86.13 53** LR LR 20 26 06.9
comp=Z,753nm,21.8s,baz=320,slow=33
**RAR Rarotonga 86.17 248** LR LR 20 23 40.5
comp=Z,553nm,18.3s,baz=90,slow=31
**ARCES ARCESS Array B 86.38 20** P **P** **19 51 48.6 +0.3**
**ARCES ARCESS Array B 86.38 20** P **P** **19 51 48.3 -0.1**
comp=Z,3.6nm,0.7s,baz=286,slow=4.4,SNR=21
ARCES LR LR 20 29 59.8

comp=Z,255nm,18.1s,baz=284,slow=35
comp=Z,3.6nm,0.7s
**ARCES ARCESS Array B 86.38 20** P **P** **19 51 48.6 +0.3**
ARCES pmax pmax

comp=Z,25nm,1.2s
**ZST Bratislava 86.52 42** *e*P **P** **19 51 51.1 +1.6**
ZST *e* 19 51 57.0
ZST pmax pmax

comp=Z,66nm,0.8s
**ZST Bratislava 86.52 42** *e*P **P** **19 51 51.1 +1.6**
ZST *e* 19 51 57.0
**SGRT San Giovanni R 86.55 48** P **P** **19 51 49.0 -0.9**
SGRT IAmb IAmb 19 51 56.8

comp=Z,66nm,0.9s
**MORC Moravsky Berou 86.56 40** P **P** **19 51 49.4 -0.3**
MORC IAmb IAmb 19 51 58.8

comp=Z,121nm,1.6s
**MORC Moravsky Berou 86.56 40** *e*P **P** **19 51 50.9 +1.2**
MORC *e* 19 51 57.3
**MORC Moravsky Berou 86.56 40** ⇓P **P** **19 51 51.7 +2.0**
**MORC Moravsky Berou 86.56 40** P **P** **19 51 49.4 -0.3**
MORC pmax pmax

comp=Z,121nm,1.6s
MORC MLR MLR

comp=Z,1µm,18.0s

**SMOL Smolenice 86.69 42** *e*P **P** 19 51 58.5 +8.2
**A050A Klekovaca 86.71 46**⇑ *i*P **P** **19 51 51.6 +1.0**
**JAVC Velka Javorina 86.79 41** *e*P **P** **19 51 52.9 +2.0**
JAVC *e* 19 51 59.4
**MAUC Maruska 86.81 41** *e*P **P** **19 51 53.1 +2.2**
MAUC *e*pP **sP** **19 51 58.9 +1.2**
MAUC AMS AMS 20 33 00.0

comp=Z,2µm,20.4s
**KEV Kevo 86.83 20** P **P** **19 51 50.8 +0.3**
KEV IAmb IAmb 19 52 04.8

comp=Z,48nm,1.2s
**KEV Kevo 86.83 20** P **P** **19 51 50.8 +0.3**
KEV pmax pmax

comp=Z,48nm,1.2s
**VAF Ylistaro 86.83 27** *e*P **P** **19 51 52.2 +1.6**
**RAF Rauma 86.85 29** *e*P **P** **19 51 51.2 +0.5**
**A051A Mrakovica 86.89 45**⇑ *i*P **P** **19 51 52.7 +1.3**
**OKC Ostrava-Krasne 86.94 40** *e*P **P** **19 51 53.9 +2.5**
OKC *e*pP **sP** **19 51 59.8 +1.6**
OKC AMS AMS 20 33 20.0

comp=Z,1µm,15.4s
**OKC Ostrava-Krasne 86.94 40** *e*P **P** **19 51 53.9 +2.5**
OKC *e**PP **sP** **19 51 59.8 +1.6**
OKC MLR MLR

comp=Z,1µm,15.4s
**MPLH Magyarpolny 86.98 43** P **P** **19 51 52.2 +0.5**
comp=Z,127nm,1.4s,comp=Z,2µm
**BLY Banja Luka 87.13 45**⇑ *i*P **P** **19 51 53.4 +0.9**
**SRO Srobarova 87.39 42** *e*P **P** **19 51 55.3 +1.6**
SRO *e* 19 52 01.1
SRO pmax pmax

comp=Z,14nm,0.9s
**SRO Srobarova 87.39 42** *e*P **P** **19 51 55.3 +1.6**
SRO *e* 19 52 01.1
**VYHS Vyhne 87.61 41** *e*P **P** **19 51 56.0 +1.2**
VYHS *e* 19 52 02.1
VYHS pmax pmax

comp=Z,17nm,1.1s
**VYHS Vyhne 87.61 41** *e*P **P** **19 51 56.0 +1.2**
VYHS *e* 19 52 02.1
**TIP Timpagrande 87.71 51** P **P** **19 51 54.0 -1.5**
TIP IAmb IAmb 19 52 02.5

comp=Z,50nm,1.1s
TIP IAMs_20 IAMs_20 20 26 53.9

comp=Z,654nm,22.0s
**TIP Timpagrande 87.71 51** ⇓P **P** **19 51 55.3 -0.3**
**STON Ston 87.80 47**⇑ *i*P **P** **19 51 56.3 +0.5**
**MORH Mrgy, Hungar 87.89 44** ⇑P **P** **19 51 57.6 +1.4**
**MORH Mrgy, Hungar 87.89 44** P **P** **19 51 56.7 +0.6**
comp=Z,42nm,1.4s,comp=Z,707nm
**LANS Liptovska Anna 87.90 41** *e*P **P** **19 51 58.9 +2.7**
LANS *e* 19 52 05.3
LANS pmax pmax

comp=Z,11nm,1.0s
**LANS Liptovska Anna 87.90 41** *e*P **P** **19 51 58.9 +2.7**
LANS *e* 19 52 05.3
**OJC Ojcow 87.91 40** *e*P **P** **19 51 57.7 +1.4**
OJC *e*S **S** **20 02 41.0 +2.0**
**OJC Ojcow 87.91 40** P **P** **19 51 56.3 +0.1**
**OJC Ojcow 87.91 40** P **P** **19 51 56.3 +0.1**
OJC pmax pmax

comp=Z,95nm,1.2s
**OJC Ojcow 87.91 40** P **P** **19 51 57.6 +1.4**
comp=Z,73nm,1.4s,comp=Z,920nm
**KEF Keuruu 88.03 27** *e*P **P** **19 51 56.9 +0.5**
**BEL Belsk 88.21 38** *e*P **P** **19 52 00.1 +2.6**
**TREB Trebinje 88.30 47** *e*P **P** **19 51 59.2 +1.0**
**NIE Niedzica 88.39 40** *e*P **P** **19 52 01.0 +2.5**
NIE *e*S **S** **20 02 48.2 +4.6**
**NIE Niedzica 88.39 40** P **P** **19 52 00.3 +1.8**
comp=Z,33nm,1.4s,comp=Z,552nm
**BRY Bratogost 88.41 47**⇑ *i*P **P** **19 52 00.3 +1.4**
**PSZ Piszkesteto 88.42 42** P **P** **19 51 58.5 -0.1**
**PSZ Piszkesteto 88.42 42** P **P** **19 51 58.6 -0.1**
PSZ pmax pmax

comp=Z,163nm,1.7s
PSZ MLR MLR

comp=Z,400nm,21.0s
**HAPS Han Pijesak,Bl 88.49 46**⇑ *i*P **P** **19 51 59.7 +0.5**
**KECS Kecovo 88.69 41** *e*P P 19 52 08.2 +8.3
**FINES FINESS Array B 88.77 28** P **P** **19 51 59.9 0.0**
**FINES FINESS Array B 88.77 28** P **P** **19 52 00.6 +0.7**
comp=Z,4.0nm,0.9s,baz=270,slow=0.8,SNR=4.9
FINES LR LR 20 30 19.9

comp=Z,476nm,18.4s,baz=280,slow=35
comp=Z,4.0nm,0.9s
**TEKS Tekeris 88.81 45**⇑ *i*P **P** **19 52 01.8 +1.2**
**BBLS Lazi&#263i 88.85 46**⇑ *i*P **P** **19 52 01.9 +1.1**
**RUDO Rudo 88.87 46** *e*P **P** **19 51 59.4 -1.5**
**FRGS Fruska Gora 88.89 45**⇑ *i*P **P** **19 52 02.0 +1.1**
**DRME Dracevica, Mon 89.00 48** *e*P **P** **19 52 03.0 +1.5**
**PDG Podgorica 89.01 47**⇑ *i*P **P** **19 52 02.6 +1.1**
**PDG Podgorica 89.01 47** ⇓P **P** **19 52 03.1 +1.6**
**VSVD Vaisvydziai 89.10 33** *e*P **P** **19 52 02.0 +0.4**
**SUW Suwalki 89.15 35** *e*P **P** **19 52 04.1 +2.2**
**SUW Suwalki 89.15 35** P **P** **19 52 01.9 0.0**
SUW IAmb IAmb 19 52 10.1

comp=Z,101nm,1.2s
SUW IAMs_20 IAMs_20 20 29 51.5

comp=Z,667nm,19.0s
**SUW Suwalki 89.15 35** *e*P **P** **19 52 01.8 -0.1**
**SUW Suwalki 89.15 35** P **P** **19 52 01.9 0.0**
SUW pmax pmax

comp=Z,101nm,1.2s
SUW MLR MLR

comp=Z,700nm,19.0s
**PABE Paberze 89.24 34** *e*P **P** **19 52 02.6 +0.3**
**CRVS Cervenica-Dubn 89.24 41** *e*P **P** **19 52 04.5 +2.0**
CRVS *e* 19 52 10.7
CRVS pmax pmax

comp=Z,29nm,1.2s
**CRVS Cervenica-Dubn 89.24 41** *e*P **P** **19 52 04.5 +2.0**
CRVS *e* 19 52 10.7
**ARBE Arbavere 89.27 30** *e*P **P** **19 52 03.4 +1.0**
**SJES Sjenica 89.37 46**⇑ *i*P **P** **19 52 04.6 +1.2**
**BELA Belgrano 2 89.57 172** P **P** **19 52 03.3 0.0**
**KOLS Kolonicke sedl 89.75 41** *e*P **P** **19 52 07.2 +2.3**
KOLS *e* 19 52 13.2
KOLS pmax pmax

comp=Z,9.0nm,0.9s
**KOLS Kolonicke sedl 89.75 41** *e*P **P** **19 52 07.2 +2.3**
KOLS *e* 19 52 13.2
**KWP Kalwaria Pacla 89.88 40** *e*P **P** **19 52 07.7 +2.3**
**KWP Kalwaria Pacla 89.88 40** P **P** **19 52 06.4 +0.9**
KWP IAmb IAmb 19 52 15.2

comp=Z,90nm,1.2s
KWP IAMs_20 IAMs_20 20 30 43.1

comp=Z,862nm,20.0s
**KWP Kalwaria Pacla 89.88 40** P **P** **19 52 06.4 +0.9**
KWP pmax pmax

comp=Z,90nm,1.2s
KWP MLR MLR

comp=Z,900nm,20.0s
**VSU Vasula 89.92 31** *i* P **P** **19 52 04.9 -0.5**
VSU pmax pmax

comp=Z,21nm,1.1s
**KEK Kerkira 89.93 50** P P 19 52 12.9 +7.0
**SIRR Siria 89.93 43** ⇑P **P** **19 52 07.5 +1.7**
**BZS Buzias 90.04 44** ⇓P **P** **19 52 07.9 +1.6**
**BZS Buzias 90.04 44** P **P** **19 52 07.7 +1.4**
**LVZ Lovozero 90.07 21** *i* P **P** **19 52 06.3 +0.3**
LVZ pmax pmax

comp=Z,8.0nm,1.0s
LVZ MLR MLR

comp=Z,509nm,15.0s
**BERU Beregovo 90.15 41** P **P** **19 52 08.3 +1.6**
**MDVR Moldovita 90.29 45** ⇑P **P** **19 52 07.3 -0.2**
**SURR Surduc 90.36 44** ⇓P **P** **19 52 09.8 +2.1**
**IGT Igoumenitsa 90.37 50** P P 19 52 15.2 +7.2
**BRIU Brid 90.37 41** P **P** **19 52 08.7 +1.0**
**SHIU Shidnytsya 90.39 40** P **P** **19 52 10.3 +2.4**
**OHR Ohrid 90.40 48** *i* P **P** **19 52 10.8 +2.7**
**ISAL Salakas 90.40 34** *e*P **P** **19 52 08.8 +1.1**
**KBN Korca 90.49 49** P **P** **19 52 08.9 +0.3**
**KBN Korca 90.49 49** P P 19 52 16.9 +8.3
**KBN Korca 90.49 49** P **P** **19 52 08.9 +0.3**
KBN pmax pmax

comp=Z,136nm,1.1s
KBN MLR MLR

comp=Z,400nm,19.0s
**IIGN Ignalina 90.52 34** *e*P **P** **19 52 09.7 +1.4**
**DRGR 90.53 43** ⇓P **P** **19 52 10.1 +1.5**
**DRGR 90.53 43** P **P** **19 52 09.8 +1.2**

**BOVS Bovan 90.53 46** ⇓P **P** **19 52 09.5 +0.9**
**JOF Joensuu 90.64 26** *e*P **P** **19 52 09.1 +0.4**
**LVV L'vov 90.67 39** *e*P **P** **19 52 10.7 +1.6**
LVV *e* 20 02 35.8
LVV *e*S **S** **20 03 03.9 -0.8**
comp=Z,72nm,1.0s
**MORS Morshin 90.75 40** P **P** **19 52 11.0 +1.5**
**BMR Baia Mare 90.84 42** ⇑P **P** **19 52 12.1 +2.1**
**BMR Baia Mare 90.84 42** ⇑P **P** **19 52 12.1 +2.1**
**GZR Gura Zlata 90.89 44** ⇓P **P** **19 52 12.1 +1.8**
**GZR Gura Zlata 90.89 44** ⇓P **P** **19 52 12.1 +1.8**
**FNA Florina 90.90 49** P **P** **19 52 10.7 +0.2**
FNA IAmb IAmb 19 52 19.3
comp=Z,72nm,1.0s
**FNA Florina 90.90 49** P **P** **19 52 11.6 +1.1**
**FNA Florina 90.90 49** P **P** **19 52 10.7 +0.2**
FNA pmax pmax
comp=Z,72nm,1.0s
FNA MLR MLR
comp=Z,300nm,20.0s
**VALR Valaam 91.00 27** *i* P **P** **19 52 08.3 -2.0**
VALR pmax pmax
comp=Z,35nm,0.7s
VALR MLR MLR
comp=Z,262nm,14.0s
**VNA3 Neumayer Olymp 91.13 163** ⇑P **P** **19 52 10.6 -0.1**
comp=Z,22nm,0.9s
VNA3 ⇑PP **PP** **19 55 42.1 -5.4**
comp=Z,2.7nm,0.9s
**CJR Cluj-Napoca 91.14 43** ⇓P **P** **19 52 13.7 +2.2**
**CJR Cluj-Napoca 91.14 43** ⇓P **P** **19 52 13.7 +2.2**
**RAKU Rahkiv 91.19 41** P **P** **19 52 11.5 -0.1**
**STNU Starunia 91.24 40** P **P** **19 52 13.6 +1.8**
**VNA1 Neumayer--Stat 91.32 162** ⇑P **P** **19 52 12.1 +0.5**
comp=Z,61nm,1.2s
VNA1 ⇑PP PP 19 55 40.9 -8.1
comp=Z,3.2nm,1.2s
**RNPP8 Varash 91.40 38** P **P** **19 52 13.8 +1.4**
**RNPP9 Sopachiv 91.40 38** P **P** **19 52 13.8 +1.4**
**PVO Paravola 91.47 51** P P 19 52 20.9 +7.8
**BILL Bilibino 91.55 340** IAMs_20 IAMs_20 20 37 33.2
comp=Z,1µm,20.0s
**BILL Bilibino 91.55 340** *d i*P **P** **19 52 13.9 +1.1**
BILL *e* 19 55 49.7
BILL *e*PPP PPP 19 57 52.9
BILL *i*S **SKSac** **20 02 37.6 -7.1**
BILL *i*SS **SS** **20 09 27.7 +10**
BILL *i*SSS SSS 20 12 50.3
BILL pmax pmax
comp=Z,33nm,1.7s
**AMKA Amchitka 91.56 322** P **P** **19 52 13.4 +0.2**
**EVR Evrytania 91.62 50** P P 19 52 23.1 +9.2
**VAY Valandovo 91.66 48** *i*P **P** **19 52 15.7 +1.8**
**MNK Minsk 91.68 34** *e*P **P** **19 52 14.3 +0.6**
**VNA2 Neumayer--Watz 91.69 162** ⇑P **P** **19 52 13.2 -0.1**
VNA2 ⇑PP PP 19 55 43.2 -8.8
comp=Z,2.6nm,1.3s,baz=307,slow=9.0
**KSV Kosov 91.70 41** P **P** **19 52 15.0 +1.0**
**TYRN Tyrnavos 91.77 50** P P 19 52 21.0 +6.6
**ANX Ano Chora 91.77 51** P P 19 52 22.4 +7.8
**EFP Efpalio 91.80 51** P P 19 52 22.1 +7.5
**MAKR Makrakomi, Fth 91.84 50** P P 19 52 22.2 +7.3
**VTS Vitosha 91.85 47** P **P** **19 52 15.2 +0.2**
**KNT Kendrikon 91.94 48** P P 19 52 22.8 +7.6
**KKB Krupnik 91.95 47** P **P** **19 52 15.2 -0.1**
**BUR08 Bucovina Ar. S 91.96 41** P **P** **19 52 16.1 +0.8**
BUR08 IAmb IAmb 19 52 24.5
comp=Z,38nm,1.2s
**BURAR Bucovina Array 91.98 41** P **P** **19 52 16.0 +0.6**
**BURAR Bucovina Array 91.98 41** ⇓P **P** **19 52 17.2 +1.8**
**BURAR Bucovina Array 91.98 41** ⇓P **P** **19 52 17.2 +1.8**
**MPEP Malo Peshtene 92.03 46** P **P** **19 52 16.6 +1.0**
**KLV Kalavryta, Ach 92.07 51** P P 19 52 23.7 +7.7
**ARR Arges 92.16 44** ⇑P **P** **19 52 18.1 +1.8**
**HORT Hortiatis 92.22 49** P P 19 52 24.1 +7.5
**AXAR Agios Charalam 92.30 50** P P 19 52 24.1 +7.2
**VOIR 92.43 44** ⇑P **P** **19 52 19.5 +2.0**
**VOIR 92.43 44** ⇑P **P** **19 52 19.5 +2.0**
**KMPD K-Podol'skiy 92.53 40** P **P** **19 52 17.5 -0.2**
**PGB Panagyurishte 92.55 46** P **P** **19 52 19.3 +1.3**
**NVR Nevrokopi 92.60 48** P P 19 52 26.1 +7.8
**PAIG Paliouri 92.80 49** P P 19 52 26.5 +7.3
**KOKK Kokkinochori, 92.83 48** P P 19 52 26.1 +6.8
**OUR Ouranopolis 92.93 49** P P 19 52 27.2 +7.4
**VILL Villia 92.94 51** P P 19 52 26.8 +6.9
**VLI Veliai 92.97 52** P P 19 52 27.0 +6.9
**MLR Muntele Rosu 93.03 43** P **P** **19 52 20.6 +0.3**
MLR IAMs_20 IAMs_20 20 42 20.1
comp=Z,731nm,19.0s
**MLR Muntele Rosu 93.03 43** LR LR 20 32 55.1
comp=Z,513nm,19.4s,baz=284,slow=35
**MLR Muntele Rosu 93.03 43** ⇓P **P** **19 52 21.9 +1.6**
**MLR Muntele Rosu 93.03 43** P **P** **19 52 20.6 +0.3**
MLR pmax pmax
comp=Z,64nm,1.0s
MLR MLR MLR
comp=Z,700nm,19.0s
**MLR Muntele Rosu 93.03 43** P **P** **19 52 21.1 +0.8**
comp=Z,71nm,1.5s,comp=Z,934nm
**COVR Voineasa-Covas 93.11 43** ⇓P **P** **19 52 23.2 +2.6**
**ADZR Andozero 93.11 24** P P 19 52 26.3 +6.2
ADZR pmax pmax
comp=Z,19nm,1.0s
**KTHA Kythira Island 93.17 53** P P 19 52 27.5 +6.5
**SNAA Sanae 93.33 162** P **P** **19 52 20.8 -0.2**
SNAA IAmb IAmb 19 52 33.2
comp=Z,79nm,1.3s
SNAA IAMs_20 IAMs_20 20 33 11.8
comp=Z,995nm,21.0s
**SNAA Sanae 93.33 162** ⇑P **P** **19 52 20.7 -0.2**
comp=Z,492nm,1.1s
SNAA ⇑PP PP 19 55 46.2 -19
comp=Z,51nm,1.0s
**SNAA Sanae 93.33 162** P **P** **19 52 20.8 -0.2**
comp=Z,10nm,1.0s,baz=276,slow=9.2,SNR=29
SNAA PP **PP** **19 56 04.5 -0.4**
comp=Z,2.5nm,1.1s,baz=301,slow=7.4,SNR=2.3
SNAA LR LR 20 35 35.0
comp=Z,415nm,20.1s,baz=303,slow=36
comp=Z,10nm,1.0s
**SNAA Sanae 93.33 162** *i* P **P** **19 52 20.6 -0.3**
SNAA pmax pmax
comp=Z,19nm,1.3s
SNAA MLR MLR
comp=Z,944nm,22.0s
**ATHU Athens Univers 93.34 51** P P 19 52 28.8 +7.0
**PLOR Plostina 93.40 43** ⇑P **P** **19 52 24.3 +2.4**
**PLOR Plostina 93.40 43** ⇑P **P** **19 52 24.3 +2.4**
**VRI Vrincioaia 93.45 43** ⇓P **P** **19 52 25.5 +3.4**
**VRI Vrincioaia 93.45 43** ⇓P **P** **19 52 25.5 +3.4**
**AK19 Malin Array Si 93.48 38** P **P** **19 52 22.1 0.0**
**KIEV Kiev 93.61 38** IAMs_20 IAMs_20 20 31 26.0
comp=Z,1µm,20.0s
**AKASG Malin Array Be 93.62 38** P **P** **19 52 24.0 +1.3**
comp=Z,0.6nm,0.5s,baz=274,slow=4.4,SNR=1.9
AKASG LR LR 20 33 34.5
comp=Z,826nm,19.0s,baz=290,slow=35
comp=Z,0.6nm,0.5s
**AKBB Malin Array Si 93.62 38** *i* P **P** **19 52 22.6 -0.1**
AKBB pmax pmax
comp=Z,7.0nm,1.0s
**AK02 Malin Array Si 93.62 38** P **P** **19 52 23.2 +0.5**
**SORM Soroca 93.86 40** ⇑P **P** **19 52 24.7 +0.8**
**SORM Soroca 93.86 40** ⇑P **P** **19 52 24.7 +0.8**
**SORM Soroca 93.86 40** P **P** **19 52 24.4 +0.5**
comp=Z,49nm,1.4s,comp=Z,757nm
**SHEM Shemya Is, Ala 94.20 325** LR LR 20 39 31.7
comp=Z,354nm,18.7s,baz=83,slow=38
**KIS Kishinev 94.51 41** *e*P P 19 52 32.0 +5.1
KIS *e*L L 20 26 13.0
KIS LRM MLR 20 38 31.0
comp=Z,300nm,18.0s
**KIS Kishinev 94.51 41** *e*P P 19 52 32.0 +5.1
**MILM Milestii Mici 94.53 41** ⇓ *i*P P 19 52 33.0 +6.0
comp=Z,120nm,1.2s
MILM *e*SKS **SKSac** **20 02 58.0 -4.0**
MILM *e*S **S** **20 03 38.0 -1.2**
MILM *e*L L 20 24 11.0
MILM LRM MLR 20 38 34.0
comp=Z,600nm,19.0s
**MILM Milestii Mici 94.53 41** *d i*P P 19 52 33.0 +6.0
MILM *e*S **S** **20 03 38.0 -1.2**
MILM pmax pmax
comp=Z,120nm,1.3s

**IDI Anoyia 94.85 53** LR LR 20 34 16.4
comp=Z,74nm,19.4s,baz=290,slow=35
**TROLL Troll, Antarti 95.04 162** ⇑P **P** **19 52 29.1 +0.2**
comp=Z,2µm,1.1s
TROLL ⇑PP **PP** **19 56 17.4 -0.9**
comp=Z,327nm,1.1s
**OBN Obninsk 96.16 32** IAMs_20 IAMs_20 20 36 34.3
comp=Z,875nm,20.0s
**OBN Obninsk 96.16 32** LR LR 20 32 57.5
comp=Z,495nm,20.5s,baz=331,slow=34
**OBN Obninsk 96.16 32** ⇑ *e*P **P** **19 52 36.8 +2.6**
OBN *e* 19 56 22.9
OBN pmax pmax
comp=Z,21nm,1.1s
OBN MLR MLR
comp=Z,687nm,20.0s
**MOS Moscow 96.44 31** *e*P **P** **19 52 36.6 +1.1**
MOS *e* 19 56 28.1
MOS pmax pmax
comp=Z,35nm,1.0s
**TSUM Tsumeb 97.36 108** LR LR 20 36 41.2
comp=Z,662nm,18.1s,baz=290,slow=35
**NVL N'lazarevskaya 97.82 160** *e*P Pdif 19 52 42.4 +1.0
NVL *e*S **SKSac** **20 03 22.1 +4.0**
NVL pmax pmax
comp=Z,9.0nm,1.1s
NVL MLR MLR
comp=Z,601nm,18.0s
**TIXI Tiksi 98.00 352** LR LR 20 40 21.0
comp=Z,3µm,18.9s,baz=37,slow=38
**TIXI Tiksi 98.00 352** *i* P **P** **19 52 41.7 -0.5**
TIXI pmax pmax
comp=Z,15nm,0.9s
TIXI MLR MLR
comp=Z,3µm,19.0s
**QSPA South Pole Qui 98.66 180** **P** **19 52 45.2 -0.2**
**QSPA South Pole Qui 98.66 180** IAMs_20 IAMs_20 20 39 16.9
comp=Z,850nm,21.0s
**QSPA South Pole Qui 98.66 180** P **P** **19 52 45.1 -0.2**
comp=Z,8.3nm,1.1s,baz=173,slow=2.7,SNR=11
QSPA PP **PP** **19 56 45.8 -0.4**
comp=Z,2.3nm,1.0s,baz=164,slow=8.3,SNR=3.6
comp=Z,8.3nm,1.1s
**SIM Simferopol' 98.67 42** *e*P Pdif 19 52 46.7 +0.8
SIM *e*S **S** **20 04 07.3 -7.7**
SIM smax smax
comp=N,43nm,13.1s
**SEY Seymchan 99.19 339** *i* P **Pdif** **19 52 47.8 +0.1**
SEY pmax pmax
comp=Z,3.0nm,1.2s
SEY MLR MLR
comp=Z,1µm,25.0s
**ANTO Ankara 99.53 47** IAMs_20 IAMs_20 20 38 12.0
comp=Z,513nm,22.0s
**BR105 Keskin Array S 100.18 47** P **Pdif** **19 52 53.5 +0.6**
comp=Z,9.1nm,1.1s,comp=Z,61nm
**BR131 Keskin Array S 100.20 47** *i* P **Pdif** **19 52 52.4 -0.6**
**BRTR Keskin Array B 100.20 47** Pdif **Pdif** **19 52 51.1 -1.8**
**BRTR Keskin Array B 100.20 47** P **Pdif** **19 52 52.9 -0.1**
comp=Z,2.8nm,0.9s,baz=248,slow=3.9,SNR=14
**BRTR Keskin Array B 100.20 47** *i* P **Pdif** **19 52 53.5 +0.5**
BRTR pmax pmax
comp=Z,3.0nm,0.9s
**BR104 Keskin Array S 100.20 47** P **Pdif** **19 52 53.7 +0.7**
**ANN Anapa 100.91 41** *e*P **Pdif** **19 52 52.0 -3.8**
ANN *e* 20 03 31.3
ANN pmax pmax
comp=Z,85nm,1.6s
ANN MLR MLR
comp=Z,640nm,16.0s
**ELIB Princess Elisa 101.48 162** *d*PP **PP** **19 57 09.7 +2.1**
**ERBR Yeremizino-Bor 102.47 39** *e*P **Pdif** **19 52 58.3 -4.4**
ERBR pmax pmax
comp=Z,8.0nm,0.5s
ERBR MLR MLR
comp=Z,568nm,14.0s
**SOC Sochi 102.91 42** *e*P **Pdif** **19 53 04.2 -0.5**
SOC *i* 19 57 24.2
SOC *e*PPP PPP 19 59 27.7
SOC *e*S **SKSac** **20 03 44.0 -0.3**
SOC *e*PS PS 20 06 24.5 -2.4
SOC *e*SS **SS** **20 11 54.8 -4.1**
SOC *e*SSS SSS 20 15 56.0
SOC MLR MLR
comp=Z,384nm,19.0s
**KIV Kislovodsk 104.67 40** IAMs_20 IAMs_20 20 42 31.7
comp=Z,572nm,19.0s
**KBZ Khabaz 104.91 40** PKKPab **PKKPdf** **20 09 03.5 -3.7**
comp=Z,2.7nm,1.0s,baz=61,slow=5.8,SNR=4.4
**KARS Kars 106.46 43** IAMs_20 IAMs_20 20 42 11.0
comp=Z,830nm,20.0s
**MAK Makhachkala 108.21 39** *e*P **Pdif** **19 53 26.3 -2.0**
MAK *e* 20 04 01.4
MAK *e*PS PS 20 07 20.0 -1.9
MAK pmax pmax
comp=Z,95nm,1.0s
**TOZ Tahuroa Road 108.86 233** IAMs_20 IAMs_20 20 37 03.8
comp=Z,525nm,18.0s
**LODK Lodwar 111.78 83** IAMs_20 IAMs_20 20 48 24.6
comp=Z,748nm,20.0s
**BRVK Borovoye 112.61 21** IAMs_20 IAMs_20 20 54 06.9
comp=Z,760nm,19.0s
**BVAR Borovoye Array 112.67 20** PP **PP** **19 58 29.8 +0.5**
comp=Z,1.9nm,0.9s,baz=324,slow=7.1,SNR=4.2
BVAR PKKPbc **PKKPbc** **20 08 32.4 -0.9**
comp=Z,0.4nm,0.4s,baz=134,slow=6.2,SNR=2.5
**FURI Furi 113.87 76** IAMs_20 IAMs_20 20 46 48.3
comp=Z,706nm,21.0s
**YSS Yuzh-Sakhalins 114.18 331** IAMs_20 IAMs_20 20 44 58.4
comp=Z,854nm,22.0s
**KMBO Kilima Mbogo 114.42 87** IAMs_20 IAMs_20 20 51 58.9
comp=Z,638nm,18.0s
**KIBK Kibwezi 115.38 88** IAMs_20 IAMs_20 20 56 02.6
comp=Z,625nm,19.0s
**RAYN Ar Rayn 115.60 59** IAMs_20 IAMs_20 20 43 08.6
comp=Z,469nm,19.0s
**ZAA0 Zalesovo Array 115.81 12** **PKiKP** **19 57 47.6 -1.3**
**ZALV Zalesovo Beam 115.81 12** **PKiKP** **19 57 48.1 -0.9**
**ZALV Zalesovo Beam 115.81 12** PKP **PKiKP** **19 57 47.8 -1.1**
comp=Z,2.7nm,0.9s,baz=270,slow=1.4,SNR=12
ZALV PKKPbc **PKKPbc** **20 08 24.9 +2.3**
comp=Z,0.3nm,0.3s,baz=188,slow=1.0,SNR=2.2
**ZALV Zalesovo Beam 115.81 12** PKIKP **PKiKP** **19 57 48.1 -0.9**
**KLR Kul'dur 116.98 339** *i* PKIKP **PKPdf** **19 57 50.0 -1.3**
KLR pmax pmax
comp=Z,1.0nm,1.0s
KLR MLR MLR
comp=Z,2µm,23.0s
**ATD Arta Tunnel 117.17 72** IAMs_20 IAMs_20 20 53 26.3
comp=Z,488nm,19.0s
**KURK Kurchatov 117.28 17** PKPdf **PKPdf** **19 57 51.2 -0.6**
**KURK Kurchatov 117.28 17** *c i*PKIKP **PKPdf** **19 57 51.6 -0.2**
KURK pmax pmax
comp=Z,11nm,2.5s
**KURBB Kurchatov Arra 117.33 17** PKP **PKPdf** **19 57 51.5 -0.5**
comp=Z,2.1nm,0.8s,baz=326,slow=2.4,SNR=20
KURBB PP **PP** **19 59 04.8 +2.9**
comp=Z,3.4nm,1.2s,baz=341,slow=5.6,SNR=4.7
KURBB PKKPbc **PKKPbc** **20 08 13.6 -3.5**
comp=Z,1.2nm,1.0s,baz=156,slow=2.9,SNR=6.6
**JEM Erimo 117.45 327** IAMs_20 IAMs_20 20 55 07.1
comp=Z,569nm,21.0s
**ERM Erimo 117.45 327** IAMs_20 IAMs_20 20 59 18.5
comp=Z,751nm,19.0s
**DZM Mont Dzumac 117.51 250** *e*PP **PP** **19 59 05.4 +0.1**
comp=Z,84nm,24.4s
**DZM Mont Dzumac 117.51 250** *e*SS SS 20 15 14.3 -2.6
comp=Z,267nm,26.6s
**DZM Mont Dzumac 117.51 250** *e*LQ LQ 20 28 36.9
comp=Z,822nm,34.5s
DZM *e*LR LR 20 33 30.8
comp=Z,362nm,23.1s
**DZM Mont Dzumac 117.51 250** PKP **PKPdf** **19 57 53.1 -0.1**
comp=Z,4.8nm,1.1s,baz=110,slow=7.1,SNR=2.8
**HEH HeiHe 117.51 342** PKP **PKiKP** **19 57 52.8 +0.5**
HEH PP **PP** **19 59 04.5 +1.3**
HEH AMB AMB
comp=Z,230nm,5.8s
HEH LR LR
comp=Z,760nm,23.7s
HEH LR LR
comp=Z,590nm,24.7s
HEH LR LR
comp=Z,1µm,24.5s
**SEM Semipalatinsk 118.01 16** *e*PKP **PKiKP** **19 57 53.8 +0.2**
baz=16
SEM LR LR 20 47 59.3
baz=16
**SEM Semipalatinsk 118.01 16** *e*PKIKP **PKiKP** **19 57 53.8 +0.2**
**JTM Tenmabayashi 119.43 327** IAMs_20 IAMs_20 20 52 39.9
comp=Z,490nm,19.0s
**KOUNC Koumac, New Ca 119.56 251** **PKPdf** **19 57 56.6 -0.4**
**DGZ Jazzator, Alta 120.36 11** *i* PKIKP **PKPdf** **19 57 57.0 -1.1**
DGZ pmax pmax
comp=Z,9.0nm,1.2s
DGZ MLR MLR
comp=Z,1µm,20.0s
**BRLS Borolday 120.47 28** *e*PKP **PKiKP** **19 57 58.5 0.0**
baz=28
**BRLS Borolday 120.47 28** *e*PKIKP **PKiKP** **19 57 58.4 0.0**
**BTLS Baital 120.63 23** *e*PKP **PKiKP** **19 57 58.6 0.0**
baz=23
BTLS *e*PP **PP** **19 59 25.4 +0.4**
baz=23
**BTLS Baital 120.63 23** *e*PKIKP **PKiKP** **19 57 58.6 0.0**
BTLS *e* 19 59 25.3
**CHM Chimkent 120.92 28** *e*PKP **PKiKP** **19 57 59.4 +0.1**
baz=28
CHM LR LR 20 49 31.5
comp=Z,343nm,16.5s,baz=28
**CHM Chimkent 120.92 28** *e*PKIKP **PKiKP** **19 57 59.3 +0.1**
**USRK Ussuriysk Ar. 121.09 336** PKP **PKPdf** **19 57 58.1 -1.3**
comp=Z,1.3nm,0.8s,baz=93,slow=7.2,SNR=2.5
**MAKZ Makanchi 121.76 17** **PKPdf** **19 57 59.5 -1.2**
**MAKZ Makanchi 121.76 17** PKIKP **PKPdf** **19 57 59.5 -1.2**
MAKZ MLR MLR
comp=Z,800nm,20.0s
**MK31 Makanchi Array 121.86 16** *c i*PKIKP **PKPdf** **19 58 00.5 -0.4**
**MKAR Makanchi Array 121.86 16** PKP **PKPdf** **19 57 59.9 -1.0**
comp=Z,3.0nm,0.9s,baz=355,slow=1.8,SNR=16
MKAR PP **PP** **19 59 37.4 +4.2**
comp=Z,2.2nm,1.1s,baz=357,slow=5.2,SNR=3.9
MKAR PKKPbc **PKKPbc** **20 07 58.4 -2.0**
comp=Z,0.4nm,0.9s,baz=122,slow=5.4,SNR=2.4
**ZSN Zaisan 121.93 14** *e*PKP **PKiKP** **19 58 01.4 +0.3**
baz=14
ZSN *e*PP **PP** **19 59 34.0 +0.4**
baz=14
**ZSN Zaisan 121.93 14** *e*PKIKP **PKiKP** **19 58 01.4 +0.3**
ZSN *e* 19 59 33.9
**CASY Casey 122.22 184** **PKiKP** **19 58 01.1 +0.1**
**TDK Taldyqorghan 122.26 20** *e*PKP **PKiKP** **19 58 02.0 +0.1**
baz=20
TDK *e*PP **PP** **19 59 36.7 +0.7**
baz=20
TDK LR LR 20 50 17.6
comp=Z,567nm,22.6s,baz=20
**TDK Taldyqorghan 122.26 20** *e*PKIKP **PKiKP** **19 58 02.0 +0.1**
TDK *e* 19 59 36.7
**KUU Kurty 122.48 22** *e*PKP **PKiKP** **19 58 02.4 0.0**
baz=22
KUU LR LR 20 50 28.3
comp=Z,483nm,18.9s,baz=22
**KUU Kurty 122.48 22** *e*PKIKP **PKiKP** **19 58 02.3 0.0**
**HRA Herat 122.54 40** PKPdf **PKPdf** **19 58 01.6 -1.1**
**CHKK Chushkaly 122.75 22** *e*PKP **PKiKP** **19 58 02.9 +0.1**
baz=22
**CHKK Chushkaly 122.75 22** *e*PKIKP **PKiKP** **19 58 02.9 +0.1**
**AAK Ala-Archa 122.81 25** PKPdf **PKPdf** **19 58 02.8 -0.2**
**AAK Ala-Archa 122.81 25** IAMs_20 IAMs_20 21 00 03.8
comp=Z,672nm,19.0s
**AAK Ala-Archa 122.81 25** *c i*PKIKP **PKiKP** **19 58 03.6 +0.4**
AAK pmax pmax
comp=Z,8.0nm,1.3s
**BTK Batken 123.25 29** PKPdf **PKPdf** **19 58 02.9 -0.9**
**BTK Batken 123.25 29** PKIKP **PKPdf** **19 58 02.9 -0.9**
**AAA Alma-Ata 123.28 22** *e*PKP **PKPdf** **19 58 03.8 +0.1**
baz=22
AAA LR LR 20 51 03.8
baz=22
**AAA Alma-Ata 123.28 22** *e*PKIKP **PKPdf** **19 58 03.8 +0.1**
**MDOK Medeo 123.37 22** *e*PKP **PKPdf** **19 58 04.0 0.0**
baz=22
MDOK LR LR 20 51 01.4
baz=22
**MDOK Medeo 123.37 22** *e*PKIKP **PKPdf** **19 58 04.0 0.0**
**SIMJ Simiganj 123.42 31** PKPdf **PKPdf** **19 58 03.9 -0.3**
**TNSS Tian-Shan 123.44 22** *e*PKP **PKPdf** **19 58 04.3 -0.3**
baz=22
**TNSS Tian-Shan 123.44 22** *e*PKIKP **PKPdf** **19 58 04.2 -0.3**
**CHGR Chuyangaron 123.50 31** PKPdf **PKPdf** **19 58 04.1 -0.2**
**CHGR Chuyangaron 123.50 31** PKIKP **PKPdf** **19 58 04.1 -0.2**
CHGR MLR MLR
comp=Z,2µm,20.0s
**HNR Honiara 123.53 264** IAMs_20 IAMs_20 20 44 01.4
comp=Z,637nm,21.0s
**ULN Ulaanbaatar 123.59 356** PKPdf **PKPdf** **19 58 02.9 -1.4**
**ULN Ulaanbaatar 123.59 356** *c i*PKIKP **PKPdf** **19 58 04.2 -0.1**
ULN pmax pmax
comp=Z,7.0nm,1.0s
**SONM Songino Array 123.66 357** PKP **PKPdf** **19 58 03.3 -1.1**
comp=Z,3.9nm,0.9s,baz=312,slow=0.2,SNR=18
SONM PP **PP** **19 59 49.3 +4.0**
comp=Z,1.3nm,0.9s,baz=0.0,slow=7.2,SNR=2.2
SONM PKKPbc **PKKPab** **20 07 51.0 -2.4**
comp=Z,0.7nm,0.9s,baz=176,slow=4.3,SNR=3.8
**KPKS Kokpek 123.70 21** *e*PKP **PKPdf** **19 58 04.6 0.0**
baz=21
**KPKS Kokpek 123.70 21** *e*PKIKP **PKPdf** **19 58 04.6 0.0**
**GAR Garm 123.83 30** PKPdf **PKPdf** **19 58 03.8 -1.2**
**SATY Saty 123.96 21** *e*PKP **PKPdf** **19 58 05.1 0.0**
baz=21
**SATY Saty 123.96 21** *e*PKIKP **PKPdf** **19 58 05.1 0.0**
**MJAR Matsushiro Arr 124.03 326** PKP **PKPdf** **19 58 03.4 -1.9**
comp=Z,4.3nm,1.0s,baz=34,slow=2.1,SNR=9.6
**MAJO Matsushiro 124.03 326** PKPdf **PKPdf** **19 58 04.3 -1.0**
**MAJO Matsushiro 124.03 326** IAMs_20 IAMs_20 21 01 00.8
comp=Z,483nm,20.0s
**MAJO Matsushiro 124.03 326** PKIKP **PKPdf** **19 58 04.3 -1.0**
MAJO MLR MLR
comp=Z,500nm,20.0s
**UZB Uzynbulak 124.10 21** *e*PKP **PKPdf** **19 58 05.3 -0.1**
baz=21
UZB *e*PP **PP** **19 59 48.8 +0.2**
baz=21
**UZB Uzynbulak 124.10 21** *e*PKIKP **PKPdf** **19 58 05.3 -0.1**
UZB *e* 19 59 48.7
**SHLS Shalkode 124.25 20** *e*PKP **PKiKP** **19 58 06.0 0.0**
baz=20
SHLS *e*PP **PP** **19 59 51.1 +1.5**
baz=20
**SHLS Shalkode 124.25 20** *e*PKIKP **PKiKP** **19 58 05.9 0.0**
SHLS *e* 19 59 51.0
**NRN Naryn 124.43 24** PKPdf **PKiKP** **19 58 06.6 -0.1**
**NRN Naryn 124.43 24** PKIKP **PKiKP** **19 58 06.6 -0.1**
NRN MLR MLR
comp=Z,700nm,20.0s
**PRZ Przheval'sk 124.46 22** IAMs_20 IAMs_20 20 50 25.7
comp=Z,501nm,21.0s
**WMQ Urumqi 126.01 13** PKP **PKPdf** **19 58 08.3 -0.7**
WMQ PP **PP** **20 00 05.9 +4.8**
WMQ AMB AMB
comp=Z,300nm,6.3s
WMQ LR LR
comp=Z,890nm,14.3s
WMQ LR LR
comp=Z,510nm,18.9s
WMQ LR LR
comp=Z,720nm,23.7s
**KSH Kashi 126.03 25** PKP **PKiKP** **19 58 10.3 +0.7**
KSH LR LR
comp=Z,590nm,21.0s
KSH LR LR
comp=Z,440nm,22.0s
KSH LR LR
comp=Z,490nm,20.1s
**XLT XiLinHaoTe 126.30 348** *e*PKP **PKiKP** **19 58 15.8 +5.8**
XLT PP **PP** **20 00 06.3 +3.3**
XLT LR LR
comp=N,89nm,21.1s
XLT LR LR
comp=E,450nm,18.6s
XLT LR LR
comp=Z,1µm,20.1s
**KS19 Wonju Array Si 128.40 334** **PKPdf** **19 58 13.3 -0.3**
**KSRS Korea Array 128.41 334** PKP **PKPdf** **19 58 12.6 -1.0**
comp=Z,6.1nm,1.0s,baz=26,slow=2.1,SNR=20
**KSAR Wonju Array Be 128.44 334** PKPdf **PKPdf** **19 58 12.8 -0.9**
**KSAR Wonju Array Be 128.44 334** PKIKP **PKPdf** **19 58 12.8 -0.9**
**NIL Nilore 129.46 32** PKPdf **PKPdf** **19 58 15.2 -0.6**
**NIL Nilore 129.46 32** IAMs_20 IAMs_20 21 06 27.9
comp=Z,581nm,21.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NIL** | **Nilore** | **129.46** | **32** | PKIKP | **PKPdf** | **19 58 15.2** | **-0.6** | |
| NIL | | | | MLR | MLR | | | |
| | comp=Z,600nm,21.0s | | | | | | | |
| **ARMA** | **Armidale** | **129.55** | **238** | P | **PKiKP** | **19 58 23.9** | **+7.1** | |
| **CNB** | **Canberra Magne** | **129.88** | **231** | P | **PKiKP** | **19 58 25.0** | **+7.7** | |
| **BJI** | **Beijing** | **129.97** | **347** | PKP | **PKiKP** | **19 58 23.0** | **+5.7** | |
| BJI | | | | PP | **PP** | **20 00 33.3** | **+6.3** | |
| BJI | | | | AMB | AMB | | | |
| | comp=Z,93nm,5.7s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=N,500nm,19.7s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=E,270nm,20.0s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,730nm,22.0s | | | | | | | |
| **BJT** | **Baijiatuau** | **129.99** | **347** | PKPdf | **PKPdf** | **19 58 15.4** | **-1.1** | |
| **BJT** | **Baijiatuau** | **129.99** | **347** | PKIKP | **PKPdf** | **19 58 15.5** | **-1.1** | |
| BJT | | | | MLR | MLR | | | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **130.06** | **351** | *e*PKP | **PKPdf** | **19 58 12.8** | **-4.0** | |
| HHC | | | | PP | **PP** | **20 00 28.8** | **+1.1** | |
| HHC | | | | PKS | **PKSdf** | **20 01 47.1** | **-6.3** | |
| HHC | | | | SKKS | | 20 07 18.8 | | |
| HHC | | | | AMB | AMB | | | |
| | comp=Z,230nm,5.4s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,540nm,19.1s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,430nm,19.1s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,970nm,20.7s | | | | | | | |
| **CAN** | **Canberra** | **130.16** | **231** | P | **PKiKP** | **19 58 25.5** | **+7.6** | |
| **BTO** | **Baotou** | **130.52** | **353** | *e*PKP | **PKPdf** | **19 58 17.6** | **-0.1** | |
| BTO | | | | SS | SS | 20 17 54.8 | -2.7 | |
| BTO | | | | AMB | AMB | | | |
| | comp=Z,560nm,8.6s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,1μm,19.2s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,2μm,22.8s | | | | | | | |
| **EIDS** | **Eidsvold** | **131.15** | **244** | P | **PKiKP** | **19 58 19.8** | **-0.2** | |
| **GTA** | **Gaotai** | **132.10** | **3** | PKP | **PKPdf** | **19 58 20.5** | **-0.3** | |
| GTA | | | | PP | PP | 20 00 50.6 | +10 | |
| GTA | | | | PKS | **PKSdf** | **20 01 55.3** | **-2.0** | |
| GTA | | | | LR | LR | | | |
| | comp=Z,720nm,20.4s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,420nm,18.9s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,960nm,21.4s | | | | | | | |
| **HNS** | **HongShan** | **132.82** | **347** | ⇑PKP | **PKiKP** | **19 58 23.3** | **+0.2** | |
| HNS | | | | *e*PP | **PP** | **20 00 50.0** | **+4.6** | |
| HNS | | | | LR | LR | | | |
| | comp=Z,1μm,21.5s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,240nm,15.1s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,2μm,19.2s | | | | | | | |
| **TIA** | **Tai'an** | **133.35** | **344** | PKP | **PKPdf** | **19 58 21.6** | **-1.4** | |
| **CMSA** | **Cobar Meteorol** | **134.07** | **234** | P | **PKiKP** | **19 58 26.1** | **+0.3** | |
| **GOMU** | **GeErMu** | **134.76** | **9** | PKP | **PKiKP** | **19 58 27.0** | **-0.6** | |
| GOMU | | | | PP | **PP** | **20 01 05.0** | **+6.8** | |
| GOMU | | | | AMB | AMB | | | |
| | comp=Z,380nm,7.7s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,980nm,19.8s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,630nm,19.0s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,1μm,19.4s | | | | | | | |
| **LZH** | **Lanzhou** | **135.48** | **359** | *e*PKP | **PKiKP** | **19 58 28.8** | **0.0** | |
| LZH | | | | PKS | **PKSdf** | **20 02 04.3** | **+0.5** | |
| LZH | | | | LR | LR | | | |
| | comp=Z,760nm,14.4s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,360nm,14.4s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,1μm,15.1s | | | | | | | |
| **PMG** | **Port Moresby** | **136.13** | **265** | IAMs_20 | IAMs_20 | 20 53 24.0 | | |
| | comp=Z,552nm,18.0s | | | | | | | |
| **CTAO** | **Charters Tower** | **136.45** | **250** | PKPdf | **PKPdf** | **19 58 28.4** | **-0.9** | |
| **CTAO** | **Charters Tower** | **136.45** | **250** | PKIKP | **PKPdf** | **19 58 28.4** | **-0.9** | |
| **NJ2** | **Nanjing** | **136.68** | **340** | *e*PKP | **PKPdf** | **19 58 28.6** | **-0.7** | |
| NJ2 | | | | sPKP | | 19 58 36.0 | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,620nm,22.7s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,900nm,21.8s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,940nm,22.7s | | | | | | | |
| **QLP** | **Quilpie** | **136.85** | **240** | P | **PKiKP** | **19 58 31.2** | **-0.4** | |
| **XAN** | **Xi'an** | **137.13** | **352** | ⇓PKP | **PKPdf** | **19 58 30.5** | **+0.3** | |
| XAN | | | | LR | LR | | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,680nm,19.2s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,2μm,20.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **137.18** | **232** | P | **PKPdf** | **19 58 29.7** | **-0.6** | |
| **STKA** | **Stephens Creek** | **137.18** | **232** | PKP | **PKPdf** | **19 58 29.2** | **-1.0** | |
| | comp=Z,9.2nm,1.0s,baz=92,slow=0.7,SNR=6.5 | | | | | | | |
| **HTT** | **Hallett** | **138.53** | **228** | P | **PKiKP** | **19 58 41.5** | **+6.7** | |
| **WHN** | **Wuhan** | **139.45** | **344** | PKP | **PKiKP** | **19 58 41.3** | **+4.5** | |
| **COEN** | **Coen** | **140.02** | **259** | PKPdf | **PKPdf** | **19 58 35.4** | **-0.5** | |
| **COEN** | **Coen** | **140.02** | **259** | P | **PKPdf** | **19 58 36.1** | **+0.3** | |
| **LSA** | **Lhasa** | **140.27** | **16** | PKP | **PKPdf** | **19 58 37.8** | **+1.2** | |
| **LSA** | **Lhasa** | **140.27** | **16** | IAMs_20 | IAMs_20 | 21 14 12.6 | | |
| | comp=Z,375nm,20.0s | | | | | | | |
| **CD2** | **Chengdu** | **140.64** | **359** | PKP | **PKPdf** | **19 58 36.8** | **+0.1** | |
| CD2 | | | | PP | PP | 20 01 42.3 | +7.9 | |
| CD2 | | | | SS | SS | 20 20 01.8 | +3.2 | |
| CD2 | | | | AMB | AMB | | | |
| | comp=Z,400nm,7.0s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,680nm,17.3s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,780nm,19.2s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,640nm,19.2s | | | | | | | |
| **ENH** | **Enshi** | **140.75** | **351** | PKPdf | **PKPdf** | **19 58 36.0** | **-0.9** | |
| **BBOO** | **Buckleboo** | **140.92** | **227** | P | **PKiKP** | **19 58 44.6** | **+4.8** | |
| **QIS** | **Mount Isa** | **142.50** | **247** | P | **PKPdf** | **19 58 37.1** | **-3.1** | |
| **SHL** | **Shillong** | **144.38** | **17** | PKPdf | **PKPab** | **19 58 41.2** | **-0.5** | |
| **SHL** | **Shillong** | **144.38** | **17** | PKIKP | **PKPab** | **19 58 41.2** | **-0.5** | |
| SHL | | | | MLR | MLR | | | |
| | comp=Z,600nm,20.0s | | | | | | | |
| **HYB** | **Hyderabad** | **144.76** | **43** | *e*PKPdf | **PKPab** | **19 58 43.0** | **-0.1** | |
| **GYA** | **Guiyang** | **144.88** | **354** | PKP | **PKPab** | **19 58 42.8** | **-0.6** | |
| GYA | | | | SKKS | | 20 08 48.9 | | |
| GYA | | | | AMB | AMB | | | |
| | comp=Z,95nm,8.0s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,1μm,17.0s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,570nm,23.2s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,2μm,20.2s | | | | | | | |
| **PZH** | **PanZhiHua** | **145.03** | **2** | PKPbc | **PKPab** | **19 58 42.9** | **-1.1** | |
| PZH | | | | sPKP | | 19 58 50.8 | | |
| PZH | | | | PP | **PP** | **20 02 06.8** | **+5.8** | |
| PZH | | | | AMB | AMB | | | |
| | comp=Z,290nm,11.0s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,340nm,19.6s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,320nm,21.0s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,660nm,20.6s | | | | | | | |
| **GULI** | **GuiLin** | **145.44** | **348** | ⇓PKPbc | **PKPab** | **19 58 45.5** | **+0.2** | |
| **TNCH** | **TengChong** | **146.26** | **7** | PKPbc | **PKPdf** | **19 58 45.3** | **-1.6** | |
| TNCH | | | | PKPab | **PKPab** | **19 58 48.3** | **-0.3** | |
| TNCH | | | | sPKP | | 19 58 51.0 | | |
| TNCH | | | | PP | **PP** | **20 02 11.9** | **+3.5** | |
| TNCH | | | | PKS | **PKSdf** | **20 02 23.3** | **+0.6** | |
| TNCH | | | | AMB | AMB | | | |
| | comp=Z,160nm,6.7s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,420nm,17.3s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,330nm,18.2s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,1μm,21.7s | | | | | | | |
| **KMI** | **Kunming** | **146.42** | **360** | ⇑PKPbc | **PKPdf** | **19 58 47.3** | **0.0** | |
| KMI | | | | PP | **PP** | **20 02 13.6** | **+4.2** | |
| KMI | | | | AMB | AMB | | | |
| | comp=Z,280nm,8.5s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,600nm,21.7s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,440nm,19.3s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,890nm,21.0s | | | | | | | |
| **AS31** | **Alice Springs** | **146.65** | **240** | PKPdf | **PKPdf** | **19 58 47.3** | **-0.1** | |
| **AS31** | **Alice Springs** | **146.65** | **240** | P | **PKPdf** | **19 58 47.9** | **+0.5** | |
| **ASAR** | **Alice Springs** | **146.65** | **240** | PKPdf | **PKPdf** | **19 58 47.0** | **-0.4** | |
| **ASAR** | **Alice Springs** | **146.65** | **240** | PKPbc | **PKPdf** | **19 58 46.7** | **-0.7** | |
| | comp=Z,50nm,1.0s,baz=115,slow=3.6,SNR=164 | | | | | | | |
| **ASAR** | **Alice Springs** | **146.65** | **240** | PKIKP | **PKPdf** | **19 58 47.0** | **-0.4** | |
| **WR0** | **Warramunga Arr** | **147.25** | **246** | | **PKPdf** | **19 58 48.0** | **-0.4** | |
| **WB2** | **Warramunga Arr** | **147.43** | **246** | PKPdf | **PKPdf** | **19 58 47.8** | **-1.0** | |
| **WRAB** | **Tennant Creek** | **147.43** | **246** | | **PKPdf** | **19 58 47.6** | **-1.1** | |
| **WRAB** | **Tennant Creek** | **147.43** | **246** | PKIKP | **PKPdf** | **19 58 47.6** | **-1.1** | |
| **WB0** | **Warramunga Arr** | **147.44** | **247** | PKPdf | **PKPdf** | **19 58 48.1** | **-0.7** | |
| **WRA** | **Warramunga Arr** | **147.44** | **246** | PKPdf | **PKPdf** | **19 58 47.6** | **-1.2** | |
| **WRA** | **Warramunga Arr** | **147.44** | **246** | PKPbc | **PKPdf** | **19 58 48.8** | **0.0** | |
| | comp=Z,19nm,1.0s,baz=98,slow=1.9,SNR=74 | | | | | | | |
| **FORT** | **Forrest** | **147.70** | **224** | | **PKPbc** | **19 58 50.7** | **-1.0** | |
| **FORT** | **Forrest** | **147.70** | **224** | P | **PKPbc** | **19 58 51.3** | **-0.4** | |
| **KDU** | **Kakadu** | **150.50** | **260** | P | **PKPdf** | **19 58 54.4** | **+0.6** | |
| **WRKA** | **Warakurna** | **150.69** | **233** | P | **PKPdf** | **19 58 54.6** | **+0.7** | |
| **RKGY** | **Rocky Gully** | **151.05** | **205** | P | **PKiKP** | **19 59 01.2** | **+0.7** | |
| **KMBL** | **Kambalda** | **151.21** | **216** | P | **PKPbc** | **19 59 00.5** | **+0.1** | |
| **QIZ** | **Qiongzhong** | **151.60** | **346** | PKPbc | **PKPdf** | **19 58 54.1** | **-1.3** | |
| QIZ | | | | SS | SS | 20 22 06.0 | +2.6 | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,300nm,20.2s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,690nm,16.8s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,680nm,18.5s | | | | | | | |
| **MTN** | **Manton Dam** | **151.79** | **259** | P | **PKPdf** | **19 58 56.5** | **+0.7** | |
| **MTN** | **Manton Dam** | **151.79** | **259** | P | **PKiKP** | **19 59 02.6** | **0.0** | |
| **CMAR** | **Chiang Mai Arr** | **152.80** | **8** | PKP | **PKPdf** | **19 58 56.5** | **-0.7** | |
| | comp=Z,7.2nm,0.9s,baz=312,slow=2.3,SNR=36 | | | | | | | |
| CMAR | | | | PKPbc | **sPKPdf** | **19 59 04.2** | **0.0** | |
| | comp=Z,14nm,0.8s,baz=322,slow=3.0,SNR=24 | | | | | | | |
| **KLBR** | **Kellerberrin** | **153.24** | **209** | P | **PKPdf** | **19 58 58.4** | **+0.9** | |
| **KNRA** | **Kununurra** | **153.62** | **252** | P | PKPdf | 19 58 50.4 | -8.1 | |
| KNRA | | | | P | **PKPbc** | **19 59 06.2** | **0.0** | |
| **MUN** | **Mundaring** | **153.63** | **207** | P | **PKPbc** | **19 59 05.3** | **-0.6** | |
| **TNTI** | **Ternate** | **153.71** | **290** | IAMs_20 | IAMs_20 | 20 53 06.6 | | |
| | comp=Z,230nm,19.0s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **155.84** | **245** | PKPdf | **PKPdf** | **19 59 00.1** | **-1.3** | |
| **MEEK** | **Meekatharra** | **156.62** | **218** | P | **PKPdf** | **19 59 02.1** | **-0.2** | |
| **LUWI** | **Luwuk** | **158.65** | **290** | IAMs_20 | IAMs_20 | 21 24 58.4 | | |
| | comp=Z,386nm,20.0s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **159.10** | **230** | | **PKPdf** | **19 59 04.0** | **-1.5** | |
| **PSA00** | **Pilbara Seismi** | **159.10** | **230** | | **PKPdf** | **19 59 04.5** | **-0.9** | |
| **PSA00** | **Pilbara Seismi** | **159.10** | **230** | P | **PKPdf** | **19 59 05.5** | **0.0** | |
| **MBWA** | **Marble Bar** | **159.42** | **231** | PKPdf | **PKPdf** | **19 59 05.1** | **-0.8** | |
| **MBWA** | **Marble Bar** | **159.42** | **231** | P | **PKPdf** | **19 59 06.7** | **+0.8** | |
| **SBUM** | **Sibu** | **165.45** | **319** | PKPdf | **PKPdf** | **19 59 11.0** | **-1.1** | |
| **KULM** | **Kulim** | **165.99** | **9** | | **PKPdf** | **19 59 11.0** | **-1.5** | |
| **IPM** | **Ipoh** | **165.84** | **7** | | **PKPdf** | **19 59 12.0** | **-1.2** | |
| **KSM** | **Kushing** | **167.41** | **323** | | **PKPdf** | **19 59 12.3** | **-1.3** | |
| **PSI** | **Prapat** | **168.00** | **19** | PKIKP | **PKPdf** | **19 59 12.6** | **-1.6** | |
| **RPSI** | **Rantau Prapat** | **168.10** | **19** | | **PKPdf** | **19 59 12.6** | **-1.4** | |

**RSNC 18 19:47:27.9±0.0, 9°N±2°×7°7W±°, h12km±1km, M3.8, mb4.5, ML3.8, Panama-Colombia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAPC** | **Capurgana** | **0.07** | **266** | P | Pg | 19 47 29.7 | -0.7 |
| CAPC | | | | S | Sg | 19 47 32.6 | +0.3 |
| **LCBC** | **Los crdobas,** | **0.93** | **76** | P | Pg | 19 47 45.1 | -0.7 |
| LCBC | | | | S | Sn | 19 48 00.3 | +0.3 |
| **APAC** | **Apartado, Choc** | **1.01** | **137** | P | Pb | 19 47 46.4 | -1.0 |
| APAC | | | | S | Sn | 19 48 04.5 | +2.4 |
| **PTAC** | **Punta Ardita,** | **1.57** | **199** | P | Pn | 19 47 53.4 | -2.3 |
| PTAC | | | | S | Sn | 19 48 12.3 | -3.7 |
| **DBBC** | **Dabeiba** | **1.93** | **147** | P | Pn | 19 47 58.6 | -2.1 |
| DBBC | | | | S | Sb | 19 48 26.6 | -0.6 |
| **UREC** | **San Jos de Ur** | **1.94** | **117** | P | Pn | 19 47 58.2 | -2.6 |
| UREC | | | | S | Sn | 19 48 20.4 | -4.7 |
| **SJCC** | **San Jacinto, C** | **2.42** | **59** | P | Pn | 19 48 04.1 | -3.3 |
| SJCC | | | | S | Sn | 19 48 33.3 | -3.7 |
| **BCIP** | **Isla Barro Col** | **2.58** | **282** | P | Pn | 19 48 07.3 | -2.2 |
| BCIP | | | | S | Sn | 19 48 38.5 | -2.4 |
| **ZARC** | **Zaragoza, Cauc** | **2.66** | **115** | P | Pn | 19 48 08.3 | -2.3 |
| ZARC | | | | S | Sn | 19 48 38.1 | -4.6 |
| **CBOC** | **Ciudad Bolivar** | **3.03** | **155** | P | Pn | 19 48 16.2 | +0.3 |
| **AZU** | **Azuero** | **3.08** | **254** | P | Pn | 19 48 12.7 | -3.7 |
| AZU | | | | S | Sn | 19 48 48.8 | -4.4 |
| **ARGC** | **Ariguani, Magd** | **3.23** | **68** | P | Pn | 19 48 16.0 | -2.5 |
| ARGC | | | | S | Sn | 19 48 51.6 | -5.3 |
| **PTBC** | **PUERTO BERRIO,** | **3.49** | **127** | P | Pn | 19 48 19.4 | -2.7 |
| PTBC | | | | S | Sn | 19 48 59.1 | -4.3 |
| **PLMC** | **San Jos del P** | **3.84** | **165** | P | Pn | 19 48 25.0 | -1.9 |
| **BRJC** | **Barrancabermej** | **3.88** | **115** | P | Pn | 19 48 22.9 | -4.5 |
| BRJC | | | | S | Sn | 19 49 09.2 | -3.6 |
| **NORC** | **Norcasia** | **3.88** | **142** | P | Pn | 19 48 26.0 | -1.5 |
| **SMRC** | **Santa Marta, M** | **3.92** | **50** | P | Pn | 19 48 26.3 | -1.6 |
| SMRC | | | | S | Sn | 19 49 08.4 | -5.5 |
| **OCAC** | **Ocana** | **3.94** | **96** | P | Pn | 19 48 25.7 | -2.7 |
| OCAC | | | | S | Sn | 19 49 10.9 | -3.7 |
| **BARC** | **Barichara** | **4.54** | **116** | P | Pn | 19 48 34.7 | -2.1 |
| **PAMC** | **Pamplona, Colo** | **4.72** | **106** | P | Pn | 19 48 37.5 | -1.9 |
| **YOTC** | **Yotoco, Valle** | **4.72** | **169** | P | Pn | 19 48 37.6 | -1.5 |
| **CRJC** | **Cerrejon, Guaj** | **4.94** | **61** | P | Pn | 19 48 38.4 | -3.6 |
| **RUSC** | **La Rusia** | **4.98** | **123** | P | Pn | 19 48 40.5 | -2.5 |
| **CHIC** | **Chingaza** | **5.32** | **138** | P | Pn | 19 48 47.1 | -0.5 |
| **URIC** | **Uribia, Colomb** | **6.03** | **59** | P | Pn | 19 48 53.4 | -3.6 |
| **POPC** | **Popayan, Colom** | **6.09** | **174** | P | Pn | 19 48 59.8 | +1.8 |

**RSNC 18 19:51:51.2±0.0, 9°N±2°×7°7W±°, h13km±2km, M3.2, mb4.2, ML3.2, Panama-Colombia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAPC** | **Capurgana** | **0.04** | **296** | P | Pg | 19 51 52.9 | -0.7 |
| CAPC | | | | S | Sg | 19 51 55.7 | +0.5 |
| **LCBC** | **Los crdobas,** | **0.97** | **76** | P | Pb | 19 52 08.1 | -1.8 |
| LCBC | | | | S | Sn | 19 52 23.9 | -0.3 |
| **APAC** | **Apartado, Choc** | **1.02** | **134** | P | Pb | 19 52 09.4 | -1.4 |
| APAC | | | | S | Sn | 19 52 25.5 | 0.0 |
| **PTAC** | **Punta Ardita,** | **1.54** | **198** | P | Pn | 19 52 16.0 | -2.4 |
| PTAC | | | | S | Sn | 19 52 35.6 | -2.7 |
| **DBBC** | **Dabeiba** | **1.94** | **145** | P | Pn | 19 52 21.7 | -2.2 |
| DBBC | | | | S | Sb | 19 52 50.5 | 0.0 |
| **UREC** | **San Jos de Ur** | **1.97** | **116** | P | Pn | 19 52 21.2 | -3.1 |
| UREC | | | | S | Sn | 19 52 43.6 | -5.3 |
| **SJCC** | **San Jacinto, C** | **2.46** | **59** | P | Pn | 19 52 27.5 | -3.7 |
| SJCC | | | | S | Sn | 19 52 56.1 | -5.1 |
| **BCIP** | **Isla Barro Col** | **2.55** | **283** | P | Pn | 19 52 30.7 | -1.5 |
| **ZARC** | **Zaragoza, Cauc** | **2.68** | **115** | P | Pn | 19 52 31.5 | -2.6 |
| ZARC | | | | S | Sn | 19 53 01.1 | -5.4 |
| **PTBC** | **PUERTO BERRIO,** | **3.51** | **126** | P | Pn | 19 52 42.4 | -3.1 |
| PTBC | | | | S | Sn | 19 53 22.5 | -4.5 |
| **NORC** | **Norcasia** | **3.89** | **141** | P | Pn | 19 52 48.9 | -1.9 |
| **OCAC** | **Ocana** | **3.98** | **95** | P | Pn | 19 52 48.9 | -3.2 |
| OCAC | | | | S | Sn | 19 53 25.6 | -13 |
| **PAMC** | **Pamplona, Colo** | **4.75** | **105** | P | Pn | 19 53 00.9 | -2.1 |
| PAMC | | | | S | Sn | 19 53 54.0 | -4.2 |
| **RUSC** | **La Rusia** | **5.00** | **123** | P | Pn | 19 53 04.2 | -2.3 |
| | 20nm,1.2s | | | | | | |
| RUSC | | | | S | Sn | 19 54 00.3 | -4.1 |
| | 20nm,1.2s | | | | | | |
| **URIC** | **Uribia, Colomb** | **6.07** | **59** | P | Pn | 19 53 16.2 | -4.6 |

**IDC 18 19:52:49.6±5.2, 16°82S×174°52W, h0km, mb4.1/4, mbtmp4.1/4, Error ellipse: s-maj=227.7km s-min=38.9km az=137.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **42.40** | **241** | P | P | 20 00 46.5 | +0.4 |
| | 2.9nm,0.8s,baz=73,slow=7.5,SNR=3.5 | | | | | | |
| | 2.9nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.49** | **258** | P | P | 20 01 34.1 | -0.5 |
| | 1.8nm,0.9s,baz=97,slow=7.1,SNR=1.4 | | | | | | |
| | 1.8nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **48.66** | **253** | P | P | 20 01 35.5 | -0.3 |
| | 3.9nm,0.7s,baz=88,slow=8.3,SNR=7.6 | | | | | | |
| | 3.9nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **84.04** | **12** | P | P | 20 05 21.6 | 0.0 |
| | 0.3nm,0.6s,baz=213,slow=6.4,SNR=2.3 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*UCR **18** 20:04:18.0±0.8, 8°.83N×84°.15W, h14km±14km, MW4.5*
*UPA **18** 20:04:18.4±1.3, 8°.95N×84°.11W, h5km±10km, ML3.4*
**ISC 18 20:04:17.7±1.7, 8°.89N±0°.06×84°.13W±0°.06, h8km±12km, n32, σ0°.43/38, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LLNJ** | **Naranjito** | **0.58** | **3** | *e*P | **Pb** | **20 04 29.8** | **-0.5** |
| **ZELE** | **Perez Zeledon** | **0.64** | **41** | *e*P | **Pg** | **20 04 30.2** | **+0.2** |
| **EDPN** | **Palmar Norte** | **0.67** | **83** | *e*P | **Pg** | **20 04 30.6** | **0.0** |
| EDPN | | | | *e*S | **Sb** | **20 04 40.5** | **-0.5** |
| **ABE2** | **San Pablo** | **0.82** | **5** | *e*P | **Pg** | **20 04 34.0** | **+0.5** |
| **LCR2** | **La Lucha 2** | **0.86** | **8** | *e*P | **Pg** | **20 04 34.3** | **0.0** |
| **ACOS** | **Acosta** | **0.91** | **358** | *e*P | **Pg** | **20 04 35.3** | **+0.1** |
| **DRK0** | **Durika** | **0.95** | **67** | *e*P | **Pg** | **20 04 35.7** | **-0.4** |
| DRK0 | | | | *e*S | **Sb** | **20 04 50.3** | **+0.9** |
| **DRK0** | **Durika** | **0.95** | **67** | *e*P | **Pg** | **20 04 35.3** | **-0.8** |
| **REPA** | **Paraso** | **0.97** | **15** | *e*P | **Pb** | **20 04 37.4** | **+0.4** |
| **TRIO** | **Tres Rios** | **1.02** | **7** | *e*P | **Pg** | **20 04 37.0** | **-0.4** |
| **SANTA** | **Santa Ana** | **1.04** | **357** | *e*P | **Pg** | **20 04 37.7** | **-0.1** |
| **SJS3** | **Mercedes San J** | **1.05** | **4** | *e*P | **Pg** | **20 04 38.0** | **+0.1** |
| **HDC** | **Heredia** | **1.11** | **1** | *e*P | **Pg** | **20 04 38.9** | **-0.2** |
| **RAFA** | **San Farael, Vo** | **1.11** | **16** | *e*P | **Pg** | **20 04 38.8** | **-0.3** |
| **VICA** | **Volcano Irazu** | **1.13** | **14** | *e*P | **Pg** | **20 04 39.0** | **-0.4** |
| **VERB** | **Verbena** | **1.14** | **22** | *e*P | **Pg** | **20 04 39.2** | **-0.3** |
| **TCS1** | **Tacares** | **1.16** | **352** | *e*P | **Pg** | **20 04 40.1** | **0.0** |
| **CVTQ** | **Turrialba Volc** | **1.17** | **18** | *e*P | **Pg** | **20 04 39.8** | **-0.4** |
| **CVTV** | **Tajo** | **1.17** | **19** | *e*P | **Pg** | **20 04 40.0** | **-0.3** |
| **VTR0** | **Volcan Turrial** | **1.18** | **18** | *e*P | **Pg** | **20 04 40.1** | **-0.4** |
| **MLIR3** | **Monte Lirio, C** | **1.29** | **94** | *e*P | **Pb** | **20 04 42.4** | **0.0** |
| **LCOCO** | **El Coco** | **1.32** | **25** | *e*P | **Pn** | **20 04 42.4** | **0.0** |
| **PTPM** | **Petroterminale** | **1.41** | **119** | *e*P | **Pg** | **20 04 45.0** | **+0.2** |
| PTPM | | | | *e*S | **Sg** | **20 05 03.1** | **0.0** |
| **BRU2** | **Volcan** | **1.42** | **94** | *e*P | **Pn** | **20 04 43.7** | **-0.3** |
| BRU2 | | | | *e*S | **Sg** | **20 05 04.0** | **+0.4** |
| **BRU2** | **Volcan** | **1.42** | **94** | *e*P | **Pn** | **20 04 43.7** | **-0.3** |
| **SOCE** | **Pocosol** | **1.56** | **342** | *e*P | **Pn** | **20 04 46.4** | **+0.5** |
| **BCO2** | **Palmira** | **1.59** | **96** | *e*P | **Pn** | **20 04 46.3** | **-0.1** |
| BCO2 | | | | AMP | | 20 04 46.7 | |
| | comp=Z,455nm,0.3s | | | | | | |
| BCO2 | | | | *e*S | **Sn** | **20 05 07.2** | **0.0** |
| **JTS** | **Las Juntas de** | **1.61** | **330** | *e*P | **Pn** | **20 04 46.0** | **-0.6** |
| **JTS** | **Las Juntas de** | **1.61** | **330** | *e*P | **Pn** | **20 04 45.7** | **-0.9** |
| **ARE1** | **Arenal 1** | **1.67** | **340** | *e*P | **Pn** | **20 04 47.9** | **+0.6** |
| **DVD** | **David** | **1.72** | **105** | *e*P | **Pn** | **20 04 47.3** | **-0.6** |
| DVD | | | | *e*S | **Sn** | **20 05 10.4** | **+0.3** |
| **PEDE3** | **Pedregal, Chir** | **1.76** | **106** | *e*P | **Pn** | **20 04 49.0** | **+0.4** |

*KRNET **18** 20:06:33.2±0.1, 39°.95N×75°.24E, h20km, mb3.8*
*SOME **18** 20:06:36.9, 40°.27N×75°.05E, h0km*
*NNC **18** 20:06:43.6±5.2, 40°.74N×74°.92E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=38.9km s-min=29.7km az=35.0*
**ISC 18 20:06:36.9±1.0, 40°.14N±0°.04×75°.09E±0°.02, h10km, n65, σ2°.17/112, 35C-30D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.22** | **265** | ⇑*i*P | **Pb** | **20 06 58.4** | **-1.8** |
| | baz=73 | | | | | | |
| SFK | | | | ⇑*e*S | **Sn** | **20 07 17.0** | **+0.1** |
| | baz=73 | | | | | | |
| **NRN** | **Naryn** | **1.47** | **28** | ⇓*e*P | **Pn** | **20 07 02.6** | **-1.1** |
| | baz=20 | | | | | | |
| NRN | | | | ⇓*e*S | **Sg** | **20 07 23.9** | **-0.3** |
| | baz=20 | | | | | | |
| **OHH** | **Osh** | **1.80** | **283** | ⇓*e*P | **Pb** | **20 07 09.5** | **-0.5** |
| | baz=88 | | | | | | |
| OHH | | | | ⇓*e*S | **Sg** | **20 07 36.0** | **+1.2** |
| | baz=88 | | | | | | |
| **ARLS** | **Aral** | **1.82** | **342** | ⇑*e*P | **Pb** | **20 07 10.4** | **+0.1** |
| | baz=40 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sg** | **20 07 37.5** | **+2.2** |
| | baz=40 | | | | | | |
| **ARSB** | **Arslanbob** | **1.99** | **307** | ⇓*e*P | **Pb** | **20 07 12.8** | **-0.5** |
| | baz=9.0 | | | | | | |
| ARSB | | | | ⇓*e*S | **Sg** | **20 07 41.7** | **+0.8** |
| | baz=9.0 | | | | | | |
| **UCH** | **Uchtor** | **2.13** | **348** | P | **Pg** | **20 07 16.5** | **-1.3** |
| | SNR=22 | | | | | | |
| **AML** | **Almayashu** | **2.25** | **333** | P | **Pb** | **20 07 17.8** | **0.0** |
| | SNR=74 | | | | | | |
| **AML** | **Almayashu** | **2.25** | **333** | ⇑*e*P | **Pb** | **20 07 16.8** | **-1.1** |
| | baz=32 | | | | | | |
| AML | | | | ⇑*e*S | **Sg** | **20 07 48.7** | **-0.6** |
| | baz=32 | | | | | | |
| **ULHL** | **Ulahol** | **2.28** | **22** | P | **Pn** | **20 07 16.0** | **+1.3** |
| | SNR=50 | | | | | | |
| **ULHL** | **Ulahol** | **2.28** | **22** | ⇑*e*P | **Pn** | **20 07 15.9** | **+1.1** |
| | baz=18 | | | | | | |
| ULHL | | | | ⇑*e*S | **Sb** | **20 07 46.9** | **+0.3** |
| | baz=18 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.44** | **15** | ⇑*e

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=22 | | | | | | | | |
| MNAS | | | | ⇓*i*S | | **Sb** | **20 08 07.5** | **-1.1** |
| | baz=22 | | | | | | | | |
| **DGS** | **Degeres** | **3.15** | **9** | *e*P | | **Pg** | **20 07 35.0** | **-2.2** |
| | 47nm,0.4s | | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **20 08 16.8** | **-1.1** |
| | 86nm,0.3s | | | | | | | | |
| **MTBS** | **Maitube** | **3.16** | **18** | *e*P | | **Pb** | **20 07 34.6** | **+1.5** |
| | 24nm,0.5s | | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **20 08 16.0** | **-2.2** |
| | 160nm,0.5s | | | | | | | | |
| **USP** | **Ospenovka** | **3.16** | **352** | P | | **Pb** | **20 07 29.8** | **-3.3** |
| | SNR=42 | | | | | | | | |
| **USP** | **Ospenovka** | **3.16** | **352** | ⇓*e*P | | **Pn** | **20 07 28.8** | **+2.1** |
| | baz=51 | | | | | | | | |
| USP | | | | ⇓*e*S | | **Sb** | **20 08 09.4** | **-2.3** |
| | baz=51 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.22** | **25** | *e*P | | **Pb** | **20 07 35.8** | **+1.5** |
| | 29nm,0.5s | | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **20 08 17.9** | **-2.3** |
| | 54nm,1.1s | | | | | | | | |
| **BTK** | **Batken** | **3.27** | **270** | ⇓*e*P | | **Pn** | **20 07 29.5** | **+1.2** |
| | baz=73 | | | | | | | | |
| BTK | | | | ⇓*e*S | | **Sn** | **20 08 10.4** | **+3.0** |
| | baz=73 | | | | | | | | |
| **TRKS** | **Terek-Say** | **3.30** | **296** | ⇑*e*P | | **Pn** | **20 07 30.1** | **+1.3** |
| | baz=97 | | | | | | | | |
| TRKS | | | | ⇑*e*S | | **Sn** | **20 08 11.6** | **+3.4** |
| | baz=97 | | | | | | | | |
| **MDOK** | **Medeo** | **3.36** | **25** | *e*P | | **Pb** | **20 07 38.5** | **+1.8** |
| | 22nm,0.8s | | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **20 08 22.5** | **-2.3** |
| | 74nm,0.8s | | | | | | | | |
| **MDOK** | **Medeo** | **3.36** | **25** | Pn | | **Pb** | **20 07 32.9** | **-3.7** |
| | 33nm,1.0s | | | | | | | | |
| MDOK | | | | Sn | | **Sb** | **20 08 17.7** | **+0.1** |
| | 119nm,0.7s | | | | | | | | |
| **KNDC** | **Almaty** | **3.38** | **24** | ⇑Pn | | **Pb** | **20 07 33.9** | **-3.1** |
| | 18nm,0.3s | | | | | | | | |
| KNDC | | | | ⇑Sn | | **Sb** | **20 08 19.0** | **+0.8** |
| | 349nm,0.6s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **3.42** | **46** | ⇑*e*P | | **Pn** | **20 07 30.7** | **+0.2** |
| | baz=42 | | | | | | | | |
| PRZ | | | | ⇑*e*S | | **Sn** | **20 08 12.6** | **+1.4** |
| | baz=42 | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.45** | **25** | *e*P | | **Pb** | **20 07 39.0** | **+1.0** |
| | 21nm,0.5s | | | | | | | | |
| KOTS | | | | *e*S | | **Sg** | **20 08 24.1** | **-3.4** |
| | 305nm,0.6s | | | | | | | | |
| **KRBS** | **Karabastau** | **3.58** | **7** | *e*P | | **Pb** | **20 07 42.2** | **+1.8** |
| | 53nm,0.4s | | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **20 08 29.1** | **-2.9** |
| | 59nm,0.6s | | | | | | | | |
| **KTBS** | **Karatobe** | **3.77** | **18** | *e*P | | **Pb** | **20 07 45.4** | **+2.0** |
| | 21nm,0.3s | | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **20 08 34.7** | **-3.1** |
| | 111nm,0.7s | | | | | | | | |
| **SATY** | **Saty** | **3.84** | **39** | *e*P | | **Pb** | **20 07 46.1** | **+1.4** |
| | 17nm,0.8s | | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **20 08 35.9** | **-4.2** |
| | 57nm,0.8s | | | | | | | | |
| **GAR** | **Garm** | **3.86** | **254** | ⇓*e*P | | **Pn** | **20 07 36.7** | **+0.3** |
| | baz=58 | | | | | | | | |
| GAR | | | | ⇓*e*S | | **Sn** | **20 08 23.2** | **+1.4** |
| | baz=58 | | | | | | | | |
| **KUU** | **Kurty** | **3.87** | **14** | *e*P | | **Pg** | **20 07 47.9** | **-3.1** |
| | 12nm,0.3s | | | | | | | | |
| KUU | | | | *e*S | | **Sg** | **20 08 38.9** | **-2.1** |
| | 89nm,0.7s | | | | | | | | |
| **CHKK** | **Chushkaly** | **3.98** | **20** | *e*P | | **Pb** | **20 07 49.3** | **+2.3** |
| | 15nm,0.6s | | | | | | | | |
| CHKK | | | | *e*S | | **Sg** | **20 08 41.5** | **-2.9** |
| | 82nm,0.5s | | | | | | | | |
| **KURS** | **Kuram** | **4.07** | **34** | *e*P | | **Pb** | **20 07 49.6** | **+1.1** |
| | 12nm,0.8s | | | | | | | | |
| KURS | | | | *e*S | | **Sb** | **20 08 42.0** | **+4.3** |
| | 43nm,0.8s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.21** | **43** | *e*P | | **Pb** | **20 07 53.8** | **+2.7** |
| | 13nm,0.5s | | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **20 08 48.8** | **-3.3** |
| | 36nm,0.9s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.28** | **38** | *e*P | | **Pb** | **20 07 53.9** | **+1.7** |
| | 17nm,0.8s | | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **20 08 49.6** | **-4.6** |
| | 66nm,0.6s | | | | | | | | |
| **SHLS** | **Shalkode** | **4.46** | **46** | *e*P | | **Pg** | **20 08 02.3** | **+0.1** |
| | 21nm,0.8s | | | | | | | | |
| SHLS | | | | *e*S | | **Sg** | **20 09 03.7** | **+3.8** |
| | 54nm,1.0s | | | | | | | | |
| **KK31** | **Karatay Array** | **4.53** | **312** | Pn | | Pn | 20 07 50.2 | +4.7 |
| | 0.4nm,0.3s,baz=126,slow=14,SNR=37 | | | | | | | | |
| KK31 | | | | ⇑Pg | | **Pg** | **20 08 02.9** | **-0.7** |
| | 3.9nm,0.5s | | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 20 09 13.0 | |
| | 12nm,0.5s,baz=129,slow=30 | | | | | | | | |
| **KKAR** | **Karatay Array** | **4.53** | **312** | ⇑*e*P | | **Pn** | **20 07 48.0** | **+2.5** |
| | baz=13 | | | | | | | | |
| KKAR | | | | ⇑*e*S | | **Sn** | **20 08 42.7** | **+4.4** |
| | baz=13 | | | | | | | | |
| **ARXS** | **Arharly** | **4.55** | **26** | *e*P | | **Pg** | **20 08 00.5** | **-3.6** |
| | 10nm,0.4s | | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **20 09 00.4** | **-2.6** |
| | 58nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **4.59** | **44** | ⇑Pg | | **Pg** | **20 08 00.1** | **+2.7** |
| | 10nm,0.6s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 20 08 59.9 | |
| | 51nm,0.7s | | | | | | | | |
| **CHGR** | **Chuyangaron** | **4.82** | **254** | ⇓*e*P | | **Pn** | **20 07 50.1** | **+0.5** |
| | baz=57 | | | | | | | | |
| CHGR | | | | ⇓*e*S | | **Sn** | **20 08 46.2** | **+0.6** |
| | baz=57 | | | | | | | | |
| **BRLS** | **Borolday** | **4.88** | **308** | *e*P | | **Pb** | **20 08 04.6** | **+2.1** |
| | 8.3nm,0.4s | | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **20 09 08.4** | **-5.3** |
| | 24nm,0.6s | | | | | | | | |
| **BTLS** | **Baital** | **4.96** | **351** | *e*P | | **Pb** | **20 08 06.9** | **+3.1** |
| | 6.5nm,0.6s | | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **20 09 12.1** | **-4.0** |
| | 20nm,0.5s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **5.45** | **26** | *e*P | | **Pg** | **20 08 18.1** | **-3.0** |
| | 24nm,0.3s | | | | | | | | |
| TDK | | | | *e*S | | **Sg** | **20 09 30.7** | **-0.9** |
| | 46nm,0.7s | | | | | | | | |
| **DJR** | **Jarkent** | **5.46** | **38** | *e*P | | **Pg** | **20 08 18.5** | **-2.8** |
| | 3.4nm,0.6s | | | | | | | | |
| DJR | | | | *e*S | | **Sg** | **20 09 31.4** | **-0.5** |
| | 14nm,0.8s | | | | | | | | |
| **OTUK** | **Ortayu** | **8.34** | **347** | ⇑Lg | | Lg | 20 10 50.2 | |
| | 18nm,1.2s | | | | | | | | |
| **MK31** | **Makanchi Array** | **8.47** | **36** | ⇑Pn | | **Pn** | **20 08 43.1** | **+3.6** |
| | 1.3nm,0.8s,baz=224,slow=14,SNR=5.5 | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 20 11 00.3 | |
| | 2.5nm,0.7s,baz=226,slow=26 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.76** | **12** | ⇑Lg | | Lg | 20 12 09.7 | |
| | 21nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **10.87** | **12** | ⇓Lg | | Lg | 20 12 12.9 | |
| | 22nm,1.2s | | | | | | | | |

*DJA* ***18*** *20:12:57.3±0.5,8°S±6°×11°6E±°, h11km±5km, M4.1/13, mb4.4/3, MLv4.0/13*
*NEIC* ***18*** *20:12:58.1±2.0,8°3S±0°.1×116°.07E±0°.05, h22km±12km, mb3.8/6, Error ellipse: s-maj=18.2km s-min=6.6km az=173.0*
*IDC* ***18*** *20:13:01.9±4.3,8°.25S×116°.26E, h59km±36km, mb3.3/6, mbtmp3.6/7, ML3.8/1, Error ellipse: s-maj=30.7km s-min=14.2km az=51.0*
**ISC 18 20:12:55.7±0.6,8°.32S±0°.07×116°.10E±0°.05, h10km, n33, σ1s23/36, mb3.6/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRBI** | **Singaraja** | **0.91** | **285** | P | **Pg** | **20 13 13.8** | **+0.5** |
| **DNP** | **Denpasar** | **0.95** | **248** | P | **Pg** | **20 13 15.4** | **+1.4** |
| **PLAI** | **Plampang** | **1.73** | **107** | P | **Pn** | **20 13 28.1** | **+2.3** |
| **JAGI** | **Jajag, Banyuwa** | **1.94** | **266** | | **Pn** | **20 13 28.4** | **-0.2** |
| JAGI | | | | Sn | **Sn** | **20 13 52.4** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **1.94** | **266** | P | **Pn** | **20 13 28.9** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **3.50** | **112** | P | **Pn** | **20 13 52.2** | **+1.9** |
| **GRJI** | **Gresik** | **3.85** | **291** | P | **Pn** | **20 13 55.8** | **+0.7** |
| **PWJI** | **Pagerwojo** | **4.27** | **274** | P | **Pn** | **20 14 01.5** | **+0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.86** | **64** | P | **Pn** | **20 14 10.0** | **+1.1** |
| **KAPI** | **Kappang** | **4.89** | **48** | P | **Pn** | **20 14 10.3** | **+0.9** |
| | 3.9nm,0.3s,baz=249,slow=3.6,SNR=7.6 | | | | | | |
| KAPI | | | | S | **Sn** | **20 15 04.7** | **-1.4** |
| | 13nm,0.3s,baz=266,slow=21,SNR=7.2 | | | | | | |
| | 8.2nm,0.3s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **5.54** | **274** | | | **Pn** | **20 14 19.7** | **+1.4** |
| **UGM** | **Wanagama** | **5.54** | **274** | P | | **Pn** | **20 14 18.9** | **+0.6** |
| | 167nm,1.8s | | | | | | | |
| **EDFI** | **Ende, Flores** | **5.54** | **95** | P | | **Pn** | **20 14 20.2** | **+1.8** |
| **BNSI** | **Bone** | **5.57** | **46** | P | | **Pn** | **20 14 21.0** | **+2.3** |
| | 21nm,0.7s,0.1nm | | | | | | | |
| **SOEI** | **Soe** | **8.19** | **101** | Pn | | **Pn** | **20 14 55.9** | **+1.1** |
| **MBWA** | **Marble Bar** | **13.23** | **165** | Pn | | **Pn** | **20 16 02.6** | **-1.2** |
| **FITZ** | **Fitzroy Crossi** | **13.43** | **137** | Pn | | **Pn** | **20 16 05.6** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **165** | Pn | | **Pn** | **20 16 08.7** | **-0.9** |
| **GIRL** | **Giralia** | **14.35** | **187** | Pn | | **Pn** | **20 16 18.2** | **-0.9** |
| **KNRA** | **Kununurra** | **14.37** | **122** | Pn | | **Pn** | **20 16 20.1** | **+0.7** |
| **MTN** | **Manton Dam** | **15.44** | **108** | Pn | | **Pn** | **20 16 33.8** | **+0.1** |
| MTN | | | | IAmb | | IAmb | 20 16 43.1 | |
| | comp=Z,8.1nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.05** | **125** | P | | **P** | **20 17 40.7** | **+0.6** |
| WB0 | | | | IAmb | | IAmb | 20 17 43.1 | |
| | comp=Z,3.9nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.09** | **125** | P | | **P** | **20 17 40.7** | **+0.2** |
| **WRA** | **Warramunga Arr** | **21.09** | **125** | P | | **P** | **20 17 41.4** | **+0.8** |
| | comp=Z,2.5nm,0.7s,baz=299,slow=12,SNR=23 | | | | | | | |
| WRA | | | | S | | **S** | **20 21 32.1** | **-3.4** |
| | comp=Z,0.5nm,0.7s,baz=293,slow=25,SNR=3.8 | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.11** | **125** | P | | **P** | **20 17 41.4** | **+0.7** |
| WB2 | | | | IAmb | | IAmb | 20 17 55.0 | |
| | comp=Z,7.7nm,1.3s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.27** | **125** | P | | **P** | **20 17 43.0** | **+0.7** |
| **ASAR** | **Alice Springs** | **22.88** | **134** | P | | **P** | **20 18 00.4** | **+0.7** |
| **ASAR** | **Alice Springs** | **22.88** | **134** | P | | **P** | **20 18 00.2** | **+0.5** |
| | comp=Z,0.8nm,0.5s,baz=309,slow=8.9,SNR=19 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **22.88** | **134** | P | | **P** | **20 18 00.6** | **+0.9** |
| AS31 | | | | IAmb | | IAmb | 20 18 39.8 | |
| | comp=Z,2.6nm,1.4s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.22** | **24** | P | | **P** | **20 21 44.3** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=184,slow=11,SNR=1.6 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **56.57** | **352** | P | | **P** | **20 22 39.0** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=185,slow=6.2,SNR=2.6 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.58** | **334** | P | | **P** | **20 23 19.1** | **-0.9** |
| | comp=Z,0.4nm,0.8s,baz=160,slow=8.8,SNR=2.1 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.42** | **341** | P | | **P** | **20 23 50.4** | **-0.9** |
| | comp=Z,0.2nm,0.3s,baz=133,slow=10,SNR=2.0 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |

*NEIC* ***18*** *20:25:38.0±1.2, 69°.57N±0°.06×144°.31W±0°.06, h3km±7km, Error ellipse: s-maj=8.5km s-min=2.4km az=191.0*
**AEIC 18 20:25:37.4±1.5, 69°.60N±0°.05×144°.31W±0°.08, h13km±3km, ML2.5, ML2.7**/80(NEIC)**, Error ellipse: s-maj=7.9km s-min=4.1km az=188.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.21** | **83** | Pg | Pg | 20 25 42.1 | +0.1 |
| C27K | | | | Sg | Sg | 20 25 45.5 | +0.3 |
| C27K | | | | IAML | | 20 25 49.7 | |
| | comp=N,951nm,0.7s | | | | | | |
| **C26K** | **Camden Bay** | **0.38** | **327** | | Pb | 20 25 46.3 | +0.3 |
| **D25K** | **Kavik River** | **0.78** | **250** | Pg | Pg | 20 25 51.6 | -0.9 |
| D25K | | | | | Sg | 20 26 02.0 | -0.8 |
| **D27M** | **Malcolm River** | **1.23** | **105** | | Pn | 20 26 00.2 | -0.2 |
| D27M | | | | | Sg | 20 26 17.9 | +0.7 |
| D27M | | | | IAML | | 20 26 23.2 | |
| | comp=N,148nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.54** | **277** | | Pn | 20 26 05.1 | +0.5 |
| C24K | | | | Sn | Sg | 20 26 26.3 | -0.6 |
| C24K | | | | IAML | | 20 26 29.3 | |
| | comp=N,91nm,0.8s | | | | | | |
| C24K | | | | IAML | | 20 26 31.8 | |
| | comp=E,81nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **256** | | Pn | 20 26 06.9 | +0.7 |
| D24K | | | | Sn | Sb | 20 26 29.5 | +0.8 |
| **E27K** | **Coleen River** | **1.73** | **144** | Pn | Pb | 20 26 08.2 | -0.8 |
| E27K | | | | IAML | | 20 26 36.9 | |
| | comp=E,56nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.92** | **178** | | Pb | 20 26 11.4 | -0.8 |
| F26K | | | | IAML | | 20 26 39.3 | |
| | comp=N,61nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **118** | | Pn | 20 26 11.5 | +0.8 |
| E28M | | | | Sn | Sn | 20 26 36.4 | +1.0 |
| **F25K** | **Christian Rive** | **2.08** | **194** | | Pn | 20 26 13.0 | +1.0 |
| F25K | | | | | Sn | 20 26 35.2 | -2.5 |
| **TOLK** | **Toolik Lake Re** | **2.12** | **245** | Pn | Pb | 20 26 14.8 | -0.8 |
| TOLK | | | | IAML | | 20 26 52.5 | |
| | comp=E,54nm,1.0s | | | | | | |
| TOLK | | | | IAML | | 20 26 54.1 | |
| | comp=N,49nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.16** | **227** | | Pn | 20 26 14.5 | +1.4 |
| E24K | | | | IAML | | 20 26 47.7 | |
| | comp=N,37nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.18** | **183** | | Pn | 20 26 14.4 | +1.0 |
| **C23K** | **Itkillik River** | **2.21** | **279** | Pn | Pb | 20 26 15.8 | -1.4 |
| C23K | | | | IAML | | 20 27 00.7 | |
| | comp=E,47nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **2.35** | **257** | | Pn | 20 26 16.6 | +0.8 |
| D23K | | | | IAML | | 20 27 09.0 | |
| | comp=N,34nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.47** | **214** | | Pn | 20 26 18.8 | +1.4 |
| **E23K** | **Chandalar** | **2.47** | **234** | Pn | Pb | 20 26 20.0 | -1.7 |
| E23K | | | | IAML | | 20 27 01.6 | |
| | comp=E,24nm,0.5s | | | | | | |
| E23K | | | | IAML | | 20 27 03.9 | |
| | comp=N,34nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.57** | **139** | | Pn | 20 26 20.6 | +1.8 |
| **E29M** | **Blow River** | **2.61** | **115** | | Pn | 20 26 20.6 | +1.4 |
| E29M | | | | IAML | | 20 27 03.6 | |
| | comp=N,28nm,0.8s | | | | | | |
| E29M | | | | IAML | | 20 27 08.1 | |
| | comp=E,26nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.67** | **176** | | Pn | 20 26 21.9 | +1.9 |
| **G27K** | **Doyon Strip** | **2.97** | **159** | | Pn | 20 26 25.8 | +1.5 |
| **D22K** | **Ayikyak River** | **3.07** | **260** | | Pn | 20 26 26.2 | +0.6 |
| D22K | | | | IAML | | 20 27 27.9 | |
| | comp=N,25nm,0.9s | | | | | | |
| D22K | | | | IAML | | 20 27 28.5 | |
| | comp=E,26nm,0.9s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **245** | | Pn | 20 26 26.6 | +0.7 |
| **G24K** | **Hadweenzic Riv** | **3.15** | **204** | Pn | Pn | 20 26 27.2 | +0.5 |
| G24K | | | | IAML | | 20 27 22.9 | |
| | comp=E,21nm,1.4s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.22** | **288** | | Pn | 20 26 28.4 | +0.7 |
| B22K | | | | IAML | | 20 27 28.3 | |
| | comp=N,35nm,0.9s | | | | | | |
| B22K | | | | IAML | | 20 27 28.4 | |
| | comp=E,30nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **3.57** | **136** | | Pn | 20 26 34.1 | +1.6 |
| G29M | | | | IAML | | 20 27 40.3 | |
| | comp=N,16nm,0.7s | | | | | | |
| **G23K** | **Bananza Creek** | **3.60** | **219** | | Pn | 20 26 35.5 | +2.6 |
| G23K | | | | IAML | | 20 27 35.6 | |
| | comp=E,15nm,1.1s | | | | | | |
| G23K | | | | IAML | | 20 27 39.4 | |
| | comp=N,11nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | **4.02** | **201** | Pn | Pn | 20 26 39.8 | +1.1 |
| H24K | | | | IAML | | 20 27 53.7 | |
| | comp=N,7.3nm,1.1s | | | | | | |
| H24K | | | | IAML | | 20 27 59.9 | |
| | comp=E,6.7nm,1.5s | | | | | | |
| **H29M** | **Whitestone** | **4.07** | **144** | | Pn | 20 26 41.1 | +1.8 |
| H29M | | | | IAML | | 20 28 00.1 | |
| | comp=N,8.7nm,1.2s | | | | | | |
| H29M | | | | IAML | | 20 28 03.0 | |
| | comp=E,11nm,0.7s | | | | | | |
| **F21K** | **Alatna River** | **4.15** | **239** | Pn | Pn | 20 26 42.2 | +1.8 |
| F21K | | | | IAML | | 20 27 57.8 | |
| | comp=E,10nm,0.8s | | | | | | |
| F21K | | | | IAML | | 20 28 00.9 | |
| | comp=N,9.1nm,1.1s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.32** | **135** | Pn | Pn | 20 26 44.4 | +1.6 |
| **I26K** | **Coal Creek Min** | **4.34** | **174** | Pn | Pn | 20 26 44.9 | +1.9 |
| **B20K** | **Meade River** | **4.47** | **281** | Pn | Pn | 20 26 46.5 | +1.7 |
| **I28M** | **Miner Creek** | **4.49** | **156** | | Pn | 20 26 47.7 | +2.4 |
| I28M | | | | IAML | | 20 27 40.7 | |
| | comp=E,7.1nm,0.7s | | | | | | |
| I28M | | | | IAML | | 20 27 43.1 | |
| | comp=N,7.9nm,0.6s | | | | | | |
| **G31M** | **Satah River** | **4.60** | **121** | Pn | Pn | 20 26 48.2 | +1.7 |
| G31M | | | | IAML | | 20 28 10.3 | |
| | comp=E,6.3nm,1.3s | | | | | | |
| G31M | | | | IAML | | 20 28 17.6 | |
| | comp=N,7.2nm,1.1s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **I29M** | **Ogilvie Camp,** | **4.84** | **149** | Pn | | Pn | 20 26 51.5 | +1.6 |
| **F20K** | **Avaraart Lake** | **4.95** | **244** | Pn | | Pn | 20 26 53.7 | +2.4 |
| F20K | | | | IAML | | | 20 28 21.6 | |
| | comp=E,5.1nm,1.2s | | | | | | | |
| F20K | | | | IAML | | | 20 28 43.8 | |
| | comp=N,4.2nm,1.2s | | | | | | | |
| **EGAK** | **Eagle** | **5.00** | **164** | Pn | | Pn | 20 26 53.8 | +1.8 |
| EGAK | | | | IAML | | | 20 28 24.6 | |
| | comp=N,5.7nm,0.9s | | | | | | | |
| **D19K** | **Kuna River** | **5.08** | **264** | Pn | | Pn | 20 26 55.0 | +1.8 |
| D19K | | | | IAML | | | 20 28 32.6 | |
| | comp=E,4.0nm,1.1s | | | | | | | |
| **IMAR** | **Indian Mountai** | **5.10** | **229** | Pn | | Pn | 20 26 54.6 | +1.2 |
| **H21K** | **Melozitna Rive** | **5.12** | **223** | Pn | | Pn | 20 26 56.0 | +2.3 |
| H21K | | | | IAML | | | 20 28 27.5 | |
| | comp=N,5.5nm,1.5s | | | | | | | |
| H21K | | | | IAML | | | 20 28 30.1 | |
| | comp=E,3.2nm,1.3s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.13** | **176** | Pn | | Pn | 20 26 55.6 | +1.6 |
| J26L | | | | IAML | | | 20 28 18.9 | |
| | comp=E,4.5nm,0.9s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.35** | **141** | | | Pn | 20 26 58.3 | +1.3 |
| I30M | | | | IAML | | | 20 28 00.9 | |
| | comp=E,4.1nm,0.5s | | | | | | | |
| I30M | | | | IAML | | | 20 28 02.2 | |
| | comp=N,3.2nm,1.1s | | | | | | | |
| **SCRK** | **Sand Creek** | **5.65** | **179** | Pn | | Pn | 20 26 60.0 | -1.2 |

*NEIC* ***18*** *20:45:25.0±1.5, 24°.2S±0°.2×180°.0E±0°.1, h550km±11km, mb4.2/22, Error ellipse: s-maj=24.8km s-min=19.3km az=194.0*
*IDC* ***18*** *20:45:41.3±2.4, 24°.74S×178°.84E, h691km±24km, mb3.0/5, mbtmp4.2/5, Error ellipse: s-maj=43.0km s-min=19.3km az=31.0*
**ISC 18 20:45:24.5±0.8, 24°.1S±0°.1×180°.0E±0°.1, h550km, n34, σ0s77/33, mb4.2/14, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **5.45** | **160** | P | P | 20 47 22.7 | +25 |
| | 273nm,0.3s,baz=343,slow=16,SNR=6.6 | | | | | | |
| **NIUE** | **Niue** | **10.66** | **64** | P | **P** | **20 47 49.0** | **-0.3** |
| **PINNC** | **Pines Island,** | **11.59** | **275** | P | **P** | **20 47 59.0** | **+0.1** |
| **MRZ** | **Mangatainoka R** | **16.90** | **192** | P | **P** | **20 48 50.6** | **-1.5** |
| MRZ | | | | IAmb | IAmb | 20 49 06.0 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **QRZ** | **Quartz Range** | **17.79** | **199** | P | **P** | **20 49 00.2** | **0.0** |
| **ARMA** | **Armidale** | **25.91** | **250** | P | **P** | **20 50 14.3** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 20 50 43.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **26.24** | **261** | P | **P** | **20 50 16.8** | **+0.6** |
| EIDS | | | | IAmb | IAmb | 20 50 45.4 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **29.00** | **240** | P | **P** | **20 50 40.6** | **+0.3** |
| **CTA** | **Charters Tower** | **31.44** | **271** | P | **P** | **20 51 02.2** | **+0.7** |
| | comp=Z,0.7nm,0.5s,baz=96,slow=10,SNR=27 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **CTAO** | **Charters Tower** | **31.44** | **271** | P | **P** | **20 51 02.0** | **+0.5** |
| CTAO | | | | IAmb | IAmb | 20 51 02.9 | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **32.30** | **237** | P | **P** | **20 51 09.0** | **+0.4** |
| **STKA** | **Stephens Creek** | **34.61** | **248** | P | **P** | **20 51 27.8** | **-0.2** |
| **STKA** | **Stephens Creek** | **34.61** | **248** | P | **P** | **20 51 28.8** | **+0.8** |
| | comp=Z,1.9nm,0.7s,baz=97,slow=11,SNR=2.9 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **COEN** | **Coen** | **36.11** | **279** | P | **P** | **20 51 40.9** | **+0.1** |
| COEN | | | | IAmb | IAmb | 20 52 03.2 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **39.32** | **247** | P | **P** | **20 52 06.5** | **-0.2** |
| **AS31** | **Alice Springs** | **41.96** | **261** | P | **P** | **20 52 27.4** | **-0.5** |
| **ASAR** | **Alice Springs** | **41.96** | **261** | P | **P** | **20 52 27.9** | **+0.1** |
| | comp=Z,4.3nm,0.7s,baz=95,slow=7.5,SNR=11 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.17** | **266** | P | **P** | **20 52 28.9** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 20 52 30.0 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.34** | **266** | P | **P** | **20 52 30.3** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 20 52 31.3 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.35** | **266** | P | **P** | **20 52 30.3** | **-0.7** |
| **WRA** | **Warramunga Arr** | **42.35** | **266** | P | **P** | **20 52 30.5** | **-0.4** |
| | comp=Z,5.8nm,0.5s,baz=93,slow=8.3,SNR=37 | | | | | | |
| | comp=Z,5.8nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **46.20** | **250** | P | **P** | **20 53 00.2** | **-0.2** |
| **KNRA** | **Kununurra** | **48.65** | **270** | P | **P** | **20 53 18.7** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 20 53 26.0 | |
| | comp=Z,8.9nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **55.30** | **260** | P | **P** | **20 54 05.7** | **-1.0** |
| MBWA | | | | IAmb | IAmb | 20 54 07.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **56.77** | **250** | P | **P** | **20 54 16.6** | **-0.1** |
| MORW | | | | IAmb | IAmb | 20 54 25.5 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **TOLI2** | **Tolitoli** | **62.60** | **285** | P | **P** | **20 54 55.2** | **-0.5** |
| TOLI2 | | | | IAmb | IAmb | 20 54 56.5 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.97** | **180** | P | **P** | **20 55 17.3** | **+1.0** |
| QSPA | | | | IAmb | IAmb | 20 55 18.5 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.97** | **180** | P | **P** | **20 55 18.0** | **+1.6** |
| | comp=Z,2.0nm,0.8s,baz=76,slow=6.8,SNR=13 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **76.22** | **173** | P | **P** | **20 56 15.8** | **-0.3** |
| **SNAA** | **Sanae** | **84.45** | **179** | P | **P** | **20 56 58.4** | **-0.6** |
| **BRTR** | **Keskin Array B** | **147.68** | **307** | PKPbc | **PKPbc** | **21 04 06.8** | **-1.0** |
| **BRTR** | **Keskin Array B** | **147.68** | **307** | PKPbc | **PKiKP** | **21 04 11.3** | **+2.1** |
| | comp=Z,0.6nm,0.6s,baz=90,slow=4.5,SNR=4.1 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.76** | **294** | PKPbc | **PKPbc** | **21 04 08.8** | **+0.7** |
| | comp=Z,1.3nm,0.4s,baz=70,slow=8.0,SNR=7.3 | | | | | | |
| **BURAR** | **Bucovina

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.01** | **165** | P | | **P** | **20 51 15.0** | **+0.2** |
| **ASAR** | **Alice Springs** | **22.01** | **165** | P | | **P** | **20 51 15.2** | **+0.4** |
| | comp=Z,1.7nm,0.3s,baz=341,slow=7.1,SNR=55 | | | | | | | |
| ASAR | | | | S | | **S** | **20 55 11.3** | **-4.9** |
| | comp=Z,1.8nm,0.9s,baz=348,slow=17,SNR=8.3 | | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| **XMIS** | **Christmas Isla** | **23.57** | **249** | P | | **P** | **20 51 30.4** | **-0.6** |
| **STKA** | **Stephens Creek** | **32.12** | **158** | P | | **P** | **20 52 46.8** | **-0.7** |
| | comp=Z,2.0nm,0.7s,baz=305,slow=14,SNR=1.2 | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **35.21** | **307** | P | | **P** | **20 53 17.4** | **+2.7** |
| | comp=Z,0.5nm,0.8s,baz=116,slow=10,SNR=2.9 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **39.55** | **360** | P | | **P** | **20 53 50.6** | **-0.5** |
| | comp=Z,1.0nm,0.8s,baz=181,slow=9.2,SNR=2.6 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.81** | **13** | P | | **P** | **20 53 53.4** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=187,slow=9.8,SNR=2.5 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **42.26** | **121** | P | | **P** | **20 54 13.2** | **-0.6** |
| DZM | | | | IAmb | | IAmb | 20 54 32.8 | |
| | comp=Z,7.5nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **53.36** | **342** | P | | P | 20 55 34.6 | -4.9 |
| SONM | | | | IAmb | | IAmb | 20 55 56.9 | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **SONM** | **Songino Array** | **53.36** | **342** | P | | **P** | **20 55 38.8** | **-0.7** |
| | comp=Z,0.8nm,0.7s,baz=157,slow=7.8,SNR=4.8 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **63.19** | **327** | P | | **P** | **20 56 47.1** | **-1.0** |
| MK31 | | | | IAmb | | IAmb | 20 57 01.5 | |
| | comp=Z,1.7nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.19** | **327** | P | | **P** | **20 56 46.6** | **-1.5** |
| **MKAR** | **Makanchi Array** | **63.19** | **327** | P | | **P** | **20 56 49.0** | **+0.8** |
| | comp=Z,1.0nm,0.9s,baz=104,slow=8.9,SNR=8.0 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.45** | **328** | P | | **P** | **20 57 16.9** | **+1.3** |
| | comp=Z,0.5nm,0.3s,baz=126,slow=5.8,SNR=1.6 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **QSPA** | **South Pole Qui** | **87.65** | **180** | P | | **P** | **20 59 07.1** | **-1.1** |
| QSPA | | | | IAmb | | IAmb | 20 59 22.5 | |
| | comp=Z,3.8nm,1.2s | | | | | | | |

*IDC* ***18*** *20:45:36.7±29.0, 23˚10S×174˚26W, h0km, mb4.3/4, mbtmp4.3/4, Error ellipse: s-maj=529.3km s-min=161.2km az=76.0*

*NEIC* ***18*** *20:47:05.9±1.3, 23˚9S±0˚2×179˚8W±0˚2, h520km±14km, mb4.3/20, Error ellipse: s-maj=29.0km s-min=22.8km az=51.0*

**ISC 18 20:47:04.5±1.3, 23˚9S±0˚1×179˚7W±0˚2, h512km, n29, σ0s90/29, mb4.3/13, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **6.46** | **341** | P | **P** | **20 48 46.2** | **+0.2** |
| **PINNC** | **Pines Island,** | **11.87** | **274** | P | **P** | **20 49 43.7** | **+2.1** |
| **QRZ** | **Quartz Range** | **18.11** | **199** | P | **P** | **20 50 46.0** | **+0.9** |
| **GVZ** | **Greta Valley S** | **19.96** | **196** | | **P** | **20 51 01.9** | **-0.1** |
| **ARMA** | **Armidale** | **26.27** | **249** | P | **P** | **20 51 59.8** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 20 52 22.6 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **EIDS** | **Eidsvold** | **26.56** | **261** | P | **P** | **20 52 01.8** | **+0.6** |
| EIDS | | | | IAmb | IAmb | 20 52 12.1 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **29.37** | **240** | P | **P** | **20 52 26.4** | **+0.7** |
| **CTA** | **Charters Tower** | **31.73** | **270** | P | **P** | **20 52 46.6** | **+0.4** |
| | comp=Z,0.7nm,0.5s,baz=98,slow=9.6,SNR=19 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **CTAO** | **Charters Tower** | **31.73** | **270** | P | **P** | **20 52 46.4** | **+0.2** |
| CTAO | | | | IAmb | IAmb | 20 52 47.4 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **32.67** | **237** | P | **P** | **20 52 54.2** | **+0.2** |
| **STKA** | **Stephens Creek** | **34.97** | **248** | P | **P** | **20 53 12.8** | **-0.6** |
| **STKA** | **Stephens Creek** | **34.97** | **248** | P | **P** | **20 53 12.4** | **-1.0** |
| | comp=Z,2.2nm,0.7s,baz=82,slow=14,SNR=3.3 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **39.69** | **247** | P | **P** | **20 53 51.1** | **-1.0** |
| BBOO | | | | IAmb | IAmb | 20 53 53.3 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **42.29** | **261** | P | **P** | **20 54 12.4** | **-0.6** |
| **ASAR** | **Alice Springs** | **42.29** | **261** | P | **P** | **20 54 11.9** | **-1.2** |
| **ASAR** | **Alice Springs** | **42.29** | **261** | P | **P** | **20 54 12.8** | **-0.2** |
| | comp=Z,4.9nm,0.8s,baz=96,slow=7.8,SNR=18 | | | | | | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.47** | **266** | P | **P** | **20 54 13.6** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 20 54 18.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.66** | **266** | P | **P** | **20 54 14.7** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 20 54 15.8 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.66** | **266** | P | **P** | **20 54 15.0** | **-0.9** |
| **WRA** | **Warramunga Arr** | **42.66** | **266** | P | **P** | **20 54 15.3** | **-0.7** |
| | comp=Z,5.4nm,0.5s,baz=103,slow=7.9,SNR=31 | | | | | | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **46.56** | **250** | P | **P** | **20 54 44.8** | **-1.1** |
| **MTN** | **Manton Dam** | **47.71** | **274** | P | **P** | **20 54 53.8** | **-0.9** |
| MTN | | | | IAmb | IAmb | 20 55 00.4 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **48.94** | **270** | P | **P** | **20 55 03.2** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 20 55 04.5 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **SOEI** | **Soe** | **55.10** | **275** | P | **P** | **20 55 47.7** | **-0.8** |
| SOEI | | | | IAmb | IAmb | 20 56 00.3 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **57.12** | **250** | P | **P** | **20 56 01.3** | **-0.8** |
| MORW | | | | IAmb | IAmb | 20 56 25.8 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **CASY** | **Casey** | **60.24** | **206** | P | **P** | **20 56 21.8** | **-0.7** |
| **QSPA** | **South Pole Qui** | **66.21** | **180** | P | **P** | **20 57 02.2** | **+1.2** |
| **BURAR** | **Bucovina Array** | **149.09** | **326** | PKPbc | **PKPbc** | **21 05 55.0** | **+0.2** |
| **PSZ** | **Piszkesteto** | **151.38** | **332** | PKPbc | **PKiKP** | **21 06 00.1** | **-0.3** |

*IDC* ***18*** *20:51:17.4±1.1, 41˚54S×88˚29W, h0km, mb3.9/5, mbtmp3.9/5, MS3.8/8, Error ellipse: s-maj=150.4km s-min=24.2km az=74.0*

*NEIC* ***18*** *20:51:18.1±1.1, 41˚33S±0˚05×87˚9W±0˚2, h10km±1km, mb4.6/19, Error ellipse: s-maj=28.4km s-min=7.0km az=277.0*

**ISC 18 20:51:18.6±0.8, 41˚3S±0˚1×87˚7W±0˚1, h12km, n44, σ0s79/30, mb4.6/16, MS4.0/7, 5C, West Chile Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H03S2** | **Juan Fernandez** | **10.23** | **46** | T | T | 21 04 06.0 | |
| | baz=218,slow=73,SNR=96 | | | | | | |
| **H03S1** | **Juan Fernandez** | **10.24** | **46** | T | T | 21 04 16.9 | |
| | baz=218,slow=73,SNR=95 | | | | | | |
| **H03S3** | **Juan Fernandez** | **10.25** | **46** | T | T | 21 04 15.1 | |
| | baz=218,slow=73,SNR=75 | | | | | | |
| **H03N3** | **Juan Fernandez** | **10.52** | **45** | T | T | 21 04 36.4 | |
| | baz=215,slow=79,SNR=64 | | | | | | |
| **H03N2** | **Juan Fernandez** | **10.53** | **44** | T | T | 21 04 35.0 | |
| | baz=215,slow=79,SNR=113 | | | | | | |
| **H03N1** | **Juan Fernandez** | **10.54** | **45** | T | T | 21 04 35.4 | |
| | baz=215,slow=79,SNR=54 | | | | | | |
| **PLCA** | **Paso Flores** | **13.00** | **93** | LR | LR | 20 58 18.9 | |
| | comp=Z,418nm,19.1s,baz=296,slow=32 | | | | | | |
| **MT09** | **Talagante** | **15.26** | **66** | Pn | **Pn** | **20 54 52.7** | **-1.3** |
| MT09 | | | | IAmb | IAmb | 20 55 02.3 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **MT02** | **Curacav** | **15.46** | **64** | Pn | **Pn** | **20 54 57.8** | **+1.3** |
| **LMEL** | **Las Melosas** | **15.76** | **67** | | **Pn** | **20 55 01.0** | **+0.4** |
| LMEL | | | | IAmb | IAmb | 20 55 13.6 | |
| | comp=Z,40nm,1.2s | | | | | | |
| **TRQA** | **Tornquist** | **20.07** | **89** | P | **P** | **20 55 52.4** | **+0.6** |
| **GO02** | **Mina Guanaco** | **22.07** | **49** | P | **P** | **20 56 14.2** | **+0.4** |
| GO02 | | | | IAmb | IAmb | 20 56 18.2 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **LVC** | **Limon Verde** | **24.47** | **46** | LR | LR | 21 03 37.3 | |
| | comp=Z,139nm,21.5s,baz=236,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **29.18** | **69** | LR | LR | 21 07 53.9 | |
| | comp=Z,185nm,18.4s,baz=252,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **30.15** | **40** | LR | LR | 21 07 26.3 | |
| | comp=Z,108nm,19.5s,baz=134,slow=32 | | | | | | |
| **AQDB** | **Aquidauana** | **34.17** | **62** | P | **P** | **20 58 02.8** | **-1.1** |
| AQDB | | | | IAmb | IAmb | 20 58 11.7 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **OTAV** | **Otavalo** | **42.22** | **14** | P | **P** | **20 59 11.8** | **-0.3** |
| **BELA** | **Belgrano 2** | **42.40** | **165** | P | **P** | **20 59 12.8** | **+0.4** |
| BELA | | | | IAmb | IAmb | 20 59 21.6 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **BDFB** | **Brasilia** | **42.75** | **65** | LR | LR | 21 16 39.5 | |
| | comp=Z,157nm,18.0s,baz=141,slow=35 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **47.72** | **155** | ⇑P | **P** | **20 59 55.7** | **+0.9** |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **48.24** | **154** | ⇑P | **P** | **20 59 59.4** | **+0.6** |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.49** | **154** | ⇑P | **P** | **21 00 00.8** | **+0.1** |
| | comp=Z,5.0nm,0.7s,baz=274,slow=8.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **48.91** | **180** | P | **P** | **21 00 03.7** | **-0.5** |
| QSPA | | | | IAmb | IAmb | 21 00 13.5 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **48.91** | **180** | P | **P** | **21 00 03.4** | **-0.8** |
| | comp=Z,1.0nm,0.8s,baz=140,slow=3.5,SNR=1.8 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **49.82** | **156** | P | **P** | **21 00 10.7** | **-0.3** |
| **SNAA** | **Sanae** | **49.82** | **156** | ⇑P | **P** | **21 00 10.9** | **-0.1** |
| | comp=Z,68nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **49.82** | **156** | P | **P** | **21 00 11.2** | **+0.2** |
| | comp=Z,3.4nm,0.9s,baz=264,slow=4.7,SNR=13 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **51.38** | **157** | ⇑P | **P** | **21 00 22.6** | **-0.2** |
| | comp=Z,286nm,0.7s | | | | | | |
| **MDP** | **Montagnes des** | **56.24** | **44** | LR | LR | 21 23 49.8 | |
| | comp=Z,114nm,19.3s,baz=126,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.83** | **345** | P | **P** | **21 02 43.1** | **+2.0** |
| | comp=Z,1.1nm,0.9s,baz=172,slow=8.2,SNR=8.7 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **71.83** | **345** | P | **P** | **21 02 40.4** | **-0.7** |
| **Z47A** | **Carrollton** | **74.16** | **360** | P | **P** | **21 02 54.0** | **-0.7** |
| Z47A | | | | IAmb | IAmb | 21 03 11.4 | |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **PLPT** | **Palo Pinto** | **74.41** | **351** | P | **P** | **21 02 55.9** | **-0.4** |
| PLPT | | | | IAmb | IAmb | 21 02 58.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **X48A** | **Hartselle** | **75.41** | **1** | P | **P** | **21 03 01.9** | **0.0** |
| X48A | | | | IAmb | IAmb | 21 03 10.3 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **U49A** | **Red Boiling Sp** | **77.48** | **2** | P | **P** | **21 03 12.7** | **-1.0** |
| U49A | | | | IAmb | IAmb | 21 03 22.5 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **T47A** | **Sharon Grove** | **77.94** | **1** | P | **P** | **21 03 15.1** | **-1.1** |
| **CCM** | **Cathedral Cave** | **79.07** | **357** | P | **P** | **21 03 21.6** | **-0.8** |
| CCM | | | | IAmb | IAmb | 21 03 24.2 | |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **BLO** | **Bloomington** | **80.12** | **1** | P | **P** | **21 03 28.1** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **84.13** | **336** | P | **P** | **21 03 49.8** | **+0.3** |
| | comp=Z,0.6nm,0.8s,baz=161,slow=5.7,SNR=5.3 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **85.05** | **354** | P | **P** | **21 03 53.8** | **+0.1** |
| **PDAR** | **Pinedale Array** | **85.99** | **344** | P | **P** | **21 03 58.8** | **+0.1** |
| **PDAR** | **Pinedale Array** | **85.99** | **344** | P | **P** | **21 03 59.7** | **+1.0** |
| | comp=Z,0.6nm,0.9s,baz=160,slow=5.6,SNR=2.3 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **BBTS** | **Babate** | **86.02** | **67** | LR | LR | 21 40 45.5 | |
| | comp=Z,57nm,18.2s,baz=27,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **89.04** | **80** | LR | LR | 21 42 08.3 | |
| | comp=Z,56nm,18.9s,baz=168,slow=34 | | | | | | |

*NORS* ***18*** *21:03:38.1, 42˚48N×43˚39E, h1km, MPVA4.1*

*TIF* ***18*** *21:03:38.5, 42˚53N×43˚49E, h12km*

*AFAD* ***18*** *21:03:39.8±0.0, 42˚53N×43˚30E, h19km±1km, MW3.4*

*MOS* ***18*** *21:03:40.0, 42˚55N×43˚36E, h6km, MPVA3.9*

**ISC 18 21:03:38.8±1.0, 42˚52N±0˚01×43˚40E±0˚01, h6km±9km, n62, σ1s02/120, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TKB** | **Tkibuli** | **0.34** | **241** | P | **Pb** | **21 03 47.3** | **0.0** |
| TKB | | | | S | **Sb** | **21 03 53.5** | **+0.4** |
| **TKB** | **Tkibuli** | **0.34** | **241** | *e*Pg | **Pb** | **21 03 47.3** | **0.0** |
| TKB | | | | *e*Sg | **Sb** | **21 03 53.5** | **+0.4** |
| **DIGR** | **Digorskoe uzhe** | **0.41** | **19** | *e*Pg | **Pg** | **21 03 46.6** | **-0.1** |
| DIGR | | | | *e*Sg | **Sg** | **21 03 52.5** | **+0.5** |
| **ALIG** | **Mtskhetisjvari** | **0.45** | **156** | P | **Pg** | **21 03 47.8** | **+0.3** |
| ALIG | | | | S | **Sg** | **21 03 54.4** | **+1.0** |
| **LACR** | **Lac** | **0.73** | **64** | *i* Pg | **Pg** | **21 03 52.0** | **-0.8** |
| LACR | | | | *e*Sg | **Sg** | **21 04 01.4** | **-0.8** |
| **KORR** | **Kora** | **0.75** | **40** | *i* Pg | **Pg** | **21 03 53.3** | **+0.1** |
| KORR | | | | *e*Sg | **Sg** | **21 04 03.5** | **+0.6** |
| **GUDG** | **Gudauri** | **0.80** | **93** | *e*Pg | **Pg** | **21 03 53.4** | **-0.7** |
| GUDG | | | | *e*Sg | **Sg** | **21 04 03.5** | **-0.9** |
| **BCHG** | **Becho** | **0.80** | **311** | P | **Pb** | **21 03 54.9** | **-0.2** |
| **LSNR** | **Lesken** | **0.82** | **22** | *i* Pg | **Pg** | **21 03 54.8** | **+0.2** |
| LSNR | | | | *e*Sg | **Sb** | **21 04 07.4** | **+0.5** |
| **MTEO** | **Meteo** | **0.85** | **79** | P | **Pg** | **21 03 54.4** | **-0.8** |
| **ABS** | **Abastumani** | **0.88** | **210** | P | **Pb** | **21 03 56.4** | **-0.1** |
| ABS | | | | S | **Sn** | **21 04 09.7** | **-1.3** |
| **ABS** | **Abastumani** | **0.88** | **210** | *e*Pg | **Pb** | **21 03 56.4** | **-0.1** |
| ABS | | | | *e*Sg | **Sn** | **21 04 09.7** | **-1.3** |
| **ARNR** | **Ardon** | **0.93** | **44** | *i* Pg | **Pb** | **21 03 57.2** | **-0.1** |
| ARNR | | | | *e*Sg | **Sn** | **21 04 10.8** | **-1.3** |
| **BRNG** | **Burnasheti** | **0.95** | **160** | P | **Pb** | **21 03 57.2** | **-0.5** |
| BRNG | | | | S | **Sn** | **21 04 11.6** | **-1.2** |
| **STDR** | **Stavd-Durt** | **0.98** | **29** | *e*Pg | **Pn** | **21 03 58.8** | **-0.3** |
| STDR | | | | *e*Sg | **Sn** | **21 04 13.4** | **0.0** |
| **NCK** | **Nalchik** | **0.99** | **8** | *i* Pg | **Pn** | **21 03 58.5** | **-0.7** |
| NCK | | | | *e*Sg | **Sn** | **21 04 13.5** | **-0.1** |
| **VLKR** | **Vladikavkaz** | **1.08** | **60** | *e*Pg | **Pn** | **21 04 00.3** | **-0.2** |
| VLKR | | | | *e*Sg | **Sn** | **21 04 16.1** | **+0.3** |
| **TRLG** | **Trialeti** | **1.11** | **152** | P | **Pg** | **21 03 59.6** | **-0.3** |
| TRLG | | | | S | **Sn** | **21 04 15.4** | **-1.3** |
| **AKH** | **Akhalkalaki** | **1.11** | **176** | P | **Pb** | **21 04 00.2** | **-0.3** |
| AKH | | | | S | **Sn** | **21 04 16.0** | **-0.7** |
| **EPOS** | **Posof** | **1.13** | **207** | P | **Pn** | **21 04 01.0** | **-0.4** |
| EPOS | | | | S | **Sn** | **21 04 17.0** | **-0.3** |
| EPOS | | | | *i* AML | AML | 21 04 18.0 | |
| | comp=E,173nm,0.3s | | | | | | |
| EPOS | | | | *i* AML | AML | 21 04 19.0 | |
| | comp=N,216nm,0.5s | | | | | | |
| **CHRG** | **Chargali** | **1.14** | **99** | P | **Pg** | **21 03 59.4** | **-1.3** |
| CHRG | | | | S | **Sg** | **21 04 15.4** | **-0.1** |
| **BTKR** | **Batakoyurt** | **1.20** | **44** | *e*Pg | **Pn** | **21 04 03.1** | **+1.0** |
| BTKR | | | | *e*Sg | **Sn** | **21 04 20.1** | **+1.3** |
| **KMGR** | **Komgaron** | **1.21** | **63** | *e*Pg | **Pn** | **21 04 02.4** | **+0.1** |
| KMGR | | | | *e*Sg | **Sn** | **21 04 20.9** | **+1.9** |
| **KBZ** | **Khabaz** | **1.27** | **343** | *e*Pg | **Pg** | **21 04 03.0** | **-0.1** |
| KBZ | | | | *e*Sg | **Sn** | **21 04 19.8** | **-0.5** |
| **KBTC** | **Kuba-Taba** | **1.30** | **0** | *e*Pg | **Pg** | **21 04 04.1** | **+0.4** |
| KBTC | | | | *e*Sg | **Sn** | **21 04 21.6** | **+0.2** |
| **SHTL** | **Shatili** | **1.30** | **83** | P | **Pn** | **21 04 02.2** | **-1.4** |
| **SHA1** | **Shidzhatmaz** | **1.34** | **336** | *e*Pg | **Pg** | **21 04 04.8** | **+0.4** |
| SHA1 | | | | *e*Sg | **Sn** | **21 04 22.9** | **+0.4** |
| **PRTR** | **Priterechnaya** | **1.39** | **27** | *e*Pg | Pg | 21 04 13.7 | +8.3 |
| PRTR | | | | *e*Sg | **Sg** | **21 04 26.5** | **+3.0** |
| **AHAN** | **Ardahan-Merkez** | **1.47** | **204** | P | **Pg** | **21 04 07.4** | **+0.5** |
| AHAN | | | | S | **Sg** | **21 04 27.9** | **+1.8** |
| AHAN | | | | *i* AML | AML | 21 04 28.0 | |
| | comp=E,370nm,0.5s | | | | | | |
| AHAN | | | | *i* AML | AML | 21 04 30.0 | |
| | comp=N,310nm,0.9s | | | | | | |
| **DOMR** | **Dombai** | **1.52** | **301** | *e*Pg | **Pg** | **21 04 08.7** | **+0.8** |
| DOMR | | | | *e*Sg | **Sg** | **21 04 28.9** | **+1.2** |
| **KIV0** | **Kislovodsk Arr** | **1.53** | **340** | *e*Pg | **Pg** | **21 04 07.9** | **-0.2** |
| KIV0 | | | | *e*Sg | **Sg** | **21 04 28.4** | **+0.5** |
| **KIV** | **Kislovodsk** | **1.53** | **340** | *e*Pg | **Pg** | **21 04 08.0** | **-0.1** |
| KIV | | | | *e*Sg | **Sg** | **21 04 28.5** | **+0.5** |
| **TRKR** | **Terskaya** | **1.55** | **38** | *e*Pg | **Pg** | **21 04 08.2** | **-0.3** |
| TRKR | | | | *e*Sg | **Sg** | **21 04 29.6** | **+1.0** |
| **BEYR** | **Belyy Ugol+** | **1.56** | **344** | *e*Pg | **Pg** | **21 04 08.3** | **-0.3** |
| BEYR | | | | *e*Sg | **Sg** | **21 04 28.3** | **-0.4** |
| **PYA1** | **Pyatigorsk** | **1.56** | **352** | *i* Pg | **Pg** | **21 04 08.4** | **-0.3** |
| PYA1 | | | | *e*Sg | **Sg** | **21 04 28.8** | **-0.2** |
| **BATM** | **Batumi** | **1.57** | **235** | P | **Pb** | **21 04 07.6** | **-0.5** |
| BATM | | | | S | **Sg** | **21 04 30.6** | **+1.5** |
| **DBOC** | **Borcka** | **1.75** | **228** | P | **Pb** | **21 04 11.1** | **-0.2** |
| DBOC | | | | *i* AML | AML | 21 04 34.0 | |
| | comp=N,1.1nm,0.8s | | | | | | |
| DBOC | | | | S | **Sg** | **21 04 34.3** | **-0.5** |
| DBOC | | | | *i* AML | AML | 21 04 36.0 | |
| | comp=E,213nm,0.7s | | | | | | |
| **GOLE** | **Ardahan-Gȫle** | **1.78** | **200** | P | **Pg** | **21 04 12.7** | **-0.2** |
| GOLE | | | | S | **Sg** | **21 04 37.7** | **+1.7** |
| GOLE | | | | *i* AML | AML | 21 04 39.0 | |
| | comp=N,118nm,0.3s | | | | | | |
| GOLE | | | | *i* AML | AML | 21 04 39.0 | |
| | comp=E,99nm,0.3s | | | | | | |
| **DAGI** | **Agillar** | **1.82** | **218** | P | **Pg** | **21 04 12.9** | **-0.7** |
| DAGI | | | | S | **Sg** | **21 04 37.0** | **-0.1** |
| DAGI | | | | *i* AML | AML | 21 04 38.0 | |
| | comp=N,104nm,0.8s | | | | | | |
| DAGI | | | | *i* AML | AML | 21 04 40.0 | |
| | comp=E,113nm,0.7s | | | | | | |
| **EAK** | **Akyaka** | **1.83** | **175** | P | **Pb** | **21 04 12.0** | **-0.9** |
| EAK | | | | S | **Sg** | **21 04 37.0** | **-0.7** |
| EAK | | | | *i* AML | AML | 21 04 46.0 | |
| | comp=N,90nm,1.0s | | | | | | |
| EAK | | | | *i* AML | AML | 21 04 52.0 | |
| | comp=E,72nm,0.8s | | | | | | |
| **ARXR** | **Arkhyz** | **1.88** | **305** | *e*Pg | **Pg** | **21 04 14.6** | **-0.2** |
| ARXR | | | | *e*Sg | **Sg** | **21 04 37.9** | **-1.2** |
| **GROC** | **Groznyy** | **1.89** | **68** | *e*Pg | **Pg** | **21 04 16.8** | **+1.8** |
| GROC | | | | *e*Sg | **Sg** | **21 04 40.4** | **+1.0** |
| **BOZK** | **Kars-Merkez-Bo** | **1.95** | **190** | P | **Pb** | **21 04 15.1** | **+0.2** |
| BOZK | | | | S | **Sg** | **21 04 41.8** | **+0.4** |
| BOZK | | | | *i* AML | AML | 21 04 49.0 | |
| | comp=E,44nm,0.6s | | | | | | |
| BOZK | | | | *i* AML | AML | 21 04 50.0 | |
| | comp=N,40nm,0.7s | | | | | | |
| **DBAD** | **Bademkaya** | **1.97** | **221** | P | **Pb** | **21 04 14.8** | **-0.3** |
| DBAD | | | | S | **Sg** | **21 04 40.6** | **-1.4** |
| DBAD | | | | *i* AML | AML | 21 04 42.0 | |
| | comp=E,223nm,0.4s | | | | | | |
| DBAD | | | | *i* AML | AML | 21 04 43.0 | |
| | comp=N,241nm,0.4s | | | | | | |
| **DDEM** | **Demirkent** | **2.04** | **218** | P | **Pg** | **21 04 16.7** | **-1.1** |
| DDEM | | | | S | **Sg** | **21 04 44.3** | **0.0** |
| DDEM | | | | *i* AML | AML | 21 04 54.0 | |
| | comp=N,302nm,0.6s | | | | | | |
| DDEM | | | | *i* AML | AML | 21 04 56.0 | |
| | comp=E,210nm,0.5s | | | | | | |
| **DVE** | **Vedeno** | **2.05** | **77** | *e*Pg | **Pb** | **21 04 16.4** | **-0.2** |
| DVE | | | | *e*Sg | **Sg** | **21 04 44.0** | **-0.8** |
| **BTLR** | **Botlikh** | **2.09** | **85** | *e*Pg | **Pb** | **21 04 17.2** | **+0.1** |
| BTLR | | | | *e*Sg | **Sg** | **21 04 44.7** | **-1.1** |
| **LGD** | **Lagodekhi** | **2.22** | **107** | P | **Pb** | **21 04 17.9** | **-1.4** |
| LGD | | | | S | **Sb** | **21 04 46.9** | **-0.2** |
| **ALER** | **Alexandrovskoy** | **2.27** | **351** | *e*Pg | **Pb** | **21 04 19.0** | **-1.3** |
| ALER | | | | *e*Sg | **Sn** | **21 04 44.7** | **-0.6** |
| **DLMR** | **Dylym** | **2.44** | **76** | *e*Pn | **Pb** | **21 04 22.7** | **-1.1** |
| DLMR | | | | *e*Sn | **Sb** | **21 04 53.5** | **+0.1** |
| **XNZR** | **Khunzakh** | **2.44** | **88** | *e*Pn | **Pn** | **21 04 20.8** | **+1.4** |
| XNZR | | | | *e*Sn | **Sn** | **21 04 51.1** | **+1.4** |
| **UNCR** | **Uncukul** | **2.51** | **84** | *e*Pn | **Pb** | **21 04 23.9** | **-0.5** |
| UNCR | | | | *e*Sn | **Sb** | **21 04 55.1** | **-0.4** |
| **GOF** | **Gofitskoye** | **2.55** | **354** | *e*Pn | **Pb** | **21 04 24.8** | **-0.2** |
| GOF | | | | *e*Sn | **Sb** | **21 04 56.0** | **-0.7** |
| **GNI** | **Garni** | **2.57** | **156** | *e*Pn | **Pb** | **21 04 26.0** | **+0.6** |
| GNI | | | | *e*Sn | **Sb** | **21 04 58.6** | **+1.3** |
| **DBC** | **Dubki** | **2.57** | **78** | *e*Pn | **Pb** | **21 04 25.2** | **-0.1** |
| DBC | | | | *e*Sn | **Sb** | **21 04 59.2** | **+1.9** |
| **VSHL** | **Vashlovani** | **2.58** | **119** | P | **Pb** | **21 04 23.1** | **-2.4** |
| VSHL | | | | S | **Sb** | **21 04 58.6** | **+1.1** |
| **RPOR** | **Krasnaya Polya** | **2.58** | **298** | *e*Pn | **Pb** | **21 04 23.6** | **-1.9** |
| RPOR | | | | *e*Sn | **Sb** | **21 04 56.4** | **-1.2** |
| **KRNR** | **Karanay** | **2.60** | **82** | *e*Pn | **Pb** | **21 04 25.4** | **-0.5** |
| KRNR | | | | *e*Sn | **Sb** | **21 04 55.5** | **-2.7** |
| **GNBR** | **Gunib** | **2.64** | **92** | *e*Pn | **Pb** | **21 04 27.0** | **+0.5** |
| GNBR | | | | *e*Sn | **Sb** | **21 04 56.8** | **-2.4** |
| **IZDR** | **Rize** | **2.74** | **232** | P | **Pn** | **21 04 24.4** | **+1.0** |
| IZDR | | | | S | **Sb** | **21 05 03.8** | **+1.6** |
| IZDR | | | | *i* AML | AML | 21 05 08.0 | |
| | comp=E,24nm,0.5s | | | | | | |
| IZDR | | | | *i* AML | AML | 21 05 10.0 | |
| | comp=N,18nm,0.4s | | | | | | |
| **KMKR** | **Kumukh** | **2.77** | **97** | *e*Pn | **Pb** | **21 04 28.6** | **-0.1** |
| KMKR | | | | *i* Sn | **Sb** | **21 05 02.1** | **-0.9** |
| **AKT** | **Akhty** | **3.39** | **106** | *e*Pn | **Pn** | **21 04 34.3** | **+2.0** |
| AKT | | | | *e*Sn | **Sn** | **21 05 15.8** | **+2.9** |

**NEIC 18 21:21:27.7±1.6, 41˚1N±0˚05×69˚13W±0˚07, h5km±2km, mb_Lg2.4/6, Error ellipse: s-maj=10.7km s-min=4.8km az=50.0, Southern New England**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **L64A** | **Middleborough** | **1.52** | **303** | Pg | Pn | 21 21 54.8 | -0.7 |
| L64A | | | | Sg | Sn | 21 22 14.5 | -1.1 |
| **BCX** | **Boston College** | **1.95** | **309** | Pn | Pn | 21 22 01.3 | -0.1 |
| **WES** | **Weston** | **2.07** | **308** | | Pn | 21 22 01.5 | -1.5 |
| **M63A** | **Gales Ferry** | **2.22** | **278** | Pn | Pn | 21 22 03.2 | -1.9 |
| **HRV** | **Adam Dziewonsk** | **2.28** | **308** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ARMA** | **Armidale** | **28.02 245** | P | **P** | **21 49 07.2** | **+0.8** |
| ARMA | | | IAmb | IAmb | 21 49 08.7 | |
| | comp=Z,12nm,0.8s | | | | | |
| **CTA** | **Charters Tower** | **32.56 265** | P | **P** | **21 49 45.0** | **-0.2** |
| | comp=Z,0.7nm,0.3s,baz=106,slow=11,SNR=11 | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | |
| **CTAO** | **Charters Tower** | **32.56 265** | P | **P** | **21 49 44.9** | **-0.2** |
| **PMG** | **Port Moresby** | **34.62 284** | P | **P** | **21 50 01.4** | **-1.0** |
| | comp=Z,32nm,0.8s,baz=101,slow=7.7,SNR=6.7 | | | | | |
| | comp=Z,32nm,0.8s | | | | | |
| **TOO** | **Toolangi** | **34.84 234** | P | **P** | **21 50 04.2** | **+0.2** |
| TOO | | | IAmb | IAmb | 21 50 13.4 | |
| | comp=Z,40nm,1.4s | | | | | |
| **STKA** | **Stephens Creek** | **36.74 245** | P | **P** | **21 50 20.0** | **+0.3** |
| **STKA** | **Stephens Creek** | **36.74 245** | P | **P** | **21 50 19.9** | **+0.3** |
| | comp=Z,10.0nm,0.8s,baz=93,slow=10,SNR=18 | | | | | |
| | comp=Z,10.0nm,0.8s | | | | | |
| **BBOO** | **Buckleboo** | **41.50 244** | P | **P** | **21 50 57.7** | **0.0** |
| BBOO | | | IAmb | IAmb | 21 51 28.7 | |
| | comp=Z,52nm,1.5s | | | | | |
| **AS31** | **Alice Springs** | **43.53 257** | P | **P** | **21 51 13.5** | **-0.2** |
| AS31 | | | IAmb | IAmb | 21 51 15.1 | |
| | comp=Z,12nm,1.1s | | | | | |
| **ASAR** | **Alice Springs** | **43.53 257** | P | **P** | **21 51 13.7** | **0.0** |
| **ASAR** | **Alice Springs** | **43.53 257** | P | **P** | **21 51 13.8** | **+0.2** |
| | comp=Z,28nm,0.8s,baz=85,slow=8.7,SNR=57 | | | | | |
| | comp=Z,28nm,0.8s | | | | | |
| **WRA** | **Warramunga Arr** | **43.65 263** | P | **P** | **21 51 14.1** | **-0.6** |
| | comp=Z,18nm,0.8s,baz=98,slow=7.6,SNR=16 | | | | | |
| | comp=Z,18nm,0.8s | | | | | |
| **FORT** | **Forrest** | **48.26 247** | P | **P** | **21 51 49.2** | **0.0** |
| **SOEI** | **Soe** | **55.64 272** | P | **P** | **21 52 43.3** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **56.68 257** | P | **P** | **21 52 48.9** | **-0.3** |
| PSA00 | | | IAmb | IAmb | 21 52 49.8 | |
| | comp=Z,25nm,0.8s | | | | | |
| **NWAO** | **Narrogin (SRO)** | **57.32 244** | P | **P** | **21 52 53.0** | **-0.4** |
| | comp=Z,11nm,0.9s,baz=110,slow=6.3,SNR=3.9 | | | | | |
| | comp=Z,11nm,0.9s | | | | | |
| **MORW** | **Morawa** | **58.79 248** | P | **P** | **21 53 03.0** | **-0.3** |
| MORW | | | IAmb | IAmb | 21 53 04.2 | |
| | comp=Z,36nm,1.4s | | | | | |
| **GIRL** | **Giralia** | **61.55 255** | P | **P** | **21 53 22.1** | **+0.6** |
| **TOLI2** | **Tolitoli** | **62.87 283** | P | **P** | **21 53 30.8** | **+0.6** |
| **CASY** | **Casey** | **63.06 205** | P | **P** | **21 53 30.8** | **+0.3** |
| **QSPA** | **South Pole Qui** | **68.99 180** | P | **P** | **21 54 08.8** | **+1.5** |
| **QSPA** | **South Pole Qui** | **68.99 180** | P | **P** | **21 54 09.0** | **+1.7** |
| | comp=Z,4.6nm,0.8s,baz=6.8,slow=0.4,SNR=21 | | | | | |
| | comp=Z,4.6nm,0.8s | | | | | |
| **KKM** | **Kota Kinabalu** | **69.06 285** | P | **P** | **21 54 08.1** | **-0.4** |
| KKM | | | IAmb | IAmb | 21 54 36.0 | |
| | comp=Z,31nm,1.3s | | | | | |
| **UGM** | **Wanagama** | **69.07 269** | P | **P** | **21 54 08.1** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **70.16 324** | P | **P** | **21 54 13.7** | **-0.8** |
| | comp=Z,3.8nm,0.8s,baz=156,slow=5.5,SNR=11 | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | |
| **KSM** | **Kuching** | **72.62 279** | P | **P** | **21 54 29.4** | **+0.1** |
| KSM | | | IAmb | IAmb | 21 54 30.6 | |
| | comp=Z,15nm,0.8s | | | | | |
| **YULB** | **Yu-li** | **73.08 304** | P | **P** | **21 54 30.6** | **-1.2** |
| YULB | | | IAmb | IAmb | 21 54 41.0 | |
| | comp=Z,29nm,1.5s | | | | | |
| **TPUB** | **Ta-pu** | **73.55 304** | P | **P** | **21 54 32.7** | **-1.7** |
| **PEA0B** | **Petropavlovsk-** | **76.61 346** | P | **P** | **21 54 50.2** | **-0.4** |
| PEA0B | | | IAmb | IAmb | 21 55 10.9 | |
| | comp=Z,43nm,1.4s | | | | | |
| **PETK** | **Petropavlovsk-** | **76.61 346** | P | **P** | **21 54 49.9** | **-0.8** |
| **PETK** | **Petropavlovsk-** | **76.61 346** | P | **P** | **21 54 49.8** | **-0.9** |
| | comp=Z,3.2nm,0.7s,baz=227,slow=4.9,SNR=6.7 | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | |
| **KSRS** | **Korea Array** | **76.74 319** | P | **P** | **21 54 52.2** | **+0.5** |
| | comp=Z,1.1nm,0.7s,baz=141,slow=6.0,SNR=3.1 | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | |
| **USRK** | **Ussuriysk Ar.** | **78.95 326** | P | **P** | **21 55 03.9** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **78.95 326** | P | **P** | **21 55 04.0** | **+0.6** |
| | comp=Z,5.6nm,0.8s,baz=125,slow=2.5,SNR=7.9 | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | |
| **BELA** | **Belgrano 2** | **79.10 173** | P | **P** | **21 55 04.3** | **+0.5** |
| **DSP** | **Deep Springs** | **81.67 45** | P | **P** | **21 55 18.4** | **+0.8** |
| **HUMO** | **Hull Mountain** | **81.69 38** | P | **P** | **21 55 18.2** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **82.05 44** | P | **P** | **21 55 20.7** | **+0.8** |
| | comp=Z,0.9nm,0.6s,baz=225,slow=7.8,SNR=7.2 | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | |
| **IPM** | **Ipoh** | **82.33 278** | P | **P** | **21 55 21.5** | **-0.1** |
| IPM | | | IAmb | IAmb | 21 55 23.0 | |
| | comp=Z,10.0nm,0.8s | | | | | |
| **N15K** | **Kwethluk River** | **82.40 9** | P | **P** | **21 55 21.1** | **+0.3** |
| N15K | | | IAmb | IAmb | 21 55 22.8 | |
| | comp=Z,25nm,1.1s | | | | | |
| **J05D** | **Fort Rock, OR** | **83.11 38** | P | **P** | **21 55 26.1** | **+1.1** |
| J05D | | | IAmb | IAmb | 21 55 26.9 | |
| | comp=Z,6.1nm,0.7s | | | | | |
| **M16K** | **Timber Creek** | **83.39 10** | P | **P** | **21 55 26.7** | **+0.9** |
| M16K | | | IAmb | IAmb | 21 55 38.0 | |
| | comp=Z,32nm,1.5s | | | | | |
| **GSI** | **Gunungsitoli** | **84.38 274** | P | **P** | **21 55 32.7** | **+1.0** |
| **GHO** | **Glory Hole Cre** | **85.99 14** | P | **P** | **21 55 36.9** | **-1.5** |
| GHO | | | IAmb | IAmb | 21 55 38.9 | |
| | comp=Z,9.3nm,0.8s | | | | | |
| **N25K** | **Chitina, Valde** | **86.88 16** | P | **P** | **21 55 41.9** | **-0.7** |
| **TROLL** | **Troll, Antarti** | **87.15 180** | ⇑P | **P** | **21 55 44.1** | **+0.1** |
| | comp=Z,49nm,0.5s | | | | | |
| **SNAA** | **Sanae** | **87.45 179** | ⇑P | **P** | **21 55 45.2** | **-0.1** |
| | comp=Z,16nm,0.6s | | | | | |
| **SNAA** | **Sanae** | **87.45 179** | P | **P** | **21 55 45.2** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=189,slow=14,SNR=7.3 | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | |
| **VNA3** | **Neumayer Olymp** | **87.62 177** | ⇑P | **P** | **21 55 46.2** | **+0.2** |
| | comp=Z,3.2nm,0.5s | | | | | |
| **VNA2** | **Neumayer--Watz** | **88.05 177** | ⇑P | **P** | **21 55 48.4** | **+0.4** |
| | comp=Z,2.5nm,0.7s,baz=179,slow=3.5 | | | | | |
| **TXAR** | **Lajitas Array** | **88.11 58** | P | **P** | **21 55 50.0** | **+0.8** |
| | comp=Z,0.9nm,0.9s,baz=224,slow=5.2,SNR=5.9 | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | |
| **VNA1** | **Neumayer--Stat** | **88.28 177** | ⇑P | **P** | **21 55 49.5** | **+0.5** |
| | comp=Z,3.4nm,0.8s | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.48 290** | P | **P** | **21 55 56.0** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **89.48 290** | P | **P** | **21 55 56.9** | **+1.3** |
| | comp=Z,3.7nm,0.9s,baz=123,slow=3.1,SNR=16 | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | |
| **PDAR** | **Pinedale Array** | **89.99 44** | P | **P** | **21 55 58.2** | **+0.5** |
| | comp=Z,0.3nm,0.5s,baz=200,slow=3.9,SNR=4.1 | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | |
| **KURBB** | **Kurchatov Arra** | **113.87 317** | PKiKP | **PKiKP** | **22 01 30.8** | **-1.3** |
| | comp=Z,0.5nm,0.3s,baz=111,slow=2.0,SNR=6.3 | | | | | |
| **ARCES** | **ARCESS Array B** | **129.32 349** | PKP | **PKPdf** | **22 02 00.5** | **-0.7** |
| | comp=Z,1.4nm,0.6s,baz=2.9,slow=2.4,SNR=12 | | | | | |
| **HFS** | **Hagfors** | **139.96 350** | PKhKP | PKPpre | 22 02 12.9 | |
| | comp=Z,1.4nm,0.4s,baz=40,slow=2.5,SNR=12 | | | | | |
| **AKASG** | **Malin Array Be** | **143.08 330** | PKhKP | PKPpre | 22 02 24.4 | |
| | comp=Z,17nm,0.3s,baz=44,slow=4.2,SNR=37 | | | | | |
| **AKBB** | **Malin Array Si** | **143.08 330** | PKPdf | PKPab | 22 02 24.1 | -0.9 |
| **KIEV** | **Kiev** | **143.09 330** | PKPdf | PKPab | 22 02 24.2 | -0.9 |
| **AK05** | **Malin Array Si** | **143.15 330** | PKPdf | PKPab | 22 02 24.5 | -0.8 |
| **BNN** | **Bunyan** | **145.31 308** | | **PKPdf** | **22 02 32.1** | **+0.6** |
| **EKA** | **Eskdalemuir Ar** | **145.65 4** | PKPbc | **PKPbc** | **22 02 32.2** | **-0.8** |
| | comp=Z,4.0nm,0.8s,baz=344,slow=2.7,SNR=7.3 | | | | | |
| **BSEG** | **Bad Segeberg** | **146.44 350** | *e*PKPbc | **PKPbc** | **22 02 35.6** | **+0.3** |
| | baz=20,slow=2.3 | | | | | |
| **BR131** | **Keskin Array S** | **146.56 311** | | **PKPbc** | **22 02 35.1** | **-1.1** |
| **BRTR** | **Keskin Array B** | **146.56 311** | | **PKPbc** | **22 02 35.1** | **-1.1** |
| **BRTR** | **Keskin Array B** | **146.56 311** | PKPbc | **PKPbc** | **22 02 35.8** | **-0.5** |
| | comp=Z,2.4nm,0.7s,baz=133,slow=4.1,SNR=15 | | | | | |
| **KWP** | **Kalwaria Pacla** | **146.73 334** | | **PKPbc** | **22 02 35.5** | **-0.7** |
| **BUR08** | **Bucovina Ar. S** | **147.11 329** | | **PKPbc** | **22 02 37.1** | **-0.3** |
| **BURAR** | **Bucovina Array** | **147.12 329** | | **PKPbc** | **22 02 37.4** | **-0.1** |
| **MMAI** | **Mount Meron Ar** | **147.32 299** | PKPbc | **PKPbc** | **22 02 38.6** | **+0.2** |
| | comp=Z,6.5nm,0.6s,baz=72,slow=5.4,SNR=12 | | | | | |
| **FLTG** | **Flechtingen** | **147.82 348** | *e*PKPbc | **PKPbc** | **22 02 38.6** | **-0.3** |
| | baz=20,slow=2.3 | | | | | |
| FLTG | | | *e*PKPab | **PKPab** | **22 02 42.9** | **-0.8** |
| | baz=20,slow=2.3 | | | | | |
| **ASSE** | **Asse, Remlinge** | **148.12 349** | *e*PKPbc | **PKPbc** | **22 02 39.9** | **+0.3** |
| | baz=20,slow=2.3 | | | | | |
| ASSE | | | *e*PKPab | **PKPab** | **22 02 44.6** | **-0.2** |
| | baz=20,slow=2.3 | | | | | |
| **OSTC** | **Ostas** | **148.25 342** | *e*PKP | **PKPbc** | **22 02 40.6** | **+0.5** |
| **CLL** | **Collm** | **148.41 346** | | **PKPbc** | **22 02 39.1** | **-1.3** |
| **CLL** | **Collm** | **148.41 346** | *i* PKPab | **PKPab** | **22 02 45.4** | **-0.8** |
| | comp=Z,3.0nm,0.7s | | | | | |
| **CLL** | **Collm** | **148.41 346** | *e*PKPbc | **PKPbc** | **22 02 40.3** | **-0.1** |
| | baz=20,slow=2.3 | | | | | |
| **CLL** | **Collm** | **148.41 346** | *i* PKPbc | **PKPbc** | **22 02 40.3** | **-0.1** |
| | comp=Z,9.0nm,1.0s | | | | | |
| **CLZ** | **Clausthal** | **148.45 349** | *e*PKPbc | **PKPbc** | **22 02 40.7** | **+0.2** |
| | baz=20,slow=2.3 | | | | | |
| CLZ | | | *e*PKPab | **PKPab** | **22 02 46.5** | **+0.1** |
| | baz=20,slow=2.3 | | | | | |
| **KRLC** | **Kraliky** | **148.50 340** | *e*PKP | **PKPbc** | **22 02 41.1** | **+0.3** |
| KRLC | | | *ex* | **PKPab** | **22 02 46.7** | **0.0** |
| **MORC** | **Moravsky Berou** | **148.52 339** | *e* | **PKPab** | **22 02 46.8** | **0.0** |
| **MORC** | **Moravsky Berou** | **148.52 339** | *e*PKP | **PKPbc** | **22 02 41.1** | **+0.3** |
| **CJR** | **Cluj-Napoca** | **148.53 330** | ⇓P | **PKPdf** | **22 02 37.9** | **+1.5** |
| **BRG** | **Berggiesshubel** | **148.59 344** | Amp | | 22 02 41.9 | |
| | comp=Z,3.4nm,0.7s | | | | | |
| **BRG** | **Berggiesshubel** | **148.59 344** | Amp | | 22 02 48.1 | |
| | comp=Z,1.4nm,0.7s | | | | | |
| **BRG** | **Berggiesshubel** | **148.59 344** | *e*PKPbc | **PKPbc** | **22 02 40.9** | **0.0** |
| | baz=20,slow=2.3 | | | | | |
| **BRG** | **Berggiesshubel** | **148.59 344** | *i* P | **PKPbc** | **22 02 41.2** | **+0.3** |
| **BRG** | **Berggiesshubel** | **148.59 344** | P | **PKPab** | **22 02 46.7** | **-0.2** |
| **PVCC** | **Panska Ves** | **148.74 343** | *e*PKP | **PKPbc** | **22 02 41.4** | **+0.2** |
| **NEUB** | **Neuenburg** | **148.78 347** | *e*PKPbc | **PKPbc** | **22 02 41.3** | **0.0** |
| | baz=20,slow=2.3 | | | | | |
| NEUB | | | *e*PKPab | **PKPab** | **22 02 47.2** | **-0.5** |
| | baz=20,slow=2.3 | | | | | |
| **GTTG** | **Gottingen** | **148.81 349** | *e*PKPbc | **PKPbc** | **22 02 41.2** | **-0.1** |
| | baz=20,slow=2.3 | | | | | |
| GTTG | | | *e*PKPab | **PKPab** | **22 02 47.8** | **0.0** |
| | baz=20,slow=2.3 | | | | | |
| **VRAC** | **Vranov** | **149.23 340** | *e* | **PKPab** | **22 02 49.9** | **+0.2** |
| **VRAC** | **Vranov** | **149.23 340** | *e*PKP | **PKPbc** | **22 02 42.8** | **+0.3** |
| **GOPC** | **GO Pecny, Ondr** | **149.24 343** | *e*PKP | **PKPbc** | **22 02 42.8** | **+0.3** |
| **PRU** | **Pruhonice** | **149.24 343** | *e*PKP | **PKPbc** | **22 02 42.7** | **+0.2** |
| **JAVC** | **Velka Javorina** | **149.26 338** | *e*PKP | **PKiKP** | **22 02 44.0** | **+0.6** |
| **MOX** | **Moxa** | **149.34 347** | *e*PKPbc | **PKPbc** | **22 02 42.5** | **-0.2** |
| | baz=20,slow=2.3 | | | | | |
| **LOT** | **Lotru** | **149.36 328** | ⇓P | **PKPbc** | **22 02 41.9** | **-1.2** |
| **TANN** | **Tannenbergstha** | **149.37 346** | *e*PKPbc | **PKPbc** | **22 02 42.9** | **+0.1** |
| | baz=20,slow=2.3 | | | | | |
| **PLN** | **Plauen** | **149.38 346** | *e*PKPbc | **PKPbc** | **22 02 42.8** | **0.0** |
| | baz=20,slow=2.3 | | | | | |
| **KASTN** | **Kahler Asten** | **149.39 351** | *e*PKPbc | **PKPbc** | **22 02 42.8** | **0.0** |
| | baz=20,slow=2.3 | | | | | |
| **UBBA** | **Unterbreizbach** | **149.50 349** | *e*PKPbc | **PKPbc** | **22 02 42.8** | **-0.1** |
| | baz=20,slow=2.3 | | | | | |
| **KRUC** | **Moravsky** | **149.51 340** | *e* | **PKPab** | **22 02 50.7** | **-0.1** |
| **KRUC** | **Moravsky** | **149.51 340** | *e*PKP | **PKPbc** | **22 02 43.0** | **-0.1** |
| **ZVC** | **Zvikov** | **149.83 343** | *e*PKP | **PKiKP** | **22 02 44.4** | **-0.1** |
| **MANZ** | **Manzenberg** | **149.85 346** | *e*PKPbc | **PKPbc** | **22 02 44.0** | **0.0** |
| | baz=20,slow=2.3 | | | | | |
| **GZR** | **Guza Zlata** | **149.89 329** | ⇑P | **PKPbc** | **22 02 43.5** | **-0.7** |
| **SURR** | **Surduc** | **149.93 330** | ⇑P | **PKPbc** | **22 02 44.2** | **-0.1** |
| **ROTZ** | **Rotzenmuhle** | **150.03 345** | *e*PKPbc | **PKPbc** | **22 02 44.3** | **-0.1** |
| | baz=20,slow=2.3 | | | | | |
| **BZS** | **Buzias** | **150.27 330** | ⇑P | **PKPbc** | **22 02 44.9** | **-0.2** |
| **KHC** | **Kasperske Hory** | **150.28 343** | | **PKPbc** | **22 02 44.2** | **-0.8** |
| **KHC** | **Kasperske Hory** | **150.28 343** | *e*PKP | **PKPbc** | **22 02 45.1** | **+0.1** |
| **GRF** | **Grafenberg Arr** | **150.33 347** | *e*PKPbc | **PKPbc** | **22 02 45.0** | **-0.1** |
| | baz=20,slow=2.3 | | | | | |
| **TNS** | **Taunus Mts** | **150.34 350** | *e*PKPbc | **PKPbc** | **22 02 45.3** | **+0.2** |
| | baz=20,slow=2.3 | | | | | |
| TNS | | | *e*PKPab | **PKPab** | **22 02 54.1** | **-0.3** |
| | baz=20,slow=2.3 | | | | | |
| **CKRC** | **Cesky Krumlov** | **150.36 342** | *e*PKP | **PKPbc** | **22 02 45.2** | **0.0** |
| **HERR** | **Herculane** | **150.44 328** | ⇓P | **PKPbc** | **22 02 44.8** | **-0.6** |
| **WET** | **Wettzell** | **150.45 344** | *e*PKPab | **PKPab** | **22 02 54.7** | **-0.1** |
| | baz=20,slow=2.3 | | | | | |
| **GEC2** | **GERESS Array S** | **150.50 343** | | **PKPbc** | **22 02 44.6** | **-1.0** |
| **GEC2** | **GERESS Array S** | **150.50 343** | *e*PKPbc | **PKPbc** | **22 02 45.3** | **-0.3** |
| | baz=20,slow=2.3 | | | | | |
| **GERES** | **GERESS Array B** | **150.50 343** | | **PKPbc** | **22 02 45.0** | **-0.7** |
| **GERES** | **GERESS Array B** | **150.50 343** | PKPbc | **PKPbc** | **22 02 45.4** | **-0.3** |
| | comp=Z,1.6nm,0.6s,baz=53,slow=3.9,SNR=11 | | | | | |
| **CONA** | **Conrad Observa** | **150.67 339** | *i* PKP | **PKPbc** | **22 02 46.1** | **+0.1** |
| | comp=Z,3.9nm,0.6s | | | | | |
| **RONA** | **Rosalia, Austr** | **150.73 339** | *i* PKP | **PKPbc** | **22 02 46.1** | **0.0** |
| | comp=Z,5.4nm,0.5s | | | | | |
| **AKAS** | **Kas** | **150.89 307** | PKPbc | **PKPbc** | **22 02 45.9** | **-1.0** |
| **WLF** | **Walferdange** | **151.19 353** | *e*PKPbc | **PKiKP** | **22 02 47.4** | **+0.1** |
| | baz=20,slow=2.3 | | | | | |
| **MOA** | **Molln** | **151.24 341** | *e*PKP | **PKPbc** | **22 02 46.9** | **-0.3** |
| | comp=Z,1.2nm,0.4s | | | | | |
| **ARSA** | **Arzberg** | **151.38 339** | *e*PKiKP | **PKiKP** | **22 02 48.1** | **+0.3** |
| | comp=Z,0.8nm,0.4s | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **151.57 342** | *e*PKP | **PKPbc** | **22 02 47.7** | **-0.2** |
| | comp=Z,0.7nm,0.4s | | | | | |
| **STU** | **Stuttgart** | **151.61 349** | *e*PKPbc | **PKPbc** | **22 02 47.9** | **-0.1** |
| | baz=20,slow=2.3 | | | | | |
| **BOVS** | **Bovan** | **151.69 327** | ⇓P | **PKPbc** | **22 02 47.4** | **-0.9** |
| **FUR** | **Furstenfeldbru** | **151.75 345** | *e*PKPbc | **PKPbc** | **22 02 48.3** | **0.0** |
| | baz=20,slow=2.3 | | | | | |
| FUR | | | *e*PKPab | **PKPab** | **22 03 00.4** | **+0.1** |
| | baz=20,slow=2.3 | | | | | |
| **RJOB** | **Jochberg** | **151.76 343** | *e*PKPbc | **PKPbc** | **22 02 48.0** | **-0.5** |
| | baz=20,slow=2.3 | | | | | |
| RJOB | | | *e*PKPab | **PKPab** | **22 03 01.2** | **+0.8** |
| | baz=20,slow=2.3 | | | | | |
| **SOKA** | **Soboth** | **152.04 339** | *e*PKP | **PKPbc** | **22 02 48.4** | **-0.7** |
| | comp=Z,0.1nm,0.2s | | | | | |
| **LESA** | **Schwarzleotal** | **152.08 343** | *e*PKP | **PKPbc** | **22 02 48.9** | **-0.3** |
| | comp=Z,2.4nm,0.6s | | | | | |
| **BFO** | **Black Forest** | **152.19 350** | *e*PKPbc | **PKPbc** | **22 02 48.9** | **-0.4** |
| | baz=20,slow=2.3 | | | | | |
| BFO | | | *e*PKPab | **PKPab** | **22 03 01.2** | **-0.9** |
| | baz=20,slow=2.3 | | | | | |
| **KBA** | **Koelnbreinsper** | **152.21 342** | *e*PKP | **PKPbc** | **22 02 49.0** | **-0.6** |
| | comp=Z,0.9nm,0.5s | | | | | |
| **WATA** | **Walderalm** | **152.45 344** | *e*PKP | **PKPbc** | **22 02 49.5** | **-0.6** |
| | comp=Z,0.5nm,0.3s | | | | | |
| **WTTA** | **Wattenberg** | **152.50 344** | *e*PKP | **PKPbc** | **22 02 49.6** | **-0.6** |
| | comp=Z,2.1nm,0.5s | | | | | |
| **RETA** | **Reute** | **152.51 346** | *e*PKP | **PKPbc** | **22 02 50.0** | **-0.1** |
| | comp=Z,0.2nm,0.3s | | | | | |
| **MYKA** | **Terra Mystica** | **152.53 341** | *e*PKP | **PKPbc** | **22 02 48.9** | **-1.2** |
| | comp=Z,1.5nm,0.4s | | | | | |
| **MOTA** | **Moosalm** | **152.56 345** | *e*PKP | **PKPbc** | **22 02 49.6** | **-0.7** |
| | comp=Z,0.2nm,0.2s | | | | | |
| **SQTA** | **Sankt Quirin** | **152.65 345** | *i* PKP | **PKPbc** | **22 02 49.6** | **-0.9** |
| | comp=Z,0.9nm,0.3s | | | | | |
| **PRED** | **Cave del Predi** | **152.72 341** | PKPbc | **PKPbc** | **22 02 49.0** | **-1.5** |
| **FETA** | **Feichten** | **152.95 345** | *e*PKP | **PKPbc** | **22 02 50.3** | **-0.9** |
| | comp=Z,0.3nm,0.3s | | | | | |
| **STAL** | **STALIGIAL** | **153.14 342** | | **PKPbc** | **22 02 50.0** | **-1.5** |
| **FUORN** | **Ofenpass-Fuorn** | **153.44 346** | PKPbc | **PKPbc** | **22 02 51.7** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **172.09 185** | PKPbc | **PKPdf** | **22 03 01.3** | **-1.0** |
| | comp=Z,0.6nm,0.9s,baz=97,slow=0.9,SNR=2.8 | | | | | |

*IDC* ***18*** *21:44:44.7±0.7,5.°54S×133.°88E, h0km, mb4.2/8, mbtmp4.3/10, ML4.2/3, MS3.8/2, Error ellipse: s-maj=44.3km s-min=16.3km az=77.0*
*NEIC* ***18*** *21:44:48.6±1.9,5.°48S±0.°06×133.°95E±0.°09, h23km±6km, mb4.5/22, Error ellipse: s-maj=12.9km s-min=9.0km az=76.0*
*DJA* ***18*** *21:44:50.2±1.5,5.°5S±2.°×13.°4E±.°, h23km±14km, M4.8/15, mB5.3/10, mb4.9/15, MLv4.9/13, Mw(mB)4.7/10,*

**ISC 18 21:44:49.5±0.4,5.°49S±0.°05×133.°91E±0.°06, h32km, n101, σ1§27/97, mb4.4/17, 2C, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMPI** | **Kaimana, Papua** | **1.82** | **354** | P | **Pn** | **21 45 17.8** | **-0.9** |
| KMPI | | | | S | **Sn** | **21 45 38.9** | **-1.8** |
| **FAKI** | **Fak Fak** | **3.04** | **327** | P | **Pn** | **21 45 36.4** | **+1.0** |
| **FAKI** | **Fak Fak** | **3.04** | **327** | Pn | **Pn** | **21 45 34.7** | **-0.8** |
| **FAKI** | **Fak Fak** | **3.04** | **327** | P | **Pn** | **21 45 34.8** | **-0.6** |
| **SAUI** | **Saumlaki** | **3.59** | **226** | Pn | **Pn** | **21 45 43.5** | **+0.6** |
| **SAUI** | **Saumlaki** | **3.59** | **226** | P | **Pn** | **21 45 45.8** | **+2.8** |
| **BNDI** | **Bandanaira** | **4.10** | **283** | P | **Pn** | **21 45 51.8** | **+1.7** |
| **BNDI** | **Bandanaira** | **4.10** | **283** | P | **Pn** | **21 45 50.9** | **+0.8** |
| BNDI | | | | S | **Sn** | **21 46 36.7** | **-0.3** |
| **SWI** | **Sorong** | **5.30** | **330** | P | **Pn** | **21 46 06.9** | **+0.4** |
| **MSAI** | **Masohi** | **5.40** | **293** | P | **Pn** | **21 46 08.1** | **+0.2** |
| | 136nm,0.6s,4μm0.6nm | | | | | | |
| **GENI** | **Genyem** | **6.87** | **66** | P | **Pn** | **21 46 28.8** | **+0.6** |
| | 68nm,0.6s,0.6nm | | | | | | |
| **NLAI** | **Namlea** | **7.15** | **288** | P | **Pn** | **21 46 32.3** | **+0.4** |
| | 62nm,0.6s,2μm0.4nm | | | | | | |
| **TABU** | **Tabubil** | **7.29** | **89** | P | **Pn** | **21 46 34.9** | **+1.0** |
| **KDU** | **Kakadu** | **7.29** | **191** | P | **Pn** | **21 46 33.9** | **-0.1** |
| **JAY** | **Jayapura** | **7.39** | **67** | P | **Pn** | **21 46 36.0** | **+0.6** |
| **DRS** | **Darwin Rock St** | **7.51** | **203** | P | **Pn** | **21 46 37.4** | **+0.4** |
| **MTN** | **Manton Dam** | **7.81** | **200** | P | **Pn** | **21 46 41.5** | **+0.5** |
| **MTN** | **Manton Dam** | **7.81** | **200** | Pn | **Pn** | **21 46 41.0** | **0.0** |
| **SANI** | **Sanana** | **8.61** | **293** | P | **Pn** | **21 46 51.3** | **-0.7** |
| **SANI** | **Sanana** | **8.61** | **293** | P | **Pn** | **21 46 49.3** | **-2.7** |
| | 63nm,0.6s,887nm | | | | | | |
| **SOEI** | **Soe** | **10.46** | **245** | P | **Pn** | **21 47 17.7** | **+0.3** |
| **SOEI** | **Soe** | **10.46** | **245** | Pn | **Pn** | **21 47 15.8** | **-1.7** |
| **SOEI** | **Soe** | **10.46** | **245** | P | **Pn** | **21 47 17.6** | **+0.2** |
| | 86nm,0.6s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KNRA** | **Kununurra** | **11.32 206** | Pn | **Pn** | **21 47 27.2** | **-1.9** |
| **LUWI** | **Luwuk** | **11.96 291** | | **Pn** | **21 47 35.1** | **-2.9** |
| **LUWI** | **Luwuk** | **11.96 291** | P | **Pn** | **21 47 38.1** | **+0.2** |
| | 44nm,0.7s,1μm | | | | | |
| **COEN** | **Coen** | **12.42 133** | P | **Pn** | **21 47 42.0** | **-2.2** |
| **COEN** | **Coen** | **12.42 133** | Pn | **Pn** | **21 47 41.2** | **-3.0** |
| **GTOI** | **Gorontalo** | **12.47 299** | P | **Pn** | **21 47 47.0** | **+2.1** |
| | 11nm,0.7s | | | | | |
| **EDFI** | **Ende, Flores** | **12.55 254** | P | **Pn** | **21 47 47.3** | **+1.2** |
| | 20nm,1.3s | | | | | |
| **PMG** | **Port Moresby** | **13.70 107** | Pn | **Pn** | **21 48 02.2** | **+0.5** |
| **KAPI** | **Kappang** | **14.11 271** | Pn | **Pn** | **21 48 08.6** | **+1.3** |
| **KAPI** | **Kappang** | **14.11 271** | LR | LR | 21 53 12.8 | |
| | comp=Z,131nm,19.9s,baz=90,slow=36 | | | | | |
| **WB0** | **Warramunga Arr** | **14.20 178** | Pn | **Pn** | 21 48 04.5 | -4.2 |
| **WRA** | **Warramunga Arr** | **14.38 178** | Pn | **Pn** | 21 48 05.5 | -5.5 |
| **WRA** | **Warramunga Arr** | **14.38 178** | Pn | **Pn** | 21 48 07.0 | -3.9 |
| | 3.2nm,0.3s,baz=355,slow=13,SNR=71 | | | | | |
| WRA | | | Sn | Sn | 21 50 36.2 | -13 |
| | 2.7nm,0.3s,baz=353,slow=24,SNR=5.6 | | | | | |
| | 4.3nm,0.3s | | | | | |
| **TOLI2** | **Tolitoli** | **14.66 296** | P | **Pn** | **21 48 16.1** | **+1.3** |
| **TOLI2** | **Tolitoli** | **14.66 296** | | **Pn** | **21 48 14.7** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **14.91 212** | P | **Pn** | **21 48 16.8** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **14.91 212** | Pn | **Pn** | **21 48 14.9** | **-3.3** |
| **QIS** | **Mount Isa** | **15.97 160** | P | **Pn** | **21 48 30.8** | **-1.2** |
| **MTSU** | **Mount Surprise** | **16.17 142** | P | **Pn** | **21 48 32.3** | **-2.3** |
| **AS01** | **Alice Springs** | **18.07 180** | P | **Pn** | **21 48 57.4** | **-1.0** |
| **AS31** | **Alice Springs** | **18.08 180** | Pn | **Pn** | **21 48 55.1** | **-3.2** |
| **ASAR** | **Alice Springs** | **18.08 180** | P | **Pn** | **21 48 55.5** | **-2.9** |
| | 1.2nm,0.3s,baz=356,slow=14,SNR=55 | | | | | |
| ASAR | | | S | Sn | 21 52 07.5 | -12 |
| | 2.3nm,0.6s,baz=357,slow=17,SNR=3.6 | | | | | |
| | 22nm,0.7s | | | | | |
| **MYLDM** | **Lahad Datu** | **18.68 304** | P | **P** | **21 49 04.9** | **-0.4** |
| **CTA** | **Charters Tower** | **18.84 142** | P | **P** | **21 49 07.0** | **0.0** |
| | 0.1nm,0.3s,baz=320,slow=11,SNR=13 | | | | | |
| **CTAO** | **Charters Tower** | **18.84 142** | P | **P** | **21 49 05.6** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **19.83 260** | P | **P** | **21 49 18.8** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **19.83 260** | P | **P** | **21 49 16.2** | **-1.7** |
| JAGI | | | IAmb | IAmb | 21 49 37.5 | |
| | comp=Z,38nm,1.4s | | | | | |
| **WRKA** | **Warakurna** | **20.17 195** | P | **P** | **21 49 21.3** | **-0.2** |
| **MBWA** | **Marble Bar** | **20.78 220** | P | **P** | **21 49 29.3** | **+1.2** |
| **MBWA** | **Marble Bar** | **20.78 220** | P | **P** | **21 49 28.5** | **+0.4** |
| MBWA | | | IAmb | IAmb | 21 49 30.3 | |
| | comp=Z,36nm,0.8s | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.01 219** | P | **P** | **21 49 31.7** | **+1.1** |
| **PSA00** |

comp=Z,11nm,0.7s
**USRK Ussuriysk Ar. 22.97 337** P **P** **21 54 24.3 +0.3**
**SONM Songino Array 38.65 318** P **P** **21 56 43.6 +0.5**
comp=Z,0.4nm,0.5s,baz=119,slow=9.3,SNR=2.4
comp=Z,0.4nm,0.5s
**WRA Warramunga Arr 44.32 194** P **P** **21 57 28.2 -1.5**
comp=Z,0.8nm,0.7s,baz=11,slow=9.3,SNR=2.6
comp=Z,0.8nm,0.7s
**ASAR Alice Springs 48.02 193** P **P** **21 57 57.3 -1.5**
comp=Z,0.2nm,0.4s,baz=13,slow=9.5,SNR=2.1
comp=Z,0.2nm,0.4s
**ZALV Zalesovo Beam 53.47 321** P **P** **21 58 39.2 -0.4**
**ZALV Zalesovo Beam 53.47 321** P **P** **21 58 39.3 -0.3**
comp=Z,1.4nm,0.5s,baz=109,slow=8.5,SNR=8.3
comp=Z,1.4nm,0.5s
**J16K Anvik River 53.69 27** P **P** **21 58 40.2 -0.9**
**MK31 Makanchi Array 54.28 312** P **P** **21 58 45.6 -0.1**
**MKAR Makanchi Array 54.28 312** P **P** **21 58 45.3 -0.4**
**MKAR Makanchi Array 54.28 312** P **P** **21 58 46.2 +0.6**
comp=Z,0.7nm,0.5s,baz=87,slow=8.5,SNR=8.8
comp=Z,0.7nm,0.5s
**MAKZ Makanchi 54.49 312** P **P** **21 58 46.8 -0.5**
MAKZ IAmb IAmb 21 59 10.1
comp=Z,5.5nm,1.3s
**E18K Tukpahlearik C 55.28 23** P **P** **21 58 52.1 -0.4**
**KURBB Kurchatov Arra 56.94 316** P **P** **21 59 04.6 -0.1**
comp=Z,1.1nm,0.5s,baz=91,slow=8.0,SNR=11
comp=Z,1.1nm,0.5s
**ARSB Arslanbob 61.19 305** P **P** **21 59 34.7 +0.1**
**CRQM Cirque 61.20 32** P **P** **21 59 34.3 -0.1**
**BVAR Borovoye Array 62.00 319** P **P** **21 59 40.5 +0.9**
comp=Z,6.2nm,0.5s,baz=83,slow=7.6,SNR=26
comp=Z,6.2nm,0.5s
**KK31 Karatay Array 62.79 308** P **P** **21 59 44.0 -1.1**
**KKAR Karatay Array 62.79 308** P **P** **21 59 45.1 0.0**
**ARU Arti 68.44 323** P **P** **22 00 21.4 +0.1**
ARU IAmb IAmb 22 00 22.7
comp=Z,2.5nm,0.6s
**ABKAR Akbulak array 68.99 316** P **P** **22 00 23.9 -1.0**
**ABKAR Akbulak array 68.99 316** P **P** **22 00 24.5 -0.4**
ABKAR IAmb IAmb 22 00 25.6
comp=Z,1.3nm,0.6s
**B08A Colville Reser 76.77 43** P **P** **22 01 12.5 +1.4**
B08A IAmb IAmb 22 01 13.9
comp=Z,3.4nm,0.8s
**FINES FINESS Array B 81.99 335** P **P** **22 01 38.9 -0.4**
**FINES FINESS Array B 81.99 335** P **P** **22 01 39.9 +0.7**
comp=Z,2.4nm,0.9s,baz=69,slow=6.3,SNR=6.1
comp=Z,2.4nm,0.9s

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*MOS* ***18*** *21:52:38.9±0.8, 4°.75S×153°.51E, h35km, mb5.4/35, Error ellipse: s-maj=8.9km s-min=5.6km az=114.9*
*BJI* ***18*** *21:52:41.3±0.0, 4°.50S×153°.75E, h55km, mb5.2/77, mB5.3/37, Ms4.6/27, Ms7 4.3/34*
*NEIC* ***18*** *21:52:43.3, 4°.77S×153°.65E, h50km, Moment Tensor Solution. Duration: 28s0 Moment tensor: Scale 10^16 Nm; Mrr7.24; Mθθ-0.89; Mφφ-6.34; Mrθ 0.53; Mθφ 5.20; Mφr-2.12; Fault plane solution: Mo 8.66000×10^16 NP1: φs155.28000°, δ52.40000°, λ98.53000°. NP2: φs321.47000°, δ38.41000°, λ79.10000°. Principal axes: T 7.5712, Plg80.0000°, Azm103.0000°; N 2.1755, Plg7.0000°, Azm330.0000°; P -9.7467, Plg7.0000°, Azm239.0000°;*
*GCMT* ***18*** *21:52:43.2±0.1, 5°.00S±0°.01×153°.37E±0°.01, h51km, MW5.2/115, Moment Tensor Solution. s115,c161; s101,c147; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr0.80±.02; Mθθ-0.17±.01; Mφφ-0.63±.01; Mrθ 0.07±.01; Mθφ 0.42±.01; Mφr-0.14±.01; Best double couple: Mo 0.85400×10^17 NP1:φs151.00000°, δ50.00000°, λ91.00000°. NP2:φs329.00000°, δ40.00000°, λ88.00000°. Principal axes: T 0.8140, Plg85.0000°, Azm70.0000°; N 0.0790, Plg1.0000°, Azm330.0000°; P -0.8930, Plg5.0000°, Azm240.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC* ***18*** *21:52:43.3, 4°.87S×153°.55E, h50km*
*NEIC* ***18*** *21:52:43.2±1.4, 4°.87S±0°.07×153°.55E±0°.07, h61km±4km, mb5.3/127, Mww5.2/15, Error ellipse: s-maj=11.0km s-min=8.5km az=215.0*
*IDC* ***18*** *21:52:44.5±0.5, 4°.87S×153°.58E, h76km±3km, mb4.6/23, mbtmp5.0/24, MS4.1/43, Error ellipse: s-maj=14.7km s-min=9.7km az=94.0*
*DJA* ***18*** *21:52:44.1±0.5, 5°S±3°×15°4E±°, h74km±7km, M5.2/18, mb5.2/18, mB5.5/11, MLv5.6/2, Mw(mB)5.0/11, MwMwp4.5/3, Mwp4.9/3*
**ISC 18 21:52:43.5±0.3, 4°.80S±0°.03×153°.52E±0°.04, h64km±2km, h65km:pP-P, n718,σ1s24/751, mb5.2/152, 33C-5D, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.48** | **294** | | **Pn** | **21 53 08.8** | **+0.7** |
| RABL | | | | Sn | **Sn** | **21 53 30.1** | **+3.5** |
| **I40PG** | **Keravat** | **1.58** | **288** | P | **Pn** | **21 53 10.0** | **+0.6** |
| | baz=140,slow=21 | | | | | | |
| I40PG | | | | I | I | 22 03 10.0 | |
| | baz=82,slow=313,SNR=1.0 | | | | | | |
| **BULU** | **Kimbe** | **3.27** | **257** | P | **Pn** | **21 53 32.0** | **-0.4** |
| **MANU** | **Manus Island** | **6.72** | **294** | Pn | **Pn** | **21 54 21.1** | **+1.5** |
| **PMG** | **Port Moresby** | **7.80** | **234** | P | **Pn** | **21 54 34.5** | **+0.2** |
| **PMG** | **Port Moresby** | **7.80** | **234** | | **Pn** | **21 54 33.8** | **-0.5** |
| **PMG** | **Port Moresby** | **7.80** | **234** | P | **Pn** | **21 54 34.5** | **+0.2** |
| | 473nm,0.7s,baz=48,slow=6.9,SNR=70 | | | | | | |
| PMG | | | | S | **Sn** | **21 56 01.2** | **+0.1** |
| | 806nm,0.7s,baz=24,slow=17,SNR=14 | | | | | | |
| **PMG** | **Port Moresby** | **7.80** | **234** | *ce*P | **Pn** | **21 54 33.7** | **-0.6** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,553nm,0.7s | | | | | | |
| **HNR** | **Honiara** | **7.86** | **126** | P | **Pn** | **21 54 36.5** | **+1.3** |
| **HNR** | **Honiara** | **7.86** | **126** | Pn | **Pn** | **21 54 34.4** | **-0.8** |
| **HNR** | **Honiara** | **7.86** | **126** | P | **Pn** | **21 54 34.4** | **-0.8** |
| **PATS** | **Pohnpei** | **12.51** | **23** | P | **Pn** | **21 55 37.1** | **-1.6** |
| **PATS** | **Pohnpei** | **12.51** | **23** | Pn | **Pn** | **21 55 37.3** | **-1.4** |
| **PATS** | **Pohnpei** | **12.51** | **23** | P | **Pn** | **21 55 37.4** | **-1.4** |
| **JAY** | **Jayapura** | **12.99** | **280** | P | **Pn** | **21 55 47.3** | **+2.0** |
| | comp=Z,53nm,1.0s,comp=Z,1μm | | | | | | |
| **GENI** | **Genyem** | **13.50** | **279** | P | **Pn** | **21 55 52.6** | **+0.4** |
| **GENI** | **Genyem** | **13.50** | **279** | P | **Pn** | **21 55 53.8** | **+1.6** |
| | comp=Z,114nm,1.1s,comp=Z,3μmcomp=Z,3μm | | | | | | |
| **COEN** | **Coen** | **13.67** | **228** | P | **Pn** | **21 55 55.7** | **+1.3** |
| **COEN** | **Coen** | **13.67** | **228** | Pn | **Pn** | **21 55 54.5** | **+0.1** |
| **COEN** | **Coen** | **13.67** | **228** | P | **Pn** | **21 55 55.6** | **+1.2** |
| | comp=Z,95nm,1.5s | | | | | | |
| **TV1H** | **Townsville Har** | **15.80** | **204** | P | **Pn** | **21 56 23.5** | **+1.4** |
| **MTSU** | **Mount Surprise** | **16.02** | **213** | P | **P** | **21 56 26.8** | **-0.4** |
| **CTA** | **Charters Tower** | **16.76** | **204** | P | **Pn** | **21 56 33.7** | **-0.5** |
| | comp=Z,1.2nm,0.8s,baz=27,slow=12,SNR=4.9 | | | | | | |
| CTA | | | | LR | LR | 22 02 11.7 | |
| | comp=Z,91nm,21.3s,baz=22,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **16.76** | **204** | P | **P** | **21 56 35.0** | **-0.4** |
| **CTAO** | **Charters Tower** | **16.76** | **204** | | **Pn** | **21 56 32.9** | **-1.3** |
| **CTAO** | **Charters Tower** | **16.76** | **204** | P | **Pn** | **21 56 32.9** | **-1.3** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **18.71** | **189** | P | **Pn** | **21 56 57.5** | **-0.4** |
| **KOUNC** | **Koumac, New Ca** | **18.84** | **147** | P | **Pn** | **21 56 58.7** | **-0.7** |
| **KOUNC** | **Koumac, New Ca** | **18.84** | **147** | P | **P** | **21 56 56.9** | **-1.3** |
| **KMPI** | **Kaimana, Papua** | **19.79** | **273** | P | **Pn** | **21 57 11.9** | **+1.1** |
| | comp=Z,244nm,0.7s | | | | | | |
| **GUMO** | **Guam** | **20.19** | **335** | P | **P** | **21 57 13.1** | **+0.1** |
| GUMO | | | | IAmb | IAmb | 21 57 30.9 | |
| | comp=Z,217nm,1.0s | | | | | | |
| **GUMO** | **Guam** | **20.19** | **335** | P | **P** | **21 57 13.5** | **+0.5** |
| | comp=Z,105nm,0.9s,baz=176,slow=12,SNR=2.2 | | | | | | |
| GUMO | | | | LR | LR | 22 04 02.1 | |
| | comp=Z,213nm,21.8s,baz=158,slow=33 | | | | | | |
| | comp=Z,105nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **20.19** | **335** | P | **P** | **21 57 13.1** | **+0.1** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,217nm,1.0s | | | | | | |
| **TARA** | **Tarawa** | **20.33** | **73** | P | **P** | **21 57 14.3** | **-0.3** |
| TARA | | | | IAmb | IAmb | 21 57 21.3 | |
| | comp=Z,155nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **20.59** | **186** | P | **P** | **21 57 17.8** | **+0.5** |
| **EIDS** | **Eidsvold** | **20.59** | **186** | P | **P** | **21 57 15.2** | **-2.1** |
| **EIDS** | **Eidsvold** | **20.59** | **186** | P | **P** | **21 57 17.6** | **+0.3** |
| | comp=Z,73nm,1.3s | | | | | | |
| **QIS** | **Mount Isa** | **20.70** | **220** | P | **P** | **21 57 18.6** | **0.0** |
| **QIS** | **Mount Isa** | **20.70** | **220** | P | **P** | **21 57 18.5** | **0.0** |
| | comp=Z,87nm,1.0s | | | | | | |
| **LIFNC** | **LIFOU** | **20.74** | **141** | P | **P** | **21 57 19.6** | **+0.7** |
| **LIFNC** | **LIFOU** | **20.74** | **141** | P | **P** | **21 57 18.3** | **-0.6** |
| **NOUC** | **Port Laguerre** | **21.19** | **145** | P | **P** | **21 57 23.9** | **+0.1** |
| **DZM** | **Mont Dzumac** | **21.25** | **145** | P | **P** | **21 57 24.8** | **+0.3** |
| **DZM** | **Mont Dzumac** | **21.25** | **145** | *e*P | **P** | **21 57 23.6** | **-0.9** |
| | comp=Z,336nm,1.4s | | | | | | |
| DZM | | | | *e*S | **S** | **22 01 19.3** | **+2.0** |
| | comp=Z,546nm,24.4s | | | | | | |
| DZM | | | | *e*LR | LR | 22 02 32.1 | |
| | comp=Z,2μm,27.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.25** | **145** | P | **P** | **21 57 23.5** | **-1.0** |
| DZM | | | | IAmb | IAmb | 21 57 36.8 | |
| | comp=Z,288nm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.25** | **145** | P | **P** | **21 57 23.3** | **-1.2** |
| | comp=Z,18nm,0.6s,baz=272,slow=8.0,SNR=56 | | | | | | |
| | comp=Z,18nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **21.30** | **274** | P | **P** | **21 57 26.8** | **+1.7** |
| **FAKI** | **Fak Fak** | **21.30** | **274** | P | **P** | **21 57 24.4** | **-0.7** |
| FAKI | | | | IAmb | IAmb | 21 57 30.0 | |
| | comp=Z,97nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **21.30** | **274** | P | **P** | **21 57 24.8** | **-0.3** |
| | comp=Z,154nm,0.9s,comp=Z,2μm | | | | | | |
| **YATNC** | **Mamie plateau,** | **21.50** | **144** | P | **P** | **21 57 27.4** | **+0.3** |
| **KDU** | **Kakadu** | **22.21** | **248** | P | **P** | **21 57 34.3** | **-0.5** |
| **KDU** | **Kakadu** | **22.21** | **248** | P | **P** | **21 57 33.6** | **-1.2** |
| | comp=Z,229nm,0.8s | | | | | | |
| **PINNC** | **Pines Island,** | **22.25** | **144** | P | **P** | **21 57 35.8** | **+0.7** |
| **PINNC** | **Pines Island,** | **22.25** | **144** | P | **P** | **21 57 34.7** | **-0.4** |
| **AUWSH** | **Wavell State H** | **22.48** | **181** | P | **P** | **21 57 37.9** | **+0.3** |
| **SWI** | **Sorong** | **22.57** | **279** | P | **P** | **21 57 40.6** | **+1.9** |
| | comp=Z,201nm,0.9s,comp=Z,2μm | | | | | | |
| **SWI** | **Sorong** | **22.57** | **279** | P | **P** | **21 57 40.8** | **+2.1** |
| **GC1S** | **Gold Coast 1 S** | **23.23** | **180** | P | **P** | **21 57 46.5** | **+1.3** |
| **QLP** | **Quilpie** | **23.41** | **201** | P | **P** | **21 57 46.9** | **0.0** |
| **QLP** | **Quilpie** | **23.41** | **201** | P | **P** | **21 57 45.9** | **-1.1** |
| | comp=Z,122nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **23.50** | **249** | P | **P** | **21 57 49.0** | **+1.1** |
| **MTN** | **Manton Dam** | **23.50** | **249** | P | **P** | **21 57 46.7** | **-1.2** |
| MTN | | | | IAmb | IAmb | 21 58 13.7 | |
| | comp=Z,87nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **23.50** | **249** | P | **P** | **21 57 48.1** | **+0.1** |
| | comp=Z,121nm,1.1s | | | | | | |
| **DRS** | **Darwin Rock St** | **23.60** | **250** | P | **P** | **21 57 51.2** | **+2.4** |
| **WB0** | **Warramunga Arr** | **23.84** | **230** | P | **P** | **21 57 49.9** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 21 58 16.4 | |
| | comp=Z,108nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.97** | **229** | *i* P | **P** | **21 57 52.4** | **+0.3** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.99** | **229** | P | **P** | **21 57 50.4** | **-1.9** |
| **WRA** | **Warramunga Arr** | **23.99** | **229** | P | **P** | **21 57 52.4** | **+0.1** |
| | comp=Z,20nm,0.9s,baz=54,slow=9.5,SNR=30 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 01 33.8** | **+0.7** |
| | comp=Z,12nm,0.7s,baz=56,slow=2.5,SNR=8.8 | | | | | | |
| WRA | | | | S | **S** | **22 02 08.2** | **+3.4** |
| | comp=Z,4.1nm,1.0s,baz=54,slow=14,SNR=3.0 | | | | | | |
| WRA | | | | LR | LR | 22 06 56.2 | |
| | comp=Z,997nm,21.4s,baz=68,slow=36 | | | | | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.99** | **229** | P | **P** | **21 57 50.4** | **-1.9** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **AULRC** | **Lightning Ridg** | **25.05** | **191** | P | **P** | **21 58 01.8** | **0.0** |
| **ARMA** | **Armidale** | **25.55** | **184** | P | **P** | **21 58 07.2** | **+0.8** |
| **ARMA** | **Armidale** | **25.55** | **184** | P | **P** | **21 58 04.6** | **-1.8** |
| ARMA | | | | IAmb | IAmb | 21 58 08.2 | |
| | comp=Z,68nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **25.55** | **184** | P | **P** | **21 58 06.8** | **+0.4** |
| | comp=Z,80nm,1.2s | | | | | | |
| **INKA** | **Innaminka** | **25.86** | **207** | P | **P** | **21 58 11.4** | **+2.3** |
| **AUPHS** | **Peel High Scho** | **26.28** | **185** | P | **P** | **21 58 13.7** | **+0.7** |
| **NLAI** | **Namlea** | **26.40** | **272** | P | **P** | 21 58 35.2 | +21 |
| **AS01** | **Alice Springs** | **26.60** | **223** | P | **P** | **21 58 17.8** | **+1.8** |
| **KNRA** | **Kununurra** | **26.62** | **244** | P | **P** | **21 58 17.6** | **+1.5** |
| | comp=Z,142nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **26.64** | **223** | P | **P** | **21 58 15.7** | **-0.7** |
| **AS31** | **Alice Springs** | **26.64** | **223** | P | **P** | **21 58 16.1** | **-0.2** |
| | comp=Z,11nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **26.64** | **223** | P | **P** | **21 58 14.5** | **-1.8** |
| **ASAR** | **Alice Springs** | **26.64** | **223** | P | **P** | **21 58 16.1** | **-0.2** |
| | comp=Z,3.3nm,0.6s,baz=56,slow=9.1,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 01 39.4** | **+0.3** |
| | comp=Z,12nm,0.7s,baz=54,slow=2.6,SNR=9.2 | | | | | | |
| ASAR | | | | ScP | **ScP** | **22 05 13.7** | **0.0** |
| | comp=Z,1.5nm,0.8s,baz=46,slow=2.7,SNR=4.3 | | | | | | |
| ASAR | | | | LR | LR | 22 08 38.9 | |
| | comp=Z,867nm,22.0s,baz=57,slow=36 | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **MSVF** | **Nonsavu** | **27.23** | **120** | P | **P** | **21 58 21.6** | **-0.1** |
| **MSVF** | **Nonsavu** | **27.23** | **120** | *i* P | **P** | **21 58 21.8** | **+0.1** |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.60** | **195** | P | **P** | **21 58 25.5** | **+0.7** |
| **CMSA** | **Cobar Meteorol** | **27.60** | **195** | P | **P** | **21 58 26.6** | **+1.8** |
| | comp=Z,31nm,0.8s | | | | | | |
| **AUDCS** | **Dubbo College** | **27.67** | **189** | P | **P** | **21 58 26.5** | **+1.1** |
| **OOD** | **Oodnadatta** | **28.48** | **215** | P | **P** | **21 58 32.7** | **0.0** |
| **STKA** | **Stephens Creek** | **29.17** | **201** | P | **P** | **21 58 40.8** | **+2.1** |
| **STKA** | **Stephens Creek** | **29.17** | **201** | P | **P** | **21 58 37.4** | **-1.3** |
| **STKA** | **Stephens Creek** | **29.17** | **201** | P | **P** | **21 58 37.2** | **-1.6** |
| | comp=Z,5.8nm,0.8s,baz=28,slow=12,SNR=8.0 | | | | | | |
| STKA | | | | LR | LR | 22 10 02.3 | |
| | comp=Z,666nm,20.7s,baz=20,slow=36 | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **29.17** | **201** | *i* P | **P** | **21 58 38.9** | **+0.2** |
| **LCRK** | **Leigh Creek** | **29.31** | **208** | P | **P** | **21 58 40.4** | **+0.4** |
| **SOEI** | **Soe** | **29.42** | **259** | P | **P** | **21 58 40.4** | **-1.0** |
| SOEI | | | | IAmb | IAmb | 21 59 21.7 | |
| | comp=Z,74nm,1.0s | | | | | | |
| **DAV** | **Davao City (W)** | **30.27** | **293** | LR | LR | 22 11 05.6 | |
| | comp=Z,313nm,18.8s,baz=102,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.29** | **242** | P | **P** | **21 58 48.5** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **30.29** | **242** | P | **P** | **21 58 47.3** | **-1.6** |
| **CAN** | **Canberra** | **30.66** | **187** | P | **P** | **21 58 52.6** | **+0.6** |
| | comp=Z,30nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **30.66** | **187** | P | **P** | **21 58 52.6** | **+0.6** |
| CAN | | | | pP | **pP** | **21 59 09.0** | **-2.6** |
| **LUWI** | **Luwuk** | **30.93** | **276** | P | **P** | **21 58 55.7** | **+1.2** |
| **LUWI** | **Luwuk** | **30.93** | **276** | P | **P** | **21 58 54.3** | **-0.3** |
| LUWI | | | | IAmb | IAmb | 21 59 14.1 | |
| | comp=Z,113nm,1.2s | | | | | | |
| **LUWI** | **Luwuk** | **30.93** | **276** | P | P | 21 59 12.8 | +18 |
| **WRKA** | **Warakurna** | **31.49** | **228** | P | **P** | **21 59 02.0** | **+2.6** |
| **WRKA** | **Warakurna** | **31.49** | **228** | P | **P** | **21 58 58.0** | **-1.4** |
| | comp=Z,33nm,0.8s | | | | | | |
| **HTT** | **Hallett** | **31.57** | **204** | P | **P** | **21 58 59.6** | **-0.4** |
| **HTT** | **Hallett** | **31.57** | **204** | P | **P** | **21 58 59.4** | **-0.5** |
| | comp=Z,37nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **32.29** | **208** | P | **P** | **21 59 04.4** | **-1.9** |
| BBOO | | | | IAmb | IAmb | 21 59 32.1 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **33.23** | **279** | P | **P** | **21 59 14.2** | **-0.6** |
| **JCJ** | **Chichijima** | **33.55** | **342** | LR | LR | 22 10 46.0 | |
| | comp=Z,398nm,21.2s,baz=114,slow=32 | | | | | | |
| **ARPS** | **Mount Arapiles** | **33.58** | **197** | P | **P** | **21 59 18.9** | **+1.5** |
| **KAPI** | **Kappang** | **33.64** | **268** | P | **P** | **21 59 16.3** | **-2.1** |
| KAPI | | | | IAmb | IAmb | 21 59 46.7 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **33.64** | **268** | LR | LR | 22 16 41.1 | |
| | comp=Z,121nm,19.6s,baz=100,slow=43 | | | | | | |
| **KAPI** | **Kappang** | **33.64** | **268** | *i* P | | **21 59 17.5** | **-0.8** |
| **FORT** | **Forrest** | **35.24** | **220** | P | **P** | **21 59 31.5** | **-0.5** |
| **FORT** | **Forrest** | **35.24** | **220** | P | **P** | **21 59 30.2** | **-1.7** |
| **FORT** | **Forrest** | **35.24** | **220** | P | **P** | **21 59 30.8** | **-1.1** |
| | comp=Z,124nm,0.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **36.35** | **285** | P | **P** | **21 59 41.0** | **-0.7** |
| **MBWA** | **Marble Bar** | **36.59** | **241** | P | **P** | **21 59 43.2** | **-0.4** |
| **MBWA** | **Marble Bar** | **36.59** | **241** | P | **P** | **21 59 42.0** | **-1.7** |
| MBWA | | | | IAmb | IAmb | 22 00 02.2 | |
| | comp=Z,69nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **36.59** | **241** | P | **P** | **21 59 42.7** | **-0.9** |
| | comp=Z,82nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **36.65** | **240** | P | **P** | **21 59 43.9** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **36.65** | **240** | P | **P** | **21 59 43.1** | **-1.0** |
| PSA00 | | | | IAmb | IAmb | 22 00 02.6 | |
| | comp=Z,60nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **36.65** | **240** | P | **P** | **21 59 43.7** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 22 00 02.6 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **36.65** | **240** | P | **P** | **21 59 43.3** | **-0.8** |
| | comp=Z,61nm,1.0s | | | | | | |
| **KUZ** | **Kuaotunu** | **37.76** | **150** | P | **P** | **21 59 54.3** | **+1.0** |
| **TAU** | **Tasmania Unive** | **38.35** | **187** | P | **P** | **21 59 56.9** | **-1.2** |
| **TAU** | **Tasmania Unive** | **38.35** | **187** | P | **P** | **21 59 56.9** | **-1.2** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,398nm,1.7s | | | | | | |
| **TOZ** | **Tahuroa Road** | **38.43** | **151** | P | **P** | **21 59 58.2** | **-0.7** |
| TOZ | | | | IAmb | IAmb | 22 00 12.9 | |
| | comp=Z,58nm,1.3s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **39.26** | **263** | P | **P** | **22 00 08.6** | **+2.4** |
| **JAGI** | **Jajag, Banyuwa** | **39.26** | **263** | P | **P** | **22 00 03.7** | **-2.5** |
| JAGI | | | | IAmb | IAmb | 22 00 23.4 | |
| | comp=Z,73nm,1.1s | | | | | | |
| **QRZ** | **Quartz Range** | **39.72** | **157** | P | **P** | **22 00 10.3** | **+0.6** |
| **QRZ** | **Quartz Range** | **39.72** | **157** | P | **P** | **22 00 09.2** | **-0.5** |
| QRZ | | | | IAmb | IAmb | 22 00 10.6 | |
| | comp=Z,113nm,1.3s | | | | | | |
| **KMBL** | **Kambalda** | **39.75** | **225** | P | **P** | **22 00 09.5** | **-0.6** |
| **KMBL** | **Kambalda** | **39.75** | **225** | P | **P** | **22 00 08.8** | **-1.3** |
| | comp=Z,37nm,1.2s | | | | | | |
| **MEEK** | **Meekatharra** | **39.78** | **233** | P | **P** | **22 00 10.6** | **+0.2** |
| **MEEK** | **Meekatharra** | **39.78** | **233** | P | **P** | **22 00 09.5** | **-0.9** |
| | comp=Z,53nm,0.9s | | | | | | |
| **JOW** | **Kunigami** | **39.82** | **323** | P | **P** | **22 00 12.1** | **+1.5** |
| **JOW** | **Kunigami** | **39.82** | **323** | P | **P** | **22 00 11.7** | **+1.0** |
| **JOW** | **Kunigami** | **39.82** | **323** | P | **P** | **22 00 12.0** | **+1.3** |
| | comp=Z,32nm,0.3s,baz=139,slow=13,SNR=21 | | | | | | |
| JOW | | | | pP | **pwP** | **22 00 30.8** | **0.0** |
| | comp=Z,85nm,0.7s,baz=178,slow=8.2,SNR=11 | | | | | | |
| JOW | | | | LR | LR | 22 13 43.3 | |
| | comp=Z,164nm,21.8s,baz=149,slow=32 | | | | | | |
| | comp=Z,32nm,0.3s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **39.90** | **342** | LR | LR | 22 16 45.6 | |
| | comp=Z,196nm,18.4s,baz=272,slow=36 | | | | | | |
| **BKZ** | **Black Stump Fm** | **40.05** | **152** | P | **P** | **22 00 11.6** | **-0.9** |
| **JCZ** | **Jackson Bay** | **41.36** | **163** | P | **P** | **22 00 24.9** | **+1.6** |
| **KHZ** | **Kahutara** | **41.48** | **157** | P | **P** | **22 00 23.3** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **41.57** | **316** | P | **P** | **22 00 23.3** | **-1.8** |
| **YOJ** | **Yonaguni jima** | **41.57** | **316** | P | **P** | **22 00 23.3** | **-1.8** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,663nm,1.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **41.73** | **161** | LR | LR | 22 15 50.3 | |
| | comp=Z,837nm,21.0s,baz=324,slow=33 | | | | | | |
| **SBUM** | **Sibu** | **41.89** | **279** | P | **P** | **22 00 26.4** | **-1.5** |
| **GIRL** | **Giralia** | **41.89** | **241** | P | **P** | **22 00 27.6** | **-0.2** |
| **YULB** | **Yu-li** | **42.12** | **313** | P | **P** | **22 00 30.4** | **+0.8** |
| **YULB** | **Yu-li** | **42.12** | **313** | P | **P** | **22 00 29.7** | **0.0** |
| YULB | | | | IAmb | IAmb | 22 00 50.9 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **NACB** | **Ninganchiao** | **42.38** | **314** | P | **P** | **22 00 32.5** | **+0.7** |
| **NACB** | **Ninganchiao** | **42.38** | **314** | P | **P** | **22 00 32.5** | **+0.7** |
| NACB | | | | IAmb | IAmb | 22 00 53.4 | |
| | comp=Z,86nm,1.0s | | | | | | |
| **TPUB** | **Ta-pu** | **42.55** | **312** | P | **P** | **22 00 33.1** | **0.0** |
| TPUB | | | | IAmb | IAmb | 22 00 55.0 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **SSLB** | **Suanglung** | **42.61** | **313** | P | **P** | **22 00 35.3** | **+1.7** |
| **UGM** | **Wanagama** | **42.83** | **264** | P | **P** | **22 00 34.6** | **-1.0** |
| **KLBR** | **Kellerberrin** | **42.83** | **227** | P | **P** | **22 00 34.4** | **-0.9** |
| **KLBR** | **Kellerberrin** | **42.83** | **227** | P | **P** | **22 00 33.4** | **-2.0** |
| | comp=Z,48nm,0.8s | | | | | | |
| **INU** | **Inuyama** | **42.84** | **340** | P | **P** | **22 00 34.4** | **-0.9** |
| **INU** | **Inuyama** | **42.84** | **340** | P | **P** | **22 00 34.0** | **-1.3** |
| **YHNB** | **Yeheng** | **42.85** | **315** | P | **P** | **22 00 36.8** | **+1.2** |
| **MORW** | **Morawa** | **42.91** | **231** | P | **P** | **22 00 37.7** | **+1.7** |
| **MORW** | **Morawa** | **42.91** | **231** | P | **P** | **22 00 34.9** | **-1.1** |
| MORW | | | | IAmb | IAmb | 22 01 00.2 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **42.91** | **231** | P | **P** | **22 00 35.4** | **-0.6** |
| | comp=Z,54nm,1.1s | | | | | | |
| **BLDU** | **Ballidu** | **43.12** | **229** | P | **P** | **22 00 33.7** | **-3.9** |
| **JNU** | **Nakatsue** | **43.40** | **332** | P | **P** | **22 00 41.0** | **+1.1** |
| **JNU** | **Nakatsue** | **43.40** | **332** | P | **P** | **22 00 39.8** | **-0.1** |
| JNU | | | | IAmb | IAmb | 22 00 41.2 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **JNU** | **Nakatsue** | **43.40** | **332** | P | **P** | **22 00 39.5** | **-0.3** |
| | comp=Z,40nm,0.8s,baz=129,slow=2.8,SNR=26 | | | | | | |
| JNU | | | | LR | LR | 22 15 09.8 | |
| | comp=Z,143nm,21.0s,baz=158,slow=31 | | | | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.55** | **342** | P | **P** | **22 00 39.6** | **-1.4** |
| | comp=Z,3.1nm,0.8s,baz=174,slow=9.0,SNR=12 | | | | | | |
| MJAR | | | | pP | **pwP** | **22 00 59.4** | **-2.0** |
| | comp=Z,3.4nm,0.7s,baz=163,slow=7.7,SNR=5.1 | | | | | | |
| MJAR | | | | LR | LR | 22 19 13.5 | |
| | comp=Z,132nm,18.3s,baz=170,slow=36 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **43.55** | **342** | P | **P** | **22 00 39.6** | **-1.4** |
| **MAJO** | **Matsushiro** | **43.55** | **342** | P | **P** | **22 00 40.2** | **-0.8** |
| **MAJO** | **Matsushiro** | **43.55** | **342** | P | **P** | **22 00 40.2** | **-0.8** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **43.55** | **342** | P | **P** | **22 

USA0B pmax pmax
comp=Z,161nm,1.9s
**USRK Ussuriysk Ar. 52.48 341** P **P** **22 01 49.9 0.0**
comp=Z,7.7nm,0.7s,baz=164,slow=8.1,SNR=14
USRK pP **pwP** **22 02 09.9 -0.8**
comp=Z,12nm,0.7s,baz=175,slow=6.6,SNR=9.5
USRK LR LR 22 20 26.5
comp=Z,133nm,21.9s,baz=164,slow=32
comp=Z,7.7nm,0.7s
**TIA Tai'an 53.14 323** P **P** **22 01 55.1 +0.2**
TIA pmax pmax
comp=Z,29nm,1.0s
**IPM Ipoh 53.24 279** P **P** **22 01 55.5 -0.6**
**MDJ Mudanjiang 53.67 339** P **P** **22 01 58.8 +0.2**
MDJ pmax pmax
comp=Z,14nm,1.3s
MDJ pmax pmax
comp=Z,230nm,6.4s
**MDJ Mudanjiang 53.67 339** P **P** **22 01 58.6 +0.1**
MDJ IAmb IAmb 22 02 19.9
comp=Z,115nm,1.9s
**KULM Kulim 53.74 280** P **P** **22 01 58.5 -1.2**
KULM IAmb IAmb 22 02 41.9
comp=Z,21nm,1.0s
**CN2 Changchun 54.59 335** P **P** **22 02 05.8 +0.5**
CN2 pP pwP 22 02 23.5 -2.9
CN2 pmax pmax
comp=Z,10.0nm,0.9s
**ENH Enshi 54.68 313** P **P** **22 02 07.2 +0.9**
**ENH Enshi 54.68 313** P **P** **22 02 06.2 0.0**
**ENH Enshi 54.68 313** P **P** **22 02 07.0 +0.8**
ENH pP **pwP** **22 02 26.3 -0.9**
**GYA Guiyang 54.97 307** ⇓P **P** **22 02 10.3 +1.8**
GYA pP pwP 22 02 29.5 0.0
GYA pmax pmax
comp=Z,26nm,0.8s
GYA LR LR
comp=Z,420nm,23.4s
**LYN LuoYang 55.01 319** *e*P **P** **22 02 09.6 +1.1**
LYN pP pwP 22 02 28.3 -0.9
LYN pmax pmax
comp=Z,17nm,0.7s
LYN pmax pmax
comp=Z,330nm,4.6s
**SLVN Son La 55.12 300** P **P** **22 02 09.8 +0.2**
**NAYO Nakonayok 55.13 291** P **P** **22 02 11.5 +1.8**
**HNS HongShan 55.38 323** ⇑P **P** **22 02 11.9 +0.8**
HNS pP **pP** **22 02 23.8 -2.8**
HNS sP **pwP** **22 02 31.0 -1.2**
HNS pmax pmax
comp=Z,34nm,1.2s
HNS LR LR
comp=Z,210nm,16.7s
HNS LR LR
comp=Z,220nm,19.1s
**BNX BinXian 55.44 338** ⇓P **P** **22 02 11.5 +0.2**
BNX pmax pmax
comp=Z,19nm,0.9s
**GSI Gunungsitoli 56.22 275** P **P** **22 02 16.5 -1.1**
**BJT Baijiatuau 56.28 326** P **P** **22 02 18.0 +0.5**
**BJT Baijiatuau 56.28 326** P **P** **22 02 17.4 -0.1**
**BJT Baijiatuau 56.28 326** P **P** **22 02 17.4 -0.1**
BJT pmax pmax
comp=Z,23nm,1.5s
**BJT Baijiatuau 56.28 326** P **P** **22 02 18.0 +0.5**
**BJI Beijing 56.29 326** P **P** **22 02 17.8 +0.2**
BJI pmax pmax
comp=Z,4.0nm,0.8s
**PPT Papeete 57.04 108** LR LR 22 24 17.3
comp=Z,83nm,18.9s,baz=279,slow=33
**PPT2 Papeete2 57.04 108** *e*PKP2 **P** **22 02 24.4 +1.0**
comp=Z,141nm,29.2s
PPT2 *e*S **S** **22 10 19.9 +6.1**
comp=Z,155nm,27.2s
PPT2 *e*LQ LQ 22 16 38.0
comp=Z,326nm,28.0s
PPT2 *e*LR LR 22 19 01.6
comp=Z,300nm,26.2s
PPT2 *e*LR LR 22 19 03.9
comp=Z,212nm,29.5s
**KLR Kul'dur 57.05 343** LR LR 22 25 02.3
comp=Z,98nm,21.7s,baz=166,slow=34
**KLR Kul'dur 57.05 343** *ce*P **P** **22 02 22.9 +0.1**
KLR pmax pmax
comp=Z,11nm,1.3s
**XAN Xi'an 57.12 316** ⇑P **P** **22 02 24.3 +0.7**
XAN pP pP 22 02 40.3 +1.1
XAN sP sP 22 02 46.0 0.0
XAN S **S** **22 10 13.5 -0.7**
XAN pmax pmax
comp=Z,66nm,1.1s
XAN LR LR
comp=Z,250nm,15.8s
XAN LR LR
comp=Z,200nm,14.4s
XAN LR LR
comp=Z,230nm,16.5s
**SRDT SRDT 57.19 290** P **P** **22 02 26.2 +1.8**
**PHRA Phrae 57.38 295** P **P** **22 02 25.7 0.0**
**KMI Kunming 57.58 304** ⇑P **P** **22 02 28.9 +1.6**
KMI pP pwP 22 02 47.8 -0.6
KMI pmax pmax
comp=Z,26nm,1.2s
KMI pmax pmax
comp=Z,110nm,5.2s
KMI LR LR
comp=Z,140nm,15.0s
KMI LR LR
comp=Z,190nm,21.8s
KMI LR LR
comp=Z,340nm,25.7s
**PEA0B Petropavlovsk- 57.80 3** *ce*P **P** **22 02 29.1 +1.1**
**PETK Petropavlovsk- 57.80 3** P **P** **22 02 28.0 0.0**
**PETK Petropavlovsk- 57.80 3** P **P** **22 02 28.8 +0.8**
comp=Z,13nm,1.0s,baz=154,slow=6.7,SNR=6.0
PETK pP **sP** **22 02 49.5 -0.7**
comp=Z,17nm,0.8s,baz=144,slow=4.8,SNR=7.6
PETK LR LR 22 23 20.5
comp=Z,150nm,22.0s,baz=178,slow=32
comp=Z,13nm,1.0s
**CRAI Chiangrai 57.81 297** P **P** **22 02 29.1 +0.4**
**TBI Tubuai 57.91 114** *e*P **P** **22 02 32.3 +3.0**
comp=Z,557nm,31.2s
TBI *e*S **S** **22 10 30.6 +5.8**
comp=Z,1μm,30.0s
TBI *e*SS **SS** **22 14 21.7 +5.0**
comp=Z,380nm,28.2s
TBI *e*LQ LQ 22 17 02.0
comp=Z,3μm,32.2s
TBI *e*LR LR 22 19 26.2
comp=Z,2μm,27.2s
TBI *e*LR LR 22 19 30.7
comp=Z,842nm,27.2s
**CM31 Chiang Mai Arr 58.53 295** P **P** **22 02 34.1 +0.3**
CM31 IAmb IAmb 22 02 36.4
comp=Z,31nm,0.9s
**CMAR Chiang Mai Arr 58.53 295** P **P** **22 02 34.3 +0.6**
**CMAR Chiang Mai Arr 58.53 295** P **P** **22 02 35.2 +1.5**
comp=Z,16nm,0.8s,baz=121,slow=5.7,SNR=53
CMAR LR LR 22 25 37.7
comp=Z,110nm,21.5s,baz=120,slow=34
comp=Z,16nm,0.8s
**CMAR Chiang Mai Arr 58.53 295** P **P** **22 02 34.3 +0.6**
**PZH PanZhiHua 58.96 305** P **P** **22 02 36.6 -0.2**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,160nm,7.1s
PZH LR LR
comp=Z,180nm,22.0s
PZH LR LR
comp=Z,200nm,21.2s
PZH LR LR
comp=Z,230nm,22.1s
**XLT XiLinHaoTe 59.03 329** *e*P **P** **22 02 37.3 +0.4**
XLT pP pwP 22 02 55.8 -2.3
XLT sP sP 22 03 03.4 +4.1
XLT ScP **ScP** **22 07 18.8 -1.6**
XLT S **S** **22 10 37.9 -1.0**
XLT pmax pmax
comp=Z,47nm,1.0s
**CD2 Chengdu 59.28 310** P **P** **22 02 39.8 +1.0**
CD2 S **S** **22 10 43.0 +0.5**
CD2 pmax pmax
comp=Z,150nm,0.6s
CD2 LR LR
comp=Z,320nm,21.2s
CD2 LR LR
comp=Z,290nm,18.4s
**HEH HeiHe 59.29 341** *e*P **P** **22 02 37.9 -0.5**
HEH pP **pP** **22 02 55.8 +1.8**
HEH pmax pmax
comp=Z,6.0nm,0.8s
**HHC Hu-ho-hao-te 59.47 324** *e*P **P** **22 02 40.8 +0.8**
HHC S **S** **22 10 45.4 +0.7**
HHC pmax pmax
comp=Z,14nm,0.9s
HHC pmax pmax
comp=Z,140nm,4.5s
HHC LR LR
comp=Z,110nm,16.0s
HHC LR LR
comp=Z,140nm,17.6s
HHC LR LR
comp=Z,220nm,18.3s
**SHEM Shemya Is, Ala 59.91 14** LR LR 22 24 08.4
comp=Z,301nm,21.9s,baz=186,slow=31
**BTO Baotou 60.23 323** *e*P **P** **22 02 47.0 +1.8**
BTO pmax pmax
comp=Z,36nm,1.0s
BTO pmax pmax
comp=Z,200nm,4.2s
BTO LR LR
comp=Z,280nm,6.4s
BTO LR LR
comp=Z,210nm,6.7s
BTO LR LR
comp=Z,420nm,15.7s
**TNCH TengChong 61.08 302** ⇑P **P** **22 02 52.1 +0.7**
TNCH pP pP 22 03 08.8 +1.6
TNCH sP sP 22 03 16.3 +2.4
TNCH S **S** **22 11 08.4 +2.3**
TNCH sS sS 22 11 33.4 -1.8
TNCH pmax pmax
comp=Z,25nm,1.2s
TNCH pmax pmax
comp=Z,160nm,4.4s
**HIA Hailar 61.33 335** P **P** **22 02 52.2 -0.1**
**HIA Hailar 61.33 335** P **P** **22 02 52.3 -0.1**
HIA pmax pmax
comp=Z,12nm,0.8s
**KIWB Kanaga Island 61.73 20** P **P** **22 02 55.1 +0.1**
**LZH Lanzhou 61.73 315** ⇑P **P** **22 02 57.4 +1.8**
LZH pP pP 22 03 08.6 -2.8
LZH sP pwP 22 03 16.9 +0.2
LZH S **S** **22 11 17.3 +3.4**
LZH pmax pmax
comp=Z,120nm,1.5s
LZH LR LR
comp=Z,170nm,12.4s
LZH LR LR
comp=Z,230nm,13.1s
LZH LR LR
comp=Z,220nm,13.7s
**ZEA Zeya 62.35 343** *e*P **P** **22 02 59.8 +0.7**
ZEA pmax pmax
comp=N,20nm,1.4s
ZEA pmax pmax
comp=Z,20nm,1.2s
**DRV Dumont d'Urvil 62.47 186** P **P** **22 02 59.5 -0.2**
DRV pP **pwP** **22 03 17.8 -3.7**
DRV sP **sP** **22 03 25.1 +3.0**
**MA2 Magadan 64.21 358** P **P** **22 03 11.1 -0.2**
MA2 IAmb IAmb 22 03 59.2
comp=Z,40nm,1.0s
**MA2 Magadan 64.21 358** LR LR 22 31 02.8
comp=Z,52nm,19.8s,baz=170,slow=36
**MA2 Magadan 64.21 358** P **P** **22 03 11.1 -0.2**
MA2 pmax pmax
comp=Z,40nm,1.0s
**MA2 Magadan 64.21 358** P **P** **22 03 10.8 -0.5**
comp=Z,30nm,0.8s
**MA2 Magadan 64.21 358** P **P** **22 03 11.2 -0.1**
MA2 PcP **PcP** **22 03 43.7 -2.0**
**NIKH Nikolski High 65.72 24** P **P** **22 03 23.7 +2.5**
baz=222
**GTA Gaotai 66.14 317** ⇑P **P** **22 03 26.0 +1.6**
GTA pP pP 22 03 38.5 -1.8
GTA sP pwP 22 03 45.3 -0.9
GTA pmax pmax
comp=Z,77nm,1.0s
GTA LR LR
comp=Z,91nm,17.5s
GTA LR LR
comp=Z,88nm,17.1s
GTA LR LR
comp=Z,130nm,17.5s
**ULN Ulaanbaatar 66.38 328** P **P** **22 03 26.5 +0.7**
**ULN Ulaanbaatar 66.38 328** *ce*P **P** **22 03 26.5 +0.7**
ULN pmax pmax
comp=Z,21nm,1.0s
**ULN Ulaanbaatar 66.38 328** P **P** **22 03 26.7 +0.9**
ULN pP **pwP** **22 03 45.7 -1.6**
ULN sP **PcP** **22 03 53.1 -2.0**
**SONM Songino Array 66.71 327** P **P** **22 03 27.9 0.0**
SONM IAmb IAmb 22 03 30.1
comp=Z,41nm,1.5s
**SONM Songino Array 66.71 327** P **P** **22 03 28.5 +0.6**
comp=Z,12nm,0.9s,baz=146,slow=6.1,SNR=34
SONM pP **pwP** **22 03 47.7 -1.6**
comp=Z,6.4nm,0.7s,baz=146,slow=5.1,SNR=5.7
SONM LR LR 22 33 58.5
comp=Z,134nm,18.4s,baz=132,slow=37
comp=Z,12nm,0.9s
**SONM Songino Array 66.71 327** P **P** **22 03 27.9 0.0**
SONM pmax pmax
comp=Z,41nm,1.5s
**SHL Shillong 66.92 300** P **P** **22 03 29.6 -0.2**
SHL IAmb IAmb 22 03 52.5
comp=Z,33nm,0.8s
**SHL Shillong 66.92 300** P **P** **22 03 29.6 -0.2**
SHL pmax pmax
comp=Z,33nm,0.8s
**SEY Seymchan 67.55 359** *ce*P **P** **22 03 33.2 +0.5**
SEY pmax pmax
comp=Z,14nm,1.7s
**CASY Casey 68.23 197** P **P** **22 03 35.9 -1.0**
**CASY Casey 68.23 197** P **P** **22 03 36.7 -0.3**
CASY PcP **PcP** **22 04 01.7 -0.6**
**GOMU GeErMu 68.29 312** P **P** **22 03 39.9 +1.5**
GOMU S **S** **22 12 37.8 +2.9**
GOMU pmax pmax
comp=Z,24nm,0.9s
GOMU LR LR
comp=Z,180nm,18.4s
GOMU LR LR
comp=Z,280nm,18.6s
GOMU LR LR
comp=Z,420nm,19.0s
**LSA Lhasa 68.83 304** P **P** **22 03 43.9 +1.9**
LSA pmax pmax
comp=Z,14nm,0.8s
**LSA Lhasa 68.83 304** P **P** **22 03 42.3 +0.3**
**LSA Lhasa 68.83 304** P **P** **22 03 42.3 +0.3**
LSA pmax pmax
comp=Z,14nm,0.8s
**LSA Lhasa 68.83 304** P **P** **22 03 43.6 +1.6**
**YAK Yakutsk 69.12 348** P **P** **22 03 42.9 +0.4**
YAK IAmb IAmb 22 04 04.3
comp=Z,78nm,1.4s
**YAK Yakutsk 69.12 348** LR LR 22 32 21.3
comp=Z,68nm,21.4s,baz=158,slow=34
**YAK Yakutsk 69.12 348** *e*P **P** **22 03 42.6 +0.1**
YAK *e**PP **pwP** **22 04 02.3 -1.9**
YAK *e* 22 06 13.0
YAK *e*PPP PPP 22 07 55.7
YAK *e*S **S** **22 12 41.3 -1.5**
YAK *e**SS **sS** **22 13 12.4 +1.6**
YAK *e*SS **SS** **22 17 06.6 -3.6**
YAK *e*SSS SSS 22 20 17.5
YAK pmax pmax
comp=Z,23nm,1.1s
YAK pmax pmax
comp=N,6.0nm,1.7s
YAK pmax pmax
comp=E,5.0nm,1.8s
YAK pmax pmax
comp=Z,90nm,3.7s
YAK pmax pmax
comp=N,60nm,3.6s
YAK pmax pmax
comp=E,97nm,6.6s
YAK smax smax
comp=E,113nm,4.7s
YAK smax smax
comp=N,78nm,5.2s
**ZAK Zakamensk 69.87 328** *e*P **P** **22 03 47.8 +0.3**
ZAK pmax pmax
comp=Z,24nm,1.1s
**BOD Bodaibo 70.05 339** *e*P **P** **22 03 48.3 0.0**
BOD pmax pmax
comp=Z,22nm,1.7s
**S12K Black Hills 70.46 25** P **P** **22 03 52.0 +1.0**
baz=228
**SDPT Sand Point 70.91 26** P **P** **22 03 54.8 +1.3**
baz=229
**CHNA Chernabura Isl 70.96 27** P **P** **22 03 56.3 +2.4**
baz=230
**MOY Mondy 71.79 329** *e*P **P** **22 03 59.7 +0.5**
MOY pmax pmax
comp=Z,25nm,1.5s
**O14K Tigyukauivet M 73.18 22** P **P** **22 04 07.8 +0.7**
O14K IAmb IAmb 22 04 31.4
comp=Z,76nm,1.2s
**O14K Tigyukauivet M 73.18 22** P **P** **22 04 08.4 +1.3**
baz=228
**GAMB Gambell 73.19 15** P **P** **22 04 08.8 +1.7**
baz=216
**M13K Dall Lake 73.22 21** P **P** **22 04 08.5 +1.2**
baz=225
**BILL Bilibino 73.23 5** P **P** **22 04 07.2 -0.1**
BILL IAmb IAmb 22 04 11.4
comp=Z,22nm,0.5s
**BILL Bilibino 73.23 5**⇓ *e*P **P** **22 04 07.8 +0.6**
BILL *e* 22 04 26.9
BILL *e* 22 06 49.6
BILL *e*S **S** **22 13 24.0 -6.2**
BILL pmax pmax
comp=Z,17nm,0.7s
**N14K Kuskokwak Cree 73.48 22** P **P** **22 04 10.7 +1.9**
baz=227
**PALK Pallekele 73.64 279** LR LR 22 38 30.8
comp=Z,84nm,21.9s,baz=215,slow=37
**O15K Ungalikthiuk R 73.68 23** P **P** **22 04 11.3 +1.2**
baz=229
**K13K Kusilvak Mount 73.86 19** P **P** **22 04 13.0 +1.9**
baz=224
**M14K Bethel 73.95 21** P **P** **22 04 12.0 +0.4**
M14K IAmb IAmb 22 04 36.0
comp=Z,98nm,1.4s
**M14K Bethel 73.95 21** P **P** **22 04 13.6 +2.0**
baz=226
**L14K Kuka Creek 74.10 20** P **P** **22 04 13.3 +0.8**
L14K IAmb IAmb 22 04 36.5
comp=Z,42nm,0.9s
**L14K Kuka Creek 74.10 20** P **P** **22 04 14.3 +1.8**
baz=226
**R17L Mt. Peulik Vol 74.12 25** P **P** **22 04 14.7 +2.0**
baz=233
**N15K Kwethluk River 74.23 22** P **P** **22 04 14.9 +1.6**
baz=228
**P16K Nushagak River 74.31 24** P **P** **22 04 15.5 +1.8**
baz=231
**M15K Kasigluk River 74.37 21** P **P** **22 04 16.1 +2.1**
baz=228
**Q17K Contact Creek 74.70 25** P **P** **22 04 17.5 +1.4**
baz=233
**L15K Ungalak Mounta 74.75 20** P **P** **22 04 17.9 +1.6**
baz=227
**J14K Nanvaranak Lak 74.81 19** P **P** **22 04 18.6 +2.1**
baz=225
**N16K Nishlik Lake 74.93 22** P **P** **22 04 19.6 +2.3**
baz=230
**O17K Koliganek Bris 75.14 23** P **P** **22 04 20.3 +1.8**
baz=231
**K15K Wolf Creek Mou 75.16 20** P **P** **22 04 19.1 +0.5**
K15K IAmb IAmb 22 04 42.8
comp=Z,44nm,0.9s
**K15K Wolf Creek Mou 75.16 20** P **P** **22 04 19.8 +1.2**
baz=227,SNR=7.7
**M16K Timber Creek 75.22 22** P **P** **22 04 20.7 +1.7**
baz=229
**OHAK Old Harbor 75.22 27** P **P** **22 04 20.3 +1.2**
baz=236
**Q18K Katmai Hardscr 75.30 25** P **P** **22 04 20.5 +0.9**
baz=234
**L16K Owhat River 75.48 21** P **P** **22 04 21.6 +1.1**
**L16K Owhat River 75.48 21** P **P** **22 04 21.8 +1.4**
baz=229
**N17K Nushagak Hills 75.57 23** P **P** **22 04 22.3 +1.3**
baz=231
**F14K Arctic Creek 75.97 16** P **P** **22 04 24.3 +1.1**
baz=221
**M17K Holitna River 76.03 22** P **P** **22 04 24.5 +0.9**
baz=231
**Q19K Cape Douglas, 76.04 25** P **P** **22 04 25.0 +1.2**
baz=235
**J16K Anvik River 76.15 20** P **P** **22 04 26.0 +1.7**
baz=227
**N18K Kilae Creek 76.17 23** P **P** **22 04 25.3 +0.8**
N18K IAmb IAmb 22 04 49.3
comp=Z,44nm,1.0s
**N18K Kilae Creek 76.17 23** P **P** **22 04 25.8 +1.4**
baz=232
**L17K Donlin 76.18 21** P **P** **22 04 26.1 +1.7**
baz=230
**WMQ Urumqi 76.23 317** *e*P **P** **22 04 26.9 +1.7**
WMQ PcP **pP** **22 04 40.0 -1.4**
WMQ pP pwP 22 04 46.3 -0.9
WMQ pmax pmax
comp=Z,28nm,1.1s
WMQ pmax pmax
comp=Z,340nm,4.7s
WMQ LR LR
comp=Z,170nm,24.3s
**I17K Unalakleet 76.53 19** P **P** **22 04 27.6 +1.3**
baz=227
**H16K Elim 76.56 18** P **P** **22 04 28.0 +1.5**
baz=226
**K17K Iditarod 76.56 21** P **P** **22 04 27.0 +0.4**
K17K IAmb IAmb 22 04 51.5
comp=Z,47nm,1.1s
**K17K Iditarod 76.56 21** P **P** **22 04 28.1 +1.6**
baz=230
**F15K North Star Dit 76.61 16** P **P** **22 04 28.0 +1.2**
baz=223
**P19K Oil Pt 76.63 25** P **P** **22 04 27.9 +0.8**
baz=235
**M18K Stony River 76.69 22** P **P** **22 04 28.5 +1.2**
baz=232
**J17K VABM Dome 76.73 20** P **P** **22 04 28.3 +0.7**
J17K IAmb IAmb 22 04 52.1
comp=Z,22nm,0.8s
**J17K VABM Dome 76.73 20** P **P** **22 04 29.0 +1.5**
baz=229
**N19K Bonanza Creek 76.80 23** P **P** **22 04 29.4 +1.2**
baz=234
**L18K Granite Mounta 76.82 22** P **P** **22 04 29.0 +1.0**
L18K IAmb IAmb 22 04 53.1
comp=Z,70nm,1.3s
**L18K Granite Mounta 76.82 22** P **P** **22 04 30.0 +1.9**
baz=231
**G16K Koyuk River 77.05 17** P **P** **22 04 30.6 +1.4**
baz=225
**O20K Slope Mountain 77.13 25** P **P** **22 04 30.6 +0.7**
baz=236
**HYB Hyderabad 77.17 289** *e*P **P** **22 04 30.2 -0.8**
HYB IVmB_BB 22 04 41.7
comp=Z,930nm,6.1s
HYB *e* 22 04 50.7
**HOM Homer 77.31 25** P **P** **22 04 31.5 +0.7**
baz=236
**CNPM China Poot 77.41 25** P **P** **22 04 31.4 0.0**
**L19K White Mountain 77.48 22** P **P** **22 04 32.9 +1.1**
baz=233,SNR=8.6
**M19K Big River Lodg 77.49 22** P **P** **22 04 32.9 +1.1**
baz=234
**H17K Granite Mounta 77.49 18** P **P** **22 04 33.0 +1.2**
baz=228
**J18K Innoko River 77.59 21** P **P** **22 04 32.4 0.0**
**J18K Innoko River 77.59 21** P **P** **22 04 33.4 +1.1**
baz=231
**G17K Kiwalik Mounta 77.64 18** P **P** **22 04 33.7 +1.1**
baz=227
**BRSE Bradley Lake S 77.73 25** P **P** **22 04 34.3 +1.0**
baz=237
**N20K Mount Spurr 77.93 24** P **P** **22 04 35.2 +0.8**
baz=236

SPCR **Spurr Chakacha** 77.93 24 P P 22 04 35.6 +1.2
baz=236
M20K **Styx River** 77.96 23 P P 22 04 35.8 +1.2
baz=235
TIXI **Tiksi** 77.99 352 LR LR 22 36 32.1
comp=Z,64nm,21.9s,baz=164,slow=34
L20K **Farewell, AK** 78.02 22 P P 22 04 36.3 +1.5
baz=234
F17K **Baldwin Pennin** 78.11 17 P P 22 04 36.5 +1.3
baz=226
CAPN **Captain Cook N** 78.12 24 P P 22 04 37.2 +1.9
baz=237
H18K **Honhosa River** 78.12 19 P P 22 04 36.5 +1.2
baz=229
J19K **Poorman** 78.30 20 P P 22 04 37.9 +1.5
baz=232
C16K **Lisburne Hills** 78.33 14 P P 22 04 37.8 +1.5
baz=222
GCSA **Galena City Sc** 78.35 19 P P 22 04 38.1 +1.6
baz=231
E17K **Hotham Inlet** 78.39 16 P P 22 04 38.2 +1.5
baz=226
K20K **Telida** 78.47 21 P P 22 04 38.5 +1.2
baz=234
SEW **Seward** 78.48 25 P P 22 04 38.5 +1.2
baz=238
D17K **Noatak River** 78.49 16 P P 22 04 38.9 +1.6
baz=224
DGZ **Jazzator, Alta** 78.52 323*c i* P P 22 04 38.6 +0.6
DGZ pmax pmax
comp=Z,37nm,1.0s
G18K **Tagagawik** 78.52 18 P P 22 04 38.5 +1.1
baz=229,SNR=5.9
O22K **Cooper Landing** 78.56 25 P P 22 04 39.1 +1.3
baz=238
SKT **Skwentna** 78.64 23 P P 22 04 39.0 +0.8
baz=236
SUA **Susitna One** 78.67 24 P P 22 04 38.5 0.0
SUA lAmb lAmb 22 05 01.4
comp=Z,26nm,0.8s
SUA **Susitna One** 78.67 24 P P 22 04 39.8 +1.3
baz=237
F18K **Selawik** 78.69 17 P P 22 04 39.2 +0.8
baz=228
RDOG **Red Dog Mine** 78.79 15 P P 22 04 39.7 +0.8
baz=224
RC01 **Rabbit Creek A** 78.88 24 P P 22 04 40.4 +0.9
baz=238
J20K **Nowinta River** 78.93 21 P P 22 04 40.8 +1.1
baz=233,SNR=12
E18K **Tukpahlearik C** 78.97 16 P P 22 04 40.8 +0.9
baz=227
H19K **Roundabout Mou** 78.98 19 P P 22 04 40.9 +0.9
H19K lAmb lAmb 22 05 04.6
comp=Z,44nm,1.0s
H19K **Roundabout Mou** 78.98 19 P P 22 04 40.5 +0.5
baz=231,SNR=6.4
C17K **DeLong Mountai** 79.02 15 P P 22 04 41.1 +0.9
baz=224
G19K **Purcell Mounta** 79.17 18 P P 22 04 42.0 +1.0
baz=230,SNR=6.1
I20K **Naaghedeneel** 79.19 20 P P 22 04 41.9 +0.9
baz=233
P23K **Montague Islan** 79.31 26 P P 22 04 42.5 +0.7
baz=240
ZSN **Zaisan** 79.33 320⇑ *i* P P 22 04 43.3 +0.9
comp=Z,19nm,1.0s,baz=320
ZSN *e* S S 22 14 39.3 +1.3
baz=320
ZSN **Zaisan** 79.33 320*c i* P P 22 04 43.2 +0.9
ZSN *e* S S 22 14 39.2 +1.3
ZSN pmax pmax
comp=Z,19nm,1.0s
PWL **Port Wells** 79.34 25 P P 22 04 42.5 +0.4
baz=239,SNR=8.0
PMR **Palmer** 79.39 24 P P 22 04 42.8 +0.6
PMR **Palmer** 79.39 24 P P 22 04 41.9 -0.4
PMR lAmb lAmb 22 05 05.8
comp=Z,28nm,1.0s
PMR **Palmer** 79.39 24 P P 22 04 42.9 +0.6
baz=238
PMR **Palmer** 79.39 24 P P 22 04 41.9 -0.4
PMR pmax pmax
comp=Z,28nm,1.0s
F19K **Shaleruckik Mo** 79.41 18 P P 22 04 43.3 +1.0
baz=230
H20K **Anotleneega Mo** 79.47 19 P P 22 04 43.5 +0.8
baz=232
Q23K **Middleton Isla** 79.50 27 P P 22 04 43.5 +0.6
baz=241
KNK **Knik Glacier** 79.57 25 P P 22 04 43.7 +0.4
KNK lAmb lAmb 22 05 07.5
comp=Z,50nm,1.3s
KNK **Knik Glacier** 79.57 25 P P 22 04 43.9 +0.5
baz=239
SML **Sawmill** 79.83 24 P P 22 04 44.8 0.0
SML lAmb lAmb 22 05 08.7
comp=Z,68nm,0.9s
SML **Sawmill** 79.83 24 P P 22 04 45.0 +0.3
baz=239,SNR=7.1
GLI **Glacier Island** 79.88 25 P P 22 04 44.8 -0.2
baz=240
E19K **Redstone River** 79.97 17 P P 22 04 45.3 -0.1
baz=230,SNR=11
B18K **Kokolik River** 80.01 15 P P 22 04 46.1 +0.6
baz=225
BPAW **Bear Paw Mtn.** 80.02 22 P P 22 04 46.1 +0.4
baz=236
M23K **Glacier View** 80.07 24 P P 22 04 46.5 +0.5
baz=240
IMAR **Indian Mountai** 80.14 19 P P 22 04 46.1 -0.2
F20K **Avaraart Lake** 80.17 18 P P 22 04 46.6 +0.3
baz=232
SCM **Sheep Creek Mo** 80.25 24 P P 22 04 47.5 +0.4
baz=240
WAT1 **Susitna Watana** 80.27 23 P P 22 04 47.0 -0.1
baz=239
H21K **Melozitna Rive** 80.27 20 P P 22 04 47.3 +0.3
baz=234
EYAK **Cordova Ski Ar** 80.30 26 P P 22 04 47.6 +0.4
baz=242
D19K **Kuna River** 80.39 16 P P 22 04 48.1 +0.5
baz=229
C19K **Lookout Ridge** 80.40 15 P P 22 04 48.0 +0.3
baz=228
WAT6 **Susitna Watana** 80.46 24 P P 22 04 48.4 +0.1
baz=240
G21K **Allakaket** 80.54 19 P P 22 04 49.0 +0.5
baz=234,SNR=5.7
MCK **McKinley** 80.59 22 P P 22 04 48.5 -0.3
baz=238,SNR=8.7
MLY **Manley** 80.63 21 P P 22 04 48.8 -0.1
baz=236,SNR=9.8
KLU **Klutina** 80.67 25 P P 22 04 49.4 +0.1
baz=242,SNR=7.1
A19K **Wainwright** 80.78 14 P P 22 04 49.9 +0.3
baz=226
E20K **Nigu River** 80.79 17 P P 22 04 50.4 +0.6
baz=231
MK31 **Makanchi Array** 80.80 319 P P 22 04 50.3 0.0
MK31 lAmb lAmb 22 05 11.5
comp=Z,30nm,1.1s
MK31 **Makanchi Array** 80.80 319*ce* P P 22 04 50.8 +0.5
MKAR **Makanchi Array** 80.80 319 P P 22 04 50.6 +0.4
MKAR **Makanchi Array** 80.80 319 P P 22 04 50.9 +0.6
comp=Z,17nm,0.7s,baz=101,slow=7.2,SNR=118
MKAR LR LR 22 42 22.2
comp=Z,98nm,18.9s,baz=83,slow=37
comp=Z,17nm,0.7s
DHY **Denali Highway** 80.85 23 P P 22 04 50.9 +0.5
baz=240
M24K **Tolsona, Glenn** 80.86 24 P P 22 04 50.1 -0.3
baz=241
H22K **Ishtalitna Cre** 80.89 20 P P 22 04 50.0 -0.3
baz=236
D20K **Etivluk River** 80.96 16 P P 22 04 50.6 0.0
baz=230
BMRM **Bremner River** 80.99 26 P P 22 04 51.1 +0.1
baz=243
NEA2 **Nenana** 80.99 22 P P 22 04 50.2 -0.7
baz=238,SNR=5.3
MAKZ **Makanchi** 81.01 319 P P 22 04 51.2 -0.2
MAKZ **Makanchi** 81.01 319 P P 22 04 51.2 -0.2
MAKZ pmax pmax
comp=Z,132nm,1.6s
I23K **Minto, Yukon-K** 81.18 21 P P 22 04 52.0 +0.2
baz=238
N25K **Chitina, Valde** 81.29 25 P P 22 04 52.3 -0.3
baz=243
HARP **HAARP** 81.42 24 P P 22 04 53.0 -0.2
baz=242
G22K **Bettles** 81.42 19 P P 22 04 52.8 -0.3
baz=236
H23K **Yukon River** 81.48 20 P P 22 04 53.4 -0.1
baz=238,SNR=6.0
CCB **Clear Creek Bu** 81.49 22 P P 22 04 51.8 -1.7
F22K **John River** 81.55 18 P P 22 04 54.5 +0.8
baz=235
GLB **Gilahina Butte** 81.55 26 P P 22 04 53.2 -0.8
GLB lAmb lAmb 22 05 18.1
comp=Z,39nm,0.9s
ZAA0 **Zalesovo Array** 81.55 326 P P 22 04 53.0 -1.1
ZALV **Zalesovo Beam** 81.55 326 P P 22 04 53.4 -0.7
ZALV **Zalesovo Beam** 81.55 326 P P 22 04 54.0 0.0
comp=Z,15nm,0.7s,baz=111,slow=5.8,SNR=53
ZALV LR LR 22 40 49.7
comp=Z,42nm,21.7s,baz=97,slow=35
comp=Z,15nm,0.7s
ZALV **Zalesovo Beam** 81.55 326 P P 22 04 54.0 0.0
CRQE **Cirque** 81.56 26 P P 22 04 53.8 -0.3
baz=244
PAX **Paxson** 81.56 24 P P 22 04 54.7 +0.6
baz=242
COLA **College** 81.58 22 P P 22 04 52.9 -1.1
COLA **College** 81.58 22 P P 22 04 54.7 +0.7
baz=239
B20K **Meade River** 81.64 15 P P 22 04 54.8 +0.6
baz=230
HDA **Harding Lake** 81.69 22 P P 22 04 55.0 +0.4
baz=240
SHLS **Shalkode** 81.74 315 *e* P P 22 04 54.6 -1.0
comp=Z,11nm,1.0s,baz=315
SHLS **Shalkode** 81.74 315 *e* P P 22 04 54.5 -1.0
SHLS pmax pmax
comp=Z,11nm,1.0s
C21K **Knifeblade Rid** 81.75 16 P P 22 04 55.6 +0.8
baz=232
G23K **Bananza Creek** 81.80 20 P P 22 04 55.8 +0.6
baz=237,SNR=5.8
MESA **MESA** 81.82 27 P P 22 04 55.9 +0.3
baz=245
K24K **Donnelly Dome** 81.84 23 P P 22 04 55.9 +0.5
baz=241
POKR **Poker Plat Res** 81.86 22 P P 22 04 55.8 +0.3
baz=240
MCARA **McCarthy VSAT** 81.86 26 P P 22 04 55.0 -0.5
MCARA lAmb lAmb 22 05 19.8
comp=Z,28nm,1.0s
MCARA **McCarthy VSAT** 81.86 26 P P 22 04 55.3 -0.3
baz=244
ILAR **Eielson Array** 81.89 22 P P 22 04 54.2 -1.4
comp=Z,5.2nm,0.9s,baz=252,slow=5.3,SNR=34
ILAR pP pwP 22 05 16.4 -1.5
comp=Z,11nm,0.7s,baz=247,slow=5.8,SNR=16
comp=Z,5.2nm,0.9s
E22K **Anaktuvuk Pass** 82.02 18 P P 22 04 56.7 +0.4
baz=235
COLD **Coldfoot** 82.02 19 P P 22 04 56.5 +0.3
baz=237
UZB **Uzynbulak** 82.05 315 *e* P P 22 04 57.7 +0.6
comp=Z,17nm,1.1s,baz=315
UZB **Uzynbulak** 82.05 315 *e* P P 22 04 57.7 +0.6
UZB pmax pmax
comp=Z,17nm,1.1s
H24K **Noodor Dome** 82.07 21 P P 22 04 57.1 +0.5
baz=239
B21K **Ikpikpuk River** 82.08 16 P P 22 04 57.1 +0.6
baz=232
RIDG **Independent Ri** 82.17 23 P P 22 04 57.8 +0.6
baz=242
D22K **Ayikyak River** 82.19 17 P P 22 04 57.3 +0.2
baz=234
M26K **Nabesna, AK** 82.32 25 P P 22 04 58.5 +0.5
baz=244
PRZ **Przheval'sk** 82.33 314 P P 22 04 59.4 +0.7
PRZ **Przheval'sk** 82.33 314 P P 22 04 59.4 +0.7
PRZ pmax pmax
comp=Z,104nm,1.2s
KPKS **Kokpek** 82.37 315⇑ *i* P P 22 04 59.4 +0.7
comp=Z,4.5nm,0.6s,baz=315
KPKS **Kokpek** 82.37 315*c i* P P 22 04 59.4 +0.7
KPKS pmax pmax
comp=Z,5.0nm,0.6s
J25K **Salcha River,** 82.38 22 P P 22 04 57.5 -0.7
baz=242,SNR=12
CTG **Chitna Glacier** 82.42 27 P P 22 04 58.3 -0.4
baz=246
CTGM **Chitina Glacie** 82.43 27 P P 22 04 58.5 -0.2
CTGM lAmb lAmb 22 05 23.0
comp=Z,26nm,0.9s
L26K **Log Cabin Wild** 82.45 24 P P 22 04 58.6 0.0
baz=244
SATY **Saty** 82.47 314 *e* P P 22 04 59.8 +0.5
comp=Z,13nm,1.1s,baz=314
SATY **Saty** 82.47 314 *e* P P 22 04 59.8 +0.5
SATY pmax pmax
comp=Z,13nm,1.1s
ZHN **Zhinishke** 82.47 315 *e* P P 22 04 59.9 +0.6
comp=Z,7.8nm,1.0s,baz=314
ZHN **Zhinishke** 82.47 315 *e* P P 22 04 59.9 +0.6
ZHN pmax pmax
comp=Z,8.0nm,1.0s
SCRK **Sand Creek** 82.62 23 P P 22 04 59.6 0.0
baz=243,SNR=5.7
E23K **Chandalar** 82.66 18 P P 22 04 59.5 -0.2
E23K **Chandalar** 82.66 18 P P 22 05 00.1 +0.4
baz=237
M27K **Edge Creek, AK** 82.77 25 P P 22 05 01.0 +0.5
baz=245,SNR=16
PNL **Peninsula** 82.80 28 P P 22 05 00.7 +0.2
baz=248
D23K **Nanushuk River** 82.83 18 P P 22 05 01.4 +0.9
baz=236
O28M **Mount Upton** 82.86 27 P P 22 05 01.8 +0.6
baz=247,SNR=5.4
TDK **Taldyqorghan** 82.93 316 *e* P P 22 05 02.2 +0.6
baz=316
TDK **Taldyqorghan** 82.93 316 *e* P P 22 05 02.1 +0.6
F24K **Squaw Lake** 82.94 19 P P 22 05 01.6 +0.5
baz=239,SNR=8.9
TOLK **Toolik Lake Re** 82.99 18 P P 22 05 01.6 +0.3
TOLK **Toolik Lake Re** 82.99 18 P P 22 05 01.8 +0.4
baz=237
J26L **Joseph Creek** 83.02 23 P P 22 05 01.9 +0.2
baz=243
E24K **Your Creek** 83.03 19 P P 22 05 01.6 0.0
baz=238
L27K **Beaver Creek,** 83.09 24 P P 22 05 02.6 +0.7
baz=245,SNR=5.2
BCAR **Beaver Creek A** 83.11 24 P P 22 05 02.0 -0.1
YUK3 **Moose Creek** 83.14 26 P P 22 05 02.1 -0.4
baz=246
ARXS **Arharly** 83.15 315 *e* P P 22 05 03.0 +0.3
G25K **Bearman Lake** 83.16 20 P P 22 05 02.5 +0.3
baz=241
YUK8 **Steele Glacier** 83.25 27 P P 22 05 02.6 -0.6
baz=247
C23K **Itkillik River** 83.34 17 P P 22 05 03.0 -0.1
baz=236
K27K **Chicken** 83.40 24 P P 22 05 04.1 +0.7
baz=245
O29M **Mount Kennedy** 83.42 28 P P 22 05 03.6 -0.2
baz=248
MDOK **Medeo** 83.46 314 *e* P P 22 05 05.0 +0.6
baz=314
MDOK **Medeo** 83.46 314 *e* P P 22 05 05.0 +0.6
KSH **Kashi** 83.48 311 P P 22 05 07.1 +2.5
KSH pP sP 22 05 27.3 -0.2
KSH pmax pmax
comp=Z,27nm,1.3s
D24K **Happy Valley** 83.50 18 P P 22 05 04.2 +0.4
baz=238
TNSS **Tian-Shan** 83.50 314 *e* P P 22 05 05.3 +0.3
baz=314
TNSS **Tian-Shan** 83.50 314 *e* P P 22 05 05.3 +0.3
I26K **Coal Creek Min** 83.54 22 P P 22 05 04.5 +0.4
baz=244
AAA **Alma-Ata** 83.56 314 *e* P P 22 05 05.5 +0.6
comp=Z,22nm,1.0s,baz=314
AAA **Alma-Ata** 83.56 314 *e* P P 22 05 05.4 +0.6
AAA pmax pmax
comp=Z,22nm,1.0s
P29M **Windy Craggy** 83.57 28 P P 22 05 04.5 0.0
baz=249
CHKK **Chushkaly** 83.65 315 *e* P P 22 05 05.7 +0.4
baz=315
CHKK **Chushkaly** 83.65 315 *e* P P 22 05 05.7 +0.4
F25K **Christian Rive** 83.72 20 P P 22 05 06.0 +0.9
baz=241
S31K **Pelican** 83.73 30 P P 22 05 05.4 +0.2
baz=251
YUK6 **Outpost Mounta** 83.75 27 P P 22 05 05.5 -0.2
baz=249
C24K **Franklin Bluff** 83.84 17 P P 22 05 05.9 +0.4
baz=238
ULHL **Ulahol** 83.84 313 P P 22 05 07.9 +1.4
SNR=7.9
NRN **Naryn** 83.85 312 P P 22 05 06.3 -0.3
NRN lAmb lAmb 22 05 28.4
comp=Z,46nm,1.4s
NRN **Naryn** 83.85 312 P P 22 05 06.4 -0.3
NRN pmax pmax
comp=Z,46nm,1.4s
SIT **Sitka** 83.90 31 P P 22 05 06.5 +0.4
baz=251
BMAR **Burnt Mountain** 84.00 20 P P 22 05 07.0 +0.4
G26K **Porcupine Rive** 84.05 21 P P 22 05 06.7 -0.1
baz=243
EGAK **Eagle** 84.08 23 P P 22 05 07.0 +0.1
EGAK lAmb lAmb 22 05 39.7
comp=Z,19nm,0.9s
EGAK **Eagle** 84.08 23 P P 22 05 07.3 +0.4
baz=246,SNR=6.0
P30M **Million Dollar** 84.11 28 P P 22 05 07.2 0.0
baz=250
BOOM **Boomskoye usch** 84.11 313 P P 22 05 08.0 +0.2
BOOM lAmb lAmb 22 05 29.7
comp=Z,45nm,1.1s
BOOM **Boomskoye usch** 84.11 313 P P 22 05 08.0 +0.2
BOOM pmax pmax
comp=Z,45nm,1.1s
KUU **Kurty** 84.12 315 *e* P P 22 05 08.4 +0.7
comp=Z,13nm,0.9s,baz=315
KUU **Kurty** 84.12 315 *e* P P 22 05 08.3 +0.7
KUU pmax pmax
comp=Z,13nm,0.9s
PLBC **Pleasant Camp** 84.17 29 P P 22 05 08.2 +0.8
baz=250
KURK **Kurchatov** 84.21 322 P P 22 05 07.7 -0.2
KURK lAmb lAmb 22 05 09.2
comp=Z,41nm,0.9s
KURK **Kurchatov** 84.21 322*ce* P P 22 05 07.8 -0.1
KURK pmax pmax
comp=Z,62nm,1.3s
KURBB **Kurchatov Arra** 84.24 322 P P 22 05 08.0 0.0
comp=Z,20nm,0.9s,baz=108,slow=4.3,SNR=92
KURBB pP pwP 22 05 27.6 -2.6
comp=Z,14nm,1.0s,baz=108,slow=4.2,SNR=5.2
KURBB LR LR 22 45 00.1
comp=Z,52nm,19.0s,baz=178,slow=37
comp=Z,20nm,0.9s
I27K **Kandik River** 84.25 22 P P 22 05 08.4 +0.5
baz=245
M29M **Somme Creek** 84.27 26 P P 22 05 08.2 +0.1
baz=248,SNR=6.8
F26K **Sheenjek River** 84.27 20 P P 22 05 08.5 +0.6
baz=242
D25K **Kavik River** 84.33 18 P P 22 05 08.9 +0.7
baz=240
S32K **Killisnoo** 84.42 31 P P 22 05 08.9 +0.1
baz=252
TKM2 **Tokmak 2** 84.45 314 P P 22 05 10.5 +1.0
SNR=21
DAWY **Dawson** 84.49 24 P P 22 05 09.4 +0.3
baz=247
N30M **Aishikik Lake** 84.52 27 P P 22 05 09.7 +0.4
baz=250
H27K **Steamboat Moun** 84.55 22 P P 22 05 09.9 +0.5
baz=245
NIL **Nilore** 84.57 304 P P 22 05 09.5 -0.6
NIL **Nilore** 84.57 304 P P 22 05 09.5 -0.6
NIL pmax pmax
comp=Z,51nm,0.8s
CRAG **Craig** 84.59 33 P P 22 05 09.5 -0.2
baz=253
O30N **Mendenhall** 84.74 28 P P 22 05 09.7 -0.7
baz=250
G27K **Doyon Strip** 84.75 21 P P 22 05 10.4 0.0
baz=245
U33K **Whale Pass** 84.78 33 P P 22 05 09.7 -0.8
baz=253
I28M **Miner Creek** 84.82 23 P P 22 05 10.2 -0.6
baz=247
KBK **Karagaybulak** 84.86 313 P P 22 05 13.1 +1.5
SNR=17
CHMS **Chumysh** 85.07 314 P P 22 05 13.3 +0.9
SNR=32
C26K **Camden Bay** 85.07 18 P P 22 05 11.2 -0.6
baz=242
N31M **Braeburn, Yuko** 85.12 27 P P 22 05 12.0 -0.2
baz=251
QSPA **South Pole Qui** 85.16 180 P P 22 05 12.2 -0.3
QSPA **South Pole Qui** 85.16 180 P P 22 05 12.3 -0.3
comp=Z,55nm,0.7s,baz=329,slow=0.6,SNR=278
QSPA LR LR 22 43 21.8
comp=Z,104nm,18.1s,baz=2.0,slow=36
comp=Z,55nm,0.7s
K29M **Barlow Dome** 85.18 25 P P 22 05 12.4 -0.3
baz=249,SNR=11
AAK **Ala-Archa** 85.19 313 P P 22 05 14.8 +1.6
SNR=13
AAK **Ala-Archa** 85.19 313 P P 22 05 13.5 +0.2
AAK **Ala-Archa** 85.19 313 LR LR 22 46 23.0
comp=Z,79nm,18.6s,baz=99,slow=38
AAK **Ala-Archa** 85.19 313 *ce* P P 22 05 14.1 +0.9
AAK pmax pmax
comp=Z,26nm,0.7s
USP **Ospenovka** 85.30 314 P P 22 05 14.6 +0.9
SNR=38
E27K **Colean River** 85.35 20 P P 22 05 13.0 -0.3
baz=245,SNR=7.2
V35K **Ketchikan** 85.38 34 P P 22 05 12.9 -0.8
baz=255
I29M **Ogilvie Camp,** 85.42 23 P P 22 05 13.9 +0.2
baz=248,SNR=7.1
AML **Almayashu** 85.68 313 P P 22 05 17.5 +1.5
SNR=50
EKS2 **Erkin-Say** 85.71 313 P P 22 05 17.1 +1.3
SNR=24
F28M **Old Crow** 85.71 21 P P 22 05 15.4 +0.3
baz=246
MAW **Mawson** 85.85 203 P P 22 05 15.4 -0.3
comp=Z,17nm,0.7s,baz=99,slow=5.7,SNR=38
comp=Z,17nm,0.7s
J30M **Hart River** 85.92 24 P P 22 05 16.0 -0.3
baz=250,SNR=9.2
BTLS **Baital** 85.96 316⇑ *i* P P 22 05 17.5 +0.6
comp=Z,10nm,0.9s,baz=316
BTLS **Baital** 85.96 316*c i* P P 22 05 17.4 +0.6
BTLS pmax pmax
comp=Z,10.0nm,0.9s
M31M **Drury Creek, Y** 85.97 27 P P 22 05 17.2 +0.7
baz=252
D27M **Malcolm River** 86.01 19 P P 22 05 16.6 0.0
baz=245
Q32M **Nakina River** 86.02 30 P P 22 05 16.6 -0.5
baz=254
ARSB **Arslanbob** 86.06 312 P P 22 05 17.6 0.0
ARSB lAmb lAmb 22 05 43.9
comp=Z,34nm,1.1s
ARSB **Arslanbob** 86.06 312 P P 22 05 17.6 0.0
ARSB pmax pmax
comp=Z,34nm,1.1s
P33M **Teslin, Yukon** 86.10 29 P P 22 05 17.0 -0.3
baz=253
G29M **Pine Creek** 86.11 22 P P 22 05 17.2 +0.1
baz=248,SNR=5.3
I30M **Mount Dempster** 86.13 23 P P 22 05 17.6 +0.2
baz=250,SNR=5.1
E28M **Babbage River** 86.22 20 P P 22 05 17.9 +0.3
baz=247
N32M **Quiet Lake** 86.25 28 P P 22 05 18.6 +0.7
baz=253
S34M **Telegraph Cree** 86.32 31 P P 22 05 19.1 +0.9
baz=255
EPYK **Eagle Plains** 86.39 22 P P 22 05 18.5 0.0
baz=250,SNR=10
FARO **Faro, Yukon** 86.44 27 P P 22 05 18.5 -0.3
FARO **Faro, Yukon** 86.44 27 P P 22 05 19.9 +1.0
baz=253
T35M **Bob Quinn** 86.54 32 P P 22 05 20.7 +1.3
baz=256
DRK **Karamyk** 86.65 310 P P 22 05 20.9 +0.2

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DRK** | **Karamyk** | **86.65** | **310** | P | **P** | **22 05 20.9** | **+0.2** |
| DRK | | | | pmax | pmax | | |
| | comp=Z,110nm,1.4s | | | | | | |
| **E29M** | **Blow River** | **86.70** | **20** | P | **P** | **22 05 20.8** | **+0.9** |
| | baz=248 | | | | | | |
| **D28M** | **Stokes Point** | **86.77** | **19** | P | **P** | **22 05 21.5** | **+1.3** |
| | baz=247 | | | | | | |
| **R33M** | **Jennings River** | **86.78** | **30** | P | **P** | **22 05 21.1** | **+0.4** |
| | baz=255 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **86.79** | **22** | P | **P** | **22 05 21.9** | **+1.5** |
| | baz=250 | | | | | | |
| **DLBC** | **Dease Lake** | **87.01** | **31** | P | **P** | **22 05 21.7** | **-0.1** |
| DLBC | | | | lAmb | lAmb | 22 05 59.0 | |
| | comp=Z,34nm,1.3s | | | | | | |
| **DLBC** | **Dease Lake** | **87.01** | **31** | P | **P** | **22 05 21.7** | **-0.1** |
| | comp=Z,3.1nm,0.9s,baz=244,slow=5.7,SNR=4.9 | | | | | | |
| DLBC | | | | pP | **pwP** | **22 05 43.0** | **-1.1** |
| | comp=Z,18nm,1.1s,baz=241,slow=4.8,SNR=9.4 | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **DLBC** | **Dease Lake** | **87.01** | **31** | P | **P** | **22 05 22.2** | **+0.4** |
| | baz=256 | | | | | | |
| **F30M** | **Barrier River** | **87.17** | **21** | P | **P** | **22 05 22.9** | **+0.7** |
| | baz=250 | | | | | | |
| **BTK** | **Batken** | **87.48** | **310** | P | **P** | **22 05 24.2** | **-0.3** |
| **BTK** | **Batken** | **87.48** | **310** | P | **P** | **22 05 24.2** | **-0.3** |
| BTK | | | | pmax | pmax | | |
| | comp=Z,62nm,1.2s | | | | | | |
| **MMPY** | **Sheldon Lake,** | **87.49** | **27** | P | **P** | **22 05 24.1** | **+0.2** |
| | baz=255 | | | | | | |
| **G31M** | **Satah River** | **87.50** | **22** | P | **P** | **22 05 24.2** | **+0.5** |
| | baz=252 | | | | | | |
| **GAR** | **Garm** | **87.72** | **309** | P | **P** | **22 05 25.4** | **-0.2** |
| **F31M** | **Tsiigehtchic** | **87.86** | **22** | P | **P** | **22 05 25.8** | **+0.3** |
| | baz=252 | | | | | | |
| **KBL** | **Kabul** | **88.15** | **305** | P | **P** | **22 05 26.6** | **-1.3** |
| **KBL** | **Kabul** | **88.15** | **305** | P | **P** | **22 05 26.6** | **-1.3** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **88.15** | **313** | P | **P** | **22 05 27.3** | **-0.2** |
| KK31 | | | | lAmb | lAmb | 22 05 48.5 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **KK31** | **Karatay Array** | **88.15** | **313** | P | **P** | **22 05 27.3** | **-0.2** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **88.15** | **313** | P | **P** | **22 05 26.8** | **-0.7** |
| **KKAR** | **Karatay Array** | **88.15** | **313** | P | **P** | **22 05 26.8** | **-0.7** |
| **INK** | **Inuvik** | **88.20** | **21** | P | **P** | **22 05 28.0** | **+0.9** |
| | baz=252 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **88.52** | **48** | LR | LR | 22 37 17.6 | |
| | comp=Z,470nm,21.9s,baz=280,slow=30 | | | | | | |
| **CHGR** | **Chuyangaron** | **88.57** | **309** | P | **P** | **22 05 29.7** | **0.0** |
| **CHGR** | **Chuyangaron** | **88.57** | **309** | P | **P** | **22 05 29.7** | **0.0** |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,77nm,1.0s | | | | | | |
| **TGTN** | **Hyland Airport** | **88.59** | **28** | P | **P** | **22 05 30.0** | **+0.8** |
| | baz=257 | | | | | | |
| **BRLS** | **Borolday** | **88.63** | **313** | ⇑*i*P | **P** | **22 05 30.2** | **+0.4** |
| | baz=313 | | | | | | |
| **BRLS** | **Borolday** | **88.63** | **313***c* | *i*P | **P** | **22 05 30.2** | **+0.4** |
| **SIMJ** | **Simiganj** | **88.69** | **309** | P | **P** | **22 05 29.8** | **-0.4** |
| SIMJ | | | | lAmb | lAmb | 22 05 31.8 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **BVAR** | **Borovoye Array** | **89.67** | **323** | P | **P** | **22 05 34.0** | **-0.4** |
| | comp=Z,29nm,0.8s,baz=103,slow=3.5,SNR=59 | | | | | | |
| BVAR | | | | pP | **pwP** | **22 05 53.8** | **-2.8** |
| | comp=Z,58nm,0.8s,baz=96,slow=3.0,SNR=17 | | | | | | |
| BVAR | | | | LR | LR | 22 45 24.3 | |
| | comp=Z,90nm,21.8s,baz=100,slow=35 | | | | | | |
| | comp=Z,29nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **89.67** | **323** | P | **P** | **22 05 34.0** | **-0.4** |
| **BRVK** | **Borovoye** | **89.74** | **323** | P | **P** | **22 05 33.7** | **-0.9** |
| **BRVK** | **Borovoye** | **89.74** | **323***ce* | P | **P** | **22 05 34.3** | **-0.4** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,31nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.52** | **52** | P | **P** | **22 05 42.5** | **-1.1** |
| **NVAR** | **Mina Array Bea** | **91.52** | **52** | P | **P** | **22 05 42.9** | **-0.7** |
| | comp=Z,1.5nm,0.7s,baz=252,slow=7.2,SNR=9.3 | | | | | | |
| NVAR | | | | pP | **pwP** | **22 06 03.4** | **-2.6** |
| | comp=Z,3.4nm,0.8s,baz=249,slow=7.0,SNR=9.1 | | | | | | |
| NVAR | | | | LR | LR | 22 39 06.2 | |
| | comp=Z,367nm,22.0s,baz=271,slow=30 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **DSP** | **Deep Springs** | **91.70** | **53** | P | **P** | **22 05 44.0** | **-0.1** |
| DSP | | | | lAmb | lAmb | 22 06 09.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PFO** | **Pinyon Flats O** | **92.64** | **57** | LR | LR | 22 42 42.8 | |
| | comp=Z,103nm,18.3s,baz=270,slow=32 | | | | | | |
| **F10A** | **Beach Ranch, E** | **92.89** | **44** | P | **P** | **22 05 48.0** | **-1.7** |
| **TPNV** | **Topopah Spring** | **93.04** | **53** | P | **P** | **22 05 50.0** | **-0.5** |
| | baz=266 | | | | | | |
| **NEW** | **Newport** | **93.12** | **42** | LR | LR | 22 40 38.4 | |
| | comp=Z,167nm,21.7s,baz=272,slow=31 | | | | | | |
| **NEW** | **Newport** | **93.12** | **42** | P | **P** | **22 05 50.5** | **-0.1** |
| | baz=266 | | | | | | |
| **R11B** | **Troy Canyon, C** | **93.65** | **52** | P | **P** | **22 05 52.5** | **-0.9** |
| | baz=267 | | | | | | |
| **HRA** | **Herat** | **93.73** | **304** | P | **P** | **22 05 52.9** | **-1.0** |
| HRA | | | | lAmb | lAmb | 22 05 54.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **RPN** | **Rapa Nui** | **94.17** | **118** | LR | LR | 22 43 50.4 | |
| | comp=Z,56nm,18.0s,baz=297,slow=33 | | | | | | |
| **HLID** | **Hailey** | **94.77** | **47** | P | **P** | **22 05 57.7** | **-0.7** |
| | baz=268 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.09** | **28** | LR | LR | 22 42 60.0 | |
| | comp=Z,170nm,21.5s,baz=284,slow=32 | | | | | | |
| **YKA** | **Yellowknife Ar** | **95.09** | **28***ce* | P | **P** | **22 06 00.7** | **+1.5** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **95.94** | **319** | P | **P** | **22 06 01.8** | **-1.6** |
| **ABKAR** | **Akbulak array** | **95.94** | **319** | P | **P** | **22 06 01.9** | **-1.5** |
| ABKAR | | | | lAmb | lAmb | 22 06 23.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **ARU** | **Arti** | **96.72** | **326** | P | **P** | **22 06 04.9** | **-1.8** |
| ARU | | | | lAmb | lAmb | 22 06 26.5 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ARU** | **Arti** | **96.72** | **326** | LR | LR | 22 50 41.6 | |
| | comp=Z,70nm,21.3s,baz=80,slow=36 | | | | | | |
| **ARU** | **Arti** | **96.72** | **326***d* | *i*P | **P** | **22 06 05.7** | **-1.0** |
| ARU | | | | *PP | **pP** | **22 06 23.2** | **-0.1** |
| ARU | | | | | | 22 10 01.0 | |
| ARU | | | | S | **SKSac** | **22 16 36.9** | **-1.0** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **ARU** | **Arti** | **96.72** | **326** | P | **P** | **22 06 05.2** | **-1.5** |
| | comp=Z,18nm,1.1s | | | | | | |
| **ELIB** | **Princess Elisa** | **96.98** | **194** | *d*P | **P** | **22 06 07.0** | **-0.9** |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **AKTO** | **Aktyubinsk** | **97.18** | **320** | LR | LR | 22 50 34.2 | |
| | comp=Z,55nm,21.2s,baz=66,slow=36 | | | | | | |
| **BELA** | **Belgrano 2** | **97.31** | **178** | P | **P** | **22 06 07.5** | **-1.6** |
| BELA | | | | lAmb | lAmb | 22 06 31.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **LPIG** | **La Paz** | **97.57** | **66** | LR | LR | 22 41 46.8 | |
| | comp=Z,170nm,21.8s,baz=237,slow=30 | | | | | | |
| **PDAR** | **Pinedale Array** | **98.32** | **48** | pP | **pP** | **22 06 36.0** | **+4.7** |
| | comp=Z,1.0nm,0.8s,baz=253,slow=2.7,SNR=4.3 | | | | | | |
| PDAR | | | | LR | LR | 22 44 49.4 | |
| | comp=Z,195nm,20.3s,baz=262,slow=32 | | | | | | |
| **NVL** | **N'lazarevskaya** | **100.41** | **192** | *e*P | **Pdif** | **22 06 30.4** | **+7.4** |
| NVL | | | | *e*S | **SKSac** | **22 17 04.4** | **+8.4** |
| NVL | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,148nm,18.0s | | | | | | |
| **TROLL** | **Troll, Antarti** | **101.06** | **189** | ⇑Pdiff | **Pdif** | **22 06 25.1** | **-1.0** |
| | comp=Z,354nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **102.12** | **187** | ⇑Pdiff | **Pdif** | **22 06 29.9** | **-0.8** |
| | comp=Z,21nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **102.12** | **187** | P | **Pdif** | **22 06 30.0** | **-0.7** |
| | comp=Z,1.0nm,0.7s,baz=198,slow=6.7,SNR=8.8 | | | | | | |
| **SNAA** | **Sanae** | **102.12** | **187** | P | **Pdif** | **22 06 30.0** | **-0.7** |
| **VNA3** | **Neumayer Olymp** | **103.30** | **186** | ⇑Pdiff | **Pdif** | **22 06 34.7** | **-1.2** |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **103.36** | **186** | ⇑Pdiff | **Pdif** | **22 06 35.1** | **-1.1** |
| | comp=Z,1.8nm,0.8s,baz=159,slow=3.3 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **103.72** | **186** | ⇑Pdiff | **Pdif** | **22 06 37.5** | **-0.3** |
| | comp=Z,3.9nm,1.2s | | | | | | |
| **AKASG** | **Malin Array Be** | **114.91** | **325** | PKP | **PKiKP** | **22 11 16.4** | **-0.6** |
| | comp=Z,1.6nm,0.6s,baz=61,slow=2.1,SNR=2.7 | | | | | | |
| **KOLS** | **Kolonicke sedl** | **119.72** | **325** | *e*PKiKP | **PKiKP** | **22 11 27.5** | **+1.1** |
| **KOLS** | **Kolonicke sedl** | **119.72** | **325** | *e*PKiP | **PKiKP** | **22 11 27.5** | **+1.1** |
| **BOSA** | **Boshof** | **120.20** | **233** | PKP | **PKPdf** | **22 11 27.6** | **-0.5** |
| | comp=Z,6.0nm,0.7s,baz=62,slow=2.4,SNR=14 | | | | | | |
| **LANS** | **Liptovska Anna** | **121.17** | **327** | *e*PKiKP | **PKiKP** | **22 11 30.7** | **+1.4** |
| **LANS** | **Liptovska Anna** | **121.17** | **327** | *e*PKP | **PKiKP** | **22 11 30.7** | **+1.4** |
| **MORC** | **Moravsky Berou** | **121.86** | **328** | *e*PKP | **PKiKP** | **22 11 31.4** | **+0.7** |
| **KRLC** | **Kraliky** | **122.08** | **329** | *e*PKPDF | **PKPdf** | **22 11 30.5** | **-0.4** |
| **KRLC** | **Kraliky** | **122.08** | **329** | *e*PKiKP | **PKPdf** | **22 11 30.5** | **-0.4** |
| **LSZ** | **Lusaka** | **122.31** | **249** | PKPdf | **PKPdf** | **22 11 31.4** | **-1.0** |
| **LSZ** | **Lusaka** | **122.31** | **249** | PKiKP | **PKPdf** | **22 11 31.4** | **-1.0** |
| **MBAR** | **Mbarara** | **122.59** | **266***c* | *i*PKiKP | **PKiKP** | **22 11 33.9** | **+0.6** |
| MBAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **KRUC** | **Moravsky** | **122.89** | **328** | *e*PKP | **PKPdf** | **22 11 32.5** | **+0.1** |
| **BRG** | **Berggiesshubel** | **123.02** | **331** | *e*PKP | **PKPdf** | **22 11 32.9** | **+0.2** |
| BRG | | | | Amp | | 22 11 35.7 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **CLL** | **Collm** | **123.19** | **332** | PKPdf | **PKPdf** | **22 11 32.1** | **-0.8** |
| **CLL** | **Collm** | **123.19** | **332** | *i* PKPdf | **PKPdf** | **22 11 32.6** | **-0.3** |
| | comp=Z,4.0nm,1.0s | | | | | | |
| CLL | | | | *ep*PKPdf | **pPKPdf** | **22 11 50.0** | **-0.1** |
| CLL | | | | AMS | AMS | 23 10 00.0 | |
| | comp=Z,100nm,19.6s | | | | | | |
| **CLL** | **Collm** | **123.19** | **332** | *i* PKIKP | **PKPdf** | **22 11 32.6** | **-0.3** |
| CLL | | | | *e* | | 22 11 50.0 | |
| CLL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **RONA** | **Rosalia, Austr** | **123.74** | **327** | *e*PKiKP | **PKPdf** | **22 11 34.5** | **+0.3** |
| | comp=Z,9.9nm,0.5s | | | | | | |
| **CONA** | **Conrad Observa** | **123.84** | **327** | *e*PKiKP | **PKPdf** | **22 11 34.7** | **+0.2** |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **124.13** | **329** | *e*PKPDF | **PKPdf** | **22 11 34.6** | **-0.3** |
| CKRC | | | | *ex* | x | 22 11 56.6 | |
| **CKRC** | **Cesky Krumlov** | **124.13** | **329** | *e*PKiKP | **PKPdf** | **22 11 34.6** | **-0.3** |
| **FNA** | **Florina** | **124.18** | **317** | | **PKPdf** | **22 11 34.0** | **-1.3** |
| **FNA** | **Florina** | **124.18** | **317** | PKiKP | **PKPdf** | **22 11 34.0** | **-1.3** |
| **KHC** | **Kasperske Hory** | **124.31** | **329** | | **PKPdf** | **22 11 34.8** | **-0.4** |
| **KHC** | **Kasperske Hory** | **124.31** | **329** | *e*PKPDF | **PKPdf** | **22 11 35.5** | **+0.3** |
| KHC | | | | *ex* | x | 22 11 57.2 | |
| **KHC** | **Kasperske Hory** | **124.31** | **329***c* | *i*PKIKP | **PKiKP** | **22 11 36.7** | **+1.2** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,12nm,1.7s | | | | | | |
| **ARSA** | **Arzberg** | **124.42** | **326** | *e*PKiKP | **PKiKP** | **22 11 36.1** | **+0.3** |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **GEC2** | **GERESS Array S** | **124.43** | **329** | PKPdf | **PKPdf** | **22 11 35.0** | **-0.5** |
| **GERES** | **GERESS Array B** | **124.43** | **329** | PKP | **PKPdf** | **22 11 35.0** | **-0.5** |
| | comp=Z,1.8nm,0.7s,baz=76,slow=2.4,SNR=12 | | | | | | |
| **MOA** | **Molln** | **124.75** | **328** | *e*PKiKP | **PKPdf** | **22 11 36.4** | **+0.3** |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **SOKA** | **Soboth** | **125.03** | **326** | *e*PKiKP | **PKPdf** | **22 11 36.9** | **+0.2** |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **GRF** | **Grafenberg Arr** | **125.12** | **331** | *e*PKP | **PKPdf** | **22 11 36.6** | **-0.1** |
| | baz=48,slow=1.1 | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **125.18** | **328** | *e*PKP | **PKPdf** | **22 11 36.5** | **-0.4** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **OBKA** | **Obir** | **125.40** | **326** | *e*PKP | **PKPdf** | **22 11 37.1** | **-0.4** |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **KBA** | **Koelnbreinsper** | **125.71** | **327** | *e*PKP | **PKPdf** | **22 11 37.1** | **-1.0** |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **125.85** | **328** | *e*PKP | **PKPdf** | **22 11 38.0** | **-0.3** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **126.23** | **344** | PKP | **PKPdf** | **22 11 38.1** | **-0.6** |
| | comp=Z,1.1nm,0.7s,baz=20,slow=2.3,SNR=2.5 | | | | | | |
| **ABTA** | **Abfaltersbach** | **126.37** | **327** | *e*PKP | **PKPdf** | **22 11 38.8** | **-0.5** |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **WATA** | **Walderalm** | **126.49** | **329** | *e*PKiKP | **PKPdf** | **22 11 39.5** | **-0.1** |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **126.50** | **328** | *e*PKP | **PKPdf** | **22 11 39.3** | **-0.3** |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **STAL** | **STALIGIAL** | **126.56** | **327** | | **PKPdf** | **22 11 38.8** | **-0.9** |
| **MOTA** | **Moosalm** | **126.72** | **329** | *e*PKiKP | **PKPdf** | **22 11 40.0** | **0.0** |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **126.75** | **329** | *e*PKiKP | **PKPdf** | **22 11 40.2** | **+0.1** |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **RETA** | **Reutte** | **126.81** | **329** | *e*PKiKP | **PKPdf** | **22 11 40.5** | **+0.4** |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **127.13** | **329** | *i* PKiKP | **PKPdf** | **22 11 41.2** | **+0.4** |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **DAVA** | **Damuels** | **127.39** | **329** | *e*PKiKP | **PKPdf** | **22 11 41.5** | **+0.2** |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **127.63** | **329** | PKPdf | **PKPdf** | **22 11 41.7** | **-0.2** |
| **DAVOX** | **Davos/Dischmat** | **127.73** | **329** | PKP | **PKPdf** | **22 11 41.9** | **-0.2** |
| | comp=Z,2.6nm,0.7s,baz=91,slow=4.0,SNR=13 | | | | | | |
| **LPAZ** | **La Paz** | **133.78** | **118** | PKPdf | **PKPdf** | **22 11 53.3** | **-1.6** |
| **LPAZ** | **La Paz** | **133.78** | **118** | PKP | **PKPdf** | **22 11 54.0** | **-0.9** |
| | comp=Z,1.6nm,0.6s,baz=305,slow=4.1,SNR=7.7 | | | | | | |
| **LPAZ** | **La Paz** | **133.78** | **118** | PKIKP | **PKPdf** | **22 11 53.3** | **-1.6** |
| **KEST** | **Kesra** | **134.89** | **318** | PKP | **PKPdf** | **22 11 54.8** | **-1.0** |
| | comp=Z,2.1nm,0.8s,baz=336,slow=11,SNR=4.1 | | | | | | |
| **CPUP** | **Villa Florida** | **136.98** | **138** | PKP | **PKPdf** | **22 11 59.2** | **-0.6** |
| | comp=Z,2.1nm,1.0s,baz=336,slow=2.0,SNR=3.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **139.76** | **333** | PKhKP | PKPpre | 22 11 57.4 | |
| | comp=Z,0.4nm,0.8s,baz=36,slow=3.6,SNR=3.3 | | | | | | |
| **TAM** | **Tamanrasset** | **144.28** | **303** | PKPdf | PKPbc | 22 12 12.3 | **+0.6** |
| **TAM** | **Tamanrasset** | **144.28** | **303** | PKIKP | PKPbc | 22 12 12.3 | **+0.6** |
| **MDT** | **Midelt** | **145.44** | **326** | PKPbc | **PKPdf** | **22 12 14.8** | **-0.2** |
| | comp=Z,15nm,0.9s,baz=71,slow=5.3,SNR=18 | | | | | | |
| **BOAV** | **Boa Vista** | **145.94** | **93** | PKPdf | **PKPdf** | **22 12 14.4** | **-1.8** |
| **BDFB** | **Brasilia** | **150.55** | **134** | | **PKPbc** | **22 12 27.3** | **-1.9** |
| **BDFB** | **Brasilia** | **150.55** | **134** | PKPbc | **PKPbc** | **22 12 27.6** | **-1.6** |
| | comp=Z,11nm,0.8s,baz=19,slow=1.1,SNR=14 | | | | | | |
| **BDFB** | **Brasilia** | **150.55** | **134** | PKIKP | **PKPbc** | **22 12 27.3** | **-1.9** |
| **TORD** | **Torodi Ar. Bea** | **150.99** | **288** | | **PKPbc** | **22 12 29.3** | **-0.8** |
| **TORD** | **Torodi Ar. Bea** | **150.99** | **288** | PKPbc | **PKPbc** | **22 12 29.6** | **-0.5** |
| | comp=Z,47nm,0.8s,baz=49,slow=2.4,SNR=188 | | | | | | |
| **DBIC** | **Dimbokro** | **158.41** | **276** | PKPab | **PKPab** | **22 13 08.8** | **-0.6** |
| | comp=Z,9.4nm,0.8s,baz=20,slow=2.7,SNR=7.1 | | | | | | |

**IDC 18 22:06:56.7±2.2,5.83N×126.79E, h0km, mb3.5/5, mbtmp3.5/5, Error ellipse: s-maj=204.0km s-min=21.7km az=67.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **26.67** | **164** | P | P | 22 12 37.7 | +0.1 |
| | 0.6nm,0.9s,baz=344,slow=10,SNR=6.7 | | | | | | |
| | 0.6nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **30.13** | **167** | P | P | 22 13 08.3 | -0.1 |
| | 0.2nm,0.6s,baz=345,slow=6.9,SNR=1.8 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.88** | **324** | P | P | 22 16 36.8 | +0.5 |
| | 0.2nm,0.3s,baz=113,slow=8.3,SNR=9.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.02** | **327** | P | P | 22 17 04.3 | -0.9 |
| | 0.4nm,0.5s,baz=128,slow=6.6,SNR=4.4 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **65.60** | **326** | P | P | 22 17 42.6 | +0.2 |
| | 0.2nm,0.3s,baz=134,slow=8.3,SNR=3.1 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*TAP **18** 22:10:41.5, 24.81N×122.52E, h23km±1km, ML2.7, D*
*JMA **18** 22:10:42.2±0.1, 24.7N±0.6×122.5E±0.3, h10km±2km, MV2.1/9, NW OFF ISHIGAKIJIMA IS*
**ISC 18 22:10:41.7±1.0, 24.79N±0.04×122.51E±0.03, h17km±9km, n35, σ0.41/60, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.45** | **214** | *e*P | **Pb** | **22 10 51.3** | **+0.2** |
| | baz=221 | | | | | | |
| EOS2 | | | | S | **Sb** | **22 10 58.6** | **+1.1** |
| | baz=221 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.52** | **131** | P | **Pg** | **22 10 52.1** | **0.0** |
| JYNG | | | | S | **Sg** | **22 10 58.9** | **-0.3** |
| **TWB1** | **Santiao Chiao** | **0.52** | **294** | *e*P | **Pg** | **22 10 52.2** | **+0.1** |
| | baz=292 | | | | | | |
| TWB1 | | | | S | **Sg** | **22 10 59.1** | **-0.1** |
| | baz=292 | | | | | | |
| **EOS3** | **EOS3** | **0.54** | **199** | *e*P | **Pb** | **22 10 53.1** | **+0.6** |
| | baz=206 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **22 11 02.2** | **-0.7** |
| | baz=206 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.56** | **126** | P | **Pg** | **22 10 52.8** | **0.0** |
| | baz=119 | | | | | | |
| YOJ | | | | S | **Sg** | **22 11 00.1** | **-0.2** |
| | baz=119 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.56** | **126** | P | **Pg** | **22 10 52.9** | **0.0** |
| YOJ | | | | S | **Sg** | **22 11 00.2** | **-0.2** |
| **TWC** | **Suao** | **0.63** | **253** | *e*P | **Pg** | **22 10 53.9** | **-0.3** |
| | baz=251 | | | | | | |
| TWC | | | | *e*S | **Sg** | **22 11 02.3** | **-0.3** |
| | baz=251 | | | | | | |
| **TIPB** | **Shuangxi** | **0.65** | **286** | *e*P | **Pg** | **22 10 54.5** | **0.0** |
| | baz=295 | | | | | | |
| TIPB | | | | *e*S | **Sg** | **22 11 03.4** | **+0.3** |
| | baz=295 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.65** | **298** | P | **Pg** | **22 10 54.7** | **+0.1** |
| | baz=296 | | | | | | |
| SXI1 | | | | *e*S | **Sb** | **22 11 04.1** | **+0.7** |
| | baz=296 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EOS4** | **EOS4** | **0.69** | **195** | *e*P | **Pb** | **22 10 55.6** | **+0.6** |
| | baz=186 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **22 11 05.5** | **-1.0** |
| | baz=186 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.72** | **293** | *e*S | **Sb** | **22 11 06.5** | **+1.2** |
| | baz=291 | | | | | | |
| **NDS** | **Dongshan** | **0.74** | **258** | *e*P | **Pb** | **22 10 56.3** | **+0.2** |
| | baz=256 | | | | | | |
| NDS | | | | *e*S | **Sb** | **22 11 07.0** | **+1.1** |
| | baz=256 | | | | | | |
| **EWUT** | **Wuta** | **0.75** | **243** | *e*P | **Pg** | **22 10 56.1** | **-0.3** |
| | baz=252 | | | | | | |
| EWUT | | | | *e*S | **Sb** | **22 11 06.6** | **+0.4** |
| | baz=252 | | | | | | |
| **TWE** | **Neicheng** | **0.77** | **265** | *e*P | **Pb** | **22 10 56.2** | **-0.4** |
| | baz=263 | | | | | | |
| TWE | | | | *e*S | **Sb** | **22 11 07.0** | **+0.2** |
| | baz=263 | | | | | | |
| **ENA** | **Nanau** | **0.79** | **243** | *e*P | **Pb** | **22 10 56.6** | **-0.4** |
| | baz=251 | | | | | | |
| ENA | | | | *e*S | **Sb** | **22 11 08.0** | **+0.7** |
| | baz=251 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.84** | **268** | *e*P | **Pb** | **22 10 57.9** | **+0.1** |
| | baz=266 | | | | | | |
| FUSB | | | | *e*S | **Sb** | **22 11 09.0** | **+0.1** |
| | baz=266 | | | | | | |
| **TWA** | **Mucha** | **0.86** | **283** | *e*S | **Sb** | **22 11 09.4** | **-0.1** |
| | baz=281 | | | | | | |
| **ENTT** | **Nioudou** | **0.87** | **260** | *e*P | **Pg** | **22 10 58.8** | **+0.1** |
| | baz=248 | | | | | | |
| ENTT | | | | *e*S | **Sg** | **22 11 10.5** | **+0.2** |
| | baz=248 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.91** | **281** | *e*S | **Sb** | **22 11 10.9** | **+0.1** |
| | baz=279 | | | | | | |
| **NWLT** | **Wulai** | **0.92** | **269** | *e*P | **Pg** | **22 10 59.6** | **+0.1** |
| | baz=277 | | | | | | |
| NWLT | | | | *e*S | **Sb** | **22 11 11.2** | **+0.1** |
| | baz=277 | | | | | | |
| **YM01** | **YM01** | **0.92** | **293** | *e*P | **Pb** | **22 10 59.0** | **-0.3** |
| | baz=291 | | | | | | |
| YM01 | | | | *e*S | **Sb** | **22 11 11.1** | **-0.2** |
| | baz=291 | | | | | | |
| **YM08** | **YM08** | **0.93** | **295** | *e*P | **Pn** | **22 11 00.2** | **+0.3** |
| | baz=294 | | | | | | |
| **NDT** | **Datong Townshi** | **0.93** | **258** | *e*P | **Pb** | **22 10 59.1** | **-0.2** |
| | baz=247 | | | | | | |
| NDT | | | | *e*S | **Sg** | **22 11 11.9** | **-0.1** |
| | baz=247 | | | | | | |
| **LATG** | **Datong** | **0.93** | **254** | P | **Pb** | **22 10 59.6** | **+0.1** |
| | baz=252 | | | | | | |
| LATG | | | | S | **Sg** | **22 11 12.1** | **-0.1** |
| | baz=252 | | | | | | |
| **ANP** | **Anpu** | **0.98** | **294** | *e*S | **Sb** | **22 11 13.4** | **+0.5** |
| | baz=292 | | | | | | |
| **NACB** | **Ninganchiao** | **1.04** | **234** | P | **Pb** | **22 11 00.9** | **-0.3** |
| | baz=241 | | | | | | |
| NACB | | | | S | **Sg** | **22 11 15.0** | **-0.5** |
| | baz=241 | | | | | | |
| **YHNB** | **Yeheng** | **1.04** | **263** | P | **Pb** | **22 11 01.3** | **0.0** |
| | baz=262 | | | | | | |
| YHNB | | | | *e*S | **Sb** | **22 11 14.8** | **+0.1** |
| | baz=262 | | | | | | |
| **NSK** | **Sanguang** | **1.06** | **264** | *e*P | **Pb** | **22 11 01.5** | **0.0** |
| | baz=262 | | | | | | |
| NSK | | | | *e*S | **Sb** | **22 11 14.8** | **-0.3** |
| | baz=262 | | | | | | |
| **NNSB** | **Datong** | **1.09** | **251** | *e*P | **Pb** | **22 11 02.0** | **-0.2** |
| | baz=249 | | | | | | |
| NNSB | | | | *e*S | **Sg** | **22 11 16.7** | **-0.4** |
| | baz=249 | | | | | | |
| **NNS** | **Nan Shan** | **1.09** | **251** | *e*P | **Pb** | **22 11 02.2** | **0.0** |
| | baz=249 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.10** | **238** | *e*P | **Pb** | **22 11 02.4** | **0.0** |
| | baz=237 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.20** | **112** | P | **Pg** | **22 11 04.7** | **-0.2** |
| IRIF | | | | *e*S | **Sg** | **22 11 20.5** | **-0.1** |
| **LXIB** | **Xiulin Townshi** | **1.26** | **233** | *e*P | **Pb** | **22 11 05.2** | **0.0** |
| | baz=231 | | | | | | |
| **FUSS** | **Fushou** | **1.28** | **245** | *e*P | **Pb** | **22 11 05.8** | **+0.4** |
| | baz=244 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.31** | **241** | *e*P | **Pb** | **22 11 06.2** | **+0.1** |
| | baz=247 | | | | | | |

**IDC 18 22:10:58.3±2.3, 4.84S×128.98E, h0km, mb3.5/1, mbtmp3.3/3, ML3.4/2, Error ellipse: s-maj=155.9km s-min=30.3km az=68.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.89** | **161** | Pn | Pn | 22 14 41.

| | | | | | | |
|---|---|---|---|---|---|---|
| D27M | | | IAML | | | 22 13 06.9 |
| | comp=N,64nm,0.8s | | | | | |
| **E27K** | **Coleen River** | **2.08 117** | Pn | Pb | | 22 12 32.2 -1.1 |
| E27K | | | IAML | | | 22 13 54.2 |
| | comp=E,55nm,0.6s | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.18 243** | | Pn | | 22 12 32.4 +0.8 |
| E22K | | | IAML | | | 22 13 47.8 |
| | comp=N,59nm,0.5s | | | | | |
| **D22K** | **Ayikyak River** | **2.21 265** | | Pn | | 22 12 33.2 +1.3 |
| **COLD** | **Coldfoot** | **2.39 216** | | Pn | | 22 12 35.6 +1.3 |
| **G24K** | **Hadweenzic Riv** | **2.52 188** | | Pn | | 22 12 37.5 +1.4 |
| **E28M** | **Babbage River** | **2.62 100** | Pn | Pn | | 22 12 39.3 +1.8 |
| **F22K** | **John River** | **2.67 233** | | Pb | | 22 12 41.2 -2.1 |
| **FYU** | **Fort Yukon** | **2.68 168** | Pn | Pn | | 22 12 38.9 +0.6 |
| **E21K** | **Killik River** | **2.78 258** | | Pn | | 22 12 41.3 +1.5 |
| **G23K** | **Bananza Creek** | **2.81 209** | | Pn | | 22 12 41.6 +1.5 |
| **F28M** | **Old Crow** | **2.94 119** | | Pn | | 22 12 42.5 +0.5 |
| **G27K** | **Doyon Strip** | **3.03 140** | | Pn | | 22 12 44.9 +1.8 |
| **F21K** | **Alatna River** | **3.24 236** | | Pn | | 22 12 47.1 +1.0 |
| **E29M** | **Blow River** | **3.26 100** | Pn | Pn | | 22 12 47.6 +1.3 |
| **H24K** | **Noodor Dome** | **3.40 189** | Pn | Pn | | 22 12 49.8 +1.5 |
| **H23K** | **Yukon River** | **3.56 200** | | Pn | | 22 12 51.2 +0.8 |
| **PRP** | **Porcupine Dome** | **3.71 173** | | Pn | | 22 12 54.0 +1.4 |
| **G21K** | **Allakaket** | **3.75 228** | | Pn | | 22 12 54.1 +1.1 |
| **B20K** | **Meade River** | **3.79 287** | Pn | Pn | | 22 12 54.5 +1.0 |
| **G29M** | **Pine Creek** | **3.94 121** | | Pn | | 22 12 57.7 +2.0 |
| **F20K** | **Avaraaart Lake** | **4.04 242** | | Pn | | 22 12 57.5 +0.6 |
| **I26K** | **Coal Creek Min** | **4.12 159** | Pn | Pn | | 22 12 59.9 +1.8 |
| **I23K** | **Minto, Yukon-K** | **4.20 196** | | Pn | | 22 13 00.9 +1.8 |
| **IMAR** | **Indian Mountai** | **4.23 224** | | Pn | | 22 13 00.7 +1.1 |
| **D19K** | **Kuna River** | **4.24 266** | Pn | Pn | | 22 13 00.7 +1.0 |
| **H21K** | **Melozitna Rive** | **4.28 217** | | Pn | | 22 13 02.0 +1.8 |
| **MDM** | **Murphy Dome** | **4.30 189** | | Pn | | 22 13 02.3 +1.8 |
| **E19K** | **Redstone River** | **4.31 251** | Pn | Pn | | 22 13 01.7 +1.0 |
| **H29M** | **Whitestone** | **4.32 130** | | Pn | | 22 13 02.8 +1.9 |
| **IL31** | | **4.44 182** | | Pn | | 22 13 03.8 +1.4 |
| **ILAR** | **Eielson Array** | **4.44 182** | Pn | Pn | | 22 13 04.7 +2.3 |
| **MLY** | **Manley** | **4.48 203** | | Pn | | 22 13 04.8 +1.7 |
| **I28M** | **Miner Creek** | **4.55 142** | | Pn | | 22 13 06.6 +2.5 |
| **CCB** | **Clear Creek Bu** | **4.59 187** | Pn | Pn | | 22 13 06.2 +1.7 |
| **J25K** | **Salcha River,** | **4.62 173** | | Pn | | 22 13 06.3 +1.3 |
| **C19K** | **Lookout Ridge** | **4.65 275** | Pn | Pn | | 22 13 06.5 +1.2 |
| **EPYK** | **Eagle Plains** | **4.69 122** | Pn | Pn | | 22 13 07.7 +1.7 |
| **NEA2** | **Nenana** | **4.72 193** | | Pn | | 22 13 07.9 +1.6 |
| **HDA** | **Harding Lake** | **4.80 182** | | Pn | | 22 13 09.0 +1.6 |
| **F19K** | **Shaleruckik Mo** | **4.82 246** | Pn | Pn | | 22 13 09.5 +1.9 |
| **J26L** | **Joseph Creek** | **4.86 164** | | Pn | | 22 13 09.9 +1.6 |
| **I29M** | **Ogilvie Camp,** | **5.01 136** | Pn | Pn | | 22 13 12.2 +1.9 |
| **G19K** | **Purcell Mounta** | **5.03 238** | Pn | Pn | | 22 13 12.8 +2.2 |
| **G31M** | **Satah River** | **5.15 110** | Pn | Pn | | 22 13 13.5 +1.4 |
| **SCRK** | **Sand Creek** | **5.34 168** | Pn | Pn | | 22 13 15.6 +0.7 |
| **BPAW** | **Bear Paw Mtn.** | **5.40 201** | Pn | Pn | | 22 13 17.0 +1.3 |
| **K27K** | **Chicken** | **5.48 159** | Pn | Pn | | 22 13 18.1 +1.3 |
| **I30M** | **Mount Dempster** | **5.62 130** | | Pn | | 22 13 20.0 +1.2 |
| **J20K** | **Nowinta River** | **5.86 214** | Pn | Pn | | 22 13 23.2 +1.4 |
| **J30M** | **Hart River** | **6.14 134** | Pn | Pn | | 22 13 27.2 +1.3 |
| **DHY** | **Denali Highway** | **6.15 183** | Pn | Pn | | 22 13 27.1 +1.1 |
| **K29M** | **Barlow Dome** | **6.47 142** | | Pn | | 22 13 31.3 +0.9 |
| **M29M** | **Somme Creek** | **7.54 150** | Pn | Pn | | 22 13 46.5 +1.4 |

*NEIC **18** 22:12:34.6±1.5,69°.20N±0°.04×146°.47W±0°.07,h10km±2km, Error ellipse: s-maj=7.2km s-min=4.0km az=347.0*

**AEIC 18 22:12:34.0±2.2,69°.14N±0°.04×146°.54W±0°.08,h14km±6km, ML2.5,ML2.8/58(NEIC),Error ellipse: s-maj=5.6km s-min=3.6km az=156.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **D25K** | **Kavik River** | **0.19** | **18** | Pg | Pg | 22 12 37.6 | -0.8 |
| D25K | | | | IAML | | 22 12 42.6 | |
| | comp=E,2µm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **0.82** | **272** | Pg | Pb | 22 12 50.2 | +0.3 |
| D24K | | | | Sg | Sn | 22 13 01.9 | -1.0 |
| **C24K** | **Franklin Bluff** | **0.96** | **308** | | Pn | 22 12 52.8 | -0.2 |
| C24K | | | | Sg | Sg | 22 13 05.3 | +0.4 |
| **C26K** | **Camden Bay** | **0.97** | **36** | | Pn | 22 12 53.3 | +0.2 |
| **C27K** | **Jago River** | **1.11** | **63** | | Pn | 22 12 55.2 | 0.0 |
| C27K | | | | | Sb | 22 13 08.7 | -0.7 |
| C27K | | | | IAML | | 22 13 26.7 | |
| | comp=E,160nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.21** | **247** | | Pg | 22 12 57.3 | +0.1 |
| TOLK | | | | | Sg | 22 13 14.2 | +1.3 |
| TOLK | | | | IAML | | 22 13 31.1 | |
| | comp=N,232nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **1.29** | **214** | | Pg | 22 12 58.5 | -0.2 |
| E24K | | | | IAML | | 22 13 32.9 | |
| | comp=E,145nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **1.50** | **265** | Pn | Pb | 22 13 01.8 | +0.3 |
| D23K | | | | IAML | | 22 13 37.4 | |
| | comp=N,129nm,1.1s | | | | | | |
| D23K | | | | IAML | | 22 13 38.0 | |
| | comp=E,157nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **1.59** | **298** | Pn | Pb | 22 13 03.2 | 0.0 |
| **F25K** | **Christian Rive** | **1.59** | **167** | Pn | Pg | 22 13 04.4 | -0.2 |
| F25K | | | | IAML | | 22 13 34.2 | |
| | comp=N,80nm,0.6s | | | | | | |
| F25K | | | | IAML | | 22 13 42.7 | |
| | comp=E,124nm,0.5s | | | | | | |
| **F24K** | **Squaw Lake** | **1.71** | **198** | Pn | Pb | 22 13 04.7 | -0.4 |
| F24K | | | | IAML | | 22 13 32.6 | |
| | comp=E,113nm,0.6s | | | | | | |
| F24K | | | | IAML | | 22 13 44.2 | |
| | comp=N,125nm,0.7s | | | | | | |
| **G23K** | **Bananza Creek** | **2.77** | **210** | Pn | Pn | 22 13 19.4 | +1.5 |
| G23K | | | | IAML | | 22 14 15.0 | |
| | comp=E,45nm,1.1s | | | | | | |
| G23K | | | | IAML | | 22 14 22.4 | |
| | comp=N,30nm,1.3s | | | | | | |
| **E21K** | **Killik River** | **2.79** | **259** | Pn | Pn | 22 13 17.9 | -0.3 |
| E21K | | | | IAML | | 22 14 18.9 | |
| | comp=E,37nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **3.36** | **189** | Pn | Pn | 22 13 27.1 | +1.0 |
| H24K | | | | IAML | | 22 14 30.6 | |
| | comp=E,18nm,0.8s | | | | | | |
| H24K | | | | IAML | | 22 14 36.5 | |
| | comp=N,18nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **3.53** | **200** | Pn | Pn | 22 13 30.5 | +2.2 |
| H23K | | | | IAML | | 22 14 41.1 | |
| | comp=N,20nm,0.6s | | | | | | |
| **G29M** | **Pine Creek** | **3.91** | **121** | Pn | Pn | 22 13 34.4 | +0.9 |
| **I26K** | **Coal Creek Min** | **4.07** | **160** | Pn | Pn | 22 13 38.2 | +2.5 |
| **I23K** | **Minto, Yukon-K** | **4.16** | **197** | Pn | Pn | 22 13 39.5 | +2.6 |
| I23K | | | | IAML | | 22 14 19.3 | |
| | comp=N,12nm,1.1s | | | | | | |
| I23K | | | | IAML | | 22 15 15.6 | |
| | comp=E,15nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **4.25** | **267** | Pn | Pn | 22 13 39.4 | +1.2 |
| D19K | | | | IAML | | 22 15 12.0 | |
| | comp=E,11nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.26** | **190** | Pn | Pn | 22 13 40.8 | +2.5 |
| MDM | | | | IAML | | 22 15 06.4 | |
| | comp=N,9.1nm,0.8s | | | | | | |
| MDM | | | | IAML | | 22 15 10.6 | |
| | comp=E,8.4nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **4.28** | **129** | Pn | Pn | 22 13 41.1 | +2.5 |
| H29M | | | | IAML | | 22 15 03.8 | |
| | comp=E,14nm,1.4s | | | | | | |
| **I28M** | **Miner Creek** | **4.51** | **142** | Pn | Pn | 22 13 44.2 | +2.4 |
| I28M | | | | IAML | | 22 14 44.0 | |
| | comp=N,9.3nm,0.6s | | | | | | |
| I28M | | | | IAML | | 22 15 17.9 | |
| | comp=E,8.3nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **4.54** | **187** | Pn | Pn | 22 13 43.1 | +0.9 |
| CCB | | | | IAML | | 22 14 59.7 | |
| | comp=E,6.4nm,1.4s | | | | | | |
| **J25K** | **Salcha River,** | **4.58** | **174** | Pn | Pn | 22 13 44.9 | +2.2 |
| J25K | | | | IAML | | 22 14 55.2 | |
| | comp=N,6.2nm,0.9s | | | | | | |
| J25K | | | | IAML | | 22 15 06.8 | |
| | comp=E,8.0nm,0.6s | | | | | | |
| **C19K** | **Lookout Ridge** | **4.67** | **276** | Pn | Pn | 22 13 44.4 | +0.4 |
| C19K | | | | IAML | | 22 14 40.6 | |
| | comp=E,9.7nm,1.2s | | | | | | |
| **NEA2** | **Nenana** | **4.68** | **193** | Pn | Pn | 22 13 46.0 | +1.9 |
| NEA2 | | | | IAML | | 22 15 25.0 | |
| | comp=E,5.9nm,1.3s | | | | | | |
| **HDA** | **Harding Lake** | **4.76** | **182** | Pn | Pn | 22 13 47.0 | +1.8 |
| **I29M** | **Ogilvie Camp,** | **4.96** | **136** | Pn | Pn | 22 13 50.3 | +2.3 |
| **SCRK** | **Sand Creek** | **5.29** | **168** | Pn | Pn | 22 13 54.7 | +2.2 |
| SCRK | | | | IAML | | 22 15 38.3 | |
| | comp=E,5.8nm,0.8s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **5.37** | **201** | Pn | Pn | 22 13 55.9 | +2.4 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **K27K** | **Chicken** | **5.44** | **159** | Pn | Pn | 22 13 56.0 +1.6 |
| **I30M** | **Mount Dempster** | **5.58** | **130** | Pn | Pn | 22 13 57.6 +1.1 |
| **DHY** | **Denali Highway** | **6.11** | **184** | Pn | Pn | 22 14 05.9 +2.1 |
| **K29M** | **Barlow Dome** | **6.42** | **142** | Pn | Pn | 22 14 10.2 +2.1 |
| **M29M** | **Somme Creek** | **7.50** | **150** | Pn | Pn | 22 14 25.3 +2.5 |

*IDC **18** 22:23:57.0±1.2,60°.07S×28°.03W,h0km,mb4.0/4, mbtmp3.9/5,ML3.6/1,MS3.8/3,Error ellipse: s-maj=37.8km s-min=28.3km az=88.0*

**ISC 18 22:23:58.5±1.1,60°.2S±0°.1×28°.0W±0°.2,h10km,n17, σ0.97/9,mb4.1/4,6C-1D,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **13.25** | **151** | ⇑P | **Pn** | **22 27 05.5** | **-0.7** |
| | comp=Z,4.1nm,0.3s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **13.34** | **154** | ⇑P | **Pn** | **22 27 06.0** | **-1.6** |
| | comp=Z,0.1nm,0.1s | | | | | | |
| VNA3 | | | | ⇓S | Sn | 22 29 23.4 | -12 |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **13.65** | **151** | ⇑P | **Pn** | **22 27 11.4** | **-0.3** |
| | comp=Z,1.5nm,0.4s,baz=298,slow=17 | | | | | | |
| VNA2 | | | | ⇑S | Sn | 22 29 28.7 | -14 |
| | comp=Z,0.4nm,0.4s,baz=95,slow=4.8 | | | | | | |
| **SNAA** | **Sanae** | **15.26** | **149** | ⇑P | **Pn** | **22 27 33.8** | **+0.1** |
| | comp=Z,53nm,0.5s | | | | | | |
| SNAA | | | | ⇑S | Sn | 22 30 11.7 | -11 |
| | comp=Z,14nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **15.26** | **149** | Pn | **Pn** | **22 27 33.5** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=320,slow=17,SNR=14 | | | | | | |
| SNAA | | | | LR | LR | 22 33 14.6 | |
| | comp=Z,151nm,18.0s,baz=114,slow=36 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **PMSA** | **Palmer Station** | **17.12** | **239** | LR | LR | 22 33 11.8 | |
| | comp=Z,179nm,20.1s,baz=88,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **30.07** | **180** | P | **P** | **22 30 08.7** | **+1.1** |
| | comp=Z,2.4nm,1.1s,baz=270,slow=0.2,SNR=6.6 | | | | | | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **46.35** | **111** | T | T | 23 23 11.3 | |
| | baz=223,slow=75,SNR=65 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **46.36** | **111** | T | T | 23 23 08.9 | |
| | baz=223,slow=75,SNR=52 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **46.37** | **111** | T | T | 23 23 18.2 | |
| | baz=223,slow=75,SNR=47 | | | | | | |
| **BOSA** | **Boshof** | **47.49** | **73** | P | **P** | **22 32 34.4** | **+0.8** |
| | comp=Z,2.5nm,1.0s,baz=223,slow=7.4,SNR=5.9 | | | | | | |
| | comp=Z,2.5nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **52.52** | **309** | P | **P** | **22 33 12.2** | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=141,slow=6.5,SNR=2.2 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **53.19** | **17** | T | T | 23 31 30.5 | |
| | baz=190 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **53.20** | **17** | T | T | 23 31 24.8 | |
| | baz=190,slow=74 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **53.21** | **17** | T | T | 23 31 31.9 | |
| | baz=190,slow=74 | | | | | | |
| **RPZ** | **Rata Peaks** | **75.31** | **194** | LR | LR | 23 06 29.9 | |
| | comp=Z,183nm,18.0s,baz=141,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.85** | **30** | P | **P** | **22 35 49.6** | **-0.8** |
| | comp=Z,1.4nm,0.6s,baz=199,slow=5.5,SNR=15 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |

**TRN 18 22:28:32.8,17°.40N×62°.04W,h17km,MD3.5,South-west of Barbuda.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANWB** | **Willy Bob** | **0.36** | **42** | eP | Pn | 22 28 42.0 | -1.2 |
| ANWB | | | | eS | Sb | 22 28 47.3 | +1.1 |
| **ANBD** | **Bethesda, Anti** | **0.44** | **143** | eP | Pn | 22 28 44.4 | +0.1 |
| ANBD | | | | eS | Sn | 22 28 51.1 | -0.8 |
| **MBFL** | **Flemmings, Mon** | **0.67** | **194** | eP | Pn | 22 28 48.6 | +1.1 |
| MBFL | | | | eS | Sn | 22 28 58.5 | +0.9 |
| **MBWH** | | **0.67** | **193** | eP | Pn | 22 28 48.5 | +0.9 |
| MBWH | | | | eS | Sn | 22 28 58.7 | +1.0 |
| **SKOC** | **St. Kitts, UWI** | **0.67** | **261** | eP | Pn | 22 28 48.8 | +1.3 |
| SKOC | | | | eS | Sn | 22 28 58.7 | +1.1 |
| **SKI** | **Saint Kitts** | **0.67** | **264** | eP | Pn | 22 28 49.1 | +1.5 |
| SKI | | | | eS | Sn | 22 28 58.9 | +1.2 |
| **ABD** | **La Joyeuse, An** | **1.06** | **150** | eP | Pg | 22 28 54.5 | +1.2 |
| **SMRT** | **St. Maarten** | **1.18** | **303** | eP | Pg | 22 28 56.3 | +0.7 |
| **CBE** | **Ff, Capester** | **1.39** | **163** | eP | Pg | 22 29 00.2 | +0.7 |
| **TBG** | **Guadaloupe-3** | **1.58** | **166** | eP | Pg | 22 29 02.7 | -0.6 |
| TBG | | | | eS | Sg | 22 29 23.9 | -0.1 |
| **TDBA** | **Terre de Bas,** | **1.59** | **166** | eP | Pg | 22 29 02.8 | -0.6 |
| **MAGL** | **Barre de l'ile** | **1.61** | **153** | eP | Pb | 22 29 02.4 | +0.2 |

*JMA **18** 22:29:02.9±0.1,25°.1N±1°.1×122°.5E±0°.6,h19km±3km, MV2.3/8,NW OFF ISHIGAKIJIMA IS*
*TAP **18** 22:29:02.3,24°.82N×122°.54E,h13km±1km,ML2.5,D*

**ISC 18 22:28:59.9±1.4,24°.89N±0°.05×122°.58E±0°.03,h13km±10km, n29,σ0.62/48,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.55** | **143** | P | **Pn** | **22 29 12.3** | **-1.1** |
| JYNG | | | | eS | **Sb** | **22 29 19.1** | **0.0** |
| **TWB1** | **Santiao Chiao** | **0.55** | **283** | eP | **Pn** | **22 29 12.4** | **-1.1** |
| | baz=290 | | | | | | |
| TWB1 | | | | eS | **Sb** | **22 29 19.5** | **+0.3** |
| | baz=290 | | | | | | |
| **EOS2** | **EOS2** | **0.56** | **214** | eP | **Pb** | **22 29 11.7** | **+0.1** |
| | baz=214 | | | | | | |
| EOS2 | | | | eS | **Sg** | **22 29 18.7** | **+0.3** |
| | baz=214 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.58** | **137** | P | **Pn** | **22 29 13.2** | **-0.6** |
| | baz=129 | | | | | | |
| YOJ | | | | S | **Sb** | **22 29 20.3** | **+0.3** |
| | baz=129 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.58** | **137** | P | **Pn** | **22 29 13.2** | **-0.6** |
| YOJ | | | | S | **Sb** | **22 29 20.3** | **+0.3** |
| **EOS3** | **EOS3** | **0.65** | **202** | eP | **Pb** | **22 29 13.1** | **+0.2** |
| | baz=200 | | | | | | |
| EOS3 | | | | eS | **Sb** | **22 29 21.9** | **+0.1** |
| | baz=200 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.67** | **288** | P | **Pn** | **22 29 15.1** | **-0.2** |
| | baz=294 | | | | | | |
| SXI1 | | | | eS | **Sn** | **22 29 24.5** | **-1.1** |
| | baz=294 | | | | | | |
| **TIPB** | **Shuangxi** | **0.69** | **277** | eP | **Pn** | **22 29 15.1** | **-0.3** |
| | baz=283 | | | | | | |
| TIPB | | | | eS | **Sb** | **22 29 23.8** | **+0.5** |
| | baz=283 | | | | | | |
| **TWC** | **Suao** | **0.72** | **247** | eP | **Pb** | **22 29 14.3** | **0.0** |
| | baz=251 | | | | | | |
| TWC | | | | eS | **Sg** | **22 29 24.1** | **+0.7** |
| | baz=251 | | | | | | |
| **EOS4** | **EOS4** | **0.80** | **197** | eP | **Pb** | **22 29 15.8** | **+0.4** |
| | baz=196 | | | | | | |
| EOS4 | | | | eS | **Sg** | **22 29 25.6** | **-0.2** |
| | baz=196 | | | | | | |
| **TWE** | **Neicheng** | **0.85** | **259** | eP | **Pn** | **22 29 16.9** | **-0.6** |
| | baz=262 | | | | | | |
| TWE | | | | eS | **Sb** | **22 29 28.0** | **+0.3** |
| | baz=262 | | | | | | |
| **EWUT** | **Wuta** | **0.85** | **239** | eP | **Pg** | **22 29 16.5** | **+0.1** |
| | baz=241 | | | | | | |
| EWUT | | | | eS | **Sg** | **22 29 26.9** | **-0.7** |
| | baz=241 | | | | | | |
| **ENA** | **Nanau** | **0.89** | **239** | eP | **Pg** | **22 29 17.2** | **+0.1** |
| | baz=241 | | | | | | |
| ENA | | | | eS | **Sg** | **22 29 28.6** | **-0.2** |
| | baz=241 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.91** | **262** | eP | **Pn** | **22 29 18.3** | **-0.2** |
| | baz=266 | | | | | | |
| FUSB | | | | eS | **Sg** | **22 29 29.7** | **+0.2** |
| | baz=266 | | | | | | |
| **ENTT** | **Nioudou** | **0.95** | **255** | eP | **Pg** | **22 29 18.4** | **0.0** |
| | baz=258 | | | | | | |
| ENTT | | | | eS | **Sb** | **22 29 30.6** | **-0.3** |
| | baz=258 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.96** | **275** | eS | **Sg** | **22 29 31.5** | **+0.5** |
| | baz=278 | | | | | | |
| **NWLT** | **Wulai** | **0.98** | **264** | eP | **Pn** | **22 29 19.5** | **0.0** |
| | baz=267 | | | | | | |
| NWLT | | | | eS | **Sg** | **22 29 32.1** | **+0.3** |
| | baz=267 | | | | | | |
| **LATG** | **Datong** | **1.02** | **250** | P | **Pb** | **22 29 19.4** | **-0.1** |
| | baz=252 | | | | | | |
| **YHNB** | **Yeheng** | **1.12** | **259** | eP | **Pg** | **22 29 21.5** | **0.0** |
| | baz=261 | | | | | | |
| **NSK** | **Sanguang** | **1.13** | **259** | eP | **Pg** | **22 29 22.0** | **+0.3** |
| | baz=262 | | | | | | |
| **NACB** | **Ninganchiao** | **1.15** | **232** | P | **Pn** | **22 29 21.1** | **-0.6** |
| | baz=233 | | | | | | |
| NACB | | | | eS | **Sb** | **22 29 34.7** | **-1.6** |
| | baz=233 | | | | | | |
| **NNSB** | **Datong** | **1.18** | **247** | eP | **Pb** | **22 29 22.4** | **+0.1** |
| | baz=249 | | | | | | |
| NNSB | | | | eS | **Sb** | **22 29 37.9** | **+0.4** |
| | baz=249 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.18** | **118** | eS | **Sn** | **22 29 40.3** | **+2.2** |
| **NNS** | **Nan Shan** | **1.19** | **248** | eP | **Pg** | **22 29 22.8** | **0.0** |
| | baz=250 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.21** | **236** | eP | **Pn** | **22 29 22.6** | **0.0** |
| | baz=237 | | | | | | |
| ETLH | | | | eS | **Sb** | **22 29 38.0** | **-0.3** |
| | baz=237 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.37** | **231** | eP | **Pn** | **22 29 25.0** | **+0.1** |
| | baz=232 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.39** | **126** | eS | **Sb** | **22 29 43.3** | **0.0** |
| **WHF** | **Hehuan Shan** | **1.41** | **239** | eP | **Pb** | **22 29 26.5** | **+0.2** |
| | baz=239 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.45** | **116** | eS | **Sg** | **22 29 45.7** | **-1.1** |

*TEH **18** 22:33:50.9,34°.36N×46°.12E,h6km±41km,ML3.3*
*ISN **18** 22:33:51.0±0.6,34°.35N×46°.12E,h10km±5km,ML3.4*
*AFAD **18** 22:33:53.7±0.0,34°.27N×45°.57E,h6km±4km,MW4.1*

**ISC 18 22:33:52.9±0.8,34°.34N±0°.02×46°.10E±0°.03,h10km,n39, σ1.47/53,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GLG1** | **Gilan-e-Gharb** | **0.28** | **215** | Pg | **Pg** | **22 33 57.8** | **-0.8** |
| **IGHG** | **Ghaleghazi** | **0.39** | **91** | Pg | **Pg** | **22 33 59.7** | **-1.0** |
| **IDHR** | **Dehrash** | **0.43** | **33** | Pg | **Pg** | **22 33 59.5** | **-1.9** |
| **KGS1** | **Ghasr-e-Shirin** | **0.45** | **291** | Pg | **Pg** | **22 34 01.0** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **0.72** | **173** | Pg | **Pg** | **22 34 06.2** | **-0.6** |
| ILBA | | | | Sg | **Sb** | **22 34 17.4** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.78** | **95** | Pg | **Pg** | **22 34 07.0** | **-1.1** |
| **ILIN** | **Lien** | **0.92** | **51** | Pg | **Pg** | **22 34 09.5** | **-1.1** |
| **IBDR** | **Badra** | **1.23** | **187** | ePn | **Pg** | **22 34 16.0** | **-0.7** |
| IBDR | | | | eSn | **Sn** | **22 34 34.5** | **+1.5** |
| IBDR | | | | AML | AML | 22 34 39.7 | |
| | comp=N,292nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 22 34 40.0 | |
| | comp=E,539nm,0.2s | | | | | | |
| **SNQR** | **Sonqor, Kerman** | **1.36** | **67** | Pg | **Pb** | **22 34 18.1** | **-0.6** |
| **IBZA** | **Bozab** | **1.46** | **84** | Pg | **Pb** | **22 34 19.5** | **-0.9** |
| **IKFM** | **Kafar-mosalman** | **1.66** | **119** | Pg | **Pb** | **22 34 23.0** | **-0.6** |
| **BHD** | **Baghdad** | **1.79** | **234** | ePn | **Pn** | **22 34 24.0** | **+0.2** |
| BHD | | | | eSn | **Sb** | **22 34 48.0** | **-0.2** |
| BHD | | | | AML | AML | 22 34 58.9 | |
| | comp=E,384nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.79** | **307** | ePn | **Pn** | **22 34 24.0** | **0.0** |
| IKRK | | | | eSn | **Sb** | **22 34 48.0** | **-0.4** |
| IKRK | | | | AML | AML | 22 34 54.5 | |
| | comp=E,1µm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 22 34 56.2 | |
| | comp=N,638nm,0.4s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.87** | **345** | Pn | **Pb** | **22 34 26.6** | **-0.8** |
| **HSAM** | **Samen** | **2.08** | **93** | Pn | **Pb** | **22 34 29.7** | **-1.2** |
| **MAHB** | **Mahabad** | **2.44** | **353** | Pn | **Pb** | **22 34 34.9** | **-2.2** |
| **HAGD** | **Aghdareh** | **2.55** | **78** | Pn | **Pb** | **22 34 36.6** | **-2.4** |
| **RAFI** | **Al-Rafai** | **2.61** | **180** | ePn | **Pn** | **22 34 35.5** | **+0.3** |
| RAFI | | | | eSn | **Sn** | **22 35 08.0** | **+1.1** |
| **IHSH** | **Hashtrud** | **3.10** | **17** | Pn | **Pn** | **22 34 44.1** | **+1.8** |
| **IAZR** | **Azarshahr** | **3.33** | **358** | Pn | **Pn** | **22 34 46.5** | **+1.2** |
| **CUKT** | **Cukurca** | **3.54** | **326** | P | **Pn** | **22 34 49.5** | **+1.4** |
| CUKT | | | | S | **Sn** | **22 35 32.8** | **+2.7** |
| CUKT | | | | AML | AML | 22 36 01.0 | |
| | comp=N,129nm,0.8s | | | | | | |
| CUKT | | | | AML | AML | 22 36 05.0 | |
| | comp=N,152nm,0.7s | | | | | | |
| **YOVA** | **Hakkari_Yksek** | **3.56** | **336** | P | **Pn** | **22 34 50.8** | **+2.4** |
| YOVA | | | | S | **Sn** | **22 35 33.5** | **+2.9** |
| YOVA | | | | AML | AML | 22 35 36.0 | |
| | comp=N,57nm,0.8s | | | | | | |
| YOVA | | | | AML | AML | 22 35 54.0 | |
| | comp=N,47nm,1.2s | | | | | | |
| **ISRB** | **Sarab** | **3.70** | **20** | Pn | **Pn** | **22 34 52.1** | **+1.7** |
| **HAKT** | **HAKKARI** | **3.75** | **330** | P | **Pn** | **22 34 52.7** | **+1.5** |
| HAKT | | | | S | **Sn** | **22 35 35.1** | **-0.4** |
| HAKT | | | | AML | AML | 22 36 12.0 | |
| | comp=N,49nm,0.6s | | | | | | |
| HAKT | | | | AML | AML | 22 36 21.0 | |
| | comp=N,43nm,0.6s | | | | | | |
| **ISHB** | **Shabestar** | **3.95** | **354** | Pn | **Pn** | **22 34 55.8** | **+1.9** |
| **IHRS** | **Heris** | **4.04** | **11** | Pn | **Pn** | **22 34 57.1** | **+2.0** |
| **IQOM** | **Qom** | **4.13** | **82** | Pn | **Pn** | **22 34 57.5** | **+1.2** |
| **IPIR** | **Pirpir** | **4.33** | **111** | Pn | **Pn** | **22 35 00.5** | **+1.4** |
| **SIRN** | **Sırnak** | **4.34** | **318** | P | **Pn** | **22 35 00.2** | **+1.1** |
| SIRN | | | | S | **Sn** | **22 35 50.9** | **+1.0** |
| SIRN | | | | AML | AML | 22 36 21.0 | |
| | comp=N,79nm,0.6s | | | | | | |
| SIRN | | | | AML | AML | 22 36 26.0 | |
| | comp=N,57nm,0.7s | | | | | | |
| **JHBN** | **Jahan bin** | **4.36** | **118** | Pn | **Pn** | **22 35 01.2** | **+1.6** |
| **IMRD** | **Marand** | **4.38** | **356** | Pn | **Pn** | **22 35 02.2** | **+2.5** |
| **ZNGN** | **Zangian** | **4.56** | **118** | Pn | **Pn** | **22 35 03.7** | **+1.4** |
| **PERV** | **Siirt/Pervari-** | **4.61** | **322** | P | **Pn** | **22 35 04.7** | **+1.9** |
| PERV | | | | S | **Sn** | **22 35 57.2** | **+0.8** |
| PERV | | | | AML | AML | 22 36 33.0 | |
| | comp=N,55nm,0.7s | | | | | | |
| PERV | | | | AML | AML | 22 36 46.0 | |
| | comp=N,63nm,0.6s | | | | | | |
| **GEVA** | **Gevas** | **4.66** | **329** | P | **Pn** | **22 35 06.1** | **+2.6** |
| GEVA | | | | S | **Sn** | **22 35 58.6** | **+0.8** |
| GEVA | | | | AML | AML | 22 36 08.0 | |
| | comp=N,20nm,0.6s | | | | | | |
| GEVA | | | | AML | AML | 22 36 47.0 | |
| | comp=N,10nm,0.5s | | | | | | |
| **IKLH** | **Kolahrood** | **4.67** | **101** | Pn | **Pn** | **22 35 05.9** | **+2.1** |
| **MIDY** | **Mardin/Midyat-** | **4.89** | **310** | P | **Pn** | **22 35 08.0** | **+1.4** |
| MIDY | | | | S | **Sn

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1.7nm,0.2s | | | | | | | |
| **DJR** | **Jarkent** | **1.63** | **275** | *e*P | | Pg | 23 16 30.5 | -0.1 |
| | 1.0nm,0.2s | | | | | | | |
| DJR | | | | *e*S | | Sg | 23 16 51.2 | -0.6 |
| | 7.6nm,0.1s | | | | | | | |
| **PDGK** | **Podgornoye** | **2.05** | **246** | Pg | | Pg | 23 16 38.6 | -0.1 |
| | 1.5nm,0.5s | | | | | | | |
| **PDGK** | **Podgornoye** | **2.05** | **246** | ⇑Pn | | Pg | 23 16 39.0 | +0.3 |
| | 0.7nm,0.2s | | | | | | | |
| PDGK | | | | ⇑Sn | | Sg | 23 17 05.4 | +0.1 |
| | 22nm,0.7s | | | | | | | |
| **SHLS** | **Shalkode** | **2.15** | **242** | *e*P | | Pn | 23 16 34.2 | -1.2 |
| | 8.4nm,0.4s | | | | | | | |
| SHLS | | | | *e*S | | Sn | 23 16 57.1 | -5.0 |
| | 48nm,0.3s | | | | | | | |
| **UZB** | **Uzynbulak** | **2.44** | **245** | *e*P | | Pb | 23 16 44.4 | +1.0 |
| | 1.8nm,0.0s | | | | | | | |
| UZB | | | | *e*S | | Sb | 23 17 15.0 | +1.5 |
| | 8.3nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **2.44** | **245** | Lg | | Lg | 23 17 15.0 | |
| | 8.3nm,0.4s | | | | | | | |
| **KPKS** | **Kokpek** | **2.54** | **254** | *e*P | | Pg | 23 16 47.6 | -0.5 |
| | 3.5nm,0.2s | | | | | | | |
| KPKS | | | | *e*S | | Sg | 23 17 20.4 | -0.7 |
| | 15nm,0.2s | | | | | | | |
| **KPKS** | **Kokpek** | **2.54** | **254** | Pg | | Pg | 23 16 47.6 | -0.5 |
| | 3.5nm,0.2s | | | | | | | |
| KPKS | | | | Lg | | Lg | 23 17 20.4 | |
| | 15nm,0.2s | | | | | | | |
| **BLB** | **Baldybastay** | **2.57** | **269** | Pg | | Pb | 23 16 46.9 | +1.2 |
| | 3.1nm,0.2s | | | | | | | |
| BLB | | | | Lg | | Lg | 23 17 19.0 | |
| | 3.9nm,0.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **2.60** | **4** | ⇑Pn | | Pg | 23 16 58.8 | +10 |
| | 0.5nm,0.7s,baz=179,slow=13,SNR=7.5 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 23 17 59.2 | |
| | 0.4nm,0.2s,baz=169,slow=26 | | | | | | | |
| **MAKZ** | **Makanchi** | **2.61** | **359** | ⇓Pn | | Pg | 23 16 59.3 | +10 |
| | 6.6nm,1.8s | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 23 17 58.8 | |
| | 1.0nm,0.6s | | | | | | | |
| **SATY** | **Saty** | **2.88** | **248** | *e*P | | Pg | 23 16 53.1 | -1.5 |
| | 1.6nm,0.1s | | | | | | | |
| SATY | | | | *e*S | | Sg | 23 17 29.8 | -2.1 |
| | 16nm,0.1s | | | | | | | |
| **SATY** | **Saty** | **2.88** | **248** | Pg | | Pg | 23 16 53.1 | -1.5 |
| | 1.6nm,0.1s | | | | | | | |
| SATY | | | | Lg | | Lg | 23 17 29.8 | |
| | 16nm,0.1s | | | | | | | |
| **ARXS** | **Arharly** | **3.04** | **272** | *e*P | | Pb | 23 16 55.5 | +1.9 |
| | 4.0nm,0.1s | | | | | | | |
| ARXS | | | | *e*S | | Sg | 23 17 33.9 | -3.0 |
| | 1.5nm,0.3s | | | | | | | |
| **ARXS** | **Arharly** | **3.04** | **272** | Lg | | Lg | 23 17 33.9 | |
| | 1.5nm,0.3s | | | | | | | |

*IDC **18** 23:19:24.5±2.6, 23°.53N×143°.80E, h0km, mb3.8/7, mbtmp3.8/8, ML2.8/1, Error ellipse: s-maj=115.1km s-min=20.5km az=81.0*

**ISC 18 23:19:27.2±2.5, 23.6N±0.2×143.4E±0.8, h10km, n9, σ1°62/9, mb3.8/7, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.63** | **343** | Sn | **Sn** | **23 21 04.1** | **-2.4** |
| | 21nm,0.3s,baz=270,slow=20,SNR=2.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.64** | **342** | Pn | **Pn** | **23 22 40.6** | **-0.1** |
| | baz=145,slow=11,SNR=2.3 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **27.16** | **343** | P | **P** | **23 25 12.3** | **+1.7** |
| | 0.9nm,0.6s,baz=140,slow=7.9,SNR=2.3 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.19** | **192** | P | **P** | **23 27 35.0** | **-1.4** |
| | 0.7nm,0.5s,baz=15,slow=8.1,SNR=7.8 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **47.90** | **192** | P | **P** | **23 28 04.7** | **-1.0** |
| | 0.3nm,0.6s,baz=15,slow=9.5,SNR=5.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.57** | **312** | P | **P** | **23 28 49.9** | **+1.6** |
| | 0.3nm,0.6s,baz=76,slow=8.7,SNR=3.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.28** | **316** | P | **P** | **23 29 08.6** | **+0.8** |
| | 1.0nm,0.6s,baz=93,slow=7.8,SNR=11 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.36** | **319** | P | **P** | **23 29 44.2** | **+1.1** |
| | 2.4nm,0.5s,baz=81,slow=7.2,SNR=13 | | | | | | |
| | 2.4nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **81.54** | **334** | P | **P** | **23 31 44.7** | **-0.1** |
| | 1.5nm,0.6s,baz=66,slow=4.7,SNR=4.0 | | | | | | |
| | 1.5nm,0.8s | | | | | | |

*IDC **18** 23:29:51.9±0.5, 13°.75N×144°.90E, h125km±4km, mb3.5/10, mbtmp3.9/10, Error ellipse: s-maj=27.5km s-min=16.3km az=87.0*

*NEIC **18** 23:29:52.7±1.0, 13°.69N±0°.03×144°.8E±0°.1, h127km±5km, mb4.2/8, Error ellipse: s-maj=21.0km s-min=4.4km az=92.0*

**ISC 18 23:29:52.4±0.8, 13.7N±0.1×144.8E±0.1, h130km±7km, n32, σ0°83/27, mb3.9/14, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.13** | **136** | P | **Pn** | **23 30 10.3** | **+0.3** |
| | 2µm,0.3s,baz=305,slow=1.8,SNR=525 | | | | | | |
| GUMO | | | | S | **Sn** | **23 30 23.0** | **-0.4** |
| | 3µm,0.3s,baz=150,slow=20,SNR=20 | | | | | | |
| **PATS** | **Pohnpei** | **14.95** | **116** | Pn | **Pn** | **23 33 17.0** | **-0.3** |
| **H11S3** | **WAKE ISLAND Hy** | **21.58** | **74** | T | T | 23 57 22.3 | |
| | baz=260,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.60** | **74** | T | T | 23 57 21.3 | |
| | baz=260,slow=74 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.60** | **74** | T | T | 23 57 22.8 | |
| | baz=260 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.00** | **71** | T | T | 23 57 45.3 | |
| | baz=257,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.01** | **71** | T | T | 23 57 43.8 | |
| | baz=257,slow=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.02** | **71** | T | T | 23 57 46.2 | |
| | baz=257,slow=75 | | | | | | |
| **JNU** | **Nakatsue** | **23.13** | **329** | P | **P** | **23 34 47.0** | **-0.3** |
| JNU | | | | IAmb | IAmb | 23 34 47.2 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **28.04** | **331** | P | **P** | **23 35 31.5** | **+0.1** |
| | comp=Z,0.9nm,0.8s,baz=142,slow=6.2,SNR=2.7 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **34.77** | **197** | P | **P** | **23 36 29.9** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 23 36 34.4 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **34.96** | **197** | P | **P** | **23 36 32.2** | **+0.1** |
| | comp=Z,1.2nm,0.6s,baz=19,slow=9.3,SNR=8.6 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **38.61** | **196** | P | **P** | **23 37 03.2** | **+0.1** |
| **ASAR** | **Alice Springs** | **38.61** | **196** | P | **P** | **23 37 03.7** | **+0.6** |
| | comp=Z,0.4nm,0.7s,baz=19,slow=13,SNR=10.0 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **41.40** | **149** | P | **P** | **23 37 26.7** | **+0.4** |
| **SONM** | **Songino Array** | **46.60** | **325** | P | **P** | **23 38 08.3** | **+0.8** |
| | comp=Z,0.5nm,0.3s,baz=142,slow=7.2,SNR=2.8 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **BBOO** | **Buckleboo** | **46.98** | **190** | P | **P** | **23 38 10.3** | **-0.1** |
| **KIWB** | **Kanaga Island** | **48.78** | **31** | P | **P** | **23 38 25.0** | **+1.0** |
| **MK31** | **Makanchi Array** | **61.36** | **316** | P | **P** | **23 39 55.2** | **+0.6** |
| MK31 | | | | IAmb | IAmb | 23 40 07.8 | |
| | comp=Z,2.1nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.36** | **316** | P | **P** | **23 39 54.8** | **+0.2** |
| **MKAR** | **Makanchi Array** | **61.36** | **316** | P | **P** | **23 39 55.7** | **+1.1** |
| | comp=Z,0.3nm,0.4s,baz=91,slow=8.2,SNR=7.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.50** | **320** | P | **P** | **23 40 14.7** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=104,slow=6.8,SNR=8.1 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **68.52** | **25** | P | **P** | **23 40 38.4** | **-2.2** |
| | comp=Z,0.7nm,0.4s,baz=253,slow=5.8,SNR=13 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.80** | **322** | P | **P** | **23 40 49.3** | **+0.6** |
| | comp=Z,1.4nm,0.5s,baz=103,slow=6.7,SNR=9.4 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **BMAR** | **Burnt Mountain** | **70.05** | **23** | P | **P** | **23 40 48.8** | **-1.2** |
| **GRNC** | **Granite Creek** | **70.09** | **30** | P | **P** | **23 40 50.3** | **-0.2** |
| GRNC | | | | IAmb | IAmb | 23 41 14.7 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **76.41** | **318** | P | **P** | **23 41 27.8** | **+0.2** |
| **ABKAR** | **Akbulak array** | **76.41** | **318** | P | **P** | **23 41 27.4** | **-0.2** |
| ABKAR | | | | IAmb | IAmb | 23 41 53.6 | |
| | comp=Z,1.9nm,1.2s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **86.93** | **51** | P | **P** | **23 42 24.3** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=263,slow=5.0,SNR=4.7 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **91.04** | **335** | P | **P** | **23 42 40.7** | **-1.2** |
| | comp=Z,3.3nm,1.0s,baz=7.4,slow=4.4,SNR=5.7 | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **134.74** | **305** | PKP | **PKPdf** | **23 48 55.4** | **-1.3** |
| | comp=Z,0.2nm,0.6s,baz=21,slow=3.5,SNR=1.9 | | | | | | |
| **LPAZ** | **La Paz** | **148.12** | **99** | PKPbc | **PKPbc** | **23 49 25.2** | **+0.6** |
| | comp=Z,0.7nm,0.6s,baz=243,slow=0.5,SNR=4.2 | | | | | | |

**DJA 18 23:47:36.0±0.6, 8°S±8°×117°6E±°, h15km±4km, M3.7/8, mb4.0/1, MLv3.5/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.79** | **124** | P | Pg | 23 47 50.9 | -0.5 |
| **SRBI** | **Singaraja** | **1.02** | **281** | P | Pb | 23 47 55.1 | -0.2 |
| SRBI | | | | S | Sn | 23 48 10.3 | +0.5 |
| **DNP** | **Denpasar** | **1.07** | **249** | P | Pb | 23 47 55.9 | -0.3 |
| **PLAI** | **Plampang** | **1.63** | **109** | P | Pn | 23 48 04.2 | 0.0 |
| PLAI | | | | S | Sb | 23 48 26.8 | +0.6 |
| **JAGI** | **Jajag, Banyuwa** | **2.05** | **265** | P | Pn | 23 48 10.1 | +0.1 |
| JAGI | | | | S | Sn | 23 48 35.6 | +0.2 |
| **WBSI** | **Waikabubak, Su** | **3.41** | **113** | P | Pn | 23 48 27.4 | -1.3 |
| **PWJI** | **Pagerwojo** | **4.38** | **273** | P | Pn | 23 48 42.3 | +0.3 |
| **EDFI** | **Ende, Flores** | **5.43** | **95** | P | Pn | 23 48 56.1 | -0.5 |

*MEX **18** 23:47:52.1±0.7, 15°.20N×93°.20W, h92km±13km, MD4.1*
*GCG **18** 23:47:53.9±0.6, 15°.38N×92°.98W, h11km±10km, MD4.0*

**ISC 18 23:47:51.4±1.3, 15.28N±0.05×93.22W±0.04, h88km±11km, n22, σ1°49/38, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.43** | **360** | *e*P | **Pn** | **23 48 05.5** | **+0.1** |
| PCIG | | | | *e*S | **Sn** | **23 48 15.7** | **-0.1** |
| **THIG** | | **0.99** | **112** | *e*P | **Pn** | **23 48 10.3** | **-0.5** |
| THIG | | | | *e*S | **Sn** | **23 48 24.7** | **-0.7** |
| **PAVE** | **Pavencul** | **1.01** | **95** | *e*P | **Pn** | **23 48 10.6** | **-0.6** |
| PAVE | | | | *e*S | **Sn** | **23 48 25.6** | **-0.5** |
| **CHUJ** | **Union Juarez** | **1.08** | **99** | *e*P | **Pn** | **23 48 11.3** | **-0.8** |
| CHUJ | | | | *e*S | **Sn** | **23 48 26.7** | **-1.1** |
| **CARR** | **Arriaga** | **1.18** | **325** | *e*P | **Pn** | **23 48 14.7** | **+1.7** |
| CARR | | | | *i* S | **Sn** | **23 48 32.0** | **+2.7** |
| **CCIG** | **Comitan** | **1.44** | **46** | *e*P | **Pn** | **23 48 16.9** | **+0.5** |
| CCIG | | | | *e*S | **Sn** | **23 48 35.2** | **-0.2** |
| **TGIG** | | **1.50** | **3** | *e*P | **Pn** | **23 48 17.1** | **0.0** |
| TGIG | | | | *e*S | **Sn** | **23 48 34.4** | **-2.1** |
| **RTAL** | **Retalhuleu** | **1.65** | **117** | *e*P | **Pn** | **23 48 19.7** | **+0.7** |
| RTAL | | | | *e*S | **Sn** | **23 48 39.1** | **-0.8** |
| **HUEH** | **Huehuetenango** | **1.65** | **88** | *i* P | **Pn** | **23 48 18.8** | **-0.4** |
| HUEH | | | | *i* S | **Sn** | **23 48 38.2** | **-2.1** |
| **STG3** | **Santiaguito 3,** | **1.69** | **109** | *e*P | **Pn** | **23 48 20.7** | **+1.1** |
| STG3 | | | | *e*S | **Sn** | **23 48 42.4** | **+1.4** |
| **NILT** | **Santiago Nilte** | **1.86** | **314** | *e*P | **Pn** | **23 48 23.1** | **+1.4** |
| NILT | | | | *i* S | **Sn** | **23 48 47.2** | **+2.4** |
| **SULM** | **Suchitepequez,** | **1.87** | **121** | *e*P | **Pn** | **23 48 23.5** | **+1.8** |
| **UXUV** | **UXUV** | **2.22** | **336** | *e*P | **Pn** | **23 48 27.8** | **+1.4** |
| **CMIG** | **Matias Romero** | **2.41** | **319** | *e*P | **Pn** | **23 48 30.3** | **+1.3** |
| CMIG | | | | *e*S | **Sn** | **23 48 57.2** | **-0.6** |
| **FUG** | **Fuego 3** | **2.44** | **109** | *e*P | **Pn** | **23 48 31.9** | **+2.4** |
| FUG | | | | *e*S | **Sn** | **23 49 00.6** | **+1.9** |
| **HUIG** | **Huatulco** | **2.83** | **280** | *e*P | **Pn** | **23 48 35.0** | **+0.5** |
| HUIG | | | | *i* S | **Sn** | **23 49 05.6** | **-2.3** |
| **NEUV** | **Arroyo Zacate** | **3.47** | **315** | *e*P | **Pn** | **23 48 43.9** | **+0.7** |
| NEUV | | | | *e*S | **Sn** | **23 49 24.5** | **+1.3** |
| **PMUV** | **Sontecomapan** | **3.73** | **331** | *e*S | **Sn** | **23 49 28.4** | **-1.2** |
| **PEIG** | **Puerto Escondi** | **3.86** | **281** | *e*P | **Pn** | **23 48 46.5** | **-1.9** |
| PEIG | | | | *e*S | **Sn** | **23 49 30.7** | **-2.0** |
| **SCIG** | **Sabancuy** | **4.15** | **28** | *e*P | **Pn** | **23 48 52.9** | **+0.5** |
| SCIG | | | | *e*S | **Sn** | **23 49 37.4** | **-2.5** |
| **TXIG** | **Tlaxiaco** | **4.79** | **295** | *i* P | **Pn** | **23 49 00.6** | **-0.8** |
| **JAUV** | **Jalcomulco** | **5.32** | **320** | *e*P | Pn | 23 49 04.9 | -3.5 |

**IDC 19 00:06:09.2±5.4, 16°.52S×175°.47W, h0km, mb4.6/3, mbtmp4.6/3, Error ellipse: s-maj=161.9km s-min=105.8km az=152.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **41.75** | **240** | P | P | 00 14 00.7 | +0.4 |
| | 5.3nm,0.7s,baz=93,slow=11,SNR=8.3 | | | | | | |
| | 5.3nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.65** | **258** | P | P | 00 14 47.4 | -0.3 |
| | 2.1nm,0.5s,baz=95,slow=7.0,SNR=22 | | | | | | |
| | 2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **47.87** | **253** | P | P | 00 14 48.9 | -0.4 |
| | 16nm,0.6s,baz=88,slow=8.5,SNR=203 | | | | | | |
| ASAR | | | | PcP | PcP | 00 16 17.9 | -0.2 |
| | 0.4nm,0.4s,baz=94,slow=3.9,SNR=3.0 | | | | | | |
| | 16nm,0.6s | | | | | | |

*IDC **19** 00:17:52.1±0.9, 12°.45N×126°.35E, h0km, mb4.0/10, mbtmp4.1/11, ML3.9/1, MS2.3/1, Error ellipse: s-maj=39.4km s-min=16.2km az=73.0*

**ISC 19 00:17:57.5±0.9, 12.4N±0.1×126.4E±0.3, h41km, n43, σ2°04/41, mb4.0/10, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **5.38** | **188** | LR | LR | 00 20 53.8 | |
| | comp=Z,33nm,21.6s,baz=316,slow=34 | | | | | | |
| **KAPI** | **Kappang** | **18.53** | **201** | P | **Pn** | **00 22 11.5** | **+0.3** |
| | 0.4nm,0.3s,baz=18,slow=14,SNR=3.4 | | | | | | |
| | 7.2nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **24.96** | **3** | P | **P** | **00 23 17.6** | **+0.5** |
| | 1.7nm,0.8s,baz=186,slow=10,SNR=7.0 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.07** | **286** | P | **P** | **00 23 36.5** | **0.0** |
| | 1.7nm,0.7s,baz=92,slow=7.8,SNR=9.5 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.12** | **166** | P | **P** | **00 24 29.8** | **-0.1** |
| | 2.0nm,0.9s,baz=344,slow=9.9,SNR=7.1 | | | | | | |
| | 2.0nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **36.63** | **168** | P | **P** | **00 25 01.2** | **+1.0** |
| | 3.0nm,0.7s,baz=336,slow=6.0,SNR=24 | | | | | | |
| | 3.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **39.04** | **339** | P | **P** | **00 25 20.7** | **+0.2** |
| | 0.9nm,0.7s,baz=147,slow=7.8,SNR=2.9 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.38** | **322** | P | **P** | **00 26 51.8** | **+1.1** |
| | 1.6nm,0.8s,baz=117,slow=8.8,SNR=10 | | | | | | |
| | 1.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.79** | **331** | P | **P** | **00 27 08.9** | **+0.4** |
| | 1.1nm,0.6s,baz=125,slow=7.4,SNR=4.9 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.36** | **324** | P | **P** | **00 27 20.4** | **+0.3** |
| | 3.0nm,0.2s,baz=119,slow=7.8,SNR=5.1 | | | | | | |
| | 3.0nm,0.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **59.95** | **325** | P | **P** | **00 27 59.8** | **+0.2** |
| | 1.2nm,0.8s,baz=108,slow=9.8,SNR=5.6 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **84.23** | **309** | P | **P** | **00 30 24.6** | **-0.6** |
| | 0.5nm,0.7s,baz=80,slow=5.6,SNR=2.2 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ANTO** | **Ankara** | **84.84** | **310** | P | PKiKP | 00 35 51.3 | +11 |
| **LODK** | **Lodwar** | **90.24** | **274** | P | **PKiKP** | **00 35 47.9** | **-2.4** |
| **OKC** | **Ostrava-Krasne** | **91.98** | **322** | *e*P | **PKiKP** | **00 35 51.8** | **-0.4** |
| **OKC** | **Ostrava-Krasne** | **91.98** | **322** | *e*PDIFF | **PKiKP** | **00 35 51.8** | **-0.4** |
| **MAUC** | **Maruska** | **92.36** | **322** | *e*PDIFF | **PKiKP** | **00 35 54.6** | **+1.7** |
| **MORC** | **Moravsky Berou** | **92.37** | **322** | *e*P | **PKiKP** | **00 35 51.4** | **-1.5** |
| **JAVC** | **Velka Javorina** | **92.64** | **321** | *e*P | **PKiKP** | **00 35 56.3** | **+2.9** |
| **KRLC** | **Kraliky** | **92.71** | **323** | *e*PDIFF | **PKiKP** | **00 35 53.7** | **+0.2** |
| **OSTC** | **Ostas** | **92.86** | **323** | *e*P | **PKiKP** | **00 35 51.8** | **-1.9** |
| **OSTC** | **Ostas** | **92.86** | **323** | *e*PDIFF | **PKiKP** | **00 35 51.8** | **-1.9** |
| **DPC** | **Dobruska-Polom** | **92.88** | **323** | *e*P | **PKiKP** | **00 35 53.2** | **-0.6** |
| **DPC** | **Dobruska-Polom** | **92.88** | **323** | *e*PDIFF | **PKiKP** | **00 35 53.2** | **-0.6** |
| **CHVC** | **Chvalec** | **92.94** | **323** | *e*P | **PKiKP** | **00 35 51.6** | **-2.2** |
| **CHVC** | **Chvalec** | **92.94** | **323** | *e*PDIFF | **PKiKP** | **00 35 51.6** | **-2.2** |
| **UPC** | **Upice** | **92.99** | **323** | *e*P | **PKiKP** | **00 35 51.5** | **-2.4** |
| **UPC** | **Upice** | **92.99** | **323** | *e*PDIFF | **PKiKP** | **00 35 51.5** | **-2.4** |
| **VRAC** | **Vranov** | **93.12** | **322** | *e*P | **PKiKP** | **00 35 55.3** | **+1.1** |
| **KRUC** | **Moravsky** | **93.34** | **322** | *e*P | **PKiKP** | **00 35 58.2** | **+3.7** |
| **TREC** | **Trest** | **93.79** | **322** | *e*P | **PKiKP** | **00 35 58.1** | **+2.7** |
| **TREC** | **Trest** | **93.79** | **322** | *e*PDIFF | **PKiKP** | **00 35 58.1** | **+2.7** |
| **PVCC** | **Panska Ves** | **93.83** | **324** | *e*P | **PKiKP** | **00 35 54.5** | **-0.8** |
| **PVCC** | **Panska Ves** | **93.83** | **324** | *e*PDIFF | **PKiKP** | **00 35 54.5** | **-0.8** |
| **GOPC** | **GO Pecny, Ondr** | **93.95** | **323** | *e*P | **PKiKP** | **00 35 55.8** | **+0.2** |
| **GOPC** | **GO Pecny, Ondr** | **93.95** | **323** | *e*PDIFF | **PKiKP** | **00 35 55.8** | **+0.2** |
| **PRU** | **Pruhonice** | **94.07** | **323** | *e*P | **PKiKP** | **00 35 51.7** | **-4.1** |
| **PRU** | **Pruhonice** | **94.07** | **323** | *e*PDIFF | **PKiKP** | **00 35 51.7** | **-4.1** |
| **HSKC** | **Hora Svate Kat** | **94.45** | **324** | *e*PDIFF | **PKiKP** | **00 35 52.5** | **-4.0** |
| **ZVC** | **Zvikov** | **94.50** | **323** | *e*PDIFF | **PKiKP** | **00 35 59.1** | **+2.6** |
| **CKRC** | **Cesky Krumlov** | **94.69** | **322** | *e*P | **PKiKP** | **00 35 59.1** | **+2.2** |
| **CKRC** | **Cesky Krumlov** | **94.69** | **322** | *e*PDIFF | **PKiKP** | **00 36 00.8** | **+3.9** |
| **TXAR** | **Lajitas Array** | **116.35** | **48** | PKP | **PKPdf** | **00 36 37.5** | **0.0** |
| | 19nm,0.9s,baz=288,slow=1.7,SNR=0.9 | | | | | | |

*UCR **19** 00:18:21.8±0.8, 8°.56N×83°.22W, h15km±3km, MW3.8*

**UPA 19 00:18:21.9±0.6, 8°.64N×83°.20W, h18km±6km, MW3.4, 3C-1D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EDAD** | **Golfito** | **0.04** | **66** | *e*P | Pg | 00 18 24.8 | -0.5 |
| EDAD | | | | *e*S | Sg | 00 18 27.5 | -0.1 |
| **JIME** | **Puerto Jimenez** | **0.16** | **231** | *e*P | Pb | 00 18 25.7 | +0.5 |
| **NELY** | **Ciudad Neily** | **0.25** | **87** | *e*P | Pb | 00 18 28.0 | +0.3 |
| **VITO** | **San Vito** | **0.29** | **52** | *e*P | Pb | 00 18 29.3 | +0.7 |
| **EDP2** | **Potrero Grande** | **0.38** | **4** | *e*P | Pb | 00 18 30.6 | +0.5 |
| EDP2 | | | | *e*S | Sn | 00 18 37.7 | -1.6 |
| **MLIR3** | **Monte Lirio, C** | **0.41** | **67** | ⇑*i*P | Pb | 00 18 31.1 | +0.4 |
| MLIR3 | | | | *e*S | Sb | 00 18 37.7 | +1.1 |
| **EDPN** | **Palmar Norte** | **0.41** | **322** | *e*P | Pg | 00 18 30.3 | -0.1 |
| EDPN | | | | *e*S | Sb | 00 18 37.2 | +0.6 |
| **BRU2** | **Volcan** | **0.53** | **73** | ⇑*i*P | Pb | 00 18 32.8 | +0.1 |
| BRU2 | | | | *e*S | Sb | 00 18 41.2 | +1.2 |
| **BRU2** | **Volcan** | **0.53** | **73** | *e*P | Pb | 00 18 32.7 | 0.0 |
| **EDBA** | **Buenos Aires** | **0.53** | **352** | *e*P | Pb | 00 18 33.0 | +0.4 |
| EDBA | | | | *e*S | Sn | 00 18 41.9 | -1.2 |
| **PTPM** | **Petroterminale** | **0.54** | **143** | ⇑*e*P | Pg | 00 18 32.2 | -0.5 |
| PTPM | | | | *e*S | Sn | 00 18 41.9 | -1.2 |
| **BURE** | **Buenos Aires** | **0.55** | **346** | *e*P | Pb | 00 18 33.3 | +0.3 |
| BURE | | | | *e*S | Sn | 00 18 42.1 | -1.5 |
| **DRK0** | **Durika** | **0.62** | **356** | *e*P | Pg | 00 18 34.4 | 0.0 |
| DRK0 | | | | *e*S | Sg | 00 18 43.4 | +0.6 |
| **DRK0** | **Durika** | **0.62** | **356** | *e*P | Pb | 00 18 34.2 | -0.1 |
| DRK0 | | | | *e*S | Sg | 00 18 43.7 | +0.9 |
| **BCO2** | **Palmira** | **0.67** | **83** | *e*P | Pb | 00 18 34.9 | -0.2 |
| BCO2 | | | | *e*S | Sg | 00 18 45.2 | +1.0 |
| **DVD** | **David** | **0.77** | **105** | *e*P | Pb | 00 18 36.1 | -0.6 |
| DVD | | | | *e*S | Sb | 00 18 46.4 | -0.5 |
| **LOCO3** | **Loma Colorada,** | **0.81** | **106** | *e*P | Pb | 00 18 36.7 | -0.7 |
| LOCO3 | | | | *e*S | Sb | 00 18 48.0 | +0.1 |
| **PEDE3** | **Pedregal, Chir** | **0.81** | **108** | ⇓*e*P | Pb | 00 18 36.6 | -0.9 |
| PEDE3 | | | | *e*S | Sb | 00 18 47.0 | -1.1 |
| **LOMA3** | **Las Lomas, Chi** | **0.83** | **104** | *e*S | Sg | 00 18 48.9 | -0.2 |
| **BUS1** | **Rivas** | **1.06** | **329** | *e*P | Pb | 00 18 41.2 | -0.8 |
| BUS1 | | | | *e*S | Sg | 00 18 56.6 | 0.0 |
| **LLNJ** | **Naranjito** | **1.22** | **313** | *e*P | Pn | 00 18 43.8 | -0.2 |
| **ABE2** | **San Pablo** | **1.35** | **322** | *e*P | Pb | 00 18 46.7 | -0.2 |
| **LCR2** | **La Lucha 2** | **1.35** | **324** | *e*P | Pn | 00 18 46.3 | +0.2 |
| **VERB** | **Verbena** | **1.39** | **340** | *e*P | Pn | 00 18 46.8 | +0.3 |
| **VTCV** | **VTCV, Calle Va** | **1.44** | **339** | *e*P | Pb | 00 18 47.8 | -0.4 |
| **CVTV** | **Tajo** | **1.46** | **338** | *e*P | Pb | 00 18 49.0 | +0.2 |
| **CVTQ** | **Turrialba Volc** | **1.47** | **338** | *e*P | Pb | 00 18 49.0 | +0.1 |
| **CVTR** | **Volcan Turrial** | **1.48** | **338** | *e*P | Pb | 00 18 49.3 | +0.2 |
| **VICA** | **Volcano Irazu** | **1.48** | **335** | *e*P | Pb | 00 18 49.8 | +0.7 |
| **ACOS** | **Acosta** | **1.49** | **321** | *e*P | Pn | 00 18 48.1 | +0.2 |
| **NANC3** | **Nancito, Chiri** | **1.51** | **105** | *e*P | Pn | 00 18 47.9 | -0.1 |
| NANC3 | | | | *e*S | Sn | 00 19 06.2 | -0.9 |
| **BELE** | **Belen** | **1.65** | **324** | *e*P | Pb | 00 18 51.3 | -0.6 |

*MOS **19** 00:19:35.7±0.9, 18°.08S×178°.15W, h554km, mb7.2/56, Error ellipse: s-maj=7.1km s-min=6.4km az=100.5*

*IDC **19** 00:19:37.3±0.5, 18°.10S×178°.11W, h563km±4km, mb5.9/34, mbtmp6.7/37, Error ellipse: s-maj=7.3km s-min=6.3km az=77.0*

*BJI **19** 00:19:37.0±0.0, 18°.10S×178°.10W, h570km, mb6.6/61, mB7.8/64*

*IPGP **19** 00:19:37.0, 18°.16S×178°.14W, h570km, Mw8.3, Fault plane solution: NP1:ϕs17.00000°, δ72.00000°, λ-99.00000°. NP2:ϕs225.00000°, δ20.00000°, λ-64.00000°.*

*NEIC **19** 00:19:38.2, 18°.16S×178°.11W, h572

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 15.09 | 252 | P | | P | 00 22 47.0 | -2.2 | |
| | comp=Z,447nm,0.6s,baz=77,slow=17,SNR=158 | | | | | | | | |
| NFK | Norfolk Island | 16.82 | 227 | ⇑P | | P | 00 23 04.0 | -1.0 | |
| NFK | Norfolk Island | 16.82 | 227 | P | | P | 00 23 05.0 | 0.0 | |
| | comp=Z,0.0nmcomp=Z,85µm,1.3s | | | | | | | | |
| KOUNC | Koumac, New Ca | 16.85 | 259 | P | | P | 00 23 04.2 | -1.2 | |
| KOUNC | Koumac, New Ca | 16.85 | 259 | P | | P | 00 23 05.0 | -0.5 | |
| KOUNC | Koumac, New Ca | 16.85 | 259 | ⇓P | | P | 00 23 05.1 | -0.3 | |
| RAR | Rarotonga | 17.48 | 103 | P | | P | 00 23 10.3 | -0.8 | |
| RAR | Rarotonga | 17.48 | 103 | P | | P | 00 23 10.1 | -1.0 | |
| | comp=Z,3µm,0.9s,baz=245,slow=6.6,SNR=199 | | | | | | | | |
| OUZ | Omahuta | 18.59 | 202 | P | | P | 00 23 21.8 | +0.8 | |
| OUZ | Omahuta | 18.59 | 202 | P | | P | 00 23 22.6 | +1.5 | |
| GRZ | Great Barrier | 18.96 | 196 | P | | P | 00 23 25.2 | +0.8 | |
| WCZ | Waipu Caves | 18.99 | 199 | P | | P | 00 23 26.1 | +1.4 | |
| KUZ | Kuaotunu | 19.36 | 195 | P | | P | 00 23 27.4 | -0.6 | |
| KUZ | Kuaotunu | 19.36 | 195 | P | | P | 00 23 27.9 | -0.1 | |
| ABAZ | Army Bay | 19.46 | 197 | P | | P | 00 23 29.5 | +0.6 | |
| MBAZ | Motutapu North | 19.60 | 197 | P | | P | 00 23 30.4 | +0.3 | |
| MXZ | Matakaoa Point | 19.64 | 189 | P | | P | 00 23 28.2 | -2.3 | |
| MXZ | Matakaoa Point | 19.64 | 189 | P | | P | 00 23 27.8 | -2.7 | |
| MXZ | Matakaoa Point | 19.64 | 189 | P | | P | 00 23 28.8 | -1.8 | |
| HBAZ | Herne Bay Bore | 19.72 | 197 | P | | P | 00 23 30.8 | -0.5 | |
| ETAZ | East Tamaki Re | 19.76 | 197 | P | | P | 00 23 31.7 | +0.1 | |
| WSRZ | White Island S | 19.78 | 191 | P | | P | 00 23 31.6 | -0.2 | |
| WIZ | White Island | 19.79 | 191 | P | | P | 00 23 29.9 | -1.9 | |
| MKAZ | Moumakai | 19.84 | 196 | P | | P | 00 23 32.4 | +0.1 | |
| HAZ | Te Kaha | 19.91 | 190 | P | | P | 00 23 31.1 | -1.9 | |
| HAZ | | | | S | | S | 00 26 51.5 | +9.4 | |
| AWAZ | Awhitu Peninsu | 19.95 | 197 | P | | P | 00 23 33.6 | +0.3 | |
| RUGZ | Raukumara Rang | 20.13 | 190 | P | | P | 00 23 32.8 | -2.3 | |
| PUZ | Puketiti | 20.15 | 189 | P | | P | 00 23 33.9 | -1.3 | |
| PUZ | | | | S | | S | 00 26 58.6 | +13 | |
| WHRZ | Whale Island | 20.15 | 192 | P | | P | 00 23 33.9 | -1.3 | |
| TGRZ | Tauranga | 20.17 | 193 | P | | P | 00 23 35.6 | +0.3 | |
| OPRZ | Ohinepanea | 20.22 | 192 | P | | P | 00 23 35.0 | -0.8 | |
| TWGZ | Tauwhareparae | 20.29 | 189 | P | | P | 00 23 34.4 | -2.0 | |
| TWGZ | | | | S | | S | 00 27 00.3 | +12 | |
| MARZ | Manawahe | 20.33 | 192 | P | | P | 00 23 35.8 | -1.0 | |
| TOZ | Tahuroa Road | 20.35 | 195 | P | | P | 00 23 36.4 | -0.5 | |
| TOZ | Tahuroa Road | 20.35 | 195 | P | | P | 00 23 36.3 | -0.7 | |
| KMRZ | Kaimai | 20.35 | 194 | P | | P | 00 23 37.3 | +0.2 | |
| LIRZ | Lichensteins R | 20.41 | 193 | P | | P | 00 23 39.2 | +1.7 | |
| EDRZ | Edgecumbe | 20.48 | 193 | P | | P | 00 23 36.7 | -1.1 | |
| KARZ | Kaharoa | 20.45 | 193 | P | | P | 00 23 38.7 | +0.7 | |
| OMRZ | Omania | 20.51 | 193 | P | | P | 00 23 38.6 | +0.1 | |
| URZ | Urewera | 20.51 | 191 | P | | P | 00 23 36.8 | -1.6 | |
| URZ | Urewera | 20.51 | 191 | ⇑P | | P | 00 23 33.9 | -4.5 | |
| URZ | Urewera | 20.51 | 191 | P | | P | 00 23 34.1 | -4.3 | |
| | comp=Z,1µm,0.6s,baz=44,slow=1.9,SNR=103 | | | | | | | | |
| URZ | Urewera | 20.51 | 191 | P | | P | 00 23 36.3 | -2.1 | |
| MWZ | Matawai | 20.52 | 190 | P | | P | 00 23 36.7 | -1.8 | |
| CNGZ | Carnagh Statio | 20.56 | 188 | P | | P | 00 23 37.1 | -1.7 | |
| TKGZ | Te Karaka | 20.57 | 189 | P | | P | 00 23 37.4 | -1.5 | |
| TARZ | Mount Tarawera | 20.61 | 192 | P | | P | 00 23 38.5 | -0.9 | |
| HLRZ | Highlands Stat | 20.65 | 193 | P | | P | 00 23 40.3 | +0.6 | |
| RAGZ | Rawiri | 20.69 | 190 | P | | P | 00 23 37.6 | -2.6 | |
| RRRZ | Republican Roa | 20.70 | 192 | P | | P | 00 23 40.0 | -0.2 | |
| MUGZ | Murupara | 20.79 | 192 | P | | P | 00 23 39.0 | -2.0 | |
| RIGZ | Rimuhau | 20.84 | 192 | P | | P | 00 23 38.0 | -2.9 | |
| RTZ | Ruatahuna | 20.88 | 191 | P | | P | 00 23 38.7 | -3.2 | |
| RTZ | Ruatahuna | 20.88 | 191 | P | | P | 00 23 39.2 | -2.7 | |
| TLZ | Tolley Road | 20.91 | 194 | P | | P | 00 23 42.3 | +0.2 | |
| ALRZ | Allen Road | 20.95 | 192 | P | | P | 00 23 44.8 | +2.3 | |
| SNGZ | Shannon Statio | 20.98 | 190 | P | | P | 00 23 41.3 | -1.4 | |
| WHTZ | Whakaora | 21.14 | 193 | P | | P | 00 23 44.9 | +0.8 | |
| KNZ | Kokohu | 21.16 | 189 | P | | P | 00 23 42.5 | -1.8 | |
| MRHZ | Matea Rd | 21.20 | 192 | P | | P | 00 23 41.4 | -3.3 | |
| WATZ | Wairara | 21.23 | 194 | P | | P | 00 23 44.9 | +0.1 | |
| HIZ | Hauiti | 21.25 | 196 | P | | P | 00 23 45.1 | 0.0 | |
| HIZ | Hauiti | 21.25 | 196 | P | | P | 00 23 44.6 | -0.4 | |
| HIZ | Hauiti | 21.25 | 196 | P | | P | 00 23 45.7 | +0.7 | |
| MHGZ | Mahia Peninsul | 21.26 | 189 | P | | P | 00 23 44.7 | -0.4 | |
| WHHZ | Waihua | 21.29 | 190 | P | | P | 00 23 44.8 | -0.6 | |
| TARA | Tarawa | 21.29 | 334 | P | | P | 00 23 44.2 | -1.6 | |
| HATZ | Hinemaiaia | 21.32 | 193 | P | | P | 00 23 47.0 | +1.3 | |
| RATZ | Rangitukua | 21.37 | 193 | P | | P | 00 23 44.5 | -1.7 | |
| NMHZ | Naumai | 21.38 | 191 | P | | P | 00 23 44.1 | -2.3 | |
| KATZ | Kakaramea | 21.49 | 193 | P | | P | 00 23 44.5 | -2.9 | |
| BKZ | Black Stump Fm | 21.51 | 192 | P | | P | 00 23 45.2 | -2.2 | |
| BKZ | Black Stump Fm | 21.51 | 192 | P | | P | 00 23 44.5 | -2.9 | |
| BKZ | Black Stump Fm | 21.51 | 192 | P | | P | 00 23 44.7 | -2.8 | |
| NTVZ | North Tongarir | 21.61 | 193 | P | | P | 00 23 46.3 | -2.1 | |
| KRVZ | Karewarewa | 21.62 | 193 | P | | P | 00 23 48.0 | -0.4 | |
| TMVZ | Te Maari | 21.62 | 193 | P | | P | 00 23 45.8 | -2.7 | |
| TWVZ | Taurewa | 21.64 | 194 | P | | P | 00 23 46.0 | -2.6 | |
| ETVZ | East Tongariro | 21.64 | 193 | P | | P | 00 23 45.8 | -2.9 | |
| WTVZ | West Tongariro | 21.65 | 194 | P | | P | 00 23 47.1 | -1.6 | |
| NNVZ | North Ngauruho | 21.66 | 193 | P | | P | 00 23 47.5 | -1.4 | |
| OTVZ | Oturere | 21.68 | 193 | P | | P | 00 23 46.1 | -3.0 | |
| NGZ | Ngauruhoe | 21.70 | 193 | P | | P | 00 23 46.8 | -2.5 | |
| SNVZ | South Ngauruho | 21.70 | 193 | P | | P | 00 23 46.6 | -2.8 | |
| COVZ | Chateau Observ | 21.74 | 194 | P | | P | 00 23 46.7 | -2.8 | |
| KWHZ | Kaweka Forest | 21.77 | 192 | P | | P | 00 23 47.1 | -2.7 | |
| TUVZ | Tukino | 21.78 | 193 | P | | P | 00 23 45.9 | -6.1 | |
| FWVZ | Far West T-bar | 21.79 | 193 | P | | P | 00 23 48.0 | -2.1 | |
| MAVZ | Matarangi | 21.80 | 193 | P | | P | 00 23 47.4 | -2.9 | |
| WHVZ | Whangaehu Hut | 21.81 | 193 | P | | P | 00 23 47.5 | -2.8 | |
| TRVZ | Turoa | 21.83 | 193 | P | | P | 00 23 47.2 | -3.3 | |
| WNVZ | Wahianoa | 21.85 | 193 | P | | P | 00 23 47.0 | -3.6 | |
| VRZ | Vera Road | 21.85 | 195 | P | | P | 00 23 50.8 | +0.4 | |
| PKVZ | Pokaka | 21.87 | 194 | P | | P | 00 23 47.9 | -2.7 | |
| CKHZ | Cape Kidnapper | 21.88 | 190 | P | | P | 00 23 49.2 | -1.5 | |
| MOVZ | Moawhango | 21.89 | 193 | P | | P | 00 23 48.0 | -2.9 | |
| KRHZ | Kereru | 21.99 | 192 | P | | P | 00 23 48.5 | -3.3 | |
| KAHZ | Kahuranaki | 22.05 | 190 | P | | P | 00 23 49.6 | -2.7 | |
| DREZ | Durham Road | 22.06 | 196 | P | | P | 00 23 54.9 | +2.6 | |
| PKE | Pukeiti | 22.12 | 197 | P | | P | 00 23 54.1 | +1.3 | |
| NEZ | North Egmont | 22.16 | 196 | P | | P | 00 23 55.0 | +1.7 | |
| KHEZ | Kahui Hut | 22.20 | 196 | P | | P | 00 23 54.4 | +0.7 | |
| KHEZ | Kahui Hut | 22.20 | 196 | P | | P | 00 23 54.9 | +1.3 | |
| PREZ | Palmer Road | 22.21 | 196 | P | | P | 00 23 55.4 | +1.7 | |
| NBEZ | Newall Road No | 22.22 | 197 | P | | P | 00 23 54.8 | +1.2 | |
| LREZ | Lake Rotokare | 22.26 | 196 | P | | P | 00 23 54.6 | +0.6 | |
| PXZ | Pawanui | 22.28 | 190 | P | | P | 00 23 51.3 | -3.0 | |
| PNHZ | Pukenui | 22.29 | 192 | P | | P | 00 23 50.8 | -3.5 | |
| NMEZ | Namu Road | 22.35 | 197 | P | | P | 00 23 53.6 | -1.2 | |
| WPHZ | Waipukurau | 22.39 | 191 | P | | P | 00 23 54.1 | -1.1 | |
| WAZ | Wanganui | 22.39 | 194 | P | | P | 00 23 53.2 | -2.1 | |
| PRHZ | Porangahau | 22.55 | 191 | P | | P | 00 23 55.4 | -1.2 | |
| DVHZ | Dannevirke | 22.67 | 192 | P | | P | 00 23 55.1 | -2.6 | |
| POWZ | Post Office Ro | 22.84 | 192 | P | | P | 00 23 57.2 | -2.0 | |
| PRWZ | Pori Road | 22.95 | 192 | P | | P | 00 23 58.3 | -2.0 | |
| BFZ | Birch Farm | 23.02 | 191 | P | | P | 00 23 59.0 | -1.9 | |
| BFZ | Birch Farm | 23.02 | 191 | P | | P | 00 23 58.2 | -2.6 | |
| BFZ | Birch Farm | 23.02 | 191 | P | | P | 00 23 59.6 | -1.2 | |
| HNR | Honiara | 23.03 | 289 | P | | P | 00 23 58.8 | -2.5 | |
| HNR | Honiara | 23.03 | 289 | P | | P | 00 23 58.8 | -2.5 | |
| MRZ | Mangatainoka R | 23.13 | 192 | P | | P | 00 23 58.4 | -3.5 | |
| MRZ | Mangatainoka R | 23.13 | 192 | P | | P | 00 23 59.1 | -2.8 | |
| MSWZ | Moikau Station | 23.93 | 193 | P | | P | 00 24 06.2 | -2.7 | |
| SNZO | South Karori | 23.94 | 194 | P | | P | 00 24 05.3 | -3.6 | |
| SNZO | South Karori | 23.94 | 194 | P | | P | 00 24 06.4 | -2.5 | |
| QRZ | Quartz Range | 24.05 | 198 | P | | P | 00 24 07.7 | -2.2 | |
| NNZ | Nelson | 24.18 | 196 | P | | P | 00 24 07.9 | -3.1 | |
| TUWZ | Tuamarina | 24.23 | 195 | P | | P | 00 24 08.8 | -2.7 | |
| LHI | Lord Howe Isla | 24.63 | 233 | P | | P | 00 24 13.0 | -2.2 | |
| KHZ | Kahutara | 25.26 | 195 | P | | P | 00 24 16.8 | -3.8 | |
| KHZ | Kahutara | 25.26 | 195 | ⇑P | | P | 00 24 17.5 | -3.1 | |
| CTZ | Chatham Island | 25.57 | 178 | P | | P | 00 24 24.2 | +0.9 | |
| CTZ | Chatham Island | 25.57 | 178 | P | | P | 00 24 25.5 | +2.1 | |
| LTZ | Lake Taylor | 25.93 | 196 | P | | P | 00 24 21.4 | -5.2 | |
| PAE | Paea | 27.08 | 93 | *e*P | | P | 00 24 36.5 | -0.5 | |
| | comp=Z,16µm,1.3s | | | | | | | | |
| PAE | | | | *ep*P | | **pwP** | 00 26 11.6 | -2.4 | |
| | comp=Z,3µm,1.2s | | | | | | | | |
| PAE | | | | *e*S | | **S** | 00 28 41.0 | +5.6 | |
| | comp=Z,179µm,24.9s | | | | | | | | |
| PAE | | | | *e*ScP | | **ScP** | 00 30 29.7 | +5.1 | |
| | comp=Z,990nm,1.0s | | | | | | | | |
| PPT2 | Papeete2 | 27.09 | 93 | *e*P | | P | 00 24 37.1 | -0.1 | |
| | comp=Z,42µm,1.2s | | | | | | | | |
| PPT2 | | | | *es*P | | **sP** | 00 27 10.9 | -3.9 | |
| | comp=Z,2207µm,34.8s | | | | | | | | |
| PPT2 | | | | *e*S | | **S** | 00 28 38.6 | +2.9 | |
| | comp=Z,1551µm,27.8s | | | | | | | | |
| PPT2 | | | | *e*S | | S | 00 28 42.2 | +6.5 | |
| | comp=Z,312µm,24.7s | | | | | | | | |
| PPT2 | | | | *e*ScP | | **ScP** | 00 30 34.1 | +9.3 | |
| | comp=Z,5µm,1.3s | | | | | | | | |
| PPT2 | | | | *es*S | | **sS** | 00 31 21.2 | -6.0 | |
| | comp=Z,4661µm,26.8s | | | | | | | | |
| PPT2 | | | | *es*S | | **SS** | 00 31 25.9 | -14 | |
| | comp=Z,8147µm,30.8s | | | | | | | | |
| PPT | Papeete | 27.09 | 93 | P | | P | 00 24 36.3 | -0.8 | |
| | comp=Z,2µm,0.7s,baz=79,slow=2.9,SNR=180 | | | | | | | | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| PPTF | Pamatai, Papee | 27.10 | 93 | P | | P | 00 24 35.9 | -1.4 | |
| PPTF | Pamatai, Papee | 27.10 | 93 | P | | P | 00 24 36.4 | -0.9 | |
| PPTF | Pamatai, Papee | 27.10 | 93 | ⇑P | | P | 00 24 36.2 | -1.0 | |
| RPZ | Rata Peaks | 27.13 | 198 | P | | P | 00 24 34.8 | -2.3 | |
| RPZ | Rata Peaks | 27.13 | 198 | P | | P | 00 24 34.6 | -2.4 | |
| | comp=Z,114nm,0.5s,baz=357,slow=1.2,SNR=50 | | | | | | | | |
| RPZ | | | | S | | S | 00 28 35.7 | +0.1 | |
| | comp=Z,750nm,0.8s,baz=107,slow=7.3,SNR=1.3 | | | | | | | | |
| | comp=Z,114nm,0.5s | | | | | | | | |
| RPZ | Rata Peaks | 27.13 | 198 | P | | P | 00 24 33.1 | -4.0 | |
| TBI | Tubuai | 27.21 | 106 | *e*P | | P | 00 24 38.3 | +0.3 | |
| | comp=Z,22µm,0.8s | | | | | | | | |
| TBI | | | | *ep*P | | **pP** | 00 26 05.6 | -2.8 | |
| | comp=Z,17µm,1.3s | | | | | | | | |
| TBI | | | | *e*S | | **S** | 00 28 37.1 | -0.2 | |
| | comp=Z,984µm,25.8s | | | | | | | | |
| TBI | | | | *e*S | | S | 00 28 38.2 | +0.9 | |
| | comp=Z,4795µm,29.2s | | | | | | | | |
| TBI | | | | *es*S | | sS | 00 31 20.9 | -8.0 | |
| | comp=Z,9643µm,25.5s | | | | | | | | |
| TBI | | | | *es*S | | SS | 00 31 24.3 | -17 | |
| | comp=Z,5669µm,32.0s | | | | | | | | |
| FOZ | Fox Glacier | 27.34 | 199 | P | | P | 00 24 36.0 | -2.8 | |
| I24FR | TAHITI-TARAVAO | 27.34 | 94 | P | | P | 00 24 40.0 | +0.7 | |
| | baz=273,slow=13,SNR=1.4 | | | | | | | | |
| TVO | Taravao | 27.38 | 94 | *e*P | | P | 00 24 39.3 | -0.4 | |
| | comp=Z,10µm,0.9s | | | | | | | | |
| TVO | | | | *e*S | | **S** | 00 28 46.2 | +6.0 | |
| | comp=Z,187µm,25.0s | | | | | | | | |
| TVO | | | | *e*ScP | | **ScP** | 00 30 29.4 | +3.8 | |
| | comp=Z,967nm,1.2s | | | | | | | | |
| GC1S | Gold Coast 1 S | 27.94 | 244 | P | | P | 00 24 43.4 | -0.9 | |
| JCZ | Jackson Bay | 28.16 | 200 | P | | P | 00 24 44.1 | -2.0 | |
| ODZ | Otahua Downs | 28.47 | 197 | P | | P | 00 24 46.6 | -2.1 | |
| ODZ | Otahua Downs | 28.47 | 197 | ⇓P | | P | 00 24 45.9 | -2.8 | |
| XMAS | Kiritimati | 28.51 | 47 | P | | P | 00 24 49.2 | -0.3 | |
| XMAS | Kiritimati | 28.51 | 47 | P | | P | 00 24 48.4 | -1.1 | |
| PMOR | Pomariorio Ree | 29.05 | 88 | *e*P | | P | 00 24 52.8 | -1.3 | |
| | comp=Z,72µm,1.3s | | | | | | | | |
| PMOR | | | | *e*S | | **S** | 00 29 09.0 | +3.0 | |
| | comp=Z,833µm,25.9s | | | | | | | | |
| PMOR | | | | *e*ScP | | **ScP** | 00 30 38.4 | +7.6 | |
| | comp=Z,5µm,1.2s | | | | | | | | |
| PMOR | | | | *e*SS | | **SS** | 00 32 07.9 | -4.6 | |
| | comp=Z,4713µm,25.1s | | | | | | | | |
| MISM | Misima Island | 29.12 | 281 | P | | P | 00 24 53.9 | -0.9 | |
| VAH | Vaihoa | 29.26 | 89 | *e*P | | P | 00 24 54.5 | -1.4 | |
| | comp=Z,32µm,1.2s | | | | | | | | |
| VAH | | | | *e*S | | **S** | 00 29 13.6 | +4.4 | |
| | comp=Z,944µm,25.4s | | | | | | | | |
| VAH | | | | *e*ScP | | **ScP** | 00 30 34.8 | +3.3 | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| VAH | | | | *e*SS | | **SS** | 00 32 11.5 | -4.5 | |
| | comp=Z,5035µm,25.6s | | | | | | | | |
| GD1S | Gladstone Soft | 29.27 | 253 | P | | P | 00 24 54.7 | -1.2 | |
| EIDS | Eidsvold | 29.52 | 250 | P | | P | 00 24 56.7 | -1.4 | |
| EIDS | Eidsvold | 29.52 | 250 | P | | P | 00 24 56.2 | -1.9 | |
| EIDS | Eidsvold | 29.52 | 250 | ⇓P | | P | 00 24 56.2 | -1.9 | |
| EIDS | Eidsvold | 29.52 | 250 | P | | P | 00 24 56.3 | -1.9 | |
| | comp=Z,0.0nmcomp=Z,18µm,0.9s | | | | | | | | |
| RK1H | Rockhampton Ha | 29.85 | 254 | P | | P | 00 24 59.6 | -1.3 | |
| ARMA | Armidale | 30.14 | 240 | P | | P | 00 25 03.2 | -0.3 | |
| ARMA | Armidale | 30.14 | 240 | P | | P | 00 25 02.2 | -1.3 | |
| ARMA | | | | | IAmb | IAmb | 00 25 30.3 | | |
| | comp=Z,12µm,0.9s | | | | | | | | |
| ARMA | Armidale | 30.14 | 240 | ⇓P | | P | 00 25 02.8 | -0.7 | |
| ARMA | Armidale | 30.14 | 240 | P | | P | 00 25 02.9 | -0.7 | |
| | comp=Z,0.0nmcomp=Z,13µm,0.9s | | | | | | | | |
| SYZ | Scrubby Hill | 30.26 | 198 | P | | P | 00 25 03.2 | -0.9 | |
| PYZ | Puysegur Point | 30.70 | 201 | P | | P | 00 25 07.5 | -0.4 | |
| NTLH | Newcastle Hard | 30.89 | 236 | P | | P | 00 25 10.6 | +0.9 | |
| RIV | Riverview | 31.65 | 234 | P | | P | 00 25 17.5 | +1.3 | |
| RIV | Riverview | 31.65 | 234 | ⇑P | | P | 00 25 15.4 | -0.8 | |
| RIV | Riverview | 31.65 | 234 | P | | P | 00 25 15.2 | -1.0 | |
| | comp=Z,0.0nmcomp=Z,19µm,2.0s | | | | | | | | |
| RMQ | Roma | 31.75 | 249 | P | | P | 00 25 17.5 | +0.3 | |
| RMQ | Roma | 31.75 | 249 | P | | P | 00 25 16.5 | -0.7 | |
| | comp=Z,3µm,0.8s | | | | | | | | |
| SYDH | Sydney Hard Ro | 31.95 | 235 | P | | P | 00 25 18.1 | -0.6 | |
| WOLH | Wollongong Har | 32.09 | 233 | P | | P | 00 25 19.3 | -0.6 | |
| RABL | Rabaul | 32.26 | 292 | P | | P | 00 25 19.9 | -1.8 | |
| I40PG | Keravat | 32.35 | 292 | P | | P | 00 25 22.3 | -0.1 | |
| | baz=143,slow=19,SNR=3.2 | | | | | | | | |
| TV1H | Townsville Har | 33.29 | 262 | P | | P | 00 25 28.2 | -2.1 | |
| CNB | Canberra Magne | 33.58 | 233 | P | | P | 00 25 31.8 | -0.8 | |
| CNB | Canberra Magne | 33.58 | 233 | P | | P | 00 25 31.9 | -0.7 | |
| | comp=Z,0.0nmcomp=Z,34µm,2.1s | | | | | | | | |
| CTA | Charters Tower | 33.76 | 261 | P3KPbc | | | 00 56 23.3 | | |
| | comp=Z,0.7nm,0.7s,baz=242,slow=11,SNR=3.2 | | | | | | | | |
| CTAO | Charters Tower | 33.76 | 261 | P | | P | 00 25 32.8 | -1.4 | |
| CTAO | Charters Tower | 33.76 | 261 | P | | P | 00 25 32.3 | -1.9 | |
| CTAO | | | | | IAmb | IAmb | 00 25 51.8 | | |
| | comp=Z,9µm,0.8s | | | | | | | | |
| CTAO | Charters Tower | 33.76 | 261 | ⇓P | | P | 00 25 32.4 | -1.9 | |
| CTAO | Charters Tower | 33.76 | 261 | P | | P | 00 25 32.3 | -1.9 | |
| CTAO | | | | | pmax | pmax | | | |
| | comp=Z,9µm,0.8s | | | | | | | | |
| CTAO | Charters Tower | 33.76 | 261 | P | | P | 00 25 32.6 | -1.6 | |
| CAN | Canberra | 33.86 | 233 | P | | P | 00 25 33.7 | -1.2 | |
| CAN | Canberra | 33.86 | 233 | ⇓P | | P | 00 25 33.9 | -1.0 | |
| CAN | Canberra | 33.86 | 233 | P | | P | 00 25 34.2 | -0.7 | |
| | comp=Z,0.0nmcomp=Z,17µm,1.9s | | | | | | | | |
| CAN | Canberra | 33.86 | 233 | P | | P | 00 25 33.7 | -1.2 | |
| CAN | | | | | pmax | pmax | | | |
| | comp=Z,15µm,1.0s | | | | | | | | |
| CAN | Canberra | 33.86 | 233 | P | | P | 00 25 34.0 | -0.9 | |
| CAN | | | | sP | | **sP** | 00 28 21.1 | +5.5 | |
| YNG | Young | 33.96 | 235 | P | | P | 00 25 35.5 | -0.2 | |
| YNG | Young | 33.96 | 235 | P | | P | 00 25 34.8 | -0.9 | |
| | comp=Z,0.0nmcomp=Z,39µm,1.9s | | | | | | | | |
| PATS | Pohnpei | 34.05 | 315 | P | | P | 00 25 35.7 | -1.0 | |
| PATS | Pohnpei | 34.05 | 315 | P | | P | 00 25 36.4 | -0.3 | |
| | comp=Z,0.0nmcomp=Z,23µm,1.4s | | | | | | | | |
| KAVG | Kavieng | 34.21 | 293 | P | | P | 00 25 36.2 | -1.9 | |
| MILA | Mila | 34.42 | 230 | P | | P | 00 25 38.6 | -0.9 | |
| MILA | Mila | 34.42 | 230 | ⇓P | | P | 00 25 38.3 | -1.2 | |
| MILA | Mila | 34.42 | 230 | P | | P | 00 25 38.6 | -0.9 | |
| | comp=Z,0.0nmcomp=Z,13µm,1.7s | | | | | | | | |
| PMG | Port Moresby | 34.84 | 280 | P | | P | 00 25 42.8 | -0.4 | |
| PMG | Port Moresby | 34.84 | 280 | P | | P | 00 25 42.2 | -1.1 | |
| PMG | Port Moresby | 34.84 | 280 | ⇓P | | P | 00 25 42.5 | -0.8 | |
| PMG | Port Moresby | 34.84 | 280 | *de*P | | P | 00 25 42.4 | -0.8 | |
| PMG | | | | | pmax | pmax | | | |
| | comp=Z,5µm,1.0s | | | | | | | | |
| PMG | Port Moresby | 34.84 | 280 | P | | P | 00 25 42.6 | -0.7 | |
| PMG | | | | pP | | **pwP** | 00 27 22.1 | +0.1 | |
| PMG | | | | sP | | **sP** | 00 28 28.7 | +3.9 | |
| CMSA | Cobar Meteorol | 35.35 | 241 | P | | P | 00 25 46.0 | -1.3 | |
| CMSA | Cobar Meteorol | 35.35 | 241 | P | | P | 00 25 46.2 | -1.1 | |
| | comp=Z,0.0nmcomp=Z,23µm,1.3s | | | | | | | | |
| JOHN | Johnston Islan | 35.63 | 14 | P | | P | 00 25 49.4 | -0.3 | |
| JOHN | Johnston Islan | 35.63 | 14 | P | | P | 00 25 48.8 | -0.9 | |
| JOHN | | | | | IAmb | IAmb | 00 26 02.8 | | |
| | comp=Z,12µm,0.9s | | | | | | | | |
| JOHN | Johnston Islan | 35.63 | 14 | ⇑P | | P | 00 25 48.8 | -0.9 | |
| MTSU | Mount Surprise | 35.73 | 264 | P | | P | 00 25 49.2 | -1.5 | |
| QLP | Quilpie | 35.79 | 250 | P | | P | 00 25 49.5 | -1.5 | |
| QLP | Quilpie | 35.79 | 250 | P | | P | 00 25 49.5 | -1.5 | |
| | comp=Z,0.0nmcomp=Z,37µm,0.8s | | | | | | | | |
| GLAD | Gladstone | 36.95 | 225 | P | | P | 00 25 59.1 | -1.2 | |
| TOO | Toolangi | 37.31 | 231 | P | | P | 00 26 03.0 | -0.4 | |
| TOO | Toolangi | 37.31 | 231 | P | | P | 00 26 02.2 | -1.2 | |
| TOO | Toolangi | 37.31 | 231 | ⇑P | | P | 00 26 02.5 | -0.9 | |
| TOO | Toolangi | 37.31 | 231 | P | | P | 00 26 02.4 | -1.0 | |
| | comp=Z,0.0nmcomp=Z,45µm,1.2s | | | | | | | | |
| TOO | Toolangi | 37.31 | 231 | P | | P | 00 26 02.2 | -1.2 | |
| COEN | Coen | 37.45 | 271 | P | | P | 00 26 03.9 | -0.9 | |
| COEN | Coen | 37.45 | 271 | P | | P | 00 26 03.3 | -1.5 | |
| COEN | Coen | 37.45 | 271 | ⇓P | | P | 00 26 03.7 | -1.1 | |
| COEN | Coen | 37.45 | 271 | P | | P | 00 26 03.7 | -1.1 | |
| | comp=Z,0.0nmcomp=Z,39µm,0.8s | | | | | | | | |
| MANU | Manus Island | 37.50 | 291 | P | | P | 00 26 03.8 | -1.4 | |
| CORO | Coronation Par | 37.74 | 225 | P | | P | 00 26 07.2 | +0.5 | |
| MLBS | Spotswood, Mel | 37.84 | 231 | P | | P | 00 26 07.5 | -0.1 | |
| I21FR | MARQUESAS ISLA | 37.90 | 81 | P | | P | 00 26 10.0 | +1.5 | |
| | baz=162,slow=8.9,SNR=1.9 | | | | | | | | |
| TAOE | Nuku Hiva Isla | 37.91 | 81 | P | | P | 00 26 08.6 | 0.0 | |
| TAOE | Nuku Hiva Isla | 37.91 | 81 | *e*P | | P | 00 26 08.1 | -0.6 | |
| | comp=Z,32µm,1.0s | | | | | | | | |
| TAOE | | | | *ep*P | | **PP** | 00 27 53.8 | -0.9 | |
| | comp=Z,10µm,1.4s | | | | | | | | |
| TAOE | | | | *e*ScP | | **S** | 00 31 16.6 | -3.5 | |
| | comp=Z,7µm,1.4s | | | | | | | | |
| TAOE | | | | *e*SS | | **SS** | 00 34 36.8 | -3.7 | |
| | comp=Z,3155µm,34.6s | | | | | | | | |
| TAOE | Nuku Hiva Isla | 37.91 | 81 | P | | P | 00 26 07.8 | -0.9 | |
| TAOE | | | | | IAmb | IAmb | 00 26 24.2 | | |
| | comp=Z,11µm,0.8s | | | | | | | | |
| TAOE | Nuku Hiva Isla | 37.91 | 81 | ⇓P | | P | 00 26 08.2 | -0.6 | |
| TAOE | Nuku Hiva Isla | 37.91 | 81 | P | | P | 00 26 08.0 | -0.6 | |
| MOO | Moorlands | 38.18 | 223 | P | | P | 00 26 09.7 | -0.6 | |
| MOO | Moorlands | 38.18 | 223 | P | | P | 00 26 09.6 | -0.6 | |
| | comp=Z,0.0nmcomp=Z,20µm,1.6s | | | | | | | | |
| TAU | Tasmania Unive | 38.32 | 222 | P | | P | 00 26 10.4 | -1.0 | |
| TAU | Tasmania Unive | 38.32 | 222 | P | | P | 00 26 09.6 | -1.8 | |
| TAU | | | | | IAmb | IAmb | 00 26 31.6 | | |
| | comp=Z,14µm,1.1s | | | | | | | | |
| TAU | Tasmania Unive | 38.32 | 222 | ⇓P | | P | 00 26 10.1 | -1.3 | |
| TAU | Tasmania Unive | 38.32 | 222 | P | | P | 00 26 09.6 | -1.8 | |
| TAU | | | | | pmax | pmax | | | |
| | comp=Z,14µm,1.1s | | | | | | | | |
| GEXS | Deakin Univers | 38.42 | 231 | P | | P | 00 26 12.4 | +0.1 | |
| BRAT | Ballarat | 38.47 | 232 | P | | P | 00 26 12.6 | 0.0 | |
| STKA | Stephens Creek | 38.84 | 241 | P | | P | 00 26 15.1 | -0.7 | |
| STKA | Stephens Creek | 38.84 | 241 | P | | P | 00 26 14.9 | -0.9 | |
| STKA | | | | | IAmb | IAmb | 00 26 35.8 | | |
| | comp=Z,4µm,0.8s | | | | | | | | |
| STKA | Stephens Creek | 38.84 | 241 | P | | P | 00 26 14.9 | -0.9 | |
| | comp=Z,0.0nmcomp=Z,6µm,1.4s | | | | | | | | |
| STKA | Stephens Creek | 38.84 | 241 | P | | P | 00 26 15.0 | -0.7 | |
| | comp=Z,2µm,0.9s,baz=89,slow=9.8,SNR=412 | | | | | | | | |
| STKA | | | | S | | S | 00 31 19.4 | -14 | |
| | comp=Z,518nm,0.7s,baz=103,slow=15,SNR=1.9 | | | | | | | | |
| STKA | | | | P3KPbc | | | 00 56 07.8 | | |
| | comp=Z,20nm,1.2s,baz=273,slow=6.4,SNR=2.5 | | | | | | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| STKA | Stephens Creek | 38.84 | 241 | *d i*P | | P | 00 26 14.8 | -0.9 | |
| INKA | Innaminka | 38.99 | 248 | P | | P | 00 26 16.9 | -0.2 | |
| H11S2 | WAKE ISLAND Hy | 39.34 | 337 | P | | P | 00 26 17.9 | -1.8 | |
| H11S3 | WAKE ISLAND Hy | 39.35 | 337 | P | | P | 00 26 18.3 | -1.5 | |
| | baz=343,slow=74,SNR=731 | | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.36 | 337 | P | | P | 00 26 18.9 | -1.0 | |
| | baz=102,slow=74,SNR=829 | | | | | | | | |
| ARPS | Mount Arapiles | 39.81 | 234 | P | | P | 00 26 22.3 | -1.2 | |
| ARPS | Mount Arapiles | 39.81 | 234 | P | | P | 00 26 22.0 | -1.5 | |
| | comp=Z,30µm,0.9s | | | | | | | | |
| QIS | Mount Isa | 39.96 | 259 | P | | P | 00 26 22.9 | -2.1 | |
| QIS | Mount Isa | 39.96 | 259 | P | | P | 00 26 22.6 | -2.3 | |
| | comp=Z,0.0nmcomp=Z,8µm,1.5s | | | | | | | | |
| WAKE | Wake Island | 40.09 | 337 | P | | P | 00 26 24.5 | -1.4 | |
| I60US | Wake Island | 40.11 | 337 | P | | P | 00 26 26.0 | 0.0 | |
| | baz=180,slow=5.6,SNR=1.2 | | | | | | | | |
| M

KDU Kakadu 47.90 269 ⇓P P 00 27 24.1 -2.2
KDU Kakadu 47.90 269 P P 00 27 24.2 -2.1
comp=Z,0.0nmcomp=Z,22µm,1.6s
GUMO Guam 48.27 308 P P 00 27 28.2 -0.8
GUMO Guam 48.27 308 P P 00 27 27.6 -1.4
GUMO IAmb IAmb 00 27 42.9
comp=Z,90µm,1.3s
GUMO Guam 48.27 308 ⇓P P 00 27 27.6 -1.4
GUMO Guam 48.27 308 P P 00 27 28.1 -0.9
comp=Z,6µm,1.0s,baz=163,slow=5.7,SNR=82
comp=Z,6µm,1.0s
GUMO Guam 48.27 308 P P 00 27 27.6 -1.4
MTN Manton Dam 49.14 269 P P 00 27 33.7 -1.7
MTN Manton Dam 49.14 269 P P 00 27 33.0 -2.4
MTN IAmb IAmb 00 27 52.6
comp=Z,11µm,0.7s
MTN Manton Dam 49.14 269 ⇓P P 00 27 32.9 -2.4
MTN Manton Dam 49.14 269 P P 00 27 33.1 -2.4
comp=Z,0.0nmcomp=Z,16µm,0.8s
DRS Darwin Rock St 49.45 269 P P 00 27 35.7 -2.0
WRKA Warakurna 50.11 252 P P 00 27 41.5 -1.0
WRKA Warakurna 50.11 252 ⇓P P 00 27 40.8 -1.7
WRKA Warakurna 50.11 252 P P 00 27 40.9 -1.7
comp=Z,0.0nmcomp=Z,35µm,1.6s
SAUI Saumlaki 50.22 275 P P 00 27 44.1 +0.7
SAUI Saumlaki 50.22 275 P P 00 27 43.1 -0.3
SAUI Saumlaki 50.22 275 ⇓P P 00 27 42.6 -0.8
FORT Forrest 50.23 245 P P 00 27 41.6 -1.6
FORT Forrest 50.23 245 P P 00 27 40.9 -2.3
FORT Forrest 50.23 245 P P 00 27 41.1 -2.2
comp=Z,0.0nmcomp=Z,42µm,0.9s
KNRA Kununurra 50.81 264 P P 00 27 45.5 -2.1
KNRA IAmb IAmb 00 28 05.4
comp=Z,20µm,1.1s
KNRA Kununurra 50.81 264 P P 00 27 45.6 -2.1
comp=Z,0.0nmcomp=Z,24µm,0.9s
FAKI Fak Fak 50.96 281 P P 00 27 47.3 -1.4
FAKI Fak Fak 50.96 281 P P 00 27 46.8 -2.0
FAKI Fak Fak 50.96 281 ⇓P P 00 27 46.7 -2.1
BNDI Bandanaira 52.61 278 P P 00 27 59.6 -1.0
BNDI Bandanaira 52.61 278 ⇓P P 00 27 58.9 -1.7
I39PW PALAU INFRASON 53.28 294 P P 00 28 06.0 +0.7
baz=119,slow=10,SNR=3.8
FITZ Fitzroy Crossi 53.34 261 P P 00 28 03.9 -1.7
KMBL Kambalda 55.53 244 P P 00 28 19.2 -1.7
KMBL Kambalda 55.53 244 P P 00 28 18.5 -2.4
comp=Z,0.0nmcomp=Z,13µm,1.2s
DRV Dumont d'Urvil 55.58 199 P P 00 28 19.4 -1.1
DRV pP pwP 00 30 13.9 +1.2
SOEI Soe 56.42 270 P P 00 28 27.2 -0.2
SOEI Soe 56.42 270 P P 00 28 26.2 -1.2
SOEI Soe 56.42 270 P P 00 28 24.4 -3.0
SOEI Soe 56.42 270 ⇓P P 00 28 26.9 -0.5
TNTI Ternate 56.85 283 P P 00 28 27.8 -2.4
TNTI IAmb IAmb 00 28 53.4
comp=Z,14µm,0.8s
TNTI Ternate 56.85 283 ⇑P P 00 28 28.5 -1.6
SANI Sanana 57.12 280 P P 00 28 30.6 -1.4
SANI Sanana 57.12 280 P P 00 28 29.4 -2.6
SANI Sanana 57.12 280 ⇓P P 00 28 29.8 -2.2
PSA00 Pilbara Seismi 58.19 255 P P 00 28 37.2 -2.1
PSA00 Pilbara Seismi 58.19 255 P P 00 28 36.9 -2.3
PSA00 IAmb IAmb 00 29 03.6
comp=Z,12µm,0.8s
PSA00 Pilbara Seismi 58.19 255 P P 00 28 36.3 -2.9
PSA00 IAmb IAmb 00 29 03.6
comp=Z,12µm,0.8s
PSA00 Pilbara Seismi 58.19 255 P P 00 28 37.1 -2.1
comp=Z,0.0nmcomp=Z,17µm,1.7s
MBWA Marble Bar 58.36 256 P P 00 28 39.0 -1.3
MBWA Marble Bar 58.36 256 P P 00 28 38.2 -2.1
MBWA IAmb IAmb 00 28 58.3
comp=Z,34µm,1.5s
MBWA Marble Bar 58.36 256 ⇓P P 00 28 38.1 -2.1
MBWA Marble Bar 58.36 256 P P 00 28 38.2 -2.1
comp=Z,0.0nmcomp=Z,17µm,1.5s
MBWA Marble Bar 58.36 256 P P 00 28 38.1 -2.2
MBWA pP pwP 00 30 33.6 -0.9
MBWA sP sP 00 31 37.7 +4.5
MMRI Maumere 58.65 271 P P 00 28 40.8 -1.6
MMRI Maumere 58.65 271 P P 00 28 40.0 -2.3
MMRI IAmb IAmb 00 29 42.3
comp=Z,43µm,1.3s
MMRI Maumere 58.65 271 ⇑P P 00 28 40.2 -2.1
MEEK Meekatharra 58.69 249 P P 00 28 41.0 -1.5
MEEK Meekatharra 58.69 249 P P 00 28 40.1 -2.4
comp=Z,0.0nmcomp=Z,12µm,1.7s
KLBR Kellerberrin 59.05 244 P P 00 28 42.6 -2.2
KLBR Kellerberrin 59.05 244 P P 00 28 42.6 -2.2
comp=Z,33µm,0.8s
JCJ Chichijima 59.23 318 P P 00 28 45.2 -0.7
JCJ Chichijima 59.23 318 P P 00 28 44.8 -1.0
JCJ IAmb IAmb 00 28 58.5
comp=Z,16µm,0.8s
JCJ Chichijima 59.23 318 ⇓P P 00 28 44.9 -1.0
JCJ Chichijima 59.23 318 P P 00 28 40.2 -5.7
comp=Z,1µm,0.8s,baz=156,slow=4.4,SNR=26
NWAO Narrogin (SRO) 59.42 242 P P 00 28 45.4 -1.8
NWAO Narrogin (SRO) 59.42 242 P P 00 28 45.0 -2.2
NWAO IAmb IAmb 00 29 12.6
comp=Z,15µm,1.1s
NWAO Narrogin (SRO) 59.42 242 P P 00 28 45.0 -2.2
NWAO pmax pmax
comp=Z,15µm,1.1s
NWAO Narrogin (SRO) 59.42 242 P P 00 28 45.5 -1.8
NWAO pP pwP 00 30 41.2 -1.2
NWAO sP sP 00 31 45.9 +6.4
RKGY Rocky Gully 59.57 240 P P 00 28 47.2 -1.0
RKGY Rocky Gully 59.57 240 P P 00 28 46.8 -1.4
comp=Z,15µm,0.9s
BLDU Ballidu 60.01 245 P P 00 28 48.6 -2.6
BLDU Ballidu 60.01 245 P P 00 28 48.9 -2.3
comp=Z,0.0nmcomp=Z,11µm,1.4s
I55US WINDLESS BIGHT 60.07 184 P P 00 28 52.0 +1.3
baz=23,slow=20,SNR=6.1
I04AU SHANNON INFRAS 60.08 240 P P 00 28 53.0 +1.4
baz=82,slow=7.0,SNR=2.5
MUN Mundaring 60.34 243 P P 00 28 51.5 -1.8
MUN Mundaring 60.34 243 P P 00 28 51.5 -1.8
comp=Z,0.0nmcomp=Z,10µm,2.0s
LUWI Luwuk 60.48 279 P P 00 28 53.1 -1.4
LUWI Luwuk 60.48 279 P P 00 28 52.1 -2.4
LUWI Luwuk 60.48 279 ⇓P P 00 28 53.5 -1.1
MTKN Mount Kenneth 60.71 243 P P 00 28 55.9 +0.2
MTKN Mount Kenneth 60.71 243 P P 00 28 56.0 +0.2
comp=Z,26µm,0.8s
MORW Morawa 60.72 246 P P 00 28 53.4 -2.5
MORW Morawa 60.72 246 P P 00 28 53.5 -2.5
MORW IAmb IAmb 00 29 13.5
comp=Z,35µm,1.9s
MORW Morawa 60.72 246 ⇓P P 00 28 53.5 -2.3
MORW Morawa 60.72 246 P P 00 28 53.7 -2.2
comp=Z,0.0nmcomp=Z,6µm,0.8s
DAV Davao City (W) 60.99 289 P P 00 28 57.6 -0.3
DAV Davao City (W) 60.99 289 P P 00 28 56.4 -1.5
DAV IAmb IAmb 00 29 10.2
comp=Z,13µm,0.8s
DAV Davao City (W) 60.99 289 ⇓P P 00 28 56.2 -1.7
H01W1 Cape Leeuwin H 61.88 240 P P 00 29 03.1 0.0
baz=113,slow=7.3,SNR=2459
H01W3 Cape Leeuwin H 61.89 240 P P 00 29 04.4 +1.2
baz=113,slow=7.3,SNR=1402
H01W2 Cape Leeuwin H 61.90 240 P P 00 29 03.2 0.0
baz=113,slow=7.3,SNR=2293
KAPI Kappang 62.05 274 P P 00 29 02.5 -2.3
KAPI IAmb IAmb 00 29 28.9
comp=Z,20µm,1.4s
KAPI Kappang 62.05 274 ⇓P P 00 29 03.0 -1.7
KAPI Kappang 62.05 274 P P 00 29 03.1 -1.7
comp=Z,411nm,0.9s,baz=126,slow=3.2,SNR=55
comp=Z,411nm,0.9s
KAPI Kappang 62.05 274 *d* *i*P P 00 29 02.6 -2.2
TOLI2 Tolitoli 63.10 281 P P 00 29 09.7 -1.8
TOLI2 Tolitoli 63.10 281 P P 00 29 09.3 -2.2
TOLI2 IAmb IAmb 00 29 28.2
comp=Z,26µm,1.5s
GIRL Giralia 63.17 253 P P 00 29 11.3 -0.6
GIRL Giralia 63.17 253 P P 00 29 10.6 -1.3
GIRL Giralia 63.17 253 ⇑P P 00 29 11.0 -0.8
VA02 Isla de Pascua 63.30 112 P P 00 29 13.0 +0.4
VA02 IAmb IAmb 00 29 28.5
comp=Z,23µm,1.8s
VA02 Isla de Pascua 63.30 112 ⇓P P 00 29 14.3 +1.7
VA02 Isla de Pascua 63.30 112 *e*P P 00 29 14.1 +1.5
VA02 IAmb IAmb 00 29 27.9
comp=Z,24µm,1.8s
RPN Rapa Nui 63.39 112 P P 00 29 13.3 +0.1
RPN IAmb IAmb 00 29 42.4
comp=Z,8µm,1.1s
RPN Rapa Nui 63.39 112 ⇑P P 00 29 13.9 +0.7
RPN Rapa Nui 63.39 112 P P 00 29 13.3 +0.1
RPN pmax pmax
comp=Z,8µm,1.1s
CCD Concordia, Ant 64.76 194 P P 00 29 20.5 -0.9
CCD pP pwP 00 31 18.0 -0.5
CCD sP sP 00 32 22.5 +5.4
JHJ2 Mitsune 64.92 322 P P 00 29 20.8 -1.8
JHJ2 Mitsune 64.92 322 ⇓P P 00 29 21.7 -0.9
JHJ Hachijo jima 2 64.95 322 P P 00 29 22.1 -0.8
comp=Z,7µm,0.9s,baz=171,slow=7.1,SNR=65
JHJ S S 00 37 20.1 +0.1
comp=Z,250nm,0.8s,baz=262,slow=4.4,SNR=1.9
comp=Z,7µm,0.9s
JMZ Minamidaito 2 65.88 310 P P 00 29 28.2 -0.6
JMZ Minamidaito 2 65.88 310 P P 00 29 28.6 -0.2
JMZ Minamidaito 2 65.88 310 ⇑P P 00 29 28.4 -0.4
BKB Balikpapan 65.94 277 P P 00 29 30.7 +1.2
BKB Balikpapan 65.94 277 P P 00 29 28.2 -1.2
BKB IAmb IAmb 00 29 49.9
comp=Z,13µm,1.1s
BKB Balikpapan 65.94 277 ⇓P P 00 29 29.6 +0.1
CASY Casey 66.10 205 P P 00 29 28.2 -1.3
CASY IAmb IAmb 00 29 55.7
comp=Z,7µm,0.9s
CASY Casey 66.10 205 P P 00 29 28.2 -1.3
CASY pP pwP 00 31 27.8 -0.2
CASY sP sP 00 32 30.2 +4.9
I30JP ISUMI INFRASON 66.20 324 P P 00 29 32.0 +1.4
baz=166,slow=11,SNR=4.7
JAGI Jajag, Banyuwa 66.38 269 P P 00 29 29.3 -3.0
JAGI Jajag, Banyuwa 66.38 269 ⇓P P 00 29 29.2 -3.0
MYLDM Lahad Datu 66.70 284 P P 00 29 33.2 -0.9
MYLDM Lahad Datu 66.70 284 ⇓P P 00 29 34.2 0.0
JOD2 Odawara 2 66.87 323 P P 00 29 32.4 -2.3
JSG Sagara 66.98 322 P P 00 29 36.1 +0.7
JSG Sagara 66.98 322 P P 00 29 34.5 -0.9
JSG Sagara 66.98 322 ⇓P P 00 29 34.5 -0.9
JSG Sagara 66.98 322 P P 00 29 34.4 -1.1
JRY Ryogami san 67.51 323 P P 00 29 37.2 -1.5
JMM Marumori 67.80 326 P P 00 29 39.2 -1.2
JMM Marumori 67.80 326 P P 00 29 39.0 -1.4
JMM IAmb IAmb 00 29 53.9
comp=Z,9µm,1.0s
JMM Marumori 67.80 326 ⇑P P 00 29 38.7 -1.7
JMM Marumori 67.80 326 P P 00 29 38.5 -1.8
JGF Kuroka 68.11 322 P P 00 29 41.0 -1.4
JGF Kuroka 68.11 322 P P 00 29 40.9 -1.4
JGF IAmb IAmb 00 29 55.4
comp=Z,5µm,0.9s
JGF Kuroka 68.11 322 ⇓P P 00 29 40.5 -1.9
JGF Kuroka 68.11 322 P P 00 29 40.2 -2.1
INU Inuyama 68.14 322 P P 00 29 42.5 0.0
INU Inuyama 68.14 322 P P 00 29 41.7 -0.8
INU IAmb IAmb 00 29 55.8
comp=Z,7µm,1.1s
INU Inuyama 68.14 322 ⇓P P 00 29 40.9 -1.6
INU Inuyama 68.14 322 P P 00 29 40.9 -1.6
INU pP pwP 00 31 40.6 -1.3
INU sP sP 00 32 41.9 +3.5
MJAR Matsushiro Arr 68.28 323 P P 00 29 41.2 -2.1
comp=Z,990nm,0.9s,baz=156,slow=5.5,SNR=144
MJAR S S 00 37 59.2 +0.1
comp=Z,32nm,0.9s,baz=180,slow=8.3,SNR=1.2
comp=Z,990nm,0.9s
MAJO Matsushiro 68.28 323 P P 00 29 41.3 -2.0
MAJO Matsushiro 68.28 323 P P 00 29 42.2 -1.1
MAJO IAmb IAmb 00 29 56.3
comp=Z,7µm,0.9s
MAJO Matsushiro 68.28 323 ⇑P P 00 29 40.1 -3.2
MAJO Matsushiro 68.28 323 *d* *i*P P 00 29 42.5 -0.8
MAJO pmax pmax
comp=Z,8µm,1.0s
MAJO Matsushiro 68.28 323 P P 00 29 41.7 -1.6
MAJO pP pwP 00 31 41.4 -1.7
MAJO sP sP 00 32 42.8 +3.5
MJB9 Matsu-Tunnel 68.28 323 P P 00 29 42.6 -0.7
MJB9 IAmb IAmb 00 29 57.7
comp=Z,6µm,0.9s
JAM Amami Oshima 68.56 311 P P 00 29 44.7 -0.5
JGN Niukaw 68.57 322 P P 00 29 43.3 -1.9
JOW Kunigami 68.62 309 P P 00 29 44.6 -1.0
JOW IAmb IAmb 00 30 00.7
comp=Z,9µm,1.0s
JOW Kunigami 68.62 309 ⇓P P 00 29 44.9 -0.7
JOW Kunigami 68.62 309 P P 00 29 44.8 -0.7
comp=Z,1µm,0.9s,baz=144,slow=6.8,SNR=80
comp=Z,1µm,0.9s
JOW Kunigami 68.62 309 P P 00 29 44.7 -0.9
JOM Ohasama 68.73 327 P P 00 29 44.0 -1.9
JYA Atsumi 68.91 326 P P 00 29 45.8 -1.3
JMN Monobe 68.97 318 P P 00 29 46.8 -0.8
JMN Monobe 68.97 318 P P 00 29 46.9 -0.8
JMN Monobe 68.97 318 ⇓P P 00 29 46.9 -0.8
JMN Monobe 68.97 318 P P 00 29 46.8 -0.8
JWT Wachi 69.06 321 P P 00 29 46.3 -1.7
KKM Kota Kinabalu 69.13 284 P P 00 29 47.4 -1.7
KKM Kota Kinabalu 69.13 284 P P 00 29 47.3 -1.7
KKM Kota Kinabalu 69.13 284 ⇓P P 00 29 47.3 -1.7
AMKA Amchitka 69.23 358 P P 00 29 46.9 -1.7
JSD Sado 69.31 324 P P 00 29 48.8 -0.6
JSD Sado 69.31 324 P P 00 29 47.9 -1.5
JSD IAmb IAmb 00 30 02.8
comp=Z,9µm,1.0s
JSD Sado 69.31 324 ⇓P P 00 29 48.0 -1.4
JSD Sado 69.31 324 P P 00 29 47.8 -1.6
JAD Aida 69.59 320 P P 00 29 50.2 -1.0
KIWB Kanaga Island 69.67 1 P P 00 29 49.6 -1.6
ERM Erimo 69.74 330 P P 00 29 53.6 +1.7
ERM Erimo 69.74 330 P P 00 29 51.1 -0.7
ERM IAmb IAmb 00 30 09.3
comp=Z,16µm,1.8s
ERM Erimo 69.74 330 ⇓P P 00 29 50.7 -1.2
ERM Erimo 69.74 330 *d* *i*P P 00 29 51.3 -0.6
ERM pmax pmax
comp=Z,8µm,1.6s
JEM Erimo 69.74 330 P P 00 29 51.6 -0.3
JMJ Miyako jima 2 69.76 306 P P 00 29 52.5 +0.1
JSU Suzuyama 69.82 315 P P 00 29 51.3 -1.4
JTM Tenmabayashi 69.83 328 P P 00 29 51.9 -0.5
JTM Tenmabayashi 69.83 328 P P 00 29 50.9 -1.6
JTM IAmb IAmb 00 30 06.7
comp=Z,12µm,1.1s
JTM Tenmabayashi 69.83 328 ⇓P P 00 29 50.9 -1.6
JTM Tenmabayashi 69.83 328 P P 00 29 50.7 -1.8
GSTR Great Sitkin T 69.93 1 P P 00 29 51.6 -1.2
UGM Wanagama 69.99 268 P P 00 29 52.6 -1.5
UGM Wanagama 69.99 268 P P 00 29 52.2 -1.9
YUK Yuzh-Kuril'sk 70.11 333 *c* *i*P P 00 29 47.4 -6.6
YUK *i* 00 30 09.7
YUK *e* 00 32 38.7
YUK *i* S S 00 38 28.5 +8.9
YUK pmax pmax
comp=N,1µm,0.9s
YUK pmax pmax
comp=Z,5µm,0.9s
YUK pmax pmax
comp=E,2µm,0.6s
YUK pmax pmax
comp=Z,29µm,4.0s
KUR Kuril'sk 70.25 335 *d* *i*P P 00 29 54.6 -0.2
KUR *e* 00 30 11.2
KUR *e**PP pwP 00 31 54.4 -1.3
KUR *e**SP sP 00 32 48.8 -2.8
KUR *e*S S 00 38 23.9 +2.7
KUR *e* 00 39 03.9
KUR *e*SS SS 00 43 08.7 +0.8
KUR pmax pmax
comp=Z,29µm,1.3s
KUR pmax pmax
comp=N,11µm,1.5s
KUR pmax pmax
comp=E,6µm,1.7s
JHS Saijyo 70.28 319 P P 00 29 54.2 -1.1
SMRI Semarang 70.31 269 P P 00 29 55.0 -1.0
SMRI Semarang 70.31 269 P P 00 29 54.3 -1.6
SMRI Semarang 70.31 269 ⇓P P 00 29 54.7 -1.2
JNU Nakatsue 70.53 316 P P 00 29 54.5 -2.3
JNU Nakatsue 70.53 316 P P 00 29 55.3 -1.6
JNU IAmb IAmb 00 30 10.8
comp=Z,12µm,1.3s
JNU Nakatsue 70.53 316 ⇓P P 00 29 55.0 -1.8
JNU Nakatsue 70.53 316 P P 00 29 55.3 -1.6
comp=Z,725nm,0.9s,baz=90,slow=3.4,SNR=114
JNU pP pP 00 31 51.2 -3.0
comp=Z,739nm,1.1s,baz=77,slow=1.2,SNR=1.3
JNU S S 00 38 25.2 +0.3
comp=Z,70nm,1.0s,baz=95,slow=7.2,SNR=1.7
comp=Z,725nm,0.9s
JNU Nakatsue 70.53 316 P P 00 29 55.1 -1.8
SHEM Shemya Is, Ala 70.87 355 P P 00 29 57.0 -1.3
comp=Z,3µm,0.8s,baz=60,slow=1.4,SNR=126
SHEM pP pP 00 31 53.2 -2.6
comp=Z,851nm,0.9s,baz=74,slow=19,SNR=2.2
SHEM S S 00 38 28.0 +0.2
comp=Z,130nm,1.1s,baz=39,slow=12,SNR=1.4
comp=Z,3µm,0.8s
CLES Cleveland East 70.99 5 P P 00 29 58.8 -0.2
JMP Maruseppu 71.19 332 P P 00 29 59.4 -1.0
NIKH Nikolski High 71.23 6 P P 00 29 59.8 -0.6
NIKH Nikolski High 71.23 6 P P 00 30 00.1 -0.4
baz=189,SNR=82
NIKH S SKiKP 00 38 36.7 -2.6
baz=189
YOJ Yonaguni jima 71.35 305 P P 00 29 59.8 -1.9
YOJ Yonaguni jima 71.35 305 P P 00 29 59.9 -1.9
YOJ Yonaguni jima 71.35 305 ⇓P P 00 30 00.2 -1.5
YOJ Yonaguni jima 71.35 305 P P 00 29 59.9 -1.8
YOJ pmax pmax
comp=Z,37µm,1.1s
SBUM Sibu 71.58 279 P P 00 30 02.0 -1.4
SBUM Sibu 71.58 279 ⇓P P 00 30 02.5 -0.9
JKA Kamikawa-asahi 71.62 331 P P 00 30 02.3 -0.6
ASAJ Asahikawa 71.62 331 P P 00 30 02.9 -0.1
comp=Z,981nm,0.8s,baz=221,slow=7.4,SNR=201
ASAJ S SKiKP 00 38 40.7 +0.6
comp=Z,35nm,0.9s,baz=290,slow=24,SNR=0.9
comp=Z,981nm,0.8s
ASAJ Asahikawa 71.62 331 P P 00 30 02.6 -0.4
JSH Shimam 71.72 329 P P 00 30 02.6 -0.9
QSPA South Pole Qui 71.94 180 P P 00 30 04.0 -0.7
QSPA IAmb IAmb 00 30 25.4
comp=Z,12µm,1.0s
QSPA South Pole Qui 71.94 180 ⇓P P 00 30 04.1 -0.7
QSPA South Pole Qui 71.94 180 P P 00 30 04.1 -0.6
comp=Z,1µm,0.9s,baz=335,slow=0.4,SNR=704
QSPA pP pP 00 32 00.0 -2.6
comp=Z,660nm,0.9s,baz=1.4,slow=6.5,SNR=1.1
QSPA S SKiKP 00 38 42.2 +2.0
comp=Z,141nm,1.0s,baz=272,slow=14,SNR=1.1
QSPA PKPPKP P'P'df 00 57 44.0 -3.2
comp=Z,85nm,0.7s,baz=282,slow=2.1,SNR=7.1
comp=Z,1µm,0.9s
QSPA South Pole Qui 71.94 180 P P 00 30 04.1 -0.6
QSPA pP pP 00 32 03.9 +1.3
QSPA sP sP 00 33 05.0 +2.6
TWGBT Beinan 72.07 302 P P 00 30 02.8 -3.2
TWG Pinlang 72.07 302 P P 00 30 02.7 -3.3
TWG IAmb IAmb 00 30 19.8
comp=Z,6µm,0.7s
YULB Yu-li 72.17 303 P P 00 30 04.7 -1.9
SKR Severo-Kuril's 72.18 343 *e*P P 00 30 05.8 -0.1
SKR *e* 00 32 05.7
SKR *e*S S 00 38 42.2 -0.3
SKR pmax pmax
comp=Z,4µm,1.0s
SKR pmax pmax
comp=Z,112µm,10.6s
SKR smax smax
comp=E,502µm,17.0s
SKR smax smax
comp=N,184µm,11.1s
NACB Ninganchiao 72.32 304 P P 00 30 05.8 -1.6
UNV Unalaska Valle 72.35 7 P P 00 30 05.4 -1.5
UNV Unalaska Valle 72.35 7 P P 00 30 05.9 -0.9
baz=192,SNR=234
UNV S S 00 38 48.7 +4.4
baz=192
JTU Tsushima 72.36 317 P P 00 30 06.2 -1.2
JTU Tsushima 72.36 317 ⇑P P 00 30 05.8 -1.6
SSLB Suanglung 72.64 303 P P 00 30 07.1 -2.2
SSLB Suanglung 72.64 303 P P 00 30 06.8 -2.5
SSLB IAmb IAmb 00 30 22.5
comp=Z,13µm,1.1s
TPUB Ta-pu 72.66 302 P P 00 30 07.2 -2.2
TPUB Ta-pu 72.66 302 P P 00 30 07.0 -2.4
LVA Lava Point 72.71 7 P P 00 30 08.1 -0.9
YHNB Yeheng 72.74 304 P P 00 30 08.8 -1.1
TATO Taipei 72.80 304 P P 00 30 09.9 -0.2
TATO Taipei 72.80 304 P P 00 30 08.4 -1.8
BBJI Bungbulang 72.84 268 P P 00 30 08.7 -2.1
KSM Kuching 73.06 277 P P 00 30 11.2 -0.7
KSM Kuching 73.06 277 P P 00 30 10.5 -1.4
KSM Kuching 73.06 277 ⇓P P 00 30 11.0 -0.9
PET Petropavlovsk 73.66 346 P P 00 30 12.7 -1.7
PET Petropavlovsk 73.66 346 P P 00 30 13.1 -1.2
PET IAmb IAmb 00 30 22.5
comp=Z,35µm,2.3s
PET Petropavlovsk 73.66 346 ⇑P P 00 30 12.6 -1.8
PET Petropavlovsk 73.66 346 *ce*P P 00 30 13.6 -0.8
PET *e**SP sP 00 33 15.9 +3.6
PET *e*S S 00 38 58.2 -0.6
PET *e*SS SS 00 44 04.1 +5.0
PET pmax pmax
comp=Z,232µm,18.5s
PET pmax pmax
comp=Z,4µm,1.1s
PET smax smax
comp=E,330µm,18.1s
PET smax smax
comp=N,101µm,17.3s
PET smax smax
comp=E,275µm,13.6s
PET smax smax
comp=N,120µm,9.9s
PET Petropavlovsk 73.66 346 P P 00 30 13.0 -1.4
comp=N,6µm,1.9s,comp=N,173µm
FALS False Pass 73.74 9 P P 00 30 14.4 -0.4
FALS False Pass 73.74 9 P P 00 30 14.1 -0.7
baz=195,SNR=53
FALS S S 00 39 03.5 +4.0
baz=195
YSS Yuzh-Sakhalins 73.75 333 P P 00 30 14.3 -0.7
YSS IAmb IAmb 00 30 30.2
comp=Z,8µm,0.9s
YSS Yuzh-Sakhalins 73.75 333 ⇓P P 00 30 14.3 -0.7
YSS Yuzh-Sakhalins 73.75 333 ⇓*e*P P 00 30 14.7 -0.4
YSS *e**PP pP 00 32 12.8 -1.0
YSS *e**SP PP 00 33 11.4 +0.8
YSS *e*S S 00 39 00.0 -0.1
YSS pmax pmax
comp=Z,257µm,5.3s
YSS pmax pmax
comp=N,85µm,6.0s
YSS pmax pmax
comp=E,42µm,7.3s
YSS pmax pmax
comp=Z,5µm,0.9s
YSS smax smax
comp=N,189µm,8.8s
YSS smax smax
comp=E,289µm,7.6s
XMI Christmas Isla 73.87 264 P P 00 30 15.2 -1.4
XMI Christmas Isla 73.87 264 ⇓P P 00 30 15.6 -0.9
XMIS Christmas Isla 73.90 264 P P 00 30 15.5 -1.2
XMIS Christmas Isla 73.90 264 P P 00 30 14.9 -1.7
XMIS IAmb IAmb 00 30 32.7
comp=Z,15µm,1.3s
I44RU PETROPAVLOVSK 73.96 345 P P 00 30 16.0 -0.1
baz=101,slow=7.0,SNR=3.9
PEA0B Petropavlovsk- 73.97 345 P P 00 30 14.6 -1.5
PEA0B IAmb IAmb 00 30 25.4
comp=Z,16µm,1.3s
PEA0B Petropavlovsk- 73.97 345 *ce*P P 00 30 14.7 -1.5
PETK Petropavlovsk- 73.97 345 P P 00 30 14.2 -2.0
PETK Petropavlovsk- 73.97 345 P P 00 30 14.6 -1.6
comp=Z,2µm,0.8s,baz=99,slow=9.2,SNR=296
PETK S S 00 39 03.0 +0.8
comp=Z,93nm,1.0s,baz=164,slow=2.5,SNR=2.1
PETK PKPPKP 00 57 40.9
comp=Z,17nm,0.9s,baz=86,slow=4.6,SNR=6.0
comp=Z,2µm,0.8s
CNBA Chernabura Isl 74.33 11 P P 00 30 17.6 -0.5

CNBA IAmb IAmb 00 30 33.4
comp=Z,7μm,1.2s
**CHNA Chernabura Isl 74.34 11 P P 00 30 17.5 -0.6**
baz=198,SNR=66
CHNA S **S 00 39 10.4 +4.3**
baz=198
**SDPT Sand Point 74.68 10 P P 00 30 18.4 -1.7**
**SDPT Sand Point 74.68 10 P P 00 30 19.0 -1.0**
SDPT IAmb IAmb 00 30 35.1
comp=Z,6μm,0.8s
**SDPT Sand Point 74.68 10 P P 00 30 19.3 -0.7**
baz=197,SNR=80
SDPT S **S 00 39 13.7 +3.9**
baz=197
**S12K Black Hills 74.76 9 P P 00 30 19.7 -0.9**
baz=196,SNR=167
S12K S **S 00 39 14.1 +3.4**
baz=196
**P08K Saint George I 74.77 5 P P 00 30 19.8 -0.7**
baz=188,SNR=41
P08K S **S 00 39 16.3 +5.6**
baz=188
P08K S **S 00 39 16.3 +5.6**
baz=188
**TJN Taejon 74.80 317 P P 00 30 20.3 -0.9**
**TJN Taejon 74.80 317 P P 00 30 20.6 -0.6**
TJN IAmb IAmb 00 30 38.1
comp=Z,13μm,1.1s
**TJN Taejon 74.80 317** *de*P **P 00 30 19.4 -1.8**
**QZH Quanzhou 75.08 303** ⇓ *i*P **P 00 30 21.8 -1.2**
QZH PP **PP 00 33 21.8 -0.3**
QZH S **S 00 39 17.4 +2.0**
QZH SKS **SKSac 00 39 32.4 -5.3**
QZH sS **sS 00 42 45.8 -2.6**
QZH pmax pmax
comp=Z,1μm,1.1s
QZH pmax pmax
comp=Z,330μm,7.3s
**KSRS Korea Array 75.08 318 P P 00 30 22.2 -0.6**
comp=Z,328nm,1.0s,baz=134,slow=6.0,SNR=246
KSRS PKKPbc **PKKPbc 00 49 37.0 -4.1**
comp=Z,15nm,0.8s,baz=305,slow=4.2,SNR=4.6
KSRS PKPPKP **P'P'df 00 57 39.4 -1.3**
comp=Z,14nm,1.0s,baz=302,slow=2.5,SNR=4.7
comp=Z,328nm,1.0s
**KSAR Wonju Array Be 75.10 318 P P 00 30 21.9 -1.0**
**KSAR Wonju Array Be 75.10 318 P P 00 30 21.9 -1.0**
**KS19 Wonju Array Si 75.15 318 P P 00 30 22.3 -0.9**
KS19 IAmb IAmb 00 30 33.4
comp=Z,7μm,1.4s
**TEY Ternei 75.17 329** ⇓ *e*P **P 00 30 23.2 +0.2**
TEY *e* 00 33 20.6
TEY *e* 00 39 18.5
TEY pmax pmax
comp=N,80nm,1.0s
TEY pmax pmax
comp=E,80nm,1.0s
TEY pmax pmax
comp=Z,290nm,1.0s
TEY pmax pmax
comp=N,2μm,9.0s
TEY pmax pmax
comp=E,2μm,9.2s
TEY MLR MLR
comp=N,3μm,15.0s
**SPIA Saint Paul Isl 75.28 4 P P 00 30 23.3 0.0**
**SPIA Saint Paul Isl 75.28 4 P P 00 30 23.4 0.0**
baz=188,SNR=75
SPIA S **S 00 39 21.9 +5.7**
baz=188
**H06S1 SOCORRO T 75.39 64 P P 00 30 26.3 +1.4**
SNR=444
H06S1 S **S 00 39 20.8 +1.9**
**H06E1 SOCORRO T-PHAS 75.44 64 P P 00 30 25.4 +0.3**
H06E1 S **S 00 39 21.7 +2.2**
**UGL Uglegorsk 75.70 334** *e*P **P 00 30 25.6 -0.3**
UGL *e* 00 32 27.6
UGL *e* 00 33 24.0
UGL *e*S **S 00 39 28.4 +7.4**
UGL pmax pmax
comp=Z,2μm,0.9s
UGL pmax pmax
comp=E,86μm,4.7s
UGL pmax pmax
comp=N,82μm,6.1s
UGL pmax pmax
comp=Z,234μm,5.6s
**S14K Fog Glacier 75.73 11 P P 00 30 25.8 -0.2**
baz=198,SNR=79
S14K S **S 00 39 26.5 +5.1**
baz=198
**INCN Inchon 75.92 318 P P 00 30 28.0 +0.5**
**INCN Inchon 75.92 318 P P 00 30 26.5 -1.0**
**INCN Inchon 75.92 318** ⇓ P **P 00 30 27.2 -0.3**
**INCN Inchon 75.92 318 P P 00 30 26.5 -1.0**
INCN pmax pmax
comp=Z,4μm,0.9s
**CHGN Chignik 75.95 11 P P 00 30 25.9 -1.2**
CHGN IAmb IAmb 00 30 44.9
comp=Z,5μm,0.7s
**CHGN Chignik 75.95 11 P P 00 30 26.6 -0.5**
baz=199,SNR=87
CHGN S **S 00 39 27.7 +4.3**
baz=199
**SSE Sheshan 76.14 310 P P 00 30 28.3 -0.4**
SSE PcP **PcP 00 30 38.3 +0.5**
SSE PP **PP 00 33 29.9 -0.8**
SSE pmax pmax
comp=Z,2μm,1.0s
SSE pmax pmax
comp=Z,4μm,12.2s
**MCCM Marconi Confer 76.22 42 P P 00 30 28.4 -0.5**
**MCCM Marconi Confer 76.22 42** ⇑ P **P 00 30 28.0 -1.0**
**SAO San Andreas Ge 76.33 44** ⇓ P **P 00 30 29.8 +0.1**
**MSHR Mys Shultsa 76.37 324** *de*P **P 00 30 29.5 -0.2**
MSHR pmax pmax
comp=Z,5μm,0.8s
**PMPB Monarch Peak 76.44 44 P P 00 30 30.3 -0.1**
PMPB IAmb IAmb 00 30 45.4
comp=Z,5μm,0.9s
**HOPS Hopland Field 76.60 41 P P 00 30 31.5 +0.4**
**PSTR Posyet 76.61 324** *i*P **P 00 30 30.9 -0.2**
**GDXM Geysers 76.66 41 P P 00 30 31.9 +0.3**
**BCW Bitter Crk WRg 76.67 46 P P 00 30 31.8 0.0**
BCW IAmb IAmb 00 30 47.3
comp=Z,8μm,1.1s
**HJU Haeju 76.84 318 P P 00 30 33.6 +1.2**
HJU S **S 00 39 29.7 -3.9**
**TYV Tymovskoe 76.86 336** *e*P **P 00 30 33.9 +1.7**
TYV *e*S **S 00 39 36.3 +3.0**
TYV pmax pmax
comp=Z,4μm,0.9s
TYV pmax pmax
comp=Z,128μm,5.4s
TYV smax smax
comp=N,113μm,9.1s
TYV smax smax
comp=E,182μm,9.1s
TYV smax smax
comp=N,1μm,3.1s
TYV smax smax
comp=E,657nm,3.1s
**PMBI Palembang 76.92 271 P P 00 30 32.5 -1.0**
PMBI IAmb IAmb 00 30 49.8
comp=Z,17μm,1.1s
**PMBI Palembang 76.92 271** ⇓ P **P 00 30 32.7 -0.8**
**USA0B Ussuriysk Arra 76.98 326 P P 00 30 31.9 -1.1**
USA0B IAmb IAmb 00 30 43.7
comp=Z,17μm,1.8s
**USA0B Ussuriysk Arra 76.98 326** *i*P **P 00 30 33.4 +0.4**
**USRK Ussuriysk Ar. 76.98 326 P P 00 30 31.8 -1.2**
**USRK Ussuriysk Ar. 76.98 326 P P 00 30 32.3 -0.8**
comp=Z,247nm,0.8s,baz=119,slow=5.2,SNR=219
USRK PKKPbc **PKKPbc 00 49 44.4 +7.0**
comp=Z,19nm,0.8s,baz=307,slow=3.8,SNR=5.0
USRK PKPPKP **P'P'df 00 57 34.1 -2.7**
comp=Z,7.8nm,0.9s,baz=256,slow=2.6,SNR=4.1
comp=Z,247nm,0.8s
**CCX Cicese 76.98 50 P P 00 30 33.3 -0.1**
**I45RU USSURIYSK INFR 76.99 326 P P 00 30 35.0 +1.9**
baz=89,slow=7.9,SNR=3.3
**SII Sitkinak Islan 77.04 13 P P 00 30 32.4 -0.7**
**SII Sitkinak Islan 77.04 13 P P 00 30 32.0 -1.1**
SII IAmb IAmb 00 30 49.2
comp=Z,11μm,0.9s
**SII Sitkinak Islan 77.04 13 P P 00 30 33.2 0.0**
baz=203,SNR=81
SII S **S 00 39 41.2 +6.2**
baz=203
**109C Camp Elliot, M 77.19 49 P P 00 30 34.1 -0.4**
**109C Camp Elliot, M 77.19 49 P P 00 30 33.7 -0.7**
baz=238,SNR=39
109C S **SKSac 00 39 49.9 -2.7**
baz=238
**R16K Pilot Point 77.30 11 P P 00 30 34.2 -0.2**
baz=200,SNR=45
R16K S **S 00 39 44.0 +6.4**
baz=200
R16K S **S 00 39 44.0 +6.4**
baz=200
**PYAG Pyongyang 77.40 318 P P 00 30 35.9 +0.5**
PYAG pP **pwP 00 32 40.7 +2.5**
PYAG S **S 00 39 36.4 -3.2**
**HKC Hong Kong Obse 77.50 299** ⇑ P **P 00 30 36.0 -0.3**
**HKPS Hong Kong Po S 77.52 299 P P 00 30 35.4 -1.1**
**HKPS Hong Kong Po S 77.52 299 P P 00 30 35.1 -1.4**
HKPS IAmb IAmb 00 30 52.3
comp=Z,15μm,1.1s
**R17L Mt. Peulik Vol 77.59 12 P P 00 30 35.4 -0.7**
baz=201,SNR=180
R17L S **S 00 39 44.9 +4.1**
baz=201
**PLK4 Peulik 4 77.59 12 P P 00 30 35.5 -0.6**
PLK4 IAmb IAmb 00 30 52.4
comp=Z,10μm,0.8s
**MONP2 Monument Peak 77.68 49 P P 00 30 35.9 -1.5**
baz=239,SNR=326
MONP2 S **SKSac 00 39 53.2 -3.4**
baz=239
**CCAC Calif City Air 77.75 47 P P 00 30 37.1 -0.4**
**OHAK Old Harbor 77.85 13 P P 00 30 36.6 -0.8**
**OHAK Old Harbor 77.85 13 P P 00 30 36.4 -1.0**
**OHAK Old Harbor 77.85 13 P P 00 30 36.8 -0.6**
baz=204,SNR=107
OHAK S **SKSac 00 39 50.5 -5.6**
baz=204
**AFDM Forest Hills D 77.90 42 P P 00 30 37.5 -0.6**
**R18K Karluk 77.92 13 P P 00 30 37.0 -0.7**
baz=203
R18K S **S 00 39 49.4 +5.3**
baz=203
R18K S **S 00 39 49.4 +5.3**
baz=203
**MCO Taipa Grande 77.94 298 P P 00 30 39.0 +0.3**
**PFO Pinyon Flats O 78.03 49 P P 00 30 38.8 -0.3**
**PFO Pinyon Flats O 78.03 49 P P 00 30 39.0 -0.1**
baz=239,SNR=81
PFO S **SKSac 00 39 58.6 -0.2**
baz=239
**PFO Pinyon Flats O 78.03 49** *i*P **P 00 30 39.7 +0.6**
PFO pmax pmax
comp=Z,3μm,0.8s
**TPFO Pinon Flats 78.03 49 P P 00 30 40.4 +1.2**
baz=239,SNR=91
TPFO S **SKSac 00 39 57.9 -0.9**
baz=239
**SRIG Santa Rosalia 78.13 56 P P 00 30 39.4 -0.2**
**L02F Cave Junction 78.19 38 P P 00 30 39.3 -0.3**
**MNAI Manna 78.21 269 P P 00 30 38.7 -1.7**
**MNAI Manna 78.21 269 P P 00 30 39.0 -1.4**
**MNAI Manna 78.21 269** ⇓ P **P 00 30 38.3 -2.1**
**Q17K Contact Creek 78.27 12 P P 00 30 38.7 -1.1**
baz=202,SNR=88
Q17K S **S 00 39 52.7 +4.6**
baz=202
**O14K Tigyukauivet M 78.30 9 P P 00 30 38.7 -1.1**
baz=196,SNR=94
O14K S **SKSac 00 39 55.7 -3.5**
baz=196
**ACHA Angle Creek He 78.33 12 P P 00 30 39.3 -0.8**
**NJ2 Nanjing 78.34 309** ⇓ *i*P **P 00 30 39.8 -0.8**
NJ2 PcP **PcP 00 30 46.4 -1.0**
NJ2 pP **pP 00 32 40.4 -1.7**
NJ2 sP **sP 00 33 38.3 -2.8**
NJ2 PP **PP 00 33 45.1 -3.7**
NJ2 ScS **ScS 00 40 09.3 +0.8**
NJ2 pmax pmax
comp=Z,6μm,1.1s
NJ2 pmax pmax
comp=Z,150μm,5.7s
**SLBS Sierra La Lagu 78.36 60 P P 00 30 40.9 -0.2**
SLBS IAmb IAmb 00 30 56.6
comp=Z,7μm,1.1s
**SLBS Sierra La Lagu 78.36 60** ⇑ P **P 00 30 41.4 +0.4**
**GUVIX Guadalupe Vict 78.36 50 P P 00 30 40.9 +0.2**
GUVIX IAmb IAmb 00 30 56.8
comp=Z,13μm,1.2s
**O15K Ungalikthiuk R 78.45 9 P P 00 30 39.7 -0.9**
baz=198,SNR=80
O15K S **SKSac 00 39 55.8 -4.5**
baz=198
**K02D Willamette Mer 78.49 38 P P 00 30 41.2 -0.1**
**Q16K King Salmon 78.51 11 P P 00 30 39.9 -1.0**
baz=201,SNR=80
Q16K S **SKSac 00 39 56.8 -3.8**
baz=201
**KDAK Kodiak Island 78.52 14 P P 00 30 40.7 -0.3**
KDAK IAmb IAmb 00 30 59.1
comp=Z,40μm,2.0s
**KDAK Kodiak Island 78.52 14 P P 00 30 40.1 -0.9**
baz=205
KDAK S **SKSac 00 39 56.1 -4.6**
baz=205
**KDAK Kodiak Island 78.52 14** *i*P **P 00 30 40.9 -0.1**
KDAK pmax pmax
comp=Z,8μm,1.1s
**MDJ Mudanjiang 78.55 325 P P 00 30 41.3 -0.2**
MDJ sP sP 00 33 43.5 +1.7
MDJ pmax pmax
comp=Z,3μm,1.0s
MDJ pmax pmax
comp=Z,292μm,6.0s
**MDJ Mudanjiang 78.55 325 P P 00 30 40.8 -0.7**
MDJ IAmb IAmb 00 30 57.1
comp=Z,19μm,1.0s
**P16K Nushagak River 78.61 10 P P 00 30 40.5 -0.9**
baz=200,SNR=94
P16K S **SKSac 00 39 58.7 -2.6**
baz=200
P16K S **SKSac 00 39 58.7 -2.6**
baz=200
**Q18K Katmai Hardscr 78.80 12 P P 00 30 41.5 -1.1**
baz=202,SNR=245
Q18K S **SKSac 00 39 59.0 -4.0**
baz=202
**M11K Mekoryuk 78.81 6 P P 00 30 42.8 +0.4**
baz=192,SNR=200
M11K S **SKSac 00 40 03.3 +0.7**
baz=192
**SUJ Sinuiju 78.81 319 P P 00 30 42.6 -0.3**
SUJ S **S 00 39 51.2 -2.9**
**HUMO Hull Mountain 78.85 38 P P 00 30 43.1 0.0**
**HUMO Hull Mountain 78.85 38** ⇓ P **P 00 30 43.3 +0.1**
**N14K Kuskokwak Cree 78.89 8 P P 00 30 43.2 +0.3**
baz=196,SNR=285
N14K S **SKSac 00 40 00.2 -3.0**
baz=196
**P17K Kvichak River 79.04 11 P P 00 30 42.8 -0.9**
baz=201,SNR=185
P17K S **S 00 39 59.6 +3.9**
baz=201
P17K S **S 00 39 59.6 +3.9**
baz=201
**O16K Kokwok River B 79.12 10 P P 00 30 42.5 -1.6**
**O16K Kokwok River B 79.12 10 P P 00 30 43.5 -0.7**
baz=199,SNR=271
O16K S **SKSac 00 40 02.8 -2.1**
baz=199
**M13K Dall Lake 79.15 7 P P 00 30 44.1 -0.1**
**M13K Dall Lake 79.15 7 P P 00 30 45.0 +0.7**
baz=194,SNR=109
M13K S **SKSac 00 40 05.0 +0.1**
baz=194
**PIX Pinacate 79.19 52 P P 00 30 44.9 -0.3**
**BTDF Bukit Timah Da 79.20 275 P P 00 30 45.3 -0.4**
**MYKOM Kota Tinggi 79.26 275 P P 00 30 44.3 -1.7**
MYKOM IAmb IAmb 00 31 02.2
comp=Z,33μm,1.8s
**MYKOM Kota Tinggi 79.26 275** ⇓ P **P 00 30 44.9 -1.1**
**Q20K Shuyak Island 79.31 13 P P 00 30 45.4 +0.2**
baz=205,SNR=89
Q20K S **SKSac 00 40 04.5 -1.7**
baz=205
**NVAR Mina Array Bea 79.33 44 P P 00 30 45.7 -0.3**
**NVAR Mina Array Bea 79.33 44 P P 00 30 45.9 -0.2**
comp=Z,318nm,0.7s,baz=224,slow=8.3,SNR=286
NVAR pP **pP 00 32 47.4 +0.2**
comp=Z,469nm,1.0s,baz=224,slow=6.3,SNR=3.1
NVAR S **S 00 40 03.7 +3.5**
comp=Z,5.8nm,0.7s,baz=236,slow=8.9,SNR=1.6
NVAR PKKPbc PKKPbc 00 49 40.0 +8.0
comp=Z,37nm,0.6s,baz=50,slow=5.5,SNR=9.0
NVAR PKPPKP **P'P'df 00 57 34.2 +0.7**
comp=Z,28nm,0.8s,baz=59,slow=0.6,SNR=5.8
comp=Z,318nm,0.7s
**Q19K Cape Douglas, 79.34 13 P P 00 30 44.3 -1.0**
Q19K IAmb IAmb 00 31 07.6
comp=Z,9μm,0.9s
**Q19K Cape Douglas, 79.34 13 P P 00 30 44.4 -1.0**
baz=204,SNR=111
Q19K S **SKSac 00 40 04.6 -1.9**
baz=204
Q19K S **SKSac 00 40 04.6 -1.9**
baz=204
**N15K Kwethluk River 79.36 9 P P 00 30 44.7 -0.7**
baz=197,SNR=132
N15K S **SKSac 00 40 06.1 -0.4**
baz=197
**GRNR Gornyy 79.38 333** ⇓ *i*P **P 00 30 46.1 +0.3**
GRNR *e*S **S 00 39 58.1 -1.6**
GRNR pmax pmax
comp=N,410nm,1.0s
GRNR pmax pmax
comp=E,360nm,1.0s
GRNR pmax pmax
comp=Z,2μm,1.0s
GRNR smax smax
comp=N,30nm,0.8s
**NKL Nikolayevsk 79.41 336** *e*P **P 00 30 47.1 +1.3**
NKL *e* 00 33 44.7
NKL *e*S **S 00 40 08.6 +8.9**
NKL pmax pmax
comp=N,2μm,0.8s
NKL pmax pmax
comp=Z,17μm,1.5s
NKL pmax pmax
comp=E,4μm,1.4s
NKL smax smax
comp=E,43μm,6.1s
NKL smax smax
comp=N,22μm,2.8s
**NV11 Mina Array Sit 79.43 44 P P 00 30 46.0 -0.5**
**P18K Big Mountain, 79.45 12 P P 00 30 44.8 -1.2**
baz=202,SNR=179
P18K S **SKSac 00 40 05.2 -2.0**
baz=202
**O17K Koliganek Bris 79.47 11 P P 00 30 45.0 -0.9**
baz=200
O17K S **SKSac 00 40 05.3 -1.9**
baz=200
**113A Mohawk Valley, 79.55 51 P P 00 30 47.0 -0.1**
**M14K Bethel 79.65 8 P P 00 30 46.3 -0.5**
baz=196,SNR=236
M14K S **SKSac 00 40 08.4 0.0**
baz=196
**M15K Kasigluk River 79.77 9 P P 00 30 47.4 -0.2**
baz=197,SNR=764
M15K S **SKSac 00 40 11.1 +1.8**
baz=197
**N16K Nishlik Lake 79.85 10 P P 00 30 48.2 +0.2**
baz=199,SNR=222
N16K S **S 00 40 12.9 +8.8**
baz=199
**QIZ Qiongzhong 79.85 294 P P 00 30 48.1 -0.8**
QIZ pP **pP 00 32 47.6 -3.1**
QIZ sP **sP 00 33 46.4 -2.9**
QIZ S **S 00 40 07.3 +1.5**
QIZ sS **sS 00 43 39.6 -2.7**
QIZ pmax pmax
comp=N,4μm,1.4s
QIZ pmax pmax
comp=N,237μm,12.0s
**QIZ Qiongzhong 79.85 294 P P 00 30 47.9 -1.1**
QIZ IAmb IAmb 00 31 05.2
comp=Z,14μm,1.7s
**TPH Tonopah 79.85 44 P P 00 30 48.0 -0.8**
**COR Corvallis 79.86 36 P P 00 30 48.0 -0.4**
**COR Corvallis 79.86 36** ⇑ P **P 00 30 48.7 +0.4**
**COR Corvallis 79.86 36 P P 00 30 48.0 -0.4**
COR pmax pmax
comp=Z,3μm,0.9s
**214A Organ Pipe Nat 79.87 52 P P 00 30 48.7 -0.1**
baz=241,SNR=77
214A S S 00 40 18.0 +12
baz=241
**O18K Koktuh Hills 79.89 11 P P 00 30 47.9 -0.3**
baz=202,SNR=383
O18K S **SKSac 00 40 11.6 +1.5**
baz=202
O18K S **SKSac 00 40 11.6 +1.5**
baz=202
**TPNV Topopah Spring 79.91 46 P P 00 30 48.9 -0.2**
baz=238,SNR=377
TPNV S S 00 40 16.9 +11
baz=238
**DL2 Dalian 79.98 316 P P 00 30 48.1 -1.0**
DL2 pP **pP 00 32 49.3 -1.8**
DL2 sP **sP 00 33 43.8 -5.6**
DL2 pmax pmax
comp=Z,800nm,1.2s
**P19K Oil Pt 80.09 12 P P 00 30 48.5 -0.8**
**P19K Oil Pt 80.09 12 P P 00 30 48.3 -0.9**
baz=204,SNR=82
P19K S **SKSac 00 40 12.7 +1.1**
baz=204
**L14K Kuka Creek 80.13 7 P P 00 30 48.6 -0.8**
baz=195,SNR=545
L14K S **S 00 40 15.0 +8.2**
baz=195
**N17K Nushagak Hills 80.16 10 P P 00 30 48.9 -0.6**
baz=200,SNR=252
N17K S **SKSac 00 40 13.1 +1.2**
baz=200
**M16K Timber Creek 80.34 9 P P 00 30 50.1 -0.5**
M16K IAmb IAmb 00 31 07.9
comp=Z,16μm,1.1s
**M16K Timber Creek 80.34 9 P P 00 30 50.0 -0.5**
baz=198,SNR=1000
M16K S S 00 40 18.9 +10
baz=198
**SNY Shenyang 80.37 320** ⇓ P **P 00 30 49.9 -1.2**
SNY pP **pP 00 32 47.5 -5.4**
SNY S **SKSac 00 40 12.1 -2.0**
SNY pmax pmax
comp=Z,1μm,1.6s
SNY pmax pmax
comp=Z,228μm,12.0s
**O19K Port Alsworth 80.37 12 P P 00 30 49.5 -1.2**
baz=203
O19K S **S 00 40 15.5 +6.3**
baz=203
O19K S **S 00 40 15.5 +6.3**
baz=203
**CN2 Changchun 80.39 322 P P 00 30 50.3 -0.9**
CN2 pP pwP 00 32 54.4 -1.1
CN2 S **SKSac 00 40 12.3 -2.0**
CN2 pmax pmax
comp=Z,2μm,1.0s
CN2 pmax pmax
comp=Z,192μm,8.0s
**HOM Homer 80.43 13 P P 00 30 50.4 -0.6**
HOM IAmb IAmb 00 31 07.3
comp=Z,23μm,1.4s
**HOM Homer 80.43 13 P P 00 30 49.7 -1.3**
baz=205,SNR=64
HOM S **S 00 40 17.2 +7.3**
baz=205
**BNX BinXian 80.46 325** ⇓ P **P 00 30 50.3 -1.2**
BNX pP **pP 00 32 53.4 -0.4**
BNX sP **sP 00 33 50.8 -1.0**
BNX PP **PP 00 34 05.8 -0.1**
BNX S **S 00 40 11.5 +0.6**
BNX pmax pmax
comp=Z,2μm,0.9s
BNX pmax pmax
comp=Z,199μm,7.6s
**KLR Kulʹdur 80.46 329 P P 00 30 50.4 -1.1**

comp=Z,423nm,1.0s,baz=111,slow=4.1,SNR=206
comp=Z,423nm,1.0s
**KLR Kul'dur 80.46 329** *ce*P P 00 30 49.4 -2.0
KLR pmax pmax
comp=Z,4µm,1.0s
**K13K Kusilvak Mount 80.48 6** P P 00 30 51.2 0.0
baz=193
K13K S S 00 40 19.6 +9.2
baz=193
**N18K Kilae Creek 80.53 11** P P 00 30 51.0 -0.6
baz=201,SNR=175
N18K S S 00 40 17.1 +6.1
baz=201
N18K S S 00 40 17.1 +6.1
baz=201
**H04A Detroit Lake 80.55 37** P P 00 30 51.3 -0.8
H04A IAmb IAmb 00 31 10.0
comp=Z,16µm,1.5s
**O20K Slope Mountain 80.61 13** P P 00 30 51.2 -0.8
baz=204,SNR=212
O20K S S 00 40 18.1 +6.2
baz=204
O20K S S 00 40 18.1 +6.2
baz=204
**L15K Ungalak Mounta 80.61 8** P P 00 30 51.5 -0.4
baz=196,SNR=409
L15K S S 00 40 20.3 +8.6
baz=196
**BRLK Bradley Lake 80.69 14** P P 00 30 51.0 -1.5
BRLK IAmb IAmb 00 31 08.4
comp=Z,6µm,1.0s
**BRSE Bradley Lake S 80.70 14** P P 00 30 52.1 -0.4
baz=206,SNR=201
BRSE S SKSac 00 40 17.9 +2.3
baz=206
**PINE Pine Mountain 80.74 38** P P 00 30 52.8 -0.5
PINE IAmb IAmb 00 31 09.2
comp=Z,10µm,1.0s
**SMAI San Martin Ant 80.84 159** P P 00 30 53.0 -0.1
SMAI IAmb IAmb 00 31 05.0
comp=Z,7µm,0.9s
**N19K Bonanza Creek 80.91 11** P P 00 30 52.6 -1.0
baz=203,SNR=352
N19K S S 00 40 20.4 +5.4
baz=203
N19K S S 00 40 20.4 +5.4
baz=203
**L16K Owhat River 80.92 9** P P 00 30 53.0 -0.5
baz=198,SNR=607
L16K S S 00 40 24.0 +9.1
baz=198
**M17K Holitna River 80.94 10** P P 00 30 53.3 -0.3
baz=200,SNR=618
M17K S S 00 40 23.4 +8.3
baz=200
**PRN Pahroc Range 80.97 46** ⇑P P 00 30 53.5 -1.0
**WHN Wuhan 81.01 306** P P 00 30 53.9 -0.8
WHN pP pP 00 33 00.8 +3.5
WHN sP sP 00 33 57.0 +1.0
WHN pmax pmax
comp=Z,8µm,2.0s
WHN pmax pmax
comp=Z,349µm,4.4s
**HG4B Hotspring 81.05 27** P P 00 30 53.5 -0.8
**CNSH ChangSha 81.06 303** P P 00 30 53.3 -1.7
CNSH pmax pmax
comp=Z,870nm,1.0s
**R11B Troy Canyon, C 81.09 45** P P 00 30 54.1 -1.1
**R11B Troy Canyon, C 81.09 45** P P 00 30 54.4 -0.8
baz=239,SNR=354
R11B S S 00 40 27.2 +9.2
baz=239
**BMN Battle Mountai 81.12 42** P P 00 30 54.5 -0.8
BMN IAmb IAmb 00 31 10.4
comp=Z,8µm,1.0s
**BMN Battle Mountai 81.12 42** P P 00 30 54.5 -0.8
BMN pmax pmax
comp=Z,8µm,1.0s
**DIB Dawson Inlet, 81.16 26** P P 00 30 53.9 -1.0
**H02S1 DAWSON INLET T 81.16 26** P P 00 30 55.6 +0.7
SNR=9571
H02S1 S SKSac 00 40 19.1 +0.3
H02S1 PKKPbc PKKPbc 00 49 28.4 0.0
H02S1 PKPPKP P'P'df 00 57 29.7 +1.0
SNR=36
**K15K Wolf Creek Mou 81.20 8** P P 00 30 54.7 -0.2
baz=196,SNR=1000
K15K S S 00 40 26.1 +8.4
baz=196
**HOOD Mount Hood Mea 81.23 36** P P 00 30 54.9 -0.8
HOOD IAmb IAmb 00 31 10.9
comp=Z,6µm,0.8s
**HOLB Holberg 81.28 30** P P 00 30 55.0 -0.6
**NLWA Neilton Lookou 81.29 34** P P 00 30 55.1 -0.7
**NLWA Neilton Lookou 81.29 34** ⇓P P 00 30 55.4 -0.3
**M18K Stony River 81.30 11** P P 00 30 54.9 -0.6
baz=201,SNR=201
M18K S S 00 40 24.5 +5.8
baz=201
**SEW Seward 81.32 14** P P 00 30 54.9 -0.7
baz=208,SNR=107
SEW S S 00 40 25.3 +6.4
baz=208
**WVOR Wild Horse Val 81.34 40** P P 00 30 55.8 -0.5
WVOR IAmb IAmb 00 31 12.0
comp=Z,8µm,1.0s
**WVOR Wild Horse Val 81.34 40** ⇓P P 00 30 56.1 -0.2
**WVOR Wild Horse Val 81.34 40** P P 00 30 55.8 -0.5
WVOR pmax pmax
comp=Z,8µm,1.0s
**J14K Nanvaranak Lak 81.40 7** P P 00 30 55.8 -0.1
baz=194,SNR=177
J14K S S 00 40 27.1 +7.6
baz=194
**OZB Mount Ozzard 81.45 32** P P 00 30 55.8 -0.8
**BKNI Bangkinang 81.47 273** P P 00 30 56.6 -0.8
**BKNI Bangkinang 81.47 273** P P 00 30 55.5 -2.0
**BKNI Bangkinang 81.47 273** P P 00 30 55.7 -1.7
**BKNI Bangkinang 81.47 273** ⇓P P 00 30 55.3 -2.1
**MA2 Magadan 81.48 345** P P 00 30 55.5 -0.9
**MA2 Magadan 81.48 345** P P 00 30 54.5 -2.0
MA2 IAmb IAmb 00 31 10.0
comp=Z,7µm,1.2s
**MA2 Magadan 81.48 345** ⇓P P 00 30 54.3 -2.2
**MA2 Magadan 81.48 345** P P 00 30 55.2 -1.2
comp=Z,941nm,0.8s,baz=142,slow=5.8,SNR=185
MA2 pP pP 00 32 56.8 -1.8
comp=Z,176nm,0.8s,baz=150,slow=11,SNR=0.9
MA2 S SKSac 00 40 20.8 0.0
comp=Z,116nm,1.2s,baz=33,slow=11,SNR=1.9
comp=Z,941nm,0.8s
**MA2 Magadan 81.48 345** *ce*P P 00 30 55.0 -1.4
MA2 pmax pmax
comp=Z,5µm,1.1s
**MA2 Magadan 81.48 345** P P 00 30 55.1 -1.4
comp=Z,4µm,1.5s,comp=Z,164µm
**Q23K Middleton Isla 81.49 16** P P 00 30 56.0 -0.4
baz=210,SNR=36
Q23K S S 00 40 27.5 +6.9
baz=210
Q23K S S 00 40 27.5 +6.9
baz=210
**MID Middleton Isla 81.49 16** P P 00 30 56.2 -0.2
**L17K Donlin 81.50 9** P P 00 30 56.1 -0.3
baz=199,SNR=532
L17K S S 00 40 30.4 +10
baz=199
**CAPN Captain Cook N 81.54 13** P P 00 30 57.2 +0.6
CAPN IAmb IAmb 00 31 19.6
comp=Z,11µm,0.9s
**CAPN Captain Cook N 81.54 13** P P 00 30 56.9 +0.2
baz=206,SNR=14
CAPN S S 00 40 31.3 +10
baz=206
**TUC Tucson 81.55 52** P P 00 30 57.5 -0.1
TUC IAmb IAmb 00 31 13.7
comp=Z,6µm,1.0s
**TUC Tucson 81.55 52** ⇑P P 00 30 58.2 +0.7
**TUC Tucson 81.55 52** P P 00 30 58.2 +0.7
baz=242
TUC S S 00 40 35.0 +12
baz=242
**TUC Tucson 81.55 52** P P 00 30 57.5 -0.1
TUC pmax pmax
comp=Z,6µm,1.0s
**O22K Cooper Landing 81.60 14** P P 00 30 55.8 -1.2
baz=207,SNR=78
O22K S S 00 40 28.1 +6.4
baz=207
**TIA Tai'an 81.64 312** *e*P P 00 30 56.8 -1.0
TIA sP sP 00 33 57.8 -1.5
TIA S S 00 40 19.6 -3.6
TIA pmax pmax
comp=Z,1µm,1.4s
TIA pmax pmax
comp=Z,253µm,11.2s
**N20K Mount Spurr 81.71 12** P P 00 30 56.2 -1.5
baz=205,SNR=185
N20K S S 00 40 27.3 +4.3
baz=205
**P23K Montague Islan 81.72 15** P P 00 30 56.9 -0.7
baz=209,SNR=71
P23K S S 00 40 28.7 +5.8
baz=209
P23K S S 00 40 28.7 +5.8
baz=209
**COCO West Island 81.73 260** P P 00 30 57.7 -1.0
**COCO West Island 81.73 260** P P 00 30 57.7 -1.0
COCO pmax pmax
comp=Z,30µm,1.4s
**I06AU Cocos Islands 81.75 260** P P 00 31 02.0 +3.2
baz=110,slow=18,SNR=1.4
**GAMB Gambell 81.77 3** P P 00 30 57.4 -0.3
baz=186,SNR=86
GAMB S S 00 40 31.1 +7.9
baz=186
**L18K Granite Mounta 81.84 10** P P 00 30 58.2 0.0
baz=201,SNR=623
L18K S S 00 40 32.8 +8.8
baz=201
L18K S S 00 40 32.8 +8.8
baz=201
**B04A Port Angeles 81.89 34** P P 00 30 58.0 -0.8
B04A IAmb IAmb 00 31 16.4
comp=Z,6µm,1.2s
**BELA Belgrano 2 81.92 173** P P 00 30 57.4 -1.2
BELA IAmb IAmb 00 31 15.2
comp=Z,7µm,0.8s
**GULI GuiLin 81.92 300** ⇓P P 00 30 59.3 -0.2
GULI pmax pmax
comp=Z,9µm,1.1s
GULI pmax pmax
comp=Z,140µm,6.7s
**M19K Big River Lodg 81.94 11** P P 00 30 57.5 -1.2
**M19K Big River Lodg 81.94 11** P P 00 30 57.8 -1.0
baz=203
M19K S S 00 40 30.5 +5.4
baz=203
M19K S S 00 40 30.5 +5.4
baz=203
**CLRS Cowichan Lake 82.05 33** P P 00 30 58.8 -0.7
**K17K Iditarod 82.05 9** P P 00 30 58.6 -0.7
K17K IAmb IAmb 00 31 17.0
comp=Z,13µm,1.6s
**K17K Iditarod 82.05 9** P P 00 30 59.0 -0.2
baz=199,SNR=250
K17K S S 00 40 36.7 +11
baz=199
**FIS Fire Island 82.08 13** P P 00 30 59.3 -0.1
FIS IAmb IAmb 00 31 15.9
comp=Z,11µm,0.9s
**L19K White Mountain 82.11 11** P P 00 30 58.8 -0.9
baz=202,SNR=953
L19K S S 00 40 32.8 +5.9
baz=202
L19K S S 00 40 32.8 +5.9
baz=202
**RC01 Rabbit Creek A 82.14 13** P P 00 30 58.4 -1.3
RC01 IAmb IAmb 00 31 15.7
comp=Z,6µm,1.2s
**RC01 Rabbit Creek A 82.14 13** P P 00 30 58.6 -1.1
baz=207,SNR=169
RC01 S S 00 40 32.9 +5.8
baz=207
**M20K Styx River 82.16 12** P P 00 30 58.3 -1.6
baz=204
M20K S S 00 40 31.6 +4.2
baz=204
M20K S S 00 40 31.6 +4.2
baz=204
**CBB Campbell River 82.20 31** P P 00 30 59.6 -0.7
**PWL Port Wells 82.25 14** P P 00 30 59.2 -1.1
PWL IAmb IAmb 00 31 16.0
comp=Z,6µm,1.0s
**PWL Port Wells 82.25 14** P P 00 30 58.9 -1.5
baz=208,SNR=483
PWL S S 00 40 32.0 +3.8
baz=208
**SUA Susitna One 82.25 13** P P 00 30 58.7 -1.8
SUA IAmb IAmb 00 31 14.2
comp=Z,4µm,0.8s
**SUA Susitna One 82.25 13** P P 00 30 59.1 -1.3
baz=206,SNR=418
SUA S S 00 40 34.9 +6.4
baz=206
**J16K Anvik River 82.27 8** P P 00 31 00.5 +0.1
baz=197,SNR=984
J16K S S 00 40 37.8 +9.4
baz=197
**HIN Hinchinbrook I 82.29 15** P P 00 30 59.7 -0.9
HIN IAmb IAmb 00 31 16.5
comp=Z,7µm,1.1s
**PGC Sidney 82.29 33** P P 00 31 00.5 -0.2
**UBPT Khong Chiam 82.33 289** P P 00 31 00.4 -1.3
**BBB Bella Bella 82.33 28** P P 00 31 00.6 -0.3
BBB IAmb IAmb 00 31 19.0
comp=Z,32µm,2.5s
**KAIM Kayak Island 82.42 16** P P 00 31 01.4 +0.2
baz=212,SNR=98
KAIM S S 00 40 36.4 +6.4
baz=212
**SKT Skwentna 82.56 12** P P 00 31 00.2 -1.7
baz=205,SNR=368
SKT S S 00 40 35.0 +3.7
baz=205
**CRAG Craig 82.56 24** P P 00 31 01.9 0.0
**CRAG Craig 82.56 24** ⇓P P 00 31 02.3 +0.4
**CRAG Craig 82.56 24** P P 00 31 02.4 +0.4
baz=223,SNR=96
CRAG S S 00 40 40.5 +9.0
baz=223
**GLI Glacier Island 82.56 15** P P 00 31 00.8 -1.1
baz=210,SNR=755
GLI S S 00 40 37.1 +5.8
baz=210
**L20K Farewell, AK 82.56 11** P P 00 31 00.9 -1.0
baz=203,SNR=617
L20K S S 00 40 37.1 +5.8
baz=203
L20K S S 00 40 37.1 +5.8
baz=203
**ELK Elko 82.57 43** P P 00 31 01.8 -0.9
**ELK Elko 82.57 43** ⇓P P 00 31 02.2 -0.5
**ELK Elko 82.57 43** P P 00 31 01.8 -0.9
ELK pmax pmax
comp=Z,5µm,1.0s
**J17K VABM Dome 82.59 8** P P 00 31 02.2 +0.2
baz=198,SNR=832
J17K S S 00 40 40.7 +9.3
baz=198
J17K S S 00 40 40.7 +9.3
baz=198
**EYAK Cordova Ski Ar 82.61 15** P P 00 31 01.1 -1.0
**EYAK Cordova Ski Ar 82.61 15** P P 00 31 01.3 -0.8
baz=211,SNR=126
EYAK S S 00 40 38.0 +6.3
baz=211
**WUAZ Wupatki 82.61 49** ⇓P P 00 31 03.1 +0.1
**WUAZ Wupatki 82.61 49** P P 00 31 03.1 +0.1
baz=242,SNR=230
WUAZ S S 00 40 43.2 +10
baz=242
**M22K Willow 82.65 13** P P 00 31 01.3 -0.9
baz=207,SNR=473
M22K S S 00 40 36.8 +4.8
baz=207
**KNK Knik Glacier 82.71 14** P P 00 31 02.0 -0.7
baz=208,SNR=293
KNK S S 00 40 38.5 +5.7
baz=208
**PMR Palmer 82.72 13** P P 00 31 00.9 -1.7
**PMR Palmer 82.72 13** P P 00 31 01.4 -1.2
baz=208,SNR=270
PMR S S 00 40 37.9 +5.1
baz=208
**SUCK Suckling Hills 82.72 17** P P 00 31 02.3 -0.4
SUCK IAmb IAmb 00 31 20.6
comp=Z,9µm,1.3s
**IPM Ipoh 82.79 277** P P 00 31 04.3 +0.1
**IPM Ipoh 82.79 277** P P 00 31 02.6 -1.5
**I17K Unalakleet 82.84 8** P P 00 31 02.5 -0.6
baz=197,SNR=228
I17K S S 00 40 43.4 +10
baz=197
**RUBB Prince Rupert 82.89 26** P P 00 31 03.2 -0.4
**BGLC Bering Glacier 82.89 17** P P 00 31 02.6 -0.9
baz=213,SNR=29
BGLC S S 00 40 42.2 +7.7
baz=213
**GHO Glory Hole Cre 82.92 13** P P 00 31 02.1 -1.7
GHO IAmb IAmb 00 31 17.8
comp=Z,6µm,0.9s
**SIT Sitka 82.94 22** P P 00 31 04.3 +0.5
**SIT Sitka 82.94 22** P P 00 31 03.1 -0.7
baz=221,SNR=100
SIT S S 00 40 42.4 +7.3
baz=221
**ANM Nome 82.99 5** P P 00 31 03.5 -0.5
**ANM Nome 82.99 5** P P 00 31 03.4 -0.5
baz=192,SNR=29
ANM S S 00 40 44.2 +8.8
baz=192
**ANM Nome 82.99 5** P P 00 31 03.5 -0.5
ANM pmax pmax
comp=Z,4µm,1.4s
**J18K Innoko River 83.00 9** P P 00 31 03.7 -0.4
baz=200,SNR=1000
J18K S S 00 40 43.5 +7.9
baz=200
**U33K Whale Pass 83.04 23** P P 00 31 04.6 +0.3
baz=223,SNR=332
U33K S S 00 40 43.6 +7.5
baz=223
U33K S S 00 40 43.6 +7.5
baz=223
**V35K Ketchikan 83.05 25** P P 00 31 04.8 +0.4
baz=224,SNR=172
V35K S S 00 40 43.6 +7.3
baz=224
V35K S S 00 40 43.6 +7.3
baz=224
**HAWA Hanford 83.06 36** P P 00 31 04.3 -0.4
HAWA IAmb IAmb 00 31 19.7
comp=Z,7µm,1.0s
**HAWA Hanford 83.06 36** ⇓P P 00 31 04.3 -0.4
**SML Sawmill 83.09 14** P P 00 31 03.6 -1.0
baz=208,SNR=153
SML S S 00 40 43.2 +6.6
baz=208
**CUT Chulitna 83.20 13** P P 00 31 03.9 -1.1
baz=207,SNR=312
CUT S S 00 40 40.3 +2.8
baz=207
**M23K Glacier View 83.21 14** P P 00 31 03.4 -1.8
baz=209,SNR=205
M23K S S 00 40 43.8 +6.1
baz=209
**HPIG 83.23 59** P P 00 31 05.9 -0.4
**BMRM Bremner River 83.26 16** P P 00 31 04.0 -1.4
baz=212,SNR=550
BMRM S S 00 40 44.0 +5.7
baz=212
**HEH HeiHe 83.27 328** *e*P P 00 31 04.1 -1.5
HEH S S 00 40 38.6 -0.1
HEH sS sS 00 44 16.3 -1.6
HEH pmax pmax
comp=Z,224µm,8.1s
**MESA MESA 83.31 17** P P 00 31 05.3 -0.6
MESA IAmb IAmb 00 31 20.7
comp=Z,12µm,1.0s
**MESA MESA 83.31 17** P P 00 31 05.2 -0.7
baz=214,SNR=587
MESA S S 00 40 45.7 +6.5
baz=214
**S31K Pelican 83.32 21** P P 00 31 05.9 +0.3
baz=220,SNR=416
S31K S S 00 40 46.3 +7.6
baz=220
S31K S S 00 40 46.3 +7.6
baz=220
**K20K Telida 83.34 11** P P 00 31 05.1 -0.6
baz=203,SNR=919
K20K S S 00 40 44.5 +5.5
baz=203
K20K S S 00 40 44.5 +5.5
baz=203
**SCM Sheep Creek Mo 83.34 14** P P 00 31 04.6 -1.3
SCM IAmb IAmb 00 31 24.5
comp=Z,7µm,0.8s
**SCM Sheep Creek Mo 83.34 14** P P 00 31 05.2 -0.7
baz=209,SNR=605
SCM S S 00 40 44.4 +5.3
baz=209
**SCM Sheep Creek Mo 83.34 14** P P 00 31 04.6 -1.3
SCM pmax pmax
comp=Z,7µm,0.8s
**KLU Klutina 83.38 15** P P 00 31 05.1 -0.9
baz=211,SNR=287
KLU S S 00 40 45.3 +5.8
baz=211
**H16K Elim 83.38 7** P P 00 31 05.1 -0.7
baz=195,SNR=184
H16K S S 00 40 48.2 +9.0
baz=195
**KULM Kulim 83.41 278** P P 00 31 05.5 -1.7
**CRQE Cirque 83.48 16** P P 00 31 05.4 -1.2
baz=213,SNR=644
CRQE S S 00 40 46.5 +5.9
baz=213
**PMSA Palmer Station 83.48 157** P P 00 31 06.4 -0.1
**PMSA Palmer Station 83.48 157** ⇓P P 00 31 06.6 -1.0
**PMSA Palmer Station 83.48 157** *e*P P 00 31 06.7 +0.2
**BMO Blue Mountains 83.48 39** ⇓P P 00 31 06.1 -0.9
**S32K Killisnoo 83.52 22** P P 00 31 06.3 -0.3
baz=221,SNR=138
S32K S S 00 40 48.0 +7.3
baz=221
S32K S S 00 40 48.0 +7.3
baz=221
**G15K Niukluk 83.54 6** P P 00 31 06.5 -0.1
baz=194
G15K S S 00 40 48.9 +8.2
baz=194
**WRAK Wrangell Islan 83.56 24** P P 00 31 06.0 -0.9
**WRAK Wrangell Islan 83.56 24** P P 00 31 06.5 -0.4
baz=223
WRAK S S 00 40 50.3 +9.1
baz=223
**MFID Camas Ranch 83.60 40** P P 00 31 06.7 -1.0
MFID IAmb IAmb 00 31 23.2
comp=Z,6µm,1.1s
**W18A Petrified Fore 83.61 50** P P 00 31 07.9 -0.1
baz=243,SNR=64
W18A S S 00 40 49.5 +6.3
baz=243
**T33K Petersburg 83.62 23** P P 00 31 07.7 +0.6
baz=223,SNR=24
T33K S S 00 40 49.2 +7.5
baz=223
**PNL Peninsula 83.64 19** P P 00 31 05.9 -1.4
**PNL Peninsula 83.64 19** P P 00 31 06.5 -0.8
baz=217,SNR=430
PNL S S 00 40 47.3 +5.2
baz=217
**J19K Poorman 83.67 10** P P 00 31 06.2 -1.1
baz=202,SNR=343
J19K S S 00 40 49.6 +7.5
baz=202
J19K S S 00 40 49.6 +7.5
baz=202
**PINM Pinnacle 83.73 18** P P 00 31 06.6 -1.2
baz=216,SNR=274
PINM S S 00 40 48.4 +5.4
baz=216
**TNA Tin City 83.77 4** P P 00 31 07.3 -0.4
TNA IAmb IAmb 00 31 22.4
comp=Z,6µm,1.1s
**TNA Tin City 83.77 4** P P 00 31 06.9 -0.9
baz=190,SNR=68
TNA S S 00 40 50.8 +7.9

baz=190
**MAW Mawson 83.78 200 P P 00 31 07.0 -1.0**
comp=Z,124nm,0.8s,baz=138,slow=5.5,SNR=80
MAW S **SKSac 00 40 35.4 -0.3**
comp=Z,32nm,0.9s,baz=74,slow=18,SNR=1.2
MAW PKKPbc **PKKPbc 00 49 22.3 0.0**
comp=Z,51nm,1.1s,baz=322,slow=2.9,SNR=3.6
MAW PKPPKP **P'P'df 00 57 26.0 +0.2**
comp=Z,32nm,0.9s,baz=233,slow=4.2,SNR=4.2
comp=Z,124nm,0.8s
**F14K Arctic Creek 83.81 5 P P 00 31 07.9 -0.1**
baz=191
F14K S S 00 40 52.3 +9.0
baz=191
**N25K Chitina, Valde 83.81 15 P P 00 31 07.3 -0.8**
baz=212,SNR=1000
N25K S S **00 40 48.1 +4.4**
baz=212
**GRNC Granite Creek 83.83 17 P P 00 31 07.0 -1.5**
GRNC IAmb IAmb 00 31 22.8
comp=Z,4µm,0.9s
**R31K City Hall, Gus 83.83 21 P P 00 31 08.9 +0.7**
baz=220,SNR=20
R31K S S **00 40 51.0 +7.2**
baz=220
**M24K Tolsona, Glenn 83.85 14 P P 00 31 07.4 -0.9**
baz=210,SNR=429
M24K S S **00 40 49.7 +5.7**
baz=210
**GLB Gilahina Butte 83.87 16 P P 00 31 07.3 -1.1**
**DUG Dugway, Tooele 83.88 44 P P 00 31 08.4 -0.7**
**DUG Dugway, Tooele 83.88 44 ⇑P P 00 31 08.8 -0.4**
**DUG Dugway, Tooele 83.88 44 P P 00 31 08.0 -1.2**
baz=240,SNR=274
DUG S S **00 40 51.6 +6.1**
baz=240
**DUG Dugway, Tooele 83.88 44 P P 00 31 08.4 -0.7**
DUG pmax pmax
comp=Z,2µm,1.1s
**WAT6 Susitna Watana 83.90 14 P P 00 31 07.8 -0.9**
baz=209,SNR=1000
WAT6 S S **00 40 49.3 +4.5**
baz=209
**HNS HongShan 83.91 312 ⇓P P 00 31 08.4 -0.7**
HNS pP **pP 00 33 16.5 +3.8**
HNS PP **PP 00 34 38.8 +4.9**
HNS S S **00 40 42.3 -3.2**
HNS pmax pmax
comp=Z,6µm,1.1s
**121A Cookes Peak, D 83.92 53 P P 00 31 09.7 +0.2**
baz=244,SNR=560
121A S S **00 40 52.4 +6.1**
baz=244
**WAT1 Susitna Watana 83.94 13 P P 00 31 07.8 -0.9**
baz=208
WAT1 S S **00 40 51.6 +6.7**
baz=208
**H17K Granite Mounta 83.95 8 P P 00 31 07.5 -1.1**
baz=197,SNR=328
H17K S S **00 40 50.9 +6.2**
baz=197
**MCARA McCarthy VSAT 84.02 16 P P 00 31 07.9 -1.2**
MCARA IAmb IAmb 00 31 32.0
comp=Z,6µm,1.0s
**MCARA McCarthy VSAT 84.02 16 P P 00 31 08.3 -0.8**
baz=213,SNR=302
MCARA S S **00 40 49.2 +3.5**
baz=213
**SEY Seymchan 84.05 347 P P 00 31 07.5 -1.7**
comp=Z,2µm,0.8s,baz=147,slow=5.9,SNR=345
SEY pP **pP 00 33 11.3 -1.0**
comp=Z,250nm,0.8s,baz=135,slow=5.7,SNR=1.3
SEY S **SKSac 00 40 36.9 -0.3**
comp=Z,30nm,1.0s,baz=219,slow=9.7,SNR=1.2
comp=Z,2µm,0.8s
**SEY Seymchan 84.05 347** *ce*P **P 00 31 07.2 -2.0**
**J20K Nowinta River 84.09 10 P P 00 31 08.9 -0.5**
baz=203,SNR=711
J20K S S **00 40 51.6 +5.5**
baz=203
J20K S S **00 40 51.6 +5.5**
baz=203
**U35K Hyder 84.10 25 P P 00 31 09.6 0.0**
baz=225,SNR=20
U35K S S **00 40 50.9 +4.4**
baz=225
**G16K Koyuk River 84.10 7 P P 00 31 08.5 -0.9**
baz=195
G16K S S **00 40 52.4 +6.2**
baz=195
**LOGN Logan Glacier 84.11 17 P P 00 31 08.4 -1.4**
LOGN IAmb IAmb 00 31 26.3
comp=Z,4µm,1.0s
**P29M Windy Craggy 84.12 19 P P 00 31 10.1 +0.4**
baz=218,SNR=1000
P29M S S **00 40 52.4 +5.7**
baz=218
**CTG Chitna Glacier 84.13 17 P P 00 31 09.4 -0.5**
baz=215,SNR=658
CTG S S **00 40 51.8 +4.8**
baz=215
**R32K Eaglecrest 84.14 21 P P 00 31 09.4 -0.4**
baz=221,SNR=209
R32K S S **00 40 51.8 +4.9**
baz=221
R32K S S **00 40 51.8 +4.9**
baz=221
**BJT Baijiatuau 84.17 315 P P 00 31 09.2 -1.1**
BJT IAmb IAmb 00 31 27.5
comp=Z,10µm,1.3s
**BJT Baijiatuau 84.17 315 P P 00 31 09.2 -1.1**
BJT pmax pmax
comp=Z,10µm,1.3s
**BJI Beijing 84.17 315 P P 00 31 09.3 -1.0**
BJI pP **pP 00 33 14.0 -0.1**
BJI sP **sP 00 34 08.9 -3.3**
BJI pmax pmax
comp=Z,3µm,1.1s
BJI pmax pmax
comp=Z,128µm,14.7s
**F15K North Star Dit 84.18 6 P P 00 31 08.8 -1.0**
baz=193
F15K S S **00 40 54.2 +7.2**
baz=193
**GCSA Galena City Sc 84.19 9 P P 00 31 09.0 -0.8**
baz=200,SNR=97
GCSA S S **00 40 54.9 +7.9**
baz=200
**ZAIG Zacatecas 84.19 64 P P 00 31 10.8 -0.4**
ZAIG IAmb IAmb 00 31 36.1
comp=Z,6µm,1.4s
**JIS Juneau Island 84.19 22 P P 00 31 10.5 +0.5**
**RPSI Rantau Prapat 84.21 275 P P 00 31 08.9 -2.2**
**LYN LuoYang 84.23 309 ⇓P P 00 31 10.3 -0.5**
LYN PP **PP 00 34 41.6 +5.1**
LYN S S **00 40 51.0 +2.3**
LYN pmax pmax
comp=Z,3µm,1.0s
LYN pmax pmax
comp=Z,269µm,5.2s
**MOIG Morelia 84.24 67 P P 00 31 10.2 -1.2**
MOIG IAmb IAmb 00 31 35.5
comp=Z,4µm,1.0s
**PSI Prapat 84.25 275 P P 00 31 10.2 -1.3**
**PSI Prapat 84.25 275 P P 00 31 08.9 -2.6**
PSI pmax pmax
comp=Z,18µm,0.9s
**O28M Mount Upton 84.30 18 P P 00 31 09.6 -1.3**
baz=216,SNR=903
O28M S S **00 40 52.6 +3.7**
baz=216
**HARP HAARP 84.35 15 P P 00 31 09.8 -1.0**
baz=211,SNR=352
HARP S S **00 40 53.5 +4.8**
baz=211
**H18K Honhosa River 84.36 8 P P 00 31 09.8 -0.9**
baz=199,SNR=102
H18K S S **00 40 55.0 +6.3**
baz=199
**O29M Mount Kennedy 84.40 19 P P 00 31 10.3 -0.9**
baz=218,SNR=373
O29M S S **00 40 54.5 +4.9**
baz=218
**G17K Kiwalik Mounta 84.40 7 P P 00 31 09.8 -1.1**
baz=197,SNR=182
G17K S S **00 40 56.6 +7.5**
baz=197
**DHY Denali Highway 84.42 13 P P 00 31 09.3 -1.9**
baz=209,SNR=356
DHY S S **00 40 52.5 +2.8**
baz=209
**PLBC Pleasant Camp 84.43 20 P P 00 31 10.5 -0.7**
baz=220,SNR=719
PLBC S S **00 40 53.2 +3.6**
baz=220
**HLID Hailey 84.56 41 P P 00 31 11.3 -1.1**
**HLID Hailey 84.56 41 ⇓P P 00 31 12.2 -0.2**
**HLID Hailey 84.56 41 P P 00 31 12.1 -0.3**
baz=239,SNR=604
HLID S S **00 40 55.7 +3.7**
baz=239
**EPT El Paso 84.57 54 P P 00 31 12.2 -0.5**
EPT IAmb IAmb 00 31 28.3
comp=Z,6µm,1.0s
**BPAW Bear Paw Mtn. 84.59 12 P P 00 31 10.9 -0.9**
baz=206,SNR=458
BPAW S S **00 40 51.9 +0.9**
baz=206
**I20K Naaghedeneel 84.61 10 P P 00 31 11.2 -0.7**
baz=202,SNR=373
I20K S S **00 40 59.7 +8.7**
baz=202
**MCK McKinley 84.66 13 P P 00 31 10.4 -1.9**
baz=208,SNR=591
MCK S S **00 40 56.5 +4.7**
baz=208
**ENH Enshi 84.67 304 P P 00 31 11.8 -1.2**
**P30M Million Dollar 84.75 19 P P 00 31 12.3 -0.5**
baz=219,SNR=1000
P30M S S **00 40 58.3 +5.4**
baz=219
**PAX Paxson 84.76 14 P P 00 31 11.2 -1.6**
baz=211,SNR=578
PAX S S **00 40 59.0 +6.1**
baz=211
**T35M Bob Quinn 84.77 24 P P 00 31 12.6 -0.3**
baz=225,SNR=186
T35M S S **00 40 57.6 +4.5**
baz=225
**SKAG Skagway 84.77 20 P P 00 31 14.4 +1.6**
**SKAG Skagway 84.77 20 P P 00 31 13.0 +0.2**
baz=220,SNR=128
SKAG S S **00 41 01.1 +8.3**
baz=220
**YUK8 Steele Glacier 84.84 17 P P 00 31 12.8 -0.6**
baz=216,SNR=886
YUK8 S S **00 40 58.0 +3.9**
baz=216
**M26K Nabesna, AK 84.89 16 P P 00 31 12.2 -1.2**
baz=213,SNR=1000
M26K S S **00 40 58.2 +4.2**
baz=213
M26K S S **00 40 58.2 +4.2**
baz=213
**YUK6 Outpost Mounta 84.97 18 P P 00 31 12.0 -2.1**
baz=218,SNR=249
YUK6 S S **00 40 57.2 +1.9**
baz=218
**H19K Roundabout Mou 84.98 9 P P 00 31 12.5 -1.2**
baz=201,SNR=172
H19K S S **00 40 58.0 +3.4**
baz=201
**JLU Jordanelle 84.99 45 P P 00 31 12.9 -1.8**
JLU IAmb IAmb 00 31 32.0
comp=Z,24µm,2.8s
**G18K Tagagawik 85.03 8 P P 00 31 13.1 -0.9**
baz=199,SNR=116
G18K S S **00 40 58.2 +3.1**
baz=199
**YUK3 Moose Creek 85.04 17 P P 00 31 13.1 -1.3**
baz=216,SNR=1000
YUK3 S S **00 40 56.2 +0.3**
baz=216
YUK3 S **ScS 00 40 58.3 -4.7**
baz=216
**GSI Gunungsitoli 85.06 273 P P 00 31 14.8 -0.6**
**GSI Gunungsitoli 85.06 273 P P 00 31 13.8 -1.5**
**GSI Gunungsitoli 85.06 273 ⇓P P 00 31 14.7 -0.6**
**S34M Telegraph Cree 85.10 23 P P 00 31 14.1 -0.3**
baz=224,SNR=1000
S34M S S **00 40 58.5 +2.4**
baz=224
**M27K Edge Creek, AK 85.14 16 P P 00 31 13.6 -1.1**
baz=214,SNR=1000
M27K S S **00 40 57.3 +0.7**
baz=214
M27K S S **00 40 57.3 +0.7**
baz=214
**H20K Anotleneega Mo 85.19 9 P P 00 31 13.9 -0.8**
baz=202,SNR=247
H20K S S **00 40 56.9 +0.2**
baz=202
**YUK4 Talbot Arm 85.21 18 P P 00 31 15.2 0.0**
baz=217,SNR=362
YUK4 S S **00 41 00.9 +3.4**
baz=217
**MG05 Puerto Natales 85.23 143 P P 00 31 15.9 +0.5**
MG05 IAmb IAmb 00 31 32.0
comp=Z,12µm,1.4s
**MG05 Puerto Natales 85.23 143** *e*P **P 00 31 16.8 +1.4**
MG05 IAmb IAmb 00 31 31.7
comp=Z,10µm,1.3s
**Y22D IRIS PASSCAL I 85.23 52 P P 00 31 15.5 -0.4**
baz=244,SNR=30
Y22D S S **00 40 59.5 +0.7**
baz=244
**F17K Baldwin Pennin 85.24 7 P P 00 31 14.1 -0.8**
baz=196
F17K S S **00 40 57.2 +0.1**
baz=196
**JRQG Juriquilla Cam 85.26 67 P P 00 31 16.1 -0.3**
**MG04 Isla Riesco 85.29 144 P P 00 31 15.9 +0.3**
MG04 IAmb IAmb 00 31 33.1
comp=Z,9µm,1.2s
**MG04 Isla Riesco 85.29 144** *e*P **P 00 31 17.4 +1.8**
MG04 IAmb IAmb 00 31 33.4
comp=Z,10µm,1.3s
**L26K Log Cabin Wild 85.32 15 P P 00 31 14.7 -0.8**
baz=213,SNR=164
L26K S S **00 40 58.9 +0.8**
baz=213
L26K S S **00 40 58.9 +0.8**
baz=213
**VHRN Van Horn 85.35 56 P P 00 31 16.0 -0.5**
VHRN IAmb IAmb 00 31 29.7
comp=Z,9µm,1.6s
**HWUT Hardware Ranch 85.40 44 ⇑P P 00 31 14.9 -1.6**
**NEA2 Nenana 85.40 12 P P 00 31 14.0 -1.7**
baz=208,SNR=229
NEA2 S S **00 40 59.3 +0.5**
baz=208
**P32M Atlin 85.41 21 P P 00 31 15.9 0.0**
baz=222
P32M S S **00 41 00.7 +1.6**
baz=222
**K24K Donnelly Dome 85.41 14 P P 00 31 15.0 -0.9**
baz=211,SNR=596
K24K S S **00 40 57.2 -1.7**
baz=211
K24K S S **00 40 57.2 -1.7**
baz=211
**MNTX Cornudas Mount 85.41 55 ⇑P P 00 31 16.5 -0.1**
**MNTX Cornudas Mount 85.41 55 P P 00 31 16.7 +0.1**
baz=246,SNR=249
MNTX S S **00 40 57.5 -2.8**
baz=246
**GYA Guiyang 85.44 300 ⇓P P 00 31 16.3 -0.7**
GYA pP pP 00 33 16.6 -4.7
GYA sP sP 00 34 19.8 +0.7
GYA S S **00 41 01.0 0.0**
GYA pmax pmax
comp=Z,490nm,1.2s
GYA pmax pmax
comp=Z,267µm,14.2s
**Q32M Nakina River 85.44 22 P P 00 31 15.5 -0.8**
baz=223,SNR=686
Q32M S S **00 41 00.1 +0.3**
baz=223
**GO10 Punta Arenas 85.45 145 P P 00 31 17.0 +0.5**
GO10 IAmb IAmb 00 31 34.1
comp=Z,13µm,1.4s
**GO10 Punta Arenas 85.45 145 ⇑P P 00 31 19.4 +2.9**
**GO10 Punta Arenas 85.45 145** *e*P **P 00 31 18.6 +2.1**
GO10 IAmb IAmb 00 31 34.3
comp=Z,11µm,1.3s
**MVCO Mesa Verde 85.45 49 P P 00 31 16.1 -0.9**
**MVCO Mesa Verde 85.45 49 ⇑P P 00 31 16.6 -0.4**
**MVCO Mesa Verde 85.45 49 P P 00 31 16.6 -0.4**
baz=243,SNR=55
MVCO S S **00 41 01.2 +0.3**
baz=243
**SRIT Nakonsritamara 85.45 281 P P 00 31 16.4 -0.8**
**I56US NEWPORT INFRAS 85.47 36 P P 00 31 18.0 +1.5**
baz=265,slow=11,SNR=4.3
**NEW Newport 85.47 36 ⇓P P 00 31 15.2 -1.3**
**NEW Newport 85.47 36 P P 00 31 15.3 -1.2**
baz=236,SNR=260
NEW S S **00 40 58.7 -1.5**
baz=236
**G19K Purcell Mounta 85.47 8 P P 00 31 14.6 -1.5**
baz=200,SNR=237
G19K S S **00 40 58.3 -1.1**
baz=200
**MLY Manley 85.47 11 P P 00 31 13.7 -2.5**
baz=206,SNR=469
MLY S S **00 40 56.8 -2.7**
baz=206
**GO09 Cerro Castillo 85.49 143 P P 00 31 16.7 +0.1**
GO09 IAmb IAmb 00 31 33.8
comp=Z,9µm,1.9s
**GO09 Cerro Castillo 85.49 143** *e*P **P 00 31 18.8 +2.2**
GO09 IAmb IAmb 00 31 34.2
comp=Z,9µm,1.9s
**O30N Mendenhall 85.53 19 P P 00 31 15.6 -0.9**
baz=220,SNR=1000
O30N S S **00 40 59.9 -0.4**
baz=220
**RIDG Independent Ri 85.57 14 P P 00 31 15.0 -1.6**
baz=212,SNR=630
RIDG S S **00 40 58.0 -2.5**
baz=212
**F18K Selawik 85.58 7 P P 00 31 15.1 -1.4**
baz=198,SNR=63
F18K S S **00 40 58.7 -1.5**
baz=198
**TIY Taiyuan 85.66 312 ⇓P P 00 31 17.3 -0.4**
TIY sP **sP 00 34 13.1 -7.3**
TIY pmax pmax
comp=Z,138µm,5.0s
**H21K Melozitna Rive 85.68 10 P P 00 31 15.7 -1.4**
baz=204,SNR=291
H21K S S **00 40 59.9 -1.5**
baz=204
H21K S S **00 40 59.9 -1.5**
baz=204
**HDA Harding Lake 85.68 13 P P 00 31 15.2 -1.9**
baz=210,SNR=783
HDA S S **00 41 02.7 +1.3**
baz=210
**CCB Clear Creek Bu 85.71 13 P P 00 31 15.7 -1.5**
CCB IAmb IAmb 00 31 30.7
comp=Z,4µm,1.0s
**L27K Beaver Creek, 85.73 16 P P 00 31 16.5 -0.9**
baz=214,SNR=388
L27K S S **00 41 00.8 -1.2**
baz=214
**BCAR Beaver Creek A 85.75 16 P P 00 31 16.6 -0.9**
**NAYO Nakonayok 85.75 286 P P 00 31 18.0 -0.5**
**N30M Aishikik Lake 85.76 18 P P 00 31 16.4 -1.2**
baz=219,SNR=414
N30M S S **00 41 01.7 -0.8**
baz=219
**E17K Hotham Inlet 85.80 6 P P 00 31 16.5 -1.1**
baz=196,SNR=213
E17K S S **00 41 01.2 -1.2**
baz=196
**TX31 Lajitas Ar. Si 85.81 57 P P 00 31 18.1 -0.6**
TX31 IAmb IAmb 00 31 35.1
comp=Z,12µm,1.2s
**TXAR Lajitas Array 85.81 57 P P 00 31 18.3 -0.4**
**TXAR Lajitas Array 85.81 57 P P 00 31 19.4 +0.7**
comp=Z,279nm,0.8s,baz=217,slow=6.0,SNR=521
TXAR S **S 00 40 56.5 -7.9**
comp=Z,48nm,1.1s,baz=208,slow=5.3,SNR=4.8
TXAR PKKP **PKKPdf 00 49 05.5 -3.9**
comp=Z,32nm,0.9s,baz=118,slow=2.8,SNR=4.9
TXAR PKPPKP **P'P'df 00 57 22.9 +0.4**
comp=Z,21nm,0.9s,baz=132,slow=5.6,SNR=6.3
comp=Z,279nm,0.8s
**TXAR Lajitas Array 85.81 57 P P 00 31 18.3 -0.4**
**TLIG Tlapa 85.81 70 P P 00 31 18.1 -0.9**
**IMAR Indian Mountai 85.82 10 P P 00 31 17.2 -0.5**
**WHY Whitehorse 85.83 20 P P 00 31 16.9 -1.1**
**WHY Whitehorse 85.83 20 P P 00 31 17.2 -0.8**
baz=221,SNR=496
WHY S S **00 41 01.3 -2.0**
baz=221
**I23K Minto, Yukon-K 85.84 12 P P 00 31 16.5 -1.3**
baz=207,SNR=700
I23K S S **00 41 00.7 -2.2**
baz=207
I23K S S **00 41 00.7 -2.2**
baz=207
**DLBC Dease Lake 85.88 23 P P 00 31 17.6 -0.6**
DLBC IAmb IAmb 00 31 36.4
comp=Z,5µm,1.4s
**DLBC Dease Lake 85.88 23 P P 00 31 17.7 -0.6**
baz=225,SNR=377
DLBC S S **00 41 03.6 -0.1**
baz=225
**SLVN Son La 85.88 294 P P 00 31 18.2 -0.9**
SLVN IAmb IAmb 00 31 35.7
comp=Z,6µm,1.0s
**UNM Universidad Na 85.89 68 P P 00 31 18.9 -0.6**
UNM IAmb IAmb 00 31 35.1
comp=Z,4µm,1.0s
**UNM Universidad Na 85.89 68 P P 00 31 18.9 -0.6**
UNM pmax pmax
comp=Z,4µm,1.0s
**MDM Murphy Dome 85.90 12 P P 00 31 15.6 -2.5**
**I53US FAIRBANKS INFR 85.90 12 P P 00 31 20.0 +1.9**
baz=208,slow=6.4,SNR=2.3
**COLA College 85.90 12 P P 00 31 17.3 -0.8**
**COLA College 85.90 12 P P 00 31 16.0 -2.1**
COLA IAmb IAmb 00 31 33.6
comp=Z,10µm,1.4s
**COLA College 85.90 12 ⇓P P 00 31 15.8 -2.3**
**COLA College 85.90 12 P P 00 31 16.9 -1.1**
baz=209
COLA S S **00 41 01.6 -1.7**
baz=209
**COLA College 85.90 12** *i*P **P 00 31 16.7 -1.4**
COLA pmax pmax
comp=Z,4µm,1.0s
**ANMO Albuquerque 85.95 51 P P 00 31 18.5 -0.9**
ANMO IAmb IAmb 00 31 34.5
comp=Z,4µm,1.1s
**ANMO Albuquerque 85.95 51 P P 00 31 18.6 -0.8**
baz=245
ANMO S S **00 41 03.6 -2.1**
baz=245
**ANMO Albuquerque 85.95 51** *i*P **P 00 31 19.7 +0.3**
ANMO pmax pmax
comp=Z,1µm,1.2s
**SCRK Sand Creek 85.97 14 P P 00 31 17.0 -1.6**
baz=212,SNR=1000
SCRK S S **00 41 02.0 -2.5**
baz=212
**ILAR Eielson Array 86.01 13 P P 00 31 16.6 -2.0**
**ILAR Eielson Array 86.01 13 P P 00 31 16.2 -2.4**
comp=Z,579nm,0.9s,baz=223,slow=4.0,SNR=376
ILAR pP **pP 00 33 21.4 -1.1**
comp=Z,88nm,0.9s,baz=228,slow=7.0,SNR=0.9
ILAR S **SKSac 00 40 49.8 +0.5**
comp=Z,21nm,0.8s,baz=210,slow=6.0,SNR=1.4
ILAR PKKP **PKKPdf 00 49 08.0 -2.5**
comp=Z,22nm,0.8s,baz=347,slow=2.9,SNR=5.3
ILAR PKPPKP 00 57 22.2
comp=Z,30nm,1.0s,baz=328,slow=2.5,SNR=8.7
comp=Z,579nm,0.9s
**F19K Shaleruckik Mo 86.03 8 P P 00 31 17.4 -1.3**
baz=199
F19K S S **00 41 02.3 -2.3**
baz=199
**XLT XiLinHaoTe 86.13 319** *e*P **P 00 31 19.3 -0.5**
XLT sP sP 00 34 20.1 -2.4
XLT S **S 00 41 00.8 -6.0**
XLT pmax pmax
comp=Z,1µm,1.1s
XLT pmax pmax
comp=Z,59µm,5.2s

**USHA Ushuaia 86.14 147** P **P** **00 31 21.0 +1.4**
comp=Z,388nm,1.0s,baz=242,slow=6.2,SNR=28
USHA pP **pP** **00 33 22.1 -1.3**
comp=Z,130nm,0.9s,baz=248,slow=9.7,SNR=0.9
USHA S **SKSac** **00 40 52.2 +1.4**
comp=Z,28nm,1.0s,baz=44,slow=2.3,SNR=1.2
comp=Z,388nm,1.0s
**USHA Ushuaia 86.14 147** *e*P **P** **00 31 20.7 +1.1**
USHA IAmb IAmb 00 31 36.5
comp=Z,5μm,1.3s
**M29M Somme Creek 86.14 17** P **P** **00 31 18.3 -1.1**
baz=218,SNR=766
M29M S **S** **00 41 04.1 -1.9**
baz=218
**H22K Ishtalitna Cre 86.14 11** P **P** **00 31 18.5 -0.7**
baz=205
H22K S **S** **00 41 02.8 -3.0**
baz=205
H22K S **S** **00 41 02.8 -3.0**
baz=205
**P33M Teslin, Yukon 86.17 21** P **P** **00 31 18.6 -1.0**
baz=223,SNR=555
P33M S **S** **00 41 04.3 -2.2**
baz=223
**N31M Braeburn, Yuko 86.18 19** P **P** **00 31 18.5 -1.1**
baz=220,SNR=523
N31M S **S** **00 41 05.0 -1.3**
baz=220
**POKR Poker Plat Res 86.20 12** P **P** **00 31 17.2 -2.3**
baz=209,SNR=347
POKR S **S** **00 41 03.7 -2.6**
baz=209
**J25K Salcha River, 86.20 13** P **P** **00 31 18.8 -0.8**
baz=211,SNR=1000
J25K S **S** **00 41 02.3 -4.1**
baz=211
J25K S **S** **00 41 02.3 -4.1**
baz=211
**R33M Jennings River 86.22 22** P **P** **00 31 19.2 -0.8**
baz=224,SNR=1000
R33M S **S** **00 41 05.2 -1.8**
baz=224
**E18K Tukpahlearik C 86.25 7** P **P** **00 31 19.0 -0.8**
baz=197,SNR=302
E18K S **S** **00 41 05.4 -1.3**
baz=197
**AHID Auburn Hatcher 86.26 43** ⇑P **P** **00 31 20.4 -0.2**
**D17K Noatak River 86.27 6** P **P** **00 31 18.8 -1.0**
baz=194,SNR=99
D17K S **S** **00 41 05.5 -1.3**
baz=194
**G21K Allakaket 86.35 10** P **P** **00 31 18.9 -1.4**
baz=203,SNR=613
G21K S **S** **00 41 06.6 -1.1**
baz=203
**H23K Yukon River 86.41 11** P **P** **00 31 19.1 -1.4**
baz=207,SNR=132
H23K S **S** **00 41 06.1 -2.2**
baz=207
H23K S **S** **00 41 06.1 -2.2**
baz=207
**GO08 Villa O'Higgin 86.47 140** P **P** **00 31 22.0 +0.6**
GO08 IAmb IAmb 00 31 38.7
comp=Z,5μm,1.2s
**GO08 Villa O'Higgin 86.47 140** *e*P **P** **00 31 23.5 +2.2**
**K27K Chicken 86.48 15** P **P** **00 31 20.0 -0.9**
baz=214
K27K S **S** **00 41 07.8 -1.1**
baz=214
K27K S **S** **00 41 07.8 -1.1**
baz=214
**MG01 Puerto William 86.51 147** P **P** **00 31 21.9 +0.5**
MG01 IAmb IAmb 00 31 38.1
comp=Z,8μm,1.1s
**MG01 Puerto William 86.51 147** *e*P **P** **00 31 22.8 +1.4**
**F20K Avaraart Lake 86.52 9** P **P** **00 31 20.0 -1.0**
baz=201
F20K S **S** **00 41 05.9 -3.2**
baz=201
**J26L Joseph Creek 86.52 14** P **P** **00 31 20.1 -1.1**
baz=213,SNR=1000
J26L S **S** **00 41 07.3 -2.2**
baz=213
J26L S **S** **00 41 07.3 -2.2**
baz=213
**MSO Missoula 86.53 38** P **P** **00 31 20.5 -1.2**
MSO IAmb IAmb 00 31 38.2
comp=Z,6μm,1.6s
**MSO Missoula 86.53 38** ⇑P **P** **00 31 20.2 -1.4**
**MSO Missoula 86.53 38** P **P** **00 31 20.9 -0.8**
baz=239,SNR=188
MSO S **S** **00 41 05.8 -4.7**
baz=239
**DLMT Dillon 86.59 40** P **P** **00 31 21.6 -0.4**
DLMT IAmb IAmb 00 31 37.2
comp=Z,5μm,1.1s
**RDOG Red Dog Mine 86.63 6** P **P** **00 31 21.1 -0.4**
**RDOG Red Dog Mine 86.63 6** P **P** **00 31 20.6 -0.9**
baz=194,SNR=39
RDOG S **S** **00 41 07.2 -3.1**
baz=194
**C16K Lisburne Hills 86.64 5** P **P** **00 31 20.4 -1.1**
baz=192,SNR=28
C16K S **S** **00 41 07.2 -3.0**
baz=192
**XAN Xi'an 86.66 307** ⇓P **P** **00 31 22.0 -0.5**
XAN pP pP 00 33 29.3 +1.9
XAN sP sP 00 34 19.5 -5.9
XAN S **S** **00 41 10.8 -1.3**
XAN pmax pmax
comp=Z,114μm,8.2s
**BILL Bilibino 86.67 354** P **P** **00 31 21.9 +0.2**
BILL IAmb IAmb 00 31 38.2
comp=Z,4μm,1.1s
**BILL Bilibino 86.67 354** *de*P **P** **00 31 20.3 -1.4**
BILL *i* S **SKSac** **00 40 55.3 +2.2**
BILL *i* SS **SS** **00 47 19.5 +9.2**
BILL pmax pmax
comp=Z,4μm,1.1s
BILL MLR MLR
comp=Z,86μm,18.0s
**E19K Redstone River 86.69 8** P **P** **00 31 20.5 -1.3**
baz=200,SNR=415
E19K S **S** **00 41 06.8 -4.1**
baz=200
**REDW Red Top Meadow 86.71 42** P **P** **00 31 22.0 -0.8**
REDW IAmb IAmb 00 31 40.3
comp=Z,4μm,1.0s
**HIA Hailar 86.74 325** P **P** **00 31 21.9 -0.6**
HIA IAmb IAmb 00 31 37.5
comp=Z,4μm,1.1s
**HIA Hailar 86.74 325** P **P** **00 31 21.9 -0.6**
HIA pmax pmax
comp=Z,4μm,1.1s
**H24K Noodor Dome 86.74 12** P **P** **00 31 20.7 -1.5**
baz=209
H24K S **S** **00 41 09.1 -2.4**
baz=209
H24K S **S** **00 41 09.1 -2.4**
baz=209
**N32M Quiet Lake 86.78 20** P **P** **00 31 21.8 -0.6**
baz=222
N32M S **S** **00 41 07.8 -4.2**
baz=222
**AY02 Valle Explorad 86.85 138** P **P** **00 31 23.9 +0.7**
**AY02 Valle Explorad 86.85 138** ⇑*i*P **P** **00 31 25.8 +2.6**
**LHMI Lhok Sumawe 86.88 276** P **P** **00 31 23.5 -0.4**
**LHMI Lhok Sumawe 86.88 276** P **P** **00 31 22.6 -1.3**
**S22A 4UR Ranch, Cre 86.88 49** P **P** **00 31 22.7 -1.1**
baz=244
S22A S **S** **00 41 10.1 -4.5**
baz=244
**AY03 Cochrane 86.93 139** P **P** **00 31 23.5 0.0**
AY03 IAmb IAmb 00 31 40.9
comp=Z,6μm,1.2s
**AY03 Cochrane 86.93 139** *e*P **P** **00 31 25.2 +1.7**
**PRP Porcupine Dome 86.95 13** P **P** **00 31 23.2 0.0**
baz=211,SNR=124
PRP S **S** **00 41 10.7 -2.9**
baz=211
**F21K Alatna River 87.01 9** P **P** **00 31 22.4 -0.9**
baz=203,SNR=346
F21K S **S** **00 41 12.4 -1.4**
baz=203
**C17K DeLong Mountai 87.02 5** P **P** **00 31 22.1 -1.3**
baz=194,SNR=47
C17K S **S** **00 41 11.1 -2.8**
baz=194
**G22K Bettles 87.05 10** S **S** **00 41 11.9 -2.2**
baz=205
**G23K Bananza Creek 87.12 11** P **P** **00 31 22.4 -1.4**
baz=207,SNR=353
G23K S **S** **00 41 13.6 -1.3**
baz=207
**M31M Drury Creek, Y 87.16 19** P **P** **00 31 22.6 -1.5**
baz=221,SNR=303
M31M S **S** **00 41 13.1 -2.4**
baz=221
**YPP Pitchstone Pla 87.17 42** P **P** **00 31 24.9 -0.1**
YPP IAmb IAmb 00 31 55.0
comp=Z,7μm,1.7s
**DAWY Dawson 87.19 16** P **P** **00 31 23.4 -0.9**
**DAWY Dawson 87.19 16** P **P** **00 31 23.1 -1.2**
baz=217,SNR=430
DAWY S **S** **00 41 12.5 -3.2**
baz=217
**OVMT Ovando 87.20 38** P **P** **00 31 23.8 -1.1**
**BW06 Boulder Array 87.26 43** P **P** **00 31 24.6 -0.8**
baz=242,SNR=326
BW06 S **S** **00 41 11.9 -5.8**
baz=242
**PD31 Pinedale Array 87.26 43** P **P** **00 31 24.7 -0.7**
PD31 IAmb IAmb 00 31 39.9
comp=Z,3μm,0.9s
**PDAR Pinedale Array 87.26 43** P **P** **00 31 24.4 -0.9**
comp=Z,208nm,0.8s,baz=219,slow=2.8,SNR=232
PDAR pP **pP** **00 33 28.4 -1.1**
comp=Z,33nm,0.6s,baz=218,slow=4.1,SNR=1.0
PDAR S **SKSac** **00 40 59.0 +0.7**
comp=Z,38nm,1.1s,baz=63,slow=3.2,SNR=2.4
PDAR PKPPKP **P'P'df** **00 57 16.1 -2.9**
comp=Z,15nm,0.9s,baz=101,slow=3.8,SNR=4.3
comp=Z,208nm,0.8s
**I26K Coal Creek Min 87.29 14** P **P** **00 31 24.2 -0.5**
baz=213,SNR=778
I26K S **S** **00 41 14.4 -2.1**
baz=213
I26K S **S** **00 41 14.4 -2.1**
baz=213
**BOZ Bozeman (W) 87.30 40** P **P** **00 31 24.8 -0.6**
BOZ IAmb IAmb 00 31 41.2
comp=Z,6μm,1.4s
**BOZ Bozeman (W) 87.30 40** P **P** **00 31 24.8 -0.6**
baz=241,SNR=494
BOZ S **S** **00 41 11.4 -6.3**
baz=241
**BOZ Bozeman (W) 87.30 40** P **P** **00 31 24.8 -0.6**
BOZ pmax pmax
comp=Z,6μm,1.5s
**EGAK Eagle 87.32 15** P **P** **00 31 23.6 -1.2**
**EGAK Eagle 87.32 15** P **P** **00 31 23.5 -1.3**
baz=215,SNR=456
EGAK S **S** **00 41 14.6 -2.2**
baz=215
**H03S2 Juan Fernandez 87.37 125** P **P** **00 31 28.6 +3.1**
baz=321,slow=10,SNR=128
H03S2 PKKPbc **PKKPbc** **00 49 16.2 +3.9**
baz=167,slow=22,SNR=6.4
**H17A Grant Village 87.37 42** P **P** **00 31 27.6 +1.7**
baz=242,SNR=85
H17A S **S** **00 41 16.6 -2.1**
baz=242
**C18K Utukok River 87.38 6** P **P** **00 31 25.4 +0.4**
baz=196,SNR=70
C18K S **S** **00 41 13.4 -3.9**
baz=196
**H03S1 Juan Fernandez 87.39 125** P **P** **00 31 28.7 +3.1**
baz=321,slow=10,SNR=139
H03S1 PKKPbc **PKKPbc** **00 49 16.2 +4.0**
baz=167,slow=22,SNR=8.6
**H03S3 Juan Fernandez 87.39 125** P **P** **00 31 28.5 +2.8**
baz=321,slow=10,SNR=130
H03S3 PKKPbc **PKKPbc** **00 49 16.2 +4.0**
baz=167,slow=22,SNR=15
**F22K John River 87.48 10** P **P** **00 31 25.1 -0.4**
baz=205
F22K S **S** **00 41 13.9 -4.3**
baz=205
**FARO Faro, Yukon 87.50 19** P **P** **00 31 26.0 +0.3**
baz=222,SNR=178
FARO S **S** **00 41 13.3 -5.4**
baz=222
**H03N2 Juan Fernandez 87.50 124** P **P** **00 31 27.4 +1.2**
baz=166,slow=74,SNR=43
H03N2 PKKPbc **PKKPbc** **00 49 16.1 +4.2**
baz=149,slow=18,SNR=14
**H03N3 Juan Fernandez 87.50 124** P **P** **00 31 26.9 +0.6**
baz=341,slow=74,SNR=38
H03N3 PKKPbc **PKKPbc** **00 49 16.1 +4.1**
baz=149,slow=18,SNR=8.8
**WTLY Watson Lake, Y 87.51 22** P **P** **00 31 26.1 +0.2**
baz=226,SNR=92
WTLY S **S** **00 41 13.3 -5.5**
baz=226
**K29M Barlow Dome 87.51 17** P **P** **00 31 25.0 -0.9**
baz=218,SNR=726
K29M S **S** **00 41 14.7 -4.2**
baz=218
**VA04 Juan Fernndez 87.51 124** P **P** **00 31 27.2 +0.6**
VA04 IAmb IAmb 00 31 43.6
comp=Z,11μm,1.2s
**VA04 Juan Fernndez 87.51 124** ⇑*i*P **P** **00 31 28.6 +2.0**
**H03N1 Juan Fernandez 87.52 124** P **P** **00 31 26.3 +0.1**
H03N1 PKKPbc **PKKPbc** **00 49 16.2 +4.3**
baz=149,slow=18,SNR=12
**H25L Birch Creek 87.53 12** P **P** **00 31 25.8 0.0**
baz=211,SNR=106
H25L S **S** **00 41 14.1 -4.5**
baz=211
**COLD Coldfoot 87.55 10** P **P** **00 31 24.9 -1.0**
baz=206,SNR=876
COLD S **S** **00 41 14.9 -3.9**
baz=206
**LKWY Lake 87.57 41** P **P** **00 31 27.2 +0.4**
LKWY IAmb IAmb 00 31 51.5
comp=Z,5μm,1.1s
**LKWY Lake 87.57 41** ⇑P **P** **00 31 28.4 +1.6**
**LKWY Lake 87.57 41** P **P** **00 31 27.2 +0.4**
LKWY pmax pmax
comp=Z,5μm,1.1s
**D19K Kuna River 87.57 7** P **P** **00 31 25.5 -0.5**
baz=199,SNR=247
D19K S **S** **00 41 12.9 -6.1**
baz=199
**G24K Hadweenzic Riv 87.58 12** P **P** **00 31 25.6 -0.4**
baz=209,SNR=174
G24K S **S** **00 41 15.8 -3.4**
baz=209
**E20K Nigu River 87.59 8** P **P** **00 31 24.7 -1.3**
baz=201,SNR=744
E20K S **S** **00 41 15.8 -3.5**
baz=201
**I20EC Galapagos 87.60 90** P **P** **00 31 29.0 +1.6**
baz=304,slow=11,SNR=3.5
**PAYG Puerto Ayora 87.66 90** P **P** **00 31 27.6 0.0**
PAYG IAmb IAmb 00 31 44.9
comp=Z,10μm,1.4s
**HHC Hu-ho-hao-te 87.66 314** ⇓*i*P **P** **00 31 26.4 -0.7**
HHC pP pP 00 33 34.8 +2.5
HHC sP sP 00 34 26.4 -3.8
HHC S S **00 41 18.1 -3.2**
HHC pmax pmax
comp=Z,630nm,1.1s
HHC pmax pmax
comp=Z,134μm,7.7s
**SRDT SRDT 87.77 286** P **P** **00 31 28.4 +0.4**
**J29N Klondike Camp 87.81 16** P **P** **00 31 27.5 +0.3**
baz=218,SNR=208
J29N S **S** **00 41 18.2 -3.3**
baz=218
**SDCO Great Sand Dun 87.83 49** P **P** **00 31 27.4 -0.9**
**SDCO Great Sand Dun 87.83 49** ⇓P **P** **00 31 27.6 -0.6**
SDCO ⇑P **PcP** **00 31 27.9 -1.6**
**SDCO Great Sand Dun 87.83 49** P **P** **00 31 27.1 -1.2**
baz=245,SNR=270
SDCO S **S** **00 41 15.2 -8.2**
baz=245
**GO07 Milladeo Hill, 87.85 135** P **P** **00 31 28.6 +0.6**
GO07 IAmb IAmb 00 31 44.8
comp=Z,7μm,1.1s
**GO07 Milladeo Hill, 87.85 135** *e*P **P** **00 31 29.6 +1.7**
**I27K Kandik River 87.89 14** P **P** **00 31 26.4 -1.1**
baz=214,SNR=158
I27K S **S** **00 41 19.3 -2.9**
baz=214
**G25K Bearman Lake 87.91 12** P **P** **00 31 26.4 -1.1**
baz=210,SNR=207
**COYC Coyhaique 87.92 137** P **P** **00 31 28.4 +0.1**
**COYC Coyhaique 87.92 137** *e*P **P** **00 31 29.5 +1.3**
**D20K Etivluk River 87.96 8** P **P** **00 31 28.2 +0.5**
baz=200,SNR=214
D20K S **S** **00 41 19.6 -3.0**
baz=200
**C19K Lookout Ridge 87.98 7** P **P** **00 31 27.6 -0.3**
baz=198,SNR=180
C19K S **S** **00 41 18.4 -4.5**
baz=198
**TOAD Toad River Com 88.00 24** P **P** **00 31 27.9 -0.3**
baz=229,SNR=507
TOAD S **S** **00 41 18.3 -5.1**
baz=229
**B18K Kokolik River 88.01 6** P **P** **00 31 27.5 -0.4**
baz=196,SNR=51
B18K S **S** **00 41 19.9 -3.1**
baz=196
**LIRD Liard River Hi 88.04 24** P **P** **00 31 27.9 -0.4**
baz=229,SNR=175
LIRD S **S** **00 41 18.5 -5.1**
baz=229
**E21K Killik River 88.06 9** P **P** **00 31 26.9 -1.3**
baz=203
E21K S **S** **00 41 19.4 -4.2**
baz=203
**LL07 Hotel Espejo d 88.09 135** P **P** **00 31 28.5 -0.5**
**LL07 Hotel Espejo d 88.09 135** *e*P **P** **00 31 29.9 +0.8**
**E22K Anaktuvuk Pass 88.11 10** P **P** **00 31 26.8 -1.7**
baz=205,SNR=763
E22K S **S** **00 41 21.0 -3.0**
baz=205
**PHRA Phrae 88.14 290** P **P** **00 31 28.6 -1.2**
**I28M Miner Creek 88.17 15** P **P** **00 31 28.7 -0.2**
baz=216,SNR=1000
I28M S **S** **00 41 19.9 -5.0**
baz=216
**F24K Squaw Lake 88.22 11** P **P** **00 31 29.4 +0.4**
baz=209,SNR=954
F24K S **S** **00 41 19.4 -5.7**
baz=209
**LL06 Loncomilla 88.22 134** P **P** **00 31 29.1 -0.6**
**LL06 Loncomilla 88.22 134** ⇑*i*P **P** **00 31 31.9 +2.2**
**KMI Kunming 88.23 297** ⇓P **P** **00 31 30.3 0.0**
KMI sP sP 00 34 32.6 -0.2
KMI pmax pmax
comp=Z,9μm,1.2s
**T25A Trinidad 88.37 50** P **P** **00 31 30.7 0.0**
baz=246,SNR=82
T25A S **S** **00 41 21.9 -6.3**
baz=246
**E23K Chandalar 88.40 10** P **P** **00 31 31.2 +1.3**
baz=207,SNR=1000
E23K S **S** **00 41 21.7 -5.2**
baz=207
**J30M Hart River 88.41 17** P **P** **00 31 30.8 +0.7**
baz=219,SNR=337
J30M S **S** **00 41 21.7 -5.5**
baz=219
**H27K Steamboat Moun 88.44 14** P **P** **00 31 28.9 -1.2**
baz=215,SNR=542
**MMPY Sheldon Lake, 88.45 20** P **P** **00 31 29.3 -0.9**
baz=224,SNR=930
**I29M Ogilvie Camp, 88.51 16** P **P** **00 31 28.9 -1.5**
baz=218,SNR=993
**RLMT Red Lodge 88.54 41** P **P** **00 31 30.9 -0.4**
baz=242,SNR=137
**G26K Porcupine Rive 88.54 13** P **P** **00 31 29.6 -0.9**
baz=212,SNR=534
**Q24A Divide 88.59 48** P **P** **00 31 31.2 -0.6**
baz=245,SNR=89
**CRAI Chiangrai 88.60 292** P **P** **00 31 30.2 -1.6**
CRAI IAmb IAmb 00 31 48.3
comp=Z,7μm,1.2s
**E24K Your Creek 88.61 11** P **P** **00 31 30.3 -0.5**
baz=208
**BTO Baotou 88.61 314** *e*P **P** **00 31 32.8 +1.2**
BTO SKS **SKSac** **00 41 04.8 -1.3**
BTO S **S** **00 41 25.0 -5.0**
BTO pmax pmax
comp=Z,750nm,1.1s
BTO pmax pmax
comp=Z,208μm,7.6s
**C21K Knifeblade Rid 88.61 8** P **P** **00 31 29.9 -0.9**
baz=202,SNR=564
**ISCO Idaho Springs 88.62 47** P **P** **00 31 31.5 -0.4**
**ISCO Idaho Springs 88.62 47** P **P** **00 31 31.9 0.0**
baz=245
**ISCO Idaho Springs 88.62 47** P **P** **00 31 31.5 -0.4**
ISCO pmax pmax
comp=Z,3μm,1.4s
**LL05 Los Muermos 88.64 133** P **P** **00 31 32.4 +0.7**
**LL05 Los Muermos 88.64 133** *e*P **P** **00 31 33.3 +1.6**
**D22K Ayikyak River 88.66 9** P **P** **00 31 29.9 -1.0**
baz=204,SNR=691
**TGTN Hyland Airport 88.67 21** P **P** **00 31 31.9 +0.7**
baz=227,SNR=144
**F25K Christian Rive 88.71 12** P **P** **00 31 31.3 -0.1**
baz=211,SNR=486
**BMAR Burnt Mountain 88.78 12** P **P** **00 31 30.9 -0.8**
**N23A Red Feather La 88.85 46** P **P** **00 31 33.4 +0.5**
baz=245,SNR=163
**G27K Doyon Strip 88.89 14** P **P** **00 31 32.0 -0.1**
baz=214,SNR=238
**A19K Wainwright 88.89 6** P **P** **00 31 32.1 +0.1**
baz=196,SNR=41
**833A Chaparral WMA, 88.90 60** P **P** **00 31 33.0 0.0**
baz=249,SNR=75
**I30M Mount Dempster 88.90 16** P **P** **00 31 30.8 -1.6**
baz=219,SNR=852
**TOLK Toolik Lake Re 88.93 10** P **P** **00 31 30.9 -1.3**
baz=207,SNR=532
**LL01 San Ignacio de 88.99 134** P **P** **00 31 33.8 +0.6**
LL01 IAmb IAmb 00 31 56.8
comp=Z,3μm,1.1s
**LL01 San Ignacio de 88.99 134** *e*P **P** **00 31 34.6 +1.3**
**ELIB Princess Elisa 89.00 187** *d*P **P** **00 31 31.3 -1.6**
comp=Z,6μm,0.8s
ELIB *d*pP **pP** **00 33 44.4 +6.2**
**D23K Nanushuk River 89.04 10** P **P** **00 31 33.2 +0.5**
baz=206
**LL02 Futaleuf 89.04 135** P **P** **00 31 33.0 -0.5**
LL02 IAmb IAmb 00 31 50.3
comp=Z,7μm,1.1s
**LL02 Futaleuf 89.04 135** *e*P **P** **00 31 33.7 +0.2**
**B21K Ikpikpuk River 89.07 8** P **P** **00 31 31.9 -1.0**
baz=202,SNR=113
**F26K Sheenjek River 89.10 12** P **P** **00 31 32.4 -0.7**
baz=212,SNR=416
**B20K Meade River 89.12 7** P **P** **00 31 31.6 -1.5**
baz=200
**H29M Whitestone 89.18 15** P **P** **00 31 33.4 -0.1**
baz=218,SNR=1000
**LR04 Corral 89.27 132** P **P** **00 31 34.6 0.0**
LR04 IAmb IAmb 00 31 51.1
comp=Z,5μm,1.1s
**LR04 Corral 89.27 132** *e*P **P** **00 31 36.0 +1.4**
**CMAR Chiang Mai Arr 89.28 290** P **P** **00 31 33.6 -1.5**
**CMAR Chiang Mai Arr 89.28 290** P **P** **00 31 34.7 -0.3**
comp=Z,493nm,0.9s,baz=110,slow=2.6,SNR=193
CMAR PKiKP PKiKP 00 36 39.1 +10
comp=Z,63nm,0.6s,baz=200,slow=0.8,SNR=6.8
CMAR PKKP **PKKPdf** **00 49 01.5 -1.3**
comp=Z,23nm,1.0s,baz=297,slow=5.7,SNR=4.1
CMAR PKPPKP **P'P'df** **00 57 14.2 -2.7**
comp=Z,20nm,1.0s,baz=288,slow=3.5,SNR=7.5
comp=Z,493nm,0.9s
**CMAR Chiang Mai Arr 89.28 290** *i* P **P** **00 31 34.7 -0.3**
CMAR pmax pmax
comp=Z,514nm,0.9s
**KOTAN Kotaneelee Air 89.29 24** P **P** **00 31 33.9 -0.2**
baz=230,SNR=129
**JCT Junction City 89.35 58** P **P** **00 31 34.3 -0.8**
JCT IAmb IAmb 00 31 58.5
comp=Z,3μm,0.8s
**JCT Junction City 89.35 58** P **P** **00 31 36.1 +0.9**
baz=249,SNR=140
**JCT Junction City 89.35 58** P **P** **00 31 34.3 -0.8**
JCT pmax pmax
comp=Z,3μm,0.9s
**LR02 Universidad Au 89.43 132** *e*P **P** **00 31 37.7 +2.3**
**CD2 Chengdu 89.47 303** P **P** **00 31 35.0 -0.7**

CD2 pP pP 00 33 43.4 +2.0
CD2 sP sP 00 34 36.0 -3.5
CD2 SKS **SKSac** **00 41 13.3 +1.9**
CD2 S **ScS** **00 41 39.8 -0.9**
CD2 pmax pmax
comp=Z,5µm,1.0s
**LL03 Petrohue 89.49 133** P **P** **00 31 35.9 +0.3**
**LL03 Petrohue 89.49 133** *e*P **P** **00 31 36.5 +0.8**
**D24K Happy Valley 89.51 10** P **P** **00 31 33.9 -1.0**
baz=208,SNR=225
**BI04 Isla Mocha 89.52 130** *e*P **P** **00 31 39.2 +3.5**
**AMTX Amarillo 89.52 53** P **P** **00 31 34.9 -1.0**
AMTX IAmb IAmb 00 31 50.0
comp=Z,3µm,0.9s
**AMTX Amarillo 89.52 53** P **P** **00 31 36.4 +0.5**
baz=248
**PZH PanZhiHua 89.56 298** P **P** **00 31 35.8 -0.5**
PZH pP **pP** **00 33 45.5 +3.8**
PZH S **S** **00 41 39.0 -0.2**
PZH sS **sS** **00 45 19.5 -2.5**
PZH SS **SS** **00 47 57.5 +3.9**
PZH pmax pmax
comp=Z,410nm,1.1s
PZH pmax pmax
comp=Z,23µm,5.5s
**LL04 Puerto Octay 89.58 133** P **P** **00 31 35.7 -0.3**
LL04 IAmb IAmb 00 31 52.3
comp=Z,3µm,1.0s
**LL04 Puerto Octay 89.58 133** ⇑*i*P **P** **00 31 35.7 -0.3**
**EGMT Eagleton 89.59 39** P **P** **00 31 35.3 -0.6**
EGMT IAmb IAmb 00 31 53.0
comp=Z,14µm,2.5s
**EGMT Eagleton 89.59 39** P **P** **00 31 35.5 -0.4**
baz=242,SNR=37
**EPYK Eagle Plains 89.71 15** P **P** **00 31 35.3 -0.6**
baz=219,SNR=527
**LC02 Puerto Saavedr 89.73 131** **P** **00 31 36.2 -0.6**
LC02 IAmb IAmb 00 31 55.8
comp=Z,4µm,1.0s
**G29M Pine Creek 89.81 15** P **P** **00 31 36.3 -0.1**
baz=218,SNR=348
**C23K Itkillik River 89.84 9** P **P** **00 31 36.4 0.0**
baz=206,SNR=306
**B22K Teshekpuk Lake 89.89 8** P **P** **00 31 36.7 +0.1**
baz=203,SNR=195
**YAK Yakutsk 89.89 338** P **P** **00 31 34.5 -2.3**
YAK IAmb IAmb 00 31 47.2
comp=Z,4µm,0.8s
**YAK Yakutsk 89.89 338** P **P** **00 31 35.5 -1.3**
comp=Z,655nm,0.7s,baz=101,slow=0.9,SNR=156
YAK PP **PP** **00 35 17.4 -3.1**
comp=Z,621nm,1.0s,baz=31,slow=4.4,SNR=2.1
YAK S **SKSac** **00 41 12.3 +0.1**
comp=Z,80nm,0.9s,baz=153,slow=22,SNR=1.3
comp=Z,655nm,0.7s
**YAK Yakutsk 89.89 338** *e*P **P** **00 31 36.2 -0.6**
YAK *e* 00 35 16.5
YAK *e*PPP PPP 00 37 23.4
YAK *e*S **SKSac** **00 41 12.8 +0.6**
YAK *e* 00 41 42.1
YAK *e*SS **SS** **00 47 56.7 +0.1**
YAK pmax pmax
comp=Z,2µm,0.8s
YAK pmax pmax
comp=N,539nm,1.0s
YAK pmax pmax
comp=E,914nm,1.1s
YAK pmax pmax
comp=Z,33µm,3.8s
YAK pmax pmax
comp=N,10µm,3.0s
YAK pmax pmax
comp=E,9µm,3.2s
YAK smax smax
comp=N,47µm,4.9s
YAK smax smax
comp=E,37µm,5.4s
**AIS Amsterdam Isla 89.92 230** P **P** **00 31 37.3 -0.3**
**F28M Old Crow 89.95 14** P **P** **00 31 37.8 +0.8**
baz=216,SNR=193
**C24K Franklin Bluff 90.03 10** P **P** **00 31 36.7 -0.6**
baz=208
**E27K Coleen River 90.04 13** P **P** **00 31 37.8 +0.4**
baz=214,SNR=762
**D25K Kavik River 90.08 11** P **P** **00 31 38.0 +0.4**
baz=210,SNR=100
**TROLL Troll, Antarti 90.10 180** ⇑P **P** **00 31 37.3 -0.7**
comp=Z,21µm,0.8s
TROLL ⇑SKSac **SKSac** **00 41 17.0 +3.2**
comp=Z,3µm,0.8s
TROLL ⇓PKKPbc **PKKPbc** **00 49 05.9 -1.8**
comp=Z,6µm,0.7s
TROLL ⇑P'P'df P'P'df 00 57 01.3 -13
comp=Z,3µm,1.1s
**LR05 Currie 90.14 133** P **P** **00 31 38.8 +0.2**
**LR05 Currie 90.14 133** *e*P **P** **00 31 40.0 +1.3**
**LR03 Panguipulli 90.14 132** P **P** **00 31 39.3 +0.6**
**LR03 Panguipulli 90.14 132** *e*P **P** **00 31 39.9 +1.3**
**CMBY CAMPBELL BAY 90.29 277** *e*P **P** **00 31 43.6 +3.8**
CMBY IAmb IAmb 00 31 53.8
comp=Z,12µm,1.1s
**G30M tAoh Zraii Nji 90.31 15** P **P** **00 31 37.1 -1.6**
baz=219,SNR=931
**A22K Sinclair Lake 90.31 7** P **P** **00 31 39.1 +0.5**
baz=202
**SNAA Sanae 90.38 178** P **P** **00 31 37.5 -1.7**
SNAA IAmb IAmb 00 31 50.6
comp=Z,4µm,1.2s
**SNAA Sanae 90.38 178** ⇑P **P** **00 31 38.3 -0.9**
comp=Z,4µm,0.7s
SNAA ⇑SKSac **SKSac** **00 41 17.7 +2.4**
comp=Z,3µm,0.9s
SNAA ⇑PKKPbc **PKKPbc** **00 49 05.6 -1.2**
comp=Z,4µm,1.0s
SNAA ⇑P'P'df P'P'df 00 57 01.7 -12
comp=Z,1µm,0.9s
**SNAA Sanae 90.38 178** P **P** **00 31 37.4 -1.8**
comp=Z,260nm,1.0s,baz=207,slow=6.5,SNR=330
SNAA pP **pP** **00 33 42.5 -2.0**
comp=Z,216nm,0.8s,baz=159,slow=23,SNR=1.3
SNAA S **SKSac** **00 41 15.1 -0.1**
comp=Z,76nm,1.0s,baz=352,slow=20,SNR=0.8
SNAA PKKPbc **PKKPbc** **00 49 05.1 -1.8**
comp=Z,41nm,0.9s,baz=265,slow=12,SNR=3.0
SNAA PKPPKP 00 57 09.6
comp=Z,23nm,0.9s,baz=213,slow=0.8,SNR=5.5
comp=Z,260nm,1.0s
**SNAA Sanae 90.38 178** *ce*P **P** **00 31 37.5 -1.7**
SNAA pmax pmax
comp=Z,4µm,1.2s
**A21K Barrow 90.42 7** P **P** **00 31 38.6 -0.5**
baz=200
**VNA3 Neumayer Olymp 90.51 176** ⇑P **P** **00 31 39.1 -0.6**
comp=Z,848nm,0.8s
VNA3 ⇑SKSac **SKSac** **00 41 15.0 -0.9**
comp=Z,52nm,0.6s
VNA3 ⇑PKKPbc **PKKPbc** **00 49 04.3 -2.2**
comp=Z,179nm,0.8s
VNA3 ⇑P'P'df P'P'df 00 57 04.4 -8.7
comp=Z,86nm,0.9s
**G31M Satah River 90.76 16** P **P** **00 31 41.1 +0.4**
baz=221,SNR=673
**GO06 Curarrehue 90.77 132** P **P** **00 31 41.7 0.0**
GO06 IAmb IAmb 00 31 58.1
comp=Z,5µm,1.1s
**GO06 Curarrehue 90.77 132** *e*P **P** **00 31 43.0 +1.2**
**E28M Babbage River 90.82 13** P **P** **00 31 40.9 -0.1**
baz=216,SNR=532
**C27K Jago River 90.83 11** P **P** **00 31 40.8 -0.3**
baz=212,SNR=470
**C26K Camden Bay 90.85 11** P **P** **00 31 40.4 -0.7**
baz=211
**F30M Barrier River 90.90 15** P **P** **00 31 40.5 -0.9**
baz=220,SNR=326
**PLCA Paso Flores 90.94 134** P **P** **00 31 42.9 +0.5**
PLCA IAmb IAmb 00 31 59.0
comp=Z,3µm,1.1s
**PLCA Paso Flores 90.94 134** P **P** **00 31 43.6 +1.2**
comp=Z,175nm,0.9s,baz=237,slow=4.7,SNR=160
PLCA pP **pP** **00 33 45.3 -2.3**
comp=Z,74nm,0.9s,baz=235,slow=7.5,SNR=1.3
PLCA PKKP **PKKPdf** **00 48 56.4 -2.7**
comp=Z,49nm,1.0s,baz=152,slow=6.9,SNR=3.2
PLCA PKPPKP P'P'df 00 56 58.8 -15
comp=Z,17nm,0.8s,baz=318,slow=1.4,SNR=5.1
comp=Z,175nm,0.9s
**PLCA Paso Flores 90.94 134** P **P** **00 31 42.9 +0.5**
PLCA pmax pmax
comp=Z,3µm,1.1s
**PLCA Paso Flores 90.94 134** *e*P **P** **00 31 42.7 +0.3**
**VNA2 Neumayer--Watz 90.96 177** ⇑P **P** **00 31 41.5 -0.2**
comp=Z,565nm,0.7s,baz=189,slow=4.9
VNA2 ⇑SKSac **SKSac** **00 41 18.7 +0.3**
comp=Z,74nm,0.9s,baz=28,slow=1.9
VNA2 ⇑PKKPbc **PKKPbc** **00 49 04.2 -1.2**
comp=Z,267nm,1.2s,baz=342,slow=4.0
VNA2 ⇑P'P'df P'P'df 00 57 04.4 -7.8
comp=Z,53nm,0.8s,baz=13,slow=3.4
**E29M Blow River 91.02 14** P **P** **00 31 40.4 -1.5**
baz=218,SNR=205
**D27M Malcolm River 91.04 12** P **P** **00 31 41.1 -1.0**
baz=215
**RTAL Retalhuleu 91.05 75** P **P** **00 31 43.3 0.0**
RTAL IAmb IAmb 00 31 59.7
comp=Z,2µm,0.9s
**NVL N'lazarevskaya 91.08 183** ⇓*i*P **P** **00 31 41.8 -0.5**
NVL *e*PPP PPP 00 37 32.0
NVL *e*S **SKSac** **00 41 17.5 -1.5**
NVL *e*SS **SS** **00 48 14.5 +3.0**
NVL *e*SSS SSS 00 52 00.3
NVL pmax pmax
comp=Z,3µm,1.0s
**LAO LASA Array 91.14 41** P **P** **00 31 43.0 0.0**
**LAO LASA Array 91.14 41** P **P** **00 31 43.1 0.0**
baz=245,SNR=184
**VNA1 Neumayer--Stat 91.18 177** ⇑P **P** **00 31 42.7 -0.1**
comp=Z,762nm,0.8s
VNA1 ⇑SKSac **SKSac** **00 41 24.6 +5.1**
comp=Z,135nm,1.0s
VNA1 ⇑PKKPbc **PKKPbc** **00 49 05.5 +0.8**
comp=Z,410nm,1.0s
VNA1 ⇑P'P'df **P'P'df** **00 57 07.0 -4.8**
comp=Z,126nm,1.0s
**CCIG Comitan 91.20 73** P **P** **00 31 43.3 -0.8**
**435B Jarrell 91.24 58** P **P** **00 31 42.1 -1.7**
baz=250
**F31M Tsiigehtchic 91.29 16** P **P** **00 31 43.1 0.0**
baz=222,SNR=564
**LZH Lanzhou 91.29 308** ⇓P **P** **00 31 43.8 -0.3**
LZH pmax pmax
comp=Z,510nm,1.4s
LZH pmax pmax
comp=Z,73µm,6.5s
**RSSD Black Hills 91.47 44** P **P** **00 31 45.0 +0.2**
baz=246
**WRGLY Wrigley 91.49 22** P **P** **00 31 43.7 -0.4**
baz=231,SNR=14
**CIT Chita 91.53 325** *e*P **P** **00 31 44.8 +0.1**
CIT *e*S **SKSac** **00 41 29.4 +7.4**
CIT *e* 00 43 49.8
CIT pmax pmax
comp=Z,9µm,2.9s
**D28M Stokes Point 91.58 13** P **P** **00 31 43.3 -1.1**
baz=217,SNR=203
**OGNE Ogallala 91.58 47** P **P** **00 31 44.8 -0.4**
baz=247,SNR=32
**WMOK Wichita Mounta 91.68 54** **P** **00 31 44.4 -1.4**
**WMOK Wichita Mounta 91.68 54** P **P** **00 31 45.9 +0.1**
baz=249,SNR=154
**WMOK Wichita Mounta 91.68 54** P **P** **00 31 44.4 -1.4**
WMOK pmax pmax
comp=Z,764nm,1.0s
**TNCH TengChong 91.80 296** ⇓*i*P **P** **00 31 46.3 -0.5**
TNCH pP pP 00 33 51.6 -0.5
TNCH sP sP 00 34 41.6 -7.9
TNCH PP **PP** **00 35 41.9 +5.4**
TNCH SKS **SKSac** **00 41 28.6 +3.6**
TNCH pmax pmax
comp=Z,2µm,1.5s
TNCH pmax pmax
comp=Z,67µm,6.7s
**INK Inuvik 91.99 15** P **P** **00 31 45.3 -1.0**
INK IAmb IAmb 00 32 00.3
comp=Z,3µm,0.9s
**INK Inuvik 91.99 15** P **P** **00 31 45.1 -1.2**
baz=222,SNR=342
**INK Inuvik 91.99 15** P **P** **00 31 45.3 -1.0**
INK pmax pmax
comp=Z,3µm,1.0s
**BI02 San Fabin de 92.12 130** P **P** **00 31 47.8 -0.2**
**BI02 San Fabin de 92.12 130** ⇑*i*P **P** **00 31 47.7 -0.2**
**GO05 Huala 92.30 128** P **P** **00 31 48.4 -0.4**
**OK038 West end E0370 92.33 52** **P** **00 31 48.2 -0.5**
OK038 IAmb IAmb 00 32 03.5
comp=Z,3µm,0.9s
**ML02 Panimavida 92.38 129** P **P** **00 31 48.6 -0.5**
ML02 IAmb IAmb 00 32 04.8
comp=Z,3µm,1.1s
**HKT Hockley 92.39 59** P **P** **00 31 48.3 -0.7**
HKT IAmb IAmb 00 32 13.4
comp=Z,4µm,1.5s
**HKT Hockley 92.39 59** *i*P **P** **00 31 49.5 +0.5**
HKT pmax pmax
comp=Z,3µm,1.6s
**CBKS Cedar Bluff 92.42 50** P **P** **00 31 48.6 -0.5**
CBKS IAmb IAmb 00 32 04.0
comp=Z,3µm,1.0s
**CBKS Cedar Bluff 92.42 50** P **P** **00 31 49.0 -0.2**
baz=249,SNR=41
**CBKS Cedar Bluff 92.42 50** P **P** **00 31 48.6 -0.5**
CBKS pmax pmax
comp=Z,3µm,1.0s
**BO03 Pichilemu 92.49 127** *e*P **P** **00 31 50.8 +1.3**
**PBA Port Blair 92.82 281** P **P** **00 31 49.7 -1.7**
**PBA Port Blair 92.82 281** *e*P **P** **00 31 53.7 +2.3**
**VA05 Santo Domingo 93.09 127** P **P** **00 31 51.9 -0.5**
**VA05 Santo Domingo 93.09 127** *e*P **P** **00 31 53.4 +1.1**
**EFI East Falkland 93.10 147** P **P** **00 31 52.0 0.0**
EFI IAmb IAmb 00 32 07.8
comp=Z,5µm,1.5s
**EFI East Falkland 93.10 147** *ce*P **P** **00 31 53.0 +1.0**
EFI pmax pmax
comp=Z,1µm,1.5s
**DGMT Dagmar 93.13 40** P **P** **00 31 52.2 +0.1**
baz=246,SNR=108
**MTO3 Montecristo 93.16 76** P **P** **00 31 52.6 -0.6**
MTO3 IAmb IAmb 00 32 17.4
comp=Z,2µm,1.5s
**BO01 Tunca 93.19 128** P **P** **00 31 52.0 -0.8**
**BO01 Tunca 93.19 128** *e*P **P** **00 31 53.9 +1.1**
**ESQI Esquipulas 93.23 76** P **P** **00 31 52.9 -0.5**
ESQI IAmb IAmb 00 32 23.1
comp=Z,7µm,1.9s
**BO02 Sierra Bellavi 93.25 128** P **P** **00 31 52.9 -0.3**
**BO02 Sierra Bellavi 93.25 128** *e*P **P** **00 31 53.9 +0.7**
**MT01 Popeta 93.28 127** P **P** **00 31 52.9 -0.3**
MT01 IAmb IAmb 00 32 10.1
comp=Z,2µm,1.2s
**MT01 Popeta 93.28 127** *e*P **P** **00 31 54.4 +1.1**
MT01 IAmb IAmb 00 32 10.4
comp=Z,2µm,1.2s
**VA01 Torpederas 93.32 126** *e*P **P** **00 31 55.8 +2.4**
**MT09 Talagante 93.52 127** P **P** **00 31 53.5 -1.0**
**MT09 Talagante 93.52 127** *e*P **P** **00 31 56.3 +1.8**
**ULN Ulaanbaatar 93.54 319** P **P** **00 31 52.4 -1.7**
**ULN Ulaanbaatar 93.54 319** *ce*P **P** **00 31 52.2 -1.9**
ULN pmax pmax
comp=Z,5µm,1.2s
**MT02 Curacav 93.61 127** P **P** **00 31 54.1 -0.6**
**MT02 Curacav 93.61 127** *e*P **P** **00 31 54.2 -0.6**
**BO04 La Punta 93.72 127** P **P** **00 31 54.4 -0.9**
**BO04 La Punta 93.72 127** *e*P **P** **00 31 56.2 +1.0**
**VA06 Catapilco 93.78 126** *e*P P 00 31 47.6 -7.9
**ROCH El Roble 93.83 126** *e*P **P** **00 31 57.2 +1.2**
**MT05 Renca 93.86 127** P **P** **00 31 54.4 -1.6**
MT05 IAmb IAmb 00 32 19.1
comp=Z,5µm,2.0s
**MT05 Renca 93.86 127** *e*P **P** **00 31 59.5 +3.5**
**MT12 Pirque 93.87 127** *e*P **P** **00 31 57.5 +1.5**
**NATX Nacogdoches 93.93 58** P **P** **00 31 55.6 -0.5**
baz=251
**SONM Songino Array 93.93 319** P **P** **00 31 53.8 -2.1**
**SONM Songino Array 93.93 319** P **P** **00 31 53.9 -2.1**
comp=Z,79nm,0.9s,baz=128,slow=2.7,SNR=144
SONM pP **pP** **00 34 00.4 -1.6**
comp=Z,82nm,1.0s,baz=124,slow=6.1,SNR=1.0
SONM PP **PP** **00 35 55.6 +3.3**
comp=Z,446nm,1.2s,baz=135,slow=6.0,SNR=3.6
SONM PKiKP **PKiKP** **00 36 41.4 +4.9**
comp=Z,110nm,0.9s,baz=108,slow=1.9,SNR=6.9
SONM S **SKSac** **00 41 38.0 +2.6**
comp=Z,48nm,1.0s,baz=112,slow=4.8,SNR=1.3
SONM PKKPbc **PKKPdf** **00 48 56.1 +0.1**
comp=Z,22nm,1.0s,baz=270,slow=2.6,SNR=1.4
SONM PKPPKP **P'P'df** **00 57 07.8 +1.6**
comp=Z,20nm,1.1s,baz=265,slow=3.1,SNR=5.5
comp=Z,79nm,0.9s
**SONM Songino Array 93.93 319** P **P** **00 31 53.8 -2.1**
SONM pmax pmax
comp=Z,6µm,1.8s
**MT15 Las Vizcachas 93.96 127** *e*P **P** **00 31 57.6 +1.3**
**MT03 Universidad Ad 94.00 127** P **P** **00 31 55.9 -0.7**
**MT03 Universidad Ad 94.00 127** *e*P **P** **00 31 57.5 +0.8**
MT03 IAmb IAmb 00 32 13.2
comp=Z,3µm,2.0s
**PEL Peldehue 94.01 127** P **P** **00 31 55.4 -1.2**
PEL IAmb IAmb 00 32 13.7
comp=Z,2µm,1.2s
**PEL Peldehue 94.01 127** *e*P **P** **00 31 58.2 +1.6**
**PEL Peldehue 94.01 127** P **P** **00 31 55.4 -1.2**
PEL pmax pmax
comp=Z,2µm,1.2s
**BOD Bodaibo 94.01 330** *e*P **P** **00 31 53.5 -2.3**
BOD pmax pmax
comp=Z,2µm,1.7s
**MT16 CCHEN 94.01 127** P **P** **00 31 55.5 -1.2**
MT16 IAmb IAmb 00 32 15.5
comp=Z,1µm,1.0s
**MT16 CCHEN 94.01 127** *e*P **P** **00 31 58.1 +1.4**
**MT14 Cerro Cal¡n 94.02 127** *e*P **P** **00 31 58.1 +1.4**
**MT10 Hacienda Santa 94.07 127** *e*P **P** **00 31 59.3 +2.3**
**LMEL Las Melosas 94.08 127** P **P** **00 31 55.8 -1.3**
**FCH Farellones 94.23 127** *e*P **P** **00 31 59.7 +1.7**
**CO04 Los Peladeros 94.24 126** *e*P **P** **00 32 00.4 +2.4**
**VA03 San Esteban 94.27 126** P **P** **00 31 57.5 -0.3**
VA03 IAmb IAmb 00 32 14.8
comp=Z,2µm,1.2s
**VA03 San Esteban 94.27 126** *e*P **P** **00 31 58.5 +0.6**
**CO06 Fray Jorge 94.28 124** P **P** **00 31 57.7 -0.1**
**CO06 Fray Jorge 94.28 124** *e*P **P** **00 31 60.0 +2.2**
**MT04 Ro Olivares 94.32 127** *e*P **P** **00 32 00.1 +1.9**
**YKA Yellowknife Ar 94.37 25** P **P** **00 31 55.7 -1.6**
**YKA Yellowknife Ar 94.37 25** P **P** **00 31 56.0 -1.4**
comp=Z,158nm,0.9s,baz=250,slow=4.3,SNR=165
YKA pP **pP** **00 34 02.7 -0.3**
comp=Z,19nm,0.7s,baz=246,slow=4.5,SNR=0.9
YKA PP **PP** **00 35 53.8 -1.4**
comp=Z,174nm,1.2s,baz=245,slow=8.1,SNR=4.3
YKA PKiKP **PKiKP** **00 36 40.3 +3.7**
comp=Z,30nm,0.8s,baz=269,slow=1.7,SNR=1.9
YKA S **SKSac** **00 41 37.5 +0.7**
comp=Z,8.0nm,0.8s,baz=89,slow=13,SNR=0.9
YKA PKKPbc **PKKPdf** **00 48 54.5 -1.0**
comp=Z,31nm,1.0s,baz=63,slow=2.7,SNR=4.5
YKA PKPPKP **P'P'df** **00 57 05.1 +1.0**
comp=Z,14nm,0.9s,baz=22,slow=2.6,SNR=4.6
comp=Z,158nm,0.9s
**MT08 Bocatoma Ro 94.39 127** P **P** **00 31 57.9 -0.7**
MT08 IAmb IAmb 00 32 21.1
comp=Z,1µm,1.1s
**MT08 Bocatoma Ro 94.39 127** *e*P **P** **00 32 00.7 +2.1**
**CO02 Combarbal 94.56 125** *e*P **P** **00 32 00.9 +1.6**
**LKP Lekhapani 94.80 297** *e*P P 00 32 06.0 +5.8
LKP IAmb IAmb 00 32 14.6
comp=Z,2µm,1.0s
LKP IAMs_20 IAMs_20 00 47 36.7
comp=Z,403µm,21.4s
**KSU1 Kansas State U 94.81 51** P **P** **00 31 59.6 -0.3**
**KSU1 Kansas State U 94.81 51** P **P** **00 32 00.2 +0.3**
baz=251,SNR=73
**CO05 La Serena 94.90 123** P **P** **00 31 59.5 -1.2**
**CO05 La Serena 94.90 123** *e*P **P** **00 32 02.3 +1.7**
**CO03 El Pedregal 94.95 125** P **P** **00 31 59.9 -1.1**
CO03 IAmb IAmb 00 32 19.0
comp=Z,2µm,1.4s
**CO03 El Pedregal 94.95 125** *e*P **P** **00 32 02.1 +1.1**
**TGUH Tegucigalpa,Un 94.99 77** P **P** **00 32 01.1 -0.4**
**GO04 Tololo Observa 95.14 124** P **P** **00 32 00.9 -1.2**
**C36M Paulatuk 95.19 17** P **P** **00 32 01.1 +0.2**
baz=231,SNR=54
**GTA Gaotai 95.43 310** ⇓P **P** **00 32 01.8 -1.1**
GTA S **S** **00 42 23.3 -6.7**
**MOKO MOKOCHONG 95.63 296** *e*P P 00 32 09.6 +5.4
MOKO IAmb IAmb 00 32 18.5
comp=Z,9µm,1.3s
**MIAR Mount Ida 95.67 56** P **P** **00 32 02.7 -1.2**
MIAR IAmb IAmb 00 32 21.6
comp=Z,7µm,2.8s
**MIAR Mount Ida 95.67 56** P **P** **00 32 04.8 +0.8**
baz=252,SNR=167
**MIAR Mount Ida 95.67 56** P **P** **00 32 02.7 -1.2**
MIAR pmax pmax
comp=Z,7µm,2.8s
**IMP Imphal 95.68 294** *e*P P 00 32 09.9 +5.6
IMP IAmb IAmb 00 32 17.9
comp=Z,4µm,1.1s
IMP IAMs_20 IAMs_20 00 47 47.7
comp=Z,596µm,24.5s
**LCO Las Campanas 95.69 123** P **P** **00 32 03.7 -0.9**
**LCO Las Campanas 95.69 123** P **P** **00 32 03.7 -0.9**
LCO pmax pmax
comp=Z,949nm,1.0s
**AC04 Llanos de Chal 95.72 122** *e*P **P** **00 31 59.8 -4.6**
**CO01 Juntas del Tor 95.78 124** P **P** **00 32 04.3 -0.7**
**CO01 Juntas del Tor 95.78 124** *e*P **P** **00 32 08.2 +3.2**
**KOHI KOHIMA 95.81 295** *e*P P 00 32 10.3 +5.3
KOHI IAmb IAmb 00 32 20.2
comp=Z,8µm,1.6s
KOHI IAMs_20 IAMs_20 00 48 12.9
comp=Z,435µm,21.3s
**HHAR Hobbs 95.92 54** P **P** **00 32 03.7 -1.3**
**JORH JORHAT 95.98 296** *e*P **P** **00 32 09.6 +4.1**
JORH IAmb IAmb 00 32 21.4
comp=Z,5µm,1.1s
JORH IAMs_20 IAMs_20 00 47 48.6
comp=Z,462µm,21.5s
**BOAB BOACO BROADBA 96.01 79** P P 00 32 11.5 +5.7
**JTS Las Juntas de 96.05 81** P **P** **00 32 05.5 -0.5**
JTS IAmb IAmb 00 34 25.7
comp=Z,6µm,2.2s
**JTS Las Juntas de 96.05 81** P **P** **00 32 05.6 -0.5**
JTS pmax pmax
comp=Z,6µm,2.2s
**AC05 El Transito 96.11 123** *e*P **P** **00 32 07.9 +1.6**
**ZON Zonda 96.22 126** P **P** **00 32 06.8 +0.1**
**ZON Zonda 96.22 126** P **P** **00 32 06.8 +0.1**
ZON pmax pmax
comp=Z,907nm,1.2s
**ECSD EROS Data Cent 96.32 46** P **P** **00 32 05.4 -1.3**
**ECSD EROS Data Cent 96.32 46** Pdiff **P** **00 32 06.6 -0.1**
baz=251
**ACON Acoyapa 96.33 80** P **P** **00 32 06.4 -1.0**
**TIXI Tiksi 96.44 345** P **P** **00 32 04.9 -1.6**
TIXI IAmb IAmb 00 32 23.6
comp=Z,1µm,0.9s
**TIXI Tiksi 96.44 345** P **P** **00 32 06.1 -0.4**
comp=Z,430nm,1.0s,baz=132,slow=4.5,SNR=50
TIXI pP **pP** **00 34 11.2 -0.9**
comp=Z,62nm,0.8s,baz=174,slow=11,SNR=1.2
TIXI PP **PP** **00 36 10.9 +0.3**
comp=Z,434nm,0.9s,baz=129,slow=7.4,SNR=6.0
TIXI S **SKSac** **00 41 44.5 -2.7**
comp=Z,60nm,0.9s,baz=78,slow=3.2,SNR=1.9
comp=Z,430nm,1.0s
**TIXI Tiksi 96.44 345** *ce*P **P** **00 32 04.9 -1.6**
TIXI pmax pmax
comp=Z,995nm,0.8s
**ZIRO ZIRO 96.56 297** *e*P P 00 32 13.8 +5.5
ZIRO IAmb IAmb 00 32 25.4
comp=Z,2µm,0.9s
ZIRO IAMs_20 IAMs_20 00 47 58.6
comp=Z,509µm,22.8s
**A36M Sachs Harbour 96.59 14** Pdiff **P** **00 32 08.7 +1.6**
baz=230
**AC06 Mina Casimiro 96.65 121** P **P** **00 32 07.2 -1.4**
**AC06 Mina Casimiro 96.65 121** *e*P **P** **00 32 11.2 +2.6**
**GO03 Copiap 96.65 122** *e*P **P** **00 32 08.7 +0.1**
**UALR University of 96.70 56** P **P** **00 32 07.4 -1.2**
**NNA Nana 96.72 105** P **P** **00 32 08.3 -0.9**
**NNA Nana 96.72 105** P **P** **00 32 08.6 -0.6**
comp=Z,4.8nm,0.4s,baz=206,slow=6.3,SNR=2.5
NNA pP **pP** **00 34 14.8 +0.1**
comp=Z,22nm,0.8s,baz=268,slow=14,SNR=1.1
NNA S **SKSac** **00 41 51.2 -0.1**
comp=Z,27nm,1.0s,baz=236,slow=13,SNR=1.3
**NNA Nana 96.72 105** *i*P **P** **00 32 08.9 -0.3**
NNA pmax pmax

comp=Z,698nm,1.4s
**ZAK Zakamensk 96.77 321** *e*P **P 00 32 08.1 -0.5**
ZAK pmax pmax
comp=Z,849nm,1.2s
**LCR2 La Lucha 2 96.78 82** P **P 00 32 07.7 -1.9**
**FFC Flin Flon 96.83 35** P **P 00 32 07.8 -0.8**
**FFC Flin Flon 96.83 35** P **P 00 32 07.8 -0.8**
FFC pmax pmax
comp=Z,521nm,1.4s
**IRK Irkutsk 96.83 323** *e*P **P 00 32 08.1 -0.6**
IRK *e* 00 42 37.6
IRK pmax pmax
comp=Z,1μm,1.5s
**AC01 Pan de Azucar 96.94 120** ⇧ *i*P **P 00 32 14.2 +4.3**
**VBMS Vicksburg 97.42 59** Pdiff Pdif 00 32 10.6 -1.2
baz=253
**MGMO Mountain Grove 97.46 53** Pdif 00 32 10.6 -1.3
MGMO IAmb IAmb 00 32 27.8
comp=Z,1μm,0.9s
**SHL Shillong 97.69 294** *e*P P 00 32 19.1 +5.7
SHL IAmb IAmb 00 32 29.1
comp=Z,2μm,0.9s
**PB14 IPOC Station P 97.72 119** P **P 00 32 17.8 +4.0**
**PB14 IPOC Station P 97.72 119** *e*P **P 00 32 16.4 +2.6**
**SCIA State Center 98.14 49** Pdiff **P 00 32 15.4 +0.6**
baz=253
**GO02 Mina Guanaco 98.17 120** *e*P **P 00 32 20.1 +4.3**
**GOMU GeErMu 98.24 305** P **P 00 32 15.9 0.0**
GOMU PP **PP 00 36 27.0 +1.4**
GOMU SS SS 00 49 49.6 -6.2
GOMU pmax pmax
comp=Z,110nm,1.2s
**AGMN Agassiz Nation 98.26 42** Pdiff **P 00 32 16.7 +1.5**
baz=252
**TAWA Tawang 98.26 296** IAmb IAmb 00 33 32.5
comp=Z,1μm,0.9s
TAWA IAMs_20 IAMs_20 00 47 43.1
comp=Z,116μm,21.2s
**CCM Cathedral Cave 98.50 53** Pdiff Pdif 00 32 16.2 -0.3
baz=254
**MOY Mondy 98.55 322** *e*P Pdif 00 32 16.0 -0.5
MOY *e* 00 36 26.8
MOY *e* 00 42 05.9
**ULM Lac du Bonnet 98.84 40** P Pdif 00 32 17.0 -0.7
comp=Z,41nm,1.0s,baz=251,slow=4.6,SNR=27
ULM pP pP 00 34 22.9 -0.6
comp=Z,57nm,0.8s,baz=237,slow=17,SNR=1.6
ULM PP **PP 00 36 29.1 -0.2**
comp=Z,123nm,1.0s,baz=266,slow=7.0,SNR=2.5
ULM S **SKSac 00 42 00.5 +0.3**
comp=Z,76nm,1.1s,baz=277,slow=7.7,SNR=2.0
ULM PKKPbc **PKKPbc 00 48 42.0 -1.9**
comp=Z,67nm,0.9s,baz=48,slow=2.1,SNR=5.4
ULM PKPPKP **P'P'df 00 56 56.5 -0.2**
comp=Z,28nm,1.1s,baz=102,slow=3.7,SNR=3.0
comp=Z,41nm,1.0s
**ULM Lac du Bonnet 98.84 40** *i*P **P 00 32 17.9 +0.1**
**PB04 IPOC Station P 98.85 117** *e*P **P 00 32 21.8 +3.1**
**OXF Oxford 98.95 57** Pdiff **P 00 32 18.9 +0.3**
baz=254
**LSA Lhasa 99.44 298** P **Pdif 00 32 22.4 +0.9**
**LSA Lhasa 99.44 298** Pdiff **Pdif 00 32 24.1 +2.6**
**PATCX Punta Patache 99.45 116** *e*P **Pdif 00 32 22.6 +1.3**
**TA01 Diego Aracena 99.52 115** *e*P **Pdif 00 32 23.6 +2.2**
**TA02 Huaiquique 99.68 115** *e*P **Pdif 00 32 29.1 +7.0**
**LVC Limon Verde 99.78 118** P **Pdif 00 32 24.9 +1.9**
comp=Z,50nm,1.1s,baz=256,slow=3.5,SNR=19
LVC pP **pP 00 34 28.8 -0.1**
comp=Z,45nm,0.9s,baz=248,slow=8.0,SNR=1.6
**CYA Choya 99.82 124** *e*P **Pdif 00 32 24.6 +1.8**
**PB09 IPOC Station P 99.83 117** *e*P **Pdif 00 32 26.0 +2.9**
**BRAL Brewton 99.98 60** Pdiff **Pdif 00 32 22.3 -0.9**
baz=255
**LRAL Lakeview Retre 100.50 59** Pdiff **Pdif 00 32 24.3 -1.2**
baz=255
**JFWS Jewell Farm 100.53 48** Pdiff **Pdif 00 32 24.1 -1.3**
baz=255
**WVT Waverly 100.62 55** Pdiff **Pdif 00 32 25.2 -0.8**
baz=255
**HDIL Hopedale 100.62 51** Pdiff **Pdif 00 32 26.0 +0.1**
baz=255
**GO01 Chusmiza 100.73 115** *e*P **Pdif 00 32 31.2 +3.7**
**EYMN Ely 100.97 43** Pdiff **Pdif 00 32 27.2 -0.1**
baz=255
**GTK Tadong 100.99 295** *e*P **Pdif 00 32 30.9 +3.0**
GTK IAmb IAmb 00 32 46.9
comp=Z,1μm,1.2s
GTK IAMs_20 IAMs_20 00 48 46.3
comp=Z,433μm,23.7s
**H04S1 CROZET ISLANDS 101.26 212** P **Pdif 00 32 30.7 +2.3**
baz=282,slow=73,SNR=6.0
H04S1 pP **pPdif 00 34 33.0 -1.4**
H04S1 PKiKP **PKiKP 00 36 52.9 +3.6**
baz=154,slow=4.0,SNR=5.0
**H04S2 CROZET ISLANDS 101.27 212** P **Pdif 00 32 28.4 -0.1**
baz=282,slow=73,SNR=9.1
H04S2 pP **pPdif 00 34 33.0 -1.5**
H04S2 PKiKP **PKiKP 00 36 52.7 +3.4**
baz=154,slow=4.0,SNR=4.7
**H04S3 CROZET ISLANDS 101.28 212** P **Pdif 00 32 29.5 +1.0**
baz=282,slow=73,SNR=5.2
H04S3 pP **pPdif 00 34 32.9 -1.6**
H04S3 PKiKP **PKiKP 00 36 52.9 +3.6**
baz=154,slow=4.0,SNR=3.4
**PB18 Visviri 101.30 113** *e*P **Pdif 00 32 33.9 +3.8**
**H04N2 CROZET ISLANDS 101.77 213** P **Pdif 00 32 30.7 0.0**
baz=310,slow=74,SNR=4.6
H04N2 pP **pPdif 00 34 35.6 -1.1**
H04N2 PKiKP **PKiKP 00 36 52.8 +2.6**
**H04N3 CROZET ISLANDS 101.78 213** P **Pdif 00 32 30.6 -0.1**
SNR=4.9
H04N3 pP **pPdif 00 34 35.5 -1.1**
H04N3 PKiKP **PKiKP 00 36 52.7 +2.6**
**H04N1 CROZET ISLANDS 101.79 213** P **Pdif 00 32 31.8 +1.0**
baz=28,slow=74,SNR=7.7
H04N1 pP **pPdif 00 34 35.6 -1.2**
H04N1 PKiKP **PKiKP 00 36 52.8 +2.6**
**L44A Lake County Fo 102.03 49** Pdiff **Pdif 00 32 31.5 -0.6**
baz=256
**WCI Wyandotte Cave 102.32 54** Pdiff **Pdif 00 32 31.9 -1.5**
baz=257
**LPA La Plata 102.48 133** *ce*PDIFF **Pdif 00 32 36.2 +1.9**
LPA PP **PP 00 36 59.6 +3.8**
LPA PS **PS 00 46 22.5 +1.7**
LPA PPP PPP 00 56 44.0
**BOK Bokaro 102.48 291** *e*P **Pdif 00 32 36.9 +2.4**
BOK IAmb IAmb 00 32 50.6
comp=Z,732nm,1.0s
**PALK Pallekele 102.89 274** *d i*P **Pdif 00 32 41.0 +4.4**
PALK pmax pmax
comp=Z,762nm,1.3s
**LPAZ La Paz 103.00 112** Pdiff **Pdif 00 32 39.9 +2.1**
comp=Z,30nm,0.8s,baz=264,slow=4.3,SNR=39
LPAZ pP **pPdif 00 34 44.1 +0.5**
comp=Z,14nm,0.9s,baz=230,slow=9.3,SNR=0.6
LPAZ PKiKP **PKiKP 00 36 54.5 +0.3**
comp=Z,96nm,1.1s,baz=295,slow=9.0,SNR=2.3
LPAZ PKKP **PKKPdf 00 48 37.6 -0.8**
comp=Z,93nm,0.7s,baz=86,slow=2.7,SNR=16
LPAZ PKPPKP **P'P'df 00 56 50.1 -2.4**
comp=Z,18nm,1.1s,baz=125,slow=6.5,SNR=2.3
**MALK Mahakanadarawa 103.36 275** P **Pdif 00 32 39.9 +1.3**
**GOGA Godfrey 103.46 59** Pdiff **Pdif 00 32 38.1 -0.5**
baz=257
**P49A Miami Univ. Ec 103.80 53** Pdiff **Pdif 00 32 39.7 -0.4**
baz=258
**JHSG JHARSUGUGA 103.87 289** *e*P **Pdif 00 32 46.8 +6.1**
JHSG IAmb IAmb 00 32 59.3
comp=Z,731nm,0.8s
**DWPF Disney Wildern 103.98 65** Pdiff **Pdif 00 32 41.2 +0.1**
baz=257
**TZTN Tazewell 104.08 56** Pdiff **Pdif 00 32 40.9 -0.5**
baz=258
**ROSC El Rosal 104.52 90** Pdiff **Pdif 00 32 51.6 +7.3**
comp=Z,25nm,0.7s,baz=243,slow=4.1,SNR=9.7
ROSC pP **pPdif 00 34 49.1 -0.9**
comp=Z,45nm,1.0s,baz=134,slow=23,SNR=1.1
ROSC PKiKP **PKiKP 00 36 56.1 -0.7**
comp=Z,176nm,1.2s,baz=358,slow=13,SNR=4.0
**MDRS Chennai 104.92 279** *e*P **Pdif 00 32 50.9 +5.4**
**GLMI Grayling 104.92 47** Pdiff **Pdif 00 32 43.5 -1.4**
baz=259
**AAM Ann Arbor 105.14 50** Pdiff **Pdif 00 32 51.7 +5.8**
baz=259
**ACSO Alum Creek Sta 105.25 52** Pdiff **Pdif 00 32 51.9 +5.5**
baz=259

**WMQ Urumqi 105.33 312** Pdif **Pdif 00 32 47.8 +1.0**
WMQ PP **PP 00 37 18.4 +1.0**
WMQ AMB AMB
comp=Z,87μm,11.7s
**BLSP Bilaspur 105.44 289** *e*P **Pdif 00 32 52.1 +4.4**
BLSP IAmb IAmb 00 33 01.4
comp=Z,529nm,0.9s
**STH Stony Hill 105.76 76** *i*P **Pdif 00 32 56.3 +7.1**
**P52A Corning 105.78 53** Pdiff **Pdif 00 32 52.2 +3.3**
baz=260
**H08S2 Diego Garcia H 105.86 256** Pdiff **Pdif 00 32 56.9 +7.4**
baz=22,slow=8.7,SNR=9.7
H08S2 PKiKP **PKiKP 00 36 59.8 +1.4**
baz=20,slow=6.1,SNR=21
**H08S3 Diego Garcia H 105.87 256** Pdiff **Pdif 00 32 57.0 +7.4**
baz=22,slow=8.7,SNR=5.5
H08S3 PKiKP **PKiKP 00 36 59.9 +1.4**
baz=20,slow=6.1,SNR=32
**H08S1 Diego Carcia H 105.88 256** Pdiff **Pdif 00 32 56.9 +7.4**
baz=22,slow=8.7,SNR=9.3
H08S1 PKiKP **PKiKP 00 36 59.9 +1.4**
baz=20,slow=6.1,SNR=18
**NHSC New Hope 106.09 60** Pdiff **Pdif 00 32 55.4 +5.0**
baz=259
**ALBI Allahabad 106.44 292** *e*P **Pdif 00 32 56.7 +4.6**
**SALM Salem 106.47 277** *e*P **Pdif 00 32 58.5 +6.0**
SALM IAmb IAmb 00 33 12.8
comp=Z,206nm,0.9s
**O53A New Philadelph 106.59 52** Pdiff **Pdif 00 32 58.2 +5.8**
**BLA Blacksburg 106.67 56** Pdiff **Pdif 00 32 58.4 +5.5**
baz=260
**TRD Trivandrum 106.79 274** *e*P **Pdif 00 33 00.0 +6.1**
**M53A WI Miller and 107.19 51** Pdiff **Pdif 00 33 00.5 +5.5**
baz=261
**CPUP Villa Florida 107.43 126** Pdiff **Pdif 00 32 58.7 +2.1**
comp=Z,5.9nm,0.8s,baz=250,slow=4.4,SNR=5.9
CPUP pP **pPdif 00 35 00.6 -1.8**
comp=Z,17nm,0.8s,baz=286,slow=1.1,SNR=1.2
CPUP PKiKP **PKiKP 00 37 03.6 +2.2**
comp=Z,17nm,0.9s,baz=240,slow=7.8,SNR=1.4
CPUP PKKPbc **PKKPbc 00 48 16.4 -1.9**
comp=Z,39nm,0.9s,baz=54,slow=2.0,SNR=3.6
CPUP PKPPKP **P'P'df 00 56 38.7 -4.1**
comp=Z,16nm,0.9s,baz=2.5,slow=6.5,SNR=3.6
**MCWV Mont Chateau 107.53 53** Pdiff **Pdif 00 33 02.3 +5.7**
baz=261
**HYB Hyderabad 107.60 283** *e*Pdif **Pdif 00 32 58.5 +1.0**
HYB *ep*Pdif **pPdif 00 35 07.2 +3.9**
HYB *es*Pdif **sPdif 00 36 06.1 +5.7**
HYB *e*PKiKP **PKiKP 00 37 01.1 -0.8**
HYB *e*PP **PP 00 37 30.2 -4.1**
HYB *e*SKSac **SKSac 00 42 37.9 -3.8**
HYB *e* 00 42 50.0
HYB *e*SKSdf **SKSdf 00 43 15.7 -4.2**
HYB *e*Sdif **Sdif 00 44 06.2 -6.2**
HYB *e*PS **PS 00 47 09.8 +0.6**
HYB *e*PKKPdf **PKKPdf 00 48 26.2 -3.5**
HYB *e*PKKPab **PKKPab 00 48 31.4 -2.3**
HYB *e*PKKSbc PKKSbc 00 52 00.3 -0.9
HYB *e* 00 52 17.2
**GTBY Guantanamo Bay 107.76 74** *i*P **Pdif 00 33 02.8 +4.8**
**ERPA Erie 107.80 51** Pdiff **Pdif 00 33 03.2 +5.4**
baz=262
**ZSN Zaisan 107.86 315** *e*PKiKP **PKiKP 00 37 00.2 -1.3**
baz=315
ZSN *e*PP **PP 00 37 33.2 -2.3**
baz=315
**NGP Nagpur 108.01 287** *e*P **Pdif 00 33 03.3 +4.2**
**CNNC Cliffs of the 108.34 58** Pdiff **Pdif 00 33 06.1 +5.8**
baz=260
**I46RU ZALESOVO INFRA 108.61 322** PP **PP 00 37 45.0 +4.5**
baz=113,slow=7.2,SNR=3.1
**ZALV Zalesovo Beam 108.61 322** Pdiff **Pdif 00 32 59.8 -1.3**
comp=Z,21nm,1.0s,baz=100,slow=3.6,SNR=52
ZALV PKiKP **PKiKP 00 37 03.1 +0.4**
comp=Z,158nm,0.9s,baz=96,slow=2.0,SNR=6.6
ZALV PP **PP 00 37 39.9 -0.6**
comp=Z,90nm,0.6s,baz=130,slow=1.7,SNR=1.3
ZALV PKKPbc **PKKPbc 00 48 14.1 -1.0**
comp=Z,28nm,0.6s,baz=265,slow=3.3,SNR=4.7
**LGTI Lohaghat 108.63 296** *e*P **Pdif 00 33 08.2 +6.4**
**FRKB FARRUKHABAD 108.83 293** *e*P **Pdif 00 33 09.1 +6.4**
**SSPA Standing Stone 109.15 52** Pdiff **Pdif 00 33 07.6 +3.8**
baz=262
**CBN Corbin Frederi 109.21 55** Pdiff **Pdif 00 33 09.6 +5.5**
baz=262
**SIV San Ignacio 109.28 115** Pdiff **Pdif 00 33 07.4 +2.4**
comp=Z,2.6nm,0.9s,baz=271,slow=3.9,SNR=7.0
SIV PKiKP **PKiKP 00 37 03.0 -2.2**
comp=Z,26nm,1.1s,baz=172,slow=2.6,SNR=3.7
SIV PP **PP 00 37 47.1 +1.2**
comp=Z,140nm,1.0s,baz=245,slow=10,SNR=8.0
**JHNI Jhansi 109.37 291** *e*P **Pdif 00 33 08.9 +3.8**
**MKAR Makanchi Array 109.53 314** Pdiff **Pdif 00 33 06.2 +0.8**
comp=Z,16nm,0.8s,baz=84,slow=2.6,SNR=43
MKAR PKiKP **PKiKP 00 37 02.5 -2.2**
comp=Z,34nm,0.5s,baz=95,slow=2.4,SNR=12
MKAR PP **PP 00 37 46.4 -1.0**
comp=Z,156nm,0.9s,baz=101,slow=8.7,SNR=0.9
MKAR PKKPbc **PKKPbc 00 48 13.2 +1.1**
comp=Z,97nm,0.8s,baz=284,slow=0.6,SNR=6.7
**BHPL Bhopal 109.92 289** *e*P **Pdif 00 33 13.3 +5.6**
BHPL IAmb IAmb 00 33 25.2
comp=Z,178nm,0.8s
BHPL IAMs_20 IAMs_20 00 46 42.4
comp=Z,92μm,19.3s
**HNLY HANLEY 110.28 299** *e*P **Pdif 00 33 15.6 +5.9**
**GUNA GUNA 110.28 290** *e*P **Pdif 00 33 13.1 +3.8**
GUNA IAmb IAmb 00 33 28.3
comp=Z,543nm,0.9s
**ASOR Ausora 110.64 295** *e*P **Pdif 00 33 15.8 +5.1**
**DDI Dehra Dun 110.66 296** *e*P **Pdif 00 33 18.4 +7.6**
**KLP Kalpa 110.69 298** *e*P **Pdif 00 33 17.8 +6.5**
**BINY Binghamton 110.76 51** Pdiff **Pdif 00 33 13.7 +2.8**
baz=264
**SDDR Presa de Saban 111.06 76** *e*P **Pdif 00 33 14.6 +1.8**
**NDI New Delhi 111.11 294** *e*P **Pdif 00 33 19.2 +6.4**
**SONA Sohna 111.15 294** *e*P **Pdif 00 33 18.8 +5.8**
**SEM Semipalatinsk 111.16 318** *e*PKiKP **PKiKP 00 37 06.7 -1.3**
baz=318
**SEM Semipalatinsk 111.16 318** *i*PKIKP **PKiKP 00 37 06.6 -1.3**
**PDGK Podgornoye 111.17 310** PKIKP **PKiKP 00 37 10.5 +2.4**
**SHLS Shalkode 111.17 310** *e*PKiKP **PKiKP 00 37 05.9 -2.3**
baz=310
SHLS *e*PP **PP 00 37 54.5 -4.7**
baz=310
**SHLS Shalkode 111.17 310** *i*PKIKP **PKiKP 00 37 05.8 -2.3**
SHLS *e* 00 37 54.5
**UZB Uzunbulak 111.49 310** *e*PKiKP **PKiKP 00 37 07.3 -1.5**
baz=310
UZB *e*PP **PP 00 37 58.7 -2.8**
baz=310
**UZB Uzunbulak 111.49 310** *i*PKIKP **PKiKP 00 37 07.2 -1.5**
UZB *e* 00 37 58.6
**SMLA Simla 111.54 297** *e*P **Pdif 00 33 18.8 +4.2**
SMLA IAmb IAmb 00 33 34.3
comp=Z,288nm,0.9s
**KAD Karad 111.64 282** *e*P **Pdif 00 33 20.6 +5.2**
**KUDL Kundal 111.65 294** *e*P **Pdif 00 33 18.8 +3.6**
KUDL IAmb IAmb 00 33 36.6
comp=Z,338nm,1.1s
**BAUV El Baul 111.66 87** *e*P **Pdif 00 33 12.5 -3.0**
**KPKS Kokpek 111.77 310** *e*PKiKP **PKiKP 00 37 07.4 -1.8**
baz=310
KPKS *e*PP **PP 00 38 00.5 -2.9**
baz=310
**KPKS Kokpek 111.77 310** *i*PKIKP **PKiKP 00 37 07.3 -1.8**
KPKS *e* 00 38 00.4
**ZHN Zhinishke 111.92 310** *e*PKiKP **PKiKP 00 37 07.8 -1.7**
baz=310
ZHN *e*PP **PP 00 38 01.6 -2.9**
baz=310
**ZHN Zhinishke 111.92 310** *i*PKIKP **PKiKP 00 37 07.8 -1.7**
ZHN *e* 00 38 01.5
**SATY Saty 111.94 310** *e*PKiKP **PKiKP 00 37 07.9 -1.6**
baz=310
SATY *e*PP **PP 00 38 01.9 -2.8**
baz=310
**SATY Saty 111.94 310** *i*PKIKP **PKiKP 00 37 07.9 -1.6**
SATY *e* 00 38 01.8
**TULEG Thule 111.95 14** *i*P **PKiKP 00 37 10.6 +2.1**
**LONY Lake Ozonia 111.99 49** Pdiff **Pdif 00 33 21.0 +4.7**
baz=266
**TDK Taldyqorghan 112.08 312** *e*PKiKP **PKiKP 00 37 08.1 -1.5**
baz=312
**TDK Taldyqorghan 112.08 312** *i*PKIKP **PKiKP 00 37 08.1 -1.5**
**PAL Palisades 112.19 52** Pdiff **Pdif 00 33 23.3 +6.0**
baz=265
**KURK Kurchatov 112.21 318** P **Pdif 00 33 21.4 +4.3**
**KURK Kurchatov 112.21 318** *i*PKIKP **PKiKP 00 37 09.5 -0.1**
**POO Poona 112.21 283** *e*P **Pdif 00 33 22.6 +4.6**
**BHK Bhakra 112.22 297** *e*P **Pdif 00 33 24.6 +7.0**
**KURBB Kurchatov Arra 112.26 318** Pdiff **Pdif 00 33 17.2 -0.2**
comp=Z,5.4nm,0.7s,baz=99,slow=3.3,SNR=21
KURBB PKiKP **PKiKP 00 37 09.7 -0.1**
comp=Z,125nm,0.8s,baz=95,slow=1.8,SNR=12
KURBB PP **PP 00 38 06.2 -0.3**
comp=Z,606nm,1.1s,baz=92,slow=7.6,SNR=9.0
KURBB PKKPbc **PKKPbc 00 48 01.6 -1.7**
comp=Z,35nm,0.9s,baz=257,slow=4.2,SNR=5.1
KURBB PKKPab **PKKPab 00 48 10.9 -1.1**
comp=Z,80nm,0.9s,baz=266,slow=4.1,SNR=9.9
**DHRM DHARAMSHALA 112.43 298** *e*P **Pdif 00 33 26.1 +7.2**
DHRM IAmb IAmb 00 33 47.9
comp=Z,184nm,0.7s
DHRM E 00 48 37.5
comp=Z,230μm,18.6s
**MDOK Medeo 112.93 310** *e*PKiKP **PKiKP 00 37 09.8 -1.7**
baz=310
**MDOK Medeo 112.93 310** *i*PKIKP **PKiKP 00 37 09.8 -1.7**
**THN Thein Dam 112.95 298** *e*P **Pdif 00 33 30.0 +9.2**
**KNDC Almaty 113.00 310** PKiKP **PKiKP 00 37 12.5 +1.0**
**AJM Ajmer 113.00 292** *e*P **Pdif 00 33 28.1 +6.8**
AJM IAmb IAmb 00 33 41.7
comp=Z,220nm,0.8s
**CHKK Chushkaly 113.02 311** *e*PKiKP **PKiKP 00 37 09.7 -1.7**
baz=311
**CHKK Chushkaly 113.02 311** *i*PKIKP **PKiKP 00 37 09.7 -1.7**
**AAA Alma-Ata 113.03 310** *e*PKiKP **PKiKP 00 37 09.1 -2.5**
baz=310
**AAA Alma-Ata 113.03 310** *i*PKIKP **PKiKP 00 37 09.9 -1.7**
**L61B Northampton 113.22 51** Pdiff **Pdif 00 33 26.8 +5.0**
baz=266
**ULHL Ulahol 113.47 309** P **PKiKP 00 37 14.1 +1.5**
SNR=6.0
**KSH Kashi 113.48 306** PKP **PKiKP 00 37 14.6 +2.0**
KSH PP **PP 00 38 21.1 +5.6**
KSH AMB AMB
comp=Z,112μm,7.7s
**JMU Jammu 113.67 298** IAmb IAmb 00 33 45.2
comp=Z,392nm,1.0s
**LBNH Lisbon 113.87 49** Pdiff **Pdif 00 33 31.1 +6.4**
baz=268
**TKM2 Tokmak 2 113.98 310** P **PKiKP 00 37 12.7 -0.9**
SNR=7.5
**TKM2 Tokmak 2 113.98 310** PKIKP **PKiKP 00 37 12.4 -1.2**
**HRV Adam Dziewonsk 114.05 51** Pdiff **Pdif 00 33 30.7 +5.2**
baz=267
**KBK Karagaybulak 114.45 309** P PKPdf 00 37 12.9 -1.5
SNR=6.2
**CHMS Chumysh 114.61 310** P **PKiKP 00 37 14.9 +0.3**
SNR=7.2
**FRU1 Bishkek 114.69 309** PKPdf 00 37 13.3 -1.4
**FRU1 Bishkek 114.69 309** PKIKP PKPdf 00 37 13.3 -1.5
**UCH Uchtor 114.75 309** P **PKiKP 00 37 16.3 +0.9**
SNR=6.3
**AAK Ala-Archa 114.78 309** P **PKiKP 00 37 15.6 +0.5**
SNR=9.3
**AAK Ala-Archa 114.78 309** *i*PKPdf PKPdf 00 37 14.3 -0.7
SNR=18
**AAK Ala-Archa 114.78 309** P **Pdif 00 33 31.4 +2.4**
**AAK Ala-Archa 114.78 309** *i*PKIKP PKPdf 00 37 15.0 -0.1
**USP Ospenovka 114.80 310** P **PKiKP 00 37 15.6 +0.7**
SNR=6.9
**CELP Cerrillos 115.24 78** **PKPdf 00 37 14.5 -1.9**
**NEEM North Greenlan 115.26 11** *i*P **PKiKP 00 37 20.3 +5.2**
**EKS2 Erkin-Say 115.31 309** P **PKPdf 00 37 14.3 -1.7**
SNR=7.2
**KULLO Kullorsuaq 115.35 15** *i*P **PKiKP 00 37 17.3 +2.3**
**AML Almayashu 115.36 309** P **PKiKP 00 37 17.6 +1.1**
SNR=6.5
**WVL Waterville 115.50 49** **PKPdf 00 37 15.1 -1.0**
**IGPR InterUniversit 115.65 78** **PKPdf 00 37 15.9 -1.3**
**PDPR Patillas Dam, 115.74 78** **PKPdf 00 37 15.7 -1.6**
**PKME Peaks-Kenny Pk 115.77 48** Pdiff **Pdif 00 33 38.5 +5.5**
baz=270
**HUMP Col San Antoni 115.93 78** **PKPdf 00 37 15.2 -2.5**
**NOR Nord 115.99 3** *i*P **PKiKP 00 37 18.8 +2.7**
**OTUK Ortayu 116.31 315** PKIKP **PKPdf 00 37 16.5 -1.1**
**UPNV Upernavik 116.40 16** *i*P **PKiKP 00 37 17.8 +0.8**
**SCHQ Schefferville 116.82 37** Pdiff **Pdif 00 33 42.9 +5.3**
comp=Z,11nm,1.0s,baz=298,slow=9.4,SNR=3.6
SCHQ PKP **PKPdf 00 37 17.8 -0.6**
comp=Z,42nm,0.9s,baz=345,slow=2.9,SNR=4.1
**ICQ Pointe Anglais 117.01 43** **PKPdf 00 37 18.0 -0.9**
**EMMW East Machias 117.07 49** **PKPdf 00 37 18.3 -0.8**
**VAO Valinhos 117.11 129** **PKPdf 00 37 18.3 -1.8**
**BVA0 Borovoye Array 117.22 321** *i*PKIKP **PKPdf 00 37 17.0 -2.2**
**BVAR Borovoye Array 117.22 321** Pdiff **Pdif 00 33 39.5 +0.1**
comp=Z,1.3nm,0.8s,baz=96,slow=4.5,SNR=9.1
BVAR PKP **PKPdf 00 37 18.5 -0.8**
comp=Z,179nm,0.6s,baz=79,slow=2.1,SNR=21
BVAR PP **PP 00 38 39.6 -1.1**
comp=Z,419nm,0.9s,baz=84,slow=7.1,SNR=3.8
BVAR PKKPbc **PKKPbc 00 47 45.1 -1.5**
comp=Z,31nm,0.8s,baz=221,slow=3.2,SNR=5.0
**BRVK Borovoye 117.28 321** P **Pdif 00 33 41.8 +2.2**
**BRVK Borovoye 117.28 321** *c*PKIKP **PKiKP 00 37 19.6 +0.3**
BRVK pmax pmax
comp=Z,368nm,1.3s
**GGN Saint George 117.50 48** **PKPdf 00 37 19.0 -1.0**
**KK31 Karatay Array 117.72 310** *i*PKIKP **PKPdf 00 37 19.2 -1.3**
**NUUG Nuugaatsiaq 117.78 17** *i*P **PKiKP 00 37 20.8 +1.1**
**BRLS Boroldav 118.21 310** *e*PKiKP **PKPdf 00 37 19.9 -1.6**
baz=309
**BRLS Boroldav 118.21 310** *i*PKIKP **PKPdf 00 37 19.8 -1.6**
**TRN Trinidad (W) 118.42 87** *e*P **PKiKP 00 37 25.3 +2.6**
**GRFF Grenada Fort F 118.45 86** *e*P **PKiKP 00 37 25.3 +2.6**
**UMMG Uummannaq 118.50 18** *i*P **PKiKP 00 37 21.3 +0.2**
**GRGR Grenville 118.55 86** *e*P **PKiKP 00 37 25.3 +2.4**
**GRW Mount Saint Ca 118.55 86** *e*P **PKiKP 00 37 26.8 +3.7**
**GRHS Sauteurs 118.58 86** *e*P **PKiKP 00 37 27.6 +4.6**
**GRSS Sisters 118.63 86** *e*P **PKiKP 00 37 27.4 +4.4**
**SKOC St. Kitts, UWI 118.67 80** *e*P **PKiKP 00 37 28.6 +5.6**
**SKI Saint Kitts 118.67 80** *e*P **PKiKP 00 37 27.2 +4.1**
**KBL Kabul 118.69 300** P **Pdif 00 33 48.8 +2.1**
SNR=51
**FOMA Nahampoana Res 118.71 227** **PKPdf 00 37 21.1 -1.9**
**GCMP Grenada, Carri 118.85 85** *e*P **PKiKP 00 37 30.7 +7.2**
**KBS Kingsbay 118.97 358** **PKPdf 00 37 21.0 -0.9**
**KBS Kingsbay 118.97 358** *e*Pdif **Pdif 00 33 49.3 +2.7**
KBS IVmBBB 00 34 00.6
comp=Z,3μm,5.3s
KBS *e*PKPdf **PKiKP 00 37 22.6 +0.6**
KBS *e*PP **PP 00 38 52.9 +1.2**
KBS *e*SS SS 00 54 33.6 +6.1
**KBS Kingsbay 118.97 358** PKIKP **PKPdf 00 37 21.0 -0.9**
**KBS Kingsbay 118.97 358** *i*P **PKiKP 00 37 23.1 +1.1**
**MBFL Flemmings, Mon 119.05 81** *e*P **PKiKP 00 37 22.8 -0.9**
**MBWH 119.07 81** *e*P **PKiKP 00 37 29.1 +5.2**
**SVT Saint Vincent 119.19 85** *e*P **PKiKP 00 37 28.0 +3.8**
**SVB Belmont 119.20 85** *e*P **PKiKP 00 37 29.8 +5.6**
**SVOC Richmond Hill, 119.20 85** *e*P **PKiKP 00 37 31.0 +6.8**
**TBG Guadaloupe-3 119.40 82** *e*P **PKiKP 00 37 25.1 +0.6**
**SPA0 Spitsbergen Ar 119.49 357** *e*Pdif **Pdif 00 33 49.7 +0.7**
SPA0 *e*PKPdf **PKiKP 00 37 23.4 +0.3**
SPA0 *e*PP **PP 00 38 56.0 +0.7**
**SPITS Spitsbergen Ar 119.49 357** PKP **PKPdf 00 37 22.5 -0.5**
comp=Z,412nm,0.9s,baz=74,slow=3.6,SNR=29
SPITS PP **PP 00 38 56.2 +0.9**
comp=Z,1μm,1.1s,baz=140,slow=10,SNR=5.8
SPITS PKKPbc **PKKPab 00 47 44.9 +5.2**
comp=Z,144nm,0.8s,baz=155,slow=6.1,SNR=9.4
**SPITS Spitsbergen Ar 119.49 357** PKIKP **PKPdf 00 37 21.8 -1.1**
**SPB2 Spitsbergen Ar 119.50 357** **PKPdf 00 37 22.1 -0.8**
**ANBD Bethesda, Anti 119.53 80** *e*P **PKPdf 00 37 23.9 -0.8**
**FDF Fort de France 119.62 83** **PKPdf 00 37 22.9 -2.1**
**FDF Fort de France 119.62 83** PKIKP **PKPdf 00 37 22.9 -2.1**
**ANWB Willy Bob 119.63 80** **PKPdf 00 37 23.3 -1.5**
**ANWB Willy Bob 119.63 80** *e*P **PKiKP 00 37 25.0 0.0**
**SVN Savane Anatole 119.63 83** **PKPdf 00 37 22.9 -2.1**
**SVN Savane Anatole 119.63 83** *e*P **PKPdf 00 37 23.8 -1.2**
**SLBI Saint Lucia, B 119.64 84** *e*P **PKiKP 00 37 25.3 +0.3**
**SLAC Saint Lucia, A 119.68 84** *e*P **PKiKP 00 37 28.0 +2.9**
**HAL Halifax 119.83 49** **PKPdf 00 37 22.5 -2.0**
**HAL Halifax 119.83 49** PKIKP **PKPdf 00 37 22.5 -2.0**
**H05S1 Guadeloupe/Mar 119.85 83** PKP **PKiKP 00 37 26.4 +1.0**
SNR=77

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GDSD** | **La Dsirade Is** | **120.04** | **81** | | | **PKPdf** | **00 37 23.7** | **-2.0** |
| **H05N1** | **Guadeloupe/Mar** | **120.05** | **81** | PKP | | **PKPdf** | **00 37 25.0** | **-0.7** |
| | SNR=145 | | | | | | | |
| **DAG** | **Danmarks Havn** | **120.38** | **5** | *i* P | | **PKiKP** | **00 37 25.9** | **+1.1** |
| **HOPEN** | **Hopen** | **120.39** | **354** | *e*Pdif | | **Pdif** | **00 33 53.3** | **+0.3** |
| HOPEN | | | | IVmB_BB | | | 00 34 07.6 | |
| | comp=Z,5μm,3.4s | | | | | | | |
| HOPEN | | | | *e*PKPdf | | **PKiKP** | **00 37 25.9** | **+1.1** |
| HOPEN | | | | *e*PP | | **PP** | **00 39 01.6** | **+0.3** |
| HOPEN | | | | *e*SS | | SS | 00 54 49.3 | +3.8 |
| **BDFB** | **Brasilia** | **120.43** | **121** | PKP | | **PKiKP** | **00 37 26.8** | **0.0** |
| | comp=Z,15nm,0.6s,baz=174,slow=6.1,SNR=3.7 | | | | | | | |
| BDFB | | | | PP | | **PP** | **00 39 03.7** | **+0.7** |
| | comp=Z,119nm,1.0s,baz=301,slow=3.6,SNR=1.8 | | | | | | | |
| BDFB | | | | PKKPab | | **PKKPbc** | **00 47 35.7** | **+0.7** |
| | comp=Z,69nm,0.8s,baz=104,slow=4.6,SNR=5.3 | | | | | | | |
| **SAM** | **Samarkand** | **120.45** | **306** | PKiKP | | **PKPdf** | **00 37 22.9** | **-3.0** |
| **HSPB** | **Hornsund (broa** | **120.68** | **356** | *e*Pdif | | **Pdif** | **00 33 59.1** | **+4.8** |
| HSPB | | | | *e*PKP | | **PKiKP** | **00 37 29.8** | **+4.4** |
| HSPB | | | | *e*PP | | **PP** | **00 39 02.1** | **-1.1** |
| **HSPB** | **Hornsund (broa** | **120.68** | **356** | *e*P | | **PKiKP** | **00 37 26.6** | **+1.2** |
| **BCHC** | **Barbados, Cave** | **120.70** | **85** | *e*P | | **PKiKP** | **00 37 34.4** | **+7.3** |
| **SFJD** | **Kangerlussuaq** | **120.75** | **21** | | | **PKPdf** | **00 37 23.6** | **-1.9** |
| **SFJD** | **Kangerlussuaq** | **120.75** | **21** | PKiKP | | **PKPdf** | **00 37 23.6** | **-1.9** |
| **SFJD** | **Kangerlussuaq** | **120.75** | **21** | *i* P | | **PKPdf** | **00 37 25.6** | **+0.1** |
| **VOI** | **Vohitsoka** | **120.78** | **230** | P | | **Pdif** | **00 34 00.8** | **+4.7** |
| | SNR=52 | | | | | | | |
| **SUMG** | **Summit** | **120.85** | **13** | *i* P | | **PKiKP** | **00 37 27.4** | **+1.0** |
| **GBN** | **Guysborough** | **121.24** | **47** | | | **PKPdf** | **00 37 26.5** | **-0.6** |
| **SVE** | **Sverdlovsk** | **122.00** | **326** | *i* PKiKP | | **PKPdf** | **00 37 26.8** | **-1.5** |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,3μm,0.9s | | | | | | | |
| **ABPO** | **Ambohimpanom** | **122.22** | **233** | | | **PKPdf** | **00 37 28.5** | **-1.6** |
| **ABPO** | **Ambohimpanom** | **122.22** | **233** | PKiKP | | **PKPdf** | **00 37 28.5** | **-1.6** |
| **DBG** | **Daneborg** | **122.48** | **7** | *i* P | | **PKPdf** | **00 37 28.6** | **-0.1** |
| **OPO** | **Ambohidratompo** | **122.51** | **233** | PKP | | **PKPdf** | **00 37 29.4** | **-1.2** |
| | comp=Z,118nm,0.8s,baz=152,slow=2.7,SNR=18 | | | | | | | |
| OPO | | | | PP | | **PP** | **00 39 16.4** | **-0.3** |
| | comp=Z,177nm,1.0s,baz=330,slow=3.3,SNR=1.4 | | | | | | | |
| OPO | | | | PKKPbc | | **PKKPbc** | **00 47 25.7** | **-1.8** |
| | comp=Z,10nm,0.9s,baz=236,slow=12,SNR=1.3 | | | | | | | |
| **BJO1** | **Bjornoya** | **122.83** | **355** | *e*Pdif | | **Pdif** | **00 34 06.5** | **+2.6** |
| BJO1 | | | | IVmB_BB | | | 00 34 32.1 | |
| | comp=Z,4μm,3.8s | | | | | | | |
| BJO1 | | | | *e* | | | 00 34 34.5 | |
| BJO1 | | | | *e*PKPdf | | **PKiKP** | **00 37 31.1** | **+1.5** |
| BJO1 | | | | *e*PP | | **PP** | **00 39 18.8** | **+1.2** |
| BJO1 | | | | *e*SS | | SS | 00 55 20.9 | +4.8 |
| **ICESG** | **Greenland Ices** | **122.94** | **17** | *i* P | | **PKPdf** | **00 37 29.9** | **-0.3** |
| **ARU** | **Arti** | **123.21** | **326** | P | | **Pdif** | **00 34 09.5** | **+3.6** |
| ARU | | | | *i* | | | 00 37 29.8 | |
| ARU | | | | | | | 00 39 19.8 | |
| ARU | | | | PPP | PPP | | 00 42 05.5 | |
| ARU | | | | | | | 00 43 47.8 | |
| ARU | | | | SP | SP | | 00 48 19.1 | -0.8 |
| ARU | | | | PS | PS | | 00 49 27.3 | +0.2 |
| **ARU** | **Arti** | **123.21** | **326** | PKP | | **PKPdf** | **00 37 29.1** | **-1.5** |
| **SBV** | **Sambava** | **123.24** | **240** | P | | **Pdif** | **00 34 14.8** | **+7.8** |
| | SNR=46 | | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **123.46** | **166** | PKP | | **PKiKP** | **00 37 33.5** | **+1.4** |
| | SNR=26 | | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **123.49** | **166** | PKP | | **PKiKP** | **00 37 34.1** | **+2.0** |
| | SNR=16 | | | | | | | |
| **GRHM** | **Grahamstown, E** | **123.83** | **205** | | | **PKPdf** | **00 37 31.8** | **-0.9** |
| **AB31** | **Akbulak array** | **124.32** | **318** | PKiKP | | **PKPdf** | **00 37 29.0** | **-3.9** |
| **IVI** | **Ivigtut** | **124.44** | **27** | | | **PKPdf** | **00 37 31.0** | **-1.8** |
| **IVI** | **Ivigtut** | **124.44** | **27** | *i* P | | **PKPdf** | **00 37 32.6** | **-0.2** |
| **NGCH** | **Negor - Chabah** | **124.92** | **289** | P | | **Pdif** | **00 34 19.9** | **+5.6** |
| | SNR=37 | | | | | | | |
| **VADS** | **Vadso** | **125.39** | **349** | *e*Pdif | | **Pdif** | **00 34 19.0** | **+3.7** |
| VADS | | | | IVmB_BB | | | 00 34 32.0 | |
| | comp=Z,4μm,16.8s | | | | | | | |
| VADS | | | | *e*PKPdf | | **PKiKP** | **00 37 34.8** | **0.0** |
| VADS | | | | *e*PP | | **PP** | **00 39 34.4** | **-0.1** |
| VADS | | | | *e*SS | | SS | 00 55 53.5 | +5.5 |
| **ISOG** | **Isortoq, Green** | **125.45** | **20** | *i* P | | **PKPdf** | **00 37 34.6** | **0.0** |
| **SCO** | **Scoresbysund** | **125.68** | **10** | | | **PKPdf** | **00 37 34.2** | **-0.7** |
| **SCO** | **Scoresbysund** | **125.68** | **10** | PKIKP | | **PKPdf** | **00 37 34.2** | **-0.7** |
| **SCO** | **Scoresbysund** | **125.68** | **10** | *i* P | | **PKiKP** | **00 37 36.4** | **+1.0** |
| **HAMF** | **Hammerfest** | **125.87** | **351** | *e*Pdif | | **Pdif** | **00 34 19.8** | **+2.4** |
| HAMF | | | | *e*PKPdf | | **PKiKP** | **00 37 35.7** | **0.0** |
| HAMF | | | | IVmBBB | | | 00 37 46.7 | |
| | comp=Z,20μm,1.6s | | | | | | | |
| HAMF | | | | *e*PP | | **PP** | **00 39 36.6** | **-1.0** |
| HAMF | | | | *e*SS | | SS | 00 55 58.4 | +4.6 |
| **LVZ** | **Lovozero** | **126.08** | **345** | | | **PKPdf** | **00 37 34.4** | **-1.4** |
| **LVZ** | **Lovozero** | **126.08** | **345** | *c* PKIKP | | **PKPdf** | **00 37 35.5** | **-0.3** |
| LVZ | | | | pmax | pmax | | | |
| | comp=Z,419nm,0.8s | | | | | | | |
| **KEV** | **Kevo** | **126.13** | **349** | | | **PKPdf** | **00 37 35.0** | **-0.8** |
| **KEV** | **Kevo** | **126.13** | **349** | PKIKP | | **PKPdf** | **00 37 35.0** | **-0.8** |
| **JLN** | **Jalan Bani Buh** | **126.17** | **285** | P | | **Pdif** | **00 34 24.7** | **+4.9** |
| JLN | | | | P | | **Pdif** | **00 34 25.1** | **+5.2** |
| **POGA** | **Pongola** | **126.39** | **213** | | | **PKPdf** | **00 37 36.1** | **-1.6** |
| **ARA0** | **ARCESS Array S** | **126.58** | **350** | *e*Pdif | | **Pdif** | **00 34 22.5** | **+1.9** |
| ARA0 | | | | *e*PKPdf | | **PKiKP** | **00 37 37.1** | **-0.1** |
| ARA0 | | | | *e*PP | | **PP** | **00 39 42.6** | **+0.3** |
| ARA0 | | | | *e*PKSdf | | sPKPdf | 00 41 07.6 | +22 |
| ARA0 | | | | *e*SS | | SS | 00 56 05.2 | +2.6 |
| **ARCES** | **ARCESS Array B** | **126.58** | **350** | PKhKP | | PKPpre | 00 37 25.4 | |
| | comp=Z,19nm,0.5s,baz=28,slow=0.4,SNR=9.5 | | | | | | | |
| ARCES | | | | PKP | | **PKPdf** | **00 37 35.6** | **-1.1** |
| | comp=Z,227nm,0.7s,baz=53,slow=2.7,SNR=26 | | | | | | | |
| ARCES | | | | SKKPbc | | SKKPbc | 00 50 12.7 | +3.2 |
| | comp=Z,30nm,0.8s,baz=179,slow=4.1,SNR=2.0 | | | | | | | |
| **WBK** | **Wadi Bani Khal** | **126.63** | **285** | P | | **Pdif** | **00 34 27.3** | **+5.4** |
| | SNR=47 | | | | | | | |
| **APA** | **Apatity** | **126.64** | **346** | ⇓ *i* PKIKP | | **PKPdf** | **00 37 35.9** | **-0.9** |
| APA | | | | *i* | | | 00 39 37.0 | |
| APA | | | | *i* PPP | PPP | | 00 42 29.0 | |
| APA | | | | *i* | | | 00 43 54.0 | |
| APA | | | | *i* | | | 00 48 45.0 | |
| APA | | | | *i* PS | PS | | 00 49 47.0 | -9.2 |
| APA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **SUR** | **Sutherland** | **126.64** | **200** | | | **PKPdf** | **00 37 37.2** | **-1.1** |
| **SUR** | **Sutherland** | **126.64** | **200** | PKhKP | PKPpre | | 00 37 29.6 | |
| | comp=Z,31nm,0.8s,baz=160,slow=3.4,SNR=5.8 | | | | | | | |
| SUR | | | | PKP | | **PKPdf** | **00 37 36.6** | **-1.7** |
| | comp=Z,49nm,0.6s,baz=133,slow=5.5,SNR=9.2 | | | | | | | |
| **SUR** | **Sutherland** | **126.64** | **200** | P | | **Pdif** | **00 34 31.6** | **+9.4** |
| **JMIC** | **Jan Mayen** | **126.76** | **4** | *e*Pdif | | **Pdif** | **00 34 22.8** | **+1.3** |
| JMIC | | | | IVmB_BB | | | 00 34 35.9 | |
| | comp=Z,3μm,2.7s | | | | | | | |
| JMIC | | | | *e*PKPdf | | **PKiKP** | **00 37 38.9** | **+1.4** |
| JMIC | | | | *e*PP | | **PP** | **00 39 43.5** | **+0.1** |
| JMIC | | | | *e*SS | | SS | 00 56 10.6 | +5.8 |
| **JMI** | **Jan Mayen** | **126.80** | **4** | *e*Pdif | | **Pdif** | **00 34 22.0** | **+0.4** |
| JMI | | | | *e*PKPdf | | **PKiKP** | **00 37 37.9** | **+0.3** |
| JMI | | | | *e*PP | | **PP** | **00 39 44.1** | **+0.5** |
| JMI | | | | *e*SS | | SS | 00 56 08.6 | +3.4 |
| **KIRV** | **Kirov** | **126.87** | **331** | *i* PKIKP | | **PKPdf** | **00 37 36.1** | **-1.4** |
| **MHTO** | **MHTO** | **127.36** | **283** | P | | **Pdif** | **00 34 30.4** | **+5.2** |
| | SNR=95 | | | | | | | |
| **JMDO** | **Jabal Madar** | **127.40** | **285** | P | | **Pdif** | **00 34 30.1** | **+4.8** |
| | SNR=92 | | | | | | | |
| **KTK1** | **Kautokeino** | **127.41** | **351** | *e*Pdif | | **Pdif** | **00 34 25.1** | **+0.7** |
| KTK1 | | | | IVmB_BB | | | 00 34 40.8 | |
| | comp=Z,3μm,17.8s | | | | | | | |
| KTK1 | | | | *e*PKPdf | | **PKiKP** | **00 37 38.6** | **-0.3** |
| KTK1 | | | | *e*PP | | **PP** | **00 39 48.6** | **+0.9** |
| KTK1 | | | | *e*SP | SP | | 00 48 59.3 | +3.8 |
| KTK1 | | | | *e*SS | | **SS** | **00 56 15.1** | **+2.2** |
| KTK1 | | | | IVMs_BB | IVMs_BB | | 01 13 22.0 | |
| | comp=Z,48μm,25.8s | | | | | | | |
| **TRO** | **Tromso** | **127.44** | **353** | *e*Pdif | | **Pdif** | **00 34 27.6** | **+3.2** |
| TRO | | | | *e*PKPdf | | **PKPdf** | **00 37 38.1** | **-0.2** |
| TRO | | | | *e*PP | | **PP** | **00 39 47.6** | **-0.2** |
| TRO | | | | *e*SS | | SS | 00 56 17.3 | +4.2 |
| **BIDO** | **Bidbid** | **127.49** | **286** | P | | **Pdif** | **00 34 31.3** | **+5.6** |
| | SNR=57 | | | | | | | |
| **SMDO** | **Samad** | **127.52** | **285** | P | | **Pdif** | **00 34 30.0** | **+4.0** |
| | SNR=111 | | | | | | | |
| **DQM** | **DQM** | **127.62** | **282** | P | | **Pdif** | **00 34 32.0** | **+5.6** |
| | SNR=126 | | | | | | | |
| **JASK** | **Jask - Hormozg** | **127.91** | **289** | P | | **Pdif** | **00 34 33.2** | **+5.7** |
| | SNR=56 | | | | | | | |
| **ADZR** | **Andozero** | **128.01** | **341** | ⇑ *i* PKIKP | | **PKPdf** | **00 37 39.6** | **+0.1** |
| ADZR | | | | *i* | | | 00 39 52.2 | |
| ADZR | | | | PPP | PPP | | 00 42 44.3 | |
| ADZR | | | | | | | 00 43 51.8 | |
| ADZR | | | | SP | SP | | 00 49 04.5 | +3.5 |
| ADZR | | | | pmax | pmax | | | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **HOQ** | **Hoqain** | **128.24** | **286** | P | | **Pdif** | **00 34 34.4** | **+5.3** |
| | SNR=43 | | | | | | | |
| **BSY** | **Bisya** | **128.27** | **285** | P | | **Pdif** | **00 34 34.2** | **+5.0** |
| | SNR=64 | | | | | | | |
| **BOSA** | **Boshof** | **128.37** | **206** | PKhKP | PKPpre | | 00 37 34.2 | |
| | comp=Z,36nm,0.7s,baz=211,slow=3.1,SNR=10 | | | | | | | |
| **ARQ** | **Araqi** | **128.94** | **286** | P | | **SKiKP** | **00 40 25.0** | **0.0** |
| | SNR=5.1 | | | | | | | |
| **ARQ** | **Araqi** | **128.94** | **286** | P | | **Pdif** | **00 34 36.9** | **+4.7** |
| | SNR=44 | | | | | | | |
| **SOHO** | **SOHO** | **129.00** | **287** | *i* PKiKP | | **PKiKP** | **00 37 44.0** | **+0.6** |
| | SNR=82 | | | | | | | |
| **SOHO** | **SOHO** | **129.00** | **287** | P | | **Pdif** | **00 34 37.4** | **+5.0** |
| **SHAO** | **Shalim** | **129.14** | **279** | *i* PKiKP | | **PKiKP** | **00 37 46.0** | **+2.2** |
| | SNR=12 | | | | | | | |
| **SHAO** | **Shalim** | **129.14** | **279** | P | | **Pdif** | **00 34 37.5** | **+4.4** |
| SHAO | | | | P | | **Pdif** | **00 34 38.7** | **+5.6** |
| | SNR=23 | | | | | | | |
| **MDH** | **Madha** | **129.29** | **288** | *i* PKPdf | | **PKPdf** | **00 37 41.0** | **-2.2** |
| | SNR=83 | | | | | | | |
| **MDH** | **Madha** | **129.29** | **288** | P | | **Pdif** | **00 34 38.9** | **+5.3** |
| | SNR=72 | | | | | | | |
| **BANOM** | **Banah** | **129.32** | **289** | PKiKP | | **PKiKP** | **00 37 44.7** | **+0.6** |
| **UOSS** | **Minazif** | **129.35** | **288** | *i* PKiKP | | **PKPdf** | **00 37 43.5** | **+0.2** |
| | SNR=52 | | | | | | | |
| **UOSS** | **Minazif** | **129.35** | **288** | P | | **Pdif** | **00 34 38.9** | **+4.9** |
| **HATD** | **Hatta, Dubai** | **129.41** | **288** | *i* PKiKP | | **PKiKP** | **00 37 45.8** | **+1.5** |
| | SNR=65 | | | | | | | |
| **HATD** | **Hatta, Dubai** | **129.41** | **288** | P | | **Pdif** | **00 34 39.3** | **+5.1** |
| | SNR=98 | | | | | | | |
| **MSFE** | **Esma-Masafi** | **129.41** | **288** | *i* PKiKP | | **PKPdf** | **00 37 43.0** | **-0.5** |
| | SNR=10 | | | | | | | |
| **MASF** | **Masafi** | **129.41** | **288** | P | | **Pdif** | **00 34 39.5** | **+5.2** |
| | SNR=62 | | | | | | | |
| **LOF** | **Lofoten** | **129.46** | **354** | *e*Pdif | | **Pdif** | **00 34 36.5** | **+3.0** |
| LOF | | | | IVmBBB | | | 00 34 41.7 | |
| | comp=Z,947nm,2.6s | | | | | | | |
| LOF | | | | *e*PKPdf | | **PKiKP** | **00 37 42.8** | **-0.2** |
| LOF | | | | *e*PP | | **PP** | **00 40 02.1** | **+1.3** |
| LOF | | | | *e*PKSdf | | **PKSdf** | **00 41 19.4** | **+1.2** |
| LOF | | | | *e*SS | | SS | 00 56 41.6 | +4.0 |
| **SHME** | **Shamm** | **129.47** | **289** | *i* PKiKP | | **PKPdf** | **00 37 43.3** | **-0.2** |
| | SNR=50 | | | | | | | |
| **SHME** | **Shamm** | **129.47** | **289** | P | | **SKiKP** | **00 40 24.0** | **-1.9** |
| | SNR=12 | | | | | | | |
| **SHME** | **Shamm** | **129.47** | **289** | P | | **Pdif** | **00 34 39.4** | **+5.0** |
| | SNR=50 | | | | | | | |
| **ASHO** | **Ashiyiah** | **129.47** | **287** | *i* PKiKP | | **PKiKP** | **00 37 46.1** | **+1.7** |
| | SNR=55 | | | | | | | |
| **ASHO** | **Ashiyiah** | **129.47** | **287** | P | | **SKiKP** | **00 40 26.0** | **0.0** |
| | SNR=6.3 | | | | | | | |
| **ASHO** | **Ashiyiah** | **129.47** | **287** | P | | **Pdif** | **00 34 39.3** | **+4.7** |
| | SNR=59 | | | | | | | |
| **STEI** | **Steigen** | **129.49** | **354** | *e*Pdif | | **Pdif** | **00 34 34.3** | **+0.7** |
| STEI | | | | IVmBBB | | | 00 34 46.7 | |
| | comp=Z,1μm,19.0s | | | | | | | |
| STEI | | | | IVmB_BB | | | 00 34 58.4 | |
| | comp=Z,3μm,24.4s | | | | | | | |
| STEI | | | | *e*PKPdf | | **PKiKP** | **00 37 44.2** | **+1.1** |
| STEI | | | | *e*PKSdf | | **PKSdf** | **00 41 19.7** | **+1.4** |
| STEI | | | | *e*SS | | SS | 00 56 44.5 | +6.5 |
| **ALNE** | **Al Ain** | **129.70** | **287** | *i* PKiKP | | **PKiKP** | **00 37 45.9** | **+1.0** |
| | SNR=52 | | | | | | | |
| **ALNE** | **Al Ain** | **129.70** | **287** | P | | **Pdif** | **00 34 40.9** | **+5.4** |
| | SNR=51 | | | | | | | |
| **DMTO** | **DMTO** | **129.73** | **278** | P | | **SKiKP** | **00 40 30.0** | **+3.3** |
| | SNR=7.3 | | | | | | | |
| **DMTO** | **DMTO** | **129.73** | **278** | P | | **Pdif** | **00 34 42.3** | **+6.5** |
| | SNR=48 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **129.84** | **288** | *i* PKiKP | | **PKiKP** | **00 37 46.5** | **+1.4** |
| | SNR=76 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **129.84** | **288** | P | | **Pdif** | **00 34 41.2** | **+5.0** |
| | SNR=114 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **129.87** | **288** | *i* PKiKP | | **PKiKP** | **00 37 46.5** | **+1.4** |
| | SNR=72 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **129.87** | **288** | P | | **SKiKP** | **00 40 26.9** | **+0.2** |
| | SNR=14 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **129.87** | **288** | P | | **Pdif** | **00 34 41.4** | **+5.2** |
| | SNR=59 | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **129.89** | **287** | *i* PKiKP | | **PKiKP** | **00 37 45.8** | **+0.6** |
| | SNR=62 | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **129.89** | **287** | P | | **Pdif** | **00 34 41.6** | **+5.2** |
| | SNR=53 | | | | | | | |
| **FAUS** | **Fauske** | **130.01** | **353** | *e*Pdif | | **Pdif** | **00 34 39.1** | **+3.2** |
| FAUS | | | | IVmB_BB | | | 00 34 52.5 | |
| | comp=Z,3μm,16.3s | | | | | | | |
| FAUS | | | | *e*PKPdf | | **PKiKP** | **00 37 45.9** | **+1.8** |
| FAUS | | | | *e*PP | | **PP** | **00 40 01.6** | **-2.6** |
| FAUS | | | | *e*PKSdf | | sPKPdf | 00 41 20.9 | +29 |
| FAUS | | | | *e*SS | | SS | 00 56 47.3 | +3.0 |
| **ASUD** | **Al Ashush, Dub** | **130.12** | **287** | *i* PKiKP | | **PKiKP** | **00 37 47.3** | **+1.6** |
| | SNR=42 | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **130.12** | **287** | P | | **SKiKP** | **00 40 27.6** | **+0.3** |
| | SNR=13 | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **130.12** | **287** | P | | **Pdif** | **00 34 43.3** | **+5.9** |
| | SNR=36 | | | | | | | |
| **RBK** | **Rabkut** | **130.39** | **278** | P | | **SKiKP** | **00 40 28.0** | **-0.1** |
| | SNR=8.2 | | | | | | | |
| **RBK** | **Rabkut** | **130.39** | **278** | P | | **Pdif** | **00 34 44.2** | **+5.4** |
| **AJN** | **Ajban** | **130.43** | **287** | *i* PKPdf | | **PKPdf** | **00 37 44.6** | **-0.7** |
| | SNR=10 | | | | | | | |
| **AJN** | **Ajban** | **130.43** | **287** | P | | **Pdif** | **00 34 43.8** | **+5.1** |
| | SNR=74 | | | | | | | |
| **DOK** | **Doka** | **130.63** | **279** | P | | **SKiKP** | **00 40 30.0** | **+1.6** |
| | SNR=12 | | | | | | | |
| **DOK** | **Doka** | **130.63** | **279** | P | | **Pdif** | **00 34 44.8** | **+5.0** |
| | SNR=54 | | | | | | | |
| **BELG** | **Belogornoye** | **130.65** | **325** | *i* PKIKP | | **PKPdf** | **00 37 45.2** | **+0.3** |
| **BORG** | **Borgarnes** | **130.84** | **13** | | | **PKPdf** | **00 37 42.8** | **-2.1** |
| **BORG** | **Borgarnes** | **130.84** | **13** | PKIKP | | **PKPdf** | **00 37 42.8** | **-2.1** |
| **JOF** | **Joensuu** | **130.85** | **343** | *e*P | | **PKPdf** | **00 37 42.7** | **-2.2** |
| **WHFO** | **Wadi Hawf** | **130.87** | **278** | P | | **Pdif** | **00 34 47.1** | **+6.3** |
| | SNR=57 | | | | | | | |
| **KONS** | **Konsvik** | **131.09** | **354** | *e*PKPdf | | **PKiKP** | **00 37 46.9** | **+0.5** |
| KONS | | | | *e*PP | | **PP** | **00 40 10.7** | **-0.4** |
| **KONS** | **Konsvik** | **131.09** | **354** | *e*P | | Pdif | 00 34 11.5 | -29 |
| KONS | | | | IAML | | | 00 34 17.7 | |
| | comp=Z,7.1nm,0.5s | | | | | | | |
| **ABTO** | **Aybut** | **131.22** | **277** | P | | **SKiKP** | **00 40 32.0** | **+2.2** |
| | SNR=13 | | | | | | | |
| **ABTO** | **Aybut** | **131.22** | **277** | P | | **Pdif** | **00 34 48.2** | **+5.7** |
| | SNR=63 | | | | | | | |
| **STOK** | **Stokkvaagen** | **131.26** | **354** | *e*Pdif | | **Pdif** | **00 34 42.3** | **+0.8** |
| STOK | | | | *e*PKPdf | | **sPdif** | **00 37 44.7** | **-0.1** |
| STOK | | | | *e*PP | | **PP** | **00 40 10.5** | **-1.7** |
| STOK | | | | *e*SP | SP | | 00 49 33.0 | +4.5 |
| STOK | | | | *e*SS | | **SS** | **00 57 03.9** | **+4.6** |
| **STOK** | **Stokkvaagen** | **131.26** | **354** | *e*P | Pdif | | 00 34 14.2 | -27 |
| **MOR8** | **Moi Rana** | **131.27** | **353** | *e*Pdif | | **Pdif** | **00 34 42.3** | **+0.7** |
| MOR8 | | | | IVmB_BB | | | 00 34 58.2 | |
| | comp=Z,3μm,19.0s | | | | | | | |
| MOR8 | | | | *e*PKPdf | | **PKPdf** | **00 37 46.0** | **+0.2** |
| MOR8 | | | | *e*PP | | **PP** | **00 40 11.0** | **-1.3** |
| MOR8 | | | | *e*SS | | SS | 00 57 00.1 | +0.5 |
| **LBTB** | **Lobatse** | **131.34** | **209** | PKhKP | PKPpre | | 00 37 41.5 | |
| | comp=Z,27nm,0.5s,baz=151,slow=4.7,SNR=15 | | | | | | | |
| LBTB | | | | SKP | | **SKPab** | **00 40 23.3** | **+3.3** |
| | comp=Z,217nm,0.9s,baz=148,slow=10,SNR=2.6 | | | | | | | |
| **MZWR** | **Madinat Zayed** | **131.39** | **286** | P | | **Pdif** | **00 34 48.4** | **+5.4** |
| **MZR** | **Muzera** | **131.71** | **285** | *i* PKiKP | | **PKPdf** | **00 37 47.8** | **-0.1** |
| | SNR=74 | | | | | | | |
| **MZR** | **Muzera** | **131.71** | **285** | P | | **Pdif** | **00 34 49.7** | **+5.2** |
| | SNR=70 | | | | | | | |
| **VALR** | **Valaam** | **132.21** | **342** | *i* PKIKP | | **PKiKP** | **00 37 48.2** | **-0.5** |
| **GHWR** | **Ruwais** | **132.32** | **286** | P | | **Pdif** | **00 34 52.6** | **+5.4** |
| **JRN** | **Qarnain Island** | **132.39** | **287** | P | | **SKiKP** | **00 40 34.3** | **+2.4** |
| | SNR=9.5 | | | | | | | |
| **JRN** | **Qarnain Island** | **132.39** | **287** | P | | **Pdif** | **00 34 52.3** | **+4.9** |
| | SNR=72 | | | | | | | |
| **SKOMA** | **Sekoma** | **132.52** | **208** | *i* P | | **PKPdf** | **00 37 45.8** | **-3.7** |
| **VAF** | **Ylistaro** | **132.88** | **347** | *e*P | | **PKPdf** | **00 37 47.1** | **-1.7** |
| **NSS** | **Namsos** | **133.13** | **354** | *e*Pdif | | **Pdif** | **00 34 52.1** | **+2.3** |
| NSS | | | | *e*PKPdf | | **PKiKP** | **00 37 51.0** | **+0.5** |
| NSS | | | | *e*SS | | SS | 00 57 26.6 | +4.8 |
| **KEF** | **Keuruu** | **133.16** | **345** | *e*P | | **PKPdf** | **00 37 47.7** | **-1.7** |
| **I43RU** | **DUBNA INFRASON** | **133.31** | **334** | PKP | | **PKPdf** | **00 37 50.0** | **+0.2** |
| | baz=91,slow=10,SNR=1.9 | | | | | | | |
| I43RU | | | | PP | | **PP** | **00 40 25.0** | **-0.5** |
| | baz=82,slow=8.4,SNR=3.6 | | | | | | | |
| **SLWR** | **Sila** | **133.41** | **286** | P | | **Pdif** | **00 34 57.3** | **+5.3** |
| **FIA1** | **FINESS Array S** | **133.48** | **344** | | | **PKPdf** | **00 37 49.3** | **-0.6** |
| **FINES** | **FINESS Array B** | **133.48** | **344** | | | **PKPdf** | **00 37 49.6** | **-0.3** |
| **FINES** | **FINESS Array B** | **133.48** | **344** | PKhKP | PKPpre | | 00 37 35.6 | |
| | comp=Z,21nm,0.6s,baz=46,slow=3.7,SNR=15 | | | | | | | |
| FINES | | | | PKP | | **PKPdf** | **00 37 49.0** | **-1.0** |
| | comp=Z,197nm,0.6s,baz=60,slow=2.7,SNR=14 | | | | | | | |
| FINES | | | | SKPbc | | **SKPbc** | **00 40 24.5** | **-0.3** |
| | comp=Z,228nm,0.8s,baz=29,slow=4.4,SNR=5.1 | | | | | | | |
| FINES | | | | SKKPbc | | **SKKPbc** | **00 49 45.6** | **+0.8** |
| | comp=Z,26nm,0.7s,baz=158,slow=1.5,SNR=1.4 | | | | | | | |
| **PUL** | **Pulkovo** | **133.63** | **341** | *i* PKIKP | | **PKPdf** | **00 37 48.0** | **-2.3** |
| **MATP** | **Matopo** | **133.69** | **215** | PKhKP | PKPpre | | 00 37 38.6 | |
| | comp=Z,7.6nm,0.4s,baz=150,slow=4.1,SNR=12 | | | | | | | |
| MATP | | | | PKP | | **PKPdf** | **00 37 51.4** | **-0.4** |
| | comp=Z,44nm,0.5s,baz=156,slow=3.5,SNR=13 | | | | | | | |
| MATP | | | | SKP | | **SKPdf** | **00 40 33.2** | **+0.6** |
| | comp=Z,109nm,0.8s,baz=144,slow=7.4,SNR=2.4 | | | | | | | |
| **MOS** | **Moscow** | **133.78** | **333** | *i* P | | **Pdif** | **00 34 52.8** | **-0.1** |
| MOS | | | | *e* | | | 00 40 28.4 | |
| MOS | | | | *e* | | | 00 44 14.0 | |
| MOS | | | | *i* SS | SS | | 00 57 34.5 | +4.3 |
| MOS | | | | *e*SSS | SSS | | 01 02 44.1 | |
| MOS | | | | pmax | pmax | | | |
| | comp=N,3μm,3.4s | | | | | | | |
| MOS | | | | pmax | pmax | | | |
| | comp=Z,5μm,1.1s | | | | | | | |
| **TRNA** | **Turayna** | **133.87** | **287** | P | | **Pdif** | **00 34 59.2** | **+5.2** |
| **SHMA** | **Al-Shehemyia** | **134.12** | **289** | P | | **Pdif** | **00 34 59.5** | **+4.3** |
| **SMRA** | **Abu-Samra** | **134.22** | **287** | P | | **Pdif** | **00 35 00.4** | **+4.8** |
| **MAK** | **Makhachkala** | **134.33** | **313** | *e*P | | **Pdif** | **00 35 00.5** | **+4.8** |
| MAK | | | | *e* | | | 00 40 35.5 | |
| MAK | | | | *e*PPP | PPP | | 00 43 28.5 | |
| MAK | | | | *e* | | | 00 44 09.8 | |
| MAK | | | | *e*SS | SS | | 00 57 42.6 | +4.6 |
| MAK | | | | *e*SSS | SSS | | 01 02 53.1 | |
| MAK | | | | pmax | pmax | | | |
| | comp=Z,5μm,0.9s | | | | | | | |
| **VRH** | **Novokhopyorsk** | **134.44** | **326** | *e*PKIKP | | **PKiKP** | **00 37 53.3** | **-0.3** |
| VRH | | | | *e* | | | 00 40 33.1 | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,2μm,1.9s | | | | | | | |
| **SAKB** | **Bahrain** | **134.50** | **289** | P | | **Pdif** | **00 35 01.7** | **+4.9** |
| **TBLU** | **Trondheim** | **134.54** | **355** | *e*Pdif | | **Pdif** | **00 34 55.4** | **-0.8** |
| TBLU | | | | IVmB_BB | | | 00 35 09.7 | |
| | comp=Z,2μm,5.2s | | | | | | | |
| TBLU | | | | *e*PKPdf | | **PKPdf** | **00 37 51.2** | **-0.7** |
| TBLU | | | | *e*SKPdf | | **SKiKP** | **00 40 38.2** | **+3.2** |
| TBLU | | | | *e*SS | | **SS** | **00 57 42.1** | **+3.6** |
| **OBN** | **Obninsk** | **134.64** | **333** | *i* P | | **Pdif** | **00 35 03.7** | **+7.0** |
| OBN | | | | *i* | | | 00 37 53.0 | |
| OBN | | | | *i* | | | 00 40 28.3 | |
| OBN | | | | *i* SS | SS | | 00 57 39.4 | -1.0 |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.3s | | | | | | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,407nm,0.8s | | | | | | | |
| **RAF** | **Rauma** | **134.88** | **347** | *e*P | | **PKPdf** | **00 37 50.7** | **-1.9** |
| **MEF** | **Metsahovi** | **134.96** | **344** | *e*P | | **PKPdf** | **00 37 50.1** | **-2.6** |
| **LPSR** | **Galich'ya Gora** | **135.10** | **329** | *e*P | | **Pdif** | **00 34 58.1** | **-0.8** |
| LPSR | | | | *e* | | | 00 37 51.4 | |
| LPSR | | | | *e* | | | 00 40 36.7 | |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,3μm,1.1s | | | | | | | |
| **ARBE** | **Arbavere** | **135.20** | **343** | *e*P | | **PKPdf** | **00 37 50.7** | **-2.5** |
| **MOL** | **Molde** | **135.42** | **356** | *e*Pdif | | **Pdif** | **00 34

**BER Bergen 137.71 358** *e*Pdif **Pdif** **00 35 12.5 +2.1**
BER IVmB_BB 00 35 27.6
comp=Z,3µm,3.4s
BER *e*PKPdf **PKPdf** **00 37 54.2 -3.6**
BER *e*PP **PP** **00 40 53.0 +0.7**
BER *e*SS SS 00 58 17.7 +2.0
**OSL Oslo 137.75 353** *e*Pdif **Pdif** **00 35 10.5 0.0**
OSL IVmB_BB 00 35 28.3
comp=Z,2µm,4.5s
OSL *e*PKPdf **PKPdf** **00 37 56.9 -1.0**
OSL *e*PP **PP** **00 40 54.5 +1.9**
OSL *e*SS SS 00 58 22.8 +6.6
**SLIT Slitere, Latvi 137.75 344** *e*P **PKPdf** **00 37 56.1 -1.8**
**ERBR Yeremizino-Bor 137.88 319** *i* PKIKP **PKiKP** **00 38 01.9 +1.1**
ERBR pmax pmax
comp=Z,2µm,1.3s
**LSZ Lusaka 137.94 220** P **Pdif** **00 35 20.8 +8.3**
**LRW Lerwick 137.97 2** *e*P PKPpre 00 37 47.9
**ODD1 Odda 138.12 356** *e*PKPdf **PKPdf** **00 37 58.5 -0.2**
ODD1 *e*PP **PP** **00 40 56.4 +1.5**
ODD1 *e*SS SS 00 58 24.2 +3.6
**KONO Kongsberg 138.15 354** *e*Pdif **Pdif** **00 35 15.1 +2.8**
KONO *e*PKPdf **PKPdf** **00 37 57.6 -1.0**
KONO *e*SS SS 00 58 25.7 +4.8
**KONO Kongsberg 138.15 354** *i* PKIKP **PKPdf** **00 37 56.8 -1.9**
**IZAR Zarasai 138.16 340** *e*P PKPpre 00 37 55.3
**LABN Labinsk 138.22 318** *i* PKIKP **PKiKP** **00 38 00.9 -0.6**
LABN *i* 00 44 20.6
LABN pmax pmax
comp=Z,442nm,0.7s
**ISAL Salakas 138.34 340** *e*P PKPpre 00 37 54.8
**IIGN Ignalina 138.49 339** *e*P PKPpre 00 37 55.9
**MNK Minsk 138.58 337** *i* PKIKP **PKPdf** **00 37 57.3 -2.3**
MNK *i* 00 40 55.7
MNK *i* PPP PPP 00 44 12.4
MNK *i* SS SS 00 58 28.4 +2.0
MNK *i* SSS SSS 01 03 48.9
MNK pmax pmax
comp=Z,2µm,0.8s
MNK pmax pmax
comp=N,326nm,0.8s
MNK pmax pmax
comp=E,685nm,0.9s
**BLS5 Blasjo 138.62 357** *e*PKPdf **PKPdf** **00 37 58.3 -1.3**
BLS5 IVmB_BB 00 38 13.6
comp=Z,39µm,5.4s
BLS5 *e*SS SS 00 58 30.6 +4.3
**VSVD Vaisvydziai 138.70 341** *e*P **PKPdf** **00 37 57.0 -2.8**
**DODT Dodoma, Tanzan 138.83 237** *i* P PKPpre 00 37 52.8
**KMY Karmoy 138.89 357** *e*PKPdf **PKPdf** **00 37 57.1 -2.9**
KMY *e*SS SS 00 58 34.8 +5.5
**BCA Borcka 138.95 313** ⇓P PKPpre 00 37 54.9
**PDHT Panda Hill 139.03 231** *i* P PKPpre 00 37 53.6
**RAYN Ar Rayn 139.06 285** *i* PKPdf PKPpre 00 37 55.9
SNR=131
**RAYN Ar Rayn 139.06 285** P **Pdif** **00 35 22.0 +4.8**
**KIBK Kibwezi 139.06 244** P PKPpre 00 37 50.3
**KIBK Kibwezi 139.06 244** PKP PKPpre 00 37 53.9
**KIBK Kibwezi 139.06 244** P **Pdif** **00 35 26.6 +9.1**
SNR=258
**PABE Paberze 139.09 341** **PKPdf** **00 37 59.8 -0.7**
**PABE Paberze 139.09 341** *e*P **PKPdf** **00 37 57.8 -2.7**
**PBUR Paburge 139.25 343** *e*P **PKPdf** **00 37 57.8 -3.0**
**SOC Sochi 139.35 317** *e*PKIKP **PKPdf** **00 37 57.9 -3.5**
SOC *e* 00 41 06.0
SOC *e*SSS SSS 01 00 59.5
**BIGH Upper Bighouse 139.45 5** *e*P PKPpre 00 37 53.1
**LEWI Lewis, Hebride 139.50 7** *e*P PKPpre 00 37 52.5
**HOMB Homborsund 139.61 355** *e*Pdif **Pdif** **00 35 20.9 +2.1**
HOMB *e*PKPdf **PKPdf** **00 38 01.9 +0.6**
HOMB *e*SS SS 00 58 42.4 +4.6
**SNART Snartemo 139.65 356** *e*PKPdf **PKPdf** **00 38 00.4 -1.1**
**GURO Guroymak-BITLI 139.68 309** **PKPdf** **00 38 00.5 -1.9**
**LINV Loch Inver, As 139.68 6** *e*P PKPpre 00 37 54.7
**KSMZ Kasama 139.69 228** ⇑*i*P PKPpre 00 37 56.5
KSMZ ⇑*i*P PKPpre 00 37 57.5
KSMZ ⇓*i*P PKPpre 00 37 58.5
KSMZ *i* 00 40 20.6
KSMZ *i* 00 41 08.9
KSMZ *i* 00 41 11.4
**TSUM Tsumeb 139.87 203** **PKPdf** **00 38 01.5 -1.7**
**TSUM Tsumeb 139.87 203** PKhKP PKPpre 00 37 55.9
comp=Z,12nm,0.5s,baz=128,slow=3.3,SNR=10
TSUM PKP **PKPdf** **00 38 01.9 -1.4**
comp=Z,107nm,0.6s,baz=138,slow=5.3,SNR=25
TSUM SKPab **SKPab** **00 40 57.2 -0.4**
comp=Z,129nm,0.6s,baz=222,slow=16,SNR=1.2
**ANN Anapa 140.21 320** *i* PKIKP **PKiKP** **00 38 05.5 0.0**
ANN *i* 00 44 25.6
ANN pmax pmax
comp=Z,1µm,0.7s
**KMBO Kilima Mbogo 140.36 245** PKhKP PKPpre 00 37 57.4
comp=Z,57nm,0.9s,baz=112,slow=5.2,SNR=17
**OVD Ostervraa, Den 140.38 353** *i* P PKPpre 00 37 59.2
**KPL Plockton 140.43 6** *e*P PKPpre 00 37 56.0
**SUW Suwalki 140.60 340** *e*Pdif **Pdif** **00 35 27.4 +4.1**
SUW *e*PKP PKPpre 00 37 58.5
SUW *ep*PKP **pPKPdf** **00 40 15.1 -2.0**
**SUW Suwalki 140.60 340** *e*P PKPpre 00 37 59.4
**I32KE NAIROBI INFRAS 140.66 244** PKP **PKiKP** **00 38 06.4 -1.3**
baz=95,slow=31,SNR=2.2
I32KE SKPab **SKPab** **00 41 01.4 -0.3**
baz=119,slow=14,SNR=2.8
**AKASG Malin Array Be 140.90 332** **PKPdf** **00 38 02.4 -1.5**
**AKASG Malin Array Be 140.90 332** PKhKP PKPpre 00 37 57.5
comp=Z,111nm,0.6s,baz=42,slow=4.0,SNR=54
AKASG PKP **PKPdf** **00 38 03.1 -0.8**
comp=Z,163nm,0.3s,baz=40,slow=3.7,SNR=38
AKASG SKPbc **SKiKP** **00 40 48.5 0.0**
comp=Z,221nm,0.9s,baz=44,slow=4.2,SNR=4.5
AKASG SKPab **SKPab** **00 40 59.1 -2.0**
comp=Z,407nm,1.0s,baz=33,slow=3.1,SNR=4.2
AKASG SKKPbc **SKKPab** **00 49 18.5 +2.3**
comp=Z,3.3nm,0.4s,baz=231,slow=4.4,SNR=1.6
**AKBB Malin Array Si 140.90 332** *i* PKIKP **PKPdf** **00 38 03.4 -0.5**
**KIEV Kiev 140.91 332** *i* PKPdf PKPpre 00 37 58.8
SNR=145
**KIEV Kiev 140.91 332** ⇓P PKPpre 00 37 57.9
**KIEV Kiev 140.91 332** ⇓PKHKP PKPpre 00 37 57.9
**DRUM Mains of Drumt 141.12 4** *e*P PKPpre 00 37 56.6
**MUD Monsted U'grnd 141.34 354** *i* P PKPpre 00 37 59.9
**INVG Invergeldie, C 141.48 5** *e*P PKPpre 00 37 59.0
**LAWE Loch Awe, Argy 141.51 7** *e*P PKPpre 00 37 59.0
**COP Copenhagen 141.66 350** *i* P PKPpre 00 38 00.9
**BSD Bornholm Skovb 141.76 348** *e*P PKPpre 00 38 01.9
**BSD Bornholm Skovb 141.76 348** *i* P PKPpre 00 38 01.2
**PGBU Glenifferbraes 142.05 6** *e*P PKPpre 00 37 59.1
**EDI Edinburgh 142.05 5** *e*P PKPpre 00 38 01.9
**ESY Stoneypath 142.10 4** *e*P PKPpre 00 38 01.3
**SSRD Sdr. Stenderup 142.24 353** *i* P PKPpre 00 38 02.5
**IDGL Inch Island, C 142.40 9** PKP PKPpre 00 38 04.5
**IDGL Inch Island, C 142.40 9** *e*P PKPpre 00 38 02.5
**CLGH Cloghs, Cushen 142.59 8** *e*P PKPpre 00 38 02.6
**RGN Rugen 142.60 349** *e*P **PKPdf** **00 38 04.9 -1.9**
**RGN Rugen 142.60 349** *e*PKPdf PKPpre 00 38 02.2
baz=17,slow=1.8
**EKA Eskdalemuir Ar 142.64 5** PKP **PKPdf** **00 38 04.5 -2.4**
comp=Z,213nm,0.8s,baz=332,slow=2.6,SNR=120
EKA SKKPbc SKKPbc 00 49 09.1 -0.4
comp=Z,55nm,0.9s,baz=143,slow=5.5,SNR=5.8
**ESK Eskdalemuir 142.66 5** *e*P PKPpre 00 38 01.4
**NEWG New Galloway 142.76 6** *e*P PKPpre 00 38 02.8
**GKP Gorka Klasztor 142.95 345** *e*PKP PKPpre 00 38 04.0
**GKP Gorka Klasztor 142.95 345** *e*P **PKPdf** **00 38 04.6 -2.8**
**GAL1 Galloway 142.96 6** *e*P PKPpre 00 38 03.4
**SORM Soroca 143.14 330** ⇑P PKPab 00 38 05.5 -0.4
**SORM Soroca 143.14 330** ⇑PKIKP PKPab 00 38 05.5 -0.4
**DIKM Dikmen 143.16 317** ⇓P **PKPdf** **00 38 08.7 +0.4**
**BEL Belsk 143.21 340** *e*Pdif **Pdif** **00 35 38.4 +3.4**
BEL *e*PKP PKPab 00 38 05.3 -0.8
BEL *e*SKKSac SKKSac 00 47 24.8 +4.3
**EDMD Edmundbyers 143.23 4** *e*P PKPab 00 38 04.2 -1.9
**KESW Keswick, Cumbr 143.39 5** *e*P PKPab 00 38 05.0 -1.7
**SLPK Sellapark 143.51 5** *e*P PKPab 00 38 05.9 -1.1
**IOMK Kirk Michael 143.57 6** *e*P PKPab 00 38 05.8 -1.5
**ILTH Belurgan, Co L 143.59 8** PKP PKPab 00 38 05.7 -1.7
**ILTH Belurgan, Co L 143.59 8** *e*P PKPab 00 38 06.4 -1.0
**BSEG Bad Segeberg 143.67 352** *e*PKPdf PKPab 00 38 06.2 -1.5
baz=17,slow=1.8
**WIM Isle of Man 143.67 7** *e*P PKPab 00 38 05.6 -2.2
**IGLA Glengowla, Co 143.68 11** PKP PKPbc 00 38 05.3 -2.5
**IGLA Glengowla, Co 143.68 11** *e*P PKPbc 00 38 06.3 -1.4

**GDLE Glaisdale, N Y 143.70 3** *e*P PKPbc 00 38 06.0 -1.8
**HLG Helgoland 143.71 354** *e*PKPdf PKPbc 00 38 06.5 -1.3
baz=17,slow=1.8
**KIS Kishinev 143.71 328** *e*PKP **Pdif** **00 35 40.0 +2.7**
**KIS Kishinev 143.71 328** *e*PKHKP PKPpre 00 38 06.0
**KIS Kishinev 143.71 328** ⇓*i*PKiKP **PKiKP** **00 38 12.0 -0.7**
KIS *ep*PKP **pPKPdf** **00 40 19.0 -4.1**
**KIS Kishinev 143.71 328** *de*P **Pdif** **00 35 40.0 +2.7**
KIS *e* 00 38 06.0
KIS *i* 01 44 29.0
KIS pmax pmax
comp=Z,24µm,1.6s
**GAZ Gaziantep 143.73 309** PKPbc 00 38 06.7 -2.0
**LVV L'vov 143.74 336** *e*PKIKP PKPbc 00 38 08.0 -0.1
LVV *e* 00 41 15.7
LVV MLR MLR
comp=Z,118µm,23.0s
**MILM Milestii Mici 143.77 328** *e*PKP **Pdif** **00 35 39.0 +1.4**
comp=Z,498µm,34.5s
**MILM Milestii Mici 143.77 328** *e*PKHKP PKPpre 00 38 08.0
**MILM Milestii Mici 143.77 328** *i* PKiKP **PKiKP** **00 38 13.0 +0.2**
MILM *i* pPKP **pPKPdf** **00 40 19.0 -4.2**
**MILM Milestii Mici 143.77 328** *e*P **Pdif** **00 35 39.0 +1.4**
MILM *e* 00 38 08.0
MILM *i* 00 44 23.0
MILM pmax pmax
comp=Z,68µm,1.9s
**BZK Bozkurt 143.81 318** ⇓P **PKPdf** **00 38 10.6 +1.3**
**DRBR Darabani 143.89 332** ⇑P PKPab 00 38 08.9 +0.1
**BNN Bunyan 144.05 312** PKPbc 00 38 08.2 -1.4
**HPK Haverah Park 144.12 4** *e*P PKPbc 00 38 07.7 -1.4
**IAS Iasi 144.19 330** ⇑P PKPbc 00 38 09.5 -0.1
**IAS Iasi 144.19 330** ⇑PKIKP PKPbc 00 38 09.5 -0.1
**H07N1 FLORES T-PHASE 144.24 46** *e*PKP PKPbc 00 38 00.8 -9.3
**H07N1 FLORES T-PHASE 144.24 46** PKP PKPbc 00 38 09.6 -0.5
SNR=5531
**H07S1 FLORES T-PHASE 144.32 47** PKP **PKPdf** **00 38 10.4 0.0**
SNR=5172
**DSB Dublin 144.34 9** PKP PKPbc 00 38 08.7 -1.2
**DSB Dublin 144.34 9** PKPbc 00 38 08.4 -1.5
**DSB Dublin 144.34 9** P PKPbc 00 38 03.3 -6.6
DSB S pPKPdf 00 40 19.9 -3.9
**DSB Dublin 144.34 9** PKP PKPbc 00 38 07.3 -2.6
**KWP Kalwaria Pacla 144.40 337** *e*Pdif 00 35 43.5
KWP *e*PKP **PKPdf** **00 38 08.4 -1.7**
KWP *ep*PKP pPKPdf 00 40 24.4 +0.1
**WPS Cemaes, Angles 144.43 7** *e*P **PKPdf** **00 38 08.4 -1.6**
**GORT1 Trebel 144.44 350** *e*PKPdf **PKPdf** **00 38 08.7 -1.3**
baz=17,slow=1.8
**WME Myndd Eilian 144.45 6** *e*P **PKPdf** **00 38 07.8 -2.2**
**RUE Ruedersdorf 144.47 348** *e*P **PKPdf** **00 38 09.6 -0.6**
**RUE Ruedersdorf 144.47 348** *e*PKPdf **PKPdf** **00 38 08.6 -1.5**
baz=17,slow=1.8
**CIDE Kastamonu/Cide 144.52 319** ⇑P **PKPdf** **00 38 10.3 -0.2**
**WLF1 Llynfaes 144.55 7** *e*P **PKPdf** **00 38 09.0 -1.2**
**YRC Rhoscolyn 144.57 7** *e*P **PKPdf** **00 38 09.6 -0.6**
**LBWR Ladybower, Pea 144.67 4** *e*P **PKPdf** **00 38 09.5 -1.0**
**LMK Market Rasen 144.68 2** *e*P **PKPdf** **00 38 09.5 -1.0**
**YLL Llanberis 144.72 6** *e*P **PKPdf** **00 38 08.6 -1.9**
**BIR Birlad 144.81 329** ⇑P **PKPab** **00 38 12.7 +0.4**
**VLDR Vladesti 144.87 328** ⇑P **PKPab** **00 38 12.3 -0.3**
**VAL Valentia 144.90 13** PKP **PKPdf** **00 38 10.8 -0.1**
**VAL Valentia 144.90 13** P PKPdf 00 38 02.4 -8.5
VAL S pPKPdf 00 40 22.5 -2.3
**VAL Valentia 144.90 13** PKP PKPbc 00 38 11.3 -0.3
**OJC Ojcow 144.92 340** *e*Pdif 00 35 46.8
OJC *e*PKP **PKPdf** **00 38 10.4 -0.6**
OJC *ep*PKP pPKPdf 00 40 26.0 +1.0
OJC *e*SKKSac SKKSac 00 47 37.3 +7.0
**OJC Ojcow 144.92 340** **PKPdf** **00 38 10.3 -0.7**
**OJC Ojcow 144.92 340** PKIKP **PKPdf** **00 38 10.3 -0.7**
**TLCR 144.94 326** ⇑P PKPbc 00 38 12.1 +0.2
**TLCR 144.94 326** ⇑PKIKP PKPbc 00 38 12.1 +0.2
**BUR08 Bucovina Ar. S 144.94 332** **PKPdf** **00 38 10.3 -1.0**
**STNC Stoke 144.94 4** *e*P **PKPdf** **00 38 10.6 -0.4**
**VARL Varlezi 144.95 328** ⇑P **PKPab** **00 38 13.3 +0.4**
**BURAR Bucovina Array 144.96 332** **PKPdf** **00 38 10.9 -0.4**
**BURAR Bucovina Array 144.96 332** ⇑P **PKPab** **00 38 13.6 +0.6**
**BURAR Bucovina Array 144.96 332** ⇑PKIKP **PKPab** **00 38 13.6 +0.6**
**RETH Rethem/Aller, 144.96 352** *e*PKPdf **PKPdf** **00 38 09.7 -1.2**
baz=17,slow=1.8
**SCTR Scanteiesti 145.03 328** ⇓P **PKPbc** **00 38 12.3 +0.1**
**TATR Tatarca 145.06 327** ⇓P **PKPdf** **00 38 08.2 -3.2**
**LLW Llanuwchllyn 145.06 6** *e*P **PKPdf** **00 38 11.4 +0.2**
**FOEL Foel Wylfa 145.06 5** *e*P **PKPdf** **00 38 10.9 -0.3**
**FLTG Flechtingen 145.08 350** *e*PKPdf **PKPdf** **00 38 10.1 -1.0**
baz=17,slow=1.8
**NRDL Niedersach Rie 145.10 351** *e*PKPdf **PKPdf** **00 38 10.2 -0.9**
baz=17,slow=1.8
**TESR Tescani 145.11 330** ⇑P **PKPab** **00 38 14.1 +0.5**
**KOLS Kolonicke sedl 145.13 336** *e*PKP2 **PKPdf** **00 38 11.7 +0.3**
**KOLS Kolonicke sedl 145.13 336** *e*PKP **PKPdf** **00 38 11.7 +0.3**
KOLS *e* 00 38 13.3
KOLS *e* 00 38 19.2
**BR131 Keskin Array S 145.17 315** *i* PKIKP **PKPdf** **00 38 11.4 -0.6**
**BRTR Keskin Array B 145.17 315** PKPbc **PKPdf** **00 38 11.1 -0.9**
comp=Z,685nm,0.8s,baz=131,slow=3.8,SNR=113
**NEGRR Negrea 145.19 327** ⇑P **PKPab** **00 38 13.4 -0.4**
**SLCR Slobozia Conac 145.21 328** ⇓P **PKPab** **00 38 13.8 -0.2**
**SCHL Schela 145.24 327** ⇑P **PKPdf** **00 38 11.7 0.0**
**IZVR Izvoarele 145.24 328** ⇓P **PKPab** **00 38 13.9 -0.2**
**COSR Cosmesti PH 145.25 328** ⇑P **PKPab** **00 38 14.5 +0.4**
**TUDR 145.25 328** ⇑P **PKPab** **00 38 13.8 -0.3**
**SCHLR Schela 145.26 327** ⇑P **PKPbc** **00 38 12.8 -0.1**
**CFR Carcaliu 145.30 327** ⇑P **PKPbc** **00 38 13.2 +0.2**
**CFR Carcaliu 145.30 327** ⇑PKP2 **PKPbc** **00 38 13.2 +0.2**
**CWF Charnwood Fore 145.35 3** *e*P **PKPdf** **00 38 11.6 0.0**
**ONER Baraj Valea Uz 145.36 330** ⇓P **PKiKP** **00 38 16.5 +0.4**
**TPGR Topolog 145.36 326** ⇓P **PKPab** **00 38 14.6 0.0**
**KSP Ksiaz 145.40 344** *e*Pdif 00 35 48.2
KSP *e*PKP **PKPdf** **00 38 11.0 -0.9**
KSP *ep*PKP pPKPdf 00 40 27.8 +1.9
KSP *e*SKKSac SKKSac 00 47 40.8 +7.9
**NIE Niedzica 145.44 339** *e*Pdif 00 35 47.8
NIE *e*PKP **PKPdf** **00 38 10.9 -1.1**
NIE *ep*PKP pPKPdf 00 40 28.4 +2.2
**WACR West Acre 145.44 1** *e*P **PKPdf** **00 38 11.4 -0.4**
**HLM1 Long Mynd 145.46 5** *e*P **PKPdf** **00 38 12.1 +0.3**
**CRVS Cervenica-Dubn 145.46 337** *e*PKIKP **PKPdf** **00 38 12.0 0.0**
CRVS *e* 00 38 14.2
**CRVS Cervenica-Dubn 145.46 337** *e*PKP **PKPdf** **00 38 12.0 0.0**
CRVS *e* 00 38 14.2
CRVS *e* 00 38 19.1
**VRI Vrincioaia 145.53 329** ⇓P **PKPbc** **00 38 13.7 0.0**
**VRI Vrincioaia 145.53 329** ⇓PKP2 **PKPbc** **00 38 13.7 0.0**
**IBBN Ibbenburen 145.57 354** *e*PKPdf **PKPdf** **00 38 10.6 -1.4**
baz=17,slow=1.8
IBBN *ep*PKPdf **pPKPdf** **00 40 31.8 +5.9**
**PLOR Plostina 145.58 329** ⇓P **PKPbc** **00 38 14.3 +0.4**
**PLOR Plostina 145.58 329** ⇓PKP2 **PKPbc** **00 38 14.3 +0.4**
**BMR Baia Mare 145.65 334** ⇑P **PKPab** **00 38 15.5 -0.1**
**BMR Baia Mare 145.65 334** ⇓PKP2 **PKPbc** **00 38 13.6 -0.4**
**ANTO Ankara 145.67 316** **PKPdf** **00 38 11.4 -1.3**
**ANTO Ankara 145.67 316** ⇓P **PKPbc** **00 38 14.4 0.0**
**ANTO Ankara 145.67 316** PKIKP **PKPdf** **00 38 11.4 -1.3**
**OSTC Ostas 145.68 344** *e*PKP PKPdf 00 37 59.9 -12
OSTC *ep*PKP pPKPdf 00 40 26.7 +0.3
**BR231 Keskin MP Arra 145.69 316** **PKPdf** **00 38 11.2 -1.6**
**CLZ Clausthal 145.69 351** *e*PKPdf **PKPdf** **00 38 10.4 -1.9**
baz=17,slow=1.8
**TSCT Constanta Port 145.69 325** ⇓P **PKPbc** **00 38 14.7 +0.5**
**CHVC Chvalec 145.70 344** *e*PKP PKPdf 00 38 01.5 -11
CHVC *ep*PKP pPKPdf 00 40 30.1 +3.7
**HWQ Hawqa 145.71 305** *e*P **PKPbc** **00 38 14.4 -0.3**
**HARR Harsova 145.73 326** ⇓P **PKPbc** **00 38 14.2 0.0**
**HARR Harsova 145.73 326** ⇓PKP2 **PKPbc** **00 38 14.2 0.0**
**CLL Collm 145.74 348** **PKPdf** **00 38 11.1 -1.3**
**CLL Collm 145.74 348** PKIKP **PKPdf** **00 38 11.1 -1.3**
**CLL Collm 145.74 348** *e*PKPdf **PKPdf** **00 38 10.7 -1.6**
baz=17,slow=1.8
**ARCR ARCALIA 145.74 332** ⇓P **PKPab** **00 38 15.2 -0.8**
**TURR Turia 145.74 330** ⇓P **PKPab** **00 38 15.5 -0.6**
**GRER 145.75 328** ⇑P **PKiKP** **00 38 16.5 -0.4**
**EFOR EFORIE 145.76 325** ⇑P **PKiKP** **00 38 16.9 -0.1**
**BISRR Bisoca 145.77 328** ⇑P **PKPbc** **00 38 15.3 +0.9**
**TLBR Topalu 145.77 326** ⇓P **PKPdf** **00 38 13.4 +0.8**
**OKC Ostrava-Krasne 145.78 341** *e*PKP PKPdf 00 38 02.8 -10
OKC *ep*PKP pPKPdf 00 40 28.8 +2.3
**UPC Upice 145.78 344** *e*PKP PKPdf 00 37 59.6 -13
**COVR Voineasa-Covas 145.81 329** ⇓P **PKPab** **00 38 16.4 0.0**
**RSBS Rosebush, Pemb 145.82 7** *e*P **PKPdf** **00 38 11.5 -1.0**

**OZUR 145.82 330** ⇑P **PKPbc** **00 38 14.5 0.0**
**DPC Dobruska-Polom 145.84 344** *e*PKP PKPdf 00 38 03.6 -9.1
DPC *ep*PKP pPKPdf 00 40 30.1 +3.4
**BOSR Bodos 145.90 330** ⇓P **PKiKP** **00 38 17.0 -0.3**
**CVD1 Cernavoda-Powe 145.91 326** ⇓P **PKiKP** **00 38 18.2 +0.9**
**CVDA Cernavoda 145.92 326** ⇓P **PKPbc** **00 38 15.0 +0.2**
**BRG Berggiesshubel 145.95 346** *e*PKP **PKPdf** **00 38 11.7 -1.0**
BRG Amp 00 38 15.0
comp=Z,324nm,0.8s
**BRG Berggiesshubel 145.95 346** P **PKPab** **00 38 16.2 -0.5**
BRG Amp 00 38 17.0
comp=Z,1µm,0.9s
**BRG Berggiesshubel 145.95 346** P **PKiKP** **00 38 22.2 +5.1**
BRG Amp 00 38 31.8
comp=Z,13µm,1.1s
**BRG Berggiesshubel 145.95 346** *e*PKPdf **PKPdf** **00 38 11.3 -1.5**
baz=17,slow=1.8
**LANS Liptovska Anna 145.95 339** *e*PKIKP **PKPdf** **00 38 12.2 -0.7**
LANS *e* 00 38 14.6
**LANS Liptovska Anna 145.95 339** *e*PKP **PKPdf** **00 38 12.2 -0.7**
LANS *e* 00 38 14.6
LANS *e* 00 38 22.2
**TSMN Mangalia Port- 145.96 325** ⇓P **PKPbc** **00 38 15.1 +0.1**
**MCH1 Michaelchurch 145.96 5** *e*P **PKPdf** **00 38 13.1 +0.4**
**KRLC Kraliky 145.97 343** *e*PKP PKPdf 00 40 32.3 +5.4
KRLC *e*PKP PKPpre 00 38 00.7
**KRLC Kraliky 145.97 343** *e*PKHKP PKPpre 00 38 04.7
KRLC *e* 00 38 11.8
**MORC Moravsky Berou 146.01 342** **PKPdf** **00 38 11.5 -1.4**
**MORC Moravsky Berou 146.01 342** *e*PKP **PKPdf** **00 38 11.3 -1.7**
**MORC Moravsky Berou 146.01 342** ⇓P **PKPbc** **00 38 14.7 -0.2**
**MORC Moravsky Berou 146.01 342** PKIKP **PKPdf** **00 38 11.5 -1.4**
**GTTG Gottingen 146.04 351** *e*PKPdf **PKPdf** **00 38 11.7 -1.2**
baz=17,slow=1.8
**NEHR Nehoiu 146.06 329** ⇑P **PKPdf** **00 38 14.0 +0.9**
**BHL Bhannes 146.06 304** *e*P **PKPdf** **00 38 14.3 +0.7**
**NEUB Neuenburg 146.07 349** *e*PKPdf **PKPdf** **00 38 11.7 -1.2**
baz=17,slow=1.8
**ELMS Elmsett, Ipswi 146.09 1** *e*P **PKPdf** **00 38 13.1 +0.3**
**TGMR Targu Mures 146.09 332** ⇑P **PKPab** **00 38 16.5 -0.9**
**AMRR Amara 146.10 327** ⇑P **PKPbc** **00 38 16.2 +0.9**
**AMRR Amara 146.10 327** ⇑PKP2 **PKPbc** **00 38 16.2 +0.9**
**DOPR Dopca 146.11 330** ⇑P **PKPab** **00 38 17.2 -0.3**
**PVCC Panska Ves 146.12 346** *e*PKP **PKPdf** **00 38 03.3 -10**
PVCC *ex* x 00 38 14.3
PVCC *ep*PKP pPKPdf 00 40 28.2 +1.2
**PVCC Panska Ves 146.12 346** *e* **PKPbc** **00 38 14.3 -0.9**
**MBAR Mbarara 146.13 240** PKPdf **PKPdf** **00 38 11.6 -2.8**
**MBAR Mbarara 146.13 240** PKPbc **PKPdf** **00 38 15.4 +1.0**
comp=Z,433nm,0.8s,baz=300,slow=8.6,SNR=67
**MBAR Mbarara 146.13 240** *i* PKIKP **PKPdf** **00 38 12.9 -1.5**
**MONM Monmouth 146.14 5** *e*P **PKPdf** **00 38 13.6 +0.6**
**ISR Istrita 146.15 328** ⇓P **PKPbc** **00 38 16.2 +0.7**
**ISR Istrita 146.15 328** ⇓PKP2 **PKPbc** **00 38 16.2 +0.7**
**KECS Kecovo 146.17 338** *e*PKP2 **PKPbc** **00 38 14.8 -0.6**
**KECS Kecovo 146.17 338** *e*PKP **PKPbc** **00 38 14.8 -0.6**
KECS *e* 00 38 23.4
**MLR Muntele Rosu 146.19 329** **PKPdf** **00 38 12.5 -1.0**
**MLR Muntele Rosu 146.19 329** PKPbc **PKPbc** **00 38 14.8 -0.9**
comp=Z,908nm,1.0s,baz=349,slow=9.9,SNR=74
**MLR Muntele Rosu 146.19 329** ⇑P **PKPbc** **00 38 16.5 +0.8**
**MLR Muntele Rosu 146.19 329** PKIKP **PKPdf** **00 38 12.5 -1.0**
**RICC Richard 146.22 346** *e*PKP PKPdf 00 38 05.2 -8.0
RICC *ep*PKP pPKPdf 00 40 31.1 +4.0
**STRD Stroud 146.25 5** *e*P **PKPdf** **00 38 13.8 +0.6**
**MAUC Maruska 146.29 341** *e*PKP PKPdf 00 38 05.2 -8.2
MAUC *ep*PKP pPKPdf 00 40 32.4 +4.9
**HSKC Hora Svate Kat 146.31 347** *e*PKP PKPdf 00 38 04.7 -8.7
HSKC *e*PKP **PKPbc** **00 38 11.8 -3.9**
HSKC *ep*PKP pPKPdf 00 40 32.1 +3.9
**PSN Preselentsi 146.32 325** P **PKPbc** **00 38 14.9 -1.0**
**CBBR Cluj-Babes-Bol 146.34 333** ⇑P **PKPdf** **00 38 14.5 +1.0**
**OLDB Oldbury-Upon-S 146.34 5** *e*P **PKPdf** **00 38 13.6 +0.3**
**MDUB Mudurnu 146.40 318** **PKPdf** **00 38 12.3 -1.7**
**PCED Cedros 146.40 46** *e*PKP **PKPdf** **00 38 07.8 -6.1**
**CALA Caldeira 146.42 46** *e*PKP **PKPdf** **00 38 08.6 -5.4**
**BUG Bochum--Univer 146.48 354** *e*PKPdf **PKPdf** **00 38 11.9 -1.7**
baz=17,slow=1.8
**HOR Horta 146.50 46** *e*PKP **PKPdf** **00 38 08.0 -6.0**
**SWN1 Swindon 146.54 4** *e*P **PKPdf** **00 38 14.3 +0.7**
**MMAI Mount Meron Ar 146.54 303** PKPbc **PKPdf** **00 38 15.2 +0.8**
comp=Z,199nm,0.6s,baz=46,slow=3.6,SNR=7.0
**PRA Prague 146.58 345** *ep*PKP pPKPdf 00 40 29.3 +1.6
**KASTN Kahler Asten 146.59 353** *e*PKPdf **PKPdf** **00 38 12.1 -1.7**
baz=17,slow=1.8
KASTN *ep*PKPdf pPKPbc 00 40 33.6 +5.5
**SULR 146.61 328** ⇑P **PKPbc** **00 38 16.6 -0.1**
**PCAN Candelaria 146.63 46** *e*PKP **PKPdf** **00 38 08.7 -5.6**
**PRU Pruhonice 146.63 345** *e*PKP PKPdf 00 38 05.4 -8.5
PRU *ep*PKP pPKPbc 00 40 33.1 +4.9
**MOX Moxa 146.64 349** *e*PKPdf **PKPdf** **00 38 12.2 -1.7**
baz=17,slow=1.8
**GOPC GO Pecny, Ondr 146.64 345** *e*PKP **PKPdf** **00 38 06.5 -7.5**
**SRBC Serra Branca 146.65 45** *e*PKP **PKPdf** **00 38 07.7 -6.6**
**PICO Pico 146.65 46** *e*PKP **PKPdf** **00 38 09.2 -5.2**
**VOIR 146.66 330** ⇑P **PKiKP** **00 38 18.0 -1.0**
**VOIR 146.66 330** ⇑PKP2 **PKiKP** **00 38 18.0 -1.0**
**I42PT GRACIOSA ISLAN 146.67 45** PKPbc **PKPdf** **00 38 15.0 +0.7**
baz=51,slow=8.0,SNR=6.5
**ROSA Rosais 146.67 46** *e*PKP **PKPdf** **00 38 07.5 -6.8**
**DRGR 146.68 334** ⇓P **PKPbc** **00 38 17.6 +0.7**
**DRGR 146.68 334** ⇓PKP2 **PKPbc** **00 38 17.6 +0.7**
**PLN Plauen 146.69 348** *e*PKPdf **PKPdf** **00 38 12.6 -1.5**
baz=17,slow=1.8
**PGRA Graciosa 146.69 45** *e*PKP **PKPdf** **00 38 09.1 -5.3**
**TANN Tannenbergstha 146.69 348** *e*PKPdf **PKPdf** **00 38 12.5 -1.6**
baz=17,slow=1.8
TANN *ep*PKPdf pPKPab 00 40 33.7 +5.2
**VRAC Vranov 146.71 342** *e*PKP **PKPdf** **00 38 12.3 -1.8**
**VRAC Vranov 146.71 342** PKPbc **PKPdf** **00 38 15.2 +1.2**
comp=Z,358nm,0.8s,baz=39,slow=1.2,SNR=65
**VRAC Vranov 146.71 342** ⇓P **PKPbc** **00 38 15.9 -1.0**
**VYHS Vyhne 146.73 339** *e*PKIKP **PKPdf** **00 38 14.0 -0.2**
VYHS *e* 00 38 18.4
**VYHS Vyhne 146.73 339** *e*PKP **PKPdf** **00 38 14.0 -0.2**
VYHS *e* 00 38 18.4
VYHS *e* 00 38 23.0
VYHS *e* 00 40 32.4
**UBBA Unterbreizbach 146.75 351** *e*PKPdf **PKPdf** **00 38 12.9 -1.0**
baz=17,slow=1.8
UBBA *ep*PKPdf pPKPbc 00 40 33.5 +5.2
**PPNO Prainha do Nor 146.78 46** *e*PKP **PKPdf** **00 38 09.5 -5.1**
**WOL Wolverton 146.78 4** *e*P **PKPbc** **00 38 15.5 -1.4**
**JAVC Velka Javorina 146.79 341** *e*PKP **PKPdf** **00 38 13.5 -0.8**
**HTL Hartland 146.79 7** *e*P **PKPbc** **00 38 15.9 -1.0**
**PMAN Manadas 146.82 46** *e*PKP **PKPdf** **00 38 08.2 -6.4**
**BORR Bors 146.82 335** ⇑P **PKiKP** **00 38 18.3 -0.8**
**PSZ Piszkesteto 146.86 338** **PKPdf** **00 38 12.9 -1.5**
**PSZ Piszkesteto 146.86 338** PKIKP **PKPdf** **00 38 12.9 -1.5**
**PID Ribeirinha 146.89 46** *e*PKP **PKPdf** **00 38 08.2 -6.5**
**GHAJ Ghor Haditha 146.90 300** **PKPdf** **00 38 13.9 -1.0**
**ARR Arges 146.91 330** ⇓P **PKPbc** **00 38 18.2 +0.7**
**CIOR Ciorogarla 146.96 328

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ADH | Angra Heroismo | 147.38 | 45 | ePKP | PKPdf | 00 38 00.9 | -15 | | |
| AHRW | Bad Neuenahr-A | 147.39 | 354 | ePKPdf | PKPdf | 00 38 13.5 | -1.6 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| AHRW | | | | epPKPdf | pPKPbc | 00 40 35.1 | +4.5 | | |
| ISK | Istanbul-Kandi | 147.39 | 320 | P | PKPdf | 00 38 14.2 | -1.2 | | |
| DYA | Yadsworthy | 147.41 | 7 | eP | PKPdf | 00 38 15.6 | +0.4 | | |
| MEM | Membach | 147.42 | 355 | dPKP | PKPdf | 00 38 14.6 | -0.6 | | |
| MEM | | | | dpPKiKP | pPKiKP | 00 40 35.7 | +2.2 | | |
| BTNL | Ternell | 147.43 | 355 | dPKPdf | PKPdf | 00 38 14.8 | -0.5 | | |
| BTNL | | | | dPKiKP | PKiKP | 00 38 19.6 | -0.7 | | |
| BTNL | | | | dpPKiKP | pPKiKP | 00 40 35.7 | +2.1 | | |
| PSCM | Serra do Cume | 147.44 | 45 | ePKP | PKPdf | 00 38 01.4 | -14 | | |
| BSTI | Sart Tilman | 147.48 | 356 | dPKPdf | PKPdf | 00 38 14.7 | -0.6 | | |
| BSTI | | | | dPKP | PKPbc | 00 38 17.9 | -0.9 | | |
| BSTI | | | | dPKiKP | PKiKP | 00 38 19.9 | -0.5 | | |
| BSTI | | | | dpPKiKP | pPKiKP | 00 40 34.9 | +1.3 | | |
| SRO | Srobarova | 147.50 | 339 | ePKIKP | PKPdf | 00 38 16.6 | +1.2 | | |
| SRO | | | | e | | 00 38 19.6 | | | |
| SRO | Srobarova | 147.50 | 339 | ePKP | PKPdf | 00 38 16.6 | +1.2 | | |
| SRO | | | | e | | 00 38 19.6 | | | |
| SRO | | | | e | | 00 38 26.2 | | | |
| COPA | Copaceanca | 147.52 | 328 | ⇓P | PKPbc | 00 38 18.4 | -0.6 | | |
| SIRR | Siria | 147.53 | 334 | ⇓P | PKPdf | 00 38 17.1 | +1.6 | | |
| TNS | Taunus Mts | 147.55 | 352 | ePKPdf | PKPdf | 00 38 14.4 | -1.1 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| ZST | Bratislava | 147.55 | 341 | ePKIKP | PKPdf | 00 38 15.2 | -0.3 | | |
| ZST | Bratislava | 147.55 | 341 | ePKP | PKPdf | 00 38 15.2 | -0.3 | | |
| ZST | | | | e | | 00 38 18.4 | | | |
| ZST | | | | e | | 00 38 26.4 | | | |
| ZST | | | | e | | 00 40 37.2 | | | |
| GRA1 | Grafenberg Arr | 147.62 | 349 | | PKPdf | 00 38 14.1 | -1.5 | | |
| GRF | Grafenberg Arr | 147.62 | 349 | PKIKP | PKPdf | 00 38 14.1 | -1.5 | | |
| GRF | Grafenberg Arr | 147.62 | 349 | ePKPdf | PKPdf | 00 38 14.6 | -1.0 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| GRF | | | | epPKPdf | pPKPab | 00 40 36.8 | +5.1 | | |
| GRFO | Grafenberg | 147.63 | 349 | | PKPdf | 00 38 14.2 | -1.4 | | |
| GRFO | Grafenberg | 147.63 | 349 | PKIKP | PKPdf | 00 38 14.2 | -1.4 | | |
| BCLA | Clavier | 147.66 | 356 | dPKPdf | PKPdf | 00 38 15.1 | -0.5 | | |
| BCLA | | | | dPKP | PKPab | 00 38 23.9 | +0.3 | | |
| KHC | Kasperske Hory | 147.66 | 346 | | PKPdf | 00 38 14.2 | -1.5 | | |
| KHC | Kasperske Hory | 147.66 | 346 | ePDIFF | | 00 35 57.0 | | | |
| KHC | | | | ePKP | PKPdf | 00 38 15.6 | -0.1 | | |
| KHC | | | | epPKP | pPKPab | 00 40 32.3 | +0.3 | | |
| KHC | | | | ex | x | 00 41 26.0 | | | |
| KHC | | | | eSKS | SKSdf | 00 44 52.5 | +23 | | |
| KHC | Kasperske Hory | 147.66 | 346 | ePKIKP | PKPdf | 00 38 15.6 | -0.1 | | |
| BHOU | Houvegnez | 147.67 | 355 | dPKPdf | PKPdf | 00 38 15.0 | -0.6 | | |
| BHOU | | | | dPcP | PKPab | 00 38 24.5 | +0.9 | | |
| BHOU | | | | dpPKiKP | pPKiKP | 00 40 34.8 | +0.7 | | |
| BGES | Gesves | 147.71 | 356 | dPKPdf | PKPdf | 00 38 15.2 | -0.4 | | |
| BGES | | | | dPKP | PKPbc | 00 38 19.9 | +0.5 | | |
| BGES | | | | dpPKiKP | pPKPab | 00 40 32.6 | +0.9 | | |
| BGES | | | | dSKP | SKPbc | 00 41 05.0 | +2.4 | | |
| SZH | Strazhitsa | 147.74 | 326 | P | PKiKP | 00 38 20.5 | -0.6 | | |
| GZR | Gura Zlata | 147.74 | 332 | ⇓P | PKPbc | 00 38 19.8 | 0.0 | | |
| GZR | Gura Zlata | 147.74 | 332 | ⇓PKHKP | PKPpre | 00 38 19.8 | | | |
| SURR | Surduc | 147.75 | 333 | ⇓P | PKPbc | 00 38 19.4 | -0.2 | | |
| CKRC | Cesky Krumlov | 147.77 | 345 | ePKP | PKPdf | 00 38 16.3 | +0.4 | | |
| CKRC | | | | epPKP | pPKPab | 00 40 33.4 | +1.0 | | |
| BMRD | Maredsous | 147.81 | 357 | dPKPdf | PKPdf | 00 38 15.5 | -0.3 | | |
| BMRD | | | | dPKP | PKPbc | 00 38 18.8 | -0.9 | | |
| BMRD | | | | dPKiKP | PKiKP | 00 38 20.4 | -0.6 | | |
| BMRD | | | | dpPKiKP | pPKiKP | 00 40 36.7 | +2.4 | | |
| BMRD | | | | dsPKP | | 00 41 22.3 | | | |
| WET | Wettzell | 147.81 | 346 | ePKPdf | PKPdf | 00 38 14.5 | -1.4 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| WET | | | | epPKPdf | pPKPab | 00 40 37.4 | +5.0 | | |
| GEC2 | GERESS Array S | 147.90 | 345 | | PKPdf | 00 38 13.8 | -2.4 | | |
| GEC2 | GERESS Array S | 147.90 | 345 | ePKPdf | PKPdf | 00 38 14.1 | -2.1 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| GERES | GERESS Array B | 147.90 | 345 | | PKPdf | 00 38 13.9 | -2.4 | | |
| GERES | GERESS Array B | 147.90 | 345 | PKPbc | PKPbc | 00 38 19.1 | -1.0 | | |
| | comp=Z,100nm,0.6s,baz=177,slow=2.7,SNR=159 | | | | | | | | |
| GERES | GERESS Array B | 147.90 | 345 | PKIKP | PKPdf | 00 38 13.9 | -2.3 | | |
| RCHB | Rochefort | 147.93 | 356 | dPKiKP | PKPbc | 00 38 20.5 | +0.6 | | |
| RCHB | | | | dPKP | PKPab | 00 38 23.8 | -0.9 | | |
| RCHB | | | | dpPKiKP | pPKiKP | 00 40 34.9 | +0.4 | | |
| RCHB | | | | dsPKP | | 00 41 28.5 | | | |
| JMB | Yambol | 147.96 | 325 | P | PKiKP | 00 38 21.1 | -0.5 | | |
| ELND | Elena | 148.02 | 326 | ⇑P | PKiKP | 00 38 21.7 | 0.0 | | |
| DOU | Dourbes | 148.02 | 357 | dPKPdf | PKPdf | 00 38 15.0 | -1.2 | | |
| DOU | | | | dPKP | PKPbc | 00 38 19.9 | -0.2 | | |
| DOU | | | | dPKiKP | PKiKP | 00 38 21.3 | -0.2 | | |
| DOU | | | | dpPKiKP | pPKiKP | 00 40 34.9 | +0.2 | | |
| VLAD | Vladila | 148.02 | 329 | ⇑P | PKPbc | 00 38 19.7 | -0.7 | | |
| BZS | Buzias | 148.07 | 333 | ⇓P | PKPbc | 00 38 20.5 | 0.0 | | |
| BZS | Buzias | 148.07 | 333 | ⇓PKP2 | PKPbc | 00 38 20.5 | 0.0 | | |
| SRE | Strehaia | 148.11 | 331 | ⇓P | PKPbc | 00 38 20.8 | +0.2 | | |
| SRE | Strehaia | 148.11 | 331 | ⇓PKP2 | PKPbc | 00 38 20.8 | +0.2 | | |
| TIM | Timisoara | 148.14 | 334 | ⇑P | PKPbc | 00 38 21.0 | +0.4 | | |
| TIM | Timisoara | 148.14 | 334 | ⇑PKP2 | PKPbc | 00 38 21.0 | +0.4 | | |
| CONA | Conrad Observa | 148.16 | 342 | i PKP | PKPdf | 00 38 15.2 | -1.4 | | |
| | comp=Z,61nm,1.4s,SNR=300 | | | | | | | | |
| RONA | Rosalia, Austr | 148.24 | 341 | ePKP | PKPdf | 00 38 15.6 | -1.1 | | |
| | comp=Z,61nm,0.9s,SNR=236 | | | | | | | | |
| PVL | Pavlikeni | 148.26 | 327 | P | PKPbc | 00 38 19.9 | -1.1 | | |
| EDRB | Edirne | 148.27 | 323 | P | PKPbc | 00 38 19.0 | -2.1 | | |
| HERR | Herculane | 148.30 | 332 | ⇑P | PKPbc | 00 38 20.5 | -0.6 | | |
| WLF | Walferdange | 148.34 | 355 | | PKPdf | 00 38 15.0 | -1.7 | | |
| WLF | Walferdange | 148.34 | 355 | P | PKPdf | 00 38 18.8 | +2.1 | | |
| WLF | | | | S | pPKiKP | 00 40 37.2 | +1.7 | | |
| WLF | Walferdange | 148.34 | 355 | PKP | PKPdf | 00 38 18.4 | +1.6 | | |
| WLF | Walferdange | 148.34 | 355 | dPKiKP | PKiKP | 00 38 22.5 | +0.4 | | |
| WLF | | | | dPKP | PKPab | 00 38 26.7 | +0.3 | | |
| WLF | | | | dpPKiKP | pPKiKP | 00 40 39.1 | +3.7 | | |
| WLF | Walferdange | 148.34 | 355 | PKIKP | PKPdf | 00 38 15.0 | -1.7 | | |
| WLF | Walferdange | 148.34 | 355 | ePKPdf | PKPdf | 00 38 15.2 | -1.6 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| WLF | | | | epPKPdf | pPKPab | 00 40 38.2 | +4.0 | | |
| BAND | Balkesir-Ban | 148.40 | 320 | ⇑P | PKPbc | 00 38 20.3 | -1.2 | | |
| DJES | Djerdap | 148.42 | 331 | ⇑P | PKiKP | 00 38 24.0 | +1.5 | | |
| BANR | Banloc | 148.46 | 334 | ⇑P | PKiKP | 00 38 23.3 | +0.8 | | |
| H10S3 | ASCENSION HYDR | 148.50 | 147 | PKPbc | PKPbc | 00 38 21.0 | -1.1 | | |
| | baz=16,slow=74,SNR=567 | | | | | | | | |
| H10S2 | ASCENSION HYDR | 148.50 | 147 | PKPbc | PKPbc | 00 38 21.0 | -1.1 | | |
| | baz=204,slow=74,SNR=634 | | | | | | | | |
| BAIL | Bailesti | 148.52 | 330 | ⇓P | PKiKP | 00 38 22.8 | +0.1 | | |
| PUNG | Punghina | 148.53 | 330 | ⇓P | PKPbc | 00 38 20.8 | -0.8 | | |
| MOA | Molln | 148.68 | 344 | i PKP | PKPdf | 00 38 16.0 | -1.3 | | |
| | comp=Z,38nm,1.1s,SNR=80 | | | | | | | | |
| MDVR | Moldovita | 148.69 | 332 | ⇓P | PKPbc | 00 38 22.2 | +0.1 | | |
| VALD | Valchedram | 148.73 | 329 | P | PKPdf | 00 38 17.0 | -0.5 | | |
| MORH | Mrgy, Hungar | 148.75 | 337 | ⇓P | PKPdf | 00 38 18.5 | +1.0 | | |
| JLP | Les Platons | 148.77 | 5 | eP | PKPbc | 00 38 20.7 | -1.4 | | |
| JQE | Queens East | 148.82 | 5 | eP | PKPdf | 00 38 17.9 | +0.4 | | |
| MPEP | Malo Peshtene | 148.82 | 328 | P | PKPbc | 00 38 21.1 | -1.3 | | |
| JSA | Saint Aubin | 148.82 | 5 | eP | PKPdf | 00 38 18.2 | +0.8 | | |
| PSET | Sete Cidades | 148.83 | 45 | ePKP | PKPdf | 00 38 04.3 | -14 | | |
| STU | Stuttgart | 148.86 | 351 | | PKPdf | 00 38 15.4 | -2.1 | | |
| STU | Stuttgart | 148.86 | 351 | PKIKP | PKPdf | 00 38 15.5 | -2.1 | | |
| STU | Stuttgart | 148.86 | 351 | ePKPdf | PKPdf | 00 38 16.2 | -1.4 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| STU | | | | epPKPdf | pPKPab | 00 40 39.3 | +3.0 | | |
| ARSA | Arzberg | 148.88 | 342 | i PKP | PKPdf | 00 38 16.0 | -1.7 | | |
| | comp=Z,27nm,1.3s,SNR=97 | | | | | | | | |
| PDA | Ponta Delgada | 148.91 | 45 | ePKP | PKPdf | 00 38 00.9 | -17 | | |
| BIOA | Bad Ischl, Aus | 148.99 | 345 | ePKP | PKPdf | 00 38 16.4 | -1.5 | | |
| | comp=Z,625nm,1.1s,SNR=70 | | | | | | | | |
| CMLA | Cha da Macela | 149.00 | 45 | | PKPdf | 00 38 16.8 | -1.4 | | |
| CMLA | Cha da Macela | 149.00 | 45 | ePKP | PKPdf | 00 38 03.0 | -15 | | |
| CMLA | Cha da Macela | 149.00 | 45 | PKIKP | PKPdf | 00 38 16.8 | -1.4 | | |
| PCALD | Caldeiras da R | 149.00 | 45 | ePKP | PKPdf | 00 38 04.9 | -13 | | |
| FUR | Furstenfeldbru | 149.08 | 348 | ePKPdf | PKPdf | 00 38 16.5 | -1.5 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| PGRON | Lagoa das Cont | 149.09 | 45 | ePKP | PKPdf | 00 38 05.1 | -13 | | |
| KULA | Kula-Manisa | 149.11 | 317 | P | PKPdf | 00 38 20.1 | +1.7 | | |
| RJOB | Jochberg | 149.15 | 346 | ePKPdf | PKPdf | 00 38 15.9 | -2.3 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| RJOB | | | | epPKPdf | pPKPab | 00 40 39.1 | +1.5 | | |
| ELL | Elmali | 149.19 | 313 | | PKPdf | 00 38 16.8 | -1.9 | | |
| ELL | Elmali | 149.19 | 313 | PKIKP | PKPdf | 00 38 16.8 | -1.9 | | |
| FRGS | Fruska Gora | 149.19 | 335 | ⇓i P | PKPdf | 00 38 16.1 | -2.2 | | |
| KDZ | Kurdzhali | 149.20 | 324 | P | PKPbc | 00 38 22.7 | -0.7 | | |
| PGB | Panagyurishte | 149.21 | 327 | P | PKPbc | 00 38 21.1 | -2.3 | | |
| BART | Pico Bartolome | 149.23 | 45 | ePKP | PKPdf | 00 38 09.1 | -10 | | |
| ALN | Alexandroupoli | 149.28 | 323 | | PKPdf | 00 38 16.2 | -2.3 | | |
| ALN | Alexandroupoli | 149.28 | 323 | P | PKPdf | 00 38 19.5 | +1.0 | | |
| ALN | Alexandroupoli | 149.28 | 323 | PKIKP | PKPdf | 00 38 16.2 | -2.3 | | |
| ENEZ | Enez | 149.33 | 322 | P | PKPbc | 00 38 22.5 | -1.2 | | |
| CAVK | Edirne/Enez-Ca | 149.35 | 322 | ⇓P | PKPbc | 00 38 23.5 | -0.3 | | |
| KOGS | Kog | 149.37 | 340 | i PKPpre | PKPpre | 00 36 05.8 | | | |
| KOGS | | | | i PKPdf | PKPbc | 00 38 16.4 | -2.1 | | |
| KOGS | | | | i PKPdf | PKPbc | 00 38 22.6 | -0.9 | | |
| BFO | Black Forest | 149.42 | 352 | | PKPdf | 00 38 16.7 | -1.8 | | |
| BFO | Black Forest | 149.42 | 352 | PKIKP | PKPdf | 00 38 16.7 | -1.8 | | |
| BFO | Black Forest | 149.42 | 352 | ePKPdf | PKPdf | 00 38 16.0 | -2.6 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| LESA | Schwarzleotal | 149.47 | 346 | ePKP | PKPdf | 00 38 16.5 | -2.2 | | |
| | comp=Z,405nm,1.4s | | | | | | | | |
| RZN | Rozhen | 149.48 | 325 | P | PKPbc | 00 38 23.2 | -1.1 | | |
| I50GB | ASCENSION ISLA | 149.50 | 147 | PKPbc | PKiKP | 00 38 26.3 | +0.7 | | |
| | baz=234,slow=11,SNR=5.2 | | | | | | | | |
| ASCN | Ascension | 149.51 | 147 | | PKPdf | 00 38 17.2 | -2.5 | | |
| H10N3 | ASCENSION HYDR | 149.52 | 146 | PKPbc | PKPbc | 00 38 23.9 | -0.7 | | |
| | baz=198,slow=3.2,SNR=1311 | | | | | | | | |
| H10N1 | ASCENSION HYDR | 149.53 | 146 | PKPbc | PKPbc | 00 38 23.9 | -0.7 | | |
| | baz=198,slow=3.2,SNR=1099 | | | | | | | | |
| H10N2 | ASCENSION HYDR | 149.54 | 146 | PKPbc | PKPbc | 00 38 23.9 | -0.7 | | |
| | baz=198,slow=3.2,SNR=746 | | | | | | | | |
| SOKA | Soboth | 149.54 | 342 | ePKP | PKPdf | 00 38 17.1 | -1.7 | | |
| | comp=Z,286nm,1.4s,SNR=82 | | | | | | | | |
| VTS | Vitosha | 149.61 | 328 | P | PKPbc | 00 38 22.5 | -2.0 | | |
| KBA | Koelnbreinsper | 149.63 | 345 | i PKP | PKPdf | 00 38 17.3 | -1.8 | | |
| | comp=Z,234nm,1.0s,SNR=67 | | | | | | | | |
| PSMA | Santa Maria | 149.66 | 46 | ePKP | PKPdf | 00 38 05.2 | -14 | | |
| ECH | Echery | 149.68 | 353 | | PKPdf | 00 38 17.0 | -1.9 | | |
| ECH | Echery | 149.68 | 353 | PKIKP | PKPdf | 00 38 17.0 | -1.9 | | |
| PSMN | Pico do Norte, | 149.70 | 46 | ePKP | PKPdf | 00 38 07.3 | -12 | | |
| UBR | Ueberruh | 149.76 | 349 | ePKPdf | PKPdf | 00 38 17.4 | -1.8 | | |
| | baz=17,slow=1.8 | | | | | | | | |
| EZN | Ezine | 149.80 | 321 | P | PKPdf | 00 38 20.3 | +1.0 | | |
| WATA | Walderalm | 149.80 | 347 | ePKP | PKPdf | 00 38 17.1 | -2.2 | | |
| | comp=Z,542nm,1.1s,SNR=90 | | | | | | | | |
| WATA | Walderalm | 149.80 | 347 | i PKP | | 01 47 21.7 | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| TEKS | Tekeris | 149.81 | 335 | eP | PKPdf | 00 38 17.3 | -1.9 | | |
| RETA | Reutte | 149.83 | 348 | ePKP | PKPdf | 00 38 16.9 | -2.3 | | |
| | comp=Z,739nm,1.0s,SNR=59 | | | | | | | | |
| RETA | | | | epPKP | pPKPab | 00 40 45.7 | +5.5 | | |
| | comp=Z,981nm,1.2s | | | | | | | | |
| RETA | Reutte | 149.83 | 348 | i PKP | | 01 41 14.1 | | | |
| | comp=Z,2.6nm,0.5s | | | | | | | | |
| RETA | | | | ePKP | SKPbc | 01 41 01.9 | | | |
| | comp=Z,2.1nm,0.6s,SNR=4.6 | | | | | | | | |
| OBKA | Obir | 149.83 | 343 | ePKP | PKPdf | 00 38 17.0 | -2.4 | | |
| | comp=Z,44nm,1.4s,SNR=77 | | | | | | | | |
| OBKA | Obir | 149.83 | 343 | ePKP | SKPbc | 01 41 13.5 | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| OBKA | Obir | 149.83 | 343 | ⇓i P | PKPdf | 00 38 15.3 | -4.0 | | |
| SMTH | Samothraki Isl | 149.86 | 323 | P | PKPdf | 00 38 21.9 | +2.5 | | |
| WTTA | Wattenberg | 149.86 | 347 | ePKP | PKPdf | 00 38 17.5 | -2.0 | | |
| | comp=Z,777nm,0.7s,SNR=123 | | | | | | | | |
| MOTA | Moosalm | 149.89 | 348 | ePKP | PKPdf | 00 38 17.2 | -2.2 | | |
| | comp=Z,1μm,1.7s | | | | | | | | |
| MOTA | Moosalm | 149.89 | 348 | ePKP | | 01 47 21.9 | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | | |
| MYKA | Terra Mystica | 149.97 | 344 | i PKP | PKPdf | 00 38 16.8 | -2.7 | | |
| | comp=Z,545nm,0.7s,SNR=112 | | | | | | | | |
| SQTA | Sankt Quirin | 149.99 | 347 | ePKP | PKPdf | 00 38 17.5 | -2.1 | | |
| | comp=Z,1μm,0.8s,SNR=74 | | | | | | | | |
| SQTA | | | | epPKP | pPKPab | 00 40 46.6 | +5.7 | | |
| | comp=Z,2μm,1.8s | | | | | | | | |
| SQTA | Sankt Quirin | 149.99 | 347 | ePKP | | 01 41 02.7 | | | |
| | comp=Z,4.6nm,0.6s,SNR=4.5 | | | | | | | | |
| SQTA | | | | i PKP | | 01 41 14.6 | | | |
| | comp=Z,6.1nm,0.7s | | | | | | | | |
| KAVA | Kavala | 150.08 | 324 | P | PKPbc | 00 38 23.4 | -2.0 | | |
| YER | Yerkesik | 150.11 | 315 | P | PKPdf | 00 38 21.0 | +1.0 | | |
| MMB | Musomishta | 150.12 | 326 | P | PKPbc | 00 38 22.9 | -2.7 | | |
| ABTA | Abfaltersbach | 150.15 | 345 | i PKP | PKPdf | 00 38 17.3 | -2.5 | | |
| | comp=Z,321nm,1.0s,SNR=71 | | | | | | | | |
| ABTA | | | | epPKP | pPKPab | 00 40 46.2 | +4.5 | | |
| | comp=Z,871nm,1.0s | | | | | | | | |
| PRED | Cave del Predi | 150.16 | 344 | | PKPdf | 00 38 18.1 | -1.7 | | |
| CLF | Chambon-Foret | 150.16 | 360 | | PKPdf | 00 38 18.3 | -1.3 | | |
| DAVA | Damuels | 150.19 | 349 | ePKP | PKPdf | 00 38 17.5 | -2.4 | | |
| | comp=Z,2μm,1.0s,SNR=48 | | | | | | | | |
| DAVA | | | | epPKP | pPKPab | 00 40 47.2 | +5.4 | | |
| | comp=Z,3μm,1.5s | | | | | | | | |
| PRK | Paraskevi | 150.19 | 320 | P | PKPdf | 00 38 21.0 | +1.0 | | |
| NVR | Nevrokopi | 150.19 | 326 | P | PKPdf | 00 38 22.1 | +2.1 | | |
| DOB | Doboj | 150.21 | 336 | eP | PKPbc | 00 38 25.1 | -0.5 | | |
| KKB | Krupnik | 150.23 | 327 | P | PKPbc | 00 38 23.1 | -2.7 | | |
| THAS | Thassos island | 150.23 | 324 | P | PKPdf | 00 38 21.6 | +1.6 | | |
| LJU | Ljubljana | 150.26 | 342 | ePKPpre | PKPpre | 00 36 12.1 | | | |
| LJU | | | | ePKPdf | PKPdf | 00 38 18.1 | -1.8 | | |
| LJU | | | | i PKPbc | PKPbc | 00 38 24.7 | -1.0 | | |
| LJU | | | | epPKPbc | pPKPbc | 00 40 38.7 | +0.2 | | |
| LJU | | | | i sPKPbc | sPKPbc | 00 41 34.2 | 0.0 | | |
| LJU | | | | ePP | PP | 00 42 05.7 | -0.8 | | |
| LJU | | | | epPP | | 00 44 08.4 | | | |
| LJU | | | | i sPP | | 00 45 08.2 | | | |
| FETA | Feichten | 150.28 | 348 | i PKP | PKPdf | 00 38 18.3 | -1.8 | | |
| | comp=Z,2μm,0.9s,SNR=86 | | | | | | | | |
| FETA | | | | epPKP | pPKPab | 00 40 48.2 | +6.0 | | |
| | comp=Z,2μm,1.3s | | | | | | | | |
| CADS | Cadrg | 150.31 | 343 | ePKPpre | PKPpre | 00 36 10.9 | | | |
| CADS | | | | ePKPdf | PKPdf | 00 38 17.2 | -2.8 | | |
| A051A | Mrakovica | 150.41 | 338 | ⇓i P | PKPdf | 00 38 18.0 | -2.1 | | |
| BBLS | Lazi&#263i | 150.41 | 334 | ⇓i P | PKPdf | 00 38 18.7 | -1.6 | | |
| HAPS | Han Pijesak,Bl | 150.42 | 335 | ⇓i P | PKPdf | 00 38 18.5 | -1.8 | | |
| LIA | Limnos Island | 150.43 | 322 | P | PKPdf | 00 38 20.1 | -0.2 | | |
| SIGR | SIGRI | 150.47 | 320 | P | PKPdf | 00 38 20.8 | +0.4 | | |
| KOKK | Kokkinochori, | 150.49 | 325 | P | PKPdf | 00 38 20.7 | +0.3 | | |
| SRS | Serrai | 150.50 | 326 | P | PKPdf | 00 38 21.0 | +0.6 | | |
| PRIJ | Prijedor | 150.51 | 338 | eP | PKPdf | 00 38 21.7 | +1.4 | | |
| BOJS | Bojanci | 150.53 | 341 | ⇓i P | PKPdf | 00 38 18.6 | -1.7 | | |
| BLY | Banja Luka | 150.54 | 338 | ⇓i P | PKPdf | 00 38 18.3 | -2.0 | | |
| STAL | STALIGIAL | 150.55 | 345 | | PKPdf | 00 38 17.9 | -2.4 | | |
| CEY | Cerknica | 150.57 | 342 | eP | PKPdf | 00 38 18.7 | -1.7 | | |
| RUDO | Rudo | 150.63 | 334 | eP | PKPdf | 00 38 19.4 | -1.1 | | |
| SJES | Sjenica | 150.66 | 333 | ⇓i P | PKPdf | 00 38 18.9 | -1.8 | | |
| DAVOX | Davos/Dischmat | 150.67 | 349 | PKP | PKPdf | 00 38 19.9 | -0.9 | | |
| | comp=Z,189nm,0.8s,baz=239,slow=3.4,SNR=67 | | | | | | | | |
| FUORN | Ofenpass-Fuorn | 150.75 | 348 | | PKPdf | 00 38 19.2 | -1.8 | | |
| BODT | Bodrum | 150.80 | 315 | P | PKPdf | 00 38 22.1 | +1.1 | | |
| DAT | Datca | 150.80 | 315 | P | PKPdf | 00 38 22.5 | +1.4 | | |
| OUR | Ouranopolis | 150.83 | 324 | P | PKPdf | 00 38 21.4 | +0.5 | | |
| SOH | Sokhos | 150.84 | 325 | P | PKPdf | 00 38 21.9 | +0.9 | | |
| KNT | Kendrikon | 150.84 | 326 | P | PKPdf | 00 38 21.2 | +0.3 | | |
| CHOS | Chios island | 150.85 | 319 | P | PKPdf | 00 38 21.6 | +0.5 | | |
| PLE | Pljevlja | 150.86 | 333 | ⇓iPKP | PKPbc | 00 38 25.6 | -1.7 | | |
| SKDS | Skadanscina | 150.86 | 342 | ⇓i P | PKPdf | 00 38 19.9 | -0.9 | | |
| VAY | Valandovo | 150.90 | 327 | i P | PKPdf | 00 38 19.0 | -2.0 | | |
| A050A | Klekovaca | 151.00 | 338 | ⇓i P | PKPdf | 00 38 18.5 | -2.7 | | |
| IVA | Berane | 151.01 | 332 | ⇓iPKP | PKPbc | 00 38 25.5 | -2.1 | | |
| HORT | Hortiatis | 151.13 | 325 | P | PKPdf | 00 38 22.6 | +1.1 | | |
| UPM | Unac-Piva | 151.17 | 334 | eP | PKPdf | 00 38 19.7 | -1.9 | | |
| UPM | Unac-Piva | 151.17 | 334 | ⇓i PKP | PKPbc | 00 38 25.5 | -2.6 | | |
| NISR | Nisiros | 151.17 | 315 | P | PKiKP | 00 38 30.7 | +2.3 | | |
| THE | Thessaloniki | 151.18 | 326 | P | PKPdf | 00 38 20.5 | -0.9 | | |
| KOME | Kolasin | 151.19 | 333 | ⇓iPKP | PKPbc | 00 38 26.1 | -2.0 | | |
| PVY | Plav | 151.20 | 332 | ⇓iPKP | PKPbc | 00 38 26.6 | -1.5 | | |
| PAIG | Paliouri | 151.28 | 324 | P | PKPdf | 00 38 23.6 | +2.0 | | |
| BCI | Bajram Curri | 151.33 | 331 | i P | PKPdf | 00 38 21.2 | -0.5 | | |
| SKY | Skiros Island | 151.47 | 321 | P | PKPbc | 00 38 27.0 | -1.7 | | |
| SENIN | Lac Senin/Sane | 151.48 | 352 | | PKPdf | 00 38 20.1 | -1.9 | | |
| NKME | Niksic | 151.50 | 333 | ⇓iPKP | PKPbc | 00 38 26.1 | -2.6 | | |
| BRY | Bratogost | 151.57 | 334 | eP | PKPdf | 00 38 21.1 | -1.0 | | |
| PDG | Podgorica | 151.64 | 332 | | PKPdf | 00 38 20.1 | -1.9 | | |
| PDG | Podgorica | 151.64 | 332 | ⇓i P | PKPdf | 00 38 19.8 | -2.2 | | |
| PDG | Podgorica | 151.64 | 332 | ⇓iPKP | PKPbc | 00 38 26.5 | -2.4 | | |
| TEOL | Teolo | 151.65 | 345 | | PKPdf | 00 38 19.1 | -2.9 | | |
| PUK | Puka | 151.66 | 331 | | PKPdf | 00 38 20.3 | -2.0 | | |
| PUK | Puka | 151.66 | 331 | i P | PKPdf | 00 38 21.9 | -0.3 | | |
| CEME | Cevo | 151.69 | 333 | ⇓iPKP | PKPbc | 00 38 26.5 | -2.7 | | |
| KARP | Karpathos | 151.71 | 313 | | PKPdf | 00 38 20.3 | -2.1 | | |
| KARP | | | | PKPbc | PKPbc | 00 38 27.5 | -1.9 | | |
| KARP | Karpathos | 151.71 | 313 | P | PKPbc | 00 38 26.3 | -3.1 | | |
| TREB | Trebinje | 151.80 | 334 | eP | PKPdf | 00 38 24.3 | +2.0 | | |
| DRME | Dracevica, Mon | 151.87 | 332 | ⇓i P | PKPdf | 00 38 20.3 | -2.1 | | |
| DRME | Dracevica, Mon | 151.87 | 332 | ⇓iPKP | PKPbc | 00 38 27.1 | -2.4 | | |
| KYMI | Kymi, Euboea I | 151.89 | 321 | P | PKPdf | 00 38 21.7 | -0.9 | | |
| BUM | Brajici-Budva | 151.91 | 333 | ⇓iPKP | PKPbc | 00 38 26.7 | -2.9 | | |
| FNA | Florina | 151.91 | 328 | i P | PKPdf | 00 38 21.4 | -1.2 | | |
| FNA | Florina | 151.91 | 328 | P | PKPbc | 00 38 26.8 | -2.9 | | |
| STON | Ston | 151.94 | 335 | ⇓i P | PKPdf | 00 38 20.1 | -2.4 | | |
| OHR | Ohrid | 151.95 | 329 | i P | PKPdf | 00 38 20.7 | -1.9 | | |
| APE | Apeiranthos | 151.97 | 317 | P | PKPdf | 00 38 23.7 | +0.9 | | |
| APE | Apeiranthos | 151.97 | 317 | ⇑P | PKPbc | 00 38 28.2 | -1.8 | | |
| LRSO | Larissa Observ | 152.17 | 325 | P | PKPdf | 00 38 21.2 | -1.7 | | |
| TIR | Tirane | 152.22 | 330 | i P | PKPdf | 00 38 23.4 | +0.4 | | |
| TIR | Tirane | 152.22 | 330 | P | PKPdf | 00 38 23.6 | +0.6 | | |
| TIR | Tirane | 152.22 | 330 | ⇓P | PKPdf | 00 38 24.3 | +1.3 | | |
| TIR | Tirane | 152.22 | 330 | ⇓PKIKP | PKPdf | 00 38 24.3 | +1.3 | | |
| TYRN | Tyrnavos | 152.23 | 325 | P | PKPdf | 00 38 22.5 | -0.5 | | |
| KBN | Korca | 152.32 | 328 | i P | PKiKP | 00 38 33.9 | +3.1 | | |
| KBN | Korca | 152.32 | 328 | P | PKPdf | 00 38 20.8 | -2.4 | | |
| NEST | Nestorio | 152.35 | 327 | P | PKPdf | 00 38 22.8 | -0.5 | | |
| DION | Dionisos Attik | 152.35 | 320 | P | PKPdf | 00 38 21.4 | -1.9 | | |
| CMBO | Columbo, Santo | 152.40 | 316 | P | PKPdf | 00 38 26.1 | +2.7 | | |
| SNT1 | Gialos, Santor | 152.41 | 316 | P | PKPdf | 00 38 24.0 | +0.6 | | |
| SANT | Santorini | 152.42 | 316 | PKPdf | PKPdf | 00 38 22.9 | -0.5 | | |
| SANT | | | | | PKPbc | 00 38 28.4 | -2.6 | | |
| SANT | Santorini | 152.42 | 316 | P | PKPbc | 00 38 28.3 | -2.6 | | |
| SANT | Santorini | 152.42 | 316 | ⇓P | PKPbc | 00 38 28.2 | -2.7 | | |
| SAP3 | Santorini-Thir | 152.46 | 316 | P | PKPdf | 00 38 25.0 | +1.5 | | |
| PENT | Pentalofos | 152.46 | 327 | P | PKPdf | 00 38 25.5 | +2.1 | | |
| ATHU | Athens Univers | 152.51 | 320 | P | PKPdf | 00 38 24.0 | +0.5 | | |
| ATH | Athens Observa | 152.55 | 321 | P | PKPdf | 00 38 23.3 | -0.2 | | |
| ZKR | Zakros | 152.60 | 313 | P | PKPdf | 00 38 25.5 | +1.8 | | |
| AXAR | Agios Charalam | 152.65 | 323 | P | PKPdf | 00 38 22.1 | -1.6 | | |
| VILL | Villia | 152.67 | 321 | P | PKPdf | 00 38 22.6 | -1.2 | | |
| MAKR | Makrakomi, Fth | 152.77 | 324 | P | PKPdf | 00 38 21.2 | -2.7 | | |
| MHLO | Agia Marina, M | 152.92 | 318 | P | PKPdf | 00 38 26.2 | +2.1 | | |
| LOUT | Loutraki | 152.98 | 321 | P | PKPdf | 00 38 25.0 | +0.8 | | |
| EVR | Evrytania | 153.02 | 324 | P | PKPdf | 00 38 24.4 | +0.1 | | |
| VLO | Vlora | 153.08 | 329 | | PKPdf | 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PCVE | Castro Verde | 158.67 | 22 | *e*PKPdf | PKPdf | P | 00 38 31.7 | +0.1 | |
| PCVE | | | | *i* LQ | LQ | LQ | 00 40 48.4 | | |
| MORF | Marmelete | 158.73 | 24 | | PKPdf | P | 00 38 29.9 | -1.8 | |
| MORF | Marmelete | 158.73 | 24 | *e*PKPdf | PKPdf | P | 00 38 32.1 | +0.4 | |
| MORF | | | | *i* LQ | LQ | LQ | 00 40 48.1 | | |
| MORF | Marmelete | 158.73 | 24 | *e*PKPdf | PKPdf | P | 00 38 31.8 | +0.1 | |
| MORF | Marmelete | 158.73 | 24 | PKIKP | PKPdf | P | 00 38 29.9 | -1.8 | |
| PFVI | Vila Bisbo | 158.81 | 24 | | PKPdf | P | 00 38 29.5 | -2.2 | |
| PFVI | Vila Bisbo | 158.81 | 24 | *e*PKPdf | PKPdf | P | 00 38 32.3 | +0.5 | |
| PFVI | | | | *i* LQ | LQ | LQ | 00 40 49.6 | | |
| PFVI | Vila Bisbo | 158.81 | 24 | P | PKPdf | P | 00 38 33.6 | +1.8 | |
| EGRO | El Granado | 158.95 | 21 | P | PKPdf | P | 00 38 31.9 | 0.0 | |
| PVAQ | Vaqueiros | 158.99 | 22 | *e*PKPdf | PKPdf | P | 00 38 32.3 | +0.3 | |
| PVAQ | | | | *i* LQ | LQ | LQ | 00 40 48.6 | | |
| EMIN | Mina Concepcio | 159.01 | 19 | P | PKPdf | P | 00 38 32.0 | 0.0 | |
| PBDV | Barranco-do-Ve | 159.05 | 23 | *e*PKPdf | PKPdf | P | 00 38 32.7 | +0.6 | |
| PBDV | | | | *i* LQ | LQ | LQ | 00 40 49.5 | | |
| ECAB | El Cabril | 159.09 | 16 | P | PKPdf | P | 00 38 32.1 | 0.0 | |
| WDD | Wied Dalam | 159.13 | 330 | | PKPdf | P | 00 38 30.6 | -1.6 | |
| EADA | Adamuz | 159.22 | 15 | P | PKPdf | P | 00 38 33.3 | +1.1 | |
| ESPR | Espera | 160.09 | 19 | P | PKPdf | P | 00 38 33.3 | +0.1 | |
| TLOR | Lorca, Murcia | 160.27 | 9 | P | PKPdf | P | 00 38 34.2 | +0.8 | |
| EGOR | Sierra Gorda, | 160.34 | 15 | P | PKPdf | P | 00 38 33.9 | +0.2 | |
| EBER | Berja | 160.81 | 12 | P | PKPdf | P | 00 38 34.9 | +0.7 | |
| ENIJ | Nijar | 160.86 | 10 | P | PKPdf | P | 00 38 34.0 | -0.1 | |
| CAEH | 'Ain El Ouahch | 160.91 | 348 | P | PKPdf | P | 00 38 36.7 | +2.6 | |
| CMAH | Djebel Manchou | 160.94 | 346 | P | PKPdf | P | 00 38 38.8 | +4.6 | |
| KEST | Kesra | 161.27 | 341 | | PKPdf | P | 00 38 32.8 | -1.8 | |
| KEST | Kesra | 161.27 | 341 | PKP | PKPdf | P | 00 38 33.5 | -1.2 | |
| | comp=Z,64nm,0.9s,baz=215,slow=4.6,SNR=25 | | | | | | | | |
| KEST | | | | PKPab | PKPab | P | 00 39 26.6 | +4.3 | |
| | comp=Z,1μm,0.9s,baz=63,slow=0.4,SNR=6.8 | | | | | | | | |
| CKFL | Kef-Lekhel | 161.30 | 348 | P | PKPdf | P | 00 38 40.2 | +5.5 | |
| CASM | Ain Smara | 161.49 | 348 | P | PKPdf | P | 00 38 34.9 | +0.1 | |
| CTEI | Djebel Teioual | 161.69 | 348 | P | PKPdf | | 00 38 43.7 | +8.6 | |
| SET | Setif | 161.73 | 351 | P | PKPdf | P | 00 38 37.0 | +1.9 | |
| BBTS | Babate | 161.93 | 98 | PKPab | PKPab | P | 00 39 33.4 | +7.5 | |
| | comp=Z,854nm,1.0s,baz=290,slow=1.4,SNR=2.2 | | | | | | | | |
| AVE | Averroes | 162.70 | 27 | | PKPdf | P | 00 38 34.0 | -2.0 | |
| IFR | Ifrane | 163.40 | 21 | P | PKPdf | P | 00 38 37.3 | +0.4 | |
| IFR | | | | S | pPKPab | P | 00 41 40.3 | +2.0 | |
| TATN | Tataouine | 163.66 | 333 | | PKPdf | P | 00 38 34.7 | -2.3 | |
| MDT | Midelt | 164.22 | 21 | PKP | PKPdf | P | 00 38 37.0 | -0.6 | |
| | comp=Z,110nm,0.9s,baz=354,slow=1.3,SNR=50 | | | | | | | | |
| MDT | | | | PKPab | PKPab | P | 00 39 38.6 | +3.2 | |
| | comp=Z,334nm,1.0s,baz=281,slow=8.6,SNR=1.7 | | | | | | | | |
| EKNA | AfricaArray - | 164.43 | 208 | *e*P | PKPdf | P | 00 38 43.7 | +5.5 | |
| LIC | Lamto | 166.36 | 149 | *e*PKP1 | PKPdf | P | 00 38 36.9 | -2.8 | |
| | comp=Z,1μm,1.2s | | | | | | | | |
| KIC | Kosan Boka | 166.62 | 150 | *e*PKP1 | PKPdf | P | 00 38 38.0 | -1.9 | |
| | comp=Z,549nm,1.1s | | | | | | | | |
| TIC | Toumodi | 166.72 | 148 | *e*PKP1 | PKPdf | P | 00 38 38.0 | -2.0 | |
| | comp=Z,391nm,0.9s | | | | | | | | |
| DBIC | Dimbokro | 166.83 | 149 | | PKPdf | P | 00 38 37.3 | -2.7 | |
| DBIC | Dimbokro | 166.83 | 149 | PKP | PKPdf | P | 00 38 37.7 | -2.4 | |
| | comp=Z,52nm,0.8s,baz=164,slow=1.1,SNR=20 | | | | | | | | |
| DBIC | | | | PKPab | PKPab | P | 00 39 50.5 | +3.3 | |
| | comp=Z,348nm,0.9s,baz=150,slow=11,SNR=1.1 | | | | | | | | |
| TAM | Tamanrasset | 174.27 | 325 | | PKPdf | P | 00 38 41.5 | -2.5 | |
| TAM | Tamanrasset | 174.27 | 325 | PKIKP | PKPdf | P | 00 38 41.5 | -2.5 | |
| TORD | Torodi Ar. Bea | 175.06 | 177 | | PKPdf | P | 00 38 41.2 | -3.0 | |
| TORD | Torodi Ar. Bea | 175.06 | 177 | PKP | PKPdf | P | 00 38 41.5 | -2.6 | |
| | comp=Z,84nm,1.1s,baz=352,slow=2.2,SNR=69 | | | | | | | | |
| TORD | | | | PKPab | PKPab | P | 00 40 22.3 | -1.2 | |
| | comp=Z,76nm,0.9s,baz=176,slow=1.9,SNR=6.3 | | | | | | | | |
| TORD | | | | PP | PP | P | 00 44 18.5 | +3.5 | |
| | comp=Z,139nm,1.0s,baz=143,slow=6.5,SNR=4.1 | | | | | | | | |

*IDC **19** 00:22:44.9±7.9, 18°.48S×177°.66W, h358km±73km, mb5.9/16, mbtmp6.5/16, Error ellipse: s-maj=33.9km s-min=22.4km az=148.0*
*BJI **19** 00:23:00.0±0.0, 18°.74S×177°.62W, h566km, mb6.1/18*
*NEIC **19** 00:23:06.2±1.5, 18°.4S±0°.1×177°.64W±0°.02, h576km±6km, mb6.3/58, Error ellipse: s-maj=17.0km s-min=1.1km az=172.0*

**ISC 19 00:23:06.8±0.4, 18°.54S±0°.08×177°.67W±0°.06, h600km, n177, σ1§57/179, mb6.2/56, 5C-11D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 4.15 | 280 | P | P | 00 24 35.6 | +1.1 |
| PINNC | Pines Island, | 14.51 | 251 | P | P | 00 26 10.9 | +0.4 |
| KOUNC | Koumac, New Ca | 17.13 | 260 | P | P | 00 26 34.8 | +0.3 |
| PPTF | Pamatai, Papee | 26.73 | 92 | P | P | 00 28 00.8 | +0.4 |
| XMAS | Kiritimati | 28.54 | 46 | P | P | 00 28 14.8 | -1.4 |
| XMAS | | | | IAmb | IAmb | 00 28 17.8 | |
| | comp=Z,2μm,0.9s | | | | | | |
| MLZ | Mavora Lakes | 29.25 | 201 | | P | 00 28 19.8 | -2.1 |
| WHZ | Wether Hill Ro | 29.77 | 200 | P | P | 00 28 24.9 | -1.4 |
| CTAO | Charters Tower | 34.04 | 261 | | P | 00 29 03.8 | +0.9 |
| CTAO | | | | IAmb | IAmb | 00 29 05.6 | |
| | comp=Z,1μm,0.8s | | | | | | |
| CTAO | Charters Tower | 34.04 | 261 | P | P | 00 29 04.8 | +1.9 |
| JOHN | Johnston Islan | 35.96 | 13 | P | P | 00 29 16.4 | -2.2 |
| TAOE | Nuku Hiva Isla | 37.63 | 80 | P | P | 00 29 33.4 | +0.8 |
| TAOE | Nuku Hiva Isla | 37.63 | 80 | P | P | 00 29 33.4 | +0.8 |
| COEN | Coen | 37.82 | 271 | P | P | 00 29 34.3 | +0.3 |
| MANU | Manus Island | 37.98 | 291 | P | P | 00 29 35.7 | +0.4 |
| MANU | | | | IAmb | IAmb | 00 29 49.8 | |
| | comp=Z,2μm,1.2s | | | | | | |
| WAKE | Wake Island | 40.62 | 337 | P | P | 00 29 56.0 | -0.2 |
| HMH | Humu'ula Sheep | 43.72 | 31 | P | P | 00 30 20.1 | -0.8 |
| KIP | Kipapa | 44.14 | 27 | P | P | 00 30 22.9 | -0.8 |
| KIP | | | | IAmb | IAmb | 00 30 24.5 | |
| | comp=Z,929nm,0.9s | | | | | | |
| KIP | Kipapa | 44.14 | 27 | P | P | 00 30 22.8 | -0.9 |
| KHLH | Kahului Airpor | 44.38 | 29 | P | P | 00 30 24.9 | -0.6 |
| KHLH | | | | IAmb | IAmb | 00 30 25.7 | |
| | comp=Z,2μm,1.0s | | | | | | |
| WRA | Warramunga Ar | 45.21 | 260 | P | P | 00 30 27.5 | -4.6 |
| | comp=Z,752nm,0.7s,baz=97,slow=7.1,SNR=4.9 | | | | | | |
| | comp=Z,752nm,0.7s | | | | | | |
| ASAR | Alice Springs | 45.30 | 255 | P | P | 00 30 34.6 | +1.9 |
| ASAR | Alice Springs | 45.30 | 255 | P | P | 00 30 28.9 | -3.9 |
| | comp=Z,3μm,0.8s,baz=85,slow=8.8,SNR=4.2 | | | | | | |
| | comp=Z,3μm,0.8s | | | | | | |
| GUMO | Guam | 48.82 | 308 | P | P | 00 30 58.7 | -0.3 |
| GUMO | Guam | 48.82 | 308 | P | P | 00 30 59.6 | +0.6 |
| FAKI | Fak Fak | 51.39 | 281 | P | P | 00 31 16.7 | -1.2 |
| FAKI | | | | IAmb | IAmb | 00 31 29.6 | |
| | comp=Z,1μm,1.1s | | | | | | |
| SOEI | Soe | 56.78 | 270 | P | P | 00 31 56.6 | +0.8 |
| TNTI | Ternate | 57.29 | 283 | P | P | 00 32 00.0 | +0.9 |
| TNTI | | | | IAmb | IAmb | 00 32 01.2 | |
| | comp=Z,1μm,0.9s | | | | | | |
| RPN | Rapa Nui | 62.90 | 112 | P | P | 00 32 37.1 | +1.2 |
| RPN | | | | IAmb | IAmb | 00 32 41.2 | |
| | comp=Z,1μm,1.4s | | | | | | |
| JHJ2 | Mitsune | 65.48 | 321 | P | P | 00 32 52.4 | +0.5 |
| JHJ | Hachijo jima 2 | 65.50 | 321 | P | P | 00 32 51.0 | -1.1 |
| | comp=Z,1μm,0.3s,baz=256,slow=19,SNR=12 | | | | | | |
| | comp=Z,1μm,0.3s | | | | | | |
| JAGI | Jajag, Banyuwa | 66.73 | 269 | P | P | 00 32 59.7 | -0.4 |
| JAGI | | | | IAmb | IAmb | 00 33 01.8 | |
| | comp=Z,1μm,0.9s | | | | | | |
| JSG | Sagara | 67.54 | 322 | P | P | 00 33 05.4 | +0.8 |
| MJAR | Matsushiro Arr | 68.83 | 323 | P | P | 00 33 11.4 | -1.0 |
| | comp=Z,274nm,0.6s,baz=156,slow=5.8,SNR=6.8 | | | | | | |
| | comp=Z,274nm,0.6s | | | | | | |
| MAJO | Matsushiro | 68.83 | 323 | P | P | 00 33 12.7 | +0.2 |
| MAJO | Matsushiro | 68.83 | 323 | P | P | 00 33 12.6 | +0.2 |
| MJB9 | Matsu-Tunnel | 68.84 | 323 | P | P | 00 33 13.2 | +0.8 |
| KKM | Kota Kinabalu | 69.58 | 284 | P | P | 00 33 17.2 | -0.3 |
| KKM | | | | IAmb | IAmb | 00 33 19.8 | |
| | comp=Z,890nm,0.9s | | | | | | |
| AMKA | Amchitka | 69.67 | 358 | P | P | 00 33 17.4 | +0.4 |
| JSD | Sado | 69.86 | 324 | P | P | 00 33 19.3 | +0.8 |
| JSD | | | | IAmb | IAmb | 00 33 20.2 | |
| | comp=Z,460nm,0.7s | | | | | | |
| KIWB | Kanaga Island | 70.09 | 0 | P | P | 00 33 20.4 | +0.8 |
| UGM | Wanagama | 70.33 | 268 | P | P | 00 33 22.9 | +1.0 |
| GSTR | Great Sitkin T | 70.35 | 1 | P | P | 00 33 21.2 | +0.1 |
| QSPA | South Pole Qui | 71.52 | 180 | P | P | 00 33 28.5 | +0.5 |
| QSPA | | | | IAmb | IAmb | 00 33 30.6 | |
| | comp=Z,2μm,1.4s | | | | | | |
| YOJ | Yonaguni jima | 71.88 | 304 | P | P | 00 33 31.2 | +0.6 |
| YOJ | | | | IAmb | IAmb | 00 33 32.8 | |
| | comp=Z,1μm,0.8s | | | | | | |
| SBUM | Sibu | 72.00 | 279 | P | P | 00 33 32.8 | +1.3 |
| YULB | Yu-li | 72.70 | 303 | P | P | 00 33 34.9 | -0.5 |
| YULB | | | | IAmb | IAmb | 00 33 39.0 | |
| | comp=Z,634nm,0.9s | | | | | | |
| NACB | Ninganchiao | 72.85 | 304 | P | P | 00 33 36.2 | 0.0 |
| NACB | | | | IAmb | IAmb | 00 33 38.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| LVA | Lava Point | 73.09 | 7 | P | P | 00 33 37.8 | +0.9 |
| LVA | | | | IAmb | IAmb | 00 33 45.2 | |
| | comp=Z,1μm,1.4s | | | | | | |
| SSLB | Suanglung | 73.17 | 303 | P | P | 00 33 37.5 | -0.6 |
| SSLB | | | | IAmb | IAmb | 00 33 40.9 | |
| | comp=Z,682nm,0.8s | | | | | | |
| TPUB | Ta-pu | 73.19 | 302 | P | P | 00 33 37.9 | -0.3 |
| TPUB | | | | IAmb | IAmb | 00 33 39.1 | |
| | comp=Z,2μm,0.8s | | | | | | |
| TATO | Taipei | 73.33 | 304 | P | P | 00 33 39.7 | +0.7 |
| TATO | | | | IAmb | IAmb | 00 33 40.7 | |
| | comp=Z,1μm,0.8s | | | | | | |
| KSM | Kuching | 73.46 | 277 | P | P | 00 33 41.3 | +1.3 |
| KSM | | | | IAmb | IAmb | 00 33 43.6 | |
| | comp=Z,2μm,0.9s | | | | | | |
| PET | Petropavlovsk | 74.16 | 345 | P | P | 00 33 43.4 | +0.4 |
| YSS | Yuzh-Sakhalins | 74.30 | 333 | P | P | 00 33 46.9 | +3.0 |
| YSS | | | | IAmb | IAmb | 00 33 54.2 | |
| | comp=Z,906nm,1.2s | | | | | | |
| PEA0B | Petropavlovsk- | 74.47 | 345 | P | P | 00 33 45.8 | +1.0 |
| PETK | Petropavlovsk- | 74.47 | 345 | P | P | 00 33 45.6 | +0.9 |
| PETK | Petropavlovsk- | 74.47 | 345 | P | P | 00 33 43.9 | -0.9 |
| | comp=Z,426nm,0.7s,baz=124,slow=8.9,SNR=6.0 | | | | | | |
| | comp=Z,426nm,0.7s | | | | | | |
| KSRS | Korea Array | 75.64 | 318 | P | P | 00 33 50.2 | -1.4 |
| | comp=Z,103nm,0.7s,baz=129,slow=6.3,SNR=1.7 | | | | | | |
| | comp=Z,103nm,0.7s | | | | | | |
| KSAR | Wonju Array Be | 75.66 | 318 | P | P | 00 33 53.0 | +1.3 |
| MCCM | Marconi Confer | 76.30 | 42 | P | P | 00 33 55.0 | -0.2 |
| MCCM | | | | IAmb | IAmb | 00 33 56.2 | |
| | comp=Z,1μm,1.1s | | | | | | |
| PMPB | Monarch Peak | 76.50 | 44 | P | P | 00 33 56.9 | +0.4 |
| PMPB | | | | IAmb | IAmb | 00 33 59.5 | |
| | comp=Z,826nm,1.1s | | | | | | |
| CCX | Cicese | 76.98 | 50 | P | P | 00 33 59.4 | +0.3 |
| PASC | Pasadena Art C | 77.13 | 47 | P | P | 00 33 60.0 | +0.1 |
| 109C | Camp Elliot, M | 77.20 | 49 | P | P | 00 34 00.4 | +0.1 |
| 109C | | | | IAmb | IAmb | 00 34 05.1 | |
| | comp=Z,1μm,1.4s | | | | | | |
| ELS | Elsinore Mount | 77.38 | 48 | P | P | 00 34 01.0 | -0.3 |
| ELS | | | | IAmb | IAmb | 00 34 06.7 | |
| | comp=Z,1μm,1.5s | | | | | | |
| TKX | Tecate | 77.39 | 49 | P | P | 00 34 01.6 | +0.2 |
| USRK | Ussuriysk Ar. | 77.53 | 325 | P | P | 00 34 03.4 | +1.6 |
| USRK | Ussuriysk Ar. | 77.53 | 325 | P | P | 00 34 01.2 | -0.5 |
| | comp=Z,176nm,0.7s,baz=116,slow=3.1,SNR=6.5 | | | | | | |
| | comp=Z,176nm,0.7s | | | | | | |
| ESJX | Sierra Juarez | 77.57 | 50 | P | P | 00 34 03.0 | +0.5 |
| ISA | Isabella, Lake | 77.75 | 46 | P | P | 00 34 03.7 | +0.5 |
| SRIG | Santa Rosalia | 78.07 | 56 | P | P | 00 34 05.7 | +0.7 |
| SLBS | Sierra La Lagu | 78.26 | 60 | P | P | 00 34 06.7 | +0.4 |
| SLBS | | | | IAmb | IAmb | 00 34 08.7 | |
| | comp=Z,1μm,1.1s | | | | | | |
| NJ2 | Nanjing | 78.88 | 309 | *e*P | P | 00 34 07.5 | -1.7 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,240nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 79.39 | 43 | P | P | 00 34 12.6 | +0.5 |
| | comp=Z,341nm,0.8s,baz=216,slow=4.6,SNR=4.9 | | | | | | |
| | comp=Z,341nm,0.8s | | | | | | |
| SMAI | San Martin Ant | 80.32 | 159 | P | P | 00 34 17.4 | +1.3 |
| QIZ | Qiongzhong | 80.35 | 294 | P | P | 00 34 12.8 | -4.4 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,620nm,1.5s | | | | | | |
| KLR | Kul'dur | 81.01 | 329 | P | P | 00 34 20.6 | +0.7 |
| | comp=Z,627nm,1.1s,baz=134,slow=5.0,SNR=3.5 | | | | | | |
| | comp=Z,627nm,1.1s | | | | | | |
| TUC | Tucson | 81.53 | 52 | P | P | 00 34 24.9 | +1.7 |
| MA2 | Magadan | 81.99 | 344 | P | P | 00 34 24.3 | -0.3 |
| MA2 | Magadan | 81.99 | 344 | P | P | 00 34 25.0 | +0.3 |
| | comp=Z,190nm,0.6s,baz=186,slow=12,SNR=2.1 | | | | | | |
| | comp=Z,190nm,0.6s | | | | | | |
| UBPT | Khong Chiam | 82.80 | 289 | P | P | 00 34 30.8 | +1.1 |
| UBPT | | | | IAmb | IAmb | 00 34 33.2 | |
| | comp=Z,2μm,1.4s | | | | | | |
| SEY | Seymchan | 84.55 | 347 | P | P | 00 34 38.0 | +0.7 |
| | comp=Z,359nm,0.7s,baz=139,slow=5.7,SNR=5.2 | | | | | | |
| | comp=Z,359nm,0.7s | | | | | | |
| BJT | Baijiatuau | 84.72 | 315 | P | P | 00 34 39.3 | +0.6 |
| BJT | | | | IAmb | IAmb | 00 34 41.0 | |
| | comp=Z,796nm,1.1s | | | | | | |
| BJI | Beijing | 84.73 | 315 | P | P | 00 34 39.3 | +0.6 |
| BJI | | | | pmax | pmax | | |
| | comp=Z,500nm,1.8s | | | | | | |
| ENH | Enshi | 85.21 | 304 | | P | 00 34 43.2 | +1.9 |
| GSI | Gunungsitoli | 85.44 | 273 | P | P | 00 34 45.2 | +2.5 |
| NEW | Newport | 85.61 | 36 | | P | 00 34 45.3 | +2.4 |
| NEW | | | | IAmb | IAmb | 00 35 04.1 | |
| | comp=Z,1μm,1.4s | | | | | | |
| TXAR | Lajitas Array | 85.74 | 57 | P | P | 00 34 44.5 | +0.5 |
| TXAR | Lajitas Array | 85.74 | 57 | P | P | 00 34 45.7 | +1.7 |
| | comp=Z,457nm,0.8s,baz=220,slow=5.7,SNR=7.2 | | | | | | |
| | comp=Z,457nm,0.8s | | | | | | |
| ILAR | Eielson Array | 86.34 | 13 | P | P | 00 34 45.9 | 0.0 |
| | comp=Z,337nm,1.0s,baz=221,slow=4.8,SNR=5.4 | | | | | | |
| | comp=Z,337nm,1.0s | | | | | | |
| XAN | Xi'an | 87.20 | 307 | ⇑P | P | 00 34 53.3 | +2.6 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,1μm,1.1s | | | | | | |
| PDAR | Pinedale Array | 87.33 | 43 | P | P | 00 34 51.0 | -0.3 |
| | comp=Z,192nm,0.8s,baz=201,slow=2.7,SNR=3.8 | | | | | | |
| | comp=Z,192nm,0.8s | | | | | | |
| HHC | Hu-ho-hao-te | 88.22 | 314 | *e*P | P | 00 34 55.8 | +0.5 |
| HHC | | | | sP | sP | 00 37 48.6 | -15 |
| HHC | | | | SKS | SKSac | 00 44 29.0 | +1.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,510nm,1.1s | | | | | | |
| ELIB | Princess Elisa | 88.61 | 186 | *d*P | P | 00 34 55.9 | -0.8 |
| | comp=Z,573nm,0.9s | | | | | | |
| TROLL | Troll, Antarti | 89.68 | 180 | ⇑P | P | 00 34 59.8 | -1.8 |
| | comp=Z,21μm,1.1s | | | | | | |
| CMAR | Chiang Mai Arr | 89.76 | 289 | P | P | 00 35 04.0 | +1.1 |
| | comp=Z,159nm,0.8s,baz=105,slow=2.2,SNR=2.7 | | | | | | |
| | comp=Z,159nm,0.8s | | | | | | |
| VNA3 | Neumayer Olymp | 90.06 | 176 | ⇑P | P | 00 35 02.7 | -0.6 |
| | comp=Z,672nm,0.8s | | | | | | |
| PZH | PanZhiHua | 90.07 | 298 | P | P | 00 35 02.3 | -2.0 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,60nm,1.4s | | | | | | |
| VNA2 | Neumayer--Watz | 90.51 | 177 | ⇑P | P | 00 35 05.6 | +0.3 |
| | comp=Z,383nm,2.4s,baz=162,slow=3.9 | | | | | | |
| VNA1 | Neumayer--Stat | 90.74 | 176 | ⇑P | P | 00 35 03.0 | -3.4 |
| | comp=Z,599nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 94.61 | 25 | P | P | 00 35 23.4 | -0.6 |
| | comp=Z,164nm,1.1s,baz=245,slow=4.7,SNR=3.2 | | | | | | |
| | comp=Z,164nm,1.1s | | | | | | |
| GTA | Gaotai | 95.98 | 309 | P | P | 00 35 29.4 | -1.6 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,290nm,2.2s | | | | | | |
| WMQ | Urumqi | 105.88 | 311 | Pdif | Pdif | 00 36 11.8 | -3.0 |
| AOPR | Arecibo Observ | 114.87 | 78 | *e*P | Pdif | 00 36 46.7 | -8.6 |
| BVAR | Borovoye Array | 117.78 | 321 | PKP | PKiKP | 00 40 48.1 | +2.4 |
| | comp=Z,146nm,0.6s,baz=66,slow=2.0,SNR=2.3 | | | | | | |
| NUUK | Nuuk | 121.87 | 25 | *i* P | Pdif | 00 37 28.1 | +2.8 |
| DY2G | Dye2 | 122.78 | 21 | *i* P | Pdif | 00 37 30.4 | +0.7 |
| EKB | Eskdalemuir | 143.03 | 5 | PKPdf | PKPdf | 00 41 33.2 | +0.3 |
| EKA | Eskdalemuir Ar | 143.03 | 5 | PKP | PKPdf | 00 41 33.3 | +0.3 |
| | comp=Z,74nm,0.6s,baz=311,slow=2.3,SNR=3.6 | | | | | | |
| SNOP | Sinop | 143.56 | 317 | PKPdf | PKPdf | 00 41 34.6 | +0.3 |
| GAZ | Gaziantep | 144.28 | 309 | PKPdf | PKPab | 00 41 37.0 | +0.7 |
| BNN | Bunyan | 144.60 | 312 | PKPdf | PKPdf | 00 41 35.7 | -0.7 |
| ILGA | Ilgaz | 145.02 | 317 | PKPdf | PKPab | 00 41 38.2 | -1.0 |
| OJC | Ojcow | 145.44 | 340 | PKPdf | PKPdf | 00 41 37.2 | -0.1 |
| BURAR | Bucovina Array | 145.50 | 332 | PKPdf | PKPbc | 00 41 38.1 | -1.1 |
| BRTR | Keskin Array B | 145.72 | 315 | PKPbc | PKPab | 00 41 40.9 | +1.1 |
| BRTR | Keskin Array B | 145.72 | 315 | PKPbc | PKiKP | 00 41 42.3 | -0.4 |
| | comp=Z,228nm,0.6s,baz=73,slow=4.2,SNR=6.5 | | | | | | |
| OSTC | Ostas | 146.19 | 344 | *e*PKP | PKiKP | 00 41 43.8 | +0.6 |
| ANTO | Ankara | 146.22 | 315 | PKPbc | PKiKP | 00 41 42.4 | -1.2 |
| CLL | Collm | 146.23 | 348 | PKPbc | PKiKP | 00 41 42.5 | -0.6 |
| CLL | Collm | 146.23 | 348 | *i* PKPbc | PKiKP | 00 41 43.2 | +0.1 |
| | comp=Z,1μm,0.8s | | | | | | |
| CLL | | | | *ep*PKPdf | pPKPab | 00 43 52.0 | -4.0 |
| CLL | | | | *e*(PKSdf) | | 00 45 13.0 | |
| OKC | Ostrava-Krasne | 146.29 | 341 | *e*PKP | PKPab | 00 41 43.7 | +0.1 |
| DPC | Dobruska-Polom | 146.35 | 344 | *e*PKP | PKPab | 00 41 44.2 | +0.3 |
| BRG | Berggiesshubel | 146.44 | 347 | *e*PKP | PKPab | 00 41 44.4 | +0.2 |
| BRG | | | | Amp | | 00 41 44.7 | |
| | comp=Z,596nm,0.8s | | | | | | |
| KRLC | Kraliky | 146.48 | 343 | *e*PKP | PKPab | 00 41 44.5 | +0.1 |
| MDUB | Mudurnu | 146.95 | 318 | PKPbc | PKPab | 00 41 45.8 | -1.0 |
| MMAI | Mount Meron Ar | 147.07 | 302 | PKP | PKPbc | 00 41 43.0 | -0.9 |
| | comp=Z,797nm,0.8s,baz=70,slow=5.4,SNR=4.0 | | | | | | |
| MMAI | | | | PKPbc | PKPab | 00 41 46.2 | -1.3 |
| | comp=Z,799nm,0.8s,baz=64,slow=5.7,SNR=4.7 | | | | | | |
| PRA | Prague | 147.08 | 346 | *e*PKP | PKPab | 00 41 46.0 | -0.8 |
| PRU | Pruhonice | 147.13 | 345 | *e*PKP | PKPab | 00 41 45.9 | -1.1 |
| PRU | | | | AMS | AMS | 01 35 30.0 | |
| | comp=Z,183μm,22.8s | | | | | | |
| GOPC | GO Pecny, Ondr | 147.14 | 345 | *e*PKP | PKPab | 00 41 45.9 | -1.2 |
| GHAJ | Ghor Haditha | 147.42 | 299 | PKPbc | PKiKP | 00 41 45.8 | -0.4 |
| BEBN | Eben Emael | 147.71 | 356 | *d*PKP | PKiKP | 00 41 46.8 | +0.6 |
| ZVC | Zvikov | 147.73 | 345 | *e*PKP | PKPab | 00 41 47.7 | -1.8 |
| BORA | Bzkisehir | 147.75 | 317 | PKPbc | PKPbc | 00 41 44.5 | -0.9 |
| MEM | Membach | 147.87 | 356 | *d*PKP | PKiKP | 00 41 45.7 | -0.8 |
| BTNL | Ternell | 147.88 | 355 | *d*PKP | PKPbc | 00 41 45.1 | -0.2 |
| BSTI | Sart Tilman | 147.93 | 356 | *d*PKP | PKPab | 00 41 47.8 | -2.4 |
| BCLA | Clavier | 148.11 | 356 | *d*PKP | PKiKP | 00 41 46.9 | -0.2 |
| GRFO | Grafenberg | 148.11 | 349 | PKPbc | PKPbc | 00 41 45.6 | -0.2 |
| BHOU | Houvegnez | 148.12 | 356 | *d*PKP | PKPab | 00 41 49.0 | -2.1 |
| BGES | Gesves | 148.15 | 357 | *d*PKP | PKPab | 00 41 50.8 | -0.4 |
| KHC | Kasperske Hory | 148.16 | 346 | PKPbc | PKiKP | 00 41 47.5 | +0.2 |
| KHC | Kasperske Hory | 148.16 | 346 | *e*PKP | PKPab | 00 41 48.8 | -2.5 |
| KHC | | | | AMS | AMS | 01 31 10.0 | |
| | comp=Z,217μm,23.6s | | | | | | |
| BMRD | Maredsous | 148.25 | 357 | *d*PKP | PKPab | 00 41 51.1 | -0.5 |
| CKRC | Cesky Krumlov | 148.28 | 345 | *e*PKP | PKPab | 00 41 49.3 | -2.5 |
| GEC2 | GERESS Array S | 148.40 | 346 | PKPbc | PKiKP | 00 41 48.2 | +0.3 |
| GERES | GERESS Array B | 148.40 | 346 | PKPbc | PKPab | 00 41 49.5 | -2.9 |
| | comp=Z,216nm,0.6s,baz=39,slow=2.8,SNR=5.1 | | | | | | |
| DOU | Dourbes | 148.47 | 357 | *d*PKP | PKPab | 00 41 49.8 | -2.7 |
| CONA | Conrad Observa | 148.68 | 342 | *e*PKP | PKiKP | 00 41 49.8 | +1.4 |
| | comp=Z,267nm,0.8s | | | | | | |
| CONA | Conrad Observa | 148.68 | 342 | *e*PP | PKiKP | 00 41 49.8 | +1.4 |
| | comp=Z,267nm,0.8s | | | | | | |
| RONA | Rosalia, Austr | 148.76 | 342 | *e*PKP | PKiKP | 00 41 50.0 | +1.4 |
| | comp=Z,210nm,0.7s | | | | | | |
| RONA | Rosalia, Austr | 148.76 | 342 | *e*PP | PKiKP | 00 41 50.0 | +1.4 |
| | comp=Z,210nm,0.7s | | | | | | |
| WLF | Walferdange | 148.80 | 355 | *d*PKP | PKPab | 00 41 50.6 | -3.3 |
| STU | Stuttgart | 149.34 | 351 | PKPbc | PKiKP | 00 41 50.6 | +1.0 |
| BIOA | Bad Ischl, Aus | 149.49 | 345 | *e*PKP | PKiKP | 00 41 52.5 | +2.4 |
| | comp=Z,213nm,0.6s | | | | | | |
| BIOA | Bad Ischl, Aus | 149.49 | 345 | *e*PP | PKiKP | 00 41 52.5 | +2.4 |
| | comp=Z,213nm,0.6s | | | | | | |
| MANT | Manisa | 149.74 | 317 | PKPbc | PKiKP | 00 41 51.3 | +0.2 |
| LESA | Schwarzleotal | 149.97 | 346 | *e*PKP | PKiKP | 00 41 53.6 | +2.5 |
| | comp=Z,211nm,0.7s | | | | | | |
| LESA | Schwarzleotal | 149.97 | 346 | *e*PP | PKiKP | 00 41 53.6 | +2.5 |
| | comp=Z,211nm,0.7s | | | | | | |
| SOKA | Soboth | 150.05 | 342 | *e*PKiKP | PKiKP | 00 41 52.9 | +1.6 |
| | comp=Z,83nm,0.6s | | | | | | |
| SOKA | Soboth | 150.05 | 342 | *e*PP | PKiKP | 00 41 52.9 | +1.6 |
| | comp=Z,83nm,0.6s | | | | | | |
| KBA | Koelnbreinsper | 150.13 | 345 | *e*PKiKP | PKiKP | 00 41 53.7 | +2.1 |
| | comp=Z,218nm,0.6s | | | | | | |
| KBA | Koelnbreinsper | 150.13 | 345 | *e*PP | PKiKP | 00 41 53.7 | +2.1 |
| | comp=Z,218nm,0.6s | | | | | | |
| WATA | Walderalm | 150.30 | 347 | *e*PKiKP | PKiKP | 00 41 53.3 | +1.4 |
| | comp=Z,205nm,0.6s | | | | | | |
| WATA | Walderalm | 150.30 | 347 | *e*PP | PKiKP | 00 41 53.3 | +1.4 |
| | comp=Z,205nm,0.6s | | | | | | |
| WTTA | Wattenberg | 150.35 | 347 | *e*PKiKP | PKiKP | 00 41 53.7 | +1.7 |
| | comp=Z,426nm,0.7s | | | | | | |
| WTTA | Wattenberg | 150.35 | 347 | *e*PP | PKiKP | 00 41 53.7 | +1.7 |
| | comp=Z,426nm,0.7s | | | | | | |
| MYKA | Terra Mystica | 150.48 | 344 | *i* PKiKP | PKiKP | 00 41 53.5 | +1.4 |
| | comp=Z,268nm,0.6s | | | | | | |
| SQTA | Sankt Quirin | 150.48 | 348 | *e*PKiKP | PKiKP | 00 41 54.3 | +2.1 |
| | comp=Z,268nm,0.6s | | | | | | |
| SQTA | Sankt Quirin | 150.48 | 348 | *e*PP | PKiKP | 00 41 54.3 | +2.1 |
| | comp=Z,268nm,0.6s | | | | | | |
| CLF | Chambon-Foret | 150.59 | 0 | PKPbc | PKiKP | 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,275nm,1.4s | | | | | | | | |
| JGF | Kuroka | 68.07 | 322 | P | | P | 00 40 44.1 | +0.1 | |
| MJAR | Matsushiro Arr | 68.24 | 323 | P | | P | 00 40 45.2 | +0.2 | |
| | comp=Z,60nm,0.8s,baz=162,slow=5.7,SNR=24 | | | | | | | | |
| | comp=Z,60nm,0.8s | | | | | | | | |
| MAJO | Matsushiro | 68.24 | 323 | P | | P | 00 40 45.2 | +0.2 | |
| MAJO | | | | IAmb | | IAmb | 00 41 13.7 | | |
| | comp=Z,126nm,1.4s | | | | | | | | |
| MAJO | Matsushiro | 68.24 | 323 | P | | P | 00 40 45.3 | +0.2 | |
| MJB9 | Matsu-Tunnel | 68.24 | 323 | P | | P | 00 40 46.4 | +1.3 | |
| JMN | Monobe | 68.92 | 318 | P | | P | 00 40 49.8 | +0.5 | |
| JMN | | | | IAmb | | IAmb | 00 40 51.6 | | |
| | comp=Z,269nm,1.2s | | | | | | | | |
| KKM | Kota Kinabalu | 69.02 | 284 | P | | P | 00 40 49.8 | -0.5 | |
| KKM | | | | IAmb | | IAmb | 00 40 51.5 | | |
| | comp=Z,277nm,1.2s | | | | | | | | |
| JSD | Sado | 69.27 | 324 | P | | P | 00 40 51.4 | +0.2 | |
| KIWB | Kanaga Island | 69.71 | 1 | P | | P | 00 40 53.0 | -0.5 | |
| JTM | Tenmabayashi | 69.80 | 328 | P | | P | 00 40 53.8 | -0.4 | |
| JTM | | | | IAmb | | IAmb | 00 41 13.9 | | |
| | comp=Z,154nm,1.2s | | | | | | | | |
| UGM | Wanagama | 69.86 | 268 | P | | P | 00 40 55.2 | -0.1 | |
| SMRI | Semarang | 70.19 | 269 | P | | P | 00 40 57.2 | 0.0 | |
| SMRI | | | | IAmb | | IAmb | 00 41 20.6 | | |
| | comp=Z,250nm,1.0s | | | | | | | | |
| JNU | Nakatsue | 70.47 | 316 | P | | P | 00 40 59.1 | +0.7 | |
| | comp=Z,37nm,1.1s,baz=295,slow=1.7,SNR=1.5 | | | | | | | | |
| | comp=Z,37nm,1.1s | | | | | | | | |
| SHEM | Shemya Is, Ala | 70.90 | 355 | P | | P | 00 41 00.4 | 0.0 | |
| | comp=Z,66nm,0.5s,baz=44,slow=6.5,SNR=7.8 | | | | | | | | |
| | comp=Z,66nm,0.5s | | | | | | | | |
| YOJ | Yonaguni jima | 71.27 | 305 | P | | P | 00 41 02.5 | -0.7 | |
| YOJ | | | | IAmb | | IAmb | 00 41 08.0 | | |
| | comp=Z,227nm,1.2s | | | | | | | | |
| SBUM | Sibu | 71.47 | 279 | P | | P | 00 41 04.5 | -0.2 | |
| JKA | Kamikawa-asahi | 71.60 | 331 | P | | P | 00 41 04.5 | -0.2 | |
| JKA | | | | IAmb | | IAmb | 00 41 05.4 | | |
| | comp=Z,163nm,1.2s | | | | | | | | |
| TWG | Pinlang | 71.99 | 302 | P | | P | 00 41 06.3 | -1.2 | |
| TWG | | | | IAmb | | IAmb | 00 41 12.3 | | |
| | comp=Z,245nm,1.5s | | | | | | | | |
| NACB | Ninganchiao | 72.24 | 304 | P | | P | 00 41 08.4 | -0.5 | |
| NACB | | | | IAmb | | IAmb | 00 41 12.3 | | |
| | comp=Z,119nm,1.0s | | | | | | | | |
| TPUB | Ta-pu | 72.58 | 302 | P | | P | 00 41 10.0 | -0.9 | |
| TPUB | | | | IAmb | | IAmb | 00 41 11.3 | | |
| | comp=Z,169nm,0.7s | | | | | | | | |
| KSM | Kuching | 72.94 | 277 | P | | P | 00 41 13.8 | +0.6 | |
| KSM | | | | IAmb | | IAmb | 00 41 15.8 | | |
| | comp=Z,189nm,0.9s | | | | | | | | |
| PET | Petropavlovsk | 73.67 | 346 | P | | P | 00 41 15.9 | -0.5 | |
| PEA0B | Petropavlovsk- | 73.97 | 345 | P | | P | 00 41 18.6 | +0.5 | |
| PEA0B | | | | IAmb | | IAmb | 00 41 27.0 | | |
| | comp=Z,408nm,1.4s | | | | | | | | |
| PETK | Petropavlovsk- | 73.97 | 345 | P | | P | 00 41 17.8 | -0.3 | |
| PETK | Petropavlovsk- | 73.97 | 345 | P | | P | 00 41 18.8 | +0.7 | |
| | comp=Z,76nm,0.8s,baz=111,slow=7.3,SNR=13 | | | | | | | | |
| | comp=Z,76nm,0.8s | | | | | | | | |
| SDPT | Sand Point | 74.74 | 10 | P | | P | 00 41 21.7 | -0.7 | |
| S12K | Black Hills | 74.82 | 9 | P | | P | 00 41 22.6 | -0.3 | |
| S12K | | | | IAmb | | IAmb | 00 41 34.1 | | |
| | comp=Z,276nm,1.4s | | | | | | | | |
| KNMB | Chin-men Tao | 74.94 | 302 | P | | P | 00 41 23.9 | -0.2 | |
| KSRS | Korea Array | 75.03 | 318 | P | | P | 00 41 26.2 | +1.8 | |
| | comp=Z,13nm,0.8s,baz=126,slow=6.1,SNR=7.6 | | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| USRK | Ussuriysk Ar. | 76.94 | 326 | P | | P | 00 41 35.8 | +1.0 | |
| USRK | Ussuriysk Ar. | 76.94 | 326 | P | | P | 00 41 36.1 | +1.3 | |
| | comp=Z,18nm,0.7s,baz=129,slow=2.6,SNR=4.9 | | | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | | | |
| KMRM | Mail Ridge | 77.06 | 40 | P | | P | 00 41 36.5 | +0.9 | |
| KMRM | | | | IAmb | | IAmb | 00 41 58.1 | | |
| | comp=Z,249nm,1.5s | | | | | | | | |
| PLK4 | Peulik 4 | 77.66 | 12 | P | | P | 00 41 38.1 | -0.3 | |
| PLK4 | | | | IAmb | | IAmb | 00 42 06.7 | | |
| | comp=Z,367nm,1.5s | | | | | | | | |
| ISA | Isabella, Lake | 77.83 | 46 | P | | P | 00 41 40.4 | +0.5 | |
| OHAK | Old Harbor | 77.92 | 14 | P | | P | 00 41 39.4 | -0.3 | |
| OHAK | | | | IAmb | | IAmb | 00 41 52.4 | | |
| | comp=Z,325nm,1.4s | | | | | | | | |
| MDJ | Mudanjiang | 78.52 | 325 | P | | P | 00 41 43.7 | +0.5 | |
| OMMB | Old Mammoth Mi | 78.54 | 44 | P | | P | 00 41 43.9 | -0.1 | |
| YBH | Yreka Blue Hor | 78.57 | 39 | P | | P | 00 41 43.9 | +0.1 | |
| YERR | Yerington | 79.14 | 43 | P | | P | 00 41 47.5 | +0.5 | |
| YERR | | | | IAmb | | IAmb | 00 41 49.5 | | |
| | comp=Z,356nm,1.5s | | | | | | | | |
| O16K | Kokwok River B | 79.19 | 10 | P | | P | 00 41 45.7 | -0.7 | |
| O16K | | | | IAmb | | IAmb | 00 41 55.6 | | |
| | comp=Z,477nm,1.4s | | | | | | | | |
| N15K | Kwethluk River | 79.41 | 9 | P | | P | 00 41 48.0 | +0.4 | |
| N15K | | | | IAmb | | IAmb | 00 41 55.2 | | |
| | comp=Z,420nm,1.4s | | | | | | | | |
| P18K | Big Mountain, | 79.52 | 12 | P | | P | 00 41 48.2 | 0.0 | |
| O18K | Koktuh Hills | 79.95 | 12 | P | | P | 00 41 50.5 | 0.0 | |
| O18K | | | | IAmb | | IAmb | 00 41 52.0 | | |
| | comp=Z,228nm,1.0s | | | | | | | | |
| SEY | Seymchan | 84.06 | 347 | P | | P | 00 42 11.8 | +0.6 | |
| | comp=Z,149nm,1.0s,baz=151,slow=6.6,SNR=7.9 | | | | | | | | |
| | comp=Z,149nm,1.0s | | | | | | | | |
| ILAR | Eielson Array | 86.08 | 13 | P | | P | 00 42 20.9 | 0.0 | |
| | comp=Z,16nm,0.5s,baz=222,slow=5.0,SNR=4.9 | | | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| BRTR | Keskin Array B | 145.11 | 315 | PKPbc | | PKPab | 00 49 16.6 | +0.8 | |
| | comp=Z,128nm,0.9s,baz=75,slow=0.9,SNR=8.3 | | | | | | | | |
| CLL | Collm | 145.75 | 348 | *i* PKPbc | | PKPbc | 00 49 16.7 | +0.8 | |
| | comp=Z,157nm,0.8s | | | | | | | | |
| MLR | Muntele Rosu | 146.16 | 329 | PKPbc | | PKPbc | 00 49 18.1 | +0.6 | |
| | comp=Z,127nm,1.1s,baz=303,slow=11,SNR=4.1 | | | | | | | | |
| MMAI | Mount Meron Ar | 146.46 | 303 | PKPbc | | PKiKP | 00 49 19.9 | -0.8 | |
| | comp=Z,46nm,0.6s,baz=68,slow=7.3,SNR=10.0 | | | | | | | | |
| GERES | GERESS Array B | 147.91 | 345 | PKPbc | | PKiKP | 00 49 22.6 | -0.7 | |
| | comp=Z,39nm,0.7s,baz=45,slow=2.7,SNR=5.1 | | | | | | | | |

*IDC* ***19*** *00:32:57.8±1.9, 17.97S×178.22W, h500km±21km, mb5.0/21, mbtmp5.8/24, Error ellipse: s-maj=12.4km s-min=10.7km az=10.0*

*NOU* ***19*** *00:32:58.0, 17.77S×177.99W, h533km, mb5.8/24, Fiji Islands Region*

*NEIC* ***19*** *00:32:59.5±1.1, 17.95S±0.10×178.20W±0.09, h520km±7km, mb5.7/96, Error ellipse: s-maj=15.7km s-min=10.7km az=138.0*

**ISC 19 00:32:57.8±0.3, 17.92S±0.06×178.18W±0.06, h500km, n265, σ1$^{s}$3$^{s}$/264, mb5.7/78, 28C-16D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.59 | 272 | P | P | 00 34 17.3 | +4.2 |
| MSVF | Nonsavu | 3.59 | 272 | P | P | 00 34 17.7 | +4.6 |
| RAO | Raoul Island | 11.28 | 179 | P | P | 00 35 29.9 | +1.3 |
| | 1μm,0.6s | | | | | | |
| RAO | Raoul Island | 11.28 | 179 | P | P | 00 35 28.9 | +0.4 |
| | 795nm,0.3s,baz=64,slow=9.9,SNR=10 | | | | | | |
| RAO | | | | S | S | 00 37 33.8 | +1.0 |
| | 616nm,0.4s,baz=76,slow=23,SNR=2.1 | | | | | | |
| DVP | Devils Point | 12.98 | 269 | P | P | 00 35 48.5 | +1.7 |
| MARNC | Mare, Loyalty | 13.46 | 253 | P | P | 00 35 54.0 | +2.3 |
| LIFNC | LIFOU | 14.05 | 256 | P | P | 00 35 57.6 | -0.4 |
| PINNC | Pines Island, | 14.27 | 249 | P | P | 00 36 00.7 | +0.5 |
| DZM | Mont Dzumac | 15.03 | 252 | P | P | 00 36 10.0 | +1.6 |
| DZM | | | | IAmb | IAmb | 00 36 13.4 | |
| | comp=Z,111nm,0.9s | | | | | | |
| DZM | Mont Dzumac | 15.03 | 252 | P | P | 00 36 08.3 | 0.0 |
| | comp=Z,116nm,0.9s,baz=67,slow=23,SNR=1.7 | | | | | | |
| NOUC | Port Laguerre | 15.16 | 252 | P | P | 00 36 10.8 | +1.1 |
| KOUNC | Koumac, New Ca | 16.76 | 258 | P | P | 00 36 28.3 | +1.9 |
| KOUNC | Koumac, New Ca | 16.76 | 258 | P | P | 00 36 27.0 | +0.6 |
| NFK | Norfolk Island | 16.85 | 226 | P | P | 00 36 28.4 | +1.2 |
| RAR | Rarotonga | 17.66 | 104 | P | P | 00 36 35.2 | +0.2 |
| | comp=Z,443nm,0.9s,baz=232,slow=5.6,SNR=4.2 | | | | | | |
| TOZ | Tahuroa Road | 20.50 | 194 | P | P | 00 37 01.4 | +0.7 |
| URZ | Urewera | 20.68 | 191 | P | P | 00 37 01.1 | -1.3 |
| | comp=Z,32nm,0.3s,baz=353,slow=2.8,SNR=13 | | | | | | |
| | comp=Z,32nm,0.3s | | | | | | |
| TARA | Tarawa | 21.06 | 335 | P | P | 00 37 05.6 | -0.6 |
| QRZ | Quartz Range | 24.19 | 197 | P | P | 00 37 34.5 | +0.6 |
| QRZ | Quartz Range | 24.19 | 197 | P | P | 00 37 34.4 | +0.5 |
| QRZ | | | | IAmb | IAmb | 00 37 50.4 | |
| | comp=Z,167nm,1.1s | | | | | | |
| LHI | Lord Howe Isla | 24.64 | 232 | P | P | 00 37 37.4 | -0.6 |
| LHI | | | | IAmb | IAmb | 00 37 39.9 | |
| | comp=Z,114nm,0.8s | | | | | | |
| PPT | Papeete | 27.24 | 94 | P | P | 00 38 01.3 | +0.1 |
| | comp=Z,319nm,0.6s,baz=88,slow=3.1,SNR=26 | | | | | | |
| | comp=Z,319nm,0.6s | | | | | | |
| PPTF | Pamatai, Papee | 27.25 | 94 | P | P | 00 38 01.2 | -0.1 |
| JCZ | Jackson Bay | 28.29 | 200 | P | P | 00 38 11.0 | +0.9 |
| ODZ | Otahua Downs | 28.61 | 197 | P | P | 00 38 12.1 | -0.7 |
| EIDS | Eidsvold | 29.46 | 250 | P | P | 00 38 20.5 | -0.1 |
| EIDS | Eidsvold | 29.46 | 250 | P | P | 00 38 20.0 | -0.6 |
| EIDS | Eidsvold | 29.46 | 250 | P | P | 00 38 19.8 | -0.7 |
| | comp=Z,607nm,1.6s | | | | | | |
| RK1H | Rockhampton Ha | 29.77 | 254 | P | P | 00 38 22.5 | -0.7 |
| | comp=Z,245nm,0.8s | | | | | | |
| ARMA | Armidale | 30.12 | 240 | P | P | 00 38 26.6 | +0.3 |
| ARMA | Armidale | 30.12 | 240 | P | P | 00 38 26.3 | 0.0 |
| ARMA | | | | IAmb | IAmb | 00 38 27.6 | |
| | comp=Z,223nm,0.8s | | | | | | |
| ARMA | Armidale | 30.12 | 240 | P | P | 00 38 26.9 | +0.6 |
| | comp=Z,323nm,1.4s | | | | | | |
| RMQ | Roma | 31.70 | 249 | P | P | 00 38 39.8 | -0.1 |
| TV1H | Townsville Har | 33.19 | 262 | P | P | 00 38 51.7 | -0.9 |
| | comp=Z,318nm,0.9s | | | | | | |
| CNB | Canberra Magne | 33.59 | 232 | P | P | 00 38 55.8 | -0.1 |
| CNB | Canberra Magne | 33.59 | 232 | P | P | 00 38 56.3 | +0.4 |
| | comp=Z,640nm,0.9s | | | | | | |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 00 38 56.5 | -0.1 |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 00 38 56.1 | -0.5 |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 00 38 55.8 | -0.8 |
| PATS | Pohnpei | 33.82 | 315 | P | P | 00 38 58.9 | +0.9 |
| PATS | Pohnpei | 33.82 | 315 | P | P | 00 38 59.1 | +1.1 |
| CAN | Canberra | 33.87 | 233 | P | P | 00 38 58.2 | 0.0 |
| CAN | Canberra | 33.87 | 233 | P | P | 00 38 58.0 | -0.1 |
| CAN | | | | IAmb | IAmb | 00 38 59.5 | |
| | comp=Z,261nm,0.9s | | | | | | |
| CAN | Canberra | 33.87 | 233 | P | P | 00 38 58.0 | -0.1 |
| | comp=Z,409nm,0.9s | | | | | | |
| CAN | Canberra | 33.87 | 233 | P | P | 00 38 58.5 | +0.3 |
| PMG | Port Moresby | 34.67 | 279 | P | P | 00 39 05.1 | -0.1 |
| PMG | | | | IAmb | IAmb | 00 39 06.9 | |
| | comp=Z,429nm,0.9s | | | | | | |
| PMG | Port Moresby | 34.67 | 279 | P | P | 00 39 06.0 | +0.9 |
| CMSA | Cobar Meteorol | 35.33 | 241 | P | P | 00 39 10.7 | +0.2 |
| CMSA | Cobar Meteorol | 35.33 | 241 | P | P | 00 39 10.5 | 0.0 |
| | comp=Z,673nm,0.9s | | | | | | |
| QLP | Quilpie | 35.73 | 249 | P | P | 00 39 13.8 | -0.1 |
| GLAD | Gladstone | 36.99 | 224 | P | P | 00 39 23.7 | -0.4 |
| | comp=Z,151nm,0.8s | | | | | | |
| MANU | Manus Island | 37.30 | 291 | P | P | 00 39 27.3 | +0.3 |
| COEN | Coen | 37.32 | 270 | P | P | 00 39 26.5 | -0.7 |
| COEN | Coen | 37.32 | 270 | P | P | 00 39 26.9 | -0.2 |
| COEN | Coen | 37.32 | 270 | P | P | 00 39 27.2 | 0.0 |
| | comp=Z,652nm,0.9s | | | | | | |
| TOO | Toolangi | 37.33 | 231 | P | P | 00 39 27.1 | +0.1 |
| TOO | Toolangi | 37.33 | 231 | P | P | 00 39 26.9 | -0.1 |
| TOO | Toolangi | 37.33 | 231 | P | P | 00 39 27.3 | +0.3 |
| | comp=Z,577nm,1.1s | | | | | | |
| TAOE | Nuku Hiva Isla | 38.02 | 81 | P | P | 00 39 32.7 | -0.3 |
| TAOE | | | | IAmb | IAmb | 00 39 34.0 | |
| | comp=Z,466nm,1.0s | | | | | | |
| TAOE | Nuku Hiva Isla | 38.02 | 81 | P | P | 00 39 32.9 | -0.1 |
| TAU | Tasmania Unive | 38.37 | 222 | P | P | 00 39 35.0 | -0.4 |
| TAU | | | | IAmb | IAmb | 00 39 36.3 | |
| | comp=Z,185nm,1.1s | | | | | | |
| STKA | Stephens Creek | 38.81 | 241 | P | P | 00 39 39.2 | 0.0 |
| STKA | | | | IAmb | IAmb | 00 39 40.7 | |
| | comp=Z,123nm,1.0s | | | | | | |
| STKA | Stephens Creek | 38.81 | 241 | P | P | 00 39 39.6 | +0.5 |
| | comp=Z,150nm,1.0s | | | | | | |
| STKA | Stephens Creek | 38.81 | 241 | P | P | 00 39 38.9 | -0.2 |
| | comp=Z,377nm,0.9s,baz=295,slow=23,SNR=9.0 | | | | | | |
| | comp=Z,377nm,0.9s | | | | | | |
| ARPS | Mount Arapiles | 39.81 | 234 | P | P | 00 39 47.1 | 0.0 |
| | comp=Z,385nm,1.0s | | | | | | |
| WAKE | Wake Island | 39.86 | 337 | P | P | 00 39 47.1 | -0.6 |
| WAKE | | | | IAmb | IAmb | 00 39 51.6 | |
| | comp=Z,354nm,1.1s | | | | | | |
| HTT | Hallett | 41.32 | 240 | P | P | 00 39 59.4 | 0.0 |
| | comp=Z,646nm,1.2s | | | | | | |
| HMH | Humu'ula Sheep | 43.45 | 32 | P | P | 00 40 16.6 | +0.2 |
| HMH | | | | IAmb | IAmb | 00 40 17.8 | |
| | comp=Z,198nm,0.8s | | | | | | |
| STCH | Steam Cracks | 43.45 | 33 | P | P | 00 40 15.8 | -0.4 |
| STCH | | | | IAmb | IAmb | 00 40 17.0 | |
| | comp=Z,171nm,1.0s | | | | | | |
| BBOO | Buckleboo | 43.59 | 241 | P | P | 00 40 16.7 | -0.4 |
| BBOO | Buckleboo | 43.59 | 241 | P | P | 00 40 16.9 | -0.2 |
| | comp=Z,935nm,1.1s | | | | | | |
| KIP | Kipapa | 43.81 | 28 | P | P | 00 40 18.4 | -0.5 |
| KIP | | | | IAmb | IAmb | 00 40 20.9 | |
| | comp=Z,246nm,1.2s | | | | | | |
| KIP | Kipapa | 43.81 | 28 | P | P | 00 40 19.4 | +0.5 |
| HLK | Haleakala | 44.05 | 30 | P | P | 00 40 20.9 | -0.2 |
| HLK | | | | IAmb | IAmb | 00 40 49.4 | |
| | comp=Z,550nm,1.5s | | | | | | |
| WR0 | Warramunga Arr | 44.65 | 260 | P | P | 00 40 24.8 | -0.8 |
| WB2 | Warramunga Arr | 44.83 | 260 | P | P | 00 40 25.8 | -1.2 |
| WB2 | | | | IAmb | IAmb | 00 40 26.9 | |
| | comp=Z,397nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 00 40 26.2 | -0.8 |
| | comp=Z,257nm,0.7s,baz=97,slow=6.7,SNR=31 | | | | | | |
| | comp=Z,257nm,0.7s | | | | | | |
| AS31 | Alice Springs | 44.99 | 254 | P | P | 00 40 27.8 | -0.4 |
| AS31 | Alice Springs | 44.99 | 254 | P | P | 00 40 27.7 | -0.4 |
| | comp=Z,787nm,0.8s | | | | | | |
| ASAR | Alice Springs | 44.99 | 254 | P | P | 00 40 28.0 | -0.2 |
| ASAR | Alice Springs | 44.99 | 254 | P | P | 00 40 27.9 | -0.4 |
| | comp=Z,2μm,0.7s,baz=88,slow=8.3,SNR=129 | | | | | | |
| GUMO | Guam | 48.05 | 308 | P | P | 00 40 51.6 | +0.2 |
| GUMO | Guam | 48.05 | 308 | P | P | 00 40 51.8 | +0.4 |
| MTN | Manton Dam | 49.01 | 268 | P | P | 00 40 57.3 | -1.3 |
| MTN | | | | IAmb | IAmb | 00 40 58.2 | |
| | comp=Z,320nm,0.9s | | | | | | |
| WRKA | Warakurna | 50.04 | 252 | P | P | 00 41 05.8 | -0.4 |
| | comp=Z,1μm,0.9s | | | | | | |
| FORT | Forrest | 50.20 | 245 | P | P | 00 41 06.4 | -0.7 |
| KNRA | Kununurra | 50.70 | 264 | P | P | 00 41 10.1 | -0.9 |
| KNRA | | | | IAmb | IAmb | 00 41 11.3 | |
| | comp=Z,417nm,0.8s | | | | | | |
| FAKI | Fak Fak | 50.79 | 281 | P | P | 00 41 10.8 | -0.9 |
| FITZ | Fitzroy Crossi | 53.24 | 261 | P | P | 00 41 28.8 | -0.6 |
| DRV | Dumont d'Urvil | 55.72 | 199 | P | P | 00 41 45.8 | -0.2 |
| SOEI | Soe | 56.28 | 270 | P | P | 00 41 51.1 | +0.1 |
| TNTI | Ternate | 56.67 | 283 | P | P | 00 41 53.2 | -0.2 |
| TNTI | | | | IAmb | IAmb | 00 41 54.4 | |
| | comp=Z,290nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 58.11 | 255 | P | P | 00 42 02.1 | -1.1 |
| PSA00 | Pilbara Seismi | 58.11 | 255 | P | P | 00 42 02.0 | -1.3 |
| PSA00 | | | | IAmb | IAmb | 00 42 03.3 | |
| | comp=Z,409nm,0.8s | | | | | | |
| MBWA | Marble Bar | 58.28 | 256 | P | P | 00 42 03.1 | -1.3 |
| MBWA | | | | IAmb | IAmb | 00 42 03.6 | |
| | comp=Z,706nm,1.4s | | | | | | |
| MBWA | Marble Bar | 58.28 | 256 | P | P | 00 42 03.4 | -0.9 |
| MMRI | Maumere | 58.51 | 271 | P | P | 00 42 04.8 | -1.2 |
| MMRI | | | | IAmb | IAmb | 00 42 15.7 | |
| | comp=Z,333nm,1.2s | | | | | | |
| JCJ | Chichijima | 58.99 | 318 | P | P | 00 42 08.2 | -0.9 |
| JCJ | | | | IAmb | IAmb | 00 42 09.4 | |
| | comp=Z,303nm,0.9s | | | | | | |
| KLBR | Kellerberrin | 59.01 | 244 | P | P | 00 42 08.2 | -1.0 |
| | comp=Z,1μm,1.0s | | | | | | |
| NWAO | Narrogin (SRO) | 59.39 | 242 | P | P | 00 42 10.9 | -0.8 |
| NWAO | | | | IAmb | IAmb | 00 42 19.1 | |
| | comp=Z,925nm,1.5s | | | | | | |
| MORW | Morawa | 60.67 | 246 | P | P | 00 42 19.2 | -1.1 |
| MORW | | | | IAmb | IAmb | 00 42 19.8 | |
| | comp=Z,632nm,1.2s | | | | | | |
| KAPI | Kappang | 61.91 | 274 | P | P | 00 42 27.6 | -1.0 |
| KAPI | | | | IAmb | IAmb | 00 42 31.0 | |
| | comp=Z,181nm,1.2s | | | | | | |
| TOLI2 | Tolitoli | 62.93 | 281 | P | P | 00 42 34.4 | -0.9 |
| TOLI2 | | | | IAmb | IAmb | 00 42 35.7 | |
| | comp=Z,178nm,1.1s | | | | | | |
| GIRL | Giralia | 63.09 | 253 | P | P | 00 42 36.1 | -0.1 |
| JHJ2 | Mitsune | 64.69 | 322 | P | P | 00 42 45.4 | -0.7 |
| JHJ | Hachijo jima 2 | 64.72 | 322 | P | P | 00 42 46.2 | 0.0 |
| | comp=Z,757nm,0.9s,baz=187,slow=7.5,SNR=9.0 | | | | | | |
| | comp=Z,757nm,0.9s | | | | | | |
| CASY | Casey | 66.21 | 205 | P | P | 00 42 54.9 | -0.2 |
| JAGI | Jajag, Banyuwa | 66.25 | 268 | P | P | 00 42 54.4 | -2.0 |
| JSG | Sagara | 66.75 | 322 | P | P | 00 42 58.6 | -0.4 |
| JMM | Marumori | 67.57 | 326 | P | P | 00 43 02.8 | -1.1 |
| JMM | | | | IAmb | IAmb | 00 43 04.7 | |
| | comp=Z,173nm,1.2s | | | | | | |
| JGF | Kuroka | 67.88 | 322 | P | P | 00 43 05.2 | -0.8 |
| JGF | | | | IAmb | IAmb | 00 43 06.7 | |
| | comp=Z,179nm,1.0s | | | | | | |
| INU | Inuyama | 67.91 | 322 | P | P | 00 43 05.4 | -0.7 |
| INU | Inuyama | 67.91 | 322 | P | P | 00 43 06.0 | -0.1 |
| MJAR | Matsushiro Arr | 68.05 | 323 | P | P | 00 43 06.1 | -0.9 |
| | comp=Z,96nm,0.8s,baz=136,slow=6.9,SNR=26 | | | | | | |
| | comp=Z,96nm,0.8s | | | | | | |
| MAJO | Matsushiro | 68.05 | 323 | P | P | 00 43 06.0 | -0.9 |
| MAJO | | | | IAmb | IAmb | 00 43 07.5 | |
| | comp=Z,149nm,0.9s | | | | | | |
| MAJO | Matsushiro | 68.05 | 323 | P | P | 00 43 06.4 | -0.5 |
| MJB9 | Matsu-Tunnel | 68.05 | 323 | P | P | 00 43 07.1 | +0.1 |
| MJB9 | | | | IAmb | IAmb | 00 43 08.9 | |
| | comp=Z,136nm,0.8s | | | | | | |
| JOW | Kunigami | 68.39 | 309 | P | P | 00 43 09.2 | -0.1 |
| JOW | | | | IAmb | IAmb | 00 43 11.1 | |
| | comp=Z,200nm,1.1s | | | | | | |
| JMN | Monobe | 68.75 | 318 | P | P | 00 43 11.3 | +0.1 |
| JMN | | | | IAmb | IAmb | 00 43 13.0 | |
| | comp=Z,420nm,1.1s | | | | | | |
| KKM | Kota Kinabalu | 68.95 | 284 | P | P | 00 43 12.1 | -0.9 |
| KKM | | | | IAmb | IAmb | 00 43 13.3 | |
| | comp=Z,101nm,0.7s | | | | | | |
| JSD | Sado | 69.08 | 324 | P | P | 00 43 12.7 | -0.4 |
| JSD | | | | IAmb | IAmb | 00 43 14.0 | |
| | comp=Z,138nm,1.1s | | | | | | |
| ERM | Erimo | 69.51 | 330 | P | P | 00 43 15.2 | -0.3 |
| JTM | Tenmabayashi | 69.60 | 328 | P | P | 00 43 15.5 | -0.6 |
| JTM | | | | IAmb | IAmb | 00 43 18.4 | |
| | comp=Z,231nm,1.4s | | | | | | |
| UGM | Wanagama | 69.86 | 268 | P | P | 00 43 17.5 | -0.9 |
| SMRI | Semarang | 70.18 | 269 | P | P | 00 43 19.3 | -1.0 |
| SMRI | | | | IAmb | IAmb | 00 43 23.4 | |
| | comp=Z,312nm,1.0s | | | | | | |
| JNU | Nakatsue | 70.30 | 316 | P | P | 00 43 19.9 | -0.7 |
| JNU | | | | IAmb | IAmb | 00 43 20.9 | |
| | comp=Z,216nm,1.1s | | | | | | |
| JNU | Nakatsue | 70.30 | 316 | P | P | 00 43 20.3 | -0.3 |
| | comp=Z,116nm,0.9s,baz=214,slow=0.7,SNR=12 | | | | | | |
| | comp=Z,116nm,0.9s | | | | | | |
| YOJ | Yonaguni jima | 71.13 | 305 | P | P | 00 43 25.2 | -0.4 |
| JKA | Kamikawa-asahi | 71.39 | 331 | P | P | 00 43 26.6 | -0.1 |
| SBUM | Sibu | 71.42 | 279 | P | P | 00 43 27.4 | -0.2 |
| TWG | Pinlang | 71.86 | 302 | P | P | 00 43 28.2 | -1.8 |
| TWG | | | | IAmb | IAmb | 00 43 28.8 | |
| | comp=Z,118nm,0.7s | | | | | | |
| YULB | Yu-li | 71.96 | 303 | P | P | 00 43 28.8 | -1.7 |
| NACB | Ninganchiao | 72.10 | 304 | P | P | 00 43 30.5 | -0.8 |
| NACB | | | | IAmb | IAmb | 00 43 31.6 | |
| | comp=Z,513nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 72.13 | 180 | P | P | 00 43 30.6 | -0.3 |
| QSPA | South Pole Qui | 72.13 | 180 | P | P | 00 43 30.7 | -0.3 |
| | comp=Z,72nm,0.8s,baz=32,slow=2.8,SNR=3.6 | | | | | | |
| | comp=Z,72nm,0.8s | | | | | | |
| SSLB | Suanglung | 72.42 | 303 | P | P | 00 43 31.7 | -1.5 |
| SSLB | | | | IAmb | IAmb | 00 43 32.9 | |
| | comp=Z,154nm,0.7s | | | | | | |
| TATO | Taipei | 72.58 | 304 | P | P | 00 43 33.2 | -0.9 |
| TATO | | | | IAmb | IAmb | 00 43 34.5 | |
| | comp=Z,225nm,0.8s | | | | | | |
| KSM | Kuching | 72.90 | 277 | P | P | 00 43 35.8 | -0.4 |
| YSS | Yuzh-Sakhalins | 73.53 | 333 | P | P | 00 43 39.1 | +0.1 |
| PETK | Petropavlovsk- | 73.75 | 345 | P | P | 00 43 39.4 | -0.8 |
| PETK | Petropavlovsk- | 73.75 | 345 | P | P | 00 43 39.8 | -0.4 |
| | comp=Z,54nm,0.8s,baz=134,slow=7.9,SNR=10.0 | | | | | | |
| | comp=Z,54nm,0.8s | | | | | | |
| XMIS | Christmas Isla | 73.79 | 264 | P | P | 00 43 40.0 | -1.3 |
| TJN | Taejon | 74.57 | 317 | P | P | 00 43 45.0 | -0.2 |
| TJN | | | | IAmb | IAmb | 00 43 47.1 | |
| | comp=Z,214nm,0.9s | | | | | | |
| KNMB | Chin-men Tao | 74.80 | 302 | P | P | 00 43 46.3 | -0.5 |
| KNMB | | | | IAmb | IAmb | 00 43 47.9 | |
| | comp=Z,192nm,0.8s | | | | | | |
| KSRS | Korea Array | 74.86 | 318 | P | P | 00 43 47.4 | +0.7 |
| | comp=Z,51nm,0.7s,baz=129,slow=6.5,SNR=46 | | | | | | |
| | comp=Z,51nm,0.7s | | | | | | |
| KSAR | Wonju Array Be | 74.87 | 318 | P | P | 00 43 47.1 | +0.2 |
| KS19 | Wonju Array Si | 74.92 | 318 | P | P | 00 43 46.3 | -0.8 |
| INCN | Inchon | 75.69 | 318 | P | P | 00 43 51.7 | +0.2 |
| MCCM | Marconi Confer | 76.16 | 42 | P | P | 00 43 53.9 | -0.1 |
| SAO | San Andreas Ge | 76.29 | 44 | P | P | 00 43 55.0 | +0.2 |
| PMPB | Monarch Peak | 76.40 | 44 | P | P | 00 43 55.8 | +0.3 |
| BBGB | Big Mountain B | 76.45 | 44 | P | P | 00 43 56.4 | +0.5 |
| BBGB | | | | IAmb | IAmb | 00 43 58.0 | |
| | comp=Z,394nm,1.5s | | | | | | |
| HOPS | Hopland Field | 76.54 | 41 | P | P | 00 43 55.8 | -0.4 |
| USRK | Ussuriysk Ar. | 76.75 | 326 | P | P | 00 43 58.5 | +1.4 |
| | comp=Z,50nm,0.9s,baz=128,slow=3.8,SNR=7.4 | | | | | | |
| | comp=Z,50nm,0.9s | | | | | | |
| USA0B | Ussuriysk Arra | 76.75 | 326 | P | P | 00 43 58.1 | +1.0 |
| KMRM | Mail Ridge | 76.89 | 40 | P | P | 00 43 58.5 | +0.4 |
| KMRM | | | | IAmb | IAmb | 00 43 59.9 | |
| | comp=Z,143nm,0.8s | | | | | | |
| PASC | Pasadena Art C | 77.07 | 47 | P | P | 00 43 58.6 | -0.6 |
| CMB | Columbia Colle | 77.70 | 43 | P | P | 00 44 02.2 | -0.4 |
| YUH | Yuha Desert | 77.90 | 50 | P | P | 00 44 03.3 | -0.3 |
| MDJ | Mudanjiang | 78.32 | 325 | P | P | 00 44 05.6 | 0.0 |
| MDJ | | | | IAmb | IAmb | 00 44 08.0 | |
| | comp=Z,261nm,1.0s | | | | | | |
| MDPB | Devils Postpil | 78.34 | 44 | P | P | 00 44 06.3 | +0.1 |
| PNTR | Pine Nut | 78.81 | 43 | P | P | 00 44 08.8 | +0.1 |
| NVAR | Mina Array Bea | 79.29 | 44 | P | P | 00 44 11.4 | +0.2 |
| | comp=Z,46nm,0.8s,baz=223,slow=8.8,SNR=12 | | | | | | |
| | comp=Z,46nm,0.8s | | | | | | |
| ENH | Enshi | 84.46 | 304 | P | P | 00 44

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| VLDR | Vladesti | 144.64 328 | ⇓P | | PKPdf | 00 51 37.3 | +0.3 |
| TLCR | | 144.70 326 | ⇑P | | PKPdf | 00 51 36.6 | -0.6 |
| VARL | Varlezi | 144.72 328 | ⇑P | | PKPdf | 00 51 37.0 | -0.2 |
| BURAR | Bucovina Array | 144.73 332 | ⇑P | | PKPdf | 00 51 37.5 | +0.2 |
| SCTR | Scanteiesti | 144.80 328 | ⇑P | | PKPdf | 00 51 37.8 | +0.4 |
| TATR | Tatarca | 144.82 327 | ⇓P | | PKPdf | 00 51 32.0 | -5.4 |
| GHRR | | 144.83 329 | ⇑P | | PKPdf | 00 51 38.4 | +1.0 |
| KOLS | Kolonicke sedl | 144.90 336 | *e*PKP | | PKPdf | 00 51 37.9 | +0.4 |
| BR131 | Keskin Array S | 144.94 315 | | | PKPdf | 00 51 37.6 | -0.4 |
| BRTR | Keskin Array B | 144.94 315 | PKP | | PKPdf | 00 51 37.9 | -0.2 |
| | comp=Z,164nm,0.9s,baz=68,slow=2.2,SNR=45 | | | | | | |
| BRTR | | | SKKPbc | SKKPbc | | 01 02 29.9 | -2.5 |
| | comp=Z,9.9nm,0.9s,baz=237,slow=3.4,SNR=10 | | | | | | |
| JURR | Jurilovca | 144.95 326 | ⇓P | | PKPdf | 00 51 37.6 | 0.0 |
| NEGRR | Negrea | 144.96 327 | ⇓P | | PKPdf | 00 51 38.4 | +0.7 |
| SCHL | Schela | 145.00 327 | ⇑P | | PKPdf | 00 51 37.4 | -0.2 |
| IZVR | Izvoarele | 145.01 328 | ⇓P | | PKPdf | 00 51 38.4 | +0.7 |
| COSR | Cosmesti PH | 145.02 328 | ⇑P | | PKPdf | 00 51 38.6 | +0.9 |
| SCHLR | Schela | 145.02 327 | ⇑P | | PKPdf | 00 51 38.5 | +0.8 |
| CFR | Carcaliu | 145.06 327 | ⇑P | | PKPdf | 00 51 38.1 | +0.3 |
| TPGR | Topolog | 145.13 326 | ⇓P | | PKPdf | 00 51 38.8 | +0.8 |
| PLOR | Plostina | 145.35 329 | ⇑P | | PKPdf | 00 51 38.0 | -0.4 |
| BMR | Baia Mare | 145.42 334 | ⇓P | | PKPdf | 00 51 39.0 | +0.6 |
| ANTO | Ankara | 145.44 316 | | | PKPdf | 00 51 38.8 | +0.1 |
| ANTO | Ankara | 145.44 316 | ⇓P | | PKPdf | 00 51 38.8 | +0.1 |
| OSTC | Ostas | 145.47 344 | *e*PKP | | PKPdf | 00 51 39.4 | +1.0 |
| HARR | Harsova | 145.50 326 | ⇑P | | PKPdf | 00 51 39.3 | +0.8 |
| CLL | Collm | 145.52 348 | *i* PKPbc | | PKPdf | 00 51 39.1 | +0.7 |
| | comp=Z,107nm,1.0s | | | | | | |
| CLL | | | *i* (PKPab) | | PKPbc | 00 51 40.3 | +0.6 |
| TLBR | Topalu | 145.54 326 | ⇓P | | PKPdf | 00 51 39.3 | +0.7 |
| UPC | Upice | 145.56 344 | *e*PKP | | PKPdf | 00 51 39.7 | +1.2 |
| MFTR | Murfatlar | 145.58 325 | ⇑P | | PKPdf | 00 51 40.3 | +1.6 |
| DPC | Dobruska-Polom | 145.62 343 | *e*PKP | | PKPdf | 00 51 39.7 | +1.0 |
| BOSR | Bodos | 145.67 330 | ⇑P | | PKPdf | 00 51 40.7 | +1.8 |
| CVDA | Cernavoda | 145.68 326 | ⇓P | | PKPdf | 00 51 40.0 | +1.1 |
| KRLC | Kraliky | 145.75 343 | *e*PKP | | PKPdf | 00 51 39.3 | +0.4 |
| AMRR | Amara | 145.87 327 | ⇓P | | PKPdf | 00 51 40.6 | +1.4 |
| DOPR | Dopca | 145.88 330 | ⇑P | | PKPdf | 00 51 41.3 | +2.1 |
| PVCC | Panska Ves | 145.91 345 | *e*PKP | | PKPdf | 00 51 41.0 | +1.9 |
| MLR | Muntele Rosu | 145.96 329 | PKPbc | | PKPdf | 00 51 40.0 | +0.5 |
| | comp=Z,92nm,1.1s,baz=324,slow=6.8,SNR=8.0 | | | | | | |
| MLR | Muntele Rosu | 145.96 329 | ⇑P | | PKPdf | 00 51 39.4 | -0.1 |
| MAUC | Maruska | 146.07 341 | *e*PKP | | PKPdf | 00 51 40.5 | +1.0 |
| HSKC | Hora Svate Kat | 146.09 347 | *e*PKP | | PKPbc | 00 51 42.3 | +0.9 |
| CBBR | Cluj-Babes-Bol | 146.11 333 | ⇓P | | PKPdf | 00 51 37.6 | -1.9 |
| MBAR | Mbarara | 146.11 240 | PKPbc | | PKPdf | 00 51 42.1 | +1.3 |
| | comp=Z,59nm,0.8s,baz=145,slow=20,SNR=9.2 | | | | | | |
| CJR | Cluj-Napoca | 146.13 333 | ⇓P | | PKPdf | 00 51 40.9 | +1.2 |
| MDUB | Mudurnu | 146.17 318 | | | PKPdf | 00 51 40.6 | +0.6 |
| MDB | Medias | 146.22 331 | ⇑P | | PKPdf | 00 51 41.8 | +2.0 |
| LEHL | Lehliu | 146.23 327 | ⇓P | | PKPdf | 00 51 41.8 | +2.0 |
| MMAI | Mount Meron Ar | 146.33 303 | PKPbc | | PKPdf | 00 51 42.5 | +2.0 |
| | comp=Z,208nm,0.6s,baz=65,slow=6.0,SNR=80 | | | | | | |
| PRU | Pruhonice | 146.41 345 | *e*PKP | | PKPdf | 00 51 42.2 | +2.2 |
| DRGR | | 146.45 334 | ⇑P | | PKPdf | 00 51 42.2 | +2.0 |
| VYHS | Vyhne | 146.51 339 | *e*PKP | | PKPdf | 00 51 42.0 | +1.8 |
| ARR | Arges | 146.68 330 | ⇑P | | PKPdf | 00 51 42.8 | +2.1 |
| ZVC | Zvikov | 147.01 345 | *e*PKP | | PKPdf | 00 51 43.5 | +2.5 |
| HUMR | Humele | 147.12 329 | ⇑P | | PKPdf | 00 51 42.8 | +1.5 |
| SRO | Srobarova | 147.27 339 | *e*PKP | | PKPbc | 00 51 44.9 | +0.3 |
| SIRR | Siria | 147.30 334 | ⇑P | | PKPdf | 00 51 40.8 | -0.8 |
| KHC | Kasperske Hory | 147.44 346 | *e*PKP | | PKPdf | 00 51 44.6 | +2.8 |
| SURR | Surduc | 147.52 333 | ⇑P | | PKPdf | 00 51 44.1 | +2.2 |
| GERES | GERESS Array B | 147.68 345 | PKPbc | | PKPdf | 00 51 45.3 | +3.0 |
| | comp=Z,19nm,0.8s,baz=78,slow=3.8,SNR=7.8 | | | | | | |
| SRE | Strehaia | 147.88 331 | ⇑P | | PKPdf | 00 51 46.1 | +3.5 |
| CONA | Conrad Observa | 147.94 342 | *e*PKP | | PKPdf | 00 51 46.0 | +3.3 |
| | comp=Z,23nm,1.0s | | | | | | |
| RONA | Rosalia, Austr | 148.02 341 | *e*PKP | | PKPdf | 00 51 45.9 | +3.1 |
| | comp=Z,29nm,0.9s | | | | | | |
| HERR | Herculane | 148.07 332 | ⇑P | | PKPdf | 00 51 45.2 | +2.3 |
| BAND | Balkesir-Ban | 148.17 320 | ⇓P | | PKPdf | 00 51 46.5 | +3.3 |
| BANR | Banloc | 148.23 334 | ⇓P | | PKPdf | 00 51 46.5 | +3.5 |
| BIOA | Bad Ischl, Aus | 148.77 345 | *e*PKP | | PKiKP | 00 51 53.2 | +3.7 |
| | comp=Z,13nm,0.7s | | | | | | |
| CAVK | Edirne/Enez-Ca | 149.11 322 | ⇑P | | PKPdf | 00 51 48.4 | +3.8 |
| LESA | Schwarzleotal | 149.25 346 | *e*PKP | | PKPbc | 00 51 49.1 | -0.6 |
| | comp=Z,9.6nm,0.4s | | | | | | |
| BOVS | Bovan | 149.36 331 | ⇑P | | PKPdf | 00 51 47.2 | +2.2 |
| KBA | Koelnbreinsper | 149.41 344 | *e*PKP | | PKPdf | 00 51 49.2 | +4.0 |
| | comp=Z,12nm,0.4s | | | | | | |
| WATA | Walderalm | 149.59 347 | *e*PKP | | PKPdf | 00 51 49.7 | +4.3 |
| | comp=Z,11nm,0.5s | | | | | | |
| RETA | Reutte | 149.61 348 | *e*PKP | | PKPdf | 00 51 49.3 | +3.9 |
| | comp=Z,12nm,0.6s | | | | | | |
| WTTA | Wattenberg | 149.64 347 | *e*PKP | | PKPbc | 00 51 50.2 | -0.6 |
| | comp=Z,27nm,0.5s | | | | | | |
| MOTA | Moosalm | 149.68 347 | *e*PKP | | PKPdf | 00 51 48.0 | +2.4 |
| | comp=Z,22nm,1.1s | | | | | | |
| MYKA | Terra Mystica | 149.75 344 | *e*PKP | | PKPdf | 00 51 49.2 | +3.6 |
| | comp=Z,11nm,0.5s | | | | | | |
| ABTA | Abfaltersbach | 149.93 345 | *e*PKP | | PKPdf | 00 51 50.1 | +4.2 |
| | comp=Z,22nm,0.6s | | | | | | |
| FETA | Feichten | 150.06 348 | *e*PKP | | PKPdf | 00 51 50.4 | +4.2 |
| | comp=Z,18nm,0.8s | | | | | | |
| IDI | Anoyia | 153.19 315 | PKPbc | | PKPbc | 00 51 58.6 | -0.4 |
| | comp=Z,51nm,0.6s,baz=306,slow=9.5,SNR=8.7 | | | | | | |
| TORD | Torodi Ar. Bea | 175.25 179 | PKPab | | PKPab | 00 53 48.3 | -1.8 |
| | comp=Z,13nm,1.0s,baz=182,slow=4.9,SNR=2.2 | | | | | | |

*IDC **19** 00:38:17.3±8.9, 17°.96S×178°.09W, h552km±82km, mb4.3/6, mbtmp5.2/7, Error ellipse: s-maj=76.0km s-min=28.2km az=108.0*
*NEIC **19** 00:38:17.3±1.3, 18°.1S±0°.1×177°.7W±0°.2, h580km±11km, mb5.2/33, Error ellipse: s-maj=25.1km s-min=20.0km az=79.0*

**ISC 19 00:38:18.8±0.8, 18°.2S±0°.1×178°.0W±0°.1, h590km, n61, σ0s66/62, mb5.1/18, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.81 | 276 | P | P | 00 39 41.7 | -0.6 |
| PINNC | Pines Island, | 14.38 | 250 | P | P | 00 41 21.8 | +0.3 |
| DZM | Mont Dzumac | 15.15 | 253 | P | P | 00 41 30.2 | +1.4 |
| DZM | Mont Dzumac | 15.15 | 253 | P | P | 00 41 28.0 | -0.8 |
| | 22nm,0.8s,baz=85,slow=20,SNR=1.5 | | | | | | |
| KOUNC | Koumac, New Ca | 16.92 | 259 | P | P | 00 41 46.0 | +1.0 |
| TOZ | Tahuroa Road | 20.33 | 195 | P | P | 00 42 16.3 | +0.6 |
| MRZ | Mangatainoka R | 23.11 | 193 | P | P | 00 42 39.8 | -0.8 |
| EIDS | Eidsvold | 29.58 | 250 | | P | 00 43 37.4 | -0.1 |
| EIDS | | | | IAmb | IAmb | 00 43 55.6 | |
| | comp=Z,100nm,1.4s | | | | | | |
| ARMA | Armidale | 30.18 | 240 | P | P | 00 43 43.7 | +0.9 |
| CTAO | Charters Tower | 33.82 | 261 | P | P | 00 44 13.4 | -0.2 |
| CTAO | Charters Tower | 33.82 | 261 | P | P | 00 44 13.8 | +0.2 |
| CAN | Canberra | 33.89 | 233 | P | P | 00 44 14.4 | +0.4 |
| PMG | Port Moresby | 34.91 | 280 | P | P | 00 44 23.4 | +0.6 |
| PMG | Port Moresby | 34.91 | 280 | P | P | 00 44 23.3 | +0.5 |
| TOO | Toolangi | 37.34 | 231 | P | P | 00 44 43.1 | +0.6 |
| COEN | Coen | 37.53 | 271 | P | P | 00 44 44.7 | +0.5 |
| MANU | Manus Island | 37.58 | 291 | P | P | 00 44 45.3 | +0.6 |
| MANU | | | | IAmb | IAmb | 00 44 51.0 | |
| | comp=Z,72nm,1.2s | | | | | | |
| STKA | Stephens Creek | 38.88 | 242 | P | P | 00 44 56.1 | +1.1 |
| STKA | Stephens Creek | 38.88 | 242 | P | P | 00 44 55.6 | +0.7 |
| | comp=Z,48nm,0.9s,baz=92,slow=12,SNR=4.5 | | | | | | |
| | comp=Z,48nm,0.9s | | | | | | |
| BBOO | Buckleboo | 43.66 | 241 | P | P | 00 45 32.7 | +0.1 |
| WB0 | Warramunga Arr | 44.97 | 260 | P | P | 00 45 43.0 | +0.1 |
| WB2 | Warramunga Arr | 44.99 | 260 | P | P | 00 45 42.5 | -0.5 |
| WB2 | | | | IAmb | IAmb | 00 45 46.5 | |
| | comp=Z,114nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 45.00 | 260 | P | P | 00 45 43.1 | 0.0 |
| | comp=Z,18nm,0.5s,baz=96,slow=7.3,SNR=14 | | | | | | |
| | comp=Z,18nm,0.5s | | | | | | |
| AS31 | Alice Springs | 45.13 | 254 | P | P | 00 45 44.2 | +0.2 |
| ASAR | Alice Springs | 45.13 | 254 | P | P | 00 45 44.4 | +0.3 |
| ASAR | Alice Springs | 45.13 | 254 | P | P | 00 45 44.5 | +0.4 |
| | comp=Z,69nm,0.6s,baz=87,slow=9.0,SNR=15 | | | | | | |
| | comp=Z,69nm,0.6s | | | | | | |
| GUMO | Guam | 48.36 | 308 | P | P | 00 46 08.5 | +0.2 |
| MTN | Manton Dam | 49.21 | 269 | P | P | 00 46 14.0 | -0.7 |
| MTN | | | | IAmb | IAmb | 00 46 15.3 | |
| | comp=Z,57nm,0.9s | | | | | | |
| FORT | Forrest | 50.28 | 245 | P | P | 00 46 21.9 | -0.4 |
| FORT | | | | IAmb | IAmb | 00 46 50.2 | |
| | comp=Z,96nm,0.8s | | | | | | |
| KNRA | Kununurra | 50.88 | 264 | P | P | 00 46 26.6 | -0.2 |
| KNRA | | | | IAmb | IAmb | 00 46 30.3 | |
| | comp=Z,118nm,1.2s | | | | | | |
| FAKI | Fak Fak | 51.04 | 281 | P | P | 00 46 27.8 | -0.2 |
| FAKI | | | | IAmb | IAmb | 00 46 43.7 | |
| | comp=Z,125nm,1.5s | | | | | | |
| FITZ | Fitzroy Crossi | 53.40 | 261 | P | P | 00 46 44.9 | +0.1 |
| SOEI | Soe | 56.49 | 270 | P | P | 00 47 07.4 | +0.9 |
| PSA00 | Pilbara Seismi | 58.25 | 255 | P | P | 00 47 17.8 | -0.5 |
| MBWA | Marble Bar | 58.42 | 256 | P | P | 00 47 19.3 | -0.1 |
| MBWA | | | | IAmb | IAmb | 00 47 47.1 | |
| | comp=Z,134nm,1.5s | | | | | | |
| MORW | Morawa | 60.77 | 246 | P | P | 00 47 34.2 | -0.6 |
| MORW | | | | IAmb | IAmb | 00 47 43.1 | |
| | comp=Z,91nm,1.2s | | | | | | |
| GIRL | Giralia | 63.23 | 253 | P | P | 00 47 51.6 | +0.7 |
| JAGI | Jajag, Banyuwa | 66.45 | 269 | P | P | 00 48 10.2 | -1.1 |
| MJAR | Matsushiro Arr | 68.36 | 323 | P | P | 00 48 22.2 | -0.2 |
| | comp=Z,15nm,0.7s,baz=161,slow=5.8,SNR=16 | | | | | | |
| | comp=Z,15nm,0.7s | | | | | | |
| MAJO | Matsushiro | 68.36 | 323 | P | P | 00 48 22.7 | +0.3 |
| QSPA | South Pole Qui | 71.90 | 180 | P | P | 00 48 42.9 | -0.1 |
| QSPA | | | | IAmb | IAmb | 00 48 55.6 | |
| | comp=Z,138nm,1.4s | | | | | | |
| TWG | Pinlang | 72.16 | 302 | P | P | 00 48 43.9 | -1.2 |
| TWG | | | | IAmb | IAmb | 00 48 55.9 | |
| | comp=Z,104nm,1.4s | | | | | | |
| YULB | Yu-li | 72.25 | 303 | P | P | 00 48 45.2 | -0.5 |
| SSLB | Suanglung | 72.72 | 303 | P | P | 00 48 47.6 | -0.8 |
| PEA0B | Petropavlovsk- | 74.03 | 345 | P | P | 00 48 55.1 | 0.0 |
| PEA0B | | | | IAmb | IAmb | 00 48 56.9 | |
| | comp=Z,126nm,1.4s | | | | | | |
| PETK | Petropavlovsk- | 74.03 | 345 | P | P | 00 48 54.9 | -0.2 |
| PETK | Petropavlovsk- | 74.03 | 345 | P | P | 00 48 55.8 | +0.8 |
| | comp=Z,24nm,0.9s,baz=110,slow=7.8,SNR=4.8 | | | | | | |
| | comp=Z,24nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 77.06 | 326 | P | P | 00 49 12.2 | +0.3 |
| | comp=Z,6.8nm,0.7s,baz=172,slow=2.4,SNR=4.6 | | | | | | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 89.36 | 290 | P | P | 00 50 12.5 | -1.4 |
| BVAR | Borovoye Array | 117.30 | 321 | PKP | PKiKP | 00 55 58.0 | +0.2 |
| | comp=Z,1.9nm,0.5s,baz=79,slow=2.1,SNR=4.3 | | | | | | |
| ARCES | ARCESS Array B | 126.63 | 350 | PKP | PKiKP | 00 56 16.1 | +0.4 |
| | comp=Z,9.6nm,1.0s,baz=70,slow=1.1,SNR=1.2 | | | | | | |
| AKASG | Malin Array Ir. | 140.97 | 333 | PKP | PKPdf | 00 56 43.5 | +1.1 |
| | comp=Z,2.4nm,0.8s,baz=45,slow=3.5,SNR=4.3 | | | | | | |
| EKA | Eskdalemuir Ar | 142.68 | 5 | PKP | PKPdf | 00 56 45.7 | +0.3 |
| | comp=Z,2.1nm,0.7s,baz=8.1,slow=1.2,SNR=1.3 | | | | | | |
| BRTR | Keskin Array B | 145.25 | 315 | PKPbc | PKPab | 00 56 52.6 | -0.3 |
| | comp=Z,5.0nm,0.4s,baz=74,slow=3.8,SNR=13 | | | | | | |
| CLL | Collm | 145.79 | 348 | *i* PKPbc | PKPab | 00 56 53.9 | -0.6 |
| UPC | Upice | 145.84 | 344 | *e*PKP | PKPab | 00 56 54.4 | -0.3 |
| DPC | Dobruska-Polom | 145.90 | 344 | *e*PKP | PKPab | 00 56 54.8 | -0.3 |
| KRLC | Kraliky | 146.03 | 343 | *e*PKP | PKPab | 00 56 54.9 | -0.7 |
| MMAI | Mount Meron Ar | 146.63 | 303 | PKPbc | PKiKP | 00 56 57.2 | -0.4 |
| | comp=Z,6.4nm,0.5s,baz=70,slow=7.2,SNR=9.7 | | | | | | |
| KHC | Kasperske Hory | 147.72 | 346 | *e*PKP | PKiKP | 00 56 59.6 | +0.3 |
| KHC | | | | *ex* | PKPab | 00 57 04.4 | +2.0 |
| GERES | GERESS Array B | 147.96 | 345 | PKPbc | PKiKP | 00 57 00.1 | +0.2 |
| | comp=Z,5.6nm,0.7s,baz=79,slow=4.0,SNR=10.0 | | | | | | |

*IDC **19** 00:38:43.8±10.0, 17°.88S×177°.98W, h558km±101km, mb4.4/3, mbtmp5.3/4, Error ellipse: s-maj=131.4km s-min=67.8km az=136.0*
*NEIC **19** 00:38:46.9±1.8, 18°.3S±0°.1×178°.0W±0°.2, h584km±9km, mb5.2/21, Error ellipse: s-maj=25.0km s-min=4.8km az=54.0*

**ISC 19 00:38:46.7±0.9, 18°.2S±0°.1×178°.1W±0°.1, h590km, n49, σ0s88/49, mb5.2/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.73 | 276 | P | P | 00 40 10.8 | +1.1 |
| LIFNC | LIFOU | 14.11 | 257 | P | P | 00 41 45.4 | -1.4 |
| PINNC | Pines Island, | 14.29 | 250 | P | P | 00 41 48.3 | -0.3 |
| DZM | Mont Dzumac | 15.07 | 252 | P | P | 00 41 55.4 | -0.5 |
| DZM | Mont Dzumac | 15.07 | 252 | P | P | 00 41 55.8 | -0.1 |
| | 16nm,0.6s,baz=118,slow=8.2,SNR=7.0 | | | | | | |
| KOUNC | Koumac, New Ca | 16.83 | 259 | P | P | 00 42 13.0 | +0.8 |
| MRZ | Mangatainoka R | 23.08 | 192 | P | P | 00 43 06.8 | -1.5 |
| MRZ | | | | IAmb | IAmb | 00 43 22.8 | |
| | comp=Z,105nm,1.3s | | | | | | |
| SNZO | South Karori | 23.89 | 194 | P | P | 00 43 13.0 | -2.4 |
| FOZ | Fox Glacier | 27.29 | 199 | P | P | 00 43 45.2 | 0.0 |
| MLZ | Mavora Lakes | 29.47 | 200 | P | P | 00 44 05.3 | +1.1 |
| EIDS | Eidsvold | 29.50 | 250 | P | P | 00 44 04.8 | +0.1 |
| EIDS | | | | IAmb | IAmb | 00 44 12.0 | |
| | comp=Z,94nm,1.4s | | | | | | |
| ARMA | Armidale | 30.10 | 240 | P | P | 00 44 09.8 | -0.2 |
| CTAO | Charters Tower | 33.73 | 261 | P | P | 00 44 39.8 | -1.0 |
| CTAO | Charters Tower | 33.73 | 261 | P | P | 00 44 40.9 | +0.1 |
| CAN | Canberra | 33.82 | 233 | P | P | 00 44 42.0 | +0.7 |
| CAN | | | | IAmb | IAmb | 00 44 43.4 | |
| | comp=Z,60nm,0.9s | | | | | | |
| CAN | Canberra | 33.82 | 233 | P | P | 00 44 42.4 | +1.1 |
| PMG | Port Moresby | 34.83 | 280 | P | P | 00 44 50.6 | +0.6 |
| PMG | | | | IAmb | IAmb | 00 44 52.2 | |
| | comp=Z,75nm,0.9s | | | | | | |
| PMG | Port Moresby | 34.83 | 280 | P | P | 00 44 50.3 | +0.3 |
| TOO | Toolangi | 37.27 | 231 | P | P | 00 45 10.5 | +0.8 |
| TOO | | | | IAmb | IAmb | 00 45 11.5 | |
| | comp=Z,79nm,0.9s | | | | | | |
| COEN | Coen | 37.44 | 271 | P | P | 00 45 11.4 | 0.0 |
| COEN | | | | IAmb | IAmb | 00 45 13.0 | |
| | comp=Z,82nm,0.9s | | | | | | |
| TAU | Tasmania Unive | 38.28 | 222 | P | P | 00 45 17.3 | -0.5 |
| TAU | | | | IAmb | IAmb | 00 45 27.5 | |
| | comp=Z,58nm,1.2s | | | | | | |
| STKA | Stephens Creek | 38.80 | 242 | P | P | 00 45 22.9 | +0.7 |
| STKA | Stephens Creek | 38.80 | 242 | P | P | 00 45 22.7 | +0.5 |
| | comp=Z,46nm,0.8s,baz=95,slow=11,SNR=5.3 | | | | | | |
| | comp=Z,46nm,0.8s | | | | | | |
| BBOO | Buckleboo | 43.58 | 241 | P | P | 00 46 00.1 | +0.2 |
| WB0 | Warramunga Arr | 44.88 | 260 | P | P | 00 46 09.9 | -0.3 |
| WB0 | | | | IAmb | IAmb | 00 46 13.6 | |
| | comp=Z,81nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 44.91 | 260 | P | P | 00 46 10.1 | -0.3 |
| | comp=Z,25nm,0.7s,baz=95,slow=7.4,SNR=7.6 | | | | | | |
| | comp=Z,25nm,0.7s | | | | | | |
| AS31 | Alice Springs | 45.04 | 254 | P | P | 00 46 11.2 | -0.1 |
| ASAR | Alice Springs | 45.04 | 254 | P | P | 00 46 11.4 | 0.0 |
| ASAR | Alice Springs | 45.04 | 254 | P | P | 00 46 11.6 | +0.2 |
| | comp=Z,76nm,0.7s,baz=85,slow=8.7,SNR=12 | | | | | | |
| | comp=Z,76nm,0.7s | | | | | | |
| MTN | Manton Dam | 49.13 | 269 | P | P | 00 46 41.5 | -0.5 |
| MTN | | | | IAmb | IAmb | 00 46 41.9 | |
| | comp=Z,60nm,0.9s | | | | | | |
| DRV | Dumont d'Urvil | 55.53 | 199 | P | P | 00 47 27.4 | +0.7 |
| SOEI | Soe | 56.41 | 270 | P | P | 00 47 34.6 | +0.8 |
| SOEI | | | | IAmb | IAmb | 00 47 36.1 | |
| | comp=Z,139nm,1.0s | | | | | | |
| PSA00 | Pilbara Seismi | 58.17 | 256 | P | P | 00 47 44.5 | -1.1 |
| NWAO | Narrogin (SRO) | 59.39 | 242 | P | P | 00 47 52.8 | -0.8 |
| GIRL | Giralia | 63.14 | 253 | P | P | 00 48 18.0 | -0.2 |
| QSPA | South Pole Qui | 71.89 | 180 | P | P | 00 49 11.8 | +1.0 |
| QSPA | | | | IAmb | IAmb | 00 49 24.1 | |
| | comp=Z,66nm,1.1s | | | | | | |
| BVAR | Borovoye Array | 117.25 | 321 | PKP | PKPdf | 00 56 24.2 | -1.3 |
| | comp=Z,2.8nm,0.7s,baz=99,slow=2.7,SNR=1.2 | | | | | | |
| KWP | Kalwaria Pacla | 144.44 | 337 | PKPdf | PKPdf | 00 57 16.3 | -0.2 |
| OJC | Ojcow | 144.97 | 340 | PKPbc | PKPdf | 00 57 17.4 | 0.0 |
| BUR08 | Bucovina Ar. S | 144.98 | 332 | | PKPdf | 00 57 18.4 | +0.8 |
| BR131 | Keskin Array S | 145.20 | 315 | | PKPdf | 00 57 18.6 | +0.2 |
| BRTR | Keskin Array B | 145.20 | 315 | PKPbc | PKPbc | 00 57 20.0 | +0.5 |
| BRTR | Keskin Array B | 145.20 | 315 | PKPbc | PKPdf | 00 57 18.1 | -0.2 |
| | comp=Z,2.1nm,0.5s,baz=69,slow=3.9,SNR=4.1 | | | | | | |
| MMAI | Mount Meron Ar | 146.56 | 303 | PKPbc | PKPbc | 00 57 23.6 | +0.3 |
| | comp=Z,3.3nm,0.4s,baz=65,slow=3.8,SNR=7.0 | | | | | | |
| KHC | Kasperske Hory | 147.71 | 346 | | PKPdf | 00 57 24.1 | +2.0 |
| GEC2 | GERESS Array S | 147.94 | 345 | | PKPbc | 00 57 25.2 | -1.3 |
| GERES | GERESS Array B | 147.94 | 345 | | PKPbc | 00 57 25.6 | -0.9 |
| GERES | GERESS Array B | 147.94 | 345 | PKPbc | PKPbc | 00 57 25.3 | -1.2 |
| | comp=Z,2.3nm,0.6s,baz=27,slow=3.5,SNR=5.7 | | | | | | |
| WLF | Walferdange | 148.39 | 355 | | PKPbc | 00 57 26.0 | -1.4 |

*IDC **19** 00:39:05.5±2.0, 17°.90S×178°.00W, h553km±22km, mb4.8/16, mbtmp5.6/17, Error ellipse: s-maj=13.4km s-min=12.3km az=149.0*
*MOS **19** 00:39:05.5±1.3, 17°.81S×178°.15W, h552km, mb5.5/20, Error ellipse: s-maj=10.5km s-min=9.6km az=142.3*
*NEIC **19** 00:39:07.7±1.3, 17°.9S±0°.1×177°.99W±0°.10, h576km±6km, mb5.7/69, Error ellipse: s-maj=15.7km s-min=12.9km az=150.0*
*NOU **19** 00:39:08.7, 17°.90S×177°.96W, h584km, mb5.6/115, Fiji Islands Region*

**ISC 19 00:39:07.7±0.5, 17°.90S±0°.06×177°.93W±0°.06, h582km±5km, h581km; pP-P, n494, σ0s97/479, mb5.6/85, 30C-36D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.83 | 272 | P | P | 00 40 32.1 | +1.4 |
| MSVF | Nonsavu | 3.83 | 272 | P | P | 00 40 30.7 | 0.0 |
| MSVF | Nonsavu | 3.83 | 272 | *i* P | P | 00 40 31.9 | +1.2 |
| AFI | Afiamalu | 7.13 | 57 | P | P | 00 40 56.1 | -2.1 |
| AFI | Afiamalu | 7.13 | 57 | P | P | 00 40 56.2 | -2.1 |
| NIUE | Niue | 7.69 | 100 | P | P | 00 41 02.3 | -1.1 |
| RTV | Rentapao | 12.99 | 268 | P | P | 00 41 57.8 | +1.3 |
| DVP | Devils Point | 13.22 | 269 | P | P | 00 42 00.4 | +1.5 |
| MARNC | Mare, Loyalty | 13.69 | 253 | P | P | 00 42 03.6 | -0.1 |
| LIFNC | LIFOU | 14.28 | 256 | P | P | 00 42 08.3 | -1.3 |
| LIFNC | LIFOU | 14.28 | 256 | P | P | 00 42 06.9 | -2.7 |
| PINNC | Pines Island, | 14.50 | 249 | P | P | 00 42 12.1 | +0.5 |
| PINNC | Pines Island, | 14.50 | 249 | P | P | 00 42 10.4 | -1.2 |
| DZM | Mont Dzumac | 15.26 | 252 | P | P | 00 42 20.1 | +1.1 |
| DZM | Mont Dzumac | 15.26 | 252 | P | P | 00 42 17.9 | -1.2 |
| DZM | | | | IAmb | IAmb | 00 42 21.6 | |
| | comp=Z,368nm,1.4s | | | | | | |
| DZM | Mont Dzumac | 15.26 | 252 | P | P | 00 42 16.8 | -2.2 |
| | comp=Z,37nm,0.5s,baz=152,slow=9.8,SNR=9.6 | | | | | | |
| NOUC | Port Laguerre | 15.39 | 252 | P | P | 00 42 21.5 | +1.3 |
| KOUNC | Koumac, New Ca | 17.00 | 258 | P | P | 00 42 36.2 | +1.2 |
| KOUNC | Koumac, New Ca | 17.00 | 258 | | P | 00 42 35.8 | +0.8 |
| NFK | Norfolk Island | 17.04 | 227 | P | P | 00 42 36.4 | +1.1 |
| KUZ | Kuaotunu | 19.59 | 195 | P | P | 00 42 59.5 | +1.1 |
| TOZ | Tahuroa Road | 20.59 | 195 | P | P | 00 43 07.3 | 0.0 |
| URZ | Urewera | 20.75 | 191 | P | P | 00 43 09.7 | +0.9 |
| URZ | Urewera | 20.75 | 191 | P | P | 00 43 05.9 | -2.9 |
| | comp=Z,124nm,0.8s,baz=359,slow=2.2,SNR=7.4 | | | | | | |
| | comp=Z,124nm,0.8s | | | | | | |
| SNZO | South Karori | 24.18 | 194 | P | P | 00 43 37.5 | -1.8 |
| SNZO | | | | IAmb | IAmb | 00 43 38.3 | |
| | comp=Z,100nm,0.8s | | | | | | |
| LHI | Lord Howe Isla | 24.85 | 233 | P | P | 00 43 46.1 | +0.7 |
| LHI | | | | IAmb | IAmb | 00 44 05.6 | |
| | comp=Z,222nm,1.2s | | | | | | |
| PPT | Papeete | 27.00 | 94 | P | P | 00 44 04.8 | +0.2 |
| | comp=Z,242nm,0.5s,baz=33,slow=2.2,SNR=14 | | | | | | |
| | comp=Z,242nm,0.5s | | | | | | |
| PPTF | Pamatai, Papee | 27.01 | 94 | P | P | 00 44 05.5 | +0.8 |
| PPTF | Pamatai, Papee | 27.01 | 94 | P | P | 00 44 04.6 | -0.1 |
| RPZ | Rata Peaks | 27.37 | 198 | P | P | 00 44 08.4 | +1.0 |
| RPZ | Rata Peaks | 27.37 | 198 | P | P | 00 44 06.7 | -0.7 |
| GC1S | Gold Coast 1 S | 28.13 | 244 | P | P | 00 44 15.1 | +0.8 |
| AUWSH | Wavell State H | 28.35 | 245 | P | P | 00 44 16.7 | +0.5 |
| JCZ | Jackson Bay | 28.40 | 200 | P | P | 00 44 16.1 | -0.3 |
| TW1H | Toowoomba 1 Ha | 29.31 | 245 | P | P | 00 44 25.6 | +1.0 |
| EIDS | Eidsvold | 29.70 | 250 | P | P | 00 44 28.8 | +0.9 |
| EIDS | Eidsvold | 29.70 | 250 | P | P | 00 44 26.9 | -1.0 |
| EIDS | | | | IAmb | IAmb | 00 44 28.4 | |
| | comp=Z,405nm,1.4s | | | | | | |
| MLZ | Mavora Lakes | 29.76 | 200 | P | P | 00 44 27.8 | -0.4 |
| MLZ | | | | IAmb | IAmb | 00 44 29.3 | |
| | comp=Z,204nm,0.7s | | | | | | |
| ARMA | Armidale | 30.34 | 240 | P | P | 00 44 33.0 | -0.4 |
| ARMA | | | | IAmb | IAmb | 00 44 34.5 | |
| | comp=Z,129nm,1.0s | | | | | | |
| NTLH | Newcastle Hard | 31.09 | 235 | P | P | 00 44 41.0 | +1.3 |
| AUPHS | Peel High Scho | 31.15 | 239 | P | P | 00 44 40.7 | +0.4 |
| SYDH | Sydney Hard Ro | 32.16 | 234 | P | P | 00 44 49.3 | +0.5 |
| WOLH | Wollongong Har | 32.30 | 233 | P | P | 00 44 50.5 | +0.6 |
| AUUHS | Ulladulla High | 32.98 | 232 | P | P | 00 44 56.6 | +1.0 |
| AULRC | Lightning Ridg | 33.15 | 243 | P | P | 00 44 57.7 | +0.5 |
| AUDCS | Dubbo College | 33.33 | 238 | P | P | 00 44 59.7 | +1.0 |
| CNB | Canberra Magne | 33.79 | 233 | P | P | 00 45 02.9 | +0.3 |
| CTA | Charters Tower | 33.89 

WB2 Warramunga Arr 45.07 259 P P 00 46 31.9 -1.2
WRAB Tennant Creek 45.07 259 *i* P P 00 46 30.6 -2.5
WRAB pmax pmax
comp=Z,188nm,1.1s
WRA Warramunga Arr 45.08 259 P P 00 46 31.4 -1.8
comp=Z,54nm,0.3s,baz=93,slow=7.5,SNR=32
comp=Z,54nm,0.3s
AS01 Alice Springs 45.19 254 P P 00 46 34.2 +0.2
MULG Mulgathing 45.23 245 P P 00 46 33.6 -0.5
AS31 Alice Springs 45.23 254 P P 00 46 33.3 -1.0
AS31 IAmb IAmb 00 46 34.8
comp=Z,104nm,0.6s
ASAR Alice Springs 45.23 254 P P 00 46 33.4 -0.9
ASAR Alice Springs 45.23 254 P P 00 46 33.6 -0.7
comp=Z,345nm,0.7s,baz=90,slow=7.9,SNR=43
comp=Z,345nm,0.7s
KDU Kakadu 48.01 269 P P 00 46 56.5 +1.2
GUMO Guam 48.22 308 P P 00 46 57.4 +0.6
GUMO Guam 48.22 308 P P 00 46 56.2 -0.6
GUMO Guam 48.22 308 P P 00 46 56.2 -0.6
GUMO pmax pmax
comp=Z,581nm,1.0s
GUMO Guam 48.22 308 P P 00 46 57.3 +0.5
MTN Manton Dam 49.25 268 P P 00 47 05.0 +0.5
MTN Manton Dam 49.25 268 P P 00 47 03.1 -1.3
MTN IAmb IAmb 00 47 04.6
comp=Z,204nm,1.1s
DRS Darwin Rock St 49.56 269 P P 00 47 06.7 0.0
WRKA Warakurna 50.28 252 P P 00 47 11.6 -0.3
FORT Forrest 50.42 245 P P 00 47 13.1 +0.3
FORT Forrest 50.42 245 P P 00 47 11.3 -1.5
FORT IAmb IAmb 00 47 12.3
comp=Z,204nm,0.8s
KNRA Kununurra 50.94 264 P P 00 47 15.7 -1.1
KNRA IAmb IAmb 00 47 17.1
comp=Z,328nm,1.2s
FAKI Fak Fak 51.02 281 P P 00 47 17.7 +0.3
FAKI Fak Fak 51.02 281 P P 00 47 16.5 -0.9
FAKI IAmb IAmb 00 47 18.3
comp=Z,322nm,1.3s
FAKI Fak Fak 51.02 281 P P 00 47 16.4 -1.0
comp=Z,277nm,0.5s
SWI Sorong 52.68 283 P P 00 47 29.0 -0.3
SWI Sorong 52.68 283 P P 00 47 29.4 +0.1
FITZ Fitzroy Crossi 53.48 260 P P 00 47 34.0 -0.9
MSAI Masohi 53.99 279 P P 00 47 37.9 -0.6
MSAI Masohi 53.99 279 P P 00 47 38.8 +0.3
NLAI Namlea 55.74 278 P P 00 47 50.2 -0.6
comp=Z,253nm,1.3s
NLAI Namlea 55.74 278 P P 00 47 50.7 -0.1
comp=Z,252nm,1.3s
DRV Dumont d'Urvil 55.82 199 P P 00 47 49.9 -0.5
LBMI Labuha 56.26 282 P P 00 47 54.8 +0.5
comp=Z,406nm,1.2s
SOEI Soe 56.52 270 P P 00 47 57.4 +1.1
SOEI Soe 56.52 270 P P 00 47 56.9 +0.6
SOEI Soe 56.52 270 P P 00 47 57.2 +0.9
SOEI Soe 56.52 270 P P 00 47 58.0 +1.7
TNTI Ternate 56.90 283 P P 00 47 59.7 +1.0
TNTI Ternate 56.90 283 P P 00 47 58.4 -0.3
TNTI IAmb IAmb 00 47 59.9
comp=Z,448nm,1.1s
TNTI Ternate 56.90 283 P P 00 47 59.0 +0.3
comp=Z,414nm,1.1s
SANI Sanana 57.19 279 P P 00 48 01.3 +0.6
SANI Sanana 57.19 279 P P 00 48 00.2 -0.5
PSA00 Pilbara Seismi 58.35 255 P P 00 48 08.0 -0.4
MBWA Marble Bar 58.52 256 P P 00 48 09.4 -0.2
MBWA Marble Bar 58.52 256 P P 00 48 08.5 -1.1
MBWA IAmb IAmb 00 48 10.7
comp=Z,454nm,1.4s
MBWA Marble Bar 58.52 256 P P 00 48 08.3 -1.3
MMRI Maumere 58.75 271 P P 00 48 12.4 +1.2
MMRI Maumere 58.75 271 P P 00 48 10.1 -1.2
MMRI IAmb IAmb 00 48 11.7
comp=Z,514nm,1.3s
KLBR Kellerberrin 59.24 244 P P 00 48 14.2 -0.1
NWAO Narrogin (SRO) 59.62 242 P P 00 48 15.9 -0.8
NWAO Narrogin (SRO) 59.62 242 P P 00 48 15.9 -0.8
NWAO pmax pmax
comp=Z,288nm,1.5s
NWAO Narrogin (SRO) 59.62 242 P P 00 48 15.9 -0.8
BASI Baing, Sumba 59.92 268 P P 00 48 19.1 +0.1
comp=Z,698nm,1.5s
KMSI Cibinong 59.98 281 P P 00 48 18.8 -0.6
comp=Z,480nm,1.0s
LUWI Luwuk 60.55 279 P P 00 48 24.6 +1.4
LUWI Luwuk 60.55 279 P P 00 48 23.0 -0.2
LUWI Luwuk 60.55 279 P P 00 48 23.5 +0.3
comp=Z,751nm,1.4s
MORW Morawa 60.90 246 P P 00 48 24.2 -1.0
GTOI Gorontalo 60.91 281 P P 00 48 25.9 +0.4
comp=Z,142nm,1.1s
WBSI Waikabubak, Su 61.20 269 P P 00 48 26.9 -0.6
comp=Z,213nm,1.4s
BNSI Bone 61.99 275 P P 00 48 32.1 -0.5
comp=Z,446nm,1.3s
KAPI Kappang 62.14 274 P P 00 48 34.2 +0.6
KAPI Kappang 62.14 274 P P 00 48 32.7 -0.9
KAPI IAmb IAmb 00 48 34.6
comp=Z,247nm,1.4s
KAPI Kappang 62.14 274 P P 00 48 32.7 -0.9
KAPI pmax pmax
comp=Z,247nm,1.4s
PLAI Plampang 62.95 269 P P 00 48 39.5 +0.8
PLAI Plampang 62.95 269 P P 00 48 38.0 -0.7
comp=Z,567nm,1.4s
TOLI2 Tolitoli 63.16 281 P P 00 48 40.2 +0.1
TOLI2 Tolitoli 63.16 281 P P 00 48 39.9 -0.2
TOLI2 IAmb IAmb 00 48 41.0
comp=Z,312nm,1.3s
GIRL Giralia 63.33 253 P P 00 48 42.5 +1.4
GIRL Giralia 63.33 253 P P 00 48 40.7 -0.4
TWSI Taliwang, Sumb 63.82 269 P P 00 48 43.5 -0.8
CCD Concordia, Ant 64.99 194 P P 00 48 51.3 +0.2
CCD pP pP 00 50 47.9 +1.3
SRBI Singaraja 65.59 269 P P 00 48 54.7 -0.7
comp=Z,370nm,1.9s
CASY Casey 66.34 205 P P 00 48 58.6 -0.5
CASY Casey 66.34 205 P P 00 48 58.9 -0.2
CASY pP pP 00 50 56.2 +1.2
JAGI Jajag, Banyuwa 66.49 268 P P 00 48 59.9 -1.2
JAGI Jajag, Banyuwa 66.49 268 P P 00 48 59.1 -2.0
JAGI Jajag, Banyuwa 66.49 268 P P 00 48 59.1 -2.0
comp=Z,447nm,1.0s
MYLDM Lahad Datu 66.75 284 P P 00 49 02.1 -0.5
MYLDM IAmb IAmb 00 49 06.5
comp=Z,377nm,1.3s
JSG Sagara 66.88 322 P P 00 49 04.1 +1.2
JSG Sagara 66.88 322 P P 00 49 03.2 +0.3
JSG IAmb IAmb 00 49 04.8
comp=Z,391nm,1.1s
JMM Marumori 67.68 326 P P 00 49 08.4 +0.6
JMM Marumori 67.68 326 P P 00 49 07.4 -0.4
JMM IAmb IAmb 00 49 08.9
comp=Z,177nm,1.3s
JGF Kuroka 68.01 322 P P 00 49 10.1 +0.2
INU Inuyama 68.03 321 P P 00 49 10.5 +0.5
MJAR Matsushiro Arr 68.17 323 P P 00 49 09.8 -1.0
comp=Z,61nm,1.0s,baz=158,slow=6.0,SNR=18
comp=Z,61nm,1.0s
MAJO Matsushiro 68.17 323 P P 00 49 11.0 +0.2
MAJO Matsushiro 68.17 323 P P 00 49 10.5 -0.3
MAJO Matsushiro 68.17 323 P P 00 49 10.5 -0.3
MAJO pmax pmax
comp=Z,84nm,1.0s
MAJO Matsushiro 68.17 323 P P 00 49 10.7 -0.1
JOW Kunigami 68.56 309 P P 00 49 14.6 +1.2
PWJI Pagerwojo 68.85 268 P P 00 49 14.7 -0.7
comp=Z,238nm,1.2s
JMN Monobe 68.88 318 P P 00 49 16.1 +0.9
KKM Kota Kinabalu 69.18 284 P P 00 49 18.5 +1.0
KKM Kota Kinabalu 69.18 284 P P 00 49 16.9 -0.6
KKM IAmb IAmb 00 49 18.7
comp=Z,463nm,1.5s
JSD Sado 69.19 324 P P 00 49 18.2 +1.3
KIWB Kanaga Island 69.45 1 P P 00 49 17.9 -0.2
JTM Tenmabayashi 69.70 328 P P 00 49 20.4 +0.5
UGM Wanagama 70.10 268 P P 00 49 22.8 -0.1
UGM Wanagama 70.10 268 P P 00 49 22.0 -0.9
UGM IAmb IAmb 00 49 23.1
comp=Z,276nm,0.7s
UGM Wanagama 70.10 268 P P 00 49 21.9 -1.0
SMRI Semarang 70.42 269 P P 00 49 25.6 +0.8
SMRI Semarang 70.42 269 P P 00 49 24.3 -0.5
SMRI IAmb IAmb 00 49 26.0
comp=Z,352nm,1.1s
YOJ Yonaguni jima 71.31 304 P P 00 49 30.2 +0.5
YOJ Yonaguni jima 71.31 304 P P 00 49 29.3 -0.4
YOJ IAmb IAmb 00 49 30.9
comp=Z,490nm,1.2s
YOJ Yonaguni jima 71.31 304 P P 00 49 29.3 -0.4
YOJ pmax pmax
comp=Z,490nm,1.2s
JKA Kamikawa-asahi 71.48 331 P P 00 49 30.6 +0.4
ASAJ Asahikawa 71.48 331 P P 00 49 30.6 +0.3
ASAJ pmax pmax
comp=Z,78nm,0.9s
STKI Sintang 71.57 276 P P 00 49 32.1 +0.6
comp=Z,420nm,1.5s
SBUM Sibu 71.65 279 P P 00 49 31.7 -0.2
KPJI Karang Pucung 71.78 268 P P 00 49 32.4 -0.3
comp=Z,239nm,1.4s
TWGBT Beinan 72.04 302 P P 00 49 34.7 +0.7
TWG Pinlang 72.05 302 P P 00 49 32.4 -1.6
YULB Yu-li 72.14 303 P P 00 49 34.4 -0.2
YULB Yu-li 72.14 303 P P 00 49 33.3 -1.3
QSPA South Pole Qui 72.16 180 P P 00 49 34.5 +0.4
QSPA IAmb IAmb 00 49 56.9
comp=Z,173nm,1.3s
QSPA South Pole Qui 72.16 180 P P 00 49 34.7 +0.6
comp=Z,40nm,0.6s,baz=241,slow=1.2,SNR=8.0
comp=Z,40nm,0.6s
NACB Ninganchiao 72.29 303 P P 00 49 35.6 +0.2
NACB Ninganchiao 72.29 303 P P 00 49 34.6 -0.8
NACB IAmb IAmb 00 49 36.1
comp=Z,412nm,1.2s
SSLB Suanglung 72.61 303 P P 00 49 37.0 -0.3
TPUB Ta-pu 72.63 302 P P 00 49 36.9 -0.5
YHNB Yeheng 72.70 304 P P 00 49 38.1 +0.2
YHNB Yeheng 72.70 304 P P 00 49 37.2 -0.7
YHNB IAmb IAmb 00 49 38.8
comp=Z,203nm,1.1s
TATO Taipei 72.77 304 P P 00 49 38.2 +0.1
TATO Taipei 72.77 304 P P 00 49 37.7 -0.4
TATO IAmb IAmb 00 49 38.9
comp=Z,461nm,1.4s
BBJI Bungbulang 72.96 268 P P 00 49 38.9 -0.7
KSM Kuching 73.13 277 P P 00 49 41.2 +0.7
KSM Kuching 73.13 277 P P 00 49 40.0 -0.4
YSS Yuzh-Sakhalins 73.61 333 P P 00 49 43.5 +1.1
YSS Yuzh-Sakhalins 73.61 333 *i* P P 00 49 39.2 -3.2
YSS pmax pmax
comp=Z,125nm,1.1s
PEA0B Petropavlovsk- 73.78 345 P P 00 49 43.6 +0.3
PEA0B Petropavlovsk- 73.78 345 P P 00 49 43.6 +0.3
PEA0B pmax pmax
comp=Z,136nm,1.1s
PETK Petropavlovsk- 73.78 345 P P 00 49 43.4 +0.1
PETK Petropavlovsk- 73.78 345 P P 00 49 43.6 +0.3
comp=Z,58nm,0.9s,baz=130,slow=7.5,SNR=10
comp=Z,58nm,0.9s
PETK Petropavlovsk- 73.78 345 P P 00 49 43.4 +0.1
KNMB Chin-men Tao 74.99 302 P P 00 49 50.4 -0.3
KNMB IAmb IAmb 00 49 52.4
comp=Z,347nm,1.4s
KSRS Korea Array 74.99 318 P P 00 49 50.7 +0.3
comp=Z,21nm,1.0s,baz=130,slow=6.0,SNR=4.3
comp=Z,21nm,1.0s
SAO San Andreas Ge 76.10 44 P P 00 49 57.5 +0.9
SAO San Andreas Ge 76.10 44 P P 00 49 57.5 +0.9
SAO pmax pmax
comp=Z,60nm,0.8s
PSTR Posyet 76.50 324 *i* P P 00 49 59.8 +1.2
KMRM Mail Ridge 76.72 40 P P 00 49 59.3 -0.7
USA0B Ussuriysk Arra 76.86 325 *i* P P 00 50 02.4 +1.9
USRK Ussuriysk Ar. 76.86 325 P P 00 50 01.8 +1.2
comp=Z,16nm,0.7s,baz=146,slow=4.4,SNR=5.1
comp=Z,16nm,0.7s
HKPS Hong Kong Po S 77.50 298 P P 00 50 05.2 +0.6
YUH Yuha Desert 77.70 50 P P 00 50 06.1 +0.7
MDPB Devils Postpil 78.15 44 P P 00 50 09.0 +1.0
SLBS Sierra La Lagu 78.16 60 P P 00 50 09.5 +1.3
MDJ Mudanjiang 78.44 325 P P 00 50 10.0 +1.0
NVAR Mina Array Bea 79.10 44 P P 00 50 14.2 +1.2
comp=Z,34nm,0.8s,baz=223,slow=10,SNR=4.5
comp=Z,34nm,0.8s
BTDF Bukit Timah Da 79.28 275 P P 00 50 15.3 +1.0
CN2 Changchun 80.29 322 P P 00 50 19.5 +0.7
CN2 pmax pmax
comp=Z,200nm,1.2s
KLR Kul'dur 80.33 329 *i* P P 00 50 18.0 -0.9
KLR pmax pmax
comp=Z,60nm,1.2s
BNX BinXian 80.34 325 ⇑P P 00 50 19.8 +0.7
BNX pmax pmax
comp=Z,130nm,0.9s
BKNI Bangkinang 81.56 273 P P 00 50 27.2 +1.1
IPM Ipoh 82.87 277 P P 00 50 33.9 +1.2
LYN LuoYang 84.17 309 P P 00 50 40.1 +1.5
LYN pmax pmax
comp=Z,190nm,1.1s
PSI Prapat 84.33 275 P P 00 50 40.7 +0.6
ENH Enshi 84.64 304 P P 00 50 42.0 +0.9
GSI Gunungsitoli 85.15 273 P P 00 50 44.9 +1.0
ZEA Zeya 85.40 331 *eP* P 00 50 45.3 +1.2
ZEA pmax pmax
comp=N,50nm,1.2s
ZEA pmax pmax
comp=Z,70nm,1.1s
SRIT Nakonsritamara 85.52 280 P P 00 50 46.9 +1.3
TXAR Lajitas Array 85.61 57 P P 00 50 47.9 +2.1
comp=Z,50nm,0.8s,baz=218,slow=5.0,SNR=6.4
comp=Z,50nm,0.8s
ILAR Eielson Array 85.77 13 P P 00 50 45.1 -0.6
comp=Z,13nm,0.5s,baz=220,slow=5.2,SNR=9.3
comp=Z,13nm,0.5s
ILAR Eielson Array 85.77 13 *eP* P 00 50 45.1 -0.6
ILAR pmax pmax
comp=Z,12nm,0.5s
BILL Bilibino 86.46 354 *i* P P 00 50 49.9 +1.0
BILL pmax pmax
comp=Z,84nm,1.1s
XAN Xi'an 86.61 307 ⇑P P 00 50 52.1 +1.7
XAN pmax pmax
comp=Z,330nm,1.3s
XAN LR LR
comp=N,79μm,18.6s
XAN LR LR
comp=E,48μm,13.1s
XAN LR LR
comp=Z,112μm,22.7s
HIA Hailar 86.62 324 *i* P P 00 50 48.8 -1.3
HIA pmax pmax
comp=Z,74nm,1.2s
KMI Kunming 88.23 297 ⇓P P 00 50 59.8 +1.4
KMI pmax pmax
comp=Z,120nm,1.3s
BTO Baotou 88.54 314 *eP* P 00 50 55.0 -4.4
BTO pP pP 00 53 02.3 -2.9
BTO sP sP 00 53 57.3 -6.1
BTO PP PP 00 54 36.6 -2.3
BTO S SKSac 01 00 38.5 +5.0
BTO Baotou 88.54 314 SS SS 01 07 11.4 +4.9
BTO Baotou 88.54 314 pmax pmax
comp=Z,110nm,1.1s
BTO Baotou 88.54 314 LR LR
comp=Z,170μm,24.5s
BTO Baotou 88.54 314 LR LR
comp=E,125μm,21.2s
BTO Baotou 88.54 314 LR LR
comp=N,141μm,16.3s
BTO Baotou 88.54 314 pmax pmax
comp=Z,394μm,9.8s
CMAR Chiang Mai Arr 89.31 290 P P 00 51 04.4 +1.1
comp=Z,56nm,1.0s,baz=110,slow=2.8,SNR=9.9
comp=Z,56nm,1.0s
CMAR Chiang Mai Arr 89.31 290 *eP* P 00 51 04.8 +1.5
CMAR pmax pmax
comp=Z,59nm,1.0s
YAK Yakutsk 89.73 338 *i* P P 00 51 03.7 -0.5
YAK pmax pmax
comp=Z,83nm,1.1s
SNAA Sanae 90.60 178 P P 00 51 08.2 -0.1
comp=Z,18nm,0.8s,baz=253,slow=20,SNR=1.4
comp=Z,18nm,0.8s
TNCH TengChong 91.80 296 P P 00 51 15.0 +0.1
TNCH pmax pmax
comp=Z,170nm,1.6s
EFI East Falkland 93.23 147 *i* P P 00 51 20.7 0.0
EFI pmax pmax
comp=Z,90nm,1.5s
SONM Songino Array 93.84 319 P P 00 51 23.5 -0.1
comp=Z,33nm,1.2s,baz=114,slow=4.9,SNR=1.7
comp=Z,33nm,1.2s
ZALV Zalesovo Beam 108.50 322 PKiKP PKiKP 00 56 29.2 -1.4
comp=Z,1.4nm,1.0s,baz=90,slow=2.2,SNR=4.6
MKAR Makanchi Array 109.45 314 PKiKP PKiKP 00 56 31.5 -1.2
comp=Z,4.7nm,0.5s,baz=100,slow=2.3,SNR=14
KURK Kurchatov 112.12 318 *i* PKiKP PKiKP 00 56 37.3 -0.3
KURBB Kurchatov Arra 112.17 318 PKiKP PKiKP 00 56 37.3 -0.3
comp=Z,2.5nm,0.4s,baz=90,slow=1.7,SNR=4.3
BVAR Borovoye Array 117.12 321 PKP PKPdf 00 56 46.3 -0.8
comp=Z,9.4nm,0.5s,baz=118,slow=1.5,SNR=18
SPITS Spitsbergen Ar 119.28 357 PKP PKPdf 00 56 50.2 -0.5
comp=Z,5.7nm,0.6s,baz=98,slow=5.1,SNR=7.8
OPO Ambohidratompo 122.73 233 PKP PKiKP 00 56 59.2 -0.2
comp=Z,4.6nm,0.6s,baz=110,slow=1.9,SNR=12
ARU Arti 123.09 326 *i* PKiKP PKPdf 00 56 57.1 -1.4
ARCES ARCESS Array B 126.38 350 PKP PKPdf 00 57 04.5 +0.1
comp=Z,4.5nm,0.4s,baz=27,slow=1.5,SNR=21
APA Apatity 126.45 346 ⇓*i* PKiKP PKPdf 00 57 01.8 -2.8
APA *i* 00 59 09.5
APA pmax pmax
comp=Z,6.0nm,0.8s
SUR Sutherland 126.88 200 PKP PKiKP 00 57 07.1 -0.4
comp=Z,11nm,0.5s,baz=17,slow=0.1,SNR=15
WSAR Wadi Sarin 127.04 286 PKP PKiKP 00 57 07.4 -0.2
comp=Z,30nm,1.2s,baz=254,slow=12,SNR=4.5
BOSA Boshof 128.61 206 PKP PKiKP 00 57 11.0 +0.1
comp=Z,11nm,0.9s,baz=187,slow=4.3,SNR=7.8
LBTB Lobatse 131.58 209 PKP PKPdf 00 57 16.2 +0.4
comp=Z,9.8nm,0.8s,baz=155,slow=3.5,SNR=8.6
FINES FINESS Array B 133.30 344 PKhKP PKPpre 00 57 12.0
comp=Z,16nm,1.0s,baz=27,slow=3.0,SNR=6.6
FINES PP PP 00 59 54.1 +0.7
comp=Z,16nm,0.7s,baz=56,slow=4.8,SNR=8.8
MATP Matopo 133.93 215 PKP PKPdf 00 57 20.3 -0.1
comp=Z,3.3nm,0.6s,baz=161,slow=2.6,SNR=7.2
OBN Obninsk 134.49 333 *i* PKiKP PKPdf 00 57 19.5 -0.6
OBN pmax pmax
comp=Z,31nm,1.2s
NB2 NORSAR Subarra 136.41 354 PKPdf PKiKP 00 57 24.7 -0.8
comp=Z,1.1nm,0.4s,baz=14,slow=1.8
NB2 SKPa SKPdf 01 00 04.3 +0.3
comp=Z,3.8nm,0.8s,baz=11,slow=2.9
NOA NORSAR Array B 136.41 354 PKP PKiKP 00 57 24.9 -0.6
comp=Z,1.2nm,0.5s,baz=59,slow=1.5,SNR=10
HFS Hagfors 136.99 351 PKP PKPdf 00 57 24.6 -0.1
comp=Z,3.0nm,0.4s,baz=71,slow=2.6,SNR=7.6
KIV Kislovodsk 137.16 316 *e*PKiKP PKPdf 00 57 21.3 -4.3
KIV pmax pmax
comp=Z,25nm,1.1s
TSUM Tsumeb 140.11 203 PKhKP PKPpre 00 57 24.2
comp=Z,4.7nm,0.6s,baz=256,slow=13,SNR=1.8
TSUM PKP PKPdf 00 57 31.5 -0.3
comp=Z,6.2nm,0.7s,baz=179,slow=6.1,SNR=5.7
AKASG Malin Array Be 140.76 333 PKhKP PKPpre 00 57 25.4
comp=Z,5.0nm,0.4s,baz=44,slow=3.8,SNR=17
AKASG PKP PKiKP 00 57 33.5 -1.1
comp=Z,5.1nm,0.4s,baz=43,slow=3.5,SNR=8.9
SIM Simferopol' 142.01 322 *ce*PKHKP PKPpre 00 57 31.2
SIM pmax pmax
comp=Z,85nm,1.2s
EKA Eskdalemuir Ar 142.42 5 PKhKP PKPpre 00 57 31.2
comp=Z,1.6nm,0.4s,baz=326,slow=2.8,SNR=12
GKP Gorka Klasztor 142.77 345 *e*PKP PKPdf 00 57 33.0 -2.2
SORM Soroca 143.00 330 ⇑P PKPab 00 57 33.1 -0.4
SORM Soroca 143.00 330 ⇑PKHKP PKPpre 00 57 33.1
BEL Belsk 143.04 341 *e*PKP PKPbc 00 57 34.7 +0.7
PURM Purcari 143.36 327 ⇑P PKPbc 00 57 35.2 +0.1
LVV L'vov 143.58 336 *e*PKiKP PKPab 00 57 35.3 -0.4
MILM Milestii Mici 143.63 329 ⇑P PKPab 00 57 36.1 +0.1
MILM Milestii Mici 143.63 329 ⇑PKiKP PKPab 00 57 36.1 +0.1
GAZ Gaziantep 143.68 309 PKPdf 00 57 37.1 -0.4
IAS Iasi 144.05 330 ⇑P PKPbc 00 57 37.4 +0.1
IAS Iasi 144.05 330 ⇑PKiKP PKPbc 00 57 37.4 +0.1
KWP Kalwaria Pacla 144.24 337 *e*PKP PKPab 00 57 38.3 0.0
PRAR RASCA 144.55 331 ⇑P PKPdf 00 57 38.6 0.0
VLDR Vladesti 144.74 328 ⇑P PKPbc 00 57 39.3 -0.2
OJC Ojcow 144.75 340 *e*PKP PKPbc 00 57 39.0 -0.1
OJC Ojcow 144.75 340 PKPbc 00 57 39.2 -0.1
OJC Ojcow 144.75 340 PKiKP PKPbc 00 57 39.2 -0.2
BUR08 Bucovina Ar. S 144.80 333 PKPab 00 57 40.2 -0.3
BURAR Bucovina Array 144.81 333 ⇓P PKPab 00 57 40.3 -0.3
BURAR Bucovina Array 144.81 333 ⇓PKiKP PKPab 00 57 40.3 -0.3
TLCR 144.81 326 ⇓P PKPbc 00 57 39.6 -0.1
TLCR 144.81 326 ⇓PKiKP PKPbc 00 57 39.6 -0.1
SCTR Scanteiesti 144.90 328 ⇓P PKPbc 00 57 40.4 +0.5
GHRR 144.93 329 ⇑P PKPab 00 57 40.9 -0.1
KOLS Kolonicke sedl 144.97 337 *e*PKiKP PKPab 00 57 40.8 -0.3
KOLS Kolonicke sedl 144.97 337 *e*PKP PKPab 00 57 40.8 -0.3
TESR Tescani 144.97 330 ⇓P PKPbc 00 57 39.8 -0.4
SLCR Slobozia Conac 145.08 328 ⇓P PKPab 00 57 41.2 -0.3
BR131 Keskin Array S 145.09 315 PKPbc 00 57 40.5 -0.4
BR131 Keskin Array S 145.09 315 PKiKP PKPbc 00 57 40.5 -0.4
BRTR Keskin Array B 145.09 315 PKPbc PKPbc 00 57 40.9 0.0
comp=Z,45nm,0.7s,baz=65,slow=3.5,SNR=38
SCHL Schela 145.11 328 ⇓P PKPab 00 57 41.4 -0.3
IZVR Izvoarele 145.11 328 ⇑P PKPab 00 57 41.6 -0.1
TUDR 145.12 328 ⇓P PKPab 00 57 41.3 -0.4
KIRS Kirsehir-Merke 145.19 314 ⇑P PKPdf 00 57 39.8 -0.3
PANC Panciu 145.19 329 ⇓P PKPbc 00 57 41.4 +0.6
KSP Ksiaz 145.22 344 *e*PKP PKPab 00 57 41.8 -0.2
ONER Baraj Valea Uz 145.22 330 ⇓P PKPbc 00 57 40.6 -0.3
NIE Niedzica 145.28 339 *e*PKP PKPbc 00 57 40.5 -0.5
CRVS Cervenica-Dubn 145.30 337 *e*PKiKP PKPbc 00 57 41.7 +0.6
CRVS Cervenica-Dubn 145.30 337 *e*PKP PKPbc 00 57 41.7 +0.6
VRI Vrincioaia 145.40 329 ⇑P PKPbc 00 57 41.3 -0.1
PLOR Plostina 145.45 329 ⇓P PKPbc 00 57 41.0 -0.6
PLOR Plostina 145.45 329 ⇓PKiKP PKPbc 00 57 41.0 -0.6
BMR Baia Mare 145.50 334 ⇓P PKPbc 00 57 41.7 +0.1
BMR Baia Mare 145.50 334 ⇓PKiKP PKPbc 00 57 41.7 +0.1
CLL Collm 145.55 348 *i* PKPbc PKPbc 00 57 41.8 +0.1
comp=Z,184nm,1.1s
CLL *ex* x 00 57 50.0
CLL *ep*PKPdf pPKPdf 00 59 56.0 +1.3
CLL Collm 145.55 348 *i* PKiKP PKPbc 00 57 41.8 +0.1
CLL pmax pmax
comp=Z,184nm,1.1s
ANTO Ankara 145.59 316 PKPbc 00 57 42.6 +0.4
ANTO Ankara 145.59 316 ⇑P PKPdf 00 57 40.9 +0.2
ANTO Ankara 145.59 316 ⇑PKiKP PKPdf 00 57 40.9 +0.2
ARCR ARCALIA 145.59 333 ⇓P PKPbc 00 57 42.2 +0.3
UPC Upice 145.60 344 *e*PKP PKPbc 00 57 42.2 +0.3
UPC Upice 145.60 344 *e*PKiKP PKPbc 00 57 42.2 +0.3
TURR Turia 145.61 330 ⇓P PKPbc 00 57 42.6 +0.5
HARR Harsova 145.61 327 ⇑P PKPbc 00 57 42.4 +0.4
HARR Harsova 145.61 327 ⇑PKiKP PKPbc 00 57 42.4 +0.4
DPC Dobruska-Polom 145.66 344 *e*PKP PKPbc 00 57 42.5 +0.4
DPC Dobruska-Polom 145.66 344 *e*PKiKP PKPbc 00 57 42.5 +0.4
COVR Voineasa-Covas 145.67 330 ⇓P PKPbc 00 57 41.4 -0.8
OZUR 145.69 330 ⇑P PKPbc 00 57 41.8 -0.5
BRG Berggiesshubel 145.76 347 *i* PKP PKPbc 00 57 42.8 +0.5
BRG Amp 00 57 44.6
comp=Z,88nm,1.1s
BRG Berggiesshubel 145.76 347 P PKiKP 00 57 50.0 +5.1
BRG Amp 00 57 52.5
comp=Z,32nm,1.0s
BOSR Bodos 145.76 330 ⇓P PKPbc 00 57 42.9 +0.4
LANS Liptovska Anna 145.79 340 *e*PKP2 PKPab 00 57 43.5 -0.8
LANS Liptovska Anna 145.79 340 *e*PKP PKPab 00 57 43.5 -0.8
KRLC Kraliky 145.79 343 *e*PKP PKPbc 00 57 43.0 +0.5
KRLC Kraliky 145.79 343 *e*PKP2 PKPbc 00 57 43.9 -0.4
MORC Moravsky Berou 145.84 342 *e*PKP PKPbc 00 57 42.7 +0.1
MORC Moravsky Berou 145.84 342 ⇓P PKPdf 00 57 41.5 +0.7
MORC Moravsky Berou 145.84 342 ⇓PKiKP PKPdf 00 57 41.5 +0.7
PVCC Panska Ves 145.94 346 *e*PKP PKPbc 00 57 43.4 +0.6
PVCC Panska Ves 145.94 346 *e*PKiKP PKPbc 00 57 43.4 +0.6
DOPR Dopca 145.97 330 ⇓P PKPab 00 57 44.2 -1.0
KECS Kecovo 146.00 338 *e*PKP2 PKPbc 00 57 44.0 +0.9
KECS Kecovo 146.00 338 *e*PKP PKPbc 00 57 44.0 +0.9
RICC Richard 146.03 346 *e*PKP PKPbc 00 57 43.9 +0.8
MLR Muntele Rosu 146.05 329 ⇓P PKPbc 00 57 42.7 -0.8
MLR Muntele Rosu 146.05 329 ⇓PKiKP PKPbc 00 57 42.7 -0.8
MAUC Maruska 146.12 341 *e*PKP PKPbc 00 57 43.6 +0.2
HSKC Hora Svate Kat 146.12 347 *e*PKP PKPbc 00 57 43.9 +0.6
CBBR Cluj-Babes-Bol 146.19 333 ⇓P PKPdf 00 57 40.6 -0.8
CJR Cluj-Napoca 146.21 333 ⇑P PKPbc 00 57 42.8 -0.9
CJR Cluj-Napoca 146.21 333 ⇑PKiKP PKPbc 00 57 42.8 -0.9
MDUB Mudurnu 146.30 318 PKPbc 00 57 44.2 0.0
MBAR Mbarara 146.33 240 PKPbc PKPbc 00 57 45.8 +0.6

comp=Z,42nm,0.7s,baz=296,slow=4.7,SNR=26
**PRA Prague 146.40 346** *e*PKP **PKPbc 00 57 44.2 +0.1**
**PRA Prague 146.40 346** *e*PKIKP **PKPbc 00 57 44.2 +0.1**
**PRU Pruhonice 146.45 345** *e*PKP **PKPbc 00 57 44.5 +0.3**
**PRU Pruhonice 146.45 345** *e*PKIKP **PKPbc 00 57 44.5 +0.3**
**MMAI Mount Meron Ar 146.51 303** PKPbc **PKPbc 00 57 45.6 +0.5**
comp=Z,70nm,0.5s,baz=67,slow=6.4,SNR=100
**VOIR 146.52 330** ⇓P **PKPbc 00 57 44.3 -0.4**
**VOIR 146.52 330** ⇓PKIKP **PKPbc 00 57 44.3 -0.4**
**DRGR 146.53 334** ⇑P **PKPbc 00 57 44.5 -0.1**
**DRGR 146.53 334** ⇑PKIKP **PKPbc 00 57 44.5 -0.1**
**VRAC Vranov 146.53 343** *e*PKP **PKPbc 00 57 44.8 +0.3**
**VRAC Vranov 146.53 343** ⇓P **PKPbc 00 57 44.7 +0.2**
**VRAC Vranov 146.53 343** ⇓PKIKP **PKPbc 00 57 44.7 +0.2**
**VYHS Vyhne 146.56 340** *e*PKP2 **PKPbc 00 57 45.3 +0.7**
**VYHS Vyhne 146.56 340** *e*PKP **PKPbc 00 57 45.3 +0.7**
**JAVC Velka Javorina 146.62 341** *e*PKP **PKiKP 00 57 45.9 -0.9**
**PSZ Piszkesteto 146.69 338 PKPbc 00 57 44.4 -0.7**
**PSZ Piszkesteto 146.69 338** ⇑P **PKPbc 00 57 45.0 -0.1**
**ARR Arges 146.77 330** ⇑P **PKPbc 00 57 44.0 -1.3**
**KRUC Moravsky 146.81 343** *e*PKP **PKPbc 00 57 45.7 +0.5**
**TREC Trest 146.85 344** *e*PKP **PKPbc 00 57 45.7 +0.3**
**TREC Trest 146.85 344** *e*PKP2 **PKPbc 00 57 45.7 +0.3**
**GHAJ Ghor Haditha 146.88 300 PKPbc 00 57 46.0 0.0**
**SMOL Smolenice 147.00 341** *e*PKP2 **PKiKP 00 57 46.9 -0.7**
**ZVC Zvikov 147.04 345** *e*PKP **PKPbc 00 57 46.3 +0.5**
**BSZH Besenyszog 147.08 337** ⇓P **PKPbc 00 57 46.5 +0.6**
**SRO Srobarova 147.33 340** *e*PKP2 **PKPbc 00 57 47.2 +0.6**
**SRO Srobarova 147.33 340** *e* **PKPab 00 57 51.7 +1.2**
**SRO Srobarova 147.33 340** *e*PKP **PKPbc 00 57 47.2 +0.6**
**ZST Bratislava 147.38 341** *e*PKP2 **PKPbc 00 57 47.5 +0.8**
**ZST Bratislava 147.38 341** *e*PKP **PKPbc 00 57 47.5 +0.8**
**SIRR Siria 147.38 334** ⇓P **PKPdf 00 57 40.5 -2.9**
**CSS Mathiatis 147.43 308 PKPbc 00 57 46.6 -0.8**
**GRF Grafenberg Arr 147.43 349** *e*PKP **PKPbc 00 57 47.2 +0.3**
baz=16,slow=1.9
**KHC Kasperske Hory 147.47 346** *e*PKP **PKPbc 00 57 47.3 +0.3**
**KHC Kasperske Hory 147.47 346** *e*PKIKP **PKPbc 00 57 47.3 +0.3**
**CKRC Cesky Krumlov 147.59 345** *e*PKP **PKiKP 00 57 48.1 -0.7**
**CKRC Cesky Krumlov 147.59 345** *e*PKIKP **PKPdf 00 57 43.9 +0.2**
**SURR Surduc 147.60 333** ⇓P **PKPbc 00 57 47.1 -0.3**
**GERES GERESS Array B 147.71 346** PKPbc **PKPbc 00 57 47.7 0.0**
comp=Z,15nm,0.4s,baz=83,slow=11,SNR=59
**EIL Elat 147.82 297** PKPbc **PKPbc 00 57 48.2 -0.3**
comp=Z,48nm,1.0s,baz=9.8,slow=3.0,SNR=8.7
**BZS Buzias 147.92 334** ⇑P **PKPbc 00 57 48.3 0.0**
**CONA Conrad Observa 147.99 342** *i* PKiKP **PKPbc 00 57 48.5 +0.1**
comp=Z,113nm,1.3s,SNR=11
**RONA Rosalia, Austr 148.07 342** *e*PKiKP **PKPbc 00 57 48.6 +0.1**
comp=Z,94nm,1.3s,SNR=11
**HERR Herculane 148.16 332** ⇓P **PKPbc 00 57 48.5 -0.3**
**BANR Banloc 148.31 334** ⇓P **PKPbc 00 57 49.4 +0.2**
**MOA Molln 148.50 344** *i* PKP **PKPbc 00 57 49.4 -0.3**
comp=Z,51nm,1.5s
**MDVR Moldovita 148.54 333** ⇑P **PKPbc 00 57 48.9 -1.0**
**STU Stuttgart 148.66 351 PKPbc 00 57 49.4 -0.5**
**STU Stuttgart 148.66 351** PKHKP PKPpre 00 57 49.4
**ARSA Arzberg 148.70 342** *i* PKP **PKPbc 00 57 49.6 -0.5**
comp=Z,60nm,1.5s,SNR=4.8
**BIOA Bad Ischl, Aus 148.80 345** *i* PKP **PKPbc 00 57 50.0 -0.4**
comp=Z,38nm,1.1s
**FRGS Fruska Gora 149.04 335** *e*P **PKPbc 00 57 51.0 0.0**
**LESA Schwarzleotal 149.29 346** *i* PKP **PKPbc 00 57 51.2 -0.4**
comp=Z,23nm,0.5s
**SOKA Soboth 149.36 342** *i* PKiKP **PKPbc 00 57 51.5 -0.3**
comp=Z,61nm,1.2s,SNR=7.2
**BOVS Bovan 149.45 331** ⇑P **PKPdf 00 57 45.8 -1.0**
**KBA Koelnbreinsper 149.45 345** *i* PKP **PKPbc 00 57 51.2 -0.9**
comp=Z,18nm,0.5s
**WATA Walderalm 149.61 347** *i* PKP **PKPbc 00 57 51.9 -0.6**
comp=Z,18nm,0.5s,SNR=9.7
**RETA Reutte 149.63 348** *i* PKP **PKPbc 00 57 52.0 -0.4**
comp=Z,11nm,0.5s,SNR=7.3
**TEKS Tekeris 149.65 335** *e*P **PKPbc 00 57 51.2 -1.3**
**OBKA Obir 149.65 343** *i* PKP **PKPbc 00 57 51.4 -1.2**
comp=Z,33nm,1.2s
**OBKA Obir 149.65 343** *e*P **PKPbc 00 57 51.7 -0.8**
**WTTA Wattenberg 149.67 347** *i* PKiKP **PKPbc 00 57 52.3 -0.4**
comp=Z,33nm,0.5s,SNR=11
**MOTA Moosalm 149.70 348** *i* PKP **PKPbc 00 57 52.1 -0.6**
comp=Z,11nm,0.5s
**MYKA Terra Mystica 149.79 344** *e*PKP **PKPbc 00 57 52.1 -0.7**
comp=Z,15nm,0.5s,SNR=9.2
**SQTA Sankt Quirin 149.80 348** *i* PKiKP **PKPbc 00 57 52.6 -0.3**
comp=Z,25nm,0.6s,SNR=7.5
**ABTA Abfaltersbach 149.96 346** *i* PKP **PKPbc 00 57 52.8 -0.5**
comp=Z,59nm,0.6s,SNR=8.2
**DAVA Damuels 149.99 349** *e*PKiKP **PKPbc 00 57 52.9 -0.4**
comp=Z,140nm,1.4s,SNR=9.6
**FETA Feichten 150.09 348** *i* PKiKP **PKPbc 00 57 53.4 -0.2**
comp=Z,69nm,1.1s
**A051A Mrakovica 150.25 339** *e*P **PKPbc 00 57 52.8 -1.1**
**BBLS Lazi&#263i 150.26 334** *e*P **PKPbc 00 57 53.5 -0.5**
**HAPS Han Pijesak,BI 150.27 335** *e*P **PKPbc 00 57 53.7 -0.4**
**BOJS Bojanci 150.36 341** *e*P **PKiKP 00 57 54.3 -0.3**
**STAL STALIGIAL 150.37 345 PKPbc 00 57 53.3 -0.9**
**BLY Banja Luka 150.38 338** *e*P **PKiKP 00 57 54.4 -0.2**
**CEY Cerknica 150.39 342** *e*P **PKPbc 00 57 54.1 -0.1**
**RUDO Rudo 150.48 334** *e*P **PKPbc 00 57 52.5 -1.9**
**SJES Sjenica 150.51 333** *e*P **PKiKP 00 57 54.9 -0.2**
**FUORN Ofenpass-Fuorn 150.56 348 PKPbc 00 57 54.9 +0.1**
**SKDS Skadanscina 150.68 343** *e*P **PKPbc 00 57 54.4 -0.5**
**VAY Valandovo 150.77 327** *i* P **PKPbc 00 57 54.6 -0.5**
**A050A Klekovaca 150.84 338** *e*P **PKPbc 00 57 54.3 -1.0**
**UPM Unac-Piva 151.02 334** *e*P **PKPbc 00 57 53.7 -2.2**
**BRY Bratogost 151.42 334** *e*P **PKPbc 00 57 55.1 -1.7**
**PDG Podgorica 151.50 333** *e*P **PKPbc 00 57 53.7 -3.0**
**TREB Trebinje 151.65 334** *e*P **PKPbc 00 57 55.7 -1.4**
**DRME Dracevica, Mon 151.72 332** *e*P **PKPbc 00 57 56.4 -0.9**
**FNA Florina 151.78 328 PKPbc 00 57 56.3 -1.2**
**FNA Florina 151.78 328** PKIKP **PKPbc 00 57 56.3 -1.2**
**STON Ston 151.78 335** *e*P **PKPdf 00 57 52.6 +2.3**
**OHR Ohrid 151.82 329** ⇓P **PKiKP 00 57 57.8 0.0**
**IDI Anoyia 153.33 315** PKPbc **PKiKP 00 58 01.4 +0.2**
comp=Z,12nm,0.5s,baz=111,slow=23,SNR=10
**ESDC Sonseca Array 157.68 12** PKPab **PKPab 00 58 34.3 -0.3**
comp=Z,2.1nm,0.6s,baz=347,slow=4.5,SNR=6.1
**KEST Kesra 161.09 341** PKPab **PKPab 00 58 49.3 -0.4**
comp=Z,33nm,1.1s,baz=332,slow=2.5,SNR=6.2
**MDT Midelt 163.97 21** PKPab **PKPab 00 59 02.8 +0.3**
comp=Z,9.3nm,1.2s,baz=269,slow=1.9,SNR=4.9
**TORD Torodi Ar. Bea 175.27 176** PKP **PKPdf 00 58 10.6 -1.8**
comp=Z,10nm,1.2s,baz=90,slow=0.2,SNR=5.6
TORD PKPab **PKPab 00 59 53.0 +0.3**
comp=Z,4.5nm,0.7s,baz=177,slow=4.5,SNR=4.3

*IDC* ***19*** *00:39:21.3±9.0, 17.°49S×177.°82W, h622km±89km, mb4.4/6, mbtmp5.4/6, Error ellipse: s-maj=76.5km s-min=29.2km az=108.0*
*NEIC* ***19*** *00:39:23.2±2.0, 17.°69S±0.°07×177.°84W±0.°09, h644km±8km, mb5.3/37, Error ellipse: s-maj=14.8km s-min=7.9km az=56.0*
**ISC 19 00:39:22.7±0.5, 17.°7S±0.°1×177.°82W±0.°09, h650km, n70, σ0s93/68, mb5.3/25, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **MSVF** | **Nonsavu** | **3.94** | **269** | P | **P** | | **00 40 51.0** | **-0.5** |
| **LIFNC** | **LIFOU** | **14.44** | **255** | P | **P** | | **00 42 22.9** | **-0.8** |
| **KOUNC** | **Koumac, New Ca** | **17.14** | **258** | P | **P** | | **00 42 46.9** | **-1.7** |
| **SNZO** | **South Karori** | **24.37** | **194** | P | **P** | | **00 43 51.2** | **-1.5** |
| SNZO | | | | IAmb | IAmb | | 00 43 52.7 | |
| | comp=Z,68nm,0.8s | | | | | | | |
| **BHW** | **Baring Head** | **24.43** | **193** | P | **P** | | **00 43 51.3** | **-2.0** |
| **PPTF** | **Pamatai, Papee** | **26.91** | **94** | P | **P** | | **00 44 15.6** | **+0.1** |
| **EIDS** | **Eidsvold** | **29.86** | **250** | P | **P** | | **00 44 42.1** | **+1.3** |
| **ARMA** | **Armidale** | **30.52** | **240** | P | **P** | | **00 44 48.3** | **+1.9** |
| ARMA | | | | IAmb | IAmb | | 00 44 49.9 | |
| | comp=Z,56nm,0.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **34.03** | **260** | P | **P** | | **00 45 16.9** | **+0.9** |
| CTAO | | | | IAmb | IAmb | | 00 45 19.8 | |
| | comp=Z,147nm,1.2s | | | | | | | |
| **PMG** | **Port Moresby** | **34.99** | **279** | P | **P** | | **00 45 24.2** | **+0.3** |
| **MANU** | **Manus Island** | **37.56** | **291** | P | **P** | | **00 45 44.8** | **-0.1** |
| MANU | | | | IAmb | IAmb | | 00 45 56.2 | |
| | comp=Z,137nm,1.4s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.64** | **81** | P | **P** | | **00 45 44.9** | **-0.8** |
| TAOE | | | | IAmb | IAmb | | 00 45 45.4 | |
| | comp=Z,169nm,1.2s | | | | | | | |
| **COEN** | **Coen** | **37.67** | **270** | P | **P** | | **00 45 45.6** | **-0.1** |
| COEN | | | | IAmb | IAmb | | 00 45 48.1 | |
| | comp=Z,77nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **39.21** | **241** | P | **P** | | **00 45 59.3** | **+1.4** |
| **STKA** | **Stephens Creek** | **39.21** | **241** | P | **P** | | **00 45 59.1** | **+1.2** |
| | comp=Z,56nm,0.5s,baz=80,slow=11,SNR=9.2 | | | | | | | |
| | comp=Z,56nm,0.5s | | | | | | | |
| **WAKE** | **Wake Island** | **39.82** | **337** | P | **P** | | **00 46 02.0** | **-0.8** |
| WAKE | | | | IAmb | IAmb | | 00 46 18.5 | |
| | comp=Z,96nm,0.9s | | | | | | | |
| **WAKE** | **Wake Island** | **39.82** | **337** | P | **P** | | **00 46 03.0** | **+0.2** |
| **HMH** | **Humu'ula Sheep** | **43.09** | **32** | P | **P** | | **00 46 29.6** | **+0.8** |
| HMH | | | | IAmb | IAmb | | 00 46 57.5 | |
| | comp=Z,197nm,1.4s | | | | | | | |
| **DHH** | **Diamond Head** | **43.43** | **28** | P | **P** | | **00 46 31.3** | **+0.3** |
| **HLK** | **Haleakala** | **43.70** | **30** | P | **P** | | **00 46 33.5** | **+0.1** |
| **BBOO** | **Buckleboo** | **43.99** | **241** | P | **P** | | **00 46 35.9** | **+0.6** |
| BBOO | | | | IAmb | IAmb | | 00 46 37.9 | |
| | comp=Z,87nm,0.6s | | | | | | | |
| **WR0** | **Warramunga Arr** | **45.03** | **259** | P | **P** | | **00 46 43.4** | **+0.1** |
| **WRA** | **Warramunga Arr** | **45.22** | **259** | P | **P** | | **00 46 45.6** | **+0.8** |
| | comp=Z,39nm,0.4s,baz=93,slow=7.4,SNR=9.8 | | | | | | | |
| | comp=Z,39nm,0.4s | | | | | | | |
| **AS31** | **Alice Springs** | **45.38** | **254** | P | **P** | | **00 46 47.1** | **+1.1** |
| AS31 | | | | IAmb | IAmb | | 00 46 50.6 | |
| | comp=Z,44nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.38** | **254** | P | **P** | | **00 46 46.8** | **+0.8** |
| | comp=Z,76nm,0.4s,baz=88,slow=8.2,SNR=5.6 | | | | | | | |
| | comp=Z,76nm,0.4s | | | | | | | |
| **GUMO** | **Guam** | **48.21** | **308** | P | **P** | | **00 47 07.4** | **+0.3** |
| **FORT** | **Forrest** | **50.60** | **244** | P | **P** | | **00 47 23.5** | **-0.9** |
| FORT | | | | IAmb | IAmb | | 00 47 25.6 | |
| | comp=Z,111nm,0.7s | | | | | | | |
| **BNDI** | **Bandanaira** | **52.77** | **278** | P | **P** | | **00 47 37.0** | **-3.1** |
| **FITZ** | **Fitzroy Crossi** | **53.62** | **260** | P | **P** | | **00 47 45.5** | **-0.5** |
| **MBWA** | **Marble Bar** | **58.67** | **256** | P | **P** | | **00 48 21.0** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **59.80** | **242** | P | **P** | | **00 48 28.7** | **+0.9** |
| **LUWI** | **Luwuk** | **60.63** | **279** | P | **P** | | **00 48 33.3** | **-0.3** |
| **MORW** | **Morawa** | **61.07** | **246** | P | **P** | | **00 48 36.3** | **+0.1** |
| **TOLI2** | **Tolitoli** | **63.24** | **281** | P | **P** | | **00 48 50.5** | **+0.1** |
| TOLI2 | | | | IAmb | IAmb | | 00 48 55.2 | |
| | comp=Z,230nm,1.5s | | | | | | | |
| **GIRL** | **Giralia** | **63.49** | **253** | P | **P** | | **00 48 52.8** | **+1.0** |
| GIRL | | | | IAmb | IAmb | | 00 49 06.3 | |
| | comp=Z,298nm,1.5s | | | | | | | |
| **JHJ2** | **Mitsune** | **64.75** | **321** | P | **P** | | **00 48 58.2** | **-1.3** |
| **CASY** | **Casey** | **66.54** | **205** | P | **P** | | **00 49 10.4** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **66.61** | **268** | P | **P** | | **00 49 10.9** | **-0.5** |
| JAGI | | | | IAmb | IAmb | | 00 49 17.5 | |
| | comp=Z,74nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.10** | **323** | P | **P** | | **00 49 19.2** | **-0.7** |
| | comp=Z,8.8nm,0.5s,baz=149,slow=5.4,SNR=12 | | | | | | | |
| | comp=Z,8.8nm,0.5s | | | | | | | |
| **MAJO** | **Matsushiro** | **68.10** | **323** | P | **P** | | **00 49 19.3** | **-0.7** |
| MAJO | | | | IAmb | IAmb | | 00 49 21.3 | |
| | comp=Z,50nm,1.1s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.11** | **323** | P | **P** | | **00 49 19.5** | **-0.5** |
| **KIWB** | **Kanaga Island** | **69.28** | **0** | P | **P** | | **00 49 26.1** | **-0.5** |
| **UGM** | **Wanagama** | **70.22** | **268** | P | **P** | | **00 49 33.2** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **71.31** | **304** | P | **P** | | **00 49 38.4** | **-0.7** |
| YOJ | | | | IAmb | IAmb | | 00 49 52.7 | |
| | comp=Z,143nm,1.1s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **71.39** | **331** | P | **P** | | **00 49 39.9** | **+0.8** |
| JKA | | | | IAmb | IAmb | | 00 49 52.4 | |
| | comp=Z,156nm,1.4s | | | | | | | |
| **NACB** | **Ninganchiao** | **72.29** | **303** | P | **P** | | **00 49 44.1** | **-0.7** |
| NACB | | | | IAmb | IAmb | | 00 49 50.5 | |
| | comp=Z,127nm,1.4s | | | | | | | |
| **TPUB** | **Ta-pu** | **72.64** | **302** | P | **P** | | **00 49 45.8** | **-1.0** |
| TPUB | | | | IAmb | IAmb | | 00 49 48.6 | |
| | comp=Z,100nm,0.7s | | | | | | | |
| **TATO** | **Taipei** | **72.76** | **304** | P | **P** | | **00 49 47.2** | **-0.3** |
| TATO | | | | IAmb | IAmb | | 00 50 04.3 | |
| | comp=Z,211nm,1.4s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.65** | **345** | P | **P** | | **00 49 52.0** | **+0.1** |
| | comp=Z,19nm,0.8s,baz=157,slow=6.6,SNR=4.7 | | | | | | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **SAO** | **San Andreas Ge** | **75.90** | **44** | P | **P** | | **00 50 05.6** | **+0.8** |
| SAO | | | | IAmb | IAmb | | 00 50 14.1 | |
| | comp=Z,43nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.36** | **289** | P | **P** | | **00 51 14.2** | **+1.7** |
| | comp=Z,9.8nm,0.8s,baz=132,slow=1.8,SNR=1.6 | | | | | | | |
| | comp=Z,9.8nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.41** | **314** | PKiKP | **PKiKP** | | **00 56 40.7** | **-0.2** |
| | comp=Z,5.0nm,0.8s,baz=95,slow=2.2,SNR=1.8 | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.06** | **321** | PKP | **PKPdf** | | **00 56 55.0** | **-0.3** |
| | comp=Z,6.2nm,0.5s,baz=84,slow=2.0,SNR=7.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.23** | **350** | PKP | **PKPdf** | | **00 57 13.1** | **+0.6** |
| | comp=Z,3.6nm,0.4s,baz=26,slow=1.2,SNR=7.6 | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **144.12** | **337** | PKPbc | PKPbc | | 00 57 45.9 | -0.1 |
| **KWP** | **Kalwaria Pacla** | **144.12** | **337** | PKIKP | PKPbc | | 00 57 45.9 | -0.1 |
| **OJC** | **Ojcow** | **144.63** | **340** | | **PKPdf** | | **00 57 46.6** | **-0.3** |
| **BUR08** | **Bucovina Ar. S** | **144.70** | **333** | PKPbc | **PKPdf** | | **00 57 47.9** | **+0.6** |
| **BURAR** | **Bucovina Array** | **144.71** | **333** | PKPbc | **PKPab** | | **00 57 49.3** | **+0.4** |
| **BRTR** | **Keskin Array B** | **145.05** | **315** | PKP | **PKPdf** | | **00 57 49.0** | **+0.9** |
| | comp=Z,9.7nm,0.8s,baz=82,slow=3.1,SNR=12 | | | | | | | |
| **CLL** | **Collm** | **145.41** | **348** | PKPbc | **PKPdf** | | **00 57 49.1** | **+0.9** |
| **ANTO** | **Ankara** | **145.54** | **316** | PKPbc | **PKPbc** | | **00 57 50.8** | **+0.2** |
| **MMAI** | **Mount Meron Ar** | **146.51** | **303** | PKPbc | **PKPbc** | | **00 57 54.1** | **+0.7** |
| | comp=Z,39nm,0.6s,baz=67,slow=2.6,SNR=9.1 | | | | | | | |
| **BORA** | **Eskisehir** | **147.06** | **318** | PKPbc | **PKPbc** | | **00 57 54.2** | **-0.5** |
| **GEC2** | **GERESS Array S** | **147.58** | **346** | PKPbc | **PKPbc** | | **00 57 55.5** | **-0.3** |
| **GERES** | **GERESS Array B** | **147.58** | **346** | PKPbc | **PKPbc** | | **00 57 56.4** | **+0.7** |
| | comp=Z,6.0nm,0.4s,baz=14,slow=8.4,SNR=9.3 | | | | | | | |
| **STU** | **Stuttgart** | **148.51** | **351** | PKPbc | **PKPbc** | | **00 57 58.4** | **+0.4** |
| **ALN** | **Alexandroupoli** | **149.10** | **323** | PKPbc | **PKPbc** | | **00 57 58.0** | **-1.6** |
| **ALN** | **Alexandroupoli** | **149.10** | **323** | PKP2 | **PKPbc** | | **00 57 58.0** | **-1.6** |
| **ESDC** | **Sonseca Array** | **157.49** | **12** | PKPab | **PKPab** | | **00 58 42.7** | **0.0** |
| | comp=Z,1.2nm,0.7s,baz=339,slow=5.0,SNR=1.2 | | | | | | | |

*IDC* ***19*** *00:45:58.7±10.0, 18.°06S×177.°90W, h536km±97km, mb4.0/4, mbtmp4.9/5, Error ellipse: s-maj=96.3km s-min=43.5km az=110.0*
*NEIC* ***19*** *00:46:00.5±1.8, 18.°2S±0.°1×178.°0W±0.°2, h546km±9km, mb4.8/26, Error ellipse: s-maj=24.4km s-min=13.9km az=66.0*
**ISC 19 00:45:59.9±0.8, 18.°2S±0.°1×178.°0W±0.°1, h550km, n60, σ1s18/59, mb4.8/18, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **MSVF** | **Nonsavu** | **3.79** | **277** | P | **P** | | **00 47 22.8** | **+2.4** |
| **PINNC** | **Pines Island,** | **14.32** | **250** | P | **P** | | **00 49 01.6** | **-0.8** |
| **DZM** | **Mont Dzumac** | **15.10** | **253** | P | **P** | | **00 49 09.7** | **-0.9** |
| **DZM** | **Mont Dzumac** | **15.10** | **253** | P | **P** | | **00 49 11.1** | **+0.5** |
| | 18nm,0.9s,baz=130,slow=21,SNR=6.9 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.88** | **259** | P | **P** | | **00 49 26.5** | **-1.1** |
| KOUNC | | | | IAmb | IAmb | | 00 49 39.6 | |
| | comp=Z,39nm,1.1s | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.25** | **200** | P | **P** | | **00 50 57.9** | **-2.4** |
| **MLZ** | **Mavora Lakes** | **29.43** | **200** | P | **P** | | **00 51 16.9** | **-2.4** |
| **EIDS** | **Eidsvold** | **29.53** | **251** | P | **P** | | **00 51 20.3** | **-0.2** |
| **WHZ** | **Wether Hill Ro** | **29.95** | **200** | P | **P** | | **00 51 21.3** | **-2.5** |
| WHZ | | | | IAmb | IAmb | | 00 51 32.6 | |
| | comp=Z,29nm,1.5s | | | | | | | |
| **ARMA** | **Armidale** | **30.12** | **240** | P | **P** | | **00 51 26.2** | **+0.5** |
| ARMA | | | | IAmb | IAmb | | 00 51 52.9 | |
| | comp=Z,19nm,1.1s | | | | | | | |
| **CTA** | **Charters Tower** | **33.78** | **261** | P | **P** | | **00 51 57.0** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=164,slow=20,SNR=1.9 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | **P** | | **00 51 57.3** | **+0.5** |
| **CAN** | **Canberra** | **33.83** | **233** | P | **P** | | **00 51 58.4** | **+1.4** |
| CAN | | | | IAmb | IAmb | | 00 51 59.9 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **33.83** | **233** | P | **P** | | **00 51 59.1** | **+2.1** |
| **PMG** | **Port Moresby** | **34.90** | **280** | P | **P** | | **00 52 06.7** | **+0.6** |
| **PMG** | **Port Moresby** | **34.90** | **280** | P | **P** | | **00 52 07.3** | **+1.1** |
| **TOO** | **Toolangi** | **37.28** | **231** | P | **P** | | **00 52 26.8** | **+1.3** |
| TOO | | | | IAmb | IAmb | | 00 52 29.0 | |
| | comp=Z,38nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **37.50** | **271** | P | **P** | | **00 52 28.3** | **+0.7** |
| COEN | | | | IAmb | IAmb | | 00 52 29.5 | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.82** | **242** | P | **P** | | **00 52 38.7** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.82** | **242** | P | **P** | | **00 52 39.0** | **+0.9** |
| | comp=Z,16nm,0.7s,baz=100,slow=13,SNR=4.2 | | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.60** | **241** | P | **P** | | **00 53 16.9** | **+0.9** |
| **WB0** | **Warramunga Arr** | **44.93** | **260** | P | **P** | | **00 53 26.4** | **0.0** |
| WB0 | | | | IAmb | IAmb | | 00 53 48.2 | |
| | comp=Z,58nm,1.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.95** | **260** | P | **P** | | **00 53 26.6** | **+0.1** |
| WB2 | | | | IAmb | IAmb | | 00 53 33.0 | |
| | comp=Z,39nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.96** | **260** | P | **P** | | **00 53 26.9** | **+0.2** |
| | comp=Z,11nm,0.7s,baz=96,slow=7.3,SNR=6.9 | | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **45.08** | **255** | P | **P** | | **00 53 28.1** | **+0.5** |
| AS31 | | | | IAmb | IAmb | | 00 53 29.3 | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **255** | P | **P** | | **00 53 28.2** | **+0.7** |
| | comp=Z,35nm,0.6s,baz=86,slow=8.8,SNR=14 | | | | | | | |
| | comp=Z,35nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **49.18** | **269** | P | **P** | | **00 53 58.1** | **-0.3** |
| MTN | | | | IAmb | IAmb | | 00 53 58.6 | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **50.23** | **245** | P | **P** | | **00 54 05.9** | **0.0** |
| FORT | | | | IAmb | IAmb | | 00 54 06.4 | |
| | comp=Z,25nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **50.85** | **264** | P | **P** | | **00 54 10.2** | **-0.4** |
| **FAKI** | **Fak Fak** | **51.02** | **281** | P | **P** | | **00 54 11.5** | **-0.4** |
| FAKI | | | | IAmb | IAmb | | 00 54 36.3 | |
| | comp=Z,40nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.36** | **261** | P | **P** | | **00 54 28.5** | **-0.2** |
| **SOEI** | **Soe** | **56.46** | **270** | P | **P** | | **00 54 50.2** | **-0.3** |
| SOEI | | | | IAmb | IAmb | | 00 55 14.7 | |
| | comp=Z,94nm,1.3s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.21** | **256** | P | **P** | | **00 55 01.3** | **-0.8** |
| **MBWA** | **Marble Bar** | **58.38** | **256** | P | **P** | | **00 55 03.3** | **0.0** |
| **GIRL** | **Giralia** | **63.18** | **253** | P | **P** | | **00 55 35.2** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **66.42** | **269** | P | **P** | | **00 55 54.2** | **-1.3** |
| **MJAR** | **Matsushiro Arr** | **68.39** | **323** | P | **P** | | **00 56 06.2** | **-0.8** |
| | comp=Z,3.0nm,0.7s,baz=138,slow=5.4,SNR=4.9 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **UGM** | **Wanagama** | **70.03** | **268** | P | **P** | | **00 56 16.8** | **-0.6** |
| **TPUB** | **Ta-pu** | **72.76** | **302** | P | **P** | | **00 56 31.2** | **-1.8** |
| TPUB | | | | IAmb | IAmb | | 00 56 32.2 | |
| | comp=Z,25nm,0.8s | | | | | | | |
| **SMAI** | **San Martin Ant** | **80.72** | **159** | P | **P** | | **00 57 18.0** | **+2.3** |
| **MKAR** | **Makanchi Array** | **109.64** | **314** | PKiKP | **PKiKP** | | **01 03 26.5** | **-1.9** |
| | comp=Z,2.3nm,1.0s,baz=82,slow=1.1,SNR=1.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.34** | **321** | PKP | **PKPdf** | | **01 03 41.9** | **-1.0** |
| | comp=Z,0.8nm,0.4s,baz=90,slow=2.6,SNR=1.4 | | | | | | | |
| **BNN** | **Bunyan** | **144.16** | **312** | PKPbc | PKPbc | | 01 04 32.5 | -0.8 |
| **KWP** | **Kalwaria Pacla** | **144.51** | **337** | | **PKPdf** | | **01 04 33.2** | **-0.7** |
| **BUR08** | **Bucovina Ar. S** | **145.06** | **332** | PKPbc | **PKPbc** | | **01 04 36.1** | **+0.3** |
| **BURAR** | **Bucovina Array** | **145.07** | **332** | PKPbc | **PKPbc** | | **01 04 36.1** | **+0.2** |
| **BRTR** | **Keskin Array B** | **145.28** | **315** | PKPbc | **PKPdf** | | **01 04 35.9** | **+0.2** |
| **BRTR** | **Keskin Array B** | **145.28** | **315** | PKPbc | **PKPdf** | | **01 04 36.1** | **+0.4** |
| | comp=Z,3.0nm,0.7s,baz=79,slow=3.3,SNR=7.4 | | | | | | | |
| **CLL** | **Collm** | **145.86** | **348** | PKPbc | **PKPdf** | | **01 04 36.9** | **+0.8** |
| **CLL** | **Collm** | **145.86** | **348** | *i* PKPbc | **PKPdf** | | **01 04 37.4** | **+1.3** |
| CLL | | | | *i* pPKPdf | pPKPab | | 01 06 43.0 | 0.0 |
| **MLR** | **Muntele Rosu** | **146.30** | **329** | PKPbc | **PKPdf** | | **01 04 38.5** | **+1.3** |
| **MMAI** | **Mount Meron Ar** | **146.64** | **303** | PKPbc | **PKPbc** | | **01 04 40.9** | **+0.1** |
| | comp=Z,3.7nm,0.5s,baz=70,slow=7.2,SNR=9.6 | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **147.00** | **300** | PKPbc | **PKPdf** | | **01 04 40.3** | **+1.7** |
| **BORA** | **Eskisehir** | **147.31** | **317** | PKPbc | **PKPdf** | | **01 04 40.9** | **+1.9** |
| **GRA1** | **Grafenberg Arr** | **147.74** | **349** | PKPbc | **PKPbc** | | **01 04 42.5** | **-0.5** |
| **KHC** | **Kasperske Hory** | **147.78** | **346** | | **PKPbc** | | **01 04 42.0** | **-1.2** |
| **GEC2** | **GERESS Array S** | **148.02** | **345** | PKPbc | **PKPbc** | | **01 04 42.6** | **-1.2** |
| **GERES** | **GERESS Array B** | **148.02** | **345** | PKPbc | **PKPbc** | | **01 04 42.9** | **-0.9** |
| **GERES** | **GERESS Array B** | **148.02** | **345** | PKPbc | **PKPbc** | | **01 04 43.1** | **-0.7** |
| | comp=Z,1.2nm,0.5s,baz=45,slow=1.9,SNR=5.9 | | | | | | | |
| **SABO** | **M.te Sabotino** | **150.70** | **343** | PKPbc | **PKPbc** | | **01 04 48.2** | **

comp=Z,1.4nm,0.6s,baz=87,slow=11,SNR=14
CTAO Charters Tower 33.86 261 P P 00 53 26.3 -0.7
CTAO Charters Tower 33.86 261 P P 00 53 27.2 +0.2
CAN Canberra 33.91 233 P P 00 53 26.4 -0.9
CAN IAmb IAmb 00 53 29.2
comp=Z,26nm,0.9s
CAN Canberra 33.91 233 P P 00 53 28.5 +1.2
PMG Port Moresby 34.96 280 P P 00 53 36.4 +0.2
PMG Port Moresby 34.96 280 P P 00 53 37.4 +1.2
TOO Toolangi 37.36 231 P P 00 53 56.5 +0.8
TOO IAmb IAmb 00 54 13.0
comp=Z,20nm,1.1s
COEN Coen 37.57 271 P P 00 53 57.9 +0.3
MANU Manus Island 37.62 291 P P 00 53 58.9 +0.8
STKA Stephens Creek 38.91 242 P P 00 54 09.2 +0.9
STKA Stephens Creek 38.91 242 P P 00 54 09.4 +1.1
comp=Z,19nm,0.5s,baz=88,slow=9.9,SNR=12
comp=Z,19nm,0.5s
BBOO Buckleboo 43.68 241 P P 00 54 45.8 -0.1
BBOO IAmb IAmb 00 54 47.4
comp=Z,36nm,0.8s
WB0 Warramunga Arr 45.01 260 P P 00 54 55.9 -0.3
WB0 IAmb IAmb 00 54 56.6
comp=Z,50nm,0.9s
WRA Warramunga Arr 45.04 260 P P 00 54 56.0 -0.5
comp=Z,24nm,0.4s,baz=95,slow=7.1,SNR=50
comp=Z,24nm,0.4s
AS31 Alice Springs 45.16 254 P P 00 54 57.2 -0.2
AS31 IAmb IAmb 00 54 58.7
comp=Z,29nm,0.5s
ASAR Alice Springs 45.16 254 P P 00 54 57.4 -0.1
comp=Z,39nm,0.4s,baz=90,slow=8.0,SNR=40
comp=Z,39nm,0.4s
MTN Manton Dam 49.25 269 P P 00 55 27.5 -0.6
MTN IAmb IAmb 00 55 28.2
comp=Z,32nm,0.9s
FORT Forrest 50.31 245 P P 00 55 34.8 -0.8
FORT IAmb IAmb 00 55 49.7
comp=Z,88nm,1.1s
KNRA Kununurra 50.92 264 P P 00 55 39.6 -0.6
KNRA IAmb IAmb 00 55 45.5
comp=Z,38nm,1.1s
FAKI Fak Fak 51.08 281 P P 00 55 40.6 -0.9
FAKI IAmb IAmb 00 55 47.5
comp=Z,35nm,1.1s
DRV Dumont d'Urvil 55.56 199 P P 00 56 13.4 +1.3
SOEI Soe 56.53 270 P P 00 56 20.2 +0.3
SOEI IAmb IAmb 00 56 27.0
comp=Z,72nm,0.8s
PSA00 Pilbara Seismi 58.29 255 P P 00 56 30.9 -0.7
NWAO Narrogin (SRO) 59.49 242 P P 00 56 39.3 -0.2
TOLI2 Tolitoli 63.22 281 P P 00 57 04.4 +0.4
TOLI2 IAmb IAmb 00 57 24.6
comp=Z,36nm,1.1s
MJAR Matsushiro Arr 68.39 323 P P 00 57 35.1 -0.6
comp=Z,6.6nm,0.4s,baz=136,slow=6.1,SNR=4.6
comp=Z,6.6nm,0.4s
MAJO Matsushiro 68.40 323 P P 00 57 35.3 -0.4
MJB9 Matsu-Tunnel 68.40 323 P P 00 57 36.4 +0.7
JOW Kunigami 68.75 309 P P 00 57 38.4 +0.4
SSLB Suanglung 72.77 303 P P 00 58 00.4 -1.3
TPUB Ta-pu 72.79 302 P P 00 58 00.3 -1.5
PETK Petropavlovsk- 74.05 345 P P 00 58 08.6 +0.3
comp=Z,9.8nm,0.7s,baz=114,slow=7.1,SNR=12
comp=Z,9.8nm,0.7s
USRK Ussuriysk Ar. 77.09 326 P P 00 58 25.3 0.0
USRK Ussuriysk Ar. 77.09 326 P P 00 58 26.2 +0.9
comp=Z,8.2nm,1.0s,baz=126,slow=5.8,SNR=4.8
comp=Z,8.2nm,1.0s
SEY Seymchan 84.14 347 P P 00 59 00.8 -0.4
comp=Z,7.9nm,0.4s,baz=147,slow=6.0,SNR=10
comp=Z,7.9nm,0.4s
ILAR Eielson Array 86.04 13 P P 00 59 09.7 -0.7
comp=Z,2.7nm,0.4s,baz=220,slow=4.8,SNR=12
comp=Z,2.7nm,0.4s
PDAR Pinedale Array 87.22 43 P P 00 59 17.0 +0.2
comp=Z,5.0nm,0.8s,baz=231,slow=3.4,SNR=1.3
comp=Z,5.0nm,0.8s
ZALV Zalesovo Beam 108.73 322 PKiKP PKiKP 01 04 53.4 -0.9
comp=Z,0.7nm,0.4s,baz=90,slow=2.2,SNR=1.9
MKAR Makanchi Array 109.64 314 PKiKP PKiKP 01 04 55.6 -0.8
comp=Z,1.0nm,0.4s,baz=101,slow=2.1,SNR=8.2
KURBB Kurchatov Arra 112.39 318 PKiKP PKiKP 01 05 01.8 +0.4
comp=Z,0.3nm,0.3s,baz=84,slow=2.1,SNR=1.6
BVAR Borovoye Array 117.34 321 PKP PKPdf 01 05 10.4 -0.5
comp=Z,1.8nm,0.3s,baz=80,slow=2.3,SNR=12
ARCES ARCESS Array B 126.66 350 PKP PKPdf 01 05 27.5 -0.8
comp=Z,0.8nm,0.4s,baz=34,slow=1.9,SNR=13
FINES FINESS Array B 133.57 344 PKP PKPdf 01 05 40.9 -0.6
comp=Z,2.0nm,0.8s,baz=36,slow=2.3,SNR=5.1
AKASG Malin Array Be 141.01 333 PKP PKiKP 01 05 57.1 -1.4
comp=Z,1.1nm,0.4s,baz=46,slow=3.0,SNR=5.3
EKA Eskdalemuir Ar 142.69 5 PKhKP PKPpre 01 05 54.9
comp=Z,1.0nm,0.4s,baz=320,slow=2.5,SNR=11
BNN Bunyan 144.17 312 PKPdf 01 06 01.6 -0.2
BR131 Keskin Array S 145.30 315 PKPbc 01 06 04.5 -0.3
BRTR Keskin Array B 145.30 315 PKPbc PKPbc 01 06 04.8 -0.1
comp=Z,5.7nm,0.5s,baz=50,slow=3.2,SNR=31
ANTO Ankara 145.79 316 PKPbc 01 06 06.2 0.0
BR231 Keskin MP Arra 145.82 316 PKPbc 01 06 06.2 -0.2
CLL Collm 145.82 348 PKPbc 01 06 06.0 +0.2
CLL Collm 145.82 348 *i* PKPbc PKPbc 01 06 05.9 +0.2
CLL *i* (PKPab) PKPab 01 06 07.9 +0.2
comp=Z,24nm,0.9s
CLL *ep*PKPdf pPKPdf 01 08 24.0 +3.9
UPC Upice 145.87 344 *e*PKP PKPbc 01 06 06.6 +0.6
DPC Dobruska-Polom 145.93 344 *e*PKP PKPbc 01 06 06.9 +0.7
BRG Berggiesshubel 146.03 347 *e*P PKPbc 01 06 07.0 +0.6
BRG Amp 01 06 09.4
comp=Z,6.4nm,0.8s
KRLC Kraliky 146.06 343 *e*PKP PKPbc 01 06 06.7 +0.1
PVCC Panska Ves 146.21 346 *e*PKP PKPbc 01 06 07.6 +0.7
MLR Muntele Rosu 146.29 329 PKPbc 01 06 07.2 -0.3
MLR Muntele Rosu 146.29 329 PKPbc PKPbc 01 06 07.6 +0.1
comp=Z,6.3nm,0.6s,baz=335,slow=7.2,SNR=13
HSKC Hora Svate Kat 146.39 347 *e*PKP PKPbc 01 06 07.4 0.0
MMAI Mount Meron Ar 146.67 303 PKPbc PKPbc 01 06 09.5 +0.7
comp=Z,5.9nm,0.4s,baz=73,slow=6.5,SNR=17
PRU Pruhonice 146.72 345 *e*PKP PKPbc 01 06 08.8 +0.5
VRAC Vranov 146.80 343 PKPbc PKPbc 01 06 08.8 +0.2
comp=Z,3.3nm,0.5s,baz=55,slow=4.8,SNR=4.4
PSZ Piszkesteto 146.95 338 PKPbc PKPbc 01 06 08.5 -0.6
GRA1 Grafenberg Arr 147.71 349 PKPbc PKPbc 01 06 11.1 +0.2
GRFO Grafenberg 147.71 349 PKPbc PKPbc 01 06 11.1 +0.2
KHC Kasperske Hory 147.75 346 PKPbc PKPbc 01 06 11.2 +0.1
KHC Kasperske Hory 147.75 346 *e*PKP PKPbc 01 06 11.4 +0.3
GERES GERESS Array B 147.98 345 PKPbc PKPbc 01 06 11.9 +0.2
GERES GERESS Array B 147.98 345 PKPbc PKPbc 01 06 11.7 0.0
comp=Z,2.4nm,0.4s,baz=8.5,slow=11,SNR=22
CONA Conrad Observa 148.26 342 *e*PKiKP PKPbc 01 06 12.9 +0.4
comp=Z,31nm,1.4s,SNR=8.1
RONA Rosalia, Austr 148.33 342 *e*PKiKP PKPbc 01 06 13.1 +0.5
comp=Z,17nm,1.2s,SNR=6.6
MOA Molln 148.77 344 *i* PKiKP PKPbc 01 06 14.0 +0.3
comp=Z,9.5nm,1.3s
ARSA Arzberg 148.97 342 *e*PKiKP PKPbc 01 06 13.9 -0.2
comp=Z,8.8nm,1.3s
BIOA Bad Ischl, Aus 149.07 345 *e*PKiKP PKPbc 01 06 13.9 -0.4
comp=Z,14nm,1.5s
BFO Black Forest 149.49 352 PKPbc 01 06 14.7 -0.6
LESA Schwarzleotal 149.56 346 *i* PKiKP PKPbc 01 06 15.5 -0.1
comp=Z,4.5nm,0.4s
KBA Koelnbreinsper 149.72 345 *e*PKiKP PKPbc 01 06 15.4 -0.7
comp=Z,4.8nm,0.5s,SNR=6.7
WATA Walderalm 149.89 347 *e*PKP PKPbc 01 06 16.2 -0.2
comp=Z,5.5nm,0.5s,SNR=9.4
RETA Reutte 149.91 348 *e*PKP PKPbc 01 06 16.4 0.0
comp=Z,4.7nm,0.5s,SNR=4.6
WTTA Wattenberg 149.94 347 *e*PKP PKPbc 01 06 16.6 0.0
comp=Z,7.8nm,0.4s,SNR=10
MOTA Moosalm 149.98 348 *i* PKP PKPbc 01 06 16.4 -0.3
comp=Z,19nm,1.3s
MYKA Terra Mystica 150.06 344 *i* PKP PKPbc 01 06 15.8 -1.0
comp=Z,3.3nm,0.4s
SQTA Sankt Quirin 150.07 347 *e*PKP PKPbc 01 06 16.8 -0.1
comp=Z,4.3nm,0.5s,SNR=5.2
ABTA Abfaltersbach 150.23 345 *e*PKP PKPbc 01 06 16.7 -0.5
comp=Z,7.2nm,0.5s,SNR=9.6
DAVA Damuels 150.26 349 *i* PKP PKiKP 01 06 17.6 -0.3
comp=Z,34nm,1.5s
FETA Feichten 150.36 348 *i* PKP PKPbc 01 06 17.4 -0.2
comp=Z,11nm,1.1s
SABO M.te Sabotino 150.67 343 PKPbc PKPbc 01 06 17.8 -0.4
DAVOX Davos/Dischmat 150.75 349 PKPbc PKiKP 01 06 18.7 -0.2
comp=Z,7.2nm,0.4s,baz=238,slow=2.9,SNR=15
KEST Kesra 161.36 341 PKPab PKPab 01 07 14.9 +0.6
comp=Z,2.4nm,0.7s,baz=234,slow=1.8,SNR=6.9

*IDC* ***19*** *00:47:57.5±27.0, 18.48S×177.06W, h272km±222km, mb4.5/3, mbtmp5.1/3, Error ellipse: s-maj=176.8km s-min=48.6km az=120.0*
*NEIC* ***19*** *00:48:32.1±2.3, 18.4S±0.2×178.0W±0.2, h577km±10km, mb4.8/15, Error ellipse: s-maj=30.1km s-min=23.0km az=129.0*

**ISC 19 00:48:32.3±0.8, 18.2S±0.2×178.0W±0.2, h600km, n63, σ0.89/63, mb4.8/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.79 | 277 | P | P | | P | 00 49 55.9 | -0.5 |
| BHW | Baring Head | 23.90 | 193 | P | P | | P | 00 52 59.0 | -1.6 |
| BHW | | | | IAmb | IAmb | | IAmb | 00 53 03.7 | |
| | comp=Z,33nm,1.1s | | | | | | | | |
| PLWZ | Palliser | 23.97 | 193 | P | P | | P | 00 53 00.7 | -0.6 |
| THZ | Tophouse | 24.71 | 196 | P | P | | P | 00 53 08.6 | +0.7 |
| THZ | | | | IAmb | IAmb | | IAmb | 00 53 32.8 | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| CTAO | Charters Tower | 33.78 | 261 | P | P | | P | 00 54 26.7 | +0.5 |
| CAN | Canberra | 33.82 | 233 | P | P | | P | 00 54 27.6 | +1.2 |
| PMG | Port Moresby | 34.90 | 280 | P | P | | P | 00 54 36.5 | +0.9 |
| PMG | | | | IAmb | IAmb | | IAmb | 00 54 39.9 | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| TOO | Toolangi | 37.27 | 231 | P | P | | P | 00 54 56.0 | +1.2 |
| TOO | | | | IAmb | IAmb | | IAmb | 00 55 20.4 | |
| | comp=Z,28nm,1.1s | | | | | | | | |
| COEN | Coen | 37.50 | 271 | P | P | | P | 00 54 57.9 | +1.0 |
| COEN | | | | IAmb | IAmb | | IAmb | 00 54 59.5 | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| STKA | Stephens Creek | 38.82 | 242 | P | P | | P | 00 55 08.5 | +1.2 |
| WB0 | Warramunga Arr | 44.93 | 260 | P | P | | P | 00 55 54.2 | -1.1 |
| WB0 | | | | IAmb | IAmb | | IAmb | 00 55 55.9 | |
| | comp=Z,38nm,0.8s | | | | | | | | |
| WB2 | Warramunga Arr | 44.95 | 260 | P | P | | P | 00 55 54.5 | -1.0 |
| ASAR | Alice Springs | 45.08 | 255 | P | P | | P | 00 55 54.6 | -2.0 |
| ASAR | Alice Springs | 45.08 | 255 | P | P | | P | 00 55 53.3 | -3.2 |
| | comp=Z,9.9nm,0.6s,baz=92,slow=7.8,SNR=7.6 | | | | | | | | |
| | comp=Z,9.9nm,0.6s | | | | | | | | |
| KNRA | Kununurra | 50.85 | 264 | P | P | | P | 00 56 38.1 | -1.2 |
| KNRA | | | | IAmb | IAmb | | IAmb | 00 56 54.2 | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| SOEI | Soe | 56.46 | 270 | P | P | | P | 00 57 19.7 | +0.6 |
| SOEI | | | | IAmb | IAmb | | IAmb | 00 57 28.7 | |
| | comp=Z,71nm,1.0s | | | | | | | | |
| MA2 | Magadan | 81.61 | 345 | P | P | | P | 00 59 46.5 | -1.7 |
| | comp=Z,28nm,1.2s,baz=103,slow=1.3,SNR=2.0 | | | | | | | | |
| | comp=Z,28nm,1.2s | | | | | | | | |
| J17K | VABM Dome | 82.70 | 8 | P | P | | P | 00 59 54.0 | +0.4 |
| J17K | | | | IAmb | IAmb | | IAmb | 01 00 23.2 | |
| | comp=Z,51nm,1.1s | | | | | | | | |
| GHO | Glory Hole Cre | 83.03 | 13 | P | P | | P | 00 59 54.9 | -0.5 |
| SCM | Sheep Creek Mo | 83.44 | 14 | P | P | | P | 00 59 57.3 | -0.2 |
| SEY | Seymchan | 84.18 | 347 | P | P | | P | 01 00 00.3 | -0.7 |
| | comp=Z,23nm,1.0s,baz=85,slow=2.8,SNR=4.2 | | | | | | | | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| MKAR | Makanchi Array | 109.64 | 314 | PKiKP | PKiKP | | PKiKP | 01 05 55.4 | -0.4 |
| | comp=Z,0.6nm,0.5s,baz=101,slow=2.1,SNR=1.4 | | | | | | | | |
| KURBB | Kurchatov Arra | 112.38 | 318 | PKiKP | PKiKP | | PKiKP | 01 06 00.6 | -0.2 |
| | comp=Z,0.7nm,0.6s,baz=104,slow=1.9,SNR=2.2 | | | | | | | | |
| BVAR | Borovoye Array | 117.34 | 321 | PKP | PKiKP | | PKiKP | 01 06 11.0 | +0.6 |
| | comp=Z,1.3nm,0.5s,baz=90,slow=2.0,SNR=2.1 | | | | | | | | |
| ARCES | ARCESS Array B | 126.70 | 350 | PKP | PKiKP | | PKiKP | 01 06 28.3 | -0.1 |
| | comp=Z,0.5nm,0.3s,baz=43,slow=1.1,SNR=4.5 | | | | | | | | |
| BRTR | Keskin Array B | 145.28 | 315 | PKPbc | PKPab | | PKPab | 01 07 05.3 | -0.4 |
| | comp=Z,3.7nm,0.7s,baz=59,slow=3.5,SNR=6.1 | | | | | | | | |
| ASF | Jabal al Asfar | 145.68 | 301 | PKPbc | PKPbc | | PKPbc | 01 07 06.5 | +0.9 |
| | comp=Z,3.6nm,0.7s,baz=229,slow=0.1,SNR=4.6 | | | | | | | | |
| CLL | Collm | 145.86 | 348 | PKPbc | PKPbc | | PKPbc | 01 07 05.9 | +0.6 |
| CLL | Collm | 145.86 | 348 | *i* PKPbc | PKPbc | | PKPbc | 01 07 06.1 | +0.8 |
| | comp=Z,15nm,0.8s | | | | | | | | |
| CLL | | | | *i* pPKPdf | pPKPab | | | 01 09 17.7 | -2.4 |
| UPC | Upice | 145.91 | 344 | *e*PKP | PKPbc | | PKPbc | 01 07 06.8 | +1.3 |
| DPC | Dobruska-Polom | 145.97 | 344 | *e*PKP | PKPbc | | PKPbc | 01 07 06.9 | +1.1 |
| BRG | Berggiesshubel | 146.07 | 346 | P | PKPbc | | PKPbc | 01 07 07.1 | +1.2 |
| BRG | | | | Amp | | | | 01 07 07.8 | |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| KRLC | Kraliky | 146.09 | 343 | *e*PKP | PKPbc | | PKPbc | 01 07 06.9 | +0.8 |
| PVCC | Panska Ves | 146.25 | 346 | *e*PKP | PKiKP | | PKiKP | 01 07 07.8 | -0.9 |
| MLR | Muntele Rosu | 146.31 | 329 | | PKPbc | | PKPbc | 01 07 07.8 | +0.8 |
| MMAI | Mount Meron Ar | 146.64 | 303 | PKPbc | PKiKP | | PKiKP | 01 07 10.0 | -0.2 |
| | comp=Z,6.3nm,0.5s,baz=67,slow=6.5,SNR=8.5 | | | | | | | | |
| PRU | Pruhonice | 146.75 | 345 | *e*PKP | PKiKP | | PKiKP | 01 07 09.0 | -0.8 |
| GHAJ | Ghor Haditha | 147.00 | 300 | PKPbc | PKiKP | | PKiKP | 01 07 10.3 | -0.5 |
| BORA | Eskisehir | 147.31 | 317 | PKPbc | PKPbc | | PKPbc | 01 07 10.5 | +0.8 |
| ZVC | Zvikov | 147.35 | 345 | *e*PKP | PKiKP | | PKiKP | 01 07 11.0 | 0.0 |
| GRA1 | Grafenberg Arr | 147.75 | 349 | | PKPbc | | PKPbc | 01 07 10.9 | +0.5 |
| KHC | Kasperske Hory | 147.78 | 346 | PKPbc | PKiKP | | PKiKP | 01 07 11.9 | -0.1 |
| KHC | Kasperske Hory | 147.78 | 346 | *e*PKP | PKiKP | | PKiKP | 01 07 11.9 | -0.1 |
| GERES | GERESS Array B | 148.02 | 345 | PKPbc | PKPbc | | PKPbc | 01 07 11.8 | +0.5 |
| GERES | GERESS Array B | 148.02 | 345 | PKPbc | PKPbc | | PKPbc | 01 07 11.9 | +0.6 |
| | comp=Z,2.1nm,0.4s,baz=12,slow=10.0,SNR=8.9 | | | | | | | | |
| CONA | Conrad Observa | 148.29 | 342 | *i* PcP | PKiKP | | PKiKP | 01 07 13.0 | -0.1 |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| RONA | Rosalia, Austr | 148.37 | 341 | *e*PcP | PKiKP | | PKiKP | 01 07 13.2 | 0.0 |
| | comp=Z,3.1nm,0.6s,SNR=5.1 | | | | | | | | |
| BIOA | Bad Ischl, Aus | 149.11 | 345 | *e*PcP | PKiKP | | PKPab | 01 07 21.6 | +0.9 |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| ELL | Elmali | 149.30 | 313 | PKPbc | PKiKP | | PKiKP | 01 07 15.6 | -0.1 |
| LESA | Schwarzleotal | 149.59 | 346 | *e*PcP | PKiKP | | PKiKP | 01 07 15.8 | -0.1 |
| | comp=Z,1.2nm,0.4s | | | | | | | | |
| KBA | Koelnbreinsper | 149.75 | 345 | *e*PcP | PKPbc | | PKiKP | 01 07 15.9 | +0.3 |
| | comp=Z,2.8nm,0.5s | | | | | | | | |
| WATA | Walderalm | 149.93 | 347 | *e*PcP | PKiKP | | PKiKP | 01 07 16.7 | +0.1 |
| | comp=Z,5.6nm,0.6s,SNR=5.3 | | | | | | | | |
| RETA | Reutte | 149.95 | 348 | *e*PcP | PKiKP | | PKiKP | 01 07 16.6 | 0.0 |
| | comp=Z,1.2nm,0.5s | | | | | | | | |
| WTTA | Wattenberg | 149.98 | 347 | *e*PcP | PKiKP | | PKiKP | 01 07 16.9 | +0.1 |
| | comp=Z,8.9nm,0.6s,SNR=8.8 | | | | | | | | |
| MOTA | Moosalm | 150.02 | 348 | *e*PcP | PKiKP | | PKiKP | 01 07 16.8 | 0.0 |
| | comp=Z,4.5nm,0.9s | | | | | | | | |
| MYKA | Terra Mystica | 150.09 | 344 | *i* PcP | PKPbc | | PKiKP | 01 07 16.5 | +0.1 |
| | comp=Z,4.5nm,0.5s | | | | | | | | |
| SQTA | Sankt Quirin | 150.11 | 347 | *e*PcP | PKiKP | | PKiKP | 01 07 17.1 | +0.2 |
| | comp=Z,5.8nm,0.6s | | | | | | | | |
| ABTA | Abfaltersbach | 150.27 | 345 | *e*PcP | PKPbc | | PKiKP | 01 07 17.0 | +0.3 |
| | comp=Z,8.4nm,0.6s,SNR=7.8 | | | | | | | | |
| DAVA | Damuels | 150.31 | 349 | *i* PcP | PKiKP | | PKiKP | 01 07 18.2 | +0.8 |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| FETA | Feichten | 150.40 | 348 | *e*PcP | PKiKP | | PKiKP | 01 07 18.0 | +0.4 |
| | comp=Z,6.7nm,0.9s | | | | | | | | |
| DAVOX | Davos/Dischmat | 150.79 | 349 | PKPbc | PKiKP | | PKiKP | 01 07 19.4 | +0.9 |
| | comp=Z,8.1nm,0.5s,baz=243,slow=4.4,SNR=7.0 | | | | | | | | |
| FNA | Florina | 152.03 | 328 | PKPbc | PKPbc | | PKPbc | 01 07 21.0 | +0.2 |
| BNI | Bardonecchia | 152.97 | 353 | PKPbc | PKiKP | | PKiKP | 01 07 23.8 | +0.8 |

*IDC* ***19*** *00:51:25.2±6.0, 18.24S×177.20W, h490km±63km, mb3.9/8, mbtmp4.7/8, Error ellipse: s-maj=44.5km s-min=22.6km az=151.0*
*NEIC* ***19*** *00:51:27.3±2.2, 17.7S±0.2×177.9W±0.1, h468km±9km, mb4.7/12, Error ellipse: s-maj=25.9km s-min=19.4km az=155.0*

**ISC 19 00:51:25.0±0.6, 17.6S±0.1×177.8W±0.1, h450km, n49, σ2.33/44, mb4.5/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.94 | 267 | P | P | | P | 00 52 41.8 | +2.1 |
| NIUE | Niue | 7.64 | 102 | P | P | | P | 00 53 19.6 | +3.0 |
| DSZ | Denniston Nort | 25.66 | 198 | P | P | | P | 00 56 17.1 | 0.0 |
| DSZ | | | | IAmb | IAmb | | IAmb | 00 56 29.5 | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| LTZ | Lake Taylor | 26.48 | 196 | P | P | | P | 00 56 24.9 | +0.4 |
| LTZ | | | | IAmb | IAmb | | IAmb | 00 56 27.4 | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| CTAO | Charters Tower | 34.05 | 260 | P | P | | P | 00 57 32.2 | +1.9 |
| CTAO | | | | IAmb | IAmb | | IAmb | 00 57 33.2 | |
| | comp=Z,60nm,1.0s | | | | | | | | |
| COEN | Coen | 37.66 | 270 | P | P | | P | 00 58 03.2 | +2.7 |
| WB0 | Warramunga Arr | 45.20 | 259 | P | P | | P | 00 59 01.2 | +0.5 |
| WRA | Warramunga Arr | 45.24 | 259 | P | P | | P | 00 59 01.6 | +0.7 |
| | comp=Z,34nm,1.1s,baz=96,slow=7.5,SNR=9.5 | | | | | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| AS31 | Alice Springs | 45.41 | 254 | P | P | | P | 00 59 02.2 | -0.1 |
| AS31 | | | | IAmb | IAmb | | IAmb | 00 59 15.9 | |
| | comp=Z,27nm,1.1s | | | | | | | | |
| ASAR | Alice Springs | 45.41 | 254 | P | P | | P | 00 59 02.6 | +0.3 |
| | comp=Z,13nm,0.4s,baz=96,slow=8.1,SNR=6.2 | | | | | | | | |
| | comp=Z,13nm,0.4s | | | | | | | | |
| MBWA | Marble Bar | 58.69 | 256 | P | P | | P | 01 00 37.0 | -1.5 |
| MBWA | | | | IAmb | IAmb | | IAmb | 01 00 38.1 | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| MJAR | Matsushiro Arr | 67.99 | 323 | P | P | | P | 01 01 39.4 | +1.3 |
| | comp=Z,3.9nm,0.6s,baz=129,slow=6.7,SNR=5.6 | | | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | | | |
| MAJO | Matsushiro | 68.00 | 323 | P | P | | P | 01 01 39.6 | +1.5 |
| UGM | Wanagama | 70.22 | 268 | P | P | | P | 01 01 51.0 | -1.1 |
| SSLB | Suanglung | 72.54 | 303 | P | P | | P | 01 02 04.9 | -0.6 |
| TPUB | Ta-pu | 72.57 | 302 | P | P | | P | 01 02 05.0 | -0.6 |
| TPUB | | | | IAmb | IAmb | | IAmb | 01 02 18.8 | |
| | comp=Z,31nm,1.1s | | | | | | | | |
| PEA0B | Petropavlovsk- | 73.53 | 345 | P | P | | P | 01 02 11.5 | +1.0 |
| PETK | Petropavlovsk- | 73.53 | 345 | P | P | | P | 01 02 11.7 | +1.1 |
| | comp=Z,3.3nm,0.6s,baz=116,slow=5.6,SNR=6.6 | | | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| NVAR | Mina Array Bea | 78.82 | 44 | P | P | | P | 01 02 36.9 | -3.6 |
| | comp=Z,3.9nm,0.7s,baz=220,slow=5.6,SNR=4.8 | | | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | | | |
| M16K | Timber Creek | 79.80 | 9 | P | P | | P | 01 02 47.3 | +2.3 |
| K15K | Wolf Creek Mou | 80.66 | 8 | P | P | | P | 01 02 51.6 | +2.2 |
| L18K | Granite Mounta | 81.30 | 10 | P | P | | P | 01 02 55.0 | +2.3 |
| TXAR | Lajitas Array | 85.36 | 57 | P | P | | P | 01 03 10.5 | -3.5 |
| | comp=Z,3.2nm,0.7s,baz=215,slow=7.1,SNR=11 | | | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | | | |
| ILAR | Eielson Array | 85.46 | 13 | P | P | | P | 01 03 13.6 | 0.0 |
| | comp=Z,1.4nm,0.4s,baz=219,slow=4.7,SNR=7.5 | | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| PDAR | Pinedale Array | 86.75 | 43 | P | P | | P | 01 03 15.8 | -4.7 |
| | comp=Z,3.0nm,0.7s,baz=237,slow=4.9,SNR=3.2 | | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| BVAR | Borovoye Array | 116.96 | 321 | PKP | PKPdf | | PKPdf | 01 09 14.3 | -3.2 |
| | comp=Z,6.0nm,1.0s,baz=116,slow=3.3,SNR=4.3 | | | | | | | | |
| ARCES | ARCESS Array B | 126.11 | 350 | PKP | PKPdf | | PKPdf | 01 09 31.4 | -3.1 |
| | comp=Z,5.2nm,1.0s,baz=45,slow=2.0,SNR=5.7 | | | | | | | | |
| FINES | FINESS Array B | 133.04 | 345 | PKP | PKPdf | | PKPdf | 01 09 45.0 | -2.9 |
| | comp=Z,4.4nm,1.1s,baz=63,slow=2.7,SNR=3.8 | | | | | | | | |
| EKA | Eskdalemuir Ar | 142.11 | 5 | PKP | PKPdf | | PKPdf | 01 09 59.5 | -5.3 |
| | comp=Z,0.4nm,0.4s,baz=5.7,slow=1.8,SNR=4.8 | | | | | | | | |
| BRTR | Keskin Array B | 144.96 | 315 | PKPbc | PKPdf | | PKPdf | 01 10 08.8 | -1.6 |
| | comp=Z,2.8nm,0.7s,baz=60,slow=3.3,SNR=7.1 | | | | | | | | |
| CLL | Collm | 145.28 | 348 | | | | PKPdf | 01 10 09.5 | -0.9 |
| CLL | Collm | 145.28 | 348 | *i* (PKPab) | PKPdf | | PKPdf | 01 10 04.1 | -6.3 |
| CLL | Collm | 145.28 | 348 | *i* PKPbc | PKPdf | | PKPdf | 01 10 09.9 | -0.5 |
| | comp=Z,19nm,0.9s | | | | | | | | |
| CLL | Collm | 145.28 | 348 | *i* PKPbc | PKPdf | | | 01 10 02.0 | -8.4 |
| MMAI | Mount Meron Ar | 146.44 | 304 | PKPbc | PKPdf | | PKPdf | 01 10 13.3 | +0.2 |
| | comp=Z,3.2nm,0.5s,baz=70,slow=5.5,SNR=8.1 | | | | | | | | |
| GERES | GERESS Array B | 147.45 | 346 | PKPbc | PKPdf | | PKPdf | 01 10 15.9 | +1.7 |
| | comp=Z,2.4nm,0.7s,baz=29,slow=2.4,SNR=5.8 | | | | | | | | |
| CONA | Conrad Observa | 147.74 | 343 | *i* PKP | PKPdf | | PKPdf | 01 10 11.3 | -3.4 |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| RONA | Rosalia, Austr | 147.82 | 342 | *i* PKP | PKPdf | | PKPdf | 01 10 11.3 | -3.5 |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| ELL | Elmali | 148.99 | 313 | PKPbc | PKPdf | | PKPdf | 01 10 18.9 | +1.7 |
| LESA | Schwarzleotal | 149.03 | 346 | *i* PKP | PKPdf | | PKPdf | 01 10 13.9 | -3.0 |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| KBA | Koelnbreinsper | 149.19 | 345 | *i* PKP | PKPdf | | PKPdf | 01 10 13.7 | -3.5 |
| | comp=Z,0.8nm,0.3s | | | | | | | | |
| WATA | Walderalm | 149.35 | 347 | *i* PKP | PKPdf | | PKPdf | 01 10 14.6 | -2.8 |
| | comp=Z,1.7nm,0.4s | | | | | | | | |
| RETA | Reutte | 149.37 | 349 | *i* PKP | PKPdf | | PKPdf | 01 10 14.8 | -2.6 |
| | comp=Z,1.2nm,0.4s | | | | | | | | |
| WTTA | Wattenberg | 149.41 | 347 | *e*PKP | PKPdf | | PKPdf | 01 10 14.9 | -2.7 |
| | comp=Z,3.8nm,0.4s | | | | | | | | |
| MOTA | Moosalm | 149.44 | 348 | *i* PKP | PKPdf | | PKPdf | 01 10 14.7 | -2.9 |
| | comp=Z,1.4nm,0.5s | | | | | | | | |
| SQTA | Sankt Quirin | 149.53 | 348 | *i* PKP | PKPdf | | PKPdf | 01 10 14.8 | -2.9 |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| ABTA | Abfaltersbach | 149.70 | 346 | *i* PKP | PKPdf | | PKPdf | 01 10 15.0 | -3.0 |
| | comp=Z,3.4nm,0.5s | | | | | | | | |
| DAVA | Damuels | 149.72 | 350 | *i* PKP | PKPdf | | PKPdf | 01 10 16.2 | -1.9 |
| | comp=Z,1.4nm,0.5s | | | | | | | | |
| SABO | M.te Sabotino | 150.15 | 344 | PKPbc | PKPdf | | PKPdf | 01 10 21.8 | +3.2 |

*NOU* ***19*** *00:52:27.9, 17.95S×177.90W, h485km, mb5.7/98, Fiji Islands Region*
*IDC* ***19*** *00:52:31.9±1.4, 18.07S×178.31W, h511km±14km, mb4.6/22, mbtmp5.4/24, Error ellipse: s-maj=11.7km s-min=10.5km az=104.0*
*NEIC* ***19*** *00:52:32.5±1.6, 18.12S±0.09×178.29W±0.10, h511km±6km, mb5.3/153, Error ellipse: s-maj=14.2km s-min=13.0km az=134.0*
*MOS* ***19*** *00:52:36.6±1.5, 17.91S×178.73W, h558km, mb5.1/22, Error ellipse: s-maj=9.6km s-min=8.7km az=42.8*

**ISC 19 00:52:32.7±0.4, 18.11S±0.05×178.28W±0.05, h525km±4km, h527km:pP-P, n955, σ0.98/940, mb5.3/152, 47C-48D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.52 | 276 | P | P | | P | 00 53 51.9 | +2.6 |
| MSVF | Nonsavu | 3.52 | 276 | *i* P | P | | P | 00 53 52.

SNZO South Karori 23.89 193 P P 00 57 02.7 -2.0
QRZ Quartz Range 23.98 197 P P 00 57 05.3 -0.2
QRZ IAmb IAmb 00 57 06.3
comp=Z,101nm,0.8s
PLWZ Palliser 24.03 192 P P 00 57 03.8 -2.3
LHI Lord Howe Isla 24.46 233 P P 00 57 09.6 -0.3
LHI IAmb IAmb 00 57 12.1
comp=Z,92nm,0.8s
KHZ Kahutara 25.21 194 P P 00 57 14.8 -1.6
CTZ Chatham Island 25.59 177 P P 00 57 17.6 -2.1
RPZ Rata Peaks 27.07 197 P P 00 57 32.6 -0.2
AUWSH Wavell State H 27.96 246 P P 00 57 41.6 +0.7
JCZ Jackson Bay 28.08 200 P P 00 57 42.2 +0.4
ODZ Otahua Downs 28.41 197 P P 00 57 44.5 0.0
WKZ Wanaka 28.68 199 P P 00 57 46.1 -0.9
GD1S Gladstone Soft 29.06 253 P P 00 57 51.4 +0.9
EIDS Eidsvold 29.32 250 P P 00 57 52.7 0.0
EIDS Eidsvold 29.32 250 P P 00 57 52.5 -0.2
EIDS Eidsvold 29.32 250 P P 00 57 52.5 -0.2
MLZ Mavora Lakes 29.45 200 P P 00 57 53.3 -0.4
MLZ IAmb IAmb 00 58 03.0
comp=Z,100nm,0.8s
RK1H Rockhampton Ha 29.64 254 P P 00 57 56.3 +0.8
ARMA Armidale 29.95 240 P P 00 57 59.0 +0.7
ARMA Armidale 29.95 240 P P 00 57 59.1 +0.7
ARMA Armidale 29.95 240 P P 00 57 59.3 +1.0
comp=Z,262nm,0.9s
SYZ Scrubby Hill 30.20 197 P P 00 57 59.9 -0.1
KWJN Gagan, Kwajale 30.57 332 P P 00 58 04.7 +1.0
NTLH Newcastle Hard 30.70 236 P P 00 58 05.4 +0.8
AUPHS Peel High Scho 30.76 239 P P 00 58 06.3 +1.1
RIV Riverview 31.47 234 P P 00 58 12.7 +1.5
RMQ Roma 31.55 249 P P 00 58 08.8 -3.1
SYDH Sydney Hard Ro 31.77 235 P P 00 58 14.6 +0.9
WOLH Wollongong Har 31.91 233 P P 00 58 15.2 +0.3
RABL Rabaul 32.05 292 P P 00 58 14.9 -1.5
RABL IAmb IAmb 00 58 28.7
comp=Z,139nm,0.6s
AUAYR Ayr State High 32.48 262 P P 00 58 21.0 +1.1
AUUHS Uladulla High 32.59 232 P P 00 58 21.7 +1.0
AULRC Lightning Ridg 32.76 244 P P 00 58 24.6 +2.4
AUDCS Dubbo College 32.94 238 P P 00 58 25.7 +2.0
TV1H Townsville Har 33.07 262 P P 00 58 25.1 +0.1
CNB Canberra Magne 33.40 233 P P 00 58 28.9 +1.2
CNB Canberra Magne 33.40 233 P P 00 58 28.6 +0.9
comp=Z,387nm,2.2s
CTA Charters Tower 33.54 261 P P 00 58 28.9 -0.1
comp=Z,38nm,0.8s,baz=90,slow=9.7,SNR=59
comp=Z,38nm,0.8s
CTAO Charters Tower 33.54 261 P P 00 58 29.8 +0.8
CTAO Charters Tower 33.54 261 P P 00 58 28.4 -0.6
CTAO Charters Tower 33.54 261 P P 00 58 28.4 -0.6
CTAO pmax pmax
comp=Z,608nm,1.0s
CTAO Charters Tower 33.54 261 P P 00 58 28.7 -0.2
CAN Canberra 33.68 233 P P 00 58 30.1 +0.1
CAN IAmb IAmb 00 58 31.7
comp=Z,158nm,0.9s
CAN Canberra 33.68 233 P P 00 58 30.1 +0.1
CAN pmax pmax
comp=Z,158nm,0.9s
CAN Canberra 33.68 233 P P 00 58 30.7 +0.7
YNG Young 33.78 235 P P 00 58 31.6 +0.8
KAVG Kavieng 34.01 293 P P 00 58 32.1 -0.8
AUCSH Cairns State H 34.27 266 P P 00 58 35.8 +0.7
PMG Port Moresby 34.62 280 P P 00 58 39.1 +1.1
PMG Port Moresby 34.62 280 P P 00 58 38.9 +0.9
PMG Port Moresby 34.62 280 P P 00 58 38.3 +0.2
PMG Port Moresby 34.62 280 *i* P P 00 58 37.8 -0.2
PMG pmax pmax
comp=Z,486nm,0.9s
PMG Port Moresby 34.62 280 P P 00 58 38.6 +0.6
CMSA Cobar Meteorol 35.16 241 P P 00 58 43.3 +0.9
CMSA Cobar Meteorol 35.16 241 P P 00 58 42.7 +0.3
comp=Z,417nm,0.8s
MTSU Mount Surprise 35.51 264 P P 00 58 47.0 +1.5
QLP Quilpie 35.58 249 P P 00 58 47.2 +1.2
QLP Quilpie 35.58 249 P P 00 58 45.9 0.0
comp=Z,823nm,1.0s
TOO Toolangi 37.14 231 P P 00 58 59.9 +1.2
TOO Toolangi 37.14 231 P P 00 58 59.2 +0.5
TOO Toolangi 37.14 231 P P 00 58 59.4 +0.7
comp=Z,291nm,0.9s
TOO Toolangi 37.14 231 P P 00 58 59.3 +0.5
TOO pmax pmax
comp=Z,204nm,0.8s
AUMAG Moama Anglican 37.19 234 P P 00 59 01.7 +2.6
COEN Coen 37.23 271 P P 00 59 00.3 +0.6
COEN Coen 37.23 271 P P 00 59 00.0 +0.2
COEN Coen 37.23 271 P P 00 58 59.9 +0.2
comp=Z,658nm,1.1s
MANU Manus Island 37.29 291 P P 00 59 00.3 +0.1
MLBS Spotswood, Mel 37.67 231 P P 00 59 03.9 +0.9
TAOE Nuku Hiva Isla 38.13 81 P P 00 59 07.1 -0.1
TAU Tasmania Unive 38.17 222 P P 00 59 06.8 -0.2
TAU IAmb IAmb 00 59 47.6
comp=Z,177nm,1.5s
TAU Tasmania Unive 38.17 222 P P 00 59 06.8 -0.2
TAU pmax pmax
comp=Z,177nm,1.5s
BRAT Ballarat 38.29 232 P P 00 59 08.8 +0.7
STKA Stephens Creek 38.64 241 P P 00 59 12.2 +1.2
STKA Stephens Creek 38.64 241 P P 00 59 11.5 +0.5
STKA IAmb IAmb 00 59 12.4
comp=Z,59nm,0.7s
STKA Stephens Creek 38.64 241 P P 00 59 11.8 +0.7
comp=Z,102nm,0.9s
STKA Stephens Creek 38.64 241 P P 00 59 11.7 +0.7
comp=Z,262nm,0.7s,baz=88,slow=10,SNR=51
comp=Z,262nm,0.7s
STKA Stephens Creek 38.64 241 P P 00 59 11.5 +0.5
STKA pmax pmax
comp=Z,59nm,0.7s
ARPS Mount Arapiles 39.63 234 P P 00 59 20.2 +1.3
ARPS Mount Arapiles 39.63 234 P P 00 59 19.2 +0.2
comp=Z,200nm,0.7s
WAKE Wake Island 40.00 338 P P 00 59 21.6 -0.4
WAKE Wake Island 40.00 338 P P 00 59 21.4 -0.6
WAKE pP pP 01 00 54.8 +0.2
HTT Hallett 41.15 240 P P 00 59 32.6 +1.4
HTT Hallett 41.15 240 P P 00 59 31.8 +0.6
comp=Z,436nm,0.7s
LCRK Leigh Creek 41.28 244 P P 00 59 32.7 +0.5
TABU Tabubil 41.55 283 P P 00 59 34.6 0.0
GHSS Government Hou 41.71 238 P P 00 59 36.2 +0.7
PTPS Port Pirie 41.87 240 P P 00 59 37.6 +0.8
WHYH Whyalla 42.19 241 P P 00 59 40.3 +0.9
JAY Jayapura 43.08 286 P P 00 59 46.9 +0.2
comp=Z,391nm,1.0s
OOD Oodnadatta 43.26 249 P P 00 59 50.0 +2.2
BBOO Buckleboo 43.42 241 P P 00 59 48.8 -0.2
BBOO Buckleboo 43.42 241 P P 00 59 49.1 +0.1
BBOO Buckleboo 43.42 241 P P 00 59 49.0 0.0
comp=Z,527nm,0.8s
GENI Genyem 43.54 286 P P 00 59 51.8 +1.6
GENI Genyem 43.54 286 P P 00 59 50.5 +0.3
comp=Z,616nm,0.8s
WR0 Warramunga Arr 44.53 260 P P 00 59 57.3 -0.5
WR0 IAmb IAmb 00 59 58.1
comp=Z,144nm,0.9s
WB0 Warramunga Arr 44.69 260 P P 00 59 58.2 -0.8
WB2 Warramunga Arr 44.71 260 P P 00 59 58.6 -0.6
WRAB Tennant Creek 44.71 260 P P 00 59 58.0 -1.1
WRAB Tennant Creek 44.71 260 *i* P P 00 59 58.1 -1.1
WRAB pmax pmax
comp=Z,146nm,0.9s
WRA Warramunga Arr 44.72 260 P P 00 59 58.2 -1.0
comp=Z,142nm,0.7s,baz=98,slow=6.8,SNR=98
comp=Z,142nm,0.7s
MULG Mulgathing 44.84 245 P P 01 00 00.2 +0.2
AS31 Alice Springs 44.86 254 P P 01 00 00.2 -0.1
AS31 Alice Springs 44.86 254 P P 01 00 00.2 -0.1
comp=Z,391nm,0.8s
ASAR Alice Springs 44.86 254 P P 01 00 00.2 -0.1
comp=Z,953nm,0.7s,baz=89,slow=8.3,SNR=337
KDU Kakadu 47.68 269 P P 01 00 21.8 0.0
KDU Kakadu 47.68 269 P P 01 00 21.2 -0.6
comp=Z,464nm,1.2s
GUMO Guam 48.10 308 P P 01 00 24.4 -0.4
GUMO Guam 48.10 308 P P 01 00 24.8 0.0
GUMO Guam 48.10 308 P P 01 00 24.8 0.0
GUMO pmax pmax
comp=Z,470nm,0.9s
GUMO Guam 48.10 308 P P 01 00 24.8 0.0
MTN Manton Dam 48.92 269 P P 01 00 30.4 -0.6
MTN Manton Dam 48.92 269 P P 01 00 30.3 -0.8
MTN Manton Dam 48.92 269 P P 01 00 30.2 -0.9
comp=Z,375nm,0.9s
DRS Darwin Rock St 49.23 269 P P 01 00 33.4 +0.1
WRKA Warakurna 49.90 252 P P 01 00 38.3 +0.1
WRKA Warakurna 49.90 252 P P 01 00 38.2 0.0
comp=Z,732nm,1.3s
SAUI Saumlaki 50.00 275 P P 01 00 38.8 -0.2
FORT Forrest 50.03 245 P P 01 00 39.4 +0.4
FORT Forrest 50.03 245 P P 01 00 38.7 -0.4
FORT Forrest 50.03 245 P P 01 00 38.4 -0.7
comp=Z,532nm,0.7s
KNRA Kununurra 50.59 264 P P 01 00 43.1 -0.2
KNRA Kununurra 50.59 264 P P 01 00 42.8 -0.5
comp=Z,504nm,1.0s
FAKI Fak Fak 50.74 281 P P 01 00 44.1 -0.4
FAKI IAmb IAmb 01 01 12.2
comp=Z,184nm,1.3s
FAKI Fak Fak 50.74 281 P P 01 00 43.9 -0.5
SWI Sorong 52.41 283 P P 01 00 55.4 -1.1
comp=Z,758nm,1.1s
DRV Dumont d'Urvil 55.52 199 P P 01 01 17.9 +0.4
DRV PcP PcP 01 02 10.3 +0.7
SOEI Soe 56.20 270 P P 01 01 24.1 +0.8
SOEI Soe 56.20 270 P P 01 01 24.3 +1.0
TNTI Ternate 56.63 283 P P 01 01 27.6 +1.4
TNTI Ternate 56.63 283 P P 01 01 25.9 -0.3
TNTI IAmb IAmb 01 01 27.1
comp=Z,224nm,0.9s
BATI Baumata 56.65 270 P P 01 01 27.0 +0.6
SANI Sanana 56.90 280 P P 01 01 28.4 +0.4
SANI Sanana 56.90 280 P P 01 01 27.4 -0.6
comp=Z,315nm,1.1s
PSA00 Pilbara Seismi 57.98 256 P P 01 01 34.7 -0.6
PSA00 Pilbara Seismi 57.98 256 P P 01 01 34.6 -0.6
comp=Z,255nm,0.8s
MBWA Marble Bar 58.15 256 P P 01 01 35.7 -0.8
comp=Z,279nm,1.3s
MBWA Marble Bar 58.15 256 P P 01 01 35.7 -0.8
MMRI Maumere 58.42 271 P P 01 01 37.3 -1.2
MMRI IAmb IAmb 01 01 38.6
comp=Z,272nm,1.1s
KLBR Kellerberrin 58.85 244 P P 01 01 41.3 +0.3
KLBR Kellerberrin 58.85 244 P P 01 01 40.3 -0.8
comp=Z,646nm,0.8s
NWAO Narrogin (SRO) 59.23 242 P P 01 01 42.9 -0.7
NWAO IAmb IAmb 01 01 43.7
comp=Z,82nm,0.8s
NWAO Narrogin (SRO) 59.23 242 P P 01 01 42.9 -0.7
NWAO pmax pmax
comp=Z,82nm,0.9s
NWAO Narrogin (SRO) 59.23 242 P P 01 01 43.0 -0.5
RKGY Rocky Gully 59.38 240 P P 01 01 45.5 +1.0
RKGY Rocky Gully 59.38 240 P P 01 01 44.6 +0.1
comp=Z,227nm,0.9s
BLDU Ballidu 59.81 245 P P 01 01 46.7 -0.8
MUN Mundaring 60.14 243 P P 01 01 49.6 0.0
LUWI Luwuk 60.26 279 P P 01 01 50.8 +0.1
MTKN Mount Kenneth 60.52 243 P P 01 01 53.3 +1.2
MTKN Mount Kenneth 60.52 243 P P 01 01 53.6 +1.5
comp=Z,482nm,0.8s
KAPI Kappang 61.83 274 P P 01 02 00.4 -0.6
KAPI IAmb IAmb 01 02 01.8
comp=Z,279nm,1.7s
KAPI Kappang 61.83 274 *i* P P 01 01 59.7 -1.3
KAPI pmax pmax
comp=Z,79nm,1.3s
TOLI2 Tolitoli 62.88 281 P P 01 02 07.3 -0.5
TOLI2 IAmb IAmb 01 02 08.3
comp=Z,107nm,1.0s
GIRL Giralia 62.96 253 P P 01 02 08.8 +0.7
CCD Concordia, Ant 64.71 194 P P 01 02 19.3 +0.4
JHJ2 Mitsune 64.78 322 P P 01 02 18.8 -0.7
CASY Casey 66.01 205 P P 01 02 26.4 -0.2
CASY IAmb IAmb 01 02 28.8
comp=Z,48nm,1.1s
CASY Casey 66.01 205 P P 01 02 26.7 0.0
CASY pP pP 01 04 13.5 +0.3
JAGI Jajag, Banyuwa 66.16 269 P P 01 02 28.7 +0.1
JAGI Jajag, Banyuwa 66.16 269 P P 01 02 26.9 -1.8
MYLDM Lahad Datu 66.48 284 P P 01 02 31.5 +0.9
MYLDM IAmb IAmb 01 02 46.1
comp=Z,199nm,1.3s
JMM Marumori 67.67 326 P P 01 02 37.0 -0.3
JMM IAmb IAmb 01 02 38.1
comp=Z,46nm,0.9s
JGF Kuroka 67.97 322 P P 01 02 39.1 -0.3
JGF IAmb IAmb 01 02 40.0
comp=Z,47nm,0.9s
MJAR Matsushiro Arr 68.14 323 P P 01 02 40.0 -0.3
comp=Z,36nm,0.8s,baz=160,slow=5.7,SNR=32
comp=Z,36nm,0.8s
MAJO Matsushiro 68.14 323 P P 01 02 39.8 -0.5
MAJO IAmb IAmb 01 02 40.9
comp=Z,80nm,1.0s
MAJO Matsushiro 68.14 323 P P 01 02 39.8 -0.5
MAJO pmax pmax
comp=Z,80nm,1.0s
MAJO Matsushiro 68.14 323 P P 01 02 39.9 -0.5
MAJO PcP PcP 01 03 01.9 +0.1
JOW Kunigami 68.44 309 P P 01 02 42.0 -0.4
JOW IAmb IAmb 01 02 44.2
comp=Z,64nm,1.0s
KKM Kota Kinabalu 68.91 284 P P 01 02 46.1 +0.5
KKM Kota Kinabalu 68.91 284 P P 01 02 45.3 -0.3
KKM IAmb IAmb 01 02 46.0
comp=Z,92nm,0.7s
AMKA Amchitka 69.22 358 P P 01 02 45.5 -0.9
KIWB Kanaga Island 69.67 1 P P 01 02 48.9 -0.2
JTM Tenmabayashi 69.71 328 P P 01 02 49.3 -0.3
JTM IAmb IAmb 01 02 51.2
comp=Z,110nm,1.1s
UGM Wanagama 69.76 268 P P 01 02 50.0 -0.6
SMRI Semarang 70.09 269 P P 01 02 51.8 -0.7
JNU Nakatsue 70.37 316 P P 01 02 53.6 -0.2
JNU IAmb IAmb 01 02 54.6
comp=Z,96nm,1.3s
SHEM Shemya Is, Ala 70.85 355 P P 01 02 55.8 -0.2
comp=Z,88nm,0.8s,baz=284,slow=8.3,SNR=4.4
comp=Z,88nm,0.8s
YOJ Yonaguni jima 71.16 305 P P 01 02 58.1 -0.4
YOJ IAmb IAmb 01 02 59.4
comp=Z,229nm,1.0s
YOJ Yonaguni jima 71.16 305 P P 01 02 58.1 -0.4
YOJ pmax pmax
comp=Z,229nm,1.0s
NIKH Nikolski High 71.25 6 P P 01 02 58.8 +0.4
baz=189
SBUM Sibu 71.36 279 P P 01 03 00.1 +0.1
JKA Kamikawa-asahi 71.51 331 P P 01 03 01.4 +1.2
JKA IAmb IAmb 01 03 02.4
comp=Z,65nm,0.9s
ASAJ Asahikawa 71.51 331 P P 01 03 00.5 +0.3
comp=Z,39nm,0.7s,baz=191,slow=7.2,SNR=17
comp=Z,39nm,0.7s
ASAJ Asahikawa 71.51 331 P P 01 03 01.4 +1.2
ASAJ pmax pmax
comp=Z,65nm,0.9s
TWG Pinlang 71.88 302 P P 01 03 01.3 -1.6
TWG IAmb IAmb 01 03 01.7
comp=Z,42nm,0.7s
QSPA South Pole Qui 71.95 180 P 01 03 03.5 +0.8
QSPA IAmb IAmb 01 03 04.5
comp=Z,110nm,1.0s
QSPA South Pole Qui 71.95 180 P P 01 03 03.4 +0.8
comp=Z,71nm,0.8s,baz=223,slow=1.1,SNR=27
comp=Z,71nm,0.8s
QSPA South Pole Qui 71.95 180 P P 01 03 03.2 +0.6
YULB Yu-li 71.98 303 P P 01 03 02.5 -0.9
NACB Ninganchiao 72.13 304 P P 01 03 03.8 -0.4
NACB Ninganchiao 72.13 304 P P 01 03 03.5 -0.8
NACB IAmb IAmb 01 03 04.6
comp=Z,179nm,1.1s
UNV Unalaska Valle 72.37 7 P P 01 03 04.6 -0.3
baz=192
SSLB Suanglung 72.45 303 P P 01 03 05.1 -1.1
SSLB IAmb IAmb 01 03 06.3
comp=Z,78nm,1.0s
TPUB Ta-pu 72.47 302 P P 01 03 05.2 -1.1
TPUB Ta-pu 72.47 302 P P 01 03 05.1 -1.1
TPUB IAmb IAmb 01 03 05.8
comp=Z,170nm,0.7s
YHNB Yeheng 72.55 304 P P 01 03 07.5 +0.7
BBJI Bungbulang 72.62 268 P P 01 03 06.4 -1.0
KSM Kuching 72.83 277 P P 01 03 09.0 +0.4
KSM Kuching 72.83 277 P P 01 03 08.2 -0.4
PET Petropavlovsk 73.60 346 *i* P P 01 03 10.8 -1.2
PET pmax pmax
comp=Z,18nm,0.6s
YSS Yuzh-Sakhalins 73.65 333 P P 01 03 13.5 +1.1
YSS IAmb IAmb 01 03 14.2
comp=Z,59nm,0.9s
YSS Yuzh-Sakhalins 73.65 333 *i* P P 01 03 11.9 -0.5
YSS pmax pmax
comp=Z,68nm,0.9s
PEA0B Petropavlovsk- 73.90 345 P P 01 03 13.9 +0.1
PEA0B IAmb IAmb 01 03 14.5
comp=Z,87nm,0.8s
PEA0B Petropavlovsk- 73.90 345 *i* P P 01 03 13.7 -0.1
PETK Petropavlovsk- 73.90 345 P P 01 03 14.0 +0.2
PETK Petropavlovsk- 73.90 345 P P 01 03 13.8 0.0
comp=Z,60nm,0.8s,baz=132,slow=8.2,SNR=29
comp=Z,60nm,0.8s
TJN Taejon 74.64 317 *i* P P 01 03 17.6 -0.7
KNMB Chin-men Tao 74.83 302 P P 01 03 19.2 -0.5
KNMB IAmb IAmb 01 03 20.3
comp=Z,54nm,0.7s
QZH Quanzhou 74.89 303 P P 01 03 20.1 +0.1
KSRS Korea Array 74.93 318 P P 01 03 20.6 +0.6
comp=Z,8.5nm,0.7s,baz=130,slow=6.6,SNR=22
comp=Z,8.5nm,0.7s
KSAR Wonju Array Be 74.95 318 P P 01 03 20.5 +0.5
KSAR Wonju Array Be 74.95 318 P P 01 03 20.5 +0.5
KS19 Wonju Array Si 75.00 318 P P 01 03 21.1 +0.7
UGL Uglegorsk 75.60 334 *eP* P 01 03 22.9 -0.4
KASI Kota Agung 76.18 269 P P 01 03 26.3 -1.1
comp=Z,388nm,1.0s
PSTR Posyet 76.48 324 *i* P P 01 03 27.9 -0.5
SAO San Andreas Ge 76.48 44 P P 01 03 30.0 +1.4
SAO San Andreas Ge 76.48 44 P P 01 03 30.0 +1.4
SAO pmax pmax
comp=Z,73nm,1.6s
PMPB Monarch Peak 76.60 45 P P 01 03 30.5 +1.2
PMPB IAmb IAmb 01 03 32.6
comp=Z,200nm,1.7s
HOPS Hopland Field 76.74 41 P P 01 03 31.0 +1.0
HOPS IAmb IAmb 01 03 41.1
comp=Z,170nm,1.7s
TYV Tymovskoe 76.76 336 *eP* P 01 03 30.0 +0.3
TYV pmax pmax
comp=Z,57nm,1.4s
USA0B Ussuriysk Arra 76.85 326 P P 01 03 31.5 +1.1
USA0B Ussuriysk Arra 76.85 326 *i* P P 01 03 29.9 -0.5
USRK Ussuriysk Ar. 76.85 326 P P 01 03 30.8 +0.4
USRK Ussuriysk Ar. 76.85 326 P P 01 03 31.5 +1.1
comp=Z,15nm,0.9s,baz=114,slow=4.1,SNR=12
comp=Z,15nm,0.9s
USRK Ussuriysk Ar. 76.85 326 P P 01 03 30.8 +0.4
SII Sitkinak Islan 77.09 13 P P 01 03 31.8 +0.4
baz=203
PASC Pasadena Art C 77.27 47 P P 01 03 33.4 +0.5
R16K Pilot Point 77.34 11 P P 01 03 33.4 +0.7
baz=200
CBX Cerro Bola 77.38 50 P P 01 03 34.7 +0.9
CBX IAmb IAmb 01 03 35.9
comp=Z,76nm,1.3s
ELS Elsinore Mount 77.52 48 P P 01 03 35.0 +0.6
O02D Mt. Diablo Mer 77.62 40 P P 01 03 35.7 +0.9
O02D IAmb IAmb 01 03 46.6
comp=Z,92nm,1.6s
R17L Mt. Peulik Vol 77.63 12 P P 01 03 35.0 +0.6
baz=201
ESJX Sierra Juarez 77.74 50 P P 01 03 36.6 +0.8
MONP2 Monument Peak 77.85 49 P P 01 03 37.2 +0.8
baz=239
OHAK Old Harbor 77.90 14 P P 01 03 36.2 +0.5
OHAK IAmb IAmb 01 04 01.2
comp=Z,156nm,1.6s
OHAK Old Harbor 77.90 14 P P 01 03 35.8 +0.1
baz=204
R18K Karluk 77.96 13 P P 01 03 36.6 +0.6
baz=203
MNAI Manna 77.99 269 P P 01 03 36.8 -0.5
MNAI IAmb IAmb 01 03 47.5
comp=Z,276nm,1.0s
NJ2 Nanjing 78.16 309 *eP* P 01 03 39.1 +1.3
NJ2 pmax pmax
comp=Z,120nm,1.3s
PFO Pinyon Flats O 78.19 49 P P 01 03 37.2 -0.9
baz=239
TPFO Pinon Flats 78.19 49 P P 01 03 37.0 -1.1
baz=239
Q17K Contact Creek 78.31 12 P P 01 03 38.0 -0.1
baz=202
O14K Tigyukauivet M 78.33 9 P P 01 03 38.0 0.0
baz=196
MDJ Mudanjiang 78.42 325 P P 01 03 38.2 -0.7
MDJ Mudanjiang 78.42 325 P P 01 03 40.3 +1.4
MDJ pmax pmax
comp=Z,100nm,0.9s
O15K Ungalikthiuk R 78.48 10 P P 01 03 38.7 -0.1
baz=198
SLBS Sierra La Lagu 78.55 60 P P 01 03 42.0 +1.8
KDAK Kodiak Island 78.57 14 P P 01 03 40.1 +0.8
KDAK IAmb IAmb 01 03 41.5
comp=Z,269nm,1.8s
KDAK Kodiak Island 78.57 14 P P 01 03 39.0 -0.3
baz=205
KDAK Kodiak Island 78.57 14 P P 01 03 40.1 +0.8
KDAK pmax pmax
comp=Z,269nm,1.8s
OMMB Old Mammoth Mi 78.57 44 P P 01 03 41.4 +1.1
OMMB IAmb IAmb 01 03 43.0
comp=Z,106nm,1.6s
YBH Yreka Blue Hor 78.60 39 P P 01 03 41.5 +1.4
YBH Yreka Blue Hor 78.60 39 P P 01 03 41.5 +1.4
YBH pmax pmax
comp=Z,18nm,1.0s
P16K Nushagak River 78.65 11 P P 01 03 39.2 -0.5
baz=200
M11K Mekoryuk 78.83 6 P P 01 03 40.4 -0.2
baz=192
Q18K Katmai Hardscr 78.84 12 P P 01 03 39.8 -1.1
baz=202
N14K Kuskokwak Cree 78.92 8 P P 01 03 40.7 -0.4
baz=196,SNR=5.0
BTDF Bukit Timah Da 78.98 275 P P 01 03 43.0 +0.4
HUMO Hull Mountain 78.98 38 P P 01 03 43.4 +1.4
PNTR Pine Nut 79.00 43 P P 01 03 43.8 +1.4
P17K Kvichak River 79.08 11 P P 01 03 41.9 -0.1
baz=201
GLA Glamis 79.09 50 P P 01 03 44.8 +2.0
GLA Glamis 79.09 50 P P 01 03 44.8 +2.0
GLA pmax pmax
comp=Z,41nm,1.1s
DSP Deep Springs 79.13 45 P P 01 03 44.2 +1.4
O16K Kokwok River B 79.16 10 P P 01 03 41.9 -0.5
O16K Kokwok River B 79.16 10 P P 01 03 41.6 -0.8
baz=200
M13K Dall Lake 79.17 7 P P 01 03 42.3 -0.2
baz=194
YERR Yerington 79.18 43 P P 01 03 44.2 +0.9
LHV Little Huntoon 79.25 44 P P 01 03 44.6 +1.2
LHV IAmb IAmb 01 03 46.5
comp=Z,87nm,1.3s
GRNR Gornyy 79.27 333 ‖ *i* P P 01 03 43.8 +0.5
GRNR pmax pmax
comp=Z,60nm,0.9s
GRAC Grapevine Rang 79.33 45 P P 01 03 45.5 +1.5
GRAC IAmb IAmb 01 03 59.3
comp=Z,76nm,1.2s
Q20K Shuyak Island 79.36 13 P P 01 03 42.3 -1.2
baz=205
SYI Shuyak Island 79.36 13 P P 01 03 44.4 +0.8
SYI IAmb IAmb 01 03 45.3
comp=Z,99nm,0.9s
PIX Pinacate 79.36 52 P P 01 03 44.9 +0.7
GWY Greenwater Val 79.38 46 P P 01 03 45.2 +0.8
Q19K Cape Douglas, 79.38 13 P P 01 03 42.9 -0.8
baz=204
N15K Kwethluk River 79.39 9 P P 01 03 44.1 +0.4
N15K Kwethluk River 79.39 9 P P 01 03 42.8 -0.9
baz=198
I03D Drain, OR 79.42 37 P P 01 03 45.7 +1.6
RYN Ryan 79.45 43 P P 01 03 45.7 +1.0
NVAR Mina Array Bea 79.48 44 P P 01 03 46.3 +1.4
NVAR Mina Array Bea 79.48 44 P P 01 03 46.1 +1.1

comp=Z,11nm,0.8s,baz=225,slow=7.5,SNR=9.8
comp=Z,11nm,0.8s
**PAHR Pah Rah Range 79.49 42 P P 01 03 46.0 +1.1**
**P18K Big Mountain, 79.49 12 P P 01 03 43.8 -0.5**
baz=202
**O17K Koliganek Bris 79.50 11 P P 01 03 44.1 -0.2**
baz=200
**GMN Gold Mountain 79.57 45 P P 01 03 46.8 +1.3**
**NV11 Mina Array Sit 79.58 44 P P 01 03 46.4 +1.0**
**BLYC Blythe 79.65 49 P P 01 03 47.4 +1.7**
**M14K Bethel 79.68 8 P P 01 03 46.1 +1.0**
M14K IAmb IAmb 01 04 08.1
comp=Z,117nm,1.7s
**M14K Bethel 79.68 8 P P 01 03 45.1 0.0**
baz=196
**MZP Montezuma Peak 79.70 45 P P 01 03 47.3 +1.1**
**113A Mohawk Valley, 79.72 51 P P 01 03 47.6 +1.5**
**WCT Wildcat Mounta 79.73 46 P P 01 03 47.4 +1.2**
**M15K Kasigluk River 79.80 9 P P 01 03 46.1 +0.3**
baz=197
**DL2 Dalian 79.82 317 P P 01 03 46.5 +0.1**
DL2 pmax pmax
comp=Z,46nm,0.8s
**N16K Nishlik Lake 79.88 10 P P 01 03 46.5 +0.2**
baz=199
**O18K Koktuh Hills 79.92 12 P P 01 03 46.9 +0.3**
O18K IAmb IAmb 01 03 47.5
comp=Z,97nm,0.8s
**O18K Koktuh Hills 79.92 12 P P 01 03 46.8 +0.3**
baz=202,SNR=6.9
**BUCK Buck Mountain 79.93 37 P P 01 03 48.4 +1.4**
BUCK IAmb IAmb 01 03 55.7
comp=Z,135nm,1.7s
**KVN Kaiserville 79.95 43 P P 01 03 48.1 +0.7**
**KVN Kaiserville 79.95 43 P P 01 03 48.1 +0.7**
KVN pmax pmax
comp=Z,36nm,1.4s
**I04A Tendick Farm, 80.01 37 P P 01 03 48.6 +1.2**
**214A Organ Pipe Nat 80.04 52 P P 01 03 47.0 -0.8**
baz=241
**TPNV Topopah Spring 80.07 46 P P 01 03 48.5 +0.5**
baz=238
**P19K Oil Pt 80.13 13 P 01 03 47.4 -0.3**
P19K IAmb IAmb 01 04 17.6
comp=Z,179nm,1.6s
**P19K Oil Pt 80.13 13 P P 01 03 48.0 +0.4**
baz=204
**L14K Kuka Creek 80.16 8 P P 01 03 49.0 +1.4**
L14K IAmb IAmb 01 03 52.1
comp=Z,114nm,1.6s
**L14K Kuka Creek 80.16 8 P P 01 03 48.7 +1.1**
baz=195
**N17K Nushagak Hills 80.19 10 P P 01 03 48.1 +0.2**
baz=200
**CN2 Changchun 80.25 322 P P 01 03 49.4 +0.8**
CN2 pmax pmax
comp=Z,50nm,1.1s
**BNX BinXian 80.33 325 ⇑P P 01 03 49.4 +0.5**
BNX pmax pmax
comp=Z,100nm,0.9s
**KLR Kul'dur 80.35 329 P P 01 03 49.4 +0.5**
comp=Z,15nm,1.0s,baz=101,slow=4.2,SNR=4.5
comp=Z,15nm,1.0s
**KLR Kul'dur 80.35 329** *i* P P **01 03 48.5 -0.4**
KLR pmax pmax
comp=Z,17nm,1.1s
**M16K Timber Creek 80.37 9 P P 01 03 50.0 +1.1**
baz=199,SNR=5.7
**J05D Fort Rock, OR 80.40 38 P P 01 03 51.3 +1.7**
J05D IAmb IAmb 01 03 52.0
comp=Z,109nm,1.3s
**CNPM China Poot 80.45 14 P P 01 03 49.6 +0.3**
CNPM IAmb IAmb 01 03 50.4
comp=Z,54nm,1.0s
**HOM Homer 80.48 13 P P 01 03 50.5 +1.1**
baz=206
**K13K Kusilvak Mount 80.50 6 P P 01 03 50.4 +1.0**
baz=193
**N18K Kilae Creek 80.57 11 P P 01 03 50.2 +0.3**
baz=202
**L15K Ungalak Mounta 80.64 8 P P 01 03 50.8 +0.6**
baz=196
**O20K Slope Mountain 80.65 13 P P 01 03 50.9 +0.6**
baz=205
**BRLK Bradley Lake 80.74 14 P P 01 03 50.9 +0.1**
BRLK IAmb IAmb 01 03 51.3
comp=Z,40nm,0.8s
**BRSE Bradley Lake S 80.75 14 P P 01 03 51.3 +0.5**
baz=206
**L16K Owhat River 80.95 9 P P 01 03 52.7 +1.0**
L16K IAmb IAmb 01 03 53.8
comp=Z,55nm,1.1s
**L16K Owhat River 80.95 9 P P 01 03 53.3 +1.5**
baz=198
**N19K Bonanza Creek 80.95 12 P P 01 03 52.1 +0.2**
baz=203
**M17K Holitna River 80.98 10 P P 01 03 53.0 +1.1**
M17K IAmb IAmb 01 03 54.2
comp=Z,58nm,0.8s
**M17K Holitna River 80.98 10 P P 01 03 53.4 +1.5**
baz=200,SNR=5.1
**E03A Lebam 81.05 35 P P 01 03 53.9 +1.3**
**PRN Pahroc Range 81.12 46 P P 01 03 54.6 +1.1**
**K15K Wolf Creek Mou 81.22 8 P 01 03 53.8 +0.6**
K15K IAmb IAmb 01 03 55.5
comp=Z,140nm,1.0s
**K15K Wolf Creek Mou 81.22 8 P P 01 03 54.5 +1.4**
baz=196,SNR=8.4
**R11B Troy Canyon, C 81.25 45 P P 01 03 55.3 +1.2**
**R11B Troy Canyon, C 81.25 45 P P 01 03 55.0 +0.8**
baz=239
**BMN Battle Mountai 81.27 43 P P 01 03 54.9 +0.7**
**BMN Battle Mountai 81.27 43 P P 01 03 54.9 +0.7**
BMN pmax pmax
comp=Z,26nm,1.1s
**WISH Wishkah 81.29 34 P P 01 03 55.2 +1.3**
WISH IAmb IAmb 01 03 57.0
comp=Z,159nm,1.7s
**M18K Stony River 81.33 11 P P 01 03 54.4 +0.7**
baz=202
**HOOD Mount Hood Mea 81.36 37 P P 01 03 55.4 +0.9**
HOOD IAmb IAmb 01 04 09.3
comp=Z,108nm,1.8s
**SEW Seward 81.37 14 P P 01 03 54.2 +0.3**
SEW IAmb IAmb 01 03 57.2
comp=Z,173nm,1.7s
**SEW Seward 81.37 14 P P 01 03 54.4 +0.4**
baz=208
**NLWA Neilton Lookou 81.41 34 P P 01 03 55.9 +1.4**
**J14K Nanvaranak Lak 81.42 7 P P 01 03 55.2 +1.1**
baz=194
**MA2 Magadan 81.42 345 P P 01 03 53.3 -1.0**
MA2 IAmb IAmb 01 03 54.3
comp=Z,42nm,0.9s
**MA2 Magadan 81.42 345** *i* P P **01 03 53.6 -0.7**
MA2 pmax pmax
comp=Z,49nm,1.0s
**WVOR Wild Horse Val 81.48 40 P P 01 03 56.1 +1.0**
**WVOR Wild Horse Val 81.48 40 P P 01 03 56.1 +1.0**
WVOR pmax pmax
comp=Z,24nm,0.9s
**L17K Donlin 81.53 9 P P 01 03 56.2 +1.5**
baz=199
**TUC Tucson 81.72 52 P P 01 03 58.8 +2.3**
baz=242
**N20K Mount Spurr 81.76 12 P P 01 03 55.9 -0.2**
baz=205
**SPCR Spurr Chakacha 81.76 12 P P 01 03 55.9 -0.2**
baz=205
**P23K Montague Islan 81.77 15 P P 01 03 56.7 +0.7**
baz=210
**GAMB Gambell 81.78 3 P P 01 03 57.1 +1.2**
baz=186
**L18K Granite Mounta 81.87 10 P P 01 03 57.6 +1.1**
baz=201
**M19K Big River Lodg 81.98 11 P P 01 03 57.6 +0.5**
baz=203
**K17K Iditarod 82.08 9 P P 01 03 58.1 +0.5**
baz=199
**L19K White Mountain 82.15 11 P P 01 03 59.1 +1.1**
baz=202
**RC01 Rabbit Creek A 82.18 14 P P 01 03 58.6 +0.5**
baz=207
**M20K Styx River 82.19 12 P P 01 03 58.8 +0.5**
baz=204
**SUA Susitna One 82.30 13 P P 01 03 59.2 +0.3**
baz=206
**J16K Anvik River 82.30 8 P P 01 03 59.7 +1.1**
baz=197,SNR=6.9
**PWL Port Wells 82.30 14 P P 01 03 58.5 -0.3**
baz=209
**IPM Ipoh 82.57 277 P P 01 04 01.7 +0.5**
**L20K Farewell, AK 82.60 11 P P 01 04 00.4 +0.1**
baz=203
**GLI Glacier Island 82.61 15 P P 01 04 00.1 -0.2**
baz=210,SNR=6.2
**J17K VABM Dome 82.62 9 P P 01 04 01.1 +0.9**
baz=198
**EYAK Cordova Ski Ar 82.66 16 P P 01 04 01.3 +0.8**
baz=211
**M22K Willow 82.69 13 P P 01 04 00.9 +0.3**
baz=207
**KNK Knik Glacier 82.76 14 P P 01 04 01.4 +0.3**
baz=208
**PMR Palmer 82.77 14 P P 01 04 01.1 0.0**
baz=208
**WUAZ Wupatki 82.78 49 P P 01 04 02.6 +0.7**
baz=242
**I17K Unalakleet 82.87 8 P P 01 04 02.2 +0.8**
baz=197
**ANM Nome 83.01 6 P P 01 04 02.7 +0.5**
baz=192
**J18K Innoko River 83.03 10 P P 01 04 02.9 +0.5**
baz=201,SNR=6.8
**U33K Whale Pass 83.12 24 P P 01 04 03.7 +0.8**
baz=223
**SML Sawmill 83.14 14 P P 01 04 02.9 -0.1**
baz=208
**V35K Ketchikan 83.14 25 P P 01 04 03.5 +0.5**
baz=224
**CUT Chulitna 83.25 13 P P 01 04 03.5 0.0**
baz=207
**BMRM Bremner River 83.31 16 P P 01 04 04.0 +0.1**
baz=212
**MESA MESA 83.37 17 P P 01 04 04.8 +0.5**
baz=214
**K20K Telida 83.38 11 P P 01 04 04.5 +0.3**
baz=203,SNR=10.0
**S31K Pelican 83.39 21 P P 01 04 05.0 +0.8**
baz=220
**SCM Sheep Creek Mo 83.39 14 P P 01 04 04.7 +0.4**
baz=210
**H16K Elim 83.41 7 P P 01 04 04.8 +0.6**
baz=195
**KLU Klutina 83.43 15 P P 01 04 04.4 -0.2**
baz=211
**CRQE Cirque 83.53 17 P P 01 04 05.5 +0.4**
baz=213
**G15K Niukluk 83.56 6 P P 01 04 05.6 +0.6**
baz=194
**WRAK Wrangell Islan 83.64 24 P P 01 04 06.8 +1.3**
baz=223
**J19K Poorman 83.71 10 P P 01 04 06.5 +0.8**
baz=202
**PNL Peninsula 83.71 19 P P 01 04 06.1 +0.3**
baz=217
**MAW Mawson 83.71 200 P P 01 04 06.5 +0.6**
comp=Z,9.1nm,0.4s,baz=149,slow=4.3,SNR=20
comp=Z,9.1nm,0.4s
**HNS HongShan 83.75 312 ⇓P P 01 04 07.0 +0.5**
HNS pmax pmax
comp=Z,34nm,1.2s
**PINM Pinnacle 83.80 18 P P 01 04 06.9 +0.6**
baz=216
**F14K Arctic Creek 83.82 5 P P 01 04 06.3 +0.1**
baz=191
**N25K Chitina, Valde 83.86 15 P P 01 04 07.0 +0.4**
baz=212,SNR=5.0
**M24K Toxa, Glenn 83.90 15 P P 01 04 07.2 +0.4**
baz=210
**WAT6 Susitna Watana 83.95 14 P P 01 04 07.5 +0.3**
baz=209
**H17K Granite Mounta 83.97 8 P P 01 04 07.4 +0.4**
baz=198
**WAT1 Susitna Watana 83.99 13 P P 01 04 07.4 +0.2**
baz=208
**SEY Seymchan 84.00 347 P P 01 04 07.1 -0.1**
comp=Z,53nm,0.7s,baz=142,slow=5.7,SNR=33
comp=Z,53nm,0.7s
**SEY Seymchan 84.00 347** *i* P P **01 04 07.0 -0.1**
SEY pmax pmax
comp=Z,65nm,0.8s
**BJT Baijiatuau 84.01 315 P P 01 04 07.8 0.0**
**BJT Baijiatuau 84.01 315 P P 01 04 07.8 0.0**
BJT pmax pmax
comp=Z,39nm,1.2s
**PSI Prapat 84.03 275 P P 01 04 08.8 +0.2**
**DUG Dugway, Tooele 84.03 44 P P 01 04 07.6 -0.5**
baz=240
**LYN LuoYang 84.05 309 ⇑P P 01 04 09.3 +1.2**
LYN pmax pmax
comp=Z,160nm,0.8s
**121A Cookes Peak, D 84.09 53 P P 01 04 09.7 +1.1**
baz=244
**J20K Nowinta River 84.12 10 P P 01 04 08.7 +0.9**
baz=203
**G16K Koyuk River 84.12 7 P P 01 04 08.8 +1.1**
baz=195
**CTG Chitna Glacier 84.19 17 P P 01 04 09.1 +0.7**
baz=215
**P29M Windy Craggy 84.19 19 P P 01 04 09.1 +0.8**
baz=218
**F15K North Star Dit 84.20 6 P P 01 04 09.1 +1.0**
baz=193
**GCSA Galena City Sc 84.22 9 P P 01 04 09.2 +1.1**
baz=200
**R32K Eaglecrest 84.22 22 P P 01 04 09.2 +0.8**
baz=221
**O28M Mount Upton 84.36 18 P P 01 04 10.0 +0.6**
baz=216
**HARP HAARP 84.40 15 P P 01 04 10.2 +1.0**
baz=211
**G17K Kiwalik Mounta 84.42 7 P P 01 04 10.5 +1.3**
baz=197
**DHY Denali Highway 84.47 14 P P 01 04 09.6 0.0**
baz=209
**O29M Mount Kennedy 84.47 19 P P 01 04 09.4 -0.3**
baz=218
**ENH Enshi 84.49 304 P P 01 04 09.3 -1.1**
**PLBC Pleasant Camp 84.50 20 P P 01 04 10.5 +0.8**
baz=220
**I20K Naaghedeneel 84.64 10 P P 01 04 10.7 +0.5**
baz=203
**HLID Hailey 84.70 41 P P 01 04 12.8 +1.5**
baz=239
**MCK McKinley 84.71 13 P P 01 04 10.7 0.0**
baz=208
**PAX Paxson 84.81 14 P P 01 04 11.3 0.0**
baz=211
**P30M Million Dollar 84.82 19 P P 01 04 11.9 +0.5**
baz=219
**GSI Gunungsitoli 84.84 273 P P 01 04 14.7 +2.2**
**GSI Gunungsitoli 84.84 273 P P 01 04 13.7 +1.2**
comp=Z,157nm,1.2s
**SKAG Skagway 84.84 20 P P 01 04 12.2 +0.9**
baz=221
**T35M Bob Quinn 84.85 24 P P 01 04 12.7 +1.2**
baz=225
**YUK8 Steele Glacier 84.90 18 P P 01 04 13.0 +1.0**
baz=216
**M26K Nabesna, AK 84.94 16 P P 01 04 12.1 +0.2**
baz=213,SNR=6.8
**H19K Roundabout Mou 85.01 9 P P 01 04 13.0 +0.9**
baz=201
**YUK6 Outpost Mounta 85.04 18 P P 01 04 12.5 -0.1**
baz=218
**G18K Tagagawik 85.05 8 P P 01 04 12.1 -0.2**
baz=199
**YUK3 Moose Creek 85.10 17 P P 01 04 14.2 +1.3**
baz=216,SNR=7.5
**S34M Telegraph Cree 85.18 23 P P 01 04 14.6 +1.6**
baz=224
**M27K Edge Creek, AK 85.20 16 P P 01 04 14.2 +0.9**
baz=214
**H20K Anotleneega Mo 85.22 10 P P 01 04 14.3 +1.2**
baz=202
**SRIT Nakonsritamara 85.23 281 P P 01 04 14.9 +0.6**
**F17K Baldwin Pennin 85.26 7 P P 01 04 13.9 +0.7**
baz=196
**YUK4 Talbot Arm 85.27 18 P P 01 04 14.9 +1.2**
baz=218
**L26K Log Cabin Wild 85.38 15 P P 01 04 14.7 +0.7**
baz=213
**SURA Surathani 85.39 281 P P 01 04 16.2 +1.1**
**ZEA Zeya 85.42 331** *e*P **P 01 04 14.9 +0.6**
ZEA pmax pmax
comp=N,30nm,1.0s
ZEA pmax pmax
comp=Z,50nm,0.8s
**K24K Donnelly Dome 85.46 14 P P 01 04 15.4 +1.1**
baz=211
**P32M Atlin 85.48 21 P P 01 04 15.7 +1.2**
baz=222
**G19K Purcell Mounta 85.50 8 P P 01 04 14.7 +0.3**
baz=200
**MLY Manley 85.51 11 P P 01 04 14.7 +0.1**
baz=206
**Q32M Nakina River 85.52 22 P P 01 04 16.1 +1.2**
baz=223
**NAYO Nakonayok 85.54 287 P P 01 04 15.8 +0.1**
**MNTX Cornudas Mount 85.59 55 P P 01 04 16.9 +1.2**
baz=246
**NEW Newport 85.60 36 P P 01 04 15.9 +0.5**
baz=237
**O30N Mendenhall 85.60 19 P P 01 04 16.2 +1.1**
baz=220,SNR=5.0
**MVCO Mesa Verde 85.62 49 P P 01 04 16.3 +0.3**
baz=243
**RIDG Independent Ri 85.62 14 P P 01 04 15.5 +0.4**
baz=212
**H21K Melozitna Rive 85.71 10 P P 01 04 15.7 +0.2**
baz=204
**HDA Harding Lake 85.72 13 P P 01 04 15.4 -0.1**
baz=210
**L27K Beaver Creek, 85.79 16 P P 01 04 16.0 0.0**
baz=214
**E17K Hotham Inlet 85.82 6 P P 01 04 16.1 +0.2**
baz=196
**N30M Aishikik Lake 85.83 18 P P 01 04 16.6 +0.4**
baz=219
**I23K Minto, Yukon-K 85.88 12 P P 01 04 17.3 +1.1**
baz=207
**WHY Whitehorse 85.90 20 P P 01 04 17.3 +0.6**
baz=221
**COLA College 85.94 13 P P 01 04 16.4 -0.1**
baz=209
**DLBC Dease Lake 85.97 23 P P 01 04 17.5 +0.6**
baz=225
**TXAR Lajitas Array 86.00 58 P P 01 04 19.8 +2.0**
comp=Z,31nm,0.8s,baz=215,slow=7.6,SNR=55
comp=Z,31nm,0.8s
**SCRK Sand Creek 86.02 14 P P 01 04 17.6 +0.5**
baz=212
**ILAR Eielson Array 86.05 13 P P 01 04 16.4 -0.8**
comp=Z,8.7nm,0.7s,baz=222,slow=5.0,SNR=16
comp=Z,8.7nm,0.7s
**F19K Shaleruckik Mo 86.06 8 P P 01 04 16.8 -0.3**
baz=200
**ANMO Albuquerque 86.12 51 P P 01 04 19.7 +1.3**
baz=245
**H22K Ishtalitna Cre 86.18 11 P P 01 04 17.9 +0.2**
baz=206
**M29M Somme Creek 86.20 17 P P 01 04 18.2 +0.2**
baz=218
**POKR Poker Plat Res 86.24 13 P P 01 04 17.1 -1.0**
baz=209
**J25K Salcha River, 86.25 14 P P 01 04 18.6 +0.4**
baz=211
**N31M Braeburn, Yuko 86.25 19 P P 01 04 19.0 +0.8**
baz=220
**P33M Teslin, Yukon 86.25 21 P P 01 04 19.0 +0.8**
baz=223
**E18K Tukpahlearik C 86.28 7 P P 01 04 18.7 +0.6**
baz=197
**D17K Noatak River 86.29 6 P P 01 04 18.4 +0.3**
baz=194
**R33M Jennings River 86.30 22 P P 01 04 18.1 -0.5**
baz=224
**G21K Allakaket 86.39 10 P P 01 04 19.3 +0.7**
baz=204
**XAN Xi'an 86.48 307 ⇑P P 01 04 21.4 +1.5**
XAN pmax pmax
comp=Z,170nm,1.1s
**K27K Chicken 86.53 15 P P 01 04 20.2 +0.8**
baz=214
**F20K Avaraart Lake 86.54 9 P P 01 04 20.0 +0.6**
baz=201
**J26L Joseph Creek 86.57 14 P P 01 04 20.4 +0.7**
J26L IAmb IAmb 01 04 21.2
comp=Z,90nm,1.6s
**J26L Joseph Creek 86.57 14 P P 01 04 20.3 +0.7**
baz=213
**HIA Hailar 86.60 325** *i* P **P 01 04 19.4 -0.7**
HIA pmax pmax
comp=Z,15nm,1.0s
**BILL Bilibino 86.64 354** *i* P **P 01 04 18.6 -1.2**
BILL *i* *PP **pwP 01 06 18.6 +0.7**
BILL pmax pmax
comp=Z,23nm,0.9s
**RDOG Red Dog Mine 86.65 6 P P 01 04 20.7 +0.8**
baz=195
**MSO Missoula 86.66 38 P P 01 04 20.6 0.0**
baz=239
**E19K Redstone River 86.72 8 P P 01 04 20.9 +0.7**
baz=200
**N32M Quiet Lake 86.86 20 P P 01 04 21.7 +0.7**
baz=222
**MLSI Meulaboh, Aceh 86.87 275 P P 01 04 22.3 +0.1**
**PRP Porcupine Dome 86.99 13 P P 01 04 23.3 +1.6**
baz=211
**C17K DeLong Mountai 87.03 6 P P 01 04 22.1 +0.4**
baz=194
**F21K Alatna River 87.04 9 P P 01 04 22.3 +0.5**
baz=204
**S22A 4UR Ranch, Cre 87.05 49 P P 01 04 23.9 +1.1**
baz=244
**G22K Bettles 87.09 10 P P 01 04 22.5 +0.6**
baz=205
**G23K Bananza Creek 87.16 11 P P 01 04 23.3 +0.9**
baz=207
**M31M Drury Creek, Y 87.22 19 P P 01 04 22.2 -0.5**
baz=221
**DAWY Dawson 87.25 16 P P 01 04 23.4 +0.6**
baz=217
**I26K Coal Creek Min 87.34 14 P P 01 04 23.9 +0.7**
baz=213
**EGAK Eagle 87.38 15 P P 01 04 24.1 +0.7**
baz=215
**C18K Utukok River 87.39 6 P P 01 04 25.3 +1.9**
baz=196
**BW06 Boulder Array 87.41 43 P P 01 04 24.9 +0.5**
baz=242
**PDAR Pinedale Array 87.41 43 P P 01 04 25.0 +0.6**
comp=Z,9.0nm,0.8s,baz=204,slow=1.9,SNR=13
comp=Z,9.0nm,0.8s
**BOZ Bozeman (W) 87.44 40 P P 01 04 25.2 +0.9**
baz=241
**HHC Hu-ho-hao-te 87.50 314** *e*P **P 01 04 26.3 +1.6**
**F22K John River 87.51 10 P P 01 04 25.0 +1.1**
baz=205
**H17A Grant Village 87.52 42 P P 01 04 26.7 +1.8**
baz=242
**FARO Faro, Yukon 87.57 19 P P 01 04 24.9 +0.6**
baz=222
**K29M Barlow Dome 87.57 17 P P 01 04 26.0 +1.5**
baz=218
**COLD Coldfoot 87.59 11 P P 01 04 24.8 +0.5**
baz=207
**WTLY Watson Lake, Y 87.59 22 P P 01 04 25.9 +1.4**
baz=226
**D19K Kuna River 87.59 7 P P 01 04 24.3 -0.1**
baz=199
**E20K Nigu River 87.61 8 P P 01 04 24.8 +0.4**
baz=201
**G24K Hadweenzic Riv 87.62 12 P P 01 04 25.0 +0.5**
baz=209
**I27K Kandik River 87.94 14 P P 01 04 26.6 +0.5**
baz=215
**G25K Bearman Lake 87.95 12 P P 01 04 26.6 +0.7**
baz=210
**D20K Etivluk River 87.98 8 P P 01 04 26.4 +0.3**
baz=201
**SDCO Great Sand Dun 88.00 49 P P 01 04 27.2 -0.1**
baz=245
**C19K Lookout Ridge 88.00 7 P P 01 04 26.4 +0.1**
baz=198
**B18K Kokolik River 88.03 6 P P 01 04 25.6 -0.7**
baz=196
**KMI Kunming 88.03 297 ⇓P P 01 04 28.8 +1.2**
KMI pmax pmax
comp=Z,48nm,1.1s
**TOAD Toad River Com 88.09 25 P P 01 04 27.6 +0.7**

baz=230
E21K Killik River 88.09 9 P P 01 04 27.2 +0.5
baz=203
LIRD Liard River Hi 88.12 24 P P 01 04 27.5 +0.5
baz=229
E22K Anaktuvuk Pass 88.14 10 P P 01 04 27.0 +0.1
baz=205
I28M Miner Creek 88.22 15 P P 01 04 27.4 0.0
baz=216
F24K Squaw Lake 88.26 11 P P 01 04 27.7 +0.2
baz=209
E23K Chandalar 88.43 10 P P 01 04 28.9 +0.5
baz=207
BTO Baotou 88.45 314 eP P 01 04 28.9 -0.2
BTO pP pP 01 06 20.8 -4.1
BTO sP sP 01 07 20.0 +2.0
BTO S S 01 14 21.0 -10
BTO SS SS 01 20 34.4 -2.7
BTO pmax pmax
comp=Z,40nm,0.6s
J30M Hart River 88.47 17 P P 01 04 29.1 +0.5
J30M Hart River 88.47 17 P P 01 04 29.6 +0.9
baz=220
H27K Steamboat Moun 88.48 14 P P 01 04 29.0 +0.4
baz=215
DRIO Del Rio 88.49 58 P P 01 04 30.9 +1.5
DRIO IAmb IAmb 01 04 31.8
comp=Z,82nm,0.9s
MMPY Sheldon Lake, 88.52 20 P P 01 04 29.3 +0.5
MMPY IAmb IAmb 01 04 30.6
comp=Z,27nm,0.9s
MMPY Sheldon Lake, 88.52 20 P P 01 04 29.6 +0.8
baz=224
T25A Trinidad 88.54 50 P P 01 04 30.7 +1.0
baz=246
I29M Ogilvie Camp, 88.56 16 P P 01 04 29.0 +0.1
baz=218
G26K Porcupine Rive 88.59 13 P P 01 04 30.1 +1.2
baz=213
OZNA Ozona 88.64 57 P P 01 04 31.2 +1.0
OZNA IAmb IAmb 01 04 32.0
comp=Z,34nm,0.9s
C21K Knifeblade Rid 88.64 8 P P 01 04 29.7 +0.5
baz=202
E24K Your Creek 88.64 11 P P 01 04 29.8 +0.5
baz=208
RLMT Red Lodge 88.68 41 P P 01 04 31.0 +0.8
baz=243
D22K Ayikyak River 88.69 9 P P 01 04 29.8 +0.4
baz=204
TGTN Hyland Airport 88.75 22 P P 01 04 31.0 +1.1
baz=227
F25K Christian Rive 88.76 12 P P 01 04 30.5 +0.6
baz=211
I30M Mount Dempster 88.96 16 P P 01 04 31.2 +0.3
baz=219
TOLK Toolik Lake Re 88.96 10 P P 01 04 31.3 +0.6
baz=207
ELIB Princess Elisa 88.97 187 dP P 01 04 30.4 -0.7
comp=Z,34nm,0.8s
N23A Red Feather La 89.01 46 P P 01 04 33.4 +1.5
baz=245
CMAR Chiang Mai Arr 89.07 290 P P 01 04 33.6 +1.3
CMAR Chiang Mai Arr 89.07 290 P P 01 04 33.3 +1.0
comp=Z,28nm,0.9s,baz=110,slow=2.7,SNR=41
comp=Z,28nm,0.9s
CMAR Chiang Mai Arr 89.07 290 P P 01 04 33.6 +1.3
D23K Nanushuk River 89.07 10 P P 01 04 31.5 +0.3
baz=206
833A Chaparral WMA, 89.09 60 P P 01 04 32.8 +0.5
baz=249
B21K Ikpikpuk River 89.10 8 P P 01 04 32.4 +1.1
baz=202
B20K Meade River 89.14 7 P P 01 04 32.9 +1.5
baz=200
F26K Sheenjek River 89.14 12 P P 01 04 32.9 +1.3
baz=212
POST Post 89.14 55 P P 01 04 32.8 +0.4
POST IAmb IAmb 01 04 33.9
comp=Z,48nm,1.0s
LL02 Futaleuf 89.20 135 P P 01 04 32.5 -0.1
LL02 IAmb IAmb 01 04 34.4
comp=Z,31nm,0.9s
H29M Whitestone 89.23 15 P P 01 04 32.8 +0.8
baz=218
HBVL Hebbronville 89.25 61 P P 01 04 34.3 +1.4
HBVL IAmb IAmb 01 04 35.8
comp=Z,96nm,1.4s
PZH PanZhiHua 89.36 298 P P 01 04 35.3 +1.6
PZH pmax pmax
comp=Z,20nm,0.7s
JCT Junction City 89.53 58 P P 01 04 35.4 +1.1
baz=249
D24K Happy Valley 89.54 10 P P 01 04 33.9 +0.5
baz=208
HNDO Hondo 89.61 59 P P 01 04 36.4 +1.7
HNDO IAmb IAmb 01 04 37.3
comp=Z,58nm,0.9s
AMTX Amarillo 89.69 53 P P 01 04 35.7 +0.7
AMTX IAmb IAmb 01 04 36.4
comp=Z,32nm,1.1s
AMTX Amarillo 89.69 53 P P 01 04 35.3 +0.3
baz=248
EGMT Eagleton 89.73 39 P P 01 04 35.1 +0.3
baz=242
EPYK Eagle Plains 89.76 16 P P 01 04 35.4 +0.9
baz=219
YAK Yakutsk 89.81 338 iP P 01 04 32.8 -1.9
YAK pmax pmax
comp=Z,15nm,0.8s
G29M Pine Creek 89.86 15 P P 01 04 35.6 +0.6
G29M IAmb IAmb 01 04 52.2
comp=Z,152nm,1.8s
G29M Pine Creek 89.86 15 P P 01 04 35.1 +0.2
baz=218
C23K Itkillik River 89.87 9 P P 01 04 35.3 +0.5
C23K IAmb IAmb 01 04 35.9
comp=Z,33nm,0.9s
C23K Itkillik River 89.87 9 P P 01 04 35.2 +0.3
baz=206
B22K Teshekpuk Lake 89.92 8 P P 01 04 35.4 +0.4
baz=204
F28M Old Crow 89.99 14 P P 01 04 37.2 +1.7
baz=216
C24K Franklin Bluff 90.07 10 P P 01 04 36.4 +0.7
baz=208
E27K Coleen River 90.08 13 P P 01 04 36.3 +0.4
E27K IAmb IAmb 01 04 39.3
comp=Z,52nm,1.6s
E27K Coleen River 90.08 13 P P 01 04 37.0 +1.1
baz=215
TROLL Troll, Antarti 90.11 180 ⇑P P 01 04 36.0 -0.3
comp=Z,2µm,0.7s
G30M tAoh Zraii Nji 90.36 15 P P 01 04 38.9 +1.6
baz=220
SNAA Sanae 90.39 179 ⇑P P 01 04 36.9 -0.7
comp=Z,331nm,0.8s
SNAA Sanae 90.39 179 P P 01 04 36.9 -0.7
comp=Z,16nm,0.9s,baz=208,slow=7.5,SNR=34
comp=Z,16nm,0.9s
VNA3 Neumayer Olymp 90.53 176 ⇑P P 01 04 37.6 -0.5
comp=Z,74nm,0.7s
G31M Satah River 90.82 16 P P 01 04 39.9 +0.6
baz=221
E28M Babbage River 90.87 13 P P 01 04 40.1 +0.6
baz=216
C26K Camden Bay 90.89 11 P P 01 04 41.4 +1.8
baz=212
F30M Barrier River 90.96 15 P P 01 04 42.0 +2.0
baz=220
VNA2 Neumayer--Watz 90.97 177 ⇑P P 01 04 40.0 -0.2
comp=Z,37nm,0.6s,baz=187,slow=4.9
E29M Blow River 91.06 14 P P 01 04 40.6 +0.2
baz=218
NVL N'lazarevskaya 91.08 183 eP P 01 04 38.6 -2.0
NVL pmax pmax
comp=Z,21nm,0.9s
PLCA Paso Flores 91.10 134 P P 01 04 42.2 +0.7
comp=Z,12nm,1.0s,baz=223,slow=6.6,SNR=6.1
comp=Z,12nm,1.0s
LZH Lanzhou 91.11 308 ⇑P P 01 04 43.0 +1.4
LZH pmax pmax
comp=Z,89nm,1.4s
VNA1 Neumayer--Stat 91.20 177 ⇑P P 01 04 41.5 +0.3
comp=Z,69nm,0.8s
LAO LASA Array 91.28 41 P P 01 04 44.4 +2.4
baz=245

F31M Tsiigehtchic 91.34 16 P P 01 04 42.3 +0.6
baz=222
435B Jarrell 91.43 58 P P 01 04 44.1 +1.1
baz=250
WRGLY Wrigley 91.56 22 P P 01 04 44.3 +1.6
baz=231
RSSD Black Hills 91.62 44 P P 01 04 45.2 +1.3
baz=246
D28M Stokes Point 91.63 13 P P 01 04 43.9 +1.0
baz=217
INK Inuvik 92.05 15 P P 01 04 44.9 +0.1
baz=222
CBKS Cedar Bluff 92.59 50 P P 01 04 48.4 +0.2
baz=249
R32A Long Quarter, 93.20 51 P P 01 04 52.1 +1.1
DGMT Dagmar 93.27 40 P P 01 04 51.9 +0.8
DGMT IAmb IAmb 01 04 53.4
comp=Z,29nm,0.8s
DGMT Dagmar 93.27 40 P P 01 04 52.6 +1.6
baz=246
SONM Songino Array 93.78 319 P P 01 04 53.1 -0.4
comp=Z,5.2nm,1.0s,baz=122,slow=3.1,SNR=4.6
comp=Z,5.2nm,1.0s
YKA Yellowknife Ar 94.46 25 P P 01 04 56.1 +0.1
comp=Z,5.3nm,0.9s,baz=250,slow=3.8,SNR=7.6
comp=Z,5.3nm,0.9s
KSU1 Kansas State U 94.98 51 P P 01 05 00.6 +1.6
KSU1 IAmb IAmb 01 05 01.0
comp=Z,38nm,0.8s
KSU1 Kansas State U 94.98 51 P P 01 04 59.5 +0.5
baz=251
GTA Gaotai 95.26 310 P P 01 05 03.8 +3.3
GTA pmax pmax
comp=Z,13nm,1.0s
WMQ Urumqi 105.16 312 Pdif Pdif 01 05 45.8 +1.4
ZALV Zalesovo Beam 108.47 322 PKiKP PKiKP 01 10 00.1 -1.1
comp=Z,9.9nm,0.7s,baz=90,slow=2.0,SNR=2.2
MKAR Makanchi Array 109.36 314 PKiKP PKiKP 01 10 01.9 -1.2
comp=Z,4.2nm,1.0s,baz=96,slow=1.8,SNR=5.8
KURK Kurchatov 112.06 318 i PKiKP PKiKP 01 10 07.1 -1.0
KURBB Kurchatov Arra 112.11 318 PKiKP PKiKP 01 10 07.1 -1.1
comp=Z,3.2nm,0.7s,baz=80,slow=1.8,SNR=12
KURBB SKKP SKKPdf 01 24 09.8 +3.2
comp=Z,1.5nm,0.6s,baz=272,slow=4.1,SNR=4.5
BVAR Borovoye Array 117.08 321 PKP PKPdf 01 10 16.8 -1.0
comp=Z,7.8nm,0.7s,baz=84,slow=2.0,SNR=17
BVAR SKKP SKKPdf 01 23 57.8 +0.6
comp=Z,1.8nm,0.6s,baz=39,slow=2.7,SNR=4.8
BDFB Brasilia 120.63 121 SKKP SKKPdf 01 23 42.9 -6.0
comp=Z,7.5nm,0.8s,baz=186,slow=1.9,SNR=8.5
ARU Arti 123.09 326 i PKiKP PKPdf 01 10 28.0 -1.1
ARU 01 12 17.9
ARU 01 16 46.3
ARU SS SS 01 28 21.8 +0.4
ARCES ARCESS Array B 126.53 350 PKPdf 01 10 35.5 +0.1
ARCES ARCESS Array B 126.53 350 PKP PKPdf 01 10 35.2 -0.2
comp=Z,8.4nm,0.8s,baz=357,slow=2.4,SNR=9.0
ARCES PKKPab PKKPab 01 20 08.1 +0.4
comp=Z,1.5nm,0.7s,baz=222,slow=1.6,SNR=3.8
SUR Sutherland 126.57 200 PKP PKPdf 01 10 36.6 -0.3
comp=Z,12nm,1.0s,baz=25,slow=1.8,SNR=5.9
BOSA Boshof 128.28 207 PKP PKiKP 01 10 41.0 +0.1
comp=Z,4.3nm,1.0s,baz=171,slow=9.7,SNR=4.0
BELG Belogornoye 130.52 325 i PKiKP PKPdf 01 10 42.8 -0.6
BELG pmax pmax
comp=Z,3.0nm,0.9s
FINES FINESS Array B 133.41 344 PKhKP PKPpre 01 10 41.4
comp=Z,4.6nm,0.9s,baz=73,slow=2.6,SNR=2.1
FINES PKP PKPdf 01 10 48.5 -0.1
comp=Z,7.5nm,0.9s,baz=56,slow=1.8,SNR=7.1
FINES SKPbc SKPbc 01 13 28.7 +0.8
comp=Z,4.1nm,0.7s,baz=22,slow=2.1,SNR=5.9
OBN Obninsk 134.53 333 i PKiKP PKPdf 01 10 49.6 -1.3
OBN i 01 12 58.2
OBN i 01 13 30.4
OBN pmax pmax
comp=Z,8.0nm,1.0s
GOF Gofitskoye 136.40 317 ce PKiKP PKPdf 01 10 54.4 -0.3
NB2 NORSAR Array B 136.59 353 PKP PKPpre 01 10 47.3
comp=Z,1.4nm,0.7s,baz=21,slow=3.8
NOA NORSAR Array B 136.59 353 PKP PKPdf 01 10 54.4 -0.3
comp=Z,1.8nm,0.8s,baz=14,slow=4.1,SNR=4.8
NOA SKPbc SKPbc 01 13 38.5 +0.7
comp=Z,2.3nm,0.9s,baz=19,slow=2.5,SNR=3.9
KIV Kislovodsk 137.09 316 ePKiKP PKPdf 01 10 53.4 -2.7
KIV pmax pmax
comp=Z,6.0nm,1.0s
HFS Hagfors 137.15 351 PKhKP PKPpre 01 10 45.3
comp=Z,1.6nm,0.4s,baz=76,slow=6.3,SNR=8.3
HFS PKP PKPdf 01 10 55.8 +0.2
comp=Z,7.3nm,0.8s,baz=27,slow=2.3,SNR=5.8
AKASG Malin Array Be 140.79 332 PKhKP PKPpre 01 10 55.5
comp=Z,6.0nm,0.8s,baz=43,slow=4.0,SNR=8.5
SIM Simferopol' 141.98 322 ePKHKP PKPpre 01 11 01.4
SIM pmax pmax
comp=Z,30nm,1.0s
EKA Eskdalemuir Ar 142.66 5 PKhKP PKPpre 01 11 02.3
comp=Z,5.6nm,0.7s,baz=334,slow=2.6,SNR=10
GKP Gorki Klasztor 142.89 345 ePKP PKPdf 01 11 04.0 -2.2
BEL Belsk 143.13 340 ePKP PKPbc 01 11 05.1 +0.4
EDMD Edmundbyers 143.24 4 eP PKPab 01 11 04.0 -0.6
PURM Purcari 143.37 327 ⇑P PKPbc 01 11 05.8 +0.2
KESW Keswick, Cumbr 143.40 5 eP PKPab 01 11 04.9 -0.3
GAZ Gaziantep 143.56 309 PKPbc 01 11 06.8 +0.2
LVV L'vov 143.64 335 ePKiKP PKPab 01 11 05.6 -0.7
MILM Milestii Mici 143.65 328 ⇑P PKPab 01 11 06.0 -0.4
MILM Milestii Mici 143.65 328 ⇑PKiKP PKPab 01 11 06.0 -0.4
BZK Bozkurt 143.66 318 PKPbc PKPbc 01 11 07.1 +0.4
GDLE Glaisdale, N Y 143.70 3 eP PKPab 01 11 05.8 -0.6
BNN Bunyan 143.88 312 PKPbc 01 11 07.6 -0.1
LODK Lodwar 143.97 250 PKPbc PKPab 01 11 08.7 0.0
IAS Iasi 144.07 330 ⇑P PKPbc 01 11 05.9 -1.9
IAS Iasi 144.07 330 ⇑PKHKP PKPbc 01 11 05.9 -1.9
HPK Haverah Park 144.13 3 eP PKPbc 01 11 07.6 -0.2
KWP Kalwaria Pacla 144.30 336 ePKP PKPbc 01 11 08.5 0.0
KWP Kalwaria Pacla 144.30 336 PKPbc 01 11 08.2 -0.3
KWP Kalwaria Pacla 144.30 336 PKiKP PKPbc 01 11 08.3 -0.2
DSB Dublin 144.37 8 PKPbc PKPab 01 11 08.8 -0.1
WLF1 Llynfaes 144.57 6 eP PKPdf 01 11 08.7 -0.3
PRAR RÁSCA 144.58 331 ⇑P PKPbc 01 11 09.6 +0.1
LBWR Ladybower, Pea 144.68 4 eP PKPdf 01 11 09.3 +0.1
VLDR Vladesti 144.75 327 ⇑P PKPab 01 11 10.3 -0.3
TLCR 144.81 326 ⇓P PKPbc 01 11 10.1 -0.1
TLCR 144.81 326 ⇓PKiKP PKPbc 01 11 10.1 -0.1
BUR08 Bucovina Ar. S 144.83 332 PKPbc 01 11 10.6 +0.3
OJC Ojcow 144.84 340 ePKP PKPbc 01 11 10.1 0.0
OJC Ojcow 144.84 340 PKPdf 01 11 09.8 +0.1
OJC Ojcow 144.84 340 PKiKP PKPdf 01 11 09.8 +0.1
BURAR Bucovina Array 144.85 332 ⇑P PKPab 01 11 11.3 +0.2
SCTR Scanteiesti 144.91 327 ⇓P PKPab 01 11 11.1 -0.1
GHRR 144.94 328 ⇓P PKPab 01 11 11.5 +0.2
STNC Stoke 144.95 4 eP PKPbc 01 11 10.6 +0.2
TESR Tescani 144.99 330 ⇑P PKPbc 01 11 10.8 -0.2
BR131 Keskin Array S 145.01 315 PKPbc 01 11 11.0 -0.2
BR131 Keskin Array S 145.01 315 PKiKP PKPbc 01 11 11.0 -0.2
BRTR Keskin Array B 145.01 315 PKPbc 01 11 10.9 -0.3
BRTR Keskin Array B 145.01 315 PKP PKPdf 01 11 10.7 +0.1
comp=Z,41nm,1.1s,baz=61,slow=2.1,SNR=36
BRTR SKKPbc SKKPbc 01 22 01.4 -1.0
comp=Z,2.2nm,0.9s,baz=241,slow=3.7,SNR=3.7
KOLS Kolonicke sedl 145.04 336 ePKiKP PKPbc 01 11 11.1 +0.3
KOLS Kolonicke sedl 145.04 336 ePKP PKPbc 01 11 11.1 +0.3
FOEL Foel Wylfa 145.08 5 eP PKPbc 01 11 10.7 -0.1
SLCR Slobozia Conac 145.08 327 ⇓P PKPab 01 11 11.5 -0.4
KIRS Kirsehir-Merke 145.10 314 ⇑P PKPdf 01 11 11.0 +0.4
IZVR Izvoarele 145.12 327 ⇑P PKPab 01 11 11.8 -0.2
COSR Cosmesti PH 145.13 328 ⇑P PKPab 01 11 12.5 +0.4
TUDR 145.13 327 ⇓P PKPab 01 11 11.7 -0.4
CFR Carcaliu 145.17 327 ⇓P PKPbc 01 11 11.3 0.0
CFR Carcaliu 145.17 327 ⇓PKiKP PKPbc 01 11 11.3 0.0
PANC Panciu 145.20 328 ⇑P PKPab 01 11 12.3 -0.1
TPGR Topolog 145.24 326 ⇓P PKPbc 01 11 11.7 +0.2
ONER Baraj Valea Uz 145.24 330 ⇓P PKPab 01 11 12.3 -0.3
KSP Ksiaz 145.34 344 ePKP PKPab 01 11 12.5 -0.3
NIE Niedzica 145.36 339 ePKP PKPab 01 11 12.7 -0.2
CWF Charnwood Fore 145.36 3 eP PKPbc 01 11 11.2 -0.4
CRVS Cervenica-Dubn 145.37 337 ePKP2 PKPbc 01 11 12.2 +0.4
CRVS Cervenica-Dubn 145.37 337 ePKP PKPbc 01 11 12.2 +0.4
ASF Jabal al Asfar 145.39 301 PKPbc PKPbc 01 11 12.6 +0.1
comp=Z,33nm,0.8s,baz=236,slow=0.1,SNR=21
VRI Vrincioaia 145.41 329 ⇑P PKPab 01 11 12.7 -0.5
VRI Vrincioaia 145.41 329 ⇑PKP2 PKPab 01 11 12.7 -0.5
WACR West Acre 145.45 1 eP PKPbc 01 11 11.4 -0.4
PLOR Plostina 145.46 329 ⇓P PKPbc 01 11 11.5 -0.7

PLOR Plostina 145.46 329 ⇓PKiKP PKPbc 01 11 11.5 -0.7
HLM1 Long Mynd 145.47 5 eP PKPbc 01 11 11.7 -0.3
ANTO Ankara 145.51 315 PKPbc 01 11 12.5 -0.1
ANTO Ankara 145.51 315 ⇓P PKPbc 01 11 12.7 +0.2
ANTO Ankara 145.51 315 PKP2 PKPbc 01 11 12.5 -0.1
BR231 Keskin MP Arra 145.53 315 PKPbc 01 11 12.5 -0.2
BMR Baia Mare 145.55 334 ⇑P PKPbc 01 11 12.7 +0.4
HARR Harsova 145.61 326 ⇓P PKPbc 01 11 12.3 -0.3
TURR Turia 145.63 330 ⇑P PKPab 01 11 13.5 -0.6
ARCR ARCALIA 145.63 332 ⇑P PKPbc 01 11 12.5 -0.1
CLL Collm 145.69 347 PKPbc 01 11 12.5 -0.1
CLL Collm 145.69 347 i PKPbc PKPbc 01 11 12.4 -0.1
comp=Z,98nm,0.9s
CLL Collm 145.69 347 PKIKP PKPbc 01 11 12.5 -0.1
COVR Voineasa-Covas 145.69 329 ⇑P PKPbc 01 11 12.1 -0.7
OKC Ostrava-Krasne 145.70 341 ePKP PKPbc 01 11 12.6 -0.1
OKC Ostrava-Krasne 145.70 341 ePKIKP PKPbc 01 11 12.6 -0.1
OZUR 145.71 330 ⇑P PKPbc 01 11 13.5 +0.6
UPC Upice 145.72 344 ePKP PKPbc 01 11 13.0 +0.3
UPC Upice 145.72 344 ePKP2 PKPbc 01 11 13.0 +0.3
DPC Dobruska-Polom 145.78 343 ePKP PKPbc 01 11 13.3 +0.4
DPC Dobruska-Polom 145.78 343 ePKP2 PKPbc 01 11 13.3 +0.4
BOSR Bodos 145.78 330 ⇓P PKPbc 01 11 13.3 +0.2
LANS Liptovska Anna 145.87 339 ePKP2 PKPab 01 11 14.3 -0.7
LANS Liptovska Anna 145.87 339 ePKP PKPab 01 11 14.3 -0.7
BRG Berggiesshubel 145.89 346 ePKP PKPdf 01 11 11.7 +0.3
BRG Amp 01 11 12.4
comp=Z,11nm,1.1s
BRG Berggiesshubel 145.89 346 P PKPbc 01 11 13.6 +0.4
BRG Amp 01 11 15.5
comp=Z,40nm,0.9s
BRG Berggiesshubel 145.89 346 P PKiKP 01 11 21.7 +5.9
BRG Amp 01 11 22.5
comp=Z,14nm,0.8s
KRLC Kraliky 145.90 343 ePKP PKPbc 01 11 13.6 +0.3
KRLC Kraliky 145.90 343 ePKP2 PKPab 01 11 14.4 -0.6
MBAR Mbarara 145.94 240 PKPbc PKPbc 01 11 14.4 -0.2
MBAR Mbarara 145.94 240 PKPbc PKPbc 01 11 15.3 +0.7
comp=Z,14nm,0.8s,baz=77,slow=1.8,SNR=16
MORC Moravsky Berou 145.94 342 ePKP PKPbc 01 11 13.3 -0.1
MORC Moravsky Berou 145.94 342 ⇓P PKPbc 01 11 13.7 +0.3
MORC Moravsky Berou 145.94 342 ⇓PKP2 PKPbc 01 11 13.7 +0.3
AMRR Amara 145.97 327 ⇑P PKPbc 01 11 14.4 +0.8
DOPR Dopca 145.99 330 ⇓P PKPbc 01 11 14.4 +0.7
ISR Istrita 146.03 328 ⇑P PKPbc 01 11 14.2 +0.3
ISR Istrita 146.03 328 ⇑PKP2 PKPbc 01 11 14.2 +0.3
PVCC Panska Ves 146.06 345 ePKP PKPbc 01 11 14.2 +0.5
PVCC Panska Ves 146.06 345 ePKP2 PKPbc 01 11 14.2 +0.5
MLR Muntele Rosu 146.07 329 PKPbc 01 11 13.6 -0.5
MLR Muntele Rosu 146.07 329 PKPbc PKPbc 01 11 13.4 -0.7
comp=Z,25nm,0.8s,baz=341,slow=6.0,SNR=16
MLR Muntele Rosu 146.07 329 ⇑P PKPbc 01 11 13.9 -0.1
MLR Muntele Rosu 146.07 329 ⇑PKP2 PKPbc 01 11 13.9 -0.1
KECS Kecovo 146.08 337 ePKP PKPbc 01 11 14.4 +0.6
MONM Monmouth 146.15 5 eP PKPbc 01 11 13.5 -0.3
RICC Richard 146.16 346 ePKP PKPbc 01 11 14.5 +0.6
MAUC Maruska 146.22 341 ePKP PKPbc 01 11 14.5 +0.3
CBBR Cluj-Babes-Bol 146.23 333 ⇑P PKPdf 01 11 11.1 -1.1
CJR Cluj-Napoca 146.25 333 ⇑P PKPbc 01 11 14.4 0.0
CJR Cluj-Napoca 146.25 333 ⇑PKP2 PKPbc 01 11 14.4 0.0
HSKC Hora Svate Kat 146.25 347 ePKP PKPbc 01 11 14.4 +0.1
LEHL Lehliu 146.34 327 ⇓P PKPbc 01 11 14.9 +0.3
MMAI Mount Meron Ar 146.36 303 PKPbc PKPbc 01 11 15.3 +0.2
comp=Z,34nm,0.6s,baz=72,slow=3.2,SNR=44
PRA Prague 146.52 345 ePKP PKPbc 01 11 15.3 +0.4
PRA Prague 146.52 345 ePKP2 PKPbc 01 11 15.3 +0.4
VOIR 146.54 330 ⇑P PKPbc 01 11 15.2 -0.1
VOIR 146.54 330 ⇑PKP2 PKPbc 01 11 15.2 -0.1
SWN1 Swindon 146.55 4 eP PKPbc 01 11 14.8 -0.1
PCED Cedros 146.56 46 ePKP PKPbc 01 11 16.4 +1.0
PRU Pruhonice 146.57 345 ePKP PKPbc 01 11 15.1 0.0
PRU Pruhonice 146.57 345 ePKP2 PKPbc 01 11 15.1 0.0
DRGR 146.57 333 ⇓P PKPbc 01 11 15.3 0.0
DRGR 146.57 333 ⇓PKP2 PKPbc 01 11 15.3 0.0
GOPC GO Pecny, Ondr 146.58 345 ePKP PKPbc 01 11 15.4 +0.2
GOPC GO Pecny, Ondr 146.58 345 ePKP2 PKPbc 01 11 15.4 +0.2
CALA Caldeira 146.58 46 ePKP PKiKP 01 11 16.7 -1.0
VRAC Vranov 146.64 342 ePKP PKPbc 01 11 15.2 -0.1
VRAC Vranov 146.64 342 PKPbc PKPbc 01 11 15.8 +0.5
comp=Z,24nm,0.8s,baz=35,slow=1.9,SNR=14
VRAC Vranov 146.64 342 ⇓P PKPbc 01 11 15.7 +0.4
VYHS Vyhne 146.65 339 ePKP2 PKPbc 01 11 15.9 +0.5
VYHS Vyhne 146.65 339 ePKP PKPbc 01 11 15.9 +0.5
HOR Horta 146.66 46 ePKP PKiKP 01 11 16.7 -1.1
JAVC Velka Javorina 146.71 341 ePKP PKiKP 01 11 16.7 -1.0
BORR Bors 146.72 335 ⇓P PKPbc 01 11 16.3 +0.8
PSZ Piszkesteto 146.77 337 PKPbc 01 11 15.3 -0.5
PSZ Piszkesteto 146.77 337 ⇑P PKPbc 01 11 15.3 +0.4
PSZ Piszkesteto 146.77 337 PKIKP PKPbc 01 11 15.3 -0.5
PCAN Candelaria 146.78 46 ePKP PKPbc 01 11 17.0 +0.9
ARR Arges 146.79 330 ⇓P PKPbc 01 11 16.5 +0.6
SRBC Serra Branca 146.80 45 ePKP PKPbc 01 11 16.2 +0.1
PICO Pico 146.81 46 ePKP PKiKP 01 11 17.2 -1.0
ROSA Rosais 146.82 46 ePKP PKiKP 01 11 17.2 -1.0
KRUC Moravsky 146.92 342 ePKP PKPbc 01 11 15.8 -0.3
PPNO Prainha do Nor 146.93 46 ePKP PKiKP 01 11 17.6 -0.9
TREC Trest 146.96 343 ePKP PKPbc 01 11 16.1 -0.1
TREC Trest 146.96 343 ePKP2 PKPbc 01 11 16.1 -0.1
PMAN Manadas 146.97 46 ePKP PKiKP 01 11 17.5 -0.9
PID Ribeirinha 147.05 46 ePKP PKPbc 01 11 17.6 +0.8
SMOL Smolenice 147.09 341 ePKP2 PKiKP 01 11 17.6 -0.8
LOT Lotru 147.14 331 ⇑P PKPbc 01 11 15.9 -1.1
ZVC Zvikov 147.16 345 ePKP2 PKPbc 01 11 16.8 +0.1
BEBN Eben Emael 147.24 355 dPKP PKPbc 01 11 16.8 0.0
HUMR Humele 147.24 329 ⇓P PKPbc 01 11 16.3 -0.7
CSS Mathiatis 147.30 307 PKPbc 01 11 16.3 -1.3
MEM Membach 147.40 355 dPKP PKPbc 01 11 17.3 0.0
BTNL Ternell 147.41 355 dPKP PKPbc 01 11 17.1 -0.2
SRO Srobarova 147.41 339 ePKP2 PKiKP 01 11 18.2 -0.8
SRO Srobarova 147.41 339 ePKP PKiKP 01 11 18.2 -0.8
SRO e 01 11 22.0
PSBA Serra de Santa 147.42 45 ePKP PKiKP 01 11 18.9 -0.5
SIRR Siria 147.43 334 ⇓P PKPbc 01 11 17.8 +0.2
DYA Yadsworthy 147.43 7 eP PKPbc 01 11 16.8 -0.6
BSTI Sart Tilman 147.46 355 dPKP PKPbc 01 11 17.5 +0.1
ZST Bratislava 147.47 341 ePKP2 PKiKP 01 11 18.8 -0.4
ZST Bratislava 147.47 341 ePKP PKiKP 01 11 18.8 -0.4
PAGU Agualva, Azore 147.51 45 ePKP PKiKP 01 11 18.9 -0.7
GRF Grafenberg Arr 147.58 348 ePKP PKPbc 01 11 17.9 +0.1
baz=17,slow=2.0
PSCM Serra do Cume 147.59 45 ePKP PKiKP 01 11 19.4 -0.3
KHC Kasperske Hory 147.60 345 ePKP PKPbc 01 11 18.1 +0.2
KHC Kasperske Hory 147.60 345 ePKP2 PKPbc 01 11 18.1 +0.2
EIL Elat 147.62 297 PKPbc PKPbc 01 11 18.3 -0.2
comp=Z,25nm,1.0s,baz=1.0,slow=2.2,SNR=12
GZR Gura Zlata 147.63 332 ⇑P PKPbc 01 11 18.0 -0.1
BCLA Clavier 147.64 356 dPKP PKPbc 01 11 17.7 -0.2
SURR Surduc 147.64 333 ⇓P PKPbc 01 11 17.7 -0.4
BHOU Houvegnez 147.65 355 dPKP PKPbc 01 11 18.0 0.0
BGES Gesves 147.69 356 dPKP PKPbc 01 11 17.5 -0.5
CKRC Cesky Krumlov 147.71 344 ePKIKP PKPdf 01 11 14.5 -0.1
BMRD Maredsous 147.79 356 dPKP PKPbc 01 11 18.1 -0.1
GEC2 GERESS Array S 147.84 345 PKPbc 01 11 18.2 -0.4
GERES GERESS Array B 147.84 345 PKPbc 01 11 18.2 -0.4
GERES GERESS Array B 147.84 345 PKPbc PKPbc 01 11 18.6 0.0
comp=Z,17nm,0.7s,baz=69,slow=3.7,SNR=45
ELND Elena 147.89 326 ⇓P PKPbc 01 11 18.7 -0.1
VLAD Vladila 147.90 328 ⇑P PKPbc 01 11 18.7 0.0
RCHB Rochefort 147.91 356 dPKP PKPbc 01 11 18.6 0.0
BZS Buzias 147.97 333 ⇓P PKPbc 01 11 18.8 -0.1
BZS Buzias 147.97 333 ⇓PKP2 PKPbc 01 11 18.8 -0.1
SRE Strehaia 147.99 330 ⇓P PKPbc 01 11 19.2 +0.2
DOU Dourbes 148.01 357 dPKP PKPbc 01 11 18.8 0.0
CONA Conrad Observa 148.09 342 ePKP PKPbc 01 11 19.4 +0.2
comp=Z,14nm,0.7s,SNR=6.9
EDRB Edirne 148.13 323 P PKPbc 01 11 18.7 -0.7
RONA Rosalia, Austr 148.17 341 ePKP PKPbc 01 11 19.4 0.0
comp=Z,14nm,0.7s,SNR=9.3
HERR Herculane 148.19 332 ⇑P PKPbc 01 11 18.5 -1.0
WLF Walferdange 148.32 355 PKPbc 01 11 20.0 +0.4
WLF Walferdange 148.32 355 dPKP PKPbc 01 11 19.9 +0.4
WLF Walferdange 148.32 355 PKP2 PKPbc 01 11 20.0 +0.4
BANR Banloc 148.36 333 ⇑P PKiKP 01 11 20.6 -0.4
MDVR Moldovita 148.58 332 ⇑P PKPbc 01 11 19.0 -1.5
MOA Molln 148.61 344 i PKP PKPbc 01 11 20.1 -0.4
comp=Z,5.3nm,0.9s
MORH Mrgy, Hungar 148.66 337 ⇓P PKPbc 01 11 20.4 -0.2
ARSA Arzberg 148.80 342 i PKP PKPbc 01 11 20.2 -0.8
comp=Z,6.0nm,0.9s
STU Stuttgart 148.82 350 PKPbc 01 11 20.4 -0.5
STU Stuttgart 148.82 350 PKHKP PKPbc 01 11 20.4 -0.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JSA | Saint Aubin | 148.84 | 5 | *e*P | | PKPbc | 01 11 20.9 | 0.0 |
| BIOA | Bad Ischl, Aus | 148.92 | 344 | *e*PKP | | PKPbc | 01 11 20.6 | -0.7 |
| | comp=Z,10nm,0.9s | | | | | | | |
| KULA | Kula-Manisa | 148.95 | 316 | P | | PKPbc | 01 11 21.1 | -0.6 |
| ELL | Elmali | 149.02 | 313 | | | PKPbc | 01 11 21.2 | -0.8 |
| ELL | Elmali | 149.02 | 313 | | PKHKP | PKPbc | 01 11 21.2 | -0.8 |
| BFO | Black Forest | 149.38 | 351 | | | PKPbc | 01 11 21.6 | -0.7 |
| BFO | Black Forest | 149.38 | 351 | | PKHKP | PKPbc | 01 11 21.6 | -0.7 |
| LESA | Schwarzleotal | 149.41 | 345 | *e*PKP | | PKPbc | 01 11 21.9 | -0.6 |
| | comp=Z,9.3nm,0.6s | | | | | | | |
| SOKA | Soboth | 149.46 | 342 | *i* PKP | | PKPbc | 01 11 22.1 | -0.6 |
| | comp=Z,4.1nm,0.3s,SNR=5.3 | | | | | | | |
| BOVS | Bovan | 149.47 | 331 | ||P | PKPbc | 01 11 21.8 | -0.8 |
| KBA | Koelnbreinsper | 149.57 | 344 | *e*PKP | | PKPbc | 01 11 22.2 | -0.8 |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| EZN | Ezine | 149.66 | 321 | P | | PKPbc | 01 11 22.6 | -0.6 |
| WATA | Walderalm | 149.75 | 347 | *i* PKP | | PKPbc | 01 11 22.9 | -0.5 |
| | comp=Z,24nm,1.0s | | | | | | | |
| OBKA | Obir | 149.76 | 342 | *i* PKP | | PKPbc | 01 11 22.3 | -1.1 |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| RETA | Reutte | 149.78 | 348 | *i* PKP | | PKPbc | 01 11 23.0 | -0.4 |
| | comp=Z,5.6nm,0.6s | | | | | | | |
| WTTA | Wattenberg | 149.80 | 347 | *i* PKP | | PKPbc | 01 11 23.3 | -0.3 |
| | comp=Z,20nm,0.6s,SNR=8.4 | | | | | | | |
| PSMA | Santa Maria | 149.82 | 46 | *e*PKP | | PKiKP | 01 11 26.3 | +1.9 |
| MOTA | Moosalm | 149.84 | 347 | *i* PKP | | PKPbc | 01 11 23.0 | -0.6 |
| | comp=Z,14nm,0.8s | | | | | | | |
| MYKA | Terra Mystica | 149.90 | 344 | *i* PKP | | PKPbc | 01 11 22.5 | -1.2 |
| | comp=Z,12nm,0.7s,SNR=6.3 | | | | | | | |
| SQTA | Sankt Quirin | 149.94 | 347 | *i* PKP | | PKPbc | 01 11 23.5 | -0.3 |
| | comp=Z,14nm,0.6s,SNR=8.5 | | | | | | | |
| KAVA | Kavala | 149.95 | 324 | P | | PKPbc | 01 11 22.7 | -1.2 |
| PRK | Paraskevi | 150.05 | 320 | P | | PKPbc | 01 11 23.2 | -0.9 |
| NVR | Nevrokopi | 150.06 | 325 | P | | PKiKP | 01 11 24.5 | -0.3 |
| ABTA | Abfaltersbach | 150.08 | 345 | *i* PKP | | PKPbc | 01 11 23.1 | -1.0 |
| | comp=Z,34nm,0.7s,SNR=13 | | | | | | | |
| THAS | Thassos island | 150.10 | 323 | P | | PKPbc | 01 11 22.5 | -1.7 |
| DAVA | Damuels | 150.14 | 349 | *i* PKP | | PKPbc | 01 11 24.2 | -0.1 |
| | comp=Z,14nm,0.8s,SNR=5.7 | | | | | | | |
| FETA | Feichten | 150.23 | 348 | *i* PKP | | PKPbc | 01 11 24.6 | 0.0 |
| | comp=Z,22nm,0.9s,SNR=7.1 | | | | | | | |
| KOKK | Kokkinochori, | 150.36 | 324 | P | | PKPbc | 01 11 23.9 | -0.9 |
| DAVOX | Davos/Dischmat | 150.62 | 349 | PKPbc | | PKiKP | 01 11 25.8 | -0.2 |
| | comp=Z,45nm,0.7s,baz=304,slow=0.6,SNR=39 | | | | | | | |
| DAT | Datca | 150.64 | 314 | P | | PKPbc | 01 11 24.3 | -1.5 |
| BODT | Bodrum | 150.64 | 315 | P | | PKPbc | 01 11 24.8 | -0.8 |
| CHOS | Chios island | 150.70 | 319 | P | | PKPbc | 01 11 25.1 | -0.7 |
| FUORN | Ofenpass-Fuorn | 150.70 | 348 | | | PKiKP | 01 11 26.0 | -0.2 |
| KNT | Kendrikon | 150.71 | 326 | P | | PKPbc | 01 11 24.1 | -1.6 |
| VAY | Valandovo | 150.77 | 327 | *i* P | | PKPbc | 01 11 24.8 | -0.9 |
| CTI | Castel Tesino | 150.95 | 346 | | | PKPbc | 01 11 25.8 | -0.4 |
| CTI | Castel Tesino | 150.95 | 346 | | PKIKP | PKPbc | 01 11 25.8 | -0.4 |
| HORT | Hortiatis | 151.00 | 325 | P | | PKPbc | 01 11 25.2 | -1.2 |
| KYMI | Kymi, Euboea I | 151.75 | 321 | P | | PKPbc | 01 11 26.4 | -1.7 |
| FNA | Florina | 151.78 | 327 | P | | PKPbc | 01 11 27.4 | -0.8 |
| OHR | Ohrid | 151.83 | 328 | *i* P | | PKiKP | 01 11 28.8 | +0.3 |
| DION | Dionisos Attik | 152.21 | 320 | P | | PKPbc | 01 11 29.1 | 0.0 |
| NEST | Nestorio | 152.22 | 327 | P | | PKPbc | 01 11 28.1 | -1.1 |
| AXAR | Agios Charalam | 152.51 | 323 | P | | PKPbc | 01 11 28.7 | -1.1 |
| VILL | Villia | 152.52 | 321 | P | | PKPbc | 01 11 27.5 | -2.4 |
| MAKR | Makrakomi, Fth | 152.64 | 324 | P | | PKPbc | 01 11 29.0 | -1.1 |
| EVR | Evrytania | 152.89 | 324 | P | | PKPbc | 01 11 30.2 | -0.5 |
| ANX | Ano Chora | 153.05 | 323 | P | | PKPbc | 01 11 30.4 | -0.6 |
| EFP | Efpalio | 153.17 | 323 | P | | PKPbc | 01 11 30.5 | -0.7 |
| GUR | Goura | 153.25 | 322 | P | | PKPbc | 01 11 30.4 | -1.1 |
| KLV | Kalavryta, Ach | 153.29 | 322 | P | | PKPbc | 01 11 30.7 | -0.8 |
| EVGI | Lefkada island | 153.73 | 325 | P | | PKiKP | 01 11 33.3 | +0.9 |
| ESDC | Sonseca Array | 157.95 | 12 | PKPab | | PKPab | 01 12 05.8 | -0.3 |
| | comp=Z,5.3nm,0.9s,baz=336,slow=3.3,SNR=12 | | | | | | | |
| KEST | Kesra | 161.19 | 340 | PKPab | | PKPab | 01 12 20.0 | -0.3 |
| | comp=Z,9.2nm,0.8s,baz=6.6,slow=1.1,SNR=9.5 | | | | | | | |
| MDT | Midelt | 164.22 | 20 | PKPab | | PKPab | 01 12 34.1 | +0.1 |
| | comp=Z,4.8nm,0.8s,baz=7.1,slow=4.5,SNR=6.8 | | | | | | | |
| DBIC | Dimbokro | 166.94 | 150 | PKPab | | PKPab | 01 12 46.5 | +0.4 |
| | comp=Z,4.3nm,0.7s,baz=133,slow=7.0,SNR=3.3 | | | | | | | |

*MOS* ***19*** *00:55:41.4±1.0, 18°.15S×178°.13W, h516km, mb5.6/37, Error ellipse: s-maj=8.2km s-min=7.6km az=118.6*
*BJI* ***19*** *00:55:43.8±0.0, 18°.04S×177°.85W, h550km, mb5.6/54*
*IDC* ***19*** *00:55:44.8±1.0, 18°.31S×178°.15W, h548km±11km, mb4.9/26, mbtmp5.8/29, Error ellipse: s-maj=9.1km s-min=8.0km az=141.0*
*NOU* ***19*** *00:55:44.9, 18°.19S×178°.10W, h546km, mb5.7/165, Fiji Islands Region*
*NEIC* ***19*** *00:55:44.5±1.6, 18°.23S±0°.09×178°.10W±0°.09, h538km±5km, mb5.6/209, Error ellipse: s-maj=13.7km s-min=12.1km az=161.0*
*BGR* ***19*** *00:55:44.7, 18°.50S×177°.56W, h550km*
**ISC 19 00:55:45.2±0.5, 18°.25S±0°.04×178°.13W±0°.04, h555km±4km, n1416, σ0s90/1460, mb5.6/215, 96C-96D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.68 | 277 | P | P | 00 57 06.7 | +1.6 |
| MSVF | Nonsavu | 3.68 | 277 | P | P | 00 57 06.7 | +1.6 |
| AFI | Afiamalu | 7.47 | 56 | P | P | 00 57 35.3 | -2.8 |
| AFI | Afiamalu | 7.47 | 56 | P | P | 00 57 35.3 | -2.8 |
| NIUE | Niue | 7.81 | 97 | P | P | 00 57 40.9 | -0.3 |
| NIUE | Niue | 7.81 | 97 | | P | 00 57 41.0 | -0.3 |
| NIUE | Niue | 7.81 | 97 | P | P | 00 57 41.1 | -0.1 |
| | comp=Z,15460μmcomp=Z,3μm,1.1s | | | | | | |
| FUNA | Funafuti | 10.01 | 345 | P | P | 00 58 02.5 | -0.9 |
| FUNA | Funafuti | 10.01 | 345 | | P | 00 58 02.6 | -0.7 |
| RAO | Raoul Island | 10.95 | 179 | P | P | 00 58 11.0 | -1.8 |
| | comp=Z,224nm,0.2s,baz=84,slow=23,SNR=1.6 | | | | | | |
| RAO | | | | S | S | 01 00 13.1 | -1.1 |
| | comp=Z,816nm,0.5s,baz=262,slow=23,SNR=7.2 | | | | | | |
| RAO | Raoul Island | 10.95 | 179 | P | P | 00 58 11.0 | -1.8 |
| RAO | | | | S | S | 01 00 13.1 | -1.1 |
| GLKZ | Green Lake | 10.96 | 179 | P | P | 00 58 10.1 | -2.8 |
| RTV | Rentapao | 12.80 | 270 | P | P | 00 58 32.2 | +0.2 |
| DVP | Devils Point | 13.03 | 270 | P | P | 00 58 34.6 | +0.2 |
| LIFNC | LIFOU | 14.03 | 257 | P | P | 00 58 42.9 | -1.7 |
| PINNC | Pines Island, | 14.20 | 250 | P | P | 00 58 45.8 | -0.6 |
| PINNC | Pines Island, | 14.20 | 250 | P | P | 00 58 45.4 | -1.0 |
| DZM | Mont Dzumac | 14.98 | 253 | P | P | 00 58 54.6 | +0.1 |
| DZM | Mont Dzumac | 14.98 | 253 | P | P | 00 58 53.9 | -0.6 |
| DZM | | | | IAmb | IAmb | 00 58 57.9 | |
| | comp=Z,182nm,0.8s | | | | | | |
| DZM | Mont Dzumac | 14.98 | 253 | P | P | 00 58 53.2 | -1.3 |
| | comp=Z,160nm,0.7s,baz=82,slow=15,SNR=13 | | | | | | |
| KOUNC | Koumac, New Ca | 16.75 | 259 | P | P | 00 59 12.0 | +0.5 |
| KOUNC | Koumac, New Ca | 16.75 | 259 | P | P | 00 59 11.2 | -0.3 |
| RAR | Rarotonga | 17.53 | 103 | P | P | 00 59 18.7 | +0.2 |
| RAR | Rarotonga | 17.53 | 103 | P | P | 00 59 18.4 | -0.1 |
| RAR | Rarotonga | 17.53 | 103 | P | P | 00 59 18.0 | -0.5 |
| | comp=Z,473nm,0.9s,baz=247,slow=6.4,SNR=24 | | | | | | |
| RAR | Rarotonga | 17.53 | 103 | P | P | 00 59 18.4 | -0.1 |
| RAR | | | | pmax | pmax | | |
| | comp=Z,581nm,1.0s | | | | | | |
| OUZ | Omahuta | 18.43 | 202 | P | P | 00 59 28.6 | +2.0 |
| OUZ | Omahuta | 18.43 | 202 | P | P | 00 59 29.3 | +2.7 |
| WCZ | Waipu Caves | 18.84 | 199 | P | P | 00 59 33.0 | +2.7 |
| KUZ | Kuaotunu | 19.21 | 195 | P | P | 00 59 34.7 | +1.1 |
| KUZ | Kuaotunu | 19.21 | 195 | P | P | 00 59 33.3 | -0.4 |
| ABAZ | Army Bay | 19.31 | 197 | P | P | 00 59 36.6 | +2.0 |
| WIAZ | Waiheke Island | 19.40 | 196 | P | P | 00 59 37.5 | +2.0 |
| MBAZ | Motutapu North | 19.45 | 197 | P | P | 00 59 37.2 | +1.3 |
| MXZ | Matakaoa Point | 19.49 | 189 | P | P | 00 59 33.5 | -2.8 |
| RVAZ | Riverhead Bore | 19.54 | 198 | P | P | 00 59 37.7 | +1.0 |
| HBAZ | Herne Bay Bore | 19.57 | 197 | P | P | 00 59 37.9 | +1.0 |
| EPAZ | Eden Park BICE | 19.59 | 197 | P | P | 00 59 38.8 | +1.7 |
| ETAZ | East Tamaki Re | 19.61 | 197 | P | P | 00 59 39.0 | +1.7 |
| URZ | Urewera | 20.37 | 191 | P | P | 00 59 41.7 | -2.5 |
| | comp=Z,217nm,0.5s,baz=350,slow=3.0,SNR=28 | | | | | | |
| | comp=Z,217nm,0.5s | | | | | | |
| TARA | Tarawa | 21.38 | 335 | P | P | 00 59 53.3 | -0.3 |
| MSWZ | Moikau Station | 23.78 | 192 | P | P | 01 00 13.0 | -1.7 |
| SNZO | South Karori | 23.79 | 193 | P | P | 01 00 13.2 | -1.6 |
| TCW | Tory Channel | 23.80 | 194 | P | P | 01 00 13.2 | -1.7 |
| BHW | Baring Head | 23.85 | 193 | P | P | 01 00 12.9 | -2.4 |
| QRZ | Quartz Range | 23.89 | 198 | P | P | 01 00 15.7 | 0.0 |
| PLWZ | Palliser | 23.92 | 192 | P | P | 01 00 14.1 | -1.9 |
| TKNZ | Takaka Hill | 23.96 | 197 | P | P | 01 00 14.8 | -1.5 |
| NNZ | Nelson | 24.02 | 196 | P | P | 01 00 14.8 | -2.1 |
| TUWZ | Tuamarina | 24.08 | 195 | P | P | 01 00 15.8 | -1.5 |
| CMWZ | Cape Campbell | 24.32 | 194 | P | P | 01 00 17.4 | -2.1 |
| MRNZ | Matariki Terra | 24.36 | 197 | P | P | 01 00 18.6 | -1.2 |
| BSWZ | Blackbirch Sta | 24.37 | 195 | P | P | 01 00 17.2 | -2.7 |
| LHI | Lord Howe Isla | 24.49 | 233 | P | P | 01 00 21.1 | 0.0 |
| LHI | | | | IAmb | IAmb | 01 01 08.0 | |
| | comp=Z,188nm,1.3s | | | | | | |
| INZ | Inchbonnie | 25.96 | 198 | P | P | 01 00 32.6 | -1.3 |
| WVZ | Waitaha Valley | 26.48 | 199 | P | P | 01 00 37.2 | -1.3 |
| MQZ | McQueen's Vall | 26.54 | 195 | P | P | 01 00 36.8 | -2.2 |
| RPZ | Rata Peaks | 26.98 | 197 | P | P | 01 00 41.9 | -1.0 |
| RPZ | Rata Peaks | 26.98 | 197 | P | P | 01 00 40.8 | -2.1 |
| RPZ | | | | IAmb | IAmb | 01 00 48.3 | |
| | comp=Z,79nm,0.7s | | | | | | |
| RPZ | Rata Peaks | 26.98 | 197 | P | P | 01 00 41.3 | -1.6 |
| ARCZ | Arundel | 27.16 | 197 | P | P | 01 00 43.1 | -1.3 |
| PPT | Papeete | 27.16 | 93 | P | P | 01 00 44.7 | -0.2 |
| PPT | Papeete | 27.16 | 93 | P | P | 01 00 44.7 | -0.2 |
| | comp=Z,407nm,1.0s,baz=344,slow=2.6,SNR=9.9 | | | | | | |
| | comp=Z,407nm,1.0s | | | | | | |
| PPT | Papeete | 27.16 | 93 | P | P | 01 00 44.7 | -0.2 |
| PPTF | Pamatai, Papee | 27.17 | 93 | P | P | 01 00 45.5 | +0.5 |
| PPTF | Pamatai, Papee | 27.17 | 93 | P | P | 01 00 44.7 | -0.3 |
| TMZ | Timaru | 27.61 | 197 | P | P | 01 00 47.1 | -1.3 |
| GC1S | Gold Coast 1 S | 27.81 | 244 | P | P | 01 00 51.9 | +1.5 |
| LBZ | Lake Benmore | 27.84 | 198 | P | P | 01 00 48.9 | -1.5 |
| LBZ | | | | IAmb | IAmb | 01 00 53.5 | |
| | comp=Z,150nm,0.9s | | | | | | |
| AUWSH | Wavell State H | 28.04 | 246 | P | P | 01 00 53.4 | +1.0 |
| ODZ | Otahua Downs | 28.32 | 197 | P | P | 01 00 53.8 | -0.8 |
| GD1S | Gladstone Soft | 29.16 | 254 | P | P | 01 01 02.8 | +0.6 |
| EIDS | Eidsvold | 29.41 | 251 | P | P | 01 01 04.5 | +0.2 |
| EIDS | Eidsvold | 29.41 | 251 | P | P | 01 01 04.2 | -0.2 |
| EIDS | | | | IAmb | IAmb | 01 01 05.4 | |
| | comp=Z,192nm,0.8s | | | | | | |
| EIDS | Eidsvold | 29.41 | 251 | P | P | 01 01 04.3 | 0.0 |
| | comp=Z,270nm,1.3s | | | | | | |
| RK1H | Rockhampton Ha | 29.74 | 255 | P | P | 01 01 07.3 | +0.1 |
| DCZ | Deep Cove | 29.78 | 201 | P | P | 01 01 07.0 | -0.1 |
| DCZ | | | | IAmb | IAmb | 01 01 08.8 | |
| | comp=Z,116nm,0.8s | | | | | | |
| ARMA | Armidale | 30.00 | 240 | P | P | 01 01 10.8 | +1.2 |
| ARMA | Armidale | 30.00 | 240 | P | P | 01 01 10.7 | +1.2 |
| ARMA | | | | IAmb | IAmb | 01 01 11.7 | |
| | comp=Z,145nm,0.8s | | | | | | |
| ARMA | Armidale | 30.00 | 240 | P | P | 01 01 10.7 | +1.2 |
| | comp=Z,225nm,1.1s | | | | | | |
| NTLH | Newcastle Hard | 30.75 | 236 | P | P | 01 01 16.8 | +1.1 |
| KWJN | Gagan, Kwajale | 30.76 | 331 | P | P | 01 01 17.1 | +1.1 |
| AUPHS | Peel High Scho | 30.81 | 240 | P | P | 01 01 17.7 | +1.3 |
| SYDH | Sydney Hard Ro | 31.81 | 235 | P | P | 01 01 25.9 | +1.1 |
| RABL | Rabaul | 32.24 | 292 | P | P | 01 01 28.9 | +0.1 |
| AULRC | Lightning Ridg | 32.83 | 244 | P | P | 01 01 33.9 | +0.4 |
| AUDCS | Dubbo College | 32.98 | 239 | P | P | 01 01 35.8 | +1.0 |
| TV1H | Townsville Har | 33.20 | 263 | P | P | 01 01 36.7 | -0.1 |
| BULU | Kimbe | 33.29 | 288 | P | P | 01 01 39.1 | +1.5 |
| CNB | Canberra Magne | 33.44 | 233 | P | P | 01 01 39.6 | +1.0 |
| CNB | Canberra Magne | 33.44 | 233 | P | P | 01 01 39.7 | +1.0 |
| | comp=Z,257nm,1.0s | | | | | | |
| CTA | Charters Tower | 33.66 | 261 | P | P | 01 01 40.9 | +0.2 |
| | comp=Z,25nm,0.7s,baz=97,slow=9.5,SNR=41 | | | | | | |
| CTA | | | | PcP | PcP | 01 04 05.0 | +0.6 |
| | comp=Z,3.0nm,1.0s,baz=80,slow=6.5,SNR=3.5 | | | | | | |
| | comp=Z,25nm,0.7s | | | | | | |
| CTA | Charters Tower | 33.66 | 261 | P | P | 01 01 40.9 | +0.2 |
| CTA | | | | | | 01 04 05.1 | |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 01 01 40.9 | +0.2 |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 01 01 40.4 | -0.3 |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 01 01 40.4 | -0.3 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,411nm,0.8s | | | | | | |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 01 01 40.7 | 0.0 |
| CTAO | | | | PcP | PcP | 01 04 04.6 | +0.2 |
| CTAO | | | | ScP | ScP | 01 06 59.2 | +2.4 |
| CAN | Canberra | 33.71 | 233 | P | P | 01 01 41.8 | +0.8 |
| CAN | Canberra | 33.71 | 233 | P | P | 01 01 41.3 | +0.3 |
| CAN | | | | IAmb | IAmb | 01 01 42.9 | |
| | comp=Z,142nm,0.9s | | | | | | |
| CAN | Canberra | 33.71 | 233 | P | P | 01 01 41.7 | +0.7 |
| | comp=Z,226nm,1.0s | | | | | | |
| CAN | Canberra | 33.71 | 233 | P | P | 01 01 41.3 | +0.3 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,143nm,0.9s | | | | | | |
| CAN | Canberra | 33.71 | 233 | P | P | 01 01 41.8 | +0.8 |
| CAN | | | | ScP | ScP | 01 06 59.8 | +3.0 |
| YNG | Young | 33.82 | 235 | P | P | 01 01 43.0 | +1.2 |
| | comp=Z,329nm,1.2s | | | | | | |
| PATS | Pohnpei | 34.09 | 315 | P | P | 01 01 45.2 | +0.9 |
| PATS | Pohnpei | 34.09 | 315 | P | P | 01 01 44.2 | 0.0 |
| PATS | Pohnpei | 34.09 | 315 | P | P | 01 01 45.0 | +0.7 |
| KAVG | Kavieng | 34.20 | 293 | P | P | 01 01 44.7 | -0.5 |
| PMG | Port Moresby | 34.78 | 280 | P | P | 01 01 51.0 | +0.9 |
| PMG | Port Moresby | 34.78 | 280 | P | P | 01 01 51.1 | +0.9 |
| PMG | Port Moresby | 34.78 | 280 | P | P | 01 01 50.7 | +0.6 |
| PMG | Port Moresby | 34.78 | 280 | *ce*P | P | 01 01 51.2 | +1.1 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,1μm,0.8s | | | | | | |
| PMG | Port Moresby | 34.78 | 280 | P | P | 01 01 51.0 | +0.9 |
| PMG | | | | ScP | ScP | 01 07 02.9 | +2.0 |
| CMSA | Cobar Meteorol | 35.22 | 241 | P | P | 01 01 54.3 | +0.8 |
| CMSA | Cobar Meteorol | 35.22 | 241 | P | P | 01 01 54.1 | +0.6 |
| | comp=Z,376nm,1.4s | | | | | | |
| MTSU | Mount Surprise | 35.64 | 264 | P | P | 01 01 57.6 | +0.3 |
| QLP | Quilpie | 35.67 | 250 | P | P | 01 01 57.6 | +0.3 |
| QLP | Quilpie | 35.67 | 250 | P | P | 01 01 57.5 | +0.2 |
| | comp=Z,753nm,1.1s | | | | | | |
| GLAD | Gladstone | 36.80 | 225 | P | P | 01 02 07.3 | +0.9 |
| TOO | Toolangi | 37.17 | 231 | P | P | 01 02 10.7 | +1.1 |
| TOO | Toolangi | 37.17 | 231 | P | P | 01 02 10.3 | +0.7 |
| TOO | | | | IAmb | IAmb | 01 02 11.5 | |
| | comp=Z,236nm,0.8s | | | | | | |
| TOO | Toolangi | 37.17 | 231 | P | P | 01 02 10.3 | +0.7 |
| | comp=Z,315nm,0.9s | | | | | | |
| TOO | Toolangi | 37.17 | 231 | P | P | 01 02 10.3 | +0.7 |
| TOO | | | | pmax | pmax | | |
| | comp=Z,236nm,0.8s | | | | | | |
| AUMAG | Moama Anglican | 37.23 | 234 | P | P | 01 02 11.1 | +1.1 |
| COEN | Coen | 37.38 | 271 | P | P | 01 02 11.9 | +0.3 |
| COEN | Coen | 37.38 | 271 | P | P | 01 02 12.1 | +0.5 |
| COEN | Coen | 37.38 | 271 | P | P | 01 02 12.1 | +0.5 |
| | comp=Z,646nm,2.1s | | | | | | |
| MANU | Manus Island | 37.47 | 291 | P | P | 01 02 13.0 | +0.6 |
| CORO | Coronation Par | 37.59 | 225 | P | P | 01 02 14.5 | +1.6 |
| MLBS | Spotswood, Mel | 37.70 | 231 | P | P | 01 02 15.2 | +1.4 |
| TAOE | Nuku Hiva Isla | 38.01 | 81 | P | P | 01 02 17.6 | +0.8 |
| TAU | Tasmania Unive | 38.17 | 222 | P | P | 01 02 17.8 | +0.2 |
| TAU | | | | IAmb | IAmb | 01 02 18.5 | |
| | comp=Z,229nm,1.6s | | | | | | |
| TAU | Tasmania Unive | 38.17 | 222 | P | P | 01 02 17.8 | +0.2 |
| TAU | | | | pmax | pmax | | |
| | comp=Z,229nm,1.6s | | | | | | |
| GEXS | Deakin Univers | 38.28 | 231 | P | P | 01 02 19.7 | +1.2 |
| BRAT | Ballarat | 38.32 | 232 | P | P | 01 02 20.0 | +1.1 |
| STKA | Stephens Creek | 38.70 | 242 | P | P | 01 02 23.2 | +1.1 |
| STKA | Stephens Creek | 38.70 | 242 | P | P | 01 02 22.9 | +0.8 |
| STKA | | | | IAmb | IAmb | 01 02 24.2 | |
| | comp=Z,84nm,0.9s | | | | | | |
| STKA | Stephens Creek | 38.70 | 242 | P | P | 01 02 23.1 | +1.1 |
| | comp=Z,97nm,1.6s | | | | | | |
| STKA | Stephens Creek | 38.70 | 242 | P | P | 01 02 23.1 | +1.1 |
| | comp=Z,292nm,0.8s,baz=90,slow=9.6,SNR=26 | | | | | | |
| | comp=Z,292nm,0.8s | | | | | | |
| STKA | Stephens Creek | 38.70 | 242 | P | P | 01 02 22.9 | +0.8 |
| STKA | | | | pmax | pmax | | |
| | comp=Z,84nm,1.0s | | | | | | |
| INKA | Innaminka | 38.87 | 248 | P | P | 01 02 24.8 | +1.3 |
| ARPS | Mount Arapiles | 39.67 | 234 | P | P | 01 02 30.5 | +0.7 |
| ARPS | Mount Arapiles | 39.67 | 234 | P | P | 01 02 30.3 | +0.6 |
| | comp=Z,214nm,1.0s | | | | | | |
| QIS | Mount Isa | 39.86 | 260 | P | P | 01 02 31.4 | -0.2 |
| QIS | Mount Isa | 39.86 | 260 | P | P | 01 02 31.2 | -0.4 |
| | comp=Z,110nm,1.3s | | | | | | |
| WAKE | Wake Island | 40.18 | 337 | P | P | 01 02 33.2 | -0.8 |
| WAKE | Wake Island | 40.18 | 337 | P | P | 01 02 33.2 | -0.8 |
| H11N3 | WAKE ISLAND Hy | 40.49 | 338 | P | P | 01 02 35.9 | -0.4 |
| H11N3 | WAKE ISLAND Hy | 40.49 | 338 | P | P | 01 02 35.9 | -0.4 |
| | baz=167,slow=11,SNR=12 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.49 | 338 | P | P | 01 02 36.0 | -0.3 |
| | baz=167,slow=11,SNR=8.3 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 40.51 | 338 | P | P | 01 02 36.1 | -0.2 |
| | baz=167,slow=11,SNR=7.0 | | | | | | |
| HTT | Hallett | 41.21 | 240 | P | P | 01 02 42.9 | +0.7 |
| HTT | Hallett | 41.21 | 240 | P | P | 01 02 42.9 | +0.7 |
| LCRK | Leigh Creek | 41.35 | 244 | P | P | 01 02 44.0 | +0.7 |
| MMPI | Merauke | 41.43 | 278 | P | P | 01 02 46.1 | +2.0 |
| | comp=Z,1μm,1.3s | | | | | | |
| TABU | Tabubil | 41.72 | 283 | P | P | 01 02 47.7 | +1.2 |
| GHSS | Government Hou | 41.76 | 238 | P | P | 01 02 47.3 | +0.9 |
| PTPS | Port Pirie | 41.93 | 240 | P | P | 01 02 48.6 | +0.9 |
| WHYH | Whyalla | 42.25 | 241 | P | P | 01 02 51.2 | +0.9 |
| JAY | Jayapura | 43.26 | 286 | P | P | 01 02 59.1 | +0.6 |
| | comp=Z,927nm,1.0s | | | | | | |
| OOD | Oodnadatta | 43.34 | 249 | P | P | 01 03 00.0 | +1.1 |
| BBOO | Buckleboo | 43.48 | 241 | P | P | 01 03 00.4 | +0.5 |
| BBOO | Buckleboo | 43.48 | 241 | P | P | 01 03 00.2 | +0.3 |
| BBOO | Buckleboo | 43.48 | 241 | P | P | 01 03 00.5 | +0.6 |
| GENI | Genyem | 43.72 | 286 | P | P | 01 03 03.1 | +1.1 |
| GENI | Genyem | 43.72 | 286 | P | P | 01 03 03.4 | +1.4 |
| | comp=Z,1μm,1.7s | | | | | | |
| KIP | Kipapa | 44.08 | 27 | P | P | 01 03 05.0 | +0.4 |
| KIP | Kipapa | 44.08 | 27 | P | P | 01 03 04.5 | 0.0 |
| WR0 | Warramunga Arr | 44.65 | 260 | P | P | 01 03 08.2 | -0.9 |
| WB2 | Warramunga Arr | 44.83 | 260 | P | P | 01 03 10.0 | -0.5 |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 01 03 09.9 | -0.7 |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 01 03 10.0 | -0.6 |
| | comp=Z,282nm,0.7s,baz=94,slow=7.6,SNR=58 | | | | | | |
| WRA | | | | PcP | PcP | 01 04 40.8 | +0.3 |
| | comp=Z,48nm,0.8s,baz=85,slow=3.2,SNR=5.9 | | | | | | |
| WRA | | | | S | S | 01 09 04.5 | -3.8 |
| | comp=Z,14nm,0.9s,baz=96,slow=13,SNR=4.8 | | | | | | |
| | comp=Z,282nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 01 03 09.9 | -0.7 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| MULG | Mulgathing | 44.91 | 245 | P | P | 01 03 11.0 | 0.0 |
| AS31 | Alice Springs | 44.96 | 255 | P | P | 01 03 11.6 | +0.1 |
| AS31 | Alice Springs | 44.96 | 255 | P | P | 01 03 11.7 | +0.2 |
| | comp=Z,552nm,0.8s | | | | | | |
| ASAR | Alice Springs | 44.96 | 255 | P | P | 01 03 11.8 | +0.2 |
| ASAR | Alice Springs | 44.96 | 255 | P | P | 01 03 11.8 | +0.2 |
| | comp=Z,1μm,0.7s,baz=86,slow=8.6,SNR=193 | | | | | | |
| ASAR | | | | PcP | PcP | 01 04 41.0 | +0.1 |
| | comp=Z,47nm,0.7s,baz=91,slow=3.9,SNR=5.4 | | | | | | |
| ASAR | | | | S | S | 01 09 08.6 | -1.4 |
| | comp=Z,61nm,1.0s,baz=94,slow=14,SNR=20 | | | | | | |
| ASAR | Alice Springs | 44.96 | 255 | P | P | 01 03 11.8 | +0.2 |
| ASAR | | | | | | 01 04 41.0 | |
| ASAR | | | | S | S | 01 09 08.6 | -1.4 |
| PTCN | Pitcairn Islan | 44.97 | 107 | P | P | 01 03 12.8 | +1.2 |
| MIDW | Midway | 46.20 | 1 | P | P | 01 03 19.9 | -0.7 |
| KDU | Kakadu | 47.82 | 269 | P | P | 01 03 32.9 | -0.3 |
| KDU | Kakadu | 47.82 | 269 | P | P | 01 03 32.9 | -0.3 |
| | comp=Z,404nm,0.8s | | | | | | |
| GUMO | Guam | 48.30 | 308 | P | P | 01 03 37.1 | +0.4 |
| GUMO | Guam | 48.30 | 308 | P | P | 01 03 36.9 | +0.2 |
| GUMO | Guam | 48.30 | 308 | P | P | 01 03 36.9 | +0.2 |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,1μm,0.9s | | | | | | |
| GUMO | Guam | 48.30 | 308 | P | P | 01 03 36.9 | +0.2 |
| MTN | Manton Dam | 49.06 | 269 | P | P | 01 03 41.7 | -0.7 |
| MTN | Manton Dam | 49.06 | 269 | P | P | 01 03 42.2 | -0.3 |
| MTN | Manton Dam | 49.06 | 269 | P | P | 01 03 41.7 | -0.7 |
| | comp=Z,442nm,0.8s | | | | | | |
| DRS | Darwin Rock St | 49.38 | 269 | P | P | 01 03 44.3 | -0.4 |
| WRKA | Warakurna | 50.00 | 252 | P | P | 01 03 49.2 | 0.0 |
| | comp=Z,712nm,0.9s | | | | | | |
| FORT | Forrest | 50.11 | 245 | P | P | 01 03 49.6 | -0.3 |
| FORT | Forrest | 50.11 | 245 | P | P | 01 03 49.4 | -0.5 |
| FORT | Forrest | 50.11 | 245 | P | P | 01 03 49.4 | -0.5 |
| | comp=Z,582nm,1.4s | | | | | | |
| SAUI | Saumlaki | 50.16 | 275 | P | P | 01 03 50.0 | -0.5 |
| KNRA | Kununurra | 50.72 | 264 | P | P | 01 03 54.3 | -0.2 |
| KNRA | | | | IAmb | IAmb | 01 03 55.4 | |
| | comp=Z,323nm,0.8s | | | | | | |
| KNRA | Kununurra | 50.72 | 264 | P | P | 01 03 54.4 | -0.2 |
| | comp=Z,514nm,0.9s | | | | | | |
| FAKI | Fak Fak | 50.91 | 281 | P | P | 01 03 56.1 | +0.1 |
| FAKI | Fak Fak | 50.91 | 281 | P | P | 01 03 55.8 | -0.2 |
| FAKI | | | | IAmb | IAmb | 01 03 57.1 | |
| | comp=Z,646nm,1.6s | | | | | | |
| FAKI | Fak Fak | 50.91 | 281 | P | P | 01 03 56.4 | +0.4 |
| | comp=Z,306nm,1.3s | | | | | | |
| SWI | Sorong | 52.58 | 283 | P | P | 01 04 08.2 | +0.2 |
| FITZ | Fitzroy Crossi | 53.24 | 261 | P | P | 01 04 13.2 | +0.6 |
| FITZ | Fitzroy Crossi | 53.24 | 261 | P | P | 01 04 12.3 | -0.4 |
| MSAI | Masohi | 53.86 | 279 | P | P | 01 04 17.6 | +0

KAPI **Kappang** 61.98 274 P P 01 05 12.0 -0.1
KAPI IAmb IAmb 01 05 13.2
comp=Z,294nm,1.6s
KAPI **Kappang** 61.98 274 P P 01 05 12.0 -0.1
KAPI pmax pmax
comp=Z,294nm,1.6s
PLAI **Plampang** 62.76 269 P P 01 05 16.8 -0.4
comp=Z,676nm,1.0s,comp=Z,76µm
TOLI2 **Tolitoli** 63.04 281 P P 01 05 19.0 0.0
TOLI2 **Tolitoli** 63.04 281 P P 01 05 18.6 -0.4
TOLI2 IAmb IAmb 01 05 19.9
comp=Z,161nm,0.9s
GIRL **Giralia** 63.05 253 P P 01 05 19.6 +0.7
GIRL **Giralia** 63.05 253 P P 01 05 19.8 +0.8
RPN **Rapa Nui** 63.41 112 P P 01 05 21.5 +0.3
RPN **Rapa Nui** 63.41 112 P P 01 05 21.5 +0.3
RPN pmax pmax
comp=Z,769nm,1.6s
CCD **Concordia, Ant** 64.61 194 P P 01 05 28.8 +0.4
JHJ2 **Mitsune** 64.98 322 P P 01 05 31.4 +0.5
JHJ2 **Mitsune** 64.98 322 P P 01 05 31.3 +0.5
DNP **Denpasar** 65.24 269 P P 01 05 33.3 +0.4
SRBI **Singaraja** 65.40 269 P P 01 05 33.8 -0.1
comp=Z,372nm,1.2s
SMKI **Samarinda** 65.86 278 P P 01 05 39.5 +2.7
comp=Z,146nm,0.5s
JMZ **Minamidaito 2** 65.91 310 P P 01 05 37.7 +0.9
JMZ **Minamidaito 2** 65.91 310 P P 01 05 36.2 -0.5
CASY **Casey** 65.94 205 P P 01 05 36.6 +0.2
CASY **Casey** 65.94 205 P P 01 05 36.5 +0.2
JAGI **Jajag, Banyuwa** 66.30 269 P P 01 05 38.2 -1.3
JAGI **Jajag, Banyuwa** 66.30 269 P P 01 05 38.3 -1.3
JAGI **Jajag, Banyuwa** 66.30 269 P P 01 05 38.2 -1.3
comp=Z,616nm,1.6s
MYLDM **Lahad Datu** 66.66 284 P P 01 05 42.7 +1.0
MYLDM IAmb IAmb 01 05 45.8
comp=Z,305nm,1.2s
JSG **Sagara** 67.04 322 P P 01 05 44.1 +0.5
JSG **Sagara** 67.04 322 P P 01 05 44.0 +0.5
JMM **Marumori** 67.87 326 P P 01 05 48.3 -0.3
JMM **Marumori** 67.87 326 P P 01 05 48.4 -0.3
JMM IAmb IAmb 01 05 49.7
comp=Z,146nm,0.9s
JGF **Kuroka** 68.17 322 P P 01 05 50.3 -0.3
JGF **Kuroka** 68.17 322 P P 01 05 50.5 -0.1
JGF IAmb IAmb 01 05 51.5
comp=Z,90nm,0.8s
INU **Inuyama** 68.20 322 P P 01 05 50.7 +0.1
INU **Inuyama** 68.20 322 P P 01 05 50.7 +0.1
INU IAmb IAmb 01 05 52.0
comp=Z,148nm,1.3s
INU **Inuyama** 68.20 322 P P 01 05 50.6 -0.1
MJAR **Matsushiro Arr** 68.34 323 P P 01 05 51.3 -0.2
comp=Z,129nm,0.8s,baz=159,slow=5.8,SNR=109
MJAR PcP PcP 01 06 13.2 +0.8
comp=Z,33nm,0.8s,baz=164,slow=3.8,SNR=5.6
comp=Z,129nm,0.8s
MJAR **Matsushiro Arr** 68.34 323 P P 01 05 51.3 -0.2
MJAR 01 06 13.2
MAJO **Matsushiro** 68.34 323 P P 01 05 51.2 -0.4
MAJO **Matsushiro** 68.34 323 P P 01 05 51.6 0.0
MAJO IAmb IAmb 01 05 52.4
comp=Z,210nm,1.1s
MAJO **Matsushiro** 68.34 323 P P 01 05 51.6 0.0
MAJO pmax pmax
comp=Z,210nm,1.1s
MAJO **Matsushiro** 68.34 323 P P 01 05 51.4 -0.1
MAJO PcP PcP 01 06 12.5 +0.1
MJB9 **Matsu-Tunnel** 68.35 323 P P 01 05 52.8 +1.2
MJB9 IAmb IAmb 01 05 53.8
comp=Z,194nm,1.0s
JOW **Kunigami** 68.64 309 P P 01 05 54.3 +0.7
PWJI **Pagerwojo** 68.66 268 P P 01 05 53.8 -0.1
comp=Z,332nm,0.8s
JMN **Monobe** 69.02 318 P P 01 05 56.7 +0.9
JMN **Monobe** 69.02 318 P P 01 05 56.5 +0.7
JMN IAmb IAmb 01 05 57.9
comp=Z,286nm,1.0s
KKM **Kota Kinabalu** 69.09 284 P P 01 05 56.9 +0.3
KKM **Kota Kinabalu** 69.09 284 P P 01 05 56.6 0.0
KKM IAmb IAmb 01 05 57.4
comp=Z,138nm,0.7s
JSD **Sado** 69.37 324 P P 01 05 57.9 +0.2
KIWB **Kanaga Island** 69.81 1 P P 01 05 59.7 -0.3
ERM **Erimo** 69.82 330 P P 01 06 00.9 +0.7
ERM **Erimo** 69.82 330 P P 01 06 01.1 +0.9
ERM **Erimo** 69.82 330 *ce* P P 01 06 01.5 +1.3
ERM pmax pmax
comp=Z,108nm,1.0s
JEM **Erimo** 69.82 330 P P 01 06 00.9 +0.7
JTM **Tenmabayashi** 69.90 328 P P 01 06 01.0 +0.2
JTM **Tenmabayashi** 69.90 328 P P 01 06 01.0 +0.2
JTM IAmb IAmb 01 06 02.1
comp=Z,202nm,1.0s
UGM **Wanagama** 69.90 268 P P 01 06 01.4 0.0
UGM **Wanagama** 69.90 268 P P 01 06 01.4 0.0
UGM **Wanagama** 69.90 268 P P 01 06 01.5 0.0
GSTR **Great Sitkin T** 70.07 1 P P 01 06 01.2 -0.4
SMRI **Semarang** 70.23 269 P P 01 06 04.0 +0.7
SMRI **Semarang** 70.23 269 P P 01 06 03.9 +0.5
SMRI **Semarang** 70.23 269 P P 01 06 04.1 +0.7
comp=Z,509nm,0.8s
KUR **Kuril'sk** 70.34 335 *e* P P 01 06 02.9 -0.4
KUR *e* 01 06 20.4
KUR pmax pmax
comp=Z,551nm,1.6s
KUR pmax pmax
comp=N,218nm,1.5s
KUR pmax pmax
comp=E,126nm,0.9s
JNU **Nakatsue** 70.57 316 P P 01 06 05.0 0.0
JNU **Nakatsue** 70.57 316 P P 01 06 04.7 -0.2
JNU IAmb IAmb 01 06 06.2
comp=Z,152nm,1.1s
SHEM **Shemya Is, Ala** 71.00 355 P P 01 06 05.8 -1.2
comp=Z,238nm,0.7s,baz=48,slow=3.7,SNR=23
comp=Z,238nm,0.7s
YOJ **Yonaguni jima** 71.36 305 P P 01 06 10.0 +0.3
YOJ **Yonaguni jima** 71.36 305 P P 01 06 09.7 0.0
YOJ **Yonaguni jima** 71.36 305 P P 01 06 09.7 0.0
YOJ pmax pmax
comp=Z,590nm,1.0s
NIKH **Nikolski High** 71.38 6 P P 01 06 08.8 -0.4
NIKH **Nikolski High** 71.38 6 P P 01 06 08.8 -0.4
baz=189,SNR=6.8
STKI **Sintang** 71.43 276 P P 01 06 11.4 +1.0
comp=Z,423nm,0.9s
SBUM **Sibu** 71.53 279 P P 01 06 11.4 +0.5
KPJI **Karang Pucung** 71.58 268 P P 01 06 11.3 0.0
comp=Z,334nm,1.0s
JKA **Kamikawa-asahi** 71.70 331 P P 01 06 12.4 +1.1
ASAJ **Asahikawa** 71.70 331 P P 01 06 12.8 +1.5
comp=Z,104nm,0.7s,baz=209,slow=5.7,SNR=50
comp=Z,104nm,0.7s
ASAJ **Asahikawa** 71.70 331 P P 01 06 12.4 +1.1
ASAJ pmax pmax
comp=Z,944nm,1.9s
QSPA **South Pole Qui** 71.81 180 P P 01 06 12.1 +0.3
QSPA IAmb IAmb 01 06 13.6
comp=Z,157nm,1.1s
QSPA **South Pole Qui** 71.81 180 P P 01 06 11.4 -0.4
comp=Z,107nm,0.8s,baz=307,slow=0.4,SNR=54
comp=Z,107nm,0.8s
QSPA **South Pole Qui** 71.81 180 P P 01 06 12.6 +0.7
CMJI **Cimerak** 71.91 268 P P 01 06 12.8 -0.4
comp=Z,268nm,0.9s
TWGBT **Beinan** 72.07 302 P P 01 06 12.6 -1.3
TWG **Pinlang** 72.08 302 P P 01 06 12.8 -1.2
TWG IAmb IAmb 01 06 13.2
comp=Z,145nm,0.6s
YULB **Yu-li** 72.18 303 P P 01 06 13.4 -1.1
YULB **Yu-li** 72.18 303 P P 01 06 13.3 -1.3
YULB IAmb IAmb 01 06 14.6
comp=Z,102nm,0.6s
SKR **Severo-Kuril's** 72.28 343 *ce* P P 01 06 14.9 +0.4
NACB **Ninganchiao** 72.33 304 P P 01 06 15.1 -0.3
NACB **Ninganchiao** 72.33 304 P P 01 06 15.0 -0.3
JCJI **Jatiwangi** 72.45 269 P P 01 06 16.5 +0.2
comp=Z,737nm,1.5s
UNV **Unalaska Valle** 72.49 7 P P 01 06 14.9 -0.7
UNV **Unalaska Valle** 72.49 7 P P 01 06 14.9 -0.7
baz=192,SNR=7.8
SSLB **Suanglung** 72.65 303 P P 01 06 16.4 -0.9
TPUB **Ta-pu** 72.67 302 P P 01 06 16.4 -1.0
TPUB **Ta-pu** 72.67 302 P P 01 06 16.4 -1.0
YHNB **Yeheng** 72.75 304 P P 01 06 18.0 +0.1
YHNB **Yeheng** 72.75 304 P P 01 06 17.5 -0.4
YHNB IAmb IAmb 01 06 18.8
comp=Z,250nm,1.0s
BBJI **Bungbulang** 72.76 268 P P 01 06 17.6 -0.6
TATO **Taipei** 72.81 304 P P 01 06 18.4 +0.3
TATO **Taipei** 72.81 304 P P 01 06 17.9 -0.2
KSM **Kuching** 73.00 277 P P 01 06 20.3 +0.8
KSM **Kuching** 73.00 277 P P 01 06 19.9 +0.4
CNJI **Cibinong** 73.30 268 P P 01 06 20.8 -0.4
comp=Z,198nm,1.0s
PET **Petropavlovsk** 73.77 346 P P 01 06 22.5 -0.4
PET **Petropavlovsk** 73.77 346 P P 01 06 22.5 -0.4
PET **Petropavlovsk** 73.77 346 *ce* P P 01 06 20.8 -2.1
PET pmax pmax
comp=Z,259nm,1.7s
PET **Petropavlovsk** 73.77 346 P P 01 06 22.1 -0.8
XMIS **Christmas Isla** 73.81 264 P P 01 06 23.9 -0.2
XMIS IAmb IAmb 01 06 25.2
comp=Z,97nm,0.8s
YSS **Yuzh-Sakhalins** 73.84 333 P P 01 06 24.7 +1.2
YSS **Yuzh-Sakhalins** 73.84 333 P P 01 06 23.9 +0.4
YSS IAmb IAmb 01 06 25.6
comp=Z,227nm,1.0s
YSS **Yuzh-Sakhalins** 73.84 333 *ce* P P 01 06 24.4 +0.9
YSS pmax pmax
comp=Z,256nm,1.0s
DBJI **Dramaga** 73.88 268 P P 01 06 24.4 -0.1
comp=Z,565nm,1.3s
FALS **False Pass** 73.89 9 P P 01 06 22.7 -0.8
FALS **False Pass** 73.89 9 P P 01 06 22.4 -1.1
baz=194
SKJI **Sukabumi** 73.93 268 P P 01 06 24.3 -0.5
PEA0B **Petropavlovsk-** 74.08 345 P P 01 06 24.6 -0.1
PEA0B IAmb IAmb 01 06 25.8
comp=Z,285nm,0.9s
PEA0B **Petropavlovsk-** 74.08 345 *ce* P P 01 06 25.0 +0.3
PETK **Petropavlovsk-** 74.08 345 P P 01 06 23.8 -0.9
PETK **Petropavlovsk-** 74.08 345 P P 01 06 23.9 -0.7
comp=Z,202nm,0.8s,baz=130,slow=7.3,SNR=84
comp=Z,202nm,0.8s
PETK **Petropavlovsk-** 74.08 345 P P 01 06 24.0 -0.7
CNBA **Chernabura Isl** 74.48 11 P P 01 06 26.1 -0.8
CNBA IAmb IAmb 01 06 27.1
comp=Z,266nm,1.4s
CHNA **Chernabura Isl** 74.49 11 P P 01 06 25.8 -1.1
baz=198
SBJI **Serang** 74.59 269 P P 01 06 28.4 -0.1
comp=Z,545nm,1.1s
SDPT **Sand Point** 74.83 10 P P 01 06 28.2 -0.6
SDPT **Sand Point** 74.83 10 P P 01 06 28.3 -0.6
baz=197,SNR=5.5
TJN **Taejon** 74.84 317 P P 01 06 29.9 +0.5
TJN **Taejon** 74.84 317 P P 01 06 29.6 +0.3
TJN IAmb IAmb 01 06 31.8
comp=Z,175nm,0.8s
TJN **Taejon** 74.84 317 *ce* P P 01 06 29.8 +0.4
S12K **Black Hills** 74.91 9 P P 01 06 28.6 -0.8
baz=196,SNR=10.0
KNMB **Chin-men Tao** 75.02 302 P P 01 06 31.1 +0.5
KNMB IAmb IAmb 01 06 31.7
comp=Z,147nm,0.8s
QZH **Quanzhou** 75.09 303 P P 01 06 31.8 +0.8
QZH pmax pmax
comp=Z,280nm,0.8s
KSRS **Korea Array** 75.13 318 P P 01 06 32.0 +1.1
comp=Z,29nm,0.7s,baz=129,slow=6.3,SNR=80
comp=Z,29nm,0.7s
KSRS **Korea Array** 75.13 318 P P 01 06 32.1 +1.1
KSAR **Wonju Array Be** 75.15 318 P P 01 06 31.3 +0.2
KSAR **Wonju Array Be** 75.15 318 P P 01 06 31.3 +0.2
KS19 **Wonju Array Si** 75.20 318 P P 01 06 31.7 +0.3
KS19 IAmb IAmb 01 06 33.5
comp=Z,488nm,2.0s
SPIA **Saint Paul Isl** 75.42 4 P P 01 06 32.2 +0.1
SPIA **Saint Paul Isl** 75.42 4 P P 01 06 32.3 +0.1
baz=188,SNR=5.4
BLSI **Bandar Lampung** 75.66 269 P P 01 06 34.2 -0.3
comp=Z,413nm,1.0s
PPBI **Pangkal Pinang** 75.78 272 P P 01 06 35.8 +0.6
comp=Z,244nm,1.2s
UGL **Uglegorsk** 75.79 334 *e* P P 01 06 34.7 +0.4
UGL pmax pmax
comp=Z,250nm,1.0s
S14K **Fog Glacier** 75.88 11 P P 01 06 35.0 +0.2
baz=198,SNR=8.9
INCN **Inchon** 75.97 318 P P 01 06 36.8 +1.1
INCN **Inchon** 75.97 318 P P 01 06 36.4 +0.7
INCN IAmb IAmb 01 06 37.8
comp=Z,249nm,1.5s
INCN **Inchon** 75.97 318 P P 01 06 36.4 +0.7
INCN pmax pmax
comp=Z,249nm,1.5s
CHGN **Chignik** 76.10 11 P P 01 06 35.7 -0.1
baz=199
KASI **Kota Agung** 76.32 269 P P 01 06 37.0 -1.1
comp=Z,537nm,1.1s
MSHR **Mys Shultsa** 76.43 324 *ce* P P 01 06 39.3 +1.3
MSHR pmax pmax
comp=Z,261nm,1.3s
PMPB **Monarch Peak** 76.60 44 P P 01 06 40.3 +1.1
PSTR **Posyet** 76.68 324 *i* P P 01 06 39.8 +0.4
LWLI **Liwa** 76.89 269 P P 01 06 40.7 -0.7
comp=Z,422nm,0.7s
TYV **Tymovskoe** 76.95 336 *e* P P 01 06 41.0 +0.3
TYV pmax pmax
comp=Z,141nm,1.5s
KMPM **Mount Pierce** 76.97 39 P P 01 06 42.5 +1.4
USA0B **Ussuriysk Arra** 77.05 326 P P 01 06 42.3 +0.9
USA0B IAmb IAmb 01 06 43.8
comp=Z,264nm,1.5s
USA0B **Ussuriysk Arra** 77.05 326 *i* P P 01 06 41.8 +0.4
USRK **Ussuriysk Ar.** 77.05 326 P P 01 06 42.4 +1.0
USRK **Ussuriysk Ar.** 77.05 326 P P 01 06 42.8 +1.4
comp=Z,49nm,0.9s,baz=108,slow=4.0,SNR=32
comp=Z,49nm,0.9s
USRK **Ussuriysk Ar.** 77.05 326 P P 01 06 42.8 +1.4
SII **Sitkinak Islan** 77.19 13 P P 01 06 42.2 +0.3
SII **Sitkinak Islan** 77.19 13 P P 01 06 42.2 +0.3
SII **Sitkinak Islan** 77.19 13 P P 01 06 42.5 +0.6
baz=203,SNR=7.4
PASC **Pasadena Art C** 77.25 47 P P 01 06 43.1 +0.3
109C **Camp Elliot, M** 77.34 49 P P 01 06 44.3 +1.1
baz=238
R16K **Pilot Point** 77.45 11 P P 01 06 43.4 +0.2
baz=200
HKPS **Hong Kong Po S** 77.51 299 P P 01 06 45.8 +1.4
HKPS **Hong Kong Po S** 77.51 299 P P 01 06 45.2 +0.8
HKPS IAmb IAmb 01 06 46.8
comp=Z,302nm,1.2s
ESJX **Sierra Juarez** 77.72 50 P P 01 06 46.7 +1.1
R17L **Mt. Peulik Vol** 77.74 12 P P 01 06 44.9 +0.1
baz=201,SNR=14
MONP2 **Monument Peak** 77.83 49 P P 01 06 47.6 +1.4
baz=239,SNR=18
OHAK **Old Harbor** 78.00 14 P P 01 06 46.2 0.0
OHAK **Old Harbor** 78.00 14 P P 01 06 46.2 0.0
OHAK IAmb IAmb 01 06 47.2
comp=Z,151nm,0.8s
OHAK **Old Harbor** 78.00 14 P P 01 06 46.4 +0.2
baz=204,SNR=12
R18K **Karluk** 78.06 13 P P 01 06 46.5 0.0
baz=203
MNAI **Manna** 78.13 269 P P 01 06 47.7 -0.3
PFO **Pinyon Flats O** 78.18 49 P P 01 06 48.6 +0.7
baz=239
TPFO **Pinon Flats** 78.18 49 P P 01 06 49.1 +1.2
baz=239
TPRI **Tanjung Pinang** 78.28 275 P P 01 06 49.4 +0.7
comp=Z,268nm,0.9s
NJ2 **Nanjing** 78.36 309 ⇓P P 01 06 49.8 +1.1
NJ2 pmax pmax
comp=Z,150nm,0.9s
Q17K **Contact Creek** 78.42 12 P P 01 06 48.2 -0.4
baz=202
O14K **Tigyukauivet M** 78.45 9 P P 01 06 48.2 -0.4
O14K **Tigyukauivet M** 78.45 9 P P 01 06 48.2 -0.4
baz=196
SLBS **Sierra La Lagu** 78.49 60 P P 01 06 51.0 +1.3
OMMB **Old Mammoth Mi** 78.57 44 P P 01 06 50.9 +0.7
O15K **Ungalikthiuk R** 78.59 9 P P 01 06 48.7 -0.6
baz=198,SNR=5.6
YBH **Yreka Blue Hor** 78.62 39 P P 01 06 51.1 +1.1
YBH **Yreka Blue Hor** 78.62 39 P P 01 06 51.1 +1.1
YBH pmax pmax
comp=Z,43nm,0.8s
MDJ **Mudanjiang** 78.62 325 P P 01 06 50.9 +1.1
MDJ **Mudanjiang** 78.62 325 P P 01 06 51.1 +1.3
MDJ pmax pmax
comp=Z,380nm,1.0s
MDJ **Mudanjiang** 78.62 325 P P 01 06 50.7 +0.8
MDJ IAmb IAmb 01 06 52.2
comp=Z,288nm,0.9s
K02D **Willamette Mer** 78.64 38 P P 01 06 50.7 +0.6
Q16K **King Salmon** 78.66 11 P P 01 06 49.8 +0.1
baz=201,SNR=9.3
KDAK **Kodiak Island** 78.67 14 P P 01 06 49.9 +0.1
KDAK IAmb IAmb 01 06 51.7
comp=Z,116nm,0.8s
KDAK **Kodiak Island** 78.67 14 P P 01 06 49.7 0.0
baz=205
KDAK **Kodiak Island** 78.67 14 P P 01 06 49.9 +0.1
KDAK pmax pmax
comp=Z,116nm,0.8s
P16K **Nushagak River** 78.76 10 P P 01 06 50.0 -0.2
baz=199,SNR=11
M11K **Mekoryuk** 78.95 6 P P 01 06 52.2 +1.0
baz=192,SNR=8.9
Q18K **Katmai Hardscr** 78.95 12 P P 01 06 51.0 -0.4
baz=202,SNR=24
N14K **Kuskokwak Cree** 79.04 8 P P 01 06 52.2 +0.6
baz=196,SNR=32
BTDF **Bukit Timah Da** 79.13 275 P P 01 06 53.9 +0.6
P17K **Kvichak River** 79.19 11 P P 01 06 52.3 -0.2
baz=201,SNR=22
MYKOM **Kota Tinggi** 79.20 275 P P 01 06 53.8 +0.2
MYKOM IAmb IAmb 01 06 55.2
comp=Z,131nm,1.0s
O16K **Kokwok River B** 79.27 10 P P 01 06 52.1 -0.8
baz=199,SNR=19
M13K **Dall Lake** 79.29 7 P P 01 06 53.4 +0.4
M13K IAmb IAmb 01 06 55.2
comp=Z,348nm,1.5s
M13K **Dall Lake** 79.29 7 P P 01 06 53.8 +0.8
baz=194,SNR=6.3
GRNR **Gornyy** 79.46 333 ⇓*i* P P 01 06 55.1 +0.9
GRNR pmax pmax
comp=Z,180nm,0.9s
Q20K **Shuyak Island** 79.46 13 P P 01 06 54.3 +0.3
baz=205,SNR=6.9
NVAR **Mina Array Bea** 79.48 44 P P 01 06 55.7 +0.8
NVAR **Mina Array Bea** 79.48 44 P P 01 06 55.4 +0.6
comp=Z,34nm,0.7s,baz=224,slow=7.8,SNR=36
comp=Z,34nm,0.7s
Q19K **Cape Douglas,** 79.49 13 P P 01 06 53.9 -0.2
baz=204,SNR=6.1
N15K **Kwethluk River** 79.50 9 P P 01 06 54.5 +0.3
baz=197,SNR=17
P18K **Big Mountain,** 79.60 12 P P 01 06 54.4 -0.3
baz=202,SNR=12
O17K **Koliganek Bris** 79.61 11 P P 01 06 54.3 -0.5
baz=200
BLYC **Blythe** 79.64 49 P P 01 06 56.2 +0.7
M14K **Bethel** 79.80 8 P P 01 06 56.2 +0.6
baz=196,SNR=13
QIZ **Qiongzhong** 79.84 294 P P 01 06 57.5 +0.7
QIZ **Qiongzhong** 79.84 294 P P 01 06 57.4 +0.5
M15K **Kasigluk River** 79.92 9 P P 01 06 56.8 +0.5
baz=197,SNR=26
N16K **Nishlik Lake** 80.00 10 P P 01 06 57.4 +0.6
baz=199,SNR=22
214A **Organ Pipe Nat** 80.01 52 P P 01 06 59.1 +1.6
baz=241,SNR=6.3
DL2 **Dalian** 80.02 317 P P 01 06 57.8 +0.5
DL2 pmax pmax
comp=Z,150nm,0.9s
O18K **Koktuh Hills** 80.03 12 P P 01 06 56.9 -0.1
baz=202,SNR=44
TPNV **Topopah Spring** 80.06 46 P P 01 06 59.4 +1.5
baz=238,SNR=5.2
P19K **Oil Pt** 80.24 13 P P 01 06 58.0 -0.1
baz=204,SNR=9.8
L14K **Kuka Creek** 80.28 7 P P 01 06 58.8 +0.7
baz=195,SNR=17
N17K **Nushagak Hills** 80.31 10 P P 01 06 58.4 0.0
baz=200,SNR=10
CN2 **Changchun** 80.45 322 P P 01 07 00.1 +0.6
CN2 pmax pmax
comp=Z,230nm,1.1s
M16K **Timber Creek** 80.49 9 P P 01 07 00.5 +1.2
baz=198,SNR=45
O19K **Port Alsworth** 80.52 12 P P 01 06 59.2 -0.3
baz=203
BNX **BinXian** 80.53 325 ⇓P P 01 07 00.1 +0.3
BNX pmax pmax
comp=Z,300nm,0.9s
KLR **Kul'dur** 80.54 329 P P 01 07 00.6 +0.8
comp=Z,49nm,1.1s,baz=102,slow=3.5,SNR=22
comp=Z,49nm,1.1s
KLR **Kul'dur** 80.54 329 *ce* P P 01 07 00.9 +1.1
KLR pmax pmax
comp=Z,88nm,1.3s
CNPM **China Poot** 80.55 14 P P 01 06 59.5 -0.2
CNPM IAmb IAmb 01 07 00.6
comp=Z,130nm,0.9s
HOM **Homer** 80.58 13 P P 01 07 00.2 +0.5
baz=205
K13K **Kusilvak Mount** 80.63 6 P P 01 07 00.7 +0.7
baz=193
N18K **Kilae Creek** 80.68 11 P P 01 07 00.1 -0.2
baz=201,SNR=8.6
H04A **Detroit Lake** 80.70 37 P P 01 07 01.2 +0.4
L15K **Unggalak Mounta** 80.75 8 P P 01 07 00.9 +0.2
baz=196,SNR=28
O20K **Slope Mountain** 80.76 13 P P 01 07 00.5 -0.3
baz=204,SNR=9.0
BRLK **Bradley Lake** 80.84 14 P P 01 07 00.9 -0.3
BRLK IAmb IAmb 01 07 01.9
comp=Z,147nm,0.8s
BRSE **Bradley Lake S** 80.85 14 P P 01 07 01.5 +0.3
baz=206,SNR=23
WHN **Wuhan** 81.02 306 P P 01 07 03.6 +0.9
WHN pmax pmax
comp=Z,150nm,1.0s
N19K **Bonanza Creek** 81.06 11 P P 01 07 01.8 -0.6
baz=203,SNR=14
L16K **Owhat River** 81.07 9 P P 01 07 02.8 +0.5
L16K IAmb IAmb 01 07 04.1
comp=Z,230nm,1.1s
L16K **Owhat River** 81.07 9 P P 01 07 03.1 +0.9
baz=198,SNR=44
CNSH **ChangSha** 81.07 303 P P 01 07 03.5 +0.4
CNSH pmax pmax
comp=Z,110nm,1.2s
M17K **Holitna River** 81.09 10 P P 01 07 03.3 +0.9
M17K **Holitna River** 81.09 10 P P 01 07 03.6 +1.3
baz=200,SNR=45
PRN **Pahroc Range** 81.12 46 P P 01 07 04.6 +1.3
HG4B **Hotspring** 81.20 27 P P 01 07 03.8 +0.6
R11B **Troy Canyon, C** 81.24 45 P P 01 07 04.7 +0.7
baz=238
DIB **Dawson Inlet,** 81.31 26 P P 01 07 03.5 -0.2
H02S1 **DAWSON INLET T** 81.31 26 P P 01 07 04.8 +1.1
SNR=26
WISH **Wishkah** 81.32 34 P P 01 07 05.0 +1.2
F04A **Amboy** 81.33 36 P P 01 07 04.3 +0.3
F04A IAmb IAmb 01 07 05.5
comp=Z,170nm,1.3s
K15K **Wolf Creek Mou** 81.34 8 P P 01 07 04.6 +1.0
K15K **Wolf Creek Mou** 81.34 8 P P 01 07 04.8 +1.1
baz=196,SNR=70
BKNI **Bangkinang** 81.40 273 P P 01 07 05.7 +0.6
BKNI **Bangkinang** 81.40 273 P P 01 07 04.9 -0.2
BKNI IAmb IAmb 01 07 07.2
comp=Z,449nm,1.3s
BKNI **Bangkinang** 81.40 273 P P 01 07 06.5 +1.4
comp=Z,185nm,0.4s
HOLB **Holberg** 81.43 30 P P 01 07 04.7 +0.3
HOLB IAmb IAmb 01 07 05.9
comp=Z,88nm,0.9s
NLWA **Neilton Lookou** 81.44 34 P P 01 07 05.4 +0.8
M18K **Stony River** 81.45 11 P P 01 07 04.5 +0.3
baz=201,SNR=14
SEW **Seward** 81.47 14 P P 01 07 04.0 -0.4
baz=207,SNR=9.0
J14K **Nanvaranak Lak** 81.54 7 P P 01 07 05.1 +0.5
baz=194,SNR=17
PDSI **Padang** 81.56 272 P P 01 07 04.9 -1.1
comp=Z,140nm,0.9s
MA2 **Magadan** 81.59 345 P P 01 07 04.3 -0.7

**MA2 Magadan 81.59 345 P P 01 07 04.3 -0.7**
MA2 IAmb IAmb 01 07 05.4
comp=Z,154nm,1.0s
**MA2 Magadan 81.59 345** *ce* P P **01 07 04.6 -0.4**
MA2 pmax pmax
comp=Z,150nm,1.0s
**MA2 Magadan 81.59 345 P P 01 07 04.1 -0.9**
**L17K Donlin 81.65 9 P P 01 07 06.5 +1.3**
baz=199,SNR=40
**TUC Tucson 81.69 52 P P 01 07 08.7 +2.4**
baz=242
**O22K Cooper Landing 81.75 14 P P 01 07 05.6 -0.1**
baz=207,SNR=14
**BELA Belgrano 2 81.79 173 P P 01 07 05.7 -0.2**
BELA IAmb IAmb 01 07 06.9
comp=Z,142nm,0.8s
**N20K Mount Spurr 81.86 12 P P 01 07 05.5 -1.0**
baz=205,SNR=16
**SPCR Spurr Chakacha 81.86 12 P P 01 07 05.5 -0.9**
baz=205,SNR=14
**P23K Montague Islan 81.87 15 P P 01 07 06.7 +0.3**
baz=209
**GAMB Gambell 81.91 3 P P 01 07 07.3 +0.9**
baz=186,SNR=7.1
**GULI GuiLin 81.92 300 P P 01 07 08.9 +1.4**
GULI pmax pmax
comp=Z,140nm,1.2s
**L18K Granite Mounta 81.98 10 P P 01 07 07.9 +1.0**
L18K IAmb IAmb 01 07 08.7
comp=Z,150nm,0.7s
**L18K Granite Mounta 81.98 10 P P 01 07 07.9 +1.0**
baz=200,SNR=26
**M19K Big River Lodg 82.09 11 P P 01 07 07.5 0.0**
baz=203
**K17K Iditarod 82.20 9 P P 01 07 08.5 +0.5**
K17K IAmb IAmb 01 07 09.2
comp=Z,76nm,0.7s
**K17K Iditarod 82.20 9 P P 01 07 08.8 +0.8**
baz=199,SNR=16
**CLRS Cowichan Lake 82.20 33 P P 01 07 08.8 +0.4**
**L19K White Mountain 82.26 11 P P 01 07 08.5 +0.1**
baz=202,SNR=18
**RC01 Rabbit Creek A 82.29 13 P P 01 07 08.2 -0.3**
baz=207,SNR=13
**M20K Styx River 82.30 12 P P 01 07 08.0 -0.7**
baz=204
**CBB Campbell River 82.36 31 P P 01 07 09.6 +0.5**
**PWL Port Wells 82.40 14 P P 01 07 08.6 -0.5**
PWL IAmb IAmb 01 07 09.6
comp=Z,185nm,0.9s
**PWL Port Wells 82.40 14 P P 01 07 08.7 -0.4**
baz=208,SNR=25
**SUA Susitna One 82.40 13 P P 01 07 08.8 -0.4**
baz=206,SNR=24
**J16K Anvik River 82.42 8 P P 01 07 10.0 +0.9**
baz=197,SNR=29
**HIN Hinchinbrook I 82.44 15 P P 01 07 08.7 -0.6**
HIN IAmb IAmb 01 07 10.0
comp=Z,182nm,1.3s
**PGC Sidney 82.45 33 P P 01 07 10.0 +0.5**
**KAIM Kayak Island 82.57 16 P P 01 07 10.8 +0.8**
baz=212,SNR=8.2
**SKT Skwentna 82.71 12 P P 01 07 09.2 -1.4**
baz=205,SNR=7.4
**L20K Farewell, AK 82.71 11 P P 01 07 10.3 -0.3**
baz=203,SNR=19
**GLI Glacier Island 82.71 15 P P 01 07 10.3 -0.4**
baz=210,SNR=32
**CRAG Craig 82.72 24 P P 01 07 11.8 +1.1**
**CRAG Craig 82.72 24 P P 01 07 12.1 +1.3**
baz=223,SNR=6.1
**ELK Elko 82.72 43 P P 01 07 12.0 +0.5**
**ELK Elko 82.72 43 P P 01 07 12.0 +0.5**
ELK pmax pmax
comp=Z,34nm,0.8s
**IPM Ipoh 82.73 277 P P 01 07 12.3 +0.4**
**J17K VABM Dome 82.73 9 P P 01 07 11.4 +0.7**
baz=198,SNR=24
**EYAK Cordova Ski Ar 82.76 15 P P 01 07 10.6 -0.2**
**EYAK Cordova Ski Ar 82.76 15 P P 01 07 10.6 -0.2**
baz=211,SNR=11
**WUAZ Wupatki 82.76 49 P P 01 07 13.4 +1.7**
baz=242,SNR=9.6
**M22K Willow 82.80 13 P P 01 07 10.8 -0.2**
baz=207,SNR=12
**GRNB Grenville Isla 82.83 26 P P 01 07 11.9 +0.5**
**KNK Knik Glacier 82.86 14 P P 01 07 11.3 -0.1**
baz=208,SNR=18
**PMR Palmer 82.87 14 P P 01 07 10.8 -0.5**
**PMR Palmer 82.87 14 P P 01 07 10.9 -0.5**
PMR IAmb IAmb 01 07 11.4
comp=Z,82nm,0.6s
**PMR Palmer 82.87 14 P P 01 07 10.9 -0.5**
baz=208,SNR=26
**PMR Palmer 82.87 14 P P 01 07 10.9 -0.5**
PMR pmax pmax
comp=Z,82nm,0.6s
**I17K Unalakleet 82.98 8 P P 01 07 12.7 +0.8**
baz=197,SNR=10.0
**BGLC Bering Glacier 83.05 17 P P 01 07 13.2 +1.0**
baz=213
**GHO Glory Hole Cre 83.08 14 P P 01 07 12.4 -0.1**
**SIT Sitka 83.09 22 P P 01 07 13.1 +0.5**
**SIT Sitka 83.09 22 P P 01 07 12.9 +0.3**
**SIT Sitka 83.09 22 P P 01 07 13.4 +0.8**
baz=220,SNR=7.1
**SIT Sitka 83.09 22 P P 01 07 12.9 +0.3**
SIT pmax pmax
comp=Z,96nm,1.4s
**ANM Nome 83.14 6 P P 01 07 12.9 +0.3**
baz=192
**J18K Innoko River 83.15 10 P P 01 07 13.2 +0.4**
baz=200,SNR=48
**U33K Whale Pass 83.19 24 P P 01 07 14.5 +1.4**
baz=222,SNR=14
**V35K Ketchikan 83.20 25 P P 01 07 14.0 +0.8**
baz=224,SNR=11
**HAWA Hanford 83.22 37 P P 01 07 14.2 +0.7**
**SML Sawmill 83.24 14 P P 01 07 12.9 -0.4**
baz=208,SNR=8.9
**HEH HeiHe 83.34 328** *eP* P **01 07 14.4 +0.4**
HEH pmax pmax
comp=Z,130nm,1.3s
**KULM Kulim 83.35 278 P P 01 07 15.4 +0.5**
KULM IAmb IAmb 01 07 16.8
comp=Z,197nm,1.3s
**CUT Chulitna 83.35 13 P P 01 07 13.4 -0.4**
baz=206,SNR=18
**M23K Glacier View 83.36 14 P P 01 07 13.4 -0.5**
baz=209,SNR=13
**HPIG 83.37 59 P P 01 07 16.1 +1.1**
**PMSA Palmer Station 83.39 157 P P 01 07 14.4 +0.3**
**BMRM Bremner River 83.41 16 P P 01 07 14.2 0.0**
baz=212,SNR=19
**MESA MESA 83.46 17 P P 01 07 15.3 +0.6**
baz=214,SNR=51
**S31K Pelican 83.47 21 P P 01 07 15.2 +0.7**
baz=220,SNR=22
**K20K Telida 83.49 11 P P 01 07 14.4 -0.1**
baz=203,SNR=43
**SCM Sheep Creek Mo 83.49 14 P P 01 07 14.5 -0.1**
**SCM Sheep Creek Mo 83.49 14 P P 01 07 14.6 -0.1**
baz=209,SNR=42
**SCM Sheep Creek Mo 83.49 14 P P 01 07 14.5 -0.1**
SCM pmax pmax
comp=Z,260nm,0.6s
**H16K Elim 83.53 7 P P 01 07 14.9 +0.3**
baz=195,SNR=17
**KLU Klutina 83.53 15 P P 01 07 15.2 +0.4**
baz=211,SNR=11
**CRQE Cirque 83.63 16 P P 01 07 15.5 +0.2**
baz=213,SNR=18
**MAW Mawson 83.63 200 P P 01 07 15.4 +0.1**
comp=Z,7.7nm,0.5s,baz=134,slow=6.0,SNR=12
comp=Z,7.7nm,0.5s
**MAW Mawson 83.63 200 P P 01 07 15.4 +0.1**
**BMO Blue Mountains 83.64 39 P P 01 07 16.1 +0.3**
**BMO Blue Mountains 83.64 39 P P 01 07 16.1 +0.3**
BMO pmax pmax
comp=Z,27nm,0.9s
**S32K Killisnoo 83.67 22 P P 01 07 16.0 +0.6**
baz=221,SNR=7.6
**G15K Niukluk 83.68 6 P P 01 07 16.1 +0.7**
baz=193
**WRAK Wrangell Islan 83.71 24 P P 01 07 16.3 +0.7**
WRAK IAmb IAmb 01 07 17.4
comp=Z,70nm,0.8s
**WRAK Wrangell Islan 83.71 24 P P 01 07 16.6 +0.9**
baz=223
**MFID Camas Ranch 83.76 40 P P 01 07 16.8 +0.3**
**T33K Petersburg 83.77 23 P P 01 07 16.9 +0.9**
baz=223
**PNL Peninsula 83.80 19 P P 01 07 16.1 0.0**
**PNL Peninsula 83.80 19 P P 01 07 16.5 +0.4**
baz=217,SNR=33
**J19K Poorman 83.82 10 P P 01 07 16.5 +0.4**
baz=201,SNR=17
**PINM Pinnacle 83.89 18 P P 01 07 16.7 +0.1**
baz=216,SNR=15
**TNA Tin City 83.91 4 P P 01 07 16.6 +0.2**
baz=190
**F14K Arctic Creek 83.95 5 P P 01 07 17.3 +0.6**
baz=191
**HNS HongShan 83.95 312** ⇓P P **01 07 18.3 +1.0**
HNS pmax pmax
comp=Z,140nm,1.5s
**N25K Chitina, Valde 83.96 15 P P 01 07 17.1 +0.2**
baz=212,SNR=45
**M24K Tolsona, Glenn 84.00 14 P P 01 07 17.6 +0.5**
baz=210,SNR=18
**DUG Dugway, Tooele 84.03 44 P P 01 07 17.6 -0.3**
**DUG Dugway, Tooele 84.03 44 P P 01 07 18.7 +0.7**
baz=240
**DUG Dugway, Tooele 84.03 44 P P 01 07 17.6 -0.3**
DUG pmax pmax
comp=Z,1nm,1.2s
**WAT6 Susitna Watana 84.05 14 P P 01 07 17.3 -0.2**
baz=209,SNR=39
**121A Cookes Peak, D 84.06 53 P P 01 07 19.8 +1.5**
baz=244
**H17K Granite Mounta 84.09 8 P P 01 07 17.5 +0.1**
baz=197,SNR=9.9
**WAT1 Susitna Watana 84.09 13 P P 01 07 17.3 -0.3**
baz=208
**RPSI Rantau Prapat 84.15 275 P P 01 07 18.0 -0.9**
RPSI IAmb IAmb 01 07 19.7
comp=Z,187nm,0.9s
**SEY Seymchan 84.17 347 P P 01 07 17.7 -0.1**
comp=Z,225nm,0.9s,baz=144,slow=5.7,SNR=96
comp=Z,225nm,0.9s
**SEY Seymchan 84.17 347** *ce* P **01 07 17.5 -0.3**
SEY pmax pmax
comp=Z,363nm,1.3s
**MCARA McCarthy VSAT 84.17 16 P P 01 07 18.1 +0.2**
baz=213,SNR=16
**PSI Prapat 84.18 275 P P 01 07 18.7 -0.5**
**PSI Prapat 84.18 275 P P 01 07 18.0 -1.2**
PSI pmax pmax
comp=Z,187nm,0.9s
**BJT Baijiatuan 84.21 315 P P 01 07 19.1 +0.5**
**BJT Baijiatuan 84.21 315 P P 01 07 18.8 +0.2**
BJT IAmb IAmb 01 07 20.6
comp=Z,222nm,1.4s
**BJT Baijiatuan 84.21 315 P P 01 07 18.8 +0.2**
BJT pmax pmax
comp=Z,222nm,1.4s
**BJI Beijing 84.22 315 P P 01 07 19.3 +0.7**
BJI pmax pmax
comp=Z,53nm,1.1s
**J20K Nowinta River 84.23 10 P P 01 07 18.2 +0.1**
baz=203,SNR=26
**G16K Koyuk River 84.25 7 P P 01 07 18.3 +0.1**
baz=195,SNR=9.4
**LYN LuoYang 84.25 309** ⇓P P **01 07 20.1 +1.2**
LYN pmax pmax
comp=Z,580nm,0.8s
**LOGN Logan Glacier 84.26 17 P P 01 07 18.6 +0.1**
LOGN IAmb IAmb 01 07 19.6
comp=Z,131nm,0.8s
**P29M Windy Craggy 84.28 19 P P 01 07 19.3 +0.8**
baz=218,SNR=46
**CTG Chitna Glacier 84.28 17 P P 01 07 18.9 +0.3**
baz=215,SNR=43
**R32K Eaglecrest 84.30 21 P P 01 07 19.2 +0.6**
baz=221,SNR=13
**F15K North Star Dit 84.32 6 P P 01 07 18.9 +0.3**
baz=193
**GCSA Galena City Sc 84.33 9 P P 01 07 19.0 +0.5**
baz=200
**JIS Juneau Island 84.35 22 P P 01 07 19.1 +0.3**
**O28M Mount Upton 84.45 18 P P 01 07 19.9 +0.2**
baz=216,SNR=37
**HARP HAARP 84.50 15 P P 01 07 19.8 +0.3**
baz=211,SNR=18
**H18K Honhosa River 84.50 8 P P 01 07 19.0 -0.5**
baz=199,SNR=6.5
**RND Reindeer 84.54 13 P P 01 07 19.6 -0.2**
**RND Reindeer 84.54 13 P P 01 07 19.6 -0.2**
RND pmax pmax
comp=Z,291nm,0.8s
**G17K Kiwalik Mounta 84.54 7 P P 01 07 19.6 -0.1**
baz=197,SNR=10
**O29M Mount Kennedy 84.55 19 P P 01 07 20.5 +0.6**
baz=217,SNR=17
**DHY Denali Highway 84.57 14 P P 01 07 19.7 -0.3**
baz=209,SNR=14
**PLBC Pleasant Camp 84.58 20 P P 01 07 20.7 +0.8**
baz=219,SNR=26
**ENH Enshi 84.68 304 P P 01 07 22.0 +0.8**
**ENH Enshi 84.68 304 P P 01 07 21.7 +0.5**
**HLID Hailey 84.71 41 P P 01 07 22.2 +1.0**
**HLID Hailey 84.71 41 P P 01 07 22.4 +1.2**
baz=239,SNR=11
**BPAW Bear Paw Mtn. 84.73 12 P P 01 07 19.2 -1.4**
baz=206,SNR=12
**I20K Naagheheneel 84.75 10 P P 01 07 21.0 +0.4**
baz=202,SNR=10
**MCK McKinley 84.81 13 P P 01 07 20.6 -0.4**
baz=208,SNR=26
**P30M Million Dollar 84.91 19 P P 01 07 22.5 +0.9**
baz=219
**PAX Paxson 84.91 14 P P 01 07 21.0 -0.6**
baz=211,SNR=15
**T35M Bob Quinn 84.92 24 P P 01 07 22.7 +1.0**
baz=225,SNR=7.5
**SKAG Skagway 84.92 20 P P 01 07 22.6 +1.0**
**SKAG Skagway 84.92 20 P P 01 07 22.7 +1.2**
baz=220,SNR=10
**GSI Gunungsitoli 84.99 273 P P 01 07 24.0 +1.0**
**GSI Gunungsitoli 84.99 273 P P 01 07 23.7 +0.7**
**GSI Gunungsitoli 84.99 273 P P 01 07 24.0 +1.0**
comp=Z,368nm,0.9s
**YUK8 Steele Glacier 84.99 18 P P 01 07 22.7 +0.5**
baz=216,SNR=34
**M26K Nabesna, AK 85.04 16 P P 01 07 22.3 +0.2**
baz=213,SNR=37
**YUK6 Outpost Mounta 85.13 18 P P 01 07 23.3 +0.4**
baz=218,SNR=7.2
**H19K Roundabout Mou 85.13 9 P P 01 07 22.6 +0.2**
baz=201,SNR=6.4
**MG05 Puerto Natales 85.17 143 P P 01 07 23.4 +0.3**
MG05 IAmb IAmb 01 07 25.3
comp=Z,80nm,0.8s
**G18K Tagagawik 85.17 8 P P 01 07 22.3 -0.4**
baz=198,SNR=7.2
**YUK3 Moose Creek 85.19 17 P P 01 07 23.4 +0.3**
baz=216,SNR=46
**S34M Telegraph Cree 85.25 23 P P 01 07 24.2 +1.0**
baz=224,SNR=35
**M27K Edge Creek, AK 85.29 16 P P 01 07 24.0 +0.5**
baz=214,SNR=29
**H20K Anotleneega Mo 85.33 10 P P 01 07 23.7 +0.2**
baz=202,SNR=13
**YUK4 Talbot Arm 85.36 18 P P 01 07 24.6 +0.7**
baz=217,SNR=15
**NONG Nongkai 85.37 291 P P 01 07 25.4 +0.7**
**F17K Baldwin Pennin 85.38 7 P P 01 07 23.9 +0.3**
baz=196
**SRIT Nakonsritamara 85.40 281 P P 01 07 26.3 +1.3**
**SRIT Nakonsritamara 85.40 281 P P 01 07 25.9 +1.0**
**GYA Guiyang 85.44 300** ⇓P P **01 07 25.9 +0.9**
GYA pmax pmax
comp=Z,110nm,1.0s
**L26K Log Cabin Wild 85.47 15 P P 01 07 24.4 +0.2**
baz=213,SNR=16
**HWUT Hardware Ranch 85.55 44 P P 01 07 25.3 0.0**
**NEA2 Nenana 85.55 12 P P 01 07 23.3 -1.2**
baz=208,SNR=7.9
**MNTX Cornudas Mount 85.55 55 P P 01 07 27.2 +1.8**
baz=245
**K24K Donnelly Dome 85.56 14 P P 01 07 24.7 +0.1**
baz=211,SNR=27
**P32M Atlin 85.56 21 P P 01 07 25.5 +0.8**
baz=222,SNR=17
**SURA Surathani 85.56 281 P P 01 07 27.3 +1.6**
**Q32M Nakina River 85.60 22 P P 01 07 26.0 +0.8**
baz=223,SNR=18
**MVCO Mesa Verde 85.60 49 P P 01 07 25.6 -0.2**
baz=243
**ZEA Zeya 85.61 331** *eP* P **01 07 25.9 +0.8**
ZEA pmax pmax
comp=E,20nm,1.0s
ZEA pmax pmax
comp=N,70nm,0.9s
ZEA pmax pmax
comp=Z,130nm,0.9s
**G19K Purcell Mounta 85.62 8 P P 01 07 24.8 -0.1**
baz=200,SNR=12
**MLY Manley 85.62 11 P P 01 07 23.8 -1.1**
baz=206,SNR=18
**NEW Newport 85.63 36 P P 01 07 25.3 0.0**
**NEW Newport 85.63 36 P P 01 07 25.6 +0.3**
baz=236,SNR=7.6
**NEW Newport 85.63 36 P P 01 07 25.3 0.0**
NEW pmax pmax
comp=Z,25nm,0.9s
**O30N Mendenhall 85.69 19 P P 01 07 25.9 +0.6**
baz=220,SNR=20
**NAYO Nakonayok 85.72 286 P P 01 07 27.7 +1.3**
**F18K Selawik 85.72 7 P P 01 07 24.7 -0.5**
baz=198
**RIDG Independent Ri 85.72 14 P P 01 07 25.3 -0.1**
baz=212,SNR=12
**H21K Melozitna Rive 85.83 10 P P 01 07 25.9 +0.1**
baz=204,SNR=9.8
**HDA Harding Lake 85.83 13 P P 01 07 25.4 -0.5**
baz=210,SNR=26
**CCB Clear Creek Bu 85.86 13 P P 01 07 25.2 -0.7**
CCB IAmb IAmb 01 07 26.2
comp=Z,264nm,1.3s
**SLVN Son La 85.87 294 P P 01 07 27.5 +0.4**
**L27K Beaver Creek, 85.89 16 P P 01 07 26.4 +0.2**
baz=214,SNR=9.1
**BCAR Beaver Creek A 85.90 16 P P 01 07 26.1 -0.2**
**N30M Aishikik Lake 85.91 18 P P 01 07 26.6 +0.2**
baz=219,SNR=13
**TLIG Tlapa 85.93 70 P P 01 07 28.2 +0.6**
**E17K Hotham Inlet 85.94 6 P P 01 07 26.4 +0.1**
baz=196,SNR=14
**TX31 Lajitas Ar. Si 85.95 57 P P 01 07 28.9 +1.5**
TX31 IAmb IAmb 01 07 30.6
comp=Z,55nm,0.9s
**TXAR Lajitas Array 85.95 57 P P 01 07 29.0 +1.6**
**TXAR Lajitas Array 85.95 57 P P 01 07 29.2 +1.9**
comp=Z,39nm,0.7s,baz=216,slow=8.1,SNR=82
TXAR PKKPbc **PKKPbc 01 25 24.8 +0.3**
comp=Z,0.3nm,0.5s,baz=80,slow=2.2,SNR=4.4
comp=Z,39nm,0.7s
**TXAR Lajitas Array 85.95 57 P P 01 07 29.0 +1.6**
**IMAR Indian Mountai 85.97 10 P P 01 07 26.1 -0.3**
**WHY Whitehorse 85.98 20 P P 01 07 27.0 +0.2**
WHY IAmb IAmb 01 07 28.3
comp=Z,72nm,1.0s
**WHY Whitehorse 85.98 20 P P 01 07 27.4 +0.6**
baz=221,SNR=17
**I23K Minto, Yukon-K 85.99 12 P P 01 07 25.6 -0.9**
baz=207,SNR=12
**DLBC Dease Lake 86.04 23 P P 01 07 27.9 +0.8**
baz=225,SNR=7.4
**COLA College 86.05 12 P P 01 07 25.8 -1.0**
**COLA College 86.05 12 P P 01 07 26.6 -0.2**
baz=209
**ANMO Albuquerque 86.10 51 P P 01 07 28.6 +0.5**
**ANMO Albuquerque 86.10 51 P P 01 07 28.8 +0.7**
baz=245
**ANMO Albuquerque 86.10 51 P P 01 07 28.6 +0.5**
ANMO pmax pmax
comp=Z,23nm,1.0s
**SCRK Sand Creek 86.12 14 P P 01 07 27.4 0.0**
baz=212,SNR=12
**ILAR Eielson Array 86.16 13 P P 01 07 26.7 -0.7**
**ILAR Eielson Array 86.16 13 P P 01 07 26.6 -0.9**
comp=Z,34nm,0.4s,baz=221,slow=4.8,SNR=138
comp=Z,34nm,0.4s
**ILAR Eielson Array 86.16 13 P P 01 07 26.7 -0.7**
**F19K Shaleruckik Mo 86.18 8 P P 01 07 27.2 -0.2**
baz=199
**XLT XiLinHaoTe 86.18 319** *eP* P **01 07 29.1 +1.0**
XLT pmax pmax
comp=Z,150nm,1.2s
**H22K Ishtalitna Cre 86.29 11 P P 01 07 28.0 0.0**
baz=205,SNR=14
**M29M Somo Creek 86.29 17 P P 01 07 28.6 +0.3**
baz=217,SNR=28
**P33M Teslin, Yukon 86.33 21 P P 01 07 28.8 +0.4**
baz=222,SNR=14
**N31M Braeburn, Yuko 86.33 19 P P 01 07 28.9 +0.6**
baz=220,SNR=21
**POKR Poker Plat Res 86.35 12 P P 01 07 27.5 -0.8**
baz=209,SNR=17
**J25K Salcha River, 86.35 14 P P 01 07 28.2 -0.2**
baz=211,SNR=15
**R33M Jennings River 86.38 22 P P 01 07 29.6 +0.8**
baz=224,SNR=14
**E18K Tukpahlearik C 86.40 7 P P 01 07 28.6 +0.1**
baz=197,SNR=15
**D17K Noatak River 86.41 6 P P 01 07 29.1 +0.6**
baz=194,SNR=7.2
**GO08 Villa O'Higgin 86.41 140 P P 01 07 30.4 +1.2**
**G21K Allakaket 86.50 10 P P 01 07 29.0 0.0**
baz=203,SNR=22
**H23K Yukon River 86.56 11 P P 01 07 28.7 -0.7**
baz=207
**K27K Chicken 86.63 15 P P 01 07 30.8 +1.1**
baz=214
**F20K Avaraart Lake 86.66 9 P P 01 07 30.1 +0.4**
baz=201
**J26L Joseph Creek 86.67 14 P P 01 07 30.3 +0.4**
baz=213,SNR=35
**XAN Xi'an 86.68 307** ⇓P P **01 07 31.8 +1.1**
XAN pmax pmax
comp=Z,460nm,1.1s
**MSO Missoula 86.68 38 P P 01 07 30.1 -0.3**
**MSO Missoula 86.68 38 P P 01 07 30.6 +0.1**
baz=239
**DLMT Dillon 86.75 40 P P 01 07 31.6 +0.8**
DLMT IAmb IAmb 01 07 32.7
comp=Z,60nm,0.8s
**RDOG Red Dog Mine 86.78 6 P P 01 07 30.5 +0.2**
baz=194
**C16K Lisburne Hills 86.78 5 P P 01 07 30.4 +0.2**
baz=192
**BILL Bilibino 86.80 354 P P 01 07 30.8 +0.4**
BILL IAmb IAmb 01 07 32.1
comp=Z,90nm,1.1s
**BILL Bilibino 86.80 354** *i* P P **01 07 29.4 -0.9**
BILL pmax pmax
comp=Z,63nm,1.0s
**HIA Hailar 86.80 325 P P 01 07 31.5 +0.7**
**HIA Hailar 86.80 325 P P 01 07 31.0 +0.1**
HIA IAmb IAmb 01 07 32.4
comp=Z,82nm,1.1s
**HIA Hailar 86.80 325** *i* P P **01 07 31.2 +0.4**
HIA pmax pmax
comp=Z,47nm,1.0s
**E19K Redstone River 86.84 8 P P 01 07 30.5 -0.1**
baz=200,SNR=24
**H24K Noodor Dome 86.89 12 P P 01 07 29.0 -2.0**
baz=209
**N32M Quiet Lake 86.94 20 P P 01 07 32.2 +1.0**
baz=222
**MLSI Meulaboh, Aceh 87.03 275 P P 01 07 33.1 +0.4**
comp=Z,374nm,0.9s
**S22A 4UR Ranch, Cre 87.03 49 P P 01 07 33.3 +0.8**
baz=244
**PRP Porcupine Dome 87.09 13 P P 01 07 31.5 -0.5**
baz=211,SNR=6.2
**F21K Alatna River 87.16 9 P P 01 07 31.9 -0.2**
baz=203,SNR=8.8
**C17K DeLong Mountai 87.16 5 P P 01 07 31.8 -0.2**
baz=194
**G22K Bettles 87.20 10 P P 01 07 32.6 +0.3**
baz=205
**G23K Bananza Creek 87.27 11 P P 01 07 32.2 -0.4**
baz=207,SNR=8.0
**M31M Drury Creek, Y 87.31 19 P P 01 07 32.5 -0.4**
baz=221,SNR=12
**DAWY Dawson 87.34 16 P P 01 07 33.0 -0.1**
DAWY IAmb IAmb 01 07 34.4
comp=Z,144nm,1.3s

**DAWY Dawson** 87.34 16 P P 01 07 33.2 +0.1
baz=216,SNR=14
**YFT Old Faithful** 87.39 41 P P 01 07 35.8 +1.8
**BW06 Boulder Array** 87.41 43 P P 01 07 34.6 +0.5
baz=242,SNR=11
**PDAR Pinedale Array** 87.41 43 P P 01 07 34.6 +0.4
**PDAR Pinedale Array** 87.41 43 P P 01 07 34.4 +0.2
comp=Z,22nm,0.7s,baz=218,slow=2.8,SNR=37
comp=Z,22nm,0.7s
**I26K Coal Creek Min** 87.44 14 P P 01 07 33.6 +0.2
baz=213,SNR=12
**BOZ Bozeman (W)** 87.45 40 P P 01 07 35.2 +1.0
baz=241,SNR=9.8
**EGAK Eagle** 87.47 15 P P 01 07 33.6 0.0
EGAK IAmb IAmb 01 07 34.6
comp=Z,90nm,0.9s
**EGAK Eagle** 87.47 15 P P 01 07 34.0 +0.4
baz=215,SNR=15
**C18K Utukok River** 87.52 6 P P 01 07 33.1 -0.7
baz=196
**H17A Grant Village** 87.53 42 P P 01 07 37.1 +2.4
baz=241,SNR=7.4
**F22K John River** 87.62 10 P P 01 07 34.6 +0.4
baz=205
**FARO Faro, Yukon** 87.65 19 P P 01 07 34.6 +0.1
baz=222,SNR=7.9
**K29M Barlow Dome** 87.66 17 P P 01 07 34.9 +0.3
K29M IAmb IAmb 01 07 36.2
comp=Z,190nm,1.4s
**K29M Barlow Dome** 87.66 17 P P 01 07 35.2 +0.6
baz=218,SNR=15
**WTLY Watson Lake, Y** 87.66 22 P P 01 07 35.3 +0.7
baz=226
**H25L Birch Creek** 87.68 13 P P 01 07 33.7 -0.8
baz=210
**COLD Coldfoot** 87.70 11 P P 01 07 35.1 +0.6
baz=206,SNR=31
**HHC Hu-ho-hao-te** 87.70 314 ⇓*i*P P 01 07 36.3 +0.9
HHC pmax pmax
comp=Z,110nm,1.1s
**D19K Kuna River** 87.71 7 P P 01 07 34.6 -0.1
baz=199,SNR=13
**LKWY Lake** 87.72 41 P P 01 07 36.7 +1.1
LKWY IAmb IAmb 01 07 38.8
comp=Z,47nm,0.8s
**LKWY Lake** 87.72 41 P P 01 07 36.7 +1.1
LKWY pmax pmax
comp=Z,47nm,0.9s
**G24K Hadweenzic Riv** 87.73 12 P P 01 07 34.8 0.0
baz=209,SNR=8.7
**E20K Nigu River** 87.73 8 P P 01 07 35.0 +0.2
baz=201,SNR=38
**COYC Coyhaique** 87.88 138 P P 01 07 37.0 +0.9
COYC IAmb IAmb 01 07 38.9
comp=Z,131nm,1.0s
**J29N Klondike Camp** 87.96 16 P P 01 07 36.8 +0.8
baz=218,SNR=12
**SDCO Great Sand Dun** 87.98 49 P P 01 07 37.2 +0.2
**SDCO Great Sand Dun** 87.98 49 P P 01 07 37.3 +0.2
baz=245
**I27K Kandik River** 88.05 14 P P 01 07 36.6 +0.3
baz=214,SNR=6.0
**G25K Bearman Lake** 88.06 12 P P 01 07 36.0 -0.3
baz=210,SNR=6.6
**D20K Etivluk River** 88.10 8 P P 01 07 36.6 +0.1
baz=200,SNR=11
**PHRA Phrae** 88.12 290 P P 01 07 37.9 +0.3
**C19K Lookout Ridge** 88.13 7 P P 01 07 36.8 +0.2
baz=198,SNR=7.9
**B18K Kokolik River** 88.15 6 P P 01 07 37.0 +0.3
baz=196
**TOAD Toad River Com** 88.16 25 P P 01 07 37.5 +0.5
baz=229,SNR=22
**LL06 Loncomilla** 88.19 134 P P 01 07 38.1 +0.6
**E21K Killik River** 88.21 9 P P 01 07 37.1 +0.1
baz=203
**KMI Kunming** 88.23 297 ⇓P P 01 07 39.9 +1.6
KMI pmax pmax
comp=Z,91nm,1.2s
**E22K Anaktuvuk Pass** 88.25 10 P P 01 07 37.1 -0.1
baz=205
**I28M Miner Creek** 88.32 15 P P 01 07 37.6 -0.1
baz=216,SNR=13
**F24K Squaw Lake** 88.37 11 P P 01 07 38.2 +0.4
baz=209,SNR=25
**T25A Trinidad** 88.52 50 P P 01 07 40.4 +1.0
baz=246
**E23K Chandalar** 88.54 10 P P 01 07 38.8 +0.2
baz=207,SNR=19
**J30M Hart River** 88.56 17 P P 01 07 39.1 +0.2
baz=219,SNR=9.6
**CRAI Chiangrai** 88.57 292 P P 01 07 40.3 +0.5
CRAI IAmb IAmb 01 07 42.0
comp=Z,74nm,1.2s
**H27K Steamboat Moun** 88.58 14 P P 01 07 39.0 +0.2
baz=214,SNR=11
**MMPY Sheldon Lake,** 88.60 20 P P 01 07 39.7 +0.7
baz=224,SNR=30
**LL05 Los Muermos** 88.61 133 P P 01 07 40.4 +0.8
LL05 IAmb IAmb 01 07 41.6
comp=Z,101nm,0.8s
**BTO Baotou** 88.65 314 *e*P P 01 07 41.5 +1.7
BTO pP **pP -2.6**
BTO PP **PP** 01 11 18.3 -0.7
BTO S **S** 01 17 33.6 -6.5
BTO pmax pmax
comp=Z,140nm,1.1s
**I29M Ogilvie Camp,** 88.66 16 P P 01 07 39.0 -0.2
baz=217,SNR=13
**G26K Porcupine Rive** 88.69 13 P P 01 07 39.4 +0.2
baz=212,SNR=21
**RLMT Red Lodge** 88.69 41 P P 01 07 41.5 +1.5
baz=242,SNR=7.8
**Q24A Divide** 88.74 48 P P 01 07 40.9 +0.4
baz=245
**E24K Your Creek** 88.75 11 P P 01 07 39.8 +0.2
baz=208
**C21K Knifeblade Rid** 88.76 8 P P 01 07 39.9 +0.4
baz=202,SNR=24
**D22K Ayikyak River** 88.80 9 P P 01 07 40.2 +0.5
baz=204,SNR=27
**TGTN Hyland Airport** 88.83 21 P P 01 07 40.9 +0.9
baz=226,SNR=14
**ELIB Princess Elisa** 88.85 187 *d*P P 01 07 40.0 -0.2
comp=Z,64nm,0.7s
**F25K Christian Rive** 88.86 12 P P 01 07 40.8 +0.7
baz=211,SNR=10
**BMAR Burnt Mountain** 88.93 12 P P 01 07 40.6 +0.2
**LL02 Futaleuf** 89.00 135 P P 01 07 42.2 +0.8
LL02 IAmb IAmb 01 07 43.8
comp=Z,64nm,0.9s
**N23A Red Feather La** 89.00 46 P P 01 07 42.7 +1.1
baz=245
**A19K Wainwright** 89.03 6 P P 01 07 41.1 +0.4
baz=196
**G27K Doyon Strip** 89.03 14 P P 01 07 41.1 +0.3
baz=214,SNR=6.9
**I30M Mount Dempster** 89.05 16 P P 01 07 41.2 +0.1
baz=219,SNR=16
**TOLK Toolik Lake Re** 89.07 10 P P 01 07 40.8 -0.2
TOLK IAmb IAmb 01 07 42.0
comp=Z,49nm,0.8s
**TOLK Toolik Lake Re** 89.07 10 P P 01 07 41.1 +0.1
baz=207,SNR=7.8
**D23K Nanushuk River** 89.19 10 P P 01 07 42.1 +0.6
baz=206
**B21K Ikpikpuk River** 89.21 8 P P 01 07 42.1 +0.6
baz=202
**F26K Sheenjek River** 89.25 12 P P 01 07 42.5 +0.7
baz=212,SNR=9.0
**CM31 Chiang Mai Arr** 89.25 290 P P 01 07 43.8 +0.8
CM31 IAmb IAmb 01 07 45.5
comp=Z,132nm,1.0s
**CMAR Chiang Mai Arr** 89.25 290 P 01 07 43.8 +0.8
**CMAR Chiang Mai Arr** 89.25 290 P P 01 07 44.6 +1.7
comp=Z,74nm,0.9s,baz=111,slow=2.9,SNR=70
CMAR PKPPKP **P'P'df** 01 33 25.9 +0.7
comp=Z,3.6nm,0.7s,baz=119,slow=4.9,SNR=9.4
comp=Z,74nm,0.9s
**CMAR Chiang Mai Arr** 89.25 290 *ce*P P 01 07 44.7 +1.7
CMAR pmax pmax
comp=Z,76nm,0.9s
**B20K Meade River** 89.26 7 P P 01 07 42.7 +0.9
baz=200
**H29M Whitestone** 89.33 15 P P 01 07 42.7 +0.5
baz=217,SNR=17
**KOTAN Kotaneelee Air** 89.45 24 P P 01 07 43.8 +0.9
baz=230
**JCT Junction City** 89.49 58 P P 01 07 44.0 +0.1
**JCT Junction City** 89.49 58 P P 01 07 44.3 +0.5
baz=248
**JCT Junction City** 89.49 58 P P 01 07 44.0 +0.1
JCT pmax pmax
comp=Z,22nm,0.7s
**PZH PanZhiHua** 89.55 298 P P 01 07 45.3 +0.9
PZH pmax pmax
comp=Z,20nm,0.8s
**D24K Happy Valley** 89.66 10 P P 01 07 44.0 +0.3
baz=208,SNR=12
**AMTX Amarillo** 89.66 53 P P 01 07 45.1 +0.5
baz=247
**EGMT Eagleton** 89.75 39 P P 01 07 45.2 +0.6
baz=242
**EPYK Eagle Plains** 89.86 15 P P 01 07 44.8 0.0
baz=219,SNR=18
**G29M Pine Creek** 89.96 15 P P 01 07 45.4 +0.2
baz=218,SNR=9.7
**TROLL Troll, Antarti** 89.97 180 PKKPbc PKKPbc 01 25 12.3 -3.9
TROLL SKSac **SKSac** 01 17 22.9 -0.3
**TROLL Troll, Antarti** 89.97 180 ⇓P P 01 07 45.2 -0.2
comp=Z,2μm,0.5s
TROLL ⇑SKSac **SKSac** 01 17 22.9 -0.3
comp=Z,190nm,1.4s
TROLL ⇑PKKPbc **PKKPdf** 01 25 12.3 +3.0
comp=Z,122nm,0.7s
**C23K Itkillik River** 89.98 9 P P 01 07 45.5 +0.4
baz=206,SNR=17
**YAK Yakutsk** 89.99 338 P P 01 07 44.2 -1.0
YAK IAmb IAmb 01 07 45.5
comp=Z,78nm,0.8s
**YAK Yakutsk** 89.99 338 P P 01 07 44.6 -0.7
comp=Z,71nm,0.7s,baz=84,slow=0.9,SNR=12
comp=Z,71nm,0.7s
**YAK Yakutsk** 89.99 338 *ce*P P 01 07 44.3 -1.0
YAK pmax pmax
comp=Z,75nm,0.9s
**B22K Teshekpuk Lake** 90.04 8 P P 01 07 45.6 +0.3
baz=203,SNR=6.9
**F28M Old Crow** 90.10 14 P P 01 07 46.2 +0.4
baz=216,SNR=6.2
**LR05 Currie** 90.10 133 P P 01 07 46.7 +0.2
LR05 IAmb IAmb 01 07 48.7
comp=Z,78nm,0.9s
**LR03 Panguipulli** 90.11 132 P P 01 07 46.9 +0.3
LR03 IAmb IAmb 01 07 48.8
comp=Z,88nm,1.0s
**C24K Franklin Bluff** 90.18 10 P P 01 07 46.5 +0.5
baz=208
**E27K Coleen River** 90.19 13 P P 01 07 46.7 +0.5
baz=214,SNR=6.5
**SNAA Sanae** 90.25 179 PKKPbc PKKPbc 01 25 10.8 -4.6
SNAA SKSac **SKSac** 01 17 24.3 -0.4
**SNAA Sanae** 90.25 179 P P 01 07 46.0 -0.7
SNAA IAmb IAmb 01 07 47.2
comp=Z,62nm,1.3s
**SNAA Sanae** 90.25 179 ⇓P P 01 07 45.6 -1.1
comp=Z,310nm,0.5s
SNAA ⇑SKSac **SKSac** 01 17 24.3 -0.4
comp=Z,76nm,0.8s
SNAA ⇑PKKPbc **PKKPdf** 01 25 10.8 +2.0
comp=Z,36nm,0.8s
**SNAA Sanae** 90.25 179 P P 01 07 46.3 -0.4
comp=Z,13nm,0.6s,baz=217,slow=7.6,SNR=27
comp=Z,13nm,0.6s
**SNAA Sanae** 90.25 179 P P 01 07 46.0 -0.7
SNAA pmax pmax
comp=Z,62nm,1.3s
**VNA3 Neumayer Olymp** 90.38 176 PKKPbc PKKPbc 01 25 10.8 -4.3
VNA3 SKSac **SKSac** 01 17 24.5 -0.8
**VNA3 Neumayer Olymp** 90.38 176 ⇓P P 01 07 47.3 +0.1
comp=Z,92nm,0.6s
VNA3 ⇑SKSac **SKSac** 01 17 24.5 -0.8
comp=Z,2.4nm,1.0s
VNA3 ⇑PKKPbc **PKKPdf** 01 25 10.8 +2.3
comp=Z,3.4nm,0.7s
**BRDY Brady** 90.42 57 P P 01 07 48.6 +0.5
**A22K Sinclair Lake** 90.46 7 P P 01 07 47.4 +0.1
baz=202
**G30M tAoh Zraii Nji** 90.46 15 P P 01 07 47.3 -0.2
baz=219,SNR=27
**GO06 Curarrehue** 90.74 132 P P 01 07 49.5 -0.2
GO06 IAmb IAmb 01 07 51.7
comp=Z,44nm,1.0s
**VNA2 Neumayer--Watz** 90.83 177 PKKPbc **PKKPdf** 01 25 07.7 0.0
baz=147,slow=3.5
VNA2 SKSac **SKSac** 01 17 24.1 -3.7
baz=203,slow=1.5
**VNA2 Neumayer--Watz** 90.83 177 ⇓P P 01 07 49.5 +0.3
comp=Z,67nm,0.7s,baz=188,slow=5.1
VNA2 ⇑SKSac **SKSac** 01 17 24.1 -3.7
comp=Z,3.6nm,1.3s,baz=203,slow=1.5
VNA2 ⇑PKKPbc **PKKPdf** 01 25 07.7 0.0
comp=Z,4.4nm,0.7s,baz=147,slow=3.5
**PLCA Paso Flores** 90.90 134 P P 01 07 50.8 +0.5
**PLCA Paso Flores** 90.90 134 P P 01 07 51.5 +1.2
comp=Z,12nm,0.6s,baz=242,slow=5.0,SNR=23
comp=Z,12nm,0.6s
**PLCA Paso Flores** 90.90 134 P P 01 07 50.8 +0.5
PLCA pmax pmax
comp=Z,26nm,1.0s
**G31M Satah River** 90.91 16 P P 01 07 49.4 -0.1
baz=221,SNR=28
**NVL N'lazarevskaya** 90.95 183 *e*P P 01 07 48.3 -1.5
NVL pmax pmax
comp=Z,32nm,0.9s
**C27K Jago River** 90.97 11 P P 01 07 50.4 +0.7
baz=212,SNR=6.9
**E28M Babbage River** 90.97 13 P P 01 07 50.3 +0.5
baz=216,SNR=16
**C26K Camden Bay** 91.00 11 P P 01 07 50.9 +1.0
baz=211
**VNA1 Neumayer--Stat** 91.05 177 PKKPbc PKKPbc 01 25 09.7 -3.6
VNA1 SKSac **SKSac** 01 17 25.2 -3.8
**VNA1 Neumayer--Stat** 91.05 177 ⇓P P 01 07 50.5 +0.3
comp=Z,85nm,0.9s
VNA1 ⇑SKSac **SKSac** 01 17 25.2 -3.8
comp=Z,11nm,1.3s
VNA1 ⇑PKKPbc **PKKPdf** 01 25 09.7 +2.5
comp=Z,5.8nm,0.9s
**F30M Barrier River** 91.06 15 P P 01 07 50.3 +0.2
baz=220,SNR=5.9
**E29M Blow River** 91.17 14 P P 01 07 50.5 -0.1
baz=218,SNR=6.6
**D27M Malcolm River** 91.19 12 P P 01 07 51.5 +0.6
baz=215
**LAO LASA Array** 91.29 41 P P 01 07 53.1 +1.3
baz=245
**LZH Lanzhou** 91.31 308 ⇓P P 01 07 53.5 +1.2
LZH pmax pmax
comp=Z,200nm,1.6s
**435B Jarrell** 91.38 58 P P 01 07 53.4 +0.8
baz=250
**F31M Tsiigehtchic** 91.44 16 P P 01 07 51.9 0.0
baz=222,SNR=21
**RSSD Black Hills** 91.62 44 P P 01 07 53.6 0.0
RSSD IAmb IAmb 01 07 54.7
comp=Z,27nm,0.7s
**RSSD Black Hills** 91.62 44 P P 01 07 53.9 +0.3
baz=246
**RSSD Black Hills** 91.62 44 P P 01 07 53.6 0.0
**D28M Stokes Point** 91.73 13 P P 01 07 53.2 0.0
baz=217,SNR=8.1
**BI02 San Fabin de** 92.09 130 P P 01 07 54.9 -1.0
BI02 IAmb IAmb 01 08 34.6
comp=Z,97nm,1.9s
**INK Inuvik** 92.14 15 P P 01 07 54.4 -0.7
INK IAmb IAmb 01 07 55.6
comp=Z,88nm,1.0s
**INK Inuvik** 92.14 15 P P 01 07 54.7 -0.4
baz=222,SNR=16
**INK Inuvik** 92.14 15 P P 01 07 54.4 -0.7
INK pmax pmax
comp=Z,88nm,1.0s
**GO05 Huala** 92.28 128 P P 01 07 56.3 -0.5
GO05 IAmb IAmb 01 08 11.4
comp=Z,76nm,1.6s
**CBKS Cedar Bluff** 92.57 50 P P 01 07 58.3 +0.4
baz=249
**BO01 Tunca** 93.17 128 P P 01 08 00.3 -0.4
BO01 IAmb IAmb 01 08 59.3
comp=Z,50nm,1.6s
**BO02 Sierra Bellavi** 93.23 128 P P 01 08 01.2 0.0
BO02 IAmb IAmb 01 08 03.0
comp=Z,75nm,1.6s
**MT01 Popeta** 93.26 127 P P 01 08 00.7 -0.5
MT01 IAmb IAmb 01 08 11.9
comp=Z,108nm,1.9s
**DGMT Dagmar** 93.28 40 P P 01 08 01.2 +0.3
**DGMT Dagmar** 93.28 40 P P 01 08 01.6 +0.7
baz=246
**MT09 Talagante** 93.50 127 P P 01 08 01.6 -0.9
MT09 IAmb IAmb 01 08 34.9
comp=Z,142nm,1.9s
**ULN Ulaanbaatar** 93.59 319 P P 01 08 02.8 +0.3
ULN IAmb IAmb 01 08 03.6
comp=Z,41nm,0.9s
**ULN Ulaanbaatar** 93.59 319 *ce*P P 01 08 02.8 +0.3
ULN pmax pmax
comp=Z,41nm,1.0s
**SONM Songino Array** 93.98 319 P P 01 08 04.8 +0.6
SONM IAmb IAmb 01 08 06.1
comp=Z,132nm,1.8s
**SONM Songino Array** 93.98 319 P P 01 08 04.8 +0.6
comp=Z,9.3nm,0.6s,baz=126,slow=3.4,SNR=16
comp=Z,9.3nm,0.6s
**SONM Songino Array** 93.98 319 P P 01 08 04.8 +0.6
**YKA Yellowknife Ar** 94.53 25 P P 01 08 05.8 -0.3
comp=Z,16nm,0.8s,baz=303,slow=14,SNR=29
comp=Z,16nm,0.8s
**YKA Yellowknife Ar** 94.53 25 P P 01 08 05.8 -0.3
**KSU1 Kansas State U** 94.96 51 P P 01 08 09.0 +0.3
**KSU1 Kansas State U** 94.96 51 P P 01 08 09.9 +1.2
baz=251
**GTA Gaotai** 95.46 310 *e*P P 01 08 11.8 +0.7
GTA pmax pmax
comp=Z,30nm,0.9s
**ECSD EROS Data Cent** 96.47 46 P P 01 08 15.2 -0.3
ECSD IAmb IAmb 01 08 51.3
comp=Z,52nm,1.7s
**ECSD EROS Data Cent** 96.47 46 P P 01 08 15.6 +0.1
baz=251
**TIXI Tiksi** 96.55 345 *ce*P P 01 08 14.4 -0.7
TIXI pmax pmax
comp=Z,25nm,0.9s
**A36M Sachs Harbour** 96.74 14 P P 01 08 16.1 +0.2
**A36M Sachs Harbour** 96.74 14 P P 01 08 16.7 +0.8
baz=230
**ULM Lac du Bonnet** 99.00 40 P P 01 08 27.2 +0.6
comp=Z,3.8nm,0.8s,baz=253,slow=4.6,SNR=6.5
comp=Z,3.8nm,0.8s
**ULM Lac du Bonnet** 99.00 40 P P 01 08 27.2 +0.6
**LPAZ La Paz** 103.02 112 Pdiff **Pdif** 01 08 47.5 +1.6
comp=Z,2.9nm,1.0s,baz=53,slow=13,SNR=4.1
**WMQ Urumqi** 105.36 312 Pdif **Pdif** 01 08 55.9 +0.9
**ZALV Zalesovo Beam** 108.67 322 PKiKP **PKiKP** 01 13 10.0 -1.1
comp=Z,6.9nm,0.6s,baz=86,slow=1.3,SNR=8.4
**MKAR Makanchi Array** 109.56 314 Pdiff **Pdif** 01 09 14.1 +0.5
comp=Z,1.5nm,0.7s,baz=92,slow=4.7,SNR=2.3
MKAR PKiKP **PKiKP** 01 13 11.9 -1.2
comp=Z,6.8nm,0.5s,baz=168,slow=0.5,SNR=20
**KURK Kurchatov** 112.26 318 *c i*PKiKP **PKiKP** 01 13 17.5 -0.5
KURK pmax pmax
comp=Z,39nm,1.7s
**KURBB Kurchatov Arra** 112.31 318 PKiKP **PKiKP** 01 13 16.9 -1.2
comp=Z,15nm,0.7s,baz=86,slow=1.7,SNR=31
KURBB SKP **SKPdf** 01 16 01.8 +0.6
comp=Z,5.4nm,0.8s,baz=92,slow=1.8,SNR=6.1
**TKM2 Tokmak 2** 114.01 309 P PKPdf 01 13 21.0 -0.9
SNR=8.0
**KBK Karagaybulak** 114.47 309 P PKPdf 01 13 22.5 -0.2
SNR=5.3
**CHMS Chumysh** 114.63 310 P PKPdf 01 13 22.1 -0.8
SNR=6.9
**AAK Ala-Archa** 114.81 309 *c i*PKiKP **PKiKP** 01 13 23.5 +0.1
AAK pmax pmax
comp=Z,10.0nm,1.3s
**USP Ospenovka** 114.83 310 P PKPdf 01 13 22.6 -0.6
SNR=7.5
**AML Almayashu** 115.38 309 P **PKPdf** 01 13 24.8 0.0
SNR=5.5
**BVAR Borovoye Array** 117.28 321 PKP **PKPdf** 01 13 26.8 -0.8
comp=Z,19nm,0.5s,baz=110,slow=2.9,SNR=27
BVAR PP **PP** 01 14 49.1 +0.3
comp=Z,9.0nm,0.8s,baz=90,slow=5.9,SNR=4.0
**BVAR Borovoye Array** 117.28 321 PKiKP **PKiKP** 01 13 26.8 -0.8
**BRVK Borovoye** 117.34 321 *c i*PKiKP **PKiKP** 01 13 28.0 +0.3
BRVK pmax pmax
comp=Z,16nm,1.0s
**GAR Garm** 117.85 305 PKPdf **PKPdf** 01 13 29.0 -0.3
**KBL Kabul** 118.69 300 PKPdf **PKPdf** 01 13 31.1 0.0
**KBL Kabul** 118.69 300 PKiKP **PKPdf** 01 13 31.2 0.0
**LMN Caledonia Moun** 119.05 47 PKPdf **PKPdf** 01 13 30.0 -1.2
**SPITS Spitsbergen Ar** 119.62 357 PKP **PKPdf** 01 13 31.1 -0.4
comp=Z,30nm,0.8s,baz=158,slow=9.0,SNR=8.4
**SPITS Spitsbergen Ar** 119.62 357 PKiKP **PKPdf** 01 13 31.1 -0.4
**FDF Fort de France** 119.72 83 PKiKP **PKPdf** 01 13 32.2 -1.2
**FDF Fort de France** 119.72 83 PKiKP **PKPdf** 01 13 32.2 -1.2
**VOI Vohitsoka** 120.63 230 PKPdf **PKPdf** 01 13 35.0 -0.2
**ARU Arti** 123.28 326 *i* PKiKP **PKPdf** 01 13 37.6 -1.4
ARU 01 15 30.1
ARU 01 19 55.9
ARU SS SS 01 31 59.1 +27
**ARU Arti** 123.28 326 PKP **PKPdf** 01 13 38.8 -0.2
**LVZ Lovozero** 126.19 345 *c i*PKiKP **PKiKP** 01 13 45.1 +0.3
LVZ pmax pmax
comp=Z,62nm,2.5s
**LVZ Lovozero** 126.19 345 PKP **PKPdf** 01 13 43.8 -0.5
**ARCES ARCESS Array B** 126.70 350 PKP **PKPdf** 01 13 44.9 -0.3
comp=Z,44nm,0.8s,baz=22,slow=1.3,SNR=21
**ARCES ARCESS Array B** 126.70 350 PKiKP **PKPdf** 01 13 44.9 -0.3
**APA Apatity** 126.75 345 ⇓*i*PKiKP **PKPdf** 01 13 42.5 -2.8
APA *i* 01 15 54.8
APA pmax pmax
comp=Z,38nm,0.8s
**ADZR Andozero** 128.11 341 PKHKP PKPpre 01 13 28.2
ADZR pmax pmax
comp=Z,25nm,0.7s
**FINES FINESS Array B** 133.59 344 SKPbc **SKPbc** 01 16 36.0 +0.6
comp=Z,11nm,1.0s,baz=75,slow=4.9,SNR=3.2
**MOS Moscow** 133.86 333 *e*PKHKP PKPpre 01 13 30.8
MOS *e* 01 16 36.9
MOS pmax pmax
comp=Z,58nm,1.4s
**VRH Novokhopyorsk** 134.50 326 *e*PKiKP **PKPdf** 01 14 00.3 -0.2
VRH pmax pmax
comp=Z,20nm,0.8s
**OBN Obninsk** 134.72 333 *i* PKiKP PKPpre 01 13 56.4
OBN pmax pmax
comp=Z,194nm,1.4s
**LPSR Galich'ya Gora** 135.17 329 *e*PKiKP **PKPdf** 01 13 59.2 -2.5
LPSR pmax pmax
comp=Z,80nm,1.1s
**VORR Voronezh** 135.57 327 *e*PKiKP **PKPdf** 01 14 00.7 -1.7
VORR pmax pmax
comp=Z,40nm,0.9s
**RCBR Riachuelo** 135.72 119 PKP **PKPdf** 01 14 04.1 +0.1
comp=Z,11nm,1.1s,baz=243,slow=18,SNR=3.3
RCBR SKPbc **SKPbc** 01 16 43.6 -0.2
comp=Z,10nm,0.9s,baz=243,slow=8.9,SNR=7.6
**RCBR Riachuelo** 135.72 119 PKiKP **PKPdf** 01 14 04.1 +0.1
**VSR Storozhevoye** 135.85 327 *e*PKiKP **PKPdf** 01 14 01.2 -1.8
VSR pmax pmax
comp=Z,30nm,1.0s
**VORD Divnogorie** 135.92 326 *e*PKiKP **PKPdf** 01 14 01.8 -1.3
VORD pmax pmax
comp=Z,30nm,1.0s
**NC405 NORSAR Array S** 136.62 353 **PKPdf** 01 14 03.8 -0.4
**NB2 NORSAR Subarra** 136.74 353 PKPdf PKPpre 01 13 54.2
comp=Z,35nm,1.2s,baz=14,slow=1.8
NB2 SKPa **SKPbc** 01 16 47.0 +1.7
comp=Z,3.7nm,0.8s,baz=9.3,slow=2.9
**NB2 NORSAR Subarra** 136.74 353 PKPdf PKPpre 01 13 54.2
baz=14,slow=1.8
**NOA NORSAR Array B** 136.74 353 PKhKP PKPpre 01 13 56.3
comp=Z,7.5nm,0.7s,baz=20,slow=2.5,SNR=23
NOA SKPbc **SKPbc** 01 16 45.7 +0.4
comp=Z,6.0nm,0.8s,baz=14,slow=4.4,SNR=6.8
**GNI Garni** 137.21 310 PKPdf **PKPdf** 01 14 06.5 +0.4
**GNI Garni** 137.21 310 *c i*PKiKP **PKPdf** 01 14 05.0 -1.1
GNI pmax pmax
comp=Z,130nm,1.7s
**KBZ Khabaz** 137.24 316 PKP **PKPdf** 01 14 05.3 -0.5
comp=Z,10nm,0.8s,baz=175,slow=1.5,SNR=7.0
**KBZ Khabaz** 137.24 316 *c i*PKiKP **PKPdf** 01 14 06.5 +0.7
**KIV Kislovodsk** 137.29 316 PKPdf **PKPdf** 01 14 05.7 -0.4
**KIV Kislovodsk** 137.29 316 ⇓P PKPpre 01 13 59.6
**KIV Kislovodsk** 137.29 316 *e*PKiKP **PKPdf** 01 14 06.2 +0.2
KIV pmax pmax
comp=Z,23nm,1.1s

**HFS Hagfors 137.31 351** PKhKP PKPpre 01 13 54.1
comp=Z,11nm,0.5s,baz=79,slow=3.8,SNR=16
HFS PKP **PKPdf 01 14 04.6 -0.8**
comp=Z,28nm,0.9s,baz=54,slow=7.5,SNR=9.1
HFS SKPbc **SKPbc 01 16 48.1 +1.1**
comp=Z,18nm,0.8s,baz=349,slow=3.0,SNR=6.8
**HFS Hagfors 137.31 351** PKIKP **PKPdf 01 14 04.6 -0.8**
**SHA1 Shidzhatmaz 137.39 316***c* iPKIKP **PKPdf 01 14 07.0 +0.6**
**KONO Kongsberg 138.28 354** PKPdf **PKPdf 01 14 07.2 +0.1**
**KONO Kongsberg 138.28 354***c* iPKIKP **PKPdf 01 14 06.0 -1.2**
KONO pmax pmax
comp=Z,128nm,1.7s
**TSUM Tsumeb 139.71 203** PKP **PKPdf 01 14 11.0 -0.2**
comp=Z,7.5nm,0.8s,baz=210,slow=0.8,SNR=6.8
TSUM SKPbc **SKPbc 01 16 54.1 -1.0**
comp=Z,2.6nm,0.5s,baz=134,slow=6.8,SNR=3.0
**ANN Anapa 140.26 320** *i* PKIKP **PKPdf 01 14 12.1 +0.9**
ANN pmax pmax
comp=Z,55nm,1.1s
**KPL Plockton 140.57 6** *e*P PKPpre 01 14 04.5
**SUW Suwalki 140.70 340** *e*PKP PKPpre 01 14 02.5
**AKASG Malin Array Be 140.99 332** PKhKP PKPpre 01 14 05.0
comp=Z,23nm,0.5s,baz=43,slow=4.2,SNR=43
**KIEV Kiev 141.00 332** ⇑P PKPpre 01 14 00.1
**KIEV Kiev 141.00 332** PKHKP PKPpre 01 14 00.1
**INVG Invergeldie, C 141.62 5** *e*P PKPpre 01 14 08.0
**LAWE Loch Awe, Argy 141.66 7** *e*P PKPpre 01 14 08.1
**SIM Simferopol' 142.18 322***ce*PKHKP PKPpre 01 14 11.9
SIM 01 14 13.7
SIM pmax pmax
comp=Z,234nm,1.0s
**PGBU Glenifferbraes 142.19 6** *e*P PKPpre 01 14 10.4
**ESY Stoneypath 142.24 4** *e*P PKPpre 01 14 10.4
**CLGH Cloghs, Cushen 142.73 8** *e*P PKPpre 01 14 11.6
**EKA Eskdalemuir Ar 142.78 5** PKhKP PKPpre 01 14 12.1
comp=Z,20nm,0.7s,baz=327,slow=2.9,SNR=34
**NEWG New Galloway 142.90 6** *e*P PKPpre 01 14 11.7
**GKP Gorka Klasztor 143.06 345** *e*PKP PKPab 01 14 13.7 +0.1
**FURI Furi 143.10 260** PKPdf **PKPdf 01 14 17.1 -0.5**
**GAL1 Galloway 143.10 6** *e*P PKPab 01 14 12.7 -1.0
**SORM Soroca 143.22 330** ⇑P PKPab 01 14 14.5 +0.1
**BEL Belsk 143.31 340** *e*PKP PKPbc 01 14 15.4 +0.5
**EDMD Edmundbyers 143.37 4** *e*P PKPab 01 14 13.8 -1.0
**KESW Keswick, Cumbr 143.53 5** *e*P PKPab 01 14 14.6 -0.7
**PURM Purcari 143.56 327** ⇑P PKPbc 01 14 16.3 +0.5
**IOMK Kirk Michael 143.72 6** *e*P PKPab 01 14 15.1 -0.9
**ILTH Belurgan, Co L 143.73 8** *e*P PKPbc 01 14 15.0 -1.1
**GAZ Gaziantep 143.76 309** PKPbc 01 14 16.5 -0.4
**KIS Kishinev 143.78 328** ⇑P PKPab 01 14 16.6 0.0
**BSEG Bad Segeberg 143.79 352** *e*PKPbc PKPbc 01 14 16.3 0.0
baz=15,slow=2.8
**WIM Isle of Man 143.81 7** *e*P PKPbc 01 14 15.4 -1.0
**IGLA Glengowla, Co 143.82 11** *e*P PKPbc 01 14 15.8 -0.6
**LVV L'vov 143.83 336** *e*PKIKP PKPbc 01 14 15.6 -1.0
**HLG Helgoland 143.83 354** *e*PKPbc **PKPdf 01 14 16.9 -0.4**
baz=15,slow=2.8
**GDLE Glaisdale, N Y 143.84 3** *e*P PKPbc 01 14 15.6 -0.8
**MILM Milestii Mici 143.84 328** ⇓P PKPbc 01 14 16.5 -0.2
**BZK Bozkurt 143.86 318** PKPab 01 14 17.0 0.0
**BZK Bozkurt 143.86 318** ⇓P **PKPdf 01 14 17.6 -0.2**
**LODK Lodwar 144.06 250** PKPbc **PKPab 01 14 18.7 0.0**
**BNN Bunyan 144.08 312** PKPbc 01 14 17.6 -0.3
**HPK Haverah Park 144.26 4** *e*P PKPbc 01 14 17.1 -0.7
**IAS Iasi 144.27 330** ⇓P PKPbc 01 14 18.3 0.0
**DSB Dublin 144.49 9** PKPdf **PKPdf 01 14 18.2 -0.3**
**KWP Kalwaria Pacla 144.49 337** *e*PKP PKPbc 01 14 18.8 +0.2
**KWP Kalwaria Pacla 144.49 337** PKPbc 01 14 18.8 +0.2
**KWP Kalwaria Pacla 144.49 337** PKIKP PKPbc 01 14 18.8 +0.1
**GORT1 Trebel 144.56 350** *e*PKPbc **PKPab 01 14 18.9 -0.3**
baz=15,slow=2.8
**WPS Cemaes, Angles 144.57 7** *e*P **PKPdf 01 14 17.5 -1.0**
**RUE Ruedersdorf 144.59 347** *e*PKPbc PKPbc 01 14 19.0 +0.2
baz=15,slow=2.8
**WME Myndd Eilian 144.59 6** *e*P **PKPdf 01 14 17.9 -0.8**
**WLF1 Llynfaes 144.69 7** *e*P **PKPdf 01 14 18.2 -0.6**
**PRAR RASCA 144.77 331** ⇓P PKPbc 01 14 19.6 -0.1
**LBWR Ladybower, Pea 144.81 4** *e*P **PKPdf 01 14 18.5 -0.5**
**LMK Market Rasen 144.82 2** *e*P **PKPdf 01 14 18.0 -1.0**
**YLL Llanberis 144.86 6** *e*P **PKPdf 01 14 19.2 +0.1**
**BIR Birlad 144.88 328** ⇑P **PKPab 01 14 21.2 +0.4**
**VLDR Vladesti 144.94 327** ⇓P **PKPab 01 14 20.9 -0.1**
**TLCR 145.00 326** ⇓P **PKPbc 01 14 20.8 +0.4**
**OJC Ojcow 145.02 340** *e*PKP **PKPdf 01 14 19.8 +0.3**
**OJC Ojcow 145.02 340** PKPdf **PKPdf 01 14 19.2 -0.3**
**OJC Ojcow 145.02 340** PKIKP **PKPdf 01 14 19.2 -0.3**
**VARL Varlezi 145.02 328** ⇓P **PKPab 01 14 21.1 -0.2**
**BUR08 Bucovina Ar. S 145.03 332** PKPdf **PKPdf 01 14 19.8 +0.1**
**BURAR Bucovina Array 145.04 332** PKPdf **PKPdf 01 14 20.1 +0.4**
**BURAR Bucovina Array 145.04 332** ⇑P **PKPab 01 14 21.2 -0.3**
**STNC Stoke 145.08 4** *e*P **PKPdf 01 14 19.4 0.0**
**RETH Rethem/Aller, 145.09 352** *e*PKPbc **PKPbc 01 14 20.7 +0.4**
baz=15,slow=2.8
**SCTR Scanteiesti 145.10 327** ⇓P **PKPab 01 14 21.4 -0.3**
**GIUM Giurgiulesti 145.12 327** ⇑P **PKPab 01 14 21.2 -0.5**
**GHRR 145.13 328** ⇓P **PKPab 01 14 22.0 +0.3**
**TESR Tescani 145.19 330** ⇓P **PKPbc 01 14 21.2 +0.3**
**LLW Llanuwychllyn 145.20 6** *e*P **PKPdf 01 14 20.1 +0.4**
**FLTG Flechtingen 145.20 350** *e*PKPbc **PKPbc 01 14 20.6 -0.1**
baz=15,slow=2.8
**FOEL Foel Wylfa 145.20 5** *e*P **PKPdf 01 14 20.1 +0.4**
**BR131 Keskin Array S 145.21 315** **PKPbc 01 14 21.1 -0.3**
**BR131 Keskin Array S 145.21 315** PKIKP **PKPbc 01 14 21.1 -0.2**
**BRTR Keskin Array B 145.21 315** PKPdf **PKPdf 01 14 18.5 -1.9**
**BRTR Keskin Array B 145.21 315** PKPbc **PKPbc 01 14 21.1 -0.2**
comp=Z,89nm,0.8s,baz=140,slow=4.8,SNR=76
BRTR SKKPbc SKKPbc 01 25 07.8 -0.7
comp=Z,3.2nm,0.8s,baz=230,slow=5.5,SNR=6.0
BRTR SKKP **SKKPdf 01 26 01.4 -8.6**
comp=Z,1.3nm,0.6s,baz=133,slow=3.1,SNR=6.0
**BRTR Keskin Array B 145.21 315** PKIKP **PKPbc 01 14 21.2 -0.2**
**NRDL Niedersach Rie 145.22 351** *e*PKPbc **PKPbc 01 14 20.8 +0.1**
baz=15,slow=2.8
**KOLS Kolonicke sedl 145.22 336** *e*PKP2 **PKPab 01 14 21.6 -0.5**
**KOLS Kolonicke sedl 145.22 336** *e*PKP **PKPab 01 14 21.6 -0.5**
**JURR Jurilovca 145.25 325** ⇑P **PKPbc 01 14 21.3 +0.2**
**NEGRR Negrea 145.26 327** ⇓P **PKPab 01 14 22.0 -0.3**
**SLCR Slobozia Conac 145.28 327** ⇓P **PKPbc 01 14 21.7 +0.6**
**KIRS Kirsehir-Merke 145.30 314** ⇑P **PKPdf 01 14 20.5 +0.1**
**SCHL Schela 145.31 327** ⇑P **PKPab 01 14 22.2 -0.2**
**IZVR Izvoarele 145.31 327** ⇑P **PKPab 01 14 22.2 -0.3**
**COSR Cosmesti PH 145.33 328** ⇓P **PKPab 01 14 22.4 -0.1**
**TUDR 145.33 328** ⇓P **PKPab 01 14 22.0 -0.5**
**SCHLR Schela 145.33 327** ⇑P **PKPab 01 14 22.2 -0.3**
**CFR Carcaliu 145.37 327** ⇑P **PKPdf 01 14 20.1 -0.1**
**PANC Panciu 145.40 328** ⇑P **PKPab 01 14 22.7 -0.1**
**TPGR Topolog 145.43 326** ⇓P **PKPbc 01 14 22.3 +0.6**
**ONER Baraj Valea Uz 145.44 330** ⇓P **PKPab 01 14 22.8 -0.2**
**CWF Charnwood Fore 145.49 3** *e*P **PKPdf 01 14 20.8 +0.6**
**KSP Ksiaz 145.51 344** *e*PKP **PKPbc 01 14 21.1 -0.6**
**NIE Niedzica 145.54 339** *e*PKP **PKPbc 01 14 21.6 -0.3**
**CRVS Cervenica-Dubn 145.56 337** *e*PKIKP **PKPbc 01 14 21.7 -0.2**
**CRVS Cervenica-Dubn 145.56 337** *e*PKP **PKPbc 01 14 21.7 -0.2**
**WACR West Acre 145.58 1** *e*P **PKPdf 01 14 20.7 +0.4**
**HLM1 Long Mynd 145.60 5** *e*P **PKPdf 01 14 20.8 +0.4**
**VRI Vrincioaia 145.61 329** ⇑P **PKPbc 01 14 22.4 +0.3**
**PLOR Plostina 145.66 329** ⇓P **PKPbc 01 14 22.4 0.0**
**IBBN Ibbenbueren 145.70 354** *e*PKPbc **PKPbc 01 14 22.4 +0.2**
baz=15,slow=2.8
**ANTO Ankara 145.71 315** **PKPdf 01 14 20.6 -0.5**
**ANTO Ankara 145.71 315** ⇑P **PKPdf 01 14 21.3 +0.2**
**ANTO Ankara 145.71 315** PKIKP **PKPdf 01 14 20.6 -0.5**
**BR231 Keskin MP Arra 145.74 315** **PKPdf 01 14 21.0 -0.2**
**BMR Baia Mare 145.74 334** ⇓P **PKPbc 01 14 23.0 +0.6**
**OSTC Ostas 145.79 344**⇑ *e*PKP **PKPab 01 14 23.8 -0.5**
**OSTC Ostas 145.79 344** *e*PKP2 **PKPab 01 14 23.8 -0.5**
**HARR Harsova 145.80 326** ⇓P **PKPbc 01 14 23.2 +0.5**
**CLZ Clausthal 145.81 351** *e*PKPbc **PKPbc 01 14 23.0 +0.4**
baz=15,slow=2.8
**TURR Turia 145.82 330** ⇑P **PKPab 01 14 23.8 -0.8**
**EFOR EFORIE 145.83 325** ⇓P **PKPbc 01 14 23.4 +0.7**
**GRER 145.83 328** ⇑P **PKPab 01 14 24.1 -0.4**
**TLBR Topalu 145.84 326** ⇓P **PKPbc 01 14 23.2 +0.4**
**BISRR Bisoca 145.84 328** ⇑P **PKPbc 01 14 23.6 +0.7**
**CLL Collm 145.85 348** **PKPbc 01 14 22.5 0.0**
**CLL Collm 145.85 348** *e*PKPdf **PKPdf 01 14 21.0 +0.2**
CLL *i* PKPbc **PKPbc 01 14 22.6 0.0**
comp=Z,432nm,0.9s
CLL *ep*PKPdf **pPKPdf 01 16 30.0 0.0**
**CLL Collm 145.85 348** *i* PKIKP **PKPbc 01 14 22.6 0.0**
CLL pmax pmax
comp=Z,432nm,0.9s
**CLL Collm 145.85 348** *e*PKPbc **PKPbc 01 14 22.9 +0.3**
baz=15,slow=2.8
**MFTR Murfatlar 145.88 325** ⇓P **PKPdf 01 14 21.7 +0.6**
**COVR Voineasa-Covas 145.88 329** ⇑P **PKPbc 01 14 23.2 +0.2**
**OKC Ostrava-Krasne 145.88 341**⇑ *e*PKP **PKPbc 01 14 23.1 +0.3**
**UPC Upice 145.89 344**⇑ *e*PKP **PKPbc 01 14 23.4 +0.6**
**UPC Upice 145.89 344** *e*PKP2 **PKPbc 01 14 23.4 +0.6**
**OZUR 145.90 330** ⇑P **PKPbc 01 14 23.9 +0.9**
**DPC Dobruska-Polom 145.95 343** *e*PKPDF **PKPdf 01 14 22.0 +0.9**
DPC ⇑*e*PKP **PKPbc 01 14 23.7 +0.7**
**DPC Dobruska-Polom 145.95 343** *e*PKIKP **PKPdf 01 14 22.0 +0.9**
DPC *e* 01 14 23.7
**BOSR Bodos 145.98 330** ⇑P **PKPbc 01 14 23.9 +0.7**
**MBAR Mbarara 145.99 240** PKPbc **PKPbc 01 14 25.0 +0.6**
**MBAR Mbarara 145.99 240** PKPbc **PKPbc 01 14 25.1 +0.6**
comp=Z,620nm,0.8s,baz=187,slow=0.9,SNR=42
**MBAR Mbarara 145.99 240***c* *i* PKP2 **PKPbc 01 14 25.2 +0.8**
MBAR pmax pmax
comp=Z,129nm,1.3s
**LANS Liptovska Anna 146.05 339** *e*PKP2 **PKPab 01 14 24.4 -1.0**
**LANS Liptovska Anna 146.05 339** *e*PKP **PKPab 01 14 24.4 -1.0**
**BRG Berggiesshubel 146.06 346** Amp 01 14 22.5
comp=Z,25nm,1.0s
**BRG Berggiesshubel 146.06 346** P **PKPbc 01 14 23.9 +0.7**
BRG Amp 01 14 24.6
comp=Z,156nm,0.8s
**BRG Berggiesshubel 146.06 346** *e*PKPdf **PKPdf 01 14 21.3 +0.1**
baz=27,slow=1.6
BRG *e*PKPbc **PKPbc 01 14 23.6 +0.3**
baz=15,slow=2.8
**BRG Berggiesshubel 146.06 346** *e*PKP **PKPdf 01 14 21.3 +0.1**
**KRLC Kraliky 146.07 343** *e*PKPDF **PKPdf 01 14 21.5 +0.2**
KRLC ⇑*e*PKP **PKPbc 01 14 23.9 +0.5**
**KRLC Kraliky 146.07 343** *e*PKP2 **PKPab 01 14 24.7 -0.7**
**MCH1 Michaelchurch 146.11 5** *e*P **PKPdf 01 14 21.9 +0.7**
**MORC Moravsky Berou 146.12 342** PKPdf **PKPdf 01 14 21.5 +0.1**
**MORC Moravsky Berou 146.12 342** *e*PKP **PKPbc 01 14 23.5 0.0**
**MORC Moravsky Berou 146.12 342** ⇓P **PKPdf 01 14 22.3 +0.9**
**MORC Moravsky Berou 146.12 342** PKIKP **PKPdf 01 14 21.5 +0.1**
**NEHR Nehoiu 146.13 329** ⇓P **PKPbc 01 14 23.4 -0.2**
**PGOR Pogoanele 146.15 327** ⇑P **PKPbc 01 14 24.6 +0.9**
**CEI Carei 146.16 335** ⇑P **PKPbc 01 14 24.6 +1.0**
**GTTG Gottingen 146.16 351** *e*PKPbc **PKPbc 01 14 24.0 +0.5**
baz=15,slow=2.8
**AMRR Amara 146.17 327** ⇓P **PKPbc 01 14 24.1 +0.3**
**TGMR Targu Mures 146.17 331** ⇓P **PKPbc 01 14 23.9 +0.3**
**DOPR Dopca 146.19 330** ⇓P **PKPbc 01 14 24.7 +0.9**
**NEUB Neuenburg 146.19 349** *e*PKPdf **PKPdf 01 14 21.5 +0.1**
baz=27,slow=1.6
NEUB *e*PKPbc **PKPbc 01 14 23.9 +0.4**
baz=15,slow=2.8
**ISR Istrita 146.23 328** ⇑P **PKPbc 01 14 24.3 +0.4**
**PVCC Panska Ves 146.24 345** *e*PKPDF **PKPdf 01 14 22.2 +0.7**
PVCC ⇑*e*PKP **PKPbc 01 14 24.5 +0.8**
**PVCC Panska Ves 146.24 345** *e*PKIKP **PKPdf 01 14 22.2 +0.7**
PVCC *e* 01 14 24.5
**ICOR Ion Corvin 146.25 325** ⇓P **PKPbc 01 14 24.4 +0.4**
**MLR Muntele Rosu 146.26 329** PKPbc **PKPbc 01 14 23.9 -0.3**
comp=Z,105nm,0.8s,baz=338,slow=5.2,SNR=70
**MLR Muntele Rosu 146.26 329** ⇓P **PKPbc 01 14 24.0 -0.1**
**MLR Muntele Rosu 146.26 329** PKIKP **PKPbc 01 14 23.9 -0.3**
**KECS Kecovo 146.26 338** *e*PKP2 **PKPbc 01 14 24.4 +0.5**
**KECS Kecovo 146.26 338** *e*PKP **PKPbc 01 14 24.3 +0.4**
**MONM Monmouth 146.28 5** *e*P **PKPdf 01 14 21.9 +0.4**
**RICC Richard 146.33 346**⇑ *e*PKP **PKPbc 01 14 24.6 +0.6**
**MESR Meseseni 146.38 334** ⇓P **PKPbc 01 14 24.6 +0.4**
**STRD Stroud 146.39 5** *e*P **PKPbc 01 14 23.2 -0.9**
**MAUC Maruska 146.40 341**⇑ *e*PKP **PKPbc 01 14 25.2 +0.9**
**CBBR Cluj-Babes-Bol 146.42 333** ⇑P **PKPdf 01 14 21.5 -0.5**
**HSKC Hora Svate Kat 146.42 347**⇑ *e*PKP **PKPbc 01 14 24.7 +0.4**
**CJR Cluj-Napoca 146.44 333** ⇑P **PKPbc 01 14 25.3 +0.8**
**MDB Medias 146.53 331** ⇓P **PKiKP 01 14 25.8 -1.0**
**LEHL Lehliu 146.53 327** ⇓P **PKiKP 01 14 26.0 -0.8**
**PCED Cedros 146.55 46** *e*PKP **PKPbc 01 14 25.2 +0.2**
**MMAI Mount Meron Ar 146.55 303** PKPbc **PKPbc 01 14 25.7 +0.5**
comp=Z,123nm,0.6s,baz=68,slow=6.7,SNR=124
**CALA Caldeira 146.57 46** *e*PKP **PKPbc 01 14 25.8 +0.6**
**LTVH Ltavrtes, Hu 146.62 335** ⇑P **PKiKP 01 14 26.0 -0.9**
**PLAR PLOIESTI 146.63 328** ⇑P **PKPbc 01 14 25.3 +0.3**
**HOR Horta 146.65 46** *e*PKP **PKPbc 01 14 25.8 +0.6**
**SULR 146.68 328** ⇓P **PKPbc 01 14 25.3 +0.2**
**SWN1 Swindon 146.68 4** *e*P **PKPbc 01 14 25.6 -1.3**
**PRA Prague 146.69 345**⇑ *e*PKP **PKPbc 01 14 25.5 +0.5**
**KASTN Kahler Asten 146.71 352** *e*PKPdf **PKPdf 01 14 22.5 +0.2**
baz=27,slow=1.6
KASTN *e*PKPbc **PKPbc 01 14 25.3 +0.2**
baz=15,slow=2.8
**VOIR 146.74 330** ⇑P **PKPbc 01 14 25.7 +0.3**
**PRU Pruhonice 146.74 345** *e*PKPDF **PKPdf 01 14 22.7 +0.3**
PRU ⇑*e*PKP **PKPbc 01 14 25.5 +0.4**
**PRU Pruhonice 146.74 345** *e*PKIKP **PKPdf 01 14 22.7 +0.3**
PRU *e* 01 14 25.5
**GOPC GO Pecny, Ondr 146.75 345**⇑ *e*PKP **PKPbc 01 14 25.6 +0.4**
**MOX Moxa 146.76 349** *e*PKPdf **PKPdf 01 14 22.6 +0.2**
baz=27,slow=1.6
MOX *e*PKPbc **PKPbc 01 14 25.3 +0.1**
baz=15,slow=2.8
MOX *e*PKPab **PKPab 01 14 28.0 -0.1**
baz=12,slow=4.1
**DRGR 146.76 334** ⇑P **PKPbc 01 14 25.3 -0.1**
**PCAN Candelaria 146.78 46** *e*PKP **PKPbc 01 14 25.5 -0.1**
**PICO Pico 146.80 46** *e*PKP **PKPbc 01 14 25.8 0.0**
**PLN Plauen 146.80 348** *e*PKPdf **PKPdf 01 14 22.6 +0.1**
baz=27,slow=1.6
PLN *e*PKPbc **PKPbc 01 14 25.7 +0.4**
baz=15,slow=2.8
**TANN Tannenbergstha 146.81 348** *e*PKPdf **PKPdf 01 14 22.7 +0.1**
baz=27,slow=1.6
TANN *e*PKPbc **PKPbc 01 14 25.7 +0.3**
baz=15,slow=2.8
**VRAC Vranov 146.81 342** *e*PKP **PKPbc 01 14 25.5 +0.1**
**VRAC Vranov 146.81 342** PKPbc **PKPbc 01 14 25.7 +0.3**
comp=Z,76nm,0.9s,baz=40,slow=2.3,SNR=33
**VRAC Vranov 146.81 342** ⇓P **PKPdf 01 14 23.3 +0.8**
**ROSA Rosais 146.82 46** *e*PKP **PKPbc 01 14 26.1 +0.4**
**VYHS Vyhne 146.83 339** *e*PKP **PKPbc 01 14 25.8 +0.4**
**UBBA Unterbreizbach 146.87 351** *e*PKPbc **PKPbc 01 14 25.5 +0.2**
baz=15,slow=2.8
**JAVC Velka Javorina 146.89 341** *e*PKP **PKiKP 01 14 26.9 -0.7**
**GHAJ Ghor Haditha 146.90 300** **PKPbc 01 14 26.1 0.0**
**BORR Bors 146.91 335** ⇓P **PKPbc 01 14 26.5 +0.9**
**WOL Wolverton 146.92 4** *e*P **PKPbc 01 14 24.9 -0.7**
**PPNO Prainha do Nor 146.93 46** *e*PKP **PKPbc 01 14 26.4 +0.3**
**HTL Hartland 146.94 7** *e*P **PKPbc 01 14 24.7 -0.9**
**TNR Turnu Rosu 146.94 331** ⇓P **PKPbc 01 14 26.2 +0.4**
**PSZ Piszkesteto 146.95 338** **PKPbc 01 14 25.8 -0.1**
**PSZ Piszkesteto 146.95 338** ⇓P **PKPbc 01 14 26.3 +0.4**
**PMAN Manadas 146.97 46** *e*PKP **PKPbc 01 14 26.4 +0.3**
**ARR Arges 146.99 330** ⇓P **PKPdf 01 14 24.2 +1.2**
**PID Ribeirinha 147.04 46** *e*PKP **PKPbc 01 14 27.1 +0.8**
**KRUC Moravsky 147.09 342** *e*PKP **PKPbc 01 14 26.2 +0.1**
**TREC Trest 147.14 344**⇑ *e*PKP **PKPbc 01 14 26.3 +0.1**
**SGRR Singureni 147.14 327** ⇓P **PKPbc 01 14 26.5 +0.2**
**ELSH Elham, Standar 147.17 1** *e*P **PKPbc 01 14 25.4 -0.8**
**MANZ Manzenberg 147.29 348** *e*PKPdf **PKPdf 01 14 23.3 0.0**
baz=27,slow=1.6
MANZ *e*PKPbc **PKPbc 01 14 27.1 +0.4**
baz=15,slow=2.8
**BSZH Besenyszg 147.33 337** ⇓P **PKiKP 01 14 27.7 -0.7**
**ZVC Zvikov 147.34 345**⇑ *e*PKP **PKPbc 01 14 27.3 +0.6**
ZVC *e*PKPAB **PKPab 01 14 31.1 +0.6**
**BEBN Eben Emael 147.39 356** *d*PKPbc **PKPbc 01 14 26.5 -0.3**
**DEV Deva 147.39 332** ⇑P **PKPbc 01 14 27.5 +0.5**
**HUMR Humele 147.43 329** ⇑P **PKPbc 01 14 27.0 -0.1**
**HMNX Herstmonceux 147.43 2** *e*P **PKPbc 01 14 26.3 -0.4**
**ISK Istanbul-Kandi 147.45 320** ⇓P **PKPbc 01 14 26.8 -0.5**
**ROTZ Trotzenmuhle 147.48 348** *e*PKPbc **PKPbc 01 14 27.6 +0.5**
baz=15,slow=2.8
ROTZ *e*PKPab **PKPab 01 14 31.5 +0.5**
baz=12,slow=4.1
**PAGU Agualva, Azore 147.51 45** *e*PKP **PKiKP 01 14 28.3 -0.8**
**AHRW Bad Neuenahr-A 147.52 354** *e*PKPdf **PKPdf 01 14 25.0 +1.4**
baz=27,slow=1.6
**MEM Membach 147.55 355** *d*PKPdf **PKPdf 01 14 23.7 +0.1**
MEM *d*PKPbc **PKPbc 01 14 27.3 +0.1**
**DYA Yadsworthy 147.56 7** *e*P **PKPbc 01 14 25.9 -1.3**
**BTNL Ternell 147.56 355** *d*PKPdf **PKPdf 01 14 23.5 -0.3**
BTNL *d*PKPbc **PKPbc 01 14 27.3 0.0**
**PSCM Serra do Cume 147.59 45** *e*PKP **PKiKP 01 14 29.0 -0.3**
**COPA Copaceanca 147.59 328** ⇓P **PKPbc 01 14 27.5 -0.1**
**SRO Srobarova 147.60 339** *e*PKP **PKPbc 01 14 28.0 +0.6**
SRO *e* 01 14 32.8
**BSTI Sart Tilman 147.61 356** *d*PKPdf **PKPdf 01 14 23.9 +0.1**
BSTI *d*PKPbc **PKPbc 01 14 27.4 0.0**
**SIRR Siria 147.62 334** ⇑P **PKPbc 01 14 26.0 -1.6**
**ZST Bratislava 147.65 341** *e*PKP **PKPbc 01 14 28.2 +0.6**
**TNS Taunus Mts 147.67 352** *e*PKPbc **PKPbc 01 14 27.9 +0.3**
baz=15,slow=2.8
TNS *e*PKPab **PKPab 01 14 31.4 -0.4**
baz=12,slow=4.1
**GRF Grafenberg Arr 147.74 349** *e*PKPdf **PKPdf 01 14 23.8 -0.2**
baz=27,slow=1.6
GRF *e*PKPbc **PKPbc 01 14 28.2 +0.5**
baz=15,slow=2.8
GRF *e*PKPab **PKPab 01 14 32.3 +0.2**
baz=12,slow=4.1
**KHC Kasperske Hory 147.77 346** *e*PKPDF **PKPdf 01 14 24.4 +0.2**
KHC ⇑*e*PKP **PKPbc 01 14 28.3 +0.4**
**KHC Kasperske Hory 147.77 346***c* *i* PKIKP **PKPdf 01 14 24.6 +0.4**
KHC pmax pmax
comp=Z,468nm,1.3s
**BCLA Clavier 147.79 356** *d*PKPbc **PKPbc 01 14 27.5 -0.3**
BCLA *d*PKPab **PKPab 01 14 31.7 -0.5**
**BHOU Houvegnez 147.80 355** *d*PKPdf **PKPdf 01 14 24.6 +0.4**
BHOU *d*PKPbc **PKPbc 01 14 27.9 0.0**
BHOU *d*PKPab **PKPab 01 14 32.1 -0.2**
**GZR Gura Zlata 147.82 332** ⇑P **PKPbc 01 14 27.8 -0.4**
**SURR Surduc 147.83 333** ⇑P **PKPbc 01 14 28.0 -0.1**
**BGES Gesves 147.84 356** *d*PKPbc **PKPbc 01 14 27.7 -0.3**
BGES *d*PKPab **PKPab 01 14 31.9 -0.5**
**CKRC Cesky Krumlov 147.88 344**⇑ *e*PKP **PKPbc 01 14 28.6 +0.4**
**WET Wettzell 147.92 346** *e*PKPbc **PKPbc 01 14 28.5 +0.3**
baz=15,slow=2.8
WET *e*PKPab **PKPab 01 14 33.4 +0.5**
baz=12,slow=4.1
**BMRD Maredsous 147.94 357** *d*PKPdf **PKPdf 01 14 24.1 -0.3**
BMRD *d*PKPbc **PKPbc 01 14 27.7 -0.5**
**GEC2 GERESS Array S 148.01 345** *e*PKPbc **PKPbc 01 14 29.0 +0.4**
baz=15,slow=2.8
**GERES GERESS Array B 148.01 345** **PKPbc 01 14 28.3 -0.3**
**GERES GERESS Array B 148.01 345** PKPbc **PKPbc 01 14 28.7 +0.1**
comp=Z,80nm,0.7s,baz=161,slow=8.5,SNR=115
GERES SKKP **SKKPdf 01 26 09.7 +5.2**
comp=Z,2.0nm,0.6s,baz=163,slow=9.5,SNR=9.9
**RCHB Rochefort 148.06 356** *d*PKPdf **PKPdf 01 14 24.8 +0.2**
RCHB *d*PKPbc **PKPbc 01 14 28.3 -0.2**
**ELND Elena 148.09 326** ⇓P **PKPbc 01 14 29.1 +0.3**
**VLAD Vladila 148.10 328** ⇓P **PKiKP 01 14 29.4 -0.7**
**DOU Dourbes 148.15 357** *d*PKPbc **PKPbc 01 14 28.9 +0.2**
**BZS Buzias 148.16 333** ⇑P **PKPdf 01 14 24.8 0.0**
**SRE Strehaia 148.19 331** ⇓P **PKPbc 01 14 29.6 +0.6**
**CONA Conrad Observa 148.27 342** *i* PKP **PKPbc 01 14 29.6 +0.3**
comp=Z,60nm,0.7s,SNR=31
CONA *i* PKKP **PKKPdf 01 23 16.3 -4.4**
comp=Z,1.8nm,0.6s
**EDRB Edirne 148.33 323** P **PKPbc 01 14 29.4 -0.1**
**RONA Rosalia, Austr 148.34 341** *e*PKP **PKPbc 01 14 29.7 +0.3**
comp=Z,66nm,0.7s,SNR=39
RONA *i* PKKP **PKKPdf 01 23 16.3 -4.2**
comp=Z,2.0nm,0.5s
**HERR Herculane 148.38 332** ⇓P **PKPbc 01 14 29.4 -0.1**
**RMGR Halanga-Turnu 148.42 331** ⇓P **PKPbc 01 14 29.8 +0.2**
**BAND Balkesir-Ban 148.46 320** ⇓P **PKPbc 01 14 29.6 -0.2**
**WLF Walferdange 148.47 355** *d*PKPdf **PKPdf 01 14 25.8 +0.6**
WLF *d*PKPbc **PKiKP 01 14 30.2 -0.5**
**WLF Walferdange 148.47 355** *e*PKPdf **PKPdf 01 14 26.6 +1.4**
baz=27,slow=1.6
WLF *e*PKPbc **PKiKP 01 14 30.4 -0.3**
baz=15,slow=2.8
**DJES Djerdap 148.50 331** ⇓P **PKPbc 01 14 30.3 +0.5**
**BANR Banloc 148.55 334** ⇓P **PKiKP 01 14 30.8 -0.1**
**BAIL Bailesti 148.60 330** ⇑P **PKiKP 01 14 30.7 -0.4**
**PUNG Punghina 148.60 330** ⇑P **PKPbc 01 14 30.1 +0.1**
**MDVR Moldovita 148.77 332** ⇓P **PKPbc 01 14 30.6 0.0**
**MOA Mollin 148.79 344** *i* PKP **PKPbc 01 14 30.4 -0.1**
comp=Z,23nm,0.7s,SNR=17
**MORH Mrgy, Hungar 148.85 337** ⇑P **PKPdf 01 14 25.8 -0.2**
**JLP Les Platons 148.92 5** *e*P **PKPbc 01 14 30.5 -0.1**
**JSA Saint Aubin 148.97 5** *e*P **PKPbc 01 14 30.6 -0.2**
**STU Stuttgart 148.98 351** *e*PKPdf **PKPdf 01 14 26.3 +0.3**
baz=27,slow=1.6
STU *e*PKPab **PKPab 01 14 37.1 -0.1**
baz=12,slow=4.1
**ARSA Arzberg 148.98 342** *i* PKP **PKPbc 01 14 30.4 -0.5**
comp=Z,20nm,0.8s,SNR=20
**BIOA Bad Ischl, Aus 149.10 344** *e*PKP **PKPbc 01 14 30.8 -0.4**
comp=Z,32nm,0.8s,SNR=20
**KULA Kula-Manisa 149.15 316** P **PKPbc 01 14 30.9 -0.8**
**FUR Furstenfeldbru 149.19 348** *e*PKPbc **PKPbc 01 14 31.8 +0.4**
baz=15,slow=2.8
FUR *e*PKPab **PKPab 01 14 38.4 +0.3**
baz=12,slow=4.1
**ELL Elmali 149.22 312** **PKPbc 01 14 31.4 -0.6**
**PGRON Lagoa das Cont 149.25 45** *e*PKP **PKPdf 01 14 25.2 -1.7**
**RJOB Jochberg 149.26 346** *e*PKPbc **PKPbc 01 14 31.7 0.0**
baz=15,slow=2.8
RJOB *e*PKPab **PKPab 01 14 39.0 +0.5**
baz=12,slow=4.1
**FRGS Fruska Gora 149.28 335** *e*P **PKPbc 01 14 30.7 -1.0**
**ALN Alexandroupoli 149.34 323** P **PKPbc 01 14 30.8 -1.2**
**ENEZ Enez 149.38 322** P **PKPbc 01 14 31.7 -0.4**
**CAVK Edirne/Enez-Ca 149.41 322** ⇓P **PKPbc 01 14 31.5 -0.6**
**BFO Black Forest 149.54 351** *e*PKPdf **PKPdf 01 14 27.7 +0.6**
baz=27,slow=1.6
BFO *e*PKPbc **PKPbc 01 14 32.5 +0.2**
baz=15,slow=2.8
BFO *e*PKPab **PKPab 01 14 39.1 -0.5**
baz=12,slow=4.1
**LESA Schwarzleotal 149.58 345** *i* PKP **PKPbc 01 14 31.9 -0.5**
comp=Z,37nm,0.5s
LESA *i* PKKP **PKKPdf 01 23 19.1 +1.0**
comp=Z,2.3nm,0.5s
**SOKA Soboth 149.64 342** *i* PKP **PKPbc 01 14 32.1 -0.5**
comp=Z,45nm,0.7s
**BOVS Bovan 149.67 331** ⇑P **PKPdf 01 14 26.5 -0.8**
**KBA Koelnbreinsper 149.74 344** *i* PKP **PKPbc 01 14 32.1 -0.9**
comp=Z,77nm,0.7s,SNR=22
KBA *i* PKKP **PKKPdf 01 23 18.8 +0.8**
comp=Z,1.8nm,0.4s
**PSMA Santa Maria 149.81 46** *e*PKP **PKPdf 01 14 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A051A | Mrakovica | 150.51 | 338 | *e*P | | PKPbc | 01 14 34.2 | -0.5 |
| HAPS | Han Pijesak,Bl | 150.51 | 335 | *e*P | | PKPbc | 01 14 34.9 | +0.1 |
| SIGR | SIGRI | 150.52 | 320 | P | | PKPbc | 01 14 34.2 | -0.6 |
| KOKK | Kokkinochori, | 150.55 | 324 | P | | PKPbc | 01 14 34.1 | -0.7 |
| SRS | Serrai | 150.57 | 325 | P | | PKPbc | 01 14 33.6 | -1.3 |
| PRIJ | Prijedor | 150.61 | 338 | *e*P | | PKiKP | 01 14 35.2 | 0.0 |
| BOJS | Bojanci | 150.63 | 341 | *e*P | | PKPbc | 01 14 34.7 | -0.1 |
| BLY | Banja Luka | 150.63 | 337 | *e*P | | PKPbc | 01 14 34.5 | -0.4 |
| STAL | STALIGIAL | 150.66 | 345 | | | PKPbc | 01 14 34.0 | -1.0 |
| CEY | Cerknica | 150.67 | 342 | *e*P | | PKPbc | 01 14 34.3 | -0.7 |
| SABO | M.te Sabotino | 150.69 | 343 | | | PKPbc | 01 14 34.4 | -0.6 |
| RUDO | Rudo | 150.72 | 333 | *e*P | | PKPbc | 01 14 34.1 | -1.0 |
| SJES | Sjenica | 150.74 | 332 | *e*P | | PKPbc | 01 14 35.3 | 0.0 |
| DAVOX | Davos/Dischmat | 150.78 | 349 | PKP | | PKPdf | 01 14 29.1 | -0.1 |
| | comp=Z,20nm,0.8s,baz=36,slow=1.2,SNR=9.5 | | | | | | | |
| DAVOX | | | | PKPbc | | PKPbc | 01 14 35.6 | +0.2 |
| | comp=Z,175nm,0.7s,baz=258,slow=1.6,SNR=80 | | | | | | | |
| DAT | Datca | 150.84 | 314 | P | | PKPbc | 01 14 34.8 | -1.0 |
| BODT | Bodrum | 150.84 | 315 | P | | PKPbc | 01 14 34.9 | -0.7 |
| FUORN | Ofenpass-Fuorn | 150.87 | 348 | | | PKPbc | 01 14 35.7 | 0.0 |
| OUR | Ouranopolis | 150.89 | 324 | P | | PKPbc | 01 14 34.1 | -1.5 |
| CHOS | Chios island | 150.90 | 319 | P | | PKPbc | 01 14 35.5 | -0.3 |
| SOH | Sokhos | 150.91 | 325 | P | | PKPbc | 01 14 34.1 | -1.6 |
| KNT | Kendrikon | 150.91 | 326 | P | | PKPbc | 01 14 34.4 | -1.2 |
| SKDS | Skadanscina | 150.97 | 342 | *e*P | | PKPbc | 01 14 34.6 | -1.1 |
| VAY | Valandovo | 150.97 | 327 | *i* P | | PKPbc | 01 14 34.8 | -0.9 |
| A050A | Klekovaca | 151.10 | 338 | *e*P | | PKPbc | 01 14 34.6 | -1.5 |
| HORT | Hortiatis | 151.20 | 325 | P | | PKPbc | 01 14 35.2 | -1.2 |
| THE | Thessaloniki | 151.25 | 325 | P | | PKPbc | 01 14 35.0 | -1.4 |
| UPM | Unac-Piva | 151.25 | 334 | *e*P | | PKPbc | 01 14 35.3 | -1.3 |
| PAIG | Paliouri | 151.34 | 323 | P | | PKPbc | 01 14 35.0 | -1.6 |
| BRY | Bratogost | 151.65 | 334 | *e*P | | PKPbc | 01 14 36.2 | -1.2 |
| PDG | Podgorica | 151.72 | 332 | *e*P | | PKPbc | 01 14 36.6 | -0.8 |
| PDG | Podgorica | 151.72 | 332 | ⇓P | | PKiKP | 01 14 37.5 | -0.1 |
| TREB | Trebinje | 151.88 | 334 | *e*P | | PKPbc | 01 14 36.5 | -1.3 |
| KYMI | Kymi, Euboea I | 151.95 | 321 | P | | PKPbc | 01 14 36.6 | -1.4 |
| DRME | Dracevica, Mon | 151.95 | 332 | *e*P | | PKPbc | 01 14 37.1 | -0.8 |
| FNA | Florina | 151.98 | 327 | P | | PKPbc | 01 14 36.7 | -1.4 |
| APE | Apeiranthos | 152.01 | 317 | P | | PKPbc | 01 14 36.1 | -2.2 |
| OHR | Ohrid | 152.02 | 329 | *i* P | | PKPbc | 01 14 38.1 | -0.1 |
| STON | Ston | 152.03 | 335 | *e*P | | PKPbc | 01 14 35.7 | -2.3 |
| TIR | Tirane | 152.30 | 330 | P | | PKPbc | 01 14 38.5 | -0.2 |
| TIR | Tirane | 152.30 | 330 | ⇓P | | PKiKP | 01 14 39.0 | +0.1 |
| KBN | Korca | 152.40 | 328 | P | | PKPbc | 01 14 38.6 | -0.5 |
| NEST | Nestorio | 152.42 | 327 | P | | PKPbc | 01 14 38.5 | -0.7 |
| SANT | Santorini | 152.46 | 316 | ⇓P | | PKPbc | 01 14 36.8 | -2.5 |
| THR3 | Thira Island, | 152.48 | 316 | P | | PKPbc | 01 14 38.0 | -1.3 |
| PENT | Pentalofos | 152.53 | 327 | P | | PKPbc | 01 14 38.7 | -0.7 |
| ATHU | Athens Univers | 152.57 | 320 | P | | PKPbc | 01 14 38.0 | -1.4 |
| ATH | Athens Observa | 152.60 | 320 | P | | PKPbc | 01 14 38.2 | -1.3 |
| AXAR | Agios Charalam | 152.71 | 323 | P | | PKPbc | 01 14 38.7 | -1.0 |
| VILL | Villia | 152.72 | 321 | P | | PKPbc | 01 14 38.5 | -1.3 |
| MAKR | Makrakomi, Fth | 152.84 | 324 | P | | PKPbc | 01 14 39.5 | -0.5 |
| LOUT | Loutraki | 153.04 | 321 | P | | PKPbc | 01 14 39.1 | -1.4 |
| EVR | Evrytania | 153.09 | 324 | P | | PKiKP | 01 14 41.5 | +0.8 |
| ANX | Ano Chora | 153.25 | 323 | P | | PKiKP | 01 14 41.3 | +0.2 |
| KRND | KRANIDI | 153.32 | 320 | P | | PKPbc | 01 14 40.2 | -0.9 |
| SRN | Sarande | 153.35 | 328 | P | | PKPbc | 01 14 40.4 | -0.6 |
| EFP | Efpalio | 153.37 | 323 | P | | PKPbc | 01 14 40.9 | -0.2 |
| IGT | Igoumenitsa | 153.44 | 327 | P | | PKPbc | 01 14 40.0 | -1.3 |
| GUR | Goura | 153.45 | 322 | P | | PKPbc | 01 14 40.5 | -1.0 |
| KLV | Kalavryta, Ach | 153.49 | 322 | P | | PKPbc | 01 14 41.0 | -0.5 |
| KEK | Kerkira | 153.58 | 328 | P | | PKPbc | 01 14 40.8 | -0.7 |
| LKD2 | Lefkada Island | 153.81 | 325 | P | | PKPbc | 01 14 41.2 | -0.9 |
| NYDR | Nydri-Lefkada | 153.84 | 325 | P | | PKPbc | 01 14 41.5 | -0.6 |
| CAMP | Campotosto | 153.88 | 340 | | | PKPbc | 01 14 41.5 | -0.8 |
| EVGI | Lefkada island | 153.93 | 325 | P | | PKPbc | 01 14 42.1 | -0.2 |
| IMMV | Iera Moni Meta | 153.97 | 316 | P | | PKPbc | 01 14 42.2 | -0.3 |
| KTHA | Kythira Island | 154.09 | 318 | P | | PKiKP | 01 14 43.1 | +0.3 |
| FSK | Fiskardo | 154.10 | 325 | P | | PKPbc | 01 14 41.7 | -1.0 |
| ANKY | Antikythira Is | 154.17 | 317 | P | | PKPbc | 01 14 42.8 | -0.1 |
| RTZL | Ratzakli, Kefa | 154.25 | 324 | P | | PKPab | 01 14 59.5 | -0.3 |
| LTHK | Lithakia | 154.47 | 323 | P | | PKiKP | 01 14 42.5 | -0.9 |
| PYL | PYLOS | 154.50 | 321 | P | | PKiKP | 01 14 42.0 | -1.6 |
| PGAV | Gavieira, Arco | 154.82 | 18 | *e*PKPdf | | PKPdf | 01 14 35.5 | +0.4 |
| PBRG | Braganca | 155.39 | 16 | *e*PKPdf | | PKPdf | 01 14 35.8 | 0.0 |
| PBRG | Braganca | 155.39 | 16 | *e*PKPab | | PKPab | 01 15 04.7 | +0.1 |
| POLO | Lamas de Olo | 155.51 | 18 | *e*PKPdf | | PKPdf | 01 14 36.4 | +0.4 |
| POLO | Lamas de Olo | 155.51 | 18 | *e*PKPab | | PKPab | 01 15 05.4 | +0.2 |
| MVO | Moncorvo | 155.92 | 17 | *e*PKPdf | | PKPdf | 01 14 37.0 | +0.5 |
| MVO | Moncorvo | 155.92 | 17 | *e*PKPab | | PKPab | 01 15 07.1 | +0.2 |
| MTE | Manteigas | 156.48 | 18 | *e*PKPdf | | PKPdf | 01 14 37.5 | +0.3 |
| MTE | Manteigas | 156.48 | 18 | *e*PKPab | | PKPab | 01 15 09.3 | -0.1 |
| PCAS | Casmilo, Conde | 156.50 | 20 | *e*PKPdf | | PKPdf | 01 14 37.5 | +0.3 |
| PCAS | Casmilo, Conde | 156.50 | 20 | *e*PKPab | | PKPab | 01 15 09.1 | -0.3 |
| PSBE | So Bento | 156.88 | 21 | *e*PKPab | | PKPab | 01 15 11.1 | 0.0 |
| PMRV | Marv??o | 157.42 | 19 | *e*PKPdf | | PKPdf | 01 14 38.5 | +0.1 |
| PMRV | Marv??o | 157.42 | 19 | *e*PKPab | | PKPab | 01 15 13.1 | -0.3 |
| PMTG | Montargil | 157.47 | 21 | *e*PKPab | | PKPab | 01 15 13.2 | -0.4 |
| PESTR | Estremoz | 157.87 | 20 | PKPab | | PKPab | 01 15 14.6 | -0.7 |
| PESTR | Estremoz | 157.87 | 20 | *e*PKPdf | | PKPdf | 01 14 39.0 | +0.1 |
| PESTR | Estremoz | 157.87 | 20 | *e*PKPab | | PKPab | 01 15 15.1 | -0.3 |
| EVO | Evora | 158.03 | 21 | *e*PKPab | | PKPab | 01 15 14.9 | -1.2 |
| ESBB | Sonseca Array | 158.06 | 12 | PKPab | | PKPab | 01 15 15.4 | -0.9 |
| ESDC | Sonseca Array | 158.06 | 12 | PKP | | PKPdf | 01 14 40.1 | +0.9 |
| | comp=Z,3.6nm,1.0s,baz=349,slow=3.0,SNR=7.3 | | | | | | | |
| ESDC | | | | PKPab | | PKPab | 01 15 16.0 | -0.2 |
| | comp=Z,22nm,0.9s,baz=342,slow=4.2,SNR=28 | | | | | | | |
| PNCL | Nicolau / Gran | 158.22 | 23 | *e*PKPdf | | PKPdf | 01 14 40.0 | +0.7 |
| PNCL | Nicolau / Gran | 158.22 | 23 | *e*PKPab | | PKPab | 01 15 16.7 | -0.2 |
| MESJ | Messejana | 158.57 | 22 | *e*PKPdf | | PKPdf | 01 14 40.6 | +0.8 |
| MESJ | Messejana | 158.57 | 22 | *e*PKPab | | PKPab | 01 15 18.3 | -0.2 |
| PBAR | Barrancos | 158.67 | 20 | *e*PKPdf | | PKPdf | 01 14 40.3 | +0.4 |
| PBAR | Barrancos | 158.67 | 20 | *e*PKPab | | PKPab | 01 15 18.1 | -0.8 |
| PCVE | Castro Verde | 158.82 | 22 | *e*PKPdf | | PKPdf | 01 14 40.9 | +0.8 |
| PCVE | Castro Verde | 158.82 | 22 | *e*PKPab | | PKPab | 01 15 19.5 | -0.1 |
| PFVI | Vila Bisbo | 158.97 | 24 | *e*PKPdf | | PKPdf | 01 14 40.2 | -0.1 |
| PVAQ | Vaqueiros | 159.14 | 22 | | | PKPab | 01 15 20.4 | -0.5 |
| PVAQ | Vaqueiros | 159.14 | 22 | *e*PKPdf | | PKPdf | 01 14 40.3 | -0.2 |
| PVAQ | Vaqueiros | 159.14 | 22 | *e*PKPab | | PKPab | 01 15 21.0 | 0.0 |
| PBDV | Barranco-do-Ve | 159.21 | 23 | *e*PKPdf | | PKPdf | 01 14 40.6 | 0.0 |
| PBDV | Barranco-do-Ve | 159.21 | 23 | *e*PKPab | | PKPab | 01 15 21.7 | +0.4 |
| KEST | Kesra | 161.37 | 341 | PKP | | PKPdf | 01 14 42.5 | -0.5 |
| | comp=Z,5.5nm,0.9s,baz=298,slow=3.2,SNR=4.8 | | | | | | | |
| KEST | | | | PKPab | | PKPab | 01 15 31.1 | +0.3 |
| | comp=Z,56nm,1.0s,baz=334,slow=1.3,SNR=23 | | | | | | | |
| MDT | Midelt | 164.37 | 21 | PKP | | PKPdf | 01 14 47.0 | +0.9 |
| | comp=Z,18nm,1.0s,baz=35,slow=1.4,SNR=16 | | | | | | | |
| MDT | | | | PKPab | | PKPab | 01 15 44.6 | +0.5 |
| | comp=Z,15nm,0.9s,baz=328,slow=4.4,SNR=14 | | | | | | | |
| LIC | Lamto | 166.28 | 150 | ⇑*i*PKP1 | | PKPdf | 01 14 47.4 | -0.6 |
| | comp=Z,5.5nm,0.5s | | | | | | | |
| LIC | Lamto | 166.28 | 150 | ⇑*i*PKP2 | | PKPab | 01 15 52.7 | -0.2 |
| | comp=Z,64nm,1.1s | | | | | | | |
| KIC | Kosan Boka | 166.54 | 151 | ⇑*i*PKP1 | | PKPdf | 01 14 46.8 | -1.4 |
| | comp=Z,31nm,1.1s | | | | | | | |
| KIC | Kosan Boka | 166.54 | 151 | ⇑*i*PKP2 | | PKPab | 01 15 54.0 | 0.0 |
| | comp=Z,29nm,0.9s | | | | | | | |
| TIC | Toumodi | 166.65 | 149 | ⇓*i*PKP1 | | PKPdf | 01 14 46.0 | -2.3 |
| | comp=Z,5.1nm,0.4s | | | | | | | |
| TIC | Toumodi | 166.65 | 149 | ⇓*i*PKP2 | | PKPab | 01 15 53.3 | -1.3 |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| DBIC | Dimbokro | 166.75 | 149 | PKP | | PKPdf | 01 14 47.9 | -0.5 |
| | comp=Z,7.5nm,0.7s,baz=260,slow=2.9,SNR=5.3 | | | | | | | |
| DBIC | | | | PKPab | | PKPab | 01 15 55.1 | +0.2 |
| | comp=Z,8.3nm,0.9s,baz=165,slow=5.3,SNR=4.5 | | | | | | | |
| TORD | Torodi Ar. Bea | 174.93 | 178 | PKP | | PKPdf | 01 14 51.0 | -1.5 |
| | comp=Z,8.8nm,0.9s,baz=117,slow=0.5,SNR=10 | | | | | | | |
| TORD | | | | PKPab | | PKPab | 01 16 30.9 | -0.1 |
| | comp=Z,4.3nm,0.9s,baz=182,slow=3.3,SNR=10 | | | | | | | |

*VIE* ***19*** *00:55:53.3±0.3,46°.31N×9°.97E,h13km±3km,ml1.9/2, Error ellipse: s-maj=2.7km s-min=1.8km az=160.0*

**ZUR 19 00:55:53.6,46°.31N×9°.97E,h12km±2km,MLh1.5/15, 2C-2D,Error ellipse: s-maj=4276.5km s-min=1258.3km az=273.0,Switzerland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BERNI | Berninapass | 0.11 | 21 | ⇑Pg | Pg | 00 55 57.3 | +0.5 |
| BERNI | | | | Sg | Sg | 00 55 59.4 | +0.2 |
| SCEL | Celerina | 0.21 | 339 | Pg | Pg | 00 55 58.8 | +0.5 |
| SCEL | | | | Sg | Sg | 00 56 01.7 | +0.3 |
| BRMO | Bormio | 0.33 | 60 | ⇑Pg | Pg | 00 56 00.5 | +0.2 |
| BRMO | | | | Sg | Sg | 00 56 04.8 | 0.0 |
| FUORN | Ofenpass-Fuorn | 0.37 | 34 | ⇓Pg | Pg | 00 56 01.6 | +0.5 |
| VDL | Val di Lei | 0.40 | 296 | ⇓Pg | Pg | 00 56 01.6 | 0.0 |
| FETA | Feichten 0.1nm,0.1s | 0.88 | 36 | *e*Pg | Pb | 00 56 11.0 | 0.0 |
| FETA | 0.2nm,0.1s | | | *e*Sg | Sg | 00 56 22.5 | +0.2 |

*IDC* ***19*** *00:56:24.8±7.3,17°.87S×177°.93W,h553km±76km,mb4.4/7, mbtmp5.3/7,Error ellipse: s-maj=56.9km s-min=30.8km az=129.0*

*NEIC* ***19*** *00:56:25.1±1.4,17°.9S±0°.1×178°.0W±0°.1,h558km±12km, mb5.1/32,Error ellipse: s-maj=22.2km s-min=15.8km az=155.0*

**ISC 19 00:56:24.0±0.6,17°.9S±0°.1×177°.9W±0°.1,h550km,n55, σ0s65/55,mb5.1/23,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LIFNC | LIFOU | 14.29 | 256 | P | P | 00 59 26.5 | +0.3 |
| TCW | Tory Channel | 24.18 | 194 | P | P | 01 00 57.6 | +0.3 |
| PPTF | Pamatai, Papee | 27.00 | 94 | P | P | 01 01 22.6 | -0.1 |
| PPTF | | | | IAmb | IAmb | 01 01 38.2 | |
| | comp=Z,67nm,0.9s | | | | | | |
| EIDS | Eidsvold | 29.70 | 250 | P | P | 01 01 45.5 | -0.6 |
| EIDS | | | | IAmb | IAmb | 01 01 47.0 | |
| | comp=Z,31nm,0.8s | | | | | | |
| CTAO | Charters Tower | 33.90 | 260 | P | P | 01 02 21.9 | 0.0 |
| CTAO | | | | IAmb | IAmb | 01 02 40.7 | |
| | comp=Z,61nm,1.0s | | | | | | |
| CAN | Canberra | 34.08 | 233 | P | P | 01 02 23.7 | +0.5 |
| CAN | | | | IAmb | IAmb | 01 02 52.9 | |
| | comp=Z,49nm,0.7s | | | | | | |
| CAN | Canberra | 34.08 | 233 | P | P | 01 02 23.6 | +0.5 |
| PMG | Port Moresby | 34.91 | 279 | P | P | 01 02 30.5 | +0.1 |
| PMG | Port Moresby | 34.91 | 279 | P | P | 01 02 31.2 | +0.8 |
| MANU | Manus Island | 37.52 | 291 | P | P | 01 02 52.9 | +1.0 |
| MANU | | | | IAmb | IAmb | 01 02 57.0 | |
| | comp=Z,50nm,0.9s | | | | | | |
| COEN | Coen | 37.56 | 270 | P | P | 01 02 52.7 | +0.4 |
| STKA | Stephens Creek | 39.04 | 241 | P | P | 01 03 04.4 | +0.4 |
| STKA | Stephens Creek | 39.04 | 241 | P | P | 01 03 04.7 | +0.7 |
| | comp=Z,58nm,0.8s,baz=105,slow=12,SNR=2.9 | | | | | | |
| | comp=Z,58nm,0.8s | | | | | | |
| WAKE | Wake Island | 39.93 | 337 | P | P | 01 03 11.1 | -0.1 |
| WAKE | Wake Island | 39.93 | 337 | P | P | 01 03 11.5 | +0.3 |
| DHH | Diamond Head | 43.63 | 28 | P | P | 01 03 41.4 | +1.1 |
| WRA | Warramunga Arr | 45.09 | 259 | P | P | 01 03 51.9 | +0.2 |
| | comp=Z,22nm,0.4s,baz=96,slow=7.0,SNR=1.7 | | | | | | |
| | comp=Z,22nm,0.4s | | | | | | |
| ASAR | Alice Springs | 45.24 | 254 | P | P | 01 03 52.8 | 0.0 |
| ASAR | Alice Springs | 45.24 | 254 | P | P | 01 03 53.1 | +0.3 |
| | comp=Z,123nm,0.8s,baz=85,slow=8.6,SNR=4.7 | | | | | | |
| | comp=Z,123nm,0.8s | | | | | | |
| GUMO | Guam | 48.23 | 308 | P | P | 01 04 15.3 | -0.1 |
| GUMO | Guam | 48.23 | 308 | P | P | 01 04 16.1 | +0.7 |
| TOLI2 | Tolitoli | 63.17 | 281 | P | P | 01 05 58.5 | -0.5 |
| TOLI2 | | | | IAmb | IAmb | 01 05 59.7 | |
| | comp=Z,45nm,0.8s | | | | | | |
| CASY | Casey | 66.34 | 205 | P | P | 01 06 17.8 | -0.3 |
| JAGI | Jajag, Banyuwa | 66.50 | 268 | P | P | 01 06 18.5 | -1.5 |
| MJAR | Matsushiro Arr | 68.17 | 323 | P | P | 01 06 30.1 | +0.3 |
| | comp=Z,16nm,0.6s,baz=160,slow=5.6,SNR=5.8 | | | | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| MAJO | Matsushiro | 68.18 | 323 | P | P | 01 06 29.7 | -0.1 |
| MAJO | | | | IAmb | IAmb | 01 06 30.2 | |
| | comp=Z,27nm,0.7s | | | | | | |
| MAJO | Matsushiro | 68.18 | 323 | P | P | 01 06 29.8 | 0.0 |
| KKM | Kota Kinabalu | 69.19 | 284 | P | P | 01 06 36.1 | -0.4 |
| KKM | | | | IAmb | IAmb | 01 06 53.2 | |
| | comp=Z,65nm,1.1s | | | | | | |
| JSD | Sado | 69.20 | 324 | P | P | 01 06 36.1 | +0.2 |
| KIWB | Kanaga Island | 69.45 | 1 | P | P | 01 06 36.6 | -0.5 |
| UGM | Wanagama | 70.11 | 268 | P | P | 01 06 40.9 | -1.1 |
| SMRI | Semarang | 70.42 | 269 | P | P | 01 06 44.4 | +0.6 |
| SMRI | | | | IAmb | IAmb | 01 07 03.6 | |
| | comp=Z,88nm,1.0s | | | | | | |
| YOJ | Yonaguni jima | 71.32 | 304 | P | P | 01 06 48.5 | -0.2 |
| SBUM | Sibu | 71.66 | 279 | P | P | 01 06 51.3 | +0.3 |
| TWG | Pinlang | 72.06 | 302 | P | P | 01 06 51.4 | -1.7 |
| TWG | | | | IAmb | IAmb | 01 06 52.2 | |
| | comp=Z,38nm,0.6s | | | | | | |
| NACB | Ninganchiao | 72.29 | 303 | P | P | 01 06 53.9 | -0.5 |
| NACB | | | | IAmb | IAmb | 01 06 54.9 | |
| | comp=Z,69nm,1.1s | | | | | | |
| SSLB | Suanglung | 72.62 | 303 | P | P | 01 06 55.1 | -1.3 |
| SSLB | | | | IAmb | IAmb | 01 07 03.0 | |
| | comp=Z,35nm,0.9s | | | | | | |
| KSM | Kuching | 73.14 | 277 | P | P | 01 06 59.6 | 0.0 |
| PEA0B | Petropavlovsk- | 73.79 | 345 | P | P | 01 07 02.7 | +0.3 |
| PEA0B | | | | IAmb | IAmb | 01 07 02.9 | |
| | comp=Z,64nm,0.9s | | | | | | |
| PETK | Petropavlovsk- | 73.79 | 345 | P | P | 01 07 02.3 | 0.0 |
| PETK | Petropavlovsk- | 73.79 | 345 | P | P | 01 07 03.1 | +0.8 |
| | comp=Z,19nm,0.7s,baz=116,slow=6.8,SNR=1.3 | | | | | | |
| | comp=Z,19nm,0.7s | | | | | | |
| OHAK | Old Harbor | 77.61 | 13 | P | P | 01 07 23.0 | -0.4 |
| NVAR | Mina Array Bea | 79.10 | 44 | P | P | 01 07 32.6 | +0.5 |
| | comp=Z,3.2nm,0.7s,baz=223,slow=6.2,SNR=1.2 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| O18K | Koktuh Hills | 79.65 | 11 | P | P | 01 07 33.2 | -1.1 |
| O18K | | | | IAmb | IAmb | 01 07 34.9 | |
| | comp=Z,50nm,0.8s | | | | | | |
| HEBO | Mount Hebo | 79.75 | 36 | P | P | 01 07 35.5 | +0.3 |
| HEBO | | | | IAmb | IAmb | 01 07 36.9 | |
| | comp=Z,49nm,0.9s | | | | | | |
| H04A | Detroit Lake | 80.31 | 37 | P | P | 01 07 37.4 | -0.6 |
| BRLK | Bradley Lake | 80.46 | 13 | P | P | 01 07 37.3 | -1.2 |
| L16K | Owhat River | 80.69 | 9 | P | P | 01 07 39.8 | +0.2 |
| K15K | Wolf Creek Mou | 80.97 | 8 | P | P | 01 07 41.4 | +0.4 |
| K15K | | | | IAmb | IAmb | 01 07 43.0 | |
| | comp=Z,69nm,0.9s | | | | | | |
| SEY | Seymchan | 83.87 | 347 | P | P | 01 07 55.1 | -0.5 |
| | comp=Z,42nm,1.0s,baz=148,slow=7.5,SNR=4.1 | | | | | | |
| | comp=Z,42nm,1.0s | | | | | | |
| BVAR | Borovoye Array | 117.13 | 321 | PKP | PKPdf | 01 14 05.7 | -0.9 |
| | comp=Z,3.9nm,0.5s,baz=106,slow=1.7,SNR=1.4 | | | | | | |
| BRTR | Keskin Array B | 145.10 | 315 | PKPbc | PKPdf | 01 14 59.8 | +0.3 |
| | comp=Z,24nm,0.8s,baz=129,slow=4.6,SNR=5.6 | | | | | | |
| CLL | Collm | 145.55 | 348 | *i* PKPbc | PKPdf | 01 15 01.0 | +1.3 |
| | comp=Z,58nm,1.0s | | | | | | |
| MMAI | Mount Meron Ar | 146.52 | 303 | PKPbc | PKPbc | 01 15 04.8 | +0.3 |
| | comp=Z,35nm,0.6s,baz=67,slow=6.4,SNR=9.0 | | | | | | |
| GERES | GERESS Array B | 147.72 | 346 | PKPbc | PKPbc | 01 15 07.0 | -0.2 |
| | comp=Z,13nm,0.7s,baz=54,slow=5.0,SNR=7.0 | | | | | | |

*IDC* ***19*** *00:58:29.3±2.1,17°.89S×178°.06W,h484km±24km, mb4.5/20,mbtmp5.3/22,Error ellipse: s-maj=12.1km s-min=11.2km az=171.0*

*MOS* ***19*** *00:58:30.9±1.8,17°.68S×178°.10W,h511km,mb5.2/20, Error ellipse: s-maj=10.6km s-min=9.0km az=174.8*

*BJI* ***19*** *00:58:31.4±0.0,17°.52S×177°.77W,h521km,mb5.0/30*

*NEIC* ***19*** *00:58:31.9±1.7,17°.84S±0°.09×178°.08W±0°.09, h512km±6km,mb5.3/72,Error ellipse: s-maj=13.9km s-min=11.8km az=207.0*

**ISC 19 00:58:33.8±0.3,17°.81S±0°.05×178°.10W±0°.05,h550km, n647,σ1s80/632,mb5.2/81,27C-33D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.67 | 271 | P | P | 00 59 52.3 | -1.1 |
| MSVF | Nonsavu | 3.67 | 271 | P | P | 00 59 52.3 | -1.1 |
| AFI | Afiamalu | 7.21 | 58 | P | P | 01 00 18.7 | -5.3 |
| AFI | Afiamalu | 7.21 | 58 | P | P | 01 00 18.7 | -5.3 |
| NIUE | Niue | 7.86 | 100 | | P | 01 00 28.3 | -1.8 |
| FUNA | Funafuti | 9.60 | 344 | P | P | 01 00 45.7 | -2.0 |
| LIFNC | LIFOU | 14.15 | 256 | P | P | 01 01 31.3 | -3.3 |
| PINNC | Pines Island, | 14.38 | 248 | P | P | 01 01 35.0 | -1.9 |
| DZM | Mont Dzumac | 15.14 | 251 | P | P | 01 01 42.5 | -2.3 |
| DZM | Mont Dzumac | 15.14 | 251 | P | P | 01 01 40.3 | -4.6 |
| | 35nm,0.7s,baz=108,slow=14,SNR=3.1 | | | | | | |
| KOUNC | Koumac, New Ca | 16.86 | 258 | P | P | 01 02 00.3 | -1.0 |
| RAR | Rarotonga | 17.60 | 104 | P | P | 01 02 05.3 | -2.7 |
| | 63nm,0.7s,baz=320,slow=18,SNR=3.1 | | | | | | |
| GRZ | Great Barrier | 19.23 | 196 | P | P | 01 02 23.8 | +1.1 |
| WCZ | Waipu Caves | 19.26 | 199 | P | P | 01 02 27.0 | +4.0 |
| KUZ | Kuaotunu | 19.63 | 195 | P | P | 01 02 27.6 | +1.2 |
| ABAZ | Army Bay | 19.73 | 197 | P | P | 01 02 29.3 | +2.0 |
| MXZ | Matakaoa Point | 19.93 | 188 | P | P | 01 02 27.1 | -2.0 |
| MXZ | Matakaoa Point | 19.93 | 188 | P | P | 01 02 27.1 | -2.0 |
| WMGZ | Waiomatatini S | 20.17 | 188 | P | P | 01 02 31.5 | +0.3 |
| HAZ | Te Kaha | 20.20 | 189 | P | P | 01 02 31.3 | -0.2 |
| PKGZ | Pakihiroa | 20.26 | 189 | P | P | 01 02 30.5 | -1.6 |
| RUGZ | Raukumara Rang | 20.42 | 190 | P | P | 01 02 32.6 | -1.0 |
| WHRZ | Whale Island | 20.43 | 191 | P | P | 01 02 33.2 | -0.4 |
| PUZ | Puketiti | 20.44 | 188 | P | P | 01 02 32.6 | -1.1 |
| TGRZ | Tauranga | 20.45 | 193 | P | P | 01 02 35.4 | +1.6 |
| OPRZ | Ohinepanea | 20.50 | 192 | P | P | 01 02 34.0 | -0.2 |
| TWGZ | Tauwhareparae | 20.58 | 189 | P | P | 01 02 36.0 | +1.0 |
| TOZ | Tahuroa Road | 20.62 | 195 | P | P | 01 02 35.5 | +0.1 |
| KMRZ | Kaimai | 20.63 | 193 | P | P | 01 02 36.5 | +1.0 |
| EDRZ | Edgecumbe | 20.72 | 192 | P | P | 01 02 34.7 | -1.6 |
| KARZ | Kaharoa | 20.73 | 193 | P | P | 01 02 38.4 | +2.0 |
| URZ | Urewera | 20.80 | 191 | P | P | 01 02 34.3 | -2.6 |
| | 258nm,0.5s,baz=354,slow=2.9,SNR=40 | | | | | | |
| | 258nm,0.5s | | | | | | |
| URZ | Urewera | 20.80 | 191 | P | P | 01 02 34.5 | -2.4 |
| MWZ | Matawai | 20.80 | 190 | P | P | 01 02 35.2 | -1.8 |
| TKGZ | Te Karaka | 20.86 | 189 | P | P | 01 02 38.1 | +0.6 |
| MUGZ | Murupara | 21.07 | 191 | P | P | 01 02 38.2 | -1.2 |
| HRRZ | Handcock Road | 21.08 | 192 | P | P | 01 02 39.1 | -0.5 |
| RIGZ | Rimuhau | 21.13 | 189 | P | P | 01 02 38.3 | -1.7 |
| RTZ | Ruatahuna | 21.17 | 191 | P | P | 01 02 38.1 | -2.3 |
| TLZ | Tolley Road | 21.19 | 194 | P | P | 01 02 41.0 | +0.5 |
| SNGZ | Shannon Statio | 21.27 | 190 | P | P | 01 02 39.8 | -1.4 |
| PRGZ | Paritu Road | 21.32 | 189 | P | P | 01 02 41.3 | -0.4 |
| MTHZ | Maungataniwha | 21.42 | 191 | P | P | 01 02 40.2 | -2.5 |
| KNZ | Kokohu | 21.45 | 189 | P | P | 01 02 41.5 | -1.2 |
| WATZ | Wairara | 21.51 | 193 | P | P | 01 02 44.4 | +1.0 |
| HIZ | Hauiti | 21.52 | 195 | P | P | 01 02 45.0 | +1.5 |
| MHGZ | Mahia Peninsul | 21.55 | 188 | P | P | 01 02 43.4 | -0.2 |
| WHHZ | Waihua | 21.57 | 190 | P | P | 01 02 43.6 | -0.3 |
| RATZ | Rangitukua | 21.65 | 193 | P | P | 01 02 43.6 | -1.0 |
| NMHZ | Naumai | 21.67 | 191 | P | P | 01 02 42.1 | -2.7 |
| KATZ | Kakaramea | 21.77 | 193 | P | P | 01 02 46.8 | +1.0 |
| BKZ | Black Stump Fm | 21.79 | 191 | P | P | 01 02 43.0 | -2.9 |
| ARHZ | Aropaoanui | 21.80 | 190 | P | P | 01 02 45.5 | -0.4 |
| NTVZ | North Tongarir | 21.89 | 193 | P | P | 01 02 45.5 | -1.4 |
| KRVZ | Karewarewa | 21.90 | 193 | P | P | 01 02 45.0 | -1.9 |
| TMVZ | Te Maari | 21.90 | 193 | P | P | 01 02 44.9 | -2.1 |
| TWVZ | Taurewa | 21.92 | 194 | P | P | 01 02 45.2 | -1.9 |
| ETVZ | East Tongariro | 21.92 | 193 | P | P | 01 02 45.1 | -2.1 |
| WTVZ | West Tongariro | 21.93 | 193 | P | P | 01 02 45.1 | -2.1 |
| NNVZ | North Ngauruho | 21.94 | 193 | P | P | 01 02 45.6 | -1.7 |
| OTVZ | Oturere | 21.96 | 193 | P | P | 01 02 45.4 | -2.1 |
| NGZ | Ngauruhoe | 21.98 | 193 | P | P | 01 02 47.3 | -0.5 |
| SNVZ | South Ngauruho | 21.98 | 193 | P | P | 01 02 47.4 | -0.4 |
| COVZ | Chateau Observ | 22.02 | 193 | P | P | 01 02 44.9 | -3.1 |
| MCHZ | McNeill Hill | 22.02 | 191 | P | P | 01 02 47.1 | -0.8 |
| KWHZ | Kaweka Forest | 22.06 | 191 | P | P | 01 02 46.0 | -2.3 |
| MAVZ | Matarangi | 22.08 | 193 | P | P | 01 02 46.7 | -2.1 |
| WHVZ | Whangaehu Hut | 22.09 | 193 | P | P | 01 02 46.2 | -2.6 |
| VRZ | Vera Road | 22.13 | 195 | P | P | 01 02 49.5 | +0.6 |
| WNVZ | Wahianoa | 22.13 | 193 | P | P | 01 02 47.1 | -2.0 |
| CKHZ | Cape Kidnapper | 22.17 | 190 | P | P | 01 02 47.2 | -2.0 |
| MOWZ | Moawhango | 22.17 | 193 | P | P | 01 02 47.1 | -2.3 |
| KRHZ | Kereru | 22.28 | 191 | P | P | 01 02 49.7 | -0.5 |
| KAHZ | Kahuranaki | 22.34 | 190 | P | P | 01 02 49.6 | -1.2 |
| PKE | Pukeiti | 22.39 | 196 | P | P | 01 02 53.5 | +2.3 |
| NEZ | North Egmont | 22.43 | 196 | P | P | 01 02 53.9 | +2.2 |
| KHEZ | Kahui Hut | 22.48 | 196 | P

NWAO **Narrogin (SRO)** 59.52 242 P P 01 07 45.0 +0.4
LUWI **Luwuk** 60.38 279 P P 01 07 51.3 +0.6
MORW **Morawa** 60.79 246 P P 01 07 53.2 +0.1
MORW IAmb IAmb 01 07 53.7
comp=Z,36nm,0.7s
KAPI **Kappang** 61.98 274 P P 01 08 01.4 +0.2
KAPI IAmb IAmb 01 08 02.7
comp=Z,142nm,1.4s
KAPI **Kappang** 61.98 274 *i* P P 01 08 01.3 +0.2
KAPI pmax pmax
comp=Z,52nm,1.1s
TOLI2 **Tolitoli** 62.99 281 P P 01 08 08.0 +0.4
TOLI2 IAmb IAmb 01 08 09.1
comp=Z,80nm,0.9s
RPN **Rapa Nui** 63.55 112 P P 01 08 10.7 -0.3
RPN **Rapa Nui** 63.55 112 P P 01 08 10.7 -0.3
RPN pmax pmax
comp=Z,1μm,2.0s
CCD **Concordia, Ant** 65.03 194 P P 01 08 21.6 +1.5
JAGI **Jajag, Banyuwa** 66.34 268 P P 01 08 28.0 -0.8
CASY **Casey** 66.35 205 P P 01 08 28.8 +1.0
CASY **Casey** 66.35 205 P P 01 08 28.9 +1.1
MYLDM **Lahad Datu** 66.58 284 P P 01 08 31.6 +1.4
MJA0 **Matsu Arr-Jizo** 67.99 323 *e* P P 01 08 39.2 +0.8
MJA0 pmax pmax
comp=Z,19nm,0.8s
MJAR **Matsushiro Arr** 68.01 323 P P 01 08 39.2 +0.7
comp=Z,19nm,0.8s,baz=156,slow=5.8,SNR=9.4
comp=Z,19nm,0.8s
MAJO **Matsushiro** 68.01 323 P P 01 08 38.4 -0.1
MAJO **Matsushiro** 68.01 323 P P 01 08 38.4 -0.1
MAJO pmax pmax
comp=Z,30nm,0.9s
MAJO **Matsushiro** 68.01 323 P P 01 08 38.5 -0.1
KKM **Kota Kinabalu** 69.01 284 P P 01 08 45.6 +0.4
KKM IAmb IAmb 01 08 47.1
comp=Z,98nm,0.8s
JSD **Sado** 69.03 324 P P 01 08 45.1 +0.4
KIWB **Kanaga Island** 69.37 1 P P 01 08 46.7 +0.3
UGM **Wanagama** 69.95 268 P P 01 08 50.8 +0.1
SMRI **Semarang** 70.26 269 P P 01 08 53.1 +0.5
JNU **Nakatsue** 70.28 316 P P 01 08 52.6 +0.3
JNU IAmb IAmb 01 08 54.0
comp=Z,52nm,1.1s
NIKH **Nikolski High** 70.94 6 P P 01 08 57.7 +2.1
baz=189
YOJ **Yonaguni jima** 71.14 304 P P 01 08 57.6 +0.2
YOJ IAmb IAmb 01 08 58.8
comp=Z,87nm,0.8s
YOJ **Yonaguni jima** 71.14 304 P P 01 08 57.6 +0.2
YOJ pmax pmax
comp=Z,87nm,0.8s
JKA **Kamikawa-asahi** 71.33 331 P P 01 08 59.3 +1.2
JKA IAmb IAmb 01 09 01.2
comp=Z,37nm,0.9s
ASAJ **Asahikawa** 71.33 331 P P 01 09 00.1 +1.9
comp=Z,25nm,0.7s,baz=206,slow=6.2,SNR=6.6
comp=Z,25nm,0.7s
ASAJ **Asahikawa** 71.33 331 P P 01 08 59.3 +1.1
ASAJ pmax pmax
comp=Z,37nm,0.9s
SBUM **Sibu** 71.48 279 P P 01 09 01.0 +1.2
QSPA **South Pole Qui** 72.24 180 P P 01 09 05.4 +2.1
QSPA **South Pole Qui** 72.24 180 P P 01 09 05.5 +2.1
comp=Z,144nm,0.8s,baz=28,slow=1.4,SNR=26
comp=Z,144nm,0.8s
SSLB **Suanglung** 72.43 303 P P 01 09 04.6 -0.4
TPUB **Ta-pu** 72.46 302 P P 01 09 04.9 -0.3
TPUB IAmb IAmb 01 09 06.4
comp=Z,90nm,0.9s
KSM **Kuching** 72.97 277 P P 01 09 09.4 +1.1
FALS **False Pass** 73.45 9 P P 01 09 12.6 +2.5
baz=194
YSS **Yuzh-Sakhalins** 73.46 333 *i* P P 01 09 11.5 +1.1
PEA0B **Petropavlovsk-** 73.66 345 P P 01 09 11.3 0.0
PEA0B IAmb IAmb 01 09 28.2
comp=Z,155nm,1.5s
PEA0B **Petropavlovsk-** 73.66 345 *i* P P 01 09 11.5 +0.1
PETK **Petropavlovsk-** 73.66 345 P P 01 09 11.9 +0.5
comp=Z,25nm,0.9s,baz=139,slow=7.9,SNR=6.6
comp=Z,25nm,0.9s
SDPT **Sand Point** 74.39 10 P P 01 09 17.0 +1.6
baz=197
KSRS **Korea Array** 74.83 318 P P 01 09 20.3 +2.0
comp=Z,8.4nm,0.8s,baz=130,slow=6.0,SNR=7.2
comp=Z,8.4nm,0.8s
MSHR **Mys Shultsa** 76.10 324 *i* P P 01 09 26.6 +1.4
MSHR pmax pmax
comp=Z,32nm,0.9s
PMPB **Monarch Peak** 76.27 44 P P 01 09 27.8 +1.4
PMPB IAmb IAmb 01 10 45.0
comp=Z,86nm,1.8s
PSTR **Posyet** 76.34 324 *i* P P 01 09 27.5 +0.9
KMRM **Mail Ridge** 76.75 40 P P 01 09 30.7 +1.7
KMRM IAmb IAmb 01 09 32.7
comp=Z,49nm,0.9s
R16K **Pilot Point** 77.02 11 P P 01 09 31.6 +1.7
baz=200
R17L **Mt. Peulik Vol** 77.31 12 P P 01 09 33.1 +1.6
baz=201
MONP2 **Monument Peak** 77.53 49 P P 01 09 35.4 +1.9
baz=239
OHAK **Old Harbor** 77.57 14 P P 01 09 34.5 +1.6
baz=204
R18K **Karluk** 77.63 13 P P 01 09 34.4 +1.2
baz=203
YUH **Yuha Desert** 77.77 50 P P 01 09 36.0 +1.4
PFO **Pinyon Flats O** 77.87 49 P P 01 09 35.5 +0.2
baz=239
TPFO **Pinon Flats** 77.87 49 P P 01 09 35.7 +0.4
baz=239
NJ2 **Nanjing** 78.11 309 *e* P P 01 09 38.9 +2.5
NJ2 pmax pmax
comp=Z,15nm,1.1s
MNAI **Manna** 78.17 269 P P 01 09 37.4 +0.2
KDAK **Kodiak Island** 78.24 14 P P 01 09 38.7 +2.2
baz=205
SLBS **Sierra La Lagu** 78.25 60 P P 01 09 38.9 +1.3
MDJ **Mudanjiang** 78.28 325 P P 01 09 39.4 +2.4
MDJ pmax pmax
comp=Z,63nm,1.0s
P16K **Nushagak River** 78.32 10 P P 01 09 38.3 +1.4
baz=200
WAKR **Walker** 78.45 43 P P 01 09 39.8 +1.4
M11K **Mekoryuk** 78.51 6 P P 01 09 39.8 +1.9
baz=192
Q18K **Katmai Hardscr** 78.52 12 P P 01 09 39.6 +1.5
baz=202
N14K **Kuskokwak Cree** 78.60 8 P P 01 09 40.2 +1.8
baz=196
P17K **Kvichak River** 78.75 11 P P 01 09 40.5 +1.3
baz=201
DSP **Deep Springs** 78.80 45 P P 01 09 41.8 +1.8
O16K **Kokwok River B** 78.84 10 P P 01 09 41.2 +1.6
baz=199
M13K **Dall Lake** 78.86 7 P P 01 09 41.2 +1.5
baz=194
Q20K **Shuyak Island** 79.03 13 P P 01 09 42.2 +1.5
baz=205
N15K **Kwethluk River** 79.07 9 P P 01 09 42.7 +1.8
baz=197
NVAR **Mina Array Bea** 79.15 44 P P 01 09 43.4 +1.3
NVAR **Mina Array Bea** 79.15 44 P P 01 09 44.0 +1.9
comp=Z,9.0nm,0.8s,baz=225,slow=9.1,SNR=8.2
comp=Z,9.0nm,0.8s
P18K **Big Mountain,** 79.17 12 P P 01 09 42.9 +1.5
baz=202
O17K **Koliganek Bris** 79.18 11 P P 01 09 44.1 +2.7
baz=200
M14K **Bethel** 79.36 8 P P 01 09 44.7 +2.3
baz=196
WCT **Wildcat Mounta** 79.40 46 P P 01 09 44.8 +1.4
M15K **Kasigluk River** 79.48 9 P P 01 09 44.9 +1.8
baz=197
N16K **Nishlik Lake** 79.56 10 P P 01 09 45.6 +2.0
baz=199
O18K **Koktuh Hills** 79.60 12 P P 01 09 44.6 +0.9
baz=202,SNR=5.3
214A **Organ Pipe Nat** 79.72 52 P P 01 09 45.7 +0.6
baz=241
TPNV **Topopah Spring** 79.74 46 P P 01 09 45.7 +0.5
baz=238
P19K **Oil Pt** 79.81 13 P P 01 09 46.4 +1.6
baz=204
L14K **Kuka Creek** 79.84 7 P P 01 09 47.1 +2.2
baz=195

N17K **Nushagak Hills** 79.87 10 P P 01 09 47.2 +2.1
baz=200
M16K **Timber Creek** 80.05 9 P P 01 09 48.1 +2.1
baz=198,SNR=6.8
CN2 **Changchun** 80.13 322 P P 01 09 48.5 +1.7
CN2 pmax pmax
comp=Z,40nm,1.1s
KLR **Kul'dur** 80.18 329 *i* P P 01 09 47.9 +0.9
KLR pmax pmax
comp=Z,7.0nm,0.9s
BNX **BinXian** 80.19 325 ⇑ P P 01 09 48.5 +1.4
BNX pmax pmax
comp=Z,51nm,0.9s
K13K **Kusilvak Mount** 80.19 6 P P 01 09 48.3 +1.6
baz=193
N18K **Kilae Creek** 80.24 11 P P 01 09 48.8 +1.7
baz=201
L15K **Ungalak Mounta** 80.32 8 P P 01 09 48.4 +1.0
baz=196
H04A **Detroit Lake** 80.34 37 P P 01 09 48.8 +0.8
BRSE **Bradley Lake S** 80.42 14 P P 01 09 48.9 +0.9
baz=206
N19K **Bonanza Creek** 80.63 11 P P 01 09 49.5 +0.3
baz=203
L16K **Owhat River** 80.63 9 P P 01 09 50.8 +1.8
baz=198
M17K **Holitna River** 80.66 10 P P 01 09 50.9 +1.7
baz=200
K15K **Wolf Creek Mou** 80.91 8 P P 01 09 52.8 +2.4
baz=196,SNR=6.2
R11B **Troy Canyon, C** 80.92 45 P P 01 09 51.8 +0.4
baz=239
M18K **Stony River** 81.01 11 P P 01 09 52.8 +1.8
baz=201
SEW **Seward** 81.04 14 P P 01 09 52.5 +1.4
baz=208
NLWA **Neilton Lookou** 81.07 34 P P 01 09 53.6 +1.9
SMAI **San Martin Ant** 81.14 159 P P 01 09 54.2 +2.6
SMAI IAmb IAmb 01 09 55.4
comp=Z,157nm,0.8s
MA2 **Magadan** 81.18 345 *i* P P 01 09 51.4 -0.5
MA2 pmax pmax
comp=Z,20nm,1.0s
L17K **Donlin** 81.21 9 P P 01 09 54.7 +2.7
baz=199,SNR=5.5
O22K **Cooper Landing** 81.32 14 P P 01 09 53.7 +1.1
baz=207
TUC **Tucson** 81.41 52 P P 01 09 55.7 +1.8
baz=243
N20K **Mount Spurr** 81.43 12 P P 01 09 53.8 +0.5
baz=205
SPCR **Spurr Chakacha** 81.43 12 P P 01 09 53.0 -0.3
baz=205
P23K **Montague Islan** 81.44 15 P P 01 09 53.6 +0.3
baz=209
GAMB **Gambell** 81.47 3 P P 01 09 54.9 +1.6
baz=186
L18K **Granite Mounta** 81.55 10 P P 01 09 55.8 +2.0
baz=200
M19K **Big River Lodg** 81.65 11 P P 01 09 55.5 +1.2
baz=203
K17K **Iditarod** 81.76 9 P P 01 09 56.1 +1.2
baz=199
L19K **White Mountain** 81.83 11 P P 01 09 57.2 +2.0
baz=202
M20K **Styx River** 81.87 12 P P 01 09 56.6 +1.1
baz=204
PWL **Port Wells** 81.97 14 P P 01 09 56.5 +0.6
baz=208
SUA **Susitna One** 81.97 13 P P 01 09 57.1 +1.0
baz=206
J16K **Anvik River** 81.98 8 P P 01 09 57.2 +1.2
baz=197
CCUT **Cedar City** 82.03 47 P P 01 09 58.8 +1.7
KAIM **Kayak Island** 82.15 16 P P 01 09 58.0 +1.1
baz=212
PSUT **Pine Spring** 82.18 45 P P 01 09 58.2 +0.4
BELA **Belgrano 2** 82.22 173 P P 01 09 58.6 +1.4
U15A **North Rim** 82.23 48 P P 01 10 00.1 +1.9
SKT **Skwentna** 82.28 12 P P 01 09 58.4 +0.9
baz=205
GLI **Glacier Island** 82.28 15 P P 01 09 58.1 +0.5
GLI **Glacier Island** 82.28 15 P P 01 09 58.9 +1.4
baz=210
J17K **VABM Dome** 82.30 9 P P 01 09 58.8 +1.2
baz=198
M22K **Willow** 82.37 13 P P 01 09 59.4 +1.5
baz=207
KNK **Knik Glacier** 82.43 14 P P 01 09 59.4 +1.1
baz=208
PMR **Palmer** 82.44 14 P P 01 09 59.7 +1.5
baz=208
WUAZ **Wupatki** 82.46 49 P P 01 10 01.4 +2.1
baz=242
I17K **Unalakleet** 82.55 8 P P 01 10 00.8 +2.0
baz=197
IPM **Ipoh** 82.70 277 P P 01 10 01.7 +0.9
IPM IAmb IAmb 01 10 03.3
comp=Z,115nm,0.8s
J18K **Innoko River** 82.72 10 P P 01 10 01.4 +1.7
baz=200
U33K **Whale Pass** 82.78 24 P P 01 10 02.4 +2.3
baz=223
V35K **Ketchikan** 82.80 25 P P 01 10 01.2 +1.0
baz=224
SML **Sawmill** 82.81 14 P P 01 10 01.8 +1.6
baz=208
CUT **Chulitna** 82.92 13 P P 01 10 02.1 +1.5
baz=207
M23K **Glacier View** 82.94 14 P P 01 10 02.2 +1.4
baz=209
BMRM **Bremner River** 82.98 16 P P 01 10 02.4 +1.3
baz=212
WAX **Waxell Ridge** 83.02 17 P P 01 10 01.9 +0.6
WAX IAmb IAmb 01 10 35.5
comp=Z,34nm,0.8s
MESA **MESA** 83.04 17 P P 01 10 03.2 +1.6
baz=214
S31K **Pelican** 83.05 21 P P 01 10 03.5 +2.1
baz=220
K20K **Telida** 83.06 11 P P 01 10 02.5 +1.2
baz=203
SCM **Sheep Creek Mo** 83.06 14 P P 01 10 02.3 +0.8
SCM IAmb IAmb 01 10 34.8
comp=Z,32nm,0.6s
SCM **Sheep Creek Mo** 83.06 14 P P 01 10 02.5 +1.0
baz=209
SCM **Sheep Creek Mo** 83.06 14 P P 01 10 02.3 +0.8
SCM pmax pmax
comp=Z,32nm,0.6s
H16K **Elim** 83.09 7 P P 01 10 02.7 +1.3
baz=195
KLU **Klutina** 83.10 15 P P 01 10 02.7 +1.0
baz=211
CRQE **Cirque** 83.20 16 P P 01 10 02.9 +0.6
baz=213
G15K **Niukluk** 83.25 6 P P 01 10 03.8 +1.5
baz=193
S32K **Killisnoo** 83.26 22 P P 01 10 04.0 +1.5
baz=221
WRAK **Wrangell Islan** 83.30 24 P P 01 10 04.2 +1.5
baz=223
KULM **Kulim** 83.31 278 P P 01 10 05.3 +1.5
KULM IAmb IAmb 01 10 06.6
comp=Z,54nm,1.0s
PNL **Peninsula** 83.38 19 P P 01 10 03.5 +0.4
baz=217
J19K **Poorman** 83.39 10 P P 01 10 04.4 +1.5
baz=202
PINM **Pinnacle** 83.46 18 P P 01 10 04.2 +0.6
baz=216
TNA **Tin City** 83.47 4 P P 01 10 04.6 +1.3
baz=190
F14K **Arctic Creek** 83.51 5 P P 01 10 05.9 +2.3
baz=191
N25K **Chitina, Valde** 83.53 15 P P 01 10 05.6 +1.7
baz=212
M24K **Tolsona, Glenn** 83.57 14 P P 01 10 05.9 +1.8
baz=210
WAT6 **Susitna Watana** 83.62 14 P P 01 10 05.9 +1.4
baz=209
H17K **Granite Mounta** 83.66 8 P P 01 10 04.7 +0.4
baz=208
WAT1 **Susitna Watana** 83.66 13 P P 01 10 05.0 +0.5
baz=208
HNS **HongShan** 83.67 312 *e* P P 01 10 06.3 +1.3
DUG **Dugway, Tooele** 83.70 44 P P 01 10 07.9 +2.6
baz=240
MCARA **McCarthy VSAT** 83.75 16 P P 01 10 05.6 +0.8
baz=213
SEY **Seymchan** 83.75 347 P P 01 10 05.4 +0.6
comp=Z,30nm,0.8s,baz=145,slow=5.1,SNR=7.5
comp=Z,30nm,0.8s
SEY **Seymchan** 83.75 347 *i* P P 01 10 05.2 +0.4
SEY pmax pmax
comp=Z,150nm,3.5s
121A **Cookes Peak, D** 83.78 53 P P 01 10 07.0 +1.1
baz=244
PMSA **Palmer Station** 83.78 157 P P 01 10 07.2 +2.1
PMSA IAmb IAmb 01 10 08.5
comp=Z,50nm,0.9s
J20K **Nowinta River** 83.80 10 P P 01 10 06.5 +1.5
baz=203
G16K **Koyuk River** 83.81 7 P P 01 10 07.0 +2.0
baz=195
P29M **Windy Craggy** 83.86 19 P P 01 10 08.0 +2.6
baz=218
CTG **Chitna Glacier** 83.86 17 P P 01 10 07.0 +1.4
baz=215
R32K **Eaglecrest** 83.88 21 P P 01 10 07.1 +1.5
baz=221
F15K **North Star Dit** 83.89 6 P P 01 10 06.4 +0.9
baz=193
O28M **Mount Upton** 84.03 18 P P 01 10 08.1 +1.5
baz=216
MAW **Mawson** 84.05 200 P P 01 10 07.2 +0.8
comp=Z,9.2nm,0.6s,baz=130,slow=3.3,SNR=4.7
comp=Z,9.2nm,0.6s
HARP **HAARP** 84.07 15 P P 01 10 08.0 +1.6
baz=211
G17K **Kiwalik Mounta** 84.11 7 P P 01 10 08.0 +1.5
baz=197
O29M **Mount Kennedy** 84.13 19 P P 01 10 08.3 +1.4
baz=218
DHY **Denali Highway** 84.14 14 P P 01 10 08.7 +1.7
baz=209
RPSI **Rantau Prapat** 84.14 275 P P 01 10 08.4 +0.6
RPSI IAmb IAmb 01 10 09.7
comp=Z,96nm,0.8s
PLBC **Pleasant Camp** 84.16 20 P P 01 10 09.2 +2.3
baz=220
PSI **Prapat** 84.17 275 P P 01 10 08.5 +0.3
PSI pmax pmax
comp=Z,96nm,0.8s
BPAW **Bear Paw Mtn.** 84.30 12 P P 01 10 08.7 +1.1
baz=206
I20K **Naaghedeneel** 84.32 10 P P 01 10 09.7 +2.2
baz=202
HLID **Hailey** 84.36 41 P P 01 10 09.9 +1.4
baz=239
MCK **McKinley** 84.38 13 P P 01 10 08.5 +0.5
baz=208
PAX **Paxson** 84.48 14 P P 01 10 09.5 +1.0
baz=211
P30M **Million Dollar** 84.49 19 P P 01 10 10.0 +1.4
baz=219
SKAG **Skagway** 84.51 20 P P 01 10 10.4 +1.8
baz=220
T35M **Bob Quinn** 84.51 24 P P 01 10 10.1 +1.4
baz=225
YUK8 **Steele Glacier** 84.57 18 P P 01 10 09.9 +0.7
baz=216
M26K **Nabesna, AK** 84.61 16 P P 01 10 10.5 +1.4
baz=213
H19K **Roundabout Mou** 84.69 9 P P 01 10 11.1 +1.8
baz=201
YUK6 **Outpost Mounta** 84.70 18 P P 01 10 10.9 +1.1
baz=218
YUK3 **Moose Creek** 84.77 17 P P 01 10 12.0 +1.8
baz=216
S34M **Telegraph Cree** 84.84 23 P P 01 10 12.5 +2.2
baz=224
M27K **Edge Creek, AK** 84.86 16 P P 01 10 11.8 +1.4
baz=214
H20K **Anotleneega Mo** 84.90 10 P P 01 10 11.6 +1.1
baz=202
YUK4 **Talbot Arm** 84.94 18 P P 01 10 12.0 +1.0
baz=217
F17K **Baldwin Pennin** 84.95 7 P P 01 10 10.9 +0.4
baz=196
GSI **Gunungsitoli** 84.99 273 P P 01 10 13.9 +1.8
L26K **Log Cabin Wild** 85.05 15 P P 01 10 12.4 +1.2
baz=213
NEA2 **Nenana** 85.12 12 P P 01 10 12.3 +0.8
baz=208
K24K **Donnelly Dome** 85.13 14 P P 01 10 12.4 +0.8
baz=211
P32M **Atlin** 85.15 21 P P 01 10 13.0 +1.3
baz=222
G19K **Purcell Mounta** 85.18 8 P P 01 10 12.4 +0.6
baz=200
Q32M **Nakina River** 85.18 22 P P 01 10 13.4 +1.2
Q32M **Nakina River** 85.18 22 P P 01 10 14.0 +1.8
baz=223
MLY **Manley** 85.19 11 P P 01 10 12.7 +0.8
baz=206
ZEA **Zeya** 85.25 331 *e* P P 01 10 14.0 +1.7
ZEA pmax pmax
comp=N,20nm,1.0s
ZEA pmax pmax
comp=Z,30nm,1.0s
NEW **Newport** 85.26 36 P P 01 10 13.6 +1.0
baz=237
O30N **Mendenhall** 85.27 19 P P 01 10 13.7 +1.4
baz=220
MNTX **Cornudas Mount** 85.28 55 P P 01 10 14.1 +1.0
baz=246
F18K **Selawik** 85.28 7 P P 01 10 13.2 +1.0
baz=198
RIDG **Independent Ri** 85.29 14 P P 01 10 13.1 +0.7
baz=212
H21K **Melozitna Rive** 85.39 10 P P 01 10 13.9 +1.0
baz=204
HDA **Harding Lake** 85.40 13 P P 01 10 13.7 +0.8
baz=210
L27K **Beaver Creek,** 85.46 16 P P 01 10 14.1 +0.9
baz=214
N30M **Aishikik Lake** 85.49 18 P P 01 10 14.5 +1.0
baz=219
E17K **Hotham Inlet** 85.50 6 P P 01 10 14.7 +1.5
baz=196
PV04 **Paradox Valley** 85.53 47 P P 01 10 15.7 +1.3
PV04 IAmb IAmb 01 11 03.5
comp=Z,72nm,1.8s
I23K **Minto, Yukon-K** 85.56 12 P P 01 10 14.7 +1.1
baz=207
WHY **Whitehorse** 85.56 20 P P 01 10 15.7 +1.9
baz=221
COLA **College** 85.62 12 P P 01 10 15.2 +1.4
baz=209
DLBC **Dease Lake** 85.63 23 P P 01 10 16.0 +1.8
baz=225
TXAR **Lajitas Array** 85.69 58 P P 01 10 17.7 +2.5
TXAR **Lajitas Array** 85.69 58 P P 01 10 18.1 +2.9
comp=Z,8.7nm,0.8s,baz=220,slow=5.9,SNR=11
comp=Z,8.7nm,0.8s
TXAR **Lajitas Array** 85.69 58 P P 01 10 17.7 +2.5
SCRK **Sand Creek** 85.69 14 P P 01 10 15.9 +1.4
baz=212
ILAR **Eielson Array** 85.73 13 P P 01 10 14.7 +0.3
comp=Z,7.6nm,0.9s,baz=230,slow=5.7,SNR=4.3
comp=Z,7.6nm,0.9s
ILAR **Eielson Array** 85.73 13 *e* P P 01 10 14.7 +0.3
ILAR pmax pmax
comp=Z,11nm,1.0s
F19K **Shaleruckik Mo** 85.74 8 P P 01 10 16.1 +1.7
baz=199
ANMO **Albuquerque** 85.81 51 P P 01 10 16.1 +0.4
baz=245
H22K **Ishtalitna Cre** 85.85 11 P P 01 10 16.6 +1.6
baz=205
M29M **Somme Creek** 85.87 17 P P 01 10 16.7 +1.4
baz=218
XLT **XiLinHaoTe** 85.87 319 *e* P P 01 10 16.8 +1.1
XLT pmax pmax
comp=Z,34nm,1.3s
P33M **Teslin, Yukon** 85.91 21 P P 01 10 16.6 +1.1
baz=223
N31M **Braeburn, Yuko** 85.91 19 P P 01 10 16.3 +0.9
baz=220
POKR **Poker Plat Res** 85.92 12 P P 01 10 16.4 +1.1
baz=209
J25K **Salcha River,** 85.92 14 P P 01 10 16.4 +1.0
baz=211
E18K **Tukpahlearik C** 85.96 7 P P 01 10 16.6 +1.2

baz=197
R33M Jennings River 85.96 22 P P 01 10 16.8 +1.0
baz=224
MCMT McKenzie Canyo 85.97 40 P P 01 10 18.0 +1.6
D17K Noatak River 85.98 6 P P 01 10 17.0 +1.5
baz=194
G21K Allakaket 86.07 10 P P 01 10 17.4 +1.4
baz=203
K27K Chicken 86.20 15 P P 01 10 18.2 +1.6
baz=214
F20K Avaraart Lake 86.23 9 P P 01 10 18.4 +1.7
baz=201
J26L Joseph Creek 86.24 14 P P 01 10 18.4 +1.5
baz=213
BILL Bilibino 86.37 354 *i* P P 01 10 15.7 -1.7
BILL pmax pmax
comp=Z,24nm,1.0s
DLMT Dillon 86.39 40 P P 01 10 19.7 +1.5
DLMT IAmb IAmb 01 10 55.9
comp=Z,57nm,1.7s
E19K Redstone River 86.41 8 P P 01 10 19.2 +1.7
baz=200
XAN Xi'an 86.44 307 ⇓P P 01 10 20.8 +2.2
XAN pmax pmax
comp=Z,81nm,1.2s
F21K Alatna River 86.72 9 P P 01 10 19.9 +0.8
baz=203
S22A 4UR Ranch, Cre 86.72 49 P P 01 10 20.3 +0.1
baz=244
C17K DeLong Mountai 86.72 5 P P 01 10 20.2 +1.1
baz=194
G22K Bettles 86.77 10 P P 01 10 21.4 +2.2
baz=205
G23K Bananza Creek 86.83 11 P P 01 10 21.3 +1.6
baz=207
M31M Drury Creek, Y 86.89 19 P P 01 10 21.5 +1.5
baz=221
DAWY Dawson 86.91 16 P P 01 10 21.5 +1.4
baz=217
I26K Coal Creek Min 87.01 14 P P 01 10 22.5 +2.0
baz=213
EGAK Eagle 87.05 15 P P 01 10 22.2 +1.6
baz=215
BW06 Boulder Array 87.08 43 P P 01 10 22.3 +0.6
baz=242
PDAR Pinedale Array 87.08 43 P P 01 10 22.8 +1.2
PDAR Pinedale Array 87.08 43 P P 01 10 23.0 +1.4
comp=Z,3.3nm,0.7s,baz=225,slow=2.7,SNR=4.5
comp=Z,3.3nm,0.7s
F22K John River 87.19 10 P P 01 10 23.2 +1.9
baz=205
FARO Faro, Yukon 87.23 19 P P 01 10 22.8 +1.1
baz=222
K29M Barlow Dome 87.24 17 P P 01 10 22.7 +1.0
baz=218
COLD Coldfoot 87.27 11 P P 01 10 23.0 +1.4
baz=206
E20K Nigu River 87.30 8 P P 01 10 23.3 +1.5
baz=201
G24K Hadweenzic Riv 87.30 12 P P 01 10 23.3 +1.5
baz=209
HHC Hu-ho-hao-te 87.42 314 *e*P P 01 10 25.3 +2.2
HHC pmax pmax
comp=Z,30nm,0.6s
J29N Klondike Camp 87.53 16 P P 01 10 24.6 +1.6
baz=218
D20K Etiviuk River 87.67 8 P P 01 10 24.4 +0.9
baz=200
C19K Lookout Ridge 87.69 7 P P 01 10 25.2 +1.6
baz=198
TOAD Toad River Com 87.75 25 P P 01 10 25.1 +1.0
baz=229
E21K Killik River 87.77 9 P P 01 10 24.9 +0.9
baz=203
E22K Anaktuvuk Pass 87.82 10 P P 01 10 25.8 +1.5
baz=205
I28M Miner Creek 87.89 15 P P 01 10 25.1 +0.3
baz=216
F24K Squaw Lake 87.94 11 P P 01 10 26.5 +1.7
baz=209
KMI Kunming 88.05 297 ⇑P P 01 10 29.5 +2.9
KMI pmax pmax
comp=Z,39nm,1.0s
E23K Chandalar 88.11 10 P P 01 10 27.3 +1.6
baz=207
J30M Hart River 88.14 17 P P 01 10 27.8 +1.8
baz=219
H27K Steamboat Moun 88.16 14 P P 01 10 28.1 +2.2
baz=215
MMPY Sheldon Lake, 88.18 20 P P 01 10 27.9 +1.8
baz=224
I29M Ogilvie Camp, 88.23 16 P P 01 10 28.0 +1.8
baz=218
G26K Porcupine Rive 88.26 13 P P 01 10 28.4 +2.1
baz=212
E24K Your Creek 88.32 11 P P 01 10 28.2 +1.6
baz=208
C21K Knifeblade Rid 88.33 8 P P 01 10 28.3 +1.7
baz=202
RLMT Red Lodge 88.35 41 P P 01 10 28.2 +0.7
baz=243
D22K Ayikyak River 88.37 9 P P 01 10 28.7 +2.0
baz=204
BTO Baotou 88.37 314 *e*P P 01 10 29.1 +1.6
BTO pP pP 01 12 20.6 -7.0
BTO sP S 01 13 17.3 -5.8
BTO S S 01 20 22.1 -4.8
BTO SS SS 01 26 37.3 +3.3
BTO pmax pmax
comp=Z,20nm,0.5s
TGTN Hyland Airport 88.41 21 P P 01 10 29.1 +1.9
baz=227
F25K Christian Rive 88.43 12 P P 01 10 28.9 +1.8
baz=211
BMAR Burnt Mountain 88.50 12 P P 01 10 28.5 +1.0
I30M Mount Dempster 88.63 16 P P 01 10 29.8 +1.6
baz=219
TOLK Toolik Lake Re 88.64 10 P P 01 10 29.7 +1.6
baz=207
D23K Nanushuk River 88.75 10 P P 01 10 29.9 +1.3
baz=206
B21K Ikpikpuk River 88.78 8 P P 01 10 30.0 +1.4
baz=202
833A Chaparral WMA, 88.80 60 P P 01 10 29.4 -0.3
baz=249
F26K Sheenjek River 88.82 12 P P 01 10 30.9 +2.0
baz=212
B20K Meade River 88.82 7 P P 01 10 30.9 +2.1
baz=200
H29M Whitestone 88.90 15 P P 01 10 31.1 +1.8
baz=218
KOTAN Kotaneelee Air 89.04 24 P P 01 10 31.1 +1.0
baz=230
CMAR Chiang Mai Arr 89.13 290 P P 01 10 34.1 +2.7
comp=Z,23nm,0.9s,baz=108,slow=2.8,SNR=16
comp=Z,23nm,0.9s
CMAR Chiang Mai Arr 89.13 290 *e*P P 01 10 34.1 +2.7
CMAR pmax pmax
comp=Z,24nm,0.9s
D24K Happy Valley 89.22 10 P P 01 10 32.0 +1.3
baz=208
ELIB Princess Elisa 89.29 187 *d*P P 01 10 32.7 +1.4
comp=Z,81nm,0.7s
HNDO Hondo 89.31 59 P P 01 10 34.8 +2.7
HNDO IAmb IAmb 01 10 36.2
comp=Z,27nm,1.0s
PZH PanZhiHua 89.37 298 P P 01 10 34.4 +1.8
PZH pmax pmax
comp=Z,20nm,0.8s
EGMT Eagleton 89.39 39 P P 01 10 33.1 +1.0
baz=242
EPYK Eagle Plains 89.43 15 P P 01 10 33.0 +1.2
baz=219
G29M Pine Creek 89.53 15 P P 01 10 33.9 +1.7
baz=218
C23K Itkillik River 89.55 9 P P 01 10 34.2 +2.0
baz=206
YAK Yakutsk 89.60 338 *i* P P 01 10 34.1 +1.6
YAK pmax pmax
comp=Z,13nm,1.0s
C24K Franklin Bluff 89.75 10 P P 01 10 35.3 +2.2
baz=208
E27K Coleen River 89.76 13 P P 01 10 35.3 +2.1
baz=214
G30M tAoh Zraii Nji 90.03 15 P P 01 10 36.3 +1.7
baz=219
A21K Barrow 90.13 7 P P 01 10 36.8 +2.0
baz=200

TROLL Troll, Antarti 90.40 180 ⇑P P 01 10 37.9 +1.4
comp=Z,2μm,0.5s
TROLL ⇑SKSac SKSac 01 20 20.1 +5.0
comp=Z,200nm,1.1s
G31M Satah River 90.49 16 P P 01 10 38.2 +1.7
baz=221
E28M Babbage River 90.54 13 P P 01 10 39.1 +2.3
baz=216
F30M Barrier River 90.63 15 P P 01 10 39.8 +2.5
baz=220
SNAA Sanae 90.69 179 P P 01 10 38.7 +1.0
SNAA IAmb IAmb 01 10 39.7
comp=Z,31nm,0.7s
SNAA Sanae 90.69 179 ⇑P P 01 10 38.8 +1.1
comp=Z,651nm,0.6s
SNAA ⇑SKSac SKSac 01 20 19.8 +3.2
comp=Z,152nm,1.2s
SNAA Sanae 90.69 179 P P 01 10 38.7 +1.1
comp=Z,26nm,0.6s,baz=210,slow=6.6,SNR=29
comp=Z,26nm,0.6s
SNAA Sanae 90.69 179 *i* P P 01 10 35.8 -1.9
SNAA pmax pmax
comp=Z,185nm,3.5s
E29M Blow River 90.74 14 P P 01 10 40.1 +2.4
baz=218
D27M Malcolm River 90.76 12 P P 01 10 41.0 +3.1
baz=215
VNA3 Neumayer Olymp 90.82 176 ⇑P P 01 10 39.8 +1.5
comp=Z,159nm,0.7s
VNA3 ⇑SKSac SKSac 01 20 19.8 +2.6
comp=Z,3.1nm,0.9s
LAO LASA Array 90.94 41 P P 01 10 41.3 +2.0
baz=245
F31M Tsiigehtchic 91.01 16 P P 01 10 41.1 +2.1
baz=222
LZH Lanzhou 91.07 308 ⇑P P 01 10 44.8 +4.6
LZH pP pP 01 12 41.3 +0.3
LZH pmax pmax
comp=Z,31nm,1.4s
PLCA Paso Flores 91.18 134 P P 01 10 40.8 +0.1
comp=Z,5.9nm,1.0s,baz=234,slow=1.8,SNR=2.9
comp=Z,5.9nm,1.0s
PLCA Paso Flores 91.18 134 *e*P P 01 10 37.3 -3.4
PLCA pmax pmax
comp=Z,3.0nm,0.9s
PLPT Palo Pinto 91.24 56 P P 01 10 42.1 +1.2
PLPT IAmb IAmb 01 11 14.3
comp=Z,51nm,1.4s
VNA2 Neumayer--Watz 91.26 177 ⇑P P 01 10 41.6 +1.3
comp=Z,103nm,0.7s,baz=188,slow=4.4
VNA2 ⇑SKSac SKSac 01 20 23.1 +3.4
comp=Z,4.8nm,1.1s,baz=134,slow=7.6
RSSD Black Hills 91.29 44 P P 01 10 42.5 +1.4
baz=246
NVL N'lazarevskaya 91.38 183 *e*P P 01 10 41.0 +0.2
NVL pmax pmax
comp=Z,28nm,0.9s
VNA1 Neumayer--Stat 91.48 177 ⇑P P 01 10 42.6 +1.4
comp=Z,118nm,0.9s
YKA Yellowknife Ar 94.12 25 P P 01 10 54.4 +1.0
comp=Z,3.2nm,0.8s,baz=256,slow=4.5,SNR=5.5
comp=Z,3.2nm,0.8s
KSU1 Kansas State U 94.66 51 P P 01 10 58.5 +2.1
baz=251
WMQ Urumqi 105.09 312 Pdif Pdif 01 11 45.5 +2.6
CPUP Villa Florida 107.65 126 Pdiff Pdif 01 11 56.0 +1.3
comp=Z,3.0nm,0.9s,baz=286,slow=11,SNR=1.9
ZALV Zalesovo Beam 108.34 322 Pdiff Pdif 01 11 58.7 +1.7
comp=Z,2.0nm,0.6s,baz=98,slow=2.8,SNR=2.4
MKAR Makanchi Array 109.28 314 Pdiff Pdif 01 12 03.8 +2.4
comp=Z,2.0nm,0.7s,baz=104,slow=5.1,SNR=2.6
KURBB Kurchatov Arra 112.01 318 Pdiff Pdif 01 12 15.5 +2.1
comp=Z,2.4nm,1.1s,baz=94,slow=4.4,SNR=2.2
NEEM North Greenlan 114.97 11 *i* P Pdif 01 12 19.4 -7.1
NUUG Nuugaatsiaq 117.50 17 *i* P Pdif 01 12 33.2 -4.1
DAG Danmarks Havn 120.08 5 *i* P Pdif 01 12 42.8 -5.9
SUMG Summit 120.57 13 *i* P Pdif 01 12 47.3 -4.2
NUUK Nuuk 121.38 24 *i* P Pdif 01 12 50.5 -4.2
SVE Sverdlovsk 121.72 326 *e*P Pdif 01 12 57.8 +1.4
SVE pmax pmax
comp=Z,61nm,1.2s
DY2G Dye2 122.24 21 *i* P Pdif 01 12 53.8 -5.1
ICESG Greenland Ices 122.66 16 *i* P Pdif 01 12 56.1 -4.7
ARU Arti 122.94 326 *i* PKIKP PKPdf 01 16 23.4 -4.0
IVI Ivigtut 124.20 27 *i* P Pdif 01 13 02.3 -5.0
ISOG Isortoq, Green 125.19 19 *i* P Pdif 01 13 05.2 -6.4
SOEG Soedalen 125.41 15 *i* P Pdif 01 13 09.4 -3.2
SOHO SOHO 128.86 287 *i* Pdiff Pdif 01 13 11.6 -17
SNR=10.0
MDH Mauna 129.14 288 *i* Pdiff Pdif 01 13 11.9 -18
SNR=8.7
UOSS Minazif 129.21 288 *i* Pdiff Pdif 01 13 12.5 -18
SNR=7.9
HATD Hatta, Dubai 129.27 288 *i* Pdiff Pdif 01 13 13.4 -17
SNR=6.2
MSFE Esma-Masafi 129.27 288 *i* Pdiff Pdif 01 13 13.8 -17
SNR=10.0
ASHO Ashiyiah 129.33 288 *i* Pdiff Pdif 01 13 13.3 -18
SNR=5.8
ALNE Al Ain 129.57 287 *i* Pdiff Pdif 01 13 14.5 -18
SNR=6.3
FAQ Al Faqa, Dubai 129.75 288 *i* Pdiff Pdif 01 13 14.1 -19
SNR=9.8
BELG Belogornoye 130.38 325 *i* PKIKP PKPdf 01 16 39.5 -2.2
FINES FINESS Array B 133.18 344 *e*PKIKP PKPdf 01 16 41.1 -5.7
FINES pmax pmax
comp=Z,33nm,0.9s
VRH Novokhopyorsk 134.16 326 *e*PKHKP PKPpre 01 16 37.9
VRH pmax pmax
comp=Z,40nm,0.8s
OBN Obninsk 134.35 333 *i* PKHKP PKPpre 01 16 38.9
OBN pmax pmax
comp=Z,34nm,0.9s
LPSR Galich'ya Gora 134.82 329 *e*PKHKP PKPpre 01 16 40.5
LPSR pmax pmax
comp=Z,50nm,0.8s
VORR Voronezh 135.22 328 *e*PKHKP PKPpre 01 16 41.6
VORR pmax pmax
comp=Z,56nm,1.3s
VSR Storozhevoye 135.50 327 *e*PKHKP PKPpre 01 16 42.1
VSR pmax pmax
comp=Z,50nm,1.1s
VORD Divnogorie 135.57 327 *e*PKHKP PKPpre 01 16 42.7
VORD pmax pmax
comp=Z,40nm,0.9s
NOA NORSAR Array B 136.31 353 *e*PKHKP PKPpre 01 16 46.8
NOA pmax pmax
comp=Z,6.0nm,0.9s
KBZ Khabaz 136.94 316 PKP PKiKP 01 16 54.6 -1.6
comp=Z,9.1nm,1.1s,baz=50,slow=16,SNR=4.7
KIV Kislovodsk 136.99 316 *e*PKiKP PKPdf 01 16 50.1 -4.5
KIV pmax pmax
comp=Z,21nm,1.0s
BCA Borcka 138.71 313 ⇓P PKPdf 01 16 53.8 -3.9
RAYN Ar Rayn 138.93 286 ⇑PKHKP PKPpre 01 16 53.4
KMBO Kilima Mbogo 140.44 245 PKhKP PKPpre 01 16 58.1
comp=Z,8.8nm,0.9s,baz=87,slow=2.5,SNR=5.4
AKASG Malin Array Be 140.61 333 PKhKP PKPpre 01 16 58.0
comp=Z,13nm,0.9s,baz=34,slow=2.8,SNR=5.7
EKA Eskdalemuir Ar 142.35 5 PKhKP PKPpre 01 17 01.4
comp=Z,5.0nm,0.9s,baz=334,slow=2.4,SNR=4.6
SORM Soroca 142.85 330 ⇓P PKPdf 01 17 03.7 -1.2
SORM Soroca 142.85 330 ⇓PKIKP PKPdf 01 17 03.7 -1.2
PURM Purcari 143.21 327 ⇓P PKPdf 01 17 05.1 -0.4
GAZ Gaziantep 143.50 309 PKPdf 01 17 06.3 -0.1
BNN Bunyan 143.81 312 PKiKP 01 17 07.3 -3.4
KWP Kalwaria Pacla 144.10 337 *e*PKP PKiKP 01 17 07.5 -3.4
KWP Kalwaria Pacla 144.10 337 PKPbc PKiKP 01 17 07.3 -3.5
KWP Kalwaria Pacla 144.10 337 PKIKP PKiKP 01 17 07.3 -3.5
LODK Lodwar 144.24 250 PKPbc PKPab 01 17 08.0 -0.5
VLDR Vladesti 144.59 328 ⇑P PKiKP 01 17 08.9 -3.0
OJC Ojcow 144.62 340 *e*PKP PKiKP 01 17 08.6 -3.3
OJC Ojcow 144.62 340 PKiKP 01 17 08.9 -3.0
OJC Ojcow 144.62 340 PKIKP PKiKP 01 17 08.9 -3.0
TLCR 144.66 326 ⇓P PKiKP 01 17 09.4 -2.7
TLCR 144.66 326 ⇓PKIKP PKiKP 01 17 09.4 -2.7
BURAR Bucovina Array 144.67 332 PKiKP 01 17 09.6 -2.5
BURAR Bucovina Array 144.67 332 ⇑P PKiKP 01 17 10.4 -1.8
SCTR Scanteiesti 144.75 328 ⇓P PKiKP 01 17 10.5 -1.7
GHRR 144.78 329 ⇑P PKiKP 01 17 11.2 -1.1
TESR Tescani 144.82 330 ⇑P PKiKP 01 17 09.6 -2.8
KOLS Kolonicke sedl 144.84 337 *e*PKP PKiKP 01 17 10.7 -1.7
BR131 Keskin Array S 144.92 315 PKPdf PKPab 01 17 09.5 -1.0
BR131 Keskin Array S 144.92 315 PKIKP PKPab 01 17 09.5 -1.0
BRTR Keskin Array B 144.93 315 PKPbc PKPab 01 17 09.0 -1.5

BRTR Keskin Array B 144.93 315 PKPbc PKPab 01 17 09.2 -1.2
comp=Z,14nm,0.8s,baz=139,slow=4.2,SNR=6.7
CFR Carcaliu 145.02 327 ⇓P PKPab 01 17 09.6 -0.8
CFR Carcaliu 145.02 327 ⇓PKIKP PKPab 01 17 09.6 -0.8
KIRS Kirsehir-Merke 145.02 314 ⇑P PKPab 01 17 09.5 -1.3
TPGR Topolog 145.09 326 ⇓P PKiKP 01 17 11.6 -1.4
KSP Ksiaz 145.10 344 *e*PKP PKPdf 01 17 06.9 -1.8
NIE Niedzica 145.14 339 *e*PKP PKiKP 01 17 10.7 -2.3
BMR Baia Mare 145.36 334 ⇑P PKiKP 01 17 12.2 -1.2
ANTO Ankara 145.42 316 PKPab 01 17 10.8 -1.5
ANTO Ankara 145.42 316 ⇑P PKPab 01 17 10.1 -2.2
ANTO Ankara 145.42 316 ⇑PKIKP PKPab 01 17 10.1 -2.2
CLL Collm 145.43 348 PKPdf 01 17 11.2 -2.2
CLL Collm 145.43 348 *i* PKPbc PKiKP 01 17 11.3 -2.2
comp=Z,38nm,0.8s
CLL Collm 145.43 348 PKIKP PKiKP 01 17 11.2 -2.2
ARCR ARCALIA 145.45 333 ⇓P PKiKP 01 17 12.4 -1.2
TURR Turia 145.46 330 ⇓P PKiKP 01 17 12.2 -1.6
OKC Ostrava-Krasne 145.48 341 *e*PKP PKiKP 01 17 12.3 -1.3
OKC Ostrava-Krasne 145.48 341 *e*PKP2 PKiKP 01 17 12.3 -1.3
COVR Voineasa-Covas 145.52 329 ⇑P PKPab 01 17 10.7 -1.8
OZUR 145.54 330 ⇑P PKiKP 01 17 11.5 -2.4
DPC Dobruska-Polom 145.54 344 *e*PKP PKiKP 01 17 12.6 -1.2
DPC Dobruska-Polom 145.54 344 *e*PKP2 PKiKP 01 17 12.6 -1.2
BRG Berggiesshubel 145.64 346 Amp 01 17 13.3
comp=Z,19nm,0.8s
BRG Berggiesshubel 145.64 346 *e*PKP PKPab 01 17 11.5 -1.1
LANS Liptovska Anna 145.66 339 *e*PKP2 PKiKP 01 17 13.7 -0.4
LANS Liptovska Anna 145.66 339 *e*PKP PKiKP 01 17 13.7 -0.4
KRLC Kraliky 145.66 343 *e*PKP2 PKiKP 01 17 13.8 -0.3
MORC Moravsky Berou 145.71 342 *e*PKP PKiKP 01 17 12.4 -1.8
MORC Moravsky Berou 145.71 342 ⇓P PKiKP 01 17 13.0 -1.1
PVCC Panska Ves 145.82 346 *e*PKP PKiKP 01 17 13.5 -0.8
PVCC Panska Ves 145.82 346 *e*PKP2 PKiKP 01 17 13.5 -0.8
ISR Istrita 145.87 328 ⇓P PKiKP 01 17 13.5 -1.2
MLR Muntele Rosu 145.90 329 ⇓P PKiKP 01 17 12.7 -2.1
HSKC Hora Svate Kat 146.00 347 *e*PKP PKiKP 01 17 13.8 -0.9
CBBR Cluj-Babes-Bol 146.04 333 ⇓P PKPbc 01 17 11.1 -1.3
CJR Cluj-Napoca 146.07 333 ⇓P PKiKP 01 17 13.1 -1.9
LEHL Lehliu 146.18 327 ⇓P PKiKP 01 17 13.4 -1.8
MBAR Mbarara 146.24 240 PKPbc PKiKP 01 17 16.3 -0.2
comp=Z,23nm,0.7s,baz=84,slow=19,SNR=12
PRA Prague 146.28 345 *e*PKP PKPab 01 17 14.2 -1.0
PRA Prague 146.28 345 *e*PKP2 PKPab 01 17 14.2 -1.0
PRU Pruhonice 146.33 345 *e*PKP PKPab 01 17 14.5 -0.9
PRU Pruhonice 146.33 345 *e*PKP2 PKPab 01 17 14.5 -0.9
MMAI Mount Meron Ar 146.34 303 PKPbc PKiKP 01 17 13.3 -2.8
comp=Z,22nm,0.6s,baz=76,slow=8.8,SNR=9.5
DRGR 146.38 334 ⇓P PKPab 01 17 14.1 -1.8
VRAC Vranov 146.41 343 *e*PKP PKPab 01 17 14.7 -1.1
VRAC Vranov 146.41 343 ⇑P PKPbc 01 17 12.6 -0.7
VYHS Vyhne 146.43 339 *e*PKP2 PKPab 01 17 15.3 -0.6
VYHS Vyhne 146.43 339 *e*PKP PKPab 01 17 15.3 -0.6
JAVC Velka Javorina 146.49 341 *e*PKP PKPab 01 17 16.3 +0.1
BORR Bors 146.53 335 ⇑P PKPab 01 17 14.9 -1.4
ARR Arges 146.62 330 ⇓P PKiKP 01 17 14.3 -2.0
KRUC Moravsky 146.69 343 *e*PKP PKPab 01 17 15.4 -1.5
TREC Trest 146.73 344 *e*PKP PKPab 01 17 15.7 -1.4
TREC Trest 146.73 344 *e*PKP2 PKPab 01 17 15.7 -1.4
ZVC Zvikov 146.92 345 *e*PKP PKPab 01 17 16.4 -1.4
MEM Membach 147.12 355 *d*PKP PKPab 01 17 16.6 -1.9
BTNL Ternell 147.13 355 *d*PKP PKPab 01 17 16.7 -1.9
BSTI Sart Tilman 147.17 356 *d*PKP PKPab 01 17 16.8 -2.0
SRO Srobarova 147.20 339 *e*PKP2 PKPab 01 17 17.8 -1.2
SRO Srobarova 147.20 339 *e*PKP PKPab 01 17 17.8 -1.2
GRF Grafenberg Arr 147.32 349 *e*PKP PKPab 01 17 17.4 -2.0
baz=16,slow=2.0
BCLA Clavier 147.35 356 *d*PKP PKPab 01 17 17.5 -2.0
KHC Kasperske Hory 147.36 346 *d*PKP PKPab 01 17 17.7 -2.0
KHC Kasperske Hory 147.36 346 *e*PKP2 PKPab 01 17 17.7 -2.0
BHOU Houvegnez 147.37 355 *d*PKP PKPab 01 17 17.6 -2.0
SURR Surduc 147.46 333 ⇑P PKPab 01 17 17.5 -2.6
CKRC Cesky Krumlov 147.47 345 *e*PKiKP PKPab 01 17 16.4 -1.4
BMRD Maredsous 147.50 357 *d*PcP PKPab 01 17 17.7 -2.5
BMRD dpDPKP pPKPdf 01 19 14.0 -6.9
GEC2 GERESS Array S 147.59 345 PKPbc PKiKP 01 17 17.6 -0.6
GERES GERESS Array B 147.59 345 PKPbc PKPab 01 17 18.0 -2.7
comp=Z,14nm,0.8s,baz=90,slow=4.7,SNR=8.9
RCHB Rochefort 147.62 356 *d*PKP PKPab 01 17 17.9 -2.8
DOU Dourbes 147.72 357 *d*PKP PKPab 01 17 18.0 -3.0
CONA Conrad Observa 147.86 342 *e*PKiKP PKPab 01 17 18.9 -2.9
comp=Z,15nm,0.7s
RONA Rosalia, Austr 147.94 342 *e*PKiKP PKPab 01 17 19.1 -3.0
comp=Z,14nm,0.7s,SNR=11
HERR Herculane 148.01 332 ⇑P PKiKP 01 17 18.5 -0.5
WLF Walferdange 148.04 355 *d*PKP PKPab 01 17 19.6 -2.8
MORH Mrgy, Hungar 148.46 338 ⇓P PKiKP 01 17 19.9 0.0
BIOA Bad Ischl, Aus 148.68 345 *e*PKP PKPab 01 17 26.7 +1.6
comp=Z,10nm,0.7s
LESA Schwarzleotal 149.17 346 *i* PKiKP PKiKP 01 17 21.4 0.0
comp=Z,9.3nm,0.5s
KBA Koelnbreinsper 149.33 345 *e*PKiKP PKiKP 01 17 21.5 -0.4
comp=Z,8.6nm,0.6s
WATA Walderalm 149.50 347 *e*PKiKP PKiKP 01 17 22.4 +0.2
comp=Z,9.8nm,0.6s,SNR=4.4
RETA Reutte 149.52 348 *i* PKiKP PKiKP 01 17 22.5 +0.3
comp=Z,4.6nm,0.6s
OBKA Obir 149.53 343 *i* PKiKP PKiKP 01 17 21.8 -0.4
comp=Z,11nm,1.0s
WTTA Wattenberg 149.56 347 *e*PKiKP PKiKP 01 17 22.9 +0.5
comp=Z,38nm,0.8s,SNR=14
MOTA Moosalm 149.59 348 *i* PKiKP PKiKP 01 17 22.6 +0.2
comp=Z,11nm,0.9s
MYKA Terra Mystica 149.67 344 *e*PKiKP PKiKP 01 17 22.1 -0.3
comp=Z,6.4nm,0.5s,SNR=4.2
SQTA Sankt Quirin 149.69 347 *e*PKiKP PKiKP 01 17 23.0 +0.5
comp=Z,14nm,0.7s,SNR=6.8
ABTA Abfaltersbach 149.84 345 *i* PKiKP PKiKP 01 17 22.6 -0.2
comp=Z,16nm,0.7s,SNR=8.9
PRED Cave del Predi 149.86 344 PKiKP 01 17 22.1 -0.8
DAVA Damuels 149.88 349 *e*PKiKP PKiKP 01 17 23.5 +0.5
comp=Z,35nm,1.0s,SNR=6.0
FETA Feichten 149.97 348 *i* PKiKP PKiKP 01 17 23.9 +0.7
comp=Z,32nm,1.0s,SNR=5.2
FUORN Ofenpass-Fuorn 150.45 348 PKPbc PKiKP 01 17 24.9 +0.6
ESDC Sonseca Array 157.63 12 PKPab PKPab 01 18 04.4 +1.0
comp=Z,2.6nm,1.1s,baz=344,slow=3.7,SNR=4.5
MDT Midelt 163.95 20 PKPab PKPab 01 18 33.0 +1.6
comp=Z,3.8nm,1.0s,baz=332,slow=5.1,SNR=4.2
DBIC Dimbokro 167.11 148 PKPab PKPab 01 18 46.2 +0.6
comp=Z,7.0nm,1.0s,baz=207,slow=7.0,SNR=2.5
TORD Torodi Ar. Bea 175.36 177 PKPab PKPab 01 19 24.2 +2.2
comp=Z,3.4nm,0.5s,baz=194,slow=2.7,SNR=14

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*IDC* ***19*** *00:59:08.4±5.7, 18°.10S×178°.13W, h581km±62km, mb4.1/12, mbtmp5.0/12, Error ellipse: s-maj=34.2km s-min=22.8km az=151.0*
*NEIC* ***19*** *00:59:09.5±1.7, 18°.2S±0°.1×178°.1W±0°.1, h603km±9km, mb4.8/25, Error ellipse: s-maj=17.9km s-min=14.4km az=112.0*

**ISC 19 00:59:08.4±0.5, 18°.19S±0°.09×178°.14W±0°.10, h590km, n69, σ0s85/68, mb4.7/26, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.66 | 277 | P | P | 01 00 31.1 | +0.1 |
| PPTF | Pamatai, Papee | 27.18 | 93 | P | P | 01 04 05.9 | -0.7 |
| PPTF | | | | IAmb | IAmb | 01 04 07.4 | |
| | comp=Z,23nm,0.6s | | | | | | |
| FOZ | Fox Glacier | 27.23 | 199 | P | P | 01 04 06.0 | -0.5 |
| WHZ | Wether Hill Ro | 29.94 | 200 | P | P | 01 04 30.4 | +0.4 |
| CAN | Canberra | 33.74 | 233 | P | P | 01 05 03.1 | +0.7 |
| CAN | | | | IAmb | IAmb | 01 05 12.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| CAN | Canberra | 33.74 | 233 | P | P | 01 05 03.2 | +0.8 |
| COEN | Coen | 37.37 | 271 | P | P | 01 05 32.7 | +0.1 |
| COEN | | | | IAmb | IAmb | 01 05 50.3 | |
| | comp=Z,49nm,1.1s | | | | | | |
| TAU | Tasmania Unive | 38.20 | 222 | P | P | 01 05 39.6 | +0.7 |
| BBOO | Buckleboo | 43.50 | 241 | P | P | 01 06 20.9 | -0.1 |
| BBOO | | | | IAmb | IAmb | 01 06 34.9 | |
| | comp=Z,31nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 01 06 31.9 | +0.4 |
| | comp=Z,6.9nm,0.6s,baz=96,slow=7.5,SNR=1.0 | | | | | | |
| | comp=Z,6.9nm,0.6s | | | | | | |
| ASAR | Alice Springs | 44.97 | 254 | P | P | 01 06 33.1 | +0.6 |
| | comp=Z,11nm,0.6s,baz=90,slow=7.8,SNR=0.4 | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | |
| FORT | Forrest | 50.12 | 245 | P | P | 01 07 07.3 | -3.5 |
| DRV | Dumont d'Urvil | 55.48 | 199 | P | P | 01 07 48.4 | +0.2 |
| SOEI | Soe | 56.33 | 270 | P | P | 01 07 55.9 | +0.8 |
| SOEI | | | | IAmb | IAmb | 01 08 03.4 | |

comp=Z,64nm,0.8s
**PSA00 Pilbara Seismi 58.09 256 P P 01 08 06.2 -0.6**
**NWAO Narrogin (SRO) 59.31 242 P P 01 08 14.5 -0.3**
**CASY Casey 65.99 205 P P 01 08 57.2 +0.2**
**CASY Casey 65.99 205 P P 01 08 58.2 +1.2**
**JAGI Jajag, Banyuwa 66.29 269 P P 01 08 58.6 -1.3**
JAGI IAmb IAmb 01 09 02.2
comp=Z,52nm,1.1s
**MJAR Matsushiro Arr 68.29 323 P P 01 09 11.2 -0.5**
comp=Z,25nm,0.9s,baz=130,slow=6.2,SNR=12
comp=Z,25nm,0.9s
**MAJO Matsushiro 68.29 323 P P 01 09 11.3 -0.3**
**UGM Wanagama 69.90 268 P P 01 09 21.1 -0.7**
**JNU Nakatsue 70.52 316 P P 01 09 24.2 -0.9**
**YOJ Yonaguni jima 71.32 305 P P 01 09 28.5 -1.3**
**JKA Kamikawa-asahi 71.65 331 P P 01 09 31.8 +0.5**
JKA IAmb IAmb 01 09 33.2
comp=Z,17nm,0.7s
**ASAJ Asahikawa 71.65 331 P P 01 09 32.2 +0.9**
comp=Z,23nm,0.9s,baz=276,slow=7.0,SNR=5.4
comp=Z,23nm,0.9s
**QSPA South Pole Qui 71.86 180 P P 01 09 31.8 -0.6**
QSPA IAmb IAmb 01 09 37.6
comp=Z,46nm,1.1s
**PETK Petropavlovsk- 74.02 345 P P 01 09 44.5 -0.2**
**PETK Petropavlovsk- 74.02 345 P P 01 09 44.7 +0.1**
comp=Z,28nm,0.8s,baz=107,slow=7.4,SNR=12
comp=Z,28nm,0.8s
**KSRS Korea Array 75.09 318 P P 01 09 52.2 +1.2**
comp=Z,3.3nm,0.7s,baz=129,slow=6.2,SNR=5.1
comp=Z,3.3nm,0.7s
**USRK Ussuriysk Ar. 77.00 326 P P 01 10 02.6 +1.3**
comp=Z,6.2nm,0.8s,baz=134,slow=5.9,SNR=3.3
comp=Z,6.2nm,0.8s
**CBX Cerro Bola 77.33 50 P P 01 10 03.5 -0.1**
**YUH Yuha Desert 78.04 50 P P 01 10 07.6 +0.3**
**SLBS Sierra La Lagu 78.47 60 P P 01 10 09.9 +0.1**
**KDAK Kodiak Island 78.61 14 P P 01 10 09.2 -0.4**
KDAK IAmb IAmb 01 10 11.4
comp=Z,28nm,0.9s
**WAKR Walker 78.75 43 P P 01 10 10.5 -0.6**
WAKR IAmb IAmb 01 10 13.2
comp=Z,18nm,0.9s
**O16K Kokwok River B 79.22 10 P P 01 10 10.9 -1.9**
O16K IAmb IAmb 01 10 12.6
comp=Z,24nm,1.0s
**NVAR Mina Array Bea 79.45 44 P P 01 10 15.1 +0.2**
**NVAR Mina Array Bea 79.45 44 P P 01 10 14.8 0.0**
comp=Z,6.0nm,0.7s,baz=228,slow=8.0,SNR=5.6
comp=Z,6.0nm,0.7s
**J05D Fort Rock, OR 80.38 38 P P 01 10 20.3 +0.8**
J05D IAmb IAmb 01 10 21.7
comp=Z,30nm,0.7s
**M16K Timber Creek 80.43 9 P P 01 10 19.7 +0.5**
M16K IAmb IAmb 01 10 21.3
comp=Z,55nm,1.1s
**M17K Holitna River 81.03 10 P P 01 10 21.9 -0.4**
**SEY Seymchan 84.11 347 P P 01 10 37.7 0.0**
comp=Z,26nm,0.8s,baz=149,slow=5.6,SNR=8.4
comp=Z,26nm,0.8s
**LYN LuoYang 84.21 309 P P 01 10 40.4 +1.6**
LYN pmax pmax
comp=Z,49nm,0.6s
**TXAR Lajitas Array 85.93 58 P P 01 10 49.0 +1.6**
comp=Z,7.5nm,0.8s,baz=213,slow=8.1,SNR=8.1
comp=Z,7.5nm,0.8s
**ILAR Eielson Array 86.11 13 P P 01 10 46.6 -0.6**
comp=Z,5.7nm,0.4s,baz=220,slow=4.9,SNR=15
comp=Z,5.7nm,0.4s
**PDAR Pinedale Array 87.38 43 P P 01 10 54.6 +0.5**
comp=Z,4.7nm,0.7s,baz=217,slow=2.7,SNR=6.9
comp=Z,4.7nm,0.7s
**MKAR Makanchi Array 109.52 314 PKiKP PKiKP 01 16 31.8 -0.9**
comp=Z,1.3nm,0.6s,baz=90,slow=2.2,SNR=0.9
**KURBB Kurchatov Arra 112.27 318 PKiKP PKiKP 01 16 36.9 -0.9**
comp=Z,1.9nm,0.8s,baz=79,slow=2.3,SNR=1.6
**BVAR Borovoye Array 117.23 321 PKP PKPdf 01 16 46.9 -0.4**
comp=Z,5.1nm,0.7s,baz=83,slow=1.6,SNR=2.0
**ARCES ARCESS Array B 126.64 350 PKP PKPdf 01 17 04.6 -0.2**
comp=Z,8.5nm,0.9s,baz=27,slow=2.4,SNR=6.3
**EKA Eskdalemuir Ar 142.73 5 PKhKP PKPpre 01 17 32.0**
comp=Z,2.2nm,0.6s,baz=316,slow=2.9,SNR=4.4
**BRTR Keskin Array B 145.17 315 PKPbc PKPbc 01 17 41.5 +0.4**
comp=Z,4.7nm,0.6s,baz=67,slow=3.1,SNR=6.6
**KOLS Kolonicke sedl 145.17 336** *e* **PKPbc PKPbc 01 17 40.2 -0.4**
**CLL Collm 145.80 348** *i* PKPbc **PKPbc 01 17 42.5 +0.2**
comp=Z,49nm,0.8s
**OKC Ostrava-Krasne 145.82 341** *e*PKP **PKPbc 01 17 42.9 +0.5**
**UPC Upice 145.83 344** *e*PKP **PKPbc 01 17 43.3 +0.8**
**DPC Dobruska-Polom 145.89 343** *e*PKP **PKPbc 01 17 43.6 +0.9**
**LANS Liptovska Anna 146.00 339** *e* **PKPab 01 17 44.5 -0.6**
**BRG Berggiesshubel 146.00 346** P **PKPbc 01 17 43.6 +0.7**
BRG Amp 01 17 44.0
comp=Z,19nm,0.8s
**KRLC Kraliky 146.02 343** *e*PKP **PKPbc 01 17 43.7 +0.7**
**PVCC Panska Ves 146.18 345** *e*PKP **PKPbc 01 17 44.3 +0.9**
**MMAI Mount Meron Ar 146.51 303** PKPbc **PKPbc 01 17 45.9 +0.9**
comp=Z,12nm,0.6s,baz=68,slow=6.7,SNR=5.0
**PRU Pruhonice 146.69 345** *e*PKP **PKPbc 01 17 45.2 +0.4**
**GOPC GO Pecny, Ondr 146.69 345** *e*PKP **PKPbc 01 17 45.6 +0.8**
**KHC Kasperske Hory 147.72 346** *e*PKP **PKiKP 01 17 48.4 -0.6**
**GERES GERESS Array B 147.95 345** PKPbc **PKPbc 01 17 48.7 +0.5**
comp=Z,9.1nm,0.7s,baz=93,slow=4.3,SNR=7.5
**ESDC Sonseca Array 158.01 12 PKPab PKPab 01 18 36.1 +0.1**
comp=Z,2.6nm,1.0s,baz=352,slow=4.5,SNR=2.2
**KEST Kesra 161.31 341 PKPab PKPab 01 18 50.9 +0.3**
comp=Z,8.4nm,0.9s,baz=220,slow=0.9,SNR=4.3

*NEIC **19** 01:01:11.7±1.0, 18.0°S±0.2°×177.9°W±0.2°, h579km±4km, mb4.7/27, Error ellipse: s-maj=25.4km s-min=23.1km az=133.0*
*IDC **19** 01:01:13.5±5.2, 18.16°S×178.12°W, h596km±61km, mb3.9/6, mbtmp4.9/7, Error ellipse: s-maj=70.3km s-min=30.4km az=158.0*
**ISC 19 01:01:13.1±0.8, 18.0°S±0.2°×178.2°W±0.1, h590km, n40, σ0°84/40, mb4.7/20, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.60** | **274** | P | | **P** | **01 02 34.9** | **-0.3** |
| **LIFNC** | **LIFOU** | **14.04** | **256** | P | | **P** | **01 04 10.2** | **-2.2** |
| **DZM** | **Mont Dzumac** | **15.01** | **252** | P | | **P** | **01 04 23.3** | **+1.6** |
| DZM | | | | IAmb | | IAmb | 01 04 27.9 | |
| | comp=Z,36nm,1.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.01** | **252** | P | | **P** | **01 04 23.5** | **+1.7** |
| | comp=Z,19nm,0.6s,baz=65,slow=14,SNR=2.6 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.75** | **258** | P | | **P** | **01 04 38.2** | **+0.4** |
| **EIDS** | **Eidsvold** | **29.45** | **250** | P | | **P** | **01 06 31.0** | **+0.4** |
| EIDS | | | | IAmb | | IAmb | 01 06 39.9 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **30.09** | **240** | P | | **P** | **01 06 37.0** | **+0.7** |
| ARMA | | | | IAmb | | IAmb | 01 06 37.7 | |
| | comp=Z,9.4nm,0.6s | | | | | | | |
| **RABL** | **Rabaul** | **32.10** | **292** | P | | **P** | **01 06 53.6** | **+0.1** |
| **CTA** | **Charters Tower** | **33.65** | **261** | P | | **P** | **01 07 05.9** | **-0.5** |
| | comp=Z,0.8nm,0.5s,baz=96,slow=9.2,SNR=2.4 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.65** | **261** | P | | **P** | **01 07 05.8** | **-0.7** |
| CTAO | | | | IAmb | | IAmb | 01 07 25.0 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **CAN** | **Canberra** | **33.83** | **233** | P | | **P** | **01 07 07.9** | **+0.1** |
| CAN | | | | IAmb | | IAmb | 01 07 12.0 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **PMG** | **Port Moresby** | **34.69** | **280** | P | | **P** | **01 07 16.0** | **+0.8** |
| | comp=Z,33nm,0.8s,baz=74,slow=10,SNR=3.3 | | | | | | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| **TOO** | **Toolangi** | **37.29** | **231** | P | | **P** | **01 07 36.6** | **+0.3** |
| TOO | | | | IAmb | | IAmb | 01 07 37.3 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **37.33** | **270** | P | | **P** | **01 07 37.5** | **+0.7** |
| COEN | | | | IAmb | | IAmb | 01 07 39.2 | |
| | comp=Z,40nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.78** | **241** | P | | **P** | **01 07 49.5** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.78** | **241** | P | | **P** | **01 07 47.8** | **-0.7** |
| | comp=Z,14nm,0.5s,baz=89,slow=11,SNR=3.8 | | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.56** | **241** | P | | **P** | **01 08 26.1** | **0.0** |
| **WB0** | **Warramunga Arr** | **44.80** | **260** | P | | **P** | **01 08 36.2** | **+0.3** |
| WB0 | | | | IAmb | | IAmb | 01 08 36.5 | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.82** | **260** | P | | **P** | **01 08 36.1** | **+0.1** |
| WB2 | | | | IAmb | | IAmb | 01 08 40.6 | |
| | comp=Z,33nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | | **P** | **01 08 34.3** | **-1.8** |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | | **P** | **01 08 36.1** | **0.0** |
| | comp=Z,10nm,0.5s,baz=97,slow=7.7,SNR=7.2 | | | | | | | |
| | comp=Z,10nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **44.98** | **254** | P | | **P** | **01 08 37.6** | **+0.4** |
| AS31 | | | | IAmb | | IAmb | 01 08 38.6 | |
| | comp=Z,15nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | | **P** | **01 08 37.8** | **+0.5** |
| | comp=Z,40nm,0.6s,baz=89,slow=8.5,SNR=7.1 | | | | | | | |
| | comp=Z,40nm,0.6s | | | | | | | |
| **KNRA** | **Kununurra** | **50.70** | **264** | P | | **P** | **01 09 20.3** | **+0.5** |
| KNRA | | | | IAmb | | IAmb | 01 09 24.2 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **FAKI** | **Fak Fak** | **50.81** | **281** | P | | **P** | **01 09 21.1** | **+0.4** |
| FAKI | | | | IAmb | | IAmb | 01 09 37.8 | |
| | comp=Z,37nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.23** | **261** | P | | **P** | **01 09 38.0** | **+0.1** |
| **SOEI** | **Soe** | **56.29** | **270** | P | | **P** | **01 10 00.9** | **+1.5** |
| SOEI | | | | IAmb | | IAmb | 01 10 08.9 | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.10** | **255** | P | | **P** | **01 10 11.1** | **-0.4** |
| **TOLI2** | **Tolitoli** | **62.95** | **281** | P | | **P** | **01 10 43.6** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **66.26** | **269** | P | | **P** | **01 11 03.3** | **-1.0** |
| JAGI | | | | IAmb | | IAmb | 01 11 04.7 | |
| | comp=Z,45nm,1.1s | | | | | | | |
| **UGM** | **Wanagama** | **69.86** | **268** | P | | **P** | **01 11 26.6** | **+0.4** |
| **CLES** | **Cleveland East** | **70.88** | **5** | P | | **P** | **01 11 31.6** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **71.17** | **305** | P | | **P** | **01 11 33.3** | **-0.3** |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | | **P** | **01 11 37.6** | **-0.6** |
| **SSLB** | **Suanglung** | **72.47** | **303** | P | | **P** | **01 11 40.7** | **-0.5** |
| **TPUB** | **Ta-pu** | **72.49** | **302** | P | | **P** | **01 11 40.5** | **-0.7** |
| TPUB | | | | IAmb | | IAmb | 01 11 43.5 | |
| | comp=Z,30nm,1.1s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.33** | **44** | P | | **P** | **01 12 18.6** | **-0.3** |
| | comp=Z,1.4nm,0.8s,baz=223,slow=6.9,SNR=2.0 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.85** | **58** | P | | **P** | **01 12 52.3** | **+0.6** |
| | comp=Z,1.8nm,0.8s,baz=214,slow=7.1,SNR=3.2 | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.00** | **315** | PKPbc | | **PKPab** | **01 19 45.1** | **-1.1** |
| | comp=Z,0.7nm,0.5s,baz=110,slow=2.7,SNR=5.1 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.37** | **303** | PKPbc | | **PKPbc** | **01 19 48.7** | **-0.5** |
| | comp=Z,1.3nm,0.5s,baz=67,slow=6.5,SNR=5.0 | | | | | | | |

*ROM **19** 01:01:53.5±0.2, 42.063°N±0.007°×15.548°E±0.010°, h4km±1km, ML2.8/41, Error ellipse: s-maj=0.8km s-min=0.6km az=52.0*
*TIR **19** 01:01:54.4, 42.03°N×16.00°E, h10km±5km, Ml4.8*
**ISC 19 01:01:53.2±1.1, 42.10°N±0.02°×15.60°E±0.02°, h6km±9km, n55, σ0°81/87, 2C, Adriatic Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **APRC** | **Apricena** | **0.35** | **186** | P | | **Pg** | **01 02 00.5** | **+0.5** |
| APRC | | | | S | | **Sg** | **01 02 05.1** | **+0.5** |
| APRC | | | | AML | | AML | | |
| | comp=E,2895μm,0.8s | | | | | | | |
| APRC | | | | AML | | AML | | |
| | comp=E,2900μm,0.8s | | | | | | | |
| APRC | | | | AML | | AML | | |
| | comp=N,4070μm,1.3s | | | | | | | |
| APRC | | | | AML | | AML | | |
| | comp=E,2900μm,1.2s | | | | | | | |
| APRC | | | | AML | | AML | | |
| | comp=N,3455μm,0.2s | | | | | | | |
| APRC | | | | AML | | AML | | |
| | comp=E,2403μm,0.1s | | | | | | | |
| APRC | | | | AML | | AML | | |
| | comp=N,1026μm,0.2s | | | | | | | |
| APRC | | | | AML | | AML | | |
| | comp=E,2293μm,0.1s | | | | | | | |
| **SGRT** | **San Giovanni R** | **0.36** | **162** | P | | **Pb** | **01 02 01.5** | **-0.7** |
| SGRT | baz=213 | | | S | | **Sb** | **01 02 06.7** | **-1.5** |
| SGRT | baz=213 | | | AMP | | | | |
| | comp=E,10.0nm,0.1s,baz=213 | | | | | | | |
| **SGRT** | **San Giovanni R** | **0.36** | **162** | P | | **Pb** | **01 02 01.5** | **-0.7** |
| SGRT | | | | S | | **Sb** | **01 02 06.7** | **-1.5** |
| SGRT | | | | AML | | AML | | |
| | comp=E,3380μm,0.2s | | | | | | | |
| SGRT | | | | AML | | AML | | |
| | comp=N,2885μm,0.2s | | | | | | | |
| SGRT | | | | AML | | AML | | |
| | comp=E,3375μm,0.2s | | | | | | | |
| SGRT | | | | AML | | AML | | |
| | comp=N,2890μm,0.2s | | | | | | | |
| SGRT | | | | AML | | AML | | |
| | comp=N,2888μm,0.2s | | | | | | | |
| SGRT | | | | AML | | AML | | |
| | comp=E,3375μm,0.2s | | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.46** | **149** | P | | **Pb** | **01 02 03.3** | **-0.4** |
| MSAG | | | | S | | **Sb** | **01 02 10.3** | **-0.5** |
| MSAG | | | | AML | | AML | | |
| | comp=E,580μm,1.0s | | | | | | | |
| MSAG | | | | AML | | AML | | |
| | comp=N,970μm,0.3s | | | | | | | |
| **T1413** | **San Martino in** | **0.50** | **240** | AML | | AML | | |
| | comp=E,871μm,0.3s | | | | | | | |
| T1413 | | | | AML | | AML | | |
| | comp=N,1078μm,0.3s | | | | | | | |
| T1413 | | | | AML | | AML | | |
| | comp=N,1118μm,0.3s | | | | | | | |
| T1413 | | | | AML | | AML | | |
| | comp=E,682μm,0.2s | | | | | | | |
| **T1411** | **Guglionesi (CB** | **0.52** | **253** | AML | | AML | | |
| | comp=E,1889μm,0.5s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=N,1765μm,0.3s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=E,1835μm,0.5s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=N,1698μm,0.3s | | | | | | | |
| **MELA** | **Melanico ??? S** | **0.53** | **222** | P | | **Pg** | **01 02 03.3** | **0.0** |
| MELA | | | | S | | **Sg** | **01 02 11.0** | **+0.8** |
| MELA | | | | AML | | AML | | |
| | comp=N,834μm,0.2s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=E,860μm,0.2s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=E,791μm,0.2s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=N,867μm,0.1s | | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.68** | **229** | P | | **Pg** | **01 02 06.3** | **-0.1** |
| CIGN | | | | S | | **Sg** | **01 02 16.3** | **+1.1** |
| **FRES** | **Fresagrandinar** | **0.70** | **260** | P | | **Pg** | **01 02 06.8** | **+0.1** |
| FRES | | | | S | | **Sg** | **01 02 16.1** | **+0.3** |
| FRES | | | | AML | | AML | | |
| | comp=N,436μm,0.4s | | | | | | | |
| FRES | | | | AML | | AML | | |
| | comp=E,732μm,1.6s | | | | | | | |
| FRES | | | | AML | | AML | | |
| | comp=E,732μm,0.4s | | | | | | | |
| FRES | | | | AML | | AML | | |
| | comp=N,404μm,0.1s | | | | | | | |
| FRES | | | | AML | | AML | | |
| | comp=E,674μm,0.3s | | | | | | | |
| **GATE** | **Gambatesa** | **0.78** | **221** | P | | **Pg** | **01 02 08.5** | **+0.3** |
| **BSSO** | **Busso** | **0.93** | **234** | P | | **Pg** | **01 02 10.5** | **-0.6** |
| BSSO | | | | S | | **Sg** | **01 02 23.8** | **+0.6** |
| **CAPA** | **Cerignola FG** | **0.96** | **170** | P | | **Pg** | **01 02 11.3** | **-0.3** |
| CAPA | | | | S | | **Sg** | **01 02 24.4** | **+0.4** |
| **LPEL** | **Lama dei Pelig** | **1.05** | **267** | P | | **Pg** | **01 02 13.0** | **-0.4** |
| LPEL | | | | AML | | AML | | |
| | comp=E,901μm,0.2s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=N,720μm,0.2s | | | | | | | |
| **RNI2** | **Rionero Sannit** | **1.15** | **250** | P | | **Pg** | **01 02 14.9** | **-0.3** |
| RNI2 | | | | S | | **Sg** | **01 02 30.1** | **0.0** |
| **LSTV** | **Lastovo** | **1.17** | **55** | *e*Pn | | **Pn** | **01 02 17.6** | **+1.5** |
| LSTV | | | | Sg | | **Sn** | **01 02 34.1** | **+1.8** |
| **PALZ** | **Palazzo San Ge** | **1.19** | **167** | P | | **Pg** | **01 02 15.6** | **-0.4** |
| PALZ | | | | S | | **Sb** | **01 02 32.5** | **+0.7** |
| PALZ | | | | AML | | AML | | |
| | comp=N,342μm,0.3s | | | | | | | |
| PALZ | | | | AML | | AML | | |
| | comp=E,389μm,0.2s | | | | | | | |
| **INTR** | **Introdacqua** | **1.26** | **266** | ⇑P | | **Pg** | **01 02 16.9** | **-0.5** |
| INTR | | | | S | | **Sg** | **01 02 34.1** | **+0.3** |
| INTR | | | | AML | | AML | | |
| | comp=E,291μm,0.5s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=N,734μm,0.5s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=E,291μm,0.5s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=N,761μm,0.6s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=N,734μm,0.5s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=E,450μm,0.5s | | | | | | | |
| **MTMR** | **Montemarano** | **1.26** | **201** | P | | **Pg** | **01 02 15.6** | **-1.8** |
| MTMR | | | | S | | **Sg** | **01 02 32.8** | **-1.0** |
| MTMR | | | | AML | | AML | | |
| | comp=N,115μm,0.3s | | | | | | | |
| **CERA** | **Filignano** | **1.28** | **247** | P | | **Pg** | **01 02 17.0** | **-0.8** |
| CERA | | | | S | | **Sg** | **01 02 34.4** | **0.0** |
| **VCEL** | **Villa Celiera** | **1.33** | **283** | ⇑P | | **Pg** | **01 02 18.1** | **-0.7** |
| VCEL | | | | AML | | AML | | |
| | comp=E,500μm,0.3s | | | | | | | |
| VCEL | | | | AML | | AML | | |
| | comp=N,435μm,0.3s | | | | | | | |
| **ACER** | **Acerenza** | **1.34** | **169** | P | | **Pb** | **01 02 19.0** | **+0.2** |
| ACER | | | | S | | **Sb** | **01 02 36.7** | **+0.5** |
| ACER | | | | AML | | AML | | |
| | comp=N,449μm,0.4s | | | | | | | |
| ACER | | | | AML | | AML | | |
| | comp=E,389μm,0.3s | | | | | | | |
| ACER | | | | AML | | AML | | |
| | comp=N,607μm,0.5s | | | | | | | |
| ACER | | | | AML | | AML | | |
| | comp=E,382μm,0.3s | | | | | | | |
| **T0110** | **Collepietro** | **1.36** | **276** | P | | **Pn** | **01 02 18.6** | **-0.2** |
| T0110 | | | | AML | | AML | | |
| | comp=N,374μm,0.3s | | | | | | | |
| T0110 | | | | AML | | AML | | |
| | comp=E,276μm,0.3s | | | | | | | |
| **FAGN** | **Fagnano** | **1.50** | **277** | P | | **Pn** | **01 02 21.2** | **+0.4** |
| FAGN | | | | S | | **Sn** | **01 02 42.0** | **+1.2** |
| FAGN | | | | AML | | AML | | |
| | comp=E,494μm,0.4s | | | | | | | |
| FAGN | | | | AML | | AML | | |
| | comp=N,493μm,1.4s | | | | | | | |
| FAGN | | | | AML | | AML | | |
| | comp=N,493μm,0.6s | | | | | | | |
| FAGN | | | | AML | | AML | | |
| | comp=N,433μm,0.4s | | | | | | | |
| FAGN | | | | AML | | AML | | |
| | comp=E,494μm,0.4s | | | | | | | |
| **ZIRJ** | **Zirje** | **1.55** | **1** | *i* Pn | | **Pn** | **01 02 21.6** | **+0.2** |
| ZIRJ | | | | Sn | | **Sn** | **01 02 42.2** | **+0.4** |
| **MAKA** | **Makarska** | **1.58** | **41** | *e*Pn | | **Pb** | **01 02 22.4** | **-0.5** |
| MAKA | | | | Sn | | **Sg** | **01 02 43.9** | **-0.2** |
| **MIGL** | **Miglionico** | **1.63** | **157** | P | | **Pb** | **01 02 23.8** | **+0.1** |
| MIGL | | | | S | | **Sg** | **01 02 45.5** | **+0.1** |
| MIGL | | | | AML | | AML | | |
| | comp=E,927μm,1.6s | | | | | | | |
| MIGL | | | | AML | | AML | | |
| | comp=N,1118μm,1.6s | | | | | | | |
| MIGL | | | | AML | | AML | | |
| | comp=N,1118μm,0.4s | | | | | | | |
| MIGL | | | | AML | | AML | | |
| | comp=E,738μm,0.2s | | | | | | | |
| MIGL | | | | AML | | AML | | |
| | comp=N,783μm,0.6s | | | | | | | |
| **NOCI** | **Noci** | **1.72** | **139** | P | | **Pn** | **01 02 22.7** | **-1.0** |
| | baz=146 | | | | | | | |
| NOCI | | | | S | | **Sn** | **01 02 44.0** | **-1.9** |
| | baz=146 | | | | | | | |
| **STON** | **Ston** | **1.74** | **63** | *e*Pn | | **Pg** | **01 02 26.2** | **-0.3** |
| **SMA1** | **SAN MARTINO** | **1.76** | **288** | P | | **Pn** | **01 02 24.2** | **-0.1** |
| SMA1 | | | | AML | | AML | | |
| | comp=E,251μm,1.6s | | | | | | | |
| SMA1 | | | | AML | | AML | | |
| | comp=E,251μm,0.4s | | | | | | | |
| SMA1 | | | | AML | | AML | | |
| | comp=N,259μm,1.6s | | | | | | | |
| SMA1 | | | | AML | | AML | | |
| | comp=E,145μm,0.4s | | | | | | | |
| **LTRZ** | **Laterza** | **1.76** | **148** | P | | **Pn** | **01 02 24.8** | **+0.6** |
| LTRZ | | | | AML | | AML | | |
| | comp=E,208μm,0.2s | | | | | | | |
| LTRZ | | | | AML | | AML | | |
| | comp=N,239μm,0.3s | | | | | | | |
| LTRZ | | | | AML | | AML | | |
| | comp=E,203μm,0.2s | | | | | | | |
| **MORI** | **Morici** | **1.76** | **3** | *e*Pn | | **Pn** | **01 02 24.9** | **+0.6** |
| MORI | | | | Sn | | **Sn** | **01 02 47.4** | **+0.3** |
| **RICI** | **Ricice** | **1.79** | **39** | *e*Pn | | **Pb** | **01 02 25.9** | **-0.5** |
| RICI | | | | Sn | | **Sg** | **01 02 49.8** | **-1.0** |
| **MF5** | **Montefalcone A** | **1.81** | **300** | P | | **Pn** | **01 02 25.5** | **+0.5** |
| **RM33** | **Pellescritta (** | **1.81** | **284** | P | | **Pn** | **01 02 25.4** | **+0.3** |
| **DUGI** | **Dugi Otok** | **1.93** | **348** | *i* Pn | | **Pn** | **01 02 26.6** | **+0.1** |
| DUGI | | | | Sn | | **Sn** | **01 02 51.0** | **-0.1** |
| **MC2** | **Monte Cornacci** | **1.95** | **295** | P | | **Pn** | **01 02 27.2** | **+0.1** |
| **DBRK** | **Dubrovnik** | **1.97** | **72** | *i* Pn | | **Pb** | **01 02 28.9** | **-0.6** |
| DBRK | | | | Sn | | **Sg** | **01 02 55.9** | **-0.7** |
| **KIJV** | **Kijevo** | **1.99** | **17** | *i* Pn | | **Pb** | **01 02 29.3** | **-0.6** |
| KIJV | | | | Sn | | **Sb** | **01 02 54.3** | **-0.7** |
| **CSP1** | **Cessapalombo** | **2.02** | **300** | P | | **Pn** | **01 02 28.6** | **+0.6** |
| **ARRO** | **Arrone** | **2.15** | **284** | P | | **Pn** | **01 02 30.0** | **+0.4** |
| **EL6** | **Elcito** | **2.21** | **305** | P | | **Pn** | **01 02 31.4** | **+0.9** |
| **VIRC** | **Vir** | **2.22** | **350** | *e*Pn | | **Pn** | **01 02 30.9** | **+0.3** |
| VIRC | | | | Sn | | **Sn** | **01 02 58.5** | **+0.1** |
| **UDBI** | **Udbina** | **2.43** | **3** | *e*Pg | | **Pb** | **01 02 37.9** | **+0.6** |
| UDBI | | | | Sg | | **Sg** | **01 03 11.2** | **+0.1** |
| **NVLJ** | **Novalja** | **2.52** | **348** | *e*Pn | | **Pn** | **01 02 35.4** | **+0.8** |
| NVLJ | | | | Sn | | **Sn** | **01 03 06.0** | **+0.4** |
| **RABC** | **Rab** | **2.71** | **348** | *e*Pn | | **Pn** | **01 02 37.1** | **-0.2** |
| RABC | | | | Sn | | **Sn** | **01 03 11.3** | **+0.9** |
| **PLIT** | **Plitvice** | **2.77** | **0** | *i* Pg | | **Pb** | **01 02 44.5** | **+1.3** |
| PLIT | | | | Sn | | **Sn** | **01 03 13.5** | **+1.4** |
| **SCTE** | **Santa Cesarea** | **2.97** | **132** | P | | **Pn** | **01 02 42.1** | **+1.2** |
| | baz=135 | | | | | | | |
| **BRJN** | **Brijuni** | **3.11** | **335** | *e*Pn | | **Pn** | **01 02 42.3** | **-0.4** |
| BRJN | | | | Sn | | **Sn** | **01 03 18.5** | **-1.7** |
| **SMRN** | **Sveta Marina** | **3.11** | **341** | *e*Pn | | **Pn** | **01 02 42.9** | **0.0** |
| SMRN | | | | Sn | | **Sn** | **01 03 18.8** | **-1.5** |
| **PUK** | **Puka** | **3.20** | **90** | P | | **Pn** | **01 02 45.5** | **+1.4** |
| | baz=88 | | | | | | | |
| **BCI** | **Bajram Curri** | **3.33** | **84** | P | | **Pn** | **01 02 47.0** | **+1.1** |
| | baz=82 | | | | | | | |
| **SRN** | **Sarande** | **4.01** | **122** | P | | **Pn** | **01 02 55.6** | **+0.5** |
| | baz=124 | | | | | | | |
| SRN | | | | S | | **Sn** | **01 03 43.9** | **+1.5** |
| | baz=124 | | | | | | | |
| SRN | | | | AMP | | | | |
| | comp=N,5.1nm,1.4s,baz=124 | | | | | | | |
| **IGT** | **Igoumenitsa** | **4.42** | **124** | P | | **Pn** | **01 03 01.4** | **+0.6** |
| | baz=125 | | | | | | | |
| IGT | | | | AMP | | | | |
| | comp=N,11nm,1.6s,baz=125 | | | | | | | |
| **FNA** | **Florina** | **4.54** | **105** | P | | **Pn** | **01 03 03.7** | **+1.1** |
| | baz=105 | | | | | | | |
| **LKD2** | **Lefkada island** | **5.09** | **129** | P | | **Pn** | **01 03 11.1** | **+1.1** |
| | baz=130 | | | | | | | |

*IDC **19** 01:03:18.1±10.0, 18.23°S×178.48°W, h679km±132km, mb3.5/9, mbtmp4.5/9, Error ellipse: s-maj=67.0km s-min=20.9km az=80.0*
**ISC 19 01:03:17.8±1.0, 18.3°S±0.2°×178.4°W±0.2°, h679km, n16, σ1°20/16, mb4.0/13, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CTA** | **Charters Tower** | **33.37** | **261** | P | | **P** | **01 09 04.2** | **-0.1** |
| | 0.3nm,0.6s,baz=89,slow=6.1,SNR=0.9 | | | | | | | |
| **STKA** | **Stephens Creek** | **38.45** | **242** | P | | **P** | **01 09 45.2** | **-0.2** |
| | 9.1nm,0.5s,baz=89,slow=5.2,SNR=5.3 | | | | | | | |
| | 9.1nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.55** | **260** | P | | **P** | **01 10 33.1** | **-0.1** |
| | 2.1nm,0.3s,baz=96,slow=7.3,SNR=5.9 | | | | | | | |
| | 2.1nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.68** | **255** | P | | **P** | **01 10 34.4** | **+0.2** |
| | 12nm,0.6s,baz=87,slow=8.3,SNR=4.9 | | | | | | | |
| | 12nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.17** | **323** | P | | **P** | **01 13 13.3** | **-0.1** |
| | 2.3nm,0.7s,baz=157,slow=5.8,SNR=6.1 | | | | | | | |
| | 2.3nm,0.7s | | | | | | | |
| **JNU** | **Nakatsue** | **70.38** | **316** | P | | **P** | **01 13 27.4** | **+0.9** |
| | 5.4nm,0.9s,baz=226,slow=16

comp=Z,173nm,0.5s
SNAA **Sanae** 90.25 179 ⇑P P **P** 01 15 08.4 0.0
comp=Z,48nm,0.6s
SNAA **Sanae** 90.25 179 P P **P** 01 15 08.7 +0.3
comp=Z,1.8nm,0.6s,baz=216,slow=14,SNR=1.1
comp=Z,1.8nm,0.6s
VNA3 **Neumayer Olymp** 90.39 176 ⇑P P **P** 01 15 10.2 +1.2
comp=Z,7.5nm,0.6s
VNA2 **Neumayer--Watz** 90.83 177 ⇑P P **P** 01 15 07.4 -3.6
comp=Z,4.0nm,0.7s,baz=204,slow=2.9
VNA1 **Neumayer--Stat** 91.06 177 ⇑P P **P** 01 15 11.1 -0.9
comp=Z,6.6nm,0.8s
BRTR **Keskin Array B** 145.01 314 PKP **PKPdf** 01 21 39.5 -1.0
comp=Z,2.1nm,1.0s,baz=97,slow=4.9,SNR=2.6

*NEIC **19** 01:03:41.1±1.2, 18°.3S±0°.2×177°.9W±0°.1, h559km±17km, mb4.8/29, Error ellipse: s-maj=24.4km s-min=16.8km az=164.0*
*IDC **19** 01:03:44.3±4.3, 18°.35S×178°.16W, h592km±46km, mb3.7/11, mbtmp4.7/11, Error ellipse: s-maj=29.2km s-min=22.2km az=118.0*
**ISC 19 01:03:42.1±0.6, 18°.24S±0°.10×177°.8W±0°.1, h600km, n66, σ1s78/67, mb4.8/25, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.99** | **277** | P | **P** | **01 05 05.1** | **-2.5** |
| **AFI** | **Afiamalu** | **7.21** | **54** | P | **P** | **01 05 32.4** | **-1.8** |
| **FUNA** | **Funafuti** | **10.09** | **343** | P | **P** | **01 06 00.7** | **-1.2** |
| **LIFNC** | **LIFOU** | **14.34** | **257** | P | **P** | **01 06 40.2** | **-4.0** |
| **PINNC** | **Pines Island,** | **14.50** | **250** | P | **P** | **01 06 42.9** | **-2.8** |
| **DZM** | **Mont Dzumac** | **15.28** | **253** | P | **P** | **01 06 49.6** | **-3.4** |
| DZM | | | | IAmb | IAmb | 01 07 03.7 | |
| | comp=Z,26nm,1.1s | | | | | | |
| KOUNC | **Koumac, New Ca** | **17.06** | **259** | P | **P** | **01 07 08.8** | **-0.4** |
| **INZ** | **Inchbonnie** | **26.06** | **198** | P | **P** | **01 08 28.8** | **-0.6** |
| INZ | | | | IAmb | IAmb | 01 08 31.3 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.48** | **200** | P | **P** | **01 08 59.5** | **+0.4** |
| MLZ | | | | IAmb | IAmb | 01 09 00.0 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **29.71** | **251** | P | **P** | **01 09 01.2** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 01 09 01.4 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **DCZ** | **Deep Cove** | **29.90** | **202** | P | **P** | **01 09 02.2** | **-0.4** |
| **WHZ** | **Wether Hill Ro** | **30.00** | **200** | P | **P** | **01 09 04.0** | **+0.3** |
| WHZ | | | | IAmb | IAmb | 01 09 04.9 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **30.28** | **241** | P | **P** | **01 09 06.5** | **+0.1** |
| ARMA | | | | IAmb | IAmb | 01 09 07.0 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **01 09 37.5** | **0.0** |
| CAN | | | | IAmb | IAmb | 01 09 38.7 | |
| | comp=Z,45nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **01 09 37.5** | **0.0** |
| **CTA** | **Charters Tower** | **33.97** | **261** | P | **P** | **01 09 36.6** | **-1.0** |
| | comp=Z,1.6nm,0.4s,baz=79,slow=9.9,SNR=22 | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.97** | **261** | P | **P** | **01 09 37.4** | **-0.2** |
| **CTAO** | **Charters Tower** | **33.97** | **261** | P | **P** | **01 09 37.2** | **-0.4** |
| **PMG** | **Port Moresby** | **35.09** | **280** | P | **P** | **01 09 47.5** | **+0.6** |
| | comp=Z,36nm,0.8s,baz=119,slow=4.4,SNR=5.7 | | | | | | |
| | comp=Z,36nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **35.09** | **280** | P | **P** | **01 09 47.9** | **+0.9** |
| **TOO** | **Toolangi** | **37.42** | **231** | P | **P** | **01 10 06.1** | **+0.3** |
| **COEN** | **Coen** | **37.69** | **271** | P | **P** | **01 10 08.5** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.98** | **242** | P | **P** | **01 10 18.8** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.98** | **242** | P | **P** | **01 10 18.4** | **-0.1** |
| | comp=Z,23nm,0.5s,baz=80,slow=9.5,SNR=13 | | | | | | |
| | comp=Z,23nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.76** | **241** | P | **P** | **01 10 56.1** | **+0.1** |
| **WR0** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **01 11 05.2** | **-0.2** |
| **WB0** | **Warramunga Arr** | **45.12** | **260** | P | **P** | **01 11 06.5** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 01 11 07.0 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.14** | **260** | P | **P** | **01 11 06.5** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 01 11 19.3 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.15** | **260** | P | **P** | **01 11 06.3** | **-0.5** |
| | comp=Z,15nm,0.5s,baz=97,slow=6.8,SNR=19 | | | | | | |
| WRA | | | | PcP | **PcP** | **01 12 35.9** | **+1.6** |
| | comp=Z,1.8nm,0.4s,baz=92,slow=3.6,SNR=1.2 | | | | | | |
| | comp=Z,15nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.27** | **255** | P | **P** | **01 11 07.7** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 01 11 08.9 | |
| | comp=Z,19nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.27** | **255** | P | **P** | **01 11 07.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.27** | **255** | P | **P** | **01 11 07.8** | **0.0** |
| | comp=Z,55nm,0.6s,baz=85,slow=8.8,SNR=23 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 12 36.1** | **+1.5** |
| | comp=Z,3.1nm,0.5s,baz=105,slow=3.6,SNR=2.1 | | | | | | |
| | comp=Z,55nm,0.6s | | | | | | |
| **GUMO** | **Guam** | **48.54** | **308** | P | **P** | **01 11 35.1** | **+2.8** |
| **MTN** | **Manton Dam** | **49.38** | **269** | P | **P** | **01 11 38.3** | **-0.2** |
| MTN | | | | IAmb | IAmb | 01 11 39.3 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **50.40** | **245** | P | **P** | **01 11 45.3** | **-0.5** |
| **KNRA** | **Kununurra** | **51.04** | **264** | P | **P** | **01 11 50.6** | **0.0** |
| KNRA | | | | IAmb | IAmb | 01 11 51.4 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **51.22** | **281** | P | **P** | **01 11 52.1** | **+0.2** |
| FAKI | | | | IAmb | IAmb | 01 12 06.7 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.55** | **261** | P | **P** | **01 12 08.9** | **+0.5** |
| **DRV** | **Dumont d'Urvil** | **55.54** | **199** | P | **P** | **01 12 22.3** | **+0.9** |
| **SOEI** | **Soe** | **56.66** | **270** | P | **P** | **01 12 32.0** | **+1.7** |
| SOEI | | | | IAmb | IAmb | 01 12 33.0 | |
| | comp=Z,67nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.39** | **256** | P | **P** | **01 12 41.9** | **+0.1** |
| **MBWA** | **Marble Bar** | **58.56** | **256** | P | **P** | **01 12 42.8** | **0.0** |
| **MBWA** | **Marble Bar** | **58.56** | **256** | P | **P** | **01 12 42.9** | **0.0** |
| **MORW** | **Morawa** | **60.88** | **246** | P | **P** | **01 12 57.8** | **-0.3** |
| **TOLI2** | **Tolitoli** | **63.35** | **281** | P | **P** | **01 13 16.0** | **+1.7** |
| **GIRL** | **Giralia** | **63.36** | **253** | P | **P** | **01 13 15.7** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **66.62** | **268** | P | **P** | **01 13 34.5** | **-0.3** |
| JAGI | | | | IAmb | IAmb | 01 13 35.0 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.53** | **323** | P | **P** | **01 13 47.7** | **+1.8** |
| | comp=Z,1.7nm,0.5s,baz=166,slow=5.7,SNR=4.9 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **68.53** | **323** | P | **P** | **01 13 48.0** | **+2.0** |
| **JNU** | **Nakatsue** | **70.79** | **316** | P | **P** | **01 14 01.5** | **+2.1** |
| | comp=Z,7.5nm,1.0s,baz=54,slow=8.7,SNR=2.4 | | | | | | |
| | comp=Z,5nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.81** | **180** | P | **P** | **01 14 07.5** | **+2.6** |
| | comp=Z,2.5nm,0.8s,baz=25,slow=0.9,SNR=1.0 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.26** | **44** | P | P | 01 14 51.5 | +4.9 |
| | comp=Z,0.8nm,0.7s,baz=222,slow=7.7,SNR=2.3 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.68** | **57** | P | P | 01 15 24.0 | +5.0 |
| | comp=Z,1.5nm,0.8s,baz=228,slow=6.7,SNR=3.9 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.08** | **13** | P | **P** | **01 15 22.7** | **+2.8** |
| | comp=Z,1.7nm,0.9s,baz=221,slow=4.7,SNR=4.3 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.79** | **314** | PKiKP | **PKiKP** | **01 21 07.7** | **+1.8** |
| | comp=Z,1.0nm,0.8s,baz=136,slow=9.1,SNR=5.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.47** | **321** | PKP | **PKiKP** | **01 21 22.5** | **+2.0** |
| | comp=Z,0.6nm,0.3s,baz=111,slow=2.2,SNR=6.4 | | | | | | |
| ARCES | **ARCESS Array B** | **126.75** | **350** | PKP | **PKiKP** | **01 21 40.2** | **+2.0** |
| | comp=Z,0.9nm,0.5s,baz=48,slow=1.8,SNR=5.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.75** | **5** | PKP | **PKPdf** | **01 22 08.0** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=327,slow=2.9,SNR=4.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.43** | **315** | PKPbc | **PKiKP** | **01 22 16.5** | **-0.9** |
| | comp=Z,1.8nm,0.6s,baz=108,slow=3.6,SNR=6.7 | | | | | | |
| **DPC** | **Dobruska-Polom** | **146.03** | **344** | *e*PKP | **PKPab** | **01 22 16.4** | **-1.6** |
| **MBAR** | **Mbarara** | **146.27** | **239** | PKPbc | **PKPab** | **01 22 18.5** | **-1.6** |
| | comp=Z,18nm,0.9s,baz=96,slow=9.0,SNR=6.8 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.82** | **303** | | **PKPab** | **01 22 21.5** | **-0.3** |
| **MMAI** | **Mount Meron Ar** | **146.82** | **303** | PKPbc | **PKPab** | **01 22 21.5** | **-0.3** |
| | comp=Z,36nm,1.0s,baz=60,slow=3.3,SNR=6.5 | | | | | | |
| **PRU** | **Pruhonice** | **146.82** | **345** | *e*PKP | **PKPdf** | **01 22 12.5** | **-2.4** |
| PRU | | | | *e*PKP | **PKPbc** | **01 22 12.8** | **-5.0** |
| **TREC** | **Trest** | **147.22** | **344** | *e*PKP | **PKPdf** | **01 22 11.0** | **-4.7** |
| **ZVC** | **Zvikov** | **147.41** | **345** | *e*PKP | **PKPdf** | **01 22 10.1** | **-5.8** |

*NEIC **19** 01:04:36.1±2.1, 18°.2S±0°.1×177°.7W±0°.2, h595km±9km, mb4.2/61, Error ellipse: s-maj=25.1km s-min=16.0km az=120.0*
*IDC **19** 01:04:39.0±4.9, 17°.99S×177°.95W, h625km±54km, mb3.6/8, mbtmp4.5/8, Error ellipse: s-maj=43.0km s-min=21.7km az=153.0*
**ISC 19 01:04:36.6±0.5, 18°.1S±0°.1×177°.8W±0°.1, h600km, n106, σ0s74/105, mb4.2/38, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.97** | **275** | P | **P** | **01 06 02.7** | **+0.7** |
| **PINNC** | **Pines Island,** | **14.54** | **250** | P | **P** | **01 07 41.6** | **+1.1** |
| **BHW** | **Baring Head** | **24.05** | **194** | P | **P** | **01 09 05.5** | **-0.7** |
| **QRZ** | **Quartz Range** | **24.11** | **198** | P | **P** | **01 09 07.1** | **+0.3** |
| **NNZ** | **Nelson** | **24.24** | **196** | P | **P** | **01 09 06.8** | **-1.1** |
| **THZ** | **Tophouse** | **24.87** | **197** | P | **P** | **01 09 14.0** | **+0.4** |
| **DSZ** | **Denniston Nort** | **25.18** | **199** | P | **P** | **01 09 16.1** | **-0.1** |
| DSZ | | | | IAmb | IAmb | 01 09 19.0 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.00** | **197** | P | **P** | **01 09 24.3** | **+0.8** |
| **INZ** | **Inchbonnie** | **26.18** | **198** | P | **P** | **01 09 24.1** | **-0.9** |
| **FOZ** | **Fox Glacier** | **27.41** | **200** | P | **P** | **01 09 35.3** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **29.60** | **200** | P | **P** | **01 09 55.4** | **+0.7** |
| **CAN** | **Canberra** | **34.04** | **233** | P | **P** | **01 10 33.6** | **+1.0** |
| **COEN** | **Coen** | **37.69** | **270** | P | **P** | **01 11 03.5** | **+0.7** |
| **WRAB** | **Tennant Creek** | **45.16** | **260** | P | **P** | **01 11 58.6** | **-2.9** |
| **WRA** | **Warramunga Arr** | **45.17** | **260** | P | **P** | **01 12 01.3** | **-0.2** |
| | comp=Z,3.5nm,0.4s,baz=95,slow=7.1,SNR=2.3 | | | | | | |
| | comp=Z,3.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.30** | **254** | P | **P** | **01 12 02.2** | **-0.3** |
| | comp=Z,4.6nm,0.4s,baz=89,slow=14,SNR=4.5 | | | | | | |
| | comp=Z,4.6nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.42** | **323** | P | **P** | **01 14 39.6** | **-0.2** |
| | comp=Z,3.4nm,0.9s,baz=161,slow=6.1,SNR=7.2 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **71.74** | **331** | P | **P** | **01 15 00.7** | **+1.5** |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **01 14 59.8** | **-0.4** |
| QSPA | | | | IAmb | IAmb | 01 15 14.0 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.03** | **345** | P | **P** | **01 15 11.2** | **-0.9** |
| | comp=Z,8.1nm,0.8s,baz=107,slow=7.6,SNR=5.9 | | | | | | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **DSP** | **Deep Springs** | **78.81** | **45** | P | **P** | **01 15 39.5** | **+1.0** |
| **YERR** | **Yerington** | **78.87** | **43** | P | **P** | **01 15 39.7** | **+0.6** |
| YERR | | | | IAmb | IAmb | 01 15 40.2 | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **LHV** | **Little Huntoon** | **78.94** | **44** | P | **P** | **01 15 40.1** | **+0.9** |
| **NVAR** | **Mina Array Bea** | **79.17** | **44** | P | **P** | **01 15 41.4** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **79.17** | **44** | P | **P** | **01 15 41.3** | **+0.5** |
| | comp=Z,3.0nm,0.7s,baz=225,slow=8.2,SNR=8.7 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **GMN** | **Gold Mountain** | **79.25** | **45** | P | **P** | **01 15 41.7** | **+0.5** |
| **NV11** | **Mina Array Sit** | **79.27** | **44** | P | **P** | **01 15 42.0** | **+0.8** |
| **WCT** | **Wildcat Mounta** | **79.41** | **46** | P | **P** | **01 15 42.6** | **+0.7** |
| **M14K** | **Bethel** | **79.62** | **8** | P | **P** | **01 15 42.2** | **-0.1** |
| M14K | | | | IAmb | IAmb | 01 15 56.1 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **L14K** | **Kuka Creek** | **80.11** | **7** | P | **P** | **01 15 45.5** | **+0.7** |
| L14K | | | | IAmb | IAmb | 01 16 04.7 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **M16K** | **Timber Creek** | **80.31** | **9** | P | **P** | **01 15 46.3** | **+0.5** |
| M16K | | | | IAmb | IAmb | 01 15 57.3 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **CNPM** | **China Poot** | **80.35** | **13** | P | **P** | **01 15 45.3** | **-0.8** |
| CNPM | | | | IAmb | IAmb | 01 15 53.5 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **PINE** | **Pine Mountain** | **80.59** | **38** | P | **P** | **01 15 48.5** | **+0.5** |
| PINE | | | | IAmb | IAmb | 01 16 01.2 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **E03A** | **Lebam** | **80.79** | **35** | P | **P** | **01 15 49.2** | **+0.5** |
| E03A | | | | IAmb | IAmb | 01 15 50.2 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **M17K** | **Holitna River** | **80.90** | **10** | P | **P** | **01 15 49.3** | **+0.4** |
| M17K | | | | IAmb | IAmb | 01 15 50.7 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **R11B** | **Troy Canyon,** | **80.93** | **45** | P | **P** | **01 15 50.2** | **+0.3** |
| **BMN** | **Battle Mountai** | **80.97** | **42** | P | **P** | **01 15 50.5** | **+0.5** |
| **NLWA** | **Neilton Lookou** | **81.16** | **34** | P | **P** | **01 15 51.4** | **+0.8** |
| **K15K** | **Wolf Creek Mou** | **81.17** | **8** | P | **P** | **01 15 51.1** | **+0.9** |
| **I07A** | **Izee** | **81.61** | **38** | P | **P** | **01 15 53.9** | **+0.8** |
| I07A | | | | IAmb | IAmb | 01 15 54.8 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **Q12A** | **Willow Creek R** | **81.79** | **44** | P | **P** | **01 15 54.6** | **+0.3** |
| **L18K** | **Granite Mounta** | **81.80** | **10** | P | **P** | **01 15 53.8** | **+0.3** |
| L18K | | | | IAmb | IAmb | 01 15 54.4 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **LCMT** | **Little Creek M** | **81.85** | **47** | P | **P** | **01 15 55.2** | **+0.6** |
| **BELA** | **Belgrano 2** | **81.89** | **173** | P | **P** | **01 15 53.7** | **-0.2** |
| **M19K** | **Big River Lodg** | **81.90** | **11** | P | **P** | **01 15 53.3** | **-0.7** |
| **K17K** | **Iditarod** | **82.02** | **9** | P | **P** | **01 15 54.8** | **+0.2** |
| K17K | | | | IAmb | IAmb | 01 16 04.7 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **CCUT** | **Cedar City** | **82.03** | **46** | P | **P** | **01 15 56.4** | **+0.8** |
| **L19K** | **White Mountain** | **82.07** | **11** | | **P** | **01 15 54.9** | **0.0** |
| L19K | | | | IAmb | IAmb | 01 15 55.0 | |
| | comp=Z,6.4nm,1.0s | | | | | | |
| **PSUT** | **Pine Spring** | **82.19** | **45** | P | **P** | **01 15 56.9** | **+0.6** |
| **U15A** | **North Rim** | **82.22** | **48** | P | **P** | **01 15 57.5** | **+0.9** |
| U15A | | | | IAmb | IAmb | 01 15 58.9 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **J16K** | **Anvik River** | **82.24** | **8** | P | **P** | **01 15 56.1** | **+0.4** |
| J16K | | | | IAmb | IAmb | 01 16 00.1 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **GLI** | **Glacier Island** | **82.50** | **15** | P | **P** | **01 15 55.6** | **-1.5** |
| GLI | | | | IAmb | IAmb | 01 16 02.2 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **J17K** | **VABM Dome** | **82.56** | **8** | P | **P** | **01 15 57.1** | **-0.1** |
| **G08A** | **Pilot Rock** | **82.62** | **38** | P | **P** | **01 15 58.3** | **+0.2** |
| **GHO** | **Glory Hole Cre** | **82.87** | **13** | P | **P** | **01 15 58.4** | **-0.6** |
| GHO | | | | IAmb | IAmb | 01 15 59.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **J18K** | **Innoko River** | **82.97** | **9** | P | **P** | **01 15 59.3** | **0.0** |
| J18K | | | | IAmb | IAmb | 01 16 00.2 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **SNH** | **Sunshine Point** | **83.00** | **17** | P | **P** | **01 15 59.5** | **-0.1** |
| **MESA** | **MESA** | **83.25** | **17** | P | **P** | **01 16 01.0** | **-0.1** |
| **SCM** | **Sheep Creek Mo** | **83.29** | **14** | P | **P** | **01 16 00.6** | **-0.5** |
| **K20K** | **Telida** | **83.30** | **11** | P | **P** | **01 16 00.8** | **-0.2** |
| K20K | | | | IAmb | IAmb | 01 16 00.9 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **J19K** | **Poorman** | **83.64** | **10** | P | **P** | **01 16 02.7** | **+0.1** |
| **TABL** | **Table Mountain** | **83.69** | **17** | P | **P** | **01 16 02.6** | **-0.6** |
| **VRDI** | **Verde Repeater** | **83.72** | **16** | P | **P** | **01 16 02.7** | **-0.6** |
| **N25K** | **Chitina, Valde** | **83.75** | **15** | P | **P** | **01 16 03.0** | **-0.3** |
| **GRNC** | **Granite Creek** | **83.76** | **17** | P | **P** | **01 16 03.4** | **-0.2** |
| GRNC | | | | IAmb | IAmb | 01 16 03.7 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **GLB** | **Gilahina Butte** | **83.81** | **16** | P | **P** | **01 16 03.4** | **-0.2** |
| GLB | | | | IAmb | IAmb | 01 16 04.0 | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **J20K** | **Nowinta River** | **84.05** | **10** | P | **P** | **01 16 04.4** | **-0.2** |
| **CTGM** | **Chitina Glacie** | **84.07** | **17** | P | **P** | **01 16 04.7** | **-0.3** |
| CTGM | | | | IAmb | IAmb | 01 16 05.0 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **84.54** | **11** | P | **P** | **01 16 07.2** | **+0.1** |
| **M27K** | **Edge Creek, AK** | **85.08** | **16** | P | **P** | **01 16 10.1** | **+0.2** |
| M27K | | | | IAmb | IAmb | 01 16 10.8 | |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **Q32M** | **Nakina River** | **85.36** | **22** | P | **P** | **01 16 11.6** | **+0.2** |
| **TX31** | **Lajitas Ar. Si** | **85.61** | **57** | P | **P** | **01 16 14.9** | **+1.7** |
| TX31 | | | | IAmb | IAmb | 01 16 16.2 | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.62** | **57** | P | **P** | **01 16 14.6** | **+1.4** |
| | comp=Z,3.6nm,0.7s,baz=215,slow=8.5,SNR=12 | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **85.64** | **10** | P | **P** | **01 16 12.1** | **-0.2** |
| **CCB** | **Clear Creek Bu** | **85.66** | **12** | P | **P** | **01 16 11.5** | **-0.9** |
| CCB | | | | IAmb | IAmb | 01 16 11.9 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **L27K** | **Beaver Creek,** | **85.67** | **16** | P | **P** | **01 16 12.5** | **-0.1** |
| **ILAR** | **Eielson Array** | **85.96** | **13** | P | **P** | **01 16 12.8** | **-1.1** |
| | comp=Z,1.5nm,0.4s,baz=216,slow=5.0,SNR=14 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **YHL** | **Hebgen Lake** | **87.06** | **41** | P | **P** | **01 16 21.0** | **+1.1** |
| **OVMT** | **Ovando** | **87.06** | **38** | P | **P** | **01 16 19.1** | **-0.6** |
| **PD31** | **Pinedale Array** | **87.10** | **43** | P | **P** | **01 16 20.3** | **+0.2** |
| **PDAR** | **Pinedale Array** | **87.10** | **43** | P | **P** | **01 16 20.1** | **0.0** |
| | comp=Z,1.2nm,0.6s,baz=201,slow=3.0,SNR=4.7 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **87.26** | **15** | P | **P** | **01 16 20.0** | **+0.1** |
| **K29M** | **Barlow Dome** | **87.45** | **17** | P | **P** | **01 16 20.9** | **-0.1** |
| **D19K** | **Kuna River** | **87.54** | **7** | P | **P** | **01 16 20.9** | **-0.4** |
| D19K | | | | IAmb | IAmb | 01 16 21.5 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **88.07** | **9** | P | **P** | **01 16 23.2** | **-0.5** |
| **I28M** | **Miner Creek** | **88.11** | **15** | P | **P** | **01 16 23.9** | **-0.2** |
| **F24K** | **Squaw Lake** | **88.18** | **11** | P | **P** | **01 16 24.1** | **-0.2** |
| F24K | | | | IAmb | IAmb | 01 16 29.3 | |
| | comp=Z,2.8nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **88.62** | **9** | P | **P** | **01 16 26.4** | **+0.1** |
| D22K | | | | IAmb | IAmb | 01 16 26.9 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **88.74** | **12** | P | **P** | **01 16 27.2** | **+0.3** |
| **H29M** | **Whitestone** | **89.12** | **15** | P | **P** | **01 16 28.5** | **-0.1** |
| H29M | | | | IAmb | IAmb | 01 16 29.8 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.70** | **314** | PKiKP | **PKiKP** | **01 21 58.4** | **-1.9** |
| | comp=Z,0.5nm,0.5s,baz=145,slow=0.7,SNR=4.1 | | | | | | |
| KURBB | **Kurchatov Arra** | **112.42** | **318** | PKiKP | **PKiKP** | **01 22 03.6** | **-1.7** |
| | comp=Z,0.4nm,0.6s,baz=151,slow=2.1,SNR=1.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.37** | **321** | PKP | **PKPdf** | **01 22 13.3** | **-1.4** |
| | comp=Z,1.0nm,0.4s,baz=101,slow=2.8,SNR=6.0 | | | | | | |
| ARCES | **ARCESS Array B** | **126.62** | **350** | PKP | **PKPdf** | **01 22 31.2** | **-0.8** |
| | comp=Z,2.4nm,0.8s,baz=51,slow=0.7,SNR=5.2 | | | | | | |
| **FINES** | **FINESS Array B** | **133.54** | **344** | PKP | **PKPdf** | **01 22 44.2** | **-1.1** |
| | comp=Z,2.3nm,0.7s,baz=64,slow=3.2,SNR=3.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.62** | **5** | PKhKP | PKPpre | 01 22 56.2 | |
| | comp=Z,1.0nm,0.6s,baz=317,slow=3.2,SNR=6.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.34** | **315** | PKPbc | **PKPbc** | **01 23 08.3** | **-0.5** |
| | comp=Z,3.3nm,0.7s,baz=127,slow=3.8,SNR=8.6 | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.91** | **344** | *e*PKP | **PKPbc** | **01 23 10.0** | **0.0** |
| **KRLC** | **Kraliky** | **146.04** | **343** | *e*PKP | **PKPbc** | **01 23 10.5** | **+0.2** |
| **PVCC** | **Panska Ves** | **146.18** | **346** | *e*PKP | **PKPbc** | **01 23 10.8** | **+0.2** |
| **HSKC** | **Hora Svate Kat** | **146.36** | **347** | *e*PKP | **PKPbc** | **01 23 11.2** | **0.0** |
| **PRU** | **Pruhonice** | **146.69** | **345** | *e*PKP | **PKPbc** | **01 23 11.9** | **-0.1** |
| **MMAI** | **Mount Meron Ar** | **146.74** | **303** | PKPbc | **PKPbc** | **01 23 12.5** | **-0.3** |
| | comp=Z,3.6nm,0.5s,baz=75,slow=7.8,SNR=12 | | | | | | |
| **TREC** | **Trest** | **147.10** | **344** | *e*PKP | **PKPbc** | **01 23 12.8** | **-0.4** |
| **KHC** | **Kasperske Hory** | **147.72** | **346** | *e*PKP | **PKPbc** | **01 23 14.1** | **-0.7** |
| **GERES** | **GERESS Array B** | **147.96** | **346** | PKPbc | **PKPbc** | **01 23 14.7** | **-0.8** |
| | comp=Z,3.1nm,0.7s,baz=11,slow=3.2,SNR=7.5 | | | | | | |

*ATH **19** 01:06:33.8, 37°.45N×20°.41E, h7km±2km, ML3.5/17, Manual Solution by N.Liadopoulou This location: 2020/06/16 07:37:36 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 1 km; Longitude uncertainty: 3 km*
*THE **19** 01:06:37.1, 37°.52N×20°.61E, h7km±1km, ML2.7/7, Error ellipse: s-maj=2.8km s-min=1.0km az=61.0*
**ISC 19 01:06:34.4±1.8, 37°.46N±0°.05×20°.45E±0°.06, h5km±10km, n35, σ0s56/55, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LTHK** | **Lithakia** | **0.40** | **51** | P | **Pg** | **01 06 42.0** | **-0.1** |
| LTHK | | | | S | **Sg** | **01 06 47.1** | **-0.2** |
| | 4µm,0.2s | | | | | | |
| **LTHK** | **Lithakia** | **0.40** | **51** | P | **Pg** | **01 06 42.1** | **-0.1** |
| LTHK | | | | S | **Sg** | **01 06 47.1** | **-0.2** |
| **PSDA** | **Pessada-Kefalo** | **0.66** | **9** | P | **Pb** | **01 06 48.6** | **+0.2** |
| PSDA | | | | S | **Sg** | **01 06 56.7** | **+0.9** |
| | 602nm,0.6s | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **0.66** | **9** | P | **Pg** | **01 06 46.9** | **-0.3** |
| PSDA | | | | S | **Sg** | **01 06 56.4** | **+0.7** |
| **RTZL** | **Ratzakli, Kefa** | **0.67** | **23** | P | **Pg** | **01 06 47.8** | **+0.6** |
| RTZL | | | | S | **Sg** | **01 06 56.3** | **+0.4** |
| | 208nm,0.7s | | | | | | |
| **LXRA** | **Lixouri, Kepha** | **0.74** | **359** | P | **Pg** | **01 06 47.9** | **-0.7** |
| LXRA | | | | S | **Sg** | **01 06 57.7** | **-0.6** |
| **DMLN** | **Damoulianata-K** | **0.78** | **356** | P | **Pn** | **01 06 51.7** | **-0.3** |
| DMLN | | | | S | **Sb** | **01 07 01.4** | **+0.1** |
| | 770nm,0.6s | | | | | | |
| **DMLN** | **Damoulianata-K** | **0.78** | **356** | P | **Pg** | **01 06 49.1** |

comp=Z,0.2nm,0.3s,baz=93,slow=8.8,SNR=5.4
**CTAO Charters Tower 33.22 261** P **P** **01 13 18.9 -0.2**
CTAO IAmb IAmb 01 13 37.5
comp=Z,14nm,1.1s
**COEN Coen 36.89 271** P **P** **01 13 49.5 0.0**
**STKA Stephens Creek 38.41 241** P **P** **01 14 02.5 +0.8**
**BBOO Buckleboo 43.18 241** P **P** **01 14 39.8 +0.3**
BBOO IAmb IAmb 01 14 51.7
comp=Z,47nm,1.5s
**WR0 Warramunga Arr 44.22 260** P **P** **01 14 47.3 -0.4**
**WB0 Warramunga Arr 44.37 260** P **P** **01 14 48.4 -0.5**
WB0 IAmb IAmb 01 15 02.5
comp=Z,23nm,1.2s
**WB2 Warramunga Arr 44.40 260** P **P** **01 14 48.4 -0.7**
WB2 IAmb IAmb 01 14 49.7
comp=Z,22nm,1.4s
**WRA Warramunga Arr 44.41 260** P **P** **01 14 48.5 -0.7**
comp=Z,5.0nm,0.5s,baz=92,slow=6.8,SNR=19
comp=Z,5.0nm,0.5s
**AS31 Alice Springs 44.56 254** P **P** **01 14 49.7 -0.6**
AS31 IAmb IAmb 01 14 50.8
comp=Z,13nm,0.7s
**ASAR Alice Springs 44.56 254** P **P** **01 14 50.6 +0.2**
**ASAR Alice Springs 44.56 254** P **P** **01 14 50.3 0.0**
comp=Z,48nm,0.5s,baz=89,slow=7.8,SNR=49
**MTN Manton Dam 48.58 269** P **P** **01 15 20.2 -0.5**
MTN IAmb IAmb 01 15 32.1
comp=Z,26nm,1.3s
**FORT Forrest 49.78 245** P **P** **01 15 29.0 -0.3**
FORT IAmb IAmb 01 15 36.4
comp=Z,28nm,0.9s
**KNRA Kununurra 50.27 264** P **P** **01 15 33.0 0.0**
KNRA IAmb IAmb 01 15 33.3
comp=Z,13nm,0.8s
**FAKI Fak Fak 50.38 281** P **P** **01 15 33.8 -0.1**
FAKI IAmb IAmb 01 15 36.2
comp=Z,35nm,1.2s
**FITZ Fitzroy Crossi 52.80 261** P **P** **01 15 51.3 +0.1**
**SOEI Soe 55.85 270** P **P** **01 16 13.7 +0.8**
**MJAR Matsushiro Arr 67.83 324** P **P** **01 17 29.7 -0.2**
comp=Z,4.8nm,0.8s,baz=159,slow=5.8,SNR=9.1
comp=Z,4.8nm,0.8s
**PETK Petropavlovsk- 73.69 345** P **P** **01 18 04.5 +0.5**
comp=Z,3.1nm,0.6s,baz=105,slow=8.1,SNR=4.3
comp=Z,3.1nm,0.6s
**M16K Timber Creek 80.30 10** P **P** **01 18 41.2 +1.5**
M16K IAmb IAmb 01 18 43.6
comp=Z,32nm,1.4s
**K15K Wolf Creek Mou 81.14 8** P **P** **01 18 45.7 +1.7**
K15K IAmb IAmb 01 18 59.5
comp=Z,44nm,1.4s
**HG4B Hotspring 81.18 27** P **P** **01 18 42.2 -2.2**
**L18K Granite Mounta 81.80 10** **P** **01 18 48.9 +1.6**
L18K IAmb IAmb 01 18 51.3
comp=Z,38nm,1.4s
**M19K Big River Lodg 81.92 11** P **P** **01 18 48.6 +0.7**
**K17K Iditarod 82.01 9** P **P** **01 18 49.5 +1.2**
**BELA Belgrano 2 82.12 173** P **P** **01 18 49.6 +0.7**
**J16K Anvik River 82.22 8** P **P** **01 18 50.8 +1.4**
**J17K VABM Dome 82.54 9** P **P** **01 18 52.2 +1.2**
J17K IAmb IAmb 01 19 07.5
comp=Z,38nm,1.5s
**GHO Glory Hole Cre 82.93 14** P **P** **01 18 53.9 +0.8**
GHO IAmb IAmb 01 19 12.1
comp=Z,25nm,1.3s
**J18K Innoko River 82.97 10** P **P** **01 18 54.2 +1.0**
**K20K Telida 83.31 11** P **P** **01 18 55.8 +0.9**
**SCM Sheep Creek Mo 83.35 14** P **P** **01 18 55.7 +0.4**
**J19K Poorman 83.64 10** P **P** **01 18 57.6 +1.1**
J19K IAmb IAmb 01 19 11.4
comp=Z,19nm,1.5s
**N25K Chitina, Valde 83.83 16** P **P** **01 18 58.1 +0.5**
N25K IAmb IAmb 01 19 06.3
comp=Z,20nm,1.4s
**GLB Gilahina Butte 83.89 16** P **P** **01 18 58.6 +0.7**
**J20K Nowinta River 84.06 11** P **P** **01 18 57.8 -0.7**
**Q32M Nakina River 85.53 22** P **P** **01 19 07.4 +1.3**
Q32M IAmb IAmb 01 19 24.5
comp=Z,22nm,1.4s
**CCB Clear Creek Bu 85.70 13** P **P** **01 19 06.5 0.0**
CCB IAmb IAmb 01 19 16.3
comp=Z,18nm,1.5s
**IMAR Indian Mountai 85.79 10** P **P** **01 19 07.4 +0.5**
**F19K Shaleruckik Mo 85.98 8** P **P** **01 19 08.3 +0.5**
**ILAR Eielson Array 86.00 13** P **P** **01 19 08.2 +0.2**
comp=Z,2.0nm,1.1s,baz=224,slow=5.1,SNR=4.5
comp=Z,2.0nm,1.1s
**J25K Salcha River, 86.20 14** P **P** **01 19 09.6 +0.6**
J25K IAmb IAmb 01 19 19.4
comp=Z,19nm,1.5s
**TXAR Lajitas Array 86.22 58** P **P** **01 19 10.1 +0.1**
comp=Z,1.1nm,1.0s,baz=205,slow=5.5,SNR=1.3
comp=Z,1.1nm,1.0s
**G21K Allakaket 86.32 10** P **P** **01 19 10.1 +0.7**
**J26L Joseph Creek 86.53 14** P **P** **01 19 11.7 +1.1**
J26L IAmb IAmb 01 19 31.5
comp=Z,14nm,1.4s
**E19K Redstone River 86.64 8** P **P** **01 19 11.4 +0.4**
E19K IAmb IAmb 01 19 16.5
comp=Z,14nm,1.4s
**PHRA Phrae 87.57 290** P **P** **01 19 15.2 -1.1**
**I28M Miner Creek 88.19 15** P **P** **01 19 19.0 +0.7**
**F24K Squaw Lake 88.20 11** P **P** **01 19 19.3 +1.0**
**BVAR Borovoye Array 116.76 321** PKP **PKPdf** **01 25 07.1 -0.6**
comp=Z,0.4nm,0.3s,baz=104,slow=3.1,SNR=1.5
**ARCES ARCESS Array B 126.35 350** PKP **PKPdf** **01 25 25.0 -0.6**
comp=Z,1.6nm,0.9s,baz=26,slow=3.1,SNR=3.8
**UPC Upice 145.50 343** *e*PKP **PKPab** **01 26 03.9 -0.4**
**DPC Dobruska-Polom 145.55 343** *e*PKP **PKPab** **01 26 04.5 0.0**
**KRLC Kraliky 145.67 342** *e*PKP **PKPab** **01 26 04.5 -0.5**
**PVCC Panska Ves 145.85 345** *e*PKP **PKPab** **01 26 05.3 -0.3**
**MMAI Mount Meron Ar 146.00 303** **PKPbc** **01 26 05.8 +0.9**
**MMAI Mount Meron Ar 146.00 303** SKKP **PKPbc** **01 26 05.8 +0.9**
comp=Z,2.6nm,0.5s,baz=64,slow=5.7,SNR=4.7
**PRU Pruhonice 146.36 345** *e*PKP **PKPbc** **01 26 06.2 +1.0**
**KHC Kasperske Hory 147.39 345** *e*PKP **PKiKP** **01 26 09.2 -0.4**

*AZER **19** 01:08:55.4, 38°.56N×44°.97E, h4km, ml3.6*
*AFAD **19** 01:08:56.3±0.0, 38°.50N×45°.09E, h6km±3km, ML3.1*
*TEH **19** 01:08:57.7, 38°.42N×45°.11E, h8km±72km, ML2.4*
**ISC 19 01:08:56.2±1.1, 38°.51N±0°.03×45°.08E±0°.02, h3km±11km, n28, σ1°17/47, Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ISHB** | **Shabestar** | **0.48** | **118** | Pg | **Pg** | **01 09 05.8** | **+0.4** |
| **IMRD** | **Marand** | **0.53** | **67** | Pg | **Pb** | **01 09 08.2** | **0.0** |
| IMRD | | | | Sg | **Sb** | **01 09 16.5** | **+0.2** |
| **ORD** | **Ordubad** | **0.82** | **59** | P | **Pn** | **01 09 13.8** | **-1.0** |
| ORD | | | | S | **Sn** | **01 09 26.1** | **-1.4** |
| **OZAP** | **Van, Ozalp-Mer** | **0.87** | **280** | P | **Pb** | **01 09 14.0** | **-0.1** |
| OZAP | | | | S | **Sb** | **01 09 25.8** | **-0.4** |
| OZAP | | | | *i* AML | AML | 01 09 46.0 | |
| | comp=N,732nm,1.0s | | | | | | |
| OZAP | | | | *i* AML | AML | 01 09 46.0 | |
| | comp=E,644nm,3.3s | | | | | | |
| **ITBZ** | **Tabriz** | **0.88** | **108** | Pg | **Pg** | **01 09 12.9** | **-0.2** |
| **SBZ** | **Shahbuz** | **0.96** | **22** | P | **Pn** | **01 09 16.4** | **-0.3** |
| SBZ | | | | S | **Sn** | **01 09 31.8** | **+0.9** |
| **IAZR** | **Azarshahr** | **1.09** | **139** | Pg | **Pb** | **01 09 17.4** | **-0.5** |
| **CLDR** | **Caldiran** | **1.11** | **305** | P | **Pg** | **01 09 13.7** | **-3.8** |
| CLDR | | | | S | **Sg** | **01 09 30.3** | **-1.6** |
| **YOVA** | **Hakkari_Yksek** | **1.11** | **214** | P | **Pg** | **01 09 17.3** | **-0.3** |
| YOVA | | | | S | **Sn** | **01 09 34.3** | **-0.6** |
| YOVA | | | | *i* AML | AML | 01 10 02.0 | |
| | comp=E,407nm,2.8s | | | | | | |
| **HYR** | **Heyderabad** | **1.22** | **352** | P | **Pn** | **01 09 20.5** | **+0.2** |
| HYR | | | | S | **Sn** | **01 09 38.5** | **+1.2** |
| **VMUR** | **Van-Muradiye** | **1.27** | **292** | P | **Pb** | **01 09 22.1** | **+1.1** |
| VMUR | | | | S | **Sn** | **01 09 39.5** | **+0.7** |
| VMUR | | | | *i* AML | AML | 01 10 10.0 | |
| | comp=N,603nm,1.4s | | | | | | |
| **TVAN** | **Van** | **1.32** | **271** | P | **Pg** | **01 09 21.8** | **+0.3** |
| TVAN | | | | *i* AML | AML | 01 10 09.0 | |
| | comp=N,271nm,1.4s | | | | | | |
| TVAN | | | | *i* AML | AML | 01 10 09.0 | |
| | comp=E,388nm,1.4s | | | | | | |
| **HAKT** | **HAKKARI** | **1.45** | **229** | P | **Pn** | **01 09 23.4** | **0.0** |
| HAKT | | | | S | **Sg** | **01 09 44.6** | **+1.9** |
| HAKT | | | | *i* AML | AML | 01 10 22.0 | |
| | comp=E,384nm,1.9s | | | | | | |
| **IHRS** | **Heris** | **1.55** | **97** | Pg | **Pg** | **01 09 26.7** | **+0.8** |
| **GEVA** | **Gevas** | **1.60** | **264** | P | **Pb** | **01 09 26.8** | **+0.2** |
| GEVA | | | | S | **Sg** | **01 09 49.5** | **+1.8** |
| GEVA | | | | *i* AML | AML | 01 10 28.0 | |
| | comp=E,385nm,1.8s | | | | | | |
| **QRD** | **Qoradiz** | **1.98** | **61** | P | **Pg** | **01 09 34.7** | **+0.4** |
| QRD | | | | S | **Sg** | **01 10 02.4** | **+2.4** |
| **IHSH** | **Hashtrud** | **2.10** | **124** | Pn | **Pb** | **01 09 34.4** | **-0.7** |
| **AGDM** | **Agdam** | **2.24** | **44** | P | **Pb** | **01 09 38.0** | **+0.7** |
| AGDM | | | | S | **Sg** | **01 10 09.1** | **+0.9** |
| **GDB** | **GEDABAY** | **2.27** | **13** | P | **Pb** | **01 09 38.8** | **+0.9** |
| GDB | | | | S | **Sg** | **01 10 09.5** | **+0.4** |
| **BLQ** | **Beylaqan** | **2.27** | **57** | S | **Sg** | **01 10 10.5** | **+1.3** |
| **GANJ** | **Ganja** | **2.34** | **24** | P | **Pb** | **01 09 38.9** | **-0.1** |
| GANJ | | | | S | **Sg** | **01 10 12.2** | **+0.9** |
| **YRD** | **Yardimli** | **2.50** | **80** | P | **Pb** | **01 09 40.9** | **-1.0** |
| YRD | | | | S | **Sg** | **01 10 15.5** | **-1.2** |
| **QZX** | **Qazax, Azerbai** | **2.55** | **5** | P | **Pn** | **01 09 40.0** | **+1.4** |
| QZX | | | | S | **Sb** | **01 10 14.8** | **+0.3** |
| **LRK** | **Lerik** | **2.56** | **86** | P | **Pb** | **01 09 43.3** | **+0.5** |
| LRK | | | | S | **Sg** | **01 10 18.5** | **+0.2** |
| **ZRD** | **Zardab** | **2.68** | **48** | P | **Pb** | **01 09 45.5** | **+0.7** |
| ZRD | | | | S | **Sg** | **01 10 21.4** | **-0.9** |
| **GLBA** | **Clilabad** | **2.68** | **73** | S | **Sg** | **01 10 20.1** | **-2.4** |
| **ASTR** | **Astara** | **2.91** | **88** | P | **Pb** | **01 09 47.8** | **-0.9** |
| ASTR | | | | S | **Sg** | **01 10 30.2** | **+0.6** |
| **SEKA** | **Sheki** | **3.15** | **30** | S | **Sb** | **01 10 30.2** | **-1.5** |

*IDC **19** 01:09:02.4±10.0, 17°.97S×178°.91W, h590km±120km, mb3.5/7, mbtmp4.5/7, Error ellipse: s-maj=87.4km s-min=37.5km az=147.0*
**ISC 19 01:09:00.0±1.7, 17°.9S±0°.5×178°.9W±0°.2, h562km, n9, σ0°76/9, mb3.9/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **33.03** | **261** | P | **P** | **01 14 50.0** | **+0.1** |
| | 0.3nm,0.3s,baz=78,slow=9.7,SNR=5.7 | | | | | | |
| **PMG** | **Port Moresby** | **34.04** | **280** | P | **P** | **01 14 59.3** | **+1.0** |
| | 22nm,1.0s,baz=104,slow=9.9,SNR=3.6 | | | | | | |
| | 22nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.22** | **260** | P | **P** | **01 16 19.8** | **-0.5** |
| | 2.0nm,0.5s,baz=96,slow=7.7,SNR=7.6 | | | | | | |
| | 2.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.39** | **254** | P | **P** | **01 16 21.1** | **-0.4** |
| | 14nm,0.6s,baz=89,slow=8.3,SNR=12 | | | | | | |
| | 14nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.69** | **44** | P | **P** | **01 20 10.9** | **+0.7** |
| | 1.1nm,0.6s,baz=224,slow=6.3,SNR=4.1 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.95** | **13** | P | **P** | **01 20 39.7** | **-0.9** |
| | 8.8nm,1.2s,baz=223,slow=4.7,SNR=2.3 | | | | | | |
| | 8.8nm,1.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.34** | **58** | P | **P** | **01 20 44.0** | **+0.5** |
| | 1.7nm,0.8s,baz=225,slow=5.0,SNR=5.4 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.62** | **44** | P | **P** | **01 20 49.2** | **-0.1** |
| | 0.7nm,0.6s,baz=201,slow=3.4,SNR=2.3 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.46** | **315** | PKP | **PKPab** | **01 27 33.2** | **-0.6** |
| | 0.8nm,0.9s,baz=139,slow=3.5,SNR=1.7 | | | | | | |

*IDC **19** 01:10:19.3±2.2, 18°.10S×177°.99W, h556km±25km, mb3.9/18, mbtmp4.8/19, Error ellipse: s-maj=13.1km s-min=12.3km az=18.0*
*NEIC **19** 01:10:20.4±1.7, 18°.2S±0°.1×178°.0W±0°.1, h562km±8km, mb4.8/27, Error ellipse: s-maj=19.8km s-min=16.4km az=153.0*
**ISC 19 01:10:21.6±0.4, 18°.10S±0°.08×178°.00W±0°.08, h590km, n127, σ0°93/126, mb4.7/34, 14C-8D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.78** | **275** | P | **P** | **01 11 44.2** | **-0.8** |
| **AFI** | **Afiamalu** | **7.29** | **56** | P | **P** | **01 12 10.9** | **-3.1** |
| **LIFNC** | **LIFOU** | **14.18** | **257** | | **P** | **01 13 19.9** | **-2.5** |
| **PINNC** | **Pines Island,** | **14.37** | **249** | | **P** | **01 13 22.4** | **-1.8** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | **P** | **01 13 31.1** | **-0.4** |
| DZM | | | | IAmb | IAmb | 01 13 33.3 | |
| | comp=Z,30nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | **P** | **01 13 28.7** | **-2.8** |
| | comp=Z,17nm,0.5s,baz=85,slow=17,SNR=31 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.90** | **259** | P | **P** | **01 13 48.2** | **+0.5** |
| **URZ** | **Urusra** | **20.54** | **191** | P | **P** | **01 14 19.1** | **-1.4** |
| | comp=Z,3.9nm,0.5s,baz=348,slow=3.4,SNR=6.2 | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **KHZ** | **Kahutara** | **25.29** | **195** | P | **P** | **01 15 01.0** | **-1.7** |
| **PPT** | **Papeete** | **27.05** | **93** | P | **P** | **01 15 18.1** | **-0.4** |
| | comp=Z,25nm,0.7s,baz=196,slow=13,SNR=5.6 | | | | | | |
| | comp=Z,25nm,0.7s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.06** | **93** | P | **P** | **01 15 19.2** | **+0.5** |
| PPTF | | | | IAmb | IAmb | 01 15 24.6 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **EIDS** | **Eidsvold** | **29.57** | **250** | P | **P** | **01 15 39.9** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 01 15 40.5 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **30.18** | **240** | P | **P** | **01 15 46.3** | **+0.6** |
| ARMA | | | | IAmb | IAmb | 01 15 47.0 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **33.80** | **261** | P | **P** | **01 16 15.8** | **-0.5** |
| | comp=Z,1.7nm,0.7s,baz=98,slow=9.9,SNR=22 | | | | | | |
| **CTAO** | **Charters Tower** | **33.80** | **261** | P | **P** | **01 16 15.9** | **-0.3** |
| CTAO | | | | IAmb | IAmb | 01 16 16.7 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **33.80** | **261** | P | **P** | **01 16 15.6** | **-0.7** |
| **CAN** | **Canberra** | **33.90** | **233** | P | **P** | **01 16 17.4** | **+0.4** |
| CAN | | | | IAmb | IAmb | 01 16 18.3 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **33.90** | **233** | P | **P** | **01 16 17.4** | **+0.4** |
| **PMG** | **Port Moresby** | **34.88** | **280** | P | **P** | **01 16 26.0** | **+0.8** |
| **PMG** | **Port Moresby** | **34.88** | **280** | P | **P** | **01 16 26.0** | **+0.8** |
| | comp=Z,81nm,0.8s,baz=83,slow=5.8,SNR=20 | | | | | | |
| | comp=Z,81nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **34.88** | **280** | P | **P** | **01 16 25.7** | **+0.4** |
| **TOO** | **Toolangi** | **37.35** | **231** | P | **P** | **01 16 46.0** | **+0.6** |
| TOO | | | | IAmb | IAmb | 01 16 46.9 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **COEN** | **Coen** | **37.50** | **271** | P | **P** | **01 16 46.9** | **+0.1** |
| **STKA** | **Stephens Creek** | **38.88** | **241** | P | **P** | **01 16 58.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.88** | **241** | P | **P** | **01 16 57.5** | **-0.3** |
| | comp=Z,25nm,0.8s,baz=84,slow=8.6,SNR=19 | | | | | | |
| | comp=Z,25nm,0.8s | | | | | | |
| **WAKE** | **Wake Island** | **40.09** | **337** | P | **P** | **01 17 07.3** | **-0.2** |
| **WRA** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **01 17 45.1** | **-0.7** |
| | comp=Z,15nm,0.7s,baz=96,slow=7.5,SNR=27 | | | | | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **45.12** | **254** | P | **P** | **01 17 46.6** | **-0.2** |
| AS31 | | | | IAmb | IAmb | 01 17 47.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **01 17 46.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **01 17 46.5** | **-0.3** |
| | comp=Z,58nm,0.8s,baz=85,slow=8.7,SNR=58 | | | | | | |
| | comp=Z,58nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **48.30** | **308** | P | **P** | **01 18 11.3** | **+0.6** |
| **GUMO** | **Guam** | **48.30** | **308** | P | **P** | **01 18 10.8** | **+0.1** |
| **MTN** | **Manton Dam** | **49.19** | **268** | P | **P** | **01 18 16.7** | **-0.6** |
| MTN | | | | IAmb | IAmb | 01 18 17.2 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **50.28** | **245** | P | **P** | **01 18 24.5** | **-0.6** |
| FORT | | | | IAmb | IAmb | 01 18 25.3 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.86** | **264** | P | **P** | **01 18 29.2** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 01 18 29.8 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **51.00** | **281** | P | **P** | **01 18 30.4** | **-0.2** |
| FAKI | | | | IAmb | IAmb | 01 18 33.9 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.38** | **261** | P | **P** | **01 18 47.5** | **-0.1** |
| **DRV** | **Dumont d'Urvil** | **55.61** | **199** | P | **P** | **01 19 03.0** | **+0.8** |
| **SOEI** | **Soe** | **56.46** | **270** | P | **P** | **01 19 10.7** | **+1.5** |
| SOEI | | | | IAmb | IAmb | 01 19 10.9 | |
| | comp=Z,37nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.24** | **255** | P | **P** | **01 19 20.6** | **-0.4** |
| **MBWA** | **Marble Bar** | **58.41** | **256** | P | **P** | **01 19 21.8** | **-0.4** |
| **MBWA** | **Marble Bar** | **58.41** | **256** | P | **P** | **01 19 21.4** | **-0.7** |
| **MORW** | **Morawa** | **60.76** | **246** | P | **P** | **01 19 37.3** | **-0.3** |
| **TOLI2** | **Tolitoli** | **63.13** | **281** | | **P** | **01 19 53.2** | **-0.1** |
| **GIRL** | **Giralia** | **63.22** | **253** | P | **P** | **01 19 54.5** | **+0.9** |
| GIRL | | | | IAmb | IAmb | 01 20 07.6 | |
| | comp=Z,47nm,1.1s | | | | | | |
| **CCD** | **Concordia, Ant** | **64.78** | **194** | P | **P** | **01 20 03.9** | **+0.8** |
| **CASY** | **Casey** | **66.13** | **205** | P | **P** | **01 20 11.4** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | **68.29** | **323** | P | **P** | **01 20 24.7** | **-0.1** |
| | comp=Z,6.5nm,0.5s,baz=164,slow=5.9,SNR=27 | | | | | | |
| | comp=Z,6.5nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **68.29** | **323** | P | **P** | **01 20 24.9** | **0.0** |
| MAJO | | | | PcP | **PcP** | **01 20 46.3** | **+0.9** |
| **ASAJ** | **Asahikawa** | **71.63** | **331** | P | **P** | **01 20 45.2** | **+0.8** |
| | comp=Z,9.5nm,0.6s,baz=230,slow=3.0,SNR=8.0 | | | | | | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | **P** | **01 20 47.4** | **+1.2** |
| | comp=Z,16nm,0.9s,baz=314,slow=0.6,SNR=14 | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | **P** | **01 20 47.4** | **+1.2** |
| **TPUB** | **Ta-pu** | **72.69** | **302** | P | **P** | **01 20 50.3** | **-0.7** |
| TPUB | | | | IAmb | IAmb | 01 20 50.8 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.96** | **345** | P | **P** | **01 20 57.5** | **-0.1** |
| | comp=Z,11nm,0.7s,baz=106,slow=7.5,SNR=14 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **75.10** | **318** | P | **P** | **01 21 05.2** | **+1.0** |
| | comp=Z,1.5nm,0.6s,baz=131,slow=6.4,SNR=7.5 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.99** | **326** | P | **P** | **01 21 15.4** | **+0.9** |
| | comp=Z,3.0nm,0.7s,baz=98,slow=5.4,SNR=6.2 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.29** | **44** | P | **P** | **01 21 28.2** | **+1.0** |
| | comp=Z,2.7nm,0.6s,baz=225,slow=7.4,SNR=8.2 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.77** | **57** | P | **P** | **01 22 01.5** | **+1.7** |
| | comp=Z,7.0nm,0.9s,baz=216,slow=7.8,SNR=29 | | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **85.98** | **13** | P | **P** | **01 21 59.5** | **-0.4** |
| | comp=Z,2.6nm,0.4s,baz=222,slow=5.1,SNR=44 | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.22** | **43** | P | **P** | **01 22 06.6** | **+0.1** |
| | comp=Z,1.4nm,0.6s,baz=215,slow=3.2,SNR=7.1 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.32** | **290** | P | **P** | **01 22 18.5** | **+1.9** |
| | comp=Z,2.2nm,0.8s,baz=85,slow=3.0,SNR=1.9 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.12** | **180** | ⇑P | **P** | **01 22 19.7** | **+0.3** |
| | comp=Z,380nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **90.40** | **178** | ⇑P | **P** | **01 22 20.1** | **-0.5** |
| | comp=Z,60nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.40** | **178** | P | **P** | **01 22 20.4** | **-0.2** |
| | comp=Z,3.9nm,0.9s,baz=198,slow=8.5,SNR=8.3 | | | | | | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.53** | **176** | ⇑P | **P** | **01 22 21.6** | **+0.5** |
| | comp=Z,15nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.97** | **177** | ⇑P | **P** | **01 22 23.4** | **+0.2** |
| | comp=Z,11nm,0.7s,baz=186,slow=2.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.20** | **177** | ⇑P | **P** | **01 22 24.5** | **+0.3** |
| | comp=Z,13nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.55** | **314** | PKiKP | **PKiKP** | **01 27 45.8** | **-0.2** |
| | comp=Z,0.4nm,0.4s,baz=151,slow=1.2,SNR=6.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.24** | **321** | PKP | **PKPdf** | **01 28 00.2** | **-0.2** |
| | comp=Z,1.6nm,0.4s,baz=127,slow=2.2,SNR=9.8 | | | | | | |
| **ARU** | **Arti** | **123.22** | **326** | PKP | **PKiKP** | **01 28 12.5** | **+0.4** |
| | comp=Z,2.0nm,0.5s,baz=118,slow=5.0,SNR=4.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.57** | **350** | PKP | **PKiKP** | **01 28 18.3** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=64,slow=1.0,SNR=12 | | | | | | |
| **FINES** | **FINESS Array B** | **133.47** | **344** | PKP | **PKPdf** | **01 28 31.0** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=50,slow=1.9,SNR=5.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **136.61** | **353** | PKP | **PKiKP** | **01 28 38.2** | **-0.8** |
| | comp=Z,0.5nm,0.6s,baz=34,slow=0.6,SNR=5.2 | | | | | | |
| **HFS** | **Hagfors** | **137.18** | **351** | PKhKP | PKPpre | 01 28 27.4 | |
| | comp=Z,3.9nm,1.0s,baz=96,slow=6.0,SNR=8.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **140.91** | **333** | PKhKP | PKPpre | 01 28 39.9 | |
| | comp=Z,0.6nm,0.4s,baz=48,slow=4.3,SNR=1.3 | | | | | | |
| AKASG | | | | PKP | **PKPdf** | **01 28 45.9** | **+0.7** |
| | comp=Z,0.8nm,0.3s,baz=42,slow=3.1,SNR=1.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.62** | **5** | PKhKP | PKPpre | 01 28 43.8 | |
| | comp=Z,0.7nm,0.4s,baz=331,slow=2.6,SNR=7.9 | | | | | | |
| **SORM** | **Soroca** | **143.15** | **330** | ⇓P | PKPab | 01 28 47.3 | 0.0 |
| **MILM** | **Milestii Mici** | **143.78** | **328** | ⇑P | **PKPdf** | **01 28 50.3** | **0.0** |
| **VLDR** | **Vladesti** | **144.88** | **328** | ⇑P | **PKPab** | **01 28 54.6** | **+0.7** |
| **BUR08** | **Bucovina Ar. S** | **144.95** | **332** | | **PKPab** | **01 28 55.3** | **+1.0** |
| **BURAR** | **Bucovina Array** | **144.96** | **332** | ⇑P | **PKPab** | **01 28 55.1** | **+0.7** |
| **SCTR** | **Scanteiesti** | **145.04** | **328** | ⇑P | **PKPab** | **01 28 55.5** | **+1.0** |
| **GHRR** | | **145.07** | **329** | ⇓P | **PKPab** | **01 28 55.3** | **+0.6** |
| **BR131** | **Keskin Array S** | **145.19** | **315** | | **PKPab** | **01 28 55.4** | **-0.2** |
| **BRTR** | **Keskin Array B** | **145.19** | **315** | | **PKPab** | **01 28 55.4** | **-0.2** |
| **BRTR** | **Keskin Array B** | **145.19** | **315** | PKPbc | **PKPbc** | **01 28 54.7** | **+0.3** |
| | comp=Z,3.1nm,0.6s,baz=115,slow=3.1,SNR=17 | | | | | | |
| **BMR** | **Baia Mare** | **145.66** | **334** | ⇑P | **PKPbc** | **01 28 56.0** | **+0.7** |
| **CLL** | **Collm** | **145.73** | **348** | *i* PKPbc | **PKPab** | **01 28 56.5** | **-0.6** |
| | comp=Z,34nm,1.3s | | | | | | |
| **HARR** | **Harsova** | **145.74** | **326** | ⇓P | **PKPab** | **01 28 56.7** | **-0.7** |
| **OZUR** | | **145.83** | **330** | ⇑P | **PKPab** | **01 28 57.7** | **0.0** |
| **DPC** | **Dobruska-Polom** | **145.84** | **344** | *e*PKP | **PKPab** | **01 28 56.9** | **-0.7** |
| **BRG** | **Berggiesshubel** | **145.94** | **346** | *e*P | **PKPab** | **01 28 57.4** | **-0.6** |
| BRG | | | | Amp | | 01 28 57.9 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| BRG | | | | Amp | | 01 30 29.0 | |
| | comp=N,109nm,27.6s | | | | | | |
| BRG | | | | Amp | | 01 30 36.0 | |
| | comp=Z,264nm,31.8s | | | | | | |
| BRG | | | | Amp | | 01 30 43.0 | |
| | comp=E,244nm,32.5s | | | | | | |
| **KRLC** | **Kraliky** | **145.96** | **343** | *e*PKP | **PKPab** | **01 28 57.1** | **-1.0** |
| **MORC** | **Moravsky Berou** | **146.01** | **342** | ⇓P | **PKPab** | **01 28 57.3** | **-1.0** |
| **DOPR** | **Dopca** | **146.11** | **330** | ⇓P | **PKPab** | **01 28 58.5** | **-0.4**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,55nm,0.6s | | | | | | |
| OK029 | | | | IAML | | 01 12 33.4 | |
| | comp=E,147nm,3.7s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.85** | **184** | Pg | Pg | 01 12 32.1 | -0.1 |
| **OK052** | **Battle Ridge R** | **0.95** | **55** | Pg | Pg | 01 12 33.5 | -0.6 |
| OK052 | | | | IAML | | 01 12 47.6 | |
| | comp=E,50nm,0.3s | | | | | | |
| **DEOK** | **Depew** | **1.10** | **69** | Pg | Pg | 01 12 36.6 | -0.5 |
| DEOK | | | | IAML | | 01 12 50.9 | |
| | comp=E,31nm,4.3s | | | | | | |
| DEOK | | | | IAML | | 01 12 53.5 | |
| | comp=N,59nm,0.3s | | | | | | |
| **QUOK** | **Quay** | **1.12** | **50** | Pg | Pg | 01 12 37.0 | -0.4 |
| QUOK | | | | IAML | | 01 13 04.0 | |
| | comp=E,60nm,3.0s | | | | | | |
| **LOOK** | **Love County** | **1.54** | **162** | | Pn | 01 12 43.8 | -0.1 |
| **T35A** | **Sooner Cattle** | **1.78** | **34** | Pn | Pn | 01 12 47.7 | +0.5 |
| **WTFS** | **Witchita Falls** | **1.78** | **199** | Pn | Pn | 01 12 47.5 | +0.3 |
| **RLO** | **Rose Lookout** | **2.34** | **72** | Pn | Pn | 01 12 56.4 | +1.5 |

*NEIC **19** 01:12:28.1±1.4, 16°.7S±0°.1×179°.7W±0°.1, h505km±12km, mb4.6/30, Error ellipse: s-maj=17.7km s-min=16.6km az=153.0*

*IDC **19** 01:12:29.8±4.0, 16°.61S×179°.86W, h528km±44km, mb3.6/13, mbtmp4.5/14, Error ellipse: s-maj=22.9km s-min=19.1km az=86.0*

**ISC 19 01:12:27.3±0.4, 16°.61S±0°.09×179°.77W±0°.08, h500km, n77, σ1°09/85, mb4.6/26, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.37** | **241** | P | **P** | **01 13 35.0** | **+0.5** |
| **FUNA** | **Funafuti** | **8.10** | **353** | P | **P** | **01 14 25.4** | **+0.5** |
| **AFI** | **Afiamalu** | **8.16** | **72** | P | **P** | **01 14 26.8** | **+1.2** |
| **NIUE** | **Niue** | **9.69** | **106** | P | **P** | **01 14 43.2** | **+1.9** |
| **LIFNC** | **LIFOU** | **12.99** | **249** | P | **P** | **01 15 16.4** | **0.0** |
| **PINNC** | **Pines Island,** | **13.45** | **242** | P | **P** | **01 15 22.1** | **+0.9** |
| **DZM** | **Mont Dzumac** | **14.10** | **245** | P | **P** | **01 15 29.1** | **+0.8** |
| **DZM** | **Mont Dzumac** | **14.10** | **245** | P | **P** | **01 15 28.7** | **+0.5** |
| | 10nm,0.7s,baz=75,slow=18,SNR=6.4 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **15.62** | **253** | P | **P** | **01 15 44.4** | **+0.4** |
| KOUNC | | | | IAmb | IAmb | 01 15 52.2 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **THZ** | **Tophouse** | **25.85** | **193** | P | **P** | **01 17 17.7** | **-0.6** |
| THZ | | | | IAmb | IAmb | 01 17 21.7 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.96** | **193** | P | **P** | **01 17 26.5** | **-1.5** |
| LTZ | | | | IAmb | IAmb | 01 17 36.0 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **GVZ** | **Greta Valley S** | **26.98** | **192** | P | **P** | **01 17 28.1** | **-0.1** |
| GVZ | | | | IAmb | IAmb | 01 17 56.5 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **INZ** | **Inchbonnie** | **27.09** | **194** | P | **P** | **01 17 28.1** | **-1.0** |
| INZ | | | | IAmb | IAmb | 01 17 35.1 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **RPZ** | **Rata Peaks** | **28.12** | **194** | P | **P** | **01 17 38.3** | **+0.1** |
| RPZ | | | | IAmb | IAmb | 01 17 55.7 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **RPZ** | **Rata Peaks** | **28.12** | **194** | P | **P** | **01 17 38.3** | **+0.1** |
| | comp=Z,3.9nm,0.6s,baz=289,slow=13,SNR=1.5 | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **FOZ** | **Fox Glacier** | **28.26** | **196** | P | **P** | **01 17 39.2** | **-0.1** |
| **EIDS** | **Eidsvold** | **28.53** | **247** | P | **P** | **01 17 41.8** | **-0.2** |
| **XMAS** | **Kiritimati** | **28.80** | **52** | P | **P** | **01 17 43.0** | **-1.4** |
| **LBZ** | **Lake Benmore** | **28.96** | **195** | P | **P** | **01 17 44.2** | **-1.4** |
| LBZ | | | | IAmb | IAmb | 01 18 18.2 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **ARMA** | **Armidale** | **29.51** | **237** | P | **P** | **01 17 51.1** | **+0.5** |
| ARMA | | | | IAmb | IAmb | 01 17 52.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.95** | **197** | P | **P** | **01 18 02.5** | **-0.3** |
| WHZ | | | | IAmb | IAmb | 01 18 06.2 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **PATS** | **Pohnpei** | **31.83** | **315** | P | **P** | **01 18 10.2** | **-0.4** |
| **CTA** | **Charters Tower** | **32.41** | **259** | P | **P** | **01 18 15.6** | **+0.1** |
| | comp=Z,1.9nm,0.7s,baz=88,slow=9.8,SNR=17 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **32.41** | **259** | P | **P** | **01 18 15.6** | **+0.1** |
| **PMG** | **Port Moresby** | **32.98** | **278** | P | **P** | **01 18 22.0** | **+1.6** |
| **PMG** | **Port Moresby** | **32.98** | **278** | P | **P** | **01 18 21.7** | **+1.3** |
| | comp=Z,40nm,0.8s,baz=78,slow=8.5,SNR=7.4 | | | | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| **COEN** | **Coen** | **35.81** | **269** | P | **P** | **01 18 44.8** | **+0.4** |
| **TOO** | **Toolangi** | **37.02** | **229** | P | **P** | **01 18 53.6** | **-0.4** |
| TOO | | | | IAmb | IAmb | 01 19 30.1 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **38.15** | **239** | P | **P** | **01 19 03.5** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.15** | **239** | P | **P** | **01 19 03.5** | **+0.2** |
| | comp=Z,5.3nm,0.6s,baz=75,slow=9.5,SNR=5.9 | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **42.92** | **240** | P | **P** | **01 19 41.1** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 01 20 18.9 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.42** | **258** | P | **P** | **01 19 44.9** | **-0.7** |
| **WB0** | **Warramunga Arr** | **43.57** | **259** | P | **P** | **01 19 45.7** | **-1.1** |
| **WB2** | **Warramunga Arr** | **43.60** | **258** | P | **P** | **01 19 46.0** | **-1.0** |
| **WRA** | **Warramunga Arr** | **43.61** | **258** | P | **P** | **01 19 45.7** | **-1.4** |
| | comp=Z,2.8nm,0.4s,baz=90,slow=6.8,SNR=9.5 | | | | | | |
| | comp=Z,2.8nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **43.91** | **253** | P | **P** | **01 19 49.0** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 01 19 49.5 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **43.91** | **253** | P | **P** | **01 19 49.1** | **-0.3** |
| **ASAR** | **Alice Springs** | **43.91** | **253** | P | **P** | **01 19 49.0** | **-0.5** |
| | comp=Z,21nm,0.4s,baz=84,slow=8.7,SNR=32 | | | | | | |
| | comp=Z,21nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **47.55** | **268** | P | **P** | **01 20 17.3** | **0.0** |
| MTN | | | | IAmb | IAmb | 01 20 18.1 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **49.34** | **263** | P | **P** | **01 20 30.2** | **-0.4** |
| **FORT** | **Forrest** | **49.41** | **244** | P | **P** | **01 20 30.3** | **-0.6** |
| FORT | | | | IAmb | IAmb | 01 20 59.3 | |
| | comp=Z,35nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.97** | **260** | P | **P** | **01 20 50.2** | **+0.3** |
| **SOEI** | **Soe** | **54.78** | **270** | P | **P** | **01 21 11.4** | **+1.4** |
| SOEI | | | | IAmb | IAmb | 01 21 12.3 | |
| | comp=Z,41nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **56.99** | **255** | P | **P** | **01 21 24.5** | **-0.7** |
| **QSPA** | **South Pole Qui** | **73.44** | **180** | P | **P** | **01 23 08.6** | **+0.6** |
| QSPA | | | | IAmb | IAmb | 01 23 11.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.44** | **180** | P | **P** | **01 23 08.6** | **+0.6** |
| | comp=Z,12nm,0.8s,baz=2.9,slow=0.8,SNR=14 | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.40** | **45** | P | **P** | **01 23 41.6** | **+0.2** |
| | comp=Z,0.8nm,0.7s,baz=216,slow=8.2,SNR=4.0 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **84.64** | **200** | P | **P** | **01 24 07.5** | **+0.2** |
| | comp=Z,4.4nm,0.7s,baz=138,slow=7.9,SNR=7.3 | | | | | | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **84.92** | **14** | P | **P** | **01 24 07.5** | **-1.1** |
| | comp=Z,1.3nm,1.0s,baz=222,slow=5.4,SNR=4.3 | | | | | | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.41** | **58** | P | **P** | **01 24 18.1** | **+1.4** |
| | comp=Z,0.5nm,0.8s,baz=208,slow=4.3,SNR=3.6 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.31** | **44** | P | **P** | **01 24 20.9** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=228,slow=1.8,SNR=5.4 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.59** | **181** | ⇑P | **P** | **01 24 39.9** | **-0.2** |
| | comp=Z,58nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **91.92** | **179** | ⇑P | **P** | **01 24 40.9** | **-0.7** |
| **SNAA** | **Sanae** | **91.92** | **179** | P | **P** | **01 24 40.5** | **-1.1** |
| | comp=Z,3.5nm,0.6s,baz=203,slow=9.7,SNR=22 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.11** | **177** | ⇑P | **P** | **01 24 41.7** | **-0.7** |
| **VNA2** | **Neumayer--Watz** | **92.53** | **177** | ⇑P | **P** | **01 24 44.0** | **-0.4** |
| | baz=191,slow=4.5 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **92.77** | **177** | ⇑P | **P** | **01 24 44.8** | **-0.5** |
| **BVAR** | **Borovoye Array** | **115.03** | **321** | PKP | **PKPdf** | **01 30 09.3** | **-1.7** |
| | comp=Z,0.6nm,0.4s,baz=62,slow=2.6,SNR=5.0 | | | | | | |
| **ARU** | **Arti** | **121.06** | **327** | PKP | **PKPdf** | **01 30 21.2** | **-1.3** |
| | comp=Z,2.1nm,0.3s,baz=131,slow=6.3,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **124.81** | **349** | PKP | **PKPdf** | **01 30 28.4** | **-1.0** |
| | comp=Z,1.1nm,0.5s,baz=51,slow=1.0,SNR=6.1 | | | | | | |
| **FINES** | **FINESS Array B** | **131.59** | **344** | PKP | **PKPdf** | **01 30 41.9** | **-0.5** |
| | comp=Z,5.8nm,1.1s,baz=64,slow=4.4,SNR=5.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **144.35** | **304** | PKP | PKPbc | 01 31 06.7 | +0.3 |
| | comp=Z,4.1nm,0.7s,baz=77,slow=5.2,SNR=5.6 | | | | | | |
| **GERES** | **GERESS Array B** | **146.02** | **344** | PKPbc | **PKPdf** | **01 31 10.9** | **+1.8** |
| | comp=Z,0.4nm,0.6s,baz=346,slow=0.8,SNR=2.3 | | | | | | |
| **CONA** | **Conrad Observa** | **146.22** | **341** | *e*PKP | **PKPbc** | **01 31 11.7** | **+0.2** |
| CONA | comp=Z,1.2nm,0.5s | | | | PKKPdf | 01 40 04.6 | -7.9 |
| | comp=Z,1.3nm,0.4s | | | *i* PKKP | | | |
| **RONA** | **Rosalia, Austr** | **146.29** | **340** | *e*PKP | **PKPbc** | **01 31 12.3** | **+0.6** |
| RONA | comp=Z,1.7nm,0.5s | | | *e*PKKP | PKKPdf | 01 40 04.7 | -7.6 |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **MOA** | **Molln** | **146.77** | **343** | *e*PKKP | **PKKPdf** | **01 40 06.0** | **-5.3** |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **LESA** | **Schwarzleotal** | **147.60** | **344** | *e*PKiKP | **PKPbc** | **01 31 15.1** | **-0.1** |
| LESA | comp=Z,0.9nm,0.3s | | | *e*PKKP | **PKKPdf** | **01 40 07.6** | **-2.2** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **147.73** | **343** | *i* PKP | **PKPbc** | **01 31 15.0** | **-0.7** |
| | comp=Z,1.8nm,0.6s | | | | | | |
| KBA | | | | *i* PKKP | **PKKPdf** | **01 40 07.3** | **-2.3** |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **147.96** | **345** | *e*PKP | **PKPbc** | **01 31 15.4** | **-0.9** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| WATA | | | | *i* PKKP | **PKKPdf** | **01 40 08.0** | **-1.2** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **RETA** | **Reutte** | **148.00** | **346** | *i* PKP | **PKPbc** | **01 31 15.7** | **-0.5** |
| | comp=Z,0.5nm,0.3s | | | | | | |
| RETA | | | | *e*PKKP | **PKKPdf** | **01 40 08.2** | **-0.8** |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **148.01** | **345** | *i* PKiKP | **PKPbc** | **01 31 16.0** | **-0.4** |
| | comp=Z,1.7nm,0.3s | | | | | | |
| WTTA | | | | *i* PKKP | **PKKPdf** | **01 40 08.4** | **-0.7** |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **MYKA** | **Terra Mystica** | **148.06** | **342** | *e*PKP | **PKPdf** | **01 31 15.0** | **+2.5** |
| | comp=Z,2.0nm,0.4s | | | | | | |
| MYKA | | | | *e*PKKP | **PKKPdf** | **01 40 07.9** | **-1.0** |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **148.06** | **346** | *i* PKP | **PKPbc** | **01 31 16.0** | **-0.5** |
| | comp=Z,0.4nm,0.3s | | | | | | |
| MOTA | | | | *i* PKKP | **PKKPdf** | **01 40 08.7** | **-0.2** |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **148.15** | **346** | *e*PKP | **PKPbc** | **01 31 15.9** | **-0.7** |
| | comp=Z,1.5nm,0.5s | | | | | | |
| SQTA | | | | *e*PKKP | **PKKPdf** | **01 40 08.5** | **-0.2** |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **ABTA** | **Abfaltersbach** | **148.26** | **344** | *e*PKP | **PKPbc** | **01 31 16.0** | **-0.9** |
| | comp=Z,2.7nm,0.7s | | | | | | |
| ABTA | | | | *e*PKKP | **PKKPdf** | **01 40 08.3** | **-0.1** |
| | comp=Z,3.7nm,0.5s | | | | | | |
| **DAVA** | **Damuels** | **148.38** | **347** | *e*PKP | **PKKPdf** | **01 40 09.6** | **+1.3** |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **FETA** | **Feichten** | **148.45** | **346** | *e*PKiKP | **PKPbc** | **01 31 17.4** | **-0.1** |
| | comp=Z,0.6nm,0.4s | | | | | | |

**IDC 19 01:13:16.4±7.2, 18°.06S×177°.12W, h0km, mb4.3/3, mbtmp4.3/3, Error ellipse: s-maj=317.6km s-min=37.0km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.81** | **260** | P | P | 01 21 39.9 | -0.5 |
| | 1.6nm,0.5s,baz=95,slow=6.8,SNR=5.9 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.93** | **254** | P | P | 01 21 41.5 | +0.1 |
| | 12nm,0.5s,baz=88,slow=8.2,SNR=11 | | | | | | |
| | 12nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.76** | **12** | P | P | 01 25 57.2 | +0.1 |
| | 0.4nm,0.4s,baz=225,slow=5.1,SNR=6.7 | | | | | | |
| | 0.4nm,0.4s | | | | | | |

*IDC **19** 01:13:47.9±7.1, 17°.89S×177°.74W, h461km±74km, mb3.5/7, mbtmp4.3/7, Error ellipse: s-maj=44.1km s-min=23.1km az=60.0*

**ISC 19 01:13:47.0±0.9, 17°.9S±0°.2×177°.7W±0°.3, h450km, n15, σ1°33/15, mb4.1/9, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.74** | **192** | P | **P** | **01 17 55.5** | **+0.5** |
| | 7.4nm,0.5s,baz=26,slow=4.7,SNR=10 | | | | | | |
| | 7.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.25** | **259** | P | **P** | **01 21 22.5** | **-0.6** |
| | 1.2nm,0.5s,baz=96,slow=7.0,SNR=3.3 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.39** | **254** | P | **P** | **01 21 24.4** | **+0.2** |
| | 7.5nm,0.7s,baz=87,slow=8.6,SNR=6.8 | | | | | | |
| | 7.5nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.31** | **323** | P | **P** | **01 24 01.9** | **-0.2** |
| | 4.3nm,0.9s,baz=150,slow=5.7,SNR=4.3 | | | | | | |
| | 4.3nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.11** | **180** | P | **P** | **01 24 25.2** | **+0.7** |
| | 1.8nm,0.5s,baz=72,slow=1.6,SNR=5.9 | | | | | | |
| | 1.8nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.78** | **13** | P | **P** | **01 25 36.7** | **-0.5** |
| | 0.3nm,0.5s,baz=225,slow=5.0,SNR=1.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.28** | **180** | ⇑P | **P** | **01 25 57.5** | **-1.0** |
| | comp=Z,49nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.55** | **178** | ⇑P | **P** | **01 25 58.2** | **-1.4** |
| | comp=Z,24nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **90.55** | **178** | P | **P** | **01 25 58.9** | **-0.7** |
| | comp=Z,1.7nm,1.0s,baz=212,slow=9.5,SNR=2.3 | | | | | | |
| | comp=Z,1.7nm,1.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.67** | **176** | ⇑P | **P** | **01 25 59.0** | **-1.1** |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.11** | **177** | ⇑P | **P** | **01 25 59.3** | **-2.9** |
| | comp=Z,2.0nm,0.8s,baz=219,slow=12 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.34** | **177** | ⇑P | **P** | **01 26 03.6** | **+0.4** |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.25** | **315** | PKPbc | **PKPdf** | **01 32 32.3** | **-0.6** |
| | comp=Z,0.5nm,0.7s,baz=46,slow=2.4,SNR=5.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.69** | **303** | PKPbc | **PKPdf** | **01 32 37.2** | **+1.7** |
| | comp=Z,1.4nm,0.5s,baz=72,slow=8.0,SNR=7.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.80** | **346** | PKPbc | **PKPdf** | **01 32 38.6** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=120,slow=5.8,SNR=2.7 | | | | | | |

**ROM 19 01:14:59.1±0.1, 41°.865N±0°.005×14°.881E±0°.005, h18km±1km, ML1.5/9, 1C, Error ellipse: s-maj=0.5km s-min=0.1km az=190.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T1411** | **Guglionesi (CB** | **0.09** | **23** | P | Pg | 01 15 03.1 | +0.3 |
| T1411 | | | | S | Sg | 01 15 06.1 | +0.9 |
| T1411 | | | | AML | AML | | |
| | comp=N,2025μm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,3190μm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,1975μm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,3145μm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,2024μm,0.3s | | | | | | |
| **T1411** | **Guglionesi (CB** | **0.09** | **23** | AML | AML | | |
| | comp=N,1864μm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,1208μm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,3190μm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,3149μm,0.1s | | | | | | |
| **T1413** | **San Martino in** | **0.10** | **97** | ⇑P | Pg | 01 15 03.0 | +0.1 |
| T1413 | | | | S | Sg | 01 15 06.1 | +0.6 |
| T1413 | | | | AML | AML | | |
| | comp=N,640μm,0.1s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=N,612μm,0.1s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,446μm,0.5s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,456μm,0.1s | | | | | | |
| **T1413** | **San Martino in** | **0.10** | **97** | AML | AML | | |
| | comp=E,344μm,0.1s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,456μm,0.1s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=N,640μm,0.1s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=N,612μm,0.1s | | | | | | |
| **FRES** | **Fresagrandinar** | **0.19** | **305** | P | Pg | 01 15 04.3 | +0.3 |
| FRES | | | | S | Sg | 01 15 07.6 | +0.2 |
| FRES | | | | AML | AML | | |
| | comp=E,163μm,0.2s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,104μm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **175** | P | Pg | 01 15 04.3 | 0.0 |
| CIGN | | | | S | Sg | 01 15 07.7 | -0.1 |
| **MELA** | **Melanico ??? S** | **0.24** | **131** | P | Pg | 01 15 04.7 | 0.0 |
| MELA | | | | S | Sg | 01 15 09.0 | +0.4 |
| MELA | | | | AML | AML | | |
| | comp=N,331μm,1.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,326μm,1.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,210μm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,247μm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,191μm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,163μm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,225μm,0.2s | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **176** | P | Pb | 01 15 07.3 | +0.4 |
| GATE | | | | S | Sb | 01 15 12.7 | +0.6 |
| **BSSO** | **Busso** | **0.38** | **214** | P | Pg | 01 15 07.3 | +0.1 |
| BSSO | | | | S | Sb | 01 15 13.5 | +0.3 |
| **SACR** | **S. Croce Del S** | **0.48** | **196** | P | Pg | 01 15 08.6 | -0.4 |
| SACR | | | | S | Sb | 01 15 15.9 | -0.1 |
| **APRC** | **Apricena** | **0.51** | **102** | P | Pg | 01 15 09.4 | 0.0 |
| APRC | | | | S | Sg | 01 15 16.3 | 0.0 |
| APRC | | | | AML | AML | | |
| | comp=E,46μm,0.1s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,53μm,0.1s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,56μm,0.2s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.54** | **157** | P | Pb | 01 15 10.1 | +0.1 |
| MOCO | | | | S | Sb | 01 15 18.3 | +0.9 |
| **LPEL** | **Lama dei Pelig** | **0.55** | **289** | P | Pg | 01 15 10.0 | -0.2 |
| LPEL | | | | S | Sb | 01 15 18.5 | +0.8 |
| **RNI2** | **Rionero Sannit** | **0.57** | **254** | P | Pb | 01 15 10.1 | -0.4 |
| RNI2 | | | | S | Sb | 01 15 18.7 | +0.5 |
| **SGRT** | **San Giovanni R** | **0.66** | **99** | P | Pg | 01 15 11.9 | -0.1 |
| SGRT | | | | S | Sg | 01 15 21.3 | +0.4 |
| **CERA** | **Filignano** | **0.70** | **248** | P | Pb | 01 15 12.5 | -0.3 |
| **INTR** | **Introdacqua** | **0.74** | **282** | P | Pb | 01 15 12.8 | -0.8 |

*IDC **19** 01:16:17.3±5.7, 18°.19S×177°.91W, h570km±61km, mb3.5/10, mbtmp4.3/11, Error ellipse: s-maj=35.2km s-min=21.1km az=90.0*

**ISC 19 01:16:18.9±1.0, 18°.2S±0°.2×177°.9W±0°.2, h590km, n16, σ0°64/16, mb3.9/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.17** | **253** | P | **P** | **01 19 29.7** | **+0.5** |
| | 1.3nm,0.3s,baz=125,slow=14,SNR=2.0 | | | | | | |
| **CTA** | **Charters Tower** | **33.85** | **261** | P | **P** | **01 22 14.0** | **0.0** |
| | 0.2nm,0.5s,baz=62,slow=8.5,SNR=3.5 | | | | | | |
| **STKA** | **Stephens Creek** | **38.90** | **242** | P | **P** | **01 22 56.1** | **+0.8** |
| | 3.8nm,0.9s,baz=133,slow=12,SNR=2.9 | | | | | | |
| | 3.8nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.03** | **260** | P | **P** | **01 23 42.8** | **-0.7** |
| | 2.1nm,0.5s,baz=91,slow=6.7,SNR=13 | | | | | | |
| | 2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | **P** | **01 23 43.3** | **-1.1** |
| | 5.1nm,0.4s,baz=83,slow=8.8,SNR=13 | | | | | | |
| | 5.1nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.41** | **323** | P | **P** | **01 26 22.1** | **-0.7** |
| | 2.6nm,0.6s,baz=154,slow=5.7,SNR=11 | | | | | | |
| | 2.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.86** | **180** | P | **P** | **01 26 42.7** | **-0.3** |
| | 5.3nm,0.9s,baz=48,slow=0.7,SNR=6.7 | | | | | | |
| | 5.3nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.07** | **345** | P | **P** | **01 26 55.3** | **-0.2** |
| | 3.8nm,0.6s,baz=108,slow=8.1,SNR=7.9 | | | | | | |
| | 3.8nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **75.22** | **318** | P | **P** | **01 27 03.3** | **+1.1** |
| | 1.9nm,1.1s,baz=148,slow=7.4,SNR=4.6 | | | | | | |
| | 1.9nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **86.06** | **13** | P | **P** | **01 27 57.1** | **-0.4** |
| | 0.9nm,0.5s,baz=219,slow=5.1,SNR=11 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **94.06** | **319** | P | **P** | **01 28 35.2** | **0.0** |
| | 0.7nm,0.9s,baz=126,slow=7.3,SNR=2.1 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.40** | **25** | P | **P** | **01 28 36.6** | **+0.5** |
| | 0.5nm,0.6s,baz=200,slow=13,SNR=3.9 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.67** | **350** | PKP | **PKPdf** | **01 34 15.4** | **0.0** |
| | 2.6nm,1.0s,baz=327,slow=8.7,SNR=2.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.31** | **315** | PKPbc | **PKPbc** | **01 34 51.9** | **-0.2** |
| | 2.3nm,0.8s,baz=130,slow=4.1,SNR=9.0 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.68** | **303** | PKPbc | **PKPbc** | **01 34 55.7** | **-0.2** |
| | 2.6nm,0.6s,baz=61,slow=6.9,SNR=5.8 | | | | | | |
| **GERES** | **GERESS Array B** | **148.00** | **345** | PKPbc | **PKPbc** | **01 34 59.3** | **+0.4** |
| | 1.5nm,0.6s,baz=57,slow=3.6,SNR=8.6 | | | | | | |

*IDC **19** 01:16:22.6±7.7, 17°.91S×178°.00W, h515km±80km, mb3.4/6, mbtmp4.3/6, Error ellipse: s-maj=44.4km s-min=31.6km az=120.0*

**ISC 19 01:16:30.5±0.9, 17°.7S±0°.2×178°.4W±0°.2, h600km, n15, σ1°29/14, mb4.0/7, 2C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.95** | **250** | P | **P** | **01 19 39.1** | **+0.7** |
| | 2.8nm,0.4s,baz=80,slow=19,SNR=2.7 | | | | | | |
| **CTA** | **Charters Tower** | **33.53** | **260** | P | **P** | **01 22 22.2** | **-0.1** |
| | 0.3nm,0.6s,baz=94,slow=10.0,SNR=7.3 | | | | | | |
| **STKA** | **Stephens Creek** | **38.79** | **241** | P | **P** | **01 23 04.2** | **-1.2** |
| | 2.3nm,0.4s,baz=93,slow=8.9,SNR=4.4 | | | | | | |
| | 2.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.72** | **259** | P | **P** | **01 23 51.7** | **-0.3** |
| | 2.7nm,0.4s,baz=95,slow=7.3,SNR=9.8 | | | | | | |
| | 2.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.90** | **254** | P | **P** | **01 23 53.1** | **-0.3** |
| | 12nm,0.6s,baz=86,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MMAI | Mount Meron Ar | 146.54 | 303 | PKPbc | PKPbc | 01 | 35 | 14.9 -0.3 |
| | 2.1nm,0.5s,baz=67,slow=6.4,SNR=8.2 | | | | | | | |
| GERES | GERESS Array B | 147.81 | 345 | PKPbc | PKPbc | 01 | 35 | 17.6 -0.4 |
| | 0.8nm,0.4s,baz=89,slow=10,SNR=5.8 | | | | | | | |

*NOU* ***19*** *01:17:40.7, 17.97S×177.83W, h558km, mb5.0/53, Fiji Islands Region*
*IDC* ***19*** *01:17:41.3±2.2, 18.10S×177.94W, h559km±25km, mb3.8/16, mbtmp4.7/17, Error ellipse: s-maj=15.3km s-min=11.6km az=179.0*
*NEIC* ***19*** *01:17:42.7±1.3, 18.1S±0.1×178.0W±0.1, h569km±8km, mb4.9/46, Error ellipse: s-maj=19.3km s-min=14.0km az=161.0*

**ISC 19 01:17:43.5±0.4, 18.10S±0.08×177.94W±0.06, h590km, n165, σ1§22/175, mb4.7/43, 15C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.83 | 275 | P | P | 01 19 06.3 | -0.9 |
| AFI | Afiamalu | 7.24 | 56 | P | P | 01 19 31.8 | -3.7 |
| NIUE | Niue | 7.66 | 99 | P | P | 01 19 37.2 | -2.1 |
| LIFNC | LIFOU | 14.23 | 257 | P | P | 01 20 42.1 | -2.7 |
| LIFNC | LIFOU | 14.23 | 257 | P | P | 01 20 41.9 | -2.9 |
| PINNC | Pines Island, | 14.42 | 249 | P | P | 01 20 45.2 | -1.3 |
| PINNC | Pines Island, | 14.42 | 249 | P | P | 01 20 45.3 | -1.3 |
| YATNC | Mamie plateau, | 14.78 | 252 | P | P | 01 20 48.9 | -1.1 |
| DZM | Mont Dzumac | 15.19 | 252 | P | P | 01 20 54.2 | +0.3 |
| DZM | Mont Dzumac | 15.19 | 252 | P | P | 01 20 53.8 | -0.1 |
| DZM | Mont Dzumac | 15.19 | 252 | P | P | 01 20 53.5 | -0.4 |
| | 24nm,0.6s,baz=85,slow=19,SNR=29 | | | | | | |
| NOUC | Port Laguerre | 15.32 | 252 | P | P | 01 20 54.7 | -0.3 |
| KOUNC | Koumac, New Ca | 16.95 | 259 | P | P | 01 21 10.4 | +0.4 |
| KOUNC | Koumac, New Ca | 16.95 | 259 | | P | 01 21 10.6 | +0.5 |
| URZ | Urewera | 20.55 | 191 | P | P | 01 21 39.9 | -2.6 |
| | 9.8nm,0.5s,baz=9.1,slow=2.2,SNR=9.8 | | | | | | |
| | 9.8nm,0.5s | | | | | | |
| MRZ | Mangatainoka R | 23.17 | 193 | P | P | 01 22 04.8 | -1.0 |
| MSWZ | Moikau Station | 23.96 | 193 | P | P | 01 22 12.1 | -0.8 |
| TCW | Tory Channel | 23.99 | 195 | P | P | 01 22 12.6 | -0.5 |
| BHW | Baring Head | 24.04 | 193 | P | P | 01 22 12.4 | -1.1 |
| QRZ | Quartz Range | 24.09 | 198 | P | P | 01 22 14.2 | +0.2 |
| PLWZ | Palliser | 24.11 | 193 | P | P | 01 22 13.6 | -0.6 |
| NNZ | Nelson | 24.22 | 196 | P | P | 01 22 15.0 | -0.1 |
| DSZ | Denniston Nort | 25.15 | 198 | P | P | 01 22 23.8 | +0.4 |
| PPT | Papeete | 27.00 | 93 | P | P | 01 22 39.6 | -0.4 |
| | 27nm,0.6s,baz=299,slow=19,SNR=8.1 | | | | | | |
| | 27nm,0.6s | | | | | | |
| PPTF | Pamatai, Papee | 27.01 | 93 | P | P | 01 22 40.1 | 0.0 |
| FOZ | Fox Glacier | 27.39 | 200 | P | P | 01 22 43.0 | +0.1 |
| GC1S | Gold Coast 1 S | 28.04 | 244 | P | P | 01 22 49.4 | +0.6 |
| LBZ | Lake Benmore | 28.04 | 198 | P | P | 01 22 47.4 | -1.2 |
| AUWSH | Wavell State H | 28.26 | 246 | P | P | 01 22 51.5 | +0.7 |
| MLZ | Mavora Lakes | 29.57 | 200 | P | P | 01 23 02.2 | +0.3 |
| MLZ | | | | IAmb | IAmb | 01 23 37.8 | |
| | comp=Z,74nm,1.6s | | | | | | |
| EIDS | Eidsvold | 29.62 | 250 | P | P | 01 23 02.3 | -0.3 |
| EIDS | Eidsvold | 29.62 | 250 | P | P | 01 23 02.4 | -0.3 |
| EIDS | | | | IAmb | IAmb | 01 23 02.8 | |
| | comp=Z,34nm,0.8s | | | | | | |
| RK1H | Rockhampton Ha | 29.95 | 254 | P | P | 01 23 05.1 | -0.3 |
| WHZ | Wether Hill Ro | 30.09 | 200 | P | P | 01 23 06.9 | +0.5 |
| WHZ | | | | IAmb | IAmb | 01 23 08.3 | |
| | comp=Z,37nm,1.0s | | | | | | |
| ARMA | Armidale | 30.23 | 240 | P | P | 01 23 08.5 | +0.6 |
| ARMA | Armidale | 30.23 | 240 | P | P | 01 23 08.6 | +0.6 |
| ARMA | | | | IAmb | IAmb | 01 23 09.4 | |
| | comp=Z,31nm,0.7s | | | | | | |
| AULRC | Lightning Ridg | 33.05 | 244 | P | P | 01 23 32.2 | +0.5 |
| AUDCS | Dubbo College | 33.21 | 238 | P | P | 01 23 33.6 | +0.5 |
| TV1H | Townsville Har | 33.39 | 262 | P | P | 01 23 34.3 | -0.4 |
| CNB | Canberra Magne | 33.67 | 233 | P | P | 01 23 37.8 | +0.9 |
| CTA | Charters Tower | 33.85 | 261 | P | P | 01 23 38.2 | -0.4 |
| CTA | Charters Tower | 33.85 | 261 | P | P | 01 23 38.0 | -0.6 |
| | comp=Z,2.2nm,0.7s,baz=89,slow=10,SNR=32 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| CTAO | Charters Tower | 33.85 | 261 | P | P | 01 23 38.2 | -0.4 |
| CTAO | Charters Tower | 33.85 | 261 | P | P | 01 23 38.3 | -0.4 |
| CTAO | | | | IAmb | IAmb | 01 23 39.0 | |
| | comp=Z,38nm,0.8s | | | | | | |
| CTAO | Charters Tower | 33.85 | 261 | P | P | 01 23 38.0 | -0.6 |
| CAN | Canberra | 33.95 | 233 | P | P | 01 23 40.0 | +0.9 |
| CAN | Canberra | 33.95 | 233 | P | P | 01 23 39.9 | +0.7 |
| CAN | Canberra | 33.95 | 233 | P | P | 01 23 39.7 | +0.5 |
| PMG | Port Moresby | 34.93 | 280 | P | P | 01 23 48.2 | +0.6 |
| PMG | Port Moresby | 34.93 | 280 | P | P | 01 23 48.1 | +0.5 |
| PMG | Port Moresby | 34.93 | 280 | P | P | 01 23 47.7 | +0.1 |
| PMG | Port Moresby | 34.93 | 280 | P | P | 01 23 47.8 | +0.2 |
| | comp=Z,80nm,0.8s,baz=78,slow=5.0,SNR=23 | | | | | | |
| | comp=Z,80nm,0.8s | | | | | | |
| PMG | Port Moresby | 34.93 | 280 | P | P | 01 23 47.7 | +0.1 |
| CMSA | Cobar Meteorol | 35.45 | 241 | P | P | 01 23 51.9 | +0.2 |
| MTSU | Mount Surprise | 35.83 | 264 | P | P | 01 23 55.0 | 0.0 |
| QLP | Quilpie | 35.88 | 250 | P | P | 01 23 55.3 | -0.1 |
| TOO | Toolangi | 37.40 | 231 | P | P | 01 24 08.6 | +1.0 |
| TOO | Toolangi | 37.40 | 231 | P | P | 01 24 08.4 | +0.8 |
| COEN | Coen | 37.55 | 271 | P | P | 01 24 09.4 | +0.3 |
| COEN | Coen | 37.55 | 271 | P | P | 01 24 09.5 | +0.4 |
| TAOE | Nuku Hiva Isla | 37.81 | 81 | P | P | 01 24 11.4 | 0.0 |
| BRAT | Ballarat | 38.55 | 232 | P | P | 01 24 18.4 | +1.5 |
| STKA | Stephens Creek | 38.93 | 241 | P | P | 01 24 20.6 | +0.6 |
| STKA | Stephens Creek | 38.93 | 241 | P | P | 01 24 20.7 | +0.6 |
| STKA | | | | IAmb | IAmb | 01 24 21.7 | |
| | comp=Z,14nm,0.9s | | | | | | |
| STKA | Stephens Creek | 38.93 | 241 | P | P | 01 24 20.7 | +0.6 |
| | comp=Z,61nm,0.8s,baz=88,slow=9.2,SNR=45 | | | | | | |
| | comp=Z,61nm,0.8s | | | | | | |
| INKA | Innaminka | 39.09 | 248 | P | P | 01 24 21.8 | +0.4 |
| QIS | Mount Isa | 40.06 | 259 | P | P | 01 24 28.5 | -0.8 |
| HTT | Hallett | 41.43 | 240 | P | P | 01 24 40.7 | +0.7 |
| LCRK | Leigh Creek | 41.58 | 244 | P | P | 01 24 41.3 | +0.2 |
| TABU | Tabubil | 41.86 | 283 | P | P | 01 24 43.9 | +0.3 |
| WHYH | Whyalla | 42.48 | 241 | P | P | 01 24 48.8 | +0.7 |
| OOD | Oodnadatta | 43.56 | 249 | P | P | 01 24 57.1 | +0.5 |
| BBOO | Buckleboo | 43.70 | 241 | P | P | 01 24 57.7 | 0.0 |
| BBOO | Buckleboo | 43.70 | 241 | P | P | 01 24 57.8 | 0.0 |
| GENI | Genyem | 43.84 | 286 | P | P | 01 24 59.5 | +0.5 |
| WR0 | Warramunga Arr | 44.84 | 260 | P | P | 01 25 06.3 | -0.4 |
| WR0 | | | | IAmb | IAmb | 01 25 06.6 | |
| | comp=Z,58nm,1.6s | | | | | | |
| WB0 | Warramunga Arr | 45.00 | 260 | P | P | 01 25 07.4 | -0.5 |
| WB0 | | | | IAmb | IAmb | 01 25 07.8 | |
| | comp=Z,36nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 45.02 | 260 | P | P | 01 25 07.3 | -0.7 |
| WB2 | | | | IAmb | IAmb | 01 25 08.1 | |
| | comp=Z,35nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 45.04 | 260 | P | P | 01 25 07.5 | -0.6 |
| WRA | Warramunga Arr | 45.04 | 260 | P | P | 01 25 07.0 | -1.1 |
| | comp=Z,28nm,0.7s,baz=96,slow=7.2,SNR=74 | | | | | | |
| WRA | | | | PcP | PcP | 01 26 36.7 | +0.5 |
| | comp=Z,3.5nm,0.8s,baz=95,slow=3.3,SNR=3.6 | | | | | | |
| | comp=Z,28nm,0.7s | | | | | | |
| MULG | Mulgathing | 45.13 | 245 | P | P | 01 25 08.3 | -0.4 |
| AS31 | Alice Springs | 45.17 | 254 | P | P | 01 25 08.9 | -0.2 |
| AS31 | | | | IAmb | IAmb | 01 25 10.0 | |
| | comp=Z,29nm,0.6s | | | | | | |
| ASAR | Alice Springs | 45.17 | 254 | P | P | 01 25 09.2 | 0.0 |
| ASAR | Alice Springs | 45.17 | 254 | P | P | 01 25 08.8 | -0.3 |
| | comp=Z,111nm,0.7s,baz=85,slow=8.7,SNR=133 | | | | | | |
| ASAR | | | | PcP | PcP | 01 26 37.1 | +0.5 |
| | comp=Z,3.9nm,0.5s,baz=102,slow=3.7,SNR=4.6 | | | | | | |
| KDU | Kakadu | 48.00 | 269 | P | P | 01 25 30.0 | -0.4 |
| MTN | Manton Dam | 49.24 | 268 | P | P | 01 25 38.8 | -0.8 |
| MTN | Manton Dam | 49.24 | 268 | P | P | 01 25 38.8 | -0.8 |
| MTN | | | | IAmb | IAmb | 01 25 39.4 | |
| | comp=Z,38nm,0.7s | | | | | | |
| WRKA | Warakurna | 50.21 | 252 | P | P | 01 25 46.4 | -0.3 |
| FORT | Forrest | 50.33 | 245 | P | P | 01 25 46.7 | -0.7 |
| FORT | Forrest | 50.33 | 245 | P | P | 01 25 46.7 | -0.7 |
| KNRA | Kununurra | 50.91 | 264 | | P | 01 25 51.5 | -0.3 |
| KNRA | | | | IAmb | IAmb | 01 25 52.0 | |
| | comp=Z,32nm,0.7s | | | | | | |
| FAKI | Fak Fak | 51.05 | 281 | P | P | 01 25 52.3 | -0.6 |
| FAKI | | | | IAmb | IAmb | 01 27 04.9 | |
| | comp=Z,54nm,1.2s | | | | | | |
| FITZ | Fitzroy Crossi | 53.44 | 261 | P | P | 01 26 09.8 | 0.0 |
| FITZ | Fitzroy Crossi | 53.44 | 261 | | P | 01 26 09.8 | 0.0 |
| DRV | Dumont d'Urvil | 55.63 | 199 | P | P | 01 26 24.9 | +0.7 |
| SOEI | Soe | 56.52 | 270 | P | P | 01 26 32.1 | +0.7 |
| SOEI | Soe | 56.52 | 270 | P | P | 01 26 32.5 | +1.0 |
| SOEI | | | | IAmb | IAmb | 01 26 33.5 | |
| | comp=Z,69nm,0.7s | | | | | | |
| SOEI | Soe | 56.52 | 270 | P | P | 01 26 32.7 | +1.3 |
| PSA00 | Pilbara Seismi | 58.29 | 255 | P | P | 01 26 42.9 | -0.3 |
| PSA00 | Pilbara Seismi | 58.29 | 255 | P | P | 01 26 43.0 | -0.3 |
| PSA00 | | | | IAmb | IAmb | 01 26 43.5 | |
| | comp=Z,34nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 58.29 | 255 | P | P | 01 26 42.9 | -0.3 |
| PSA00 | | | | IAmb | IAmb | 01 26 43.5 | |
| | comp=Z,15nm,1.1s | | | | | | |
| MBWA | Marble Bar | 58.46 | 256 | P | P | 01 26 44.1 | -0.2 |
| MBWA | Marble Bar | 58.46 | 256 | P | P | 01 26 44.2 | -0.2 |
| MBWA | | | | IAmb | IAmb | 01 26 45.2 | |
| | comp=Z,74nm,1.8s | | | | | | |
| MBWA | Marble Bar | 58.46 | 256 | P | P | 01 26 43.8 | -0.6 |
| MEEK | Meekatharra | 58.78 | 249 | P | P | 01 26 45.7 | -0.8 |
| KLBR | Kellerberrin | 59.14 | 244 | P | P | 01 26 48.5 | -0.3 |
| EDFI | Ende, Flores | 59.23 | 270 | P | P | 01 26 49.2 | -0.6 |
| NWAO | Narrogin (SRO) | 59.52 | 242 | P | P | 01 26 51.0 | -0.2 |
| MUN | Mundaring | 60.44 | 243 | P | P | 01 26 57.6 | +0.3 |
| MORW | Morawa | 60.81 | 246 | P | P | 01 26 59.7 | -0.2 |
| MORW | | | | IAmb | IAmb | 01 29 04.0 | |
| | comp=Z,52nm,1.7s | | | | | | |
| TOLI2 | Tolitoli | 63.19 | 281 | P | P | 01 27 15.2 | -0.3 |
| GIRL | Giralia | 63.27 | 253 | P | P | 01 27 16.8 | +0.9 |
| CCD | Concordia, Ant | 64.80 | 194 | P | P | 01 27 26.0 | +1.0 |
| CASY | Casey | 66.15 | 205 | P | P | 01 27 34.0 | +0.9 |
| CASY | Casey | 66.15 | 205 | P | P | 01 27 33.6 | +0.4 |
| JAGI | Jajag, Banyuwa | 66.48 | 268 | P | P | 01 27 34.9 | -1.3 |
| JAGI | | | | IAmb | IAmb | 01 27 35.5 | |
| | comp=Z,43nm,0.7s | | | | | | |
| MJAR | Matsushiro Arr | 68.32 | 323 | P | P | 01 27 46.1 | -0.8 |
| | comp=Z,1.6nm,0.5s,baz=158,slow=5.7,SNR=5.7 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| UGM | Wanagama | 70.08 | 268 | P | P | 01 27 57.7 | -0.2 |
| QSPA | South Pole Qui | 71.96 | 180 | P | P | 01 28 09.3 | +1.2 |
| QSPA | | | | IAmb | IAmb | 01 30 17.6 | |
| | comp=Z,46nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 71.96 | 180 | P | P | 01 28 09.2 | +1.2 |
| | comp=Z,2.5nm,0.5s,baz=77,slow=7.3,SNR=12 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| QSPA | South Pole Qui | 71.96 | 180 | P | P | 01 28 09.5 | +1.4 |
| QSPA | | | | PcP | PcP | 01 28 22.5 | -0.1 |
| NJ2 | Nanjing | 78.40 | 309 | *eP* | P | 01 28 46.1 | +1.9 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 79.25 | 44 | P | P | 01 28 49.5 | +0.6 |
| | comp=Z,2.1nm,0.7s,baz=225,slow=8.5,SNR=13 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| J05D | Fort Rock, OR | 80.19 | 38 | P | P | 01 28 54.7 | +1.1 |
| SMAI | San Martin Ant | 80.82 | 159 | P | P | 01 28 58.1 | +1.8 |
| O22K | Cooper Landing | 81.56 | 14 | P | P | 01 29 04.2 | +4.2 |
| I07A | Izee | 81.68 | 38 | P | P | 01 29 02.0 | +0.8 |
| I07A | | | | IAmb | IAmb | 01 29 43.5 | |
| | comp=Z,43nm,2.0s | | | | | | |
| BELA | Belgrano 2 | 81.92 | 173 | P | P | 01 29 02.6 | +0.8 |
| U15A | North Rim | 82.31 | 48 | P | P | 01 29 06.3 | +1.5 |
| K20K | Telida | 83.31 | 11 | P | P | 01 29 08.3 | -0.4 |
| K20K | | | | IAmb | IAmb | 01 31 18.0 | |
| | comp=Z,45nm,1.9s | | | | | | |
| MAW | Mawson | 83.83 | 200 | P | P | 01 29 11.7 | +0.3 |
| | comp=Z,1.7nm,0.5s,baz=46,slow=10,SNR=4.5 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| HNS | HongShan | 83.97 | 312 | *eP* | P | 01 29 13.8 | +1.1 |
| HLID | Hailey | 84.48 | 41 | P | P | 01 29 15.6 | +0.3 |
| HLID | | | | IAmb | IAmb | 01 32 37.8 | |
| | comp=Z,16nm,1.2s | | | | | | |
| VHRN | Van Horn | 85.26 | 56 | P | P | 01 29 19.8 | +0.5 |
| P18A | Preston Nutter | 85.26 | 46 | P | P | 01 29 19.2 | -0.1 |
| P18A | | | | IAmb | IAmb | 01 32 37.8 | |
| | comp=Z,30nm,1.4s | | | | | | |
| Q32M | Nakina River | 85.39 | 22 | P | P | 01 29 20.0 | +0.6 |
| Q32M | | | | IAmb | IAmb | 01 32 47.7 | |
| | comp=Z,44nm,1.5s | | | | | | |
| TX31 | Lajitas Ar. Si | 85.72 | 57 | P | P | 01 29 22.4 | +0.9 |
| TXAR | Lajitas Array | 85.72 | 57 | P | P | 01 29 23.5 | +2.0 |
| | comp=Z,4.8nm,0.9s,baz=221,slow=6.3,SNR=24 | | | | | | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| ILAR | Eielson Array | 85.97 | 13 | P | P | 01 29 20.2 | -1.4 |
| | comp=Z,3.0nm,1.1s,baz=219,slow=5.9,SNR=7.0 | | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| PDAR | Pinedale Array | 87.18 | 43 | P | P | 01 29 28.5 | +0.3 |
| | comp=Z,1.0nm,0.7s,baz=188,slow=3.6,SNR=5.2 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| HHC | Hu-ho-hao-te | 87.72 | 314 | *eP* | P | 01 29 35.8 | +5.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| ELIB | Princess Elisa | 89.03 | 187 | *dP* | P | 01 29 36.8 | +0.6 |
| CMAR | Chiang Mai Arr | 89.37 | 290 | P | P | 01 29 39.1 | +0.5 |
| | comp=Z,3.3nm,0.8s,baz=99,slow=2.8,SNR=9.1 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| PZH | PanZhiHua | 89.64 | 298 | P | P | 01 29 41.3 | +1.4 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| TROLL | Troll, Antarti | 90.12 | 180 | ⇑P | P | 01 29 40.6 | -0.7 |
| | comp=Z,75nm,0.5s | | | | | | |
| TROLL | | | | ⇑PP | PP | 01 33 21.4 | -3.5 |
| | comp=Z,157nm,0.8s | | | | | | |
| TROLL | | | | ⇑PKiKP | PKiKP | 01 34 27.7 | -4.9 |
| | comp=Z,81nm,0.6s | | | | | | |
| SNAA | Sanae | 90.40 | 178 | ⇑P | P | 01 29 41.8 | -0.7 |
| | comp=Z,19nm,0.7s | | | | | | |
| SNAA | | | | ⇑PP | PP | 01 33 17.5 | -9.5 |
| | comp=Z,26nm,0.6s | | | | | | |
| SNAA | | | | ⇑PKiKP | PKiKP | 01 34 28.0 | -4.9 |
| | comp=Z,18nm,0.6s | | | | | | |
| SNAA | Sanae | 90.40 | 178 | P | P | 01 29 41.9 | -0.6 |
| | comp=Z,1.4nm,1.0s,baz=130,slow=3.5,SNR=1.3 | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | |
| VNA3 | Neumayer Olymp | 90.52 | 176 | ⇑P | P | 01 29 43.0 | 0.0 |
| | comp=Z,2.8nm,0.6s | | | | | | |
| VNA3 | | | | ⇑PP | PP | 01 33 29.7 | +1.8 |
| | comp=Z,4.3nm,0.7s | | | | | | |
| VNA3 | | | | ⇑PKiKP | PKiKP | 01 34 29.5 | -3.6 |
| | comp=Z,3.2nm,0.7s | | | | | | |
| PLCA | Paso Flores | 90.88 | 134 | P | P | 01 29 45.0 | -0.4 |
| | comp=Z,1.6nm,0.6s,baz=270,slow=6.1,SNR=3.8 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| VNA2 | Neumayer--Watz | 90.97 | 177 | ⇑P | P | 01 29 41.7 | -3.4 |
| | comp=Z,0.4nm,0.3s,baz=214,slow=3.5 | | | | | | |
| VNA2 | | | | ⇑PP | PP | 01 33 23.4 | -7.9 |
| | comp=Z,2.2nm,0.8s,baz=266,slow=5.5 | | | | | | |
| VNA2 | | | | ⇑PKiKP | PKiKP | 01 34 31.9 | -1.9 |
| | comp=Z,3.1nm,0.7s,baz=191,slow=4.7 | | | | | | |
| VNA1 | Neumayer--Stat | 91.19 | 177 | ⇑P | P | 01 29 39.7 | -6.3 |
| | comp=Z,2.9nm,0.8s | | | | | | |
| VNA1 | | | | ⇑PP | PP | 01 33 32.5 | -0.6 |
| | comp=Z,5.4nm,1.0s | | | | | | |
| VNA1 | | | | ⇑PKiKP | PKiKP | 01 34 29.6 | -4.6 |
| | comp=Z,7.2nm,1.0s | | | | | | |
| BVAR | Borovoye Array | 117.27 | 321 | PKP | PKPdf | 01 35 21.9 | -0.5 |
| | comp=Z,0.9nm,0.5s,baz=102,slow=1.8,SNR=4.9 | | | | | | |
| ARCES | ARCESS Array B | 126.58 | 350 | PKP | PKPdf | 01 35 40.0 | +0.2 |
| | comp=Z,3.9nm,1.2s,baz=90,slow=1.3,SNR=4.5 | | | | | | |
| KOLS | Kolonicke sedl | 145.15 | 346 | *e*PKP | PKPbc | 01 36 16.4 | +0.8 |
| BRTR | Keskin Array B | 145.23 | 315 | PKPbc | PKPbc | 01 36 16.5 | +0.2 |
| | comp=Z,3.6nm,0.7s,baz=131,slow=4.6,SNR=13 | | | | | | |
| CLL | Collm | 145.74 | 348 | *i* PKPbc | PKPbc | 01 36 17.6 | +0.4 |
| CLL | | | | *i* SKPdf | SKPbc | 01 38 58.6 | -1.7 |
| DPC | Dobruska-Polom | 145.85 | 344 | *e*PKP | PKPbc | 01 36 18.5 | +0.9 |
| LANS | Liptovska Anna | 145.97 | 339 | *e*PKP | PKPbc | 01 36 19.3 | +1.3 |
| KRLC | Kraliky | 145.98 | 343 | *e*PKP | PKPbc | 01 36 18.9 | +0.9 |
| MMAI | Mount Meron Ar | 146.62 | 303 | PKPbc | PKPbc | 01 36 20.6 | +0.3 |
| | comp=Z,6.3nm,0.5s,baz=72,slow=6.3,SNR=29 | | | | | | |
| VYHS | Vyhne | 146.75 | 340 | *e*PKP | PKPbc | 01 36 20.9 | +0.8 |
| ZVC | Zvikov | 147.24 | 345 | *e*PKP | PKPbc | 01 36 22.3 | +1.0 |
| KHC | Kasperske Hory | 147.67 | 346 | *e*PKP | PKPbc | 01 36 23.1 | +0.6 |
| GERES | GERESS Array B | 147.81 | 345 | *e*PKPbc | PKPbc | 01 36 23.8 | +0.6 |
| | comp=Z,0.8nm,0.4s,baz=24,slow=3.4,SNR=7.3 | | | | | | |
| TORD | Torodi Ar. Bea | 175.07 | 176 | PKPab | PKPab | 01 38 28.4 | +1.6 |
| | comp=Z,0.7nm,1.2s,baz=102,slow=1.4,SNR=1.8 | | | | | | |

*IDC* ***19*** *01:19:22.8±6.8, 18.03S×177.90W, h555km±72km, mb3.6/8, mbtmp4.5/8, Error ellipse: s-maj=42.3km s-min=22.3km az=36.0*
*NEIC* ***19*** *01:19:23.6±2.8, 17.8S±0.1×177.8W±0.1, h582km±10km, mb4.5/26, Error ellipse: s-maj=21.2km s-min=13.8km az=174.0*

**ISC 19 01:19:24.9±0.6, 17.9S±0.1×177.90W±0.10, h590km, n58, σ1§09/52, mb4.5/22, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.86 | 272 | P | P | 01 20 50.1 | +1.4 |
| AFI | Afiamalu | 7.11 | 57 | P | P | 01 21 16.0 | +0.4 |
| NIUE | Niue | 7.65 | 100 | P | P | 01 21 20.4 | -0.1 |
| LIFNC | LIFOU | 14.31 | 256 | P | P | 01 22 25.8 | -1.1 |
| PINNC | Pines Island, | 14.52 | 249 | P | P | 01 22 29.1 | +0.2 |
| KOUNC | Koumac, New Ca | 17.03 | 258 | P | P | 01 22 53.7 | +1.6 |
| URZ | Urewera | 20.74 | 191 | P | P | 01 23 22.4 | -3.1 |
| | 9.6nm,0.6s,baz=72,slow=7.3,SNR=5.0 | | | | | | |
| | 9.6nm,0.6s | | | | | | |
| MRZ | Mangatainoka R | 23.36 | 193 | P | P | 01 23 47.2 | -1.7 |
| BHW | Baring Head | 24.23 | 193 | P | P | 01 23 55.2 | -1.4 |
| BHW | | | | IAmb | IAmb | 01 24 01.6 | |
| | comp=Z,22nm,1.2s | | | | | | |
| QRZ | Quartz Range | 24.28 | 198 | P | P | 01 23 56.8 | -0.3 |
| QRZ | | | | IAmb | IAmb | 01 23 58.2 | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| PLWZ | Palliser | 24.30 | 193 | P | P | 01 23 55.9 | -1.3 |
| NNZ | Nelson | 24.41 | 196 | P | P | 01 23 57.2 | -0.9 |
| NNZ | | | | IAmb | IAmb | 01 24 01.4 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| THZ | Tophouse | 25.05 | 196 | P | P | 01 24 03.6 | -0.3 |
| THZ | | | | IAmb | IAmb | 01 24 19.7 | |
| | comp=Z,14nm,1.0s | | | | | | |
| KHZ | Kahutara | 25.50 | 195 | P | P | 01 24 06.1 | -1.5 |
| KHZ | | | | IAmb | IAmb | 01 24 11.4 | |
| | comp=Z,18nm,0.9s | | | | | | |
| INZ | Inchbonnie | 26.34 | 198 | P | P | 01 24 14.4 | -0.7 |
| OXZ | Oxford | 26.73 | 196 | P | P | 01 24 17.6 | -1.0 |
| OXZ | | | | IAmb | IAmb | 01 24 21.0 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| RPZ | Rata Peaks | 27.37 | 198 | P | P | 01 24 22.8 | -1.3 |
| | comp=Z,6.9nm,0.6s,baz=341,slow=13,SNR=2.7 | | | | | | |
| | comp=Z,6.9nm,0.6s | | | | | | |
| FOZ | Fox Glacier | 27.58 | 200 | P | P | 01 24 25.7 | -0.2 |
| LBZ | Lake Benmore | 28.23 | 198 | P | P | 01 24 30.1 | -1.5 |
| LBZ | | | | IAmb | IAmb | 01 24 35.0 | |
| | comp=Z,16nm,1.2s | | | | | | |
| MLZ | Mavora Lakes | 29.76 | 200 | P | P | 01 24 45.4 | +0.5 |
| MLZ | | | | IAmb | IAmb | 01 24 47.6 | |
| | comp=Z,10nm,0.8s | | | | | | |
| DCZ | Deep Cove | 30.17 | 201 | P | P | 01 24 48.3 | 0.0 |
| DCZ | | | | IAmb | IAmb | 01 24 54.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| CAN | Canberra | 34.09 | 233 | P | P | 01 25 21.8 | 0.0 |
| TOO | Toolangi | 37.55 | 231 | P | P | 01 25 51.1 | +0.9 |
| COEN | Coen | 37.59 | 270 | P | P | 01 25 51.8 | +0.9 |
| COEN | | | | IAmb | IAmb | 01 25 52.8 | |
| | comp=Z,19nm,1.1s | | | | | | |
| STKA | Stephens Creek | 39.06 | 241 | P | P | 01 26 03.5 | +1.0 |
| STKA | Stephens Creek | 39.06 | 241 | P | P | 01 26 02.9 | +0.4 |
| | comp=Z,8.8nm,0.6s,baz=86,slow=11,SNR=6.0 | | | | | | |
| | comp=Z,8.8nm,0.6s | | | | | | |
| WR0 | Warramunga Arr | 44.92 | 259 | P | P | 01 26 48.7 | +0.1 |
| WB0 | Warramunga Arr | 45.08 | 260 | P | P | 01 26 49.9 | +0.1 |
| WB0 | | | | IAmb | IAmb | 01 26 50.1 | |
| | comp=Z,6.9nm,0.5s | | | | | | |
| WB2 | Warramunga Arr | 45.10 | 259 | P | P | 01 26 49.2 | -0.7 |
| WRA | Warramunga Arr | 45.11 | 259 | P | P | 01 26 49.9 | -0.2 |
| | comp=Z,4.2nm,0.4s,baz=93,slow=7.4,SNR=12 | | | | | | |
| | comp=Z,4.2nm,0.4s | | | | | | |
| AS31 | Alice Springs | 45.26 | 254 | P | P | 01 26 51.4 | +0.3 |
| ASAR | Alice Springs | 45.26 | 254 | P | P | 01 26 51.5 | +0.4 |
| ASAR | Alice Springs | 45.26 | 254 | P | P | 01 26 51.2 | +0.1 |
| | comp=Z,10nm,0.4s,baz=89,slow=8.4,SNR=15 | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | |
| FORT | Forrest | 50.45 | 245 | P | P | 01 27 29.1 | -0.4 |
| FORT | | | | IAmb | IAmb | 01 27 34.7 | |
| | comp=Z,24nm,1.1s | | | | | | |
| KNRA | Kununurra | 50.97 | 264 | P | P | 01 27 33.8 | +0.2 |
| FITZ | Fitzroy Crossi | 53.51 | 260 | P | P | 01 27 51.9 | +0.3 |
| QSPA | South Pole Qui | 72.15 | 180 | P | P | 01 29 51.9 | +1.4 |
| QSPA | | | | IAmb | IAmb | 01 30 11.0 | |
| | comp=Z,17nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 72.15 | 180 | P | P | 01 29 51.8 | +1.3 |
| | comp=Z,3.1nm,0.6s,baz=25,slow=11,SNR=7.0 | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | |
| KS19 | Wonju Array Si | 75.09 | 318 | P | P | 01 30 05.4 | -2.1 |
| KS19 | | | | IAmb | IAmb | 01 30 06.8 | |
| | comp=Z,23nm,0.9s | | | | | | |
| I07A | Izee | 81.50 | 38 | | pP | 01 32 41.7 | -4.1 |
| G06A | Carlson Farm, | 81.52 | 37 | | pP | 01 32 40.7 | -5.0 |
| WAX | Waxell Ridge | 83.05 | 17 | | pP | 01 32 50.8 | -3.0 |
| S31K | Pelican | 83.08 | 21 | pP | pP | 01 32 51.8 | -2.0 |
| S32K | Killisnoo | 83.28 | 22 | | pP | 01 32 50.8 | -4.0 |
| TXAR | Lajitas Array | 85.58 | 57 | P | P | 01 31 05.0 | +2.8 |
| | comp=Z,0.2nm,0.4s,baz=243,slow=6.0,SNR=4.0 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| I29M | Ogilvie Camp, | 88.27 | 16 | P | P | 01 31 12.1 | -1.8 |
| TROLL | Troll, Antarti | 90.31 | 180 | ⇑P | P | 01 31 23.1 | -0.4 |
| | comp=Z,84nm,0.6s | | | | | | |
| SNAA | Sanae | 90.58 | 178 | ⇑P | P | 01 31 23.4 | -1.3 |
| | comp=Z,9.7nm,0.4s | | | | | | |
| SNAA | Sanae | 90.58 | 178 | P | P | 01 31 24.9 | +0.2 |
| | comp=Z,0.6nm,0.5s,baz=205,slow=10,SNR=1.6 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| VNA3 | Neumayer Olymp | 90.71 | 176 | ⇑P | P | 01 31 24.9 

2.7nm,0.7s,baz=157,slow=6.1,SNR=6.0
2.7nm,0.7s
**QSPA South Pole Qui 71.92 180** P **P** **01 31 17.8 +0.2**
3.7nm,0.9s,baz=99,slow=1.0,SNR=0.9
3.7nm,0.9s
**PETK Petropavlovsk- 74.01 345** P **P** **01 31 30.4 +0.9**
4.3nm,0.8s,baz=129,slow=3.9,SNR=3.2
4.3nm,0.8s
**USRK Ussuriysk Ar. 77.05 326** P **P** **01 31 45.8 -0.8**
0.7nm,0.2s,baz=226,slow=10,SNR=9.9
0.7nm,0.2s
**NVAR Mina Array Bea 79.28 44** P **P** **01 31 59.1 +0.1**
1.2nm,0.7s,baz=224,slow=8.9,SNR=6.0
1.2nm,0.7s
**TXAR Lajitas Array 85.74 57** P **P** **01 32 33.0 +1.4**
5.2nm,1.0s,baz=193,slow=3.5,SNR=5.5
5.2nm,1.0s
**ILAR Eielson Array 86.01 13** P **P** **01 32 32.1 +0.2**
1.2nm,0.8s,baz=216,slow=4.6,SNR=4.5
1.2nm,0.8s
**PDAR Pinedale Array 87.21 43** P **P** **01 32 37.9 -0.5**
1.6nm,0.7s,baz=213,slow=2.6,SNR=6.6
1.6nm,0.7s
**BRTR Keskin Array B 145.26 315** PKPbc **PKPab** **01 39 25.9 -2.0**
0.9nm,0.6s,baz=136,slow=3.2,SNR=4.3
**MMAI Mount Meron Ar 146.64 303** PKPbc **PKiKP** **01 39 31.1 -1.7**
1.4nm,0.4s,baz=74,slow=6.2,SNR=4.1
**GERES GERESS Array B 147.94 345** PKPbc **PKiKP** **01 39 34.3 -0.7**
1.6nm,0.8s,baz=339,slow=7.1,SNR=5.6

*IDC **19** 01:21:30.2±3.6, 17.°97S×178.°72W, h637km±46km, mb3.5/10, mbtmp4.5/11, Error ellipse: s-maj=30.4km s-min=20.4km az=169.0*

*NEIC **19** 01:21:32.7±1.4, 17.°9S±0.°2×179.°06W±0.°08, h623km±10km, mb4.6/28, Error ellipse: s-maj=26.7km s-min=9.7km az=189.0*

**ISC 19 01:21:29.4±0.9, 17.°7S±0.°1×178.°9W±0.°1, h600km, n49, σ1s35/44, mb4.6/21, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.90** | **269** | P | | **P** | **01 22 52.1** | **+3.9** |
| **DZM** | **Mont Dzumac** | **14.44** | **250** | P | | **P** | **01 24 33.6** | **+0.9** |
| **DZM** | **Mont Dzumac** | **14.44** | **250** | P | | **P** | **01 24 33.5** | **+0.8** |
| 6.7nm,0.7s,baz=79,slow=18,SNR=6.0 | | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.13** | **257** | P | | **P** | **01 24 49.7** | **+1.6** |
| **MXZ** | **Matakaoa Point** | **19.92** | **187** | P | | **P** | **01 25 22.6** | **+0.3** |
| MXZ | | | | | IAmb | IAmb | 01 25 32.4 | |
| comp=Z,29nm,0.9s | | | | | | | | |
| **URZ** | **Urewera** | **20.76** | **189** | P | | **P** | **01 25 27.3** | **-2.5** |
| comp=Z,4.5nm,0.3s,baz=127,slow=2.8,SNR=2.7 | | | | | | | | |
| comp=Z,4.5nm,0.3s | | | | | | | | |
| **RTZ** | **Ruatahuna** | **21.13** | **189** | P | | **P** | **01 25 32.9** | **-0.3** |
| RTZ | | | | | IAmb | IAmb | 01 25 35.1 | |
| comp=Z,24nm,1.1s | | | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.35** | **191** | P | | **P** | **01 25 52.4** | **-0.5** |
| **TCW** | **Tory Channel** | **24.13** | **193** | P | | **P** | **01 26 00.8** | **+0.9** |
| **BHW** | **Baring Head** | **24.20** | **191** | P | | **P** | **01 26 00.2** | **-0.2** |
| BHW | | | | | IAmb | IAmb | 01 26 15.1 | |
| comp=Z,24nm,1.1s | | | | | | | | |
| **PLWZ** | **Palliser** | **24.29** | **191** | P | | **P** | **01 26 00.9** | **-0.4** |
| **NNZ** | **Nelson** | **24.34** | **194** | P | | **P** | **01 26 03.0** | **+1.4** |
| **THZ** | **Tophouse** | **24.97** | **195** | P | | **P** | **01 26 08.0** | **+0.8** |
| THZ | | | | | IAmb | IAmb | 01 26 09.1 | |
| comp=Z,9.3nm,0.6s | | | | | | | | |
| **GVZ** | **Greta Valley S** | **26.08** | **194** | P | | **P** | **01 26 16.8** | **-0.2** |
| **INZ** | **Inchbonnie** | **26.24** | **196** | P | | **P** | **01 26 19.0** | **+0.7** |
| INZ | | | | | IAmb | IAmb | 01 26 27.4 | |
| comp=Z,25nm,1.0s | | | | | | | | |
| **OXZ** | **Oxford** | **26.65** | **195** | P | | **P** | **01 26 22.0** | **0.0** |
| **FOZ** | **Fox Glacier** | **27.44** | **198** | P | | **P** | **01 26 30.4** | **+1.6** |
| **WKZ** | **Wanaka** | **28.86** | **198** | P | | **P** | **01 26 41.2** | **0.0** |
| WKZ | | | | | IAmb | IAmb | 01 26 51.6 | |
| comp=Z,24nm,1.0s | | | | | | | | |
| **COEN** | **Coen** | **36.63** | **270** | P | | **P** | **01 27 48.0** | **+1.0** |
| COEN | | | | | IAmb | IAmb | 01 27 51.7 | |
| comp=Z,10nm,0.8s | | | | | | | | |
| **TOO** | **Toolangi** | **36.92** | **230** | P | | **P** | **01 27 47.5** | **-1.6** |
| TOO | | | | | IAmb | IAmb | 01 28 02.0 | |
| comp=Z,17nm,1.1s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.31** | **241** | P | | **P** | **01 27 59.9** | **-0.6** |
| **STKA** | **Stephens Creek** | **38.31** | **241** | P | | **P** | **01 27 58.5** | **-2.0** |
| comp=Z,9.5nm,0.6s,baz=93,slow=9.7,SNR=6.6 | | | | | | | | |
| comp=Z,9.5nm,0.6s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.09** | **241** | P | | **P** | **01 28 36.7** | **-1.5** |
| BBOO | | | | | IAmb | IAmb | 01 28 42.5 | |
| comp=Z,13nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.20** | **259** | P | | **P** | **01 28 46.5** | **-0.5** |
| comp=Z,5.0nm,0.5s,baz=93,slow=7.1,SNR=9.9 | | | | | | | | |
| comp=Z,5.0nm,0.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **44.39** | **254** | | | **P** | **01 28 48.0** | **-0.4** |
| AS31 | | | | | IAmb | IAmb | 01 28 48.8 | |
| comp=Z,12nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.39** | **254** | | | **P** | **01 28 48.1** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.39** | **254** | P | | **P** | **01 28 47.9** | **-0.6** |
| comp=Z,38nm,0.5s,baz=88,slow=8.7,SNR=39 | | | | | | | | |
| comp=Z,38nm,0.5s | | | | | | | | |
| **FORT** | **Forrest** | **49.66** | **244** | P | | **P** | **01 29 26.1** | **-1.7** |
| FORT | | | | | IAmb | IAmb | 01 29 26.4 | |
| comp=Z,15nm,0.6s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.04** | **264** | P | | **P** | **01 29 30.5** | **-0.2** |
| **SOEI** | **Soe** | **55.60** | **270** | P | | **P** | **01 30 11.7** | **+1.3** |
| SOEI | | | | | IAmb | IAmb | 01 30 12.6 | |
| comp=Z,24nm,0.8s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.50** | **255** | P | | **P** | **01 30 21.8** | **-1.3** |
| **MBWA** | **Marble Bar** | **57.66** | **256** | P | | **P** | **01 30 23.1** | **-1.2** |
| **GIRL** | **Giralia** | **62.50** | **253** | P | | **P** | **01 30 55.8** | **-0.3** |
| **VA02** | **Isla de Pascua** | **64.20** | **112** | P | | **P** | **01 31 08.2** | **+1.3** |
| **MJAR** | **Matsushiro Arr** | **67.48** | **324** | P | | **P** | **01 31 26.1** | **-0.9** |
| comp=Z,1.6nm,0.5s,baz=154,slow=5.8,SNR=6.7 | | | | | | | | |
| comp=Z,1.6nm,0.5s | | | | | | | | |
| **UGM** | **Wanagama** | **69.18** | **268** | P | | **P** | **01 31 37.2** | **-0.5** |
| **TPUB** | **Ta-pu** | **71.76** | **303** | P | | **P** | **01 31 51.9** | **-0.8** |
| TPUB | | | | | IAmb | IAmb | 01 31 53.4 | |
| comp=Z,14nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.33** | **180** | P | | **P** | **01 31 56.1** | **+0.7** |
| **KSRS** | **Korea Array** | **74.25** | **319** | P | | **P** | **01 32 07.2** | **+0.8** |
| **KSRS** | **Korea Array** | **74.25** | **319** | P | | **P** | **01 32 07.2** | **+0.8** |
| comp=Z,0.7nm,0.5s,baz=140,slow=6.1,SNR=4.3 | | | | | | | | |
| comp=Z,0.7nm,0.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.62** | **44** | P | | P | 01 32 33.8 | -2.1 |
| comp=Z,2.9nm,0.8s,baz=226,slow=7.7,SNR=9.9 | | | | | | | | |
| comp=Z,2.9nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.81** | **13** | P | | P | 01 33 03.9 | -2.1 |
| comp=Z,0.6nm,0.4s,baz=218,slow=5.5,SNR=4.6 | | | | | | | | |
| comp=Z,0.6nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.30** | **58** | P | | P | 01 33 08.1 | -1.2 |
| comp=Z,2.4nm,0.7s,baz=215,slow=5.5,SNR=6.5 | | | | | | | | |
| comp=Z,2.4nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.54** | **44** | P | | P | 01 33 12.6 | -2.4 |
| comp=Z,1.5nm,0.6s,baz=208,slow=3.0,SNR=6.0 | | | | | | | | |
| comp=Z,1.5nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.40** | **321** | PKP | | **PKPdf** | **01 39 01.9** | **-3.8** |
| comp=Z,1.0nm,0.4s,baz=122,slow=1.7,SNR=7.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.05** | **350** | PKP | | PKPdf | 01 39 19.4 | -4.4 |
| comp=Z,2.0nm,0.7s,baz=11,slow=2.5,SNR=3.8 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.32** | **315** | PKP | | **PKPdf** | **01 39 56.5** | **-2.1** |
| comp=Z,3.1nm,0.5s,baz=122,slow=4.1,SNR=16 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.65** | **303** | PKPbc | | **PKPdf** | **01 40 01.2** | **+0.2** |
| comp=Z,5.5nm,0.5s,baz=67,slow=6.4,SNR=22 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.31** | **345** | PKPbc | | **PKPdf** | **01 40 03.7** | **+0.4** |
| comp=Z,1.7nm,0.5s,baz=158,slow=8.6,SNR=12 | | | | | | | | |

*IDC **19** 01:22:12.4±3.5, 18.°15S×178.°17W, h532km±39km, mb3.7/12, mbtmp4.5/13, Error ellipse: s-maj=21.1km s-min=18.1km az=133.0*

*NEIC **19** 01:22:14.4±2.4, 18.°2S±0.°2×178.°2W±0.°1, h556km±11km, mb4.4/19, Error ellipse: s-maj=24.5km s-min=16.7km az=142.0*

**ISC 19 01:22:14.2±0.5, 18.°25S±0.°10×178.°23W±0.°09, h550km, n73, σ1s68/85, mb4.3/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.58** | **278** | P | | **P** | **01 23 55.5** | **+2.4** |
| **AFI** | **Afiamalu** | **7.55** | **56** | P | | **P** | **01 24 07.5** | **-0.1** |
| **NIUE** | **Niue** | **7.91** | **97** | P | | **P** | **01 24 11.4** | **+0.4** |
| **FUNA** | **Funafuti** | **9.98** | **345** | P | | **P** | **01 24 31.7** | **-0.3** |
| **LIFNC** | **LIFOU** | **13.93** | **257** | P | | **P** | **01 25 11.9** | **-0.8** |
| **PINNC** | **Pines Island,** | **14.12** | **250** | P | | **P** | **01 25 14.6** | **0.0** |
| **DZM** | **Mont Dzumac** | **14.89** | **253** | P | | **P** | **01 25 21.5** | **-1.1** |
| **DZM** | **Mont Dzumac** | **14.89** | **253** | P | | **P** | **01 25 21.0** | **-1.6** |
| 3.4nm,0.4s,baz=92,slow=17,SNR=2.2 | | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.66** | **259** | P | | **P** | **01 25 40.1** | **+0.3** |
| **URZ** | **Urewera** | **20.35** | **191** | P | | **P** | **01 26 12.0** | **-1.2** |
| 7.6nm,0.3s,baz=40,slow=1.7,SNR=2.7 | | | | | | | | |
| 7.6nm,0.3s | | | | | | | | |
| **BHW** | **Baring Head** | **23.83** | **193** | P | | **P** | **01 26 44.3** | **-0.1** |
| **PLWZ** | **Palliser** | **23.91** | **192** | P | | **P** | **01 26 44.8** | **-0.3** |
| **CTA** | **Charters Tower** | **33.56** | **261** | P | | **P** | **01 28 08.7** | **-0.5** |
| 0.4nm,0.5s,baz=87,slow=9.7,SNR=3.3 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.62** | **242** | P | | **P** | **01 28 51.3** | **+0.6** |
| 5.5nm,0.5s,baz=90,slow=9.1,SNR=5.1 | | | | | | | | |
| 5.5nm,0.5s | | | | | | | | |
| **DHH** | **Diamond Head** | **44.07** | **28** | P | | **P** | **01 29 33.7** | **-0.1** |
| **WB2** | **Warramunga Arr** | **44.73** | **260** | P | | **P** | **01 29 39.1** | **0.0** |
| WB2 | | | | | IAmb | IAmb | 01 29 55.7 | |
| comp=Z,10nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.74** | **260** | P | | **P** | **01 29 39.0** | **-0.2** |
| comp=Z,5.4nm,0.5s,baz=97,slow=6.8,SNR=8.8 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **01 31 09.3** | **-0.3** |
| comp=Z,0.7nm,0.4s,baz=82,slow=3.4,SNR=2.0 | | | | | | | | |
| comp=Z,5.4nm,0.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **44.87** | **255** | P | | **P** | **01 29 40.5** | **+0.3** |
| AS31 | | | | | IAmb | IAmb | 01 29 41.3 | |
| comp=Z,9.2nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.87** | **255** | P | | **P** | **01 29 40.5** | **+0.3** |
| comp=Z,28nm,0.5s,baz=88,slow=8.7,SNR=20 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 31 09.9** | **-0.2** |
| comp=Z,1.3nm,0.4s,baz=95,slow=4.6,SNR=2.0 | | | | | | | | |
| comp=Z,28nm,0.5s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.28** | **323** | P | | **P** | **01 32 19.5** | **-1.0** |
| comp=Z,2.3nm,0.5s,baz=162,slow=5.8,SNR=13 | | | | | | | | |
| comp=Z,2.3nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.81** | **180** | P | | **P** | **01 32 41.6** | **+0.4** |
| comp=Z,3.3nm,0.8s,baz=32,slow=4.5,SNR=3.0 | | | | | | | | |
| comp=Z,3.3nm,0.8s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.05** | **345** | P | | **P** | **01 32 52.9** | **-1.0** |
| comp=Z,4.1nm,0.6s,baz=106,slow=7.1,SNR=8.5 | | | | | | | | |
| comp=Z,4.1nm,0.6s | | | | | | | | |
| **KSRS** | **Korea Array** | **75.07** | **318** | P | | **P** | **01 33 00.7** | **+0.8** |
| comp=Z,0.6nm,0.4s,baz=112,slow=5.3,SNR=2.2 | | | | | | | | |
| comp=Z,0.6nm,0.4s | | | | | | | | |
| **HUMO** | **Hull Mountain** | **79.06** | **38** | P | | **P** | **01 33 22.4** | **+0.8** |
| HUMO | | | | | IAmb | IAmb | 01 33 23.6 | |
| comp=Z,14nm,1.1s | | | | | | | | |
| **PNTR** | **Pine Nut** | **79.07** | **43** | | | **P** | **01 33 21.9** | **-0.2** |
| PNTR | | | | | IAmb | IAmb | 01 33 23.6 | |
| comp=Z,12nm,1.0s | | | | | | | | |
| **DSP** | **Deep Springs** | **79.19** | **45** | P | | **P** | **01 33 23.0** | **+0.6** |
| DSP | | | | | IAmb | IAmb | 01 33 50.2 | |
| comp=Z,12nm,1.2s | | | | | | | | |
| **YERR** | **Yerington** | **79.24** | **43** | P | | **P** | **01 33 23.2** | **+0.3** |
| **O16K** | **Kokwok River B** | **79.28** | **10** | P | | **P** | **01 33 20.2** | **-2.1** |
| O16K | | | | | IAmb | IAmb | 01 33 44.4 | |
| comp=Z,22nm,1.3s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.55** | **44** | P | | **P** | **01 33 24.3** | **-0.3** |
| comp=Z,2.0nm,0.7s,baz=227,slow=8.2,SNR=7.9 | | | | | | | | |
| comp=Z,2.0nm,0.7s | | | | | | | | |
| **WISH** | **Wishkah** | **81.37** | **34** | P | | **P** | **01 33 34.0** | **+0.5** |
| **TXAR** | **Lajitas Array** | **86.03** | **58** | P | | **P** | **01 33 58.4** | **+1.3** |
| comp=Z,1.8nm,0.7s,baz=215,slow=8.1,SNR=7.5 | | | | | | | | |
| comp=Z,1.8nm,0.7s | | | | | | | | |
| **IL31** | | **86.17** | **13** | P | | **P** | **01 33 55.5** | **-1.3** |
| IL31 | | | | | IAmb | IAmb | 01 34 08.3 | |
| comp=Z,4.6nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.17** | **13** | P | | **P** | **01 33 56.0** | **-0.8** |
| **ILAR** | **Eielson Array** | **86.17** | **13** | P | | **P** | **01 33 55.0** | **-1.9** |
| comp=Z,1.5nm,0.4s,baz=221,slow=5.1,SNR=16 | | | | | | | | |
| comp=Z,1.5nm,0.4s | | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **86.19** | **8** | P | | **P** | **01 33 55.7** | **-1.1** |
| F19K | | | | | IAmb | IAmb | 01 34 09.7 | |
| comp=Z,3.1nm,0.7s | | | | | | | | |
| **M29M** | **Somme Creek** | **86.32** | **17** | P | | **P** | **01 33 57.1** | **-0.7** |
| **J25K** | **Salcha River,** | **86.37** | **14** | P | | **P** | **01 33 57.1** | **-0.8** |
| J25K | | | | | IAmb | IAmb | 01 33 57.3 | |
| comp=Z,14nm,1.4s | | | | | | | | |
| **E18K** | **Tukpahlearik C** | **86.41** | **7** | P | | **P** | **01 33 57.2** | **-0.7** |
| **G21K** | **Allakaket** | **86.51** | **10** | P | | **P** | **01 33 57.7** | **-0.8** |
| **PDAR** | **Pinedale Array** | **87.48** | **43** | P | | **P** | **01 34 02.8** | **-1.1** |
| comp=Z,1.3nm,0.6s,baz=232,slow=2.9,SNR=5.4 | | | | | | | | |
| comp=Z,1.3nm,0.6s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **88.26** | **10** | P | | **P** | **01 34 05.9** | **-0.8** |
| E22K | | | | | IAmb | IAmb | 01 34 07.6 | |
| comp=Z,11nm,1.2s | | | | | | | | |
| **I28M** | **Miner Creek** | **88.34** | **15** | P | | **P** | **01 34 06.3** | **-0.8** |
| **F24K** | **Squaw Lake** | **88.39** | **11** | P | | **P** | **01 34 06.6** | **-0.7** |
| F24K | | | | | IAmb | IAmb | 01 34 19.6 | |
| comp=Z,5.0nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.49** | **314** | PKiKP | | **PKiKP** | **01 39 40.6** | **-1.7** |
| comp=Z,0.8nm,0.8s,baz=157,slow=0.8,SNR=5.9 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.22** | **321** | PKP | | **PKPdf** | **01 39 55.1** | **-1.9** |
| comp=Z,1.0nm,0.4s,baz=115,slow=1.3,SNR=8.9 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.68** | **350** | PKP | | **PKPdf** | **01 40 13.5** | **-1.1** |
| comp=Z,0.8nm,0.5s,baz=34,slow=1.3,SNR=9.4 | | | | | | | | |
| **FINES** | **FINESS Array B** | **133.56** | **344** | PKP | | **PKPdf** | **01 40 27.5** | **-0.3** |
| comp=Z,1.3nm,0.6s,baz=48,slow=2.8,SNR=5.0 | | | | | | | | |
| **HFS** | **Hagfors** | **137.29** | **351** | PKiKP | PKPpre | | 01 40 24.4 | |
| comp=Z,1.2nm,0.6s,baz=131,slow=3.3,SNR=6.5 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.79** | **5** | PKhKP | PKPpre | | 01 40 40.8 | |
| comp=Z,0.3nm,0.4s,baz=317,slow=2.9,SNR=5.2 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.14** | **315** | PKPbc | | **PKPdf** | **01 40 49.5** | **-0.2** |
| comp=Z,1.9nm,0.4s,baz=88,slow=2.1,SNR=12 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.92** | **343** | *e*PKP | | **PKPbc** | **01 40 52.0** | **-0.4** |
| **KRLC** | **Kraliky** | **146.04** | **343** | *e*PKP | | **PKPbc** | **01 40 52.3** | **-0.4** |
| **HSKC** | **Hora Svate Kat** | **146.40** | **347** | *e*PKP | | **PKPbc** | **01 40 53.3** | **-0.4** |
| **MMAI** | **Mount Meron Ar** | **146.47** | **303** | PKPbc | | **PKPbc** | **01 40 54.6** | **+0.1** |
| comp=Z,2.4nm,0.4s,baz=74,slow=6.2,SNR=9.1 | | | | | | | | |
| **PRU** | **Pruhonice** | **146.71** | **345** | *e*PKP | | **PKPbc** | **01 40 54.1** | **-0.4** |
| **TREC** | **Trest** | **147.11** | **343** | *e*PKP | | **PKPbc** | **01 40 55.1** | **-0.5** |
| **ZVC** | **Zvikov** | **147.31** | **345** | *e*PKP | | **PKPbc** | **01 40 55.3** | **-0.8** |
| ZVC | | | | *ex* | | **PKPab** | **01 40 59.4** | **-0.4** |
| **KHC** | **Kasperske Hory** | **147.75** | **345** | *e*PKP | | **PKPbc** | **01 40 57.1** | **-0.2** |
| **GERES** | **GERESS Array B** | **147.98** | **345** | PKPbc | | **PKPbc** | **01 40 57.5** | **-0.4** |
| comp=Z,3.3nm,0.6s,baz=160,slow=8.1,SNR=15 | | | | | | | | |
| **CONA** | **Conrad Observa** | **148.24** | **342** | *e*PKP | | **PKPbc** | **01 40 58.6** | **0.0** |
| comp=Z,2.6nm,0.6s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.31** | **341** | *e*PKP | | **PKPab** | **01 41 10.8** | **+6.9** |
| comp=Z,2.3nm,0.4s | | | | | | | | |
| RONA | | | | *e*PKP | | **PKPbc** | **01 40 58.6** | **-0.1** |
| comp=Z,2.5nm,0.5s,SNR=6.8 | | | | | | | | |
| **MOA** | **Molln** | **148.76** | **344** | *i* PKP | | **PKPab** | **01 41 11.3** | **+5.6** |
| comp=Z,1.9nm,0.6s | | | | | | | | |
| MOA | | | | *i* PKP | | **PKPbc** | **01 40 59.3** | **-0.5** |
| comp=Z,0.9nm,0.5s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.07** | **344** | *i* PKP | | **PKPbc** | **01 40 59.9** | **-0.7** |
| comp=Z,1.1nm,0.3s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.56** | **345** | *i* PKP | | **PKPab** | **01 41 13.5** | **+4.4** |
| comp=Z,3.6nm,0.4s | | | | | | | | |
| LESA | | | | *i* PKP | | **PKPbc** | **01 41 01.0** | **-0.8** |
| comp=Z,2.7nm,0.6s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.71** | **344** | *e*PKP | | **PKPab** | **01 41 13.6** | **+3.7** |
| comp=Z,3.7nm,0.5s | | | | | | | | |
| KBA | | | | *i* PKP | | **PKPbc** | **01 41 01.0** | **-1.3** |
| comp=Z,2.2nm,0.4s | | | | | | | | |
| **WATA** | **Walderalm** | **149.89** | **347** | *i* PKP | | **PKPab** | **01 41 14.1** | **+3.4** |
| comp=Z,6.3nm,0.6s | | | | | | | | |
| WATA | | | | *e*PKP | | **PKPbc** | **01 41 02.0** | **-0.7** |
| comp=Z,3.4nm,0.6s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.95** | **347** | *i* PKP | | **PKPab** | **01 41 14.3** | **+3.4** |
| comp=Z,13nm,0.5s | | | | | | | | |
| WTTA | | | | *e*PKP | | **PKPbc** | **01 41 02.3** | **-0.6** |
| comp=Z,6.6nm,0.5s | | | | | | | | |
| **MOTA** | **Moosalm** | **149.98** | **347** | *i* PKP | | **PKPab** | **01 41 14.3** | **+3.3** |
| comp=Z,1.4nm,0.5s | | | | | | | | |
| MOTA | | | | *i* PKP | | **PKPbc** | **01 41 02.1** | **-0.9** |
| comp=Z,1.4nm,0.5s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.05** | **344** | *i* PKP | | **PKPab** | **01 41 13.8** | **+2.6** |
| comp=Z,3.5nm,0.4s | | | | | | | | |
| MYKA | | | | *e*PKP | | **PKPbc** | **01 41 01.7** | **-1.3** |
| comp=Z,2.8nm,0.4s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.23** | **345** | *i* PKP | | **PKPab** | **01 41 14.4** | **+2.4** |
| comp=Z,8.1nm,0.7s | | | | | | | | |
| ABTA | | | | *e*PKP | | **PKPbc** | **01 41 02.3** | **-1.1** |
| comp=Z,6.4nm,0.6s,SNR=12 | | | | | | | | |
| **DAVA** | **Damuels** | **150.28** | **349** | *i* PKP | | **PKPab** | **01 41 15.7** | **+3.4** |
| comp=Z,4.1nm,0.5s | | | | | | | | |
| DAVA | | | | *e*PKP | | **PKPbc** | **01 41 03.7** | **0.0** |
| comp=Z,3.7nm,0.5s | | | | | | | | |
| **FETA** | **Feichten** | **150.37** | **348** | *i* PKP | | **PKPab** | **01 41 15.4** | **+2.7** |
| comp=Z,3.1nm,0.7s | | | | | | | | |
| FETA | | | | *e*PKP | | **PKPbc** | **01 41 03.3** | **-0.6** |
| comp=Z,2.7nm,0.6s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **158.07** | **12** | PKPab | | **PKPab** | **01 41 44.7** | **-1.0** |
| comp=Z,1.3nm,1.0s,baz=333,slow=3.5,SNR=4.2 | | | | | | | | |

*IDC **19** 01:22:32.2±2.2, 18.°03S×177.°98W, h611km±28km, mb3.7/11, mbtmp4.7/12, Error ellipse: s-maj=21.4km s-min=13.0km az=167.0*

*NEIC **19** 01:22:33.2±1.4, 18.°01S±0.°09×177.°9W±0.°1, h625km±8km, mb4.6/27, Error ellipse: s-maj=17.2km s-min=12.6km az=75.0*

**ISC 19 01:22:31.7±0.5, 18.°0S±0.°1×177.°99W±0.°08, h600km, n62, σ1s28/65, mb4.5/26, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.78** | **273** | P | | **P** | **01 24 00.2** | **+4.4** |
| **AFI** | **Afiamalu** | **7.22** | **57** | P | | **P** | **01 24 24.7** | **+0.8** |
| **LIFNC** | **LIFOU** | **14.21** | **256** | P | | **P** | **01 25 32.5** | **-0.2** |
| **RAR** | **Rarotonga** | **17.46** | **104** | P | | **P** | **01 26 02.8** | **+0.3** |
| 16nm,0.5s,baz=153,slow=12,SNR=2.3 | | | | | | | | |
| **QRZ** | **Quartz Range** | **24.18** | **198** | P | | **P** | **01 27 02.6** | **+0.1** |
| QRZ | | | | | IAmb | IAmb | 01 27 08.1 | |
| comp=Z,21nm,1.2s | | | | | | | | |
| **NNZ** | **Nelson** | **24.31** | **196** | P | | **P** | **01 27 02.7** | **-0.9** |
| NNZ | | | | | IAmb | IAmb | 01 27 10.4 | |
| comp=Z,16nm,1.1s | | | | | | | | |
| **LTZ** | **Lake Taylor** | **26.07** | **196** | P | | **P** | **01 27 19.3** | **+0.1** |
| LTZ | | | | | IAmb | IAmb | 01 27 20.4 | |
| comp=Z,10nm,0.8s | | | | | | | | |
| **PPT** | **Papeete** | **27.05** | **94** | P | | **P** | **01 27 27.9** | **-0.2** |
| comp=Z,27nm,0.5s,baz=166,slow=3.6,SNR=8.4 | | | | | | | | |
| comp=Z,27nm,0.5s | | | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.06** | **94** | P | | **P** | **01 27 28.6** | **+0.4** |
| **FOZ** | **Fox Glacier** | **27.48** | **199** | P | | **P** | **01 27 30.7** | **-0.7** |
| **CTA** | **Charters Tower** | **33.83** | **261** | P | | **P** | **01 28 25.9** | **-0.2** |
| comp=Z,0.4nm,0.6s,baz=62,slow=7.5,SNR=2.8 | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.83** | **261** | P | | **P** | **01 28 26.3** | **+0.2** |
| **CAN** | **Canberra** | **33.98** | **233** | P | | **P** | **01 28 27.4** | **+0.2** |
| CAN | | | | | IAmb | IAmb | 01 28 28.8 | |
| comp=Z,11nm,0.9s | | | | | | | | |
| **COEN** | **Coen** | **37.51** | **270** | P | | **P** | **01 28 57.2** | **+0.8** |
| COEN | | | | | IAmb | IAmb | 01 28 58.2 | |
| comp=Z,17nm,0.6s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | | **P** | **01 29 08.3** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | | **P** | **01 29 07.0** | **-0.8** |
| comp=Z,8.4nm,0.7s,baz=101,slow=11,SNR=4.1 | | | | | | | | |
| comp=Z,8.4nm,0.7s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.72** | **241** | P | | **P** | **01 29 45.0** | **-0.4** |
| BBOO | | | | | IAmb | IAmb | 01 29 46.0 | |
| comp=Z,14nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.01** | **260** | P | | **P** | **01 29 55.2** | **-0.3** |
| comp=Z,6.5nm,0.4s,baz=97,slow=7.5,SNR=15 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **01 31 22.9** | **-0.6** |
| comp=Z,1.6nm,0.3s,baz=90,slow=3.7,SNR=4.9 | | | | | | | | |
| comp=Z,6.5nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | | **P** | **01 29 56.1** | **-0.4** |
| comp=Z,21nm,0.6s,baz=95,slow=7.5,SNR=8.3 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 31 23.1** | **-0.8** |
| comp=Z,3.8nm,0.4s,baz=103,slow=3.9,SNR=6.2 | | | | | | | | |
| comp=Z,21nm,0.6s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.88** | **264** | P | | **P** | **01 30 38.9** | **-0.2** |
| **FAKI** | **Fak Fak** | **50.98** | **281** | P | | **P** | **01 30 39.7** | **-0.2** |
| FAKI | | | | | IAmb | IAmb | 01 30 57.9 | |
| comp=Z,39nm,1.1s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.41** | **261** | P | | **P** | **01 30 56.5** | **-0.7** |
| **SOEI** | **Soe** | **56.47** | **270** | P | | **P** | **01 31 19.4** | **+0.7** |
| SOEI | | | | | IAmb | IAmb | 01 31 20.7 | |
| comp=Z,37nm,0.8s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.28** | **255** | P | | **P** | **01 31 29.5** | **-1.1** |
| **MBWA** | **Marble Bar** | **58.44** | **256** | P | | **P** | **01 31 30.6** | **-1.1** |
| **GIRL** | **Giralia** | **63.26** | **253** | P | | **P** | **01 32 03.4** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **68.21** | **323** | P | | **P** | **01 

comp=Z,13nm,0.8s
CTAO **Charters Tower** 16.43 210 P P 01 27 16.6 +1.4
KOUNC **Koumac, New Ca** 17.23 149 P P 01 27 24.9 +1.0
LIFNC **LIFOU** 19.07 142 P P 01 27 44.2 +0.1
DZM **Mont Dzumac** 19.62 146 P 01 27 50.5 +0.4
DZM **Mont Dzumac** 19.62 146 P P 01 27 50.6 +0.4
comp=Z,42nm,0.5s,baz=286,slow=9.3,SNR=53
EIDS **Eidsvold** 19.73 190 IAmb IAmb 01 27 56.3
comp=Z,19nm,0.9s
EIDS **Eidsvold** 19.73 190 P P 01 27 51.1 -0.1
EIDS IAmb IAmb 01 27 56.3
comp=Z,19nm,0.9s
EIDS **Eidsvold** 19.73 190 P P 01 27 50.9 -0.3
PINNC **Pines Island,** 20.61 145 P P 01 28 00.6 0.0
FAKI **Fak Fak** 22.74 276 P P 01 28 21.4 -1.2
FAKI IAmb IAmb 01 28 31.5
comp=Z,35nm,1.0s
WRA **Warramunga Arr** 24.37 233 P P 01 28 36.8 -0.7
comp=Z,1.2nm,0.4s,baz=56,slow=9.5,SNR=4.3
WRA PcP **PcP** 01 32 12.0 -1.1
comp=Z,1.2nm,1.0s,baz=104,slow=6.7,SNR=2.7
comp=Z,1.2nm,0.4s
ARMA **Armidale** 24.62 187 P P 01 28 40.2 +0.5
ARMA IAmb IAmb 01 28 40.5
comp=Z,19nm,0.7s
ASAR **Alice Springs** 26.84 227 P P 01 28 58.1 -1.6
comp=Z,8.2nm,0.6s,baz=85,slow=8.8,SNR=5.2
comp=Z,8.2nm,0.6s
TOLI2 **Tolitoli** 34.73 280 P P 01 30 08.0 -1.2
TOLI2 IAmb IAmb 01 30 09.8
comp=Z,17nm,0.6s
TOZ **Tahuroa Road** 36.87 152 P P 01 30 27.8 +0.8
TOZ IAmb IAmb 01 30 28.7
comp=Z,14nm,0.8s
HIZ **Hauiti** 37.22 154 P P 01 30 30.1 +0.2
TAU **Tasmania Unive** 37.49 189 P P 01 30 32.6 +0.4
URZ **Urewera** 38.05 151 P P 01 30 35.7 -1.2
comp=Z,7.0nm,0.7s,baz=27,slow=2.3,SNR=3.9
comp=Z,7.0nm,0.7s
QRZ **Quartz Range** 38.24 158 P P 01 30 39.3 +0.8
RTZ **Ruatahuna** 38.27 152 P P 01 30 39.1 +0.2
RTZ IAmb IAmb 01 30 39.7
comp=Z,19nm,0.6s
BKZ **Black Stump Fm** 38.48 153 P P 01 30 40.2 -0.5
BKZ IAmb IAmb 01 30 41.9
comp=Z,8.2nm,0.5s
TKNZ **Takaka Hill** 38.58 158 P P 01 30 41.7 +0.4
MRNZ **Matariki Terra** 38.82 158 P P 01 30 43.5 +0.1
NNZ **Nelson** 38.90 158 P P 01 30 44.3 +0.3
NNZ IAmb IAmb 01 30 56.6
comp=Z,15nm,1.1s
THZ **Tophouse** 39.19 158 P 01 30 46.3 -0.2
TCW **Tory Channel** 39.24 157 P P 01 30 47.2 +0.4
TUWZ **Tuamarina** 39.29 157 P P 01 30 48.2 +0.9
MRZ **Mangatainoka R** 39.31 155 P P 01 30 46.8 -0.6
MRZ IAmb IAmb 01 30 47.6
comp=Z,25nm,1.0s
SNZO **South Karori** 39.49 156 P P 01 30 48.7 -0.2
SNZO **South Karori** 39.49 156 P P 01 30 48.9 0.0
BSWZ **Blackbird Sta** 39.51 157 P P 01 30 49.2 +0.1
INZ **Inchbonnie** 39.54 161 P P 01 30 49.2 -0.1
BFZ **Birch Farm** 39.61 154 P P 01 30 49.5 -0.4
BFZ IAmb IAmb 01 30 50.4
comp=Z,13nm,0.7s
BHW **Baring Head** 39.64 156 P P 01 30 49.8 -0.3
BHW IAmb IAmb 01 30 54.5
comp=Z,14nm,0.9s
CMWZ **Cape Campbell** 39.67 157 P P 01 30 50.8 +0.4
MSWZ **Moikau Station** 39.80 156 P P 01 30 51.1 -0.4
LTZ **Lake Taylor** 39.86 160 P P 01 30 52.3 +0.3
PLWZ **Palliser** 39.93 156 P P 01 30 51.8 -0.8
KHZ **Kahutara** 39.99 158 P P 01 30 52.4 -0.6
KHZ IAmb IAmb 01 30 53.1
comp=Z,23nm,0.7s
OXZ **Oxford** 40.27 161 P P 01 30 54.7 -0.6
OXZ IAmb IAmb 01 30 55.7
comp=Z,18nm,0.5s
GVZ **Greta Valley S** 40.29 159 P 01 30 55.1 -0.4
RPZ **Rata Peaks** 40.30 162 P P 01 30 55.9 +0.3
RPZ IAmb IAmb 01 30 56.6
comp=Z,17nm,0.7s
RPZ **Rata Peaks** 40.30 162 P P 01 30 54.6 -1.0
comp=Z,16nm,0.6s,baz=313,slow=2.2,SNR=14
comp=Z,16nm,0.6s
AMCZ **Amberley** 40.34 160 P P 01 30 55.7 -0.2
LBZ **Lake Benmore** 40.65 163 P P 01 30 58.0 -0.5
MQZ **McQueen's Vall** 40.81 160 P P 01 30 59.6 -0.1
MQZ IAmb IAmb 01 31 00.7
comp=Z,16nm,0.6s
ODZ **Otahua Downs** 41.39 163 P P 01 31 04.5 +0.1
KSM **Kuching** 45.09 278 P P 01 31 33.9 -0.7
KSM IAmb IAmb 01 31 35.3
comp=Z,11nm,0.7s
PETK **Petropavlovsk-** 58.80 2 P P 01 33 17.3 +1.9
comp=Z,4.7nm,0.8s,baz=144,slow=5.4,SNR=3.0
comp=Z,4.7nm,0.8s
DRV **Dumont d'Urvil** 61.57 187 P P 01 33 33.3 -0.7
MA2 **Magadan** 65.31 358 P P 01 33 59.5 +0.7
MA2 pP **pwP** 01 34 36.9 -0.4
ULN **Ulaanbaatar** 67.99 327 P P 01 34 16.8 +0.7
SONM **Songino Array** 68.32 327 P P 01 34 18.5 +0.3
comp=Z,2.2nm,0.6s,baz=150,slow=4.9,SNR=8.6
comp=Z,2.2nm,0.6s
CCD **Concordia, Ant** 71.50 188 P P 01 34 37.3 -0.2
ILAR **Eielson Array** 82.37 22 P P 01 35 37.9 -0.1
comp=Z,0.5nm,0.4s,baz=242,slow=5.5,SNR=5.4
comp=Z,0.5nm,0.4s
MKAR **Makanchi Array** 82.48 319 P P 01 35 38.9 0.0
comp=Z,5.6nm,0.7s,baz=94,slow=7.6,SNR=28
comp=Z,5.6nm,0.7s
ZALV **Zalesovo Beam** 83.18 326 P P 01 35 41.1 -1.1
comp=Z,4.8nm,0.8s,baz=108,slow=5.6,SNR=11
comp=Z,4.8nm,0.8s
QSPA **South Pole Qui** 84.11 180 P P 01 35 45.3 -1.7
comp=Z,0.9nm,0.4s,baz=37,slow=6.2,SNR=7.7
comp=Z,0.9nm,0.4s
KURBB **Kurchatov Arra** 85.90 322 P P 01 35 54.8 -1.2
comp=Z,1.5nm,0.5s,baz=102,slow=4.6,SNR=10.0
comp=Z,1.5nm,0.5s
BVAR **Borovoye Array** 91.32 323 P P 01 36 20.1 -1.5
comp=Z,3.6nm,0.8s,baz=106,slow=5.1,SNR=14
comp=Z,3.6nm,0.8s
TORD **Torodi Ar. Bea** 152.59 287 PKPbc **PKPdf** 01 43 09.5 +3.8
comp=Z,5.7nm,1.1s,baz=54,slow=1.8,SNR=11

*IDC **19** 01:26:28.6±12.0, 17.°07S×178.°62W, h434km±145km, mb3.3/4, mbtmp4.1/4, Error ellipse: s-maj=205.3km s-min=36.8km az=159.0*

**ISC 19 01:26:30.2±2.5, 17.°S±1.°×178.°7W±0.°6, h453km, n6, σ0s75/6, mb3.6/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.56** | **259** | P | | **P** | **P** | **01 34 00.6** | **0.0** |
| | 1.2nm,0.5s,baz=97,slow=6.8,SNR=6.1 | | | | | | | | |
| | 1.2nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.79** | **253** | P | | **P** | **P** | **01 34 02.5** | **0.0** |
| | 8.6nm,0.7s,baz=89,slow=9.3,SNR=16 | | | | | | | | |
| | 8.6nm,0.7s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.00** | **44** | P | | **P** | **P** | **01 37 46.9** | **+0.5** |
| | 0.7nm,0.8s,baz=232,slow=6.8,SNR=3.1 | | | | | | | | |
| | 0.7nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.76** | **58** | P | | **P** | **P** | **01 38 20.4** | **-0.4** |
| | 1.0nm,0.9s,baz=232,slow=4.1,SNR=3.8 | | | | | | | | |
| | 1.0nm,0.9s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.04** | **315** | PKP | | **PKPdf** | **PKPdf** | **01 45 14.4** | **+0.7** |
| | 0.3nm,0.5s,baz=84,slow=4.5,SNR=2.3 | | | | | | | | |
| **GERES** | **GERESS Array B** | **146.77** | **345** | PKPbc | | **PKPbc** | **PKPbc** | **01 45 19.7** | **-0.8** |
| | 0.3nm,0.3s,baz=2.6,slow=4.3,SNR=3.5 | | | | | | | | |

*IDC **19** 01:27:34.0±4.1, 18.°17S×178.°19W, h473km±45km, mb3.5/11, mbtmp4.3/12, Error ellipse: s-maj=20.8km s-min=19.2km az=91.0*

**ISC 19 01:27:31.9±0.6, 18.°2S±0.°1×178.°2W±0.°1, h450km, n25, σ1s11/25, mb4.0/15, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | | **P** | **P** | **01 30 42.3** | **-0.4** |
| | 2.5nm,0.6s,baz=357,slow=20,SNR=2.7 | | | | | | | | |
| **URZ** | **Urewera** | **20.45** | **191** | P | | **P** | **P** | **01 31 36.6** | **-0.6** |
| | 5.4nm,0.5s,baz=358,slow=1.4,SNR=2.7 | | | | | | | | |
| | 5.4nm,0.5s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.62** | **261** | P | | **P** | **P** | **01 33 34.7** | **+1.1** |
| | 0.4nm,0.7s,baz=95,slow=8.5,SNR=8.8 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.70** | **241** | P | | | **P** | **01 34 16.5** | **+0.7** |
| | 3.3nm,0.5s,baz=90,slow=10,SNR=5.5 | | | | | | | | |
| | 3.3nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.80** | **260** | P | | **P** | **P** | **01 35 04.6** | **+0.1** |
| | 1.4nm,0.5s,baz=95,slow=6.9,SNR=6.6 | | | | | | | | |
| | 1.4nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.94** | **254** | P | | **P** | **P** | **01 35 06.1** | **+0.6** |
| | 9.1nm,0.6s,baz=88,slow=8.5,SNR=20 | | | | | | | | |
| | 9.1nm,0.6s | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **64.90** | **322** | P | | **P** | **P** | **01 37 23.8** | **-1.9** |
| | 124nm,0.8s,baz=84,slow=19,SNR=1.4 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.90** | **180** | P | | **P** | **P** | **01 38 08.3** | **+0.1** |
| | 5.6nm,0.8s,baz=50,slow=3.8,SNR=9.0 | | | | | | | | |
| | 5.6nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.45** | **44** | P | | **P** | **P** | **01 38 51.5** | **+0.7** |
| | 1.3nm,0.6s,baz=225,slow=9.0,SNR=9.3 | | | | | | | | |
| | 1.3nm,0.6s | | | | | | | | |
| **MAW** | **Mawson** | **83.70** | **200** | P | | **P** | **P** | **01 39 12.1** | **+0.2** |
| | 0.8nm,0.4s,baz=145,slow=5.8,SNR=1.4 | | | | | | | | |
| | 0.8nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.94** | **58** | P | | **P** | **P** | **01 39 24.6** | **+0.9** |
| | 2.1nm,0.8s,baz=216,slow=5.8,SNR=13 | | | | | | | | |
| | 2.1nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.08** | **13** | P | | **P** | **P** | **01 39 23.1** | **-0.3** |
| | 0.3nm,0.4s,baz=224,slow=5.3,SNR=7.6 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.38** | **43** | P | | **P** | **P** | **01 39 30.5** | **+0.1** |
| | 0.7nm,0.6s,baz=150,slow=1.2,SNR=2.1 | | | | | | | | |
| | 0.7nm,0.6s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.06** | **180** | ⇑P | | **P** | **P** | **01 39 41.5** | **-0.9** |
| | comp=Z,160nm,0.7s | | | | | | | | |
| **SNAA** | **Sanae** | **90.35** | **179** | ⇑P | | **P** | **P** | **01 39 42.4** | **-1.2** |
| | comp=Z,18nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **90.35** | **179** | P | | **P** | **P** | **01 39 42.4** | **-1.2** |
| | comp=Z,0.8nm,0.7s,baz=185,slow=9.0,SNR=6.3 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.48** | **176** | ⇑P | | **P** | **P** | **01 39 43.2** | **-0.9** |
| | comp=Z,5.9nm,0.6s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.92** | **177** | ⇑P | | **P** | **P** | **01 39 45.3** | **-0.9** |
| | comp=Z,3.8nm,0.7s,baz=190,slow=4.8 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.15** | **177** | ⇑P | | **P** | **P** | **01 39 46.3** | **-0.8** |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.17** | **321** | PKP | | **PKPdf** | **PKPdf** | **01 45 22.9** | **-1.9** |
| | comp=Z,0.4nm,0.4s,baz=105,slow=4.5,SNR=4.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.59** | **350** | PKP | | **PKPdf** | **PKPdf** | **01 45 41.3** | **-1.1** |
| | comp=Z,1.9nm,0.8s,baz=349,slow=2.5,SNR=3.6 | | | | | | | | |
| **FINES** | **FINESS Array B** | **133.48** | **344** | PKP | | **PKPdf** | **PKPdf** | **01 45 55.8** | **+0.1** |
| | comp=Z,3.1nm,0.9s,baz=91,slow=11,SNR=3.6 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.11** | **315** | PKPbc | | **PKPdf** | **PKPdf** | **01 46 17.6** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=108,slow=3.6,SNR=4.6 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.46** | **303** | PKPbc | | **PKPdf** | **PKPdf** | **01 46 21.1** | **+1.1** |
| | comp=Z,2.0nm,0.6s,baz=60,slow=5.1,SNR=5.3 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.90** | **345** | PKPbc | | **PKPdf** | **PKPdf** | **01 46 24.6** | **+2.8** |
| | comp=Z,0.8nm,0.5s,baz=64,slow=3.1,SNR=5.7 | | | | | | | | |

*IDC **19** 01:28:10.2±24.0, 17.°56S×178.°85W, h564km±300km, mb3.2/5, mbtmp4.2/5, Error ellipse: s-maj=92.8km s-min=82.6km az=25.0*

**ISC 19 01:28:09.1±1.7, 17.°4S±0.°6×178.°9W±0.°3, h550km, n6, σ0s16/6, mb3.5/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **33.05** | **260** | P | | **P** | **P** | **01 33 59.9** | **+0.1** |
| | 0.1nm,0.4s,baz=78,slow=10,SNR=1.8 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.45** | **240** | P | | **P** | **P** | **01 34 44.2** | **-0.1** |
| | 3.3nm,0.5s,baz=77,slow=8.6,SNR=6.9 | | | | | | | | |
| | 3.3nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.25** | **259** | P | | **P** | **P** | **01 35 30.3** | **-0.1** |
| | 1.0nm,0.5s,baz=97,slow=7.7,SNR=7.1 | | | | | | | | |
| | 1.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.47** | **254** | P | | **P** | **P** | **01 35 32.2** | **+0.2** |
| | 7.6nm,0.4s,baz=89,slow=8.1,SNR=14 | | | | | | | | |
| | 7.6nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.50** | **13** | P | | **P** | **P** | **01 39 48.6** | **0.0** |
| | 0.2nm,0.4s,baz=217,slow=5.5,SNR=1.1 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.13** | **58** | P | | **P** | **P** | **01 39 52.7** | **0.0** |
| | 0.6nm,0.6s,baz=208,slow=6.3,SNR=4.2 | | | | | | | | |
| | 0.6nm,0.6s | | | | | | | | |

*IDC **19** 01:28:37.9±3.2, 17.°82S×177.°90W, h582km±40km, mb3.4/9, mbtmp4.3/10, Error ellipse: s-maj=28.1km s-min=20.2km az=167.0*

**ISC 19 01:28:38.1±0.7, 17.°9S±0.°1×177.°9W±0.°1, h590km, n26, σ0s73/26, mb3.8/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **11.31** | **180** | P | | **P** | **P** | **01 31 08.7** | **-1.1** |
| | 195nm,0.3s,baz=310,slow=23,SNR=4.2 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.33** | **252** | P | | **P** | **P** | **01 31 50.8** | **+1.0** |
| | 6.7nm,0.8s,baz=72,slow=16,SNR=5.1 | | | | | | | | |
| **URZ** | **Urewera** | **20.77** | **191** | P | | **P** | **P** | **01 32 40.2** | **+1.1** |
| | 2.6nm,0.3s,baz=344,slow=4.4,SNR=2.0 | | | | | | | | |
| | 2.6nm,0.3s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.97** | **260** | P | | **P** | **P** | **01 34 34.3** | **+0.1** |
| | 0.6nm,0.8s,baz=102,slow=10,SNR=6.0 | | | | | | | | |
| **STKA** | **Stephens Creek** | **39.10** | **241** | P | | **P** | **P** | **01 35 16.7** | **+0.6** |
| | 7.4nm,0.7s,baz=82,slow=11,SNR=8.3 | | | | | | | | |
| | 7.4nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.15** | **259** | P | | **P** | **P** | **01 36 03.0** | **-0.6** |
| | 3.4nm,0.4s,baz=96,slow=7.7,SNR=22 | | | | | | | | |
| | 3.4nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.30** | **254** | P | | **P** | **P** | **01 36 04.2** | **-0.6** |
| | 12nm,0.6s,baz=87,slow=8.4,SNR=16 | | | | | | | | |
| | 12nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.20** | **323** | P | | **P** | **P** | **01 38 40.8** | **-0.1** |
| | 2.6nm,0.8s,baz=153,slow=6.5,SNR=6.5 | | | | | | | | |
| | 2.6nm,0.8s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.79** | **345** | P | | **P** | **P** | **01 39 13.0** | **-0.1** |
| | 1.8nm,0.6s,baz=111,slow=8.1,SNR=7.1 | | | | | | | | |
| | 1.8nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.54** | **57** | P | | **P** | **P** | **01 40 16.4** | **+1.2** |
| | 0.7nm,0.8s,baz=217,slow=6.5,SNR=3.9 | | | | | | | | |
| | 0.7nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.75** | **13** | P | | **P** | **P** | **01 40 14.9** | **-0.3** |
| | 1.0nm,0.5s,baz=219,slow=4.9,SNR=11 | | | | | | | | |
| | 1.0nm,0.5s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **86.98** | **43** | P | | **P** | **P** | **01 40 22.3** | **+0.4** |
| | 0.7nm,0.7s,baz=289,slow=2.8,SNR=2.4 | | | | | | | | |
| | 0.7nm,0.7s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.39** | **350** | PKP | | **PKPdf** | **PKPdf** | **01 46 32.7** | **-1.4** |
| | 3.0nm,1.1s,baz=300,slow=1.0,SNR=5.3 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.14** | **315** | PKPbc | | **PKPdf** | **PKPdf** | **01 47 09.9** | **+0.3** |
| | 2.4nm,0.8s,baz=133,slow=3.6,SNR=9.8 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.57** | **303** | PKPbc | | **PKPbc** | **PKPbc** | **01 47 14.9** | **0.0** |
| | 3.1nm,0.5s,baz=68,slow=6.7,SNR=11 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.72** | **346** | PKPbc | | **PKPbc** | **PKPbc** | **01 47 17.2** | **-0.1** |
| | 1.8nm,0.7s,baz=63,slow=6.5,SNR=8.1 | | | | | | | | |
| **CONA** | **Conrad Observa** | **148.00** | **342** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 18.0** | **-0.1** |
| | 1.7nm,0.6s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.08** | **342** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 18.2** | **-0.1** |
| | 1.4nm,0.5s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.82** | **345** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 19.9** | **-0.1** |
| | 0.9nm,0.3s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.30** | **346** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 21.1** | **-0.2** |
| | 1.2nm,0.4s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.46** | **345** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 20.1** | **-1.7** |
| | 0.8nm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.68** | **347** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 21.8** | **-0.5** |
| | 2.5nm,0.5s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.81** | **348** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 22.2** | **-0.3** |
| | 1.3nm,0.4s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.97** | **346** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 22.1** | **-0.8** |
| | 2.7nm,0.7s | | | | | | | | |
| **DAVA** | **Damuels** | **150.00** | **349** | *i* PKP | | **PKiKP** | **PKiKP** | **01 47 23.4** | **-0.2** |
| | 1.4nm,0.5s | | | | | | | | |
| **FETA** | **Feichten** | **150.09** | **348** | *i* PKP | | **PKPbc** | **PKPbc** | **01 47 22.9** | **-0.4** |
| | 1.6nm,0.7s | | | | | | | | |

*IDC **19** 01:29:01.1±11.0, 17.°88S×178.°22W, h542km±134km, mb3.3/7, mbtmp4.2/7, Error ellipse: s-maj=59.4km s-min=39.7km az=159.0*

*NEIC **19** 01:29:03.2±0.7, 18.°0S±0.°1×178.°0W±0.°1, h588km±8km, mb4.3/17, Error ellipse: s-maj=20.3km s-min=17.8km az=113.0*

**ISC 19 01:29:03.8±0.8, 18.°0S±0.°1×178.°1W±0.°1, h590km, n31, σ0s85/31, mb4.2/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.65** | **273** | P | | **P** | **P** | **01 30 27.0** | **+0.7** |
| **AFI** | **Afiamalu** | **7.32** | **57** | P | | **P** | **P** | **01 30 54.5** | **-2.0** |
| **FUNA** | **Funafuti** | **9.74** | **344** | P | | **P** | **P** | **01 31 19.6** | **-0.4** |
| **BHW** | **Baring Head** | **24.12** | **193** | P | | **P** | **P** | **01 33 33.8** | **-0.7** |
| **EIDS** | **Eidsvold** | **29.50** | **250** | P | | **P** | **P** | **01 34 21.9** | **0.0** |
| EIDS | | | | IAmb | | IAmb | IAmb | 01 34 39.8 | |
| | comp=Z,8.3nm,1.1s | | | | | | | | |
| **ARMA** | **Armidale** | **30.15** | **240** | P | | **P** | **P** | **01 34 27.6** | **+0.2** |
| ARMA | | | | IAmb | | IAmb | IAmb | 01 34 38.6 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.70** | **261** | P | | **P** | **P** | **01 34 57.2** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=85,slow=11,SNR=3.9 | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.70** | **261** | P | | **P** | **P** | **01 34 57.4** | **-0.3** |
| CTAO | | | | IAmb | | IAmb | IAmb | 01 35 01.8 | |
| | comp=Z,6.7nm,1.1s | | | | | | | | |
| **JOHN** | **Johnston Islan** | **35.51** | **14** | P | | **P** | **P** | **01 35 11.2** | **-1.4** |
| **COEN** | **Coen** | **37.38** | **270** | P | | **P** | **P** | **01 35 28.3** | **+0.2** |
| COEN | | | | IAmb | | IAmb | IAmb | 01 35 29.7 | |
| | comp=Z,8.7nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.84** | **241** | P | | **P** | **P** | **01 35 39.9** | **+0.3** |
| | comp=Z,3.4nm,0.4s,baz=72,slow=6.4,SNR=3.2 | | | | | | | | |
| | comp=Z,3.4nm,0.4s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.62** | **241** | P | | **P** | **P** | **01 36 17.0** | **-0.3** |
| **WR0** | **Warramunga Arr** | **44.70** | **260** | P | | **P** | **P** | **01 36 25.7** | **-0.1** |
| **WB0** | **Warramunga Arr** | **44.86** | **260** | P | | **P** | **P** | **01 36 26.9** | **-0.2** |
| **WB2** | **Warramunga Arr** | **44.88** | **260** | P | | **P** | **P** | **01 36 26.9** | **-0.3** |
| **WRAB** | **Tennant Creek** | **44.88** | **260** | P | | **P** | **P** | **01 36 26.0** | **-1.2** |
| WRAB | | | | IAmb | | IAmb | IAmb | 01 36 37.1 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | | **P** | **P** | **01 36 26.9** | **-0.4** |
| | comp=Z,2.5nm,0.3s,baz=95,slow=7.3,SNR=12 | | | | | | | | |
| | comp=Z,2.5nm,0.3s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.03** | **254** | P | | **P** | **P** | **01 36 28.2** | **-0.2** |
| AS31 | | | | IAmb | | IAmb | IAmb | 01 36 29.2 | |
| | comp=Z,4.2nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.04** | **254** | P | | **P** | **P** | **01 36 27.3** | **-1.1** |
| **ASAR** | **Alice Springs** | **45.04** | **254** | P | | **P** | **P** | **01 36 28.2** | **-0.2** |
| | comp=Z,11nm,0.6s,baz=88,slow=8.6,SNR=9.4 | | | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| **MTN** | **Manton Dam** | **49.07** | **268** | P | | **P** | **P** | **01 36 58.2** | **-0.5** |
| MTN | | | | IAmb | | IAmb | IAmb | 01 37 07.1 | |
| | comp=Z,7.5nm,1.1s | | | | | | | | |
| **FORT** | **Forrest** | **50.23** | **245** | P | | **P** | **P** | **01 37 06.3** | **-0.7** |
| FORT | | | | IAmb | | IAmb | IAmb | 01 37 12.9 | |
| | comp=Z,9.7nm,0.9s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.75** | **264** | P | | **P** | **P** | **01 37 10.8** | **-0.2** |
| KNRA | | | | IAmb | | IAmb | IAmb | 01 37 10.9 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.29** | **261** | P | | **P** | **P** | **01 37 29.1** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **68.12** | **323** | P | | **P** | **P** | **01 39 06.6** | **+0.6** |
| | comp=Z,0.9nm,0.4s,baz=150,slow=5.8,SNR=2.3 | | | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | | | |
| **AMKA** | **Amchitka** | **69.08** | **358** | P | | **P** | **P** | **01 39 12.2** | **+0.9** |
| **UGM** | **Wanagama** | **69.92** | **268** | P | | **P** | **P** | **01 39 17.2** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **79.28** | **44** | P | | **P** | **P** | **01 40 11.0** | **+1.6** |
| | comp=Z,0.4nm,0.5s,baz=226,slow=8.5,SNR=1.7 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.80** | **58** | P | | **P** | **P** | **01 40 44.2** | **+2.1** |
| | comp=Z,1.0nm,0.7s,baz=223,slow=5.7,SNR=6.1 | | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.21** | **43** | P | | **P** | **P** | **01 40 49.4** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=252,slow=1.8,SNR=2.1 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.02** | **315** | PKP | | **PKPab** | **PKPdf** | **01 47 36.7** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=91,slow=3.3,SNR=1.5 | | | | | | | | |

*IDC **19** 01:29:31.8±6.8, 14.°27N×56.°33E, h0km, mb4.1/7, mbtmp4.1/7, Error ellipse: s-maj=139.5km s-min=45.6km az=132.0*

**ISC 19 01:29:34.1±6.3, 14.°3N±0.°6×56.°3E±0.°7, h10km, n17, σ0s97/14, mb4.1/14, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KBZ** | **Khabaz** | **31.46** | **341** | P | | **P** | **P** | **01 35 57.6** | **+1.8** |
| | 3.7nm,0.9s,baz=152,slow=7.9,SNR=5.5 | | | | | | | | |
| | 3.7nm,0.9s | | | | | | | | |
| **IDI** | **Anoyia** | **35.06** | **312** | P | | **P** | **P** | **01 36 26.6** | **-0.9** |
| | 13nm,1.0s,baz=184,slow=17,SNR=7.1 | | | | | | | | |
| | 13nm,1.0s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **42.37** | **335** | P | | **P** | **P** | **01 37 28.6** | **+0.2** |
| | 0.7nm,0.5s,baz=139,slow=7.6,SNR=4.2 | | | | | | | | |
| | 0.7nm,0.5s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **46.91** | **324** | *e*P | | **P** | **P** | **01 38 05.4** | **+0.6** |
| | 0.6nm,0.3s | | | | | | | | |
| **ARSA** | **Arzberg** | **47.12** | **323** | *e*P | | **P** | **P** | **01 38 06.8** | **+0.3** |
| | 0.3nm,0.3s | | | | | | | | |
| **CONA** | **Conrad Observa** | **47.27** | **324** | *e*P | | **P** | **P** | **01 38 06.0** | **-1.7** |
| | 0.9nm,0.6s | | | | | | | | |
| **MOA** | **Molln** | **48.16** | **323** | *i* P | | **P** | **P** | **01 38 15.0** | **+0.4** |
| | 1.2nm,0.6s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **49.70** | **321** | *e*P | | **P** | **P** | **01 38 26.4** | **-0.1** |
| | 3.4nm,0.6s | | | | | | | | |
| **MOTA** | **Moosalm** | **49.82** | **321** | *e*P | | **P** | **P** | **01 38 27.1** | **-0.3** |
| | 1.6nm,0.6s | | | | | | | | |
| **RETA** | **Reutte** | **50.09** | **321** | *i* P | | **P** | **P** | **01 38 29.2** | **-0.2** |
| | 0.8nm,0.4s | | | | | | | | |
| **FINES** | **FINESS

σ1$29/9, **mb3.5**/7, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **20.37** | **190** | P | **P** | **01 38 10.2** | **-0.8** |
| | 2.8nm,0.4s,baz=69,slow=8.2,SNR=2.3 | | | | | | |
| | 2.8nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.35** | **260** | P | **P** | **01 41 32.7** | **-1.1** |
| | 0.3nm,0.4s,baz=96,slow=6.4,SNR=2.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.49** | **254** | P | **P** | **01 41 37.0** | **+2.1** |
| | 2.3nm,0.5s,baz=90,slow=8.4,SNR=11 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.90** | **180** | P | **P** | **01 44 39.3** | **0.0** |
| | 4.2nm,0.9s,baz=73,slow=5.5,SNR=8.1 | | | | | | |
| | 4.2nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.77** | **44** | P | **P** | **01 45 22.9** | **-0.5** |
| | 0.7nm,0.6s,baz=229,slow=8.4,SNR=7.4 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.18** | **13** | P | **P** | **01 45 54.1** | **-0.4** |
| | 0.6nm,0.4s,baz=223,slow=5.2,SNR=14 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.33** | **58** | P | **P** | **01 45 57.6** | **+1.4** |
| | 0.7nm,0.7s,baz=219,slow=6.0,SNR=9.4 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.70** | **44** | P | **P** | **01 46 02.5** | **0.0** |
| | 0.3nm,0.4s,baz=258,slow=4.1,SNR=3.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **137.13** | **351** | PKP | **PKPdf** | **01 52 30.9** | **-1.2** |
| | 3.2nm,1.0s,baz=8.1,slow=1.4,SNR=1.7 | | | | | | |

*IDC **19** 01:34:18.2±1.5, 17°.52S×178°.58W, h462km±16km, mb4.2/24, mbtmp5.0/26, Error ellipse: s-maj=10.8km s-min=9.6km az=95.0*
*BJI **19** 01:34:20.2±0.0, 17°.31S×177°.96W, h507km, mb4.7/28*
*NEIC **19** 01:34:20.8±1.3, 17°.52S±0°.10×178°.55W±0°.10, h486km±5km, mb4.8/463, Error ellipse: s-maj=14.6km s-min=12.8km az=138.0*
*NOU **19** 01:34:21.0, 17°.55S×178°.55W, h493km, ML6.4/36, Fiji Islands Region*

**ISC 19 01:34:21.3**±0.2, **17°.56S**±0°.04×**178°.53W**±0°.06, **h500**km, **n956**, σ0°.89/904, **mb4.8**/254, **38C-38D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.27** | **266** | | **P** | **01 35 36.6** | **+2.3** |
| **AFI** | **Afiamalu** | **7.44** | **62** | P | **P** | **01 36 09.6** | **-2.6** |
| **NIUE** | **Niue** | **8.31** | **102** | P | **P** | **01 36 21.9** | **+0.9** |
| **NIUE** | **Niue** | **8.31** | **102** | P | **P** | **01 36 21.5** | **+0.5** |
| **FUNA** | **Funafuti** | **9.24** | **346** | P | **P** | **01 36 29.8** | **-1.0** |
| **FUNA** | **Funafuti** | **9.24** | **346** | | **P** | **01 36 29.4** | **-1.5** |
| **RAO** | **Raoul Island** | **11.66** | **177** | P | **P** | **01 36 55.6** | **-0.6** |
| **RAO** | **Raoul Island** | **11.66** | **177** | P | **P** | **01 36 53.4** | **-2.7** |
| | 105nm,0.3s,baz=119,slow=23,SNR=2.6 | | | | | | |
| RAO | | | | S | **S** | **01 39 02.8** | **-0.9** |
| | 469nm,0.5s,baz=85,slow=21,SNR=2.3 | | | | | | |
| **LIFNC** | **LIFOU** | **13.82** | **254** | P | **P** | **01 37 18.0** | **-1.2** |
| **LIFNC** | **LIFOU** | **13.82** | **254** | P | **P** | **01 37 18.1** | **-1.0** |
| **PINNC** | **Pines Island,** | **14.10** | **247** | P | **P** | **01 37 22.3** | **+0.2** |
| **PINNC** | **Pines Island,** | **14.10** | **247** | P | **P** | **01 37 22.0** | **-0.1** |
| **YATNC** | **Mamie plateau,** | **14.43** | **250** | P | **P** | **01 37 25.7** | **+0.1** |
| **DZM** | **Mont Dzumac** | **14.83** | **250** | P | **P** | **01 37 29.7** | **-0.2** |
| **DZM** | **Mont Dzumac** | **14.83** | **250** | P | **P** | **01 37 29.5** | **-0.5** |
| **DZM** | **Mont Dzumac** | **14.83** | **250** | P | **P** | **01 37 28.3** | **-1.6** |
| | 14nm,0.7s,baz=91,slow=17,SNR=21 | | | | | | |
| **NOUC** | **Port Laguerre** | **14.97** | **250** | P | **P** | **01 37 31.0** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **16.52** | **257** | P | **P** | **01 37 47.3** | **-0.1** |
| **KOUNC** | **Koumac, New Ca** | **16.52** | **257** | P | **P** | **01 37 47.1** | **-0.3** |
| **KUZ** | **Kuaotunu** | **19.78** | **194** | P | **P** | **01 38 19.4** | **+1.6** |
| **MXZ** | **Matakaoa Point** | **20.12** | **187** | P | **P** | **01 38 21.0** | **+0.1** |
| **HAZ** | **Te Kaha** | **20.38** | **188** | P | **P** | **01 38 22.2** | **-1.0** |
| **PKGZ** | **Pakihiroa** | **20.45** | **188** | P | **P** | **01 38 24.5** | **+0.5** |
| **RUGZ** | **Raukumara Rang** | **20.60** | **189** | P | **P** | **01 38 23.9** | **-1.6** |
| **WHRZ** | **Whale Island** | **20.61** | **190** | P | **P** | **01 38 26.2** | **+0.8** |
| **TGRZ** | **Tauranga** | **20.61** | **192** | P | **P** | **01 38 27.6** | **+2.2** |
| **PUZ** | **Puketiti** | **20.63** | **187** | P | **P** | **01 38 24.8** | **-0.8** |
| PUZ | | | | S | **S** | **01 41 51.5** | **+7.7** |
| **TWGZ** | **Tauwhareparae** | **20.77** | **188** | P | **P** | **01 38 27.2** | **+0.3** |
| **TOZ** | **Tahuroa Road** | **20.77** | **193** | | **P** | **01 38 28.5** | **+1.7** |
| **TOZ** | **Tahuroa Road** | **20.77** | **193** | P | **P** | **01 38 29.0** | **+2.1** |
| **KMRZ** | **Kaimai** | **20.79** | **192** | P | **P** | **01 38 29.2** | **+2.1** |
| **OMRZ** | **Omania** | **20.96** | **191** | P | **P** | **01 38 30.1** | **+1.6** |
| **URZ** | **Urewera** | **20.98** | **190** | P | **P** | **01 38 27.8** | **-0.9** |
| **URZ** | **Urewera** | **20.98** | **190** | P | **P** | **01 38 27.0** | **-1.7** |
| | 96nm,0.7s,baz=86,slow=4.5,SNR=48 | | | | | | |
| URZ | | | | S | **S** | **01 41 45.3** | **-3.9** |
| | 33nm,0.8s,baz=87,slow=7.9,SNR=5.8 | | | | | | |
| | 96nm,0.7s | | | | | | |
| **URZ** | **Urewera** | **20.98** | **190** | P | **P** | **01 38 27.2** | **-1.5** |
| URZ | | | | S | **S** | **01 41 44.8** | **-4.4** |
| **MWZ** | **Matawai** | **20.99** | **189** | P | **P** | **01 38 27.2** | **-1.6** |
| MWZ | | | | S | **S** | **01 41 44.6** | **-5.0** |
| **CNGZ** | **Carnagh Statio** | **21.05** | **187** | P | **P** | **01 38 24.3** | **-5.0** |
| **RAGZ** | **Rawiri** | **21.16** | **189** | P | **P** | **01 38 31.5** | **+1.0** |
| **HRRZ** | **Handcock Road** | **21.25** | **191** | P | **P** | **01 38 32.4** | **+1.2** |
| **RIGZ** | **Rimuhau** | **21.32** | **188** | P | **P** | **01 38 33.3** | **+1.4** |
| **RTZ** | **Ruatahuna** | **21.35** | **190** | P | **P** | **01 38 31.8** | **-0.4** |
| **SNGZ** | **Shannon Statio** | **21.45** | **189** | P | **P** | **01 38 33.2** | **+0.1** |
| **MTHZ** | **Maungataniwha** | **21.60** | **190** | P | **P** | **01 38 34.0** | **-0.3** |
| **MRHZ** | **Matea Rd** | **21.66** | **191** | P | **P** | **01 38 34.3** | **-0.5** |
| **HIZ** | **Hauiti** | **21.67** | **194** | P | **P** | **01 38 37.3** | **+2.3** |
| **HIZ** | **Hauiti** | **21.67** | **194** | P | **P** | **01 38 38.0** | **+3.1** |
| **BKZ** | **Black Stump Fm** | **21.96** | **190** | P | **P** | **01 38 36.8** | **-0.9** |
| **BKZ** | **Black Stump Fm** | **21.96** | **190** | P | **P** | **01 38 36.6** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **21.96** | **190** | P | **P** | **01 38 36.6** | **-1.1** |
| BKZ | | | | S | **S** | **01 42 02.0** | **-3.0** |
| **ETVZ** | **East Tongariro** | **22.08** | **192** | P | **P** | **01 38 37.4** | **-1.4** |
| **OTVZ** | **Oturere** | **22.12** | **192** | P | **P** | **01 38 38.5** | **-0.6** |
| **SNVZ** | **South Ngauruho** | **22.14** | **192** | P | **P** | **01 38 40.6** | **+1.2** |
| **WHVZ** | **Whangaehu Hut** | **22.25** | **192** | P | **P** | **01 38 41.2** | **+0.8** |
| **WNVZ** | **Wahianoa** | **22.29** | **192** | P | **P** | **01 38 40.9** | **+0.2** |
| **BFZ** | **Birch Farm** | **23.48** | **190** | P | **P** | **01 38 51.0** | **-0.2** |
| **MRZ** | **Mangatainoka R** | **23.58** | **191** | P | **P** | **01 38 51.5** | **-0.6** |
| **TCW** | **Tory Channel** | **24.37** | **193** | P | **P** | **01 38 59.6** | **+0.5** |
| **SNZO** | **South Karori** | **24.38** | **192** | P | **P** | **01 38 59.0** | **-0.1** |
| **QRZ** | **Quartz Range** | **24.44** | **197** | P | **P** | **01 39 00.5** | **+0.8** |
| **BHW** | **Baring Head** | **24.44** | **192** | P | **P** | **01 38 59.4** | **-0.2** |
| **TKNZ** | **Takaka Hill** | **24.52** | **196** | P | **P** | **01 39 00.5** | **+0.1** |
| **PLWZ** | **Palliser** | **24.52** | **191** | P | **P** | **01 39 00.2** | **-0.3** |
| **NNZ** | **Nelson** | **24.59** | **195** | P | **P** | **01 39 00.7** | **-0.3** |
| **MRNZ** | **Matariki Terra** | **24.91** | **196** | P | **P** | **01 39 04.3** | **+0.3** |
| **BSWZ** | **Blackbirch Sta** | **24.94** | **194** | P | **P** | **01 39 04.2** | **+0.1** |
| **THZ** | **Taphouse** | **25.22** | **195** | P | **P** | **01 39 05.8** | **+0.1** |
| **DSZ** | **Denniston Nort** | **25.49** | **197** | P | **P** | **01 39 08.9** | **-0.1** |
| **KHZ** | **Kahutara** | **25.69** | **194** | P | **P** | **01 39 09.7** | **-1.0** |
| **KHZ** | **Kahutara** | **25.69** | **194** | P | **P** | **01 39 09.7** | **-1.0** |
| **GVZ** | **Greta Valley S** | **26.33** | **194** | P | **P** | **01 39 16.1** | **-0.3** |
| **AMCZ** | **Amberley** | **26.61** | **194** | P | **P** | **01 39 18.7** | **-0.2** |
| **OXZ** | **Oxford** | **26.91** | **195** | P | **P** | **01 39 20.4** | **-1.1** |
| **MQZ** | **McQueen's Vall** | **27.11** | **194** | P | **P** | **01 39 23.3** | **0.0** |
| **RPZ** | **Rata Peaks** | **27.53** | **196** | P | **P** | **01 39 27.6** | **+0.7** |
| **RPZ** | **Rata Peaks** | **27.53** | **196** | P | **P** | **01 39 25.6** | **-1.4** |
| | 11nm,0.6s,baz=304,slow=0.8,SNR=9.5 | | | | | | |
| | 11nm,0.6s | | | | | | |
| **PPT** | **Papeete** | **27.59** | **94** | P | **P** | **01 39 27.8** | **-0.1** |
| | 25nm,0.5s,baz=209,slow=12,SNR=10 | | | | | | |
| | 25nm,0.5s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.60** | **95** | P | **P** | **01 39 28.9** | **+0.9** |
| **FOZ** | **Fox Glacier** | **27.71** | **198** | P | **P** | **01 39 28.6** | **+0.1** |
| **LBZ** | **Lake Benmore** | **28.39** | **197** | | **P** | **01 39 33.3** | **-1.2** |
| **JCZ** | **Jackson Bay** | **28.52** | **199** | P | **P** | **01 39 35.8** | **+0.1** |
| **ODZ** | **Otahua Downs** | **28.87** | **196** | P | **P** | **01 39 37.7** | **-1.0** |
| **ODZ** | **Otahua Downs** | **28.87** | **196** | P | **P** | **01 39 38.0** | **-0.6** |
| **EIDS** | **Eidsvold** | **29.28** | **249** | P | **P** | **01 39 42.5** | **-0.1** |
| **ARMA** | **Armidale** | **30.02** | **239** | P | **P** | **01 39 49.8** | **+0.8** |
| **DCZ** | **Deep Cove** | **30.29** | **200** | P | **P** | **01 39 51.8** | **+0.9** |
| DCZ | | | | IAmb | IAmb | 01 39 53.5 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **SYZ** | **Scrubby Hill** | **30.65** | **197** | P | **P** | **01 39 54.6** | **+0.5** |
| **CTA** | **Charters Tower** | **33.39** | **260** | P | **P** | **01 40 16.6** | **-1.4** |
| | comp=Z,0.4nm,0.6s,baz=98,slow=10,SNR=10 | | | | | | |
| **CTAO** | **Charters Tower** | **33.39** | **260** | P | **P** | **01 40 17.2** | **-0.7** |
| CTAO | | | | IAmb | IAmb | 01 40 40.3 | |
| | comp=Z,65nm,1.9s | | | | | | |
| **CTAO** | **Charters Tower** | **33.39** | **260** | P | **P** | **01 40 17.4** | **-0.6** |
| **CMSA** | **Cobar Meteorol** | **35.22** | **240** | P | **P** | **01 40 33.6** | **+0.4** |
| **QLP** | **Quilpie** | **35.55** | **249** | P | **P** | **01 40 35.6** | **-0.4** |
| **TOO** | **Toolangi** | **37.30** | **230** | P | **P** | **01 40 51.1** | **+0.8** |
| TOO | | | | IAmb | IAmb | 01 40 53.3 | |
| | comp=Z,41nm,1.1s | | | | | | |
| **BRAT** | **Ballarat** | **38.45** | **231** | P | **P** | **01 40 59.9** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.70** | **241** | P | **P** | **01 41 02.6** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.70** | **241** | P | **P** | **01 41 01.2** | **-0.5** |
| | comp=Z,5.6nm,0.4s,baz=84,slow=9.3,SNR=13 | | | | | | |
| | comp=Z,5.6nm,0.4s | | | | | | |
| **HTT** | **Hallett** | **41.23** | **239** | P | **P** | **01 41 22.7** | **+0.5** |
| **HMH** | **Humu'ula Sheep** | **43.31** | **33** | P | **P** | **01 41 39.7** | **+0.7** |
| **KEKH** | **Kekaha** | **43.40** | **26** | P | **P** | **01 41 39.0** | **-0.2** |
| **POHA** | **Pohakuloa** | **43.42** | **32** | P | **P** | **01 41 39.7** | **0.0** |
| **BBOO** | **Buckleboo** | **43.48** | **241** | P | **P** | **01 41 39.9** | **0.0** |
| BBOO | | | | IAmb | IAmb | 01 41 41.0 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **HPAH** | **Hawaii Prepara** | **43.56** | **32** | P | **P** | **01 41 40.5** | **-0.1** |
| **MHA** | **Mahukona** | **43.59** | **32** | P | **P** | **01 41 40.8** | **+0.1** |
| **DHH** | **Diamond Head** | **43.60** | **29** | P | **P** | **01 41 40.9** | **+0.1** |
| **KIP** | **Kipapa** | **43.64** | **28** | P | **P** | **01 41 41.2** | **0.0** |
| **KIP** | **Kipapa** | **43.64** | **28** | P | **P** | **01 41 40.7** | **-0.4** |
| **HLK** | **Haleakala** | **43.90** | **31** | P | **P** | **01 41 43.8** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.39** | **259** | P | **P** | **01 41 47.2** | **0.0** |
| **WB0** | **Warramunga Arr** | **44.55** | **259** | P | **P** | **01 41 47.3** | **-1.1** |
| **WB2** | **Warramunga Arr** | **44.57** | **259** | P | **P** | **01 41 47.5** | **-1.0** |
| WB2 | | | | pP | **pP** | **01 43 18.0** | **-2.7** |
| **WRA** | **Warramunga Arr** | **44.58** | **259** | P | **P** | **01 41 47.5** | **-1.1** |
| | comp=Z,1.5nm,0.5s,baz=93,slow=8.2,SNR=10 | | | | | | |
| WRA | | | | ScP | **ScP** | **01 46 28.3** | **+2.9** |
| | comp=Z,8.5nm,0.9s,baz=89,slow=4.2,SNR=15 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.77** | **254** | | **P** | **01 41 49.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | **P** | **01 41 49.5** | **-0.6** |
| ASAR | | | | | **PcP** | **01 43 21.4** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | **P** | **01 41 49.6** | **-0.5** |
| | comp=Z,23nm,0.8s,baz=84,slow=8.5,SNR=43 | | | | | | |
| ASAR | | | | ScP | **ScP** | **01 46 29.2** | **+3.0** |
| | comp=Z,7.3nm,0.9s,baz=99,slow=3.8,SNR=14 | | | | | | |
| | comp=Z,23nm,0.8s | | | | | | |
| **MULG** | **Mulgathing** | **44.86** | **245** | P | **P** | **01 41 50.5** | **-0.1** |
| **WRKA** | **Warakurna** | **49.84** | **252** | P | **P** | **01 42 28.1** | **-0.2** |
| **FORT** | **Forrest** | **50.05** | **244** | P | **P** | **01 42 29.2** | **-0.5** |
| **KNRA** | **Kununurra** | **50.41** | **264** | P | **P** | **01 42 32.3** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **52.97** | **260** | P | **P** | **01 42 51.1** | **+0.1** |
| **DRV** | **Dumont d'Urvil** | **55.96** | **199** | P | **P** | **01 43 12.0** | **+0.8** |
| DRV | | | | PcP | **PcP** | **01 44 02.9** | **+0.5** |
| DRV | | | | pP | **pwP** | **01 44 53.5** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **57.89** | **255** | P | **P** | **01 43 25.2** | **-0.1** |
| **MBWA** | **Marble Bar** | **58.05** | **256** | P | **P** | **01 43 26.1** | **-0.3** |
| **KLBR** | **Kellerberrin** | **58.88** | **243** | P | **P** | **01 43 31.5** | **-0.4** |
| **TOLI2** | **Tolitoli** | **62.54** | **281** | P | **P** | **01 43 56.7** | **+0.4** |
| **CCD** | **Concordia, Ant** | **65.18** | **194** | P | **P** | **01 44 13.4** | **+0.8** |
| CCD | | | | PcP | **PcP** | **01 44 40.5** | **+0.2** |
| CCD | | | | pP | **pwP** | **01 45 58.7** | **+1.4** |
| **CASY** | **Casey** | **66.41** | **205** | P | **P** | **01 44 20.7** | **+0.8** |
| CASY | | | | IAmb | IAmb | 01 44 21.7 | |
| | comp=Z,36nm,1.1s | | | | | | |
| **CASY** | **Casey** | **66.41** | **205** | P | **P** | **01 44 20.4** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **67.56** | **323** | P | **P** | **01 44 26.8** | **-0.8** |
| | comp=Z,15nm,0.7s,baz=157,slow=5.9,SNR=55 | | | | | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **67.56** | **323** | P | **P** | **01 44 28.1** | **+0.6** |
| **MAJO** | **Matsushiro** | **67.56** | **323** | P | **P** | **01 44 27.3** | **-0.3** |
| MAJO | | | | IAmb | IAmb | 01 44 27.9 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **67.56** | **323** | P | **P** | **01 44 26.8** | **-0.7** |
| **MJB9** | **Matsu-Tunnel** | **67.56** | **323** | P | **P** | **01 44 28.2** | **+0.7** |
| MJB9 | | | | IAmb | IAmb | 01 44 29.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **ERM** | **Erimo** | **69.03** | **330** | P | **P** | **01 44 37.1** | **+0.8** |
| ERM | | | | IAmb | IAmb | 01 46 09.6 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **JTM** | **Tenmabayashi** | **69.11** | **328** | P | **P** | **01 44 36.8** | **0.0** |
| **KIWB** | **Kanaga Island** | **69.12** | **1** | P | **P** | **01 44 35.6** | **-1.0** |
| **JNU** | **Nakatsue** | **69.81** | **316** | P | **P** | **01 44 41.4** | **+0.2** |
| **JNU** | **Nakatsue** | **69.81** | **316** | P | **P** | **01 44 40.9** | **-0.3** |
| | comp=Z,11nm,0.8s,baz=96,slow=4.0,SNR=6.6 | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **NIKH** | **Nikolski High** | **70.73** | **6** | P | **P** | **01 44 44.8** | **-1.4** |
| | baz=190 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **70.91** | **331** | P | **P** | **01 44 48.7** | **+1.2** |
| JKA | | | | IAmb | IAmb | 01 44 49.4 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **70.91** | **331** | P | **P** | **01 44 47.0** | **-0.5** |
| | comp=Z,22nm,0.7s,baz=201,slow=6.4,SNR=12 | | | | | | |
| | comp=Z,22nm,0.7s | | | | | | |
| **UNV** | **Unalaska Valle** | **71.86** | **7** | P | **P** | **01 44 51.8** | **-0.9** |
| | baz=192 | | | | | | |
| **SSLB** | **Suanglung** | **71.95** | **303** | P | **P** | **01 44 53.5** | **-0.6** |
| SSLB | | | | IAmb | IAmb | 01 44 54.0 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **TPUB** | **Ta-pu** | **71.97** | **302** | P | **P** | **01 44 53.6** | **-0.6** |
| TPUB | | | | IAmb | IAmb | 01 44 54.0 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.50** | **180** | P | **P** | **01 44 57.9** | **+1.3** |
| QSPA | | | | IAmb | IAmb | 01 44 59.0 | |
| | comp=Z,39nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.50** | **180** | P | **P** | **01 44 57.0** | **+0.4** |
| | comp=Z,26nm,0.8s,baz=31,slow=1.5,SNR=44 | | | | | | |
| | comp=Z,26nm,0.8s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.31** | **345** | P | **P** | **01 45 01.3** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **73.31** | **345** | P | **P** | **01 45 01.1** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **73.31** | **345** | P | **P** | **01 45 00.6** | **-0.6** |
| | comp=Z,31nm,0.9s,baz=128,slow=7.6,SNR=21 | | | | | | |
| | comp=Z,31nm,0.9s | | | | | | |
| **SDPT** | **Sand Point** | **74.22** | **11** | P | **P** | **01 45 05.1** | **-1.2** |
| | baz=198 | | | | | | |
| **S12K** | **Black Hills** | **74.29** | **10** | P | **P** | **01 45 06.6** | **-0.2** |
| | baz=196 | | | | | | |
| **KSRS** | **Korea Array** | **74.36** | **318** | P | **P** | **01 45 07.8** | **+0.3** |
| | comp=Z,4.9nm,0.8s,baz=135,slow=6.2,SNR=21 | | | | | | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **SPIA** | **Saint Paul Isl** | **74.77** | **5** | P | **P** | **01 45 08.4** | **-0.9** |
| | baz=188 | | | | | | |
| **S14K** | **Fog Glacier** | **75.27** | **11** | P | **P** | **01 45 11.9** | **-0.4** |
| | baz=199 | | | | | | |
| **CHGN** | **Chignik** | **75.50** | **11** | P | **P** | **01 45 14.3** | **+0.9** |
| | baz=200 | | | | | | |
| **SAO** | **San Andreas Ge** | **76.25** | **44** | IAmb | IAmb | 01 45 20.1 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.26** | **326** | P | **P** | **01 45 19.0** | **+1.0** |
| **USRK** | **Ussuriysk Ar.** | **76.26** | **326** | P | **P** | **01 45 18.2** | **+0.2** |
| | comp=Z,2.6nm,0.7s,baz=163,slow=2.0,SNR=7.9 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **PMPB** | **Monarch Peak** | **76.38** | **45** | P | **P** | **01 45 19.4** | **+0.5** |
| PMPB | | | | IAmb | IAmb | 01 45 21.0 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **BBGB** | **Big Mountain B** | **76.42** | **44** | P | **P** | **01 45 19.8** | **+0.6** |
| BBGB | | | | IAmb | IAmb | 01 45 21.8 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **HOPS** | **Hopland Field** | **76.49** | **41** | P | **P** | **01 45 19.1** | **-0.4** |
| HOPS | | | | IAmb | IAmb | 01 45 21.3 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **GDXM** | **Geysers** | **76.55** | **42** | P | **P** | **01 45 20.2** | **+0.4** |
| **KCPM** | **Cahto Peak** | **76.58** | **40** | P | **P** | **01 45 20.4** | **+0.3** |
| KCPM | | | | IAmb | IAmb | 01 45 22.0 | |
| | comp=Z,43nm,1.2s | | | | | | |
| **SII** | **Sitkinak Islan** | **76.61** | **14** | P | **P** | **01 45 20.1** | **+0.4** |
| | baz=204 | | | | | | |
| **BCW** | **Bitter Crk WRg** | **76.62** | **46** | P | **P** | **01 45 21.3** | **+0.9** |
| BCW | | | | IAmb | IAmb | 01 45 22.6 | |
| | comp=Z,45nm,0.9s | | | | | | |
| **KMPM** | **Mount Pierce** | **76.69** | **40** | P | **P** | **01 45 22.0** | **+1.4** |
| KMPM | | | | IAmb | IAmb | 01 45 22.8 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **KMRM** | **Mail Ridge** | **76.82** | **40** | P | **P** | **01 45 22.1** | **+0.7** |
| **CCX** | **Cicese** | **76.98** | **50** | P | **P** | **01 45 21.7** | **-0.6** |
| CCX | | | | IAmb | IAmb | 01 45 24.3 | |
| | comp=Z,25nm,0.9s | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **77.14** | **12** | P | **P** | **01 45 22.4** | **-0.2** |
| | baz=202,SNR=5.8 | | | | | | |
| **PLK4** | **Peulik 4** | **77.14** | **12** | P | **P** | **01 45 22.4** | **-0.2** |
| **109C** | **Camp Elliot, M** | **77.18** | **49** | P | **P** | **01 45 24.0** | **+0.6** |
| | baz=239 | | | | | | |
| **CBX** | **Cerro Bola** | **77.21** | **50** | IAmb | IAmb | 01 45 25.6 | |
| | comp=Z,44nm,1.0s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **77.36** | **40** | P | **P** | **01 45 25.3** | **+1.0** |
| O02D | | | | IAmb | IAmb | 01 45 26.7 | |
| | comp=Z,29nm,1.0s | | | | | | |
| **TKX** | **Tecate** | **77.38** | **50** | P | **P** | **01 45 24.5** | **0.0** |
| TKX | | | | IAmb | IAmb | 01 47 28.7 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **OHAK** | **Old Harbor** | **77.42** | **14** | P | **P** | **01 45 23.7** | **-0.3** |
| **OHAK** | **Old Harbor** | **77.42** | **14** | P | **P** | **01 45 23.9** | **-0.2** |
| | baz=205 | | | | | | |
| **R18K** | **Karluk** | **77.48** | **13** | P | **P** | **01 45 24.6** | **+0.3** |
| | baz=204 | | | | | | |
| **KRMB** | **Red Mountain** | **77.48** | **39** | P | **P** | **01 45 25.2** | **+0.3** |
| KRMB | | | | IAmb | IAmb | 01 45 26.7 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **ESJX** | **Sierra Juarez** | **77.58** | **51** | P | **P** | **01 45 26.8** | **+1.0** |
| **NJ2** | **Nanjing** | **77.63** | **309** | *e*P | **P** | **01 45 27.8** | **+2.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **ISA** | **Isabella, Lake** | **77.66** | **46** | IAmb | IAmb | 01 45 27.9 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **MONP2** | **Monument Peak** | **77.67** | **50** | P | **P** | **01 45 27.6** | **+1.3** |
| | baz=240,SNR=33 | | | | | | |
| **KSXB** | **Camp Six Broad** | **77.69** | **39** | P | **P** | **01 45 26.8** | **+0.7** |
| KSXB | | | | IAmb | IAmb | 01 45 28.1 | |
| | comp=Z,50nm,1.3s | | | | | | |
| **CCAC** | **Calif City Air** | **77.70** | **47** | IAmb | IAmb | 01 45 29.7 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **RMX** | **La Rumorosa** | **77.78** | **50** | P | **P** | **01 45 27.7** | **+0.8** |
| **AFDM** | **Forest Hills D** | **77.80** | **42** | P | **P** | **01 45 26.8** | **+0.2** |
| **ORV** | **Oroville** | **77.81** | **42** | P | **P** | **01 45 26.7** | **+0.1** |
| **Q17K** | **Contact Creek** | **77.83** | **12** | P | **P** | **01 45 26.0** | **-0.3** |
| | baz=202 | | | | | | |
| **O14K** | **Tigyukauivet M** | **77.83** | **9** | P | **P** | **01 45 25.5** | **-0.7** |
| **O14K** | **Tigyukauivet M** | **77.83** | **9** | P | **P** | **01 45 26.7** | **+0.5** |
| | baz=197 | | | | | | |
| **MDJ** | **Mudanjiang** | **77.83** | **325** | P | **P** | **01 45 27.1** | **+0.5** |
| **MDJ** | **Mudanjiang** | **77.83** | **325** | P | **P** | **01 45 27.8** | **+1.2** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **77.83** | **325** | P | **P** | **01 45 27.0** | **+0.5** |
| **YUH** | **Yuha Desert** | **77.92** | **50** | IAmb | IAmb | 01 45 29.3 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **SFX** | **San Felipe** | **77.92** | **52** | P | **P** | **01 45 27.8** | **+0.4** |
| SFX | | | | IAmb | IAmb | 01 45 29.2 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **PFO** | **Pinyon Flats O** | **78.01** | **49** | P | **P** | **01 45 28.1** | **+0.1** |
| **PFO** | **Pinyon Flats O** | **78.01** | **49** | P | **P** | **01 45 29.6** | **+1.6** |
| | baz=239,SNR=6.9 | | | | | | |
| **TPFO** | **Pinon Flats** | **78.01** | **49** | P | **P** | **01 45 28.9** | **+0.8** |
| | baz=239,SNR=7.2 | | | | | | |
| **L02F** | **Cave Junction** | **78.04** | **39** | P | **P** | **01 45 29.0** | **+1.1** |
| L02F | | | | IAmb | IAmb | 01 45 29.8 | |
| | comp=Z,51nm,1.5s | | | | | | |
| **Q16K** | **King Salmon** | **78.06** | **11** | P | **P** | **01 45 27.3** | **-0.2** |
| | baz=201 | | | | | | |
| **KDAK** | **Kodiak Island** | **78.09** | **14** | P | **P** | **01 45 27.9** | **+0.2** |
| | baz=205 | | | | | | |
| **P16K** | **Nushagak River** | **78.15** | **11** | P | **P** | **01 45 28.2** | **+0.3** |
| | baz=200 | | | | | | |
| **M11K** | **Mekoryuk** | **78.30** | **6** | P | **P** | **01 45 30.1** | **+1.3** |
| | baz=192 | | | | | | |
| **MDPB** | **Devils Postpil** | **78.31** | **44** | P | **P** | **01 45 30.1** | **+0.4** |
| MDPB | | | | IAmb | IAmb | 01 45 31.4 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.33** | **39** | P | **P** | **01 45 30.2** | **+0.7** |
| **K02D** | **Willamette Mer** | **78.33** | **38** | P | **P** | **01 45 30.0** | **+0.5** |
| **OMMB** | **Old Mammoth Mi** | **78.35** | **44** | P | **P** | **01 45 29.9** | **-0.1** |
| OMMB | | | | IAmb | IAmb | 01 45 31.8 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **Q18K** | **Katmai Hardscr** | **78.36** | **12** | P | **P** | **01 45 28.8** | **-0.4** |
| | baz=203,SNR=5.1 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **78.41** | **9** | P | **P** | **01 45 29.6** | **+0.3** |
| | baz=196,SNR=5.8 | | | | | | |
| **WAKR** | **Walker** | **78.55** | **43** | IAmb | IAmb | 01 45 32.9 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **HATC** | **Hat Creek Radi** | **78.56** | **41

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M16K | Timber Creek | 79.87 | 10 | P | P | 01 45 37.9 | +0.8 | |
| | baz=199,SNR=11 | | | | | | | |
| 214A | Organ Pipe Nat | 79.89 | 52 | P | P | 01 45 37.8 | -0.1 | |
| 214A | | | | IAmb | IAmb | 01 45 40.5 | | |
| | comp=Z,51nm,1.4s | | | | | | | |
| 214A | Organ Pipe Nat | 79.89 | 52 | P | P | 01 45 38.8 | +0.9 | |
| | baz=242,SNR=10.0 | | | | | | | |
| O19K | Port Alsworth | 79.92 | 12 | P | P | 01 45 36.9 | -0.4 | |
| O19K | Port Alsworth | 79.92 | 12 | P | P | 01 45 37.1 | -0.2 | |
| | baz=203 | | | | | | | |
| CNPM | China Poot | 79.97 | 14 | P | P | 01 45 37.4 | -0.2 | |
| CNPM | | | | IAmb | IAmb | 01 45 38.2 | | |
| | comp=Z,35nm,0.8s | | | | | | | |
| H04D | Lebanon | 79.97 | 37 | P | P | 01 45 38.4 | +0.4 | |
| H04D | | | | IAmb | IAmb | 01 45 39.8 | | |
| | comp=Z,42nm,1.2s | | | | | | | |
| K13K | Kusilvak Mount | 79.98 | 7 | P | P | 01 45 38.1 | +0.4 | |
| K13K | Kusilvak Mount | 79.98 | 7 | P | P | 01 45 37.9 | +0.2 | |
| | baz=193 | | | | | | | |
| N18K | Kilae Creek | 80.07 | 11 | P | P | 01 45 37.2 | -1.0 | |
| N18K | Kilae Creek | 80.07 | 11 | P | P | 01 45 37.4 | -0.8 | |
| | baz=202 | | | | | | | |
| G03D | McMinnville, O | 80.09 | 36 | P | P | 01 45 39.0 | +0.4 | |
| G03D | | | | IAmb | IAmb | 01 45 41.0 | | |
| | comp=Z,54nm,1.1s | | | | | | | |
| J05D | Fort Rock, OR | 80.12 | 39 | P | P | 01 45 39.5 | +0.4 | |
| L15K | Ungalak Mounta | 80.13 | 8 | P | P | 01 45 38.6 | +0.2 | |
| | baz=196,SNR=6.2 | | | | | | | |
| Q09A | Carvers | 80.21 | 44 | P | P | 01 45 40.2 | +0.5 | |
| BRLK | Bradley Lake | 80.26 | 14 | P | P | 01 45 38.8 | -0.5 | |
| BRLK | | | | IAmb | IAmb | 01 45 39.5 | | |
| | comp=Z,38nm,0.8s | | | | | | | |
| BRSE | Bradley Lake S | 80.28 | 14 | P | P | 01 45 39.5 | +0.2 | |
| | baz=207,SNR=5.5 | | | | | | | |
| F03A | Seaside | 80.36 | 35 | P | P | 01 45 39.8 | -0.3 | |
| F03A | | | | IAmb | IAmb | 01 45 41.7 | | |
| | comp=Z,56nm,1.0s | | | | | | | |
| H04A | Detroit Lake | 80.38 | 37 | P | P | 01 45 40.0 | -0.2 | |
| H04A | | | | IAmb | IAmb | 01 45 41.3 | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| SHPR | Sheep Range | 80.39 | 47 | P | P | 01 45 40.7 | +0.1 | |
| L16K | Owhat River | 80.44 | 9 | P | P | 01 45 40.1 | 0.0 | |
| L16K | | | | IAmb | IAmb | 01 45 41.4 | | |
| | comp=Z,34nm,1.1s | | | | | | | |
| L16K | Owhat River | 80.44 | 9 | P | P | 01 45 40.7 | +0.6 | |
| | baz=198,SNR=8.4 | | | | | | | |
| N19K | Bonanza Creek | 80.46 | 12 | P | P | 01 45 39.4 | -1.0 | |
| N19K | | | | IAmb | IAmb | 01 45 40.2 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| N19K | Bonanza Creek | 80.46 | 12 | P | P | 01 45 39.5 | -0.8 | |
| | baz=203,SNR=5.6 | | | | | | | |
| M17K | Holitna River | 80.48 | 10 | P | P | 01 45 40.6 | +0.3 | |
| M17K | Holitna River | 80.48 | 10 | P | P | 01 45 40.9 | +0.6 | |
| | baz=200,SNR=11 | | | | | | | |
| S11A | Rachel | 80.56 | 46 | P | P | 01 45 42.3 | +0.8 | |
| S11A | | | | IAmb | IAmb | 01 45 43.2 | | |
| | comp=Z,47nm,1.1s | | | | | | | |
| PINE | Pine Mountain | 80.59 | 38 | P | P | 01 45 41.8 | +0.3 | |
| W13A | Hualapai Mount | 80.60 | 49 | P | P | 01 45 42.4 | +0.6 | |
| I05D | Terrebonne, OR | 80.67 | 38 | P | P | 01 45 42.0 | +0.2 | |
| I05D | | | | IAmb | IAmb | 01 45 43.4 | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| Y14A | Wickenburg | 80.68 | 50 | P | P | 01 45 42.4 | +0.4 | |
| K15K | Wolf Creek Mou | 80.71 | 8 | P | P | 01 45 41.9 | +0.4 | |
| K15K | Wolf Creek Mou | 80.71 | 8 | P | P | 01 45 42.0 | +0.6 | |
| | baz=196,SNR=16 | | | | | | | |
| E03A | Lebam | 80.73 | 35 | P | P | 01 45 42.3 | +0.4 | |
| F04D | Rainier, OR | 80.75 | 36 | P | P | 01 45 42.5 | +0.5 | |
| F04D | | | | IAmb | IAmb | 01 45 44.1 | | |
| | comp=Z,31nm,0.8s | | | | | | | |
| MA2 | Magadan | 80.83 | 345 | P | P | 01 45 41.3 | -0.8 | |
| M18K | Stony River | 80.84 | 11 | P | P | 01 45 42.2 | +0.1 | |
| | baz=202 | | | | | | | |
| SEW | Seward | 80.90 | 14 | P | P | 01 45 42.0 | -0.4 | |
| | baz=208,SNR=5.3 | | | | | | | |
| J14K | Nanvaranak Lak | 80.90 | 7 | P | P | 01 45 42.6 | +0.2 | |
| | baz=194 | | | | | | | |
| PRN | Pahroc Range | 80.92 | 46 | P | P | 01 45 44.1 | +0.8 | |
| PRN | | | | IAmb | IAmb | 01 45 45.6 | | |
| | comp=Z,44nm,1.0s | | | | | | | |
| WISH | Wishkah | 80.97 | 34 | P | P | 01 45 44.2 | +1.1 | |
| WISH | | | | IAmb | IAmb | 01 45 45.3 | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| F04A | Amboy | 80.99 | 36 | P | P | 01 45 43.5 | +0.2 | |
| F04A | | | | IAmb | IAmb | 01 45 44.8 | | |
| | comp=Z,46nm,1.3s | | | | | | | |
| BMN | Battle Mountai | 81.03 | 43 | IAmb | IAmb | 01 45 45.6 | | |
| | comp=Z,48nm,1.1s | | | | | | | |
| L17K | Donlin | 81.03 | 9 | P | P | 01 45 44.1 | +1.0 | |
| | baz=200,SNR=20 | | | | | | | |
| R11B | Troy Canyon, C | 81.03 | 45 | P | P | 01 45 44.5 | +0.5 | |
| | baz=239,SNR=17 | | | | | | | |
| C03A | Quillayute Air | 81.06 | 33 | P | P | 01 45 44.4 | +0.9 | |
| HOOD | Mount Hood Mea | 81.06 | 37 | IAmb | IAmb | 01 45 45.2 | | |
| | comp=Z,39nm,1.1s | | | | | | | |
| NLWA | Nellton Lookou | 81.09 | 34 | IAmb | IAmb | 01 45 45.6 | | |
| | comp=Z,35nm,1.1s | | | | | | | |
| G05A | Wamic | 81.21 | 37 | P | P | 01 45 44.8 | +0.3 | |
| G05A | | | | IAmb | IAmb | 01 45 45.5 | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| WVOR | Wild Horse Val | 81.22 | 40 | P | P | 01 45 45.0 | +0.2 | |
| WVOR | | | | IAmb | IAmb | 01 45 46.5 | | |
| | comp=Z,51nm,1.1s | | | | | | | |
| GAMB | Gambell | 81.24 | 3 | P | P | 01 45 44.1 | 0.0 | |
| | baz=187 | | | | | | | |
| N20K | Mount Spurr | 81.27 | 13 | P | P | 01 45 43.7 | -0.8 | |
| | baz=205 | | | | | | | |
| SPCR | Spurr Chakacha | 81.27 | 13 | P | P | 01 45 43.3 | -1.2 | |
| | baz=205 | | | | | | | |
| SPU | Mount Spurr | 81.29 | 13 | P | P | 01 45 43.4 | -1.2 | |
| P23K | Montague Islan | 81.30 | 15 | P | P | 01 45 44.1 | -0.5 | |
| | baz=210 | | | | | | | |
| L18K | Granite Mounta | 81.37 | 10 | P | P | 01 45 45.3 | +0.4 | |
| | baz=201,SNR=20 | | | | | | | |
| M19K | Big River Lodg | 81.48 | 11 | IAmb | IAmb | 01 45 45.6 | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| M19K | Big River Lodg | 81.48 | 11 | P | P | 01 45 45.2 | -0.3 | |
| | baz=203 | | | | | | | |
| SMAI | San Martin Ant | 81.52 | 159 | P | P | 01 45 47.6 | +1.9 | |
| SMAI | | | | IAmb | IAmb | 01 45 48.9 | | |
| | comp=Z,38nm,1.0s | | | | | | | |
| TUC | Tucson | 81.58 | 52 | P | P | 01 45 47.8 | +1.0 | |
| TUC | | | | IAmb | IAmb | 01 45 49.5 | | |
| | comp=Z,29nm,0.8s | | | | | | | |
| TUC | Tucson | 81.58 | 52 | P | P | 01 45 48.2 | +1.5 | |
| | baz=243 | | | | | | | |
| K17K | Iditarod | 81.58 | 9 | IAmb | IAmb | 01 45 47.4 | | |
| | comp=Z,43nm,1.1s | | | | | | | |
| K17K | Iditarod | 81.58 | 9 | P | P | 01 45 46.2 | +0.3 | |
| | baz=200,SNR=7.7 | | | | | | | |
| I07A | Izee | 81.61 | 39 | IAmb | IAmb | 01 45 48.4 | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| L19K | White Mountain | 81.66 | 11 | P | P | 01 45 46.7 | +0.3 | |
| L19K | | | | IAmb | IAmb | 01 45 48.1 | | |
| | comp=Z,36nm,1.2s | | | | | | | |
| L19K | White Mountain | 81.66 | 11 | P | P | 01 45 46.8 | +0.4 | |
| | baz=203,SNR=6.4 | | | | | | | |
| M20K | Styx River | 81.70 | 12 | P | P | 01 45 46.5 | -0.2 | |
| | baz=204 | | | | | | | |
| RC01 | Rabbit Creek A | 81.71 | 14 | P | P | 01 45 45.8 | -0.8 | |
| RC01 | | | | IAmb | IAmb | 01 45 46.9 | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| RC01 | Rabbit Creek A | 81.71 | 14 | P | P | 01 45 46.2 | -0.4 | |
| | baz=208,SNR=5.0 | | | | | | | |
| GNW | Green Mountain | 81.75 | 34 | IAmb | IAmb | 01 45 48.6 | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| J16K | Anvik River | 81.79 | 8 | P | P | 01 45 47.6 | +0.6 | |
| | baz=197,SNR=15 | | | | | | | |
| SUA | Susitna One | 81.82 | 13 | P | P | 01 45 46.3 | -1.1 | |
| SUA | Susitna One | 81.82 | 13 | P | P | 01 45 46.9 | -0.5 | |
| | baz=207 | | | | | | | |
| J08A | Circle Bar Ran | 81.82 | 40 | IAmb | IAmb | 01 45 49.5 | | |
| | comp=Z,42nm,1.0s | | | | | | | |
| PWL | Port Wells | 81.83 | 14 | P | P | 01 45 46.6 | -0.6 | |
| PWL | Port Wells | 81.83 | 14 | P | P | 01 45 46.5 | -0.8 | |
| | baz=209,SNR=8.9 | | | | | | | |
| CLRS | Cowichan Lake | 81.83 | 33 | P | P | 01 45 48.1 | +0.5 | |
| CLRS | | | | IAmb | IAmb | 01 45 48.9 | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| HIN | Hinchinbrook I | 81.88 | 15 | IAmb | IAmb | 01 45 48.7 | | |
| | comp=Z,49nm,1.1s | | | | | | | |
| Q12A | Willow Creek R | 81.89 | 45 | P | P | 01 45 48.6 | +0.3 | |
| Q12A | | | | IAmb | IAmb | 01 45 50.1 | | |
| | comp=Z,48nm,1.2s | | | | | | | |
| CBB | Campbell River | 81.97 | 31 | P | P | 01 45 48.3 | +0.1 | |
| CBB | | | | IAmb | IAmb | 01 45 49.7 | | |
| | comp=Z,43nm,1.1s | | | | | | | |
| LCMT | Little Creek M | 81.98 | 47 | P | P | 01 45 49.5 | +0.7 | |
| LCMT | | | | IAmb | IAmb | 01 45 50.8 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| D05A | Enumclaw | 81.98 | 35 | P | P | 01 45 48.8 | +0.5 | |
| KAIM | Kayak Island | 82.02 | 17 | P | P | 01 45 49.0 | +0.7 | |
| | baz=213 | | | | | | | |
| X16A | Lo Mia Camp, P | 82.05 | 50 | P | P | 01 45 50.1 | +0.9 | |
| X16A | | | | IAmb | IAmb | 01 45 51.8 | | |
| | comp=Z,34nm,0.9s | | | | | | | |
| PGC | Sidney | 82.08 | 33 | P | P | 01 45 48.9 | +0.1 | |
| PGC | | | | IAmb | IAmb | 01 45 50.0 | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| J17K | VABM Dome | 82.11 | 9 | IAmb | IAmb | 01 45 49.9 | | |
| | comp=Z,32nm,0.8s | | | | | | | |
| J17K | VABM Dome | 82.11 | 9 | P | P | 01 45 49.0 | +0.4 | |
| | baz=199,SNR=9.9 | | | | | | | |
| L20K | Farewell, AK | 82.11 | 11 | P | P | 01 45 48.5 | -0.2 | |
| | baz=204,SNR=12 | | | | | | | |
| SKT | Skwentna | 82.12 | 12 | P | P | 01 45 47.5 | -1.2 | |
| SKT | Skwentna | 82.12 | 12 | P | P | 01 45 47.8 | -1.0 | |
| | baz=206 | | | | | | | |
| GLI | Glacier Island | 82.14 | 15 | P | P | 01 45 48.0 | -0.9 | |
| | baz=210,SNR=16 | | | | | | | |
| CCUT | Cedar City | 82.16 | 47 | P | P | 01 45 50.1 | +0.4 | |
| CCUT | | | | IAmb | IAmb | 01 45 52.1 | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| EYAK | Cordova Ski Ar | 82.20 | 16 | P | P | 01 45 48.3 | -0.8 | |
| EYAK | Cordova Ski Ar | 82.20 | 16 | P | P | 01 45 48.8 | -0.3 | |
| | baz=211 | | | | | | | |
| SPR3 | Spring Creek 3 | 82.20 | 45 | P | P | 01 45 50.0 | -0.1 | |
| SPR3 | | | | IAmb | IAmb | 01 45 51.4 | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| M22K | Willow | 82.21 | 13 | P | P | 01 45 49.3 | +0.2 | |
| | baz=207 | | | | | | | |
| CRAG | Craig | 82.24 | 24 | P | P | 01 45 49.9 | +0.4 | |
| | baz=223 | | | | | | | |
| KNB | Kanab | 82.28 | 47 | P | P | 01 45 50.9 | +0.6 | |
| KNB | | | | IAmb | IAmb | 01 45 52.5 | | |
| | comp=Z,29nm,0.8s | | | | | | | |
| KNK | Knik Glacier | 82.28 | 14 | P | P | 01 45 48.6 | -1.0 | |
| KNK | | | | IAmb | IAmb | 01 45 49.8 | | |
| | comp=Z,24nm,0.7s | | | | | | | |
| KNK | Knik Glacier | 82.28 | 14 | P | P | 01 45 49.7 | +0.1 | |
| | baz=209 | | | | | | | |
| PMR | Palmer | 82.29 | 14 | P | P | 01 45 49.0 | -0.5 | |
| PMR | Palmer | 82.29 | 14 | IAmb | IAmb | 01 45 49.2 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| PSUT | Pine Spring | 82.30 | 46 | P | P | 01 45 50.5 | 0.0 | |
| PSUT | | | | IAmb | IAmb | 01 45 52.1 | | |
| | comp=Z,22nm,0.7s | | | | | | | |
| 319A | Douglas | 82.31 | 54 | P | P | 01 45 51.7 | +1.1 | |
| RAGM | Ragged Mountai | 82.34 | 16 | IAmb | IAmb | 01 45 50.5 | | |
| | comp=Z,47nm,1.1s | | | | | | | |
| I17K | Unalakleet | 82.35 | 8 | P | P | 01 45 50.7 | +0.9 | |
| I17K | | | | IAmb | IAmb | 01 45 51.2 | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| I17K | Unalakleet | 82.35 | 8 | P | P | 01 45 50.5 | +0.6 | |
| | baz=197 | | | | | | | |
| SZCU | Shurtz Canyon | 82.37 | 47 | P | P | 01 45 51.5 | +0.7 | |
| SZCU | | | | IAmb | IAmb | 01 45 53.1 | | |
| | comp=Z,26nm,1.0s | | | | | | | |
| U15A | North Rim | 82.37 | 48 | P | P | 01 45 52.1 | +1.1 | |
| F07A | Phinny Hill Vi | 82.38 | 37 | IAmb | IAmb | 01 45 51.9 | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| GRNB | Grenville Isla | 82.38 | 27 | P | P | 01 45 50.3 | +0.1 | |
| GRNB | | | | IAmb | IAmb | 01 45 51.7 | | |
| | comp=Z,29nm,1.0s | | | | | | | |
| HMT | Hamilton | 82.41 | 16 | P | P | 01 45 49.8 | -0.4 | |
| HMT | | | | IAmb | IAmb | 01 45 50.7 | | |
| | comp=Z,38nm,1.0s | | | | | | | |
| ELK | Elko | 82.48 | 43 | P | P | 01 45 51.5 | +0.2 | |
| ELK | | | | IAmb | IAmb | 01 45 53.0 | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| ANM | Nome | 82.49 | 6 | P | P | 01 45 50.9 | +0.4 | |
| | baz=193 | | | | | | | |
| BGLC | Bering Glacier | 82.50 | 17 | P | P | 01 45 51.6 | +0.9 | |
| | baz=214 | | | | | | | |
| BELA | Belgrano 2 | 82.53 | 173 | P | P | 01 45 50.2 | -0.5 | |
| BELA | | | | IAmb | IAmb | 01 45 52.1 | | |
| | comp=Z,70nm,1.5s | | | | | | | |
| J18K | Innoko River | 82.53 | 10 | P | P | 01 45 50.8 | 0.0 | |
| | baz=201,SNR=18 | | | | | | | |
| HEH | HeiHe | 82.55 | 328 | *e*P | P | 01 45 50.8 | -0.4 | |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| MXC | Moxie City | 82.57 | 36 | P | P | 01 45 51.6 | +0.3 | |
| SIT | Sitka | 82.60 | 22 | P | P | 01 45 51.8 | +0.6 | |
| SIT | Sitka | 82.60 | 22 | P | P | 01 45 51.0 | -0.2 | |
| | baz=221 | | | | | | | |
| WUAZ | Wupatki | 82.60 | 49 | P | P | 01 45 52.6 | +0.6 | |
| WUAZ | | | | IAmb | IAmb | 01 45 54.3 | | |
| | comp=Z,42nm,1.1s | | | | | | | |
| WUAZ | Wupatki | 82.60 | 49 | P | P | 01 45 53.7 | +1.6 | |
| | baz=242,SNR=19 | | | | | | | |
| G08A | Pilot Rock | 82.60 | 38 | IAmb | IAmb | 01 45 53.3 | | |
| | comp=Z,35nm,1.0s | | | | | | | |
| SML | Sawmill | 82.66 | 14 | IAmb | IAmb | 01 45 54.3 | | |
| | comp=Z,60nm,1.6s | | | | | | | |
| SML | Sawmill | 82.66 | 14 | P | P | 01 45 51.3 | -0.2 | |
| | baz=209 | | | | | | | |
| U33K | Whale Pass | 82.72 | 24 | P | P | 01 45 52.5 | +0.7 | |
| U33K | | | | IAmb | IAmb | 01 45 53.4 | | |
| | comp=Z,37nm,1.3s | | | | | | | |
| U33K | Whale Pass | 82.72 | 24 | P | P | 01 45 52.4 | +0.6 | |
| | baz=223,SNR=8.2 | | | | | | | |
| V35K | Ketchikan | 82.74 | 25 | IAmb | IAmb | 01 45 53.4 | | |
| | comp=Z,24nm,1.1s | | | | | | | |
| V35K | Ketchikan | 82.74 | 25 | P | P | 01 45 52.7 | +0.8 | |
| | baz=225,SNR=6.7 | | | | | | | |
| LTY | Liberty | 82.75 | 36 | P | P | 01 45 52.0 | -0.3 | |
| CUT | Chulitna | 82.76 | 13 | P | P | 01 45 51.4 | -0.6 | |
| | baz=207,SNR=7.4 | | | | | | | |
| M23K | Glacier View | 82.79 | 14 | P | P | 01 45 51.6 | -0.6 | |
| | baz=210 | | | | | | | |
| E07A | Sunnyside | 82.80 | 36 | IAmb | IAmb | 01 45 54.2 | | |
| | comp=Z,35nm,1.0s | | | | | | | |
| PKCU | Pink Cliffs | 82.84 | 47 | P | P | 01 45 54.0 | +0.7 | |
| BMRM | Bremner River | 82.85 | 16 | P | P | 01 45 52.0 | -0.5 | |
| | baz=212,SNR=11 | | | | | | | |
| K20K | Telida | 82.88 | 11 | P | P | 01 45 52.1 | -0.5 | |
| | baz=203,SNR=23 | | | | | | | |
| H16K | Elim | 82.89 | 7 | P | P | 01 45 52.9 | +0.4 | |
| | baz=196,SNR=7.8 | | | | | | | |
| HAWA | Hanford | 82.89 | 37 | IAmb | IAmb | 01 45 54.6 | | |
| | comp=Z,39nm,0.9s | | | | | | | |
| SCM | Sheep Creek Mo | 82.92 | 14 | P | P | 01 45 52.5 | -0.4 | |
| | baz=210,SNR=16 | | | | | | | |
| MESA | MESA | 82.92 | 17 | P | P | 01 45 53.2 | +0.1 | |
| | baz=215,SNR=13 | | | | | | | |
| KLU | Klutina | 82.96 | 15 | P | P | 01 45 52.5 | -0.6 | |
| | baz=211,SNR=5.8 | | | | | | | |
| S31K | Pelican | 82.96 | 21 | IAmb | IAmb | 01 45 54.3 | | |
| | comp=Z,33nm,0.9s | | | | | | | |
| S31K | Pelican | 82.96 | 21 | P | P | 01 45 53.3 | +0.3 | |
| | baz=220,SNR=16 | | | | | | | |
| DUN6 | Lazy B Ranch | 82.97 | 53 | P | P | 01 45 54.5 | +0.6 | |
| G15K | Niukluk | 83.04 | 6 | P | P | 01 45 53.8 | +0.6 | |
| | baz=194 | | | | | | | |
| CRQM | Cirque | 83.07 | 17 | P | P | 01 45 53.5 | -0.3 | |
| CRQE | Cirque | 83.08 | 17 | P | P | 01 45 53.7 | 0.0 | |
| | baz=214,SNR=17 | | | | | | | |
| TGL | Tana Glacier | 83.15 | 17 | P | P | 01 45 53.6 | -0.5 | |
| S32K | Killisnoo | 83.17 | 22 | P | P | 01 45 54.3 | +0.2 | |
| S32K | | | | IAmb | IAmb | 01 45 55.4 | | |
| | comp=Z,41nm,1.6s | | | | | | | |
| S32K | Killisnoo | 83.17 | 22 | P | P | 01 45 54.4 | +0.4 | |
| | baz=222 | | | | | | | |
| X18A | Snowflake | 83.19 | 51 | P | P | 01 45 55.0 | 0.0 | |
| X18A | | | | IAmb | IAmb | 01 45 57.3 | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| HNS | HongShan | 83.20 | 313 | ⇑P | P | 01 45 56.3 | +1.6 | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| J19K | Poorman | 83.20 | 10 | P | P | 01 45 54.2 | +0.1 | |
| | baz=202,SNR=10 | | | | | | | |
| MTPU | Mount Pierson | 83.21 | 47 | IAmb | IAmb | 01 45 58.0 | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| E08A | Dider Farm, El | 83.22 | 37 | IAmb | IAmb | 01 45 55.6 | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| WRAK | Wrangell Islan | 83.23 | 24 | IAmb | IAmb | 01 45 55.8 | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| WRAK | Wrangell Islan | 83.23 | 24 | P | P | 01 45 55.0 | +0.6 | |
| | baz=224 | | | | | | | |
| TNA | Tin City | 83.25 | 4 | P | P | 01 45 54.3 | 0.0 | |
| | baz=190 | | | | | | | |
| PNL | Peninsula | 83.27 | 19 | P | P | 01 45 54.4 | -0.1 | |
| | baz=217,SNR=9.1 | | | | | | | |
| F14K | Arctic Creek | 83.29 | 5 | P | P | 01 45 54.8 | +0.2 | |
| | baz=192 | | | | | | | |
| TCRU | Three Creeks R | 83.30 | 46 | P | P | 01 45 56.1 | +0.5 | |
| TCRU | | | | IAmb | IAmb | 01 45 58.0 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| HPIG | | 83.35 | 59 | P | P | 01 45 56.1 | +0.1 | |
| PINM | Pinnacle | 83.35 | 18 | P | P | 01 45 55.5 | +0.4 | |
| | baz=216,SNR=5.2 | | | | | | | |
| VRDI | Verde Repeater | 83.38 | 16 | IAmb | IAmb | 01 45 55.7 | | |
| | comp=Z,36nm,1.0s | | | | | | | |
| N25K | Chitina, Valde | 83.39 | 16 | P | P | 01 45 54.9 | -0.3 | |
| | baz=212,SNR=26 | | | | | | | |
| MVU | Marysvale | 83.41 | 46 | P | P | 01 45 56.9 | +0.8 | |
| BCPM | Bancas Point | 83.42 | 19 | P | P | 01 45 54.8 | -0.5 | |
| M24K | Tolsona, Glenn | 83.43 | 15 | P | P | 01 45 55.5 | +0.1 | |
| | baz=211,SNR=11 | | | | | | | |
| GRNC | Granite Creek | 83.43 | 17 | IAmb | IAmb | 01 45 56.2 | | |
| | comp=Z,38nm,0.9s | | | | | | | |
| BJT | Baijiatuau | 83.45 | 315 | P | P | 01 45 56.5 | +0.6 | |
| BJT | Baijiatuau | 83.45 | 315 | P | P | 01 45 56.0 | +0.1 | |
| BJI | Beijing | 83.45 | 315 | P | P | 01 45 56.1 | +0.2 | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| H17K | Granite Mounta | 83.46 | 8 | P | P | 01 45 55.5 | 0.0 | |
| H17K | | | | IAmb | IAmb | 01 45 56.0 | | |
| | comp=Z,56nm,1.8s | | | | | | | |
| H17K | Granite Mounta | 83.46 | 8 | P | P | 01 45 55.3 | -0.1 | |
| | baz=198 | | | | | | | |
| WAT6 | Susitna Watana | 83.47 | 14 | P | P | 01 45 54.9 | -0.8 | |
| | baz=209,SNR=16 | | | | | | | |
| MFID | Camas Ranch | 83.48 | 41 | IAmb | IAmb | 01 45 57.8 | | |
| | comp=Z,29nm,0.9s | | | | | | | |
| WAT1 | Susitna Watana | 83.51 | 13 | P | P | 01 45 55.4 | -0.4 | |
| | baz=209 | | | | | | | |
| G16K | Koyuk River | 83.61 | 7 | P | P | 01 45 56.3 | +0.2 | |
| G16K | | | | IAmb | IAmb | 01 45 57.1 | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| G16K | Koyuk River | 83.61 | 7 | P | P | 01 45 56.1 | 0.0 | |
| | baz=196 | | | | | | | |
| D08A | Wollman Farm, | 83.61 | 36 | IAmb | IAmb | 01 45 58.1 | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| W18A | Petrified Fore | 83.61 | 50 | P | P | 01 45 57.4 | +0.3 | |
| W18A | | | | IAmb | IAmb | 01 45 59.2 | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| W18A | Petrified Fore | 83.61 | 50 | P | P | 01 45 57.1 | 0.0 | |
| | baz=243,SNR=7.1 | | | | | | | |
| MCARA | McCarthy VSAT | 83.62 | 16 | IAmb | IAmb | 01 45 57.0 | | |
| | comp=Z,37nm,1.0s | | | | | | | |
| MCARA | McCarthy VSAT | 83.62 | 16 | P | P | 01 45 56.3 | 0.0 | |
| | baz=214,SNR=8.3 | | | | | | | |
| J20K | Nowinta River | 83.62 | 10 | IAmb | IAmb | 01 45 56.9 | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| J20K | Nowinta River | 83.62 | 10 | P | P | 01 45 55.8 | -0.4 | |
| | baz=203,SNR=16 | | | | | | | |
| F15K | North Star Dit | 83.67 | 6 | P | P | 01 45 56.4 | -0.1 | |
| | baz=193 | | | | | | | |
| LOGN | Logan Glacier | 83.72 | 17 | IAmb | IAmb | 01 45 57.6 | | |
| | comp=Z,32nm,0.8s | | | | | | | |
| CTG | Chitna Glacier | 83.74 | 17 | P | P | 01 45 56.9 | -0.2 | |
| | baz=215,SNR=15 | | | | | | | |
| P29M | Windy Craggy | 83.75 | 20 | P | P | 01 45 57.5 | +0.5 | |
| | baz=219,SNR=17 | | | | | | | |
| R32K | Eaglecrest | 83.80 | 22 | P | P | 01 45 57.4 | +0.2 | |
| | baz=222,SNR=9.7 | | | | | | | |
| DUG | Dugway, Tooele | 83.81 | 45 | P | P | 01 45 58.4 | +0.4 | |
| | baz=241,SNR=9.8 | | | | | | | |
| JIS | Juneau Island | 83.85 | 22 | P | P | 01 45 57.9 | +0.5 | |
| H18K | Honhosa River | 83.88 | 8 | P | P | 01 45 58.6 | +1.1 | |
| | baz=199 | | | | | | | |
| G17K | Kiwalik Mounta | 83.91 | 7 | P | P | 01 45 57.7 | +0.1 | |
| | baz=197 | | | | | | | |
| O28M | Mount Upton | 83.91 | 18 | P | P | 01 45 57.9 | -0.2 | |
| | baz=216,SNR=22 | | | | | | | |
| HARP | HAARP | 83.93 | 15 | P | P | 01 45 57.6 | -0.2 | |
| | baz=212,SNR=7.7 | | | | | | | |
| 121A | Cookes Peak, D | 83.96 | 53 | P | P | 01 45 59.2 | +0.3 | |
| 121A | Cookes Peak, D | 83.96 | 53 | P | P | 01 46 00.1 | +1.2 | |
| | baz=245 | | | | | | | |
| ENH | Enshi | 83.98 | 304 | P | P | 01 45 59.9 | +1.1 | |
| DHY | Denali Highway | 83.99 | 14 | IAmb | IAmb | 01 45 58.5 | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| DHY | Denali Highway | 83.99 | 14 | P | P | 01 45 57.5 | -0.7 | |
| | baz=210,SNR=9.4 | | | | | | | |
| BGU | Big Grassy Mou | 84.02 | 44 | P | P | 01 45 58.9 | -0.1 | |
| O29M | Mount Kennedy | 84.02 | 19 | IAmb | IAmb | 01 45 59.5 | | |
| | comp=Z,29nm,1.4s | | | | | | | |
| O29M | Mount Kennedy | 84.02 | 19 | P | P | 01 45 58.5 | +0.1 | |
| | baz=218,SNR=5.6 | | | | | | | |
| PLBC | Pleasant Camp | 84.06 | 20 | P | P | 01 45 58.8 | +0.3 | |
| | baz=220,SNR=20 | | | | | | | |
| B08A | Colville Reser | 84.12 | 35 | IAmb | IAmb | 01 45 59.8 | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| BPAW | Bear Paw Mtn. | 84.14 | 12 | P | P | 01 45 57.5 | -1.3 | |
| | baz=206,SNR=8.3 | | | | | | | |
| I20K | Naaghedeneel | 84.14 | 10 | P | P | 01 45 59.5 | +0.8 | |
| | baz=203,SNR=8.6 | | | | | | | |
| MAW | Mawson | 84.15 | 200 | P | P | 01 45 59.3 | +0.3 | |
| | comp=Z,7.4nm,0.7s,baz=114,slow=7.4,SNR=12 | | | | | | | |
| | comp=Z,7.4nm,0.7s | | | | | | | |
| HMU | Henry Mountain | 84.17 | 47 | IAmb | IAmb | 01 46 01.6 | | |
| | comp=Z,37nm,1.6s | | | | | | | |
| NLU | North Lily Min | 84.19 | 45 | P | P | 01 45 59.8 | -0.1 | |
| MCK | McKinley | 84.22 | 13 | P | P | 01 45 58.4 | -0.9 | |
| | baz=208,SNR=13 | | | | | | | |
| PAX | Paxson | 84.34 | 15 | P | P | 01 45 58.8 | -1.1 | |
| | baz=212,SNR=13 | | | | | | | |
| ZAIG | Zacatecas | 84.36 | 64 | P | P | 01 46 01.4 | +0.2 | |
| P30M | Million Dollar | 84.39 | 20 | P | P | 01 46 01.3 | +1.1 | |
| | baz=220 | | | | | | | |
| C09A | Chrisman Ranch | 84.39 | 36 | IAmb | IAmb | 01 46 01.6 | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| SKAG | Skagway | 84.41 | 21 | P | P | 01 46 01.2 | +1.0 | |
| SKAG | Skagway | 84.41 | 21 | IAmb | IAmb | 01 46 02.0 | | |
| | comp=Z,51nm,1.4s | | | | | | | |
| SKAG | Skagway | 84.41 | 21 | P | P | 01 46 01.7 | +1.5 | |
| | baz=221 | | | | | | | |
| HLID | Hailey | 84.44 | 41 | IAmb | IAmb | 01 46 03.0 | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| HLID | Hailey | 84.44 | 41 | P | P | 01 46 01.9 | +0.9 | |
| | baz=240,SNR=37 | | | | | | | |
| YUK8 | Steele Glacier | 84.45 | 18 | P | P | 01 46 00.7 | 0.0 | |
| | baz=217,SNR=21 | | | | | | | |
| T35M | Bob Quinn | 84.45 | 24 | P | P | 01 46 00.3 | -0.2 | |
| T35M | Bob Quinn | 84.45 | 24 | P | P | 01 46 01.5 | +0.9 | |
| | baz=226,SNR=6.6 | | | | | | | |
| TMUT | Trail Mountain | 84.47 | 46 | P | P | 01 46 01.5 | 0.0 | |
| M26K | Nabesna, AK | 84.48 | 16 | P | P | 01 46 00.5 | -0.1 | |
| | baz=214,SNR=34 | | | | | | | |
| H19K | Roundabout Mou | 84.51 | 9 | IAmb | IAmb | 01 46 01.

MLY Manley 85.02 11 P P 01 46 02.1 -1.1
baz=206,SNR=13
P32M Atlin 85.06 21 P P 01 46 03.8 +0.4
P32M IAmb IAmb 01 46 04.7
comp=Z,16nm,0.9s
P32M Atlin 85.06 21 P P 01 46 03.9 +0.4
baz=222,SNR=7.6
Q32M Nakina River 85.10 22 IAmb IAmb 01 46 05.3
comp=Z,21nm,0.8s
Q32M Nakina River 85.10 22 P P 01 46 04.3 +0.4
baz=224,SNR=15
RIDG Independent Ri 85.14 14 P P 01 46 03.0 -0.9
RIDG Independent Ri 85.14 14 P P 01 46 03.6 -0.2
baz=212,SNR=14
O30N Mendenhall 85.16 19 IAmb IAmb 01 46 05.0
comp=Z,26nm,0.8s
O30N Mendenhall 85.16 19 P P 01 46 04.0 0.0
baz=220,SNR=21
TCUT Toone Canyon 85.19 44 IAmb IAmb 01 46 07.7
comp=Z,15nm,0.7s
H21K Melozitna Rive 85.22 10 IAmb IAmb 01 46 05.9
comp=Z,61nm,1.9s
H21K Melozitna Rive 85.22 10 P P 01 46 03.9 -0.2
baz=205,SNR=8.2
HDA Harding Lake 85.24 13 P P 01 46 03.3 -0.9
baz=210,SNR=23
NEW Newport 85.30 36 P P 01 46 04.8 -0.1
baz=237,SNR=12
E17K Hotham Inlet 85.30 6 P P 01 46 04.3 -0.1
baz=196
HWUT Hardware Ranch 85.32 44 P P 01 46 04.9 -0.5
L27K Beaver Creek, 85.33 16 P P 01 46 04.3 -0.4
baz=215,SNR=16
BCAR Beaver Creek A 85.34 16 P P 01 46 03.8 -1.0
IMAR Indian Mountai 85.36 10 P P 01 46 04.0 -0.7
N30M Aishikik Lake 85.38 19 P P 01 46 05.1 0.0
baz=219,SNR=7.6
I23K Minto, Yukon-K 85.39 12 P P 01 46 04.3 -0.6
baz=208,SNR=11
VHRN Van Horn 85.42 56 P P 01 46 06.4 +0.4
VHRN IAmb IAmb 01 46 08.7
comp=Z,17nm,1.0s
MVCO Mesa Verde 85.44 49 P P 01 46 06.3 +0.2
baz=244
COLA College 85.46 13 P P 01 46 05.3 +0.1
COLA College 85.46 13 P P 01 46 03.8 -1.4
COLA College 85.46 13 P P 01 46 04.8 -0.4
baz=209
WHY Whitehorse 85.47 20 IAmb IAmb 01 46 06.6
comp=Z,21nm,0.9s
WHY Whitehorse 85.47 20 P P 01 46 05.7 +0.2
baz=221,SNR=15
MNTX Cornudas Mount 85.47 55 P P 01 46 06.8 +0.7
baz=246
F19K Shaleruckik Mo 85.55 8 P P 01 46 05.3 -0.3
baz=200
SCRK Sand Creek 85.55 15 IAmb IAmb 01 46 06.3
comp=Z,17nm,0.8s
SCRK Sand Creek 85.55 15 P P 01 46 05.4 -0.5
baz=213,SNR=22
DLBC Dease Lake 85.56 23 IAmb IAmb 01 46 07.3
comp=Z,21nm,0.9s
DLBC Dease Lake 85.56 23 P P 01 46 06.3 +0.4
baz=226,SNR=19
IL31 85.57 13 IAmb IAmb 01 46 05.6
comp=Z,21nm,0.8s
ILAR Eielson Array 85.57 13 P P 01 46 03.7 -2.1
ILAR Eielson Array 85.57 13 P P 01 46 04.5 -1.3
comp=Z,20nm,1.0s,baz=229,slow=5.4,SNR=66
comp=Z,20nm,1.0s
H22K Ishtalitna Cre 85.68 11 P P 01 46 05.8 -0.6
baz=206,SNR=11
M29M Somme Creek 85.75 17 IAmb IAmb 01 46 07.6
comp=Z,14nm,0.8s
M29M Somme Creek 85.75 17 P P 01 46 06.7 -0.1
baz=218,SNR=17
POKR Poker Plat Res 85.76 13 IAmb IAmb 01 46 07.2
comp=Z,17nm,0.8s
E18K Tukpahlearik C 85.76 7 IAmb IAmb 01 46 07.4
comp=Z,14nm,0.8s
E18K Tukpahlearik C 85.76 7 P P 01 46 06.7 +0.1
baz=197
D17K Noatak River 85.76 6 P P 01 46 07.1 +0.5
baz=195
J25K Salcha River, 85.77 14 IAmb IAmb 01 46 07.1
comp=Z,27nm,1.1s
J25K Salcha River, 85.77 14 P P 01 46 06.5 -0.3
baz=212,SNR=16
N31M Braeburn, Yuko 85.81 19 IAmb IAmb 01 46 08.0
comp=Z,26nm,0.9s
N31M Braeburn, Yuko 85.81 19 P P 01 46 06.9 -0.1
baz=220,SNR=16
P33M Teslin, Yukon 85.82 21 P P 01 46 07.2 0.0
baz=223,SNR=11
R33M Jennings River 85.88 22 IAmb IAmb 01 46 09.1
comp=Z,34nm,1.2s
R33M Jennings River 85.88 22 P P 01 46 08.0 +0.4
baz=225,SNR=22
G21K Allakaket 85.88 10 P P 01 46 07.0 -0.2
baz=204,SNR=9.0
TX31 Lajitas Ar. Si 85.91 58 IAmb IAmb 01 46 11.3
comp=Z,31nm,1.1s
TXAR Lajitas Array 85.91 58 P P 01 46 09.8 +1.5
TXAR Lajitas Array 85.91 58 P P 01 46 09.9 +1.5
comp=Z,13nm,0.8s,baz=221,slow=6.2,SNR=106
comp=Z,13nm,0.8s
XAN Xi'an 85.95 307 ⇑P P 01 46 09.8 +1.4
XAN pmax pmax
comp=Z,42nm,1.0s
H23K Yukon River 85.96 12 P P 01 46 07.3 -0.4
baz=208
ANMO Albuquerque 85.97 52 P P 01 46 08.2 -0.5
ANMO Albuquerque 85.97 52 P P 01 46 09.0 +0.3
baz=245
F20K Avaraart Lake 86.04 9 P P 01 46 07.4 -0.5
F20K Avaraart Lake 86.04 9 P P 01 46 08.0 +0.1
baz=202
K27K Chicken 86.06 15 IAmb IAmb 01 46 09.3
comp=Z,18nm,1.1s
K27K Chicken 86.06 15 P P 01 46 08.7 +0.6
baz=215
J26L Joseph Creek 86.09 14 IAmb IAmb 01 46 09.3
comp=Z,24nm,0.8s
J26L Joseph Creek 86.09 14 P P 01 46 08.3 -0.1
baz=213,SNR=19
AHID Auburn Hatcher 86.17 43 P P 01 46 09.4 0.0
AHID IAmb IAmb 01 46 11.2
comp=Z,32nm,1.4s
RDMU Red Mountain 86.18 45 P P 01 46 09.5 -0.1
E19K Redstone River 86.21 8 P P 01 46 08.2 -0.6
E19K IAmb IAmb 01 46 09.2
comp=Z,16nm,0.8s
E19K Redstone River 86.21 8 P P 01 46 08.3 -0.4
baz=200,SNR=7.1
H24K Noodor Dome 86.30 12 P P 01 46 08.0 -1.3
baz=209
ALPN Alpine 86.33 57 IAmb IAmb 01 46 12.9
comp=Z,44nm,1.6s
MSO Missoula 86.38 38 P P 01 46 10.1 -0.1
baz=240,SNR=5.4
N32M Quiet Lake 86.42 20 IAmb IAmb 01 46 11.3
comp=Z,36nm,1.1s
N32M Quiet Lake 86.42 20 P P 01 46 10.2 +0.3
baz=223,SNR=14
DLMT Dillon 86.47 40 IAmb IAmb 01 46 12.4
comp=Z,24nm,0.9s
PRP Porcupine Dome 86.51 13 P P 01 46 09.8 -0.6
PRP Porcupine Dome 86.51 13 P P 01 46 10.4 0.0
baz=211
PECS Pecos 86.53 56 P P 01 46 10.4 -0.8
PECS IAmb IAmb 01 46 13.2
comp=Z,32nm,1.9s
F21K Alatna River 86.54 10 P P 01 46 09.9 -0.5
baz=204,SNR=6.0
G22K Bettles 86.59 10 P P 01 46 10.8 +0.2
baz=206
TPAW Teton Pass 86.61 42 IAmb IAmb 01 46 12.4
comp=Z,22nm,0.9s
FXWY Fox Creek 86.62 42 IAmb IAmb 01 46 14.4
comp=Z,14nm,0.8s
G23K Bananza Creek 86.66 11 P P 01 46 10.7 -0.3
baz=207
M31M Drury Creek, Y 86.78 19 P P 01 46 11.3 -0.3
baz=222,SNR=6.1
DAWY Dawson 86.78 16 IAmb IAmb 01 46 12.4
comp=Z,16nm,0.9s
DAWY Dawson 86.78 16 P P 01 46 11.7 0.0
baz=217,SNR=13

IMW Indian Meadow 86.80 42 P P 01 46 12.9 +0.4
I26K Coal Creek Min 86.86 14 IAmb IAmb 01 46 12.0
comp=Z,14nm,0.8s
I26K Coal Creek Min 86.86 14 P P 01 46 12.5 +0.6
baz=214
S22A 4UR Ranch, Cre 86.86 49 P P 01 46 13.2 +0.3
S22A IAmb IAmb 01 46 14.9
comp=Z,17nm,1.0s
S22A 4UR Ranch, Cre 86.86 49 P P 01 46 13.9 +0.9
baz=245,SNR=16
C18K Utukok River 86.87 6 P P 01 46 11.5 -0.5
baz=196
LOHW Long Hollow 86.89 42 P P 01 46 12.2 -0.7
LOHW IAmb IAmb 01 46 14.4
comp=Z,14nm,0.8s
O20A White River Ci 86.89 46 P P 01 46 13.2 +0.3
EGAK Eagle 86.91 15 P P 01 46 12.0 -0.1
baz=215,SNR=9.6
HHC Hu-ho-hao-te 86.94 314 eP P 01 46 14.8 +1.8
HHC sP sP 01 48 57.3 +2.6
HHC PP PP 01 49 47.3 +1.9
HHC pmax pmax
comp=Z,13nm,0.6s
F22K John River 87.01 10 P P 01 46 12.5 0.0
baz=205
FLWY Flagg Ranch 87.04 42 P P 01 46 13.6 0.0
YPP Pitchstone Pla 87.06 42 P P 01 46 13.1 -0.6
D19K Kuna River 87.08 7 P P 01 46 12.6 -0.3
baz=200
COLD Coldfoot 87.09 11 P P 01 46 12.9 0.0
baz=207,SNR=18
H25L Birch Creek 87.09 13 P P 01 46 03.6 -9.3
baz=211,SNR=6.0
YHL Hebgen Lake 87.10 41 P P 01 46 14.1 +0.2
E20K Nigu River 87.10 8 P P 01 46 12.7 -0.3
baz=201,SNR=11
K29M Barlow Dome 87.11 17 P P 01 46 13.4 +0.1
baz=219,SNR=8.1
YFT Old Faithful 87.13 42 P P 01 46 14.7 +0.7
YFT IAmb IAmb 01 46 17.0
comp=Z,22nm,0.9s
FARO Faro, Yukon 87.13 19 P P 01 46 12.8 -0.5
baz=223,SNR=5.9
G24K Hadweenzic Riv 87.13 12 P P 01 46 12.8 -0.3
G24K Hadweenzic Riv 87.13 12 P P 01 46 13.1 0.0
baz=210
WTLY Watson Lake, Y 87.17 22 P P 01 46 13.7 +0.2
BOZ Bozeman (W) 87.17 40 P P 01 46 13.3 -0.8
BOZ IAmb IAmb 01 46 15.8
comp=Z,21nm,1.2s
BOZ Bozeman (W) 87.17 40 P P 01 46 14.8 +0.7
baz=215,SNR=12
BW06 Boulder Array 87.18 43 P P 01 46 14.7 +0.5
baz=243
PD31 Pinedale Array 87.18 43 IAmb IAmb 01 46 15.4
comp=Z,13nm,0.8s
PDAR Pinedale Array 87.18 43 P P 01 46 14.2 -0.1
PDAR Pinedale Array 87.18 43 P P 01 46 14.3 +0.1
comp=Z,8.8nm,0.7s,baz=221,slow=2.9,SNR=73
PDAR PP PP 01 49 45.3 -2.1
comp=Z,1.3nm,0.8s,baz=243,slow=6.5,SNR=7.3
PDAR PKKPbc PKKPbc 02 04 03.4 -0.7
comp=Z,0.3nm,0.3s,baz=108,slow=4.8,SNR=4.6
comp=Z,8.8nm,0.7s
H17A Grant Village 87.27 42 P P 01 46 16.0 +1.4
H17A IAmb IAmb 01 46 17.6
comp=Z,26nm,0.8s
H17A Grant Village 87.27 42 P P 01 46 16.4 +1.8
baz=242
YNM Yellowstone No 87.34 41 P P 01 46 16.8 +1.8
YNM IAmb IAmb 01 46 18.5
comp=Z,24nm,0.9s
YNR Norris Junctio 87.35 41 P P 01 46 16.3 +1.3
SAND Sanderson 87.38 58 P P 01 46 15.9 +0.7
MNHN Monahans 87.39 56 P P 01 46 15.8 +0.5
J29N Klondike Camp 87.40 16 P P 01 46 14.8 +0.2
J29N IAmb IAmb 01 46 15.7
comp=Z,13nm,0.7s
J29N Klondike Camp 87.40 16 P P 01 46 14.6 0.0
baz=218
LYMT Lyon Mountain 87.43 39 P P 01 46 15.6 +0.2
LKWY Lake 87.46 42 P P 01 46 16.6 +1.1
LKWY IAmb IAmb 01 46 18.6
comp=Z,18nm,0.8s
G25K Bearman Lake 87.46 12 P P 01 46 14.2 -0.4
baz=211
I27K Kandik River 87.47 14 P P 01 46 14.4 -0.5
baz=215,SNR=5.9
D20K Etivluk River 87.47 8 P P 01 46 14.3 -0.5
baz=201
C19K Lookout Ridge 87.48 7 P P 01 46 15.0 +0.1
baz=198
PHRA Phrae 87.52 290 P P 01 46 16.7 +0.6
E21K Killik River 87.58 9 P P 01 46 14.8 -0.5
baz=203
E22K Anaktuvuk Pass 87.64 10 IAmb IAmb 01 46 16.0
comp=Z,21nm,0.9s
E22K Anaktuvuk Pass 87.64 10 P P 01 46 15.2 -0.4
baz=205,SNR=13
TOAD Toad River Com 87.69 25 P P 01 46 16.5 +0.5
baz=230,SNR=15
YMP Mirror Lake Pl 87.69 42 P P 01 46 17.3 +0.6
YMP IAmb IAmb 01 46 33.3
comp=Z,20nm,1.2s
I28M Miner Creek 87.75 15 P P 01 46 15.5 -0.8
baz=216,SNR=11
F24K Squaw Lake 87.77 11 IAmb IAmb 01 46 16.9
comp=Z,17nm,0.8s
F24K Squaw Lake 87.77 11 P P 01 46 15.9 -0.3
baz=209,SNR=19
SDCO Great Sand Dun 87.82 49 P P 01 46 17.8 +0.4
baz=246,SNR=11
ODSA Odessa 87.85 55 P P 01 46 17.1 -0.3
ODSA IAmb IAmb 01 46 19.8
comp=Z,23nm,1.2s
E23K Chandalar 87.94 10 IAmb IAmb 01 46 17.6
comp=Z,16nm,0.8s
E23K Chandalar 87.94 10 P P 01 46 16.9 -0.1
baz=208,SNR=10
H27K Steamboat Moun 88.01 14 P P 01 46 17.1 -0.2
baz=215,SNR=10
J30M Hart River 88.01 17 IAmb IAmb 01 47 05.3
comp=Z,36nm,1.8s
J30M Hart River 88.01 17 P P 01 46 17.4 -0.1
baz=220
MMPY Sheldon Lake, 88.08 20 P P 01 46 18.6 +0.8
baz=224,SNR=16
I29M Ogilvie Camp, 88.10 16 P P 01 46 17.0 -0.8
baz=218,SNR=11
G26K Porcupine Rive 88.10 13 P P 01 46 17.6 0.0
baz=213,SNR=13
C21K Knifeblade Rid 88.13 8 P P 01 46 17.9 +0.1
baz=203,SNR=5.9
E24K Your Creek 88.15 11 P P 01 46 18.3 +0.3
baz=208
D22K Ayikyak River 88.18 9 P P 01 46 17.6 -0.5
D22K Ayikyak River 88.18 9 P P 01 46 18.5 +0.5
baz=205,SNR=9.2
F25K Christian Rive 88.27 12 P P 01 46 18.6 0.0
baz=211,SNR=8.6
RWWY Rawlins 88.27 45 P P 01 46 19.8 +0.3
RWWY IAmb IAmb 01 46 20.8
comp=Z,29nm,1.2s
TGTN Hyland Airport 88.33 22 P P 01 46 19.6 +0.7
baz=227,SNR=6.1
BMAR Burnt Mountain 88.34 12 P P 01 46 18.9 +0.1
T25A Trinidad 88.37 50 P P 01 46 20.1 +0.1
baz=247
A19K Wainwright 88.39 6 P P 01 46 18.5 -0.4
baz=197
RLMT Red Lodge 88.43 41 P P 01 46 20.5 +0.5
RLMT IAmb IAmb 01 46 22.0
comp=Z,14nm,0.9s
RLMT Red Lodge 88.43 41 P P 01 46 20.6 +0.5
baz=243
G27K Doyon Strip 88.45 14 P P 01 46 19.2 -0.2
baz=215,SNR=5.4
TOLK Toolik Lake Re 88.46 10 P P 01 46 19.2 -0.2
baz=208,SNR=5.7
I30M Mount Dempster 88.50 16 IAmb IAmb 01 47 04.3
comp=Z,17nm,0.9s
I30M Mount Dempster 88.50 16 P P 01 46 19.3 -0.5
baz=220,SNR=11
OZNA Ozona 88.54 57 IAmb IAmb 01 46 22.5
comp=Z,15nm,0.9s
D23K Nanushuk River 88.57 10 P P 01 46 19.1 -0.7
D23K IAmb IAmb 01 46 20.7
comp=Z,23nm,0.9s
D23K Nanushuk River 88.57 10 P P 01 46 20.1 +0.3
baz=206,SNR=12
Q24A Divide 88.57 48 P P 01 46 20.2 -0.8
Q24A Divide 88.57 48 P P 01 46 22.0 +1.1
baz=246
B21K Ikpikpuk River 88.59 8 P P 01 46 19.9 0.0
baz=203
B20K Meade River 88.62 7 P P 01 46 19.8 -0.2
baz=200
COYC Coyhaique 88.64 138 P P 01 46 22.4 +1.5
F26K Sheenjek River 88.66 12 P P 01 46 20.2 -0.1
F26K Sheenjek River 88.66 12 P P 01 46 20.4 +0.1
baz=213,SNR=9.3
CMAR Chiang Mai Arr 88.66 290 P P 01 46 22.6 +1.2
comp=Z,0.9nm,0.3s,baz=119,slow=2.9,SNR=7.9
CMAR PKKPbc PKKPbc 02 03 59.5 +0.4
comp=Z,1.9nm,0.3s,baz=75,slow=6.1,SNR=4.9
comp=Z,0.9nm,0.3s
H29M Whitestone 88.76 15 IAmb IAmb 01 46 21.7
comp=Z,15nm,0.8s
H29M Whitestone 88.76 15 P P 01 46 20.7 -0.1
baz=218,SNR=7.7
N23A Red Feather La 88.80 46 P P 01 46 21.9 0.0
N23A IAmb IAmb 01 46 23.8
comp=Z,22nm,1.1s
N23A Red Feather La 88.80 46 P P 01 46 23.2 +1.3
baz=246,SNR=12
PZH PanZhiHua 88.89 298 P P 01 46 23.3 +0.8
PZH pmax pmax
comp=Z,20nm,0.8s
SGCY Sterling City 88.90 56 P P 01 46 22.4 +0.1
SGCY IAmb IAmb 01 46 23.9
comp=Z,26nm,1.6s
KOTAN Kotaneelee Air 88.97 24 P P 01 46 22.5 +0.6
baz=231
833A Chaparral WMA, 89.03 60 P P 01 46 23.6 +0.7
833A IAmb IAmb 01 46 25.2
comp=Z,16nm,0.9s
833A Chaparral WMA, 89.03 60 P P 01 46 24.9 +2.0
baz=250
POST Post 89.03 55 P P 01 46 22.7 -0.1
POST IAmb IAmb 01 46 24.0
comp=Z,17nm,1.0s
D24K Happy Valley 89.04 10 IAmb IAmb 01 46 41.2
comp=Z,20nm,0.8s
D24K Happy Valley 89.04 10 P P 01 46 22.2 +0.1
baz=208,SNR=5.2
HBVL Hebbronville 89.19 61 P P 01 46 24.2 +0.5
EPYK Eagle Plains 89.30 16 IAmb IAmb 01 47 07.7
comp=Z,18nm,1.0s
EPYK Eagle Plains 89.30 16 P P 01 46 22.8 -0.5
baz=220,SNR=5.6
PHWY Pilot Hill 89.30 46 P P 01 46 24.4 +0.1
PHWY IAmb IAmb 01 46 25.6
comp=Z,11nm,1.0s
C23K Itkillik River 89.36 9 P P 01 46 23.7 +0.2
baz=206,SNR=8.3
G29M Pine Creek 89.39 15 IAmb IAmb 01 47 08.6
comp=Z,11nm,0.9s
G29M Pine Creek 89.39 15 P P 01 46 24.4 +0.7
baz=218
SN05 Snyder 5 89.44 55 P P 01 46 25.1 +0.3
SN05 IAmb IAmb 01 46 25.9
comp=Z,12nm,0.9s
JCT Junction City 89.44 58 P P 01 46 25.0 +0.2
JCT IAmb IAmb 01 46 26.3
comp=Z,8.9nm,0.8s
JCT Junction City 89.44 58 P P 01 46 26.2 +1.4
baz=249
ELIB Princess Elisa 89.49 187 dP P 01 46 24.5 +0.1
comp=Z,15nm,0.7s
F28M Old Crow 89.52 14 P P 01 46 24.5 +0.2
baz=217
HNDO Hondo 89.54 59 P P 01 46 26.6 +1.3
AMTX Amarillo 89.56 53 P P 01 46 24.8 -0.5
AMTX IAmb IAmb 01 46 26.7
comp=Z,14nm,0.9s
AMTX Amarillo 89.56 53 P P 01 46 25.9 +0.6
baz=248
C24K Franklin Bluff 89.57 10 P P 01 46 24.8 +0.4
baz=208
E27K Coleen River 89.60 13 P P 01 46 24.9 +0.2
baz=215,SNR=6.0
LL01 San Ignacio de 89.71 135 P P 01 46 25.8 0.0
LL01 IAmb IAmb 01 46 27.9
comp=Z,31nm,1.5s
LL02 Futaleuf 89.76 136 P P 01 46 27.5 +1.3
BRIGG Briggsdale 89.80 47 P P 01 46 26.5 +0.1
BRIGG IAmb IAmb 01 47 18.2
comp=Z,9.3nm,0.7s
G30M tAoh Zraii Nji 89.90 15 P P 01 46 25.4 -0.7
G30M tAoh Zraii Nji 89.90 15 P P 01 46 25.4 -0.7
baz=220,SNR=8.4
APMT Aspermont 90.20 55 IAmb IAmb 01 46 29.5
comp=Z,14nm,0.9s
LL04 Puerto Octay 90.30 133 P P 01 46 28.6 -0.1
LL04 IAmb IAmb 01 46 31.3
comp=Z,16nm,0.8s
G31M Satah River 90.35 16 P P 01 46 27.8 -0.3
G31M Satah River 90.35 16 P P 01 46 27.6 -0.5
baz=222,SNR=10
BRDY Brady 90.37 57 P P 01 46 29.5 +0.3
BRDY IAmb IAmb 01 46 30.6
comp=Z,11nm,1.0s
E28M Babbage River 90.39 13 IAmb IAmb 01 47 11.5
comp=Z,14nm,0.8s
E28M Babbage River 90.39 13 P P 01 46 28.0 -0.3
baz=217,SNR=9.9
C26K Camden Bay 90.40 11 P P 01 46 28.8 +0.5
baz=212,SNR=9.3
F30M Barrier River 90.49 15 P P 01 46 29.1 +0.3
baz=220
LZH Lanzhou 90.58 308 eP P 01 46 31.4 +1.2
LZH pmax pmax
comp=Z,26nm,1.4s
E29M Blow River 90.59 14 P P 01 46 28.7 -0.5
E29M IAmb IAmb 01 47 13.7
comp=Z,20nm,1.6s
E29M Blow River 90.59 14 P P 01 46 30.3 +1.1
baz=218
D27M Malcolm River 90.60 13 IAmb IAmb 01 47 17.7
comp=Z,14nm,1.0s
D27M Malcolm River 90.60 13 P P 01 46 30.4 +1.1
baz=216
TROLL Troll, Antarti 90.66 180 ⇑P P 01 46 30.0 +0.1
comp=Z,488nm,0.6s
TROLL ⇑SKSac SKSac 01 56 11.2 -1.9
comp=Z,44nm,0.7s
SMWD Samnorwood 90.74 53 P P 01 46 30.6 -0.2
LR05 Currie 90.85 133 P P 01 46 31.8 +0.6
F31M Tsiigehtchic 90.88 16 P P 01 46 30.3 -0.2
F31M Tsiigehtchic 90.88 16 P P 01 46 31.9 +1.4
baz=222
SNAA Sanae 90.95 179 P P 01 46 30.9 -0.2
SNAA IAmb IAmb 01 46 32.4
comp=Z,27nm,1.5s
SNAA Sanae 90.95 179 ⇑P P 01 46 31.0 -0.2
comp=Z,105nm,0.7s
SNAA ⇑SKSac SKSac 01 56 15.3 +0.7
comp=Z,31nm,0.9s
SNAA Sanae 90.95 179 P P 01 46 30.9 -0.2
comp=Z,4.0nm,0.6s,baz=197,slow=6.2,SNR=40
comp=Z,4.0nm,0.6s
LAO LASA Array 91.02 41 P P 01 46 32.7 +0.9
LAO LASA Array 91.02 41 P P 01 46 33.0 +1.2
baz=245,SNR=16
VNA3 Neumayer Olymp 91.10 176 ⇑P P 01 46 32.1 +0.4
comp=Z,20nm,0.7s
VNA3 ⇑SKSac SKSac 01 56 13.0 -2.3
comp=Z,2.1nm,0.7s
D28M Stokes Point 91.14 13 P P 01 46 32.1 +0.3
baz=218
435B Jarrell 91.34 58 P P 01 46 33.8 +0.3
435B IAmb IAmb 01 46 35.4
comp=Z,12nm,1.0s
RSSD Black Hills 91.39 44 P P 01 46 33.7 -0.1
RSSD IAmb IAmb 01 46 34.8
comp=Z,16nm,0.9s
PLPT Palo Pinto 91.44 56 P P 01 46 33.9 -0.1
GO06 Curarrehue 91.49 132 P P 01 46 35.0 +0.7
GO06 IAmb IAmb 01 46 38.1
comp=Z,15nm,1.1s
VNA2 Neumayer--Watz 91.53 177 ⇑P P 01 46 33.6 -0.1
comp=Z,12nm,1.1s,baz=174,slow=3.5
OGNE Ogallala 91.55 47 P P 01 46 34.6 +0.2
OGNE IAmb IAmb 01 46 35.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,18nm,1.0s | | | | | | | |
| **OGNE** | **Ogallala** | **91.55** | **47** | P | | **P** | **01 46 34.9** | **+0.5** |
| | baz=248 | | | | | | | |
| **INK** | **Inuvik** | **91.58** | **15** | P | | **P** | **01 46 33.2** | **-0.5** |
| **INK** | **Inuvik** | **91.58** | **15** | P | | **P** | **01 46 33.2** | **-0.5** |
| | baz=222,SNR=8.7 | | | | | | | |
| **PLCA** | **Paso Flores** | **91.66** | **134** | | | **P** | **01 46 36.1** | **+1.1** |
| PLCA | | | | | IAmb | IAmb | 01 49 31.7 | |
| | comp=Z,24nm,1.6s | | | | | | | |
| **PLCA** | **Paso Flores** | **91.66** | **134** | P | | **P** | **01 46 37.1** | **+2.0** |
| | comp=Z,5.9nm,1.1s,baz=239,slow=4.7,SNR=5.8 | | | | | | | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **FW03** | **Perrin-Whitt E** | **91.72** | **56** | P | | **P** | **01 46 35.7** | **+0.4** |
| FW03 | | | | | IAmb | IAmb | 01 46 37.0 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **91.73** | **54** | P | | **P** | **01 46 35.5** | **+0.2** |
| **WMOK** | **Wichita Mounta** | **91.73** | **54** | P | | **P** | **01 46 35.5** | **+0.2** |
| | baz=250 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.76** | **177** | ⇑P | | **P** | **01 46 35.9** | **+1.2** |
| | comp=Z,27nm,1.1s | | | | | | | |
| **FW13** | **Cleburne** | **91.99** | **57** | P | | **P** | **01 46 36.5** | **0.0** |
| FW13 | | | | | IAmb | IAmb | 01 46 38.0 | |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| **FW06** | **Azle** | **92.10** | **56** | P | | **P** | **01 46 37.1** | **+0.2** |
| FW06 | | | | | IAmb | IAmb | 01 47 32.8 | |
| | comp=Z,24nm,1.6s | | | | | | | |
| **CSTR** | **Hydro, Custer** | **92.11** | **53** | P | | **P** | **01 46 37.2** | **+0.2** |
| **NOKA** | **Waynoka** | **92.27** | **52** | P | | **P** | **01 46 37.4** | **-0.4** |
| NOKA | | | | | IAmb | IAmb | 01 46 39.2 | |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| **OK038** | **West end E0370** | **92.36** | **53** | P | | **P** | **01 46 38.5** | **+0.3** |
| OK038 | | | | | IAmb | IAmb | 01 46 39.6 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **92.42** | **55** | P | | **P** | **01 46 38.8** | **+0.3** |
| X34A | | | | | IAmb | IAmb | 01 46 40.3 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **92.42** | **50** | | | **P** | **01 46 38.4** | **-0.1** |
| CBKS | | | | | IAmb | IAmb | 01 50 26.8 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **92.81** | **320** | P | | **P** | **01 46 40.0** | **-0.1** |
| ULN | | | | | IAmb | IAmb | 01 47 29.9 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **OK032** | **Salt Plains WL** | **92.87** | **52** | P | | **P** | **01 46 40.4** | **-0.1** |
| **DGMT** | **Dagmar** | **93.00** | **40** | P | | **P** | **01 46 41.5** | **+0.7** |
| **DGMT** | **Dagmar** | **93.00** | **40** | P | | **P** | **01 46 41.9** | **+1.1** |
| | baz=247,SNR=6.1 | | | | | | | |
| **R32A** | **Long Quarter,** | **93.04** | **51** | P | | **P** | **01 46 41.6** | **+0.4** |
| **HNVL** | **Huntsville, TX** | **93.06** | **59** | | | **P** | **01 46 42.2** | **+0.8** |
| **237A** | **Washetta, Mont** | **93.18** | **58** | P | | **P** | **01 46 42.5** | **+0.5** |
| **TREL** | **Terrell** | **93.18** | **57** | P | | **P** | **01 46 42.2** | **+0.2** |
| **KAN08** | **Anthony NE Sta** | **93.19** | **52** | P | | **P** | **01 46 41.9** | **-0.1** |
| **KAN12** | **Harper NE Stat** | **93.20** | **52** | P | | **P** | **01 46 41.9** | **-0.1** |
| **SONM** | **Songino Airay** | **93.21** | **319** | P | | **P** | **01 46 41.4** | **-0.5** |
| SONM | | | | | IAmb | IAmb | 01 47 28.4 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **SONM** | **Songino Airay** | **93.21** | **319** | P | | **P** | **01 46 41.5** | **-0.4** |
| | comp=Z,2.2nm,0.8s,baz=121,slow=4.2,SNR=9.6 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **KAN17** | **Caldwell West** | **93.29** | **52** | P | | **P** | **01 46 42.4** | **0.0** |
| **KAN01** | **Argonia South** | **93.33** | **52** | P | | **P** | **01 46 43.1** | **+0.5** |
| KAN01 | | | | | IAmb | IAmb | 01 46 44.2 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **KAN09** | **Caldwell North** | **93.43** | **52** | P | | **P** | **01 46 43.1** | **0.0** |
| **KAN13** | **South Haven SW** | **93.49** | **52** | P | | **P** | **01 46 43.5** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **94.06** | **25** | P | | **P** | **01 46 44.5** | **-0.8** |
| **YKA** | **Yellowknife Ar** | **94.06** | **25** | P | | **P** | **01 46 44.6** | **-0.6** |
| | comp=Z,6.2nm,0.8s,baz=252,slow=4.4,SNR=17 | | | | | | | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **C36M** | **Paulatuk** | **94.79** | **17** | P | | **P** | **01 46 49.4** | **+1.0** |
| | baz=231 | | | | | | | |
| **KSU1** | **Kansas State U** | **94.82** | **51** | P | | **P** | **01 46 50.1** | **+0.8** |
| **KSU1** | **Kansas State U** | **94.82** | **51** | P | | **P** | **01 46 49.7** | **+0.4** |
| | baz=251 | | | | | | | |
| **MIAR** | **Mount Ida** | **95.74** | **56** | P | | **P** | **01 46 53.8** | **+0.3** |
| | baz=253 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **96.27** | **46** | P | | **P** | **01 46 56.2** | **+0.4** |
| | baz=252 | | | | | | | |
| **MGMO** | **Mountain Grove** | **97.50** | **54** | | | **P** | **01 47 01.3** | **-0.2** |
| **R40A** | **Maddies Statio** | **97.82** | **52** | P | | **P** | **01 47 03.2** | **+0.4** |
| R40A | | | | | IAmb | IAmb | 01 47 05.2 | |
| | comp=Z,5.5nm,0.8s | | | | | | | |
| **JFWS** | **Jewell Farm** | **100.51** | **48** | P | | **Pdif** | **01 47 15.2** | **+0.5** |
| | baz=256 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **107.89** | **322** | PKiKP | | **PKiKP** | **01 51 49.4** | **-1.9** |
| | comp=Z,0.9nm,0.6s,baz=132,slow=2.2,SNR=2.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **108.81** | **314** | Pdiff | | **Pdif** | **01 47 55.5** | **+4.0** |
| | comp=Z,0.7nm,0.8s,baz=57,slow=8.8,SNR=3.7 | | | | | | | |
| MKAR | | | | PKiKP | | **PKiKP** | **01 51 52.7** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=72,slow=0.7,SNR=6.5 | | | | | | | |
| MKAR | | | | PP | | **PP** | **01 52 30.4** | **+0.2** |
| | comp=Z,1.9nm,1.0s,baz=67,slow=3.2,SNR=4.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **111.54** | **318** | PKiKP | | **PKiKP** | **01 51 57.7** | **-0.6** |
| | comp=Z,1.1nm,0.7s,baz=94,slow=1.8,SNR=9.8 | | | | | | | |
| KURBB | | | | PP | | **PP** | **01 52 52.2** | **+2.8** |
| | comp=Z,1.2nm,1.0s,baz=96,slow=6.1,SNR=5.5 | | | | | | | |
| KURBB | | | | PKKPbc | | **PKKPbc** | **02 02 55.4** | **-0.1** |
| | comp=Z,0.8nm,0.7s,baz=272,slow=4.2,SNR=7.6 | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.50** | **321** | PKP | | **PKPdf** | **01 52 07.2** | **-0.6** |
| | comp=Z,2.2nm,0.6s,baz=253,slow=0.1,SNR=12 | | | | | | | |
| BVAR | | | | PKKPbc | | **PKKPbc** | **02 02 38.5** | **-0.4** |
| | comp=Z,0.3nm,0.5s,baz=218,slow=1.6,SNR=2.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **125.95** | **350** | PKP | | **PKiKP** | **01 52 25.6** | **-0.4** |
| | comp=Z,4.8nm,0.8s,baz=315,slow=0.3,SNR=9.2 | | | | | | | |
| ARCES | | | | PKKP | | **PKKPdf** | **02 02 42.7** | **-3.2** |
| | comp=Z,1.6nm,0.7s,baz=90,slow=1.2,SNR=4.9 | | | | | | | |
| **BOSA** | **Boshof** | **128.66** | **207** | PKP | | **PKiKP** | **01 52 33.0** | **+0.1** |
| | comp=Z,4.8nm,0.9s,baz=180,slow=1.2,SNR=6.2 | | | | | | | |
| BOSA | | | | SKPbc | | SKPbc | 01 55 07.4 | |
| | comp=Z,3.1nm,0.9s,baz=175,slow=3.1,SNR=3.9 | | | | | | | |
| **BELG** | **Belogornoye** | **129.93** | **325** | SKPbc | | SKPab | 01 55 10.3 | +0.9 |
| | comp=Z,24nm,0.9s,baz=88,slow=4.5,SNR=8.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **132.82** | **344** | SKPbc | | **SKPab** | **01 55 23.9** | **+2.4** |
| | comp=Z,2.1nm,0.9s,baz=23,slow=10,SNR=3.6 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **136.01** | **353** | PKP | | **PKiKP** | **01 52 46.5** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=17,slow=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **136.01** | **353** | PKP | | **PKPdf** | **01 52 44.4** | **-0.4** |
| | comp=Z,1.6nm,0.8s,baz=13,slow=4.1,SNR=3.9 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.13** | **4** | PKhKP | | PKPpre | 01 52 52.0 | |
| | comp=Z,3.2nm,0.7s,baz=348,slow=2.2,SNR=7.6 | | | | | | | |
| **SORM** | **Soroca** | **142.43** | **330** | ⇑P | | **PKPdf** | **01 52 54.1** | **-2.6** |
| **BEL** | **Belsk** | **142.53** | **340** | *e*PKP | | **PKPdf** | **01 52 54.1** | **-2.6** |
| **BNN** | **Bunyan** | **143.33** | **312** | PKPdf | | **PKPdf** | **01 52 57.8** | **-1.0** |
| **KWP** | **Kalwaria Pacla** | **143.70** | **337** | *e*PKP | | **PKPdf** | **01 52 57.8** | **-1.2** |
| **LODK** | **Lodwar** | **143.93** | **251** | | | **PKPdf** | **01 53 00.6** | **+0.1** |
| **VLDR** | **Vladesti** | **144.16** | **328** | ⇑P | | **PKPdf** | **01 53 00.2** | **+0.4** |
| **TLCR** | | **144.22** | **326** | ⇓P | | **PKPdf** | **01 53 00.2** | **+0.2** |
| **OJC** | **Ojcow** | **144.24** | **340** | *e*PKP | | PKPbc | 01 52 58.2 | -1.2 |
| **BURAR** | **Bucovina Array** | **144.25** | **332** | | | **PKPdf** | **01 52 59.9** | **-0.2** |
| **BURAR** | **Bucovina Array** | **144.25** | **332** | ⇑P | | **PKPdf** | **01 53 00.1** | **0.0** |
| **SCTR** | **Scanteiesti** | **144.31** | **328** | ⇓P | | **PKPdf** | **01 53 00.3** | **+0.2** |
| **GHRR** | | **144.34** | **328** | ⇑P | | **PKPdf** | **01 53 01.4** | **+1.2** |
| **TESR** | **Tescani** | **144.40** | **330** | ⇑P | | **PKPab** | **01 53 00.3** | **0.0** |
| **KOLS** | **Kolonicke sedl** | **144.44** | **336** | *e*PKP | | **PKPab** | **01 53 00.6** | **+0.2** |
| **BR131** | **Keskin Array S** | **144.45** | **315** | | | **PKPab** | **01 53 00.3** | **-0.7** |
| **BRTR** | **Keskin Array B** | **144.45** | **315** | | | PKPbc | 01 52 59.4 | -1.2 |
| **BRTR** | **Keskin Array B** | **144.45** | **315** | PKP | | **PKPab** | **01 53 00.8** | **-0.2** |
| | comp=Z,8.2nm,0.8s,baz=125,slow=3.7,SNR=43 | | | | | | | |
| BRTR | | | | PKKP | | **PKKPdf** | **02 02 09.2** | **-0.8** |
| | comp=Z,0.7nm,0.7s,baz=22,slow=0.8,SNR=3.8 | | | | | | | |
| **NEGRR** | **Negrea** | **144.47** | **327** | ⇓P | | **PKPab** | **01 53 01.1** | **+0.4** |
| **SLCR** | **Slobozia Conac** | **144.49** | **328** | ⇑P | | **PKPab** | **01 53 01.4** | **+0.7** |
| **IZVR** | **Izvoarele** | **144.52** | **328** | ⇑P | | **PKPab** | **01 53 01.4** | **+0.6** |
| **TUDR** | | **144.54** | **328** | ⇓P | | **PKiKP** | **01 53 02.3** | **-2.1** |
| **SCHLR** | **Schela** | **144.54** | **327** | ⇓P | | **PKPab** | **01 53 01.4** | **+0.5** |
| **KIRS** | **Kirsehir-Merke** | **144.55** | **314** | ⇓P | | **PKPab** | **01 53 01.1** | **-0.2** |
| **CFR** | **Carcaliu** | **144.58** | **327** | ⇓P | | **PKPab** | **01 53 00.6** | **-0.4** |
| **PANC** | **Panciu** | **144.61** | **328** | ⇑P | | **PKPab** | **01 53 01.7** | **+0.5** |
| **TPGR** | **Topolog** | **144.65** | **326** | ⇑P | | **PKPab** | **01 53 01.3** | **-0.1** |
| **KSP** | **Ksiaz** | **144.74** | **344** | *e*PKP | | **PKPab** | **01 53 01.6** | **+0.1** |
| **NIE** | **Niedzica** | **144.76** | **339** | *e*PKP | | **PKPab** | **01 53 00.7** | **-0.9** |
| **CRVS** | **Cervenica-Dubn** | **144.77** | **337** | *e*PKP | | **PKPab** | **01 53 01.7** | **0.0** |
| **VRI** | **Vrincioaia** | **144.82** | **329** | ⇑P | | **PKPab** | **01 53 02.0** | **0.0** |
| **PLOR** | **Plostina** | **144.87** | **329** | ⇓P | | **PKPab** | **01 53 01.8** | **-0.4** |
| **ANTO** | **Ankara** | **144.94** | **316** | | | **PKPab** | **01 53 02.7** | **-0.1** |
| **ANTO** | **Ankara** | **144.95** | **316** | ⇓P | | **PKPab** | **01 53 02.4** | **-0.4** |
| **BMR** | **Baia Mare** | **144.95** | **334** | ⇑P | | **PKPab** | **01 53 02.1** | **-0.3** |
| **HARR** | **Harsova** | **145.01** | **326** | ⇑P | | **PKPab** | **01 53 02.1** | **-0.6** |
| **TURR** | **Turia** | **145.03** | **330** | ⇑P | | **PKPab** | **01 53 03.3** | **+0.5** |
| **ARCR** | **ARCALIA** | **145.03** | **332** | ⇑P | | **PKPab** | **01 53 03.0** | **+0.2** |
| **COVR** | **Voineasa-Covas** | **145.09** | **329** | ⇑P | | **PKPab** | **01 53 02.1** | **-0.9** |
| **CLL** | **Collm** | **145.10** | **347** | ⇓*i*PKPbc | | **PKPab** | **01 53 01.9** | **-0.9** |
| | comp=Z,90nm,1.0s | | | | | | | |
| **OZUR** | | **145.11** | **330** | ⇓P | | **PKPab** | **01 53 03.0** | **-0.1** |
| **UPC** | **Upice** | **145.12** | **344** | *e*PKP | | **PKPab** | **01 53 02.5** | **-0.5** |
| **DPC** | **Dobruska-Polom** | **145.18** | **343** | *e*PKP | | **PKPab** | **01 53 03.0** | **-0.3** |
| **BOSR** | **Bodos** | **145.19** | **330** | ⇓P | | **PKPab** | **01 53 03.4** | **-0.1** |
| **LANS** | **Liptovska Anna** | **145.27** | **339** | *e*PKP | | **PKPab** | **01 53 03.7** | **0.0** |
| **BRG** | **Berggiesshubel** | **145.30** | **346** | *e*PKP | | **PKPab** | **01 53 02.7** | **-1.0** |
| BRG | | | | Amp | | | 01 53 04.7 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.30** | **346** | P | | **PKiKP** | **01 53 08.3** | **+2.5** |
| BRG | | | | Amp | | | 01 53 09.9 | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **KRLC** | **Kraliky** | **145.30** | **343** | *e*PKP | | **PKPab** | **01 53 03.0** | **-0.7** |
| **MORC** | **Moravsky Berou** | **145.34** | **342** | *e*PKP | | **PKPbc** | **01 53 02.6** | **-0.3** |
| **MORC** | **Moravsky Berou** | **145.34** | **342** | ⇓P | | **PKPab** | **01 53 03.2** | **-0.7** |
| **DOPR** | **Dopca** | **145.40** | **330** | ⇓P | | **PKPab** | **01 53 04.1** | **-0.1** |
| **PVCC** | **Panska Ves** | **145.47** | **345** | *e*PKP | | **PKPab** | **01 53 03.7** | **-0.6** |
| **MLR** | **Muntele Rosu** | **145.47** | **329** | PKPbc | | **PKPbc** | **01 53 03.1** | **-0.4** |
| | comp=Z,19nm,1.0s,baz=95,slow=4.4,SNR=16 | | | | | | | |
| **MLR** | **Muntele Rosu** | **145.47** | **329** | ⇑P | | **PKPbc** | **01 53 02.9** | **-0.6** |
| **MAUC** | **Maruska** | **145.62** | **341** | *e*PKP | | **PKPab** | **01 53 04.0** | **-1.0** |
| **CBBR** | **Cluj-Babes-Bol** | **145.63** | **333** | ⇓P | | **PKPdf** | **01 53 01.1** | **-1.3** |
| **CJR** | **Cluj-Napoca** | **145.65** | **333** | ⇑P | | **PKPab** | **01 53 04.6** | **-0.7** |
| **HSKC** | **Hora Svate Kat** | **145.66** | **346** | *e*PKP | | **PKPab** | **01 53 03.9** | **-1.2** |
| **MMAI** | **Mount Meron Ar** | **145.85** | **303** | PKPbc | | **PKPab** | **01 53 05.7** | **-0.9** |
| | comp=Z,15nm,0.7s,baz=67,slow=4.7,SNR=24 | | | | | | | |
| **VOIR** | | **145.94** | **330** | ⇑P | | **PKPbc** | **01 53 03.7** | **-1.1** |
| **DRGR** | | **145.97** | **334** | ⇑P | | **PKPbc** | **01 53 04.9** | **+0.1** |
| **GOPC** | **GO Pecny, Ondr** | **145.98** | **345** | *e*PKP | | **PKPbc** | **01 53 04.7** | **0.0** |
| **VRAC** | **Vranov** | **146.04** | **342** | *e*PKP | | **PKPbc** | **01 53 04.7** | **-0.1** |
| **VRAC** | **Vranov** | **146.04** | **342** | PKPbc | | **PKPbc** | **01 53 04.9** | **+0.1** |
| | comp=Z,15nm,0.8s,baz=56,slow=1.3,SNR=25 | | | | | | | |
| **VRAC** | **Vranov** | **146.04** | **342** | ⇑P | | **PKPab** | **01 53 05.3** | **-1.3** |
| **VYHS** | **Vyhne** | **146.05** | **339** | *e*PKP | | **PKPab** | **01 53 05.5** | **-1.2** |
| **JAVC** | **Velka Javorina** | **146.11** | **341** | *e*PKP | | **PKPab** | **01 53 06.3** | **-0.7** |
| **BORR** | **Bors** | **146.12** | **335** | ⇓P | | **PKPbc** | **01 53 03.7** | **-1.4** |
| **PSZ** | **Piszkesteto** | **146.17** | **338** | PKPab | | **PKPab** | **01 53 05.7** | **-1.5** |
| **PSZ** | **Piszkesteto** | **146.17** | **338** | ⇑P | | **PKPab** | **01 53 05.4** | **+0.1** |
| **ARR** | **Arges** | **146.19** | **330** | ⇓P | | **PKPab** | **01 53 04.4** | **-1.1** |
| **KRUC** | **Moravsky** | **146.32** | **342** | *e*PKP | | **PKPbc** | **01 53 05.7** | **+0.1** |
| **LOT** | **Lotru** | **146.54** | **331** | ⇑P | | **PKPbc** | **01 53 04.9** | **-1.5** |
| **ZVC** | **Zvikov** | **146.57** | **345** | *e*PKP | | **PKPbc** | **01 53 06.6** | **+0.3** |
| **CSS** | **Mathiatis** | **146.77** | **308** | | | **PKPbc** | **01 53 07.4** | **+0.1** |
| **SRO** | **Srobarova** | **146.81** | **339** | *e*PKP | | **PKiKP** | **01 53 08.0** | **-1.0** |
| **MEM** | **Membach** | **146.82** | **355** | *d*PKPbc | | **PKPbc** | **01 53 06.6** | **-0.3** |
| MEM | | | | *d*PKPab | | **PKPab** | **01 53 09.3** | **-0.4** |
| **SIRR** | **Siria** | **146.83** | **334** | ⇑P | | **PKiKP** | **01 53 07.7** | **-1.4** |
| **BTNL** | **Ternell** | **146.84** | **355** | *d*PKPdf | | **PKPbc** | **01 53 07.0** | **0.0** |
| **BSTI** | **Sart Tilman** | **146.89** | **355** | *d*PKP | | **PKPbc** | **01 53 07.1** | **0.0** |
| BSTI | | | | *d*PKiKP | | **PKPab** | **01 53 09.1** | **-0.9** |
| **GRF** | **Grafenberg Arr** | **146.99** | **348** | *e*PKP | | **PKiKP** | **01 53 07.9** | **-1.5** |
| | baz=17,slow=2.0 | | | | | | | |
| **GRFO** | **Grafenberg** | **146.99** | **348** | | | **PKiKP** | **01 53 08.2** | **-1.2** |
| **KHC** | **Kasperske Hory** | **147.01** | **345** | *e*PKP | | **PKPbc** | **01 53 07.8** | **+0.3** |
| **GZR** | **Gura Zlata** | **147.03** | **332** | ⇑P | | **PKPbc** | **01 53 07.0** | **-0.8** |
| **SURR** | **Surduc** | **147.04** | **333** | ⇓P | | **PKPbc** | **01 53 07.5** | **-0.2** |
| **BCLA** | **Clavier** | **147.07** | **355** | *d*PKPbc | | **PKPbc** | **01 53 07.5** | **-0.1** |
| BCLA | | | | *d*PKiKP | | **PKPab** | **01 53 09.9** | **-0.8** |
| **BHOU** | **Houvegnez** | **147.08** | **355** | *d*PKPbc | | **PKiKP** | **01 53 08.2** | **-1.4** |
| **BGES** | **Gesves** | **147.12** | **356** | *d*PKPbc | | **PKPbc** | **01 53 07.5** | **-0.3** |
| BGES | | | | *d*PKiKP | | **PKiKP** | **01 53 09.4** | **-0.2** |
| **EIL** | **Elat** | **147.16** | **298** | PKPbc | | **PKiKP** | **01 53 09.0** | **-1.3** |
| | comp=Z,6.5nm,0.8s,baz=346,slow=4.2,SNR=5.2 | | | | | | | |
| **BMRD** | **Maredsous** | **147.22** | **356** | *d*PKPbc | | **PKPbc** | **01 53 07.7** | **-0.3** |
| BMRD | | | | *d*PKP | | **PKPab** | **01 53 10.7** | **-0.6** |
| **GERES** | **GERESS Array B** | **147.24** | **345** | | | **PKPbc** | **01 53 08.2** | **0.0** |
| **GERES** | **GERESS Array B** | **147.24** | **345** | PKPbc | | **PKPbc** | **01 53 08.2** | **0.0** |
| | comp=Z,9.7nm,0.8s,baz=39,slow=5.2,SNR=49 | | | | | | | |
| **VLAD** | **Vladila** | **147.31** | **329** | ⇑P | | **PKiKP** | **01 53 09.4** | **-0.8** |
| **BZS** | **Buzias** | **147.37** | **333** | ⇓P | | **PKPbc** | **01 53 08.4** | **-0.1** |
| **DOU** | **Dourbes** | **147.44** | **356** | *d*PKPbc | | **PKPbc** | **01 53 08.6** | **0.0** |
| DOU | | | | *d*PKPab | | **PKPab** | **01 53 11.5** | **-0.6** |
| **CONA** | **Conrad Observa** | **147.49** | **342** | *i* PKP | | **PKiKP** | **01 53 09.2** | **-1.4** |
| | comp=Z,11nm,0.6s,SNR=16 | | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.57** | **341** | *e*PKP | | **PKiKP** | **01 53 09.3** | **-1.3** |
| | comp=Z,10nm,0.7s,SNR=16 | | | | | | | |
| **HERR** | **Herculane** | **147.59** | **332** | ⇑P | | **PKiKP** | **01 53 09.4** | **-1.4** |
| **WLF** | **Walferdange** | **147.75** | **354** | *d*PKPbc | | **PKiKP** | **01 53 09.8** | **-1.1** |
| WLF | | | | *d*PKPab | | **PKPab** | **01 53 12.8** | **-0.6** |
| **BANR** | **Banloc** | **147.76** | **334** | ⇓P | | **PKiKP** | **01 53 10.0** | **-1.1** |
| **MOA** | **Molln** | **148.02** | **344** | *e*PKP | | **PKPbc** | **01 53 09.8** | **-0.4** |
| | comp=Z,7.3nm,1.1s,SNR=10 | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **148.06** | **337** | ⇓P | | **PKPbc** | **01 53 10.1** | **-0.2** |
| **ARSA** | **Arzberg** | **148.20** | **342** | *e*PKP | | **PKPbc** | **01 53 09.6** | **-1.1** |
| | comp=Z,1.8nm,0.5s,SNR=3.3 | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.33** | **344** | *e*PKP | | **PKPbc** | **01 53 10.5** | **-0.5** |
| | comp=Z,3.0nm,0.5s,SNR=17 | | | | | | | |
| **FRGS** | **Fruska Gora** | **148.49** | **335** | *e*P | | **PKiKP** | **01 53 11.6** | **-1.0** |
| **LESA** | **Schwarzleotal** | **148.82** | **345** | *i* PKP | | **PKPbc** | **01 53 11.9** | **-0.3** |
| | comp=Z,7.7nm,0.5s | | | | | | | |
| **SOKA** | **Soboth** | **148.87** | **342** | *i* PKP | | **PKPbc** | **01 53 12.0** | **-0.4** |
| | comp=Z,13nm,0.8s,SNR=8.2 | | | | | | | |
| **BOVS** | **Bovan** | **148.88** | **331** | ⇑P | | **PKPbc** | **01 53 12.0** | **-0.4** |
| **KBA** | **Koelnbreinsper** | **148.97** | **344** | *i* PKP | | **PKPbc** | **01 53 11.8** | **-0.9** |
| | comp=Z,12nm,0.6s,SNR=9.8 | | | | | | | |
| **ECH** | **Echery** | **149.07** | **353** | | | **PKiKP** | **01 53 12.7** | **-1.1** |
| ECH | | | | PKPab | | **PKPab** | **01 53 17.8** | **-1.2** |
| **TEKS** | **Tekeris** | **149.10** | **334** | *e*P | | **PKPbc** | **01 53 12.2** | **-0.8** |
| **WATA** | **Walderalm** | **149.16** | **347** | *i* PKP | | **PKPbc** | **01 53 12.6** | **-0.6** |
| | comp=Z,14nm,0.6s,SNR=14 | | | | | | | |
| **OBKA** | **Obir** | **149.16** | **342** | *i* PKP | | **PKPbc** | **01 53 12.2** | **-0.9** |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **OBKA** | **Obir** | **149.16** | **342** | *e*P | | **PKPab** | **01 53 18.4** | **-1.1** |
| **RETA** | **Reutte** | **149.19** | **348** | *i* PKP | | **PKPbc** | **01 53 12.8** | **-0.3** |
| | comp=Z,8.8nm,0.9s,SNR=9.4 | | | | | | | |
| **WTTA** | **Wattenberg** | **149.21** | **346** | *i* PKP | | **PKiKP** | **01 53 13.2** | **-1.1** |
| | comp=Z,29nm,0.6s,SNR=18 | | | | | | | |
| **MOTA** | **Moosalm** | **149.25** | **347** | *i* PKP | | **PKPbc** | **01 53 12.9** | **-0.5** |
| | comp=Z,25nm,1.0s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.31** | **343** | *i* PKP | | **PKPbc** | **01 53 12.6** | **-0.9** |
| | comp=Z,13nm,0.6s,SNR=8.9 | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.35** | **347** | *i* PKP | | **PKPbc** | **01 53 13.3** | **-0.3** |
| | comp=Z,19nm,0.6s,SNR=14 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.49** | **345** | *i* PKP | | **PKPbc** | **01 53 13.1** | **-0.8** |
| | comp=Z,25nm,0.7s,SNR=14 | | | | | | | |
| **PRED** | **Cave del Predi** | **149.50** | **343** | PKPab | | **PKPab** | **01 53 19.8** | **-1.0** |
| **DAVA** | **Damuels** | **149.55** | **349** | *i* PKP | | **PKiKP** | **01 53 14.2** | **-0.7** |
| | comp=Z,16nm,0.9s,SNR=13 | | | | | | | |
| **CLF** | **Chambon-Foret** | **149.60** | **359** | PKPab | | **PKPab** | **01 53 20.8** | **-0.3** |
| **FETA** | **Feichten** | **149.64** | **347** | *i* PKP | | **PKiKP** | **01 53 14.2** | **-0.9** |
| | comp=Z,17nm,0.9s,SNR=12 | | | | | | | |
| **BBLS** | **Lazi&#263i** | **149.71** | **334** | *e*P | | **PKiKP** | **01 53 14.9** | **-0.3** |
| **HAPS** | **Han Pijesak,Bl** | **149.72** | **335** | *e*P | | **PKiKP** | **01 53 14.9** | **-0.4** |
| **A051A** | **Mrakovica** | **149.72** | **338** | *e*P | | **PKPbc** | **01 53 14.1** | **-0.4** |
| **BLY** | **Banja Luka** | **149.85** | **337** | *e*P | | **PKiKP** | **01 53 15.1** | **-0.3** |
| **BOJS** | **Bojanci** | **149.85** | **341** | *e*P | | **PKiKP** | **01 53 15.1** | **-0.3** |
| **CEY** | **Cerknica** | **149.90** | **342** | *e*P | | **PKiKP** | **01 53 14.7** | **-0.8** |
| **RUDO** | **Rudo** | **149.93** | **334** | *e*P | | **PKPbc** | **01 53 14.2** | **-0.8** |
| **SJES** | **Sjenica** | **149.95** | **342** | *e*P | | **PKiKP** | **01 53 15.5** | **-0.3** |
| **DAVOX** | **Davos/Dischmat** | **150.04** | **348** | PKPbc | | **PKiKP** | **01 53 15.4** | **-0.5** |
| | comp=Z,38nm,0.7s,baz=332,slow=0.5,SNR=85 | | | | | | | |
| **VAY** | **Valandovo** | **150.18** | **327** | *i* P | | **PKiKP** | **01 53 15.6** | **-0.6** |
| **SKDS** | **Skadanscina** | **150.19** | **342** | *e*P | | **PKPbc** | **01 53 15.1** | **-0.4** |
| **A050A** | **Klekovaca** | **150.32** | **338** | *e*P | | **PKiKP** | **01 53 15.8** | **-0.7** |
| **PDG** | **Podgorica** | **150.94** | **332** | PKPab | | **PKPab** | **01 53 26.0** | **-0.9** |
| **PDG** | **Podgorica** | **150.94** | **332** | *e*P | | **PKiKP** | **01 53 16.9** | **-0.8** |
| **TEOL** | **Teolo** | **151.00** | **345** | PKPab | | **PKPab** | **01 53 27.1** | **0.0** |
| **TREB** | **Trebinje** | **151.09** | **334** | *e*P | | **PKPbc** | **01 53 16.7** | **-1.0** |
| **DRME** | **Dracevica, Mon** | **151.16** | **332** | *e*P | | **PKPbc** | **01 53 16.3** | **-1.5** |
| **OHR** | **Ohrid** | **151.23** | **329** | *i* P | | **PKiKP** | **01 53 19.2** | **+0.8** |
| **STON** | **Ston** | **151.24** | **335** | *e*P | | **PKPbc** | **01 53 16.0** | **-1.9** |
| **ZCCA** | **Zocca** | **152.11** | **345** | PKPdf | | **PKPdf** | **01 53 13.2** | **+0.4** |
| **SSB** | **Saint Sauveur** | **152.24** | **355** | PKPdf | | **PKPdf** | **01 53 13.1** | **+0.1** |
| SSB | | | | PKPab | | **PKPab** | **01 53 32.1** | **-0.2** |
| **BNI** | **Bardonecchia** | **152.24** | **352** | PKPdf | | **PKPdf** | **01 53 13.5** | **+0.4** |
| BNI | | | | PKPab | | **PKPab** | **01 53 20.9** | **+0.4** |
| **NRCA** | **Norcia** | **152.93** | **341** | PKPab | | **PKPab** | **01 53 35.7** | **+0.3** |
| **ESDC** | **Sonseca Array** | **157.46** | **11** | PKPab | | **PKPab** | **01 53 54.5** | **-0.4** |
| | comp=Z,3.5nm,0.9s,baz=345,slow=4.8,SNR=17 | | | | | | | |
| **KEST** | **Kesra** | **160.59** | **340** | PKPab | | **PKPab** | **01 54 08.6** | **-0.2** |
| | comp=Z,7.4nm,0.9s,baz=299,slow=2.7,SNR=9.1 | | | | | | | |
| **MDT** | **Midelt** | **163.85** | **19** | PKPab | | **PKPab** | **01 54 23.8** | **+0.6** |
| | comp=Z,9.4nm,0.9s,baz=354,slow=6.2,SNR=16 | | | | | | | |
| **DBIC** | **Dimbokro** | **167.54** | **150** | PKPab | | **PKPab** | **01 54 41.0** | **+1.2** |
| | comp=Z,8.1nm,1.0s,baz=161,slow=5.5,SNR=4.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.61** | **183** | PKP | | **PKPdf** | **01 53 33.9** | **-0.6** |
| | comp=Z,1.8nm,0.7s,baz=208,slow=0.3,SNR=9.7 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **01 55 14.9** | **-0.4** |
| | comp=Z,0.9nm,0.7s,baz=193,slow=3.5,SNR=7.0 | | | | | | | |

*IDC **19** 01:35:55.8±5.5, 17.°67S×178.°19W, h607km±65km, mb3.3/6, mbtmp4.3/7, Error ellipse: s-maj=59.1km s-min=30.3km az=154.0*

**ISC 19 01:35:55.3±1.4

comp=Z,1.7nm,0.5s
**TXAR Lajitas Array 85.71 57** P **P 01 49 04.9 +1.9**
comp=Z,3.0nm,0.8s,baz=216,slow=6.3,SNR=12
comp=Z,3.0nm,0.8s
**ILAR Eielson Array 85.86 13** P **P 01 49 02.6 -0.2**
comp=Z,0.5nm,0.4s,baz=220,slow=5.2,SNR=4.6
comp=Z,0.5nm,0.4s
**PDAR Pinedale Array 87.14 43** P **P 01 49 09.9 +0.3**
comp=Z,0.8nm,0.6s,baz=200,slow=2.4,SNR=4.6
comp=Z,0.8nm,0.6s
**TROLL Troll, Antarti 90.24 180** ⇑P **P 01 49 23.6 +0.2**
comp=Z,210nm,0.5s
**SNAA Sanae 90.52 178** ⇑P **P 01 49 24.5 -0.3**
comp=Z,55nm,0.6s
**SNAA Sanae 90.52 178** P **P 01 49 24.4 -0.3**
comp=Z,1.9nm,0.6s,baz=213,slow=8.2,SNR=10
comp=Z,1.9nm,0.6s
**VNA3 Neumayer Olymp 90.65 176** ⇑P **P 01 49 25.4 +0.2**
comp=Z,8.9nm,0.6s
**PLCA Paso Flores 91.01 134** P **P 01 49 29.1 +1.5**
comp=Z,2.5nm,0.9s,baz=270,slow=3.7,SNR=3.6
comp=Z,2.5nm,0.9s
**VNA2 Neumayer--Watz 91.09 177** ⇑P **P 01 49 27.9 +0.6**
comp=Z,7.0nm,0.6s,baz=190,slow=5.0
**VNA1 Neumayer--Stat 91.32 177** ⇑P **P 01 49 28.5 +0.3**
comp=Z,7.0nm,0.8s
**BVAR Borovoye Array 117.14 321** PKP **PKPdf 01 55 03.8 0.0**
comp=Z,0.7nm,0.4s,baz=106,slow=3.3,SNR=2.6
**ARCES ARCESS Array B 126.45 350** PKP **PKiKP 01 55 21.8 +0.1**
comp=Z,1.5nm,0.8s,baz=68,slow=1.8,SNR=5.9
**BRTR Keskin Array B 145.10 315** PKPbc **PKPab 01 55 58.4 -0.3**
comp=Z,1.0nm,0.8s,baz=126,slow=4.9,SNR=2.7
**CLL Collm 145.61 348** *e*(PKPbc) **PKPdf 01 55 56.0 -0.9**
**MMAI Mount Meron Ar 146.50 303** PKPbc **PKiKP 01 56 03.3 -0.4**
comp=Z,1.9nm,0.5s,baz=69,slow=7.2,SNR=6.3
**GERES GERESS Array B 147.77 345** PKPbc **PKiKP 01 56 05.5 -0.4**
comp=Z,1.0nm,0.4s,baz=56,slow=4.2,SNR=8.1
**CONA Conrad Observa 148.04 342** *i* PKiKP **PKiKP 01 56 06.4 0.0**
comp=Z,0.6nm,0.4s
**RONA Rosalia, Austr 148.12 342** *e*PKiKP **PKiKP 01 56 06.6 0.0**
comp=Z,0.6nm,0.3s
**LESA Schwarzleotal 149.34 346** *e*PKiKP **PKiKP 01 56 09.1 0.0**
comp=Z,0.6nm,0.3s
**KBA Koelnbreinsper 149.50 345** *i* PKiKP **PKiKP 01 56 09.7 0.0**
comp=Z,1.1nm,0.4s
**WATA Walderalm 149.68 347** *e*PKiKP **PKPbc 01 56 09.6 +0.4**
comp=Z,1.5nm,0.5s
**RETA Reutte 149.70 348** *e*PKiKP **PKPbc 01 56 09.3 +0.1**
comp=Z,0.9nm,0.5s
**WTTA Wattenberg 149.73 347** *i* PKiKP **PKiKP 01 56 10.0 -0.1**
comp=Z,2.6nm,0.5s
**MOTA Moosalm 149.76 348** *e*PKiKP **PKiKP 01 56 10.0 -0.1**
comp=Z,0.7nm,0.4s
**MYKA Terra Mystica 149.84 344** *e*PKiKP **PKPbc 01 56 09.6 0.0**
comp=Z,1.5nm,0.4s
**SQTA Sankt Quirin 149.86 347** *i* PKiKP **PKiKP 01 56 10.4 +0.1**
comp=Z,3.1nm,0.7s
**ABTA Abfaltersbach 150.02 345** *e*PKiKP **PKPbc 01 56 10.1 +0.1**
comp=Z,3.3nm,0.6s
**DAVOX Davos/Dischmat 150.54 349** PKPbc **PKiKP 01 56 12.4 +0.6**
comp=Z,4.1nm,0.5s,baz=243,slow=4.5,SNR=9.6

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*IDC **19** 01:39:22.8±5.4, 18°.18S×177°.96W,h540km±63km, mb3.6/7, mbtmp4.5/8, Error ellipse: s-maj=31.9km s-min=28.4km az=64.0*

**ISC 19 01:39:24.3**±1.2, **18°.2S**±0°.2×**178°.1W**±0°.2, **h550km, n12, σ1s20/12, mb3.8/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.02** | **253** | P | | P | P | **01 42 34.3** | **+0.2** |
| | 5.0nm,0.4s,baz=163,slow=15,SNR=9.9 | | | | | | | | |
| **URZ** | **Urewera** | **20.43** | **191** | P | | P | | **01 43 22.9** | **-1.2** |
| | 3.8nm,0.3s,baz=340,slow=4.1,SNR=6.0 | | | | | | | | |
| | 3.8nm,0.3s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.69** | **261** | P | | P | | **01 45 20.3** | **-0.1** |
| | 0.2nm,0.4s,baz=102,slow=10,SNR=7.7 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.75** | **242** | P | | P | | **01 46 02.6** | **+0.7** |
| | 9.4nm,0.5s,baz=92,slow=10,SNR=13 | | | | | | | | |
| | 9.4nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.87** | **260** | P | | P | | **01 46 49.5** | **-0.8** |
| | 1.8nm,0.4s,baz=97,slow=7.7,SNR=10 | | | | | | | | |
| | 1.8nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.00** | **254** | P | | P | | **01 46 51.4** | **0.0** |
| | 17nm,0.6s,baz=88,slow=8.9,SNR=22 | | | | | | | | |
| | 17nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.31** | **323** | P | | P | | **01 49 30.1** | **-0.7** |
| | 1.7nm,0.5s,baz=157,slow=6.0,SNR=8.7 | | | | | | | | |
| | 1.7nm,0.5s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.03** | **345** | P | | P | | **01 50 04.0** | **0.0** |
| | 1.9nm,0.6s,baz=107,slow=5.0,SNR=1.3 | | | | | | | | |
| | 1.9nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.10** | **13** | P | | P | | **01 51 05.8** | **-0.9** |
| | 0.5nm,0.4s,baz=221,slow=4.6,SNR=6.2 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.19** | **315** | PKPbc | | **PKPdf** | | **01 58 00.1** | **+0.2** |
| | 0.6nm,0.5s,baz=90,slow=2.4,SNR=4.8 | | | | | | | | |
| **CLL** | **Collm** | **145.80** | **348** | *i* PKPbc | | **PKPdf** | | **01 58 02.0** | **+1.6** |
| **GERES** | **GERESS Array B** | **147.96** | **345** | PKPbc | | **PKPdf** | | **01 58 06.7** | **+2.5** |
| | 0.7nm,0.6s,baz=54,slow=4.6,SNR=4.0 | | | | | | | | |

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*NOU **19** 01:39:50.8, 18°.23S×177°.79W, h558km, mb4.6/23, Fiji Islands Region*

*IDC **19** 01:39:53.5±1.8, 18°.26S×178°.04W, h589km±22km, mb3.8/21, mbtmp4.7/23, Error ellipse: s-maj=13.8km s-min=11.0km az=180.0*

*NEIC **19** 01:39:53.0±1.9, 18°.33S±0°.09×177°.93W±0°.09, h589km±7km, mb4.6/65, Error ellipse: s-maj=14.9km s-min=11.1km az=221.0*

**ISC 19 01:39:54.0**±0.3, **18°.33S**±0°.07×**178°.01W**±0°.07, **h600km, n392, σ0s85/394, mb4.5/66, 9C-11D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.79** | **278** | P | | P | P | **01 41 18.2** | **+0.1** |
| **AFI** | **Afiamalu** | **7.43** | **55** | P | | P | P | **01 41 45.3** | **-2.8** |
| **RAO** | **Raoul Island** | **10.88** | **180** | P | | P | P | **01 42 20.4** | **-1.0** |
| | 133nm,0.3s,baz=67,slow=23,SNR=1.9 | | | | | | | | |
| **LIFNC** | **LIFOU** | **14.12** | **258** | P | | P | P | **01 42 52.2** | **-1.8** |
| **LIFNC** | **LIFOU** | **14.12** | **258** | P | | P | P | **01 42 51.4** | **-2.6** |
| **PINNC** | **Pines Island,** | **14.28** | **250** | P | | P | P | **01 42 54.8** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.06** | **253** | P | | P | P | **01 43 03.5** | **+0.7** |
| **DZM** | **Mont Dzumac** | **15.06** | **253** | P | | P | P | **01 43 03.2** | **+0.3** |
| DZM | | | | | | IAmb | IAmb | 01 43 04.2 | |
| | comp=Z,30nm,1.3s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.06** | **253** | P | | P | P | **01 43 02.5** | **-0.4** |
| | comp=Z,6.4nm,0.4s,baz=99,slow=15,SNR=5.0 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.19** | **253** | P | | P | P | **01 43 05.7** | **+1.8** |
| **KOUNC** | **Koumac, New Ca** | **16.84** | **260** | P | | P | P | **01 43 19.9** | **+0.8** |
| **RAR** | **Rarotonga** | **17.40** | **103** | P | | P | P | **01 43 23.7** | **-0.5** |
| | comp=Z,42nm,1.0s,baz=227,slow=7.4,SNR=4.3 | | | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.15** | **195** | P | | P | P | **01 43 50.1** | **+1.2** |
| TOZ | | | | | | IAmb | IAmb | 01 43 52.1 | |
| | comp=Z,29nm,1.3s | | | | | | | | |
| **URZ** | **Urewera** | **20.31** | **191** | P | | P | P | **01 43 50.5** | **+0.2** |
| **URZ** | **Urewera** | **20.31** | **191** | P | | P | P | **01 43 50.2** | **-0.2** |
| | comp=Z,11nm,0.3s,baz=49,slow=0.6,SNR=13 | | | | | | | | |
| | comp=Z,11nm,0.3s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.31** | **192** | P | | P | P | **01 43 58.0** | **-1.4** |
| BKZ | | | | | | IAmb | IAmb | 01 44 06.6 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **MRZ** | **Mangatainoka R** | **22.93** | **193** | P | | P | P | **01 44 12.4** | **-1.4** |
| MRZ | | | | | | IAmb | IAmb | 01 44 16.4 | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **TCW** | **Tory Channel** | **23.75** | **195** | P | | P | P | **01 44 20.3** | **-0.6** |
| **PLWZ** | **Palliser** | **23.87** | **193** | P | | P | P | **01 44 21.1** | **-1.0** |
| **NNZ** | **Nelson** | **23.98** | **196** | P | | P | P | **01 44 21.4** | **-1.5** |
| **THZ** | **Tophouse** | **24.62** | **196** | P | | P | P | **01 44 28.2** | **-0.5** |
| **KHZ** | **Kahutara** | **25.07** | **195** | P | | P | P | **01 44 32.0** | **-0.5** |
| **MQZ** | **McQueen's Vall** | **26.50** | **195** | P | | P | P | **01 44 43.8** | **-1.3** |
| MQZ | | | | | | IAmb | IAmb | 01 45 15.9 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **PPT** | **Papeete** | **27.05** | **93** | P | | P | P | **01 44 51.9** | **+1.5** |
| | comp=Z,24nm,0.9s,baz=246,slow=6.4,SNR=4.1 | | | | | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| **JCZ** | **Jackson Bay** | **27.97** | **201** | P | | P | P | **01 44 58.8** | **+0.7** |
| **CTA** | **Charters Tower** | **33.75** | **261** | P | | P | P | **01 45 47.9** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=97,slow=11,SNR=11 | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.75** | **261** | P | | P | P | **01 45 47.8** | **+0.1** |
| **CAN** | **Canberra** | **33.76** | **233** | P | | P | P | **01 45 48.0** | **+0.5** |
| **PMG** | **Port Moresby** | **34.90** | **280** | P | | P | P | **01 45 58.3** | **+1.0** |
| **PMG** | **Port Moresby** | **34.90** | **280** | P | | P | P | **01 45 58.2** | **+1.0** |
| **PMG** | **Port Moresby** | **34.90** | **280** | P | | P | P | **01 45 57.3** | **0.0** |
| | comp=Z,12nm,0.6s,baz=57,slow=16,SNR=4.8 | | | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **TOO** | **Toolangi** | **37.20** | **231** | P | | P | P | **01 46 16.8** | **+0.8** |
| **COEN** | **Coen** | **37.49** | **271** | P | | P | P | **01 46 19.0** | **+0.5** |
| **COEN** | **Coen** | **37.49** | **271** | P | | P | P | **01 46 18.2** | **-0.3** |
| **STKA** | **Stephens Creek** | **38.76** | **242** | P | | P | P | **01 46 29.0** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.76** | **242** | P | | P | P | **01 46 29.4** | **+0.9** |
| | comp=Z,12nm,0.7s,baz=82,slow=9.3,SNR=7.6 | | | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.54** | **241** | P | | P | P | **01 47 06.2** | **0.0** |
| **DHH** | **Diamond Head** | **44.04** | **28** | P | | P | P | **01 47 10.1** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.74** | **260** | P | | P | P | **01 47 15.5** | **-0.2** |
| **WB0** | **Warramunga Arr** | **44.90** | **260** | P | | P | P | **01 47 16.7** | **-0.2** |
| WB0 | | | | | | IAmb | IAmb | 01 47 17.4 | |
| | comp=Z,12nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.93** | **260** | P | | P | P | **01 47 16.9** | **-0.2** |
| | comp=Z,7.6nm,0.5s,baz=95,slow=7.1,SNR=22 | | | | | | | | |
| | comp=Z,7.6nm,0.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.04** | **255** | P | | P | P | **01 47 17.9** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.04** | **255** | P | | P | P | **01 47 16.9** | **-1.0** |
| **ASAR** | **Alice Springs** | **45.04** | **255** | P | | P | P | **01 47 18.4** | **+0.4** |
| | comp=Z,28nm,0.8s,baz=86,slow=8.9,SNR=19 | | | | | | | | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| **WRKA** | **Warakurna** | **50.08** | **252** | P | | P | P | **01 47 56.0** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **53.33** | **261** | P | | P | P | **01 48 18.6** | **-0.3** |
| **MBWA** | **Marble Bar** | **58.34** | **256** | P | | P | P | **01 48 52.8** | **-0.5** |
| MBWA | | | | | | IAmb | IAmb | 01 48 55.9 | |
| | comp=Z,33nm,1.5s | | | | | | | | |
| **TOLI2** | **Tolitoli** | **63.16** | **281** | P | | P | P | **01 49 25.4** | **+0.4** |
| TOLI2 | | | | | | IAmb | IAmb | 01 49 25.8 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **CASY** | **Casey** | **65.92** | **205** | P | | P | P | **01 49 41.2** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **68.47** | **323** | P | | P | P | **01 49 56.4** | **-1.0** |
| | comp=Z,7.7nm,0.8s,baz=155,slow=5.9,SNR=21 | | | | | | | | |
| | comp=Z,7.7nm,0.8s | | | | | | | | |
| **MAJO** | **Matsushiro** | **68.47** | **323** | P | | P | P | **01 49 56.8** | **-0.6** |
| **MJB9** | **Matsu-Tunnel** | **68.47** | **323** | P | | P | P | **01 49 58.0** | **+0.5** |
| MJB9 | | | | | | IAmb | IAmb | 01 49 59.2 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **UGM** | **Wanagama** | **70.01** | **268** | P | | P | P | **01 50 06.8** | **-0.4** |
| **QSPA** | **South Pole Qui** | **71.73** | **180** | P | | P | P | **01 50 18.1** | **+1.7** |
| QSPA | | | | | | IAmb | IAmb | 01 50 19.7 | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.73** | **180** | P | | P | P | **01 50 16.8** | **+0.4** |
| | comp=Z,12nm,0.9s,baz=28,slow=2.6,SNR=12 | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **71.82** | **331** | P | | P | P | **01 50 16.2** | **-0.9** |
| | comp=Z,12nm,0.9s,baz=238,slow=5.8,SNR=3.7 | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **NACB** | **Ninganchiao** | **72.46** | **304** | P | | P | P | **01 50 21.5** | **+0.3** |
| **SSLB** | **Suanglung** | **72.78** | **303** | P | | P | P | **01 50 21.9** | **-1.1** |
| **TPUB** | **Ta-pu** | **72.80** | **302** | P | | P | P | **01 50 21.6** | **-1.5** |
| **KSM** | **Kuching** | **73.11** | **277** | P | | P | P | **01 50 26.2** | **+1.1** |
| **YSS** | **Yuzhno-Sakhalins** | **73.96** | **333** | P | | P | P | **01 50 30.7** | **+1.6** |
| **PEA0B** | **Petropavlovsk-** | **74.18** | **345** | P | | P | P | **01 50 29.7** | **-0.6** |
| **PETK** | **Petropavlovsk-** | **74.18** | **345** | P | | P | P | **01 50 30.1** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **74.18** | **345** | P | | P | P | **01 50 29.7** | **-0.6** |
| | comp=Z,16nm,0.8s,baz=132,slow=7.2,SNR=10 | | | | | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **SDPT** | **Sand Point** | **74.88** | **10** | P | | P | P | **01 50 36.4** | **+2.3** |
| | baz=197 | | | | | | | | |
| **KSRS** | **Korea Array** | **75.26** | **318** | P | | P | P | **01 50 36.5** | **-0.1** |
| | comp=Z,3.3nm,1.0s,baz=135,slow=5.3,SNR=9.7 | | | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | | | |
| **S14K** | **Fog Glacier** | **75.93** | **10** | P | | P | P | **01 50 41.6** | **+1.5** |
| | baz=198 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.17** | **326** | P | | P | P | **01 50 48.4** | **+1.4** |
| | comp=Z,2.4nm,0.7s,baz=79,slow=4.1,SNR=9.1 | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | |
| **MONP2** | **Monument Peak** | **77.80** | **49** | P | | P | P | **01 50 51.9** | **+1.0** |
| | baz=239 | | | | | | | | |
| **NJ2** | **Nanjing** | **78.49** | **309** | *e*P | | P | P | **01 50 55.8** | **+1.4** |
| NJ2 | | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.72** | **14** | P | | P | P | **01 50 56.0** | **+1.1** |
| | baz=204 | | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.74** | **325** | P | | P | P | **01 50 56.3** | **+0.9** |
| **MDJ** | **Mudanjiang** | **78.74** | **325** | P | | P | P | **01 50 56.5** | **+1.1** |
| MDJ | | | | | | pmax | pmax | | |
| | comp=Z,35nm,1.2s | | | | | | | | |
| **WAKR** | **Walker** | **78.77** | **43** | P | | P | P | **01 50 57.3** | **+1.4** |
| **P16K** | **Nushagak River** | **78.81** | **10** | P | | P | P | **01 50 55.5** | **+0.1** |
| | baz=199 | | | | | | | | |
| **Q18K** | **Katmai Hardscr** | **79.00** | **12** | P | | P | P | **01 50 56.9** | **+0.3** |
| | baz=202 | | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **79.09** | **8** | P | | P | P | **01 50 57.9** | **+1.0** |
| | baz=196 | | | | | | | | |
| **P17K** | **Kvichak River** | **79.24** | **11** | P | | P | P | **01 50 57.7** | **+0.1** |
| | baz=201 | | | | | | | | |
| **O16K** | **Kokwok River B** | **79.33** | **10** | P | | P | P | **01 50 57.3** | **-0.8** |
| | baz=199 | | | | | | | | |
| **M13K** | **Dall Lake** | **79.35** | **7** | P | | P | P | **01 50 58.0** | **-0.2** |
| | baz=194 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.46** | **44** | P | | P | P | **01 51 00.8** | **+1.2** |
| | comp=Z,2.8nm,0.8s,baz=225,slow=9.4,SNR=15 | | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| **Q20K** | **Shuyak Island** | **79.51** | **13** | P | | P | P | **01 50 59.5** | **+0.5** |
| | baz=205 | | | | | | | | |
| **GMN** | **Gold Mountain** | **79.54** | **45** | P | | P | P | **01 51 00.9** | **+0.8** |
| **M14K** | **Bethel** | **79.86** | **8** | P | | P | P | **01 51 01.3** | **+0.4** |
| | baz=195 | | | | | | | | |
| **KVN** | **Kaserville** | **79.94** | **43** | P | | P | P | **01 51 03.2** | **+1.1** |
| **M15K** | **Kasigluk River** | **79.98** | **9** | P | | P | P | **01 51 01.8** | **+0.3** |
| | baz=197 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **80.04** | **46** | P | | P | P | **01 51 02.6** | **0.0** |
| | baz=238 | | | | | | | | |
| **N16K** | **Nishlik Lake** | **80.05** | **10** | P | | P | P | **01 51 02.4** | **+0.5** |
| | baz=198 | | | | | | | | |
| **O18K** | **Koktuh Hills** | **80.08** | **11** | P | | P | P | **01 51 02.1** | **0.0** |
| | baz=202 | | | | | | | | |
| **L14K** | **Kuk Creek** | **80.34** | **7** | P | | P | P | **01 51 03.7** | **+0.4** |
| | baz=195 | | | | | | | | |
| **N17K** | **Nushagak Hills** | **80.36** | **10** | P | | P | P | **01 51 03.6** | **+0.1** |
| | baz=200 | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.41** | **38** | P | | P | P | **01 51 05.7** | **+1.3** |
| J05D | | | | | | IAmb | IAmb | 01 51 06.8 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **M16K** | **Timber Creek** | **80.54** | **9** | P | | P | P | **01 51 05.3** | **+0.9** |
| | baz=198 | | | | | | | | |
| **CN2** | **Changchun** | **80.58** | **322** | P | | P | P | **01 51 05.8** | **+0.8** |
| CN2 | | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **BNX** | **BinXian** | **80.65** | **325** | ⇑P | | P | P | **01 51 05.8** | **+0.5** |
| BNX | | | | | | pmax | pmax | | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **KLR** | **Kul'dur** | **80.66** | **329** | P | | P | P | **01 51 05.5** | **+0.1** |
| | comp=Z,1.6nm,0.6s,baz=37,slow=2.3,SNR=4.2 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **K13K** | **Kusilvak Mount** | **80.69** | **6** | P | | P | P | **01 51 05.7** | **+0.5** |
| | baz=193 | | | | | | | | |
| **N18K** | **Kilbe Creek** | **80.73** | **11** | P | | P | P | **01 51 05.8** | **+0.4** |
| | baz=201 | | | | | | | | |
| **O20K** | **Slope Mountain** | **80.81** | **13** | P | | P | P | **01 51 06.2** | **+0.3** |
| | baz=204 | | | | | | | | |
| **L15K** | **Ungalak Mounta** | **80.81** | **8** | P | | P | P | **01 51 06.5** | **+0.7** |
| | baz=196 | | | | | | | | |
| **PINE** | **Pine Mountain** | **80.88** | **38** | P | | P | P | **01 51 08.0** | **+1.2** |
| PINE | | | | | | IAmb | IAmb | 01 51 09.4 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **80.90** | **14** | P | | P | P | **01 51 06.9** | **+0.6** |
| | baz=206 | | | | | | | | |
| **N19K** | **Bonanza Creek** | **81.11** | **11** | P | | P | P | **01 51 07.1** | **-0.4** |
| | baz=202 | | | | | | | | |
| **L16K** | **Owhat River** | **81.12** | **9** | P | | P | P | **01 51 07.9** | **+0.5** |
| L16K | | | | | | IAmb | IAmb | 01 51 09.0 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **L16K** | **Owhat River** | **81.12** | **9** | P | | P | P | **01 51 08.3** | **+0.9** |
| | baz=198 | | | | | | | | |
| **M17K** | **Holitna River** | **81.14** | **10** | P | | P | P | **01 51 08.9** | **+1.4** |
| | baz=200,SNR=7.5 | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **81.22** | **45** | P | | P | P | **01 51 09.4** | **+0.7** |
| | baz=238 | | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.40** | **8** | P | | P | P | **01 51 09.8** | **+1.0** |
| **K15K** | **Wolf Creek Mou** | **81.40** | **8** | P | | P | P | **01 51 09.8** | **+1.0** |
| | baz=196,SNR=9.4 | | | | | | | | |
| **M18K** | **Stony River** | **81.50** | **11** | P | | P | P | **01 51 10.4** | **+1.1** |
| | baz=201 | | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **81.61** | **7** | P | | P | P | **01 51 10.8** | **+1.0** |
| | baz=194 | | | | | | | | |
| **TUC** | **Tucson** | **81.66** | **52** | P | | P | P | **01 51 12.1** | **+1.2** |
| | baz=242 | | | | | | | | |
| **L17K** | **Donlin** | **81.70** | **9** | P | | P | P | **01 51 11.8** | **+1.5** |
| | baz=199,SNR=5.7 | | | | | | | | |
| **I07A** | **Izee** | **81.90** | **38** | P | | P | P | **01 51 12.9** | **+1.0** |
| **N20K** | **Mount Spurr** | **81.91** | **12** | P | | P | P | **01 51 11.1** | **-0.4** |
| | baz=205 | | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **81.91** | **12** | P | | P | P | **01 51 11.3** | **-0.2** |
| | baz=205 | | | | | | | | |
| **L18K** | **Granite Mounta** | **82.04** | **10** | P | | P | P | **01 51 12.6** | **+0.5** |
| L18K | | | | | | IAmb | IAmb | 01 51 13.2 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **L18K** | **Granite Mounta** | **82.04** | **10** | P | | P | P | **01 51 12.8** | **+0.7** |
| | baz=200,SNR=7.7 | | | | | | | | |
| **M19K** | **Big River Lodg** | **82.14** | **11** | P | | P | P | **01 51 13.0** | **+0.4** |
| | baz=202 | | | | | | | | |
| **K17K** | **Iditarod** | **82.25** | **9** | P | | P | P | **01 51 13.6** | **+0.4** |
| | baz=199 | | | | | | | | |
| **L19K** | **White Mountain** | **82.31** | **11** | P | | P | P | **01 51 14.0** | **+0.6** |
| | baz=202 | | | | | | | | |
| **M20K** | **Styx River** | **82.35** | **12** | P | | P | P | **01 51 13.6** | **-0.2** |
| | baz=204 | | | | | | | | |
| **PWL** | **Port Wells** | **82.45** | **14** | P | | P | P | **01 51 13.2** | **-1.0** |
| | baz=208 | | | | | | | | |
| **J16K** | **Anvik River** | **82.48** | **8** | P | | P | P | **01 51 14.5** | **+0.3** |
| J16K | | | | | | IAmb | IAmb | 01 51 16.0 | |
| | comp=Z,37nm,1.4s | | | | | | | | |
| **J16K** | **Anvik River** | **82.48** | **8** | P | | P | P | **01 51 14.2** | **0.0** |
| | baz=197,SNR=5.6 | | | | | | | | |
| **U15A** | **North Rim** | **82.52** | **48** | P | | P | P | **01 51 16.8** | **+1.4** |
| **GLI** | **Glacier Island** | **82.76** | **15** | P | | P | P | **01 51 14.7** | **-1.0** |
| GLI | | | | | | IAmb | IAmb | 01 51 16.1 | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **GLI** | **Glacier Island** | **82.76** | **15** | P | | P | P | **01 51 15.1** | **-0.6** |
| | baz=209,SNR=6.2 | | | | | | | | |
| **SKT** | **Skwentna** | **82.76** | **12** | P | | P | P | **01 51 15.0** | **-0.8** |
| | baz=205 | | | | | | | | |
| **L20K** | **Farewell, AK** | **82.76** | **11** | P | | P | P | **01 51 15.2** | **-0.5** |
| | baz=203 | | | | | | | | |
| **J17K** | **VABM Dome** | **82.79** | **8** | P | | P | P | **01 51 16.7** | **+0.9** |
| | baz=198 | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **82.80** | **15** | P | | P | P | **01 51 15.7** | **-0.2** |
| | baz=211 | | | | | | | | |
| **M22K** | **Willow** | **82.84** | **13** | P | | P | P | **01 51 16.1** | **0.0** |
| | baz=206 | | | | | | | | |
| **KNK** | **Knik Glacier** | **82.91** | **14** | P | | P | P | **01 51 16.1** | **-0.4** |
| | baz=208 | | | | | | | | |
| **PMR** | **Palmer** | **82.92** | **13** | P | | P | P | **01 51 16.2** | **-0.2** |
| **PMR** | **Palmer** | **82.92** | **13** | P | | P | P | **01 51 15.9** | **-0.5** |
| | baz=207 | | | | | | | | |
| **I17K** | **Unalakleet** | **83.05** | **8** | P | | P | P | **01 51 17.3** | **+0.3** |
| | baz=196 | | | | | | | | |
| **J18K** | **Innoko River** | **83.20** | **9** | P | | P | P | **01 51 18.5** | **+0.6** |
| | baz=200,SNR=8.0 | | | | | | | | |
| **U33K** | **Whale Pass** | **83.22** | **23** | P | | P | P | **01 51 18.8** | **+0.8** |
| | baz=222 | | | | | | | | |
| **V35K** | **Ketchikan** | **83.23** | **25** | P | | P | P | **01 51 18.8** | **+0.7** |
| | baz=224 | | | | | | | | |
| **SML** | **Sawmill** | **83.28** | **14** | P | | P | P | **01 51 18.2** | **-0.2** |
| | baz=208 | | | | | | | | |
| **M23K** | **Glacier View** | **83.41** | **14** | P | | P | P | **01 51 19.7** | **+0.7** |
| | baz=209 | | | | | | | | |
| **BMRM** | **Bremner River** | **83.45** | **16** | P | | P | P | **01 51 19.6** | **+0.4** |
| | baz=212,SNR=5.1 | | | | | | | | |
| **HEH** | **HeiHe** | **83.46** | **328** | *e*P | | P | P | **01 51 19.9** | **+0.5** |
| **S31K** | **Pelican** | **83.50** | **21** | P | | P | P | **01 51 20.0** | **+0.6** |
| | baz=219 | | | | | | | | |
| **MESA** | **MESA** | **83.50** | **17** | P | | P | P | **01 51 19.9** | **+0.2** |
| | baz=214 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.54** | **14** | P | | P | P | **01 51 19.5** | **-0.1** |
| | baz=209,SNR=6.2 | | | | | | | | |
| **K20K** | **Telida** | **83.54** | **11** | P | | P | P | **01 51 19.6** | **0.0** |
| K20K | | | | | | IAmb | IAmb | 01 51 20.4 | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| **K20K** | **Telida** | **83.54** | **11** | P | | P | P | **01 51 19.4** | **-0.2** |
| | baz=203,SNR=7.0 | | | | | | | | |
| **KLU** | **Klutina** | **83.58** | **15** | P | | P | P | **01 51 19.8** | **0.0** |
| | baz=210 | | | | | | | | |
| **H16K** | **Elim** | **83.59** | **7** | P | | P | P | **01 51 20.4** | **+0.7** |
| | baz=195 | | | | | | | | |
| **CRQM** | **Cirque** | **83.66** | **16** | P | | P | P | **01 51 20.4** | **0.0** |
| CRQM | | | | | | IAmb | IAmb | 01 51 21.9 | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| **CRQE** | **Cirque** | **83.67** | **16** | P | | P | P | **01 51 20.8** | **+0.4** |
| | baz=213,SNR=5.1 | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **83.74** | **24** | P | | P | P | **01 51 21.0** | **+0.4** |
| | baz=223 | | | | | | | | |
| **G15K** | **Niukluk** | **83.75** | **6** | P | | P | P | **01 51 21.3** | **+0.8** |
| | baz=193 | | | | | | | | |
| **PNL** | **Peninsula** | **83.83** | **19** | P | | P | P | **01 51 21.2** | **+0.1** |
| **PNL** | **Peninsula** | **83.83** | **19** | P | | P | P | **01 51 21.6** | **+0.5** |
| | baz=216,SNR=5.5 | | | | | | | | |
| **J19K** | **Poorman** | **83.88** | **10** | P | | P | P | **01 51 21.3** | **+0.1** |
| J19K | | | | | | IAmb | IAmb | 01 51 22.0 | |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| **J19K** | **Poorman** | **83.88** | **10** | P | | P | P | **01 51 21.8** | **+0.6** |
| | baz=201 | | | | | | | | |
| **PINM** | **Pinnacle** | **83.92** | **18** | P | | P | P | **01 51 21.7** | **+0.1** |
| | baz=216 | | | | | | | | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M26K | Nabesna, AK | 85.08 | 16 | P | | P | 01 51 27.6 | +0.4 |
| | baz=213,SNR=11 | | | | | | | |
| YUK6 | Outpost Mounta | 85.16 | 18 | P | | P | 01 51 28.3 | +0.5 |
| | baz=217 | | | | | | | |
| H19K | Roundabout Mou | 85.19 | 9 | P | | P | 01 51 28.3 | +0.8 |
| | baz=200 | | | | | | | |
| G18K | Tagagawik | 85.23 | 8 | P | | P | 01 51 26.8 | -0.9 |
| | baz=198 | | | | | | | |
| YUK3 | Moose Creek | 85.23 | 17 | P | | P | 01 51 28.4 | +0.2 |
| | baz=215,SNR=11 | | | | | | | |
| S34M | Telegraph Cree | 85.28 | 23 | P | | P | 01 51 29.6 | +1.4 |
| | baz=224,SNR=9.6 | | | | | | | |
| M27K | Edge Creek, AK | 85.33 | 16 | P | | P | 01 51 28.9 | +0.4 |
| | baz=214,SNR=10 | | | | | | | |
| Y22D | IRIS PASSCAL I | 85.34 | 52 | P | | P | 01 51 29.2 | 0.0 |
| | baz=244 | | | | | | | |
| H20K | Anotleneega Mo | 85.39 | 9 | P | | P | 01 51 30.1 | +1.6 |
| | baz=202 | | | | | | | |
| YUK4 | Talbot Arm | 85.40 | 18 | P | | P | 01 51 30.1 | +1.2 |
| | baz=217 | | | | | | | |
| L26K | Log Cabin Wild | 85.52 | 15 | P | | P | 01 51 30.2 | +1.0 |
| | baz=213 | | | | | | | |
| P32M | Atlin | 85.59 | 21 | P | | P | 01 51 30.5 | +0.9 |
| | baz=222 | | | | | | | |
| K24K | Donnelly Dome | 85.61 | 14 | P | | P | 01 51 29.9 | +0.3 |
| | baz=210,SNR=5.3 | | | | | | | |
| NEW | Newport | 85.62 | 36 | P | | P | 01 51 30.5 | +0.5 |
| | baz=236 | | | | | | | |
| Q32M | Nakina River | 85.63 | 22 | P | | P | 01 51 30.2 | +0.2 |
| Q32M | Nakina River | 85.63 | 22 | P | | P | 01 51 30.7 | +0.6 |
| | baz=223,SNR=5.8 | | | | | | | |
| MLY | Manley | 85.67 | 11 | P | | P | 01 51 29.1 | -0.9 |
| | baz=206 | | | | | | | |
| G19K | Purcell Mounta | 85.68 | 8 | P | | P | 01 51 30.0 | +0.1 |
| G19K | Purcell Mounta | 85.68 | 8 | P | | P | 01 51 29.9 | +0.1 |
| | baz=200 | | | | | | | |
| O30N | Mendenhall | 85.72 | 19 | P | | P | 01 51 30.8 | +0.5 |
| O30N | | | | IAmb | | IAmb | 01 51 31.9 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| O30N | Mendenhall | 85.72 | 19 | P | | P | 01 51 30.8 | +0.5 |
| | baz=219,SNR=9.8 | | | | | | | |
| RIDG | Independent Ri | 85.77 | 14 | P | | P | 01 51 30.5 | +0.1 |
| | baz=211 | | | | | | | |
| F18K | Selawik | 85.78 | 7 | P | | P | 01 51 29.7 | -0.5 |
| | baz=197 | | | | | | | |
| HDA | Harding Lake | 85.88 | 13 | P | | P | 01 51 30.3 | -0.5 |
| | baz=209,SNR=5.4 | | | | | | | |
| H21K | Melozitna Rive | 85.88 | 10 | P | | P | 01 51 31.0 | +0.1 |
| H21K | Melozitna Rive | 85.88 | 10 | P | | P | 01 51 31.3 | +0.5 |
| | baz=204 | | | | | | | |
| TXAR | Lajitas Array | 85.90 | 57 | P | | P | 01 51 33.4 | +1.4 |
| | comp=Z,2.5nm,0.8s,baz=224,slow=7.0,SNR=15 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| CCB | Clear Creek Bu | 85.91 | 13 | P | | P | 01 51 29.5 | -1.4 |
| L27K | Beaver Creek, | 85.93 | 16 | P | | P | 01 51 31.5 | +0.3 |
| | baz=214 | | | | | | | |
| N30M | Aishikik Lake | 85.95 | 18 | P | | P | 01 51 32.0 | +0.7 |
| | baz=218 | | | | | | | |
| E17K | Hotham Inlet | 86.00 | 6 | P | | P | 01 51 31.4 | 0.0 |
| | baz=195 | | | | | | | |
| WHY | Whitehorse | 86.02 | 20 | P | | P | 01 51 32.4 | +0.7 |
| | baz=220,SNR=5.4 | | | | | | | |
| IMAR | Indian Mountai | 86.03 | 10 | P | | P | 01 51 31.2 | -0.3 |
| I23K | Minto, Yukon-K | 86.04 | 12 | P | | P | 01 51 32.3 | +0.7 |
| | baz=207 | | | | | | | |
| ANMO | Albuquerque | 86.06 | 51 | P | | P | 01 51 32.1 | -0.6 |
| | baz=244 | | | | | | | |
| DLBC | Dease Lake | 86.06 | 23 | P | | P | 01 51 32.1 | +0.2 |
| | baz=225 | | | | | | | |
| MDM | Murphy Dome | 86.09 | 12 | P | | P | 01 51 31.0 | -0.9 |
| MDM | | | | IAmb | | IAmb | 01 51 31.9 | |
| | comp=Z,19nm,1.1s | | | | | | | |
| COLA | College | 86.10 | 12 | P | | P | 01 51 31.2 | -0.6 |
| COLA | College | 86.10 | 12 | P | | P | 01 51 31.9 | +0.1 |
| | baz=208 | | | | | | | |
| SCRK | Sand Creek | 86.17 | 14 | P | | P | 01 51 32.6 | +0.3 |
| | baz=212 | | | | | | | |
| ILAR | Eielson Array | 86.21 | 13 | P | | P | 01 51 31.4 | -1.0 |
| | comp=Z,4.4nm,0.8s,baz=231,slow=5.2,SNR=15 | | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| F19K | Shaleruckik Mo | 86.24 | 8 | P | | P | 01 51 32.2 | -0.2 |
| F19K | Shaleruckik Mo | 86.24 | 8 | P | | P | 01 51 32.6 | +0.1 |
| | baz=199 | | | | | | | |
| M29M | Somme Creek | 86.33 | 17 | P | | P | 01 51 32.9 | -0.2 |
| M29M | | | | IAmb | | IAmb | 01 51 35.4 | |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| M29M | Somme Creek | 86.33 | 17 | P | | P | 01 51 33.5 | +0.3 |
| | baz=217,SNR=6.9 | | | | | | | |
| H22K | Ishtalitna Cre | 86.34 | 11 | P | | P | 01 51 33.3 | +0.3 |
| | baz=205 | | | | | | | |
| P33M | Teslin, Yukon | 86.36 | 21 | P | | P | 01 51 33.2 | -0.1 |
| | baz=222,SNR=5.2 | | | | | | | |
| N31M | Braeburn, Yuko | 86.37 | 19 | P | | P | 01 51 34.1 | +0.8 |
| | baz=220,SNR=6.4 | | | | | | | |
| POKR | Poker Plat Res | 86.40 | 12 | P | | P | 01 51 32.2 | -1.1 |
| | baz=209 | | | | | | | |
| J25K | Salcha River, | 86.40 | 13 | P | | P | 01 51 33.0 | -0.4 |
| J25K | | | | IAmb | | IAmb | 01 51 33.5 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| J25K | Salcha River, | 86.40 | 13 | P | | P | 01 51 33.3 | -0.1 |
| | baz=211 | | | | | | | |
| R33M | Jennings River | 86.41 | 22 | P | | P | 01 51 33.7 | +0.1 |
| R33M | | | | IAmb | | IAmb | 01 51 35.6 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| R33M | Jennings River | 86.41 | 22 | P | | P | 01 51 34.8 | +1.2 |
| | baz=224,SNR=5.9 | | | | | | | |
| E18K | Tukpahlearik C | 86.46 | 7 | P | | P | 01 51 33.6 | +0.1 |
| E18K | Tukpahlearik C | 86.46 | 7 | P | | P | 01 51 34.5 | +1.0 |
| | baz=196 | | | | | | | |
| D17K | Noatak River | 86.48 | 6 | P | | P | 01 51 33.9 | +0.4 |
| | baz=194 | | | | | | | |
| G21K | Allakaket | 86.56 | 10 | P | | P | 01 51 34.6 | +0.6 |
| G21K | | | | IAmb | | IAmb | 01 51 34.8 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| G21K | Allakaket | 86.56 | 10 | P | | P | 01 51 34.3 | +0.3 |
| | baz=203 | | | | | | | |
| H23K | Yukon River | 86.61 | 11 | P | | P | 01 51 35.0 | +0.7 |
| | baz=207 | | | | | | | |
| K27K | Chicken | 86.67 | 15 | P | | P | 01 51 36.1 | +1.5 |
| | baz=214 | | | | | | | |
| MSO | Missoula | 86.67 | 38 | P | | P | 01 51 34.9 | -0.3 |
| | baz=239 | | | | | | | |
| J26L | Joseph Creek | 86.71 | 14 | P | | P | 01 51 35.0 | +0.1 |
| J26L | | | | IAmb | | IAmb | 01 51 35.8 | |
| | comp=Z,9.3nm,0.9s | | | | | | | |
| J26L | Joseph Creek | 86.71 | 14 | P | | P | 01 51 35.3 | +0.4 |
| | baz=212,SNR=9.1 | | | | | | | |
| XAN | Xi'an | 86.81 | 307 | ⇑P | | P | 01 51 37.5 | +1.5 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,36nm,1.2s | | | | | | | |
| E19K | Redstone River | 86.90 | 8 | P | | P | 01 51 35.7 | +0.1 |
| E19K | | | | IAmb | | IAmb | 01 51 36.4 | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| E19K | Redstone River | 86.90 | 8 | P | | P | 01 51 36.3 | +0.7 |
| | baz=200 | | | | | | | |
| N32M | Quiet Lake | 86.97 | 20 | P | | P | 01 51 37.2 | +1.1 |
| | baz=222 | | | | | | | |
| S22A | 4UR Ranch, Cre | 87.00 | 49 | P | | P | 01 51 38.1 | +1.0 |
| | baz=244 | | | | | | | |
| PRP | Porcupine Dome | 87.14 | 13 | P | | P | 01 51 37.4 | +0.4 |
| | baz=211 | | | | | | | |
| G22K | Bettles | 87.25 | 10 | P | | P | 01 51 38.0 | +0.8 |
| | baz=205 | | | | | | | |
| G23K | Bananza Creek | 87.32 | 11 | P | | P | 01 51 38.2 | +0.6 |
| | baz=206 | | | | | | | |
| M31M | Drury Creek, Y | 87.34 | 19 | P | | P | 01 51 38.1 | +0.3 |
| | baz=221 | | | | | | | |
| DAWY | Dawson | 87.38 | 16 | P | | P | 01 51 38.5 | +0.5 |
| | baz=216,SNR=7.7 | | | | | | | |
| BW06 | Boulder Array | 87.39 | 43 | P | | P | 01 51 39.2 | +0.4 |
| | baz=242 | | | | | | | |
| PDAR | Pinedale Array | 87.39 | 43 | P | | P | 01 51 38.9 | +0.1 |
| | comp=Z,1.5nm,0.7s,baz=204,slow=3.3,SNR=10 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| BOZ | Bozeman (W) | 87.44 | 40 | P | | P | 01 51 40.1 | +1.3 |
| | baz=240 | | | | | | | |
| I26K | Coal Creek Min | 87.49 | 14 | P | | P | 01 51 38.9 | +0.5 |
| | baz=213 | | | | | | | |
| EGAK | Eagle | 87.52 | 15 | P | | P | 01 51 39.4 | +0.8 |
| | baz=215 | | | | | | | |
| C18K | Utukok River | 87.58 | 6 | P | | P | 01 51 40.4 | +1.5 |
| | baz=196 | | | | | | | |
| FARO | Faro, Yukon | 87.69 | 19 | P | | P | 01 51 39.9 | +0.4 |
| | baz=222 | | | | | | | |
| K29M | Barlow Dome | 87.70 | 17 | P | | P | 01 51 40.0 | +0.4 |
| | baz=218,SNR=6.9 | | | | | | | |
| COLD | Coldfoot | 87.75 | 10 | P | | P | 01 51 40.5 | +0.9 |
| | baz=206 | | | | | | | |
| D19K | Kuna River | 87.77 | 7 | P | | P | 01 51 39.5 | -0.2 |
| | baz=199 | | | | | | | |
| E20K | Nigu River | 87.79 | 8 | P | | P | 01 51 40.5 | +0.7 |
| | baz=201 | | | | | | | |
| HHC | Hu-ho-hao-te | 87.83 | 314 | *e*P | | P | 01 51 41.8 | +1.1 |
| HHC | | | | sP | | sP | 01 54 43.0 | -6.7 |
| HHC | | | | PP | | PP | 01 55 28.4 | +10 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,24nm,0.5s | | | | | | | |
| I27K | Kandik River | 88.09 | 14 | P | | P | 01 51 41.2 | -0.1 |
| | baz=214 | | | | | | | |
| D20K | Etivluk River | 88.16 | 8 | P | | P | 01 51 41.8 | +0.3 |
| | baz=200 | | | | | | | |
| TOAD | Toad River Com | 88.18 | 24 | P | | P | 01 51 42.7 | +0.9 |
| | baz=229 | | | | | | | |
| C19K | Lookout Ridge | 88.19 | 7 | P | | P | 01 51 42.1 | +0.5 |
| | baz=197 | | | | | | | |
| B18K | Kokolik River | 88.22 | 6 | P | | P | 01 51 42.0 | +0.3 |
| | baz=195 | | | | | | | |
| E21K | Killik River | 88.27 | 9 | P | | P | 01 51 42.2 | +0.2 |
| | baz=203 | | | | | | | |
| E22K | Anaktuvuk Pass | 88.31 | 10 | P | | P | 01 51 42.9 | +0.6 |
| | baz=205 | | | | | | | |
| I28M | Miner Creek | 88.37 | 15 | P | | P | 01 51 42.9 | +0.2 |
| | baz=216 | | | | | | | |
| F24K | Squaw Lake | 88.42 | 11 | P | | P | 01 51 42.9 | +0.2 |
| | baz=208 | | | | | | | |
| E23K | Chandalar | 88.60 | 10 | P | | P | 01 51 44.2 | +0.6 |
| | baz=207 | | | | | | | |
| J30M | Hart River | 88.60 | 17 | P | | P | 01 51 44.4 | +0.6 |
| | baz=219 | | | | | | | |
| H27K | Steamboat Moun | 88.63 | 14 | P | | P | 01 51 44.3 | +0.5 |
| | baz=214 | | | | | | | |
| MMPY | Sheldon Lake, | 88.63 | 20 | P | | P | 01 51 44.4 | +0.6 |
| MMPY | | | | IAmb | | IAmb | 01 51 45.6 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| MMPY | Sheldon Lake, | 88.63 | 20 | P | | P | 01 51 44.9 | +1.0 |
| | baz=224 | | | | | | | |
| I29M | Ogilvie Camp, | 88.70 | 16 | P | | P | 01 51 44.6 | +0.5 |
| | baz=217 | | | | | | | |
| Q24A | Divide | 88.71 | 48 | P | | P | 01 51 43.7 | -1.4 |
| | baz=245 | | | | | | | |
| G26K | Porcupine Rive | 88.74 | 13 | P | | P | 01 51 44.4 | +0.2 |
| | baz=212 | | | | | | | |
| ELIB | Princess Elisa | 88.79 | 187 | *d*P | | P | 01 51 45.6 | +0.9 |
| | comp=Z,6.9nm,1.0s | | | | | | | |
| C21K | Knifeblade Rid | 88.82 | 8 | P | | P | 01 51 45.7 | +1.1 |
| | baz=202 | | | | | | | |
| D22K | Ayikyak River | 88.86 | 9 | P | | P | 01 51 44.5 | -0.2 |
| | baz=204 | | | | | | | |
| TGTN | Hyland Airport | 88.86 | 21 | P | | P | 01 51 45.5 | +0.5 |
| | baz=226 | | | | | | | |
| N23A | Red Feather La | 88.97 | 46 | P | | P | 01 51 43.7 | -2.6 |
| | baz=244 | | | | | | | |
| G27K | Doyon Strip | 89.08 | 14 | P | | P | 01 51 46.8 | +1.0 |
| | baz=214 | | | | | | | |
| I30M | Mount Dempster | 89.09 | 16 | P | | P | 01 51 46.6 | +0.6 |
| | baz=219 | | | | | | | |
| A19K | Wainwright | 89.10 | 6 | P | | P | 01 51 46.7 | +1.0 |
| | baz=196 | | | | | | | |
| D23K | Nanushuk River | 89.24 | 10 | P | | P | 01 51 47.6 | +1.1 |
| | baz=206 | | | | | | | |
| B21K | Ikpikpuk River | 89.27 | 8 | P | | P | 01 51 47.5 | +1.0 |
| | baz=202 | | | | | | | |
| H29M | Whitestone | 89.37 | 15 | P | | P | 01 51 47.3 | +0.1 |
| | baz=217 | | | | | | | |
| CMAR | Chiang Mai Arr | 89.38 | 290 | P | | P | 01 51 49.0 | +0.8 |
| | comp=Z,2.7nm,0.8s,baz=110,slow=3.7,SNR=11 | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| KOTAN | Kotaneelee Air | 89.47 | 24 | P | | P | 01 51 48.5 | +0.8 |
| | baz=230 | | | | | | | |
| PZH | PanZhiHua | 89.69 | 298 | P | | P | 01 51 51.0 | +1.3 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| EGMT | Eagleton | 89.74 | 39 | P | | P | 01 51 49.5 | +0.1 |
| | baz=242 | | | | | | | |
| TROLL | Troll, Antarti | 89.89 | 180 | ⇑P | | P | 01 51 50.9 | +1.0 |
| | comp=Z,124nm,0.3s | | | | | | | |
| EPYK | Eagle Plains | 89.90 | 15 | P | | P | 01 51 50.1 | +0.5 |
| | baz=219 | | | | | | | |
| G29M | Pine Creek | 90.01 | 15 | P | | P | 01 51 50.0 | -0.1 |
| | baz=218 | | | | | | | |
| C23K | Itkillik River | 90.04 | 9 | P | | P | 01 51 50.6 | +0.5 |
| | baz=206 | | | | | | | |
| F28M | Old Crow | 90.14 | 14 | P | | P | 01 51 52.0 | +1.2 |
| | baz=216 | | | | | | | |
| SNAA | Sanae | 90.17 | 178 | ⇑P | | P | 01 51 51.7 | +0.7 |
| | comp=Z,42nm,0.7s | | | | | | | |
| SNAA | Sanae | 90.17 | 178 | P | | P | 01 51 51.7 | +0.7 |
| | comp=Z,3.5nm,1.0s,baz=178,slow=10,SNR=6.9 | | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | | |
| C24K | Franklin Bluff | 90.23 | 10 | P | | P | 01 51 51.7 | +0.7 |
| | baz=208 | | | | | | | |
| VNA3 | Neumayer Olymp | 90.30 | 176 | ⇑P | | P | 01 51 52.8 | +1.2 |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| G30M | tAoh Zraii Nji | 90.50 | 15 | P | | P | 01 51 52.7 | +0.3 |
| | baz=219 | | | | | | | |
| VNA2 | Neumayer--Watz | 90.74 | 177 | ⇑P | | P | 01 51 55.0 | +1.4 |
| | comp=Z,6.2nm,0.9s,baz=214,slow=4.3 | | | | | | | |
| G31M | Satah River | 90.95 | 16 | P | | P | 01 51 53.8 | -0.6 |
| G31M | Satah River | 90.95 | 16 | P | | P | 01 51 54.3 | -0.1 |
| | baz=221 | | | | | | | |
| VNA1 | Neumayer--Stat | 90.97 | 177 | ⇑P | | P | 01 51 55.4 | +0.8 |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| E28M | Babbage River | 91.02 | 13 | P | | P | 01 51 55.7 | +1.0 |
| | baz=216 | | | | | | | |
| F30M | Barrier River | 91.10 | 15 | P | | P | 01 51 56.3 | +1.2 |
| | baz=220 | | | | | | | |
| E29M | Blow River | 91.21 | 14 | P | | P | 01 51 56.5 | +0.9 |
| | baz=218 | | | | | | | |
| LAO | LASA Array | 91.28 | 41 | P | | P | 01 51 58.2 | +1.7 |
| | baz=244 | | | | | | | |
| LZH | Lanzhou | 91.44 | 308 | ⇑P | | P | 01 51 58.9 | +1.3 |
| LZH | | | | pP | | pP | 01 53 52.9 | -15 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| F31M | Tsiigehtchic | 91.48 | 16 | P | | P | 01 51 57.8 | +1.0 |
| | baz=221 | | | | | | | |
| RSSD | Black Hills | 91.60 | 44 | P | | P | 01 51 57.6 | -0.7 |
| | baz=246 | | | | | | | |
| INK | Inuvik | 92.19 | 15 | P | | P | 01 52 00.3 | +0.3 |
| | baz=222 | | | | | | | |
| SONM | Songino Array | 94.11 | 319 | P | | P | 01 52 09.3 | -0.2 |
| | comp=Z,0.3nm,0.3s,baz=132,slow=2.1,SNR=2.2 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| YKA | Yellowknife Ar | 94.55 | 25 | P | | P | 01 52 10.7 | -0.3 |
| | comp=Z,1.6nm,1.0s,baz=240,slow=3.5,SNR=3.1 | | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | | |
| GOGA | Godfrey | 103.55 | 59 | P | | Pdif | 01 52 52.0 | +0.2 |
| | baz=257 | | | | | | | |
| MKAR | Makanchi Array | 109.69 | 314 | PKiKP | | PKiKP | 01 57 16.2 | -1.4 |
| | comp=Z,0.4nm,0.5s,baz=46,slow=3.5,SNR=2.1 | | | | | | | |
| KURBB | Kurchatov Arra | 112.44 | 318 | PKiKP | | PKiKP | 01 57 21.7 | -0.9 |
| | comp=Z,0.3nm,0.6s,baz=91,slow=1.8,SNR=4.7 | | | | | | | |
| BVAR | Borovoye Array | 117.41 | 321 | PKP | | PKPdf | 01 57 30.9 | -1.3 |
| | comp=Z,0.6nm,0.4s,baz=126,slow=2.0,SNR=4.2 | | | | | | | |
| ARCES | ARCESS Array B | 126.79 | 350 | PKP | | PKiKP | 01 57 50.0 | -0.2 |
| | comp=Z,2.4nm,0.9s,baz=17,slow=1.6,SNR=5.5 | | | | | | | |
| EKA | Esitdalemuir Ar | 142.85 | 5 | PKhKP | | PKPpre | 01 58 17.0 | |
| | comp=Z,2.1nm,0.8s,baz=316,slow=2.3,SNR=3.4 | | | | | | | |
| BEL | Belsk | 143.42 | 340 | *e*PKP | | PKPdf | 01 58 20.1 | -0.8 |
| KWP | Kalwaria Pacla | 144.60 | 337 | *e*PKP | | PKPab | 01 58 23.1 | -1.2 |
| OJC | Ojcow | 145.13 | 340 | *e*PKP | | PKPab | 01 58 24.8 | -1.4 |
| KOLS | Kolonicke sedl | 145.34 | 336 | *e*PKP | | PKPab | 01 58 26.2 | -0.9 |
| BRTR | Keskin Array B | 145.34 | 315 | PKPbc | | PKPbc | 01 58 25.4 | -0.7 |
| | comp=Z,3.5nm,0.8s,baz=141,slow=4.1,SNR=13 | | | | | | | |
| KSP | Ksiaz | 145.61 | 344 | *e*PKP | | PKPab | 01 58 27.3 | -0.8 |
| NIE | Niedzica | 145.65 | 339 | *e*PKP | | PKPab | 01 58 26.9 | -1.4 |
| CRVS | Cervenica-Dubn | 145.67 | 337 | *e*PKP | | PKPab | 01 58 27.8 | -0.6 |
| ASF | Jabal al Asfar | 145.71 | 301 | PKPbc | | PKPbc | 01 58 26.4 | -1.0 |
| | comp=Z,3.2nm,0.8s,baz=36,slow=4.5 | | | | | | | |
| CLL | Collm | 145.95 | 348 | ∥*i* PKPbc | | PKPab | 01 58 27.6 | -1.8 |
| | comp=Z,40nm,1.3s | | | | | | | |
| UPC | Upice | 145.99 | 344 | *e*PKP | | PKPab | 01 58 28.1 | -1.5 |
| DPC | Dobruska-Polom | 146.05 | 344 | *e*PKP | | PKPab | 01 58 28.5 | -1.4 |
| BRG | Berggiesshubel | 146.16 | 346 | *e*PKP | | PKiKP | 01 58 28.4 | -1.8 |
| BRG | | | | Amp | | | 01 58 27.0 | |
| | comp=Z,9.6nm,0.9s | | | | | | | |
| LANS | Liptovska Anna | 146.16 | 339 | *e*PKP | | PKiKP | 01 58 29.2 | -1.2 |
| KRLC | Kraliky | 146.18 | 343 | *e*PKP | | PKiKP | 01 58 28.4 | -2.0 |
| MORC | Moravsky Berou | 146.22 | 342 | *e*PKP | | PKPbc | 01 58 28.0 | -0.2 |
| PVCC | Panska Ves | 146.34 | 345 | *e*PKP | | PKiKP | 01 58 29.0 | -1.6 |
| MLR | Muntele Rosu | 146.38 | 329 | PKPbc | | PKiKP | 01 58 29.1 | -1.9 |
| | comp=Z,13nm,1.1s,baz=91,slow=2.6,SNR=7.2 | | | | | | | |
| MMAI | Mount Meron Ar | 146.69 | 303 | PKPbc | | PKiKP | 01 58 30.2 | -1.8 |
| | comp=Z,3.0nm,0.5s,baz=62,slow=5.7,SNR=7.4 | | | | | | | |
| PRU | Pruhonice | 146.84 | 345 | *e*PKP | | PKiKP | 01 58 30.1 | -1.6 |
| VRAC | Vranov | 146.92 | 342 | *e*PKP | | PKiKP | 01 58 30.3 | -1.6 |
| JAVC | Velka Javorina | 147.00 | 341 | *e*PKP | | PKiKP | 01 58 31.8 | -0.3 |
| KRUC | Moravsky | 147.20 | 342 | *e*PKP | | PKiKP | 01 58 31.1 | -1.3 |
| MEM | Membach | 147.63 | 355 | *d*PKPbc | | PKiKP | 01 58 31.8 | -1.5 |
| BTNL | Ternell | 147.64 | 355 | *d*PKP | | PKiKP | 01 58 32.1 | -1.2 |
| BSTI | Sart Tilman | 147.69 | 356 | *d*PKPbc | | PKiKP | 01 58 32.2 | -1.1 |
| KHC | Kasperske Hory | 147.87 | 346 | *e*PKP | | PKiKP | 01 58 32.8 | -1.1 |
| EIL | Elat | 147.95 | 297 | PKPbc | | PKiKP | 01 58 33.5 | -1.1 |
| | comp=Z,3.2nm,0.9s,baz=90,slow=7.1,SNR=4.1 | | | | | | | |
| BMRD | Maredsous | 148.02 | 357 | *d*PKPdf | | PKPdf | 01 58 29.0 | +0.2 |
| BMRD | | | | *d*PKiKP | | PKiKP | 01 58 33.3 | -0.7 |
| BMRD | | | | *d*PKPab | | PKPab | 01 58 36.8 | -1.0 |
| GERES | GERESS Array B | 148.11 | 345 | PKPbc | | PKiKP | 01 58 33.5 | -1.0 |
| | comp=Z,2.6nm,0.7s,baz=41,slow=9.5,SNR=16 | | | | | | | |
| DOU | Dourbes | 148.24 | 357 | *d*PKPbc | | PKiKP | 01 58 33.2 | -1.3 |
| CONA | Conrad Observa | 148.37 | 342 | *i* PKP | | PKiKP | 01 58 34.3 | -0.7 |
| | comp=Z,6.5nm,1.1s,SNR=10 | | | | | | | |
| RONA | Rosalia, Austr | 148.45 | 341 | *e*PKP | | PKiKP | 01 58 34.4 | -0.7 |
| | comp=Z,3.8nm,0.8s,SNR=9.6 | | | | | | | |
| WLF | Walferdange | 148.56 | 355 | *d*PKPbc | | PKPbc | 01 58 33.4 | -0.8 |
| WLF | | | | *d*PKiKP | | PKiKP | 01 58 35.2 | 0.0 |
| MOA | Molln | 148.89 | 344 | *e*PKP | | PKiKP | 01 58 34.7 | -1.3 |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| BIOA | Bad Ischl, Aus | 149.20 | 345 | *e*PKP | | PKiKP | 01 58 35.7 | -0.9 |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| LESA | Schwarzleotal | 149.68 | 346 | *e*PKP | | PKiKP | 01 58 36.9 | -0.8 |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| KBA | Koelnbreinsper | 149.84 | 344 | *e*PKP | | PKiKP | 01 58 37.1 | -1.1 |
| | comp=Z,3.5nm,0.7s | | | | | | | |
| WATA | Walderalm | 150.01 | 347 | *e*PKP | | PKiKP | 01 58 37.8 | -0.7 |
| | comp=Z,2.2nm,0.5s,SNR=6.1 | | | | | | | |
| RETA | Reutte | 150.04 | 348 | *e*PKP | | PKiKP | 01 58 38.1 | -0.4 |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| WTTA | Wattenberg | 150.07 | 347 | *e*PKP | | PKiKP | 01 58 38.3 | -0.3 |
| | comp=Z,6.3nm,0.6s,SNR=5.6 | | | | | | | |
| MOTA | Moosalm | 150.11 | 348 | *e*PKP | | PKiKP | 01 58 38.0 | -0.7 |
| | comp=Z,3.9nm,1.0s | | | | | | | |
| MYKA | Terra Mystica | 150.18 | 344 | *i* PKP | | PKPbc | 01 58 37.5 | -0.7 |
| | comp=Z,2.6nm,0.5s | | | | | | | |
| SQTA | Sankt Quirin | 150.20 | 347 | *i* PKP | | PKiKP | 01 58 38.2 | -0.6 |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| ABTA | Abfaltersbach | 150.36 | 345 | *e*PKP | | PKiKP | 01 58 38.4 | -0.8 |
| | comp=Z,5.3nm,0.7s,SNR=7.3 | | | | | | | |
| DAVA | Damuels | 150.40 | 349 | *e*PKP | | PKiKP | 01 58 39.1 | -0.2 |
| | comp=Z,0.8nm,0.3s,SNR=6.2 | | | | | | | |
| FETA | Feichten | 150.49 | 348 | *e*PKP | | PKiKP | 01 58 39.3 | -0.2 |
| | comp=Z,4.9nm,1.0s,SNR=5.3 | | | | | | | |
| DAVOX | Davos/Dischmat | 150.88 | 349 | PKPbc | | PKiKP | 01 58 40.7 | +0.3 |
| | comp=Z,5.1nm,0.6s,baz=46,slow=6.4,SNR=10 | | | | | | | |
| ESDC | Sonseca Array | 158.11 | 12 | PKPab | | PKPab | 01 59 19.8 | -1.4 |
| | comp=Z,2.1nm,1.0s,baz=344,slow=4.4,SNR=7.4 | | | | | | | |

*NEIC* ***19*** *01:41:57.4±1.5, 18°.1S±0°.2×178°.0W±0°.2, h564km±20km, mb4.3/23, Error ellipse: s-maj=32.7km s-min=24.5km az=58.0*

*IDC* ***19*** *01:42:00.8±4.0, 18°.35S×178°.10W, h602km±48km, mb3.4/7, mbtmp4.4/7, Error ellipse: s-maj=38.0km s-min=23.9km az=4.0*

**ISC 19 01:42:00.3±0.8, 18°.2S±0°.1×178°.2W±0°.1, h590km, n39, σ1°12/38, mb4.2/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.56 | 277 | P | P | 01 43 19.1 | -3.1 |
| RAO | Raoul Island | 10.98 | 179 | P | P | 01 44 28.4 | -0.2 |
| | 139nm,0.4s,baz=60,slow=20,SNR=2.0 | | | | | | |
| PINNC | Pines Island, | 14.11 | 250 | P | P | 01 44 59.1 | -1.3 |
| DZM | Mont Dzumac | 14.88 | 253 | P | P | 01 45 08.0 | +0.1 |
| KOUNC | Koumac, New Ca | 16.64 | 259 | P | P | 01 45 23.3 | -0.8 |
| KOUNC | | | | IAmb | IAmb | 01 45 35.6 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| DSZ | Denniston Nort | 24.94 | 198 | P | P | 01 46 39.3 | +0.9 |
| EIDS | Eidsvold | 29.31 | 251 | P | P | 01 47 17.9 | +1.1 |
| ARMA | Armidale | 29.92 | 240 | P | P | 01 47 23.6 | +1.6 |
| ARMA | | | | IAmb | IAmb | 01 47 24.5 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| CTA | Charters Tower | 33.55 | 261 | P | P | 01 47 52.3 | -0.6 |
| | comp=Z,0.3nm,0.6s,baz=122,slow=10,SNR=3.8 | | | | | | |
| CTAO | Charters Tower | 33.55 | 261 | P | P | 01 47 52.5 | -0.4 |
| CTAO | | | | IAmb | IAmb | 01 48 10.9 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| CAN | Canberra | 33.64 | 233 | P | P | 01 47 52.8 | -0.7 |
| CAN | | | | IAmb | IAmb | 01 47 54.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| TOO | Toolangi | 37.09 | 231 | P | P | 01 48 23.4 | +1.5 |
| COEN | Coen | 37.27 | 271 | P | P | 01 48 24.3 | +0.6 |
| COEN | | | | IAmb | IAmb | 01 48 25.2 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| STKA | Stephens Creek | 38.62 | 242 | P | P | 01 48 36.0 | +1.6 |
| STKA | Stephens Creek | 38.62 | 242 | P | P | 01 48 35.5 | +1.1 |
| | comp=Z,4.3nm,0.7s,baz=94,slow=12,SNR=3.9 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| MCQ | Macquarie Isla | 40.22 | 200 | P | P | 01 48 47.1 | +0.4 |
| BBOO | Buckleboo | 43.39 | 241 | P | P | 01 49 13.3 | +1.2 |
| BBOO | | | | IAmb | IAmb | 01 49 14.3 | |
| | comp=Z,12nm,1.0s | | | | | | |
| WR0 | Warramunga Arr | 44.54 | 260 | P | P | 01 49 21.5 | +0.4 |
| WB0 | Warramunga Arr | 44.70 | 260 | P | P | 01 49 22.4 | 0.0 |
| WB0 | | | | IAmb | IAmb | 01 49 23.0 | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| WB2 | Warramunga Arr | 44.72 | 260 | P | P | 01 49 22.5 | 0.0 |
| WB2 | | | | IAmb | IAmb | 01 49 23.3 | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 44.73 | 260 | P | P | 01 49 22.8 | +0.2 |
| | comp=Z,3.4nm,0.5s,baz=95,slow=7.2,SNR=13 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| AS31 | Alice Springs | 44.86 | 255 | P | P | 01 49 24.3 | +0.8 |
| AS31 | | | | IAmb | IAmb | 01 49 25.3 

1.0nm,0.4s,baz=54,slow=7.3,SNR=4.2
**GERES GERESS Array B 147.62 347** PKPbc PKPbc 02 02 15.1 -0.5
0.5nm,0.4s,baz=3.0,slow=3.7,SNR=5.3
**DAVOX Davos/Dischmat 150.29 351** PKPbc PKiKP 02 02 22.9 -0.3
2.2nm,0.7s,baz=14,slow=8.3,SNR=5.7

*IDC **19** 01:43:45.8±9.3, 17°.66S×178°.34W, h496km±99km, mb3.2/5, mbtmp4.0/5, Error ellipse: s-maj=75.5km s-min=37.0km az=145.0*
**ISC 19 01:43:45.9±1.8, 17°.7S±0°.5×178°.3W±0°.3, h500km, n8, σ0s49/8, mb3.5/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.73** | **259** | P | | **P** | | **01 51 15.0** | **+0.6** |
| | 0.4nm,0.3s,baz=94,slow=6.4,SNR=1.9 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.91** | **254** | P | | **P** | | **01 51 15.3** | **-0.4** |
| | 2.1nm,0.6s,baz=88,slow=8.4,SNR=4.3 | | | | | | | | |
| | 2.1nm,0.6s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.50** | **345** | P | | **P** | | **01 54 27.0** | **+0.1** |
| | 3.0nm,0.7s,baz=106,slow=9.2,SNR=2.3 | | | | | | | | |
| | 3.0nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.67** | **13** | P | | **P** | | **01 55 30.6** | **-0.2** |
| | 0.5nm,0.4s,baz=221,slow=5.2,SNR=9.4 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.83** | **58** | P | | **P** | | **01 55 33.0** | **+0.4** |
| | 0.4nm,0.7s,baz=221,slow=6.2,SNR=4.3 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.08** | **303** | PKPbc | | **PKPbc** | | **02 02 30.0** | **-0.1** |
| | 0.4nm,0.3s,baz=56,slow=7.4,SNR=2.0 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.43** | **345** | PKPbc | | **PKPbc** | | **02 02 33.2** | **-0.2** |
| | 0.8nm,0.6s,baz=346,slow=6.2,SNR=5.9 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.22** | **349** | PKPbc | | **PKPbc** | | **02 02 39.7** | **-0.7** |
| | 2.5nm,0.7s,baz=107,slow=3.0,SNR=7.0 | | | | | | | | |

*IDC **19** 01:43:58.4±5.7, 17°.64S×178°.41W, h439km±59km, mb3.4/8, mbtmp4.2/8, Error ellipse: s-maj=43.4km s-min=21.0km az=154.0*
**ISC 19 01:43:59.1±1.2, 17°.6S±0°.3×178°.5W±0°.2, h450km, n24, σ0s71/24, mb3.7/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.70** | **241** | P | | **P** | | **01 50 42.6** | **-0.4** |
| | 0.8nm,0.3s,baz=138,slow=3.2,SNR=2.8 | | | | | | | | |
| | 0.8nm,0.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.60** | **259** | P | | **P** | | **01 51 30.4** | **+0.2** |
| | 0.9nm,0.6s,baz=96,slow=7.4,SNR=2.0 | | | | | | | | |
| | 0.9nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.79** | **254** | P | | **P** | | **01 51 32.5** | **+0.9** |
| | 2.8nm,0.4s,baz=90,slow=7.9,SNR=6.3 | | | | | | | | |
| | 2.8nm,0.4s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.61** | **323** | P | | **P** | | **01 54 10.9** | **+1.1** |
| | 3.2nm,0.7s,baz=157,slow=6.3,SNR=10 | | | | | | | | |
| | 3.2nm,0.7s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.26** | **44** | P | | **P** | | **01 55 17.8** | **+0.8** |
| | 2.1nm,0.7s,baz=225,slow=9.3,SNR=15 | | | | | | | | |
| | 2.1nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.61** | **13** | P | | **P** | | **01 55 46.9** | **-1.5** |
| | 0.9nm,0.4s,baz=227,slow=5.2,SNR=10 | | | | | | | | |
| | 0.9nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **58** | P | | **P** | | **01 55 51.9** | **+1.2** |
| | 1.0nm,0.7s,baz=213,slow=5.9,SNR=10 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.19** | **43** | P | | **P** | | **01 55 56.7** | **0.0** |
| | 0.5nm,0.6s,baz=201,slow=5.1,SNR=4.4 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.00** | **350** | PKP | | **PKPdf** | | **02 02 07.1** | **-1.3** |
| | 1.0nm,0.7s,baz=54,slow=3.1,SNR=5.3 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.51** | **315** | PKP | | **PKPdf** | | **02 02 43.8** | **0.0** |
| | 2.7nm,0.8s,baz=116,slow=3.4,SNR=11 | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **144.95** | **301** | PKPbc | | **PKPab** | | **02 02 45.8** | **+0.1** |
| | 2.4nm,0.8s,baz=8.1,slow=7.1,SNR=5.9 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **145.53** | **329** | PKPbc | | **PKPbc** | | **02 02 46.6** | **+0.2** |
| | 2.5nm,0.7s,baz=46,slow=3.7,SNR=3.9 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.91** | **303** | PKPbc | | **PKPab** | | **02 02 48.8** | **-0.5** |
| | 3.3nm,0.4s,baz=67,slow=6.4,SNR=16 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.29** | **345** | PKPbc | | **PKPbc** | | **02 02 51.1** | **-0.1** |
| | 1.7nm,0.6s,baz=352,slow=6.0,SNR=8.8 | | | | | | | | |
| **LESA** | **Schwarzleotal** | **148.87** | **345** | *i* PKiKP | | **PKPbc** | | **02 02 55.2** | **0.0** |
| | 2.3nm,0.3s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.02** | **344** | *i* PKiKP | | **PKPbc** | | **02 02 55.0** | **-0.7** |
| | 1.6nm,0.3s | | | | | | | | |
| **WATA** | **Walderalm** | **149.21** | **347** | *i* PKiKP | | **PKPbc** | | **02 02 55.8** | **-0.3** |
| | 2.9nm,0.5s | | | | | | | | |
| **RETA** | **Reutte** | **149.24** | **348** | *i* PKiKP | | **PKPbc** | | **02 02 55.9** | **-0.2** |
| | 1.3nm,0.3s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.26** | **346** | *i* PKiKP | | **PKPbc** | | **02 02 56.3** | **0.0** |
| | 3.0nm,0.3s | | | | | | | | |
| **MOTA** | **Moosalm** | **149.30** | **347** | *e*PKiKP | | **PKPbc** | | **02 02 55.9** | **-0.4** |
| | 1.3nm,0.4s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.36** | **343** | *i* PKiKP | | **PKPbc** | | **02 02 55.6** | **-0.8** |
| | 2.0nm,0.3s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.40** | **347** | *i* PKiKP | | **PKPbc** | | **02 02 56.2** | **-0.3** |
| | 2.3nm,0.4s | | | | | | | | |
| **DAVA** | **Damuels** | **149.60** | **349** | *e*PKiKP | | **PKPbc** | | **02 02 56.9** | **-0.1** |
| | 0.6nm,0.2s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.09** | **348** | PKPbc | | **PKPbc** | | **02 02 57.6** | **-0.7** |
| | 4.6nm,0.3s,baz=337,slow=7.7,SNR=17 | | | | | | | | |

*IDC **19** 01:44:30.5±8.4, 18°.45S×178°.08W, h590km±112km, mb3.3/8, mbtmp4.2/9, Error ellipse: s-maj=47.3km s-min=28.5km az=9.0*
**ISC 19 01:44:31.2±1.0, 18°.5S±0°.2×178°.1W±0°.2, h600km, n9, σ1s56/9, mb3.8/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.97** | **254** | P | | **P** | | **01 47 40.6** | **+1.2** |
| | 3.5nm,0.7s,baz=82,slow=14,SNR=2.8 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.80** | **198** | P | | **P** | | **01 49 22.8** | **-2.2** |
| | 15nm,1.0s,baz=32,slow=15,SNR=2.8 | | | | | | | | |
| | 15nm,1.0s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.66** | **242** | P | | **P** | | **01 51 06.2** | **+1.2** |
| | 2.3nm,0.4s,baz=80,slow=7.3,SNR=3.3 | | | | | | | | |
| | 2.3nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.86** | **260** | P | | **P** | | **01 51 53.4** | **-0.5** |
| | 2.2nm,0.5s,baz=97,slow=7.2,SNR=9.9 | | | | | | | | |
| | 2.2nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.96** | **255** | P | | **P** | | **01 51 54.5** | **-0.2** |
| | 11nm,0.6s,baz=88,slow=8.8,SNR=16 | | | | | | | | |
| | 11nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.54** | **323** | P | | **P** | | **01 54 33.3** | **-1.8** |
| | 0.8nm,0.5s,baz=151,slow=5.7,SNR=1.7 | | | | | | | | |
| | 0.8nm,0.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.59** | **44** | P | | **P** | | **01 55 37.6** | **0.0** |
| | 0.5nm,0.6s,baz=228,slow=8.0,SNR=3.7 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.01** | **57** | P | | **P** | | **01 56 11.4** | **+1.7** |
| | 1.0nm,0.7s,baz=218,slow=6.1,SNR=8.5 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.52** | **43** | P | | **P** | | **01 56 16.1** | **-0.5** |
| | 0.4nm,0.5s,baz=221,slow=3.6,SNR=3.6 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |

*SJA **19** 01:45:06.3±0.8, 32°.29S×71°.85W, h8km±2km, ML3.6, MW3.4*
*GUC **19** 01:45:10.2±0.9, 32°.26S×71°.66W, h34km±3km, ML3.6*
**ISC 19 01:45:07.2±1.1, 32°.24S±0°.01×71°.76W±0°.03, h17km, 9km, n62, σ1s32/125, 6C-6D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VA06** | **Catapilco** | **0.50** | **129** | ||*i*P | **Pn** | | **01 45 19.6** | **-0.1** |
| VA06 | | | | *i* | S | **Sn** | | **01 45 26.4** | **-1.5** |
| VA06 | | | | | IAML | | | 01 45 27.4 | |
| | comp=E,8μm,0.4s | | | | | | | | |
| **CO04** | **Los Peladeros** | **0.70** | **74** | *e*P | | **Pn** | | **01 45 22.6** | **+0.1** |
| CO04 | | | | *i* | S | **Sb** | | **01 45 31.2** | **+0.7** |
| CO04 | | | | | IAML | | | 01 45 33.8 | |
| | comp=N,5μm,0.4s | | | | | | | | |
| **VA01** | **Torpederas** | **0.78** | **173** | *e*P | | **Pb** | | **01 45 19.6** | **-2.8** |
| VA01 | | | | *e*S | | **Sn** | | **01 45 35.9** | **+1.1** |
| **VA01** | **Torpederas** | **0.78** | **173** | *e*P | | **Pn** | | **01 45 24.8** | **+1.3** |
| VA01 | | | | *i* | S | **Sn** | | **01 45 34.6** | **-0.2** |
| **ROCH** | **El Roble** | **0.96** | **139** | ||*i*P | **Pn** | | **01 45 26.7** | **+0.5** |
| ROCH | | | | *e*S | | **Sn** | | **01 45 39.0** | **-0.6** |
| **ROC1** | **El Roble** | **0.96** | **139** | *e*P | | **Pn** | | **01 45 26.4** | **+0.1** |
| ROC1 | | | | *e*S | | **Sn** | | **01 45 39.7** | **+0.1** |
| **MT02** | **Curacav** | **1.14** | **153** | *e*P | | **Pg** | | **01 45 29.4** | **0.0** |
| MT02 | | | | *e*S | | **Sg** | | **01 45 44.3** | **0.0** |
| MT02 | | | | | IAML | | | 01 45 47.0 | |
| | comp=Z,737nm,0.3s | | | | | | | | |
| **MT02** | **Curacav** | **1.14** | **153** | ||*e*P | **Pg** | | **01 45 29.3** | **0.0** |
| MT02 | | | | *i* | S | **Sn** | | **01 45 43.5** | **-0.2** |
| **VA03** | **San Esteban** | **1.15** | **117** | *e*P | | **Pg** | | **01 45 29.2** | **-0.2** |
| VA03 | | | | *e*S | | **Sg** | | **01 45 45.6** | **+1.1** |
| VA03 | | | | | IAML | | | 01 45 46.3 | |
| | comp=Z,3μm,0.2s | | | | | | | | |
| **VA03** | **San Esteban** | **1.15** | **117** | ||*e*P | **Pg** | | **01 45 29.3** | **-0.2** |
| VA03 | | | | *i* | S | **Sg** | | **01 45 45.1** | **+0.6** |
| **CO02** | **Combarbal** | **1.22** | **32** | *e*P | | **Pg** | | **01 45 31.2** | **+0.3** |
| CO02 | | | | *e*S | | **Sg** | | **01 45 48.6** | **+1.6** |
| CO02 | | | | | IAML | | | 01 45 51.4 | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **CO02** | **Combarbal** | **1.22** | **32** | ||*e*P | **Pg** | | **01 45 31.0** | **+0.1** |
| CO02 | | | | *i* | S | **Sg** | | **01 45 47.2** | **+0.3** |
| **PEL** | **Peldehue** | **1.28** | **135** | *e*P | | **Pg** | | **01 45 31.5** | **-0.4** |
| PEL | | | | *e*S | | **Sg** | | **01 45 49.5** | **+0.9** |
| PEL | | | | | IAML | | | 01 45 49.5 | |
| | comp=Z,740nm,1.4s | | | | | | | | |
| **PEL** | **Peldehue** | **1.28** | **135** | ||*e*P | **Pg** | | **01 45 31.5** | **-0.4** |
| PEL | | | | *i* | S | **Sg** | | **01 45 47.9** | **-0.7** |
| PEL | | | | | IAML | | | 01 45 50.4 | |
| | comp=N,2μm,0.4s | | | | | | | | |
| **VA05** | **Santo Domingo** | **1.42** | **175** | *e*P | | **Pb** | | **01 45 33.7** | **+0.5** |
| VA05 | | | | *i* | S | **Sg** | | **01 45 53.8** | **+0.9** |
| **MT05** | **Renca** | **1.43** | **143** | *e*P | | **Pg** | | **01 45 35.2** | **+0.3** |
| MT05 | | | | *e*S | | **Sg** | | **01 45 55.5** | **+1.9** |
| MT05 | | | | | IAML | | | 01 45 59.6 | |
| | comp=Z,562nm,0.3s | | | | | | | | |
| **MT05** | **Renca** | **1.43** | **143** | ||*e*P | **Pg** | | **01 45 35.8** | **+0.9** |
| MT05 | | | | *i* | S | **Sg** | | **01 45 54.2** | **+0.6** |
| **MT10** | **Hacienda Santa** | **1.46** | **135** | *e*P | | **Pb** | | **01 45 34.3** | **+0.3** |
| MT10 | | | | *e*S | | **Sg** | | **01 45 53.4** | **-0.9** |
| MT10 | | | | | IAML | | | 01 45 55.8 | |
| | comp=E,2μm,0.4s | | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **1.54** | **138** | ||*e*P | **Pb** | | **01 45 35.9** | **+0.5** |
| MT14 | | | | *e*S | | **Sb** | | **01 45 55.1** | **+0.4** |
| MT14 | | | | | IAML | | | 01 45 58.0 | |
| | comp=E,2μm,0.3s | | | | | | | | |
| **CO06** | **Fray Jorge** | **1.57** | **4** | ||*e*P | **Pb** | | **01 45 35.5** | **-0.3** |
| CO06 | | | | *i* | S | **Sb** | | **01 45 56.5** | **+1.2** |
| **MT16** | **CCHEN** | **1.57** | **139** | *e*P | | **Pb** | | **01 45 36.1** | **+0.1** |
| MT16 | | | | *e*S | | **Sb** | | **01 45 55.8** | **+0.2** |
| MT16 | | | | | IAML | | | 01 45 58.8 | |
| | comp=N,662nm,0.3s | | | | | | | | |
| **MT03** | **Universidad Ad** | **1.63** | **140** | *e*P | | **Pn** | | **01 45 32.5** | **-2.8** |
| MT03 | | | | *e*P | | **Pb** | | **01 45 37.6** | **+0.6** |
| MT03 | | | | *e*S | | **Sg** | | **01 45 59.7** | **-0.2** |
| MT03 | | | | | IAML | | | 01 46 01.4 | |
| | comp=Z,856nm,0.4s | | | | | | | | |
| **MT03** | **Universidad Ad** | **1.63** | **140** | *e*P | | **Pb** | | **01 45 37.1** | **+0.1** |
| MT03 | | | | *i* | S | **Sb** | | **01 45 57.3** | **0.0** |
| MT03 | | | | | IAML | | | 01 46 00.4 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| **FCH** | **Farellones** | **1.64** | **131** | *e*P | | **Pb** | | **01 45 37.2** | **-0.1** |
| FCH | | | | *i* | S | **Sb** | | **01 45 58.2** | **+0.3** |
| FCH | | | | | IAML | | | 01 45 59.5 | |
| | comp=E,1μm,0.3s | | | | | | | | |
| **MT09** | **Talagante** | **1.66** | **157** | *e*P | | **Pb** | | **01 45 38.1** | **+0.6** |
| MT09 | | | | *i* | S | **Sb** | | **01 45 59.0** | **+0.8** |
| MT09 | | | | | IAML | | | 01 46 05.1 | |
| | comp=N,1μm,0.3s | | | | | | | | |
| **MT01** | **Popeta** | **1.67** | **165** | *e*P | | **Pb** | | **01 45 37.4** | **-0.1** |
| MT01 | | | | *e*S | | **Sn** | | **01 45 55.5** | **-1.3** |
| MT01 | | | | *e*S | | **Sg** | | **01 46 00.7** | **-0.5** |
| MT01 | | | | | IAML | | | 01 46 04.0 | |
| | comp=Z,416nm,0.5s | | | | | | | | |
| **MT01** | **Popeta** | **1.67** | **165** | *e*P | | **Pb** | | **01 45 37.4** | **-0.1** |
| MT01 | | | | *i* | S | **Sb** | | **01 45 58.3** | **-0.1** |
| MT01 | | | | | IAML | | | 01 46 05.6 | |
| | comp=E,674nm,0.2s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.67** | **33** | *e*P | | **Pg** | | **01 45 38.7** | **-0.8** |
| CO03 | | | | *e*S | | **Sg** | | **01 46 03.5** | **+2.2** |
| CO03 | | | | | IAML | | | 01 46 06.3 | |
| | comp=Z,608nm,0.5s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.67** | **33** | *e*P | | **Pb** | | **01 45 38.2** | **+0.5** |
| CO03 | | | | *e*S | | **Sb** | | **01 45 59.6** | **+1.2** |
| CO03 | | | | | IAML | | | 01 46 06.7 | |
| | comp=E,1μm,0.4s | | | | | | | | |
| **MT15** | **Las Vizcachas** | **1.71** | **142** | *e*P | | **Pb** | | **01 45 38.4** | **0.0** |
| MT15 | | | | *i* | S | **Sb** | | **01 46 00.5** | **+0.9** |
| MT15 | | | | | IAML | | | 01 46 05.7 | |
| | comp=N,1μm,0.3s | | | | | | | | |
| **MT04** | **Ro Olivares** | **1.79** | **131** | *e*P | | **Pb** | | **01 45 40.3** | **+0.6** |
| MT04 | | | | *e*S | | **Sg** | | **01 46 03.5** | **-1.5** |
| **MT04** | **Ro Olivares** | **1.79** | **131** | *e*P | | **Pb** | | **01 45 39.6** | **-0.1** |
| MT04 | | | | *i* | S | **Sb** | | **01 46 02.2** | **+0.1** |
| MT04 | | | | | IAML | | | 01 46 03.7 | |
| | comp=E,548nm,0.4s | | | | | | | | |
| **MT12** | **Pirque** | **1.80** | **146** | ||*e*P | **Pb** | | **01 45 39.7** | **-0.1** |
| MT12 | | | | *i* | S | **Sb** | | **01 46 02.2** | **+0.1** |
| MT12 | | | | | IAML | | | 01 46 07.8 | |
| | comp=N,1μm,0.4s | | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.90** | **130** | *e*P | | **Pb** | | **01 45 42.1** | **+0.5** |
| MT08 | | | | *e*S | | **Sg** | | **01 46 08.6** | **+0.2** |
| MT08 | | | | | IAML | | | 01 46 13.3 | |
| | comp=Z,298nm,0.4s | | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.90** | **130** | *e*P | | **Pb** | | **01 45 41.7** | **+0.2** |
| MT08 | | | | *i* | S | **Sg** | | **01 46 06.8** | **-1.5** |
| **BO04** | **La Punta** | **1.99** | **151** | *e*P | | **Pb** | | **01 45 42.6** | **-0.4** |
| BO04 | | | | *i* | S | **Sb** | | **01 46 08.1** | **+0.6** |
| BO04 | | | | | IAML | | | 01 46 13.7 | |
| | comp=N,715nm,0.2s | | | | | | | | |
| **LMEL** | **Las Melosas** | **2.07** | **141** | *e*P | | **Pb** | | **01 45 44.0** | **-0.4** |
| LMEL | | | | *e*S | | **Sg** | | **01 46 12.1** | **-1.7** |
| LMEL | | | | | IAML | | | 01 46 20.3 | |
| | comp=Z,320nm,0.6s | | | | | | | | |
| **LMEL** | **Las Melosas** | **2.07** | **141** | *e*P | | **Pb** | | **01 45 43.5** | **-0.9** |
| LMEL | | | | *i* | S | **Sb** | | **01 46 09.5** | **-0.3** |
| LMEL | | | | | IAML | | | 01 46 15.9 | |
| | comp=N,896nm,0.4s | | | | | | | | |
| **RTLS** | **Leoncito** | **2.14** | **79** | *e*P | | **Pg** | | **01 45 47.4** | **-1.0** |
| RTLS | | | | *e*S | | **Sg** | | **01 46 16.1** | **-0.1** |
| RTLS | | | | | IAML | | | 01 46 20.3 | |
| | comp=Z,779nm,0.4s | | | | | | | | |
| **BO01** | **Tunca** | **2.22** | **165** | *e*P | | **Pb** | | **01 45 45.2** | **-1.7** |
| BO01 | | | | *e*S | | **Sb** | | **01 46 12.1** | **-1.9** |
| BO01 | | | | *e*S | | **Sn** | | **01 46 13.2** | **+3.0** |
| BO01 | | | | | IAML | | | 01 46 22.7 | |
| | comp=Z,195nm,0.7s | | | | | | | | |
| **BO01** | **Tunca** | **2.22** | **165** | *e*P | | **Pn** | | **01 45 45.0** | **+1.8** |
| BO01 | | | | *i* | S | **Sb** | | **01 46 14.7** | **+0.7** |
| **GO04** | **Tololo Observa** | **2.22** | **22** | *e*P | | **Pb** | | **01 45 47.3** | **+0.2** |
| GO04 | | | | *e*P | | **Pb** | | **01 45 47.4** | **+0.2** |
| GO04 | | | | *e*S | | **Sg** | | **01 46 17.6** | **-1.3** |
| **GO04** | **Tololo Observa** | **2.22** | **22** | *e*P | | **Pb** | | **01 45 47.7** | **+0.6** |
| GO04 | | | | *i* | S | **Sb** | | **01 46 16.0** | **+1.5** |
| **BO03** | **Pichilemu** | **2.25** | **184** | ||*e*P | **Pn** | | **01 45 44.6** | **+0.9** |
| BO03 | | | | *i* | S | **Sb** | | **01 46 15.0** | **0.0** |
| BO03 | | | | | IAML | | | 01 46 25.4 | |
| | comp=N,250nm,0.7s | | | | | | | | |
| **CO05** | **La Serena** | **2.36** | **11** | *e*P | | **Pb** | | **01 45 49.7** | **+0.4** |
| CO05 | | | | *i* | S | **Sb** | | **01 46 19.2** | **+1.0** |
| **DOCA** | **Reserva Natura** | **2.62** | **61** | *e*P | | **Pb** | | **01 45 54.0** | **0.0** |
| DOCA | | | | *e*S | | **Sb** | | **01 46 27.6** | **+1.5** |
| DOCA | | | | *e*S | | **Sg** | | **01 46 31.5** | **-0.3** |
| DOCA | | | | | IAML | | | 01 46 34.1 | |
| | comp=Z,216nm,1.8s | | | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.67** | **162** | *e*P | | **Pn** | | **01 45 51.7** | **+2.2** |
| BO02 | | | | *e*S | | **Sb** | | **01 46 25.9** | **-1.2** |
| BO02 | | | | | IAML | | | 01 46 34.0 | |
| | comp=Z,250nm,0.4s | | | | | | | | |
| **BO02** | **Sierra Bellavi** | **2.67** | **162** | *e*P | | **Pn** | | **01 45 51.7** | **+2.2** |
| BO02 | | | | *e*S | | **Sb** | | **01 46 27.0** | **-0.2** |
| BO02 | | | | | IAML | | | 01 46 36.9 | |
| | comp=E,593nm,0.6s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **2.67** | **33** | *e*P | | **Pb** | | **01 45 53.5** | **-1.3** |
| CO01 | | | | *e*S | | **Sb** | | **01 46 28.9** | **+1.5** |
| CO01 | | | | | IAML | | | 01 46 32.5 | |
| | comp=Z,161nm,0.4s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **2.67** | **33** | *e*P | | **Pb** | | **01 45 54.0** | **-0.8** |
| CO01 | | | | *i* | S | **Sb** | | **01 46 28.7** | **+1.2** |
| **ZON** | **Zonda** | **2.71** | **76** | *e*P | | **Pb** | | **01 45 56.2** | **+0.8** |
| ZON | | | | *e*S | | **Sg** | | **01 46 33.0** | **-1.5** |
| ZON | | | | | IAML | | | 01 46 42.2 | |
| | comp=Z,160nm,0.3s | | | | | | | | |
| **GO05** | **Huala** | **2.76** | **183** | *e*P | | **Pn** | | **01 45 52.9** | **+2.1** |
| GO05 | | | | *e*S | | **Sb** | | **01 46 27.0** | **-2.8** |
| **GO05** | **Huala** | **2.76** | **183** | *e*P | | **Pn** | | **01 45 51.4** | **+0.7** |
| **RTCV** | **Cerro Valdivia** | **2.76** | **83** | *e*P | | **Pb** | | **01 45 56.6** | **+0.4** |
| RTCV | | | | *e*S | | **Sb** | | **01 46 32.5** | **+2.8** |
| **ACCO** | **Cerro Coronel** | **2.84** | **55** | *e*P | | **Pb** | | **01 45 57.1** | **-0.5** |
| ACCO | | | | *e*S | | **Sb** | | **01 46 31.5** | **-0.7** |
| ACCO | | | | *e*S | | **Sg** | | **01 46 32.5** | **-6.0** |
| **AROD** | **Rodeo** | **2.85** | **44** | *e*P | | **Pn** | | **01 45 51.5** | **-0.8** |
| AROD | | | | *e*S | | **Sb** | | **01 46 32.1** | **-0.5** |
| **LCO** | **Las Campanas** | **3.35** | **16** | *e*P | | **Pn** | | **01 46 01.3** | **+2.2** |
| **LCO** | **Las Campanas** | **3.35** | **16** | *e*P | | **Pb** | | **01 46 03.5** | **-2.9** |
| LCO | | | | *i* | S | **Sb** | | **01 46 44.8** | **-2.1** |
| **AC05** | **El Transito** | **3.63** | **21** | *e*P | | **Pn** | | **01 46 05.7** | **+2.9** |
| AC05 | | | | *e*S | | **Sb** | | **01 46 51.8** | **-3.1** |
| **AC04** | **Llanos de Chal** | **4.07** | **9** | *e*S | | **Sg** | | **01 47 14.7** | **-3.3** |
| **AC04** | **Llanos de Chal** | **4.07** | **9** | ||*e*P | **Pb** | | **01 46 18.5** | **0.0** |
| **BI02** | **San Fabin de** | **4.43** | **175** | *e*P | | **Pb** | | **01 46 23.7** | **-0.9** |

*IDC **19** 01:45:35.7±3.6, 18°.02S×177°.84W, h510km±36km, mb3.8/14, mbtmp4.6/15, Error ellipse: s-maj=23.1km s-min=13.6km az=83.0*
*NEIC **19** 01:45:37.0±2.3, 17°.92S±0°.06×178°.0W±0°.1, h509km±6km, mb4.5/37, Error ellipse: s-maj=17.3km s-min=7.5km az=75.0*
*NOU **19** 01:45:45.1, 18°.30S×178°.72W, h502km, mb4.5/8, Fiji Islands Region*
**ISC 19 01:45:35.4±0.4, 17°.92S±0°.08×177°.89W±0°.09, h500km, n183, σ1s49/182, mb4.4/35, 21C-22D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.87** | **272** | P | | **P** | | **01 46 55.4** | **+2.5** |
| **FUNA** | **Funafuti** | **9.76** | **343** | P | | **P** | | 01 48 01.8 | +11 |
| **LIFNC** | **LIFOU** | **14.32** | **256** | P | | **P** | | **01 48 38.6** | **+0.2** |
| **LIFNC** | **LIFOU** | **14.32** | **256** | P | | **P** | | **01 48 38.5** | **0.0** |
| **PINNC** | **Pines Island,** | **14.53** | **249** | P | | **P** | | **01 48 41.6** | **+1.0** |
| **PINNC** | **Pines Island,** | **14.53** | **249** | P | | **P** | | **01 48 41.2** | **+0.6** |
| **YATNC** | **Mamie plateau,** | **14.88** | **251** | P | | **P** | | **01 48 44.5** | **+0.1** |
| **DZM** | **Mont Dzumac** | **15.29** | **252** | P | | **P** | | **01 48 48.9** | **+0.2** |
| **DZM** | **Mont Dzumac** | **15.29** | **252** | P | | **P** | | **01 48 48.7** | **0.0** |
| DZM | | | | | IAmb | IAmb | | 01 48 57.8 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.29** | **252** | P | | **P** | | **01 48 48.7** | **0.0** |
| | comp=Z,11nm,0.6s,baz=92,slow=16,SNR=7.8 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.42** | **252** | P | | **P** | | **01 48 51.2** | **+1.2** |
| **KOUNC** | **Koumac, New Ca** | **17.03** | **258** | P | | **P** | | **01 49 07.5** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **17.03** | **258** | | | **P** | | **01 49 07.3** | **+0.6** |
| **PPTF** | **Pamatai, Papee** | **26.97** | **94** | P | | **P** | | **01 50 39.7** | **+3.2** |
| **RPZ** | **Rata Peaks** | **27.36** | **198** | P | | **P** | | **01 50 38.4** | **-1.1** |
| | comp=Z,6.9nm,0.8s,baz=7.7,slow=22,SNR=1.7 | | | | | | | | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.57** | **200** | P | | **P** | | **01 50 41.2** | **0.0** |
| FOZ | | | | | IAmb | IAmb | | 01 51 09.7 | |
| | comp=Z,41nm,1.1s | | | | | | | | |
| **EIDS** | **Eidsvold** | **29.73** | **250** | P | | **P** | | **01 51 00.6** | **+0.1** |
| EIDS | | | | | IAmb | IAmb | | 01 51 21.5 | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.75** | **200** | P | | **P** | | **01 51 00.8** | **+0.4** |
| MLZ | | | | | IAmb | IAmb | | 01 51 42.7 | |
| | comp=Z,40nm,1.3s | | | | | | | | |
| **DCZ** | **Deep Cove** | **30.16** | **201** | P | | **P** | | **01 51 04.1** | **+0.2** |
| DCZ | | | | | IAmb | IAmb | | 01 51 38.5 | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| **ARMA** | **Armidale** | **30.36** | **240** | P | | **P** | | **01 51 06.9** | **+0.9** |
| ARMA | | | | | IAmb | IAmb | | 01 51 38.2 | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.93** | **261** | P | | **P** | | **01 51 36.4** | **-0.1** |
| **PATS** | **Pohnpei** | **34.02** | **314** | P | | **P** | | **01 51 37.7** | **+0.5** |
| **CAN** | **Canberra** | **34.09** | **233** | P | | **P** | | **01 51 37.8** | **+0.2** |
| CAN | | | | | IAmb | IAmb | | 01 52 08.5 | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **TOO** | **Toolangi** | **37.54** | **231** | P | | **P** | | **01 52 07.2** | **+0.8** |
| TOO | | | | | IAmb | IAmb | | 01 52 46.8 | |
| | comp=Z,36nm,1.2s | | | | | | | | |
| **COEN** | **Coen** | **37.60** | **270** | P | | **P** | | **01 52 07.3** | **+0.3** |
| COEN | | | | | IAmb | IAmb | | 01 52 28.0 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **STKA** | **Stephens Creek** | **39.05** | **241** | P | | **P** | | **01 52 19.1** | **+0.3** |
| **WAKE** | **Wake Island** | **39.97** | **337** | P | | **P** | | **01 52 26.8** | **+0.7** |
| **WRA** | **Warramunga Arr** | **45.11** | **259** | P | | **P** | | **01 53 05

comp=Z,1.3nm,0.6s,baz=206,slow=9.9,SNR=15
comp=Z,1.3nm,0.6s
**VNA3 Neumayer Olymp 90.69 176** ⇑P **P 01 57 43.6 -0.3**
comp=Z,6.8nm,0.6s
**VNA2 Neumayer--Watz 91.14 177** ⇑P **P 01 57 46.0 +0.1**
comp=Z,5.4nm,0.6s,baz=181,slow=5.8
**VNA1 Neumayer--Stat 91.36 177** ⇑P **P 01 57 46.7 -0.2**
comp=Z,5.4nm,0.7s
**SONM Songino Array 93.88 319** P **P 01 57 58.6 -0.5**
comp=Z,0.9nm,0.6s,baz=133,slow=6.5,SNR=4.0
comp=Z,0.9nm,0.6s
**ZALV Zalesovo Beam 108.55 322** PKiKP **PKiKP 02 03 04.9 -1.7**
comp=Z,1.4nm,0.5s,baz=155,slow=0.9,SNR=6.2
**MKAR Makanchi Array 109.50 314** PKiKP **PKiKP 02 03 06.6 -2.1**
comp=Z,1.8nm,0.5s,baz=169,slow=0.5,SNR=29
**KURBB Kurchatov Arra 112.22 318** PKiKP **PKiKP 02 03 12.0 -1.6**
comp=Z,2.2nm,0.7s,baz=103,slow=1.8,SNR=19
**BVAR Borovoye Array 117.17 321** PKP **PKPdf 02 03 21.9 -1.3**
comp=Z,4.9nm,0.4s,baz=115,slow=2.0,SNR=34
**ARU Arti 123.13 326** **PKPdf 02 03 33.6 -0.8**
**ARU Arti 123.13 326** PKP **PKPdf 02 03 32.9 -1.6**
comp=Z,6.7nm,0.5s,baz=58,slow=1.8,SNR=9.7
**ABKAR Akbulak array 124.27 318** **PKPdf 02 03 36.1 -0.7**
**AKTO Aktyubinsk 125.20 320** PKP **PKPdf 02 03 36.8 -1.8**
comp=Z,4.1nm,0.8s,baz=76,slow=1.6,SNR=12
**ARCES ARCESS Array B 126.42 350** PKP **PKPdf 02 03 39.1 -1.3**
comp=Z,1.2nm,0.4s,baz=83,slow=1.8,SNR=15
**BELG Belogornoye 130.58 325** PKP **PKPdf 02 03 46.8 -2.0**
comp=Z,14nm,0.7s,baz=340,slow=1.5,SNR=7.0
**FINES FINESS Array B 133.34 344** PKP **PKPdf 02 03 52.3 -1.4**
comp=Z,1.4nm,0.5s,baz=71,slow=4.5,SNR=5.3
**NB2 NORSAR Subarra136.44 354** PKP PKPpre 02 03 52.2
comp=Z,0.6nm,0.6s,baz=16,slow=3.2
**NOA NORSAR Array B136.44 354** PKP **PKPdf 02 03 58.8 -0.8**
comp=Z,0.7nm,0.5s,baz=15,slow=4.0,SNR=3.3
**KBZ Khabaz 137.16 316** PKP **PKPdf 02 04 02.0 +0.6**
comp=Z,1.2nm,0.7s,baz=346,slow=3.3,SNR=4.4
**GURO Guroymak-BITLI 139.67 309** **PKPdf 02 04 06.9 +0.6**
**AKASG Malin Array Be 140.80 333** PKhKP PKPpre 02 04 00.5
comp=Z,1.0nm,0.3s,baz=45,slow=4.0,SNR=5.3
**EKA Eskdalemuir Ar 142.44 5** PKhKP PKPpre 02 04 04.9
comp=Z,1.4nm,0.6s,baz=316,slow=2.3,SNR=4.3
**SORM Soroca 143.05 330** ⇑P **PKPdf 02 04 08.5 -3.3**
**PRAR RASCA 144.59 331** ⇓P PKPbc 02 04 14.8 +0.2
**VLDR Vladesti 144.79 328** ⇓P **PKPdf 02 04 15.5 +0.6**
**OJC Ojcow 144.79 340** **PKPdf 02 04 14.6 -0.2**
**BUR08 Bucovina Ar. S 144.84 333** **PKPdf 02 04 14.6 -0.6**
**BURAR Bucovina Array 144.85 333** **PKPdf 02 04 15.2 0.0**
**BURAR Bucovina Array 144.85 333** ⇓P **PKPdf 02 04 15.7 +0.5**
**TLCR 144.86 326** ⇑P **PKPdf 02 04 15.6 +0.5**
**SCTR Scanteiesti 144.95 328** ⇑P **PKPdf 02 04 16.3 +1.1**
**TESR Tescani 145.02 330** ⇓P **PKPdf 02 04 14.6 -0.7**
**BR131 Keskin Array S 145.14 315** **PKPdf 02 04 15.8 -0.2**
**BRTR Keskin Array B 145.14 315** **PKPdf 02 04 14.3 -1.7**
**BRTR Keskin Array B 145.14 315** PKPbc **PKPdf 02 04 14.7 -1.3**
comp=Z,13nm,0.6s,baz=116,slow=3.2,SNR=60
**IZVR Izvoarele 145.16 328** ⇓P **PKPdf 02 04 17.1 +1.6**
**CFR Carcaliu 145.22 327** ⇓P **PKPdf 02 04 15.6 0.0**
**PANC Panciu 145.23 329** ⇑P **PKPdf 02 04 17.3 +1.6**
**KIRS Kirsehir-Merke 145.24 314** ⇓P **PKPdf 02 04 16.5 +0.4**
**TPGR Topolog 145.29 326** ⇑P **PKPdf 02 04 17.0 +1.2**
**VRI Vrincioaia 145.43 327** ⇑P **PKPdf 02 04 17.3 +1.2**
**PLOR Plostina 145.49 329** ⇑P **PKPdf 02 04 17.3 +1.1**
**OSTC Ostas 145.54 344** *e*PKP **PKPdf 02 04 18.3 +2.2**
**BMR Baia Mare 145.54 334** ⇓P **PKPdf 02 04 17.4 +1.2**
**CLL Collm 145.58 348** **PKPdf 02 04 17.3 +1.2**
**ASF Jabal al Asfar 145.61 301** PKPbc **PKPdf 02 04 18.0 +1.1**
comp=Z,11nm,0.8s,baz=50,slow=0.2,SNR=16
**ANTO Ankara 145.63 316** **PKPdf 02 04 16.4 -0.3**
**UPC Upice 145.64 344** *e*PKP **PKPdf 02 04 18.0 +1.7**
**HARR Harsova 145.66 327** ⇑P **PKPdf 02 04 18.1 +1.7**
**DPC Dobruska-Polom 145.70 344** *e*PKP **PKPdf 02 04 17.8 +1.4**
**COVR Voineasa-Covas 145.71 330** ⇑P **PKPdf 02 04 17.7 +1.1**
**OZUR 145.73 330** ⇓P **PKPdf 02 04 18.1 +1.5**
**BOSR Bodos 145.81 330** ⇓P **PKPdf 02 04 18.8 +2.0**
**KRLC Kraliky 145.83 343** *e*PKP **PKPdf 02 04 18.3 +1.6**
**MORC Moravsky Berou 145.88 342** *e*PKP **PKPdf 02 04 18.0 +1.2**
**MORC Moravsky Berou 145.88 342** ⇓P **PKPdf 02 04 18.5 +1.7**
**NEHR Nehoiu 145.97 329** ⇑P **PKPdf 02 04 18.5 +1.5**
**PVCC Panska Ves 145.97 346** *e*PKP **PKPdf 02 04 19.0 +2.2**
**DOPR Dopca 146.01 330** ⇓P **PKPdf 02 04 19.4 +2.3**
**ISR Istrita 146.07 328** ⇓P **PKPdf 02 04 18.4 +1.2**
**MLR Muntele Rosu 146.10 329** **PKPdf 02 04 18.8 +1.4**
**MLR Muntele Rosu 146.10 329** PKPbc **PKPdf 02 04 18.5 +1.2**
comp=Z,7.2nm,0.5s,baz=337,slow=8.1,SNR=29
**MLR Muntele Rosu 146.10 329** ⇑P **PKPdf 02 04 18.8 +1.4**
**HSKC Hora Svate Kat 146.16 347** *e*PKP **PKPdf 02 04 19.0 +1.8**
**CBBR Cluj-Babes-Bol 146.23 333** ⇓P **PKPdf 02 04 16.3 -1.1**
**CJR Cluj-Napoca 146.25 333** ⇑P **PKPdf 02 04 19.4 +1.9**
**PRA Prague 146.43 346** *e*PKP **PKPdf 02 04 19.7 +2.1**
**PRU Pruhonice 146.48 345** *e*PKP **PKPdf 02 04 19.8 +2.1**
**MMAI Mount Meron Ar 146.56 303** PKPbc **PKPdf 02 04 20.8 +2.3**
comp=Z,19nm,0.5s,baz=6.6,SNR=70
**VOIR 146.56 330** ⇑P **PKPdf 02 04 20.3 +2.2**
**DRGR 146.57 334** ⇓P **PKPdf 02 04 20.2 +2.1**
**VRAC Vranov 146.57 343** *e*PKP **PKPdf 02 04 19.5 +1.6**
**VRAC Vranov 146.57 343** PKPbc **PKPdf 02 04 20.0 +2.1**
comp=Z,4.8nm,0.6s,baz=26,slow=4.9,SNR=8.4
**VRAC Vranov 146.57 343** ⇓P **PKPdf 02 04 18.1 +0.2**
**JAVC Velka Javorina 146.66 341** *e*PKP **PKPbc 02 04 21.6 +1.0**
**PSZ Piszkesteto 146.73 338** ⇓P **PKPdf 02 04 20.4 +2.1**
**KRUC Moravsky 146.85 343** *e*PKP **PKPdf 02 04 20.8 +2.5**
**TREC Trest 146.89 344** *e*PKP **PKPdf 02 04 21.2 +2.8**
**ZVC Zvikov 147.08 345** *e*PKP **PKPdf 02 04 21.7 +3.0**
**LOT Lotru 147.15 331** ⇓P **PKPdf 02 04 20.5 +1.3**
**SIRR Siria 147.42 334** ⇑P **PKPdf 02 04 22.3 +2.8**
**GRFO Grafenberg 147.47 349** **PKPbc 02 04 23.1 +0.4**
**KHC Kasperske Hory 147.51 346** *e*PKP **PKPbc 02 04 22.9 0.0**
**CKRC Cesky Krumlov 147.63 345** *e*PKP **PKPbc 02 04 23.1 -0.1**
**SURR Surduc 147.64 333** ⇓P **PKPdf 02 04 22.4 +2.7**
**GZR Gura Zlata 147.64 332** ⇑P **PKPdf 02 04 22.7 +2.8**
**GERES GERESS Array B 147.75 346** PKP **PKPdf 02 04 18.3 -1.7**
comp=Z,0.8nm,0.7s,baz=34,slow=3.5,SNR=4.0
GERES PKPbc **PKPbc 02 04 23.1 -0.4**
comp=Z,8.8nm,0.6s,baz=48,slow=4.7,SNR=4.9
**EIL Elat 147.87 297** PKPbc **PKPdf 02 04 23.6 +3.0**
comp=Z,8.0nm,0.9s,baz=356,slow=6.7,SNR=5.1
**BZS Buzias 147.97 334** ⇓P **PKPdf 02 04 20.0 -0.3**
**CONA Conrad Observa 148.03 342** *e*PKP **PKPbc 02 04 24.4 +0.1**
comp=Z,3.2nm,0.5s
**RONA Rosalia, Austr 148.11 342** *e*PKP **PKPbc 02 04 24.4 0.0**
comp=Z,6.8nm,0.6s
**HERR Herculane 148.20 332** ⇓P **PKPdf 02 04 24.2 +3.5**
**MOA Molln 148.53 344** *e*PKP **PKPdf 02 04 24.9 +3.7**
comp=Z,2.0nm,0.5s
**MDVR Moldovita 148.59 333** ⇓P **PKPdf 02 04 24.9 +3.5**
**ARSA Arzberg 148.74 342** *i* PKP **PKPdf 02 04 24.9 +3.4**
comp=Z,1.6nm,0.6s
**BIOA Bad Ischl, Aus 148.84 345** *i* PKP **PKPdf 02 04 25.3 +3.6**
comp=Z,4.8nm,0.7s
**LESA Schwarzleotal 149.32 346** *i* PKP **PKPbc 02 04 27.0 -0.5**
comp=Z,6.1nm,0.4s
**KBA Koelnbreinsper 149.49 345** *i* PKP **PKPdf 02 04 27.0 +4.1**
comp=Z,6.7nm,0.5s,SNR=5.2
**BOVS Bovan 149.49 331** ⇑P **PKPdf 02 04 26.6 +3.8**
**WATA Walderalm 149.65 347** *i* PKP **PKPbc 02 04 27.7 -0.7**
comp=Z,7.4nm,0.5s
**RETA Reutte 149.67 348** *i* PKP **PKPbc 02 04 27.8 -0.5**
comp=Z,1.7nm,0.4s
**WTTA Wattenberg 149.71 347** *i* PKP **PKPbc 02 04 28.0 -0.5**
comp=Z,21nm,0.6s,SNR=5.3
**MOTA Moosalm 149.74 348** *i* PKP **PKPbc 02 04 27.8 -0.8**
comp=Z,9.3nm,0.7s
**MYKA Terra Mystica 149.82 344** *i* PKP **PKPdf 02 04 27.5 +4.2**
comp=Z,9.9nm,0.5s,SNR=5.9
**SQTA Sankt Quirin 149.84 348** *i* PKP **PKPbc 02 04 28.2 -0.5**
comp=Z,11nm,0.6s
**ABTA Abfaltersbach 150.00 346** *i* PKP **PKPbc 02 04 28.1 -1.0**
comp=Z,17nm,0.6s,SNR=7.3
**PRED Cave del Predi 150.02 344** PKPab **PKPbc 02 04 36.2 -0.9**
**DAVA Damuels 150.03 349** *i* PKP **PKPbc 02 04 29.0 -0.3**
comp=Z,4.5nm,0.4s
**FETA Feichten 150.12 348** *i* PKP **PKPbc 02 04 28.8 -0.7**
comp=Z,6.5nm,0.8s
**DAVOX Davos/Dischmat 150.51 349** PKPbc **PKPbc 02 04 30.3 -0.1**
comp=Z,24nm,0.6s,baz=297,slow=3.2,SNR=45
**IDI Anoyia 153.38 315** PKPbc **PKPbc 02 04 36.5 -0.6**
comp=Z,5.5nm,0.5s,baz=342,slow=9.6,SNR=8.6
**ESDC Sonseca Array 157.69 12** PKPab **PKPab 02 05 09.6 -0.3**
comp=Z,0.3nm,0.5s,baz=344,slow=4.6,SNR=6.4
**KEST Kesra 161.13 342** PKPab **PKPab 02 05 24.4 -0.8**
comp=Z,3.7nm,0.7s,baz=324,slow=2.6,SNR=6.8
**TORD Torodi Ar. Bea 175.24 175** PKP **PKPdf 02 04 46.2 -2.2**
comp=Z,1.6nm,1.0s,baz=144,slow=1.1,SNR=3.9
TORD PKPab **PKPab 02 06 25.7 -2.0**

comp=Z,0.5nm,0.7s,baz=222,slow=1.4,SNR=2.1

*IDC* ***19*** *01:48:31.1±6.8, 18.°05S×178.°13W, h576km±80km, mb3.2/7, mbtmp4.1/7, Error ellipse: s-maj=41.0km s-min=27.4km az=20.0*
**ISC 19 01:48:29.7±0.8, 17.°9S±0.°2×178.°2W±0.°2, h550km, n14, σ1°73/14, mb4.0/8, 4D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.68** | **190** | P | | **P** | **01 52 30.7** | **-1.0** |
| | 3.3nm,0.4s,baz=332,slow=2.1,SNR=5.6 | | | | | | | |
| | 3.3nm,0.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.80** | **241** | P | | **P** | **01 55 08.8** | **+1.1** |
| | 1.9nm,0.4s,baz=71,slow=11,SNR=3.2 | | | | | | | |
| | 1.9nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.82** | **260** | P | | **P** | **01 55 54.4** | **-0.9** |
| | 0.7nm,0.4s,baz=95,slow=7.3,SNR=3.1 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | | **P** | **01 55 56.0** | **-0.5** |
| | 4.9nm,0.4s,baz=89,slow=7.7,SNR=14 | | | | | | | |
| | 4.9nm,0.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.14** | **180** | P | | **P** | **01 58 56.1** | **-2.5** |
| | 4.4nm,1.1s,baz=72,slow=6.4,SNR=2.2 | | | | | | | |
| | 4.4nm,1.1s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.84** | **58** | P | | **P** | **02 00 12.5** | **+0.7** |
| | 0.3nm,0.8s,baz=302,slow=7.2,SNR=3.7 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.85** | **13** | P | | **P** | **02 00 08.8** | **-2.1** |
| | 0.3nm,0.4s,baz=221,slow=4.9,SNR=5.0 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.30** | **180** | ⇓P | | **P** | **02 00 33.5** | **+1.6** |
| | comp=Z,96nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **90.58** | **179** | ⇓P | | **P** | **02 00 34.0** | **+0.8** |
| | comp=Z,14nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.72** | **176** | ⇓P | | **P** | **02 00 35.3** | **+1.6** |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.16** | **177** | ⇓P | | **P** | **02 00 38.1** | **+2.4** |
| | comp=Z,2.2nm,0.7s,baz=212,slow=5.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.93** | **315** | PKPbc | | **PKPdf** | **02 07 04.4** | **-0.4** |
| | comp=Z,0.8nm,0.8s,baz=74,slow=3.0,SNR=2.6 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.31** | **303** | PKPbc | | **PKPdf** | **02 07 08.7** | **+1.4** |
| | comp=Z,0.5nm,0.4s,baz=52,slow=11,SNR=1.5 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.67** | **345** | PKPbc | | **PKPdf** | **02 07 11.2** | **+2.1** |
| | comp=Z,0.5nm,0.6s,baz=78,slow=7.0,SNR=2.5 | | | | | | | |

*IDC* ***19*** *01:49:27.2±3.9, 18.°28S×177.°89W, h622km±48km, mb3.2/10, mbtmp4.1/11, Error ellipse: s-maj=24.4km s-min=22.1km az=71.0*
*NEIC* ***19*** *01:49:28.3±1.8, 18.°3S±0.°2×177.°8W±0.°2, h634km±22km, mb4.4/15, Error ellipse: s-maj=26.8km s-min=23.5km az=173.0*
**ISC 19 01:49:28.9±0.6, 18.°2S±0.°1×177.°8W±0.°1, h650km, n35, σ1°15/35, mb4.2/20, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.96** | **277** | P | | **P** | **01 50 56.3** | **-1.7** |
| **AFI** | **Afiamalu** | **7.22** | **54** | P | | **P** | **01 51 21.2** | **-2.2** |
| **NIUE** | **Niue** | **7.53** | **98** | P | | **P** | **01 51 23.1** | **-2.7** |
| **DZM** | **Mont Dzumac** | **15.26** | **253** | P | | **P** | **01 52 37.9** | **+0.2** |
| | 3.8nm,0.5s,baz=132,slow=12,SNR=8.4 | | | | | | | |
| **URZ** | **Urewera** | **20.44** | **191** | P | | **P** | **01 53 22.8** | **-1.5** |
| | 4.2nm,0.3s,baz=22,slow=3.4,SNR=6.8 | | | | | | | |
| | 4.2nm,0.3s | | | | | | | |
| **LTZ** | **Lake Taylor** | **25.88** | **197** | P | | **P** | **01 54 12.9** | **+0.6** |
| **INZ** | **Inchbonnie** | **26.06** | **198** | P | | **P** | **01 54 12.3** | **-1.6** |
| INZ | | | | | IAmb | IAmb | 01 54 17.9 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **OXZ** | **Oxford** | **26.44** | **197** | P | | **P** | **01 54 15.9** | **-1.3** |
| OXZ | | | | | IAmb | IAmb | 01 54 30.9 | |
| | comp=Z,8.1nm,0.6s | | | | | | | |
| **MQZ** | **McQueen's Vall** | **26.64** | **196** | P | | **P** | **01 54 17.9** | **-1.0** |
| MQZ | | | | | IAmb | IAmb | 01 54 35.1 | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.30** | **200** | P | | **P** | **01 54 24.3** | **-0.3** |
| **WHZ** | **Wether Hill Ro** | **30.00** | **200** | P | | **P** | **01 54 48.8** | **+0.9** |
| **CTAO** | **Charters Tower** | **33.95** | **261** | P | | **P** | **01 55 21.1** | **-0.5** |
| CTAO | | | | | IAmb | IAmb | 01 55 22.3 | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **33.96** | **233** | P | | **P** | **01 55 21.8** | **+0.3** |
| CAN | | | | | IAmb | IAmb | 01 55 22.8 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **37.67** | **271** | P | | **P** | **01 55 52.2** | **+0.1** |
| COEN | | | | | IAmb | IAmb | 01 55 53.1 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | | **P** | **01 56 39.5** | **-0.1** |
| BBOO | | | | | IAmb | IAmb | 01 56 55.4 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.94** | **260** | P | | **P** | **01 56 48.4** | **-0.6** |
| **WB0** | **Warramunga Arr** | **45.10** | **260** | P | | **P** | **01 56 49.8** | **-0.4** |
| **WB2** | **Warramunga Arr** | **45.12** | **260** | P | | **P** | **01 56 49.1** | **-1.2** |
| **WRA** | **Warramunga Arr** | **45.13** | **260** | P | | **P** | **01 56 49.5** | **-0.9** |
| | comp=Z,1.3nm,0.4s,baz=96,slow=7.5,SNR=7.7 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.25** | **255** | P | | **P** | **01 56 50.9** | **-0.3** |
| | comp=Z,1.1nm,0.5s,baz=88,slow=8.1,SNR=3.0 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **50.38** | **245** | P | | **P** | **01 57 28.4** | **-0.7** |
| FORT | | | | | IAmb | IAmb | 01 57 46.6 | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | | **P** | **01 59 49.4** | **+1.6** |
| QSPA | | | | | IAmb | IAmb | 01 59 49.9 | |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | | **P** | **01 59 48.5** | **+0.6** |
| | comp=Z,6.1nm,0.6s,baz=322,slow=0.4,SNR=27 | | | | | | | |
| | comp=Z,6.1nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.27** | **44** | P | | **P** | **02 00 30.2** | **+0.8** |
| | comp=Z,0.4nm,0.7s,baz=213,slow=6.7,SNR=3.6 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.69** | **57** | P | | **P** | **02 01 03.5** | **+2.0** |
| | comp=Z,0.6nm,0.7s,baz=224,slow=5.6,SNR=8.8 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.08** | **13** | P | | **P** | **02 01 02.0** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=220,slow=5.3,SNR=4.0 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.20** | **43** | P | | **P** | **02 01 09.8** | **+1.3** |
| | comp=Z,0.5nm,0.7s,baz=185,slow=10,SNR=1.8 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.52** | **290** | P | | **P** | **02 01 20.9** | **+1.4** |
| | comp=Z,0.8nm,0.3s,baz=137,slow=8.6,SNR=2.5 | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.98** | **180** | ⇑P | | **P** | **02 01 21.5** | **+0.7** |
| | comp=Z,108nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.26** | **178** | ⇑P | | **P** | **02 01 22.3** | **+0.3** |
| | comp=Z,22nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.26** | **178** | P | | **P** | **02 01 22.0** | **0.0** |
| | comp=Z,0.9nm,0.7s,baz=219,slow=11,SNR=5.2 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.38** | **176** | ⇑P | | **P** | **02 01 23.3** | **+0.8** |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.82** | **177** | ⇑P | | **P** | **02 01 25.6** | **+1.1** |
| | comp=Z,3.9nm,0.7s,baz=184,slow=5.2 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.05** | **177** | ⇑P | | **P** | **02 01 26.5** | **+1.0** |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.79** | **303** | PKPbc | | **PKPbc** | **02 08 00.1** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=64,slow=7.5,SNR=1.7 | | | | | | | |

*NEIC* ***19*** *01:49:41.1±1.7, 69.°24N±0.°03×146.°53W±0.°04, h10km±1km, Error ellipse: s-maj=4.8km s-min=2.8km az=344.0*
**AEIC 19 01:49:39.5±1.9, 69.°17N±0.°02×146.°54W±0.°06, h5km±5km, ML1.9, ML1.8/57(NEIC), Error ellipse: s-maj=3.4km s-min=3.0km az=164.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s | ISC |
| **D25K** | **Kavik River** | **0.16** | **21** | | Pg | | 01 49 42.7 | -0.1 |
| D25K | | | | | Sg | Sg | 01 49 45.8 | +0.9 |
| D25K | | | | | IAML | | 01 49 46.7 | |
| | comp=N,283nm,0.6s | | | | | | | |
| D25K | | | | | IAML | | 01 49 47.8 | |
| | comp=E,367nm,0.9s | | | | | | | |
| **D24K** | **Happy Valley** | **0.82** | **270** | | | Pb | 01 49 56.1 | -0.1 |
| D24K | | | | | Sg | Sb | 01 50 06.8 | -0.7 |
| D24K | | | | | IAML | | 01 50 09.3 | |
| | comp=N,38nm,1.0s | | | | | | | |
| D24K | | | | | IAML | | 01 50 14.4 | |
| | comp=E,34nm,1.0s | | | | | | | |
| **C26K** | **Camden Bay** | **0.94** | **37** | | | Pg | 01 49 57.2 | -0.4 |
| C26K | | | | | | Sg | 01 50 09.6 | -0.1 |
| **C26K** | **Camden Bay** | **0.94** | **37** | IAML | | | 01 50 17.3 | |
| | comp=E,20nm,0.6s | | | | | | | |
| **C24K** | **Franklin Bluff** | **0.94** | **307** | | | Pg | 01 49 57.9 | +0.4 |
| C24K | | | | | IAML | | 01 50 15.1 | |
| | comp=E,32nm,1.4s | | | | | | | |
| C24K | | | | | IAML | | 01 50 17.8 | |
| | comp=N,32nm,1.2s | | | | | | | |
| **C24K** | **Franklin Bluff** | **0.94** | **307** | | | Sn | 01 50 12.3 | -0.8 |
| **TOLK** | **Toolik Lake Re** | **1.22** | **245** | | | Pg | 01 50 02.7 | -0.2 |
| TOLK | | | | | Sg | Sb | 01 50 19.6 | +0.4 |
| **E24K** | **Your Creek** | **1.31** | **214** | | | Pn | 01 50 04.0 | -0.6 |
| **D23K** | **Nanushuk River** | **1.50** | **264** | | | Pg | 01 50 08.2 | -0.1 |
| D23K | | | | | IAML | | 01 50 33.0 | |
| | comp=E,16nm,0.9s | | | | | | | |
| D23K | | | | | IAML | | 01 50 53.6 | |
| | comp=N,8.2nm,1.1s | | | | | | | |
| **D23K** | **Nanushuk River** | **1.50** | **264** | | | Sg | 01 50 29.6 | +1.9 |
| **C23K** | **Itkillik River** | **1.58** | **297** | | | Pb | 01 50 08.8 | -0.4 |
| C23K | | | | | IAML | | 01 50 35.3 | |
| | comp=E,8.6nm,0.4s | | | | | | | |
| C23K | | | | | IAML | | 01 50 38.8 | |
| | comp=N,18nm,0.7s | | | | | | | |
| **E23K** | **Chandalar** | **1.59** | **227** | | | Pb | 01 50 09.3 | -0.1 |
| E23K | | | | | IAML | | 01 50 36.1 | |
| | comp=N,19nm,0.7s | | | | | | | |
| **E23K** | **Chandalar** | **1.59** | **227** | | | Sg | 01 50 33.3 | +2.7 |
| **F25K** | **Christian Rive** | **1.62** | **168** | | | Pg | 01 50 10.5 | 0.0 |
| F25K | | | | | Sn | Sg | 01 50 32.3 | +0.8 |
| **F26K** | **Sheenjek River** | **1.73** | **148** | | | Pb | 01 50 11.9 | +0.2 |
| F26K | | | | | IAML | | 01 50 37.8 | |
| | comp=N,8.5nm,0.6s | | | | | | | |
| F26K | | | | | IAML | | 01 50 38.4 | |
| | comp=E,14nm,0.5s | | | | | | | |
| **F24K** | **Squaw Lake** | **1.74** | **197** | | | Pb | 01 50 11.7 | -0.1 |
| F24K | | | | | IAML | | 01 50 37.8 | |
| | comp=E,15nm,0.7s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **1.90** | **157** | | Pn | Pb | 01 50 14.9 | +0.3 |
| **D27M** | **Malcolm River** | **1.99** | **85** | | Pn | Pb | 01 50 15.3 | -0.8 |
| D27M | | | | | IAML | | 01 51 05.6 | |
| | comp=E,10nm,0.2s | | | | | | | |
| **E27K** | **Coleen River** | **2.06** | **116** | | | Pb | 01 50 17.0 | -0.4 |
| E27K | | | | | IAML | | 01 51 14.6 | |
| | comp=N,6.5nm,0.4s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.19** | **244** | | | Pb | 01 50 18.8 | -0.9 |
| **D22K** | **Ayikyak River** | **2.23** | **265** | | Pn | Pb | 01 50 19.1 | -1.1 |
| **G26K** | **Porcupine Rive** | **2.46** | **154** | | | Pb | 01 50 22.8 | -1.3 |
| **G24K** | **Hadweenzic Riv** | **2.51** | **189** | | Pn | Pn | 01 50 22.8 | +1.9 |
| G24K | | | | | IAML | | 01 51 14.9 | |
| | comp=N,5.9nm,1.4s | | | | | | | |
| **E28M** | **Babbage River** | **2.60** | **99** | | Pn | Pn | 01 50 23.8 | +1.7 |
| E28M | | | | | IAML | | 01 51 08.1 | |
| | comp=N,3.9nm,0.5s | | | | | | | |
| E28M | | | | | IAML | | 01 51 30.5 | |
| | comp=E,2.9nm,0.7s | | | | | | | |
| **F22K** | **John River** | **2.68** | **234** | | | Pb | 01 50 26.0 | -1.9 |
| **G23K** | **Bananza Creek** | **2.80** | **210** | | Pn | Pn | 01 50 27.3 | +2.4 |
| **E29M** | **Blow River** | **3.24** | **100** | | Pn | Pn | 01 50 33.0 | +2.0 |
| E29M | | | | | IAML | | 01 51 46.0 | |
| | comp=N,1.8nm,0.2s | | | | | | | |
| **F21K** | **Alatna River** | **3.25** | **236** | | Pn | Pn | 01 50 32.9 | +1.8 |
| F21K | | | | | IAML | | 01 51 42.0 | |
| | comp=N,2.4nm,0.8s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.39** | **189** | | Pn | Pn | 01 50 34.8 | +1.7 |
| H24K | | | | | IAML | | 01 51 30.6 | |
| | comp=N,2.7nm,1.2s | | | | | | | |
| **H23K** | **Yukon River** | **3.56** | **200** | | Pn | Pn | 01 50 35.1 | -0.2 |
| H23K | | | | | IAML | | 01 51 36.7 | |
| | comp=E,2.8nm,0.9s | | | | | | | |
| H23K | | | | | IAML | | 01 51 45.4 | |
| | comp=N,1.2nm,0.7s | | | | | | | |
| **G29M** | **Pine Creek** | **3.92** | **121** | | Pn | Pn | 01 50 41.6 | +1.3 |
| G29M | | | | | IAML | | 01 51 39.1 | |
| | comp=E,1.4nm,0.3s | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.10** | **160** | | Pn | Pn | 01 50 44.8 | +2.1 |
| I26K | | | | | IAML | | 01 53 02.2 | |
| | comp=E,1.4nm,1.2s | | | | | | | |
| **D19K** | **Kuna River** | **4.25** | **266** | | Pn | Pn | 01 50 45.8 | +0.9 |
| D19K | | | | | IAML | | 01 52 16.1 | |
| | comp=E,1.1nm,0.9s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.29** | **190** | | Pn | Pn | 01 50 47.6 | +2.3 |
| **I28M** | **Miner Creek** | **4.53** | **143** | | Pn | Pn | 01 50 51.4 | +2.7 |
| **CCB** | **Clear Creek Bu** | **4.57** | **187** | | Pn | Pn | 01 50 51.0 | +1.7 |
| **EPYK** | **Eagle Plains** | **4.67** | **122** | | Pn | Pn | 01 50 51.7 | +1.1 |
| **J26L** | **Joseph Creek** | **4.84** | **165** | | Pn | Pn | 01 50 55.3 | +2.3 |
| **EGAK** | **Eagle** | **4.89** | **152** | | Pn | Pn | 01 50 55.4 | +1.8 |
| **I29M** | **Ogilvie Camp,** | **4.98** | **136** | | Pn | Pn | 01 50 56.7 | +1.8 |
| **SCRK** | **Sand Creek** | **5.32** | **168** | | Pn | Pn | 01 51 01.4 | +1.8 |

*IDC* ***19*** *01:49:52.0±7.4, 17.°30S×179.°06W, h667km±94km, mb3.0/5, mbtmp4.0/5, Error ellipse: s-maj=102.0km s-min=41.9km az=157.0*
**ISC 19 01:49:50.8±1.6, 17.°2S±0.°6×179.°2W±0.°4, h650km, n9, σ1°27/8, mb3.8/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | ISC | h m s |

**s-min=57.1km az=145.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **47.09** | **259** | P | P | 01 58 55.9 | -0.2 |
| | 0.8nm,0.5s,baz=95,slow=7.2,SNR=6.2 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **47.22** | **254** | P | P | 01 58 57.0 | -0.1 |
| | 2.9nm,0.6s,baz=88,slow=8.5,SNR=8.2 | | | | | | |
| | 2.9nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **146.29** | **317** | PKPbc | PKPbc | 02 10 04.8 | -0.3 |
| | 0.2nm,0.6s,baz=66,slow=4.4,SNR=2.0 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **148.02** | **305** | PKPbc | PKPbc | 02 10 08.9 | -1.3 |
| | 0.9nm,0.5s,baz=66,slow=5.0,SNR=2.1 | | | | | | |

*IDC **19** 01:53:21.5±3.2, 17.°32S×178.°45W, h482km±37km, mb4.0/12, mbtmp4.8/12, Error ellipse: s-maj=24.3km s-min=13.9km az=170.0*

*NEIC **19** 01:53:27.6±2.0, 17.°34S±0.°06×178.°49W±0.°10, h551km±7km, mb4.5/83, Error ellipse: s-maj=14.6km s-min=8.4km az=67.0*

**ISC 19 01:53:27.0±0.4, 17.°36S±0.°09×178.°52W±0.°07, h547km, n362, n0 67/360, mb4.5/55, 10D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.29** | **263** | P | **P** | **01 54 44.6** | **+0.9** |
| **NIUE** | **Niue** | **8.34** | **103** | P | **P** | **01 55 27.1** | **-1.0** |
| **FUNA** | **Funafuti** | **9.06** | **345** | P | **P** | **01 55 34.7** | **-0.7** |
| **LIFNC** | **LIFOU** | **13.88** | **254** | P | **P** | **01 56 23.4** | **-1.6** |
| **PINNC** | **Pines Island,** | **14.19** | **246** | P | **P** | **01 56 27.9** | **-0.2** |
| **DZM** | **Mont Dzumac** | **14.91** | **249** | P | **P** | **01 56 38.1** | **+2.3** |
| **DZM** | **Mont Dzumac** | **14.91** | **249** | P | **P** | **01 56 35.7** | **-0.1** |
| | 3.7nm,0.5s,baz=85,slow=17,SNR=9.4 | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.57** | **256** | P | **P** | **01 56 51.7** | **-0.3** |
| **RAR** | **Rarotonga** | **18.10** | **105** | P | **P** | **01 57 07.0** | **+1.0** |
| **URZ** | **Urewera** | **21.17** | **190** | P | **P** | **01 57 31.6** | **-2.0** |
| | 4.6nm,0.4s,baz=1.6,slow=4.3,SNR=6.9 | | | | | | |
| | 4.6nm,0.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **22.16** | **190** | P | **P** | **01 57 41.1** | **-1.5** |
| BKZ | | | | IAmb | IAmb | 01 57 48.1 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **THZ** | **Tophouse** | **25.41** | **195** | P | **P** | **01 58 12.1** | **+0.7** |
| THZ | | | | IAmb | IAmb | 01 58 37.6 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.53** | **195** | P | **P** | **01 58 21.5** | **+0.2** |
| **PPT** | **Papeete** | **27.60** | **95** | P | **P** | **01 58 27.7** | **-3.2** |
| | comp=Z,29nm,0.8s,baz=233,slow=20,SNR=3.9 | | | | | | |
| | comp=Z,29nm,0.8s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.61** | **95** | P | **P** | **01 58 31.2** | **+0.1** |
| **FOZ** | **Fox Glacier** | **27.90** | **198** | P | **P** | **01 58 33.4** | **+0.2** |
| **LBZ** | **Lake Benmore** | **28.58** | **197** | P | **P** | **01 58 38.1** | **-1.0** |
| LBZ | | | | IAmb | IAmb | 01 58 52.1 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **ODZ** | **Otahua Downs** | **29.06** | **196** | P | **P** | **01 58 42.4** | **-0.9** |
| ODZ | | | | IAmb | IAmb | 01 59 24.1 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WKZ** | **Wanaka** | **29.32** | **198** | P | **P** | **01 58 45.4** | **-0.2** |
| **EIDS** | **Eidsvold** | **29.36** | **249** | P | **P** | **01 58 46.5** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 01 59 26.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **MLZ** | **Mavora Lakes** | **30.08** | **199** | P | **P** | **01 58 52.9** | **+0.8** |
| **CTA** | **Charters Tower** | **33.44** | **260** | P | **P** | **01 59 19.2** | **-1.9** |
| | comp=Z,0.2nm,0.7s,baz=60,slow=9.8,SNR=3.7 | | | | | | |
| **CTAO** | **Charters Tower** | **33.44** | **260** | P | **P** | **01 59 21.1** | **0.0** |
| CTAO | | | | IAmb | IAmb | 01 59 44.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **PMG** | **Port Moresby** | **34.27** | **279** | P | **P** | **01 59 28.4** | **+0.3** |
| **PMG** | **Port Moresby** | **34.27** | **279** | P | **P** | **01 59 27.9** | **-0.2** |
| | comp=Z,28nm,0.9s,baz=89,slow=5.9,SNR=6.0 | | | | | | |
| | comp=Z,28nm,0.9s | | | | | | |
| **COEN** | **Coen** | **37.00** | **270** | P | **P** | **01 59 51.3** | **+0.6** |
| COEN | | | | IAmb | IAmb | 01 59 52.0 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **KEKH** | **Kekaha** | **43.22** | **26** | P | **P** | **02 00 39.3** | **-1.0** |
| **HLK** | **Haleakala** | **43.73** | **31** | P | **P** | **02 00 44.1** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.63** | **259** | P | **P** | **02 00 50.6** | **-0.8** |
| | comp=Z,1.8nm,0.5s,baz=94,slow=7.1,SNR=20 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.84** | **254** | | **P** | **02 00 52.9** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 02 00 53.7 | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.84** | **254** | P | **P** | **02 00 53.2** | **+0.2** |
| | comp=Z,14nm,0.4s,baz=89,slow=7.9,SNR=66 | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **48.71** | **268** | P | **P** | **02 01 21.9** | **-0.3** |
| MTN | | | | IAmb | IAmb | 02 01 36.8 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **50.15** | **244** | P | **P** | **02 01 32.3** | **-0.3** |
| FORT | | | | IAmb | IAmb | 02 01 37.2 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.44** | **264** | P | **P** | **02 01 35.2** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 02 01 48.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.02** | **260** | P | **P** | **02 01 53.9** | **+0.5** |
| **AMKA** | **Amchitka** | **68.47** | **359** | P | **P** | **02 03 33.1** | **-1.2** |
| **KIWB** | **Kanaga Island** | **68.93** | **1** | P | **P** | **02 03 36.2** | **-0.9** |
| **QSPA** | **South Pole Qui** | **72.69** | **180** | P | **P** | **02 04 00.1** | **+0.7** |
| **FALS** | **False Pass** | **73.07** | **9** | P | **P** | **02 04 01.9** | **+0.6** |
| | baz=195 | | | | | | |
| PEA0B | **Petropavlovsk-** | **73.12** | **345** | P | **P** | **02 04 01.7** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **73.12** | **345** | P | **P** | **02 04 01.4** | **-0.4** |
| **PETK** | **Petropavlovsk-** | **73.12** | **345** | P | **P** | **02 04 01.5** | **-0.3** |
| | comp=Z,5.7nm,0.6s,baz=117,slow=7.5,SNR=9.3 | | | | | | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **P08K** | **Saint George I** | **74.06** | **5** | P | **P** | **02 04 07.4** | **+0.5** |
| | baz=189 | | | | | | |
| **S12K** | **Black Hills** | **74.10** | **10** | P | **P** | **02 04 05.7** | **-1.6** |
| **SPIA** | **Saint Paul Isl** | **74.57** | **5** | P | **P** | **02 04 10.4** | **+0.6** |
| | baz=188 | | | | | | |
| **S14K** | **Fog Glacier** | **75.08** | **11** | P | **P** | **02 04 13.5** | **+0.7** |
| | baz=199 | | | | | | |
| **R16K** | **Pilot Point** | **76.65** | **11** | P | **P** | **02 04 22.6** | **+1.3** |
| | baz=200 | | | | | | |
| **KMRM** | **Mail Ridge** | **76.66** | **40** | P | **P** | **02 04 22.7** | **+0.7** |
| KMRM | | | | IAmb | IAmb | 02 04 53.9 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **76.95** | **12** | P | **P** | **02 04 23.3** | **+0.2** |
| | baz=202 | | | | | | |
| **OHAK** | **Old Harbor** | **77.23** | **14** | P | **P** | **02 04 24.6** | **0.0** |
| **OHAK** | **Old Harbor** | **77.23** | **14** | P | **P** | **02 04 24.1** | **-0.4** |
| | baz=205 | | | | | | |
| **R18K** | **Karluk** | **77.28** | **13** | P | **P** | **02 04 25.3** | **+0.5** |
| | baz=204 | | | | | | |
| **KRMB** | **Red Mountain** | **77.32** | **39** | P | **P** | **02 04 26.7** | **+1.1** |
| KRMB | | | | IAmb | IAmb | 02 04 36.8 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **CMB** | **Columbia Colle** | **77.51** | **43** | P | **P** | **02 04 27.4** | **+0.8** |
| MONP2 | **Monument Peak** | **77.54** | **50** | P | **P** | **02 04 28.2** | **+1.1** |
| | baz=240 | | | | | | |
| **O14K** | **Tigyukauivet M** | **77.63** | **9** | P | **P** | **02 04 25.1** | **-1.6** |
| **PFO** | **Pinyon Flats O** | **77.88** | **49** | P | **P** | **02 04 28.9** | **+0.1** |
| | baz=240 | | | | | | |
| **KDAK** | **Kodiak Island** | **77.90** | **14** | P | **P** | **02 04 27.6** | **-0.5** |
| **KDAK** | **Kodiak Island** | **77.90** | **14** | P | **P** | **02 04 28.4** | **+0.3** |
| | baz=205 | | | | | | |
| **MDPB** | **Devils Postpil** | **78.16** | **44** | P | **P** | **02 04 31.1** | **+0.7** |
| **Q18K** | **Katmai Hardscr** | **78.17** | **12** | P | **P** | **02 04 29.8** | **+0.1** |
| | baz=203 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.17** | **39** | P | **P** | **02 04 31.1** | **+1.0** |
| **OMMB** | **Old Mammoth Mi** | **78.20** | **44** | P | **P** | **02 04 31.5** | **+0.8** |
| **N14K** | **Kuskokwak Cree** | **78.22** | **9** | P | **P** | **02 04 30.1** | **+0.4** |
| | baz=196 | | | | | | |
| **WAKR** | **Walker** | **78.40** | **43** | P | **P** | **02 04 32.6** | **+1.1** |
| **N15K** | **Kwethluk River** | **78.69** | **9** | P | **P** | **02 04 33.0** | **+0.6** |
| | baz=198 | | | | | | |
| **YERR** | **Yerington** | **78.79** | **43** | P | **P** | **02 04 34.2** | **+0.5** |
| YERR | | | | IAmb | IAmb | 02 04 35.2 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **P18K** | **Big Mountain,** | **78.81** | **12** | P | **P** | **02 04 32.6** | **-0.5** |
| | baz=203 | | | | | | |
| **LHV** | **Little Huntoon** | **78.88** | **44** | P | **P** | **02 04 35.1** | **+1.3** |
| LHV | | | | IAmb | IAmb | 02 04 36.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **M14K** | **Bethel** | **78.97** | **8** | P | **P** | **02 04 34.4** | **+0.6** |
| | baz=196 | | | | | | |
| **PAHR** | **Pah Rah Range** | **79.09** | **42** | P | **P** | **02 04 35.6** | **+0.5** |
| **M15K** | **Kasigluk River** | **79.10** | **9** | P | **P** | **02 04 35.0** | **+0.5** |
| | baz=197 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.10** | **44** | P | **P** | **02 04 35.6** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **79.10** | **44** | P | **P** | **02 04 36.1** | **+0.8** |
| | comp=Z,5.2nm,0.8s,baz=226,slow=9.0,SNR=39 | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **N16K** | **Nishlik Lake** | **79.19** | **10** | P | **P** | **02 04 35.8** | **+0.8** |
| | baz=199 | | | | | | |
| **NV11** | **Mina Array Sit** | **79.20** | **44** | P | **P** | **02 04 36.1** | **+0.3** |
| **GMN** | **Gold Mountain** | **79.21** | **45** | P | **P** | **02 04 36.5** | **+0.5** |
| **O18K** | **Koktuh Hills** | **79.24** | **12** | P | **P** | **02 04 35.4** | **+0.1** |
| | baz=203 | | | | | | |
| **N17K** | **Nushagak Hills** | **79.50** | **11** | P | **P** | **02 04 37.1** | **+0.5** |
| | baz=201 | | | | | | |
| **KVN** | **Kaiserville** | **79.57** | **44** | P | **P** | **02 04 37.6** | **-0.1** |
| **TPH** | **Tonopah** | **79.64** | **45** | P | **P** | **02 04 38.6** | **+0.4** |
| TPH | | | | IAmb | IAmb | 02 04 39.8 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **M16K** | **Timber Creek** | **79.68** | **10** | P | **P** | **02 04 38.7** | **+1.2** |
| | baz=199 | | | | | | |
| **TPNV** | **Topopah Spring** | **79.72** | **46** | P | **P** | **02 04 38.8** | **+0.3** |
| | baz=239 | | | | | | |
| **K13K** | **Kusilvak Mount** | **79.79** | **7** | P | **P** | **02 04 39.2** | **+1.1** |
| | baz=193 | | | | | | |
| **N18K** | **Kilae Creek** | **79.88** | **11** | P | **P** | **02 04 39.0** | **+0.3** |
| | baz=202 | | | | | | |
| **L15K** | **Ungalak Mounta** | **79.93** | **8** | P | **P** | **02 04 39.5** | **+0.6** |
| | baz=196 | | | | | | |
| **J05D** | **Fort Rock, OR** | **79.96** | **39** | P | **P** | **02 04 40.2** | **+0.6** |
| J05D | | | | IAmb | IAmb | 02 04 41.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **O20K** | **Slope Mountain** | **79.97** | **13** | P | **P** | **02 04 39.7** | **+0.4** |
| | baz=205 | | | | | | |
| **BRSE** | **Bradley Lake S** | **80.08** | **14** | P | **P** | **02 04 40.1** | **+0.4** |
| | baz=207 | | | | | | |
| **L16K** | **Owhat River** | **80.25** | **9** | P | **P** | **02 04 41.2** | **+0.7** |
| | baz=198 | | | | | | |
| **N19K** | **Bonanza Creek** | **80.27** | **12** | P | **P** | **02 04 41.4** | **+0.6** |
| | baz=203 | | | | | | |
| **M17K** | **Holitna River** | **80.28** | **10** | P | **P** | **02 04 41.8** | **+1.1** |
| | baz=200 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **80.52** | **8** | P | **P** | **02 04 42.0** | **+0.1** |
| K15K | | | | IAmb | IAmb | 02 04 43.7 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **80.52** | **8** | P | **P** | **02 04 42.8** | **+0.9** |
| | baz=196 | | | | | | |
| **M18K** | **Stony River** | **80.64** | **11** | P | **P** | **02 04 43.3** | **+0.7** |
| | baz=202 | | | | | | |
| **J14K** | **Nanvaranak Lak** | **80.71** | **7** | P | **P** | **02 04 44.5** | **+1.7** |
| | baz=194 | | | | | | |
| **L17K** | **Donlin** | **80.83** | **9** | P | **P** | **02 04 45.0** | **+1.5** |
| | baz=200 | | | | | | |
| **R11B** | **Troy Canyon, C** | **80.88** | **45** | P | **P** | **02 04 45.2** | **+0.6** |
| | baz=239 | | | | | | |
| **CAPN** | **Captain Cook N** | **80.91** | **13** | P | **P** | **02 04 44.4** | **+0.4** |
| | baz=206 | | | | | | |
| **GAMB** | **Gambell** | **81.05** | **3** | P | **P** | **02 04 44.6** | **0.0** |
| | baz=187 | | | | | | |
| **WVOR** | **Wild Horse Val** | **81.06** | **40** | P | **P** | **02 04 45.7** | **+0.4** |
| WVOR | | | | IAmb | IAmb | 02 04 47.2 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **N20K** | **Mount Spurr** | **81.08** | **13** | P | **P** | **02 04 44.1** | **-0.9** |
| | baz=205 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **81.08** | **13** | P | **P** | **02 04 44.2** | **-0.7** |
| | baz=205 | | | | | | |
| **P23K** | **Montague Islan** | **81.11** | **15** | P | **P** | **02 04 45.0** | **0.0** |
| | baz=210 | | | | | | |
| **L18K** | **Granite Mounta** | **81.18** | **10** | P | **P** | **02 04 45.6** | **+0.3** |
| | baz=201 | | | | | | |
| **M19K** | **Big River Lodg** | **81.29** | **11** | P | **P** | **02 04 46.1** | **+0.1** |
| | baz=203 | | | | | | |
| **K17K** | **Iditarod** | **81.38** | **9** | P | **P** | **02 04 46.6** | **+0.2** |
| | baz=199 | | | | | | |
| **IZE** | **Izee** | **81.44** | **39** | P | **P** | **02 04 47.9** | **+0.6** |
| **TUC** | **Tucson** | **81.45** | **52** | P | **P** | **02 04 48.7** | **+1.1** |
| | baz=243 | | | | | | |
| **L19K** | **White Mountain** | **81.46** | **11** | P | **P** | **02 04 47.4** | **+0.6** |
| | baz=203 | | | | | | |
| **J16K** | **Anvik River** | **81.59** | **8** | P | **P** | **02 04 48.5** | **+1.0** |
| | baz=197,SNR=6.4 | | | | | | |
| **SUA** | **Susitna One** | **81.62** | **13** | P | **P** | **02 04 47.5** | **-0.3** |
| | baz=207 | | | | | | |
| **PWL** | **Port Wells** | **81.64** | **14** | P | **P** | **02 04 47.2** | **-0.5** |
| | baz=209 | | | | | | |
| **J08A** | **Circle Bar Ran** | **81.67** | **40** | P | **P** | **02 04 49.2** | **+0.8** |
| J08A | | | | IAmb | IAmb | 02 04 50.1 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **Q12A** | **Willow Creek R** | **81.74** | **45** | P | **P** | **02 04 49.6** | **+0.6** |
| Q12A | | | | IAmb | IAmb | 02 04 50.7 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **J17K** | **VABM Dome** | **81.91** | **9** | P | **P** | **02 04 49.2** | **+0.1** |
| J17K | | | | IAmb | IAmb | 02 04 50.0 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **J17K** | **VABM Dome** | **81.91** | **9** | P | **P** | **02 04 49.7** | **+0.7** |
| | baz=199 | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **81.91** | **50** | P | **P** | **02 04 51.4** | **+1.4** |
| X16A | | | | IAmb | IAmb | 02 04 52.5 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **L20K** | **Farewell, AK** | **81.92** | **11** | P | **P** | **02 04 49.4** | **+0.2** |
| | baz=204 | | | | | | |
| **GLI** | **Glacier Island** | **81.95** | **15** | P | **P** | **02 04 48.3** | **-1.0** |
| **GLI** | **Glacier Island** | **81.95** | **15** | P | **P** | **02 04 48.8** | **-0.5** |
| | baz=210,SNR=6.6 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **82.01** | **16** | P | **P** | **02 04 49.3** | **-0.2** |
| | baz=211 | | | | | | |
| **M22K** | **Willow** | **82.02** | **13** | P | **P** | **02 04 49.3** | **-0.3** |
| | baz=207 | | | | | | |
| **SPR3** | **Spring Creek 3** | **82.06** | **45** | P | **P** | **02 04 51.0** | **+0.2** |
| **KNK** | **Knik Glacier** | **82.09** | **14** | P | **P** | **02 04 50.1** | **+0.1** |
| | baz=209 | | | | | | |
| **PMR** | **Palmer** | **82.10** | **14** | P | **P** | **02 04 49.8** | **-0.2** |
| | baz=208 | | | | | | |
| **PSUT** | **Pine Spring** | **82.15** | **46** | P | **P** | **02 04 52.2** | **+1.0** |
| PSUT | | | | IAmb | IAmb | 02 04 52.7 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **U15A** | **North Rim** | **82.23** | **48** | P | **P** | **02 04 52.1** | **+0.4** |
| U15A | | | | IAmb | IAmb | 02 04 54.1 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **ELK** | **Elko** | **82.33** | **43** | P | **P** | **02 04 52.3** | **+0.3** |
| **J18K** | **Innoko River** | **82.34** | **10** | P | **P** | **02 04 51.4** | **+0.1** |
| J18K | | | | IAmb | IAmb | 02 04 52.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **J18K** | **Innoko River** | **82.34** | **10** | P | **P** | **02 04 51.5** | **+0.3** |
| | baz=201,SNR=10 | | | | | | |
| **SIT** | **Sitka** | **82.41** | **22** | P | **P** | **02 04 52.8** | **+1.1** |
| | baz=221 | | | | | | |
| **G08A** | **Pilot Rock** | **82.44** | **38** | P | **P** | **02 04 52.7** | **+0.4** |
| **WUAZ** | **Wupatki** | **82.47** | **49** | P | **P** | **02 04 53.6** | **+0.8** |
| **WUAZ** | **Wupatki** | **82.47** | **49** | P | **P** | **02 04 54.0** | **+1.2** |
| | baz=242 | | | | | | |
| **SML** | **Sawmill** | **82.47** | **14** | P | **P** | **02 04 52.7** | **+0.7** |
| | baz=209 | | | | | | |
| **U33K** | **Whale Pass** | **82.53** | **24** | P | **P** | **02 04 53.0** | **+0.7** |
| | baz=223 | | | | | | |
| **V35K** | **Ketchikan** | **82.56** | **25** | P | **P** | **02 04 52.7** | **+0.2** |
| | baz=225 | | | | | | |
| **CUT** | **Chulitna** | **82.57** | **13** | P | **P** | **02 04 52.2** | **-0.2** |
| | baz=207 | | | | | | |
| **M23K** | **Glacier View** | **82.60** | **14** | P | **P** | **02 04 52.3** | **-0.3** |
| | baz=210 | | | | | | |
| **E07A** | **Sunnyside** | **82.64** | **36** | P | **P** | **02 04 53.5** | **+0.3** |
| E07A | | | | IAmb | IAmb | 02 04 54.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **BMRM** | **Bremner River** | **82.66** | **16** | P | **P** | **02 04 52.8** | **-0.1** |
| | baz=212 | | | | | | |
| **K20K** | **Telida** | **82.69** | **11** | P | **P** | **02 04 52.5** | **-0.5** |
| K20K | | | | IAmb | IAmb | 02 04 53.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **K20K** | **Telida** | **82.69** | **11** | P | **P** | **02 04 53.0** | **0.0** |
| | baz=203,SNR=7.3 | | | | | | |
| **H16K** | **Elim** | **82.69** | **7** | P | **P** | **02 04 53.5** | **+0.6** |
| | baz=196 | | | | | | |
| **WAX** | **Waxell Ridge** | **82.70** | **17** | P | **P** | **02 04 53.1** | **-0.1** |
| WAX | | | | IAmb | IAmb | 02 04 54.2 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **82.72** | **14** | P | **P** | **02 04 52.8** | **-0.5** |
| **SCM** | **Sheep Creek Mo** | **82.72** | **14** | P | **P** | **02 04 53.5** | **+0.2** |
| | baz=210,SNR=6.0 | | | | | | |
| **HAWA** | **Hanford** | **82.73** | **37** | P | **P** | **02 04 53.9** | **+0.2** |
| HAWA | | | | IAmb | IAmb | 02 04 55.2 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **MESA** | **MESA** | **82.73** | **17** | P | **P** | **02 04 52.5** | **-1.0** |
| | baz=215,SNR=8.5 | | | | | | |
| **KLU** | **Klutina** | **82.77** | **15** | P | **P** | **02 04 53.5** | **-0.1** |
| | baz=211 | | | | | | |
| **S31K** | **Pelican** | **82.78** | **21** | P | **P** | **02 04 53.7** | **+0.2** |
| | baz=220 | | | | | | |
| **G15K** | **Niukluk** | **82.84** | **6** | P | **P** | **02 04 54.4** | **+0.7** |
| | baz=194 | | | | | | |
| **CRQM** | **Cirque** | **82.88** | **17** | P | **P** | **02 04 53.5** | **-0.8** |
| CRQM | | | | IAmb | IAmb | 02 04 55.0 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **CRQE** | **Cirque** | **82.89** | **17** | P | **P** | **02 04 54.3** | **+0.1** |
| | baz=214,SNR=5.1 | | | | | | |
| **J19K** | **Poorman** | **83.01** | **10** | P | **P** | **02 04 55.4** | **+0.8** |
| | baz=202 | | | | | | |
| **WRAK** | **Wrangell Islan** | **83.05** | **24** | P | **P** | **02 04 55.1** | **+0.2** |
| | baz=224 | | | | | | |
| **PNL** | **Peninsula** | **83.08** | **19** | P | **P** | **02 04 55.2** | **+0.1** |
| | baz=217 | | | | | | |
| **VRDI** | **Verde Repeater** | **83.19** | **16** | P | **P** | **02 04 55.2** | **-0.5** |
| VRDI | | | | IAmb | IAmb | 02 04 55.9 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.20** | **16** | P | **P** | **02 04 55.7** | **0.0** |
| | baz=212,SNR=11 | | | | | | |
| **SEY** | **Seymchan** | **83.22** | **347** | P | **P** | **02 04 55.4** | **-0.3** |
| | comp=Z,11nm,0.6s,baz=140,slow=6.0,SNR=18 | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **83.24** | **15** | P | **P** | **02 04 56.2** | **+0.3** |
| | baz=211 | | | | | | |
| **H17K** | **Granite Mounta** | **83.27** | **8** | P | **P** | **02 04 56.6** | **+0.7** |
| | baz=198 | | | | | | |
| **GLB** | **Gilahina Butte** | **83.27** | **16** | P | **P** | **02 04 55.7** | **-0.4** |
| GLB | | | | IAmb | IAmb | 02 04 56.4 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **WAT6** | **Susitna Watana** | **83.28** | **14** | P | **P** | **02 04 56.0** | **-0.2** |
| | baz=209,SNR=7.2 | | | | | | |
| **WAT1** | **Susitna Watana** | **83.32** | **13** | P | **P** | **02 04 56.2** | **0.0** |
| | baz=209 | | | | | | |
| **J20K** | **Nowinta River** | **83.43** | **10** | P | **P** | **02 04 57.0** | **+0.3** |
| | baz=203,SNR=5.5 | | | | | | |
| MCARA | **McCarthy VSAT** | **83.43** | **16** | P | **P** | **02 04 56.5** | **-0.2** |
| | baz=214 | | | | | | |
| **CTG** | **Chitna Glacier** | **83.55** | **17** | P | **P** | **02 04 57.6** | **+0.1** |
| | baz=215,SNR=6.7 | | | | | | |
| **P29M** | **Windy Craggy** | **83.57** | **20** | P | **P** | **02 04 58.1** | **+0.6** |
| | baz=219,SNR=6.9 | | | | | | |
| **R32K** | **Eaglecrest** | **83.61** | **22** | P | **P** | **02 04 58.4** | **+0.7** |
| | baz=222 | | | | | | |
| **H18K** | **Honhosa River** | **83.68** | **8** | P | **P** | **02 04 59.3** | **+1.4** |
| | baz=199 | | | | | | |
| **O28M** | **Mount Upton** | **83.72** | **18** | P | **P** | **02 04 58.6** | **+0.1** |
| | baz=216,SNR=8.2 | | | | | | |
| **HARP** | **HAARP** | **83.74** | **15** | P | **P** | **02 04 58.7** | **+0.5** |
| | baz=212 | | | | | | |
| **DHY** | **Denali Highway** | **83.80** | **14** | P | **P** | **02 04 58.3** | **-0.5** |
| | baz=210,SNR=5.4 | | | | | | |
| **O29M** | **Mount Kennedy** | **83.83** | **19** | P | **P** | **02 04 59.4** | **+0.5** |
| | baz=218 | | | | | | |
| **PLBC** | **Pleasant Camp** | **83.88** | **20** | P | **P** | **02 04 59.6** | **+0.6** |
| | baz=220,SNR=7.7 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **83.94** | **12** | P | **P** | **02 04 58.5** | **-0.8** |
| | baz=206 | | | | | | |
| **I20K** | **Naaghedeneel** | **83.94** | **10** | P | **P** | **02 04 59.3** | **+0.2** |
| | baz=203 | | | | | | |
| **MCK** | **McKinley** | **84.03** | **13** | P | **P** | **02 04 59.3** | **-0.4** |
| | baz=208,SNR=5.3 | | | | | | |
| **PAX** | **Paxson** | **84.15** | **15** | P | **P** | **02 04 59.9** | **-0.4** |
| | baz=212 | | | | | | |
| **P30M** | **Million Dollar** | **84.20** | **20** | P | **P** | **02 05 01.6** | **+1.0** |
| | baz=220 | | | | | | |
| **YUK8** | **Steele Glacier** | **84.26** | **18** | P | **P** | **02 05 01.2** | **0.0** |
| | baz=217,SNR=9.1 | | | | | | |
| **T35M** | **Bob Quinn** | **84.27** | **24** | P | **P** | **02 05 01.7** | **+0.7** |
| | baz=226 | | | | | | |
| **M26K** | **Nabesna, AK** | **84.28** | **16** | P | **P** | **02 05 00.9** | **-0.1** |
| | baz=214,SNR=16 | | | | | | |
| **HLID** | **Hailey** | **84.29** | **41** | P | **P** | **02 05 02.7** | **+1.0** |
| | baz=240 | | | | | | |
| **H19K** | **Roundabout Mou** | **84.31** | **9** | P | **P** | **02 05 01.0** | **0.0** |
| | baz=201 | | | | | | |
| **YUK6** | **Outpost Mounta** | **84.40** | **18** | P | **P** | **02 05 01.7** | **-0.1** |
| | baz=218 | | | | | | |
| **YUK3** | **Moose Creek** | **84.46** | **17** | P | **P** | **02 05 02.4** | **+0.3** |
| | baz=216,SNR=9.3 | | | | | | |
| **H20K** | **Anotleneega Mo** | **84.52** | **10** | P | **P** | **02 05 02.6** | **+0.5** |
| | baz=203 | | | | | | |
| **M27K** | **Edge Creek, AK** | **84.54** | **16** | P | **P** | **02 05 02.8** | **+0.4** |
| | baz=215,SNR=9.2 | | | | | | |
| **S34M** | **Telegraph Cree** | **84.58** | **23** | P | **P** | **02 05 03.4** | **+0.9** |
| | baz=225,SNR=11 | | | | | | |
| **YUK4** | **Talbot Arm** | **84.64** | **18** | P | **P** | **02 05 03.7** | **+0.7** |
| | baz=218 | | | | | | |
| **L26K** | **Log Cabin Wild** | **84.72** | **15** | P | **P** | **02 05 02.9** | **-0.2** |
| | baz=214 | | | | | | |
| **NEA2** | **Nenana** | **84.77** | **12** | P | **P** | **02 05 03.1** | **-0.2** |
| | baz=208 | | | | | | |
| **K24K** | **Donnelly Dome** | **84.79** | **14** | P | **P** | **02 05 03.5** | **0.0** |
| | baz=211,SNR=6.3 | | | | | | |
| **G19K** | **Purcell Mounta** | **84.80** | **9** | P | **P** | **02 05 03.8** | **+0.4** |
| | baz=200 | | | | | | |
| **MLY** | **Manley** | **84.83** | **11** | P | **P** | **02 05 03.0** | **-0.6** |
| | baz=206,SNR=6.5 | | | | | | |
| **P32M** | **Atlin** | **84.87** | **21** | P | **P** | **02 05 04.1** | **+0.1** |
| | baz=222 | | | | | | |
| **F18K** | **Selawik** | **84.89** | **7** | P | **P** | **02 05 04.3** | **+0.5** |
| | baz=198 | | | | | | |
| **Q32M** | **Nakina River** | **84.92** | **22** | P | **P** | **02 05 05.1** | **+0.8** |
| | baz=224,SNR=8.9 | | | | | | |
| **RIDG** | **Independent Ri** | **84.95** | **14** | P | **P** | **02 05 04.2** | **-0.1** |
| | baz=212,SNR=5.3 | | | | | | |
| **O30N** | **Mendenhall** | **84.97** | **19** | P | **P** | **02 05 04.5** | **+0.1** |
| O30N | | | | IAmb | IAmb | 02 05 05.6 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| **O30N** | **Mendenhall** | **84.97** | **19** | P | **P** | **02 05 04.8** | **+0.4** |
| | baz=220,SNR=9.8 | | | | | | |
| **H21K** | **Melozitna Rive** | **85.02** | **10** | P | **P** | **02 05 05.1** | **+0.6** |
| | baz=204 | | | | | | |
| **HDA** | **Harding Lake** | **85.05** | **13** | P | **P** | **02 05 04.0** | **-0.6** |
| **HDA** | **Harding Lake** | **85.05** | **13** | P | **P** | **02 05 04.2** | **-0.4** |
| | baz=210,SNR=14 | | | | | | |
| **E17K** | **Hotham Inlet** | **85.10** | **6** | P | **P** | **02 05 04.7** | **-0.1** |
| | baz=196 | | | | | | |
| **NEW** | **Newport** | **85.13** | **36** | P | **P** | **02 05 05.1** | **-0.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J26L** | **Joseph Creek** | **85.90** | **14** | P | | **P** | **02 05 09.2 +0.3** |
| | baz=213,SNR=9.4 | | | | | | |
| **E19K** | **Redstone River** | **86.02** | **8** | P | | **P** | **02 05 09.0 -0.2** |
| | baz=200 | | | | | | |
| **MSO** | **Missoula** | **86.22** | **38** | P | | **P** | **02 05 10.7 -0.1** |
| | baz=240 | | | | | | |
| **C17K** | **DeLong Mountai** | **86.31** | **6** | P | | **P** | **02 05 10.7 0.0** |
| | baz=195 | | | | | | |
| **F21K** | **Alatna River** | **86.34** | **10** | P | | **P** | **02 05 10.9 +0.1** |
| | baz=204 | | | | | | |
| **G22K** | **Bettles** | **86.39** | **10** | P | | **P** | **02 05 11.1 +0.1** |
| | baz=206 | | | | | | |
| **TPAW** | **Teton Pass** | **86.45** | **42** | P | | **P** | **02 05 11.8 -0.4** |
| **G23K** | **Bananza Creek** | **86.47** | **11** | P | | **P** | **02 05 11.7 +0.3** |
| | baz=207 | | | | | | |
| **DAWY** | **Dawson** | **86.59** | **16** | P | | **P** | **02 05 13.1 +1.1** |
| | baz=217 | | | | | | |
| **M31M** | **Drury Creek, Y** | **86.59** | **19** | P | | **P** | **02 05 12.3 +0.2** |
| | baz=222 | | | | | | |
| **I26K** | **Coal Creek Min** | **86.67** | **14** | P | | **P** | **02 05 13.0 +0.6** |
| | baz=214 | | | | | | |
| **EGAK** | **Eagle** | **86.71** | **15** | P | | **P** | **02 05 12.7 +0.2** |
| | baz=215 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **86.73** | **49** | P | | **P** | **02 05 14.9 +1.2** |
| | baz=245 | | | | | | |
| **F22K** | **John River** | **86.81** | **10** | P | | **P** | **02 05 13.2 +0.2** |
| | baz=205 | | | | | | |
| **D19K** | **Kuna River** | **86.88** | **7** | P | | **P** | **02 05 13.2 -0.1** |
| | baz=199 | | | | | | |
| **COLD** | **Coldfoot** | **86.90** | **11** | P | | **P** | **02 05 14.5 +1.1** |
| | baz=207 | | | | | | |
| **E20K** | **Nigu River** | **86.91** | **8** | P | | **P** | **02 05 13.8 +0.3** |
| | baz=201 | | | | | | |
| **K29M** | **Barlow Dome** | **86.92** | **17** | P | | **P** | **02 05 14.5 +0.7** |
| | baz=219 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **86.94** | **12** | P | | **P** | **02 05 13.3 -0.3** |
| | baz=210 | | | | | | |
| **FARO** | **Faro, Yukon** | **86.94** | **19** | P | | **P** | **02 05 14.1 +0.3** |
| | baz=223 | | | | | | |
| **YHL** | **Hebgen Lake** | **86.94** | **41** | P | | **P** | **02 05 15.6 +1.1** |
| YHL | | | | IAmb | | IAmb | 02 05 16.9 |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.02** | **40** | P | | **P** | **02 05 15.1 +0.5** |
| **BOZ** | **Bozeman (W)** | **87.02** | **40** | P | | **P** | **02 05 15.7 +1.0** |
| | baz=242 | | | | | | |
| **BW06** | **Boulder Array** | **87.03** | **43** | P | | **P** | **02 05 15.7 +0.8** |
| | baz=243 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.03** | **43** | P | | **P** | **02 05 15.3 +0.5** |
| | comp=Z,2.6nm,0.5s,baz=216,slow=3.0,SNR=24 | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **D20K** | **Etivluk River** | **87.28** | **8** | P | | **P** | **02 05 15.8 +0.7** |
| | baz=201 | | | | | | |
| **I27K** | **Kandik River** | **87.28** | **14** | P | | **P** | **02 05 15.7 +0.4** |
| | baz=215 | | | | | | |
| **B18K** | **Kokolik River** | **87.31** | **6** | P | | **P** | **02 05 15.5 +0.3** |
| | baz=196 | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **87.44** | **10** | P | | **P** | **02 05 15.7 -0.3** |
| | baz=205 | | | | | | |
| **TOAD** | **Toad River Com** | **87.51** | **25** | P | | **P** | **02 05 16.8 +0.3** |
| | baz=230 | | | | | | |
| **I28M** | **Miner Creek** | **87.56** | **15** | P | | **P** | **02 05 16.5 -0.1** |
| | baz=216 | | | | | | |
| **F24K** | **Squaw Lake** | **87.58** | **11** | P | | **P** | **02 05 17.2 +0.6** |
| | baz=209 | | | | | | |
| **SDCO** | **Great Sand Dun** | **87.69** | **49** | P | | **P** | **02 05 18.4 +0.3** |
| | baz=246 | | | | | | |
| **E23K** | **Chandalar** | **87.74** | **10** | P | | **P** | **02 05 18.0 +0.5** |
| | baz=208 | | | | | | |
| **H27K** | **Steamboat Moun** | **87.82** | **14** | P | | **P** | **02 05 18.3 +0.5** |
| | baz=215 | | | | | | |
| **J30M** | **Hart River** | **87.82** | **17** | P | | **P** | **02 05 18.4 +0.5** |
| | baz=220 | | | | | | |
| **MMPY** | **Sheldon Lake,** | **87.89** | **20** | | | **P** | **02 05 18.3 +0.1** |
| MMPY | | | | IAmb | | IAmb | 02 05 19.6 |
| | comp=Z,11nm,1.2s | | | | | | |
| **MMPY** | **Sheldon Lake,** | **87.89** | **20** | P | | **P** | **02 05 18.7 +0.5** |
| | baz=224 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **87.91** | **16** | P | | **P** | **02 05 18.4 +0.2** |
| | baz=218 | | | | | | |
| **G26K** | **Porcupine Rive** | **87.91** | **13** | P | | **P** | **02 05 18.6 +0.5** |
| | baz=213 | | | | | | |
| **C21K** | **Knifeblade Rid** | **87.94** | **8** | P | | **P** | **02 05 18.8 +0.6** |
| | baz=203 | | | | | | |
| **E24K** | **Your Creek** | **87.95** | **11** | P | | **P** | **02 05 18.6 +0.2** |
| | baz=208 | | | | | | |
| **D22K** | **Ayikyak River** | **87.98** | **9** | P | | **P** | **02 05 19.2 +0.8** |
| | baz=205 | | | | | | |
| **F25K** | **Christian River** | **88.07** | **12** | P | | **P** | **02 05 19.6 +0.7** |
| | baz=211 | | | | | | |
| **TGTN** | **Hyland Airport** | **88.14** | **22** | P | | **P** | **02 05 20.4 +1.0** |
| | baz=227 | | | | | | |
| **BMAR** | **Burnt Mountain** | **88.15** | **12** | | | **P** | **02 05 19.5 +0.2** |
| **G27K** | **Doyon Strip** | **88.26** | **14** | P | | **P** | **02 05 19.6 -0.2** |
| **G27K** | **Doyon Strip** | **88.26** | **14** | P | | **P** | **02 05 19.9 +0.1** |
| | baz=215 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **88.27** | **10** | P | | **P** | **02 05 20.5 +0.7** |
| | baz=208 | | | | | | |
| **RLMT** | **Red Lodge** | **88.28** | **41** | P | | **P** | **02 05 21.8 +1.2** |
| | baz=243 | | | | | | |
| **I30M** | **Mount Dempster** | **88.31** | **16** | P | | **P** | **02 05 20.1 -0.1** |
| I30M | | | | IAmb | | IAmb | 02 05 20.6 |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **I30M** | **Mount Dempster** | **88.31** | **16** | P | | **P** | **02 05 20.0 -0.2** |
| | baz=220 | | | | | | |
| **D23K** | **Nanushuk River** | **88.38** | **10** | P | | **P** | **02 05 20.5 +0.2** |
| D23K | | | | IAmb | | IAmb | 02 05 21.3 |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **D23K** | **Nanushuk River** | **88.38** | **10** | P | | **P** | **02 05 20.8 +0.5** |
| | baz=206 | | | | | | |
| **B21K** | **Ikpikpuk River** | **88.39** | **8** | P | | **P** | **02 05 20.0 -0.3** |
| | baz=203 | | | | | | |
| **H29M** | **Whitestone** | **88.57** | **15** | P | | **P** | **02 05 21.0 -0.2** |
| H29M | | | | IAmb | | IAmb | 02 05 21.9 |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **88.57** | **15** | P | | **P** | **02 05 21.4 +0.2** |
| | baz=218 | | | | | | |
| **D24K** | **Happy Valley** | **88.85** | **10** | P | | **P** | **02 05 22.4 0.0** |
| | baz=208 | | | | | | |
| **EPYK** | **Eagle Plains** | **89.11** | **16** | P | | **P** | **02 05 23.8 0.0** |
| | baz=220 | | | | | | |
| **C23K** | **Itkillik River** | **89.17** | **9** | P | | **P** | **02 05 24.2 +0.3** |
| **C23K** | **Itkillik River** | **89.17** | **9** | P | | **P** | **02 05 24.2 +0.3** |
| | baz=206 | | | | | | |
| **G29M** | **Pine Creek** | **89.20** | **15** | P | | **P** | **02 05 24.6 +0.4** |
| G29M | | | | IAmb | | IAmb | 02 06 08.4 |
| | comp=Z,13nm,1.4s | | | | | | |
| **G29M** | **Pine Creek** | **89.20** | **15** | P | | **P** | **02 05 24.1 -0.1** |
| | baz=218 | | | | | | |
| **C24K** | **Franklin Bluff** | **89.37** | **10** | P | | **P** | **02 05 25.2 +0.3** |
| | baz=208 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **89.70** | **15** | P | | **P** | **02 05 26.8 +0.2** |
| | baz=220 | | | | | | |
| **G31M** | **Satah River** | **90.16** | **16** | P | | **P** | **02 05 28.6 +0.1** |
| | baz=222 | | | | | | |
| **C27K** | **Jago River** | **90.18** | **12** | P | | **P** | **02 05 28.7 +0.1** |
| | baz=213 | | | | | | |
| **E28M** | **Babbage River** | **90.20** | **13** | P | | **P** | **02 05 29.0 +0.3** |
| | baz=217 | | | | | | |
| **C26K** | **Camden Bay** | **90.20** | **11** | P | | **P** | **02 05 29.4 +0.7** |
| | baz=212 | | | | | | |
| **F31M** | **Tsiigehtchic** | **90.69** | **16** | P | | **P** | **02 05 31.7 +0.8** |
| | baz=222 | | | | | | |
| **RSSD** | **Black Hills** | **91.25** | **44** | P | | **P** | **02 05 34.7 +0.3** |
| | baz=247 | | | | | | |
| **INK** | **Inuvik** | **91.39** | **15** | P | | **P** | **02 05 34.1 0.0** |
| | baz=222 | | | | | | |
| **OGNE** | **Ogallala** | **91.41** | **47** | P | | **P** | **02 05 34.2 -0.8** |
| | baz=248 | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.88** | **25** | P | | **P** | **02 05 45.3 -0.4** |
| | comp=Z,2.1nm,0.7s,baz=253,slow=4.5,SNR=5.7 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **C36M** | **Paulatuk** | **94.60** | **17** | P | | **P** | **02 05 51.1 +2.3** |
| | baz=231 | | | | | | |
| **KSU1** | **Kansas State U** | **94.69** | **51** | P | | **P** | **02 05 50.9 +0.9** |
| | baz=252 | | | | | | |
| **ECSD** | **EROS Data Cent** | **96.13** | **46** | P | | **P** | **02 05 56.9 +0.5** |
| | baz=252 | | | | | | |
| **BVAR** | **Borovoye Array** | **116.36** | **321** | PKP | | **PKPdf** | **02 11 07.8 -0.6** |
| | comp=Z,0.9nm,0.5s,baz=107,slow=5.0,SNR=5.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **125.76** | **350** | PKP | | **PKPdf** | **02 11 26.1 0.0** |
| | comp=Z,2.5nm,0.8s,baz=48,slow=1.8,SNR=8.9 | | | | | | |
| **KOLS** | **Kolonicke sedl** | **144.26** | **336** | *e*PKP | | **PKPab** | **02 12 01.3 +0.4** |
| **BRTR** | **Keskin Array B** | **144.32** | **315** | PKP | | **PKPdf** | **02 12 01.4 0.0** |
| | comp=Z,2.2nm,0.6s,baz=99,slow=3.0,SNR=18 | | | | | | |
| **CRVS** | **Cervenica-Dubn** | **144.59** | **337** | *e*PKP | | PKPbc | 02 12 01.8 +0.2 |
| **ASF** | **Jabal al Asfar** | **144.80** | **301** | PKP | | PKPbc | 02 12 02.9 -0.1 |
| | comp=Z,2.6nm,0.6s,baz=0.0,slow=1.0,SNR=6.7 | | | | | | |
| **CLL** | **Collm** | **144.91** | **347** | ||| *i*PKPbc | PKPbc | 02 12 02.7 +0.2 |
| | comp=Z,24nm,1.0s | | | | | | |
| **UPC** | **Upice** | **144.94** | **344** | *e*PKP | | **PKPab** | **02 12 03.5 +0.1** |
| **DPC** | **Dobruska-Polom** | **145.00** | **343** | *e*PKP | | **PKPab** | **02 12 03.8 +0.1** |
| **LANS** | **Liptovska Anna** | **145.09** | **339** | *e*PKP | | **PKPab** | **02 12 04.7 +0.6** |
| **BRG** | **Berggiesshubel** | **145.11** | **346** | *e*PKP | | **PKPab** | **02 12 03.9 -0.2** |
| BRG | | | | Amp | | | 02 12 04.5 |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **KRLC** | **Kraliky** | **145.12** | **343** | *e*PKP | | **PKPab** | **02 12 03.7 -0.5** |
| **MORC** | **Moravsky Berou** | **145.16** | **342** | *e*PKP | | **PKPbc** | **02 12 03.7 +0.4** |
| **MLR** | **Muntele Rosu** | **145.31** | **329** | PKPbc | | **PKPbc** | **02 12 04.2 +0.1** |
| | comp=Z,2.4nm,0.5s,baz=350,slow=6.0,SNR=14 | | | | | | |
| **PRU** | **Pruhonice** | **145.79** | **345** | *e*PKP | | **PKPbc** | **02 12 05.8 +0.7** |
| **VRAC** | **Vranov** | **145.86** | **342** | *e*PKP | | **PKPbc** | **02 12 05.7 +0.4** |
| **VRAC** | **Vranov** | **145.86** | **342** | PKPbc | | **PKPab** | **02 12 06.2 -0.9** |
| | comp=Z,2.9nm,0.6s,baz=14,slow=4.1,SNR=8.6 | | | | | | |
| **VYHS** | **Vyhne** | **145.87** | **339** | *e*PKP | | **PKPbc** | **02 12 06.2 +0.8** |
| **JAVC** | **Velka Javorina** | **145.93** | **341** | *e*PKP | | **PKPab** | **02 12 07.2 -0.3** |
| **KRUC** | **Moravsky** | **146.14** | **342** | *e*PKP | | **PKPbc** | **02 12 06.4 +0.3** |
| **ZVC** | **Zvikov** | **146.38** | **345** | *e*PKP | | **PKiKP** | **02 12 07.9 -1.1** |
| **MEM** | **Membach** | **146.63** | **355** | *d*PKPbc | | **PKPbc** | **02 12 07.1 -0.3** |
| **BTNL** | **Ternell** | **146.64** | **355** | *d*PKP | | **PKPbc** | **02 12 06.5 -1.0** |
| **BSTI** | **Sart Tilman** | **146.69** | **355** | *d*PKP | | **PKPbc** | **02 12 06.9 -0.6** |
| **KHC** | **Kasperske Hory** | **146.82** | **345** | *e*PKP | | **PKPbc** | **02 12 08.8 +0.8** |
| **BCLA** | **Clavier** | **146.88** | **356** | *d*PKPbc | | **PKPbc** | **02 12 07.3 -0.7** |
| BCLA | | | | *d*PKP | | **PKiKP** | **02 12 10.4 +0.4** |
| **BGES** | **Gesves** | **146.93** | **356** | *d*PKiKP | | **PKPbc** | **02 12 08.3 +0.1** |
| **GERES** | **GERESS Array B** | **147.06** | **345** | PKPbc | | **PKPbc** | **02 12 09.1 +0.4** |
| | comp=Z,2.7nm,0.7s,baz=344,slow=7.2,SNR=15 | | | | | | |
| **RCHB** | **Rochefort** | **147.14** | **356** | *d*PKP | | **PKPbc** | **02 12 09.1 +0.3** |
| **DOU** | **Dourbes** | **147.25** | **356** | *d*PKiKP | | **PKPbc** | **02 12 09.2 +0.2** |
| **CONA** | **Conrad Observa** | **147.31** | **342** | *i* PKP | | **PKPbc** | **02 12 10.1 +0.6** |
| | comp=Z,4.8nm,0.5s,SNR=13 | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.38** | **341** | *e*PKP | | **PKPbc** | **02 12 10.2 +0.6** |
| | comp=Z,2.1nm,0.5s,SNR=9.2 | | | | | | |
| **WLF** | **Walferdange** | **147.55** | **354** | *d*PKP | | **PKiKP** | **02 12 10.8 -0.7** |
| **MOA** | **Molln** | **147.83** | **344** | *i* PKiKP | | **PKPbc** | **02 12 11.0 +0.3** |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **ARSA** | **Arzberg** | **148.02** | **342** | *i* PKP | | **PKPbc** | **02 12 11.1 -0.1** |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.14** | **344** | *e*PKP | | **PKPbc** | **02 12 11.5 +0.1** |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **LESA** | **Schwarzleotal** | **148.63** | **345** | *i* PKiKP | | **PKPbc** | **02 12 12.9 +0.1** |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.79** | **344** | *e*PKP | | **PKPbc** | **02 12 12.9 -0.4** |
| | comp=Z,5.4nm,0.5s,SNR=8.4 | | | | | | |
| **WATA** | **Walderalm** | **148.97** | **347** | *i* PKiKP | | **PKPbc** | **02 12 13.7 +0.1** |
| | comp=Z,1.6nm,0.3s,SNR=8.6 | | | | | | |
| **OBKA** | **Obir** | **148.98** | **342** | *i* PKP | | **PKPbc** | **02 12 13.1 -0.5** |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **RETA** | **Reutte** | **149.00** | **348** | *i* PKiKP | | **PKPbc** | **02 12 13.8 +0.2** |
| | comp=Z,2.1nm,0.5s,SNR=6.7 | | | | | | |
| **WTTA** | **Wattenberg** | **149.02** | **347** | *i* PKiKP | | **PKPbc** | **02 12 14.1 +0.3** |
| | comp=Z,13nm,0.6s,SNR=20 | | | | | | |
| **MOTA** | **Moosalm** | **149.06** | **347** | *i* PKiKP | | **PKPbc** | **02 12 13.9 0.0** |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **MYKA** | **Terra Mystica** | **149.12** | **344** | *i* PKP | | **PKPbc** | **02 12 13.5 -0.5** |
| | comp=Z,2.9nm,0.3s,SNR=7.2 | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.16** | **347** | *i* PKiKP | | **PKPbc** | **02 12 14.3 +0.2** |
| | comp=Z,5.8nm,0.5s,SNR=8.4 | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.30** | **345** | *i* PKP | | **PKPbc** | **02 12 14.0 -0.4** |
| | comp=Z,6.2nm,0.5s,SNR=16 | | | | | | |
| **FETA** | **Feichten** | **149.45** | **348** | *i* PKiKP | | **PKiKP** | **02 12 15.2 -0.4** |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **149.85** | **348** | PKPbc | | **PKiKP** | **02 12 16.5 0.0** |
| | comp=Z,19nm,0.6s,baz=288,slow=3.9,SNR=78 | | | | | | |
| **ESDC** | **Sonseca Array** | **157.27** | **11** | PKPab | | **PKPab** | **02 12 53.9 -1.4** |
| | comp=Z,0.6nm,0.6s,baz=337,slow=5.0,SNR=6.4 | | | | | | |

*NOU* ***19*** *01:57:39.9, 18.13S×178.00W, h561km, mb4.8/27, Fiji Islands Region*
*NEIC* ***19*** *01:57:41.3±1.9, 18.2S±0.1×178.09W±0.08, h572km±7km, mb4.5/144, Error ellipse: s-maj=16.6km s-min=10.5km az=179.0*
*IDC* ***19*** *01:57:42.2±2.6, 18.13S×178.17W, h584km±28km, mb3.9/21, mbtmp4.8/22, Error ellipse: s-maj=16.3km s-min=13.1km az=122.0*

**ISC 19 01:57:42.3±0.3, 18.22S±0.08×178.12W±0.07, h590km, n543, σ0.73/544, mb4.5/97, 19C-31D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.68** | **277** | P | **P** | **01 59 02.2** | **-2.7** |
| **AFI** | **Afiamalu** | **7.45** | **56** | P | **P** | **01 59 32.2** | **-3.9** |
| **NIUE** | **Niue** | **7.81** | **98** | P | **P** | **01 59 37.1** | **-2.3** |
| **LIFNC** | **LIFOU** | **14.04** | **257** | P | **P** | **02 00 39.0** | **-2.7** |
| **PINNC** | **Pines Island,** | **14.22** | **250** | P | **P** | **02 00 42.4** | **-1.0** |
| **DZM** | **Mont Dzumac** | **15.00** | **253** | P | **P** | **02 00 51.0** | **+0.1** |
| **DZM** | **Mont Dzumac** | **15.00** | **253** | P | **P** | **02 00 50.5** | **-0.4** |
| | 4.7nm,0.6s,baz=84,slow=19,SNR=13 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.77** | **259** | P | **P** | **02 01 08.5** | **+1.4** |
| **KOUNC** | **Koumac, New Ca** | **16.77** | **259** | P | **P** | **02 01 06.8** | **-0.4** |
| KOUNC | | | | IAmb | IAmb | 02 01 09.3 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **KUZ** | **Kuaotunu** | **19.24** | **195** | P | **P** | **02 01 30.5** | **+1.1** |
| **TOZ** | **Tahuroa Road** | **20.23** | **195** | P | **P** | **02 01 39.1** | **+0.8** |
| TOZ | | | | IAmb | IAmb | 02 01 40.2 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **URZ** | **Urewera** | **20.40** | **191** | P | **P** | **02 01 37.5** | **-2.4** |
| | comp=Z,37nm,0.9s,baz=110,slow=3.9,SNR=13 | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.01** | **192** | P | **P** | **02 02 01.6** | **-1.7** |
| MRZ | | | | IAmb | IAmb | 02 02 10.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **TCW** | **Tory Channel** | **23.82** | **194** | P | **P** | **02 02 10.4** | **+0.1** |
| **QRZ** | **Quartz Range** | **23.92** | **198** | P | **P** | **02 02 11.1** | **-0.2** |
| **NNZ** | **Nelson** | **24.05** | **196** | P | **P** | **02 02 11.2** | **-1.2** |
| **THZ** | **Tophouse** | **24.69** | **196** | P | **P** | **02 02 16.9** | **-1.2** |
| THZ | | | | IAmb | IAmb | 02 02 47.1 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **KHZ** | **Kahutara** | **25.14** | **195** | P | **P** | **02 02 20.3** | **-1.6** |
| KHZ | | | | IAmb | IAmb | 02 02 26.5 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.21** | **199** | P | **P** | **02 02 40.1** | **0.0** |
| **JCZ** | **Jackson Bay** | **28.03** | **200** | P | **P** | **02 02 47.3** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.43** | **251** | P | **P** | **02 02 59.6** | **-0.1** |
| EIDS | | | | IAmb | IAmb | 02 03 00.1 | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.03** | **240** | P | **P** | **02 03 05.3** | **+0.4** |
| **CTA** | **Charters Tower** | **33.67** | **261** | P | **P** | **02 03 35.5** | **-0.3** |
| | comp=Z,1.0nm,0.6s,baz=96,slow=10.0,SNR=32 | | | | | | |
| **CTAO** | **Charters Tower** | **33.67** | **261** | P | **P** | **02 03 35.5** | **-0.3** |
| **CTAO** | **Charters Tower** | **33.67** | **261** | P | **P** | **02 03 35.0** | **-0.8** |
| CTAO | | | | IAmb | IAmb | 02 03 36.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.74** | **233** | P | **P** | **02 03 36.3** | **+0.1** |
| **PMG** | **Port Moresby** | **34.79** | **280** | P | **P** | **02 03 46.0** | **+0.8** |
| **PMG** | **Port Moresby** | **34.79** | **280** | P | **P** | **02 03 45.6** | **+0.4** |
| **PMG** | **Port Moresby** | **34.79** | **280** | P | **P** | **02 03 45.5** | **+0.4** |
| | comp=Z,39nm,0.8s,baz=86,slow=4.9,SNR=10 | | | | | | |
| | comp=Z,39nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **35.69** | **250** | P | **P** | **02 03 52.4** | **-0.1** |
| **TOO** | **Toolangi** | **37.19** | **231** | P | **P** | **02 04 04.7** | **0.0** |
| **COEN** | **Coen** | **37.39** | **271** | P | **P** | **02 04 06.8** | **+0.2** |
| **COEN** | **Coen** | **37.39** | **271** | P | **P** | **02 04 06.4** | **-0.2** |
| **STKA** | **Stephens Creek** | **38.73** | **242** | P | **P** | **02 04 18.2** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.73** | **242** | P | **P** | **02 04 17.5** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.73** | **242** | P | **P** | **02 04 17.9** | **+0.7** |
| | comp=Z,8.6nm,0.5s,baz=95,slow=11,SNR=11 | | | | | | |
| | comp=Z,8.6nm,0.5s | | | | | | |
| **INKA** | **Innaminka** | **38.89** | **248** | P | **P** | **02 04 19.4** | **+0.9** |
| **LCRK** | **Leigh Creek** | **41.37** | **244** | P | **P** | **02 04 38.7** | **+0.4** |
| **OOD** | **Oodnadatta** | **43.36** | **249** | P | **P** | **02 04 54.6** | **+0.7** |
| **BBOO** | **Buckleboo** | **43.50** | **241** | P | **P** | **02 04 55.0** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 02 04 55.8 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **HMH** | **Humu'ula Sheep** | **43.66** | **32** | P | **P** | **02 04 56.4** | **-0.1** |
| **GENI** | **Genyem** | **43.72** | **286** | P | **P** | **02 04 57.4** | **+0.6** |
| **DHH** | **Diamond Head** | **44.00** | **28** | P | **P** | **02 04 58.6** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.66** | **260** | P | **P** | **02 05 03.2** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **02 05 04.6** | **-0.9** |
| | comp=Z,11nm,0.7s,baz=96,slow=7.2,SNR=64 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 06 34.4** | **0.0** |
| | comp=Z,2.0nm,0.5s,baz=92,slow=3.6,SNR=6.0 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **MULG** | **Mulgathing** | **44.93** | **245** | P | **P** | **02 05 05.8** | **-0.1** |
| **AS31** | **Alice Springs** | **44.98** | **255** | P | **P** | **02 05 05.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.98** | **255** | P | **P** | **02 05 05.6** | **-0.8** |
| **ASAR** | **Alice Springs** | **44.98** | **255** | P | **P** | **02 05 06.2** | **-0.2** |
| | comp=Z,45nm,0.6s,baz=86,slow=8.7,SNR=144 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 06 35.0** | **+0.3** |
| | comp=Z,4.0nm,0.5s,baz=103,slow=3.7,SNR=10 | | | | | | |
| | comp=Z,45nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.07** | **269** | P | **P** | **02 05 36.4** | **-0.7** |
| **MTN** | **Manton Dam** | **49.07** | **269** | P | **P** | **02 05 35.9** | **-1.2** |
| MTN | | | | IAmb | IAmb | 02 05 37.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **WRKA** | **Warakurna** | **50.02** | **252** | P | **P** | **02 05 43.7** | **-0.3** |
| **SOEI** | **Soe** | **56.35** | **270** | P | **P** | **02 06 30.4** | **+1.3** |
| **SOEI** | **Soe** | **56.35** | **270** | P | **P** | **02 06 29.9** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **58.10** | **256** | P | **P** | **02 06 40.4** | **-0.3** |
| **KLBR** | **Kellerberrin** | **58.94** | **244** | P | **P** | **02 06 45.8** | **-0.4** |
| **MJAR** | **Matsushiro Arr** | **68.32** | **323** | P | **P** | **02 07 44.8** | **-0.8** |
| | comp=Z,9.2nm,0.6s,baz=156,slow=5.9,SNR=33 | | | | | | |
| | comp=Z,9.2nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **68.32** | **323** | P | **P** | **02 07 45.1** | **-0.6** |
| **MAJO** | **Matsushiro** | **68.32** | **323** | P | **P** | **02 07 45.1** | **-0.6** |
| MAJO | | | | IAmb | IAmb | 02 07 45.6 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.33** | **323** | P | **P** | **02 07 46.3** | **+0.6** |
| MJB9 | | | | IAmb | IAmb | 02 07 47.0 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **JNU** | **Nakatsue** | **70.56** | **316** | P | **P** | **02 07 58.8** | **-0.2** |
| | comp=Z,9.2nm,0.9s,baz=174,slow=4.0,SNR=3.9 | | | | | | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.84** | **180** | P | **P** | **02 08 07.0** | **+0.9** |
| | comp=Z,11nm,0.8s,baz=130,slow=3.5,SNR=8.6 | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **SSLB** | **Suanglung** | **72.64** | **303** | P | **P** | **02 08 10.6** | **-0.8** |
| **TPUB** | **Ta-pu** | **72.66** | **302** | P | **P** | **02 08 10.4** | **-1.1** |
| **TPUB** | **Ta-pu** | **72.66** | **302** | P | **P** | **02 08 10.3** | **-1.1** |
| **KSM** | **Kuching** | **73.00** | **277** | P | **P** | **02 08 14.4** | **+0.8** |
| **PEA0B** | **Petropavlovsk-** | **74.05** | **345** | P | **P** | **02 08 18.8** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **74.05** | **345** | P | **P** | **02 08 18.7** | **0.0** |
| **PETK** | **Petropavlovsk-** | **74.05** | **345** | P | **P** | **02 08 18.4** | **-0.2** |
| | comp=Z,15nm,0.6s,baz=130,slow=7.5,SNR=14 | | | | | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **SDPT** | **Sand Point** | **74.80** | **10** | P | **P** | **02 08 23.8** | **+1.1** |
| | baz=197 | | | | | | |
| **S12K** | **Black Hills** | **74.88** | **9** | P | **P** | **02 08 24.4** | **+1.2** |
| | baz=196 | | | | | | |
| **KSRS** | **Korea Array** | **75.12** | **318** | P | **P** | **02 08 25.3** | **+0.3** |
| | comp=Z,2.3nm,0.7s,baz=132,slow=6.7,SNR=13 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **S14K** | **Fog Glacier** | **75.85** | **11** | P | **P** | **02 08 29.4** | **+0.7** |
| | baz=198 | | | | | | |
| **SAO** | **San Andreas Ge** | **76.46** | **44** | P | **P** | **02 08 32.5** | **+0.1** |
| SAO | | | | IAmb | IAmb | 02 08 34.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.03** | **326** | P | **P** | **02 08 36.0** | **+0.6** |
| | comp=Z,2.3nm,0.7s,baz=94,slow=5.7,SNR=5.7 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **KMRM** | **Mail Ridge** | **77.08** | **40** | P | **P** | **02 08 37.7** | **+1.9** |
| KMRM | | | | IAmb | IAmb | 02 08 38.2 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **SII** | **Sitkinak Islan** | **77.16** | **13** | P | **P** | **02 08 36.4** | **+0.6** |
| | baz=203 | | | | | | |
| **109C** | **Camp Elliot, M** | **77.31** | **49** | P | **P** | **02 08 37.5** | **+0.4** |
| | baz=238 | | | | | | |
| **R16K** | **Pilot Point** | **77.42** | **11** | P | **P** | **02 08 39.1** | **+2.0** |
| | baz=200 | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **77.61** | **40** | P | **P** | **02 08 40.1** | **+1.4** |
| O02D | | | | IAmb | IAmb | 02 08 41.2 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **77.71** | **12** | P | **P** | **02 08 39.2** | **+0.5** |
| | baz=201 | | | | | | |
| **MONP2** | **Monument Peak** | **77.81** | **49** | P | **P** | **02 08 41.4** | **+1.3** |
| | baz=239 | | | | | | |
| **CMB** | **Columbia Colle** | **77.88** | **43** | P | **P** | **02 08 40.5** | **+0.4** |
| **KSXB** | **Camp Six Broad** | **77.96** | **38** | P | **P** | **02 08 41.9** | **+1.3** |
| KSXB | | | | IAmb | IAmb | 02 09 07.6 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **OHAK** | **Old Harbor** | **77.97** | **14** | P | **P** | **02 08 39.9** | **-0.2** |
| **OHAK** | **Old Harbor** | **77.97** | **14** | P | **P** | **02 08 40.2** | **+0.1** |
| | baz=204 | | | | | | |
| **R18K** | **Karluk** | **78.03** | **13** | P | **P** | **02 08 

J05D IAmb IAmb 02 08 55.4
comp=Z,22nm,0.7s
**CN2** **Changchun** **80.44** **322** P **P** **02 08 54.3 +0.9**
CN2 pmax pmax
comp=Z,20nm,0.8s
**M16K** **Timber Creek** **80.46** **9** P **P** **02 08 54.1 +1.0**
M16K IAmb IAmb 02 08 55.0
comp=Z,34nm,1.1s
**M16K** **Timber Creek** **80.46** **9** P **P** **02 08 54.1 +1.0**
baz=198,SNR=5.2
**BNX** **BinXian** **80.51** **325** ⇑P **P** **02 08 54.1 +0.4**
BNX pmax pmax
comp=Z,23nm,0.8s
**CNPM** **China Poot** **80.52** **14** P **P** **02 08 53.0 -0.5**
**KLR** **Kul'dur** **80.52** **329** P **P** **02 08 53.8 +0.1**
comp=Z,2.5nm,0.7s,baz=108,slow=4.5,SNR=7.3
comp=Z,2.5nm,0.7s
**K13K** **Kusilvak Mount** **80.60** **6** P **P** **02 08 54.2 +0.4**
**N18K** **Kilae Creek** **80.65** **11** P **P** **02 08 53.6 -0.6**
N18K IAmb IAmb 02 08 58.1
comp=Z,29nm,1.4s
**N18K** **Kilae Creek** **80.65** **11** P **P** **02 08 54.2 0.0**
baz=201
**H04A** **Detroit Lake** **80.67** **37** P **P** **02 08 55.3 +0.6**
H04A IAmb IAmb 02 08 55.5
comp=Z,8.8nm,0.6s
**L15K** **Ungalak Mounta** **80.73** **8** P **P** **02 08 54.6 +0.1**
baz=196
**SMAI** **San Martin Ant** **80.77** **159** P **P** **02 08 56.1 +1.4**
SMAI IAmb IAmb 02 08 57.4
comp=Z,14nm,0.8s
**BRSE** **Bradley Lake S** **80.82** **14** P **P** **02 08 55.2 +0.1**
baz=206
**N19K** **Bonanza Creek** **81.03** **11** P **P** **02 08 55.3 -0.9**
N19K IAmb IAmb 02 08 56.2
comp=Z,11nm,0.9s
**N19K** **Bonanza Creek** **81.03** **11** P **P** **02 08 55.8 -0.4**
baz=203
**L16K** **Owhat River** **81.04** **9** P **P** **02 08 56.2 +0.1**
**L16K** **Owhat River** **81.04** **9** P **P** **02 08 57.0 +0.9**
baz=198,SNR=5.4
**E03A** **Lebam** **81.05** **35** P **P** **02 08 57.2 +0.7**
E03A IAmb IAmb 02 08 58.2
comp=Z,20nm,1.0s
**M17K** **Holitna River** **81.06** **10** P **P** **02 08 57.3 +1.1**
**M17K** **Holitna River** **81.06** **10** P **P** **02 08 57.1 +0.9**
baz=200,SNR=6.2
**R11B** **Troy Canyon, C** **81.22** **45** P **P** **02 08 58.2 +0.4**
baz=238
**K15K** **Wolf Creek Mou** **81.31** **8** P **P** **02 08 58.3 +0.8**
**K15K** **Wolf Creek Mou** **81.31** **8** P **P** **02 08 58.2 +0.7**
baz=196,SNR=9.8
**C03A** **Quillayute Air** **81.40** **33** P **P** **02 08 59.5 +1.3**
**NLWA** **Neilton Lookou** **81.41** **34** P **P** **02 08 59.1 +0.7**
**M18K** **Stony River** **81.42** **11** P **P** **02 08 58.8 +0.7**
baz=201
**SEW** **Seward** **81.44** **14** P **P** **02 08 58.5 +0.4**
baz=207
**WVOR** **Wild Horse Val** **81.46** **40** P **P** **02 08 59.7 +0.8**
WVOR IAmb IAmb 02 09 00.8
comp=Z,13nm,1.1s
**J14K** **Nanvaranak Lak** **81.51** **7** P **P** **02 08 57.7 -0.7**
**J14K** **Nanvaranak Lak** **81.51** **7** P **P** **02 08 58.9 +0.5**
baz=194
**L17K** **Donlin** **81.62** **9** P **P** **02 09 00.4 +1.3**
baz=199,SNR=6.6
**TUC** **Tucson** **81.67** **52** P **P** **02 09 01.9 +1.7**
baz=242
**BELA** **Belgrano 2** **81.82** **173** P **P** **02 09 00.2 +0.2**
BELA IAmb IAmb 02 09 01.3
comp=Z,9.9nm,0.8s
**N20K** **Mount Spurr** **81.83** **12** P **P** **02 08 59.7 -0.6**
baz=205
**SPCR** **Spurr Chakacha** **81.83** **12** P **P** **02 08 59.7 -0.6**
baz=205
**I07A** **Izee** **81.88** **38** P **P** **02 09 01.7 +0.7**
I07A IAmb IAmb 02 09 02.9
comp=Z,11nm,0.8s
**GAMB** **Gambell** **81.88** **3** P **P** **02 09 01.0 +0.7**
baz=186
**L18K** **Granite Mounta** **81.95** **10** P **P** **02 09 01.3 +0.6**
L18K IAmb IAmb 02 09 01.8
comp=Z,14nm,0.7s
**L18K** **Granite Mounta** **81.95** **10** P **P** **02 09 01.5 +0.8**
baz=200,SNR=8.0
**M19K** **Big River Lodg** **82.06** **11** P **P** **02 09 00.8 -0.6**
M19K IAmb IAmb 02 09 01.2
comp=Z,8.5nm,0.8s
**M19K** **Big River Lodg** **82.06** **11** P **P** **02 09 01.3 0.0**
baz=203
**GNW** **Green Mountain** **82.08** **34** P **P** **02 09 02.4 +0.6**
GNW IAmb IAmb 02 09 03.3
comp=Z,10nm,0.9s
**Q12A** **Willow Creek R** **82.08** **45** P **P** **02 09 03.0 +0.8**
Q12A IAmb IAmb 02 09 04.0
comp=Z,9.9nm,0.9s
**LON** **Longmire** **82.13** **35** P **P** **02 09 02.5 +0.4**
**LCMT** **Little Creek M** **82.14** **47** P **P** **02 09 03.4 +0.9**
**K17K** **Iditarod** **82.17** **9** P **P** **02 09 02.4 +0.6**
K17K IAmb IAmb 02 09 04.1
comp=Z,13nm,1.1s
**K17K** **Iditarod** **82.17** **9** P **P** **02 09 02.6 +0.7**
baz=199
**CLRS** **Cowichan Lake** **82.17** **33** P **P** **02 09 02.7 +0.5**
**L19K** **White Mountain** **82.23** **11** P **P** **02 09 02.2 0.0**
L19K IAmb IAmb 02 09 03.4
comp=Z,8.9nm,0.8s
**L19K** **White Mountain** **82.23** **11** P **P** **02 09 02.9 +0.7**
baz=202
**RC01** **Rabbit Creek A** **82.26** **13** P **P** **02 09 03.2 +0.9**
baz=207
**M20K** **Styx River** **82.27** **12** P **P** **02 09 02.6 +0.1**
baz=204
**CCUT** **Cedar City** **82.32** **46** P **P** **02 09 04.8 +1.3**
**PWL** **Port Wells** **82.37** **14** P **P** **02 09 02.4 -0.5**
baz=208
**SUA** **Susitna One** **82.37** **13** P **P** **02 09 02.8 -0.3**
baz=206
**J16K** **Anvik River** **82.39** **8** P **P** **02 09 03.1 +0.2**
J16K IAmb IAmb 02 09 04.3
comp=Z,16nm,0.9s
**J16K** **Anvik River** **82.39** **8** P **P** **02 09 03.6 +0.7**
baz=197,SNR=5.1
**SPR3** **Spring Creek 3** **82.39** **45** P **P** **02 09 04.0 0.0**
**PGC** **Sidney** **82.42** **33** P **P** **02 09 03.7 +0.3**
**KNB** **Kanab** **82.43** **47** P **P** **02 09 04.9 +0.8**
**PSUT** **Pine Spring** **82.48** **45** P **P** **02 09 05.2 +0.9**
**U15A** **North Rim** **82.52** **48** P **P** **02 09 06.1 +1.5**
U15A IAmb IAmb 02 09 07.0
comp=Z,13nm,0.8s
**L20K** **Farewell, AK** **82.68** **11** P **P** **02 09 04.8 +0.3**
baz=203
**GLI** **Glacier Island** **82.68** **15** P **P** **02 09 03.6 -0.8**
GLI IAmb IAmb 02 09 04.6
comp=Z,20nm,0.7s
**GLI** **Glacier Island** **82.68** **15** P **P** **02 09 03.9 -0.6**
baz=210,SNR=5.9
**CRAG** **Craig** **82.69** **24** P **P** **02 09 05.2 +0.7**
baz=223
**ELK** **Elko** **82.69** **43** P **P** **02 09 05.9 +0.5**
comp=Z,5.0nm,0.8s,baz=257,slow=5.4,SNR=24
comp=Z,5.0nm,0.8s
**J17K** **VABM Dome** **82.70** **9** P **P** **02 09 04.7 +0.2**
J17K IAmb IAmb 02 09 05.8
comp=Z,9.6nm,0.7s
**J17K** **VABM Dome** **82.70** **9** P **P** **02 09 05.3 +0.8**
baz=198
**EYAK** **Cordova Ski Ar** **82.73** **15** P **P** **02 09 05.1 +0.4**
baz=211
**WUAZ** **Wupatki** **82.74** **49** P **P** **02 09 06.6 +1.0**
baz=242
**KNK** **Knik Glacier** **82.83** **14** P **P** **02 09 04.8 -0.4**
baz=208
**PMR** **Palmer** **82.84** **14** P **P** **02 09 04.8 -0.4**
PMR IAmb IAmb 02 09 05.0
comp=Z,10.0nm,0.6s
**PMR** **Palmer** **82.84** **14** P **P** **02 09 05.0 -0.2**
baz=208
**MXC** **Moxie City** **82.87** **36** P **P** **02 09 06.3 +0.6**
**G08A** **Pilot Rock** **82.89** **38** P **P** **02 09 06.6 +0.6**
G08A IAmb IAmb 02 09 07.7
comp=Z,20nm,1.4s
**I17K** **Unalakleet** **82.96** **8** P **P** **02 09 06.5 +0.7**
I17K IAmb IAmb 02 09 10.9
comp=Z,18nm,1.4s
**I17K** **Unalakleet** **82.96** **8** P **P** **02 09 06.4 +0.7**
baz=197
**GHO** **Glory Hole Cre** **83.04** **14** P **P** **02 09 06.1 -0.3**
**J18K** **Innoko River** **83.12** **10** P **P** **02 09 06.7 0.0**
J18K IAmb IAmb 02 09 07.6
comp=Z,18nm,0.8s
**J18K** **Innoko River** **83.12** **10** P **P** **02 09 06.8 +0.2**
baz=200,SNR=13
**U33K** **Whale Pass** **83.16** **24** P **P** **02 09 07.8 +0.9**
U33K IAmb IAmb 02 09 08.1
comp=Z,9.9nm,0.8s
**U33K** **Whale Pass** **83.16** **24** P **P** **02 09 07.8 +0.9**
baz=222
**V35K** **Ketchikan** **83.17** **25** P **P** **02 09 06.9 -0.1**
baz=224
**SNH** **Sunshine Point** **83.19** **17** P **P** **02 09 07.6 +0.6**
**HAWA** **Hanford** **83.19** **37** P **P** **02 09 07.9 +0.5**
HAWA IAmb IAmb 02 09 09.1
comp=Z,11nm,0.9s
**SML** **Sawmill** **83.21** **14** P **P** **02 09 06.7 -0.4**
SML IAmb IAmb 02 09 27.9
comp=Z,12nm,1.0s
**SML** **Sawmill** **83.21** **14** P **P** **02 09 07.1 0.0**
baz=208
**CUT** **Chulitna** **83.32** **13** P **P** **02 09 07.4 -0.2**
baz=206
**M23K** **Glacier View** **83.33** **14** P **P** **02 09 07.5 -0.2**
baz=209
**MTPU** **Mount Pierson** **83.38** **47** P **P** **02 09 10.5 +1.6**
**BMRM** **Bremner River** **83.38** **16** P **P** **02 09 08.0 -0.1**
baz=212
**WAX** **Waxell Ridge** **83.41** **17** P **P** **02 09 08.3 +0.2**
**MESA** **MESA** **83.43** **17** P **P** **02 09 08.3 -0.1**
**MESA** **MESA** **83.43** **17** P **P** **02 09 08.9 +0.4**
baz=214,SNR=5.2
**S31K** **Pelican** **83.44** **21** P **P** **02 09 08.3 +0.1**
baz=220
**K20K** **Telida** **83.46** **11** P **P** **02 09 08.2 -0.1**
K20K IAmb IAmb 02 09 08.9
comp=Z,20nm,0.8s
**K20K** **Telida** **83.46** **11** P **P** **02 09 08.4 +0.1**
baz=203,SNR=9.0
**SCM** **Sheep Creek Mo** **83.46** **14** P **P** **02 09 08.2 -0.2**
**SCM** **Sheep Creek Mo** **83.46** **14** P **P** **02 09 08.5 +0.1**
baz=209,SNR=7.0
**H16K** **Elim** **83.50** **7** P **P** **02 09 09.0 +0.6**
baz=195
**KLU** **Klutina** **83.50** **15** P **P** **02 09 08.8 +0.2**
baz=211
**CRQM** **Cirque** **83.59** **16** P **P** **02 09 09.0 -0.2**
CRQM IAmb IAmb 02 09 10.0
comp=Z,18nm,0.9s
**CRQE** **Cirque** **83.60** **16** P **P** **02 09 09.4 +0.2**
baz=213,SNR=6.4
**S32K** **Killisnoo** **83.64** **22** P **P** **02 09 09.6 +0.4**
baz=221
**G15K** **Niukluk** **83.65** **6** P **P** **02 09 09.6 +0.4**
baz=193
**TGL** **Tana Glacier** **83.67** **17** P **P** **02 09 09.4 -0.1**
TGL IAmb IAmb 02 09 10.3
comp=Z,22nm,1.1s
**WRAK** **Wrangell Islan** **83.68** **24** P **P** **02 09 09.9 +0.4**
baz=223
**PNL** **Peninsula** **83.77** **19** P **P** **02 09 09.9 0.0**
baz=217,SNR=5.2
**J19K** **Poorman** **83.79** **10** P **P** **02 09 10.4 +0.5**
J19K IAmb IAmb 02 09 10.5
comp=Z,6.4nm,0.8s
**J19K** **Poorman** **83.79** **10** P **P** **02 09 10.5 +0.5**
baz=201
**PINM** **Pinacle** **83.86** **18** P **P** **02 09 10.4 0.0**
baz=216
**TABL** **Table Mountain** **83.88** **17** P **P** **02 09 10.9 +0.3**
**VRDI** **Verde Repeater** **83.90** **16** P **P** **02 09 10.8 0.0**
VRDI IAmb IAmb 02 09 11.4
comp=Z,13nm,0.9s
**D08A** **Wollman Farm,** **83.91** **36** P **P** **02 09 11.9 +1.0**
D08A IAmb IAmb 02 09 12.6
comp=Z,10nm,1.0s
**N25K** **Chitina, Valde** **83.93** **15** P **P** **02 09 10.2 -0.5**
**N25K** **Chitina, Valde** **83.93** **15** P **P** **02 09 10.7 0.0**
baz=212,SNR=15
**HNS** **HongShan** **83.94** **312** eP **P** **02 09 12.3 +1.1**
**GRNC** **Granite Creek** **83.95** **17** P **P** **02 09 10.6 -0.4**
GRNC IAmb IAmb 02 09 11.8
comp=Z,20nm,1.0s
**M24K** **Tolsona, Glenn** **83.97** **14** P **P** **02 09 11.8 +0.9**
**M24K** **Tolsona, Glenn** **83.97** **14** P **P** **02 09 11.3 +0.4**
baz=210
**GLB** **Gilahina Butte** **83.99** **16** P **P** **02 09 11.1 0.0**
GLB IAmb IAmb 02 09 11.5
comp=Z,14nm,0.7s
**DUG** **Dugway, Tooele** **84.01** **44** P **P** **02 09 11.5 -0.3**
baz=240
**WAT6** **Susitna Watana** **84.02** **14** P **P** **02 09 11.1 -0.2**
baz=209,SNR=9.1
**121A** **Cookes Peak, D** **84.03** **53** P **P** **02 09 11.5 -0.6**
baz=244
**WAT1** **Susitna Watana** **84.06** **13** P **P** **02 09 11.3 0.0**
baz=208
**H17K** **Granite Mounta** **84.06** **8** P **P** **02 09 12.3 +1.0**
baz=197
**SEY** **Seymchan** **84.14** **347** P **P** **02 09 11.2 -0.4**
comp=Z,13nm,0.5s,baz=139,slow=6.3,SNR=31
comp=Z,13nm,0.5s
**MCARA** **McCarthy VSAT** **84.14** **16** P **P** **02 09 12.7 +1.0**
baz=213
**J20K** **Nowinta River** **84.20** **10** P **P** **02 09 12.3 +0.4**
J20K IAmb IAmb 02 09 12.7
comp=Z,11nm,0.7s
**J20K** **Nowinta River** **84.20** **10** P **P** **02 09 12.1 +0.2**
baz=203,SNR=7.8
**LOGN** **Logan Glacier** **84.23** **17** P **P** **02 09 12.1 -0.2**
LOGN IAmb IAmb 02 09 13.1
comp=Z,14nm,0.9s
**LYN** **LuoYang** **84.24** **309** P **P** **02 09 13.9 +1.1**
LYN pmax pmax
comp=Z,45nm,0.9s
**P29M** **Windy Craggy** **84.25** **19** P **P** **02 09 13.0 +0.7**
P29M IAmb IAmb 02 09 13.7
comp=Z,15nm,0.7s
**P29M** **Windy Craggy** **84.25** **19** P **P** **02 09 13.0 +0.7**
baz=218,SNR=8.1
**CTG** **Chitna Glacier** **84.25** **17** P **P** **02 09 12.5 +0.1**
baz=215,SNR=6.3
**CTGM** **Chitina Glacie** **84.26** **17** P **P** **02 09 12.2 -0.2**
CTGM IAmb IAmb 02 09 12.9
comp=Z,12nm,0.7s
**R32K** **Eaglecrest** **84.27** **21** P **P** **02 09 13.2 +0.8**
baz=221
**F15K** **North Star Dit** **84.29** **6** P **P** **02 09 12.8 +0.5**
baz=193
**O28M** **Mount Upton** **84.42** **18** P **P** **02 09 13.4 0.0**
baz=216,SNR=12
**B08A** **Colville Reser** **84.43** **35** P **P** **02 09 13.5 0.0**
B08A IAmb IAmb 02 09 14.3
comp=Z,8.9nm,0.9s
**HARP** **HAARP** **84.47** **15** P **P** **02 09 14.0 +0.7**
baz=211
**RND** **Reindeer** **84.51** **13** P **P** **02 09 13.2 -0.3**
**O29M** **Mount Kennedy** **84.52** **19** P **P** **02 09 14.2 +0.4**
baz=217
**DHY** **Denali Highway** **84.54** **14** P **P** **02 09 13.3 -0.5**
DHY IAmb IAmb 02 09 13.6
comp=Z,5.4nm,0.6s
**DHY** **Denali Highway** **84.54** **14** P **P** **02 09 13.1 -0.7**
baz=209
**PLBC** **Pleasant Camp** **84.55** **20** P **P** **02 09 14.4 +0.7**
baz=219,SNR=8.0
**ENH** **Enshi** **84.68** **304** P **P** **02 09 15.7 +0.6**
**HLID** **Hailey** **84.68** **41** P **P** **02 09 15.9 +0.9**
**HLID** **Hailey** **84.68** **41** P **P** **02 09 16.3 +1.3**
baz=239
**BPAW** **Bear Paw Mtn.** **84.70** **12** P **P** **02 09 13.8 -0.6**
**BPAW** **Bear Paw Mtn.** **84.70** **12** P **P** **02 09 14.7 +0.2**
baz=206
**I20K** **Naaghedeneel** **84.72** **10** P **P** **02 09 15.1 +0.7**
baz=202
**MCK** **McKinley** **84.78** **13** P **P** **02 09 14.5 -0.3**
baz=208,SNR=6.3
**P30M** **Milton Dollar** **84.88** **19** P **P** **02 09 16.9 +1.5**
baz=219
**PAX** **Paxson** **84.88** **14** P **P** **02 09 14.6 -0.8**
baz=211,SNR=5.4
**T35M** **Bob Quinn** **84.89** **24** P **P** **02 09 16.4 +0.9**
baz=225
**SKAG** **Skagway** **84.89** **20** P **P** **02 09 16.0 +0.6**
baz=220
**YUK8** **Steele Glacier** **84.96** **18** P **P** **02 09 16.3 +0.3**
baz=216,SNR=11
**M26K** **Nabesna, AK** **85.01** **16** P **P** **02 09 16.2 +0.2**
baz=213,SNR=10
**SRU** **San Rafael Swe** **85.03** **46** P **P** **02 09 17.6 +0.7**
**YUK6** **Outpost Mounta** **85.10** **18** P **P** **02 09 16.6 0.0**
baz=218
**H19K** **Roundabout Mou** **85.10** **9** P **P** **02 09 16.4 +0.1**
baz=201
**G18K** **Tagagawik** **85.14** **8** P **P** **02 09 16.6 +0.1**
baz=198
**YUK3** **Moose Creek** **85.16** **17** P **P** **02 09 16.6 -0.3**
baz=216,SNR=9.2
**S34M** **Telegraph Cree** **85.22** **23** P **P** **02 09 18.0 +1.0**
baz=224,SNR=8.9
**M27K** **Edge Creek, AK** **85.26** **16** P **P** **02 09 17.6 +0.3**
baz=214,SNR=9.9
**H20K** **Anotleneega Mo** **85.31** **10** P **P** **02 09 17.7 +0.4**
baz=202
**YUK4** **Talbot Arm** **85.33** **18** P **P** **02 09 18.9 +1.2**
baz=217
**L26K** **Log Cabin Wild** **85.44** **15** P **P** **02 09 19.1 +1.1**
baz=213
**NEA2** **Nenana** **85.52** **12** P **P** **02 09 19.0 +0.7**
baz=208
**MNTX** **Cornudas Mount** **85.53** **55** P **P** **02 09 18.8 -0.4**
baz=246
**K24K** **Donnelly Dome** **85.53** **14** P **P** **02 09 18.3 -0.1**
baz=211,SNR=7.0
**P32M** **Atlin** **85.53** **21** P **P** **02 09 19.0 +0.5**
baz=222
**Q32M** **Nakina River** **85.57** **22** P **P** **02 09 19.7 +0.8**
baz=223,SNR=6.5
**G19K** **Purcell Mounta** **85.59** **8** P **P** **02 09 18.8 +0.2**
baz=200
**MLY** **Manley** **85.59** **11** P **P** **02 09 18.5 -0.2**
baz=206
**NEW** **Newport** **85.60** **36** P **P** **02 09 19.1 0.0**
baz=236
**O30N** **Mendenhall** **85.65** **19** P **P** **02 09 19.8 +0.7**
baz=220,SNR=11
**RIDG** **Independent Ri** **85.69** **14** P **P** **02 09 19.2 0.0**
baz=212
**H21K** **Melozitna Rive** **85.80** **10** P **P** **02 09 19.9 +0.2**
**H21K** **Melozitna Rive** **85.80** **10** P **P** **02 09 19.6 0.0**
baz=204
**HDA** **Harding Lake** **85.80** **13** P **P** **02 09 19.2 -0.4**
baz=210,SNR=8.0
**CCB** **Clear Creek Bu** **85.83** **13** P **P** **02 09 18.5 -1.2**
CCB IAmb IAmb 02 09 19.7
comp=Z,22nm,1.2s
**L27K** **Beaver Creek,** **85.86** **16** P **P** **02 09 20.2 +0.2**
baz=214
**N30M** **Aishikik Lake** **85.88** **18** P **P** **02 09 20.3 +0.1**
baz=219
**E17K** **Hotham Inlet** **85.91** **6** P **P** **02 09 20.3 +0.2**
baz=196
**TXAR** **Lajitas Array** **85.93** **57** P **P** **02 09 23.4 +2.1**
comp=Z,11nm,1.0s,baz=220,slow=6.3,SNR=16
comp=Z,11nm,1.0s
**WHY** **Whitehorse** **85.95** **20** P **P** **02 09 21.0 +0.4**
baz=221
**I23K** **Minto, Yukon-K** **85.96** **12** P **P** **02 09 20.3 -0.1**
baz=207
**DLBC** **Dease Lake** **86.01** **23** P **P** **02 09 21.2 +0.4**
baz=225
**COLA** **College** **86.02** **12** P **P** **02 09 19.9 -0.7**
**COLA** **College** **86.02** **12** P **P** **02 09 20.6 0.0**
baz=209
**ANMO** **Albuquerque** **86.07** **51** P **P** **02 09 21.6 -0.3**
baz=245
**ILAR** **Eielson Array** **86.13** **13** P **P** **02 09 20.1 -1.1**
comp=Z,3.9nm,0.5s,baz=221,slow=4.8,SNR=58
comp=Z,3.9nm,0.5s
**F19K** **Shaleruckik Mo** **86.15** **8** P **P** **02 09 21.4 +0.2**
baz=199
**H22K** **Ishtalitna Cre** **86.26** **11** P **P** **02 09 21.7 -0.1**
baz=205,SNR=5.8
**M29M** **Somme Creek** **86.26** **17** P **P** **02 09 22.4 +0.3**
baz=217,SNR=8.8
**P33M** **Teslin, Yukon** **86.30** **21** P **P** **02 09 22.4 +0.2**
baz=223,SNR=5.4
**N31M** **Braeburn, Yuko** **86.30** **19** P **P** **02 09 22.8 +0.6**
baz=220,SNR=5.2
**POKR** **Poker Plat Res** **86.32** **12** P **P** **02 09 21.0 -1.0**
baz=209
**J25K** **Salcha River,** **86.32** **14** P **P** **02 09 21.8 -0.4**
J25K IAmb IAmb 02 09 22.4
comp=Z,6.3nm,0.6s
**J25K** **Salcha River,** **86.32** **14** P **P** **02 09 21.7 -0.5**
baz=211,SNR=9.2
**R33M** **Jennings River** **86.35** **22** P **P** **02 09 23.5 +1.0**
baz=224,SNR=5.0
**E18K** **Tukpahlearik C** **86.37** **7** P **P** **02 09 22.8 +0.5**
baz=197
**G21K** **Allakaket** **86.47** **10** P **P** **02 09 22.6 -0.2**
baz=203,SNR=8.2
**H23K** **Yukon River** **86.53** **11** P **P** **02 09 22.9 -0.1**
baz=207
**K27K** **Chicken** **86.60** **15** P **P** **02 09 24.7 +1.3**
baz=214
**F20K** **Avaraart Lake** **86.63** **9** P **P** **02 09 23.6 +0.1**
baz=201
**J26L** **Joseph Creek** **86.64** **14** P **P** **02 09 23.9 +0.2**
J26L IAmb IAmb 02 09 25.7
comp=Z,8.2nm,0.7s
**J26L** **Joseph Creek** **86.64** **14** P **P** **02 09 23.9 +0.2**
baz=213,SNR=13
**MSO** **Missoula** **86.66** **38** P **P** **02 09 24.9 +0.6**
baz=239
**XAN** **Xi'an** **86.67** **307** ⇑P **P** **02 09 26.0 +1.5**
XAN pmax pmax
comp=Z,37nm,1.2s
**DLMT** **Dillon** **86.72** **40** P **P** **02 09 25.2 +0.6**
DLMT IAmb IAmb 02 09 26.4
comp=Z,9.6nm,0.9s
**BPMT** **Black Pine Rid** **86.75** **39** P **P** **02 09 25.1 +0.2**
**E19K** **Redstone River** **86.81** **8** P **P** **02 09 24.2 -0.1**
E19K IAmb IAmb 02 09 24.9
comp=Z,10nm,0.7s
**E19K** **Redstone River** **86.81** **8** P **P** **02 09 24.4 +0.1**
baz=200,SNR=5.9
**TPAW** **Teton Pass** **86.83** **42** P **P** **02 09 24.7 -0.6**
**N32M** **Quiet Lake** **86.91** **20** P **P** **02 09 25.8 +0.8**
baz=222
**S22A** **4UR Ranch, Cre** **87.00** **49** P **P** **02 09 26.8 +0.5**
baz=244
**F21K** **Alatna River** **87.12** **9** P **P** **02 09 26.0 +0.1**
baz=203
**G22K** **Bettles** **87.17** **10** P **P** **02 09 26.3 +0.3**
baz=205
**G23K** **Bananza Creek** **87.23** **11** P **P** **02 09 26.4 -0.1**
baz=207
**M31M** **Drury Creek, Y** **87.28** **19** P **P** **02 09 26.8 +0.2**
baz=221
**DAWY** **Dawson** **87.31** **16** P **P** **02 09 27.2 +0.4**
baz=216,SNR=5.9
**YHL** **Hebgen Lake** **87.34** **41** P **P** **02 09 28.1 +0.4**
YHL IAmb IAmb 02 09 30.3
comp=Z,10nm,0.8s
**BW06** **Boulder Array** **87.39** **43** P **P** **02 09 28.1 +0.2**
baz=242
**PD31** **Pinedale Array** **87.39** **43** P **P** **02 09 28.2 +0.2**
**PDAR** **Pinedale Array** **87.39** **43** P **P** **02 09 28.1 +0.2**
comp=Z,3.1nm,0.7s,baz=224,slow=2.8,SNR=24
comp=Z,3.1nm,0.7s
**I26K** **Coal Creek Min** **87.41** **14** P **P** **02 09 26.7 -0.5**
**I26K** **Coal Creek Min** **87.41** **14** P **P** **02 09 27.8 +0.6**
baz=213
**BOZ** **Bozeman (W)** **87.42** **40** P **P** **02 09 28.5 +0.6**
baz=241
**EGAK** **Eagle** **87.44** **15** P **P** **02 09 27.0 -0.3**
EGAK IAmb IAmb 02 09 28.1
comp=Z,6.7nm,0.8s
**EGAK** **Eagle** **87.44** **15** P **P** **02 09 28.2 +0.9**
baz=215
**F22K** **John River** **87.59** **10** P **P** **02 09 28.5 +0.4**
baz=205
**FARO** **Faro, Yukon** **87.62** **19** P **P** **02 09 28.7 +0.4**
baz=222
**K29M** **Barlow Dome** **87.63** **17** P **P** **02 09 28.9 +0.4**
baz=218,SNR=8.0
**H25L** **Birch Creek** **87.65** **12** P **P** **02 09 29.1 +0.8**
baz=210
**COLD** **Coldfoot** **87.67** **11** P **P** **02 09 28.6 +0.2**
baz=206,SNR=7.9
**D19K** **Kuna River** **87.68** **7** P **P** **02 09 28.7 +0.2**
baz=199

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **HHC** | **Hu-ho-hao-te** | **87.69** | **314** | *e*P | | **P** | **02 09 30.8** | **+1.6** |
| HHC | | | | sP | | sP | 02 12 33.9 | -1.6 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **87.70** | **12** | P | | **P** | **02 09 28.4** | **-0.1** |
| | baz=209 | | | | | | | |
| **E20K** | **Nigu River** | **87.70** | **8** | P | | **P** | **02 09 28.5** | **-0.1** |
| | baz=201,SNR=7.6 | | | | | | | |
| **LYMT** | **Lyon Mountain** | **87.70** | **39** | P | | **P** | **02 09 29.5** | **+0.2** |
| **SDCO** | **Great Sand Dun** | **87.95** | **49** | P | | **P** | **02 09 31.6** | **+0.8** |
| | baz=245 | | | | | | | |
| **I27K** | **Kandik River** | **88.02** | **14** | P | | **P** | **02 09 30.4** | **+0.3** |
| | baz=214 | | | | | | | |
| **G25K** | **Bearman Lake** | **88.03** | **12** | P | | **P** | **02 09 30.0** | **0.0** |
| | baz=210 | | | | | | | |
| **D20K** | **Etivluk River** | **88.08** | **8** | P | | **P** | **02 09 29.9** | **-0.3** |
| | baz=200 | | | | | | | |
| **C19K** | **Lookout Ridge** | **88.10** | **7** | P | | **P** | **02 09 30.1** | **-0.3** |
| | baz=198 | | | | | | | |
| **TOAD** | **Toad River Com** | **88.13** | **25** | P | | **P** | **02 09 31.3** | **+0.6** |
| | baz=229 | | | | | | | |
| **LIRD** | **Liard River Hi** | **88.16** | **24** | P | | **P** | **02 09 32.1** | **+1.3** |
| | baz=228 | | | | | | | |
| **E21K** | **Killik River** | **88.18** | **9** | P | | **P** | **02 09 31.1** | **+0.3** |
| | baz=203 | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **88.22** | **10** | P | | **P** | **02 09 31.5** | **+0.5** |
| | baz=205 | | | | | | | |
| **I28M** | **Miner Creek** | **88.29** | **15** | P | | **P** | **02 09 31.4** | **-0.1** |
| | baz=216,SNR=6.8 | | | | | | | |
| **F24K** | **Squaw Lake** | **88.34** | **11** | P | | **P** | **02 09 31.9** | **+0.4** |
| | baz=209,SNR=5.2 | | | | | | | |
| **T25A** | **Trinidad** | **88.49** | **50** | P | | **P** | **02 09 32.5** | **-0.8** |
| | baz=246 | | | | | | | |
| **E23K** | **Chandalar** | **88.51** | **10** | P | | **P** | **02 09 33.3** | **+0.9** |
| | baz=207 | | | | | | | |
| **J30M** | **Hart River** | **88.53** | **17** | P | | **P** | **02 09 33.2** | **+0.6** |
| | baz=219 | | | | | | | |
| **H27K** | **Steamboat Moun** | **88.55** | **14** | P | | **P** | **02 09 33.5** | **+0.9** |
| | baz=214,SNR=5.2 | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **88.57** | **20** | P | | **P** | **02 09 33.4** | **+0.6** |
| | baz=224,SNR=12 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **88.63** | **16** | P | | **P** | **02 09 32.8** | **-0.1** |
| | baz=217,SNR=6.2 | | | | | | | |
| **G26K** | **Porcupine Rive** | **88.66** | **13** | P | | **P** | **02 09 34.1** | **+1.1** |
| | baz=212 | | | | | | | |
| **RLMT** | **Red Lodge** | **88.66** | **41** | P | | **P** | **02 09 35.0** | **+1.2** |
| | baz=242 | | | | | | | |
| **E24K** | **Your Creek** | **88.72** | **11** | P | | **P** | **02 09 34.3** | **+0.9** |
| | baz=208 | | | | | | | |
| **C21K** | **Knifeblade Rid** | **88.73** | **8** | P | | **P** | **02 09 33.7** | **+0.5** |
| | baz=202 | | | | | | | |
| **D22K** | **Ayikyak River** | **88.77** | **9** | P | | **P** | **02 09 33.9** | **+0.4** |
| | baz=204 | | | | | | | |
| **TGTN** | **Hyland Airport** | **88.80** | **21** | P | | **P** | **02 09 35.0** | **+1.2** |
| | baz=227 | | | | | | | |
| **F25K** | **Christian Rive** | **88.83** | **12** | P | | **P** | **02 09 35.0** | **+1.1** |
| | baz=211 | | | | | | | |
| **N23A** | **Red Feather La** | **88.97** | **46** | P | | **P** | **02 09 35.9** | **+0.5** |
| | baz=245 | | | | | | | |
| **G27K** | **Doyon Strip** | **89.00** | **14** | P | | **P** | **02 09 35.9** | **+1.2** |
| | baz=214 | | | | | | | |
| **833A** | **Chaparral WMA,** | **89.01** | **60** | P | | **P** | **02 09 35.9** | **+0.3** |
| | baz=249 | | | | | | | |
| **I30M** | **Mount Dempster** | **89.02** | **16** | P | | **P** | **02 09 34.0** | **-0.9** |
| I30M | | | | IAmb | | IAmb | 02 09 35.6 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **I30M** | **Mount Dempster** | **89.02** | **16** | P | | **P** | **02 09 35.5** | **+0.6** |
| | baz=219,SNR=7.6 | | | | | | | |
| **B21K** | **Ikpikpuk River** | **89.19** | **8** | P | | **P** | **02 09 36.1** | **+0.7** |
| | baz=202 | | | | | | | |
| **B20K** | **Meade River** | **89.23** | **7** | P | | **P** | **02 09 36.3** | **+0.7** |
| | baz=200 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.25** | **290** | P | | **P** | **02 09 37.9** | **+1.0** |
| | comp=Z,2.0nm,0.3s,baz=104,slow=2.8,SNR=17 | | | | | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **H29M** | **Whitestone** | **89.30** | **15** | P | | **P** | **02 09 36.2** | **+0.3** |
| | baz=217,SNR=6.1 | | | | | | | |
| **PZH** | **PanZhiHua** | **89.55** | **298** | P | | **P** | **02 09 39.0** | **+0.8** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| **EPYK** | **Eagle Plains** | **89.83** | **15** | P | | **P** | **02 09 38.5** | **+0.1** |
| | baz=219,SNR=5.5 | | | | | | | |
| **G29M** | **Pine Creek** | **89.93** | **15** | P | | **P** | **02 09 38.9** | **0.0** |
| | baz=218 | | | | | | | |
| **SNAA** | **Sanae** | **90.28** | **179** | P | | **P** | **02 09 40.8** | **+0.1** |
| | comp=Z,4.2nm,1.1s,baz=209,slow=13,SNR=1.2 | | | | | | | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **90.43** | **15** | P | | **P** | **02 09 41.0** | **-0.2** |
| | baz=219,SNR=6.3 | | | | | | | |
| **G31M** | **Satah River** | **90.88** | **16** | P | | **P** | **02 09 43.0** | **-0.2** |
| **G31M** | **Satah River** | **90.88** | **16** | P | | **P** | **02 09 43.3** | **+0.1** |
| | baz=221,SNR=6.5 | | | | | | | |
| **LAO** | **LASA Array** | **91.26** | **41** | P | | **P** | **02 09 46.8** | **+1.2** |
| | baz=245 | | | | | | | |
| **F31M** | **Tsiigehtchic** | **91.41** | **16** | P | | **P** | **02 09 46.3** | **+0.7** |
| | baz=222 | | | | | | | |
| **RSSD** | **Black Hills** | **91.59** | **44** | P | | **P** | **02 09 48.1** | **+0.7** |
| | baz=246 | | | | | | | |
| **INK** | **Inuvik** | **92.11** | **15** | P | | **P** | **02 09 49.0** | **+0.1** |
| | baz=222 | | | | | | | |
| **DGMT** | **Dagmar** | **93.25** | **40** | P | | **P** | **02 09 55.1** | **+0.4** |
| | baz=246 | | | | | | | |
| **SONM** | **Songino Array** | **93.97** | **319** | P | | **P** | **02 09 57.9** | **-0.1** |
| | comp=Z,1.0nm,0.7s,baz=115,slow=3.6,SNR=5.0 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.50** | **25** | P | | **P** | **02 09 58.5** | **-1.4** |
| | comp=Z,2.1nm,0.8s,baz=246,slow=4.5,SNR=4.8 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **KSU1** | **Kansas State U** | **94.93** | **51** | P | | **P** | **02 10 03.5** | **+1.1** |
| | baz=251 | | | | | | | |
| **WVT** | **Waverly** | **100.73** | **55** | P | | **Pdif** | **02 10 28.4** | **0.0** |
| | baz=255 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **108.65** | **322** | PKiKP | | **PKiKP** | **02 15 03.4** | **-1.3** |
| | comp=Z,0.7nm,0.6s,baz=186,slow=4.3,SNR=2.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.55** | **314** | PKiKP | | **PKiKP** | **02 15 05.8** | **-0.9** |
| | comp=Z,0.9nm,0.5s,baz=161,slow=0.8,SNR=9.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **112.30** | **318** | PKiKP | | **PKiKP** | **02 15 10.7** | **-1.0** |
| | comp=Z,1.2nm,0.7s,baz=88,slow=1.6,SNR=12 | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.22** | **321** | PKP | | **PKPdf** | **02 15 19.9** | **-1.3** |
| | comp=Z,2.3nm,0.5s,baz=109,slow=1.2,SNR=10.0 | | | | | | | |
| **ARU** | **Arti** | **123.26** | **326** | PKP | | **PKPdf** | **02 15 31.8** | **-0.7** |
| | comp=Z,4.2nm,0.5s,baz=170,slow=1.1,SNR=10 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.67** | **350** | PKP | | **PKPdf** | **02 15 38.5** | **-0.2** |
| | comp=Z,3.8nm,0.8s,baz=64,slow=1.2,SNR=12 | | | | | | | |
| **BELG** | **Belogornoye** | **130.70** | **325** | PKP | | **PKPdf** | **02 15 45.8** | **-1.0** |
| | comp=Z,16nm,0.9s,baz=81,slow=10,SNR=6.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **133.56** | **344** | PKP | | **PKPdf** | **02 15 51.3** | **-0.7** |
| | comp=Z,2.9nm,0.8s,baz=77,slow=7.3,SNR=4.0 | | | | | | | |
| **NOA** | **NORSAR Array B** | **136.72** | **353** | PKP | | **PKPdf** | **02 15 58.6** | **+0.7** |
| | comp=Z,1.1nm,0.9s,baz=14,slow=3.7,SNR=1.8 | | | | | | | |
| **HFS** | **Hagfors** | **137.28** | **351** | PKhKP | | PKPpre | 02 15 47.0 | |
| | comp=Z,4.8nm,1.0s,baz=70,slow=5.5,SNR=6.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **140.97** | **332** | PKhKP | | PKPpre | 02 15 59.5 | |
| | comp=Z,1.4nm,0.5s,baz=44,slow=3.7,SNR=6.4 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.75** | **5** | PKhKP | | PKPpre | 02 16 05.2 | |
| | comp=Z,1.5nm,0.6s,baz=314,slow=2.6,SNR=7.2 | | | | | | | |
| **SORM** | **Soroca** | **143.20** | **330** | ⇓P | | PKPab | 02 16 08.1 | +0.1 |
| **BEL** | **Belsk** | **143.29** | **340** | *e*PKP | | PKPab | 02 16 08.9 | +0.6 |
| **PURM** | **Purcari** | **143.54** | **327** | ⇓P | | PKPab | 02 16 09.7 | +0.3 |
| **KWP** | **Kalwaria Pacla** | **144.47** | **337** | *e*PKP | | **PKPdf** | **02 16 12.5** | **+0.4** |
| **VLDR** | **Vladesti** | **144.93** | **328** | ⇓P | | PKPbc | 02 16 14.5 | +0.7 |
| **OJC** | **Ojcow** | **145.00** | **340** | *e*PKP | | **PKPdf** | **02 16 13.8** | **+0.8** |
| **BURAR** | **Bucovina Array** | **145.02** | **332** | ⇓P | | **PKPab** | **02 16 15.3** | **+0.1** |
| **SCTR** | **Scanteiesti** | **145.09** | **327** | ⇓P | | **PKPab** | **02 16 15.6** | **+0.2** |
| **GHRR** | | **145.12** | **328** | ⇓P | | **PKPab** | **02 16 16.1** | **+0.6** |
| **TESR** | **Tescani** | **145.17** | **330** | ⇓P | | **PKPbc** | **02 16 14.8** | **+0.3** |
| **BRTR** | **Keskin Array B** | **145.20** | **315** | PKPbc | | **PKPdf** | **02 16 14.8** | **+1.0** |
| | comp=Z,6.8nm,0.7s,baz=136,slow=4.9,SNR=37 | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **145.20** | **336** | *e*PKP | | **PKPbc** | **02 16 15.1** | **+0.6** |
| **KIRS** | **Kirsehir-Merke** | **145.29** | **314** | ⇓P | | **PKPbc** | **02 16 15.3** | **+0.1** |
| **COSR** | **Cosmesti PH** | **145.31** | **328** | ⇑P | | **PKPbc** | **02 16 16.1** | **+1.2** |
| **CFR** | **Carcaliu** | **145.35** | **327** | ⇓P | | **PKPdf** | **02 16 14.9** | **+1.2** |
| **PANC** | **Panciu** | **145.38** | **328** | ⇓P | | **PKPbc** | **02 16 15.6** | **+0.5** |
| **TPGR** | **Topolog** | **145.41** | **326** | ⇑P | | **PKPbc** | **02 16 16.1** | **+0.8** |
| **KSP** | **Ksiaz** | **145.49** | **344** | *e*PKP | | **PKPbc** | **02 16 15.2** | **-0.1** |
| **NIE** | **Niedzica** | **145.52** | **339** | *e*PKP | | **PKPdf** | **02 16 15.3** | **+1.3** |
| **CRVS** | **Cervenica-Dubn** | **145.53** | **337** | *e*PKP | | **PKPbc** | **02 16 16.2** | **+0.7** |
| **ASF** | **Jabal al Asfar** | **145.57** | **301** | PKPbc | | **PKPbc** | **02 16 16.7** | **+0.4** |
| | comp=Z,5.6nm,0.7s,baz=344,slow=0.4,SNR=8.3 | | | | | | | |
| **VRI** | **Vrincioaia** | **145.59** | **329** | ⇑P | | **PKPdf** | **02 16 15.3** | **+1.1** |
| **PLOR** | **Plostina** | **145.64** | **329** | ⇑P | | **PKPbc** | **02 16 15.8** | **-0.1** |
| **ANTO** | **Ankara** | **145.70** | **315** | ⇓P | | **PKPbc** | **02 16 16.6** | **+0.3** |
| **OSTC** | **Ostas** | **145.77** | **344** | *e*PKP | | **PKPbc** | **02 16 17.4** | **+1.3** |
| **CHVC** | **Chvalec** | **145.78** | **344** | *e*PKP | | **PKPbc** | **02 16 16.9** | **+0.7** |
| **HARR** | **Harsova** | **145.78** | **326** | ⇑P | | **PKPbc** | **02 16 16.6** | **+0.3** |
| **ARCR** | **ARCALIA** | **145.80** | **332** | ⇑P | | **PKPbc** | **02 16 17.2** | **+0.9** |
| **CLL** | **Collm** | **145.83** | **348** | ⇓*i*PKPbc | | **PKPbc** | **02 16 16.4** | **+0.2** |
| | comp=Z,38nm,0.8s | | | | | | | |
| CLL | | | | *i* (PKPab) | | **PKPab** | **02 16 17.8** | **-0.3** |
| **COVR** | **Voineasa-Covas** | **145.86** | **329** | ⇓P | | **PKPbc** | **02 16 16.9** | **+0.4** |
| **UPC** | **Upice** | **145.87** | **344** | *e*PKP | | **PKPbc** | **02 16 16.7** | **+0.3** |
| **DPC** | **Dobruska-Polom** | **145.93** | **343** | *e*PKP | | **PKPbc** | **02 16 17.2** | **+0.6** |
| **BOSR** | **Bodos** | **145.96** | **330** | ⇑P | | **PKPbc** | **02 16 18.0** | **+1.2** |
| **LANS** | **Liptovska Anna** | **146.03** | **339** | *e*PKP | | **PKPbc** | **02 16 18.1** | **+1.2** |
| **BRG** | **Berggiesshubel** | **146.03** | **346** | *e*PKP | | **PKPbc** | **02 16 17.1** | **+0.3** |
| BRG | | | | Amp | | | 02 16 18.1 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **KRLC** | **Kraliky** | **146.05** | **343** | *e*PKP | | **PKPbc** | **02 16 17.7** | **+0.8** |
| **MORC** | **Moravsky Berou** | **146.09** | **342** | *e*PKP | | **PKPbc** | **02 16 17.1** | **0.0** |
| **DOPR** | **Dopca** | **146.16** | **330** | ⇑P | | **PKPbc** | **02 16 18.5** | **+1.1** |
| **PVCC** | **Panska Ves** | **146.21** | **345** | *e*PKP | | **PKPbc** | **02 16 18.1** | **+0.8** |
| **MLR** | **Muntele Rosu** | **146.24** | **329** | PKPbc | | **PKPbc** | **02 16 17.7** | **-0.1** |
| | comp=Z,8.6nm,0.8s,baz=336,slow=6.2,SNR=19 | | | | | | | |
| **MLR** | **Muntele Rosu** | **146.24** | **329** | ⇓P | | **PKPbc** | **02 16 18.5** | **+0.8** |
| **MAUC** | **Maruska** | **146.37** | **341** | *e*PKP | | **PKPbc** | **02 16 18.6** | **+0.8** |
| **CBBR** | **Cluj-Babes-Bol** | **146.40** | **333** | ⇑P | | **PKPdf** | **02 16 15.6** | **+0.1** |
| **CJR** | **Cluj-Napoca** | **146.42** | **333** | ⇑P | | **PKPbc** | **02 16 19.0** | **+0.9** |
| **MMAI** | **Mount Meron Ar** | **146.54** | **303** | PKPbc | | **PKPbc** | **02 16 19.2** | **+0.3** |
| | comp=Z,9.2nm,0.6s,baz=65,slow=6.8,SNR=19 | | | | | | | |
| **PRA** | **Prague** | **146.67** | **345** | *e*PKP | | **PKPbc** | **02 16 19.1** | **+0.6** |
| **VOIR** | | **146.72** | **330** | ⇑P | | **PKPbc** | **02 16 19.8** | **+0.9** |
| **PRU** | **Pruhonice** | **146.72** | **345** | *e*PKP | | **PKPbc** | **02 16 19.2** | **+0.5** |
| **DRGR** | | **146.74** | **334** | ⇑P | | **PKPbc** | **02 16 19.6** | **+0.6** |
| **VRAC** | **Vranov** | **146.79** | **342** | *e*PKP | | **PKPbc** | **02 16 19.2** | **+0.3** |
| **VRAC** | **Vranov** | **146.79** | **342** | PKPbc | | **PKPbc** | **02 16 19.4** | **+0.5** |
| | comp=Z,4.6nm,0.6s,baz=24,slow=2.8,SNR=9.7 | | | | | | | |
| **VYHS** | **Vyhne** | **146.81** | **339** | *e*PKP | | **PKPbc** | **02 16 19.8** | **+0.8** |
| **JAVC** | **Velka Javorina** | **146.87** | **341** | *e*PKP | | **PKPbc** | **02 16 20.6** | **+1.4** |
| **PSZ** | **Piszkesteto** | **146.93** | **338** | ⇓P | | **PKPbc** | **02 16 19.8** | **+0.4** |
| **ARR** | **Arges** | **146.97** | **330** | ⇑P | | **PKPbc** | **02 16 20.9** | **+1.3** |
| **KRUC** | **Moravsky** | **147.07** | **342** | *e*PKP | | **PKPbc** | **02 16 19.7** | **0.0** |
| **ZVC** | **Zvikov** | **147.31** | **345** | *e*PKP | | **PKPbc** | **02 16 20.7** | **+0.4** |
| **MEM** | **Membach** | **147.52** | **355** | *d*PKPdf | | **PKPdf** | **02 16 17.5** | **+0.3** |
| MEM | | | | *d*PKPbc | | **PKPbc** | **02 16 20.8** | **0.0** |
| **BTNL** | **Ternell** | **147.53** | **355** | *d*PKPbc | | **PKPbc** | **02 16 20.9** | **+0.1** |
| **SRO** | **Srobarova** | **147.57** | **339** | *e*PKP | | **PKPbc** | **02 16 21.9** | **+0.9** |
| **BSTI** | **Sart Tilman** | **147.58** | **356** | *d*PKPbc | | **PKPbc** | **02 16 21.1** | **+0.2** |
| **SIRR** | **Siria** | **147.60** | **334** | ⇓P | | **PKPbc** | **02 16 21.4** | **+0.3** |
| **KHC** | **Kasperske Hory** | **147.75** | **346** | *e*PKP | | **PKPbc** | **02 16 21.8** | **+0.3** |
| **BCLA** | **Clavier** | **147.76** | **356** | *d*PKPbc | | **PKPbc** | **02 16 21.8** | **+0.4** |
| BCLA | | | | *d*PKPab | | **PKPab** | **02 16 25.2** | **-0.7** |
| **GZR** | **Gura Zlata** | **147.80** | **332** | ⇑P | | **PKPbc** | **02 16 21.3** | **-0.5** |
| **BGES** | **Gesves** | **147.81** | **356** | *d*PKPbc | | **PKPbc** | **02 16 20.9** | **-0.6** |
| BGES | | | | *d*PKPab | | **PKPab** | **02 16 25.5** | **-0.7** |
| **SURR** | **Surduc** | **147.81** | **333** | ⇓P | | **PKPbc** | **02 16 21.7** | **0.0** |
| **EIL** | **Elat** | **147.81** | **297** | PKPbc | | **PKPbc** | **02 16 22.1** | **-0.1** |
| | comp=Z,8.7nm,1.1s,baz=88,slow=16,SNR=5.0 | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **147.86** | **344** | *e*PKP | | **PKPbc** | **02 16 22.4** | **+0.7** |
| **BMRD** | **Maredsous** | **147.91** | **357** | *d*PKPbc | | **PKPbc** | **02 16 21.3** | **-0.5** |
| **GERES** | **GERESS Array B** | **147.98** | **345** | PKPbc | | **PKPbc** | **02 16 22.5** | **+0.3** |
| | comp=Z,7.6nm,0.7s,baz=22,slow=6.1,SNR=36 | | | | | | | |
| **RCHB** | **Rochefort** | **148.03** | **356** | *d*PKPbc | | **PKPbc** | **02 16 22.1** | **0.0** |
| **DOU** | **Dourbes** | **148.13** | **357** | *d*PKPbc | | **PKPbc** | **02 16 22.6** | **+0.3** |
| DOU | | | | *d*PKPab | | **PKPab** | **02 16 26.9** | **-0.5** |
| **BZS** | **Buzias** | **148.14** | **333** | ⇑P | | **PKPbc** | **02 16 23.0** | **+0.5** |
| **CONA** | **Conrad Observa** | **148.25** | **342** | *i* PKP | | **PKPbc** | **02 16 23.3** | **+0.4** |
| | comp=Z,5.7nm,0.7s,SNR=12 | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.32** | **341** | *e*PKP | | **PKPbc** | **02 16 23.4** | **+0.5** |
| | comp=Z,6.7nm,0.7s,SNR=13 | | | | | | | |
| **HERR** | **Herculane** | **148.36** | **332** | ⇑P | | **PKPbc** | **02 16 23.3** | **+0.2** |
| **WLF** | **Walferdange** | **148.44** | **355** | *d*PKP | | **PKPbc** | **02 16 24.1** | **+1.0** |
| **MOA** | **Molln** | **148.76** | **344** | *i* PKP | | **PKPbc** | **02 16 23.9** | **-0.1** |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **148.83** | **337** | ⇑P | | **PKPbc** | **02 16 23.8** | **-0.3** |
| **ARSA** | **Arzberg** | **148.96** | **342** | *i* PKP | | **PKPbc** | **02 16 24.0** | **-0.5** |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.07** | **344** | *i* PKP | | **PKPbc** | **02 16 24.4** | **-0.4** |
| | comp=Z,2.8nm,0.6s,SNR=5.3 | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.56** | **345** | *i* PKP | | **PKPbc** | **02 16 25.8** | **-0.2** |
| | comp=Z,4.2nm,0.5s | | | | | | | |
| **BOVS** | **Bovan** | **149.65** | **331** | ⇓P | | **PKPbc** | **02 16 25.7** | **-0.5** |
| **KBA** | **Koelnbreinsper** | **149.72** | **344** | *i* PKP | | **PKPbc** | **02 16 26.0** | **-0.5** |
| | comp=Z,4.6nm,0.5s,SNR=7.3 | | | | | | | |
| **WATA** | **Walderalm** | **149.89** | **347** | *i* PKP | | **PKPbc** | **02 16 26.8** | **-0.1** |
| | comp=Z,5.6nm,0.5s,SNR=7.6 | | | | | | | |
| **OBKA** | **Obir** | **149.91** | **342** | *e*PKP | | **PKPbc** | **02 16 26.2** | **-0.7** |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **RETA** | **Reutte** | **149.92** | **348** | *i* PKP | | **PKPbc** | **02 16 26.7** | **-0.1** |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.95** | **347** | *e*PKP | | **PKPbc** | **02 16 26.9** | **-0.2** |
| | comp=Z,14nm,0.7s,SNR=14 | | | | | | | |
| **MOTA** | **Moosalm** | **149.98** | **347** | *e*PKP | | **PKPbc** | **02 16 26.9** | **-0.2** |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.05** | **344** | *e*PKP | | **PKPbc** | **02 16 26.5** | **-0.6** |
| | comp=Z,8.5nm,0.6s,SNR=6.3 | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.08** | **347** | *i* PKP | | **PKPbc** | **02 16 27.4** | **+0.1** |
| | comp=Z,11nm,0.6s,SNR=11 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.23** | **345** | *e*PKP | | **PKPbc** | **02 16 27.1** | **-0.5** |
| | comp=Z,11nm,0.7s,SNR=14 | | | | | | | |
| **DAVA** | **Damuels** | **150.28** | **349** | *e*PKP | | **PKPbc** | **02 16 27.8** | **0.0** |
| | comp=Z,4.7nm,0.6s,SNR=8.8 | | | | | | | |
| **FETA** | **Feichten** | **150.37** | **348** | *e*PKP | | **PKPbc** | **02 16 28.2** | **+0.2** |
| | comp=Z,7.9nm,0.7s,SNR=6.7 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.76** | **349** | PKP | | **PKPdf** | **02 16 21.7** | **-1.0** |
| | comp=Z,1.9nm,0.8s,baz=29,slow=6.4,SNR=7.0 | | | | | | | |
| DAVOX | | | | PKPbc | | **PKPbc** | **02 16 29.3** | **+0.3** |
| | comp=Z,18nm,0.7s,baz=333,slow=4.5,SNR=47 | | | | | | | |
| **ESDC** | **Sonseca Array** | **158.03** | **12** | PKPab | | **PKPab** | **02 17 09.1** | **-0.8** |
| | comp=Z,2.4nm,1.0s,baz=348,slow=4.8,SNR=11 | | | | | | | |
| **KEST** | **Kesra** | **161.35** | **341** | PKPab | | **PKPab** | **02 17 24.0** | **-0.6** |
| | comp=Z,3.8nm,0.8s,baz=55,slow=1.8,SNR=8.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **174.95** | **178** | PKPab | | **PKPab** | **02 18 25.4** | **+0.4** |
| | comp=Z,0.5nm,0.8s,baz=180,slow=2.3,SNR=1.5 | | | | | | | |

*IDC* ***19*** *01:58:24.9±0.5,35.°35S×106.°25W,h0km,mb4.6/15, mbtmp4.7/16,ML4.3/1,Error ellipse: s-maj=16.7km s-min=15.7km az=82.0*

*MOS* ***19*** *01:58:26.1±1.3,35.°31S×105.°99W,h10km,mb5.1/19, Error ellipse: s-maj=14.2km s-min=11.4km az=87.4*

*NEIC* ***19*** *01:58:27.8±1.3,35.°34S±0.°09×106.°1W±0.°1, h10km±1km, mb5.1/264, Error ellipse: s-maj=18.4km s-min=15.2km az=262.0*

**ISC 19 01:58:27.7±0.3,35.°37S±0.°06×106.°12W±0.°07,h15km, n396,σ1°08/342,mb5.1/137,2C-7D,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VA02** | **Isla de Pascua** | **8.66** | **340** | Pn | | **Pn** | **02 00 31.9** | **-0.6** |
| **VA02** | **Isla de Pascua** | **8.66** | **340** | *e*P | | **Pn** | **02 00 33.6** | **+1.1** |
| VA02 | | | | *i* S | | Sn | 02 02 19.5 | +10 |
| **RPN** | **Rapa Nui** | **8.66** | **341** | Pn | | **Pn** | **02 00 32.5** | **-0.1** |
| **RPN** | **Rapa Nui** | **8.66** | **341** | Pn | | **Pn** | **02 00 31.6** | **-1.0** |
| | 3.8nm,0.3s,baz=172,slow=8.0,SNR=4.9 | | | | | | | |
| RPN | | | | Sn | | **Sn** | **02 02 13.4** | **+3.4** |
| | 3.1nm,0.3s,baz=106,slow=13,SNR=1.4 | | | | | | | |
| | 177nm,0.9s | | | | | | | |
| **RPN** | **Rapa Nui** | **8.66** | **341** | *e*P | | **Pn** | **02 00 32.6** | **0.0** |
| **RPN** | **Rapa Nui** | **8.66** | **341** | P | | **Pn** | **02 00 32.5** | **-0.1** |
| **LL04** | **Puerto Octay** | **26.98** | **112** | P | | **P** | **02 04 09.8** | **+1.0** |
| **LL01** | **San Ignacio de** | **27.03** | **115** | P | | **P** | **02 04 10.7** | **+1.4** |
| **AY02** | **Valle Explorad** | **27.05** | **124** | P | | **P** | **02 04 09.9** | **+0.5** |
| **LL02** | **Futaleuf** | **27.51** | **117** | P | | **P** | **02 04 14.3** | **+0.8** |
| **GO05** | **Huala** | **27.87** | **99** | P | | **P** | **02 04 17.2** | **+0.3** |
| GO05 | | | | IAmb | | IAmb | 02 04 31.8 | |
| | comp=Z,46nm,1.1s | | | | | | | |
| **ML02** | **Panimavida** | **28.15** | **101** | P | | **P** | **02 04 19.3** | **0.0** |
| **PLCA** | **Paso Flores** | **28.39** | **112** | P | | **P** | **02 04 22.0** | **+0.5** |
| PLCA | | | | IAmb | | IAmb | 02 04 30.0 | |
| | comp=Z,33nm,1.3s | | | | | | | |
| **PLCA** | **Paso Flores** | **28.39** | **112** | P | | **P** | **02 04 22.8** | **+1.2** |
| | comp=Z,5.3nm,0.7s,baz=270,slow=9.6,SNR=15 | | | | | | | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **PLCA** | **Paso Flores** | **28.39** | **112** | P | | **P** | **02 04 22.0** | **+0.5** |
| PLCA | | | | pmax | | pmax | | |
| | comp=Z,33nm,1.3s | | | | | | | |
| **BO01** | **Tunca** | **28.67** | **98** | P | | **P** | **02 04 24.5** | **+0.5** |
| BO01 | | | | IAmb | | IAmb | 02 05 18.4 | |
| | comp=Z,86nm,1.9s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **28.83** | **99** | P | | **P** | **02 04 26.0** | **+0.4** |
| **MT09** | **Talagante** | **28.88** | **97** | P | | **P** | **02 04 26.2** | **+0.2** |
| MT09 | | | | IAmb | | IAmb | 02 04 27.7 | |
| | comp=Z,93nm,1.8s | | | | | | | |
| **MG05** | **Puerto Natales** | **28.99** | **135** | P | | **P** | **02 04 27.6** | **+0.9** |
| **BO04** | **La Punta** | **29.14** | **98** | P | | **P** | **02 04 28.3** | **0.0** |
| BO04 | | | | IAmb | | IAmb | 02 04 59.1 | |
| | comp=Z,41nm,1.3s | | | | | | | |
| **LMEL** | **Las Melosas** | **29.50** | **98** | P | | **P** | **02 04 32.7** | **+1.1** |
| LMEL | | | | IAmb | | IAmb | 02 04 43.4 | |
| | comp=Z,40nm,0.8s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **29.75** | **97** | P | | **P** | **02 04 34.8** | **+0.9** |
| **MT08** | **Bocatoma Ro** | **29.75** | **97** | *e*P | | **P** | **02 04 35.0** | **+1.1** |
| **ZON** | **Zonda** | **31.35** | **94** | P | | **P** | **02 04 48.9** | **+1.1** |
| ZON | | | | IAmb | | IAmb | 02 04 59.5 | |
| | comp=Z,40nm,1.4s | | | | | | | |
| **ZON** | **Zonda** | **31.35** | **94** | P | | **P** | **02 04 48.9** | **+1.1** |
| ZON | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.4s | | | | | | | |
| **AC06** | **Mina Casimiro** | **31.44** | **85** | P | | **P** | **02 04 48.6** | **0.0** |
| AC06 | | | | IAmb | | IAmb | 02 04 56.8 | |
| | comp=Z,51nm,1.4s | | | | | | | |
| **GO02** | **Mina Guanaco** | **32.99** | **82** | P | | **P** | **02 05 02.3** | **-0.3** |
| GO02 | | | | IAmb | | IAmb | 02 05 07.8 | |
| | comp=Z,50nm,1.4s | | | | | | | |
| **LVC** | **Limon Verde** | **34.74** | **79** | P | | **P** | **02 05 18.2** | **+0.3** |
| LVC | | | | IAmb | | IAmb | 02 05 20.5 | |
| | comp=Z,29nm,1.1s | | | | | | | |
| **LVC** | **Limon Verde** | **34.74** | **79** | P | | **P** | **02 05 18.2** | **+0.3** |
| LVC | | | | pmax | | pmax | | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **LVC** | **Limon Verde** | **34.74** | **79** | *e*P | | **P** | **02 05 17.6** | **-0.3** |
| **PB09** | **IPOC Station P** | **34.89** | **77** | P | | **P** | **02 05 19.2** | **+0.3** |
| PB09 | | | | IAmb | | IAmb | 02 05 21.8 | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **HMBC** | **Humberstone** | **35.17** | **74** | P | | **P** | **02 05 21.2** | **-0.1** |
| **NNA** | **Nana** | **35.27** | **56** | *i* P | | **P** | **02 05 20.3** | **-1.8** |
| NNA | | | | pmax | | pmax | | |
| | comp=Z,63nm,1.4s | | | | | | | |
| **EFI** | **East Falkland** | **37.72** | **131** | *i* P | | **P** | **02 05 43.8** | **+1.3** |
| EFI | | | | pmax | | pmax | | |
| | comp=Z,65nm,2.3s | | | | | | | |

comp=Z,20nm,1.0s,baz=140,slow=3.9,SNR=5.4
comp=Z,20nm,1.0s

**BKZ Black Stump Fm** 59.92 241 P **P** 02 08 34.2 +0.9
**MSWZ Moikau Station** 59.94 238 P **P** 02 08 34.5 +1.2
**MRZ Mangatainoka R** 59.99 239 P **P** 02 08 34.3 +0.6
**SNAA Sanae** 60.84 159 P **P** 02 08 38.3 -0.7
SNAA IAmb IAmb 02 08 40.3
comp=Z,16nm,1.1s
**SNAA Sanae** 60.84 159 ⇓P **P** 02 08 38.7 -0.4
comp=Z,166nm,0.9s
**SNAA Sanae** 60.84 159 P **P** 02 08 38.4 -0.6
comp=Z,9.0nm,1.0s,baz=236,slow=4.7,SNR=22
comp=Z,9.0nm,1.0s
**SNAA Sanae** 60.84 159 *i* P **P** 02 08 39.1 +0.1
SNAA pmax pmax
comp=Z,22nm,1.4s
**TUWZ Tuamarina** 60.84 238 P **P** 02 08 39.9 +0.5
**MQZ McQueen's Vall** 60.84 235 P **P** 02 08 39.0 -0.4
**MCPB Macapa, AP** 61.10 68 *e*P **P** 02 08 41.0 -0.5
**OXZ Oxford** 61.40 235 P **P** 02 08 42.8 -0.5
**THZ Tophouse** 61.43 237 P **P** 02 08 44.1 +0.6
**MRNZ Matariki Terra** 61.67 238 P **P** 02 08 45.6 +0.6
**HPIG** 61.97 0 P **P** 02 08 46.5 -0.8
HPIG IAmb IAmb 02 09 14.2
comp=Z,15nm,1.4s
**TROLL Troll, Antarti** 62.19 161 ⇓P **P** 02 08 48.5 +0.2
comp=Z,386nm,0.7s
**NMDO Nuevo Mundo** 62.98 33 P **P** 02 08 53.7 -0.2
NMDO IAmb IAmb 02 08 57.7
comp=Z,80nm,1.7s
**833A Chaparral WMA,** 63.67 7 P **P** 02 08 57.9 -0.4
833A IAmb IAmb 02 09 09.7
comp=Z,20nm,1.1s
**833A Chaparral WMA,** 63.67 7 P **P** 02 08 59.4 +1.1
baz=186
**TX31 Lajitas Ar. Si** 64.40 2 P **P** 02 09 03.5 +0.3
TX31 IAmb IAmb 02 09 24.2
comp=Z,10nm,0.8s
**TXAR Lajitas Array** 64.40 2 P **P** 02 09 03.6 +0.3
**TXAR Lajitas Array** 64.40 2 P **P** 02 09 03.3 +0.1
comp=Z,1.9nm,0.7s,baz=183,slow=9.3,SNR=19
comp=Z,1.9nm,0.7s
**MLPR Magueyes Islan** 64.71 42 P **P** 02 09 03.9 -1.4
**HNDO Hondo** 64.87 7 P **P** 02 09 06.2 0.0
HNDO IAmb IAmb 02 09 20.3
comp=Z,17nm,0.8s
**OBIP Obispado Ponce** 65.01 42 P **P** 02 09 04.9 -2.4
**CELP Cerrillos** 65.05 42 P **P** 02 09 07.4 -0.2
**SAND Sanderson** 65.09 4 IAmb IAmb 02 09 15.2
comp=Z,32nm,1.5s
**PDPR Patillas Dam,** 65.31 42 P **P** 02 09 06.5 -2.8
PDPR IAmb IAmb 02 09 15.7
comp=Z,14nm,1.0s
**BBGH Gun Hill** 65.34 51 P **P** 02 09 09.1 -0.4
**NVL N'lazarevskaya** 65.37 161 *e*P **P** 02 09 08.1 -0.9
NVL pmax pmax
comp=Z,11nm,1.0s
**ALPN Alpine** 65.44 2 IAmb IAmb 02 09 17.9
comp=Z,15nm,1.1s
**JCT Junction City** 65.77 6 P **P** 02 09 13.3 +1.2
baz=186
**VHRN Van Horn** 65.81 1 IAmb IAmb 02 09 22.4
comp=Z,32nm,1.8s
**NBLA Lagarto - SE** 66.08 87 *e*P **P** 02 09 14.0 -0.5
**OZNA Ozona** 66.11 5 P **P** 02 09 13.5 -0.7
OZNA IAmb IAmb 02 09 25.0
comp=Z,14nm,0.9s
**435B Jarrell** 66.29 8 P **P** 02 09 15.9 +0.6
**435B Jarrell** 66.29 8 P **P** 02 09 16.3 +1.0
baz=188
**EPT El Paso** 66.79 360 P **P** 02 09 17.1 -1.6
**SGCY Sterling City** 67.09 5 P **P** 02 09 20.8 +0.3
**ODSA Odessa** 67.22 3 P **P** 02 09 20.8 -0.6
ODSA IAmb IAmb 02 09 28.7
comp=Z,19nm,1.0s
**214A Organ Pipe Nat** 67.27 354 P **P** 02 09 22.0 +0.5
214A IAmb IAmb 02 09 38.5
comp=Z,26nm,1.6s
**214A Organ Pipe Nat** 67.27 354 P **P** 02 09 22.2 +0.7
baz=174
**DWPF Disney Wildern** 67.30 24 P **P** 02 09 20.6 -1.2
**DWPF Disney Wildern** 67.30 24 P **P** 02 09 22.9 +1.0
baz=202
**ELIB Princess Elisa** 67.32 165 *d*P **P** 02 09 21.8 +0.1
comp=Z,6.4nm,0.8s
**TUC Tucson** 67.47 356 P **P** 02 09 23.9 +1.0
**TUC Tucson** 67.47 356 P **P** 02 09 24.7 +1.8
baz=176
**TUC Tucson** 67.47 356 P **P** 02 09 23.9 +1.0
TUC pmax pmax
comp=Z,9.0nm,1.1s
**WHTX Lake Whitney,** 67.50 8 P **P** 02 09 22.7 -0.3
**121A Cookes Peak, D** 67.56 358 P **P** 02 09 24.3 +0.7
**121A Cookes Peak, D** 67.56 358 P **P** 02 09 25.6 +2.0
baz=178
**DUN6 Lazy B Ranch** 67.62 357 P **P** 02 09 24.2 +0.2
**NATX Nacogdoches** 67.64 11 P **P** 02 09 24.0 +0.1
**NATX Nacogdoches** 67.64 11 P **P** 02 09 25.9 +2.0
baz=190
**ESJX Sierra Juarez** 67.65 351 P **P** 02 09 24.4 +0.1
ESJX IAmb IAmb 02 09 34.4
comp=Z,31nm,2.0s
**237A Washetta, Mont** 67.71 9 P **P** 02 09 24.4 +0.1
**FW13 Cleburne** 67.86 8 P **P** 02 09 25.4 +0.1
FW13 IAmb IAmb 02 09 32.6
comp=Z,18nm,0.9s
**ABTX Abilene, Hawle** 67.91 6 P **P** 02 09 25.3 -0.4
ABTX IAmb IAmb 02 09 36.2
comp=Z,18nm,1.1s
**FW14 Alvarado** 67.93 8 P **P** 02 09 25.4 -0.3
**CBX Cerro Bola** 68.05 350 P **P** 02 09 26.3 -0.3
**SN05 Snyder 5** 68.07 5 P **P** 02 09 26.8 +0.2
SN05 IAmb IAmb 02 09 34.3
comp=Z,21nm,1.0s
**113A Mohawk Valley,** 68.16 353 P **P** 02 09 28.1 +1.0
113A IAmb IAmb 02 09 34.5
comp=Z,28nm,1.9s
**FW07 Weatherford** 68.17 8 P **P** 02 09 27.6 +0.4
FW07 IAmb IAmb 02 09 35.2
comp=Z,18nm,0.9s
**PLPT Palo Pinto** 68.22 7 P **P** 02 09 26.6 -1.0
PLPT IAmb IAmb 02 09 35.5
comp=Z,17nm,1.1s
**346A Big Creek Wild** 68.23 15 P **P** 02 09 27.4 -0.2
**SN07 Snyder 07** 68.28 5 P **P** 02 09 27.6 -0.4
SN07 IAmb IAmb 02 09 35.5
comp=Z,9.3nm,0.8s
**YUH Yuha Desert** 68.28 351 P **P** 02 09 26.8 -1.1
YUH IAmb IAmb 02 09 39.3
comp=Z,30nm,1.7s
**TKX Tecate** 68.30 350 P **P** 02 09 28.4 +0.3
**APMT Aspermont** 68.57 5 IAmb IAmb 02 09 40.7
comp=Z,16nm,1.0s
**MONP2 Monument Peak** 68.59 351 P **P** 02 09 32.0 +1.9
baz=171
**Y22D IRIS PASSCAL I** 69.09 359 P **P** 02 09 35.1 +1.9
baz=179
**TPFO Pinon Flats** 69.30 351 P **P** 02 09 36.2 +1.8
baz=171
**PFO Pinyon Flats O** 69.30 351 P **P** 02 09 37.8 +3.4
**PFO Pinyon Flats O** 69.30 351 P **P** 02 09 36.7 +2.3
baz=171
**PFO Pinyon Flats O** 69.30 351 P **P** 02 09 37.8 +3.4
PFO pmax pmax
comp=Z,10.0nm,1.1s
**X18A Snowflake** 69.63 357 P **P** 02 09 36.9 +0.3
X18A IAmb IAmb 02 09 42.4
comp=Z,11nm,1.0s
**ANMO Albuquerque** 69.95 360 P **P** 02 09 40.6 +2.1
baz=180
**Z47A Carrollton** 70.28 16 IAmb IAmb 02 09 50.0
comp=Z,10nm,0.8s
**SMWD Samnorwood** 70.33 5 IAmb IAmb 02 09 53.8
comp=Z,18nm,0.9s
**LRAL Lakeview Retre** 70.37 17 IAmb IAmb 02 10 13.2
comp=Z,24nm,1.6s
**LRAL Lakeview Retre** 70.37 17 P **P** 02 09 41.9 +1.1
baz=196
**W13A Hualapai Mount** 70.48 353 P **P** 02 09 42.1 +0.4
**MIAR Mount Ida** 70.54 11 P **P** 02 09 42.9 +1.1
baz=191
**152A Waverly Hall** 70.60 19 IAmb IAmb 02 09 53.5
comp=Z,30nm,1.3s
**WUAZ Wupatki** 70.69 355 P **P** 02 09 44.0 +1.0
baz=176

**CSTR Hydro, Custer** 70.99 6 P **P** 02 09 46.3 +1.6
**OXF Oxford** 71.25 15 P **P** 02 09 47.0 +0.8
baz=194
**OK029 Liberty Lake** 71.26 7 IAmb IAmb 02 09 53.5
comp=Z,28nm,1.2s
**OK031 S. Brethren Rd** 71.48 8 IAmb IAmb 02 09 58.9
comp=Z,22nm,1.2s
**ISA Isabella, Lake** 71.60 349 IAmb IAmb 02 09 56.6
comp=Z,34nm,1.4s
**GOGA Godfrey** 71.64 20 P **P** 02 09 48.7 +0.1
baz=199
**U15A North Rim** 71.66 355 IAmb IAmb 02 09 54.0
comp=Z,21nm,1.5s
**QUOK Quay** 71.72 8 IAmb IAmb 02 09 56.7
comp=Z,17nm,0.9s
**GWY Greenwater Val** 71.87 351 P **P** 02 09 50.4 +0.3
**Y52A Lilburn** 71.90 19 P **P** 02 09 49.9 -0.2
**SHPR Sheep Range** 72.00 352 P **P** 02 09 52.3 +1.5
**OK051 ED350 and S346** 72.03 8 IAmb IAmb 02 09 58.7
comp=Z,17nm,1.1s
**HHAR Hobbs** 72.18 10 IAmb IAmb 02 09 59.6
comp=Z,17nm,1.1s
**MVCO Mesa Verde** 72.25 358 P **P** 02 09 53.0 +0.6
**MVCO Mesa Verde** 72.25 358 P **P** 02 09 53.4 +1.0
baz=178
**U38A Gravette** 72.27 10 IAmb IAmb 02 10 03.9
comp=Z,29nm,1.4s
**NHSC New Hope** 72.33 23 P **P** 02 09 53.8 +1.1
baz=202
**X51A Calhoun** 72.36 18 IAmb IAmb 02 10 20.6
comp=Z,17nm,1.1s
**WCT Wildcat Mounta** 72.46 351 IAmb IAmb 02 10 02.2
comp=Z,19nm,1.4s
**KAN13 South Haven SW** 72.46 7 IAmb IAmb 02 10 01.8
comp=Z,19nm,0.9s
**PMPB Monarch Peak** 72.52 348 IAmb IAmb 02 09 57.7
comp=Z,23nm,1.2s
**TPNV Topopah Spring** 72.57 352 P **P** 02 09 55.6 +1.4
baz=171
**KAN09 Caldwell North** 72.57 7 IAmb IAmb 02 10 02.5
comp=Z,20nm,0.9s
**PKCU Pink Cliffs** 72.67 355 IAmb IAmb 02 10 03.7
comp=Z,23nm,1.2s
**SWET Sewanee** 72.71 17 IAmb IAmb 02 10 06.5
comp=Z,36nm,1.7s
**SDCO Great Sand Dun** 72.75 1 P **P** 02 09 56.5 +1.0
baz=180
**S22A 4UR Ranch, Cre** 72.75 359 P **P** 02 09 58.0 +2.5
baz=179
**CCUT Cedar City** 72.86 354 IAmb IAmb 02 10 01.4
comp=Z,21nm,1.3s
**HMU Henry Mountain** 73.07 356 P **P** 02 09 58.1 +0.8
**JSC Jenkinsville** 73.09 21 P **P** 02 09 57.0 -0.2
JSC IAmb IAmb 02 10 08.9
comp=Z,34nm,1.7s
**JSC Jenkinsville** 73.09 21 P **P** 02 09 57.0 -0.2
JSC pmax pmax
comp=Z,34nm,1.7s
**W52A Murphy** 73.10 19 P **P** 02 09 56.6 -0.7
W52A IAmb IAmb 02 10 17.7
comp=Z,16nm,1.1s
**WVT Waverly** 73.15 15 P **P** 02 09 59.2 +1.8
baz=196
**DSP Deep Springs** 73.20 350 P **P** 02 09 59.1 +1.3
DSP IAmb IAmb 02 12 40.8
comp=Z,15nm,1.0s
**BG3 Lake Jocassee** 73.27 20 IAmb IAmb 02 10 07.2
comp=Z,27nm,1.2s
**CPCT Cooper Cave** 73.28 18 IAmb IAmb 02 10 09.6
comp=Z,24nm,1.6s
**PAULI Pauline** 73.43 21 IAmb IAmb 02 10 10.8
comp=Z,23nm,1.2s
**MDPB Devils Postpil** 73.62 349 IAmb IAmb 02 12 37.4
comp=Z,12nm,0.8s
**R11B Troy Canyon, C** 73.87 352 P **P** 02 10 03.8 +1.8
baz=172
**V52A Sevierville** 73.89 19 IAmb IAmb 02 10 54.7
comp=Z,43nm,1.9s
**V53A Saluda** 73.94 20 IAmb IAmb 02 10 04.2
comp=Z,17nm,1.0s
**Q24A Divide** 73.97 1 P **P** 02 10 04.7 +2.0
baz=181
**Q16A Castle Valley** 74.07 356 IAmb IAmb 02 10 07.9
comp=Z,37nm,1.6s
**LHV Little Huntoon** 74.15 350 IAmb IAmb 02 10 08.4
comp=Z,30nm,1.2s
**NV11 Mina Array Sit** 74.28 350 IAmb IAmb 02 10 08.9
comp=Z,20nm,1.1s
**NVAR Mina Array Bea** 74.29 350 P **P** 02 10 05.4 +1.0
**NVAR Mina Array Bea** 74.29 350 P **P** 02 10 04.6 +0.1
comp=Z,3.5nm,0.7s,baz=181,slow=7.9,SNR=15
comp=Z,3.5nm,0.7s
**CCM Cathedral Cave** 74.35 12 P **P** 02 10 05.8 +1.3
baz=192
**PINNC Pines Island,** 74.50 253 P **P** 02 10 05.3 -0.6
**WAKR Walker** 74.53 349 IAmb IAmb 02 12 38.8
comp=Z,13nm,0.8s
**TZTN Tazewell** 74.57 19 P **P** 02 10 05.6 -0.2
**TZTN Tazewell** 74.57 19 P **P** 02 10 07.0 +1.2
baz=199
**KVN Kaiserville** 74.88 350 IAmb IAmb 02 10 12.3
comp=Z,28nm,1.3s
**DUG Dugway, Tooele** 75.45 355 P **P** 02 10 13.0 +2.0
baz=174
**DZM Mont Dzumac** 75.57 253 P **P** 02 10 11.8 -0.5
comp=Z,6.3nm,1.0s,baz=116,slow=13,SNR=3.7
comp=Z,6.3nm,1.0s
**Q44A Meyer Farm, Va** 75.58 14 IAmb IAmb 02 10 25.9
comp=Z,21nm,0.9s
**LIFNC LIFOU** 75.64 255 P **P** 02 10 11.7 -0.8
**JLU Jordanelle** 75.76 356 IAmb IAmb 02 10 21.5
comp=Z,25nm,1.4s
**N23A Red Feather La** 75.89 0 P **P** 02 10 15.7 +2.0
baz=180
**OGNE Ogallala** 76.04 3 P **P** 02 10 16.0 +1.7
baz=183
**BLA Blacksburg** 76.06 21 P **P** 02 10 15.3 +0.9
baz=201
**RWWY Rawlins** 76.69 359 IAmb IAmb 02 10 27.6
comp=Z,25nm,1.5s
**MAW Mawson** 77.00 176 P **P** 02 10 19.3 -0.1
comp=Z,2.2nm,0.6s,baz=310,slow=6.4,SNR=3.4
comp=Z,2.2nm,0.6s
**P49A Miami Univ. Ec** 77.11 17 P **P** 02 10 21.1 +0.8
baz=198
**HDIL Hopedale** 77.13 13 P **P** 02 10 20.5 +0.2
baz=194
**BW06 Boulder Array** 77.83 357 P **P** 02 10 24.3 -0.2
baz=177,SNR=13
**PD31 Pinedale Array** 77.83 357 IAmb IAmb 02 10 28.7
comp=Z,18nm,1.1s
**PDAR Pinedale Array** 77.83 357 P **P** 02 10 23.4 -1.1
**PDAR Pinedale Array** 77.83 357 P **P** 02 10 24.1 -0.5
comp=Z,13nm,1.1s,baz=160,slow=4.7,SNR=19
comp=Z,13nm,1.1s
**P52A Corning** 77.85 19 P **P** 02 10 24.7 +0.3
baz=200
**KOUNC Koumac, New Ca** 78.08 253 P **P** 02 10 25.8 -0.5
KOUNC IAmb IAmb 02 10 29.4
comp=Z,25nm,1.0s
**ACSO Alum Creek Sta** 78.19 18 P **P** 02 10 26.6 +0.3
baz=198
**YBH Yreka Blue Hor** 78.22 347 IAmb IAmb 02 12 36.9
comp=Z,14nm,0.9s
**WVOR Wild Horse Val** 78.27 351 IAmb IAmb 02 12 52.0
comp=Z,18nm,0.9s
**MCWV Mont Chateau** 78.50 20 P **P** 02 10 29.2 +1.2
baz=202
**SNOW Snow King Moun** 78.57 357 IAmb IAmb 02 13 19.7
comp=Z,23nm,1.3s
**TPAW Teton Pass** 78.61 356 IAmb IAmb 02 10 33.0
comp=Z,23nm,1.1s
**O53A New Philadelph** 78.67 19 P **P** 02 10 29.9 +1.0
baz=200
**LOHW Long Hollow** 78.72 357 IAmb IAmb 02 10 33.3
comp=Z,20nm,1.4s
**HLID Hailey** 78.92 354 IAmb IAmb 02 10 35.6
comp=Z,25nm,1.1s
**HLID Hailey** 78.92 354 P **P** 02 10 31.2 +0.7
baz=173,SNR=37
**L44A Lake County Fo** 78.96 14 P **P** 02 10 31.5 +1.1
baz=195
**RSSD Black Hills** 79.14 2 P **P** 02 10 31.3 -0.4
**RSSD Black Hills** 79.14 2 P **P** 02 10 33.1 +1.4
baz=182
**RSSD Black Hills** 79.14 2 P **P** 02 10 31.3 -0.4
RSSD pmax pmax
comp=Z,11nm,1.1s

**FLWY Flagg Ranch** 79.19 357 P **P** 02 10 32.2 +0.3
FLWY IAmb IAmb 02 10 40.8
comp=Z,20nm,1.1s
**ECSD EROS Data Cent** 79.20 7 P **P** 02 10 32.1 +0.3
**ECSD EROS Data Cent** 79.20 7 P **P** 02 10 33.3 +1.5
baz=188
**N53A Lisbon** 79.29 19 P **P** 02 10 32.6 +0.3
N53A IAmb IAmb 02 10 44.2
comp=Z,28nm,1.1s
**K02D Willamette Mer** 79.33 347 P **P** 02 10 33.7 +1.1
K02D IAmb IAmb 02 10 50.7
comp=Z,34nm,1.4s
**J05D Fort Rock, OR** 79.49 349 P **P** 02 10 34.6 +1.0
**YFT Old Faithful** 79.56 357 P **P** 02 10 35.0 +0.9
**DBO Dodson Butte** 79.66 347 P **P** 02 10 35.3 +0.9
**I37A Lemond, Waseca** 79.85 9 P **P** 02 10 35.2 -0.1
I37A IAmb IAmb 02 10 50.5
comp=Z,15nm,0.9s
**M53A WI Miller and** 79.93 19 P **P** 02 10 36.7 +1.0
baz=201
**PINE Pine Mountain** 79.94 349 P **P** 02 10 36.6 +0.6
PINE IAmb IAmb 02 12 48.7
comp=Z,24nm,0.8s
**SSPA Standing Stone** 79.97 21 P **P** 02 10 37.6 +1.6
baz=203
**YHL Hebgen Lake** 79.98 356 P **P** 02 10 36.3 -0.1
**AAM Ann Arbor** 79.99 17 P **P** 02 10 36.1 +0.1
AAM IAmb IAmb 02 10 46.9
comp=Z,15nm,0.8s
**AAM Ann Arbor** 79.99 17 P **P** 02 10 37.1 +1.0
baz=198
**AAM Ann Arbor** 79.99 17 P **P** 02 10 36.2 +0.1
AAM pmax pmax
comp=Z,15nm,0.8s
**I07A Izee** 80.01 350 P **P** 02 10 37.1 +0.8
**RLMT Red Lodge** 80.17 358 P **P** 02 10 38.3 +1.0
baz=177
**I05D Terrebonne, OR** 80.53 349 P **P** 02 10 40.1 +1.1
I05D IAmb IAmb 02 12 48.4
comp=Z,20nm,1.1s
**DLMT Dillon** 80.57 355 P **P** 02 10 40.6 +1.2
**J47A Sunmer** 80.61 16 P **P** 02 10 39.7 +0.3
J47A IAmb IAmb 02 10 50.6
comp=Z,27nm,0.9s
**ERPA Erie** 80.74 19 P **P** 02 10 41.4 +1.3
baz=201
**BOZ Bozeman (W)** 80.75 356 P **P** 02 10 40.9 +0.6
baz=175,SNR=8.7
**SPMN Marine on St.** 81.12 9 P **P** 02 10 42.4 +0.3
**G08A Pilot Rock** 81.12 351 P **P** 02 10 43.1 +0.8
G08A IAmb IAmb 02 12 58.3
comp=Z,16nm,0.9s
**F33A 5 Mile Ranch,** 81.32 7 P **P** 02 10 43.3 +0.2
**HOOD Mount Hood Mea** 81.54 349 P **P** 02 10 44.4 -0.1
**G40A Rib Lake** 81.55 11 P **P** 02 10 45.0 +0.6
G40A IAmb IAmb 02 11 03.0
comp=Z,34nm,1.7s
**PAL Palisades** 81.57 24 P **P** 02 10 45.7 +1.1
baz=206
**F10A Beach Ranch, E** 81.59 352 P **P** 02 10 45.1 +0.5
F10A IAmb IAmb 02 13 04.8
comp=Z,18nm,0.9s
**LAO LASA Array** 81.69 360 P **P** 02 10 46.4 +1.3
baz=180
**BINY Binghamton** 81.98 22 P **P** 02 10 47.8 +1.1
baz=204
**MSO Missoula** 82.13 355 P **P** 02 10 48.7 +1.2
**MSO Missoula** 82.13 355 P **P** 02 10 48.4 +0.9
baz=174
**LYMT Lyon Mountain** 82.15 356 P **P** 02 10 48.8 +1.0
**E09A Wood Farm, Sta** 82.23 352 P **P** 02 10 49.2 +1.3
E09A IAmb IAmb 02 13 03.5
comp=Z,34nm,1.7s
**F04A Amboy** 82.26 349 P **P** 02 10 48.8 +0.8
**HAWA Hanford** 82.28 351 P **P** 02 10 47.8 -0.4
HAWA IAmb IAmb 02 12 59.6
comp=Z,24nm,1.0s
**OVMT Ovando** 82.29 355 P **P** 02 10 49.4 +1.0
**F42A Maple Grove Fa** 82.37 13 P **P** 02 10 48.7 0.0
F42A IAmb IAmb 02 11 15.5
comp=Z,19nm,1.4s
**E07A Sunnyside** 82.49 350 P **P** 02 10 50.2 +0.9
E07A IAmb IAmb 02 12 59.1
comp=Z,19nm,0.9s
**SADO Sadowa** 83.44 19 IAmb IAmb 02 11 08.7
comp=Z,12nm,0.9s
**C09A Chrisman Ranch** 83.51 352 IAmb IAmb 02 11 00.9
comp=Z,13nm,1.1s
**E46A Sault Ste Mari** 83.70 15 P **P** 02 10 56.9 +1.3
**NEW Newport** 83.84 353 IAmb IAmb 02 11 14.7
comp=Z,23nm,1.4s
**NEW Newport** 83.84 353 P **P** 02 10 57.5 +1.3
baz=171
**GNW Green Mountain** 83.91 349 P **P** 02 10 58.1 +1.5
GNW IAmb IAmb 02 12 52.9
comp=Z,11nm,0.8s
**EYMN Ely** 83.97 10 P **P** 02 10 57.0 +0.1
baz=192
**B08A Colville Reser** 84.19 351 P **P** 02 10 59.0 +1.0
B08A IAmb IAmb 02 13 04.7
comp=Z,13nm,1.1s
**ULM Lac du Bonnet** 85.73 7 P **P** 02 11 04.5 -1.1
comp=Z,8.8nm,0.8s,baz=227,slow=3.0,SNR=7.9
comp=Z,8.8nm,0.8s
**ULM Lac du Bonnet** 85.73 7 *e*P **P** 02 11 04.9 -0.7
ULM pmax pmax
comp=Z,9.0nm,0.8s
**PMG Port Moresby** 97.96 253 *i* P **P** 02 12 02.7 -1.0
PMG pmax pmax
comp=Z,13nm,1.1s
**H01W1 Cape Leeuwin H** 100.63 213 T T 04 04 55.8
baz=145,slow=76,SNR=14
**H01W2 Cape Leeuwin H** 100.63 213 T T 04 04 56.1
baz=145,slow=76,SNR=18
**H01W3 Cape Leeuwin H** 100.64 213 T T 04 05 00.6
baz=145,slow=76,SNR=15
**BILL Bilibino** 121.41 334 *i* PKIKP **PKiKP** 02 17 19.7 +0.2
BILL pmax pmax
comp=Z,2.0nm,1.0s
**SEY Seymchan** 125.94 326 *i* PKIKP **PKiKP** 02 17 29.8 +1.2
SEY pmax pmax
comp=Z,2.0nm,1.0s
**MJAR Matsushiro Arr** 128.81 291 PKP **PKPdf** 02 17 33.9 -0.7
comp=Z,0.5nm,0.4s,baz=173,slow=2.7,SNR=1.7
**GERES GERESS Array B** 134.52 53 PKP **PKPdf** 02 17 43.4 -1.7
comp=Z,0.2nm,0.3s,baz=218,slow=6.2,SNR=2.0
**HFS Hagfors** 134.61 38 PKP **PKPdf** 02 17 44.1 -0.6
comp=Z,2.2nm,0.8s,baz=358,slow=6.5,SNR=1.6
**KLR Kul'dur** 136.06 307 *i* PKIKP **PKiKP** 02 17 48.8 -0.6
KLR pmax pmax
comp=Z,3.0nm,1.0s
**KRUC Moravsky** 136.30 53 *e*PKP **PKiKP** 02 17 51.3 +1.4
**VRAC Vranov** 136.45 53 *e*PKP **PKiKP** 02 17 51.7 +1.4
**KSRS Korea Array** 136.96 289 PKP **PKPdf** 02 17 48.8 -1.1
comp=Z,0.4nm,0.3s,baz=124,slow=5.8,SNR=2.4
**MDJ Mudanjiang** 137.07 300 P **PKiKP** 02 17 51.5 -0.1
MDJ pmax pmax
comp=Z,9.0nm,1.2s
**MORC Moravsky Berou** 137.09 52 *e*PKP **PKiKP** 02 17 54.3 +2.7
**HEH HeiHe** 138.91 308 *e*P **PKiKP** 02 17 59.9 +4.7
**FINES FINESS Array B** 140.28 34 *e*PKIKP **PKPdf** 02 17 53.7 -1.4
FINES pmax pmax
comp=Z,3.0nm,0.9s
**NJ2 Nanjing** 142.68 278 *e*P **PKPdf** 02 18 00.5 +0.1
**NJ2 Nanjing** 142.68 278 pmax pmax
comp=Z,13nm,0.5s
**AK19 Malin Array Si** 144.39 50 PKP PKPbc 02 18 02.0 +0.7
**AK21 Malin Array Si** 144.41 50 PKP **PKPdf** 02 18 02.3 -0.5
**AK22 Malin Array Si** 144.43 50 PKP **PKPdf** 02 18 02.3 -0.5
**KIEV Kiev** 144.52 50 PKPdf **PKPdf** 02 18 04.2 +1.2
**KIEV Kiev** 144.52 50 PKIKP **PKPdf** 02 18 04.2 +1.2
**AKASG Malin Array Be** 144.53 50 PKP **PKPab** 02 18 00.4 -1.1
comp=Z,0.8nm,0.4s,baz=68,slow=15,SNR=1.9
**AKASG Malin Array Be** 144.53 50 *e*PKIKP **PKiKP** 02 18 04.9 -1.8
AKASG pmax pmax
comp=Z,2.0nm,0.4s
**AKBB Malin Array Si** 144.53 50 PKPdf **PKPdf** 02 18 04.2 +1.2
**AKBB Malin Array Si** 144.53 50 PKIKP **PKPdf** 02 18 04.2 +1.2
**WHN Wuhan** 145.87 274 P **PKPdf** 02 18 05.8 -0.2
**WHN Wuhan** 145.87 274 pmax pmax
comp=Z,50nm,1.5s
**CNSH ChangSha** 146.20 269 P **PKPdf** 02 18 06.8 +0.2
**CNSH ChangSha** 146.20 269 pmax pmax
comp=Z,36nm,1.3s
**BJI Beijing** 146.45 291 PKP **PKPdf** 02 18 06.4 -0.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BJT | Baijiatuau | 146.45 | 291 | | | PKPdf | 02 18 06.9 | +0.2 |
| BJT | Baijiatuau | 146.45 | 291 | | PKIKP | PKPdf | 02 18 06.9 | +0.2 |
| HNS | HongShan | 147.25 | 286 | ⇑ | PKP | PKPbc | 02 18 09.3 | -1.1 |
| HNS | HongShan | 147.25 | 286 | | PKPab | PKiKP | 02 18 16.9 | +4.2 |
| OBN | Obninsk | 147.69 | 41 | *i* | PKIKP | PKPdf | 02 18 08.8 | +0.6 |
| OBN | | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| MOS | Moscow | 147.99 | 39 | *e* | PKP2 | PKiKP | 02 18 13.6 | -0.1 |
| SIM | Simferopol' | 148.41 | 60 | *e* | PKP2 | PKPab | 02 18 17.2 | +0.5 |
| SIM | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| LYN | LuoYang | 148.50 | 280 | ⇓ | PKP | PKPbc | 02 18 13.0 | -0.9 |
| LPSR | Galich'ya Gora | 149.91 | 44 | *e* | PKP2 | PKPab | 02 18 21.7 | -0.8 |
| LPSR | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| HHC | Hu-ho-hao-te | 150.01 | 292 | *e* | P | PKPdf | 02 18 09.0 | -3.7 |
| SLVN | Son La | 150.24 | 250 | | | PKPbc | 02 18 18.7 | 0.0 |
| VORR | Voronezh | 150.40 | 46 | *e* | PKIKP | PKPbc | 02 18 18.2 | +0.2 |
| VORR | | | | | pmax | pmax | | |
| | comp=Z,28nm,1.6s | | | | | | | |
| VSR | Storozhevoye | 150.52 | 47 | *e* | PKIKP | PKiKP | 02 18 19.0 | 0.0 |
| VSR | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| VORD | Divnogorie | 150.68 | 47 | *e* | PKIKP | PKiKP | 02 18 19.6 | +0.2 |
| VORD | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| ANN | Anapa | 150.78 | 60 | *i* | PKIKP | PKPbc | 02 18 18.3 | -0.8 |
| ANN | | | | | pmax | pmax | | |
| | comp=Z,36nm,0.8s | | | | | | | |
| PHRA | Phrae | 151.25 | 241 | | | PKPbc | 02 18 21.1 | +0.1 |
| XAN | Xi'an | 151.25 | 278 | ⇑ | PKP | PKPbc | 02 18 17.8 | -2.9 |
| VRH | Novokhopyorsk | 152.03 | 46 | *e* | PKIKP | PKiKP | 02 18 22.1 | 0.0 |
| VRH | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.5s | | | | | | | |
| CMAR | Chiang Mai Arr | 152.13 | 239 | | | PKPbc | 02 18 22.8 | -0.3 |
| CMAR | Chiang Mai Arr | 152.13 | 239 | | PKPbc | PKPbc | 02 18 23.0 | -0.1 |
| | comp=Z,1.3nm,0.3s,baz=230,slow=0.9,SNR=10.0 | | | | | | | |
| CMAR | Chiang Mai Arr | 152.13 | 239 | | PKIKP | PKPbc | 02 18 22.8 | -0.3 |
| CRAI | Chiangrai | 152.25 | 244 | | | PKPbc | 02 18 23.3 | 0.0 |
| ULN | Ulaanbaatar | 152.46 | 307 | | | PKiKP | 02 18 24.6 | +1.2 |
| ULN | Ulaanbaatar | 152.46 | 307 | | PKIKP | PKiKP | 02 18 24.6 | +1.2 |
| SONM | Songino Array | 152.89 | 307 | | | PKPbc | 02 18 22.8 | -1.3 |
| SONM | Songino Array | 152.89 | 307 | | PKPbc | PKPbc | 02 18 22.3 | -1.8 |
| | comp=Z,6.3nm,0.8s,baz=109,slow=2.0,SNR=11 | | | | | | | |
| PZH | PanZhiHua | 154.59 | 257 | | PKP | PKPdf | 02 18 19.3 | -0.6 |
| KIV | Kislovodsk | 154.62 | 61 | *e* | PKIKP | PKPdf | 02 18 19.0 | -0.4 |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| KBZ | Khabaz | 154.81 | 61 | | PKP | PKPdf | 02 18 18.7 | -0.7 |
| | comp=Z,5.5nm,1.1s,baz=356,slow=4.6,SNR=3.2 | | | | | | | |
| ARU | Arti | 156.50 | 22 | *i* | PKIKP | PKPdf | 02 18 24.5 | +3.2 |
| ZALV | Zalesovo Beam | 159.90 | 341 | | PKPdf | PKPdf | 02 18 26.3 | +0.8 |
| ZALV | Zalesovo Beam | 159.90 | 341 | | PKP | PKPdf | 02 18 23.8 | -1.7 |
| | comp=Z,1.2nm,0.8s,baz=306,slow=4.8,SNR=5.0 | | | | | | | |
| ZALV | Zalesovo Beam | 159.90 | 341 | | PKIKP | PKPdf | 02 18 26.3 | +0.8 |
| BVAR | Borovoye Array | 162.18 | 7 | | PKP | PKPdf | 02 18 27.6 | -0.4 |
| | comp=Z,0.6nm,0.5s,baz=281,slow=7.0,SNR=1.5 | | | | | | | |
| KURK | Kurchatov | 164.28 | 349 | | PKIKP | PKPdf | 02 18 28.3 | -1.8 |
| KURBB | Kurchatov Arra | 164.38 | 349 | | PKP | PKPdf | 02 18 28.3 | -1.9 |
| | comp=Z,0.3nm,0.4s,baz=82,slow=3.2,SNR=2.2 | | | | | | | |

*IDC* ***19*** *01:59:19.8±13.0, 17°.92S×177°.77W, h548km±123km, mb3.3/4, mbtmp4.2/4, Error ellipse: s-maj=104.4km s-min=43.1km az=123.0*

**ISC 19 01:59:19.3±2.1, 18°.05±0°.5×177°.7W±0°.4, h550km, n10, σ0s66/10, mb3.8/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 45.27 | 260 | P | P | 02 06 48.3 | -0.1 |
| | 1.0nm,0.4s,baz=95,slow=7.0,SNR=5.1 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| ASAR | Alice Springs | 45.41 | 254 | P | P | 02 06 49.7 | +0.3 |
| | 4.2nm,0.8s,baz=89,slow=8.1,SNR=4.7 | | | | | | |
| | 4.2nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 68.37 | 323 | P | P | 02 09 26.1 | -0.1 |
| | 1.6nm,0.5s,baz=154,slow=6.3,SNR=4.7 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| ILAR | Eielson Array | 85.81 | 13 | P | P | 02 11 00.8 | +0.6 |
| | 0.5nm,0.4s,baz=220,slow=5.3,SNR=6.4 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| FINES | FINESS Array B | 133.44 | 345 | PKP | PKPdf | 02 17 31.3 | -1.4 |
| | 1.6nm,0.8s,baz=87,slow=2.9,SNR=1.5 | | | | | | |
| BRTR | Keskin Array B | 145.31 | 315 | PKPbc | PKPdf | 02 17 55.8 | +0.7 |
| | 1.0nm,0.5s,baz=111,slow=3.7,SNR=5.3 | | | | | | |
| MLR | Muntele Rosu | 146.24 | 329 | PKPbc | PKPbc | 02 17 58.2 | -0.4 |
| | 2.3nm,0.9s,baz=346,slow=13,SNR=1.6 | | | | | | |
| MMAI | Mount Meron Ar | 146.74 | 303 | PKPbc | PKPbc | 02 18 00.4 | +0.1 |
| | 2.3nm,0.5s,baz=70,slow=5.5,SNR=6.4 | | | | | | |
| GERES | GERESS Array B | 147.85 | 346 | PKPbc | PKPbc | 02 18 02.6 | -0.2 |
| | 1.4nm,0.7s,baz=356,slow=8.4,SNR=4.6 | | | | | | |
| DAVOX | Davos/Dischmat | 150.61 | 349 | PKPbc | PKPbc | 02 18 09.8 | +0.2 |
| | 2.7nm,0.6s,baz=256,slow=8.3,SNR=3.4 | | | | | | |

*NEIC* ***19*** *01:59:39.8±1.1, 18°.3S±0°.2×177°.9W±0°.2, h593km±17km, mb4.4/22, Error ellipse: s-maj=34.5km s-min=26.4km az=60.0*

*IDC* ***19*** *01:59:40.2±4.9, 18°.36S×178°.15W, h597km±58km, mb3.4/7, mbtmp4.3/8, Error ellipse: s-maj=36.9km s-min=26.3km az=18.0*

**ISC 19 01:59:40.6±0.8, 18°.3S±0°.1×178°.1W±0°.1, h600km, n43, σ0s75/43, mb4.3/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.69 | 278 | P | P | 02 01 03.9 | -0.3 |
| PINNC | Pines Island, | 14.20 | 250 | P | P | 02 02 41.5 | +0.1 |
| DZM | Mont Dzumac | 14.98 | 253 | P | P | 02 02 47.5 | -1.3 |
| | 1.6nm,0.5s,baz=65,slow=7.2,SNR=3.6 | | | | | | |
| URZ | Urewera | 20.33 | 191 | P | P | 02 03 35.5 | -1.7 |
| | 5.1nm,0.5s,baz=326,slow=1.7,SNR=5.8 | | | | | | |
| | 5.1nm,0.5s | | | | | | |
| MSWZ | Moikau Station | 23.74 | 192 | P | P | 02 04 06.9 | -0.7 |
| TCW | Tory Channel | 23.76 | 194 | P | P | 02 04 08.4 | +0.8 |
| THZ | Tophouse | 24.62 | 196 | P | P | 02 04 15.2 | -0.2 |
| THZ | | | | IAmb | IAmb | 02 04 22.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| FOZ | Fox Glacier | 27.15 | 199 | P | P | 02 04 37.9 | +0.4 |
| FOZ | | | | IAmb | IAmb | 02 04 38.5 | |
| | comp=Z,12nm,1.0s | | | | | | |
| MLZ | Mavora Lakes | 29.33 | 200 | P | P | 02 04 56.0 | -0.5 |
| MLZ | | | | IAmb | IAmb | 02 05 14.2 | |
| | comp=Z,16nm,1.2s | | | | | | |
| EIDS | Eidsvold | 29.40 | 251 | P | P | 02 04 57.5 | +0.1 |
| EIDS | | | | IAmb | IAmb | 02 04 58.2 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| WHZ | Wether Hill Ro | 29.86 | 200 | P | P | 02 05 01.6 | +0.7 |
| ARMA | Armidale | 30.00 | 241 | P | P | 02 05 03.7 | +1.2 |
| ARMA | | | | IAmb | IAmb | 02 05 04.1 | |
| | comp=Z,10nm,1.1s | | | | | | |
| CTA | Charters Tower | 33.66 | 261 | P | P | 02 05 32.4 | -1.2 |
| | comp=Z,0.3nm,0.6s,baz=97,slow=13,SNR=5.8 | | | | | | |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 02 05 34.1 | +0.5 |
| CAN | Canberra | 33.70 | 233 | P | P | 02 05 34.3 | +0.6 |
| CAN | | | | IAmb | IAmb | 02 05 43.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| PMG | Port Moresby | 34.80 | 280 | P | P | 02 05 44.0 | +0.9 |
| TOO | Toolangi | 37.15 | 231 | P | P | 02 06 03.5 | +1.3 |
| COEN | Coen | 37.39 | 271 | P | P | 02 06 05.0 | +0.6 |
| COEN | | | | IAmb | IAmb | 02 06 06.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| STKA | Stephens Creek | 38.70 | 242 | P | P | 02 06 15.6 | +0.9 |
| STKA | Stephens Creek | 38.70 | 242 | P | P | 02 06 14.3 | -0.4 |
| | comp=Z,3.8nm,0.5s,baz=94,slow=11,SNR=4.0 | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | |
| MCQ | Macquarie Isla | 40.20 | 201 | P | P | 02 06 26.3 | 0.0 |
| BBOO | Buckleboo | 43.47 | 241 | P | P | 02 06 52.9 | +0.5 |
| WR0 | Warramunga Arr | 44.65 | 260 | P | P | 02 07 01.9 | +0.2 |
| WB0 | Warramunga Arr | 44.81 | 260 | P | P | 02 07 03.0 | +0.1 |
| WB0 | | | | IAmb | IAmb | 02 07 03.1 | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| WB2 | Warramunga Arr | 44.83 | 260 | P | P | 02 07 02.9 | -0.2 |
| WB2 | | | | IAmb | IAmb | 02 07 03.3 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 02 07 02.7 | -0.4 |
| | comp=Z,5.8nm,0.7s,baz=96,slow=7.2,SNR=13 | | | | | | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| AS31 | Alice Springs | 44.96 | 255 | P | P | 02 07 04.3 | +0.3 |
| AS31 | | | | IAmb | IAmb | 02 07 05.2 | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| ASAR | Alice Springs | 44.96 | 255 | P | P | 02 07 04.5 | +0.5 |
| ASAR | Alice Springs | 44.96 | 255 | P | P | 02 07 03.6 | -0.4 |
| | comp=Z,17nm,0.7s,baz=84,slow=8.7,SNR=19 | | | | | | |
| | comp=Z,17nm,0.7s | | | | | | |
| MTN | Manton Dam | 49.07 | 269 | P | P | 02 07 34.5 | -0.4 |
| FORT | Forrest | 50.10 | 245 | P | P | 02 07 41.8 | -0.4 |
| FORT | | | | IAmb | IAmb | 02 07 56.3 | |
| | comp=Z,21nm,1.1s | | | | | | |
| KNRA | Kununurra | 50.73 | 264 | P | P | 02 07 46.6 | -0.3 |
| FITZ | Fitzroy Crossi | 53.24 | 261 | P | P | 02 08 05.0 | +0.2 |
| SOEI | Soe | 56.35 | 270 | P | P | 02 08 27.4 | +0.7 |
| SOEI | | | | IAmb | IAmb | 02 08 29.4 | |
| | comp=Z,23nm,1.0s | | | | | | |
| MJAR | Matsushiro Arr | 68.38 | 323 | P | P | 02 09 43.0 | -0.6 |
| | comp=Z,1.9nm,0.8s,baz=157,slow=6.3,SNR=4.2 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 85.96 | 57 | P | P | 02 11 20.6 | +1.7 |
| | comp=Z,0.5nm,0.7s,baz=216,slow=6.2,SNR=2.2 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| ILAR | Eielson Array | 86.20 | 13 | P | P | 02 11 18.0 | -1.0 |
| | comp=Z,0.4nm,0.4s,baz=223,slow=3.8,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| BRTR | Keskin Array B | 145.25 | 315 | | PKPbc | 02 18 12.2 | -0.4 |
| BRTR | Keskin Array B | 145.25 | 315 | PKPbc | PKPbc | 02 18 11.8 | -0.8 |
| | comp=Z,4.3nm,0.8s,baz=137,slow=4.1,SNR=10 | | | | | | |
| BRTR | Keskin Array B | 145.25 | 315 | PKP2 | PKPbc | 02 18 12.2 | -0.4 |
| MMAI | Mount Meron Ar | 146.59 | 303 | PKPbc | PKPdf | 02 18 14.4 | +0.6 |
| | comp=Z,3.3nm,0.4s,baz=342,slow=0.5,SNR=13 | | | | | | |
| GERES | GERESS Array B | 148.05 | 345 | PKPbc | PKiKP | 02 18 19.9 | -1.1 |
| | comp=Z,1.2nm,0.7s,baz=67,slow=7.4,SNR=2.8 | | | | | | |
| DAVOX | Davos/Dischmat | 150.84 | 349 | PKPbc | PKiKP | 02 18 26.8 | -0.2 |
| | comp=Z,3.0nm,0.6s,baz=326,slow=11,SNR=3.6 | | | | | | |

*IDC* ***19*** *02:00:27.0±1.0, 44°.60N×144°.61E, h234km±7km, mb3.5/12, mbtmp4.0/19, Error ellipse: s-maj=26.1km s-min=13.4km az=159.0*

*JMA* ***19*** *02:00:27.6±0.3, 45°N±2°×14°5E±°, h230km±2km, MV3.7/31, NE OFF HOKKAIDO*

*SKHL* ***19*** *02:00:27.4±0.1, 44°.80N×144°.70E, h195km±4km, mb4.6/5, msha5.1/3*

*NEIC* ***19*** *02:00:29.6±2.9, 44°.68N±0°.06×144°.3E±0°.2, h232km±7km, mb4.5/4, Error ellipse: s-maj=20.5km s-min=8.7km az=81.0*

**ISC 19 02:00:27.0±0.6, 44°.61N±0°.06×144°.65E±0°.05, h231km±6km, n59, σ0s96/68, mb3.6/14, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JRA | Rausu | 0.76 | 153 | P | Pn | 02 00 59.3 | +0.6 |
| JRA | | | | S | S | 02 01 23.6 | +0.1 |
| JTKR | Abashiri--Toko | 0.83 | 220 | P | Pn | 02 00 59.5 | +0.5 |
| JTKR | | | | *e*S | S | 02 01 24.1 | 0.0 |
| JNK | Nakash | 1.03 | 177 | *i* P | Pn | 02 01 00.6 | +0.4 |
| JNK | | | | *e*S | S | 02 01 26.5 | +0.4 |
| YUK | Yuzh-Kuril'sk | 1.05 | 123 | *e*P | Pn | 02 01 01.0 | +0.7 |
| YUK | | | | AMB | AMB | 02 01 03.3 | |
| | 150nm,0.3s | | | | | | |
| YUK | | | | *i* S | S | 02 01 26.8 | +0.6 |
| YUK | | | | A | A | 02 01 32.3 | |
| | 850nm,0.6s | | | | | | |
| YUK | | | | A | A | 02 01 32.3 | |
| | 410nm,0.6s | | | | | | |
| JMP | Maruseppu | 1.10 | 237 | *i* P | Pn | 02 01 01.0 | +0.3 |
| JMP | | | | S | S | 02 01 26.4 | -0.6 |
| JAR | Ashorobuto | 1.46 | 206 | *i* P | Pn | 02 01 03.9 | +0.7 |
| NEM2 | Nemuro 2 | 1.48 | 147 | *i* P | Pn | 02 01 02.8 | -0.5 |
| NEM2 | | | | S | S | 02 01 29.3 | -2.3 |
| JKA | Kamikawa-asahi | 1.55 | 252 | P | Pn | 02 01 04.6 | +0.7 |
| ASAJ | Asahikawa | 1.55 | 252 | P | Pn | 02 01 04.7 | +0.7 |
| | 167nm,0.7s,baz=57,slow=4.1,SNR=151 | | | | | | |
| ASAJ | | | | S | S | 02 01 33.1 | +0.4 |
| | 34nm,0.7s,baz=278,slow=26,SNR=12 | | | | | | |
| ASAJ | Asahikawa | 1.55 | 252 | *i* P | Pn | 02 01 04.7 | +0.7 |
| ASAJ | | | | S | S | 02 01 33.2 | +0.4 |
| JKK2 | Kamakawa 2 | 1.55 | 242 | P | Pn | 02 01 04.5 | +0.6 |
| JKK2 | | | | S | S | 02 01 32.9 | +0.1 |
| JKHN | Kushirohamanak | 1.57 | 166 | *i* P | Pn | 02 01 03.9 | -0.3 |
| JKHN | | | | S | S | 02 01 31.3 | -1.8 |
| JAK | Akkeshi | 1.62 | 179 | *i* P | Pn | 02 01 04.3 | -0.2 |
| JAK | | | | S | S | 02 01 32.7 | -1.0 |
| SHO | Shikotan | 1.74 | 115 | *e*P | Pn | 02 01 04.6 | -0.9 |
| SHO | | | | AMB | AMB | 02 01 05.6 | |
| | 70nm,0.3s | | | | | | |
| SHO | | | | *e*S | S | 02 01 33.7 | -1.8 |
| SHO | | | | A | A | 02 01 36.0 | |
| | 350nm,0.4s | | | | | | |
| SHO | | | | A | A | 02 01 36.0 | |
| | 760nm,0.4s | | | | | | |
| JSS | Shosan | 2.01 | 265 | *e*P | Pn | 02 01 09.4 | +1.5 |
| JWK2 | Keihoku | 2.08 | 291 | *e*P | Pn | 02 01 09.0 | +0.5 |
| JCH | Churui | 2.20 | 205 | *i* P | Pn | 02 01 09.6 | -0.3 |
| KUR | Kuril'sk | 2.37 | 74 | *e*P | Pn | 02 01 12.1 | +0.6 |
| KUR | | | | AMB | AMB | 02 01 12.7 | |
| | 200nm,0.7s | | | | | | |
| KUR | | | | *e*S | S | 02 01 46.2 | -0.1 |
| KUR | | | | A | A | 02 01 53.3 | |
| | 50nm,0.4s | | | | | | |
| KUR | | | | A | A | 02 01 53.3 | |
| | 50nm,0.4s | | | | | | |
| JRBN | Rebuntou | 2.67 | 289 | P | Pn | 02 01 13.9 | -0.7 |
| YSS | Yuzh-Sakhalins | 2.69 | 331 | Pn | Pn | 02 01 14.3 | -0.5 |
| YSS | Yuzh-Sakhalins | 2.69 | 331 | *e*P | Pn | 02 01 14.0 | -0.8 |
| YSS | | | | AMB | AMB | 02 01 30.3 | |
| | 10.0nm,0.3s | | | | | | |
| YSS | | | | *e*S | S | 02 01 50.2 | -2.2 |
| ERM | Erimo | 2.81 | 203 | | Pn | 02 01 17.1 | +0.8 |
| JTM | Tenmabayashi | 4.64 | 216 | | Pn | 02 01 37.0 | -0.9 |
| UGL | Uglegorsk | 4.80 | 339 | *e*P | Pn | 02 01 38.6 | -1.0 |
| UGL | | | | AMB | AMB | 02 01 39.6 | |
| | 40nm,0.5s | | | | | | |
| TYV | Tymovskoe | 6.40 | 349 | *e*P | Pn | 02 01 58.1 | -1.5 |
| TYV | | | | AMB | AMB | 02 01 59.1 | |
| | 20nm,0.5s | | | | | | |
| JMM | Marumori | 7.34 | 205 | | Pn | 02 02 11.2 | -0.6 |
| USA0B | Ussuriysk Arra | 9.07 | 272 | | Pn | 02 02 33.6 | -0.3 |
| USRK | Ussuriysk Ar. | 9.07 | 272 | | Pn | 02 02 33.6 | -0.3 |
| USRK | Ussuriysk Ar. | 9.07 | 272 | P | Pn | 02 02 34.1 | +0.3 |
| | 19nm,0.7s,baz=85,slow=13,SNR=34 | | | | | | |
| USRK | | | | S | S | 02 04 17.4 | +1.3 |
| | 0.9nm,0.6s,baz=125,slow=16,SNR=2.3 | | | | | | |
| MJB9 | Matsu-Tunnel | 9.43 | 213 | Pn | Pn | 02 02 38.6 | +0.1 |
| MAJO | Matsushiro | 9.43 | 213 | | Pn | 02 02 38.3 | -0.2 |
| MJAR | Matsushiro Arr | 9.43 | 213 | P | Pn | 02 02 36.9 | -1.6 |
| | 3.5nm,0.7s,baz=22,slow=15,SNR=13 | | | | | | |
| KLR | Kul'dur | 9.96 | 302 | P | Pn | 02 02 44.5 | -0.6 |
| | 1.6nm,0.8s,baz=120,slow=9.9,SNR=3.6 | | | | | | |
| PETK | Petropavlovsk- | 12.07 | 41 | P | Pn | 02 03 12.0 | +0.2 |
| | 3.4nm,0.8s,baz=207,slow=9.1,SNR=3.0 | | | | | | |
| KSRS | Korea Array | 14.49 | 246 | P | P | 02 03 42.1 | -0.1 |
| | 2.1nm,0.5s,baz=55,slow=11,SNR=11 | | | | | | |
| MA2 | Magadan | 15.44 | 12 | P | P | 02 03 53.0 | +0.6 |
| | 5.5nm,0.7s,baz=51,slow=23,SNR=2.3 | | | | | | |
| SEY | Seymchan | 18.89 | 11 | P | P | 02 04 29.4 | -0.6 |
| | 1.6nm,0.3s,baz=182,slow=10,SNR=6.5 | | | | | | |
| SONM | Songino Array | 26.48 | 291 | P | P | 02 05 42.9 | -0.1 |
| | 1.7nm,0.5s,baz=71,slow=9.1,SNR=7.3 | | | | | | |
| | 1.7nm,0.5s | | | | | | |
| ILAR | Eielson Array | 41.87 | 37 | P | P | 02 07 53.7 | -0.4 |
| | 1.2nm,0.7s,baz=267,slow=7.3,SNR=12 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| MK31 | Makanchi Array | 42.59 | 296 | P | P | 02 08 00.9 | +0.7 |
| MKAR | Makanchi Array | 42.59 | 296 | P | P | 02 08 00.3 | +0.1 |
| | 0.9nm,0.6s,baz=83,slow=8.4,SNR=6.3 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| E27K | Coen River | 43.63 | 31 | | pP | 02 08 59.7 | +3.8 |
| KURBB | Kurchatov Arra | 43.63 | 302 | P | P | 02 08 08.3 | -0.1 |
| | 0.9nm,0.4s,baz=71,slow=8.5,SNR=5.2 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| LOGN | Logan Glacier | 45.21 | 42 | P | P | 02 08 24.1 | +3.2 |
| LOGN | | | | IAmb | IAmb | 02 08 28.2 | |
| | comp=Z,6.8nm,0.4s | | | | | | |
| BVAR | Borovoye Array | 47.56 | 308 | P | P | 02 08 39.3 | +0.2 |
| | comp=Z,0.3nm,0.3s,baz=81,slow=8.9,SNR=3.2 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| KKAR | Karatay Array | 51.72 | 296 | P | P | 02 09 10.0 | -0.6 |
| YKA | Yellowknife Ar | 56.08 | 33 | P | P | 02 09 41.8 | +0.2 |
| | comp=Z,1.5nm,0.8s,baz=306,slow=7.4,SNR=4.1 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| D05A | Enumclaw | 61.10 | 51 | | pP | 02 11 13.8 | +6.1 |
| FINES | FINESS Array B | 63.28 | 332 | P | P | 02 10 30.1 | -0.6 |
| | comp=Z,2.2nm,0.6s,baz=53,slow=7.6,SNR=12 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| NOA | NORSAR Array B | 68.13 | 338 | P | P | 02 11 01.6 | -0.1 |
| | comp=Z,0.9nm,0.7s,baz=34,slow=6.3,SNR=3.5 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| HFS | Hagfors | 68.18 | 336 | P | P | 02 11 00.5 | -1.5 |
| | comp=Z,1.1nm,0.4s,baz=46,slow=8.5,SNR=8.1 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| MSVF | Nonsavu | 69.12 | 146 | P | P | 02 11 20.1 | +12 |
| RDMU | Red Mountain | 72.22 | 50 | | pP | 02 12 23.1 | +3.2 |
| CLL | Collm | 75.70 | 331 | *e*P | P | 02 11 48.0 | +1.3 |
| EKA | Eskdalemuir Ar | 76.76 | 342 | P | P | 02 11 52.6 | +0.1 |
| | comp=Z,0.6nm,0.4s,baz=15,slow=2.9,SNR=4.8 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| MMAI | Mount Meron Ar | 79.53 | 306 | P | P | 02 12 06.7 | -1.5 |
| | comp=Z,2.2nm,0.4s,baz=71,slow=6.3,SNR=12 | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | |
| STAL | STALIGIAL | 80.05 | 328 | IAmb | IAmb | 02 12 15.8 | |
| | comp=Z,15nm,1.2s | | | | | | |
| TXAR | Lajitas Array | 83.65 | 55 | P | P | 02 12 31.4 | +1.6 |
| | comp=Z,0.7nm,0.6s,baz=286,slow=3.6,SNR=4.4 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| PVMO | Portageville | 85.53 | 41 | | pP | 02 13 37.0 | +3.3 |

*IDC* ***19*** *02:01:26.3±1.0, 16°.58S×179°.92W, h500km±10km, mb4.1/29, mbtmp4.9/31, Error ellipse: s-maj=11.2km s-min=9.1km az=159.0*

*NEIC* ***19*** *02:01:27.3±1.5, 16°.6S±0°.1×179°.9W±0°.1, h512km±8km, mb4.7/130, Error ellipse: s-maj=16.2km s-min=13.8km az=144.0*

*NOU* ***19*** *02:01:27.3, 16°.60S×179°.85W, h506km, mb4.9/49, Fiji Islands Region*

**ISC 19 02:01:26.5±0.3, 16°.60S±0°.06×179°.85W±0°.06, h500km, n682, σ0s91/654, mb4.7/109, 26C-48D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 2.30 | 240 | P | P | 02 02 37.2 | +3.9 |
| FUNA | Funafuti | 8.08 | 353 | P | P | 02 03 25.0 | +1.2 |
| AFI | Afiamalu | 8.24 | 72 | P | P | 02 03 26.2 | +0.7 |
| NIUE | Niue | 9.77 | 106 | P | P | 02 03 43.0 | +1.6 |
| NIUE | Niue | 9.77 | 106 | P | P | 02 03 42.4 | +0.9 |
| LIFNC | LIFOU | 12.92 | 249 | P | P | 02 04 14.5 | -0.3 |
| LIFNC | LIFOU | 12.92 | 249 | P | P | 02 04 14.6 | -0.2 |
| PINNC | Pines Island, | 13.38 | 241 | P | P | 02 04 20.3 | +0.7 |
| YATNC | Mamie plateau, | 13.64 | 244 | P | P | 02 04 22.9 | +0.5 |
| DZM | Mont Dzumac | 14.03 | 245 | P | P | 02 04 27.7 | +1.0 |
| DZM | Mont Dzumac | 14.03 | 245 | P | P | 02 04 26.7 | +0.1 |
| DZM | Mont Dzumac | 14.03 | 245 | P | P | 02 04 26.1 | -0.5 |
| | 14nm,0.6s,baz=78,slow=18,SNR=15 | | | | | | |
| DZM | | | | S | S | 02 06 54.4 | -0.8 |
| | 3.2nm,0.8s,baz=307,slow=22,SNR=1.8 | | | | | | |
| NOUC | Port Laguerre | 14.16 | 245 | P | P | 02 04 29.4 | +1.5 |
| KOUNC | Koumac, New Ca | 15.54 | 253 | P | P | 02 04 43.3 | +0.9 |
| KOUNC | Koumac, New Ca | 15.54 | 253 | | P | 02 04 42.8 | +0.4 |
| TARA | Tarawa | 19.21 | 338 | P | P | 02 05 17.3 | -0.8 |
| RAR | Rarotonga | 19.54 | 107 | P | P | 02 05 21.6 | +0.6 |
| | 34nm,1.0s,baz=197,slow=4.9,SNR=3.3 | | | | | | |
| URZ | Urewera | 21.75 | 186 | P | P | 02 05 40.0 | -0.8 |
| | 2.2nm,0.4s,baz=83,slow=16,SNR=1.8 | | | | | | |
| | 2.2nm,0.4s | | | | | | |
| BKZ | Black Stump Fm | 22.71 | 187 | P | P | 02 05 47.8 | -1.8 |
| BKZ | | | | IAmb | IAmb | 02 06 06.1 | |
| | comp=Z,19nm,1.5s | | | | | | |
| QRZ | Quartz Range | 25.03 | 194 | P | P | 02 06 09.6 | -0.5 |
| QRZ | | | | IAmb | IAmb | 02 06 43.5 | |
| | comp=Z,33nm,1.1s | | | | | | |
| LTZ | Lake Taylor | 26.95 | 193 | P | P | 02 06 25.1 | -2.0 |
| LTZ | | | | IAmb | IAmb | 02 06 27.6 | |
| | comp=Z,17nm,0.8s | | | | | | |
| PPT | Papeete | 28.94 | 96 | P | P | 02 06 45.6 | +0.7 |
| | comp=Z,47nm,0.6s,baz=52,slow=5.3,SNR=9.2 | | | | | | |
| | comp=Z,47nm,0.6s | | | | | | |
| PPTF | Pamatai, Papee | 28.95 | 96 | P | P | 02 06 45.7 | +0.7 |
| PPTF | Pamatai, Papee | 28.95 | 96 | P | P | 02 06 44.7 | -0.3 |
| TV1H | Townsville Har | 31.82 | 260 | P | P | 02 07 09.8 | +0.1 |
| CTA | Charters Tower | 32.33 | 259 | P | P | 02 07 14.1 | +0.1 |
| CTA | Charters Tower | 32.33 | 259 | P | P | 02 07 13.7 | -0.3 |
| | comp=Z,1.2nm,0.5s,baz=88,slow=9.6,SNR=28 | | | | | | |
| CTAO | Charters Tower | 32.33 | 259 | P | P | 02 07 14.2 | +0.2 |
| PMG | Port Moresby | 32.89 | 278 | P | P | 02 07 18.0 | -0.9 |
| | comp=Z,17nm,0.7s,baz=58,slow=7.7,SNR=4.8 | | | | | | |
| | comp=Z,17nm,0.7s | | | | | | |
| MTSU | Mount Surprise | 34.20 | 262 | P | P | 02 07 30.3 | +0.3 |
| CMSA | Cobar Meteorol | 34.63 | 238 | P | P | 02 07 33.4 | +0.1 |
| QLP | Quilpie | 34.74 | 247 | P | P | 02 07 34.3 | 0.0 |
| INKA | Innaminka | 37.99 | 246 | P | P | 02 08 01.9 | +0.7 |
| STKA | Stephens Creek | 38.08 | 239 | P | P | 02 08 02.3 | +0.4 |
| STKA | Stephens Creek | 38.08 | 239 | P | P | 02 08 01.6 | -0.3 |
| | comp=Z,4.4nm,0.4s,baz=91,slow=7.7,SNR=7.0 | | | | | | |
| | comp=Z,4.4nm,0.4s | | | | | | |
| GENI | Genyem | 41.69 | 285 | P | P | 02 08 32.1 | +0.9 |
| HMH | Humu'ula Sheep | 43.22 | 35 | P | P | 02 08 43.8 | +0.3 |
| WB0 | Warramunga Arr | 43.49 | 259 | P | P | 02 08 43.8 | -1.5 |
| WRA | Warramunga Arr | 43.53 | 258 | P | P | 02 08 44.3 | -1.3 |
| | comp=Z,2.5nm,0.4s,baz=98,slow=6.1,SNR=21 | | | | | | |
| | comp=Z,2.5nm,0.4s | | | | | | |
| HLK | Haleakala | 43.76 | 33 | P | P | 02 08 47.8 | +0.3 |
| AS31 | Alice Spring

**NIKH** **Nikolski High** 69.93 7 P P 02 11 44.8 -1.8
baz=191
**NACB** **Ninganchiao** 70.05 304 P P 02 11 48.6 +0.6
**NACB** **Ninganchiao** 70.05 304 P P 02 11 47.1 -0.9
NACB IAmb IAmb 02 11 49.1
comp=Z,36nm,1.0s
**SSLB** **Suanglung** 70.37 303 P P 02 11 49.5 -0.4
**SSLB** **Suanglung** 70.37 303 P P 02 11 49.0 -0.9
SSLB IAmb IAmb 02 11 50.3
comp=Z,22nm,0.8s
**TPUB** **Ta-pu** 70.39 303 P P 02 11 49.3 -0.8
**TPUB** **Ta-pu** 70.39 303 P P 02 11 49.0 -1.1
**UNV** **Unalaska Valle** 71.09 8 P P 02 11 51.9 -1.5
baz=194
**KSM** **Kuching** 71.15 277 P P 02 11 55.3 +0.5
**YSS** **Yuzh-Sakhalins** 71.64 334 P P 02 11 57.9 +1.1
**PEA0B** **Petropavlovsk-** 72.07 346 P P 02 11 59.1 -0.2
PEA0B IAmb IAmb 02 12 00.3
comp=Z,40nm,1.1s
**PETK** **Petropavlovsk-** 72.07 346 P P 02 11 58.5 -0.8
**PETK** **Petropavlovsk-** 72.07 346 P P 02 11 59.1 -0.2
comp=Z,26nm,0.8s,baz=133,slow=7.9,SNR=19
comp=Z,26nm,0.8s
**KSRS** **Korea Array** 72.81 319 P P 02 12 04.5 +0.7
comp=Z,11nm,0.9s,baz=140,slow=6.2,SNR=33
comp=Z,11nm,0.9s
**KSAR** **Wonju Array Be** 72.83 319 P P 02 12 05.5 +1.5
**QSPA** **South Pole Qui** 73.45 180 P P 02 12 07.8 +0.6
QSPA IAmb IAmb 02 12 08.7
comp=Z,18nm,0.9s
**QSPA** **South Pole Qui** 73.45 180 P P 02 12 07.7 +0.4
comp=Z,14nm,0.8s,baz=238,slow=1.2,SNR=31
comp=Z,14nm,0.8s
**S12K** **Black Hills** 73.57 10 P P 02 12 06.7 -1.2
**S12K** **Black Hills** 73.57 10 P P 02 12 07.0 -0.8
baz=198
**S14K** **Fog Glacier** 74.58 12 P P 02 12 12.1 -1.5
baz=200
**USRK** **Ussuriysk Ar.** 74.76 326 P P 02 12 15.3 +0.4
**USRK** **Ussuriysk Ar.** 74.76 326 P P 02 12 14.6 -0.3
comp=Z,8.9nm,0.8s,baz=149,slow=4.4,SNR=20
comp=Z,8.9nm,0.8s
**SII** **Sitkinak Islan** 75.99 14 P P 02 12 20.2 -1.2
baz=205
**NJ2** **Nanjing** 76.05 310 eP P 02 12 23.4 +1.1
NJ2 pmax pmax
comp=Z,14nm,0.8s
**MDJ** **Mudanjiang** 76.33 325 P P 02 12 24.4 +0.8
**MDJ** **Mudanjiang** 76.33 325 P P 02 12 24.4 +0.8
MDJ pmax pmax
comp=Z,53nm,1.1s
**SAO** **San Andreas Ge** 76.45 45 P P 02 12 24.9 +0.4
**R17L** **Mt. Peulik Vol** 76.48 13 P P 02 12 24.2 +0.1
baz=203
**OHAK** **Old Harbor** 76.80 14 P P 02 12 26.0 +0.2
baz=206
**R18K** **Karluk** 76.84 14 P P 02 12 25.9 -0.1
baz=205
**Q17K** **Contact Creek** 77.17 13 P P 02 12 27.8 -0.2
baz=204
**O15K** **Ungalikthiuk R** 77.26 10 P P 02 12 28.0 -0.3
baz=200
**Q16K** **King Salmon** 77.39 12 P P 02 12 28.9 -0.1
baz=203
**P16K** **Nushagak River** 77.45 11 P P 02 12 29.6 +0.2
baz=201
**KDAK** **Kodiak Island** 77.47 15 P P 02 12 30.0 +0.5
baz=207
**M11K** **Mekoryuk** 77.50 7 P P 02 12 30.3 +0.8
baz=193
**109C** **Camp Elliot, M** 77.53 50 P P 02 12 30.1 -0.3
baz=241
**N14K** **Kuskokwak Cree** 77.66 9 P P 02 12 30.6 +0.2
baz=198,SNR=8.8
**Q18K** **Katmai Hardscr** 77.70 13 P P 02 12 30.4 -0.6
baz=204
**M13K** **Dall Lake** 77.89 8 P P 02 12 31.7 0.0
baz=196
**P17K** **Kvichak River** 77.91 12 P P 02 12 31.7 -0.1
baz=203
**AFDM** **Forest Hills D** 77.95 43 P P 02 12 32.8 +0.2
**O16K** **Kokwok River B** 77.96 11 P P 02 12 30.9 -1.2
baz=201
**MONP2** **Monument Peak** 78.03 50 P P 02 12 33.7 +0.3
baz=241
**CN2** **Changchun** 78.15 323 P P 02 12 33.4 -0.1
CN2 pmax pmax
comp=Z,60nm,0.9s
**N15K** **Kwethluk River** 78.15 10 P P 02 12 33.6 +0.4
baz=199
**BNX** **BinXian** 78.24 325 ⇓P P 02 12 34.0 +0.1
BNX pmax pmax
comp=Z,54nm,0.8s
**Q20K** **Shuyak Island** 78.26 14 P P 02 12 33.1 -0.7
baz=207
**O17K** **Koliganek Bris** 78.32 12 P P 02 12 33.5 -0.5
baz=202
**P18K** **Big Mountain,** 78.34 13 P P 02 12 33.7 -0.5
baz=204
**PFO** **Pinyon Flats O** 78.35 50 P P 02 12 32.6 -2.4
baz=241
**TPFO** **Pinon Flats** 78.35 50 P P 02 12 33.5 -1.5
baz=241
**YBH** **Yreka Blue Hor** 78.40 40 P P 02 12 35.5 +0.5
comp=Z,11nm,0.7s,baz=183,slow=2.5,SNR=25
comp=Z,11nm,0.7s
**M14K** **Bethel** 78.41 9 P P 02 12 34.7 +0.2
baz=198,SNR=7.7
**M15K** **Kasigluk River** 78.55 9 P P 02 12 35.4 +0.1
baz=199,SNR=7.9
**N16K** **Nishlik Lake** 78.67 10 P P 02 12 36.5 +0.6
baz=201
**HUMO** **Hull Mountain** 78.75 39 P P 02 12 37.4 +0.6
HUMO IAmb IAmb 02 12 38.7
comp=Z,18nm,1.1s
**O18K** **Koktuh Hills** 78.77 12 P P 02 12 36.7 +0.2
baz=204
**L14K** **Kuka Creek** 78.88 8 P P 02 12 37.0 +0.1
L14K IAmb IAmb 02 12 38.2
comp=Z,22nm,0.8s
**L14K** **Kuka Creek** 78.88 8 P P 02 12 37.2 +0.2
baz=197
**PNTR** **Pine Nut** 78.93 44 P P 02 12 37.5 -0.6
PNTR IAmb IAmb 02 12 39.7
comp=Z,30nm,0.8s
**N17K** **Nushagak Hills** 79.00 11 P P 02 12 38.0 +0.4
baz=202
**P19K** **Oil Pt** 79.01 13 P P 02 12 38.3 +0.5
baz=206
**YERR** **Yerington** 79.11 44 P P 02 12 39.0 -0.1
YERR IAmb IAmb 02 12 40.4
comp=Z,20nm,0.6s
**M16K** **Timber Creek** 79.15 10 P P 02 12 39.2 +0.7
baz=200,SNR=6.0
**K13K** **Kusilvak Mount** 79.19 7 P P 02 12 39.3 +0.7
baz=195
**O19K** **Port Alsworth** 79.26 13 P P 02 12 39.0 -0.1
baz=205
**L15K** **Ungalak Mounta** 79.37 9 P P 02 12 39.8 +0.2
baz=198,SNR=8.3
**N18K** **Kilae Creek** 79.39 12 P P 02 12 39.7 0.0
baz=203
**PAHR** **Pah Rah Range** 79.40 43 P P 02 12 40.9 +0.4
PAHR IAmb IAmb 02 12 41.9
comp=Z,14nm,0.9s
**RYN** **Ryan** 79.41 44 P P 02 12 40.8 +0.3
RYN IAmb IAmb 02 12 42.0
comp=Z,11nm,1.0s
**GWY** **Greenwater Val** 79.45 47 P P 02 12 40.8 -0.1
**NVAR** **Mina Array Bea** 79.45 45 P P 02 12 40.8 -0.1
**NVAR** **Mina Array Bea** 79.45 45 P P 02 12 41.4 +0.5
comp=Z,7.2nm,0.7s,baz=225,slow=8.0,SNR=24
comp=Z,7.2nm,0.7s
**O20K** **Slope Mountain** 79.53 13 P P 02 12 40.7 +0.1
baz=206
**MA2** **Magadan** 79.58 345 P P 02 12 39.8 -0.9
comp=Z,15nm,0.6s,baz=156,slow=7.7,SNR=8.5
comp=Z,15nm,0.6s
**GMN** **Gold Mountain** 79.59 46 P P 02 12 41.1 -0.6
**BRSE** **Bradley Lake S** 79.66 15 P P 02 12 41.4 +0.1
baz=208
**L16K** **Owhat River** 79.71 10 P P 02 12 41.7 +0.3
baz=200,SNR=7.0
**M17K** **Holitna River** 79.77 11 P P 02 12 43.0 +1.3
baz=202,SNR=12
**WCT** **Wildcat Mounta** 79.78 47 P P 02 12 42.8 +0.3

**N19K** **Bonanza Creek** 79.79 12 P P 02 12 41.0 -0.9
baz=205
**RSO** **Redoubt South** 79.84 13 P P 02 12 41.3 -1.1
**KVN** **Kaiserville** 79.91 44 P P 02 12 43.2 -0.1
**K15K** **Wolf Creek Mou** 79.95 9 P P 02 12 43.5 +0.8
baz=198,SNR=15
**J14K** **Nanvaranak Lak** 80.12 8 P P 02 12 43.4 0.0
baz=196
**TPNV** **Topopah Spring** 80.12 47 P P 02 12 44.6 +0.3
baz=241
**M18K** **Stony River** 80.15 11 P P 02 12 43.6 -0.1
baz=203
**J05D** **Fort Rock, OR** 80.17 39 P P 02 12 44.7 +0.2
J05D IAmb IAmb 02 12 46.1
comp=Z,39nm,0.8s
**SEW** **Seward** 80.29 15 P P 02 12 44.3 -0.2
baz=209
**214A** **Organ Pipe Nat** 80.30 53 P P 02 12 45.1 -0.2
baz=244
**L17K** **Donlin** 80.30 10 P P 02 12 45.7 +1.2
baz=201,SNR=11
**GAMB** **Gambell** 80.36 4 P P 02 12 45.5 +0.8
baz=188
**O22K** **Cooper Landing** 80.56 15 P P 02 12 45.2 -0.6
baz=209
**N20K** **Mount Spurr** 80.62 13 P P 02 12 45.5 -0.9
baz=207
**SPCR** **Spurr Chakacha** 80.62 13 P P 02 12 44.9 -1.4
baz=207
**L18K** **Granite Mounta** 80.66 11 P P 02 12 46.3 -0.1
**L18K** **Granite Mounta** 80.66 11 P P 02 12 47.1 +0.8
baz=202,SNR=18
**P23K** **Montague Islan** 80.72 16 P P 02 12 46.4 -0.3
baz=211
**M19K** **Big River Lodg** 80.80 12 P P 02 12 47.2 0.0
baz=205
**K17K** **Iditarod** 80.85 10 P P 02 12 48.0 +0.7
baz=201,SNR=9.7
**IPM** **Ipoh** 80.89 277 P P 02 12 49.0 +0.3
**L19K** **White Mountain** 80.97 12 P P 02 12 47.7 -0.3
L19K IAmb IAmb 02 12 49.9
comp=Z,46nm,1.1s
**L19K** **White Mountain** 80.97 12 P P 02 12 48.1 +0.1
baz=204,SNR=16
**J16K** **Anvik River** 81.03 9 P P 02 12 48.4 +0.2
**J16K** **Anvik River** 81.03 9 P P 02 12 49.0 +0.7
baz=199,SNR=18
**M20K** **Styx River** 81.04 12 P P 02 12 46.9 -1.6
**M20K** **Styx River** 81.04 12 P P 02 12 47.7 -0.8
baz=206
**HOOD** **Mount Hood Mea** 81.07 37 P P 02 12 49.2 +0.1
HOOD IAmb IAmb 02 12 50.2
comp=Z,34nm,1.4s
**HEH** **HeiHe** 81.08 329 eP P 02 12 48.8 0.0
HEH pmax pmax
comp=Z,24nm,0.7s
**RC01** **Rabbit Creek A** 81.09 14 P P 02 12 48.5 -0.1
baz=209
**SUA** **Susuna One** 81.18 14 P P 02 12 48.7 -0.5
baz=208,SNR=8.9
**BMN** **Battle Mountai** 81.19 43 P P 02 12 50.3 +0.4
BMN IAmb IAmb 02 12 51.4
comp=Z,22nm,1.0s
**PWL** **Port Wells** 81.23 15 P P 02 12 48.7 -0.7
baz=210,SNR=6.9
**R11B** **Troy Canyon, C** 81.26 46 P P 02 12 50.2 -0.1
baz=241
**J17K** **VABM Dome** 81.36 9 P P 02 12 49.9 -0.1
**J17K** **VABM Dome** 81.36 9 P P 02 12 50.6 +0.6
baz=200,SNR=20
**L20K** **Farewell, AK** 81.43 12 P P 02 12 50.0 -0.4
baz=205,SNR=8.4
**SKT** **Skwentna** 81.47 13 P P 02 12 50.3 -0.3
baz=207
**KAIM** **Kayak Island** 81.48 17 P P 02 12 50.4 -0.3
baz=214
**GLI** **Glacier Island** 81.56 16 P P 02 12 49.8 -1.2
**GLI** **Glacier Island** 81.56 16 P P 02 12 50.3 -0.7
baz=212,SNR=15
**M22K** **Willow** 81.58 14 P P 02 12 50.9 -0.2
baz=209
**I17K** **Unalakleet** 81.59 8 P P 02 12 51.9 +0.8
baz=198,SNR=6.4
**HNS** **HongShan** 81.62 313 ⇓P P 02 12 52.1 +0.2
HNS pmax pmax
comp=Z,12nm,1.4s
**EYAK** **Cordova Ski Ar** 81.63 16 P P 02 12 51.2 -0.1
baz=213
**I07A** **Izee** 81.66 39 P P 02 12 52.4 +0.3
I07A IAmb IAmb 02 12 53.6
comp=Z,17nm,0.7s
**ANM** **Nome** 81.67 6 P P 02 12 52.0 +0.4
baz=194
**PMR** **Palmer** 81.67 14 P P 02 12 50.6 -1.0
**PMR** **Palmer** 81.67 14 P P 02 12 50.9 -0.7
baz=210,SNR=9.3
**KNK** **Knik Glacier** 81.67 15 P P 02 12 51.0 -0.7
KNK IAmb IAmb 02 12 51.5
comp=Z,12nm,0.6s
**KNK** **Knik Glacier** 81.67 15 P P 02 12 51.5 -0.2
baz=210
**J18K** **Innoko River** 81.81 10 P P 02 12 52.1 -0.3
**J18K** **Innoko River** 81.81 10 P P 02 12 52.5 +0.2
baz=202,SNR=30
**GHO** **Glory Hole Cre** 81.88 14 P P 02 12 52.0 -0.8
**BJT** **Baijiatuau** 81.88 316 P P 02 12 53.8 +0.6
**BJT** **Baijiatuau** 81.88 316 P P 02 12 53.5 +0.3
BJT IAmb IAmb 02 12 54.5
comp=Z,24nm,0.7s
**BJI** **Beijing** 81.89 316 P P 02 12 53.6 +0.4
BJI pmax pmax
comp=Z,16nm,0.7s
**CRAG** **Craig** 81.90 25 P P 02 12 53.3 +0.5
baz=225
**J08A** **Circle Bar Ran** 81.91 40 P P 02 12 53.8 +0.4
J08A IAmb IAmb 02 12 54.8
comp=Z,21nm,1.1s
**LYN** **LuoYang** 81.93 310 P P 02 12 54.4 +0.8
LYN pmax pmax
comp=Z,32nm,0.8s
**D05A** **Enumclaw** 81.94 36 P P 02 12 53.6 +0.3
D05A IAmb IAmb 02 12 55.1
comp=Z,19nm,0.9s
**TUC** **Tucson** 82.00 53 P P 02 12 54.7 +0.6
baz=245
**SML** **Sawmill** 82.05 15 P P 02 12 53.7 +0.1
baz=210
**H16K** **Elim** 82.10 8 P P 02 12 54.0 +0.3
baz=197,SNR=11
**Q12A** **Willow Creek R** 82.11 45 P P 02 12 54.6 0.0
Q12A IAmb IAmb 02 12 56.2
comp=Z,18nm,1.0s
**CUT** **Chulitna** 82.12 13 P P 02 12 53.2 -0.6
baz=208,SNR=7.3
**SNH** **Sunshine Point** 82.14 18 P P 02 12 53.9 -0.2
**M23K** **Glacier View** 82.18 15 P P 02 12 53.8 -0.4
baz=211
**K20K** **Telida** 82.19 11 P P 02 12 54.1 -0.1
baz=205,SNR=28
**SIT** **Sitka** 82.20 23 P P 02 12 54.5 +0.2
baz=223
**SEY** **Seymchan** 82.20 348 P P 02 12 53.9 -0.3
comp=Z,48nm,0.8s,baz=144,slow=5.9,SNR=63
comp=Z,48nm,0.8s
**G15K** **Niukluk** 82.23 7 P P 02 12 54.7 +0.3
baz=195,SNR=8.1
**LCMT** **Little Creek M** 82.27 48 P P 02 12 55.6 +0.2
**BMRM** **Bremner River** 82.29 17 P P 02 12 54.4 -0.5
baz=214,SNR=8.4
**SCM** **Sheep Creek Mo** 82.31 15 P P 02 12 53.8 -1.2
**SCM** **Sheep Creek Mo** 82.31 15 P P 02 12 54.5 -0.5
baz=211,SNR=13
**U33K** **Whale Pass** 82.36 24 P P 02 12 55.8 +0.6
baz=225,SNR=6.1
**KLU** **Klutina** 82.38 16 P P 02 12 54.9 -0.4
baz=213
**ENH** **Enshi** 82.40 305 P P 02 12 56.7 +0.6
**MESA** **MESA** 82.40 18 P P 02 12 55.4 -0.3
**MESA** **MESA** 82.40 18 P P 02 12 55.7 +0.1
baz=216,SNR=7.6
**TNA** **Tin City** 82.41 5 P P 02 12 55.7 +0.4
baz=192
**V35K** **Ketchikan** 82.41 25 P P 02 12 56.0 +0.5
baz=226
**SPR3** **Spring Creek 3** 82.43 46 P P 02 12 56.2 -0.2
**F14K** **Arctic Creek** 82.46 6 P P 02 12 55.8 +0.3
baz=193

**J19K** **Poorman** 82.49 11 P P 02 12 55.5 -0.2
J19K IAmb IAmb 02 12 56.4
comp=Z,18nm,0.7s
**J19K** **Poorman** 82.49 11 P P 02 12 56.0 +0.3
baz=203,SNR=11
**CRQM** **Cirque** 82.52 17 P P 02 12 55.8 -0.5
CRQM IAmb IAmb 02 12 56.7
comp=Z,34nm,1.0s
**CRQE** **Cirque** 82.53 17 P P 02 12 55.8 -0.4
baz=215,SNR=9.2
**S31K** **Pelican** 82.54 22 P P 02 12 56.7 +0.7
baz=222,SNR=8.8
**PSUT** **Pine Spring** 82.54 46 P P 02 12 56.6 -0.3
**KNB** **Kanab** 82.57 48 P P 02 12 57.3 +0.3
**ELK** **Elko** 82.66 44 P P 02 12 57.4 -0.1
ELK IAmb IAmb 02 12 58.8
comp=Z,8.8nm,0.9s
**ELK** **Elko** 82.66 44 P P 02 12 57.8 +0.3
comp=Z,7.2nm,0.8s,baz=254,slow=4.5,SNR=20
comp=Z,7.2nm,0.8s
**U15A** **North Rim** 82.68 49 P P 02 12 58.2 +0.4
U15A IAmb IAmb 02 12 59.7
comp=Z,16nm,0.8s
**H17K** **Granite Mounta** 82.70 8 P P 02 12 57.0 +0.2
baz=199,SNR=5.0
**LTY** **Liberty** 82.72 36 P P 02 12 57.1 -0.3
**S32K** **Killisnoo** 82.78 23 P P 02 12 57.0 -0.3
**S32K** **Killisnoo** 82.78 23 P P 02 12 57.8 +0.5
baz=223,SNR=5.6
**PNL** **Peninsula** 82.78 19 P P 02 12 57.0 -0.3
**PNL** **Peninsula** 82.78 19 P P 02 12 57.4 +0.1
baz=219
**G16K** **Koyuk River** 82.81 7 P P 02 12 57.7 +0.4
G16K IAmb IAmb 02 12 58.5
comp=Z,34nm,0.8s
**G16K** **Koyuk River** 82.81 7 P P 02 12 57.9 +0.6
baz=197,SNR=9.1
**VRDI** **Verde Repeater** 82.82 17 P P 02 12 56.9 -0.8
VRDI IAmb IAmb 02 12 58.1
comp=Z,38nm,1.2s
**N25K** **Chitina, Valde** 82.82 16 P P 02 12 56.7 -0.9
N25K IAmb IAmb 02 12 58.0
comp=Z,38nm,0.8s
**N25K** **Chitina, Valde** 82.82 16 P P 02 12 57.3 -0.3
baz=214,SNR=22
**M24K** **Tolsona, Glenn** 82.83 15 P P 02 12 57.7 +0.1
**M24K** **Tolsona, Glenn** 82.83 15 P P 02 12 57.6 0.0
baz=212,SNR=9.6
**PINM** **Pinnacle** 82.85 19 P P 02 12 57.6 -0.1
baz=218
**TABL** **Table Mountain** 82.85 18 P P 02 12 57.5 -0.4
**F15K** **North Star Dit** 82.86 6 P P 02 12 57.0 -0.5
baz=195
**WAT6** **Susitna Watana** 82.86 14 P P 02 12 56.8 -1.0
baz=211,SNR=16
**WRAK** **Wrangell Islan** 82.88 24 P P 02 12 57.9 +0.1
baz=225
**WAT1** **Susitna Watana** 82.88 14 P P 02 12 57.3 -0.5
baz=210
**GLB** **Gilahina Butte** 82.90 17 P P 02 12 56.8 -1.2
GLB IAmb IAmb 02 12 57.8
comp=Z,24nm,0.6s
**J20K** **Nowinta River** 82.92 11 P P 02 12 57.1 -0.8
J20K IAmb IAmb 02 12 58.6
comp=Z,33nm,0.8s
**J20K** **Nowinta River** 82.92 11 P P 02 12 57.6 -0.3
baz=205,SNR=19
**WUAZ** **Wupatki** 82.95 50 P P 02 12 59.8 +0.8
baz=244
**GCSA** **Galena City Sc** 82.98 10 P P 02 12 58.4 +0.3
baz=202
**MCARA** **McCarthy VSAT** 83.07 17 P P 02 12 58.8 +0.1
baz=215
**H18K** **Honhosa River** 83.13 9 P P 02 12 59.0 +0.1
baz=201
**G17K** **Kiwalik Mounta** 83.13 8 P P 02 12 59.2 +0.2
baz=198,SNR=8.7
**CTG** **Chitna Glacier** 83.21 18 P P 02 12 59.5 -0.1
baz=217,SNR=14
**NONG** **Nongkai** 83.24 291 P P 02 13 01.1 +0.6
**P29M** **Windy Craggy** 83.29 20 P P 02 13 00.2 +0.3
baz=220,SNR=11
**HARP** **HAARP** 83.34 15 P P 02 13 00.5 +0.5
baz=213,SNR=7.7
**DHY** **Denali Highway** 83.37 14 P P 02 12 59.1 -1.3
DHY IAmb IAmb 02 13 00.0
comp=Z,12nm,0.7s
**DHY** **Denali Highway** 83.37 14 P P 02 12 59.7 -0.7
baz=211,SNR=8.5
**R32K** **Eaglecrest** 83.39 22 P P 02 13 00.2 -0.2
**R32K** **Eaglecrest** 83.39 22 P P 02 13 00.7 +0.3
baz=223,SNR=6.5
**O28M** **Mount Upton** 83.40 18 P P 02 13 00.5 -0.2
baz=218,SNR=19
**BMO** **Blue Mountains** 83.40 39 P P 02 13 00.2 -0.7
BMO IAmb IAmb 02 13 01.4
comp=Z,6.0nm,0.9s
**I20K** **Naaghedeneel** 83.43 11 P P 02 13 00.8 +0.5
baz=204,SNR=8.5
**JIS** **Juneau Island** 83.44 22 P P 02 13 00.8 +0.2
**BPAW** **Bear Paw Mtn.** 83.47 12 P P 02 12 58.6 -2.0
BPAW IAmb IAmb 02 13 01.8
comp=Z,15nm,0.6s
**BPAW** **Bear Paw Mtn.** 83.47 12 P P 02 12 58.8 -1.9
baz=208,SNR=13
**O29M** **Mount Kennedy** 83.53 19 P P 02 13 00.5 -0.7
baz=220
**MCK** **McKinley** 83.58 13 P P 02 13 00.3 -1.0
baz=210,SNR=16
**PLBC** **Pleasant Camp** 83.61 21 P P 02 13 01.8 +0.3
baz=222,SNR=16
**NAYO** **Nakonayok** 83.66 287 P P 02 13 03.9 +1.2
**PAX** **Paxson** 83.74 15 P P 02 13 01.1 -1.0
baz=213,SNR=7.4
**E09A** **Wood Farm, Sta** 83.77 38 P P 02 13 02.2 -0.4
**H19K** **Roundabout Mou** 83.77 10 P P 02 13 01.8 -0.3
H19K IAmb IAmb 02 13 03.1
comp=Z,19nm,0.9s
**H19K** **Roundabout Mou** 83.77 10 P P 02 13 01.9 -0.2
baz=202,SNR=9.3
**G18K** **Tagagawik** 83.78 9 P P 02 13 02.1 -0.1
baz=200,SNR=6.7
**M26K** **Nabesna, AK** 83.91 16 P P 02 13 02.7 -0.3
baz=215,SNR=36
**YUK8** **Steele Glacier** 83.93 18 P P 02 13 03.3 0.0
baz=218,SNR=21
**F17K** **Baldwin Pennin** 83.95 7 P P 02 13 03.6 +0.6
baz=198
**SKAG** **Skagway** 83.97 21 P P 02 13 03.7 +0.5
baz=222
**H20K** **Anotleneega Mo** 84.00 10 P P 02 13 03.2 0.0
baz=204,SNR=9.5
**DUG** **Dugway, Tooele** 84.03 45 P P 02 13 04.1 -0.1
baz=242
**YUK6** **Outpost Mounta** 84.09 19 P P 02 13 03.6 -0.5
baz=220
**T35M** **Bob Quinn** 84.11 25 P P 02 13 05.0 +1.0
baz=227,SNR=5.1
**YUK3** **Moose Creek** 84.11 18 P P 02 13 04.0 -0.1
baz=218,SNR=10
**M27K** **Edge Creek, AK** 84.18 17 P P 02 13 04.3 -0.1
baz=216,SNR=30
**G19K** **Purcell Mounta** 84.25 9 P P 02 13 04.4 -0.1
baz=202,SNR=6.9
**NEA2** **Nenana** 84.30 13 P P 02 13 03.6 -1.1
baz=210,SNR=9.4
**F18K** **Selawik** 84.31 8 P P 02 13 04.3 -0.4
baz=199
**YUK4** **Talbot Arm** 84.32 19 P P 02 13 05.4 +0.3
baz=219,SNR=8.3
**L26K** **Log Cabin Wild** 84.33 16 P P 02 13 04.4 -0.6
L26K IAmb IAmb 02 13 05.5
comp=Z,20nm,0.8s
**L26K** **Log Cabin Wild** 84.33 16 P P 02 13 04.8 -0.2
baz=215,SNR=12
**MLY** **Manley** 84.34 12 P P 02 13 03.7 -1.4
MLY IAmb IAmb 02 13 05.2
comp=Z,18nm,0.8s
**MLY** **Manley** 84.34 12 P P 02 13 03.9 -1.2
baz=208,SNR=14
**K24K** **Donnelly Dome** 84.37 14 P P 02 13 04.9 -0.2
baz=213,SNR=14
**XAN** **Xi'an** 84.37 308 ⇓P P 02 13 06.8 +0.9
XAN pmax pmax
comp=Z,55nm,0.9s
**S34M** **Telegraph Cree** 84.40 24 P P 02 13 05.8 +0.4
**S34M** **Telegraph Cree** 84.40 24 P P 02 13 06.0 +0.6

baz=226,SNR=33
**121A Cookes Peak, D** 84.41 54 P P 02 13 07.2 +1.0
baz=246
**E17K Hotham Inlet** 84.50 7 P P 02 13 06.1 +0.4
baz=197,SNR=7.4
**H21K Melozitna Rive** 84.51 11 P P 02 13 05.3 -0.5
H21K IAmb IAmb 02 13 07.8
comp=Z,15nm,1.0s
**H21K Melozitna Rive** 84.51 11 P P 02 13 06.5 +0.7
baz=206,SNR=11
**RIDG Independent Ri** 84.54 15 P P 02 13 05.2 -0.8
baz=214,SNR=14
**HLID Hailey** 84.56 42 P P 02 13 07.3 +0.5
HLID IAmb IAmb 02 13 08.4
comp=Z,10.0nm,0.8s
**HLID Hailey** 84.56 42 P P 02 13 07.8 +1.0
baz=241
**HDA Harding Lake** 84.61 14 P P 02 13 06.2 -0.1
baz=212,SNR=14
**MAW Mawson** 84.62 200 P P 02 13 06.5 +0.1
comp=Z,2.1nm,0.6s,baz=99,slow=15,SNR=2.0
comp=Z,2.1nm,0.6s
**CCB Clear Creek Bu** 84.62 13 P P 02 13 04.6 -1.7
CCB IAmb IAmb 02 13 06.1
comp=Z,27nm,0.7s
**P32M Atlin** 84.63 22 P P 02 13 06.8 +0.3
baz=224,SNR=6.9
**IMAR Indian Mountai** 84.64 10 P P 02 13 05.5 -0.9
**O30N Mendenhall** 84.69 20 P P 02 13 06.8 0.0
baz=222,SNR=16
**Q32M Nakina River** 84.70 23 P P 02 13 07.5 +0.4
baz=225,SNR=12
**I23K Minto, Yukon-K** 84.73 12 P P 02 13 05.5 -1.3
I23K IAmb IAmb 02 13 07.5
comp=Z,24nm,1.3s
**I23K Minto, Yukon-K** 84.73 12 P P 02 13 05.9 -0.9
baz=209,SNR=7.8
**L27K Beaver Creek,** 84.76 16 P P 02 13 07.0 -0.1
baz=216,SNR=8.2
**BCAR Beaver Creek A** 84.78 16 P P 02 13 06.8 -0.4
**HVU Hansel Valley** 84.78 44 P P 02 13 07.6 -0.3
**F19K Shaleruckik Mo** 84.79 9 P P 02 13 06.6 -0.5
baz=201
**MDM Murphy Dome** 84.80 13 P P 02 13 05.5 -1.8
MDM IAmb IAmb 02 13 07.0
comp=Z,26nm,0.9s
**COLA College** 84.81 13 P P 02 13 06.1 -1.1
**COLA College** 84.81 13 P P 02 13 06.9 -0.3
baz=211
**N30M Aishikik Lake** 84.89 19 P P 02 13 07.7 -0.1
baz=221,SNR=5.3
**IL31** 84.93 14 P P 02 13 06.4 -1.4
IL31 IAmb IAmb 02 13 08.3
comp=Z,26nm,0.9s
**ILAR Eielson Array** 84.93 14 P P 02 13 05.9 -2.0
**ILAR Eielson Array** 84.93 14 P P 02 13 06.4 -1.5
comp=Z,16nm,0.8s,baz=235,slow=5.5,SNR=63
comp=Z,16nm,0.8s
**D17K Noatak River** 84.95 6 P P 02 13 08.5 +0.7
baz=196
**SCRK Sand Creek** 84.95 15 P P 02 13 06.9 -1.2
SCRK IAmb IAmb 02 13 08.5
comp=Z,19nm,0.8s
**SCRK Sand Creek** 84.95 15 P P 02 13 07.5 -0.6
baz=214,SNR=19
**E18K Tukpahlearik C** 84.97 7 P P 02 13 08.5 +0.6
baz=198,SNR=5.3
**H22K Ishtalitna Cre** 84.99 11 P P 02 13 07.6 -0.6
baz=207,SNR=17
**WHY Whitehorse** 85.01 20 P P 02 13 08.3 -0.2
WHY IAmb IAmb 02 13 09.3
comp=Z,14nm,0.8s
**WHY Whitehorse** 85.01 20 P P 02 13 08.5 0.0
baz=223,SNR=11
**POKR Poker Plat Res** 85.11 13 P P 02 13 08.3 -0.4
baz=211,SNR=6.2
**J25K Salcha River,** 85.15 14 P P 02 13 08.3 -0.7
J25K IAmb IAmb 02 13 09.3
comp=Z,19nm,0.7s
**J25K Salcha River,** 85.15 14 P P 02 13 08.2 -0.7
baz=213,SNR=22
**G21K Allakaket** 85.17 10 P P 02 13 08.4 -0.5
baz=205,SNR=12
**DLBC Dease Lake** 85.19 24 P P 02 13 09.6 +0.3
baz=227,SNR=14
**M29M Somme Creek** 85.22 18 P P 02 13 09.6 +0.1
baz=220,SNR=13
**NEW Newport** 85.28 37 P P 02 13 08.7 -1.3
comp=Z,4.2nm,0.6s,baz=195,slow=3.9,SNR=7.1
comp=Z,4.2nm,0.6s
**NEW Newport** 85.28 37 P P 02 13 10.0 +0.1
baz=239
**H23K Yukon River** 85.28 12 P P 02 13 09.2 -0.4
baz=209
**F20K Avaraart Lake** 85.29 9 P P 02 13 09.9 +0.4
baz=203
**RDOG Red Dog Mine** 85.31 6 P P 02 13 10.4 +0.7
baz=196
**N31M Braeburn, Yuko** 85.33 20 P P 02 13 10.5 +0.6
baz=222,SNR=8.1
**HHC Hu-ho-hao-te** 85.38 315 ⇓P P 02 13 11.6 +0.9
HHC pmax pmax
comp=Z,28nm,0.6s
**P33M Teslin, Yukon** 85.39 22 P P 02 13 10.2 -0.1
**P33M Teslin, Yukon** 85.39 22 P P 02 13 10.4 +0.1
baz=225
**E19K Redstone River** 85.45 9 P P 02 13 09.9 -0.4
baz=202,SNR=8.5
**K27K Chicken** 85.48 16 P P 02 13 11.1 +0.6
baz=216
**R33M Jennings River** 85.49 23 P P 02 13 11.1 +0.2
baz=226,SNR=12
**J26L Joseph Creek** 85.49 15 P P 02 13 10.1 -0.6
**J26L Joseph Creek** 85.49 15 P P 02 13 10.6 -0.1
baz=215,SNR=29
**F21K Alatna River** 85.81 10 P P 02 13 11.1 -1.0
**F21K Alatna River** 85.81 10 P P 02 13 11.6 -0.5
baz=205,SNR=7.4
**PRP Porcupine Dome** 85.88 14 P P 02 13 12.9 +0.3
baz=213
**MNTX Cornudas Mount** 85.96 55 P P 02 13 14.2 +0.6
baz=248
**G23K Bananza Creek** 85.97 11 P P 02 13 13.2 +0.3
baz=208
**N32M Quiet Lake** 85.97 21 P P 02 13 12.7 -0.3
N32M IAmb IAmb 02 13 14.1
comp=Z,23nm,1.1s
**N32M Quiet Lake** 85.97 21 P P 02 13 13.3 +0.2
baz=224
**KMI Kunming** 86.01 298 ⇑P P 02 13 15.6 +1.3
KMI pmax pmax
comp=Z,21nm,0.8s
**C18K Utukok River** 86.07 7 P P 02 13 14.3 +0.9
baz=198
**DAWY Dawson** 86.22 17 P P 02 13 13.7 -0.4
DAWY IAmb IAmb 02 13 14.7
comp=Z,8.2nm,0.8s
**DAWY Dawson** 86.22 17 P P 02 13 13.7 -0.4
baz=218,SNR=9.8
**I26K Coal Creek Min** 86.25 15 P P 02 13 14.2 0.0
baz=215
**F22K John River** 86.29 10 P P 02 13 13.8 -0.6
baz=206
**D19K Kuna River** 86.30 8 P P 02 13 14.2 -0.2
baz=201
**M31M Drury Creek, Y** 86.30 20 P P 02 13 14.0 -0.6
baz=223,SNR=5.8
**EGAK Eagle** 86.32 16 P P 02 13 13.5 -1.0
EGAK IAmb IAmb 02 13 14.8
comp=Z,14nm,0.7s
**EGAK Eagle** 86.32 16 P P 02 13 14.1 -0.4
baz=217,SNR=9.8
**E20K Nigu River** 86.34 9 P P 02 13 14.3 -0.4
baz=203,SNR=11
**ANMO Albuquerque** 86.38 52 P P 02 13 15.9 +0.1
comp=Z,4.0nm,0.8s,baz=312,slow=4.8,SNR=12
comp=Z,4.0nm,0.8s
**ANMO Albuquerque** 86.38 52 P P 02 13 16.2 +0.5
baz=247
**COLD Coldfoot** 86.39 11 P P 02 13 14.8 -0.1
baz=208,SNR=13
**MSO Missoula** 86.43 39 P P 02 13 15.4 -0.2
baz=241
**G24K Hadweenzic Riv** 86.46 12 P P 02 13 14.6 -0.6
baz=211
**TXAR Lajitas Array** 86.47 58 P P 02 13 17.4 +1.2
comp=Z,1.3nm,0.8s,baz=215,slow=7.6,SNR=6.8
comp=Z,1.3nm,0.8s

**DLMT Dillon** 86.56 41 P P 02 13 16.1 -0.2
DLMT IAmb IAmb 02 13 17.7
comp=Z,8.9nm,0.8s
**K29M Barlow Dome** 86.58 17 P P 02 13 15.9 0.0
baz=220,SNR=9.5
**FARO Faro, Yukon** 86.66 20 P P 02 13 15.4 -0.8
**FARO Faro, Yukon** 86.66 20 P P 02 13 15.7 -0.5
baz=224,SNR=5.4
**C19K Lookout Ridge** 86.69 7 P P 02 13 16.4 +0.1
baz=199
**D20K Etivluk River** 86.71 8 P P 02 13 16.6 +0.2
baz=202
**G25K Bearman Lake** 86.81 13 P P 02 13 16.9 +0.1
baz=212
**E21K Killik River** 86.84 9 P P 02 13 17.1 +0.1
baz=205
**J29N Klondike Camp** 86.85 17 P P 02 13 17.5 +0.4
baz=220
**I27K Kandik River** 86.87 15 P P 02 13 16.8 -0.4
baz=216,SNR=5.7
**E22K Anaktuvuk Pass** 86.92 10 P P 02 13 16.9 -0.5
baz=207,SNR=9.0
**IMW Indian Meadow** 86.95 42 P P 02 13 17.9 -0.4
IMW IAmb IAmb 02 13 20.0
comp=Z,11nm,0.8s
**F24K Squaw Lake** 87.09 12 P P 02 13 17.9 -0.3
baz=210,SNR=5.4
**OVMT Ovando** 87.11 39 P P 02 13 18.0 -0.8
**CMAR Chiang Mai Arr** 87.14 290 P P 02 13 20.1 +0.6
comp=Z,1.7nm,0.4s,baz=112,slow=3.0,SNR=16
comp=Z,1.7nm,0.4s
**I28M Miner Creek** 87.17 16 P P 02 13 17.9 -0.7
baz=218,SNR=14
**S22A 4UR Ranch, Cre** 87.20 49 P P 02 13 20.2 +0.5
baz=247
**E23K Chandalar** 87.23 11 P P 02 13 18.9 0.0
baz=209,SNR=6.0
**BOZ Bozeman (W)** 87.27 41 P P 02 13 20.5 +0.8
baz=243
**PZH PanZhiHua** 87.32 299 P P 02 13 20.0 -0.3
PZH pmax pmax
comp=Z,10.0nm,0.8s
**TOAD Toad River Com** 87.36 25 P P 02 13 19.7 +0.1
baz=231,SNR=6.8
**BW06 Boulder Array** 87.36 44 P P 02 13 20.3 0.0
baz=245
**PD31 Pinedale Array** 87.36 44 P P 02 13 19.8 -0.5
PD31 IAmb IAmb 02 13 21.0
comp=Z,6.1nm,0.7s
**PDAR Pinedale Array** 87.36 44 P P 02 13 20.1 -0.2
comp=Z,5.1nm,0.5s,baz=221,slow=3.0,SNR=20
comp=Z,5.1nm,0.5s
**C21K Knifeblade Rid** 87.38 9 P P 02 13 19.9 +0.5
baz=204
**H27K Steamboat Moun** 87.40 15 P P 02 13 19.3 -0.4
baz=216,SNR=11
**D22K Ayikyak River** 87.44 10 P P 02 13 19.7 -0.1
baz=206,SNR=7.2
**E24K Your Creek** 87.46 11 P P 02 13 20.2 +0.3
baz=210
**G26K Porcupine Rive** 87.46 13 P P 02 13 20.1 +0.3
baz=214,SNR=5.4
**J30M Hart River** 87.47 17 P P 02 13 20.7 +0.5
baz=221
**LYMT Lyon Mountain** 87.49 39 P P 02 13 20.5 -0.3
**F25K Christian Rive** 87.60 12 P P 02 13 20.7 +0.1
baz=213
**MMPY Sheldon Lake,** 87.62 20 P P 02 13 20.2 -0.6
MMPY IAmb IAmb 02 13 21.9
comp=Z,36nm,1.3s
**MMPY Sheldon Lake,** 87.62 20 P P 02 13 20.9 +0.1
baz=226,SNR=12
**TOLK Toolik Lake Re** 87.75 11 P P 02 13 22.3 +1.1
baz=209
**B21K Ikpikpuk River** 87.83 9 P P 02 13 21.9 +0.4
baz=204
**G27K Doyon Strip** 87.83 14 P P 02 13 21.6 -0.1
baz=216,SNR=6.3
**B20K Meade River** 87.84 8 P P 02 13 22.3 +0.8
baz=202
**D23K Nanushuk River** 87.85 10 P P 02 13 21.9 +0.2
baz=208,SNR=6.5
**YAK Yakutsk** 87.86 339 P P 02 13 21.2 -0.6
comp=Z,17nm,0.5s,baz=234,slow=1.3,SNR=2.2
comp=Z,17nm,0.5s
**TGTN Hyland Airport** 87.91 22 P P 02 13 22.6 +0.4
baz=229
**I30M Mount Dempster** 87.95 17 P P 02 13 21.6 -0.8
baz=221,SNR=10
**F26K Sheenjek River** 88.00 13 P P 02 13 23.1 +0.7
baz=214
**SDCO Great Sand Dun** 88.17 50 P P 02 13 24.5 +0.3
baz=247
**H29M Whitestone** 88.18 16 P P 02 13 22.4 -0.9
H29M IAmb IAmb 02 13 24.4
comp=Z,12nm,0.8s
**H29M Whitestone** 88.18 16 P P 02 13 22.9 -0.3
baz=219,SNR=8.8
**D24K Happy Valley** 88.33 11 P P 02 13 24.5 +0.6
baz=210
**RWWY Rawlins** 88.50 46 P P 02 13 24.7 -1.0
RWWY IAmb IAmb 02 13 26.7
comp=Z,13nm,1.3s
**RLMT Red Lodge** 88.56 42 P P 02 13 26.7 +0.9
baz=245
**KOTAN Kotaneelee Air** 88.62 24 P P 02 13 25.7 +0.3
baz=232
**C23K Itkillik River** 88.63 10 P P 02 13 25.7 +0.5
baz=208
**B22K Teshekpuk Lake** 88.66 9 P P 02 13 25.6 +0.3
baz=205
**EPYK Eagle Plains** 88.72 16 P P 02 13 25.4 -0.5
baz=221,SNR=5.7
**G29M Pine Creek** 88.80 15 P P 02 13 25.7 -0.5
G29M IAmb IAmb 02 13 26.3
comp=Z,8.9nm,0.9s
**G29M Pine Creek** 88.80 15 P P 02 13 25.9 -0.2
baz=220
**C24K Franklin Bluff** 88.85 10 P P 02 13 26.0 -0.2
**C24K Franklin Bluff** 88.85 10 P P 02 13 26.2 -0.1
baz=210,SNR=7.3
**Q24A Divide** 88.89 49 P P 02 13 27.4 -0.2
baz=248
**LZH Lanzhou** 89.00 308 eP P 02 13 29.0 +1.0
LZH pmax pmax
comp=Z,45nm,1.4s
**N23A Red Feather La** 89.06 47 P P 02 13 29.0 +0.6
baz=247
**G30M tAoh Zraii Nji** 89.32 16 P P 02 13 28.5 -0.1
baz=221,SNR=5.8
**EGMT Eagleton** 89.50 39 P P 02 13 30.3 +0.4
baz=244
**833A Chaparral WMA,** 89.65 60 P P 02 13 29.7 -1.2
baz=251
**C27K Jago River** 89.70 12 P P 02 13 30.2 -0.1
baz=214
**C26K Camden Bay** 89.71 11 P P 02 13 30.6 +0.3
baz=213
**E28M Babbage River** 89.76 14 P P 02 13 30.4 -0.2
E28M IAmb IAmb 02 13 31.0
comp=Z,14nm,0.7s
**E28M Babbage River** 89.76 14 P P 02 13 30.5 0.0
baz=218,SNR=6.6
**G31M Satah River** 89.79 16 P P 02 13 30.1 -0.6
G31M IAmb IAmb 02 13 30.8
comp=Z,13nm,1.0s
**G31M Satah River** 89.79 16 P P 02 13 30.1 -0.6
baz=223
**D27M Malcolm River** 89.95 13 P P 02 13 31.3 -0.2
baz=217
**AMTX Amarillo** 90.00 54 P P 02 13 32.2 -0.4
baz=250
**JCT Junction City** 90.01 58 P P 02 13 32.5 -0.2
baz=251
**ELIB Princess Elisa** 90.29 187 dP P 02 13 32.7 -0.6
comp=Z,2.7nm,0.9s
**F31M Tsiigehtchic** 90.31 16 P P 02 13 33.0 -0.1
baz=224
**D28M Stokes Point** 90.51 14 P P 02 13 33.4 -0.5
baz=219
**INK Inuvik** 90.99 16 P P 02 13 36.2 0.0
baz=224
**LAO LASA Array** 91.14 41 P P 02 13 38.2 +0.7
baz=247
**RSSD Black Hills** 91.59 44 P P 02 13 39.8 -0.1
baz=248
**TROLL Troll, Antarti** 91.60 181 ⇑P P 02 13 38.9 -0.5
comp=Z,436nm,0.6s

**SONM Songino Array** 91.66 320 P P 02 13 38.8 -1.2
comp=Z,4.1nm,0.9s,baz=135,slow=5.3,SNR=20
comp=Z,4.1nm,0.9s
**SNAA Sanae** 91.93 179 P P 02 13 40.4 -0.4
**SNAA Sanae** 91.93 179 ⇑P P 02 13 39.8 -1.0
comp=Z,55nm,0.5s
**SNAA Sanae** 91.93 179 P P 02 13 40.3 -0.4
comp=Z,2.4nm,0.5s,baz=204,slow=9.2,SNR=27
comp=Z,2.4nm,0.5s
**VNA3 Neumayer Olymp** 92.12 177 ⇑P P 02 13 41.5 -0.1
comp=Z,11nm,0.7s
**WMOK Wichita Mounta** 92.20 55 P P 02 13 43.2 +0.5
baz=251
**VNA2 Neumayer--Watz** 92.55 178 ⇑P P 02 13 43.1 -0.5
comp=Z,9.2nm,0.6s,baz=189,slow=3.9
**VNA1 Neumayer--Stat** 92.78 177 ⇑P P 02 13 43.6 -1.0
comp=Z,7.8nm,0.9s
**DGMT Dagmar** 93.08 40 P P 02 13 47.2 +0.8
baz=248
**GTA Gaotai** 93.14 310 P P 02 13 47.5 +0.5
GTA pmax pmax
comp=Z,8.0nm,0.9s
**YKA Yellowknife Ar** 93.73 25 P P 02 13 47.9 -1.0
comp=Z,3.7nm,0.8s,baz=251,slow=4.6,SNR=10.0
comp=Z,3.7nm,0.8s
**KSU1 Kansas State U** 95.19 51 P P 02 13 56.7 +0.5
baz=253
**A36M Sachs Harbour** 95.57 15 P P 02 13 57.4 +0.3
baz=232
**ECSD EROS Data Cent** 96.53 46 P P 02 14 01.9 -0.2
baz=253
**WMQ Urumqi** 103.04 312 eP Pdif P 02 14 32.5 +1.4
WMQ pmax pmax
comp=Z,20nm,0.6s
**ZALV Zalesovo Beam** 106.36 322 Pdiff Pdif P 02 14 41.6 -3.9
comp=Z,0.6nm,0.5s,baz=116,slow=3.4,SNR=4.4
ZALV PKiKP PKiKP 02 18 51.6 -2.1
comp=Z,1.3nm,0.6s,baz=114,slow=2.1,SNR=2.3
**MKAR Makanchi Array** 107.24 315 Pdiff Pdif 02 14 51.2 +1.5
comp=Z,0.3nm,0.6s,baz=87,slow=5.0,SNR=1.8
MKAR PKiKP PKiKP 02 18 54.3 -1.3
comp=Z,0.5nm,0.6s,baz=97,slow=3.1,SNR=2.4
**KURBB Kurchatov Arra** 109.99 318 PKiKP PKiKP 02 18 59.2 -1.4
comp=Z,0.9nm,0.5s,baz=112,slow=1.8,SNR=6.6
**BVAR Borovoye Array** 114.96 321 PKP PKPdf 02 19 08.7 -1.3
comp=Z,3.6nm,0.7s,baz=99,slow=0.4,SNR=12
BVAR PP PP 02 20 20.0 +1.6
comp=Z,2.0nm,0.7s,baz=85,slow=8.8,SNR=4.2
**SPITS Spitsbergen Ar** 117.88 356 PKP PKPdf 02 19 14.1 -0.9
comp=Z,8.2nm,0.7s,baz=76,slow=7.0,SNR=5.3
**ARU Arti** 121.00 326 PKP PKPdf 02 19 20.1 -1.4
comp=Z,11nm,0.6s,baz=80,slow=1.7,SNR=9.6
**ARCES ARCESS Array B** 124.78 349 PKP PKPdf 02 19 27.4 -1.0
comp=Z,7.8nm,0.6s,baz=40,slow=1.1,SNR=34
**BELG Belogornoye** 128.43 325 PKP PKPdf 02 19 34.1 -1.7
comp=Z,13nm,0.7s,baz=19,slow=2.2,SNR=8.5
**BOSA Boshof** 128.91 209 SKPbc SKPbc 02 22 12.3
comp=Z,6.1nm,1.1s,baz=128,slow=7.6,SNR=3.3
**FINES FINESS Array B** 131.55 344 PKhKP PKPpre 02 19 31.8
comp=Z,3.9nm,0.9s,baz=258,slow=7.2,SNR=4.4
FINES PKP PKPdf 02 19 41.3 -0.1
comp=Z,4.8nm,0.7s,baz=41,slow=3.6,SNR=13
FINES SKPbc SKPbc 02 22 20.0 -0.1
comp=Z,12nm,0.8s,baz=46,slow=5.5,SNR=15
**NB2 NORSAR Subarra** 134.91 352 PKP PKPdf 02 19 48.3 +0.4
comp=Z,0.8nm,0.5s,baz=10,slow=3.2
NB2 SKPa SKPbc 02 22 32.0 +0.7
comp=Z,1.7nm,0.8s,baz=14,slow=3.1
**NOA NORSAR Array B** 134.91 352 PKP PKPdf 02 19 48.6 +0.7
comp=Z,2.2nm,0.6s,baz=14,slow=4.0,SNR=8.2
NOA SKPbc SKPbc 02 22 29.4 -1.8
comp=Z,3.5nm,0.8s,baz=16,slow=4.6,SNR=7.0
**HFS Hagfors** 135.42 350 PKhKP PKPpre 02 19 35.0
comp=Z,0.9nm,0.5s,baz=132,slow=2.2,SNR=5.2
HFS PKP PKPdf 02 19 49.2 +0.4
comp=Z,3.3nm,0.6s,baz=255,slow=2.9,SNR=6.8
HFS SKPbc SKPbc 02 22 33.5 +0.6
comp=Z,2.4nm,0.7s,baz=8.5,slow=2.9,SNR=3.8
**AKASG Malin Array Be** 138.76 332 PKhKP PKPpre 02 19 45.8
comp=Z,0.7nm,0.4s,baz=43,slow=3.4,SNR=2.9
AKASG PKP PKPdf 02 19 54.5 -0.8
comp=Z,2.8nm,0.6s,baz=47,slow=2.9,SNR=9.1
AKASG SKPbc SKPbc 02 22 40.8 -2.0
comp=Z,1.0nm,0.5s,baz=42,slow=3.3,SNR=5.6
**EKA Eskdalemuir Ar** 141.25 3 PKhKP PKPpre 02 19 52.4
comp=Z,1.9nm,0.5s,baz=341,slow=2.6,SNR=10
**SCTR Scanteiesti** 142.83 327 ⇓P PKPdf 02 20 00.4 -2.3
**BRTR Keskin Array B** 142.88 315 PKP PKPdf 02 20 00.5 -2.8
comp=Z,17nm,0.9s,baz=90,slow=1.2,SNR=19
BRTR SKPbc SKPbc 02 22 53.2 -0.8
comp=Z,0.6nm,0.8s,baz=84,slow=2.8,SNR=2.5
**OJC Ojcow** 142.91 339 ePKP PKPdf 02 20 00.1 -2.7
**TESR Tescani** 142.93 329 ⇑P PKPdf 02 19 59.9 -3.0
**KIRS Kirsehir-Merke** 142.97 314 ⇓P PKPdf 02 20 01.0 -2.3
**IZVR Izvoarele** 143.04 327 ⇓P PKPbc 02 20 02.1 +1.1
**CFR Carcaliu** 143.09 326 ⇑P PKPab 02 20 00.7 +0.1
**TPGR Topolog** 143.15 326 ⇑P PKPbc 02 20 02.1 +0.7
**ONER Baraj Valea Uz** 143.18 329 ⇑P PKPbc 02 20 02.5 +1.0
**VRI Vrincioaia** 143.35 328 ⇑P PKPab 02 20 02.1 +0.4
**ANTO Ankara** 143.38 316 ⇓P PKPab 02 20 02.6 +0.5
**PLOR Plostina** 143.40 328 ⇓P PKPbc 02 20 02.0 +0.2
**NIE Niedzica** 143.40 338 ePKP PKPab 02 20 02.3 +0.6
**KSP Ksiaz** 143.46 343 ePKP PKPab 02 20 02.3 +0.5
**HARR Harsova** 143.52 326 ⇑P PKPab 02 20 03.1 +0.9
**TLBR Topalu** 143.55 326 ⇓P PKPab 02 20 03.1 +0.7
**TURR Turia** 143.57 329 ⇓P PKPab 02 20 01.3 -1.2
**MFTR Murfatlar** 143.59 325 ⇑P PKPab 02 20 02.7 +0.1
**COVR Voineasa-Covas** 143.62 329 ⇓P PKPbc 02 20 02.9 +0.2
**OZUR** 143.65 329 ⇓P PKPab 02 20 03.2 +0.4
**BOSR Bodos** 143.73 330 ⇓P PKPbc 02 20 04.1 +0.9
**OSTC Ostas** 143.74 343 ePKP PKPab 02 20 03.1 +0.1
**CHVC Chvalec** 143.76 343 ePKP PKPab 02 20 03.1 +0.1
**OKC Ostrava-Krasne** 143.78 340 ePKP PKPab 02 20 03.1 0.0
**UPC Upice** 143.84 343 ePKP PKPbc 02 20 03.5 +0.2
**NEHR Nehoiu** 143.87 328 ⇓P PKPbc 02 20 03.8 +0.1
**CLL Collm** 143.88 346 ⇓rPKPbc PKPbc 02 20 03.0 -0.4
comp=Z,66nm,0.9s
CLL eSKPbc SKPbc 02 22 54.0 -1.8
**AMRR Amara** 143.89 326 ⇓P PKPbc 02 20 04.5 +0.8
**DPC Dobruska-Polom** 143.90 342 ePKP PKPbc 02 20 03.8 +0.2
**LANS Liptovska Anna** 143.92 338 ePKP PKPbc 02 20 04.5 +0.8
**DOPR Dopca** 143.94 330 ⇓P PKPbc 02 20 04.6 +0.8
**ISR Istrita** 143.96 328 ⇓P PKPbc 02 20 04.7 +0.7
**ICOR Ion Corvin** 143.97 325 ⇓P PKPab 02 20 05.2 +1.2
**MLR Muntele Rosu** 144.00 329 PKP PKPbc 02 20 03.7 -0.4
comp=Z,64nm,0.8s,baz=341,slow=4.2,SNR=59
**MLR Muntele Rosu** 144.00 329 ⇓P PKPbc 02 20 04.1 0.0
**KRLC Kraliky** 144.00 342 ePKP PKPbc 02 20 03.7 -0.2
**MORC Moravsky Berou** 144.03 341 ePKP PKPbc 02 20 03.5 -0.5
**MORC Moravsky Berou** 144.03 341 ⇓P PKPbc 02 20 04.0 0.0
**BRG Berggiesshubel** 144.06 345 ePKP PKPbc 02 20 03.8 -0.2
BRG Amp 02 20 04.8
comp=Z,47nm,0.9s
**BRG Berggiesshubel** 144.06 345 P PKiKP 02 20 10.4 +1.9
BRG Amp 02 20 11.0
comp=Z,10nm,0.8s
**PVCC Panska Ves** 144.22 344 ePKP PKPbc 02 20 04.9 +0.4
**CJR Cluj-Napoca** 144.22 332 ⇑P PKPbc 02 20 05.2 +0.5
**LEHL Lehliu** 144.25 327 ⇓P PKPbc 02 20 05.3 +0.5
**MMAI Mount Meron Ar** 144.27 304 PKP PKPbc 02 20 05.5 +0.2
comp=Z,51nm,0.8s,baz=72,slow=5.4,SNR=49
**MDB Medias** 144.29 331 ⇓P PKPbc 02 20 05.8 +0.9
**MAUC Maruska** 144.30 340 ePKP PKPbc 02 20 05.0 +0.2
**SULR** 144.41 327 ⇑P PKPbc 02 20 05.5 +0.3
**HSKC Hora Svate Kat** 144.43 345 ePKP PKPbc 02 20 05.1 -0.1
**VOIR** 144.48 329 ⇓P PKPbc 02 20 06.2 +0.6
**PRA Prague** 144.67 344 ePKP PKPdf 02 20 06.0 +0.2
**VYHS Vyhne** 144.70 338 ePKP PKPdf 02 20 06.1 +0.2
**BORR Bors** 144.72 334 ⇑P PKPdf 02 20 06.0 +0.1
**PRU Pruhonice** 144.72 344 ePKP PKPdf 02 20 06.0 +0.1
**ARR Arges** 144.74 330 ⇑P PKPdf 02 20 06.7 +0.5
**VRAC Vranov** 144.74 341 ePKP PKPdf 02 20 06.0 +0.1
**VRAC Vranov** 144.74 341 ⇑P PKPdf 02 20 05.8 -0.2
**JAVC Velka Javorina** 144.79 340 ePKP PKPdf 02 20 07.1 +1.0
**PSZ Piszkesteto** 144.80 337 ⇓P PKPdf 02 20 06.3 +0.1
**KRUC Moravsky** 145.02 341 ePKP PKPdf 02 20 06.4 0.0
**TREC Trest** 145.08 342 ePKP PKPdf 02 20 07.2 +0.6
**DEV Deva** 145.16 332 ⇓P PKPdf 02 20 07.6 +0.9
**HUMR Humele** 145.17 328 ⇑P PKPdf 02 20 06.0 -0.8
**SIRR Siria** 145.42 333 ⇓P PKPdf 02 20 08.4 +1.2
**ZST Bratislava** 145.55 340 ePKP PKPbc 02 20 09.8 +1.2
**GZR Gura Zlata** 145.59 331 ⇓P PKPdf 02 20 08.4 +0.8
**SURR Surduc** 145.61 332 ⇑P PKPdf 02 20 08.4 +0.9
**MEM Membach** 145.75 353 dPKPdf PKPdf 02 20 07.2 -0.4
**BTNL Ternell** 145.75 353 dPKP PKPdf 02 20 08.5 +0.9

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KHC | Kasperske Hory | 145.76 | 344 | *e*PKP | | PKPdf | 02 20 09.3 | +1.6 | |
| ELND | Elena | 145.80 | 325 | ⇓P | | PKPdf | 02 20 09.5 | +1.5 | |
| BSTI | Sat Tilman | 145.82 | 354 | *d*PKPdf | | PKPdf | 02 20 07.2 | -0.5 | |
| BSTI | | | | *d*PKP | | PKPbc | 02 20 08.7 | -0.7 | |
| VLAD | Vladila | 145.83 | 328 | ⇑P | | PKPdf | 02 20 08.5 | +0.5 | |
| CKRC | Cesky Krumlov | 145.84 | 343 | *e*PKP | | PKPdf | 02 20 07.9 | 0.0 | |
| SRE | Strehaia | 145.94 | 330 | ⇓P | | PKPbc | 02 20 10.1 | +0.2 | |
| BZS | Buzias | 145.94 | 333 | ⇓P | | PKPdf | 02 20 07.2 | -0.9 | |
| GERES | GERESS Array B | 145.99 | 344 | PKPbc | | PKPdf | 02 20 09.8 | +1.6 | |
| | comp=Z,6.7nm,0.7s,baz=161,slow=8.5,SNR=27 | | | | | | | | |
| GERES | | | | SKPbc | | SKPbc | 02 22 60.0 | -0.8 | |
| | comp=Z,0.2nm,0.5s,baz=28,slow=4.4,SNR=1.6 | | | | | | | | |
| BHOU | Houvegnez | 146.00 | 353 | *d*PKPbc | | PKPdf | 02 20 08.5 | +0.4 | |
| BCLA | Clavier | 146.01 | 354 | *d*PKiKP | | PKPbc | 02 20 09.8 | 0.0 | |
| BCLA | | | | *d*PKPab | | PKPab | 02 20 10.8 | -0.8 | |
| TIM | Timisoara | 146.02 | 333 | ⇓P | | PKPdf | 02 20 09.6 | +1.4 | |
| EDRB | Edirne | 146.03 | 323 | P | | PKPdf | 02 20 09.7 | +1.4 | |
| BGES | Gesves | 146.06 | 354 | *d*PKPab | | PKPbc | 02 20 11.4 | +1.4 | |
| HERR | Herculane | 146.15 | 331 | ⇓P | | PKPdf | 02 20 10.3 | +1.8 | |
| BMRD | Maredsous | 146.17 | 355 | *d*PKP | | PKPdf | 02 20 09.6 | +1.3 | |
| CONA | Conrad Observa | 146.19 | 341 | *i* PKP | | PKPbc | 02 20 10.7 | +0.2 | |
| | comp=Z,18nm,0.6s,SNR=23 | | | | | | | | |
| RONA | Rosalia, Austr | 146.25 | 340 | *i* PKP | | PKPbc | 02 20 10.8 | +0.1 | |
| | comp=Z,21nm,0.6s,SNR=23 | | | | | | | | |
| RCHB | Rochefort | 146.27 | 354 | *d*PKP | | PKPdf | 02 20 08.9 | +0.5 | |
| BANR | Banloc | 146.34 | 333 | ⇑P | | PKPbc | 02 20 11.9 | +0.9 | |
| DOU | Dourbes | 146.39 | 355 | *d*PKP | | PKPdf | 02 20 10.6 | +2.0 | |
| MDVR | Moldovita | 146.55 | 332 | ⇑P | | PKPdf | 02 20 10.8 | +1.6 | |
| WLF | Walferdange | 146.66 | 353 | *d*PKP | | PKPbc | 02 20 11.8 | +0.1 | |
| MORH | Mrgy, Hungar | 146.69 | 336 | ⇑P | | PKPdf | 02 20 11.1 | +1.8 | |
| MOA | Molln | 146.74 | 343 | *i* PKP | | PKPbc | 02 20 11.8 | -0.2 | |
| | comp=Z,10nm,0.7s,SNR=13 | | | | | | | | |
| KULA | Kula-Manisa | 146.83 | 317 | P | | PKPbc | 02 20 12.2 | -0.4 | |
| ARSA | Arzberg | 146.89 | 341 | *i* PKP | | PKPbc | 02 20 12.0 | -0.5 | |
| | comp=Z,6.1nm,0.5s,SNR=12 | | | | | | | | |
| BIOA | Bad Ischl, Aus | 147.06 | 343 | *i* PKP | | PKPdf | 02 20 12.3 | +2.3 | |
| | comp=Z,7.5nm,0.7s,SNR=10 | | | | | | | | |
| FRGS | Fruska Gora | 147.09 | 334 | *e*P | | PKPdf | 02 20 12.3 | +2.2 | |
| BOVS | Bovan | 147.43 | 330 | ⇑P | | PKPbc | 02 20 13.2 | -0.7 | |
| SOKA | Soboth | 147.56 | 341 | *e*PKP | | PKPbc | 02 20 13.6 | -0.7 | |
| | comp=Z,3.7nm,0.2s,SNR=9.5 | | | | | | | | |
| TEKS | Tekeris | 147.69 | 334 | *e*P | | PKPbc | 02 20 13.8 | -0.8 | |
| KBA | Koelnbreinsper | 147.70 | 343 | *i* PKP | | PKPdf | 02 20 13.7 | +2.5 | |
| | comp=Z,13nm,0.6s,SNR=15 | | | | | | | | |
| YER | Yerkesik | 147.82 | 315 | P | | PKPbc | 02 20 14.7 | -0.5 | |
| KAVA | Kavala | 147.85 | 324 | P | | PKPbc | 02 20 14.3 | -0.8 | |
| OBKA | Obir | 147.86 | 341 | *e*P | | PKPdf | 02 20 12.9 | +1.5 | |
| WATA | Walderalm | 147.92 | 345 | *i* PKP | | PKPbc | 02 20 14.7 | -0.6 | |
| | comp=Z,5.0nm,0.5s,SNR=15 | | | | | | | | |
| RETA | Reutte | 147.97 | 346 | *i* PKP | | PKPbc | 02 20 15.0 | -0.4 | |
| | comp=Z,3.8nm,0.4s,SNR=9.4 | | | | | | | | |
| WTTA | Wattenberg | 147.98 | 345 | *i* PKP | | PKPbc | 02 20 15.1 | -0.3 | |
| | comp=Z,9.7nm,0.4s,SNR=17 | | | | | | | | |
| MYKA | Terra Mystica | 148.02 | 342 | *i* PKP | | PKPdf | 02 20 14.4 | +2.8 | |
| | comp=Z,15nm,0.5s,SNR=11 | | | | | | | | |
| SQTA | Sankt Quirin | 148.12 | 346 | *i* PKP | | PKPbc | 02 20 15.4 | -0.3 | |
| | comp=Z,18nm,0.6s,SNR=12 | | | | | | | | |
| ABTA | Abfaltersbach | 148.23 | 344 | *i* PKP | | PKPbc | 02 20 15.0 | -1.0 | |
| | comp=Z,16nm,0.6s,SNR=16 | | | | | | | | |
| KOKK | Kokkinochori, | 148.26 | 324 | P | | PKPbc | 02 20 15.3 | -0.8 | |
| SRS | Serrai | 148.28 | 325 | P | | PKPdf | 02 20 14.7 | +2.6 | |
| BBLS | Lazi&#263i | 148.29 | 333 | *e*P | | PKPbc | 02 20 15.7 | -0.5 | |
| HAPS | Han Pijesak,Bl | 148.31 | 334 | *e*P | | PKPbc | 02 20 15.9 | -0.4 | |
| DAVA | Damuels | 148.36 | 347 | *i* PKP | | PKPbc | 02 20 16.0 | -0.4 | |
| | comp=Z,4.7nm,0.5s,SNR=14 | | | | | | | | |
| A051A | Mrakovica | 148.36 | 337 | *e*P | | PKPbc | 02 20 15.7 | -0.7 | |
| FETA | Feichten | 148.42 | 346 | *i* PKP | | PKPbc | 02 20 16.3 | -0.3 | |
| | comp=Z,11nm,0.7s,SNR=14 | | | | | | | | |
| BLY | Banja Luka | 148.48 | 336 | *e*P | | PKPbc | 02 20 16.0 | -0.6 | |
| RUDO | Rudo | 148.51 | 333 | *e*P | | PKPbc | 02 20 15.6 | -1.1 | |
| DAT | Datca | 148.51 | 315 | P | | PKPdf | 02 20 15.7 | +2.9 | |
| SJES | Sjenica | 148.52 | 332 | *e*P | | PKPbc | 02 20 15.8 | -1.1 | |
| BOJS | Bojanci | 148.52 | 339 | *e*P | | PKPbc | 02 20 16.5 | -0.1 | |
| CHOS | Chios island | 148.58 | 319 | P | | PKPbc | 02 20 16.8 | -0.3 | |
| CEY | Cerknica | 148.59 | 341 | *e*P | | PKPbc | 02 20 16.1 | -0.7 | |
| KNT | Kendrikon | 148.63 | 326 | P | | PKPdf | 02 20 15.5 | +2.8 | |
| VAY | Valandovo | 148.69 | 326 | *i* P | | PKPbc | 02 20 16.9 | -0.3 | |
| SKDS | Skadanscina | 148.89 | 341 | *e*P | | PKPdf | 02 20 14.5 | +1.5 | |
| HORT | Hortiatis | 148.91 | 325 | P | | PKPdf | 02 20 16.3 | +3.1 | |
| A050A | Klekovaca | 148.95 | 337 | *e*P | | PKPdf | 02 20 15.0 | +1.8 | |
| BRY | Bratogost | 149.44 | 333 | *e*P | | PKPbc | 02 20 17.7 | -1.5 | |
| PDG | Podgorica | 149.50 | 331 | *e*P | | PKPbc | 02 20 17.6 | -1.5 | |
| PDG | Podgorica | 149.50 | 331 | ⇓P | | PKPbc | 02 20 17.5 | -1.6 | |
| TREB | Trebinje | 149.68 | 333 | *e*P | | PKPdf | 02 20 17.6 | +3.3 | |
| FNA | Florina | 149.70 | 327 | P | | PKPbc | 02 20 18.9 | -0.8 | |
| DRME | Dracevica, Mon | 149.72 | 331 | *e*P | | PKPdf | 02 20 17.8 | +3.4 | |
| OHR | Ohrid | 149.76 | 328 | *i* P | | PKPbc | 02 20 19.7 | -0.2 | |
| STON | Ston | 149.83 | 334 | *e*P | | PKPbc | 02 20 18.4 | -1.5 | |
| TYRN | Tyrnavos | 150.00 | 325 | P | | PKPdf | 02 20 18.4 | +3.5 | |
| TIR | Tirane | 150.05 | 329 | ⇑P | | PKPdf | 02 20 18.2 | +3.3 | |
| KBN | Korca | 150.12 | 327 | P | | PKPbc | 02 20 20.3 | -0.5 | |
| NEST | Nestorio | 150.14 | 327 | P | | PKPbc | 02 20 20.1 | -0.7 | |
| ATHU | Athens Univers | 150.25 | 320 | P | | PKPdf | 02 20 18.5 | +3.2 | |
| ATH | Athens Observa | 150.29 | 320 | P | | PKPbc | 02 20 19.6 | -1.5 | |
| AXAR | Agios Charalam | 150.40 | 323 | P | | PKPbc | 02 20 19.7 | -1.7 | |
| VILL | Villia | 150.41 | 321 | P | | PKPbc | 02 20 19.9 | -1.6 | |
| MAKR | Makrakomi, Fth | 150.54 | 324 | P | | PKPbc | 02 20 20.8 | -0.9 | |
| EVR | Evrytania | 150.79 | 324 | P | | PKPbc | 02 20 22.7 | +0.3 | |
| ANX | Ano Chora | 150.94 | 323 | P | | PKPbc | 02 20 23.4 | +0.6 | |
| KRND | KRANIDI | 151.01 | 320 | P | | PKPbc | 02 20 21.1 | -1.7 | |
| EFP | Efpalio | 151.06 | 323 | P | | PKPbc | 02 20 22.8 | -0.1 | |
| GUR | Goura | 151.14 | 322 | P | | PKPbc | 02 20 22.0 | -1.2 | |
| IGT | Igoumenitsa | 151.16 | 326 | P | | PKPbc | 02 20 21.9 | -1.2 | |
| KLV | Kalavryta, Ach | 151.18 | 322 | P | | PKPbc | 02 20 22.5 | -0.8 | |
| KEK | Kerkira | 151.31 | 327 | P | | PKPbc | 02 20 22.9 | -0.5 | |
| LKD2 | Lefkada island | 151.52 | 325 | P | | PKPbc | 02 20 23.2 | -0.8 | |
| NYDR | Nydri-Lefkada | 151.55 | 325 | P | | PKPbc | 02 20 23.4 | -0.6 | |
| VLI | Veliai | 151.56 | 319 | P | | PKPbc | 02 20 22.8 | -1.3 | |
| EVGI | Lefkada island | 151.64 | 325 | P | | PKPbc | 02 20 23.7 | -0.5 | |
| FSK | Fiskardo | 151.80 | 325 | P | | PKPbc | 02 20 23.2 | -1.3 | |
| ANKY | Antikythira Is | 151.85 | 317 | P | | PKPbc | 02 20 23.9 | -0.8 | |
| PYL | PYLOS | 152.18 | 321 | P | | PKPbc | 02 20 24.1 | -1.4 | |
| ESDC | Sonseca Array | 156.73 | 8 | PKP | | PKPdf | 02 20 24.2 | -0.3 | |
| | comp=Z,0.5nm,0.8s,baz=29,slow=2.9,SNR=2.8 | | | | | | | | |
| ESDC | | | | PKPab | | PKPab | 02 20 56.3 | -0.6 | |
| | comp=Z,2.6nm,0.9s,baz=349,slow=3.6,SNR=10.0 | | | | | | | | |
| ESDC | | | | PP | | PP | 02 24 36.3 | +0.1 | |
| | comp=Z,0.9nm,1.1s,baz=340,slow=5.6,SNR=4.1 | | | | | | | | |
| KEST | Kesra | 159.25 | 338 | PKP | | PKPdf | 02 20 26.8 | -0.9 | |
| | comp=Z,1.7nm,0.8s,baz=245,slow=21,SNR=2.0 | | | | | | | | |
| KEST | | | | PKPab | | PKPab | 02 21 07.2 | -0.9 | |
| | comp=Z,4.2nm,0.8s,baz=337,slow=7.0,SNR=5.4 | | | | | | | | |
| TORD | Torodi Ar. Bea | 176.26 | 204 | PKP | | PKPdf | 02 20 38.5 | -1.3 | |
| | comp=Z,1.0nm,0.8s,baz=158,slow=0.7,SNR=5.1 | | | | | | | | |
| TORD | | | | PP | | PP | 02 26 15.6 | +0.1 | |
| | comp=Z,0.9nm,1.0s,baz=171,slow=5.3,SNR=3.6 | | | | | | | | |

*PAS **19** 02:01:31.7±1.6,32°.40N±0°.05×117°.76W±0°.04, h30km±5km, ML3.1/30, ML2.8/36(NEIC), Error ellipse: s-maj=7.3km s-min=4.9km az=202.0*

*NEIC **19** 02:01:31.2±1.4,32°.43N±0°.06×117°.69W±0°.05, h34km±6km, Error ellipse: s-maj=9.0km s-min=4.5km az=210.0*

**ECX 19 02:01:32.0±0.3, 32°.36N×117°.70W, h18km±4km, MD2.9, ML3.1, 5C-3D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TJX | Tijuana | 0.57 | 75 | | Pb | 02 01 43.5 | 0.0 |
| TJX | | | | | Sb | 02 01 51.8 | +0.5 |
| TJX | Tijuana | 0.57 | 75 | *e*P | Pg | 02 01 43.2 | -0.2 |
| TJX | | | | *e*S | Sb | 02 01 51.4 | +0.1 |
| TJX | | | | *e* | | 02 01 52.5 | |
| TJX | | | | IAML | | 02 01 52.5 | |
| | comp=N,4μm,0.6s | | | | | | |
| TJX | | | | IAML | | 02 01 54.4 | |
| | comp=E,3μm,0.6s | | | | | | |
| SDMC | San Diego Miss | 0.64 | 48 | | Pg | 02 01 44.1 | -0.5 |
| SDMC | | | | | Sg | 02 01 53.0 | -0.1 |
| OLP | Otay Lakes Par | 0.70 | 69 | | Pb | 02 01 45.2 | -0.5 |
| OLP | | | | | Sb | 02 01 54.3 | -0.7 |
| OLP | Otay Lakes Par | 0.70 | 69 | *e*P | Pb | 02 01 44.5 | -1.2 |
| OLP | | | | *e*S | Sb | 02 01 54.2 | -0.7 |
| OLP | | | | IAML | | 02 01 54.5 | |
| | comp=E,736nm,0.3s | | | | | | |
| OLP | | | | ⇑*e* | | 02 01 54.5 | |
| OLP | | | | IAML | | 02 01 55.0 | |
| | comp=N,2μm,0.1s | | | | | | |
| OLP | | | | ⇓*e* | | 02 01 55.0 | |
| 109C | Camp Elliot, M | 0.73 | 44 | | Pb | 02 01 45.0 | -1.2 |
| CPE | Camp Elliot | 0.73 | 44 | | Pb | 02 01 45.0 | -1.2 |
| CPE | | | | | Sb | 02 01 55.0 | -0.9 |
| CPE | Camp Elliot | 0.73 | 44 | *e*P | Pb | 02 01 45.0 | -1.2 |
| CPE | | | | *e*S | Sb | 02 01 54.8 | -1.0 |
| SDRC | San Diego Road | 0.74 | 60 | | Pb | 02 01 45.6 | -0.8 |
| SDRC | San Diego Road | 0.74 | 60 | *e*P | Pb | 02 01 45.4 | -1.1 |
| SDRC | | | | *e*S | Sb | 02 01 55.5 | -0.8 |
| SDRC | | | | IAML | | 02 01 55.9 | |
| | comp=E,398nm,0.2s | | | | | | |
| SDRC | | | | *e* | | 02 01 55.9 | |
| SDRC | | | | ⇑*e* | | 02 01 56.6 | |
| SDRC | | | | IAML | | 02 01 56.6 | |
| | comp=N,540nm,0.2s | | | | | | |
| DUZA | Dulzura | 0.82 | 72 | | Pb | 02 01 47.2 | -0.6 |
| TJIG | Tijuana | 0.87 | 85 | *e*P | Pb | 02 01 47.3 | -1.3 |
| TJIG | | | | *e*S | Sb | 02 01 59.0 | -1.0 |
| TJIG | | | | IAML | | 02 01 59.9 | |
| | comp=N,621nm,0.3s | | | | | | |
| TJIG | | | | ⇑*e* | | 02 02 00.6 | |
| TJIG | | | | IAML | | 02 02 00.6 | |
| | comp=E,339nm,0.1s | | | | | | |
| CBX | Cerro Bola | 0.88 | 93 | | Pb | 02 01 47.7 | -1.2 |
| CBX | Cerro Bola | 0.88 | 93 | *e*P | Pb | 02 01 47.6 | -1.3 |
| CBX | | | | *e*S | Sb | 02 01 59.4 | -0.9 |
| CBX | | | | IAML | | 02 02 02.0 | |
| | comp=N,602nm,0.3s | | | | | | |
| CBX | | | | ⇓*e* | | 02 02 02.0 | |
| CBX | | | | IAML | | 02 02 02.3 | |
| | comp=E,580nm,0.4s | | | | | | |
| CBX | | | | ⇓*e* | | 02 02 02.3 | |
| GORC | Green Oak Ranc | 0.89 | 27 | | Pb | 02 01 47.2 | -1.7 |
| EML | El Monte Cty P | 0.90 | 54 | *e*P | Pb | 02 01 47.4 | -1.6 |
| EML | | | | ⇑*e* | | 02 02 00.4 | |
| EML | | | | IAML | | 02 02 00.4 | |
| | comp=N,360nm,0.2s | | | | | | |
| TKX | Tecate | 0.95 | 77 | Pn | Pb | 02 01 48.8 | -1.2 |
| CCX | Cicese | 1.01 | 119 | | Pb | 02 01 49.9 | -1.1 |
| CCX | | | | IAML | | 02 02 05.2 | |
| | comp=N,263nm,0.4s | | | | | | |
| CCX | | | | IAML | | 02 02 13.3 | |
| | comp=E,209nm,0.5s | | | | | | |
| CCX | Cicese | 1.01 | 119 | *e*P | Pb | 02 01 49.3 | -1.6 |
| CCX | | | | *e*S | Sb | 02 02 03.1 | -0.9 |
| CCX | | | | IAML | | 02 02 05.2 | |
| | comp=N,330nm,0.4s | | | | | | |
| CCX | | | | ⇑*e* | | 02 02 05.2 | |
| CCX | | | | IAML | | 02 02 06.7 | |
| | comp=E,269nm,0.3s | | | | | | |
| PBX | Punta Banda | 1.03 | 126 | *e*P | Pb | 02 01 49.3 | -2.1 |
| PBX | | | | *e*S | Sb | 02 02 03.2 | -1.5 |
| CIAC | Catalina I. Ai | 1.20 | 330 | | Pn | 02 01 53.2 | -0.8 |
| ELS | Elsinore Mount | 1.30 | 10 | | Pn | 02 01 52.9 | -2.5 |
| RMX | La Rumorosa | 1.39 | 80 | Pn | Pn | 02 01 56.5 | -0.2 |
| RMX | | | | IAML | | 02 02 17.1 | |
| | comp=E,170nm,0.1s | | | | | | |
| RMX | | | | IAML | | 02 02 21.0 | |
| | comp=N,121nm,0.5s | | | | | | |
| ESJX | Sierra Juarez | 1.53 | 103 | | Pn | 02 01 57.7 | -1.0 |
| ESJX | | | | IAML | | 02 02 21.5 | |
| | comp=E,77nm,0.2s | | | | | | |
| ESJX | | | | IAML | | 02 02 22.6 | |
| | comp=N,66nm,0.4s | | | | | | |
| YUH | Yuha Desert | 1.53 | 79 | | Pn | 02 01 57.9 | -0.6 |
| YUH | | | | IAML | | 02 02 21.2 | |
| | comp=N,95nm,0.9s | | | | | | |
| PFO | Pinyon Flats O | 1.63 | 40 | | Pn | 02 01 59.1 | -0.8 |
| PFO | | | | IAML | | 02 02 22.5 | |
| | comp=N,75nm,4.6s | | | | | | |
| PFO | | | | IAML | | 02 02 30.4 | |
| | comp=N,60nm,0.6s | | | | | | |
| ALAMX | Rancho Alamar | 1.73 | 101 | *e*P | Pn | 02 02 01.0 | -0.2 |
| ALAMX | | | | IAML | | 02 02 27.9 | |
| | comp=N,170nm,0.3s | | | | | | |
| ALAMX | | | | *e* | | 02 02 28.4 | |
| ALAMX | | | | IAML | | 02 02 28.4 | |
| | comp=E,175nm,0.3s | | | | | | |
| SNCC | San Nicolas Is | 1.77 | 300 | Pn | Pn | 02 01 58.4 | -3.4 |
| SNCC | | | | IAML | | 02 02 32.4 | |
| | comp=N,84nm,3.0s | | | | | | |
| SNCC | | | | IAML | | 02 02 33.5 | |
| | comp=E,94nm,1.9s | | | | | | |
| PASC | Pasadena Art C | 1.85 | 348 | Pn | Pn | 02 02 00.6 | -2.3 |
| VTX | Valle De La Tr | 1.90 | 120 | Pn | Pn | 02 02 02.8 | -0.8 |
| GLA | Glamis | 2.52 | 73 | Pn | Pn | 02 02 10.2 | -1.9 |
| GLA | | | | IAML | | 02 02 57.9 | |
| | comp=N,44nm,0.8s | | | | | | |
| CCAC | Calif City Air | 2.80 | 355 | | Pn | 02 02 14.0 | -1.9 |
| CCAC | | | | IAML | | 02 03 01.3 | |
| | comp=N,39nm,3.2s | | | | | | |
| CCAC | | | | IAML | | 02 03 24.7 | |
| | comp=E,32nm,4.8s | | | | | | |
| GSC | Goldstone, Bar | 3.03 | 14 | | Pn | 02 02 17.5 | -1.6 |
| GSC | | | | IAML | | 02 03 17.5 | |
| | comp=E,35nm,4.0s | | | | | | |
| BAKC | Calstate | 3.19 | 339 | | Pn | 02 02 21.1 | -0.3 |
| 113A | Mohawk Valley, | 3.35 | 82 | Pn | Pn | 02 02 23.3 | -0.2 |
| GWY | Greenwater Val | 3.91 | 12 | | Pn | 02 02 29.6 | -1.8 |
| WCT | Wildcat Mounta | 4.51 | 11 | Pn | Pn | 02 02 39.5 | 0.0 |

*NEIC **19** 02:03:16.9±1.3, 17°.85S±0°.1×177°.64W±0°.08, h485km±11km, mb4.2/21, Error ellipse: s-maj=22.8km s-min=6.7km az=156.0*

*IDC **19** 02:03:20.2±7.6, 18°.09S×177°.92W, h506km, 81km, mb3.4/6, mbtmp4.3/6, Error ellipse: s-maj=44.4km s-min=25.8km az=50.0*

**ISC 19 02:03:17.9±0.7, 17°.8S±0°.1×177°.7W±0°.1, h500km, n37, σt 12/37, mb4.1/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 4.03 | 271 | P | P | 02 04 34.0 | -2.6 |
| AFI | Afiamalu | 6.92 | 57 | P | P | 02 05 01.5 | -2.0 |
| LIFNC | LIFOU | 14.49 | 256 | P | P | 02 06 22.8 | -0.1 |
| URZ | Urewera | 20.85 | 191 | P | P | 02 07 23.1 | -1.0 |
| | 2.9nm,0.3s,baz=345,slow=3.5,SNR=5.9 | | | | | | |
| | 2.9nm,0.3s | | | | | | |
| PLWZ | Palliser | 24.41 | 193 | P | P | 02 07 55.8 | -0.3 |
| NNZ | Nelson | 24.53 | 196 | P | P | 02 07 57.6 | +0.6 |
| THZ | Tophouse | 25.17 | 197 | P | P | 02 08 02.6 | -0.2 |
| KHZ | Kahutara | 25.61 | 195 | P | P | 02 08 05.8 | -0.8 |
| KHZ | | | | IAmb | IAmb | 02 08 22.8 | |
| | comp=Z,17nm,1.1s | | | | | | |
| LBZ | Lake Benmore | 28.36 | 198 | P | P | 02 08 29.7 | -1.2 |
| LBZ | | | | IAmb | IAmb | 02 08 45.1 | |
| | comp=Z,11nm,1.2s | | | | | | |
| EIDS | Eidsvold | 29.91 | 250 | P | P | 02 08 44.6 | 0.0 |
| EIDS | | | | IAmb | IAmb | 02 08 50.5 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| WHZ | Wether Hill Ro | 30.41 | 200 | P | P | 02 08 48.2 | -0.5 |
| CTA | Charters Tower | 34.10 | 260 | P | P | 02 09 20.6 | +0.1 |
| | comp=Z,0.2nm,0.4s,baz=89,slow=11,SNR=3.0 | | | | | | |
| CTAO | Charters Tower | 34.10 | 260 | P | P | 02 09 20.9 | +0.4 |
| CTAO | | | | IAmb | IAmb | 02 09 21.5 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| CAN | Canberra | 34.27 | 233 | P | P | 02 09 21.7 | -0.1 |
| COEN | Coen | 37.76 | 270 | P | P | 02 09 51.6 | +0.7 |
| STKA | Stephens Creek | 39.24 | 241 | P | P | 02 10 03.2 | +0.4 |
| MCQ | Macquarie Isla | 40.76 | 201 | P | P | 02 10 15.8 | +1.2 |
| BBOO | Buckleboo | 44.01 | 241 | P | P | 02 10 40.1 | -0.5 |
| WR0 | Warramunga Arr | 45.10 | 259 | P | P | 02 10 49.0 | -0.2 |
| WR0 | | | | IAmb | IAmb | 02 10 49.0 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| WB0 | Warramunga Arr | 45.25 | 260 | P | P | 02 10 49.8 | -0.6 |
| WB0 | | | | IAmb | IAmb | 02 10 52.2 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 45.27 | 259 | P | P | 02 10 50.0 | -0.6 |
| WRA | Warramunga Arr | 45.29 | 259 | P | P | 02 10 50.3 | -0.3 |
| | comp=Z,1.4nm,0.4s,baz=96,slow=7.3,SNR=6.1 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| AS31 | Alice Springs | 45.44 | 254 | P | P | 02 10 52.0 | +0.2 |
| AS31 | | | | IAmb | IAmb | 02 10 52.7 | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| ASAR | Alice Springs | 45.44 | 254 | P | P | 02 10 51.4 | -0.5 |
| ASAR | Alice Springs | 45.44 | 254 | P | P | 02 10 51.9 | +0.1 |
| | comp=Z,9.0nm,0.6s,baz=87,slow=8.8,SNR=9.1 | | | | | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| KNRA | Kununurra | 51.14 | 264 | P | P | 02 11 34.7 | +0.2 |
| KNRA | | | | IAmb | IAmb | 02 11 35.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| NWAO | Narrogin (SRO) | 59.82 | 242 | P | P | 02 12 35.7 | +0.9 |
| KAPI | Kappang | 62.34 | 274 | P | P | 02 12 51.4 | -0.2 |
| KAPI | | | | IAmb | IAmb | 02 12 55.5 | |
| | comp=Z,13nm,0.9s | | | | | | |
| MJAR | Matsushiro Arr | 68.23 | 323 | P | P | 02 13 30.4 | +2.1 |
| | comp=Z,0.6nm,0.4s,baz=157,slow=5.6,SNR=1.8 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| QSPA | South Pole Qui | 72.22 | 180 | P | P | 02 13 52.1 | +0.4 |
| QSPA | South Pole Qui | 72.22 | 180 | P | P | 02 13 52.7 | +1.0 |
| | comp=Z,2.7nm,1.0s,baz=330,slow=7.1,SNR=1.9 | | | | | | |
| | comp=Z,2.7nm,1.0s | | | | | | |
| SSLB | Suanglung | 72.74 | 303 | P | P | 02 13 54.7 | -0.5 |
| SSLB | | | | IAmb | IAmb | 02 14 05.2 | |
| | comp=Z,9.2nm,1.0s | | | | | | |
| ILAR | Eielson Array | 85.67 | 13 | P | P | 02 15 06.3 | +3.4 |
| | comp=Z,0.7nm,0.5s,baz=222,slow=4.9,SNR=3.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 117.19 | 321 | PKP | PKiKP | 02 21 04.9 | -0.8 |
| | comp=Z,0.2nm,0.4s,baz=132,slow=2.1,SNR=1.2 | | | | | | |
| BRTR | Keskin Array B | 145.19 | 315 | PKPbc | PKPab | 02 22 00.4 | 0.0 |
| | comp=Z,0.6nm,0.6s,baz=90,slow=2.0,SNR=2.5 | | | | | | |
| MMAI | Mount Meron Ar | 146.64 | 303 | PKPbc | PKPab | 02 22 05.3 | -1.0 |
| | comp=Z,0.6nm,0.4s,baz=60,slow=4.0,SNR=2.5 | | | | | | |
| GERES | GERESS Array B | 147.70 | 346 | PKPbc | PKPab | 02 22 08.2 | -1.8 |
| | comp=Z,0.5nm,0.6s,baz=45,slow=3.8,SNR=1.6 | | | | | | |

*NEIC **19** 02:05:54.2±1.2, 36°.51N±0°.02×98°.73W±0°.02, h9km±6km, Error ellipse: s-maj=3.0km s-min=1.5km az=146.0*

**TUL 19 02:05:54.4±0.5, 36°.51N±0°.02×98°.71W±0°.03, h6km±4km, ML2.6, ML2.7/35(NEIC), Error ellipse: s-maj=4.0km s-min=2.0km az=112.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OK038 | West end E0370 | 0.04 | 222 | | Pg | 02 05 55.9 | +0.3 |
| OK038 | | | | Sg | Sg | 02 05 57.0 | +0.5 |
| NOKA | Waynoka | 0.22 | 306 | Pg | Pg | 02 05 59.2 | +0.5 |
| NOKA | | | | Sg | Sg | 02 06 02.7 | +1.0 |
| NOKA | | | | IAML | | 02 06 02.9 | |
| | comp=E,2μm,0.4s | | | | | | |
| OK032 | Salt Plains WL | 0.50 | 53 | | Pg | 02 06 04.2 | +0.1 |
| OK032 | | | | Sg | Sg | 02 06 11.1 | +0.4 |
| OK032 | | | | IAML | | 02 06 11.8 | |
| | comp=E,579nm,0.2s | | | | | | |
| OK032 | | | | IAML | | 02 06 16.8 | |
| | comp=E,398nm,0.2s | | | | | | |
| CROK | Carrier | 0.59 | 90 | Pg | Pg | 02 06 05.8 | +0.1 |
| CROK | | | | Sg | Sg | 02 06 13.9 | +0.5 |
| CROK | | | | IAML | | 02 06 14.5 | |
| | comp=N,443nm,0.3s | | | | | | |
| CROK | | | | IAML | | 02 06 18.6 | |
| | comp=E,361nm,0.2s | | | | | | |
| ELIS | Ellis County | 0.72 | 233 | | Pg | 02 06 08.2 | 0.0 |
| ELIS | | | | IAML | | 02 06 25.3 | |
| | comp=E,313nm,0.3s | | | | | | |
| ELIS | | | | IAML | | 02 06 25.4 | |
| | comp=N,284nm,0.4s | | | | | | |
| KAN14 | Manchester OK | 0.75 | 53 | | Pg | 02 06 08.9 | 0.0 |
| KAN14 | | | | Sg | Sg | 02 06 19.5 | +0.8 |
| GC02 | Grant County # | 0.77 | 63 | Pg | Pg | 02 06 09.1 | 0.0 |
| GC02 | | | | Sg | Sg | 02 06 19.7 | +0.5 |
| CSTR | Hydro, Custer | 0.86 | 179 | Pg | Pg | 02 06 10.8 | 0.0 |
| CSTR | | | | Sg | Sg | 02 06 22.2 | +0.2 |
| KAN17 | Caldwell West | 0.93 | 54 | Pg | Pg | 02 06 12.0 | -0.3 |
| KAN17 | | | | IAML | | 02 06 24.8 | |
| | comp=E,253nm,0.2s | | | | | | |
| KAN17 | | | | IAML | | 02 06 28.9 | |
| | comp=N,250nm,0.2s | | | | | | |
| KAN08 | Anthony NE Sta | 0.94 | 39 | Pg | Pg | 02 06 12.1 | -0.2 |
| KAN08 | | | | IAML | | 02 06 32.8 | |
| | comp=N,180nm,0.1s | | | | | | |
| KAN12 | Harper NE Stat | 0.98 | 36 | Pg | Pg | 02 06 13.0 | -0.1 |
| KAN12 | | | | IAML | | 02 06 36.4 | |
| | comp=N,269nm,0.3s | | | | | | |
| KAN01 | Argonia South | 1.00 | 49 | Pg | Pg | 02 06 13.3 | -0.3 |
| KAN01 | | | | IAML | | 02 06 28.2 | |
| | comp=N,152nm,0.1s | | | | | | |
| KAN09 | Caldwell North | 1.08 | 54 | | Pg | 02 06 14.7 | -0.5 |
| KAN13 | South Haven SW | 1.11 | 63 | | Pg | 02 06 15.2 | -0.6 |
| KAN13 | | | | IAML | | 02 06 36.6 | |
| | comp=E,216nm,0.2s | | | | | | |
| KS21 | Milan North St | 1.15 | 47 | IAML | | 02 06 32.8 | |
| | comp=E,162nm,0.1s | | | | | | |
| KS21 | | | | IAML | | 02 06 35.8 | |
| | comp=E,177nm,0.1s | | | | | | |
| KS21 | Milan North St | 1.15 | 47 | Pg | Pg | 02 06 16.0 | -0.4 |
| BLOK | Blackwell | 1.23 | 78 | Pg | Pg | 02 06 17.4 | -0.7 |
| OK029 | Liberty Lake | 1.24 | 124 | | Pg | 02 06 16.8 | -1.4 |
| OK029 | | | | IAML | | 02 06 35.2 | |
| | comp=E,151nm,0.4s | | | | | | |
| OK029 | | | | IAML | | 02 06 38.7 | |
| | comp=E,127nm,0.3s | | | | | | |
| OK048 | Pawnee Station | 1.43 | 93 | | Pn | 02 06 20.6 | -0.3 |
| OKCSW | OKLAHOMA CITY | 1.51 | 136 | Pg | Pn | 02 06 21.7 | -0.4 |
| OK051 | E0350 and S346 | 1.51 | 89 | | Pn | 02 06 22.1 | +0.1 |
| OK031 | S. Brethren Rd | 1.61 | 109 | | Pn | 02 06 23.5 | 0.0 |
| OK052 | Battle Ridge R | 1.63 | 108 | | Pn | 02 06 24.2

0.5nm,0.6s
**ILAR Eielson Array 85.14 13** P **P** **02 18 59.8 +0.2**
0.4nm,0.5s,baz=229,slow=5.3,SNR=6.6
0.4nm,0.5s
**PDAR Pinedale Array 87.46 44** P **P** **02 19 11.9 +0.6**
0.4nm,0.5s,baz=232,slow=4.4,SNR=4.1
0.4nm,0.5s
**TROLL Troll, Antarti 91.36 181** ⇑P **P** **02 19 28.4 -0.4**
comp=Z,127nm,0.8s
**SNAA Sanae 91.69 179** ⇑P **P** **02 19 29.7 -0.4**
comp=Z,7.8nm,0.5s
**VNA3 Neumayer Olymp 91.88 177** ⇑P **P** **02 19 31.0 0.0**
comp=Z,3.1nm,0.7s
**VNA2 Neumayer--Watz 92.30 177** ⇑P **P** **02 19 32.4 -0.5**
comp=Z,1.6nm,0.6s,baz=178,slow=3.0
**BRTR Keskin Array B 143.14 315** PKP PKPab 02 25 50.7 -0.4
comp=Z,0.8nm,0.9s,baz=66,slow=3.6,SNR=3.9
**MMAI Mount Meron Ar 144.50 304** PKP **PKPdf** **02 25 54.4 -0.8**
comp=Z,0.4nm,0.3s,baz=113,slow=1.9,SNR=1.9
**GERES GERESS Array B 146.25 344** PKPbc **PKPdf** **02 25 57.9 +0.1**
comp=Z,0.7nm,0.5s,baz=164,slow=11,SNR=6.1

*IDC **19** 02:08:17.8±5.2, 18°.35S×178°.22W, h534km±63km, mb3.3/10, mbtmp4.2/11, Error ellipse: s-maj=42.3km s-min=20.2km az=164.0*
**ISC 19 02:08:18.6±0.8, 18°.3S±0°.2×178°.3W±0°.2, h550km, n14, σ1ᵗ12/14, mb3.5/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.83 253** | | P | **P** | **02 11 27.0** | **+0.5** |
| | 2.6nm,0.6s,baz=129,slow=18,SNR=1.3 | | | | | | |
| **URZ** | **Urewera** | **20.27 191** | | P | **P** | **02 12 15.7** | **-1.2** |
| | 3.8nm,0.5s,baz=100,slow=5.0,SNR=2.8 | | | | | | |
| | 3.8nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **38.55 242** | | P | **P** | **02 14 56.0** | **+1.3** |
| | 4.1nm,0.5s,baz=90,slow=10,SNR=6.3 | | | | | | |
| | 4.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.70 260** | | P | **P** | **02 15 42.7** | **-0.6** |
| | 1.3nm,0.3s,baz=98,slow=6.9,SNR=7.8 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.81 255** | | P | **P** | **02 15 44.7** | **+0.5** |
| | 17nm,0.6s,baz=87,slow=8.3,SNR=21 | | | | | | |
| | 17nm,0.6s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.76 39** | | P | **P** | **02 19 25.8** | **+1.1** |
| | 1.0nm,0.6s,baz=169,slow=15,SNR=2.0 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.62 44** | | P | **P** | **02 19 29.9** | **+0.4** |
| | 0.8nm,0.7s,baz=223,slow=9.6,SNR=6.3 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ELK** | **Elko** | **82.86 43** | | P | **P** | **02 19 46.8** | **+0.7** |
| | 0.7nm,0.6s,baz=245,slow=4.7,SNR=4.2 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.10 58** | | P | **P** | **02 20 03.3** | **+1.3** |
| | 1.2nm,0.7s,baz=224,slow=5.8,SNR=11 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.26 13** | | P | **P** | **02 20 01.0** | **-0.8** |
| | 0.2nm,0.4s,baz=220,slow=5.1,SNR=4.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.56 43** | | P | **P** | **02 20 09.0** | **+0.3** |
| | 0.6nm,0.7s,baz=183,slow=2.5,SNR=4.8 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.17 314** | | PKPbc | **PKPab** | **02 26 55.2** | **-1.0** |
| | 0.5nm,0.5s,baz=56,slow=3.2,SNR=2.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.48 302** | | PKPbc | **PKiKP** | **02 26 59.6** | **-1.6** |
| | 2.2nm,0.7s,baz=56,slow=5.7,SNR=2.6 | | | | | | |
| **GERES** | **GERESS Array B 148.04 345** | | | PKPbc | **PKiKP** | **02 27 02.6** | **-1.3** |
| | 0.6nm,0.6s,baz=165,slow=6.9,SNR=4.4 | | | | | | |

**IDC 19 02:11:05.7±12.0, 18°.06S×177°.44W, h468km±108km, mb3.2/3, mbtmp3.9/4, Error ellipse: s-maj=164.4km s-min=72.6km az=136.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.66 253** | | P | P | 02 14 23.6 | 0.0 |
| | 0.5nm,0.4s,baz=271,slow=22,SNR=1.1 | | | | | | |
| **STKA** | **Stephens Creek** | **39.37 242** | | P | P | 02 17 53.9 | +0.1 |
| | 2.8nm,0.8s,baz=67,slow=7.2,SNR=2.8 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.52 260** | | P | P | 02 18 42.3 | -0.2 |
| | 0.6nm,0.5s,baz=96,slow=7.3,SNR=5.7 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.64 254** | | P | P | 02 18 43.3 | -0.2 |
| | 2.1nm,0.6s,baz=92,slow=8.2,SNR=8.4 | | | | | | |
| | 2.1nm,0.6s | | | | | | |
| **GERES** | **GERESS Array B 147.99 346** | | | PKPbc | PKPbc | 02 29 57.2 | -0.6 |
| | 0.1nm,0.3s,baz=1.9,slow=2.9,SNR=1.8 | | | | | | |

*IDC **19** 02:13:42.1±4.8, 18°.27S×178°.10W, h558km±53km, mb3.3/9, mbtmp4.2/10, Error ellipse: s-maj=27.5km s-min=19.6km az=61.0*
*NEIC **19** 02:13:42.3±1.0, 18°.1S±0°.3×178°.0W±0°.1, h567km±20km, mb4.1/6, Error ellipse: s-maj=40.7km s-min=19.7km az=184.0*
**ISC 19 02:13:41.5±0.6, 18°.2S±0°.1×178°.0W±0°.1, h550km, n31, σ1ᵗ19/31, mb4.1/13, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.77 277** | | P | **P** | **02 15 04.7** | **+2.8** |
| **AFI** | **Afiamalu** | **7.39 55** | | P | **P** | **02 15 32.5** | **-0.9** |
| **NIUE** | **Niue** | **7.72 97** | | P | **P** | **02 15 38.8** | **+2.2** |
| **LIFNC** | **LIFOU** | **14.12 257** | | P | **P** | **02 16 41.5** | **-0.5** |
| **PINNC** | **Pines Island,** | **14.30 250** | | P | **P** | **02 16 44.1** | **+0.3** |
| **DZM** | **Mont Dzumac** | **15.07 253** | | P | **P** | **02 16 52.3** | **+0.4** |
| DZM | | | | IAmb | IAmb | 02 16 59.0 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.07 253** | | P | **P** | **02 16 51.7** | **-0.2** |
| | comp=Z,1.8nm,0.5s,baz=122,slow=22,SNR=6.3 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.85 259** | | P | **P** | **02 17 09.0** | **+0.1** |
| **URZ** | **Urewera** | **20.40 191** | | P | **P** | **02 17 40.6** | **-0.4** |
| | comp=Z,3.9nm,0.5s,baz=226,slow=0.6,SNR=6.2 | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **38.79 242** | | P | **P** | **02 20 20.1** | **+0.6** |
| | comp=Z,4.4nm,0.9s,baz=84,slow=4.7,SNR=4.6 | | | | | | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.74 260** | | P | **P** | **02 21 05.5** | **-1.0** |
| **WB0** | **Warramunga Arr** | **44.90 260** | | P | **P** | **02 21 06.4** | **-1.4** |
| WB0 | | | | IAmb | IAmb | 02 21 07.0 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.92 260** | | P | **P** | **02 21 07.0** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 02 21 07.2 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.93 260** | | P | **P** | **02 21 06.8** | **-1.2** |
| | comp=Z,1.7nm,0.5s,baz=96,slow=7.1,SNR=15 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.05 255** | | P | **P** | **02 21 08.1** | **-0.9** |
| **ASAR** | **Alice Springs** | **45.05 255** | | P | **P** | **02 21 07.8** | **-1.2** |
| | comp=Z,9.9nm,0.8s,baz=84,slow=8.6,SNR=31 | | | | | | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82 180** | | P | **P** | **02 24 08.9** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 02 24 09.7 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82 180** | | P | **P** | **02 24 08.9** | **+0.2** |
| | comp=Z,3.0nm,0.7s,baz=315,slow=0.8,SNR=17 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **84.18 347** | | P | **P** | **02 25 15.3** | **+0.7** |
| | comp=Z,1.2nm,0.5s,baz=8.5,slow=23,SNR=1.9 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.86 57** | | P | **P** | **02 25 23.1** | **-0.6** |
| | comp=Z,0.8nm,0.8s,baz=224,slow=6.5,SNR=9.7 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.12 13** | | P | **P** | **02 25 24.1** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=222,slow=4.9,SNR=7.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.98 180** | ⇑P | P | **P** | **02 25 40.7** | **-1.6** |
| | comp=Z,58nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.26 178** | ⇑P | P | **P** | **02 25 41.9** | **-1.6** |
| | comp=Z,21nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **90.26 178** | P | P | **P** | **02 25 41.9** | **-1.6** |
| | comp=Z,0.6nm,0.7s,baz=200,slow=9.9,SNR=6.7 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.39 176** | ⇑P | P | **P** | **02 25 43.1** | **-1.0** |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.83 177** | ⇑P | P | **P** | **02 25 45.5** | **-0.6** |
| | comp=Z,3.2nm,0.8s,baz=196,slow=3.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.06 177** | ⇑P | P | **P** | **02 25 45.2** | **-1.9** |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **133.60 344** | | PKP | **PKPdf** | **02 31 56.4** | **+1.0** |
| | comp=Z,3.2nm,0.9s,baz=48,slow=2.1,SNR=2.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.27 315** | | PKPbc | **PKPdf** | **02 32 16.1** | **-1.2** |
| | comp=Z,0.5nm,0.8s,baz=101,slow=2.0,SNR=1.9 | | | | | | |
| **GERES** | **GERESS Array B 148.02 345** | | | PKPbc | **PKPbc** | **02 32 25.9** | **+0.4** |
| | comp=Z,0.6nm,0.6s,baz=160,slow=16,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea 174.93 177** | | | PKPab | **PKPab** | **02 34 27.2** | **-0.7** |
| | comp=Z,0.7nm,1.1s,baz=157,slow=2.6,SNR=0.8 | | | | | | |

*IDC **19** 02:14:28.4±3.1, 17°.93S×177°.93W, h580km±38km, mb3.5/11, mbtmp4.4/12, Error ellipse: s-maj=26.5km s-min=16.5km az=164.0*
*NEIC **19** 02:14:30.4±2.8, 18°.1S±0°.1×177°.8W±0°.1, h607km±9km, mb4.4/8, Error ellipse: s-maj=24.3km s-min=11.8km az=144.0*
**ISC 19 02:14:29.4±0.5, 18°.1S±0°.1×177°.9W±0°.1, h600km, n39, σ1ᵗ06/39, mb4.1/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **7.19 55** | | P | **P** | **02 16 20.9** | **-0.4** |
| **PINNC** | **Pines Island,** | **14.49 250** | | P | **P** | **02 17 32.7** | **-0.2** |
| **DZM** | **Mont Dzumac** | **15.26 252** | | P | **P** | **02 17 39.1** | **-0.9** |
| | 3.6nm,0.9s,baz=106,slow=20,SNR=2.4 | | | | | | |
| **THZ** | **Tophouse** | **24.87 197** | | P | **P** | **02 19 07.0** | **+0.6** |
| THZ | | | | IAmb | IAmb | 02 19 14.1 | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **PPT** | **Papeete** | **26.92 93** | | P | **P** | **02 19 25.2** | **+0.6** |
| | comp=Z,9.8nm,0.5s,baz=63,slow=22,SNR=2.0 | | | | | | |
| | comp=Z,9.8nm,0.5s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **26.93 93** | | P | **P** | **02 19 25.1** | **+0.3** |
| PPTF | | | | IAmb | IAmb | 02 19 26.9 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.40 200** | | P | **P** | **02 19 28.9** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.99 242** | | P | **P** | **02 21 07.0** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.99 242** | | P | **P** | **02 21 06.8** | **+0.9** |
| | comp=Z,11nm,0.7s,baz=94,slow=10,SNR=11 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.11 260** | | P | **P** | **02 21 53.4** | **-0.5** |
| | comp=Z,4.1nm,0.4s,baz=95,slow=7.1,SNR=24 | | | | | | |
| | comp=Z,4.1nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.24 254** | | P | **P** | **02 21 54.2** | **-0.6** |
| AS31 | | | | IAmb | IAmb | 02 21 55.9 | |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **45.24 254** | | P | **P** | **02 21 54.2** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.24 254** | | P | **P** | **02 21 54.8** | **-0.1** |
| | comp=Z,12nm,0.6s,baz=83,slow=8.9,SNR=23 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.31 268** | | P | **P** | **02 22 24.1** | **-1.3** |
| MTN | | | | IAmb | IAmb | 02 22 25.1 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.38 323** | | P | **P** | **02 24 31.4** | **-0.9** |
| | comp=Z,1.5nm,0.6s,baz=154,slow=6.1,SNR=5.4 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.95 180** | | P | **P** | **02 24 54.2** | **+1.1** |
| | comp=Z,0.4nm,0.4s,baz=351,slow=7.2,SNR=1.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.00 345** | | P | **P** | **02 25 04.9** | **+0.2** |
| | comp=Z,3.1nm,0.7s,baz=123,slow=7.4,SNR=3.0 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **J20K** | **Nowinta River** | **84.05 10** | | P | **P** | **02 25 58.1** | **+0.7** |
| **SEY** | **Seymchan** | **84.08 347** | | P | **P** | **02 25 57.1** | **-0.5** |
| | comp=Z,2.4nm,0.5s,baz=152,slow=6.1,SNR=5.6 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **GO09** | **Cerro Castillo** | **85.39 143** | | P | **P** | **02 26 00.7** | **-3.7** |
| **TXAR** | **Lajitas Array** | **85.66 57** | | P | **P** | **02 26 08.1** | **+1.9** |
| | comp=Z,0.4nm,0.7s,baz=224,slow=7.0,SNR=4.4 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.96 13** | | P | **P** | **02 26 05.8** | **-0.9** |
| | comp=Z,0.5nm,0.4s,baz=218,slow=4.9,SNR=9.2 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.44 290** | | P | **P** | **02 26 24.9** | **+0.9** |
| | comp=Z,0.7nm,0.3s,baz=84,slow=3.7,SNR=5.2 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.33 321** | | PKP | **PKPdf** | **02 32 06.5** | **-0.9** |
| | comp=Z,0.4nm,0.4s,baz=88,slow=5.1,SNR=2.6 | | | | | | |
| **FINES** | **FINESS Array B** | **133.52 344** | | PKP | **PKPdf** | **02 32 36.9** | **-1.1** |
| | comp=Z,5.1nm,1.1s,baz=45,slow=2.8,SNR=3.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.29 315** | | PKPbc | **PKPdf** | **02 33 01.1** | **+1.0** |
| | comp=Z,2.0nm,0.7s,baz=134,slow=4.3,SNR=9.3 | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.88 344** | | *e*PKP | **PKPbc** | **02 33 02.9** | **+0.2** |
| **KRLC** | **Kraliky** | **146.01 343** | | *e*PKP | **PKPbc** | **02 33 03.2** | **+0.2** |
| **PRU** | **Pruhonice** | **146.67 345** | | *e*PKP | **PKPbc** | **02 33 04.8** | **+0.1** |
| **MMAI** | **Mount Meron Ar** | **146.69 303** | | PKPbc | **PKPbc** | **02 33 05.5** | **+0.1** |
| | comp=Z,3.2nm,0.6s,baz=67,slow=6.4,SNR=7.9 | | | | | | |
| **KHC** | **Kasperske Hory** | **147.69 346** | | *e*PKP | **PKPbc** | **02 33 07.6** | **+0.1** |
| **GERES** | **GERESS Array B** | **147.93 346** | | PKPbc | **PKPbc** | **02 33 08.4** | **+0.2** |
| | comp=Z,1.3nm,0.7s,baz=171,slow=9.1,SNR=7.2 | | | | | | |
| **WATA** | **Walderalm** | **149.83 347** | | *i* PKP | **PKPbc** | **02 33 12.6** | **-0.3** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **RETA** | **Reutte** | **149.85 348** | | *e*PKP | **PKPbc** | **02 33 12.6** | **-0.2** |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **149.89 347** | | *e*PKP | **PKPbc** | **02 33 13.0** | **-0.1** |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.02 348** | | *i* PKP | **PKPbc** | **02 33 13.3** | **0.0** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.18 346** | | *i* PKP | **PKPbc** | **02 33 13.2** | **-0.5** |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **DAVA** | **Damuels** | **150.21 349** | | *e*PKP | **PKPdf** | **02 33 10.7** | **+2.8** |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **FETA** | **Feichten** | **150.31 348** | | *i* PKP | **PKPbc** | **02 33 13.7** | **-0.3** |
| | comp=Z,1.9nm,0.6s | | | | | | |

*NEIC **19** 02:14:44.9±2.0, 17°.7S±0°.1×177°.56W±0°.10, h383km±7km, mb4.4/17, Error ellipse: s-maj=20.9km s-min=13.1km az=167.0*
*IDC **19** 02:14:51.4±3.8, 17°.88S×178°.02W, h460km±40km, mb3.6/16, mbtmp4.3/17, Error ellipse: s-maj=20.7km s-min=15.8km az=78.0*
**ISC 19 02:14:45.5±0.5, 17°.73S±0°.10×177°.7W±0°.1, h400km, n58, σ1ᵗ43/57, mb4.2/26, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.04 269** | | P | **Pn** | **02 15 57.1** | **-1.0** |
| **MSVF** | **Nonsavu** | **4.04 269** | | | **Pn** | **02 15 57.4** | **-0.7** |
| **LIFNC** | **LIFOU** | **14.53 256** | | P | **P** | **02 17 56.3** | **+3.3** |
| **PINNC** | **Pines Island,** | **14.76 248** | | P | **P** | **02 17 59.2** | **+3.8** |
| **DZM** | **Mont Dzumac** | **15.52 251** | | P | **P** | **02 18 06.9** | **+3.2** |
| **DZM** | **Mont Dzumac** | **15.52 251** | | P | **P** | **02 18 04.8** | **+1.1** |
| | 2.5nm,0.6s,baz=87,slow=20,SNR=2.2 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.24 258** | | P | **P** | **02 18 25.4** | **+3.3** |
| **TOZ** | **Tahuroa Road** | **20.80 195** | | P | **P** | **02 18 59.7** | **+2.6** |
| **URZ** | **Urewera** | **20.95 191** | | P | **P** | **02 18 58.5** | **0.0** |
| | 5.6nm,0.3s,baz=344,slow=3.4,SNR=11 | | | | | | |
| | 5.6nm,0.3s | | | | | | |
| **RTZ** | **Ruatahuna** | **21.32 192** | | P | **P** | **02 19 02.7** | **+0.7** |
| RTZ | | | | IAmb | IAmb | 02 19 18.7 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.95 192** | | P | **P** | **02 19 08.2** | **+0.6** |
| BKZ | | | | IAmb | IAmb | 02 19 44.3 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **BFZ** | **Birch Farm** | **23.46 192** | | P | **P** | **02 19 21.3** | **0.0** |
| **MRZ** | **Mangatainoka R** | **23.57 193** | | P | **P** | **02 19 21.4** | **-0.9** |
| MRZ | | | | IAmb | IAmb | 02 19 37.5 | |
| | comp=Z,33nm,1.5s | | | | | | |
| **MSWZ** | **Moikau Station** | **24.37 193** | | P | **P** | **02 19 30.1** | **+0.7** |
| **TCW** | **Tory Channel** | **24.39 195** | | P | **P** | **02 19 31.3** | **+1.7** |
| **BHW** | **Baring Head** | **24.44 194** | | P | **P** | **02 19 30.6** | **+0.6** |
| **PLWZ** | **Palliser** | **24.52 193** | | P | **P** | **02 19 30.7** | **-0.1** |
| **CTAO** | **Charters Tower** | **34.13 260** | | P | **P** | **02 20 55.2** | **+0.1** |
| **STKA** | **Stephens Creek** | **39.30 241** | | P | **P** | **02 21 36.8** | **-1.1** |
| | comp=Z,2.7nm,0.5s,baz=102,slow=8.3,SNR=3.8 | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.32 259** | | P | **P** | **02 22 24.0** | **-2.0** |
| | comp=Z,2.2nm,0.4s,baz=96,slow=6.7,SNR=10 | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.48 254** | | P | **P** | **02 22 26.5** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.48 254** | | P | **P** | **02 22 26.2** | **-1.0** |
| | comp=Z,16nm,0.5s,baz=89,slow=8.3,SNR=33 | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.16 323** | | P | **P** | **02 25 04.0** | **-0.2** |
| | comp=Z,1.7nm,0.9s,baz=160,slow=6.2,SNR=3.0 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.32 180** | | P | **P** | **02 25 29.3** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 02 25 30.1 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.32 180** | | P | **P** | **02 25 28.8** | **0.0** |
| | comp=Z,4.4nm,0.7s,baz=240,slow=1.2,SNR=26 | | | | | | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **75.01 318** | | P | **P** | **02 25 45.3** | **+0.9** |
| | comp=Z,0.6nm,0.5s,baz=134,slow=5.8,SNR=1.2 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **GLA** | **Glamis** | **78.43 50** | | P | **P** | **02 26 03.1** | **-0.4** |
| GLA | | | | IAmb | IAmb | 02 26 06.0 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.83 44** | | P | **P** | **02 26 08.6** | **+2.7** |
| | comp=Z,0.9nm,0.7s,baz=228,slow=8.3,SNR=5.0 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **SMAI** | **San Martin Ant** | **81.08 159** | | P | **P** | **02 26 18.6** | **+1.6** |
| **BELA** | **Belgrano 2** | **82.26 173** | | P | **P** | **02 26 22.6** | **-0.3** |
| BELA | | | | IAmb | IAmb | 02 26 23.4 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **PMR** | **Palmer** | **82.27 13** | | P | **P** | **02 26 23.9** | **+0.9** |
| PMR | | | | IAmb | IAmb | 02 26 43.3 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.48 13** | | P | **P** | **02 26 25.4** | **+1.2** |
| GHO | | | | IAmb | IAmb | 02 26 29.7 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **J18K** | **Innoko River** | **82.57 9** | | P | **P** | **02 26 26.4** | **+1.8** |
| J18K | | | | IAmb | IAmb | 02 26 49.6 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **SEY** | **Seymchan** | **83.75 347** | | P | **P** | **02 26 30.5** | **0.0** |
| | comp=Z,3.2nm,0.5s,baz=151,slow=5.9,SNR=7.4 | | | | | | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **84.25 200** | | P | **P** | **02 26 32.0** | **-1.1** |
| | comp=Z,1.6nm,0.5s,baz=209,slow=12,SNR=3.0 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **NEW** | **Newport** | **84.98 36** | | P | **P** | **02 26 38.6** | **+1.7** |
| | comp=Z,0.9nm,0.5s,baz=254,slow=11,SNR=1.7 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.57 13** | | P | **P** | **02 26 39.8** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=221,slow=5.5,SNR=16 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **86.77 43** | | P | **P** | **02 26 47.4** | **+1.4** |
| | comp=Z,0.4nm,0.5s,baz=197,slow=1.5,SNR=3.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.45 289** | | P | **P** | **02 26 58.0** | **-0.9** |
| | comp=Z,0.9nm,0.3s,baz=113,slow=2.7,SNR=5.5 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.49 180** | ⇑P | P | **P** | **02 27 01.8** | **-1.0** |
| | comp=Z,123nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **90.76 178** | ⇑P | P | **P** | **02 27 02.5** | **-1.5** |
| | comp=Z,27nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.76 178** | P | P | **P** | **02 27 02.7** | **-1.3** |
| | comp=Z,1.2nm,0.5s,baz=202,slow=7.4,SNR=12 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.87 176** | ⇑P | P | **P** | **02 27 03.6** | **-0.8** |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.32 177** | ⇑P | P | **P** | **02 27 05.7** | **-0.9** |
| | comp=Z,6.1nm,0.7s,baz=191,slow=4.7 | | | | | | |
| **INK** | **Inuvik** | **91.54 15** | P | P | **P** | **02 27 08.0** | **+0.7** |
| | comp=Z,1.9nm,0.7s,baz=106,slow=7.5,SNR=3.5 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.54 176** | ⇑P | P | **P** | **02 27 07.0** | **-0.5** |
| | comp=Z,6.9nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.13 321** | | PKP | **PKPdf** | **02 32 41.7** | **-1.9** |
| | comp=Z,0.7nm,0.5s,baz=53,slow=2.4,SNR=5.4 | | | | | | |
| **ARCES** | **ARCESS Array B 126.26 350** | | | PKP | **PKPdf** | **02 32 59.5** | **-1.2** |
| | comp=Z,0.6nm,0.5s,baz=124,slow=0.4,SNR=9.0 | | | | | | |
| **NOA** | **NORSAR Array B 136.27 354** | | | PKP | **PKPdf** | **02 33 19.8** | **0.0** |
| | comp=Z,1.5nm,0.8s,baz=36,slow=6.3,SNR=3.7 | | | | | | |
| **BNN** | **Bunyan** | **144.03 313** | | | PKPbc | 02 33 32.9 | -0.6 |
| **BUR08** | **Bucovina Ar. S** | **144.75 333** | | | **PKPab** | **02 33 35.8** | **-0.1** |
| **BR131** | **Keskin Array S** | **145.13 315** | | | **PKPdf** | **02 33 36.1** | **-0.4** |
| **BRTR** | **Keskin Array B** | **145.13 315** | | | **PKPdf** | **02 33 35.8** | **-0.7** |
| **BRTR** | **Keskin Array B** | **145.13 315** | | PKPbc | **PKPdf** | **02 33 35.5** | **-1.0** |
| | comp=Z,3.6nm,0.8s,baz=132,slow=5.1,SNR=12 | | | | | | |
| **KRLC** | **Kraliky** | **145.69 343** | | *e*PKP | **PKPab** | **02 33 38.1** | **-1.2** |
| **MMAI** | **Mount Meron Ar** | **146.60 304** | | PKPbc | **PKPbc** | **02 33 40.2** | **-1.2** |
| | comp=Z,4.4nm,0.4s,baz=76,slow=7.0,SNR=16 | | | | | | |
| **GERES** | **GERESS Array B 147.61 346** | | | PKPbc | **PKPbc** | **02 33 43.1** | **-0.5** |
| | comp=Z,1.1nm,0.4s,baz=7.7,slow=11,SNR=9.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea 175.41 173** | | | PKPab | **PKPab** | **02 35 47.5** | **-0.8** |
| | comp=Z,0.5nm,0.9s,baz=196,slow=4.6,SNR=1.5 | | | | | | |

**IDC 19 02:15:09.6±28.0, 17°.27S×178°.75W, h490km±256km, mb3.2/3, mbtmp4.1/3, Error ellipse: s-maj=395.8km s-min=79.1km az=137.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.43 259** | | P | P | 02 22 35.8 | -0.6 |
| | 0.7nm,0.5s,baz=95,slow=7.8,SNR=1.5 | | | | | | |
| | 0.7nm,0.5s | | | | | |

**ISC 19 02:15:59.1±1.8, 17.5S±0.2×177.5W±0.3, h500km, n35, σ0§73/26, mb4.3/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | **Urewera** | 21.22 | 192 | P | P | 02 20 07.5 | -1.0 |
| | 4.3nm,0.5s,baz=27,slow=4.5,SNR=2.8 | | | | | | |
| | 4.3nm,0.5s | | | | | | |
| TCW | **Tory Channel** | 24.67 | 195 | P | P | 02 20 41.1 | +1.6 |
| PLWZ | **Palliser** | 24.79 | 193 | P | P | 02 20 40.5 | -0.1 |
| QRZ | **Quartz Range** | 24.79 | 198 | P | P | 02 20 41.5 | +0.9 |
| TKNZ | **Takaka Hill** | 24.86 | 197 | P | P | 02 20 41.5 | +0.3 |
| NNZ | **Nelson** | 24.91 | 197 | IAmb | IAmb | 02 20 53.6 | |
| | comp=Z,17nm,1.1s | | | | | | |
| NNZ | **Nelson** | 24.91 | 197 | P | P | 02 20 41.5 | -0.1 |
| MRNZ | **Matariki Terra** | 25.25 | 197 | P | P | 02 20 44.4 | -0.3 |
| THZ | **Tophouse** | 25.55 | 197 | IAmb | IAmb | 02 20 53.0 | |
| | comp=Z,6.4nm,1.0s | | | | | | |
| THZ | **Tophouse** | 25.55 | 197 | P | P | 02 20 47.8 | +0.5 |
| DSZ | **Denniston Nort** | 25.85 | 199 | P | P | 02 20 51.3 | +1.3 |
| LTZ | **Lake Taylor** | 26.67 | 197 | IAmb | IAmb | 02 21 11.0 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| LTZ | **Lake Taylor** | 26.67 | 197 | P | P | 02 20 58.3 | +1.1 |
| INZ | **Inchbonnie** | 26.86 | 198 | IAmb | IAmb | 02 21 02.7 | |
| | comp=Z,14nm,0.9s | | | | | | |
| INZ | **Inchbonnie** | 26.86 | 198 | P | P | 02 20 58.4 | -0.3 |
| OXZ | **Oxford** | 27.24 | 197 | IAmb | IAmb | 02 21 05.8 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| OXZ | **Oxford** | 27.24 | 197 | P | P | 02 21 01.7 | -0.5 |
| MQZ | **McQueen's Vall** | 27.43 | 196 | IAmb | IAmb | 02 21 10.4 | |
| | comp=Z,17nm,1.2s | | | | | | |
| MQZ | **McQueen's Vall** | 27.43 | 196 | P | P | 02 21 03.4 | -0.3 |
| FOZ | **Fox Glacier** | 28.09 | 200 | P | P | 02 21 09.4 | -0.2 |
| LBZ | **Lake Benmore** | 28.75 | 199 | IAmb | IAmb | 02 21 18.8 | |
| | comp=Z,10nm,0.9s | | | | | | |
| LBZ | **Lake Benmore** | 28.75 | 199 | P | P | 02 21 14.1 | -1.3 |
| ODZ | **Otahua Downs** | 29.21 | 197 | IAmb | IAmb | 02 21 19.9 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| ODZ | **Otahua Downs** | 29.21 | 197 | P | P | 02 21 19.0 | -0.3 |
| WKZ | **Wanaka** | 29.51 | 200 | P | P | 02 21 21.5 | -0.5 |
| MLZ | **Mavora Lakes** | 30.28 | 200 | IAmb | IAmb | 02 21 37.3 | |
| | comp=Z,12nm,1.0s | | | | | | |
| MLZ | **Mavora Lakes** | 30.28 | 200 | P | P | 02 21 29.4 | +0.7 |
| DCZ | **Deep Cove** | 30.70 | 201 | P | P | 02 21 31.8 | -0.5 |
| WHZ | **Wether Hill Ro** | 30.80 | 200 | P | P | 02 21 33.9 | +0.7 |
| STKA | **Stephens Creek** | 39.61 | 241 | P | P | 02 22 47.4 | +0.4 |
| | comp=Z,3.8nm,0.5s,baz=82,slow=8.7,SNR=5.1 | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | |
| WRA | **Warramunga Arr** | 45.59 | 259 | P | P | 02 23 33.5 | -0.6 |
| | comp=Z,1.0nm,0.3s,baz=95,slow=7.2,SNR=4.6 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ASAR | **Alice Springs** | 45.77 | 254 | P | P | 02 23 35.5 | 0.0 |
| | comp=Z,6.0nm,0.6s,baz=86,slow=8.8,SNR=6.4 | | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| QSPA | **South Pole Qui** | 72.55 | 180 | P | P | 02 26 34.7 | 0.0 |
| | comp=Z,1.3nm,0.5s,baz=291,slow=1.4,SNR=6.5 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| MMAI | **Mount Meron Ar** | 146.67 | 304 | PKPbc | PKiKP | 02 34 46.6 | -0.4 |
| | comp=Z,0.5nm,0.3s,baz=72,slow=9.3,SNR=2.0 | | | | | | |
| GERES | **GERESS Array B** | 147.45 | 346 | PKPbc | PKiKP | 02 34 48.7 | +0.5 |
| | comp=Z,0.3nm,0.4s,baz=356,slow=1.3,SNR=1.6 | | | | | | |

*IDC 19 02:16:23.7±10.0, 18.63S×176.71W, h597km±114km, mb3.3/6, mbtmp4.2/6, Error ellipse: s-maj=55.9km s-min=30.4km az=82.0*

**ISC 19 02:16:23.8±1.2, 18.6S±0.2×176.7W±0.3, h600km, n9, σ0§69/9, mb3.8/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | 46.09 | 260 | P | P | 02 23 55.4 | -0.3 |
| | 1.6nm,0.4s,baz=96,slow=7.3,SNR=5.8 | | | | | | |
| | 1.6nm,0.4s | | | | | | |
| ASAR | **Alice Springs** | 46.15 | 255 | P | P | 02 23 56.8 | +0.6 |
| | 3.3nm,0.4s,baz=87,slow=8.2,SNR=4.7 | | | | | | |
| | 3.3nm,0.4s | | | | | | |
| MJAR | **Matsushiro Arr** | 69.42 | 322 | P | P | 02 26 33.3 | +0.3 |
| | 1.2nm,0.5s,baz=162,slow=6.1,SNR=6.6 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| QSPA | **South Pole Qui** | 71.46 | 180 | P | P | 02 26 44.6 | -0.1 |
| | 1.7nm,0.8s,baz=97,slow=7.2,SNR=2.7 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| SEY | **Seymchan** | 84.81 | 346 | P | P | 02 27 54.7 | -0.9 |
| | 1.1nm,0.4s,baz=195,slow=23,SNR=2.1 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| ILAR | **Eielson Array** | 86.21 | 12 | P | P | 02 28 03.0 | +0.8 |
| | 0.3nm,0.4s,baz=216,slow=5.2,SNR=5.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| BRTR | **Keskin Array B** | 146.40 | 315 | PKPbc | PKPbc | 02 34 58.0 | -1.0 |
| | 0.6nm,0.6s,baz=90,slow=3.1,SNR=2.1 | | | | | | |
| MMAI | **Mount Meron Ar** | 147.86 | 303 | PKPbc | PKPbc | 02 35 03.1 | +0.2 |
| | 0.9nm,0.4s,baz=87,slow=5.9,SNR=2.3 | | | | | | |
| GERES | **GERESS Array B** | 148.67 | 347 | PKPbc | PKPbc | 02 35 04.5 | 0.0 |
| | 0.4nm,0.4s,baz=356,slow=15,SNR=2.2 | | | | | | |

*IDC 19 02:16:38.5±12.0, 18.08S×178.07W, h453km±147km, mb3.2/6, mbtmp4.0/6, Error ellipse: s-maj=58.2km s-min=35.1km az=8.0*

**ISC 19 02:16:29.1±1.1, 17.9S±0.1×178.0W±0.2, h350km, n9, σ0§98/9, mb3.3/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | **Nonsavu** | 3.75 | 271 | P | Pn | 02 17 35.8 | +0.1 |
| FUNA | **Funafuti** | 9.65 | 343 | P | Pn | 02 18 42.8 | -0.2 |
| URZ | **Urewera** | 20.78 | 191 | P | P | 02 20 44.1 | 0.0 |
| | 2.4nm,0.4s,baz=330,slow=4.1,SNR=1.9 | | | | | | |
| | 2.4nm,0.4s | | | | | | |
| WRA | **Warramunga Arr** | 45.01 | 259 | P | P | 02 24 11.6 | +0.2 |
| | 0.9nm,0.6s,baz=99,slow=6.8,SNR=1.9 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | 45.17 | 254 | P | P | 02 24 12.9 | +0.3 |
| | 4.0nm,0.5s,baz=88,slow=8.5,SNR=4.4 | | | | | | |
| | 4.0nm,0.5s | | | | | | |
| PETK | **Petropavlovsk-** | 73.72 | 345 | P | P | 02 27 26.0 | +0.7 |
| | 3.2nm,0.8s,baz=122,slow=5.4,SNR=2.0 | | | | | | |
| | 3.2nm,0.8s | | | | | | |
| TXAR | **Lajitas Array** | 85.65 | 57 | P | P | 02 28 30.2 | +0.7 |
| | 0.3nm,0.8s,baz=214,slow=2.9,SNR=1.4 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| ILAR | **Eielson Array** | 85.74 | 13 | P | P | 02 28 28.7 | -0.3 |
| | 0.2nm,0.5s,baz=197,slow=2.8,SNR=1.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| BRTR | **Keskin Array B** | 145.00 | 315 | PKPbc | PKPdf | 02 35 23.4 | -2.1 |
| | 0.6nm,0.9s,baz=77,slow=6.4,SNR=1.9 | | | | | | |

*IDC 19 02:17:53.7±4.7, 17.75S×177.90W, h484km±47km, mb3.7/9, mbtmp4.6/10, Error ellipse: s-maj=30.1km s-min=18.5km az=62.0*

**ISC 19 02:17:54.6±0.8, 17.7S±0.1×177.9W±0.2, h500km, n20, σ0§87/20, mb4.2/11, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | **Mont Dzumac** | 15.36 | 251 | P | P | 02 21 08.8 | +0.2 |
| | 16nm,0.6s,baz=84,slow=19,SNR=19 | | | | | | |
| URZ | **Urewera** | 20.93 | 191 | P | P | 02 22 00.4 | -1.0 |
| | 4.1nm,0.3s,baz=354,slow=3.3,SNR=9.3 | | | | | | |
| | 4.1nm,0.3s | | | | | | |
| STKA | **Stephens Creek** | 39.15 | 241 | P | P | 02 24 39.4 | +0.7 |
| | 16nm,0.5s,baz=91,slow=10,SNR=23 | | | | | | |
| | 16nm,0.5s | | | | | | |
| WRA | **Warramunga Arr** | 45.15 | 259 | P | P | 02 25 25.5 | -0.8 |
| | 11nm,0.5s,baz=95,slow=7.0,SNR=57 | | | | | | |
| | 11nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | 45.32 | 254 | P | P | 02 25 27.4 | -0.2 |
| | 106nm,0.5s,baz=88,slow=8.4,SNR=226 | | | | | | |
| QSPA | **South Pole Qui** | 72.33 | 180 | P | P | 02 28 30.1 | +1.1 |
| | 3.6nm,0.6s,baz=204,slow=1.4,SNR=16 | | | | | | |
| | 3.6nm,0.6s | | | | | | |
| SEY | **Seymchan** | 83.70 | 347 | P | P | 02 29 30.8 | +0.9 |
| | 2.7nm,0.4s,baz=138,slow=6.4,SNR=7.9 | | | | | | |
| | 2.7nm,0.4s | | | | | | |
| MAW | **Mawson** | 84.20 | 200 | P | P | 02 29 32.8 | +0.4 |
| | 1.4nm,0.4s,baz=282,slow=20,SNR=2.3 | | | | | | |
| | 1.4nm,0.4s | | | | | | |
| ILAR | **Eielson Array** | 85.59 | 13 | P | P | 02 29 39.6 | +0.5 |
| | 0.3nm,0.4s,baz=218,slow=5.7,SNR=6.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| CMAR | **Chiang Mai Arr** | 89.29 | 290 | P | P | 02 29 58.5 | +0.9 |
| | 0.9nm,0.3s,baz=112,slow=2.7,SNR=7.0 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| TROLL | **Troll, Antarti** | 90.50 | 180 | ⇑P | P | 02 30 02.0 | -0.4 |
| | comp=Z,61nm,0.4s | | | | | | |
| SNAA | **Sanae** | 90.77 | 178 | ⇑P | P | 02 30 03.2 | -0.3 |
| | comp=Z,15nm,0.5s | | | | | | |
| SNAA | **Sanae** | 90.77 | 178 | P | P | 02 30 03.4 | -0.1 |
| | comp=Z,0.6nm,0.5s,baz=180,slow=18,SNR=7.5 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| VNA3 | **Neumayer Olymp** | 90.89 | 176 | ⇑P | P | 02 30 04.1 | 0.0 |
| | comp=Z,4.6nm,0.7s | | | | | | |
| VNA2 | **Neumayer--Watz** | 91.34 | 177 | ⇑P | P | 02 30 06.7 | +0.6 |
| | comp=Z,3.4nm,0.7s,baz=200,slow=5.5 | | | | | | |
| ARCES | **ARCESS Array B** | 126.22 | 350 | PKP | PKiKP | 02 35 58.8 | -0.9 |
| | comp=Z,0.4nm,0.4s,baz=39,slow=1.7,SNR=5.6 | | | | | | |
| BRTR | **Keskin Array B** | 145.00 | 315 | PKPbc | PKPab | 02 36 35.8 | -0.5 |
| | comp=Z,1.2nm,0.6s,baz=114,slow=4.1,SNR=9.9 | | | | | | |
| MBAR | **Mbarara** | 146.45 | 240 | PKPbc | PKPbc | 02 36 39.7 | -0.8 |
| | comp=Z,4.5nm,0.8s,baz=133,slow=18,SNR=4.9 | | | | | | |
| MMAI | **Mount Meron Ar** | 146.45 | 303 | PKPbc | PKiKP | 02 36 40.2 | -1.8 |
| | comp=Z,1nm,0.5s,baz=78,slow=6.3,SNR=5.1 | | | | | | |
| GERES | **GERESS Array B** | 147.56 | 346 | PKPbc | PKiKP | 02 36 42.7 | -1.2 |
| | comp=Z,0.8nm,0.4s,baz=62,slow=3.2,SNR=7.0 | | | | | | |

*BJI 19 02:18:49.7±0.0, 18.16S×177.97W, h617km, mb5.4/78, mB6.3/12*
*MOS 19 02:18:50.9±0.8, 18.23S×178.38W, h617km, mb5.8/44, Error ellipse: s-maj=7.4km s-min=6.6km az=86.7*
*BGR 19 02:18:50.7, 19.69S×177.10W, h643km±2km*
*NEIC 19 02:18:52.6±1.6, 18.28S±0.08×178.35W±0.09, h618km±5km, mb5.7/800, Error ellipse: s-maj=12.8km s-min=12.1km az=125.0*
*IDC 19 02:18:52.4±0.3, 18.33S×178.37W, h626km±3km, mb5.1/37, mbtmp5.9/39, Error ellipse: s-maj=6.8km s-min=6.3km az=163.0*
*NOU 19 02:18:52.3, 18.33S×178.22W, h626km, ML6.2/207, Fiji Islands Region*

**ISC 19 02:18:52.5±0.2, 18.34S±0.03×178.29W±0.03, h629km±2km, h630km:pP-P, n2363, σ1§14/2350, mb5.8/551, 118C-122D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | **Nonsavu** | 3.53 | 279 | P | P | 02 20 18.4 | +1.2 |
| MSVF | **Nonsavu** | 3.53 | 279 | d iP | P | 02 20 19.0 | +1.8 |
| AFI | **Afiamalu** | 7.66 | 56 | P | P | 02 20 48.4 | -1.5 |
| AFI | **Afiamalu** | 7.66 | 56 | P | P | 02 20 48.4 | -1.5 |
| NIUE | **Niue** | 7.96 | 97 | P | P | 02 20 52.6 | +0.1 |
| NIUE | **Niue** | 7.96 | 97 | P | P | 02 20 53.1 | +0.6 |
| | comp=Z,14242µmcomp=Z,4µm,1.0s | | | | | | |
| FUNA | **Funafuti** | 10.06 | 346 | P | P | 02 21 11.3 | -1.3 |
| RAO | **Raoul Island** | 10.87 | 178 | P | P | 02 21 18.6 | -1.6 |
| RAO | **Raoul Island** | 10.87 | 178 | P | P | 02 21 18.4 | -1.8 |
| | comp=Z,1µm,0.2s,baz=78,slow=8.0,SNR=42 | | | | | | |
| RAO | | | | S | S | 02 23 19.5 | -1.9 |
| | comp=Z,2µm,0.7s,baz=266,slow=23,SNR=2.9 | | | | | | |
| RTV | **Rentapao** | 12.64 | 270 | P | P | 02 21 38.6 | +1.2 |
| DVP | **Devils Point** | 12.88 | 271 | P | P | 02 21 41.1 | +1.5 |
| MARNC | **Mare, Loyalty** | 13.24 | 254 | P | P | 02 21 43.1 | +0.1 |
| LIFNC | **LIFOU** | 13.85 | 258 | P | P | 02 21 48.7 | -0.2 |
| LIFNC | **LIFOU** | 13.85 | 258 | P | P | 02 21 48.2 | -0.7 |
| PINNC | **Pines Island,** | 14.02 | 250 | P | P | 02 21 51.5 | +1.0 |
| PINNC | **Pines Island,** | 14.02 | 250 | P | P | 02 21 50.7 | +0.2 |
| YATNC | **Mamie plateau,** | 14.39 | 253 | P | P | 02 21 54.6 | +1.5 |
| DZM | **Mont Dzumac** | 14.80 | 253 | P | P | 02 21 59.3 | +1.5 |
| DZM | **Mont Dzumac** | 14.80 | 253 | P | P | 02 21 58.3 | +0.5 |
| DZM | **Mont Dzumac** | 14.80 | 253 | P | P | 02 21 59.0 | +1.2 |
| | comp=Z,671nm,0.6s,baz=93,slow=8.2,SNR=166 | | | | | | |
| DZM | | | | S | S | 02 24 31.2 | +2.4 |
| | comp=Z,52nm,0.8s,baz=198,slow=18,SNR=4.2 | | | | | | |
| NOUC | **Port Laguerre** | 14.93 | 253 | P | P | 02 22 00.2 | +1.3 |
| NFK | **Norfolk Island** | 16.49 | 227 | P | P | 02 22 15.7 | +2.7 |
| NFK | **Norfolk Island** | 16.49 | 227 | P | P | 02 22 15.9 | +2.9 |
| | comp=Z,858nm,1.1s | | | | | | |
| KOUNC | **Koumac, New Ca** | 16.58 | 260 | P | P | 02 22 16.1 | +2.2 |
| KOUNC | **Koumac, New Ca** | 16.58 | 260 | P | P | 02 22 14.3 | +0.4 |
| RAR | **Rarotonga** | 17.66 | 102 | P | P | 02 22 24.7 | +0.9 |
| RAR | **Rarotonga** | 17.66 | 102 | P | P | 02 22 24.6 | +0.8 |
| RAR | **Rarotonga** | 17.66 | 102 | P | P | 02 22 24.4 | +0.6 |
| | comp=Z,348nm,0.8s,baz=250,slow=7.1,SNR=47 | | | | | | |
| RAR | | | | S | S | 02 25 16.9 | +1.6 |
| | comp=Z,22nm,0.8s,baz=204,slow=23,SNR=1.0 | | | | | | |
| KUZ | **Kuaotunu** | 19.08 | 195 | P | P | 02 22 38.1 | +1.7 |
| MXZ | **Matakaoa Point** | 19.38 | 188 | P | P | 02 22 39.0 | -0.1 |
| RUGZ | **Raukumara Rang** | 19.87 | 189 | P | P | 02 22 44.5 | +0.8 |
| WHRZ | **Whale Island** | 19.88 | 191 | P | P | 02 22 46.7 | +3.1 |
| TGRZ | **Tauranga** | 19.90 | 193 | P | P | 02 22 46.8 | +3.0 |
| OPRZ | **Ohinepanea** | 19.95 | 192 | P | P | 02 22 45.1 | +0.9 |
| TWGZ | **Tauwhareparae** | 20.03 | 189 | P | P | 02 22 46.2 | +1.2 |
| TWGZ | | | | S | S | 02 25 51.1 | -1.5 |
| TOZ | **Tahuroa Road** | 20.07 | 194 | P | P | 02 22 46.2 | +0.9 |
| TOZ | **Tahuroa Road** | 20.07 | 194 | P | P | 02 22 47.2 | +1.9 |
| KMRZ | **Kaimai** | 20.08 | 193 | P | P | 02 22 48.0 | +2.5 |
| EDRZ | **Edgecumbe** | 20.17 | 191 | P | P | 02 22 46.8 | +0.5 |
| OMRZ | **Omania** | 20.24 | 192 | P | P | 02 22 48.6 | +1.7 |
| URZ | **Urewera** | 20.25 | 191 | P | P | 02 22 45.3 | -1.6 |
| URZ | **Urewera** | 20.25 | 191 | P | P | 02 22 45.9 | -1.0 |
| | comp=Z,53nm,0.3s,baz=322,slow=2.9,SNR=48 | | | | | | |
| URZ | | | | S | S | 02 25 49.5 | -6.4 |
| | comp=Z,54nm,0.7s,baz=115,slow=23,SNR=1.1 | | | | | | |
| | comp=Z,53nm,0.3s | | | | | | |
| URZ | **Urewera** | 20.25 | 191 | P | P | 02 22 45.1 | -1.8 |
| URZ | | | | S | S | 02 25 50.0 | -5.9 |
| MWZ | **Matawai** | 20.25 | 190 | P | P | 02 22 46.8 | -0.2 |
| MWZ | | | | S | S | 02 25 49.5 | -6.6 |
| CNGZ | **Carnagh Statio** | 20.30 | 188 | P | P | 02 22 49.1 | +1.7 |
| TARZ | **Mount Tarawera** | 20.34 | 192 | P | P | 02 22 48.8 | +1.0 |
| RAGZ | **Rawiri** | 20.43 | 190 | P | P | 02 22 49.0 | +0.4 |
| RAGZ | | | | S | S | 02 25 56.0 | -2.9 |
| RRRZ | **Republican Roa** | 20.43 | 192 | P | P | 02 22 48.4 | -0.3 |
| MUGZ | **Murupara** | 20.52 | 191 | P | P | 02 22 50.0 | +0.6 |
| RIGZ | **Rimuhau** | 20.58 | 189 | P | P | 02 22 50.1 | +0.2 |
| RIGZ | | | | S | S | 02 25 58.2 | -3.1 |
| RTZ | **Ruatahuna** | 20.62 | 191 | P | P | 02 22 49.4 | -0.9 |
| RTZ | **Ruatahuna** | 20.62 | 191 | P | P | 02 22 50.5 | +0.2 |
| TLZ | **Tolley Road** | 20.63 | 194 | P | P | 02 22 52.6 | +2.2 |
| SNGZ | **Shannon Statio** | 20.72 | 190 | P | P | 02 22 51.5 | +0.3 |
| SNGZ | | | | S | S | 02 25 57.4 | -6.0 |
| PRGZ | **Paritu Road** | 20.78 | 188 | P | P | 02 22 53.8 | +2.1 |
| MTHZ | **Maungataniwha** | 20.87 | 191 | P | P | 02 22 53.2 | +0.6 |
| MTHZ | | | | S | S | 02 26 00.7 | -5.1 |
| KNZ | **Kokohu** | 20.90 | 189 | P | P | 02 22 53.1 | +0.4 |
| KNZ | | | | S | S | 02 26 02.3 | -3.9 |
| MRHZ | **Matea Rd** | 20.93 | 192 | P | P | 02 22 52.5 | -0.6 |
| HIZ | **Hauiti** | 20.97 | 195 | P | P | 02 22 55.7 | +2.3 |
| HIZ | **Hauiti** | 20.97 | 195 | P | P | 02 22 55.0 | +1.6 |
| HIZ | **Hauiti** | 20.97 | 195 | P | P | 02 22 56.5 | +3.1 |
| MHGZ | **Mahia Peninsul** | 21.00 | 188 | P | P | 02 22 55.0 | +1.4 |
| MHGZ | | | | S | S | 02 26 10.1 | +2.3 |
| WHHZ | **Waihua** | 21.02 | 190 | P | P | 02 22 55.4 | +1.5 |
| WHHZ | | | | S | S | 02 26 00.8 | -7.4 |
| RATZ | **Rangitukua** | 21.09 | 193 | P | P | 02 22 55.1 | +0.6 |
| NMHZ | **Naumai** | 21.12 | 191 | P | P | 02 22 54.6 | -0.2 |
| NMHZ | | | | S | S | 02 26 08.1 | -1.7 |
| BKZ | **Black Stump Fm** | 21.24 | 191 | P | P | 02 22 54.1 | -1.8 |
| BKZ | **Black Stump Fm** | 21.24 | 191 | P | P | 02 22 54.7 | -1.1 |
| BKZ | **Black Stump Fm** | 21.24 | 191 | P | P | 02 22 54.1 | -1.9 |
| BKZ | | | | S | S | 02 26 05.9 | -5.7 |
| ARHZ | **Aropaoanui** | 21.25 | 190 | P | P | 02 22 55.7 | -0.1 |
| ARHZ | | | | S | S | 02 26 09.7 | -1.9 |
| NTVZ | **North Tongarir** | 21.34 | 193 | P | P | 02 22 56.9 | +0.1 |
| KRVZ | **Karewarewa** | 21.34 | 193 | P | P | 02 22 57.0 | +0.1 |
| TMVZ | **Te Maari** | 21.35 | 193 | P | P | 02 22 56.3 | -0.6 |
| TWVZ | **Taurewa** | 21.36 | 193 | P | P | 02 22 56.6 | -0.4 |
| ETVZ | **East Tongariro** | 21.36 | 193 | P | P | 02 22 56.4 | -0.7 |
| WTVZ | **West Tongariro** | 21.37 | 193 | P | P | 02 22 56.5 | -0.7 |
| NNVZ | **North Ngauruho** | 21.38 | 193 | P | P | 02 22 57.3 | 0.0 |
| TARA | **Tarawa** | 21.40 | 335 | P | P | 02 22 57.1 | -0.4 |
| OTVZ | **Oturere** | 21.40 | 193 | P | P | 02 22 56.1 | -1.3 |
| NGZ | **Ngauruhoe** | 21.43 | 193 | P | P | 02 22 57.2 | -0.4 |
| SNVZ | **South Ngauruho** | 21.43 | 193 | P | P | 02 22 56.9 | -0.7 |
| MCHZ | **McNeill Hill** | 21.47 | 191 | P | P | 02 22 57.1 | -0.8 |
| KWHZ | **Kaweka Forest** | 21.50 | 191 | P | P | 02 22 56.8 | -1.4 |
| KWHZ | | | | S | S | 02 26 10.2 | -5.6 |
| TUVZ | **Tukino** | 21.50 | 193 | P | P | 02 22 57.6 | -0.8 |
| MAVZ | **Matarangi** | 21.52 | 193 | P | P | 02 22 58.7 | 0.0 |
| WHVZ | **Whangaehu Hut** | 21.53 | 193 | P | P | 02 22 57.7 | -1.0 |
| VRZ | **Vera Road** | 21.57 | 195 | P | P | 02 23 01.7 | +3.0 |
| WNVZ | **Wahianoa** | 21.57 | 193 | P | P | 02 22 57.8 | -1.2 |
| PKVZ | **Pokaka** | 21.59 | 194 | P | P | 02 22 58.9 | -0.1 |
| CKHZ | **Cape Kidnapper** | 21.62 | 190 | P | P | 02 22 59.0 | -0.2 |
| CKHZ | | | | S | S | 02 26 16.8 | -0.7 |
| MOVZ | **Moawhango** | 21.62 | 193 | P | P | 02 22 58.4 | -0.8 |
| MOVZ | | | | S | S | 02 26 12.4 | -5.3 |
| KRHZ | **Kereru** | 21.73 | 191 | P | P | 02 22 58.7 | -1.4 |
| KRHZ | | | | S | S | 02 26 14.4 | -4.9 |
| KAHZ | **Kahuranaki** | 21.78 | 190 | P | P | 02 22 59.9 | -0.8 |
| KAHZ | | | | S | S | 02 26 16.1 | -4.1 |
| PKE | **Pukeiti** | 21.83 | 196 | P | P | 02 23 04.5 | +3.4 |
| NEZ | **North Egmont** | 21.88 | 196 | P | P | 02 23 05.2 | +3.6 |
| KHEZ | **Kahui Hut** | 21.92 | 196 | P | P | 02 23 05.0 | +3.1 |
| PREZ | **Palmer Road** | 21.93 | 196 | P | P | 02 23 05.3 | +3.4 |
| NBEZ | **Newall Road No** | 21.93 | 196 | P | P | 02 23 05.9 | +3.9 |
| LREZ | **Lake Rotokare** | 21.98 | 195 | P | P | 02 23 05.8 | +3.4 |
| PXZ | **Pawanui** | 22.02 | 190 | P | P | 02 23 01.8 | -0.9 |
| PXZ | | | | S | S | 02 26 19.5 | -4.2 |
| PNHZ | **Pukenui** | 22.02 | 191 | P | P | 02 23 02.6 | -0.1 |
| NMEZ | **Namu Road** | 22.07 | 196 | P | P | 02 23 06.5 | +3.3 |
| WAZ | **Wanganui** | 22.12 | 194 | P | P | 02 23 04.1 | +0.5 |
| WPHZ | **Waipukurau** | 22.12 | 191 | P | P | 02 23 03.8 | +0.2 |
| WPHZ | | | | S | S | 02 26 26.4 | +1.0 |
| PRHZ | **Porangahau** | 22.28 | 190 | P | P | 02 23 04.7 | -0.4 |
| PRHZ | | | | S | S | 02 26 24.1 | -3.9 |
| DVHZ | **Dannevirke** | 22.40 | 191 | P | P | 02 23 05.1 | -1.0 |
| DVHZ | | | | S | S | 02 26 25.0 | -4.8 |
| ANWZ | **Angora Road** | 22.50 | 190 | P | P | 02 23 07.1 | +0.1 |
| ANWZ | | | | S | S | 02 26 27.5 | -3.8 |
| POWZ | **Post Office Ro** | 22.56 | 192 | P | P | 02 23 08.3 | +0.7 |
| POWZ | | | | S | S | 02 26 28.8 | -3.6 |
| PRWZ | **Pori Road** | 22.68 | 191 | P | P | 02 23 08.7 | +0.1 |
| BFZ | **Birch Farm** | 22.75 | 191 | P | P | 02 23 08.8 | -0.4 |
| BFZ | **Birch Farm** | 22.75 | 191 | P | P | 02 23 09.0 | -0.2 |
| BFZ | **Birch Farm** | 22.75 | 191 | P | P | 02 23 07.9 | -1.4 |
| BFZ | | | | S | S | 02 26 30.5 | -4.9 |
| MRZ | **Mangatainoka R** | 22.86 | 192 | P | P | 02 23 09.4 | -0.8 |
| MRZ | **Mangatainoka R** | 22.86 | 192 | P | P | 02 23 09.0 | -1.2 |
| MRZ | | | | S | S | 02 26 32.2 | -4.9 |
| HNR | **Honiara** | 22.88 | 290 | P | P | 02 23 10.7 | 0.0 |
| HNR | **Honiara** | 22.88 | 290 | P | P | 02 23 10.7 | 0.0 |
| HOWZ | **Holdsworth Sta** | 23.10 | 192 | P | P | 02 23 11.1 | -1.3 |
| HOWZ | | | | S | S | 02 26 33.2 | -7.7 |
| CAW | **Cannon Point** | 23.39 | 193 | P | P | 02 23 13.7 | -1.2 |
| CAW | | | | S | S | 02 26 39.6 | -5.9 |
| MSWZ | **Moikau Station** | 23.65 | 192 | P | P | 02 23 16.3 | -0.9 |
| SNZO | **South Karori** | 23.67 | 193 | P | P | 02 23 16.0 | -1.3 |
| SNZO | **South Karori** | 23.67 | 193 | P | P | 02 23 16.6 | -0.6 |
| TCW | **Tory Channel** | 23.67 | 194 | P | P | 02 23 17.4 | +0.1 |
| BHW | **Baring Head** | 23.73 | 193 | P | P | 02 23 17.1 | -0.7 |
| QRZ | **Quartz Range** | 23.76 | 197 | P | P | 02 23 18.5 | +0.4 |
| PLWZ | **Palliser** | 23.80 | 192 | P | P | 02 23 17.8 | -0.7 |
| NNZ | **Nelson** | 23.89 | 196 | P | P | 02 23 18.6 | -0.6 |
| TUWZ | **Tuamarina** | 23.95 | 194 | P | P | 02 23 19.7 | -0.1 |
| CMWZ | **Cape Campbell** | 24.19 | 194 | P | P | 02 23 21.1 | -0.8 |
| MRNZ | **Matariki Terra** | 24.23 | 197 | P | P | 02 23 22.1 | -0.2 |
| BSWZ | **Blackbirch Sta** | 24.24 | 194 | P | P | 02 23 21.8 | -0.5 |
| LHI | **Lord Howe Isla** | 24.30 | 233 | P | P | 02 23 23.6 | +0.5 |
| THZ | **Tophouse** | 24.53 | 196 | P | P | 02 23 24.5 | -0.5 |
| DSZ | **Denniston Nort** | 24.81 | 198 | P | P | 02 23 27.1 | -0.3 |
| KHZ | **Kahutara** | 24.98 | 194 | P | P | 02 23 27.8 | -1.1 |
| KHZ | **Kahutara** | 24.98 | 194 | P | P | 02 23 27.9 | -0.9 |
| CTZ | **Chatham Island** | 25.36 | 177 | P | P | 02 23 33.5 | +1.4 |
| CTZ | **Chatham Island** | 25.36 | 177 | P | P | 02 23 35.5 | +3.3 |
| GVZ | **Greta Valley S** | 25.63 | 195 | P | P | 02 23 33.6 | -0.9 |
| LTZ | **Lake Taylor** | 25.64 | 196 | P | P | 02 23 34.3 | -0.5 |
| LTZ | **Lake Taylor** | 25.64 | 196 | P | P | 02 23 33.6 | -1.1 |
| INZ | **Inchbonnie** | 25.82 | 198 | P | P | 02 23 35.6 | -0.7 |
| INZ | **Inchbonnie** | 25.82 | 198 | P | P | 02 23 35.5 | -0.7 |
| AMCZ | **Amberley** | 25.92 | 195 | P | P | 02 23 36.7 | -0.4 |
| AMCZ | **Amberley** | 25.92 | 195 | P | P | 02 23 36.6 | -0.5 |
| OXZ | **Oxford** | 26.21 | 196 | P | P | 02 23 39.5 | -0.2 |
| OXZ | **Oxford** | 26.21 | 196 | P | P | 02 23 38.7 | -1.1 |
| OKCZ | **Okains Bay** | 26.33 | 194 | P | P | 02 23 41.6 | +0.8 |
| WVZ | **Waitaha Valley** | 26.35 | 198 | P | P | 02 23 40.9 | +0.1 |
| MQZ | **McQueen's Vall** | 26.41 | 195 | P | P | 02 23 41.2 | -0.2 |
| MQZ | **McQueen's Vall** | 26.41 | 195 | P | P | 02 23 40.4 | -1.0 |
| AKCZ | **Akaroa Harbour** | 26.51 | 194 | P | P | 02 23 42.7 | +0.5 |
| MHCZ | **Mount Hutt** | 26.53 | 197 | P | P | 02 23 41.9 | -0.6 |
| RACZ | **Rakaia** | 26.56 | 196 | P | P | 02 23 42.4 | -0.3 |
| GCSZ | **Gaunt Creek Bo** | 26.69 | 199 | P | P | 02 23 44.4 | +0.5 |
| WACZ | **Wakanui South** | 26.84 | 196 | P | P | 02 23 45.5 | +0.4 |
| R

comp=Z,2µm,0.9s
**CAN Canberra 33.53 233** P **P** **02 24 43.5 +1.0**
CAN pmax pmax
comp=Z,1µm,0.8s
**CAN Canberra 33.53 233** P **P** **02 24 43.7 +1.2**
**YNG Young 33.63 235** P **P** **02 24 45.0 +1.6**
**YNG Young 33.63 235** P **P** **02 24 44.6 +1.2**
comp=Z,2µm,1.6s
**PATS Pohnpei 34.04 315** P **P** **02 24 47.6 +0.7**
**PATS Pohnpei 34.04 315** P **P** **02 24 47.9 +1.0**
**PATS Pohnpei 34.04 315** P **P** **02 24 47.7 +0.7**
comp=Z,627nm,1.4s
**KAVG Kavieng 34.09 294** P **P** **02 24 47.6 +0.2**
**MILA Mila 34.09 230** P **P** **02 24 47.9 +0.7**
**MILA Mila 34.09 230** P **P** **02 24 48.1 +1.0**
comp=Z,618nm,1.4s
**AUCSH Cairns State H 34.24 267** P **P** **02 24 49.7 +1.1**
**PMG Port Moresby 34.64 280** P **P** **02 24 53.3 +1.4**
**PMG Port Moresby 34.64 280** P **P** **02 24 53.3 +1.4**
**PMG Port Moresby 34.64 280** S **S** **02 29 39.3 +0.2**
comp=Z,8.2nm,0.4s,baz=238,slow=22,SNR=21
PMG ScP **ScP** **02 29 55.5 +1.2**
comp=Z,86nm,0.9s,baz=50,slow=3.9,SNR=7.7
**PMG Port Moresby 34.64 280***ce*P **P** **02 24 53.0 +1.1**
PMG pmax pmax
comp=Z,1µm,1.0s
**PMG Port Moresby 34.64 280** P **P** **02 24 53.4 +1.5**
PMG PcP **PcP** **02 27 08.2 +0.7**
PMG ScP **ScP** **02 29 55.6 +1.2**
**CMSA Cobar Meteorol 35.03 241** P **P** **02 24 55.6 +0.6**
**CMSA Cobar Meteorol 35.03 241** P **P** **02 24 55.8 +0.8**
comp=Z,2µm,0.7s
**MTSU Mount Surprise 35.47 264** P **P** **02 24 59.2 +0.4**
**QLP Quilpie 35.49 250** P **P** **02 24 59.1 +0.3**
**QLP Quilpie 35.49 250** P **P** **02 24 59.1 +0.3**
comp=Z,4µm,0.6s
**JOHN Johnston Islan 35.91 14** P **P** **02 25 02.1 -0.2**
**JOHN Johnston Islan 35.91 14** P **P** **02 25 02.0 -0.2**
**JOHN Johnston Islan 35.91 14** P **P** **02 25 01.9 -0.3**
JOHN PcP **PcP** **02 27 10.7 -0.4**
**AUSSC Sale College, 36.02 230** P **P** **02 25 04.7 +1.8**
**GLAD Gladstone 36.62 225** P **P** **02 25 08.8 +1.0**
**TOO Toolangi 36.98 231** P **P** **02 25 11.9 +1.0**
**TOO Toolangi 36.98 231** P **P** **02 25 11.8 +0.9**
**TOO Toolangi 36.98 231** P **P** **02 25 12.2 +1.3**
comp=Z,2µm,1.1s
**TOO Toolangi 36.98 231** P **P** **02 25 11.8 +0.9**
TOO pmax pmax
comp=Z,1µm,1.0s
**AUMAG Moama Anglican 37.04 234** P **P** **02 25 12.1 +0.7**
**COEN Coen 37.22 271** P **P** **02 25 14.4 +1.3**
**COEN Coen 37.22 271** P **P** **02 25 14.1 +1.0**
comp=Z,3µm,0.5s
**CORO Coronation Par 37.41 225** P **P** **02 25 15.9 +1.7**
**MLBS Spotswood, Mel 37.52 231** P **P** **02 25 16.6 +1.5**
**MOO Moorlands 37.85 223** P **P** **02 25 18.8 +1.0**
**MOO Moorlands 37.85 223** P **P** **02 25 19.2 +1.4**
comp=Z,758nm,1.0s
**AUTAR Taroona High S 37.98 222** P **P** **02 25 18.9 +0.1**
**TAU Tasmania Unive 37.99 222** P **P** **02 25 19.6 +0.7**
**TAU Tasmania Unive 37.99 222** P **P** **02 25 20.3 +1.4**
TAU IAmb IAmb 02 25 21.4
comp=Z,370nm,0.9s
**TAU Tasmania Unive 37.99 222** P **P** **02 25 20.3 +1.4**
TAU pmax pmax
comp=Z,370nm,1.0s
**TAU Tasmania Unive 37.99 222** P **P** **02 25 19.9 +1.0**
TAU PcP **PcP** **02 27 18.9 +1.6**
**GEXS Deakin Univers 38.09 231** P **P** **02 25 21.2 +1.4**
**BRAT Ballarat 38.14 232** P **P** **02 25 21.9 +1.7**
**TAOE Nuku Hiva Isla 38.18 81** P **P** **02 25 22.1 +1.1**
**TAOE Nuku Hiva Isla 38.18 81** P **P** **02 25 22.2 +1.2**
TAOE IAmb IAmb 02 25 23.8
comp=Z,379nm,0.8s
**TAOE Nuku Hiva Isla 38.18 81** P **P** **02 25 22.2 +1.2**
TAOE PcP **PcP** **02 27 18.9 +0.3**
**STKA Stephens Creek 38.52 242** P **P** **02 25 24.5 +1.1**
**STKA Stephens Creek 38.52 242** P **P** **02 25 24.3 +0.9**
STKA IAmb IAmb 02 25 26.2
comp=Z,243nm,0.8s
**STKA Stephens Creek 38.52 242** P **P** **02 25 24.2 +0.9**
comp=Z,908nm,0.7s,baz=88,slow=9.2,SNR=459
STKA ScP **ScP** **02 30 09.7 +1.0**
comp=Z,69nm,1.0s,baz=100,slow=3.5,SNR=4.8
STKA S **S** **02 30 36.4 +0.4**
comp=Z,34nm,0.9s,baz=341,slow=23,SNR=3.7
comp=Z,908nm,0.7s
**STKA Stephens Creek 38.52 242***d i*P **P** **02 25 24.9 +1.5**
**INKA Innaminka 38.69 248** P **P** **02 25 26.1 +1.4**
**ARPS Mount Arapiles 39.48 234** P **P** **02 25 31.5 +0.5**
**ARPS Mount Arapiles 39.48 234** P **P** **02 25 31.5 +0.5**
comp=Z,863nm,0.9s
**QIS Mount Isa 39.68 260** P **P** **02 25 32.8 -0.1**
**QIS Mount Isa 39.68 260** P **P** **02 25 33.0 +0.2**
comp=Z,312nm,0.6s
**MCQ Macquarie Isla 40.09 201** P **P** **02 25 36.1 +0.6**
**MCQ Macquarie Isla 40.09 201** P **P** **02 25 36.3 +0.9**
MCQ IAmb IAmb 02 25 38.2
comp=Z,382nm,1.1s
**MCQ Macquarie Isla 40.09 201** P **P** **02 25 36.9 +1.4**
comp=Z,405nm,1.5s
**MCQ Macquarie Isla 40.09 201** P **P** **02 25 36.3 +0.9**
MCQ pmax pmax
comp=Z,382nm,1.1s
**WAKE Wake Island 40.21 338** P **P** **02 25 36.3 -0.5**
**WAKE Wake Island 40.21 338** P **P** **02 25 36.2 -0.7**
**H11N3 WAKE ISLAND Hy 40.52 338** P **P** **02 25 38.7 -0.4**
baz=172,slow=10,SNR=29
**H11N1 WAKE ISLAND Hy 40.52 338** P **P** **02 25 38.5 -0.6**
baz=172,slow=10,SNR=17
**H11N2 WAKE ISLAND Hy 40.53 338** P **P** **02 25 38.7 -0.5**
baz=172,slow=10,SNR=14
**HTT Hallett 41.02 240** P **P** **02 25 43.8 +0.5**
**HTT Hallett 41.02 240** P **P** **02 25 44.7 +1.4**
**LCRK Leigh Creek 41.17 245** P **P** **02 25 44.8 +0.4**
**MMPI Merauke 41.29 278** P **P** **02 25 47.1 +1.5**
comp=Z,2µm,1.6s
**GHSS Government Hou 41.57 238** P **P** **02 25 48.0 +0.5**
**TABU Tabubil 41.59 283** P **P** **02 25 49.7 +1.7**
**PTPS Port Pirie 41.74 241** P **P** **02 25 49.5 +0.7**
**WHYH Whyalla 42.07 241** P **P** **02 25 51.8 +0.4**
**JAY Jayapura 43.13 287** P **P** **02 26 00.8 +0.8**
**OOD Oodnadatta 43.16 249** P **P** **02 26 01.0 +1.0**
**BBOO Buckleboo 43.29 241** P **P** **02 26 01.2 +0.3**
**BBOO Buckleboo 43.29 241** P **P** **02 26 01.3 +0.3**
**BBOO Buckleboo 43.29 241** P **P** **02 26 01.3 +0.3**
comp=Z,2µm,0.8s
**GENI Genyem 43.59 286** P **P** **02 26 04.6 +1.1**
**GENI Genyem 43.59 286** P **P** **02 26 05.0 +1.5**
**MWH Moku'aweowe 43.70 32** P **P** **02 26 04.2 -0.5**
**HATHI Halema'uma'u T 43.81 32** IAmb IAmb 02 26 06.7
comp=Z,285nm,0.7s
**POHA Pohakuloa 43.96 32** P **P** **02 26 06.8 +0.4**
**POHA Pohakuloa 43.96 32** P **P** **02 26 06.5 +0.1**
**POHA Pohakuloa 43.96 32** P **P** **02 26 06.2 -0.2**
POHA ScP **ScP** **02 30 33.2 +2.4**
**KEKH Kekaha 44.01 25** P **P** **02 26 06.7 +0.2**
**PAH Pahoa 44.03 33** P **P** **02 26 07.3 +0.6**
**HPAH Hawaii Prepara 44.11 31** P **P** **02 26 08.0 +0.6**
**MHA Mahukona 44.14 31** P **P** **02 26 08.7 +1.2**
**MHA Mahukona 44.14 31** P **P** **02 26 08.7 +1.2**
**HON Honolulu 44.15 28** P **P** **02 26 08.5 +0.9**
**HON Honolulu 44.15 28** P **P** **02 26 08.5 +0.9**
HON pmax pmax
comp=Z,2µm,1.5s
**KIP Kipapa 44.23 28** P **P** **02 26 08.4 +0.2**
**KIP Kipapa 44.23 28** P **P** **02 26 08.2 0.0**
**KIP Kipapa 44.23 28** *i* P **P** **02 26 06.7 -1.5**
KIP pmax pmax
comp=Z,175nm,1.2s
**KIP Kipapa 44.23 28** P **P** **02 26 08.0 -0.2**
KIP PcP **PcP** **02 27 39.9 +1.5**
KIP ScP **ScP** **02 30 33.8 +2.3**
**HLK Haleakala 44.46 30** P **P** **02 26 10.7 +0.4**
**WR0 Warramunga Arr 44.47 260** P **P** **02 26 10.1 -0.1**
**KPA Kalaupapa 44.49 29** P **P** **02 26 10.6 +0.4**
**KPA Kalaupapa 44.49 29** P **P** **02 26 10.6 +0.4**
**KHLH Kahului Airpor 44.50 30** P **P** **02 26 11.2 +0.9**
**WB0 Warramunga Arr 44.63 260** P **P** **02 26 12.4 +0.9**
**WB2 Warramunga Arr 44.65 260** P **P** **02 26 11.5 -0.1**
**WRAB Tennant Creek 44.65 260** P **P** **02 26 12.1 +0.5**
**WRAB Tennant Creek 44.65 260** *i* P **P** **02 26 10.2 -1.4**
WRAB pmax pmax
comp=Z,506nm,1.1s
**WRA Warramunga Arr 44.66 260** P **P** **02 26 11.6 -0.1**
WRA IAmb IAmb 02 26 13.9
comp=Z,362nm,1.6s
**WRA Warramunga Arr 44.66 260** P **P** **02 26 11.0 -0.6**
comp=Z,563nm,0.5s,baz=96,slow=7.3,SNR=303
WRA PcP **PcP** **02 27 40.7 +0.5**
comp=Z,67nm,0.6s,baz=90,slow=4.1,SNR=5.5
WRA ScP **ScP** **02 30 34.7 +1.2**
comp=Z,34nm,0.8s,baz=97,slow=4.2,SNR=8.5
WRA S **S** **02 32 00.5 -3.7**
comp=Z,36nm,1.1s,baz=98,slow=14,SNR=7.0
WRA P4KPbc 03 03 54.6
comp=Z,1.7nm,0.8s,baz=90,slow=4.0,SNR=7.4
comp=Z,563nm,0.5s
**MULG Mulgathing 44.73 245** P **P** **02 26 12.0 0.0**
**AS31 Alice Springs 44.78 255** P **P** **02 26 12.9 +0.4**
**ASAR Alice Springs 44.78 255** P **P** **02 26 13.0 +0.4**
**ASAR Alice Springs 44.78 255** P **P** **02 26 13.4 +0.9**
comp=Z,968nm,0.5s,baz=87,slow=8.3,SNR=507
ASAR PcP **PcP** **02 27 40.9 +0.3**
comp=Z,129nm,0.6s,baz=97,slow=4.0,SNR=6.1
ASAR ScP **ScP** **02 30 35.4 +1.3**
comp=Z,64nm,0.7s,baz=101,slow=4.3,SNR=10.0
ASAR S **S** **02 32 04.4 -1.4**
comp=Z,58nm,0.6s,baz=89,slow=15,SNR=23
ASAR P4KPbc 03 03 54.6
comp=Z,1.6nm,0.6s,baz=92,slow=4.9,SNR=9.3
comp=Z,968nm,0.5s
**MIDW Midway 46.29 1** P **P** **02 26 23.2 -0.5**
**MIDW Midway 46.29 1** P **P** **02 26 23.0 -0.7**
**KDU Kakadu 47.66 269** P **P** **02 26 34.5 +0.3**
**KDU Kakadu 47.66 269** P **P** **02 26 34.2 -0.1**
comp=Z,991nm,0.7s
**GUMO Guam 48.23 309** P **P** **02 26 38.7 +0.3**
**GUMO Guam 48.23 309** P **P** **02 26 38.4 0.0**
**GUMO Guam 48.23 309** P **P** **02 26 38.2 -0.1**
comp=Z,539nm,0.6s,baz=157,slow=10.0,SNR=20
comp=Z,539nm,0.6s
**GUMO Guam 48.23 309** P **P** **02 26 38.4 0.0**
GUMO pmax pmax
comp=Z,452nm,0.7s
**GUMO Guam 48.23 309** P **P** **02 26 38.5 +0.1**
**MTN Manton Dam 48.90 269** P **P** **02 26 43.2 -0.2**
**MTN Manton Dam 48.90 269** P **P** **02 26 43.2 -0.2**
**MTN Manton Dam 48.90 269** P **P** **02 26 43.2 -0.2**
comp=Z,862nm,1.1s
**KMPI Kaimana, Papua 49.15 281** P **P** **02 26 45.3 +0.1**
comp=Z,1µm,1.1s
**DRS Darwin Rock St 49.21 269** P **P** **02 26 45.7 0.0**
**WRKA Warakurna 49.82 252** P **P** **02 26 50.2 +0.1**
**WRKA Warakurna 49.82 252** P **P** **02 26 50.1 +0.1**
comp=Z,2µm,1.0s
**FORT Forrest 49.92 245** P **P** **02 26 50.4 -0.3**
**FORT Forrest 49.92 245** P **P** **02 26 50.5 -0.1**
**FORT Forrest 49.92 245** P **P** **02 26 50.2 -0.5**
comp=Z,2µm,0.8s
**SAUI Saumlaki 50.01 275** P **P** **02 26 52.2 +0.7**
**SAUI Saumlaki 50.01 275** P **P** **02 26 52.1 +0.7**
**SAUI Saumlaki 50.01 275** P **P** **02 26 51.9 +0.4**
comp=Z,1µm,1.4s
**KNRA Kununurra 50.55 265** P **P** **02 26 55.7 +0.3**
**KNRA Kununurra 50.55 265** P **P** **02 26 55.6 +0.2**
comp=Z,721nm,0.8s
**FAKI Fak Fak 50.77 282** P **P** **02 26 56.8 -0.3**
**FAKI Fak Fak 50.77 282** P **P** **02 26 56.6 -0.5**
**FAKI Fak Fak 50.77 282** P **P** **02 26 56.7 -0.3**
comp=Z,557nm,1.7s
**BNDI Bandanaira 52.41 279** P **P** **02 27 09.1 +0.4**
**BNDI Bandanaira 52.41 279** P **P** **02 27 09.6 +0.9**
comp=Z,2µm,1.2s
**SWI Sorong 52.45 283** P **P** **02 27 09.3 +0.3**
**FITZ Fitoy Crossi 53.07 261** P **P** **02 27 14.2 +0.8**
**MSAI Masohi 53.72 280** P **P** **02 27 19.4 +1.4**
comp=Z,428nm,0.6s
**KMBL Kambalda 55.22 244** P **P** **02 27 27.8 -0.5**
**KMBL Kambalda 55.22 244** P **P** **02 27 27.5 -0.8**
comp=Z,534nm,1.4s
**DRV Dumont d'Urvil 55.29 199** P **P** **02 27 28.7 +0.7**
**NLAI Namlea 55.47 279** P **P** **02 27 31.0 +0.8**
comp=Z,733nm,1.3s
**LBMI Labuha 56.02 282** P **P** **02 27 35.5 +1.5**
comp=Z,789nm,1.2s
**SOEI Soe 56.18 270** P **P** **02 27 36.9 +1.7**
**SOEI Soe 56.18 270** P **P** **02 27 37.0 +1.7**
**SOEI Soe 56.18 270** P **P** **02 27 36.7 +1.5**
**BATI Baumata 56.64 270** P **P** **02 27 39.5 +1.3**
comp=Z,796nm,0.9s
**TNTI Ternate 56.67 284** P **P** **02 27 38.8 +0.4**
**TNTI Ternate 56.67 284** P **P** **02 27 38.4 0.0**
**TNTI Ternate 56.67 284** P **P** **02 27 39.6 +1.2**
comp=Z,800nm,1.1s,comp=Z,11µm
**SANI Sanana 56.92 280** P **P** **02 27 40.3 +0.2**
**SANI Sanana 56.92 280** P **P** **02 27 39.9 -0.2**
comp=Z,901nm,1.3s
**PSA00 Pilbara Seismi 57.91 256** P **P** **02 27 46.6 -0.1**
**PSA00 Pilbara Seismi 57.91 256** P **P** **02 27 46.5 -0.2**
**PSA00 Pilbara Seismi 57.91 256** P **P** **02 27 46.0 -0.8**
PSA00 IAmb IAmb 02 27 48.0
comp=Z,1µm,1.6s
**PSA00 Pilbara Seismi 57.91 256** P **P** **02 27 46.2 -0.5**
comp=Z,999nm,1.8s
**MBWA Marble Bar 58.08 256** P **P** **02 27 47.6 -0.2**
**MBWA Marble Bar 58.08 256** P **P** **02 27 47.6 -0.2**
**MBWA Marble Bar 58.08 256** P **P** **02 27 47.4 -0.4**
comp=Z,1µm,1.3s
**MBWA Marble Bar 58.08 256** P **P** **02 27 47.4 -0.4**
MBWA ScP **ScP** **02 31 32.9 +1.3**
**MEEK Meekatharra 58.38 250** P **P** **02 27 49.5 -0.4**
**MEEK Meekatharra 58.38 250** P **P** **02 27 49.2 -0.6**
comp=Z,820nm,0.9s
**MMRI Maumere 58.41 271** P **P** **02 27 50.1 -0.2**
**MMRI Maumere 58.41 271** P **P** **02 27 50.0 -0.2**
MMRI IAmb IAmb 02 27 50.7
comp=Z,561nm,0.7s
**MMRI Maumere 58.41 271** P **P** **02 27 50.2 0.0**
comp=Z,1µm,1.2s,comp=Z,20µm
**AUALB St Joseph's Co 58.48 240** P **P** **02 27 50.9 +0.6**
**KLBR Kellerberrin 58.73 244** P **P** **02 27 51.8 -0.3**
**KLBR Kellerberrin 58.73 244** P **P** **02 27 51.7 -0.4**
comp=Z,3µm,0.6s
**EDFI Ende, Flores 58.90 271** P **P** **02 27 53.3 -0.3**
comp=Z,946nm,1.3s
**BBSI Bau Bau 59.02 275** P **P** **02 27 56.4 +2.2**
comp=Z,377nm,1.3s
**NWAO Narrogin (SRO) 59.10 242** P **P** **02 27 54.9 +0.4**
**NWAO Narrogin (SRO) 59.10 242** P **P** **02 27 54.5 0.0**
**NWAO Narrogin (SRO) 59.10 242** P **P** **02 27 54.5 0.0**
NWAO pmax pmax
comp=Z,2µm,1.8s
**NWAO Narrogin (SRO) 59.10 242** P **P** **02 27 54.7 +0.2**
NWAO PcP **PcP** **02 28 34.8 0.0**
**RKGY Rocky Gully 59.25 240** P **P** **02 27 56.1 +0.7**
**RKGY Rocky Gully 59.25 240** P **P** **02 27 56.2 +0.7**
comp=Z,831nm,1.0s
**SGSI Sangihe 59.49 286** P **P** **02 27 57.5 +0.1**
comp=Z,1µm,1.1s
**BASI Baing, Sumba 59.56 269** P **P** **02 27 58.0 +0.2**
comp=Z,2µm,1.7s
**BLDU Ballidu 59.70 245** P **P** **02 27 58.2 -0.3**
**BLDU Ballidu 59.70 245** P **P** **02 27 57.8 -0.7**
comp=Z,755nm,1.6s
**KMSI Cibinong 59.73 282** P **P** **02 27 59.3 +0.3**
comp=Z,804nm,0.7s
**MUN Mundaring 60.03 243** P **P** **02 28 00.9 +0.3**
**MUN Mundaring 60.03 243** P **P** **02 28 00.7 0.0**
comp=Z,930nm,1.4s
**AUHAR St Anne's Scho 60.22 242** P **P** **02 28 03.0 +1.1**
**LUWI Luwuk 60.28 280** P **P** **02 28 03.5 +0.9**
**LUWI Luwuk 60.28 280** P **P** **02 28 03.2 +0.6**
**LUWI Luwuk 60.28 280** P **P** **02 28 03.6 +0.9**
comp=Z,1µm,1.5s
**MTKN Mount Kenneth 60.40 243** P **P** **02 28 05.2 +2.1**
**MTKN Mount Kenneth 60.40 243** P **P** **02 28 04.7 +1.7**
comp=Z,3µm,0.6s
**MORW Morawa 60.41 247** P **P** **02 28 03.0 -0.2**
**MORW Morawa 60.41 247** P **P** **02 28 03.0 -0.2**
**MORW Morawa 60.41 247** P **P** **02 28 02.7 -0.5**
comp=Z,464nm,1.4s
**GTOI Gorontalo 60.66 281** P **P** **02 28 06.9 +1.9**
comp=Z,226nm,0.9s
**BSSI Bau Bau, Buton 60.79 273** P **P** **02 28 06.4 +0.5**
comp=Z,536nm,1.2s
**WBSI Waikabubak, Su 60.84 269** P **P** **02 28 06.8 +0.5**
comp=Z,361nm,1.0s
**DAV Davao City (W) 60.84 289** P **P** **02 28 06.8 +0.5**
**DAV Davao City (W) 60.84 289** P **P** **02 28 05.8 -0.5**
DAV IAmb IAmb 02 28 08.2
comp=Z,335nm,0.9s
**DAV Davao City (W) 60.84 289** P **P** **02 28 05.9 -0.3**
comp=Z,289nm,0.7s,baz=133,slow=3.4,SNR=12
DAV S **S** **02 35 36.3 -1.0**
comp=Z,127nm,0.4s,baz=240,slow=18,SNR=1.2
comp=Z,289nm,0.7s
**H01W1 Cape Leeuwin H 61.56 240** P **P** **02 28 11.5 +1.1**
baz=112,slow=6.7,SNR=33
**H01W3 Cape Leeuwin H 61.58 240** P **P** **02 28 12.5 +2.1**
baz=112,slow=6.7,SNR=19
**H01W2 Cape Leeuwin H 61.58 240** P **P** **02 28 10.7 +0.3**
baz=112,slow=6.7,SNR=16
**BNSI Bone 61.69 275** P **P** **02 28 13.5 +1.8**
comp=Z,753nm,1.5s
**KAPI Kappang 61.83 274** P **P** **02 28 13.1 +0.4**
**KAPI Kappang 61.83 274** P **P** **02 28 13.2 +0.5**
**KAPI Kappang 61.83 274** P **P** **02 28 13.1 +0.4**
comp=Z,121nm,0.5s,baz=115,slow=3.2,SNR=58
comp=Z,121nm,0.5s
**KAPI Kappang 61.83 274***d i*P **P** **02 28 11.9 -0.8**
KAPI pmax pmax
comp=Z,219nm,1.1s
**SPSI Sidrap Palu 62.14 275** P **P** **02 28 14.0 -0.7**
**PLAI Plampang 62.60 269** P **P** **02 28 17.6 0.0**
**PLAI Plampang 62.60 269** P **P** **02 28 17.8 +0.2**
comp=Z,1µm,1.3s
**GIRL Giralia 62.88 253** P **P** **02 28 20.5 +1.3**
**GIRL Giralia 62.88 253** P **P** **02 28 20.6 +1.3**
**TOLI2 Tolitoli 62.91 281** P **P** **02 28 19.5 -0.1**
**TOLI2 Tolitoli 62.91 281** P **P** **02 28 20.4 +0.8**
TOLI2 IAmb IAmb 02 28 20.9
comp=Z,626nm,1.3s
**TWSI Taliwang, Sumb 63.47 269** P **P** **02 28 23.8 +0.6**
comp=Z,2µm,1.2s,comp=Z,31µm
**RPN Rapa Nui 63.53 112** P **P** **02 28 25.5 +2.2**
comp=Z,69nm,0.8s,baz=294,slow=18,SNR=2.7
comp=Z,69nm,0.8s
**CCD Concordia, Ant 64.48 194** P **P** **02 28 29.4 +0.4**
CCD pP **pwP** **02 30 35.6 +2.0**
**JHJ2 Mitsune 64.95 322** P **P** **02 28 32.0 0.0**
**JHJ Hachijo jima 2 64.98 322** P **P** **02 28 31.6 -0.6**
comp=Z,337nm,0.7s,baz=94,slow=7.8,SNR=10
comp=Z,337nm,0.7s
**DNP Denpasar 65.08 269** P **P** **02 28 33.6 +0.3**
**IGBI Denpasar 65.10 269** P **P** **02 28 33.4 0.0**
**SRBI Singaraja 65.24 269** P **P** **02 28 33.9 -0.4**
comp=Z,841nm,1.4s,comp=Z,13µm
**SMKI Samarinda 65.71 278** P **P** **02 28 40.1 +2.8**
comp=Z,670nm,1.3s
**BKB Balikpapan 65.73 277** P **P** **02 28 39.7 +2.3**
**CASY Casey 65.79 205** P **P** **02 28 37.4 +0.6**
CASY IAmb IAmb 02 28 38.8
comp=Z,594nm,1.1s
**CASY Casey 65.79 205** P **P** **02 28 37.0 +0.3**
CASY pP **pwP** **02 30 43.6 0.0**
**JAGI Jajag, Banyuwa 66.14 269** P **P** **02 28 38.9 -1.0**
**JAGI Jajag, Banyuwa 66.14 269** P **P** **02 28 38.6 -1.3**
comp=Z,1µm,0.9s,comp=Z,20µm
**MYLDM Lahad Datu 66.52 284** P **P** **02 28 43.5 +1.3**
**JSG Sagara 67.01 322** P **P** **02 28 45.4 +0.6**
**MTKI Muara Teweh, K 67.72 277** P **P** **02 28 50.2 +0.6**
comp=Z,320nm,1.3s,comp=Z,19µm
**JMM Marumori 67.86 326** P **P** **02 28 50.1 +0.2**
**JMM Marumori 67.86 326** P **P** **02 28 50.1 +0.2**
**JGF Kuroka 68.15 322** P **P** **02 28 51.7 0.0**
**JGF Kuroka 68.15 322** P **P** **02 28 51.7 0.0**
**GRJI Gresik 68.17 270** P **P** **02 28 53.4 +1.1**
comp=Z,1µm,1.4s
**INU Inuyama 68.17 322** P **P** **02 28 52.1 +0.3**
**INU Inuyama 68.17 322** P **P** **02 28 51.6 -0.2**
**MJAR Matsushiro Arr 68.32 323** P **P** **02 28 52.0 -0.7**
comp=Z,33nm,0.7s,baz=156,slow=5.8,SNR=120
MJAR PKPPKP **P'P'df** **02 56 60.0 -0.4**
comp=Z,12nm,1.2s,baz=294,slow=2.6,SNR=8.2
comp=Z,33nm,0.7s
**MJAR Matsushiro Arr 68.32 323** P **P** **02 28 52.0 -0.7**
**MAJO Matsushiro 68.32 323** P **P** **02 28 52.5 -0.3**
**MAJO Matsushiro 68.32 323** P **P** **02 28 52.4 -0.3**
**MAJO Matsushiro 68.32 323** P **P** **02 28 52.4 -0.3**
MAJO pmax pmax
comp=Z,58nm,0.9s
**MAJO Matsushiro 68.32 323** P **P** **02 28 52.2 -0.5**
MAJO PcP **PcP** **02 29 13.2 +0.4**
MAJO pP **pwP** **02 31 01.9 +1.7**
**PWJI Pagerwojo 68.49 268** P **P** **02 28 53.9 -0.3**
comp=Z,814nm,1.2s,comp=Z,13µm
**JOW Kunigami 68.58 310** P **P** **02 28 55.7 +1.2**
**JOW Kunigami 68.58 310** P **P** **02 28 55.3 +0.8**
**JOW Kunigami 68.58 310** P **P** **02 28 54.3 -0.2**
comp=Z,80nm,0.9s,baz=146,slow=6.6,SNR=13
comp=Z,80nm,0.9s
**KKM Kota Kinabalu 68.95 284** P **P** **02 28 57.5 +0.4**
**KKM Kota Kinabalu 68.95 284** P **P** **02 28 57.4 +0.4**
KKM IAmb IAmb 02 28 58.8
comp=Z,597nm,1.3s
**JMN Monobe 68.99 319** P **P** **02 28 57.3 +0.5**
**JMN Monobe 68.99 319** P **P** **02 28 57.0 +0.2**
**NGJI Ngawi 69.01 269** P **P** **02 28 59.1 +1.8**
comp=Z,482nm,1.3s
**JSD Sado 69.35 325** P **P** **02 28 59.0 +0.2**
**JSD Sado 69.35 325** P **P** **02 28 59.3 +0.4**
**AMKA Amchitka 69.45 358** P **P** **02 28 58.3 -0.8**
**UGM Wanagama 69.74 268** P **P** **02 29 01.7 0.0**
**UGM Wanagama 69.74 268** P **P** **02 29 01.6 0.0**
**UGM Wanagama 69.74 268** P **P** **02 29 01.7 0.0**
**UWJI Ujung Watu 69.77 270** P **P** **02 29 02.9 +1.1**
comp=Z,984nm,1.6s
**ERM Erimo 69.82 330** P **P** **02 29 03.3 +1.8**
**ERM Erimo 69.82 330** P **P** **02 29 03.1 +1.7**
**ERM Erimo 69.82 330** P **P** **02 29 03.1 +1.7**
ERM pmax pmax
comp=Z,71nm,1.3s
**JEM Erimo 69.82 330** P **P** **02 29 03.6 +2.1**
**JTM Tenmabayashi 69.89 328** P **P** **02 29 02.3 +0.3**
**JTM Tenmabayashi 69.89 328** P **P** **02 29 02.2 +0.3**
**KIWB Kanaga Island 69.90 1** P **P** **02 29 01.3 -0.4**
**SMRI Semarang 70.07 269** P **P** **02 29 04.1 +0.5**
**SMRI Semarang 70.07 269** P **P** **02 29 04.0 +0.3**
**SMRI Semarang 70.07 269** P **P** **02 29 04.2 +0.6**
comp=Z,1µm,1.2s
**GSTR Great Sitkin T 70.16 1** P **P** **02 29 03.1 -0.2**
**KUR Kuril'sk 70.36 335** *e*P **P** **02 29 04.5 -0.1**
KUR *e* 02 29 21.1
KUR *e*S **S** **02 37 28.5 +0.2**
KUR pmax pmax
comp=Z,325nm,1.3s
**JNU Nakatsue 70.53 316** P **P** **02 29 05.9 0.0**
**JNU Nakatsue 70.53 316** P **P** **02 29 05.4 -0.5**
**JNU Nakatsue 70.53 316** P **P** **02 29 05.8 -0.2**
comp=Z,9.3nm,0.6s,baz=90,slow=2.4,SNR=12
JNU PKP2bc **P'P'bc** **02 56 53.6 -3.1**
comp=Z,31nm,1.1s,baz=5.4,slow=4.3,SNR=9.4
**CLES Cleveland East 71.24 5** P **P** **02 29 09.8 +0.2**
**YOJ Yonaguni jima 71.28 305** P **P** **02 29 10.7 +0.3**
**YOJ Yonaguni jima 71.28 305** IAmb IAmb 02 29 12.3
comp=Z,440nm,1.1s
**STKI Sintang 71.28 276** P **P** **02 29 11.7 +1.0**
comp=Z,643nm,1.4s
**KPJI Karang Pucung 71.42 268** P **P** **02 29 11.4 -0.1**
comp=Z,661nm,1.4s
**NIKH Nikolski High 71.48 6** P **P** **02 29 10.5 -0.5**
**JKA Kamikawa-asahi 71.71 331** IAmb IAmb 02 29 15.4
comp=Z,327nm,1.5s
**ASAJ Asahikawa 71.71 331** P **P** **02 29 13.3 +0.9**
comp=Z,64nm,0.8s,baz=218,slow=9.1,SNR=24
comp=Z,64nm,0.8s
**QSPA South Pole Qui 71.72 180** P **P** **02 29 13.7 +1.2**
**QSPA South Pole Qui 71.72 180** P **P** **02 29 13.1 +0.7**
comp=Z,552nm,1.0s,baz=19,slow=1.1,SNR=459
QSPA S **S** **02 37 43.4 +0.2**
comp=Z,12nm,1.1s,baz=201,slow=22,SNR=20
QSPA PKP2bc **P'P'bc** **02 56 48.7 -5.0**
comp=Z,13nm,1.1s,baz=190,slow=1.7,SNR=8.0
comp=Z,552nm,1.0s
**QSPA South Pole Qui 71.72 180** P **P** **02 29 13.6 +1.2**
QSPA pP **pwP** **02 31 24.9 +4.2**
**CMJI Cimerak 71.75 268** P **P** **02 29 12.5 -0.9**
comp=Z,682nm,1.3s
**TWGBT Beinan 71.98 302** P **P** **02 29 13.2 -1.4**
**YULB Yu-li 72.09 303** P **P** **02 29 14.6 -0.6**
**NACB Ninganchiao 72.25 304** P **P** **02 29 15.7 -0.3**
**NACB Ninganchiao 72.25 304** IAmb IAmb 02 29 17.4

comp=Z,418nm,1.1s
**JCJI Jatiwangi 72.29 269** P **P** **02 29 16.6 +0.1**
comp=Z,2µm,1.3s
**SKR Severo-Kuril's 72.32 343***ce*P **P** **02 29 14.7 -1.1**
**SSLB Suanglung 72.56 303** P **P** **02 29 17.1 -0.8**
**SSLB Suanglung 72.56 303** P **P** **02 29 17.0 -0.9**
SSLB IAmb IAmb 02 29 17.9
comp=Z,297nm,1.2s
**TPUB Ta-pu 72.58 302** P **P** **02 29 17.0 -1.0**
**TPUB Ta-pu 72.58 302** P **P** **02 29 17.2 -0.8**
**BBJI Bungbulang 72.60 268** P **P** **02 29 17.8 -0.6**
**UNV Unalaska Valle 72.60 7** P **P** **02 29 16.3 -1.0**
**UNV Unalaska Valle 72.60 7** P **P** **02 29 16.4 -1.0**
baz=192,SNR=10
**YHNB Yeheng 72.67 304** P **P** **02 29 18.6 +0.1**
**YHNB Yeheng 72.67 304** P **P** **02 29 18.3 -0.3**
YHNB IAmb IAmb 02 29 19.6
comp=Z,255nm,1.1s
**TATO Taipei 72.73 304** P **P** **02 29 18.8 0.0**
**TATO Taipei 72.73 304** P **P** **02 29 18.8 0.0**
TATO IAmb IAmb 02 29 19.8
comp=Z,453nm,1.2s
**KSM Kuching 72.85 277** P **P** **02 29 20.5 +0.8**
**LVA Lava Point 72.97 8** P **P** **02 29 18.8 -0.7**
LVA IAmb IAmb 02 29 19.4
comp=Z,214nm,0.7s
**CNJI Cibinong 73.14 268** P **P** **02 29 20.7 -0.7**
comp=Z,464nm,1.2s
**XMI Christmas Isla 73.61 264** P **P** **02 29 25.0 +0.9**
**XMIS Christmas Isla 73.64 264** P **P** **02 29 24.8 +0.6**
**DBJI Dramaga 73.72 268** P **P** **02 29 24.5 -0.2**
comp=Z,1µm,1.4s
**SKJI Sukabumi 73.77 268** P **P** **02 29 24.4 -0.6**
comp=Z,2µm,1.2s
**PET Petropavlovsk 73.82 346** P **P** **02 29 23.9 -0.4**
**PET Petropavlovsk 73.82 346** P **P** **02 29 23.9 -0.4**
PET IAmb IAmb 02 29 25.0
comp=Z,299nm,1.5s
**PET Petropavlovsk 73.82 346***ce*P **P** **02 29 23.6 -0.7**
PET pmax pmax
comp=Z,225nm,1.7s
**PET Petropavlovsk 73.82 346** P **P** **02 29 23.9 -0.4**
comp=Z,147nm,0.9s
**YSS Yuzh-Sakhalins 73.85 333** P **P** **02 29 26.0 +1.4**
**YSS Yuzh-Sakhalins 73.85 333** P **P** **02 29 25.6 +1.0**
**YSS Yuzh-Sakhalins 73.85 333***ce*P **P** **02 29 25.5 +0.9**
YSS pmax pmax
comp=Z,188nm,1.0s
**TNG Tangerang 73.93 269** P **P** **02 29 26.6 +0.7**
comp=Z,1µm,1.7s,comp=Z,14µm
TNG P **P** **02 29 26.5 +0.7**
comp=Z,2µm,1.7s
**FALS False Pass 74.00 9** P **P** **02 29 24.6 -0.7**
**FALS False Pass 74.00 9** P **P** **02 29 23.7 -1.6**
baz=195,SNR=6.2
**PEA0B Petropavlovsk- 74.12 345** P **P** **02 29 26.2 +0.1**
PEA0B IAmb IAmb 02 29 27.3
comp=Z,307nm,0.9s
**PEA0B Petropavlovsk- 74.12 345***ce*P **P** **02 29 26.4 +0.4**
**PETK Petropavlovsk- 74.12 345** P **P** **02 29 25.6 -0.4**
comp=Z,161nm,0.8s,baz=105,slow=5.5,SNR=106
PETK pP **pP** **02 31 33.1 -0.1**
comp=Z,8.1nm,0.8s,baz=110,slow=8.3,SNR=2.3
PETK PP **PP** **02 32 26.1 +2.2**
comp=Z,31nm,1.0s,baz=120,slow=8.8,SNR=4.8
PETK PKiKP **PKiKP** **02 35 10.9 -1.5**
comp=Z,3.6nm,0.6s,baz=116,slow=5.0,SNR=3.5
comp=Z,161nm,0.8s
**SBJI Serang 74.43 269** P **P** **02 29 28.6 -0.1**
comp=Z,1µm,1.4s,comp=Z,18µm
**CNBA Chernabura Isl 74.60 11** IAmb IAmb 02 29 29.2
comp=Z,440nm,1.4s
**CHNA Chernabura Isl 74.61 11** P **P** **02 29 27.9 -0.7**
baz=198
**TJN Taejon 74.80 317** P **P** **02 29 30.7 +0.5**
**TJN Taejon 74.80 317***ce*P **P** **02 29 30.5 +0.3**
**KNMB Chin-men Tao 74.94 303** P **P** **02 29 31.9 +0.6**
KNMB IAmb IAmb 02 29 33.0
comp=Z,258nm,1.2s
**SDPT Sand Point 74.94 10** P **P** **02 29 29.9 -0.6**
**SDPT Sand Point 74.94 10** P **P** **02 29 29.9 -0.6**
**SDPT Sand Point 74.94 10** P **P** **02 29 29.3 -1.2**
baz=198,SNR=7.0
**QZH Quanzhou 75.00 303** P **P** **02 29 32.1 +0.5**
QZH pmax pmax
comp=Z,240nm,1.1s
**P08K Saint George I 75.01 5** P **P** **02 29 30.5 -0.3**
baz=189
**S12K Black Hills 75.03 9** P **P** **02 29 30.0 -1.0**
baz=196,SNR=9.3
**KSRS Korea Array 75.10 318** P **P** **02 29 32.1 +0.3**
comp=Z,11nm,1.0s,baz=139,slow=6.2,SNR=36
KSRS PKiKP **PKiKP** **02 35 13.7 -0.6**
comp=Z,1.0nm,0.6s,baz=168,slow=1.3,SNR=5.7
KSRS PKPPKP **P'P'df** **02 56 49.0 +0.2**
comp=Z,0.8nm,0.8s,baz=319,slow=4.8,SNR=4.2
**KSAR Wonju Array Be 75.11 318** P **P** **02 29 31.8 -0.1**
**KSAR Wonju Array Be 75.11 318** P **P** **02 29 31.8 -0.1**
**KS19 Wonju Array Si 75.16 318** P **P** **02 29 32.4 +0.2**
**BLSI Bandar Lampung 75.50 269** P **P** **02 29 34.4 -0.2**
comp=Z,733nm,1.1s,comp=Z,14µm
**SPIA Saint Paul Isl 75.53 5** P **P** **02 29 34.1 +0.4**
**SPIA Saint Paul Isl 75.53 5** P **P** **02 29 33.5 -0.2**
baz=188
**PPBI Pangkal Pinang 75.63 273** P **P** **02 29 36.0 +0.7**
comp=Z,391nm,1.3s
**H06S1 SOCORRO T 75.70 64** P **P** **02 29 37.3 +1.7**
SNR=30
**H06E1 SOCORRO T-PHAS 75.75 64** P **P** **02 29 37.7 +1.8**
SNR=51
**UGL Uglegorsk 75.80 334** *e*P **P** **02 29 35.8 +0.4**
UGL pmax pmax
comp=Z,160nm,0.9s
**INCN Inchon 75.93 318** P **P** **02 29 37.7 +1.2**
**INCN Inchon 75.93 318** P **P** **02 29 36.9 +0.4**
**INCN Inchon 75.93 318** P **P** **02 29 36.9 +0.4**
INCN pmax pmax
comp=Z,143nm,1.5s
**SNCC San Nicolas Is 76.00 48** P **P** **02 29 37.5 +0.6**
**S14K Fog Glacier 76.00 11** P **P** **02 29 35.8 -0.7**
baz=198,SNR=16
**KASI Kota Agung 76.16 269** P **P** **02 29 37.2 -1.0**
comp=Z,1µm,1.2s,comp=Z,16µm
**CHGN Chignik 76.22 11** IAmb IAmb 02 29 38.0
comp=Z,327nm,0.9s
**CHGN Chignik 76.22 11** P **P** **02 29 36.9 -0.6**
baz=200,SNR=6.4
**MSHR Mys Shultsa 76.41 324***ce*P **P** **02 29 39.5 +0.6**
MSHR pmax pmax
comp=Z,54nm,1.0s
**MCCM Marconi Confer 76.54 42** P **P** **02 29 40.2 +0.5**
**PSTR Posyet 76.66 324** *i*P **P** **02 29 40.9 +0.7**
**SAO San Andreas Ge 76.66 44** P **P** **02 29 41.4 +0.9**
SAO IAmb IAmb 02 29 43.2
comp=Z,204nm,0.8s
**SAO San Andreas Ge 76.66 44** P **P** **02 29 41.4 +0.9**
SAO pmax pmax
comp=Z,204nm,0.9s
**PMBI Palembang 76.68 271** P **P** **02 29 42.9 +1.8**
**PMBI Palembang 76.68 271** P **P** **02 29 42.0 +0.9**
PMBI IAmb IAmb 02 29 43.8
comp=Z,358nm,1.0s
**PMBI Palembang 76.68 271** P **P** **02 29 43.6 +2.5**
comp=Z,426nm,1.2s,comp=Z,12µm
**LWLI Liwa 76.73 269** P **P** **02 29 40.7 -0.8**
comp=Z,919nm,1.4s,comp=Z,18µm
**PMPB Monarch Peak 76.77 44** P **P** **02 29 42.3 +1.2**
PMPB IAmb IAmb 02 29 44.0
comp=Z,229nm,0.9s
**BBGB Big Mountain B 76.82 44** P **P** **02 29 43.0 +1.6**
BBGB IAmb IAmb 02 29 44.7
comp=Z,452nm,1.3s
**HOPS Hopland Field 76.93 41** P **P** **02 29 42.4 +0.6**
HOPS IAmb IAmb 02 29 44.5
comp=Z,238nm,1.1s
**TYV Tymovskoe 76.97 336** *e*P **P** **02 29 42.4 +0.7**
TYV *e*S **S** **02 38 35.6 -4.5**
TYV pmax pmax
comp=Z,74nm,1.3s
TYV smax smax
comp=N,21nm,1.9s
TYV smax smax
comp=E,22nm,1.9s
TYV smax smax
comp=N,2µm,9.1s
TYV smax smax

comp=E,4µm,9.1s
**GDXM Geysers 76.99 41** P **P** **02 29 43.0 +0.7**
**BCW Bitter Crk WRg 77.00 46** P **P** **02 29 43.2 +0.8**
BCW IAmb IAmb 02 29 45.5
comp=Z,261nm,0.8s
**KCPM Cahto Peak 77.03 40** P **P** **02 29 43.6 +1.1**
KCPM IAmb IAmb 02 29 45.3
comp=Z,368nm,1.3s
**USA0B Ussuriysk Arra 77.03 326** P **P** **02 29 42.8 +0.5**
**USA0B Ussuriysk Arra 77.03 326** *i*P **P** **02 29 43.7 +1.4**
**USRK Ussuriysk Ar. 77.03 326** P **P** **02 29 42.6 +0.3**
**USRK Ussuriysk Ar. 77.03 326** P **P** **02 29 42.2 0.0**
comp=Z,13nm,0.8s,baz=146,slow=3.7,SNR=28
comp=Z,13nm,0.8s
**USRK Ussuriysk Ar. 77.03 326** P **P** **02 29 42.6 +0.3**
**KMPM Mount Pierce 77.15 39** P **P** **02 29 43.8 +0.7**
KMPM IAmb IAmb 02 29 46.1
comp=Z,360nm,1.1s
**KMRM Mail Ridge 77.28 40** P **P** **02 29 44.9 +1.1**
KMRM IAmb IAmb 02 29 46.8
comp=Z,440nm,0.9s
**CCX Cicese 77.31 50** P **P** **02 29 45.2 +1.2**
**SII Sitkinak Islan 77.32 13** P **P** **02 29 43.3 -0.2**
**SII Sitkinak Islan 77.32 13** P **P** **02 29 43.6 +0.1**
baz=204
**TJX Tijuana 77.36 49** P **P** **02 29 44.9 +0.6**
TJX IAmb IAmb 02 29 47.1
comp=Z,350nm,0.7s
**HKPS Hong Kong Po S 77.42 299** P **P** **02 29 45.0 +0.2**
**HKPS Hong Kong Po S 77.42 299** P **P** **02 29 45.5 +0.7**
HKPS IAmb IAmb 02 29 47.5
comp=Z,335nm,1.2s
**PASC Pasadena Art C 77.43 47** P **P** **02 29 44.9 +0.2**
PASC IAmb IAmb 02 29 46.8
comp=Z,167nm,0.8s
**JCC Jacoby Creek, 77.44 39** P **P** **02 29 45.3 +0.8**
JCC IAmb IAmb 02 29 47.4
comp=Z,306nm,1.3s
**109C Camp Elliot, M 77.52 49** P **P** **02 29 45.9 +0.8**
**109C Camp Elliot, M 77.52 49** P **P** **02 29 46.3 +1.2**
baz=238,SNR=28
**CBX Cerro Bola 77.54 50** P **P** **02 29 46.6 +1.1**
CBX IAmb IAmb 02 29 48.1
comp=Z,191nm,0.7s
**R16K Pilot Point 77.57 11** P **P** **02 29 45.2 +0.4**
**R16K Pilot Point 77.57 11** P **P** **02 29 44.2 -0.6**
baz=200
**KRPM Rodgers 77.66 39** P **P** **02 29 47.4 +1.6**
KRPM IAmb IAmb 02 29 49.0
comp=Z,329nm,1.2s
**KHMM Horse Mountain 77.66 39** P **P** **02 29 47.4 +1.5**
KHMM IAmb IAmb 02 29 48.9
comp=Z,258nm,1.2s
**ELS Elsinore Mount 77.69 48** P **P** **02 29 47.0 +0.8**
**TKX Tecate 77.71 50** P **P** **02 29 47.3 +1.0**
TKX IAmb IAmb 02 29 48.7
comp=Z,405nm,1.7s
**VTX Valle De La Tr 77.71 51** P **P** **02 29 47.4 +1.1**
**O02D Mt. Diablo Mer 77.81 40** P **P** **02 29 48.0 +1.3**
O02D IAmb IAmb 02 29 49.8
comp=Z,266nm,1.1s
**R17L Mt. Peulik Vol 77.86 12** P **P** **02 29 46.5 +0.1**
baz=201,SNR=16
**PLK4 Peulik 4 77.86 12** P **P** **02 29 46.6 0.0**
**ESJX Sierra Juarez 77.90 50** P **P** **02 29 48.6 +1.1**
**KRMB Red Mountain 77.95 39** P **P** **02 29 48.6 +1.1**
KRMB IAmb IAmb 02 29 50.5
comp=Z,284nm,1.3s
**MNAI Manna 77.97 269** P **P** **02 29 48.3 +0.2**
**MNAI Manna 77.97 269** P **P** **02 29 47.2 -0.9**
**MNAI Manna 77.97 269** P **P** **02 29 48.1 0.0**
comp=Z,1µm,0.8s,comp=Z,27µm
**MONP2 Monument Peak 78.01 49** P **P** **02 29 49.6 +1.5**
baz=239,SNR=187
**ISA Isabella, Lake 78.04 46** IAmb IAmb 02 29 51.2
comp=Z,202nm,0.9s
**RMX La Rumorosa 78.11 50** P **P** **02 29 49.9 +1.3**
RMX IAmb IAmb 02 29 51.4
comp=Z,190nm,0.8s
**OHAK Old Harbor 78.12 14** P **P** **02 29 47.5 -0.3**
**OHAK Old Harbor 78.12 14** IAmb IAmb 02 29 49.1
comp=Z,269nm,0.8s
**OHAK Old Harbor 78.12 14** P **P** **02 29 48.1 +0.3**
baz=204,SNR=15
**TPRI Tanjung Pinang 78.13 275** P **P** **02 29 49.6 +0.7**
comp=Z,454nm,1.2s
**KSXB Camp Six Broad 78.16 38** P **P** **02 29 50.0 +1.4**
**JMBI JAMBI 78.16 272** P **P** **02 29 51.0 +2.0**
comp=Z,792nm,1.2s,comp=Z,11µm
**KBO Bosley Butte 78.19 38** P **P** **02 29 49.4 +0.8**
KBO IAmb IAmb 02 29 51.7
comp=Z,325nm,1.4s
**R18K Karluk 78.19 13** P **P** **02 29 48.3 +0.2**
baz=203
**SFX San Felipe 78.23 52** P **P** **02 29 49.6 +0.6**
**NJ2 Nanjing 78.30 309**⇓*i*P **P** **02 29 50.1 +0.8**
NJ2 pmax pmax
comp=Z,79nm,1.0s
**PFO Pinyon Flats O 78.36 49** P **P** **02 29 50.7 +0.9**
**PFO Pinyon Flats O 78.36 49** P **P** **02 29 50.6 +0.9**
baz=239,SNR=36
**PFO Pinyon Flats O 78.36 49** P **P** **02 29 50.7 +0.9**
PFO pmax pmax
comp=Z,87nm,1.1s
**TPFO Pinon Flats 78.36 49** P **P** **02 29 50.6 +0.8**
baz=239,SNR=34
**SRIG Santa Rosalia 78.45 56** P **P** **02 29 51.0 +0.7**
**Q17K Contact Creek 78.54 12** P **P** **02 29 49.8 -0.4**
baz=202
**O14K Tigyukauivet M 78.56 9** P **P** **02 29 49.3 -0.8**
baz=196
**MDJ Mudanjiang 78.60 325** P **P** **02 29 51.1 +0.5**
**MDJ Mudanjiang 78.60 325** P **P** **02 29 51.8 +1.1**
MDJ S **SKSac** **02 39 05.1 -1.5**
MDJ pmax pmax
comp=Z,110nm,1.1s
**MDJ Mudanjiang 78.60 325** P **P** **02 29 51.2 +0.5**
**SLBS Sierra La Lagu 78.68 60** P **P** **02 29 53.0 +1.4**
SLBS IAmb IAmb 02 29 55.1
comp=Z,197nm,0.9s
**GUVIX Guadalupe Vict 78.69 50** P **P** **02 29 52.8 +1.3**
GUVIX IAmb IAmb 02 29 54.8
comp=Z,487nm,1.5s
**MDPB Devils Postpil 78.71 44** IAmb IAmb 02 29 54.2
comp=Z,202nm,0.8s
**O15K Ungalikthiuk R 78.71 10** P **P** **02 29 50.5 -0.4**
baz=198,SNR=10
**Q16K King Salmon 78.78 11** P **P** **02 29 51.0 -0.2**
baz=201,SNR=14
**YBH Yreka Blue Hor 78.79 39** P **P** **02 29 53.0 +1.2**
YBH IAmb IAmb 02 29 54.6
comp=Z,194nm,0.7s
**YBH Yreka Blue Hor 78.79 39** S **S** **02 39 01.1 +1.4**
comp=Z,0.3nm,0.3s,baz=70,slow=22,SNR=0.9
YBH PKKPbc PKKPbc 02 48 40.3 -1.2
comp=Z,0.9nm,0.6s,baz=59,slow=8.0,SNR=5.3
**YBH Yreka Blue Hor 78.79 39** P **P** **02 29 53.0 +1.2**
YBH pmax pmax
comp=Z,194nm,0.7s
**KDAK Kodiak Island 78.79 14** P **P** **02 29 51.2 -0.1**
KDAK IAmb IAmb 02 29 53.6
comp=Z,355nm,1.1s
**KDAK Kodiak Island 78.79 14** P **P** **02 29 51.5 +0.2**
baz=205
**KDAK Kodiak Island 78.79 14** P **P** **02 29 51.2 -0.1**
KDAK pmax pmax
comp=Z,355nm,1.1s
**EMB Emerald Bay 78.80 42** P **P** **02 29 53.2 +1.1**
**K02D Willamette Mer 78.81 38** P **P** **02 29 52.7 +0.8**
**P16K Nushagak River 78.88 11** P **P** **02 29 51.4 -0.3**
baz=200,SNR=17
**J01E Myrtle Point 78.94 37** IAmb IAmb 02 29 55.5
comp=Z,184nm,0.9s
**WAKR Walker 78.96 43** IAmb IAmb 02 29 55.8
comp=Z,262nm,0.9s
**BTDF Bukit Timah Da 78.98 275** P **P** **02 29 54.3 +0.9**
**HATC Hat Creek Radi 79.00 40** IAmb IAmb 02 29 55.7
comp=Z,360nm,0.8s
**MPK Martis Peak 79.02 42** P **P** **02 29 55.1 +1.7**
**MYKOM Kota Tinggi 79.05 276** P **P** **02 29 53.8 0.0**
MYKOM IAmb IAmb 02 29 55.8
comp=Z,272nm,1.0s
**M11K Mekoryuk 79.06 6** P **P** **02 29 53.8 +1.1**
baz=192,SNR=10
**Q18K Katmai Hardscr 79.07 12** P **P** **02 29 52.5 -0.5**

baz=202,SNR=46
**N14K Kuskokwak Cree 79.15 8** P **P** **02 29 53.3 +0.2**
baz=196,SNR=61
**PNTR Pine Nut 79.18 43** IAmb IAmb 02 29 56.8
comp=Z,392nm,0.9s
**GLA Glamis 79.25 50** P **P** **02 29 55.5 +1.1**
GLA IAmb IAmb 02 29 57.6
comp=Z,203nm,1.0s
**GLA Glamis 79.25 50** P **P** **02 29 55.5 +1.1**
GLA pmax pmax
comp=Z,203nm,1.0s
**DSP Deep Springs 79.30 45** IAmb IAmb 02 29 57.4
comp=Z,186nm,1.0s
**P17K Kvichak River 79.31 11** P **P** **02 29 53.2 -0.8**
baz=201,SNR=25
**YERR Yerington 79.36 43** IAmb IAmb 02 29 57.5
comp=Z,280nm,0.7s
**O16K Kokwok River B 79.39 10** IAmb IAmb 02 29 54.7
comp=Z,219nm,1.0s
**O16K Kokwok River B 79.39 10** P **P** **02 29 53.3 -1.1**
baz=200,SNR=31
**M13K Dall Lake 79.41 7** P **P** **02 29 55.4 +0.9**
baz=194,SNR=12
**LHV Little Huntoon 79.43 44** IAmb IAmb 02 29 58.1
comp=Z,238nm,0.9s
**GRNR Gornyy 79.47 333**⇓*i*P **P** **02 29 55.8 +0.7**
GRNR pmax pmax
comp=Z,70nm,1.2s
**GRAC Grapevine Rang 79.51 45** IAmb IAmb 02 29 58.5
comp=Z,191nm,0.7s
**PIX Pinacate 79.52 52** P **P** **02 29 57.1 +1.3**
**Q20K Shuyak Island 79.59 13** P **P** **02 29 55.3 -0.2**
baz=205,SNR=9.3
**SYI Shuyak Island 79.59 13** IAmb IAmb 02 29 56.9
comp=Z,367nm,1.1s
**I03D Drain, OR 79.61 37** IAmb IAmb 02 29 58.4
comp=Z,170nm,0.8s
**Q19K Cape Douglas, 79.61 13** IAmb IAmb 02 29 56.6
comp=Z,419nm,0.9s
**Q19K Cape Douglas, 79.61 13** P **P** **02 29 55.5 -0.1**
baz=204,SNR=9.6
**N15K Kwethluk River 79.62 9** IAmb IAmb 02 29 57.4
comp=Z,522nm,1.4s
**N15K Kwethluk River 79.62 9** P **P** **02 29 56.1 +0.5**
baz=198,SNR=30
**NVAR Mina Array Bea 79.66 44** P **P** **02 29 57.6 +1.0**
comp=Z,105nm,0.6s,baz=224,slow=8.4,SNR=312
NVAR pP **pP** **02 32 07.7 +1.1**
comp=Z,19nm,1.0s,baz=226,slow=8.9,SNR=6.1
NVAR PKiKP **PKiKP** **02 35 21.8 +0.2**
comp=Z,1.0nm,0.7s,baz=224,slow=3.8,SNR=3.0
NVAR S **S** **02 39 12.6 +3.6**
comp=Z,0.9nm,0.9s,baz=243,slow=7.0,SNR=1.9
NVAR PKKPbc **PKKPbc** **02 48 39.8 +0.3**
comp=Z,1.2nm,0.5s,baz=49,slow=4.9,SNR=14
NVAR PKPPKP **P'P'df** **02 56 41.4 +0.2**
comp=Z,4.0nm,0.9s,baz=90,slow=1.2,SNR=13
comp=Z,105nm,0.6s
**PAHR Pah Rah Range 79.67 42** IAmb IAmb 02 29 59.1
comp=Z,362nm,1.3s
**P18K Big Mountain, 79.72 12** P **P** **02 29 56.4 +0.1**
**P18K Big Mountain, 79.72 12** P **P** **02 29 55.8 -0.4**
baz=202,SNR=12
**QIZ Qiongzhong 79.73 294** P **P** **02 29 57.6 +0.4**
QIZ pmax pmax
comp=Z,81nm,1.5s
**QIZ Qiongzhong 79.73 294** P **P** **02 29 57.2 +0.1**
**O17K Koliganek Bris 79.73 11** P **P** **02 29 56.0 -0.2**
baz=200
**NV11 Mina Array Sit 79.76 44** IAmb IAmb 02 29 59.6
comp=Z,247nm,1.1s
**K04D Chiloquin, OR 79.89 39** P **P** **02 29 58.8 +1.1**
K04D IAmb IAmb 02 30 00.2
comp=Z,220nm,1.0s
**WCT Wildcat Mounta 79.90 46** IAmb IAmb 02 30 00.3
comp=Z,336nm,1.6s
**M14K Bethel 79.91 8** IAmb IAmb 02 29 58.9
comp=Z,476nm,1.4s
**M14K Bethel 79.91 8** P **P** **02 29 57.6 +0.5**
baz=196,SNR=29
**DL2 Dalian 79.98 317** P **P** **02 29 58.5 +0.5**
DL2 S **S** **02 39 14.3 +2.6**
DL2 pmax pmax
comp=Z,68nm,1.2s
**M15K Kasigluk River 80.03 9** P **P** **02 29 58.0 +0.3**
baz=197,SNR=52
**N16K Nishlik Lake 80.11 10** P **P** **02 29 58.9 +0.6**
baz=199,SNR=40
**BUCK Buck Mountain 80.12 37** IAmb IAmb 02 30 01.3
comp=Z,352nm,1.1s
**KVN Kaiserville 80.13 43** IAmb IAmb 02 30 01.4
comp=Z,189nm,0.8s
**O18K Koktuh Hills 80.15 12** P **P** **02 29 58.1 -0.3**
baz=202,SNR=62
**COR Corvallis 80.18 36** P **P** **02 29 59.9 +1.0**
COR IAmb IAmb 02 30 01.6
comp=Z,181nm,0.9s
**COR Corvallis 80.18 36** P **P** **02 29 59.9 +1.0**
COR pmax pmax
comp=Z,181nm,0.9s
**214A Organ Pipe Nat 80.19 52** P **P** **02 30 00.5 +1.1**
baz=241,SNR=70
**I04A Tendick Farm, 80.21 37** IAmb IAmb 02 30 01.2
comp=Z,194nm,1.0s
**TPNV Topopah Spring 80.24 46** P **P** **02 30 00.8 +1.2**
baz=238,SNR=126
**HEBO Mount Hebo 80.31 36** P **P** **02 30 00.7 +1.0**
HEBO IAmb IAmb 02 30 02.4
comp=Z,349nm,0.9s
**P19K Oil Pt 80.36 13** P **P** **02 29 59.5 0.0**
baz=204,SNR=15
**SNY Shenyang 80.39 320**⇓P **P** **02 30 00.3 +0.3**
SNY pmax pmax
comp=Z,28nm,1.5s
SNY pmax pmax
comp=Z,8µm,12.0s
**L14K Kuka Creek 80.39 8** IAmb IAmb 02 30 01.5
comp=Z,270nm,1.1s
**L14K Kuka Creek 80.39 8** P **P** **02 30 00.2 +0.6**
baz=195,SNR=48
**N17K Nushagak Hills 80.42 10** P **P** **02 29 59.6 -0.2**
baz=200,SNR=27
**CN2 Changchun 80.43 322** P **P** **02 30 00.8 +0.6**
CN2 pmax pmax
comp=Z,90nm,1.0s
**H04D Lebanon 80.46 37** IAmb IAmb 02 30 03.0
comp=Z,440nm,1.2s
**BNX BinXian 80.51 325**⇓P **P** **02 30 00.8 +0.2**
BNX pmax pmax
comp=Z,93nm,1.0s
**KLR Kul'dur 80.54 329** P **P** **02 30 00.8 +0.1**
comp=Z,14nm,1.0s,baz=101,slow=3.4,SNR=29
**KLR Kul'dur 80.54 329***ce*P **P** **02 29 59.3 -1.4**
KLR pmax pmax
comp=Z,27nm,1.3s
**G03D McMinnville, O 80.58 36** IAmb IAmb 02 30 03.5
comp=Z,481nm,1.2s
**M16K Timber Creek 80.60 9** P **P** **02 30 01.7 +1.0**
baz=199,SNR=133
**Q09A Carvers 80.62 44** IAmb IAmb 02 30 04.0
comp=Z,322nm,0.7s
**O19K Port Alsworth 80.64 12** P **P** **02 30 01.0 +0.1**
baz=203
**CNPM China Poot 80.68 14** IAmb IAmb 02 30 02.4
comp=Z,200nm,0.6s
**HOM Homer 80.70 13** P **P** **02 30 01.3 +0.1**
**HOM Homer 80.70 13** P **P** **02 30 01.5 +0.3**
baz=206,SNR=5.6
**SMAI San Martin Ant 80.71 159** IAmb IAmb 02 30 04.3
comp=Z,539nm,1.2s
**K13K Kusilvak Mount 80.74 6** IAmb IAmb 02 30 03.4
comp=Z,290nm,1.2s
**K13K Kusilvak Mount 80.74 6** P **P** **02 30 02.3 +0.9**
baz=193
**N18K Kilae Creek 80.80 11** P **P** **02 30 01.5 -0.2**
baz=202,SNR=18
**F03A Seaside 80.87 35** IAmb IAmb 02 30 04.9
comp=Z,298nm,1.1s
**L15K Ungalak Mounta 80.87 8** P **P** **02 30 02.6 +0.5**
baz=196
**H04A Detroit Lake 80.87 37** IAmb IAmb 02 30 04.4
comp=Z,259nm,0.7s
**O20K Slope Mountain 80.88 13** P **P** **02 30 02.0 -0.3**
baz=205,SNR=12
**S11A Rachel 80.95 46** IAmb IAmb 02 30 05.7
comp=Z,243nm,0.8s
**WHN Wuhan 80.95 306** P **P** **02 30 03.6 +0.4**

WHN S **S** **02 39 23.3 +1.4**
WHN pmax pmax
comp=Z,160nm,1.3s
**BRLK Bradley Lake** **80.97 14** P **P** **02 30 02.3 -0.4**
BRLK IAmb IAmb 02 30 03.7
comp=Z,302nm,0.9s
**BRSE Bradley Lake S** **80.98 14** P **P** **02 30 02.6 -0.1**
baz=206,SNR=30
**CNSH ChangSha** **80.99 304** P **P** **02 30 02.6 -0.9**
CNSH pmax pmax
comp=Z,120nm,1.2s
**RADR Rader Ridge** **81.04 35** IAmb IAmb 02 30 06.0
comp=Z,200nm,0.9s
**I05D Terrebonne, OR** **81.15 37** P **P** **02 30 04.7 +0.7**
I05D IAmb IAmb 02 30 06.5
comp=Z,288nm,1.0s
**N19K Bonanza Creek** **81.18 12** IAmb IAmb 02 30 04.4
comp=Z,295nm,1.1s
**N19K Bonanza Creek** **81.18 12** P **P** **02 30 03.1 -0.7**
baz=203,SNR=56
**L16K Owhat River** **81.18 9** IAmb IAmb 02 30 05.7
comp=Z,449nm,1.1s
**L16K Owhat River** **81.18 9** P **P** **02 30 04.0 +0.3**
baz=198,SNR=106
**RSO Redoubt South** **81.20 12** P **P** **02 30 03.5 -0.5**
**M17K Holitna River** **81.21 10** P **P** **02 30 05.1 +1.3**
baz=200,SNR=118
**BKNI Bangkinang** **81.24 273** P **P** **02 30 05.9 +0.8**
**BKNI Bangkinang** **81.24 273** P **P** **02 30 06.0 +0.8**
comp=Z,785nm,1.4s,comp=Z,11µm
**E03A Lebam** **81.25 35** IAmb IAmb 02 30 06.8
comp=Z,404nm,0.9s
**F04D Rainier, OR** **81.26 35** P **P** **02 30 05.4 +0.9**
F04D IAmb IAmb 02 30 07.2
comp=Z,363nm,0.8s
**HG4B Hotspring** **81.36 27** IAmb IAmb 02 30 06.9
comp=Z,222nm,1.0s
**PDSI Padang** **81.40 272** P **P** **02 30 04.5 -1.5**
comp=Z,293nm,1.2s
**R11B Troy Canyon, C** **81.42 45** P **P** **02 30 06.5 +0.7**
baz=239,SNR=132
**BMN Battle Mountai** **81.45 42** IAmb IAmb 02 30 08.3
comp=Z,328nm,1.0s
**COCO West Island** **81.45 260** P **P** **02 30 07.6 +1.5**
**COCO West Island** **81.45 260** P **P** **02 30 06.7 +0.6**
**COCO West Island** **81.45 260** P **P** **02 30 06.7 +0.6**
COCO pmax pmax
comp=Z,1µm,1.5s
**K15K Wolf Creek Mou** **81.46 8** P **P** **02 30 05.7 +0.6**
baz=196,SNR=219
**DIB Dawson Inlet,** **81.47 26** IAmb IAmb 02 30 07.6
comp=Z,191nm,1.1s
**H02S1 DAWSON INLET T** **81.47 26** P **P** **02 30 06.2 +0.9**
SNR=168
**WISH Wishkah** **81.49 34** IAmb IAmb 02 30 08.4
comp=Z,285nm,0.9s
**F04A Amboy** **81.50 36** IAmb IAmb 02 30 07.8
comp=Z,298nm,0.9s
**HOOD Mount Hood Mea** **81.56 37** IAmb IAmb 02 30 08.2
comp=Z,292nm,1.0s
**M18K Stony River** **81.56 11** P **P** **02 30 06.0 +0.3**
baz=202,SNR=35
**HOLB Holberg** **81.59 30** IAmb IAmb 02 30 08.0
comp=Z,191nm,0.8s
**C03A Quillayute Air** **81.59 33** P **P** **02 30 07.1 +1.0**
C03A IAmb IAmb 02 30 09.1
comp=Z,323nm,0.9s
**SEW Seward** **81.60 14** P **P** **02 30 05.5 -0.3**
baz=208,SNR=21
**NLWA Neilton Lookou** **81.61 34** IAmb IAmb 02 30 08.8
comp=Z,243nm,1.0s
**TIA Tai'an** **81.62 312** P **P** **02 30 06.8 +0.3**
TIA pmax pmax
comp=Z,43nm,1.0s
**MA2 Magadan** **81.64 345** P **P** **02 30 05.2 -0.8**
**MA2 Magadan** **81.64 345** P **P** **02 30 05.2 -0.8**
**MA2 Magadan** **81.64 345** P **P** **02 30 04.9 -1.2**
comp=Z,69nm,0.8s,baz=146,slow=5.7,SNR=26
MA2 pP **pP** **02 32 17.0 +0.2**
comp=Z,10nm,1.0s,baz=153,slow=4.4,SNR=1.9
comp=Z,69nm,0.8s
**MA2 Magadan** **81.64 345** *ce* P **P** **02 30 05.2 -0.8**
MA2 pmax pmax
comp=Z,201nm,1.7s
**MA2 Magadan** **81.64 345** P **P** **02 30 05.3 -0.8**
comp=Z,162nm,1.2s,comp=Z,12µm
**J14K Nanvaranak Lak** **81.65 7** IAmb IAmb 02 30 07.7
comp=Z,157nm,0.9s
**J14K Nanvaranak Lak** **81.65 7** P **P** **02 30 06.5 +0.5**
baz=194,SNR=38
**WVOR Wild Horse Val** **81.67 40** IAmb IAmb 02 30 09.3
comp=Z,319nm,1.1s
**G05A Wamic** **81.70 37** IAmb IAmb 02 30 09.0
comp=Z,259nm,1.0s
**L17K Donlin** **81.76 9** P **P** **02 30 07.5 +0.8**
baz=199,SNR=70
**Q23K Middleton Isla** **81.77 16** P **P** **02 30 07.2 +0.5**
Q23K IAmb IAmb 02 30 08.0
comp=Z,529nm,1.2s
**Q23K Middleton Isla** **81.77 16** P **P** **02 30 06.8 +0.1**
baz=211
**MID Middleton Isla** **81.77 16** P **P** **02 30 07.2 +0.5**
MID IAmb IAmb 02 30 08.0
comp=Z,499nm,1.2s
**MID Middleton Isla** **81.77 16** P **P** **02 30 07.2 +0.5**
MID pmax pmax
comp=Z,499nm,1.2s
**CAPN Captain Cook N** **81.81 13** P **P** **02 30 06.6 -0.3**
**CAPN Captain Cook N** **81.81 13** P **P** **02 30 07.0 +0.2**
baz=206
**GULI GuiLin** **81.82 300** ⇓P **P** **02 30 08.8 +1.0**
GULI pmax pmax
comp=Z,190nm,1.2s
**O22K Cooper Landing** **81.87 14** P **P** **02 30 07.0 -0.2**
baz=207,SNR=19
**TUC Tucson** **81.88 52** P **P** **02 30 09.8 +1.8**
TUC IAmb IAmb 02 30 11.4
comp=Z,191nm,1.0s
**TUC Tucson** **81.88 52** P **P** **02 30 09.8 +1.8**
baz=242
**TUC Tucson** **81.88 52** P **P** **02 30 09.8 +1.8**
TUC pmax pmax
comp=Z,191nm,1.0s
**N20K Mount Spurr** **81.98 12** P **P** **02 30 07.0 -0.9**
baz=205,SNR=36
**SPCR Spurr Chakacha** **81.98 12** P **P** **02 30 07.0 -0.9**
baz=205,SNR=30
**GAMB Gambell** **82.01 3** P **P** **02 30 08.6 +0.8**
baz=186,SNR=14
**I07A Izee** **82.08 38** IAmb IAmb 02 30 11.4
comp=Z,263nm,0.9s
**G06A Carlson Farm,** **82.09 37** IAmb IAmb 02 30 10.9
comp=Z,211nm,1.1s
**L18K Granite Mounta** **82.10 10** IAmb IAmb 02 30 10.3
comp=Z,276nm,0.9s
**L18K Granite Mounta** **82.10 10** P **P** **02 30 09.3 +0.9**
baz=201
**UBPT Khong Chiam** **82.17 289** P **P** **02 30 10.3 +0.6**
**M19K Big River Lodg** **82.21 11** IAmb IAmb 02 30 09.8
comp=Z,149nm,0.7s
**M19K Big River Lodg** **82.21 11** P **P** **02 30 08.9 0.0**
baz=203
**B04A Port Angeles** **82.22 34** IAmb IAmb 02 30 11.8
comp=Z,180nm,0.9s
**GNW Green Mountain** **82.27 34** IAmb IAmb 02 30 11.8
comp=Z,196nm,0.8s
**J08A Circle Bar Ran** **82.28 40** IAmb IAmb 02 30 12.2
comp=Z,484nm,1.3s
**Q12A Willow Creek R** **82.28 45** IAmb IAmb 02 30 12.5
comp=Z,236nm,0.9s
**K17K Iditarod** **82.31 9** IAmb IAmb 02 30 11.3
comp=Z,204nm,1.1s
**K17K Iditarod** **82.31 9** P **P** **02 30 10.1 +0.7**
baz=199,SNR=43
**LCMT Little Creek M** **82.34 47** IAmb IAmb 02 30 13.0
comp=Z,155nm,0.9s
**FIS Fire Island** **82.36 13** P **P** **02 30 10.1 +0.5**
**CLRS Cowichan Lake** **82.37 33** IAmb IAmb 02 30 12.1
comp=Z,153nm,0.9s
**X16A Lo Mia Camp, P** **82.38 50** IAmb IAmb 02 30 14.3
comp=Z,153nm,0.9s
**L19K White Mountain** **82.38 11** IAmb IAmb 02 30 12.0
comp=Z,304nm,1.0s
**L19K White Mountain** **82.38 11** P **P** **02 30 09.9 +0.2**
baz=202,SNR=103
**RC01 Rabbit Creek A** **82.41 14** IAmb IAmb 02 30 10.9
comp=Z,356nm,1.1s
baz=207,SNR=35
**RC01 Rabbit Creek A** **82.41 14** P **P** **02 30 09.7 -0.2**
**M20K Styx River** **82.42 12** P **P** **02 30 09.0 -1.0**
baz=204
**CBB Campbell River** **82.52 31** IAmb IAmb 02 30 12.9
comp=Z,262nm,1.1s
**CCUT Cedar City** **82.53 47** P **P** **02 30 12.3 +0.9**
**SUA Susitna One** **82.53 13** IAmb IAmb 02 30 11.7
comp=Z,278nm,0.7s
**SUA Susitna One** **82.53 13** P **P** **02 30 10.2 -0.4**
baz=206,SNR=61
**PWL Port Wells** **82.53 14** IAmb IAmb 02 30 11.3
comp=Z,345nm,0.8s
**PWL Port Wells** **82.53 14** P **P** **02 30 09.9 -0.6**
baz=209,SNR=58
**J16K Anvik River** **82.53 8** IAmb IAmb 02 30 12.4
comp=Z,182nm,0.7s
**J16K Anvik River** **82.53 8** P **P** **02 30 11.0 +0.5**
baz=197,SNR=72
**HIN Hinchinbrook I** **82.57 15** P **P** **02 30 10.3 -0.5**
HIN IAmb IAmb 02 30 11.7
comp=Z,204nm,0.9s
**SISI Saibi** **82.58 271** P **P** **02 30 12.6 +0.7**
comp=Z,218nm,1.3s
**IPM Ipoh** **82.58 277** P **P** **02 30 12.6 +0.7**
**319A Douglas** **82.59 54** P **P** **02 30 13.5 +1.8**
319A IAmb IAmb 02 30 15.2
comp=Z,323nm,0.9s
**PGC Sidney** **82.61 33** IAmb IAmb 02 30 13.3
comp=Z,181nm,0.9s
**KNB Kanab** **82.64 47** P **P** **02 30 13.1 +1.2**
KNB IAmb IAmb 02 30 14.8
comp=Z,173nm,0.9s
**KNB Kanab** **82.64 47** P **P** **02 30 13.1 +1.2**
KNB pmax pmax
comp=Z,173nm,0.9s
**BBB Bella Bella** **82.64 28** P **P** **02 30 11.3 0.0**
BBB IAmb IAmb 02 30 13.1
comp=Z,142nm,0.8s
**PSUT Pine Spring** **82.68 46** IAmb IAmb 02 30 14.4
comp=Z,129nm,0.8s
**KAIM Kayak Island** **82.71 16** IAmb IAmb 02 30 13.6
comp=Z,380nm,0.9s
**KAIM Kayak Island** **82.71 16** P **P** **02 30 12.5 +1.1**
baz=212,SNR=18
**U15A North Rim** **82.72 48** IAmb IAmb 02 30 15.5
comp=Z,294nm,0.9s
**SKT Skwentna** **82.83 12** P **P** **02 30 10.8 -1.3**
**SKT Skwentna** **82.83 12** P **P** **02 30 10.3 -1.8**
baz=206,SNR=25
**L20K Farewell, AK** **82.83 11** P **P** **02 30 11.6 -0.5**
baz=203,SNR=47
**GLI Glacier Island** **82.84 15** P **P** **02 30 11.4 -0.6**
baz=210,SNR=115
**J17K VABM Dome** **82.85 9** P **P** **02 30 12.4 +0.4**
baz=198,SNR=45
**CRAG Craig** **82.87 24** P **P** **02 30 13.6 +1.3**
**CRAG Craig** **82.87 24** P **P** **02 30 13.1 +0.8**
baz=223,SNR=21
**F07A Phinny Hill Vi** **82.87 37** IAmb IAmb 02 30 14.8
comp=Z,145nm,0.8s
**EYAK Cordova Ski Ar** **82.89 16** P **P** **02 30 11.9 -0.4**
**EYAK Cordova Ski Ar** **82.89 16** P **P** **02 30 11.9 -0.4**
EYAK IAmb IAmb 02 30 13.3
comp=Z,158nm,0.9s
**EYAK Cordova Ski Ar** **82.89 16** P **P** **02 30 11.9 -0.4**
baz=211,SNR=38
**ELK Elko** **82.90 43** IAmb IAmb 02 30 15.4
comp=Z,172nm,1.1s
**ELK Elko** **82.90 43** S **SKSac** **02 39 38.6 +2.7**
comp=Z,0.5nm,0.4s,baz=319,slow=20,SNR=11
ELK PKKPbc PKKPbc 02 48 32.0 -0.3
comp=Z,1.1nm,0.5s,baz=61,slow=3.4,SNR=5.0
**M22K Willow** **82.92 13** P **P** **02 30 11.8 -0.6**
baz=207,SNR=63
**WUAZ Wupatki** **82.94 49** IAmb IAmb 02 30 16.9
comp=Z,167nm,1.1s
**WUAZ Wupatki** **82.94 49** P **P** **02 30 14.4 +1.0**
baz=242,SNR=84
**GRNB Grenville Isla** **82.98 26** IAmb IAmb 02 30 15.1
comp=Z,168nm,1.1s
**KNK Knik Glacier** **82.99 14** IAmb IAmb 02 30 13.8
comp=Z,253nm,0.8s
**KNK Knik Glacier** **82.99 14** P **P** **02 30 12.5 -0.3**
baz=208,SNR=66
**PMR Palmer** **83.00 14** P **P** **02 30 12.3 -0.5**
**PMR Palmer** **83.00 14** P **P** **02 30 12.0 -0.8**
baz=208,SNR=110
**RAGM Ragged Mountai** **83.03 16** IAmb IAmb 02 30 14.4
comp=Z,391nm,1.2s
**MXC Moxie City** **83.06 36** IAmb IAmb 02 30 15.8
comp=Z,191nm,1.1s
**G08A Pilot Rock** **83.08 38** IAmb IAmb 02 30 16.1
comp=Z,401nm,1.4s
**HMT Hamilton** **83.10 16** IAmb IAmb 02 30 14.6
comp=Z,208nm,0.9s
**I17K Unalakleet** **83.10 8** P **P** **02 30 13.9 +0.6**
baz=197,SNR=18
**BGLC Bering Glacier** **83.18 17** P **P** **02 30 14.5 +0.8**
baz=213
**RUBB Prince Rupert** **83.20 26** P **P** **02 30 14.4 +0.5**
**KULM Kulim** **83.20 278** IAmb IAmb 02 30 17.2
comp=Z,461nm,1.3s
**PKCU Pink Cliffs** **83.20 47** IAmb IAmb 02 30 18.4
comp=Z,328nm,1.1s
**SIT Sitka** **83.24 22** P **P** **02 30 14.9 +0.8**
**SIT Sitka** **83.24 22** IAmb IAmb 02 30 15.9
comp=Z,226nm,1.4s
**SIT Sitka** **83.24 22** P **P** **02 30 14.6 +0.6**
baz=221,SNR=28
**ANM Nome** **83.24 6** P **P** **02 30 14.8 +0.8**
**ANM Nome** **83.24 6** P **P** **02 30 14.1 +0.1**
baz=192
**ANM Nome** **83.24 6** P **P** **02 30 14.8 +0.8**
ANM pmax pmax
comp=Z,88nm,1.2s
**LTY Liberty** **83.25 35** IAmb IAmb 02 30 16.4
comp=Z,132nm,0.8s
**DUN6 Lazy B Ranch** **83.26 53** P **P** **02 30 16.2 +1.2**
**J18K Innoko River** **83.27 10** IAmb IAmb 02 30 15.7
comp=Z,244nm,0.8s
**J18K Innoko River** **83.27 10** P **P** **02 30 14.5 +0.3**
baz=201,SNR=169
**E07A Sunnyside** **83.30 36** IAmb IAmb 02 30 17.1
comp=Z,280nm,1.0s
**HEH HeiHe** **83.34 328** *eP* **P** **02 30 15.0 +0.2**
HEH SKS **SKSac** **02 39 36.9 -0.8**
HEH S **S** **02 39 48.6 +3.9**
HEH pmax pmax
comp=Z,38nm,0.7s
**U33K Whale Pass** **83.34 24** IAmb IAmb 02 30 16.8
comp=Z,192nm,0.8s
**U33K Whale Pass** **83.34 24** P **P** **02 30 15.4 +0.8**
baz=223,SNR=74
**V35K Ketchikan** **83.35 25** IAmb IAmb 02 30 16.8
comp=Z,172nm,1.0s
**V35K Ketchikan** **83.35 25** P **P** **02 30 15.4 +0.7**
baz=224,SNR=54
**SML Sawmill** **83.36 14** P **P** **02 30 14.5 -0.2**
baz=209,SNR=41
**PMSA Palmer Station** **83.37 157** P **P** **02 30 16.6 +1.8**
PMSA IAmb IAmb 02 30 17.5
comp=Z,232nm,1.2s
**PMSA Palmer Station** **83.37 157** *eP* **P** **02 30 15.9 +1.1**
**PMSA Palmer Station** **83.37 157** *eP* **P** **02 30 15.8 +1.0**
**DIV Divide** **83.38 15** P **P** **02 30 15.0 +0.1**
DIV IAmb IAmb 02 30 15.9
comp=Z,316nm,0.8s
**HAWA Hanford** **83.39 37** IAmb IAmb 02 30 17.5
comp=Z,336nm,1.1s
**CUT Chulitna** **83.47 13** P **P** **02 30 14.5 -0.6**
baz=207,SNR=68
**M23K Glacier View** **83.49 14** P **P** **02 30 14.7 -0.7**
baz=209,SNR=54
**MAW Mawson** **83.49 200** P **P** **02 30 15.8 +0.5**
comp=Z,202nm,0.9s,baz=121,slow=6.1,SNR=196
MAW S **SKSac** **02 39 37.9 -0.5**
comp=Z,5.3nm,1.0s,baz=286,slow=19,SNR=5.8
comp=Z,202nm,0.9s
**BMRM Bremner River** **83.54 16** P **P** **02 30 15.8 +0.2**
**BMRM Bremner River** **83.54 16** P **P** **02 30 15.5 -0.1**
baz=212,SNR=108
**MTPU Mount Pierson** **83.58 47** P **P** **02 30 17.9 +1.2**
MTPU IAmb IAmb 02 30 20.1
comp=Z,149nm,1.0s
**MESA MESA** **83.60 17** P **P** **02 30 16.5 +0.4**
baz=214,SNR=87
**K20K Telida** **83.61 11** IAmb IAmb 02 30 17.1
comp=Z,254nm,0.8s
**K20K Telida** **83.61 11** P **P** **02 30 15.8 0.0**
baz=203,SNR=147
**S31K Pelican** **83.61 21** IAmb IAmb 02 30 18.0
comp=Z,220nm,0.9s
**S31K Pelican** **83.61 21** P **P** **02 30 16.7 +0.8**
baz=220,SNR=92
**SCM Sheep Creek Mo** **83.62 14** P **P** **02 30 15.9 -0.1**
**SCM Sheep Creek Mo** **83.62 14** P **P** **02 30 15.8 -0.1**
baz=210,SNR=171
**SCM Sheep Creek Mo** **83.62 14** P **P** **02 30 15.9 -0.1**
SCM pmax pmax
comp=Z,511nm,0.6s
**H16K Elim** **83.64 7** P **P** **02 30 15.8 -0.1**
baz=195,SNR=24
**KLU Klutina** **83.66 15** IAmb IAmb 02 30 17.3
comp=Z,228nm,1.2s
**KLU Klutina** **83.66 15** P **P** **02 30 15.8 -0.4**
baz=211,SNR=65
**E08A Dider Farm, El** **83.71 37** IAmb IAmb 02 30 19.0
comp=Z,160nm,0.7s
**YKU2 Yakutat** **83.72 19** P **P** **02 30 17.8 +1.4**
**YKU2 Yakutat** **83.72 19** P **P** **02 30 17.7 +1.2**
**CRQM Cirque** **83.75 17** IAmb IAmb 02 30 18.1
comp=Z,296nm,0.9s
**CRQE Cirque** **83.76 17** P **P** **02 30 16.9 +0.1**
baz=213,SNR=88
**MVU Marysvale** **83.79 46** P **P** **02 30 18.7 +1.0**
**G15K Niukluk** **83.79 6** P **P** **02 30 16.9 +0.2**
baz=194,SNR=27
**MSU Marysvale** **83.81 46** P **P** **02 30 18.2 +0.5**
**MSU Marysvale** **83.81 46** P **P** **02 30 18.3 +0.5**
**S32K Killisnoo** **83.81 22** P **P** **02 30 17.4 +0.5**
baz=221,SNR=41
**TGL Tana Glacier** **83.83 17** IAmb IAmb 02 30 18.5
comp=Z,406nm,1.1s
**ISLE Juniper Island** **83.84 17** IAmb IAmb 02 30 18.5
comp=Z,377nm,1.0s
**WRAK Wrangell Islan** **83.86 24** IAmb IAmb 02 30 19.2
comp=Z,172nm,0.8s
**WRAK Wrangell Islan** **83.86 24** P **P** **02 30 17.7 +0.5**
baz=223
**HNS HongShan** **83.89 313** ⇓P **P** **02 30 18.5 +0.7**
HNS pP **pP** **02 32 26.4 -3.9**
HNS pmax pmax
comp=Z,110nm,1.4s
**MFID Camas Ranch** **83.93 41** IAmb IAmb 02 30 20.4
comp=Z,156nm,1.0s
**PNL Peninsula** **83.93 19** P **P** **02 30 17.9 +0.4**
**PNL Peninsula** **83.93 19** P **P** **02 30 17.5 0.0**
baz=217,SNR=68
**J19K Poorman** **83.94 10** P **P** **02 30 17.8 +0.4**
baz=202,SNR=38
**W18A Petrified Fore** **83.94 50** IAmb IAmb 02 30 21.1
comp=Z,221nm,1.4s
**W18A Petrified Fore** **83.94 50** P **P** **02 30 18.4 0.0**
baz=243,SNR=32
**TNA Tin City** **84.01 4** P **P** **02 30 18.2 +0.5**
TNA IAmb IAmb 02 32 33.8
comp=Z,268nm,1.5s
**TNA Tin City** **84.01 4** P **P** **02 30 18.5 +0.7**
baz=190
**PCA Pinnacle** **84.02 18** P **P** **02 30 18.4 +0.4**
PCA IAmb IAmb 02 30 19.3
comp=Z,156nm,0.9s
**PINM Pinnacle** **84.02 18** P **P** **02 30 18.7 +0.7**
baz=216,SNR=22
**PSI Prapat** **84.03 275** P **P** **02 30 19.1 -0.1**
**F14K Arctic Creek** **84.05 5** P **P** **02 30 18.2 +0.2**
baz=192,SNR=11
**VRDI Verde Repeater** **84.06 16** IAmb IAmb 02 30 19.6
comp=Z,217nm,0.9s
**N25K Chitina, Valde** **84.09 15** P **P** **02 30 18.2 -0.1**
baz=212,SNR=204
**BCPM Bancas Point** **84.09 18** IAmb IAmb 02 30 19.8
comp=Z,182nm,1.1s
**D08A Wollman Farm,** **84.11 36** IAmb IAmb 02 30 21.0
comp=Z,234nm,1.0s
**GRNC Granite Creek** **84.11 17** IAmb IAmb 02 30 20.0
comp=Z,407nm,1.2s
**R31K City Hall, Gus** **84.13 21** P **P** **02 30 19.0 +0.5**
baz=220
**M24K Tolsona, Glenn** **84.13 15** P **P** **02 30 19.0 +0.5**
baz=210,SNR=97
**BJT Baijiatuau** **84.16 315** P **P** **02 30 19.6 +0.4**
**BJT Baijiatuau** **84.16 315** P **P** **02 30 19.5 +0.4**
**BJT Baijiatuau** **84.16 315** P **P** **02 30 19.5 +0.4**
BJT pmax pmax
comp=Z,189nm,1.5s
**BJI Beijing** **84.17 315** P **P** **02 30 19.5 +0.4**
BJI pmax pmax
comp=Z,36nm,1.3s
**WAT6 Susitna Watana** **84.18 14** P **P** **02 30 18.1 -0.8**
baz=209,SNR=172
**LYN LuoYang** **84.18 309** ⇓P **P** **02 30 20.3 +1.0**
LYN S **S** **02 39 58.3 +4.6**
LYN pmax pmax
comp=Z,350nm,1.2s
**H17K Granite Mounta** **84.21 8** P **P** **02 30 18.6 -0.2**
baz=198,SNR=21
**DUG Dugway, Tooele** **84.21 44** P **P** **02 30 20.0 +0.5**
baz=240,SNR=32
**WAT1 Susitna Watana** **84.22 13** P **P** **02 30 18.8 -0.1**
baz=208
**SEY Seymchan** **84.22 347** P **P** **02 30 18.4 -0.3**
comp=Z,284nm,1.1s,baz=146,slow=5.6,SNR=180
SEY S **SKSac** **02 39 42.2 -0.5**
comp=Z,0.7nm,0.3s,baz=339,slow=24,SNR=1.7
SEY PKPPKP **P'P'df** **02 56 31.9 +1.1**
comp=Z,7.1nm,1.2s,baz=330,slow=4.5,SNR=3.7
comp=Z,284nm,1.1s
**SEY Seymchan** **84.22 347** *ce* P **P** **02 30 18.5 -0.3**
SEY pmax pmax
comp=Z,341nm,1.3s
**121A Cookes Peak, D** **84.24 53** IAmb IAmb 02 30 23.1
comp=Z,116nm,0.8s
**121A Cookes Peak, D** **84.24 53** P **P** **02 30 21.7 +1.8**
baz=244,SNR=72
**E09A Wood Farm, Sta** **84.24 37** IAmb IAmb 02 30 21.3
comp=Z,296nm,1.4s
**MCARA McCarthy VSAT** **84.31 16** IAmb IAmb 02 30 20.7
comp=Z,264nm,1.1s
**MCARA McCarthy VSAT** **84.31 16** P **P** **02 30 19.5 +0.2**
baz=214,SNR=62
**J20K Nowinta River** **84.35 10** IAmb IAmb 02 30 20.8
comp=Z,390nm,1.4s
**J20K Nowinta River** **84.35 10** P **P** **02 30 19.5 +0.1**
baz=203,SNR=90
**G16K Koyuk River** **84.36 7** P **P** **02 30 20.1 +0.7**
baz=195
**LOGN Logan Glacier** **84.40 17** IAmb IAmb 02 30 21.3
comp=Z,300nm,1.1s
**U35K Hyder** **84.41 25** IAmb IAmb 02 30 27.1
comp=Z,166nm,0.6s
**P29M Windy Craggy** **84.42 19** IAmb IAmb 02 30 22.0
comp=Z,223nm,0.8s
**P29M Windy Craggy** **84.42 19** P **P** **02 30 20.3 +0.3**
baz=218,SNR=104
**CTG Chitna Glacier** **84.42 17** P **P** **02 30 20.1 0.0**
baz=215,SNR=130
**CTGM Chitina Glacie** **84.42 17** IAmb IAmb 02 30 21.4
comp=Z,224nm,0.9s
**F15K North Star Dit** **84.43 6** P **P** **02 30 20.1 +0.3**
**BGU Big Grassy Mou** **84.43 44** P **P** **02 30 21.4 +0.8**
**R32K Eaglecrest** **84.44 22** P **P** **02 30 20.4 +0.4**
baz=221,SNR=49
**GCSA Galena City Sc** **84.45 9** P **P** **02 30 20.0 +0.1**
baz=200,SNR=13
**F10A Beach Ranch, E** **84.47 38** IAmb IAmb 02 30 22.4
comp=Z,264nm,0.9s
**JIS Juneau Island** **84.49 22** P **P** **02 30 20.5 +0.3**
**ZAIG Zacatecas** **84.50 64** P **P** **02 30 22.8 +1.3**
**HMU Henry Mountain** **84.53 47** IAmb IAmb 02 30 23.6
comp=Z,252nm,1.8s
**MOIG Morelia** **84.55 67** P **P** **02 30 22.5 +0.8**
MOIG IAmb IAmb 02 30 24.4
comp=Z,226nm,0.9s
**BESE Bessie Mountai** **84.56 21** P **P** **02 30 21.3 +0.7**
BESE IAmb IAmb 02 30 22.7
comp=Z,179nm,0.9s
**NLU North Lily Min** **84.59 45** P **P** **02 30 21.7 +0.3**
**O28M Mount Upton** **84.59 18** P **P** **02 30 21.0 0.0**
baz=216,SNR=147
**ENH Enshi** **84.60 304** P **P** **02 30 22.3 +0.8**
**H18K Honhosa River** **84.62 8** P **P** **02 30 20.1 -0.6**
baz=199,SNR=20

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HARP | HAARP | 84.62 | 15 | P | P | 02 30 21.1 | +0.2 | |
| | baz=212,SNR=44 | | | | | | | |
| B08A | Colville Reser | 84.63 | 35 | IAmb | IAmb | 02 30 22.7 | | |
| | comp=Z,197nm,0.8s | | | | | | | |
| G17K | Kiwalik Mounta | 84.66 | 7 | P | P | 02 30 21.4 | +0.5 | |
| | baz=197,SNR=15 | | | | | | | |
| O29M | Mount Kennedy | 84.69 | 19 | P | P | 02 30 21.8 | +0.4 | |
| | baz=218,SNR=43 | | | | | | | |
| DHY | Denali Highway | 84.69 | 14 | P | P | 02 30 21.0 | -0.4 | |
| DHY | Denali Highway | 84.69 | 14 | P | P | 02 30 20.7 | -0.6 | |
| | baz=209,SNR=94 | | | | | | | |
| Q16A | Castle Valley | 84.70 | 46 | P | P | 02 30 23.2 | +1.2 | |
| Q16A | | | | IAmb | IAmb | 02 30 25.2 | | |
| | comp=Z,269nm,1.7s | | | | | | | |
| PLBC | Pleasant Camp | 84.72 | 20 | P | P | 02 30 21.9 | +0.6 | |
| | baz=220,SNR=116 | | | | | | | |
| GSI | Gunungsitoli | 84.83 | 273 | P | P | 02 30 24.0 | +1.0 | |
| GSI | Gunungsitoli | 84.83 | 273 | P | P | 02 30 23.9 | +1.0 | |
| | comp=Z,779nm,1.3s | | | | | | | |
| TMUT | Trail Mountain | 84.86 | 46 | IAmb | IAmb | 02 30 25.7 | | |
| | comp=Z,104nm,0.8s | | | | | | | |
| BPAW | Bear Paw Mtn. | 84.86 | 12 | P | P | 02 30 20.4 | -1.5 | |
| | baz=206,SNR=31 | | | | | | | |
| I20K | Naaghedeneel | 84.87 | 10 | IAmb | IAmb | 02 30 24.2 | | |
| | comp=Z,379nm,1.2s | | | | | | | |
| I20K | Naaghedeneel | 84.87 | 10 | P | P | 02 30 22.1 | +0.2 | |
| | baz=203,SNR=35 | | | | | | | |
| HLID | Hailey | 84.88 | 41 | IAmb | IAmb | 02 30 25.4 | | |
| | comp=Z,130nm,0.8s | | | | | | | |
| HLID | Hailey | 84.88 | 41 | P | P | 02 30 24.0 | +1.2 | |
| | baz=239,SNR=206 | | | | | | | |
| C09A | Chrisman Ranch | 84.89 | 36 | IAmb | IAmb | 02 30 24.4 | | |
| | comp=Z,180nm,0.7s | | | | | | | |
| EPT | El Paso | 84.90 | 54 | IAmb | IAmb | 02 30 26.4 | | |
| | comp=Z,182nm,1.0s | | | | | | | |
| MCK | McKinley | 84.94 | 13 | P | P | 02 30 21.9 | -0.4 | |
| MCK | | | | IAmb | IAmb | 02 30 23.0 | | |
| | comp=Z,273nm,1.0s | | | | | | | |
| MCK | McKinley | 84.94 | 13 | P | P | 02 30 21.7 | -0.6 | |
| | baz=208,SNR=116 | | | | | | | |
| MCK | McKinley | 84.94 | 13 | P | P | 02 30 21.9 | -0.4 | |
| MCK | | | | pmax | pmax | | | |
| | comp=Z,273nm,1.0s | | | | | | | |
| HVU | Hansel Valley | 85.02 | 43 | IAmb | IAmb | 02 30 25.7 | | |
| | comp=Z,357nm,1.7s | | | | | | | |
| PAX | Paxson | 85.04 | 14 | P | P | 02 30 22.4 | -0.5 | |
| PAX | Paxson | 85.04 | 14 | P | P | 02 30 22.3 | -0.7 | |
| | baz=211,SNR=76 | | | | | | | |
| PAX | Paxson | 85.04 | 14 | P | P | 02 30 22.4 | -0.5 | |
| PAX | | | | pmax | pmax | | | |
| | comp=Z,117nm,1.0s | | | | | | | |
| P30M | Million Dollar | 85.05 | 19 | P | P | 02 30 24.0 | +1.0 | |
| | baz=219 | | | | | | | |
| SKAG | Skagway | 85.06 | 20 | P | P | 02 30 24.2 | +1.3 | |
| SKAG | Skagway | 85.06 | 20 | IAmb | IAmb | 02 30 25.5 | | |
| | comp=Z,271nm,1.2s | | | | | | | |
| SKAG | Skagway | 85.06 | 20 | P | P | 02 30 24.2 | +1.3 | |
| | baz=221,SNR=27 | | | | | | | |
| T35M | Bob Quinn | 85.07 | 24 | P | P | 02 30 24.2 | +1.1 | |
| | baz=225,SNR=31 | | | | | | | |
| YUK8 | Steele Glacier | 85.13 | 18 | P | P | 02 30 23.6 | +0.1 | |
| | baz=216,SNR=176 | | | | | | | |
| M26K | Nabesna, AK | 85.17 | 16 | IAmb | IAmb | 02 30 25.0 | | |
| | comp=Z,369nm,1.2s | | | | | | | |
| M26K | Nabesna, AK | 85.17 | 16 | P | P | 02 30 23.6 | +0.1 | |
| | baz=214,SNR=195 | | | | | | | |
| MG05 | Puerto Natales | 85.19 | 143 | P | P | 02 30 25.3 | +1.3 | |
| MG05 | | | | IAmb | IAmb | 02 30 26.7 | | |
| | comp=Z,359nm,1.4s | | | | | | | |
| BWN | Browne | 85.22 | 12 | P | P | 02 30 23.6 | -0.1 | |
| SRU | San Rafael Swe | 85.24 | 46 | IAmb | IAmb | 02 30 26.8 | | |
| | comp=Z,115nm,0.7s | | | | | | | |
| MG04 | Isla Riesco | 85.24 | 144 | P | P | 02 30 25.6 | +1.4 | |
| MG04 | | | | IAmb | IAmb | 02 30 27.7 | | |
| | comp=Z,372nm,1.3s | | | | | | | |
| H19K | Roundabout Mou | 85.24 | 9 | IAmb | IAmb | 02 32 41.4 | | |
| | comp=Z,235nm,1.5s | | | | | | | |
| H19K | Roundabout Mou | 85.24 | 9 | P | P | 02 30 23.6 | -0.1 | |
| | baz=201,SNR=39 | | | | | | | |
| NONG | Nongkai | 85.25 | 291 | P | P | 02 30 25.6 | +0.8 | |
| P17A | Butcher Ranch, | 85.26 | 46 | P | P | 02 30 25.4 | +0.7 | |
| SRIT | Nakonsritamara | 85.26 | 281 | P | P | 02 30 26.8 | +1.8 | |
| SRIT | Nakonsritamara | 85.26 | 281 | P | P | 02 30 25.4 | +0.4 | |
| YUK6 | Outpost Mounta | 85.26 | 18 | P | P | 02 30 24.5 | +0.3 | |
| | baz=218,SNR=47 | | | | | | | |
| G18K | Tagagawik | 85.28 | 8 | IAmb | IAmb | 02 32 40.1 | | |
| | comp=Z,243nm,1.8s | | | | | | | |
| G18K | Tagagawik | 85.28 | 8 | P | P | 02 30 23.4 | -0.6 | |
| | baz=199,SNR=25 | | | | | | | |
| SBM | South Baldy | 85.32 | 52 | | P | 02 30 26.6 | +1.2 | |
| YUK3 | Moose Creek | 85.33 | 17 | P | P | 02 30 24.5 | 0.0 | |
| | baz=216,SNR=58 | | | | | | | |
| GYA | Guiyang | 85.34 | 300 | ⇑P | P | 02 30 26.5 | +1.2 | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,120nm,1.1s | | | | | | | |
| KCSI | Kotacane, Aceh | 85.35 | 275 | P | P | 02 30 25.9 | +0.4 | |
| S34M | Telegraph Cree | 85.40 | 23 | IAmb | IAmb | 02 30 27.0 | | |
| | comp=Z,235nm,0.9s | | | | | | | |
| S34M | Telegraph Cree | 85.40 | 23 | P | P | 02 30 25.7 | +1.1 | |
| | baz=224,SNR=151 | | | | | | | |
| GO10 | Punta Arenas | 85.40 | 145 | P | P | 02 30 26.6 | +1.6 | |
| M27K | Edge Creek, AK | 85.42 | 16 | IAmb | IAmb | 02 30 26.6 | | |
| | comp=Z,302nm,1.1s | | | | | | | |
| M27K | Edge Creek, AK | 85.42 | 16 | P | P | 02 30 25.3 | +0.5 | |
| | baz=214,SNR=170 | | | | | | | |
| SURA | Surathani | 85.42 | 281 | P | P | 02 30 27.7 | +2.0 | |
| GO09 | Cerro Castillo | 85.45 | 143 | P | P | 02 30 26.3 | +1.1 | |
| GO09 | | | | IAmb | IAmb | 02 30 30.8 | | |
| | comp=Z,207nm,1.6s | | | | | | | |
| H20K | Anotleneega Mo | 85.45 | 10 | P | P | 02 30 24.9 | +0.1 | |
| | baz=202,SNR=38 | | | | | | | |
| F17K | Baldwin Pennin | 85.49 | 7 | P | P | 02 30 25.3 | +0.4 | |
| | baz=196 | | | | | | | |
| YUK4 | Talbot Arm | 85.50 | 18 | P | P | 02 30 25.9 | +0.6 | |
| | baz=218,SNR=44 | | | | | | | |
| LENM | Lemitar | 85.56 | 52 | P | P | 02 30 27.7 | +1.5 | |
| Y22D | IRIS PASSCAL I | 85.56 | 52 | P | P | 02 30 27.4 | +1.2 | |
| Y22D | | | | IAmb | IAmb | 02 30 29.2 | | |
| | comp=Z,168nm,1.1s | | | | | | | |
| Y22D | IRIS PASSCAL I | 85.56 | 52 | P | P | 02 30 27.6 | +1.4 | |
| | baz=244,SNR=14 | | | | | | | |
| JRQG | Juriquilla Cam | 85.57 | 67 | P | P | 02 30 28.2 | +1.6 | |
| NAYO | Nakonayok | 85.59 | 287 | P | P | 02 30 27.9 | +1.4 | |
| TCUT | Toone Canyon | 85.59 | 44 | IAmb | IAmb | 02 30 28.7 | | |
| | comp=Z,149nm,0.8s | | | | | | | |
| L26K | Log Cabin Wild | 85.60 | 15 | IAmb | IAmb | 02 30 26.9 | | |
| | comp=Z,175nm,1.3s | | | | | | | |
| L26K | Log Cabin Wild | 85.60 | 15 | P | P | 02 30 25.5 | 0.0 | |
| | baz=213,SNR=43 | | | | | | | |
| ZEA | Zeya | 85.62 | 331 | eP | P | 02 30 26.4 | +0.6 | |
| ZEA | | | | pmax | pmax | | | |
| | comp=E,20nm,0.7s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,30nm,1.0s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,50nm,0.8s | | | | | | | |
| TIY | Taiyuan | 85.64 | 312 | eP | P | 02 30 27.4 | +1.0 | |
| CRNM | Carthage | 85.65 | 52 | P | P | 02 30 27.9 | +1.2 | |
| VHRN | Van Horn | 85.67 | 56 | IAmb | IAmb | 02 30 30.1 | | |
| | comp=Z,413nm,1.6s | | | | | | | |
| NEA2 | Nenana | 85.67 | 12 | P | P | 02 30 24.7 | -1.1 | |
| NEA2 | Nenana | 85.67 | 12 | P | P | 02 30 25.2 | -0.6 | |
| | baz=208,SNR=37 | | | | | | | |
| K24K | Donnelly Dome | 85.69 | 14 | P | P | 02 30 25.8 | -0.1 | |
| | baz=211,SNR=90 | | | | | | | |
| P32M | Atlin | 85.70 | 21 | IAmb | IAmb | 02 30 28.2 | | |
| | comp=Z,126nm,1.0s | | | | | | | |
| P32M | Atlin | 85.70 | 21 | P | P | 02 30 26.9 | +0.7 | |
| | baz=222,SNR=56 | | | | | | | |
| HWUT | Hardware Ranch | 85.73 | 44 | P | P | 02 30 27.6 | +0.8 | |
| G19K | Purcell Mounta | 85.73 | 8 | P | P | 02 30 26.0 | 0.0 | |
| | baz=200,SNR=38 | | | | | | | |
| MNTX | Cornudas Mount | 85.74 | 55 | P | P | 02 30 28.1 | +1.2 | |
| MNTX | | | | IAmb | IAmb | 02 30 29.8 | | |
| | comp=Z,386nm,1.8s | | | | | | | |
| MNTX | Cornudas Mount | 85.74 | 55 | P | P | 02 30 28.3 | +1.4 | |
| | baz=246,SNR=135 | | | | | | | |
| MLY | Manley | 85.74 | 11 | IAmb | IAmb | 02 30 26.5 | | |
| | comp=Z,174nm,1.3s | | | | | | | |
| MLY | Manley | 85.74 | 11 | P | P | 02 30 24.9 | -1.3 | |
| | baz=206,SNR=74 | | | | | | | |
| Q32M | Nakina River | 85.74 | 22 | IAmb | IAmb | 02 30 28.7 | | |
| | comp=Z,130nm,0.9s | | | | | | | |
| Q32M | Nakina River | 85.74 | 22 | P | P | 02 30 27.1 | +0.6 | |
| | baz=223,SNR=85 | | | | | | | |
| PV05 | Paradox Valley | 85.75 | 48 | P | P | 02 30 28.6 | +1.5 | |
| WRH | Wood River Hil | 85.77 | 13 | P | P | 02 30 25.7 | -0.5 | |
| MVCO | Mesa Verde | 85.78 | 49 | P | P | 02 30 27.9 | +0.6 | |
| | baz=243,SNR=19 | | | | | | | |
| NEW | Newport | 85.80 | 36 | S | SKSac | 02 39 53.7 | +0.4 | |
| | comp=Z,3.7nm,1.1s,baz=12,slow=22,SNR=2.3 | | | | | | | |
| NEW | | | | PKKPbc | PKKPbc | 02 48 24.3 | -1.3 | |
| | comp=Z,1.4nm,0.5s,baz=90,slow=3.0,SNR=2.7 | | | | | | | |
| NEW | Newport | 85.80 | 36 | P | P | 02 30 27.0 | +0.2 | |
| | baz=237,SNR=64 | | | | | | | |
| BNM | Barren Site | 85.81 | 52 | P | P | 02 30 27.9 | +0.4 | |
| O30N | Mendenhall | 85.82 | 19 | P | P | 02 30 26.9 | +0.2 | |
| O30N | | | | IAmb | IAmb | 02 30 28.6 | | |
| | comp=Z,290nm,1.2s | | | | | | | |
| O30N | Mendenhall | 85.82 | 19 | P | P | 02 30 27.0 | +0.3 | |
| | baz=220,SNR=132 | | | | | | | |
| F18K | Selawik | 85.83 | 7 | P | P | 02 30 27.1 | +0.7 | |
| | baz=198,SNR=9.8 | | | | | | | |
| RIDG | Independent Ri | 85.85 | 14 | P | P | 02 30 26.5 | -0.2 | |
| RIDG | | | | IAmb | IAmb | 02 30 27.9 | | |
| | comp=Z,226nm,1.1s | | | | | | | |
| RIDG | Independent Ri | 85.85 | 14 | P | P | 02 30 26.5 | -0.2 | |
| | baz=212,SNR=52 | | | | | | | |
| PV10 | Paradox Valley | 85.92 | 47 | P | P | 02 30 28.2 | +0.3 | |
| PV10 | | | | IAmb | IAmb | 02 30 29.8 | | |
| | comp=Z,151nm,0.9s | | | | | | | |
| PV19 | Morning Glory | 85.93 | 48 | P | P | 02 30 28.4 | +0.4 | |
| PV14 | Lion Creek, Pa | 85.94 | 47 | P | P | 02 30 28.8 | +0.8 | |
| PV17 | East Wray Mesa | 85.94 | 48 | P | P | 02 30 28.9 | +1.0 | |
| H21K | Melozitna Rive | 85.94 | 10 | IAmb | IAmb | 02 30 29.4 | | |
| | comp=Z,177nm,1.4s | | | | | | | |
| H21K | Melozitna Rive | 85.94 | 10 | P | P | 02 30 26.9 | -0.1 | |
| | baz=204,SNR=47 | | | | | | | |
| HDA | Harding Lake | 85.95 | 13 | P | P | 02 30 26.5 | -0.6 | |
| | baz=210,SNR=190 | | | | | | | |
| PV18 | Skein Mesa, Pa | 85.96 | 48 | P | P | 02 30 28.3 | +0.3 | |
| PV18 | | | | IAmb | IAmb | 02 30 30.2 | | |
| | comp=Z,105nm,1.0s | | | | | | | |
| PV20 | West Nyswonger | 85.96 | 48 | P | P | 02 30 29.2 | +1.1 | |
| PV20 | | | | IAmb | IAmb | 02 30 30.2 | | |
| | comp=Z,129nm,0.8s | | | | | | | |
| PV23 | Carpenter Ridg | 85.98 | 47 | P | P | 02 30 28.8 | +0.6 | |
| PV23 | | | | IAmb | IAmb | 02 30 30.5 | | |
| | comp=Z,162nm,0.8s | | | | | | | |
| PV13 | Radium Mtn., P | 85.98 | 48 | P | P | 02 30 28.1 | 0.0 | |
| PV16 | Nyswonger Mesa | 85.98 | 48 | P | P | 02 30 28.0 | -0.2 | |
| PV03 | Paradox Valley | 86.00 | 48 | P | P | 02 30 28.5 | +0.3 | |
| PV11 | David Mesa, Pa | 86.01 | 48 | P | P | 02 30 28.4 | +0.1 | |
| PV11 | | | | IAmb | IAmb | 02 30 30.5 | | |
| | comp=Z,297nm,1.9s | | | | | | | |
| L27K | Beaver Creek, | 86.02 | 16 | P | P | 02 30 27.6 | +0.1 | |
| | baz=214,SNR=61 | | | | | | | |
| PV04 | Paradox Valley | 86.03 | 47 | P | P | 02 30 28.6 | +0.3 | |
| BCAR | Beaver Creek A | 86.03 | 16 | P | P | 02 30 27.0 | -0.6 | |
| E17K | Hotham Inlet | 86.05 | 6 | P | P | 02 30 28.2 | +0.7 | |
| | baz=196,SNR=22 | | | | | | | |
| N30M | Aishikik Lake | 86.05 | 18 | P | P | 02 30 27.9 | +0.2 | |
| | baz=219,SNR=52 | | | | | | | |
| PV21 | Cone Mtn., Par | 86.05 | 47 | P | P | 02 30 29.2 | +0.7 | |
| PV02 | Paradox Valley | 86.06 | 48 | P | P | 02 30 29.0 | +0.4 | |
| PV02 | | | | IAmb | IAmb | 02 30 30.7 | | |
| | comp=Z,92nm,0.8s | | | | | | | |
| PV12 | Saucer Basin, | 86.06 | 48 | P | P | 02 30 29.5 | +1.0 | |
| USHA | Ushuaia | 86.08 | 147 | P | P | 02 30 28.3 | +0.3 | |
| | comp=Z,219nm,1.1s,baz=18,slow=0.4,SNR=11 | | | | | | | |
| | comp=Z,219nm,1.1s | | | | | | | |
| IMAR | Indian Mountai | 86.09 | 10 | P | P | 02 30 27.4 | -0.3 | |
| I23K | Minto, Yukon-K | 86.11 | 12 | IAmb | IAmb | 02 30 28.3 | | |
| | comp=Z,238nm,1.4s | | | | | | | |
| I23K | Minto, Yukon-K | 86.11 | 12 | P | P | 02 30 26.8 | -1.0 | |
| | baz=208,SNR=80 | | | | | | | |
| TLIG | Tlapa | 86.11 | 70 | P | P | 02 30 30.5 | +1.4 | |
| WHY | Whitehorse | 86.12 | 20 | IAmb | IAmb | 02 30 30.1 | | |
| | comp=Z,274nm,1.3s | | | | | | | |
| WHY | Whitehorse | 86.12 | 20 | P | P | 02 30 28.6 | +0.4 | |
| | baz=221,SNR=93 | | | | | | | |
| TXAR | Lajitas Array | 86.13 | 58 | P | P | 02 30 30.2 | +1.3 | |
| TXAR | Lajitas Array | 86.13 | 58 | P | P | 02 30 30.6 | +1.6 | |
| | comp=Z,199nm,0.7s,baz=219,slow=5.5,SNR=870 | | | | | | | |
| TXAR | | | | pP | pP | 02 32 42.4 | +0.7 | |
| | comp=Z,8.3nm,1.1s,baz=231,slow=5.7,SNR=3.5 | | | | | | | |
| TXAR | | | | PKiKP | PKiKP | 02 35 32.0 | -0.1 | |
| | comp=Z,0.8nm,0.7s,baz=185,slow=3.3,SNR=2.5 | | | | | | | |
| TXAR | | | | S | SKSac | 02 39 56.1 | -0.2 | |
| | comp=Z,0.6nm,1.0s,baz=260,slow=5.4,SNR=1.3 | | | | | | | |
| TXAR | | | | PKKP | PKKPdf | 02 48 17.0 | -0.1 | |
| | comp=Z,0.4nm,0.7s,baz=80,slow=3.1,SNR=3.9 | | | | | | | |
| TXAR | | | | PKKPbc | PKKPbc | 02 48 24.4 | +0.4 | |
| | comp=Z,1.2nm,0.5s,baz=129,slow=2.8,SNR=15 | | | | | | | |
| TXAR | | | | PKPPKP | P'P'df | 02 56 29.7 | -0.5 | |
| | comp=Z,2.2nm,0.9s,baz=119,slow=2.1,SNR=5.7 | | | | | | | |
| | comp=Z,199nm,0.7s | | | | | | | |
| PV01 | Paradox Valley | 86.14 | 48 | P | P | 02 30 29.5 | +0.5 | |
| XLT | XiLinHaoTe | 86.14 | 319 | eP | P | 02 30 28.8 | +0.2 | |
| XLT | | | | SKS | SKSac | 02 39 56.1 | +0.4 | |
| XLT | | | | S | S | 02 40 15.6 | +3.5 | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,86nm,1.2s | | | | | | | |
| MDM | Murphy Dome | 86.17 | 12 | IAmb | IAmb | 02 30 28.5 | | |
| | comp=Z,206nm,0.9s | | | | | | | |
| COLA | College | 86.17 | 13 | P | P | 02 30 26.8 | -1.3 | |
| COLA | College | 86.17 | 13 | P | P | 02 30 27.4 | -0.7 | |
| COLA | College | 86.17 | 13 | P | P | 02 30 27.5 | -0.5 | |
| | baz=209 | | | | | | | |
| COLA | College | 86.17 | 13 | P | P | 02 30 27.4 | -0.7 | |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,299nm,0.6s | | | | | | | |
| PV22 | Blue Mesa, Par | 86.17 | 47 | P | P | 02 30 29.8 | +0.7 | |
| DLBC | Dease Lake | 86.18 | 23 | IAmb | IAmb | 02 30 30.6 | | |
| | comp=Z,338nm,1.7s | | | | | | | |
| DLBC | Dease Lake | 86.18 | 23 | P | P | 02 30 28.9 | +0.5 | |
| | comp=Z,47nm,1.0s,baz=218,slow=3.8,SNR=95 | | | | | | | |
| DLBC | | | | pP | pP | 02 32 41.0 | -0.2 | |
| | comp=Z,24nm,1.1s,baz=194,slow=16,SNR=3.0 | | | | | | | |
| DLBC | | | | S | SKSac | 02 39 55.1 | -0.1 | |
| | comp=Z,0.9nm,0.7s,baz=224,slow=27,SNR=9.9 | | | | | | | |
| DLBC | | | | PKKP | PKKPdf | 02 48 19.5 | +1.2 | |
| | comp=Z,4.1nm,0.7s,baz=11,slow=1.6,SNR=9.9 | | | | | | | |
| | comp=Z,47nm,1.0s | | | | | | | |
| DLBC | Dease Lake | 86.18 | 23 | P | P | 02 30 29.2 | +0.8 | |
| | baz=225,SNR=82 | | | | | | | |
| UNM | Universidad Na | 86.19 | 68 | P | P | 02 30 30.8 | +1.2 | |
| UNM | Universidad Na | 86.19 | 68 | P | P | 02 30 30.8 | +1.2 | |
| UNM | | | | pmax | pmax | | | |
| | comp=Z,239nm,0.7s | | | | | | | |
| PV07 | Paradox Valley | 86.23 | 48 | P | P | 02 30 29.8 | +0.5 | |
| SCRK | Sand Creek | 86.25 | 14 | P | P | 02 30 28.6 | -0.1 | |
| | baz=212,SNR=51 | | | | | | | |
| ANMO | Albuquerque | 86.28 | 51 | P | P | 02 30 30.3 | +0.7 | |
| ANMO | Albuquerque | 86.28 | 51 | S | SKSac | 02 39 57.0 | -0.2 | |
| | comp=Z,0.4nm,0.5s,baz=157,slow=22,SNR=11 | | | | | | | |
| ANMO | | | | PKKP | PKKPdf | 02 48 19.2 | +2.0 | |
| | comp=Z,0.6nm,0.5s,baz=125,slow=1.0,SNR=3.4 | | | | | | | |
| ANMO | Albuquerque | 86.28 | 51 | P | P | 02 30 31.0 | +1.3 | |
| | baz=245 | | | | | | | |
| ANMO | Albuquerque | 86.28 | 51 | P | P | 02 30 30.3 | +0.7 | |
| ANMO | | | | pmax | pmax | | | |
| | comp=Z,96nm,1.0s | | | | | | | |
| IL31 | | 86.28 | 13 | IAmb | IAmb | 02 30 29.2 | | |
| | comp=Z,283nm,1.1s | | | | | | | |
| ILAR | Eielson Array | 86.28 | 13 | P | P | 02 30 27.7 | -0.9 | |
| ILAR | Eielson Array | 86.28 | 13 | P | P | 02 30 27.4 | -1.2 | |
| | comp=Z,71nm,0.5s,baz=216,slow=5.1,SNR=539 | | | | | | | |
| ILAR | | | | pP | pP | 02 32 41.6 | +0.1 | |
| | comp=Z,17nm,1.0s,baz=226,slow=4.8,SNR=6.9 | | | | | | | |
| ILAR | | | | PKiKP | PKiKP | 02 35 30.1 | -1.0 | |
| | comp=Z,2.7nm,0.6s,baz=303,slow=2.5,SNR=10 | | | | | | | |
| ILAR | | | | S | SKSac | 02 39 54.6 | -0.8 | |
| | comp=Z,1.6nm,0.9s,baz=213,slow=6.5,SNR=4.4 | | | | | | | |
| ILAR | | | | PKKP | PKKPdf | 02 48 19.1 | +1.0 | |
| | comp=Z,3.0nm,0.6s,baz=344,slow=2.5,SNR=16 | | | | | | | |
| ILAR | | | | PKPPKP | P'P'df | 02 56 26.6 | -0.5 | |
| | comp=Z,1.7nm,0.9s,baz=333,slow=2.7,SNR=7.4 | | | | | | | |
| | comp=Z,71nm,0.5s | | | | | | | |
| IL03 | Eielson Array | 86.29 | 13 | P | P | 02 30 28.1 | -0.6 | |
| F19K | Shaleruckik Mo | 86.29 | 8 | P | P | 02 30 28.6 | -0.1 | |
| F19K | Shaleruckik Mo | 86.29 | 8 | P | P | 02 30 28.5 | -0.1 | |
| | baz=200,SNR=48 | | | | | | | |
| PV15 | Paradox Valley | 86.30 | 48 | P | P | 02 30 30.4 | +0.7 | |
| SNSI | Sinabang, Aceh | 86.37 | 274 | P | P | 02 30 32.3 | +2.1 | |
| | comp=Z,661nm,1.5s | | | | | | | |
| H22K | Ishtalitna Cre | 86.41 | 11 | P | P | 02 30 29.2 | 0.0 | |
| | baz=206,SNR=95 | | | | | | | |
| M29M | Somme Creek | 86.43 | 17 | IAmb | IAmb | 02 30 31.2 | | |
| | comp=Z,384nm,1.6s | | | | | | | |
| M29M | Somme Creek | 86.43 | 17 | P | P | 02 30 29.7 | +0.2 | |
| | baz=218,SNR=124 | | | | | | | |
| MG01 | Puerto William | 86.45 | 147 | P | P | 02 30 31.3 | +1.5 | |
| MG01 | | | | IAmb | IAmb | 02 30 32.6 | | |
| | comp=Z,242nm,1.1s | | | | | | | |
| GO08 | Villa O'Higgin | 86.45 | 140 | P | P | 02 30 31.8 | +1.9 | |
| GO08 | | | | IAmb | IAmb | 02 30 33.3 | | |
| | comp=Z,138nm,1.2s | | | | | | | |
| POKR | Poker Plat Res | 86.47 | 13 | IAmb | IAmb | 02 30 29.8 | | |
| | comp=Z,174nm,0.6s | | | | | | | |
| POKR | Poker Plat Res | 86.47 | 13 | P | P | 02 30 28.5 | -1.0 | |
| | baz=209,SNR=38 | | | | | | | |
| P33M | Teslin, Yukon | 86.47 | 21 | P | P | 02 30 30.2 | +0.4 | |
| | baz=223,SNR=59 | | | | | | | |
| N31M | Braeburn, Yuko | 86.47 | 19 | IAmb | IAmb | 02 30 31.5 | | |
| | comp=Z,258nm,1.1s | | | | | | | |
| N31M | Braeburn, Yuko | 86.47 | 19 | P | P | 02 30 29.8 | +0.1 | |
| | baz=220,SNR=115 | | | | | | | |
| J25K | Salcha River, | 86.48 | 14 | P | P | 02 30 29.3 | -0.4 | |
| | baz=211,SNR=230 | | | | | | | |
| MCMT | McKenzie Canyo | 86.50 | 40 | P | P | 02 30 31.8 | +1.3 | |
| E18K | Tukpahlearik C | 86.51 | 7 | IAmb | IAmb | 02 30 30.8 | | |
| | comp=Z,73nm,0.7s | | | | | | | |
| E18K | Tukpahlearik C | 86.51 | 7 | P | P | 02 30 29.7 | 0.0 | |
| | baz=197,SNR=27 | | | | | | | |
| D17K | Noatak River | 86.52 | 6 | P | P | 02 30 30.4 | +0.7 | |
| | baz=194,SNR=11 | | | | | | | |
| R33M | Jennings River | 86.52 | 22 | IAmb | IAmb | 02 30 32.4 | | |
| | comp=Z,342nm,1.5s | | | | | | | |
| R33M | Jennings River | 86.52 | 22 | P | P | 02 30 30.9 | +0.8 | |
| | baz=224,SNR=115 | | | | | | | |
| RDMU | Red Mountain | 86.57 | 45 | P | P | 02 30 32.0 | +1.2 | |
| RDMU | | | | IAmb | IAmb | 02 30 33.0 | | |
| | comp=Z,392nm,2.0s | | | | | | | |
| ALPN | Alpine | 86.57 | 57 | P | P | 02 30 32.1 | +1.1 | |
| ALPN | | | | IAmb | IAmb | 02 30 34.1 | | |
| | comp=Z,258nm,1.1s | | | | | | | |
| AHID | Auburn Hatcher | 86.59 | 43 | IAmb | IAmb | 02 30 33.4 | | |
| | comp=Z,355nm,1.6s | | | | | | | |
| XAN | Xi'an | 86.61 | 307 | ⇓P | P | 02 30 32.3 | +1.3 | |
| XAN | | | | SKS | SKSac | 02 39 58.8 | -0.1 | |
| XAN | | | | S | S | 02 40 20.6 | +3.8 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,400nm,1.2s | | | | | | | |
| G21K | Allakaket | 86.62 | 10 | IAmb | IAmb | 02 30 31.4 | | |
| | comp=Z,123nm,0.8s | | | | | | | |
| G21K | Allakaket | 86.62 | 10 | P | P | 02 30 29.9 | -0.3 | |
| | baz=204,SNR=72 | | | | | | | |
| LHMI | Lhok Sumawe | 86.67 | 277 | P | P | 02 30 33.3 | +1.6 | |
| LHMI | Lhok Sumawe | 86.67 | 277 | P | P | 02 30 31.2 | -0.4 | |
| LHMI | Lhok Sumawe | 86.67 | 277 | P | P | 02 30 33.4 | +1.7 | |
| | comp=Z,456nm,1.2s | | | | | | | |
| H23K | Yukon River | 86.68 | 11 | P | P | 02 30 29.8 | -0.8 | |
| | baz=207,SNR=28 | | | | | | | |
| K27K | Chicken | 86.76 | 15 | IAmb | IAmb | 02 30 32.9 | | |
| | comp=Z,136nm,1.1s | | | | | | | |
| K27K | Chicken | 86.76 | 15 | P | P | 02 30 31.9 | +1.0 | |
| | baz=214 | | | | | | | |
| F20K | Avaraart Lake | 86.78 | 9 | P | P | 02 30 31.1 | +0.2 | |
| | baz=202 | | | | | | | |
| HIA | Hailar | 86.78 | 325 | P | P | 02 30 31.8 | +0.4 | |
| HIA | Hailar | 86.78 | 325 | P | P | 02 30 31.1 | -0.3 | |
| HIA | Hailar | 86.78 | 325 | P | P | 02 30 31.1 | -0.3 | |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,39nm,1.1s | | | | | | | |
| J26L | Joseph Creek | 86.79 | 14 | P | P | 02 30 31.4 | +0.3 | |
| | baz=213,SNR=247 | | | | | | | |
| AY02 | Valle Explorad | 86.84 | 138 | P | P | 02 30 33.5 | +1.7 | |
| MSO | Missoula | 86.85 | 38 | P | P | 02 30 32.6 | +0.6 | |
| | baz=239,SNR=75 | | | | | | | |
| BILL | Bilibino | 86.87 | 354 | P | P | 02 30 31.7 | +0.4 | |
| BILL | Bilibino | 86.87 | 354 | *i* P | P | 02 30 31.5 | +0.1 | |
| BILL | | | | *i* *PP | pwP | 02 32 46.8 | -0.7 | |
| BILL | | | | *i* | | 02 34 01.9 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,46nm,0.9s | | | | | | | |
| MLSI | Meulaboh, Aceh | 86.88 | 276 | P | P | 02 30 33.1 | +0.4 | |
| | comp=Z,470nm,1.0s,comp=Z,5μm | | | | | | | |
| RDOG | Red Dog Mine | 86.88 | 6 | P | P | 02 30 32.0 | +0.6 | |
| | baz=195 | | | | | | | |
| C16K | Lisburne Hills | 86.89 | 5 | P | P | 02 30 31.1 | -0.3 | |
| | baz=192 | | | | | | | |
| AY03 | Cochrane | 86.91 | 139 | P | P | 02 30 32.8 | +0.6 | |
| AY03 | | | | IAmb | IAmb | 02 30 35.7 | | |
| | comp=Z,211nm,1.4s | | | | | | | |
| DLMT | Dillon | 86.92 | 40 | IAmb | IAmb | 02 30 34.8 | | |
| | comp=Z,145nm,0.8s | | | | | | | |
| E19K | Redstone River | 86.95 | 8 | IAmb | IAmb | 02 30 32.9 | | |
| | comp=Z,128nm,0.6s | | | | | | | |
| E19K | Redstone River | 86.95 | 8 | P | P | 02 30 31.6 | -0.2 | |
| | baz=200,SNR=83 | | | | | | | |
| H24K | Noodor Dome | 87.01 | 12 | P | P | 02 30 30.6 | -1.5 | |
| H24K | Noodor Dome | 87.01 | 12 | P | P | 02 30 31.6 | -0.6 | |
| | baz=209,SNR=25 | | | | | | | |
| TPAW | Teton Pass | 87.03 | 42 | IAmb | IAmb | 02 30 34.7 | | |
| | comp=Z,168nm,1.1s | | | | | | | |
| N32M | Quiet Lake | 87.08 | 20 | IAmb | IAmb | 02 30 34.5 | | |
| | comp=Z,153nm,0.9s | | | | | | | |
| N32M | Quiet Lake | 87.08 | 20 | P | P | 02 30 33.6 | +1.0 | |
| | baz=222 | | | | | | | |
| CLNB | Carlsbad | 87.13 | 55 | P | P | 02 30 34.5 | +0.9 | |
| SNOW | Snow King Moun | 87.14 | 42 | IAmb | IAmb | 02 30 36.2 | | |
| | comp=Z,286nm,1.1s | | | | | | | |
| S22A | 4UR Ranch, Cre | 87.21 | 49 | IAmb | IAmb | 02 30 36.7 | | |
| | comp=Z,114nm,1.1s | | | | | | | |
| S22A | 4UR Ranch, Cre | 87.21 | 49 | P | P | 02 30 35.1 | +1.1 | |
| | baz=244,SNR=109 | | | | | | | |
| PRP | Porcupine Dome | 87.22 | 13 | P | P | 02 30 32.6 | -0.7 | |
| PRP | | | | IAmb | IAmb | 02 30 34.0 | | |
| | comp=Z,173nm,1.3s | | | | | | | |
| PRP | Porcupine Dome | 87.22 | 13 | P | P | 02 30 33.1 | -0.2 | |
| | baz=211,SNR=20 | | | | | | | |
| IMW | Indian Meadow | 87.23 | 42 | P | P | 02 30 35.1 | +1.1 | |
| IM

PDAR comp=Z,0.4nm,0.5s,baz=209,slow=1.7,SNR=1.2 S **SKSac** **02 40 05.1 +0.4**
PDAR comp=Z,0.2nm,0.4s,baz=213,slow=3.1,SNR=1.4 PKKP **PKKPdf** **02 48 16.4 +1.0**
PDAR comp=Z,3.6nm,0.7s,baz=90,slow=4.4,SNR=12 PKPPKP **P'P'df** **02 56 26.5 -0.1**
comp=Z,1.7nm,0.9s,baz=116,slow=3.4,SNR=7.7
comp=Z,89nm,0.6s
**EGAK Eagle** **87.60 15** IAmb IAmb 02 30 36.2
comp=Z,164nm,0.8s
**EGAK Eagle** **87.60 15** P **P** **02 30 34.8 -0.1**
baz=215,SNR=170
**SRDT SRDT** **87.61 286** P **P** **02 30 37.9 +1.9**
**SAND Sanderson** **87.61 58** IAmb IAmb 02 30 38.4
comp=Z,164nm,0.9s
**BOZ Bozeman (W)** **87.62 40** IAmb IAmb 02 30 38.1
comp=Z,232nm,1.4s
**BOZ Bozeman (W)** **87.62 40** P **P** **02 30 36.8 +1.2**
baz=241,SNR=42
**C18K Utukok River** **87.63 6** P **P** **02 30 35.1 +0.2**
baz=196,SNR=6.9
**MNHN Monahans** **87.64 56** P **P** **02 30 36.8 +0.9**
MNHN IAmb IAmb 02 30 38.4
comp=Z,143nm,0.8s
**HHC Hu-ho-hao-te** **87.65 314** ⇓*i*P **P** **02 30 36.6 +0.8**
HHC pmax pmax
comp=Z,74nm,1.2s
**H17A Grant Village** **87.70 42** P **P** **02 30 38.0 +1.9**
H17A IAmb IAmb 02 30 39.8
comp=Z,134nm,0.8s
**H17A Grant Village** **87.70 42** P **P** **02 30 38.9 +2.7**
baz=242,SNR=32
**YHH Holmes Hill** **87.72 41** P **P** **02 30 37.8 +1.5**
**SMCO Snowmass** **87.73 47** P **P** **02 30 36.5 -0.1**
SMCO IAmb IAmb 02 30 38.9
comp=Z,203nm,1.6s
**F22K John River** **87.74 10** P **P** **02 30 35.9 +0.4**
baz=205
**YNM Yellowstone No** **87.78 41** P **P** **02 30 37.1 +0.6**
YNM IAmb IAmb 02 30 40.7
comp=Z,221nm,1.1s
**YNR Norris Junctio** **87.79 41** P **P** **02 30 38.7 +2.2**
YNR IAmb IAmb 02 30 40.9
comp=Z,142nm,1.2s
**FARO Faro, Yukon** **87.79 19** IAmb IAmb 02 30 37.1
comp=Z,318nm,1.9s
**FARO Faro, Yukon** **87.79 19** P **P** **02 30 35.8 0.0**
baz=222,SNR=64
**K29M Barlow Dome** **87.80 17** IAmb IAmb 02 30 37.7
comp=Z,170nm,1.1s
**K29M Barlow Dome** **87.80 17** P **P** **02 30 36.0 +0.1**
baz=218,SNR=121
**H25L Birch Creek** **87.81 13** P **P** **02 30 35.2 -0.5**
baz=211,SNR=13
**WTLY Watson Lake, Y** **87.81 22** P **P** **02 30 36.1 +0.1**
WTLY IAmb IAmb 02 30 38.0
comp=Z,110nm,1.1s
**WTLY Watson Lake, Y** **87.81 22** P **P** **02 30 37.1 +1.1**
baz=226
**COLD Coldfoot** **87.82 11** P **P** **02 30 36.2 +0.4**
COLD IAmb IAmb 02 30 37.4
comp=Z,162nm,0.8s
**COLD Coldfoot** **87.82 11** P **P** **02 30 35.9 +0.1**
baz=207,SNR=38
**D19K Kuna River** **87.82 7** IAmb IAmb 02 30 36.9
comp=Z,85nm,0.8s
**D19K Kuna River** **87.82 7** P **P** **02 30 35.7 -0.2**
baz=199,SNR=25
**E20K Nigu River** **87.84 8** P **P** **02 30 35.6 -0.3**
baz=201,SNR=103
**G24K Hadweenzic Riv** **87.85 12** IAmb IAmb 02 30 36.7
comp=Z,70nm,0.6s
**G24K Hadweenzic Riv** **87.85 12** P **P** **02 30 35.6 -0.4**
baz=209,SNR=25
**GO07 Milladeo Hill,** **87.86 135** P **P** **02 30 37.2 +0.5**
GO07 IAmb IAmb 02 30 39.6
comp=Z,280nm,1.4s
**LKWY Lake** **87.89 42** P **P** **02 30 37.6 +0.6**
LKWY IAmb IAmb 02 30 40.8
comp=Z,131nm,0.8s
**LKWY Lake** **87.89 42** P **P** **02 30 37.7 +0.6**
LKWY pmax pmax
comp=Z,131nm,0.9s
**PAYG Puerto Ayora** **87.90 90** P **P** **02 30 37.7 +0.2**
PAYG IAmb IAmb 02 30 40.8
comp=Z,115nm,1.1s
**LYMT Lyon Mountain** **87.90 39** P **P** **02 30 37.4 +0.4**
**PHRA Phrae** **88.00 290** P **P** **02 30 38.4 +0.6**
**HRY Holter Researc** **88.05 39** P **P** **02 30 38.6 +1.1**
**J29N Klondike Camp** **88.09 16** P **P** **02 30 38.1 +0.9**
baz=218,SNR=24
**LL07 Hotel Espejo d** **88.10 135** P **P** **02 30 38.7 +0.9**
**ODSA Odessa** **88.11 55** IAmb IAmb 02 30 40.5
comp=Z,231nm,1.0s
**KMI Kunming** **88.12 297** ⇓P **P** **02 30 40.0 +1.5**
KMI pmax pmax
comp=Z,160nm,1.2s
**YMP Mirror Lake Pl** **88.13 41** P **P** **02 30 39.0 +0.8**
YMP IAmb IAmb 02 30 55.5
comp=Z,117nm,1.2s
**SDCO Great Sand Dun** **88.16 49** P **P** **02 30 39.4 +0.9**
baz=245,SNR=52
**I27K Kandik River** **88.17 14** P **P** **02 30 37.6 0.0**
baz=215,SNR=33
**G25K Bearman Lake** **88.18 12** P **P** **02 30 37.5 +0.1**
baz=210,SNR=8.9
**FYU Fort Yukon** **88.18 13** IAmb IAmb 02 30 38.5
comp=Z,82nm,0.6s
**D20K Etivluk River** **88.22 8** P **P** **02 30 37.9 +0.2**
baz=201,SNR=50
**C19K Lookout Ridge** **88.23 7** IAmb IAmb 02 30 39.2
comp=Z,190nm,1.2s
**C19K Lookout Ridge** **88.23 7** P **P** **02 30 38.0 +0.2**
baz=198,SNR=18
**LL06 Loncomilla** **88.24 134** P **P** **02 30 40.0 +1.6**
LL06 IAmb IAmb 02 30 41.6
comp=Z,280nm,1.2s
**B18K Kokolik River** **88.26 6** P **P** **02 30 38.6 +0.8**
baz=196,SNR=6.5
**TOAD Toad River Com** **88.31 25** P **P** **02 30 38.8 +0.5**
baz=229,SNR=150
**E21K Killik River** **88.32 9** P **P** **02 30 37.5 -0.6**
E21K IAmb IAmb 02 30 39.1
comp=Z,120nm,0.9s
**E21K Killik River** **88.32 9** P **P** **02 30 38.5 +0.3**
baz=203
**LIRD Liard River Hi** **88.34 24** P **P** **02 30 38.5 +0.1**
baz=229,SNR=34
**E22K Anaktuvuk Pass** **88.37 10** IAmb IAmb 02 30 39.7
comp=Z,214nm,1.1s
**E22K Anaktuvuk Pass** **88.37 10** P **P** **02 30 38.5 +0.1**
baz=205,SNR=38
**I28M Miner Creek** **88.45 15** P **P** **02 30 38.6 -0.3**
I28M IAmb IAmb 02 30 40.0
comp=Z,99nm,0.8s
**I28M Miner Creek** **88.45 15** P **P** **02 30 38.8 -0.1**
baz=216,SNR=90
**CRAI Chiangrai** **88.46 292** P **P** **02 30 40.1 +0.2**
CRAI IAmb IAmb 02 30 42.4
comp=Z,172nm,1.2s
**F24K Squaw Lake** **88.49 11** IAmb IAmb 02 30 40.5
comp=Z,125nm,0.8s
**F24K Squaw Lake** **88.49 11** P **P** **02 30 39.2 +0.2**
baz=209,SNR=45
**BTO Baotou** **88.60 314** *e*P **P** **02 30 41.3 +1.1**
BTO sP **sP** **02 33 51.0 -6.1**
BTO S **S** **02 40 26.3 -8.7**
BTO pmax pmax
comp=Z,100nm,1.1s
BTO pmax pmax
comp=Z,2µm,9.6s
**MSTX Muleshoe** **88.66 54** P **P** **02 30 41.0 +0.3**
**RWWY Rawlins** **88.66 45** IAmb IAmb 02 30 42.7
comp=Z,186nm,1.1s
**E23K Chandalar** **88.66 10** P **P** **02 30 40.2 +0.4**
E23K IAmb IAmb 02 30 41.2
comp=Z,124nm,0.9s
**E23K Chandalar** **88.66 10** P **P** **02 30 40.0 +0.2**
baz=207,SNR=34
**LL05 Los Muermos** **88.66 133** P **P** **02 30 41.6 +1.1**
**J30M Hart River** **88.70 17** IAmb IAmb 02 30 41.6
comp=Z,208nm,1.6s
**J30M Hart River** **88.70 17** P **P** **02 30 40.4 +0.2**
baz=220,SNR=43
**T25A Trinidad** **88.70 50** P **P** **02 30 41.5 +0.5**
baz=246,SNR=26
**H27K Steamboat Moun** **88.71 14** P **P** **02 30 40.5 +0.4**
baz=215,SNR=47
**MMPY Sheldon Lake,** **88.74 20** P **P** **02 30 41.0 +0.7**
baz=224,SNR=155
**ELIB Princess Elisa** **88.74 187** *d*P **P** **02 30 39.9 -0.5**
comp=Z,426nm,0.8s
**I29M Ogilvie Camp,** **88.79 16** IAmb IAmb 02 30 41.4
comp=Z,108nm,0.8s
**I29M Ogilvie Camp,** **88.79 16** P **P** **02 30 40.2 -0.2**
baz=218,SNR=94
**G26K Porcupine Rive** **88.81 13** P **P** **02 30 41.0 +0.5**
baz=213,SNR=37
**RLMT Red Lodge** **88.87 41** P **P** **02 30 41.9 +0.4**
RLMT IAmb IAmb 02 30 44.2
comp=Z,118nm,1.0s
**RLMT Red Lodge** **88.87 41** P **P** **02 30 43.2 +1.7**
baz=242,SNR=65
**C21K Knifeblade Rid** **88.87 8** P **P** **02 30 40.9 +0.2**
baz=202,SNR=49
**E24K Your Creek** **88.88 11** IAmb IAmb 02 30 42.1
comp=Z,52nm,0.7s
**E24K Your Creek** **88.88 11** P **P** **02 30 41.6 +0.8**
baz=208
**D22K Ayikyak River** **88.92 9** P **P** **02 30 41.0 +0.1**
**D22K Ayikyak River** **88.92 9** P **P** **02 30 41.4 +0.5**
baz=204,SNR=43
**Q24A Divide** **88.92 48** P **P** **02 30 42.7 +0.7**
Q24A IAmb IAmb 02 30 44.5
comp=Z,131nm,1.4s
**Q24A Divide** **88.92 48** P **P** **02 30 42.9 +0.9**
baz=245,SNR=27
**GCMT Greycliff** **88.93 41** P **P** **02 30 42.5 +0.8**
**ISCO Idaho Springs** **88.94 47** P **P** **02 30 43.0 +0.9**
ISCO IAmb IAmb 02 30 44.6
comp=Z,152nm,1.8s
**ISCO Idaho Springs** **88.94 47** P **P** **02 30 42.9 +0.9**
baz=245,SNR=5.7
**ISCO Idaho Springs** **88.94 47** P **P** **02 30 43.0 +0.9**
ISCO pmax pmax
comp=Z,152nm,1.8s
**TGTN Hyland Airport** **88.97 22** P **P** **02 30 42.1 +0.7**
baz=227,SNR=34
**F25K Christian Rive** **88.98 12** P **P** **02 30 41.9 +0.5**
baz=211,SNR=30
**LL01 San Ignacio de** **89.00 135** P **P** **02 30 43.0 +1.0**
LL01 IAmb IAmb 02 30 44.5
comp=Z,92nm,1.1s
**LL02 Futaleuf** **89.05 135** IAmb IAmb 02 30 45.1
comp=Z,212nm,1.1s
**BMAR Burnt Mountain** **89.06 12** P **P** **02 30 41.6 0.0**
**CM31 Chiang Mai Arr** **89.13 290** P **P** **02 30 43.6 +0.6**
**CMAR Chiang Mai Arr** **89.13 290** P **P** **02 30 43.0 -0.1**
**CMAR Chiang Mai Arr** **89.13 290** P **P** **02 30 44.5 +1.4**
comp=Z,114nm,1.0s,baz=110,slow=2.9,SNR=235
CMAR PP **PP** **02 34 30.1 +4.4**
comp=Z,8.2nm,0.9s,baz=122,slow=5.6,SNR=5.0
CMAR PKiKP **PKiKP** **02 35 37.7 +0.5**
comp=Z,3.6nm,0.7s,baz=169,slow=0.9,SNR=2.4
comp=Z,114nm,1.0s
**A19K Wainwright** **89.14 6** P **P** **02 30 42.2 +0.4**
baz=196
**SGCY Sterling City** **89.15 56** P **P** **02 30 43.7 +0.8**
**G27K Doyon Strip** **89.16 14** P **P** **02 30 42.9 +0.8**
baz=215,SNR=14
**N23A Red Feather La** **89.18 46** IAmb IAmb 02 30 45.7
comp=Z,160nm,1.1s
**N23A Red Feather La** **89.18 46** P **P** **02 30 44.3 +1.2**
baz=245,SNR=65
**I30M Mount Dempster** **89.19 16** IAmb IAmb 02 30 43.6
comp=Z,179nm,1.0s
**I30M Mount Dempster** **89.19 16** P **P** **02 30 42.0 -0.4**
baz=219,SNR=129
**TOLK Toolik Lake Re** **89.19 10** P **P** **02 30 42.1 -0.1**
TOLK IAmb IAmb 02 30 43.5
comp=Z,79nm,0.9s
**TOLK Toolik Lake Re** **89.19 10** P **P** **02 30 42.9 +0.6**
baz=207,SNR=23
**833A Chaparral WMA,** **89.22 60** IAmb IAmb 02 30 46.0
comp=Z,136nm,0.8s
**833A Chaparral WMA,** **89.22 60** P **P** **02 30 44.8 +1.5**
baz=249
**CMIG Matias Romero** **89.26 72** P **P** **02 30 44.9 +1.3**
comp=Z,65nm,0.9s,baz=274,slow=4.5,SNR=79
comp=Z,65nm,0.9s
**LR04 Corral** **89.30 132** P **P** **02 30 44.5 +1.1**
LR04 IAmb IAmb 02 30 46.6
comp=Z,161nm,1.1s
**D23K Nanushuk River** **89.30 10** P **P** **02 30 43.2 +0.5**
baz=206,SNR=31
**B21K Ikpikpuk River** **89.33 8** P **P** **02 30 42.8 0.0**
B21K IAmb IAmb 02 30 44.0
comp=Z,112nm,1.0s
**B21K Ikpikpuk River** **89.33 8** P **P** **02 30 43.4 +0.7**
baz=202
**B20K Meade River** **89.37 7** P **P** **02 30 43.2 +0.3**
B20K IAmb IAmb 02 30 44.3
comp=Z,164nm,1.1s
**B20K Meade River** **89.37 7** P **P** **02 30 43.5 +0.6**
baz=200
**HBVL Hebbronville** **89.37 61** P **P** **02 30 45.6 +1.7**
**F26K Sheenjek River** **89.37 12** IAmb IAmb 02 30 45.0
comp=Z,93nm,1.1s
**F26K Sheenjek River** **89.37 12** P **P** **02 30 43.5 +0.5**
baz=212,SNR=21
**PZH PanZhiHua** **89.46 298** P **P** **02 30 45.4 +0.9**
PZH pmax pmax
comp=Z,110nm,1.2s
**H29M Whitestone** **89.46 15** P **P** **02 30 43.6 +0.1**
baz=218,SNR=84
**LL03 Petrohue** **89.51 133** P **P** **02 30 45.6 +1.2**
**K22A Casper** **89.54 44** P **P** **02 30 45.5 +0.8**
K22A IAmb IAmb 02 30 46.7
comp=Z,153nm,1.2s
**KOTAN Kotaneelee Air** **89.60 24** P **P** **02 30 44.6 +0.4**
baz=230,SNR=16
**LL04 Puerto Octay** **89.60 133** IAmb IAmb 02 30 47.1
comp=Z,199nm,1.4s
**RTBA Rita Blanca** **89.65 51** IAmb IAmb 02 30 47.5
comp=Z,71nm,0.9s
**JCT Junction City** **89.67 58** IAmb IAmb 02 30 47.4
comp=Z,108nm,0.8s
**JCT Junction City** **89.67 58** P **P** **02 30 45.9 +0.5**
baz=248
**PHWY Pilot Hill** **89.68 46** IAmb IAmb 02 30 47.4
comp=Z,87nm,0.8s
**SN05 Snyder 5** **89.70 55** IAmb IAmb 02 30 47.2
comp=Z,155nm,0.8s
**D24K Happy Valley** **89.77 10** IAmb IAmb 02 30 46.4
comp=Z,98nm,0.9s
**D24K Happy Valley** **89.77 10** P **P** **02 30 45.2 +0.4**
baz=208,SNR=19
**SN07 Snyder 07** **89.77 55** IAmb IAmb 02 30 47.4
comp=Z,96nm,0.9s
**AMTX Amarillo** **89.84 53** IAmb IAmb 02 30 48.0
comp=Z,128nm,0.9s
**AMTX Amarillo** **89.84 53** P **P** **02 30 46.8 +0.7**
baz=248
**TROLL Troll, Antarti** **89.88 180** ⇑P **P** **02 30 45.6 0.0**
comp=Z,16µm,0.9s
TROLL ⇑SKSac **SKSac** **02 40 18.1 +1.1**
comp=Z,212nm,0.8s
TROLL ⇑S **S** **02 40 46.1 +0.4**
comp=Z,170nm,0.9s
TROLL ⇑PKKPbc **PKKPdf** **02 48 12.6 +3.1**
comp=Z,320nm,0.7s
**EGMT Eagleton** **89.92 39** P **P** **02 30 46.9 +0.8**
EGMT IAmb IAmb 02 30 48.1
comp=Z,91nm,1.3s
**EGMT Eagleton** **89.92 39** P **P** **02 30 47.4 +1.3**
baz=242,SNR=12
**DKNS Dickens** **89.97 54** IAmb IAmb 02 30 48.4
comp=Z,64nm,0.8s
**EPYK Eagle Plains** **89.99 16** P **P** **02 30 46.3 +0.3**
**EPYK Eagle Plains** **89.99 16** P **P** **02 30 45.6 -0.3**
baz=219,SNR=88
**YAK Yakutsk** **90.02 338** P **P** **02 30 45.5 -0.6**
**YAK Yakutsk** **90.02 338** P **P** **02 30 44.7 -1.3**
comp=Z,33nm,0.7s,baz=113,slow=1.8,SNR=14
YAK PP **PP** **02 34 28.5 -3.1**
comp=Z,23nm,0.5s,baz=152,slow=5.5,SNR=7.6
comp=Z,33nm,0.7s
**YAK Yakutsk** **90.02 338** *e*P **P** **02 30 45.2 -0.9**
YAK pmax pmax
comp=Z,48nm,1.0s
**G29M Pine Creek** **90.09 15** P **P** **02 30 46.9 +0.4**
G29M IAmb IAmb 02 30 47.6
comp=Z,106nm,0.9s
**G29M Pine Creek** **90.09 15** P **P** **02 30 46.8 +0.4**
baz=218,SNR=24
**C23K Itkillik River** **90.10 9** P **P** **02 30 46.4 +0.1**
baz=206,SNR=39
**B22K Teshekpuk Lake** **90.15 8** P **P** **02 30 47.3 +0.8**
baz=204,SNR=7.8
**LR03 Panguipulli** **90.16 132** P **P** **02 30 48.5 +1.0**
**SNAA Sanae** **90.16 179** P **P** **02 30 46.6 -0.3**
**SNAA Sanae** **90.16 179** ⇑P **P** **02 30 46.6 -0.3**
comp=Z,2µm,0.6s
SNAA ⇑SKSac **SKSac** **02 40 18.3 -0.2**
comp=Z,56nm,0.8s
SNAA ⇑S **S** **02 40 48.4 +0.3**
comp=Z,106nm,0.8s
SNAA ⇑PKKPbc **PKKPdf** **02 48 11.1 +2.2**
comp=Z,78nm,0.8s
**SNAA Sanae** **90.16 179** P **P** **02 30 46.3 -0.6**
comp=Z,114nm,0.8s,baz=203,slow=5.6,SNR=290
SNAA S **SKSac** **02 40 18.1 -0.4**
comp=Z,3.2nm,1.0s,baz=173,slow=20,SNR=6.7
SNAA PKKP **PKKPdf** **02 48 10.1 +1.3**
comp=Z,3.0nm,0.9s,baz=349,slow=5.2,SNR=12
SNAA PKPPKP **P'P'df** **02 56 18.0 -4.1**
comp=Z,2.0nm,1.0s,baz=347,slow=1.1,SNR=7.0
comp=Z,114nm,0.8s
**SNAA Sanae** **90.16 179** *d*/P **P** **02 30 46.8 -0.1**
SNAA pmax pmax
comp=Z,370nm,1.4s
**BRIGG Briggsdale** **90.17 47** **P** **02 30 48.4 +0.9**
BRIGG IAmb IAmb 02 30 49.9
comp=Z,75nm,0.9s
**KVTX Kingsville** **90.19 61** P **P** **02 30 49.9 +2.2**
**F28M Old Crow** **90.22 14** IAmb IAmb 02 30 48.3
comp=Z,86nm,1.2s
**F28M Old Crow** **90.22 14** P **P** **02 30 47.6 +0.6**
baz=216,SNR=14
**C24K Franklin Bluff** **90.30 10** P **P** **02 30 47.8 +0.5**
baz=208
**VNA3 Neumayer Olymp** **90.30 176** ⇑P **P** **02 30 47.5 +0.1**
comp=Z,438nm,0.7s
VNA3 ⇑SKSac **SKSac** **02 40 19.2 0.0**
comp=Z,1.9nm,0.7s
VNA3 ⇑S **S** **02 40 45.5 -3.7**
comp=Z,3.7nm,0.8s
VNA3 ⇑PKKPbc **PKKPdf** **02 48 11.0 +2.5**
comp=Z,8.1nm,0.6s
**E27K Coleen River** **90.31 13** IAmb IAmb 02 30 49.1
comp=Z,188nm,1.5s
**E27K Coleen River** **90.31 13** P **P** **02 30 47.8 +0.4**
baz=215,SNR=26
**D25K Kavik River** **90.34 11** IAmb IAmb 02 30 48.3
comp=Z,96nm,1.2s
**D25K Kavik River** **90.34 11** P **P** **02 30 47.7 +0.2**
baz=210
**ABTX Abilene, Hawle** **90.58 56** P **P** **02 30 50.5 +1.0**
**G30M tAoh Zrail Nji** **90.59 15** P **P** **02 30 48.2 -0.5**
**G30M tAoh Zrail Nji** **90.59 15** P **P** **02 30 48.6 -0.1**
baz=220,SNR=82
**BRDY Brady** **90.61 57** IAmb IAmb 02 30 51.7
comp=Z,146nm,1.3s
**735A Kenedy** **90.71 60** P **P** **02 30 51.5 +1.4**
**KSCO Kaye Shedlock'** **90.74 49** P **P** **02 30 50.5 +0.3**
KSCO IAmb IAmb 02 30 53.5
comp=Z,118nm,1.1s
**VNA2 Neumayer--Watz** **90.74 177** ⇑P **P** **02 30 50.2 +0.7**
comp=Z,256nm,0.6s,baz=184,slow=4.2
VNA2 ⇑SKSac **SKSac** **02 40 20.4 -1.2**
comp=Z,1.0nm,0.6s,baz=124,slow=5.7
VNA2 ⇑S **S** **02 40 51.0 -2.1**
comp=Z,1.0nm,0.4s,baz=180,slow=6.2
VNA2 ⇑PKKPbc **PKKPdf** **02 48 09.7 +1.9**
comp=Z,8.1nm,0.6s,baz=354,slow=2.8
**GO06 Curarrehue** **90.80 132** P **P** **02 30 51.5 +0.9**
GO06 IAmb IAmb 02 30 53.1
comp=Z,98nm,1.1s
**NVL N'lazarevskaya** **90.85 183** ⇑*i*P **P** **02 30 47.6 -2.3**
NVL *e*S **SKSac** **02 40 24.0 +1.9**
NVL pmax pmax
comp=Z,175nm,0.8s
**PLCA Paso Flores** **90.95 134** P **P** **02 30 52.2 +1.0**
PLCA IAmb IAmb 02 30 53.9
comp=Z,105nm,1.3s
**PLCA Paso Flores** **90.95 134** P **P** **02 30 51.6 +0.4**
comp=Z,18nm,0.6s,baz=248,slow=5.1,SNR=33
PLCA PKKP **PKKPbc** **02 48 12.0 -0.7**
comp=Z,4.4nm,0.9s,baz=50,slow=3.6,SNR=6.9
PLCA PKPPKP **P'P'df** **02 56 20.4 -1.6**
comp=Z,4.4nm,1.0s,baz=61,slow=7.1,SNR=4.5
comp=Z,18nm,0.6s
**PLCA Paso Flores** **90.95 134** P **P** **02 30 52.2 +1.0**
PLCA pmax pmax
comp=Z,105nm,1.3s
**PLCA Paso Flores** **90.95 134** *e*P **P** **02 30 52.0 +0.8**
**VNA1 Neumayer--Stat** **90.97 177** ⇑P **P** **02 30 51.3 +0.9**
comp=Z,547nm,1.0s
VNA1 ⇑SKSac **SKSac** **02 40 25.8 +3.0**
comp=Z,4.4nm,0.9s
VNA1 ⇑S **S** **02 40 54.8 -0.2**
comp=Z,13nm,1.1s
VNA1 ⇑PKKPbc **PKKPdf** **02 48 09.9 +2.6**
comp=Z,8.5nm,0.9s
**SMWD Samnorwood** **91.02 53** P **P** **02 30 51.8 +0.3**
SMWD IAmb IAmb 02 31 45.4
comp=Z,71nm,0.7s
**G31M Satah River** **91.04 16** P **P** **02 30 50.5 -0.2**
baz=221,SNR=141
**C27K Jago River** **91.09 11** P **P** **02 30 50.9 0.0**
baz=213,SNR=35
**E28M Babbage River** **91.10 13** IAmb IAmb 02 30 52.4
comp=Z,98nm,0.8s
**E28M Babbage River** **91.10 13** P **P** **02 30 51.2 +0.2**
baz=216,SNR=59
**C26K Camden Bay** **91.12 11** P **P** **02 30 51.5 +0.5**
baz=212
**F30M Barrier River** **91.19 15** P **P** **02 30 51.8 +0.4**
baz=220,SNR=17
**LZH Lanzhou** **91.24 308** ⇓P **P** **02 30 53.8 +1.2**
LZH pmax pmax
comp=Z,140nm,1.5s
**E29M Blow River** **91.29 14** IAmb IAmb 02 30 52.7
comp=Z,92nm,1.4s
**E29M Blow River** **91.29 14** P **P** **02 30 51.5 -0.4**
baz=218,SNR=17
**D27M Malcolm River** **91.32 12** IAmb IAmb 02 30 53.7
comp=Z,108nm,1.3s
**D27M Malcolm River** **91.32 12** P **P** **02 30 52.7 +0.7**
baz=215
**RTAL Retalhuleu** **91.34 75** P **P** **02 30 54.0 +0.7**
**LAO LASA Array** **91.47 41** P **P** **02 30 54.3 +1.1**
**LAO LASA Array** **91.47 41** P **P** **02 30 54.6 +1.4**
baz=245,SNR=84
**CCIG Comitan** **91.49 73** P **P** **02 30 54.8 +0.7**
**435B Jarrell** **91.56 58** IAmb IAmb 02 30 56.3
comp=Z,82nm,0.7s
**435B Jarrell** **91.56 58** P **P** **02 30 55.2 +1.2**
baz=250
**F31M Tsiigehtchic** **91.57 16** P **P** **02 30 52.8 -0.3**
baz=222,SNR=52
**CIT Chita** **91.58 325** *e*P **P** **02 30 53.9 +0.3**
CIT *e* 02 36 50.1
CIT *e* 02 40 27.2
**MLDN Muldoon** **91.64 59** P **P** **02 30 56.0 +1.6**
**TNCH TengChong** **91.68 296** *e*P **P** **02 30 55.8 +0.9**
TNCH pmax pmax
comp=Z,87nm,1.3s
**WRGLY Wrigley** **91.78 22** P **P** **02 30 55.1 +0.9**
**WRGLY Wrigley** **91.78 22** P **P** **02 30 55.7 +1.5**
baz=231
**RSSD Black Hills** **91.80 44** P **P** **02 30 55.2 +0.1**
RSSD IAmb IAmb 02 30 56.7
comp=Z,108nm,1.0s
**RSSD Black Hills** **91.80 44** P **P** **02 30 56.0 +0.9**
baz=246
**RSSD Black Hills** **91.80 44** P **P** **02 30 55.2 +0.1**
RSSD pmax pmax
comp=Z,108nm,1.0s
**D28M Stokes Point** **91.85 13** P **P** **02 30 55.0 +0.6**
baz=217,SNR=32
**OGNE Ogallala** **91.91 47** P **P** **02 30 56.4 +0.9**
OGNE IAmb IAmb 02 30 57.4
comp=Z,128nm,1.4s
**OGNE Ogallala** **91.91 47** P **P** **02 30 56.7 +1.2**
baz=247
**WTFS Witchita Falls** **91.91 55** **P** **02 30 56.0 +0.5**
WTFS IAmb IAmb 02 30 57.4
comp=Z,59nm,0.8s
**ELIS Ellis County** **92.00 53** P **P** **02 30 56.9 +0.9**
**WMOK Wichita Mounta** **92.01 54** **P** **02 30 55.5 -0.5**

**WMOK Wichita Mounta** 92.01 54 P P 02 30 56.8 +0.8
baz=249
**WMOK Wichita Mounta** 92.01 54 P P 02 30 55.5 -0.5
WMOK pmax pmax
comp=Z,28nm,1.2s
**FW07 Weatherford** 92.07 56 P P 02 30 57.1 +0.8
FW07 IAmb IAmb 02 30 58.4
comp=Z,74nm,1.1s
**WHTX Lake Whitney,** 92.09 57 P P 02 30 57.4 +1.1
WHTX IAmb IAmb 02 30 58.4
comp=Z,54nm,0.8s
**BI02 San Fabin de** 92.16 130 P P 02 30 57.5 +0.7
**FW13 Cleburne** 92.23 57 P P 02 30 56.6 -0.5
FW13 IAmb IAmb 02 30 59.0
comp=Z,69nm,0.8s
**INK Inuvik** 92.27 15 P P 02 30 55.8 -0.5
INK IAmb IAmb 02 30 57.0
comp=Z,114nm,0.9s
**INK Inuvik** 92.27 15 P P 02 30 55.7 -0.6
comp=Z,91nm,0.9s,baz=226,slow=4.8,SNR=74
comp=Z,91nm,0.9s
**INK Inuvik** 92.27 15 P P 02 30 55.9 -0.5
baz=222,SNR=54
**INK Inuvik** 92.27 15 P P 02 30 55.8 -0.5
INK pmax pmax
comp=Z,114nm,1.0s
**FW06 Azle** 92.34 56 P P 02 30 58.2 +0.7
FW06 IAmb IAmb 02 30 59.6
comp=Z,84nm,0.9s
**GO05 Hualа** 92.35 128 P P 02 30 57.9 +0.2
**CSTR Hydro, Custer** 92.40 53 P 02 30 58.1 +0.4
**ML02 Panimavida** 92.42 129 P P 02 30 58.6 +0.7
ML02 IAmb IAmb 02 30 59.8
comp=Z,64nm,1.2s
**FW14 Alvarado** 92.44 57 P P 02 30 58.2 +0.2
**NOKA Waynoka** 92.57 52 P P 02 30 59.2 +0.7
NOKA IAmb IAmb 02 31 00.5
comp=Z,88nm,0.9s
**APG El Apazote** 92.62 75 P P 02 30 59.8 +0.3
comp=Z,5.4nm,0.9s,baz=320,slow=10,SNR=48
comp=Z,5.4nm,0.9s
**OK038 West end E0370** 92.65 53 P 02 30 59.9 +0.9
OK038 IAmb IAmb 02 31 01.0
comp=Z,106nm,0.8s
**X34A Smith Ranch, M** 92.69 55 P 02 31 00.1 +0.9
X34A IAmb IAmb 02 31 01.7
comp=Z,97nm,1.1s
**FW16 Waxahatchie** 92.70 57 P P 02 31 00.1 +0.9
FW16 IAmb IAmb 02 31 01.2
comp=Z,86nm,0.9s
**HKT Hockley** 92.70 59 P P 02 31 01.0 +1.9
HKT IAmb IAmb 02 31 02.2
comp=Z,107nm,1.6s
**HKT Hockley** 92.70 59 P P 02 31 01.0 +1.9
HKT pmax pmax
comp=Z,107nm,1.6s
**Z35A Perchaven, San** 92.71 56 IAmb IAmb 02 31 01.1
comp=Z,93nm,0.9s
**CBKS Cedar Bluff** 92.75 50 P P 02 31 00.1 +0.8
baz=249,SNR=20
**LOOK Love County** 92.99 55 P 02 31 00.9 +0.4
**EFI East Falkland** 93.04 147 P P 02 31 01.6 +1.2
EFI IAmb IAmb 02 31 02.3
comp=Z,123nm,1.1s
**EFI East Falkland** 93.04 147 P P 02 31 01.6 +1.2
EFI pmax pmax
comp=Z,123nm,1.2s
**OK032 Salt Plains WL** 93.17 52 P P 02 31 01.5 +0.3
**CROK Carrier** 93.24 53 P P 02 31 02.1 +0.5
CROK IAmb IAmb 02 31 04.1
comp=Z,90nm,1.0s
**FNO Franklin** 93.25 54 P 02 31 02.6 +1.0
FNO IAmb IAmb 02 31 03.8
comp=Z,43nm,0.9s
**HNVL Huntsville, TX** 93.27 59 P P 02 31 02.7 +0.9
**OKCSW OKLAHOMA CITY** 93.27 54 P 02 31 02.4 +0.7
**BO02 Sierra Bellavi** 93.30 128 P P 02 31 02.6 +0.5
**MT01 Popeta** 93.33 127 P P 02 31 02.8 +0.6
**VA01 Torpederas** 93.38 126 P P 02 31 03.1 +0.8
VA01 IAmb IAmb 02 31 03.6
comp=Z,95nm,1.1s
**OK029 Liberty Lake** 93.39 54 P 02 31 02.4 +0.1
**237A Washetta, Mont** 93.41 58 P P 02 31 03.0 +0.6
**KAN14 Manchester OK** 93.41 52 P P 02 31 02.8 +0.5
KAN14 IAmb IAmb 02 31 04.1
comp=Z,37nm,0.7s
**TREL Terrell** 93.42 57 P P 02 31 03.9 +1.4
**MTO3 Montecristo** 93.45 76 P P 02 31 03.7 +0.5
**DGMT Dagmar** 93.45 40 P P 02 31 03.3 +1.0
baz=246,SNR=40
**KAN08 Anthony NE Sta** 93.50 52 P P 02 31 03.6 +0.9
KAN08 IAmb IAmb 02 31 04.8
comp=Z,108nm,1.0s
**KAN12 Harper NE Stat** 93.50 52 P P 02 31 03.9 +1.2
KAN12 IAmb IAmb 02 31 04.8
comp=Z,79nm,0.9s
**ESQI Esquipulas** 93.52 76 P P 02 31 04.0 +0.7
ESQI IAmb IAmb 02 33 31.3
comp=Z,102nm,1.7s
**ULN Ulaanbaatar** 93.55 319 P P 02 31 02.7 -0.2
ULN PcP 02 31 03.1 0.0
**ULN Ulaanbaatar** 93.55 319 *ce*P P 02 31 02.9 0.0
ULN pmax pmax
comp=Z,38nm,1.2s
**KAN17 Caldwell West** 93.59 52 P P 02 31 04.2 +1.1
**KAN01 Argonia South** 93.63 52 IAmb IAmb 02 31 05.5
comp=Z,118nm,1.1s
**KAN09 Caldwell North** 93.73 52 P P 02 31 04.8 +1.1
**OK031 S. Brethren Rd** 93.92 54 IAmb IAmb 02 31 06.4
comp=Z,73nm,1.5s
**SONM Songino Array** 93.95 319 P P 02 31 04.0 -0.6
**SONM Songino Array** 93.95 319 P P 02 31 04.6 -0.1
comp=Z,5.0nm,0.7s,baz=121,slow=3.8,SNR=30
SONM pP pP 02 33 19.6 -0.3
comp=Z,6.6nm,1.1s,baz=116,slow=4.1,SNR=6.2
SONM PP PP 02 35 02.3 -0.1
comp=Z,2.7nm,0.8s,baz=105,slow=4.5,SNR=3.7
SONM PKiKP PKiKP 02 35 44.0 -0.7
comp=Z,3.2nm,0.8s,baz=97,slow=1.0,SNR=6.1
SONM S SKSac 02 40 38.9 -1.0
comp=Z,1.9nm,1.1s,baz=160,slow=4.6,SNR=1.5
SONM PKKP PKKPdf 02 48 04.1 0.0
comp=Z,6.1nm,0.9s,baz=253,slow=2.9,SNR=14
SONM PKPPKP P'P'df 02 56 12.3 -2.1
comp=Z,3.2nm,1.1s,baz=219,slow=1.8,SNR=8.1
comp=Z,5.0nm,0.7s
**OK052 Battle Ridge R** 93.96 54 IAmb IAmb 02 31 06.6
comp=Z,94nm,1.5s
**OK048 Pawnee Station** 93.99 53 IAmb IAmb 02 31 07.8
comp=Z,32nm,0.8s
**QUOK Quay** 94.09 53 IAmb IAmb 02 31 07.4
comp=Z,101nm,1.8s
**DEOK Depew** 94.14 54 P 02 31 06.3 +0.6
**NATX Nacogdoches** 94.25 58 P P 02 31 06.8 +0.6
**NATX Nacogdoches** 94.25 58 P P 02 31 07.2 +0.9
baz=251
**MT08 Bocatoma Ro** 94.44 127 P P 02 31 08.2 +0.7
**Z38A Mt. Pleasant** 94.47 57 IAmb IAmb 02 31 10.0
comp=Z,41nm,0.8s
**T35A Sooner Cattle** 94.49 53 IAmb IAmb 02 31 10.1
comp=Z,54nm,0.8s
**YKAB2 New Yellowknif** 94.64 25 P P 02 31 07.0 -0.2
**YKA Yellowknife Ar** 94.68 25 P P 02 31 07.0 -0.4
**YKA Yellowknife Ar** 94.68 25 P P 02 31 06.5 -0.9
comp=Z,14nm,0.6s,baz=248,slow=4.4,SNR=36
YKA pP pwP 02 33 23.9 -1.1
comp=Z,6.3nm,1.1s,baz=244,slow=4.2,SNR=4.4
YKA PP PP 02 35 04.4 -3.0
comp=Z,14nm,1.2s,baz=247,slow=7.0,SNR=6.7
YKA PKiKP PKiKP 02 35 44.7 -0.6
comp=Z,2.2nm,0.6s,baz=276,slow=1.7,SNR=7.3
YKA S SKSac 02 40 42.4 -0.3
comp=Z,1.5nm,0.9s,baz=243,slow=6.2,SNR=3.1
YKA PKPPKP P'P'df 02 56 13.7 +1.9
comp=Z,2.4nm,0.9s,baz=44,slow=2.8,SNR=5.1
comp=Z,14nm,0.6s
**TUL3 Leonard** 94.70 54 P P 02 31 08.7 +0.5
**BGNE Belgrade** 94.81 48 P P 02 31 09.3 +0.7
**KSU1 Kansas State U** 95.14 51 P P 02 31 11.4 +1.3
baz=251,SNR=59
**TGUH Tegucigalpa,Un** 95.27 77 P P 02 31 11.6 +0.2
**SUSD Miller** 95.30 45 P P 02 31 10.8 +0.1
SUSD IAmb IAmb 02 31 11.9
comp=Z,68nm,1.2s
**RLO Rose Lookout** 95.38 54 IAmb IAmb 02 31 14.0
comp=Z,13nm,0.7s

**GTA Gaotai** 95.39 310 *e*P P 02 31 12.0 +0.6
GTA pP pP 02 33 29.9 +3.1
GTA pmax pmax
comp=Z,23nm,1.2s
**C36M Paulatuk** 95.48 17 P P 02 31 11.4 +0.6
C36M IAmb IAmb 02 31 12.5
comp=Z,98nm,1.2s
**C36M Paulatuk** 95.48 17 P P 02 31 11.1 +0.2
baz=231,SNR=6.1
**MIAR Mount Ida** 95.99 56 P P 02 31 15.2 +1.1
baz=252
**MDND Maddock** 96.07 42 P P 02 31 14.0 -0.1
**WLAR White Oak Lake** 96.09 57 P P 02 31 15.0 +0.5
WLAR IAmb IAmb 02 31 18.1
comp=Z,24nm,0.7s
**HHAR Hobbs** 96.25 54 P P 02 31 15.4 +0.2
**L34A Svendsen Farm,** 96.25 48 P P 02 31 14.7 -0.4
L34A IAmb IAmb 02 31 16.3
comp=Z,30nm,0.8s
**N35A Tabor** 96.41 49 P P 02 31 17.1 +1.3
**TIXI Tiksi** 96.60 345 *i* P P 02 31 15.3 -0.6
TIXI pmax pmax
comp=Z,19nm,1.0s
**ECSD EROS Data Cent** 96.65 46 IAmb IAmb 02 31 18.1
comp=Z,38nm,1.1s
**ECSD EROS Data Cent** 96.65 46 P P 02 31 17.4 +0.5
baz=251
**ZAK Zakamensk** 96.79 321 *e*P P 02 31 16.3 -1.1
ZAK pmax pmax
comp=Z,8.0nm,1.2s
ZAK pmax pmax
comp=Z,9.0nm,1.4s
**A36M Sachs Harbour** 96.87 15 P P 02 31 16.9 -0.2
**A36M Sachs Harbour** 96.87 15 P P 02 31 17.4 +0.3
baz=230
**NNA Nana** 96.89 105 P P 02 31 19.0 +0.4
comp=Z,4.8nm,0.5s,baz=229,slow=4.7,SNR=1.6
comp=Z,4.8nm,0.5s
**UALR University of** 97.03 56 P P 02 31 18.5 -0.2
**ATAH Atahualpa** 97.09 100 P Pdif 02 31 20.0 0.0
comp=Z,7.3nm,1.0s,baz=307,slow=4.8,SNR=2.6
comp=Z,7.3nm,1.0s
**S39A Bolivar** 97.14 53 IAmb IAmb 02 31 22.1
comp=Z,34nm,0.7s
**143A Socs Landing,** 97.17 58 P P 02 31 20.9 +1.6
**WHAR Wooly Hollow** 97.22 55 P P 02 31 20.0 +0.5
**CCAR Cane Creek** 97.23 57 P P 02 31 21.0 +1.5
CCAR IAmb IAmb 02 31 24.8
comp=Z,108nm,1.8s
**F33A 5 Mile Ranch,** 97.54 44 Pdif P 02 31 20.8 +0.1
**P38A Dawn** 97.57 51 Pdif P 02 31 21.7 +0.7
P38A IAmb IAmb 02 31 23.0
comp=Z,27nm,0.8s
**VBMS Vicksburg** 97.74 59 Pdif P 02 31 22.4 +0.5
**MGMO Mountain Grove** 97.79 54 Pdif P 02 31 22.3 +0.2
MGMO IAmb IAmb 02 31 25.2
comp=Z,29nm,0.7s
**R40A Maddies Statio** 98.12 52 Pdif Pdif 02 31 23.1 -0.3
R40A IAmb IAmb 02 31 26.1
comp=Z,27nm,0.9s
**N38A Joes South For** 98.13 50 Pdif P 02 31 23.7 +0.2
**GOMU GeErMu** 98.18 305 P P 02 31 26.3 +2.0
**346A Big Creek Wild** 98.37 60 Pdif P 02 31 26.4 +1.6
**SCIA State Center** 98.47 49 Pdif P 02 31 25.5 +0.5
**SCIA State Center** 98.47 49 P P 02 31 25.9 +0.9
baz=253
**AGMN Agassiz Nation** 98.59 42 Pdif Pdif 02 31 25.1 -0.2
AGMN IAmb IAmb 02 35 35.4
comp=Z,51nm,1.7s
**AGMN Agassiz Nation** 98.59 42 P P 02 31 25.4 0.0
baz=252,SNR=5.7
**P40A Paris** 98.64 51 Pdif Pdif 02 31 25.5 -0.2
P40A IAmb IAmb 02 31 28.4
comp=Z,27nm,0.7s
**T42A Van Buren** 98.65 54 P 02 31 26.4 +0.5
**CCM Cathedral Cave** 98.82 53 Pdif P 02 31 26.8 +0.2
**CCM Cathedral Cave** 98.82 53 P P 02 31 27.2 +0.5
baz=254
**CCM Cathedral Cave** 98.82 53 *i* P P 02 31 26.8 +0.2
CCM pmax pmax
comp=Z,13nm,0.7s
**I37A Lemond, Waseca** 98.95 47 Pdif Pdif 02 31 26.8 -0.3
I37A IAmb IAmb 02 31 29.6
comp=Z,22nm,0.8s
**PBMO Poplar Bluff** 99.09 54 Pdif Pdif 02 31 28.7 +0.9
**ULM Lac du Bonnet** 99.17 40 Pdif Pdif 02 31 28.0 +0.2
ULM IAmb IAmb 02 35 39.9
comp=Z,43nm,1.6s
**ULM Lac du Bonnet** 99.17 40 P Pdif 02 31 27.7 -0.1
comp=Z,7.6nm,1.0s,baz=262,slow=4.2,SNR=4.8
ULM PP PP 02 35 38.5 -3.0
comp=Z,9.4nm,1.1s,baz=263,slow=8.6,SNR=5.7
ULM PKiKP PKiKP 02 35 54.0 +0.4
comp=Z,2.2nm,0.4s,baz=239,slow=4.6,SNR=1.8
ULM PKKPbc PKKPbc 02 47 49.0 -2.2
comp=Z,2.3nm,0.5s,baz=74,slow=3.6,SNR=7.2
comp=Z,7.6nm,1.0s
**OXF Oxford** 99.27 57 P Pdif 02 31 29.2 +0.6
baz=254
**FVM French Village** 99.43 53 Pdif 02 31 30.3 +1.0
**FVM French Village** 99.43 53 *i* P Pdif 02 31 30.3 +1.0
FVM pmax pmax
comp=Z,10.0nm,0.8s
**PARMO Parma** 99.58 55 Pdif Pdif 02 31 30.1 +0.1
PARMO IAmb IAmb 02 31 35.0
comp=Z,22nm,0.7s
**SPMN Marine on St.** 99.70 46 Pdif Pdif 02 31 30.2 -0.1
SPMN IAmb IAmb 02 31 31.9
comp=Z,21nm,0.9s
**CGM3 Cape Girardeau** 99.83 54 Pdif Pdif 02 31 31.8 +0.8
**L40A Anamosa** 99.94 49 Pdif Pdif 02 31 32.4 +1.0
L40A IAmb IAmb 02 31 34.1
comp=Z,36nm,0.8s
**S44A Carbondale** 100.24 54 Pdif Pdif 02 31 35.2 +2.3
**SIUC Southern Illin** 100.28 54 Pdif Pdif 02 31 34.8 +1.8
**BRAL Brewton** 100.30 61 P Pdif 02 31 33.9 +0.6
baz=255
**PLAL Pie Wick Lake** 100.46 57 Pdif Pdif 02 31 34.0 0.0
**LRAL Lakeview Retre** 100.82 59 Pdif Pdif 02 31 37.0 +1.4
**LRAL Lakeview Retre** 100.82 59 P Pdif 02 31 36.2 +0.6
baz=255
**I40A Norwalk** 100.85 47 Pdif Pdif 02 31 35.9 +0.4
**JFWS Jewell Farm** 100.86 48 Pdif Pdif 02 31 35.8 +0.3
**JFWS Jewell Farm** 100.86 48 P Pdif 02 31 36.2 +0.7
baz=255
**JFWS Jewell Farm** 100.86 48 *i* P Pdif 02 31 35.8 +0.3
**WVT Waverly** 100.94 56 P Pdif 02 31 36.4 +0.4
baz=255
**HDIL Hopedale** 100.95 51 P Pdif 02 31 36.5 +0.5
baz=255
**EYMN Ely** 101.30 43 Pdif Pdif 02 31 37.0 -0.3
**EYMN Ely** 101.30 43 P Pdif 02 31 37.9 +0.6
baz=255
**G40A Rib Lake** 101.49 46 Pdif Pdif 02 31 38.3 0.0
**PALK Pallekele** 102.66 274 P Pdif 02 31 43.9 -0.4
comp=Z,14nm,1.0s,baz=215,slow=13,SNR=2.5
PALK PKiKP PKiKP 02 36 01.0 -0.2
comp=Z,38nm,1.2s,baz=147,slow=1.8,SNR=3.8
**LPAZ La Paz** 103.14 112 Pdif Pdif 02 31 47.8 +0.7
comp=Z,5.1nm,1.0s,baz=274,slow=2.9,SNR=9.9
LPAZ PKiKP PKiKP 02 36 02.9 +0.2
comp=Z,2.8nm,0.9s,baz=301,slow=1.4,SNR=4.9
LPAZ PKKPbc PKKPbc 02 47 39.6 -0.3
comp=Z,4.5nm,0.7s,baz=49,slow=2.3,SNR=11
**GOGA Godfrey** 103.78 59 P Pdif 02 31 48.7 -0.1
baz=257
**ROSC El Rosal** 104.76 90 PKKPbc PKKPbc 02 47 35.7 +1.1
comp=Z,8.4nm,0.6s,baz=20,slow=24,SNR=4.7
**WMQ Urumqi** 105.30 312 Pdif Pdif 02 31 53.9 -1.5
**AAM Ann Arbor** 105.47 50 P PKiKP 02 36 05.4 -0.1
baz=259
**ACSO Alum Creek Sta** 105.58 52 P PKiKP 02 36 05.2 -0.5
baz=259
**P52A Corning** 106.11 53 P PKiKP 02 36 06.2 -0.5
baz=259
**O53A New Philadelph** 106.91 53 P PKiKP 02 36 07.8 -0.4
baz=260
**BLA Blacksburg** 106.99 56 P PKiKP 02 36 08.0 -0.5
baz=260
**CPUP Villa Florida** 107.49 126 PKiKP PKiKP 02 36 08.9 -0.8
comp=Z,4.0nm,0.9s,baz=261,slow=0.5,SNR=6.6
CPUP PKKP PKKPdf 02 47 37.3 -0.1
comp=Z,3.6nm,0.7s,baz=97,slow=1.3,SNR=6.2
**M53A WI Miller and** 107.51 51 P PKiKP 02 36 08.9 -0.3
baz=261
**ZSN Zaisan** 107.85 315 *e*PP PP 02 36 43.2 -1.8
baz=315
**ZSN Zaisan** 107.85 315 *e*PKiKP PKiKP 02 36 08.9 -0.9
baz=315
**MCWV Mont Chateau** 107.85 53 P PKiKP 02 36 09.3 -0.6
baz=261
**ERPA Erie** 108.12 51 P PKiKP 02 36 10.4 0.0
baz=262
**ZALV Zalesovo Beam** 108.64 322 Pdiff Pdif 02 32 08.9 -0.9
comp=Z,0.4nm,0.3s,baz=97,slow=7.6,SNR=4.0
ZALV PKiKP PKiKP 02 36 09.7 -1.3
comp=Z,14nm,0.6s,baz=88,slow=0.6,SNR=45
ZALV PP PP 02 36 51.5 +1.1
comp=Z,4.5nm,0.8s,baz=96,slow=8.1,SNR=4.4
ZALV PKKPbc PKKPbc 02 47 21.9 -1.5
comp=Z,2.6nm,0.5s,baz=276,slow=3.9,SNR=7.8
**CNNC Cliffs of the** 108.67 58 P PKiKP 02 36 11.3 -0.3
baz=260
**SADO Sadowa** 109.09 48 PKKPbc PKKPbc 02 47 20.1 -1.6
comp=Z,3.9nm,0.5s,baz=76,slow=2.8,SNR=7.7
**SSPA Standing Stone** 109.48 53 P PKiKP 02 36 12.6 -0.4
baz=262
**MKAR Makanchi Array** 109.51 314 Pdiff Pdif 02 32 15.2 +1.3
comp=Z,1.3nm,0.7s,baz=89,slow=3.9,SNR=6.6
MKAR PKiKP PKiKP 02 36 11.8 -1.1
comp=Z,20nm,0.6s,baz=204,slow=0.7,SNR=125
MKAR SKP SKiKP 02 38 49.8 +0.1
comp=Z,1.4nm,0.5s,baz=107,slow=2.1,SNR=4.1
MKAR PKKPbc PKKPbc 02 47 19.9 -0.5
comp=Z,10nm,0.9s,baz=272,slow=3.8,SNR=17
**CBN Corbin Frederi** 109.54 55 P PKiKP 02 36 12.5 -0.6
baz=262
**HNLY HANLEY** 110.18 299 *e*P PKiKP 02 36 11.8 -3.5
**KLP Kalpa** 110.58 297 *e*P PKiKP 02 36 13.0 -2.8
KLP IAmb IAmb 02 36 16.6
comp=Z,63nm,0.5s
**SONA Sohna** 111.03 294 *e*P PKiKP 02 36 15.2 -1.1
**BINY Binghamton** 111.09 51 P PKiKP 02 36 15.4 -0.6
baz=264
**PDGK Podgornoye** 111.13 310 PKiKP PKiKP 02 36 15.4 -0.8
**SHLS Shalkode** 111.14 310 *e*PKiKP PKiKP 02 36 14.6 -1.7
baz=310
**SHLS Shalkode** 111.14 310 *i* PKiKP PKiKP 02 36 14.5 -1.7
**SMLA Simla** 111.43 297 *e*P PKiKP 02 36 16.0 -1.0
SMLA IAmb IAmb 02 36 17.6
comp=Z,34nm,0.6s
**UZB Uzynbulak** 111.45 310 *e*PKiKP PKiKP 02 36 16.0 -0.9
baz=310
**UZB Uzynbulak** 111.45 310 *i* PKiKP PKiKP 02 36 16.0 -0.9
**KUDL Kundal** 111.53 294 *e*P PKiKP 02 36 16.1 -1.1
**KPKS Kokpek** 111.73 310 *e*PKiKP PKiKP 02 36 16.5 -0.9
baz=310
**KPKS Kokpek** 111.73 310 *i* PKiKP PKiKP 02 36 16.4 -0.9
**ZHN Zhinishke** 111.89 310 *e*PKiKP PKiKP 02 36 16.5 -1.1
baz=310
**ZHN Zhinishke** 111.89 310 *i* PKiKP PKiKP 02 36 16.5 -1.1
**SATY Saty** 111.90 310 *e*PKiKP PKiKP 02 36 16.8 -0.9
baz=310
**SATY Saty** 111.90 310 *i* PKiKP PKiKP 02 36 16.8 -0.9
**TDK Taldyqorghan** 112.05 312 *e*PKiKP PKiKP 02 36 16.8 -1.1
baz=312
**TDK Taldyqorghan** 112.05 312 *i* PKiKP PKiKP 02 36 16.7 -1.1
**BHK Bhakra** 112.11 297 *e*P PKiKP 02 36 17.8 -0.5
**KURK Kurchatov** 112.22 318 *i* PKiKP PKiKP 02 36 16.9 -1.0
**KURBB Kurchatov Arra** 112.27 318 Pdiff Pdif 02 32 28.0 +1.9
comp=Z,0.7nm,0.6s,baz=83,slow=1.6,SNR=6.6
KURBB PKiKP PKiKP 02 36 16.9 -1.1
comp=Z,28nm,0.7s,baz=92,slow=1.8,SNR=168
KURBB PP PP 02 37 15.3 -0.8
comp=Z,5.4nm,0.8s,baz=94,slow=6.1,SNR=8.2
KURBB SKP SKPdf 02 38 54.4 -0.4
comp=Z,3.9nm,0.6s,baz=86,slow=1.8,SNR=6.5
KURBB PKKPbc PKKPbc 02 47 10.8 -0.8
comp=Z,7.7nm,0.8s,baz=273,slow=3.9,SNR=12
KURBB SKKPbc SKKPbc 02 49 55.3 -2.9
comp=Z,5.2nm,1.0s,baz=269,slow=3.4,SNR=10
KURBB PKPPKP P'P'df 02 55 38.7 -0.8
comp=Z,0.6nm,0.8s,baz=272,slow=2.0,SNR=4.3
**LONY Lake Ozonia** 112.32 49 P PKiKP 02 36 17.8 -0.5
baz=266
**DHRM DHARAMSHALA** 112.33 298 IAmb IAmb 02 36 19.0
comp=Z,53nm,0.6s
DHRM *e*P PKiKP 02 36 20.1 +1.1
**PAL Palisades** 112.52 53 P PKiKP 02 36 18.6 -0.1
baz=265
**THN Thein Dam** 112.84 298 IAmb IAmb 02 36 20.9
comp=Z,72nm,0.9s
THN *e*P PKiKP 02 36 22.0 +2.4
**AJM Ajmer** 112.86 292 *e*P PKiKP 02 36 20.9 +1.0
**MDOK Medeo** 112.90 310 *e*PKiKP PKiKP 02 36 18.4 -1.2
baz=310
**MDOK Medeo** 112.90 310 *i* PKiKP PKiKP 02 36 18.4 -1.2
**TNSS Tian-Shan** 112.96 310 *e*PP PP 02 37 19.7 -2.0
baz=310
**TNSS Tian-Shan** 112.96 310 *i* PKiKP PKiKP 02 36 18.8 -1.3
TNSS *e* 02 37 19.6
**TNSS Tian-Shan** 112.96 310 *e*PKiKP PKiKP 02 36 18.9 -1.3
baz=310
**AAA Alma-Ata** 113.00 310 *e*PKiKP PKiKP 02 36 18.9 -0.9
baz=310
**AAA Alma-Ata** 113.00 310 *i* PKiKP PKiKP 02 36 18.8 -0.9
**KSH Kashi** 113.42 306 PKP PKiKP 02 36 21.3 +0.6
**ULHL Ulahol** 113.43 309 P PKiKP 02 36 20.6 -0.1
SNR=12
**L61B Northampton** 113.55 51 P PKiKP 02 36 20.5 -0.2
baz=266
**TKM2 Tokmak 2** 113.94 309 P PKiKP 02 36 20.9 -0.8
SNR=40
**LBNH Lisbon** 114.19 49 P PKiKP 02 36 22.4 +0.5
baz=268
**HRV Adam Dziewonsk** 114.38 51 P PKiKP 02 36 22.4 +0.1
baz=267
**KBK Karagaybulak** 114.41 309 P PKPdf 02 36 22.1 -0.5
SNR=18
**CHMS Chumysh** 114.57 310 P PKPdf 02 36 22.1 -0.6
SNR=14
**UCH Uchtor** 114.71 309 P PKiKP 02 36 23.9 +0.3
SNR=6.8
**AAK Ala-Archa** 114.74 309 P PKPdf 02 36 23.0 -0.2
SNR=8.2
**AAK Ala-Archa** 114.74 309 PKPdf 02 36 22.6 -0.6
**AAK Ala-Archa** 114.74 309 *i* PKPdf PKPdf 02 36 23.0 -0.2
SNR=8.9
**AAK Ala-Archa** 114.74 309 *c i* PKiKP PKPdf 02 36 22.8 -0.4
AAK pmax pmax
comp=Z,23nm,0.7s
**USP Ospenovka** 114.76 310 P PKPdf 02 36 22.4 -0.7
SNR=39
**NIL Nilore** 115.04 299 PKPdf 02 36 23.0 -0.9
**NIL Nilore** 115.04 299 PKiKP PKPdf 02 36 23.0 -0.9
**BTLS Baital** 115.14 312 *e*PKiKP PKPdf 02 36 22.8 -0.9
baz=312
**BTLS Baital** 115.14 312 *i* PKiKP PKPdf 02 36 22.8 -0.9
**EKS2 Erkin-Say** 115.27 309 P PKPdf 02 36 23.8 -0.4
SNR=23
**AML Almayashu** 115.31 309 P PKPdf 02 36 24.4 -0.2
SNR=29
**PCRV Puerto La Cruz** 115.47 87 PKP PKPdf 02 36 23.6 -1.7
comp=Z,9.2nm,0.9s,baz=32,slow=19,SNR=2.2
**NEEM North Greenlan** 115.53 11 *i* P PKPdf 02 36 22.5 -1.4
**KULLO Kullorsuaq** 115.63 15 *i* P PKPdf 02 36 22.0 -1.8
**PKME Peaks-Kenny Pk** 116.09 48 P PKiKP 02 36 25.8 +0.3
baz=270
**NOR Nord** 116.23 3 *i* P PKPdf 02 36 22.0 -2.8
**OTUK Ortayu** 116.31 315 PKiKP PKPdf 02 36 24.6 -1.3
**UPNV Upernavik** 116.69 16 *i* P PKPdf 02 36 24.5 -1.3
**SCHQ Schefferville** 117.14 37 PKP PKPdf 02 36 26.1 -1.2
comp=Z,18nm,0.9s,baz=344,slow=1.1,SNR=16
SCHQ SKP SKPdf 02 39 05.0 +0.9
comp=Z,7.8nm,0.9s,baz=42,slow=6.7,SNR=3.0
SCHQ PKPPbc PKKPbc 02 46 54.4 -0.9
comp=Z,3.3nm,0.5s,baz=95,slow=2.5,SNR=6.4
**VAO Valinhos** 117.16 129 PKiKP 02 36 28.4 0.0
**BVA0 Borovoye Array** 117.25 321 *i* PKiKP PKPdf 02 36 26.6 -0.9
**BVAR Borovoye Array** 117.25 321 PKP PKPdf 02 36 26.6 -0.9
comp=Z,51nm,0.5s,baz=109,slow=0.9,SNR=170
BVAR SKP SKPdf 02 39 04.8 +0.5
comp=Z,6.3nm,0.5s,baz=126,slow=1.9,SNR=4.6
BVAR PKKPbc PKKPbc 02 46 54.2 -0.7
comp=Z,2.0nm,0.5s,baz=194,slow=2.1,SNR=7.6
**BRVK Borovoye** 117.31 321 PKPdf 02 36 26.8 -0.8
**BRVK Borovoye** 117.31 321 *c i* PKiKP PKPdf 02 36 26.9 -0.7
BRVK pmax pmax
comp=Z,60nm,1.0s
**KK31 Karatay Array** 117.68 310 *i* PKiKP PKPdf 02 36 27.6 -1.1
**KKAR Karatay Array** 117.68 310 PKPdf 02 36 27.2 -1.5
**KKAR Karatay Array** 117.68 310 PKiKP PKPdf 02 36 27.2 -1.5

NUUG Nuugaatsiaq 118.06 17 *i* P PKPdf 02 36 26.8 -1.7
BRLS Borolday 118.17 309 *e*PKiKP PKPdf 02 36 29.0 -0.6
baz=309
BRLS Borolday 118.17 309 *i* PKIKP PKPdf 02 36 29.0 -0.6
KBL Kabul 118.60 300 PKPdf 02 36 30.7 -0.3
KBL Kabul 118.60 300 PKIKP PKPdf 02 36 30.7 -0.3
SIMJ Simiganj 118.79 304 PKPdf 02 36 30.7 -0.4
UMMG Uummannaq 118.79 18 *i* P PKPdf 02 36 29.1 -0.8
KBS Kingsbay 119.18 358 PKiKP 02 36 30.8 +0.2
KBS Kingsbay 119.18 358 *e*PKPdf PKPdf 02 36 30.5 0.0
KBS Kingsbay 119.18 358 PKIKP PKiKP 02 36 30.8 +0.2
KBS Kingsbay 119.18 358 *i* P PKPdf 02 36 29.6 -0.9
BBSR BB Station 119.24 63 PKiKP 02 36 32.1 +0.1
SPA0 Spitsbergen Ar 119.70 357 *e*PKPdf PKPdf 02 36 31.1 -0.5
SPITS Spitsbergen Ar 119.70 357 PKP PKPdf 02 36 31.3 -0.3
comp=Z,60nm,0.5s,baz=85,slow=5.1,SNR=82
SPITS PKKPbc PKKPbc 02 46 45.0 -1.7
comp=Z,5.6nm,0.5s,baz=146,slow=7.7,SNR=8.7
FDF Fort de France 119.89 83 PKPdf 02 36 33.0 -0.7
FDF Fort de France 119.89 83 PKIKP PKPdf 02 36 33.0 -0.7
H05N1 Guadeloupe/Mar 120.31 81 PKP PKPdf 02 36 33.1 -1.3
SNR=9.8
BDFB Brasilia 120.52 121 PKP PKPdf 02 36 34.5 -0.6
comp=Z,22nm,0.8s,baz=287,slow=1.1,SNR=35
BDFB SKP SKPdf 02 39 12.3 +0.3
comp=Z,13nm,0.8s,baz=188,slow=2.7,SNR=7.8
BDFB PKKPbc PKKPbc 02 46 42.9 -0.3
comp=Z,8.8nm,0.7s,baz=80,slow=3.7,SNR=13
HOPEN Hopen 120.59 354 *e*PKPdf PKPdf 02 36 33.1 -0.2
DAG Danmarks Havn 120.63 5 *i* P PKPdf 02 36 32.0 -1.3
SFJD Kangerlussuaq 121.05 21 PKPdf 02 36 33.7 -0.6
SFJD Kangerlussuaq 121.05 21 PKIKP PKPdf 02 36 33.7 -0.6
SFJD Kangerlussuaq 121.05 21 *i* P PKPdf 02 36 32.6 -1.7
SUMG Summit 121.13 13 PKPdf 02 36 34.8 -0.1
SUMG Summit 121.13 13 PKIKP PKPdf 02 36 34.8 -0.1
SUMG Summit 121.13 13 *i* P PKPdf 02 36 34.0 -0.9
NUUK Nuuk 121.94 24 *i* P PKPdf 02 36 34.9 -1.2
SVE Sverdlovsk 122.06 326 *i* PKIKP PKPdf 02 36 36.2 -0.4
SVE pmax pmax
comp=Z,97nm,0.9s
DBG Daneborg 122.74 7 *i* P PKPdf 02 36 36.3 -1.2
DY2G Dye2 122.80 21 *i* P PKPdf 02 36 36.1 -2.0
BJO1 Bjornoya 123.03 355 *e*PKPdf PKPdf 02 36 37.6 -0.4
ICESG Greenland Ices 123.22 16 *i* P PKPdf 02 36 37.2 -1.7
ARU Arti 123.27 326 PKPdf 02 36 38.3 -0.7
ARU Arti 123.27 326 *i* PKIKP PKPdf 02 36 38.6 -0.3
ARU 02 38 29.9
ARU 02 42 51.9
ARU SS SS 02 54 56.1 +27
AB31 Akbulak array 124.33 318 *i* PKIKP PKPdf 02 36 40.4 -0.8
IVI Ivigtut 124.75 27 *i* P PKPdf 02 36 39.8 -1.8
MDP Montagnes des 125.39 97 PKP PKPdf 02 36 44.3 0.0
comp=Z,48nm,0.7s,baz=230,slow=3.7,SNR=25
MDP PKKPbc PKKPab 02 46 25.3 +0.4
comp=Z,5.5nm,0.7s,baz=82,slow=0.6,SNR=5.9
VADS Vadso 125.57 349 *e*PKPdf PKiKP 02 36 43.2 -0.2
ISOG Isortoq, Green 125.75 20 *i* P PKPdf 02 36 41.4 -2.0
SCO Scoresbysund 125.94 10 *i* P PKPdf 02 36 42.8 -0.9
SOEG Soedalen 125.97 15 *i* P PKPdf 02 36 41.8 -1.9
HAMF Hammerfest 126.06 351 *e*PKPdf PKPdf 02 36 43.5 -0.3
ANGG Ammassalik, Gr 126.12 19 *i* P PKPdf 02 36 41.4 -2.7
LVZ Lovozero 126.24 345 PKPdf 02 36 43.7 -0.7
LVZ Lovozero 126.24 345 *c i* PKIKP PKPdf 02 36 44.2 -0.2
LVZ pmax pmax
comp=Z,65nm,0.7s
KEV Kevo 126.31 349 PKPdf 02 36 44.2 -0.2
KEV Kevo 126.31 349 PKIKP PKPdf 02 36 44.2 -0.2
SUR Sutherland 126.35 200 PKiKP 02 36 46.4 -0.1
SUR Sutherland 126.35 200 PP PP 02 38 51.2 +1.1
comp=Z,18nm,1.0s,baz=138,slow=10,SNR=3.1
SUR SKPab SKPab 02 39 04.4
comp=Z,41nm,0.8s,baz=126,slow=4.6,SNR=13
SUR PKKPbc PKKPbc 02 46 19.5 -2.4
comp=Z,9.3nm,0.7s,baz=316,slow=5.1,SNR=7.4
ARA0 ARCESS Array S 126.76 350 *e*PKPdf PKPdf 02 36 45.2 -0.1
ARCES ARCESS Array B 126.76 350 PKPpre 02 36 37.0
ARCES ARCESS Array B 126.76 350 PKP PKPdf 02 36 45.2 -0.1
comp=Z,92nm,0.6s,baz=42,slow=1.5,SNR=91
ARCES PP PP 02 38 51.6 -1.2
comp=Z,4.9nm,0.8s,baz=46,slow=3.9,SNR=3.9
ARCES pPKP pPKPdf 02 39 08.6 -0.6
comp=Z,15nm,0.9s,baz=44,slow=2.7,SNR=5.6
ARCES PKKPbc PKKPab 02 46 17.3 +0.3
comp=Z,2.8nm,0.5s,baz=216,slow=1.9,SNR=17
ARCES PKKP PKKPdf 02 47 00.5 -2.1
comp=Z,0.7nm,0.4s,baz=208,slow=1.7,SNR=3.9
APA Apatity 126.80 345 ⇓*i* PKIKP PKPdf 02 36 43.5 -1.9
APA *i* 02 38 50.0
APA pmax pmax
comp=Z,65nm,0.7s
KIRV Kirov 126.96 331 *c i* PKIKP PKPdf 02 36 45.7 -0.2
JMI Jan Mayen 127.05 4 *e*PKPdf PKiKP 02 36 46.9 +0.5
KTK1 Kautokeino 127.60 350 *e*PKPdf PKPdf 02 36 46.7 -0.2
TRO Tromso 127.63 352 *e*PKPdf PKPdf 02 36 46.1 -0.8
BOSA Boshof 128.06 206 PKhKP PKPpre 02 36 34.2
comp=Z,2.7nm,0.6s,baz=179,slow=2.7,SNR=6.7
BOSA PKP PKPdf 02 36 49.0 -0.2
comp=Z,49nm,0.8s,baz=153,slow=2.3,SNR=43
BOSA PP PP 02 39 02.7 +1.3
comp=Z,15nm,1.0s,baz=153,slow=9.4,SNR=4.1
BOSA pPKP pPKPdf 02 39 12.2 -0.8
comp=Z,30nm,1.0s,baz=128,slow=1.9,SNR=7.9
BOSA PKKPbc PKKPbc 02 46 12.8
comp=Z,3.7nm,0.7s,baz=350,slow=3.4,SNR=8.9
BOSA PKKP PKKPdf 02 46 56.9 -2.0
comp=Z,2.8nm,0.7s,baz=270,slow=0.7,SNR=4.6
ADZR Andozero 128.14 340 ⇓*i* PKIKP PKPdf 02 36 47.9 -0.1
ADZR *e* 02 40 07.9
ADZR pmax pmax
comp=Z,38nm,0.6s
SOHO SOHO 128.83 287 *i* PKPdf PKPdf 02 36 49.8 -0.7
SNR=48
MDH Madha 129.13 288 PKPdf PKPdf 02 36 49.8 -1.3
UOSS Minazif 129.19 288 PKPdf 02 36 50.1 -1.1
UOSS Minazif 129.19 288 *i* PKPdf PKPdf 02 36 50.1 -1.1
SNR=11
HATD Hatta, Dubai 129.25 287 *i* PKPdf PKPdf 02 36 50.4 -0.9
SNR=17
HATD Hatta, Dubai 129.25 287 P SKPbc 02 39 17.0 +1.6
SNR=5.7
MSFE Esma-Masafi 129.26 288 *i* PKPdf PKPdf 02 36 50.0 -1.4
SNR=11
MASF Masafi 129.26 288 P SKPbc 02 39 15.7 +0.2
SNR=12
ASHO Ashiyiah 129.31 287 *i* PKPdf PKPdf 02 36 50.4 -1.1
SNR=14
ASHO Ashiyiah 129.31 287 P SKPbc 02 39 16.0 +0.3
SNR=6.5
SHME Shamm 129.31 289 *i* PKPdf PKPdf 02 36 50.3 -1.1
SNR=7.9
ALNE Al Ain 129.54 286 *i* PKPdf PKPdf 02 36 51.0 -1.0
SNR=20
ALNE Al Ain 129.54 286 P SKPbc 02 39 16.2 -0.3
SNR=11
LOF Lofoten 129.66 354 *e*PKPdf PKPdf 02 36 50.2 -0.6
STEI Steigen 129.69 353 *e*PKPdf PKPdf 02 36 50.6 -0.3
NAZ Nazwa, Dubai 129.69 288 *i* PKPdf PKPdf 02 36 51.5 -0.7
SNR=16
NAZ Nazwa, Dubai 129.69 288 P SKPab 02 39 17.0 -0.1
SNR=9.2
UMQ Umm Al-Quwin 129.72 288 PKiKP PKiKP 02 36 52.9 -0.1
FAQ Al Faqa, Dubai 129.73 287 *i* PKPdf PKPdf 02 36 52.1 -0.2
SNR=8.0
FAQ Al Faqa, Dubai 129.73 287 P SKPab 02 39 17.1 -0.2
SNR=11
ASUD Al Ashush, Dub 129.96 287 *i* PKiKP PKPdf 02 36 52.6 -0.1
SNR=10
ASUD Al Ashush, Dub 129.96 287 P SKPab 02 39 19.0 +0.7
SNR=15
RBK Rabkut 130.19 278 P SKPab 02 39 20.1 +0.6
SNR=10.0
FAUS Fauske 130.21 353 *e*PKPdf PKPdf 02 36 51.2 -0.7
AJN Ajban 130.27 287 *i* PKPdf PKPdf 02 36 52.8 -0.4
SNR=5.2
AJN Ajban 130.27 287 P SKPbc 02 39 19.6 +0.5
SNR=14
DOK Doka 130.43 279 P SKPbc 02 39 20.1 +0.2
SNR=13
WHFO Wadi Hawf 130.66 278 P SKPbc 02 39 21.0 +0.2
SNR=12
JOF Joensuu 131.00 343 *e*P PKPdf 02 36 53.1 -0.3
ABTO Aybut 131.02 277 P SKPab 02 39 24.0 +0.9
SNR=7.9
LBTB Lobatse 131.03 209 SKPbc SKPab 02 39 22.5 -0.4
comp=Z,45nm,0.7s,baz=133,slow=4.2,SNR=22
LBTB PKKP PKKPdf 02 46 52.5 -0.6
comp=Z,3.4nm,0.7s,baz=315,slow=4.6,SNR=4.1
BORG Borgarnes 131.11 13 PKiKP 02 36 54.6 -0.1
BORG Borgarnes 131.11 13 PKIKP PKiKP 02 36 54.6 -0.1
KONS Konsvik 131.29 354 *e*PKPdf PKPdf 02 36 53.5 -0.4
STOK Stokkvaagen 131.46 354 *e*PKPdf PKPdf 02 36 54.0 -0.2
MOR8 Moi Rana 131.47 353 *e*PKPdf PKPdf 02 36 53.4 -0.9
MZR Muzera 131.53 285 *i* PKiKP PKPdf 02 36 55.9 +0.2
SNR=16
MZR Muzera 131.53 285 P SKPab 02 39 24.2 -0.8
SNR=21
JRN Qarnain Island 132.23 287 P SKPab 02 39 28.1 +0.1
SNR=5.3
VAF Ylistaro 133.05 347 *e*P PKPdf 02 36 57.1 -0.2
KEF Keuruu 133.32 345 *e*P PKPdf 02 36 57.1 -0.7
NSS Namsos 133.33 354 *e*PKPdf PKPdf 02 36 57.3 -0.5
MATP Matopo 133.37 216 PKhKP PKPpre 02 36 43.8
comp=Z,2.2nm,0.4s,baz=158,slow=4.1,SNR=19
MATP PKP PKiKP 02 37 00.4 -0.4
comp=Z,20nm,0.7s,baz=152,slow=1.4,SNR=22
MATP SKPbc SKPbc 02 39 30.4 +0.3
comp=Z,29nm,0.9s,baz=190,slow=2.6,SNR=9.7
FINES FINESS Array B 133.63 344 PKPpre 02 36 50.9
FINES FINESS Array B 133.63 344 PKhKP PKPpre 02 36 43.5
comp=Z,2.4nm,0.4s,baz=59,slow=2.6,SNR=26
FINES PKP PKPdf 02 36 58.5 +0.1
comp=Z,48nm,0.5s,baz=64,slow=3.2,SNR=28
FINES SKPbc SKPbc 02 39 29.7 +0.3
comp=Z,36nm,1.0s,baz=53,slow=5.4,SNR=12
FINES PKKP PKKPdf 02 46 46.0 -3.1
comp=Z,3.9nm,0.9s,baz=210,slow=1.9,SNR=5.9
FINES SKKPbc SKKPbc 02 48 44.8 -3.5
comp=Z,4.8nm,1.0s,baz=152,slow=4.1,SNR=3.9
TRNA Turayna 133.71 287 P SKPab 02 39 34.1 -0.3
SNR=6.5
PUL Pulkovo 133.76 340 *c i* PKIKP PKiKP 02 37 00.5 +0.3
PUL pmax pmax
comp=Z,120nm,0.7s
MOS Moscow 133.87 333 *i* PKIKP PKPdf 02 36 56.0 -3.1
MOS pmax pmax
comp=Z,75nm,0.9s
SHMA Al-Shehemyia 133.97 288 P SKPbc 02 39 33.0 +1.3
SNR=6.8
VRH Novokhopyorsk 134.49 325 *e*PKIKP PKPdf 02 36 55.2 -5.2
VRH pmax pmax
comp=Z,50nm,1.7s
OBN Obninsk 134.73 332 *e*PKIKP PKPdf 02 37 00.2 -0.5
OBN pmax pmax
comp=Z,56nm,0.6s
TBLU Trondheim 134.74 355 *e*PKPdf PKPdf 02 37 00.5 0.0
RAF Rauma 135.04 346 *e*P PKPdf 02 36 53.6 -7.4
MEF Metsahovi 135.11 344 *e*P PKPdf 02 37 00.8 -0.4
LPSR Galich'ya Gora 135.17 328 *e*PKIKP PKPdf 02 36 59.0 -2.6
LPSR pmax pmax
comp=Z,60nm,1.1s
ARBE Arbavere 135.34 343 *e*P PKPdf 02 36 58.4 -3.3
VORR Voronezh 135.56 327 *e*PKIKP PKPdf 02 37 00.0 -2.4
VORR pmax pmax
comp=Z,90nm,0.9s
MOL Molde 135.63 356 *e*PKPdf PKPdf 02 37 02.6 +0.4
RCBR Riachuelo 135.81 119 PKhKP PKPpre 02 36 51.3
comp=Z,2.4nm,0.5s,baz=242,slow=7.0,SNR=11
RCBR PKP PKPdf 02 37 04.5 +0.5
comp=Z,6.6nm,0.7s,baz=243,slow=6.8,SNR=6.1
RCBR SKPbc SKPbc 02 39 38.2 +0.3
comp=Z,25nm,0.9s,baz=243,slow=7.4,SNR=14
VSR Storozhevoye 135.84 327 *e*PKIKP PKPdf 02 36 59.0 -3.9
VSR pmax pmax
comp=Z,60nm,1.1s
VORD Divnogorie 135.91 326 *e*PKIKP PKPdf 02 37 00.6 -2.4
VORD pmax pmax
comp=Z,50nm,1.0s
MTSE Matsula 136.56 343 *e*P PKPdf 02 37 02.1 -1.9
GOF Gotfitskoye 136.56 317 *c e*PKIKP PKPdf 02 37 04.6 +0.1
FOO Floro 136.73 358 *e*PKPdf PKPdf 02 37 04.5 +0.3
NB2 NORSAR Subarra 136.82 353 PKPdf PKPpre 02 36 54.8
comp=Z,21nm,0.6s,baz=13,slow=1.9
NB2 SKPa SKPbc 02 39 40.1 +0.8
comp=Z,12nm,0.8s,baz=11,slow=2.9
NB2 NORSAR Subarra 136.82 353 PKPdf PKPpre 02 36 54.8
baz=13,slow=1.9
NOA NORSAR Array B 136.82 353 PKhKP PKPpre 02 36 54.8
comp=Z,12nm,0.7s,baz=21,slow=3.8,SNR=24
NOA PKP PKPdf 02 37 04.2 -0.2
comp=Z,24nm,0.6s,baz=14,slow=4.0,SNR=31
NOA SKPbc SKPbc 02 39 39.6 +0.2
comp=Z,28nm,0.9s,baz=16,slow=4.6,SNR=15
NC602 NORSAR Array S 137.08 353 *e*PKPdf PKiKP 02 37 06.5 -0.4
HYA Hoyanger 137.10 357 *e*PKPdf PKPdf 02 37 04.6 -0.3
GNI Garni 137.14 310 PKPdf 02 37 05.7 -0.2
GNI Garni 137.14 310 PKPdf PKPdf 02 37 04.4 -1.5
GNI Garni 137.14 310 *c i* PKIKP PKPdf 02 37 06.5 +0.6
GNI pmax pmax
comp=Z,103nm,1.3s
KBZ Khabaz 137.19 315 PKhKP PKPpre 02 36 55.7
comp=Z,4.0nm,0.9s,baz=168,slow=2.5,SNR=7.6
KBZ PKP PKPdf 02 37 06.4 +0.8
comp=Z,19nm,0.9s,baz=56,slow=1.2,SNR=15
KBZ SKP SKPbc 02 39 41.2 +0.3
comp=Z,4.4nm,0.8s,baz=172,slow=4.2,SNR=3.6
KBZ Khabaz 137.19 315 *c i* PKIKP PKiKP 02 37 07.7 +0.1
KIV Kislovodsk 137.24 316 PKPdf 02 37 05.0 -0.9
KIV Kislovodsk 137.24 316 *i* PKPdf PKPdf 02 37 04.9 -0.9
SNR=7.3
KIV Kislovodsk 137.24 316 *e*PKIKP PKPdf 02 37 05.4 -0.5
KIV pmax pmax
comp=Z,38nm,1.0s
SHA1 Shidzhatmaz 137.35 315 *c i* PKIKP PKPdf 02 37 06.7 +0.4
HFS Hagfors 137.38 351 PKhKP PKPpre 02 36 53.6
comp=Z,11nm,0.3s,baz=72,slow=4.8,SNR=65
HFS PKP PKPdf 02 37 05.2 -0.3
comp=Z,9.3nm,0.4s,baz=82,slow=3.1,SNR=5.7
HFS SKP SKPbc 02 39 40.6 -0.3
comp=Z,47nm,0.8s,baz=349,slow=1.5,SNR=15
SKAR Skarslia 137.45 355 *e*PKPdf PKiKP 02 37 08.7 +0.9
LSZ Lusaka 137.61 220 PKPdf 02 37 06.9 -0.5
LSZ Lusaka 137.61 220 PKIKP PKPdf 02 37 06.9 -0.5
OSL Oslo 137.95 353 *e*PKPdf PKiKP 02 37 08.8 +0.1
IZAR Zarasai 138.29 339 *e*P PKPpre 02 37 03.3
ODD1 Odda 138.33 356 *e*PKPdf PKPdf 02 37 08.1 +0.8
KONO Kongsberg 138.35 354 PKPpre 02 36 59.8
KONO Kongsberg 138.35 354 PKHKP PKPpre 02 36 59.8
ISAL Salakas 138.47 339 *e*P PKPpre 02 37 01.6
IIGN Ignalina 138.62 339 *e*P PKPpre 02 36 59.4
MNK Minsk 138.70 337 *i* PKHKP PKPpre 02 37 02.0
MNK *i* 02 37 05.3
MNK *i* 02 43 15.0
MNK *i* SSS SSS 03 02 56.0
MNK pmax pmax
comp=N,6.0nm,0.7s
MNK pmax pmax
comp=Z,56nm,0.7s
MNK pmax pmax
comp=E,12nm,0.8s
MNK MLR MLR
comp=N,3μm,22.0s
MNK MLR MLR
comp=E,2μm,19.0s
MNK MLR MLR
comp=Z,6μm,21.0s
KIBK Kibwezi 138.75 244 PKPpre 02 37 01.3
KIBK Kibwezi 138.75 244 P SKPbc 02 39 48.3 +1.9
SNR=12
BLS5 Blasjo 138.83 356 *e*PKPdf PKPpre 02 36 59.4
VSVD Vaisvydziai 138.84 341 *e*P PKPpre 02 37 01.1
RAYN Ar Rayn 138.89 285 PKPpre 02 37 01.0
RAYN Ar Rayn 138.89 285 *i* PKPdf PKPpre 02 37 02.0
SNR=12
RAYN Ar Rayn 138.89 285 PKHKP PKPpre 02 37 01.0
BCA Borcka 138.93 313 ⇑P PKPpre 02 37 01.8
KMY Karmoy 139.10 357 *e*PKPdf PKPpre 02 37 02.7
SOC Sochi 139.35 317 *e*PKIKP PKPdf 02 37 08.3 -1.3
SOC *e* 02 40 10.9
SOC pmax pmax
comp=Z,27nm,0.8s
SOC pmax pmax
comp=Z,13nm,0.7s
PBUR Paburge 139.40 343 *e*P PKPpre 02 37 02.8
TSUM Tsumeb 139.56 203 PKPpre 02 37 03.7
TSUM Tsumeb 139.56 203 PKhKP PKPpre 02 37 03.3
comp=Z,8.3nm,0.5s,baz=144,slow=3.9,SNR=18
TSUM SKPbc SKiKP 02 39 49.8 -1.2
comp=Z,20nm,1.1s,baz=156,slow=4.5,SNR=5.5
HOMB Homborsund 139.81 354 *e*PKPdf PKPpre 02 37 03.2
SNART Snartemo 139.85 356 *e*PKPdf PKPpre 02 37 01.9
KMBO Kilima Mbogo 140.05 245 PKhKP PKPpre 02 37 06.9
comp=Z,24nm,0.8s,baz=84,slow=3.5,SNR=50
ANN Anapa 140.23 319 *i* PKHKP PKPpre 02 37 02.3
ANN pmax pmax
comp=Z,72nm,1.4s
KPL Plockton 140.68 6 *e*P PKPpre 02 37 05.5
SUW Suwalki 140.73 340 *e*PKP PKPpre 02 37 06.6
SUW Suwalki 140.73 340 *e*P PKPpre 02 37 06.8
AKASG Malin Array Be 140.99 332 PKhKP PKPpre 02 37 06.0
comp=Z,76nm,0.5s,baz=44,slow=4.1,SNR=190
AKASG SKPbc SKPbc 02 39 51.0 0.0
comp=Z,11nm,0.8s,baz=36,slow=3.2,SNR=6.3
AKASG SKKPbc SKKPbc 02 48 16.4 -3.5
comp=Z,8.0nm,1.1s,baz=228,slow=4.7,SNR=17
KIEV Kiev 141.00 332 PKPpre 02 37 06.3
KIEV Kiev 141.00 332 *i* PKPdf PKPpre 02 37 06.1
SNR=67
KIEV Kiev 141.00 332 ⇓P PKPpre 02 37 06.5
KIEV Kiev 141.00 332 PKHKP PKPpre 02 37 06.3
DRUM Mains of Drumt 141.36 4 *e*P PKPpre 02 37 06.9
MUD Monsted U'grnd 141.53 353 *i* P PKPpre 02 37 08.8
INVG Invergeldie, C 141.73 5 *e*P PKPpre 02 37 08.8
LAWE Loch Awe, Argy 141.77 6 *e*P PKPpre 02 37 09.1
COP Copenhagen 141.84 350 *i* P PKPpre 02 37 09.1
BSD Bornholm Skovb 141.93 348 *e*P PKPpre 02 37 09.3
BSD Bornholm Skovb 141.93 348 *i* P PKPpre 02 37 08.4
SIM Simferopol' 142.15 322 *e*PKIKP PKPpre 02 37 12.0
SIM pmax pmax
comp=Z,215nm,0.8s
PGBU Glenifferbraes 142.30 6 *e*P PKPpre 02 37 11.2
ESY Stoneypath 142.34 4 *e*P PKPpre 02 37 11.1
SSRD Sdr. Stenderup 142.44 353 *i* P PKPpre 02 37 11.6
IDGL Inch Island, C 142.66 9 PKP PKPpre 02 37 12.7
IDGL Inch Island, C 142.66 9 *e*P PKPpre 02 37 12.7
CLGH Cloghs, Cushen 142.84 7 *e*P PKPpre 02 37 12.9
EKA Eskdalemuir Ar 142.89 5 PKhKP PKPpre 02 37 12.5
comp=Z,28nm,0.4s,baz=326,slow=2.7,SNR=218
EKA SKPbc SKiKP 02 39 56.2 -0.3
comp=Z,5.0nm,0.8s,baz=336,slow=3.1,SNR=3.3
EKA PP PP 02 40 30.2 -2.4
comp=Z,16nm,1.1s,baz=330,slow=5.8,SNR=6.0
EKA SKKPbc SKKPab 02 48 10.8 -0.8
comp=Z,2.3nm,0.7s,baz=163,slow=5.2,SNR=3.3
ESK Eskdalemuir 142.90 5 PKPpre 02 37 13.0
ESK Eskdalemuir 142.90 5 *e*P PKPpre 02 37 12.5
ESK Eskdalemuir 142.90 5 PKIKP PKPdf 02 37 13.0 -2.6
NEWG New Galloway 143.01 6 *e*P PKPab 02 37 13.1 -0.5
GKP Gorka Klasztor 143.10 344 *e*PKP PKPbc 02 37 14.5 0.0
GKP Gorka Klasztor 143.10 344 *e*P PKPbc 02 37 14.5 0.0
DIKM Dikmen 143.16 316 ⇑P PKPdf 02 37 16.0 -0.5
GAL1 Galloway 143.21 6 *e*P PKPab 02 37 13.8 -0.6
SORM Soroca 143.22 330 ⇑P PKPab 02 37 14.8 +0.1
SORM Soroca 143.22 330 ⇑PKIKP PKPbc 02 37 14.8 -0.2
BEL Belsk 143.35 340 *e*PKP PKPbc 02 37 15.5 +0.3
EDMD Edmundbyers 143.47 4 *e*P PKPab 02 37 14.7 -0.7
PURM Purcari 143.55 327 ⇓P PKPbc 02 37 16.3 +0.3
KESW Keswick, Cumbr 143.63 5 *e*P PKPbc 02 37 15.9 -0.2
KIS Kishinev 143.78 328 ⇑P PKPab 02 37 16.8 -0.1
KIS Kishinev 143.78 328 ⇑PKIKP PKPab 02 37 16.8 -0.1
IOMK Kirk Michael 143.82 6 *e*P PKPbc 02 37 16.0 -0.6
MILM Milestii Mici 143.83 328 ⇑P PKPbc 02 37 16.9 0.0
MILM Milestii Mici 143.83 328 ⇑PKIKP PKPbc 02 37 16.9 0.0
ILTH Belurgan, Co L 143.84 8 PKP PKPbc 02 37 15.8 -0.9
ILTH Belurgan, Co L 143.84 8 *e*P PKPbc 02 37 16.2 -0.3
LVV L'vov 143.84 335 *e*PKIKP PKPbc 02 37 16.2 -0.6
BSEG Bad Segeberg 143.85 351 *e*PKPbc PKPdf 02 37 17.3 0.0
baz=15,slow=2.8
HLG Helgoland 143.91 354 *e*PKPbc PKPdf 02 37 17.5 +0.2
baz=15,slow=2.8
WIM Isle of Man 143.92 6 *e*P PKPbc 02 37 16.5 -0.5
GDLE Glaisdale, N Y 143.94 3 *e*P PKPbc 02 37 16.6 -0.4
IGLA Glengowla, Co 143.95 11 PKP PKPbc 02 37 16.9 -0.1
IGLA Glengowla, Co 143.95 11 *e*P PKPbc 02 37 16.8 -0.2
IAS Iasi 144.26 329 ⇓P PKPdf 02 37 18.1 -0.1
IAS Iasi 144.26 329 ⇓PKIKP PKPdf 02 37 18.1 -0.1
HPK Haverah Park 144.36 3 *e*P PKPdf 02 37 18.0 -0.1
LEOM Leova 144.42 328 ⇓P PKPab 02 37 19.0 -0.4
LEOM Leova 144.42 328 ⇓PKIKP PKPab 02 37 19.0 -0.4
KWP Kalwaria Pacla 144.51 336 *e*PKP PKPbc 02 37 19.0 +0.1
H07N1 FLORES T-PHASE 144.57 46 *e*PKP PKPbc 02 37 19.2 +0.2
H07N1 FLORES T-PHASE 144.57 46 PKPbc PKPbc 02 37 19.7 +0.3
SNR=46
DSB Dublin 144.60 8 PKP PKPbc 02 37 19.0 0.0
GORT1 Trebel 144.62 350 *e*PKPbc PKPbc 02 37 19.2 +0.2
baz=15,slow=2.8
RUE Ruedersdorf 144.64 347 *e*P PKPbc 02 37 19.5 +0.4
RUE Ruedersdorf 144.64 347 *e*PKPbc PKPab 02 37 19.6 -0.4
baz=15,slow=2.8
H07S1 FLORES T-PHASE 144.65 47 PKPbc PKPbc 02 37 20.0 +0.3
SNR=34
WPS Cemaes, Angles 144.68 6 *e*P PKPdf 02 37 18.6 -0.1
WME Myndd Eilian 144.70 6 *e*P PKPdf 02 37 18.8 +0.1
PRAR RASCA 144.77 331 ⇑P PKPbc 02 37 19.6 -0.2
WLF1 Llynfaes 144.80 6 *e*P PKPbc 02 37 19.4 -0.2
BIR Birlad 144.88 328 ⇑P PKPbc 02 37 20.5 +0.4
LBWR Ladybower, Pea 144.91 4 *e*P PKPbc 02 37 19.7 -0.3
LMK Market Rasen 144.92 2 *e*P PKPdf 02 37 19.3 +0.3
VLDR Vladesti 144.94 327 ⇑P PKPab 02 37 20.8 -0.6
YLL Llanberis 144.97 6 *e*P PKPbc 02 37 20.1 0.0
TLCR 144.99 326 ⇓P PKPdf 02 37 19.6 +0.1
TLCR 144.99 326 ⇓PKIKP PKPdf 02 37 19.6 +0.1
VARL Varlezi 145.02 328 ⇓P PKPab 02 37 21.2 -0.5
BURAR Bucovina Array 145.04 332 PKPdf 02 37 19.5 -0.2
BURAR Bucovina Array 145.04 332 ⇑P PKPbc 02 37 20.7 0.0
BURAR Bucovina Array 145.04 332 ⇑PKIKP PKPbc 02 37 20.7 0.0
OJC Ojcow 145.05 340 *e*PKP PKPdf 02 37 19.6 +0.1
SCTR Scanteiesti 145.09 327 ⇓P PKPbc 02 37 21.3 +0.6
GIUM Giurgiulesti 145.11 327 ⇓P PKPbc 02 37 21.3 +0.5
TATR Tatarca 145.12 327 ⇑P PKPdf 02 37 17.3 -2.4
GHRR 145.13 328 ⇑P PKPab 02 37 22.0 -0.1
RETH Rethem/Aller, 145.16 352 *e*PKPbc PKPbc 02 37 21.1 +0.5
baz=15,slow=2.8
BRTR Keskin Array B 145.16 314 PKPdf 02 37 18.9 -1.3
BRTR Keskin Array B 145.16 314 PKPbc PKPdf 02 37 19.6 -0.6
comp=Z,115nm,0.8s,baz=138,slow=3.4,SNR=237
BRTR pPKPbc pPKPbc 02 39 42.6 +0.2
comp=Z,9.4nm,0.8s,baz=126,slow=2.0,SNR=3.2
BRTR SKPbc SKKPbc 02 48 01.9 -0.9
comp=Z,4.1nm,0.9s,baz=226,slow=5.0,SNR=7.9
VAL Valentia 145.17 13 PKP PKPab 02 37 21.7 -0.4
TESR Tescani 145.19 329 ⇑P PKPdf 02 37 19.8 0.0
STNC Stoke 145.19 4 *e*P PKPbc 02 37 20.9 +0.1
JURR Jurilovca 145.23 325 ⇑P PKPbc 02 37 20.5 -0.6
KOLS Kolonicke sedl 145.24 336 *e*PKIKP PKPbc 02 37 20.6 -0.5
KOLS *e* 02 37 22.0
KOLS Kolonicke sedl 145.24 336 *e*PKP PKPbc 02 37 20.6 -0.5
KOLS *e* 02 37 22.0
KOLS *e* 02 45 17.4
KOLS *e* 02 48 01.3
KOLS *e* 03 00 21.0
KOLS *e* 03 01 44.6
NEGRR Negrea 145.25 327 ⇑P PKPbc 02 37 21.8 +0.6
KIRS Kirsehir-Merke 145.25 313 ⇑P PKPdf 02 37 20.1 -0.2
FLTG Flechtingen 145.26 350 *e*PKPbc PKPbc 02 37 21.2 +0.2
baz=15,slow=2.8
SLCR Slobozia Conac 145.27 327 ⇑P PKPab 02 37 22.2 -0.5
NRDL Niedersach Rie 145.29 351 *e*PKPbc PKPbc 02 37 21.5 +0.5
baz=15,slow=2.8
SCHL Schela 145.30 327 ⇑P PKPbc 02 37 21.5 +0.2
IZVR Izvoarele 145.30 327 ⇓P PKPab 02 37 22.1 -0.8
FOEL Foel Wylfa 145.31 5 *e*P PKPbc 02 37 21.0 -0.2
SCHLR Schela 145.32 327 ⇓P PKPbc 02 37 22.0 +0.6
TUDR 145.32 327 ⇓P PKPbc 02 37 22.0 +0.6
COSR Cosmesti PH 145.32 328 ⇓P PKPab 02 37 22.2 -0.7
CFR Carcaliu 145.35 326 ⇓P PKPdf 02 37 20.1 0.0
PANC Panciu 145.39 328 ⇓P PKPbc 02 37 22.0 +0.4
TPGR Topolog 145.42 326 ⇓P PKPbc 02 37 22.3 +0.6
ONER Baraj Valea Uz 145.44 329 ⇓P PKPbc 02 37 21.6 -0.6
KSP Ksiaz 145.55 344 *e*PKP PKPbc 02 37 21.0 +0.7
NIE Niedzica 145.57 338 *e*PKP PKPbc 02 37 21.8 -0.3
CRVS Cervenica-Dubn 145.58 337 *e*PKIKP PKPdf 02 37 20.8 +0.4
CRVS *e* 02 37 22.5
CRVS Cervenica-Dubn 145.58 337 *e*PKP PKPdf 02 37 20.8 +0.4
CRVS *e* 02 37 22.5
CRVS *e* 02 39 51.4
CRVS *e* 02 47 58.8
CRVS *e* 03 00 21.9
CWF Charnwood Fore 145.59 3 *e*P PKPdf 02 37 20.0 -0.3
VRI Vrincioaia 145.60 328 ⇑P PKPbc 02 37 21.8 -0.4
VRI Vrincioaia 145.60 328 ⇑PKIKP PKPbc 02 37 21.8 -0.4
PLOR Plostina 145.65 329 ⇓P PKPbc 02 37 22.4 0.0
PLOR Plostina 145.65 329 ⇓PKP2 PKPbc 02 37 22.4 0.0

**ANTO Ankara** 145.66 315 PKPdf 02 37 21.0 +0.1
**ANTO Ankara** 145.66 315 ⇑P PKPdf 02 37 21.0 +0.1
**ANTO Ankara** 145.66 315 ⇑PKIKP PKPdf 02 37 21.0 +0.1
**WACR West Acre** 145.68 1 eP PKPbc 02 37 21.7 -0.5
**HLM1 Long Mynd** 145.71 5 eP PKPdf 02 37 20.3 -0.2
**BMR Baia Mare** 145.75 334 ⇑P PKPbc 02 37 23.3 +0.7
**IBBN Ibbenburen** 145.77 353 ePKPbc PKPbc 02 37 23.0 +0.5
baz=15,slow=2.8
**HARR Harsova** 145.79 326 ⇓P PKPdf 02 37 21.4 +0.5
**HARR Harsova** 145.79 326 ⇓PKIKP PKPdf 02 37 21.4 +0.5
**MBAR Mbarara** 145.81 240 PKPdf 02 37 22.7 +0.6
**MBAR Mbarara** 145.81 240 PKIKP PKPdf 02 37 22.7 +0.6
comp=Z,239nm,0.9s,baz=120,slow=2.3,SNR=125
**MBAR Mbarara** 145.81 240 PKIKP PKPdf 02 37 22.7 +0.6
**GRER** 145.82 328 ⇑P PKPab 02 37 24.4 -0.5
**TURR Turia** 145.82 329 ⇓P PKPbc 02 37 23.2 +0.3
**TLBR Topalu** 145.82 326 ⇓P PKPbc 02 37 23.5 +0.6
**ARCR ARCALIA** 145.83 332 ⇓P PKPdf 02 37 21.7 +0.8
**OSTC Ostas** 145.84 343 ePKPDF PKPdf 02 37 21.4 +0.6
OSTC ⇑ePKP PKPab 02 37 24.0 -0.8
**OSTC Ostas** 145.84 343 ePKIKP PKPdf 02 37 21.4 +0.6
OSTC e 02 37 24.0
**BISRR Bisoca** 145.84 328 ⇑P PKPbc 02 37 24.0 +1.0
**CHVC Chvalec** 145.85 344⇑ePKP PKPbc 02 37 23.6 +0.8
**CHVC Chvalec** 145.85 344 ePKP2 PKPbc 02 37 23.6 +0.8
**MFTR Murfatlar** 145.86 325 ⇓P PKPdf 02 37 21.7 +0.7
**COVR Voineasa-Covas** 145.88 329 ⇑P PKPbc 02 37 22.7 -0.3
**CLZ Clausthal** 145.88 350 ePKPdf PKPdf 02 37 21.2 +0.3
baz=18,slow=1.4
CLZ ePKPbc PKPbc 02 37 23.5 +0.6
baz=15,slow=2.8
**OZUR** 145.90 330 ⇓P PKPbc 02 37 23.8 +0.7
**CLL Collm** 145.91 347 ePKPdf PKPdf 02 37 21.0 +0.1
CLL ⇓*i*PKPbc PKPbc 02 37 23.3 +0.4
comp=Z,771nm,0.6s
CLL epPKPdf pPKPdf 02 39 46.0 +1.0
CLL eSKPdf SKPdf 02 39 57.0 +0.5
CLL eSKPbc SKiKP 02 40 03.0 +0.1
CLL ePP PP 02 40 48.0 -2.4
CLL ePKSdf PKSdf 02 40 56.0 0.0
**CLL Collm** 145.91 347⇓ePKIKP PKPdf 02 37 21.0 +0.1
CLL *i* 02 37 23.3
CLL pmax pmax
comp=Z,771nm,0.6s
**CLL Collm** 145.91 347 ePKPdf PKPdf 02 37 21.4 +0.6
baz=18,slow=1.4
CLL ePKPbc PKPbc 02 37 23.6 +0.7
baz=15,slow=2.8
**OKC Ostrava-Krasne** 145.92 341⇑ePKP PKPbc 02 37 23.5 +0.5
**OKC Ostrava-Krasne** 145.92 341 ePKP2 PKPbc 02 37 23.5 +0.5
**UPC Upice** 145.93 344 ePKPDF PKPdf 02 37 21.5 +0.5
UPC ⇑ePKP PKPbc 02 37 23.5 +0.8
**UPC Upice** 145.93 344 ePKIKP PKPdf 02 37 21.5 +0.5
UPC e 02 37 23.8
**BOSR Bodos** 145.98 330 ⇑P PKPab 02 37 24.4 -1.1
**DPC Dobruska-Polom** 145.99 343⇑ePKP PKPbc 02 37 24.3 +1.1
**DPC Dobruska-Polom** 145.99 343 ePKP2 PKPbc 02 37 24.3 +1.1
**RSBS Rosebush, Pemb** 146.08 7 eP PKPbc 02 37 22.8 -0.5
**LANS Liptovska Anna** 146.08 339 ePKIKP PKPdf 02 37 22.1 +0.8
LANS e 02 37 24.9
**LANS Liptovska Anna** 146.08 339 ePKP PKPdf 02 37 22.1 +0.8
LANS e 02 37 24.9
LANS e 02 39 50.7
LANS e 02 45 20.4
LANS e 02 45 40.8
LANS e 02 47 57.4
LANS e 03 00 24.1
LANS e 03 01 47.6
**BRG Berggiesshubel** 146.11 346 ePKP PKPdf 02 37 21.7 +0.4
BRG Amp 02 37 22.6
comp=Z,54nm,1.1s
**BRG Berggiesshubel** 146.11 346 P PKPbc 02 37 24.3 +0.8
BRG Amp 02 37 24.9
comp=Z,259nm,0.6s
**BRG Berggiesshubel** 146.11 346 P PKPab 02 37 26.5 +0.6
BRG Amp 02 37 27.1
comp=Z,100nm,0.8s
BRG pPKP pPKPdf 02 39 49.6 +3.8
BRG Amp 02 39 51.5
comp=Z,27nm,1.1s
**BRG Berggiesshubel** 146.11 346 ePKPdf PKPdf 02 37 21.4 +0.2
baz=18,slow=1.4
BRG ePKPbc PKPbc 02 37 24.1 +0.6
baz=15,slow=2.8
**KRLC Kraliky** 146.11 343 ePKPDF PKPdf 02 37 21.6 +0.3
KRLC ⇑ePKP PKPbc 02 37 24.4 +0.8
**KRLC Kraliky** 146.11 343 ePKIKP PKPdf 02 37 21.6 +0.3
KRLC e 02 37 24.4
**NEHR Nehoiu** 146.13 328 ⇓P PKPbc 02 37 23.7 0.0
**MORC Moravsky Berou** 146.15 341 ePKP PKPdf 02 37 21.4 0.0
MORC e 02 47 55.1
**MORC Moravsky Berou** 146.15 341 ⇓P PKPdf 02 37 21.7 +0.3
**MORC Moravsky Berou** 146.15 341 ⇓PKIKP PKPdf 02 37 21.7 +0.3
**AMRR Amara** 146.16 326 ⇓P PKPbc 02 37 24.6 +0.8
**AMRR Amara** 146.16 326 ⇓PKP2 PKPbc 02 37 24.6 +0.8
**CEI Carei** 146.17 335 ⇑P PKPbc 02 37 24.6 +0.9
**TGMR Targu Mures** 146.17 331 ⇓P PKPbc 02 37 24.6 +0.8
**DOPR Dopca** 146.18 330 ⇑P PKPdf 02 37 22.1 +0.5
**MCH1 Michaelchurch** 146.21 5 eP PKPdf 02 37 21.0 -0.4
**ISR Istrita** 146.22 328 ⇓P PKPbc 02 37 24.2 +0.1
**ISR Istrita** 146.22 328 ⇓PKP2 PKPbc 02 37 24.2 +0.1
**GTTG Gottingen** 146.23 351 ePKPdf PKPdf 02 37 21.8 +0.4
baz=18,slow=1.4
GTTG ePKPbc PKPbc 02 37 24.4 +0.6
baz=15,slow=2.8
**ICOR Ion Corvin** 146.24 325 ⇓P PKPdf 02 37 22.3 +0.7
**NEUB Neuenburg** 146.25 349 ePKPdf PKPdf 02 37 22.0 +0.6
baz=18,slow=1.4
**MLR Muntele Rosu** 146.26 329 ⇑P PKPdf 02 37 21.5 -0.3
**MLR Muntele Rosu** 146.26 329 ⇑PKIKP PKPdf 02 37 21.5 -0.3
**PVCC Panska Ves** 146.28 345 ePKPDF PKPdf 02 37 21.9 +0.4
PVCC ⇑ePKP PKPbc 02 37 24.9 +0.9
**PVCC Panska Ves** 146.28 345 ePKIKP PKPdf 02 37 21.9 +0.4
PVCC e 02 37 24.9
**KECS Kecovo** 146.28 337 ePKP2 PKPbc 02 37 24.9 +0.9
**KECS Kecovo** 146.28 337 ePKP PKPbc 02 37 24.9 +0.9
**ELMS Elmsett, Ipswi** 146.31 1 eP PKPbc 02 37 23.9 0.0
**RICC Richard** 146.38 346 ePKPDF PKPdf 02 37 22.1 +0.4
RICC ⇑ePKP PKPbc 02 37 25.2 +1.0
**MONM Monmouth** 146.38 5 eP PKPdf 02 37 21.5 -0.2
**MESR Meseseni** 146.39 333 ⇓P PKPdf 02 37 22.7 +0.9
**CBBR Cluj-Babes-Bol** 146.43 332 ⇑P PKPdf 02 37 21.3 -0.6
**MAUC Maruska** 146.43 341⇑ePKP PKiKP 02 37 25.5 -1.0
**CJR Cluj-Napoca** 146.45 332 ⇓P PKPdf 02 37 22.6 +0.6
**CJR Cluj-Napoca** 146.45 332 ⇓PKIKP PKPdf 02 37 22.6 +0.6
**MMAI Mount Meron Ar** 146.47 302 PKPbc PKPbc 02 37 25.7 +0.6
comp=Z,249nm,0.7s,baz=61,slow=5.2,SNR=331
MMAI pPKPbc pPKPab 02 39 45.7 -0.2
comp=Z,30nm,0.9s,baz=64,slow=3.4,SNR=3.5
**HSKC Hora Svate Kat** 146.47 346 ePKPDF PKPdf 02 37 22.0 +0.1
HSKC ⇑ePKP PKPbc 02 37 25.1 +0.6
**STRD Stroud** 146.50 4 eP PKPbc 02 37 23.6 -0.8
**LEHL Lehliu** 146.52 327 ⇓P PKPbc 02 37 25.3 +0.5
**MDB Medias** 146.53 331 ⇑P PKPbc 02 37 25.1 +0.3
**MDB Medias** 146.53 331 ⇑PKP2 PKPbc 02 37 25.1 +0.3
**PLAR PLOIESTI** 146.62 328 ⇓P PKPbc 02 37 25.6 +0.6
**SULR** 146.67 327 ⇓P PKPbc 02 37 24.8 -0.4
**BUG Bochum--Univer** 146.68 354 ePKPdf PKPdf 02 37 22.2 +0.1
baz=18,slow=1.4
BUG ePKPbc PKPbc 02 37 25.1 +0.2
baz=15,slow=2.8
BUG epPKPbc pPKPab 02 39 49.5 +3.2
**PCED Cedros** 146.73 46 ePKP PKPbc 02 37 26.1 +0.6
**VOIR** 146.73 329 ⇓P PKPdf 02 37 23.4 +0.8
**VOIR** 146.73 329 ⇓PKIKP PKPdf 02 37 23.4 +0.8
**PRA Prague** 146.74 345 ePKPDF PKPdf 02 37 22.9 +0.6
PRA ⇑ePKP PKPbc 02 37 25.7 +0.5
**PRA Prague** 146.74 345 ePKIKP PKPdf 02 37 22.9 +0.6
PRA e 02 37 25.7
**CALA Caldeira** 146.75 46 ePKP PKiKP 02 37 26.8 -0.8
**DRGR** 146.77 333 ⇑P PKPdf 02 37 22.4 -0.1
**DRGR** 146.77 333 ⇑PKIKP PKPdf 02 37 22.4 -0.1
**KASTN Kahler Asten** 146.78 352 ePKPdf PKPdf 02 37 22.5 +0.1
baz=18,slow=1.4
KASTN ePKPbc PKPbc 02 37 25.8 +0.5
baz=15,slow=2.8
**PRU Pruhonice** 146.79 345 ePKPDF PKPdf 02 37 22.5 +0.1
PRU ⇑ePKP PKPbc 02 37 25.9 +0.6
**PRU Pruhonice** 146.79 345 ePKIKP PKPdf 02 37 22.5 +0.1
PRU e 02 37 25.9
**MOX Moxa** 146.81 348 ePKPdf PKPdf 02 37 22.4 0.0
baz=18,slow=1.4

**HOR Horta** 146.83 46 ePKP PKiKP 02 37 26.8 -0.8
**VRAC Vranov** 146.85 342 ePKP PKPdf 02 37 22.1 -0.4
VRAC e 02 47 52.1
**VRAC Vranov** 146.85 342 ⇓P PKPdf 02 37 23.1 +0.6
**VRAC Vranov** 146.85 342 ⇓PKIKP PKPdf 02 37 23.1 +0.6
**VYHS Vyhne** 146.86 339 ePKIKP PKPdf 02 37 22.4 -0.2
VYHS e 02 37 26.0
**VYHS Vyhne** 146.86 339 ePKP PKPdf 02 37 22.4 -0.2
VYHS e 02 37 26.0
VYHS e 02 39 50.4
VYHS e 02 45 22.0
VYHS e 02 45 42.4
VYHS e 02 47 52.6
VYHS e 03 00 25.6
VYHS e 03 01 49.2
**PLN Plauen** 146.86 348 ePKPdf PKPdf 02 37 22.6 +0.1
baz=18,slow=1.4
PLN ePKPbc PKPbc 02 37 26.2 +0.7
baz=15,slow=2.8
**TANN Tannenbergstha** 146.87 347 ePKPdf PKPdf 02 37 22.7 +0.1
baz=18,slow=1.4
TANN ePKPbc PKPbc 02 37 26.2 +0.6
baz=15,slow=2.8
TANN epPKPbc pPKPbc 02 39 50.9 +3.6
**MTUR Matau** 146.88 329 ⇑P PKPbc 02 37 25.6 -0.2
**BORR Bors** 146.92 335 ⇓P PKiKP 02 37 26.9 -0.7
**JAVC Velka Javorina** 146.93 341 ePKP PKPdf 02 37 23.8 +1.1
**UBBA Unterbreizbach** 146.93 350 ePKPdf PKPdf 02 37 22.6 +0.2
baz=18,slow=1.4
UBBA epPKPbc pPKPbc 02 39 50.9 +3.7
**TNR Turnu Rosu** 146.94 330 ⇑P PKPbc 02 37 26.6 +0.7
**TNR Turnu Rosu** 146.94 330 ⇑PKP2 PKPbc 02 37 26.6 +0.7
**PCAN Candelaria** 146.96 46 ePKP PKPbc 02 37 26.8 +0.6
**PSZ Piszkesteto** 146.97 337 ⇓P PKPdf 02 37 23.2 +0.3
**SRBC Serra Branca** 146.98 45 ePKP PKPbc 02 37 25.4 -0.8
**PICO Pico** 146.98 46 ePKP PKiKP 02 37 27.5 -0.6
**ARR Arges** 146.98 330 ⇑P PKPdf 02 37 23.8 +0.8
**ROSA Rosais** 147.00 46 ePKP PKPbc 02 37 26.8 +0.5
**BUC1 Bucharest** 147.02 327 ⇓P PKPbc 02 37 26.2 +0.1
**BUC1 Bucharest** 147.02 327 ⇓PKP2 PKPbc 02 37 26.2 +0.1
**PPNO Prainha do Nor** 147.10 46 ePKP PKPbc 02 37 26.8 +0.2
**KRUC Moravsky** 147.13 342 ePKP PKPdf 02 37 23.2 +0.2
KRUC e 02 47 50.9
**SGRR Singureni** 147.13 327 ⇓P PKPbc 02 37 26.0 -0.4
**PMAN Manadas** 147.15 46 ePKP PKPbc 02 37 27.2 +0.6
**TREC Trest** 147.18 343 ePKPDF PKPdf 02 37 23.5 +0.4
TREC ⇑ePKP PKPbc 02 37 26.9 +0.5
**TREC Trest** 147.18 343 ePKIKP PKPdf 02 37 23.5 +0.4
**PID Ribeirinha** 147.22 46 ePKP PKiKP 02 37 27.9 -0.6
**ELSH Elham, Standar** 147.26 1 eP PKPbc 02 37 25.8 -0.7
**SMOL Smolenice** 147.31 341 ePKP2 PKiKP 02 37 27.8 -0.5
**LOT Lotru** 147.33 331 ⇓P PKPdf 02 37 23.1 -0.5
**MANZ Manzenberg** 147.34 348 ePKPdf PKPdf 02 37 23.2 -0.1
baz=18,slow=1.4
MANZ ePKPbc PKPbc 02 37 27.5 +0.7
baz=15,slow=2.8
**BSZH Besenyszg** 147.35 336 ⇑P PKPbc 02 37 27.4 +0.5
**ZVC Zvikov** 147.38 345 ePKPDF PKPdf 02 37 23.6 +0.2
ZVC ⇑ePKP PKPbc 02 37 27.5 +0.6
ZVC ePKPAB PKPab 02 37 32.1 +1.0
**DEV Deva** 147.40 332 ⇑P PKPdf 02 37 23.3 -0.2
**DEV Deva** 147.40 332 ⇑PKIKP PKPdf 02 37 23.3 -0.2
**ISK Istanbul-Kandi** 147.41 320 P PKPbc 02 37 26.8 -0.4
**HUMR Humele** 147.42 328 ⇑P PKPdf 02 37 23.8 +0.2
**BEBN Eben Emael** 147.46 355 dPKP PKPbc 02 37 26.9 -0.1
**ROTZ Rotzenmuhle** 147.53 347 ePKPdf PKPdf 02 37 23.6 0.0
baz=18,slow=1.4
ROTZ ePKPbc PKPbc 02 37 27.9 +0.6
baz=15,slow=2.8
ROTZ epPKPbc pPKPab 02 39 53.0 +3.4
**COPA Copaceanca** 147.59 328 ⇑P PKPdf 02 37 24.5 +0.7
**AHRW Bad Neuenahr-A** 147.59 354 ePKPdf PKPdf 02 37 23.4 -0.2
baz=18,slow=1.4
AHRW ePKPbc PKPbc 02 37 27.7 +0.4
baz=15,slow=2.8
AHRW epPKPbc pPKPab 02 39 52.7 +3.3
**MEM Membach** 147.62 355 dPKPdf PKPdf 02 37 23.2 -0.5
MEM dPKP PKPbc 02 37 27.4 -0.1
MEM dPKiKP PKiKP 02 37 28.6 -0.3
MEM dPKPab PKPab 02 37 31.1 -0.9
MEM dpPKiKP pPKPab 02 39 50.8 +1.2
**SRO Srobarova** 147.62 339 ePKP2 PKPbc 02 37 27.9 +0.4
**SRO Srobarova** 147.62 339 ePKP PKPbc 02 37 27.9 +0.4
SRO e 02 39 53.1
SRO e 02 47 51.2
SRO e 03 26 09.2
**BTNL Ternell** 147.64 355 dPKPdf PKPdf 02 37 23.8 0.0
BTNL dPKPbc PKPbc 02 37 27.5 -0.1
BTNL dpPKiKP pPKiKP 02 39 51.0 -1.4
**BSTI Sart Tilman** 147.69 355 dPKPdf PKPdf 02 37 24.1 +0.2
BSTI dPKPbc PKPbc 02 37 27.9 +0.3
BSTI dpPKiKP pPKiKP 02 39 52.1 -0.4
**ZST Bratislava** 147.69 341 ePKP2 PKiKP 02 37 28.4 -0.7
**ZST Bratislava** 147.69 341 ePKP PKiKP 02 37 28.4 -0.7
ZST e 02 39 53.4
**PAGU Agualva, Azore** 147.69 45 ePKP PKPbc 02 37 28.6 +0.6
**ADH Angra Heroismo** 147.71 45 ePKP PKPbc 02 37 27.5 -0.6
**TNS Taunus Mts** 147.74 352 ePKPdf PKPdf 02 37 24.0 0.0
baz=18,slow=1.4
TNS ePKPbc PKiKP 02 37 28.5 -0.7
baz=15,slow=2.8
TNS epPKPbc pPKPab 02 39 53.0 +2.7
**PSCM Serra do Cume** 147.77 45 ePKP PKiKP 02 37 29.0 -0.6
**GRA1 Grafenberg Arr** 147.80 348 PKPbc PKiKP 02 37 28.8 -0.5
**GRF Grafenberg Arr** 147.80 348 PKP2 PKiKP 02 37 28.8 -0.5
**GRF Grafenberg Arr** 147.80 348 ePKPdf PKPdf 02 37 24.0 -0.1
baz=18,slow=1.4
GRF ePKPbc PKiKP 02 37 28.8 -0.5
baz=15,slow=2.8
GRF epPKPbc pPKPab 02 39 53.1 +2.6
**GRFO Grafenberg** 147.80 348 PKPdf 02 37 24.4 +0.3
GRFO PKPbc PKPbc 02 37 28.4 +0.5
**GRFO Grafenberg** 147.80 348 PKP2 PKPbc 02 37 28.4 +0.5
**KHC Kasperske Hory** 147.82 345 PKPbc PKiKP 02 37 29.1 -0.3
**KHC Kasperske Hory** 147.82 345 ePKPDF PKPdf 02 37 24.4 +0.2
KHC ⇑ePKP PKiKP 02 37 28.8 -0.6
**KHC Kasperske Hory** 147.82 345*c* *i*PKIKP PKPdf 02 37 24.3 +0.1
KHC pmax pmax
comp=Z,548nm,1.0s
**GZR Gura Zlata** 147.83 332 ⇓P PKPbc 02 37 28.0 -0.3
**GZR Gura Zlata** 147.83 332 ⇓PKHKP PKPpre 02 37 28.0
**SURR Surduc** 147.84 333 ⇓P PKPbc 02 37 28.4 +0.2
**BCLA Clavier** 147.87 356 dPKPbc PKPbc 02 37 27.9 -0.2
**BHOU Houvegnez** 147.88 355 dPKPdf PKPdf 02 37 23.9 -0.3
BHOU dPKP PKPbc 02 37 28.5 +0.4
**BGES Gesves** 147.92 356 dPKPdf PKPdf 02 37 24.1 -0.1
BGES dPKP PKPbc 02 37 27.8 -0.4
**CKRC Cesky Krumlov** 147.93 344⇑ePKP PKPbc 02 37 28.8 +0.5
**CKRC Cesky Krumlov** 147.93 344 ePKHKP PKPpre 02 37 22.1
CKRC e 02 37 25.2
**WET Wettzell** 147.97 346 ePKPdf PKPdf 02 37 24.0 -0.4
baz=18,slow=1.4
WET ePKPbc PKPbc 02 37 28.9 +0.5
baz=15,slow=2.8
WET epPKPbc pPKPab 02 39 53.3 +2.0
**BMRD Maredsous** 148.02 356 dPKPdf PKPdf 02 37 24.2 -0.2
BMRD dPKPbc PKPbc 02 37 27.4 -1.0
BMRD dPKiKP PKiKP 02 37 29.4 -0.3
BMRD dpPKiKP pPKiKP 02 39 52.9 -0.3
**GEC2 GERESS Array S** 148.06 345 PKPbc PKiKP 02 37 29.5 -0.5
**GEC2 GERESS Array S** 148.06 345 ePKPdf PKPdf 02 37 24.0 -0.6
baz=18,slow=1.4
GEC2 ePKPbc PKPbc 02 37 29.2 +0.4
baz=15,slow=2.8
GEC2 epPKPbc pPKPab 02 39 54.0 +2.2
**GERES GERESS Array B** 148.06 345 PKPdf 02 37 23.9 -0.7
GERES PKPbc PKiKP 02 37 29.7 -0.3
**GERES GERESS Array B** 148.06 345 PKPbc PKPbc 02 37 28.6 -0.2
comp=Z,86nm,0.6s,baz=25,slow=3.8,SNR=183
GERES pPKPbc pPKPbc 02 39 50.8 -0.5
comp=Z,11nm,0.8s,baz=167,slow=6.7,SNR=5.5
**VLAD Vladila** 148.09 328 ⇓P PKPbc 02 37 29.3 +0.4
**RCHB Rochefort** 148.13 356 dPKPdf PKPdf 02 37 23.9 -0.6
RCHB dPKPbc PKPbc 02 37 28.1 -0.6
RCHB dpPKiKP pPKiKP 02 39 53.1 -0.3
**BZS Buzias** 148.17 333 ⇑P PKPdf 02 37 24.7 0.0
**BZS Buzias** 148.17 333 ⇑PKHKP PKPpre 02 37 24.7
**SRE Strehaia** 148.19 330 ⇑P PKiKP 02 37 30.0 -0.3
**SRE Strehaia** 148.19 330 ⇑PKP2 PKiKP 02 37 30.0 -0.3
**DOU Dourbes** 148.24 356 dPKPdf PKPdf 02 37 24.0 -0.7
DOU dPKP PKPbc 02 37 29.2 +0.2
**TIM Timisoara** 148.24 334 ⇓P PKiKP 02 37 30.1 -0.2

**TIM Timisoara** 148.24 334 ⇓PKP2 PKiKP 02 37 30.1 -0.2
**EDRB Edirne** 148.31 323 P PKPbc 02 37 28.9 -0.6
**CONA Conrad Observa** 148.31 342 *i* PKP PKPdf 02 37 24.8 -0.2
comp=Z,4.2nm,0.5s,SNR=186
CONA *i* PKP PKPbc 02 37 29.9 +0.5
comp=Z,73nm,0.7s
CONA epPKiKP pPKiKP 02 39 54.3 -0.1
comp=Z,18nm,1.0s,SNR=9.4
**RONA Rosalia, Austr** 148.38 341 *i* PKP PKPdf 02 37 24.9 -0.2
comp=Z,8.7nm,0.7s,SNR=146
RONA *i* PKP PKPbc 02 37 30.0 +0.5
comp=Z,137nm,0.7s
RONA epPKiKP pPKiKP 02 39 54.7 +0.2
comp=Z,28nm,0.9s,SNR=9.2
**HERR Herculane** 148.39 331 ⇓P PKPdf 02 37 25.3 +0.2
**BAND Balkesir-Ban** 148.42 320 ⇓P PKPbc 02 37 29.3 -0.5
**RMGR Halanga-Turnu** 148.43 331 ⇓P PKiKP 02 37 30.5 -0.2
**H10S3 ASCENSION HYDR** 148.43 148 PKPbc PKPbc 02 37 30.7 +0.4
baz=185,slow=74,SNR=5.0
**H10S2 ASCENSION HYDR** 148.44 148 PKPbc PKiKP 02 37 30.8 -0.6
baz=35,slow=74,SNR=7.9
**DJES Djerdap** 148.50 331 ⇓P PKPbc 02 37 30.3 +0.4
**WLF Walferdange** 148.55 354 dPKPdf PKPdf 02 37 25.7 +0.4
WLF dPKiKP PKiKP 02 37 30.5 -0.3
WLF dpPKiKP pPKiKP 02 39 54.1 -0.1
**WLF Walferdange** 148.55 354 ePKPdf PKPdf 02 37 25.7 +0.4
baz=18,slow=1.4
WLF ePKPbc PKiKP 02 37 30.9 +0.1
baz=15,slow=2.8
WLF epPKPbc pPKPab 02 39 55.3 +2.4
**BANR Banloc** 148.56 333 ⇑P PKiKP 02 37 30.8 -0.1
**BAIL Bailesti** 148.60 329 ⇓P PKiKP 02 37 31.0 -0.1
**PUNG Punghina** 148.60 330 ⇓P PKPbc 02 37 29.6 -0.5
**MDVR Moldovita** 148.78 332 ⇓P PKPdf 02 37 25.5 -0.4
**MOA Molln** 148.83 344 *i* PKP PKPdf 02 37 25.1 -0.7
comp=Z,4.8nm,0.6s,SNR=61
MOA *i* PKP PKPbc 02 37 30.7 +0.1
comp=Z,41nm,0.8s
MOA *i* pPKiKP pPKiKP 02 39 56.3 +0.9
comp=Z,26nm,1.0s,SNR=8.5
**MORH Mrgy, Hungar** 148.87 337 ⇑P PKPdf 02 37 25.7 -0.2
**ARSA Arzberg** 149.02 342 ePKP PKPdf 02 37 25.5 -0.7
comp=Z,1.9nm,0.6s,SNR=48
ARSA *i* PKP PKPbc 02 37 30.7 -0.4
comp=Z,38nm,1.4s
ARSA epPKiKP pPKiKP 02 39 56.3 +0.5
comp=Z,14nm,1.2s,SNR=8.9
**JLP Les Platons** 149.02 5 eP PKPdf 02 37 26.1 +0.1
**STU Stuttgart** 149.04 350 ePKPdf PKPdf 02 37 25.9 -0.2
baz=18,slow=1.4
STU epPKPbc pPKPab 02 39 56.0 +1.0
**JSA Saint Aubin** 149.07 5 eP PKPdf 02 37 26.2 +0.1
**KULA Kula-Manisa** 149.11 316 P PKPbc 02 37 31.7 +0.1
**BIOA Bad Ischl, Aus** 149.14 344 ePKP PKPdf 02 37 25.4 -0.9
comp=Z,11nm,1.0s,SNR=69
BIOA *i* PKP PKPbc 02 37 31.1 -0.2
comp=Z,68nm,0.7s
BIOA epPKiKP pPKiKP 02 39 56.9 +0.7
comp=Z,23nm,0.8s,SNR=5.5
**PDA Ponta Delgada** 149.24 45 ePKP PKPbc 02 37 31.5 -0.3
**FUR Furstenfeldbru** 149.25 347 ePKPdf PKPdf 02 37 26.1 -0.4
baz=18,slow=1.4
FUR ePKPbc PKiKP 02 37 32.1 -0.3
baz=15,slow=2.8
FUR epPKPbc pPKPab 02 39 56.9 +0.8
**FRGS Fruska Gora** 149.29 334 eP PKPdf 02 37 26.4 -0.2
**RJOB Jochberg** 149.31 345 ePKPdf PKPdf 02 37 26.1 -0.5
baz=18,slow=1.4
RJOB epPKPbc pPKPab 02 39 56.8 +0.2
**ALN Alexandroupoli** 149.32 322 P PKPbc 02 37 31.3 -0.6
**ENEZ Enez** 149.36 322 P PKPbc 02 37 31.2 -0.8
**CAVK Edirne/Enez-Ca** 149.38 322 ⇑P PKPbc 02 37 31.5 -0.6
**PGRON Lagoa das Cont** 149.42 45 ePKP PKiKP 02 37 33.3 +0.2
**H10N3 ASCENSION HYDR** 149.46 147 PKPbc PKPbc 02 37 32.7 0.0
baz=198,slow=3.5,SNR=15
**H10N1 ASCENSION HYDR** 149.47 147 PKPbc PKiKP 02 37 33.7 +0.2
baz=198,slow=3.5,SNR=10
**H10N2 ASCENSION HYDR** 149.48 147 PKPbc PKiKP 02 37 33.6 +0.1
baz=198,slow=3.5,SNR=11
**KOGS Kog** 149.50 340 *i* PKP PKPbc 02 37 31.7 -0.5
**BFO Black Forest** 149.60 351 PKPdf 02 37 27.0 0.0
**BFO Black Forest** 149.60 351 PKIKP PKPdf 02 37 27.0 0.0
**BFO Black Forest** 149.60 351 ePKPdf PKPdf 02 37 26.4 -0.6
baz=18,slow=1.4
BFO ePKPbc PKiKP 02 37 32.9 -0.2
baz=15,slow=2.8
BFO epPKPbc pPKPab 02 39 57.4 0.0
**LESA Schwarzleotal** 149.63 345 *i* PKP PKPdf 02 37 26.5 -0.7
comp=Z,12nm,0.7s
LESA *i* PKP PKPbc 02 37 32.2 -0.4
comp=Z,71nm,0.4s
LESA *i* pPKP pPKPab 02 39 57.4 -0.5
comp=Z,17nm,0.8s
**CDF Champ du Feu** 149.66 353 ePKIKP PKPdf 02 37 26.0 -1.2
**BOVS Bovan** 149.67 331 ⇓P PKPbc 02 37 32.2 -0.5
**SOKA Soboth** 149.68 342 *i* PKP PKPdf 02 37 26.6 -0.7
comp=Z,6.8nm,0.6s,SNR=56
SOKA *i* PKP PKPbc 02 37 32.3 -0.4
comp=Z,93nm,0.7s
SOKA *i* pPKP pPKPab 02 39 57.3 -0.9
comp=Z,2.2nm,0.2s,SNR=8.1
**KBA Koelnbreinsper** 149.78 344 *i* PKP PKPdf 02 37 26.4 -1.2
comp=Z,5.3nm,0.8s,SNR=37
KBA *i* PKP PKPbc 02 37 32.4 -0.7
comp=Z,65nm,0.4s
KBA epPKP pPKPbc 02 39 57.2 +1.0
comp=Z,19nm,0.9s,SNR=5.7
**LDF La Druitiere** 149.79 2 ePKIKP PKPdf 02 37 26.1 -1.2
**ROSF Rostrenen** 149.81 7 ePKIKP PKPdf 02 37 25.9 -1.4
**EZN Ezine** 149.83 320 P PKPbc 02 37 33.0 -0.1
**SMTH Samothraki Isl** 149.89 322 P PKPbc 02 37 32.4 -0.9
**TEKS Tekeris** 149.91 334 eP PKPdf 02 37 27.0 -0.6
**UBR Ueberruh** 149.94 349 ePKPdf PKPdf 02 37 27.1 -0.6
baz=18,slow=1.4
**WATA Walderalm** 149.97 347 *i* PKP PKPdf 02 37 26.9 -0.9
comp=Z,11nm,0.9s,SNR=25
WATA *i* PKP PKPbc 02 37 33.2 -0.3
comp=Z,112nm,0.7s
WATA epPKP pPKPab 02 39 58.3 -0.9
comp=Z,10nm,0.7s,SNR=6.3
**OBKA Obir** 149.97 342 ePKP PKPdf 02 37 26.9 -0.9
comp=Z,5.8nm,0.8s,SNR=35
OBKA *i* PKP PKPbc 02 37 32.8 -0.7
comp=Z,49nm,0.7s
OBKA *i* pPKP pPKPab 02 39 58.1 -1.3
comp=Z,10nm,0.8s
**OBKA Obir** 149.97 342 eP PKPdf 02 37 27.0 -0.7
**PSMA Santa Maria** 149.99 46 ePKP PKPdf 02 37 29.0 +1.1
**RETA Reutte** 150.00 348 *i* PKP PKPdf 02 37 26.9 -0.8
comp=Z,6.3nm,0.7s,SNR=12
RETA *i* PKP PKPbc 02 37 33.3 -0.1
comp=Z,56nm,0.6s
RETA *i* pPKP pPKPab 02 39 58.6 -0.7
comp=Z,16nm,1.0s,SNR=6.2
**WTTA Wattenberg** 150.02 346 *i* PKP PKPdf 02 37 27.1 -0.8
comp=Z,13nm,0.8s,SNR=29
WTTA *i* PKP PKPbc 02 37 33.7 +0.1
comp=Z,261nm,0.5s
WTTA epPKP pPKPab 02 39 58.1 -1.4
comp=Z,35nm,0.9s,SNR=6.7
**MOTA Moosalm** 150.06 347 *i* PKP PKPdf 02 37 27.2 -0.8
comp=Z,19nm,0.8s
MOTA *i* PKP PKPbc 02 37 33.5 -0.2
comp=Z,175nm,0.8s
MOTA *i* pPKP pPKPab 02 39 58.5 -1.1
comp=Z,16nm,0.9s
**YER Yerkesik** 150.10 314 P PKPbc 02 37 33.8 -0.2
**MYKA Terra Mystica** 150.12 343 ePKP PKPdf 02 37 27.0 -0.9
comp=Z,4.4nm,0.6s,SNR=88
MYKA *i* PKP PKPbc 02 37 33.0 -0.8
comp=Z,112nm,0.6s
MYKA *i* pPKP pPKPbc 02 39 58.1 +1.2
comp=Z,5.5nm,0.6s,SNR=7.7
**KAVA Kavala** 150.13 324 P PKPbc 02 37 33.4 -0.4
**SQTA Sankt Quirin** 150.16 347 *i* PKP PKPdf 02 37 27.4 -0.6
comp=Z,22nm,0.7s,SNR=24
SQTA *i* PKP PKPbc 02 37 33.9 0.0
comp=Z,116nm,0.6s
SQTA epPKP pPKPab 02 39 58.8 -1.1
comp=Z,21nm,0.7s
**PRK Paraskevi** 150.21 319 P PKPbc 02 37 33.4 -0.7
**QUIF Quistinic** 150.23 7 ePKIKP PKPdf 02 37 26.8 -1.1
**NVR Nevrokopi** 150.25 325 P PKiKP 02 37 34.6 -0.1
**THAS Thassos island** 150.27 323 P PKPbc 02 37 33.1 -1.1
**ABTA Abfaltersbach** 150.30 345 *i* PKP PKPdf 02 37 27.4 -0.9
comp=Z,38nm,0.7s,SNR=49

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ABTA | | | | *i* PKP | **PKPbc** | 02 37 33.7 | -0.5 | |
| | comp=Z,156nm,0.6s | | | | | | | |
| ABTA | | | | *ep*PKP | **pPKPbc** | 02 39 58.6 | +1.2 | |
| | comp=Z,29nm,0.9s,SNR=7.0 | | | | | | | |
| **DOB** | **Doboj** | **150.33** | **336** | *eP* | **PKPbc** | 02 37 34.0 | -0.2 | |
| **DAVA** | **Damuels** | **150.36** | **349** | *i* PKP | **PKPdf** | 02 37 27.8 | -0.6 | |
| | comp=Z,9.4nm,0.8s,SNR=15 | | | | | | | |
| DAVA | | | | *i* PKP | **PKiKP** | 02 37 34.7 | -0.2 | |
| | comp=Z,81nm,0.7s | | | | | | | |
| DAVA | | | | *ep*PKP | **pPKPab** | 02 40 00.0 | -0.3 | |
| | comp=Z,29nm,1.0s,SNR=7.7 | | | | | | | |
| **LJU** | **Ljubljana** | **150.40** | **342** | *i* PKPdf | **PKPdf** | 02 37 27.8 | -0.5 | |
| LJU | | | | *i* PKPbc | **PKPbc** | 02 37 34.2 | -0.1 | |
| **FETA** | **Feichten** | **150.45** | **347** | *i* PKP | **PKPdf** | 02 37 28.2 | -0.3 | |
| | comp=Z,37nm,0.7s,SNR=50 | | | | | | | |
| FETA | | | | *i* PKP | **PKiKP** | 02 37 34.8 | -0.3 | |
| | comp=Z,90nm,0.7s | | | | | | | |
| FETA | | | | *ep*PKP | **pPKPab** | 02 39 59.9 | -1.3 | |
| | comp=Z,21nm,1.0s,SNR=11 | | | | | | | |
| **LIA** | **Limnos Island** | **150.46** | **322** | P | **PKPbc** | 02 37 33.9 | -0.7 | |
| **SIGR** | **SIGRI** | **150.49** | **320** | P | **PKPbc** | 02 37 33.8 | -0.9 | |
| **BBLS** | **Lazi&#263i** | **150.51** | **333** | *eP* | **PKPdf** | 02 37 28.7 | +0.1 | |
| **HAPS** | **Han Pijesak,BI** | **150.52** | **334** | *eP* | **PKPdf** | 02 37 28.7 | 0.0 | |
| **A051A** | **Mrakovica** | **150.53** | **338** | *eP* | **PKPdf** | 02 37 26.6 | -2.0 | |
| **KOKK** | **Kokkinochori,** | **150.53** | **324** | P | **PKPbc** | 02 37 34.0 | -0.8 | |
| **SRS** | **Serrai** | **150.55** | **325** | P | **PKPbc** | 02 37 33.6 | -1.2 | |
| **PRIJ** | **Prijedor** | **150.63** | **338** | *eP* | **PKPbc** | 02 37 34.7 | -0.2 | |
| **BLY** | **Banja Luka** | **150.66** | **337** | *eP* | **PKPdf** | 02 37 28.0 | -0.7 | |
| **BOJS** | **Bojanci** | **150.66** | **340** | *eP* | **PKPdf** | 02 37 28.7 | 0.0 | |
| **CEY** | **Cerknica** | **150.71** | **342** | *i* PKPbc | **PKPbc** | 02 37 35.0 | -0.1 | |
| **CEY** | **Cerknica** | **150.71** | **342** | *eP* | **PKPdf** | 02 37 28.4 | -0.4 | |
| **RUDO** | **Rudo** | **150.73** | **333** | *eP* | **PKPdf** | 02 37 27.4 | -1.5 | |
| **SJES** | **Sjenica** | **150.75** | **332** | *eP* | **PKPdf** | 02 37 29.1 | 0.0 | |
| **DAT** | **Datca** | **150.79** | **314** | P | **PKPbc** | 02 37 34.4 | -1.3 | |
| **BODT** | **Bodrum** | **150.79** | **315** | P | **PKPbc** | 02 37 34.7 | -0.8 | |
| **CHOS** | **Chios Island** | **150.86** | **318** | P | **PKPbc** | 02 37 35.2 | -0.5 | |
| **OUR** | **Ouranopolis** | **150.87** | **323** | P | **PKPbc** | 02 37 34.8 | -0.7 | |
| **SOH** | **Sokhos** | **150.89** | **325** | P | **PKPbc** | 02 37 34.3 | -1.4 | |
| **KNT** | **Kendrikon** | **150.90** | **326** | P | **PKPbc** | 02 37 34.7 | -0.9 | |
| **VAY** | **Valandovo** | **150.96** | **326** | *i* P | **PKPbc** | 02 37 34.9 | -0.8 | |
| **SKDS** | **Skadanscina** | **151.00** | **342** | *eP* | **PKPdf** | 02 37 28.8 | -0.5 | |
| **LOR** | **Lormes** | **151.10** | **357** | *e*PKIKP | **PKPdf** | 02 37 28.6 | -0.7 | |
| **A050A** | **Klekovaca** | **151.13** | **338** | *eP* | **PKPdf** | 02 37 28.0 | -1.5 | |
| **HORT** | **Hortiatis** | **151.18** | **325** | P | **PKPbc** | 02 37 35.1 | -1.3 | |
| **UPM** | **Unac-Piva** | **151.26** | **333** | *eP* | **PKPbc** | 02 37 34.3 | -2.3 | |
| **PAIG** | **Paliouri** | **151.32** | **323** | P | **PKPbc** | 02 37 35.2 | -1.4 | |
| **AVF** | **Avril sur Loir** | **151.60** | **358** | *e*PKIKP | **PKPdf** | 02 37 29.1 | -0.9 | |
| **BRY** | **Bratogost** | **151.66** | **333** | *eP* | **PKPbc** | 02 37 35.7 | -1.8 | |
| **KARP** | **Karpathos** | **151.69** | **312** | P | **PKPbc** | 02 37 37.3 | -0.3 | |
| **PDG** | **Podgorica** | **151.73** | **332** | *eP* | **PKPdf** | 02 37 29.7 | -0.7 | |
| **PDG** | **Podgorica** | **151.73** | **332** | ⇓P | **PKPdf** | 02 37 30.2 | -0.2 | |
| **TREB** | **Trebinje** | **151.90** | **333** | *eP* | **PKPdf** | 02 37 29.0 | -1.6 | |
| **KYMI** | **Kymi, Euboea I** | **151.92** | **321** | P | **PKPbc** | 02 37 36.7 | -1.3 | |
| **DRME** | **Dracevica, Mon** | **151.96** | **332** | *eP* | **PKPdf** | 02 37 29.5 | -1.2 | |
| **FNA** | **Florina** | **151.97** | **327** | P | **PKPbc** | 02 37 37.1 | -1.0 | |
| **APE** | **Apeiranthos** | **151.97** | **317** | P | **PKPbc** | 02 37 36.2 | -2.0 | |
| **APE** | **Apeiranthos** | **151.97** | **317** | ⇓P | **PKPbc** | 02 37 36.6 | -1.6 | |
| **APE** | **Apeiranthos** | **151.97** | **317** | ⇓PKIKP | **PKPbc** | 02 37 36.6 | -1.6 | |
| **OHR** | **Ohrid** | **152.02** | **328** | *i* P | **PKiKP** | 02 37 38.4 | 0.0 | |
| **STON** | **Ston** | **152.04** | **334** | *eP* | **PKPdf** | 02 37 28.8 | -2.0 | |
| **TYRN** | **Tyrnavos** | **152.28** | **324** | P | **PKPbc** | 02 37 37.1 | -1.6 | |
| **TIR** | **Tirane** | **152.30** | **330** | P | **PKiKP** | 02 37 38.8 | 0.0 | |
| **TIR** | **Tirane** | **152.30** | **330** | ⇑P | **PKiKP** | 02 37 38.9 | +0.1 | |
| **TIR** | **Tirane** | **152.30** | **330** | ⇑PKIKP | **PKiKP** | 02 37 38.9 | +0.1 | |
| **DION** | **Dionisos Attik** | **152.37** | **320** | P | **PKPbc** | 02 37 38.5 | -0.5 | |
| **THR8** | **Santorini-Mono** | **152.38** | **315** | P | **PKPbc** | 02 37 37.3 | -1.7 | |
| **KBN** | **Korca** | **152.39** | **328** | P | **PKPbc** | 02 37 38.8 | -0.2 | |
| **NEST** | **Nestorio** | **152.41** | **327** | P | **PKPdf** | 02 37 30.9 | -0.7 | |
| **SANT** | **Santorini** | **152.42** | **315** | ⇑P | **PKPbc** | 02 37 39.1 | -0.1 | |
| **THR3** | **Thira Island,** | **152.43** | **316** | P | **PKPbc** | 02 37 37.8 | -1.3 | |
| **THR6** | **Thira Island,** | **152.47** | **315** | P | **PKPbc** | 02 37 38.0 | -1.2 | |
| **ATHU** | **Athens Univers** | **152.53** | **320** | P | **PKPbc** | 02 37 37.8 | -1.5 | |
| **ATH** | **Athens Observa** | **152.57** | **320** | P | **PKPbc** | 02 37 38.3 | -1.1 | |
| **ZKR** | **Zakros** | **152.57** | **312** | P | **PKPbc** | 02 37 39.1 | -0.4 | |
| **LPL** | **La Plagne** | **152.58** | **352** | *e*PKIKP | **PKPdf** | 02 37 31.4 | -0.5 | |
| **LPG** | **La Plagne** | **152.60** | **352** | *e*PKIKP | **PKPdf** | 02 37 31.6 | -0.4 | |
| **AXAR** | **Agios Charalam** | **152.68** | **322** | P | **PKPbc** | 02 37 38.5 | -1.2 | |
| **VILL** | **Villia** | **152.69** | **321** | P | **PKPbc** | 02 37 38.3 | -1.4 | |
| **MAKR** | **Makrakomi, Fth** | **152.82** | **323** | P | **PKPdf** | 02 37 31.2 | -0.9 | |
| **LOUT** | **Loutraki** | **153.01** | **321** | P | **PKPbc** | 02 37 38.9 | -1.5 | |
| **EVR** | **Evrytania** | **153.06** | **324** | P | **PKiKP** | 02 37 41.3 | +0.7 | |
| **ANX** | **Ano Chora** | **153.22** | **323** | P | **PKPdf** | 02 37 33.0 | +0.2 | |
| **KSTL** | **Kastelli Herak** | **153.27** | **314** | P | **PKiKP** | 02 37 41.9 | +0.9 | |
| **ORIF** | **Oris-en-Rattie** | **153.27** | **353** | *e*PKIKP | **PKPdf** | 02 37 32.0 | -0.7 | |
| **KRND** | **KRANIDI** | **153.29** | **320** | P | **PKPbc** | 02 37 40.2 | -0.8 | |
| **ALIK** | **Aliki, Aigiali** | **153.34** | **322** | P | **PKiKP** | 02 37 41.4 | +0.3 | |
| **SRN** | **Sarande** | **153.34** | **327** | P | **PKPbc** | 02 37 40.1 | -0.9 | |
| **EFP** | **Efpalio** | **153.36** | **325** | P | **PKiKP** | 02 37 41.3 | +0.2 | |
| **IDI** | **Anoyia** | **153.40** | **314** | P | **PKiKP** | 02 37 41.4 | 0.0 | |
| **GUR** | **Goura** | **153.42** | **321** | P | **PKPdf** | 02 37 32.4 | -0.7 | |
| **IGT** | **Igoumenitsa** | **153.43** | **326** | P | **PKPbc** | 02 37 40.4 | -0.8 | |
| **PVO** | **Paravola** | **153.43** | **324** | P | **PKiKP** | 02 37 41.5 | +0.2 | |
| **VIVF** | **Saint-Julien-l** | **153.45** | **355** | *e*PKIKP | **PKPdf** | 02 37 33.7 | +0.8 | |
| **KLV** | **Kalavryta, Ach** | **153.46** | **322** | P | **PKPdf** | 02 37 32.9 | -0.2 | |
| **KEK** | **Kerkira** | **153.57** | **327** | P | **PKPbc** | 02 37 41.2 | -0.3 | |
| **LKD2** | **Lefkada island** | **153.79** | **325** | P | **PKPbc** | 02 37 41.8 | -0.2 | |
| **VLI** | **Veliai** | **153.84** | **319** | P | **PKPbc** | 02 37 41.3 | -0.9 | |
| **EVGI** | **Lefkada island** | **153.91** | **325** | P | **PKPbc** | 02 37 42.0 | -0.3 | |
| **KTHA** | **Kythira Island** | **154.05** | **318** | P | **PKPbc** | 02 37 41.9 | -0.7 | |
| **FSK** | **Fiskardo** | **154.08** | **325** | P | **PKPbc** | 02 37 42.0 | -0.6 | |
| **SBF** | **Sospel** | **154.10** | **350** | *e*PKIKP | **PKPdf** | 02 37 32.6 | -1.2 | |
| **ANKY** | **Antikythira Is** | **154.13** | **317** | P | **PKiKP** | 02 37 42.8 | 0.0 | |
| **PSDA** | **Pessada-Kefalo** | **154.31** | **324** | P | **PKiKP** | 02 37 42.0 | -1.1 | |
| **DMLN** | **Damoulianata-K** | **154.34** | **324** | P | **PKiKP** | 02 37 42.7 | -0.5 | |
| **LTHK** | **Lithakia** | **154.45** | **323** | P | **PKiKP** | 02 37 41.5 | -1.9 | |
| **PYL** | **PYLOS** | **154.47** | **320** | P | **PKiKP** | 02 37 42.6 | -0.9 | |
| **PGAV** | **Gavieira, Arco** | **154.96** | **18** | *e*PKPdf | **PKPdf** | 02 37 35.4 | +0.3 | |
| **PGAV** | **Gavieira, Arco** | **154.96** | **18** | *e*PKPab | **PKPab** | 02 38 03.5 | +0.1 | |
| **PGAV** | **Gavieira, Arco** | **154.96** | **18** | *e*LQ | LQ | 02 37 44.3 | | |
| **PCAB** | **Cabril** | **155.27** | **18** | *e*LQ | LQ | 02 37 45.5 | | |
| **PCAB** | **Cabril** | **155.27** | **18** | *e*PKPab | **PKPab** | 02 38 05.3 | +0.7 | |
| **EPF** | **Esparros** | **155.36** | **2** | *e*PKIKP | **PKPdf** | 02 37 34.9 | -0.7 | |
| **TIP** | **Timpagrande** | **155.47** | **331** | ⇓P | **PKPdf** | 02 37 35.1 | -0.7 | |
| **SACV** | **Santiago Islan** | **155.52** | **94** | | **PKPab** | 02 38 07.1 | +0.5 | |
| **PBRG** | **Braganca** | **155.53** | **15** | *e*PKPdf | **PKPdf** | 02 37 35.8 | 0.0 | |
| **PBRG** | **Braganca** | **155.53** | **15** | *e*PKPab | **PKPab** | 02 38 06.1 | +0.4 | |
| **PBRG** | **Braganca** | **155.53** | **15** | *e*LQ | LQ | 02 37 45.4 | | |
| **POLO** | **Lamas de Olo** | **155.64** | **18** | *e*PKPdf | **PKPdf** | 02 37 36.3 | +0.3 | |
| **POLO** | **Lamas de Olo** | **155.64** | **18** | *e*PKPab | **PKPab** | 02 38 07.0 | +0.7 | |
| **POLO** | **Lamas de Olo** | **155.64** | **18** | *e*LQ | LQ | 02 37 46.1 | | |
| **PVRL** | **Vila Real** | **155.76** | **17** | *e*PKPdf | **PKPdf** | 02 37 36.7 | +0.6 | |
| **PVRL** | **Vila Real** | **155.76** | **17** | *e*PKPab | **PKPab** | 02 38 07.3 | +0.6 | |
| **PVRL** | **Vila Real** | **155.76** | **17** | *e*LQ | LQ | 02 37 46.7 | | |
| **MVO** | **Moncorvo** | **156.05** | **16** | *e*PKPdf | **PKPdf** | 02 37 37.2 | +0.7 | |
| **MVO** | **Moncorvo** | **156.05** | **16** | *e*PKPab | **PKPab** | 02 38 08.7 | +0.7 | |
| **MVO** | **Moncorvo** | **156.05** | **16** | *e*LQ | LQ | 02 37 46.9 | | |
| **PVIS** | **Viseu** | **156.22** | **18** | *e*PKPdf | **PKPdf** | 02 37 36.9 | +0.1 | |
| **PVIS** | **Viseu** | **156.22** | **18** | *e*PKPab | **PKPab** | 02 38 09.1 | +0.3 | |
| **PVIS** | **Viseu** | **156.22** | **18** | *e*LQ | LQ | 02 37 47.0 | | |
| **COI** | **Coimbra** | **156.52** | **20** | *e*PKPdf | **PKPdf** | 02 37 37.7 | +0.6 | |
| **MTE** | **Manteigas** | **156.62** | **18** | *e*PKPdf | **PKPdf** | 02 37 37.6 | +0.3 | |
| **MTE** | **Manteigas** | **156.62** | **18** | *e*PKPab | **PKPab** | 02 38 10.7 | +0.2 | |
| **MTE** | **Manteigas** | **156.62** | **18** | *e*LQ | LQ | 02 37 48.3 | | |
| **PCAS** | **Casmilo, Conde** | **156.64** | **20** | *e*PKPdf | **PKPdf** | 02 37 37.5 | +0.3 | |
| **PCAS** | **Casmilo, Conde** | **156.64** | **20** | *e*PKPab | **PKPab** | 02 38 10.5 | 0.0 | |
| **PSBE** | **So Bento** | **157.02** | **21** | *e*PKPdf | **PKPdf** | 02 37 38.3 | +0.5 | |
| **PSBE** | **So Bento** | **157.02** | **21** | *e*PKPab | **PKPab** | 02 38 12.5 | +0.2 | |
| **PSBE** | **So Bento** | **157.02** | **21** | *e*LQ | LQ | 02 37 49.4 | | |
| **PCBR** | **Castelo Branco** | **157.15** | **18** | *e*PKPdf | **PKPdf** | 02 37 38.3 | +0.4 | |
| **PCBR** | **Castelo Branco** | **157.15** | **18** | *e*PKPab | **PKPab** | 02 38 12.9 | +0.2 | |
| **PMRV** | **Marv??o** | **157.56** | **19** | *e*PKPdf | **PKPdf** | 02 37 38.9 | +0.5 | |
| **PMRV** | **Marv??o** | **157.56** | **19** | *e*PKPab | **PKPab** | 02 38 15.2 | +0.6 | |
| **PMRV** | **Marv??o** | **157.56** | **19** | *e*LQ | LQ | 02 37 50.1 | | |
| **LIS** | **Lisbon** | **157.60** | **23** | *e*PKPab | **PKPab** | 02 38 15.3 | +0.6 | |
| **LIS** | **Lisbon** | **157.60** | **23** | *e*PKPab | **PKPab** | 02 38 15.1 | +0.4 | |
| **PMTG** | **Montargil** | **157.62** | **21** | *e*PKPdf | **PKPdf** | 02 37 38.6 | +0.1 | |
| **PMTG** | **Montargil** | **157.62** | **21** | *e*PKPab | **PKPab** | 02 38 14.7 | -0.1 | |
| **PMOZ** | **Porto Moniz, M** | **157.72** | **46** | *e*PKPab | **PKPab** | 02 38 16.4 | +0.7 | |
| **PMAR** | **Madeira** | **157.97** | **46** | *e*PKPdf | **PKPdf** | 02 37 41.1 | +1.8 | |
| **PMAR** | **Madeira** | **157.97** | **46** | *e*PKPab | **PKPab** | 02 38 17.3 | +0.4 | |
| **PESTR** | **Estremoz** | **158.01** | **20** | *e*PKPdf | **PKPdf** | 02 37 39.2 | +0.2 | |
| **PESTR** | **Estremoz** | **158.01** | **20** | *e*PKPab | **PKPab** | 02 38 16.5 | 0.0 | |
| **PESTR** | **Estremoz** | **158.01** | **20** | *e*LQ | LQ | 02 37 46.2 | | |
| **PESTR** | **Estremoz** | **158.01** | **20** | PKPdif | **PKPab** | 02 38 16.0 | -0.5 | |
| **EVO** | **Evora** | **158.17** | **21** | *e*PKPdf | **PKPdf** | 02 37 39.8 | +0.6 | |
| **EVO** | **Evora** | **158.17** | **21** | *e*PKPab | **PKPab** | 02 38 17.4 | +0.2 | |
| **ESDC** | **Sonseca Array** | **158.18** | **12** | PKP | **PKPdf** | 02 37 39.2 | 0.0 | |
| | comp=Z,7.6nm,0.9s,baz=349,slow=2.8,SNR=45 | | | | | | | |
| ESDC | | | | PKPab | **PKPab** | 02 38 16.9 | -0.4 | |
| | comp=Z,28nm,1.1s,baz=342,slow=4.2,SNR=24 | | | | | | | |
| ESDC | | | | pPKPab | **pPKPab** | 02 40 32.5 | -0.8 | |
| | comp=Z,2.7nm,0.9s,baz=341,slow=3.2,SNR=3.6 | | | | | | | |
| ESDC | | | | PP | **PP** | 02 41 59.0 | -0.1 | |
| | comp=Z,6.1nm,1.1s,baz=348,slow=4.9,SNR=5.0 | | | | | | | |
| **PAB** | **San Pablo** | **158.23** | **13** | | **PKPdf** | 02 37 40.0 | +0.7 | |
| **PAB** | **San Pablo** | **158.23** | **13** | PKIKP | **PKPdf** | 02 37 40.0 | +0.7 | |
| **PNCL** | **Nicolau / Gran** | **158.37** | **22** | *e*PKPdf | **PKPdf** | 02 37 40.0 | +0.6 | |
| **PNCL** | **Nicolau / Gran** | **158.37** | **22** | *e*PKPab | **PKPab** | 02 38 17.9 | -0.2 | |
| **PBEJ** | **Beja** | **158.68** | **21** | *e*PKPdf | **PKPdf** | 02 37 39.9 | +0.1 | |
| **PBEJ** | **Beja** | **158.68** | **21** | *e*PKPab | **PKPab** | 02 38 19.7 | +0.2 | |
| **MESJ** | **Messejana** | **158.72** | **22** | *e*PKPdf | **PKPdf** | 02 37 40.7 | +0.9 | |
| **MESJ** | **Messejana** | **158.72** | **22** | *e*PKPab | **PKPab** | 02 38 19.6 | -0.1 | |
| **MESJ** | **Messejana** | **158.72** | **22** | *e*PKPdf | **PKPdf** | 02 37 39.7 | -0.1 | |
| MESJ | | | | *e*PKPab | **PKPab** | 02 38 19.8 | +0.2 | |
| **PTEO** | **Sao Teotonio** | **158.79** | **23** | *e*PKPdf | **PKPdf** | 02 37 40.9 | +1.0 | |
| **PTEO** | **Sao Teotonio** | **158.79** | **23** | *e*PKPab | **PKPab** | 02 38 20.2 | +0.2 | |
| **PBAR** | **Barrancos** | **158.81** | **19** | *e*PKPdf | **PKPdf** | 02 37 40.6 | +0.7 | |
| **PBAR** | **Barrancos** | **158.81** | **19** | *e*PKPab | **PKPab** | 02 38 20.3 | +0.3 | |
| **PCVE** | **Castro Verde** | **158.97** | **22** | *e*PKPdf | **PKPdf** | 02 37 40.8 | +0.7 | |
| **PCVE** | **Castro Verde** | **158.97** | **22** | *e*PKPab | **PKPab** | 02 38 21.0 | +0.3 | |
| **MORF** | **Marmelete** | **159.03** | **24** | *e*PKPdf | **PKPdf** | 02 37 41.3 | +1.0 | |
| **MORF** | **Marmelete** | **159.03** | **24** | *e*PKPab | **PKPab** | 02 38 21.1 | 0.0 | |
| **MORF** | **Marmelete** | **159.03** | **24** | *e*PKPdf | **PKPdf** | 02 37 40.1 | -0.1 | |
| MORF | | | | *e*PKPab | **PKPab** | 02 38 21.2 | +0.1 | |
| **PFVI** | **Vila Bisbo** | **159.12** | **24** | *e*PKPdf | **PKPdf** | 02 37 41.4 | +1.1 | |
| **PFVI** | **Vila Bisbo** | **159.12** | **24** | *e*PKPab | **PKPab** | 02 38 21.8 | +0.4 | |
| **PVAQ** | **Vaqueiros** | **159.29** | **22** | PKPdf | **PKPdf** | 02 37 41.0 | +0.5 | |
| **PVAQ** | **Vaqueiros** | **159.29** | **22** | *e*PKPdf | **PKPdf** | 02 37 41.4 | +0.9 | |
| **PVAQ** | **Vaqueiros** | **159.29** | **22** | *e*PKPab | **PKPab** | 02 38 22.6 | +0.5 | |
| **PBDV** | **Barranco-do-Ve** | **159.35** | **22** | *e*PKPdf | **PKPdf** | 02 37 41.8 | +1.2 | |
| **PBDV** | **Barranco-do-Ve** | **159.35** | **22** | *e*PKPab | **PKPab** | 02 38 23.2 | +0.7 | |
| **KEST** | **Kesra** | **161.40** | **340** | PKPab | **PKPab** | 02 38 30.6 | -0.9 | |
| **KEST** | **Kesra** | **161.40** | **340** | PKP | **PKPdf** | 02 37 42.4 | -0.6 | |
| | comp=Z,16nm,0.9s,baz=299,slow=4.4,SNR=23 | | | | | | | |
| KEST | | | | PKPab | **PKPab** | 02 38 30.8 | -0.8 | |
| | comp=Z,22nm,0.6s,baz=224,slow=0.7,SNR=16 | | | | | | | |
| **LIC** | **Lamto** | **166.28** | **151** | ⇓*i*PKIKP | **PKPdf** | 02 37 47.1 | -0.7 | |
| | comp=Z,395nm,1.1s | | | | | | | |
| **KIC** | **Kosan Boka** | **166.53** | **151** | ⇓*i*PKIKP | **PKPdf** | 02 37 47.2 | -0.8 | |
| | comp=Z,191nm,0.9s | | | | | | | |
| **TIC** | **Toumodi** | **166.65** | **150** | ⇓*i*PKIKP | **PKPdf** | 02 37 47.4 | -0.7 | |
| | comp=Z,64nm,0.9s | | | | | | | |
| **DBIC** | **Dimbokro** | **166.75** | **150** | | **PKPdf** | 02 37 47.5 | -0.7 | |
| **DBIC** | **Dimbokro** | **166.75** | **150** | PKP | **PKPdf** | 02 37 47.4 | -0.8 | |
| | comp=Z,63nm,0.8s,baz=147,slow=1.5,SNR=48 | | | | | | | |
| DBIC | | | | PKPab | **PKPab** | 02 38 55.5 | -0.1 | |
| | comp=Z,27nm,1.1s,baz=192,slow=4.6,SNR=4.8 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **174.84** | **180** | | **PKPab** | 02 39 31.6 | +0.3 | |
| **TORD** | **Torodi Ar. Bea** | **174.84** | **180** | | **PKPdf** | 02 37 51.3 | -1.0 | |
| **TORD** | **Torodi Ar. Bea** | **174.84** | **180** | PKP | **PKPdf** | 02 37 51.1 | -1.1 | |
| | comp=Z,64nm,1.1s,baz=350,slow=2.5,SNR=147 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | 02 39 31.1 | -0.1 | |
| | comp=Z,18nm,0.9s,baz=184,slow=3.2,SNR=18 | | | | | | | |
| TORD | | | | PP | **PP** | 02 43 22.9 | +0.2 | |
| | comp=Z,14nm,0.8s,baz=175,slow=4.4,SNR=11 | | | | | | | |

*NEIC* ***19*** *02:19:18.6±1.3, 18.07S±0.07×178.0W±0.1, h607km±9km, mb5.6/46, Error ellipse: s-maj=15.1km s-min=8.1km az=60.0*

*IDC* ***19*** *02:19:24.2±2.9, 17.96S×178.43W, h657km±32km, mb4.5/15, mbtmp5.5/15, Error ellipse: s-maj=31.9km s-min=13.9km az=136.0*

**ISC 19 02:19:17.7±0.4, 18.11S±0.07×178.06W±0.06, h600km, n99,σ1ᵗ10/102, mb5.5/33, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.72** | **275** | P | **P** | | **02 20 42.6** | **+1.2** |
| **NIUE** | **Niue** | **7.78** | **98** | P | **P** | | **02 21 15.5** | **+0.6** |
| **FUNA** | **Funafuti** | **9.89** | **344** | P | **P** | | **02 21 34.4** | **-1.1** |
| **PINNC** | **Pines Island,** | **14.31** | **249** | P | **P** | | **02 22 19.6** | **+0.1** |
| **DZM** | **Mont Dzumac** | **15.08** | **252** | P | **P** | | **02 22 26.9** | **+0.2** |
| DZM | | | | IAmb | IAmb | | 02 22 31.2 | |
| | comp=Z,662nm,1.5s | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.84** | **259** | P | **P** | | **02 22 42.8** | **+0.1** |
| KOUNC | | | | IAmb | IAmb | | 02 22 46.3 | |
| | comp=Z,588nm,1.1s | | | | | | | |
| **RAR** | **Rarotonga** | **17.50** | **103** | P | **P** | | **02 22 48.6** | **-0.2** |
| RAR | | | | IAmb | IAmb | | 02 22 50.2 | |
| | comp=Z,289nm,1.1s | | | | | | | |
| **MXZ** | **Matakaoa Point** | **19.64** | **189** | P | **P** | | **02 23 08.2** | **+0.2** |
| MXZ | | | | IAmb | IAmb | | 02 23 12.7 | |
| | comp=Z,122nm,1.3s | | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.35** | **195** | P | **P** | | **02 23 15.0** | **+0.6** |
| TOZ | | | | IAmb | IAmb | | 02 23 17.0 | |
| | comp=Z,71nm,0.7s | | | | | | | |
| **SNZO** | **South Karori** | **23.94** | **194** | P | **P** | | **02 23 45.4** | **-0.9** |
| SNZO | | | | IAmb | IAmb | | 02 23 46.7 | |
| | comp=Z,167nm,0.7s | | | | | | | |
| **BHW** | **Baring Head** | **24.00** | **193** | P | **P** | | **02 23 45.8** | **-1.1** |
| BHW | | | | IAmb | IAmb | | 02 23 47.0 | |
| | comp=Z,130nm,0.6s | | | | | | | |
| **QRZ** | **Quartz Range** | **24.04** | **198** | P | **P** | | **02 23 47.6** | **+0.3** |
| QRZ | | | | IAmb | IAmb | | 02 23 49.0 | |
| | comp=Z,187nm,0.7s | | | | | | | |
| **PLWZ** | **Palliser** | **24.07** | **192** | P | **P** | | **02 23 46.5** | **-1.1** |
| **TKNZ** | **Takaka Hill** | **24.11** | **197** | P | **P** | | **02 23 48.2** | **+0.2** |
| **DSZ** | **Denniston Nort** | **25.10** | **198** | P | **P** | | **02 23 56.7** | **0.0** |
| DSZ | | | | IAmb | IAmb | | 02 23 58.3 | |
| | comp=Z,140nm,0.6s | | | | | | | |
| **CTZ** | **Chatham Island** | **25.58** | **178** | P | **P** | | **02 24 02.3** | **+1.5** |
| CTZ | | | | IAmb | IAmb | | 02 24 04.8 | |
| | comp=Z,171nm,1.0s | | | | | | | |
| **GVZ** | **Greta Valley S** | **25.91** | **195** | P | **P** | | **02 24 02.8** | **-0.9** |
| **LTZ** | **Lake Taylor** | **25.93** | **196** | P | **P** | | **02 24 04.6** | **+0.7** |
| **PPTF** | **Pamatai, Papee** | **27.12** | **93** | P | **P** | | **02 24 14.3** | **-0.5** |
| **FOZ** | **Fox Glacier** | **27.34** | **199** | P | **P** | | **02 24 16.3** | **+0.2** |
| **LBZ** | **Lake Benmore** | **28.00** | **198** | P | **P** | | **02 24 23.4** | **+1.5** |
| LBZ | | | | IAmb | IAmb | | 02 24 25.5 | |
| | comp=Z,148nm,0.8s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.52** | **200** | P | **P** | | **02 24 35.5** | **+0.4** |
| **DCZ** | **Deep Cove** | **29.93** | **201** | P | **P** | | **02 24 39.2** | **+0.6** |
| DCZ | | | | IAmb | IAmb | | 02 24 39.7 | |
| | comp=Z,104nm,0.9s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.04** | **200** | P | **P** | | **02 24 40.2** | **+0.7** |
| **CTAO** | **Charters Tower** | **33.74** | **261** | P | **P** | | **02 25 11.9** | **+0.7** |
| **CAN** | **Canberra** | **33.84** | **233** | P | **P** | | **02 25 12.6** | **+0.6** |
| **CAN** | **Canberra** | **33.84** | **233** | P | **P** | | **02 25 12.9** | **+0.9** |
| **PMG** | **Port Moresby** | **34.82** | **280** | P | **P** | | **02 25 20.6** | **+0.4** |
| **PMG** | **Port Moresby** | **34.82** | **280** | P | **P** | | **02 25 22.1** | **+1.8** |
| **TOO** | **Toolangi** | **37.30** | **231** | P | **P** | | **02 25 41.5** | **+1.1** |
| **COEN** | **Coen** | **37.44** | **271** | P | **P** | | **02 25 42.6** | **+0.8** |
| **MANU** | **Manus Island** | **37.48** | **291** | P | **P** | | **02 25 42.8** | **+0.6** |
| MANU | | | | IAmb | IAmb | | 02 25 44.6 | |
| | comp=Z,86nm,0.6s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.93** | **81** | P | **P** | | **02 25 45.5** | **-0.4** |
| TAOE | | | | IAmb | IAmb | | 02 25 47.3 | |
| | comp=Z,125nm,0.7s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.93** | **81** | P | **P** | | **02 25 46.0** | **+0.1** |
| **STKA** | **Stephens Creek** | **38.82** | **241** | P | **P** | | **02 25 53.1** | **+0.3** |
| STKA | | | | IAmb | IAmb | | 02 25 55.4 | |
| | comp=Z,145nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.82** | **241** | P | **P** | | **02 25 54.4** | **+1.6** |
| | comp=Z,315nm,0.9s,baz=71,slow=10,SNR=6.9 | | | | | | | |
| | comp=Z,315nm,0.9s | | | | | | | |
| **WAKE** | **Wake Island** | **40.08** | **337** | P | **P** | | **02 26 02.2** | **-0.7** |
| WAKE | | | | IAmb | IAmb | | 02 26 16.3 | |
| | comp=Z,353nm,1.2s | | | | | | | |
| **WAKE** | **Wake Island** | **40.08** | **337** | P | **P** | | **02 26 03.4** | **+0.6** |
| **MGBR** | **Mount Gambier** | **41.04** | **233** | P | **P** | | **02 26 09.6** | **-0.7** |
| **HUH** | **Hualalai** | **43.44** | **31** | P | **P** | | **02 26 28.7** | **-0.8** |
| HUH | | | | IAmb | IAmb | | 02 26 31.1 | |
| | comp=Z,314nm,1.2s | | | | | | | |
| **KNHH** | **Kane Nui o Ham** | **43.51** | **32** | P | **P** | | **02 26 30.1** | **+0.1** |
| **BBOO** | **Buckleboo** | **43.60** | **241** | P | **P** | | **02 26 30.9** | **+0.5** |
| **WRAB** | **Tennant Creek** | **44.91** | **260** | P | **P** | | **02 26 40.3** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | | **02 26 40.9** | **+0.1** |
| | comp=Z,94nm,0.7s,baz=94,slow=7.8,SNR=7.3 | | | | | | | |
| WRA | | | | S | **S** | | **02 32 30.6** | **-5.9** |
| | comp=Z,5.0nm,0.6s,baz=97,slow=13,SNR=1.3 | | | | | | | |
| | comp=Z,94nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | | **02 26 41.8** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | | **02 26 42.4** | **+0.6** |
| | comp=Z,399nm,0.8s,baz=85,slow=8.7,SNR=10 | | | | | | | |
| ASAR | | | | S | **S** | | **02 32 36.8** | **-1.5** |
| | comp=Z,25nm,1.0s,baz=86,slow=17,SNR=4.9 | | | | | | | |
| | comp=Z,399nm,0.8s | | | | | | | |
| **MIDW** | **Midway** | **46.05** | **1** | P | **P** | | **02 26 49.0** | **-0.1** |
| **GUMO** | **Guam** | **48.26** | **308** | P | **P** | | **02 27 07.3** | **+1.5** |
| | comp=Z,188nm,0.6s,baz=100,slow=5.7,SNR=4.2 | | | | | | | |
| | comp=Z,188nm,0.6s | | | | | | | |
| **GUMO** | **Guam** | **48.26** | **308** | P | **P** | | **02 27 06.6** | **+0.8** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DRV** | **Dumont d'Urvil** | **55.58

ZELE eS Sb 02 21 00.5 -0.1
**BRIBI Bribri** 1.06 19 eP Pn 02 20 51.7 0.0
**BUS1 Rivas** 1.07 330 eP Pb 02 20 50.3 -1.7
**LLNJ Naranjito** 1.23 314 eP Pn 02 20 52.2 -1.8
**SVQ2 Quepos** 1.25 310 eP Pn 02 20 52.5 -1.8
**RAZU San Marcos de** 1.31 322 eP Pn 02 20 54.4 -0.9
**TURIB Turrialba** 1.37 339 eP Pn 02 20 55.0 -1.0
**ABE2 San Pablo** 1.37 322 eP Pn 02 20 55.1 -1.0
**LCR2 La Lucha 2** 1.37 325 Pn Pn 02 20 54.7 -1.5
LCR2 Sn Sn 02 21 13.2 -0.8
**LCR2 La Lucha 2** 1.37 325 i P Pn 02 20 56.1 -0.1
LCR2 i S Sn 02 21 14.0 -0.1
LCR2 IAML 02 21 16.2
comp=Z,22µm,1.0s
**LCR2 La Lucha 2** 1.37 325 eP Pn 02 20 54.5 -1.6
**REPA Paraso** 1.37 331 eP Pn 02 20 55.7 -0.5
**VERB Verbena** 1.41 340 eP Pn 02 20 55.8 -0.8
**RVSTA Santa Teresita** 1.42 342 eP Pn 02 20 56.3 -0.5
**PCAYA Pacayas** 1.42 335 eP Pn 02 20 56.1 -0.8
**TAGO Cartago** 1.43 330 eP Pn 02 20 55.8 -1.2
**VTCV VTCV, Calle Va** 1.45 339 eP Pn 02 20 56.4 -0.9
**RAFA San Farael, Vo** 1.46 336 i P Pn 02 20 57.0 -0.5
RAFA i S Sn 02 21 15.8 -0.7
RAFA IAML 02 21 24.5
comp=Z,100µm,1.0s
**RAFA San Farael, Vo** 1.46 336 eP Pn 02 20 56.5 -1.0
**TAAN Batan** 1.46 354 eP Pn 02 20 57.3 0.0
**CVTV Tajo** 1.48 339 eP Pn 02 20 57.0 -0.8
**CVTQ Turrialba Volc** 1.49 338 eP Pn 02 20 57.0 -0.8
**VTLA Turrialba Volc** 1.49 338 eP Pn 02 20 57.0 -0.9
**VTR0 Volcan Turrial** 1.50 338 eP Pn 02 20 57.2 -0.8
**CVTR Volcan Turrial** 1.50 338 eP Pn 02 20 57.3 -0.8
**LCOCO El Coco** 1.50 346 eP Pn 02 20 57.5 -0.2
**IRES Siquirres** 1.50 348 eP Pn 02 20 57.8 0.0
**VICA Volcano Irazu** 1.50 335 eP Pn 02 20 57.0 -1.2
**ACOS Acosta** 1.51 321 eP Pn 02 20 57.1 -0.9
**RVLA Villa Bonita** 1.53 346 eP Pn 02 20 58.0 -0.2
**SJS3 Mercedes San J** 1.56 327 eP Pn 02 20 58.1 -0.6
**CVIMO Finca Echandi** 1.58 332 eP Pn 02 20 58.0 -1.0
**HDC3 Heredia 3** 1.64 327 i P Pb 02 21 01.2 -0.3
HDC3 i S Sb 02 21 22.7 +0.7
HDC3 IAML 02 21 29.1
comp=Z,41µm,1.0s
**HDC Heredia** 1.64 327 Pn 02 20 59.5 -0.3
**HDC Heredia** 1.64 327 eP Pb 02 21 01.8 +0.3
HDC eS Sb 02 21 22.5 +0.5
**HDC Heredia** 1.64 327 eP Pn 02 20 58.9 -0.9
**HDC Heredia** 1.64 327 eP Pn 02 20 58.7 -1.2
**BELE Belen** 1.66 324 eP Pn 02 20 59.5 -0.6
**TCS1 Tacares** 1.78 323 i P Pb 02 21 03.2 -0.7
TCS1 IAML 02 21 31.5
comp=Z,260µm,1.0s
**TCS1 Tacares** 1.78 323 eP Pn 02 21 01.3 -0.4
**CBL1 Cabuya** 2.10 297 eP Pn 02 21 04.7 -1.4
**GMAL Guarumal, Vera** 2.12 113 P Pn 02 21 05.6 -0.8
GMAL S Sn 02 21 32.4 0.0
**GMAL Guarumal, Vera** 2.12 113 eP Pn 02 21 04.5 -1.8
**SOCE Pocosol** 2.24 322 Pn 02 21 08.0 0.0
**SOCE Pocosol** 2.24 322 i P Pb 02 21 09.9 -1.8
SOCE i S Sb 02 21 40.2 +1.0
SOCE IAML 02 21 45.9
comp=Z,38µm,1.0s
**STIA3 Santiago, Vera** 2.26 103 eP Pn 02 21 08.6 +0.3
**VACR Volcan Arenal** 2.35 322 eP Pn 02 21 11.3 +1.8
**JTS Las Juntas de** 2.40 314 Pn Pn 02 21 09.6 -0.5
**JTS Las Juntas de** 2.40 314 Pn Pb 02 21 12.4 -1.9
comp=Z,220nm,0.3s,baz=106,slow=6.6,SNR=137
JTS Sn Sn 02 21 40.3 +1.1
comp=Z,401nm,0.3s,baz=119,slow=13,SNR=5.8
comp=Z,2µm,0.6s
**JTS Las Juntas de** 2.40 314 P Pn 02 21 11.7 +1.6
JTS S Sn 02 21 40.2 +1.0
**JTS Las Juntas de** 2.40 314 eP Pb 02 21 12.7 -1.6
JTS eS Sb 02 21 44.5 +0.8
**JTS Las Juntas de** 2.40 314 eP Pn 02 21 09.6 -0.5
**COVE Coope Vega, Sa** 2.40 331 i P Pb 02 21 12.8 -1.5
COVE i S Sb 02 21 46.2 +2.5
COVE IAML 02 21 57.0
comp=Z,12µm,1.0s
**INDI Punta indio, G** 2.59 299 i P Pn 02 21 12.4 -0.3
INDI i S Sn 02 21 42.2 -1.7
INDI IAML 02 22 06.9
comp=Z,10µm,1.0s
**CACAO El Cacao, Vera** 2.64 118 P Pn 02 21 13.4 0.0
CACAO S Sn 02 21 46.1 +1.0
**JUD3 Juan Diaz 3** 2.77 304 Pn 02 21 15.2 -0.2
**PNME Penonome** 2.84 92 eP Pn 02 21 18.4 +2.1
PNME eS Sb 02 21 55.8 -0.8
**TOSI3 Tonosi** 2.99 114 eP Pn 02 21 20.1 +1.9
**AZU Azuero** 3.01 106 P Pn 02 21 19.6 +1.1
AZU S Sb 02 21 58.0 -3.3
**AZU Azuero** 3.01 106 eP Pn 02 21 19.7 +1.2
AZU eS Sb 02 22 00.6 -0.7
**AZU Azuero** 3.01 106 eP Pn 02 21 18.9 +0.4
**ZANG Zanguenga, Cho** 3.31 84 eP Pn 02 21 22.9 +0.2
**BCIP Isla Barro Col** 3.37 80 Pn 02 21 23.5 +0.1
**BCIP Isla Barro Col** 3.37 80 P Pn 02 21 24.1 +0.7
BCIP S Sb 02 22 13.4 +1.8
**BCIP Isla Barro Col** 3.37 80 i P Pn 02 21 24.3 +0.9
BCIP IAML 02 22 24.7
comp=Z,4µm,1.0s
**BCIP Isla Barro Col** 3.37 80 eP Pn 02 21 24.1 +0.7
**BLUN Bluefields** 3.41 351 i P Pn 02 21 23.4 -0.7
BLUN IAML 02 21 27.1
comp=Z,2µm,1.0s
**ESPN Las Esperanzas** 3.71 343 Pn 02 21 28.2 0.0
**ESPN Las Esperanzas** 3.71 343 i P Pn 02 21 30.9 +2.7
ESPN IAML 02 22 33.6
comp=Z,3µm,1.0s
**ESPN Las Esperanzas** 3.71 343 eP Pn 02 21 27.7 -0.5
**JAPN Al SSO del Vol** 3.78 320 i P Pn 02 21 32.4 +3.2
JAPN IAML 02 21 50.4
comp=Z,960nm,1.0s
**ACON Acoyapa** 3.85 330 Pn 02 21 31.4 +1.3
**ACON Acoyapa** 3.85 330 i P Pn 02 21 31.8 +1.7
ACON IAML 02 21 51.6
comp=Z,1µm,1.0s
**NADN Granada** 4.18 318 i P Pn 02 21 36.8 +2.2
**BOAB BOACO BROADBAN** 4.51 328 Pn Pn 02 21 39.6 +0.4
**PRVC Isla de Provid** 5.06 21 P Pn 02 21 46.6 -0.1
comp=Z,211nm,1.0s
PRVC S Sn 02 22 43.1 -1.8
comp=Z,211nm,1.0s
**CNGN Cerro Negro** 5.17 319 Pn 02 21 50.4 +2.1
**CNGN Cerro Negro** 5.17 319 P Pn 02 21 50.7 +2.4
comp=Z,319nm,1.0s
CNGN S Sn 02 22 51.3 +3.7
comp=Z,319nm,1.0s
**PTAC Punta Ardita,** 5.54 105 P Pn 02 21 54.3 +1.0
comp=Z,104nm,0.8s
PTAC S Sn 02 22 55.0 -1.7
comp=Z,104nm,0.8s
**CRIN San Cristobal** 5.55 317 Pn 02 21 55.0 +1.5
**CRIN San Cristobal** 5.55 317 P Pn 02 21 55.9 +2.4
comp=Z,932nm,0.8s
CRIN S Sn 02 22 58.3 +1.3
comp=Z,932nm,0.8s
**CAPC Capurgana** 5.78 89 P Pn 02 22 01.4 +4.7
**SOLC Bahia Solano** 6.21 112 P Pn 02 22 01.2 -1.4
SOLC S Sn 02 23 11.0 -2.4
**APAC Apartado, Choc** 6.59 96 P Pn 02 22 11.3 +3.5
APAC S Sb 02 23 43.8 -0.6
**TGUH Tegucigalpa,Un** 6.72 324 Pn Pn 02 22 12.1 +2.4
**TGUH Tegucigalpa,Un** 6.72 324 P Pn 02 22 13.4 +3.7
**LCBC Los crdobas,** 6.76 87 P Pn 02 22 11.6 +1.5
comp=Z,163nm,1.2s
LCBC S Sn 02 23 28.2 +1.4
comp=Z,163nm,1.2s
**DBBC Dabeiba** 7.11 102 P Pn 02 22 17.2 +2.2
**GR1C Gorgona, Isla** 7.50 138 P Pn 02 22 25.2 +5.0
**CBOC Ciudad Bolivar** 7.64 111 P Pn 02 22 24.3 +2.0
comp=Z,41nm,0.8s
**UREC San Jos de Ur** 7.64 96 P Pn 02 22 24.0 +1.8
comp=Z,56nm,0.7s,comp=Z,24µm
**SNET Serv Nac Est T** 7.77 311 Pn 02 22 25.3 +1.2
**PLMC San Jos del P** 7.80 118 P Pn 02 22 24.0 -0.4
comp=Z,41nm,1.3s
**SJCC San Jacinto, C** 8.02 80 P Pn 02 22 28.5 +1.0
comp=Z,87nm,0.6s
**MTO3 Montecristo** 8.33 314 Pn 02 22 33.0 +1.0
**ZARC Zaragoza, Cauc** 8.34 97 P Pn 02 22 32.9 +1.1
comp=Z,68nm,0.7s

**JAMC Jamundi, Valle** 8.42 129 P Pn 02 22 34.8 +1.6
comp=Z,23nm,0.7s
**ESQI Esquipulas** 8.43 315 Pn 02 22 35.1 +1.9
**NORC Norcasia** 8.81 110 P Pn 02 22 41.6 +3.3
**BBAC Balboa, Cauca** 8.84 138 P Pn 02 22 42.2 +3.4
**POPC Popayan, Colom** 8.87 133 P Pn 02 22 42.5 +3.2
**PTBC PUERTO BERRIO,** 8.91 103 P Pn 02 22 43.7 +4.0
**ARGC Ariguani, Magd** 8.92 81 P Pn 02 22 43.5 +3.6
**ORTC Ortega, Tolima** 9.19 120 P Pn 02 22 45.7 +2.2
comp=Z,53nm,0.9s,comp=Z,14µm
**SMRC Santa Marta, M** 9.20 73 P Pn 02 22 43.6 0.0
comp=Z,67nm,0.7s
**GCUF Volcan Galeras** 9.38 141 P Pn 02 22 49.9 +3.4
**PAC1 Pacto, Paraso** 9.39 152 P Pn 02 22 48.6 +2.2
comp=Z,22nm,0.7s,comp=Z,28µm
**BRJC Barrancabermej** 9.51 99 P Pn 02 22 49.9 +2.0
comp=Z,47nm,0.9s
**TULM Tulcn-Chalpat** 9.52 145 Pn 02 22 52.1 +3.6
**TULM Tulcn-Chalpat** 9.52 145 P Pn 02 22 53.2 +4.7
**SPBC San Pablo de B** 9.53 107 P Pn 02 22 52.0 +3.8
**APG El Apazote** 9.53 312 Pn Pn 02 22 51.0 +2.7
comp=Z,0.3nm,0.3s,baz=144,slow=5.1,SNR=63
**ROSC El Rosal** 9.58 112 Pn Pn 02 22 52.6 +3.4
**ROSC El Rosal** 9.58 112 Pn Pn 02 22 53.9 +4.6
comp=Z,2.4nm,0.3s,baz=344,slow=2.7,SNR=30
ROSC Sn Sn 02 24 45.5 +8.6
comp=Z,1.7nm,0.3s,baz=272,slow=21,SNR=2.0
**ROSC El Rosal** 9.58 112 P Pn 02 22 54.5 +5.2
**PRAC Prado** 9.59 120 P Pn 02 22 51.6 +2.5
comp=Z,37nm,1.0s
**IMBA Imbabura, San** 9.67 149 Pn 02 22 53.5 +3.0
**PULU Pululahua** 9.74 151 Pn 02 22 53.2 +1.8
**OCAC Ocana** 9.78 91 P Pn 02 22 54.1 +2.3
comp=Z,75nm,0.7s
**BONI La Bonita** 9.88 145 P Pn 02 22 57.9 +4.6
**GARC Garzon, Huila** 9.98 129 P Pn 02 22 58.4 +3.8
**BARC Barichara** 10.13 101 P Pn 02 22 59.6 +3.0
**RTAL Retalhuleu** 10.18 306 Pn 02 22 58.1 +1.0
**CHIC Chingaza** 10.21 112 P Pn 02 23 02.3 +4.5
**FLOC Florencia** 10.26 133 P Pn 02 23 01.8 +3.6
**URMC La Uribe, Meta** 10.27 121 P Pn 02 23 01.2 +2.8
comp=Z,53nm,1.1s
**ANTS Antisana-Sarah** 10.35 151 Pn Pn 02 22 59.8 -0.2
**RUSC La Rusia** 10.39 104 P Pn 02 23 03.7 +3.2
**CRJC Cerrejon, Guaj** 10.44 76 P Pn 02 23 00.2 -0.6
comp=Z,34nm,0.9s
**VILC Villavicencio,** 10.45 115 P Pn 02 23 05.9 +4.9
**PAMC Pamplona, Colo** 10.48 96 P Pn 02 23 03.4 +1.8
**PETF Flores** 10.50 322 Pn 02 23 02.0 +0.6
**HUEH Huehuetenango** 10.50 310 Pn 02 23 03.0 +1.4
**PIAT Ana Tenorio** 10.75 153 P Pn 02 23 10.1 +4.9
**MTDJ Mount Denham** 11.02 29 Pn Pn 02 23 07.9 -0.8
**MTDJ Mount Denham** 11.02 29 P Pn 02 23 09.5 +0.8
comp=Z,62nm,0.9s
**URIC Uribia, Colomb** 11.45 74 P Pn 02 23 14.8 +0.3
comp=Z,40nm,0.9s
**TAMC Tame, Arauca** 11.52 100 P Pn 02 23 18.8 +3.4
**CCIG Comitan** 11.58 312 Pn Pn 02 23 16.9 +0.5
**PAYG Puerto Ayora** 11.62 218 P Pn 02 23 21.3 +4.4
**PTGC Puerto Gaitan,** 11.84 111 P Pn 02 23 22.0 +2.2
comp=Z,56nm,0.9s
**PTLC Puerto Leguiza** 11.85 135 P Pn 02 23 30.1 +10
**SDV Santo Domingo** 12.42 88 Pn Pn 02 23 28.5 +0.5
**SDV Santo Domingo** 12.42 88 Pn Pn 02 23 23.1 -4.9
comp=Z,2.4nm,0.3s,baz=344,slow=18,SNR=1.2
SDV Sn Sn 02 25 42.9 -3.4
comp=Z,0.7nm,0.3s,baz=340,slow=22,SNR=1.1
comp=Z,6.1nm,0.3s
**GTBY Guantanamo Bay** 13.70 34 P Pn 02 23 48.9 +3.7
**SOR Soroa** 14.09 1 Pn Pn 02 23 50.1 -0.4
**CMIG Matias Romero** 14.16 308 Pn Pn 02 23 51.3 -0.2
comp=Z,1.3nm,0.3s,baz=124,slow=11,SNR=14
CMIG Sn Sn 02 26 32.7 +4.3
comp=Z,0.3nm,0.3s,baz=51,slow=11,SNR=2.5
comp=Z,4.7nm,0.3s
**NMDO Nuevo Mundo** 14.28 33 Pn 02 23 52.2 -1.0
**BAUV El Baul** 14.98 88 Pn Pn 02 24 03.0 +0.2
**SDDR Presa de Saban** 15.48 47 Pn Pn 02 24 09.1 -0.3
SDDR IAmb IAmb 02 24 46.9
comp=Z,40nm,0.8s
**SDDR Presa de Saban** 15.48 47 P P 02 24 12.0 -1.7
**ATAH Atahualpa** 16.37 163 Pn Pn 02 24 19.6 -1.5
comp=Z,0.2nm,0.3s,baz=51,slow=13,SNR=2.0
comp=Z,2.0nm,0.6s
**TLIG Tlapa** 17.40 302 Pn 02 24 34.1 +0.2
**MLPR Magueyes Islan** 18.25 58 Pn Pn 02 24 42.2 -2.0
MLPR IAmb IAmb 02 24 56.2
comp=Z,52nm,1.2s
**PRSN Puerto Rico Se** 18.29 57 P P 02 24 45.1 +0.3
**PCRV Puerto La Cruz** 18.38 84 P P 02 24 45.9 0.0
comp=Z,2.2nm,0.3s,baz=221,slow=5.0,SNR=15
comp=Z,23nm,0.7s
**OBIP Obispado Ponce** 18.65 58 P 02 24 48.6 -0.1
OBIP IAmb IAmb 02 24 52.0
comp=Z,56nm,1.3s
**UUPR Utuado, UPR, P** 18.66 57 P 02 24 48.5 -0.3
UUPR IAmb IAmb 02 25 04.2
comp=Z,60nm,1.2s
**AOPR Arecibo Observ** 18.67 57 P P 02 24 47.6 -1.5
AOPR IAmb IAmb 02 25 06.5
comp=Z,30nm,0.7s
**CELP Cerrillos** 18.69 58 P P 02 24 47.9 -1.3
CELP IAmb IAmb 02 24 55.3
comp=Z,31nm,1.0s
**IGPR InterUniversit** 19.04 59 P P 02 24 53.0 0.0
IGPR IAmb IAmb 02 25 03.7
comp=Z,29nm,0.8s
**PDPR Patillas Dam,** 19.13 59 P P 02 24 53.9 -0.2
**GCPR Guaynabo City** 19.21 58 P P 02 24 54.8 -0.2
GCPR IAmb IAmb 02 25 11.0
comp=Z,56nm,1.1s
**CZSB Cruzeiro do Su** 19.32 147 P Pn 02 24 57.1 -0.1
CZSB IAmb IAmb 02 25 04.3
comp=Z,26nm,0.8s
**CZSB Cruzeiro do Su** 19.32 147 P Pn 02 24 57.5 +0.3
comp=Z,37nm,1.4s
**CZSB Cruzeiro do Su** 19.32 147 eP Pn 02 24 57.4 +0.2
**HUMP Col San Antoni** 19.34 59 P P 02 24 56.1 -0.1
HUMP IAmb IAmb 02 25 09.8
comp=Z,34nm,1.1s
**DWPF Disney Wildern** 19.46 5 P Pn 02 24 58.5 -0.3
DWPF IAmb IAmb 02 25 18.3
comp=Z,23nm,0.8s
**JRQG Juriquilla Cam** 20.53 308 P Pn 02 25 11.0 -0.9
**NNA Nana** 21.43 163 P P 02 25 19.4 +0.3
NNA IAmb IAmb 02 25 21.0
comp=Z,41nm,1.1s
**NNA Nana** 21.43 163 P P 02 25 20.2 +1.2
comp=Z,28nm,1.0s,baz=338,slow=8.7,SNR=5.5
comp=Z,28nm,1.0s
**NNA Nana** 21.43 163 P P 02 25 18.0 -1.1
comp=Z,41nm,1.2s
**GRGR Grenville** 21.48 79 P P 02 25 21.1 +1.5
**SMRT St. Maarten** 21.69 62 P P 02 25 21.7 -0.1
**TEFE Tefe** 22.09 122 eP P 02 25 28.4 +2.3
**CBE Ff, Capester** 22.34 69 P P 02 25 29.2 +0.3
**ZAIG Zacatecas** 23.31 309 P P 02 25 41.2 +1.9
ZAIG IAmb IAmb 02 25 51.5
comp=Z,20nm,1.4s
**BOAV Boa Vista** 23.39 104 P P 02 25 39.6 -0.3
BOAV IAmb IAmb 02 25 49.4
comp=Z,16nm,1.0s
**BOAV Boa Vista** 23.39 104 eP P 02 25 40.2 +0.4
**346A Big Creek Wild** 23.39 346 P P 02 25 38.4 -1.2
346A IAmb IAmb 02 25 42.7
comp=Z,31nm,1.1s
**250A Grady** 23.42 353 P P 02 25 40.5 +0.6
250A IAmb IAmb 02 26 06.1
comp=Z,35nm,1.2s
**HBVL Hebbronville** 23.48 323 P P 02 25 40.1 -0.5
**154A Montrose** 23.88 0 P P 02 25 43.8 -0.6
**441A DeRidder** 23.91 338 P P 02 25 44.8 +0.1
**152A Waverly Hall** 23.97 357 P P 02 25 45.1 -0.2
152A IAmb IAmb 02 25 48.2
comp=Z,8.8nm,0.6s
**VBMS Vicksburg** 24.45 345 P P 02 25 49.6 0.0
VBMS IAmb IAmb 02 25 52.6
comp=Z,25nm,0.9s
**146A Union** 24.51 348 P P 02 25 51.2 +1.0
**NHSC New Hope** 24.53 6 P P 02 25 50.3 0.0
**LRAL Lakeview Retre** 24.55 352 P P 02 25 50.8 +0.2
LRAL IAmb IAmb 02 26 19.5
comp=Z,14nm,1.1s
**GOGA Godfrey** 24.67 359 P P 02 25 52.6 +0.9

GOGA IAmb IAmb 02 26 09.6
comp=Z,10nm,0.8s
**833A Chaparral WMA,** 24.84 324 P P 02 25 52.9 -0.4
833A IAmb IAmb 02 26 26.8
comp=Z,12nm,0.9s
**Z47A Carrollton** 24.87 350 P P 02 25 53.1 -0.4
Z47A IAmb IAmb 02 26 04.7
comp=Z,16nm,0.8s
**ETMB Extrema** 24.93 137 P P 02 25 53.7 -0.5
ETMB IAmb IAmb 02 25 55.0
comp=Z,27nm,1.4s
**ETMB Extrema** 24.93 137 eP P 02 25 53.7 -0.5
**Y52A Lilburn** 25.14 358 P P 02 25 55.3 -0.6
Y52A IAmb IAmb 02 26 02.3
comp=Z,16nm,0.8s
**143A Socs Landing,** 25.14 344 P P 02 25 54.4 -1.5
143A IAmb IAmb 02 26 13.8
comp=Z,17nm,1.1s
**Y49A Blount Mountai** 25.29 354 P P 02 25 56.9 -0.4
Y49A IAmb IAmb 02 26 16.4
comp=Z,10nm,1.1s
**MACA Manacapuru-AM** 25.32 117 P P 02 25 58.2 +0.4
**MACA Manacapuru-AM** 25.32 117 eP P 02 25 59.5 +1.8
**NATX Nacogdoches** 25.37 337 P P 02 25 58.2 +0.1
NATX IAmb IAmb 02 26 11.0
comp=Z,14nm,1.0s
**Y57A Sumter** 25.41 5 P P 02 25 57.4 -0.9
Y57A IAmb IAmb 02 26 00.9
comp=Z,15nm,0.7s
**HODGE Hodges** 25.50 2 P P 02 25 59.3 +0.1
HODGE IAmb IAmb 02 26 16.5
comp=Z,13nm,1.0s
**JSC Jenkinsville** 25.60 4 P P 02 26 00.1 0.0
JSC IAmb IAmb 02 26 15.0
comp=Z,11nm,0.8s
**HNDO Hondo** 25.70 326 P P 02 26 00.5 -0.6
**Y45A Yeager Farm, C** 25.80 348 P P 02 26 02.0 +0.1
**435B Jarrell** 25.82 331 P P 02 26 02.5 +0.3
435B IAmb IAmb 02 26 25.1
comp=Z,22nm,1.2s
**X51A Calhoun** 25.87 357 P P 02 26 01.5 -1.0
X51A IAmb IAmb 02 26 17.6
comp=Z,11nm,0.8s
**FPAL Fort Paine** 25.89 355 P P 02 26 02.3 -0.5
**X48A Hartselle** 25.95 353 P P 02 26 03.7 +0.4
**BIRD Birdtown, Kers** 26.02 5 P P 02 26 02.0 -1.9
BIRD IAmb IAmb 02 26 08.2
comp=Z,13nm,0.8s
**237A Washetta, Mont** 26.05 335 P P 02 26 03.8 -0.4
237A IAmb IAmb 02 26 07.5
comp=Z,21nm,1.3s
**BG3 Lake Jocassee** 26.25 0 P P 02 26 05.1 -0.9
BG3 IAmb IAmb 02 26 21.4
comp=Z,11nm,0.9s
**W52A Murphy** 26.36 359 P P 02 26 07.6 +0.6
**DRIO Del Rio** 26.38 324 P P 02 26 06.4 -0.8
**CCAR Cane Creek** 26.39 344 P P 02 26 07.5 +0.3
**OXF Oxford** 26.39 348 P P 02 26 06.8 -0.5
OXF IAmb IAmb 02 26 44.4
comp=Z,20nm,0.9s
**SAML Samuel** 26.50 131 P P 02 26 07.7 -0.7
**W50A Signal Mountai** 26.53 356 P P 02 26 08.9 +0.3
W50A IAmb IAmb 02 26 23.3
comp=Z,14nm,1.2s
**WLAR White Oak Lake** 26.57 341 P P 02 26 08.6 -0.3
**W57A Gilead** 26.57 6 P P 02 26 08.5 -0.4
W57A IAmb IAmb 02 26 22.9
comp=Z,13nm,0.9s
**SWET Sewanee** 26.59 355 P P 02 26 09.0 -0.1
**PLAL Pickwick Lake** 26.62 351 P P 02 26 07.8 -1.5
**JCT Junction City** 26.72 327 P P 02 26 11.1 +0.8
**CPCT Cooper Cave** 26.73 358 P P 02 26 09.3 -1.0
**Z38A Mt. Pleasant** 26.83 338 P P 02 26 11.3 0.0
Z38A IAmb IAmb 02 26 43.3
comp=Z,9.9nm,0.7s
**BRDY Brady** 26.93 329 P P 02 26 12.0 -0.2
**V48A Smith Brothers** 27.20 354 P P 02 26 14.5 0.0
**V58A Windy Hill, Pi** 27.30 7 P P 02 26 14.8 -0.7
V58A IAmb IAmb 02 26 23.3
comp=Z,25nm,1.2s
**UALR University of** 27.35 343 P P 02 26 15.7 -0.2
UALR IAmb IAmb 02 26 23.8
comp=Z,16nm,1.1s
**MIAR Mount Ida** 27.51 341 P P 02 26 17.4 +0.1
MIAR IAmb IAmb 02 26 25.4
comp=Z,9.9nm,1.1s
**U56A King** 27.72 5 P P 02 26 19.9 +0.7
U56A IAmb IAmb 02 26 22.2
comp=Z,9.7nm,0.8s
**OZNA Ozona** 27.79 325 P P 02 26 20.6 +0.6
**WHAR Wooly Hollow** 27.82 344 P P 02 26 18.8 -1.3
WHAR IAmb IAmb 02 26 30.4
comp=Z,22nm,1.1s
**GNAR Gosnell** 27.92 348 P 02 26 21.0 +0.1
**LNXT Lenox** 27.95 349 P P 02 26 21.6 +0.3
**HPIG** 28.01 313 P P 02 26 22.6 +0.5
**TXAR Lajitas Array** 28.18 320 P P 02 26 23.3 -0.2
comp=Z,0.7nm,0.7s,baz=132,slow=10,SNR=6.4
TXAR PcP PcP 02 29 38.2 +0.9
comp=Z,0.7nm,0.7s,baz=148,slow=5.3,SNR=3.7
comp=Z,0.7nm,0.7s
**FCAR Ozark Folk Cen** 28.34 345 P P 02 26 23.6 -1.2
FCAR IAmb IAmb 02 26 35.3
comp=Z,14nm,1.1s
**T47A Sharon Grove** 28.46 353 P P 02 26 25.7 -0.1
T47A IAmb IAmb 02 26 56.1
comp=Z,11nm,1.3s
**T57A Hurt** 28.48 7 P P 02 26 25.5 -0.4
T57A IAmb IAmb 02 26 28.3
comp=Z,8.0nm,0.8s
**PARMO Parma** 28.55 349 P P 02 26 25.9 -0.6
**PBMO Poplar Bluff** 28.79 348 P P 02 26 28.2 -0.5
**ALPN Alpine** 28.87 321 P P 02 26 29.8 0.0
**LPAZ La Paz** 28.89 149 P P 02 26 30.9 +0.4
**LPAZ La Paz** 28.89 149 P P 02 26 31.0 +0.4
comp=Z,2.9nm,0.9s,baz=332,slow=12,SNR=14
comp=Z,2.9nm,0.9s
**LPAZ La Paz** 28.89 149 P P 02 26 31.7 +1.2
**LPAZ La Paz** 28.89 149 eP P 02 26 31.2 +0.7
**RCRC Randolf Colleg** 28.90 6 P P 02 26 28.4 -1.4
**MNHN Monahans** 29.03 324 P P 02 26 30.2 -0.9
MNHN IAmb IAmb 02 26 34.5
comp=Z,6.1nm,0.8s
**CGM3 Cape Girardeau** 29.14 349 P P 02 26 31.5 -0.4
CGM3 IAmb IAmb 02 26 42.6
comp=Z,7.7nm,1.0s
**T42A Van Buren** 29.18 347 P P 02 26 31.0 -1.2
T42A IAmb IAmb 02 26 32.4
comp=Z,11nm,0.8s
**HHAR Hobbs** 29.22 342 P P 02 26 32.2 -0.5
**S57A Dark Hollow, R** 29.27 7 P P 02 26 33.2 +0.3
S57A IAmb IAmb 02 26 37.6
comp=Z,9.7nm,1.2s
**R49A Shelbyville** 29.59 357 P P 02 26 35.8 0.0
**WCI Wyandotte Cave** 29.61 355 P P 02 26 36.4 +0.4
WCI IAmb IAmb 02 26 50.2
comp=Z,14nm,0.9s
**OK031 S. Brethren Rd** 29.92 337 P P 02 26 38.4 -0.4
OK031 IAmb IAmb 02 26 39.4
comp=Z,9.7nm,0.7s
**OK052 Battle Ridge R** 29.94 338 IAmb IAmb 02 26 39.6
comp=Z,8.3nm,0.7s
**VHRN Van Horn** 30.00 320 P P 02 26 39.8 +0.1
**CCM Cathedral Cave** 30.19 347 P P 02 26 40.4 -0.7
**S39A Bolivar** 30.36 344 IAmb IAmb 02 26 52.7
comp=Z,12nm,0.9s
**Q56A Snyder Ridge,** 30.50 6 P P 02 26 43.4 -0.5
Q56A IAmb IAmb 02 27 00.6
comp=Z,14nm,0.9s
**R40A Maddies Statio** 30.65 346 P P 02 26 44.1 -1.1
**P48A Milroy** 30.77 357 P P 02 26 45.7 -0.6
P48A IAmb IAmb 02 26 47.7
comp=Z,10nm,0.7s
**MAL2 Monte Alegre,** 30.80 109 P P 02 26 46.8 0.0
**MCWV Mont Chateau** 31.05 5 P P 02 26 49.5 +0.7
MCWV IAmb IAmb 02 27 04.4
comp=Z,17nm,1.2s
**P57A Homestead Farm** 31.08 8 P P 02 26 49.7 +0.7
P57A IAmb IAmb 02 27 04.0
comp=Z,13nm,0.9s
**P43A Skaggs, Pawnee** 31.40 351 P P 02 26 51.6 -0.2
P43A IAmb IAmb 02 26 54.2
comp=Z,8.1nm,0.7s
**ACSO Alum Creek Sta** 31.48 0 P P 02 26 52.3 -0.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ACSO | | | | | IAmb | IAmb | 02 26 54.9 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **O54A** | **Avella** | **31.53** | **4** | P | | **P** | **02 26 52.6** | **-0.4** |
| O54A | | | | | IAmb | IAmb | 02 26 55.7 | |
| | comp=Z,8.7nm,0.7s | | | | | | | |
| **HMBC** | **Humberstone** | **31.56** | **156** | P | | **P** | **02 26 54.7** | **+1.2** |
| HMBC | | | | | IAmb | IAmb | 02 26 59.5 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **P40A** | **Paris** | **31.78** | **347** | P | | **P** | **02 26 54.0** | **-1.2** |
| **P38A** | **Dawn** | **32.23** | **345** | P | | **P** | **02 26 58.4** | **-0.7** |
| **SSPA** | **Standing Stone** | **32.23** | **8** | P | | **P** | **02 26 58.3** | **-0.8** |
| SSPA | | | | | IAmb | IAmb | 02 27 01.7 | |
| | comp=Z,9.7nm,0.9s | | | | | | | |
| **R32A** | **Long Quarter,** | **32.80** | **337** | P | | **P** | **02 27 03.6** | **-0.5** |
| R32A | | | | | IAmb | IAmb | 02 27 13.2 | |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| **121A** | **Cookes Peak, D** | **32.94** | **320** | P | | **P** | **02 27 05.5** | **-0.1** |
| 121A | | | | | IAmb | IAmb | 02 27 09.2 | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **M57A** | **Sunshine Farm,** | **33.03** | **8** | P | | **P** | **02 27 06.2** | **+0.2** |
| **PDRB** | **Porto dos Gac** | **33.12** | **127** | *eP* | | **P** | **02 27 06.0** | **-1.2** |
| **319A** | **Douglas** | **33.20** | **317** | P | | **P** | **02 27 08.5** | **+0.7** |
| 319A | | | | | IAmb | IAmb | 02 27 11.2 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **CRNM** | **Carthage** | **33.24** | **323** | P | | **P** | **02 27 08.5** | **+0.3** |
| **PTLB** | **Pontes e Lacer** | **33.77** | **135** | P | | **P** | **02 27 12.6** | **-0.2** |
| PTLB | | | | | IAmb | IAmb | 02 27 13.2 | |
| | comp=Z,4.9nm,1.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **33.77** | **324** | P | | **P** | **02 27 12.7** | **-0.2** |
| **DUN6** | **Lazy B Ranch** | **33.80** | **318** | P | | **P** | **02 27 14.0** | **+0.9** |
| **WVNY** | **West Valley, N** | **33.90** | **6** | P | | **P** | **02 27 13.6** | **-0.1** |
| **BBSD** | **Serra de San D** | **34.00** | **139** | *eP* | | **P** | **02 27 14.3** | **-0.6** |
| **LVC** | **Limon Verde** | **34.05** | **156** | P | | **P** | **02 27 16.0** | **+0.5** |
| | comp=Z,12nm,1.2s,baz=333,slow=11,SNR=3.6 | | | | | | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **LVC** | **Limon Verde** | **34.05** | **156** | *eP* | | **P** | **02 27 17.6** | **+2.0** |
| **SCIA** | **State Center** | **34.31** | **347** | P | | **P** | **02 27 15.7** | **-1.5** |
| **JFWS** | **Jewell Farm** | **34.72** | **351** | P | | **P** | **02 27 20.0** | **-0.7** |
| JFWS | | | | | IAmb | IAmb | 02 27 21.7 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **J56A** | **Wolcott** | **34.97** | **8** | P | | **P** | **02 27 22.1** | **-0.7** |
| **SDCO** | **Great Sand Dun** | **35.31** | **329** | P | | **P** | **02 27 26.1** | **-0.2** |
| **I42A** | **Draeger Farm,** | **35.49** | **353** | P | | **P** | **02 27 27.3** | **0.0** |
| I42A | | | | | IAmb | IAmb | 02 27 37.6 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **PECO** | **Prince Edward** | **35.59** | **8** | P | | **P** | **02 27 27.7** | **-0.6** |
| **X18A** | **Snowflake** | **35.61** | **320** | P | | **P** | **02 27 28.6** | **-0.1** |
| X18A | | | | | IAmb | IAmb | 02 27 32.1 | |
| | comp=Z,4.8nm,1.0s | | | | | | | |
| **W18A** | **Petrified Fore** | **35.85** | **321** | P | | **P** | **02 27 31.2** | **+0.3** |
| **H43A** | **Windswept, Lux** | **35.94** | **354** | P | | **P** | **02 27 30.2** | **-1.0** |
| **214A** | **Organ Pipe Nat** | **35.98** | **314** | P | | **P** | **02 27 32.5** | **+0.7** |
| 214A | | | | | IAmb | IAmb | 02 27 34.9 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **SADO** | **Sadowa** | **36.19** | **5** | P | | **P** | **02 27 33.0** | **-0.3** |
| | comp=Z,4.5nm,0.6s,baz=196,slow=5.5,SNR=5.0 | | | | | | | |
| | comp=Z,4.5nm,0.6s | | | | | | | |
| **PIX** | **Pinacate** | **36.23** | **313** | P | | **P** | **02 27 34.4** | **+0.5** |
| PIX | | | | | IAmb | IAmb | 02 28 15.0 | |
| | comp=Z,6.8nm,0.9s | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **36.49** | **319** | P | | **P** | **02 27 37.2** | **+0.9** |
| **SALV** | **Santo Antonio** | **36.54** | **132** | *eP* | | **P** | **02 27 36.5** | **-0.2** |
| **K30B** | **Basset** | **36.86** | **340** | P | | **P** | **02 27 38.8** | **-0.4** |
| **ECSD** | **EROS Data Cent** | **36.89** | **344** | IAmb | IAmb | | 02 27 44.8 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **G40A** | **Rib Lake** | **37.01** | **352** | P | | **P** | **02 27 39.0** | **-1.4** |
| G40A | | | | | IAmb | IAmb | 02 27 41.1 | |
| | comp=Z,8.6nm,1.1s | | | | | | | |
| **113A** | **Mohawk Valley,** | **37.10** | **315** | P | | **P** | **02 27 42.1** | **+0.8** |
| 113A | | | | | IAmb | IAmb | 02 27 45.0 | |
| | comp=Z,19nm,1.5s | | | | | | | |
| **WUAZ** | **Wupatki** | **37.13** | **320** | P | | **P** | **02 27 42.8** | **+1.0** |
| WUAZ | | | | | IAmb | IAmb | 02 27 45.0 | |
| | comp=Z,8.6nm,1.3s | | | | | | | |
| **Y14A** | **Wickenburg** | **37.24** | **317** | P | | **P** | **02 27 43.6** | **+1.1** |
| Y14A | | | | | IAmb | IAmb | 02 27 45.3 | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **SNDB** | **Serra Nova Dou** | **37.75** | **122** | *eP* | | **P** | **02 27 45.8** | **-1.2** |
| **GLA** | **Glamis** | **38.01** | **314** | P | | **P** | **02 27 49.9** | **+0.8** |
| **BLYC** | **Blythe** | **38.17** | **316** | P | | **P** | **02 27 51.4** | **+1.0** |
| BLYC | | | | | IAmb | IAmb | 02 27 53.5 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **TRQ** | **Mont Tremblant** | **38.20** | **10** | P | | **P** | **02 27 50.4** | **-0.1** |
| TRQ | | | | | IAmb | IAmb | 02 28 03.6 | |
| | comp=Z,5.9nm,0.7s | | | | | | | |
| **U15A** | **North Rim** | **38.29** | **321** | P | | **P** | **02 27 52.1** | **+0.5** |
| **W13A** | **Hualapai Mount** | **38.51** | **318** | P | | **P** | **02 27 53.9** | **+0.4** |
| **F33A** | **5 Mile Ranch,** | **38.76** | **345** | IAmb | IAmb | | 02 27 55.2 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **KNB** | **Kanab** | **38.99** | **321** | P | | **P** | **02 27 58.6** | **+1.1** |
| **SRU** | **San Rafael Swe** | **39.01** | **325** | P | | **P** | **02 27 58.1** | **+0.6** |
| **MURT** | **Porto Murtinho** | **39.19** | **141** | *eP* | | **P** | **02 27 58.1** | **-0.9** |
| **P18A** | **Preston Nutter** | **39.22** | **326** | | | **PcP** | **02 30 09.9** | **+1.4** |
| **ARAG** | **Araguaiana, MT** | **39.38** | **128** | *eP* | | **P** | **02 27 59.2** | **-1.5** |
| **SMTB** | **Santa Maria do** | **39.50** | **115** | *eP* | | **P** | **02 28 01.7** | **0.0** |
| **MSU** | **Marysvale** | **39.56** | **323** | P | | **P** | **02 28 02.8** | **+0.5** |
| **AQDB** | **Aquidauana** | **39.59** | **137** | P | | **P** | **02 28 01.6** | **-0.8** |
| **RSSD** | **Black Hills** | **39.74** | **336** | P | | **P** | **02 28 03.8** | **+0.1** |
| **JLU** | **Jordanelle** | **40.56** | **326** | P | | **P** | **02 28 10.6** | **+0.1** |
| **PAPY** | **Pozo Azul** | **40.64** | **144** | *eP* | | **P** | **02 28 10.6** | **-0.4** |
| **E28A** | **Huff** | **40.68** | **341** | P | | **P** | **02 28 10.5** | **-0.6** |
| **TCUT** | **Toone Canyon** | **40.89** | **327** | P | | **P** | **02 28 12.5** | **-0.8** |
| **PD31** | **Pinedale Array** | **41.13** | **330** | P | | **P** | **02 28 15.2** | **0.0** |
| **PDAR** | **Pinedale Array** | **41.13** | **330** | P | | **P** | **02 28 14.5** | **-0.7** |
| **PDAR** | **Pinedale Array** | **41.13** | **330** | P | | **P** | **02 28 15.6** | **+0.4** |
| | comp=Z,0.2nm,0.4s,baz=123,slow=9.8,SNR=1.8 | | | | | | | |
| **SPUT** | **South Promonto** | **41.59** | **326** | P | | **P** | **02 28 19.1** | **+0.2** |
| **BGU** | **Big Grassy Mou** | **41.65** | **325** | P | | **P** | **02 28 18.9** | **-0.5** |
| **H03N2** | **Juan Fernandez** | **42.02** | **175** | T | | T | 03 12 58.4 | |
| | baz=354,slow=76,SNR=15 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **42.02** | **175** | T | | T | 03 13 00.8 | |
| | baz=354,slow=76,SNR=16 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **42.04** | **175** | T | | T | 03 12 56.5 | |
| | baz=354,slow=76,SNR=21 | | | | | | | |
| **BDFB** | **Brasilia** | **42.38** | **125** | P | | **P** | **02 28 26.0** | **+0.4** |
| BDFB | | | | | IAmb | IAmb | 02 28 35.4 | |
| | comp=Z,7.5nm,1.0s | | | | | | | |
| **BDFB** | **Brasilia** | **42.38** | **125** | P | | **P** | **02 28 23.2** | **-2.4** |
| | comp=Z,2.8nm,0.5s,baz=298,slow=12,SNR=6.9 | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **FXWY** | **Fox Creek** | **42.50** | **330** | P | | **P** | **02 28 25.7** | **-0.7** |
| **ULM** | **Lac du Bonnet** | **42.82** | **348** | IAmb | IAmb | | 02 28 37.7 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **42.82** | **348** | P | | **P** | **02 28 26.8** | **-1.7** |
| | comp=Z,6.0nm,0.6s,baz=164,slow=8.0,SNR=16 | | | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **CPUP** | **Villa Florida** | **42.88** | **145** | P | | **P** | **02 28 28.2** | **-1.1** |
| | comp=Z,1.8nm,1.0s,baz=338,slow=7.2,SNR=2.5 | | | | | | | |
| | comp=Z,1.8nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **43.32** | **319** | P | | **P** | **02 28 34.1** | **+1.0** |
| | comp=Z,2.9nm,0.6s,baz=128,slow=7.3,SNR=20 | | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **43.42** | **118** | *eP* | | **P** | **02 28 32.7** | **-1.2** |
| **YHL** | **Hebgen Lake** | **43.47** | **331** | P | | **P** | **02 28 33.6** | **-0.7** |
| **IPMB** | **Ipameri, GO** | **43.50** | **128** | *eP* | | **P** | **02 28 33.2** | **-1.4** |
| **MT08** | **Bocatoma Ro** | **43.67** | **164** | P | | **P** | **02 28 36.8** | **+0.9** |
| **WVOR** | **Wild Horse Val** | **45.85** | **323** | IAmb | IAmb | | 02 29 01.6 | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| **ITQB** | **Itaqui** | **45.87** | **147** | P | | **P** | **02 28 53.1** | **0.0** |
| **ITQB** | **Itaqui** | **45.87** | **147** | *eP* | | **P** | **02 28 53.4** | **+0.2** |
| **DIAM** | **Diamantina, MG** | **47.30** | **125** | *eP* | | **P** | **02 29 03.9** | **-0.9** |
| **SCHQ** | **Schefferville** | **47.90** | **13** | P | | **P** | **02 29 08.1** | **-0.8** |
| | comp=Z,3.9nm,0.5s,baz=213,slow=7.2,SNR=4.4 | | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| **PLCA** | **Paso Flores** | **50.47** | **168** | P | | **P** | **02 29 29.1** | **+0.4** |
| **PLCA** | **Paso Flores** | **50.47** | **168** | P | | **P** | **02 29 28.5** | **-0.3** |
| | comp=Z,18nm,0.8s,baz=341,slow=8.7,SNR=29 | | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **PLCA** | **Paso Flores** | **50.47** | **168** | *eP* | | **P** | **02 29 28.8** | **+0.1** |
| **YKA** | **Yellowknife Ar** | **58.42** | **344** | P | | **P** | **02 30 25.5** | **-0.6** |
| | comp=Z,4.0nm,0.7s,baz=140,slow=6.7,SNR=16 | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **SUMG** | **Summit** | **69.30** | **13** | P | | **P** | **02 31 37.2** | **-0.9** |
| **ILAR** | **Eielson Array** | **71.19** | **336** | P | | **P** | **02 31 49.4** | **0.0** |
| | comp=Z,5.5nm,0.7s,baz=106,slow=4.7,SNR=4.2 | | | | | | | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **PAB** | **San Pablo** | **75.98** | **51** | P | | **P** | **02 32 19.2** | **+1.1** |
| PAB | | | | | IAmb | IAmb | 02 32 19.8 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **76.28** | **51** | P | | **P** | **02 32 20.1** | **+0.3** |
| ESDC | | | | | IAmb | IAmb | 02 32 21.6 | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| **ESDC** | **Sonseca Array** | **76.28** | **51** | P | | **P** | **02 32 20.0** | **+0.1** |
| | comp=Z,14nm,0.8s,baz=277,slow=5.9,SNR=94 | | | | | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **I17K** | **Unalakleet** | **76.81** | **334** | P | | **P** | **02 32 22.8** | **+0.6** |
| **K15K** | **Wolf Creek Mou** | **76.99** | **332** | P | | **P** | **02 32 19.4** | **-3.9** |
| **EKA** | **Eskdalemuir Ar** | **77.30** | **35** | P | | **P** | **02 32 24.0** | **-1.2** |
| | comp=Z,3.0nm,0.8s,baz=259,slow=5.6,SNR=6.2 | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **DBIC** | **Dimbokro** | **77.55** | **85** | P | | **P** | **02 32 26.3** | **-1.1** |
| | comp=Z,8.5nm,1.0s,baz=339,slow=4.2,SNR=3.7 | | | | | | | |
| | comp=Z,8.5nm,1.0s | | | | | | | |
| **CEST** | **Esterri de Car** | **80.16** | **48** | P | | **P** | **02 32 41.4** | **0.0** |
| CEST | | | | | IAmb | IAmb | 02 32 43.6 | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.14** | **78** | P | | **P** | **02 32 57.3** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=302,slow=4.0,SNR=9.9 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **84.66** | **29** | P | | **P** | **02 33 04.6** | **+0.2** |
| | comp=Z,1.6nm,0.7s,baz=274,slow=5.3 | | | | | | | |
| **NOA** | **NORSAR Array B** | **84.66** | **29** | P | | **P** | **02 33 04.1** | **-0.3** |
| | comp=Z,2.5nm,1.0s,baz=275,slow=5.0,SNR=4.2 | | | | | | | |
| | comp=Z,2.5nm,1.0s | | | | | | | |
| **TAM** | **Tamanrasset** | **85.55** | **68** | P | | **P** | **02 33 10.5** | **+0.8** |
| TAM | | | | | IAmb | IAmb | 02 33 18.6 | |
| | comp=Z,5.7nm,1.3s | | | | | | | |
| **HFS** | **Hagfors** | **86.02** | **30** | P | | **P** | **02 33 10.6** | **-0.4** |
| | comp=Z,5.0nm,0.8s,baz=242,slow=3.2,SNR=6.3 | | | | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **86.18** | **44** | P | | **P** | **02 33 12.4** | **-0.1** |
| FUORN | | | | | IAmb | IAmb | 02 33 16.3 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **ZCCA** | **Zocca** | **87.02** | **46** | P | | **P** | **02 33 16.2** | **-0.2** |
| **CLL** | **Collm** | **87.20** | **39** | *i* P | | **P** | **02 33 16.9** | **-0.2** |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **BRG** | **Berggiesshubel** | **87.86** | **39** | *eP* | | **P** | **02 33 20.8** | **+0.5** |
| BRG | | | | | Amp | | 02 33 21.6 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **KHC** | **Kasperske Hory** | **87.96** | **41** | P | | **P** | **02 33 21.4** | **+0.5** |
| **AMKA** | **Amchitka** | **87.99** | **322** | P | | **P** | **02 33 21.1** | **+0.3** |
| **GERES** | **GERESS Array B** | **88.09** | **41** | P | | **P** | **02 33 21.5** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=184,slow=16,SNR=7.1 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.41** | **19** | P | | **P** | **02 33 20.9** | **-1.6** |
| | comp=Z,3.1nm,0.8s,baz=270,slow=3.6,SNR=6.8 | | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **91.51** | **27** | P | | **P** | **02 33 36.7** | **-0.4** |
| | comp=Z,4.0nm,0.9s,baz=298,slow=3.0,SNR=2.8 | | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **125.70** | **330** | PKP | | **PKPdf** | **02 39 31.4** | **-1.4** |
| | comp=Z,1.9nm,0.7s,baz=345,slow=0.9,SNR=8.2 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **128.93** | **346** | *eP* | | **PKPdf** | **02 39 34.0** | **-5.1** |
| **ASAR** | **Alice Springs** | **141.49** | **243** | PKhKP | PKPpre | | 02 39 57.5 | |
| ASAR | | | | | PKP | **PKPdf** | **02 40 02.3** | **-0.5** |
| | comp=Z,2.7nm,0.9s,baz=82,slow=2.9,SNR=4.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **142.01** | **249** | PKhKP | PKPpre | | 02 39 58.6 | |
| | comp=Z,1.3nm,0.7s,baz=106,slow=2.8,SNR=6.6 | | | | | | | |
| **PZH** | **PanZhiHua** | **144.76** | **352** | PKP | | PKPbc | 02 40 08.0 | +0.5 |
| **CMAR** | **Chiang Mai Arr** | **153.01** | **356** | PKPbc | | **PKPbc** | **02 40 27.4** | **-1.9** |
| | comp=Z,1.2nm,0.5s,baz=324,slow=2.9,SNR=4.6 | | | | | | | |

*NEIC **19** 02:23:04.9±0.9, 18°.3S±0°.1×178°.1W±0°.1, h649km±10km, mb4.8/15, Error ellipse: s-maj=22.0km s-min=17.4km az=147.0*
*IDC **19** 02:23:06.0±6.3, 17°.82S×178°.63W, h639km±79km, mb3.5/6, mbtmp4.4/6, Error ellipse: s-maj=135.9km s-min=31.6km az=157.0*

**ISC 19 02:23:05.7±0.7, 18°.3S±0°.1×178°.4W±0°.1, h650km, n34, σ0s72/34, mb4.5/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.46** | **278** | P | | **P** | **02 24 31.1** | **-0.6** |
| **KOUNC** | **Koumac, New Ca** | **16.53** | **259** | P | | **P** | **02 26 27.3** | **+1.3** |
| KOUNC | | | | | IAmb | IAmb | 02 26 34.9 | |
| | comp=Z,65nm,1.1s | | | | | | | |
| **CMWZ** | **Cape Campbell** | **24.26** | **194** | P | | **P** | **02 27 33.6** | **-1.3** |
| **EIDS** | **Eidsvold** | **29.19** | **251** | P | | **P** | **02 28 18.1** | **0.0** |
| **MLZ** | **Mavora Lakes** | **29.28** | **200** | P | | **P** | **02 28 18.2** | **-0.4** |
| **DCZ** | **Deep Cove** | **29.69** | **201** | P | | **P** | **02 28 22.6** | **+0.7** |
| **WHZ** | **Wether Hill Ro** | **29.81** | **199** | P | | **P** | **02 28 22.8** | **-0.2** |
| **CTA** | **Charters Tower** | **33.44** | **261** | P | | **P** | **02 28 54.0** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=64,slow=7.4,SNR=1.0 | | | | | | | |
| **CAN** | **Canberra** | **33.53** | **233** | P | | **P** | **02 28 54.5** | **-0.2** |
| CAN | | | | | IAmb | IAmb | 02 29 01.8 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **CAN** | **Canberra** | **33.53** | **233** | P | | **P** | **02 28 55.1** | **+0.4** |
| **PMG** | **Port Moresby** | **34.56** | **280** | P | | **P** | **02 29 04.7** | **+1.2** |
| PMG | | | | | IAmb | IAmb | 02 29 05.3 | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **PMG** | **Port Moresby** | **34.56** | **280** | P | | **P** | **02 29 04.4** | **+1.0** |
| **TOO** | **Toolangi** | **36.98** | **231** | P | | **P** | **02 29 23.0** | **-0.1** |
| TOO | | | | | IAmb | IAmb | 02 29 24.4 | |
| | comp=Z,32nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **37.15** | **271** | P | | **P** | **02 29 25.3** | **+0.6** |
| COEN | | | | | IAmb | IAmb | 02 29 26.3 | |
| | comp=Z,28nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.61** | **260** | P | | **P** | **02 30 22.7** | **-0.6** |
| | comp=Z,5.9nm,0.3s,baz=98,slow=7.8,SNR=2.2 | | | | | | | |
| | comp=Z,5.9nm,0.3s | | | | | | | |
| **AS31** | **Alice Springs** | **44.74** | **255** | P | | **P** | **02 30 24.1** | **-0.2** |
| AS31 | | | | | IAmb | IAmb | 02 30 41.2 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.74** | **255** | P | | **P** | **02 30 24.3** | **+0.1** |
| **ASAR** | **Alice Springs** | **44.74** | **255** | P | | **P** | **02 30 23.7** | **-0.5** |
| | comp=Z,14nm,0.4s,baz=95,slow=7.2,SNR=3.1 | | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | | |
| **GUMO** | **Guam** | **48.13** | **309** | P | | **P** | **02 30 49.3** | **-0.3** |
| **GUMO** | **Guam** | **48.13** | **309** | P | | **P** | **02 30 49.3** | **-0.3** |
| **GUMO** | **Guam** | **48.13** | **309** | ScP | | **P** | **02 30 49.2** | **-0.3** |
| | comp=Z,225nm,0.9s,baz=169,slow=7.8,SNR=5.6 | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **55.35** | **199** | P | | **P** | **02 31 40.0** | **-0.2** |
| **TOLI2** | **Tolitoli** | **62.83** | **281** | P | | **P** | **02 32 30.9** | **+0.1** |
| **JMN** | **Monobe** | **68.88** | **319** | P | | **P** | **02 33 08.1** | **+0.3** |
| JMN | | | | | IAmb | IAmb | 02 33 24.7 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **UGM** | **Wanagama** | **69.68** | **268** | P | | **P** | **02 33 12.6** | **-0.4** |
| UGM | | | | | IAmb | IAmb | 02 33 18.6 | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **KIWB** | **Kanaga Island** | **69.82** | **1** | P | | **P** | **02 33 11.8** | **-1.1** |
| **SII** | **Sitkinak Islan** | **77.25** | **13** | P | | **P** | **02 33 54.5** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **79.64** | **44** | P | | **P** | **02 34 08.7** | **+0.6** |
| | comp=Z,1.1nm,0.7s,baz=224,slow=7.6,SNR=1.4 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.14** | **58** | P | | **P** | **02 34 42.1** | **+1.6** |
| | comp=Z,1.5nm,0.7s,baz=218,slow=5.7,SNR=2.6 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.22** | **13** | P | | **P** | **02 34 38.9** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=219,slow=5.0,SNR=0.5 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.57** | **43** | P | | **P** | **02 34 47.6** | **+0.6** |
| | comp=Z,0.6nm,0.5s,baz=289,slow=2.8,SNR=0.9 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.14** | **321** | PKP | | **PKiKP** | **02 40 38.1** | **-0.5** |
| | comp=Z,1.3nm,0.5s,baz=79,slow=1.9,SNR=1.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **133.54** | **344** | PKP | | **PKPdf** | **02 41 08.3** | **-1.2** |
| | comp=Z,1.5nm,0.6s,baz=64,slow=3.2,SNR=1.0 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.37** | **303** | PKPbc | | **PKPbc** | **02 41 36.8** | **+0.6** |
| | comp=Z,2.2nm,0.5s,baz=65,slow=8.1,SNR=1.9 | | | | | | | |

**IDC 19 02:24:19.2±36.0, 18°.61S×178°.80W, h598km±362km, mb3.8/2, mbtmp4.8/2, Error ellipse: s-maj=391.3km s-min=218.8km az=145.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.15** | **260** | P | | P | 02 31 35.8 | -0.7 |
| | 2.9nm,0.5s,baz=99,slow=6.4,SNR=1.1 | | | | | | | |
| | 2.9nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.25** | **255** | P | | P | 02 31 37.5 | +0.2 |
| | 18nm,0.6s,baz=89,slow=8.0,SNR=5.5 | | | | | | | |
| | 18nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.00** | **314** | PKPbc | | PKPdf | 02 42 48.5 | -1.1 |
| | 1.3nm,0.8s,baz=40,slow=3.5,SNR=1.8 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.20** | **302** | PKPbc | | PKPbc | 02 42 54.1 | 0.0 |
| | 0.3nm,0.3s,baz=51,slow=7.6,SNR=1.4 | | | | | | | |
| **GERES** | **GERESS Array B** | **148.19** | **344** | PKPbc | | PKPbc | 02 42 58.9 | +0.1 |
| | 0.6nm,0.6s,baz=39,slow=1.3,SNR=1.7 | | | | | | | |

*NEIC **19** 02:25:49.3±2.3, 18°.1S±0°.1×177°.9W±0°.1, h587km±11km, mb5.0/31, Error ellipse: s-maj=19.8km s-min=17.5km az=220.0*
*IDC **19** 02:25:51.9±2.1, 18°.10S×178°.11W, h609km±24km, mb4.1/14, mbtmp5.0/15, Error ellipse: s-maj=16.4km s-min=13.4km az=6.0*

*NOU **19** 02:25:51.0, 18°.11S×178°.10W, h588km, mb5.1/39, Fiji Islands Region*

**ISC 19 02:25:49.6±0.5, 18°.12S±0°.07×177°.99W±0°.07, h590km, n129, σ1s32/135, mb5.0/38, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.79** | **275** | P | | **P** | **02 27 14.7** | **+1.7** |
| **MSVF** | **Nonsavu** | **3.79** | **275** | P | | **P** | **02 27 14.0** | **+1.0** |
| **AFI** | **Afiamalu** | **7.30** | **56** | P | | **P** | **02 27 39.4** | **-2.7** |
| **NIUE** | **Niue** | **7.71** | **98** | P | | **P** | **02 27 44.5** | **-1.4** |
| **FUNA** | **Funafuti** | **9.92** | **344** | P | | **P** | **02 28 05.2** | **-2.4** |
| **RTV** | **Rentapao** | **12.93** | **269** | P | | **P** | **02 28 37.8** | **-0.1** |
| **DVP** | **Devils Point** | **13.16** | **270** | P | | **P** | **02 28 40.0** | **-0.2** |
| **MARNC** | **Mare, Loyalty** | **13.57** | **253** | P | | **P** | **02 28 43.5** | **-0.9** |
| **LIFNC** | **LIFOU** | **14.18** | **257** | P | | **P** | **02 28 48.7** | **-1.7** |
| **LIFNC** | **LIFOU** | **14.18** | **257** | P | | **P** | **02 28 48.6** | **-1.8** |
| **LIFNC** | **LIFOU** | **14.18** | **257** | P | | **P** | **02 28 49.0** | **-1.5** |
| **PINNC** | **Pines Island,** | **14.37** | **249** | P | | **P** | **02 28 52.0** | **-0.2** |
| **PINNC** | **Pines Island,** | **14.37** | **249** | P | | **P** | **02 28 51.6** | **-0.6** |
| **YATNC** | **Mamie plateau,** | **14.73** | **252** | P | | **P** | **02 28 55.2** | **-0.4** |
| **YATNC** | **Mamie plateau,** | **14.73** | **252** | P | | **P** | **02 28 55.3** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **02 28 59.5** | **-0.1** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **02 28 59.2** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **02 28 59.0** | **-0.5** |
| DZM | | | | | IAmb | IAmb | 02 29 02.9 | |
| | comp=Z,67nm,1.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **02 28 59.4** | **-0.1** |
| | comp=Z,37nm,0.5s,baz=144,slow=16,SNR=20 | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.27** | **252** | P | | **P** | **02 29 01.1** | **+0.4** |
| **KOUNC** | **Koumac, New Ca** | **16.90** | **259** | P | | **P** | **02 29 17.7** | **+2.0** |
| **KOUNC** | **Koumac, New Ca** | **16.90** | **259** | P | | **P** | **02 29 17.3** | **+1.6** |
| **KUZ** | **Kuaotunu** | **19.36** | **195** | P | | **P** | **02 29 39.6** | **+1.7** |
| **TOZ** | **Tahuroa Road** | **20.35** | **195** | P | | **P** | **02 29 48.2** | **+1.4** |
| TOZ | | | | | IAmb | IAmb | 02 29 49.3 | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **URZ** | **Urewera** | **20.52** | **191** | P | | **P** | **02 29 45.1** | **-3.2** |
| | comp=Z,41nm,0.6s,baz=354,slow=2.2,SNR=7.5 | | | | | | | |
| URZ | | | | | S | **S** | **02 32 52.2** | **-8.8** |
| | comp=Z,43nm,1.1s,baz=173,slow=24,SNR=12 | | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.14** | **193** | P | | **P** | **02 30 10.6** | **-1.1** |
| MRZ | | | | | IAmb | IAmb | 02 30 25.1 | |
| | comp=Z,57nm,1.1s | | | | | | | |
| **BHW** | **Baring Head** | **24.00** | **193** | P | | **P** | **02 30 18.3** | **-1.0** |
| BHW | | | | | IAmb | IAmb | 02 30 19.1 | |
| | comp=Z,25nm,0.6s | | | | | | | |
| **QRZ** | **Quartz Range** | **24.05** | **198** | P | | **P** | **02 30 20.1** | **+0.3** |
| QRZ | | | | | IAmb | IAmb | 02 30 21.1 | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **PLWZ** | **Palliser** | **24.08** | **192** | P | | **P** | **02 30 19.6** | **-0.4** |
| **CTZ** | **Chatham Island** | **25.56** | **178** | P | | **P** | **02 30 35.6** | **+2.6** |
| **INZ** | **Inchbonnie** | **26.12** | **198** | P | | **P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CASY | **Casey** | **66.11** | **205** | P | **P** | **02 35 39.5** | **+0.4** |
| CASY | | | | PcP | **PcP** | **02 36 03.5** | **-0.2** |
| JAGI | **Jajag, Banyuwa** | **66.43** | **269** | P | **P** | **02 35 40.7** | **-1.3** |
| JAGI | | | | IAmb | IAmb | 02 35 41.6 | |
| | comp=Z,49nm,0.7s | | | | | | |
| MJAR | **Matsushiro Arr** | **68.31** | **323** | P | **P** | **02 35 51.8** | **-1.2** |
| | comp=Z,6.4nm,0.8s,baz=159,slow=6.0,SNR=8.5 | | | | | | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| MAJO | **Matsushiro** | **68.32** | **323** | P | **P** | **02 35 52.4** | **-0.6** |
| UGM | **Wanagama** | **70.04** | **268** | P | **P** | **02 36 03.9** | **+0.1** |
| QSPA | **South Pole Qui** | **71.94** | **180** | P | **P** | **02 36 15.2** | **+1.2** |
| QSPA | | | | IAmb | IAmb | 02 36 16.2 | |
| | comp=Z,28nm,0.8s | | | | | | |
| QSPA | **South Pole Qui** | **71.94** | **180** | P | **P** | **02 36 15.0** | **+0.9** |
| | comp=Z,27nm,0.7s,baz=227,slow=0.5,SNR=16 | | | | | | |
| | comp=Z,27nm,0.7s | | | | | | |
| QSPA | **South Pole Qui** | **71.94** | **180** | P | **P** | **02 36 15.4** | **+1.4** |
| QSPA | | | | PcP | **PcP** | **02 36 31.7** | **+3.1** |
| YULB | **Yu-li** | **72.22** | **303** | P | **P** | **02 36 15.6** | **-0.7** |
| NACB | **Ninganchiao** | **72.36** | **304** | P | **P** | **02 36 15.9** | **-1.2** |
| SSLB | **Suanglung** | **72.68** | **303** | P | **P** | **02 36 18.0** | **-1.0** |
| SSLB | **Suanglung** | **72.68** | **303** | P | **P** | **02 36 17.8** | **-1.2** |
| TPUB | **Ta-pu** | **72.71** | **302** | P | **P** | **02 36 18.1** | **-1.0** |
| TPUB | | | | IAmb | IAmb | 02 36 19.1 | |
| | comp=Z,42nm,0.8s | | | | | | |
| KSRS | **Korea Array** | **75.12** | **318** | P | **P** | **02 36 33.1** | **+0.7** |
| | comp=Z,1.6nm,0.7s,baz=138,slow=5.3,SNR=3.0 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| SMAI | **San Martin Ant** | **80.82** | **159** | P | **P** | **02 37 03.6** | **+1.2** |
| SMAI | | | | IAmb | IAmb | 02 37 04.9 | |
| | comp=Z,40nm,0.9s | | | | | | |
| BELA | **Belgrano 2** | **81.90** | **173** | P | **P** | **02 37 08.2** | **+0.3** |
| BELA | | | | IAmb | IAmb | 02 37 09.1 | |
| | comp=Z,26nm,0.8s | | | | | | |
| MAW | **Mawson** | **83.79** | **200** | P | **P** | **02 37 17.2** | **-0.2** |
| | comp=Z,4.0nm,0.7s,baz=294,slow=15,SNR=3.3 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| TXAR | **Lajitas Array** | **85.77** | **57** | P | **P** | **02 37 29.4** | **+1.5** |
| | comp=Z,1.8nm,0.8s,baz=222,slow=5.0,SNR=5.2 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| CMAR | **Chiang Mai Arr** | **89.33** | **290** | P | **P** | **02 37 45.8** | **+1.2** |
| | comp=Z,3.3nm,0.8s,baz=111,slow=5.4,SNR=3.2 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| TROLL | **Troll, Antarti** | **90.10** | **180** | ⇑P | **P** | **02 37 47.6** | **+0.3** |
| | comp=Z,58nm,0.6s | | | | | | |
| SNAA | **Sanae** | **90.38** | **178** | ⇑P | **P** | **02 37 48.4** | **-0.1** |
| SNAA | **Sanae** | **90.38** | **178** | P | **P** | **02 37 48.4** | **-0.1** |
| | comp=Z,4.3nm,0.6s,baz=188,slow=5.4,SNR=6.7 | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| VNA3 | **Neumayer Olymp** | **90.50** | **176** | ⇑P | **P** | **02 37 49.4** | **+0.3** |
| PLCA | **Paso Flores** | **90.90** | **134** | P | **P** | **02 37 52.6** | **+1.0** |
| | comp=Z,2.8nm,0.7s,baz=236,slow=4.7,SNR=6.8 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| VNA2 | **Neumayer--Watz** | **90.95** | **177** | ⇑P | **P** | **02 37 51.8** | **+0.7** |
| | baz=192,slow=4.9 | | | | | | |
| VNA1 | **Neumayer--Stat** | **91.17** | **177** | ⇑P | **P** | **02 37 52.5** | **+0.5** |
| BRTR | **Keskin Array B** | **145.21** | **315** | PKPbc | **PKPbc** | **02 44 22.4** | **0.0** |
| | comp=Z,2.3nm,0.7s,baz=101,slow=2.0,SNR=8.3 | | | | | | |
| MMAI | **Mount Meron Ar** | **146.59** | **303** | PKPbc | **PKPbc** | **02 44 26.0** | **-0.4** |
| | comp=Z,7.1nm,0.7s,baz=68,slow=6.6,SNR=5.5 | | | | | | |
| TORD | **Torodi Ar. Bea** | **175.05** | **176** | PKPab | **PKPab** | **02 46 33.2** | **+0.4** |
| | comp=Z,14nm,1.2s,baz=169,slow=2.8,SNR=4.3 | | | | | | |

*IDC **19** 02:26:38.5±4.0, 18°.22S×178°.39W, h527km±47km, mb3.8/16, mbtmp4.6/16, Error ellipse: s-maj=23.0km s-min=17.2km az=154.0*

**ISC 19 02:26:40.1±0.8, 18°.3S±0°.2×178°.5W±0°.2, h550km, n25, σ0$77/26, mb4.1/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| URZ | **Urewera** | **20.30** | **190** | P | **P** | **02 30 38.4** | **-0.3** |
| | 15nm,0.3s,baz=2.1,slow=3.0,SNR=11 | | | | | | |
| | 15nm,0.3s | | | | | | |
| WRA | **Warramunga Arr** | **44.53** | **260** | P | **P** | **02 34 03.8** | **+0.2** |
| | 2.1nm,0.3s,baz=95,slow=7.7,SNR=1.6 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 35 35.6** | **+0.8** |
| | 7.2nm,1.1s,baz=90,slow=4.1,SNR=2.7 | | | | | | |
| | 2.1nm,0.3s | | | | | | |
| ASAR | **Alice Springs** | **44.66** | **255** | P | **P** | **02 34 05.0** | **+0.5** |
| | 13nm,0.5s,baz=85,slow=8.5,SNR=4.5 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 35 36.7** | **+1.4** |
| | 5.8nm,1.0s,baz=98,slow=3.8,SNR=2.3 | | | | | | |
| | 13nm,0.5s | | | | | | |
| MJAR | **Matsushiro Arr** | **68.17** | **323** | P | **P** | **02 36 46.4** | **+0.6** |
| | 2.4nm,0.5s,baz=143,slow=5.7,SNR=5.2 | | | | | | |
| | 2.4nm,0.5s | | | | | | |
| ASAJ | **Asahikawa** | **71.57** | **331** | P | **P** | **02 37 06.1** | **+0.3** |
| | 6.7nm,0.8s,baz=62,slow=29,SNR=1.7 | | | | | | |
| | 6.7nm,0.8s | | | | | | |
| PETK | **Petropavlovsk-** | **74.01** | **345** | P | **P** | **02 37 19.8** | **+0.2** |
| | 6.7nm,0.7s,baz=104,slow=7.7,SNR=7.1 | | | | | | |
| | 6.7nm,0.7s | | | | | | |
| KSRS | **Korea Array** | **74.94** | **318** | P | **P** | **02 37 26.1** | **+0.8** |
| | 0.5nm,0.6s,baz=130,slow=6.0,SNR=1.7 | | | | | | |
| YBH | **Yreka Blue Hor** | **78.82** | **39** | P | **P** | **02 37 46.8** | **+0.4** |
| | 3.0nm,0.7s,baz=73,slow=2.9,SNR=5.2 | | | | | | |
| | 3.0nm,0.7s | | | | | | |
| NVAR | **Mina Array Bea** | **79.70** | **44** | P | **P** | **02 37 51.9** | **+0.5** |
| | 2.5nm,0.7s,baz=228,slow=8.0,SNR=7.5 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| ELK | **Elko** | **82.94** | **43** | P | **P** | **02 38 07.5** | **-0.4** |
| | 2.9nm,0.8s,baz=261,slow=7.4,SNR=6.1 | | | | | | |
| | 2.9nm,0.8s | | | | | | |
| SEY | **Seymchan** | **84.11** | **347** | P | **P** | **02 38 12.8** | **0.0** |
| | 9.4nm,0.5s,baz=142,slow=6.4,SNR=15 | | | | | | |
| | 9.4nm,0.5s | | | | | | |
| NEW | **Newport** | **85.81** | **36** | P | **P** | **02 38 22.1** | **+0.6** |
| | 1.3nm,0.5s,baz=224,slow=3.4,SNR=3.8 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| DLBC | **Dease Lake** | **86.17** | **23** | P | **P** | **02 38 23.4** | **+0.4** |
| | 2.8nm,0.7s,baz=237,slow=6.1,SNR=6.8 | | | | | | |
| | 2.8nm,0.7s | | | | | | |
| TXAR | **Lajitas Array** | **86.21** | **58** | P | **P** | **02 38 25.2** | **+1.2** |
| | 4.1nm,0.7s,baz=220,slow=6.6,SNR=14 | | | | | | |
| | 4.1nm,0.7s | | | | | | |
| ILAR | **Eielson Array** | **86.24** | **13** | P | **P** | **02 38 22.4** | **-0.7** |
| | 3.2nm,0.4s,baz=221,slow=5.2,SNR=38 | | | | | | |
| | 3.2nm,0.4s | | | | | | |
| PDAR | **Pinedale Array** | **87.63** | **43** | P | **P** | **02 38 30.6** | **0.0** |
| | 2.0nm,0.7s,baz=232,slow=3.6,SNR=6.3 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| YKA | **Yellowknife Ar** | **94.67** | **25** | P | **P** | **02 39 01.6** | **-0.6** |
| | 1.9nm,0.8s,baz=255,slow=5.4,SNR=4.2 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| BVAR | **Borovoye Array** | **117.09** | **321** | PKP | **PKiKP** | **02 44 22.4** | **-0.3** |
| | 1.4nm,0.5s,baz=119,slow=1.8,SNR=5.3 | | | | | | |
| ARCES | **ARCESS Array B** | **126.65** | **350** | PKP | **PKiKP** | **02 44 40.5** | **-0.5** |
| | 1.8nm,0.8s,baz=11,slow=1.2,SNR=3.9 | | | | | | |
| FINES | **FINESS Array B** | **133.51** | **344** | PKP | **PKPdf** | **02 44 52.7** | **-1.0** |
| | 4.2nm,0.9s,baz=54,slow=3.6,SNR=2.6 | | | | | | |
| EKA | **Eskdalemuir Ar** | **142.82** | **4** | PKhKP | PKPpre | 02 45 07.5 | |
| | 0.6nm,0.4s,baz=326,slow=2.0,SNR=6.3 | | | | | | |
| BRTR | **Keskin Array B** | **145.00** | **314** | PKPbc | **PKPbc** | **02 45 14.9** | **-1.2** |
| | 1.7nm,0.5s,baz=90,slow=1.7,SNR=9.2 | | | | | | |
| MMAI | **Mount Meron Ar** | **146.30** | **302** | PKPbc | **PKPab** | **02 45 21.0** | **-1.3** |
| | 3.6nm,0.5s,baz=60,slow=4.9,SNR=5.4 | | | | | | |
| GERES | **GERESS Array B** | **147.94** | **345** | PKPbc | **PKiKP** | **02 45 24.1** | **-1.0** |
| | 3.3nm,0.6s,baz=161,slow=8.5,SNR=12 | | | | | | |
| ESDC | **Sonseca Array** | **158.13** | **11** | PKPab | **PKPab** | **02 46 11.5** | **-0.4** |
| | 0.8nm,0.6s,baz=343,slow=4.5,SNR=5.7 | | | | | | |

*IDC **19** 02:27:03.8±4.8, 18°.09S×178°.28W, h568km±54km, mb3.6/11, mbtmp4.5/11, Error ellipse: s-maj=38.9km s-min=17.5km az=146.0*

*NEIC **19** 02:27:06.1±1.2, 18°.1S±0°.2×178°.4W±0°.2, h600km±10km, mb4.2/35, Error ellipse: s-maj=32.7km s-min=19.2km az=146.0*

**ISC 19 02:27:04.7±0.5, 18°.2S±0°.1×178°.4W±0°.1, h579km, n68, σ0$80/67, mb4.1/28, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.44** | **277** | P | **P** | **02 28 26.9** | **+2.0** |
| AFI | **Afiamalu** | **7.62** | **57** | P | **P** | **02 29 02.4** | **+2.5** |
| LIFNC | **LIFOU** | **13.82** | **257** | P | **P** | **02 30 01.5** | **-0.6** |
| CTA | **Charters Tower** | **33.45** | **261** | P | **P** | **02 32 57.7** | **+0.7** |
| | 0.5nm,0.6s,baz=114,slow=10,SNR=1.8 | | | | | | |
| CTAO | **Charters Tower** | **33.45** | **261** | P | **P** | **02 32 57.3** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 02 32 58.4 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| WRA | **Warramunga Arr** | **44.63** | **260** | P | **P** | **02 34 27.5** | **+0.6** |
| | comp=Z,1.4nm,0.4s,baz=99,slow=7.3,SNR=0.9 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| ASAR | **Alice Springs** | **44.76** | **254** | P | **P** | **02 34 28.9** | **+1.0** |
| | comp=Z,4.2nm,0.4s,baz=91,slow=8.2,SNR=1.1 | | | | | | |
| | comp=Z,4.2nm,0.4s | | | | | | |
| QSPA | **South Pole Qui** | **71.89** | **180** | P | **P** | **02 37 29.9** | **+0.1** |
| SAO | **San Andreas Ge** | **76.58** | **44** | P | **P** | **02 37 55.7** | **-0.8** |
| SAO | | | | IAmb | IAmb | 02 37 57.4 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| YBH | **Yreka Blue Hor** | **78.70** | **39** | P | **P** | **02 38 07.5** | **-0.4** |
| | comp=Z,3.3nm,0.6s,baz=176,slow=4.8,SNR=6.5 | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| NVAR | **Mina Array Bea** | **79.58** | **44** | P | **P** | **02 38 12.7** | **-0.2** |
| | comp=Z,3.0nm,0.7s,baz=228,slow=9.1,SNR=8.3 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| BELA | **Belgrano 2** | **81.91** | **173** | P | **P** | **02 38 23.5** | **-0.4** |
| GNW | **Green Mountain** | **82.16** | **34** | P | **P** | **02 38 24.7** | **-0.9** |
| GNW | | | | IAmb | IAmb | 02 38 26.7 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| Q12A | **Willow Creek R** | **82.21** | **45** | P | **P** | **02 38 26.1** | **-0.1** |
| Q12A | | | | IAmb | IAmb | 02 38 32.0 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| LCMT | **Little Creek M** | **82.27** | **47** | P | **P** | **02 38 25.8** | **-0.9** |
| X16A | **Lo Mia Camp, P** | **82.31** | **50** | P | **P** | **02 38 26.1** | **-0.9** |
| KNB | **Kanab** | **82.57** | **47** | P | **P** | **02 38 27.6** | **-0.6** |
| PSUT | **Pine Spring** | **82.61** | **46** | P | **P** | **02 38 28.3** | **-0.1** |
| PSUT | | | | IAmb | IAmb | 02 38 29.0 | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| U15A | **North Rim** | **82.66** | **48** | P | **P** | **02 38 29.1** | **+0.3** |
| U15A | | | | IAmb | IAmb | 02 38 30.0 | |
| | comp=Z,10nm,0.8s | | | | | | |
| ELK | **Elko** | **82.81** | **43** | P | **P** | **02 38 29.1** | **-0.2** |
| | comp=Z,2.8nm,0.8s,baz=267,slow=6.3,SNR=5.3 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| G08A | **Pilot Rock** | **82.99** | **38** | P | **P** | **02 38 29.9** | **0.0** |
| GHO | **Glory Hole Cre** | **83.04** | **14** | P | **P** | **02 38 28.7** | **-1.1** |
| J18K | **Innoko River** | **83.10** | **10** | P | **P** | **02 38 29.8** | **-0.2** |
| J18K | | | | IAmb | IAmb | 02 38 30.6 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| SNH | **Sunshine Point** | **83.20** | **17** | P | **P** | **02 38 30.7** | **+0.1** |
| U33K | **Whale Pass** | **83.21** | **24** | P | **P** | **02 38 30.3** | **-0.2** |
| HAWA | **Hanford** | **83.28** | **37** | P | **P** | **02 38 31.3** | **0.0** |
| HAWA | | | | IAmb | IAmb | 02 38 31.9 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| BMRM | **Bremner River** | **83.39** | **16** | P | **P** | **02 38 30.8** | **-0.7** |
| K20K | **Telida** | **83.45** | **11** | P | **P** | **02 38 30.8** | **-0.9** |
| MESA | **MESA** | **83.45** | **17** | P | **P** | **02 38 31.4** | **-0.6** |
| SCM | **Sheep Creek Mo** | **83.46** | **14** | P | **P** | **02 38 31.3** | **-0.6** |
| MTPU | **Mount Pierson** | **83.51** | **47** | P | **P** | **02 38 33.2** | **+0.2** |
| MTPU | | | | IAmb | IAmb | 02 38 34.6 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| MAW | **Mawson** | **83.64** | **200** | P | **P** | **02 38 33.0** | **+0.4** |
| | comp=Z,4.3nm,1.0s,baz=137,slow=5.5,SNR=2.2 | | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| TXAR | **Lajitas Array** | **86.10** | **58** | P | **P** | **02 38 46.2** | **+0.7** |
| | comp=Z,5.2nm,0.8s,baz=218,slow=6.0,SNR=12 | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| ILAR | **Eielson Array** | **86.12** | **13** | P | **P** | **02 38 42.9** | **-1.8** |
| | comp=Z,1.2nm,0.4s,baz=219,slow=5.0,SNR=6.0 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| ANMO | **Albuquerque** | **86.22** | **51** | P | **P** | **02 38 45.3** | **-0.7** |
| | comp=Z,2.2nm,0.9s,baz=279,slow=5.8,SNR=4.6 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| R33M | **Jennings River** | **86.38** | **22** | P | **P** | **02 38 45.5** | **-0.6** |
| MCMT | **McKenzie Canyo** | **86.41** | **40** | P | **P** | **02 38 46.6** | **-0.1** |
| G21K | **Allakaket** | **86.45** | **10** | P | **P** | **02 38 45.5** | **-0.7** |
| G21K | | | | IAmb | IAmb | 02 38 47.0 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| J26L | **Joseph Creek** | **86.64** | **14** | P | **P** | **02 38 47.0** | **-0.2** |
| J26L | | | | IAmb | IAmb | 02 38 58.4 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| MSO | **Missoula** | **86.76** | **38** | P | **P** | **02 38 48.0** | **-0.2** |
| MSO | | | | IAmb | IAmb | 02 38 48.6 | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| DLMT | **Dillon** | **86.83** | **40** | P | **P** | **02 38 48.6** | **0.0** |
| DLMT | | | | IAmb | IAmb | 02 38 58.6 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| TPAW | **Teton Pass** | **86.95** | **42** | | **P** | **02 38 48.2** | **-1.2** |
| TPAW | | | | IAmb | IAmb | 02 38 49.3 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| S22A | **4UR Ranch, Cre** | **87.14** | **49** | P | **P** | **02 38 50.1** | **-0.3** |
| IMW | **Indian Meadow** | **87.15** | **42** | P | **P** | **02 38 49.7** | **-0.6** |
| IMW | | | | IAmb | IAmb | 02 38 51.3 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| LOHW | **Long Hollow** | **87.23** | **42** | P | **P** | **02 38 50.4** | **-0.2** |
| FLWY | **Flagg Ranch** | **87.39** | **42** | P | **P** | **02 38 50.2** | **-1.1** |
| FLWY | | | | IAmb | IAmb | 02 38 52.6 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| OVMT | **Ovando** | **87.43** | **38** | P | **P** | **02 38 50.6** | **-0.8** |
| PD31 | **Pinedale Array** | **87.51** | **43** | P | **P** | **02 38 51.2** | **-0.7** |
| PD31 | | | | IAmb | IAmb | 02 38 51.7 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| PDAR | **Pinedale Array** | **87.51** | **43** | P | **P** | **02 38 51.5** | **-0.5** |
| | comp=Z,2.3nm,0.7s,baz=222,slow=3.6,SNR=5.9 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| LYMT | **Lyon Mountain** | **87.81** | **39** | P | **P** | **02 38 52.9** | **-0.4** |
| MMPY | **Sheldon Lake,** | **88.60** | **20** | P | **P** | **02 38 56.0** | **-0.4** |
| MMPY | | | | IAmb | IAmb | 02 38 56.6 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| TROLL | **Troll, Antarti** | **90.05** | **180** | ⇑P | **P** | **02 39 02.9** | **-0.3** |
| | comp=Z,58nm,0.6s | | | | | | |
| SNAA | **Sanae** | **90.34** | **179** | ⇑P | **P** | **02 39 03.9** | **-0.6** |
| SNAA | **Sanae** | **90.34** | **179** | P | **P** | **02 39 03.6** | **-0.9** |
| | comp=Z,2.3nm,0.8s,baz=230,slow=14,SNR=2.4 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| VNA3 | **Neumayer Olymp** | **90.48** | **176** | ⇑P | **P** | **02 39 04.5** | **-0.6** |
| VNA1 | **Neumayer--Stat** | **91.15** | **177** | ⇑P | **P** | **02 39 08.4** | **+0.3** |
| BVAR | **Borovoye Array** | **117.07** | **321** | PKP | **PKPdf** | **02 44 43.1** | **-1.2** |
| | comp=Z,0.8nm,0.4s,baz=90,slow=0.9,SNR=5.1 | | | | | | |
| ARCES | **ARCESS Array B** | **126.57** | **350** | PKP | **PKPdf** | **02 44 59.8** | **-2.3** |
| | comp=Z,1.4nm,0.7s,baz=45,slow=1.9,SNR=3.9 | | | | | | |
| BRTR | **Keskin Array B** | **144.99** | **315** | PKPbc | PKPbc | 02 45 37.6 | -0.3 |
| | comp=Z,1.9nm,0.7s,baz=152,slow=6.7,SNR=4.0 | | | | | | |
| OSTC | **Ostas** | **145.64** | **343** | *e*PKP | **PKPab** | **02 45 39.9** | **-1.1** |
| DPC | **Dobruska-Polom** | **145.80** | **343** | *e*PKP | **PKPbc** | **02 45 39.9** | **+0.1** |
| MBAR | **Mbarara** | **145.84** | **240** | PKPbc | **PKPbc** | **02 45 41.8** | **+0.6** |
| | comp=Z,5.1nm,0.8s,baz=152,slow=23,SNR=4.4 | | | | | | |
| KRLC | **Kraliky** | **145.92** | **343** | *e*PKP | **PKPbc** | **02 45 40.1** | **0.0** |
| PVCC | **Panska Ves** | **146.09** | **345** | *e*PKP | **PKPbc** | **02 45 40.7** | **+0.2** |
| MMAI | **Mount Meron Ar** | **146.31** | **303** | PKPbc | **PKPbc** | **02 45 40.8** | **-1.0** |
| | comp=Z,1.0nm,0.3s,baz=79,slow=4.3,SNR=4.2 | | | | | | |
| KHC | **Kasperske Hory** | **147.63** | **345** | *e*PKP | **PKPbc** | **02 45 44.8** | **+0.1** |
| CKRC | **Cesky Krumlov** | **147.74** | **344** | *e*PKP | **PKPbc** | **02 45 45.0** | **0.0** |
| GERES | **GERESS Array B** | **147.87** | **345** | PKPbc | **PKPbc** | **02 45 45.2** | **-0.2** |
| | comp=Z,2.9nm,0.6s,baz=161,slow=8.5,SNR=6.9 | | | | | | |

**BUC 19 02:28:36.6±0.3, 45°.42N×26°.22E, h122km±2km, ml3.5/48, 60C-38D, Error ellipse: s-maj=1.6km s-min=1.4km az=164.0, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NEHR | **Nehoiu** | **0.05** | **79** | ⇑P | Pn | 02 28 54.0 | +0.8 |
| NEHR | | | | ⇓S | Sn | 02 29 07.0 | +1.2 |
| MLR | **Muntele Rosu** | **0.21** | **291** | ⇑P | Pn | 02 28 54.4 | +0.8 |
| MLR | | | | ⇑S | Sn | 02 29 07.0 | +0.5 |
| BISRR | **Bisoca** | **0.37** | **69** | ⇑P | Pn | 02 28 54.7 | +0.6 |
| BISRR | | | | ⇓S | Sn | 02 29 08.4 | +1.0 |
| ISR | **Istrita** | **0.37** | **143** | ⇑P | Pn | 02 28 54.5 | +0.4 |
| ISR | | | | ⇓S | Sn | 02 29 08.1 | +0.7 |
| COVR | **Voineasa-Covas** | **0.43** | **358** | ⇑P | Pn | 02 28 54.7 | +0.3 |
| COVR | | | | ⇑S | Sn | 02 29 08.1 | +0.3 |
| PLAR | **PLOIESTI** | **0.52** | **196** | ⇑P | Pn | 02 28 55.4 | +0.5 |
| PLAR | | | | ⇑S | Sn | 02 29 10.0 | +1.4 |
| PLOR | **Plostina** | **0.53** | **34** | ⇑P | Pn | 02 28 55.4 | +0.5 |
| PLOR | | | | ⇑S | Sn | 02 29 09.3 | +0.5 |
| VRI | **Vrincioaia** | **0.57** | **38** | ⇑P | Pn | 02 28 56.0 | +0.7 |
| VRI | | | | ⇑S | Sn | 02 29 10.0 | +0.7 |
| TURR | **Turia** | **0.65** | **347** | ⇑P | Pn | 02 28 56.3 | +0.5 |
| TURR | | | | ⇓S | Sn | 02 29 10.4 | 0.0 |
| SULR | | **0.74** | **178** | ⇓P | Pn | 02 28 57.0 | +0.6 |
| SULR | | | | ⇑S | Sn | 02 29 12.6 | +1.2 |
| OZUR | | **0.74** | **336** | ⇓P | Pn | 02 28 56.5 | -0.1 |
| OZUR | | | | ⇑S | Sn | 02 29 11.0 | -0.6 |
| BOSR | **Bodos** | **0.77** | **329** | ⇑P | Pn | 02 28 56.8 | +0.1 |
| BOSR | | | | ⇓S | Sn | 02 29 11.7 | -0.3 |
| PANC | **Panciu** | **0.79** | **55** | ⇑P | Pn | 02 28 57.7 | +0.9 |
| PANC | | | | ⇓S | Sn | 02 29 13.2 | +1.0 |
| DOPR | **Dopca** | **0.80** | **314** | ⇓P | Pn | 02 28 57.1 | +0.1 |
| VOIR | | **0.83** | **272** | ⇑P | Pn | 02 28 57.4 | +0.1 |
| VOIR | | | | ⇓S | Sn | 02 29 13.3 | +0.4 |
| COSR | **Cosmesti PH** | **0.88** | **60** | ⇓P | Pn | 02 28 58.2 | +0.7 |
| COSR | | | | ⇑S | Sn | 02 29 14.2 | +0.7 |
| ONER | **Baraj Valea Uz** | **0.93** | **7** | ⇓P | Pn | 02 28 58.5 | +0.4 |
| ONER | | | | ⇓S | Sn | 02 29 14.6 | +0.3 |
| INCR | **INCERC-Sediu C** | **0.98** | **183** | ⇑S | Sn | 02 29 16.1 | +0.9 |
| CIOR | **Ciorogarla** | **1.00** | **194** | ⇑P | Pn | 02 28 59.1 | +0.4 |
| CIOR | | | | ⇑S | Sn | 02 29 16.1 | +0.6 |
| TUDR | | **1.03** | **80** | ⇑P | Pn | 02 28 58.8 | -0.2 |
| TUDR | | | | ⇑S | Sn | 02 29 16.5 | +0.4 |
| LEHL | **Lehliu** | **1.03** | **156** | ⇓P | Pn | 02 28 59.8 | +0.7 |
| LEHL | | | | ⇑S | Sn | 02 29 17.1 | +1.0 |
| GHRR | | **1.05** | **52** | ⇑P | Pn | 02 29 00.1 | +0.9 |
| GHRR | | | | ⇓S | Sn | 02 29 17.2 | +0.8 |
| BUC1 | **Bucharest** | **1.08** | **187** | ⇑P | Pn | 02 29 00.1 | +0.6 |
| BUC1 | | | | ⇑S | Sn | 02 29 17.5 | +0.6 |
| IZVR | **Izvoarele** | **1.09** | **83** | ⇑P | Pn | 02 28 59.5 | -0.2 |
| IZVR | | | | ⇑S | Sn | 02 29 16.6 | -0.6 |
| ARR | **Arges** | **1.12** | **268** | ⇑P | Pn | 02 29 00.3 | +0.2 |
| ARR | | | | ⇑S | Sn | 02 29 17.5 | -0.3 |
| AMRR | **Amara** | **1.13** | **135** | ⇓P | Pn | 02 29 00.7 | +0.7 |
| AMRR | | | | ⇑S | Sn | 02 29 18.8 | +1.0 |
| SCHL | **Schela** | **1.13** | **85** | ⇑P | Pn | 02 28 60.0 | -0.1 |
| SCHL | | | | ⇓S | Sn | 02 29 17.1 | -0.7 |
| SCHLR | **Schela** | **1.13** | **87** | ⇓P | Pn | 02 28 59.8 | -0.2 |
| SCHLR | | | | ⇑S | Sn | 02 29 17.4 | -0.4 |
| TESR | **Tescani** | **1.13** | **15** | ⇑P | Pn | 02 29 00.4 | +0.3 |
| TESR | | | | ⇓S | Sn | 02 29 17.4 | -0.6 |
| NEGRR | **Negrea** | **1.17** | **84** | ⇓P | Pn | 02 29 00.7 | +0.2 |
| NEGRR | | | | ⇑S | Sn | 02 29 18.6 | +0.1 |
| SGRR | **Singureni** | **1.21** | **189** | ⇓P | Pn | 02 29 01.1 | +0.2 |
| SGRR | | | | ⇓S | Sn | 02 29 19.0 | -0.2 |
| HUMR | **Humele** | **1.25** | **225** | ⇓P | Pn | 02 29 01.3 | 0.0 |
| HUMR | | | | ⇓S | Sn | 02 29 20.2 | 0.0 |
| SCTR | **Scanteiesti** | **1.27** | **78** | ⇑P | Pn | 02 29 02.1 | +0.5 |
| SCTR | | | | ⇓S | Sn | 02 29 21.0 | +0.5 |
| GISR | **Galati** | **1.29** | **88** | ⇓S | Sn | 02 29 20.5 | -0.3 |
| BIR | **Birlad** | **1.30** | **49** | ⇑P | Pn | 02 29 02.4 | +0.6 |
| BIR | | | | ⇓S | Sn | 02 29 20.8 | -0.2 |
| CFR | **Carcaliu** | **1.37** | **99** | ⇓P | Pn | 02 29 02.7 | +0.1 |
| CFR | | | | ⇑S | Sn | 02 29 21.3 | -1.1 |
| VLDR | **Vladesti** | **1.37** | **71** | ⇑P | Pn | 02 29 03.2 | +0.5 |
| VLDR | | | | ⇑S | Sn | 02 29 23.0 | +0.5 |
| GIUM | **Giurgiulesti** | **1.40** | **87** | ⇑P | Pn | 02 29 03.6 | +0.7 |
| GIUM | | | | ⇓S | Sn | 02 29 23.8 | +0.8 |
| HARR | **Harsova** | **1.41** | **120** | ⇓P | Pn | 02 29 03.3 | +0.2 |
| COPA | **Copaceanca** | **1.47** | **210** | ⇓P | Pn | 02 29 03.7 | -0.1 |
| COPA | | | | ⇑S | Sn | 02 29 23.9 | -0.5 |
| TLBR | **Topalu** | **1.56** | **123** | ⇑P | Pn | 02 29 05.6 | +0.8 |
| TLBR | | | | ⇓S | Sn | 02 29 25.4 | -0.8 |
| TPGR | **Topolog** | **1.65** | **109** | ⇑P | Pn | 02 29 05.8 | -0.1 |
| TPGR | | | | ⇑S | Sn | 02 29 27.6 | -0.7 |
| CVDA | **Cernavoda** | **1.68** | **129** | ⇑P | Pn | 02 29 06.5 | +0.2 |
| CVDA | | | | ⇑S | Sn | 02 29 28.3 | -0.6 |
| ICOR | **Ion Corvin** | **1.72** | **139** | ⇓P | Pn | 02 29 07.2 | +0.5 |
| ICOR | | | | ⇓S | Sn | 02 29 29.2 | -0.4 |
| LOT | **Lotru** | **1.73** | **272** | ⇑P | Pn | 02 29 06.5 | -0.5 |
| LOT | | | | ⇑S | Sn | 02 29 29.4 | -0.7 |
| LEOM | **Leova** | **1.76** | **52** | ⇑P | Pn | 02 29 07.4 | +0.3 |
| LEOM | | | | ⇓S | Sn | 02 29 29.8 | -0.7 |
| TLCR | | **1.84** | **96** | ⇑P | Pn | 02 29 08.2 | +0.1 |
| TLCR | | | | ⇑S | Sn | 02 29 32.2 | -0.1 |
| VLAD | **Vladila** | **1.92** | **223** | ⇑P | Pn | 02 29 08.4 | -0.8 |
| CJR | **Cluj-Napoca** | **2.24** | **306** | ⇑P | Pn | 02 29 12.9 | -0.3 |
| BURAR | **Bucovina Array** | **2.31** | **343** | ⇓P | Pn | 02 29 15.2 | +1.2 |
| MILM | **Milestii Mici** | **2.34** | **49** | ⇑P | Pn | 02 29 14.3 | -0.1 |
| MILM | **Milestii Mici** | **2.34** | **49** | *e*P | Pn | 02 29 14.2 | -0.2 |
| | 10.0nm,0.1s | | | | | | |
| MILM | | | | *e*S | Sn | 02 29

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRTR | **Keskin Array B** | 144.53 | 315 | PKP | | **PKPdf** | 02 48 27.4 | -0.8 |
| | 2.7nm,0.9s,baz=126,slow=3.7,SNR=5.0 | | | | | | | |
| MMAI | **Mount Meron Ar** | 145.98 | 304 | PKPbc | | **PKPdf** | 02 48 32.0 | +1.2 |
| | 1.6nm,0.5s,baz=81,slow=5.2,SNR=3.5 | | | | | | | |
| GERES | **GERESS Array B** | 147.20 | 345 | PKPbc | | **PKPdf** | 02 48 34.0 | +1.6 |
| | 0.7nm,0.5s,baz=354,slow=8.9,SNR=2.4 | | | | | | | |

*NEIC **19** 02:31:20.7±1.9, 17.°5S±0.°2×177.°9W±0.°2, h619km±12km, mb4.2/16, Error ellipse: s-maj=33.5km s-min=18.4km az=142.0*

*IDC **19** 02:31:24.7±5.5, 17.°25S×178.°77W, h596km±69km, mb3.2/7, mbtmp4.2/8, Error ellipse: s-maj=44.4km s-min=26.2km az=179.0*

**ISC 19 02:31:21.1**±0.8, **17.°4S**±0.°1×**178.°2W**±0.°1, **h600**km, **n34,** σ1°**54**/32, **mb4.2**/15, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.63** | **264** | P | **P** | **02 32 46.1** | **+1.8** |
| AFI | **Afiamalu** | **7.05** | **62** | P | **P** | **02 33 11.2** | **-0.5** |
| FUNA | **Funafuti** | **9.17** | **343** | P | **P** | **02 33 33.0** | **+1.2** |
| LIFNC | **LIFOU** | **14.21** | **254** | P | **P** | **02 34 19.8** | **-2.3** |
| PINNC | **Pines Island,** | **14.50** | **247** | P | **P** | **02 34 23.4** | **-1.3** |
| DZM | **Mont Dzumac** | **15.23** | **250** | P | **P** | **02 34 31.0** | **-0.5** |
| DZM | **Mont Dzumac** | **15.23** | **250** | P | **P** | **02 34 29.8** | **-1.7** |
| | 3.1nm,0.5s,baz=275,slow=18,SNR=6.4 | | | | | | |
| URZ | **Urewera** | **21.21** | **190** | P | **P** | **02 35 29.5** | **+3.9** |
| | 4.8nm,0.8s,baz=47,slow=14,SNR=1.6 | | | | | | |
| | 4.8nm,0.8s | | | | | | |
| EIDS | **Eidsvold** | **29.68** | **249** | P | **P** | **02 36 39.6** | **-0.6** |
| EIDS | | | | IAmb | IAmb | 02 36 40.6 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| ARMA | **Armidale** | **30.41** | **239** | P | **P** | **02 36 45.6** | **-0.9** |
| ARMA | | | | IAmb | IAmb | 02 36 55.3 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| CTA | **Charters Tower** | **33.77** | **260** | P | **P** | **02 37 14.7** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=108,slow=4.3,SNR=4.1 | | | | | | |
| CTAO | **Charters Tower** | **33.77** | **260** | P | **P** | **02 37 15.2** | **+0.2** |
| CTAO | | | | IAmb | IAmb | 02 37 16.1 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| CAN | **Canberra** | **34.22** | **232** | P | **P** | **02 37 16.5** | **-2.0** |
| COEN | **Coen** | **37.34** | **270** | P | **P** | **02 37 46.4** | **+1.9** |
| TOO | **Toolangi** | **37.69** | **230** | P | **P** | **02 37 45.5** | **-1.5** |
| TOO | | | | IAmb | IAmb | 02 37 50.2 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| STKA | **Stephens Creek** | **39.09** | **241** | P | **P** | **02 37 57.5** | **-0.8** |
| STKA | **Stephens Creek** | **39.09** | **241** | P | **P** | **02 37 57.6** | **-0.8** |
| | comp=Z,5.7nm,0.5s,baz=79,slow=8.1,SNR=5.0 | | | | | | |
| | comp=Z,5.7nm,0.5s | | | | | | |
| BBOO | **Buckleboo** | **43.87** | **241** | P | **P** | **02 38 34.5** | **-1.4** |
| BBOO | | | | IAmb | IAmb | 02 38 45.6 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| WB0 | **Warramunga Arr** | **44.93** | **259** | P | **P** | **02 38 44.2** | **-0.1** |
| WB2 | **Warramunga Arr** | **44.95** | **259** | P | **P** | **02 38 44.4** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 02 38 45.9 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| WRA | **Warramunga Arr** | **44.97** | **259** | P | **P** | **02 38 44.4** | **-0.1** |
| WRA | **Warramunga Arr** | **44.97** | **259** | P | **P** | **02 38 44.4** | **-0.1** |
| | comp=Z,3.7nm,0.5s,baz=94,slow=7.1,SNR=20 | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | |
| AS31 | **Alice Springs** | **45.16** | **254** | P | **P** | **02 38 45.9** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 02 38 46.8 | |
| | comp=Z,5.6nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | **45.17** | **254** | P | **P** | **02 38 45.5** | **-0.6** |
| ASAR | **Alice Springs** | **45.17** | **254** | P | **P** | **02 38 45.8** | **-0.2** |
| | comp=Z,9.7nm,0.5s,baz=89,slow=8.5,SNR=18 | | | | | | |
| | comp=Z,9.7nm,0.5s | | | | | | |
| KNB | **Kanab** | **81.89** | **47** | P | **P** | **02 42 37.8** | **-1.6** |
| ANM | **Nome** | **82.28** | **6** | P | **P** | **02 42 39.4** | **-0.9** |
| TABL | **Table Mountain** | **83.09** | **17** | P | **P** | **02 42 41.4** | **-3.4** |
| TABL | | | | IAmb | IAmb | 02 42 47.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| ILAR | **Eielson Array** | **85.32** | **13** | P | **P** | **02 42 58.0** | **+2.7** |
| | comp=Z,0.5nm,0.8s,baz=229,slow=4.3,SNR=3.3 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| TXAR | **Lajitas Array** | **85.51** | **58** | P | **P** | 02 43 04.4 | +7.2 |
| | comp=Z,0.2nm,0.7s,baz=227,slow=6.0,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| PDAR | **Pinedale Array** | **86.81** | **43** | P | **P** | 02 43 09.2 | +6.0 |
| | comp=Z,0.2nm,0.3s,baz=220,slow=4.1,SNR=2.7 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| BRTR | **Keskin Array B** | **144.58** | **315** | PKP | | **PKPab** | **02 49 52.2** | **+0.4** |
| | comp=Z,2.9nm,1.3s,baz=103,slow=3.4,SNR=4.2 | | | | | | | |
| MMAI | **Mount Meron Ar** | **146.05** | **304** | PKPbc | | **PKiKP** | **02 49 57.7** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=54,slow=7.3,SNR=1.5 | | | | | | | |
| GERES | **GERESS Array B** | **147.16** | **346** | PKPbc | | **PKiKP** | **02 50 00.2** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=38,slow=5.0,SNR=1.2 | | | | | | | |

*IDC **19** 02:33:11.7±6.0, 18.°55S×178.°30W, h486km±70km, mb3.2/8, mbtmp4.1/9, Error ellipse: s-maj=34.5km s-min=28.6km az=15.0*

*NEIC **19** 02:33:12.9±1.6, 18.°3S±0.°1×178.°2W±0.°1, h525km±13km, mb4.2/19, Error ellipse: s-maj=17.7km s-min=15.3km az=63.0*

**ISC 19 02:33:12.3**±0.6, **18.°4S**±0.°1×**178.°31W**±0.°08, **h500**km, **n40,** σ1°**63**/40, **mb4.1**/18, **4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.53** | **280** | P | **P** | **02 34 30.4** | **+3.2** |
| NIUE | **Niue** | **7.97** | **96** | P | **P** | **02 35 07.8** | **-0.7** |
| FUNA | **Funafuti** | **10.10** | **346** | P | **P** | **02 35 29.9** | **-0.9** |
| LIFNC | **LIFOU** | **13.83** | **258** | P | **P** | **02 36 09.7** | **-0.6** |
| PINNC | **Pines Island,** | **13.99** | **250** | P | **P** | **02 36 12.1** | **+0.2** |
| DZM | **Mont Dzumac** | **14.77** | **253** | P | **P** | **02 36 19.4** | **-0.9** |
| DZM | **Mont Dzumac** | **14.77** | **253** | P | **P** | **02 36 19.8** | **-0.5** |
| | 1.9nm,0.6s,baz=97,slow=18,SNR=2.1 | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.56** | **260** | P | **P** | **02 36 38.8** | **-0.1** |
| KOUNC | | | | IAmb | IAmb | 02 36 41.0 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| URZ | **Urewera** | **20.20** | **190** | P | **P** | **02 37 11.8** | **-0.7** |
| | comp=Z,4.8nm,0.8s,baz=217,slow=11,SNR=1.9 | | | | | | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| BKZ | **Black Stump Fm** | **21.19** | **191** | P | **P** | **02 37 19.5** | **-2.1** |
| BKZ | | | | IAmb | IAmb | 02 37 37.7 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| HNR | **Honiara** | **22.89** | **290** | P | **P** | **02 37 36.0** | **-1.2** |
| PPTF | **Pamatai, Papee** | **27.34** | **93** | P | **P** | **02 38 14.0** | **-2.7** |
| EIDS | **Eidsvold** | **29.20** | **251** | P | **P** | **02 38 33.1** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 02 38 33.5 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| ARMA | **Armidale** | **29.79** | **241** | P | **P** | **02 38 38.0** | **0.0** |
| ARMA | | | | IAmb | IAmb | 02 38 42.7 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| CTA | **Charters Tower** | **33.47** | **261** | P | **P** | **02 39 09.4** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=99,slow=10,SNR=5.6 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| CTAO | **Charters Tower** | **33.47** | **261** | P | **P** | **02 39 09.2** | **-0.3** |
| CTAO | | | | IAmb | IAmb | 02 39 10.2 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| TOO | **Toolangi** | **36.95** | **231** | P | **P** | **02 39 37.9** | **-0.5** |
| TOO | | | | IAmb | IAmb | 02 39 44.9 | |
| | comp=Z,10nm,1.1s | | | | | | |
| STKA | **Stephens Creek** | **38.49** | **242** | P | **P** | **02 39 51.1** | **+0.1** |
| | comp=Z,3.1nm,0.5s,baz=93,slow=10,SNR=5.0 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| BBOO | **Buckleboo** | **43.26** | **241** | P | **P** | **02 40 29.5** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 02 40 34.2 | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| WR0 | **Warramunga Arr** | **44.45** | **260** | P | **P** | **02 40 37.7** | **-0.9** |
| WB0 | **Warramunga Arr** | **44.61** | **260** | P | **P** | **02 40 38.6** | **-1.2** |
| WB2 | **Warramunga Arr** | **44.63** | **260** | P | **P** | **02 40 38.6** | **-1.4** |
| WB2 | | | | IAmb | IAmb | 02 40 41.6 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| WRA | **Warramunga Arr** | **44.64** | **260** | P | **P** | **02 40 38.9** | **-1.2** |
| WRA | **Warramunga Arr** | **44.64** | **260** | P | **P** | **02 40 39.5** | **-0.6** |
| | comp=Z,0.7nm,0.3s,baz=96,slow=7.8,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| AS31 | **Alice Springs** | **44.76** | **255** | P | **P** | **02 40 40.7** | **-0.2** |
| ASAR | **Alice Springs** | **44.76** | **255** | P | **P** | **02 40 40.2** | **-0.7** |
| ASAR | **Alice Springs** | **44.76** | **255** | P | **P** | **02 40 40.8** | **-0.2** |
| | comp=Z,8.5nm,0.7s,baz=90,slow=8.4,SNR=18 | | | | | | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| KNRA | **Kununurra** | **50.54** | **265** | P | **P** | **02 41 23.3** | **-1.1** |
| KNRA | | | | IAmb | IAmb | 02 41 24.0 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| FAKI | **Fak Fak** | **50.77** | **282** | P | **P** | **02 41 23.1** | **-3.0** |
| FAKI | | | | IAmb | IAmb | 02 41 42.0 | |
| | comp=Z,24nm,0.8s | | | | | | |
| FITZ | **Fitzroy Crossi** | **53.05** | **261** | P | **P** | **02 41 41.9** | **-0.6** |
| MJAR | **Matsushiro Arr** | **68.35** | **323** | P | **P** | **02 43 24.8** | **+1.5** |
| | comp=Z,1.9nm,0.7s,baz=163,slow=5.9,SNR=6.6 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| QSPA | **South Pole Qui** | **71.67** | **180** | P | **P** | **02 43 42.6** | **-0.2** |
| QSPA | | | | IAmb | IAmb | 02 43 51.8 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| TXAR | **Lajitas Array** | **86.17** | **58** | P | **P** | **02 45 00.2** | **-0.4** |
| | comp=Z,0.5nm,0.7s,baz=219,slow=7.5,SNR=4.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| ILAR | **Eielson Array** | **86.33** | **13** | P | **P** | **02 45 02.4** | **+2.0** |
| | comp=Z,0.8nm,0.6s,baz=220,slow=5.1,SNR=8.9 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| TROLL | **Troll, Antarti** | **89.83** | **180** | ⇑P | **P** | **02 45 21.0** | **+4.0** |
| | comp=Z,96nm,0.5s | | | | | | |
| SNAA | **Sanae** | **90.12** | **179** | ⇑P | **P** | **02 45 22.2** | **+3.9** |
| | comp=Z,56nm,1.2s | | | | | | |
| VNA3 | **Neumayer Olymp** | **90.26** | **176** | ⇑P | **P** | **02 45 22.8** | **+4.0** |
| | comp=Z,4.8nm,0.6s | | | | | | |
| VNA1 | **Neumayer--Stat** | **90.92** | **177** | ⇑P | **P** | **02 45 22.0** | **+0.2** |
| | comp=Z,3.0nm,0.8s | | | | | | |
| BRTR | **Keskin Array B** | **145.19** | **314** | PKPbc | **PKPbc** | **02 51 54.1** | **+0.3** |
| | comp=Z,2.0nm,1.1s,baz=190,slow=3.8,SNR=4.7 | | | | | | |
| GERES | **GERESS Array B** | **148.10** | **345** | PKPbc | **PKiKP** | **02 52 02.7** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=96,slow=4.0,SNR=2.6 | | | | | | |

*IDC **19** 02:34:02.0±4.1, 18.°45S×178.°17W, h600km±51km, mb3.2/14, mbtmp4.2/14, Error ellipse: s-maj=22.0km s-min=21.7km az=150.0*

*NEIC **19** 02:34:04.3±1.3, 18.°5S±0.°1×178.°0W±0.°2, h633km±13km, mb4.5/23, Error ellipse: s-maj=22.3km s-min=19.3km az=132.0*

**ISC 19 02:34:05.5**±0.5, **18.°4S**±0.°1×**178.°1W**±0.°1, **h650**km, **n46,** σ1°**22**/46, **mb4.1**/26, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.69** | **280** | P | **P** | **02 35 31.7** | **-1.1** |
| AFI | **Afiamalu** | **7.58** | **55** | P | **P** | **02 35 59.7** | **-3.3** |
| URZ | **Urewera** | **20.20** | **191** | P | **P** | **02 37 56.0** | **-2.7** |
| | 6.3nm,0.7s,baz=102,slow=9.3,SNR=2.3 | | | | | | |
| | 6.3nm,0.7s | | | | | | |
| BHW | **Baring Head** | **23.68** | **193** | P | **P** | **02 38 28.0** | **-1.6** |
| BHW | | | | IAmb | IAmb | 02 38 28.8 | |
| | comp=Z,7.7nm,0.6s | | | | | | |
| QRZ | **Quartz Range** | **23.73** | **198** | P | **P** | **02 38 29.5** | **-0.5** |
| QRZ | | | | IAmb | IAmb | 02 38 30.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| NNZ | **Nelson** | **23.86** | **196** | P | **P** | **02 38 29.9** | **-1.2** |
| NNZ | | | | IAmb | IAmb | 02 38 43.2 | |
| | comp=Z,17nm,1.2s | | | | | | |
| BSWZ | **Blackbirch Sta** | **24.20** | **195** | P | **P** | **02 38 33.5** | **-0.6** |
| THZ | **Tophouse** | **24.49** | **196** | P | **P** | **02 38 35.4** | **-1.4** |
| THZ | | | | IAmb | IAmb | 02 38 41.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| DSZ | **Denniston Nort** | **24.79** | **198** | P | **P** | **02 38 37.9** | **-1.5** |
| KHZ | **Kahutara** | **24.95** | **195** | P | **P** | **02 38 38.9** | **-1.8** |
| KHZ | | | | IAmb | IAmb | 02 38 44.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| LTZ | **Lake Taylor** | **25.61** | **196** | P | **P** | **02 38 45.6** | **-1.1** |
| INZ | **Inchbonnie** | **25.79** | **198** | P | **P** | **02 38 47.4** | **-0.7** |
| OXZ | **Oxford** | **26.18** | **196** | P | **P** | **02 38 50.7** | **-0.9** |
| OXZ | | | | IAmb | IAmb | 02 39 03.6 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| RPZ | **Rata Peaks** | **26.82** | **198** | P | **P** | **02 38 55.0** | **-2.1** |
| | comp=Z,6.0nm,0.6s,baz=92,slow=9.2,SNR=3.7 | | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| FOZ | **Fox Glacier** | **27.02** | **200** | P | **P** | **02 38 58.3** | **-0.5** |
| LBZ | **Lake Benmore** | **27.68** | **198** | P | **P** | **02 39 02.4** | **-2.2** |
| LBZ | | | | IAmb | IAmb | 02 39 18.9 | |
| | comp=Z,15nm,1.2s | | | | | | |
| MLZ | **Mavora Lakes** | **29.21** | **200** | P | **P** | **02 39 18.1** | **+0.4** |
| MLZ | | | | IAmb | IAmb | 02 39 18.7 | |
| | comp=Z,15nm,0.7s | | | | | | |
| DCZ | **Deep Cove** | **29.62** | **201** | P | **P** | **02 39 20.9** | **-0.3** |
| DCZ | | | | IAmb | IAmb | 02 39 36.1 | |
| | comp=Z,20nm,1.1s | | | | | | |
| WHZ | **Wether Hill Ro** | **29.73** | **200** | P | **P** | **02 39 22.6** | **+0.4** |
| ARMA | **Armidale** | **29.91** | **241** | P | **P** | **02 39 24.9** | **+0.8** |
| CAN | **Canberra** | **33.60** | **233** | P | **P** | **02 39 55.8** | **+0.7** |
| CAN | | | | IAmb | IAmb | 02 40 14.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| CTAO | **Charters Tower** | **33.62** | **261** | P | **P** | **02 39 55.6** | **+0.2** |
| TOO | **Toolangi** | **37.05** | **231** | P | **P** | **02 40 23.9** | **+0.5** |
| TOO | | | | IAmb | IAmb | 02 40 24.6 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| STKA | **Stephens Creek** | **38.62** | **242** | P | **P** | **02 40 36.1** | **+0.1** |
| | comp=Z,4.0nm,0.7s,baz=88,slow=5.9,SNR=4.4 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| BBOO | **Buckleboo** | **43.39** | **242** | P | **P** | **02 41 13.7** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 02 41 14.8 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| WB0 | **Warramunga Arr** | **44.77** | **260** | P | **P** | **02 41 24.0** | **-0.2** |
| WB2 | **Warramunga Arr** | **44.78** | **260** | P | **P** | **02 41 24.3** | **-0.1** |
| WRA | **Warramunga Arr** | **44.80** | **260** | P | **P** | **02 41 24.4** | **0.0** |
| WRA | **Warramunga Arr** | **44.80** | **260** | P | **P** | **02 41 24.0** | **-0.4** |
| | comp=Z,0.8nm,0.4s,baz=96,slow=8.2,SNR=3.4 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| ASAR | **Alice Springs** | **44.90** | **255** | P | **P** | **02 41 25.1** | **-0.1** |
| | comp=Z,3.1nm,0.7s,baz=81,slow=9.5,SNR=4.9 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| CASY | **Casey** | **65.78** | **205** | P | **P** | **02 43 48.8** | **+0.7** |
| MJAR | **Matsushiro Arr** | **68.47** | **323** | P | **P** | **02 44 04.3** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=162,slow=5.8,SNR=5.2 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| QSPA | **South Pole Qui** | **71.64** | **180** | P | **P** | **02 44 24.4** | **+1.1** |
| | comp=Z,3.1nm,0.9s,baz=341,slow=7.7,SNR=3.0 | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| PETK | **Petropavlovsk-** | **74.24** | **345** | P | **P** | **02 44 38.8** | **+0.7** |
| | comp=Z,1.7nm,0.5s,baz=156,slow=7.9,SNR=1.7 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| YBH | **Yreka Blue Hor** | **78.76** | **39** | P | **P** | **02 45 04.9** | **+1.9** |
| | comp=Z,1.3nm,0.6s,baz=50,slow=2.3,SNR=2.5 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| NVAR | **Mina Array Bea** | **79.61** | **44** | P | **P** | **02 45 09.8** | **+2.1** |
| | comp=Z,0.7nm,0.7s,baz=219,slow=8.9,SNR=5.2 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| CCB | **Clear Creek Bu** | **86.02** | **13** | P | **P** | **02 45 38.7** | **+0.1** |
| CCB | | | | IAmb | IAmb | 02 45 39.4 | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| TXAR | **Lajitas Array** | **86.05** | **57** | P | **P** | **02 45 41.2** | **+1.4** |
| TXAR | **Lajitas Array** | **86.05** | **57** | P | **P** | **02 45 41.0** | **+1.3** |
| | comp=Z,1.4nm,0.8s,baz=221,slow=7.3,SNR=12 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| ILAR | **Eielson Array** | **86.32** | **13** | P | **P** | **02 45 40.1** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=226,slow=4.9,SNR=5.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| PDAR | **Pinedale Array** | **87.54** | **43** | P | **P** | **02 45 48.1** | **+1.5** |
| | comp=Z,0.4nm,0.5s,baz=232,slow=4.4,SNR=2.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| SNAA | **Sanae** | **90.08** | **179** | P | **P** | **02 45 57.9** | **+0.1** |
| | comp=Z,1.3nm,0.9s,baz=213,slow=16,SNR=1.9 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| BVAR | **Borovoye Array** | **117.40** | **321** | PKP | **PKiKP** | **02 51 38.7** | **-0.2** |
| | comp=Z,0.3nm,0.4s,baz=90,slow=2.0,SNR=1.5 | | | | | | |
| ARCES | **ARCESS Array B** | **126.86** | **350** | PKP | **PKiKP** | **02 51 57.1** | **0.0** |
| | comp=Z,1.9nm,0.9s,baz=48,slow=1.3,SNR=4.0 | | | | | | |
| BRTR | **Keskin Array B** | **145.32** | **314** | PKPbc | **PKPab** | **02 52 33.3** | **-1.2** |
| | comp=Z,1.0nm,1.0s,baz=86,slow=5.9,SNR=1.8 | | | | | | |
| MMAI | **Mount Meron Ar** | **146.63** | **302** | PKPbc | **PKiKP** | **02 52 38.3** | **-0.3** |
| | comp=Z,0.3nm,0.2s,baz=35,slow=3.5,SNR=1.7 | | | | | | |

*IDC **19** 02:36:20.4±9.1, 18.°03S×177.°90W, h581km±94km, mb3.3/5, mbtmp4.2/6, Error ellipse: s-maj=70.6km s-min=29.0km az=42.0*

*NEIC **19** 02:36:23.4±1.2, 18.°2S±0.°2×178.°0W±0.°2, h610km±11km, mb4.5/21, Error ellipse: s-maj=35.6km s-min=26.8km az=147.0*

**ISC 19 02:36:21.5**±0.7, **18.°2S**±0.°2×**177.°9W**±0.°1, **h590**km, **n33,** σ1°**11**/30, **mb4.4**/16, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.90** | **276** | P | **P** | **02 37 47.3** | **+1.7** |
| DZM | **Mont Dzumac** | **15.23** | **253** | P | **P** | **02 39 32.9** | **+0.7** |
| | 5.0nm,1.2s,baz=69,slow=22,SNR=2.4 | | | | | | |
| URZ | **Urewera** | **20.50** | **191** | P | **P** | **02 40 19.4** | **-0.6** |
| | 5.2nm,1.0s,baz=84,slow=14,SNR=2.1 | | | | | | |
| | 5.2nm,1.0s | | | | | | |
| STKA | **Stephens Creek** | **38.95** | **242** | P | **P** | **02 42 58.1** | **-0.1** |
| | 4.4nm,0.9s,baz=156,slow=7.3,SNR=3.0 | | | | | | |
| | 4.4nm,0.9s | | | | | | |
| WR0 | **Warramunga Arr** | **44.89** | **260** | P | **P** | **02 43 44.1** | **-0.9** |
| WB0 | **Warramunga Arr** | **45.05** | **260** | P | **P** | **02 43 44.7** | **-1.4** |
| WB2 | **Warramunga Arr** | **45.07** | **260** | P | **P** | **02 43 45.3** | **-1.0** |
| WRA | **Warramunga Arr** | **45.08** | **260** | P | **P** | **02 43 45.3** | **-1.1** |
| WRA | **Warramunga Arr** | **45.08** | **260** | P | **P** | **02 43 45.5** | **-0.9** |
| | 1.3nm,0.5s,baz=95,slow=7.2,SNR=14 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | **45.21** | **254** | P | **P** | **02 43 46.9** | **-0.5** |
| | 3.7nm,0.6s,baz=87,slow=8.3,SNR=16 | | | | | | |
| | 3.7nm,0.6s | | | | | | |
| QSPA | **South Pole Qui** | **71.90** | **180** | P | **P** | **02 46 46.6** | **+0.9** |
| QSPA | **South Pole Qui** | **71.90** | **180** | P | **P** | **02 46 46.8** | **+1.1** |
| | 2.8nm,1.1s,baz=248,slow=13,SNR=3.1 | | | | | | |
| | 2.8nm,1.1s | | | | | | |
| I28M | **Miner Creek** | **88.17** | **15** | P | P | 02 48 15.5 | +5.4 |
| I28M | | | | IAmb | IAmb | 02 48 18.4 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| RWWY | **Rawlins** | **88.25** | **45** | P | P | 02 48 17.4 | +6.1 |
| RWWY | | | | IAmb | IAmb | 02 48 18.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| T25A | **Trinidad** | **88.28** | **50** | P | P | 02 48 16.4 | +4.9 |
| T25A | | | | IAmb | IAmb | 02 48 19.9 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| OZNA | **Ozona** | **88.35** | **57** | P | **P** | **02 48 11.7** | **0.0** |
| OZNA | | | | IAmb | IAmb | 02 48 12.7 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| MMPY | **Sheldon Lake,** | **88.44** | **20** | P | **P** | **02 48 13.5** | **+2.1** |
| MMPY | | | | IAmb | IAmb | 02 48 18.0 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| GCMT | **Greycliff** | **88.53** | **41** | P | **P** | **02 48 13.0** | **+0.7** |
| N23A | **Red Feather La** | **88.77** | **46** | P | **P** | **02 48 14.8** | **+1.1** |
| BMAR | **Burnt Mountain** | **88.79** | **12** | P | **P** | **02 48 14.5** | **+1.6** |
| I30M | **Mount Dempster** | **88.90** | **16** | P | **P** | **02 48 14.1** | **+0.6** |
| I30M | | | | IAmb | IAmb | 02 48 16.3 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| D23K | **Nanushuk River** | **89.06** | **10** | P | **P** | **02 48 14.7** | **+0.7** |
| D23K | | | | IAmb | IAmb | 02 48 16.6 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| B21K | **Ikpikpuk River** | **89.09** | **8** | P | **P** | **02 48 15.1** | **+1.0** |
| B21K | | | | IAmb | IAmb | 02 48 16.0 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| K22A | **Casper** | **89.13** | **44** | P | **P** | **02 48 14.7** | **-0.6** |
| B20K | **Meade River** | **89.14** | **7** | P | **P** | **02 48 14.8** | **+0.5** |
| B20K | | | | IAmb | IAmb | 02 48 27.4 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| H29M | **Whitestone** | **89.18** | **15** | P | **P** | **02 48 14.3** | **-0.4** |
| CM31 | **Chiang Mai Arr** | **89.44** | **290** | P | **P** | **02 48 15.8** | **-1.2** |
| CM31 | | | | IAmb | IAmb | 02 48 18.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| CMAR | **Chiang Mai Arr** | **89.44** | **290** | P | **P** | **02 48 16.2** | **-0.8** |
| CMAR | **Chiang Mai Arr** | **89.44** | **290** | PKKPbc | **P** | **02 48 16.5** | **-0.5** |
| | comp=Z,9.4nm,0.7s,baz=288,slow=4.7,SNR=22 | | | | | | |
| EGMT | **Eagleton** | **89.53** | **39** | P | **P** | **02 48 15.1** | **-1.8** |
| EGMT | | | | IAmb | IAmb | 02 48 15.5 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| DKNS | **Dickens** | **89.54** | **54** | P | **P** | **02 48 15.4** | **-1.7** |
| BRTR | **Keskin Array B** | **145.31** | **315** | PKPbc | **PKPdf** | **02 54 52.2** | **-1.1** |
| | comp=Z,1.8nm,1.1s,baz=54,slow=4.6,SNR=1.5 | | | | | | |
| GERES | **GERESS Array B** | **147.98** | **346** | PKPbc | **PKPbc** | **02 55 00.9** | **-0.4** |
| | comp=Z,0.3nm,0.4s,baz=0.0,slow=4.1,SNR=2.9 | | | | | | |

*IDC **19** 02:38:06.5±9.2, 18.°17S×178.°11W, h525km±82km, mb3.6/6, mbtmp4.5/7, Error ellipse: s-maj=81.5km s-min=33.0km az=112.0*

*NEIC **19** 02:38:08.8±1.8, 18.°5S±0.°1×178.°0W±0.°1, h552km±15km, mb4.3/15, Error ellipse: s-maj=21.4km s-min=16.6km az=152.0*

**ISC 19 02:38:07.9**±0.7, **18.°4S**±0.°1×**177.°95W**±0.°09, **h557**km, **n34,** σ0°**88**/34, **mb4.2**/14, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.87** | **280** | P | **P** | **02 39 31.6** | **+2.1** |
| NIUE | **Niue** | **7.63** | **96** | P | **P** | **02 40 00.9** | **-1.4** |
| RAO | **Raoul Island** | **10.77** | **180** | P | **P** | **02 40 33.4** | **-0.3** |
| PINNC | **Pines Island,** | **14.30** | **251** | P | **P** | **02 41 09.7** | **-0.5** |
| DZM | **Mont Dzumac** | **15.09** | **254** | P | **P** | **02 41 17.1** | **-1.2** |
| DZM | | | | IAmb | IAmb | 02 41 37.0 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| DZM | **Mont Dzumac** | **15.09** | **254** | P | **P** | **02 41 16.3** | **-2.0** |
| | comp=Z,2.3nm,0.5s,baz=174,slow=16,SNR=6.7 | | | | | | |
| PPTF | **Pamatai, Papee** | **27.00** | **93** | P | **P** | **02 43 07.6** | **+1.4** |
| EIDS | **Eidsvold** | **29.50** | **251** | P | **P** | **02 43 28.4** | **+0.5** |
| EIDS | | | | IAmb | IAmb | 02 43 30.5 | |
| | comp=Z,18nm,1.5s | | | | | | |
| ARMA | **Armidale** | **30.06** | **241** | P | **P** | **02 43 33.5** | **+0.8** |
| CTA | **Charters Tower** | **33.80** | **261** | P | **P** | **02 44

*IDC **19** 02:38:55.2±5.1, 18°.05S×177°.72W, h435km±53km, mb3.5/13, mbtmp4.2/13, Error ellipse: s-maj=24.4km s-min=17.0km az=58.0*

*NEIC **19** 02:39:05.8±2.1, 18°.2S±0°.1×178°.0W±0°.1, h550km±8km, mb4.5/32, Error ellipse: s-maj=20.7km s-min=13.2km az=153.0*

**ISC 19 02:39:05.3**±0.5, **18°.15S**±0°.10×**178°.01W**±0°.09, **h550**km, **n61**, σ1°**18**/62, **mb4.4**/29, **4C**, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.77** | **276** | P | **P** | **02 40 27.1** | **+1.5** |
| **AFI** | **Afiamalu** | **7.33** | **56** | P | **P** | **02 40 56.9** | **+0.3** |
| **NIUE** | **Niue** | **7.72** | **98** | P | **P** | **02 41 01.6** | **+1.3** |
| **PINNC** | **Pines Island,** | **14.34** | **250** | P | **P** | **02 42 05.3** | **-2.6** |
| **DZM** | **Mont Dzumac** | **15.11** | **252** | P | **P** | **02 42 14.8** | **-1.3** |
| DZM | | | | IAmb | IAmb | 02 42 18.8 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.88** | **259** | P | **P** | **02 42 32.3** | **-0.7** |
| **URZ** | **Urewera** | **20.48** | **191** | P | **P** | **02 43 03.2** | **-2.3** |
| | comp=Z,6.3nm,0.3s,baz=358,slow=2.8,SNR=13 | | | | | | |
| | comp=Z,6.3nm,0.3s | | | | | | |
| **BFZ** | **Birch Farm** | **22.99** | **191** | P | **P** | **02 43 25.8** | **-2.2** |
| **MSWZ** | **Moikau Station** | **23.89** | **193** | P | **P** | **02 43 34.9** | **-1.2** |
| **CTA** | **Charters Tower** | **33.78** | **261** | P | **P** | **02 45 01.7** | **-0.4** |
| | comp=Z,0.6nm,0.6s,baz=92,slow=9.4,SNR=10 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | **P** | **02 44 59.6** | **-2.5** |
| CTAO | | | | IAmb | IAmb | 02 45 02.3 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.31** | **231** | P | **P** | **02 45 32.0** | **+0.9** |
| **COEN** | **Coen** | **37.48** | **271** | P | **P** | **02 45 32.9** | **+0.1** |
| COEN | | | | IAmb | IAmb | 02 45 34.0 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.84** | **242** | P | **P** | **02 45 44.3** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.84** | **242** | P | **P** | **02 45 44.0** | **+0.4** |
| | comp=Z,5.1nm,0.5s,baz=86,slow=10,SNR=8.1 | | | | | | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.62** | **241** | P | **P** | **02 46 21.2** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 02 46 53.0 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.77** | **260** | P | **P** | **02 46 30.5** | **-0.1** |
| **WB0** | **Warramunga Arr** | **44.93** | **260** | P | **P** | **02 46 31.4** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 02 46 31.7 | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **02 46 31.4** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 02 46 31.9 | |
| | comp=Z,9.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **02 46 31.4** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **02 46 31.4** | **-0.6** |
| | comp=Z,7.6nm,0.7s,baz=97,slow=6.8,SNR=23 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 48 01.8** | **+0.2** |
| | comp=Z,0.6nm,0.5s,baz=97,slow=3.5,SNR=2.4 | | | | | | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **45.09** | **254** | P | **P** | **02 46 32.9** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 02 46 33.8 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.09** | **254** | P | **P** | **02 46 32.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.09** | **254** | P | **P** | **02 46 33.0** | **-0.1** |
| | comp=Z,35nm,0.5s,baz=89,slow=8.7,SNR=53 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 48 02.7** | **+0.7** |
| | comp=Z,1.4nm,0.6s,baz=92,slow=4.2,SNR=3.8 | | | | | | |
| **MTN** | **Manton Dam** | **49.17** | **269** | P | **P** | **02 47 03.1** | **-0.6** |
| MTN | | | | IAmb | IAmb | 02 47 03.7 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **50.24** | **245** | P | **P** | **02 47 10.9** | **-0.5** |
| **KNRA** | **Kununurra** | **50.84** | **264** | P | **P** | **02 47 15.7** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 02 47 16.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.36** | **261** | P | **P** | **02 47 34.4** | **+0.4** |
| **SOEI** | **Soe** | **56.45** | **270** | P | **P** | **02 47 56.9** | **+1.1** |
| SOEI | | | | IAmb | IAmb | 02 48 01.6 | |
| | comp=Z,16nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.21** | **255** | P | **P** | **02 48 07.5** | **-0.1** |
| **MBWA** | **Marble Bar** | **58.38** | **256** | P | **P** | **02 48 08.5** | **-0.2** |
| **NWAO** | **Narrogin (SRO)** | **59.43** | **242** | P | **P** | **02 48 16.2** | **+0.7** |
| NWAO | | | | IAmb | IAmb | 02 48 23.4 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **60.73** | **246** | P | **P** | **02 48 23.4** | **-0.8** |
| **GIRL** | **Giralia** | **63.19** | **253** | P | **P** | **02 48 41.3** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **68.33** | **323** | P | **P** | **02 49 12.6** | **+0.6** |
| | comp=Z,1.9nm,0.5s,baz=163,slow=5.2,SNR=7.8 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **UGM** | **Wanagama** | **70.02** | **268** | P | **P** | **02 49 22.8** | **+0.2** |
| **QSPA** | **South Pole Qui** | **71.90** | **180** | P | **P** | **02 49 34.4** | **+1.5** |
| **QSPA** | **South Pole Qui** | **71.90** | **180** | P | **P** | **02 49 34.2** | **+1.3** |
| | comp=Z,3.4nm,0.7s,baz=230,slow=2.0,SNR=11 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **SSLB** | **Suanglung** | **72.69** | **303** | P | **P** | **02 49 38.1** | **0.0** |
| SSLB | | | | IAmb | IAmb | 02 49 58.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **TPUB** | **Ta-pu** | **72.71** | **302** | P | **P** | **02 49 38.0** | **-0.2** |
| TPUB | | | | IAmb | IAmb | 02 49 58.5 | |
| | comp=Z,33nm,1.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.01** | **345** | P | **P** | **02 49 43.5** | **-1.4** |
| **KSRS** | **Korea Array** | **75.14** | **318** | P | **P** | **02 49 53.4** | **+1.8** |
| | comp=Z,0.7nm,0.7s,baz=132,slow=6.4,SNR=4.2 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **K20K** | **Telida** | **83.38** | **11** | P | **P** | **02 50 32.5** | **-2.0** |
| K20K | | | | IAmb | IAmb | 02 50 33.6 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.84** | **15** | P | **P** | **02 50 35.5** | **-1.4** |
| N25K | | | | IAmb | IAmb | 02 51 17.0 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **GLB** | **Gilahina Butte** | **83.90** | **16** | P | **P** | **02 50 35.6** | **-1.6** |
| **SEY** | **Seymchan** | **84.10** | **347** | P | **P** | **02 50 39.2** | **+1.2** |
| | comp=Z,3.0nm,0.6s,baz=150,slow=4.4,SNR=4.0 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **J20K** | **Nowinta River** | **84.12** | **10** | P | **P** | **02 50 37.2** | **-0.9** |
| J20K | | | | IAmb | IAmb | 02 51 08.3 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.81** | **57** | P | **P** | **02 50 46.3** | **-1.0** |
| | comp=Z,0.6nm,0.7s,baz=228,slow=7.5,SNR=3.4 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.04** | **13** | P | **P** | **02 50 45.3** | **-2.1** |
| | comp=Z,0.7nm,0.7s,baz=221,slow=4.6,SNR=4.1 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.27** | **43** | P | **P** | **02 50 51.9** | **-2.2** |
| | comp=Z,0.3nm,0.5s,baz=242,slow=1.9,SNR=1.5 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.32** | **290** | P | **P** | **02 51 05.6** | **+1.7** |
| | comp=Z,0.7nm,0.3s,baz=115,slow=3.0,SNR=4.2 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.06** | **180** | ⇑P | **P** | **02 51 07.3** | **+0.9** |
| | comp=Z,101nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.34** | **178** | ⇑P | **P** | **02 51 08.2** | **+0.5** |
| | comp=Z,16nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.34** | **178** | P | **P** | **02 51 07.8** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=208,slow=8.3,SNR=5.7 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.47** | **176** | ⇑P | **P** | **02 51 09.5** | **+1.3** |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.91** | **177** | ⇑P | **P** | **02 51 11.6** | **+1.3** |
| | comp=Z,2.6nm,0.6s,baz=186,slow=4.9 | | | | | | |
| **SOCE** | **Pocosol** | **96.36** | **81** | IAmb | IAmb | 02 51 33.3 | |
| | comp=Z,102nm,1.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.22** | **315** | PKPbc | **PKPab** | **02 57 44.5** | **+1.4** |
| | comp=Z,1.0nm,0.8s,baz=57,slow=2.2,SNR=2.4 | | | | | | |
| **CLL** | **Collm** | **145.78** | **348** | | **PKPdf** | **02 57 40.8** | **-0.5** |
| **MMAI** | **Mount Meron Ar** | **146.59** | **303** | PKPbc | **PKPbc** | **02 57 47.5** | **+1.6** |
| | comp=Z,1.5nm,0.4s,baz=62,slow=5.7,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **147.94** | **345** | PKPbc | **PKiKP** | **02 57 50.6** | **+0.3** |
| | comp=Z,1.2nm,0.6s,baz=166,slow=16,SNR=3.5 | | | | | | |

*IDC **19** 02:41:52.8±2.3, 18°.10S×178°.24W, h631km±28km, mb3.6/18, mbtmp4.6/19, Error ellipse: s-maj=15.6km s-min=14.8km az=115.0*

*NEIC **19** 02:41:52.0±1.9, 18°.09S±0°.08×178°.2W±0°.1, h620km±6km, mb4.3/79, Error ellipse: s-maj=17.0km s-min=11.5km az=83.0*

*NOU **19** 02:41:58.9, 18°.23S×178°.81W, h652km, mb4.6/15, Fiji Islands Region*

**ISC 19 02:41:53.9**±0.4, **18°.02S**±0°.08×**178°.21W**±0°.08, **h650**km, **n177**, σ1°**12**/174, **mb4.3**/58, **3C**, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.57** | **274** | P | **P** | **02 43 17.6** | **-2.9** |
| **AFI** | **Afiamalu** | **7.42** | **57** | P | **P** | **02 43 47.6** | **-2.4** |
| **NIUE** | **Niue** | **7.93** | **99** | P | **P** | **02 43 53.8** | **-0.6** |
| **FUNA** | **Funafuti** | **9.77** | **345** | P | **P** | **02 44 10.4** | **-1.2** |
| **LIFNC** | **LIFOU** | **13.99** | **256** | P | **P** | **02 44 50.3** | **-0.7** |
| **PINNC** | **Pines Island,** | **14.20** | **249** | P | **P** | **02 44 53.3** | **+0.4** |
| **DZM** | **Mont Dzumac** | **14.97** | **252** | P | **P** | **02 45 01.1** | **+1.1** |
| **DZM** | **Mont Dzumac** | **14.97** | **252** | P | **P** | **02 45 01.2** | **+1.2** |
| **DZM** | **Mont Dzumac** | **14.97** | **252** | P | **P** | **02 44 59.8** | **-0.3** |
| | 20nm,0.8s,baz=76,slow=11,SNR=24 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.10** | **252** | P | **P** | **02 45 01.9** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **16.71** | **259** | P | **P** | **02 45 17.6** | **+1.7** |
| **OUZ** | **Omahuta** | **18.61** | **201** | P | **P** | **02 45 35.3** | **+2.4** |
| **URZ** | **Urewera** | **20.57** | **191** | P | **P** | **02 45 48.0** | **-2.4** |
| | 6.7nm,0.8s,baz=94,slow=6.5,SNR=5.8 | | | | | | |
| | 6.7nm,0.8s | | | | | | |
| **BHW** | **Baring Head** | **24.05** | **193** | P | **P** | **02 46 19.2** | **-2.0** |
| **QRZ** | **Quartz Range** | **24.08** | **197** | P | **P** | **02 46 21.1** | **-0.4** |
| **MRNZ** | **Matariki Terra** | **24.55** | **197** | P | **P** | **02 46 24.4** | **-1.2** |
| **THZ** | **Tophouse** | **24.85** | **196** | P | **P** | **02 46 26.7** | **-1.7** |
| **DSZ** | **Denniston Nort** | **25.14** | **198** | P | **P** | **02 46 30.3** | **-0.6** |
| **KHZ** | **Kahutara** | **25.31** | **194** | P | **P** | **02 46 34.7** | **+2.4** |
| **KHZ** | **Kahutara** | **25.31** | **194** | P | **P** | **02 46 30.1** | **-2.1** |
| **RPZ** | **Rata Peaks** | **27.17** | **197** | P | **P** | **02 46 47.8** | **-0.8** |
| | 7.4nm,0.9s,baz=92,slow=17,SNR=2.0 | | | | | | |
| | 7.4nm,0.9s | | | | | | |
| **CNB** | **Canberra Magne** | **33.50** | **233** | P | **P** | **02 47 43.5** | **+0.8** |
| **CTA** | **Charters Tower** | **33.61** | **261** | P | **P** | **02 47 43.8** | **+0.1** |
| **CTAO** | **Charters Tower** | **33.61** | **261** | P | **P** | **02 47 43.8** | **+0.1** |
| **PMG** | **Port Moresby** | **34.66** | **280** | P | **P** | **02 47 53.5** | **+1.0** |
| **PMG** | **Port Moresby** | **34.66** | **280** | P | **P** | **02 47 52.5** | **0.0** |
| | 24nm,0.7s,baz=107,slow=6.6,SNR=7.3 | | | | | | |
| | 24nm,0.7s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.26** | **241** | P | **P** | **02 47 57.5** | **+0.4** |
| **MTSU** | **Mount Surprise** | **35.58** | **264** | P | **P** | **02 48 00.3** | **+0.3** |
| **QLP** | **Quilpie** | **35.67** | **249** | P | **P** | **02 48 00.8** | **+0.2** |
| **COEN** | **Coen** | **37.29** | **270** | P | **P** | **02 48 14.9** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.74** | **241** | P | **P** | **02 48 25.6** | **+0.2** |
| | 15nm,0.8s,baz=82,slow=8.5,SNR=17 | | | | | | |
| | 15nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.60** | **260** | P | **P** | **02 49 11.4** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 02 49 12.2 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.76** | **260** | P | **P** | **02 49 12.2** | **-0.4** |
| **WB2** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **02 49 12.7** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.79** | **260** | P | **P** | **02 49 11.9** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.79** | **260** | P | **P** | **02 49 12.8** | **-0.1** |
| | comp=Z,10nm,0.4s,baz=94,slow=7.1,SNR=76 | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.94** | **254** | P | **P** | **02 49 14.0** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 02 49 14.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **44.94** | **254** | P | **P** | **02 49 13.4** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.94** | **254** | P | **P** | **02 49 14.1** | **+0.1** |
| | comp=Z,35nm,0.6s,baz=86,slow=8.5,SNR=90 | | | | | | |
| | comp=Z,35nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **48.98** | **268** | P | **P** | **02 49 44.0** | **-0.1** |
| **FORT** | **Forrest** | **50.13** | **245** | P | **P** | **02 49 51.9** | **-0.3** |
| **KNRA** | **Kununurra** | **50.66** | **264** | P | **P** | **02 49 56.4** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 02 49 57.0 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.19** | **261** | P | **P** | **02 50 14.7** | **+0.4** |
| **SOEI** | **Soe** | **56.26** | **270** | P | **P** | **02 50 37.1** | **+1.4** |
| **PSA00** | **Pilbara Seismi** | **58.06** | **255** | P | **P** | **02 50 47.6** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | 02 50 48.3 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **58.23** | **256** | P | **P** | **02 50 48.0** | **-0.8** |
| MBWA | | | | IAmb | IAmb | 02 50 49.5 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.32** | **242** | P | **P** | **02 50 55.3** | **-0.6** |
| NWAO | | | | IAmb | IAmb | 02 51 03.2 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **MORW** | **Morawa** | **60.60** | **246** | P | **P** | **02 51 04.0** | **-0.5** |
| MORW | | | | IAmb | IAmb | 02 51 46.5 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **TOLI2** | **Tolitoli** | **62.92** | **281** | P | **P** | **02 51 20.7** | **+1.1** |
| TOLI2 | | | | IAmb | IAmb | 02 51 23.8 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **GIRL** | **Giralia** | **63.04** | **253** | P | **P** | **02 51 21.4** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **68.11** | **323** | P | **P** | **02 51 51.0** | **-0.3** |
| | comp=Z,3.9nm,0.8s,baz=157,slow=5.5,SNR=10 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **68.11** | **323** | P | **P** | **02 51 51.7** | **+0.4** |
| MAJO | | | | IAmb | IAmb | 02 51 52.4 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.12** | **323** | P | **P** | **02 51 51.7** | **+0.3** |
| **UGM** | **Wanagama** | **69.83** | **268** | P | **P** | **02 52 02.0** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | **02 52 14.2** | **+0.2** |
| | comp=Z,1.6nm,0.9s,baz=122,slow=1.3,SNR=2.6 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **SSLB** | **Suanglung** | **72.45** | **303** | P | **P** | **02 52 16.8** | **-0.3** |
| SSLB | | | | IAmb | IAmb | 02 52 21.3 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **TPUB** | **Ta-pu** | **72.48** | **302** | P | **P** | **02 52 16.6** | **-0.6** |
| **PEA0B** | **Petropavlovsk-** | **73.84** | **345** | P | **P** | **02 52 24.9** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **73.84** | **345** | P | **P** | **02 52 24.9** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **73.84** | **345** | P | **P** | **02 52 24.3** | **+0.1** |
| | comp=Z,4.8nm,0.6s,baz=114,slow=6.9,SNR=16 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **74.91** | **318** | P | **P** | **02 52 32.1** | **+1.6** |
| | comp=Z,0.9nm,0.6s,baz=134,slow=6.8,SNR=6.7 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **AFDM** | **Forest Hills D** | **77.94** | **42** | P | **P** | **02 52 47.4** | **+0.3** |
| **ORV** | **Oroville** | **77.95** | **41** | P | **P** | **02 52 47.1** | **0.0** |
| **YBH** | **Yreka Blue Hor** | **78.50** | **39** | P | **P** | **02 52 51.6** | **+1.6** |
| | comp=Z,2.2nm,0.6s,baz=208,slow=3.4,SNR=9.0 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.38** | **44** | P | **P** | **02 52 56.6** | **+1.7** |
| | comp=Z,1.4nm,0.7s,baz=222,slow=8.5,SNR=11 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **L14K** | **Kuka Creek** | **80.07** | **8** | P | **P** | **02 52 58.7** | **+1.1** |
| L14K | | | | IAmb | IAmb | 02 53 33.8 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **M16K** | **Timber Creek** | **80.28** | **9** | P | **P** | **02 53 00.6** | **+1.8** |
| **J05D** | **Fort Rock, OR** | **80.30** | **38** | P | **P** | **02 53 01.6** | **+2.1** |
| J05D | | | | IAmb | IAmb | 02 53 02.1 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **H04A** | **Detroit Lake** | **80.57** | **37** | P | **P** | **02 53 01.7** | **+1.0** |
| **PINE** | **Pine Mountain** | **80.77** | **38** | P | **P** | **02 53 02.2** | **+0.2** |
| PINE | | | | IAmb | IAmb | 02 53 04.7 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **N19K** | **Bonanza Creek** | **80.86** | **12** | P | **P** | **02 53 02.0** | **+0.1** |
| N19K | | | | IAmb | IAmb | 02 53 22.4 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **L16K** | **Owhat River** | **80.86** | **9** | P | **P** | **02 53 03.1** | **+1.4** |
| **M17K** | **Holitna River** | **80.88** | **10** | P | **P** | **02 53 03.4** | **+1.5** |
| M17K | | | | IAmb | IAmb | 02 53 04.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.13** | **8** | P | **P** | **02 53 04.8** | **+1.7** |
| K15K | | | | IAmb | IAmb | 02 53 05.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **L18K** | **Granite Mounta** | **81.78** | **10** | P | **P** | **02 53 08.0** | **+1.6** |
| L18K | | | | IAmb | IAmb | 02 53 08.3 | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **I07A** | **Izee** | **81.78** | **38** | P | **P** | **02 53 08.7** | **+1.6** |
| **M19K** | **Big River Lodg** | **81.88** | **11** | P | **P** | **02 53 07.6** | **+0.7** |
| M19K | | | | IAmb | IAmb | 02 53 43.6 | |
| | comp=Z,8.6nm,1.2s | | | | | | |
| **BELA** | **Belgrano 2** | **82.03** | **173** | P | **P** | **02 53 07.8** | **+0.2** |
| **L19K** | **White Mountain** | **82.06** | **11** | P | **P** | **02 53 09.2** | **+1.3** |
| **LCMT** | **Little Creek M** | **82.07** | **47** | P | **P** | **02 53 10.4** | **+1.7** |
| **J16K** | **Anvik River** | **82.21** | **8** | P | **P** | **02 53 10.0** | **+1.5** |
| J16K | | | | IAmb | IAmb | 02 53 35.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **U15A** | **North Rim** | **82.46** | **48** | P | **P** | **02 53 12.8** | **+2.0** |
| **GLI** | **Glacier Island** | **82.52** | **15** | P | **P** | **02 53 10.6** | **+0.4** |
| GLI | | | | IAmb | IAmb | 02 53 23.5 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **J17K** | **VABM Dome** | **82.52** | **9** | P | **P** | **02 53 11.4** | **+1.3** |
| J17K | | | | IAmb | IAmb | 02 53 54.2 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **G08A** | **Pilot Rock** | **82.79** | **38** | P | **P** | **02 53 13.7** | **+1.7** |
| **GHO** | **Glory Hole Cre** | **82.88** | **14** | P | **P** | **02 53 12.6** | **+0.6** |
| GHO | | | | IAmb | IAmb | 02 53 13.1 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **J18K** | **Innoko River** | **82.94** | **10** | P | **P** | **02 53 13.4** | **+1.2** |
| J18K | | | | IAmb | IAmb | 02 53 13.9 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **E07A** | **Sunnyside** | **83.00** | **36** | P | **P** | **02 53 14.9** | **+2.0** |
| **U33K** | **Whale Pass** | **83.02** | **24** | P | **P** | **02 53 13.6** | **+0.9** |
| **K20K** | **Telida** | **83.28** | **11** | P | **P** | **02 53 14.8** | **+0.8** |
| K20K | | | | IAmb | IAmb | 02 53 16.1 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.29** | **14** | P | **P** | **02 53 14.7** | **+0.6** |
| **J19K** | **Poorman** | **83.61** | **10** | P | **P** | **02 53 16.9** | **+1.3** |
| J19K | | | | IAmb | IAmb | 02 53 29.5 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **TABL** | **Table Mountain** | **83.72** | **18** | P | **P** | **02 53 17.4** | **+1.0** |
| TABL | | | | IAmb | IAmb | 02 53 17.9 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.76** | **15** | P | **P** | **02 53 17.1** | **+0.7** |
| N25K | | | | IAmb | IAmb | 02 53 17.8 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **GLB** | **Gilahina Butte** | **83.83** | **16** | P | **P** | **02 53 17.4** | **+0.7** |
| GLB | | | | IAmb | IAmb | 02 53 56.2 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **SEY** | **Seymchan** | **83.93** | **347** | P | **P** | **02 53 17.5** | **+0.5** |
| | comp=Z,4.4nm,0.5s,baz=144,slow=6.3,SNR=11 | | | | | | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **J20K** | **Nowinta River** | **84.03** | **10** | P | **P** | **02 53 18.2** | **+0.7** |
| **RND** | **Reindeer** | **84.34** | **13** | P | **P** | **02 53 19.7** | **+0.5** |
| RND | | | | IAmb | IAmb | 02 53 20.2 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **DHY** | **Denali Highway** | **84.37** | **14** | P | **P** | **02 53 19.7** | **+0.2** |
| DHY | | | | IAmb | IAmb | 02 53 20.3 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **S34M** | **Telegraph Cree** | **85.08** | **23** | P | **P** | **02 53 23.2** | **+0.5** |
| **HDA** | **Harding Lake** | **85.63** | **13** | P | **P** | **02 53 25.4** | **+0.1** |
| HDA | | | | IAmb | IAmb | 02 53 26.3 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.66** | **13** | P | **P** | **02 53 25.4** | **+0.1** |
| CCB | | | | IAmb | IAmb | 02 53 25.5 | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **MDM** | **Murphy Dome** | **85.84** | **12** | P | **P** | **02 53 25.9** | **-0.4** |
| MDM | | | | IAmb | IAmb | 02 53 26.4 | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.90** | **58** | P | **P** | **02 53 30.0** | **+2.5** |
| **TXAR** | **Lajitas Array** | **85.90** | **58** | P | **P** | **02 53 29.9** | **+2.4** |
| | comp=Z,2.2nm,0.7s,baz=215,slow=6.1,SNR=20 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **IL31** | | **85.96** | **13** | P | **P** | **02 53 26.2** | **-0.5** |
| IL31 | | | | IAmb | IAmb | 02 53 27.4 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **85.96** | **13** | P | **P** | **02 53 26.3** | **-0.5** |
| **ILAR** | **Eielson Array** | **85.96** | **13** | P | **P** | **02 53 26.7** | **-0.1** |
| | comp=Z,1.6nm,0.5s,baz=221,slow=4.9,SNR=33 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **IL03** | **Eielson Array** | **85.97** | **13** | P | **P** | **02 53 27.0** | **+0.2** |
| **M29M** | **Somme Creek** | **86.10** | **17** | P | **P** | **02 53 28.2** | **+0.6** |
| **POKR** | **Poker Plat Res** | **86.14** | **13** | P | **P** | **02 53 27.3** | **-0.4** |
| POKR | | | | IAmb | IAmb | 02 53 28.0 | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **J25K** | **Salcha River,** | **86.15** | **14** | P | **P** | **02 53 28.3** | **+0.5** |
| J25K | | | | IAmb | IAmb | 02 53 28.8 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **E18K** | **Tukpahlearik C** | **86.19** | **7** | P | **P** | **02 53 28.3** | **+0.5** |
| E18K | | | | IAmb | IAmb | 02 54 00.5 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **86.21** | **40** | P | **P** | **02 53 30.5** | **+1.7** |
| **G21K** | **Allakaket** | **86.29** | **10** | P | **P** | **02 53 28.7** | **+0.4** |
| G21K | | | | IAmb | IAmb | 02 53 29.7 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **86.45** | **9** | P | **P** | **02 53 29.9** | **+0.8** |
| **J26L** | **Joseph Creek** | **86.47** | **14** | P | **P** | **02 53 30.4** | **+1.0** |
| **E19K** | **Redstone River** | **86.63** | **8** | P | **P** | **02 53 30.7** | **+0.8** |
| E19K | | | | IAmb | IAmb | 02 53 30.9 | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **BPMT** | **Black Pine Rid** | **86.65** | **39** | P | **P** | **02 53 28.4** | **-2.4** |
| **F21K** | **Alatna River** | **86.95** | **9** | P | **P** | **02 53 32.1** | **+0.7** |
| F21K | | | | IAmb | IAmb | 02 53 47.8 | |
| | comp=Z,7.6nm,1.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.31** | **43** | P | **P** | **02 53 35.0** | **+1.1** |
| | comp=Z,1.4nm,0.6s,baz=212,slow=3.0,SNR=11 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.10** | **290** | P | **P** | **02 53 43.9** | **+1.4** |
| | comp=Z,2.0nm,0.7s,baz=107,slow=2.2,SNR=11 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.19** | **180** | ⇑P | **P** | **02 53 46.9** | **+0.2** |
| | comp=Z,63nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.48** | **179** | ⇑P | **P** | **02 53 48.2** |

*MEX* ***19*** *02:42:57.4±0.8, 15°.52N×93°.67W, h79km±8km, MD4.5*
**ISC 19 02:42:54.6**±1.2, **15°.51N**±0°.04×**93°.64W**±0°.03, **h95**km±10km, **n40**, σ2s**43**/69, **Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.45** | **64** | *eP* | **Pn** | **02 43 09.3** | **-0.2** |
| PCIG | | | | *eS* | **Sn** | **02 43 18.7** | **-2.0** |
| **CARR** | **Arriaga** | **0.78** | **341** | *eP* | **Pn** | **02 43 13.2** | **+0.8** |
| CARR | | | | *eS* | **Sn** | **02 43 25.5** | **-0.1** |
| **TGIG** | | **1.36** | **22** | *i* P | **Pn** | **02 43 19.9** | **+0.9** |
| TGIG | | | | *eS* | **Sn** | **02 43 36.0** | **-1.3** |
| **TGBT** | **Tuxtla Gutierr** | **1.37** | **23** | *i* P | **Pn** | **02 43 19.6** | **+0.6** |
| TGBT | | | | *i* S | **Sn** | **02 43 36.8** | **-0.6** |
| **NILT** | **Santiago Nilte** | **1.41** | **318** | *eP* | **Pn** | **02 43 21.2** | **+1.7** |
| NILT | | | | *eS* | **Sn** | **02 43 39.3** | **+1.0** |
| **PAVE** | **Pavencul** | **1.45** | **102** | *i* P | **Pn** | **02 43 21.9** | **+1.7** |
| PAVE | | | | *eS* | **Sn** | **02 43 40.4** | **+0.8** |
| **THIG** | | **1.46** | **114** | *eP* | **Pn** | **02 43 21.6** | **+1.5** |
| THIG | | | | *eS* | **Sn** | **02 43 39.2** | **-0.2** |
| **CHUJ** | **Union Juarez** | **1.54** | **105** | *i* P | **Pn** | **02 43 22.5** | **+1.2** |
| CHUJ | | | | *eS* | **Sn** | **02 43 42.0** | **+0.5** |
| **CCIG** | **Comitan** | **1.64** | **62** | *eP* | **Pn** | **02 43 24.3** | **+1.7** |
| CCIG | | | | *eS* | **Sn** | **02 43 41.1** | **-2.7** |
| **UXUV** | **UXUV** | **1.86** | **345** | *eP* | **Pn** | **02 43 27.8** | **+2.5** |
| UXUV | | | | *eS* | **Sn** | **02 43 48.6** | **0.0** |
| **CMIG** | **Matias Romero** | **1.97** | **323** | *eP* | **Pn** | **02 43 28.3** | **+1.6** |
| CMIG | | | | *eS* | **Sn** | **02 43 50.0** | **-1.1** |
| **HUEH** | **Huehuetenango** | **2.07** | **95** | *eP* | **Pn** | **02 43 30.4** | **+2.3** |
| HUEH | | | | *eS* | **Sn** | **02 43 50.1** | **-3.7** |
| **RTAL** | **Retalhuleu** | **2.12** | **117** | *eP* | **Pn** | **02 43 31.0** | **+2.4** |
| RTAL | | | | *eS* | **Sn** | **02 43 55.3** | **+0.7** |
| **STG3** | **Santiaguito 3,** | **2.15** | **111** | *eP* | **Pn** | **02 43 28.5** | **-0.6** |
| STG3 | | | | *eS* | **Sn** | **02 43 56.8** | **+1.2** |
| **SULM** | **Suchitepequez,** | **2.34** | **121** | *eP* | **Pn** | **02 43 28.5** | **-2.9** |
| **HUIG** | **Huatulco** | **2.39** | **277** | *eP* | **Pn** | **02 43 32.9** | **+0.8** |
| HUIG | | | | *eS* | **Sn** | **02 43 56.9** | **-3.9** |
| **FUG** | **Fuego 3** | **2.91** | **111** | *eP* | **Pn** | **02 43 42.3** | **+3.1** |
| FUG | | | | *eS* | **Sn** | **02 44 14.3** | **+0.8** |
| **NEUV** | **Arroyo Zacate** | **3.02** | **317** | *eP* | **Pn** | **02 43 42.1** | **+1.6** |
| NEUV | | | | *eS* | **Sn** | **02 44 14.4** | **-1.4** |
| **PMUV** | **Sontecomapan** | **3.33** | **335** | *eP* | Pn | 02 43 53.4 | +8.5 |
| PMUV | | | | *eS* | **Sn** | **02 44 19.3** | **-4.3** |
| **VHO** | **Vista Hermosa** | **3.35** | **298** | *eP* | **Pn** | **02 43 49.8** | **+4.6** |
| VHO | | | | *eS* | **Sn** | **02 44 24.1** | **0.0** |
| **PEIG** | **Puerto Escondi** | **3.41** | **279** | *eP* | **Pn** | **02 43 46.7** | **+0.9** |
| PEIG | | | | *eS* | **Sn** | **02 44 20.9** | **-4.4** |
| **PETF** | **Flores** | **3.89** | **68** | *eP* | **Pn** | **02 43 51.4** | **-0.8** |
| PETF | | | | *eS* | **Sn** | **02 44 35.6** | **-1.2** |
| **YOIG** | **Yosondua** | **3.98** | **290** | *eP* | **Pn** | **02 43 57.6** | **+3.9** |
| YOIG | | | | *eS* | **Sn** | **02 44 38.9** | **-0.6** |
| **SCIG** | **Sabancuy** | **4.17** | **34** | *eP* | **Pn** | **02 43 57.7** | **+1.7** |
| SCIG | | | | *eS* | **Sn** | **02 44 41.7** | **-1.8** |
| **TXIG** | **Tlaxiaco** | **4.32** | **294** | *eP* | **Pn** | **02 44 02.4** | **+4.1** |
| TXIG | | | | *eS* | **Sn** | **02 44 50.8** | **+3.0** |
| **PNIG** | **Pinotepa** | **4.40** | **282** | *eP* | **Pn** | **02 44 02.0** | **+2.8** |
| PNIG | | | | *eS* | **Sn** | **02 44 44.3** | **-5.1** |
| **TPIG** | **Tehuac#an** | **4.59** | **310** | *eP* | **Sn** | **02 44 04.3** | **+2.5** |
| TPIG | | | | *eS* | **Sn** | **02 44 52.6** | **-1.5** |
| **HLIG** | **Huajuapan de L** | **4.61** | **301** | *eP* | Pn | 02 44 07.4 | +5.3 |
| HLIG | | | | *eS* | **Sn** | **02 44 54.8** | **+0.1** |
| **JAUV** | **Jalcomulco** | **4.88** | **322** | *i* P | **Pn** | **02 44 06.5** | **+0.8** |
| JAUV | | | | *eS* | **Sn** | **02 44 59.8** | **-1.3** |
| **FTIG** | **Fresnillo de T** | **4.92** | **300** | *eP* | Pn | 02 44 12.2 | +5.8 |
| FTIG | | | | *eS* | **Sn** | **02 45 01.1** | **-1.0** |
| **LVIG** | **Laguna Verde** | **4.96** | **328** | *e* | **Pn** | **02 44 05.4** | **-1.3** |
| LVIG | | | | *e* | | 02 44 54.0 | |
| **MGIG** | **Malinaltepec** | **5.09** | **290** | *eP* | **Pn** | **02 44 10.4** | **+1.7** |
| MGIG | | | | *eS* | **Sn** | **02 45 03.9** | **-2.4** |
| **TLIG** | **Tlapa** | **5.14** | **294** | *eP* | **Pn** | **02 44 12.6** | **+3.2** |
| TLIG | | | | *eS* | Sn | 02 44 57.3 | -10 |
| **CRIG** | **Cruz Grande** | **5.41** | **284** | *e* | **Pn** | **02 44 14.2** | **+1.3** |
| CRIG | | | | *e* | | 02 45 04.9 | |
| **DAIG** | **Los Arroyos** | **5.96** | **285** | *e* | Sn | 02 45 17.6 | -10 |
| **CXUV** | **Coxquihui** | **5.97** | **322** | *i* P | **Pn** | **02 44 22.5** | **+2.0** |
| CXUV | | | | *eS* | **Sn** | **02 45 25.9** | **-1.7** |
| **YAIG** | **Yautepec** | **6.16** | **304** | *eP* | **Pn** | **02 44 23.6** | **+0.4** |
| YAIG | | | | *eS* | **Sn** | **02 45 30.3** | **-2.1** |
| **MEIG** | **Mezcala** | **6.21** | **294** | *eP* | **Pn** | **02 44 28.4** | **+4.6** |
| MEIG | | | | *eS* | **Sn** | **02 45 26.5** | **-7.0** |
| **PLIG** | **Platanillo** | **6.30** | **298** | *eS* | **Sn** | **02 45 33.3** | **-2.3** |
| **ARIG** | **Puente Sto Nin** | **6.99** | **294** | *eP* | Pn | 02 44 39.4 | +5.0 |
| ARIG | | | | *eS* | **Sn** | **02 45 48.7** | **-3.6** |

*NEIC* ***19*** *02:43:05.8±1.9, 18°.2S±0°.1×178°.1W±0°.1, h523km±8km, mb4.4/150, Error ellipse: s-maj=20.2km s-min=15.3km az=129.0*
*IDC* ***19*** *02:43:07.8±2.3, 18°.18S×178°.29W, h546km±27km, mb3.7/20, mbtmp4.6/21, Error ellipse: s-maj=14.6km s-min=11.1km az=137.0*
**ISC 19 02:43:07.8**±0.4, **18°.12S**±0°.08×**178°.18W**±0°.07, **h550**km, **n197**, σ1s**13**/200, **mb4.4**/94, **5C**, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.61** | **276** | P | **P** | **02 44 28.1** | **+1.2** |
| **AFI** | **Afiamalu** | **7.44** | **57** | P | **P** | **02 44 57.7** | **-2.5** |
| AFI | | | | S | **S** | **02 46 27.6** | **-4.6** |
| **NIUE** | **Niue** | **7.88** | **98** | P | **P** | **02 45 03.8** | **-0.5** |
| **FUNA** | **Funafuti** | **9.87** | **345** | P | **P** | **02 45 24.1** | **-0.4** |
| **LIFNC** | **LIFOU** | **14.01** | **257** | P | **P** | **02 46 04.9** | **-2.2** |
| **PINNC** | **Pines Island,** | **14.20** | **249** | P | **P** | **02 46 08.3** | **-0.7** |
| **RAR** | **Rarotonga** | **17.60** | **103** | P | **P** | **02 46 41.4** | **-0.6** |
| | 6.4nm,0.5s,baz=140,slow=12,SNR=1.5 | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.31** | **195** | P | **P** | **02 47 06.9** | **+0.4** |
| TOZ | | | | IAmb | IAmb | 02 47 08.8 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **URZ** | **Urewera** | **20.48** | **191** | P | **P** | **02 47 05.5** | **-2.5** |
| | comp=Z,13nm,0.4s,baz=2.1,slow=2.6,SNR=18 | | | | | | |
| | comp=Z,13nm,0.4s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.85** | **191** | P | **P** | **02 47 10.5** | **-1.0** |
| RTZ | | | | IAmb | IAmb | 02 47 33.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **BFZ** | **Birch Farm** | **22.99** | **191** | P | **P** | **02 47 28.7** | **-1.8** |
| **MRZ** | **Mangatainoka R** | **23.10** | **192** | P | **P** | **02 47 30.1** | **-1.4** |
| **SNZO** | **South Karori** | **23.90** | **193** | P | **P** | **02 47 37.0** | **-1.6** |
| **BHW** | **Baring Head** | **23.96** | **193** | P | **P** | **02 47 37.1** | **-2.0** |
| **QRZ** | **Quartz Range** | **24.00** | **198** | P | **P** | **02 47 39.4** | **0.0** |
| **PLWZ** | **Palliser** | **24.04** | **192** | P | **P** | **02 47 38.4** | **-1.5** |
| **TKNZ** | **Takaka Hill** | **24.07** | **197** | P | **P** | **02 47 38.9** | **-1.3** |
| **NNZ** | **Nelson** | **24.13** | **196** | P | **P** | **02 47 39.1** | **-1.5** |
| **DSZ** | **Denniston Nort** | **25.06** | **198** | P | **P** | **02 47 48.3** | **-0.6** |
| **KHZ** | **Kahutara** | **25.22** | **194** | P | **P** | **02 47 48.5** | **-1.7** |
| KHZ | | | | IAmb | IAmb | 02 47 50.9 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **LTZ** | **Lake Taylor** | **25.89** | **196** | P | **P** | **02 47 54.8** | **-1.4** |
| LTZ | | | | IAmb | IAmb | 02 47 57.1 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **INZ** | **Inchbonnie** | **26.06** | **198** | P | **P** | **02 47 56.9** | **-0.8** |
| **OXZ** | **Oxford** | **26.45** | **196** | P | **P** | **02 47 59.5** | **-1.6** |
| OXZ | | | | IAmb | IAmb | 02 48 03.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **MQZ** | **McQueen's Vall** | **26.65** | **195** | P | **P** | **02 48 01.0** | **-1.9** |
| **RPZ** | **Rata Peaks** | **27.08** | **197** | P | **P** | **02 48 06.5** | **-0.2** |
| RPZ | | | | IAmb | IAmb | 02 48 10.0 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.08** | **197** | P | **P** | **02 48 06.8** | **+0.1** |
| | comp=Z,10nm,0.8s,baz=213,slow=9.5,SNR=3.6 | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.29** | **199** | P | **P** | **02 48 07.5** | **-0.9** |
| **LBZ** | **Lake Benmore** | **27.95** | **198** | P | **P** | **02 48 12.6** | **-1.6** |
| LBZ | | | | IAmb | IAmb | 02 48 19.9 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **ODZ** | **Otahua Downs** | **28.42** | **197** | P | **P** | **02 48 17.0** | **-1.3** |
| ODZ | | | | IAmb | IAmb | 02 48 17.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WKZ** | **Wanaka** | **28.70** | **199** | P | **P** | **02 48 19.9** | **-0.9** |
| **MLZ** | **Mavora Lakes** | **29.47** | **200** | P | **P** | **02 48 27.7** | **+0.2** |
| **DCZ** | **Deep Cove** | **29.88** | **201** | P | **P** | **02 48 30.6** | **-0.3** |
| **WHZ** | **Wether Hill Ro** | **29.99** | **200** | P | **P** | **02 48 31.9** | **-0.1** |
| **ARMA** | **Armidale** | **30.02** | **240** | P | **P** | **02 48 33.2** | **+0.7** |
| **CTAO** | **Charters Tower** | **33.63** | **261** | P | P | 02 49 07.3 | +4.0 |
| CTAO | | | | IAmb | IAmb | 02 49 39.6 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **33.75** | **233** | P | **P** | **02 49 04.1** | **-0.1** |
| **PMG** | **Port Moresby** | **34.71** | **280** | P | **P** | **02 49 12.5** | **+0.1** |
| | comp=Z,6.0nm,0.6s,baz=209,slow=19,SNR=1.6 | | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.72** | **241** | P | **P** | **02 49 45.7** | **+0.5** |
| | comp=Z,3.5nm,0.6s,baz=73,slow=10,SNR=2.8 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.81** | **260** | P | **P** | **02 50 32.9** | **-0.4** |
| | comp=Z,2.6nm,0.5s,baz=96,slow=6.8,SNR=5.9 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 52 03.8** | **+0.4** |
| | comp=Z,1.0nm,0.8s,baz=102,slow=3.4,SNR=3.4 | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.94** | **254** | P | **P** | **02 50 34.0** | **-0.3** |
| | comp=Z,5.2nm,0.5s,baz=87,slow=8.4,SNR=7.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 52 04.0** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=104,slow=3.2,SNR=2.4 | | | | | | |
| ASAR | | | | S | **S** | **02 56 29.4** | **-3.5** |
| | comp=Z,2.5nm,1.0s,baz=92,slow=15,SNR=6.1 | | | | | | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.21** | **323** | P | **P** | **02 53 13.7** | **0.0** |
| | comp=Z,2.0nm,0.5s,baz=155,slow=5.8,SNR=8.0 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.93** | **180** | P | **P** | **02 53 36.5** | **+1.0** |
| | comp=Z,3.4nm,0.6s,baz=211,slow=0.8,SNR=16 | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.94** | **345** | P | **P** | **02 53 46.8** | **-0.1** |
| | comp=Z,5.3nm,0.6s,baz=113,slow=7.1,SNR=12 | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.91** | **326** | P | **P** | **02 54 05.0** | **+1.4** |
| | comp=Z,1.2nm,0.6s,baz=93,slow=8.7,SNR=2.7 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **CMB** | **Columbia Colle** | **77.84** | **43** | P | **P** | **02 54 10.3** | **+1.4** |
| **OHAK** | **Old Harbor** | **77.89** | **14** | P | **P** | **02 54 09.1** | **+0.5** |
| **MDPB** | **Devils Postpil** | **78.48** | **44** | P | **P** | **02 54 14.3** | **+1.7** |
| **YBH** | **Yreka Blue Hor** | **78.55** | **39** | P | **P** | **02 54 14.4** | **+1.8** |
| **KDAK** | **Kodiak Island** | **78.56** | **14** | P | **P** | **02 54 13.1** | **+0.9** |
| **KDAK** | **Kodiak Island** | **78.56** | **14** | P | **P** | **02 54 12.5** | **+0.3** |
| | comp=Z,7.1nm,0.6s,baz=267,slow=4.0,SNR=1.4 | | | | | | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| **WAKR** | **Walker** | **78.73** | **43** | P | **P** | **02 54 15.7** | **+1.9** |
| **PNTR** | **Pine Nut** | **78.95** | **43** | P | **P** | **02 54 16.5** | **+1.5** |
| PNTR | | | | IAmb | IAmb | 02 54 18.0 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **DSP** | **Deep Springs** | **79.07** | **45** | P | **P** | **02 54 17.2** | **+1.8** |
| **YERR** | **Yerington** | **79.12** | **43** | P | **P** | **02 54 17.4** | **+1.4** |
| **O16K** | **Kokwok River B** | **79.16** | **10** | P | **P** | **02 54 15.0** | **-0.3** |
| O16K | | | | IAmb | IAmb | 02 54 33.8 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **N15K** | **Kwethluk River** | **79.38** | **9** | P | **P** | **02 54 17.3** | **+0.7** |
| N15K | | | | IAmb | IAmb | 02 54 52.4 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.43** | **44** | P | **P** | **02 54 19.2** | **+1.6** |
| **NVAR** | **Mina Array Bea** | **79.43** | **44** | P | **P** | **02 54 19.1** | **+1.5** |
| | comp=Z,2.8nm,0.7s,baz=224,slow=9.5,SNR=20 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **GMN** | **Gold Mountain** | **79.51** | **45** | P | **P** | **02 54 19.0** | **+1.0** |
| **NV11** | **Mina Array Sit** | **79.53** | **44** | P | **P** | **02 54 19.1** | **+1.1** |
| **M14K** | **Bethel** | **79.68** | **8** | P | **P** | **02 54 18.9** | **+0.8** |
| **L14K** | **Kuka Creek** | **80.16** | **8** | P | **P** | **02 54 22.0** | **+1.4** |
| **J05D** | **Fort Rock, OR** | **80.35** | **38** | P | **P** | **02 54 23.9** | **+1.6** |
| J05D | | | | IAmb | IAmb | 02 54 24.8 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **M16K** | **Timber Creek** | **80.37** | **9** | P | **P** | **02 54 23.2** | **+1.5** |
| M16K | | | | IAmb | IAmb | 02 54 24.2 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **CNPM** | **China Poot** | **80.44** | **14** | P | **P** | **02 54 22.6** | **+0.6** |
| **N18K** | **Kilae Creek** | **80.56** | **11** | P | **P** | **02 54 22.3** | **-0.4** |
| N18K | | | | IAmb | IAmb | 02 54 55.4 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **H04A** | **Detroit Lake** | **80.63** | **37** | P | **P** | **02 54 24.3** | **+0.8** |
| H04A | | | | IAmb | IAmb | 02 54 25.2 | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **PINE** | **Pine Mountain** | **80.82** | **38** | P | **P** | **02 54 26.3** | **+1.6** |
| PINE | | | | IAmb | IAmb | 02 54 27.3 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **SMAI** | **San Martin Ant** | **80.88** | **159** | P | **P** | **02 54 26.1** | **+1.7** |
| **N19K** | **Bonanza Creek** | **80.94** | **12** | P | **P** | **02 54 24.5** | **-0.3** |
| N19K | | | | IAmb | IAmb | 02 54 49.1 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **L16K** | **Owhat River** | **80.95** | **9** | P | **P** | **02 54 25.7** | **+1.0** |
| L16K | | | | IAmb | IAmb | 02 54 27.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **M17K** | **Holitna River** | **80.97** | **10** | P | **P** | **02 54 26.3** | **+1.5** |
| **E03A** | **Lebam** | **81.00** | **35** | P | **P** | **02 54 26.9** | **+1.6** |
| E03A | | | | IAmb | IAmb | 02 54 27.5 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **BMN** | **Battle Mountai** | **81.22** | **42** | P | **P** | **02 54 27.8** | **+1.1** |
| **K15K** | **Wolf Creek Mou** | **81.22** | **8** | P | **P** | **02 54 27.6** | **+1.6** |
| **NLWA** | **Neilton Lookou** | **81.36** | **34** | P | **P** | **02 54 27.6** | **+0.4** |
| NLWA | | | | IAmb | IAmb | 02 54 45.7 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **MA2** | **Magadan** | **81.46** | **345** | P | **P** | **02 54 26.5** | **-0.9** |
| | comp=Z,5.1nm,0.6s,baz=181,slow=23,SNR=1.7 | | | | | | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| **SPU** | **Mount Spurr** | **81.76** | **12** | P | **P** | **02 54 28.8** | **-0.2** |
| **I07A** | **Izee** | **81.84** | **38** | P | **P** | **02 54 31.4** | **+1.6** |
| I07A | | | | IAmb | IAmb | 02 54 32.2 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **L18K** | **Granite Mounta** | **81.87** | **10** | P | **P** | **02 54 30.8** | **+1.5** |
| L18K | | | | IAmb | IAmb | 02 54 31.4 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **BELA** | **Belgrano 2** | **81.93** | **173** | P | **P** | **02 54 29.8** | **+0.2** |
| **M19K** | **Big River Lodg** | **81.97** | **11** | P | **P** | **02 54 30.0** | **0.0** |
| M19K | | | | IAmb | IAmb | 02 54 52.7 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **J08A** | **Circle Bar Ran** | **82.04** | **39** | P | **P** | **02 54 31.6** | **+0.8** |
| J08A | | | | IAmb | IAmb | 02 54 33.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **K17K** | **Iditarod** | **82.08** | **9** | P | **P** | **02 54 31.3** | **+0.9** |
| K17K | | | | IAmb | IAmb | 02 54 33.6 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| **LCMT** | **Little Creek M** | **82.11** | **47** | P | **P** | **02 54 31.2** | **-0.3** |
| **CLRS** | **Cowichan Lake** | **82.12** | **33** | P | **P** | **02 54 31.8** | **+0.9** |
| CLRS | | | | IAmb | IAmb | 02 55 10.8 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **L19K** | **White Mountain** | **82.14** | **11** | P | **P** | **02 54 31.7** | **+0.9** |
| L19K | | | | IAmb | IAmb | 02 54 59.7 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **PWL** | **Port Wells** | **82.29** | **14** | P | **P** | **02 54 31.3** | **-0.2** |
| PWL | | | | IAmb | IAmb | 02 54 58.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **J16K** | **Anvik River** | **82.30** | **8** | P | **P** | **02 54 32.8** | **+1.3** |
| J16K | | | | IAmb | IAmb | 02 54 33.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **PGC** | **Sidney** | **82.37** | **33** | P | **P** | **02 54 32.7** | **+0.5** |
| PGC | | | | IAmb | IAmb | 02 54 45.7 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **KNB** | **Kanab** | **82.41** | **47** | P | **P** | **02 54 34.7** | **+1.7** |
| **PSUT** | **Pine Spring** | **82.45** | **45** | P | **P** | **02 54 34.2** | **+1.0** |
| **U15A** | **North Rim** | **82.50** | **48** | P | **P** | **02 54 35.5** | **+1.9** |
| U15A | | | | IAmb | IAmb | 02 54 36.5 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **GLI** | **Glacier Island** | **82.60** | **15** | P | **P** | **02 54 33.0** | **-0.2** |
| **J17K** | **VABM Dome** | **82.61** | **9** | P | **P** | **02 54 34.3** | **+1.2** |
| J17K | | | | IAmb | IAmb | 02 55 05.0 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **PMR** | **Palmer** | **82.76** | **14** | P | **P** | **02 54 33.9** | **+0.1** |
| PMR | | | | IAmb | IAmb | 02 54 34.2 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **G08A** | **Pilot Rock** | **82.84** | **38** | P | **P** | **02 54 36.0** | **+1.2** |
| **I17K** | **Unalakleet** | **82.87** | **8** | P | **P** | **02 54 35.5** | **+1.2** |
| I17K | | | | IAmb | IAmb | 02 54 37.1 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.96** | **14** | P | **P** | **02 54 35.3** | **+0.3** |
| **J18K** | **Innoko River** | **83.03** | **10** | P | **P** | **02 54 36.0** | **+0.7** |
| J18K | | | | IAmb | IAmb | 02 54 36.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **U33K** | **Whale Pass** | **83.10** | **24** | P | **P** | **02 54 36.7** | **+1.0** |
| U33K | | | | IAmb | IAmb | 02 55 01.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **SNH** | **Sunshine Point** | **83.11** | **17** | P | **P** | **02 54 36.4** | **+0.7** |
| **SML** | **Sawmill** | **83.13** | **14** | P | **P** | **02 54 35.5** | **-0.3** |
| SML | | | | IAmb | IAmb | 02 54 41.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **DIV** | **Divide** | **83.14** | **15** | P | **P** | **02 54 36.2** | **+0.3** |
| DIV | | | | IAmb | IAmb | 02 54 36.9 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **HAWA** | **Hanford** | **83.14** | **37** | P | **P** | **02 54 37.3** | **+1.1** |
| HAWA | | | | IAmb | IAmb | 02 54 38.4 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **BMRM** | **Bremner River** | **83.30** | **16** | P | **P** | **02 54 37.2** | **+0.5** |
| BMRM | | | | IAmb | IAmb | 02 54 37.7 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **WAX** | **Waxell Ridge** | **83.33** | **17** | P | **P** | **02 54 37.5** | **+0.7** |
| WAX | | | | IAmb | IAmb | 02 54 38.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MESA** | **MESA** | **83.36** | **17** | P | **P** | **02 54 38.2** | **+1.1** |
| **K20K** | **Telida** | **83.37** | **11** | P | **P** | **02 54 37.4** | **+0.5** |
| K20K | | | | IAmb | IAmb | 02 54 38.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.38** | **14** | P | **P** | **02 54 37.6** | **+0.5** |
| **J19K** | **Poorman** | **83.70** | **10** | P | **P** | **02 54 39.6** | **+1.0** |
| J19K | | | | IAmb | IAmb | 02 54 40.2 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **TABL** | **Table Mountain** | **83.80** | **17** | P | **P** | **02 54 39.6** | **+0.2** |
| **N25K** | **Chitina, Valde** | **83.85** | **15** | P | **P** | **02 54 39.9** | **+0.5** |
| **GRNC** | **Granite Creek** | **83.87** | **17** | P | **P** | **02 54 40.3** | **+0.6** |
| GRNC | | | | IAmb | IAmb | 02 54 41.0 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **83.89** | **15** | P | **P** | **02 54 40.7** | **+1.1** |
| **GLB** | **Gilahina Butte** | **83.91** | **16** | P | **P** | **02 54 39.5** | **-0.1** |
| GLB | | | | IAmb | IAmb | 02 54 40.4 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **84.03** | **347** | P | **P** | **02 54 40.5** | **+0.3** |
| | comp=Z,6.6nm,0.5s,baz=149,slow=5.8,SNR=17 | | | | | | |
| | comp=Z,6.6nm,0.5s | | | | | | |
| **J20K** | **Nowinta River** | **84.12** | **10** | P | **P** | **02 54 41.3** | **+0.8** |
| J20K | | | | IAmb | IAmb | 02 54 41.9 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| **LOGN** | **Logan Glacier** | **84.16** | **17** | P | **P** | **02 54 41.6** | **+0.5** |
| LOGN | | | | IAmb | IAmb | 02 54 42.3 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **CTGM** | **Chitina Glacie** | **84.18** | **17** | P | **P** | **02 54 41.7** | **+0.6** |
| CTGM | | | | IAmb | IAmb | 02 54 42.5 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **F15K** | **North Star Dit** | **84.20** | **6** | P | **P** | **02 54 40.3** | **-0.6** |
| F15K | | | | IAmb | IAmb | 02 55 08.7 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **RND** | **Reindeer** | **84.43** | **13** | P | **P** | **02 54 42.5** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **84.62** | **12** | P | **P** | **02 54 42.7** | **-0.4** |
| **HLID** | **Hailey** | **84.65** | **41** | P | **P** | **02 54 45.4** | **+1.5** |
| **S34M** | **Telegraph Cree** | **85.16** | **23** | P | **P** | **02 54 47.7** | **+1.9** |
| S34M | | | | IAmb | IAmb | 02 54 48.1 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **M27K** | **Edge Creek, AK** | **85.18** | **16** | P | **P** | **02 54 46.8** | **+0.8** |
| M27K | | | | IAmb | IAmb | 02 54 48.3 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **Q32M** | **Nakina River** | **85.50** | **22** | P | **P** | **02 54 49.0** | **+1.3** |
| Q32M | | | | IAmb | IAmb | 02 54 49.7 | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **G19K** | **Purcell Mounta** | **85.50** | **8** | P | **P** | **02 54 47.3** | **0.0** |
| **O30N** | **Mendenhall** | **85.58** | **19** | P | **P** | **02 54 49.0** | **+1.1** |
| O30N | | | | IAmb | IAmb | 02 54 49.6 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **RIDG** | **Independent Ri** | **85.61** | **14** | P | **P** | **02 54 47.9** | **0.0** |
| RIDG | | | | IAmb | IAmb | 02 54 49.0 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **PV10** | **Paradox Valley** | **85.70** | **47** | P | **P** | **02 54 49.5** | **+0.3** |
| **H21K** | **Melozitna Rive** | **85.71** | **10** | P | **P** | **02 54 48.7** | **+0.4** |
| **HDA** | **Harding Lake** | **85.72** | **13** | P | **P** | **02 54 47.9** | **-0.5** |
| HDA | | | | IAmb | IAmb | 02 54 49.0 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.74** | **13** | P | **P** | **02 54 48.2** | **-0.2** |
| **IMAR** | **Indian Mountai** | **85.85** | **10** | P | **P** | **02 54 49.2** | **+0.2** |
| **I23K** | **Minto, Yukon-K** | **85.88** | **12** | P | **P** | **02 54 48.5** | **-0.5** |
| I23K | | | | IAmb | IAmb | 02 54 50.5 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WHY** | **Whitehorse** | **85.88** | **20** | P | **P** | **02 54 50.4** | **+1.0** |
| WHY | | | | IAmb | IAmb | 02 54 51.2 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.92** | **58** | P | **P** | **02 54 52.4** | **+2.1** |
| TX31 | | | | IAmb | IAmb | 02 54 53.6 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.92** | **58** | P | **P** | **02 54 52.5** | **+2.2** |
| | comp=Z,3.2nm,0.8s,baz=221,slow=6.2,SNR=24 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **85.93** | **12** | P | **P** | **02 54 48.8** | **-0.6** |
| MDM | | | | IAmb | IAmb | 02 54 49.7

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BVAR | Borovoye Array | 117.15 | 321 | PKP | | PKiKP | 03 00 50.0 | -0.5 |
| | comp=Z,0.8nm,0.5s,baz=112,slow=1.5,SNR=4.8 | | | | | | | |
| BRTR | Keskin Array B | 145.09 | 315 | PKPbc | | PKPab | 03 01 43.4 | -1.7 |
| | comp=Z,1.8nm,0.8s,baz=81,slow=2.1,SNR=5.0 | | | | | | | |
| MMAI | Mount Meron Ar | 146.44 | 303 | PKPbc | | PKPab | 03 01 49.1 | -1.4 |
| | comp=Z,1.4nm,0.5s,baz=71,slow=8.0,SNR=4.1 | | | | | | | |
| GERES | GERESS Array B | 147.87 | 345 | PKPbc | | PKiKP | 03 01 51.5 | -1.2 |
| | comp=Z,1.9nm,0.7s,baz=156,slow=10,SNR=8.6 | | | | | | | |
| PRED | Cave del Predi | 150.13 | 344 | | | PKPab | 03 02 05.2 | 0.0 |
| ESDC | Sonseca Array | 157.95 | 12 | PKPab | | PKPab | 03 02 38.7 | 0.0 |
| | comp=Z,0.5nm,0.6s,baz=344,slow=5.6,SNR=7.4 | | | | | | | |

*IDC **19** 02:45:53.5±7.2, 18°.15S×178°.20W, h534km±85km, mb3.1/6, mbtmp4.0/7, Error ellipse: s-maj=41.7km s-min=36.4km az=37.0*

**ISC 19 02:45:54.2±1.4, 18°.2S±0°.2×178°.2W±0°.2, h550km, n8, σ0.64/8, mb3.6/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DZM | Mont Dzumac | 14.97 | 252 | P | P | 02 49 04.0 | +0.4 |
| | 1.6nm,0.4s,baz=98,slow=18,SNR=1.8 | | | | | | |
| URZ | Urewera | 20.43 | 191 | P | P | 02 49 53.8 | -0.2 |
| | 2.3nm,0.6s,baz=63,slow=17,SNR=1.3 | | | | | | |
| | 2.3nm,0.6s | | | | | | |
| STKA | Stephens Creek | 38.71 | 242 | P | P | 02 52 31.7 | +0.1 |
| | 2.3nm,0.7s,baz=91,slow=6.8,SNR=2.9 | | | | | | |
| | 2.3nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 44.82 | 260 | P | P | 02 53 18.8 | -1.1 |
| | 0.9nm,0.4s,baz=97,slow=6.9,SNR=7.0 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| ASAR | Alice Springs | 44.95 | 254 | P | P | 02 53 21.3 | +0.4 |
| | 5.5nm,0.5s,baz=88,slow=9.2,SNR=16 | | | | | | |
| | 5.5nm,0.5s | | | | | | |
| MJAR | Matsushiro Arr | 68.26 | 323 | P | P | 02 56 00.3 | -0.2 |
| | 0.6nm,0.5s,baz=136,slow=3.2,SNR=4.3 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| ILAR | Eielson Array | 86.09 | 13 | P | P | 02 57 37.0 | +0.5 |
| | 0.2nm,0.4s,baz=224,slow=4.3,SNR=1.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| GERES | GERESS Array B | 147.93 | 345 | PKPbc | PKiKP | 03 04 38.9 | -0.4 |
| | 0.4nm,0.6s,baz=340,slow=5.2,SNR=2.3 | | | | | | |

*IDC **19** 02:46:51.5±6.3, 17°.99S×177°.66W, h512km±72km, mb3.0/6, mbtmp3.9/7, Error ellipse: s-maj=43.7km s-min=33.1km az=172.0*

**ISC 19 02:46:50.5±1.1, 17°.9S±0°.2×177°.6W±0°.2, h500km, n11, σ0.996/11, mb3.6/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DZM | Mont Dzumac | 15.52 | 252 | P | P | 02 50 07.4 | +1.2 |
| | 0.9nm,0.5s,baz=259,slow=23,SNR=1.2 | | | | | | |
| URZ | Urewera | 20.77 | 192 | P | P | 02 50 55.3 | -0.7 |
| | 3.7nm,0.4s,baz=196,slow=12,SNR=2.8 | | | | | | |
| | 3.7nm,0.4s | | | | | | |
| STKA | Stephens Creek | 39.26 | 241 | P | P | 02 53 35.7 | +0.2 |
| | 3.7nm,1.0s,baz=139,slow=19,SNR=2.1 | | | | | | |
| | 3.7nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 45.35 | 259 | P | P | 02 54 22.3 | -1.4 |
| | 0.4nm,0.4s,baz=96,slow=8.1,SNR=2.0 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| ASAR | Alice Springs | 45.49 | 254 | P | P | 02 54 24.7 | 0.0 |
| | 1.1nm,0.5s,baz=86,slow=8.5,SNR=4.4 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 78.93 | 44 | P | P | 02 58 02.5 | +0.5 |
| | 0.1nm,0.4s,baz=234,slow=3.0,SNR=1.4 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| SEY | Seymchan | 83.96 | 347 | P | P | 02 58 26.3 | -0.7 |
| | 0.7nm,0.4s,baz=188,slow=23,SNR=1.4 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| BRTR | Keskin Array B | 145.32 | 315 | PKPbc | PKPdf | 03 05 31.6 | +0.2 |
| | 0.3nm,0.4s,baz=88,slow=5.7,SNR=1.7 | | | | | | |
| MLR | Muntele Rosu | 146.22 | 330 | PKPbc | PKPdf | 03 05 34.2 | +1.6 |
| | 1.3nm,0.8s,baz=244,slow=7.7,SNR=1.6 | | | | | | |
| GERES | GERESS Array B | 147.82 | 346 | PKPbc | PKPbc | 03 05 38.4 | -0.5 |
| | 0.2nm,0.5s,baz=156,slow=10.0,SNR=1.9 | | | | | | |
| DAVOX | Davos/Dischmat | 150.56 | 349 | PKPbc | PKPbc | 03 05 45.6 | -0.1 |
| | 1.0nm,0.5s,baz=331,slow=22,SNR=2.5 | | | | | | |

*IDC **19** 02:47:32.0±2.6, 18°.29S×178°.20W, h548km±31km, mb3.3/12, mbtmp4.2/13, Error ellipse: s-maj=26.8km s-min=13.4km az=148.0*

*NEIC **19** 02:47:32.8±1.3, 18°.2S±0°.1×178°.1W±0°.1, h557km±7km, mb4.2/24, Error ellipse: s-maj=23.7km s-min=12.8km az=141.0*

**ISC 19 02:47:32.2±0.6, 18°.2S±0°.1×178°.17W±0°.09, h550km, n61, σ0.985/62, mb4.2/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.63 | 277 | P | P | 02 48 54.0 | +2.4 |
| AFI | Afiamalu | 7.50 | 56 | P | P | 02 49 23.1 | -2.1 |
| NIUE | Niue | 7.86 | 97 | P | P | 02 49 28.9 | +0.3 |
| FUNA | Funafuti | 9.97 | 345 | P | P | 02 49 49.9 | -0.1 |
| PINNC | Pines Island, | 14.17 | 250 | P | P | 02 50 33.0 | -0.2 |
| DZM | Mont Dzumac | 14.94 | 253 | P | P | 02 50 41.6 | +0.4 |
| DZM | Mont Dzumac | 14.94 | 253 | P | P | 02 50 41.3 | 0.0 |
| | 4.0nm,0.7s,baz=50,slow=21,SNR=4.2 | | | | | | |
| KOUNC | Koumac, New Ca | 16.71 | 259 | P | P | 02 50 58.5 | +0.1 |
| KOUNC | | | | IAmb | IAmb | 02 51 13.7 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| URZ | Urewera | 20.38 | 191 | P | P | 02 51 29.1 | -2.5 |
| | comp=Z,3.6nm,0.6s,baz=210,slow=17,SNR=1.7 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| TCW | Tory Channel | 23.81 | 194 | P | P | 02 52 01.3 | -0.9 |
| EIDS | Eidsvold | 29.37 | 251 | P | P | 02 52 52.0 | +0.6 |
| EIDS | | | | IAmb | IAmb | 02 52 52.5 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| ARMA | Armidale | 29.98 | 240 | P | P | 02 52 58.0 | +1.4 |
| ARMA | | | | IAmb | IAmb | 02 53 16.8 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| CTAO | Charters Tower | 33.62 | 261 | P | P | 02 53 27.9 | +0.2 |
| CTAO | | | | IAmb | IAmb | 02 53 28.9 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| PMG | Port Moresby | 34.73 | 280 | P | P | 02 53 36.1 | -1.0 |
| TOO | Toolangi | 37.15 | 231 | P | P | 02 53 57.2 | +0.4 |
| COEN | Coen | 37.33 | 271 | P | P | 02 53 59.0 | +0.5 |
| STKA | Stephens Creek | 38.67 | 242 | P | P | 02 54 10.4 | +1.2 |
| STKA | Stephens Creek | 38.67 | 242 | P | P | 02 54 08.7 | -0.5 |
| | comp=Z,3.1nm,0.5s,baz=97,slow=10.0,SNR=6.7 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| BBOO | Buckleboo | 43.45 | 241 | P | P | 02 54 47.4 | +0.4 |
| BBOO | | | | IAmb | IAmb | 02 54 48.7 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| WB0 | Warramunga Arr | 44.76 | 260 | P | P | 02 54 57.4 | 0.0 |
| WB0 | | | | IAmb | IAmb | 02 54 57.8 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| WB2 | Warramunga Arr | 44.78 | 260 | P | P | 02 54 57.4 | -0.2 |
| WB2 | | | | IAmb | IAmb | 02 54 58.1 | |
| | comp=Z,6.1nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 44.80 | 260 | P | P | 02 54 57.1 | -0.6 |
| WRA | Warramunga Arr | 44.80 | 260 | P | P | 02 54 56.9 | -0.8 |
| | comp=Z,3.6nm,0.5s,baz=97,slow=6.8,SNR=23 | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| AS31 | Alice Springs | 44.92 | 255 | P | P | 02 54 59.1 | +0.4 |
| ASAR | Alice Springs | 44.92 | 255 | P | P | 02 54 58.6 | 0.0 |
| ASAR | Alice Springs | 44.92 | 255 | P | P | 02 54 59.0 | +0.4 |
| | comp=Z,31nm,0.5s,baz=88,slow=8.6,SNR=124 | | | | | | |
| ASAR | | | | S | | S | 03 00 55.6 | -1.4 |
| | comp=Z,0.5nm,0.8s,baz=87,slow=18,SNR=5.3 | | | | | | |
| MTN | Manton Dam | 49.02 | 269 | P | P | 02 55 28.2 | -1.3 |
| MTN | | | | IAmb | IAmb | 02 55 29.7 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| FORT | Forrest | 50.08 | 245 | P | P | 02 55 35.9 | -1.1 |
| FORT | | | | IAmb | IAmb | 02 55 42.2 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| KNRA | Kununurra | 50.68 | 264 | P | P | 02 55 41.3 | -0.4 |
| KNRA | | | | IAmb | IAmb | 02 55 42.4 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| MJAR | Matsushiro Arr | 68.29 | 323 | P | P | 02 57 38.1 | -0.6 |
| | comp=Z,1.6nm,0.6s,baz=157,slow=6.1,SNR=5.6 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 74.04 | 345 | P | P | 02 58 11.8 | -0.2 |
| | comp=Z,2.9nm,0.7s,baz=103,slow=5.1,SNR=6.1 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| KSRS | Korea Array | 75.09 | 318 | P | P | 02 58 18.1 | -0.1 |
| | comp=Z,0.6nm,0.7s,baz=119,slow=7.0,SNR=2.5 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 79.50 | 44 | P | P | 02 58 42.8 | +0.4 |
| | comp=Z,1.0nm,0.7s,baz=221,slow=8.4,SNR=6.0 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| KLR | Kul'dur | 80.50 | 329 | P | P | 02 58 47.7 | +0.6 |
| | comp=Z,0.6nm,0.2s,baz=98,slow=3.4,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| U15A | North Rim | 82.56 | 48 | P | P | 02 58 59.9 | +1.6 |
| K20K | Telida | 83.47 | 11 | P | P | 02 59 01.9 | +0.1 |
| SCM | Sheep Creek Mo | 83.48 | 14 | P | P | 02 59 01.7 | -0.3 |
| J19K | Poorman | 83.80 | 10 | P | P | 02 59 03.6 | +0.1 |
| N25K | Chitina, Valde | 83.95 | 15 | P | P | 02 59 03.9 | -0.5 |
| N25K | | | | IAmb | IAmb | 02 59 05.2 | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| GLB | Gilahina Butte | 84.01 | 16 | P | P | 02 59 04.5 | -0.2 |
| GLB | | | | IAmb | IAmb | 02 59 04.9 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| SEY | Seymchan | 84.13 | 347 | P | P | 02 59 04.5 | -0.6 |
| | comp=Z,3.9nm,0.8s,baz=151,slow=7.3,SNR=5.8 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| J20K | Nowinta River | 84.22 | 10 | P | P | 02 59 05.6 | +0.1 |
| TXAR | Lajitas Array | 85.97 | 58 | P | P | 02 59 16.1 | +1.1 |
| | comp=Z,0.5nm,0.7s,baz=224,slow=5.7,SNR=4.2 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| ILAR | Eielson Array | 86.14 | 13 | P | P | 02 59 14.1 | -0.7 |
| | comp=Z,0.9nm,0.5s,baz=220,slow=5.0,SNR=17 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| PDAR | Pinedale Array | 87.43 | 43 | P | P | 02 59 21.8 | +0.1 |
| | comp=Z,0.3nm,0.4s,baz=284,slow=3.6,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| BRTR | Keskin Array B | 145.16 | 315 | PKPbc | PKPdf | 03 06 08.8 | +1.0 |
| | comp=Z,1.0nm,0.5s,baz=100,slow=3.3,SNR=7.0 | | | | | | |
| MLR | Muntele Rosu | 146.22 | 329 | PKPbc | PKPbc | 03 06 11.4 | -0.2 |
| | comp=Z,1.7nm,0.7s,baz=14,slow=7.5,SNR=4.3 | | | | | | |
| MMAI | Mount Meron Ar | 146.50 | 303 | PKPbc | PKPdf | 03 06 12.0 | +1.9 |
| | comp=Z,3.2nm,0.7s,baz=41,slow=13,SNR=4.6 | | | | | | |
| GERES | GERESS Array B | 147.97 | 345 | PKPbc | PKPbc | 03 06 16.3 | +0.3 |
| | comp=Z,1.0nm,0.6s,baz=161,slow=8.5,SNR=7.5 | | | | | | |
| CONA | Conrad Observa | 148.23 | 342 | *e*PKP | PKPbc | 03 06 16.8 | +0.1 |
| | comp=Z,0.2nm,0.3s | | | | | | |
| RONA | Rosalia, Austr | 148.31 | 341 | *i* PKP | PKPbc | 03 06 16.9 | +0.1 |
| | comp=Z,0.1nm,0.2s | | | | | | |
| RETA | Reute | 149.91 | 348 | *i* PKP | PKPbc | 03 06 21.0 | +0.3 |
| | comp=Z,0.4nm,0.3s | | | | | | |
| WTTA | Wattenberg | 149.94 | 347 | *e*PKP | PKPbc | 03 06 21.1 | +0.1 |
| | comp=Z,3.0nm,0.7s | | | | | | |
| MOTA | Moosalm | 149.98 | 347 | *e*PKP | PKPbc | 03 06 21.0 | +0.1 |
| | comp=Z,1.7nm,0.7s | | | | | | |
| MYKA | Terra Mystica | 150.04 | 344 | *i* PKP | PKPbc | 03 06 20.6 | -0.5 |
| | comp=Z,1.6nm,0.5s | | | | | | |
| SQTA | Sankt Quirin | 150.07 | 347 | *i* PKP | PKPbc | 03 06 21.3 | +0.1 |
| | comp=Z,1.3nm,0.4s | | | | | | |
| ABTA | Abfaltersbach | 150.22 | 345 | *e*PKP | PKPbc | 03 06 21.1 | -0.4 |
| | comp=Z,2.9nm,0.6s | | | | | | |
| DAVA | Damuels | 150.27 | 349 | *e*PKP | PKPbc | 03 06 22.4 | +0.7 |
| | comp=Z,0.4nm,0.2s | | | | | | |
| FETA | Feichten | 150.36 | 348 | *e*PKP | PKPbc | 03 06 22.5 | +0.6 |
| | comp=Z,2.0nm,0.8s | | | | | | |
| DAVOX | Davos/Dischmat | 150.76 | 349 | PKPbc | PKPbc | 03 06 22.7 | -0.2 |
| | comp=Z,1.7nm,0.6s,baz=182,slow=0.7,SNR=9.4 | | | | | | |
| ESDC | Sonseca Array | 158.05 | 12 | PKPab | PKPab | 03 07 02.8 | -0.9 |
| | comp=Z,0.5nm,0.9s,baz=344,slow=8.0,SNR=3.4 | | | | | | |

*IDC **19** 02:48:46.0±7.8, 18°.06S×178°.20W, h532km±79km, mb3.2/6, mbtmp4.0/6, Error ellipse: s-maj=54.4km s-min=31.6km az=135.0*

*NEIC **19** 02:48:51.4±1.3, 18°.5S±0°.2×178°.5W±0°.1, h568km±19km, mb4.0/9, Error ellipse: s-maj=29.6km s-min=19.8km az=168.0*

**ISC 19 02:48:47.9±0.7, 18°.3S±0°.1×178°.3W±0°.1, h550km, n26, σ1.976/25, mb3.8/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.54 | 279 | P | P | 02 50 10.2 | +3.6 |
| FUNA | Funafuti | 10.04 | 346 | P | P | 02 51 09.4 | +3.0 |
| LIFNC | Lifou | 13.87 | 257 | P | P | 02 51 45.1 | -0.7 |
| GVZ | Greta Valley S | 25.65 | 195 | P | P | 02 53 34.3 | 0.0 |
| PPTF | Pamatai, Papee | 27.32 | 93 | P | P | 02 53 52.5 | +3.2 |
| CAN | Canberra | 33.55 | 233 | P | P | 02 54 42.4 | -0.3 |
| CAN | | | | IAmb | IAmb | 02 55 01.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| STKA | Stephens Creek | 38.54 | 242 | P | P | 02 55 17.4 | -6.5 |
| BBOO | Buckleboo | 43.31 | 241 | P | P | 02 56 02.3 | +0.5 |
| BBOO | | | | IAmb | IAmb | 02 56 21.7 | |
| | comp=Z,5.4nm,1.0s | | | | | | |
| WB0 | Warramunga Arr | 44.65 | 260 | P | P | 02 56 11.7 | -0.6 |
| WB0 | | | | IAmb | IAmb | 02 56 30.4 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 44.66 | 260 | P | P | 02 56 12.2 | -0.2 |
| WB2 | | | | IAmb | IAmb | 02 56 12.6 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 44.68 | 260 | P | P | 02 56 12.0 | -0.5 |
| WRA | Warramunga Arr | 44.68 | 260 | P | P | 02 56 12.3 | -0.2 |
| | comp=Z,0.8nm,0.4s,baz=96,slow=7.1,SNR=5.8 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| AS31 | Alice Springs | 44.80 | 255 | P | P | 02 56 13.8 | +0.4 |
| AS31 | | | | IAmb | IAmb | 02 56 14.5 | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| ASAR | Alice Springs | 44.80 | 255 | P | P | 02 56 12.9 | -0.5 |
| ASAR | Alice Springs | 44.80 | 255 | P | P | 02 56 13.8 | +0.4 |
| | comp=Z,4.3nm,0.5s,baz=87,slow=8.5,SNR=7.6 | | | | | | |
| | comp=Z,4.3nm,0.5s | | | | | | |
| MJAR | Matsushiro Arr | 68.31 | 323 | P | P | 02 58 52.7 | -1.8 |
| | comp=Z,1.0nm,0.6s,baz=157,slow=6.6,SNR=4.5 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 74.11 | 345 | P | P | 02 59 26.6 | -1.4 |
| | comp=Z,1.2nm,0.6s,baz=129,slow=9.1,SNR=4.3 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 86.11 | 58 | P | P | 03 00 30.6 | -0.8 |
| | comp=Z,0.5nm,0.7s,baz=206,slow=6.9,SNR=5.0 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| ILAR | Eielson Array | 86.26 | 13 | P | P | 03 00 28.8 | -2.3 |
| | comp=Z,0.3nm,0.4s,baz=219,slow=4.9,SNR=7.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 109.50 | 314 | PKiKP | PKiKP | 03 06 14.0 | -2.2 |
| | comp=Z,1.2nm,0.6s,baz=129,slow=2.0,SNR=1.4 | | | | | | |
| BVAR | Borovoye Array | 117.24 | 321 | PKP | PKPdf | 03 06 29.1 | -1.7 |
| | comp=Z,0.5nm,0.4s,baz=72,slow=4.7,SNR=2.6 | | | | | | |
| ARCES | ARCESS Array B | 126.74 | 350 | PKP | PKPdf | 03 06 46.9 | -1.7 |
| | comp=Z,2.4nm,1.0s,baz=48,slow=1.3,SNR=4.0 | | | | | | |
| BRTR | Keskin Array B | 145.15 | 314 | PKPbc | PKPdf | 03 07 25.1 | +1.7 |
| | comp=Z,0.4nm,0.4s,baz=99,slow=2.6,SNR=5.4 | | | | | | |
| MLR | Muntele Rosu | 146.24 | 329 | PKPbc | PKPdf | 03 07 25.6 | +0.5 |
| | comp=Z,1.4nm,0.8s,baz=345,slow=3.6,SNR=4.3 | | | | | | |
| GERES | GERESS Array B | 148.04 | 345 | PKPbc | PKPdf | 03 07 30.8 | +2.9 |
| | comp=Z,1.0nm,0.7s,baz=153,slow=9.0,SNR=5.4 | | | | | | |
| DAVOX | Davos/Dischmat | 150.83 | 348 | PKPbc | PKPbc | 03 07 37.5 | -1.2 |
| | comp=Z,2.0nm,0.5s,baz=212,slow=3.7,SNR=7.2 | | | | | | |

*IDC **19** 02:51:31.4±3.9, 17°.89S×177°.94W, h589km±47km, mb3.3/9, mbtmp4.2/10, Error ellipse: s-maj=26.5km s-min=20.0km az=176.0*

*NEIC **19** 02:51:33.2±1.3, 18°.0S±0°.1×177°.9W±0°.1, h607km±9km, mb4.2/44, Error ellipse: s-maj=20.4km s-min=14.0km az=107.0*

**ISC 19 02:51:32.5±0.5, 18°.1S±0°.1×177°.9W±0°.1, h600km, n64, σ0.985/65, mb4.1/28, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.88 | 274 | P | P | 02 52 59.9 | +2.6 |
| AFI | Afiamalu | 7.17 | 56 | P | P | 02 53 23.7 | -0.6 |
| PINNC | Pines Island, | 14.49 | 249 | P | P | 02 54 35.5 | -0.4 |
| DZM | Mont Dzumac | 15.26 | 252 | P | P | 02 54 43.0 | -0.1 |
| DZM | | | | IAmb | IAmb | 02 54 48.5 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| DZM | Mont Dzumac | 15.26 | 252 | P | P | 02 54 42.7 | -0.4 |
| | comp=Z,1.4nm,0.4s,baz=294,slow=23,SNR=6.9 | | | | | | |
| URZ | Urewera | 20.61 | 191 | P | P | 02 55 31.1 | -0.4 |
| | comp=Z,2.7nm,0.5s,baz=265,slow=20,SNR=1.2 | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | |
| BKZ | Black Stump Fm | 21.60 | 192 | P | P | 02 55 39.5 | -1.0 |
| BKZ | | | | IAmb | IAmb | 02 55 58.4 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| QRZ | Quartz Range | 24.15 | 198 | P | P | 02 56 04.5 | +1.4 |
| TUWZ | Tuamarina | 24.34 | 195 | P | P | 02 56 05.0 | +0.3 |
| THZ | Tophouse | 24.91 | 197 | P | P | 02 56 10.1 | +0.2 |
| THZ | | | | IAmb | IAmb | 02 56 17.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| DSZ | Denniston Nort | 25.21 | 198 | P | P | 02 56 12.9 | +0.5 |
| LTZ | Lake Taylor | 26.04 | 197 | P | P | 02 56 20.1 | +0.4 |
| LTZ | | | | IAmb | IAmb | 02 56 22.4 | |
| | comp=Z,11nm,0.5s | | | | | | |
| INZ | Inchbonnie | 26.22 | 198 | P | P | 02 56 20.8 | -0.4 |
| AMCZ | Amberley | 26.30 | 196 | P | P | 02 56 22.4 | +0.5 |
| OXZ | Oxford | 26.60 | 197 | P | P | 02 56 25.1 | +0.5 |
| OXZ | | | | IAmb | IAmb | 02 56 28.5 | |
| | comp=Z,8.4nm,0.5s | | | | | | |
| RPZ | Rata Peaks | 27.24 | 198 | P | P | 02 56 30.5 | +0.3 |
| RPZ | | | | IAmb | IAmb | 02 56 33.7 | |
| | comp=Z,8.6nm,0.6s | | | | | | |
| RPZ | Rata Peaks | 27.24 | 198 | P | P | 02 56 30.5 | +0.3 |
| | comp=Z,7.3nm,0.6s,baz=170,slow=12,SNR=3.9 | | | | | | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| FOZ | Fox Glacier | 27.45 | 200 | P | P | 02 56 32.5 | +0.6 |
| LBZ | Lake Benmore | 28.11 | 198 | P | P | 02 56 37.0 | -0.7 |
| LBZ | | | | IAmb | IAmb | 02 56 49.0 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| WKZ | Wanaka | 28.86 | 200 | P | P | 02 56 44.7 | +0.4 |
| MLZ | Mavora Lakes | 29.64 | 200 | P | P | 02 56 52.3 | +1.4 |
| EIDS | Eidsvold | 29.69 | 250 | P | P | 02 56 50.9 | -0.8 |
| EIDS | | | | IAmb | IAmb | 02 57 00.4 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| DCZ | Deep Cove | 30.05 | 201 | P | P | 02 56 54.0 | -0.4 |
| DCZ | | | | IAmb | IAmb | 02 57 03.7 | |
| | comp=Z,12nm,1.1s | | | | | | |
| WHZ | Wether Hill Ro | 30.16 | 200 | P | P | 02 56 55.9 | +0.6 |
| ARMA | Armidale | 30.30 | 240 | P | P | 02 56 57.2 | +0.2 |
| ARMA | | | | IAmb | IAmb | 02 57 17.0 | |
| | comp=Z,13nm,1.1s | | | | | | |
| CAN | Canberra | 34.02 | 233 | P | P | 02 57 29.1 | +0.8 |
| TOO | Toolangi | 37.47 | 231 | P | P | 02 57 56.5 | -0.1 |
| COEN | Coen | 37.60 | 270 | P | P | 02 57 57.9 | -0.1 |
| COEN | | | | IAmb | IAmb | 02 57 58.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| STKA | Stephens Creek | 39.00 | 241 | P | P | 02 58 09.4 | +0.3 |
| STKA | Stephens Creek | 39.00 | 241 | P | P | 02 58 09.7 | +0.6 |
| | comp=Z,4.9nm,0.8s,baz=44,slow=4.5,SNR=5.8 | | | | | | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| BBOO | Buckleboo | 43.78 | 241 | P | P | 02 58 46.4 | -0.2 |
| WR0 | Warramunga Arr | 44.91 | 260 | P | P | 02 58 54.7 | -0.8 |
| WB0 | Warramunga Arr | 45.06 | 260 | P | P | 02 58 55.9 | -0.8 |
| WB0 | | | | IAmb | IAmb | 02 58 56.7 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 45.09 | 260 | P | P | 02 58 55.9 | -0.9 |
| WB2 | | | | IAmb | IAmb | 02 59 14.6 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 45.10 | 260 | P | P | 02 58 56.0 | -0.9 |
| WRA | Warramunga Arr | 45.10 | 260 | P | P | 02 58 56.1 | -0.8 |
| | comp=Z,1.3nm,0.4s,baz=95,slow=7.2,SNR=18 | | | | | | |
| WRA | | | | PcP | PcP | 03 00 24.0 | -0.5 |
| | comp=Z,1.3nm,1.1s,baz=104,slow=3.6,SNR=2.1 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| AS31 | Alice Springs | 45.23 | 254 | | P | 02 58 57.5 | -0.4 |
| AS31 | | | | IAmb | IAmb | 02 58 59.0 | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| ASAR | Alice Springs | 45.23 | 254 | P | P | 02 58 56.6 | -1.4 |
| ASAR | Alice Springs | 45.23 | 254 | P | P | 02 58 57.4 | -0.5 |
| | comp=Z,4.2nm,0.4s,baz=92,slow=7.8,SNR=26 | | | | | | |
| | comp=Z,4.2nm,0.4s | | | | | | |
| FORT | Forrest | 50.40 | 245 | P | P | 02 59 35.1 | -1.0 |
| FORT | | | | IAmb | IAmb | 02 59 36.0 | |
| | comp=Z,14nm,0.8s | | | | | | |
| NIKH | Nikolski High | 71.15 | 6 | P | P | 03 01 54.4 | +3.0 |
| QSPA | South Pole Qui | 72.01 | 180 | P | P | 03 01 57.4 | +0.9 |
| QSPA | South Pole Qui | 72.01 | 180 | P | P | 03 01 57.9 | +1.3 |
| | comp=Z,1.1nm,0.8s,baz=238,slow=1.6,SNR=5.9 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| NVAR | Mina Array Bea | 79.18 | 44 | P | P | 03 02 36.8 | +0.1 |
| NVAR | Mina Array Bea | 79.18 | 44 | P | P | 03 02 36.2 | -0.4 |
| | comp=Z,1.1nm,0.7s,baz=224,slow=8.9,SNR=8.6 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| GMN | Gold Mountain | 79.26 | 45 | P | P | 03 02 37.0 | -0.1 |
| WCT | Wildcat Mounta | 79.42 | 46 | P | P | 03 02 37.2 | -0.7 |
| KVN | Kaiserville | 79.65 | 43 | P | P | 03 02 38.4 | -0.7 |
| J05D | Fort Rock, OR | 80.12 | 38 | P | P | 03 02 41.2 | -0.2 |
| J05D | | | | IAmb | IAmb | 03 02 42.4 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| M16K | Timber Creek | 80.25 | 9 | P | P | 03 02 40.9 | -0.6 |
| M16K | | | | IAmb | IAmb | 03 02 54.8 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| L16K | Owhat River | 80.83 | 9 | P | P | 03 02 43.2 | -1.3 |
| M17K | Holitna River | 80.85 | 10 | P | P | 03 02 44.9 | +0.4 |
| M17K | | | | IAmb | IAmb | 03 03 04.4 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| HG4B | Hotspring | 80.92 | 27 | P | P | 03 02 44.2 | -0.9 |
| K15K | Wolf Creek Mou | 81.11 | 8 | P | P | 03 02 45.6 | -0.3 |
| K15K | | | | IAmb | IAmb | 03 02 45.9 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| U15A | North Rim | 82.24 | 48 | P | P | 03 02 53.4 | +0.8 |
| U15A | | | | IAmb | IAmb | 03 02 54.0 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| GRNB | Grenville Isla | 82.55 | 26 | P | P | 03 02 53.3 | 0.0 |
| GRNB | | | | IAmb | IAmb | 03 02 57.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| G08A | Pilot Rock | 82.61 | 38 | P | P | 03 02 54.0 | 0.0 |
| U33K | Whale Pass | 82.92 | 23 | P | P | 03 02 54.7 | -0.4 |
| U33K | | | | IAmb | IAmb | 03 03 05.5 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| TXAR | Lajitas Array | 85.65 | 57 | P | P | 03 03 09.4 | +0.2 |
| | comp=Z,1.2nm,0.7s,baz=217,slow=5.9,SNR=14 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| PDAR | Pinedale Array | 87.11 | 43 | P | P | 03 03 15.4 | -0.6 |
| | comp=Z,0.7nm,0.6s,baz=213,slow=3.1,SNR=6.1 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| BRTR | Keskin Array B | 145

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **49.23** | **268** | P | **P** | **03 00 20.8** | **-0.6** |
| MTN | | | | IAmb | IAmb | 03 00 21.9 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **50.36** | **245** | P | **P** | **03 00 28.7** | **-0.7** |
| FORT | | | | IAmb | IAmb | 03 00 46.2 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **50.92** | **264** | P | **P** | **03 00 33.5** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 03 00 34.1 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.45** | **261** | P | **P** | **03 00 51.1** | **-0.6** |
| **SOEI** | **Soe** | **56.51** | **270** | P | **P** | **03 01 13.2** | **+0.1** |
| SOEI | | | | IAmb | IAmb | 03 01 15.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.25** | **323** | P | **P** | **03 02 27.9** | **-0.2** |
| | comp=Z,2.0nm,0.6s,baz=151,slow=6.2,SNR=5.8 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **68.25** | **323** | P | **P** | **03 02 27.4** | **-0.8** |
| MAJO | | | | IAmb | IAmb | 03 02 28.7 | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.26** | **323** | P | **P** | **03 02 27.4** | **-0.8** |
| MJB9 | | | | IAmb | IAmb | 03 02 28.6 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | **P** | **03 02 50.9** | **+0.6** |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | **P** | **03 02 50.9** | **+0.6** |
| | comp=Z,1.2nm,0.6s,baz=195,slow=1.4,SNR=12 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **72.66** | **303** | P | **P** | **03 02 53.5** | **-0.9** |
| SSLB | | | | IAmb | IAmb | 03 03 05.3 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **TPUB** | **Ta-pu** | **72.69** | **302** | P | **P** | **03 02 53.5** | **-1.0** |
| TPUB | | | | IAmb | IAmb | 03 02 54.2 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.89** | **345** | P | **P** | **03 03 00.4** | **-0.2** |
| PEA0B | | | | IAmb | IAmb | 03 03 18.9 | |
| | comp=Z,9.5nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.89** | **345** | P | **P** | **03 03 01.4** | **+0.7** |
| **KRMB** | **Red Mountain** | **77.49** | **39** | P | **P** | **03 03 17.2** | **-3.7** |
| **SEY** | **Seymchan** | **83.97** | **347** | P | **P** | **03 03 54.0** | **+0.3** |
| | comp=Z,1.2nm,0.3s,baz=202,slow=23,SNR=2.7 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.68** | **57** | P | **P** | **03 04 05.2** | **+2.4** |
| | comp=Z,0.5nm,0.8s,baz=234,slow=5.5,SNR=5.5 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.52** | **314** | PKiKP | **PKiKP** | **03 09 48.2** | **-1.2** |
| | comp=Z,0.1nm,0.4s,baz=128,slow=2.4,SNR=1.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.16** | **315** | PKPbc | **PKPdf** | **03 10 57.2** | **+0.7** |
| | comp=Z,0.8nm,0.4s,baz=111,slow=3.0,SNR=7.0 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.57** | **303** | PKPbc | **PKPbc** | **03 11 02.5** | **+0.7** |
| | comp=Z,0.7nm,0.3s,baz=90,slow=8.8,SNR=3.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.82** | **345** | PKPbc | **PKPbc** | **03 11 04.9** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=31,slow=3.1,SNR=3.5 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.59** | **349** | PKPbc | **PKPbc** | **03 11 11.7** | **+0.4** |
| | comp=Z,0.8nm,0.5s,baz=226,slow=2.1,SNR=5.1 | | | | | | |

*IDC **19** 02:54:06.5±6.7, 18°.42S×178°.46W, h511$^{km}$±77$^{km}$, mb3.0/7, mbtmp3.9/7, Error ellipse: s-maj=47.9km s-min=24.5km az=164.0*

**ISC 19 02:54:05.5**±0.8, **18°.4S**±0°.2×**178°.5W**±0°.2, **h500**$^{km}$, **n11**, σ1°**24**/12, **mb3.4**/6, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **20.20** | **190** | P | **P** | **02 58 05.0** | **-0.9** |
| | 3.2nm,0.5s,baz=297,slow=10,SNR=2.2 | | | | | | |
| | 3.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.47** | **260** | P | **P** | **03 01 32.4** | **+0.4** |
| | 0.3nm,0.3s,baz=94,slow=8.4,SNR=1.9 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.59** | **255** | P | **P** | **03 01 33.5** | **+0.5** |
| | 1.8nm,0.5s,baz=89,slow=8.3,SNR=6.8 | | | | | | |
| ASAR | | | | PcP | **pP** | **03 03 05.0** | **+0.1** |
| | 0.3nm,0.4s,baz=101,slow=3.9,SNR=1.7 | | | | | | |
| | 1.8nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.80** | **44** | P | **P** | **03 05 21.3** | **-0.4** |
| | 0.5nm,0.7s,baz=221,slow=9.5,SNR=4.5 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.30** | **58** | P | **P** | **03 05 56.3** | **+1.9** |
| | 0.5nm,0.7s,baz=237,slow=5.3,SNR=6.9 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.33** | **13** | P | **P** | **03 05 52.5** | **-1.1** |
| | 0.6nm,0.8s,baz=218,slow=4.7,SNR=3.9 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.73** | **43** | P | **P** | **03 06 00.8** | **-0.2** |
| | 0.4nm,0.5s,baz=239,slow=2.6,SNR=3.8 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.38** | **314** | PKiKP | **PKiKP** | **03 11 37.3** | **-1.3** |
| | 0.2nm,0.5s,baz=130,slow=1.2,SNR=1.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.73** | **350** | PKP | **PKPdf** | **03 12 10.2** | **-1.0** |
| | 0.6nm,0.6s,baz=31,slow=2.1,SNR=4.5 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.31** | **302** | PKPbc | **PKPdf** | **03 12 50.4** | **+2.2** |
| | 0.5nm,0.3s,baz=26,slow=9.6,SNR=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **148.01** | **345** | PKPbc | **PKPbc** | **03 12 53.9** | **-0.5** |
| | 0.7nm,0.6s,baz=165,slow=11,SNR=5.5 | | | | | | |

*IDC **19** 02:54:36.1±6.4, 18°.14S×178°.05W, h562$^{km}$±77$^{km}$, mb2.8/6, mbtmp3.7/7, Error ellipse: s-maj=38.9km s-min=31.4km az=45.0*

**ISC 19 02:54:38.3**±1.0, **18°.2S**±0°.2×**178°.1W**±0°.2, **h590**$^{km}$, **n7**, σ1°**08**/7, **mb3.2**/5, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.01** | **252** | P | **P** | **02 57 47.5** | **+0.5** |
| | 3.6nm,1.1s,baz=329,slow=20,SNR=1.5 | | | | | | |
| **URZ** | **Urewera** | **20.46** | **191** | P | **P** | **02 58 34.9** | **-1.5** |
| | 2.5nm,0.6s,baz=104,slow=6.3,SNR=1.7 | | | | | | |
| | 2.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.86** | **260** | P | **P** | **03 02 01.2** | **-0.4** |
| | 0.5nm,0.7s,baz=98,slow=6.7,SNR=2.1 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.99** | **254** | P | **P** | **03 02 02.4** | **-0.1** |
| | 1.6nm,0.5s,baz=87,slow=8.7,SNR=6.5 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.90** | **180** | P | **P** | **03 05 03.8** | **+1.3** |
| | 0.5nm,0.6s,baz=158,slow=2.9,SNR=1.8 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **58** | P | **P** | **03 06 16.9** | **-0.2** |
| | 0.2nm,0.8s,baz=222,slow=8.0,SNR=2.0 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.07** | **13** | P | **P** | **03 06 16.8** | **-0.1** |
| | 0.2nm,0.7s,baz=223,slow=5.2,SNR=1.3 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

*IDC **19** 02:54:52.8±10.0, 18°.10S×178°.75W, h623$^{km}$±139$^{km}$, mb3.0/5, mbtmp4.0/6, Error ellipse: s-maj=104.4km s-min=50.4km az=150.0*

**ISC 19 02:54:49.7**±2.1, **18°.0S**±0°.6×**178°.6W**±0°.4, **h579**$^{km}$, **n6**, σ0°**86**/6, **mb3.2**/5, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.60** | **251** | P | **P** | **02 57 55.8** | **+0.9** |
| | 2.5nm,0.7s,baz=86,slow=20,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.41** | **260** | P | **P** | **03 02 09.4** | **-0.8** |
| | 0.4nm,0.5s,baz=95,slow=7.2,SNR=3.6 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.57** | **254** | P | **P** | **03 02 10.6** | **-0.8** |
| | 2.3nm,0.5s,baz=88,slow=8.4,SNR=4.7 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **78.50** | **14** | P | **P** | **03 05 51.6** | **+0.3** |
| | 10.0nm,0.8s,baz=56,slow=12,SNR=2.1 | | | | | | |
| | 10.0nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.99** | **13** | P | **P** | **03 06 28.9** | **-0.1** |
| | 0.2nm,0.4s,baz=220,slow=4.1,SNR=2.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.21** | **58** | P | **P** | **03 06 31.0** | **0.0** |
| | 0.2nm,0.8s,baz=224,slow=6.3,SNR=2.2 | | | | | | |
| | 0.2nm,0.8s | | | | | | |

*IDC **19** 02:56:41.1±4.2, 17°.76S×178°.53W, h503$^{km}$±43$^{km}$, mb3.3/10, mbtmp4.1/11, Error ellipse: s-maj=22.6km s-min=18.3km az=71.0*

*NEIC **19** 02:56:43.7±1.3, 17°.7S±0°.2×178°.5W±0°.1, h537$^{km}$±10$^{km}$, mb4.5/31, Error ellipse: s-maj=25.9km s-min=19.2km az=156.0*

**ISC 19 02:56:44.3**±0.5, **17°.7S**±0°.1×**178°.59W**±0°.10, **h547**$^{km}$, **n65**, σ0°**90**/67, **mb4.4**/26, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.20** | **269** | P | **P** | **02 58 00.5** | **0.0** |
| **AFI** | **Afiamalu** | **7.57** | **61** | P | **P** | **02 58 36.1** | **-1.8** |
| **LIFNC** | **LIFOU** | **13.72** | **255** | P | **P** | **02 59 38.8** | **-1.9** |
| **PINNC** | **Pines Island,** | **13.98** | **247** | P | **P** | **02 59 43.0** | **-0.4** |
| **DZM** | **Mont Dzumac** | **14.72** | **250** | P | **P** | **02 59 50.8** | **-0.4** |
| **DZM** | **Mont Dzumac** | **14.72** | **250** | P | **P** | **02 59 49.8** | **-1.4** |
| | 3.6nm,0.7s,baz=89,slow=21,SNR=2.9 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.42** | **257** | P | **P** | **03 00 08.1** | **0.0** |
| KOUNC | | | | IAmb | IAmb | 03 00 10.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **20.81** | **190** | P | **P** | **03 00 44.7** | **-3.0** |
| | comp=Z,7.5nm,1.1s,baz=77,slow=4.9,SNR=2.1 | | | | | | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **QRZ** | **Quartz Range** | **24.27** | **197** | P | **P** | **03 01 19.4** | **+0.8** |
| **NNZ** | **Nelson** | **24.42** | **195** | P | **P** | **03 01 20.1** | **+0.2** |
| **TUWZ** | **Tuamarina** | **24.49** | **194** | P | **P** | **03 01 21.3** | **+0.8** |
| **MRNZ** | **Matariki Terra** | **24.75** | **196** | P | **P** | **03 01 22.5** | **-0.3** |
| **THZ** | **Tophouse** | **25.05** | **195** | P | **P** | **03 01 24.8** | **-0.8** |
| THZ | | | | IAmb | IAmb | 03 01 42.0 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **DSZ** | **Denniston Nort** | **25.32** | **197** | P | **P** | **03 01 27.7** | **-0.3** |
| **KHZ** | **Kahutara** | **25.52** | **194** | P | **P** | **03 01 28.4** | **-1.2** |
| KHZ | | | | IAmb | IAmb | 03 01 29.1 | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.17** | **195** | P | **P** | **03 01 35.4** | **0.0** |
| LTZ | | | | IAmb | IAmb | 03 01 37.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **INZ** | **Inchbonnie** | **26.33** | **197** | P | **P** | **03 01 35.7** | **-1.1** |
| INZ | | | | IAmb | IAmb | 03 01 43.9 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **OXZ** | **Oxford** | **26.74** | **195** | P | **P** | **03 01 38.8** | **-1.6** |
| OXZ | | | | IAmb | IAmb | 03 01 55.1 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.54** | **198** | P | **P** | **03 01 46.8** | **-0.6** |
| **LBZ** | **Lake Benmore** | **28.22** | **197** | P | **P** | **03 01 51.3** | **-2.0** |
| LBZ | | | | IAmb | IAmb | 03 01 55.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **ODZ** | **Otahua Downs** | **28.70** | **196** | P | **P** | **03 01 55.9** | **-1.6** |
| **WKZ** | **Wanaka** | **28.96** | **198** | P | **P** | **03 01 58.7** | **-1.1** |
| WKZ | | | | IAmb | IAmb | 03 02 11.7 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **29.17** | **250** | P | **P** | **03 02 01.6** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 03 02 02.7 | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.72** | **199** | P | **P** | **03 02 06.6** | **+0.2** |
| **ARMA** | **Armidale** | **29.89** | **239** | P | **P** | **03 02 09.2** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 03 02 09.9 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **DCZ** | **Deep Cove** | **30.12** | **200** | P | **P** | **03 02 09.1** | **-0.6** |
| DCZ | | | | IAmb | IAmb | 03 02 12.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.25** | **199** | P | **P** | **03 02 10.8** | **-0.1** |
| WHZ | | | | IAmb | IAmb | 03 02 25.3 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **33.30** | **260** | P | **P** | **03 02 37.4** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 03 02 38.3 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.68** | **232** | P | **P** | **03 02 41.3** | **+0.9** |
| CAN | | | | IAmb | IAmb | 03 02 50.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **COEN** | **Coen** | **36.93** | **270** | P | **P** | **03 03 07.0** | **-0.5** |
| **TOO** | **Toolangi** | **37.16** | **231** | P | **P** | **03 03 10.4** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.57** | **241** | P | **P** | **03 03 21.7** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.57** | **241** | P | **P** | **03 03 20.8** | **+0.1** |
| | comp=Z,7.7nm,0.5s,baz=90,slow=11,SNR=18 | | | | | | |
| | comp=Z,7.7nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.34** | **241** | P | **P** | **03 03 59.2** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 03 03 59.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.30** | **259** | P | **P** | **03 04 06.0** | **-0.2** |
| **WB0** | **Warramunga Arr** | **44.46** | **260** | P | **P** | **03 04 07.2** | **-0.2** |
| **WB2** | **Warramunga Arr** | **44.48** | **259** | P | **P** | **03 04 06.9** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.49** | **259** | P | **P** | **03 04 07.2** | **-0.5** |
| | comp=Z,2.4nm,0.5s,baz=94,slow=7.2,SNR=27 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 05 40.0** | **+0.8** |
| | comp=Z,0.9nm,0.8s,baz=90,slow=3.5,SNR=2.7 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.67** | **254** | P | **P** | **03 04 09.2** | **+0.2** |
| AS31 | | | | IAmb | IAmb | 03 04 09.9 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.67** | **254** | P | **P** | **03 04 09.0** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.67** | **254** | P | **P** | **03 04 09.3** | **+0.3** |
| | comp=Z,35nm,0.6s,baz=89,slow=7.9,SNR=172 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 05 40.2** | **+0.4** |
| | comp=Z,0.6nm,0.4s,baz=106,slow=4.0,SNR=2.5 | | | | | | |
| **MTN** | **Manton Dam** | **48.63** | **268** | P | **P** | **03 04 37.4** | **-1.5** |
| MTN | | | | IAmb | IAmb | 03 04 39.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.65** | **323** | P | **P** | **03 06 47.8** | **+0.7** |
| | comp=Z,1.1nm,0.4s,baz=160,slow=6.4,SNR=5.6 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.34** | **180** | P | **P** | **03 07 15.6** | **+0.9** |
| **QSPA** | **South Pole Qui** | **72.34** | **180** | P | **P** | **03 07 15.8** | **+1.1** |
| | comp=Z,3.2nm,0.7s,baz=304,slow=0.5,SNR=16 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.41** | **44** | P | **P** | **03 07 55.2** | **+0.8** |
| | comp=Z,0.5nm,0.8s,baz=237,slow=9.6,SNR=3.6 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **83.98** | **200** | P | **P** | **03 08 17.6** | **+0.7** |
| | comp=Z,0.9nm,0.5s,baz=149,slow=8.3,SNR=1.4 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.04** | **58** | P | **P** | **03 08 28.0** | **+0.3** |
| | comp=Z,0.2nm,0.6s,baz=224,slow=5.0,SNR=2.8 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.33** | **44** | P | **P** | **03 08 34.9** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=232,slow=2.2,SNR=2.1 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **90.79** | **179** | P | **P** | **03 08 48.9** | **-0.2** |
| | comp=Z,1.0nm,0.9s,baz=239,slow=6.8,SNR=5.1 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **OK038** | **West end E0370** | **92.50** | **53** | P | **P** | **03 08 56.8** | **-0.7** |
| **MKAR** | **Makanchi Array** | **108.87** | **314** | PKiKP | **PKiKP** | **03 14 11.2** | **-0.5** |
| | comp=Z,0.7nm,0.8s,baz=82,slow=2.3,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **111.62** | **318** | PKiKP | **PKiKP** | **03 14 16.1** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=84,slow=1.9,SNR=2.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.09** | **350** | PKP | **PKiKP** | **03 14 44.8** | **+0.3** |
| | comp=Z,2.3nm,0.9s,baz=24,slow=1.1,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.52** | **315** | PKP | **PKPab** | **03 15 19.7** | **-0.1** |
| | comp=Z,1.6nm,0.8s,baz=128,slow=4.0,SNR=11 | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.31** | **343** | *e*PKP | **PKPab** | **03 15 22.7** | **+0.4** |
| **KRLC** | **Kraliky** | **145.43** | **342** | *e*PKP | **PKPab** | **03 15 22.9** | **+0.1** |
| **MMAI** | **Mount Meron Ar** | **145.89** | **303** | PKPbc | **PKPab** | **03 15 24.9** | **-0.3** |
| | comp=Z,1.6nm,0.5s,baz=24,slow=3.0,SNR=4.0 | | | | | | |
| **ZVC** | **Zvikov** | **146.71** | **345** | *e*PKP | **PKiKP** | **03 15 26.7** | **-0.3** |
| **KHC** | **Kasperske Hory** | **147.14** | **345** | *e*PKP | **PKiKP** | **03 15 27.6** | **-0.4** |
| **CKRC** | **Cesky Krumlov** | **147.25** | **344** | *e*PKP | **PKiKP** | **03 15 27.8** | **-0.4** |
| **GERES** | **GERESS Array B** | **147.38** | **345** | PKPbc | **PKPbc** | **03 15 27.7** | **+0.8** |
| | comp=Z,1.5nm,0.5s,baz=165,slow=6.9,SNR=12 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.18** | **348** | PKPbc | **PKiKP** | **03 15 35.1** | **+0.5** |
| | comp=Z,3.8nm,0.4s,baz=235,slow=2.8,SNR=20 | | | | | | |
| **FNA** | **Florina** | **151.29** | **327** | | **PKiKP** | **03 15 37.1** | **+0.2** |
| **TORD** | **Torodi Ar. Bea** | **175.45** | **184** | PKPab | **PKPab** | **03 17 33.8** | **+0.5** |
| | comp=Z,0.5nm,1.1s,baz=185,slow=4.0,SNR=1.6 | | | | | | |

*ISK **19** 02:56:53.1, 36°.17N×30°.98E, h10$^{km}$, ML1.6/5*
*AFAD **19** 02:56:55.6±0.0, 36°.33N×31°.12E, h7$^{km}$±4$^{km}$, ML2.8*

**ISC 19 02:56:54.1**±1.3, **36°.23N**±0°.09×**31°.00E**±0°.03, **h9**$^{km}$±12$^{km}$, **n10**, σ0°**84**/18, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKUM** | **Antalya-Kumluc** | **0.54** | **281** | P | **Pb** | **02 57 07.3** | **+1.5** |
| AKUM | | | | S | **Sn** | **02 57 17.7** | **+0.5** |
| **ELL** | **Elmali** | **1.03** | **301** | Pg | **Pg** | **02 57 13.6** | **-0.3** |
| ELL | | | | Sg | **Sb** | **02 57 28.4** | **+0.6** |
| **GAZI** | **Gazipasa** | **1.06** | **89** | Pn | **Pb** | **02 57 14.5** | **-0.2** |
| GAZI | | | | Sn | **Sn** | **02 57 29.8** | **-0.3** |
| **GAZI** | **Gazipasa** | **1.06** | **89** | P | **Pn** | **02 57 14.8** | **-0.3** |
| GAZI | | | | S | **Sg** | **02 57 27.5** | **-0.8** |
| GAZI | | | | *i* AML | AML | 02 57 29.0 | |
| | comp=E,243nm,0.8s | | | | | | |
| **AKAS** | **Kas** | **1.13** | **271** | Pn | **Pg** | **02 57 14.9** | **-1.0** |
| AKAS | | | | Sn | **Sg** | **02 57 30.2** | **-0.4** |
| **SEYD** | **Seydisehir-KON** | **1.35** | **29** | Pn | **Pn** | **02 57 19.2** | **-0.2** |
| **SEDI** | **Konya, Seydise** | **1.36** | **26** | P | **Pn** | **02 57 19.4** | **-0.1** |
| SEDI | | | | S | **Sb** | **02 57 36.5** | **-1.0** |
| SEDI | | | | *i* AML | AML | 02 57 37.0 | |
| | comp=N,116nm,1.7s | | | | | | |
| SEDI | | | | *i* AML | AML | 02 57 37.0 | |
| | comp=E,302nm,2.2s | | | | | | |
| **CAME** | **Cameli-Denizli** | **1.55** | **298** | Pn | **Pn** | **02 57 21.7** | **-0.3** |
| **ERMK** | **Ermenek** | **1.59** | **74** | P | **Pg** | **02 57 26.5** | **+1.8** |
| ERMK | | | | S | **Sg** | **02 57 46.0** | **+0.5** |
| ERMK | | | | *i* AML | AML | 02 58 29.0 | |
| | comp=N,94nm,1.9s | | | | | | |
| ERMK | | | | *i* AML | AML | 02 58 29.0 | |
| | comp=E,226nm,2.1s | | | | | | |
| **KKBE** | **Karaman, Kazim** | **1.85** | **57** | P | **Pb** | **02 57 27.6** | **-0.5** |
| KKBE | | | | S | **Sb** | **02 57 51.1** | **-0.3** |
| KKBE | | | | *i* AML | AML | 02 58 30.0 | |
| | comp=N,138nm,2.0s | | | | | | |
| KKBE | | | | *i* AML | AML | 02 58 30.0 | |
| | comp=E,190nm,2.2s | | | | | | |

**IDC 19 02:57:36.1**±23.0, **17°.78S**×**177°.84W**, **h438**$^{km}$±266$^{km}$, **mb3.0**/4, **mbtmp3.8**/4, **Error ellipse: s-maj=123.6km s-min=34.7km az=13.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **20.88** | **191** | P | P | 03 01 45.6 | -0.4 |
| | 1.9nm,0.6s,baz=264,slow=23,SNR=1.5 | | | | | | |
| | 1.9nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.19** | **259** | P | P | 03 05 12.5 | -0.1 |
| | 0.5nm,0.3s,baz=94,slow=7.4,SNR=5.9 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.35** | **254** | P | P | 03 05 14.0 | +0.1 |
| | 2.8nm,0.6s,baz=85,slow=8.7,SNR=5.1 | | | | | | |
| | 2.8nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.47** | **57** | P | P | 03 09 27.5 | +0.7 |
| | 0.1nm,0.6s,baz=226,slow=7.1,SNR=1.6 | | | | | | |
| | 0.1nm,0.6s | | | | | | |
| **GERES** | **GERESS Array B** | **147.63** | **346** | PKPbc | PKPbc | 03 16 29.0 | -1.4 |
| | 0.2nm,0.3s,baz=357,slow=15,SNR=1.9 | | | | | | |

*NEIC **19** 02:59:52.2±0.8, 18°.1S±0°.1×177°.94W±0°.08, h621$^{km}$±10$^{km}$, mb4.5/20, Error ellipse: s-maj=22.9km s-min=7.0km az=157.0*

*IDC **19** 02:59:53.5±2.7, 18°.09S×178°.13W, h630$^{km}$±31$^{km}$, mb3.5/11, mbtmp4.4/12, Error ellipse: s-maj=19.7km s-min=14.2km az=127.0*

**ISC 19 02:59:52.3**±0.5, **18°.1S**±0°.1×**178°.02W**±0°.09, **h621**$^{km}$, **n67**, σ0°**63**/69, **mb4.4**/22, **1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.76** | **275** | P | **P** | **03 01 18.0** | **+0.2** |
| **AFI** | **Afiamalu** | **7.30** | **56** | P | **P** | **03 01 44.5** | **-1.7** |
| **NIUE** | **Niue** | **7.74** | **99** | P | **P** | **03 01 48.8** | **-1.2** |
| **LIFNC** | **LIFOU** | **14.16** | **257** | P | **P** | **03 02 51.2** | **-0.7** |
| **PINNC** | **Pines Island,** | **14.35** | **249** | P | **P** | **03 02 53.3** | **-0.3** |
| **DZM** | **Mont Dzumac** | **15.12** | **252** | P | **P** | **03 03 00.9** | **+0.1** |
| | 1.3nm,0.4s,baz=87,slow=16,SNR=2.1 | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.55** | **200** | P | **P** | **03 05 09.5** | **+0.7** |
| MLZ | | | | IAmb | IAmb | 03 05 19.2 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | **P** | **03 05 44.5** | **-0.5** |
| CTAO | | | | IAmb | IAmb | 03 05 46.1 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.88** | **233** | P | **P** | **03 05 45.0** | **-0.7** |
| CAN | | | | IAmb | IAmb | 03 05 54.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **34.85** | **280** | P | **P** | **03 05 53.9** | **0.0** |
| **COEN** | **Coen** | **37.48** | **271** | P | **P** | **03 06 16.0** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.86** | **241** | P | **P** | **03 06 27.4** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.86** | **241** | P | **P** | **03 06 26.8** | **+0.4** |
| | comp=Z,8.9nm,0.8s,baz=80,slow=6.5,SNR=10 | | | | | | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.64** | **241** | P | **P** | **03 07 03.8** | **-0.1** |
| BBOO | | | | IAmb | IAmb | 03 07 04.9 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.93** | **260** | P | **P** | **03 07 13.8** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 03 07 14.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **03 07 13.9** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 03 07 14.7 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **03 07 13.9** | **-0.3** |
| | comp=Z,5.0nm,0.6s,baz=97,slow=8.1,SNR=37 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 08 42.2** | **+0.4** |
| | comp=Z,0.6nm,0.3s,baz=90,slow=3.5,SNR=3.5 | | | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.09** | **254** | P | **P** | **03 07 14.6** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.09** | **254** | P | **P** | **03 07 15.3** | **+0.1** |
| | comp=Z,11nm,0.5s,baz=84,slow=8.7,SNR=52 | | | | | | |
| ASAR | | | | PcP | **PcP** |

**RETA Reutte 149.81 348** *i* PKP **PKPbc 03 18 33.7 +0.2**
comp=Z,0.2nm,0.3s
**WTTA Wattenberg 149.84 347** *i* PKP **PKPbc 03 18 33.9 +0.1**
comp=Z,2.0nm,0.4s
**MYKA Terra Mystica 149.96 344** *e*PKP **PKPbc 03 18 33.6 -0.3**
comp=Z,1.6nm,0.4s
**SQTA Sankt Quirin 149.98 347** *i* PKP **PKPbc 03 18 34.2 +0.2**
comp=Z,0.4nm,0.2s
**ABTA Abfaltersbach 150.13 345** *i* PKP **PKPbc 03 18 33.9 -0.4**
comp=Z,2.3nm,0.6s
**DAVA Damuels 150.17 349** *i* PKiKP **PKiKP 03 18 35.3 +0.3**
comp=Z,0.4nm,0.2s

*NEIC* ***19*** *03:00:02.0±2.1, 18°.1S±0°.1×178°.0W±0°.1, h566km±8km, mb4.3/30, Error ellipse: s-maj=22.1km s-min=9.9km az=138.0*
*IDC* ***19*** *03:00:02.9±4.9, 18°.01S×178°.18W, h567km±51km, mb3.3/10, mbtmp4.3/11, Error ellipse: s-maj=32.3km s-min=23.4km az=106.0*
**ISC 19 03:00:03.5±0.5, 18°.1S±0°.1×178°.07W±0°.10, h590km, n69, ₀0°92/71, mb4.2/24, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.71** | **275** | P | **P** | **03 01 23.5** | **-2.9** |
| **NIUE** | **Niue** | **7.78** | **98** | P | **P** | **03 01 57.3** | **-3.1** |
| **DZM** | **Mont Dzumac** | **15.07** | **252** | P | **P** | **03 03 13.8** | **+1.0** |
| DZM | | | | IAmb | IAmb | 03 03 19.2 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.07** | **252** | P | **P** | **03 03 13.6** | **+0.9** |
| | comp=Z,3.7nm,0.6s,baz=68,slow=18,SNR=9.3 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.83** | **259** | P | **P** | **03 03 28.7** | **-0.3** |
| KOUNC | | | | IAmb | IAmb | 03 03 29.4 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.33** | **199** | P | **P** | **03 05 02.1** | **-0.3** |
| **ARMA** | **Armidale** | **30.12** | **240** | P | **P** | **03 05 27.5** | **+0.6** |
| ARMA | | | | IAmb | IAmb | 03 05 28.2 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **33.73** | **261** | P | **P** | **03 05 57.0** | **-0.6** |
| CTAO | | | | IAmb | IAmb | 03 06 25.6 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **37.30** | **231** | P | **P** | **03 06 27.6** | **+0.9** |
| TOO | | | | IAmb | IAmb | 03 06 28.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.43** | **271** | P | **P** | **03 06 28.4** | **+0.2** |
| COEN | | | | IAmb | IAmb | 03 06 29.1 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.82** | **241** | P | **P** | **03 06 40.1** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.82** | **241** | P | **P** | **03 06 39.8** | **+0.7** |
| | comp=Z,6.1nm,0.6s,baz=95,slow=12,SNR=7.4 | | | | | | |
| | comp=Z,6.1nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **43.59** | **241** | P | **P** | **03 07 16.3** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 03 07 17.3 | |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **03 07 22.9** | **-2.8** |
| **WB0** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **03 07 26.6** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 03 07 26.9 | |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.90** | **260** | P | **P** | **03 07 25.7** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 03 07 26.8 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **03 07 25.8** | **-1.3** |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **03 07 26.5** | **-0.7** |
| | comp=Z,3.4nm,0.5s,baz=96,slow=6.9,SNR=13 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 08 56.7** | **+0.9** |
| | comp=Z,0.7nm,0.3s,baz=96,slow=3.4,SNR=3.1 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.05** | **254** | P | **P** | **03 07 27.6** | **-0.6** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **03 07 27.1** | **-1.0** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **03 07 28.1** | **0.0** |
| | comp=Z,24nm,0.5s,baz=88,slow=8.7,SNR=55 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 08 57.1** | **+0.9** |
| | comp=Z,1.5nm,0.4s,baz=106,slow=4.0,SNR=5.9 | | | | | | |
| | comp=Z,24nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **49.12** | **269** | P | **P** | **03 07 57.7** | **-1.0** |
| MTN | | | | IAmb | IAmb | 03 07 58.6 | |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **FORT** | **Forrest** | **50.21** | **245** | P | **P** | **03 08 05.9** | **-0.6** |
| **KNRA** | **Kununurra** | **50.79** | **264** | P | **P** | **03 08 10.9** | **0.0** |
| KNRA | | | | IAmb | IAmb | 03 08 13.8 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.31** | **261** | P | **P** | **03 08 28.9** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **58.17** | **255** | P | **P** | **03 09 02.0** | **-0.4** |
| PSA00 | | | | IAmb | IAmb | 03 09 02.5 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.17** | **255** | P | **P** | **03 09 02.0** | **-0.4** |
| PSA00 | | | | IAmb | IAmb | 03 09 18.4 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **58.34** | **256** | P | **P** | **03 09 02.6** | **-1.0** |
| MBWA | | | | IAmb | IAmb | 03 09 31.6 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **GIRL** | **Giralia** | **63.15** | **253** | P | **P** | **03 09 36.1** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **68.26** | **323** | P | **P** | **03 10 06.0** | **-0.5** |
| | comp=Z,2.1nm,0.8s,baz=152,slow=6.1,SNR=6.4 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **68.26** | **323** | P | **P** | **03 10 06.3** | **-0.2** |
| MAJO | | | | IAmb | IAmb | 03 10 15.6 | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.27** | **323** | P | **P** | **03 10 06.3** | **-0.3** |
| MJB9 | | | | IAmb | IAmb | 03 10 14.0 | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **UGM** | **Wanagama** | **69.96** | **268** | P | **P** | **03 10 16.5** | **-0.7** |
| **QSPA** | **South Pole Qui** | **71.95** | **180** | P | **P** | **03 10 29.5** | **+1.5** |
| | comp=Z,1.1nm,0.6s,baz=27,slow=4.5,SNR=2.1 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **72.62** | **303** | P | **P** | **03 10 32.1** | **-0.3** |
| SSLB | | | | IAmb | IAmb | 03 10 33.0 | |
| | comp=Z,7.1nm,0.5s | | | | | | |
| **TPUB** | **Ta-pu** | **72.64** | **302** | P | **P** | **03 10 32.0** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **73.95** | **345** | P | **P** | **03 10 39.9** | **+0.5** |
| | comp=Z,1.7nm,0.7s,baz=111,slow=8.3,SNR=1.8 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **75.07** | **318** | P | **P** | **03 10 47.2** | **+1.3** |
| | comp=Z,0.9nm,0.6s,baz=124,slow=7.0,SNR=4.7 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.20** | **8** | P | **P** | **03 11 19.0** | **+0.9** |
| **L18K** | **Granite Mounta** | **81.83** | **10** | P | **P** | **03 11 22.3** | **+0.9** |
| **BELA** | **Belgrano 2** | **81.93** | **173** | P | **P** | **03 11 22.5** | **+0.7** |
| **K20K** | **Telida** | **83.34** | **11** | P | **P** | **03 11 29.1** | **+0.1** |
| **TXAR** | **Lajitas Array** | **85.83** | **57** | P | **P** | **03 11 43.7** | **+1.7** |
| | comp=Z,0.3nm,0.7s,baz=229,slow=4.8,SNR=3.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.01** | **13** | P | **P** | **03 11 42.0** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=217,slow=5.1,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.26** | **290** | P | **P** | **03 11 58.6** | **+0.5** |
| | comp=Z,0.9nm,0.3s,baz=88,slow=4.0,SNR=4.3 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.20** | **321** | PKP | **PKiKP** | **03 17 42.4** | **+0.1** |
| | comp=Z,0.7nm,0.4s,baz=100,slow=1.6,SNR=2.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.57** | **350** | PKP | **PKiKP** | **03 18 00.5** | **+0.1** |
| | comp=Z,2.0nm,1.1s,baz=117,slow=1.4,SNR=3.5 | | | | | | |
| **FINES** | **FINESS Array B** | **133.47** | **344** | PKPdf | **PKiKP** | **03 18 15.4** | **+1.1** |
| **KWP** | **Kalwaria Pacla** | **144.38** | **337** | | **PKPab** | **03 18 33.8** | **0.0** |
| **BUR08** | **Bucovina Ar. S** | **144.93** | **332** | PKPbc | **PKPab** | **03 18 36.3** | **+0.2** |
| **BURAR** | **Bucovina Array** | **144.94** | **332** | PKPbc | **PKPab** | **03 18 36.8** | **+0.7** |
| **BR131** | **Keskin Array S** | **145.15** | **315** | PKPbc | **PKPbc** | **03 18 36.4** | **+0.3** |
| **BRTR** | **Keskin Array B** | **145.15** | **315** | PKPbc | **PKPbc** | **03 18 36.7** | **+0.6** |
| **BRTR** | **Keskin Array B** | **145.15** | **315** | PKPbc | **PKPab** | **03 18 36.9** | **-0.5** |
| | comp=Z,2.1nm,0.5s,baz=117,slow=2.9,SNR=9.9 | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.83** | **344** | *e*PKP | **PKPab** | **03 18 39.1** | **-0.4** |
| **LANS** | **Liptovska Anna** | **145.94** | **339** | *e* | **PKPab** | **03 18 39.7** | **-0.2** |
| LANS | | | | *e* | | 03 26 05.0 | |
| **MMAI** | **Mount Meron Ar** | **146.52** | **303** | PKPbc | **PKiKP** | **03 18 41.5** | **-0.6** |
| | comp=Z,3.3nm,0.5s,baz=66,slow=6.7,SNR=8.6 | | | | | | |
| **PRU** | **Pruhonice** | **146.62** | **345** | *e*PKP | **PKPbc** | **03 18 40.6** | **+0.9** |
| **VYHS** | **Vyhne** | **146.72** | **339** | *e* | **PKiKP** | **03 18 41.4** | **-0.6** |
| VYHS | | | | *e* | | 03 26 06.3 | |
| **KHC** | **Kasperske Hory** | **147.65** | **346** | *e*PKP | **PKiKP** | **03 18 43.4** | **-0.5** |
| **GERES** | **GERESS Array B** | **147.89** | **345** | PKPbc | **PKiKP** | **03 18 44.0** | **-0.4** |
| | comp=Z,0.9nm,0.4s,baz=23,slow=7.2,SNR=8.4 | | | | | | |
| **CONA** | **Conrad Observa** | **148.15** | **342** | *i* PKP | **PKiKP** | **03 18 44.9** | **-0.2** |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.23** | **341** | *i* PKP | **PKiKP** | **03 18 45.1** | **-0.1** |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.46** | **346** | *i* PKP | **PKiKP** | **03 18 47.9** | **+0.1** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.62** | **344** | *i* PKP | **PKPbc** | **03 18 47.7** | **+0.2** |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **149.79** | **347** | *i* PKP | **PKiKP** | **03 18 48.7** | **+0.2** |
| | comp=Z,0.2nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **149.85** | **347** | *i* PKP | **PKiKP** | **03 18 48.8** | **+0.1** |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **MYKA** | **Terra Mystica** | **149.96** | **344** | *i* PKP | **PKPbc** | **03 18 48.4** | **+0.2** |
| | comp=Z,1.7nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.98** | **347** | *i* PKP | **PKiKP** | **03 18 49.0** | **+0.1** |
| | comp=Z,0.9nm,0.4s | | | | | | |

**IDC 19 03:03:52.8±1.4, 16°.88S×177°.83W, h0km, mb3.7/5, mbtmp3.7/5, Error ellipse: s-maj=50.1km s-min=28.9km az=138.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **21.76** | **191** | P | P | 03 08 46.4 | +0.4 |
| | 1.6nm,0.4s,baz=18,slow=3.2,SNR=1.5 | | | | | | |
| | 1.6nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.37** | **258** | P | P | 03 12 13.2 | -0.1 |
| | 0.5nm,0.4s,baz=96,slow=7.1,SNR=5.4 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.60** | **253** | P | P | 03 12 14.8 | -0.3 |
| | 0.9nm,0.4s,baz=92,slow=7.5,SNR=7.8 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **84.77** | **13** | P | P | 03 16 28.4 | -0.1 |
| | 0.2nm,0.4s,baz=220,slow=4.9,SNR=4.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.98** | **57** | P | P | 03 16 30.6 | 0.0 |
| | 0.1nm,0.4s,baz=203,slow=5.9,SNR=2.2 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*BJI* ***19*** *03:06:51.5±0.0, 17°.83S×177°.51W, h590km, mb5.0/40, mB5.6/2*
*NEIC* ***19*** *03:06:52.4±1.8, 18°.17S±0°.09×178°.00W±0°.10, h578km±6km, mb4.9/188, Error ellipse: s-maj=13.7km s-min=12.1km az=112.0*
*IDC* ***19*** *03:06:54.0±1.4, 18°.10S×178°.10W, h596km±16km, mb4.1/22, mbtmp5.0/24, Error ellipse: s-maj=11.6km s-min=8.7km az=157.0*
*NOU* ***19*** *03:06:53.3, 18°.13S×177°.97W, h595km, mb5.1/107, Fiji Islands Region*
**ISC 19 03:06:53.1±0.2, 18°.13S±0°.05×178°.02W±0°.05, h590km, n806, ₀0°83/782, mb4.8/130, 53C-45D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.77** | **275** | P | **P** | **03 08 18.6** | **+2.2** |
| **MSVF** | **Nonsavu** | **3.77** | **275** | P | **P** | **03 08 18.6** | **+2.2** |
| **AFI** | **Afiamalu** | **7.32** | **56** | | **P** | **03 08 43.8** | **-2.0** |
| **NIUE** | **Niue** | **7.73** | **98** | P | **P** | **03 08 49.4** | **-0.1** |
| **NIUE** | **Niue** | **7.73** | **98** | P | **P** | **03 08 49.3** | **-0.2** |
| **NIUE** | **Niue** | **7.73** | **98** | P | **P** | **03 08 49.4** | **-0.1** |
| | comp=Z,4406µmcomp=Z,447nm,0.8s | | | | | | |
| **FUNA** | **Funafuti** | **9.93** | **344** | P | **P** | **03 09 09.8** | **-1.2** |
| **RIZ** | **Raoul Island** | **11.06** | **180** | P | **P** | **03 09 20.5** | **-1.7** |
| RIZ | | | | S | **S** | **03 11 29.5** | **+4.8** |
| **RAO** | **Raoul Island** | **11.07** | **180** | P | **P** | **03 09 20.2** | **-2.0** |
| **RAO** | **Raoul Island** | **11.07** | **180** | P | **P** | **03 09 20.7** | **-1.6** |
| | comp=Z,118nm,0.3s,baz=0.0,slow=20,SNR=2.4 | | | | | | |
| RAO | | | | S | **S** | **03 11 22.7** | **-2.2** |
| | comp=Z,218nm,0.6s,baz=307,slow=20,SNR=1.9 | | | | | | |
| **RTV** | **Rentapao** | **12.91** | **269** | P | **P** | **03 09 41.3** | **+0.2** |
| **DVP** | **Devils Point** | **13.14** | **270** | P | **P** | **03 09 44.4** | **+1.0** |
| **MARNC** | **Mare, Loyalty** | **13.55** | **253** | P | **P** | **03 09 47.5** | **-0.1** |
| **LIFNC** | **LIFOU** | **14.15** | **257** | P | **P** | **03 09 52.8** | **-0.8** |
| **LIFNC** | **LIFOU** | **14.15** | **257** | P | **P** | **03 09 52.0** | **-1.7** |
| **PINNC** | **Pines Island,** | **14.34** | **249** | P | **P** | **03 09 54.7** | **-0.7** |
| **YATNC** | **Mamie plateau,** | **14.70** | **252** | P | **P** | **03 09 58.5** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.11** | **252** | P | **P** | **03 10 02.7** | **-0.1** |
| **DZM** | **Mont Dzumac** | **15.11** | **252** | P | **P** | **03 10 02.5** | **-0.2** |
| DZM | | | | IAmb | IAmb | 03 10 09.5 | |
| | comp=Z,52nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.11** | **252** | P | **P** | **03 10 02.3** | **-0.5** |
| | comp=Z,40nm,0.5s,baz=97,slow=2.9,SNR=128 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.25** | **252** | P | **P** | **03 10 04.5** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **16.87** | **259** | P | **P** | **03 10 20.2** | **+1.3** |
| **KOUNC** | **Koumac, New Ca** | **16.87** | **259** | P | **P** | **03 10 19.1** | **+0.1** |
| **RAR** | **Rarotonga** | **17.45** | **103** | P | **P** | **03 10 24.3** | **+0.1** |
| **RAR** | **Rarotonga** | **17.45** | **103** | | **P** | **03 10 23.7** | **-0.5** |
| **RAR** | **Rarotonga** | **17.45** | **103** | P | **P** | **03 10 24.9** | **+0.7** |
| | comp=Z,63nm,0.8s,baz=232,slow=6.2,SNR=9.3 | | | | | | |
| **OUZ** | **Omahuta** | **18.58** | **202** | P | **P** | **03 10 36.3** | **+2.0** |
| **OUZ** | **Omahuta** | **18.58** | **202** | P | **P** | **03 10 36.5** | **+2.3** |
| **KUZ** | **Kuaotunu** | **19.34** | **195** | P | **P** | **03 10 42.4** | **+1.2** |
| **MXZ** | **Matakaoa Point** | **19.62** | **189** | P | **P** | **03 10 42.7** | **-1.0** |
| **MXZ** | **Matakaoa Point** | **19.62** | **189** | P | **P** | **03 10 42.1** | **-1.6** |
| MXZ | | | | IAmb | IAmb | 03 10 45.2 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **MXZ** | **Matakaoa Point** | **19.62** | **189** | P | **P** | **03 10 42.4** | **-1.3** |
| **WMGZ** | **Waiomatatini S** | **19.86** | **188** | P | **P** | **03 10 46.2** | **+0.3** |
| **HAZ** | **Te Kaha** | **19.89** | **190** | P | **P** | **03 10 44.0** | **-2.1** |
| **PKGZ** | **Pakihiroa** | **19.95** | **189** | P | **P** | **03 10 47.6** | **+0.8** |
| **RUGZ** | **Raukumara Rang** | **20.11** | **190** | P | **P** | **03 10 43.7** | **-4.6** |
| **PUZ** | **Puketiti** | **20.13** | **189** | P | **P** | **03 10 47.6** | **-0.7** |
| **OPRZ** | **Ohinepanea** | **20.20** | **193** | P | **P** | **03 10 49.3** | **+0.3** |
| **TWGZ** | **Tauwhareparae** | **20.27** | **189** | P | **P** | **03 10 49.6** | **0.0** |
| **TOZ** | **Tahuroa Road** | **20.34** | **195** | P | **P** | **03 10 51.1** | **+1.0** |
| TOZ | | | | IAmb | IAmb | 03 10 52.4 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.34** | **195** | P | **P** | **03 10 51.4** | **+1.3** |
| **EDRZ** | **Edgecumbe** | **20.42** | **192** | P | **P** | **03 10 49.5** | **-1.5** |
| **URZ** | **Urewera** | **20.50** | **191** | P | **P** | **03 10 49.7** | **-1.9** |
| **URZ** | **Urewera** | **20.50** | **191** | P | **P** | **03 10 49.4** | **-2.1** |
| | comp=Z,48nm,0.4s,baz=85,slow=0.2,SNR=69 | | | | | | |
| URZ | | | | S | **S** | **03 14 01.1** | **-3.1** |
| | comp=Z,8.0nm,0.6s,baz=18,slow=20,SNR=1.6 | | | | | | |
| **URZ** | **Urewera** | **20.50** | **191** | P | **P** | **03 10 49.3** | **-2.3** |
| **MWZ** | **Matawai** | **20.50** | **190** | P | **P** | **03 10 49.6** | **-2.1** |
| **RAGZ** | **Rawiri** | **20.68** | **190** | P | **P** | **03 10 52.5** | **-0.8** |
| **MUGZ** | **Murupara** | **20.77** | **192** | P | **P** | **03 10 52.8** | **-1.3** |
| **RIGZ** | **Rimuhau** | **20.83** | **189** | P | **P** | **03 10 53.8** | **-0.8** |
| **RTZ** | **Ruatahuna** | **20.87** | **191** | P | **P** | **03 10 51.9** | **-3.1** |
| RTZ | | | | IAmb | IAmb | 03 11 05.3 | |
| | comp=Z,22nm,0.6s | | | | | | |
| **TLZ** | **Tolley Road** | **20.89** | **194** | P | **P** | **03 10 56.2** | **+1.0** |
| **SNGZ** | **Shannon Statio** | **20.97** | **190** | P | **P** | **03 10 55.4** | **-0.5** |
| **PRGZ** | **Paritu Road** | **21.02** | **189** | P | **P** | **03 10 57.1** | **+0.7** |
| **MTHZ** | **Maungataniwha** | **21.12** | **191** | P | **P** | **03 10 54.9** | **-2.4** |
| **KNTZ** | **Tokohu** | **21.15** | **189** | P | **P** | **03 10 57.8** | **+0.4** |
| **HIZ** | **Hauiti** | **21.24** | **196** | P | **P** | **03 10 59.5** | **+1.3** |
| **HIZ** | **Hauiti** | **21.24** | **196** | P | **P** | **03 10 58.3** | **0.0** |
| **HIZ** | **Hauiti** | **21.24** | **196** | P | **P** | **03 11 00.7** | **+2.4** |
| **MHGZ** | **Mahia Peninsul** | **21.24** | **189** | P | **P** | **03 10 58.4** | **+0.1** |
| **WHHZ** | **Waihua** | **21.27** | **190** | P | **P** | **03 10 58.3** | **-0.3** |
| **TARA** | **Tarawa** | **21.32** | **334** | P | **P** | **03 10 58.2** | **-1.1** |
| **RATZ** | **Rangitukua** | **21.36** | **193** | P | **P** | **03 10 58.6** | **-0.7** |
| **NMHZ** | **Naumai** | **21.37** | **191** | P | **P** | **03 10 58.2** | **-1.3** |
| **BKZ** | **Black Stump Fm** | **21.49** | **192** | P | **P** | **03 11 01.3** | **+0.7** |
| **BKZ** | **Black Stump Fm** | **21.49** | **192** | P | **P** | **03 10 57.7** | **-2.9** |
| BKZ | | | | IAmb | IAmb | 03 11 06.7 | |
| | comp=Z,14nm,0.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.49** | **192** | P | **P** | **03 10 58.5** | **-2.1** |
| **ARHZ** | **Aropaoanui** | **21.50** | **191** | P | **P** | **03 11 00.5** | **-0.1** |
| **TMVZ** | **Te Maari** | **21.61** | **193** | P | **P** | **03 11 00.4** | **-1.3** |
| **TWVZ** | **Tauwara** | **21.62** | **194** | P | **P** | **03 11 01.0** | **-0.8** |
| **ETVZ** | **East Tongariro** | **21.63** | **193** | P | **P** | **03 11 01.0** | **-0.8** |
| **NNVZ** | **North Ngauruho** | **21.64** | **194** | P | **P** | **03 11 01.8** | **-0.3** |
| **OTVZ** | **Oturere** | **21.66** | **193** | P | **P** | **03 11 00.4** | **-1.9** |
| **NGZ** | **Ngauruhoe** | **21.69** | **194** | P | **P** | **03 11 01.9** | **-0.6** |
| **SNVZ** | **South Ngauruho** | **21.69** | **193** | P | **P** | **03 11 01.6** | **-0.9** |
| **MCHZ** | **McNeill Hill** | **21.73** | **191** | P | **P** | **03 11 01.5** | **-1.1** |
| **WNVZ** | **Wahianoa** | **21.83** | **193** | P | **P** | **03 11 02.2** | **-1.6** |
| **VRZ** | **Vera Road** | **21.84** | **195** | P | **P** | **03 11 05.7** | **+2.1** |
| **MOVZ** | **Moawhango** | **21.88** | **193** | P | **P** | **03 11 03.1** | **-0.9** |
| **PKE** | **Pukeiti** | **22.11** | **197** | P | **P** | **03 11 09.1** | **+3.1** |
| **NEZ** | **North Egmont** | **22.15** | **196** | P | **P** | **03 11 09.0** | **+2.5** |
| **PXZ** | **Pawanui** | **22.27** | **190** | P | **P** | **03 11 06.4** | **-1.0** |
| **WAZ** | **Wanganui** | **22.38** | **194** | P | **P** | **03 11 08.9** | **+0.4** |
| **DVHZ** | **Dannevirke** | **22.65** | **192** | P | **P** | **03 11 09.9** | **-1.0** |
| **ANWZ** | **Angora Road** | **22.75** | **191** | P | **P** | **03 11 10.9** | **-0.8** |
| **BFZ** | **Birch Farm** | **23.01** | **191** | P | **P** | **03 11 12.1** | **-1.9** |
| **BFZ** | **Birch Farm** | **23.01** | **191** | P | **P** | **03 11 12.4** | **-1.6** |
| **MRZ** | **Mangatainoka R** | **23.12** | **192** | P | **P** | **03 11 13.1** | **-1.9** |
| **HOWZ** | **Holdsworth Sta** | **23.36** | **192** | P | **P** | **03 11 15.6** | **-1.6** |
| **MSWZ** | **Moikau Station** | **23.91** | **193** | P | **P** | **03 11 20.3** | **-1.7** |
| **SNZO** | **South Karori** | **23.93** | **194** | P | **P** | **03 11 20.5** | **-1.6** |
| **SNZO** | **South Karori** | **23.93** | **194** | P | **P** | **03 11 20.1** | **-2.0** |
| **QRZ** | **Quartz Range** | **24.03** | **198** | P | **P** | **03 11 23.0** | **-0.1** |
| **QRZ** | **Quartz Range** | **24.03** | **198** | P | **P** | **03 11 22.4** | **-0.7** |
| QRZ | | | | IAmb | IAmb | 03 11 23.8 | |
| | comp=Z,40nm,0.6s | | | | | | |
| **NNZ** | **Nelson** | **24.16** | **196** | P | **P** | **03 11 22.5** | **-1.7** |
| NNZ | | | | IAmb | IAmb | 03 11 29.2 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **BSWZ** | **Blackbirch Sta** | **24.51** | **195** | P | **P** | **03 11 26.1** | **-1.2** |
| **DSZ** | **Denniston Nort** | **25.09** | **198** | P | **P** | **03 11 32.1** | **-0.4** |
| DSZ | | | | IAmb | IAmb | 03 11 36.6 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **KHZ** | **Kahutara** | **25.25** | **195** | P | **P** | **03 11 32.1** | **-1.7** |
| **CTZ** | **Chatham Island** | **25.55** | **178** | P | **P** | **03 11 36.1** | **-0.3** |
| **CTZ** | **Chatham Island** | **25.55** | **178** | P | **P** | **03 11 39.0** | **+2.6** |
| **INZ** | **Inchbonnie** | **26.10** | **198** | IAmb | IAmb | 03 11 43.7 | |
| | comp=Z,42nm,0.7s | | | | | | |
| **MQZ** | **McQueen's Vall** | **26.68** | **195** | P | **P** | **03 11 44.8** | **-1.5** |
| MQZ | | | | IAmb | IAmb | 03 11 58.3 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **PPT** | **Papeete** | **27.07** | **93** | P | **P** | **03 11 50.4** | **+0.3** |
| **PPT** | **Papeete** | **27.07** | **93** | P | **P** | **03 11 50.4** | **+0.3** |
| | comp=Z,52nm,0.6s,baz=178,slow=4.4,SNR=17 | | | | | | |
| | comp=Z,52nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.08** | **93** | P | **P** | **03 11 50.8** | **+0.5** |
| **PPTF** | **Pamatai, Papee** | **27.08** | **93** | P | **P** | **03 11 50.6** | **+0.3** |
| **RPZ** | **Rata Peaks** | **27.12** | **198** | P | **P** | **03 11 50.5** | **+0.3** |
| **FOZ** | **Fox Glacier** | **27.33** | **200** | P | **P** | **03 11 51.6** | **-0.3** |
| **JCZ** | **Jackson Bay** | **28.14** | **200** | P | **P** | **03 11 58.7** | **-0.6** |
| **ODZ** | **Otahua Downs** | **28.46** | **197** | P | **P** | **03 12 00.6** | **-1.2** |
| **MLZ** | **Mavora Lakes** | **29.51** | **200** | P | **P** | **03 12 10.9** | **0.0** |
| **EIDS** | **Eidsvold** | **29.54** | **250** | P | **P** | **03 12 11.5** | **0.0** |
| **EIDS** | **Eidsvold** | **29.54** | **250** | P | **P** | **03 12 11.1** | **-0.4** |
| **EIDS** | **Eidsvold** | **29.54** | **250** | P | **P** | **03 12 11.6** | **+0.1** |
| | comp=Z,87nm,0.8s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **29.87** | **255** | P | **P** | **03 12 14.2** | **-0.1** |
| **DCZ** | **Deep Cove** | **29.92** | **201** | P | **P** | **03 12 14.0** | **-0.4** |
| DCZ | | | | IAmb | IAmb | 03 12 19.8 | |
| | comp=Z,42nm,1.1s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.03** | **200** | P | **P** | **03 12 15.3** | **-0.2** |
| **ARMA** | **Armidale** | **30.15** | **240** | P | **P** | **03 12 17.9** | **+1.1** |
| **ARMA** | **Armidale** | **30.15** | **240** | P | **P** | **03 12 18.0** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 03 12 18.5 | |
| | comp=Z,35nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **30.15** | **240** | P | **P** | **03 12 17.9** | **+1.1** |
| | comp=Z,58nm,1.2s | | | | | | |
| **SYZ** | **Scrubby Hill** | **30.25** | **198** | P | **P** | **03 12 17.4** | **+0.2** |
| **TV1H** | **Townsville Har** | **33.32** | **262** | P | **P** | **03 12 43.4** | **-0.3** |
| **CNB** | **Canberra Magne** | **33.59** | **233** | P | **P** | **03 12 46.9** | **+1.1** |
| **CTA** | **Charters Tower** | **33.78** | **261** | P | **P** | **03 12 47.5** | **0.0** |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | **P** | **03 12 47.6** | **0.0** |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | **P** | **03 12 47.4** | **-0.1** |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | **P** | **03 12 47.7** | **+0.1** |
| CTAO | | | | ScP | **ScP** | **03 18 01.3** | **+2.6** |
| **CAN** | **Canberra** | **33.87** | **233** | P | **P** | **03 12 49.0** | **+0.8** |
| **CAN** | **Canberra** | **33.87** | **233** | P | **P** | **03 12 48.9** | **+0.8** |
| **CAN** | **Canberra** | **33.87** | **233** | P | **P** | **03 12 49.0** | **+0.8** |
| **PATS** | **Pohnpei** | **34.08** | **315** | P | **P** | **03 12 50.9** | **+0.8** |
| PATS | | | | IAmb | IAmb | 03 12 51.4 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **MILA** | **Mila** | **34.42** | **230** | P | **P** | **03 12 53.7** | **+0.9** |
| **PMG** | **Port

MUN Mundaring 60.35 243 P P 03 16 06.7 +0.3
LUWI Luwuk 60.51 279 P P 03 16 08.8 +1.1
MORW Morawa 60.73 246 P P 03 16 08.6 -0.3
MORW Morawa 60.73 246 P P 03 16 08.4 -0.5
MORW IAmb IAmb 03 16 09.4
comp=Z,20nm,0.8s
GTOI Gorontalo 60.88 281 P P 03 16 11.4 +1.3
WBSI Waikabubak, Su 61.11 269 P P 03 16 12.9 +1.2
TOLI2 Tolitoli 63.12 281 P P 03 16 25.0 +0.4
TOLI2 Tolitoli 63.12 281 P P 03 16 24.5 -0.1
TOLI2 IAmb IAmb 03 16 25.4
comp=Z,36nm,0.7s
GIRL Giralia 63.19 253 P P 03 16 26.0 +1.1
GIRL Giralia 63.19 253 P P 03 16 26.0 +1.1
CCD Concordia, Ant 64.74 194 P P 03 16 35.0 +0.6
JHJ2 Mitsune 64.95 322 P P 03 16 36.0 +0.2
JHJ2 Mitsune 64.95 322 P P 03 16 36.0 +0.2
SRBI Singaraja 65.50 269 P P 03 16 40.2 +0.5
CASY Casey 66.09 205 P P 03 16 42.1 -0.3
CASY Casey 66.09 205 P P 03 16 42.7 +0.4
JAGI Jajag, Banyuwa 66.41 269 P P 03 16 44.0 -1.3
JAGI Jajag, Banyuwa 66.41 269 P P 03 16 43.7 -1.6
JSG Sagara 67.01 322 P P 03 16 48.9 +0.3
JMM Marumori 67.83 326 P P 03 16 53.6 +0.1
JMM Marumori 67.83 326 P P 03 16 53.5 0.0
JMM IAmb IAmb 03 16 54.4
comp=Z,32nm,0.8s
JGF Kuroka 68.14 322 P P 03 16 55.5 0.0
JGF Kuroka 68.14 322 P P 03 16 55.2 -0.3
JGF IAmb IAmb 03 16 55.8
comp=Z,19nm,0.8s
MJAR Matsushiro Arr 68.31 323 P P 03 16 56.0 -0.4
comp=Z,29nm,0.6s,baz=161,slow=5.9,SNR=142
comp=Z,29nm,0.6s
MAJO Matsushiro 68.31 323 P P 03 16 56.3 -0.1
MAJO Matsushiro 68.31 323 P P 03 16 55.9 -0.5
MAJO IAmb IAmb 03 16 56.7
comp=Z,39nm,0.6s
MAJO Matsushiro 68.31 323 P P 03 16 56.1 -0.3
MJB9 Matsu-Tunnel 68.32 323 P P 03 16 55.9 -0.5
MJB9 IAmb IAmb 03 16 56.7
comp=Z,39nm,0.5s
JMN Monobe 69.01 318 P P 03 17 01.5 +0.8
JMN Monobe 69.01 318 P P 03 17 00.7 0.0
JMN IAmb IAmb 03 17 02.5
comp=Z,41nm,1.0s
KKM Kota Kinabalu 69.16 284 P P 03 17 02.1 0.0
KKM Kota Kinabalu 69.16 284 P P 03 17 01.7 -0.4
KKM IAmb IAmb 03 17 02.8
comp=Z,37nm,0.6s
JSD Sado 69.34 324 P P 03 17 02.9 +0.4
JSD IAmb IAmb 03 17 03.7
comp=Z,33nm,0.6s
ERM Erimo 69.77 330 P P 03 17 05.5 +0.5
JTM Tenmabayashi 69.86 328 P P 03 17 05.6 +0.1
JTM IAmb IAmb 03 17 06.6
comp=Z,40nm,0.9s
UGM Wanagama 70.01 268 P P 03 17 06.9 -0.3
UGM Wanagama 70.01 268 P P 03 17 06.8 -0.3
JNU Nakatsue 70.56 316 P P 03 17 09.7 -0.2
JNU Nakatsue 70.56 316 P P 03 17 09.2 -0.7
JNU IAmb IAmb 03 17 10.4
comp=Z,21nm,1.0s
NIKH Nikolski High 71.25 6 P P 03 17 13.1 -0.3
baz=189
YOJ Yonaguni jima 71.38 305 P P 03 17 15.0 +0.2
QSPA South Pole Qui 71.92 180 P P 03 17 18.0 +0.5
QSPA IAmb IAmb 03 17 19.5
comp=Z,36nm,0.8s
QSPA South Pole Qui 71.92 180 P P 03 17 18.4 +0.9
comp=Z,33nm,0.7s,baz=34,slow=1.8,SNR=275
comp=Z,33nm,0.7s
QSPA South Pole Qui 71.92 180 P P 03 17 18.4 +0.9
TWGBT Beinan 72.10 302 P P 03 17 17.8 -1.3
TWG Pinlang 72.11 302 IAmb IAmb 03 17 18.5
comp=Z,47nm,0.6s
YULB Yu-li 72.20 303 P P 03 17 19.1 -0.6
YULB Yu-li 72.20 303 IAmb IAmb 03 17 19.6
comp=Z,28nm,0.6s
NACB Ninganchiao 72.35 304 P P 03 17 20.0 -0.5
UNV Unalaska Valle 72.36 7 P P 03 17 18.9 -0.9
UNV Unalaska Valle 72.36 7 P P 03 17 19.9 0.0
baz=191
JTU Tsushima 72.39 317 P P 03 17 19.4 -1.1
SSLB Suanglung 72.67 303 P P 03 17 21.4 -1.0
TPUB Ta-pu 72.69 302 P P 03 17 21.5 -1.0
YHNB Yeheng 72.77 304 P P 03 17 22.3 -0.7
YHNB IAmb IAmb 03 17 24.3
comp=Z,66nm,1.1s
BBJI Bungbulang 72.87 268 P P 03 17 23.0 -0.8
FALS False Pass 73.76 9 P P 03 17 27.6 -0.2
baz=194
PEA0B Petropavlovsk- 73.99 345 IAmb IAmb 03 17 30.0
comp=Z,41nm,0.8s
PETK Petropavlovsk- 73.99 345 P P 03 17 28.8 -0.4
PETK Petropavlovsk- 73.99 345 P P 03 17 28.6 -0.6
comp=Z,31nm,0.7s,baz=128,slow=7.6,SNR=33
comp=Z,31nm,0.7s
CHNA Chernabura Isl 74.36 11 P P 03 17 31.0 -0.1
baz=198
SDPT Sand Point 74.69 10 P P 03 17 33.0 0.0
baz=197
S12K Black Hills 74.78 9 P P 03 17 33.0 -0.5
baz=196
KSRS Korea Array 75.12 318 P P 03 17 36.4 +0.6
comp=Z,6.0nm,0.7s,baz=132,slow=6.3,SNR=31
comp=Z,6.0nm,0.7s
KSAR Wonju Array Be 75.14 318 P P 03 17 36.0 +0.1
S14K Fog Glacier 75.75 10 P P 03 17 38.9 -0.1
baz=198
LWLI Liwa 76.99 269 P P 03 17 47.9 +1.0
USRK Ussuriysk Ar. 77.01 326 P P 03 17 46.2 +0.1
USRK Ussuriysk Ar. 77.01 326 P P 03 17 47.0 +0.9
comp=Z,5.5nm,0.5s,baz=132,slow=4.0,SNR=20
comp=Z,5.5nm,0.5s
OHAK Old Harbor 77.86 13 P P 03 17 49.5 -0.8
OHAK IAmb IAmb 03 17 51.2
comp=Z,54nm,1.2s
R18K Karluk 77.93 13 P P 03 17 51.1 +0.5
baz=203
MNAI Manna 78.24 269 P P 03 17 52.7 -0.7
Q17K Contact Creek 78.29 12 P P 03 17 53.6 +0.8
baz=201
NJ2 Nanjing 78.37 309 eP P 03 17 54.8 +1.1
NJ2 pmax pmax
comp=Z,20nm,0.6s
YBH Yreka Blue Hor 78.46 39 P P 03 17 55.4 +1.3
KDAK Kodiak Island 78.53 14 P P 03 17 53.7 -0.2
KDAK IAmb IAmb 03 18 01.8
comp=Z,38nm,1.1s
KDAK Kodiak Island 78.53 14 P P 03 17 54.1 +0.2
comp=Z,16nm,0.7s,baz=218,slow=6.1,SNR=5.5
comp=Z,16nm,0.7s
KDAK Kodiak Island 78.53 14 P P 03 17 54.8 +0.9
baz=205
MDJ Mudanjiang 78.58 325 P P 03 17 55.5 +1.0
MDJ pmax pmax
comp=Z,62nm,0.9s
P16K Nushagak River 78.62 10 P P 03 17 54.9 +0.6
baz=199
Q18K Katmai Hardscr 78.82 12 P P 03 17 55.7 +0.1
baz=202
M11K Mekoryuk 78.83 6 P P 03 17 56.1 +0.7
baz=191
N14K Kuskokwak Cree 78.91 8 P P 03 17 56.1 +0.3
baz=196
P17K Kvichak River 79.06 11 P P 03 17 57.2 +0.6
baz=201
O16K Kokwok River B 79.14 10 P P 03 17 56.5 -0.6
baz=199
M13K Dall Lake 79.17 7 P P 03 17 57.7 +0.5
baz=194
NVAR Mina Array Bea 79.33 44 P P 03 17 60.0 +1.1
comp=Z,1.2nm,0.6s,baz=226,slow=8.0,SNR=2.6
comp=Z,1.2nm,0.6s
N15K Kwethluk River 79.37 9 P P 03 17 58.0 -0.4
P18K Big Mountain, 79.47 12 P P 03 17 58.6 -0.3
baz=202
O17K Koliganek Bris 79.48 11 P P 03 17 58.8 -0.1
baz=200
M14K Bethel 79.67 8 P P 03 17 59.5 -0.3
M14K IAmb IAmb 03 18 01.8
comp=Z,20nm,0.9s
M14K Bethel 79.67 8 P P 03 18 00.2 +0.4
baz=196
M15K Kasigluk River 79.79 9 P P 03 18 00.3 -0.2
baz=197
N16K Nishlik Lake 79.87 10 P P 03 18 01.3 +0.4
baz=198
I04A Tendick Farm, 79.88 37 P P 03 18 02.0 +0.6
O18K Koktuh Hills 79.90 11 P P 03 18 00.5 -0.7
O18K IAmb IAmb 03 18 02.1
comp=Z,42nm,0.8s
O18K Koktuh Hills 79.90 11 P P 03 18 01.1 -0.1
baz=202,SNR=5.9
P19K Oil Pt 80.10 12 P P 03 18 01.4 -0.8
baz=204
L14K Kuka Creek 80.15 7 P P 03 18 02.5 +0.1
L14K Kuka Creek 80.15 7 P P 03 18 02.8 +0.5
baz=195
N17K Nushagak Hills 80.17 10 P P 03 18 03.1 +0.6
baz=200
M16K Timber Creek 80.36 9 P P 03 18 04.2 +0.8
baz=198,SNR=7.5
O19K Port Alsworth 80.39 12 P P 03 18 03.8 +0.2
baz=203
CN2 Changchun 80.43 322 P P 03 18 04.8 +0.6
CN2 pmax pmax
comp=Z,40nm,1.1s
BNX BinXian 80.49 325 ⇓P P 03 18 04.8 +0.3
BNX pmax pmax
comp=Z,51nm,0.8s
KLR Kul'dur 80.50 329 P P 03 18 04.5 +0.1
comp=Z,7.7nm,0.9s,baz=93,slow=4.7,SNR=19
comp=Z,7.7nm,0.9s
K13K Kusilvak Mount 80.50 6 P P 03 18 04.2 0.0
baz=193
N18K Kilae Creek 80.54 11 P P 03 18 03.8 -0.7
N18K Kilae Creek 80.54 11 P P 03 18 04.6 +0.1
baz=201
O20K Slope Mountain 80.62 13 P P 03 18 05.1 +0.1
baz=204
L15K Ingalalk Mounta 80.63 8 P P 03 18 05.6 +0.8
baz=196
BRSE Bradley Lake S 80.72 14 P P 03 18 05.8 +0.4
baz=206
PINE Pine Mountain 80.74 38 P P 03 18 07.2 +1.1
SMAI San Martin Ant 80.81 159 P P 03 18 07.2 +1.3
SMAI IAmb IAmb 03 18 08.3
comp=Z,40nm,0.8s
N19K Bonanza Creek 80.93 11 P P 03 18 06.3 -0.2
baz=203
L16K Owhat River 80.94 9 P P 03 18 06.9 +0.5
L16K IAmb IAmb 03 18 08.0
comp=Z,33nm,1.1s
L16K Owhat River 80.94 9 P P 03 18 07.3 +0.9
baz=198,SNR=6.0
M17K Holitna River 80.96 10 P P 03 18 07.5 +0.9
M17K IAmb IAmb 03 18 08.6
comp=Z,44nm,0.9s
M17K Holitna River 80.96 10 P P 03 18 07.5 +0.9
baz=200
WHN Wuhan 81.04 306 P P 03 18 08.6 +0.9
WHN pmax pmax
comp=Z,50nm,1.5s
R11B Troy Canyon, C 81.09 45 P P 03 18 07.7 -0.3
baz=238
CNSH ChangSha 81.10 303 P P 03 18 08.9 +0.9
CNSH pmax pmax
comp=Z,25nm,1.2s
K15K Wolf Creek Mou 81.22 8 P P 03 18 08.7 +0.8
K15K IAmb IAmb 03 18 09.8
comp=Z,57nm,0.8s
K15K Wolf Creek Mou 81.22 8 P P 03 18 09.2 +1.4
baz=196
NLWA Neilton Lookou 81.29 34 P P 03 18 08.9 +0.3
M18K Stony River 81.31 11 P P 03 18 09.3 +0.9
baz=201
J14K Nanvaranak Lak 81.42 7 P P 03 18 09.8 +1.0
baz=194
Q23K Middleton Isla 81.50 16 P P 03 18 10.2 +0.9
baz=210
MA2 Magadan 81.51 345 P P 03 18 08.0 -1.5
L17K Donlin 81.52 9 P P 03 18 10.5 +1.1
baz=199,SNR=7.8
N20K Mount Spurr 81.73 12 P P 03 18 10.6 0.0
baz=205
SPCR Spurr Chakacha 81.73 12 P P 03 18 10.5 -0.1
baz=205
P23K Montague Islan 81.73 15 P P 03 18 10.5 -0.1
baz=209
GAMB Gambell 81.79 3 P P 03 18 11.3 +0.6
baz=186
L18K Granite Mounta 81.85 10 P P 03 18 11.8 +0.7
L18K IAmb IAmb 03 18 12.7
comp=Z,20nm,0.7s
L18K Granite Mounta 81.85 10 P P 03 18 11.4 +0.3
baz=200
BELA Belgrano 2 81.89 173 P P 03 18 11.0 -0.2
BELA IAmb IAmb 03 18 12.4
comp=Z,33nm,0.8s
M19K Big River Lodg 81.95 11 P P 03 18 11.6 0.0
baz=203
CLRS Cowichan Lake 82.05 33 P P 03 18 13.1 +0.7
K17K Iditarod 82.07 9 P P 03 18 12.9 +0.7
baz=199
L19K White Mountain 82.13 11 P P 03 18 12.9 +0.4
baz=202
RC01 Rabbit Creek A 82.15 13 P P 03 18 12.5 -0.2
baz=207
M20K Styx River 82.17 12 P P 03 18 12.1 -0.7
baz=204
PWL Port Wells 82.26 14 P P 03 18 12.2 -1.0
baz=206
SUA Susitna One 82.27 13 P P 03 18 13.5 +0.1
baz=206
J16K Anvik River 82.29 8 P P 03 18 13.6 +0.3
baz=197
UBPT Khong Chiam 82.36 289 IAmb IAmb 03 18 15.8
comp=Z,18nm,0.7s
U15A North Rim 82.39 48 P P 03 18 15.3 +0.5
SKT Skwentna 82.57 12 P P 03 18 14.4 -0.4
baz=205
GLI Glacier Island 82.58 15 IAmb IAmb 03 18 15.0
comp=Z,26nm,0.8s
GLI Glacier Island 82.58 15 P P 03 18 14.3 -0.4
baz=210,SNR=8.9
L20K Farewell, AK 82.58 11 P P 03 18 15.0 +0.1
baz=203
J17K VABM Dome 82.60 8 P P 03 18 14.9 0.0
J17K IAmb IAmb 03 18 16.3
comp=Z,15nm,0.8s
J17K VABM Dome 82.60 8 P P 03 18 15.5 +0.6
baz=198,SNR=6.2
EYAK Cordova Ski Ar 82.62 15 P P 03 18 15.2 +0.3
baz=211
M22K Willow 82.66 13 P P 03 18 14.8 -0.3
baz=207
KNK Knik Glacier 82.72 14 P P 03 18 15.6 0.0
baz=208
PMR Palmer 82.73 13 P P 03 18 15.2 -0.3
PMR Palmer 82.73 13 IAmb IAmb 03 18 15.4
comp=Z,9.9nm,0.6s
PMR Palmer 82.73 13 P P 03 18 15.1 -0.4
baz=208,SNR=5.5
I17K Unalakleet 82.86 8 P P 03 18 17.1 +1.0
baz=196
BGLC Bering Glacier 82.91 17 P P 03 18 17.2 +0.9
baz=213
GHO Glory Hole Cre 82.94 13 IAmb IAmb 03 18 17.2
comp=Z,35nm,0.8s
J18K Innoko River 83.02 9 IAmb IAmb 03 18 18.0
comp=Z,23nm,0.8s
J18K Innoko River 83.02 9 P P 03 18 17.1 +0.2
baz=200,SNR=17
U33K Whale Pass 83.05 23 P P 03 18 17.4 +0.2
baz=222
V35K Ketchikan 83.06 25 P P 03 18 17.4 +0.2
baz=224
SNH Sunshine Point 83.08 17 IAmb IAmb 03 18 18.7
comp=Z,40nm,0.8s
SML Sawmill 83.10 14 P P 03 18 17.2 -0.3
baz=208
CUT Chulitna 83.22 13 P P 03 18 17.4 -0.5
baz=206
M23K Glacier View 83.23 14 P P 03 18 17.9 -0.1
baz=209
BMRM Bremner River 83.27 16 P P 03 18 18.3 0.0
baz=212,SNR=6.1
HEH HeiHe 83.30 328 eP P 03 18 18.5 -0.1
HEH pmax pmax
comp=Z,22nm,1.2s
MESA MESA 83.32 17 IAmb IAmb 03 18 20.0
comp=Z,43nm,0.7s
MESA MESA 83.32 17 P P 03 18 19.5 +0.7
baz=214,SNR=8.6
S31K Pelican 83.33 21 P P 03 18 19.1 +0.6
baz=220
SCM Sheep Creek Mo 83.36 14 IAmb IAmb 03 18 19.3
comp=Z,29nm,0.7s
SCM Sheep Creek Mo 83.36 14 P P 03 18 18.6 -0.1
baz=209,SNR=8.6
K20K Telida 83.36 11 P P 03 18 18.5 -0.1
K20K IAmb IAmb 03 18 19.5
comp=Z,25nm,0.7s
K20K Telida 83.36 11 P P 03 18 18.6 -0.1
baz=203
KLU Klutina 83.39 15 P P 03 18 19.4 +0.5
baz=210
H16K Elim 83.40 7 P P 03 18 19.7 +0.9
baz=195
CRQM Cirque 83.48 16 IAmb IAmb 03 18 20.9
comp=Z,28nm,1.1s
CRQE Cirque 83.49 16 P P 03 18 19.5 +0.1
baz=213,SNR=7.3
S32K Killisnoo 83.53 22 P P 03 18 19.9 +0.4
baz=221
G15K Niukluk 83.56 6 P P 03 18 19.7 +0.1
baz=193
WRAK Wrangell Islan 83.56 24 P P 03 18 20.4 +0.6
baz=223
PNL Peninsula 83.65 19 P P 03 18 20.1 -0.1
PNL Peninsula 83.65 19 P P 03 18 20.5 +0.3
baz=217,SNR=7.2
J19K Poorman 83.69 10 P P 03 18 20.6 +0.3
baz=201,SNR=6.3
PINM Pinnacle 83.74 18 P P 03 18 20.9 +0.2
baz=216
MAW Mawson 83.77 200 P P 03 18 21.7 +0.9
comp=Z,3.0nm,0.5s,baz=160,slow=4.4,SNR=6.4
comp=Z,3.0nm,0.5s
VRDI Verde Repeater 83.79 16 IAmb IAmb 03 18 21.8
comp=Z,13nm,0.8s
N25K Chitina, Valde 83.82 15 IAmb IAmb 03 18 21.9
comp=Z,28nm,0.8s
N25K Chitina, Valde 83.82 15 P P 03 18 21.2 +0.1
baz=212,SNR=9.9
GRNC Granite Creek 83.84 17 IAmb IAmb 03 18 22.2
comp=Z,16nm,0.9s
M24K Tolsona, Glenn 83.86 14 IAmb IAmb 03 18 22.5
comp=Z,32nm,0.7s
M24K Tolsona, Glenn 83.86 14 P P 03 18 21.9 +0.7
baz=210,SNR=6.6
GLB Gilahina Butte 83.88 16 IAmb IAmb 03 18 22.0
comp=Z,19nm,0.7s
WAT6 Susitna Watana 83.92 14 P P 03 18 21.3 -0.3
baz=209,SNR=15
HNS HongShan 83.95 312 ⇓P P 03 18 23.0 +0.9
HNS pmax pmax
comp=Z,24nm,1.3s
WAT1 Susitna Watana 83.96 13 P P 03 18 21.5 -0.1
baz=208
H17K Granite Mounta 83.97 8 P P 03 18 21.8 +0.2
baz=197
MCARA McCarthy VSAT 84.04 16 P P 03 18 22.1 +0.1
baz=213
J20K Nowinta River 84.10 10 P P 03 18 21.7 -0.5
J20K IAmb IAmb 03 18 23.2
comp=Z,14nm,0.7s
J20K Nowinta River 84.10 10 P P 03 18 22.5 +0.2
baz=203,SNR=12
G16K Koyuk River 84.12 7 P P 03 18 22.6 +0.2
baz=195
LOGN Logan Glacier 84.12 17 IAmb IAmb 03 18 23.5
comp=Z,17nm,0.9s
P29M Windy Craggy 84.14 19 IAmb IAmb 03 18 24.1
comp=Z,16nm,0.8s
P29M Windy Craggy 84.14 19 P P 03 18 23.3 +0.7
baz=218,SNR=11
CTG Chitna Glacier 84.14 17 P P 03 18 22.9 +0.2
baz=215,SNR=9.1
CTGM Chitina Glacie 84.15 17 IAmb IAmb 03 18 23.6
comp=Z,18nm,0.8s
R32K Eaglecrest 84.15 21 P P 03 18 23.2 +0.5
baz=221
BJT Baijiatuan 84.20 315 IAmb IAmb 03 18 24.5
comp=Z,13nm,0.7s
BJI Beijing 84.21 315 P P 03 18 24.1 +0.8
BJI pmax pmax
comp=Z,11nm,1.1s
RPSI Rantau Prapat 84.24 275 P P 03 18 23.6 -0.5
RPSI IAmb IAmb 03 18 24.9
comp=Z,39nm,0.8s
LYN LuoYang 84.26 309 ⇓P P 03 18 24.8 +1.1
LYN pmax pmax
comp=Z,110nm,0.7s
O28M Mount Upton 84.31 18 P P 03 18 24.0 +0.2
baz=216,SNR=14
HARP HAARP 84.36 15 P P 03 18 24.0 +0.4
baz=211,SNR=5.3
O29M Mount Kennedy 84.41 19 P P 03 18 24.3 +0.3
baz=217
G17K Kiwalik Mounta 84.42 7 P P 03 18 24.8 +1.0
baz=196
DHY Denali Highway 84.43 13 P P 03 18 23.7 -0.4
baz=209,SNR=8.5
PLBC Pleasant Camp 84.44 20 P P 03 18 24.6 +0.6
baz=219,SNR=9.9
HLID Hailey 84.56 41 P P 03 18 26.7 +1.5
HLID Hailey 84.56 41 P P 03 18 25.6 +0.3
baz=239
BPAW Bear Paw Mtn. 84.60 12 P P 03 18 24.5 -0.2
baz=206
I20K Naaghedeneel 84.62 10 P P 03 18 25.1 +0.3
baz=202
MCK McKinley 84.68 13 P P 03 18 24.6 -0.5
baz=208,SNR=8.8
P30M Million Dollar 84.77 19 P P 03 18 26.2 +0.5
baz=219
PAX Paxson 84.78 14 P P 03 18 25.1 -0.6
baz=211,SNR=7.3
T35M Bob Quinn 84.78 24 P P 03 18 26.0 +0.3
baz=225
SKAG Skagway 84.78 20 P P 03 18 26.3 +0.7
baz=220
YUK8 Steele Glacier 84.85 17 P P 03 18 26.8 +0.4
baz=216,SNR=7.1
M26K Nabesna, AK 84.90 16 IAmb IAmb 03 18 27.4
comp=Z,20nm,1.0s
M26K Nabesna, AK 84.90 16 P P 03 18 26.6 +0.4
baz=213,SNR=14
YUK6 Outpost Mounta 84.98 18 P P 03 18 27.0 0.0
baz=218
H19K Roundabout Mou 85.00 9 P P 03 18 26.8 +0.2
baz=200
G18K Tagagawik 85.04 8 P P 03 18 26.3 -0.5
baz=198
YUK3 Moose Creek 85.05 17 P P 03 18 27.5 +0.2
baz=216,SNR=16
S34M Telegraph Cree 85.11 23 IAmb IAmb 03 18 29.1
comp=Z,14nm,0.8s
S34M Telegraph Cree 85.11 23 P P 03 18 28.3 +1.0
baz=224,SNR=9.5
M27K Edge Creek, AK 85.15 16 P P 03 18 27.5 -0.1
M27K IAmb IAmb 03 18 29.0
comp=Z,25nm,1.1s
M27K Edge Creek, AK 85.15 16 P P 03 18 28.0 +0.4
baz=214,SNR=15
H20K Anotleneega Mo 85.20 9 P P 03 18 28.1 +0.4
baz=202
YUK4 Talbot Arm 85.22 18 P P 03 18 28.9 +0.9
baz=217
L26K Log Cabin Wild 85.33 15 P P 03 18 28.8 +0.4
baz=213
NEA2 Nenana 85.42 12 P P 03 18 28.2 -0.5
baz=207
P32M Atlin 85.42 21 P P 03 18 29.1 +0.3
baz=222
K24K Donnelly Dome 85.42 14 P P 03 18 28.9 +0.1
baz=210,SNR=8.9
Q32M Nakina River 85.45 22 P P 03 18 30.0 +0.8
baz=223,SNR=11
NEW Newport 85.47 36 P P 03 18 29.6 +0.2
baz=236
G19K Purcell Mounta 85.49 8 P P 03 18 29.4 +0.5
baz=200
MLY Manley 85.49 11 P P 03 18 29.0 -0.1
baz=206,SNR=6.9
WRH Wood River Hil 85.51 13 IAmb IAmb 03 18 30.0
comp=Z,22nm,1.0s

O30N **Mendenhall** 85.54 19 IAmb IAmb 03 18 30.8
comp=Z,9.5nm,0.7s
O30N **Mendenhall** 85.54 19 P **P** **03 18 30.0 +0.6**
baz=220,SNR=10
RIDG **Independent Ri** 85.58 14 P **P** **03 18 29.6 0.0**
baz=211,SNR=6.2
F18K **Selawik** 85.59 7 P **P** **03 18 29.8 +0.4**
baz=197
HDA **Harding Lake** 85.69 13 IAmb IAmb 03 18 29.8
comp=Z,12nm,0.7s
HDA **Harding Lake** 85.69 13 P **P** **03 18 29.4 -0.6**
baz=209,SNR=12
H21K **Melozitna Rive** 85.69 10 P **P** **03 18 29.9 0.0**
baz=204
CCB **Clear Creek Bu** 85.72 13 IAmb IAmb 03 18 29.6
comp=Z,14nm,0.6s
L27K **Beaver Creek,** 85.75 16 P **P** **03 18 30.7 +0.4**
baz=214,SNR=5.3
N30M **Aishikik Lake** 85.77 18 P **P** **03 18 31.4 +0.9**
baz=219
TXAR **Lajitas Array** 85.80 57 P **P** **03 18 31.9 +0.5**
TXAR **Lajitas Array** 85.80 57 P **P** **03 18 33.0 +1.5**
comp=Z,4.3nm,0.8s,baz=218,slow=6.2,SNR=48
comp=Z,4.3nm,0.8s
E17K **Hotham Inlet** 85.81 6 P **P** **03 18 30.6 +0.2**
baz=195
IMAR **Indian Mountai** 85.84 10 P **P** **03 18 29.9 -0.8**
WHY **Whitehorse** 85.84 20 P **P** **03 18 31.7 +0.8**
baz=221,SNR=5.2
I23K **Minto, Yukon-K** 85.86 12 P **P** **03 18 30.0 -0.7**
baz=207,SNR=5.4
DLBC **Dease Lake** 85.89 23 P **P** **03 18 31.4 +0.2**
comp=Z,1.9nm,0.3s,baz=272,slow=6.4,SNR=6.8
comp=Z,1.9nm,0.3s
DLBC **Dease Lake** 85.89 23 P **P** **03 18 31.9 +0.8**
baz=225
MDM **Murphy Dome** 85.91 12 IAmb IAmb 03 18 31.0
comp=Z,17nm,1.0s
COLA **College** 85.91 12 P **P** **03 18 30.5 -0.4**
COLA **College** 85.91 12 P **P** **03 18 30.7 -0.2**
baz=209
ANMO **Albuquerque** 85.94 51 P **P** **03 18 31.8 -0.4**
baz=245
SCRK **Sand Creek** 85.99 14 P **P** **03 18 31.4 -0.1**
baz=212,SNR=5.7
IL31 **86.02 13** IAmb IAmb 03 18 31.6
comp=Z,9.6nm,0.7s
ILAR **Eielson Array** 86.02 13 P **P** **03 18 30.6 -1.0**
comp=Z,4.7nm,0.4s,baz=221,slow=4.8,SNR=101
comp=Z,4.7nm,0.4s
F19K **Shaleruckik Mo** 86.05 8 P **P** **03 18 31.6 0.0**
baz=199
M29M **Somme Creek** 86.15 17 P **P** **03 18 32.5 +0.2**
baz=217,SNR=13
H22K **Ishtalitna Cre** 86.16 11 P **P** **03 18 32.0 -0.1**
baz=205,SNR=5.7
XLT **XiLinHaoTe** 86.16 319 *e*P **P** **03 18 32.5 -0.3**
XLT pmax pmax
comp=Z,27nm,1.0s
P33M **Teslin, Yukon** 86.18 21 P **P** **03 18 33.1 +0.6**
baz=222,SNR=6.4
N31M **Braeburn, Yuko** 86.19 19 P **P** **03 18 32.9 +0.5**
baz=220,SNR=8.2
POKR **Poker Plat Res** 86.21 12 P **P** **03 18 31.6 -0.9**
baz=209,SNR=12
J25K **Salcha River,** 86.21 13 IAmb IAmb 03 18 32.6
comp=Z,7.7nm,0.7s
J25K **Salcha River,** 86.21 13 P **P** **03 18 32.1 -0.5**
baz=211,SNR=12
R33M **Jennings River** 86.23 22 P **P** **03 18 33.6 +0.8**
baz=224,SNR=7.0
E18K **Tukpahlearik C** 86.27 7 P **P** **03 18 33.0 +0.4**
baz=196
D17K **Noatak River** 86.29 6 P **P** **03 18 32.9 +0.2**
baz=194
G21K **Allakaket** 86.37 10 P **P** **03 18 32.8 -0.3**
G21K IAmb IAmb 03 18 33.9
comp=Z,11nm,0.8s
G21K **Allakaket** 86.37 10 P **P** **03 18 33.1 0.0**
baz=203,SNR=9.4
H23K **Yukon River** 86.43 11 P **P** **03 18 33.5 0.0**
baz=207
K27K **Chicken** 86.49 15 P **P** **03 18 34.6 +0.9**
baz=214
J26L **Joseph Creek** 86.53 14 IAmb IAmb 03 18 36.1
comp=Z,10.0nm,0.7s
J26L **Joseph Creek** 86.53 14 P **P** **03 18 34.4 +0.3**
baz=213,SNR=19
F20K **Avaraart Lake** 86.53 9 P **P** **03 18 34.1 +0.2**
baz=201
XAN **Xi'an** 86.69 307 ⇓P **P** **03 18 36.8 +1.3**
XAN pmax pmax
comp=Z,74nm,1.0s
E19K **Redstone River** 86.71 8 IAmb IAmb 03 18 35.4
comp=Z,13nm,0.7s
E19K **Redstone River** 86.71 8 P **P** **03 18 34.8 +0.1**
baz=200,SNR=12
H24K **Noodor Dome** 86.76 12 P **P** **03 18 33.8 -1.2**
baz=208
L29M **L29M** 86.78 17 P **P** **03 18 34.4 -0.8**
baz=218
N32M **Quiet Lake** 86.79 20 P **P** **03 18 36.5 +1.2**
baz=222
S22A **4UR Ranch, Cre** 86.88 49 P **P** **03 18 36.6 +0.1**
baz=244
LHMI **Lhok Sumawe** 86.91 276 P **P** **03 18 36.6 -0.3**
PRP **Porcupine Dome** 86.96 13 P **P** **03 18 37.0 +0.8**
baz=211
F21K **Alatna River** 87.03 9 P **P** **03 18 36.5 +0.3**
baz=203
C17K **DeLong Mountai** 87.04 5 P **P** **03 18 36.6 +0.3**
baz=194
G22K **Bettles** 87.07 10 P **P** **03 18 36.5 +0.2**
baz=205,SNR=8.1
G23K **Bananza Creek** 87.13 11 P **P** **03 18 36.6 -0.1**
baz=206,SNR=5.3
M31M **Drury Creek, Y** 87.17 19 P **P** **03 18 37.5 +0.5**
baz=221,SNR=5.3
DAWY **Dawson** 87.20 16 P **P** **03 18 37.3 +0.2**
baz=216,SNR=8.3
BW06 **Boulder Array** 87.26 43 P **P** **03 18 38.2 0.0**
baz=242
PDAR **Pinedale Array** 87.26 43 P **P** **03 18 38.8 +0.6**
comp=Z,1.4nm,0.8s,baz=223,slow=3.1,SNR=11
comp=Z,1.4nm,0.8s
BOZ **Bozeman (W)** 87.30 40 P **P** **03 18 39.0 +0.8**
baz=241
I26K **Coal Creek Min** 87.30 14 P **P** **03 18 38.4 +0.9**
baz=213
EGAK **Eagle** 87.33 15 IAmb IAmb 03 18 38.6
comp=Z,11nm,0.9s
EGAK **Eagle** 87.33 15 P **P** **03 18 38.0 +0.3**
baz=215,SNR=8.8
F22K **John River** 87.49 10 P **P** **03 18 38.7 +0.3**
baz=204
FARO **Faro, Yukon** 87.51 19 P **P** **03 18 38.7 +0.1**
baz=222
K29M **Barlow Dome** 87.52 17 P **P** **03 18 38.6 -0.1**
K29M **Barlow Dome** 87.52 17 P **P** **03 18 39.2 +0.5**
baz=218,SNR=12
COLD **Coldfoot** 87.57 10 P **P** **03 18 39.1 +0.4**
baz=206,SNR=13
G24K **Hadweenzic Riv** 87.59 12 P **P** **03 18 38.5 -0.4**
baz=209
E20K **Nigu River** 87.60 8 P **P** **03 18 39.0 +0.1**
baz=201,SNR=9.8
HHC **Hu-ho-hao-te** 87.70 314 ⇓P **P** **03 18 41.1 +1.0**
HHC pP pP 03 20 48.4 +1.1
HHC pmax pmax
comp=Z,25nm,0.8s
J29N **Klondike Camp** 87.82 16 P **P** **03 18 40.6 +0.5**
baz=218
I27K **Kandik River** 87.91 14 P **P** **03 18 40.5 0.0**
baz=214
G25K **Bearman Lake** 87.92 12 P **P** **03 18 40.4 +0.1**
baz=210
D20K **Etivluk River** 87.98 8 P **P** **03 18 40.9 +0.3**
baz=200
C19K **Lookout Ridge** 88.00 7 P **P** **03 18 40.8 0.0**
baz=198
TOAD **Toad River Com** 88.01 24 P **P** **03 18 42.3 +1.2**
baz=229,SNR=10
E21K **Killik River** 88.08 9 P **P** **03 18 41.2 0.0**
baz=203
E22K **Anaktuvuk Pass** 88.12 10 P **P** **03 18 41.8 +0.4**
baz=205
I28M **Miner Creek** 88.18 15 P **P** **03 18 41.5 -0.3**
baz=216,SNR=8.1

F24K **Squaw Lake** 88.24 11 P **P** **03 18 42.3 +0.4**
baz=208,SNR=13
KMI **Kunming** 88.27 297 ⇓P **P** **03 18 44.6 +1.3**
KMI pmax pmax
comp=Z,18nm,0.9s
DRIO **Del Rio** 88.29 58 IAmb IAmb 03 18 45.1
comp=Z,7.9nm,0.9s
E23K **Chandalar** 88.41 10 P **P** **03 18 43.2 +0.4**
baz=207,SNR=6.7
J30M **Hart River** 88.42 17 P **P** **03 18 43.5 +0.5**
baz=219
H27K **Steamboat Moun** 88.45 14 P **P** **03 18 43.7 +0.8**
baz=214
MMPY **Sheldon Lake,** 88.46 20 IAmb IAmb 03 18 44.6
comp=Z,14nm,0.9s
MMPY **Sheldon Lake,** 88.46 20 P **P** **03 18 43.8 +0.8**
baz=224,SNR=13
I29M **Ogilvie Camp,** 88.52 16 IAmb IAmb 03 18 43.8
comp=Z,11nm,1.1s
I29M **Ogilvie Camp,** 88.52 16 P **P** **03 18 42.8 -0.5**
baz=217,SNR=7.0
RLMT **Red Lodge** 88.54 41 P **P** **03 18 44.6 +0.5**
baz=242
G26K **Porcupine Rive** 88.56 13 P **P** **03 18 44.0 +0.7**
baz=212,SNR=7.6
E24K **Your Creek** 88.62 11 P **P** **03 18 44.5 +0.7**
baz=208
C21K **Kniteblade Rid** 88.63 8 P **P** **03 18 44.1 +0.5**
baz=202,SNR=7.5
D22K **Ayikyak River** 88.67 9 P **P** **03 18 44.3 +0.4**
baz=204,SNR=8.9
TGTN **Hyland Airport** 88.68 21 P **P** **03 18 45.1 +1.0**
baz=226
F25K **Christian Rive** 88.73 12 P **P** **03 18 44.7 +0.5**
baz=211,SNR=5.6
BMAR **Burnt Mountain** 88.80 12 P **P** **03 18 44.6 0.0**
G27K **Doyon Strip** 88.90 14 P **P** **03 18 45.0 0.0**
baz=214
I30M **Mount Dempster** 88.91 16 P **P** **03 18 44.7 -0.5**
I30M IAmb IAmb 03 18 46.0
comp=Z,12nm,1.1s
I30M **Mount Dempster** 88.91 16 P **P** **03 18 45.5 +0.3**
baz=219,SNR=5.9
TOLK **Toolik Lake Re** 88.94 10 P **P** **03 18 45.3 +0.1**
baz=207
ELIB **Prcess Elisa** 88.98 187 *d*P **P** **03 18 45.6 0.0**
comp=Z,21nm,0.7s
D23K **Nanushuk River** 89.06 10 IAmb IAmb 03 18 47.4
comp=Z,15nm,0.9s
D23K **Nanushuk River** 89.06 10 P **P** **03 18 46.2 +0.5**
baz=206,SNR=7.4
B21K **Ikpikpuk River** 89.09 8 P **P** **03 18 46.3 +0.5**
baz=202
F26K **Sheenjek River** 89.11 12 P **P** **03 18 46.4 +0.4**
baz=212,SNR=5.7
B20K **Meade River** 89.13 7 P **P** **03 18 46.3 +0.3**
baz=200
H29M **Whitestone** 89.19 15 IAmb IAmb 03 18 47.2
comp=Z,15nm,0.8s
H29M **Whitestone** 89.19 15 P **P** **03 18 46.4 +0.1**
baz=217,SNR=12
CMAR **Chiang Mai Arr** 89.31 290 P **P** **03 18 48.5 +0.5**
comp=Z,12nm,0.8s,baz=112,slow=2.7,SNR=52
comp=Z,12nm,0.8s
D24K **Happy Valley** 89.52 10 P **P** **03 18 48.2 +0.4**
baz=208
PZH **PanZhiHua** 89.59 298 P **P** **03 18 51.0 +1.7**
PZH pmax pmax
comp=Z,20nm,0.5s
EPYK **Eagle Plains** 89.72 15 IAmb IAmb 03 18 49.6
comp=Z,15nm,0.9s
EPYK **Eagle Plains** 89.72 15 P **P** **03 18 49.0 +0.2**
baz=219,SNR=6.7
G29M **Pine Creek** 89.83 15 IAmb IAmb 03 18 50.0
comp=Z,8.1nm,0.8s
G29M **Pine Creek** 89.83 15 P **P** **03 18 49.5 +0.3**
baz=218,SNR=5.0
C23K **Itkillik River** 89.85 9 P **P** **03 18 49.7 +0.4**
baz=206
F28M **Old Crow** 89.96 14 P **P** **03 18 50.1 +0.3**
baz=216
C24K **Franklin Bluff** 90.05 10 P **P** **03 18 50.6 +0.4**
baz=208
E27K **Coleen River** 90.05 13 P **P** **03 18 50.8 +0.5**
E27K **Coleen River** 90.05 13 P **P** **03 18 50.6 +0.3**
baz=214
TROLL **Troll, Antarti** 90.08 180 ⇑P **P** **03 18 50.8 0.0**
comp=Z,562nm,0.5s
D25K **Kavik River** 90.09 11 P **P** **03 18 50.9 +0.4**
baz=210
G30M **tAoh Zraii Nji** 90.32 15 P **P** **03 18 51.0 -0.6**
baz=219,SNR=10
SNAA **Sanae** 90.36 178 P **P** **03 18 51.4 -0.5**
SNAA IAmb IAmb 03 18 52.6
comp=Z,6.4nm,0.6s
SNAA **Sanae** 90.36 178 ⇑P **P** **03 18 51.6 -0.3**
comp=Z,150nm,0.6s
SNAA **Sanae** 90.36 178 P **P** **03 18 51.6 -0.3**
comp=Z,5.5nm,0.6s,baz=204,slow=5.4,SNR=57
comp=Z,5.5nm,0.6s
VNA3 **Neumayer Olymp** 90.49 176 ⇑P **P** **03 18 52.6 +0.2**
comp=Z,32nm,0.7s
G31M **Satah River** 90.77 16 P **P** **03 18 53.5 0.0**
baz=221,SNR=11
E28M **Babbage River** 90.84 13 P **P** **03 18 53.9 0.0**
baz=216,SNR=11
C27K **Jago River** 90.84 11 P **P** **03 18 54.0 +0.1**
baz=212,SNR=5.8
C26K **Camden Bay** 90.87 11 P **P** **03 18 54.8 +0.8**
baz=211
PLCA **Paso Flores** 90.91 134 P **P** **03 18 56.0 +0.8**
comp=Z,7.0nm,0.9s,baz=239,slow=5.5,SNR=15
comp=Z,7.0nm,0.9s
F30M **Barrier River** 90.92 15 P **P** **03 18 54.8 +0.6**
baz=220
VNA2 **Neumayer--Watz** 90.93 177 ⇑P **P** **03 18 54.7 +0.2**
comp=Z,20nm,0.6s,baz=188,slow=4.2
E29M **Blow River** 91.03 14 P **P** **03 18 55.4 +0.6**
baz=218
D27M **Malcolm River** 91.06 12 P **P** **03 18 55.5 +0.5**
baz=215
LAO **LASA Array** 91.14 41 IAmb IAmb 03 18 58.7
comp=Z,6.8nm,1.1s
LAO **LASA Array** 91.14 41 P **P** **03 18 57.7 +1.8**
baz=244
VNA1 **Neumayer--Stat** 91.16 177 ⇑P **P** **03 18 56.0 +0.5**
comp=Z,22nm,0.8s
F31M **Tsiigehtchic** 91.30 16 P **P** **03 18 55.8 -0.1**
F31M **Tsiigehtchic** 91.30 16 P **P** **03 18 56.4 +0.4**
baz=222
LZH **Lanzhou** 91.32 308 *e*P **P** **03 18 57.8 +0.7**
LZH sP sP 03 22 06.4 +2.5
LZH pmax pmax
comp=Z,29nm,1.4s
D28M **Stokes Point** 91.59 13 P **P** **03 18 57.3 0.0**
baz=217
INK **Inuvik** 92.00 15 P **P** **03 18 58.5 -0.6**
INK IAmb IAmb 03 18 59.5
comp=Z,8.9nm,0.8s
INK **Inuvik** 92.00 15 P **P** **03 18 58.6 -0.6**
comp=Z,7.2nm,0.7s,baz=245,slow=2.2,SNR=15
comp=Z,7.2nm,0.7s
INK **Inuvik** 92.00 15 P **P** **03 18 59.1 -0.1**
baz=222
ULN **Ulaanbaatar** 93.57 319 P **P** **03 19 06.8 -0.3**
ULN IAmb IAmb 03 19 08.1
comp=Z,8.4nm,0.9s
SONM **Songino Array** 93.97 319 P **P** **03 19 08.4 -0.5**
comp=Z,1.9nm,0.9s,baz=130,slow=5.1,SNR=9.0
comp=Z,1.9nm,0.9s
YKA **Yellowknife Ar** 94.38 25 P **P** **03 19 09.8 -0.4**
comp=Z,1.3nm,0.7s,baz=260,slow=9.9,SNR=4.8
comp=Z,1.3nm,0.7s
GTA **Gaotai** 95.47 310 P **P** **03 19 16.5 +0.6**
GTA pmax pmax
comp=Z,6.0nm,0.8s
ZALV **Zalesovo Beam** 108.64 322 PKiKP **PKiKP** **03 24 14.3 -1.1**
comp=Z,1.4nm,0.7s,baz=168,slow=2.7,SNR=4.0
MKAR **Makanchi Array** 109.56 314 Pdiff **Pdif** **03 20 19.2 +0.9**
comp=Z,0.4nm,0.5s,baz=89,slow=7.4,SNR=4.2
MKAR PKiKP **PKiKP** **03 24 16.4 -1.1**
comp=Z,1.6nm,0.5s,baz=180,slow=0.8,SNR=19
MKAR PKKPbc **PKKPbc** **03 35 23.5 -1.2**
comp=Z,1.0nm,0.8s,baz=285,slow=4.6,SNR=4.5
KURBB **Kurchatov Arra** 112.30 318 PKiKP **PKiKP** **03 24 21.5 -1.0**
comp=Z,2.8nm,0.7s,baz=95,slow=1.9,SNR=20
KURBB PKKPbc **PKKPbc** **03 35 14.8 -1.1**
comp=Z,0.3nm,0.6s,baz=292,slow=3.9,SNR=4.3

BVAR **Borovoye Array** 117.25 321 PKP **PKPdf** **03 24 31.1 -0.8**
comp=Z,3.1nm,0.4s,baz=128,slow=1.5,SNR=15
BVAR PKKPbc **PKKPbc** **03 34 58.2 -1.0**
comp=Z,0.3nm,0.5s,baz=258,slow=7.2,SNR=2.2
KK31 **Karatay Array** 117.75 310 **PKPdf** **03 24 32.1 -1.2**
KKAR **Karatay Array** 117.75 310 PKPdf **PKPdf** **03 24 32.1 -1.2**
GAR **Garm** 117.87 305 PKPdf **PKPdf** **03 24 32.9 -0.9**
SPITS **Spitsbergen Ar** 119.51 357 PKP **PKPdf** **03 24 35.3 -0.4**
comp=Z,15nm,1.0s,baz=67,slow=6.4,SNR=3.4
ARU **Arti** 123.24 326 PKP **PKPdf** **03 24 43.1 -0.2**
comp=Z,9.0nm,0.6s,baz=167,slow=1.3,SNR=19
ABKAR **Akbulak array** 124.35 318 PKPdf **PKPdf** **03 24 44.6 -1.1**
AKTO **Aktyubinsk** 125.28 319 PKP **PKPdf** **03 24 46.5 -0.9**
comp=Z,5.6nm,0.9s,baz=102,slow=1.3,SNR=13
ARCES **ARCESS Array B** 126.60 350 PKP **PKPdf** **03 24 49.2 -0.3**
comp=Z,2.1nm,0.4s,baz=63,slow=1.3,SNR=26
KIRV **Kirov** 126.90 331 PKP **PKiKP** **03 24 50.5 -0.3**
comp=Z,7.1nm,0.5s,baz=325,slow=1.6,SNR=3.8
BELG **Belogornoye** 130.68 325 **PKPdf** **03 24 57.1 -0.5**
BELG **Belogornoye** 130.68 325 PKP **PKPdf** **03 24 57.1 -0.5**
comp=Z,17nm,0.7s,baz=161,slow=2.6,SNR=5.8
FINES **FINESS Array B** 133.51 344 PKhKP PKPpre 03 24 52.8
comp=Z,2.8nm,0.9s,baz=14,slow=8.6,SNR=2.0
FINES PKP **PKPdf** **03 25 02.1 -0.6**
comp=Z,2.3nm,0.6s,baz=122,slow=2.5,SNR=8.2
NB2 **NORSAR Subarra** 136.64 353 PKP PKPpre 03 25 00.2
comp=Z,1.7nm,1.0s,baz=16,slow=3.2
NOA **NORSAR Array B** 136.64 353 PKhKP PKPpre 03 24 59.6
comp=Z,1.9nm,0.8s,baz=21,slow=3.8,SNR=3.4
NOA PKP **PKPdf** **03 25 09.0 +0.4**
comp=Z,0.8nm,0.5s,baz=15,slow=3.9,SNR=4.2
HFS **Hagfors** 137.21 351 PKhKP PKPpre 03 24 58.1
comp=Z,1.8nm,0.5s,baz=73,slow=5.1,SNR=8.2
HFS PKP **PKPdf** **03 25 09.4 -0.3**
comp=Z,3.9nm,0.9s,baz=89,slow=1.8,SNR=5.3
KBZ **Khabaz** 137.23 316 PKP **PKPdf** **03 25 10.9 +0.7**
comp=Z,0.5nm,0.3s,baz=108,slow=3.2,SNR=3.8
GURO **Guroymak-BITLI** 139.71 309 PKP PKPpre 03 25 08.3
AKASG **Malin Array Be** 140.93 332 PKhKP PKPpre 03 25 09.8
comp=Z,2.0nm,0.4s,baz=43,slow=4.1,SNR=12
AKASG PKP **PKPdf** **03 25 16.7 0.0**
comp=Z,3.1nm,0.4s,baz=47,slow=2.9,SNR=7.8
EKA **Eskdalemuir Ar** 142.66 5 PKhKP PKPpre 03 25 16.2
comp=Z,2.7nm,0.6s,baz=315,slow=2.6,SNR=11
SORM **Soroca** 143.17 330 ⇑P PKPab 03 25 18.6 -0.2
PURM **Purcari** 143.52 327 ⇑P PKPbc 03 25 20.6 +0.3
MILM **Milestii Mici** 143.80 328 ⇑P PKPbc 03 25 20.9 -0.2
VLDR **Vladesti** 144.90 328 ⇑P **PKPab** **03 25 25.0 -0.5**
OJC **Ojcow** 144.95 340 PKPdf **PKPdf** **03 25 23.6 -0.2**
TLCR **144.97 326** ⇑P **PKPab** 03 25 24.6 -0.2
VARL **Varlezi** 144.98 328 ⇓P **PKPab** **03 25 25.5 -0.3**
BURAR **Bucovina Array** 144.99 332 PKPdf PKPbc 03 25 24.8 -0.1
BURAR **Bucovina Array** 144.99 332 ⇓P **PKPab** **03 25 25.5 -0.5**
SCTR **Scanteiesti** 145.06 328 ⇓P **PKPab** **03 25 25.9 -0.2**
GHRR **145.09 329** ⇓P **PKPab** **03 25 26.4 +0.2**
TESR **Tescani** 145.14 330 ⇑P **PKPbc** **03 25 25.3 0.0**
KOLS **Kolonicke sedl** 145.16 336 *e*PKP **PKPab** **03 25 25.9 -0.5**
BRTR **Keskin Array B** 145.21 315 PKPdf **PKPdf** **03 25 23.8 -1.0**
BRTR **Keskin Array B** 145.21 315 PKPbc **PKPbc** **03 25 25.6 -0.2**
comp=Z,18nm,0.7s,baz=130,slow=4.5,SNR=92
SLCR **Slobozia Conac** 145.24 328 ⇑P **PKPab** **03 25 26.4 -0.4**
IZVR **Izvoarele** 145.27 328 ⇑P **PKPab** **03 25 26.5 -0.4**
SCHLR **Schela** 145.29 327 ⇑P **PKPab** **03 25 27.7 +0.7**
KIRS **Kirsehir-Merke** 145.30 314 ⇑P **PKPdf** **03 25 25.2 +0.4**
CFR **Carcaliu** 145.33 327 ⇑P **PKPbc** **03 25 25.5 -0.3**
PANC **Panciu** 145.35 328 ⇓P **PKPab** **03 25 26.9 -0.4**
ONER **Baraj Valea Uz** 145.39 330 ⇓P **PKPab** **03 25 27.1 -0.3**
TPGR **Topolog** 145.40 326 ⇑P **PKPbc** **03 25 26.7 +0.6**
CRVS **Cervenica-Dubn** 145.49 337 *e*PKP **PKPbc** **03 25 26.6 +0.4**
CRVS *e* 03 26 03.0
VRI **Vrincioaia** 145.56 329 ⇑P **PKPbc** **03 25 26.7 +0.2**
ASF **Jabal al Asfar** 145.61 301 PKPbc **PKPbc** **03 25 26.8 -0.4**
comp=Z,18nm,0.8s,baz=350,slow=0.0,SNR=6.2
PLOR **Plostina** 145.61 329 ⇑P **PKPbc** **03 25 26.8 +0.1**
BMR **Baia Mare** 145.68 334 ⇓P **PKPbc** **03 25 27.3 +0.5**
ANTO **Ankara** 145.70 316 ⇑P **PKPbc** **03 25 27.8 +0.6**
OSTC **Ostas** 145.71 344⇑*e*PKP **PKPab** **03 25 27.7 -0.9**
CHVC **Chvalec** 145.72 344⇑*e*PKP **PKPbc** **03 25 27.4 +0.6**
CLL **Collm** 145.76 348⇓*i*PKPbc **PKPbc** **03 25 27.0 +0.1**
comp=Z,60nm,0.8s
HARR **Harsova** 145.76 326 ⇑P **PKPbc** **03 25 27.7 +0.6**
ARCR **ARCALIA** 145.77 332 ⇑P **PKPbc** **03 25 27.6 +0.5**
TURR **Turia** 145.78 330 ⇑P **PKPbc** **03 25 28.0 +0.9**
TLBR **Topalu** 145.80 326 ⇑P **PKPbc** **03 25 27.7 +0.5**
OKC **Ostrava-Krasne** 145.81 341⇑*e*PKP **PKPbc** **03 25 27.2 +0.2**
UPC **Upice** 145.81 344⇑*e*PKP **PKPbc** **03 25 27.5 +0.4**
COVR **Voineasa-Covas** 145.84 329 ⇑P **PKPbc** **03 25 27.4 0.0**
OZUR **145.85 330** ⇑P **PKPbc** **03 25 28.2 +0.8**
DPC **Dobruska-Polom** 145.87 344⇑*e*PKP **PKPbc** **03 25 28.0 +0.7**
BOSR **Bodos** 145.93 330 ⇓P **PKPab** **03 25 28.6 -1.0**
BRG **Berggiesshubel** 145.97 346 Amp 03 25 26.6
comp=Z,3.0nm,0.8s
BRG **Berggiesshubel** 145.97 346 Amp 03 25 28.7
comp=Z,23nm,0.7s
BRG **Berggiesshubel** 145.97 346 *e*PKP **PKPdf** **03 25 26.0 +0.5**
BRG **Berggiesshubel** 145.97 346 P **PKPbc** **03 25 28.1 +0.6**
LANS **Liptovska Anna** 145.98 339 *e*PKP **PKPab** **03 25 28.8 -0.9**
KRLC **Kraliky** 145.99 343 *e*PKPDF **PKPdf** **03 25 26.3 +0.7**
KRLC ⇑*e*PKP **PKPbc** **03 25 28.1 +0.5**
MORC **Moravsky Berou** 146.04 342 *e*PKP **PKPbc** **03 25 28.0 +0.2**
MORC **Moravsky Berou** 146.04 342 ⇓P **PKPbc** **03 25 28.3 +0.5**
NEHR **Nehoiu** 146.09 329 ⇑P **PKPbc** **03 25 28.2 +0.1**
DOPR **Dopca** 146.14 330 ⇓P **PKPbc** **03 25 29.1 +1.0**
PVCC **Panska Ves** 146.15 346⇑*e*PKP **PKPbc** **03 25 28.6 +0.6**
MLR **Muntele Rosu** 146.22 329 **PKPbc** **03 25 27.6 -0.9**
MLR **Muntele Rosu** 146.22 329 PKPbc **PKPbc** **03 25 28.2 -0.3**
comp=Z,17nm,0.7s,baz=342,slow=5.6,SNR=41
MLR **Muntele Rosu** 146.22 329 ⇓P **PKPbc** **03 25 28.5 0.0**
RICC **Richard** 146.25 346⇑*e*PKP **PKPbc** **03 25 28.7 +0.5**
MAUC **Maruska** 146.32 341⇑*e*PKP **PKPbc** **03 25 29.2 +0.7**
MESR **Meseseni** 146.32 334 ⇓P **PKPbc** **03 25 28.9 +0.3**
HSKC **Hora Svate Kat** 146.34 347⇑*e*PKP **PKPbc** **03 25 28.8 +0.3**
CBBR **Cluj-Babes-Bol** 146.37 333 ⇑P **PKPdf** **03 25 25.7 -0.6**
MMAI **Mount Meron Ar** 146.58 303 PKPbc **PKPbc** **03 25 30.4 +0.5**
comp=Z,33nm,0.6s,baz=68,slow=5.5,SNR=36
MMAI SKPbc **SKiKP** **03 28 12.7 0.0**
comp=Z,0.4nm,0.3s,baz=149,slow=3.0,SNR=1.7
PRA **Prague** 146.61 345⇑*e*PKP **PKPbc** **03 25 29.7 +0.5**
PRU **Pruhonice** 146.66 345⇑*e*PKP **PKPbc** **03 25 29.6 +0.2**
PRU *e*PKPAB **PKPab** **03 25 32.9 +0.6**
GOPC **GO Pecny, Ondr** 146.67 345⇑*e*PKP **PKPbc** **03 25 29.7 +0.3**
VOIR **146.69 330** ⇓P **PKPbc** **03 25 29.9 +0.2**
DRGR **146.71 334** ⇑P **PKPbc** **03 25 30.0 +0.3**
VRAC **Vranov** 146.74 342 *e*PKP **PKPbc** **03 25 29.9 +0.3**
VRAC **Vranov** 146.74 342 PKPbc **PKPbc** **03 25 29.9 +0.3**
comp=Z,18nm,0.9s,baz=33,slow=4.3,SNR=13
VYHS **Vyhne** 146.76 339 *e*PKP **PKPbc** **03 25 30.2 +0.5**
JAVC **Velka Javorina** 146.82 341 *e*PKP **PKiKP** **03 25 31.3 -0.5**
BORR **Bors** 146.85 335 ⇑P **PKPdf** **03 25 26.4 -0.7**
ARR **Arges** 146.94 330 ⇑P **PKiKP** **03 25 31.6 -0.6**
KRUC **Moravsky** 147.02 342 *e*PKP **PKPbc** **03 25 30.5 +0.1**
TREC **Trest** 147.06 344⇑*e*PKP **PKPbc** **03 25 30.7 +0.2**
ZVC **Zvikov** 147.25 345⇑*e*PKP **PKPbc** **03 25 31.2 +0.2**
HUMR **Humele** 147.38 329 ⇑P **PKPbc** **03 25 30.5 -0.9**
MEM **Membach** 147.44 355 *d*PKPbc **PKPbc** **03 25 31.3 -0.1**
MEM *d*PKPab **PKPab** **03 25 35.1 -0.4**
BTNL **Ternell** 147.45 355 *d*PKPbc **PKPbc** **03 25 31.4 -0.1**
BTNL *d*PKP **PKPab** **03 25 34.8 -0.7**
BSTI **Sart Tilman** 147.50 356 *d*PKPbc **PKPbc** **03 25 31.8 +0.3**
CSS **Mathiatis** 147.51 307 **PKPbc** **03 25 31.0 -1.2**
SIRR **Siria** 147.56 334 ⇓P **PKPbc** **03 25 32.4 +0.5**
ZST **Bratislava** 147.58 341 *e*PKP **PKPbc** **03 25 32.3 +0.5**
BCLA **Clavier** 147.68 356 *d*PKPbc **PKPbc** **03 25 31.6 -0.4**
BCLA *d*PKPab **PKPab** **03 25 35.7 -0.7**
KHC **Kasperske Hory** 147.69 346⇑*e*PKP **PKPbc** **03 25 32.5 +0.3**
BHOU **Houvegnez** 147.69 355 *d*PKPbc **PKPbc** **03 25 32.4 +0.3**
BHOU *d*PKPab **PKPab** **03 25 36.2 -0.3**
BGES **Gesves** 147.73 356 *d*PKPbc **PKPbc** **03 25 31.8 -0.4**
BGES *d*PKiKP **PKiKP** **03 25 33.7 +0.1**
GZR **Gura Zlata** 147.77 332 ⇑P **PKPbc** **03 25 32.2 -0.4**
SURR **Surduc** 147.78 333 ⇓P **PKPbc** **03 25 32.4 -0.1**
CKRC **Cesky Krumlov** 147.80 345 *e*PKPDF **PKPdf** **03 25 29.2 +0.6**
CKRC ⇑*e*PKP **PKPbc** **03 25 32.8 +0.4**
BMRD **Maredsous** 147.83 357 *d*PKPdf **PKPdf** **03 25 28.6 0.0**
BMRD *d*PKPbc **PKPbc** **03 25 32.1 -0.3**
EIL **Elat** 147.86 297 PKPbc **PKPbc** **03 25 33.0 -0.2**
comp=Z,15nm,0.8s,baz=358,slow=4.5,SNR=13
GEC2 **GERESS Array S** 147.92 345 PKPbc **PKPbc** **03 25 32.7 -0.1**
GERES **GERESS Array B** 147.92 345 PKPbc **PKPbc** **03 25 33.0 +0.2**
comp=Z,11nm,0.7s,baz=316,slow=9.3,SNR=69
RCHB **Rochefort** 147.95 356 *d*PKPbc **PKPbc** **03 25 32.4 -0.3**
RCHB *d*PKPab **PKPab** **03 25 36.7 -0.8**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DOU | Dourbes | 148.04 357 | *d*PKPdf | PKPdf | 03 25 29.4 | +0.5 |
| DOU | | | *d*PKPbc | PKPbc | 03 25 33.0 | +0.1 |
| DOU | | | *d*PKPab | PKPab | 03 25 37.3 | -0.6 |
| BZS | Buzias | 148.10 333 | ⇑P | PKPbc | 03 25 33.5 | +0.2 |
| SRE | Strehaia | 148.14 331 | ⇑P | PKiKP | 03 25 34.1 | -0.5 |
| CONA | Conrad Observa | 148.19 342 | *i* PKP | PKPbc | 03 25 33.9 | +0.3 |
| | comp=Z,9.4nm,0.6s,SNR=13 | | | | | |
| RONA | Rosalia, Austr | 148.27 341 | *i* PKP | PKPbc | 03 25 33.9 | +0.3 |
| | comp=Z,11nm,0.7s,SNR=16 | | | | | |
| EDRB | Edirne | 148.30 323 | P | PKPbc | 03 25 33.6 | -0.3 |
| HERR | Herculane | 148.33 332 | ⇓P | PKPbc | 03 25 33.7 | -0.1 |
| WLF | Walferdange | 148.37 355 | *d*PKP | PKiKP | 03 25 34.4 | -0.5 |
| MOA | Molln | 148.71 344 | *i* PKP | PKPbc | 03 25 34.5 | -0.2 |
| | comp=Z,3.8nm,0.7s,SNR=5.0 | | | | | |
| MDVR | Moldovita | 148.72 332 | ⇓P | PKPbc | 03 25 35.0 | +0.1 |
| MORH | Mrgy, Hungar | 148.78 337 | ⇓P | PKPbc | 03 25 34.9 | 0.0 |
| BIOA | Bad Ischl, Aus | 149.01 345 | *i* PKP | PKPbc | 03 25 35.0 | -0.5 |
| | comp=Z,5.9nm,0.7s,SNR=6.9 | | | | | |
| KULA | Kula-Manisa | 149.14 317 | P | PKPbc | 03 25 35.8 | -0.4 |
| BFO | Black Forest | 149.44 352 | PKPbc | PKPbc | 03 25 36.0 | -0.5 |
| LESA | Schwarzleotal | 149.50 346 | *i* PKP | PKPbc | 03 25 36.3 | -0.4 |
| | comp=Z,7.7nm,0.4s | | | | | |
| SOKA | Soboth | 149.56 342 | *i* PKP | PKPbc | 03 25 36.2 | -0.7 |
| | comp=Z,1.7nm,0.3s,SNR=7.5 | | | | | |
| BOVS | Bovan | 149.62 331 | ⇑P | PKPbc | 03 25 36.0 | -1.0 |
| KBA | Koelnbreinsper | 149.66 345 | *i* PKP | PKPbc | 03 25 36.4 | -0.8 |
| | comp=Z,9.6nm,0.5s,SNR=12 | | | | | |
| WATA | Walderalm | 149.83 347 | *i* PKP | PKPbc | 03 25 37.2 | -0.4 |
| | comp=Z,13nm,0.6s,SNR=12 | | | | | |
| EZN | Ezine | 149.83 321 | P | PKPbc | 03 25 37.3 | -0.3 |
| RETA | Reutte | 149.85 348 | *i* PKP | PKPbc | 03 25 37.3 | -0.2 |
| | comp=Z,5.8nm,0.6s,SNR=6.5 | | | | | |
| OBKA | Obir | 149.86 343 | *i* PKP | PKPbc | 03 25 36.7 | -0.9 |
| | comp=Z,3.2nm,0.6s | | | | | |
| WTTA | Wattenberg | 149.88 347 | *i* PKP | PKPbc | 03 25 37.6 | -0.2 |
| | comp=Z,22nm,0.5s,SNR=22 | | | | | |
| MOTA | Moosalm | 149.92 348 | *i* PKP | PKPbc | 03 25 37.4 | -0.4 |
| | comp=Z,14nm,0.8s | | | | | |
| MYKA | Terra Mystica | 150.00 344 | *i* PKP | PKPbc | 03 25 37.1 | -0.8 |
| | comp=Z,9.9nm,0.5s,SNR=6.6 | | | | | |
| SQTA | Sankt Quirin | 150.02 347 | *i* PKP | PKPbc | 03 25 37.8 | -0.2 |
| | comp=Z,14nm,0.6s,SNR=14 | | | | | |
| ABTA | Abfaltersbach | 150.17 345 | *i* PKP | PKPbc | 03 25 37.6 | -0.8 |
| | comp=Z,26nm,0.6s,SNR=17 | | | | | |
| DAVA | Damuels | 150.21 349 | *i* PKP | PKPbc | 03 25 38.5 | 0.0 |
| | comp=Z,11nm,0.5s,SNR=12 | | | | | |
| NVR | Nevrokopi | 150.23 326 | P | PKiKP | 03 25 39.0 | -0.1 |
| LJU | Ljubljana | 150.29 342 | *i* PKPbc | PKPbc | 03 25 38.3 | -0.2 |
| LJU | | | *i* PKPab | PKPab | 03 25 47.0 | -0.5 |
| FETA | Feichten | 150.30 348 | *i* PKP | PKPbc | 03 25 38.7 | 0.0 |
| | comp=Z,7.8nm,0.6s,SNR=7.7 | | | | | |
| KOKK | Kokkinochori, | 150.52 325 | P | PKPbc | 03 25 38.1 | -1.1 |
| BOJS | Bojanci | 150.56 341 | *i* PKPbc | PKPbc | 03 25 39.3 | +0.2 |
| CEY | Cerknica | 150.59 342 | *i* PKPbc | PKPbc | 03 25 39.0 | -0.3 |
| CEY | | | *i* PKPab | PKPab | 03 25 48.3 | -0.4 |
| SABO | M.te Sabotino | 150.61 343 | PKPbc | PKPbc | 03 25 38.2 | -1.1 |
| DAVOX | Davos/Dischmat | 150.70 349 | PKPbc | PKiKP | 03 25 39.9 | -0.2 |
| | comp=Z,28nm,0.6s,baz=270,slow=5.1,SNR=96 | | | | | |
| FUORN | Ofenpass-Fuorn | 150.78 348 | PKPbc | PKPbc | 03 25 39.5 | -0.5 |
| BODT | Bodrum | 150.83 315 | P | PKPbc | 03 25 39.0 | -1.1 |
| DAT | Datca | 150.84 315 | P | PKPbc | 03 25 38.9 | -1.3 |
| KNT | Kendrikon | 150.87 326 | P | PKPbc | 03 25 38.6 | -1.4 |
| CHOS | Chios island | 150.88 319 | P | PKPbc | 03 25 39.9 | -0.3 |
| VAY | Valandovo | 150.93 327 | *i* P | PKPbc | 03 25 40.0 | 0.0 |
| FNA | Florina | 151.94 328 | P | PKPbc | 03 25 41.6 | -0.9 |
| OHR | Ohrid | 151.98 329 | *i* P | PKiKP | 03 25 43.5 | +0.7 |
| NEST | Nestorio | 152.38 327 | P | PKPbc | 03 25 43.5 | 0.0 |
| DION | Dionisos Attik | 152.38 320 | P | PKPbc | 03 25 43.5 | 0.0 |
| MAKR | Makrakomi, Fth | 152.81 324 | P | PKPbc | 03 25 43.6 | -0.8 |
| EVR | Evrytania | 153.05 324 | P | PKiKP | 03 25 45.3 | +0.2 |
| ANX | Ano Chora | 153.22 324 | P | PKiKP | 03 25 45.9 | +0.5 |
| EFP | Efpalio | 153.34 323 | P | PKiKP | 03 25 46.1 | +0.6 |
| IGT | Igoumenitsa | 153.40 327 | P | PKPbc | 03 25 43.0 | -2.6 |
| GUR | Goura | 153.42 322 | P | PKPbc | 03 25 44.4 | -1.4 |
| IDI | Anoyia | 153.45 315 | P | PKiKP | 03 25 46.0 | 0.0 |
| IDI | Anoyia | 153.45 315 | PKPbc | PKiKP | 03 25 46.3 | +0.4 |
| | comp=Z,11nm,0.7s,baz=328,slow=7.0,SNR=7.8 | | | | | |
| KLV | Kalavryta, Ach | 153.46 322 | P | PKPbc | 03 25 45.2 | -0.7 |
| EVGI | Lefkada island | 153.90 325 | P | PKPbc | 03 25 46.2 | -0.5 |
| FSK | Fiskardo | 154.06 325 | P | PKPbc | 03 26 02.9 | -0.8 |
| INTR | Introdacqua | 154.12 339 | PKPab | PKPab | 03 26 03.1 | -0.8 |
| PBRG | Braganca | 155.25 16 | *e*PKPab | PKPab | 03 26 08.6 | -0.1 |
| MVO | Moncorvo | 155.78 17 | *e*PKPab | PKPab | 03 26 11.2 | +0.2 |
| PCBR | Castelo Branco | 156.87 19 | *e*PKPab | PKPab | 03 26 16.3 | +0.6 |
| ESDC | Sonseca Array | 157.33 12 | PKPab | PKPab | 03 26 20.2 | -0.1 |
| | comp=Z,3.0nm,0.9s,baz=344,slow=4.4,SNR=11 | | | | | |
| PNCL | Nicolau / Gran | 158.07 23 | *e*PKPab | PKPab | 03 26 20.7 | -0.3 |
| PBAR | Barrancos | 158.53 20 | *e*PKPab | PKPab | 03 26 22.2 | -0.8 |
| KEST | Kesra | 161.29 341 | PKPab | PKPbc | 03 26 34.9 | -0.3 |
| KEST | Kesra | 161.29 341 | PKPab | PKPab | 03 26 35.4 | +0.2 |
| | comp=Z,9.1nm,0.8s,baz=342,slow=4.0,SNR=16 | | | | | |
| TORD | Torodi Ar. Bea | 175.03 177 | PKPab | PKPab | 03 27 37.1 | +0.8 |
| | comp=Z,1.1nm,0.7s,baz=183,slow=4.5,SNR=4.7 | | | | | |

*IDC* ***19*** *03:07:26.8±1.0, 18°.16S×178°.68W, h550km±10km, mb4.4/24, mbtmp5.3/26, Error ellipse: s-maj=9.9km s-min=7.9km az=136.0*

*MOS* ***19*** *03:07:26.4±1.0, 18°.10S×178°.68W, h557km, mb5.1/31, Error ellipse: s-maj=10.3km s-min=9.7km az=100.9*

*NEIC* ***19*** *03:07:27.0±2.2, 18°.21S±0°.09×178°.61W±0°.09, h555km±6km, mb5.0/202, Error ellipse: s-maj=14.0km s-min=12.8km az=155.0*

*NOU* ***19*** *03:07:27.6, 18°.05S×178°.66W, h556km, mb5.4/118, Fiji Islands Region*

**ISC 19 03:07:27.5±0.5, 18°.07S±0°.05×178°.62W±0°.05, h563km±5km, n665, σ1s10/649, mb5.1/170, 26C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.19 | 276 | P | P | 03 08 46.0 | +1.2 |
| MSVF | Nonsavu | 3.19 | 276 | *i* P | P | 03 08 46.5 | +1.7 |
| AFI | Afiamalu | 7.77 | 59 | P | P | 03 09 20.2 | -3.3 |
| AFI | Afiamalu | 7.77 | 59 | P | P | 03 09 20.2 | -3.3 |
| NIUE | Niue | 8.30 | 98 | P | P | 03 09 29.2 | +0.6 |
| NIUE | Niue | 8.30 | 98 | P | P | 03 09 28.4 | -0.2 |
| RIZ | Raoul Island | 11.14 | 177 | S | S | 03 11 59.6 | -0.6 |
| RAO | Raoul Island | 11.15 | 177 | P | P | 03 09 50.9 | -6.3 |
| RAO | Raoul Island | 11.15 | 177 | P | P | 03 09 51.2 | -6.0 |
| | 184nm,0.3s,baz=330,slow=20,SNR=2.6 | | | | | | |
| RAO | | | | S | S | 03 11 59.4 | -0.9 |
| | 282nm,0.5s,baz=18,slow=18,SNR=2.4 | | | | | | |
| RAO | Raoul Island | 11.15 | 177 | P | P | 03 09 50.9 | -6.3 |
| GLKZ | Green Lake | 11.16 | 177 | P | P | 03 09 49.1 | -8.2 |
| GLKZ | | | | S | S | 03 11 59.9 | -0.6 |
| LIFNC | LIFOU | 13.61 | 256 | P | P | 03 10 21.2 | -1.4 |
| LIFNC | LIFOU | 13.61 | 256 | P | P | 03 10 20.9 | -1.8 |
| PINNC | Pines Island, | 13.83 | 249 | P | P | 03 10 22.5 | -2.3 |
| DZM | Mont Dzumac | 14.59 | 252 | P | P | 03 10 32.4 | -0.3 |
| DZM | Mont Dzumac | 14.59 | 252 | P | P | 03 10 30.9 | -1.8 |
| DZM | Mont Dzumac | 14.59 | 252 | P | P | 03 10 32.3 | -0.3 |
| | 74nm,0.6s,baz=96,slow=17,SNR=8.9 | | | | | | |
| DZM | | | | S | S | 03 13 07.6 | +2.6 |
| | 50nm,1.0s,baz=64,slow=12,SNR=4.7 | | | | | | |
| KOUNC | Koumac, New Ca | 16.32 | 259 | P | P | 03 10 49.8 | +0.2 |
| KOUNC | Koumac, New Ca | 16.32 | 259 | P | P | 03 10 48.6 | -0.9 |
| RAR | Rarotonga | 18.02 | 103 | P | P | 03 11 06.6 | +1.6 |
| RAR | Rarotonga | 18.02 | 103 | P | P | 03 11 04.3 | -0.7 |
| RAR | Rarotonga | 18.02 | 103 | P | P | 03 11 05.2 | +0.2 |
| | 123nm,0.8s,baz=255,slow=7.4,SNR=15 | | | | | | |
| RAR | Rarotonga | 18.02 | 103 | P | P | 03 11 04.3 | -0.7 |
| RAR | | | | pmax | pmax | | |
| | comp=Z,147nm,0.9s | | | | | | |
| KUZ | Kuaotunu | 19.26 | 194 | P | P | 03 11 17.3 | +1.2 |
| MXZ | Matakaoa Point | 19.61 | 187 | P | P | 03 11 19.6 | +0.4 |
| MXZ | Matakaoa Point | 19.61 | 187 | P | P | 03 11 16.5 | -2.7 |
| TGRZ | Tauranga | 20.09 | 192 | P | P | 03 11 25.1 | +1.5 |
| OPRZ | Ohinepanea | 20.15 | 191 | P | P | 03 11 24.6 | +0.5 |
| TWGZ | Tauwhareparae | 20.25 | 188 | P | P | 03 11 23.3 | -1.8 |
| TOZ | Tahuroa Road | 20.26 | 194 | P | P | 03 11 23.8 | -1.2 |
| TOZ | Tahuroa Road | 20.26 | 194 | P | P | 03 11 24.8 | -0.3 |
| EDRZ | Edgecumbe | 20.37 | 191 | P | P | 03 11 25.6 | -0.6 |
| URZ | Urewera | 20.46 | 190 | P | P | 03 11 25.7 | -1.2 |
| | comp=Z,145nm,0.8s,baz=82,slow=3.8,SNR=19 | | | | | | |
| URZ | | | | S | S | 03 14 40.2 | -0.4 |
| | comp=Z,14nm,0.6s,baz=72,slow=17,SNR=2.3 comp=Z,145nm,0.8s | | | | | | |
| URZ | Urewera | 20.46 | 190 | P | P | 03 11 26.0 | -0.9 |
| MWZ | Matawai | 20.47 | 189 | P | P | 03 11 24.8 | -2.3 |
| RAGZ | Rawiri | 20.64 | 189 | P | P | 03 11 26.6 | -2.1 |
| MUGZ | Murupara | 20.73 | 190 | P | P | 03 11 27.6 | -1.8 |
| RIGZ | Rimuhau | 20.80 | 188 | P | P | 03 11 28.9 | -1.1 |
| RTZ | Ruatahuna | 20.83 | 190 | P | P | 03 11 27.8 | -2.5 |
| SNGZ | Shannon Statio | 20.94 | 189 | P | P | 03 11 30.5 | -0.7 |
| PRGZ | Paritu Road | 21.00 | 188 | P | P | 03 11 31.1 | -0.7 |
| TARA | Tarawa | 21.02 | 336 | P | P | 03 11 31.8 | -0.5 |
| NMHZ | Naumai | 21.33 | 190 | P | P | 03 11 34.5 | -0.3 |
| BKZ | Black Stump Fm | 21.45 | 190 | P | P | 03 11 34.7 | -1.2 |
| BKZ | Black Stump Fm | 21.45 | 190 | P | P | 03 11 32.9 | -3.0 |
| NNVZ | North Ngauruho | 21.58 | 192 | P | P | 03 11 36.6 | -0.6 |
| BFZ | Birch Farm | 22.97 | 190 | P | P | 03 11 48.5 | -0.9 |
| BFZ | Birch Farm | 22.97 | 190 | P | P | 03 11 47.2 | -2.2 |
| BFZ | | | | IAmb | IAmb | 03 11 54.8 | |
| | comp=Z,35nm,0.7s | | | | | | |
| TCW | Tory Channel | 23.86 | 193 | P | P | 03 11 54.7 | -2.5 |
| BHW | Baring Head | 23.92 | 192 | P | P | 03 11 55.9 | -1.9 |
| BHW | | | | IAmb | IAmb | 03 11 57.0 | |
| | comp=Z,56nm,0.7s | | | | | | |
| DSZ | Denniston Nort | 24.98 | 197 | P | P | 03 12 05.4 | -1.9 |
| AMCZ | Amberley | 26.10 | 195 | P | P | 03 12 14.2 | -2.8 |
| MQZ | McQueen's Vall | 26.60 | 194 | IAmb | IAmb | 03 12 21.2 | |
| | comp=Z,34nm,0.9s | | | | | | |
| RPZ | Rata Peaks | 27.01 | 197 | IAmb | IAmb | 03 12 25.9 | |
| | comp=Z,31nm,0.6s | | | | | | |
| GC1S | Gold Coast 1 S | 27.47 | 243 | P | P | 03 12 29.6 | +0.3 |
| PPT | Papeete | 27.64 | 93 | P | P | 03 12 31.3 | +0.4 |
| | comp=Z,91nm,0.5s,baz=246,slow=18,SNR=29 comp=Z,91nm,0.5s | | | | | | |
| PPTF | Pamatai, Papee | 27.65 | 94 | P | P | 03 12 31.6 | +0.5 |
| PPTF | Pamatai, Papee | 27.65 | 94 | P | P | 03 12 30.0 | -1.1 |
| AUWSH | Wavell State H | 27.68 | 245 | P | P | 03 12 31.7 | +0.5 |
| JCZ | Jackson Bay | 28.01 | 200 | P | P | 03 12 33.3 | -0.6 |
| ODZ | Otahua Downs | 28.35 | 196 | P | P | 03 12 34.5 | -2.3 |
| ODZ | | | | IAmb | IAmb | 03 12 36.7 | |
| | comp=Z,20nm,0.8s | | | | | | |
| WKZ | Wanaka | 28.62 | 199 | P | P | 03 12 35.4 | -3.7 |
| GD1S | Gladstone Soft | 28.76 | 253 | P | P | 03 12 41.5 | +0.9 |
| EIDS | Eidsvold | 29.02 | 250 | P | P | 03 12 42.9 | 0.0 |
| EIDS | Eidsvold | 29.02 | 250 | P | P | 03 12 42.1 | -0.8 |
| RK1H | Rockhampton Ha | 29.33 | 254 | P | P | 03 12 45.7 | +0.1 |
| ARMA | Armidale | 29.69 | 240 | P | P | 03 12 49.5 | +0.8 |
| ARMA | Armidale | 29.69 | 240 | P | P | 03 12 49.2 | +0.6 |
| DCZ | Deep Cove | 29.78 | 200 | P | P | 03 12 47.8 | -1.2 |
| DCZ | | | | IAmb | IAmb | 03 12 50.3 | |
| | comp=Z,50nm,0.9s | | | | | | |
| SYZ | Scrubby Hill | 30.14 | 197 | P | P | 03 12 52.4 | +0.3 |
| NTLH | Newcastle Hard | 30.46 | 235 | P | P | 03 12 56.8 | +1.7 |
| AUPHS | Peel High Scho | 30.50 | 239 | P | P | 03 12 56.7 | +1.1 |
| RIV | Riverview | 31.23 | 234 | P | P | 03 13 01.8 | +0.1 |
| SYDH | Sydney Hard Ro | 31.53 | 234 | P | P | 03 13 05.3 | +1.1 |
| WOLH | Wollongong Har | 31.67 | 233 | P | P | 03 13 06.4 | +0.9 |
| AUAYR | Ayr State High | 32.16 | 262 | P | P | 03 13 10.2 | +0.4 |
| AUUHS | Ulladulla High | 32.36 | 232 | P | P | 03 13 12.1 | +0.8 |
| AULRC | Lightning Ridg | 32.49 | 243 | P | P | 03 13 13.0 | +0.5 |
| AUDCS | Dubbo College | 32.68 | 238 | P | P | 03 13 15.3 | +1.2 |
| TV1H | Townsville Har | 32.76 | 262 | P | P | 03 13 14.7 | -0.2 |
| CNB | Canberra Magne | 33.17 | 232 | P | P | 03 13 19.2 | +0.9 |
| CNB | Canberra Magne | 33.17 | 232 | P | P | 03 13 19.0 | +0.8 |
| CTA | Charters Tower | 33.22 | 261 | P | P | 03 13 18.9 | +0.1 |
| CTAO | Charters Tower | 33.22 | 261 | P | P | 03 13 18.9 | +0.1 |
| CTAO | Charters Tower | 33.22 | 261 | P | P | 03 13 18.5 | -0.4 |
| CTAO | Charters Tower | 33.22 | 261 | P | P | 03 13 18.5 | -0.4 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,118nm,0.8s | | | | | | |
| CTAO | Charters Tower | 33.22 | 261 | P | P | 03 13 18.4 | -0.4 |
| CTAO | | | | PcP | PcP | 03 15 44.9 | +0.2 |
| CTAO | | | | ScP | ScP | 03 18 36.7 | +0.6 |
| CAN | Canberra | 33.45 | 233 | P | P | 03 13 21.5 | +0.9 |
| CAN | Canberra | 33.45 | 233 | P | P | 03 13 20.7 | +0.1 |
| CAN | Canberra | 33.45 | 233 | P | P | 03 13 21.2 | +0.7 |
| CAN | Canberra | 33.45 | 233 | P | P | 03 13 20.7 | +0.1 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,99nm,0.8s | | | | | | |
| CAN | Canberra | 33.45 | 233 | P | P | 03 13 20.9 | +0.3 |
| CAN | | | | ScP | ScP | 03 18 38.8 | +2.1 |
| YNG | Young | 33.54 | 235 | P | P | 03 13 22.6 | +1.3 |
| PATS | Pohnpei | 33.63 | 315 | P | P | 03 13 23.1 | +0.8 |
| PATS | Pohnpei | 33.63 | 315 | P | P | 03 13 22.4 | +0.1 |
| PATS | Pohnpei | 33.63 | 315 | P | P | 03 13 23.3 | +1.0 |
| KAVG | Kavieng | 33.69 | 294 | P | P | 03 13 23.1 | +0.2 |
| PMG | Port Moresby | 34.29 | 280 | P | P | 03 13 28.1 | +0.3 |
| PMG | Port Moresby | 34.29 | 280 | *i* P | P | 03 13 29.4 | +1.6 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,287nm,0.9s | | | | | | |
| PMG | Port Moresby | 34.29 | 280 | P | P | 03 13 28.5 | +0.6 |
| CMSA | Cobar Meteorol | 34.90 | 241 | P | P | 03 13 33.2 | +0.5 |
| CMSA | Cobar Meteorol | 34.90 | 241 | P | P | 03 13 32.9 | +0.3 |
| MTSU | Mount Surprise | 35.19 | 264 | P | P | 03 13 35.2 | -0.2 |
| QLP | Quilpie | 35.29 | 249 | P | P | 03 13 35.9 | -0.1 |
| GLAD | Gladstone | 36.60 | 224 | P | P | 03 13 47.0 | +0.4 |
| COEN | Coen | 36.91 | 271 | P | P | 03 13 49.8 | +0.3 |
| TOO | Toolangi | 36.91 | 231 | P | P | 03 13 50.0 | +0.7 |
| TOO | Toolangi | 36.91 | 231 | P | P | 03 13 49.6 | +0.3 |
| TOO | Toolangi | 36.91 | 231 | P | P | 03 13 50.2 | +0.9 |
| TOO | Toolangi | 36.91 | 231 | P | P | 03 13 49.6 | +0.3 |
| TOO | | | | pmax | pmax | | |
| | comp=Z,199nm,0.8s | | | | | | |
| AUMAG | Moama Anglican | 36.95 | 233 | P | P | 03 13 50.6 | +1.0 |
| MANU | Manus Island | 36.97 | 292 | P | P | 03 13 50.7 | +0.6 |
| CORO | Coronation Par | 37.39 | 224 | P | P | 03 13 54.1 | +1.1 |
| MLBS | Spotswood, Mel | 37.45 | 231 | P | P | 03 13 54.1 | +0.5 |
| TAU | Tasmania Unive | 37.99 | 222 | P | P | 03 13 57.6 | -0.3 |
| TAU | | | | IAmb | IAmb | 03 13 58.8 | |
| | comp=Z,47nm,0.9s | | | | | | |
| TAU | Tasmania Unive | 37.99 | 222 | P | P | 03 13 57.6 | -0.3 |
| TAU | | | | pmax | pmax | | |
| | comp=Z,47nm,0.9s | | | | | | |
| BRAT | Ballarat | 38.06 | 232 | P | P | 03 13 59.6 | +1.0 |
| STKA | Stephens Creek | 38.38 | 241 | P | P | 03 14 01.9 | +0.6 |
| STKA | Stephens Creek | 38.38 | 241 | P | P | 03 14 01.6 | +0.3 |
| STKA | | | | IAmb | IAmb | 03 14 03.2 | |
| | comp=Z,28nm,0.8s | | | | | | |
| STKA | Stephens Creek | 38.38 | 241 | P | P | 03 14 01.9 | +0.6 |
| STKA | Stephens Creek | 38.38 | 241 | P | P | 03 14 01.5 | +0.3 |
| | comp=Z,105nm,0.6s,baz=87,slow=11,SNR=20 comp=Z,105nm,0.6s | | | | | | |
| STKA | Stephens Creek | 38.38 | 241 | P | P | 03 14 01.6 | +0.3 |
| STKA | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| TAOE | Nuku Hiva Isla | 38.45 | 81 | P | P | 03 14 03.3 | +1.1 |
| TAOE | Nuku Hiva Isla | 38.45 | 81 | P | P | 03 14 02.4 | +0.3 |
| TAOE | Nuku Hiva Isla | 38.45 | 81 | P | P | 03 14 02.9 | +0.7 |
| ARPS | Mount Arapiles | 39.39 | 234 | P | P | 03 14 09.6 | +0.2 |
| ARPS | Mount Arapiles | 39.39 | 234 | P | P | 03 14 09.6 | +0.2 |
| WAKE | Wake Island | 39.84 | 338 | P | P | 03 14 12.8 | -0.2 |
| HTT | Hallett | 40.89 | 240 | P | P | 03 14 21.7 | +0.2 |
| HTT | Hallett | 40.89 | 240 | P | P | 03 14 21.6 | +0.2 |
| MMPI | Merauke | 40.94 | 278 | P | P | 03 14 23.6 | +1.6 |
| LCRK | Leigh Creek | 41.01 | 244 | P | P | 03 14 22.6 | +0.3 |
| GHSS | Government Hou | 41.46 | 237 | P | P | 03 14 26.6 | +0.8 |
| WHYH | Whyalla | 41.93 | 240 | P | P | 03 14 29.8 | +0.2 |
| JAY | Jayapura | 42.76 | 286 | P | P | 03 14 37.0 | +0.6 |
| | comp=Z,274nm,0.8s,comp=Z,8μm | | | | | | |
| OOD | Oodnadatta | 42.97 | 248 | P | P | 03 14 38.5 | +0.7 |
| BBOO | Buckleboo | 43.15 | 241 | P | P | 03 14 39.1 | -0.1 |
| BBOO | Buckleboo | 43.15 | 241 | P | P | 03 14 38.7 | -0.5 |
| BBOO | Buckleboo | 43.15 | 241 | P | P | 03 14 39.2 | +0.1 |
| MLH | Mauna Loa | 43.75 | 33 | P | P | 03 14 44.6 | +0.4 |
| HMH | Humu'ula Sheep | 43.79 | 32 | P | P | 03 14 44.9 | +0.4 |
| DHH | Diamond Head | 44.09 | 28 | P | P | 03 14 47.4 | +0.9 |
| DHH | Diamond Head | 44.09 | 28 | P | P | 03 14 47.4 | +0.9 |
| WRAB | Tennant Creek | 44.40 | 260 | P | P | 03 14 48.0 | -1.0 |
| WRAB | Tennant Creek | 44.40 | 260 | P | P | 03 14 48.0 | -1.0 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,96nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 44.41 | 260 | P | P | 03 14 48.1 | -0.9 |
| | comp=Z,73nm,0.6s,baz=93,slow=7.6,SNR=29 | | | | | | |
| WRA | | | | PcP | PcP | 03 16 20.8 | +0.3 |
| | comp=Z,8.9nm,0.5s,baz=102,slow=3.6,SNR=4.1 | | | | | | |
| WRA | | | | ScP | ScP | 03 19 21.6 | +2.2 |
| | comp=Z,6.7nm,1.0s,baz=90,slow=4.2,SNR=7.2 | | | | | | |
| WRA | | | | S | S | 03 20 41.4 | -2.2 |
| | comp=Z,5.4nm,0.9s,baz=98,slow=13,SNR=4.9 comp=Z,73nm,0.6s | | | | | | |
| AS31 | Alice Springs | 44.55 | 254 | P | P | 03 14 49.3 | -0.9 |
| ASAR | Alice Springs | 44.55 | 254 | P | P | 03 14 49.6 | -0.6 |
| ASAR | Alice Springs | 44.55 | 254 | P | P | 03 14 49.9 | -0.3 |
| | comp=Z,594nm,0.6s,baz=85,slow=8.4,SNR=49 | | | | | | |
| ASAR | | | | PcP | PcP | 03 16 21.7 | +0.6 |
| | comp=Z,22nm,0.6s,baz=95,slow=4.5,SNR=4.4 | | | | | | |
| ASAR | | | | ScP | ScP | 03 19 22.6 | +2.6 |
| | comp=Z,7.0nm,0.9s,baz=96,slow=4.1,SNR=5.8 | | | | | | |
| ASAR | | | | S | S | 03 20 43.6 | -2.0 |
| | comp=Z,7.2nm,0.8s,baz=88,slow=16,SNR=8.7 | | | | | | |
| ASAR | Alice Springs | 44.55 | 254 | P | P | 03 14 49.6 | -0.6 |
| MULG | Mulgathing | 44.56 | 245 | P | P | 03 14 49.5 | -0.6 |
| KDU | Kakadu | 47.35 | 269 | P | P | 03 15 11.0 | -0.5 |
| KDU | Kakadu | 47.35 | 269 | P | P | 03 15 11.3 | -0.1 |
| GUMO | Guam | 47.82 | 309 | P | P | 03 15 15.5 | +0.6 |
| GUMO | Guam | 47.82 | 309 | P | P | 03 15 15.2 | +0.3 |
| GUMO | Guam | 47.82 | 309 | P | P | 03 15 15.2 | +0.3 |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,373nm,0.8s | | | | | | |
| GUMO | Guam | 47.82 | 309 | P | P | 03 15 15.2 | +0.3 |
| MTN | Manton Dam | 48.59 | 269 | P | P | 03 15 20.3 | -0.4 |
| MTN | Manton Dam | 48.59 | 269 | P | P | 03 15 19.9 | -0.8 |
| MTN | Manton Dam | 48.59 | 269 | P | P | 03 15 20.6 | -0.1 |
| DRS | Darwin Rock St | 48.91 | 269 | P | P | 03 15 22.9 | -0.1 |
| WRKA | Warakurna | 49.60 | 252 | P | P | 03 15 28.0 | -0.1 |
| FORT | Forrest | 49.76 | 245 | P | P | 03 15 28.7 | -0.4 |
| FORT | Forrest | 49.76 | 245 | P | P | 03 15 27.8 | -1.3 |
| FORT | Forrest | 49.76 | 245 | P | P | 03 15 28.4 | -0.7 |
| KNRA | Kununurra | 50.27 | 264 | P | P | 03 15 32.6 | -0.4 |
| KNRA | Kununurra | 50.27 | 264 | P | P | 03 15 33.0 | -0.1 |
| SWI | Sorong | 52.09 | 283 | P | P | 03 15 46.4 | +0.2 |
| FITZ | Fitzroy Crossi | 52.80 | 261 | P | P | 03 15 51.4 | +0.1 |
| FITZ | Fitzroy Crossi | 52.80 | 261 | P | P | 03 15 51.0 | -0.3 |
| MSAI | Masohi | 53.37 | 279 | P | P | 03 15 57.8 | +2.4 |
| | comp=Z,141nm,0.7s,comp=Z,7μm | | | | | | |
| KMBL | Kambalda | 55.06 | 244 | P | P | 03 16 06.7 | -0.3 |
| KMBL | Kambalda | 55.06 | 244 | P | P | 03 16 06.2 | -0.8 |
| DRV | Dumont d'Urvil | 55.45 | 199 | P | P | 03 16 08.9 | -0.1 |
| SOEI | Soe | 55.87 | 270 | P | P | 03 16 14.3 | +1.3 |
| TNTI | Ternate | 56.30 | 283 | P | P | 03 16 16.5 | +0.7 |
| TNTI | Ternate | 56.30 | 283 | P | P | 03 16 16.5 | +0.7 |
| SANI | Sanana | 56.57 | 280 | P | P | 03 16 17.7 | 0.0 |
| PSA00 | Pilbara Seismi | 57.67 | 256 | P | P | 03 16 24.4 | -0.7 |
| PSA00 | Pilbara Seismi | 57.67 | 256 | P | P | 03 16 24.1 | -1.0 |
| PSA00 | | | | IAmb | IAmb | 03 16 25.9 | |
| | comp=Z,62nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 57.67 | 256 | P | P | 03 16 24.3 | -0.8 |
| PSA00 | | | | IAmb | IAmb | 03 16 25.9 | |
| | comp=Z,173nm,0.8s | | | | | | |
| PSA00 | Pilbara Seismi | 57.67 | 256 | P | P | 03 16 24.6 | -0.5 |
| MBWA | Marble Bar | 57.84 | 256 | P | P | 03 16 25.7 | -0.6 |
| MBWA | Marble Bar | 57.84 | 256 | P | P | 03 16 25.3 | -1.0 |
| MBWA | | | | IAmb | IAmb | 03 16 27.0 | |
| | comp=Z,84nm,0.8s | | | | | | |
| MBWA | Marble Bar | 57.84 | 256 | P | P | 03 16 25.7 | -0.6 |
| MBWA | Marble Bar | 57.84 | 256 | P | P | 03 16 25.3 | -1.0 |
| MMRI | Maumere | 58.10 | 271 | P | P | 03 16 27.8 | -0.3 |
| MMRI | Maumere | 58.10 | 271 | P | P | 03 16 26.1 | -2.0 |
| MMRI | | | | IAmb | IAmb | 03 16 28.9 | |
| | comp=Z,131nm,0.9s | | | | | | |
| MEEK | Meekatharra | 58.19 | 249 | P | P | 03 16 27.8 | -0.8 |
| MEEK | Meekatharra | 58.19 | 249 | P | P | 03 16 27.7 | -0.8 |
| AUALB | St Joseph's Co | 58.35 | 240 | P | P | 03 16 29.5 | +0.1 |
| KLBR | Kellerberrin | 58.58 | 244 | P | P | 03 16 30.6 | -0.5 |
| KLBR | Kellerberrin | 58.58 | 244 | P | P | 03 16 30.5 | -0.5 |
| NWAO | Narrogin (SRO) | 58.96 | 242 | P | P | 03 16 33.5 | -0.1 |
| NWAO | Narrogin (SRO) | 58.96 | 242 | P | P | 03 16 32.3 | -1.3 |
| NWAO | | | | IAmb | IAmb | 03 16 34.4 | |
| | comp=Z,51nm,0.8s | | | | | | |
| NWAO | Narrogin (SRO) | 58.96 | 242 | P | P | 03 16 32.3 | -1.3 |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,51nm,0.8s | | | | | | |
| NWAO | Narrogin (SRO) | 58.96 | 242 | P | P | 03 16 33.0 | -0.6 |
| RKGY | Rocky Gully | 59.12 | 240 | P | P | 03 16 35.4 | +0.8 |
| RKGY | Rocky Gully | 59.12 | 240 | P | P | 03 16 35.5 | +0.8 |
| BLDU | Ballidu | 59.53 | 245 | P | P | 03 16 36.8 | -0.7 |
| BLDU | Ballidu | 59.53 | 245 | P | P | 03 16 36.9 | -0.5 |
| MUN | Mundaring | 59.87 | 243 | P | P | 03 16 39.8 | +0.1 |
| MUN | Mundaring | 59.87 | 243 | P | P | 03 16 40.1 | +0.4 |
| LUWI | Luwuk | 59.93 | 280 | P | P | 03 16 41

JKA IAmb IAmb 03 17 53.9
comp=Z,46nm,1.0s
**ASAJ Asahikawa 71.32 332** P **P** **03 17 52.1 +1.4**
ASAJ pmax pmax
comp=Z,46nm,1.0s
**TWGBT Beinan 71.58 302** P **P** **03 17 51.8 -0.9**
**TWG Pinlang 71.59 302** IAmb IAmb 03 17 52.4
comp=Z,57nm,0.7s
**YULB Yu-li 71.69 303** P **P** **03 17 52.9 -0.4**
**NACB Ninganchiao 71.84 304** P **P** **03 17 54.0 -0.2**
**NACB Ninganchiao 71.84 304** P **P** **03 17 54.3 +0.2**
NACB IAmb IAmb 03 17 55.8
comp=Z,86nm,0.9s
**QSPA South Pole Qui 71.99 180** P **P** **03 17 54.9 +0.4**
QSPA IAmb IAmb 03 17 56.4
comp=Z,46nm,0.8s
**QSPA South Pole Qui 71.99 180** P **P** **03 17 54.8 +0.4**
comp=Z,41nm,0.7s,baz=358,slow=0.8,SNR=19
comp=Z,41nm,0.7s
**QSPA South Pole Qui 71.99 180** P **P** **03 17 54.9 +0.4**
QSPA pP **pP** **03 19 53.4 +3.2**
**SSLB Suanglung 72.16 303** P **P** **03 17 55.7 -0.4**
**TPUB Ta-pu 72.18 303** P **P** **03 17 55.3 -0.9**
**YHNB Yeheng 72.26 304** P **P** **03 17 57.3 +0.6**
**YHNB Yeheng 72.26 304** P **P** **03 17 56.4 -0.3**
YHNB IAmb IAmb 03 17 58.1
comp=Z,73nm,0.8s
**BBJI Bungbulang 72.30 268** P **P** **03 17 56.4 -0.8**
**KSM Kuching 72.51 277** P **P** **03 17 58.9 +0.6**
**KSM Kuching 72.51 277** P **P** **03 17 59.3 +1.0**
**CNJI Cibinong 72.84 268** P **P** **03 18 00.2 0.0**
comp=Z,93nm,1.0s
**DBJI Dramaga 73.41 268** P **P** **03 18 03.6 +0.1**
comp=Z,291nm,0.8s
**SKJI Sukabumi 73.47 268** P **P** **03 18 03.6 -0.2**
**YSS Yuzh-Sakhalins 73.47 334***ce*P **P** **03 18 04.2 +1.2**
YSS pmax pmax
comp=Z,41nm,0.8s
**PEA0B Petropavlovsk- 73.78 345** P **P** **03 18 04.5 -0.2**
PEA0B IAmb IAmb 03 18 05.3
comp=Z,37nm,0.8s
**PEA0B Petropavlovsk- 73.78 345***ce*P **P** **03 18 04.8 +0.1**
**PETK Petropavlovsk- 73.78 345** P **P** **03 18 04.3 -0.4**
**PETK Petropavlovsk- 73.78 345** P **P** **03 18 05.1 +0.4**
comp=Z,30nm,0.7s,baz=132,slow=7.1,SNR=19
comp=Z,30nm,0.7s
**PETK Petropavlovsk- 73.78 345** P **P** **03 18 04.3 -0.4**
**TJN Taejon 74.39 317***ce*P **P** **03 18 09.0 +0.5**
**KNMB Chin-men Tao 74.53 303** P **P** **03 18 10.0 +0.5**
KNMB IAmb IAmb 03 18 11.4
comp=Z,62nm,0.6s
**KSRS Korea Array 74.69 318** P **P** **03 18 11.0 +0.9**
comp=Z,12nm,0.7s,baz=128,slow=6.3,SNR=29
comp=Z,12nm,0.7s
**KS19 Wonju Array Si 74.75 318** P **P** **03 18 10.9 +0.4**
**PPBI Pangkal Pinang 75.31 273** P **P** **03 18 15.2 +1.1**
comp=Z,106nm,0.8s
**INCN Inchon 75.52 318** P **P** **03 18 15.8 +1.0**
**KASI Kota Agung 75.86 269** P **P** **03 18 16.3 -0.9**
comp=Z,264nm,0.8s
**MSHR Mys Shultsa 76.01 324***ce*P **P** **03 18 19.1 +1.8**
MSHR pmax pmax
comp=Z,73nm,1.3s
**PSTR Posyet 76.26 324** *i*P **P** **03 18 20.6 +1.9**
**TYV Tymovskoe 76.59 336** *e*P **P** **03 18 21.0 +0.7**
TYV *e*S **S** **03 27 13.3 -7.8**
TYV pmax pmax
comp=Z,25nm,0.8s
TYV smax smax
comp=N,9.0nm,1.6s
TYV smax smax
comp=E,9.0nm,1.6s
TYV smax smax
comp=N,800nm,9.9s
TYV smax smax
comp=E,600nm,9.9s
**USA0B Ussuriysk Arra 76.63 326** P **P** **03 18 22.9 +2.2**
**USA0B Ussuriysk Arra 76.63 326** *i*P **P** **03 18 22.5 +1.8**
**USRK Ussuriysk Ar. 76.63 326** P **P** **03 18 22.6 +1.9**
comp=E,18nm,0.7s,baz=129,slow=3.7,SNR=22
comp=E,18nm,0.7s
**SAO San Andreas Ge 76.68 44** P **P** **03 18 22.9 +1.7**
SAO IAmb IAmb 03 18 24.1
comp=Z,45nm,0.9s
**SAO San Andreas Ge 76.68 44** P **P** **03 18 22.9 +1.7**
SAO pmax pmax
comp=Z,45nm,0.9s
**PMPB Monarch Peak 76.80 45** P **P** **03 18 22.6 +0.6**
PMPB IAmb IAmb 03 18 25.1
comp=Z,76nm,1.3s
**HKPS Hong Kong Po S 77.02 299** P **P** **03 18 24.1 +0.8**
HKPS IAmb IAmb 03 18 25.6
comp=Z,48nm,0.6s
**CBX Cerro Bola 77.60 50** P **P** **03 18 27.9 +1.4**
CBX IAmb IAmb 03 18 29.3
comp=Z,43nm,1.0s
**VTX Valle De La Tr 77.78 51** P **P** **03 18 29.3 +1.9**
**OHAK Old Harbor 77.94 14** P **P** **03 18 27.5 +0.1**
OHAK IAmb IAmb 03 18 41.2
comp=Z,147nm,1.7s
**ESJX Sierra Juarez 77.97 51** P **P** **03 18 29.3 +0.8**
**CMB Columbia Colle 78.09 43** P **P** **03 18 28.8 -0.1**
**CMB Columbia Colle 78.09 43** P **P** **03 18 28.8 -0.1**
CMB pmax pmax
comp=Z,42nm,1.1s
**MDJ Mudanjiang 78.20 325** P **P** **03 18 30.6 +1.4**
**AFDM Forest Hills D 78.23 42** P **P** **03 18 29.4 -0.2**
**KDAK Kodiak Island 78.61 14** P **P** **03 18 31.4 +0.4**
KDAK IAmb IAmb 03 18 31.9
comp=Z,48nm,1.1s
**KDAK Kodiak Island 78.61 14** P **P** **03 18 32.6 +1.6**
comp=Z,17nm,0.7s,baz=306,slow=1.1,SNR=8.4
comp=Z,17nm,0.7s
**KDAK Kodiak Island 78.61 14** P **P** **03 18 31.4 +0.4**
KDAK pmax pmax
comp=Z,48nm,1.2s
**BTDF Bukit Timah Da 78.65 275** P **P** **03 18 32.9 +0.6**
**YBH Yreka Blue Hor 78.78 39** P **P** **03 18 33.1 +0.6**
**YBH Yreka Blue Hor 78.78 39** P **P** **03 18 33.1 +0.6**
YBH pmax pmax
comp=Z,21nm,0.8s
**MPK Martis Peak 79.03 42** P **P** **03 18 35.5 +1.4**
MPK IAmb IAmb 03 18 37.5
comp=Z,111nm,1.2s
**GRNR Gornyy 79.09 333**⇑ *i*P **P** **03 18 34.8 +1.0**
GRNR pmax pmax
comp=Z,50nm,0.9s
**O16K Kokwok River B 79.18 10** P **P** **03 18 33.2 -0.9**
**DSP Deep Springs 79.33 45** P **P** **03 18 36.7 +1.3**
DSP IAmb IAmb 03 18 38.5
comp=Z,46nm,1.2s
**YERR Yerington 79.37 43** P **P** **03 18 36.9 +1.1**
YERR IAmb IAmb 03 18 38.5
comp=Z,70nm,1.2s
**N15K Kwethluk River 79.40 9** P **P** **03 18 35.2 -0.1**
N15K IAmb IAmb 03 18 38.1
comp=Z,166nm,2.0s
**DL2 Dalian 79.57 317** P **P** **03 18 37.4 +0.8**
DL2 pmax pmax
comp=Z,83nm,0.8s
**RYN Ryan 79.64 44** IAmb IAmb 03 18 40.0
comp=Z,58nm,1.4s
**NVAR Mina Array Bea 79.68 44** P **P** **03 18 39.2 +1.7**
comp=Z,21nm,0.9s,baz=226,slow=8.9,SNR=32
NVAR PKKPbc **PKKPbc** **03 37 22.3 +1.2**
comp=Z,0.6nm,0.7s,baz=94,slow=3.6,SNR=4.2
comp=Z,21nm,0.9s
**WCT Wildcat Mounta 79.94 46** P **P** **03 18 39.9 +1.2**
**CN2 Changchun 80.03 322** P **P** **03 18 39.6 +0.7**
CN2 pmax pmax
comp=Z,40nm,0.9s
**BNX BinXian 80.11 325**⇑ P **P** **03 18 39.5 +0.2**
BNX pmax pmax
comp=Z,100nm,0.8s
**KLR Kul'dur 80.15 330** P **P** **03 18 40.5 +1.1**
comp=Z,8.0nm,0.8s,baz=125,slow=4.7,SNR=9.6
comp=Z,8.0nm,0.8s
**KLR Kul'dur 80.15 330***ce*P **P** **03 18 39.8 +0.4**
KLR pmax pmax
comp=Z,18nm,1.3s
**KVN Kaiserville 80.15 43** P **P** **03 18 40.3 +0.4**
**KVN Kaiserville 80.15 43** P **P** **03 18 40.3 +0.4**
KVN pmax pmax
comp=Z,38nm,1.1s
**P19K Oil Pt 80.17 13** P **P** **03 18 38.5 -0.8**
P19K IAmb IAmb 03 18 49.6
comp=Z,73nm,1.2s
**M16K Timber Creek 80.39 10** P **P** **03 18 41.6 +1.2**
M16K IAmb IAmb 03 18 42.6
comp=Z,33nm,0.9s
**O19K Port Alsworth 80.44 12** IAmb IAmb 03 18 41.3
comp=Z,103nm,1.1s
**WHN Wuhan 80.54 306** P **P** **03 18 42.3 +0.5**
WHN pmax pmax
comp=Z,50nm,0.7s
**J05D Fort Rock, OR 80.57 39** P **P** **03 18 43.0 +1.0**
J05D IAmb IAmb 03 18 44.9
comp=Z,94nm,1.1s
**H04A Detroit Lake 80.84 37** P **P** **03 18 44.1 +0.9**
**PINE Pine Mountain 81.04 38** P **P** **03 18 45.3 +0.8**
PINE IAmb IAmb 03 18 47.5
comp=Z,77nm,1.1s
**SMAI San Martin Ant 81.08 159** P **P** **03 18 44.7 +0.7**
SMAI IAmb IAmb 03 19 07.9
comp=Z,18nm,0.4s
**PDSI Padang 81.08 272** P **P** **03 18 44.8 -0.3**
comp=Z,66nm,0.7s,comp=Z,9μm
**I05D Terrebonne, OR 81.13 38** IAmb IAmb 03 18 47.4
comp=Z,65nm,1.3s
**K15K Wolf Creek Mou 81.23 8** P **P** **03 18 45.5 +0.8**
K15K IAmb IAmb 03 18 46.8
comp=Z,92nm,1.1s
**MA2 Magadan 81.30 345** P **P** **03 18 44.8 -0.3**
**MA2 Magadan 81.30 345***ce*P **P** **03 18 44.9 -0.2**
MA2 pmax pmax
comp=Z,62nm,2.5s
**PRN Pahroc Range 81.33 46** IAmb IAmb 03 18 49.2
comp=Z,58nm,1.1s
**GULI GuiLin 81.42 300** P **P** **03 18 47.8 +1.3**
GULI pmax pmax
comp=Z,40nm,0.7s
**WISH Wishkah 81.44 34** P **P** **03 18 47.2 +1.1**
WISH IAmb IAmb 03 18 48.7
comp=Z,43nm,1.0s
**F04A Amboy 81.46 36** IAmb IAmb 03 18 48.0
comp=Z,24nm,0.7s
**NLWA Neilton Lookou 81.56 34** P **P** **03 18 47.5 +0.8**
NLWA IAmb IAmb 03 18 49.6
comp=Z,43nm,1.2s
**WVOR Wild Horse Val 81.66 40** P **P** **03 18 48.4 +0.9**
WVOR IAmb IAmb 03 18 50.3
comp=Z,57nm,1.1s
**WVOR Wild Horse Val 81.66 40** P **P** **03 18 48.4 +0.9**
WVOR pmax pmax
comp=Z,57nm,1.1s
**M19K Big River Lodg 82.00 11** P **P** **03 18 48.2 -0.5**
**BELA Belgrano 2 82.03 173** P **P** **03 18 48.3 -0.4**
BELA IAmb IAmb 03 18 49.9
comp=Z,40nm,0.8s
**K17K Iditarod 82.10 9** P **P** **03 18 49.8 +0.7**
**GNW Green Mountain 82.22 34** P **P** **03 18 50.9 +0.8**
**IPM Ipoh 82.24 277** P **P** **03 18 51.6 +0.6**
**J08A Circle Bar Ran 82.27 40** P **P** **03 18 51.7 +1.1**
J08A IAmb IAmb 03 18 53.3
comp=Z,61nm,1.1s
**J16K Anvik River 82.31 8** P **P** **03 18 50.6 +0.5**
J16K IAmb IAmb 03 18 52.0
comp=Z,41nm,1.1s
**Q12A Willow Creek R 82.31 45** IAmb IAmb 03 18 53.7
comp=Z,71nm,1.2s
**SUA Susitna One 82.33 13** IAmb IAmb 03 18 51.7
comp=Z,38nm,0.9s
**D05A Enumclaw 82.45 35** IAmb IAmb 03 18 54.3
comp=Z,123nm,1.4s
**CBB Campbell River 82.45 31** P **P** **03 18 51.6 +0.5**
**BBB Bella Bella 82.56 29** P **P** **03 18 53.5 +1.9**
comp=Z,11nm,0.7s,baz=281,slow=5.9,SNR=7.9
comp=Z,11nm,0.7s
**PGC Sidney 82.56 33** P **P** **03 18 52.0 +0.3**
**J17K VABM Dome 82.63 9** P **P** **03 18 52.5 +0.7**
**GLI Glacier Island 82.66 15** P **P** **03 18 51.0 -1.0**
GLI IAmb IAmb 03 18 52.9
comp=Z,45nm,0.7s
**319A Douglas 82.68 54** P **P** **03 18 54.3 +1.4**
319A IAmb IAmb 03 18 56.6
comp=Z,66nm,1.0s
**PMR Palmer 82.81 14** P **P** **03 18 52.4 -0.2**
**PMR Palmer 82.81 14** P **P** **03 18 52.3 -0.4**
PMR IAmb IAmb 03 18 53.7
comp=Z,20nm,0.5s
**PMR Palmer 82.81 14** P **P** **03 18 52.3 -0.4**
PMR pmax pmax
comp=Z,20nm,0.5s
**KULM Kulim 82.86 278** P **P** **03 18 54.3 +0.3**
KULM IAmb IAmb 03 18 56.2
comp=Z,35nm,1.1s
**I17K Unalakleet 82.87 8** P **P** **03 18 53.4 +0.5**
**HEH HeiHe 82.94 328** *e*P **P** **03 18 53.6 0.0**
HEH pmax pmax
comp=Z,12nm,0.8s
**J18K Innoko River 83.05 10** P **P** **03 18 54.2 +0.3**
J18K IAmb IAmb 03 18 55.6
comp=Z,30nm,0.7s
**SNH Sunshine Point 83.18 17** P **P** **03 18 54.4 -0.3**
SNH IAmb IAmb 03 18 56.8
comp=Z,58nm,0.8s
**E07A Sunnyside 83.27 36** IAmb IAmb 03 18 58.0
comp=Z,56nm,1.2s
**HAWA Hanford 83.35 37** P **P** **03 18 56.6 +0.8**
HAWA IAmb IAmb 03 18 58.4
comp=Z,54nm,1.2s
**WAX Waxell Ridge 83.40 17** IAmb IAmb 03 18 57.2
comp=Z,80nm,1.2s
**SCM Sheep Creek Mo 83.43 14** P **P** **03 18 55.9 0.0**
SCM IAmb IAmb 03 18 57.2
comp=Z,52nm,0.6s
**SCM Sheep Creek Mo 83.43 14** P **P** **03 18 55.9 0.0**
SCM pmax pmax
comp=Z,52nm,0.6s
**MAW Mawson 83.64 200** P **P** **03 18 57.3 +0.4**
comp=Z,17nm,0.6s,baz=129,slow=6.6,SNR=26
comp=Z,17nm,0.6s
**RPSI Rantau Prapat 83.66 275** P **P** **03 18 57.0 -1.1**
RPSI IAmb IAmb 03 18 59.2
comp=Z,50nm,0.8s
**TGL Tana Glacier 83.66 17** IAmb IAmb 03 18 58.7
comp=Z,40nm,1.1s
**S32K Killisnoo 83.68 22** P **P** **03 18 57.0 -0.1**
**PSI Prapat 83.70 275** P **P** **03 18 57.8 -0.6**
**PSI Prapat 83.70 275** P **P** **03 18 57.0 -1.4**
PSI pmax pmax
comp=Z,50nm,0.8s
**BJT Baijiatuau 83.75 315** P **P** **03 18 58.8 +0.9**
**LYN LuoYang 83.77 309**⇑ P **P** **03 18 59.3 +1.2**
LYN pmax pmax
comp=Z,210nm,0.7s
**PNL Peninsula 83.78 19** P **P** **03 18 58.4 +0.8**
**SEY Seymchan 83.89 347***ce*P **P** **03 18 58.1 +0.1**
SEY pmax pmax
comp=Z,54nm,0.8s
**VRDI Verde Repeater 83.89 16** P **P** **03 18 57.9 -0.4**
VRDI IAmb IAmb 03 18 59.3
comp=Z,30nm,1.1s
**GRNC Granite Creek 83.94 17** P **P** **03 18 58.0 -0.6**
**GLB Gilahina Butte 83.97 16** IAmb IAmb 03 18 59.9
comp=Z,26nm,0.6s
**D08A Wollman Farm, 84.08 36** P **P** **03 19 00.0 +0.6**
D08A IAmb IAmb 03 19 01.3
comp=Z,23nm,0.9s
**ENH Enshi 84.19 304** P **P** **03 19 01.4 +1.0**
**LOGN Logan Glacier 84.23 17** IAmb IAmb 03 19 01.6
comp=Z,24nm,1.0s
**CTGM Chitina Glacie 84.25 17** IAmb IAmb 03 19 01.7
comp=Z,23nm,0.8s
**P29M Windy Craggy 84.27 20** P **P** **03 18 59.6 -0.4**
P29M IAmb IAmb 03 19 01.8
comp=Z,31nm,1.1s
**JIS Juneau Island 84.35 22** P **P** **03 19 01.5 +1.1**
**RND Reindeer 84.47 13** P **P** **03 19 01.1 +0.1**
RND IAmb IAmb 03 19 02.1
comp=Z,61nm,1.0s
**RND Reindeer 84.47 13** P **P** **03 19 01.1 +0.1**
RND pmax pmax
comp=Z,61nm,1.0s
**GSI Gunungsitoli 84.51 273** P **P** **03 19 03.4 +1.1**
**GSI Gunungsitoli 84.51 273** P **P** **03 19 03.7 +1.4**
comp=Z,138nm,0.9s
**NONG Nongkai 84.86 291** P **P** **03 19 04.4 +0.6**
**TMUT Trail Mountain 84.89 46** P **P** **03 19 04.7 +0.8**
**SRIT Nakonsritamara 84.91 281** P **P** **03 19 05.9 +1.7**
**SKAG Skagway 84.92 21** P **P** **03 19 04.3 +1.2**
**SURA Surathani 85.07 281** P **P** **03 19 06.8 +1.9**
**NAYO Nakonayok 85.21 287** P **P** **03 19 07.1 +1.5**
**ZEA Zeya 85.23 331** *e*P **P** **03 19 05.5 +0.7**
ZEA pmax pmax
comp=E,10.0nm,0.7s
ZEA pmax pmax
comp=N,30nm,0.8s
ZEA pmax pmax
comp=Z,40nm,0.8s
**WRH Wood River Hil 85.57 13** IAmb IAmb 03 19 07.2
comp=Z,43nm,1.2s
**NEW Newport 85.76 36** P **P** **03 19 07.2 -0.3**
**NEW Newport 85.76 36** P **P** **03 19 07.2 -0.3**
NEW pmax pmax
comp=Z,13nm,1.0s
**IMAR Indian Mountai 85.87 10** P **P** **03 19 06.6 -1.0**
**COLA College 85.97 13** P **P** **03 19 07.2 -0.9**
**DLBC Dease Lake 86.06 23** P **P** **03 19 09.3 +0.5**
comp=Z,3.8nm,0.5s,baz=226,slow=6.2,SNR=12
comp=Z,3.8nm,0.5s
**F19K Shaleruckik Mo 86.07 8** P **P** **03 19 07.9 -0.5**
**ILAR Eielson Array 86.09 13** P **P** **03 19 08.2 -0.5**
comp=Z,8.0nm,0.4s,baz=221,slow=5.0,SNR=43
comp=Z,8.0nm,0.4s
**TXAR Lajitas Array 86.25 58** P **P** **03 19 11.9 +1.5**
**TXAR Lajitas Array 86.25 58** P **P** **03 19 12.1 +1.7**
comp=Z,35nm,0.9s,baz=224,slow=5.2,SNR=82
TXAR PKKPbc **PKKPbc** **03 37 05.2 0.0**
comp=Z,0.2nm,0.4s,baz=128,slow=2.8,SNR=7.5
comp=Z,35nm,0.9s
**TXAR Lajitas Array 86.25 58** P **P** **03 19 11.9 +1.5**
**POKR Poker Plat Res 86.27 13** IAmb IAmb 03 19 10.0
comp=Z,16nm,0.6s
**J25K Salcha River, 86.29 14** IAmb IAmb 03 19 10.7
comp=Z,18nm,0.5s
**HIA Hailar 86.38 325** *i* P **P** **03 19 11.8 +1.3**
HIA pmax pmax
comp=Z,9.0nm,0.9s
**BILL Bilibino 86.57 354** *i* P **P** **03 19 09.9 -1.0**
BILL pmax pmax
comp=Z,20nm,1.0s
**J26L Joseph Creek 86.61 14** P **P** **03 19 11.4 +0.2**
J26L IAmb IAmb 03 19 12.7
comp=Z,32nm,1.1s
**N32M Quiet Lake 86.93 20** IAmb IAmb 03 19 14.5
comp=Z,21nm,1.0s
**F21K Alatna River 87.06 10** P **P** **03 19 13.0 -0.2**
**SRDT SRDT 87.23 286** P **P** **03 19 16.6 +1.4**
**DAWY Dawson 87.30 16** IAmb IAmb 03 19 15.7
comp=Z,21nm,1.2s
**LOHW Long Hollow 87.32 42** IAmb IAmb 03 19 17.9
comp=Z,45nm,1.6s
**I26K Coal Creek Min 87.38 14** IAmb IAmb 03 19 15.9
comp=Z,20nm,1.1s
**YHL Hebgen Lake 87.54 41** P **P** **03 19 18.2 +1.8**
YHL IAmb IAmb 03 19 19.7
comp=Z,59nm,1.2s
**PDAR Pinedale Array 87.61 44** P **P** **03 19 17.3 +0.7**
comp=Z,12nm,0.8s,baz=208,slow=2.9,SNR=42
PDAR PP **PP** **03 22 51.0 -1.6**
comp=Z,2.8nm,1.0s,baz=243,slow=6.5,SNR=8.2
PDAR PKKPbc **PKKPbc** **03 37 00.7 -2.2**
comp=Z,0.3nm,0.7s,baz=85,slow=5.5,SNR=4.5
comp=Z,12nm,0.8s
**KMI Kunming 87.73 297**⇓ P **P** **03 19 19.3 +1.7**
KMI pmax pmax
comp=Z,34nm,0.8s
**YMP Mirror Lake Pl 88.13 42** IAmb IAmb 03 19 34.0
comp=Z,20nm,1.3s
**E22K Anaktuvuk Pass 88.15 10** IAmb IAmb 03 19 19.8
comp=Z,19nm,0.9s
**I29M Ogilvie Camp, 88.61 16** IAmb IAmb 03 19 21.2
comp=Z,16nm,1.1s
**RWWY Rawlins 88.69 45** P **P** **03 19 21.6 -0.2**
RWWY IAmb IAmb 03 19 24.0
comp=Z,36nm,1.1s
**CMAR Chiang Mai Arr 88.75 290** P **P** **03 19 23.6 +1.5**
comp=Z,20nm,0.8s,baz=112,slow=2.7,SNR=29
CMAR PP **PP** **03 22 59.5 -2.4**
comp=Z,0.9nm,0.3s,baz=99,slow=5.6,SNR=2.1
comp=Z,20nm,0.8s
**CMAR Chiang Mai Arr 88.75 290***ce*P **P** **03 19 23.7 +1.5**
CMAR pmax pmax
comp=Z,22nm,0.9s
**ELIB Princess Elisa 88.98 187** P **P** **03 19 22.0 -0.4**
comp=Z,44nm,0.7s
**POST Post 89.39 55** P **P** **03 19 26.0 +1.1**
POST IAmb IAmb 03 19 26.8
comp=Z,27nm,0.9s
**YAK Yakutsk 89.65 338***ce*P **P** **03 19 24.9 -0.4**
YAK pmax pmax
comp=Z,15nm,0.8s
**EPYK Eagle Plains 89.81 16** IAmb IAmb 03 19 27.5
comp=Z,24nm,0.9s
**C24K Franklin Bluff 90.08 10** IAmb IAmb 03 19 28.5
comp=Z,33nm,1.0s
**TROLL Troll, Antarti 90.15 180**⇑ P **P** **03 19 27.1 -0.8**
comp=Z,1μm,0.6s
**SNAA Sanae 90.44 179** P **P** **03 19 27.7 -1.4**
SNAA IAmb IAmb 03 19 29.9
comp=Z,25nm,1.4s
**SNAA Sanae 90.44 179**⇑ P **P** **03 19 28.8 -0.4**
comp=Z,192nm,0.6s
**SNAA Sanae 90.44 179** P **P** **03 19 28.8 -0.4**
comp=Z,8.1nm,0.7s,baz=203,slow=8.0,SNR=20
comp=Z,8.1nm,0.7s
**SNAA Sanae 90.44 179** P **P** **03 19 27.7 -1.4**
SNAA pmax pmax
comp=Z,25nm,1.4s
**APMT Aspermont 90.56 55** P **P** **03 19 31.1 +0.8**
APMT IAmb IAmb 03 19 32.3
comp=Z,25nm,1.0s
**VNA3 Neumayer Olymp 90.59 176**⇑ P **P** **03 19 29.2 -0.6**
comp=Z,49nm,0.6s
**LZH Lanzhou 90.83 308**⇓ P **P** **03 19 33.1 +1.4**
LZH sP PcP 03 19 44.5 +12
LZH pmax pmax
comp=Z,73nm,1.5s
**VNA2 Neumayer--Watz 91.03 177**⇑ P **P** **03 19 31.9 +0.1**
comp=Z,21nm,0.6s,baz=188,slow=4.3
**VNA1 Neumayer--Stat 91.26 177**⇑ P **P** **03 19 33.2 +0.4**
comp=Z,38nm,0.9s
**PLCA Paso Flores 91.36 134** P **P** **03 19 33.9 -0.1**
comp=Z,1.3nm,0.4s,baz=239,slow=8.1,SNR=8.2
comp=Z,1.3nm,0.4s
**RSSD Black Hills 91.82 44** P **P** **03 19 37.3 +1.2**
RSSD IAmb IAmb 03 19 37.9
comp=Z,17nm,1.0s
**RSSD Black Hills 91.82 44** P **P** **03 19 37.3 +1.2**
RSSD pmax pmax
comp=Z,17nm,1.0s
**INK Inuvik 92.09 15** P **P** **03 19 36.4 -0.1**
comp=Z,14nm,0.8s,baz=179,slow=7.2,SNR=16
comp=Z,14nm,0.8s
**FW06 Azle 92.45 56** P **P** **03 19 39.4 +0.4**
FW06 IAmb IAmb 03 19 41.2
comp=Z,17nm,1.0s
**X34A Smith Ranch, M 92.79 55** IAmb IAmb 03 19 43.2
comp=Z,19nm,1.1s
**ULN Ulaanbaatar 93.15 320***ce*P **P** **03 19 42.6 +0.6**
ULN pmax pmax
comp=Z,11nm,0.8s
**SONM Songino Array 93.54 319** P **P** **03 19 44.8 +1.0**
comp=Z,4.7nm,0.7s,baz=134,slow=4.3,SNR=15
comp=Z,4.7nm,0.7s
**YKA Yellowknife Ar 94.56 25** P **P** **03 19 47.8 0.0**
comp=Z,3.0nm,0.8s,baz=251,slow=4.2,SNR=8.1
comp=Z,3.0nm,0.8s
**ZAK Zakamensk 96.39 321** *e*P **P** **03 19 56.2 -0.4**
ZAK pmax pmax
comp=Z,3.0nm,1.1s
**ZSN Zaisan 107.44 315** *e*PKiKP **PKiKP** **03 24 49.5 -1.1**
baz=315
ZSN *e*PP **PP** **03 25 20.6 -1.2**
baz=315
**ZALV Zalesovo Beam 108.23 322** Pdiff **Pdif** **03 20 49.5 +0.5**
comp=Z,0.8nm,0.6s,baz=115,slow=10.0,SNR=3.8
ZALV PKiKP **PKiKP** **03 24 50.6 -1.2**
comp=Z,2.6nm,0.6s,baz=123,slow=1.3,SNR=9.3
**MKAR Makanchi Array 109.10 314** Pdiff **Pdif** **03 20 55.8 +2.6**
comp=Z,1.1nm,0.6s,baz=81,slow=5.0,SNR=7.2
MKAR PKiKP **PKiKP** **03 24 52.6 -1.1**
comp=Z,3.5nm,0.4s,baz=147,slow=0.7,SNR=35
MKAR PKKPbc **PKKPbc** **03 36 01.3 -1.9**
comp=Z,0.7nm,0.8s,baz=282,slow=2.7,SNR=3.6
**SHLS Shalkode 110.72 310** *e*PKiKP **PKiKP** **03 24 55.0 -2.0**

baz=310
SHLS **Shalkode** 110.72 310 *i* PKiKP **PKiKP** 03 24 55.0 -2.0
UZB **Uzynbulak** 111.04 310 *e*PKiKP **PKiKP** 03 24 55.9 -1.8
baz=310
UZB **Uzynbulak** 111.04 310 *i* PKiKP **PKiKP** 03 24 55.8 -1.8
KPKS **Kokpek** 111.32 310 *e*PKiKP **PKiKP** 03 24 56.8 -1.4
baz=310
KPKS **Kokpek** 111.32 310 *i* PKiKP **PKiKP** 03 24 56.7 -1.4
ZHN **Zhinishke** 111.47 310 *e*PKiKP **PKiKP** 03 24 56.6 -1.8
baz=310
ZHN **Zhinishke** 111.47 310 *i* PKiKP **PKiKP** 03 24 56.6 -1.8
SATY **Saty** 111.48 310 *e*PKiKP **PKiKP** 03 24 56.7 -1.8
baz=310
SATY **Saty** 111.48 310 *i* PKiKP **PKiKP** 03 24 56.6 -1.8
TDK **Taldyqorghan** 111.64 312 *e*PKiKP **PKiKP** 03 24 57.2 -1.4
baz=312
TDK **Taldyqorghan** 111.64 312 *i* PKiKP **PKiKP** 03 24 57.1 -1.4
KURK **Kurchatov** 111.81 318*c* *i*PKiKP **PKiKP** 03 24 58.0 -0.6
KURK pmax pmax
comp=Z,7.0nm,0.7s
KURBB **Kurchatov Arra** 111.86 318 PKiKP **PKiKP** 03 24 57.1 -1.7
comp=Z,6.6nm,0.7s,baz=91,slow=1.8,SNR=30
TNSS **Tian-Shan** 112.55 310 *e*PKiKP **PKiKP** 03 24 58.8 -2.1
baz=310
TNSS **Tian-Shan** 112.55 310 *i* PKiKP **PKiKP** 03 24 58.8 -2.1
BTLS **Baital** 114.73 312 *e*PKiKP PKPdf 03 25 03.2 -1.2
baz=312
BTLS **Baital** 114.73 312 *i* PKiKP PKPdf 03 25 03.2 -1.3
OTUK **Ortayu** 115.90 315 PKiKP **PKPdf** 03 25 05.8 -0.8
BVA0 **Borovoye Array** 116.84 321 *i* PKiKP **PKPdf** 03 25 07.4 -0.9
BVAR **Borovoye Array** 116.84 321 PKP **PKPdf** 03 25 07.2 -1.1
comp=Z,11nm,0.4s,baz=112,slow=2.2,SNR=43
BRVK **Borovoye** 116.90 321*c* *i*PKiKP **PKPdf** 03 25 08.3 -0.1
BRVK pmax pmax
comp=Z,7.0nm,0.7s
BTK **Batken** 117.00 306 **PKPdf** 03 25 07.5 -1.6
BTK **Batken** 117.00 306 PKiKP **PKPdf** 03 25 07.5 -1.6
SCHQ **Schefferville** 117.11 37 PKP **PKPdf** 03 25 08.0 -0.7
comp=Z,2.8nm,0.7s,baz=61,slow=18,SNR=3.8
KK31 **Karatay Array** 117.26 310 *i* PKiKP **PKPdf** 03 25 08.0 -1.4
BRLS **Borolday** 117.76 310 *e*PKiKP **PKPdf** 03 25 09.2 -1.2
baz=309
BRLS **Borolday** 117.76 310 *i* PKiKP **PKPdf** 03 25 09.2 -1.2
SPITS **Spitsbergen Ar** 119.42 356 PKP **PKPdf** 03 25 11.7 -0.9
comp=Z,12nm,0.7s,baz=70,slow=5.4,SNR=13
SPB2 **Spitsbergen Ar** 119.42 356 PKPdf **PKPdf** 03 25 12.3 -0.3
BDFB **Brasilia** 120.92 121 PKP **PKPdf** 03 25 16.9 -0.5
comp=Z,2.7nm,1.1s,baz=202,slow=1.3,SNR=3.5
SVE **Sverdlovsk** 121.66 326 *e*PKiKP **PKPdf** 03 25 17.0 -0.4
SVE pmax pmax
comp=Z,15nm,0.8s
ARU **Arti** 122.87 326 PKP **PKPdf** 03 25 19.2 -0.6
comp=Z,13nm,0.4s,baz=358,slow=1.5,SNR=17
ARU **Arti** 122.87 326 *i* PKiKP **PKPdf** 03 25 19.0 -0.7
ARU 03 31 35.3
HRA **Herat** 123.81 300 PKPdf **PKPdf** 03 25 20.4 -2.1
AB31 **Akbulak array** 123.92 318 *i* PKiKP **PKPdf** 03 25 21.0 -1.0
ABKAR **Akbulak array** 123.92 318 PKPdf **PKPdf** 03 25 21.3 -0.6
AKTO **Aktyubinsk** 124.86 319 PKP **PKPdf** 03 25 23.4 -0.3
comp=Z,10nm,0.7s,baz=49,slow=1.0,SNR=22
ARCES **ARCESS Array B** 126.44 350 PKP **PKPdf** 03 25 25.9 -0.4
comp=Z,5.6nm,0.4s,baz=25,slow=1.2,SNR=40
KIRV **Kirov** 126.57 331 PKP **PKPdf** 03 25 26.8 0.0
comp=Z,18nm,0.7s,baz=300,slow=3.7,SNR=7.1
KIRV **Kirov** 126.57 331 PKiKP **PKPdf** 03 25 26.1 -0.6
BOSA **Boshof** 128.17 207 PKP **PKPdf** 03 25 31.0 0.0
comp=Z,4.6nm,0.7s,baz=133,slow=3.1,SNR=8.8
BELG **Belogornoye** 130.30 325 PKP **PKPdf** 03 25 34.0 +0.1
comp=Z,40nm,0.8s,baz=124,slow=0.6,SNR=11
BELG SKPbc **SKPab** 03 28 06.7 +1.0
comp=Z,43nm,0.8s,baz=160,slow=2.3,SNR=9.9
BELG **Belogornoye** 130.30 325 *i* PKiKP **PKPdf** 03 25 33.3 -0.7
FINES **FINESS Array B** 133.29 344 PKP **PKiKP** 03 25 40.3 -0.4
comp=Z,6.8nm,0.6s,baz=75,slow=2.2,SNR=10
FINES SKPbc **SKPab** 03 28 17.0 -1.2
comp=Z,3.9nm,0.7s,baz=45,slow=3.5,SNR=4.4
FINES **FINESS Array B** 133.29 344*c* *i*PKiKP **PKPdf** 03 25 40.0 +0.6
FINES pmax pmax
comp=Z,7.0nm,0.6s
OBN **Obninsk** 134.35 332 *i* PKiKP **PKPdf** 03 25 40.8 -0.7
OBN pmax pmax
comp=Z,10.0nm,0.8s
NB2 **NORSAR Subarra** 136.51 353 SKPa **SKPdf** 03 28 28.1 +0.6
comp=Z,1.0nm,0.7s,baz=9.7,slow=3.0
NB2 **NORSAR Subarra** 136.51 353 PKP PKPpre 03 25 36.6
comp=Z,1.0nm,0.5s,baz=21,slow=3.6
NOA **NORSAR Array B** 136.51 353 PKP **PKPdf** 03 25 45.2 -0.3
comp=Z,3.3nm,0.7s,baz=14,slow=4.1,SNR=11
NOA SKPbc **SKPbc** 03 28 27.2 +1.7
comp=Z,2.2nm,0.9s,baz=16,slow=4.6,SNR=4.5
GNI **Garni** 136.73 310 PKP **PKPdf** 03 25 46.8 +0.1
comp=Z,3.4nm,0.4s,baz=359,slow=11,SNR=5.6
GNI SKPbc **SKPbc** 03 28 27.7 +0.8
comp=Z,5.5nm,0.6s,baz=150,slow=7.9,SNR=3.3
GNI **Garni** 136.73 310*c* *i*PKiKP **PKPdf** 03 25 47.5 +0.8
GNI pmax pmax
comp=Z,19nm,1.7s
KBZ **Khabaz** 136.78 315 PKP **PKPdf** 03 25 45.5 -0.9
comp=Z,4.1nm,0.8s,baz=111,slow=2.2,SNR=5.9
KBZ SKPbc **SKPbc** 03 28 28.5 +1.8
comp=Z,4.4nm,1.0s,baz=258,slow=5.7,SNR=3.1
KBZ **Khabaz** 136.78 315*c* *i*PKiKP **PKPdf** 03 25 46.1 -0.3
KIV **Kislovodsk** 136.83 316 *e*PKiKP **PKPdf** 03 25 45.5 -1.2
KIV pmax pmax
comp=Z,6.0nm,1.1s
SHA1 **Shidzhatmaz** 136.94 316*c* *i*PKiKP **PKPdf** 03 25 47.9 +0.8
HFS **Hagfors** 137.06 351 PKhKP PKPpre 03 25 35.4
comp=Z,3.8nm,0.3s,baz=76,slow=3.7,SNR=20
RAYN **Ar Rayn** 138.52 285 PKPpre 03 25 42.6
RAYN **Ar Rayn** 138.52 285 PKHKP PKPpre 03 25 42.7
SUW **Suwalki** 140.37 340 PKPpre PKPpre 03 25 46.5
SUW **Suwalki** 140.37 340 PKHKP PKPpre 03 25 46.5
AKASG **Malin Array Be** 140.61 332 PKPpre PKPpre 03 25 45.6
AKASG **Malin Array Be** 140.61 332 PKhKP PKPpre 03 25 46.8
comp=Z,11nm,0.4s,baz=42,slow=3.9,SNR=31
AKASG **Malin Array Be** 140.61 332*c* *i*PKiKP **PKPdf** 03 25 54.5 +1.3
AKASG pmax pmax
comp=Z,4.0nm,0.6s
KIEV **Kiev** 140.62 332 PKPpre 03 25 45.6
EKA **Eskdalemuir Ar** 142.64 4 PKhKP PKPpre 03 25 53.1
comp=Z,2.9nm,0.4s,baz=313,slow=2.5,SNR=17
GKP **Gorka Klasztor** 142.76 344 *e*PKP **PKPdf** 03 25 54.1 -2.8
BEL **Belsk** 142.99 340 *e*PKP **PKPdf** 03 25 55.5 -1.9
LVV **L'vov** 143.47 335 *e*PKiKP PKPab 03 25 56.5 -0.4
KWP **Kalwaria Pacla** 144.14 336 *e*PKP PKPbc 03 25 59.0 -0.1
OJC **Ojcow** 144.69 339 *e*PKP PKPbc 03 26 00.7 -0.1
BRTR **Keskin Array B** 144.75 314 PKPdf **PKPdf** 03 25 57.8 -3.3
BRTR **Keskin Array B** 144.75 314 PKP **PKPdf** 03 26 01.0 -0.1
comp=Z,39nm,0.9s,baz=137,slow=4.1,SNR=22
BRTR **Keskin Array B** 144.75 314 PKHKP PKPpre 03 25 57.8
ASF **Jabal al Asfar** 145.09 301 PKPbc **PKPbc** 03 26 02.9 +0.2
comp=Z,30nm,0.7s,baz=31,slow=0.0,SNR=18
NIE **Niedzica** 145.20 338 *e*PKP **PKPbc** 03 26 02.9 +0.5
KSP **Ksiaz** 145.21 343 *e*PKP **PKPbc** 03 26 02.5 +0.2
ANTO **Ankara** 145.25 315 PKPdf **PKPdf** 03 26 02.2 +0.5
ANTO **Ankara** 145.25 315 PKiKP **PKPdf** 03 26 02.3 +0.5
OSTC **Ostas** 145.49 343 *e*PKP **PKPbc** 03 26 03.9 +0.7
OSTC **Ostas** 145.49 343 *e*PKP2 **PKPbc** 03 26 03.9 +0.7
CHVC **Chvalec** 145.50 343 *e*PKP **PKPbc** 03 26 03.9 +0.7
CHVC **Chvalec** 145.50 343 *e*PKP2 **PKPbc** 03 26 03.9 +0.7
OKC **Ostrava-Krasne** 145.56 341 *e*PKP **PKPbc** 03 26 03.7 +0.3
OKC **Ostrava-Krasne** 145.56 341 *e*PKP2 **PKPbc** 03 26 03.7 +0.3
CLL **Collm** 145.57 347 *e*PKPbc **PKPdf** 03 26 00.0 -1.9
CLL **Collm** 145.57 347 *i* PKPbc **PKPbc** 03 26 03.3 -0.1
comp=Z,176nm,0.6s
CLL **Collm** 145.57 347 *e*PKHKP PKPpre 03 26 00.0
CLL *i* 03 26 03.3
CLL pmax pmax
comp=Z,176nm,0.6s
UPC **Upice** 145.59 343 *e*PKP **PKPbc** 03 26 04.0 +0.5
UPC **Upice** 145.59 343 *e*PKP2 **PKPbc** 03 26 04.0 +0.5
DPC **Dobruska-Polom** 145.64 343 *e*PKP **PKPab** 03 26 04.7 -0.6
DPC **Dobruska-Polom** 145.64 343 *e*PKP2 **PKPab** 03 26 04.7 -0.6
MBAR **Mbarara** 145.68 240*c* *i*PKP2 **PKPbc** 03 26 05.2 +0.2
MBAR pmax pmax
comp=Z,63nm,1.7s
KRLC **Kraliky** 145.76 342 *e*PKP **PKPbc** 03 26 04.6 +0.6
KRLC **Kraliky** 145.76 342 *e*PKP2 **PKPbc** 03 26 04.6 +0.6
BRG **Berggiesshubel** 145.77 346 *e*PKP **PKPdf** 03 26 00.4 -1.9
BRG Amp 03 26 00.7
comp=Z,6.8nm,0.8s
BRG **Berggiesshubel** 145.77 346 P **PKPbc** 03 26 04.5 +0.6
BRG Amp 03 26 05.7
comp=Z,52nm,0.7s
BRG **Berggiesshubel** 145.77 346 P **PKiKP** 03 26 13.5 +6.9
BRG Amp 03 26 13.9
comp=Z,15nm,0.7s
MORC **Moravsky Berou** 145.80 341 *e*PKP **PKPbc** 03 26 04.4 +0.3
MLR **Muntele Rosu** 145.86 329 PKPbc **PKPbc** 03 26 04.9 +0.3
comp=Z,22nm,0.6s,baz=112,slow=5.9,SNR=5.2
PVCC **Panska Ves** 145.94 345 *e*PKP **PKPbc** 03 26 05.3 +0.9
PVCC **Panska Ves** 145.94 345 *e*PKP2 **PKPbc** 03 26 05.3 +0.9
RICC **Richard** 146.04 345 *e*PKP **PKPab** 03 26 05.9 -0.9
MMAI **Mount Meron Ar** 146.06 303 PKP **PKPdf** 03 26 02.9 -0.5
comp=Z,74nm,0.6s,baz=68,slow=4.6,SNR=32
MMAI PKPbc **PKPbc** 03 26 06.3 +0.9
comp=Z,74nm,0.6s,baz=71,slow=5.4,SNR=23
MAUC **Maruska** 146.07 341 *e*PKP **PKPbc** 03 26 05.7 +0.8
HSKC **Hora Svate Kat** 146.14 346 *e*PKP **PKPbc** 03 26 05.6 +0.6
PRA **Prague** 146.40 345 *e*PKP **PKPbc** 03 26 06.3 +0.6
PRA **Prague** 146.40 345 *e*PKP2 **PKPbc** 03 26 06.3 +0.6
PRU **Pruhonice** 146.45 345 *e*PKP **PKPbc** 03 26 06.3 +0.5
PRU **Pruhonice** 146.45 345 *e*PKP2 **PKPbc** 03 26 06.3 +0.5
GOPC **GO Pecny, Ondr** 146.45 344 *e*PKP **PKPbc** 03 26 06.5 +0.6
GOPC **GO Pecny, Ondr** 146.45 344 *e*PKP2 **PKPbc** 03 26 06.5 +0.6
VRAC **Vranov** 146.50 342 *e*PKP **PKPbc** 03 26 06.2 +0.2
VRAC **Vranov** 146.50 342 PKPbc **PKPbc** 03 26 06.6 +0.6
comp=Z,22nm,0.7s,baz=21,slow=1.8,SNR=14
JAVC **Velka Javorina** 146.57 340 *e*PKP **PKiKP** 03 26 07.9 -0.5
KRUC **Moravsky** 146.78 342 *e*PKP **PKPbc** 03 26 06.9 +0.1
SMOL **Smolenice** 146.95 340 *e*PKP2 **PKiKP** 03 26 08.7 -0.4
ZVC **Zvikov** 147.04 345 *e*PKP **PKPbc** 03 26 08.1 +0.6
EIL **Elat** 147.32 297 PKPbc **PKPbc** 03 26 08.9 +0.1
comp=Z,29nm,0.8s,baz=348,slow=3.5,SNR=13
ZST **Bratislava** 147.33 340 *e* **PKPbc** 03 26 09.2 +1.0
GRFO **Grafenberg** 147.47 348 **PKPbc** 03 26 07.7 -0.9
KHC **Kasperske Hory** 147.48 345 *e*PKP **PKPbc** 03 26 09.2 +0.5
KHC **Kasperske Hory** 147.48 345 *e*PKP2 **PKPbc** 03 26 09.2 +0.5
CKRC **Cesky Krumlov** 147.58 344 *e*PKP **PKPbc** 03 26 09.6 +0.7
CKRC **Cesky Krumlov** 147.58 344 *e*PKIKP **PKPdf** 03 26 05.9 +0.5
GERES **GERESS Array B** 147.71 345 PKPdf **PKPdf** 03 26 05.2 -0.5
GERES **GERESS Array B** 147.71 345 PKP **PKPdf** 03 26 05.5 -0.2
comp=Z,19nm,0.6s,baz=167,slow=6.7,SNR=14
GERES PKPbc **PKPbc** 03 26 09.8 +0.5
comp=Z,28nm,0.5s,baz=163,slow=9.8,SNR=34
GERES **GERESS Array B** 147.71 345 PKHKP PKPpre 03 26 05.2
CONA **Conrad Observa** 147.95 342 *i* PKiKP **PKPbc** 03 26 10.5 +0.5
comp=Z,34nm,1.0s,SNR=8.0
RONA **Rosalia, Austr** 148.02 341 *e*PKiKP **PKPbc** 03 26 10.5 +0.4
comp=Z,13nm,0.6s,SNR=11
MOA **Molln** 148.48 343 *e*PKiKP **PKPbc** 03 26 11.4 +0.2
comp=Z,6.3nm,0.5s
ARSA **Arzberg** 148.66 341 *i* PKiKP **PKPbc** 03 26 11.8 +0.1
comp=Z,6.4nm,0.9s
BIOA **Bad Ischl, Aus** 148.80 344 *e*PKiKP **PKPbc** 03 26 11.9 -0.1
comp=Z,5.2nm,0.4s
FRGS **Fruska Gora** 148.92 334 *e*P **PKPbc** 03 26 12.2 -0.2
KOGS **Kog** 149.14 340 *i* PKPbc **PKPbc** 03 26 12.2 -0.6
LESA **Schwarzleotal** 149.29 345 *e*PKiKP **PKPbc** 03 26 13.2 -0.1
comp=Z,9.2nm,0.4s
SOKA **Soboth** 149.32 341 *e*PKiKP **PKPbc** 03 26 13.1 -0.3
comp=Z,8.3nm,0.4s,SNR=7.8
PERS **Penze** 149.34 341 *i* PKPbc **PKPbc** 03 26 12.7 -0.7
KBA **Koelnbreinsper** 149.44 344 *e*PKiKP **PKPbc** 03 26 13.3 -0.5
comp=Z,6.2nm,0.4s,SNR=7.1
TEKS **Tekeris** 149.53 334 *e*P **PKPbc** 03 26 13.2 -0.7
OBKA **Obir** 149.62 342 *i* PKiKP **PKPbc** 03 26 13.4 -0.7
comp=Z,7.2nm,0.7s
OBKA **Obir** 149.62 342 *e*P **PKPbc** 03 26 12.2 -1.9
WATA **Walderalm** 149.63 346 *i* PKiKP **PKPbc** 03 26 14.1 -0.1
comp=Z,26nm,0.6s,SNR=9.3
RETA **Reutte** 149.67 347 *i* PKiKP **PKPbc** 03 26 14.2 0.0
comp=Z,9.9nm,0.6s,SNR=5.5
WTTA **Wattenberg** 149.69 346 *e*PKiKP **PKPbc** 03 26 14.4 0.0
comp=Z,80nm,0.7s,SNR=14
KAVA **Kavala** 149.73 324 P **PKPbc** 03 26 13.5 -0.9
MOTA **Moosalm** 149.73 347 *i* PKiKP **PKPbc** 03 26 14.3 -0.2
comp=Z,32nm,0.9s
MYKA **Terra Mystica** 149.77 343 *e*PKiKP **PKPbc** 03 26 13.8 -0.6
comp=Z,34nm,0.9s,SNR=11
SQTA **Sankt Quirin** 149.82 347 *e*PKiKP **PKPbc** 03 26 14.7 +0.1
comp=Z,35nm,0.9s,SNR=14
DOB **Doboj** 149.95 336 *e*P **PKiKP** 03 26 16.6 +1.2
ABTA **Pfaltersbach** 149.96 345 *e*PKiKP **PKPbc** 03 26 14.2 -0.6
comp=Z,49nm,0.8s,SNR=16
DAVA **Damuels** 150.03 348 *e*PKiKP **PKPbc** 03 26 15.2 +0.1
comp=Z,24nm,0.7s,SNR=11
LJU **Ljubljana** 150.05 342 *i* PKPdf **PKPdf** 03 26 11.0 +1.7
LJU *i* PKPbc **PKPbc** 03 26 14.9 -0.2
FETA **Feichten** 150.12 347 *i* PKiKP **PKPbc** 03 26 15.5 +0.1
comp=Z,34nm,1.0s,SNR=6.8
BBLS **Lazi&#263i** 150.13 333 *e*P **PKPbc** 03 26 15.4 0.0
HAPS **Han Pijesak,Bl** 150.15 334 *e*P **PKPbc** 03 26 15.4 0.0
A051A **Mrakovica** 150.16 338 *e*P **PKPbc** 03 26 15.2 -0.2
BLY **Banja Luka** 150.29 337 *e*P **PKPbc** 03 26 17.1 -0.5
BOJS **Bojanci** 150.30 340 *e*P **PKPbc** 03 26 15.8 +0.2
RUDO **Rudo** 150.35 333 *e*P **PKPbc** 03 26 15.3 -0.5
CEY **Cerknica** 150.35 341 *e*P **PKPbc** 03 26 15.4 -0.4
SJES **Sjenica** 150.37 332 *e*P **PKPbc** 03 26 15.9 -0.1
OUR **Ouranopolis** 150.47 323 P **PKPbc** 03 26 14.6 -1.5
DAVOX **Davos/Dischmat** 150.52 348 PKP **PKPdf** 03 26 10.4 +0.1
comp=Z,61nm,0.6s,baz=63,slow=2.3,SNR=15
DAVOX PKPbc **PKiKP** 03 26 16.9 +0.1
comp=Z,61nm,0.6s,baz=22,slow=3.0,SNR=21
SKDS **Skadanscina** 150.65 342 *e*P **PKPbc** 03 26 15.6 -0.9
A050A **Klekovaca** 150.76 337 *e*P **PKPbc** 03 26 16.0 -0.8
UPM **Unac-Piva** 150.88 333 *e*P **PKPbc** 03 26 16.1 -1.2
PVIS **Visegrad** 150.88 333 *e*P **PKPbc** 03 26 17.8 -0.3
PDG **Podgorica** 151.32 322 *e*P **PKPbc** 03 26 17.0 -1.1
PUK **Puka** 151.36 330 **PKPbc** 03 26 18.0 -0.2
TREB **Trebinje** 151.51 333 *e*P **PKPbc** 03 26 17.7 -0.8
DRME **Dracevica, Mon** 151.57 331 *e*P **PKPbc** 03 26 17.4 -1.2
STON **Ston** 151.66 334 *e*P **PKPdf** 03 26 15.1 +3.2
TIR **Tirane** 151.91 330 PKPbc **PKPbc** 03 26 18.3 -1.1
TIR **Tirane** 151.91 330 PKIKP **PKPbc** 03 26 18.3 -1.1
IDI **Anoyia** 152.99 314 PKPbc **PKPbc** 03 26 21.5 -0.5
comp=Z,15nm,0.6s,baz=19,slow=4.7,SNR=3.3
CAMP **Campotosto** 153.55 340 PKPbc **PKPbc** 03 26 21.9 -1.2
INTR **Introdacqua** 153.85 338 PKPbc **PKPbc** 03 26 23.6 -0.1
PBRG **Braganca** 155.34 15 *e*PKPab **PKPab** 03 26 46.3 +0.3
POLO **Lamas de Olo** 155.48 17 *e*PKPab **PKPab** 03 26 47.0 +0.4
PVRL **Vila Real** 155.59 17 *e*PKPab **PKPab** 03 26 47.4 +0.3
MVO **Moncorvo** 155.88 16 *e*PKPab **PKPab** 03 26 48.4 +0.1
PVIS **Viseu** 156.06 18 *e*PKPab **PKPab** 03 26 49.4 +0.3
COI **Coimbra** 156.37 19 *e*PKPab **PKPab** 03 26 51.2 +0.8
MTE **Manteigas** 156.45 17 *e*PKPab **PKPab** 03 26 51.4 +0.6
PCAS **Casmilo, Conde** 156.49 19 *e*PKPab **PKPab** 03 26 50.8 -0.1
PSBE **So Bento** 156.88 20 *e*PKPab **PKPab** 03 26 52.0 -0.7
PCBR **Castelo Branco** 156.99 18 *e*PKPab **PKPab** 03 26 53.8 +0.7
PMRV **Marv??o** 157.40 18 *e*PKPab **PKPab** 03 26 55.5 +0.6
PESTR **Estremoz** 157.85 19 *e*PKPab **PKPab** 03 26 56.2 -0.7
ESDC **Sonseca Array** 157.98 11 PKPab **PKPab** 03 26 57.3 -0.1
comp=Z,4.5nm,0.8s,baz=342,slow=4.4,SNR=14
EVO **Evora** 158.03 20 *e*PKPab **PKPab** 03 26 57.9 +0.3
PNCL **Nicolau / Gran** 158.23 21 *e*PKPab **PKPab** 03 26 58.3 -0.2
PBEJ **Beja** 158.53 20 *e*PKPab **PKPab** 03 27 00.6 +0.7
PBAR **Barrancos** 158.66 18 *e*PKPab **PKPab** 03 27 00.2 -0.2
PFVI **Vila Bisbo** 158.99 23 *e*PKPab **PKPab** 03 27 00.4 -1.5
PVAQ **Vaqueiros** 159.15 21 *e*PKPab **PKPab** 03 27 03.1 +0.6
KEST **Kesra** 161.04 340 PKPab **PKPab** 03 27 11.2 +0.2
comp=Z,6.5nm,0.7s,baz=101,slow=2.2,SNR=10
TORD **Torodi Ar. Bea** 175.10 184 **PKPdf** 03 26 30.7 -3.3
TORD **Torodi Ar. Bea** 175.10 184 PKPab **PKPab** 03 28 13.3 -0.1
comp=Z,1.7nm,0.6s,baz=176,slow=3.0,SNR=5.9

*SNET* ***19*** *03:08:32.4±0.8, 11.84N×87.86W, h12km±11km, ML4.1*
*CATAC* ***19*** *03:08:33.2±0.5, 11.85N×87.82W, h18km±5km, ML3.9*
**ISC 19 03:08:33.8±2.1, 11.89N±0.05×87.79W±0.03, h18km±8km,**
**n67, σ0.98/98, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **1.08** | **42** | *e*P | **Pb** | | **03 08 53.7** | **-0.4** |
| CRIN | | | | *e*S | **Sg** | | **03 09 10.2** | **+1.0** |
| CRIN | | | | IAML | | | 03 09 22.7 | |
| | comp=Z,5μm,0.4s | | | | | | | |
| **CRIN** | **San Cristobal** | **1.08** | **42** | *i* P | **Pb** | | **03 08 54.0** | **-0.2** |
| CRIN | | | | IAML | | | 03 09 24.1 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| **QUEN** | **Al S del Volca** | **1.16** | **52** | *i* P | **Pn** | | **03 08 54.7** | **-0.5** |
| QUEN | | | | IAML | | | 03 08 57.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **TELN** | **Telica** | **1.18** | **53** | *i* P | **Pn** | | **03 08 54.6** | **-0.9** |
| TELN | | | | *i* S | **Sg** | | **03 09 12.9** | **+0.8** |
| TELN | | | | IAML | | | 03 09 16.5 | |
| | comp=Z,170nm,1.0s | | | | | | | |
| **HERN** | **Volcan Telica** | **1.18** | **52** | *i* P | **Pn** | | **03 08 54.5** | **-1.1** |
| HERN | | | | *i* S | **Sb** | | **03 09 11.8** | **+1.0** |
| HERN | | | | IAML | | | 03 09 39.6 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **ROCN** | **Rota Cerro Neg** | **1.20** | **58** | *i* P | **Pn** | | **03 08 55.4** | **-0.4** |
| ROCN | | | | *i* S | **Sb** | | **03 09 12.5** | **+1.2** |
| ROCN | | | | IAML | | | 03 09 18.8 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **COPN** | **Copaltepe** | **1.21** | **76** | *i* P | **Pn** | | **03 08 55.0** | **-0.9** |
| COPN | | | | IAML | | | 03 09 04.8 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.23** | **60** | *e*P | **Pn** | | **03 08 55.1** | **-1.1** |
| **CNGN** | **Cerro Negro** | **1.23** | **60** | *i* P | **Pn** | | **03 08 55.3** | **-0.9** |
| CNGN | | | | *i* S | **Sb** | | **03 09 13.4** | **+1.2** |
| CNGN | | | | IAML | | | 03 09 31.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **1.26** | **66** | *i* P | **Pn** | | **03 08 56.0** | **-0.5** |
| LEVN | | | | *i* S | **Sb** | | **03 09 13.9** | **+1.0** |
| LEVN | | | | IAML | | | 03 09 20.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **ILCN** | **San Idelfonso** | **1.27** | **57** | *i* P | **Pn** | | **03 08 55.9** | **-0.8** |
| ILCN | | | | *i* S | **Sn** | | **03 09 14.2** | **+0.9** |
| ILCN | | | | IAML | | | 03 09 21.5 | |
| | comp=Z,480nm,1.0s | | | | | | | |
| **INTP** | **Intipuca** | **1.33** | **349** | *e*P | **Pn** | | **03 08 57.1** | **-0.4** |
| **CNCH** | **Conchagua** | **1.38** | **358** | *e*P | **Pn** | | **03 08 57.6** | **-0.8** |
| CNCH | | | | *e*S | **Sb** | | **03 09 17.5** | **+0.8** |
| CNCH | | | | IAML | | | 03 09 21.8 | |
| | comp=Z,4μm,0.3s | | | | | | | |
| **CNCH** | **Conchagua** | **1.38** | **358** | *i* P | **Pn** | | **03 08 57.9** | **-0.5** |
| CNCH | | | | *i* S | **Sb** | | **03 09 17.9** | **+1.2** |
| CNCH | | | | IAML | | | 03 09 20.9 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **SAPS** | **Ciudad Sandino** | **1.38** | **78** | *i* P | **Pn** | | **03 08 57.5** | **-0.8** |
| SAPS | | | | *i* S | **Sn** | | **03 09 17.3** | **+1.1** |
| SAPS | | | | IAML | | | 03 09 25.8 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **MOM2** | **El Cardon** | **1.39** | **67** | *i* P | **Pn** | | **03 08 58.1** | **-0.2** |
| MOM2 | | | | *i* S | **Sn** | | **03 09 17.3** | **+1.0** |
| MOM2 | | | | IAML | | | 03 09 24.3 | |
| | comp=Z,980nm,1.0s | | | | | | | |
| **AMPH** | **Amapala** | **1.40** | **5** | *e*P | **Pn** | | **03 08 57.8** | **-0.7** |
| AMPH | | | | *e*S | **Sb** | | **03 09 17.6** | **+0.6** |
| **AMPH** | **Amapala** | **1.40** | **5** | *i* P | **Pn** | | **03 08 58.1** | **-0.4** |
| AMPH | | | | *i* S | **Sb** | | **03 09 17.6** | **+0.6** |
| **LCND** | **La Caada** | **1.42** | **356** | *e*P | **Pn** | | **03 08 58.0** | **-0.8** |
| LCND | | | | IAML | | | 03 09 20.1 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| **LCND** | **La Caada** | **1.42** | **356** | *i* P | **Pn** | | **03 08 58.3** | **-0.5** |
| LCND | | | | *i* S | **Sb** | | **03 09 17.9** | **+0.3** |
| LCND | | | | IAML | | | 03 09 19.8 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **APQ3** | **Volcan Apoyequ** | **1.44** | **74** | *i* P | **Pn** | | **03 08 58.5** | **-0.6** |
| APQ3 | | | | *i* S | **Sn** | | **03 09 17.4** | **-0.2** |
| APQ3 | | | | IAML | | | 03 09 28.4 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **APYN** | **Apoyeque** | **1.45** | **76** | *i* P | **Pn** | | **03 08 59.9** | **+0.7** |
| APYN | | | | IAML | | | 03 09 22.1 | |
| | comp=Z,32nm,1.0s | | | | | | | |
| **CRUN** | **El Crucero** | **1.46** | **86** | *i* P | **Pn** | | **03 08 59.2** | **-0.2** |
| CRUN | | | | IAML | | | 03 09 28.3 | |
| | comp=Z,22μm,1.0s | | | | | | | |
| **APQ2** | **Apoyeque** | **1.47** | **78** | *i* P | **Pn** | | **03 08 58.4** | **-1.0** |
| APQ2 | | | | IAML | | | 03 09 23.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **ABCN** | **Banco Central** | **1.47** | **81** | *i* P | **Pn** | | **03 08 58.9** | **-0.5** |
| ABCN | | | | IAML | | | 03 09 09.8 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **UNAN** | **Cigeo UNAN** | **1.50** | **81** | *i* P | **Pn** | | **03 08 59.3** | **-0.6** |
| UNAN | | | | IAML | | | 03 09 25.7 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.51** | **80** | *i* P | **Pn** | | **03 08 59.3** | **-0.7** |
| TISN | | | | IAML | | | 03 09 27.1 | |
| | comp=Z,160nm,1.0s | | | | | | | |
| **ENAN** | **Enatrel Managu** | **1.51** | **81** | *i* P | **Pn** | | **03 08 59.4** | **-0.7** |
| ENAN | | | | IAML | | | 03 09 27.8 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **R4DEC** | **Barrio San Lui** | **1.53** | **80** | *i* P | **Pn** | | **03 08 59.5** | **-0.8** |
| R4DEC | | | | *i* P | **Pn** | | **03 08 59.5** | **-0.8** |
| R4DEC | | | | IAML | | | 03 09 27.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| R4DEC | | | | IAML | | | 03 09 27.2 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **R0529** | **La Mascota** | **1.54** | **81** | *i* P | **Pn** | | **03 09 00.3** | **-0.1** |
| R0529 | | | | IAML | | | 03 09 08.9 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **WILN** | **Americas 2** | **1.59** | **80** | *i* P | **Pn** | | **03 09 00.3** | **-0.8** |
| WILN | | | | *i* S | **Sn** | | **03 09 22.3** | **+1.0** |
| WILN | | | | IAML | | | 03 09 34.7 | |
| | comp=Z,950nm,1.0s | | | | | | | |
| **LCY** | **Lacayo** | **1.61** | **342** | *e*P | **Pn** | | **03 09 00.6** | **-0.9** |
| **MASN** | **Masaya** | **1.61** | **86** | *i* P | **Pn** | | **03 09 01.3** | **-0.1** |
| MASN | | | | IAML | | | 03 09 29.3 | |
| | comp=Z,280nm,1.0s | | | | | | | |
| **AERN** | **Aeropuerto Man** | **1.61** | **81** | *i* P | **Pn** | | **03 09 01.2** | **-0.2** |
| AERN | | | | IAML | | | 03 09 10.4 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **BLLM** | **Bellamira** | **1.61** | **344** | *e*P | **Pn** | | **03 09 00.7** | **-0.7** |
| **CNRM** | **Centro Naciona** | **1.62** | **347** | *i* P | **Pn** | | **03 09 00.8** | **-0.8** |
| CNRM | | | | *i* S | **Sb** | | **03 09 23.9** | **+0.4** |
| CNRM | | | | IAML | | | 03 09 35.5 | |
| | comp=Z,5μm,1.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| JAYA | | | | | IAML | | | 03 09 40.9 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **CEDA** | **San Andres** | **2.47** | **321** | *i* P | | **Pn** | **03 09 13.1** | **-0.1** | |
| CEDA | | | | *i* S | | **Sn** | **03 09 43.7** | **+0.7** | |
| CEDA | | | | | IAML | | 03 10 04.3 | | |
| | comp=Z,960nm,1.0s | | | | | | | | |
| **ACON** | **Acoyapa** | **2.56** | **88** | *i* P | | **Pn** | **03 09 14.5** | **0.0** | |
| ACON | | | | | IAML | | 03 10 00.5 | | |
| | comp=Z,170nm,1.0s | | | | | | | | |
| **NUBE** | **Las Nubes** | **2.79** | **316** | *i* P | | **Pn** | **03 09 17.5** | **-0.3** | |
| NUBE | | | | *i* S | | **Sn** | **03 09 49.2** | **-1.9** | |
| NUBE | | | | | IAML | | 03 09 51.2 | | |
| | comp=Z,290nm,1.0s | | | | | | | | |
| **MTO3** | **Montecristo** | **2.93** | **329** | *i* P | | **Pn** | **03 09 20.1** | **+0.3** | |
| MTO3 | | | | | IAML | | 03 10 06.1 | | |
| | comp=Z,130nm,1.0s | | | | | | | | |
| **INDI** | **Punta indio, G** | **3.01** | **132** | *i* P | | **Pn** | **03 09 21.1** | **+0.4** | |
| INDI | | | | | IAML | | 03 10 25.3 | | |
| | comp=Z,220nm,1.0s | | | | | | | | |
| **ESPN** | **Las Esperanzas** | **3.43** | **84** | *i* P | | **Pb** | **03 09 31.7** | **-2.4** | |
| ESPN | | | | | IAML | | 03 10 12.0 | | |
| | comp=Z,250nm,1.0s | | | | | | | | |
| **LCR2** | **La Lucha 2** | **4.29** | **119** | *i* P | | **Pn** | **03 09 40.3** | **+1.9** | |
| LCR2 | | | | | IAML | | 03 10 01.7 | | |
| | comp=Z,86nm,1.0s | | | | | | | | |

**GUC 19 03:10:45.3±0.6, 34°25S×72°19W, h28km±7km, ML2.6, 3C-4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BO03** | **Pichilemu** | **0.31** | **142** | *eP* | Pb | 03 10 52.3 | -0.4 |
| BO03 | | | | *i* S | Sb | 03 10 57.3 | -0.4 |
| **VA05** | **Santo Domingo** | **0.76** | **39** | | Pb | 03 10 59.5 | -0.5 |
| **VA05** | **Santo Domingo** | **0.76** | **39** | *eP* | Pb | 03 10 59.4 | -0.6 |
| VA05 | | | | *i* S | Sb | 03 11 09.5 | -0.5 |
| VA05 | | | | IAML | | 03 11 15.1 | |
| | comp=E,807nm,0.5s | | | | | | |
| **GO05** | **Huala** | **0.78** | **164** | | Pb | 03 10 59.8 | -0.6 |
| **GO05** | **Huala** | **0.78** | **164** | *eP* | Pb | 03 10 59.6 | -0.8 |
| GO05 | | | | *eS* | Sb | 03 11 10.2 | -0.5 |
| GO05 | | | | IAML | | 03 11 12.6 | |
| | comp=E,629nm,0.3s | | | | | | |
| **MT01** | **Popeta** | **0.87** | **64** | | Pn | 03 11 00.8 | -0.9 |
| **MT01** | **Popeta** | **0.87** | **64** | *eP* | Pn | 03 11 00.7 | -1.0 |
| MT01 | | | | *i* S | Sb | 03 11 12.6 | -0.5 |
| MT01 | | | | IAML | | 03 11 14.9 | |
| | comp=E,187nm,0.3s | | | | | | |
| **BO01** | **Tunca** | **0.92** | **99** | | Pn | 03 11 01.6 | -0.9 |
| **BO01** | **Tunca** | **0.92** | **99** | *eP* | Pn | 03 11 01.4 | -1.1 |
| BO01 | | | | *i* S | Sb | 03 11 10.7 | -4.0 |
| **MT09** | **Talagante** | **1.10** | **65** | | Pn | 03 11 04.5 | -0.6 |
| **MT09** | **Talagante** | **1.10** | **65** | *eP* | Pn | 03 11 04.5 | -0.6 |
| MT09 | | | | *i* S | Sn | 03 11 19.4 | -0.1 |
| MT09 | | | | IAML | | 03 11 21.5 | |
| | comp=N,445nm,0.1s | | | | | | |
| **BO02** | **Sierra Bellavi** | **1.28** | **115** | *eP* | Pn | 03 11 07.7 | +0.3 |
| BO02 | | | | *i* S | Sb | 03 11 24.5 | -0.4 |
| **MT02** | **Curacav** | **1.32** | **42** | *eP* | Pn | 03 11 07.8 | -0.1 |
| **BO04** | **La Punta** | **1.34** | **79** | *i* P | Pn | 03 11 08.2 | +0.1 |
| BO04 | | | | *i* S | Sb | 03 11 26.9 | +0.5 |
| BO04 | | | | IAML | | 03 11 31.1 | |
| | comp=N,153nm,0.4s | | | | | | |
| **MT12** | **Pirque** | **1.46** | **70** | *eP* | Pn | 03 11 10.2 | +0.3 |
| MT12 | | | | *i* S | Sb | 03 11 29.3 | -0.6 |
| MT12 | | | | IAML | | 03 11 31.6 | |
| | comp=E,301nm,0.3s | | | | | | |
| **MT05** | **Renca** | **1.48** | **55** | *eP* | Pb | 03 11 11.8 | -0.4 |
| MT05 | | | | *i* S | Sb | 03 11 32.1 | +1.4 |
| **MT15** | **Las Vizcachas** | **1.54** | **65** | *eP* | Pn | 03 11 11.8 | +0.7 |
| MT15 | | | | *i* S | Sb | 03 11 32.0 | -0.4 |
| MT15 | | | | IAML | | 03 11 35.2 | |
| | comp=E,269nm,0.4s | | | | | | |
| **MT03** | **Universidad Ad** | **1.59** | **62** | *eP* | Pn | 03 11 12.2 | +0.5 |
| MT03 | | | | *i* S | Sb | 03 11 34.1 | +0.3 |
| MT03 | | | | IAML | | 03 11 38.0 | |
| | comp=E,158nm,0.3s | | | | | | |
| **MT16** | **CCHEN** | **1.61** | **60** | *eP* | Pb | 03 11 13.3 | -1.2 |
| MT16 | | | | IAML | | 03 11 41.6 | |
| | comp=E,58nm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **1.61** | **38** | *eP* | Pn | 03 11 13.1 | +0.9 |
| **MT14** | **Cerro Calan** | **1.62** | **59** | *eP* | Pn | 03 11 12.9 | +0.8 |
| MT14 | | | | *eS* | Sb | 03 11 34.2 | -0.4 |
| MT14 | | | | IAML | | 03 11 39.6 | |
| | comp=N,119nm,0.7s | | | | | | |
| **ML02** | **Panimavida** | **1.63** | **157** | *i* S | Sn | 03 11 25.9 | -6.4 |
| **PEL** | **Peldehue** | **1.67** | **49** | *eP* | Pn | 03 11 14.1 | +1.3 |
| PEL | | | | *i* S | Sb | 03 11 35.5 | -0.6 |
| PEL | | | | IAML | | 03 11 43.3 | |
| | comp=N,87nm,0.4s | | | | | | |
| **MT10** | **Hacienda Santa** | **1.69** | **55** | *eP* | Pn | 03 11 14.1 | +1.0 |
| MT10 | | | | *i* S | Sb | 03 11 36.1 | -0.5 |
| MT10 | | | | IAML | | 03 11 37.6 | |
| | comp=N,164nm,0.2s | | | | | | |
| **LMEL** | **Las Melosas** | **1.70** | **77** | *eP* | Pn | 03 11 14.2 | +0.9 |
| LMEL | | | | *i* S | Sb | 03 11 37.7 | +0.7 |
| **FCH** | **Farellones** | **1.83** | **60** | *eP* | Pn | 03 11 16.0 | +0.8 |
| FCH | | | | *i* S | Sn | 03 11 39.0 | +1.4 |
| **VA06** | **Catapilco** | **1.84** | **24** | *i* S | Sn | 03 11 38.1 | +0.6 |
| **MT04** | **Ro Olivares** | **1.91** | **64** | *eP* | Pn | 03 11 17.3 | +1.2 |
| MT04 | | | | *i* S | Sb | 03 11 41.6 | -1.4 |
| MT04 | | | | IAML | | 03 11 48.1 | |
| | comp=E,60nm,0.3s | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.98** | **67** | *eP* | Pb | 03 11 19.2 | -1.6 |
| MT08 | | | | *eS* | Sb | 03 11 44.6 | -0.4 |
| MT08 | | | | IAML | | 03 11 50.8 | |
| | comp=N,44nm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **2.02** | **43** | *eP* | Pb | 03 11 19.6 | -1.8 |
| VA03 | | | | *i* S | Sn | 03 11 43.5 | +1.5 |
| VA03 | | | | IAML | | 03 11 56.4 | |
| | comp=E,84nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **3.20** | **19** | *eP* | Pn | 03 11 34.3 | +0.4 |

*IDC **19** 03:13:26.8±15.0, 17°66S×178°15W, h559km±125km, mb3.6/4, mbtmp4.4/5, Error ellipse: s-maj=170.0km s-min=39.8km az=38.0*
*NEIC **19** 03:13:27.3±0.9, 18°1S±0°2×178°1W±0°2, h543km±18km, mb4.5/12, Error ellipse: s-maj=34.4km s-min=8.3km az=45.0*

**ISC 19 03:13:27.2±2.3, 18°0S±0°3×178°2W±0°2, h550km, n19, σ0s71/20, mb4.4/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.57** | **273** | P | **P** | **03 14 45.7** | **-0.5** |
| **DZM** | **Mont Dzumac** | **14.98** | **252** | P | **P** | **03 16 36.8** | **+0.1** |
| **DZM** | **Mont Dzumac** | **14.98** | **252** | P | **P** | **03 16 38.1** | **+1.4** |
| | 2.9nm,0.6s,baz=136,slow=21,SNR=2.2 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.72** | **258** | P | **P** | **03 16 53.9** | **+0.3** |
| KOUNC | | | | IAmb | IAmb | 03 17 13.1 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **KHZ** | **Kahutara** | **25.35** | **194** | P | **P** | **03 18 10.5** | **-0.3** |
| KHZ | | | | IAmb | IAmb | 03 18 23.9 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **GVZ** | **Greta Valley S** | **25.99** | **195** | P | **P** | **03 18 15.2** | **-1.4** |
| **CAN** | **Canberra** | **33.81** | **233** | P | **P** | **03 19 24.7** | **+0.5** |
| CAN | | | | IAmb | IAmb | 03 19 41.5 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **37.27** | **231** | P | **P** | **03 19 52.9** | **+0.1** |
| TOO | | | | IAmb | IAmb | 03 20 20.1 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.76** | **241** | P | **P** | **03 20 04.5** | **-0.4** |
| **STKA** | **Stephens Creek** | **38.76** | **241** | P | **P** | **03 20 05.4** | **+0.4** |
| | comp=Z,5.0nm,0.8s,baz=71,slow=9.9,SNR=2.8 | | | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.54** | **241** | P | **P** | **03 20 42.8** | **0.0** |
| **WRAB** | **Tennant Creek** | **44.80** | **260** | P | **P** | **03 20 53.8** | **+1.2** |
| **WRA** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **03 20 51.8** | **-0.9** |
| | comp=Z,1.9nm,0.5s,baz=92,slow=7.2,SNR=5.6 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.95** | **254** | P | **P** | **03 20 53.4** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 03 20 54.1 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.95** | **254** | P | **P** | **03 20 53.2** | **-0.7** |
| **ASAR** | **Alice Springs** | **44.95** | **254** | P | **P** | **03 20 53.6** | **-0.2** |
| | comp=Z,20nm,0.5s,baz=88,slow=8.5,SNR=34 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 22 23.1** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=84,slow=3.5,SNR=1.4 | | | | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | **P** | **03 23 56.1** | **+0.3** |
| QSPA | | | | IAmb | IAmb | 03 24 09.7 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | **P** | **03 23 56.2** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=124,slow=12,SNR=6.4 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **82.07** | **173** | P | **P** | **03 24 50.3** | **+0.5** |

*IDC **19** 03:16:44.2±5.5, 17°37S×179°70E, h537km±66km, mb3.2/8, mbtmp4.0/9, Error ellipse: s-maj=31.1km s-min=25.9km az=6.0*
*NEIC **19** 03:16:53.1±2.5, 17°9S±0°1×179°3E±0°2, h603km±8km, mb4.4/15, Error ellipse: s-maj=26.4km s-min=14.4km az=117.0*

**ISC 19 03:16:49.8±0.8, 17°4S±0°1×179°6E±0°1, h602km, n30, σ1s54/29, mb4.2/15, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **1.48** | **257** | P | **P** | **03 18 03.1** | **+0.5** |
| **PINNC** | **Pines Island,** | **12.51** | **244** | P | **P** | **03 19 32.8** | **-0.9** |
| **DZM** | **Mont Dzumac** | **13.20** | **247** | P | **P** | **03 19 41.0** | **+0.2** |
| **DZM** | **Mont Dzumac** | **13.20** | **247** | P | **P** | **03 19 38.0** | **-2.7** |
| | 1.6nm,0.9s,baz=101,slow=20,SNR=2.1 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **14.79** | **255** | P | **P** | **03 19 54.9** | **-1.2** |
| **URZ** | **Urewera** | **20.88** | **185** | P | **P** | **03 20 49.1** | **-2.1** |
| | 4.0nm,0.8s,baz=4.4,slow=13,SNR=2.4 | | | | | | |
| | 4.0nm,0.8s | | | | | | |
| **QRZ** | **Quartz Range** | **24.11** | **193** | P | **P** | **03 21 21.2** | **+1.3** |
| **LTZ** | **Lake Taylor** | **26.04** | **192** | P | **P** | **03 21 36.9** | **-0.1** |
| LTZ | | | | IAmb | IAmb | 03 21 42.4 | |
| | comp=Z,30nm,1.5s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.32** | **196** | P | **P** | **03 21 48.7** | **+0.7** |
| **LBZ** | **Lake Benmore** | **28.03** | **194** | P | **P** | **03 21 53.6** | **-0.6** |
| LBZ | | | | IAmb | IAmb | 03 22 11.9 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.00** | **196** | P | **P** | **03 22 14.2** | **+2.9** |
| **COEN** | **Coen** | **35.17** | **270** | P | **P** | **03 22 58.7** | **+3.4** |
| COEN | | | | IAmb | IAmb | 03 23 07.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **37.19** | **240** | P | **P** | **03 23 09.8** | **-1.8** |
| **STKA** | **Stephens Creek** | **37.19** | **240** | P | **P** | **03 23 09.9** | **-1.8** |
| | comp=Z,2.2nm,0.5s,baz=80,slow=7.9,SNR=4.5 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **41.97** | **240** | P | **P** | **03 23 47.2** | **-2.6** |
| BBOO | | | | IAmb | IAmb | 03 23 57.2 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.64** | **259** | P | **P** | **03 23 54.2** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 03 23 55.9 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.79** | **260** | P | **P** | **03 23 56.4** | **0.0** |
| WB0 | | | | IAmb | IAmb | 03 23 59.1 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.82** | **259** | P | **P** | **03 23 56.6** | **0.0** |
| WB2 | | | | IAmb | IAmb | 03 24 35.7 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.83** | **259** | P | **P** | **03 23 56.7** | **0.0** |
| **WRA** | **Warramunga Arr** | **42.83** | **259** | P | **P** | **03 23 56.2** | **-0.5** |
| | comp=Z,1.6nm,0.5s,baz=94,slow=7.0,SNR=15 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **43.07** | **254** | P | **P** | **03 23 58.3** | **-0.2** |
| **ASAR** | **Alice Springs** | **43.07** | **254** | P | **P** | **03 23 57.5** | **-1.1** |
| **ASAR** | **Alice Springs** | **43.07** | **254** | P | **P** | **03 23 58.0** | **-0.5** |
| | comp=Z,6.3nm,0.6s,baz=90,slow=8.3,SNR=24 | | | | | | |
| | comp=Z,6.3nm,0.6s | | | | | | |
| **GSTR** | **Great Sitkin T** | **69.32** | **3** | P | P | 03 27 05.1 | +7.2 |
| **QSPA** | **South Pole Qui** | **72.64** | **180** | P | **P** | **03 27 18.6** | **+1.3** |
| QSPA | | | | IAmb | IAmb | 03 27 26.6 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.64** | **180** | P | **P** | **03 27 18.6** | **+1.3** |
| | comp=Z,2.0nm,0.8s,baz=63,slow=9.0,SNR=2.6 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **82.89** | **173** | P | **P** | **03 28 12.0** | **+0.1** |
| BELA | | | | IAmb | IAmb | 03 28 24.4 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **85.86** | **14** | P | **P** | **03 28 27.9** | **+1.5** |
| | comp=Z,0.1nm,0.3s,baz=232,slow=5.2,SNR=5.4 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **TXAR** | **Lajitas Array** | **87.37** | **58** | P | **P** | **03 28 33.0** | **-1.6** |
| | comp=Z,0.7nm,0.7s,baz=213,slow=6.4,SNR=9.8 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **88.33** | **44** | P | **P** | **03 28 37.8** | **-1.1** |
| | comp=Z,0.3nm,0.5s,baz=240,slow=2.9,SNR=3.9 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |

*IDC **19** 03:17:21.5±4.0, 17°90S×178°21W, h500km±46km, mb3.2/10, mbtmp4.1/11, Error ellipse: s-maj=24.2km s-min=20.4km az=158.0*
*NEIC **19** 03:17:21.8±1.2, 17°9S±0°2×178°2W±0°1, h506km±12km, mb4.3/45, Error ellipse: s-maj=24.6km s-min=14.8km az=158.0*

**ISC 19 03:17:21.4±0.6, 17°9S±0°1×178°26W±0°09, h500km, n65, σ0s85/66, mb4.3/31, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.37** | **59** | P | **P** | **03 19 10.6** | **-0.9** |
| **NIUE** | **Niue** | **8.00** | **100** | P | **P** | **03 19 19.3** | **+1.5** |
| **LIFNC** | **LIFOU** | **14.00** | **256** | P | **P** | **03 20 21.4** | **+0.3** |
| **PINNC** | **Pines Island,** | **14.23** | **248** | P | **P** | **03 20 24.2** | **+0.7** |
| **DZM** | **Mont Dzumac** | **14.98** | **251** | P | **P** | **03 20 32.4** | **+0.8** |
| DZM | | | | IAmb | IAmb | 03 20 39.0 | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **14.98** | **251** | P | **P** | **03 20 33.3** | **+1.7** |
| | comp=Z,3.3nm,0.4s,baz=123,slow=14,SNR=16 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.71** | **258** | P | **P** | **03 20 50.8** | **+1.3** |
| **URZ** | **Urewera** | **20.72** | **190** | P | **P** | **03 21 25.1** | **-1.4** |
| | comp=Z,3.6nm,0.8s,baz=36,slow=16,SNR=1.1 | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **QRZ** | **Quartz Range** | **24.22** | **197** | P | **P** | **03 21 59.5** | **+1.7** |
| **INZ** | **Inchbonnie** | **26.29** | **197** | P | **P** | **03 22 14.0** | **-2.1** |
| **FOZ** | **Fox Glacier** | **27.51** | **199** | P | **P** | **03 22 24.8** | **-2.0** |
| **LBZ** | **Lake Benmore** | **28.18** | **198** | P | **P** | **03 22 30.0** | **-2.7** |
| **EIDS** | **Eidsvold** | **29.42** | **250** | P | **P** | **03 22 43.8** | **-0.1** |
| EIDS | | | | IAmb | IAmb | 03 22 45.4 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.69** | **200** | P | **P** | **03 22 45.4** | **-0.5** |
| **ARMA** | **Armidale** | **30.09** | **240** | P | **P** | **03 22 50.8** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 03 22 51.4 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **33.60** | **260** | P | **P** | **03 23 20.2** | **+0.4** |
| | comp=Z,0.5nm,0.6s,baz=105,slow=11,SNR=8.4 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.60** | **260** | P | **P** | **03 23 19.4** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 03 23 21.3 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.85** | **233** | P | **P** | **03 23 22.0** | **+0.3** |
| **COEN** | **Coen** | **37.25** | **270** | P | **P** | **03 23 50.7** | **+0.4** |
| COEN | | | | IAmb | IAmb | 03 23 52.3 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **37.31** | **231** | P | **P** | **03 23 51.0** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.78** | **241** | P | **P** | **03 24 02.7** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.78** | **241** | P | **P** | **03 24 03.2** | **+0.7** |
| | comp=Z,6.4nm,0.5s,baz=90,slow=10,SNR=9.2 | | | | | | |
| | comp=Z,6.4nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.56** | **241** | P | **P** | **03 24 40.7** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 03 24 41.0 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.59** | **259** | P | **P** | **03 24 48.9** | **+0.1** |
| **WB0** | **Warramunga Arr** | **44.75** | **260** | P | **P** | **03 24 48.7** | **-1.3** |
| **WB2** | **Warramunga Arr** | **44.77** | **259** | P | **P** | **03 24 49.3** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 03 24 50.7 | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.78** | **259** | P | **P** | **03 24 49.5** | **-0.8** |
| **WRA** | **Warramunga Arr** | **44.78** | **259** | P | **P** | **03 24 50.0** | **-0.3** |
| | comp=Z,4.5nm,0.5s,baz=94,slow=6.8,SNR=40 | | | | | | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.94** | **254** | P | **P** | **03 24 51.5** | **0.0** |
| AS31 | | | | IAmb | IAmb | 03 24 52.4 | |
| | comp=Z,9.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.95** | **254** | P | **P** | **03 24 51.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.95** | **254** | P | **P** | **03 24 51.8** | **+0.3** |
| | comp=Z,32nm,0.6s,baz=88,slow=8.3,SNR=88 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 26 22.3** | **-0.1** |
| | comp=Z,0.4nm,0.6s,baz=93,slow=4.8,SNR=1.7 | | | | | | |
| **FORT** | **Forrest** | **50.16** | **245** | P | **P** | **03 25 30.0** | **-0.6** |
| **KNRA** | **Kununurra** | **50.64** | **264** | P | **P** | **03 25 34.3** | **0.0** |
| KNRA | | | | IAmb | IAmb | 03 25 35.4 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.18** | **260** | P | **P** | **03 25 52.5** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **67.96** | **323** | P | **P** | **03 27 29.9** | **-0.1** |
| | comp=Z,1.8nm,0.7s,baz=160,slow=6.8,SNR=6.0 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.19** | **180** | P | **P** | **03 27 54.8** | **-0.2** |
| | comp=Z,1.2nm,1.0s,baz=112,slow=13,SNR=1.2 | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| **N15K** | **Kwethluk River** | **79.14** | **9** | P | **P** | **03 28 33.1** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **79.29** | **44** | P | **P** | **03 28 35.4** | **+0.4** |
| | comp=Z,0.9nm,0.7s,baz=222,slow=8.7,SNR=9.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **M16K** | **Timber Creek** | **80.13** | **9** | P | **P** | **03 28 38.7** | **+0.2** |
| M16K | | | | IAmb | IAmb | 03 29 22.9 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.19** | **38** | P | **P** | **03 28 40.0** | **+0.6** |
| **N19K** | **Bonanza Creek** | **80.70** | **12** | P | **P** | **03 28 40.8** | **-0.9** |
| N19K | | | | IAmb | IAmb | 03 28 57.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **80.98** | **8** | P | **P** | **03 28 43.5** | **+0.5** |
| K15K | | | | IAmb | IAmb | 03 28 46.4 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **L18K** | **Granite Mounta** | **81.62** | **10** | P | **P** | **03 28 46.6** | **+0.4** |
| L18K | | | | IAmb | IAmb | 03 29 04.9 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **I07A** | **Izee** | **81.68** | **39** | P | **P** | **03 28 47.6** | **+0.5** |
| **K17K** | **Iditarod** | **81.84** | **9** | P | **P** | **03 28 47.3** | **0.0** |
| K17K | | | | IAmb | IAmb | 03 28 48.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **J16K** | **Anvik River** | **82.05** | **8** | P | **P** | **03 28 48.7** | **+0.3** |
| J16K | | | | IAmb | IAmb | 03 29 18.8 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **J17K** | **VABM Dome** | **82.37** | **9** | P | **P** | **03 28 50.3** | **+0.3** |
| J17K | | | | IAmb | IAmb | 03 29 27.5 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **PMR** | **Palmer** | **82.52** | **14** | P | **P** | **03 28 49.5** | **-1.3** |
| **G08A** | **Pilot Rock** | **82.68** | **38** | P | **P** | **03 28 51.7** | **-0.5** |
| **J16K** | **Innoko River** | **82.79** | **10** | P | **P** | **03 28 52.0** | **-0.2** |
| J18K | | | | IAmb | IAmb | 03 28 55.1 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **K20K** | **Telida** | **83.13** | **11** | P | **P** | **03 28 53.2** | **-0.7** |
| K20K | | | | IAmb | IAmb | 03 29 30.8 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.15** | **14** | P | **P** | **03 28 53.4** | **-0.7** |
| SCM | | | | IAmb | IAmb | 03 29 01.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **J19K** | **Poorman** | **83.46** | **10** | P | **P** | **03 28 55.5** | **0.0** |
| J19K | | | | IAmb | IAmb | 03 29 07.2 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.62** | **15** | P | **P** | **03 28 56.1** | **-0.3** |
| **GLB** | **Gilahina Butte** | **83.68** | **16** | P | **P** | **03 28 55.6** | **-1.1** |
| **J20K** | **Nowinta River** | **83.88** | **10** | P | **P** | **03 28 57.1** | **-0.4** |
| J20K | | | | IAmb | IAmb | 03 29 19.2 | |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **RND** | **Reindeer** | **84.19** | **13** | P | **P** | **03 28 58.5** | **-0.7** |
| RND | | | | IAmb | IAmb | 03 28 59.4 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **DHY** | **Denali Highway** | **84.22** | **14** | P | **P** | **03 28 58.6** | **-0.9** |
| DHY | | | | IAmb | IAmb | 03 28 59.0 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **M27K** | **Edge Creek, AK** | **84.95** | **16** | P | **P** | **03 29 02.7** | **-0.4** |
| **ILAR** | **Eielson Array** | **85.81** | **13** | P | **P** | **03 29 06.0** | **-1.0** |
| | comp=Z,0.6nm,0.4s,baz=223,slow=5.4,SNR=18 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.85** | **58** | P | **P** | **03 29 09.1** | **+0.9** |
| | comp=Z,0.7nm,0.7s,baz=229,slow=5.2,SNR=7.8 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.22** | **43** | P | **P** | **03 29 14.4** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=132,slow=2.2,SNR=4.2 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.85** | **315** | PKP | **PKPdf** | **03 36 01.8** | **+0.3** |
| | comp=Z,0.7nm,0.4s,baz=100,slow=3.2,SNR=10 | | | | | | |
| **GERES** | **GERESS Array B** | **147.60** | **345** | PKPbc | **PKPbc** | **03 36 09.2** | **-0.1** |
| | comp=Z,1.3nm,0.6s,baz=167,slow=6.6,SNR=7.5 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.39** | **349** | PKPbc | **PKPbc** | **03 36 16.2** | **0.0** |
| | comp=Z,4.9nm,0.7s,baz=229,slow=4.9,SNR=15 | | | | | | |

*IDC **19** 03:19:34.3±6.4, 18°05S×177°97W, h534km±72km, mb3.2/5, mbtmp4.1/6, Error ellipse: s-maj=42.6km s-min=27.3km az=66.0*
*NEIC **19** 03:19:38.5±1.8, 18°3S±0°1×178°0W±0°1, h588km±11km, mb4.6/21, Error ellipse: s-maj=22.9km s-min=15.7km az=142.0*

**ISC 19 03:19:38.7±0.8, 18°2S±0°1×178°0W±0°1, h600km, n32, σ1s01/32, mb4.5/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.75** | **276** | P | **P** | **03 21 02.3** | **-0.2** |
| **AFI** | **Afiamalu** | **7.38** | **56** | P | **P** | **03 21 31.0** | **-1.3** |
| **DZM** | **Mont Dzumac** | **15.07** | **253** | P | **P** | **03 22 47.7** | **+0.1** |
| **DZM** | **Mont Dzumac** | **15.07** | **253** | P | **P** | **03 22 46.9** | **-0.7** |
| | 2.2nm,0.7s,baz=67,slow=21,SNR=1.7 | | | | | | |
| **URZ** | **Urewera** | **20.43** | **191** | P | **P** | **03 23 35.8** | **-0.3** |
| | 3.2nm,0.4s,baz=13,slow=3.6,SNR=6.0 | | | | | | |
| | 3.2nm,0.4s | | | | | | |
| **TARA** | **Tarawa** | **21.37** | **334** | P | **P** | **03 23 44.5** | **-0.3** |
| **MRZ** | **Mangatainoka R** | **23.05** | **192** | P | **P** | **03 23 57.9** | **-1.6** |
| MRZ | | | | IAmb | IAmb | 03 24 30.8 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **MSWZ** | **Moikau Station** | **23.85** | **193** | P | **P** | **03 24 06.1** | **-0.4** |
| **QRZ** | **Quartz Range** | **23.97** | **198** | P | **P** | **03 24 07.3** | **-0.2** |
| **PLWZ** | **Palliser** | **23.99** | **192** | P | **P** | **03 24 06.7** | **-1.1** |
| **TH

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EANR | 'Ain N'Sour | 0.79 | 97 | P | | Pb | 03 21 32.9 | +0.8 |
| ECHA | Ech Chlef | 1.00 | 84 | P | | Pb | 03 21 35.5 | -0.1 |
| EBNR | Beni Rached | 1.16 | 78 | P | | Pb | 03 21 38.6 | +0.3 |
| EBNH | Beni Haoua | 1.24 | 68 | P | | Pb | 03 21 40.0 | +0.3 |
| OSBL | Sidi Abdelli | 1.42 | 227 | P | | Pg | 03 21 46.0 | +2.3 |
| EBGR | Bougara | 1.55 | 108 | P | | Pn | 03 21 43.5 | -0.2 |
| EADEB | Ain Deheb | 1.67 | 135 | P | | Pn | 03 21 46.2 | +0.7 |
| EDDR | Deurdeur | 1.69 | 91 | P | | Pn | 03 21 45.3 | -0.4 |
| OBHAM | Bir El Hammam | 1.71 | 197 | P | | Pn | 03 21 46.9 | +0.9 |
| CART | Cartagena | 1.78 | 330 | S | | Sn | 03 22 06.7 | -2.6 |
| CART | | | | P | | Pn | 03 21 46.3 | -0.6 |
| CART | Cartagena | 1.78 | 330 | S | | Sn | 03 22 06.9 | -2.4 |
| ABKD | Sidi Amar | 1.82 | 74 | P | | Pg | 03 21 52.8 | +1.4 |
| ETRV | Los Montesinos | 2.09 | 340 | Pn | | Pn | 03 21 51.9 | +0.8 |
| ETRV | | | | Sn | | Sn | 03 22 16.8 | -0.2 |
| ETRV | | | | *i* Vmb_Lg | | | 03 22 21.0 | |
| ENIJ | Nijar | 2.10 | 297 | S | | Sn | 03 22 15.1 | -2.0 |
| ENIJ | | | | P | | Pn | 03 21 50.9 | -0.3 |
| ENIJ | Nijar | 2.10 | 297 | Pn | | Sn | 03 21 52.4 | +1.2 |
| ENIJ | | | | Sn | | Sn | 03 22 15.7 | -1.5 |
| ENIJ | | | | *i* Vmb_Lg | | | 03 22 21.9 | |
| EMUR | La Murta | 2.10 | 329 | P | | Pn | 03 21 50.9 | -0.3 |
| EMUR | La Murta | 2.10 | 329 | Pn | | Pn | 03 21 52.1 | +0.8 |
| EMUR | | | | Sn | | Sn | 03 22 16.2 | -1.1 |
| EMUR | | | | *i* Vmb_Lg | | | 03 22 20.4 | |
| EZEK | Zmalet El Emir | 2.13 | 123 | P | | Pg | 03 21 57.3 | 0.0 |
| TLOR | Lorca, Murcia | 2.17 | 318 | Pn | | Pn | 03 21 53.3 | +1.1 |
| TLOR | | | | Sn | | Sn | 03 22 17.1 | -1.8 |
| ELOR | Lorca, Murcia | 2.18 | 317 | Pn | | Pn | 03 21 53.2 | +0.8 |
| ELOR | | | | Sn | | Sn | 03 22 18.3 | -1.1 |
| ELOR | | | | *i* Vmb_Lg | | | 03 22 19.3 | |
| EASA | Ain Sidi Ali | 2.22 | 148 | P | | Pg | 03 21 59.4 | +0.4 |
| ADOR | Douera | 2.33 | 74 | P | | Pn | 03 21 54.5 | -0.2 |
| EZAR | Zarzadilla de | 2.33 | 322 | Pn | | Pn | 03 21 55.9 | +1.3 |
| EZAR | | | | Sn | | Sn | 03 22 28.8 | -0.4 |
| EZAR | | | | *i* Vmb_Lg | | | 03 22 26.7 | |
| TAF | Taforalt | 2.42 | 240 | P | | Pn | 03 21 56.2 | +0.5 |
| TAF | Taforalt | 2.42 | 240 | S | | Sn | 03 22 23.0 | -2.3 |
| EBER | Berja | 2.58 | 290 | P | | Pn | 03 21 57.4 | -0.6 |
| EBER | Berja | 2.58 | 290 | Pn | | Pn | 03 21 58.0 | 0.0 |
| EBER | | | | Sn | | Sn | 03 22 28.1 | -1.2 |
| EBER | | | | *i* Vmb_Lg | | | 03 22 38.6 | |
| EMEL | Melilla | 2.62 | 254 | Pn | | Pn | 03 21 50.2 | -8.3 |
| EMEL | | | | Sn | | Sn | 03 22 30.8 | +0.6 |
| EBEN2 | Beniarda presa | 2.63 | 354 | Pn | | Pn | 03 21 59.5 | +0.9 |
| EBEN2 | | | | Sn | | Sn | 03 22 29.9 | -0.5 |
| EBEN2 | | | | *i* Vmb_Lg | | | 03 22 38.2 | |
| ADJB | Djebel Djouab | 2.68 | 87 | P | | Pn | 03 21 59.5 | +0.2 |
| GOG | Mont Gurugu | 2.68 | 253 | P | | Pn | 03 21 58.4 | -0.9 |
| GOG | Mont Gurugu | 2.68 | 253 | S | | Sn | 03 22 29.5 | -2.2 |
| ETOB | Tobarra | 2.91 | 333 | P | | Pn | 03 22 03.4 | +0.8 |
| ETOB | Tobarra | 2.91 | 333 | Pn | | Pn | 03 22 04.0 | +1.5 |
| ETOB | | | | Sn | | Sn | 03 22 38.3 | +0.9 |
| EIBI | Ibiza | 3.12 | 18 | P | | Pn | 03 22 05.1 | -0.2 |
| EIBI | Ibiza | 3.12 | 18 | Pn | | Pn | 03 22 06.6 | +1.3 |
| EIBI | | | | Sn | | Sn | 03 22 41.7 | -0.8 |
| EIBI | | | | *i* Vmb_Lg | | | 03 22 45.6 | |
| ELGU | Los Guajares, | 3.14 | 286 | P | | Pn | 03 22 05.1 | -0.5 |
| ELGU | Los Guajares, | 3.14 | 286 | Pn | | Pn | 03 22 05.5 | -0.1 |
| ELGU | | | | Sn | | Sn | 03 22 41.3 | -1.6 |
| ELGU | | | | *i* Vmb_Lg | | | 03 22 46.8 | |
| EVIV | Cofrentes, Val | 3.36 | 343 | Pn | | Pn | 03 22 10.6 | +2.0 |
| EVIV | | | | Sn | | Sn | 03 22 47.5 | -0.9 |
| EVIV | | | | *i* Vmb_Lg | | | 03 22 52.1 | |
| AKLM | AKL | 3.61 | 246 | P | | Pn | 03 22 12.9 | +0.8 |
| AKLM | AKL | 3.61 | 246 | S | | Sn | 03 22 53.1 | -1.6 |
| ECHE | Chera | 3.64 | 346 | Pn | | Pn | 03 22 14.0 | +1.6 |
| ECHE | | | | S | | Sn | 03 22 54.2 | -1.0 |
| ECHE | Chera | 3.64 | 346 | Pn | | Pn | 03 22 13.6 | +1.1 |
| ECHE | | | | Sn | | Sn | 03 22 54.5 | -0.8 |
| ECHE | | | | *i* Vmb_Lg | | | 03 23 01.4 | |
| ECOL | Islas Columbre | 3.86 | 6 | Pn | | Pn | 03 22 16.4 | +0.9 |
| ECOL | | | | Sn | | Sn | 03 22 58.6 | -2.2 |
| FIGM | Figuig | 4.08 | 197 | P | | Pn | 03 22 19.8 | +1.2 |
| FIGM | Figuig | 4.08 | 197 | S | | Sn | 03 23 07.2 | +1.0 |
| ETOS | Mallorca | 4.27 | 29 | Pn | | Pn | 03 22 21.4 | +0.3 |
| ETOS | | | | Sn | | Sn | 03 23 09.3 | -1.5 |
| ETOS | | | | *i* Vmb_Lg | | | 03 23 16.4 | |
| EADA | Adamuz | 4.31 | 301 | P | | Pn | 03 22 22.2 | +0.5 |
| EADA | Adamuz | 4.31 | 301 | Pn | | Pn | 03 22 23.3 | +1.6 |
| EADA | | | | Sn | | Sn | 03 23 11.0 | -1.0 |
| EADA | | | | *i* Vmb_Lg | | | 03 23 27.1 | |
| EMOS | Mosqueruela | 4.33 | 354 | Pn | | Pn | 03 22 23.7 | +1.6 |
| EMOS | | | | Sn | | Sn | 03 23 11.1 | -1.4 |
| EMOS | | | | *i* Vmb_Lg | | | 03 23 32.6 | |
| ECAB | El Cabril | 4.88 | 296 | P | | Pn | 03 22 30.2 | +0.8 |
| ECAB | | | | S | | Sn | 03 23 22.9 | -2.9 |
| ECAB | El Cabril | 4.88 | 296 | Pn | | Pn | 03 22 29.9 | +0.5 |
| ECAB | | | | Sn | | Sn | 03 23 23.6 | -2.1 |
| ECAB | | | | *i* Vmb_Lg | | | 03 23 31.4 | |
| ERTA | Horta de San J | 4.90 | 2 | Pn | | Pn | 03 22 30.9 | +1.1 |
| ERTA | | | | Sn | | Sn | 03 23 23.1 | -3.2 |
| ERTA | | | | *i* Vmb_Lg | | | 03 23 28.7 | |
| PAB | San Pablo | 4.97 | 316 | Pn | | Pn | 03 22 32.4 | +1.5 |
| PAB | | | | Sn | | Sn | 03 23 27.4 | -0.9 |
| PAB | | | | *i* Vmb_Lg | | | 03 23 43.7 | |
| UCM | Universidad Co | 5.01 | 329 | P | | Pn | 03 22 33.8 | +2.5 |
| MDT | Midelt | 5.08 | 232 | P | | Pn | 03 22 32.5 | +0.2 |
| MDT | Midelt | 5.08 | 232 | S | | Sn | 03 23 27.5 | -3.3 |
| MD31 | MD31 | 5.14 | 233 | P | | Pn | 03 22 34.4 | +1.2 |
| MD31 | MD31 | 5.14 | 233 | S | | Sn | 03 23 30.5 | -1.9 |
| EPOB | Poblet | 5.34 | 8 | Pn | | Pn | 03 22 36.9 | +1.0 |
| EPOB | | | | Sn | | Sn | 03 23 34.3 | -3.1 |
| EPOB | | | | *i* Vmb_Lg | | | 03 23 41.5 | |
| GUD | Guadarrama | 5.69 | 325 | Pn | | Pn | 03 22 43.2 | +2.5 |
| GUD | | | | *i* Vmb_Lg | | | 03 24 09.3 | |
| EMIN | Mina Concepcio | 5.71 | 289 | Pn | | Pn | 03 22 41.2 | +0.2 |
| PBAR | Barrancos | 6.11 | 292 | *e*P | | Pn | 03 22 47.6 | +1.2 |
| PBAR | | | | *e*S | | Sn | 03 23 53.2 | -2.9 |
| PBAR | Barrancos | 6.11 | 292 | P | | Pn | 03 22 46.7 | +0.3 |
| PBAR | | | | S | | Sn | 03 23 52.6 | -3.5 |
| EBAD | Badajoz | 6.29 | 297 | P | | Pn | 03 22 48.7 | -0.2 |
| EBAD | Badajoz | 6.29 | 297 | Pn | | Pn | 03 22 49.6 | +0.7 |
| EBAD | | | | Sn | | Sn | 03 23 58.7 | -1.9 |
| EBAD | | | | *i* Vmb_Lg | | | 03 23 59.9 | |
| PVAQ | Vaqueiros | 6.45 | 284 | *e*P | | Pn | 03 22 51.6 | +0.6 |
| PVAQ | | | | *e*S | | Sn | 03 24 01.9 | -2.5 |
| PVAQ | Vaqueiros | 6.45 | 284 | P | | Pn | 03 22 50.9 | -0.1 |
| PVAQ | | | | S | | Sn | 03 24 01.7 | -2.7 |
| PVAQ | Vaqueiros | 6.45 | 284 | Pn | | Pn | 03 22 49.9 | -1.1 |
| PVAQ | Vaqueiros | 6.45 | 284 | S | | Sn | 03 23 58.2 | -6.2 |
| PMRV | Marv??o | 6.85 | 302 | *e*P | | Pn | 03 22 58.6 | +2.1 |
| PMRV | | | | *e*S | | Sn | 03 24 12.9 | -1.4 |
| PNCL | Nicolau / Gran | 7.22 | 289 | *e*P | | Pn | 03 23 01.8 | +0.2 |
| PNCL | Nicolau / Gran | 7.22 | 289 | P | | Pn | 03 23 01.5 | -0.1 |

*IDC* ***19*** *03:21:26.5*±11.0*,* ***18°25S×178°25W, h513***km±131km*,*
***mb3.1/5, mbtmp4.0/5, Error ellipse: s-maj=54.3km***
***s-min=29.3km az=29.0, Fiji Islands region***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **20.35** | **191** | P | P | 03 25 27.4 | 0.0 |
| | 2.0nm,0.3s,baz=16,slow=15,SNR=2.8<br>2.0nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.72** | **260** | P | P | 03 28 53.5 | -0.4 |
| | 0.8nm,0.5s,baz=97,slow=6.9,SNR=7.0<br>0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.84** | **255** | P | P | 03 28 54.9 | 0.0 |
| | 4.9nm,0.6s,baz=88,slow=8.4,SNR=28<br>4.9nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.81** | **180** | P | P | 03 31 56.8 | +0.1 |
| | 1.0nm,0.8s,baz=53,slow=5.1,SNR=2.2<br>1.0nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.05** | **58** | P | P | 03 33 12.9 | -0.1 |
| | 0.3nm,0.7s,baz=239,slow=6.2,SNR=4.0<br>0.3nm,0.7s | | | | | | |

**IDC 19 03:23:03.9**±10.0**, 17°68S×178°30W, h618**km±143km**,**
**mb3.0/4, mbtmp4.0/5, Error ellipse: s-maj=137.8km**
**s-min=48.9km az=162.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.00** | **251** | P | P | 03 26 12.4 | +0.9 |
| | 3.3nm,1.0s,baz=66,slow=22,SNR=1.4 | | | | | | |
| **STKA** | **Stephens Creek** | **38.83** | **241** | P | P | 03 29 37.6 | -0.4 |
| | 3.4nm,0.8s,baz=90,slow=12,SNR=2.9<br>3.4nm,0.8s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 44.78 | 259 | P | | P | 03 30 24.6 | -0.1 |
| | 0.8nm,0.4s,baz=94,slow=7.4,SNR=12<br>0.8nm,0.4s | | | | | | | |
| ASAR | Alice Springs | 44.95 | 254 | P | | P | 03 30 26.1 | +0.1 |
| | 2.6nm,0.6s,baz=88,slow=8.8,SNR=16<br>2.6nm,0.6s | | | | | | | |
| TXAR | Lajitas Array | 85.78 | 58 | P | | P | 03 34 39.6 | -0.1 |
| | 0.3nm,0.7s,baz=221,slow=5.0,SNR=4.6<br>0.3nm,0.7s | | | | | | | |

*NEIC* ***19*** *03:23:42.9±2.3, 18°.3S±0°.1×178°.1W±0°.1, h518km±19km, mb4.4/19, Error ellipse: s-maj=24.7km s-min=13.0km az=47.0*
*IDC* ***19*** *03:23:43.7±7.8, 18°.23S×178°.30W, h520km±92km, mb3.4/7, mbtmp4.3/8, Error ellipse: s-maj=45.9km s-min=26.9km az=138.0*

**ISC 19 03:23:42.1**±0.7**, 18°.3S**±0°.1×**178°.19W**±0°.09**, h500**km**, n34,**
**σ1ᵗ26/34, mb4.3/18, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.63** | **279** | P | P | 03 25 02.2 | +4.5 |
| **AFI** | **Afiamalu** | **7.56** | **55** | P | P | 03 25 32.8 | -1.3 |
| **NIUE** | **Niue** | **7.86** | **97** | P | P | 03 25 38.5 | +1.4 |
| **LIFNC** | **LIFOU** | **13.96** | **258** | P | P | 03 26 39.9 | -1.4 |
| **PINNC** | **Pines Island,** | **14.12** | **250** | P | P | 03 26 42.4 | -0.7 |
| **DZM** | **Mont Dzumac** | **14.90** | **253** | P | P | 03 26 50.4 | -1.0 |
| **DZM** | **Mont Dzumac** | **14.90** | **253** | P | P | 03 26 51.1 | -0.3 |
| | 3.3nm,0.6s,baz=84,slow=18,SNR=3.2 | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.68** | **260** | P | P | 03 27 11.7 | +1.8 |
| **LTZ** | **Lake Taylor** | **25.69** | **196** | P | P | 03 28 30.4 | -1.2 |
| LTZ | | | | IAmb | IAmb | 03 28 39.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **29.33** | **251** | P | P | 03 29 03.8 | 0.0 |
| EIDS | | | | IAmb | IAmb | 03 29 03.8 | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.80** | **200** | P | P | 03 29 07.4 | -0.1 |
| **ARMA** | **Armidale** | **29.92** | **241** | P | P | 03 29 09.6 | +0.7 |
| **CTAO** | **Charters Tower** | **33.59** | **261** | P | P | 03 29 40.3 | -0.1 |
| CTAO | | | | IAmb | IAmb | 03 29 40.9 | |
| | comp=Z,9.4nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **37.08** | **231** | P | P | 03 30 09.5 | +0.3 |
| **COEN** | **Coen** | **37.32** | **271** | P | P | 03 30 11.5 | 0.0 |
| COEN | | | | IAmb | IAmb | 03 30 12.0 | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.62** | **242** | P | P | 03 30 22.3 | +0.4 |
| **STKA** | **Stephens Creek** | **38.62** | **242** | P | P | 03 30 22.5 | +0.6 |
| | comp=Z,5.2nm,0.5s,baz=91,slow=9.2,SNR=9.7<br>comp=Z,5.2nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.40** | **241** | P | P | 03 30 59.3 | -0.6 |
| BBOO | | | | IAmb | IAmb | 03 31 07.0 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.58** | **260** | P | P | 03 31 09.2 | -0.1 |
| **WB0** | **Warramunga Arr** | **44.74** | **260** | P | P | 03 31 09.3 | -1.2 |
| WB0 | | | | IAmb | IAmb | 03 31 11.4 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.76** | **260** | P | P | 03 31 09.1 | -1.7 |
| WB2 | | | | IAmb | IAmb | 03 31 11.0 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.77** | **260** | P | P | 03 31 09.6 | -1.2 |
| | comp=Z,3.0nm,0.7s,baz=96,slow=6.7,SNR=26<br>comp=Z,3.0nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **44.88** | **255** | P | P | 03 31 10.6 | -1.1 |
| AS31 | | | | IAmb | IAmb | 03 31 11.8 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.88** | **255** | P | P | 03 31 10.5 | -1.2 |
| **ASAR** | **Alice Springs** | **44.88** | **255** | P | P | 03 31 11.2 | -0.5 |
| | comp=Z,2.3nm,0.6s,baz=89,slow=8.4,SNR=139<br>comp=Z,2.3nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.00** | **269** | P | P | 03 31 41.5 | -1.4 |
| MTN | | | | IAmb | IAmb | 03 31 45.5 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **50.02** | **245** | P | P | 03 31 49.4 | -0.9 |
| FORT | | | | IAmb | IAmb | 03 31 59.1 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.66** | **264** | P | P | 03 31 54.4 | -0.7 |
| KNRA | | | | IAmb | IAmb | 03 31 55.0 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.17** | **261** | P | P | 03 32 12.3 | -0.9 |
| **PSA00** | **Pilbara Seismi** | **58.01** | **256** | P | P | 03 32 45.9 | -1.0 |
| **QSPA** | **South Pole Qui** | **71.74** | **180** | P | P | 03 34 12.6 | -0.3 |
| | comp=Z,1.1nm,1.0s,baz=127,slow=5.0,SNR=3.2<br>comp=Z,1.1nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.57** | **44** | P | P | 03 34 56.5 | -0.6 |
| | comp=Z,0.9nm,0.7s,baz=228,slow=8.6,SNR=8.2<br>comp=Z,0.9nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.04** | **58** | P | P | 03 35 30.4 | +0.6 |
| | comp=Z,2.0nm,0.7s,baz=221,slow=6.2,SNR=27<br>comp=Z,2.0nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.50** | **43** | P | P | 03 35 36.0 | -0.6 |
| | comp=Z,0.7nm,0.7s,baz=205,slow=2.8,SNR=7.1<br>comp=Z,0.7nm,0.7s | | | | | | |

*IDC* ***19*** *03:24:18.0±6.4, 18°.32S×178°.34W, h467km±70km, mb3.3/5, mbtmp4.0/6, Error ellipse: s-maj=41.7km s-min=27.7km az=45.0*
*NEIC* ***19*** *03:24:21.5±1.2, 18°.3S±0°.1×178°.3W±0°.1, h514km±18km, mb4.6/20, Error ellipse: s-maj=21.5km s-min=16.7km az=133.0*

**ISC 19 03:24:21.0**±0.9**, 18°.4S**±0°.2×**178°.4W**±0°.1**, h500**km**, n32,**
**σ0ᵗ89/32, mb4.5/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.49** | **280** | P | P | 03 25 37.8 | +2.2 |
| **NIUE** | **Niue** | **8.01** | **96** | P | P | 03 26 17.2 | -0.3 |
| **DZM** | **Mont Dzumac** | **14.74** | **253** | P | P | 03 27 27.7 | -0.9 |
| **DZM** | **Mont Dzumac** | **14.74** | **253** | P | P | 03 27 28.2 | -0.4 |
| | 1.3nm,0.6s,baz=120,slow=20,SNR=0.9 | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.52** | **260** | P | P | 03 27 47.5 | +0.4 |
| KOUNC | | | | IAmb | IAmb | 03 28 04.0 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **URZ** | **Urewera** | **20.19** | **190** | P | P | 03 28 20.2 | -1.0 |
| | comp=Z,4.7nm,0.3s,baz=47,slow=2.0,SNR=10<br>comp=Z,4.7nm,0.3s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.18** | **191** | P | P | 03 28 29.8 | -0.4 |
| BKZ | | | | IAmb | IAmb | 03 28 37.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **BFZ** | **Birch Farm** | **22.70** | **191** | P | P | 03 28 44.5 | +0.7 |
| **MRZ** | **Mangatainoka R** | **22.80** | **192** | P | P | 03 28 43.8 | -0.9 |
| MRZ | | | | IAmb | IAmb | 03 29 03.4 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **TCW** | **Tory Channel** | **23.61** | **194** | P | P | 03 28 52.5 | +0.6 |
| **QRZ** | **Quartz Range** | **23.69** | **197** | P | P | 03 28 53.2 | +0.4 |
| **TUWZ** | **Tuamarina** | **23.89** | **194** | P | P | 03 28 54.7 | +0.2 |
| **DSZ** | **Denniston Nort** | **24.75** | **198** | P | P | 03 29 03.0 | +0.8 |
| **KHZ** | **Kahutara** | **24.92** | **194** | P | P | 03 29 03.4 | -0.2 |
| KHZ | | | | IAmb | IAmb | 03 29 26.2 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **LTZ** | **Lake Taylor** | **25.58** | **196** | P | P | 03 29 11.1 | +1.5 |
| LTZ | | | | IAmb | IAmb | 03 29 19.9 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **OXZ** | **Oxford** | **26.15** | **196** | P | P | 03 29 14.8 | +0.3 |
| OXZ | | | | IAmb | IAmb | 03 29 16.4 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **LBZ** | **Lake Benmore** | **27.64** | **198** | P | P | 03 29 27.7 | +0.1 |
| LBZ | | | | IAmb | IAmb | 03 29 28.4 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.16** | **200** | P | P | 03 29 42.1 | +1.2 |
| MLZ | | | | IAmb | IAmb | 03 29 59.9 | |
| | comp=Z,36nm,1.3s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.69** | **200** | P | P | 03 29 46.5 | +1.1 |
| **CTAO** | **Charters Tower** | **33.43** | **261** | P | P | 03 30 17.3 | -0.6 |
| **COEN** | **Coen** | **37.17** | **271** | P | P | 03 30 48.8 | -0.4 |
| COEN | | | | IAmb | IAmb | 03 30 58.0 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **43.23** | **241** | P | P | 03 31 37.2 | -0.3 |
| BBOO | | | | IAmb | IAmb | 03 31 48.7 | |
| | comp=Z,29nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.57** | **260** | P | P | 03 31 47.5 | -0.7 |
| **WRAB** | **Tennant Creek** | **44.59** | **260** | P | P | 03 31 46.7 | -1.7 |
| **WRA** | **Warramunga Arr** | **44.60** | **260** | P | P | 03 31 47.0 | -1.4 |
| | comp=Z,0.5nm,0.4s,baz=95,slow=6.8,SNR=1.5<br>comp=Z,0.5nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.72** | **255** | P | P | 03 31 49.2 | -0.1 |
| **ASAR** | **Alice Springs** | **44.72** | **255** | P | P | 03 31 48.5 | -0.9 |
| **ASAR** | **Alice Springs** | **44.72** | **255** | P | P | 03 31 48.9 | -0.4 |
| | comp=Z,3.1nm,0.6s,baz=89,slow=8.3,SNR=5.6<br>comp=Z,3.1nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.67** | **180** | P | P | 03 34 52.1 | +0.6 |
| **QSPA** | **South Pole Qui** | **71.67** | **180** | P | P | 03 34 52.3 | +0.8 |
| | comp=Z,2.4nm,0.8s,baz=56,slow=3.6,SNR=14<br>comp=Z,2.4nm,0.8s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BELA | Belgrano 2 | 81.68 | 173 | P | | P | 03 35 45.9 | -0.2 |
| TXAR | Lajitas Array | 86.20 | 58 | P | | P | 03 36 09.1 | -0.3 |
| | comp=Z,0.4nm,0.6s,baz=217,slow=6.3,SNR=4.0<br>comp=Z,0.4nm,0.6s | | | | | | | |

*IDC* ***19*** *03:26:12.6±6.2, 17°.90S×178°.16W, h583km±69km, mb3.3/6, mbtmp4.2/7, Error ellipse: s-maj=37.0km s-min=32.2km az=91.0*
*NEIC* ***19*** *03:26:12.3±1.4, 17°.9S±0°.2×178°.1W±0°.1, h585km±16km, mb4.4/20, Error ellipse: s-maj=29.8km s-min=13.1km az=168.0*

**ISC 19 03:26:12.4**±0.8**, 17°.9S**±0°.1×**178°.1W**±0°.1**, h590**km**, n71,**
**σ1ᵗ63/68, mb4.2/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.65** | **272** | P | P | 03 27 35.2 | +0.3 |
| **NIUE** | **Niue** | **7.86** | **100** | P | P | 03 28 08.9 | -1.2 |
| **LIFNC** | **LIFOU** | **14.11** | **256** | P | P | 03 29 10.4 | -2.1 |
| **PINNC** | **Pines Island,** | **14.33** | **249** | P | P | 03 29 14.1 | -0.5 |
| **DZM** | **Mont Dzumac** | **15.09** | **252** | P | P | 03 29 21.5 | -0.3 |
| **DZM** | **Mont Dzumac** | **15.09** | **252** | P | P | 03 29 22.4 | +0.6 |
| | 1.2nm,0.4s,baz=121,slow=16,SNR=2.3 | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.52** | **195** | P | P | 03 30 23.8 | +13 |
| **URZ** | **Urewera** | **20.69** | **191** | P | P | 03 30 25.5 | +13 |
| **TLZ** | **Tolley Road** | **21.08** | **194** | P | P | 03 30 21.9 | +5.7 |
| **MRHZ** | **Matea Rd** | **21.38** | **192** | P | P | 03 30 20.5 | +1.6 |
| **HIZ** | **Hauiti** | **21.42** | **195** | P | P | 03 30 24.3 | +5.1 |
| **NMHZ** | **Naumai** | **21.56** | **191** | P | P | 03 30 24.1 | +3.6 |
| **BKZ** | **Black Stump Fm** | **21.68** | **191** | P | P | 03 30 21.9 | +0.3 |
| **ARHZ** | **Aropaoanui** | **21.69** | **190** | P | P | 03 30 25.6 | +4.0 |
| **TMVZ** | **Te Maari** | **21.80** | **193** | P | P | 03 30 21.1 | -1.6 |
| **TWVZ** | **Taurewa** | **21.81** | **194** | P | P | 03 30 21.4 | -1.4 |
| **ETVZ** | **East Tongariro** | **21.81** | **193** | P | P | 03 30 21.2 | -1.7 |
| **OTVZ** | **Oturere** | **21.85** | **193** | P | P | 03 30 21.5 | -1.8 |
| **SNVZ** | **South Ngauruho** | **21.88** | **193** | P | P | 03 30 21.6 | -1.9 |
| **KWHZ** | **Kaweka Forest** | **21.95** | **191** | P | P | 03 30 23.4 | -0.5 |
| **WHVZ** | **Whangaehu Hut** | **21.98** | **193** | P | P | 03 30 22.2 | -2.2 |
| **WNVZ** | **Wahianoa** | **22.02** | **193** | P | P | 03 30 22.4 | -2.4 |
| **MOVZ** | **Moawhango** | **22.06** | **193** | P | P | 03 30 22.1 | -2.9 |
| **KRHZ** | **Kereru** | **22.17** | **191** | P | P | 03 30 24.9 | -1.0 |
| **KAHZ** | **Kahuranaki** | **22.23** | **190** | P | P | 03 30 28.3 | +1.9 |
| **WAZ** | **Wanganui** | **22.57** | **194** | P | P | 03 30 27.9 | -1.6 |
| **DVHZ** | **Dannevirke** | **22.84** | **191** | P | P | 03 30 30.5 | -1.4 |
| **ANWZ** | **Angora Road** | **22.94** | **191** | P | P | 03 30 33.1 | +0.3 |
| **BFZ** | **Birch Farm** | **23.20** | **191** | P | P | 03 30 33.7 | -1.3 |
| BFZ | | | | IAmb | IAmb | 03 30 44.8 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **BFZ** | **Birch Farm** | **23.20** | **191** | P | P | 03 30 34.8 | -0.3 |
| **MRZ** | **Mangatainoka R** | **23.31** | **192** | P | P | 03 30 34.4 | -1.5 |
| **OGWZ** | **Otaki Gorge** | **23.54** | **193** | P | P | 03 30 37.0 | -1.0 |
| **HOWZ** | **Holdsworth Sta** | **23.55** | **192** | P | P | 03 30 36.6 | -1.5 |
| **KIW** | **Kapiti Island** | **23.64** | **193** | P | P | 03 30 37.9 | -1.0 |
| **MTW** | **Mount Morrison** | **23.80** | **192** | P | P | 03 30 39.9 | -0.5 |
| **TRWZ** | **Traveller** | **24.00** | **192** | P | P | 03 30 41.8 | -0.3 |
| **PAWZ** | **Paruwai Farm** | **24.03** | **192** | P | P | 03 30 42.4 | 0.0 |
| **MSWZ** | **Moikau Station** | **24.10** | **192** | P | P | 03 30 43.5 | +0.5 |
| **MSWZ** | **Moikau Station** | **24.10** | **192** | P | P | 03 30 43.1 | +0.1 |
| **TCW** | **Tory Channel** | **24.12** | **194** | P | P | 03 30 44.0 | +0.9 |
| **PLWZ** | **Palliser** | **24.25** | **192** | P | P | 03 30 44.9 | +0.6 |
| **TUWZ** | **Tuamarina** | **24.40** | **195** | P | P | 03 30 48.2 | +2.7 |
| **TUWZ** | **Tuamarina** | **24.40** | **195** | P | P | 03 30 48.7 | +3.1 |
| **MOZ** | **McQueen's Vall** | **26.86** | **195** | P | P | 03 31 18.0 | +11 |
| **EIDS** | **Eidsvold** | **29.52** | **250** | P | P | 03 31 29.9 | -0.8 |
| EIDS | | | | IAmb | IAmb | 03 31 43.7 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.17** | **240** | P | P | 03 31 37.0 | +0.7 |
| ARMA | | | | IAmb | IAmb | 03 31 37.2 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.72** | **261** | P | P | 03 32 06.3 | -0.1 |
| CTAO | | | | IAmb | IAmb | 03 32 07.0 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.92** | **233** | P | P | 03 32 08.4 | +0.5 |
| **COEN** | **Coen** | **37.38** | **270** | P | P | 03 32 37.5 | +0.8 |
| COEN | | | | IAmb | IAmb | 03 32 38.6 | |
| | comp=Z,9.4nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | P | 03 32 48.6 | +0.1 |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | P | 03 32 48.8 | +0.3 |
| | comp=Z,3.4nm,0.5s,baz=91,slow=11,SNR=5.5<br>comp=Z,3.4nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.64** | **241** | P | P | 03 33 26.3 | +0.2 |
| **WR0** | **Warramunga Arr** | **44.71** | **260** | P | P | 03 33 34.0 | -0.5 |
| **WB0** | **Warramunga Arr** | **44.87** | **260** | P | P | 03 33 35.5 | -0.2 |
| WB0 | | | | IAmb | IAmb | 03 33 36.2 | |
| | com

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WB2 | | | | | IAmb | IAmb | 03 34 42.8 | |
| | comp=Z,8.4nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.49 260** | | P | | **P** | **03 34 32.8** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.49 260** | | P | | **P** | **03 34 33.1** | **+0.1** |
| | comp=Z,1.6nm,0.5s,baz=97,slow=6.9,SNR=10 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **03 36 03.6** | **-0.9** |
| | comp=Z,0.2nm,0.4s,baz=102,slow=3.3,SNR=1.8 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **44.59 255** | | P | | **P** | **03 34 34.0** | **+0.1** |
| AS31 | | | | | IAmb | IAmb | 03 34 35.2 | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.59 255** | | P | | **P** | **03 34 33.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.59 255** | | P | | **P** | **03 34 34.4** | **+0.5** |
| | comp=Z,8.6nm,0.6s,baz=88,slow=8.7,SNR=24 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **03 36 03.4** | **-1.4** |
| | comp=Z,0.4nm,0.4s,baz=104,slow=3.5,SNR=3.1 | | | | | | | |
| | comp=Z,8.6nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **49.70 245** | | P | | **P** | **03 35 12.1** | **0.0** |
| FORT | | | | | IAmb | IAmb | 03 35 25.4 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **KNRA** | **Kununurra** | **50.41 265** | | P | | **P** | **03 35 16.7** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **68.44 324** | | P | | P | 03 37 14.1 | -3.1 |
| | comp=Z,0.8nm,0.5s,baz=136,slow=6.2,SNR=2.1 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.47 180** | | P | | **P** | **03 37 35.3** | **+0.3** |
| **QSPA** | **South Pole Qui** | **71.47 180** | | P | | **P** | **03 37 36.0** | **+0.9** |
| | comp=Z,0.2nm,0.4s,baz=12,slow=2.6,SNR=0.7 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **BELA** | **Belgrano 2** | **81.50 173** | | P | | **P** | **03 38 30.3** | **+0.7** |
| **ILAR** | **Eielson Array** | **86.55 13** | | P | | P | 03 38 49.8 | -4.6 |
| | comp=Z,0.5nm,0.7s,baz=226,slow=5.0,SNR=3.1 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.24 314** | | PKPbc | | **PKPdf** | **03 45 44.0** | **-1.6** |
| | comp=Z,0.4nm,0.4s,baz=52,slow=2.5,SNR=4.5 | | | | | | | |
| **GERES** | **GERESS Array B** | **148.25 345** | | PKPbc | | **PKPdf** | **03 45 50.4** | **+0.1** |
| | comp=Z,0.5nm,0.9s,baz=165,slow=5.5,SNR=4.2 | | | | | | | |

*AEIC **19** 03:30:51.8±1.4, 69.54N±0.05×144.17W±0.06, h6km±7km, Error ellipse: s-maj=7.8km s-min=2.4km az=192.0*
*NEIC **19** 03:30:53.9±1.5, 69.59N±0.05×144.13W±0.06, h10km±2km, ML3.9/122, ML3.9(AEIC), Error ellipse: s-maj=8.5km s-min=3.4km az=6.0*
*IDC **19** 03:30:54.9±1.0, 69.65N×143.93W, h0km, mb3.6/5, mbtmp3.7/9, ML3.8/4, Error ellipse: s-maj=25.5km s-min=14.5km az=54.0*

**ISC 19 03:30:54.1±0.6, 69.52N±0.04×144.13W±0.03, h10km, n207, σ1§29/221, mb3.8/6, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.18** | **55** | Pg | **Pg** | **03 30 57.0** | **-1.0** |
| C27K | | | | | **Sg** | **03 31 00.1** | **-0.5** |
| **C26K** | **Camden Bay** | **0.48** | **326** | Pg | **Pg** | **03 31 02.6** | **-0.8** |
| C26K | | | | Sg | **Sb** | **03 31 10.3** | **-1.4** |
| **D25K** | **Kavik River** | **0.82** | **257** | Pg | **Pg** | **03 31 06.7** | **-3.2** |
| D25K | | | | | **Sg** | **03 31 18.7** | **-1.9** |
| **D27M** | **Malcolm River** | **1.16** | **103** | | **Pb** | **03 31 13.7** | **-2.5** |
| D27M | | | | Sg | **Sb** | **03 31 30.7** | **-0.5** |
| **C24K** | **Franklin Bluff** | **1.61** | **279** | | **Sb** | **03 31 22.0** | **-0.6** |
| C24K | | | | | **Sb** | **03 31 44.1** | **-0.2** |
| C24K | | | | IAML | | 03 31 48.5 | |
| | comp=E,2μm,1.1s | | | | | | |
| **E27K** | **Coleen River** | **1.63** | **144** | Pn | **Pn** | **03 31 22.7** | **-0.1** |
| E27K | | | | | **Sn** | **03 31 44.4** | **+0.5** |
| E27K | | | | IAML | | 03 31 48.4 | |
| | comp=N,1μm,0.8s | | | | | | |
| E27K | | | | IAML | | 03 31 50.0 | |
| | comp=E,1μm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.71** | **260** | Pn | **Pn** | **03 31 23.8** | **0.0** |
| D24K | | | | | **Sb** | **03 31 48.1** | **+1.1** |
| **F26K** | **Sheenjek River** | **1.84** | **180** | | **Pn** | **03 31 26.3** | **+0.6** |
| F26K | | | | | **Sn** | **03 31 50.6** | **+1.6** |
| **E28M** | **Babbage River** | **1.89** | **117** | Pn | **Pn** | **03 31 27.2** | **+0.7** |
| E28M | | | | | **Sn** | **03 31 51.9** | **+1.5** |
| **D28M** | **Stokes Point** | **1.92** | **93** | Pn | **Pn** | **03 31 27.2** | **+0.5** |
| D28M | | | | | **Sg** | **03 31 56.1** | **+0.5** |
| **F25K** | **Christian Rive** | **2.02** | **197** | | **Pn** | **03 31 28.9** | **+0.7** |
| F25K | | | | | **Sn** | **03 31 55.2** | **+1.7** |
| **BMAR** | **Burnt Mountain** | **2.11** | **185** | Pn | **Pn** | **03 31 29.7** | **+0.2** |
| **TOLK** | **Toolik Lake Re** | **2.15** | **248** | | **Pn** | **03 31 30.4** | **+0.5** |
| TOLK | | | | IAML | | 03 32 08.9 | |
| | comp=N,720nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 03 32 13.2 | |
| | comp=E,721nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.15** | **248** | Pn | **Pn** | **03 31 30.0** | **0.0** |
| **E24K** | **Your Creek** | **2.15** | **229** | Pn | **Pn** | **03 31 30.1** | **0.0** |
| **C23K** | **Itkillik River** | **2.29** | **281** | Pn | **Pn** | **03 31 31.1** | **-0.7** |
| C23K | | | | IAML | | 03 32 12.6 | |
| | comp=E,805nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.40** | **260** | | **Pn** | **03 31 34.2** | **+0.8** |
| D23K | | | | IAML | | 03 32 27.6 | |
| | comp=N,482nm,1.2s | | | | | | |
| **F24K** | **Squaw Lake** | **2.44** | **216** | Pn | **Pn** | **03 31 34.1** | **0.0** |
| F24K | | | | IAML | | 03 32 18.6 | |
| | comp=E,549nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.48** | **139** | Pn | **Pn** | **03 31 35.1** | **+0.6** |
| F28M | | | | IAML | | 03 32 15.2 | |
| | comp=N,573nm,0.8s | | | | | | |
| F28M | | | | IAML | | 03 32 19.1 | |
| | comp=E,557nm,1.0s | | | | | | |
| **E23K** | **Chandalar** | **2.48** | **236** | Pn | **Pn** | **03 31 34.5** | **-0.1** |
| E23K | | | | IAML | | 03 32 15.5 | |
| | comp=N,523nm,0.9s | | | | | | |
| E23K | | | | IAML | | 03 32 19.6 | |
| | comp=E,565nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **2.52** | **114** | Pn | **Pn** | **03 31 35.4** | **+0.3** |
| E29M | | | | IAML | | 03 32 20.2 | |
| | comp=E,531nm,0.9s | | | | | | |
| E29M | | | | IAML | | 03 32 21.9 | |
| | comp=N,576nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.59** | **177** | | **Pn** | **03 31 36.3** | **+0.4** |
| **G25K** | **Bearman Lake** | **2.87** | **196** | | **Pn** | **03 31 40.9** | **+1.1** |
| **G27K** | **Doyon Strip** | **2.88** | **160** | Pn | **Pn** | **03 31 39.6** | **-0.5** |
| **FYU** | **Fort Yukon** | **3.00** | **188** | Pn | **Pn** | **03 31 42.0** | **+0.3** |
| **G24K** | **Hadweenzic Riv** | **3.10** | **205** | | **Pn** | **03 31 43.3** | **+0.3** |
| G24K | | | | IAML | | 03 32 32.8 | |
| | comp=E,328nm,0.8s | | | | | | |
| G24K | | | | IAML | | 03 32 34.7 | |
| | comp=N,407nm,1.0s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.12** | **247** | Pn | **Pn** | **03 31 42.4** | **-0.9** |
| **D22K** | **Ayikyak River** | **3.12** | **262** | Pn | **Pn** | **03 31 42.3** | **-1.0** |
| D22K | | | | IAML | | 03 32 39.8 | |
| | comp=E,331nm,0.8s | | | | | | |
| D22K | | | | IAML | | 03 32 43.2 | |
| | comp=N,396nm,0.8s | | | | | | |
| **COLD** | **Coldfoot** | **3.22** | **227** | Pn | **Pn** | **03 31 44.6** | **0.0** |
| **B22K** | **Teshekpuk Lake** | **3.31** | **289** | Pn | **Pn** | **03 31 45.4** | **-0.4** |
| **H25L** | **Birch Creek** | **3.33** | **192** | | **Pn** | **03 31 47.6** | **+1.4** |
| **H27K** | **Steamboat Moun** | **3.45** | **162** | | **Pn** | **03 31 48.8** | **+0.8** |
| **G29M** | **Pine Creek** | **3.47** | **136** | Pn | **Pn** | **03 31 48.5** | **+0.4** |
| **G23K** | **Bananza Creek** | **3.58** | **221** | Pn | **Pn** | **03 31 49.4** | **-0.4** |
| G23K | | | | IAML | | 03 32 51.5 | |
| | comp=N,211nm,0.7s | | | | | | |
| **F22K** | **John River** | **3.59** | **239** | | **Pn** | **03 31 50.4** | **+0.6** |
| **F30M** | **Barrier River** | **3.61** | **118** | | **Pn** | **03 31 52.2** | **+2.1** |
| **B21K** | **Ikpikpuk River** | **3.68** | **276** | Pn | **Pn** | **03 31 51.0** | **0.0** |
| B21K | | | | IAML | | 03 32 57.7 | |
| | comp=N,259nm,1.0s | | | | | | |
| B21K | | | | IAML | | 03 33 10.5 | |
| | comp=E,260nm,0.9s | | | | | | |
| **E21K** | **Killik River** | **3.71** | **258** | Pn | **Pn** | **03 31 51.1** | **-0.3** |
| E21K | | | | IAML | | 03 32 58.2 | |
| | comp=N,189nm,0.7s | | | | | | |
| E21K | | | | IAML | | 03 33 04.6 | |
| | comp=E,225nm,0.7s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.79** | **269** | | **Pn** | **03 31 52.8** | **+0.2** |
| **G30M** | **tAoh Zraii Nji** | **3.90** | **127** | Pn | **Pn** | **03 31 54.1** | **+0.1** |
| G30M | | | | IAML | | 03 33 04.8 | |
| | comp=N,174nm,0.8s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.97** | **297** | | **Pn** | **03 31 55.2** | **+0.3** |
| **H24K** | **Noodor Dome** | **3.97** | **203** | Pn | **Pn** | **03 31 55.0** | **0.0** |
| H24K | | | | IAML | | 03 32 58.9 | |
| | comp=N,150nm,0.7s | | | | | | |
| H24K | | | | IAML | | 03 32 59.1 | |
| | comp=E,186nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **3.97** | **144** | Pn | **Pn** | **03 31 55.4** | **+0.4** |
| H29M | | | | IAML | | 03 32 47.8 | |
| | comp=N,213nm,0.5s | | | | | | |
| **INK** | **Inuvik** | **4.02** | **103** | | **Pn** | **03 31 56.1** | **+0.4** |
| **INK** | **Inuvik** | **4.02** | **103** | Pn | **Pn** | **03 31 56.8** | **+1.1** |
| | comp=N,4.0nm,0.3s,baz=324,slow=5.1,SNR=24 | | | | | | |
| INK | | | | Sn | **Sn** | **03 32 42.0** | **-0.7** |
| | comp=N,6.7nm,0.3s,baz=291,slow=17,SNR=6.0 | | | | | | |
| | comp=N,11nm,0.4s | | | | | | |
| **I27K** | **Kandik River** | **4.05** | **165** | | **Pn** | **03 31 57.4** | **+1.2** |
| **PRP** | **Porcupine Dome** | **4.06** | **188** | Pn | **Pn** | **03 31 57.0** | **+0.6** |
| PRP | | | | IAML | | 03 33 04.8 | |
| | comp=N,213nm,0.9s | | | | | | |
| PRP | | | | IAML | | 03 33 08.0 | |
| | comp=E,197nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.16** | **241** | Pn | **Pn** | **03 31 57.6** | **0.0** |
| F21K | | | | IAML | | 03 33 13.1 | |
| | comp=E,147nm,0.7s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.22** | **135** | Pn | **Pn** | **03 31 59.0** | **+0.5** |
| **H23K** | **Yukon River** | **4.25** | **212** | Pn | **Pn** | **03 31 58.6** | **-0.2** |
| H23K | | | | IAML | | 03 33 13.3 | |
| | comp=E,183nm,0.9s | | | | | | |
| H23K | | | | IAML | | 03 33 13.5 | |
| | comp=N,183nm,0.8s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.25** | **174** | Pn | **Pn** | **03 31 59.0** | **+0.2** |
| **F31M** | **Tsiigehtchic** | **4.36** | **114** | Pn | **Pn** | **03 32 00.9** | **+0.7** |
| F31M | | | | IAML | | 03 33 19.0 | |
| | comp=E,121nm,0.8s | | | | | | |
| F31M | | | | IAML | | 03 33 20.2 | |
| | comp=N,126nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.40** | **157** | Pn | **Pn** | **03 32 01.7** | **+0.7** |
| I28M | | | | IAML | | 03 32 56.1 | |
| | comp=N,137nm,0.7s | | | | | | |
| I28M | | | | IAML | | 03 33 24.4 | |
| | comp=E,121nm,1.0s | | | | | | |
| **G31M** | **Satah River** | **4.50** | **121** | Pn | **Pn** | **03 32 02.8** | **+0.6** |
| G31M | | | | IAML | | 03 33 22.3 | |
| | comp=E,132nm,0.9s | | | | | | |
| **D20K** | **Etivluk River** | **4.54** | **266** | | **Pn** | **03 32 03.7** | **+0.9** |
| **E20K** | **Nigu River** | **4.54** | **259** | | **Pn** | **03 32 03.6** | **+0.7** |
| **B20K** | **Meade River** | **4.55** | **282** | Pn | **Pn** | **03 32 02.8** | **-0.1** |
| **H22K** | **Ishtalitna Cre** | **4.57** | **221** | | **Pn** | **03 32 03.0** | **-0.2** |
| **A21K** | **Barrow** | **4.57** | **299** | | **Pn** | **03 32 03.4** | **+0.3** |
| **POKR** | **Poker Plat Res** | **4.61** | **198** | Pn | **Pn** | **03 32 04.3** | **+0.6** |
| POKR | | | | IAML | | 03 33 00.5 | |
| | comp=N,129nm,0.8s | | | | | | |
| **G21K** | **Allakaket** | **4.64** | **234** | Pn | **Pn** | **03 32 03.2** | **-1.0** |
| G21K | | | | IAML | | 03 33 33.6 | |
| | comp=E,144nm,1.0s | | | | | | |
| G21K | | | | IAML | | 03 33 34.6 | |
| | comp=N,100nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.74** | **149** | Pn | **Pn** | **03 32 05.3** | **-0.3** |
| I29M | | | | IAML | | 03 33 41.1 | |
| | comp=N,94nm,0.8s | | | | | | |
| I29M | | | | IAML | | 03 33 42.3 | |
| | comp=E,93nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.84** | **207** | Pn | **Pn** | **03 32 07.1** | **+0.3** |
| I23K | | | | IAML | | 03 33 33.2 | |
| | comp=N,102nm,1.2s | | | | | | |
| I23K | | | | IAML | | 03 33 33.6 | |
| | comp=E,117nm,0.9s | | | | | | |
| **MDM** | **Murphy Dome** | **4.85** | **201** | Pn | **Pn** | **03 32 07.3** | **+0.2** |
| MDM | | | | IAML | | 03 33 28.8 | |
| | comp=N,92nm,0.7s | | | | | | |
| MDM | | | | IAML | | 03 33 35.9 | |
| | comp=E,97nm,0.9s | | | | | | |
| **COLA** | **College** | **4.89** | **199** | Pn | **Pn** | **03 32 08.1** | **+0.5** |
| **IL31** | | **4.89** | **194** | Pn | **Pn** | **03 32 07.7** | **+0.1** |
| **ILAR** | **Eielson Array** | **4.89** | **194** | Pn | **Pn** | **03 32 07.7** | **+0.1** |
| **ILAR** | **Eielson Array** | **4.89** | **194** | Pn | **Pn** | **03 32 09.1** | **+1.4** |
| | comp=E,3.4nm,0.3s,baz=9.3,slow=13,SNR=122 | | | | | | | |
| ILAR | | | | Sn | **Sn** | **03 33 06.2** | **+2.0** | |
| | comp=E,6.5nm,0.3s,baz=7.1,slow=25,SNR=7.7 | | | | | | | |
| | comp=E,8.3nm,0.5s | | | | | | | |
| **EGAK** | **Eagle** | **4.91** | **165** | Pn | **Pn** | **03 32 08.0** | **+0.2** | |
| EGAK | | | | IAML | | 03 33 06.7 | | |
| | comp=E,104nm,1.0s | | | | | | | |
| EGAK | | | | IAML | | 03 33 07.1 | | |
| | comp=E,104nm,1.1s | | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **186** | Pn | **Pn** | **03 32 09.0** | **+0.4** | |
| J25K | | | | IAML | | 03 33 29.3 | | |
| | comp=E,94nm,0.9s | | | | | | | |
| J25K | | | | IAML | | 03 33 36.6 | | |
| | comp=N,77nm,0.7s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.97** | **246** | Pn | **Pn** | **03 32 09.0** | **+0.3** | |
| F20K | | | | IAML | | 03 33 42.9 | | |
| | comp=N,61nm,1.1s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.05** | **177** | Pn | **Pn** | **03 32 10.9** | **+1.1** | |
| J26L | | | | IAML | | 03 33 32.6 | | |
| | comp=E,76nm,0.6s | | | | | | | |
| **IMAR** | **Indian Mountai** | **5.09** | **230** | | **Pn** | **03 32 10.4** | **0.0** | |
| **CCB** | **Clear Creek Bu** | **5.10** | **198** | Pn | **Pn** | **03 32 10.9** | **+0.4** | |
| CCB | | | | IAML | | 03 33 22.7 | | |
| | comp=E,58nm,0.9s | | | | | | | |
| CCB | | | | IAML | | 03 33 38.0 | | |
| | comp=N,56nm,0.9s | | | | | | | |
| **H21K** | **Melozitna Rive** | **5.11** | **225** | Pn | **Pn** | **03 32 10.5** | **0.0** | |
| H21K | | | | IAML | | 03 33 38.3 | | |
| | comp=E,67nm,0.8s | | | | | | | |
| H21K | | | | IAML | | 03 33 46.1 | | |
| | comp=N,75nm,1.0s | | | | | | | |
| **D19K** | **Kuna River** | **5.13** | **265** | Pn | **Pn** | **03 32 11.1** | **+0.1** | |
| **MLY** | **Manley** | **5.19** | **213** | Pn | **Pn** | **03 32 11.5** | **-0.2** | |
| **E19K** | **Redstone River** | **5.25** | **253** | Pn | **Pn** | **03 32 12.1** | **-0.4** | |
| E19K | | | | IAML | | 03 33 16.1 | | |
| | comp=E,70nm,0.7s | | | | | | | |
| E19K | | | | IAML | | 03 33 24.8 | | |
| | comp=N,84nm,0.6s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.25** | **142** | Pn | **Pn** | **03 32 12.8** | **+0.2** | |
| I30M | | | | IAML | | 03 33 55.3 | | |
| | comp=N,79nm,1.1s | | | | | | | |
| **HDA** | **Harding Lake** | **5.25** | **193** | Pn | **Pn** | **03 32 13.2** | **+0.6** | |
| **WRH** | **Wood River Hil** | **5.31** | **199** | Pn | **Pn** | **03 32 13.4** | **+0.1** | |
| WRH | | | | IAML | | 03 33 16.1 | | |
| | comp=N,66nm,0.9s | | | | | | | |
| WRH | | | | IAML | | 03 33 51.6 | | |
| | comp=E,66nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.32** | **204** | Pn | **Pn** | **03 32 13.7** | **+0.2** | |
| NEA2 | | | | IAML | | 03 33 51.0 | | |
| | comp=E,52nm,1.1s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.49** | **273** | Pn | **Pn** | **03 32 16.1** | **+0.1** | |
| **SCRK** | **Sand Creek** | **5.57** | **179** | Pn | **Pn** | **03 32 17.6** | **+0.5** | |
| **K27K** | **Chicken** | **5.58** | **171** | Pn | **Pn** | **03 32 17.2** | **+0.2** | |
| **J29N** | **Klondike Camp** | **5.59** | **153** | | **Pn** | **03 32 17.9** | **+0.6** | |
| **F19K** | **Shaleruckik Mo** | **5.76** | **249** | Pn | **Pn** | **03 32 19.2** | **-0.2** | |
| **BWN** | **Browne** | **5.77** | **204** | Pn | **Pn** | **03 32 20.0** | **+0.3** | |
| **K24K** | **Donnelly Dome** | **5.78** | **187** | | **Pn** | **03 32 21.6** | **+1.7** | |
| **DAWY** | **Dawson** | **5.79** | **159** | Pn | **Pn** | **03 32 20.8** | **+0.8** | |
| **RIDG** | **Independent Ri** | **5.82** | **183** | Pn | **Pn** | **03 32 21.1** | **+0.7** | |
| **J30M** | **Hart River** | **5.83** | **145** | Pn | **Pn** | **03 32 20.3** | **-0.3** | |
| **A19K** | **Wainwright** | **5.89** | **285** | | **Pn** | **03 32 21.4** | **+0.1** | |
| **DOT** | **Dot Lake** | **5.90** | **180** | | **Pn** | **03 32 22.7** | **+1.2** | |
| **G19K** | **Purcell Mounta** | **5.96** | **241** | Pn | **Pn** | **03 32 21.7** | **-0.5** | |
| **BPAW** | **Bear Paw Mtn.** | **6.08** | **210** | Pn | **Pn** | **03 32 24.2** | **+0.2** | |
| **MCK** | **McKinley** | **6.12** | **200** | | **Pn** | **03 32 25.5** | **+1.0** | |
| **C18K** | **Utukok River** | **6.17** | **270** | Pn | **Pn** | **03 32 24.5** | **-0.7** | |
| **H19K** | **Roundabout Mou** | **6.19** | **236** | Pn | **Pn** | **03 32 25.3** | **-0.1** | |
| **I20K** | **Naaghedeneel** | **6.22** | **225** | Pn | **Pn** | **03 32 26.1** | **+0.3** | |
| **B18K** | **Kokolik River** | **6.22** | **277** | | **Pn** | **03 32 25.6** | **-0.3** | |
| **K29M** | **Barlow Dome** | **6.28** | **152** | Pn | **Pn** | **03 32 26.9** | **+0.2** | |
| **E18K** | **Tukpahlearik C** | **6.41** | **259** | Pn | **Pn** | **03 32 27.8** | **-0.6** | |
| **RND** | **Reindeer** | **6.43** | **199** | Pn | **Pn** | **03 32 29.2** | **+0.5** | |
| **F18K** | **Selawik** | **6.51** | **251** | | **Pn** | **03 32 29.7** | **0.0** | |
| **L26K** | **Log Cabin Wild** | **6.54** | **177** | Pn | **Pn** | **03 32 30.2** | **0.0** | |
| **BCAR** | **Beaver Creek A** | **6.55** | **171** | Pn | **Pn** | **03 32 30.8** | **+0.3** | |
| **L27K** | **Beaver Creek,** | **6.56** | **171** | Pn | **Pn** | **03 32 31.1** | **+0.6** | |
| **PAX** | **Paxson** | **6.61** | **185** | | **Pn** | **03 32 33.0** | **+1.7** | |
| **DHY** | **Denali Highway** | **6.61** | **193** | Pn | **Pn** | **03 32 32.6** | **+1.3** | |
| **G18K** | **Tagagawik** | **6.61** | **244** | Pn | **Pn** | **03 32 31.8** | **+0.6** | |
| **J20K** | **Nowinta River** | **6.66** | **221** | Pn | **Pn** | **03 32 31.0** | **-0.8** | |
| **A36M** | **Sachs Harbour** | **6.70** | **60** | Pn | **Pn** | **03 32 30.8** | **-1.6** | |
| **WAT1** | **Susitna Watana** | **6.96** | **197** | | **Pn** | **03 32 37.7** | **+1.7** | |
| **RDOG** | **Red Dog Mine** | **6.96** | **267** | Pn | **Pn** | **03 32 34.8** | **-1.2** | |
| **WAT7** | **Susitna Watana** | **6.98** | **198** | | **Pn** | **03 32 38.3** | **+1.9** | |
| **E17K** | **Hotham Inlet** | **6.99** | **258** | | **Pn** | **03 32 35.9** | **-0.5** | |
| **H18K** | **Honhosa River** | **7.02** | **238** | Pn | **Pn** | **03 32 37.3** | **+0.5** | |
| **C36M** | **Paulatuk** | **7.06** | **82** | Pn | **Pn** | **03 32 35.5** | **-1.7** | |
| **WAT6** | **Susitna Watana** | **7.12** | **194** | | **Pn** | **03 32 40.6** | **+2.2** | |
| **F17K** | **Baldwin Pennin** | **7.13** | **252** | Pn | **Pn** | **03 32 37.8** | **-0.5** | |
| **J19K** | **Poorman** | **7.16** | **225** | Pn | **Pn** | **03 32 39.0** | **+0.2** | |
| **M26K** | **Nabesna, AK** | **7.17** | **176** | Pn | **Pn** | **03 32 39.3** | **+0.4** | |
| **HARP** | **HAARP** | **7.17** | **184** | | **Pn** | **03 32 41.0** | **+2.2** | |
| **M27K** | **Edge Creek, AK** | **7.25** | **172** | | **Pn** | **03 32 40.9** | **+0.7** | |
| **K20K** | **Telida** | **7.35** | **217** | Pn | **Pn** | **03 32 41.1** | **-0.3** | |
| **M29M** | **Somme Creek** | **7.47** | **159** | Pn | **Pn** | **03 32 43.8** | **+0.6** | |
| **WAZA** | **Wrangell Mount** | **7.48** | **180** | | **Pn** | **03 32 45.7** | **+2.3** | |
| **G17K** | **Kiwalik Mounta** | **7.50** | **245** | | **Pn** | **03 32 43.0** | **-0.3** | |
| **M24K** | **Tolsona, Glenn** | **7.50** | **187** | | **Pn** | **03 32 43.9** | **+0.5** | |
| **WACK** | **Wrangell Chich** | **7.57** | **181** | | **Pn** | **03 32 46.5** | **+1.9** | |
| **H17K** | **Granite Mounta** | **7.64** | **241** | Pn | **Pn** | **03 32 45.0** | **-0.4** | |
| **C16K** | **Lisburne Hills** | **7.74** | **271** | Pn | **Pn** | **03 32 46.3** | **-0.4** | |
| **SCM** | **Sheep Creek Mo** | **7.83** | **191** | | **Pn** | **03 32 50.2** | **+2.2** | |
| **J18K** | **Innoko River** | **7.88** | **226** | Pn | **Pn** | **03 32 48.9** | **+0.3** | |
| **SML** | **Sawmill** | **7.94** | **195** | | **Pn** | **03 32 50.6** | **+1.2** | |
| **N25K** | **Chitina, Valde** | **7.95** | **182** | Pn | **Pn** | **03 32 51.7** | **+2.0** | |
| **GHO** | **Glory Hole Cre** | **8.03** | **197** | Pn | **Pn** | **03 32 51.5** | **+0.8** | |
| **KLU** | **Klutina** | **8.10** | **186** | Pn | **Pn** | **03 32 53.8** | **+2.1** | |
| **G16K** | **Koyuk River** | **8.12** | **248** | Pn | **Pn** | **03 32 50.9** | **-0.9** | |
| **GLB** | **Gilahina Butte** | **8.12** | **179** | Pn | **Pn** | **03 32 53.5** | **+1.6** | |
| **SKT** | **Skwentna** | **8.16** | **205** | Pn | **Pn** | **03 32 54.3** | **+1.9** | |
| **MCARA** | **McCarthy VSAT** | **8.19** | **176** | Pn | **Pn** | **03 32 54.2** | **+1.3** | |
| **PMR** | **Palmer** | **8.23** | **197** | Pn | **Pn** | **03 32 54.8** | **+1.4** | |
| **VRDI** | **Verde Repeater** | **8.34** | **178** | Pn | **Pn** | **03 32 56.9** | **+1.9** | |
| **KNK** | **Knik Glacier** | **8.34** | **194** | | **Pn** | **03 32 56.1** | **+1.2** | |
| **M31M** | **Drury Creek, Y** | **8.35** | **147** | Pn | **Pn** | **03 32 55.0** | **-0.1** | |
| **PTPK** | **Patty Peak** | **8.40** | **174** | | **Pn** | **03 32 58.5** | **+2.6** | |
| **M20K** | **Styx River** | **8.51** | **210** | Pn | **Pn** | **03 32 58.4** | **+1.0** | |
| **FARO** | **Faro, Yukon** | **8.53** | **144** | | **Pn** | **03 32 57.6** | **0.0** | |
| **SUA** | **Susitna One** | **8.54** | **202** | Pn | **Pn** | **03 32 58.1** | **+0.4** | |
| **J17K** | **VABM Dome** | **8.55** | **231** | Pn | **Pn** | **03 32 58.3** | **+0.5** | |
| **L19K** | **White Mountain** | **8.57** | **216** | Pn | **Pn** | **03 32 58.2** | **+0.1** | |
| **H16K** | **Elim** | **8.57** | **244** | | **Pn** | **03 32 57.8** | **-0.2** | |
| **N30M** | **Aishikik Lake** | **8.60** | **157** | Pn | **Pn** | **03 32 58.9** | **+0.3** | |
| **I17K** | **Unalakleet** | **8.64** | **237** | Pn | **Pn** | **03 32 59.2** | **+0.3** | |
| **MMPY** | **Sheldon Lake,** | **8.66** | **137** | Pn | **Pn** | **03 33 00.6** | **+1.2** | |
| **STLK** | **Strandline Lak** | **8.66** | **205** | | **Pn** | **03 33 00.8** | **+1.5** | |
| **CTGM** | **Chitina Glacie** | **8.67** | **171** | | **Pn** | **03 33 00.9** | **+1.3** | |
| **F15K** | **North Star Dit** | **8.69** | **254** | Pn | **Pn** | **03 32 59.0** | **-0.7** | |
| **M19K** | **Big River Lodg** | **8.72** | **214** | Pn | **Pn** | **03 33 00.9** | **+0.7** | |
| **GLI** | **Glacier Island** | **8.77** | **190** | Pn | **Pn** | **03 33 02.4** | **+1.6** | |
| **RC01** | **Rabbit Creek A** | **8.78** | **198** | Pn | **Pn** | **03 33 03.0** | **+2.0** | |
| **CRQM** | **Cirque** | **8.81** | **177** | Pn | **Pn** | **03 33 03.6** | **+2.1** | |
| **TGL** | **Tana Glacier** | **8.82** | **176** | Pn | **Pn** | **03 33 03.4** | **+1.8** | |
| **LOGN** | **Logan Glacier** | **8.83** | **170** | Pn | **Pn** | **03 33 01.8** | **-0.1** | |
| **PWL** | **Port Wells** | **8.88** | **193** | Pn | **Pn** | **03 33 04.2** | **+1.9** | |
| **GRNC** | **Granite Creek** | **8.88** | **172** | | **Pn** | **03 33 05.2** | **+2.6** | |
| **K17K** | **Iditarod** | **8.90** | **227** | Pn | **Pn** | **03 33 04.0** | **+1.4** | |
| **SPNN** | **North Nagishla** | **8.92** | **208** | | **Pn** | **03 33 04.9** | **+1.9** | |
| **L18K** | **Granite Mounta** | **8.93** | **221** | | **Pn** | **03 33 02.6** | **-0.4** | |
| **YUK6** | **Outpost Mounta** | **8.94** | **162** | | **Pn** | **03 33 05.4** | **+2.0** | |
| **SPWE** | **Spurr West** | **8.99** | **207** | | **Pn** | **03 33 06.2** | **+2.4** | |
| **ISLE** | **Juniper Island** | **8.99** | **174** | | **Pn** | **03 33 05.6** | **+1.6** | |
| **J16K** | **Anvik River** | **9.07** | **234** | Pn | **Pn** | **03 33 05.9** | **+1.0** | |
| **WAX** | **Waxell Ridge** | **9.13** | **176** | | **Pn** | **03 33 09.8** | **+4.1** | |
| **RAGM** | **Ragged Mountai** | **9.18** | **182** | | **Pn** | **03 33 10.3** | **+3.9** | |
| **HMT** | **Hamilton** | **9.23** | **180** | Pn | **Pn** | **03 33 08.9** | **+1.8** | |
| **F14K** | **Arctic Creek** | **9.39** | **255** | | **Pn** | **03 33 08.2** | **-1.1** | |
| **L17K** | **Donlin** | **9.39** | **225** | | **Pn** | **03 33 09.4** | **+0.1** | |
| **O30N** | **Mendenhall** | **9.41** | **155** | Pn | **Pn** | **03 33 09.4** | **-0.2** | |
| **O29M** | **Mount Kennedy** | **9.55** | **163** | | **Pn** | **03 33 13.8** | **+2.2** | |
| **ANM** | **Nome** | **9.63** | **249** | Pn | **Pn** | **03 33 13.2** | **+0.6** | |
| **WHY** | **Whitehorse** | **9.70** | **152** | Pn | **Pn** | **03 33 14.5** | **+0.8** | |
| **N19K** | **Bonanza Creek** | **9.75** | **211** | Pn | **Pn** | **03 33 15.2** | **+0.9** | |
| **M17K** | **Holitna River** | **9.82** | **220** | Pn | **Pn** | **03 33 15.7** | **+0.4** | |
| **L16K** | **Owhat River** | **10.05** | **226** | Pn | **Pn** | **03 33 18.1** | **-0.2** | |
| **K15K** | **Wolf Creek Mou** | **10.12** | **233** | Pn | **Pn** | **03 33 20.3** | **+1.1** | |
| **N18K** | **Kilae Creek** | **10.14** | **215** | Pn | **Pn** | **03 33 19.8** | **+0.2** | |
| **J14K** | **Nanvaranak Lak** | **10.35** | **238

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MBWA** | **Marble Bar** | **57.27** | **255** | P | **P** | **03 43 11.2** | **+0.9** |
| MBWA | | | | IAmb | IAmb | 03 43 12.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **58.89** | **241** | P | **P** | **03 43 21.6** | **+0.5** |
| NWAO | | | | IAmb | IAmb | 03 43 30.0 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **60.00** | **246** | P | **P** | **03 43 29.4** | **+0.7** |
| MORW | | | | IAmb | IAmb | 03 43 40.7 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **CASY** | **Casey** | **67.11** | **204** | P | **P** | **03 44 13.2** | **-0.2** |
| **QSPA** | **South Pole Qui** | **73.80** | **180** | P | **P** | **03 44 54.2** | **+1.2** |
| **QSPA** | **South Pole Qui** | **73.80** | **180** | P | **P** | **03 44 54.2** | **+1.2** |
| | comp=Z,3.4nm,0.7s,baz=17,slow=2.8,SNR=27 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **83.96** | **173** | P | **P** | **03 45 46.9** | **+0.4** |
| **TXAR** | **Lajitas Array** | **86.19** | **58** | P | P | 03 45 52.6 | -5.7 |
| | comp=Z,0.3nm,0.9s,baz=236,slow=6.4,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.95** | **181** | ⇑P | **P** | **03 46 25.5** | **+1.2** |
| | comp=Z,180nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **92.28** | **179** | ⇑P | **P** | **03 46 25.7** | **-0.1** |
| | comp=Z,21nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **92.28** | **179** | P | **P** | **03 46 26.8** | **+1.0** |
| | comp=Z,0.9nm,0.6s,baz=180,slow=3.0,SNR=14 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.46** | **177** | ⇑P | **P** | **03 46 28.3** | **+1.7** |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.89** | **177** | ⇑P | **P** | **03 46 29.8** | **+1.3** |
| | comp=Z,3.1nm,0.6s,baz=184,slow=4.5 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **93.12** | **177** | ⇑P | **P** | **03 46 30.5** | **+1.0** |
| | comp=Z,2.1nm,0.6s | | | | | | |

**IDC 19 03:34:52.8±9.2, 15°79S×171°37W, h0km, mb3.9/4, mbtmp3.9/4, Error ellipse: s-maj=213.8km s-min=159.7km az=143.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **21.89** | **250** | P | P | 03 39 48.0 | +0.4 |
| | 1.0nm,0.5s,baz=31,slow=23,SNR=1.1 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **45.55** | **241** | P | P | 03 43 14.7 | +0.1 |
| | 1.4nm,0.4s,baz=104,slow=12,SNR=2.8 | | | | | | |
| | 1.4nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.66** | **257** | P | P | 03 44 01.7 | -0.2 |
| | 0.5nm,0.4s,baz=96,slow=7.3,SNR=6.3 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **51.86** | **252** | P | P | 03 44 03.0 | -0.3 |
| | 2.2nm,0.6s,baz=86,slow=8.8,SNR=8.1 | | | | | | |
| | 2.2nm,0.6s | | | | | | |

*IDC **19** 03:41:07.6±8.5, 18°.29S×177°.97W, h595km±106km, mb3.0/7, mbtmp4.0/7, Error ellipse: s-maj=43.7km s-min=28.1km az=127.0*
*NEIC **19** 03:41:08.4±0.7, 18°.3S±0°.2×178°.03W±0°.09, h599km±11km, mb4.1/14, Error ellipse: s-maj=28.0km s-min=11.7km az=168.0*

**ISC 19 03:41:08.1±0.8, 18°.2S±0°.2×178°.1W±0°.1, h600km, n25, σ0s71/26, mb3.8/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.75** | **277** | P | **P** | **03 42 31.7** | **-0.3** |
| **PINNC** | **Pines Island,** | **14.28** | **250** | P | **P** | **03 44 09.5** | **-0.1** |
| **RPZ** | **Rata Peaks** | **27.01** | **198** | P | **P** | **03 46 02.9** | **-0.9** |
| **CTA** | **Charters Tower** | **33.73** | **261** | P | **P** | **03 47 01.7** | **+0.1** |
| | 0.2nm,0.6s,baz=117,slow=9.4,SNR=4.2 | | | | | | |
| **COEN** | **Coen** | **37.45** | **271** | P | **P** | **03 47 32.8** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.78** | **242** | P | **P** | **03 47 44.1** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.78** | **242** | P | **P** | **03 47 44.0** | **+1.2** |
| | 1.9nm,0.6s,baz=102,slow=9.3,SNR=3.8 | | | | | | |
| | 1.9nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **43.55** | **241** | P | **P** | **03 48 20.7** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **03 48 29.2** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 03 48 46.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **03 48 30.4** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 03 48 35.3 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.90** | **260** | P | **P** | **03 48 29.8** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 03 48 39.5 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **03 48 30.5** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **03 48 30.7** | **-0.4** |
| | comp=Z,2.1nm,0.7s,baz=95,slow=7.3,SNR=24 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **45.03** | **255** | P | **P** | **03 48 32.1** | **0.0** |
| AS31 | | | | IAmb | IAmb | 03 48 33.3 | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.04** | **255** | P | **P** | **03 48 31.0** | **-1.1** |
| **ASAR** | **Alice Springs** | **45.04** | **255** | P | **P** | **03 48 32.2** | **+0.2** |
| | comp=Z,5.9nm,0.6s,baz=86,slow=8.8,SNR=43 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 50 00.2** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=97,slow=4.7,SNR=2.0 | | | | | | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.18** | **245** | P | **P** | **03 49 09.8** | **-0.4** |
| FORT | | | | IAmb | IAmb | 03 49 24.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **50.80** | **264** | P | **P** | **03 49 14.4** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 03 49 17.2 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | **P** | **03 51 31.8** | **+0.7** |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | **P** | **03 51 30.2** | **-0.9** |
| | comp=Z,0.5nm,0.8s,baz=48,slow=16,SNR=5.1 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.42** | **44** | P | **P** | **03 52 13.3** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=219,slow=9.0,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.36** | **38** | P | **P** | **03 52 18.5** | **+0.2** |
| J05D | | | | IAmb | IAmb | 03 52 18.6 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **BELA** | **Belgrano 2** | **81.80** | **173** | P | **P** | **03 52 25.4** | **+0.5** |
| BELA | | | | IAmb | IAmb | 03 52 42.9 | |
| | comp=Z,3.9nm,1.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.88** | **57** | P | **P** | **03 52 46.5** | **+0.5** |
| | comp=Z,0.9nm,0.8s,baz=218,slow=6.1,SNR=11 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.35** | **43** | P | **P** | **03 52 51.6** | **-1.2** |
| | comp=Z,0.2nm,0.6s,baz=197,slow=2.8,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |

*IDC **19** 03:43:46.6±14.0, 18°.24S×178°.23W, h538km±113km, mb3.3/5, mbtmp4.2/6, Error ellipse: s-maj=164.9km s-min=22.1km az=41.0*
*NEIC **19** 03:43:47.8±1.4, 18°.1S±0°.1×178°.1W±0°.2, h581km±13km, mb4.3/25, Error ellipse: s-maj=22.0km s-min=14.0km az=72.0*

**ISC 19 03:43:47.9±0.8, 18°.1S±0°.1×178°.1W±0°.1, h590km, n40, σ1s05/40, mb4.3/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.71** | **275** | P | **P** | **03 45 09.7** | **-1.1** |
| **AFI** | **Afiamalu** | **7.33** | **57** | P | **P** | **03 45 40.5** | **-0.2** |
| **NIUE** | **Niue** | **7.79** | **99** | P | **P** | **03 45 44.0** | **-0.9** |
| **DZM** | **Mont Dzumac** | **15.08** | **252** | P | **P** | **03 46 56.0** | **-1.3** |
| DZM | | | | IAmb | IAmb | 03 47 02.2 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.08** | **252** | P | **P** | **03 46 56.5** | **-0.9** |
| | comp=Z,2.5nm,0.8s,baz=131,slow=22,SNR=1.8 | | | | | | |
| **URZ** | **Urewera** | **20.55** | **191** | P | **P** | **03 47 45.8** | **-1.2** |
| | comp=Z,6.1nm,0.3s,baz=8.2,slow=3.0,SNR=13 | | | | | | |
| | comp=Z,6.1nm,0.3s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.92** | **191** | P | **P** | **03 47 49.2** | **-1.2** |
| RTZ | | | | IAmb | IAmb | 03 48 07.0 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.55** | **192** | P | **P** | **03 47 53.1** | **-2.8** |
| BKZ | | | | IAmb | IAmb | 03 48 11.7 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **TCW** | **Tory Channel** | **23.98** | **194** | P | **P** | **03 48 16.5** | **-1.0** |
| **QRZ** | **Quartz Range** | **24.08** | **198** | P | **P** | **03 48 18.3** | **-0.1** |
| QRZ | | | | IAmb | IAmb | 03 48 27.7 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **PLWZ** | **Palliser** | **24.11** | **192** | P | **P** | **03 48 17.7** | **-1.0** |
| **TKNZ** | **Takaka Hill** | **24.15** | **197** | P | **P** | **03 48 17.7** | **-1.3** |
| **THZ** | **Tophouse** | **24.85** | **196** | P | **P** | **03 48 23.7** | **-1.4** |
| THZ | | | | IAmb | IAmb | 03 48 40.7 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **DSZ** | **Denniston Nort** | **25.14** | **198** | P | **P** | **03 48 27.2** | **-0.6** |
| **LTZ** | **Lake Taylor** | **25.97** | **196** | P | **P** | **03 48 33.4** | **-1.6** |
| LTZ | | | | IAmb | IAmb | 03 48 46.1 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **OXZ** | **Oxford** | **26.53** | **196** | P | **P** | **03 48 38.6** | **-1.3** |
| OXZ | | | | IAmb | IAmb | 03 48 42.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.37** | **199** | P | **P** | **03 48 46.7** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **29.56** | **200** | P | **P** | **03 49 06.3** | **+0.1** |
| **DCZ** | **Deep Cove** | **29.96** | **201** | P | **P** | **03 49 09.6** | **0.0** |
| **WHZ** | **Wether Hill Ro** | **30.08** | **200** | P | **P** | **03 49 10.5** | **-0.2** |
| **CTA** | **Charters Tower** | **33.74** | **261** | P | **P** | **03 49 42.0** | **-0.1** |
| | comp=Z,0.1nm,0.4s,baz=96,slow=9.4,SNR=3.7 | | | | | | |
| **CTAO** | **Charters Tower** | **33.74** | **261** | P | **P** | **03 49 42.0** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 03 49 44.9 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **37.32** | **231** | P | **P** | **03 50 12.3** | **+0.9** |
| **COEN** | **Coen** | **37.43** | **271** | P | **P** | **03 50 13.4** | **+0.8** |
| COEN | | | | IAmb | IAmb | 03 50 18.1 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **38.83** | **241** | P | **P** | **03 50 25.1** | **+1.4** |
| **STKA** | **Stephens Creek** | **38.83** | **241** | P | **P** | **03 50 25.1** | **+1.4** |
| | comp=Z,1.5nm,0.7s,baz=53,slow=10,SNR=1.4 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.61** | **241** | P | **P** | **03 51 01.4** | **0.0** |
| BBOO | | | | IAmb | IAmb | 03 51 01.8 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **03 51 10.7** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 03 51 21.3 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **03 51 11.4** | **0.0** |
| WB0 | | | | IAmb | IAmb | 03 51 16.5 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **03 51 10.7** | **-0.8** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **03 51 11.2** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **03 51 11.6** | **0.0** |
| | comp=Z,1.0nm,0.4s,baz=97,slow=6.9,SNR=18 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.05** | **254** | P | **P** | **03 51 12.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **03 51 12.6** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **03 51 13.2** | **+0.5** |
| | comp=Z,6.3nm,0.5s,baz=88,slow=8.5,SNR=48 | | | | | | |
| | comp=Z,6.3nm,0.5s | | | | | | |
| **MBWA** | **Marble Bar** | **58.34** | **256** | P | **P** | **03 52 47.4** | **-0.6** |
| MBWA | | | | IAmb | IAmb | 03 52 51.3 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.99** | **180** | P | **P** | **03 54 14.4** | **+1.7** |
| **QSPA** | **South Pole Qui** | **71.99** | **180** | P | **P** | **03 54 15.0** | **+2.3** |
| | comp=Z,2.0nm,1.0s,baz=82,slow=7.1,SNR=8.4 | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.93** | **326** | P | **P** | **03 54 40.8** | **+0.3** |
| **BELA** | **Belgrano 2** | **81.97** | **173** | P | **P** | **03 55 06.9** | **+0.4** |

*IDC **19** 03:46:18.6±7.3, 17°.90S×179°.96W, h584km±88km, mb2.9/5, mbtmp3.9/6, Error ellipse: s-maj=45.9km s-min=41.0km az=169.0*

**ISC 19 03:46:19.8±1.4, 17°.9S±0°.4×180°.0E±0°.2, h600km, n6, σ0s34/6, mb3.4/5, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **13.38** | **250** | P | **P** | **03 49 12.6** | **0.0** |
| | 1.3nm,0.7s,baz=52,slow=19,SNR=2.2 | | | | | | |
| **STKA** | **Stephens Creek** | **37.29** | **241** | P | **P** | **03 52 42.0** | **-0.4** |
| | 2.3nm,1.0s,baz=63,slow=9.0,SNR=1.3 | | | | | | |
| | 2.3nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.12** | **260** | P | **P** | **03 53 29.1** | **+0.2** |
| | 0.3nm,0.3s,baz=91,slow=7.7,SNR=8.0 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **43.31** | **254** | P | **P** | **03 53 30.8** | **+0.3** |
| | 2.4nm,0.5s,baz=89,slow=8.7,SNR=21 | | | | | | |
| | 2.4nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.15** | **180** | P | **P** | **03 56 44.7** | **+0.1** |
| | 1.1nm,0.8s,baz=32,slow=9.5,SNR=5.2 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **87.30** | **58** | P | **P** | **03 58 04.2** | **-0.1** |
| | 0.2nm,0.6s,baz=230,slow=5.6,SNR=3.4 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**IDC 19 03:48:00.2±9.2, 15°.62S×171°.39W, h0km, mb4.0/4, mbtmp4.0/4, Error ellipse: s-maj=218.7km s-min=160.6km az=145.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **21.93** | **250** | P | P | 03 52 55.4 | -0.1 |
| | 1.3nm,0.6s,baz=105,slow=16,SNR=1.5 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **45.61** | **241** | P | P | 03 56 22.9 | +0.4 |
| | 1.2nm,0.4s,baz=70,slow=12,SNR=3.3 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.68** | **257** | P | P | 03 57 09.2 | -0.2 |
| | 0.5nm,0.5s,baz=93,slow=6.9,SNR=2.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **51.89** | **252** | P | P | 03 57 10.7 | -0.3 |
| | 4.2nm,0.4s,baz=90,slow=7.8,SNR=17 | | | | | | |
| | 4.2nm,0.4s | | | | | | |

*IDC **19** 03:48:03.2±3.7, 18°.12S×178°.18W, h579km±42km, mb3.4/12, mbtmp4.3/13, Error ellipse: s-maj=21.0km s-min=17.3km az=109.0*
*NEIC **19** 03:48:03.2±1.0, 18°.3S±0°.1×178°.1W±0°.1, h589km±8km, mb4.4/52, Error ellipse: s-maj=20.6km s-min=17.6km az=117.0*

**ISC 19 03:48:04.1±0.5, 18°.25S±0°.09×178°.2W±0°.1, h600km, n104, σ0s81/105, mb4.3/40, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.62** | **278** | P | **P** | **03 49 26.1** | **-1.1** |
| **PINNC** | **Pines Island,** | **14.15** | **250** | P | **P** | **03 51 04.7** | **+0.2** |
| **DZM** | **Mont Dzumac** | **14.93** | **253** | P | **P** | **03 51 12.2** | **+0.4** |
| **DZM** | **Mont Dzumac** | **14.93** | **253** | P | **P** | **03 51 11.7** | **-0.1** |
| | 1.6nm,0.5s,baz=92,slow=20,SNR=1.8 | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.18** | **195** | P | **P** | **03 51 60.0** | **+0.7** |
| TOZ | | | | IAmb | IAmb | 03 52 05.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **20.35** | **191** | P | **P** | **03 51 59.6** | **-1.3** |
| | comp=Z,9.1nm,0.4s,baz=348,slow=3.6,SNR=9.7 | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.35** | **191** | P | **P** | **03 52 06.8** | **-3.1** |
| BKZ | | | | IAmb | IAmb | 03 52 34.9 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **MRZ** | **Mangatainoka R** | **22.97** | **192** | P | **P** | **03 52 21.7** | **-2.5** |
| MRZ | | | | IAmb | IAmb | 03 52 31.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **QRZ** | **Quartz Range** | **23.87** | **198** | P | **P** | **03 52 31.7** | **-0.5** |
| **PLWZ** | **Palliser** | **23.91** | **192** | P | **P** | **03 52 30.9** | **-1.7** |
| **DSZ** | **Denniston Nort** | **24.93** | **198** | P | **P** | **03 52 42.0** | **+0.4** |
| **INZ** | **Inchbonnie** | **25.94** | **198** | P | **P** | **03 52 49.6** | **-0.7** |
| **FOZ** | **Fox Glacier** | **27.16** | **199** | P | **P** | **03 52 59.8** | **-1.3** |
| **MLZ** | **Mavora Lakes** | **29.35** | **200** | P | **P** | **03 53 20.0** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.35** | **251** | P | **P** | **03 53 20.5** | **+0.1** |
| **WHZ** | **Wether Hill Ro** | **29.87** | **200** | P | **P** | **03 53 24.4** | **-0.1** |
| WHZ | | | | IAmb | IAmb | 03 53 28.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **33.60** | **261** | P | **P** | **03 53 57.0** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=97,slow=11,SNR=11 | | | | | | |
| **CTAO** | **Charters Tower** | **33.60** | **261** | P | **P** | **03 53 56.9** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 03 53 57.7 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **34.73** | **280** | P | **P** | **03 54 06.7** | **+0.7** |
| | comp=Z,18nm,0.8s,baz=107,slow=6.2,SNR=4.9 | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.32** | **271** | P | **P** | **03 54 27.8** | **+0.4** |
| COEN | | | | IAmb | IAmb | 03 54 29.1 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.65** | **242** | P | **P** | **03 54 39.0** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.65** | **242** | P | **P** | **03 54 39.1** | **+1.2** |
| | comp=Z,2.3nm,0.5s,baz=63,slow=8.5,SNR=6.4 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.43** | **241** | P | **P** | **03 55 16.1** | **+0.6** |
| **WR0** | **Warramunga Arr** | **44.59** | **260** | P | **P** | **03 55 24.3** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 03 55 25.4 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.75** | **260** | P | **P** | **03 55 25.5** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 03 55 26.4 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.77** | **260** | P | **P** | **03 55 25.7** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **03 55 25.5** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **03 55 26.1** | **-0.1** |
| | comp=Z,2.9nm,0.5s,baz=95,slow=7.1,SNR=21 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 56 55.8** | **+0.8** |
| | comp=Z,0.6nm,0.3s,baz=90,slow=3.8,SNR=5.3 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.90** | **255** | P | **P** | **03 55 26.7** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 03 55 28.6 | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.91** | **255** | P | **P** | **03 55 26.4** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.91** | **255** | P | **P** | **03 55 27.3** | **+0.2** |
| | comp=Z,11nm,0.6s,baz=88,slow=8.7,SNR=47 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 56 56.1** | **+0.7** |
| | comp=Z,1.3nm,0.5s,baz=100,slow=4.0,SNR=9.1 | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.01** | **269** | P | **P** | **03 55 57.0** | **-0.8** |
| MTN | | | | IAmb | IAmb | 03 55 58.9 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **50.05** | **245** | P | **P** | **03 56 05.2** | **-0.1** |
| FORT | | | | IAmb | IAmb | 03 56 26.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **50.67** | **264** | P | **P** | **03 56 10.2** | **+0.2** |
| KNRA | | | | IAmb | IAmb | 03 56 18.1 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.18** | **261** | P | **P** | **03 56 28.0** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **68.31** | **323** | P | **P** | **03 58 06.1** | **-0.5** |
| | comp=Z,2.2nm,0.5s,baz=156,slow=5.8,SNR=9.2 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **68.31** | **323** | P | **P** | **03 58 06.5** | **-0.1** |
| MAJO | | | | IAmb | IAmb | 03 58 37.5 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.32** | **323** | P | **P** | **03 58 06.5** | **-0.1** |
| MJB9 | | | | IAmb | IAmb | 03 58 37.6 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **UGM** | **Wanagama** | **69.85** | **268** | P | **P** | **03 58 16.4** | **0.0** |
| **JKA** | **Kamikawa-asahi** | **71.68** | **331** | P | **P** | **03 58 27.8** | **+1.4** |
| **QSPA** | **South Pole Qui** | **71.80** | **180** | P | **P** | **03 58 27.7** | **+0.7** |
| **QSPA** | **South Pole Qui** | **71.80** | **180** | P | **P** | **03 58 28.2** | **+1.2** |
| | comp=Z,2.2nm,0.6s,baz=58,slow=3.2,SNR=17 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **YULB** | **Yu-li** | **72.14** | **303** | P | **P** | **03 58 29.9** | **+0.4** |
| YULB | | | | IAmb | IAmb | 03 58 55.7 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **SSLB** | **Suanglung** | **72.60** | **303** | P | **P** | **03 58 31.2** | **-1.0** |
| **TPUB** | **Ta-pu** | **72.62** | **302** | P | **P** | **03 58 31.5** | **-0.8** |
| **PEA0B** | **Petropavlovsk-** | **74.07** | **345** | P | **P** | **03 58 39.6** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **74.07** | **345** | P | **P** | **03 58 39.9** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **74.07** | **345** | P | **P** | **03 58 39.5** | **-0.3** |
| | comp=Z,2.8nm,0.6s,baz=106,slow=7.1,SNR=5.0 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **75.10** | **318** | P | **P** | **03 58 46.8** | **+0.9** |
| | comp=Z,0.6nm,0.7s,baz=116,slow=5.9,SNR=4.4 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.52** | **44** | P | **P** | **03 59 11.1** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **79.52** | **44** | P | **P** | **03 59 10.9** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=221,slow=9.3,SNR=8.5 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **O18K** | **Koktuh Hills** | **80.05** | **12** | P | **P** | **03 59 11.1** | **-1.0** |
| O18K | | | | IAmb | IAmb | 03 59 32.0 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.46** | **38** | P | **P** | **03 59 15.0** | **+0.2** |
| **M16K** | **Timber Creek** | **80.50** | **9** | P | **P** | **03 59 14.9** | **+0.5** |
| M16K | | | | IAmb | IAmb | 03 59 33.6 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **M17K** | **Hidden River** | **81.10** | **10** | P | **P** | **03 59 18.0** | **+0.5** |
| M17K | | | | IAmb | IAmb | 03 59 52.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.36** | **8** | P | **P** | **03 59 19.5** | **+0.7** |
| K15K | | | | IAmb | IAmb | 03 59 20.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **81.80** | **173** | P | **P** | **03 59 21.1** | **+0.1** |
| **I07A** | **Izee** | **81.94** | **38** | P | **P** | **03 59 22.3** | **0.0** |
| **L18K** | **Granite Mounta** | **82.00** | **10** | P | **P** | **03 59 22.3** | **+0.3** |
| **K17K** | **Iditarod** | **82.21** | **9** | P | **P** | **03 59 23.5** | **+0.4** |
| K17K | | | | IAmb | IAmb | 04 00 03.3 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **L19K** | **White Mountain** | **82.27** | **11** | P | **P** | **03 59 23.7** | **+0.3** |
| **J16K** | **Anvik River** | **82.43** | **8** | P | **P** | **03 59 24.6** | **+0.5** |
| J16K | | | | IAmb | IAmb | 03 59 38.9 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **J17K** | **VABM Dome** | **82.74** | **9** | P | **P** | **03 59 26.0** | **+0.3** |
| J17K | | | | IAmb | IAmb | 03 59 29.3 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **J18K** | **Innoko River** | **83.16** | **10** | P | **P** | **03 59 27.8** | **0.0** |
| **K20K** | **Telida** | **83.50** | **11** | P | **P** | **03 59 29.2** | **-0.4** |
| **SCM** | **Sheep Creek Mo** | **83.51** | **14** | P | **P** | **03 59 29.1** | **-0.6** |
| SCM | | | | IAmb | IAmb | 03 59 46.6 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **J19K** | **Poorman** | **83.83** | **10** | P | **P** | **03 59 30.8** | **-0.4** |
| J19K | | | | IAmb | IAmb | 04 00 01.3 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.97** | **15** | P | **P** | **03 59 31.6** | **-0.4** |
| N25K | | | | IAmb | IAmb | 03 59 32.5 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **GLB** | **Gilahina Butte** | **84.04** | **16** | P | **P** | **03 59 31.5** | **-0.8** |
| **RND** | **Reindeer** | **84.56** | **13** | P | **P** | **03 59 34.4** | **-0.3** |
| RND | | | | IAmb | IAmb | 03 59 35.0 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.00** | **58** | P | **P** | **03 59 44.0** | **+1.5** |
| | comp=Z,0.9nm,0.7s,baz=220,slow=6.2,SNR=12 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **IL

0.5nm,0.4s
**ASAR Alice Springs 44.59 254** P **P 03 58 26.9 +0.4**
3.9nm,0.4s,baz=90,slow=8.5,SNR=23
3.9nm,0.4s
**ILAR Eielson Array 85.32 13** P **P 04 02 43.4 0.0**
0.3nm,0.7s,baz=220,slow=5.4,SNR=4.9
0.3nm,0.7s
**TXAR Lajitas Array 85.97 58** P **P 04 02 46.1 -1.3**
0.4nm,0.8s,baz=216,slow=4.0,SNR=4.8
0.4nm,0.8s
**TORD Torodi Ar. Bea 175.91 187** PKP **PKPdf 04 10 17.0 +3.2**
1.0nm,0.8s,baz=182,slow=2.2,SNR=4.8

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*IDC **19** 03:52:16.3±11.0, 18.27S×179.08W, h636km±152km, mb3.1/5, mbtmp4.0/6, Error ellipse: s-maj=93.2km s-min=52.4km az=161.0*
**ISC 19 03:52:17.8±1.7, 18°1S±0.6×179°3W±0.4, h650km, n6, σ0.926/6, mb3.4/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.01** | **251** | P | **P** | **03 55 14.8** | **-0.3** |
| | 1.3nm,0.6s,baz=90,slow=23,SNR=1.3 | | | | | | |
| **STKA** | **Stephens Creek** | **37.85** | **241** | P | **P** | **03 58 42.1** | **0.0** |
| | 0.8nm,0.3s,baz=96,slow=9.2,SNR=2.1 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.81** | **260** | P | **P** | **03 59 29.2** | **+0.1** |
| | 0.7nm,0.4s,baz=98,slow=6.7,SNR=8.7 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **43.97** | **254** | P | **P** | **03 59 30.8** | **+0.4** |
| | 6.8nm,0.4s,baz=89,slow=8.6,SNR=38 | | | | | | |
| | 6.8nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **86.22** | **13** | P | **P** | **04 03 51.9** | **0.0** |
| | 0.9nm,1.2s,baz=221,slow=5.3,SNR=6.4 | | | | | | |
| | 0.9nm,1.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.76** | **58** | P | **P** | **04 03 55.4** | **0.0** |
| | 0.4nm,0.7s,baz=224,slow=5.0,SNR=6.1 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

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**IDC 19 03:52:36.8±1.9, 16°84S×177°83W, h0km, mb3.7/4, mbtmp3.8/4, Error ellipse: s-maj=57.5km s-min=35.3km az=120.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **21.80** | **191** | P | P | 03 57 30.6 | +0.2 |
| | 5.1nm,0.9s,baz=0.0,slow=4.0,SNR=2.5 | | | | | | |
| | 5.1nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.38** | **258** | P | P | 04 00 57.5 | +0.1 |
| | 0.3nm,0.5s,baz=96,slow=7.1,SNR=2.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.62** | **253** | P | P | 04 00 58.9 | -0.4 |
| | 1.5nm,0.6s,baz=86,slow=8.6,SNR=7.9 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.73** | **13** | P | P | 04 05 12.3 | 0.0 |
| | 0.4nm,1.0s,baz=217,slow=5.2,SNR=4.7 | | | | | | |
| | 0.4nm,1.0s | | | | | | |

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**IDC 19 03:53:22.2±7.8, 18°09S×177°08W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=341.5km s-min=38.9km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.84** | **260** | P | P | 04 01 46.1 | -0.4 |
| | 0.5nm,0.5s,baz=95,slow=6.7,SNR=6.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.96** | **254** | P | P | 04 01 47.5 | 0.0 |
| | 4.2nm,0.5s,baz=89,slow=8.4,SNR=24 | | | | | | |
| | 4.2nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.78** | **12** | P | P | 04 06 03.1 | +0.1 |
| | 0.2nm,0.4s,baz=213,slow=5.0,SNR=4.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

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**IDC 19 03:57:29.5±47.0, 16°04S×171°71W, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=911.3km s-min=198.4km az=80.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **45.14** | **241** | P | P | 04 05 48.6 | +0.6 |
| | 0.8nm,0.3s,baz=76,slow=8.3,SNR=3.2 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.29** | **257** | P | P | 04 06 35.4 | -0.4 |
| | 0.5nm,0.6s,baz=97,slow=6.7,SNR=6.7 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **51.47** | **252** | P | P | 04 06 36.8 | -0.3 |
| | 3.4nm,0.6s,baz=87,slow=8.5,SNR=18 | | | | | | |
| | 3.4nm,0.6s | | | | | | |
| **JMZ** | **Minamidaito 2** | **69.37** | **306** | P | P | 04 08 36.1 | -3.4 |

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**IDC 19 03:58:58.1±2.5, 20°10S×175°14W, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=154.0km s-min=30.9km az=154.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **47.22** | **256** | P | P | 04 07 33.8 | +0.6 |
| | 1.3nm,0.6s,baz=80,slow=8.8,SNR=6.9 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.31** | **261** | P | P | 04 07 32.8 | -1.1 |
| | 0.4nm,0.4s,baz=96,slow=7.2,SNR=6.1 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.60** | **56** | P | P | 04 11 33.0 | -0.9 |
| | 0.3nm,0.8s,baz=234,slow=6.1,SNR=4.2 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **87.36** | **12** | P | P | 04 11 48.0 | +1.4 |
| | 0.2nm,0.6s,baz=223,slow=5.2,SNR=1.5 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

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**IDC 19 04:01:31.0±0.9, 18°37S×177°54W, h0km, mb4.0/6, mbtmp4.0/6, Error ellipse: s-maj=46.9km s-min=22.9km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.37** | **260** | P | P | 04 09 50.7 | -0.8 |
| | 0.4nm,0.3s,baz=98,slow=7.1,SNR=11 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.47** | **255** | P | P | 04 09 52.8 | +0.5 |
| | 3.2nm,0.6s,baz=87,slow=8.2,SNR=20 | | | | | | |
| | 3.2nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.69** | **180** | P | P | 04 12 54.6 | 0.0 |
| | 3.0nm,1.0s,baz=336,slow=4.6,SNR=6.9 | | | | | | |
| | 3.0nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.18** | **43** | P | P | 04 13 38.8 | +0.6 |
| | 0.5nm,0.7s,baz=217,slow=7.1,SNR=5.1 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.54** | **57** | P | P | 04 14 12.2 | +0.7 |
| | 1.0nm,0.8s,baz=218,slow=6.0,SNR=14 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.11** | **43** | P | P | 04 14 17.4 | -1.8 |
| | 0.4nm,0.7s,baz=252,slow=4.6,SNR=4.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

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*ISN **19** 04:02:18.9±0.5, 34.20N×45.68E, h14km±21km, ML2.5*
*TEH **19** 04:02:19.1, 34.21N×45.68E, h9km, ML2.6*
**ISC 19 04:02:19.6±1.0, 34°22N±0.04×45°66E±0.04, h10km, n10, σ0.962/14, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLG1** | **Gilan-e-Gharb** | **0.23** | **116** | Pg | **Pg** | **04 02 24.7** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.29** | **349** | Pg | **Pb** | **04 02 26.2** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **0.75** | **142** | Pg | **Pb** | **04 02 33.8** | **-1.0** |
| **IGHG** | **Ghaleghazi** | **0.76** | **81** | Pg | **Pb** | **04 02 34.7** | **-0.4** |
| IGHG | | | | Sg | **Sb** | **04 02 46.0** | **+0.3** |
| **IDHR** | **Dehrash** | **0.77** | **51** | Pg | **Pg** | **04 02 34.2** | **-0.4** |
| **IBDR** | **Badra** | **1.13** | **168** | *e*Pg | **Pb** | **04 02 40.5** | **-0.7** |
| IBDR | | | | *e*Sg | **Sb** | **04 02 55.5** | **-0.4** |
| IBDR | | | | AML | AML | 04 03 02.5 | |
| | comp=N,59nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 04 03 06.3 | |
| | comp=E,59nm,0.4s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **1.15** | **87** | Pg | **Pn** | **04 02 42.6** | **+0.6** |
| **ILIN** | **Lien** | **1.28** | **57** | Pg | **Pg** | **04 02 45.0** | **+0.7** |
| **BHD** | **Baghdad** | **1.42** | **229** | *e*Pn | **Pb** | **04 02 46.0** | **-0.3** |
| BHD | | | | *e*Sn | **Sg** | **04 03 06.0** | **+0.6** |
| **IKRK** | **Kirkuk** | **1.60** | **318** | *e*Pn | **Pb** | **04 02 49.0** | **-0.3** |
| IKRK | | | | *e*Sn | **Sg** | **04 03 11.0** | **-0.2** |
| IKRK | | | | AML | AML | 04 03 18.5 | |
| | comp=N,141nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 04 03 18.7 | |
| | comp=E,122nm,0.6s | | | | | | |

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*MOS **19** 04:05:41.7±1.0, 23.54N×143.28E, h10km, mb5.4/73, Error ellipse: s-maj=8.6km s-min=3.9km az=118.7*
*IDC **19** 04:05:41.7±0.4, 23.59N×143.30E, h0km, mb4.8/36, mbtmp4.8/40, ML4.3/4, MS5.1/2, Error ellipse: s-maj=15.4km s-min=8.5km az=65.0*
*BJI **19** 04:05:41.3±0.0, 23.57N×143.37E, h6km, mb5.1/79, mB5.8/26, Ms5.8/41, Ms7 5.6/40*
*NEIC **19** 04:05:44.2±1.9, 23.57N±0.05×143.36E±0.09, h10km±1km, mb5.2/411, Error ellipse: s-maj=14.5km s-min=8.0km az=87.0*
*JMA **19** 04:05:47.3±0.5, 24°N±1°×14°4E±°, h81km, MV5.5/11, IOTO ISLANDS REGION*
**ISC 19 04:05:46.5±0.3, 23°56N±0°04×143°41E±0°05, h31km, n882, σ1.952/757, mb5.2/315, MS5.3/12, 18C-6D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **3.26** | **340** | *e*P | **Pn** | **04 06 36.7** | **+1.2** |
| JHH2 | | | | *e*S | **Sn** | **04 07 15.0** | **+1.8** |
| **CBIJ** | **Chichi jima** | **3.69** | **343** | *e*P | **Pn** | **04 06 43.3** | **+1.8** |
| CBIJ | | | | *e*S | **Sn** | **04 07 24.7** | **+0.7** |
| **JCJ** | **Chichijima** | **3.69** | **343** | P | **Pn** | **04 06 44.5** | **+3.0** |
| **JCJ** | **Chichijima** | **3.69** | **343** | Pn | **Pn** | **04 06 41.3** | **-0.2** |
| **JCJ** | **Chichijima** | **3.69** | **343** | Pn | **Pn** | **04 06 38.3** | **-3.2** |
| | 66nm,0.3s,baz=131,slow=18,SNR=6.7 | | | | | | |
| JCJ | | | | Sn | **Sn** | **04 07 20.9** | **-3.0** |
| | 298nm,0.3s,baz=279,slow=22,SNR=4.1 | | | | | | |
| | 343nm,0.5s | | | | | | |
| **GUMO** | **Guam** | **10.01** | **172** | Pn | **Pn** | **04 08 08.6** | **+0.3** |
| **GUMO** | **Guam** | **10.01** | **172** | Pn | **Pn** | **04 08 11.0** | **+2.7** |
| | 3.1nm,0.3s,baz=265,slow=7.6,SNR=6.4 | | | | | | |
| GUMO | | | | Sn | **Sn** | **04 10 04.7** | **+5.0** |
| | 3.5nm,0.3s,baz=345,slow=18,SNR=1.2 | | | | | | |
| **GUMO** | **Guam** | **10.01** | **172** | P | **Pn** | **04 08 08.6** | **+0.3** |
| **JHJ2** | **Mitsune** | **10.03** | **342** | Pn | **Pn** | **04 08 09.9** | **+1.4** |
| **JHJ** | **Hachijo jima 2** | **10.04** | **342** | Pn | **Pn** | **04 08 07.0** | **-1.7** |
| | 8.0nm,0.3s,baz=202,slow=5.9,SNR=1.2 | | | | | | |
| JHJ | | | | Sn | **Sn** | **04 09 55.4** | **-5.0** |
| | 17nm,0.3s,baz=60,slow=14,SNR=1.6 | | | | | | |
| | 136nm,0.8s | | | | | | |
| **BSO1** | **Boso 1** | **11.26** | **350** | *e*P | **Pn** | **04 08 25.2** | **+0.4** |
| **JMZ** | **Minamidaito 2** | **11.31** | **284** | Pn | **Pn** | **04 08 25.3** | **-0.8** |
| **JMZ** | **Minamidaito 2** | **11.31** | **284** | *e*P | **Pn** | **04 08 29.7** | **+3.6** |
| **JSG** | **Sagara** | **11.98** | **339** | | **Pn** | **04 08 31.3** | **-3.8** |
| **JOD2** | **Odawara 2** | **12.25** | **343** | *e*P | **Pn** | **04 08 37.0** | **-1.9** |
| **JTNC** | **Tanabenakahech** | **12.30** | **328** | *e*P | **Pn** | **04 08 40.6** | **+1.1** |
| **INU** | **Inuyama** | **13.00** | **336** | P | **Pn** | **04 08 51.5** | **+2.4** |
| **INU** | **Inuyama** | **13.00** | **336** | Pn | **Pn** | **04 08 47.7** | **-1.4** |
| **JGF** | **Kuroka** | **13.10** | **338** | P | **Pn** | **04 08 52.0** | **+1.5** |
| **JGF** | **Kuroka** | **13.10** | **338** | Pn | **Pn** | **04 08 49.2** | **-1.3** |
| **JMN** | **Monobe** | **13.13** | **323** | P | **Pn** | **04 08 55.5** | **+4.5** |
| **JMN** | **Monobe** | **13.13** | **323** | | **Pn** | **04 08 51.5** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **13.70** | **342** | Pn | **Pn** | **04 08 56.0** | **-2.6** |
| | 0.6nm,0.3s,baz=165,slow=12,SNR=28 | | | | | | |
| MJAR | | | | Sn | **Sn** | **04 11 27.0** | **-2.7** |
| | 0.2nm,0.3s,baz=147,slow=25,SNR=2.7 | | | | | | |
| | 18nm,7s | | | | | | |
| **MAJO** | **Matsushiro** | **13.70** | **342** | P | **Pn** | **04 08 59.3** | **+0.6** |
| **MAJO** | **Matsushiro** | **13.70** | **342** | Pn | **Pn** | **04 08 56.7** | **-2.0** |
| **MAJO** | **Matsushiro** | **13.70** | **342** | *i* P | **Pn** | **04 08 57.8** | **-0.9** |
| **MJB9** | **Matsu-Tunnel** | **13.70** | **342** | | **Pn** | **04 08 56.6** | **-2.2** |
| **JOW** | **Kunigami** | **14.09** | **287** | P | **P** | **04 09 13.0** | **+1.7** |
| **JOW** | **Kunigami** | **14.09** | **287** | P | **P** | **04 09 14.0** | **+2.6** |
| **JOW** | **Kunigami** | **14.09** | **287** | Pn | **Pn** | **04 09 06.3** | **+2.3** |
| | 2.9nm,0.3s,baz=112,slow=17,SNR=2.1 | | | | | | |
| JOW | | | | LR | LR | 04 14 04.7 | |
| | comp=Z,17μm,19.8s,baz=78,slow=36 | | | | | | |
| **JMM** | **Marumori** | **14.44** | **352** | P | **Pn** | **04 09 08.6** | **-0.1** |
| **JMM** | **Marumori** | **14.44** | **352** | Pn | **Pn** | **04 09 07.4** | **-1.3** |
| **JHS** | **Saijyo** | **14.50** | **324** | *e*P | **Pn** | **04 09 10.2** | **+0.5** |
| **JNU** | **Nakatsue** | **14.57** | **314** | P | **P** | **04 09 15.7** | **-1.0** |
| **JNU** | **Nakatsue** | **14.57** | **314** | Pn | **Pn** | **04 09 10.2** | **-0.3** |
| **JNU** | **Nakatsue** | **14.57** | **314** | Pn | **Pn** | **04 09 12.2** | **+1.6** |
| | 0.3nm,0.3s,baz=114,slow=7.5,SNR=5.2 | | | | | | |
| **JSD** | **Sado** | **15.09** | **344** | P | **Pn** | **04 09 19.1** | **+1.6** |
| **JSD** | **Sado** | **15.09** | **344** | Pn | **Pn** | **04 09 14.0** | **-3.5** |
| **JTM** | **Tenmabayashi** | **17.29** | **354** | | **P** | **04 09 46.6** | **-0.2** |
| JTM | | | | IAmb | IAmb | 04 10 05.9 | |
| | comp=Z,214nm,1.0s | | | | | | |
| **ERM** | **Erimo** | **18.41** | **359** | P | **P** | **04 09 58.4** | **-0.7** |
| **ERM** | **Erimo** | **18.41** | **359** | *i* P | **P** | **04 09 58.1** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **18.66** | **277** | | **P** | **04 10 01.0** | **-1.1** |
| **YOJ** | **Yonaguni jima** | **18.66** | **277** | P | **P** | **04 10 01.0** | **-1.1** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,754nm,1.3s | | | | | | |
| **TJN** | **Taejon** | **18.85** | **316** | P | **P** | **04 10 03.8** | **-0.2** |
| **TJN** | **Taejon** | **18.85** | **316** | P | **P** | **04 10 03.8** | **-0.2** |
| TJN | | | | pmax | pmax | | |
| | comp=Z,741nm,1.4s | | | | | | |
| **KSRS** | **Korea Array** | **19.20** | **320** | P | **P** | **04 10 07.7** | **-0.1** |
| | comp=Z,1.4nm,0.3s,baz=140,slow=11,SNR=44 | | | | | | |
| KSRS | | | | S | **Sn** | **04 13 42.2** | **-0.9** |
| | comp=Z,0.4nm,0.6s,baz=143,slow=17,SNR=0.9 | | | | | | |
| | comp=Z,53nm,1.1s | | | | | | |
| **KSAR** | **Wonju Array Be** | **19.21** | **320** | P | **P** | **04 10 07.7** | **-0.3** |
| **KSAR** | **Wonju Array Be** | **19.21** | **320** | P | **P** | **04 10 07.7** | **-0.3** |
| **KS19** | **Wonju Array Si** | **19.26** | **320** | P | **P** | **04 10 08.0** | **-0.6** |
| **NACB** | **Ninganchiao** | **19.96** | **276** | P | **P** | **04 10 16.7** | **+0.4** |
| NACB | | | | IAmb | IAmb | 04 10 35.5 | |
| | comp=Z,174nm,1.3s | | | | | | |
| **INCN** | **Inchon** | **20.00** | **318** | | **P** | **04 10 15.6** | **-1.0** |
| **INCN** | **Inchon** | **20.00** | **318** | P | **P** | **04 10 15.6** | **-1.0** |
| INCN | | | | pmax | pmax | | |
| | comp=Z,73nm,1.1s | | | | | | |
| **YHNB** | **Yeheng** | **20.15** | **278** | P | **P** | **04 10 19.2** | **+0.9** |
| **YULB** | **Yu-li** | **20.29** | **274** | P | **P** | **04 10 20.7** | **+0.8** |
| YULB | | | | IAmb | IAmb | 04 10 33.5 | |
| | comp=Z,197nm,1.1s | | | | | | |
| **ASAJ** | **Asahikawa** | **20.52** | **358** | P | **P** | **04 10 22.9** | **+0.8** |
| | comp=Z,20nm,0.9s,baz=212,slow=13,SNR=5.2 | | | | | | |
| ASAJ | | | | LR | LR | 04 21 45.9 | |
| | comp=Z,3μm,18.4s,baz=133,slow=47 | | | | | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **ASAJ** | **Asahikawa** | **20.52** | **358** | P | **P** | **04 10 21.5** | **-0.6** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,130nm,1.3s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **20.52** | **358** | | **P** | **04 10 21.4** | **-0.7** |
| JKA | | | | IAmb | IAmb | 04 10 34.5 | |
| | comp=Z,130nm,1.3s | | | | | | |
| **SSE** | **Sheshan** | **21.10** | **296** | P | **P** | **04 10 29.3** | **+0.7** |
| SSE | | | | S | Sn | 04 14 27.6 | -1.5 |
| SSE | | | | pmax | pmax | | |
| | comp=Z,71nm,0.9s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,510nm,4.0s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,2μm,12.1s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,5μm,8.9s | | | | | | |
| **MSHR** | **Mys Shultsa** | **21.53** | **335** | *i* P | **P** | **04 10 32.9** | **-0.1** |
| **PATS** | **Pohnpei** | **21.94** | **137** | P | **P** | **04 10 36.8** | **-0.9** |
| **PATS** | **Pohnpei** | **21.94** | **137** | P | **P** | **04 10 35.5** | **-2.3** |
| **TEY** | **Ternei** | **22.13** | **347** | *e*P | **P** | **04 10 36.2** | **-3.3** |
| **H11N1** | **WAKE ISLAND Hy** | **22.15** | **95** | T | T | 04 34 52.4 | |
| | baz=284,slow=74 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.15** | **95** | T | T | 04 35 00.9 | |
| | baz=284,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.17** | **95** | T | T | 04 35 03.3 | |
| | baz=284,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.29** | **99** | T | T | 04 34 29.1 | |
| | baz=284 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.30** | **99** | T | T | 04 33 49.8 | |
| | baz=284 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.31** | **99** | T | T | 04 34 18.6 | |
| | baz=284 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **22.62** | **338** | P | **P** | **04 10 43.5** | **-1.2** |
| USA0B | | | | IAmb | IAmb | 04 10 59.1 | |
| | comp=Z,71nm,0.9s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **22.62** | **338** | *i* P | **P** | **04 10 44.6** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **22.62** | **338** | P | **P** | **04 10 43.7** | **-1.1** |
| **USRK** | **Ussuriysk Ar.** | **22.62** | **338** | P | **P** | **04 10 43.8** | **-0.9** |
| | comp=Z,11nm,0.8s,baz=154,slow=8.4,SNR=8.2 | | | | | | |
| USRK | | | | S | **S** | **04 14 50.4** | **-0.2** |
| | comp=Z,1.1nm,0.6s,baz=135,slow=14,SNR=1.5 | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **QZH** | **Quanzhou** | **22.67** | **279** | ⇑*i* P | **P** | **04 10 45.8** | **+0.4** |
| QZH | | | | LR | LR | | |
| | comp=Z,16μm,18.9s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NJ2** | **Nanjing** | **23.27** | **297** | ⇑P | **P** | **04 10 50.6** | **-1.0** |
| NJ2 | | | | sP | **pP** | **04 10 55.0** | **-3.8** |
| NJ2 | | | | S | **S** | **04 15 04.6** | **+2.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,45nm,1.1s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,4μm,16.1s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,6μm,18.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,7μm,17.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **23.35** | **359** | P | **P** | **04 10 51.5** | **-0.6** |
| YSS | | | | IAmb | IAmb | 04 11 01.6 | |
| | comp=Z,78nm,1.1s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **23.35** | **359** | *e*P | **P** | **04 10 53.4** | **+1.3** |
| YSS | | | | *e*S | **S** | **04 14 59.7** | **-3.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,2μm,7.6s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=N,2μm,7.5s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,140nm,1.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **23.86** | **335** | P | **P** | **04 10 57.4** | **+0.3** |
| MDJ | | | | sP | pP | 04 11 02.0 | -2.4 |
| MDJ | | | | PP | **PnPn** | **04 11 23.5** | **-2.3** |
| MDJ | | | | S | **S** | **04 15 14.6** | **+3.6** |
| MDJ | | | | sS | pS | 04 15 18.3 | -0.2 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,67nm,1.8s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,2μm,3.9s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,8μm,14.3s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,6μm,16.3s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,17μm,20.1s | | | | | | |
| **MDJ** | **Mudanjiang** | **23.86** | **335** | P | **P** | **04 10 57.0** | **-0.1** |
| MDJ | | | | IAmb | IAmb | 04 11 07.8 | |
| | comp=Z,116nm,1.2s | | | | | | |
| **DL2** | **Dalian** | **24.02** | **315** | P | **P** | **04 10 58.3** | **-0.3** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,35nm,1.0s | | | | | | |
| **SNY** | **Shenyang** | **24.61** | **322** | ⇑P | **P** | **04 11 02.9** | **-1.1** |
| SNY | | | | S | **S** | **04 15 26.4** | **+3.2** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,63nm,1.4s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,3μm,12.0s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,4μm,14.9s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,3μm,15.7s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,5μm,20.1s | | | | | | |
| **CN2** | **Changchun** | **25.02** | **328** | P | **P** | **04 11 09.0** | **+1.3** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,4μm,16.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,5μm,16.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,8μm,19.0s | | | | | | |
| **UGL** | **Uglegorsk** | **25.49** | **358** | *e*P | **P** | **04 11 15.2** | **+3.3** |
| UGL | | | | *e*S | **S** | **04 15 33.2** | **-3.9** |
| UGL | | | | pmax | pmax | | |
| | comp=Z,100nm,0.9s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=E,2μm,11.0s | | | | | | |
| UGL | | | | smax | smax | | |
| | comp=N,5μm,15.0s | | | | | | |
| **BNX** | **BinXian** | **25.65** | **334** | ⇓P | **P** | **04 11 14.4** | **+1.0** |
| BNX | | | | S | **S** | **04 15 46.3** | **+6.5** |
| BNX | | | | pmax | pmax | | |
| | comp=N,39nm,0.7s | | | | | | |
| BNX | | | | LR | LR | | |
| | comp=N,5μm,19.0s | | | | | | |
| BNX | | | | LR | LR | | |
| | comp=N,4μm,19.5s | | | | | | |
| **MANU** | **Manus Island** | **25.74** | **171** | P | **P** | **04 11 13.6** | **-0.9** |
| **TIA** | **Tai'an** | **25.96** | **305** | P | **P** | **04 11 15.3** | **-1.0** |
| TIA | | | | pmax | pmax | | |
| | comp=N,80nm,1.2s | | | | | | |
| **WHN** | **Wuhan** | **26.75** | **291** | P | **P** | **04 11 23.1** | **-0.5** |
| WHN | | | | pP | **pP** | **04 11 26.3** | **-4.8** |
| WHN | | | | S | **S** | **04 16 02.8** | **+5.3** |
| WHN | | | | pmax | pmax | | |
| | comp=N,80nm,1.3s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=N,10μm,10.4s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=N,6μm,10.2s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=N,14μm,16.1s | | | | | | |
| **KLR** | **Kul'dur** | **27.22** | **343** | *ce*P | **P** | **04 11 25.9** | **-1.6** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,32nm,0.7s | | | | | | |
| **TYV** | **Tymovskoe** | **27.26** | **359** | *e*P | **P** | **04 11 30.4** | **+2.5** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **GRNR** | **Gornyy** | **27.70** | **350** | ⇑*i* P | **P** | **04 11 34.4** | **+2.5** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **CNSH** | **ChangSha** | **27.77** | **286** | P | **P** | **04 11 31.4** | **-1.3** |
| CNSH | | | | pmax | pmax | | |
| | comp=Z,28nm,1.7s | | | | | | |
| **HNS** | **HongShan** | **28.20** | **306** | ⇑P | **P** | **04 11 35.4** | **-1.0** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,41nm,1.0s | | | | | | |
| **BJT** | **Baijiatuan** | **28.23** | **312** | P | **P** | **04 11 35.2** | **-1.4** |
| **BJT** | **Baijiatuan** | **28.23** | **312** | P | **P** | **04 11 35.3** | **-1.4** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **BJI** | **Beijing** | **28.23** | **312** | P | **P** | **04 11 34.9** | **-1.8** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **LYN** | **LuoYang** | **29.08** | **299** | ⇓P | **P** | **04 11 44.4** | **+0.1** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,36nm,0.9s | | | | | | |
| **HEH** | **HeiHe** | **29.43** | **339** | *e*P | **P** | **04 11 48.3** | **+1.1** |
| HEH | | | | pP | **pP** | **04 11 51.4** | **-3.3** |
| HEH | | | | S | **S** | **04 16 41.3** | **+2.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,94nm,1.8s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,5μm,19.6s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,8μm,16.7s | | | | | | |
| HEH | | | | LR | LR | | |
| | comp=Z,13μm,17.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **30.17** | **237** | P | **P** | **04 11 54.5** | **+0.4** |
| **ENH** | **Enshi** | **30.90** | **290** | P | **P** | **04 11 58.7** | **-1.9** |
| ENH | | | | IAmb | IAmb | 04 12 14.5 | |
| | comp=Z,50nm,1.3s | | | | | | |
| **TOLI2** | **Tolitoli** | **31.30** | **228** | P | **P** | **04 12 02.5** | **-1.6** |
| TOLI2 | | | | IAmb | IAmb | 04 12 10.6 | |
| | comp=Z,73nm,1.4s | | | | | | |
| **KKM** | **Kota Kinabalu** | **31.43** | **241** | P | **P** | **04 12 04.7** | **-0.7** |
| **PETK** | **Petropavlovsk-** | **31.44** | **17** | P | **P** | **04 12 04.0** | **-0.9** |
| | comp=Z,5.2nm,1.0s,baz=232,slow=10,SNR=2.7 | | | | | | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **QIZ** | **

BTO pP **pP** **04 12 22.3 -2.2**
BTO sP **sP** **04 12 25.4 -2.3**
BTO PP **PnPn** **04 13 25.8 +0.3**
BTO S **S** **04 17 37.1 +5.4**
BTO pmax pmax
comp=Z,23nm,0.8s
BTO pmax pmax
comp=Z,3µm,9.4s
BTO LR LR
comp=Z,41µm,8.8s
BTO LR LR
comp=Z,30µm,9.9s
**PMG Port Moresby 32.97 173** P **P** **04 12 17.9 -0.8**
PMG lAmb lAmb 04 12 36.0
comp=Z,36nm,0.8s
**PMG Port Moresby 32.97 173** P **P** **04 12 17.8 -0.8**
comp=Z,12nm,0.4s,baz=90,slow=3.0,SNR=5.4
comp=Z,12nm,0.4s
**PMG Port Moresby 32.97 173** *i* P **P** **04 12 19.0 +0.3**
PMG pmax pmax
comp=Z,19nm,0.8s
**GYA Guiyang 33.36 283** ⇓P **P** **04 12 23.0 +0.7**
GYA pmax pmax
comp=Z,22nm,1.0s
**CD2 Chengdu 35.87 291** P **P** **04 12 43.4 -0.4**
CD2 pmax pmax
comp=Z,50nm,0.9s
**LZH Lanzhou 36.29 299** *eP* **P** **04 12 47.5 0.0**
LZH pP pP 04 12 52.4 -2.8
LZH pmax pmax
comp=Z,20nm,1.4s
**SLVN Son La 36.51 274** P **P** **04 12 47.7 -1.7**
SLVN lAmb lAmb 04 13 04.5
comp=Z,51nm,1.2s
**KMI Kunming 36.99 281** ⇓P **P** **04 12 55.0 +1.3**
KMI pmax pmax
comp=Z,43nm,1.4s
**COEN Coen 37.29 180** P **P** **04 12 56.8 +0.9**
COEN lAmb lAmb 04 13 00.8
comp=Z,44nm,0.7s
**ULN Ulaanbaatar 37.68 319** P **P** **04 12 58.3 -0.9**
**ULN Ulaanbaatar 37.68 319** *ce*P **P** **04 12 58.9 -0.3**
ULN pmax pmax
comp=Z,26nm,1.3s
**PZH PanZhiHua 37.76 283** P **P** **04 13 00.1 +0.1**
PZH pmax pmax
comp=Z,90nm,0.7s
**SONM Songino Array 38.06 319** P **P** **04 13 01.3 -1.1**
**SONM Songino Array 38.06 319** P **P** **04 13 01.2 -1.2**
comp=Z,4.1nm,0.9s,baz=132,slow=7.6,SNR=22
comp=Z,4.1nm,0.9s
**SONM Songino Array 38.06 319** P **P** **04 13 01.3 -1.1**
SONM pmax pmax
comp=Z,16nm,1.4s
**KSM Kuching 38.87 240** P **P** **04 13 10.1 +0.7**
**KSM Kuching 38.87 240** **P** **04 13 09.7 +0.3**
**AMKA Amchitka 39.14 36** P **P** **04 13 11.1 -0.1**
**YAK Yakutsk 39.58 350** P **P** **04 13 15.3 +0.7**
YAK lAmb lAmb 04 13 32.5
comp=Z,54nm,0.8s
**YAK Yakutsk 39.58 350** *eP* **P** **04 13 16.6 +2.0**
YAK pmax pmax
comp=Z,49nm,0.9s
YAK pmax pmax
comp=N,6.0nm,0.9s
YAK pmax pmax
comp=E,4.0nm,0.8s
**SEY Seymchan 39.82 6** *ce*P **P** **04 13 19.9 +3.2**
SEY pmax pmax
comp=Z,37nm,1.7s
**CRAI Chiangrai 39.97 274** P **P** **04 13 18.0 -0.5**
CRAI lAmb lAmb 04 13 33.0
comp=Z,97nm,1.2s
**GTA Gaotai 39.99 304** P **P** **04 13 20.3 +1.7**
**PHRA Phrae 40.51 271** P **P** **04 13 23.2 +0.2**
**TNCH TengChong 40.80 282**⇑ *eP* **P** **04 13 25.4 -0.2**
TNCH sP pP 04 13 31.3 -2.1
TNCH pmax pmax
comp=Z,57nm,1.8s
TNCH pmax pmax
comp=Z,2µm,8.3s
TNCH LR LR
comp=Z,5µm,12.7s
TNCH LR LR
comp=Z,7µm,8.8s
TNCH LR LR
comp=Z,9µm,15.0s
**ZAK Zakamensk 41.02 321** *eP* **P** **04 13 25.8 -1.1**
ZAK pmax pmax
comp=Z,18nm,1.6s
**IRK Irkutsk 41.32 324** *eP* **P** **04 13 29.1 -0.1**
IRK pmax pmax
comp=Z,50nm,1.7s
**CM31 Chiang Mai Arr 41.70 272** P **P** **04 13 33.0 +0.2**
CM31 lAmb lAmb 04 13 47.0
comp=Z,61nm,1.3s
**CMAR Chiang Mai Arr 41.70 272** P **P** **04 13 33.0 +0.2**
**CMAR Chiang Mai Arr 41.70 272** P **P** **04 13 32.1 -0.8**
comp=Z,5.7nm,0.7s,baz=63,slow=7.3,SNR=14
comp=Z,5.7nm,0.7s
**CMAR Chiang Mai Arr 41.70 272** *i* P **P** **04 13 33.0 +0.2**
CMAR pmax pmax
comp=Z,8.0nm,0.6s
**MOY Mondy 42.87 322** *eP* **P** **04 13 41.9 -0.2**
MOY pmax pmax
comp=Z,47nm,3.3s
**LKP Lekhapani 42.92 285** *eP* **P** **04 13 43.3 +0.7**
**CTA Charters Tower 43.47 176** P **P** **04 13 47.4 +0.3**
comp=Z,1.1nm,0.8s,baz=340,slow=10,SNR=5.2
**CTAO Charters Tower 43.47 176** P **P** **04 13 47.8 +0.8**
CTAO lAmb lAmb 04 13 59.9
comp=Z,28nm,0.8s
**CTAO Charters Tower 43.47 176** P **P** **04 13 47.8 +0.8**
CTAO pmax pmax
comp=Z,28nm,0.8s
**GOMU GeErMu 43.57 298** P **P** **04 13 49.3 +1.1**
GOMU pmax pmax
comp=Z,32nm,1.3s
**DIBR DIBRUGARH 43.73 286** *eP* **P** **04 13 49.6 +0.4**
**WB0 Warramunga Arr 43.95 192** P **P** **04 13 48.6 -2.3**
**WR0 Warramunga Arr 44.11 192** P **P** **04 13 49.6 -2.6**
**WRAB Tennant Creek 44.12 192** P **P** **04 13 48.9 -3.4**
WRAB lAmb lAmb 04 14 00.3
comp=Z,35nm,1.0s
**WRAB Tennant Creek 44.12 192** P **P** **04 13 48.9 -3.4**
WRAB pmax pmax
comp=Z,35nm,1.0s
**WB2 Warramunga Arr 44.13 192** P **P** **04 13 49.4 -3.0**
WB2 lAmb lAmb 04 14 00.4
comp=Z,49nm,1.1s
**WRA Warramunga Arr 44.13 192** P **P** **04 13 49.7 -2.7**
**WRA Warramunga Arr 44.13 192** P **P** **04 13 50.3 -2.0**
comp=Z,14nm,0.7s,baz=11,slow=8.8,SNR=7.5
comp=Z,14nm,0.7s
**WRA Warramunga Arr 44.13 192** *i* P **P** **04 13 50.2 -2.2**
WRA pmax pmax
comp=Z,16nm,0.7s
**MOKO MOKOCHONG 44.22 284** *eP* **P** **04 13 53.3 0.0**
**JORH JORHAT 44.40 285** *eP* **P** **04 13 54.1 -0.4**
**ZIRO ZIRO 44.66 286** *eP* **P** **04 13 57.4 +0.6**
**KOHI KOHIMA 44.66 283** *ex* P 04 13 50.0 -6.9
**ITAN ITANAGAR 44.82 285** *eP* **P** **04 13 58.7 +0.8**
**IMP Imphal 44.94 282** *ex* P 04 13 52.3 -6.7
**KULM Kulim 44.99 253** P **P** **04 13 59.2 -0.1**
**BILL Bilibino 46.66 12** *i* P **P** **04 14 12.9 +1.1**
BILL *i* 04 15 59.3
BILL pmax pmax
comp=Z,22nm,1.3s
**SHL Shillong 46.67 284** P **P** **04 14 12.3 -0.5**
**SHL Shillong 46.67 284** P **P** **04 14 12.3 -0.5**
SHL pmax pmax
comp=Z,65nm,0.7s
**LSA Lhasa 46.80 289** P **P** **04 14 16.0 +1.9**
**LSA Lhasa 46.80 289** P **P** **04 14 14.4 +0.3**
**LSA Lhasa 46.80 289** P **P** **04 14 16.2 +2.2**
**LSA Lhasa 46.80 289** P **P** **04 14 14.4 +0.3**
LSA pmax pmax
comp=Z,65nm,1.1s
**PSI Prapat 47.69 251** P **P** **04 14 19.9 -0.9**
PSI pmax pmax
comp=Z,55nm,1.0s
**RPSI Rantau Prapat 47.74 251** P **P** **04 14 19.9 -1.1**
**ASAR Alice Springs 47.84 192** P **P** **04 14 19.8 -1.8**
comp=Z,5.0nm,0.7s,baz=17,slow=10,SNR=3.2
comp=Z,5.0nm,0.7s

**KOUNC Koumac, New Ca 48.33 153** P **P** **04 14 23.9 -1.4**
KOUNC lAmb lAmb 04 14 40.1
comp=Z,31nm,1.2s
**TIXI Tiksi 48.83 354** P **P** **04 14 28.5 -0.1**
TIXI lAmb lAmb 04 14 34.4
comp=Z,44nm,1.2s
**TIXI Tiksi 48.83 354** *i* P **P** **04 14 31.1 +2.5**
TIXI pmax pmax
comp=Z,30nm,1.1s
**GTK Tadong 49.31 286** *eP* **P** **04 14 33.9 +0.7**
**WMQ Urumqi 49.58 308** *eP* **P** **04 14 35.5 +0.6**
WMQ sP sP 04 14 45.8 -0.2
WMQ pmax pmax
comp=Z,41nm,1.5s
WMQ pmax pmax
comp=Z,2µm,11.8s
WMQ LR LR
comp=Z,16µm,22.7s
WMQ LR LR
comp=Z,12µm,24.0s
WMQ LR LR
comp=Z,15µm,24.2s
**GSI Gunungsitoli 49.60 250** P **P** **04 14 33.9 -1.4**
**DGZ Jazzator, Alta 50.53 316** *i* P **P** **04 14 42.0 -0.1**
DGZ pmax pmax
comp=Z,34nm,1.3s
**DZM Mont Dzumac 50.59 152** P **P** **04 14 42.4 -0.3**
DZM lAmb lAmb 04 14 55.5
comp=Z,36nm,1.1s
**DZM Mont Dzumac 50.59 152** P **P** **04 14 42.8 +0.1**
comp=Z,20nm,0.9s,baz=354,slow=8.9,SNR=8.9
comp=Z,20nm,0.9s
**K13K Kusilvak Mount 51.84 28** lAmb lAmb 04 15 00.7
comp=Z,35nm,1.4s
**K13K Kusilvak Mount 51.84 28** P **P** **04 14 53.6 +2.1**
baz=247
**M13K Dall Lake 51.86 30** P **P** **04 14 53.3 +1.6**
baz=249
**ZSN Zaisan 51.91 313** *eP* **P** **04 14 51.9 -0.4**
comp=Z,24nm,1.0s,baz=313
**ZSN Zaisan 51.91 313** *eP* **P** **04 14 51.9 -0.4**
ZSN pmax pmax
comp=Z,24nm,1.0s
**BOK Bokaro 52.36 283** *eP* **P** **04 14 56.6 +0.6**
BOK lAmb lAmb 04 15 10.3
comp=Z,92nm,0.8s
**N14K Kuskokwak Cree 52.48 31** P **P** **04 14 57.4 +1.2**
baz=251
**L14K Kuka Creek 52.49 29** P **P** **04 14 58.3 +1.9**
baz=249
**M14K Bethel 52.62 30** P **P** **04 14 57.5 +0.2**
M14K lAmb lAmb 04 15 06.2
comp=Z,33nm,0.9s
**M14K Bethel 52.62 30** P **P** **04 14 59.3 +2.0**
baz=250
**J14K Nanvaranak Lak 52.64 28** P **P** **04 14 59.1 +1.7**
baz=247
**ANM Nome 52.65 25** P **P** **04 14 59.2 +1.8**
baz=244
**F14K Arctic Creek 52.70 24** P **P** **04 14 58.8 +1.0**
baz=242
**ZAA0 Zalesovo Array 52.90 321** P **P** **04 14 59.1 -0.4**
**ZALV Zalesovo Beam 52.90 321** P **P** **04 14 59.3 -0.2**
**ZALV Zalesovo Beam 52.90 321** P **P** **04 14 58.9 -0.6**
comp=Z,6.8nm,0.6s,baz=106,slow=7.7,SNR=22
comp=Z,6.8nm,0.6s
**ZALV Zalesovo Beam 52.90 321** P **P** **04 14 59.3 -0.2**
**L15K Ungalak Mounta 53.15 29** P **P** **04 15 02.4 +1.2**
baz=250
**O15K Ungalikthiuk R 53.15 33** P **P** **04 15 02.1 +0.9**
baz=254
**M15K Kasigluk River 53.19 31** P **P** **04 15 02.7 +1.1**
baz=252
**N15K Kwethluk River 53.31 31** P **P** **04 15 03.1 +0.6**
N15K lAmb lAmb 04 15 20.4
comp=Z,24nm,0.8s
**N15K Kwethluk River 53.31 31** P **P** **04 15 03.6 +1.1**
baz=253
**K15K Wolf Creek Mou 53.34 29** P **P** **04 15 04.0 +1.4**
baz=250
**G15K Niukluk 53.35 25** P **P** **04 15 03.8 +1.2**
baz=245
**F15K North Star Dit 53.42 24** P **P** **04 15 04.1 +1.0**
baz=244
**MK31 Makanchi Array 53.61 312** P **P** **04 15 05.2 +0.3**
MK31 lAmb lAmb 04 15 06.7
comp=Z,30nm,1.1s
**MK31 Makanchi Array 53.61 312** *i* P **P** **04 15 05.0 +0.1**
MK31 pmax pmax
comp=Z,33nm,0.9s
**MKAR Makanchi Array 53.61 312** P **P** **04 15 05.2 +0.3**
**MKAR Makanchi Array 53.61 312** P **P** **04 15 05.0 +0.1**
comp=Z,12nm,0.6s,baz=92,slow=7.9,SNR=96
comp=Z,12nm,0.6s
**MKAR Makanchi Array 53.61 312** P **P** **04 15 05.2 +0.3**
**MAKZ Makanchi 53.83 312** P **P** **04 15 06.2 -0.3**
**MAKZ Makanchi 53.83 312** P **P** **04 15 06.2 -0.3**
MAKZ pmax pmax
comp=Z,50nm,1.1s
**R16K Pilot Point 53.89 35** P **P** **04 15 07.9 +1.2**
baz=257
**H16K Elim 53.91 26** P **P** **04 15 08.4 +1.7**
baz=247
**N16K Nishlik Lake 54.03 31** P **P** **04 15 09.0 +1.3**
baz=254
**L16K Owhat River 54.07 30** P **P** **04 15 09.1 +1.1**
baz=252
**J16K Anvik River 54.09 28** P **P** **04 15 09.3 +1.2**
**J16K Anvik River 54.09 28** P **P** **04 15 09.9 +1.9**
baz=250
**M16K Timber Creek 54.10 31** lAmb lAmb 04 15 29.2
comp=Z,22nm,1.1s
**M16K Timber Creek 54.10 31** P **P** **04 15 10.3 +2.1**
baz=253
**O16K Kokwok River B 54.12 32** P **P** **04 15 09.4 +1.1**
baz=255
**G16K Koyuk River 54.16 25** P **P** **04 15 09.6 +1.1**
baz=247
**I17K Unalakleet 54.26 27** lAmb lAmb 04 15 22.6
comp=Z,39nm,1.2s
**I17K Unalakleet 54.26 27** P **P** **04 15 10.9 +1.7**
baz=249
**C16K Lisburne Hills 54.36 21** P **P** **04 15 11.9 +2.0**
baz=242
**Q16K King Salmon 54.61 34** P **P** **04 15 14.2 +2.3**
baz=257
**O17K Koliganek Bris 54.65 32** P **P** **04 15 14.0 +1.8**
baz=256
**L17K Donlin 54.73 29** P **P** **04 15 14.8 +2.1**
baz=253
**J17K VABM Dome 54.77 28** P **P** **04 15 14.0 +0.9**
J17K lAmb lAmb 04 15 32.1
comp=Z,33nm,1.2s
**J17K VABM Dome 54.77 28** P **P** **04 15 14.2 +1.1**
baz=251
**N17K Nushagak Hills 54.80 31** P **P** **04 15 14.9 +1.6**
baz=255
**D17K Noatak River 54.85 22** P **P** **04 15 15.7 +2.2**
baz=244
**G17K Kiwalik Mounta 54.86 25** P **P** **04 15 15.5 +1.9**
baz=248
**K17K Iditarod 54.90 29** P **P** **04 15 14.5 +0.5**
**K17K Iditarod 54.90 29** P **P** **04 15 16.3 +2.3**
baz=253
**M17K Holitna River 54.91 30** lAmb lAmb 04 15 36.9
comp=Z,34nm,0.9s
**M17K Holitna River 54.91 30** P **P** **04 15 16.2 +2.1**
baz=254
**H17K Granite Mounta 54.95 26** P **P** **04 15 15.7 +1.4**
baz=250
**F17K Baldwin Pennin 54.99 24** P **P** **04 15 15.5 +1.0**
F17K lAmb lAmb 04 15 27.9
comp=Z,32nm,1.0s
**F17K Baldwin Pennin 54.99 24** P **P** **04 15 15.8 +1.2**
baz=247
**E17K Hotham Inlet 55.04 23** P **P** **04 15 16.4 +1.5**
baz=246
**RDOG Red Dog Mine 55.07 22** P **P** **04 15 16.9 +1.7**
baz=244
**STKA Stephens Creek 55.15 182** P **P** **04 15 15.1 -1.0**
comp=Z,15nm,0.8s,baz=357,slow=11,SNR=3.4
comp=Z,15nm,0.8s
**C17K DeLong Mountai 55.16 21** P **P** **04 15 17.5 +1.7**
baz=244
**SEM Semipalatinsk 55.21 316** *eP* **P** **04 15 16.1 -0.7**
comp=Z,18nm,0.7s,baz=316
**SEM Semipalatinsk 55.21 316** *eP* **P** **04 15 16.0 -0.7**

SEM pmax pmax
comp=Z,19nm,0.7s
**Q18K Katmai Hardscr 55.45 34** P **P** **04 15 18.2 +0.1**
baz=258
**N18K Kilae Creek 55.46 31** P **P** **04 15 19.2 +1.1**
baz=256
**L18K Granite Mounta 55.48 29** P **P** **04 15 19.5 +1.4**
L18K lAmb lAmb 04 15 32.5
comp=Z,46nm,1.4s
**L18K Granite Mounta 55.48 29** P **P** **04 15 20.0 +1.8**
baz=254
**PDGK Podgornoye 55.52 307** P **P** **04 15 18.9 -0.1**
**R18K Karluk 55.53 35** P **P** **04 15 19.4 +0.8**
baz=260
**SHLS Shalkode 55.55 307** *eP* **P** **04 15 16.0 -3.2**
comp=Z,30nm,1.2s,baz=307
**SHLS Shalkode 55.55 307** *eP* **P** **04 15 15.9 -3.2**
SHLS pmax pmax
comp=Z,30nm,1.2s
**O18K Koktuh Hills 55.60 32** P **P** **04 15 20.9 +1.8**
baz=258
**E18K Tukpahlearik C 55.61 23** lAmb lAmb 04 15 33.1
comp=Z,24nm,0.9s
**E18K Tukpahlearik C 55.61 23** P **P** **04 15 20.8 +1.7**
baz=247
**H18K Honhosa River 55.64 26** lAmb lAmb 04 15 37.6
comp=Z,35nm,1.2s
**H18K Honhosa River 55.64 26** P **P** **04 15 20.9 +1.6**
baz=251
**F18K Selawik 55.64 24** P **P** **04 15 21.4 +2.2**
baz=249
**RAGD RAYAGADA 55.65 278** *eP* **P** **04 15 21.4 +1.4**
**ALBI Allahabad 55.67 285** *eP* **P** **04 15 19.7 -0.5**
**M18K Stony River 55.68 30** P **P** **04 15 21.7 +2.1**
baz=256
**G18K Tagagawik 55.77 25** P **P** **04 15 20.9 +0.7**
G18K lAmb lAmb 04 15 33.0
comp=Z,28nm,1.1s
**G18K Tagagawik 55.77 25** P **P** **04 15 22.3 +2.0**
baz=250,SNR=11
**J18K Innoko River 55.81 28** P **P** **04 15 22.1 +1.6**
baz=254
**UZB Uzynbulak 55.87 307** *eP* **P** **04 15 20.6 -0.9**
baz=307
**UZB Uzynbulak 55.87 307** *eP* **P** **04 15 20.6 -0.9**
**C18K Utukok River 55.90 21** P **P** **04 15 22.5 +1.3**
baz=246
**B18K Kokolik River 56.00 20** P **P** **04 15 22.5 +0.7**
baz=245
**OHAK Old Harbor 56.10 36** P **P** **04 15 23.1 +0.4**
**OHAK Old Harbor 56.10 36** P **P** **04 15 23.2 +0.6**
baz=261
**BLSP Bilaspur 56.10 282** *eP* **P** **04 15 23.5 +0.2**
**KPKS Kokpek 56.11 308** *eP* **P** **04 15 22.2 -0.9**
comp=Z,32nm,1.2s,baz=308
**KPKS Kokpek 56.11 308** *eP* **P** **04 15 22.2 -0.9**
KPKS pmax pmax
comp=Z,32nm,1.2s
**O19K Port Alsworth 56.11 32** lAmb lAmb 04 15 44.5
comp=Z,27nm,0.8s
**O19K Port Alsworth 56.11 32** P **P** **04 15 24.1 +1.4**
baz=258
**GCSA Galena City Sc 56.11 27** P **P** **04 15 24.0 +1.4**
baz=253
**N19K Bonanza Creek 56.16 31** P **P** **04 15 24.8 +1.6**
baz=258
**Q19K Cape Douglas, 56.20 34** P **P** **04 15 24.3 +0.9**
baz=260
**LGTI Lohaghat 56.24 291** *eP* **P** **04 15 25.5 +1.4**
**PTH Pithoragarh 56.25 291** *eP* **P** **04 15 24.9 +0.4**
**KURK Kurchatov 56.27 316** P **P** **04 15 24.3 +0.3**
**KURK Kurchatov 56.27 316** *ce*P **P** **04 15 23.6 -0.4**
KURK pmax pmax
comp=Z,108nm,1.3s
**ZHN Zhinishke 56.30 307** *eP* **P** **04 15 23.7 -0.8**
comp=Z,29nm,1.2s,baz=307
**ZHN Zhinishke 56.30 307** *eP* **P** **04 15 23.7 -0.8**
ZHN pmax pmax
comp=Z,29nm,1.2s
**L19K White Mountain 56.30 30** lAmb lAmb 04 15 45.0
comp=Z,25nm,1.1s
**L19K White Mountain 56.30 30** P **P** **04 15 26.3 +2.2**
baz=256
**SATY Saty 56.32 307** *eP* **P** **04 15 24.0 -0.8**
comp=Z,16nm,0.9s,baz=307
**SATY Saty 56.32 307** *eP* **P** **04 15 23.9 -0.8**
SATY pmax pmax
comp=Z,16nm,0.9s
**KURBB Kurchatov Arra 56.32 316** P **P** **04 15 24.2 -0.1**
comp=Z,35nm,0.7s,baz=93,slow=7.7,SNR=177
comp=Z,35nm,0.7s
**J19K Poorman 56.42 28** lAmb lAmb 04 15 45.7
comp=Z,44nm,1.2s
**J19K Poorman 56.42 28** P **P** **04 15 27.0 +2.1**
baz=254,SNR=11
**F19K Shaleruckik Mo 56.43 24** P **P** **04 15 26.6 +1.7**
baz=250
**G19K Purcell Mounta 56.46 25** P **P** **04 15 26.5 +1.4**
G19K lAmb lAmb 04 15 37.8
comp=Z,25nm,1.2s
**G19K Purcell Mounta 56.46 25** P **P** **04 15 26.8 +1.7**
baz=252,SNR=5.6
**H19K Roundabout Mou 56.52 26** P **P** **04 15 28.0 +2.5**
baz=253,SNR=13
**A19K Wainwright 56.59 20** P **P** **04 15 27.9 +2.0**
baz=245
**C19K Lookout Ridge 56.61 21** lAmb lAmb 04 15 30.9
comp=Z,27nm,0.9s
**C19K Lookout Ridge 56.61 21** P **P** **04 15 28.6 +2.3**
baz=247
**JOSI Joshimath 56.64 292** *eP* **P** **04 15 27.9 +0.6**
**Q20K Shuyak Island 56.79 34** P **P** **04 15 29.3 +1.8**
baz=261
**HNLY HANLEY 56.79 295** *eP* **P** **04 15 30.1 +1.4**
**L20K Farewell, AK 56.81 30** P **P** **04 15 30.0 +2.2**
baz=257
**E19K Redstone River 56.83 23** lAmb lAmb 04 15 41.1
comp=Z,29nm,0.9s
**E19K Redstone River 56.83 23** P **P** **04 15 29.8 +2.0**
baz=251
**D19K Kuna River 56.88 22** lAmb lAmb 04 15 46.2
comp=Z,25nm,1.0s
**D19K Kuna River 56.88 22** P **P** **04 15 30.0 +1.8**
baz=249
**K20K Telida 56.93 29** lAmb lAmb 04 15 42.0
comp=Z,52nm,1.4s
**K20K Telida 56.93 29** P **P** **04 15 30.5 +2.0**
baz=256
**M20K Styx River 57.02 30** lAmb lAmb 04 15 50.5
comp=Z,23nm,1.0s
**M20K Styx River 57.02 30** P **P** **04 15 31.7 +2.4**
baz=258
**J20K Nowinta River 57.09 28** P **P** **04 15 30.9 +1.2**
**J20K Nowinta River 57.09 28** P **P** **04 15 32.4 +2.7**
baz=256,SNR=17
**I20K Naaghedeneel 57.11 27** P **P** **04 15 31.9 +2.2**
baz=255
**H20K Anotleneega Mo 57.14 26** P **P** **04 15 32.4 +2.4**
baz=254,SNR=18
**F20K Avaraart Lake 57.26 24** P **P** **04 15 33.8 +3.1**
baz=252
**MDOK Medeo 57.31 307** *eP* **P** **04 15 30.9 -0.8**
baz=307
**MDOK Medeo 57.31 307** *eP* **P** **04 15 30.9 -0.8**
**CHKK Chushkaly 57.32 308** *eP* **P** **04 15 31.2 -0.5**
baz=308
**CHKK Chushkaly 57.32 308** *eP* **P** **04 15 31.1 -0.5**
**N20K Mount Spurr 57.32 31** P **P** **04 15 33.6 +2.2**
baz=259
**SPCR Spurr Chakacha 57.32 31** P **P** **04 15 33.6 +2.2**
baz=259
**HOM Homer 57.34 33** P **P** **04 15 33.2 +1.7**
baz=261
**TNSS Tian-Shan 57.39 307** *eP* **P** **04 15 31.8 -0.9**
baz=307
**TNSS Tian-Shan 57.39 307** *eP* **P** **04 15 31.7 -0.9**
**AAA Alma-Ata 57.41 307** *eP* **P** **04 15 31.5 -0.8**
comp=Z,20nm,0.9s,baz=307
**AAA Alma-Ata 57.41 307** *eP* **P** **04 15 31.5 -0.8**
AAA pmax pmax
comp=Z,21nm,0.9s
**E20K Nigu River 57.47 23** P **P** **04 15 34.6 +2.3**
baz=251
**D20K Etivluk River 57.47 22** P **P** **04 15 34.2 +1.9**
baz=250,SNR=5.6
**KLP Kalpa 57.59 293** *eP* **P** **04 15 34.1 0.0**
KLP lAmb lAmb 04 15 45.6

comp=Z,82nm,0.8s
IMAR **Indian Mountai** 57.72 26 P P 04 15 35.1 +1.1
B20K **Meade River** 57.74 20 P P 04 15 36.3 +2.2
baz=249
CAPN **Captain Cook N** 57.76 32 P P 04 15 36.4 +2.1
baz=261
SKT **Skwentna** 57.78 30 P P 04 15 35.9 +1.3
baz=260
KUU **Kurty** 57.79 308 eP P 04 15 34.3 -0.7
comp=Z,21nm,0.7s,baz=308
KUU **Kurty** 57.79 308 eP P 04 15 34.2 -0.7
KUU pmax pmax
comp=Z,21nm,0.7s
BRSE **Bradley Lake S** 57.80 33 P P 04 15 36.2 +1.5
baz=262
G21K **Allakaket** 57.95 25 P P 04 15 37.5 +1.8
G21K IAmb IAmb 04 15 49.0
comp=Z,21nm,1.1s
G21K **Allakaket** 57.95 25 P P 04 15 37.4 +1.7
baz=255,SNR=9.8
ULHL **Ulahol** 57.96 306 P P 04 15 37.4 +1.0
SNR=17
DDI **Dehra Dun** 57.96 292 eP P 04 15 36.4 0.0
DDI IAmb IAmb 04 15 54.5
comp=Z,142nm,1.2s
H21K **Melozitna Rive** 58.01 26 IAmb IAmb 04 15 54.5
comp=Z,18nm,0.8s
H21K **Melozitna Rive** 58.01 26 P P 04 15 37.6 +1.5
baz=256,SNR=18
F21K **Alatna River** 58.15 24 P P 04 15 38.5 +1.4
baz=254
BOOM **Boomskoye usch** 58.16 306 P P 04 15 38.9 +1.1
BOOM **Boomskoye usch** 58.16 306 P P 04 15 38.9 +1.1
BOOM pmax pmax
comp=Z,44nm,0.8s
C21K **Knifeblade Rid** 58.24 22 P P 04 15 39.7 +2.0
baz=252
E21K **Killik River** 58.31 23 IAmb IAmb 04 15 56.3
comp=Z,34nm,1.1s
E21K **Killik River** 58.31 23 P P 04 15 40.7 +2.5
baz=253
KSH **Kashi** 58.38 303 P P 04 15 43.3 +4.0
KSH pP pP 04 15 47.8 +0.4
KSH pmax pmax
comp=Z,66nm,0.8s
KSH LR LR
comp=Z,8μm,28.9s
KSH LR LR
comp=Z,6μm,24.0s
KSH LR LR
comp=Z,14μm,22.3s
TKM2 **Tokmak 2** 58.39 307 P P 04 15 40.5 +1.1
SNR=27
TKM2 **Tokmak 2** 58.39 307 i P P 04 15 40.5 +1.1
TKM2 pmax pmax
comp=Z,135nm,2.0s
M22K **Willow** 58.41 31 P P 04 15 40.7 +1.8
baz=261
BPAW **Bear Paw Mtn.** 58.43 28 IAmb IAmb 04 15 55.9
comp=Z,19nm,0.9s
BPAW **Bear Paw Mtn.** 58.43 28 P P 04 15 40.9 +1.9
baz=259,SNR=9.3
B21K **Ikpikpuk River** 58.45 21 IAmb IAmb 04 15 59.7
comp=Z,26nm,1.1s
B21K **Ikpikpuk River** 58.45 21 P P 04 15 41.1 +2.1
baz=252
RC01 **Rabbit Creek A** 58.49 32 P P 04 15 39.8 +0.3
RC01 IAmb IAmb 04 15 59.1
comp=Z,38nm,1.2s
RC01 **Rabbit Creek A** 58.49 32 P P 04 15 40.5 +1.0
baz=262
SEW **Seward** 58.49 33 P P 04 15 41.3 +1.8
baz=263
JHNI **Jhansi** 58.52 286 eP P 04 15 38.2 -2.1
SMLA **Simla** 58.57 293 eP P 04 15 39.4 -1.1
SMLA IAmb IAmb 04 15 59.5
comp=Z,177nm,1.0s
H22K **Ishtalitna Cre** 58.64 26 P P 04 15 42.2 +1.7
baz=257
F22K **John River** 58.71 24 P P 04 15 43.5 +2.5
baz=256
MLY **Manley** 58.72 27 IAmb IAmb 04 15 54.2
comp=Z,31nm,1.2s
MLY **Manley** 58.72 27 P P 04 15 43.4 +2.3
baz=258,SNR=16
A22K **Sinclair Lake** 58.77 20 P P 04 15 43.5 +2.2
baz=251
G22K **Bettles** 58.82 25 P P 04 15 43.8 +2.1
baz=257
PMR **Palmer** 58.85 31 IAmb IAmb 04 16 02.1
comp=Z,27nm,0.9s
PMR **Palmer** 58.85 31 P P 04 15 43.5 +1.5
baz=262,SNR=7.1
KBK **Karagaybulak** 58.88 307 P P 04 15 45.1 +2.3
SNR=7.2
D22K **Ayikyaya River** 58.89 22 P P 04 15 44.5 +2.3
baz=254,SNR=8.9
GHO **Glory Hole Cre** 58.97 31 IAmb IAmb 04 15 58.8
comp=Z,23nm,0.9s
NDI **New Delhi** 58.99 290 eP P 04 15 43.4 -0.1
CHMS **Chumysh** 59.00 307 P P 04 15 44.2 +0.7
SNR=14
E22K **Anaktuvuk Pass** 59.00 23 IAmb IAmb 04 16 04.5
comp=Z,24nm,1.1s
E22K **Anaktuvuk Pass** 59.00 23 P P 04 15 45.5 +2.5
baz=256
B22K **Teshekpuk Lake** 59.06 21 P P 04 15 44.9 +1.7
baz=253
DHRM **DHARAMSHALA** 59.10 295 eP P 04 15 44.3 -0.2
DHRM IAmb IAmb 04 15 59.2
comp=Z,242nm,1.3s
PWL **Port Wells** 59.14 32 P P 04 15 45.0 +1.0
baz=263
KNK **Knik Glacier** 59.14 31 P P 04 15 45.6 +1.5
baz=263
BHK **Bhakra** 59.15 294 eP P 04 15 45.3 +0.7
BHK IAmb IAmb 04 15 50.0
comp=Z,288nm,1.0s
USP **Ospenovka** 59.16 307 P P 04 15 45.1 +0.6
SNR=14
AAK **Ala-Archa** 59.22 307 P P 04 15 45.9 +0.8
SNR=8.0
AAK **Ala-Archa** 59.22 307 P P 04 15 45.3 +0.1
AAK IAmb IAmb 04 15 51.8
comp=Z,24nm,0.9s
AAK **Ala-Archa** 59.22 307 P P 04 15 46.0 +0.9
AAK **Ala-Archa** 59.22 307 ceP P 04 15 45.2 +0.1
AAK pmax pmax
comp=Z,49nm,1.3s
UCH **Uchtor** 59.24 306 P P 04 15 47.3 +1.7
SNR=11
RND **Reindeer** 59.24 29 IAmb IAmb 04 16 01.5
comp=Z,27nm,0.9s
SML **Sawmill** 59.26 31 P P 04 15 45.3 +0.4
SML **Sawmill** 59.26 31 P P 04 15 46.2 +1.3
baz=263,SNR=9.7
MCK **McKinley** 59.26 29 P P 04 15 46.0 +1.1
baz=261,SNR=8.7
WAT1 **Susitna Watana** 59.29 30 P P 04 15 46.0 +0.9
baz=262
I23K **Minto, Yukon-K** 59.31 27 IAmb IAmb 04 16 03.6
comp=Z,14nm,0.8s
I23K **Minto, Yukon-K** 59.31 27 P P 04 15 46.6 +1.5
baz=260,SNR=6.5
NEA2 **Nenana** 59.34 28 IAmb IAmb 04 16 03.6
comp=Z,18nm,0.9s
NEA2 **Nenana** 59.34 28 P P 04 15 46.6 +1.2
baz=260,SNR=12
G23K **Bananza Creek** 59.35 25 P P 04 15 47.1 +1.7
baz=258,SNR=13
H23K **Yukon River** 59.37 26 IAmb IAmb 04 15 59.0
comp=Z,34nm,1.1s
H23K **Yukon River** 59.37 26 P P 04 15 47.4 +1.8
baz=259,SNR=14
BTLS **Baital** 59.37 310 eP P 04 15 45.3 -0.6
comp=Z,11nm,0.8s,baz=310
BTLS **Baital** 59.37 310 eP P 04 15 45.2 -0.6
BTLS pmax pmax
comp=Z,11nm,0.8s
COLD **Coldfoot** 59.39 24 P P 04 15 47.6 +2.0
baz=258
M23K **Glacier View** 59.54 31 P P 04 15 48.8 +2.0
baz=263
THN **Thein Dam** 59.56 295 eP P 04 15 47.3 -0.1
D23K **Nanushuk River** 59.61 22 P P 04 15 49.0 +1.9
baz=256,SNR=8.8
WAT6 **Susitna Watana** 59.63 30 P P 04 15 48.9 +1.3
baz=263,SNR=8.5
SCM **Sheep Creek Mo** 59.73 31 P P 04 15 49.9 +1.7
baz=264,SNR=9.2
GLI **Glacier Island** 59.74 32 IAmb IAmb 04 15 55.4
comp=Z,33nm,1.0s
GLI **Glacier Island** 59.74 32 P P 04 15 48.7 +0.5
baz=264,SNR=5.5
EKS2 **Erkin-Say** 59.74 307 P P 04 15 49.5 +0.8
SNR=17
MDM **Murphy Dome** 59.76 27 P P 04 15 48.9 +0.6
MDM IAmb IAmb 04 15 55.0
comp=Z,28nm,1.3s
GUNA **GUNA** 59.78 286 eP P 04 15 48.4 -0.7
E23K **Chandalar** 59.79 24 P P 04 15 50.8 +2.3
baz=258,SNR=15
C23K **Itkillik River** 59.84 21 P P 04 15 51.0 +2.3
baz=256,SNR=13
AML **Almayashu** 59.85 306 P P 04 15 51.1 +1.4
SNR=37
DHY **Denali Highway** 59.86 29 P P 04 15 50.9 +1.8
baz=263
CCB **Clear Creek Bu** 59.89 28 IAmb IAmb 04 15 55.1
comp=Z,27nm,1.4s
COLA **College** 59.90 27 P P 04 15 51.2 +2.0
baz=261
TOLK **Toolik Lake Re** 59.93 23 IAmb IAmb 04 16 02.9
comp=Z,24nm,1.2s
TOLK **Toolik Lake Re** 59.93 23 P P 04 15 51.4 +2.0
baz=258
Q23K **Middleton Isla** 59.99 34 P P 04 15 51.2 +1.3
baz=266
H24K **Noodor Dome** 60.04 26 P P 04 15 52.6 +2.4
baz=261,SNR=17
POKR **Poker Plat Res** 60.11 27 IAmb IAmb 04 15 55.2
comp=Z,24nm,1.1s
POKR **Poker Plat Res** 60.11 27 P P 04 15 52.0 +1.3
baz=262,SNR=17
E24K **Your Creek** 60.20 24 P P 04 15 53.8 +2.5
baz=259
HDA **Harding Lake** 60.22 28 IAmb IAmb 04 16 07.8
comp=Z,16nm,0.9s
HDA **Harding Lake** 60.22 28 P P 04 15 52.2 +0.8
baz=262,SNR=8.0
IL31 60.30 28 IAmb IAmb 04 15 54.7
comp=Z,19nm,0.9s
ILAR **Eielson Array** 60.30 28 P P 04 15 50.6 -1.3
ILAR **Eielson Array** 60.30 28 P P 04 15 51.1 -0.8
comp=Z,15nm,0.9s,baz=257,slow=4.9,SNR=54
comp=Z,15nm,0.9s
M24K **Tolsona, Glenn** 60.30 31 P P 04 15 54.2 +2.1
baz=264
D24K **Happy Valley** 60.30 22 P P 04 15 53.8 +1.9
D24K IAmb IAmb 04 16 00.6
comp=Z,28nm,1.1s
D24K **Happy Valley** 60.30 22 P P 04 15 53.7 +1.9
baz=258
F24K **Squaw Lake** 60.33 24 IAmb IAmb 04 16 10.9
comp=Z,31nm,1.4s
F24K **Squaw Lake** 60.33 24 P P 04 15 54.3 +2.2
baz=260,SNR=5.4
G24K **Hadweenzic Riv** 60.34 25 IAmb IAmb 04 16 05.8
comp=Z,38nm,1.2s
G24K **Hadweenzic Riv** 60.34 25 P P 04 15 55.0 +2.8
baz=261,SNR=18
OTUK **Ortayu** 60.36 313 P P 04 15 52.4 -0.3
KLU **Klutina** 60.36 31 IAmb IAmb 04 16 10.3
comp=Z,28nm,1.0s
KLU **Klutina** 60.36 31 P P 04 15 54.1 +1.6
baz=265,SNR=5.5
EYAK **Cordova Ski Ar** 60.37 32 P P 04 15 54.2 +1.8
baz=266
C24K **Franklin Bluff** 60.47 22 P P 04 15 54.6 +1.6
baz=258
ARSB **Arlanbob** 60.47 305 IAmb IAmb 04 16 03.8
comp=Z,42nm,1.3s
HYB **Hyderabad** 60.63 277 eP P 04 15 54.6 -0.4
K24K **Donnelly Dome** 60.66 29 P P 04 15 56.2 +1.7
baz=264
PAX **Paxson** 60.71 30 P P 04 15 55.8 +0.9
baz=265,SNR=10
HARP **HAARP** 60.80 30 P P 04 15 57.4 +1.9
baz=265
RAGM **Ragged Mountai** 60.89 33 P P 04 15 57.4 +1.3
RAGM IAmb IAmb 04 16 01.8
comp=Z,29nm,1.1s
G25K **Bearman Lake** 60.89 25 P P 04 15 57.5 +1.6
baz=262
J25K **Salcha River,** 60.92 28 P P 04 15 56.9 +0.6
baz=264,SNR=9.0
H25L **Birch Creek** 60.94 26 P P 04 15 57.5 +1.3
baz=262
BMRM **Bremner River** 60.96 32 P P 04 15 58.4 +1.9
baz=266,SNR=7.0
KAIM **Kayak Island** 60.99 33 P P 04 15 57.6 +0.8
KAIM **Kayak Island** 60.99 33 P P 04 15 58.2 +1.4
baz=267
N25K **Chitina, Valde** 61.01 31 P P 04 15 58.0 +1.1
baz=266
RIDG **Independent Ri** 61.06 29 P P 04 15 57.8 +0.5
RIDG **Independent Ri** 61.06 29 P P 04 15 58.9 +1.6
baz=265,SNR=12
AKL **Akola** 61.08 281 eP P 04 15 57.6 -0.4
F25K **Christian Rive** 61.19 24 IAmb IAmb 04 16 12.1
comp=Z,32nm,1.2s
F25K **Christian Rive** 61.19 24 P P 04 16 00.3 +2.2
baz=262,SNR=14
D25K **Kavik River** 61.19 22 P P 04 16 00.2 +2.2
baz=260
FYU **Fort Yukon** 61.21 26 IAmb IAmb 04 16 03.0
comp=Z,34nm,1.1s
NIL **Nilore** 61.38 297 P P 04 16 00.3 +0.4
NIL **Nilore** 61.38 297 P P 04 16 00.3 +0.4
NIL pmax pmax
comp=Z,274nm,1.3s
BVA0 **Borovoye Array** 61.41 319 i P P 04 16 00.0 +0.3
BVAR **Borovoye Array** 61.41 319 P P 04 15 59.9 +0.2
comp=Z,82nm,0.7s,baz=91,slow=7.9,SNR=159
SCRK **Sand Creek** 61.46 29 P P 04 16 01.4 +1.4
baz=265,SNR=36
BRVK **Borovoye** 61.47 319 P P 04 16 00.5 +0.3
BRVK **Borovoye** 61.47 319 ceP P 04 16 00.4 +0.3
BRVK pmax pmax
comp=Z,119nm,1.3s
NWAO **Narrogin (SRO)** 61.47 205 P P 04 16 01.6 +1.3
comp=Z,204nm,0.5s,baz=24,slow=13,SNR=6.2
VRDI **Verde Repeater** 61.53 32 IAmb IAmb 04 16 18.1
comp=Z,29nm,1.1s
BMAR **Burnt Mountain** 61.57 25 P P 04 16 02.3 +1.7
L26K **Log Cabin Wild** 61.68 30 P P 04 16 03.1 +1.7
baz=266
CRQE **Cirque** 61.69 32 P P 04 16 03.5 +1.9
baz=268,SNR=9.9
J26L **Joseph Creek** 61.69 28 P P 04 16 02.8 +1.3
baz=266,SNR=24
MCARA **McCarthy VSAT** 61.75 32 P P 04 16 02.6 +0.7
baz=268
F26K **Sheenjek River** 61.77 24 P P 04 16 04.3 +2.4
baz=263,SNR=13
C26K **Camden Bay** 61.79 22 P P 04 16 04.0 +2.0
baz=261
M26K **Nabesna, AK** 61.81 30 IAmb IAmb 04 16 20.7
comp=Z,26nm,1.5s
M26K **Nabesna, AK** 61.81 30 P P 04 16 03.7 +1.4
baz=267
G26K **Porcupine Rive** 61.82 25 P P 04 16 04.0 +1.8
baz=264,SNR=19
I26K **Coal Creek Min** 61.93 27 P P 04 16 03.5 +0.6
baz=266
ISLE **Juniper Island** 62.05 33 IAmb IAmb 04 16 23.6
comp=Z,21nm,0.9s
KK31 **Karatay Array** 62.08 308 P P 04 16 05.3 +0.9
KK31 **Karatay Array** 62.08 308 P P 04 16 05.3 +0.9
KK31 pmax pmax
comp=Z,41nm,0.9s
KKAR **Karatay Array** 62.08 308 P P 04 16 05.0 +0.5
KKAR **Karatay Array** 62.08 308 P P 04 16 05.0 +0.5
MESA **MESA** 62.24 33 P P 04 16 07.1 +1.7
baz=269
K27K **Chicken** 62.31 29 IAmb IAmb 04 16 24.1
comp=Z,26nm,1.4s
K27K **Chicken** 62.31 29 P P 04 16 07.5 +2.0
baz=267
M27K **Edge Creek, AK** 62.33 31 IAmb IAmb 04 16 11.7
comp=Z,17nm,1.2s
M27K **Edge Creek, AK** 62.33 31 P P 04 16 06.9 +1.1
baz=268
GRNC **Granite Creek** 62.35 32 IAmb IAmb 04 16 18.5
comp=Z,24nm,1.1s
L27K **Beaver Creek,** 62.37 30 IAmb IAmb 04 16 23.7
comp=Z,15nm,1.0s
L27K **Beaver Creek,** 62.37 30 P P 04 16 07.1 +1.0
baz=268,SNR=8.0
BCAR **Beaver Creek A** 62.39 30 P P 04 16 06.2 0.0
CTG **Chitna Glacier** 62.55 32 P P 04 16 08.3 +0.9
baz=269
BRLS **Boroldav** 62.58 308 eP P 04 16 08.1 +0.2
baz=307
BRLS **Boroldav** 62.58 308 eP P 04 16 08.0 +0.2
I27K **Kandik River** 62.59 27 P P 04 16 08.9 +1.4
baz=267,SNR=7.8
TABL **Table Mountain** 62.65 33 IAmb IAmb 04 16 24.5
comp=Z,24nm,1.0s
G27K **Doyon Strip** 62.65 26 P P 04 16 09.6 +1.7
baz=266
H27K **Steamboat Moun** 62.66 26 P P 04 16 09.3 +1.3
baz=266,SNR=21
EGAK **Eagle** 62.74 28 P P 04 16 09.4 +1.0
baz=268
E27K **Coleen River** 62.78 24 IAmb IAmb 04 16 22.2
comp=Z,17nm,1.1s
E27K **Coleen River** 62.78 24 P P 04 16 10.7 +2.1
baz=265,SNR=10
YUK3 **Moose Creek** 62.98 31 P P 04 16 12.0 +1.7
baz=270
PINM **Pinnacle** 63.09 33 P P 04 16 12.5 +1.5
baz=271
D27M **Malcolm River** 63.09 23 IAmb IAmb 04 16 30.0
comp=Z,25nm,1.1s
D27M **Malcolm River** 63.09 23 P P 04 16 12.7 +1.9
baz=266
O28M **Mount Upton** 63.11 32 P P 04 16 12.8 +1.5
baz=270,SNR=7.6
I28M **Miner Creek** 63.28 27 P P 04 16 14.1 +1.9
baz=268,SNR=13
YUK8 **Steele Glacier** 63.32 32 P P 04 16 13.8 +1.1
baz=271
F28M **Old Crow** 63.39 25 P P 04 16 14.5 +1.8
baz=267,SNR=6.1
DAWY **Dawson** 63.49 29 IAmb IAmb 04 16 26.4
comp=Z,17nm,1.2s
DAWY **Dawson** 63.49 29 P P 04 16 15.5 +2.1
baz=270,SNR=7.8
PNL **Peninsula** 63.53 34 P P 04 16 15.7 +1.9
baz=272
E28M **Babbage River** 63.57 24 P P 04 16 16.1 +2.2
baz=267,SNR=18
CHGR **Chuyangaron** 63.76 303 P P 04 16 15.6 -0.1
CHGR **Chuyangaron** 63.76 303 P P 04 16 15.6 -0.1
CHGR pmax pmax
comp=Z,465nm,1.0s
YUK4 **Talbot Arm** 63.85 32 P P 04 16 18.1 +2.0
baz=272,SNR=11
SIMJ **Simiganj** 63.87 303 P P 04 16 16.8 +0.3
D28M **Stokes Point** 63.89 23 P P 04 16 18.2 +2.3
baz=268
M29M **Somme Creek** 63.92 30 IAmb IAmb 04 16 35.2
comp=Z,24nm,1.0s
M29M **Somme Creek** 63.92 30 P P 04 16 18.1 +1.7
baz=271,SNR=19
O29M **Mount Kennedy** 63.92 33 P P 04 16 18.5 +2.0
baz=272,SNR=13
H29M **Whitestone** 63.94 26 IAmb IAmb 04 16 34.5
comp=Z,23nm,1.0s
H29M **Whitestone** 63.94 26 P P 04 16 18.7 +2.3
baz=269,SNR=7.2
I29M **Ogilvie Camp,** 63.96 27 IAmb IAmb 04 16 24.4
comp=Z,35nm,1.4s
I29M **Ogilvie Camp,** 63.96 27 P P 04 16 17.6 +1.1
baz=270,SNR=13
J29N **Klondike Camp** 64.00 28 IAmb IAmb 04 16 21.3
comp=Z,19nm,1.1s
J29N **Klondike Camp** 64.00 28 P P 04 16 18.5 +1.6
baz=270
KOD **Kodaikanal** 64.00 270 eP P 04 16 16.8 -1.1
YUK6 **Outpost Mounta** 64.00 32 P P 04 16 18.8 +1.6
baz=272
G29M **Pine Creek** 64.09 25 IAmb IAmb 04 16 29.4
comp=Z,25nm,1.1s
G29M **Pine Creek** 64.09 25 P P 04 16 20.1 +2.7
baz=269,SNR=12
E29M **Blow River** 64.16 24 IAmb IAmb 04 16 36.1
comp=Z,31nm,1.3s
E29M **Blow River** 64.16 24 P P 04 16 19.6 +1.8
baz=269,SNR=11
K29M **Barlow Dome** 64.31 29 IAmb IAmb 04 16 37.7
comp=Z,24nm,1.2s
K29M **Barlow Dome** 64.31 29 P P 04 16 21.1 +2.1
baz=271,SNR=14
P29M **Windy Craggy** 64.37 34 IAmb IAmb 04 16 38.3
comp=Z,27nm,0.9s
P29M **Windy Craggy** 64.37 34 P P 04 16 21.2 +1.8
baz=273,SNR=10.0
N30M **Aishikik Lake** 64.60 32 IAmb IAmb 04 16 39.0
comp=Z,17nm,1.0s
N30M **Aishikik Lake** 64.60 32 P P 04 16 23.1 +2.3
baz=273,SNR=10
EPYK **Eagle Plains** 64.61 26 P P 04 16 21.7 +0.9
EPYK **Eagle Plains** 64.61 26 P P 04 16 22.9 +2.1
baz=271,SNR=15
KBL **Kabul** 64.63 298 P P 04 16 21.9 +0.2
KBL **Kabul** 64.63 298 P P 04 16 21.9 +0.2
KBL pmax pmax
comp=Z,227nm,1.2s
KAD **Karad** 64.64 279 eP P 04 16 22.0 +0.2
I30M **Mount Dempster** 64.77 27 IAmb IAmb 04 16 35.9
comp=Z,29nm,1.5s
I30M **Mount Dempster** 64.77 27 P P 04 16 23.4 +1.4
baz=272,SNR=7.7
G30M **tAoh Zrail Nji** 64.80 25 P P 04 16 23.4 +1.4
baz=271,SNR=11
J30M **Hart River** 64.81 28 P P 04 16 24.4 +2.1
baz=272,SNR=9.7
F30M **Barrier River** 64.95 25 P P 04 16 25.5 +2.5
baz=271,SNR=5.3
PLBC **Pleasant Camp** 65.08 34 P P 04 16 25.6 +1.7
baz=274,SNR=8.8
O30N **Mendenhall** 65.12 32 IAmb IAmb 04 16 42.1
comp=Z,16nm,1.1s
O30N **Mendenhall** 65.12 32 P P 04 16 26.1 +1.8
baz=274
N31M **Braeburn, Yuko** 65.22 31 IAmb IAmb 04 16 43.7
comp=Z,19nm,0.9s
N31M **Braeburn, Yuko** 65.22 31 P P 04 16 26.7 +1.8
baz=274,SNR=12
S31K **Pelican** 65.28 35 IAmb IAmb 04 16 43.2
comp=Z,23nm,1.1s
S31K **Pelican** 65.28 35 P P 04 16 27.1 +1.9
baz=275
G31M **Satah River** 65.57 25 P P 04 16 28.7 +1.8
baz=273,SNR=18
SKAG **Skagway** 65.61 34 P P 04 16 28.7 +1.4
baz=275
WHY **Whitehorse** 65.73 32 IAmb IAmb 04 16 46.3
comp=Z,27nm,1.3s
WHY **Whitehorse** 65.73 32 P P 04 16 30.0 +1.8
baz=275
F31M **Tsiigehtchic** 65.75 25 P P 04 16 29.8 +1.8
baz=273
INK **Inuvik** 65.78 24 P P 04 16 29.5 +1.2
INK IAmb IAmb 04 16 46.3
comp=Z,25nm,1.2s
INK **Inuvik** 65.78 24 P P 04 16 30.0 +1.7
baz=273,SNR=8.4
INK **Inuvik** 65.78 24 P P 04 16 29.5 +1.2
INK pmax pmax
comp=Z,25nm,1.3s
M31M **Drury Creek, Y** 65.83 31 IAmb IAmb 04 16 47.1
comp=Z,26nm,1.4s
M31M **Drury Creek, Y** 65.83 31 P P 04 16 30.6 +1.9
baz=275,SNR=12
R32K **Eaglecrest** 66.15 35 P P 04 16 32.0 +1.2
baz=276,SNR=8.0
S32K **Killisnoo** 66.21 36 IAmb IAmb 04 16 49.0
comp=Z,21nm,1.4s
S32K **Killisnoo** 66.21 36 P P 04 16 32.4 +1.2
baz=277
FARO **Faro, Yukon** 66.31 31 IAmb IAmb 04 16 50.3
comp=Z,20nm,1.4s
FARO **Faro, Yukon** 66.31 31 P P 04 16 33.2 +1.4
baz=276
P32M **Atlin** 66.42 33 P P 04 16 33.2 +0.6
baz=277
N32M **Quiet Lake** 66.55 32 P P 04 16 34.8 +1.4
baz=276
SVE **Sverdlovsk** 66.71 324 eP P 04 16 34.7 +0.3

SVE pmax pmax
comp=Z,77nm,1.1s
**P33M Teslin, Yukon 66.79 33** IAmb IAmb 04 16 52.8
comp=Z,18nm,1.3s
**P33M Teslin, Yukon 66.79 33** P **P 04 16 36.4 +1.4**
baz=277,SNR=9.2
**U33K Whale Pass 67.19 37** P **P 04 16 39.3 +1.9**
baz=279
**Q32M Nakina River 67.23 34** P **P 04 16 39.8 +1.9**
baz=278
**CRAG Craig 67.28 38** P **P 04 16 40.2 +2.1**
baz=279
**WRAK Wrangell Islan 67.57 37** IAmb IAmb 04 16 48.4
comp=Z,17nm,1.2s
**WRAK Wrangell Islan 67.57 37** P **P 04 16 41.8 +1.9**
baz=279
**R33M Jennings River 67.83 33** P **P 04 16 43.4 +1.7**
baz=279
**ARU Arti 67.90 323** P **P 04 16 41.7 -0.2**
**ARU Arti 67.90 323** P **P 04 16 41.9 -0.1**
comp=Z,38nm,0.6s,baz=100,slow=3.7,SNR=65
comp=Z,38nm,0.6s
**ARU Arti 67.90 323***c i*P **P 04 16 41.1 -0.9**
ARU 04 17 07.7
ARU S **S 04 25 38.5 +0.1**
ARU pmax pmax
comp=Z,37nm,0.6s
**S34M Telegraph Cree 67.98 35** P **P 04 16 43.4 +0.9**
**S34M Telegraph Cree 67.98 35** P **P 04 16 44.3 +1.8**
baz=279,SNR=11
**V35K Ketchikan 68.15 38** P **P 04 16 44.8 +1.2**
baz=280
**AB31 Akbulak array 68.37 316** *i* P **P 04 16 44.6 -0.4**
**ABKAR Akbulak array 68.37 316** P **P 04 16 43.7 -1.3**
**DLBC Dease Lake 68.47 34** IAmb IAmb 04 17 03.9
comp=Z,31nm,1.4s
**DLBC Dease Lake 68.47 34** P **P 04 16 47.2 +1.6**
baz=280,SNR=11
**T35M Bob Quinn 68.61 36** IAmb IAmb 04 16 52.8
comp=Z,20nm,1.3s
**T35M Bob Quinn 68.61 36** P **P 04 16 48.3 +1.8**
baz=280
**TGTN Hyland Airport 68.79 31** P **P 04 16 49.3 +1.7**
baz=280
**OTVZ Oturere 69.31 154** P **P 04 16 52.4 +1.3**
**AKTO Aktyubinsk 69.35 317** P **P 04 16 50.5 -0.7**
comp=Z,4.7nm,0.7s,baz=96,slow=8.4,SNR=12
comp=Z,4.7nm,0.7s
**QRZ Quartz Range 69.54 157** P **P 04 16 52.9 +0.6**
**MOVZ Moawhango 69.55 154** P **P 04 16 52.0 -0.4**
**DUWZ D'Urville Isla 70.03 156** P **P 04 16 55.0 -0.3**
**NNZ Nelson 70.19 156** P **P 04 16 55.8 -0.5**
**TCW Tory Channel 70.52 156** P **P 04 16 59.3 +1.1**
**CAW Cannon Point 70.73 155** P **P 04 17 00.4 +0.9**
**BFZ Birch Farm 70.83 154** P **P 04 16 59.8 -0.4**
**TOAD Toad River Com 70.84 33** P **P 04 17 01.3 +1.2**
baz=284,SNR=7.3
**MSWZ Moikau Station 71.07 155** P **P 04 17 00.0 -1.6**
**PAWZ Paruwai Farm 71.11 155** P **P 04 17 02.8 +0.9**
**LTZ Lake Taylor 71.17 158** P **P 04 17 01.3 -0.9**
LTZ IAmb IAmb 04 17 15.7
comp=Z,25nm,1.0s
**PLWZ Palliser 71.20 155** P **P 04 17 01.9 -0.5**
**KIRV Kirov 72.24 327** P **P 04 17 08.1 -0.4**
comp=Z,34nm,0.8s,baz=94,slow=0.9,SNR=12
comp=Z,34nm,0.8s
**KIRV Kirov 72.24 327***ce*P **P 04 17 08.9 +0.4**
**SPITS Spitsbergen Ar 74.04 350** P **P 04 17 19.4 +0.5**
comp=Z,5.4nm,0.8s,baz=81,slow=11,SNR=1.3
comp=Z,5.4nm,0.8s
**CLRS Cowichan Lake 74.20 43** P **P 04 17 21.7 +1.4**
**YKA Yellowknife Ar 74.72 28** P **P 04 17 23.3 +0.3**
**YKA Yellowknife Ar 74.72 28** P **P 04 17 23.5 +0.5**
comp=Z,6.1nm,0.9s,baz=297,slow=5.8,SNR=12
comp=Z,6.1nm,0.9s
**YKA Yellowknife Ar 74.72 28** *i* P **P 04 17 23.8 +0.8**
YKA pmax pmax
comp=Z,6.0nm,0.9s
**NLWA Neilton Lookou 74.81 45** IAmb IAmb 04 17 42.3
comp=Z,23nm,1.1s
**BELG Belogornoye 75.09 321** P **P 04 17 25.5 +0.2**
comp=Z,61nm,1.0s,baz=190,slow=2.0,SNR=7.7
comp=Z,61nm,1.0s
**LVZ Lovozero 75.16 338** P **P 04 17 24.9 -0.6**
LVZ IAmb IAmb 04 17 41.0
comp=Z,28nm,1.0s
**LVZ Lovozero 75.16 338***ce*P **P 04 17 23.9 -1.6**
LVZ pmax pmax
comp=Z,28nm,1.3s
**GNW Green Mountain 75.42 44** IAmb IAmb 04 17 45.6
comp=Z,36nm,1.4s
**APA Apatity 75.73 338**⇓ *i*P **P 04 17 27.7 -1.1**
APA pmax pmax
comp=Z,20nm,1.1s
**I03D Drain, OR 76.35 48** IAmb IAmb 04 17 50.8
comp=Z,44nm,1.3s
**H04D Lebanon 76.49 47** IAmb IAmb 04 17 51.7
comp=Z,34nm,1.1s
**KEV Kevo 76.67 341** P **P 04 17 34.0 -0.1**
**KEV Kevo 76.67 341** P **P 04 17 34.0 -0.1**
KEV pmax pmax
comp=Z,87nm,1.4s
**L02F Cave Junction 76.72 50** IAmb IAmb 04 17 53.5
comp=Z,40nm,1.3s
**H04A Detroit Lake 76.80 47** IAmb IAmb 04 17 53.6
comp=Z,36nm,1.1s
**HOOD Mount Hood Mea 76.94 46** IAmb IAmb 04 17 40.3
comp=Z,31nm,0.9s
**I04A Tendick Farm, 76.95 48** IAmb IAmb 04 17 54.3
comp=Z,29nm,1.1s
**KHMM Horse Mountain 77.03 51** IAmb IAmb 04 17 55.7
comp=Z,37nm,1.1s
**PPT Papeete 77.14 116** P **P 04 17 39.6 +2.1**
comp=Z,20nm,1.1s,baz=290,slow=15,SNR=1.8
comp=Z,20nm,1.1s
**G05A Wamic 77.19 46** IAmb IAmb 04 17 53.8
comp=Z,16nm,0.9s
**ARCES ARCESS Array B 77.23 341** P **P 04 17 37.8 +0.5**
**ARCES ARCESS Array B 77.23 341** P **P 04 17 37.5 +0.3**
comp=Z,13nm,0.7s,baz=56,slow=3.1,SNR=32
comp=Z,13nm,0.7s
**ARCES ARCESS Array B 77.23 341** P **P 04 17 37.8 +0.5**
ARCES pmax pmax
comp=Z,53nm,1.2s
**B08A Colville Reser 77.36 43** P **P 04 17 38.6 +0.2**
B08A IAmb IAmb 04 17 55.9
comp=Z,19nm,1.0s
**MXC Moxie City 77.39 45** IAmb IAmb 04 17 56.3
comp=Z,23nm,1.1s
**YBH Yreka Blue Hor 77.46 50** IAmb IAmb 04 17 56.6
comp=Z,19nm,1.1s
**I05D Terrebonne, OR 77.49 47** IAmb IAmb 04 17 57.1
comp=Z,27nm,1.3s
**L04D Klamath Falls 77.57 49** IAmb IAmb 04 17 51.3
comp=Z,36nm,1.2s
**G06A Carlson Farm, 77.64 46** IAmb IAmb 04 17 47.9
comp=Z,30nm,1.5s
**SHME Shamm 77.71 293** *i* P **P 04 17 41.5 +0.8**
SNR=7.7
**MSFE Esma-Masafi 77.93 292** *i* P **P 04 17 42.9 +0.9**
SNR=10
**J05D Fort Rock, OR 77.94 48** IAmb IAmb 04 17 59.8
comp=Z,39nm,1.1s
**O02D Mt. Diablo Mer 77.95 51** P **P 04 17 41.8 -0.2**
O02D IAmb IAmb 04 18 00.1
comp=Z,35nm,1.4s
**UOSS Minazif 78.04 292** P **P 04 17 42.6 0.0**
**SOHO SOHO 78.04 291** P **P 04 17 42.7 +0.1**
**HATD Hatta, Dubai 78.14 292** P **P 04 17 43.6 +0.4**
**C09A Chrisman Ranch 78.22 43** IAmb IAmb 04 17 48.6
comp=Z,32nm,1.3s
**ASHO Ashiyiah 78.25 292** *i* P **P 04 17 44.5 +0.6**
SNR=15
**GDXM Geysers 78.42 53** IAmb IAmb 04 18 01.9
comp=Z,28nm,1.3s
**MAK Makhachkala 78.43 312** *e*P P 04 17 38.0 -6.4
MAK *e*S S 04 27 29.1 -9.2
MAK pmax pmax
comp=Z,136nm,1.0s
**NAZ Nazwa, Dubai 78.48 292** *i* P **P 04 17 44.0 -1.0**
SNR=10
**FAQ Al Faqa, Dubai 78.63 292** *i* P **P 04 17 45.8 0.0**
SNR=10
**HATC Hat Creek Radi 78.66 50** IAmb IAmb 04 18 06.7
comp=Z,26nm,1.1s
**JOF Joensuu 78.73 334** *e*P **P 04 17 46.0 +0.3**
**ALNE Al Ain 78.74 291** *i* P **P 04 17 46.4 -0.1**
SNR=5.8
**NEW Newport 78.76 42** P **P 04 17 47.6 +1.4**
baz=293
**E09A Wood Farm, Sta 78.79 44** IAmb IAmb 04 17 57.9
comp=Z,23nm,1.0s
**ASUD Al Ashush, Dub 78.89 292** *i* P **P 04 17 47.7 +0.4**
SNR=17
**VRH Novokhopyorsk 78.93 321** *e*P **P 04 17 46.4 -0.6**
VRH pmax pmax
comp=Z,48nm,1.8s
**ORV Oroville 79.09 52** P **P 04 17 47.5 -0.7**
ORV IAmb IAmb 04 18 05.2
comp=Z,36nm,1.4s
**ORV Oroville 79.09 52** P **P 04 17 47.5 -0.7**
ORV pmax pmax
comp=Z,36nm,1.4s
**AJN Ajban 79.21 292** *i* P **P 04 17 48.8 -0.2**
SNR=6.9
**MOS Moscow 79.25 326** *e*P **P 04 17 46.4 -2.2**
MOS pmax pmax
comp=Z,30nm,1.1s
MOS MLR MLR
comp=Z,4µm,18.0s
**J08A Circle Bar Ran 79.78 47** IAmb IAmb 04 17 55.9
comp=Z,26nm,1.1s
**LPSR Galich'ya Gora 79.92 323** *e*P **P 04 17 52.7 +0.3**
LPSR pmax pmax
comp=Z,30nm,1.1s
**OBN Obninsk 80.06 326** P **P 04 17 53.6 +0.5**
comp=Z,10nm,0.5s,baz=0.0,slow=5.1,SNR=4.0
comp=Z,10nm,0.5s
**OBN Obninsk 80.06 326** *i* P **P 04 17 52.7 -0.4**
OBN *i* 04 17 59.8
OBN pmax pmax
comp=Z,11nm,1.1s
**VORR Voronezh 80.17 322** *e*P **P 04 17 54.1 +0.4**
VORR pmax pmax
comp=Z,28nm,1.4s
**MPK Martis Peak 80.25 51** IAmb IAmb 04 18 12.1
comp=Z,34nm,1.1s
**VSR Storozhevoye 80.39 322** *e*P **P 04 17 55.6 +0.7**
VSR pmax pmax
comp=Z,20nm,1.0s
**VORD Divnogorie 80.42 322** *e*P **P 04 17 55.2 +0.1**
VORD pmax pmax
comp=Z,10.0nm,1.0s
**CMB Columbia Colle 80.47 53** IAmb IAmb 04 18 13.0
comp=Z,40nm,1.4s
**GOF Gofitskoye 80.60 315***ce*P **P 04 17 54.7 -1.5**
**PNTR Pine Nut 80.64 52** IAmb IAmb 04 18 15.9
comp=Z,24nm,1.0s
**PMPB Monarch Peak 80.85 55** IAmb IAmb 04 18 10.8
comp=Z,26nm,1.2s
**YERR Yerington 80.93 52** IAmb IAmb 04 18 15.8
comp=Z,21nm,1.1s
**MZR Muzera 81.06 291** *i* P **P 04 17 58.9 -0.2**
SNR=8.9
**KBZ Khabaz 81.24 314** P **P 04 17 59.8 +0.2**
comp=Z,15nm,0.8s,baz=48,slow=8.8,SNR=28
comp=Z,15nm,0.8s
**KBZ Khabaz 81.24 314***ce*P **P 04 17 57.1 -2.5**
**KVAR Kislovodsk Arr 81.28 314** P **P 04 18 01.4 +1.4**
comp=Z,5.3nm,0.7s,baz=90,slow=19,SNR=3.0
comp=Z,5.3nm,0.7s
**KIV Kislovodsk 81.28 314** P **P 04 17 59.7 -0.3**
KIV IAmb IAmb 04 18 14.7
comp=Z,34nm,1.0s
**KIV Kislovodsk 81.28 314** *i* P **P 04 18 00.7 +0.7**
SNR=13
**KIV Kislovodsk 81.28 314** *e*P **P 04 18 00.0 0.0**
KIV pmax pmax
comp=Z,15nm,1.1s
**MSO Missoula 81.31 43** P **P 04 18 01.2 +1.1**
baz=295
**MFID Camas Ranch 81.53 46** IAmb IAmb 04 18 12.7
comp=Z,21nm,1.0s
**RYN Ryan 81.59 52** IAmb IAmb 04 18 19.2
comp=Z,24nm,1.3s
**FINES FINESS Array B 81.60 334** P **P 04 18 00.4 -0.8**
**FINES FINESS Array B 81.60 334** P **P 04 18 00.7 -0.5**
comp=Z,6.3nm,0.7s,baz=64,slow=5.3,SNR=28
comp=Z,6.3nm,0.7s
**FINES FINESS Array B 81.60 334** *i* P **P 04 18 01.2 0.0**
FINES pmax pmax
comp=Z,6.0nm,0.7s
**KEF Keuruu 81.65 335** *e*P **P 04 18 01.3 -0.1**
**KVN Kaiserville 81.72 51** IAmb IAmb 04 18 19.9
comp=Z,22nm,1.1s
**LHV Little Huntoon 81.75 52** IAmb IAmb 04 18 20.4
comp=Z,24nm,1.2s
**NVAR Mina Array Bea 81.83 52** P **P 04 18 03.3 +0.1**
**NVAR Mina Array Bea 81.83 52** P **P 04 18 03.9 +0.7**
comp=Z,11nm,0.9s,baz=273,slow=4.7,SNR=43
comp=Z,11nm,0.9s
**VAF Ylistaro 81.95 337** *e*P **P 04 18 04.4 +1.4**
**ERBR Yeremizino-Bor 81.97 316** *e*P **P 04 18 03.4 -0.1**
ERBR *e**PP **PcP 04 18 05.8 -3.2**
ERBR *e*S **S 04 28 18.6 +3.2**
ERBR pmax pmax
comp=Z,60nm,1.6s
**LABN Labinsk 82.27 315** *e*P **P 04 18 02.9 -2.2**
LABN *e**PP **PcP 04 18 06.0 -4.3**
LABN *e*S **S 04 28 18.3 -0.3**
LABN pmax pmax
comp=Z,11nm,0.5s
**HLID Hailey 82.40 46** P **P 04 18 07.0 +1.0**
baz=295
**DSP Deep Springs 82.49 53** IAmb IAmb 04 18 24.2
comp=Z,20nm,1.3s
**ARBE Arbavere 82.78 333** *e*P **P 04 18 08.6 +1.2**
**DLMT Dillon 82.79 44** IAmb IAmb 04 18 24.7
comp=Z,20nm,1.2s
**ISA Isabella, Lake 82.81 54** P **P 04 18 07.7 -0.5**
ISA IAmb IAmb 04 18 24.7
comp=Z,18nm,1.2s
**ISA Isabella, Lake 82.81 54** P **P 04 18 07.7 -0.5**
ISA pmax pmax
comp=Z,18nm,1.3s
**GRAC Grapevine Rang 83.08 53** IAmb IAmb 04 18 25.5
comp=Z,35nm,1.4s
**BOZ Bozeman (W) 83.30 43** P **P 04 18 12.0 +1.4**
baz=297,SNR=13
**EGMT Eagleton 83.33 40** P **P 04 18 11.6 +1.0**
baz=298
**CCAC Calif City Air 83.35 55** IAmb IAmb 04 18 28.3
comp=Z,25nm,1.1s
**SOC Sochi 83.39 315** *e*P **P 04 18 11.0 +0.1**
SOC *e*S **S 04 28 33.0 +3.0**
SOC *e*SS **SS 04 33 54.4 -0.6**
SOC *e*SSS SSS 04 37 24.2
SOC pmax pmax
comp=Z,15nm,0.8s
**WCT Wildcat Mounta 83.71 53** P **P 04 18 12.3 -0.5**
**R11B Troy Canyon, C 83.81 51** P **P 04 18 14.1 +0.7**
baz=295,SNR=12
**YHL Hebgen Lake 83.92 44** IAmb IAmb 04 18 25.8
comp=Z,33nm,1.3s
**TPNV Topopah Spring 83.92 52** P **P 04 18 15.3 +1.3**
baz=295,SNR=14
**GWY Greenwater Val 83.93 53** IAmb IAmb 04 18 33.4
comp=Z,23nm,1.0s
**SUMG Summit 84.11 1** IAmb IAmb 04 18 30.0
comp=Z,16nm,1.0s
**FFC Flin Flon 84.14 32** P **P 04 18 14.7 +0.2**
**FFC Flin Flon 84.14 32** P **P 04 18 14.7 +0.2**
FFC pmax pmax
comp=Z,30nm,1.0s
**YHH Holmes Hill 84.16 44** P **P 04 18 16.2 +1.1**
**GSC Goldstone, Bar 84.19 54** IAmb IAmb 04 18 32.5
comp=Z,26nm,1.2s
**HVU Hansel Valley 84.26 47** IAmb IAmb 04 18 23.3
comp=Z,26nm,1.3s
**YNR Norris Junctio 84.30 44** IAmb IAmb 04 18 33.1
comp=Z,24nm,1.2s
**ANN Anapa 84.30 317** *e*P **P 04 18 14.5 -1.0**
ANN *e**PP **PcP 04 18 17.7 -1.5**
ANN *e*S **SKSac 04 28 37.4 +0.4**
ANN *e*SSS SSS 04 37 45.3
ANN pmax pmax
comp=Z,82nm,1.5s
**YFT Old Faithful 84.32 44** IAmb IAmb 04 18 21.6
comp=Z,22nm,1.1s
**ELS Elsinore Mount 84.41 56** IAmb IAmb 04 18 27.1
comp=Z,16nm,1.2s
**IMW Indian Meadow 84.51 44** IAmb IAmb 04 18 28.9
comp=Z,15nm,1.0s
**H17A Grant Village 84.51 44** IAmb IAmb 04 18 31.1
comp=Z,26nm,1.2s
**H17A Grant Village 84.51 44** P **P 04 18 18.9 +2.0**
baz=298
**LKWY Lake 84.54 44** IAmb IAmb 04 18 22.7
comp=Z,16nm,0.9s
**FLWY Flagg Ranch 84.58 44** IAmb IAmb 04 18 29.5
comp=Z,21nm,0.9s
**TPAW Teton Pass 84.69 45** IAmb IAmb 04 18 33.2
comp=Z,26nm,1.4s
**MNK Minsk 84.71 328** *i* P **P 04 18 15.5 -1.9**
MNK *i* 04 21 33.7
MNK *i* PPP PPP 04 23 25.7
MNK *i* S **SKSac 04 28 38.9 -0.4**
MNK *i* SS **SS 04 34 18.0 +4.2**
MNK *i* SSS SSS 04 37 48.2
MNK pmax pmax
comp=N,14nm,1.0s
MNK pmax pmax
comp=Z,24nm,0.9s
MNK MLR MLR
comp=N,3µm,17.0s
MNK MLR MLR
comp=E,4µm,18.0s
MNK MLR MLR
comp=Z,4µm,18.0s
**AHID Auburn Hatcher 84.92 45** P **P 04 18 18.8 -0.2**
AHID IAmb IAmb 04 18 30.2
comp=Z,16nm,1.1s
**DUG Dugway, Tooele 84.94 48** IAmb IAmb 04 18 30.2
comp=Z,18nm,0.9s
**DUG Dugway, Tooele 84.94 48** P **P 04 18 20.2 +1.1**
baz=297
**PSUT Pine Spring 84.95 50** IAmb IAmb 04 18 34.0
comp=Z,14nm,1.0s
**RLMT Red Lodge 84.99 43** IAmb IAmb 04 18 37.4
comp=Z,16nm,0.8s
**RLMT Red Lodge 84.99 43** P **P 04 18 20.8 +1.4**
baz=299
**HWUT Hardware Ranch 85.15 47** IAmb IAmb 04 18 31.3
comp=Z,18nm,1.1s
**PFO Pinyon Flats O 85.16 56** P **P 04 18 21.0 +0.7**
PFO IAmb IAmb 04 18 38.8
comp=Z,14nm,0.9s
**PFO Pinyon Flats O 85.16 56** P **P 04 18 21.6 +1.3**
baz=295,SNR=8.4
**PFO Pinyon Flats O 85.16 56** P **P 04 18 21.0 +0.7**
PFO pmax pmax
comp=Z,14nm,1.0s
**TPFO Pinon Flats 85.17 56** P **P 04 18 21.4 +1.1**
baz=295,SNR=7.8
**CTU Camp Tracy 85.44 48** IAmb IAmb 04 18 28.6
comp=Z,16nm,1.0s
**TCUT Toone Canyon 85.48 47** IAmb IAmb 04 18 32.8
comp=Z,19nm,0.9s
**MONP2 Monument Peak 85.49 56** P **P 04 18 22.8 +0.8**
baz=295,SNR=5.6
**JLU Jordanelle 85.69 47** IAmb IAmb 04 18 40.2
comp=Z,22nm,1.1s
**MPU Maple Canyon 85.83 48** IAmb IAmb 04 18 34.6
comp=Z,19nm,1.2s
**BW06 Boulder Array 85.93 45** P **P 04 18 24.4 +0.4**
baz=298
**PDAR Pinedale Array 85.93 45** P **P 04 18 23.5 -0.6**
**PDAR Pinedale Array 85.93 45** P **P 04 18 25.0 +0.9**
comp=Z,2.6nm,0.9s,baz=231,slow=1.2,SNR=14
comp=Z,2.6nm,0.9s
**LCMT Little Creek M 86.06 51** IAmb IAmb 04 18 42.2
comp=Z,14nm,0.9s
**LAO LASA Array 86.07 40** IAmb IAmb 04 18 42.2
comp=Z,28nm,1.0s
**LAO LASA Array 86.07 40** P **P 04 18 25.9 +1.5**
baz=301
**AKASG Malin Array Be 86.12 324** P **P 04 18 23.4 -1.0**
comp=Z,0.6nm,0.3s,baz=46,slow=5.8,SNR=7.3
comp=Z,0.6nm,0.3s
**AKASG Malin Array Be 86.12 324** *i* P **P 04 18 23.5 -1.0**
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**AKBB Malin Array Si 86.12 324** IAmb IAmb 04 18 40.9
comp=Z,26nm,1.4s
**AKBB Malin Array Si 86.12 324***ce*P **P 04 18 26.1 +1.6**
**KIEV Kiev 86.13 324** P **P 04 18 23.9 -0.6**
KIEV IAmb IAmb 04 18 40.9
comp=Z,23nm,1.4s
**KIEV Kiev 86.13 324** P **P 04 18 24.0 -0.6**
KIEV pmax pmax
comp=Z,23nm,1.4s
**DGMT Dagmar 86.33 38** P **P 04 18 26.5 +0.9**
baz=302
**KNB Kanab 86.36 51** P **P 04 18 26.7 +0.5**
**KNB Kanab 86.36 51** P **P 04 18 26.7 +0.5**
KNB pmax pmax
comp=Z,22nm,0.8s
**PKCU Pink Cliffs 86.53 51** IAmb IAmb 04 18 43.3
comp=Z,16nm,1.1s
**BLYC Blythe 86.56 55** IAmb IAmb 04 18 44.4
comp=Z,24nm,1.2s
**Q16A Castle Valley 86.65 49** IAmb IAmb 04 18 44.6
comp=Z,20nm,1.0s
**P17A Butcher Ranch, 86.69 48** IAmb IAmb 04 18 45.1
comp=Z,15nm,0.9s
**P18A Preston Nutter 86.96 48** IAmb IAmb 04 18 49.1
comp=Z,11nm,0.8s
**RDMU Red Mountain 86.97 47** IAmb IAmb 04 18 33.0
comp=Z,14nm,0.9s
**U15A North Rim 87.00 51** IAmb IAmb 04 18 47.4
comp=Z,12nm,0.8s
**SRU San Rafael Swe 87.01 48** P **P 04 18 28.1 -1.3**
SRU IAmb IAmb 04 18 46.3
comp=Z,12nm,0.8s
**SRU San Rafael Swe 87.01 48** P **P 04 18 28.1 -1.3**
SRU pmax pmax
comp=Z,12nm,0.8s
**HFS Hagfors 87.10 337** P **P 04 18 27.0 -2.1**
comp=Z,4.4nm,0.7s,baz=92,slow=4.5,SNR=8.4
comp=Z,4.4nm,0.7s
**SUW Suwalki 87.24 329** *e*P **P 04 18 29.9 0.0**
**NB2 NORSAR Subarra 87.29 339** P **P 04 18 28.6 -1.5**
comp=Z,41nm,1.7s,baz=43,slow=5.1
**NB2 NORSAR Subarra 87.29 339** P **P 04 18 28.6 -1.5**
baz=43,slow=5.1
**NB2 NORSAR Subarra 87.29 339** P **P** 04 18 35.0 +4.9
**NOA NORSAR Array B 87.29 339** P **P 04 18 28.7 -1.4**
comp=Z,3.1nm,0.8s,baz=46,slow=4.8,SNR=8.8
comp=Z,3.1nm,0.8s
**HMU Henry Mountain 87.41 50** IAmb IAmb 04 18 48.2
comp=Z,17nm,0.9s
**113A Mohawk Valley, 87.56 55** P **P 04 18 32.4 +0.5**
113A IAmb IAmb 04 18 42.9
comp=Z,16nm,1.1s
**RAYN Ar Rayn 87.60 295** P **P 04 18 32.2 -0.1**
**RAYN Ar Rayn 87.60 295** *i* P **P 04 18 29.6 -2.8**
SNR=12
**RAYN Ar Rayn 87.60 295** P **P 04 18 32.2 -0.1**
RAYN pmax pmax
comp=Z,38nm,1.0s
**Y14A Wickenburg 87.61 54** IAmb IAmb 04 18 49.6
comp=Z,18nm,1.0s
**WUAZ Wupatki 88.08 52** IAmb IAmb 04 18 52.2
comp=Z,18nm,1.2s
**WUAZ Wupatki 88.08 52** P **P 04 18 35.3 +0.7**
baz=298
**214A Organ Pipe Nat 88.65 56** IAmb IAmb 04 18 54.7
comp=Z,16nm,0.9s
**214A Organ Pipe Nat 88.65 56** P **P 04 18 38.2 +1.1**
baz=297
**RSSD Black Hills 88.72 42** P **P 04 18 38.1 +0.6**
**RSSD Black Hills 88.72 42** P **P 04 18 39.0 +1.5**
baz=302
**RSSD Black Hills 88.72 42** P **P 04 18 38.1 +0.6**
RSSD pmax pmax
comp=Z,13nm,1.4s
**N23A Red Feather La 89.20 45** IAmb IAmb 04 18 52.5
comp=Z,28nm,1.2s
**N23A Red Feather La 89.20 45** P **P 04 18 41.3 +1.4**
baz=301
**BR131 Keskin Array S 89.22 313** IAmb IAmb 04 18 55.2
comp=Z,15nm,0.9s
**BRTR Keskin Array B 89.22 313** P **P 04 18 38.0 -1.8**
**BRTR Keskin Array B 89.22 313** P **P 04 18 38.5 -1.3**
comp=Z,2.3nm,0.9s,baz=66,slow=11,SNR=9.8
comp=Z,2.3nm,0.9s
**BRTR Keskin Array B 89.22 313** *i* P **P 04 18 38.0 -1.8**
BRTR pmax pmax
comp=Z,2.0nm,0.7s
**MVCO Mesa Verde 89.32 49** P **P 04 18 41.2 +0.8**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=299 | | | | | | | | |
| LVV | L'vov | 89.36 | 326 | *e*P | | P | | 04 18 42.1 | +2.0 |
| SMCO | Snowmass | 89.39 | 47 | IAmb | | IAmb | | 04 19 02.1 | |
| | comp=Z,29nm,1.4s | | | | | | | | |
| ULM | Lac du Bonnet | 89.78 | 34 | P | | P | | 04 18 41.4 | -0.6 |
| | comp=Z,3.6nm,0.9s,baz=297,slow=4.5,SNR=4.9 | | | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | | | |
| ISCO | Idaho Springs | 89.98 | 46 | P | | P | | 04 18 44.4 | +0.8 |
| | baz=301 | | | | | | | | |
| TUC | Tucson | 90.01 | 55 | P | | P | | 04 18 43.9 | +0.3 |
| TUC | Tucson | 90.01 | 55 | P | | P | | 04 18 44.4 | +0.8 |
| | baz=298 | | | | | | | | |
| TUC | Tucson | 90.01 | 55 | P | | P | | 04 18 43.9 | +0.3 |
| TUC | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| BURAR | Bucovina Array | 90.04 | 323 | P | | P | | 04 18 43.0 | -0.4 |
| KWP | Kalwaria Pacla | 90.16 | 326 | *e*P | | P | | 04 18 43.0 | -0.9 |
| S22A | 4UR Ranch, Cre | 90.21 | 48 | P | | P | | 04 18 45.5 | +0.9 |
| | baz=300 | | | | | | | | |
| Q24A | Divide | 90.72 | 47 | P | | P | | 04 18 47.6 | +0.6 |
| | baz=302 | | | | | | | | |
| AGMN | Agassiz Nation | 90.99 | 35 | IAmb | | IAmb | | 04 19 08.3 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| AGMN | Agassiz Nation | 90.99 | 35 | P | | P | | 04 18 48.9 | +1.2 |
| | baz=308 | | | | | | | | |
| SDCO | Great Sand Dun | 91.11 | 48 | P | | P | | 04 18 50.1 | +1.3 |
| | baz=301 | | | | | | | | |
| OJC | Ojcow | 91.25 | 328 | *e*P | | P | | 04 18 48.2 | -0.7 |
| CRVS | Cervenica-Dubn | 91.25 | 326 | *e*P | | P | | 04 18 49.9 | +1.0 |
| CRVS | Cervenica-Dubn | 91.25 | 326 | *e*P | | P | | 04 18 49.9 | +1.0 |
| MMAI | Mount Meron Ar | 91.31 | 307 | P | | P | | 04 18 48.6 | -1.0 |
| | comp=Z,0.6nm,0.3s,baz=46,slow=8.3,SNR=2.5 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| NIE | Niedzica | 91.51 | 327 | *e*P | | P | | 04 18 49.5 | -0.7 |
| 319A | Douglas | 91.58 | 55 | IAmb | | IAmb | | 04 19 00.3 | |
| | comp=Z,9.8nm,0.9s | | | | | | | | |
| ANMO | Albuquerque | 91.88 | 51 | P | | P | | 04 18 51.8 | -0.5 |
| ANMO | Albuquerque | 91.88 | 51 | P | | P | | 04 18 53.3 | +0.9 |
| | baz=301 | | | | | | | | |
| ANMO | Albuquerque | 91.88 | 51 | P | | P | | 04 18 51.8 | -0.5 |
| ANMO | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| LANS | Liptovska Anna | 92.10 | 327 | *e*P | | P | | 04 18 53.6 | +0.7 |
| LANS | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.4s | | | | | | | | |
| LANS | Liptovska Anna | 92.10 | 327 | *e*P | | P | | 04 18 53.6 | +0.7 |
| 121A | Cookes Peak, D | 92.13 | 53 | IAmb | | IAmb | | 04 19 05.3 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| 121A | Cookes Peak, D | 92.13 | 53 | P | | P | | 04 18 55.0 | +1.5 |
| | baz=300 | | | | | | | | |
| T25A | Trinidad | 92.17 | 48 | IAmb | | IAmb | | 04 19 11.2 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| T25A | Trinidad | 92.17 | 48 | P | | P | | 04 18 54.9 | +1.2 |
| | baz=302 | | | | | | | | |
| F33A | 5 Mile Ranch, | 92.26 | 37 | IAmb | | IAmb | | 04 19 00.5 | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| KSP | Ksiaz | 92.51 | 330 | *e*P | | P | | 04 18 53.7 | -0.9 |
| MORC | Moravsky Berou | 92.63 | 328 | *e*P | | P | | 04 18 53.4 | -1.9 |
| CHVC | Chvalec | 92.79 | 330 | *e*P | | P | | 04 18 56.2 | +0.2 |
| CHVC | Chvalec | 92.79 | 329 | *e*P | | P | | 04 18 56.2 | +0.2 |
| DPC | Dobruska-Polom | 92.83 | 329 | *e*P | | P | | 04 18 56.8 | +0.6 |
| DPC | Dobruska-Polom | 92.83 | 329 | *e*P | | P | | 04 18 56.8 | +0.6 |
| VYHS | Vyhne | 92.84 | 327 | *e*P | | P | | 04 18 55.3 | -1.0 |
| VYHS | | | | pmax | | pmax | | | |
| | comp=Z,30nm,2.2s | | | | | | | | |
| VYHS | Vyhne | 92.84 | 327 | *e*P | | P | | 04 18 55.3 | -1.0 |
| ECSD | EROS Data Cent | 93.35 | 39 | IAmb | | IAmb | | 04 19 13.7 | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| ECSD | EROS Data Cent | 93.35 | 39 | P | | P | | 04 18 59.2 | +0.4 |
| | baz=307 | | | | | | | | |
| SRO | Srobarova | 93.56 | 326 | *e*P | | P | | 04 18 59.7 | +0.2 |
| SRO | Srobarova | 93.56 | 326 | *e*P | | P | | 04 18 59.7 | +0.2 |
| BRG | Berggiesshubel | 93.56 | 331 | *e*P | | P | | 04 19 04.9 | +5.4 |
| BRG | | | | Amp | | | | 04 19 05.3 | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| CLL | Collm | 93.67 | 331 | *e*P | | P | | 04 19 00.0 | 0.0 |
| CLL | | | | *ex* | | x | | 04 19 18.0 | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| CLL | | | | *ex* | | x | | 04 22 17.0 | |
| CLL | | | | *e*PP | | PP | | 04 22 45.0 | +0.6 |
| CLL | Collm | 93.67 | 331 | *e*P | | P | | 04 19 00.0 | 0.0 |
| KRUC | Moravsky | 93.67 | 328 | *e*P | | P | | 04 19 00.0 | -0.1 |
| RTBA | Rita Blanca | 93.68 | 48 | IAmb | | IAmb | | 04 19 18.8 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| MNTX | Cornudas Mount | 94.31 | 53 | P | | P | | 04 19 04.1 | +0.8 |
| | baz=301 | | | | | | | | |
| KHC | Kasperske Hory | 94.96 | 330 | *e*P | | P | | 04 19 05.4 | -0.6 |
| KHC | Kasperske Hory | 94.96 | 330 | *e*P | | P | | 04 19 05.4 | -0.6 |
| GERES | GERESS Array B | 95.10 | 329 | P | | P | | 04 19 06.0 | -0.7 |
| | comp=Z,0.6nm,0.8s,baz=151,slow=2.2,SNR=2.6 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| GRF | Grafenberg Arr | 95.62 | 331 | *e*P | | P | | 04 19 26.7 | +18 |
| | comp=Z,2.5nm,0.9s,baz=43,slow=4.1 | | | | | | | | |
| KSU1 | Kansas State U | 96.15 | 43 | IAmb | | IAmb | | 04 19 21.8 | |
| | comp=Z,8.7nm,0.9s | | | | | | | | |
| KSU1 | Kansas State U | 96.15 | 43 | P | | P | | 04 19 11.5 | -0.1 |
| | baz=307 | | | | | | | | |
| TXAR | Lajitas Array | 96.80 | 54 | P | | P | | 04 19 15.0 | +0.1 |
| | comp=Z,0.6nm,0.8s,baz=263,slow=4.8,SNR=6.7 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| WMOK | Wichita Mounta | 97.30 | 47 | P | | P | | 04 19 16.8 | -0.2 |
| | baz=305 | | | | | | | | |
| TORD | Torodi Ar. Bea | 127.72 | 310 | PKP | | PKPdf | | 04 24 48.3 | -1.4 |
| | comp=Z,2.2nm,0.6s,baz=23,slow=1.4,SNR=10 | | | | | | | | |
| BAUV | El Baul | 135.40 | 47 | PKPdf | | PKPdf | | 04 25 04.1 | -0.1 |
| PCRV | Puerto La Cruz | 136.68 | 42 | PKP | | PKPdf | | 04 25 07.2 | +0.4 |
| | comp=Z,3.9nm,0.6s,baz=307,slow=5.1,SNR=1.8 | | | | | | | | |
| DBIC | Dimbokro | 136.84 | 310 | PKP | | PKPdf | | 04 25 05.9 | -1.0 |
| | comp=Z,4.7nm,0.8s,baz=106,slow=5.6,SNR=4.7 | | | | | | | | |
| DBIC | Dimbokro | 136.84 | 310 | PKIKP | | PKPdf | | 04 25 05.9 | -1.0 |
| BOAV | Boa Vista | 145.23 | 45 | | | PKPbc | | 04 25 19.5 | -2.2 |
| PLCA | Paso Flores | 146.79 | 129 | PKPdf | | PKPdf | | 04 25 24.3 | +0.3 |
| PLCA | Paso Flores | 146.79 | 129 | PKPbc | | PKPbc | | 04 25 25.1 | -0.6 |
| | comp=Z,16nm,0.9s,baz=240,slow=3.9,SNR=24 | | | | | | | | |
| PLCA | Paso Flores | 146.79 | 129 | PKIKP | | PKPdf | | 04 25 24.3 | +0.3 |
| EFI | East Falkland | 147.43 | 155 | | | PKPbc | | 04 25 26.2 | -0.9 |
| EFI | East Falkland | 147.43 | 155 | PKP2 | | PKPbc | | 04 25 26.2 | -0.9 |
| MDP | Montagnes des | 147.49 | 31 | PKPbc | | PKPbc | | 04 25 29.1 | +0.7 |
| | comp=Z,20nm,0.8s,baz=342,slow=2.6,SNR=7.3 | | | | | | | | |
| ETMB | Extrema | 148.59 | 69 | PKPdf | | PKPdf | | 04 25 25.0 | -2.6 |
| HMBC | Humberstone | 148.97 | 90 | | | PKPbc | | 04 25 32.2 | 0.0 |
| HOPE | Hope Point | 149.32 | 180 | PKPbc | | PKPbc | | 04 25 31.9 | 0.0 |
| LPAZ | La Paz | 149.52 | 82 | PKP | | PKPdf | | 04 25 30.3 | +0.5 |
| | comp=Z,8.8nm,0.9s,baz=236,slow=3.6,SNR=11 | | | | | | | | |
| LPAZ | | | | PKPbc | | PKiKP | | 04 25 35.3 | -0.1 |
| | comp=Z,8.8nm,0.8s,baz=340,slow=5.2,SNR=20 | | | | | | | | |
| SAML | Samuel | 150.70 | 65 | PKPdf | | PKPdf | | 04 25 29.1 | -1.9 |
| SAML | Samuel | 150.70 | 65 | PKIKP | | PKPdf | | 04 25 29.1 | -1.9 |
| SIV | San Ignacio | 155.78 | 76 | PKP | | PKPdf | | 04 25 37.8 | -0.5 |
| | comp=Z,0.6nm,0.8s,baz=264,slow=10,SNR=2.7 | | | | | | | | |
| VAO | Valinhos | 170.44 | 89 | | | PKPdf | | 04 25 50.6 | -1.5 |

*IDC* ***19*** *04:06:10.4±0.5,8.˙32S×116.˙54E,h0km,mb5.0/17, mbtmp5.1/19,ML5.0/2,MS6.4/1,Error ellipse: s-maj=18.3km s-min=12.0km az=67.0*

*MOS* ***19*** *04:06:10.4±1.0,8.˙28S×116.˙59E,h10km,mb5.2/29,Error ellipse: s-maj=11.4km s-min=6.5km az=115.8*

*BJI* ***19*** *04:06:11.1±0.0,8.˙92S×117.˙44E,h41km,mb4.9/31, mB5.8/6,Ms5.9/3,Ms7 5.8/3*

*DJA* ***19*** *04:06:12.8±0.3,8.˚S±1.˚×11.˚7E±.˚,h11km±2km,M5.5/64, mB5.9/24,mb5.2/64,MLv5.5/29,Mw(mB)5.5/24*

*NEIC* ***19*** *04:06:13.1±1.6,8.˙41S±0.˙07×116.˙58E±0.˙06,h10km±1km, mb5.4/53,Error ellipse: s-maj=11.5km s-min=9.9km az=191.0*

**ISC 19 04:06:12.4±0.3,8.˙37S±0.˙04×116.˙60E±0.˙04,h10km,n348,**
**σ1.˚37/335,mb5.3/84,6C-4D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.46 | 143 | P | Pb | 04 06 22.9 | +0.3 |
| TWSI | | | | S | Sb | 04 06 30.4 | +0.9 |
| PLAI | Plampang | 1.25 | 111 | P | Pn | 04 06 36.1 | +0.2 |
| PLAI | | | | S | Sg | 04 06 52.6 | +1.0 |
| SRBI | Singaraja | 1.40 | 282 | P | Pn | 04 06 37.6 | -0.5 |
| DNP | Denpasar | 1.41 | 257 | P | Pb | 04 06 38.7 | -0.1 |
| IGBI | Denpasar | 1.51 | 253 | P | Pb | 04 06 40.7 | +0.2 |
| JAGI | Jajag, Banyuwa | 2.42 | 268 | P | Pn | 04 06 52.4 | +0.3 |
| JAGI | Jajag, Banyuwa | 2.42 | 268 | Pn | Pn | 04 06 52.5 | +0.3 |
| JAGI | Jajag, Banyuwa | 2.42 | 268 | P | Pn | 04 06 52.4 | +0.3 |
| WBSI | Waikabubak, Su | 3.03 | 115 | P | Pn | 04 07 00.8 | +0.3 |
| BASI | Baing, Sumba | 4.33 | 115 | P | Pn | 04 07 19.5 | +1.1 |
| GRJI | Gresik | 4.33 | 289 | P | Pn | 04 07 18.6 | +0.2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BSSI | Bau Bau, Buton | 4.45 | 60 | P | | Pn | | 04 07 19.2 | -0.8 |
| KAPI | Kappang | 4.57 | 43 | P | | Pn | | 04 07 21.1 | -0.6 |
| KAPI | Kappang | 4.57 | 43 | Pn | | Pn | | 04 07 19.9 | -1.8 |
| KAPI | Kappang | 4.57 | 43 | Pn | | Pn | | 04 07 20.8 | -0.8 |
| | 25nm,0.3s,baz=181,slow=5.2,SNR=31 | | | | | | | | |
| KAPI | | | | Sn | | Sn | | 04 08 09.4 | -5.5 |
| | 83nm,0.3s,baz=138,slow=22,SNR=16 | | | | | | | | |
| | 71nm,0.2s | | | | | | | | |
| KAPI | Kappang | 4.57 | 43 | *i* P | | Pn | | 04 07 21.4 | -0.3 |
| BKSI | Bukumba | 4.63 | 49 | P | | Pn | | 04 07 21.0 | -1.4 |
| PWJI | Pagerwojo | 4.76 | 274 | P | | Pn | | 04 07 24.5 | +0.2 |
| EDFI | Ende, Flores | 5.05 | 95 | P | | Pn | | 04 07 28.6 | +0.3 |
| NGJI | Ngawi | 5.19 | 281 | P | | Pn | | 04 07 30.5 | +0.3 |
| | 208nm,0.7s,8µm3.2nm | | | | | | | | |
| BNSI | Bone | 5.26 | 42 | P | | Pn | | 04 07 31.0 | -0.2 |
| | 393nm,0.7s,9µm6.0nm | | | | | | | | |
| SPSI | Sidrap Palu | 5.39 | 36 | P | | Pn | | 04 07 32.5 | -0.5 |
| | 322nm,0.9s,6µm2.4nm | | | | | | | | |
| MMRI | Maumere | 5.58 | 93 | P | | Pn | | 04 07 36.0 | +0.4 |
| MMRI | Maumere | 5.58 | 93 | Pn | | Pn | | 04 07 36.2 | +0.6 |
| MMRI | Maumere | 5.58 | 93 | P | | Pn | | 04 07 35.5 | -0.1 |
| UGM | Wanagama | 6.04 | 274 | P | | Pn | | 04 07 43.4 | +1.6 |
| UGM | Wanagama | 6.04 | 274 | | | | | 04 07 42.1 | +0.3 |
| UGM | Wanagama | 6.04 | 274 | P | | Pn | | 04 07 43.0 | +1.2 |
| | 580nm,1.1s,7µm3.2nm | | | | | | | | |
| SMRI | Semarang | 6.25 | 282 | P | | Pn | | 04 07 48.9 | +4.2 |
| SMRI | Semarang | 6.25 | 282 | Pn | | Pn | | 04 07 43.4 | -1.4 |
| SMRI | Semarang | 6.25 | 282 | P | | Pn | | 04 07 45.3 | +0.6 |
| | 203nm,0.9s,5µm1.6nm | | | | | | | | |
| BBSI | Bau Bau | 6.58 | 65 | P | | Pn | | 04 07 49.4 | +0.1 |
| | 193nm,0.8s,1.0nm | | | | | | | | |
| BKB | Balikpapan | 7.07 | 2 | Pn | | Pn | | 04 07 59.5 | +3.4 |
| BKB | Balikpapan | 7.07 | 2 | P | | Pn | | 04 07 57.5 | +1.5 |
| | 136nm,0.5s,1.9nm | | | | | | | | |
| BATI | Baumata | 7.21 | 105 | P | | Pn | | 04 07 57.9 | 0.0 |
| MTKI | Muara Teweh, K | 7.57 | 347 | P | | Pn | | 04 08 02.6 | -0.4 |
| KPJI | Karang Pucung | 7.67 | 277 | P | | Pn | | 04 08 04.7 | +0.5 |
| | 135nm,0.6s,6µm0.8nm | | | | | | | | |
| SOEI | Soe | 7.70 | 101 | P | | Pn | | 04 08 05.4 | +0.7 |
| SOEI | Soe | 7.70 | 101 | Pn | | Pn | | 04 08 05.4 | +0.7 |
| SOEI | Soe | 7.70 | 101 | P | | Pn | | 04 08 05.8 | +1.1 |
| CMJI | Cimerak | 8.09 | 274 | P | | Pn | | 04 08 10.7 | +0.6 |
| | 129nm,0.8s | | | | | | | | |
| BBJI | Bungbulang | 8.91 | 275 | P | | Pn | | 04 08 24.5 | +3.1 |
| CNJI | Cibinong | 9.44 | 276 | P | | Pn | | 04 08 30.8 | +2.2 |
| | 68nm,0.7s | | | | | | | | |
| LUWI | Luwuk | 9.53 | 40 | Pn | | Pn | | 04 08 30.6 | +0.9 |
| DBJI | Dramaga | 9.93 | 280 | P | | Pn | | 04 08 37.7 | +2.3 |
| | 124nm,1.0s | | | | | | | | |
| TOLI2 | Tolitoli | 10.30 | 24 | P | | Pn | | 04 08 43.7 | +3.3 |
| TOLI2 | Tolitoli | 10.30 | 24 | Pn | | Pn | | 04 08 39.8 | -0.6 |
| GTOI | Gorontalo | 10.99 | 36 | P | | Pn | | 04 08 50.3 | +0.4 |
| XMIS | Christmas Isla | 11.00 | 258 | Pn | | Pn | | 04 08 46.5 | -3.5 |
| SANI | Sanana | 11.26 | 57 | P | | Pn | | 04 08 55.5 | +2.0 |
| SBUM | Sibu | 11.60 | 338 | Pn | | Pn | | 04 08 57.8 | -0.4 |
| KSM | Kuching | 11.62 | 327 | P | | Pn | | 04 09 01.3 | +2.9 |
| KSM | Kuching | 11.62 | 327 | Pn | | Pn | | 04 08 59.4 | +0.9 |
| FITZ | Fitzroy Crossi | 13.07 | 139 | Pn | | Pn | | 04 09 16.3 | -1.9 |
| MBWA | Marble Bar | 13.07 | 167 | P | | Pn | | 04 09 17.4 | -0.8 |
| MBWA | Marble Bar | 13.07 | 167 | Pn | | Pn | | 04 09 15.8 | -2.5 |
| MBWA | Marble Bar | 13.07 | 167 | P | | Pn | | 04 09 16.6 | -1.7 |
| | comp=Z,79µmcomp=Z,134nm,0.6s | | | | | | | | |
| PSA00 | Pilbara Seismi | 13.49 | 167 | P | | Pn | | 04 09 24.1 | +0.1 |
| PSA00 | Pilbara Seismi | 13.49 | 167 | Pn | | Pn | | 04 09 22.8 | -1.2 |
| PSA00 | Pilbara Seismi | 13.49 | 167 | Pn | | Pn | | 04 09 20.9 | -3.1 |
| PSA00 | Pilbara Seismi | 13.49 | 167 | P | | Pn | | 04 09 22.5 | -1.5 |
| | comp=Z,60µmcomp=Z,137nm,0.7s | | | | | | | | |
| BNDI | Bandanaira | 13.76 | 75 | P | | Pn | | 04 09 28.9 | +1.2 |
| BNDI | Bandanaira | 13.76 | 75 | P | | Pn | | 04 09 28.2 | +0.5 |
| KNRA | Kununurra | 13.93 | 123 | Pn | | Pn | | 04 09 28.7 | -1.4 |
| KNRA | Kununurra | 13.93 | 123 | P | | Pn | | 04 09 28.4 | -1.6 |
| | comp=Z,37µmcomp=Z,137nm,0.7s | | | | | | | | |
| MNAI | Manna | 14.13 | 286 | P | | Pn | | 04 09 32.5 | -0.3 |
| | comp=Z,247nm,1.0s | | | | | | | | |
| KKM | Kota Kinabalu | 14.33 | 358 | P | | Pn | | 04 09 39.4 | +3.8 |
| KKM | Kota Kinabalu | 14.33 | 358 | | | Pn | | 04 09 35.9 | +0.3 |
| GIRL | Giralia | 14.37 | 189 | P | | Pn | | 04 09 36.1 | +0.1 |
| GIRL | Giralia | 14.37 | 189 | Pn | | Pn | | 04 09 34.7 | -1.3 |
| SAUI | Saumlaki | 14.55 | 90 | P | | Pn | | 04 09 38.9 | +0.3 |
| DRS | Darwin Rock St | 14.63 | 107 | P | | Pn | | 04 09 38.4 | -1.2 |
| MTN | Manton Dam | 14.96 | 109 | P | | Pn | | 04 09 42.0 | -2.1 |
| MTN | Manton Dam | 14.96 | 109 | Pn | | Pn | | 04 09 40.1 | -4.0 |
| MTN | Manton Dam | 14.96 | 109 | P | | Pn | | 04 09 40.5 | -3.5 |
| KDU | Kakadu | 16.18 | 107 | P | | Pn | | 04 09 58.3 | -1.8 |
| KDU | Kakadu | 16.18 | 107 | P | | Pn | | 04 09 56.1 | -3.9 |
| SWI | Sorong | 16.40 | 64 | P | | Pn | | 04 10 03.6 | +0.8 |
| | comp=Z,87nm,1.1s | | | | | | | | |
| FAKI | Fak Fak | 16.48 | 72 | P | | Pn | | 04 10 03.7 | -0.2 |
| FAKI | Fak Fak | 16.48 | 72 | Pn | | Pn | | 04 10 01.6 | -2.3 |
| FAKI | Fak Fak | 16.48 | 72 | P | | Pn | | 04 10 02.8 | -1.1 |
| | comp=Z,102nm,0.8s | | | | | | | | |
| PPSI | Pulau Pagai | 17.42 | 288 | P | | Pn | | 04 10 16.8 | +1.0 |
| | comp=Z,167nm,1.5s | | | | | | | | |
| PDSI | Padang | 17.70 | 294 | P | | Pn | | 04 10 18.6 | -0.7 |
| DAV | Davao City (W) | 17.76 | 31 | P | | Pn | | 04 10 21.1 | +1.2 |
| | comp=Z,17nm,0.3s,baz=67,slow=2.5,SNR=5.1 | | | | | | | | |
| | comp=Z,116nm,0.4s | | | | | | | | |
| MEEK | Meekatharra | 18.27 | 174 | P | | P | | 04 10 26.8 | +0.5 |
| MEEK | Meekatharra | 18.27 | 174 | P | | Pn | | 04 10 25.6 | -0.6 |
| | comp=Z,31µmcomp=Z,136nm,1.0s | | | | | | | | |
| WRKA | Warakurna | 19.98 | 147 | P | | P | | 04 10 45.6 | +0.5 |
| WRKA | Warakurna | 19.98 | 147 | P | | Pn | | 04 10 46.6 | -0.2 |
| | comp=Z,66µmcomp=Z,207nm,0.8s | | | | | | | | |
| IPM | Ipoh | 20.11 | 309 | P | | Pn | | 04 10 51.1 | +2.7 |
| MORW | Morawa | 20.59 | 181 | P | | Pn | | 04 10 53.6 | -0.4 |
| MORW | Morawa | 20.59 | 181 | P | | P | | 04 10 52.2 | +0.4 |
| MORW | Morawa | 20.59 | 181 | P | | Pn | | 04 10 53.2 | -0.7 |
| | comp=Z,48nm,1.0s | | | | | | | | |
| WB0 | Warramunga Arr | 20.62 | 125 | IAmb | | IAmb | | 04 10 52.9 | |
| | comp=Z,116nm,0.8s | | | | | | | | |
| WRA | Warramunga Arr | 20.66 | 126 | P | | P | | 04 10 51.3 | -1.3 |
| WRA | Warramunga Arr | 20.66 | 126 | P | | P | | 04 10 52.5 | -0.1 |
| | comp=Z,90nm,0.7s,baz=302,slow=12,SNR=375 | | | | | | | | |
| | comp=Z,90nm,0.7s | | | | | | | | |
| WRA | Warramunga Arr | 20.66 | 126 | *e*P | | P | | 04 10 52.2 | -0.4 |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,90nm,0.6s | | | | | | | | |
| WRAB | Tennant Creek | 20.67 | 126 | P | | P | | 04 10 51.7 | -0.9 |
| WRAB | | | | IAmb | | IAmb | | 04 10 53.6 | |
| | comp=Z,112nm,0.8s | | | | | | | | |
| WRAB | Tennant Creek | 20.67 | 126 | *i* P | | P | | 04 10 51.8 | -0.9 |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,81nm,0.9s | | | | | | | | |
| WB2 | Warramunga Arr | 20.67 | 126 | IAmb | | IAmb | | 04 10 53.5 | |
| | comp=Z,108nm,0.8s | | | | | | | | |
| RPSI | Rantau Prapat | 20.77 | 301 | P | | P | | 04 10 53.9 | +0.1 |
| PSI | Prapat | 20.83 | 301 | P | | P | | 04 10 56.0 | +1.4 |
| PSI | Prapat | 20.83 | 301 | P | | P | | 04 10 53.9 | -0.7 |
| PSI | | | | pmax | | pmax | | | |
| | comp=Z,63nm,1.1s | | | | | | | | |
| WR0 | Warramunga Arr | 20.84 | 125 | P | | P | | 04 10 53.6 | -0.8 |
| WR0 | | | | IAmb | | IAmb | | 04 10 55.4 | |
| | comp=Z,182nm,0.8s | | | | | | | | |
| BLDU | Ballidu | 22.13 | 180 | P | | P | | 04 11 09.5 | +1.2 |
| BLDU | Ballidu | 22.13 | 180 | P | | P | | 04 11 08.8 | +0.5 |
| | comp=Z,51nm,1.7s | | | | | | | | |
| AS31 | Alice Springs | 22.49 | 135 | P | | P | | 04 11 12.1 | -0.2 |
| AS31 | Alice Springs | 22.49 | 135 | P | | P | | 04 11 12.4 | +0.1 |
| | comp=Z,53nm,0.8s | | | | | | | | |
| ASAR | Alice Springs | 22.49 | 135 | P | | P | | 04 11 12.1 | -0.2 |
| ASAR | Alice Springs | 22.49 | 135 | P | | P | | 04 11 12.4 | +0.1 |
| | comp=Z,120nm,0.8s,baz=311,slow=8.5,SNR=439 | | | | | | | | |
| | comp=Z,120nm,0.8s | | | | | | | | |
| AS01 | Alice Springs | 22.53 | 134 | P | | P | | 04 11 13.0 | +0.4 |
| KLBR | Kellerberrin | 23.13 | 177 | P | | P | | 04 11 19.7 | +0.9 |
| KLBR | Kellerberrin | 23.13 | 177 | P | | P | | 04 11 19.1 | +0.3 |
| | comp=Z,90nm,1.1s | | | | | | | | |
| KMBL | Kambalda | 23.40 | 169 | P | | P | | 04 11 21.6 | 0.0 |
| KMBL | Kambalda | 23.40 | 169 | P | | P | | 04 11 21.3 | -0.3 |
| | comp=Z,119nm,1.0s | | | | | | | | |
| MUN | Mundaring | 23.49 | 181 | P | | P | | 04 11 23.2 | +0.7 |
| MUN | Mundaring | 23.49 | 181 | P | | P | | 04 11 20.0 | -2.4 |
| GENI | Genyem | 24.14 | 78 | P | | P | | 04 11 30.1 | +1.2 |
| GENI | Genyem | 24.14 | 78 | P | | P | | 04 11 29.2 | +0.3 |
| | comp=Z,45nm,0.8s,comp=Z,10µm | | | | | | | | |
| GENI | Genyem | 24.14 | 78 | P | | P | | 04 11 36.5 | +7.6 |
| | comp=Z,112nm,1.2s,comp=Z,10µm | | | | | | | | |
| SURA | Surathani | 24.28 | 315 | P | | P | | 04 11 32.5 | +2.4 |
| NWAO | Narrogin (SRO) | 24.44 | 179 | P | | P | | 04 11 32.9 | +1.4 |
| NWAO | Narrogin (SRO) | 24.44 | 179 | P | | P | | 04 11 32.0 | +0.5 |
| NWAO | | | | IAmb | | IAmb | | 04 11 53.1 | |
| | comp=Z,40nm,0.7s | | | | | | | | |
| NWAO | Narrogin (SRO) | 24.44 | 179 | P | | P | | 04 11 32.0 | +0.5 |
| NWAO | | | | pmax | | pmax | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,41nm,0.7s | | | | | | | | |
| TABU | Tabubil | 24.64 | 84 | P | | P | | 04 11 32.7 | -0.8 |
| JAY | Jayapura | 24.68 | 78 | P | | P | | 04 11 34.4 | +0.5 |
| | comp=Z,30nm,1.1s,comp=Z,6µm | | | | | | | | |
| FORT | Forrest | 24.73 | 156 | P | | P | | 04 11 35.7 | +1.6 |
| FORT | Forrest | 24.73 | 156 | P | | P | | 04 11 34.4 | +0.3 |
| | comp=Z,191nm,0.7s | | | | | | | | |
| QIS | Mount Isa | 25.31 | 121 | P | | P | | 04 11 39.6 | +0.1 |
| QIS | Mount Isa | 25.31 | 121 | P | | P | | 04 11 39.4 | -0.1 |
| | comp=Z,103nm,1.3s | | | | | | | | |
| RKGY | Rocky Gully | 26.11 | 179 | P | | P | | 04 11 48.5 | +1.9 |
| | comp=Z,53nm,0.7s | | | | | | | | |
| OOD | Oodnadatta | 26.43 | 139 | P | | P | | 04 11 49.7 | +0.2 |
| COEN | Coen | 26.64 | 104 | P | | P | | 04 11 51.2 | -0.4 |
| COEN | Coen | 26.64 | 104 | P | | P | | 04 11 50.4 | -1.2 |
| COEN | | | | IAmb | | IAmb | | 04 11 51.9 | |
| | comp=Z,46nm,0.8s | | | | | | | | |
| COEN | Coen | 26.64 | 104 | P | | P | | 04 11 50.7 | -0.8 |
| | comp=Z,66nm,0.8s | | | | | | | | |
| MULG | Mulgathing | 27.24 | 145 | P | | P | | 04 11 57.0 | +0.2 |
| MTSU | Mount Surprise | 28.63 | 113 | P | | P | | 04 12 09.9 | +0.5 |
| NONG | Nongkai | 29.44 | 333 | P | | P | | 04 12 19.1 | +2.6 |
| LCRK | Leigh Creek | 29.85 | 140 | P | | P | | 04 12 20.5 | +0.4 |
| INKA | Innaminka | 29.86 | 133 | P | | P | | 04 12 20.9 | +0.8 |
| PMG | Port Moresby | 30.20 | 94 | P | | P | | 04 12 25.1 | +1.7 |
| PMG | Port Moresby | 30.20 | 94 | P | | P | | 04 12 24.7 | +1.3 |
| BBOO | Buckleboo | 30.27 | 146 | P | | P | | 04 12 23.7 | -0.1 |
| BBOO | Buckleboo | 30.27 | 146 | P | | P | | 04 12 23.6 | -0.1 |
| BBOO | | | | IAmb | | IAmb | | 04 12 24.7 | |
| | comp=Z,64nm,0.8s | | | | | | | | |
| BBOO | Buckleboo | 30.27 | 146 | P | | P | | 04 12 23.6 | -0.1 |
| CTA | Charters Tower | 30.95 | 115 | P | | P | | 04 12 30.6 | +0.6 |
| | comp=Z,1.7nm,1.0s,baz=283,slow=11,SNR=16 | | | | | | | | |
| CTAO | Charters Tower | 30.95 | 115 | P | | P | | 04 12 30.5 | +0.6 |
| CTAO | Charters Tower | 30.95 | 115 | P | | P | | 04 12 29.6 | -0.3 |
| CTAO | | | | IAmb | | IAmb | | 04 12 31.6 | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| CTAO | Charters Tower | 30.95 | 115 | P | | P | | 04 12 29.6 | -0.3 |
| CTAO | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| TV1H | Townsville Har | 31.20 | 113 | P | | P | | 04 12 33.0 | +0.9 |
| PHRA | Phrae | 31.21 | 329 | P | | P | | 04 12 33.3 | +1.2 |
| PHRA | | | | IAmb | | IAmb | | 04 12 53.7 | |
| | comp=Z,97nm,1.2s | | | | | | | | |
| WHYH | Whyalla | 31.29 | 145 | P | | P | | 04 12 33.5 | +0.8 |
| CMAR | Chiang Mai Arr | 31.85 | 327 | P | | P | | 04 12 38.2 | +0.4 |
| | comp=Z,9.2nm,1.0s,baz=154,slow=6.7,SNR=23 | | | | | | | | |
| | comp=Z,9.2nm,1.0s | | | | | | | | |
| CMAR | Chiang Mai Arr | 31.85 | 327 | *e*P | | P | | 04 12 39.3 | +1.5 |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| QLP | Quilpie | 31.86 | 128 | P | | P | | 04 12 38.7 | +0.9 |
| QLP | Quilpie | 31.86 | 128 | P | | P | | 04 12 38.7 | +0.9 |
| | comp=Z,81nm,1.2s | | | | | | | | |
| HTT | Hallett | 32.35 | 144 | P | | P | | 04 12 43.0 | +0.8 |
| HTT | Hallett | 32.35 | 144 | P | | P | | 04 12 43.4 | +1.2 |
| | comp=Z,70nm,1.0s | | | | | | | | |
| STKA | Stephens Creek | 32.97 | 139 | P | | P | | 04 12 48.1 | +0.6 |
| STKA | Stephens Creek | 32.97 | 139 | P | | P | | 04 12 47.7 | +0.1 |
| STKA | Stephens Creek | 32.97 | 139 | P | | P | | 04 12 48.0 | +0.4 |
| | comp=Z,17nm,0.8s | | | | | | | | |
| STKA | Stephens Creek | 32.97 | 139 | P | | P | | 04 12 47.9 | +0.4 |
| | comp=Z,46nm,0.6s,baz=311,slow=9.5,SNR=88 | | | | | | | | |
| | comp=Z,46nm,0.6s | | | | | | | | |
| STKA | Stephens Creek | 32.97

SONM Songino Array 56.69 352 P P 04 15 55.8 -0.3
SONM Songino Array 56.69 352 P P 04 15 55.9 -0.2
comp=Z,11nm,0.8s,baz=170,slow=9.5,SNR=12
comp=Z,11nm,0.8s
SONM Songino Array 56.69 352 eP P 04 15 56.2 0.0
SONM pmax pmax
comp=Z,11nm,0.8s
JCZ Jackson Bay 57.48 138 P P 04 16 03.1 +1.2
MLZ Mavora Lakes 57.54 139 P P 04 16 02.2 -0.1
WKZ Wanaka 57.92 138 P P 04 16 05.2 +0.2
WKZ IAmb IAmb 04 16 16.5
comp=Z,47nm,0.9s
CASY Casey 57.97 183 P P 04 16 04.7 -0.1
CASY IAmb IAmb 04 16 05.9
comp=Z,21nm,0.8s
WMQ Urumqi 58.19 336 eP P 04 16 09.8 +3.1
LBZ Lake Benmore 58.53 137 P P 04 16 09.0 -0.2
LBZ IAmb IAmb 04 16 10.2
comp=Z,46nm,1.0s
INZ Inchbonnie 58.83 135 IAmb IAmb 04 16 12.3
comp=Z,34nm,0.8s
KLR Kul'dur 58.88 12 iP P 04 16 11.3 -0.1
KLR pmax pmax
comp=Z,15nm,1.6s
RPZ Rata Peaks 58.89 136 P P 04 16 11.2 -0.5
RPZ Rata Peaks 58.89 136 P P 04 16 11.6 -0.1
comp=Z,101nm,0.9s,baz=263,slow=3.2,SNR=32
comp=Z,101nm,0.9s
QRZ Quartz Range 59.01 133 P P 04 16 14.7 +2.2
HEH HeiHe 59.14 8 eP P 04 16 12.5 -0.6
HEH pmax pmax
comp=Z,15nm,1.1s
OXZ Oxford 59.43 136 IAmb IAmb 04 16 16.2
comp=Z,32nm,0.7s
THZ Tophouse 59.56 134 P P 04 16 16.6 +0.2
NNZ Nelson 59.74 133 P P 04 16 17.1 -0.5
YSS Yuzh-Sakhalins 59.80 20 iP P 04 16 17.1 -0.6
YSS pmax pmax
comp=Z,34nm,1.2s
MQZ McQueen's Vall 59.98 136 P P 04 16 19.5 +0.4
MQZ IAmb IAmb 04 16 21.0
comp=Z,39nm,1.2s
DUWZ D'Urville Isla 60.02 132 P P 04 16 20.1 +0.6
KHZ Kahutara 60.20 134 P P 04 16 20.9 +0.2
TUWZ Tuamarina 60.21 133 P P 04 16 21.1 +0.3
TCW Tory Channel 60.39 133 P P 04 16 22.0 0.0
TCW Tory Channel 60.39 133 P P 04 16 22.0 0.0
TOZ Tahuroa Road 60.44 129 P P 04 16 23.7 +1.3
TOZ IAmb IAmb 04 16 25.9
comp=Z,26nm,1.0s
WNVZ Wahianoa 60.88 130 P P 04 16 26.4 +0.7
OTVZ Oturere 60.89 130 P P 04 16 26.7 +0.9
CAW Cannon Point 60.94 133 P P 04 16 25.2 -0.6
OGWZ Otaki Gorge 60.94 132 P P 04 16 25.5 -0.2
MOVZ Moawhango 61.02 131 P P 04 16 26.7 +0.2
MSWZ Moikau Station 61.15 133 P P 04 16 27.9 +0.6
PAWZ Paruwai Farm 61.27 133 P P 04 16 28.3 +0.2
SHLS Shalkode 61.40 330 eP P 04 16 26.6 -2.5
comp=Z,5.7nm,0.7s,baz=330
SHLS Shalkode 61.40 330 eP P 04 16 26.5 -2.5
SHLS pmax pmax
comp=Z,6.0nm,0.7s
BKZ Black Stump Fm 61.52 130 P P 04 16 30.4 +0.5
BKZ Black Stump Fm 61.52 130 IAmb IAmb 04 16 31.0
comp=Z,32nm,0.8s
UZB Uzynbulak 61.62 330 eP P 04 16 29.4 -1.1
baz=329
UZB Uzynbulak 61.62 330 eP P 04 16 29.3 -1.1
BFZ Birch Farm 61.69 132 P P 04 16 30.0 -0.9
BFZ Birch Farm 61.69 132 P P 04 16 31.2 +0.3
URZ Urewera 61.79 129 P P 04 16 30.6 -1.0
comp=Z,21nm,0.6s,baz=330,slow=4.9,SNR=21
comp=Z,21nm,0.6s
SATY Saty 61.86 329 eP P 04 16 31.2 -0.9
comp=Z,7.5nm,0.9s,baz=329
SATY Saty 61.86 329 eP P 04 16 31.2 -0.9
SATY pmax pmax
comp=Z,8.0nm,0.9s
ZHN Zhinishke 61.93 329 eP P 04 16 31.8 -0.8
baz=329
ZHN Zhinishke 61.93 329 eP P 04 16 31.7 -0.8
KPKS Kokpek 62.02 330 eP P 04 16 32.0 -1.2
comp=Z,7.3nm,1.0s,baz=330
KPKS Kokpek 62.02 330 eP P 04 16 31.9 -1.2
KPKS pmax pmax
comp=Z,7.0nm,1.0s
ZSN Zaisan 62.30 336 eP P 04 16 34.1 -0.7
comp=Z,6.5nm,1.0s,baz=336
ZSN Zaisan 62.30 336 eP P 04 16 34.0 -0.7
ZSN pmax pmax
comp=Z,7.0nm,1.0s
ZEA Zeya 62.53 7 eP P 04 16 36.2 +0.1
ZEA pmax pmax
comp=Z,30nm,1.0s
TNSS Tian-Shan 62.60 328 eP P 04 16 36.0 -1.4
baz=328
TNSS Tian-Shan 62.60 328 eP P 04 16 35.9 -1.4
MDOK Medeo 62.64 328 eP P 04 16 36.6 -0.8
baz=328
MDOK Medeo 62.64 328 eP P 04 16 36.5 -0.8
AAA Alma-Ata 62.74 328 eP P 04 16 37.2 -0.7
baz=328
AAA Alma-Ata 62.74 328 eP P 04 16 37.2 -0.7
MKAR Makanchi Array 62.84 334 P P 04 16 36.4 -2.0
comp=Z,7.9nm,0.8s,baz=138,slow=6.7,SNR=2.2
comp=Z,7.9nm,0.8s
CHKK Chushkaly 63.16 329 eP P 04 16 39.9 -0.8
baz=329
CHKK Chushkaly 63.16 329 eP P 04 16 39.8 -0.8
DGZ Jazzator, Alta 63.19 339 iP P 04 16 41.4 +0.5
DGZ pmax pmax
comp=Z,29nm,1.1s
TDK Taldyqorghan 63.27 331 eP P 04 16 40.6 -0.7
comp=Z,6.6nm,0.4s,baz=330
TDK Taldyqorghan 63.27 331 eP P 04 16 40.6 -0.7
TDK pmax pmax
comp=Z,7.0nm,0.4s
KUU Kurty 63.52 329 eP P 04 16 42.1 -1.0
comp=Z,12nm,0.9s,baz=328
KUU Kurty 63.52 329 eP P 04 16 42.0 -1.0
KUU pmax pmax
comp=Z,12nm,0.9s
BTLS Baital 65.50 328 eP P 04 16 55.3 -0.6
baz=328
BTLS Baital 65.50 328 eP P 04 16 55.3 -0.6
SEM Semipalatinsk 66.50 336 eP P 04 17 01.3 -1.3
baz=336
SEM Semipalatinsk 66.50 336 eP P 04 17 01.2 -1.3
BRLS Borolday 66.51 324 eP P 04 17 01.5 -1.0
baz=324
BRLS Borolday 66.51 324 eP P 04 17 01.4 -1.0
H04N2 CROZET ISLANDS 66.62 223 T T 05 30 02.2
baz=82,slow=76,SNR=7.7
H04N1 CROZET ISLANDS 66.64 223 T T 05 30 12.3
baz=82,slow=76,SNR=7.9
H04N3 CROZET ISLANDS 66.64 223 T T 05 29 51.4
baz=82,slow=76,SNR=7.0
ZALV Zalesovo Beam 67.63 340 P P 04 17 07.8 -1.6
comp=Z,3.0nm,0.6s,baz=139,slow=4.0,SNR=2.1
comp=Z,3.0nm,0.6s
VOI Vohitsoka 68.23 250 P P 04 17 13.5 -0.6
MAW Mawson 69.03 199 P P 04 17 18.8 +0.9
comp=Z,30nm,0.9s,baz=62,slow=6.3,SNR=36
comp=Z,30nm,0.9s
YAK Yakutsk 70.92 6 iP P 04 17 30.6 +1.1
YAK pmax pmax
comp=Z,15nm,0.9s
MA2 Magadan 73.01 17 iP P 04 17 43.1 +0.9
MA2 pmax pmax
comp=Z,17nm,1.1s
SEY Seymchan 76.20 16 eP P 04 17 58.1 -2.5
SEY pmax pmax
comp=Z,20nm,1.6s
AKTO Aktyubinsk 77.37 326 P P 04 18 05.1 -2.4
comp=Z,10nm,0.9s,baz=120,slow=11,SNR=4.0
comp=Z,10nm,0.9s
KMBO Kilima Mbogo 79.30 270 P P 04 18 17.9 -1.4
comp=Z,4.0nm,0.9s,baz=61,slow=8.2,SNR=7.9
comp=Z,4.0nm,0.9s
ARU Arti 80.17 331 iP P 04 18 22.7 0.0
ARU pmax pmax
comp=Z,8.0nm,0.9s
QSPA South Pole Qui 81.62 180 P P 04 18 30.6 0.0
QSPA IAmb IAmb 04 18 33.7
comp=Z,36nm,1.1s
QSPA South Pole Qui 81.62 180 P P 04 18 30.7 0.0
comp=Z,28nm,1.0s,baz=319,slow=3.0,SNR=29
comp=Z,28nm,1.0s
POGA Pongola 81.70 244 P P 04 18 31.5 -0.1
POGA IAmb IAmb 04 18 32.9
comp=Z,28nm,0.9s
ELIB Princess Elisa 83.11 198 dP P 04 18 39.5 +1.2
comp=Z,22nm,0.9s
BILL Bilibino 83.87 17 iP P 04 18 42.2 +0.3
BILL pmax pmax
comp=Z,5.0nm,1.3s
KIV Kislovodsk 84.38 316 eP P 04 18 46.2 +1.0
KIV pmax pmax
comp=Z,32nm,1.1s
GRHM Grahamstown, E 85.66 237 P P 04 18 52.8 +0.9
MBAR Mbarara 85.82 270 P P 04 18 51.9 -1.3
MBAR Mbarara 85.82 270 P P 04 18 51.9 -1.3
MBAR pmax pmax
comp=Z,13nm,1.1s
NVL N'lazarevskaya 86.97 199 eP P 04 18 57.8 +0.3
NVL eS SKSac 04 29 24.2 -0.3
NVL pmax pmax
comp=Z,16nm,0.8s
NVL MLR MLR
comp=Z,7μm,19.0s
BOSA Boshof 87.22 242 P P 04 18 58.9 -0.9
comp=Z,18nm,0.8s,baz=100,slow=4.8,SNR=22
comp=Z,18nm,0.8s
LBTB Lobatse 87.42 245 P P 04 19 00.2 -0.6
LBTB IAmb IAmb 04 19 01.7
comp=Z,18nm,0.8s
LBTB Lobatse 87.42 245 P P 04 19 00.2 -0.6
LBTB pmax pmax
comp=Z,18nm,0.9s
TROLL Troll, Antarti 89.31 196 ⇑P P 04 19 10.0 +1.2
comp=Z,777nm,0.6s
SNAA Sanae 90.95 196 P P 04 19 16.9 +0.5
SNAA IAmb IAmb 04 19 18.4
comp=Z,33nm,1.2s
SNAA Sanae 90.95 196 ⇑P P 04 19 17.4 +1.0
comp=Z,258nm,0.6s
SNAA Sanae 90.95 196 P P 04 19 16.9 +0.5
comp=Z,20nm,1.0s,baz=95,slow=5.7,SNR=89
comp=Z,20nm,1.0s
OBN Obninsk 91.14 326 iP P 04 19 16.4 -1.0
OBN pmax pmax
comp=Z,7.0nm,0.9s
BELA Belgrano 2 92.41 186 P P 04 19 22.9 0.0
BELA IAmb IAmb 04 19 24.1
comp=Z,18nm,0.8s
VNA2 Neumayer--Watz 92.59 196 ⇑P P 04 19 24.8 +0.9
comp=Z,14nm,0.6s,baz=125,slow=4.2
VNA1 Neumayer--Stat 92.99 196 ⇑P P 04 19 26.0 +0.3
comp=Z,16nm,1.2s
VNA3 Neumayer Olymp 93.01 195 ⇑P P 04 19 26.4 +0.5
comp=Z,11nm,0.9s
APA Apatity 95.08 338 ⇓iP P 04 19 43.6 +8.3
APA pmax pmax
comp=Z,5.0nm,0.9s
KVN Kaiserville 122.41 49 PKPdf PKPdf 04 25 07.2 -1.5
KVN Kaiserville 122.41 49 PKIKP PKPdf 04 25 07.2 -1.5
NVAR Mina Array Bea 122.44 50 PKP PKPdf 04 25 07.0 -1.8
comp=Z,1.8nm,0.8s,baz=265,slow=2.6,SNR=4.1
HLID Hailey 123.49 43 PKPdf PKPdf 04 25 08.8 -1.7
ELK Elko 123.95 46 PKPdf PKPdf 04 25 09.7 -1.9
ELK Elko 123.95 46 PKIKP PKPdf 04 25 09.7 -1.9
EGMT Eagleton 124.45 36 PKPdf PKPdf 04 25 10.0 -2.1
LL01 San Ignacio de 128.83 171 PKPdf PKPdf 04 25 19.9 -0.7
S22A 4UR Ranch, Cre 131.13 46 PKPdf PKPdf 04 25 25.6 +0.1
LR03 Panguipulli 131.53 171 PKPdf PKPdf 04 25 23.8 -2.0
TXAR Lajitas Array 136.87 56 PKhKP PKPpre 04 25 24.2
comp=Z,0.5nm,0.7s,baz=261,slow=2.9,SNR=4.0
TXAR PKP PKPdf 04 25 36.5 +0.3
comp=Z,1.6nm,0.8s,baz=248,slow=1.0,SNR=8.3
MT08 Bocatoma Ro 137.94 172 PKPdf PKPdf 04 25 35.5 -2.8
JCT Junction City 139.51 52 PKPdf PKPdf 04 25 39.2 -1.8
JCT Junction City 139.51 52 PKIKP PKPdf 04 25 39.2 -1.8
U38A Gravette 140.31 41 PKPdf PKPdf 04 25 39.5 -2.7
HBVL Hebbronville 141.80 56 PKPdf PKPdf 04 25 42.9 -2.3
MIAR Mount Ida 141.97 42 PKPpre 04 25 38.8
MIAR Mount Ida 141.97 42 PKHKP PKPpre 04 25 38.8
WCI Wyandotte Cave 143.81 31 PKPpre 04 25 42.9
WCI Wyandotte Cave 143.81 31 PKHKP PKPpre 04 25 42.9
CPUP Villa Florida 145.00 190 PKPbc PKPab 04 25 50.2 +0.2
comp=Z,80nm,0.8s,baz=168,slow=2.4,SNR=151
Q52A Bidwell 145.14 26 PKPbc PKPdf 04 25 47.5 -2.6
N58A Sunbury 145.56 18 PKPdf PKPdf 04 25 48.8 -2.3
146A Union 146.12 41 PKPdf PKPdf 04 25 51.3 -1.3
Z47A Carrollton 146.38 39 PKPdf PKPdf 04 25 50.3 -2.6
SDMD Soldier's Deli 146.83 19 PKPdf PKPdf 04 25 53.1 -0.4
Y49A Blount Mountai 146.94 37 PKPdf PKPdf 04 25 52.8 -1.1
152A Waverly Hall 148.78 36 PKPdf PKPdf 04 25 55.1 -1.8
AQDB Aquidauana 150.35 195 PKPbc PKPdf 04 26 02.1 +2.3
BDFB Brasilia 151.69 213 PKPbc PKPbc 04 26 07.3 -1.1
comp=Z,11nm,0.6s,baz=122,slow=2.2,SNR=6.8
PETF Flores 152.84 69 PKPdf 04 26 01.2 -2.4
PETF pPKPdf 04 26 08.4 +1.2
SIV San Ignacio 155.68 185 PKPab PKPab 04 26 33.9 +0.3
comp=Z,13nm,0.8s,baz=168,slow=2.9,SNR=13

*MOS* ***19*** *04:10:19.2±1.1,8.°21S×116.°48E,h10km,mb6.2/80, MS6.0/26,Error ellipse: s-maj=6.7km s-min=4.2km az=116.8*

*IDC* ***19*** *04:10:19.1±0.3,8.°25S×116.°48E,h0km,mb5.8/43, mbtmp5.8/45,ML5.6/2,MS6.0/19,Error ellipse: s-maj=11.2km s-min=7.7km az=61.0*

*BJI* ***19*** *04:10:21.6±0.0,8.°38S×116.°58E,h20km,mb5.9/91, mB6.5/74,Ms6.3/91,Ms7 6.1/85*

*NEIC* ***19*** *04:10:22.8,8.°45S×116.°50E,h24km,Moment Tensor Solution. Duration: 7s6 Moment tensor: Scale 10^18^Nm; Mrr3.88; Mθθ-3.20; Mφφ-0.69; Mrθ-2.01; Mθφ0.42; Mrφ0.17; Fault plane solution: M0 4.10000×10^18^ NP1: φs277.27000°, δ59.69000°, λ88.26000°. NP2: φs100.73000°, δ30.35000°, λ92.98000°. Principal axes: T 4.4125, Plg75.0000°, Azm182.0000°; N -0.6208, Plg2.0000°, Azm278.0000°; P -3.7916, Plg15.0000°, Azm9.0000°;*

*NEIC* ***19*** *04:10:22.6±2.3,8.°34S±0.°06×116.°60E±0.°05,h16km±1km, mb6.2/198,Ms_20 6.3/155,Mww6.3/8 Error ellipse: s-maj=10.5km s-min=8.6km az=171.0*

*NEIC* ***19*** *04:10:22.8,8.°35S×116.°60E,h24km*

*DJA* ***19*** *04:10:23.2±0.1,8.°S±1.°×11.°7E±.°,h18km±1km,M6.5/139, mB6.6/117,mb6.1/139,MLv6.6/30,Mw6.2/146, Mw(mB)6.5/117,MwMwp5.8/4,Mwp5.9/4*

**ISC 19 04:10:23.2±0.5,8.°33S±0.°03×116.°58E±0.°03,h26km±3km, n1547,σ1°52/1596,mb6.1/311,MS6.2/153,55C-12D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | ISC | Res |
|---|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.51 | 144 | Pg | Pb | 04 10 31.8 | -1.8 | |
| TWSI | | | | S | Sb | 04 10 39.1 | -1.6 | |
| PLAI | Plampang | 1.29 | 113 | Pg | Pn | 04 10 45.3 | -0.3 | |
| SRBI | Singaraja | 1.37 | 280 | P | Pb | 04 10 47.1 | -1.1 | |
| DNP | Denpasar | 1.40 | 255 | P | Pb | 04 10 48.1 | -0.6 | |
| DNP | | | | Pg | Pn | 04 10 50.0 | +2.9 | |
| JAGI | Jajag, Banyuwa | 2.40 | 266 | P | Pn | 04 11 01.1 | +0.1 | |
| JAGI | Jajag, Banyuwa | 2.40 | 266 | Pn | Pn | 04 11 00.8 | -0.2 | |
| JAGI | Jajag, Banyuwa | 2.40 | 266 | Pg | Pb | 04 11 08.5 | +2.6 | |
| JAGI | | | | Pn | Pn | 04 11 01.1 | +0.1 | |
| WBSI | Waikabubak, Su | 3.07 | 115 | Pn | Pn | 04 11 09.6 | -0.6 | |
| GRJI | Gresik | 4.30 | 289 | Pn | Pn | 04 11 28.2 | +1.2 | |
| BASI | Baing, Sumba | 4.37 | 116 | Pn | Pn | 04 11 28.9 | +0.8 | |
| BSSI | Bau Bau, Buton | 4.45 | 61 | Pn | Pn | 04 11 27.8 | -1.3 | |
| KAPI | Kappang | 4.56 | 44 | P | Pn | 04 11 29.8 | -0.8 | |
| KAPI | Kappang | 4.56 | 44 | Pn | Pn | 04 11 29.3 | -1.3 | |
| KAPI | Kappang | 4.56 | 44 | Pn | Pn | 04 11 29.4 | -1.2 | |
| | 140nm,0.3s,baz=193,slow=5.7,SNR=95 | | | | | | | |
| KAPI | | | | Sn | Sn | 04 12 21.8 | -0.9 | |
| | 504nm,0.3s,baz=40,slow=21,SNR=5.3 | | | | | | | |
| | 346nm,0.2s | | | | | | | |
| KAPI | Kappang | 4.56 | 44 | P | Pn | 04 11 30.4 | -0.2 | |
| KAPI | | | | S | Sn | 04 12 20.8 | -1.9 | |
| PWJI | Pagerwojo | 4.74 | 273 | Pn | Pn | 04 11 33.6 | +0.6 | |
| EDFI | Ende, Flores | 5.07 | 95 | Pn | Pn | 04 11 37.7 | -0.1 | |
| NGJI | Ngawi | 5.16 | 280 | Pn | Pn | 04 11 41.5 | +2.6 | |
| | 3μm,0.9s,97μm65nm | | | | | | | |
| BNSI | Bone | 5.25 | 42 | Pn | Pn | 04 11 40.6 | +0.5 | |
| | 3μm,0.7s,83nm | | | | | | | |
| SPSI | Sidrap Palu | 5.37 | 36 | Pn | Pn | 04 11 40.3 | -1.5 | |
| | 1μm,1.0s,37nm | | | | | | | |

MMRI Maumere 5.61 94 P Pn 04 11 44.8 -0.3
MMRI Maumere 5.61 94 Pn 04 11 44.2 -0.9
MMRI Maumere 5.61 94 P Pn 04 11 45.2 +0.1
UWJI Ujung Watu 5.90 288 P Pn 04 11 51.7 +2.7
3μm,1.8s,45μm
UGM Wanagama 6.01 273 P Pn 04 11 52.3 +1.7
UGM Wanagama 6.01 273 Pn Pn 04 11 51.6 +1.0
UGM Wanagama 6.01 273 P Pn 04 11 51.8 +1.2
SMRI Semarang 6.21 281 P Pn 04 11 57.0 +3.6
SMRI Semarang 6.21 281 Pn 04 11 54.6 +1.2
SMRI Semarang 6.21 281 P Pn 04 11 55.9 +2.5
2μm,1.0s,62μm25nm
BBSI Bau Bau 6.58 65 P Pn 04 12 00.7 +2.2
2μm,1.1s,47μm12nm
BKB Balikpapan 7.03 3 P Pn 04 12 10.0 +5.4
BKB Balikpapan 7.03 3 P Pn 04 12 10.4 +5.8
2μm,0.8s,25nm
BATI Baumata 7.24 106 P Pn 04 12 08.4 +0.9
MTKI Muara Teweh, K 7.52 347 P Pn 04 12 11.8 +0.4
KPJI Karang Pucung 7.64 277 P Pn 04 12 14.9 +1.9
1μm,0.7s,22μm12nm
SOEI Soe 7.73 101 P Pn 04 12 15.7 +1.4
SOEI Soe 7.73 101 Pn Pn 04 12 13.9 -0.4
SOEI Soe 7.73 101 P Pn 04 12 13.9 +0.4
SOEI Soe 7.73 101 P Pn 04 12 15.3 +1.0
SMKI Samarinda 7.85 5 P Pn 04 12 19.7 +3.8
812nm,0.8s,50μm9.4nm
CMJI Cimerak 8.07 273 P Pn 04 12 19.5 +0.6
1μm,0.8s,17μm
JCJI Jatiwangi 8.44 282 P Pn 04 12 26.7 +2.8
681nm,1.0s,31μm
BBJI Bungbulang 8.88 275 P Pn 04 12 32.1 +1.9
CNJI Cibinong 9.41 276 P Pn 04 12 39.8 +2.4
800nm,1.0s
LUWI Luwuk 9.51 41 P Pn 04 12 41.5 +2.9
LUWI Luwuk 9.51 41 Pn 04 12 40.1 +1.5
LUWI Luwuk 9.51 41 P Pn 04 12 31.5 -7.1
LUWI Luwuk 9.51 41 P Pn 04 12 41.8 +3.2
440nm,1.1s,13μm
STKI Sintang 9.76 328 P Pn 04 12 44.1 +2.0
DBJI Dramaga 9.90 280 P Pn 04 12 46.6 +2.5
1μm,0.9s,40μm
SKJI Sukabumi 10.02 277 P Pn 04 12 48.2 +2.6
1μm,1.1s,24μm
TNG Tangerang 10.08 282 P 04 12 49.5
729nm,1.3s,17μm
TNG P Pn 04 12 49.4 +2.9
1μm,1.4s,27μm
MRSI Marisa 10.25 32 P Pn 04 12 49.0 +0.2
336nm,0.9s
TOLI2 Tolitoli 10.27 24 P Pn 04 12 53.0 +3.9
TOLI2 Tolitoli 10.27 24 Pn 04 12 49.6 +0.6
SBJI Serang 10.59 281 P Pn 04 12 56.4 +2.9
714nm,0.9s,16μm
XMI Christmas Isla 10.95 258 P Pn 04 12 57.4 -1.0
GTOI Gorontalo 10.97 36 P Pn 04 13 02.5 +3.8
XMIS Christmas Isla 10.99 258 Pn Pn 04 12 56.2 -2.8
SANI Sanana 11.25 57 P Pn 04 13 04.4 +1.8
SANI Sanana 11.25 57 P Pn 04 12 59.9 -2.7
SANI Sanana 11.25 57 P Pn 04 13 03.8 +1.2
999nm,1.4s,15μm
KMSI Cibinong 11.52 40 P Pn 04 13 09.5 +3.3
1μm,1.4s,24μm
SBUM Sibu 11.55 338 Pn Pn 04 13 08.2 +1.5
KSM Kuching 11.57 327 Pn Pn 04 13 09.1 +2.2
NLAI Namlea 11.62 65 P Pn 04 13 11.1 +3.5
647nm,2.0s,17μm
BLSI Bandar Lampung 11.63 284 P Pn 04 13 11.8 +4.1
308nm,0.8s,11μm
PPBI Pangkal Pinang 12.06 300 P Pn 04 13 16.1 +2.5
348nm,1.2s,39μm
KASI Kota Agung 12.31 282 P Pn 04 13 18.9 +1.9
672nm,1.1s,12μm
LWLI Liwa 12.86 284 P Pn 04 13 26.9 +2.2
1μm,0.8s,22μm
PMBI Palembang 12.91 294 Pn Pn 04 13 26.9 +1.6
FITZ Fitzroy Crossi 13.12 139 P Pn 04 13 27.5 -0.5
FITZ Fitzroy Crossi 13.12 139 Pn Pn 04 13 26.5 -1.5
FITZ Fitzroy Crossi 13.12 139 P Pn 04 13 27.5 -0.5
comp=Z,14μm,0.9s
MBWA Marble Bar 13.12 167 P Pn 04 13 27.5 -0.5
MBWA Marble Bar 13.12 167 Pn Pn 04 13 25.4 -2.6
MBWA Marble Bar 13.12 167 P Pn 04 13 26.8 -1.2
comp=Z,80μmcomp=Z,1μm,0.8s
MSAI Masohi 13.24 69 P Pn 04 13 32.9 +3.1
comp=Z,458nm,1.3s,comp=Z,13μm
LBMI Labuha 13.29 55 P Pn 04 13 34.2 +3.7
comp=Z,1μm,1.6s,comp=Z,17μm
PSAD1 Pilbara Seismi 13.43 167 P Pn 04 13 31.3 -0.9
comp=Z,76μmcomp=Z,1μm,0.9s
PSA00 Pilbara Seismi 13.54 167 P Pn 04 13 33.7 -0.1
PSA00 Pilbara Seismi 13.54 167 Pn Pn 04 13 31.6 -2.2
PSA00 Pilbara Seismi 13.54 167 Pn Pn 04 13 32.9 -0.9
PSA00 Pilbara Seismi 13.54 167 P Pn 04 13 32.3 -1.5
comp=Z,60μmcomp=Z,1μm,0.9s
PSAC2 Pilbara Seismi 13.54 167 P Pn 04 13 32.4 -1.4
comp=Z,67μmcomp=Z,1μm,0.9s
MYLDM Lahad Datu 13.55 8 Pn Pn 04 13 34.0 0.0
PSAD3 Pilbara Seismi 13.60 167 P Pn 04 13 32.8 -1.8
BNDI Bandanaira 13.77 75 P Pn 04 13 39.4 +2.4
BNDI Bandanaira 13.77 75 P Pn 04 13 38.9 +1.9
KNRA Kununurra 13.97 123 Pn Pn 04 13 37.8 -1.9
KNRA Kununurra 13.97 123 P Pn 04 13 37.7 -2.0
TNTI Ternate 14.05 50 P Pn 04 13 43.4 +2.6
TNTI Ternate 14.05 50 Pn Pn 04 13 40.3 -0.5
TNTI Ternate 14.05 50 P P 04 13 45.0 -3.3
comp=Z,546nm,1.7s,comp=Z,25μm
MNAI Manna 14.10 285 P Pn 04 13 43.9 +2.4
MNAI Manna 14.10 285 Pn 04 13 40.5 -1.0
MNAI Manna 14.10 285 P Pn 04 13 42.8 +1.3
comp=Z,1μm,1.4s,comp=Z,25μm
KKM Kota Kinabalu 14.28 359 P Pn 04 13 46.4 +2.4
KKM Kota Kinabalu 14.28 359 Pn Pn 04 13 45.1 +1.1
GIRL Giralia 14.41 189 P Pn 04 13 43.8 -1.0
GIRL Giralia 14.41 189 Pn Pn 04 13 43.4 -2.3
SAUI Saumlaki 14.58 90 P Pn 04 13 46.4 -1.6
SAUI Saumlaki 14.58 90 04 13 45.7 -2.3
SAUI Saumlaki 14.58 90 P Pn 04 13 46.2 -1.8
comp=Z,2μm,1.1s,comp=Z,44μm
DRS Darwin Rock St 14.66 107 P Pn 04 13 47.6 -1.6
SGSI Sangihe 14.90 37 P P 04 13 56.5 -1.3
MTN Manton Dam 14.99 109 P Pn 04 13 51.6 -2.0
MTN Manton Dam 14.99 109 Pn Pn 04 13 49.5 -4.1
MTN Manton Dam 14.99 109 P Pn 04 13 51.1 -2.5
TPRI Tanjung Pinang 15.12 307 P P 04 13 58.6 -1.7
comp=Z,639nm,1.9s,comp=Z,14μm
BTDF Bukit Timah Da 15.99 306 P P 04 14 11.7 +1.8
MYKOM Kota Tinggi 16.19 308 P Pn 04 14 08.6 -0.6
KDU Kakadu 16.22 107 P Pn 04 14 07.2 -2.3
KDU Kakadu 16.22 107 P Pn 04 14 05.6 -3.9
SWI Sorong 16.40 64 P Pn 04 14 12.6 +0.8
comp=Z,2μm,1.5s,comp=Z,33μm
FAKI Fak Fak 16.49 72 P Pn 04 14 12.7 -0.3
FAKI Fak Fak 16.49 72 Pn 04 14 11.5 -1.5
FAKI IAmb IAmb 04 14 20.8
comp=Z,3μm,1.7s
FAKI Fak Fak 16.49 72 P Pn 04 14 11.2 -1.8
comp=Z,1μm,2.0s,comp=Z,33μm
PPSI Pulau Pagai 17.39 288 P P 04 14 25.3 -0.1
comp=Z,632nm,1.1s,comp=Z,14μm
PDSI Padang 17.66 294 P P 04 14 28.8 +0.3
comp=Z,325nm,0.8s
BKNI Bangkinang 17.71 298 P P 04 14 31.6 +2.6
BKNI Bangkinang 17.71 298 Pn Pn 04 14 27.4 -0.9
BKNI Bangkinang 17.71 298 P P 04 14 29.9 +0.9
BKNI S S 04 17 52.1 +0.3
BKNI Bangkinang 17.71 298 P P 04 14 31.8 +2.8
comp=Z,721nm,1.2s,comp=Z,34μm
DAV Davao City (W) 17.73 31 P P 04 14 32.1 +2.9
DAV Davao City (W) 17.73 31 P P 04 14 29.8 +0.6
DAV Davao City (W) 17.73 31 P P 04 14 29.5 +0.3
comp=Z,48nm,0.3s,baz=158,slow=0.8,SNR=29
DAV LR LR 04 22 02.8
comp=Z,46μm,20.1s,baz=202,slow=40
comp=Z,579nm,1.0s
DAV Davao City (W) 17.73 31 P P 04 14 31.9 +2.6
MEEK Meekatharra 18.32 174 P Pn 04 14 36.2 +0.5
MEEK Meekatharra 18.32 174 P Pn 04 14 35.8 +0.1
comp=Z,31μmcomp=Z,2μm,0.9s
SISI Saibi 18.75 291 P P 04 14 40.3 -0.2
comp=Z,477nm,1.0s
COCO West Island 19.80 257 P Pn 04 14 54.9 +1.3
COCO West Island 19.80 257 P P 04 14 51.9 0.0
COCO West Island 19.80 257 P Pn 04 14 53.8 +0.2

COCO P Pn 04 14 53.8 +0.2
**COCO West Island 19.80 257** P P 04 14 51.9 0.0
COCO pmax pmax
comp=Z,273nm,0.9s
**PBSI Pulau Batu 20.00 293** P Pn 04 14 55.3 -0.7
comp=Z,625nm,1.6s,comp=Z,14μm
**WRKA Warakurna 20.03 147** P P 04 14 55.4 +0.9
comp=Z,4μm,0.9s
**IPM Ipoh 20.06 309** P Pn 04 14 58.7 +2.0
**IPM Ipoh 20.06 309** P Pn 04 14 56.2 -0.5
IPM IAMs_20 IAMs_20 04 23 21.6
comp=Z,107μm,20.0s
**MORW Morawa 20.64 181** P Pn 04 15 03.2 -0.2
**MORW Morawa 20.64 181** P Pn 04 15 02.6 -0.8
comp=Z,973nm,2.9s
**WRA Warramunga Arr 20.71 126** P P 04 15 01.6 -0.3
comp=Z,755nm,0.8s,baz=300,slow=12,SNR=160
WRA S S 04 18 48.8 -3.3
comp=Z,244nm,1.1s,baz=307,slow=22,SNR=14
WRA LR LR 04 23 44.0
comp=Z,51μm,18.5s,baz=298,slow=39
comp=Z,755nm,0.8s
**WRAB Tennant Creek 20.71 126** P P 04 15 01.5 -0.4
WRAB IAmb IAmb 04 15 07.7
comp=Z,1μm,0.7s
**WRAB Tennant Creek 20.71 126** P P 04 15 01.5 -0.4
WRAB pmax pmax
comp=Z,1μm,0.7s
WRAB MLR MLR
comp=Z,49μm,20.0s
**WB1 Warramunga Ar. 20.73 126** P P 04 15 02.1 +0.1
**RPSI Rantau Prapat 20.73 301** P P 04 15 03.1 +1.1
**PSI Prapat 20.79 301** P Pn 04 15 04.6 -0.7
**PSI Prapat 20.79 301** P P 04 15 03.2 +0.4
PSI pmax pmax
comp=Z,480nm,0.9s
PSI MLR MLR
comp=Z,75μm,20.0s
**KULM Kulim 20.86 310** P P 04 15 03.8 +0.3
KULM IAMs_20 IAMs_20 04 24 15.7
comp=Z,112μm,18.0s
**GSI Gunungsitoli 21.22 296** P P 04 15 11.5 +4.1
**GSI Gunungsitoli 21.22 296** P P 04 15 08.6 +1.2
**GSI Gunungsitoli 21.22 296** P P 04 15 10.0 +2.6
comp=Z,301nm,0.8s
**KCSI Kotacane, Aceh 22.14 301** P P 04 15 18.5 +1.2
comp=Z,632nm,1.3s
**BLDU Ballidu 22.18 180** P P 04 15 19.0 +1.5
**AS31 Alice Springs 22.54 135** P P 04 15 21.2 -0.4
AS31 IAmb IAmb 04 15 24.9
comp=Z,490nm,1.1s
**AS31 Alice Springs 22.54 135** P P 04 15 21.9 +0.3
comp=Z,463nm,1.1s
**ASAR Alice Springs 22.54 135** P P 04 15 21.3 -0.3
**ASAR Alice Springs 22.54 135** P P 04 15 21.5 -0.1
comp=Z,1μm,0.9s,baz=311,slow=8.9,SNR=138
ASAR PcP PcP 04 19 15.3 +0.4
comp=Z,56nm,0.8s,baz=310,slow=1.7,SNR=4.4
ASAR S S 04 19 31.8 +4.3
comp=Z,272nm,1.0s,baz=315,slow=24,SNR=8.8
ASAR LR LR 04 24 18.6
comp=Z,54μm,19.7s,baz=310,slow=37
comp=Z,1μm,0.9s
**AS01 Alice Springs 22.57 135** P P 04 15 22.7 +0.8
**SNSI Sinabang, Aceh 22.84 297** P P 04 15 25.8 +1.1
comp=Z,651nm,1.1s,comp=Z,16μm
**KLBR Kellerberrin 23.18 177** P P 04 15 29.0 +1.0
**KLBR Kellerberrin 23.18 177** P P 04 15 28.7 +0.7
comp=Z,1μm,1.1s
**KMBL Kambalda 23.45 169** P P 04 15 31.0 +0.2
**KMBL Kambalda 23.45 169** P P 04 15 30.9 +0.2
comp=Z,2μm,1.6s
**MTKN Mount Kenneth 23.50 182** P P 04 15 34.7 +3.5
**MUN Mundaring 23.54 181** P P 04 15 32.5 +0.9
**MUN Mundaring 23.54 181** P P 04 15 32.5 +0.9
comp=Z,624nm,1.3s
**MMPI Merauke 23.55 92** P P 04 15 29.3 -2.6
comp=Z,2μm,1.7s,comp=Z,40μm
**MLSI Meulaboh, Aceh 23.69 301** P P 04 15 33.8 +0.6
comp=Z,615nm,0.8s,comp=Z,1μm
**LHMI Lhok Sumawe 23.76 304** P P 04 15 35.5 +1.6
**LHMI Lhok Sumawe 23.76 304** P P 04 15 34.0 +0.2
LHMI IAmb IAmb 04 15 38.6
comp=Z,1μm,0.8s
**LHMI Lhok Sumawe 23.76 304** P P 04 15 35.7 +1.8
comp=Z,2μm,0.9s,comp=Z,39μm
**SRIT Nakonsritamara 23.85 314** P P 04 15 36.1 +1.4
SRIT IAmb IAmb 04 15 39.6
comp=Z,422nm,1.1s
SRIT IAMs_20 IAMs_20 04 25 42.1
comp=Z,97μm,20.0s
**GENI Genyem 24.15 78** P P 04 15 36.5 -1.1
**NWAO Narrogin (SRO) 24.49 179** P P 04 15 41.1 +0.6
**NWAO Narrogin (SRO) 24.49 179** P P 04 15 41.4 +0.9
**NWAO Narrogin (SRO) 24.49 179** P P 04 15 40.3 -0.2
NWAO IAmb IAmb 04 15 57.5
comp=Z,2μm,1.4s
**NWAO Narrogin (SRO) 24.49 179** P P 04 15 40.5 0.0
comp=Z,152nm,0.9s,baz=348,slow=10,SNR=31
NWAO LR LR 04 25 31.8
comp=Z,60μm,20.7s,baz=360,slow=37
comp=Z,152nm,0.9s
**NWAO Narrogin (SRO) 24.49 179** S S 04 20 13.4 +14
**NWAO Narrogin (SRO) 24.49 179** P P 04 15 40.3 -0.2
NWAO pmax pmax
comp=Z,2μm,1.5s
NWAO MLR MLR
comp=Z,62μm,20.0s
**TABU Tabubil 24.66 85** P P 04 15 41.7 -0.6
**FORT Forrest 24.78 156** P P 04 15 44.2 +1.1
**FORT Forrest 24.78 156** P P 04 15 43.2 +0.1
FORT IAmb IAmb 04 16 08.9
comp=Z,1μm,0.9s
FORT IAMs_20 IAMs_20 04 25 10.6
comp=Z,149μm,21.0s
**FORT Forrest 24.78 156** P P 04 15 45.0 +1.8
comp=Z,1μm,1.0s
**QIS Mount Isa 25.36 121** P P 04 15 49.0 +0.5
comp=Z,1μm,1.3s
**RKGY Rocky Gully 26.16 179** P P 04 15 57.6 +2.0
**RKGY Rocky Gully 26.16 179** P P 04 15 58.2 +2.6
comp=Z,791nm,1.1s
**OOD Oodnadatta 26.48 139** P P 04 15 58.6 +0.1
**H01W3 Cape Leeuwin H 26.53 184** P P 04 16 01.4 +2.8
baz=18,slow=8.0,SNR=21
**H01W1 Cape Leeuwin H 26.54 184** P P 04 16 01.4 +2.7
baz=18,slow=8.0,SNR=30
**H01W2 Cape Leeuwin H 26.54 184** P P 04 16 01.8 +3.1
baz=18,slow=8.0,SNR=24
**AUALB St Joseph's Co 26.58 178** P P 04 16 01.6 +2.3
**COEN Coen 26.68 104** P P 04 16 00.1 -0.4
**COEN Coen 26.68 104** P P 04 15 59.9 -0.6
COEN IAmb IAmb 04 16 02.0
comp=Z,1μm,1.6s
**COEN Coen 26.68 104** P P 04 16 00.2 -0.3
comp=Z,461nm,1.3s
**NAYO Nakonayok 27.11 326** P P 04 16 07.7 +3.4
**MULG Mulgathing 27.29 145** P P 04 16 06.1 +0.2
**QIZ Qiongzhong 27.98 346** P P 04 16 17.2 +5.1
**QIZ Qiongzhong 27.98 346** P P 04 16 13.8 +1.7
QIZ S S 04 21 00.5 +5.6
QIZ pmax pmax
comp=Z,100nm,1.1s
QIZ pmax pmax
comp=Z,5μm,7.5s
QIZ LR LR
comp=Z,25μm,14.8s
QIZ LR LR
comp=Z,18μm,14.8s
QIZ LR LR
comp=Z,30μm,12.7s
**MTSU Mount Surprise 28.67 113** P P 04 16 19.3 +0.9
**NONG Nongkai 29.39 333** P P 04 16 28.3 +3.7
**LCRK Leigh Creek 29.90 140** P P 04 16 29.8 +0.7
**INKA Innaminka 29.91 133** P P 04 16 30.3 +1.1
**PMG Port Moresby 30.23 94** P P 04 16 34.0 +1.8
**PMG Port Moresby 30.23 94** P P 04 16 34.2 +2.0
**PMG Port Moresby 30.23 94** P P 04 16 31.2 -1.0
**PMG Port Moresby 30.23 94** P P 04 16 31.8 -0.4
comp=Z,22nm,0.6s,baz=287,slow=5.7,SNR=6.8
PMG LR LR 04 32 23.1
comp=Z,41μm,18.2s,baz=268,slow=44
comp=Z,22nm,0.6s
**PMG Port Moresby 30.23 94** *ce*P P 04 16 34.8 +2.6
PMG pmax pmax
comp=Z,224nm,2.5s

**BBOO Buckleboo 30.32 146** P P 04 16 33.3 +0.5
**BBOO Buckleboo 30.32 146** P P 04 16 32.3 -0.4
BBOO IAMs_20 IAMs_20 04 29 22.2
comp=Z,78μm,19.0s
**BBOO Buckleboo 30.32 146** P P 04 16 32.9 +0.1
comp=Z,711nm,0.9s
**PBA Port Blair 30.92 310** IAMs_20 IAMs_20 04 30 19.1
comp=Z,69μm,20.0s
**CTA Charters Tower 30.99 115** P P 04 16 39.3 +0.4
comp=Z,26nm,1.1s,baz=288,slow=9.6,SNR=85
comp=Z,26nm,1.1s
**CTAO Charters Tower 30.99 115** P P 04 16 40.2 +1.3
**CTAO Charters Tower 30.99 115** P P 04 16 38.7 -0.2
CTAO IAmb IAmb 04 16 41.5
comp=Z,817nm,1.3s
**CTAO Charters Tower 30.99 115** IAMs_20 IAMs_20 04 31 22.5
comp=Z,71μm,18.0s
**CTAO Charters Tower 30.99 115** P P 04 16 38.7 -0.2
CTAO pmax pmax
comp=Z,817nm,1.3s
CTAO MLR MLR
comp=Z,71μm,18.0s
**PHRA Phrae 31.16 329** P P 04 16 41.8 +1.5
**TV1H Townsville Har 31.24 114** P P 04 16 42.5 +1.5
**MANU Manus Island 31.27 80** P P 04 16 40.5 -0.9
**WHYH Whyalla 31.34 145** P P 04 16 42.8 +1.1
**PTPS Port Pirie 31.68 144** P P 04 16 46.5 +1.8
**TPUB Ta-pu 31.68 7** P P 04 16 48.2 +3.4
**TPUB Ta-pu 31.68 7** P P 04 16 46.1 +1.3
TPUB IAmb IAmb 04 16 50.5
comp=Z,163nm,1.0s
**CM31 Chiang Mai Arr 31.80 327** P P 04 16 47.9 +2.0
CM31 IAmb IAmb 04 17 05.8
comp=Z,457nm,1.3s
**CMAR Chiang Mai Arr 31.80 327** P P 04 16 46.9 +1.0
**CMAR Chiang Mai Arr 31.80 327** P P 04 16 48.5 +2.6
comp=Z,159nm,1.0s,baz=154,slow=6.9,SNR=129
CMAR ScP ScP 04 23 20.1 +1.3
comp=Z,15nm,0.8s,baz=177,slow=3.1,SNR=12
CMAR LR LR 04 31 13.1
comp=Z,35μm,18.5s,baz=150,slow=40
**CMAR Chiang Mai Arr 31.80 327** P P 04 16 46.9 +1.0
**YULB Yu-li 31.86 8** P P 04 16 51.1 +4.7
**YULB Yu-li 31.86 8** P P 04 16 45.9 -0.6
**AUAYR Ayr State High 31.88 114** P P 04 16 48.0 +1.3
**QLP Quilpie 31.90 128** P P 04 16 48.2 +1.4
**QLP Quilpie 31.90 128** P P 04 16 48.1 +1.2
comp=Z,1μm,1.9s
**SLVN Son La 31.99 337** P P 04 16 47.7 +0.1
SLVN IAmb IAmb 04 16 53.6
comp=Z,255nm,1.2s
**SSLB Suanglung 32.20 8** P P 04 16 53.3 +3.9
**SSLB Suanglung 32.20 8** P P 04 16 49.3 -0.1
SSLB IAmb IAmb 04 16 55.3
comp=Z,267nm,1.1s
**HTT Hallett 32.40 144** P P 04 16 51.9 +0.7
**HTT Hallett 32.40 144** P P 04 16 51.9 +0.7
comp=Z,846nm,1.7s
**CRAI Chiangrai 32.55 331** P P 04 16 52.8 +0.3
CRAI IAmb IAmb 04 16 57.7
comp=Z,385nm,1.2s
**KNMB Chin-men Tao 32.64 3** P P 04 16 52.4 -0.8
KNMB IAmb IAmb 04 16 59.0
comp=Z,187nm,1.1s
**NACB Ninganchiao 32.67 9** P P 04 16 55.5 +2.0
**NACB Ninganchiao 32.67 9** P P 04 16 53.2 -0.2
**STKA Stephens Creek 33.02 139** P P 04 16 57.3 +0.8
**STKA Stephens Creek 33.02 139** P P 04 16 56.6 +0.1
**STKA Stephens Creek 33.02 139** P P 04 16 57.1 +0.6
comp=Z,143nm,1.5s
**STKA Stephens Creek 33.02 139** P P 04 16 57.4 +0.9
comp=Z,328nm,0.8s,baz=308,slow=9.8,SNR=79
STKA LR LR 04 31 14.7
comp=Z,51μm,19.2s,baz=305,slow=38
comp=Z,328nm,0.8s
**STKA Stephens Creek 33.02 139** P P 04 16 56.6 +0.1
STKA pmax pmax
comp=Z,125nm,1.0s
**QZH Quanzhou 33.12 3**⇓*i*P P 04 16 57.6 +0.2
QZH S S 04 22 17.3 +1.9
QZH pmax pmax
comp=Z,170nm,1.1s
QZH LR LR
comp=Z,13μm,15.8s
QZH LR LR
comp=Z,7μm,14.1s
QZH LR LR
comp=Z,18μm,17.2s
**YHNB Yeheng 33.13 8** P P 04 16 59.5 +1.9
**YHNB Yeheng 33.13 8** P P 04 16 57.4 -0.2
YHNB IAmb IAmb 04 17 06.6
comp=Z,237nm,1.0s
**GHSS Government Hou 33.30 146** P P 04 17 01.0 +2.1
**TATO Taipei 33.44 8** P P 04 17 01.3 +1.1
**TATO Taipei 33.44 8** P P 04 16 59.7 -0.5
TATO IAmb IAmb 04 17 05.2
comp=Z,511nm,1.1s
**TATO Taipei 33.44 8** P P 04 17 00.6 +0.4
**GULI GuiLin 33.96 350**⇓P P 04 17 07.3 +2.6
GULI S S 04 22 34.6 +6.3
GULI pmax pmax
comp=Z,60nm,1.3s
GULI pmax pmax
comp=Z,5μm,8.1s
GULI LR LR
comp=Z,16μm,15.3s
GULI LR LR
comp=Z,14μm,16.6s
GULI LR LR
comp=Z,23μm,16.5s
**RMQ Roma 35.47 125** P P 04 17 20.2 +2.3
**GUMO Guam 35.54 52** P P 04 17 18.8 +0.3
**GUMO Guam 35.54 52** P P 04 17 17.6 -0.9
GUMO IAmb IAmb 04 17 23.8
comp=Z,612nm,1.3s
**GUMO Guam 35.54 52** P P 04 17 17.9 -0.6
comp=Z,303nm,1.1s,baz=203,slow=8.4,SNR=5.1
comp=Z,303nm,1.1s
**GUMO Guam 35.54 52** P P 04 17 17.6 -0.9
GUMO pmax pmax
comp=Z,612nm,1.3s
**CMSA Cobar Meteorol 35.60 134** P P 04 17 20.3 +1.4
**CMSA Cobar Meteorol 35.60 134** P P 04 17 20.5 +1.5
comp=Z,601nm,1.4s
**RK1H Rockhampton Ha 35.77 119** P P 04 17 21.6 +1.1
**KMI Kunming 35.88 338**⇑P P 04 17 25.4 +3.8
KMI PP PP 04 18 43.5 +0.1
KMI S S 04 23 04.8 +6.5
KMI pmax pmax
comp=Z,520nm,1.0s
KMI pmax pmax
comp=Z,7μm,6.0s
KMI LR LR
comp=Z,24μm,18.0s
KMI LR LR
comp=Z,17μm,15.0s
**GYA Guiyang 35.89 345**⇑P P 04 17 23.9 +2.3
GYA PP PP 04 18 47.3 +3.8
GYA S S 04 23 03.8 +5.5
GYA pmax pmax
comp=Z,220nm,1.3s
GYA pmax pmax
comp=Z,7μm,5.9s
GYA LR LR
comp=Z,12μm,14.4s
GYA LR LR
comp=Z,11μm,22.9s
GYA LR LR
comp=Z,19μm,25.4s
**AULRC Lightning Ridg 36.18 130** P P 04 17 25.0 +1.1
**ARPS Mount Arapiles 36.45 145** P P 04 17 27.5 +1.4
**ARPS Mount Arapiles 36.45 145** P P 04 17 27.2 +1.1
comp=Z,681nm,1.0s
**CNSH ChangSha 36.46 355** P P 04 17 27.0 +0.7
CNSH S S 04 23 10.1 +3.3
CNSH pmax pmax
comp=Z,46nm,1.2s
CNSH LR LR
comp=Z,16μm,15.3s
CNSH LR LR
comp=Z,8μm,14.0s
CNSH LR LR
comp=Z,20μm,16.1s
**JOW Kunigami 36.74 18** P P 04 17 31.9 +3.2
**JOW Kunigami 36.74 18** P P 04 17 28.7 0.0

JOW IAmb IAmb 04 17 33.4
comp=Z,257nm,1.2s
**JOW Kunigami 36.74 18** P P 04 17 28.7 0.0
comp=Z,103nm,0.9s,baz=200,slow=7.5,SNR=12
JOW LR LR 04 34 19.4
comp=Z,12μm,20.2s,baz=205,slow=39
comp=Z,103nm,0.9s
**JMZ Minamidaito 2 36.81 22** P P 04 17 33.2 +4.0
**JMZ Minamidaito 2 36.81 22** P P 04 17 28.6 -0.7
**EIDS Eidsvold 36.96 122** P P 04 17 32.0 +1.4
**EIDS Eidsvold 36.96 122** P P 04 17 30.7 +0.1
EIDS IAmb IAmb 04 17 34.8
comp=Z,464nm,1.8s
EIDS IAMs_20 IAMs_20 04 34 14.4
comp=Z,67μm,19.0s
**EIDS Eidsvold 36.96 122** P P 04 17 31.7 +1.1
comp=Z,106nm,1.2s
**PZH PanZhiHua 37.50 338** P P 04 17 37.8 +2.5
PZH PP PnPn 04 19 09.6 +7.5
PZH S S 04 23 23.1 +0.2
PZH pmax pmax
comp=Z,290nm,1.1s
PZH pmax pmax
comp=Z,7μm,6.4s
PZH LR LR
comp=Z,15μm,19.1s
PZH LR LR
comp=Z,27μm,20.1s
PZH LR LR
comp=Z,22μm,19.1s
**TNCH TengChong 37.53 333**⇑*i*P P 04 17 38.8 +3.2
TNCH pP pP 04 17 41.8 -1.4
TNCH sP sP 04 17 44.6 -1.6
TNCH PP PnPn 04 19 06.8 +4.2
TNCH S S 04 23 22.3 -1.2
TNCH pmax pmax
comp=Z,390nm,1.4s
TNCH pmax pmax
comp=Z,4μm,2.9s
TNCH LR LR
comp=Z,26μm,12.8s
TNCH LR LR
comp=Z,14μm,11.8s
TNCH LR LR
comp=Z,51μm,15.2s
**AUMAG Moama Anglican 37.73 141** P P 04 17 39.2 +2.2
**AUDCS Dubbo College 38.08 133** P P 04 17 41.6 +1.6
**BRAT Ballarat 38.20 144** P P 04 17 42.7 +1.8
**WHN Wuhan 38.70 357** P P 04 17 46.0 +0.8
WHN S S 04 23 44.8 +4.1
WHN pmax pmax
comp=Z,200nm,1.4s
WHN LR LR
comp=Z,10μm,12.3s
WHN LR LR
comp=Z,7μm,15.1s
WHN LR LR
comp=Z,15μm,14.6s
**GEXS Deakin Univers 38.85 144** P P 04 17 49.1 +2.7
**MLBS Spotswood, Mel 38.95 143** P P 04 17 49.9 +2.7
**ENH Enshi 38.98 350** P P 04 17 49.2 +1.7
**PALK Pallekele 38.98 292** P P 04 17 47.0 -0.8
**PALK Pallekele 38.98 292** P P 04 17 47.1 -0.8
PALK P P 04 17 47.1 -0.8
**PALK Pallekele 38.98 292** P P 04 17 47.0 -0.8
PALK pmax pmax
comp=Z,172nm,1.2s
**YNG Young 39.03 136** P P 04 17 49.6 +1.6
**YNG Young 39.03 136** P P 04 17 50.2 +2.2
comp=Z,4μm,1.5s
**TOO Toolangi 39.14 143** P P 04 17 51.4 +2.5
**TOO Toolangi 39.14 143** P P 04 17 50.1 +1.2
TOO IAmb IAmb 04 17 52.5
comp=Z,687nm,1.1s
TOO IAMs_20 IAMs_20 04 34 25.7
comp=Z,59μm,19.0s
**TOO Toolangi 39.14 143** P P 04 17 51.2 +2.3
comp=Z,695nm,1.6s
**TOO Toolangi 39.14 143** P P 04 17 50.1 +1.2
TOO pmax pmax
comp=Z,687nm,1.1s
TOO MLR MLR
comp=Z,59μm,19.0s
**AUPHS Peel High Scho 39.19 130** P P 04 17 51.7 +2.3
**AUWSH Wavell State H 39.34 124** P P 04 17 53.1 +2.5
**ARMA Armidale 39.44 129** P P 04 17 54.5 +2.9
**ARMA Armidale 39.44 129** P P 04 17 53.6 +2.0
ARMA IAmb IAmb 04 17 55.7
comp=Z,568nm,1.2s
ARMA IAMs_20 IAMs_20 04 34 52.0
comp=Z,54μm,19.0s
**ARMA Armidale 39.44 129** P P 04 17 54.5 +2.9
comp=Z,487nm,1.7s
**SSE Sheshan 39.45 6** P P 04 17 53.6 +2.2
SSE S S 04 23 51.3 -0.5
SSE pmax pmax
comp=Z,110nm,1.2s
SSE pmax pmax
comp=Z,3μm,6.2s
SSE LR LR
comp=Z,3μm,13.6s
SSE LR LR
comp=Z,3μm,18.2s
**IMP Imphal 39.66 327** *e*P P 04 17 54.3 +0.9
IMP IAmb IAmb 04 17 59.0
comp=Z,278nm,1.2s
IMP IAMs_20 IAMs_20 04 38 06.1
comp=Z,25μm,17.2s
**GC1S Gold Coast 1 S 40.01 124** P P 04 17 59.1 +2.9
**CAN Canberra 40.01 137** P P 04 17 57.9 +1.7
**CAN Canberra 40.01 137** P P 04 17 57.2 +0.9
CAN IAmb IAmb 04 17 59.4
comp=Z,616nm,1.2s
CAN IAMs_20 IAMs_20 04 35 18.9
comp=Z,48μm,20.0s
**CAN Canberra 40.01 137** P P 04 17 57.7 +1.5
comp=Z,491nm,1.6s
**CAN Canberra 40.01 137** P P 04 17 57.2 +0.9
CAN pmax pmax
comp=Z,616nm,1.2s
CAN MLR MLR
comp=Z,48μm,20.0s
**NJ2 Nanjing 40.21 3**⇓*i*P P 04 17 59.3 +1.6
NJ2 S S 04 24 05.5 +2.2
NJ2 pmax pmax
comp=Z,330nm,1.4s
NJ2 pmax pmax
comp=Z,6μm,5.5s
NJ2 LR LR
comp=Z,10μm,19.9s
NJ2 LR LR
comp=Z,8μm,19.9s
NJ2 LR LR
comp=Z,10μm,18.9s
**CNB Canberra Magne 40.26 137** P P 04 18 00.1 +1.8
**CNB Canberra Magne 40.26 137** P P 04 17 59.6 +1.3
comp=Z,467nm,1.8s
**KOHI KOHIMA 40.29 328** *e*P P 04 17 59.0 +0.3
KOHI IAmb IAmb 04 18 02.9
comp=Z,620nm,1.1s
KOHI IAMs_20 IAMs_20 04 36 54.1
comp=Z,37μm,19.7s
**SYDH Sydney Hard Ro 40.38 134** P P 04 18 01.9 +2.6
**AGT Agartala 40.46 323** *e*P P 04 18 01.1 +1.2
AGT IAMs_20 IAMs_20 04 37 46.8
comp=Z,30μm,18.7s
**MOKO MOKOCHONG 40.56 329** *e*P P 04 18 02.1 +1.1
MOKO IAmb IAmb 04 18 04.6
comp=Z,698nm,1.0s
MOKO IAMs_20 IAMs_20 04 36 43.6
comp=Z,25μm,17.5s
**NTLH Newcastle Hard 40.65 132** P P 04 18 04.1 +2.6
**RIV Riverview 40.72 134** P P 04 18 04.4 +2.4
**RIV Riverview 40.72 134** P P 04 18 04.5 +2.4
comp=Z,1μm,2.0s
**LKP Lekhapani 40.74 331** *e*P P 04 18 04.8 +2.6
LKP IAmb IAmb 04 18 06.7
comp=Z,2μm,1.1s
LKP IAMs_20 IAMs_20 04 36 55.1
comp=Z,62μm,16.0s
**WOLH Wollongong Har 40.81 135** P P 04 18 05.4 +2.6
**CD2 Chengdu 40.90 343** P P 04 18 05.3 +1.7
CD2 sP pP 04 18 11.0 -0.2
CD2 S S 04 24 17.3 +3.5
CD2 pmax pmax

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CD2 | comp=Z,1µm,0.9s | | | pmax | pmax | | | | |
| CD2 | comp=Z,9µm,5.6s | | | LR | LR | | | | |
| CD2 | comp=Z,18µm,16.2s | | | LR | LR | | | | |
| CD2 | comp=Z,30µm,16.7s | | | LR | LR | | | | |
| | comp=Z,24µm,16.3s | | | | | | | | |
| AUUHS | **Ulladulla High** | **41.04** | **136** | P | **P** | **04** | **18** | **06.5** | **+1.9** |
| **JORH** | **JORHAT** | **41.04** | **329** | *e*P | **P** | **04** | **18** | **06.0** | **+1.3** |
| JORH | comp=Z,1µm,1.2s | | | IAmb | IAmb | 04 | 18 | 09.0 | |
| JORH | | | | IAMs_20 | IAMs_20 | 04 | 38 | 31.0 | |
| | comp=Z,14µm,23.9s | | | | | | | | |
| **MILA** | **Mila** | **41.11** | **139** | P | **P** | **04** | **18** | **07.4** | **+2.1** |
| **MILA** | **Mila** | **41.11** | **139** | P | **P** | **04** | **18** | **07.2** | **+1.8** |
| | comp=Z,166nm,1.3s | | | | | | | | |
| **DIBR** | **DIBRUGARH** | **41.31** | **330** | *e*P | **P** | **04** | **18** | **07.9** | **+1.0** |
| DIBR | comp=Z,21µm,17.3s | | | IAMs_20 | IAMs_20 | 04 | 37 | 52.1 | |
| **SHL** | **Shillong** | **41.38** | **325** | P | **P** | **04** | **18** | **07.9** | **+0.2** |
| SHL | comp=Z,498nm,0.9s | | | IAmb | IAmb | 04 | 18 | 11.8 | |
| **SHL** | **Shillong** | **41.38** | **325** | *e*P | **P** | **04** | **18** | **09.2** | **+1.5** |
| SHL | comp=Z,430nm,1.0s | | | IAmb | IAmb | 04 | 18 | 11.0 | |
| SHL | comp=Z,20µm,18.1s | | | IAMs_20 | IAMs_20 | 04 | 37 | 57.3 | |
| **SHL** | **Shillong** | **41.38** | **325** | P | **P** | **04** | **18** | **08.2** | **+0.5** |
| | SNR=53 | | | | | | | | |
| **SHL** | **Shillong** | **41.38** | **325** | P | **P** | **04** | **18** | **07.9** | **+0.2** |
| SHL | comp=Z,498nm,0.9s | | | pmax | pmax | | | | |
| **ITAN** | **ITANAGAR** | **41.64** | **329** | *e*P | **P** | **04** | **18** | **11.5** | **+1.9** |
| ITAN | comp=Z,709nm,0.9s | | | IAmb | IAmb | 04 | 18 | 13.2 | |
| ITAN | comp=Z,17µm,17.3s | | | IAMs_20 | IAMs_20 | 04 | 37 | 07.8 | |
| **MDRS** | **Chennai** | **41.88** | **300** | *e*P | **P** | **04** | **18** | **11.2** | **-0.6** |
| MDRS | comp=Z,109nm,1.2s | | | IAmb | IAmb | 04 | 18 | 17.8 | |
| **ZIRO** | **ZIRO** | **41.89** | **329** | *e*P | **P** | **04** | **18** | **12.7** | **+0.9** |
| ZIRO | comp=Z,432nm,1.3s | | | IAmb | IAmb | 04 | 18 | 18.0 | |
| ZIRO | comp=Z,29µm,19.0s | | | IAMs_20 | IAMs_20 | 04 | 37 | 48.5 | |
| **RAGD** | **RAYAGADA** | **42.62** | **310** | *e*P | **P** | **04** | **18** | **17.5** | **-0.2** |
| **CORO** | **Coronation Par** | **42.66** | **146** | P | **P** | **04** | **18** | **20.3** | **+2.5** |
| **XAN** | **Xi'an** | **42.75** | **351** | ⇓P | **P** | **04** | **18** | **19.0** | **+0.3** |
| XAN | | | | pP | sP | 04 | 18 | 29.0 | -0.3 |
| XAN | | | | sP | pP | 04 | 18 | 34.3 | +8.0 |
| XAN | | | | S | **S** | **04** | **24** | **43.8** | **+2.7** |
| XAN | | | | sS | sS | 04 | 24 | 56.8 | +3.6 |
| XAN | comp=Z,140nm,1.6s | | | pmax | pmax | | | | |
| XAN | comp=Z,8µm,6.3s | | | pmax | pmax | | | | |
| XAN | comp=Z,47µm,15.5s | | | LR | LR | | | | |
| XAN | comp=Z,9µm,14.4s | | | LR | LR | | | | |
| XAN | comp=Z,65µm,16.5s | | | LR | LR | | | | |
| **LYN** | **LuoYang** | **42.82** | **355** | ⇑P | **P** | **04** | **18** | **20.5** | **+1.4** |
| LYN | | | | sP | sP | 04 | 18 | 34.5 | +4.7 |
| LYN | | | | S | **S** | **04** | **24** | **44.6** | **+2.7** |
| LYN | | | | SS | **SS** | **04** | **27** | **50.8** | **-3.0** |
| LYN | comp=Z,260nm,1.5s | | | pmax | pmax | | | | |
| LYN | comp=Z,8µm,5.8s | | | pmax | pmax | | | | |
| LYN | comp=Z,18µm,16.8s | | | LR | LR | | | | |
| LYN | comp=Z,16µm,16.8s | | | LR | LR | | | | |
| LYN | comp=Z,30µm,15.5s | | | LR | LR | | | | |
| **GLAD** | **Gladstone** | **42.84** | **145** | P | **P** | **04** | **18** | **21.4** | **+2.1** |
| **HNR** | **Honiara** | **42.84** | **95** | P | **P** | **04** | **18** | **18.9** | **-0.8** |
| HNR | comp=Z,895nm,1.0s | | | IAmb | IAmb | 04 | 18 | 45.0 | |
| HNR | comp=Z,46µm,20.0s | | | IAMs_20 | IAMs_20 | 04 | 37 | 51.9 | |
| **HNR** | **Honiara** | **42.84** | **95** | P | **P** | **04** | **18** | **18.9** | **-0.8** |
| HNR | comp=Z,895nm,1.0s | | | pmax | pmax | | | | |
| HNR | comp=Z,46µm,20.0s | | | MLR | MLR | | | | |
| **TRD** | **Trivandrum** | **42.87** | **292** | *e*P | **P** | **04** | **18** | **19.0** | **-0.9** |
| TRD | comp=Z,14µm,20.0s | | | IAMs_20 | IAMs_20 | 04 | 37 | 47.6 | |
| **TAWA** | **Tawang** | **42.98** | **327** | IAMs_20 | IAMs_20 | 04 | 38 | 51.1 | |
| **PASG** | comp=Z,7µm,18.7s<br>**PASIGHAT** | **43.02** | **327** | *e*P | P | 04 | 18 | 11.1 | -10 |
| PASG | comp=Z,305nm,0.9s | | | IAmb | IAmb | 04 | 18 | 17.2 | |
| PASG | comp=Z,39µm,16.2s | | | IAMs_20 | IAMs_20 | 04 | 37 | 26.8 | |
| **JCJ** | **Chichijima** | **43.08** | **34** | P | **P** | **04** | **18** | **22.4** | **+1.0** |
| **JCJ** | **Chichijima** | **43.08** | **34** | P | **P** | **04** | **18** | **20.9** | **-0.5** |
| JCJ | comp=Z,763nm,1.0s | | | IAmb | IAmb | 04 | 18 | 23.0 | |
| **JCJ** | **Chichijima** | **43.08** | **34** | P | **P** | **04** | **18** | **17.4** | **-4.0** |
| | comp=Z,532nm,0.9s,baz=205,slow=17,SNR=7.4 | | | | | | | | |
| **MOO** | **Moorlands** | **43.35** | **147** | P | **P** | **04** | **18** | **25.3** | **+1.9** |
| **MOO** | **Moorlands** | **43.35** | **147** | P | **P** | **04** | **18** | **24.7** | **+1.3** |
| **JNU** | comp=Z,491nm,1.2s<br>**Nakatsue** | **43.41** | **18** | P | **P** | **04** | **18** | **24.6** | **+0.6** |
| **JNU** | **Nakatsue** | **43.41** | **18** | P | **P** | **04** | **18** | **23.7** | **-0.2** |
| JNU | comp=Z,278nm,1.1s | | | IAmb | IAmb | 04 | 18 | 28.5 | |
| **JNU** | **Nakatsue** | **43.41** | **18** | P | **P** | **04** | **18** | **23.8** | **-0.2** |
| | comp=Z,166nm,1.0s,baz=180,slow=3.0,SNR=40 | | | | | | | | |
| | comp=Z,166nm,1.0s | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **43.65** | **268** | P | **P** | **04** | **18** | **26.9** | **+1.1** |
| **H08S3** | **Diego Garcia H** | **43.66** | **268** | P | **P** | **04** | **18** | **27.0** | **+1.1** |
| **H08S1** | **Diego Garcia H** | **43.66** | **268** | P | **P** | **04** | **18** | **27.1** | **+1.1** |
| **DGAR** | **Diego Garcia** | **43.70** | **268** | P | **P** | **04** | **18** | **27.3** | **+0.7** |
| DGAR | comp=Z,925nm,1.2s | | | IAmb | IAmb | 04 | 18 | 29.6 | |
| **DGAR** | **Diego Garcia** | **43.70** | **268** | P | **P** | **04** | **18** | **28.4** | **+1.8** |
| **DGAR** | **Diego Garcia** | **43.70** | **268** | *ce*P | **P** | **04** | **18** | **28.3** | **+1.7** |
| DGAR | comp=Z,764nm,1.7s | | | pmax | pmax | | | | |
| **TAU** | **Tasmania Unive** | **43.74** | **147** | P | **P** | **04** | **18** | **29.0** | **+2.5** |
| **TAU** | **Tasmania Unive** | **43.74** | **147** | P | **P** | **04** | **18** | **27.1** | **+0.7** |
| TAU | comp=Z,306nm,1.1s | | | IAmb | IAmb | 04 | 18 | 29.9 | |
| **TAU** | **Tasmania Unive** | **43.74** | **147** | P | **P** | **04** | **18** | **27.2** | **+0.7** |
| TAU | comp=Z,306nm,1.2s | | | pmax | pmax | | | | |
| TAU | comp=Z,67µm,21.0s | | | MLR | MLR | | | | |
| **BOK** | **Bokaro** | **43.80** | **318** | *e*P | **P** | **04** | **18** | **27.3** | **0.0** |
| **JHSG** | **JHARSUGUGA** | **43.93** | **313** | *e*P | **P** | **04** | **18** | **29.2** | **+0.9** |
| **PATS** | **Pohnpei** | **44.25** | **71** | P | **P** | **04** | **18** | **31.1** | **+0.1** |
| PATS | comp=Z,1µm,1.7s | | | IAmb | IAmb | 04 | 19 | 20.0 | |
| **PATS** | **Pohnpei** | **44.25** | **71** | P | **P** | **04** | **18** | **31.7** | **+0.6** |
| | comp=Z,271nm,1.5s | | | | | | | | |
| **TIA** | **Tai'an** | **44.30** | **1** | P | **P** | **04** | **18** | **31.9** | **+0.8** |
| TIA | | | | S | **S** | **04** | **25** | **02.9** | **-0.7** |
| TIA | comp=Z,180nm,0.9s | | | pmax | pmax | | | | |
| TIA | comp=Z,6µm,9.8s | | | pmax | pmax | | | | |
| TIA | comp=Z,16µm,17.2s | | | LR | LR | | | | |
| TIA | comp=Z,10µm,19.1s | | | LR | LR | | | | |
| TIA | comp=Z,22µm,20.1s | | | LR | LR | | | | |
| **KAAM** | **Kaadhehdhoo** | **44.31** | **279** | P | **P** | **04** | **18** | **31.4** | **-0.1** |
| **KAAM** | **Kaadhehdhoo** | **44.31** | **279** | P | **P** | **04** | **18** | **31.1** | **-0.4** |
| **JTU** | **Tsushima** | **44.31** | **15** | P | **P** | **04** | **18** | **34.0** | **+2.9** |
| **GTK** | **Tadong** | **44.61** | **324** | *e*P | **P** | **04** | **18** | **34.7** | **+0.9** |
| GTK | comp=Z,356nm,1.3s | | | IAmb | IAmb | 04 | 18 | 39.0 | |
| GTK | comp=Z,14µm,21.1s | | | IAMs_20 | IAMs_20 | 04 | 38 | 24.2 | |
| **JMN** | **Monobe** | **44.94** | **21** | P | **P** | **04** | **18** | **37.8** | **+1.6** |
| **JMN** | **Monobe** | **44.94** | **21** | P | **P** | **04** | **18** | **37.0** | **+0.8** |
| JMN | comp=Z,479nm,1.2s | | | IAmb | IAmb | 04 | 18 | 39.8 | |
| **LSA** | **Lhasa** | **45.03** | **328** | P | **P** | **04** | **18** | **39.8** | **+2.2** |
| LSA | | | | S | **S** | **04** | **25** | **20.8** | **+5.4** |
| LSA | comp=Z,11µm,21.8s | | | LR | LR | | | | |
| LSA | comp=Z,10µm,15.1s | | | LR | LR | | | | |
| LSA | comp=Z,18µm,29.9s | | | LR | LR | | | | |
| **LSA** | **Lhasa** | **45.03** | **328** | IAmb | IAmb | 04 | 18 | 42.2 | |
| **LSA** | comp=Z,339nm,1.1s<br>**Lhasa** | **45.03** | **328** | P | **P** | **04** | **18** | **39.2** | **+1.7** |
| **BLSP** | **Bilaspur** | **45.35** | **313** | *e*P | **P** | **04** | **18** | **38.9** | **-0.8** |
| **HYB** | **Hyderabad** | **45.46** | **304** | *e*P | **P** | **04** | **18** | **39.5** | **-1.1** |
| HYB | comp=Z,2µm,4.0s | | | IVmB_BB | | 04 | 18 | 59.1 | |
| HYB | comp=Z,6µm,25.6s | | | IVMs_BB | IVMs_BB | 04 | 37 | 44.4 | |
| **HNS** | **HongShan** | **45.52** | **358** | ⇓P | **P** | **04** | **18** | **41.0** | **+0.3** |
| HNS | | | | S | **S** | **04** | **25** | **22.0** | **+0.9** |
| HNS | | | | SS | **SS** | **04** | **28** | **43.8** | **-1.6** |
| HNS | comp=Z,190nm,1.9s | | | pmax | pmax | | | | |
| HNS | comp=Z,6µm,7.2s | | | pmax | pmax | | | | |
| HNS | comp=Z,18µm,16.3s | | | LR | LR | | | | |
| HNS | comp=Z,7µm,19.7s | | | LR | LR | | | | |
| HNS | comp=Z,23µm,19.9s | | | LR | LR | | | | |
| **TJN** | **Taejon** | **45.61** | **12** | P | **P** | **04** | **18** | **43.4** | **+2.0** |
| **TJN** | **Taejon** | **45.61** | **12** | P | **P** | **04** | **18** | **42.0** | **+0.6** |
| TJN | comp=Z,340nm,1.0s | | | IAmb | IAmb | 04 | 20 | 21.6 | |
| **TJN** | **Taejon** | **45.61** | **12** | *ce*P | **P** | **04** | **18** | **43.7** | **+2.3** |
| **LHI** | **Lord Howe Isla** | **45.73** | **126** | P | **P** | **04** | **18** | **42.9** | **+0.4** |
| LHI | comp=Z,34µm,19.0s | | | IAMs_20 | IAMs_20 | 04 | 40 | 18.5 | |
| **LZH** | **Lanzhou** | **45.77** | **346** | ⇑P | **P** | **04** | **18** | **45.1** | **+2.1** |
| LZH | | | | sP | sP | 04 | 18 | 54.9 | +1.2 |
| LZH | | | | S | **S** | **04** | **25** | **25.9** | **+0.6** |
| LZH | | | | ScS | **ScS** | **04** | **28** | **37.3** | **-0.4** |
| LZH | comp=Z,150nm,1.5s | | | pmax | pmax | | | | |
| LZH | comp=Z,7µm,5.8s | | | pmax | pmax | | | | |
| LZH | comp=Z,18µm,16.5s | | | LR | LR | | | | |
| LZH | comp=Z,24µm,16.5s | | | LR | LR | | | | |
| LZH | comp=Z,30µm,16.1s | | | LR | LR | | | | |
| **JHS** | **Saijyo** | **45.84** | **19** | P | **P** | **04** | **18** | **44.3** | **+1.0** |
| **TIY** | **Taiyuan** | **45.96** | **355** | *e*P | **P** | **04** | **18** | **44.8** | **+0.5** |
| TIY | | | | PP | **PP** | **04** | **20** | **31.0** | **-1.4** |
| TIY | | | | S | **S** | **04** | **25** | **27.8** | **+0.1** |
| TIY | comp=Z,73nm,0.9s | | | pmax | pmax | | | | |
| TIY | comp=Z,4µm,6.4s | | | pmax | pmax | | | | |
| TIY | comp=Z,11µm,19.2s | | | LR | LR | | | | |
| TIY | comp=Z,10µm,17.1s | | | LR | LR | | | | |
| TIY | comp=Z,12µm,23.1s | | | LR | LR | | | | |
| **INCN** | **Inchon** | **46.53** | **11** | P | **P** | **04** | **18** | **51.6** | **+2.9** |
| **INCN** | **Inchon** | **46.53** | **11** | P | **P** | **04** | **18** | **49.0** | **+0.3** |
| **INCN** | **Inchon** | **46.53** | **11** | P | **P** | **04** | **18** | **50.1** | **+1.4** |
| **INCN** | **Inchon** | **46.53** | **11** | P | **P** | **04** | **18** | **49.0** | **+0.3** |
| INCN | comp=Z,181nm,1.7s | | | pmax | pmax | | | | |
| **KSAR** | **Wonju Array Be** | **46.74** | **12** | P | **P** | **04** | **18** | **51.4** | **+1.1** |
| **KSAR** | **Wonju Array Be** | **46.74** | **12** | P | **P** | **04** | **18** | **51.4** | **+1.1** |
| **JHJ** | **Hachijo jima 2** | **46.76** | **27** | LR | LR | 04 | 41 | 06.1 | |
| | comp=Z,6µm,18.1s,baz=260,slow=40 | | | | | | | | |
| **KSRS** | **Korea Array** | **46.76** | **12** | P | **P** | **04** | **18** | **50.9** | **+0.4** |
| KSRS | comp=Z,87nm,1.0s,baz=191,slow=7.2,SNR=22 | | | LR | LR | 04 | 42 | 35.2 | |
| | comp=Z,5µm,18.4s,baz=170,slow=42 | | | | | | | | |
| | comp=Z,87nm,1.0s | | | | | | | | |
| **KS19** | **Wonju Array Si** | **46.80** | **12** | P | **P** | **04** | **18** | **50.6** | **-0.2** |
| KS19 | comp=Z,526nm,1.5s | | | IAmb | IAmb | 04 | 19 | 09.2 | |
| **JWT** | **Wachi** | **46.87** | **21** | P | **P** | **04** | **18** | **52.5** | **+1.1** |
| **NGP** | **Nagpur** | **47.08** | **309** | *e*P | **P** | **04** | **18** | **52.2** | **-1.1** |
| NGP | comp=Z,188nm,1.1s | | | IAmb | IAmb | 04 | 18 | 53.6 | |
| **DL2** | **Dalian** | **47.22** | **5** | P | **P** | **04** | **18** | **54.8** | **+0.7** |
| DL2 | | | | S | **S** | **04** | **25** | **46.1** | **+0.5** |
| DL2 | comp=Z,220nm,1.1s | | | pmax | pmax | | | | |
| DL2 | comp=Z,4µm,6.8s | | | pmax | pmax | | | | |
| DL2 | comp=Z,13µm,19.8s | | | LR | LR | | | | |
| DL2 | comp=Z,7µm,16.9s | | | LR | LR | | | | |
| DL2 | comp=Z,18µm,16.1s | | | LR | LR | | | | |
| **JSG** | **Sagara** | **47.40** | **24** | P | **P** | **04** | **18** | **58.2** | **+2.6** |
| **JSG** | **Sagara** | **47.40** | **24** | P | **P** | **04** | **18** | **55.8** | **+0.2** |
| **INU** | **Inuyama** | **47.53** | **23** | P | **P** | **04** | **18** | **57.4** | **+0.9** |
| **INU** | **Inuyama** | **47.53** | **23** | P | **P** | **04** | **18** | **56.2** | **-0.4** |
| INU | comp=Z,242nm,1.2s | | | IAmb | IAmb | 04 | 19 | 04.0 | |
| **ALBI** | **Allahabad** | **47.58** | **316** | *e*P | **P** | **04** | **18** | **55.9** | **-1.1** |
| KOUNC | **Koumac, New Ca** | **47.60** | **110** | IAMs_20 | IAMs_20 | 04 | 42 | 43.7 | |
| **JGF** | comp=Z,43µm,22.0s<br>**Kuroka** | **47.88** | **23** | P | **P** | **04** | **19** | **00.0** | **+0.7** |
| **JGF** | **Kuroka** | **47.88** | **23** | P | **P** | **04** | **18** | **58.9** | **-0.5** |
| JGF | comp=Z,196nm,1.2s | | | IAmb | IAmb | 04 | 19 | 03.2 | |
| **JGF** | **Kuroka** | **47.88** | **23** | P | **P** | **04** | **18** | **59.4** | **+0.1** |
| **BJT** | **Baijiatuau** | **48.10** | **360** | P | **P** | **04** | **19** | **02.2** | **+1.3** |
| **BJT** | **Baijiatuau** | **48.10** | **360** | IAmb | IAmb | 04 | 19 | 04.6 | |
| **BJI** | comp=Z,376nm,1.2s<br>**Beijing** | **48.12** | **360** | P | **P** | **04** | **19** | **00.9** | **-0.1** |
| BJI | | | | S | **S** | **04** | **26** | **00.0** | **+1.7** |
| BJI | comp=Z,130nm,1.1s | | | pmax | pmax | | | | |
| BJI | comp=Z,3µm,6.3s | | | pmax | pmax | | | | |
| BJI | comp=Z,7µm,20.1s | | | LR | LR | | | | |
| BJI | comp=Z,4µm,17.4s | | | LR | LR | | | | |
| BJI | comp=Z,10µm,15.6s | | | LR | LR | | | | |
| **JGN** | **Niukaw** | **48.42** | **23** | P | **P** | **04** | **19** | **03.6** | **+0.1** |
| **AKL** | **Akola** | **48.42** | **307** | *e*P | **P** | **04** | **19** | **02.9** | **-0.8** |
| **GOMU** | **GeErMu** | **48.79** | **337** | P | **P** | **04** | **19** | **08.5** | **+1.8** |
| GOMU | | | | S | **S** | **04** | **26** | **04.8** | **-3.9** |
| GOMU | comp=Z,140nm,1.1s | | | pmax | pmax | | | | |
| GOMU | comp=Z,24µm,15.6s | | | LR | LR | | | | |
| GOMU | comp=Z,18µm,15.8s | | | LR | LR | | | | |
| GOMU | comp=Z,37µm,15.5s | | | LR | LR | | | | |
| **KAD** | **Karad** | **49.03** | **301** | *e*P | **P** | **04** | **19** | **07.4** | **-1.1** |
| **MAJO** | **Matsushiro** | **49.04** | **23** | P | **P** | **04** | **19** | **08.3** | **+0.1** |
| **MAJO** | **Matsushiro** | **49.04** | **23** | P | **P** | **04** | **19** | **07.8** | **-0.4** |
| **MAJO** | **Matsushiro** | **49.04** | **23** | P | **P** | **04** | **19** | **07.8** | **-0.4** |
| MAJO | comp=Z,724nm,1.4s | | | pmax | pmax | | | | |
| **MJAR** | **Matsushiro Arr** | **49.04** | **23** | P | **P** | **04** | **19** | **08.1** | **-0.1** |
| | comp=Z,158nm,1.0s,baz=196,slow=7.5,SNR=118 | | | | | | | | |
| MJAR | comp=Z,3µm,21.0s,baz=202,slow=38 | | | LR | LR | 04 | 41 | 04.7 | |
| MJAR | comp=Z,3.0nm,1.0s,baz=23,slow=3.8,SNR=4.3 | | | PKP2ab | | 04 | 51 | 03.8 | |
| | comp=Z,158nm,1.0s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **49.04** | **23** | P | **P** | **04** | **19** | **08.0** | **-0.2** |
| **BTO** | **Baotou** | **49.06** | **353** | *e*P | **P** | **04** | **19** | **10.8** | **+2.4** |
| BTO | | | | pP | **pP** | **04** | **19** | **15.3** | **-0.8** |
| BTO | | | | sP | **sP** | **04** | **19** | **17.6** | **-1.5** |
| BTO | | | | S | **S** | **04** | **26** | **18.4** | **+6.6** |
| BTO | comp=Z,510nm,1.0s | | | pmax | pmax | | | | |
| BTO | comp=Z,4µm,6.3s | | | pmax | pmax | | | | |
| BTO | comp=Z,24µm,20.1s | | | LR | LR | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,26µm,16.4s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,28µm,23.0s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.15** | **355** | pmax | pmax | | | | |
| | comp=Z,13nm,0.5s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.15** | **355** | ⇑*i*P | **P** | **04** | **19** | **10.4** | **+1.3** |
| HHC | | | | pP | pP | 04 | 19 | 13.5 | -3.3 |
| HHC | | | | sP | sP | 04 | 19 | 16.6 | -3.2 |
| HHC | | | | S | **S** | **04** | **26** | **13.0** | **0.0** |
| HHC | | | | sS | sS | 04 | 26 | 25.0 | -0.3 |
| HHC | comp=Z,130nm,1.3s | | | pmax | pmax | | | | |
| HHC | comp=Z,6µm,5.6s | | | pmax | pmax | | | | |
| HHC | comp=Z,12µm,16.9s | | | LR | LR | | | | |
| HHC | comp=Z,11µm,15.3s | | | LR | LR | | | | |
| HHC | comp=Z,16µm,16.3s | | | LR | LR | | | | |
| **NOUC** | **Port Laguerre** | **49.68** | **112** | P | **P** | **04** | **19** | **15.0** | **+1.6** |
| **DZM** | **Mont Dzumac** | **49.80** | **112** | P | **P** | **04** | **19** | **16.4** | **+2.0** |
| **DZM** | **Mont Dzumac** | **49.80** | **112** | P | **P** | **04** | **19** | **14.8** | **+0.3** |
| **DZM** | **Mont Dzumac** | **49.80** | **112** | P | **P** | **04** | **19** | **15.8** | **+1.4** |
| | comp=Z,294nm,1.2s,baz=288,slow=6.6,SNR=92 | | | | | | | | |
| | comp=Z,294nm,1.2s | | | | | | | | |
| **GTA** | **Gaotai** | **49.98** | **343** | *e*P | **P** | **04** | **19** | **17.3** | **+1.9** |
| GTA | | | | S | **S** | **04** | **26** | **25.0** | **+0.3** |
| GTA | | | | ScS | **ScS** | **04** | **29** | **03.8** | **-1.6** |
| GTA | | | | SS | **SS** | **04** | **29** | **56.9** | **-1.2** |
| GTA | comp=Z,180nm,1.5s | | | pmax | pmax | | | | |
| GTA | comp=Z,7µm,8.7s | | | pmax | pmax | | | | |
| GTA | comp=Z,7µm,20.4s | | | LR | LR | | | | |
| GTA | comp=Z,9µm,19.6s | | | LR | LR | | | | |
| GTA | comp=Z,14µm,20.0s | | | LR | LR | | | | |
| **JHNI** | **Jhansi** | **49.98** | **313** | *e*P | **P** | **04** | **19** | **13.1** | **-2.5** |
| JHNI | comp=Z,191nm,0.9s | | | IAmb | IAmb | 04 | 19 | 14.6 | |
| **YATNC** | **Mamie plateau,** | **50.21** | **112** | P | **P** | **04** | **19** | **19.3** | **+1.9** |
| **SNY** | **Shenyang** | **50.32** | **7** | ⇑P | **P** | **04** | **19** | **18.1** | **+0.3** |
| SNY | | | | S | **S** | **04** | **26** | **28.6** | **-0.5** |
| SNY | comp=Z,190nm,1.0s | | | pmax | pmax | | | | |
| SNY | comp=Z,5µm,4.8s | | | pmax | pmax | | | | |
| SNY | comp=Z,5µm,21.0s | | | LR | LR | | | | |
| SNY | comp=Z,3µm,22.5s | | | LR | LR | | | | |
| SNY | comp=Z,8µm,22.6s | | | LR | LR | | | | |
| **JSD** | **Sado** | **50.37** | **22** | P | **P** | **04** | **19** | **18.8** | **+0.5** |
| **JSD** | **Sado** | **50.37** | **22** | P | **P** | **04** | **19** | **18.3** | **0.0** |
| JSD | comp=Z,656nm,1.4s | | | IAmb | IAmb | 04 | 19 | 20.6 | |
| **LIFNC** | **LIFOU** | **50.38** | **110** | P | **P** | **04** | **19** | **20.6** | **+1.9** |
| **LIFNC** | **LIFOU** | **50.38** | **110** | P | **P** | **04** | **19** | **19.2** | **+0.5** |
| **GUNA** | **GUNA** | **50.38** | **312** | *e*P | **P** | **04** | **19** | **17.3** | **-1.3** |
| **PINNC** | **Pines Island,** | **50.80** | **112** | P | **P** | **04** | **19** | **24.1** | **+2.3** |
| **PINNC** | **Pines Island,** | **50.80** | **112** | P | **P** | **04** | **19** | **22.7** | **+0.8** |
| **DVP** | **Devils Point** | **51.00** | **106** | P | **P** | **04** | **19** | **26.2** | **+2.8** |
| MARNC | **Mare, Loyalty** | **51.19** | **111** | P | **P** | **04** | **19** | **27.1** | **+2.3** |
| **JMM** | **Marumori** | **51.22** | **25** | P | **P** | **04** | **19** | **25.7** | **+1.0** |
| **JMM** | **Marumori** | **51.22** | **25** | P | **P** | **04** | **19** | **25.1** | **+0.4** |
| **RTV** | **Rentapao** | **51.23** | **106** | P | **P** | **04** | **19** | **27.3** | **+2.1** |
| **LGTI** | **Lohaghat** | **51.32** | **319** | *e*P | **P** | **04** | **19** | **24.5** | **-1.1** |
| **PTH** | **Pithoragarh** | **51.41** | **319** | *e*P | **P** | **04** | **19** | **24.6** | **-1.8** |
| PTH | comp=Z,82nm,0.7s | | | IAmb | IAmb | 04 | 19 | 48.3 | |
| **JYA** | **Atsumi** | **51.41** | **23** | P | **P** | **04** | **19** | **27.1** | **+1.0** |
| **XLT** | **XiLinHaoTe** | **51.98** | **360** | *e*P | **P** | **04** | **19** | **31.8** | **+1.4** |
| XLT | | | | S | **S** | **04** | **26** | **50.8** | **-1.4** |
| XLT | | | | SS | **SS** | **04** | **30** | **26.5** | **-3.2** |
| XLT | comp=Z,390nm,1.1s | | | pmax | pmax | | | | |
| XLT | comp=Z,5µm,4.7s | | | pmax | pmax | | | | |
| XLT | comp=Z,11µm,19.1s | | | LR | LR | | | | |
| XLT | comp=Z,20µm,19.7s | | | LR | LR | | | | |
| **NFK** | **Norfolk Island** | **52.37** | **120** | P | **P** | **04** | **19** | **36.3** | **+2.8** |
| **NFK** | **Norfolk Island** | **52.37** | **120** | P | **P** | **04** | **19** | **35.9** | **+2.4** |
| **MSHR** | comp=Z,668nm,1.2s<br>**Mys Shultsa** | **52.38** | **14** | *ce*P | **P** | **04** | **19** | **35.0** | **+1.8** |
| MSHR | comp=Z,199nm,1.3s | | | pmax | pmax | | | | |
| **CN2** | **Changchun** | **52.50** | **8** | P | **P** | **04** | **19** | **34.1** | **0.0** |
| CN2 | | | | S | **S** | **04** | **26** | **52.5** | **-6.7** |
| CN2 | comp=Z,100nm,1.2s | | | pmax | pmax | | | | |
| CN2 | comp=Z,4µm,6.0s | | | pmax | pmax | | | | |
| CN2 | comp=Z,6µm,18.0s | | | LR | LR | | | | |
| CN2 | comp=Z,4µm,18.0s | | | LR | LR | | | | |
| CN2 | comp=Z,9µm,18.0s | | | LR | LR | | | | |
| ROCAM | **Rodrigues Isla** | **52.66** | **252** | P | **P** | **04** | **19** | **36.1** | **+0.4** |
| **SONA** | **Sohna** | **52.70** | **315** | *e*P | **P** | **04** | **19** | **33.6** | **-2.3** |
| SONA | comp=Z,278nm,1.2s | | | IAmb | IAmb | 04 | 19 | 34.7 | |
| **NDI** | **New Delhi** | **52.87** | **316** | *e*P | **P** | **04** | **19** | **34.3** | **-2.9** |
| **NPLP** | **NPLP New Delhi** | **52.88** | **316** | *e*P | **P** | **04** | **19** | **34.0** | **-3.3** |
| NPLP | comp=Z,96nm,0.6s | | | IAmb | IAmb | 04 | 19 | 36.6 | |
| **KUDL** | **Kundal** | **53.05** | **315** | *e*P | **P** | **04** | **19** | **35.3** | **-3.2** |
| KUDL | comp=Z,207nm,1.1s | | | IAmb | IAmb | 04 | 19 | 37.2 | |
| **AJM** | **Ajmer** | **53.41** | **312** | *e*P | **P** | **04** | **19** | **38.8** | **-2.5** |
| **JTM** | **Tenmabayashi** | **53.83** | **23** | P | **P** | **04** | **19** | **44.3** | **+0.3** |
| **JTM** | **Tenmabayashi** | **53.83** | **23** | P | **P** | **04** | **19** | **43.9** | **0.0** |
| **KLP** | **Kalpa** | **53.98** | **319** | *e*P | **P** | **04** | **19** | **44.8** | **-0.9** |
| **MDJ** | **Mudanjiang** | **53.99** | **11** | P | **P** | **04** | **19** | **45.8** | **+0.7** |
| **MDJ** | **Mudanjiang** | **53.99** | **11** | P | **P** | **04** | **19** | **46.0** | **+0.9** |
| MDJ | | | | S | **S** | **04** | **27** | **21.5** | **+2.1** |
| MDJ | comp=Z,280nm,1.5s | | | pmax | pmax | | | | |
| MDJ | comp=Z,14µm,7.7s | | | pmax | pmax | | | | |
| MDJ | comp=Z,19µm,20.6s | | | LR | LR | | | | |
| MDJ | comp=Z,6µm,22.7s | | | LR | LR | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.11** | **14** | P | **P** | **04** | **19** | **46.0** | **0.0** |
| **USA0B** | **Ussuriysk Arra** | **54.11** | **14** | P | **P** | **04** | **19** | **46.0** | **0.0** |
| USA0B | comp=Z,1µm,1.7s | | | pmax | pmax | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.11** | **14** | P | **P** | **04** | **19** | **46.3** | **+0.3** |
| **USRK** | **Ussuriysk Ar.** | **54.11** | **14** | P | **P** | **04** | **19** | **46.5** | **+0.6** |
| | comp=Z,126nm,0.9s,baz=192,slow=5.8,SNR=108 | | | | | | | | |
| | comp=Z,126nm,0.9s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.11** | **14** | P | **P** | **04** | **19** | **46.3** | **+0.3** |
| **HNLY** | **HANLEY** | **54.34** | **321** | *e*P | **P** | **04** | **19** | **47.7** | **-0.8** |
| **SMLA** | **Simla** | **54.43** | **318** | *e*P | **P** | **04** | **19** | **46.9** | **-1.7** |
| SMLA | comp=Z,125nm,1.1s | | | IAmb | IAmb | 04 | 19 | 52.6 | |
| **BNX** | **BinXian** | **54.69** | **9** | ⇑P | **P** | **04** | **19** | **50.6** | **+0.5** |
| BNX | | | | S | **S** | **04** | **27** | **28.9** | **+0.1** |
| BNX | | | | SS | **SS** | **04** | **31** | **15.3** | **+3.1** |
| BNX | comp=Z,200nm,1.8s | | | pmax | pmax | | | | |
| BNX | comp=Z,4µm,6.9s | | | pmax | pmax | | | | |
| **BHK** | **Bhakra** | **55.11** | **318** | *e*P | **P** | **04** | **19** | **52.3** | **-1.2** |
| **ERM** | **Erimo** | **55.70** | **24** | P | **P** | **04** | **19** | **59.1** | **+1.6** |
| **ERM** | **Erimo** | **55.70** | **24** | P | **P** | **04** | **19** | **58.2** | **+0.8** |
| ERM | comp=Z,280nm,1.2s | | | IAmb | IAmb | 04 | 20 | 09.8 | |
| **ERM** | **Erimo** | **55.70** | **24** | *ce*P | **P** | **04** | **19** | **59.3** | **+1.8** |
| ERM | comp=Z,352nm,1.7s | | | pmax | pmax | | | | |
| **JEM** | **Erimo** | **55.70** | **24** | P | **P** | **04** | **19** | **59.1** | **+1.6** |
| **DHRM** | **DHARAMSHALA** | **55.71** | **318** | *e*P | **P** | **04** | **19** | **56.1** | **-2.0** |
| DHRM | comp=Z,163nm,0.6s | | | IAmb | I

comp=N,80nm,1.3s
TEY pmax pmax
comp=Z,180nm,1.3s
TEY pmax pmax
comp=E,30nm,1.1s
TEY pmax pmax
comp=Z,700nm,4.0s
TEY pmax pmax
comp=N,500nm,3.2s
**THN Thein Dam 56.21 318** *e*P **P 04 19 59.3 -2.1**
**PAF Port-aux-Franc 56.26 215** P **P 04 20 03.5 +2.0**
**PAF Port-aux-Franc 56.26 215** P **P 04 20 03.5 +2.0**
PAF pmax pmax
comp=Z,805nm,1.3s
**ULN Ulaanbaatar 56.58 352** P **P 04 20 04.3 +0.4**
ULN IAmb IAmb 04 20 07.0
comp=Z,374nm,1.2s
**ULN Ulaanbaatar 56.58 352** P **P 04 20 05.3 +1.5**
ULN P **P 04 20 05.3 +1.5**
**ULN Ulaanbaatar 56.58 352***ce*P **P 04 20 05.5 +1.6**
ULN pmax pmax
comp=Z,356nm,1.3s
**SONM Songino Array 56.64 352** P **P 04 20 04.8 +0.5**
SONM IAmb IAmb 04 20 07.3
comp=Z,379nm,1.1s
**SONM Songino Array 56.64 352** P **P 04 20 05.0 +0.7**
comp=Z,206nm,1.0s,baz=171,slow=7.7,SNR=180
SONM LR LR 04 47 50.4
comp=Z,9µm,18.6s,baz=194,slow=40
comp=Z,206nm,1.0s
**SONM Songino Array 56.64 352** P **P 04 20 04.8 +0.5**
SONM pmax pmax
comp=Z,379nm,1.1s
**TARA Tarawa 56.98 83** P **P 04 20 06.0 -1.3**
TARA IAmb IAmb 04 20 08.4
comp=Z,392nm,1.4s
**PYZ Puysegur Point 57.01 141** P **P 04 20 09.4 +2.5**
**PYZ Puysegur Point 57.01 141** IAmb IAmb 04 20 11.7
comp=Z,536nm,1.2s
**DCZ Deep Cove 57.01 140** P **P 04 20 08.0 +1.1**
**MCQ Macquarie Isla 57.09 152** P **P 04 20 10.2 +2.9**
**MCQ Macquarie Isla 57.09 152** P **P 04 20 09.3 +2.0**
MCQ IAMs_20 IAMs_20 04 42 54.7
comp=Z,27µm,20.0s
**MCQ Macquarie Isla 57.09 152** P **P 04 20 09.8 +2.5**
comp=Z,907nm,1.3s
**MCQ Macquarie Isla 57.09 152** P **P 04 20 09.3 +2.0**
MCQ pmax pmax
comp=Z,1µm,1.1s
**ASAJ Asahikawa 57.27 22** P **P 04 20 09.1 +0.5**
comp=Z,329nm,1.0s,baz=238,slow=12,SNR=70
comp=Z,329nm,1.0s
**JKA Kamikawa-asahi 57.27 22** P **P 04 20 09.1 +0.4**
**HIA Hailar 57.41 2** P **P 04 20 10.6 +1.0**
**HIA Hailar 57.41 2** IAmb IAmb 04 20 12.2
comp=Z,279nm,1.2s
**JCZ Jackson Bay 57.53 138** P **P 04 20 12.6 +1.8**
**CASY Casey 58.02 183** P **P 04 20 13.7 +0.1**
CASY IAmb IAmb 04 20 15.8
comp=Z,261nm,0.9s
**CASY Casey 58.02 183** IAMs_20 IAMs_20 04 39 49.7
comp=Z,24µm,22.0s
**FOZ Fox Glacier 58.03 137** IAmb IAmb 04 20 16.1
comp=Z,273nm,1.1s
**WMQ Urumqi 58.13 336** ⇑P **P 04 20 16.1 +1.3**
WMQ S **S 04 28 17.0 +2.3**
WMQ ScS **ScS 04 30 00.8 -2.2**
WMQ pmax pmax
comp=Z,260nm,1.3s
WMQ pmax pmax
comp=Z,3µm,3.9s
WMQ LR LR
comp=Z,9µm,17.5s
WMQ LR LR
comp=Z,8µm,15.9s
WMQ LR LR
comp=Z,14µm,24.0s
**YUK Yuzh-Kuril'sk 58.47 24** *e*P **P 04 20 14.7 -2.4**
YUK *e* 04 22 23.3
YUK *e*S **S 04 28 18.7 -0.2**
YUK *e*SS **SS 04 32 11.1 -0.8**
YUK pmax pmax
comp=N,313nm,1.1s
YUK pmax pmax
comp=Z,427nm,1.1s
YUK pmax pmax
comp=E,248nm,1.2s
YUK pmax pmax
comp=Z,644nm,1.2s
YUK MLR MLR
comp=N,14µm,12.0s
YUK MLR MLR
comp=E,9µm,12.0s
YUK MLR MLR
comp=Z,13µm,12.0s
**NIL Nilore 58.59 318** P **P 04 20 16.1 -2.1**
**NIL Nilore 58.59 318** P **P 04 20 16.9 -1.3**
NIL P **P 04 20 16.9 -1.3**
**NIL Nilore 58.59 318** P **P 04 20 16.1 -2.1**
NIL pmax pmax
comp=Z,87nm,1.0s
**SYZ Scrubby Hill 58.71 140** P **P 04 20 20.0 +1.2**
**KLR Kul'dur 58.84 12***ce*P **P 04 20 19.8 +0.3**
KLR pmax pmax
comp=Z,281nm,1.3s
**RPZ Rata Peaks 58.94 136** P **P 04 20 20.6 +0.1**
**HEH HeiHe 59.09 8** *e*P **P 04 20 21.9 +0.6**
HEH S **S 04 28 27.3 +0.5**
HEH SS **SS 04 32 28.9 +7.5**
HEH pmax pmax
comp=Z,890nm,1.3s
HEH pmax pmax
comp=Z,7µm,4.6s
HEH LR LR
comp=Z,3µm,15.5s
HEH LR LR
comp=Z,8µm,15.9s
HEH LR LR
comp=Z,19µm,16.5s
**ZAK Zakamensk 59.60 350** *e*P **P 04 20 25.2 +0.3**
ZAK pmax pmax
comp=Z,154nm,1.3s
**THZ Tophouse 59.61 134** P **P 04 20 25.7 +0.5**
**KHEZ Kahui Hut 59.73 131** P **P 04 20 29.3 +3.2**
**KHEZ Kahui Hut 59.73 131** P **P 04 20 27.8 +1.6**
**YSS Yuzh-Sakhalins 59.76 20** P **P 04 20 26.7 +0.7**
**YSS Yuzh-Sakhalins 59.76 20** P **P 04 20 26.4 +0.4**
**YSS Yuzh-Sakhalins 59.76 20***ce*P **P 04 20 26.7 +0.7**
YSS *e* 04 22 39.0
YSS *e*S **S 04 28 31.9 -3.6**
YSS *e*PS **PnS 04 28 45.6 -4.7**
YSS pmax pmax
comp=Z,550nm,1.3s
YSS pmax pmax
comp=Z,5µm,4.1s
**NEZ North Egmont 59.79 131** P P 04 20 31.3 +4.8
**RER Riviere de l'E 59.88 250** P **P 04 20 28.5 +1.0**
**RER Riviere de l'E 59.88 250** P **P 04 20 29.8 +2.4**
SNR=9.5
**DUWZ D'Urville Isla 60.07 132** P **P 04 20 29.1 +0.7**
**MKAZ Moumakai 60.08 128** P **P 04 20 29.9 +1.5**
**CIT Chita 60.16 358** *e*P **P 04 20 30.6 +1.9**
CIT *e* 04 20 38.6
CIT *e* 04 22 47.4
CIT *e*S **S 04 28 45.4 +4.8**
CIT *e* 04 30 19.8
CIT pmax pmax
comp=Z,1µm,2.9s
**HIZ Hauiti 60.17 130** P **P 04 20 30.9 +1.9**
**VRZ Vera Road 60.25 130** P **P 04 20 31.0 +1.5**
**KHZ Kahutara 60.25 134** P **P 04 20 30.0 +0.5**
**KUR Kuril'sk 60.28 25***d*/P **P 04 20 31.0 +1.5**
KUR *i* S **S 04 28 43.8 +1.6**
KUR pmax pmax
comp=Z,769nm,1.3s
**MSVF Nonsavu 60.40 106** P **P 04 20 31.3 +0.3**
**MSVF Nonsavu 60.40 106** P **P 04 20 31.3 +0.3**
MSVF pmax pmax
comp=Z,1µm,1.4s
**KUZ Kuaotunu 60.44 128** P **P 04 20 33.6 +2.7**
**TOZ Tahuroa Road 60.48 129** P **P 04 20 31.9 +0.7**
**TOZ Tahuroa Road 60.48 129** P **P 04 20 32.8 +1.6**
**TLZ Tolley Road 60.65 129** P **P 04 20 33.8 +1.4**
**KSH Kashi 60.66 325** P **P 04 20 31.4 -1.1**
KSH S **S 04 28 45.8 -1.8**

KSH pmax pmax
comp=Z,45nm,1.3s
KSH pmax pmax
comp=Z,2µm,8.6s
KSH LR LR
comp=Z,8µm,19.9s
KSH LR LR
comp=Z,9µm,19.9s
KSH LR LR
comp=Z,14µm,19.2s
**MSEY Mahe Island 60.77 269** P **P 04 20 33.5 -0.1**
MSEY IAmb IAmb 04 20 35.8
comp=Z,121nm,1.2s
**MSEY Mahe Island 60.77 269** P **P 04 20 33.5 -0.1**
MSEY pmax pmax
comp=Z,121nm,1.2s
**SNZO South Karori 60.77 133** P **P 04 20 33.7 +0.6**
**KIW Kapiti Island 60.80 132** P **P 04 20 34.3 +0.9**
**NGZ Ngauruhoe 60.90 130** P **P 04 20 36.0 +1.8**
**WNVZ Wahianoa 60.93 130** P **P 04 20 35.1 +0.7**
**TMVZ Te Maari 60.96 130** P **P 04 20 35.4 +0.8**
**CAW Cannon Point 60.98 133** P **P 04 20 34.7 +0.2**
**OGWZ Otaki Gorge 60.98 132** P **P 04 20 35.1 +0.5**
**MOVZ Moawhango 61.06 131** P **P 04 20 35.8 +0.5**
**MSWZ Moikau Station 61.20 133** P **P 04 20 36.1 +0.1**
**MSWZ Moikau Station 61.20 133** P **P 04 20 35.8 -0.2**
**MOY Mondy 61.24 349** *e*P **P 04 20 36.5 +0.4**
MOY pmax pmax
comp=Z,602nm,3.0s
**MRZ Mangatainoka R 61.24 132** P **P 04 20 36.2 -0.2**
**IRK Irkutsk 61.24 351** *e*P **P 04 20 36.4 +0.4**
IRK *e* 04 28 59.4
**HOWZ Holdsworth Sta 61.26 132** P **P 04 20 36.9 +0.4**
**PAWZ Paruwai Farm 61.32 133** P **P 04 20 37.6 +0.7**
**GRNR Gornyy 61.32 14** ⇓P **P 04 20 38.0 +1.5**
GRNR *e*S **S 04 29 03.0 +7.6**
GRNR pmax pmax
comp=N,100nm,1.2s
GRNR pmax pmax
comp=E,20nm,1.2s
GRNR pmax pmax
comp=Z,200nm,1.2s
GRNR smax smax
comp=E,8.0nm,1.0s
**OPRZ Ohinepanea 61.32 129** P **P 04 20 37.8 +0.9**
**SHLS Shalkode 61.35 330** *e*P **P 04 20 34.1 -3.0**
comp=E,62nm,1.1s,baz=330
SHLS *e*S **S 04 28 54.0 -2.4**
baz=330
**SHLS Shalkode 61.35 330** *e*P **P 04 20 34.9 -2.2**
SHLS *e*S **S 04 28 54.0 -2.4**
SHLS pmax pmax
comp=Z,62nm,1.1s
**UGL Uglegorsk 61.38 19** *e*P **P 04 20 39.2 +2.3**
UGL *e*S **S 04 28 56.5 +0.4**
UGL pmax pmax
comp=Z,1µm,1.1s
UGL pmax pmax
comp=Z,7µm,4.5s
**PRZ Przheval'sk 61.40 329** P **P 04 20 37.9 +0.4**
PRZ IAmb IAmb 04 21 00.8
comp=Z,190nm,1.3s
**PRZ Przheval'sk 61.40 329** P **P 04 20 37.9 +0.4**
PRZ pmax pmax
comp=Z,190nm,1.3s
**PDGK Podgornoye 61.47 330** P **P 04 20 37.1 -0.8**
**TRWZ Traveller 61.51 133** P **P 04 20 39.5 +1.3**
**UZB Uzynbulak 61.56 330** *e*P **P 04 20 37.6 -1.0**
comp=Z,65nm,1.0s,baz=330
UZB *e*S **S 04 28 59.5 +0.3**
baz=330
**UZB Uzynbulak 61.56 330** *e*P **P 04 20 37.5 -1.0**
UZB *e*S **S 04 28 59.4 +0.3**
UZB pmax pmax
comp=Z,65nm,1.0s
**BKZ Black Stump Fm 61.57 130** P **P 04 20 39.6 +1.0**
**BKZ Black Stump Fm 61.57 130** P **P 04 20 39.3 +0.6**
**BKZ Black Stump Fm 61.57 130** P **P 04 20 38.6 -0.1**
**TMWZ Te Maipa 61.59 132** P **P 04 20 39.7 +1.0**
**BFZ Birch Farm 61.74 132** P **P 04 20 41.2 +1.5**
**BFZ Birch Farm 61.74 132** P **P 04 20 40.3 +0.6**
**SATY Saty 61.81 329** *e*P **P 04 20 39.2 -1.0**
comp=Z,95nm,1.3s,baz=329
SATY *e*S **S 04 29 02.7 +0.4**
baz=329
**SATY Saty 61.81 329** *e*P **P 04 20 39.2 -1.0**
SATY *e*S **S 04 29 02.6 +0.4**
SATY pmax pmax
comp=Z,95nm,1.3s
**URZ Urewera 61.84 129** P **P 04 20 40.1 -0.3**
comp=Z,105nm,0.8s,baz=12,slow=3.3,SNR=36
comp=Z,105nm,0.8s
**ZHN Zhinishke 61.88 329** *e*P **P 04 20 39.8 -0.9**
comp=Z,46nm,0.9s,baz=329
**ZHN Zhinishke 61.88 329** *e*P **P 04 20 39.7 -0.9**
ZHN pmax pmax
comp=Z,45nm,0.9s
**FUNA Funafuti 61.88 95** P **P 04 20 42.3 +1.3**
**FUNA Funafuti 61.88 95** P **P 04 20 41.4 +0.3**
**KBL Kabul 61.94 316** P **P 04 20 39.2 -2.1**
**KBL Kabul 61.94 316** P **P 04 20 39.4 -1.9**
SNR=10.0
**KBL Kabul 61.94 316** P **P 04 20 39.2 -2.1**
KBL pmax pmax
comp=Z,57nm,1.0s
**NRN Naryn 61.94 326** P **P 04 20 40.5 -0.9**
**NRN Naryn 61.94 326** P **P 04 20 40.5 -0.9**
NRN pmax pmax
comp=Z,64nm,1.1s
**KPKS Kokpek 61.97 330** *e*P **P 04 20 40.4 -0.9**
comp=Z,73nm,1.1s,baz=330
KPKS *e*S **S 04 29 04.6 +0.5**
baz=330
**KPKS Kokpek 61.97 330** *e*P **P 04 20 40.3 -0.9**
KPKS *e*S **S 04 29 04.6 +0.5**
KPKS pmax pmax
comp=Z,73nm,1.1s
**ZSN Zaisan 62.24 336** *e*P **P 04 20 42.4 -0.5**
comp=Z,88nm,1.1s,baz=336
ZSN *e*S **S 04 29 08.5 +1.2**
baz=336
**ZSN Zaisan 62.24 336** *e*P **P 04 20 42.4 -0.5**
ZSN *e*S **S 04 29 08.4 +1.2**
ZSN pmax pmax
comp=Z,89nm,1.1s
**ULHL Ulahol 62.37 327** P **P 04 20 44.5 +0.4**
SNR=12
**ZEA Zeya 62.48 7** *e*P **P 04 20 45.6 +1.3**
ZEA *e*S **S 04 29 11.6 +1.6**
ZEA pmax pmax
comp=N,210nm,1.2s
ZEA pmax pmax
comp=E,60nm,1.2s
ZEA pmax pmax
comp=Z,370nm,1.2s
ZEA pmax pmax
comp=N,2µm,4.2s
ZEA pmax pmax
comp=Z,3µm,8.5s
ZEA smax smax
comp=E,4µm,13.2s
ZEA smax smax
comp=N,7µm,8.5s
**TNSS Tian-Shan 62.55 328** *e*P **P 04 20 44.3 -1.2**
baz=328
**TNSS Tian-Shan 62.55 328** *e*P **P 04 20 44.2 -1.2**
**MDOK Medeo 62.59 328** *e*P **P 04 20 44.5 -0.9**
baz=328
MDOK LR LR 04 50 20.0
comp=N,6µm,19.3s,baz=328
**MDOK Medeo 62.59 328** *e*P **P 04 20 44.5 -0.9**
MDOK MLR MLR
comp=Z,6µm,19.0s
**MXZ Matakaoa Point 62.63 128** P **P 04 20 47.4 +1.7**
**MXZ Matakaoa Point 62.63 128** P **P 04 20 46.2 +0.5**
**AAA Alma-Ata 62.69 328** *e*P **P 04 20 45.4 -0.6**
comp=Z,66nm,1.1s,baz=328
AAA LR LR 04 50 22.0
baz=328
**AAA Alma-Ata 62.69 328** *e*P **P 04 20 45.3 -0.7**
AAA pmax pmax
comp=Z,66nm,1.1s
**BOOM Boomskoye usch 62.70 327** P **P 04 20 45.5 -0.8**
BOOM IAmb IAmb 04 21 04.2
comp=Z,135nm,1.2s

**BOOM Boomskoye usch 62.70 327** P **P 04 20 45.5 -0.8**
BOOM pmax pmax
comp=Z,135nm,1.2s
**MK31 Makanchi Array 62.79 334** P **P 04 20 46.4 -0.2**
MK31 IAmb IAmb 04 20 50.1
comp=Z,98nm,0.9s
**MK31 Makanchi Array 62.79 334***ce*P **P 04 20 46.7 +0.1**
**MKAR Makanchi Array 62.79 334** P **P 04 20 46.2 -0.4**
**MKAR Makanchi Array 62.79 334** P **P 04 20 46.4 -0.2**
comp=Z,79nm,0.8s,baz=142,slow=7.2,SNR=52
MKAR LR LR 04 49 36.6
comp=Z,11µm,21.8s,baz=160,slow=38
comp=Z,79nm,0.8s
**ARXS Arharly 62.94 330** *e*P **P 04 20 47.0 -0.6**
**MAKZ Makanchi 62.94 334** P **P 04 20 47.2 -0.3**
**MAKZ Makanchi 62.94 334** P **P 04 20 47.2 -0.3**
MAKZ pmax pmax
comp=Z,102nm,1.3s
**CHKK Chushkaly 63.10 329** *e*P **P 04 20 48.0 -0.8**
baz=329
**CHKK Chushkaly 63.10 329** *e*P **P 04 20 47.9 -0.8**
**TYV Tymovskoe 63.13 18** *e*P **P 04 20 51.0 +2.4**
TYV *e*S **S 04 29 22.2 +4.1**
TYV pmax pmax
comp=Z,138nm,1.3s
TYV pmax pmax
comp=Z,4µm,5.0s
TYV smax smax
comp=N,7µm,7.6s
TYV smax smax
comp=E,9µm,7.6s
TYV smax smax
comp=E,43nm,1.7s
**DGZ Jazzator, Alta 63.14 339** *i* P **P 04 20 48.4 -0.6**
DGZ pmax pmax
comp=Z,523nm,1.1s
DGZ MLR MLR
comp=Z,10µm,19.0s
**TKM2 Tokmak 2 63.18 327** P **P 04 20 48.9 -0.6**
SNR=31
**TKM2 Tokmak 2 63.18 327** P **P 04 20 48.9 -0.6**
**KBK Karagaybulak 63.35 327** P **P 04 20 51.0 +0.4**
SNR=39
**KUU Kurty 63.47 329** *e*P **P 04 20 50.3 -0.8**
comp=Z,46nm,1.1s,baz=329
KUU LR LR 04 50 51.0
comp=Z,7µm,19.0s,baz=329
**KUU Kurty 63.47 329** *e*P **P 04 20 50.2 -0.8**
KUU pmax pmax
comp=Z,46nm,1.1s
KUU MLR MLR
comp=Z,7µm,19.0s
**ARSB Arslanbob 63.57 325** P **P 04 20 51.1 -0.9**
**ARSB Arslanbob 63.57 325** P **P 04 20 51.1 -0.9**
ARSB pmax pmax
comp=Z,57nm,1.3s
ARSB MLR MLR
comp=Z,3µm,20.0s
**AAK Ala-Archa 63.58 326** P **P 04 20 51.7 -0.4**
SNR=23
**AAK Ala-Archa 63.58 326** P **P 04 20 50.9 -1.2**
AAK IAmb IAmb 04 21 09.8
comp=Z,93nm,0.9s
AAK IAMs_20 IAMs_20 04 52 26.2
comp=Z,17µm,21.0s
**AAK Ala-Archa 63.58 326** P **P 04 20 51.5 -0.6**
comp=Z,54nm,1.0s,baz=145,slow=4.5,SNR=32
comp=Z,54nm,1.0s
**AAK Ala-Archa 63.58 326** P **P 04 20 51.7 -0.4**
AAK P **P 04 20 51.7 -0.4**
**AAK Ala-Archa 63.58 326***ce*P **P 04 20 51.6 -0.5**
AAK pmax pmax
comp=Z,113nm,1.3s
**FRU1 Bishkek 63.63 327** P **P 04 20 51.6 -0.6**
FRU1 IAmb IAmb 04 21 13.1
comp=Z,147nm,1.3s
**FRU1 Bishkek 63.63 327** P **P 04 20 51.6 -0.6**
FRU1 pmax pmax
comp=Z,147nm,1.3s
**JLN Jalan Bani Buh 63.67 300** P **P 04 20 51.6 -1.2**
**CHMS Chumysh 63.69 327** P **P 04 20 52.6 +0.1**
SNR=9.1
**AML Almayashu 63.69 326** P **P 04 20 52.7 -0.4**
SNR=45
**GAR Garm 63.71 321** P **P 04 20 51.5 -1.4**
**EKS2 Erkin-Say 63.99 326** P **P 04 20 54.5 -0.3**
SNR=56
**USP Ospenovka 64.00 327** P **P 04 20 53.9 -0.8**
SNR=30
**BTK Batken 64.04 322** P **P 04 20 54.1 -1.0**
BTK IAmb IAmb 04 21 55.4
comp=Z,109nm,1.1s
**BTK Batken 64.04 322** P **P 04 20 54.1 -1.0**
BTK pmax pmax
comp=Z,109nm,1.2s
**WBK Wadi Bani Khal 64.22 300** P **P 04 20 55.5 -1.0**
**CHGR Chuyangaron 64.23 320** P **P 04 20 54.5 -1.8**
CHGR IAmb IAmb 04 21 19.8
comp=Z,222nm,1.1s
**CHGR Chuyangaron 64.23 320** P **P 04 20 54.5 -1.8**
CHGR pmax pmax
comp=Z,222nm,1.1s
**SIMJ Simiganj 64.33 320** P **P 04 20 55.0 -2.0**
SIMJ IAmb IAmb 04 21 20.4
comp=Z,130nm,1.2s
**MHTO MHTO 64.50 298** P **P 04 20 56.7 -1.6**
SNR=7.1
**DQM DQM 64.52 297** P **P 04 20 57.6 -0.8**
DQM P **P 04 20 57.6 -0.8**
**NKL Nikolayevsk 64.58 16** *e*P **P 04 20 56.8 -1.3**
NKL *e*S **S 04 29 36.9 +0.9**
NKL pmax pmax
comp=N,337nm,1.2s
NKL pmax pmax
comp=E,248nm,1.2s
NKL pmax pmax
comp=Z,1µm,1.2s
NKL smax smax
comp=E,2µm,4.1s
NKL smax smax
comp=N,5µm,4.0s
**JMDO Jabal Madar 64.88 299** P **P 04 20 59.9 -0.9**
SNR=5.8
**SMDO Samad 65.18 300** P **P 04 21 01.4 -1.4**
SNR=8.6
**BIDO Bidbid 65.28 301** P **P 04 21 02.3 -1.1**
SNR=18
**BTLS Baital 65.44 328** *e*P **P 04 21 03.2 -0.8**
baz=328
**BTLS Baital 65.44 328** *e*P **P 04 21 03.1 -0.8**
**SBV Sambava 65.50 259** P **P 04 21 05.6 +0.7**
**SHAO Shalim 65.61 294** P **P 04 21 04.3 -1.3**
SHAO P **P 04 21 04.3 -1.3**
**BSY Bisya 65.79 299** P **P 04 21 05.5 -1.3**
**BOD Bodaibo 65.95 358** *e*P **P 04 21 09.7 +2.8**
BOD pmax pmax
comp=Z,278nm,1.4s
**HOQ Hoqain 66.00 300** P **P 04 21 06.9 -1.1**
SNR=9.8
**KK31 Karatay Array 66.11 325** P **P 04 21 07.0 -1.4**
**KK31 Karatay Array 66.11 325** P **P 04 21 07.0 -1.4**
KK31 pmax pmax
comp=Z,104nm,1.5s
**KKAR Karatay Array 66.11 325** P **P 04 21 06.4 -2.0**
**KKAR Karatay Array 66.11 325** P **P 04 21 06.4 -2.0**
**DMTO DMTO 66.13 293** P **P 04 21 07.9 -1.0**
**JASK Jask - Hormozg 66.38 303** P **P 04 21 10.1 -0.4**
**SEM Semipalatinsk 66.45 336** *e*P **P 04 21 10.1 -0.6**
comp=Z,57nm,1.0s,baz=336
SEM LR LR 04 52 40.4
comp=Z,5µm,17.7s,baz=336
**SEM Semipalatinsk 66.45 336** *e*P **P 04 21 10.0 -0.6**
SEM pmax pmax
comp=Z,57nm,1.0s
SEM MLR MLR
comp=Z,5µm,18.0s
**BRLS Borolday 66.45 324** *e*P **P 04 21 09.4 -1.2**
comp=Z,41nm,1.2s,baz=324
**BRLS Borolday 66.45 324** *e*P **P 04 21 09.3 -1.2**
BRLS pmax pmax
comp=Z,41nm,1.2s
**ARQ Araqi 66.59 300** P **P 04 21 10.5 -1.3**
ARQ P **P 04 21 10.5 -1.3**
**H04N2 CROZET ISLANDS 66.64 223** P **P 04 21 15.5 +4.1**
baz=69,slow=5.4,SNR=4.8
**HRA Herat 66.65 313** P **P 04 21 09.3 -2.9**

**H04N1 CROZET ISLANDS 66.65 223** P **P** **04 21 15.3 +3.8**
baz=69,slow=5.4,SNR=3.8
**H04N3 CROZET ISLANDS 66.65 223** P **P** **04 21 14.9 +3.3**
baz=69,slow=5.4,SNR=3.3
**CRZF Crozet Islands 66.66 223** P **P** **04 21 12.2 +0.4**
CRZF IAmb IAmb 04 21 14.3
comp=Z,224nm,0.9s
**H04S1 CROZET ISLANDS 66.72 222** P **P** **04 21 16.1 +4.1**
**H04S2 CROZET ISLANDS 66.73 222** P **P** **04 21 15.3 +3.2**
**H04S3 CROZET ISLANDS 66.73 222** P **P** **04 21 15.2 +3.1**
**RBK Rabkut 66.74 293** P **P** **04 21 11.8 -1.1**
**SOHO SOHO 66.86 301** P **P** **04 21 12.0 -1.5**
**DOK Doka 67.14 294** P **P** **04 21 13.8 -1.6**
**WHFO Wadi Hawf 67.26 293** P **P** **04 21 14.4 -1.8**
**KURBB Kurchatov Arra 67.33 335** P **P** **04 21 14.9 -1.0**
comp=Z,27nm,0.8s,baz=142,slow=5.3,SNR=24
KURBB PKP2bc 04 49 42.9
comp=Z,16nm,1.1s,baz=297,slow=3.6,SNR=4.3
comp=Z,27nm,0.8s
**KURK Kurchatov 67.36 335** P **P** **04 21 15.5 -0.6**
KURK IAmb IAmb 04 21 40.4
comp=Z,114nm,1.1s
**KURK Kurchatov 67.36 335** P **P** **04 21 16.0 -0.1**
**KURK Kurchatov 67.36 335** *ce*P **P** **04 21 15.4 -0.6**
KURK pmax pmax
comp=Z,132nm,1.3s
**UOSS Minazif 67.43 301** P **P** **04 21 15.3 -1.9**
UOSS IAmb IAmb 04 21 46.0
comp=Z,189nm,1.5s
**UOSS Minazif 67.43 301** P **P** **04 21 15.5 -1.7**
**HATD Hatta, Dubai 67.45 301** P **P** **04 21 16.1 -1.1**
SNR=7.1
**ASHO Ashiyiah 67.46 301** P **P** **04 21 16.1 -1.3**
SNR=7.4
**MDH Madha 67.48 302** P **P** **04 21 15.8 -1.6**
**ALNE Al Ain 67.50 300** P **P** **04 21 16.4 -1.2**
SNR=8.4
ALNE P **P** **04 21 16.4 -1.2**
SNR=8.4
**ABTO Aybut 67.52 293** P **P** **04 21 16.7 -1.2**
**UMZA Um Al Zommool 67.55 299** P **P** **04 21 16.3 -1.5**
**CTZ Chatham Island 67.57 134** P **P** **04 21 20.4 +2.8**
**ZAA0 Zalesovo Array 67.58 340** P **P** **04 21 16.3 -1.1**
ZAA0 IAmb IAmb 04 21 18.8
comp=Z,86nm,0.9s
**ZALV Zalesovo Beam 67.58 340** P **P** **04 21 16.1 -1.3**
**ZALV Zalesovo Beam 67.58 340** P **P** **04 21 16.3 -1.1**
comp=Z,46nm,0.7s,baz=127,slow=3.9,SNR=50
comp=Z,46nm,0.7s
**MASF Masafi 67.63 302** P **P** **04 21 17.5 -0.9**
**ABPO Ambohimpanom 67.87 253** P **P** **04 21 20.3 +0.1**
ABPO IAmb IAmb 04 21 23.0
comp=Z,171nm,1.1s
**ABPO Ambohimpanom 67.87 253** *eP* **P** **04 21 20.6 +0.4**
ABPO IAmb IAmb 04 21 22.7
comp=Z,164nm,1.1s
**ABPO Ambohimpanom 67.87 253** P **P** **04 21 20.3 +0.1**
ABPO pmax pmax
comp=Z,171nm,1.1s
ABPO MLR MLR
comp=Z,9µm,20.0s
**FAQ Al Faqa, Dubai 67.88 301** P **P** **04 21 18.3 -1.6**
SNR=15
**SHME Shamm 67.89 302** P **P** **04 21 19.1 -0.9**
**NAZ Nazwa, Dubai 67.91 301** P **P** **04 21 19.1 -1.0**
SNR=8.5
**ASUD Al Ashush, Dub 68.06 301** P **P** **04 21 20.0 -1.0**
SNR=12
**FOMA Nahampoana Res 68.07 246** P **P** **04 21 20.9 -0.3**
**FOMA Nahampoana Res 68.07 246** P **P** **04 21 22.5 +1.3**
SNR=15
**UMQ Umm Al-Quwin 68.10 302** P **P** **04 21 20.6 -0.7**
**VOI Vohitsoka 68.23 250** P **P** **04 21 21.8 -0.6**
VOI IAmb IAmb 04 21 25.4
comp=Z,312nm,1.2s
**VOI Vohitsoka 68.23 250**⇑ *i*P **P** **04 21 22.7 +0.3**
**VOI Vohitsoka 68.23 250** P **P** **04 21 23.8 +1.4**
SNR=15
**AJN Ajban 68.33 300** P **P** **04 21 20.9 -1.8**
SNR=7.1
AJN P **P** **04 21 20.9 -1.8**
SNR=7.1
**OTUK Ortayu 68.47 330** P **P** **04 21 22.6 -0.6**
**MZWR Madinat Zayed 69.01 299** P **P** **04 21 25.8 -1.2**
**MAW Mawson 69.06 199** P **P** **04 21 27.7 +1.2**
comp=Z,295nm,1.0s,baz=60,slow=7.2,SNR=220
MAW LR LR 04 45 14.7
comp=Z,11µm,21.1s,baz=54,slow=30
comp=Z,295nm,1.0s
**MZR Muzera 69.10 298** P **P** **04 21 26.8 -0.9**
SNR=11
MZR P **P** **04 21 26.8 -0.9**
SNR=11
**GHWR Ruwais 69.94 299** P **P** **04 21 31.2 -1.6**
GHWR P **P** **04 21 31.2 -1.6**
**JRN Qarnain Island 70.29 300** P **P** **04 21 33.0 -1.8**
SNR=7.4
JRN P **P** **04 21 33.0 -1.8**
SNR=7.4
**AFI Afiamalu 70.31 102** P **P** **04 21 35.1 -0.2**
**AFI Afiamalu 70.31 102** P **P** **04 21 35.1 -0.2**
AFI pmax pmax
comp=Z,868nm,1.6s
**PEA0B Petropavlovsk- 70.45 25** P **P** **04 21 35.8 +0.5**
PEA0B IAmb IAmb 04 21 39.3
comp=Z,225nm,1.2s
**PEA0B Petropavlovsk- 70.45 25** *ce*P **P** **04 21 37.2 +1.9**
**PETK Petropavlovsk- 70.45 25** P **P** **04 21 35.3 0.0**
**PETK Petropavlovsk- 70.45 25** P **P** **04 21 35.7 +0.4**
comp=Z,126nm,1.1s,baz=208,slow=2.5,SNR=43
PETK PKKP **PKKPdf** **04 41 19.3 -3.1**
comp=Z,260nm,1.1s,baz=99,slow=9.2,SNR=7.5
comp=Z,126nm,1.1s
**PETK Petropavlovsk- 70.45 25** P **P** **04 21 35.3 0.0**
**PET Petropavlovsk 70.79 25** P **P** **04 21 39.2 +1.9**
**PET Petropavlovsk 70.79 25** P **P** **04 21 37.6 +0.3**
PET IAmb IAmb 04 21 40.1
comp=Z,172nm,1.2s
**PET Petropavlovsk 70.79 25** *eP* **P** **04 21 38.0 +0.7**
PET *eS* **S** **04 30 52.4 +1.9**
PET pmax pmax
comp=Z,143nm,1.2s
**PET Petropavlovsk 70.79 25** P **P** **04 21 38.3 +1.0**
comp=Z,131nm,1.3s
**YAK Yakutsk 70.88 6** P **P** **04 21 37.3 -0.4**
YAK IAmb IAmb 04 21 47.7
comp=Z,189nm,0.9s
**YAK Yakutsk 70.88 6** *eP* **P** **04 21 36.5 -1.2**
YAK *e* 04 21 56.0
YAK *eS* **S** **04 30 49.6 -1.6**
YAK *e**SS **SKiKP** **04 31 11.7 -6.8**
YAK *e* 04 31 32.0
YAK *eSS* **SS** **04 35 25.6 +1.2**
YAK pmax pmax
comp=Z,174nm,1.0s
YAK pmax pmax
comp=N,65nm,0.9s
YAK pmax pmax
comp=E,21nm,1.1s
YAK smax smax
comp=N,7µm,8.1s
YAK smax smax
comp=E,4µm,8.9s
**SLWR Sila 71.00 299** P **P** **04 21 38.1 -1.1**
**TRNA Turayna 71.62 299** P **P** **04 21 41.7 -1.3**
SNR=7.0
**NIUE Niue 71.78 107** P **P** **04 21 46.6 +2.5**
**NIUE Niue 71.78 107** P **P** **04 21 43.5 -0.6**
**SMRA Abu-Samra 71.96 299** P **P** **04 21 43.8 -1.3**
SNR=9.4
**SHMA Al-Shehemyia 72.20 300** P **P** **04 21 45.1 -1.3**
**BVAR Borovoye Array 72.59 333** P **P** **04 21 47.3 -0.9**
comp=E,86nm,0.9s,baz=128,slow=6.6,SNR=24
BVAR LR LR 04 57 33.8
comp=E,10µm,19.8s,baz=159,slow=39
comp=E,86nm,0.9s
**SAKB Bahrain 72.60 300** P **P** **04 21 48.0 -0.8**
**BRVK Borovoye 72.66 333** P **P** **04 21 48.1 -0.5**
**BRVK Borovoye 72.66 333** P **P** **04 21 48.5 -0.1**
**BRVK Borovoye 72.66 333** *ce*P **P** **04 21 48.8 +0.2**
BRVK pmax pmax
comp=Z,149nm,1.3s
**MA2 Magadan 72.98 17** P **P** **04 21 51.5 +1.1**
**MA2 Magadan 72.98 17** P **P** **04 21 50.8 +0.4**
MA2 IAmb IAmb 04 21 52.7
comp=Z,276nm,1.1s
**MA2 Magadan 72.98 17** *ce*P **P** **04 21 50.3 -0.1**
MA2 pmax pmax
comp=Z,301nm,1.3s
MA2 MLR MLR
comp=Z,9µm,20.0s
**MA2 Magadan 72.98 17** P **P** **04 21 50.9 +0.5**
comp=Z,243nm,1.1s,comp=Z,8µm
**MIDW Midway 73.33 57** P **P** **04 21 54.0 +0.9**
**MIDW Midway 73.33 57** P **P** **04 21 53.1 0.0**
MIDW IAmb IAmb 04 21 55.1
comp=Z,156nm,1.1s
MIDW IAMs_20 IAMs_20 04 48 28.8
comp=Z,24µm,22.0s
**AB31 Akbulak array 75.64 326** *i*P **P** **04 22 04.8 -1.3**
**ABKAR Akbulak array 75.64 326** P **P** **04 22 04.7 -1.4**
ABKAR IAmb IAmb 04 22 06.5
comp=Z,221nm,1.1s
**ABKAR Akbulak array 75.64 326** P **P** **04 22 04.7 -1.4**
**ATD Arta Tunnel 75.93 284** P **P** **04 22 08.3 -0.3**
ATD IAmb IAmb 04 22 11.0
comp=Z,221nm,1.1s
**ATD Arta Tunnel 75.93 284** LR LR 04 51 24.9
comp=Z,101nm,21.5s,baz=42,slow=32
**KBD Kabd 76.00 303** P **P** **04 22 07.4 -1.2**
**SEY Seymchan 76.16 16** *ce*P **P** **04 22 08.4 -0.3**
SEY pmax pmax
comp=Z,303nm,1.3s
SEY MLR MLR
comp=Z,8µm,21.0s
**RAYN Ar Rayn 76.26 297** P **P** **04 22 08.1 -2.2**
**RAYN Ar Rayn 76.26 297** P **P** **04 22 09.3 -1.0**
**RAYN Ar Rayn 76.26 297** P **P** **04 22 08.1 -2.2**
RAYN pmax pmax
comp=Z,57nm,1.0s
**AKTO Aktyubinsk 77.32 326** P **P** **04 22 14.4 -1.2**
comp=Z,74nm,0.8s,baz=118,slow=3.7,SNR=68
comp=Z,74nm,0.8s
**KIBK Kibwezi 78.32 269** P **P** **04 22 20.9 -1.2**
KIBK IAmb IAmb 04 22 24.4
comp=Z,148nm,1.1s
**KIBK Kibwezi 78.32 269** P **P** **04 22 22.0 -0.1**
**KIBK Kibwezi 78.32 269** P **P** **04 22 22.3 +0.2**
SNR=19
**KMBO Kilima Mbogo 79.28 270** P **P** **04 22 28.1 +0.6**
comp=Z,69nm,1.0s,baz=68,slow=6.7,SNR=75
comp=Z,69nm,1.0s
**SVE Sverdlovsk 79.37 332** *de*P **P** **04 22 25.0 -1.8**
SVE *eS* **S** **04 32 22.4 -3.4**
SVE pmax pmax
comp=Z,144nm,1.3s
**FURI Furi 79.46 281** IAMs_20 IAMs_20 04 53 52.8
comp=Z,13µm,22.0s
**AMKA Amchitka 80.09 34** P **P** **04 22 30.3 -0.5**
**ARU Arti 80.12 331** P **P** **04 22 29.4 -1.4**
ARU IAmb IAmb 04 22 53.9
comp=Z,254nm,1.6s
**ARU Arti 80.12 331** P **P** **04 22 29.8 -1.1**
comp=Z,34nm,0.9s,baz=132,slow=5.8,SNR=13
comp=Z,34nm,0.9s
**ARU Arti 80.12 331** *c i*P **P** **04 22 29.6 -1.2**
ARU 04 25 30.2
ARU S **S** **04 32 36.6 +2.8**
ARU SS **SS** **04 37 46.4 +1.6**
ARU pmax pmax
comp=Z,80nm,1.1s
**TIXI Tiksi 80.22 4** P **P** **04 22 30.0 -1.1**
**TIXI Tiksi 80.22 4** *ce*P **P** **04 22 29.2 -1.9**
TIXI pmax pmax
comp=Z,126nm,1.0s
TIXI MLR MLR
comp=Z,5µm,17.0s
**SEKA Sheki 80.30 314** P **P** **04 22 32.0 -0.3**
**MAK Makhachkala 80.69 316** *eP* P 04 22 28.8 -5.4
MAK *e* 04 25 37.7
MAK *eS* **S** **04 32 32.6 -7.7**
MAK *eSS* **SS** **04 37 46.9 -7.0**
MAK *eSSS* SSS 04 41 20.2
MAK pmax pmax
comp=Z,259nm,1.9s
MAK MLR MLR
comp=Z,12µm,18.0s
**GANJ Ganja 80.73 313** P **P** **04 22 33.9 -0.7**
**TEMBE Tembe Elephant 81.08 244** *eP* **P** **04 22 35.7 -1.0**
TEMBE IAmb IAmb 04 22 39.3
comp=Z,3µm,2.6s
**RAR Rarotonga 81.15 110** P **P** **04 22 39.0 +1.8**
**RAR Rarotonga 81.15 110** P **P** **04 22 37.4 +0.2**
RAR IAmb IAmb 04 22 39.9
comp=Z,317nm,1.4s
**RAR Rarotonga 81.15 110** P **P** **04 22 38.0 +0.8**
comp=Z,65nm,1.1s,baz=207,slow=5.2,SNR=6.4
comp=Z,65nm,1.1s
**RAR Rarotonga 81.15 110** P **P** **04 22 37.4 +0.2**
RAR pmax pmax
comp=Z,317nm,1.5s
**CHIPN CHIPINGE 81.51 251** *eP* **P** **04 22 39.0 -0.3**
**CHIPN CHIPINGE 81.51 251** *i*P **P** **04 22 40.5 +1.2**
**CHIPN CHIPINGE 81.51 251** *i*P **P** **04 22 40.5 +1.2**
**QSPA South Pole Qui 81.67 180** P **P** **04 22 38.8 -0.4**
**QSPA South Pole Qui 81.67 180** P **P** **04 22 39.3 +0.1**
comp=Z,339nm,1.1s,baz=320,slow=2.2,SNR=132
QSPA LR LR 04 55 22.6
comp=Z,23µm,21.7s,baz=340,slow=33
comp=Z,339nm,1.1s
**POGA Pongola 81.70 244** P **P** **04 22 40.8 +0.7**
**POGA Pongola 81.70 244** *eP* **P** **04 22 41.1 +1.1**
POGA IAmb IAmb 04 22 42.8
comp=Z,518nm,1.1s
**GNI Garni 81.72 313** P **P** **04 22 39.7 -0.3**
**GNI Garni 81.72 313** P **P** **04 22 39.4 -0.6**
comp=Z,32nm,1.2s,baz=193,slow=3.9,SNR=5.3
comp=Z,32nm,1.2s
**GNI Garni 81.72 313** P **P** **04 22 40.2 +0.2**
**GNI Garni 81.72 313** *ce*P **P** **04 22 38.5 -1.5**
GNI pmax pmax
comp=Z,66nm,1.7s
**GNI Garni 81.72 313** P **P** **04 22 40.2 +0.2**
comp=Z,56nm,1.1s,comp=Z,7µm
**LODK Lodwar 81.82 275** P **P** **04 22 40.2 -0.8**
**LODK Lodwar 81.82 275** P **P** **04 22 41.6 +0.7**
SNR=15
**MOPA Mopani 82.33 247** *eP* **P** **04 22 43.0 -0.4**
MOPA IAmb IAmb 04 22 46.0
comp=Z,1µm,1.2s
**MOPA Mopani 82.33 247** *i*P **P** **04 22 45.2 +1.7**
**MOPA Mopani 82.33 247** *i*P **P** **04 22 45.2 +1.7**
**PMBG Pietermaritzbu 82.55 241** *eP* **P** **04 22 45.1 +0.6**
PMBG IAmb IAmb 04 22 47.4
comp=Z,417nm,1.1s
**HOED Hoedspruit, Li 82.67 246** *eP* **P** **04 22 44.2 -1.0**
HOED IAmb IAmb 04 22 47.4
comp=Z,473nm,1.4s
**PILG Pilgrimsrest, 82.82 246** *eP* **P** **04 22 45.8 -0.4**
PILG IAmb IAmb 04 22 48.5
comp=Z,314nm,1.2s
**ELIB Princess Elisa 83.15 198** *dP* **P** **04 22 48.0 +1.2**
comp=Z,197nm,1.1s
**DULL Dullstroom, Mp 83.25 245** *eP* **P** **04 22 49.4 +0.9**
DULL IAmb IAmb 04 22 50.8
comp=Z,290nm,1.1s
**NWCL Newcastle 83.26 243** *eP* **P** **04 22 48.6 +0.3**
NWCL IAmb IAmb 04 22 50.0
comp=Z,209nm,1.2s
**KSTD Kokstad 83.48 240** *eP* **P** **04 22 51.2 +1.8**
KSTD IAmb IAmb 04 22 52.1
comp=Z,210nm,1.0s
**MPHEP Siloam, Limpop 83.51 248** *eP* **P** **04 22 48.6 -1.1**
MPHEP IAmb IAmb 04 22 51.9
comp=Z,212nm,1.1s
**BILL Bilibino 83.83 17** P **P** **04 22 49.7 -0.4**
**BILL Bilibino 83.83 17** *ce*P **P** **04 22 50.2 +0.1**
BILL pmax pmax
comp=Z,42nm,1.3s
**MUSN Musina, Limpop 83.87 248** *eP* **P** **04 22 50.8 -0.6**
MUSN IAmb IAmb 04 22 53.8
comp=Z,294nm,1.1s
**MUSN Musina, Limpop 83.87 248** *i*P **P** **04 22 53.4 +1.9**
**MUSN Musina, Limpop 83.87 248** *i*P **P** **04 22 53.4 +1.9**
**BELG Belogornoye 84.02 325** P **P** **04 22 49.9 -1.5**
comp=Z,148nm,1.0s,baz=124,slow=1.8,SNR=24
comp=Z,148nm,1.0s
**BELG Belogornoye 84.02 325** *i*P **P** **04 22 49.1 -2.3**
BELG pmax pmax
comp=Z,21nm,0.9s
BELG MLR MLR
comp=Z,1µm,18.0s
**KBZ Khabaz 84.12 316** P **P** **04 22 51.1 -1.0**
comp=Z,27nm,1.0s,baz=109,slow=2.6,SNR=20
KBZ PKKPbc **PKKPbc** **04 41 07.1 -0.7**
comp=Z,10nm,0.9s,baz=246,slow=0.7,SNR=12
comp=Z,27nm,1.0s
**KBZ Khabaz 84.12 316** *ce*P **P** **04 22 50.9 -1.2**
KBZ pmax pmax
comp=Z,37nm,1.0s
**SHA1 Shidzhatmaz 84.29 316** *ce*P **P** **04 22 51.8 -1.5**
**KIV Kislovodsk 84.33 316** P **P** **04 22 52.5 -0.8**
KIV IAMs_20 IAMs_20 04 50 37.7
comp=Z,14µm,19.0s
**KIV Kislovodsk 84.33 316** P **P** **04 22 53.3 -0.1**
**KIV Kislovodsk 84.33 316** *eP* **P** **04 22 52.4 -0.9**
KIV *e* 04 33 15.2
KIV pmax pmax
comp=Z,37nm,1.0s
KIV pmax pmax
comp=Z,548nm,4.7s
**KIV Kislovodsk 84.33 316** P **P** **04 22 53.0 -0.3**
comp=Z,36nm,1.0s,comp=Z,7µm
**GOF Gofitskoye 84.42 317** *c i*P **P** **04 22 52.3 -1.3**
GOF *eS* S 04 33 06.8 -12
**WTBG Waterberg Wild 84.55 246** *eP* **P** **04 22 56.0 +1.0**
WTBG IAmb IAmb 04 22 56.3
comp=Z,122nm,1.0s
**KRI Karoi 84.74 254** *eP* **P** **04 22 56.4 +0.3**
**RUST Rust De Winter 84.75 245** *eP* **P** **04 22 55.6 -0.4**
RUST IAmb IAmb 04 22 57.8
comp=Z,172nm,1.1s
**KOPT Kop Dagi 84.80 312** P **P** **04 22 55.8 -0.3**
KOPT IAmb IAmb 04 23 42.7
comp=Z,114nm,1.0s
**SNKL Senekal, Frees 85.07 242** *eP* **P** **04 22 58.3 +0.7**
SNKL IAmb IAmb 04 22 60.0
comp=Z,326nm,1.1s
**TSWA Tswaing Meteor 85.13 245** *eP* **P** **04 22 58.1 +0.2**
TSWA IAmb IAmb 04 23 00.4
comp=Z,307nm,1.4s
**CRAIL Swartwater, Li 85.30 248** *eP* **P** **04 22 58.6 -0.1**
**MATP Matopo 85.35 250** *i*P **P** **04 23 01.5 +2.4**
**MATP Matopo 85.35 250** *i*P **P** **04 23 01.5 +2.4**
**HRAO HartRAO 85.43 245** *eP* **P** **04 22 58.5 -0.9**
**KIRV Kirov 85.49 331** P **P** **04 22 57.6 -1.0**
comp=Z,47nm,1.0s,baz=116,slow=3.8,SNR=17
KIRV LR LR 05 07 11.1
comp=Z,11µm,19.2s,baz=119,slow=40
comp=Z,47nm,1.0s
**LEPH Lephalale, Lim 85.58 247** *eP* **P** **04 23 00.3 +0.2**
LEPH IAmb IAmb 04 23 02.3
comp=Z,204nm,1.1s
**PRYS Parys 85.59 244** *eP* **P** **04 22 59.5 -0.7**
PRYS IAmb IAmb 04 23 02.3
comp=Z,556nm,1.2s
**NYAT Nyati, Northwe 85.60 245** *eP* **P** **04 23 00.1 -0.1**
NYAT IAmb IAmb 04 23 03.1
comp=Z,849nm,1.2s
**GRHM Grahamstown, E 85.66 237** P **P** **04 23 00.9 +0.6**
**GRHM Grahamstown, E 85.66 237** *eP* **P** **04 23 01.3 +1.0**
GRHM IAmb IAmb 04 23 03.4
comp=Z,618nm,1.0s
**ASF Jabal al Asfar 85.75 303** P **P** **04 23 00.5 -0.3**
comp=Z,47nm,1.1s,baz=190,slow=0.0,SNR=20
comp=Z,47nm,1.1s
**MBAR Mbarara 85.80 270** P **P** **04 23 01.1 -0.3**
MBAR IAmb IAmb 04 23 03.8
comp=Z,301nm,1.2s
**MBAR Mbarara 85.80 270** *eP* **P** **04 23 00.5 -0.9**
MBAR IAmb IAmb 04 23 03.5
comp=Z,346nm,1.2s
**MBAR Mbarara 85.80 270** P **P** **04 23 02.1 +0.6**
**MBAR Mbarara 85.80 270** *ce*P **P** **04 23 01.7 +0.2**
MBAR pmax pmax
comp=Z,424nm,1.7s
**LABN Labinsk 85.88 316** *eP* **P** **04 22 58.2 -2.7**
LABN *e**PP **PcP** **04 23 01.1 -2.6**
LABN *eS* **SKSac** **04 33 22.9 -2.3**
LABN pmax pmax
comp=Z,153nm,1.2s
**NHAM Northam, North 85.88 246** *eP* **P** **04 23 01.1 -0.5**
NHAM IAmb IAmb 04 23 04.2
comp=Z,315nm,1.2s
**NMMU Nelson Mandela 86.16 236** *eP* **P** **04 23 03.3 +0.6**
**ARPR Arapgir-MALATY 86.18 310** P **P** **04 23 01.9 -0.9**
ARPR IAmb IAmb 04 23 04.6
comp=Z,213nm,1.2s
**MTLB Matlabas, Limp 86.25 247** *eP* **P** **04 23 03.3 -0.1**
MTLB IAmb IAmb 04 23 05.9
comp=Z,514nm,1.1s
**SOC Sochi 86.29 315** *eP* **P** **04 23 00.3 -2.7**
SOC *e* 04 26 18.4
SOC *e*PPP PPP 04 28 14.0
SOC *eS* **SKSac** **04 33 25.7 -2.1**
SOC *eSS* **SS** **04 39 16.0 -0.9**
SOC *eSSS* SSS 04 42 41.2
SOC pmax pmax
comp=Z,75nm,0.8s
SOC MLR MLR
comp=Z,5µm,17.0s
**LSZ Lusaka 86.30 255** P **P** **04 23 03.1 -0.8**
LSZ IAmb IAmb 04 23 06.2
comp=Z,373nm,1.2s
**LSZ Lusaka 86.30 255** *eP* **P** **04 23 03.8 -0.1**
LSZ IAmb IAmb 04 23 05.8
comp=Z,537nm,1.2s
**LSZ Lusaka 86.30 255** P **P** **04 23 04.4 +0.5**
**LSZ Lusaka 86.30 255** P **P** **04 23 03.1 -0.8**
LSZ pmax pmax
comp=Z,373nm,1.2s
**XMAS Kiritimati 86.31 87** P **P** **04 23 06.4 +2.6**
**XMAS Kiritimati 86.31 87** P **P** **04 23 04.2 +0.4**
**ERBR Yeremizino-Bor 86.33 317** *eP* **P** **04 23 00.9 -2.3**
ERBR *e**PP **PcP** **04 23 04.1 -1.6**
ERBR *eS* **SKSac** **04 33 26.2 -1.7**
ERBR pmax pmax
comp=Z,154nm,1.3s
**GAZ Gaziantep 86.60 308** P **P** **04 23 04.3 -0.5**
GAZ IAmb IAmb 04 23 06.1
comp=Z,101nm,1.1s
**GHAJ Ghor Haditha 86.68 302** P **P** **04 23 04.6 -0.5**
GHAJ IAmb IAmb 04 23 19.7
comp=Z,204nm,1.1s
**HVD Gariep Dam 86.75 240** *eP* **P** **04 23 05.8 0.0**
HVD IAmb IAmb 04 23 08.3
comp=Z,360nm,1.3s
**EIL Elat 86.87 300** P **P** **04 23 05.5 -0.7**
comp=Z,86nm,1.2s,baz=119,slow=5.7,SNR=26
comp=Z,86nm,1.2s
**BUFB Buffelsbos 86.90 236** *eP* **P** **04 23 07.7 +1.4**
BUFB IAmb IAmb 04 23 09.1
comp=Z,323nm,1.4s
**NVL N'lazarevskaya 87.00 199**⇑ *i*P **P** **04 23 07.1 +1.1**
NVL *eS* **SKSac** **04 33 31.8 +0.5**
NVL pmax pmax
comp=Z,160nm,0.9s
NVL MLR MLR
comp=Z,8µm,17.0s
**VRH Novokhopyorsk 87.09 323** *eP* **P** **04 23 04.5 -2.2**
VRH pmax pmax
comp=Z,250nm,1.2s
**MMAI Mount Meron Ar 87.16 304** P **P** **04 23 07.1 -0.5**
comp=Z,58nm,1.0s,baz=94,slow=6.8,SNR=29
comp=Z,58nm,1.0s
**BOSA Boshof 87.22 242** P **P** **04 23 08.0 -0.2**
**BOSA Boshof 87.22 242** *eP* **P** **04 23 08.1 -0.1**
BOSA IAmb IAmb 04 23 10.4
comp=Z,539nm,1.1s
**BOSA Boshof 87.22 242** P **P** **04 23 08.5 +0.4**
comp=Z,306nm,0.9s,baz=99,slow=4.0,SNR=183
comp=Z,306nm,0.9s
**BOSA Boshof 87.22 242** P **P** **04 23 08.0 -0.2**
BOSA pmax pmax
comp=Z,483nm,1.1s
**SWZ Schweizer 87.35 243** *eP* **P** **04 23 08.1 -0.7**
SWZ IAmb IAmb 04 23 11.2
comp=Z,375nm,1.0s
**LBTB Lobatse 87.41 245** P **P** **04 23 09.3 +0.2**
**LBTB Lobatse 87.41 245**⇑ *i*P **P** **04 23 09.5 +0.4**
LBTB IAmb IAmb 04 23 11.4
comp=Z,440nm,1.1s
**LBTB Lobatse 87.41 245** *i*P **P** **04 23 10.9 +1.8**
**LBTB Lobatse 87.41 245** P **P** **04 23 09.3 +0.2**
LBTB pmax pmax

comp=Z,416nm,1.1s
**LBTB Lobatse 87.41 245** *i* P **P** **04 23 10.9 +1.8**
**BNN Bunyan 88.02 310** P **P** **04 23 10.4 -1.2**
**ROOI Rooidraai Farm 88.12 238** *e*P **P** **04 23 12.7 +0.3**
ROOI IAmb IAmb 04 23 14.7
comp=Z,92nm,0.8s
**P08K Saint George I 88.16 32** P **P** **04 23 13.1 +1.4**
baz=252
**ANN Anapa 88.19 316** *e*P **P** **04 23 09.9 -2.2**
ANN *e**PP **PcP** **04 23 13.1 -0.7**
ANN *e*S **SKSac** **04 33 37.8 -1.4**
ANN pmax pmax
comp=Z,133nm,1.2s
**VORD Divnogorie 88.49 322** *e*P **P** **04 23 11.5 -1.9**
VORD pmax pmax
comp=Z,150nm,1.0s
**VSR Storozhevoye 88.64 322** *e*P **P** **04 23 12.2 -1.9**
VSR pmax pmax
comp=Z,160nm,1.1s
**VORR Voronezh 88.73 323** *e*P **P** **04 23 12.7 -1.8**
VORR pmax pmax
comp=Z,111nm,1.3s
**KIP Kipapa 88.76 68** P **P** **04 23 17.5 +2.1**
**KIP Kipapa 88.76 68** P **P** **04 23 16.1 +0.7**
KIP IAmb IAmb 04 23 39.1
comp=Z,148nm,1.1s
**KIP Kipapa 88.76 68** P **P** **04 23 16.1 +0.7**
KIP pmax pmax
comp=Z,148nm,1.2s
**BRAK Brakfontein 88.78 238** *e*P **P** **04 23 16.1 +0.6**
BRAK IAmb IAmb 04 23 18.2
comp=Z,134nm,1.0s
**LPSR Galich'ya Gora 89.13 323** *e*P **P** **04 23 14.5 -1.9**
LPSR pmax pmax
comp=Z,120nm,1.2s
**CSS Mathiatis 89.23 305** P **P** **04 23 16.0 -1.3**
CSS IAmb IAmb 04 23 51.5
comp=Z,87nm,1.2s
**CSS Mathiatis 89.23 305** P **P** **04 23 16.8 -0.5**
comp=Z,58nm,1.3s
**GRAN Grantham 89.31 238** *e*P **P** **04 23 19.6 +1.6**
GRAN IAmb IAmb 04 23 20.4
comp=Z,50nm,0.9s
**TROLL Troll, Antarti 89.35 196** ⇑P **P** **04 23 18.6 +1.3**
comp=Z,6μm,0.7s
TROLL ⇑SKSac **SKSac** **04 33 46.3 +0.7**
comp=Z,134nm,1.0s
**GAMB Gambell 89.48 25** P **P** **04 23 19.4 +1.7**
baz=250
**MERW Merweville 89.78 237** *e*P **P** **04 23 20.9 +0.7**
MERW IAmb IAmb 04 23 22.5
comp=Z,119nm,0.9s
**BR104 Keskin Array S 89.87 310** P **P** **04 23 18.6 -1.8**
comp=Z,35nm,1.1s,comp=Z,278nm
**BR131 Keskin Array S 89.87 310** P **P** **04 23 18.5 -1.9**
**BR131 Keskin Array S 89.87 310** P **P** **04 23 18.5 -1.9**
BR131 pmax pmax
comp=Z,44nm,1.0s
**BRTR Keskin Array B 89.87 310** P **P** **04 23 18.6 -1.8**
comp=Z,31nm,1.0s,baz=128,slow=4.4,SNR=41
BRTR PKKPbc **PKKPbc** **04 40 53.8 -0.1**
comp=Z,3.4nm,0.9s,baz=225,slow=3.1,SNR=7.9
comp=Z,31nm,1.0s
**BR105 Keskin Array S 89.89 310** P **P** **04 23 18.6 -1.9**
comp=Z,37nm,1.1s,comp=Z,303nm
**BR106 Keskin Array S 89.89 310** P **P** **04 23 18.6 -1.9**
comp=Z,33nm,1.1s,comp=Z,265nm
**FRAZ Fraserburg 90.01 238** *e*P **P** **04 23 21.5 +0.2**
FRAZ IAmb IAmb 04 23 24.2
comp=Z,212nm,1.2s
**SUR Sutherland 90.43 237** P **P** **04 23 23.9 +0.6**
SUR IAmb IAmb 04 23 26.8
comp=Z,188nm,1.1s
**SUR Sutherland 90.43 237** *e*P **P** **04 23 24.6 +1.3**
SUR IAmb IAmb 04 23 26.5
comp=Z,212nm,1.1s
**SUR Sutherland 90.43 237** LR LR 04 58 00.7
comp=Z,5μm,21.3s,baz=37,slow=32
**SUR Sutherland 90.43 237** P **P** **04 23 24.3 +1.0**
**MATJ Matjiesfontein 90.46 236** *e*P **P** **04 23 23.9 +0.6**
MATJ IAmb IAmb 04 23 26.5
comp=Z,430nm,1.0s
**SIM Simferopol' 90.52 315** *e*P **P** **04 23 22.7 -0.4**
SIM *e* 04 33 48.0
SIM *e*S **S** **04 34 12.0 -5.0**
SIM pmax pmax
comp=Z,61nm,1.1s
SIM pmax pmax
comp=Z,940nm,11.8s
**ANTO Ankara 90.54 310** P **P** **04 23 22.2 -1.2**
**ANTO Ankara 90.54 310** P **P** **04 23 22.8 -0.7**
**ANTO Ankara 90.54 310** P **P** **04 23 22.2 -1.2**
ANTO pmax pmax
comp=Z,49nm,1.4s
**ANTO Ankara 90.54 310** P **P** **04 23 22.2 -1.2**
comp=Z,17nm,1.6s
**BR231 Keskin MP Arra 90.55 310** P **P** **04 23 22.1 -1.5**
**MOS Moscow 90.65 326** *e*P **P** **04 23 20.4 -3.0**
MOS *e* 04 26 54.9
MOS *e* 04 33 46.5
MOS *e*S **S** **04 34 11.4 -6.3**
MOS *e*PS **PS** **04 35 26.0 -2.2**
MOS pmax pmax
comp=Z,76nm,1.4s
**UPI Upington 90.74 241** *e*P **P** **04 23 25.8 +1.1**
UPI IAmb IAmb 04 23 27.6
comp=Z,149nm,1.3s
**POHA Pohakuloa 90.80 70** P **P** **04 23 27.5 +2.2**
**POHA Pohakuloa 90.80 70** P **P** **04 23 25.9 +0.6**
POHA IAmb IAmb 04 23 28.3
comp=Z,230nm,1.1s
**KEIM Keimoes 90.93 241** *e*P **P** **04 23 26.2 +0.7**
KEIM IAmb IAmb 04 23 28.6
comp=Z,219nm,1.2s
**SNAA Sanae 90.99 196** P **P** **04 23 25.5 +0.6**
**SNAA Sanae 90.99 196** ⇑*i*P **P** **04 23 26.4 +1.5**
SNAA IAmb IAmb 04 23 28.1
comp=Z,21μm,1.2s
**SNAA Sanae 90.99 196** ⇑P **P** **04 23 26.6 +1.7**
comp=Z,3μm,1.1s
SNAA ⇑SKSac **SKSac** **04 33 54.0 -1.1**
comp=Z,78nm,1.1s
**SNAA Sanae 90.99 196** P **P** **04 23 25.9 +0.9**
comp=Z,142nm,0.9s,baz=145,slow=4.2,SNR=209
SNAA LR LR 04 58 43.6
comp=Z,17μm,21.9s,baz=119,slow=32
comp=Z,142nm,0.9s
**SNAA Sanae 90.99 196***ce*P **P** **04 23 26.5 +1.5**
SNAA pmax pmax
comp=Z,377nm,1.3s
**KNHH Kane Nui o Ham 91.09 71** P **P** **04 23 27.2 +0.8**
**OBN Obninsk 91.09 326** IAmb IAmb 04 23 25.4
comp=Z,105nm,1.4s
**OBN Obninsk 91.09 326**
comp=Z,19nm,0.6s
**OBN Obninsk 91.09 326** *i* 04 27 02.2
**OBN Obninsk 91.09 326** P **P** **04 23 24.5 -1.0**
comp=Z,55nm,1.3s
**OBN Obninsk 91.09 326** MLR MLR
comp=Z,5μm,19.0s
**OBN Obninsk 91.09 326** pmax pmax
comp=Z,74nm,1.3s
**OBN Obninsk 91.09 326***d i*P **P** **04 23 23.1 -2.4**
**OBN Obninsk 91.09 326** P **P** **04 23 24.1 -1.4**
**OBN Obninsk 91.09 326** P **P** **04 23 24.4 -1.0**
comp=Z,19nm,0.6s,baz=100,slow=5.4,SNR=12
**PPT Papeete 91.16 108** P **P** **04 23 28.4 +1.7**
comp=Z,183nm,1.0s,baz=211,slow=3.4,SNR=21
comp=Z,183nm,1.0s
**PPTF Pamatai, Papee 91.16 108** P **P** **04 23 30.1 +3.3**
**PPTF Pamatai, Papee 91.16 108** **P** **04 23 27.6 +0.8**
**CVNA Calvinia 91.47 238** *e*P **P** **04 23 28.8 +0.8**
CVNA IAmb IAmb 04 23 31.1
comp=Z,342nm,1.2s
**AUGR Augrabies 91.50 241** *e*P **P** **04 23 29.7 +1.6**
AUGR IAmb IAmb 04 23 31.1
comp=Z,135nm,1.2s
**CER Ceres 91.50 236** *e*P **P** **04 23 28.9 +0.8**
CER IAmb IAmb 04 23 31.3
comp=Z,171nm,0.9s
**PRTV Porterville,We 91.73 236** *e*P **P** **04 23 30.1 +0.9**
PRTV IAmb IAmb 04 23 32.7
comp=Z,248nm,1.0s
**K13K Kusilvak Mount 92.04 28** IAmb IAmb 04 23 31.1
comp=Z,84nm,1.3s
**K13K Kusilvak Mount 92.04 28** P **P** **04 23 30.5 +0.8**
baz=256
**ARMS Ukamas 92.11 241** *e*P **P** **04 23 32.5 +1.5**
ARMS IAmb IAmb 04 23 33.7
comp=Z,135nm,1.1s
**F14K Arctic Creek 92.20 24** P **P** **04 23 31.8 +1.3**
baz=255
**ELL Elmali 92.26 307** P **P** **04 23 30.2 -1.4**
ELL IAmb IAmb 04 24 12.7
comp=Z,146nm,1.1s
**ELL Elmali 92.26 307** P **P** **04 23 30.2 -1.4**
ELL pmax pmax
comp=Z,145nm,1.1s
**ADZR Andozero 92.31 334** P **P** **04 23 29.2 -1.7**
ADZR *e* 04 27 08.2
ADZR pmax pmax
comp=Z,40nm,1.1s
**BELA Belgrano 2 92.45 186** P **P** **04 23 31.9 +0.4**
BELA IAMs_20 IAMs_20 05 05 14.7
comp=Z,9μm,21.0s
**VNA2 Neumayer--Watz 92.63 196** ⇑P **P** **04 23 34.0 +1.6**
comp=Z,92nm,0.7s,baz=123,slow=4.0
VNA2 ⇑SKSac **SKSac** **04 34 05.0 +0.7**
comp=Z,1.5nm,0.6s,baz=104,slow=1.5
**J14K Nanvaranak Lak 92.73 27** P **P** **04 23 32.9 0.0**
J14K IAmb IAmb 04 23 34.3
comp=Z,68nm,1.3s
**J14K Nanvaranak Lak 92.73 27** P **P** **04 23 33.5 +0.6**
baz=257,SNR=5.8
**L14K Kuka Creek 92.82 28** P **P** **04 23 34.6 +1.2**
baz=258
**F15K North Star Dit 92.94 24** P **P** **04 23 34.6 +0.8**
baz=256,SNR=7.1
**G15K Niukluk 93.02 25** P **P** **04 23 34.9 +0.7**
baz=257
**VNA1 Neumayer--Stat 93.03 196** ⇑P **P** **04 23 35.9 +1.7**
comp=Z,97nm,0.9s
VNA1 ⇑SKSac **SKSac** **04 34 07.4 +1.1**
comp=Z,7.2nm,1.1s
**M14K Bethel 93.05 29** P **P** **04 23 34.9 +0.5**
baz=258
**VNA3 Neumayer Olymp 93.05 195** ⇑P **P** **04 23 35.8 +1.4**
comp=Z,72nm,0.8s
VNA3 ⇑SKSac **SKSac** **04 34 04.6 -2.0**
comp=Z,2.5nm,1.0s
**O14K Tigyukauivet M 93.10 31** P **P** **04 23 35.0 +0.4**
baz=259
**C16K Lisburne Hills 93.29 21** P **P** **04 23 36.3 +0.9**
baz=256,SNR=5.2
**L15K Ungalak Mounta 93.45 28** P **P** **04 23 36.7 +0.4**
baz=259
**S14K Fog Glacier 93.47 34** P **P** **04 23 36.4 -0.2**
baz=260
**K15K Wolf Creek Mou 93.55 28** P **P** **04 23 37.6 +0.8**
baz=259
**MANT Manisa 93.57 308** P **P** **04 23 36.6 -1.1**
**M15K Kasigluk River 93.65 29** P **P** **04 23 37.6 +0.4**
baz=260,SNR=5.3
**H16K Elim 93.70 25** P **P** **04 23 37.8 +0.4**
baz=258,SNR=11
**KOMG Komaggas 93.72 239** *e*P **P** **04 23 38.5 +0.1**
KOMG IAmb IAmb 04 23 41.9
comp=Z,131nm,1.3s
**G16K Koyuk River 93.80 24** P **P** **04 23 38.4 +0.6**
baz=258,SNR=15
**O15K Ungalikthiuk R 93.81 31** P **P** **04 23 38.8 +0.8**
baz=260
**N15K Kwethluk River 93.85 30** P **P** **04 23 38.8 +0.6**
baz=260
**D17K Noatak River 93.99 22** P **P** **04 23 38.9 +0.3**
baz=258,SNR=17
**C17K DeLong Mountai 94.12 21** P **P** **04 23 39.6 +0.3**
baz=258,SNR=6.9
**RDOG Red Dog Mine 94.13 22** P **P** **04 23 39.2 -0.1**
RDOG IAmb IAmb 04 23 40.9
comp=Z,78nm,1.3s
**RDOG Red Dog Mine 94.13 22** P **P** **04 23 39.8 +0.5**
baz=258,SNR=6.0
**J16K Anvik River 94.15 27** P **P** **04 23 39.9 +0.4**
baz=260,SNR=14
**I17K Unalakleet 94.22 26** P **P** **04 23 40.3 +0.5**
baz=260,SNR=14
**E17K Hotham Inlet 94.34 23** P **P** **04 23 40.8 +0.6**
baz=259,SNR=8.6
**L16K Owhat River 94.40 28** P **P** **04 23 41.0 +0.3**
baz=261
**F17K Baldwin Pennin 94.45 24** P **P** **04 23 41.3 +0.6**
baz=260
**G17K Kiwalik Mounta 94.52 25** P **P** **04 23 41.5 +0.3**
baz=260,SNR=16
**M16K Timber Creek 94.54 29** P **P** **04 23 42.1 +0.7**
baz=261
**N16K Nishlik Lake 94.55 30** P **P** **04 23 41.4 0.0**
baz=261,SNR=12
**LVZ Lovozero 94.62 338** IAMs_20 IAMs_20 05 11 56.5
comp=Z,13μm,19.0s
**AK09 Malin Array Si 94.65 320** P **P** **04 23 39.6 -2.4**
**AK10 Malin Array Si 94.67 320** P **P** **04 23 39.5 -2.6**
**AK08 Malin Array Si 94.67 320** P **P** **04 23 39.5 -2.6**
**AKASG Malin Array Be 94.70 320** P **P** **04 23 40.0 -2.2**
comp=Z,12nm,1.0s,baz=84,slow=4.4,SNR=19
AKASG PP **PP** **04 27 29.7 -1.1**
comp=Z,8.3nm,1.1s,baz=84,slow=6.4,SNR=4.5
AKASG PKKP **PKKPdf** **04 40 39.4 -2.1**
comp=Z,0.5nm,0.3s,baz=272,slow=3.5,SNR=5.8
comp=Z,12nm,1.0s
**AKBB Malin Array Si 94.70 320** P **P** **04 23 39.6 -2.6**
**AKBB Malin Array Si 94.70 320***ce*P **P** **04 23 39.1 -3.2**
**AK05 Malin Array Si 94.70 320** P **P** **04 23 39.6 -2.6**
**KIEV Kiev 94.71 320** P **P** **04 23 39.3 -3.0**
**KIEV Kiev 94.71 320** P **P** **04 23 39.3 -3.0**
KIEV pmax pmax
comp=Z,14nm,1.0s
**H17K Granite Mounta 94.73 25** P **P** **04 23 41.8 -0.3**
H17K IAmb IAmb 04 23 43.6
comp=Z,93nm,1.1s
**H17K Granite Mounta 94.73 25** P **P** **04 23 42.5 +0.4**
baz=261,SNR=28
**O16K Kokwok River B 94.75 31** P **P** **04 23 42.6 +0.3**
baz=262
**B18K Kokolik River 94.78 21** P **P** **04 23 43.0 +0.7**
baz=259
**J17K VABM Dome 94.85 27** P **P** **04 23 43.4 +0.7**
baz=261,SNR=10
**C18K Utukok River 94.87 21** IAmb IAmb 04 23 44.2
comp=Z,69nm,1.4s
**C18K Utukok River 94.87 21** P **P** **04 23 43.3 +0.6**
baz=260
**E18K Tukpahlearik C 94.87 23** P **P** **04 23 43.7 +1.0**
baz=260,SNR=8.4
**L17K Donlin 95.02 28** P **P** **04 23 44.5 +1.0**
baz=262
**APA Apatity 95.03 338** ⇓*i*P P 04 23 35.0 -8.4
APA pmax pmax
comp=Z,7.0nm,1.0s
**K17K Iditarod 95.10 27** P **P** **04 23 43.4 -0.5**
**K17K Iditarod 95.10 27** P **P** **04 23 44.5 +0.7**
baz=262,SNR=8.7
**F18K Selawik 95.11 23** P **P** **04 23 44.6 +0.9**
baz=261
**A19K Wainwright 95.19 20** P **P** **04 23 45.0 +1.0**
baz=260
**PUL Pulkovo 95.24 330***ce*P **P** **04 23 44.4 -0.1**
PUL pmax pmax
comp=Z,32nm,0.4s
PUL MLR MLR
comp=Z,7μm,22.0s
**O17K Koliganek Bris 95.28 30** P **P** **04 23 45.0 +0.3**
baz=263
**M17K Holitna River 95.32 29** P **P** **04 23 45.5 +0.6**
baz=262
**N17K Nushagak Hills 95.33 30** P **P** **04 23 45.5 +0.6**
baz=263
**G18K Tagagawik 95.40 24** P **P** **04 23 45.3 +0.1**
baz=262,SNR=5.2
**H18K Honhosa River 95.42 25** P **P** **04 23 45.5 +0.3**
baz=262,SNR=21
**C19K Lookout Ridge 95.52 21** P **P** **04 23 46.7 +1.0**
baz=261,SNR=7.1
**MI29 MI29, Kamyanyy 95.54 320** P **P** **04 23 44.4 -1.7**
**LUBAR Lubar, Ukraine 95.54 320** P **P** **04 23 43.4 -2.7**
**TSUM Tsumeb 95.69 250** P **P** **04 23 45.7 -2.0**
TSUM IAmb IAmb 04 23 50.1
comp=Z,61nm,1.2s
**TSUM Tsumeb 95.69 250** *e*P **P** **04 23 46.8 -1.0**
TSUM IAmb IAmb 04 23 49.8
comp=Z,60nm,1.2s
**Q17K Contact Creek 95.72 32** P **P** **04 23 46.7 -0.2**
baz=264
**L18K Granite Mounta 95.78 28** P **P** **04 23 47.4 +0.5**
baz=263,SNR=7.0
**ALN Alexandroupoli 95.78 310** IAMs_20 IAMs_20 05 01 14.9
comp=Z,8μm,18.0s
**VRI Vrincioaia 95.80 315** P **P** **04 23 46.7 -0.8**
comp=Z,16nm,1.1s,comp=Z,161nm
**F19K Shaleruckik Mo 95.88 23** P **P** **04 23 47.3 0.0**
baz=263
**J18K Innoko River 95.91 27** P **P** **04 23 46.3 -1.2**
**J18K Innoko River 95.91 27** P **P** **04 23 47.2 -0.3**
baz=263,SNR=17
**TESR Tescani 95.92 316** P **P** **04 23 45.8 -2.2**
**MNK Minsk 95.95 324** *i* P **P** **04 23 45.6 -2.3**
MNK *i* 04 27 39.0
MNK *i* PPP PPP 04 29 41.0
MNK *i* S **SKSac** **04 34 22.2 -0.3**
MNK *i* SS **SS** **04 41 34.4 -1.2**
MNK *i* SSS SSS 04 45 19.7
MNK pmax pmax
comp=N,18nm,1.0s
MNK pmax pmax
comp=Z,39nm,1.0s
MNK pmax pmax
comp=E,10.0nm,0.9s
MNK MLR MLR
comp=N,4μm,20.0s
MNK MLR MLR
comp=E,8μm,21.0s
MNK MLR MLR
comp=Z,9μm,24.0s
**D19K Kuna River 95.96 22** P **P** **04 23 48.5 +0.8**
baz=263,SNR=6.5
**N18K Kilae Creek 95.98 30** P **P** **04 23 47.9 -0.1**
baz=264
**GCSA Galena City Sc 95.99 26** P **P** **04 23 48.4 +0.6**
baz=263,SNR=10.0
**G19K Purcell Mounta 96.07 24** IAmb IAmb 04 23 49.6
comp=Z,62nm,1.1s
**G19K Purcell Mounta 96.07 24** P **P** **04 23 48.5 +0.3**
baz=263,SNR=15
**M18K Stony River 96.10 29** P **P** **04 23 48.9 +0.5**
baz=264,SNR=5.3
**E19K Redstone River 96.16 23** P **P** **04 23 49.4 +0.8**
baz=263,SNR=16
**KMPD K-Podol'skiy 96.25 318** P **P** **04 23 46.6 -2.8**
**H19K Roundabout Mou 96.26 25** IAmb IAmb 04 23 50.6
comp=Z,88nm,1.1s
**H19K Roundabout Mou 96.26 25** P **P** **04 23 49.5 +0.5**
baz=264,SNR=24
**MLR Muntele Rosu 96.31 315** P **P** **04 23 48.0 -1.9**
comp=Z,13nm,1.1s,baz=76,slow=4.2,SNR=5.5
MLR PP **PP** **04 27 42.1 -1.5**
comp=Z,21nm,1.2s,baz=56,slow=5.9,SNR=4.4
comp=Z,13nm,1.1s
**J19K Poorman 96.45 26** P **P** **04 23 50.5 +0.5**
baz=264,SNR=16
**B20K Meade River 96.48 20** P **P** **04 23 50.6 +0.7**
baz=264
**D20K Etivluk River 96.53 22** P **P** **04 23 50.6 +0.3**
baz=264,SNR=9.8
**L19K White Mountain 96.63 28** P **P** **04 23 51.1 +0.3**
baz=265,SNR=8.6
**E20K Nigu River 96.64 22** P **P** **04 23 51.3 +0.4**
baz=264,SNR=18
**N19K Bonanza Creek 96.69 30** P **P** **04 23 51.4 +0.2**
baz=265,SNR=9.4
**F20K Avaraart Lake 96.70 23** IAmb IAmb 04 23 52.7
comp=Z,63nm,1.5s
**F20K Avaraart Lake 96.70 23** P **P** **04 23 51.8 +0.8**
baz=265
**M19K Big River Lodg 96.82 28** P **P** **04 23 52.0 +0.3**
baz=265
**H20K Anotleneega Mo 96.91 25** P **P** **04 23 52.6 +0.6**
baz=265,SNR=11
**VSU Vasula 96.95 328***ce*P **P** **04 23 51.8 -0.5**
VSU pmax pmax
comp=Z,47nm,1.7s
**BURAR Bucovina Array 97.00 317** P **P** **04 23 51.2 -1.8**
**OHAK Old Harbor 97.01 33** P Pdif 04 23 53.0 +0.4
baz=266
**BUR08 Bucovina Ar. S 97.01 317** P **P** **04 23 51.0 -2.0**
**I20K Naaghedeneel 97.02 26** P Pdif 04 23 53.1 +0.5
baz=266,SNR=6.5
**K20K Telida 97.09 27** P Pdif 04 23 53.4 +0.4
baz=266
**L20K Farewell, AK 97.11 28** P Pdif 04 23 53.4 +0.3
baz=266,SNR=6.7
**J20K Nowinta River 97.11 26** P Pdif 04 23 53.7 +0.6
baz=266,SNR=13
**P19K Oil Pt 97.22 31** P Pdif 04 23 54.3 +0.7
baz=266
**C21K Knifeblade Rid 97.23 21** P Pdif 04 23 54.1 +0.6
baz=266
**B21K Ikpikpuk River 97.33 21** P Pdif 04 23 54.6 +0.7
baz=266
**IMAR Indian Mountai 97.41 24** P **P** **04 23 53.7 -0.6**
**M20K Styx River 97.42 29** P Pdif 04 23 54.9 +0.3
baz=266
**E21K Killik River 97.48 22** P Pdif 04 23 55.4 +0.7
baz=266
**FINES FINESS Array B 97.49 331** P **P** **04 23 52.8 -1.9**
comp=Z,21nm,1.1s,baz=102,slow=4.7,SNR=7.8
FINES PKIKP **PKiKP** **04 28 28.6 -0.6**
comp=Z,6.9nm,1.0s,baz=75,slow=2.2,SNR=7.9
FINES PKKPbc **PKKPbc** **04 40 32.5 -1.9**
comp=Z,1.5nm,0.8s,baz=236,slow=2.1,SNR=4.2
comp=Z,21nm,1.1s
**FINES FINESS Array B 97.49 331***ce*P **P** **04 23 53.5 -1.2**
FINES pmax pmax
comp=Z,21nm,1.1s
**G21K Allakaket 97.54 24** P **P** **04 23 53.6 -1.3**
**G21K Allakaket 97.54 24** P Pdif 04 23 55.5 +0.5
baz=267,SNR=9.9
**H21K Melozitna Rive 97.78 25** P Pdif 04 23 56.6 +0.6
baz=267,SNR=14
**B22K Teshekpuk Lake 97.78 20** P **P** **04 23 55.9 +0.1**
baz=267
**N20K Mount Spurr 97.82 29** P **P** **04 23 55.9 -0.4**
baz=267
**SPCR Spurr Chakacha 97.82 29** P **P** **04 23 56.3 0.0**
baz=267
**D22K Ayikyak River 97.97 21** P Pdif 04 23 57.7 +0.9
baz=268
**F22K John River 98.11 23** P Pdif 04 23 57.9 +0.5
baz=268
**ARCES ARCESS Array B 98.12 339** P **P** **04 23 55.7 -1.7**
ARCES IAmb IAmb 04 24 36.3
comp=Z,42nm,1.2s
**ARCES ARCESS Array B 98.12 339** P **P** **04 23 55.7 -1.7**
comp=Z,20nm,1.0s,baz=76,slow=5.1,SNR=9.5
ARCES PP **PP** **04 27 52.6 -4.1**
comp=Z,6.0nm,1.0s,baz=80,slow=6.5,SNR=3.3
ARCES PKiKP **PKiKP** **04 28 29.9 -0.3**
comp=Z,6.5nm,1.0s,baz=98,slow=4.1,SNR=2.6
ARCES PKKPbc **PKKPbc** **04 40 30.9 -2.0**
comp=Z,0.7nm,0.4s,baz=236,slow=0.9,SNR=9.3
comp=Z,20nm,1.0s
**SKT Skwentna 98.18 28** P **P** **04 23 57.2 -0.6**
baz=268
**E22K Anaktuvuk Pass 98.27 22** P Pdif 04 23 58.6 +0.5
baz=268
**G22K Bettles 98.35 23** P Pdif 04 23 58.9 +0.4
baz=268
**H22K Ishtalitna Cre 98.38 25** P Pdif 04 23 59.4 +0.7
baz=268,SNR=9.7
**BPAW Bear Paw Mtn. 98.49 26** P **P** **04 23 58.8 -0.4**
BPAW IAmb IAmb 04 23 59.9
comp=Z,54nm,1.5s
**BPAW Bear Paw Mtn. 98.49 26** P **P** **04 23 59.1 -0.1**
baz=268,SNR=6.2
**MLY Manley 98.62 25** P **P** **04 23 59.7 -0.1**
baz=269,SNR=16
**SUW Suwalki 98.67 323** *e*Pdif **P** **04 23 58.6 -1.6**
**SUW Suwalki 98.67 323** P **P** **04 23 58.4 -1.7**
**D23K Nanushuk River 98.70 21** P Pdif 04 24 00.4 +0.4
baz=270
**C23K Itkillik River 98.73 21** P Pdif 04 24 00.8 +0.7
baz=270,SNR=7.3
**CUT Chulitna 98.78 28** P **P** **04 24 00.5 0.0**
baz=269
**KWP Kalwaria Pacla 98.78 319** *e*Pdif **P** **04 24 00.1 -0.7**
KWP *e*PP **PP** **04 28 06.8 +4.4**
**KWP Kalwaria Pacla 98.78 319** P **P** **04 23 58.7 -2.1**
**M22K Willow 98.84 29** P **P** **04 24 00.5 -0.2**
baz=269
**COLD Coldfoot 98.87 23** P Pdif 04 24 01.1 +0.3

baz=270,SNR=7.1
G23K Bananza Creek 98.94 24 P Pdif 04 24 01.7 +0.5
baz=270,SNR=16
O22K Cooper Landing 99.01 30 P Pdif 04 24 01.4 -0.2
baz=269
RC01 Rabbit Creek A 99.01 29 P Pdif 04 24 00.8 -0.8
baz=269
E23K Chandalar 99.09 22 P Pdif 04 24 02.5 +0.6
baz=270
TOLK Toolik Lake Re 99.10 22 P Pdif 04 24 02.0 +0.1
baz=270
H23K Yukon River 99.13 25 P Pdif 04 24 02.8 +0.8
baz=270,SNR=9.2
SEW Seward 99.14 30 P Pdif 04 24 02.3 +0.2
baz=269
I23K Minto, Yukon-K 99.21 25 P Pdif 04 24 02.5 +0.1
baz=270,SNR=19
PMR Palmer 99.31 29 P Pdif 04 24 02.2 -0.6
PMR Palmer 99.31 29 P Pdif 04 24 02.4 -0.4
baz=270
NEA2 Nenana 99.33 26 P Pdif 04 24 02.8 -0.2
baz=270
D24K Happy Valley 99.36 21 P Pdif 04 24 03.2 +0.2
baz=271
C24K Franklin Bluff 99.39 21 P Pdif 04 24 03.2 +0.1
baz=272
MCK McKinley 99.40 27 P Pdif 04 24 02.7 -0.5
baz=270,SNR=7.4
E24K Your Creek 99.52 22 P Pdif 04 24 03.9 +0.2
baz=271
CRVS Cervenica-Dubn 99.57 318 ePDIFF Pdif 04 24 03.8 -0.6
CRVS Cervenica-Dubn 99.57 318 ePP PP 04 28 13.9 +5.5
CRVS Cervenica-Dubn 99.57 318 pmax pmax
comp=Z,50nm,1.5s
WAT1 Susitna Watana 99.58 28 P Pdif 04 24 04.1 0.0
baz=270
KNK Knik Glacier 99.63 29 P Pdif 04 24 03.8 -0.5
baz=270,SNR=6.5
SML Sawmill 99.69 29 P Pdif 04 24 04.5 -0.2
baz=270,SNR=7.5
PWL Port Wells 99.69 30 P Pdif 04 24 04.4 -0.3
baz=270
F24K Squaw Lake 99.76 23 P Pdif 04 24 05.1 +0.3
baz=272
H24K Noodor Dome 99.81 25 P Pdif 04 24 05.5 +0.4
baz=272,SNR=6.7
G24K Hadweenzic Riv 99.95 24 P Pdif 04 24 06.0 +0.4
baz=272,SNR=5.2
WAT6 Susitna Watana 99.95 28 P Pdif 04 24 05.8 -0.2
baz=271,SNR=11
M23K Glacier View 99.98 29 P Pdif 04 24 05.5 -0.4
baz=271
POKR Poker Plat Res 100.02 25 P Pdif 04 24 05.9 -0.1
baz=272
DHY Denali Highway 100.11 27 P Pdif 04 24 06.4 -0.2
SCM Sheep Creek Mo 100.17 29 P Pdif 04 24 06.7 -0.1
baz=271
SPITS Spitsbergen Ar 100.19 348 P Pdif 04 24 04.1 -2.4
comp=Z,20nm,1.0s,baz=76,slow=7.6,SNR=3.6
D25K Kavik River 100.23 21 P Pdif 04 24 07.0 +0.1
baz=274
HDA Harding Lake 100.26 26 P Pdif 04 24 06.2 -0.8
baz=272,SNR=6.0
ILAR Eielson Array 100.27 26 P Pdif 04 24 05.3 -1.8
comp=Z,1.5nm,0.9s,baz=288,slow=4.5,SNR=4.9
ILAR PP PP 04 28 12.0 -1.2
comp=Z,7.1nm,1.1s,baz=286,slow=6.9,SNR=7.2
ILAR PKKPbc PKKPbc 04 40 24.6 -2.1
comp=Z,5.8nm,0.8s,baz=98,slow=1.8,SNR=16
GLI Glacier Island 100.30 30 P Pdif 04 24 07.3 0.0
baz=271
NIE Niedzica 100.35 319 ePdif Pdif 04 24 05.6 -2.2
NIE ePP PP 04 28 14.5 +0.2
G25K Bearman Lake 100.49 24 P Pdif 04 24 08.1 +0.1
baz=273
F25K Christian Rive 100.61 23 P Pdif 04 24 09.7 +1.0
baz=274
H25L Birch Creek 100.63 24 P Pdif 04 24 09.6 +0.9
baz=274
C26K Camden Bay 100.69 20 P Pdif 04 24 09.7 +0.9
baz=275
M24K Tolsona, Glenn 100.70 28 P Pdif 04 24 09.6 +0.5
baz=272,SNR=6.4
K24K Donnelly Dome 100.80 27 P Pdif 04 24 09.8 +0.3
baz=273
PRP Porcupine Dome 100.80 25 P Pdif 04 24 10.4 +0.8
baz=274
KLU Klutina 100.85 29 P Pdif 04 24 09.9 +0.1
baz=273
J25K Salcha River, 100.93 26 P Pdif 04 24 09.9 -0.2
baz=274
EYAK Cordova Ski Ar 100.97 30 P Pdif 04 24 10.0 -0.2
baz=272
PAX Paxson 100.98 27 P Pdif 04 24 10.6 +0.2
baz=273,SNR=13
C27K Jago River 101.14 21 P Pdif 04 24 11.8 +0.9
baz=276
HARP HAARP 101.16 28 P Pdif 04 24 11.5 +0.4
baz=273
F26K Sheenjek River 101.18 23 P Pdif 04 24 11.7 +0.6
baz=275
RIDG Independent Ri 101.22 27 P Pdif 04 24 11.1 -0.3
baz=274,SNR=7.3
G26K Porcupine Rive 101.39 23 P Pdif 04 24 12.2 +0.2
baz=276
N25K Chitina, Valde 101.47 29 P Pdif 04 24 12.6 -0.1
baz=274,SNR=7.2
BMRM Bremner River 101.51 29 P Pdif 04 24 12.5 -0.3
baz=274
SCRK Sand Creek 101.58 26 Pdif 04 24 12.9 -0.1
SCRK Sand Creek 101.58 26 P Pdif 04 24 13.2 +0.1
baz=275,SNR=5.6
J26L Joseph Creek 101.71 26 P Pdif 04 24 13.8 +0.2
baz=275,SNR=11
I26K Coal Creek Min 101.81 25 P Pdif 04 24 13.7 -0.2
baz=276
E27K Coleen River 102.08 22 P Pdif 04 24 15.7 +0.5
baz=278,SNR=9.5
MORC Moravsky Berou 102.14 319 ePP PP 04 28 26.9 -0.9
MORC ePKKP PKKPbc 04 40 20.5 -0.4
D27M Malcolm River 102.15 21 P Pdif 04 24 15.8 +0.3
baz=279
M26K Nabesna, AK 102.16 28 P Pdif 04 24 16.2 +0.5
baz=275,SNR=5.9
G27K Doyon Strip 102.24 23 P Pdif 04 24 16.3 +0.4
baz=278,SNR=7.1
MCARA McCarthy VSAT 102.24 29 P Pdif 04 24 16.2 +0.3
baz=275
CRQE Cirque 102.27 30 P Pdif 04 24 16.3 +0.1
baz=275
H27K Steamboat Moun 102.37 24 P Pdif 04 24 17.8 +1.3
baz=278,SNR=7.8
K27K Chicken 102.41 26 P Pdif 04 24 18.0 +1.3
baz=276
I27K Kandik River 102.41 25 P Pdif 04 24 17.9 +1.2
baz=277,SNR=16
L27K Beaver Creek, 102.63 27 P Pdif 04 24 18.9 +1.2
baz=277,SNR=13
M27K Edge Creek, AK 102.69 28 P Pdif 04 24 18.0 0.0
baz=276
EGAK Eagle 102.71 25 P Pdif 04 24 18.3 +0.4
baz=278,SNR=5.7
E28M Babbage River 102.77 21 P Pdif 04 24 18.5 +0.4
baz=280
VRAC Vranov 102.77 319 ePP PP 04 28 30.4 -2.1
VRAC ePKKP PKKPbc 04 40 18.8 -0.1
VRAC Vranov 102.77 319 PP PP 04 28 30.2 -2.3
comp=Z,1.5nm,0.4s,baz=99,slow=8.1,SNR=5.3
F28M Old Crow 102.81 22 P Pdif 04 24 19.1 +0.8
baz=279
KRUC Moravsky 102.91 318 ePP PP 04 28 31.2 -2.4
KRUC ePKKP PKKPbc 04 40 18.0 -0.5
D28M Stokes Point 102.92 21 P Pdif 04 24 20.0 +1.2
baz=281
RONA Rosalia, Austr 103.03 317 ePKKP 04 40 16.5
comp=Z,2.7nm,0.8s
RONA Rosalia, Austr 103.03 317 ePKiKP PKiKP 04 28 38.8 -0.9
comp=Z,6.1nm,1.1s
CTG Chitna Glacier 103.10 29 P Pdif 04 24 20.4 +0.5
baz=276,SNR=6.4
I28M Miner Creek 103.13 25 IAMs_20 IAMs_20 05 06 18.1
comp=Z,9µm,21.0s
I28M Miner Creek 103.13 25 P Pdif 04 24 20.9 +0.9
baz=279,SNR=13
CONA Conrad Observa 103.31 317 ePKKP 04 40 16.6
comp=Z,2.5nm,0.6s
CONA Conrad Observa 103.31 317 ePP PP 04 28 34.4 -2.3
comp=Z,11nm,1.4s
E29M Blow River 103.40 22 P Pdif 04 24 21.9 +0.9
baz=281
YUK3 Moose Creek 103.42 28 P Pdif 04 24 22.5 +1.1
baz=278
ARSA Arzberg 103.57 317 ePKKP 04 40 15.1
comp=Z,3.5nm,0.8s
DAWY Dawson 103.57 26 P Pdif 04 24 22.8 +0.9
baz=279,SNR=8.3
HFS Hagfors 103.59 330 Pdiff Pdif 04 24 20.0 -1.9
comp=Z,12nm,1.1s,baz=147,slow=6.5,SNR=4.1
HFS PP PP 04 28 38.7 +0.4
comp=Z,10nm,1.0s,baz=85,slow=6.4,SNR=4.6
H29M Whitestone 103.63 24 P Pdif 04 24 22.6 +0.6
baz=280,SNR=6.1
G29M Pine Creek 103.64 23 P Pdif 04 24 22.8 +0.7
baz=281
O28M Mount Upton 103.68 29 P Pdif 04 24 23.3 +0.6
baz=278,SNR=6.5
PINM Pinnacle 103.74 30 P Pdif 04 24 23.6 +0.9
baz=277
I29M Ogilvie Camp, 103.81 25 P Pdif 04 24 23.4 +0.5
baz=280,SNR=9.0
YUK8 Steele Glacier 103.82 29 P Pdif 04 24 23.4 +0.1
baz=278
SOKA Soboth 103.93 316 ePP PP 04 28 39.3 -2.0
comp=Z,3.6nm,0.9s
PNL Peninsula 104.22 31 P Pdif 04 24 25.2 +0.4
baz=278
M29M Somme Creek 104.25 28 P Pdif 04 24 25.5 +0.5
baz=279
EPYK Eagle Plains 104.26 23 P Pdif 04 24 25.2 +0.3
baz=282
OBKA Obir 104.27 316 i PKKP 04 40 13.7
comp=Z,1.5nm,0.6s
OBKA Obir 104.27 316 ePKiKP PKiKP 04 28 40.1 -2.0
comp=Z,10nm,1.4s
CKRC Cesky Krumlov 104.30 318 ePKP PKKPbc 04 40 15.1 +0.7
G30M tAoh Zraii Nji 104.32 23 P Pdif 04 24 25.4 +0.2
baz=283
ZVC Zvikov 104.33 319 ePKP PKKPbc 04 40 14.3 0.0
YUK4 Talbot Arm 104.34 29 P Pdif 04 24 26.5 +1.0
baz=279
F30M Barrier River 104.34 22 P Pdif 04 24 25.5 +0.3
baz=283
BRG Berggiesshubel 104.39 320 eP PKiKP 04 28 42.7 +0.7
BRG Amp 04 28 44.1
comp=Z,6.0nm,1.0s
BRG Berggiesshubel 104.39 320 Amp 04 40 15.2
comp=Z,18nm,1.2s
BRG Berggiesshubel 104.39 320 ePKiKP PKiKP 04 28 42.3 +0.3
baz=85,slow=1.8
BRG ePKKPdf PKKPbc 04 40 13.7 -0.4
baz=262,slow=3.2
BRG Berggiesshubel 104.39 320 ePKP PKKPbc 04 40 14.2 +0.1
MOA Molln 104.39 317 ePKKP 04 40 12.7
comp=Z,1.8nm,0.5s
MOA Molln 104.39 317 ePKiKP PKiKP 04 28 42.1 -0.1
comp=Z,7.3nm,1.1s
K29M Barlow Dome 104.43 26 P Pdif 04 24 26.5 +0.8
baz=281
O29M Mount Kennedy 104.54 30 P Pdif 04 24 27.0 +0.7
baz=279
YUK6 Outpost Mounta 104.54 29 P Pdif 04 24 26.7 +0.2
baz=279
I30M Mount Dempster 104.64 25 P Pdif 04 24 27.1 +0.4
baz=282
NOA NORSAR Array B 104.67 331 PP PKiKP 04 28 43.2 +0.9
comp=Z,4.1nm,1.0s,baz=76,slow=7.9,SNR=4.3
NOA PKKPbc PKKPbc 04 40 12.5 -1.2
comp=Z,4.1nm,1.0s,baz=298,slow=4.0,SNR=3.2
GEC2 GERESS Array S 104.69 318 ePKiKP PKiKP 04 28 43.4 +0.6
baz=85,slow=1.8
GEC2 ePKKPdf PKKPbc 04 40 12.7 -0.6
baz=262,slow=3.2
GERES GERESS Array B 104.69 318 Pdiff Pdif 04 24 25.2 -2.1
comp=Z,1.1nm,1.0s,baz=152,slow=11,SNR=2.6
GERES PKiKP PKiKP 04 28 41.7 -1.1
comp=Z,3.2nm,0.9s,baz=66,slow=2.4,SNR=8.4
GERES PKKPbc PKKPbc 04 40 12.3 -1.0
comp=Z,7.0nm,1.0s,baz=186,slow=11,SNR=15
KHC Kasperske Hory 104.75 319 ePKP PKKPbc 04 40 12.5 -0.5
J30M Hart River 104.79 25 P Pdif 04 24 27.8 +0.4
baz=282
BIOA Bad Ischl, Aus 104.82 317 ePKKP 04 40 12.0
comp=Z,2.4nm,0.5s
MYKA Terra Mystica 104.89 316 i PKKP 04 40 12.0
comp=Z,3.1nm,0.4s
MYKA Terra Mystica 104.89 316 ePKiKP PKiKP 04 28 45.2 +2.0
comp=Z,3.4nm,0.9s
CLL Collm 104.94 321 ePKiKP PKiKP 04 28 44.0 +1.0
comp=Z,12nm,1.4s
CLL comp=Z,14nm,1.2s ePP PP 04 28 54.0 +5.4
CLL esPKKPdf 04 40 29.0
CLL Collm 104.94 321 ex x 04 40 28.0
CLL Collm 104.94 321 ePKKPdf PKKPbc 04 40 12.1 -0.3
baz=262,slow=3.2
CLL Collm 104.94 321 i PKPbc PKKPbc 04 40 12.4 -0.1
comp=Z,25nm,1.3s
INK Inuvik 105.00 21 Pdif Pdif 04 24 27.4 -0.6
KBA Koelnbreinsper 105.06 316 ePKKP 04 40 11.1
comp=Z,7.4nm,1.1s
KBA Koelnbreinsper 105.06 316 ePKiKP PKiKP 04 28 41.2 -2.5
comp=Z,7.8nm,1.7s
P29M Windy Craggy 105.06 30 P PKiKP 04 28 43.7 +0.6
baz=279
N30M Aishikik Lake 105.06 29 P PKiKP 04 28 43.7 +0.6
baz=280
G31M Satah River 105.08 23 P PKiKP 04 28 43.3 +0.5
baz=284
F31M Tsigehtchic 105.15 22 P PKiKP 04 28 43.2 +0.2
baz=285
WET Wettzell 105.21 319 ePKiKP PKiKP 04 28 43.5 -0.1
baz=85,slow=1.8
WET ePKKPdf PKKPbc 04 40 11.6 0.0
baz=262,slow=3.2
P30M Million Dollar 105.36 30 P PKiKP 04 28 44.1 +0.5
baz=280
TANN Tannenbergstha 105.36 320 ePKKPdf PKKPbc 04 40 11.2 -0.1
baz=262,slow=3.2
RJOB Joaberg 105.38 317 ePKiKP PKiKP 04 28 44.3 +0.3
baz=85,slow=1.8
RJOB ePKKPdf PKKPbc 04 40 10.6 -0.5
baz=262,slow=3.2
LESA Schwarzleotal 105.49 317 ePKKP 04 40 10.3
comp=Z,1.4nm,0.4s
LESA Schwarzleotal 105.49 317 ePKiKP PKiKP 04 28 42.7 -1.6
comp=Z,11nm,1.2s
PLN Plauen 105.55 320 ePKKPdf PKKPbc 04 40 10.3 -0.3
baz=262,slow=3.2
ROTZ Rotzenmuhle 105.59 319 ePKKPdf PKKPbc 04 40 10.5 0.0
baz=262,slow=3.2
MANZ Manzenberg 105.63 320 ePKiKP PKiKP 04 28 44.6 +0.2
baz=85,slow=1.8
MANZ ePKKPdf PKKPbc 04 40 10.1 -0.2
baz=262,slow=3.2
ABTA Abfaltersbach 105.65 316 ePKKP 04 40 09.7
comp=Z,6.5nm,1.0s,SNR=5.5
ABTA Abfaltersbach 105.65 316 ePKiKP PKiKP 04 28 42.5 -2.2
comp=Z,7.8nm,1.0s
O30N Mendenhall 105.67 29 P PKiKP 04 28 45.3 +1.1
baz=281
N31M Braeburn, Yuko 105.67 28 P PKiKP 04 28 45.4 +1.2
baz=282
NEUB Neuenburg 105.72 321 ePKKPdf PKKPbc 04 40 10.1 0.0
baz=262,slow=3.2
GORT1 Trebel 105.79 323 ePKKPdf PKKPbc 04 40 10.0 +0.1
baz=262,slow=3.2
MOX Moxa 105.88 320 ePKKPdf PKKPbc 04 40 09.5 -0.1
baz=262,slow=3.2
FLTG Flechtingen 105.92 322 ePKKPdf PKKPbc 04 40 09.0 -0.5
baz=262,slow=3.2
S31K Pelican 106.12 32 P PKiKP 04 28 46.2 +1.2
baz=280
M31M Drury Creek, Y 106.16 27 P PKiKP 04 28 46.0 +0.9
baz=283
WTTA Wattenberg 106.21 317 ePKKP 04 40 08.3
comp=Z,8.6nm,1.1s
WTTA Wattenberg 106.21 317 ePKiKP PKiKP 04 28 44.2 -1.6
comp=Z,6.0nm,0.7s
GRF Grafenberg Arr 106.23 319 ePKKPdf PKKPbc 04 40 08.8 +0.3
baz=262,slow=3.2
WATA Walderalm 106.24 317 ePKKP 04 40 08.3
comp=Z,1.7nm,0.6s,SNR=6.3
WATA Walderalm 106.24 317 ePKiKP PKiKP 04 28 45.0 -0.8
comp=Z,3.7nm,0.7s
BSEG Bad Segeberg 106.25 324 ePKKPdf PKKPbc 04 40 08.4 -0.1
baz=262,slow=3.2
FUR Furstenfeldbru 106.36 318 ePKiKP PKiKP 04 28 45.7 -0.2
baz=85,slow=1.8
SQTA Sankt Quirin 106.50 317 ePKKP 04 40 06.9
comp=Z,3.7nm,0.6s,SNR=6.5
SQTA Sankt Quirin 106.50 317 ePKiKP PKiKP 04 28 44.5 -1.8
comp=Z,6.6nm,0.9s
CLZ Clausthal 106.51 322 ePKiKP PKiKP 04 28 46.3 +0.3
baz=85,slow=1.8
CLZ ePKKPdf PKKPbc 04 40 07.4 -0.3
baz=262,slow=3.2
MOTA Moosalm 106.56 317 ePKKP 04 40 07.0
comp=Z,7.6nm,1.0s
MOTA Moosalm 106.56 317 ePKiKP PKiKP 04 28 44.7 -1.7
comp=Z,5.9nm,1.0s
NRDL Niedersach Rie 106.58 322 ePKiKP PKiKP 04 28 46.5 +0.5
baz=85,slow=1.8
NRDL ePKKPdf PKKPbc 04 40 07.6 +0.3
baz=262,slow=3.2
FARO Faro, Yukon 106.63 27 P PKiKP 04 28 46.9 +1.0
baz=284
SIT Sitka 106.77 33 P PKiKP 04 28 47.1 +0.9
baz=281
RETA Reutte 106.78 317 ePKiKP PKiKP 04 28 45.9 -0.8
comp=Z,3.6nm,0.8s
FETA Feichten 106.85 317 ePKKP 04 40 06.8
comp=Z,11nm,1.1s,SNR=6.8
FETA Feichten 106.85 317 ePKiKP PKiKP 04 28 45.4 -1.5
comp=Z,11nm,1.2s
R32K Eaglecrest 106.95 32 P PKiKP 04 28 47.2 +0.6
baz=282
N32M Quiet Lake 107.02 28 P PKiKP 04 28 47.0 +0.3
baz=284
P32M Atlin 107.08 30 P PKiKP 04 28 47.2 +0.4
baz=283
S32K Killisnoo 107.08 32 P PKiKP 04 28 46.8 0.0
baz=282
UBR Ueberruh 107.19 317 ePKiKP PKiKP 04 28 47.4 0.0
baz=85,slow=1.8
UBR ePKKPdf PKKPbc 04 40 05.1 -0.4
baz=262,slow=3.2
P33M Teslin, Yukon 107.37 29 P PKiKP 04 28 47.5 +0.1
baz=284
DAVA Damuels 107.39 317 ePKKP 04 40 05.5
comp=Z,4.2nm,0.9s
DAVA Damuels 107.39 317 ePKiKP PKiKP 04 28 46.7 -1.3
comp=Z,24nm,1.2s
HLG Helgoland 107.63 324 ePKiKP PKiKP 04 28 48.7 +0.8
baz=85,slow=1.8
HLG ePKKPdf PKKPbc 04 40 04.6 +0.4
baz=262,slow=3.2
STU Stuttgart 107.67 319 ePKiKP PKiKP 04 28 49.1 +0.9
baz=85,slow=1.8
STU ePKKPdf PKKPbc 04 40 03.7 -0.3
baz=262,slow=3.2
KASTN Kahler Asten 107.81 321 ePKiKP PKiKP 04 28 48.6 +0.2
baz=85,slow=1.8
KASTN ePKKPdf PKKPbc 04 40 02.5 -1.1
baz=262,slow=3.2
C36M Paulatuk 107.85 19 P PKiKP 04 28 48.7 +0.8
baz=295
TNS Taunus Mts 107.94 320 ePKiKP PKiKP 04 28 48.6 -0.1
baz=85,slow=1.8
TNS ePKKPdf PKKPbc 04 40 02.5 -0.7
baz=262,slow=3.2
Q32M Nakina River 107.94 31 P PKiKP 04 28 48.5 -0.2
baz=284
MSSA Maissana 107.97 314 IAMs_20 IAMs_20 05 07 35.9
comp=Z,7µm,19.0s
IBBN Ibbenburen 108.03 322 ePKiKP PKiKP 04 28 49.5 +0.8
baz=85,slow=1.8
U33K Whale Pass 108.15 34 P PKiKP 04 28 49.0 +0.2
baz=282
CRAG Craig 108.28 34 P PKiKP 04 28 49.3 +0.2
baz=282
BFO Black Forest 108.30 318 ePKKPdf PKKPbc 04 40 01.1 -0.9
baz=262,slow=3.2
BUG Bochum--Univer 108.48 321 ePKKPdf PKKPbc 04 40 00.7 -0.8
baz=262,slow=3.2
R33M Jennings River 108.48 30 P PKiKP 04 28 50.3 +0.7
baz=285
WRAK Wrangell Islan 108.50 33 P PKiKP 04 28 50.1 +0.6
baz=283
AHRW Bad Neuenahr-A 108.76 321 ePKiKP PKiKP 04 28 49.8 -0.3
baz=85,slow=1.8
S34M Telegraph Cree 108.78 31 P PKiKP 04 28 51.0 +1.1
baz=285
KEST Kesra 108.79 305 PKiKP PKiKP 04 28 50.2 -0.6
comp=Z,5.2nm,1.0s,baz=16,slow=2.1,SNR=5.5
KEST PKKPbc PKKPbc 04 39 59.8 -0.3
comp=Z,5.2nm,1.0s,baz=321,slow=6.0,SNR=4.7
TGTN Hyland Airport 109.14 27 P PKiKP 04 28 51.7 +1.1
baz=288
V35K Ketchikan 109.16 34 P PKiKP 04 28 51.7 +1.0
baz=283
DLBC Dease Lake 109.21 31 P PKiKP 04 28 51.8 +1.0
baz=286
T35M Bob Quinn 109.49 32 P PKiKP 04 28 52.4 +1.0
baz=285
BNI Bardonecchia 109.89 315 IAMs_20 IAMs_20 05 22 30.0
comp=Z,10µm,21.0s
LIRD Liard River Hi 110.85 29 P PKiKP 04 28 54.9 +1.1
baz=290
SSB Saint Sauveur 111.35 315 IAMs_20 IAMs_20 05 01 34.5
comp=Z,7µm,20.0s
TOAD Toad River Com 111.46 29 P PKiKP 04 28 55.7 +0.7
baz=290
EKA Eskdalemuir Ar 113.49 327 PP PP 04 29 49.6 -0.7
comp=Z,3.0nm,0.9s,baz=55,slow=5.5,SNR=1.9
EKA PKKPbc PKKPbc 04 39 42.2 -2.9
comp=Z,3.9nm,0.7s,baz=258,slow=2.7,SNR=7.0
YKA Yellowknife Ar 114.55 23 PKP PKiKP 04 28 59.5 -1.2
comp=Z,10nm,0.9s,baz=309,slow=2.3,SNR=18
YKA PKKPbc PKKPbc 04 39 33.4 -8.3
comp=Z,3.0nm,0.9s,baz=92,slow=3.5,SNR=7.0
QUIF Quistinic 115.89 320 ePKIKP PKiKP 04 29 01.9 -1.9
TOA0 Torodi Ar. Sit 115.98 281 PKPdf 04 29 03.3 -1.6
TORD Torodi Ar. Bea 115.98 281 PKPdf 04 29 03.1 -1.8
TORD Torodi Ar. Bea 115.98 281 PKP PKPdf 04 29 03.8 -1.2
comp=Z,47nm,1.0s,baz=53,slow=1.7,SNR=53
TORD PKKPbc PKKPbc 04 39 34.7 -0.7
comp=Z,2.2nm,0.8s,baz=306,slow=4.0,SNR=13
E03A Lebam 116.37 42 PKPdf 04 29 03.9 -0.8
ECHE Chera 116.42 310 PKP PKPdf 04 29 02.8 -2.4
F03A Seaside 116.55 43 PKPdf 04 29 04.1 -1.0
GNW Green Mountain 116.55 41 PKPdf 04 29 04.0 -1.1
ETOB Tobarra 117.05 309 PKP PKPdf 04 29 04.2 -2.3
I03D Drain, OR 117.30 45 PKPdf 04 29 06.2 -0.4
F04A Amboy 117.31 42 PKPdf 04 29 06.0 -0.6
BUCK Buck Mountain 117.42 44 PKPdf 04 29 06.6 -0.4
LON Longmire 117.46 41 PKPdf 04 29 05.9 -1.1
LON Longmire 117.46 41 PKiKP PKPdf 04 29 05.9 -1.1
H04D Lebanon 117.50 44 PKPdf 04 29 06.8 -0.3
KHMM Horse Mountain 117.74 48 PKPdf 04 29 07.6 -0.2
ENIJ Nijar 117.89 307 PKP PKPdf 04 28 57.8 -10
I04A Tendick Farm, 117.93 45 PKPdf 04 29 07.2 -0.7
UCM Universidad Co 117.97 311 PKP PKiKP 04 29 08.4 +0.2
HOOD Mount Hood Mea 118.00 43 PKPdf 04 29 08.0 -0.2
YBH Yreka Blue Hor 118.27 47 PKPdf 04 29 08.4 -0.4
YBH Yreka Blue Hor 118.27 47 PKiKP PKPdf 04 29 08.4 -0.4
I05D Terrebonne, OR 118.51 44 PKPdf 04 29 08.6 -0.5
O02D Mt. Diablo Mer 118.61 49 PKPdf 04 29 08.9 -0.6
ESBB Sonseca Array 118.66 311 PKPdf 04 29 08.4 -1.1
ESDC Sonseca Array 118.66 311 PKPdf 04 29 08.2 -1.3
ESDC Sonseca Array 118.66 311 PKP PKPdf 04 29 08.7 -0.8
comp=Z,17nm,1.1s,baz=42,slow=2.1,SNR=40
ESDC PKKPbc PKKPbc 04 39 26.1 -0.6
comp=Z,4.5nm,1.1s,baz=271,slow=4.4,SNR=10
GDXM Geysers 118.93 50 PKPdf 04 29 09.9 -0.2
PAB San Pablo 118.98 311 PKPdf 04 29 09.1 -1.1
PAB San Pablo 118.98 311 PKiKP PKPdf 04 29 09.1 -1.1
HAWA Hanford 119.06 41 PKPdf 04 29 09.6 -0.4
HATC Hat Creek Radi 119.42 48 PKPdf 04 29 10.4 -0.6
MG05 Puerto Natales 119.73 174 PKPdf PKPdf 04 29 11.3 +0.1
NEW Newport 119.90 38 PKPdf 04 29 10.9 -0.7
NEW Newport 119.90 38 P PKiKP 04 29 11.8 +0.1
baz=293
NEW Newport 119.90 38 PKiKP PKPdf 04 29 10.9 -0.7
EFI East Falkland 120.06 184 PKPdf 04 29 11.7 -0.1
EFI East Falkland 120.06 184 c iPKiKP PKiKP 04 29 13.2 +1.3
EFI pmax pmax
comp=Z,44nm,1.3s
PBRG Braganca 120.13 314 ePKP PKPdf 04 29 11.3 -1.0
GO09 Cerro Castillo 120.15 174 PKPdf PKPdf 04 29 12.0 0.0
AFDM Forest Hills D 120.27 50 PKPdf 04 29 11.5 -1.1
MVO Moncorvo 120.52 313 ePKP PKPdf 04 29 13.0 -0.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SFJD | Kangerlussuaq | 120.77 | 354 | | PKPdf | 04 29 11.5 | -1.1 | |
| SFJD | Kangerlussuaq | 120.77 | 354 | PKIKP | PKPdf | 04 29 11.5 | -1.1 | |
| WVOR | Wild Horse Val | 120.97 | 45 | | PKPdf | 04 29 13.3 | -0.7 | |
| WVOR | Wild Horse Val | 120.97 | 45 | PKIKP | PKPdf | 04 29 13.3 | -0.7 | |
| PVRL | Vila Real | 120.98 | 313 | *e*PKP | PKPdf | 04 29 13.7 | -0.2 | |
| POLO | Lamas de Olo | 121.01 | 314 | *e*PKP | PKPdf | 04 29 13.9 | -0.1 | |
| BMO | Blue Mountains | 121.06 | 42 | | PKPdf | 04 29 12.7 | -1.4 | |
| BMO | Blue Mountains | 121.06 | 42 | PKIKP | PKPdf | 04 29 12.7 | -1.4 | |
| MTE | Manteigas | 121.12 | 312 | | PKPdf | 04 29 13.4 | -0.8 | |
| MTE | Manteigas | 121.12 | 312 | *e*PKP | PKPdf | 04 29 14.1 | -0.1 | |
| PGAV | Gavieira, Arco | 121.17 | 314 | *e*PKP | PKPdf | 04 29 14.0 | -0.3 | |
| PCBR | Castelo Branco | 121.23 | 312 | *e*PKP | PKPdf | 04 29 14.3 | 0.0 | |
| PAHR | Pah Rah Range | 121.25 | 48 | | PKPdf | 04 29 14.0 | -0.6 | |
| PVIS | Viseu | 121.28 | 313 | *e*PKP | PKPdf | 04 29 14.3 | -0.2 | |
| PMRV | Marv??o | 121.28 | 311 | *e*PKP | PKPdf | 04 29 14.1 | -0.4 | |
| PBAR | Barrancos | 121.36 | 310 | *e*PKP | PKPdf | 04 29 14.5 | -0.1 | |
| PESTR | Estremoz | 121.59 | 311 | | PKPdf | 04 29 13.9 | -1.2 | |
| PESTR | Estremoz | 121.59 | 311 | *e*PKP | PKPdf | 04 29 14.6 | -0.5 | |
| COI | Coimbra | 121.81 | 312 | | PKPdf | 04 29 15.1 | -0.4 | |
| COI | Coimbra | 121.81 | 312 | *e*PKP | PKPdf | 04 29 15.5 | +0.1 | |
| COI | Coimbra | 121.81 | 312 | PKIKP | PKPdf | 04 29 15.1 | -0.4 | |
| KIC | Kosan Boka | 121.81 | 272 | ⇑*i*PKP1 | PKPdf | 04 29 15.7 | -0.5 | |
| | comp=Z,140nm,1.1s | | | | | | | |
| PCAS | Casmilo, Conde | 121.92 | 312 | *e*PKP | PKPdf | 04 29 15.4 | -0.3 | |
| DBIC | Dimbokro | 121.95 | 273 | | PKPdf | 04 29 15.3 | -1.2 | |
| DBIC | Dimbokro | 121.95 | 273 | *e*P | PKPdf | 04 29 14.6 | -1.9 | |
| DBIC | Dimbokro | 121.95 | 273 | PKP | PKPdf | 04 29 15.5 | -1.0 | |
| | comp=Z,96nm,1.1s,baz=95,slow=3.1,SNR=25 | | | | | | | |
| DBIC | | | | PKKPbc | PKKPbc | 04 39 13.8 | +0.2 | |
| | comp=Z,8.9nm,1.0s,baz=80,slow=5.7,SNR=3.7 | | | | | | | |
| DBIC | Dimbokro | 121.95 | 273 | PKIKP | PKPdf | 04 29 15.3 | -1.2 | |
| PMTG | Montargil | 122.00 | 311 | *e*PKP | PKPdf | 04 29 15.0 | -0.9 | |
| PBEJ | Beja | 122.02 | 310 | *e*PKP | PKPdf | 04 29 15.9 | 0.0 | |
| PVAQ | Vaqueiros | 122.08 | 309 | *e*PKP | PKPdf | 04 29 16.1 | 0.0 | |
| LIC | Lamto | 122.08 | 272 | ⇑*e*PKP1 | PKPdf | 04 29 15.3 | -1.4 | |
| | comp=Z,296nm,1.3s | | | | | | | |
| TIC | Toumodi | 122.11 | 273 | ⇑*i*PKP1 | PKPdf | 04 29 16.2 | -0.6 | |
| | comp=Z,208nm,1.2s | | | | | | | |
| PCVE | Castro Verde | 122.26 | 309 | *e*PKP | PKPdf | 04 29 16.3 | -0.1 | |
| PBDV | Barranco-do-Ve | 122.28 | 309 | *e*PKP | PKiKP | 04 29 16.9 | +0.2 | |
| PSBE | So Bento | 122.30 | 312 | *e*PKP | PKPdf | 04 29 16.3 | -0.2 | |
| MESJ | Messejana | 122.34 | 310 | | PKPdf | 04 29 16.6 | 0.0 | |
| MESJ | Messejana | 122.34 | 310 | *e*PKP | PKPdf | 04 29 16.4 | -0.2 | |
| MESJ | Messejana | 122.34 | 310 | *e*PKPdf | PKPdf | 04 29 16.2 | -0.3 | |
| MESJ | Messejana | 122.34 | 310 | PKIKP | PKPdf | 04 29 16.6 | 0.0 | |
| NVAR | Mina Array Bea | 122.42 | 50 | | PKPdf | 04 29 16.8 | -0.2 | |
| NVAR | Mina Array Bea | 122.42 | 50 | PKP | PKPdf | 04 29 17.0 | 0.0 | |
| | comp=Z,21nm,0.9s,baz=261,slow=2.2,SNR=51 | | | | | | | |
| NVAR | | | | PKKPbc | PKKPab | 04 39 12.3 | +0.4 | |
| | comp=Z,9.2nm,0.9s,baz=138,slow=5.0,SNR=28 | | | | | | | |
| MSO | Missoula | 122.45 | 39 | | PKPdf | 04 29 15.4 | -1.2 | |
| MSO | Missoula | 122.45 | 39 | P | PKPdf | 04 29 16.6 | -0.1 | |
| | baz=295 | | | | | | | |
| PNCL | Nicolau / Gran | 122.50 | 310 | *e*PKP | PKPdf | 04 29 16.9 | +0.1 | |
| NV11 | Mina Array Sit | 122.53 | 50 | | PKPdf | 04 29 16.8 | -0.3 | |
| PTEO | Sao Teotonio | 122.81 | 309 | *e*PKP | PKPdf | 04 29 17.4 | 0.0 | |
| MORF | Marmelete | 122.82 | 309 | | PKPdf | 04 29 17.3 | -0.2 | |
| MORF | Marmelete | 122.82 | 309 | *e*PKP | PKPdf | 04 29 17.6 | 0.0 | |
| MORF | Marmelete | 122.82 | 309 | *e*PKPdf | PKPdf | 04 29 17.1 | -0.5 | |
| MORF | Marmelete | 122.82 | 309 | PKIKP | PKPdf | 04 29 17.3 | -0.2 | |
| BPMT | Black Pine Rid | 122.93 | 39 | | PKPdf | 04 29 17.4 | -0.4 | |
| PFVI | Vila Bisbo | 123.00 | 309 | PKPdf | PKPdf | 04 29 17.6 | -0.3 | |
| PFVI | Vila Bisbo | 123.00 | 309 | *e*PKP | PKPdf | 04 29 17.9 | +0.1 | |
| TPH | Tonopah | 123.34 | 50 | | PKPdf | 04 29 18.9 | +0.2 | |
| TPH | Tonopah | 123.34 | 50 | PKIKP | PKPdf | 04 29 19.0 | +0.2 | |
| HLID | Hailey | 123.48 | 43 | | PKPdf | 04 29 18.6 | -0.2 | |
| HLID | Hailey | 123.48 | 43 | P | PKiKP | 04 29 19.3 | +0.2 | |
| | baz=293,SNR=64 | | | | | | | |
| PASC | Pasadena Art C | 123.63 | 54 | | PKPdf | 04 29 19.3 | +0.1 | |
| AY03 | Cochrane | 124.07 | 172 | PKPdf | PKiKP | 04 29 20.8 | +0.8 | |
| TPNV | Topopah Spring | 124.41 | 51 | P | PKiKP | 04 29 21.3 | +0.2 | |
| | baz=287 | | | | | | | |
| EGMT | Eagleton | 124.42 | 36 | P | PKPdf | 04 29 20.0 | -0.4 | |
| | baz=300 | | | | | | | |
| BOZ | Bozeman (W) | 124.44 | 39 | P | PKPdf | 04 29 20.7 | +0.1 | |
| | baz=297,SNR=61 | | | | | | | |
| FFC | Flin Flon | 124.48 | 26 | | PKPdf | 04 29 19.4 | -0.7 | |
| FFC | Flin Flon | 124.48 | 26 | PKIKP | PKPdf | 04 29 19.4 | -0.7 | |
| R11B | Troy Canyon, C | 124.48 | 49 | P | PKiKP | 04 29 21.4 | +0.2 | |
| | baz=289 | | | | | | | |
| AY02 | Valle Explorad | 124.74 | 172 | PKPdf | PKiKP | 04 29 22.7 | +1.5 | |
| 109C | Camp Elliot, M | 124.81 | 56 | P | PKPdf | 04 29 21.4 | -0.1 | |
| | baz=284,SNR=5.4 | | | | | | | |
| YHL | Hebgen Lake | 125.05 | 40 | | PKPdf | 04 29 22.2 | +0.2 | |
| PFO | Pinyon Flats O | 125.16 | 55 | | PKPdf | 04 29 22.3 | 0.0 | |
| PFO | Pinyon Flats O | 125.16 | 55 | P | PKPdf | 04 29 22.2 | 0.0 | |
| | baz=285,SNR=45 | | | | | | | |
| PFO | Pinyon Flats O | 125.16 | 55 | PKIKP | PKPdf | 04 29 22.3 | 0.0 | |
| TPFO | Pinon Flats | 125.16 | 55 | P | PKPdf | 04 29 22.6 | +0.3 | |
| | baz=285,SNR=38 | | | | | | | |
| SPR3 | Spring Creek 3 | 125.20 | 48 | | PKPdf | 04 29 22.3 | -0.2 | |
| HVU | Hansel Valley | 125.28 | 44 | | PKPdf | 04 29 22.2 | -0.1 | |
| HVU | Hansel Valley | 125.28 | 44 | PKIKP | PKPdf | 04 29 22.2 | -0.1 | |
| CBX | Cerro Bola | 125.31 | 56 | | PKPdf | 04 29 22.8 | +0.2 | |
| CBX | | | | IAMs_20 | IAMs_20 | 05 05 46.8 | | |
| | comp=Z,6μm,21.0s | | | | | | | |
| MONP2 | Monument Peak | 125.37 | 55 | P | PKiKP | 04 29 23.6 | +0.4 | |
| | baz=284,SNR=28 | | | | | | | |
| IMW | Indian Meadow | 125.63 | 41 | | PKPdf | 04 29 23.1 | 0.0 | |
| H17A | Grant Village | 125.64 | 40 | P | PKiKP | 04 29 24.0 | +0.6 | |
| | baz=297,SNR=11 | | | | | | | |
| COYC | Coyhaique | 125.79 | 173 | | PKiKP | 04 29 23.7 | +0.3 | |
| COYC | Coyhaique | 125.79 | 173 | IAMs_20 | IAMs_20 | 05 15 00.9 | | |
| | comp=Z,6μm,20.0s | | | | | | | |
| DUG | Dugway, Tooele | 125.86 | 46 | | PKPdf | 04 29 23.4 | 0.0 | |
| DUG | Dugway, Tooele | 125.86 | 46 | P | PKiKP | 04 29 24.2 | +0.4 | |
| | baz=292 | | | | | | | |
| DUG | Dugway, Tooele | 125.86 | 46 | PKIKP | PKPdf | 04 29 23.5 | 0.0 | |
| AHID | Auburn Hatcher | 126.01 | 42 | | PKPdf | 04 29 23.5 | -0.2 | |
| RLMT | Red Lodge | 126.13 | 39 | | PKPdf | 04 29 24.2 | +0.3 | |
| RLMT | Red Lodge | 126.13 | 39 | P | PKiKP | 04 29 24.8 | +0.5 | |
| | baz=298,SNR=18 | | | | | | | |
| W13A | Hualapai Mount | 126.79 | 52 | | PKiKP | 04 29 26.2 | +0.2 | |
| MVU | Marysvale | 126.92 | 48 | | PKPdf | 04 29 26.0 | +0.4 | |
| BW06 | Boulder Array | 127.03 | 42 | P | PKiKP | 04 29 26.2 | 0.0 | |
| | baz=297 | | | | | | | |
| PD31 | Pinedale Array | 127.03 | 42 | | PKPdf | 04 29 25.4 | -0.4 | |
| PDAR | Pinedale Array | 127.03 | 42 | | PKPdf | 04 29 24.9 | -0.9 | |
| PDAR | Pinedale Array | 127.03 | 42 | PKP | PKPdf | 04 29 25.4 | -0.4 | |
| | comp=Z,29nm,1.1s,baz=225,slow=0.8,SNR=61 | | | | | | | |
| PDAR | | | | PKKPbc | PKKPbc | 04 38 52.5 | | |
| | comp=Z,1.5nm,0.8s,baz=123,slow=4.6,SNR=4.6 | | | | | | | |
| LAO | LASA Array | 127.17 | 36 | P | PKiKP | 04 29 26.7 | +0.5 | |
| | baz=302,SNR=85 | | | | | | | |
| PKCU | Pink Cliffs | 127.23 | 49 | IAMs_20 | IAMs_20 | 05 13 53.8 | | |
| | comp=Z,6μm,21.0s | | | | | | | |
| DGMT | Dagmar | 127.31 | 33 | P | PKiKP | 04 29 26.4 | 0.0 | |
| | baz=306,SNR=9.4 | | | | | | | |
| 214A | Organ Pipe Nat | 128.56 | 56 | P | PKiKP | 04 29 29.2 | -0.1 | |
| | baz=286 | | | | | | | |
| WUAZ | Wupatki | 128.60 | 51 | P | PKiKP | 04 29 29.8 | +0.3 | |
| | baz=290,SNR=26 | | | | | | | |
| RSSD | Black Hills | 129.85 | 38 | PKPdf | PKPdf | 04 29 29.5 | -1.6 | |
| RSSD | Black Hills | 129.85 | 38 | P | PKPdf | 04 29 30.7 | -0.3 | |
| | baz=303 | | | | | | | |
| RSSD | Black Hills | 129.85 | 38 | PKIKP | PKPdf | 04 29 29.5 | -1.6 | |
| W18A | Petrified Fore | 130.00 | 51 | P | PKiKP | 04 29 32.2 | -0.2 | |
| | baz=291,SNR=7.9 | | | | | | | |
| X18A | Snowflake | 130.04 | 51 | IAMs_20 | IAMs_20 | 05 23 44.7 | | |
| | comp=Z,5μm,19.0s | | | | | | | |
| TUC | Tucson | 130.10 | 55 | PKPdf | PKPdf | 04 29 31.5 | -0.2 | |
| TUC | Tucson | 130.10 | 55 | P | PKiKP | 04 29 32.3 | -0.2 | |
| | baz=288 | | | | | | | |
| TUC | Tucson | 130.10 | 55 | PKIKP | PKPdf | 04 29 31.5 | -0.2 | |
| MVCO | Mesa Verde | 130.13 | 48 | P | PKiKP | 04 29 32.5 | -0.1 | |
| | baz=294,SNR=19 | | | | | | | |
| ULM | Lac du Bonnet | 130.27 | 27 | PKP | PKPdf | 04 29 30.4 | -0.9 | |
| | comp=Z,20nm,1.1s,baz=312,slow=2.6,SNR=21 | | | | | | | |
| ULM | | | | SKPbc | SKPbc | 04 32 53.9 | +0.9 | |
| | comp=Z,8.8nm,0.9s,baz=297,slow=6.8,SNR=5.3 | | | | | | | |
| N23A | Red Feather La | 130.30 | 42 | P | PKPdf | 04 29 32.2 | +0.2 | |
| | baz=299 | | | | | | | |
| PLCA | Paso Flores | 130.75 | 173 | PKP | PKiKP | 04 29 33.5 | -0.1 | |
| | comp=Z,71nm,1.2s,baz=206,slow=3.4,SNR=17 | | | | | | | |
| PLCA | | | | SKPbc | SKPab | 04 32 56.9 | +1.7 | |
| | comp=Z,12nm,1.1s,baz=192,slow=2.7,SNR=5.3 | | | | | | | |
| ISCO | Idaho Springs | 131.04 | 43 | P | PKPdf | 04 29 33.6 | +0.1 | |
| | baz=298 | | | | | | | |
| S22A | 4UR Ranch, Cre | 131.12 | 46 | P | PKPdf | 04 29 34.1 | +0.4 | |
| | baz=296,SNR=18 | | | | | | | |
| DUN6 | Lazy B Ranch | 131.38 | 54 | PKPdf | PKPdf | 04 29 33.8 | -0.3 | |
| AGMN | Agassiz Nation | 131.66 | 29 | P | PKPdf | 04 29 34.4 | +0.4 | |
| | baz=315 | | | | | | | |
| Q24A | Divide | 131.75 | 44 | P | PKiKP | 04 29 35.6 | -0.3 | |
| | baz=298 | | | | | | | |
| SDCO | Great Sand Dun | 132.06 | 46 | P | PKiKP | 04 29 36.4 | -0.2 | |
| | baz=297,SNR=21 | | | | | | | |
| 121A | Cookes Peak, D | 132.43 | 53 | P | PKPdf | 04 29 36.6 | +0.4 | |
| | baz=290 | | | | | | | |
| Y22D | IRIS PASSCAL I | 132.54 | 51 | IAMs_20 | IAMs_20 | 05 31 51.9 | | |
| | comp=Z,7μm,20.0s | | | | | | | |
| Y22D | IRIS PASSCAL I | 132.54 | 51 | P | PKiKP | 04 29 37.4 | -0.1 | |
| | baz=292 | | | | | | | |
| ANMO | Albuquerque | 132.55 | 50 | PKPdf | PKPdf | 04 29 36.1 | -0.3 | |
| ANMO | Albuquerque | 132.55 | 50 | P | PKPdf | 04 29 36.7 | +0.3 | |
| | baz=294 | | | | | | | |
| ANMO | Albuquerque | 132.55 | 50 | PKIKP | PKPdf | 04 29 36.1 | -0.3 | |
| OGNE | Ogallala | 132.82 | 40 | P | PKPdf | 04 29 36.4 | -0.2 | |
| | baz=303 | | | | | | | |
| T25A | Trinidad | 133.11 | 46 | PKPdf | PKPdf | 04 29 36.9 | -0.5 | |
| T25A | Trinidad | 133.11 | 46 | P | PKPdf | 04 29 37.6 | +0.2 | |
| | baz=297,SNR=16 | | | | | | | |
| SCHQ | Schefferville | 133.54 | 3 | PKP | PKPdf | 04 29 37.5 | +0.1 | |
| | comp=Z,25nm,0.9s,baz=23,slow=1.6,SNR=14 | | | | | | | |
| TRQA | Tornquist | 133.84 | 182 | PKPdf | PKPdf | 04 29 38.5 | 0.0 | |
| TRQA | Tornquist | 133.84 | 182 | PKIKP | PKPdf | 04 29 38.6 | 0.0 | |
| EYMN | Ely | 133.91 | 26 | P | PKPdf | 04 29 38.3 | 0.0 | |
| | baz=320 | | | | | | | |
| ECSD | EROS Data Cent | 134.38 | 34 | P | PKPdf | 04 29 39.1 | -0.2 | |
| | baz=311,SNR=6.6 | | | | | | | |
| MNTX | Cornudas Mount | 134.63 | 53 | P | PKPdf | 04 29 40.7 | +0.6 | |
| | baz=292 | | | | | | | |
| CBKS | Cedar Bluff | 135.46 | 41 | P | PKPdf | 04 29 42.1 | +0.5 | |
| | baz=303 | | | | | | | |
| PECS | Pecos | 135.95 | 53 | | PKPpre | 04 29 30.1 | | |
| PECS | | | | | PKPdf | 04 29 43.2 | +0.5 | |
| TXAR | Lajitas Array | 136.86 | 56 | PKhKP | PKPpre | 04 29 33.6 | | |
| | comp=Z,6.3nm,1.0s,baz=220,slow=2.2,SNR=21 | | | | | | | |
| TXAR | | | | PKP | PKPdf | 04 29 44.5 | 0.0 | |
| | comp=Z,15nm,1.0s,baz=240,slow=2.1,SNR=14 | | | | | | | |
| TXAR | | | | SKPbc | SKPbc | 04 33 16.5 | +0.6 | |
| | comp=Z,4.3nm,0.9s,baz=300,slow=1.8,SNR=3.5 | | | | | | | |
| OK032 | Salt Plains WL | 137.57 | 43 | | PKPpre | 04 29 35.4 | | |
| OK032 | | | | | PKPdf | 04 29 45.0 | -0.4 | |
| MT08 | Bocatoma Ro | 137.99 | 172 | | PKPpre | 04 29 35.7 | | |
| E46A | Sault Ste Mari | 138.08 | 22 | IAMs_20 | IAMs_20 | 05 42 00.5 | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| WMOK | Wichita Mounta | 138.27 | 46 | IAMs_20 | IAMs_20 | 05 24 59.2 | | |
| | comp=Z,5μm,19.0s | | | | | | | |
| VA03 | San Esteban | 138.58 | 171 | IAMs_20 | IAMs_20 | 05 22 52.4 | | |
| | comp=Z,7μm,20.0s | | | | | | | |
| VLDO | Val d'Or | 138.60 | 14 | | PKPdf | 04 29 45.1 | -1.8 | |
| OK029 | Liberty Lake | 138.63 | 44 | IAMs_20 | IAMs_20 | 05 40 28.6 | | |
| | comp=Z,5μm,19.0s | | | | | | | |
| ICQ | Pointe Anglais | 138.81 | 4 | IAMs_20 | IAMs_20 | 05 34 09.5 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| DRLN | Deer Lake | 138.90 | 354 | | PKPdf | 04 29 46.6 | -0.8 | |
| JCT | Junction City | 139.50 | 52 | PKPdf | PKPdf | 04 29 48.9 | -0.3 | |
| JCT | Junction City | 139.50 | 52 | PKIKP | PKPdf | 04 29 48.9 | -0.3 | |
| TUL3 | Leonard | 139.69 | 42 | IAMs_20 | IAMs_20 | 05 31 44.4 | | |
| | comp=Z,5μm,19.0s | | | | | | | |
| Z35A | Perchaven, San | 140.08 | 47 | IAMs_20 | IAMs_20 | 05 31 59.2 | | |
| | comp=Z,6μm,21.0s | | | | | | | |
| LMQ | La Malbaie | 140.47 | 7 | IAMs_20 | IAMs_20 | 05 43 12.5 | | |
| | comp=Z,6μm,22.0s | | | | | | | |
| X37A | Clayton | 140.72 | 44 | IAMs_20 | IAMs_20 | 05 32 31.9 | | |
| | comp=Z,7μm,21.0s | | | | | | | |
| P43A | Skaggs, Pawnee | 141.04 | 33 | IAMs_20 | IAMs_20 | 05 35 29.3 | | |
| | comp=Z,4μm,19.0s | | | | | | | |
| 435B | Jarrell | 141.07 | 50 | IAMs_20 | IAMs_20 | 05 25 55.0 | | |
| | comp=Z,7μm,21.0s | | | | | | | |
| 237A | Washetta, Mont | 141.80 | 47 | IAMs_20 | IAMs_20 | 05 26 58.0 | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| F62A | Pitton Farm, | 142.14 | 7 | IAMs_20 | IAMs_20 | 05 29 00.7 | | |
| | comp=Z,6μm,20.0s | | | | | | | |
| UALR | University of | 142.63 | 41 | PKPpre | PKPpre | 04 29 48.6 | | |
| UALR | | | | IAMs_20 | IAMs_20 | 05 34 10.1 | | |
| | comp=Z,5μm,19.0s | | | | | | | |
| WLAR | White Oak Lake | 142.77 | 43 | PKPpre | PKPpre | 04 29 49.7 | | |
| PKME | Peaks-Kenny Pk | 142.85 | 7 | IAMs_20 | IAMs_20 | 05 33 18.3 | | |
| | comp=Z,5μm,22.0s | | | | | | | |
| BLO | Bloomington | 142.95 | 30 | IAMs_20 | IAMs_20 | 05 40 36.4 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| ITAB | Concordia | 143.00 | 197 | | PKPdf | 04 29 53.2 | -2.4 | |
| PARMO | Parma | 143.00 | 36 | IAMs_20 | IAMs_20 | 05 35 56.6 | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| GNAR | Gosnell | 143.32 | 37 | IAMs_20 | IAMs_20 | 05 44 35.0 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| HICK | Hickman | 143.40 | 36 | IAMs_20 | IAMs_20 | 05 24 11.8 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| LNXT | Lenox | 143.54 | 37 | IAMs_20 | IAMs_20 | 05 19 48.8 | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| UNM | Universidad Na | 143.68 | 69 | | PKPbc | 04 29 55.4 | +0.6 | |
| UNM | Universidad Na | 143.68 | 69 | PKIKP | PKPbc | 04 29 55.4 | +0.6 | |
| WCI | Wyandotte Cave | 143.78 | 31 | | PKPpre | 04 29 52.2 | | |
| WCI | Wyandotte Cave | 143.78 | 31 | PKIKP | PKPab | 04 29 52.2 | -1.3 | |
| R49A | Shelbyville | 144.30 | 30 | IAMs_20 | IAMs_20 | 05 31 47.1 | | |
| | comp=Z,4μm,20.0s | | | | | | | |
| WVT | Waverly | 144.49 | 35 | | PKPab | 04 29 54.9 | -1.3 | |
| WVT | Waverly | 144.49 | 35 | PKIKP | PKPab | 04 29 54.9 | -1.3 | |
| Q51A | Peebles | 144.58 | 27 | IAMs_20 | IAMs_20 | 05 39 48.1 | | |
| | comp=Z,6μm,21.0s | | | | | | | |
| TLIG | Tlapa | 144.60 | 71 | | PKPab | 04 29 57.4 | +0.1 | |
| TLIG | | | | IAMs_20 | IAMs_20 | 05 23 17.2 | | |
| | comp=Z,5μm,18.0s | | | | | | | |
| OXF | Oxford | 144.66 | 39 | P | PKPab | 04 29 56.0 | -0.9 | |
| | baz=312,SNR=349 | | | | | | | |
| K62A | Royalston | 144.93 | 11 | | PKPab | 04 29 56.6 | -1.0 | |
| CPUP | Villa Florida | 145.05 | 190 | PKPbc | PKPab | 04 29 58.8 | +0.3 | |
| | comp=Z,805nm,0.9s,baz=169,slow=2.1,SNR=490 | | | | | | | |
| L61B | Northampton | 145.05 | 12 | P | PKPbc | 04 29 57.3 | -0.7 | |
| | baz=344,SNR=27 | | | | | | | |
| HRV | Adam Dziewonsk | 145.21 | 11 | | PKPbc | 04 29 57.3 | -1.2 | |
| HRV | Adam Dziewonsk | 145.21 | 11 | P | PKPbc | 04 29 57.6 | -0.9 | |
| | baz=346 | | | | | | | |
| SSPA | Standing Stone | 145.34 | 20 | | PKPbc | 04 29 57.6 | -1.5 | |
| SSPA | Standing Stone | 145.34 | 20 | P | PKPbc | 04 29 58.7 | -0.4 | |
| | baz=334 | | | | | | | |
| VBMS | Vicksburg | 145.39 | 43 | P | PKPbc | 04 29 59.3 | -0.2 | |
| | baz=308,SNR=25 | | | | | | | |
| MCWV | Mont Chateau | 145.51 | 23 | P | PKPdf | 04 29 59.0 | -0.6 | |
| | baz=330,SNR=150 | | | | | | | |
| UCCT | U. Connecticut | 145.77 | 12 | PKPdf | PKPdf | 04 29 59.7 | -0.2 | |
| TRNY | Table Rock, Ra | 145.94 | 15 | IAMs_20 | IAMs_20 | 05 44 28.3 | | |
| | comp=Z,4μm,18.0s | | | | | | | |
| PAL | Palisades | 146.15 | 14 | P | PKPdf | 04 30 00.8 | +0.2 | |
| | baz=341,SNR=27 | | | | | | | |
| M63A | Gales Ferry | 146.18 | 12 | IAMs_20 | IAMs_20 | 05 41 48.7 | | |
| | comp=Z,7μm,22.0s | | | | | | | |
| SWET | Sewanee | 146.22 | 34 | | PKPdf | 04 29 59.9 | -1.0 | |
| Q56A | Snyder Ridge, | 146.30 | 22 | IAMs_20 | IAMs_20 | 05 40 16.4 | | |
| | comp=Z,7μm,22.0s | | | | | | | |
| CPNY | Central Park | 146.34 | 15 | IAMs_20 | IAMs_20 | 05 38 30.9 | | |
| | comp=Z,6μm,19.0s | | | | | | | |
| TZTN | Tazewell | 146.47 | 30 | P | PKPdf | 04 30 01.4 | +0.1 | |
| | baz=322,SNR=67 | | | | | | | |
| WUPA | West Chester U | 146.69 | 17 | | PKPdf | 04 30 00.9 | -0.6 | |
| FPAL | Fort Paine | 146.89 | 35 | IAMs_20 | IAMs_20 | 05 37 18.2 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| V52A | Sevierville | 146.99 | 31 | IAMs_20 | IAMs_20 | 05 49 08.9 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| LRAL | Lakeview Retre | 147.13 | 38 | P | PKPbc | 04 30 03.9 | -0.7 | |
| | baz=313,SNR=117 | | | | | | | |
| TRCB | Terra Rica | 147.32 | 199 | | PKPdf | 04 30 03.5 | +0.3 | |
| BLA | Blacksburg | 147.37 | 26 | P | PKPbc | 04 30 04.7 | -0.5 | |
| | baz=328,SNR=33 | | | | | | | |
| CBN | Corbin Frederi | 147.70 | 21 | P | PKPbc | 04 30 05.9 | -0.1 | |
| | baz=334,SNR=19 | | | | | | | |
| BG3 | Lake Jocassee | 147.99 | 31 | IAMs_20 | IAMs_20 | 05 48 49.0 | | |
| | comp=Z,6μm,21.0s | | | | | | | |
| BRAL | Brewton | 148.35 | 41 | P | PKPbc | 04 30 07.9 | -0.1 | |
| | baz=311 | | | | | | | |
| AF01 | San Pedro de A | 148.57 | 172 | IAMs_20 | IAMs_20 | 05 19 27.0 | | |
| | comp=Z,7μm,21.0s | | | | | | | |
| LVC | Limon Verde | 148.79 | 170 | | PKPdf | 04 30 07.8 | +1.8 | |
| LVC | Limon Verde | 148.79 | 170 | IAMs_20 | IAMs_20 | 05 18 39.4 | | |
| | comp=Z,7μm,21.0s | | | | | | | |
| LVC | Limon Verde | 148.79 | 170 | PKPbc | PKPbc | 04 30 08.4 | -1.4 | |
| | comp=Z,244nm,0.9s,baz=176,slow=2.4,SNR=21 | | | | | | | |
| GOGA | Godfrey | 148.92 | 34 | P | PKPbc | 04 30 08.9 | -0.5 | |
| | baz=319 | | | | | | | |
| JSC | Jenkinsville | 149.39 | 30 | IAMs_20 | IAMs_20 | 05 52 15.0 | | |
| | comp=Z,4μm,18.0s | | | | | | | |
| 154A | Montrose | 149.72 | 34 | IAMs_20 | IAMs_20 | 05 48 04.1 | | |
| | comp=Z,6μm,22.0s | | | | | | | |
| CNNC | Cliffs of the | 150.11 | 24 | | PKPdf | 04 30 07.0 | -0.2 | |
| CNNC | Cliffs of the | 150.11 | 24 | P | PKPbc | 04 30 11.6 | -0.6 | |
| | baz=330,SNR=9.8 | | | | | | | |
| NHSC | New Hope | 150.87 | 30 | IAMs_20 | IAMs_20 | 05 51 16.9 | | |
| | comp=Z,6μm,21.0s | | | | | | | |
| NHSC | New Hope | 150.87 | 30 | P | PKPbc | 04 30 13.8 | -0.4 | |
| | baz=324 | | | | | | | |
| BDFB | Brasilia | 151.72 | 213 | PKP | PKPdf | 04 30 10.0 | -0.4 | |
| | comp=Z,37nm,1.0s,baz=118,slow=2.2,SNR=24 | | | | | | | |
| BDFB | | | | PKPbc | pPKPdf | 04 30 17.6 | -2.0 | |
| | comp=Z,439nm,1.2s,baz=146,slow=1.1,SNR=74 | | | | | | | |
| BDFB | | | | PKPab | PKPab | 04 30 26.1 | +0.7 | |
| | comp=Z,201nm,0.8s,baz=171,slow=4.7,SNR=20 | | | | | | | |
| PAYG | Puerto Ayora | 151.77 | 107 | PKPbc | PKPdf | 04 30 13.2 | +2.7 | |
| SNET | Serv Nac Est T | 154.12 | 76 | IAMs_20 | IAMs_20 | 05 36 35.5 | | |
| | comp=Z,4μm,20.0s | | | | | | | |
| LPAZ | La Paz | 155.10 | 169 | PKP | PKPdf | 04 30 15.9 | -0.1 | |
| | comp=Z,40nm,1.0s,baz=180,slow=1.0,SNR=32 | | | | | | | |
| LPAZ | | | | PKPab | PKPab | 04 30 41.1 | +0.9 | |
| | comp=Z,181nm,1.0s,baz=171,slow=3.3,SNR=20 | | | | | | | |
| SIV | San Ignacio | 155.73 | 186 | PKP | PKPdf | 04 30 16.5 | +0.4 | |
| | comp=Z,36nm,1.0s,baz=161,slow=1.6,SNR=39 | | | | | | | |
| SIV | | | | PKPab | PKPab | 04 30 43.5 | +1.4 | |
| | comp=Z,101nm,0.9s,baz=149,slow=4.2,SNR=22 | | | | | | | |
| SIV | | | | PP | PP | 04 34 17.9 | +0.6 | |
| | comp=Z,26nm,1.0s,baz=180,slow=4.9,SNR=4.7 | | | | | | | |
| NNA | Nana | 155.81 | 146 | PKP | PKPdf | 04 30 16.6 | +0.4 | |
| | comp=Z,42nm,1.1s,baz=246,slow=2.1,SNR=8.1 | | | | | | | |
| PTLB | Pontes e Lacer | 156.00 | 190 | PKPdf | PKPdf | 04 30 16.0 | -0.3 | |
| ATAH | Atahualpa | 158.58 | 135 | PKP | PKPdf | 04 30 21.6 | +1.4 | |
| | comp=Z,76nm,1.0s,baz=314,slow=1.8,SNR=39 | | | | | | | |
| ATAH | | | | PKPab | PKPab | 04 30 57.5 | +2.4 | |
| | comp=Z,73nm,1.2s,baz=239,slow=6.2,SNR=8.3 | | | | | | | |
| ATAH | | | | PP | PP | 04 34 35.0 | +0.3 | |
| | comp=Z,4.5nm,0.9s,baz=271,slow=4.8,SNR=5.0 | | | | | | | |
| JTS | Las Juntas de | 158.66 | 83 | PKPdf | PKPdf | 04 30 18.0 | -1.8 | |
| JTS | Las Juntas de | 158.66 | 83 | PKIKP | PKPdf | 04 30 18.0 | -1.8 | |
| ETMB | Extrema | 161.76 | 171 | PKPdf | PKPdf | 04 30 21.7 | -1.5 | |
| ETMB | | | | PKPab | PKPab | 04 31 08.7 | +0.4 | |
| ROSC | El Rosal | 168.63 | 107 | PKP | PKPdf | 04 30 29.1 | -0.5 | |
| | comp=Z,63nm,1.2s,baz=305,slow=3.4,SNR=29 | | | | | | | |
| ROSC | | | | PKPab | PKPab | 04 31 40.6 | +1.1 | |
| | comp=Z,82nm,1.1s,baz=280,slow=7.0,SNR=6.0 | | | | | | | |
| ROSC | | | | PP | PP | 04 35 28.9 | +0.1 | |
| | comp=Z,6.4nm,0.3s,baz=282,slow=7.9,SNR=5.0 | | | | | | | |
| MDP | Montagnes des | 168.82 | 254 | PKP | PKPdf | 04 30 29.1 | -0.1 | |
| | comp=Z,59nm,1.1s,baz=100,slow=1.0,SNR=12 | | | | | | | |
| MDP | | | | PKPab | PKPab | 04 31 39.7 | -0.2 | |
| | comp=Z,50nm,1.0s,baz=90,slow=6.2,SNR=7.0 | | | | | | | |
| MDP | | | | PP | PP | 04 35 28.5 | -0.8 | |
| | comp=Z,10nm,0.9s,baz=134,slow=6.8,SNR=4.1 | | | | | | | |
| PRSN | Puerto Rico Se | 169.52 | 20 | | PKPdf | 04 30 28.3 | -1.1 | |
| PRSN | | | | | PKPab | 04 31 42.2 | -0.2 | |
| SDV | Santo Domingo | 172.85 | 85 | | PKPdf | 04 30 30.0 | -1.5 | |
| SDV | Santo Domingo | 172.85 | 85 | PKP | PKPdf | 04 30

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WMQ | **Urumqi** | 49.52 | 308 | *e*P | P | 04 20 08.0 | +2.3 | |
| WMQ | | | | pP | sP | 04 20 15.4 | -1.5 | |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.3s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=N,9μm,19.3s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=E,9μm,19.3s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,13μm,23.9s | | | | | | | |
| **M11K** | **Mekoryuk** baz=246 | 50.57 | 30 | P | P | 04 20 13.8 | +0.5 | |
| **K13K** | **Kusilvak Mount** baz=247 | 51.87 | 28 | P | P | 04 20 23.0 | 0.0 | |
| **ZAA0** | **Zalesovo Array** | 52.84 | 321 | P | P | 04 20 30.8 | +0.4 | |
| **ZALV** | **Zalesovo Beam** | 52.84 | 321 | P | P | 04 20 30.9 | +0.5 | |
| **ZALV** | **Zalesovo Beam** | 52.84 | 321 | P | P | 04 20 30.3 | -0.1 | |
| | comp=Z,3.4nm,0.7s,baz=103,slow=6.2,SNR=5.1 comp=Z,3.4nm,0.7s | | | | | | | |
| **L15K** | **Ungalak Mounta** baz=250 | 53.18 | 29 | P | P | 04 20 33.2 | +0.5 | |
| **N15K** | **Kwethluk River** | 53.34 | 31 | P | P | 04 20 34.8 | +0.8 | |
| N15K | | | | IAmb | IAmb | 04 20 41.7 | | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | 53.55 | 312 | P | P | 04 20 36.2 | +0.4 | |
| MK31 | | | | IAmb | IAmb | 04 20 37.4 | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | 53.55 | 312 | P | P | 04 20 36.9 | +1.1 | |
| **MKAR** | **Makanchi Array** | 53.55 | 312 | P | P | 04 20 35.9 | +0.1 | |
| | comp=Z,6.6nm,0.7s,baz=92,slow=9.1,SNR=15 comp=Z,6.6nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | 53.77 | 312 | P | P | 04 20 38.5 | +1.1 | |
| MAKZ | | | | IAmb | IAmb | 04 20 47.7 | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **J16K** | **Anvik River** | 54.11 | 28 | P | P | 04 20 40.2 | +0.6 | |
| J16K | | | | IAmb | IAmb | 04 20 41.2 | | |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| **O16K** | **Kokwok River B** | 54.15 | 32 | P | P | 04 20 40.3 | +0.4 | |
| **O17K** | **Koliganek Bris** baz=256 | 54.69 | 32 | P | P | 04 20 44.1 | +0.4 | |
| **L17K** | **Donlin** baz=253 | 54.76 | 29 | P | P | 04 20 44.7 | +0.4 | |
| **J17K** | **VABM Dome** | 54.80 | 28 | P | P | 04 20 46.8 | +2.3 | |
| J17K | | | | IAmb | IAmb | 04 20 53.9 | | |
| | comp=Z,7.3nm,1.1s | | | | | | | |
| **J17K** | **VABM Dome** baz=251 | 54.80 | 28 | P | P | 04 20 45.0 | +0.5 | |
| **N17K** | **Nushagak Hills** baz=255 | 54.83 | 31 | P | P | 04 20 44.6 | -0.2 | |
| **K17K** | **Iditarod** | 54.93 | 29 | P | P | 04 20 44.0 | -1.5 | |
| **K17K** | **Iditarod** baz=253 | 54.93 | 29 | P | P | 04 20 46.4 | +0.9 | |
| **M17K** | **Holitna River** | 54.94 | 30 | P | P | 04 20 46.1 | +0.5 | |
| M17K | | | | IAmb | IAmb | 04 20 48.7 | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **H17K** | **Granite Mounta** baz=250 | 54.97 | 26 | P | P | 04 20 46.6 | +0.9 | |
| **E18K** | **Tukpahlearik C** baz=247 | 55.63 | 23 | P | P | 04 20 51.2 | +0.7 | |
| **H18K** | **Honhosa River** | 55.66 | 26 | P | P | 04 20 51.3 | +0.6 | |
| H18K | | | | IAmb | IAmb | 04 20 58.5 | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **H18K** | **Honhosa River** baz=251 | 55.66 | 26 | P | P | 04 20 51.5 | +0.7 | |
| **F18K** | **Selawik** baz=249 | 55.67 | 24 | P | P | 04 20 51.3 | +0.6 | |
| **G18K** | **Tagagawik** | 55.80 | 25 | P | P | 04 20 52.3 | +0.6 | |
| G18K | | | | IAmb | IAmb | 04 20 59.6 | | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **G18K** | **Tagagawik** baz=250 | 55.80 | 25 | P | P | 04 20 52.1 | +0.4 | |
| **GCSA** | **Galena City Sc** baz=253 | 56.14 | 27 | P | P | 04 20 55.1 | +1.0 | |
| **O19K** | **Port Alsworth** baz=258 | 56.14 | 32 | P | P | 04 20 54.6 | +0.4 | |
| **N19K** | **Bonanza Creek** baz=258 | 56.19 | 31 | P | P | 04 20 55.0 | +0.2 | |
| **KURK** | **Kurchatov** | 56.22 | 316 | P | P | 04 20 55.6 | +0.7 | |
| **KURBB** | **Kurchatov Arra** | 56.27 | 316 | P | P | 04 20 55.6 | +0.3 | |
| | comp=Z,22nm,0.7s,baz=93,slow=7.8,SNR=41 comp=Z,22nm,0.7s | | | | | | | |
| **F19K** | **Shaleruckik Mo** baz=250 | 56.45 | 24 | P | P | 04 20 56.4 | +0.1 | |
| **J19K** | **Poorman** | 56.45 | 28 | P | P | 04 20 56.7 | +0.3 | |
| J19K | | | | IAmb | IAmb | 04 20 57.6 | | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| **J19K** | **Poorman** baz=254 | 56.45 | 28 | P | P | 04 20 57.1 | +0.7 | |
| **G19K** | **Purcell Mounta** | 56.48 | 25 | P | P | 04 20 57.5 | +0.9 | |
| **G19K** | **Purcell Mounta** baz=252 | 56.48 | 25 | P | P | 04 20 56.6 | 0.0 | |
| **H19K** | **Roundabout Mou** baz=253 | 56.54 | 26 | P | P | 04 20 57.5 | +0.5 | |
| **KDAK** | **Kodiak Island** baz=261 | 56.59 | 35 | P | P | 04 20 57.8 | +0.3 | |
| **C19K** | **Lookout Ridge** baz=247 | 56.63 | 21 | P | P | 04 20 58.1 | +0.4 | |
| **E19K** | **Redstone River** | 56.86 | 23 | P | P | 04 21 00.2 | +0.9 | |
| **E19K** | **Redstone River** baz=251 | 56.86 | 23 | P | P | 04 21 00.0 | +0.8 | |
| **K20K** | **Telida** | 56.96 | 29 | P | P | 04 21 00.3 | +0.3 | |
| K20K | | | | IAmb | IAmb | 04 21 01.3 | | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **K20K** | **Telida** baz=256 | 56.96 | 29 | P | P | 04 21 00.4 | +0.3 | |
| **M20K** | **Styx River** baz=258 | 57.05 | 30 | P | P | 04 21 01.2 | +0.4 | |
| **J20K** | **Nowinta River** | 57.12 | 28 | P | P | 04 21 01.7 | +0.5 | |
| J20K | | | | IAmb | IAmb | 04 21 09.8 | | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **J20K** | **Nowinta River** baz=256 | 57.12 | 28 | P | P | 04 21 02.1 | +0.9 | |
| **I20K** | **Naaghedeneel** baz=255 | 57.14 | 27 | P | P | 04 21 01.7 | +0.5 | |
| **H20K** | **Anotleneega Mo** baz=254 | 57.16 | 26 | P | P | 04 21 01.9 | +0.5 | |
| **F20K** | **Avaraart Lake** | 57.28 | 24 | P | P | 04 21 02.6 | +0.4 | |
| **F20K** | **Avaraart Lake** baz=252 | 57.28 | 24 | P | P | 04 21 02.8 | +0.6 | |
| **D20K** | **Etivluk River** baz=250 | 57.49 | 22 | P | P | 04 21 04.3 | +0.5 | |
| **IMAR** | **Indian Mountai** | 57.74 | 26 | P | P | 04 21 05.5 | 0.0 | |
| **B20K** | **Meade River** | 57.76 | 21 | P | P | 04 21 06.6 | +1.1 | |
| B20K | | | | IAmb | IAmb | 04 21 07.5 | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **B20K** | **Meade River** baz=249 | 57.76 | 21 | P | P | 04 21 06.2 | +0.6 | |
| **BRSE** | **Bradley Lake S** baz=262 | 57.83 | 33 | P | P | 04 21 05.8 | -0.5 | |
| **G21K** | **Allakaket** | 57.98 | 25 | P | P | 04 21 06.7 | -0.5 | |
| G21K | | | | IAmb | IAmb | 04 21 15.7 | | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **G21K** | **Allakaket** baz=255 | 57.98 | 25 | P | P | 04 21 07.4 | +0.3 | |
| **H21K** | **Melozitna Rive** | 58.04 | 26 | P | P | 04 21 08.2 | +0.6 | |
| H21K | | | | IAmb | IAmb | 04 21 16.3 | | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| **H21K** | **Melozitna Rive** baz=256 | 58.04 | 26 | P | P | 04 21 07.8 | +0.2 | |
| **F21K** | **Alatna River** | 58.17 | 24 | P | P | 04 21 09.1 | +0.6 | |
| **F21K** | **Alatna River** baz=254 | 58.17 | 24 | P | P | 04 21 09.0 | +0.5 | |
| **C21K** | **Knifeblade Rid** baz=252 | 58.26 | 22 | P | P | 04 21 09.7 | +0.5 | |
| **BPAW** | **Bear Paw Mtn.** | 58.46 | 28 | P | P | 04 21 11.1 | +0.5 | |
| BPAW | | | | IAmb | IAmb | 04 21 18.1 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** baz=259 | 58.46 | 28 | P | P | 04 21 11.1 | +0.5 | |
| **B21K** | **Ikpikpuk River** baz=252 | 58.47 | 21 | P | P | 04 21 11.1 | +0.6 | |
| **RC01** | **Rabbit Creek A** baz=262 | 58.52 | 32 | P | P | 04 21 11.6 | +0.6 | |
| **H22K** | **Ishtalitna Cre** baz=257 | 58.66 | 26 | P | P | 04 21 13.9 | +1.9 | |
| **F22K** | **John River** baz=256 | 58.73 | 24 | P | P | 04 21 13.7 | +1.3 | |
| **MLY** | **Manley** | 58.74 | 27 | P | P | 04 21 13.1 | +0.5 | |
| MLY | | | | IAmb | IAmb | 04 21 20.9 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **G22K** | **Bettles** baz=257 | 58.85 | 25 | P | P | 04 21 14.2 | +1.0 | |
| **D22K** | **Ayikyak River** | 58.91 | 22 | P | P | 04 21 14.4 | +0.8 | |
| D22K | | | | IAmb | IAmb | 04 21 20.4 | | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **D22K** | **Ayikyak River** baz=254 | 58.91 | 22 | P | P | 04 21 14.6 | +1.0 | |
| **E22K** | **Anaktuvuk Pass** baz=256 | 59.02 | 23 | P | P | 04 21 15.4 | +0.9 | |
| **PWL** | **Port Wells** | 59.17 | 32 | P | P | 04 21 17.2 | +1.6 | |
| **PWL** | **Port Wells** baz=263 | 59.17 | 32 | P | P | 04 21 15.8 | +0.3 | |
| **KNK** | **Knik Glacier** baz=263 | 59.18 | 31 | P | P | 04 21 16.1 | +0.5 | |
| **MCK** | **McKinley** baz=261 | 59.28 | 29 | P | P | 04 21 16.7 | +0.4 | |
| **SML** | **Sawmill** baz=263 | 59.29 | 31 | P | P | 04 21 17.2 | +0.8 | |
| **WAT1** | **Susitna Watana** baz=262 | 59.32 | 30 | P | P | 04 21 16.7 | +0.1 | |
| **I23K** | **Minto, Yukon-K** baz=260 | 59.34 | 27 | P | P | 04 21 17.3 | +0.7 | |
| **NEA2** | **Nenana** | 59.37 | 28 | P | P | 04 21 17.8 | +1.0 | |
| NEA2 | | | | IAmb | IAmb | 04 21 18.2 | | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **NEA2** | **Nenana** baz=260 | 59.37 | 28 | P | P | 04 21 17.4 | +0.5 | |
| **G23K** | **Bananza Creek** | 59.37 | 25 | P | P | 04 21 17.2 | +0.3 | |
| G23K | | | | IAmb | IAmb | 04 21 25.6 | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **G23K** | **Bananza Creek** baz=258 | 59.37 | 25 | P | P | 04 21 17.8 | +0.9 | |
| **H23K** | **Yukon River** | 59.39 | 26 | P | P | 04 21 15.6 | -1.5 | |
| H23K | | | | IAmb | IAmb | 04 21 19.2 | | |
| | comp=Z,7.9nm,1.1s | | | | | | | |
| **H23K** | **Yukon River** baz=259 | 59.39 | 26 | P | P | 04 21 17.7 | +0.6 | |
| **COLD** | **Coldfoot** baz=258 | 59.41 | 24 | P | P | 04 21 17.8 | +0.7 | |
| **M23K** | **Glacier View** baz=263 | 59.57 | 31 | P | P | 04 21 18.6 | +0.3 | |
| **D23K** | **Nanushuk River** baz=256 | 59.63 | 22 | P | P | 04 21 19.2 | +0.6 | |
| **WAT6** | **Susitna Watana** baz=263 | 59.66 | 30 | P | P | 04 21 19.2 | +0.2 | |
| **SCM** | **Sheep Creek Mo** baz=264 | 59.76 | 31 | P | P | 04 21 19.9 | +0.2 | |
| **GLI** | **Glacier Island** | 59.77 | 32 | P | P | 04 21 19.7 | 0.0 | |
| **GLI** | **Glacier Island** baz=264 | 59.77 | 32 | P | P | 04 21 20.1 | +0.4 | |
| **MDM** | **Murphy Dome** | 59.78 | 27 | P | P | 04 21 19.8 | +0.1 | |
| MDM | | | | IAmb | IAmb | 04 21 27.8 | | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **E23K** | **Chandalar** | 59.81 | 24 | | P | 04 21 20.9 | +1.0 | |
| E23K | | | | IAmb | IAmb | 04 21 22.1 | | |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| **E23K** | **Chandalar** baz=258 | 59.81 | 24 | P | P | 04 21 20.6 | +0.6 | |
| **C23K** | **Itkillik River** | 59.86 | 21 | P | P | 04 21 19.8 | -0.3 | |
| **C23K** | **Itkillik River** baz=256 | 59.86 | 21 | P | P | 04 21 21.2 | +1.1 | |
| **DHY** | **Denali Highway** baz=263 | 59.89 | 29 | P | P | 04 21 21.1 | +0.4 | |
| **TOLK** | **Toolik Lake Re** baz=258 | 59.95 | 23 | P | P | 04 21 21.6 | +0.8 | |
| **H24K** | **Noodor Dome** | 60.07 | 26 | P | P | 04 21 21.9 | +0.1 | |
| **H24K** | **Noodor Dome** baz=261 | 60.07 | 26 | P | P | 04 21 21.8 | +0.1 | |
| **POKR** | **Poker Plat Res** | 60.14 | 27 | P | P | 04 21 22.4 | +0.2 | |
| POKR | | | | IAmb | IAmb | 04 21 30.5 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **POKR** | **Poker Plat Res** baz=262 | 60.14 | 27 | P | P | 04 21 22.3 | +0.2 | |
| **E24K** | **Your Creek** baz=259 | 60.23 | 24 | P | P | 04 21 23.4 | +0.7 | |
| **IL31** | | 60.32 | 28 | P | P | 04 21 22.5 | -0.8 | |
| **ILAR** | **Eielson Array** | 60.32 | 28 | P | P | 04 21 22.5 | -0.9 | |
| **ILAR** | **Eielson Array** | 60.32 | 28 | P | P | 04 21 22.2 | -1.2 | |
| | comp=Z,4.8nm,0.9s,baz=261,slow=5.6,SNR=22 comp=Z,4.8nm,0.9s | | | | | | | |
| **F24K** | **Squaw Lake** baz=260 | 60.35 | 24 | P | P | 04 21 24.8 | +1.2 | |
| **G24K** | **Hadweenzic Riv** | 60.37 | 25 | P | P | 04 21 24.6 | +0.9 | |
| G24K | | | | IAmb | IAmb | 04 21 33.0 | | |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| **G24K** | **Hadweenzic Riv** baz=261 | 60.37 | 25 | P | P | 04 21 24.6 | +0.9 | |
| **KLU** | **Klutina** baz=265 | 60.40 | 31 | P | P | 04 21 25.0 | +1.0 | |
| **EYAK** | **Cordova Ski Ar** baz=266 | 60.40 | 32 | P | P | 04 21 25.1 | +1.1 | |
| **PAX** | **Paxson** baz=265 | 60.74 | 30 | P | P | 04 21 26.5 | +0.1 | |
| **J25K** | **Salcha River,** | 60.95 | 28 | P | P | 04 21 27.2 | -0.5 | |
| J25K | | | | IAmb | IAmb | 04 21 34.4 | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **J25K** | **Salcha River,** baz=264 | 60.95 | 28 | P | P | 04 21 27.8 | 0.0 | |
| **H25L** | **Birch Creek** baz=262 | 60.96 | 26 | P | P | 04 21 27.8 | +0.1 | |
| **BMRM** | **Bremner River** baz=267 | 60.99 | 32 | P | P | 04 21 28.0 | -0.1 | |
| **RIDG** | **Independent Ri** baz=265 | 61.09 | 29 | P | P | 04 21 28.8 | +0.1 | |
| **F25K** | **Christian Rive** baz=262 | 61.21 | 24 | P | P | 04 21 29.8 | +0.3 | |
| **BVAR** | **Borovoye Array** | 61.35 | 319 | P | P | 04 21 31.1 | +0.4 | |
| | comp=Z,37nm,0.7s,baz=91,slow=7.9,SNR=47 comp=Z,37nm,0.7s | | | | | | | |
| **GLB** | **Gilahina Butte** | 61.40 | 32 | P | P | 04 21 31.8 | +0.9 | |
| **BRVK** | **Borovoye** | 61.41 | 319 | P | P | 04 21 31.4 | +0.3 | |
| **SCRK** | **Sand Creek** | 61.49 | 29 | P | P | 04 21 31.4 | -0.1 | |
| **SCRK** | **Sand Creek** baz=265 | 61.49 | 29 | P | P | 04 21 31.7 | +0.2 | |
| **J26L** | **Joseph Creek** | 61.72 | 28 | P | P | 04 21 32.8 | -0.2 | |
| **J26L** | **Joseph Creek** baz=266 | 61.72 | 28 | P | P | 04 21 33.1 | +0.2 | |
| **CRQE** | **Cirque** baz=268 | 61.72 | 32 | P | P | 04 21 33.1 | 0.0 | |
| **MCARA** | **McCarthy VSAT** baz=268 | 61.78 | 32 | P | P | 04 21 33.9 | +0.5 | |
| **F26K** | **Sheenjek River** baz=263 | 61.79 | 24 | P | P | 04 21 34.0 | +0.6 | |
| **C26K** | **Camden Bay** baz=261 | 61.81 | 22 | P | P | 04 21 34.4 | +1.0 | |
| **G26K** | **Porcupine Rive** baz=264 | 61.85 | 25 | P | P | 04 21 35.0 | +1.3 | |
| **I26K** | **Coal Creek Min** | 61.95 | 27 | P | P | 04 21 34.6 | +0.1 | |
| **I26K** | **Coal Creek Min** baz=266 | 61.95 | 27 | P | P | 04 21 35.8 | +1.3 | |
| **MESA** | **MESA** baz=269 | 62.27 | 33 | P | P | 04 21 38.0 | +1.1 | |
| **K27K** | **Chicken** | 62.33 | 29 | P | P | 04 21 37.5 | +0.5 | |
| K27K | | | | IAmb | IAmb | 04 21 45.2 | | |
| | comp=Z,5.5nm,1.1s | | | | | | | |
| **K27K** | **Chicken** baz=267 | 62.33 | 29 | P | P | 04 21 38.1 | +1.1 | |
| **M27K** | **Edge Creek, AK** baz=268 | 62.36 | 31 | P | P | 04 21 38.3 | +0.9 | |
| **L27K** | **Beaver Creek,** baz=268 | 62.40 | 30 | P | P | 04 21 37.8 | +0.3 | |
| **H27K** | **Steamboat Moun** baz=266 | 62.69 | 26 | P | P | 04 21 40.2 | +0.8 | |
| **D27M** | **Malcolm River** baz=266 | 63.11 | 23 | P | P | 04 21 43.0 | +0.7 | |
| **O28M** | **Mount Upton** baz=270 | 63.15 | 32 | P | P | 04 21 43.2 | +0.4 | |
| **I28M** | **Miner Creek** | 63.31 | 27 | P | P | 04 21 43.3 | -0.3 | |
| I28M | | | | IAmb | IAmb | 04 21 44.5 | | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| **I28M** | **Miner Creek** baz=268 | 63.31 | 27 | P | P | 04 21 43.9 | +0.3 | |
| **F28M** | **Old Crow** baz=267 | 63.41 | 25 | P | P | 04 21 44.7 | +0.5 | |
| **DAWY** | **Dawson** baz=270 | 63.52 | 29 | P | P | 04 21 45.7 | +0.8 | |
| **E28M** | **Babbage River** baz=267 | 63.59 | 24 | P | P | 04 21 46.2 | +0.9 | |
| **YUK4** | **Talbot Arm** baz=272,SNR=5.2 | 63.89 | 32 | P | P | 04 21 48.1 | +0.4 | |
| **M29M** | **Somme Creek** baz=271,SNR=5.1 | 63.95 | 30 | P | P | 04 21 49.0 | +1.1 | |
| **O29M** | **Mount Kennedy** baz=272 | 63.96 | 33 | P | P | 04 21 48.6 | +0.6 | |
| **H29M** | **Whitestone** | 63.97 | 26 | P | P | 04 21 47.8 | 0.0 | |
| **H29M** | **Whitestone** baz=269 | 63.97 | 26 | P | P | 04 21 48.5 | +0.6 | |
| **I29M** | **Ogilvie Camp,** baz=270 | 63.99 | 27 | P | P | 04 21 48.6 | +0.6 | |
| **YUK6** | **Outpost Mounta** baz=272 | 64.04 | 32 | P | P | 04 21 48.9 | +0.2 | |
| **G29M** | **Pine Creek** | 64.11 | 25 | P | P | 04 21 48.9 | +0.1 | |
| **G29M** | **Pine Creek** baz=269 | 64.11 | 25 | P | P | 04 21 49.9 | +1.1 | |
| **K29M** | **Barlow Dome** baz=271,SNR=5.0 | 64.34 | 29 | P | P | 04 21 51.2 | +0.7 | |
| **P29M** | **Windy Craggy** baz=273 | 64.41 | 34 | P | P | 04 21 51.3 | +0.4 | |
| **N30M** | **Aishikik Lake** baz=273 | 64.63 | 32 | P | P | 04 21 52.9 | +0.5 | |
| **P30M** | **Million Dollar** baz=274 | 64.77 | 33 | P | P | 04 21 53.8 | +0.5 | |
| **I30M** | **Mount Dempster** | 64.80 | 27 | P | P | 04 21 53.4 | 0.0 | |
| **I30M** | **Mount Dempster** baz=272 | 64.80 | 27 | P | P | 04 21 53.9 | +0.4 | |
| **G30M** | **tAoh Zraii Nji** baz=271 | 64.82 | 25 | P | P | 04 21 54.3 | +0.8 | |
| **J30M** | **Hart River** | 64.84 | 28 | P | P | 04 21 54.2 | +0.5 | |
| J30M | | | | IAmb | IAmb | 04 22 01.8 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **J30M** | **Hart River** baz=272 | 64.84 | 28 | P | P | 04 21 53.9 | +0.2 | |
| **F30M** | **Barrier River** baz=271 | 64.98 | 25 | P | P | 04 21 54.6 | +0.2 | |
| **PLBC** | **Pleasant Camp** baz=274 | 65.12 | 34 | P | P | 04 21 55.6 | +0.1 | |
| **O30N** | **Mendenhall** baz=274 | 65.16 | 32 | P | P | 04 21 55.8 | +0.1 | |
| **N31M** | **Braeburn, Yuko** baz=274 | 65.26 | 31 | P | P | 04 21 56.6 | +0.2 | |
| **S31K** | **Pelican** baz=275 | 65.31 | 35 | P | P | 04 21 56.6 | -0.1 | |
| **G31M** | **Satah River** | 65.59 | 25 | P | P | 04 21 58.0 | -0.3 | |
| **G31M** | **Satah River** baz=273,SNR=5.5 | 65.59 | 25 | P | P | 04 21 58.7 | +0.3 | |
| **SKAG** | **Skagway** baz=275 | 65.64 | 34 | P | P | 04 21 59.2 | +0.4 | |
| **WHY** | **Whitehorse** baz=275 | 65.76 | 32 | P | P | 04 21 59.9 | +0.2 | |
| **INK** | **Inuvik** | 65.81 | 24 | P | P | 04 21 59.4 | -0.3 | |
| INK | | | | IAmb | IAmb | 04 22 08.4 | | |
| | comp=Z,7.1nm,1.1s | | | | | | | |
| **INK** | **Inuvik** baz=273 | 65.81 | 24 | P | P | 04 22 00.4 | +0.7 | |
| **M31M** | **Drury Creek, Y** baz=275 | 65.86 | 31 | P | P | 04 22 00.7 | +0.5 | |
| **R32K** | **Eaglecrest** baz=276 | 66.19 | 35 | P | P | 04 22 03.0 | +0.7 | |
| **FARO** | **Faro, Yukon** baz=276 | 66.34 | 31 | P | P | 04 22 03.8 | +0.5 | |
| **P32M** | **Atlin** baz=277 | 66.45 | 33 | P | P | 04 22 04.7 | +0.6 | |
| **P33M** | **Teslin, Yukon** baz=277 | 66.82 | 33 | P | P | 04 22 07.1 | +0.6 | |
| **Q32M** | **Nakina River** | 67.27 | 34 | P | P | 04 22 10.2 | +0.7 | |
| **Q32M** | **Nakina River** baz=278 | 67.27 | 34 | P | P | 04 22 09.8 | +0.3 | |
| **WRAK** | **Wrangell Islan** baz=279 | 67.60 | 37 | P | P | 04 22 11.7 | +0.3 | |
| **ARU** | **Arti** | 67.85 | 323 | P | P | 04 22 13.0 | +0.1 | |
| **ARU** | **Arti** | 67.85 | 323 | P | P | 04 22 13.2 | +0.3 | |
| | comp=Z,18nm,0.6s,baz=75,slow=4.7,SNR=17 comp=Z,18nm,0.6s | | | | | | | |
| **R33M** | **Jennings River** baz=279 | 67.86 | 33 | P | P | 04 22 13.7 | +0.5 | |
| **S34M** | **Telegraph Cree** baz=280 | 68.02 | 35 | P | P | 04 22 14.7 | +0.7 | |
| **DLBC** | **Dease Lake** baz=280 | 68.50 | 34 | P | P | 04 22 17.9 | +0.8 | |
| **T35M** | **Bob Quinn** baz=280 | 68.65 | 36 | P | P | 04 22 18.8 | +0.8 | |
| **C36M** | **Paulatuk** baz=281 | 69.09 | 22 | P | P | 04 22 21.7 | +1.3 | |
| **TOAD** | **Toad River Com** baz=284 | 70.87 | 33 | P | P | 04 22 31.8 | +0.1 | |
| **YKA** | **Yellowknife Ar** | 74.75 | 28 | P | P | 04 22 52.9 | -1.6 | |
| | comp=Z,2.3nm,0.8s,baz=282,slow=14,SNR=7.2 comp=Z,2.3nm,0.8s | | | | | | | |
| **NLWA** | **Neilton Lookou** | 74.85 | 45 | P | P | 04 22 56.6 | +1.2 | |
| NLWA | | | | IAmb | IAmb | 04 23 05.1 | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **E03A** | **Lebam** | 75.32 | 45 | P | P | 04 22 59.6 | +1.5 | |
| **BUCK** | **Buck Mountain** | 76.48 | 48 | P | P | 04 23 06.4 | +1.5 | |
| **ARCES** | **ARCESS Array B** | 77.20 | 341 | P | P | 04 23 08.6 | +0.2 | |
| **ARCES** | **ARCESS Array B** | 77.20 | 341 | P | P | 04 23 08.9 | +0.5 | |
| | comp=Z,8.0nm,0.9s,baz=66,slow=7.3,SNR=9.5 comp=Z,8.0nm,0.9s | | | | | | | |
| **B08A** | **Colville Reser** | 77.40 | 43 | P | P | 04 23 09.1 | -0.9 | |
| B08A | | | | IAmb | IAmb | 04 23 10.8 | | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | 77.51 | 50 | P | P | 04 23 09.8 | -1.0 | |
| **J05D** | **Fort Rock, OR** | 77.98 | 48 | P | P | 04 23 13.3 | -0.2 | |
| J05D | | | | IAmb | IAmb | 04 23 14.8 | | |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| **NEW** | **Newport** baz=293 | 78.81 | 42 | P | P | 04 23 17.9 | +0.1 | |
| **BMO** | **Blue Mountains** | 80.02 | 45 | P | P | 04 23 24.1 | -0.5 | |
| **WVOR** | **Wild Horse Val** | 80.07 | 48 | P | P | 04 23 23.8 | -1.1 | |
| **CMB** | **Columbia Colle** | 80.52 | 53 | P | P | 04 23 26.1 | -1.2 | |
| CMB | | | | IAmb | IAmb | 04 23 27.6 | | |
| | comp=Z,7.8nm,1.1s | | | | | | | |
| **YERR** | **Yerington** | 80.99 | 51 | IAmb | IAmb | 04 23 38.2 | | |
| | comp=Z,7.5nm,1.2s | | | | | | | |
| **FINES** | **FINESS Array B** | 81.56 | 334 | P | P | 04 23 31.5 | -0.8 | |
| | comp=Z,2.5nm,0.7s,baz=69,slow=5.5,SNR=11 comp=Z,2.5nm,0.7s | | | | | | | |
| **MFID** | **Camas Ranch** | 81.57 | 46 | P | P | 04 23 32.4 | -0.5 | |
| MFID | | | | IAmb | IAmb | 04 23 33.9 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **KVN** | **Kaiserville** | 81.78 | 51 | IAmb | IAmb | 04 23 40.0 | | |
| | comp=Z,5.5nm,1.1s | | | | | | | |
| **LHV** | **Little Huntoon** | 81.81 | 52 | P | P | 04 23 33.9 | -0.2 | |
| LHV | | | | IAmb | IAmb | 04 23 40.0 | | |
| | comp=Z,7.7nm,1.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | 81.88 | 52 | P | P | 04 23 33.8 | -0.9 | |
| **NVAR** | **Mina Array Bea** | 81.88 | 52 | P | P | 04 23 34.4 | -0.3 | |
| | comp=Z,2.9nm,0.9s,baz=262,slow=6.4,SNR=11 comp=Z,2.9nm,0.9s | | | | | | | |
| **HLID** | **Hailey** baz=295 | 82.45 | 46 | P | P | 04 23 37.2 | -0.3 | |
| **ELK** | **Elko** | 83.09 | 49 | IAmb | IAmb | 04 23 49.3 | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **GMN** | **Gold Mountain** | 83.09 | 52 | P | P | 04 23 39.5 | -1.6 | |
| **BOZ** | **Bozeman (W)** baz=297 | 83.34 | 43 | P | P | 04 23 41.6 | -0.6 | |
| **R11B** | **Troy Canyon, C** | 83.86 | 51 | P | P | 04 23 44.0 | -1.0 | |
| **R11B** | **Troy Canyon, C** baz=295 | 83.86 | 51 | P | P | 04 23 44.8 | -0.2 | |
| **YHL** | **Hebgen Lake** | 83.96 | 44 | IAmb | IAmb | 04 23 47.0 | | |
| | comp=Z,5.3nm,1.0s | | | | | | | |
| **TPNV** | **Topopah Spring** baz=295 | 83.97 | 52 | P | P | 04 23 45.4 | -0.1 | |
| **GSC** | **Goldstone, Bar** | 84.25 | 54 | IAmb | IAmb | 04 23 47.0 | | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **HVU** | **Hansel Valley** | 84.31 | 47 | IAmb | IAmb | 04 23 47.9 | | |
| | comp=Z,5.4nm,1.2s | | | | | | | |
| **YFT** | **Old Faithful** | 84.36 | 44 | P | P | 04 23 48.1 | +0.6 | |
| YFT | | | | IAmb | IAmb | 04 23 50.5 | | |
| | comp=Z,5.7nm,1.0s | | | | | | | |
| **IMW** | **Indian Meadow** | 84.55 | 44 | IAmb | IAmb | 04 23 50.1 | | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **H17A** | **Grant Village** | 84.56 | 44 | P | P | 04 23 48.9 | +0.4 | |
| **H17A** | **Grant Village** baz=298 | 84.56 | 44 | P | P | 04 23 49.5 | +1.0 | |
| **FXWY** | **Fox Creek** | 84.62 | 45 | IAmb | IAmb | 04 23 58.1 | | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **LOHW** | **Long Hollow** | 84.90 | 44 | IAmb | IAmb | 04 23 56.5 | | |
| | comp=Z,3.9nm,1.1s | | | | | | | |
| **DUG** | **Dugway, Tooele** | 84.99 | 48 | P | P | 04 23 50.0 | -0.6 | |
| DUG | | | | IAmb | IAmb | 04 23 58.8 | | |
| | comp=Z,5.5nm,1.1s | | | | | | | |
| **DUG** | **Dugway, Tooele** baz=297 | 84.99 | 48 | P | P | 04 23 50.7 | +0.1 | |
| **PSUT** | **Pine Spring** | 85.00 | 50 | IAmb | IAmb | 04 23 56.4 | | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **109C** | **Camp Elliot, M** baz=295 | 85.03 | 56 | P | P | 04 23 51.4 | +0.6 | |
| **RLMT** | **Red Lodge** | 85.04 | 43 | IAmb | IAmb | 04 23 51.9 | | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| **RLMT** | **Red Lodge** baz=299 | 85.04 | 43 | P | P | 04 23 51.0 | +0.2 | |
| **HWUT** | **Hardware Ranch** | 85.20 | 47 | IAmb | IAmb | 04 24 00.6 | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **PFO** | **Pinyon Flats O** baz=295 | 85.22 | 56 | P | P | 04 23 51.4 | -0.5 | |
| **TPFO** | **Pinon Flats** baz=295 | 85.22 | 56 | P | P | 04 23 51.8 | -0.1 | |
| **MONP2** | **Monument Peak** baz=295 | 85.55 | 56 | P | P | 04 23 52.9 | -0.7 | |
| **JLU** | **Jordanelle** | 85.73 | 47 | IAmb | IAmb | 04 24 00.2 | | |
| | comp=Z,6.4nm,0.9s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CCUT | Cedar City | 85.79 | 51 | IAmb | IAmb | 04 23 55.2 | | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| MPU | Maple Canyon | 85.88 | 48 | P | P | 04 23 54.0 | -1.1 | |
| MPU | | | | IAmb | IAmb | 04 24 00.8 | | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| BW06 | Boulder Array | 85.97 | 45 | P | P | 04 23 55.1 | -0.4 | |
| | baz=299 | | | | | | | |
| PDAR | Pinedale Array | 85.97 | 45 | P | P | 04 23 54.3 | -1.3 | |
| | comp=Z,1.1nm,0.9s,baz=273,slow=2.5,SNR=5.2 | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | |
| LCMT | Little Creek M | 86.11 | 51 | IAmb | IAmb | 04 24 01.7 | | |
| | comp=Z,5.3nm,1.0s | | | | | | | |
| LAO | LASA Array | 86.11 | 40 | P | P | 04 23 55.9 | -0.1 | |
| | baz=301 | | | | | | | |
| P17A | Butcher Ranch, | 86.74 | 48 | IAmb | IAmb | 04 24 07.5 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| U15A | North Rim | 87.06 | 51 | P | P | 04 23 59.7 | -1.4 | |
| U15A | | | | IAmb | IAmb | 04 24 07.0 | | |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| SRU | San Rafael Swe | 87.06 | 48 | IAmb | IAmb | 04 24 07.8 | | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| HFS | Hagfors | 87.06 | 337 | P | P | 04 23 58.4 | -1.8 | |
| | comp=Z,2.5nm,0.8s,baz=84,slow=7.4,SNR=5.7 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| NOA | NORSAR Array B | 87.26 | 339 | P | P | 04 23 59.4 | -1.9 | |
| | comp=Z,1.1nm,0.8s,baz=43,slow=4.6,SNR=3.1 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| 113A | Mohawk Valley, | 87.62 | 55 | IAmb | IAmb | 04 24 04.0 | | |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| WUAZ | Wupatki | 88.14 | 52 | IAmb | IAmb | 04 24 06.7 | | |
| | comp=Z,5.2nm,1.0s | | | | | | | |
| WUAZ | Wupatki | 88.14 | 52 | P | P | 04 24 05.8 | -0.3 | |
| | baz=298 | | | | | | | |
| 214A | Organ Pipe Nat | 88.70 | 56 | P | P | 04 24 08.4 | -0.2 | |
| | baz=297 | | | | | | | |
| N23A | Red Feather La | 89.25 | 45 | P | P | 04 24 11.1 | -0.3 | |
| | baz=301 | | | | | | | |
| S22A | 4UR Ranch, Cre | 90.26 | 48 | P | P | 04 24 15.5 | -0.7 | |
| | baz=300 | | | | | | | |
| AGMN | Agassiz Nation | 91.02 | 35 | P | P | 04 24 18.7 | -0.5 | |
| | baz=308 | | | | | | | |
| SDCO | Great Sand Dun | 91.16 | 48 | P | P | 04 24 19.5 | -0.9 | |
| | baz=301 | | | | | | | |
| ANMO | Albuquerque | 91.93 | 50 | P | P | 04 24 23.3 | -0.6 | |
| ANMO | | | | IAmb | IAmb | 04 24 30.0 | | |
| | comp=Z,2.7nm,1.1s | | | | | | | |
| ANMO | Albuquerque | 91.93 | 50 | P | P | 04 24 23.9 | 0.0 | |
| | baz=301 | | | | | | | |
| 121A | Cookes Peak, D | 92.18 | 53 | P | P | 04 24 25.1 | 0.0 | |
| | baz=300 | | | | | | | |
| T25A | Trinidad | 92.22 | 48 | P | P | 04 24 24.9 | -0.3 | |
| | baz=302 | | | | | | | |
| ECSD | EROS Data Cent | 93.39 | 39 | P | P | 04 24 30.2 | 0.0 | |
| | baz=307 | | | | | | | |

*IDC* ***19*** *04:15:30.5±1.9, 18°.07S×178°.06W, h600km±24km, mb4.0/15, mbtmp4.9/17, Error ellipse: s-maj=23.5km s-min=11.0km az=175.0*

*NOU* ***19*** *04:15:30.7, 18°.14S×178°.05W, h593km, mb5.1/10, Fiji Islands Region*

*NEIC* ***19*** *04:15:31.0±1.7, 17°.9S±0°.1×178°.1W±0°.1, h599km±7km, mb4.5/104, Error ellipse: s-maj=17.3km s-min=14.2km az=169.0*

**ISC 19 04:15:29.8±0.4, 18°.00S±0°.08×178°.07W±0°.06, h590km, n238, σ0°.85/232, mb4.6/73, 12C-27D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.70 | 273 | P | P | 04 16 56.3 | +3.7 |
| AFI | Afiamalu | 7.29 | 57 | P | P | 04 17 22.5 | +0.2 |
| NIUE | Niue | 7.80 | 99 | P | P | 04 17 28.1 | +1.2 |
| NIUE | Niue | 7.80 | 99 | P | P | 04 17 27.7 | +0.8 |
| FUNA | Funafuti | 9.78 | 344 | P | P | 04 17 47.9 | +1.5 |
| FUNA | Funafuti | 9.78 | 344 | P | P | 04 17 46.5 | +0.1 |
| LIFNC | LIFOU | 14.13 | 256 | P | P | 04 18 29.0 | -1.1 |
| PINNC | Pines Island, | 14.34 | 249 | P | P | 04 18 32.8 | +0.7 |
| DZM | Mont Dzumac | 15.10 | 252 | P | P | 04 18 40.5 | +1.1 |
| DZM | Mont Dzumac | 15.10 | 252 | P | P | 04 18 39.6 | +0.2 |
| | 9.2nm,0.7s,baz=121,slow=16,SNR=10 | | | | | | |
| NOUC | Port Laguerre | 15.23 | 252 | P | P | 04 18 41.7 | +1.1 |
| KOUNC | Koumac, New Ca | 16.85 | 258 | P | P | 04 18 57.9 | +2.5 |
| KOUNC | Koumac, New Ca | 16.85 | 258 | P | P | 04 18 57.7 | +2.2 |
| RAR | Rarotonga | 17.54 | 103 | P | P | 04 19 01.3 | -0.4 |
| RAR | Rarotonga | 17.54 | 103 | P | P | 04 19 01.4 | -0.3 |
| | 42nm,0.9s,baz=221,slow=2.9,SNR=4.5 | | | | | | |
| QRZ | Quartz Range | 24.14 | 198 | P | P | 04 20 00.5 | -0.3 |
| QRZ | Quartz Range | 24.14 | 198 | P | P | 04 20 00.9 | +0.1 |
| THZ | Tophouse | 24.91 | 196 | P | P | 04 20 06.6 | -1.1 |
| KHZ | Kahutara | 25.37 | 195 | P | P | 04 20 10.0 | -1.5 |
| CTZ | Chatham Island | 25.69 | 178 | P | P | 04 20 16.2 | +1.9 |
| PPT | Papeete | 27.13 | 94 | P | P | 04 20 27.5 | 0.0 |
| | 45nm,0.8s,baz=297,slow=15,SNR=12 | | | | | | |
| | 45nm,0.8s | | | | | | |
| PPTF | Pamatai, Papee | 27.14 | 94 | P | P | 04 20 27.9 | +0.3 |
| EIDS | Eidsvold | 29.54 | 250 | P | P | 04 20 47.1 | -1.1 |
| CTA | Charters Tower | 33.75 | 261 | P | P | 04 21 23.6 | -0.4 |
| | 3.5nm,0.9s,baz=101,slow=14,SNR=9.1 | | | | | | |
| | 3.5nm,0.9s | | | | | | |
| CTAO | Charters Tower | 33.75 | 261 | P | P | 04 21 23.8 | -0.3 |
| CAN | Canberra | 33.90 | 233 | P | P | 04 21 25.6 | +0.4 |
| PATS | Pohnpei | 33.95 | 315 | P | P | 04 21 26.8 | +1.0 |
| PMG | Port Moresby | 34.79 | 280 | P | P | 04 21 33.9 | +1.2 |
| PMG | Port Moresby | 34.79 | 280 | P | P | 04 21 34.0 | +1.2 |
| | 110nm,0.9s,baz=102,slow=5.2,SNR=8.9 | | | | | | |
| | 110nm,0.9s | | | | | | |
| COEN | Coen | 37.42 | 270 | P | P | 04 21 54.8 | +0.3 |
| TAOE | Nuku Hiva Isla | 37.92 | 81 | P | P | 04 21 59.0 | +0.4 |
| STKA | Stephens Creek | 38.87 | 241 | P | P | 04 22 06.9 | +1.0 |
| STKA | | | | IAmb | IAmb | 04 22 29.2 | |
| | comp=Z,40nm,1.4s | | | | | | |
| WAKE | Wake Island | 39.97 | 337 | P | P | 04 22 14.3 | -0.4 |
| WRA | Warramunga Arr | 44.93 | 260 | P | P | 04 22 53.1 | -0.6 |
| | comp=Z,16nm,0.5s,baz=96,slow=7.6,SNR=8.8 | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | |
| ASAR | Alice Springs | 45.07 | 254 | P | P | 04 22 54.5 | -0.3 |
| | comp=Z,96nm,0.9s,baz=90,slow=8.5,SNR=5.6 | | | | | | |
| ASAR | | | | PcP | PcP | 04 24 21.4 | -1.3 |
| | comp=Z,14nm,1.1s,baz=102,slow=3.8,SNR=1.2 | | | | | | |
| | comp=Z,96nm,0.9s | | | | | | |
| GUMO | Guam | 48.18 | 308 | P | P | 04 23 18.1 | 0.0 |
| FAKI | Fak Fak | 50.91 | 281 | P | P | 04 23 37.7 | -0.4 |
| SOEI | Soe | 56.39 | 270 | P | P | 04 24 17.4 | +0.5 |
| TOLI2 | Tolitoli | 63.05 | 281 | P | P | 04 24 59.9 | -1.0 |
| TOLI2 | | | | IAmb | IAmb | 04 25 01.4 | |
| | comp=Z,19nm,0.8s | | | | | | |
| JAGI | Jajag, Banyuwa | 66.36 | 268 | P | P | 04 25 19.1 | -2.6 |
| MJAR | Matsushiro Arr | 68.17 | 323 | P | P | 04 25 31.7 | -0.6 |
| | comp=Z,13nm,0.6s,baz=162,slow=5.9,SNR=39 | | | | | | |
| | comp=Z,13nm,0.6s | | | | | | |
| MAJO | Matsushiro | 68.17 | 323 | P | P | 04 25 31.7 | -0.6 |
| MAJO | | | | IAmb | IAmb | 04 25 32.5 | |
| | comp=Z,16nm,0.5s | | | | | | |
| MJB9 | Matsu-Tunnel | 68.18 | 323 | P | P | 04 25 31.7 | -0.7 |
| MJB9 | | | | IAmb | IAmb | 04 25 32.5 | |
| | comp=Z,16nm,0.5s | | | | | | |
| KKM | Kota Kinabalu | 69.07 | 284 | P | P | 04 25 37.9 | -0.4 |
| KKM | | | | IAmb | IAmb | 04 25 51.9 | |
| | comp=Z,12nm,1.1s | | | | | | |
| AMKA | Amchitka | 69.11 | 358 | P | P | 04 25 36.4 | -1.2 |
| JSD | Sado | 69.20 | 324 | P | P | 04 25 39.2 | +0.8 |
| JSD | | | | IAmb | IAmb | 04 25 39.4 | |
| | comp=Z,15nm,0.7s | | | | | | |
| UGM | Wanagama | 69.96 | 268 | P | P | 04 25 42.7 | -0.8 |
| JNU | Nakatsue | 70.42 | 316 | P | P | 04 25 45.3 | -0.6 |
| JNU | | | | IAmb | IAmb | 04 26 01.8 | |
| | comp=Z,36nm,1.3s | | | | | | |
| YOJ | Yonaguni jima | 71.26 | 304 | P | P | 04 25 50.7 | -0.2 |
| JKA | Kamikawa-asahi | 71.51 | 331 | P | P | 04 25 53.3 | +1.4 |
| ASAJ | Asahikawa | 71.51 | 331 | P | P | 04 25 52.9 | +1.0 |
| | comp=Z,13nm,0.8s,baz=153,slow=2.3,SNR=7.1 | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | |
| TWG | Pinlang | 71.99 | 302 | P | P | 04 25 53.7 | -1.5 |
| TWG | | | | IAmb | IAmb | 04 25 54.0 | |
| | comp=Z,18nm,0.6s | | | | | | |
| YULB | Yu-li | 72.09 | 303 | P | P | 04 25 53.7 | -2.1 |
| YULB | | | | IAmb | IAmb | 04 25 56.4 | |
| | comp=Z,13nm,0.7s | | | | | | |
| NACB | Ninganchiao | 72.23 | 304 | P | P | 04 25 55.1 | -1.5 |
| SSLB | Suanglung | 72.55 | 303 | P | P | 04 25 56.9 | -1.5 |
| SSLB | | | | IAmb | IAmb | 04 25 58.0 | |
| | comp=Z,20nm,0.6s | | | | | | |
| TPUB | Ta-pu | 72.58 | 302 | P | P | 04 25 56.9 | -1.7 |
| KSM | Kuching | 73.01 | 277 | P | P | 04 26 01.9 | +0.6 |
| PEA0B | Petropavlovsk- | 73.85 | 345 | P | P | 04 26 05.1 | -0.1 |
| PETK | Petropavlovsk- | 73.85 | 345 | P | P | 04 26 04.7 | -0.5 |
| PETK | Petropavlovsk- | 73.85 | 345 | P | P | 04 26 04.8 | -0.3 |
| | comp=Z,12nm,0.7s,baz=107,slow=7.5,SNR=16 | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | |
| KSRS | Korea Array | 74.98 | 318 | P | P | 04 26 12.2 | +0.5 |
| | comp=Z,3.1nm,0.8s,baz=128,slow=6.4,SNR=7.6 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| SAO | San Andreas Ge | 76.27 | 44 | P | P | 04 26 19.5 | +0.5 |
| SAO | | | | IAmb | IAmb | 04 26 20.6 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| PMPB | Monarch Peak | 76.38 | 44 | P | P | 04 26 19.8 | +0.1 |
| PMPB | | | | IAmb | IAmb | 04 26 39.8 | |
| | comp=Z,17nm,1.3s | | | | | | |
| USA0B | Ussuriysk Arra | 76.87 | 326 | P | P | 04 26 23.0 | +1.0 |
| USA0B | | | | IAmb | IAmb | 04 26 49.1 | |
| | comp=Z,19nm,1.4s | | | | | | |
| USRK | Ussuriysk Ar. | 76.87 | 326 | P | P | 04 26 22.8 | +0.7 |
| | comp=Z,3.6nm,0.6s,baz=120,slow=5.1,SNR=6.1 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| CBX | Cerro Bola | 77.16 | 50 | P | P | 04 26 24.6 | +0.5 |
| CBX | | | | IAmb | IAmb | 04 26 39.6 | |
| | comp=Z,22nm,1.3s | | | | | | |
| ESJX | Sierra Juarez | 77.52 | 50 | P | P | 04 26 26.2 | 0.0 |
| CMB | Columbia Colle | 77.69 | 43 | P | P | 04 26 27.1 | +0.3 |
| AFDM | Forest Hills D | 77.83 | 42 | P | P | 04 26 27.2 | -0.2 |
| YUH | Yuha Desert | 77.87 | 50 | P | P | 04 26 28.1 | +0.4 |
| NJ2 | Nanjing | 78.24 | 309 | *e*P | P | 04 26 30.1 | +0.4 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| MDPB | Devils Postpil | 78.32 | 44 | P | P | 04 26 29.8 | -0.6 |
| SLBS | Sierra La Lagu | 78.33 | 60 | P | P | 04 26 31.4 | +0.9 |
| SLBS | | | | IAmb | IAmb | 04 26 32.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| OMMB | Old Mammoth Mi | 78.36 | 44 | P | P | 04 26 30.8 | +0.2 |
| MDJ | Mudanjiang | 78.44 | 325 | P | P | 04 26 31.8 | +1.3 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,32nm,1.0s | | | | | | |
| WAKR | Walker | 78.57 | 43 | P | P | 04 26 31.8 | +0.1 |
| MPK | Martis Peak | 78.63 | 42 | P | P | 04 26 33.0 | +1.0 |
| MPK | | | | IAmb | IAmb | 04 26 40.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| PNTR | Pine Nut | 78.79 | 43 | P | P | 04 26 32.9 | +0.1 |
| PNTR | | | | IAmb | IAmb | 04 26 34.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| DSP | Deep Springs | 78.91 | 45 | P | P | 04 26 33.3 | +0.1 |
| YERR | Yerington | 78.96 | 43 | P | P | 04 26 33.6 | -0.1 |
| YERR | | | | IAmb | IAmb | 04 26 35.0 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| PIX | Pinacate | 79.14 | 52 | P | P | 04 26 34.8 | +0.3 |
| N15K | Kwethluk River | 79.25 | 9 | P | P | 04 26 34.8 | +0.3 |
| N15K | | | | IAmb | IAmb | 04 27 02.9 | |
| | comp=Z,67nm,1.5s | | | | | | |
| NVAR | Mina Array Bea | 79.27 | 44 | P | P | 04 26 35.8 | +0.4 |
| | comp=Z,3.1nm,0.8s,baz=224,slow=8.4,SNR=14 | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| GMN | Gold Mountain | 79.35 | 45 | P | P | 04 26 36.4 | +0.5 |
| NV11 | Mina Array Sit | 79.37 | 44 | P | P | 04 26 35.6 | -0.2 |
| KVN | Kaiserville | 79.74 | 43 | P | P | 04 26 37.3 | -0.5 |
| O18K | Koktuh Hills | 79.78 | 11 | P | P | 04 26 37.0 | -0.3 |
| O18K | | | | IAmb | IAmb | 04 26 37.9 | |
| | comp=Z,24nm,0.9s | | | | | | |
| TPNV | Topopah Spring | 79.85 | 46 | P | P | 04 26 38.6 | +0.3 |
| L14K | Kuka Creek | 80.02 | 7 | P | P | 04 26 37.7 | -0.7 |
| L14K | | | | IAmb | IAmb | 04 26 51.4 | |
| | comp=Z,34nm,1.4s | | | | | | |
| J05D | Fort Rock, OR | 80.19 | 38 | P | P | 04 26 40.4 | +0.4 |
| J05D | | | | IAmb | IAmb | 04 26 41.6 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| M16K | Timber Creek | 80.23 | 9 | P | P | 04 26 40.0 | +0.5 |
| M16K | | | | IAmb | IAmb | 04 26 40.8 | |
| | comp=Z,19nm,0.9s | | | | | | |
| CN2 | Changchun | 80.29 | 322 | P | P | 04 26 40.8 | +0.6 |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| BNX | BinXian | 80.35 | 325 | ⇑P | P | 04 26 40.8 | +0.3 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,25nm,0.8s | | | | | | |
| H04A | Detroit Lake | 80.47 | 37 | P | P | 04 26 41.2 | -0.1 |
| L16K | Owhat River | 80.81 | 9 | P | P | 04 26 42.6 | +0.1 |
| L16K | | | | IAmb | IAmb | 04 26 43.9 | |
| | comp=Z,27nm,1.1s | | | | | | |
| M17K | Holitna River | 80.83 | 10 | P | P | 04 26 43.1 | +0.5 |
| M17K | | | | IAmb | IAmb | 04 26 44.4 | |
| | comp=Z,18nm,0.9s | | | | | | |
| PRN | Pahroc Range | 80.91 | 46 | P | P | 04 26 44.5 | +0.7 |
| PRN | | | | IAmb | IAmb | 04 26 45.6 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| R11B | Troy Canyon, C | 81.03 | 45 | P | P | 04 26 43.9 | -0.6 |
| K15K | Wolf Creek Mou | 81.09 | 8 | P | P | 04 26 44.3 | +0.4 |
| K15K | | | | IAmb | IAmb | 04 26 45.6 | |
| | comp=Z,31nm,0.9s | | | | | | |
| WVOR | Wild Horse Val | 81.27 | 40 | P | P | 04 26 45.4 | -0.1 |
| I07A | Izee | 81.68 | 38 | P | P | 04 26 47.8 | +0.2 |
| L18K | Granite Mounta | 81.73 | 10 | P | P | 04 26 47.6 | +0.4 |
| L18K | | | | IAmb | IAmb | 04 26 48.5 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| J08A | Circle Bar Ran | 81.89 | 39 | P | P | 04 26 49.2 | +0.6 |
| J08A | | | | IAmb | IAmb | 04 26 50.0 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| K17K | Iditarod | 81.94 | 9 | P | P | 04 26 48.4 | +0.1 |
| K17K | | | | IAmb | IAmb | 04 27 32.0 | |
| | comp=Z,48nm,1.5s | | | | | | |
| LCMT | Little Creek M | 81.96 | 47 | P | P | 04 26 49.5 | +0.3 |
| L19K | White Mountain | 82.01 | 11 | P | P | 04 26 48.0 | -0.7 |
| L19K | | | | IAmb | IAmb | 04 26 53.7 | |
| | comp=Z,29nm,1.5s | | | | | | |
| CCUT | Cedar City | 82.14 | 47 | P | P | 04 26 50.5 | +0.3 |
| J16K | Anvik River | 82.17 | 8 | P | P | 04 26 49.5 | +0.1 |
| J16K | | | | IAmb | IAmb | 04 26 50.2 | |
| | comp=Z,17nm,1.0s | | | | | | |
| SPR3 | Spring Creek 3 | 82.21 | 45 | P | P | 04 26 50.2 | -0.5 |
| KNB | Kanab | 82.25 | 47 | P | P | 04 26 51.0 | +0.2 |
| KNB | | | | IAmb | IAmb | 04 26 52.0 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| PSUT | Pine Spring | 82.29 | 45 | P | P | 04 26 50.9 | 0.0 |
| U15A | North Rim | 82.34 | 48 | P | P | 04 26 52.2 | +0.9 |
| U15A | | | | IAmb | IAmb | 04 26 53.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| J17K | VABM Dome | 82.48 | 8 | P | P | 04 26 51.2 | +0.3 |
| J17K | | | | IAmb | IAmb | 04 27 34.6 | |
| | comp=Z,42nm,1.4s | | | | | | |
| ELK | Elko | 82.50 | 43 | P | P | 04 26 51.4 | -0.6 |
| G08A | Pilot Rock | 82.69 | 38 | P | P | 04 26 52.9 | +0.2 |
| PKCU | Pink Cliffs | 82.82 | 47 | P | P | 04 26 55.0 | +1.3 |
| PKCU | | | | IAmb | IAmb | 04 26 56.1 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| J18K | Innoko River | 82.89 | 9 | P | P | 04 26 52.9 | -0.2 |
| J18K | | | | IAmb | IAmb | 04 26 53.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| MTPU | Mount Pierson | 83.19 | 47 | P | P | 04 26 55.4 | -0.3 |
| K20K | Telida | 83.23 | 11 | P | P | 04 26 54.6 | -0.2 |
| K20K | | | | IAmb | IAmb | 04 26 55.3 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| SCM | Sheep Creek Mo | 83.24 | 14 | P | P | 04 26 54.0 | -0.9 |
| SCM | | | | IAmb | IAmb | 04 26 55.2 | |
| | comp=Z,15nm,0.7s | | | | | | |
| MSU | Marysvale | 83.43 | 46 | P | P | 04 26 56.4 | -0.2 |
| J19K | Poorman | 83.56 | 10 | P | P | 04 26 56.1 | -0.3 |
| J19K | | | | IAmb | IAmb | 04 27 02.7 | |
| | comp=Z,16nm,1.4s | | | | | | |
| N25K | Chitina, Valde | 83.70 | 15 | P | P | 04 26 56.6 | -0.6 |
| N25K | | | | IAmb | IAmb | 04 26 57.7 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| HNS | HongShan | 83.82 | 312 | ⇓P | P | 04 26 58.6 | +0.4 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| J20K | Nowinta River | 83.98 | 10 | P | P | 04 26 58.2 | -0.2 |
| J20K | | | | IAmb | IAmb | 04 27 11.0 | |
| | comp=Z,21nm,1.4s | | | | | | |
| LYN | LuoYang | 84.13 | 309 | P | P | 04 27 00.6 | +0.7 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,50nm,0.9s | | | | | | |
| RPSI | Rantau Prapat | 84.18 | 275 | P | P | 04 26 59.8 | -0.8 |
| RPSI | | | | IAmb | IAmb | 04 27 39.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| RND | Reindeer | 84.29 | 13 | P | P | 04 26 59.3 | -0.7 |
| RND | | | | IAmb | IAmb | 04 27 00.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| SRU | San Rafael Swe | 84.85 | 46 | P | P | 04 27 02.4 | -1.1 |
| BCAR | Beaver Creek A | 85.65 | 16 | P | P | 04 27 06.8 | +0.2 |
| IMAR | Indian Mountai | 85.72 | 10 | P | P | 04 27 05.7 | -1.1 |
| TX31 | Lajitas Ar. Si | 85.77 | 57 | P | P | 04 27 08.2 | +0.1 |
| TX31 | | | | IAmb | IAmb | 04 27 10.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| TXAR | Lajitas Array | 85.77 | 57 | P | P | 04 27 08.5 | +0.4 |
| TXAR | Lajitas Array | 85.77 | 57 | P | P | 04 27 09.2 | +1.1 |
| | comp=Z,7.5nm,0.8s,baz=219,slow=6.1,SNR=40 | | | | | | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| MDM | Murphy Dome | 85.79 | 12 | P | P | 04 27 05.6 | -1.6 |
| MDM | | | | IAmb | IAmb | 04 27 26.1 | |
| | comp=Z,20nm,1.5s | | | | | | |
| IL31 | | 85.90 | 13 | P | P | 04 27 06.1 | -1.5 |
| IL31 | | | | IAmb | IAmb | 04 27 07.4 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| ILAR | Eielson Array | 85.90 | 13 | P | P | 04 27 06.7 | -1.0 |
| ILAR | Eielson Array | 85.90 | 13 | P | P | 04 27 06.5 | -1.3 |
| | comp=Z,11nm,1.2s,baz=220,slow=5.0,SNR=21 | | | | | | |
| | comp=Z,11nm,1.2s | | | | | | |
| F19K | Shaleruckik Mo | 85.92 | 8 | P | P | 04 27 06.6 | -1.1 |
| PDAR | Pinedale Array | 87.20 | 43 | P | P | 04 27 13.6 | -1.0 |
| PDAR | Pinedale Array | 87.20 | 43 | P | P | 04 27 14.5 | -0.1 |
| | comp=Z,1.6nm,0.6s,baz=226,slow=3.0,SNR=12 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| HHC | Hu-ho-hao-te | 87.56 | 314 | *e*P | P | 04 27 18.8 | +2.6 |
| HHC | Hu-ho-hao-te | 87.56 | 314 | sP | sP | 04 30 18.8 | -3.7 |
| OZNA | Ozona | 88.41 | 57 | P | P | 04 27 20.0 | -0.4 |
| OZNA | | | | IAmb | IAmb | 04 27 21.4 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 89.22 | 290 | P | P | 04 27 25.0 | +0.7 |
| | comp=Z,3.1nm,0.3s,baz=112,slow=2.0,SNR=7.2 | | | | | | |
| | comp=Z,3.1nm,0.3s | | | | | | |
| PZH | PanZhiHua | 89.48 | 298 | P | P | 04 27 26.3 | +0.8 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| G31M | Satah River | 90.66 | 16 | P | P | 04 27 29.1 | -0.7 |
| G31M | | | | IAmb | IAmb | 04 27 31.3 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| PLPT | Palo Pinto | 91.33 | 56 | P | P | 04 27 32.8 | -0.9 |
| PLPT | | | | IAmb | IAmb | 04 27 34.6 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| INK | Inuvik | 91.89 | 15 | P | P | 04 27 34.1 | -1.4 |
| INK | | | | IAmb | IAmb | 04 28 07.3 | |
| | comp=Z,11nm,1.3s | | | | | | |
| ARCES | ARCESS Array B | 126.46 | 350 | PKP | PKPdf | 04 33 24.4 | -1.6 |
| | comp=Z,1.9nm,0.7s,baz=56,slow=1.5,SNR=7.7 | | | | | | |
| FINES | FINESS Array B | 133.36 | 344 | PKP | PKPdf | 04 33 37.2 | -1.9 |
| | comp=Z,2.2nm,0.7s,baz=24,slow=3.8,SNR=6.2 | | | | | | |
| NOA | NORSAR Array B | 136.50 | 353 | PKP | PKPdf | 04 33 43.3 | -1.8 |
| | comp=Z,1.1nm,0.7s,baz=13,slow=4.0,SNR=3.3 | | | | | | |
| AKASG | Malin Array Be | 140.79 | 333 | PKhKP | PKPpre | 04 33 45.6 | |
| | comp=Z,0.6nm,0.3s,baz=43,slow=4.3,SNR=6.1 | | | | | | |
| EKA | Eskdalemuir Ar | 142.53 | 5 | PKhKP | PKPpre | 04 33 51.0 | |
| | comp=Z,1.5nm,0.7s,baz=325,slow=2.5,SNR=4.7 | | | | | | |
| SORM | Soroca | 143.03 | 330 | ⇓P | PKPab | 04 33 53.5 | -1.5 |
| BEL | Belsk | 143.10 | 340 | *e*PKP | PKPab | 04 33 55.1 | 0.0 |
| MILM | Milestii Mici | 143.65 | 328 | ⇓P | PKPbc | 04 33 56.3 | -1.1 |
| KWP | Kalwaria Pacla | 144.28 | 337 | *e*PKP | PKPbc | 04 33 59.1 | -0.2 |
| OJC | Ojcow | 144.81 | 340 | *e*PKP | PKPdf | 04 34 00.6 | +0.3 |
| BURAR | Bucovina Array | 144.84 | 332 | ⇓P | PKPbc | 04 34 01.4 | +0.2 |
| GHRR | | 144.95 | 329 | ⇑P | PKPab | 04 34 02.2 | -0.2 |
| TESR | Tescani | 145.00 | 330 | ⇑P | PKPdf | 04 34 01.1 | +0.4 |
| KOLS | Kolonicke sedl | 145.01 | 336 | *e*PKP | PKPbc | 04 34 01.4 | -0.2 |
| BRTR | Keskin Array B | 145.01 | 315 | PKPbc | PKPdf | 04 34 00.7 | -0.6 |
| | comp=Z,10nm,0.8s,baz=133,slow=4.6,SNR=22 | | | | | | |
| KIRS | Kirsehir-Merke | 145.17 | 314 | ⇑P | PKPbc | 04 34 02.0 | -0.4 |
| CFR | Carcaliu | 145.19 | 327 | ⇓P | PKPdf | 04 34 00.8 | -0.2 |
| ONER | Baraj Valea Uz | 145.25 | 330 | ⇑P | PKPbc | 04 34 02.5 | +0.2 |
| TPGR | Topolog | 145.25 | 326 | ⇑P | PKPdf | 04 34 01.3 | +0.1 |
| KSP | Ksiaz | 145.28 | 344 | *e*PKP | PKPbc | 04 34 02.3 | 0.0 |
| NIE | Niedzica | 145.32 | 339 | *e*PKP | PKPbc | 04 34 02.6 | +0.1 |
| CRVS | Cervenica-Dubn | 145.34 | 337 | *e*PKP | PKPbc | 04 34 02.5 | 0.0 |
| VRI | Vrincioaia | 145.42 | 329 | ⇓P | PKPbc | 04 34 02.7 | -0.1 |
| PLOR | Plostina | 145.47 | 329 | ⇓P | PKPbc | 04 34 02.4 | -0.7 |
| ASF | Jabal al Asfar | 145.50 | 301 | PKPbc | PKPbc | 04 34 03.3 | -0.3 |
| | comp=Z,8.7nm,0.8s,baz=90,slow=1.0,SNR=10 | | | | | | |
| BMR | Baia Mare | 145.54 | 334 | ⇓P | PKPbc | 04 34 02.7 | -0.4 |
| ANTO | Ankara | 145.57 | 316 | ⇓P | PKPdf | 04 34 02.7 | +0.7 |
| OSTC | Ostas | 145.57 | 344 | *e*PKP | PKPbc | 04 34 03.5 | +0.4 |
| CHVC | Chvalec | 145.58 | 344 | *e*PKP | PKPbc | 04 34 02.8 | -0.4 |
| CLL | Collm | 145.62 | 348 | ⇓*i* PKPbc | PKPbc | 04 34 02.6 | -0.6 |
| | comp=Z,29nm,0.8s | | | | | | |
| CLL | | | | *i* SKPbc | SKiKP | 04 36 46.9 | +0.2 |
| HARR | Harsova | 145.62 | 326 | ⇑P | PKPbc | 04 34 02.9 | -0.5 |
| ARCR | ARCALIA | 145.63 | 332 | ⇓P | PKPbc | 04 34 03.4 | 0.0 |
| TURR | Turia | 145.63 | 330 | ⇓P | PKPbc | 04 34 03.6 | +0.1 |
| OKC | Ostrava-Krasne | 145.66 | 341 | *e*PKP | PKPbc | 04 34 02.9 | -0.5 |
| DPC | Dobruska-Polom | 145.73 | 344 | *e*PKP | PKPbc | 04 34 03.5 | -0.1 |
| BRG | Berggiesshubel | 145.83 | 346 | *e*PKP | PKPbc | 04 34 03.5 | -0.3 |
| BRG | | | | Amp | | 04 34 04.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| LANS | Liptovska Anna | 145.84 | 339 | *e*PKP | PKPbc | 04 34 04.5 | +0.5 |
| KRLC | Kraliky | 145.85 | 343 | *e*PKP | PKPbc | 04 34 03.6 | -0.4 |
| MORC | Moravsky Berou | 145.90 | 342 | *e*PKP | PKPbc | 04 34 03.9 | -0.2 |
| MORC | Moravsky Berou | 145.90 | 342 | ⇑P | PKPdf | 04 34 02.5 | +0.3 |
| DOPR | Dopca | 145.99 | 330 | ⇑P | PKPbc | 04 34 04.8 | +0.3 |
| MLR | Muntele Rosu | 146.07 | 329 | PKPbc | PKPbc | 04 34 03.9 | -1.0 |
| | comp=Z,9.0nm,0.8s,baz=64,slow=5.5,SNR=11 | | | | | | |
| MLR | Muntele Rosu | 146.07 | 329 | ⇓P | PKPdf | 04 34 02.0 | -0.7 |
| CJR | Cluj-Napoca | 146.24 | 333 | ⇓P | PKPbc | 04 34 04.8 | -0.4 |
| MMAI | Mount Meron Ar | 146.46 | 303 | PKPbc | PKPbc | 04 34 05.8 | -0

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **46.27** | **260** | P | P | 04 26 15.7 | -0.5 |
| | 6.7nm,0.9s,baz=97,slow=7.3,SNR=1.3<br>6.7nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **46.32** | **255** | P | P | 04 26 16.8 | +0.1 |
| | 6.1nm,0.6s,baz=91,slow=7.9,SNR=6.6<br>6.1nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.23** | **12** | P | P | 04 30 31.5 | 0.0 |
| | 0.3nm,0.6s,baz=226,slow=4.5,SNR=4.0<br>0.3nm,0.6s | | | | | | |

**DJA 19 04:19:35.9±0.3,8°S±5°×117°E±°, h10km, M4.4/7, MLv4.4/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.46** | **134** | P | Pb | 04 19 45.7 | -0.4 |
| TWSI | | | | S | Sb | 04 19 52.2 | -0.7 |
| **PLAI** | **Plampang** | **1.28** | **109** | P | Pn | 04 19 59.4 | -0.5 |
| PLAI | | | | S | Sg | 04 20 17.1 | 0.0 |
| **SRBI** | **Singaraja** | **1.36** | **284** | P | Pn | 04 20 00.5 | -0.5 |
| SRBI | | | | S | Sg | 04 20 20.1 | +0.2 |
| **JAGI** | **Jajag, Banyuwa** | **2.37** | **269** | P | Pn | 04 20 14.6 | -0.3 |
| **WBSI** | **Waikabubak, Su** | **3.06** | **114** | P | Pn | 04 20 23.9 | -0.5 |
| **BSSI** | **Bau Bau, Buton** | **4.52** | **60** | P | Pn | 04 20 43.1 | -1.3 |
| **EDFI** | **Ende, Flores** | **5.09** | **94** | P | Pn | 04 20 54.0 | +1.5 |

**IDC 19 04:21:09.4±17.0,17°87S×177°82W,h474km±160km, mb3.3/3,mbtmp4.2/3,Error ellipse: s-maj=261.3km s-min=60.2km az=140.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.19** | **259** | P | P | 04 28 43.0 | -0.2 |
| | 1.2nm,0.3s,baz=96,slow=7.4,SNR=9.9<br>1.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **254** | P | P | 04 28 44.3 | 0.0 |
| | 5.7nm,0.6s,baz=87,slow=9.0,SNR=11<br>5.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.72** | **13** | P | P | 04 32 57.0 | 0.0 |
| | 0.4nm,0.6s,baz=226,slow=5.5,SNR=6.1<br>0.4nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.15** | **315** | PKPbc | PKPdf | 04 39 52.3 | -0.4 |
| | 1.0nm,0.8s,baz=48,slow=2.1,SNR=4.4 | | | | | | |
| **GERES** | **GERESS Array B** | **147.71** | **346** | PKPbc | PKPbc | 04 39 59.5 | -0.6 |
| | 0.9nm,0.7s,baz=126,slow=5.0,SNR=4.8 | | | | | | |

*IDC* ***19*** *04:22:20.1±0.6,0.72S×99.88E,h0km,mb4.7/18, mbtmp4.7/19,ML4.5/1,Error ellipse: s-maj=19.0km s-min=14.0km az=68.0*

*MOS* ***19*** *04:22:28.4±0.9,0.68S×99.98E,h79km,mb5.1/20,Error ellipse: s-maj=11.3km s-min=6.9km az=105.8*

*BJI* ***19*** *04:22:29.3±0.0,0.90S×99.79E,h84km,mb4.8/19,Ms5.8/4, Ms7 5.8/5*

*DJA* ***19*** *04:22:30.7±0.4,1°S±3°×10°0E±°,h76km±9km,M5.0/17, mb4.8/4,mB6.5/1,MLv5.0/17,Mw(mB)6.2/1*

*NEIC* ***19*** *04:22:31.3±1.8,0.71S±0.07°×99.79E±0.07,h81km±6km, mb5.2/40,Error ellipse: s-maj=10.8km s-min=9.0km az=222.0*

**ISC 19 04:22:30.5±0.4,0.76S±0.04×99.78E±0.04,h81km,n149, σ1°11/153,mb5.0/51,5C-6D,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDSI** | **Padang** | **0.70** | **103** | P | **Pn** | **04 22 46.4** | **+0.2** |
| **SISI** | **Saibi** | **0.89** | **231** | P | **Pn** | 04 22 48.5 | +0.2 |
| SISI | | | | S | **Sn** | **04 23 02.4** | **+0.8** |
| **BKNI** | **Bangkinang** | **1.66** | **49** | Pn | **Pn** | 04 22 58.3 | +0.4 |
| **BKNI** | **Bangkinang** | **1.66** | **49** | P | **Pn** | **04 22 58.5** | **+0.6** |
| **PBSI** | **Pulau Batu** | **1.66** | **295** | P | **Pn** | **04 22 57.7** | **-0.2** |
| **PPSI** | **Pulau Pagai** | **2.00** | **173** | P | **Pn** | **04 23 02.6** | **+0.1** |
| **GSI** | **Gunungsitoli** | **3.01** | **313** | | **Pn** | **04 23 15.8** | **-0.2** |
| **GSI** | **Gunungsitoli** | **3.01** | **313** | P | **Pn** | **04 23 15.7** | **-0.3** |
| **RPSI** | **Rantau Prapat** | **3.54** | **346** | Pn | **Pn** | **04 23 23.3** | **+0.1** |
| **PSI** | **Prapat** | **3.64** | **346** | P | **Pn** | **04 23 23.3** | **-1.4** |
| **SNSI** | **Sinabang, Aceh** | **4.67** | **312** | P | **Pn** | **04 23 38.0** | **-0.6** |
| **KCSI** | **Kotacane, Aceh** | **4.70** | **335** | P | **Pn** | **04 23 38.9** | **-0.2** |
| **MNAI** | **Manna** | **4.78** | **139** | | **Pn** | **04 23 41.2** | **+1.1** |
| **MNAI** | **Manna** | **4.78** | **139** | P | **Pn** | **04 23 40.8** | **+0.7** |
| **TPRI** | **Tanjung Pinang** | **5.03** | **71** | P | **Pn** | **04 23 44.2** | **+0.7** |
| | 115nm,0.6s,49µm | | | | | | |
| **IPM** | **Ipoh** | **5.35** | **13** | Pn | **Pn** | **04 23 48.8** | **+0.9** |
| **MLSI** | **Meulaboh, Aceh** | **6.03** | **326** | P | **Pn** | **04 23 56.7** | **-0.4** |
| **KULM** | **Kulim** | **6.07** | **8** | Pn | **Pn** | **04 23 58.4** | **+0.7** |
| **KKM** | **Kota Kinabalu** | **17.74** | **67** | P | **Pn** | **04 26 33.0** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **19.11** | **358** | P | **P** | **04 26 46.1** | **-1.0** |
| | 0.6nm,0.3s,baz=103,slow=15,SNR=6.1<br>3.1nm,0.7s | | | | | | |
| **MYLDM** | **Lahad Datu** | **19.61** | **72** | P | **P** | **04 26 52.9** | **+0.4** |
| **KAPI** | **Kappang** | **20.38** | **102** | P | **P** | **04 27 01.4** | **+0.5** |
| **KAPI** | **Kappang** | **20.38** | **102** | P | **P** | **04 27 00.2** | **-0.7** |
| | 92nm,1.3s,baz=255,slow=12,SNR=5.1 | | | | | | |
| **KAPI** | **Kappang** | **20.38** | **102** | P | **P** | **04 27 01.4** | **+0.5** |
| **PALK** | **Pallekele** | **20.64** | **293** | P | **P** | **04 27 05.8** | **+2.0** |
| | 42nm,1.0s,baz=214,slow=10.0,SNR=8.3 | | | | | | |
| **PALK** | **Pallekele** | **20.64** | **293** | P | **P** | **04 27 05.9** | **+2.2** |
| **TOLI2** | **Tolitoli** | **21.08** | **85** | P | **P** | **04 27 09.1** | **+0.6** |
| **LUWI** | **Luwuk** | **22.99** | **91** | P | **P** | **04 27 29.5** | **+0.8** |
| **PZH** | **PanZhiHua** | **27.17** | **4** | P | **P** | **04 28 10.8** | **+4.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **SHL** | **Shillong** | **27.26** | **344** | P | **P** | **04 28 07.1** | **-0.4** |
| SHL | | | | IAmb | IAmb | 04 28 10.0 | |
| | comp=Z,110nm,1.9s | | | | | | |
| **SHL** | **Shillong** | **27.26** | **344** | P | **P** | **04 28 07.1** | **-0.4** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,110nm,1.9s | | | | | | |
| **HYB** | **Hyderabad** | **27.63** | **312** | *e*P | **P** | **04 28 10.0** | **-0.8** |
| **YULB** | **Yu-li** | **31.84** | **40** | P | **P** | **04 28 48.5** | **+0.6** |
| **FAKI** | **Fak Fak** | **32.52** | **94** | P | **P** | **04 28 53.2** | **-0.8** |
| FAKI | | | | IAmb | IAmb | 04 28 55.4 | |
| | comp=Z,110nm,1.5s | | | | | | |
| **YHNB** | **Yeheng** | **32.82** | **38** | P | **P** | **04 28 55.1** | **-1.4** |
| YHNB | | | | IAmb | IAmb | 04 29 24.1 | |
| | comp=Z,96nm,1.8s | | | | | | |
| **LYN** | **LuoYang** | **37.09** | **17** | P | **P** | **04 29 31.8** | **-1.2** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,40nm,0.5s | | | | | | |
| **NJ2** | **Nanjing** | **37.30** | **27** | *e*P | **P** | **04 29 38.4** | **+3.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **38.79** | **121** | P | **P** | **04 29 46.1** | **-1.5** |
| **WRA** | **Warramunga Arr** | **38.81** | **122** | P | **P** | **04 29 45.8** | **-2.1** |
| **WRA** | **Warramunga Arr** | **38.81** | **122** | P | **P** | **04 29 46.5** | **-1.4** |
| | comp=Z,10nm,0.7s,baz=303,slow=9.0,SNR=17 | | | | | | |
| WRA | | | | PcP | **PcP** | **04 31 57.5** | **-0.3** |
| | comp=Z,1.3nm,0.7s,baz=315,slow=2.6,SNR=1.5<br>comp=Z,10nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **38.81** | **122** | *e*P | **P** | **04 29 45.7** | **-2.1** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **38.83** | **122** | P | **P** | **04 29 46.3** | **-1.6** |
| **WR0** | **Warramunga Arr** | **38.99** | **122** | P | **P** | **04 29 47.5** | **-1.8** |
| **FORT** | **Forrest** | **40.13** | **141** | P | **P** | **04 29 59.8** | **+1.2** |
| **ASAR** | **Alice Springs** | **40.16** | **127** | P | **P** | **04 29 58.1** | **-0.9** |
| | comp=Z,5.0nm,0.6s,baz=299,slow=7.3,SNR=20 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 32 02.5** | **+0.5** |
| | comp=Z,2.1nm,0.6s,baz=311,slow=2.1,SNR=4.5<br>comp=Z,5.0nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **40.16** | **127** | P | **P** | **04 29 58.2** | **-0.8** |
| AS31 | | | | IAmb | IAmb | 04 30 05.2 | |
| | comp=Z,52nm,1.9s | | | | | | |
| **HNS** | **HongShan** | **40.41** | **18** | *e*P | **P** | **04 30 00.0** | **-0.7** |
| **BTO** | **Baotou** | **42.22** | **12** | *e*P | P | 04 30 21.8 | +6.2 |
| BTO | | | | pP | pP | 04 30 37.4 | +2.2 |
| BTO | | | | sP | sP | 04 30 48.9 | +4.5 |
| BTO | | | | PP | **PP** | **04 31 58.9** | **+4.0** |
| BTO | | | | SS | SS | 04 39 32.4 | -8.8 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,22nm,0.5s | | | | | | |
| **NIL** | **Nilore** | **42.35** | **326** | P | **P** | **04 30 16.9** | **+0.1** |
| **HHC** | **Hu-ho-hao-te** | **42.78** | **13** | *e*P | **P** | **04 30 22.4** | **+2.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| **JNU** | **Nakatsue** | **44.65** | **38** | P | **P** | **04 30 34.6** | **-0.7** |
| JNU | | | | IAmb | IAmb | 04 30 36.2 | |
| | comp=Z,56nm,1.0s | | | | | | |
| **WMQ** | **Urumqi** | **45.68** | **348** | *e*P | **P** | **04 30 45.3** | **+2.0** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,29nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **46.08** | **31** | P | **P** | **04 30 45.2** | **-1.2** |
| | comp=Z,7.7nm,0.6s,baz=222,slow=7.9,SNR=39<br>comp=Z,7.7nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **46.08** | **31** | *e*P | **P** | **04 30 45.5** | **-0.9** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **KS19** | **Wonju Array Si** | **46.08** | **31** | P | **P** | **04 30 44.8** | **-1.7** |
| **JMN** | **Monobe** | **46.94** | **40** | P | **P** | **04 30 52.6** | **-0.7** |
| JMN | | | | IAmb | IAmb | 04 30 55.0 | |
| | comp=Z,35nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **47.91** | **102** | P | **P** | **04 31 00.6** | **-0.5** |
| PMG | | | | IAmb | IAmb | 04 31 14.9 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **47.91** | **102** | P | **P** | **04 31 00.6** | **-0.5** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| **BOOM** | **Boomskoye usch** | **48.12** | **336** | P | **P** | **04 31 02.7** | **+0.2** |
| **BOOM** | **Boomskoye usch** | **48.12** | **336** | P | **P** | **04 31 02.7** | **+0.2** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **SIMJ** | **Simiganj** | **48.36** | **328** | P | **P** | **04 31 04.1** | **-0.3** |
| **SIMJ** | **Simiganj** | **48.36** | **328** | P | **P** | **04 31 04.2** | **-0.3** |
| **ARSB** | **Arslanbob** | **48.43** | **333** | P | **P** | **04 31 04.3** | **-0.5** |
| **ARSB** | **Arslanbob** | **48.43** | **333** | P | **P** | **04 31 04.3** | **-0.5** |
| ARSB | | | | pmax | pmax | | |
| | comp=Z,16nm,1.9s | | | | | | |
| **SONM** | **Songino Array** | **48.74** | **6** | P | **P** | **04 31 06.6** | **-0.5** |
| **SONM** | **Songino Array** | **48.74** | **6** | P | **P** | **04 31 06.2** | **-0.9** |
| | comp=Z,7.0nm,0.6s,baz=189,slow=9.2,SNR=19<br>comp=Z,7.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **48.74** | **6** | *e*P | **P** | **04 31 06.9** | **-0.2** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.84** | **6** | ⇓*e*P | **P** | **04 31 07.4** | **-0.5** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.84** | **6** | P | **P** | **04 31 07.6** | **-0.3** |
| **MK31** | **Makanchi Array** | **49.78** | **344** | P | **P** | **04 31 14.6** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 04 31 16.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **49.78** | **344** | *d*P | **P** | **04 31 15.1** | **+0.2** |
| **MKAR** | **Makanchi Array** | **49.78** | **344** | P | **P** | **04 31 14.8** | **-0.2** |
| **MKAR** | **Makanchi Array** | **49.78** | **344** | P | **P** | **04 31 15.0** | **+0.1** |
| | comp=Z,8.9nm,0.3s,baz=155,slow=8.6,SNR=170<br>comp=Z,8.9nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **49.88** | **344** | P | **P** | **04 31 15.1** | **-0.6** |
| **MAKZ** | **Makanchi** | **49.88** | **344** | P | **P** | **04 31 15.1** | **-0.6** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **MAKZ** | **Makanchi** | **49.88** | **344** | P | **P** | **04 31 16.8** | **+1.1** |
| MAKZ | | | | pP | **pP** | **04 31 37.8** | **+2.1** |
| **STKA** | **Stephens Creek** | **50.14** | **132** | P | **P** | **04 31 17.9** | **0.0** |
| STKA | | | | IAmb | IAmb | 04 31 37.4 | |
| | comp=Z,47nm,1.6s | | | | | | |
| **STKA** | **Stephens Creek** | **50.14** | **132** | P | **P** | **04 31 17.5** | **-0.3** |
| | comp=Z,10nm,0.5s,baz=316,slow=7.3,SNR=14<br>comp=Z,10nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **50.14** | **132** | P | **P** | **04 31 17.9** | **0.0** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,47nm,1.6s | | | | | | |
| **KK31** | **Karatay Array** | **50.96** | **333** | P | **P** | **04 31 24.1** | **+0.2** |
| **KK31** | **Karatay Array** | **50.96** | **333** | P | **P** | **04 31 24.1** | **+0.2** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,13nm,1.6s | | | | | | |
| **KKAR** | **Karatay Array** | **50.96** | **333** | P | **P** | **04 31 24.1** | **+0.3** |
| **KKAR** | **Karatay Array** | **50.96** | **333** | P | **P** | **04 31 24.2** | **+0.3** |
| **DGZ** | **Jazzator, Alta** | **51.38** | **350** | *d*P | **P** | **04 31 27.9** | **+0.9** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,37nm,1.5s | | | | | | |
| **MAJO** | **Matsushiro** | **51.46** | **40** | ⇑*e*P | **P** | **04 31 26.7** | **-1.1** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,19nm,1.9s | | | | | | |
| **MAJO** | **Matsushiro** | **51.46** | **40** | P | **P** | **04 31 27.8** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **51.46** | **40** | P | **P** | **04 31 26.3** | **-1.4** |
| | comp=Z,4.3nm,0.9s,baz=221,slow=6.5,SNR=8.8<br>comp=Z,4.3nm,0.9s | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **51.49** | **40** | *e*P | **P** | **04 31 26.5** | **-1.5** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **BNX** | **BinXian** | **52.34** | **24** | ⇓P | **P** | **04 31 32.8** | **-1.2** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **53.17** | **29** | P | **P** | **04 31 40.4** | **+0.2** |
| USA0B | | | | IAmb | IAmb | 04 31 40.8 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **53.17** | **29** | *d*P | **P** | **04 31 38.7** | **-1.5** |
| **USRK** | **Ussuriysk Ar.** | **53.17** | **29** | P | **P** | **04 31 39.9** | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **53.17** | **29** | P | **P** | **04 31 39.6** | **-0.7** |
| | comp=Z,16nm,0.7s,baz=223,slow=6.3,SNR=24<br>comp=Z,16nm,0.7s | | | | | | |
| **JMM** | **Marumori** | **53.91** | **40** | P | **P** | **04 31 44.9** | **-0.9** |
| JMM | | | | IAmb | IAmb | 04 33 35.0 | |
| | comp=Z,41nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.31** | **343** | P | **P** | **04 31 48.2** | **-0.1** |
| | comp=Z,7.7nm,0.7s,baz=160,slow=7.1,SNR=22<br>comp=Z,7.7nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **54.36** | **344** | P | **P** | **04 31 48.0** | **-0.7** |
| KURK | | | | IAmb | IAmb | 04 31 50.7 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **54.36** | **344** | ⇑*i*P | **P** | **04 31 48.6** | **-0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **54.36** | **344** | P | **P** | **04 31 48.7** | **-0.2** |
| KURK | | | | pP | **pP** | **04 32 09.0** | **-0.1** |
| KURK | | | | sP | **sP** | **04 32 16.9** | **-1.2** |
| **EIDS** | **Eidsvold** | **55.16** | **121** | P | **P** | **04 31 55.1** | **0.0** |
| **VOI** | **Vohitsoka** | **55.68** | **244** | P | **P** | **04 31 58.8** | **-0.2** |
| VOI | | | | IAmb | IAmb | 04 33 10.0 | |
| | comp=Z,75nm,1.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **55.92** | **349** | P | **P** | **04 31 59.6** | **-0.3** |
| ZAA0 | | | | IAmb | IAmb | 04 32 00.3 | |
| | comp=Z,16nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.92** | **349** | P | **P** | **04 31 59.6** | **-0.3** |
| | comp=Z,18nm,0.5s,baz=164,slow=7.0,SNR=40<br>comp=Z,18nm,0.5s | | | | | | |
| **KRAR** | **Krasnoyarsk** | **56.87** | **355** | ⇑*e*P | **P** | **04 32 06.9** | **+0.3** |
| **KLR** | **Kul'dur** | **56.90** | **24** | P | **P** | **04 32 06.1** | **-1.0** |
| | comp=Z,6.8nm,0.8s,baz=247,slow=6.9,SNR=17<br>comp=Z,6.8nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **56.90** | **24** | ⇑*e*P | **P** | **04 32 06.0** | **-1.0** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **57.20** | **133** | P | **P** | **04 32 07.4** | **-2.1** |
| **CAN** | **Canberra** | **57.20** | **133** | P | **P** | **04 32 07.4** | **-2.1** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,547nm,1.9s | | | | | | |
| **ARMA** | **Armidale** | **57.30** | **126** | P | **P** | **04 32 11.2** | **+0.8** |
| **ERM** | **Erimo** | **57.80** | **37** | P | **P** | **04 32 12.9** | **-0.6** |
| **RAYN** | **Ar Rayn** | **57.95** | **298** | P | **P** | **04 32 15.3** | **+0.4** |
| RAYN | | | | pP | **pP** | **04 32 36.6** | **+1.3** |
| **ASAJ** | **Asahikawa** | **58.72** | **35** | P | **P** | **04 32 19.2** | **-0.7** |
| | comp=Z,2.8nm,0.4s,baz=247,slow=11,SNR=8.3<br>comp=Z,2.8nm,0.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **58.72** | **35** | P | **P** | **04 32 19.8** | **-0.1** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,44nm,0.9s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **58.73** | **35** | P | **P** | **04 32 19.8** | **-0.1** |
| **ZEA** | **Zeya** | **58.91** | **19** | *e*P | **P** | **04 32 19.7** | **-1.2** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **BVA0** | **Borovoye Array** | **58.95** | **340** | *i*P | **P** | **04 32 19.9** | **-1.4** |
| **BVAR** | **Borovoye Array** | **58.95** | **340** | P | **P** | **04 32 20.6** | **-0.7** |
| | comp=Z,3.4nm,0.5s,baz=128,slow=6.9,SNR=11<br>comp=Z,3.4nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **59.02** | **340** | P | **P** | **04 32 21.2** | **-0.6** |
| BRVK | | | | IAmb | IAmb | 04 33 12.5 | |
| | comp=Z,27nm,1.8s | | | | | | |
| **BRVK** | **Borovoye** | **59.02** | **340** | ⇓*e*P | **P** | **04 32 21.1** | **-0.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| **BRVK** | **Borovoye** | **59.02** | **340** | P | **P** | **04 32 21.0** | **-0.7** |
| **AB31** | **Akbulak array** | **60.46** | **331** | *i*P | **P** | **04 32 31.0** | **-0.7** |
| **ABKAR** | **Akbulak array** | **60.46** | **331** | P | **P** | **04 32 31.1** | **-0.6** |
| **ABKAR** | **Akbulak array** | **60.46** | **331** | P | **P** | **04 32 30.8** | **-0.9** |
| ABKAR | | | | IAmb | IAmb | 04 32 57.8 | |
| | comp=Z,28nm,1.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **60.55** | **32** | ⇑*e*P | **P** | **04 32 31.7** | **-0.7** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **62.52** | **269** | P | **P** | **04 32 48.2** | **+1.6** |
| | comp=Z,1.8nm,0.6s,baz=60,slow=12,SNR=5.3<br>comp=Z,1.8nm,0.6s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **62.52** | **269** | P | **P** | **04 32 48.4** | **+1.8** |
| **SEY** | **Seymchan** | **74.57** | **22** | P | **P** | **04 33 59.7** | **-0.6** |
| | comp=Z,3.8nm,0.6s,baz=228,slow=5.2,SNR=8.7 | | | | | | |
| **SEY** | **Seymchan** | **74.57** | **22** | *i*P | **P** | **04 34 00.0** | **-0.3** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,12nm,1.9s | | | | | | |
| **LBTB** | **Lobatse** | **75.36** | **244** | P | **P** | **04 34 07.3** | **+1.5** |
| **LBTB** | **Lobatse** | **75.36** | **244** | P | **P** | **04 34 07.4** | **+1.5** |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,21nm,1.3s | | | | | | |
| **BOSA** | **Boshof** | **76.06** | **241** | P | **P** | **04 34 10.7** | **+0.8** |
| BOSA | | | | IAmb | IAmb | 04 34 17.0 | |
| | comp=Z,77nm,1.9s | | | | | | |
| **BOSA** | **Boshof** | **76.06** | **241** | P | **P** | **04 34 11.1** | **+1.3** |
| | comp=Z,3.2nm,0.7s,baz=83,slow=5.3,SNR=8.9<br>comp=Z,3.2nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **76.06** | **241** | P | **P** | **04 34 10.7** | **+0.8** |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,77nm,2.0s | | | | | | |
| **FIA1** | **FINESS Array S** | **82.92** | **332** | P | **P** | **04 34 46.7** | **+0.5** |
| **FINES** | **FINESS Array B** | **82.92** | **332** | P | **P** | **04 34 46.2** | **0.0** |
| | comp=Z,4.1nm,0.9s,baz=106,slow=7.0,SNR=6.5<br>comp=Z,4.1nm,0.9s | | | | | | |
| **AMKA** | **Amchitka** | **84.05** | **38** | P | **P** | **04 34 50.8** | **-1.3** |
| **ARCES** | **ARCESS Array B** | **85.24** | **340** | P | **P** | **04 34 57.5** | **-0.4** |
| | comp=Z,1.8nm,0.5s,baz=100,slow=5.0,SNR=19<br>comp=Z,1.8nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.24** | **340** | *e*P | **P** | **04 34 57.8** | **0.0** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **CLL** | **Collm** | **88.57** | **321** | *e*pP | pP | 04 35 38.0 | +1.9 |
| **H19K** | **Roundabout Mou** | **96.38** | **24** | P | **P** | **04 35 50.1** | **0.0** |
| **P40A** | **Paris** | **139.93** | **14** | PKPdf | **PKPdf** | **04 41 47.3** | **-2.5** |
| **UTMT** | **University of** | **143.70** | **12** | PKPdf | PKPbc | 04 41 55.5 | +1.3 |
| **BDFB** | **Brasilia** | **144.25** | **242** | PKP | PKPbc | 04 41 57.9 | +1.2 |
| | comp=Z,1.5nm,0.5s,baz=133,slow=7.2,SNR=3.7 | | | | | | |
| **CPUP** | **Villa Florida** | **145.17** | **218** | PKPbc | **PKPbc** | **04 41 57.9** | **-1.3** |
| | comp=Z,2.1nm,0.8s,baz=142,slow=5.5,SNR=1.7 | | | | | | |
| **CPCT** | **Cooper Cave** | **145.25** | **6** | | **PKPbc** | **04 41 57.4** | **-1.8** |
| **BG3** | **Lake Jocassee** | **145.85** | **4** | PKPdf | **PKPdf** | **04 41 59.7** | **-0.8** |
| **X48A** | **Hartselle** | **145.88** | **10** | PKPdf | **PKPdf** | **04 41 58.9** | **-1.6** |
| **FPAL** | **Fort Paine** | **146.02** | **8** | PKPdf | **PKPdf** | **04 42 00.1** | **-0.7** |
| **X51A** | **Calhoun** | **146.09** | **7** | PKPdf | **PKPdf** | **04 42 00.2** | **-0.6** |
| **Y52A** | **Lilburn** | **146.87** | **6** | | **PKPdf** | **04 42 03.5** | **+1.3** |

**JMA 19 04:23:51.5±0.2,30°N±1°×14°0E±°, h380km, MV3.8/11, NEAR TORISHIMA IS,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **3.17** | **139** | *e*P | Pn | 04 24 54.8 | +0.2 |
| CBIJ | | | | *e*S | S | 04 25 44.4 | -1.2 |
| **JHH2** | **Haha-jima-NKT2** | **3.53** | **144** | *e*S | S | 04 25 50.2 | -1.4 |
| **JHJ2** | **Mitsune** | **3.57** | **359** | *e*P | Pn | 04 24 58.6 | +0.6 |
| **BSO1** | **Boso 1** | **5.19** | **10** | *e*P | Pn | 04 25 15.1 | +1.3 |
| BSO1 | | | | *e*S | S | 04 26 19.4 | -1.5 |
| **JIE** | **Ise** | **5.54** | **332** | *e*P | Pn | 04 25 19.4 | +1.2 |
| **JTNC** | **Tanabenakahech** | **5.61** | **321** | *e*P | Pn | 04 25 19.1 | +0.2 |
| **JOD2** | **Odawara 2** | **5.75** | **354** | *e*P | Pn | 04 25 20.6 | +0.1 |
| **JRY** | **Ryogami san** | **6.52** | **353** | *e*P | Pn | 04 25 27.7 | -1.4 |
| **JHS** | **Saijyo** | **7.90** | **315** | *e*P | Pn | 04 25 44.9 | 0.0 |
| **JMK** | **Ichinoseki** | **9.46** | **6** | *e*P | P | 04 26 04.6 | +1.2 |

*IDC* ***19*** *04:24:13.6±4.3,16°20S×178°06W,h0km,mb4.5/3, mbtmp4.5/3,Error ellipse: s-maj=199.5km s-min=37.4km az=141.0*

*NEIC* ***19*** *04:25:09.4±1.7,17°9S±0°1×177°9W±0°1,h597km±8km, mb4.7/47,Error ellipse: s-maj=19.7km s-min=14.9km az=160.0*

**ISC 19 04:25:09.2±0.6,17°98S±0°09×177°91W±0°09,h590km, n89,σ1°12/88,mb4.6/33,4C-2D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.85** | **273** | P | **P** | **04 26 35.3** | **+2.3** |
| **AFI** | **Afiamalu** | **7.16** | **56** | P | **P** | **04 26 59.6** | **-0.8** |
| **NIUE** | **Niue** | **7.65** | **99** | P | **P** | **04 27 04.9** | **+0.1** |
| **GLKZ** | **Green Lake** | **11.23** | **180** | S | **S** | **04 29 41.7** | **-2.2** |
| **LIFNC** | **LIFOU** | **14.28** | **256** | P | **P** | **04 28 09.3** | **-1.7** |
| **PINNC** | **Pines Island,** | **14.49** | **249** | P | **P** | **04 28 12.2** | **-0.6** |
| **DZM** | **Mont Dzumac** | **15.25** | **252** | P | **P** | **04 28 19.2** | **-0.9** |
| **KOUNC** | **Koumac, New Ca** | **17.00** | **258** | P | **P** | **04 28 37.0** | **+0.8** |
| KOUNC | | | | IAmb | IAmb | 04 28 51.9 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **GRZ** | **Great Barrier** | **19.12** | **197** | P | **P** | **04 28 57.1** | **+1.8** |
| **KUZ** | **Kuaotunu** | **19.52** | **195** | P | **P** | **04 29 00.8** | **+1.9** |
| **WIAZ** | **Waiheke Island** | **19.72** | **197** | P | **P** | **04 29 02.9** | **+2.2** |
| **MBAZ** | **Motutapu North** | **19.76** | **197** | P | **P** | **04 29 01.9** | **+0.8** |
| **MXZ** | **Matakaoa Point** | **19.79** | **189** | P | **P** | **04 29 00.7** | **-0.6** |
| **ETAZ** | **East Tamaki Re** | **19.92** | **197** | P | **P** | **04 29 05.2** | **+2.6** |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **45.23** | **254** | P | **P** | **04 32 34.9** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 04 32 36.2 | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.23** | **254** | P | **P** | **04 32 34.4** | **-0.9** |
| **ASAR** | **Alice Springs** | **45.23** | **254** | P | **P** | **04 32 35.2** | **0.0** |
| | comp=Z,19nm,0.6s,baz=87,slow=8.8,SNR=52 | | | | | | |
| | comp=Z,19nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.40** | **245** | P | **P** | **04 33 12.4** | **-1.2** |
| FORT | | | | IAmb | IAmb | 04 33 29.9 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.48** | **261** | P | **P** | **04 33 35.5** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **58.35** | **255** | P | **P** | **04 34 08.6** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **58.35** | **255** | P | **P** | **04 34 08.5** | **-0.8** |
| **MBWA** | **Marble Bar** | **58.51** | **256** | P | **P** | **04 34 09.2** | **-1.2** |
| **CASY** | **Casey** | **66.27** | **205** | P | **P** | **04 34 59.9** | **+0.3** |
| **QSPA** | **South Pole Qui** | **72.07** | **180** | P | **P** | **04 35 35.6** | **+1.2** |
| QSPA | | | | IAmb | IAmb | 04 35 36.3 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **SSLB** | **Suanglung** | **72.67** | **303** | P | **P** | **04 35 37.0** | **-1.4** |
| SSLB | | | | IAmb | IAmb | 04 35 37.6 | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **78.35** | **309** | *e*P | **P** | **04 36 10.0** | **+0.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **SMAI** | **San Martin Ant** | **80.92** | **159** | P | **P** | **04 36 24.4** | **+2.0** |
| SMAI | | | | IAmb | IAmb | 04 36 24.9 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.05** | **8** | P | **P** | **04 36 23.3** | **+0.2** |
| K15K | | | | IAmb | IAmb | 04 36 31.0 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **L18K** | **Granite Mounta** | **81.69** | **10** | P | **P** | **04 36 26.6** | **+0.2** |
| L18K | | | | IAmb | IAmb | 04 36 38.9 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **BELA** | **Belgrano 2** | **82.03** | **173** | P | **P** | **04 36 27.9** | **-0.2** |
| BELA | | | | IAmb | IAmb | 04 36 37.2 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **J17K** | **VABM Dome** | **82.44** | **8** | P | **P** | **04 36 30.1** | **0.0** |
| **J19K** | **Poorman** | **83.52** | **10** | P | **P** | **04 36 35.2** | **-0.3** |
| **N25K** | **Chitina, Valde** | **83.65** | **15** | P | **P** | **04 36 35.0** | **-1.4** |
| N25K | | | | IAmb | IAmb | 04 36 36.9 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **GLB** | **Gilahina Butte** | **83.71** | **16** | P | **P** | **04 36 35.7** | **-0.9** |
| **J20K** | **Nowinta River** | **83.94** | **10** | P | **P** | **04 36 37.9** | **+0.4** |
| **P29M** | **Windy Craggy** | **83.96** | **19** | P | **P** | **04 36 37.5** | **-0.4** |
| **RND** | **Reindeer** | **84.24** | **13** | P | **P** | **04 36 38.7** | **-0.5** |
| **CCB** | **Clear Creek Bu** | **85.55** | **13** | P | **P** | **04 36 44.3** | **-1.1** |
| **ILAR** | **Eielson Array** | **85.85** | **13** | P | **P** | **04 36 45.8** | **-1.0** |
| | comp=Z,0.5nm,0.4s,baz=225,slow=4.5,SNR=4.2 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.66** | **314** | *e*P | **P** | **04 36 57.0** | **+0.9** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,25nm,0.5s | | | | | | |
| **ELIB** | **Princess Elisa** | **89.14** | **186** | *d*P | **P** | **04 37 02.6** | **+0.2** |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **89.61** | **298** | P | **P** | **04 37 05.0** | **-0.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.23** | **180** | ⇑P | **P** | **04 37 07.6** | **+0.1** |
| | comp=Z,108nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.51** | **178** | ⇑P | **P** | **04 37 08.9** | **+0.2** |
| | comp=Z,30nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.64** | **176** | ⇓P | **P** | **04 37 09.7** | **+0.4** |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.08** | **177** | ⇑P | **P** | **04 37 12.2** | **+0.9** |
| | comp=Z,4.6nm,0.7s,baz=194,slow=5.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.31** | **177** | ⇑P | **P** | **04 37 12.9** | **+0.6** |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **CLL** | **Collm** | **145.64** | **348** | *i* PKPbc | **PKPdf** | **04 43 40.2** | **-0.8** |
| | comp=Z,7.0nm,0.8s | | | | | | |

**IDC 19 04:25:11.2±49.0, 16°91S×177°39W, h0km, mb4.7/3, mbtmp4.7/3, MS5.8/5, Error ellipse: s-maj=912.7km s-min=166.0km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **39.96** | **240** | P | P | 04 32 48.0 | +0.4 |
| | 6.7nm,0.6s,baz=100,slow=12,SNR=1.6 | | | | | | |
| | 6.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.78** | **258** | P | P | 04 33 34.8 | -0.2 |
| | 2.6nm,0.5s,baz=95,slow=7.2,SNR=15 | | | | | | |
| WRA | | | | LR | LR | 04 52 25.4 | |
| | comp=Z,20µm,19.8s,baz=98,slow=36 | | | | | | |
| | 2.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.00** | **253** | P | P | 04 33 36.3 | -0.4 |
| | 10nm,0.6s,baz=87,slow=8.7,SNR=16 | | | | | | |
| ASAR | | | | LR | LR | 04 52 23.7 | |
| | comp=Z,19µm,20.0s,baz=94,slow=36 | | | | | | |
| | 10nm,0.6s | | | | | | |
| **GUMO** | **Guam** | **48.04** | **307** | LR | LR | 04 51 50.4 | |
| | comp=Z,4µm,21.9s,baz=4.0,slow=33 | | | | | | |
| **PMSA** | **Palmer Station** | **84.34** | **157** | LR | LR | 05 10 10.0 | |
| | comp=Z,4µm,19.9s,baz=188,slow=32 | | | | | | |
| **DLBC** | **Dease Lake** | **84.54** | **23** | LR | LR | 05 08 48.6 | |
| | comp=Z,3µm,21.2s,baz=294,slow=31 | | | | | | |

*BGR **19** 04:28:56.0, 18°.78S×178°.87W, h424km±11km*
*MOS **19** 04:28:57.7±0.9, 16°.92S×178°.11W, h418km, mb6.3/46, Error ellipse: s-maj=7.8km s-min=6.4km az=117.0*
*BJI **19** 04:28:57.9±0.0, 16°.95S×178°.05W, h430km, mb6.1/86, mB6.5/33*
*NEIC **19** 04:28:58.7±1.9, 16°.98S±0°.07×178°.03W±0°.07, h416km±4km, mb6.4/790, Error ellipse: s-maj=11.7km s-min=8.7km az=221.0*
*NOU **19** 04:28:59.3, 17°.02S×177°.99W, h430km, ML6.5/226, Fiji Islands Region*
*IDC **19** 04:28:59.3±0.3, 17°.02S×178°.10W, h424km±2km, mb5.8/32, mbtmp6.5/35, Error ellipse: s-maj=6.2km s-min=6.2km az=80.0*

**ISC 19 04:28:59.0±0.2, 16°.99S±0°.03×178°.03W±0°.03, h425km±1km, h426km:pP-P, n2414, σ1°.27/2687, mb6.4/540, 155C-121D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.82** | **258** | P | **P** | **04 30 13.7** | **+2.7** |
| **MSVF** | **Nonsavu** | **3.82** | **258** | *d* P | **P** | **04 30 14.1** | **+3.1** |
| **AFI** | **Afiamalu** | **6.76** | **64** | P | **P** | **04 30 37.8** | **-3.2** |
| **AFI** | **Afiamalu** | **6.76** | **64** | P | **P** | **04 30 37.8** | **-3.2** |
| **NIUE** | **Niue** | **7.98** | **106** | P | **P** | **04 30 53.5** | **-0.7** |
| **NIUE** | **Niue** | **7.98** | **106** | P | **P** | **04 30 52.5** | **-1.6** |
| **NIUE** | **Niue** | **7.98** | **106** | P | **P** | **04 30 52.6** | **-1.6** |
| | comp=Z,236304µmcomp=Z,54µm,1.0s | | | | | | |
| **FUNA** | **Funafuti** | **8.83** | **342** | P | **P** | **04 31 02.3** | **-1.2** |
| **FUNA** | **Funafuti** | **8.83** | **342** | | **P** | **04 31 01.8** | **-1.7** |
| **RIZ** | **Raoul Island** | **12.20** | **180** | P | **P** | **04 31 40.5** | **+0.2** |
| RIZ | | | | S | **S** | **04 33 54.3** | **+0.8** |
| **RAO** | **Raoul Island** | **12.21** | **180** | P | **P** | **04 31 41.0** | **+0.7** |
| **RAO** | **Raoul Island** | **12.21** | **180** | P | **P** | **04 31 39.6** | **-0.8** |
| **RAO** | **Raoul Island** | **12.21** | **180** | P | **P** | **04 31 41.1** | **+0.7** |
| | comp=Z,2µm,0.3s,baz=91,slow=0.7,SNR=33 | | | | | | |
| RAO | | | | S | **S** | **04 33 54.7** | **+1.0** |
| | comp=Z,9µm,0.6s,baz=81,slow=23,SNR=14 | | | | | | |
| **GLKZ** | **Green Lake** | **12.22** | **180** | P | **P** | **04 31 39.4** | **-1.1** |
| GLKZ | | | | S | **S** | **04 33 54.1** | **+0.2** |
| **RTV** | **Rentapao** | **12.96** | **264** | P | **P** | **04 31 51.5** | **+2.8** |
| **DVP** | **Devils Point** | **13.18** | **265** | P | **P** | **04 31 53.6** | **+2.5** |
| **LIFNC** | **LIFOU** | **14.44** | **253** | P | **P** | **04 32 04.9** | **+0.1** |
| **LIFNC** | **LIFOU** | **14.44** | **253** | P | **P** | **04 32 04.3** | **-0.5** |
| **PINNC** | **Pines Island,** | **14.77** | **245** | P | **P** | **04 32 08.8** | **+0.6** |
| **YATNC** | **Mamie plateau,** | **15.08** | **248** | P | **P** | **04 32 12.0** | **+0.3** |
| **DZM** | **Mont Dzumac** | **15.48** | **248** | P | **P** | **04 32 16.1** | **+0.1** |
| **DZM** | **Mont Dzumac** | **15.48** | **248** | P | **P** | **04 32 16.4** | **+0.3** |
| | comp=Z,1µm,0.9s,baz=80,slow=13,SNR=49 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.62** | **248** | P | **P** | **04 32 18.3** | **+0.9** |
| **KOUNC** | **Koumac, New Ca** | **17.12** | **255** | P | **P** | **04 32 34.0** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **17.12** | **255** | | **P** | **04 32 32.8** | **-0.5** |
| **NFK** | **Norfolk Island** | **17.61** | **225** | P | **P** | **04 32 39.0** | **+0.5** |
| **NFK** | **Norfolk Island** | **17.61** | **225** | P | **P** | **04 32 38.7** | **+0.2** |
| | comp=Z,3µm,1.7s | | | | | | |
| **RAR** | **Rarotonga** | **17.76** | **107** | P | **P** | **04 32 40.8** | **+0.6** |
| **RAR** | **Rarotonga** | **17.76** | **107** | P | **P** | **04 32 39.8** | **-0.4** |
| **RAR** | **Rarotonga** | **17.76** | **107** | P | **P** | **04 32 40.7** | **+0.6** |
| | comp=Z,3µm,1.2s,baz=264,slow=6.7,SNR=123 | | | | | | |
| **OUZ** | **Omahuta** | **19.64** | **201** | P | **P** | **04 32 59.7** | **+1.2** |
| **OUZ** | **Omahuta** | **19.64** | **201** | P | **P** | **04 32 59.4** | **+0.9** |
| **WCZ** | **Waipu Caves** | **20.06** | **198** | P | **P** | **04 33 04.6** | **+2.4** |
| **TARA** | **Tarawa** | **20.29** | **333** | P | **P** | **04 33 03.8** | **-0.9** |
| **KUZ** | **Kuaotunu** | **20.45** | **194** | P | **P** | **04 33 06.2** | **+0.4** |
| **KUZ** | **Kuaotunu** | **20.45** | **194** | P | **P** | **04 33 05.7** | **-0.1** |
| **ABAZ** | **Army Bay** | **20.54** | **197** | P | **P** | **04 33 09.6** | **+2.9** |
| **WIAZ** | **Waiheke Island** | **20.64** | **196** | P | **P** | **04 33 09.4** | **+1.9** |
| **MXZ** | **Matakaoa Point** | **20.75** | **188** | P | **P** | **04 33 07.7** | **-0.9** |
| **MXZ** | **Matakaoa Point** | **20.75** | **188** | P | **P** | **04 33 08.2** | **-0.4** |
| **HBAZ** | **Herne Bay Bore** | **20.80** | **197** | P | **P** | **04 33 11.1** | **+2.1** |
| **ETAZ** | **East Tamaki Re** | **20.84** | **196** | P | **P** | **04 33 12.0** | **+2.6** |
| **WSRZ** | **White Island S** | **20.89** | **191** | P | **P** | **04 33 12.5** | **+2.6** |
| **WIZ** | **White Island** | **20.89** | **191** | P | **P** | **04 33 09.4** | **-0.5** |
| **WTAZ** | **Waiatarua** | **20.92** | **197** | P | **P** | **04 33 11.9** | **+1.7** |
| **MKAZ** | **Moumakai** | **20.92** | **195** | P | **P** | **04 33 11.6** | **+1.4** |
| **WMGZ** | **Waiomatatini S** | **20.99** | **188** | P | **P** | **04 33 10.3** | **-0.5** |
| WMGZ | | | | S | **S** | **04 36 36.6** | **+0.8** |
| **HAZ** | **Te Kaha** | **21.02** | **189** | P | **P** | **04 33 09.7** | **-1.3** |
| HAZ | | | | S | **S** | **04 36 39.7** | **+3.4** |
| **PKGZ** | **Pakihiroa** | **21.08** | **189** | P | **P** | **04 33 11.1** | **-0.5** |
| PKGZ | | | | S | **S** | **04 36 47.1** | **+10** |
| **RUGZ** | **Raukumara Rang** | **21.24** | **189** | P | **P** | **04 33 11.2** | **-2.0** |
| RUGZ | | | | S | **S** | **04 36 49.3** | **+9.2** |
| **WHRZ** | **Whale Island** | **21.25** | **191** | P | **P** | **04 33 13.5** | **+0.3** |
| **PUZ** | **Puketiti** | **21.26** | **188** | P | **P** | **04 33 13.0** | **-0.3** |
| PUZ | | | | S | **S** | **04 36 36.5** | **-3.7** |
| **TGRZ** | **Tauranga** | **21.27** | **193** | P | **P** | **04 33 14.2** | **+0.9** |
| **OPRZ** | **Ohinepanea** | **21.32** | **192** | P | **P** | **04 33 13.7** | **0.0** |
| **TWGZ** | **Tauwhareparae** | **21.40** | **189** | P | **P** | **04 33 14.2** | **-0.4** |
| **MARZ** | **Manawahe** | **21.43** | **192** | P | **P** | **04 33 15.1** | **+0.3** |
| **TOZ** | **Tahuroa Road** | **21.44** | **194** | | **P** | **04 33 14.5** | **-0.3** |
| **TOZ** | **Tahuroa Road** | **21.44** | **194** | P | **P** | **04 33 16.1** | **+1.3** |
| **LIRZ** | **Lichensteins R** | **21.51** | **192** | P | **P** | **04 33 16.7** | **+1.2** |
| **EDRZ** | **Edgecumbe** | **21.54** | **191** | P | **P** | **04 33 15.3** | **-0.5** |
| **URZ** | **Urewera** | **21.62** | **190** | P | **P** | **04 33 13.4** | **-3.1** |
| **URZ** | **Urewera** | **21.62** | **190** | P | **P** | **04 33 15.2** | **-1.3** |
| | comp=Z,1µm,0.5s,baz=349,slow=1.3,SNR=183 | | | | | | |
| URZ | | | | S | **S** | **04 36 42.0** | **-3.8** |
| | comp=Z,224nm,0.8s,baz=290,slow=17,SNR=6.5 | | | | | | |
| URZ | | | | PKPPKP | **P'P'df** | **05 08 25.3** | **-4.0** |
| | comp=Z,33nm,1.3s,baz=279,slow=1.8,SNR=6.2 | | | | | | |
| | comp=Z,1µm,0.5s | | | | | | |
| **URZ** | **Urewera** | **21.62** | **190** | P | **P** | **04 33 13.9** | **-2.6** |
| URZ | | | | S | **S** | **04 36 47.8** | **+1.9** |
| **MKRZ** | **Makatiti** | **21.62** | **192** | P | **P** | **04 33 18.6** | **+2.0** |
| **MWZ** | **Matawai** | **21.62** | **190** | P | **P** | **04 33 16.3** | **-0.3** |
| **CNGZ** | **Carnagh Statio** | **21.67** | **188** | P | **P** | **04 33 16.3** | **-0.7** |
| **RAGZ** | **Rawiri** | **21.80** | **190** | P | **P** | **04 33 16.8** | **-1.4** |
| **RRRZ** | **Republican Roa** | **21.80** | **192** | P | **P** | **04 33 17.9** | **-0.3** |
| **RTZ** | **Ruatahuna** | **21.99** | **190** | | **P** | **04 33 18.0** | **-2.0** |
| **TLZ** | **Tolley Road** | **22.00** | **194** | P | **P** | **04 33 21.3** | **+1.3** |
| **KUTZ** | **Kaahu Road** | **22.09** | **193** | P | **P** | **04 33 21.6** | **+0.8** |
| **WHTZ** | **Whakaora** | **22.23** | **193** | P | **P** | **04 33 22.6** | **+0.5** |
| **KNZ** | **Kokohu** | **22.27** | **189** | P | **P** | **04 33 21.1** | **-1.3** |
| KNZ | | | | S | **S** | **04 36 53.7** | **-2.5** |
| **WATZ** | **Wairara** | **22.32** | **193** | P | **P** | **04 33 23.6** | **+0.7** |
| **HIZ** | **Hauiti** | **22.34** | **195** | P | **P** | **04 33 23.3** | **+0.3** |
| **HIZ** | **Hauiti** | **22.34** | **195** | P | **P** | **04 33 24.6** | **+1.6** |
| **HIZ** | **Hauiti** | **22.34** | **195** | P | **P** | **04 33 25.5** | **+2.5** |
| **MHGZ** | **Mahia Peninsul** | **22.37** | **188** | P | **P** | **04 33 23.0** | **-0.3** |
| MHGZ | | | | S | **S** | **04 36 58.8** | **+1.0** |
| **WHHZ** | **Waihua** | **22.39** | **190** | P | **P** | **04 33 22.5** | **-1.0** |
| WHHZ | | | | S | **S** | **04 36 54.8** | **-3.4** |
| **HATZ** | **Hinemaiaia** | **22.42** | **192** | P | **P** | **04 33 23.9** | **+0.1** |
| **RATZ** | **Rangitukua** | **22.46** | **193** | P | **P** | **04 33 23.6** | **-0.6** |
| **NMHZ** | **Naumai** | **22.49** | **191** | P | **P** | **04 33 23.4** | **-1.1** |
| **KATZ** | **Kakaramea** | **22.58** | **193** | P | **P** | **04 33 25.4** | **0.0** |
| **BKZ** | **Black Stump Fm** | **22.61** | **191** | P | **P** | **04 33 23.0** | **-2.5** |
| **BKZ** | **Black Stump Fm** | **22.61** | **191** | | **P** | **04 33 23.6** | **-1.9** |
| **BKZ** | **Black Stump Fm** | **22.61** | **191** | P | **P** | **04 33 23.3** | **-2.2** |
| BKZ | | | | S | **S** | **04 36 59.1** | **-2.6** |
| **ARHZ** | **Aropaoanui** | **22.62** | **190** | P | **P** | **04 33 24.5** | **-1.0** |
| ARHZ | | | | S | **S** | **04 37 00.7** | **-1.0** |
| **HNR** | **Honiara** | **22.70** | **287** | P | **P** | **04 33 27.5** | **+0.9** |
| **HNR** | **Honiara** | **22.70** | **287** | P | **P** | **04 33 26.5** | **-0.1** |
| **HNR** | **Honiara** | **22.70** | **287** | P | **P** | **04 33 26.5** | **-0.1** |
| **NTVZ** | **North Tongarir** | **22.71** | **193** | P | **P** | **04 33 26.2** | **-0.3** |
| **KRVZ** | **Karewarewa** | **22.71** | **193** | P | **P** | **04 33 26.1** | **-0.5** |
| **TMVZ** | **Te Maari** | **22.72** | **193** | P | **P** | **04 33 25.8** | **-0.8** |
| **TWVZ** | **Taurewa** | **22.73** | **193** | P | **P** | **04 33 26.2** | **-0.5** |
| **ETVZ** | **East Tongariro** | **22.74** | **193** | P | **P** | **04 33 25.7** | **-1.0** |
| **WTVZ** | **West Tongariro** | **22.74** | **193** | P | **P** | **04 33 25.9** | **-0.9** |
| **NNVZ** | **North Ngauruho** | **22.75** | **193** | P | **P** | **04 33 26.6** | **-0.4** |
| **NGZ** | **Ngauruhoe** | **22.80** | **193** | P | **P** | **04 33 26.6** | **-0.7** |
| **SNVZ** | **South Ngauruho** | **22.80** | **193** | P | **P** | **04 33 26.3** | **-1.1** |
| **COVZ** | **Chateau Observ** | **22.83** | **193** | P | **P** | **04 33 27.5** | **-0.1** |
| **MCHZ** | **McNeill Hill** | **22.84** | **191** | P | **P** | **04 33 26.2** | **-1.4** |
| MCHZ | | | | S | **S** | **04 37 06.8** | **+1.5** |
| **KWHZ** | **Kaweka Forest** | **22.87** | **191** | P | **P** | **04 33 26.5** | **-1.4** |
| KWHZ | | | | S | **S** | **04 37 02.3** | **-3.6** |
| **FWVZ** | **Far West T-bar** | **22.88** | **193** | P | **P** | **04 33 27.6** | **-0.6** |
| **MAVZ** | **Matarangi** | **22.89** | **193** | P | **P** | **04 33 28.2** | **-0.2** |
| **WHVZ** | **Whangaehu Hut** | **22.90** | **193** | P | **P** | **04 33 27.7** | **-0.7** |
| **WNVZ** | **Wahianoa** | **22.94** | **193** | P | **P** | **04 33 27.0** | **-1.7** |
| **MOVZ** | **Moawhango** | **22.99** | **192** | P | **P** | **04 33 27.6** | **-1.3** |
| **MTVZ** | **Mangateitei** | **23.03** | **193** | P | **P** | **04 33 30.2** | **+0.9** |
| **KRHZ** | **Kereru** | **23.10** | **191** | P | **P** | **04 33 27.6** | **-2.3** |
| **KHEZ** | **Kahui Hut** | **23.29** | **196** | P | **P** | **04 33 33.3** | **+1.6** |
| **PNHZ** | **Pukenui** | **23.39** | **191** | P | **P** | **04 33 31.1** | **-1.4** |
| **BFZ** | **Birch Farm** | **24.13** | **191** | P | **P** | **04 33 38.1** | **-1.0** |
| **BFZ** | **Birch Farm** | **24.13** | **191** | P | **P** | **04 33 37.7** | **-1.4** |
| **MRZ** | **Mangatainoka R** | **24.23** | **192** | | **P** | **04 33 38.4** | **-1.3** |
| **MSWZ** | **Moikau Station** | **25.02** | **192** | P | **P** | **04 33 45.9** | **-1.2** |
| **SNZO** | **South Karori** | **25.04** | **193** | P | **P** | **04 33 45.9** | **-1.2** |
| **SNZO** | **South Karori** | **25.04** | **193** | P | **P** | **04 33 45.5** | **-1.6** |
| **TCW** | **Tory Channel** | **25.04** | **194** | P | **P** | **04 33 46.0** | **-1.2** |
| **BHW** | **Baring Head** | **25.09** | **193** | | **P** | **04 33 45.8** | **-1.8** |
| BHW | | | | IAmb | IAmb | 04 33 49.5 | |
| | comp=Z,1µm,0.6s | | | | | | |
| **QRZ** | **Quartz Range** | **25.12** | **197** | P | **P** | **04 33 47.1** | **-0.9** |
| QRZ | | | | IAmb | IAmb | 04 33 53.1 | |
| | comp=Z,885nm,0.6s | | | | | | |
| **PLWZ** | **Palliser** | **25.17** | **192** | P | **P** | **04 33 46.3** | **-2.2** |
| **TKNZ** | **Takaka Hill** | **25.19** | **196** | P | **P** | **04 33 48.4** | **-0.2** |
| **NNZ** | **Nelson** | **25.26** | **195** | P | **P** | **04 33 48.6** | **-0.6** |
| NNZ | | | | IAmb | IAmb | 04 33 52.2 | |
| | comp=Z,763nm,0.6s | | | | | | |
| **TUWZ** | **Tuamarina** | **25.32** | **194** | P | **P** | **04 33 49.1** | **-0.6** |
| **LHI** | **Lord Howe Isla** | **25.33** | **231** | | **P** | **04 33 50.5** | **+0.5** |
| LHI | | | | IAmb | IAmb | 04 33 54.9 | |
| | comp=Z,3µm,1.8s | | | | | | |
| **CMWZ** | **Cape Campbell** | **25.56** | **194** | P | **P** | **04 33 51.2** | **-0.7** |
| **MRNZ** | **Matariki Terra** | **25.59** | **196** | P | **P** | **04 33 50.9** | **-1.2** |
| **THZ** | **Tophouse** | **25.89** | **196** | IAmb | IAmb | 04 33 58.7 | |
| | comp=Z,964nm,0.6s | | | | | | |
| **DSZ** | **Denniston Nort** | **26.18** | **197** | IAmb | IAmb | 04 33 59.0 | |
| | comp=Z,2µm,1.1s | | | | | | |
| **KHZ** | **Kahutara** | **26.35** | **194** | P | **P** | **04 33 57.3** | **-1.5** |
| **KHZ** | **Kahutara** | **26.35** | **194** | | **P** | **04 33 57.0** | **-1.8** |
| KHZ | | | | IAmb | IAmb | 04 34 01.9 | |
| | comp=Z,1µm,0.7s | | | | | | |
| **CTZ** | **Chatham Island** | **26.69** | **178** | P | **P** | **04 34 03.0** | **+1.2** |
| **CTZ** | **Chatham Island** | **26.69** | **178** | P | **P** | **04 34 02.4** | **+0.6** |
| CTZ | | | | IAmb | IAmb | 04 34 05.5 | |
| | comp=Z,1µm,1.2s | | | | | | |
| **LTZ** | **Lake Taylor** | **27.01** | **196** | P | **P** | **04 34 03.2** | **-1.5** |
| **PPT** | **Papeete** | **27.17** | **95** | P | **P** | **04 34 07.0** | **+0.6** |
| | comp=Z,2µm,1.0s,baz=335,slow=2.8,SNR=137 | | | | | | |
| | comp=Z,2µm,1.0s | | | | | | |
| **PPT** | **Papeete** | **27.17** | **95** | P | **P** | **04 34 07.0** | **+0.6** |
| **PPTF** | **Pamatai, Papee** | **27.18** | **96** | P | **P** | **04 34 07.1** | **+0.5** |
| **PPTF** | **Pamatai, Papee** | **27.18** | **96** | P | **P** | **04 34 06.6** | **+0.1** |
| **INZ** | **Inchbonnie** | **27.18** | **197** | IAmb | IAmb | 04 34 07.0 | |
| | comp=Z,2µm,1.1s | | | | | | |
| **XMAS** | **Kiritimati** | **27.75** | **49** | P | **P** | **04 34 11.8** | **+0.2** |
| **XMAS** | **Kiritimati** | **27.75** | **49** | P | **P** | **04 34 11.7** | **+0.2** |
| XMAS | | | | IAmb | IAmb | 04 34 14.2 | |
| | comp=Z,2µm,0.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **28.20** | **197** | P | **P** | **04 34 14.5** | **-0.7** |
| **RPZ** | **Rata Peaks** | **28.20** | **197** | P | **P** | **04 34 14.1** | **-1.1** |
| **RPZ** | **Rata Peaks** | **28.20** | **197** | S | **S** | **04 38 29.9** | **+0.4** |
| | comp=Z,184nm,1.1s,baz=143,slow=17,SNR=3.7 | | | | | | |
| **GC1S** | **Gold Coast 1 S** | **28.46** | **242** | P | **P** | **04 34 17.9** | **+0.2** |
| **AUWSH** | **Wavell State H** | **28.66** | **244** | P | **P** | **04 34 20.0** | **+0.6** |
| **MISM** | **Misima Island** | **28.95** | **279** | P | **P** | **04 34 22.2** | **+0.1** |
| **JCZ** | **Jackson Bay** | **29.21** | **200** | P | **P** | **04 34 23.8** | **-0.3** |
| **ODZ** | **Otahua Downs** | **29.55** | **196** | P | **P** | **04 34 25.9** | **-1.0** |
| **GD1S** | **Gladstone Soft** | **29.62** | **252** | P | **P** | **04 34 27.8** | **0.0** |
| **WKZ** | **Wanaka** | **29.82** | **199** | IAmb | IAmb | 04 34 39.7 | |
| | comp=Z,1µm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **29.93** | **249** | P | **P** | **04 34 29.8** | **-0.8** |
| **EIDS** | **Eidsvold** | **29.93** | **249** | P | **P** | **04 34 29.8** | **-0.8** |
| **EIDS** | **Eidsvold** | **29.93** | **249** | P | **P** | **04 34 29.7** | **-0.8** |
| | comp=Z,619nm,1.1s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **30.18** | **253** | P | **P** | **04 34 32.4** | **-0.3** |
| **MLZ** | **Mavora Lakes** | **30.58** | **199** | IAmb | IAmb | 04 34 38.9 | |
| | comp=Z,2µm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.72** | **239** | P | **P** | **04 34 37.8** | **+0.3** |
| **ARMA** | **Armidale** | **30.72** | **239** | P | **P** | **04 34 37.8** | **+0.3** |
| **ARMA** | **Armidale** | **30.72** | **239** | P | **P** | **04 34 37.4** | **-0.1** |
| | comp=Z,1µm,0.8s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **31.11** | **199** | IAmb | IAmb | 04 34 47.1 | |
| | comp=Z,1µm,0.6s | | | | | | |
| **SYZ** | **Scrubby Hill** | **31.33** | **197** | P | **P** | **04 34 42.0** | **-0.4** |
| **NTLH** | **Newcastle Hard** | **31.54** | **234** | P | **P** | **04 34 44.9** | **+0.5** |
| **AUPHS** | **Peel High Scho** | **31.54** | **238** | P | **P** | **04 34 44.8** | **+0.3** |
| **PYZ** | **Puysegur Point** | **31.76** | **200** | P | **P** | **04 34 46.6** | **+0.5** |
| **PYZ** | **Puysegur Point** | **31.76** | **200** | P | **P** | **04 34 45.4** | **-0.7** |
| PYZ | | | | IAmb | IAmb | 04 34 51.2 | |
| | comp=Z,1µm,0.6s | | | | | | |
| **RABL** | **Rabaul** | **31.87** | **290** | P | **P** | **04 34 46.9** | **-0.6** |
| RABL | | | | IAmb | IAmb | 04 34 54.5 | |
| | comp=Z,2µm,0.8s | | | | | | |
| **RMQ** | **Roma** | **32.19** | **247** | P | **P** | **04 34 50.6** | **+0.5** |
| **RMQ** | **Roma** | **32.19** | **247** | P | **P** | **04 34 50.3** | **+0.2** |
| | comp=Z,212nm,0.7s | | | | | | |
| **RIV** | **Riverview** | **32.33** | **233** | P | **P** | **04 34 51.2** | **+0.1** |
| **RIV** | **Riverview** | **32.33** | **233** | P | **P** | **04 34 51.6** | **+0.4** |
| | comp=Z,1µm,1.3s | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **32.62** | **233** | P | **P** | **04 34 53.9** | **+0.2** |
| **WOLH** | **Wollongong Har** | **32.77** | **232** | P | **P** | **04 34 55.0** | **0.0** |
| **AUAYR** | **Ayr State High** | **32.88** | **260** | P | **P** | **04 34 55.6** | **-0.5** |
| **BULU** | **Kimbe** | **33.00** | **286** | P | **P** | **04 34 58.1** | **+0.9** |
| **PATS** | **Pohnpei** | **33.28** | **313** | P | **P** | **04 34 59.9** | **+0.4** |
| **PATS** | **Pohnpei** | **33.28** | **313** | P | **P** | **04 34 59.6** | **+0.1** |
| | comp=Z,2µm,1.8s | | | | | | |
| **AUUHS** | **Ulladulla High** | **33.47** | **231** | P | **P** | **04 35 00.4** | **-0.5** |
| **TV1H** | **Townsville Har** | **33.47** | **261** | P | **P** | **04 35 00.4** | **-0.8** |
| **AULRC** | **Lightning Ridg** | **33.48** | **242** | P | **P** | **04 35 00.4** | **-0.7** |
| **AUDCS** | **Dubbo College** | **33.73** | **237** | P | **P** | **04 35 02.9** | **-0.3** |
| **KAVG** | **Kavieng** | **33.80** | **292** | P | **P** | **04 35 02.5** | **-1.5** |
| **CTA** | **Charters Tower** | **33.96** | **259** | P | **P** | **04 35 05.1** | **-0.3** |
| **CTA** | **Charters Tower** | **33.96** | **259** | P | **P** | **04 35 04.9** | **-0.4** |
| | comp=Z,31nm,0.8s,baz=86,slow=10,SNR=114 | | | | | | |
| **CTAO** | **Charters Tower** | **33.96** | **259** | P | **P** | **04 35 04.8** | **-0.6** |
| **CTAO** | **Charters Tower** | **33.96** | **259** | P | **P** | **04 35 04.7** | **-0.6** |
| **CTAO** | **Charters Tower** | **33.96** | **259** | P | **P** | **04 35 04.7** | **-0.6** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,462nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **33.96** | **259** | P | **P** | **04 35 04.7** | **-0.7** |
| CTAO | | | | PcP | **PcP** | **04 37 33.0** | **+0.8** |
| CTAO | | | | ScP | **ScP** | **04 40 38.6** | **+2.5** |
| **CNB** | **Canberra Magne** | **34.28** | **231** | P | **P** | **04 35 07.8** | **-0.1** |
| **CNB** | **Canberra Magne** | **34.28** | **231** | P | **P** | **04 35 07.8** | **-0.1** |
| | comp=Z,2µm,1.7s | | | | | | |
| **JOHN** | **Johnston Islan** | **34.54** | **14** | P | **P** | **04 35 10.0** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KHU | **Kahuku** | **42.21** | **32** | IAmb | IAmb | 04 37 42.3 | | | |
| | comp=Z,2µm,1.3s | | | | | | | | |
| HLP | **Hilina Pali** | **42.41** | **33** | P | **P** | **04 36 15.6** | **+0.8** | | |
| MWH | **Moku'aweowe** | **42.42** | **32** | P | **P** | **04 36 15.5** | **+0.2** | | |
| HUH | **Hualalai** | **42.47** | **32** | IAmb | IAmb | 04 36 18.5 | | | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| GHSS | **Government Hou** | **42.52** | **237** | P | **P** | **04 36 15.4** | **+0.1** | | |
| PUH | **Pauahi** | **42.52** | **33** | P | **P** | **04 36 15.9** | **+0.2** | | |
| PUH | | | | IAmb | IAmb | 04 36 18.7 | | | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| BYL | **Byron's Ledge** | **42.53** | **33** | IAmb | IAmb | 04 36 18.9 | | | |
| | comp=Z,3µm,1.9s | | | | | | | | |
| MLH | **Mauna Loa** | **42.54** | **32** | P | **P** | **04 36 16.7** | **+0.8** | | |
| HATHI | **Halema'uma'u T** | **42.54** | **33** | IAmb | IAmb | 04 36 19.0 | | | |
| | comp=Z,3µm,2.0s | | | | | | | | |
| STCH | **Steam Cracks** | **42.58** | **33** | IAmb | IAmb | 04 36 18.4 | | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| PTPS | **Port Pirie** | **42.63** | **239** | P | **P** | **04 36 16.4** | **+0.1** | | |
| POHA | **Pohakuloa** | **42.68** | **32** | P | **P** | **04 36 17.5** | **+0.4** | | |
| POHA | **Pohakuloa** | **42.68** | **32** | P | **P** | **04 36 17.3** | **+0.3** | | |
| POHA | | | | pP | **pP** | **04 37 38.4** | **+0.6** | | |
| POHA | | | | ScP | **ScP** | **04 41 11.1** | **+1.5** | | |
| KEKH | **Kekaha** | **42.68** | **25** | IAmb | IAmb | 04 36 19.0 | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| JOKA | **Jonika Flow** | **42.69** | **33** | IAmb | IAmb | 04 36 19.8 | | | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| HON | **Honolulu** | **42.84** | **28** | P | **P** | **04 36 17.5** | **-0.5** | | |
| HON | **Honolulu** | **42.84** | **28** | P | **P** | **04 36 17.5** | **-0.5** | | |
| HON | | | | pmax | pmax | | | | |
| | comp=Z,887nm,0.9s | | | | | | | | |
| MHA | **Mahukona** | **42.86** | **31** | P | **P** | **04 36 19.1** | **+1.0** | | |
| MHA | **Mahukona** | **42.86** | **31** | P | **P** | **04 36 19.1** | **+1.0** | | |
| KIP | **Kipapa** | **42.92** | **28** | P | **P** | **04 36 18.8** | **+0.1** | | |
| KIP | **Kipapa** | **42.92** | **28** | P | **P** | **04 36 18.7** | **+0.1** | | |
| KIP | **Kipapa** | **42.92** | **28** | P | **P** | **04 36 18.7** | **+0.1** | | |
| KIP | | | | pmax | pmax | | | | |
| | comp=Z,828nm,0.9s | | | | | | | | |
| KIP | **Kipapa** | **42.92** | **28** | P | **P** | **04 36 18.6** | **0.0** | | |
| KIP | | | | pP | **pP** | **04 37 41.5** | **+1.8** | | |
| KIP | | | | ScP | **ScP** | **04 41 13.5** | **+3.3** | | |
| WHYH | **Whyalla** | **42.95** | **240** | P | **P** | **04 36 18.4** | **-0.4** | | |
| JAY | **Jayapura** | **43.01** | **285** | P | **P** | **04 36 20.0** | **+0.4** | | |
| | comp=Z,2µm,1.6s,comp=Z,33µm | | | | | | | | |
| HLK | **Haleakala** | **43.17** | **31** | IAmb | IAmb | 04 36 23.2 | | | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| KHLH | **Kahului Airpor** | **43.20** | **30** | P | **P** | **04 36 21.5** | **+0.7** | | |
| GENI | **Genyem** | **43.48** | **285** | P | **P** | **04 36 24.0** | **+0.8** | | |
| GENI | **Genyem** | **43.48** | **285** | P | **P** | **04 36 24.2** | **+1.0** | | |
| | comp=Z,5µm,0.8s | | | | | | | | |
| OOD | **Oodnadatta** | **43.90** | **247** | P | **P** | **04 36 26.2** | **-0.1** | | |
| BBOO | **Buckleboo** | **44.17** | **240** | P | **P** | **04 36 27.7** | **-0.7** | | |
| BBOO | **Buckleboo** | **44.17** | **240** | IAmb | IAmb | 04 36 32.6 | | | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| BBOO | **Buckleboo** | **44.17** | **240** | P | **P** | **04 36 27.8** | **-0.6** | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| MIDW | **Midway** | **44.94** | **1** | P | **P** | **04 36 33.7** | **-0.6** | | |
| MIDW | **Midway** | **44.94** | **1** | P | **P** | **04 36 33.0** | **-1.2** | | |
| MIDW | | | | IAmb | IAmb | 04 36 35.6 | | | |
| | comp=Z,3µm,1.6s | | | | | | | | |
| WR0 | **Warramunga Arr** | **44.97** | **259** | P | **P** | **04 36 34.1** | **-0.7** | | |
| WB0 | **Warramunga Arr** | **45.12** | **259** | IAmb | IAmb | 04 36 39.7 | | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| WB2 | **Warramunga Arr** | **45.15** | **259** | IAmb | IAmb | 04 36 39.9 | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| WRAB | **Tennant Creek** | **45.15** | **259** | P | **P** | **04 36 36.4** | **+0.2** | | |
| WRAB | | | | IAmb | IAmb | 04 36 39.9 | | | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| WRAB | **Tennant Creek** | **45.15** | **259** | *c* iP | **P** | **04 36 34.6** | **-1.6** | | |
| WRAB | | | | pmax | pmax | | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| WRA | **Warramunga Arr** | **45.16** | **259** | P | **P** | **04 36 35.5** | **-0.9** | | |
| WRA | **Warramunga Arr** | **45.16** | **259** | P | **P** | **04 36 35.4** | **-0.9** | | |
| | comp=Z,941nm,0.7s,baz=94,slow=8.3,SNR=274 | | | | | | | | |
| WRA | | | | ScP | **ScP** | **04 41 21.6** | **+1.9** | | |
| | comp=Z,55nm,0.9s,baz=80,slow=4.4,SNR=4.7 | | | | | | | | |
| WRA | | | | S | **S** | **04 42 41.8** | **-2.0** | | |
| | comp=Z,41nm,0.8s,baz=88,slow=13,SNR=4.5 | | | | | | | | |
| | comp=Z,941nm,0.7s | | | | | | | | |
| WRA | **Warramunga Arr** | **45.16** | **259** | ScP | **PcP** | **04 38 08.8** | **+0.5** | | |
| | comp=Z,248nm,0.9s,baz=90,slow=3.9,SNR=8.1 | | | | | | | | |
| AS01 | **Alice Springs** | **45.35** | **253** | P | **P** | **04 36 37.1** | **-0.7** | | |
| AS31 | **Alice Springs** | **45.39** | **253** | IAmb | IAmb | 04 36 40.7 | | | |
| | comp=Z,1µm,0.8s | | | | | | | | |
| AS31 | **Alice Springs** | **45.39** | **253** | P | **P** | **04 36 37.5** | **-0.6** | | |
| | comp=Z,1µm,0.7s | | | | | | | | |
| ASAR | **Alice Springs** | **45.39** | **253** | P | **P** | **04 36 37.4** | **-0.7** | | |
| ASAR | **Alice Springs** | **45.39** | **253** | P | **P** | **04 36 37.5** | **-0.5** | | |
| | comp=Z,4µm,0.7s,baz=87,slow=7.9,SNR=1277 | | | | | | | | |
| ASAR | | | | ScP | **ScP** | **04 41 22.7** | **+2.0** | | |
| | comp=Z,53nm,1.0s,baz=90,slow=4.2,SNR=2.9 | | | | | | | | |
| ASAR | | | | S | **S** | **04 42 46.4** | **-0.7** | | |
| | comp=Z,186nm,0.8s,baz=87,slow=14,SNR=17 | | | | | | | | |
| | comp=Z,4µm,0.7s | | | | | | | | |
| ASAR | **Alice Springs** | **45.39** | **253** | ScP | **PcP** | **04 38 09.9** | **+0.8** | | |
| | comp=Z,277nm,0.8s,baz=95,slow=4.4,SNR=6.8 | | | | | | | | |
| MULG | **Mulgathing** | **45.53** | **244** | P | **P** | **04 36 38.5** | **-0.5** | | |
| GUMO | **Guam** | **47.60** | **307** | P | **P** | **04 36 55.6** | **+0.7** | | |
| GUMO | **Guam** | **47.60** | **307** | P | **P** | **04 36 55.8** | **+0.9** | | |
| GUMO | | | | IAmb | IAmb | 04 36 58.3 | | | |
| | comp=Z,4µm,1.3s | | | | | | | | |
| GUMO | **Guam** | **47.60** | **307** | P | **P** | **04 36 55.8** | **+0.9** | | |
| GUMO | | | | pmax | pmax | | | | |
| | comp=Z,4µm,1.3s | | | | | | | | |
| GUMO | **Guam** | **47.60** | **307** | P | **P** | **04 36 55.0** | **+0.1** | | |
| GUMO | | | | PcP | **PcP** | **04 38 16.9** | **0.0** | | |
| GUMO | | | | ScP | **ScP** | **04 41 30.7** | **+0.8** | | |
| KDU | **Kakadu** | **47.94** | **268** | P | **P** | **04 36 57.3** | **-0.3** | | |
| KDU | **Kakadu** | **47.94** | **268** | P | **P** | **04 36 57.3** | **-0.3** | | |
| | comp=Z,4µm,0.7s | | | | | | | | |
| KMPI | **Kaimana, Papua** | **49.15** | **280** | P | **P** | **04 37 07.7** | **+1.1** | | |
| | comp=Z,3µm,0.8s,comp=Z,37µm | | | | | | | | |
| MTN | **Manton Dam** | **49.19** | **268** | P | **P** | **04 37 05.9** | **-1.1** | | |
| MTN | **Manton Dam** | **49.19** | **268** | P | **P** | **04 37 06.6** | **-0.4** | | |
| | comp=Z,3µm,0.8s | | | | | | | | |
| DRS | **Darwin Rock St** | **49.50** | **268** | P | **P** | **04 37 08.5** | **-0.7** | | |
| SAUI | **Saumlaki** | **50.15** | **274** | P | **P** | **04 37 15.3** | **+1.2** | | |
| SAUI | **Saumlaki** | **50.15** | **274** | P | **P** | **04 37 14.9** | **+0.8** | | |
| | comp=Z,7µm,1.6s,comp=Z,82µm | | | | | | | | |
| WRKA | **Warakurna** | **50.48** | **251** | P | **P** | **04 37 15.6** | **-0.8** | | |
| WRKA | **Warakurna** | **50.48** | **251** | P | **P** | **04 37 16.2** | **-0.2** | | |
| | comp=Z,7µm,0.8s | | | | | | | | |
| FORT | **Forrest** | **50.73** | **244** | P | **P** | **04 37 16.9** | **-1.2** | | |
| FORT | **Forrest** | **50.73** | **244** | P | **P** | **04 37 17.5** | **-0.7** | | |
| FORT | **Forrest** | **50.73** | **244** | P | **P** | **04 37 17.3** | **-0.8** | | |
| | comp=Z,5µm,0.8s | | | | | | | | |
| FAKI | **Fak Fak** | **50.76** | **280** | P | **P** | **04 37 18.6** | **0.0** | | |
| FAKI | **Fak Fak** | **50.76** | **280** | P | **P** | **04 37 18.0** | **-0.6** | | |
| FAKI | | | | IAmb | IAmb | 04 37 20.3 | | | |
| | comp=Z,2µm,1.5s | | | | | | | | |
| FAKI | **Fak Fak** | **50.76** | **280** | P | **P** | **04 37 18.3** | **-0.3** | | |
| KNRA | **Kununurra** | **50.95** | **263** | IAmb | IAmb | 04 37 21.3 | | | |
| | comp=Z,2µm,0.7s | | | | | | | | |
| KNRA | **Kununurra** | **50.95** | **263** | P | **P** | **04 37 19.5** | **-0.4** | | |
| | comp=Z,3µm,0.8s | | | | | | | | |
| SWI | **Sorong** | **52.39** | **282** | P | **P** | **04 37 31.2** | **+0.7** | | |
| | comp=Z,3µm,1.1s,comp=Z,37µm | | | | | | | | |
| BNDI | **Bandanaira** | **52.47** | **277** | P | **P** | **04 37 31.3** | **+0.2** | | |
| BNDI | **Bandanaira** | **52.47** | **277** | P | **P** | **04 37 31.2** | **+0.2** | | |
| | comp=Z,4µm,1.5s,comp=Z,52µm | | | | | | | | |
| MSAI | **Masohi** | **53.76** | **278** | P | **P** | **04 37 40.2** | **-0.1** | | |
| NLAI | **Namlea** | **55.52** | **278** | P | **P** | **04 37 53.2** | **+0.4** | | |
| | comp=Z,1µm,1.6s,comp=Z,20µm | | | | | | | | |
| LBMI | **Labuha** | **55.99** | **281** | P | **P** | **04 37 57.2** | **+1.1** | | |
| | comp=Z,2µm,1.3s,comp=Z,20µm | | | | | | | | |
| KMBL | **Kambalda** | **56.04** | **243** | P | **P** | **04 37 54.8** | **-1.4** | | |
| KMBL | **Kambalda** | **56.04** | **243** | P | **P** | **04 37 55.2** | **-1.0** | | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| SOEI | **Soe** | **56.44** | **269** | P | **P** | **04 38 00.7** | **+1.4** | | |
| SOEI | **Soe** | **56.44** | **269** | P | **P** | **04 38 00.3** | **+1.0** | | |
| SOEI | **Soe** | **56.44** | **269** | P | **P** | 04 37 53.1 | -6.2 | | |
| SOEI | **Soe** | **56.44** | **269** | P | **P** | **04 38 01.0** | **+1.7** | | |
| TNTI | **Ternate** | **56.61** | **283** | P | **P** | **04 38 00.8** | **+0.4** | | |
| TNTI | **Ternate** | **56.61** | **283** | IAmb | IAmb | 04 38 03.4 | | | |
| | comp=Z,2µm,1.0s | | | | | | | | |
| TNTI | **Ternate** | **56.61** | **283** | P | **P** | **04 38 01.0** | **+0.6** | | |
| | comp=Z,2µm,1.5s,comp=Z,21µm | | | | | | | | |
| DRV | **Dumont d'Urvil** | **56.65** | **199** | P | **P** | **04 38 00.3** | **+0.5** | | |
| BATI | **Baumata** | **56.91** | **269** | P | **P** | **04 38 04.1** | **+1.6** | | |
| | comp=Z,2µm,1.1s,comp=Z,33µm | | | | | | | | |
| SANI | **Sanana** | **56.95** | **279** | P | **P** | **04 38 02.5** | **-0.3** | | |
| SANI | **Sanana** | **56.95** | **279** | P | **P** | 04 37 55.6 | -7.1 | | |
| SANI | **Sanana** | **56.95** | **279** | P | **P** | **04 38 02.4** | **-0.3** | | |
| | comp=Z,2µm,0.9s,comp=Z,18µm | | | | | | | | |
| JCJ | **Chichijima** | **58.40** | **318** | P | **P** | **04 38 14.0** | **+1.6** | | |
| JCJ | **Chichijima** | **58.40** | **318** | IAmb | IAmb | 04 38 14.7 | | | |
| | comp=Z,2µm,1.2s | | | | | | | | |
| PSA00 | **Pilbara Seismi** | **58.49** | **255** | P | **P** | **04 38 12.4** | **-0.9** | | |
| PSA00 | **Pilbara Seismi** | **58.49** | **255** | P | **P** | **04 38 12.2** | **-1.1** | | |
| PSA00 | | | | IAmb | IAmb | 04 38 16.6 | | | |
| | comp=Z,4µm,1.9s | | | | | | | | |
| PSA00 | **Pilbara Seismi** | **58.49** | **255** | P | **P** | **04 38 12.9** | **-0.4** | | |
| | comp=Z,4µm,0.8s | | | | | | | | |
| MMRI | **Maumere** | **58.65** | **270** | P | **P** | **04 38 14.0** | **-0.4** | | |
| MMRI | **Maumere** | **58.65** | **270** | P | **P** | **04 38 14.2** | **-0.2** | | |
| MMRI | **Maumere** | **58.65** | **270** | P | **P** | **04 38 14.4** | **0.0** | | |
| MBWA | **Marble Bar** | **58.65** | **255** | P | **P** | **04 38 13.5** | **-0.8** | | |
| MBWA | **Marble Bar** | **58.65** | **255** | P | **P** | **04 38 13.5** | **-0.8** | | |
| MBWA | **Marble Bar** | **58.65** | **255** | P | **P** | **04 38 13.9** | **-0.4** | | |
| | comp=Z,2µm,1.6s | | | | | | | | |
| MBWA | **Marble Bar** | **58.65** | **255** | P | **P** | **04 38 14.5** | **+0.2** | | |
| MBWA | | | | S | **S** | **04 45 44.8** | **-0.6** | | |
| MBWA | **Marble Bar** | **58.65** | **255** | P | **P** | **04 38 13.7** | **-0.6** | | |
| MEEK | **Meekatharra** | **59.10** | **249** | P | **P** | **04 38 16.2** | **-1.1** | | |
| MEEK | **Meekatharra** | **59.10** | **249** | P | **P** | **04 38 16.6** | **-0.7** | | |
| | comp=Z,2µm,2.1s | | | | | | | | |
| EDFI | **Ende, Flores** | **59.15** | **270** | P | **P** | **04 38 17.6** | **-0.3** | | |
| | comp=Z,3µm,1.1s,comp=Z,36µm | | | | | | | | |
| BBSI | **Bau Bau** | **59.17** | **274** | P | **P** | **04 38 18.8** | **+0.9** | | |
| | comp=Z,1µm,1.0s,comp=Z,28µm | | | | | | | | |
| SGSI | **Sangihe** | **59.38** | **285** | P | **P** | **04 38 19.3** | **0.0** | | |
| | comp=Z,2µm,1.4s,comp=Z,29µm | | | | | | | | |
| AUALB | **St Joseph's Co** | **59.38** | **239** | P | **P** | **04 38 18.6** | **-0.4** | | |
| KLBR | **Kellerberrin** | **59.56** | **243** | P | **P** | **04 38 19.2** | **-1.1** | | |
| KLBR | **Kellerberrin** | **59.56** | **243** | P | **P** | **04 38 19.6** | **-0.7** | | |
| | comp=Z,6µm,0.7s | | | | | | | | |
| KMSI | **Cibinong** | **59.71** | **281** | P | **P** | **04 38 21.5** | **-0.1** | | |
| | comp=Z,3µm,0.8s,comp=Z,29µm | | | | | | | | |
| BASI | **Baing, Sumba** | **59.85** | **268** | P | **P** | **04 38 23.1** | **+0.6** | | |
| | comp=Z,5µm,1.4s | | | | | | | | |
| NWAO | **Narrogin (SRO)** | **59.96** | **241** | P | **P** | **04 38 22.4** | **-0.6** | | |
| NWAO | **Narrogin (SRO)** | **59.96** | **241** | P | **P** | **04 38 22.5** | **-0.5** | | |
| NWAO | **Narrogin (SRO)** | **59.96** | **241** | S | **S** | **04 46 00.9** | **-0.7** | | |
| | comp=Z,18nm,0.7s,baz=343,slow=22,SNR=6.7 | | | | | | | | |
| NWAO | **Narrogin (SRO)** | **59.96** | **241** | P | **P** | **04 38 23.0** | **0.0** | | |
| NWAO | | | | S | **S** | **04 46 01.8** | **+0.2** | | |
| NWAO | **Narrogin (SRO)** | **59.96** | **241** | P | **P** | **04 38 22.5** | **-0.5** | | |
| NWAO | | | | pmax | pmax | | | | |
| | comp=Z,5µm,1.9s | | | | | | | | |
| NWAO | **Narrogin (SRO)** | **59.96** | **241** | P | **P** | **04 38 22.4** | **-0.5** | | |
| NWAO | | | | PcP | **PcP** | **04 39 04.0** | **-0.2** | | |
| RKGY | **Rocky Gully** | **60.14** | **240** | P | **P** | **04 38 24.0** | **-0.2** | | |
| RKGY | **Rocky Gully** | **60.14** | **240** | P | **P** | **04 38 24.2** | **0.0** | | |
| | comp=Z,2µm,0.8s | | | | | | | | |
| LUWI | **Luwuk** | **60.32** | **279** | P | **P** | **04 38 26.3** | **+0.7** | | |
| LUWI | **Luwuk** | **60.32** | **279** | P | **P** | **04 38 26.6** | **+1.0** | | |
| LUWI | **Luwuk** | **60.32** | **279** | P | **P** | 04 38 20.5 | -5.2 | | |
| LUWI | **Luwuk** | **60.32** | **279** | P | **P** | **04 38 26.5** | **+0.9** | | |
| | comp=Z,3µm,1.4s,comp=Z,33µm | | | | | | | | |
| BLDU | **Ballidu** | **60.50** | **244** | P | **P** | **04 38 25.5** | **-1.2** | | |
| BLDU | **Ballidu** | **60.50** | **244** | P | **P** | **04 38 25.8** | **-0.9** | | |
| | comp=Z,2µm,1.4s | | | | | | | | |
| DAV | **Davao City (W)** | **60.65** | **288** | P | **P** | **04 38 28.2** | **+0.4** | | |
| DAV | **Davao City (W)** | **60.65** | **288** | P | **P** | **04 38 27.3** | **-0.5** | | |
| DAV | | | | IAmb | IAmb | 04 38 31.0 | | | |
| | comp=Z,1µm,0.8s | | | | | | | | |
| DAV | **Davao City (W)** | **60.65** | **288** | P | **P** | **04 38 28.5** | **+0.6** | | |
| DAV | | | | S | **S** | **04 46 14.0** | **+3.2** | | |
| GTOI | **Gorontalo** | **60.65** | **281** | P | **P** | **04 38 28.7** | **+0.9** | | |
| MUN | **Mundaring** | **60.86** | **243** | P | **P** | **04 38 28.5** | **-0.5** | | |
| MUN | **Mundaring** | **60.86** | **243** | P | **P** | **04 38 28.6** | **-0.5** | | |
| | comp=Z,1µm,1.3s | | | | | | | | |
| BSSI | **Bau Bau, Buton** | **60.98** | **272** | P | **P** | **04 38 29.8** | **-0.2** | | |
| | comp=Z,2µm,1.2s,comp=Z,30µm | | | | | | | | |
| AUHAR | **St Anne's Scho** | **61.09** | **241** | P | **P** | **04 38 30.6** | **+0.2** | | |
| WBSI | **Waikabubak, Su** | **61.13** | **268** | P | **P** | **04 38 30.9** | **-0.2** | | |
| | comp=Z,1µm,1.5s,comp=Z,25µm | | | | | | | | |
| MORW | **Morawa** | **61.18** | **246** | P | **P** | **04 38 30.1** | **-1.1** | | |
| MORW | **Morawa** | **61.18** | **246** | P | **P** | **04 38 30.2** | **-1.0** | | |
| MORW | | | | IAmb | IAmb | 04 38 31.8 | | | |
| | comp=Z,559nm,0.8s | | | | | | | | |
| MORW | **Morawa** | **61.18** | **246** | P | **P** | **04 38 30.6** | **-0.6** | | |
| | comp=Z,1µm,1.8s | | | | | | | | |
| MTKN | **Mount Kenneth** | **61.23** | **243** | P | **P** | **04 38 32.7** | **+1.2** | | |
| MTKN | **Mount Kenneth** | **61.23** | **243** | P | **P** | **04 38 32.7** | **+1.2** | | |
| | comp=Z,3µm,0.8s | | | | | | | | |
| MRSI | **Marisa** | **61.60** | **280** | P | **P** | **04 38 33.8** | **-0.3** | | |
| | comp=Z,1µm,1.1s | | | | | | | | |
| BNSI | **Bone** | **61.83** | **274** | P | **P** | **04 38 35.9** | **+0.2** | | |
| | comp=Z,3µm,1.2s,comp=Z,30µm | | | | | | | | |
| KAPI | **Kappang** | **61.99** | **273** | P | **P** | **04 38 36.7** | **0.0** | | |
| KAPI | **Kappang** | **61.99** | **273** | P | **P** | **04 38 36.9** | **+0.2** | | |
| KAPI | | | | IAmb | IAmb | 04 38 38.8 | | | |
| | comp=Z,1µm,1.1s | | | | | | | | |
| KAPI | **Kappang** | **61.99** | **273** | P | **P** | **04 38 37.0** | **+0.2** | | |
| | comp=Z,532nm,0.8s,baz=126,slow=3.7,SNR=140 | | | | | | | | |
| KAPI | | | | S | **S** | **04 46 27.8** | **+0.2** | | |
| | comp=Z,35nm,1.1s,baz=176,slow=21,SNR=13 | | | | | | | | |
| | comp=Z,532nm,0.8s | | | | | | | | |
| KAPI | **Kappang** | **61.99** | **273** | P | **P** | **04 38 37.4** | **+0.7** | | |
| KAPI | | | | S | **S** | **04 46 28.7** | **+1.2** | | |
| KAPI | **Kappang** | **61.99** | **273** | *c* iP | **P** | **04 38 37.2** | **+0.5** | | |
| KAPI | | | | pmax | pmax | | | | |
| | comp=Z,2µm,1.1s | | | | | | | | |
| SPSI | **Sidrap Palu** | **62.28** | **274** | P | **P** | **04 38 38.0** | **-0.6** | | |
| | comp=Z,3µm,1.2s | | | | | | | | |
| H01W1 | **Cape Leeuwin H** | **62.46** | **239** | P | **P** | **04 38 40.5** | **+1.3** | | |
| | baz=116,slow=6.5,SNR=59 | | | | | | | | |
| H01W3 | **Cape Leeuwin H** | **62.48** | **239** | P | **P** | **04 38 40.6** | **+1.3** | | |
| | baz=116,slow=6.5,SNR=38 | | | | | | | | |
| H01W2 | **Cape Leeuwin H** | **62.48** | **239** | P | **P** | **04 38 40.8** | **+1.5** | | |
| | baz=116,slow=6.5,SNR=36 | | | | | | | | |
| PLAI | **Plampang** | **62.87** | **269** | P | **P** | **04 38 42.6** | **+0.1** | | |
| | comp=Z,4µm,1.0s | | | | | | | | |
| TOLI2 | **Tolitoli** | **62.90** | **280** | P | **P** | **04 38 42.1** | **-0.6** | | |
| TOLI2 | **Tolitoli** | **62.90** | **280** | P | **P** | **04 38 42.0** | **-0.7** | | |
| GIRL | **Giralia** | **63.51** | **253** | P | **P** | **04 38 47.3** | **+0.8** | | |
| VA02 | **Isla de Pascua** | **63.70** | **112** | P | **P** | **04 38 48.6** | **+0.9** | | |
| TWSI | **Taliwang, Sumb** | **63.75** | **268** | P | **P** | **04 38 48.2** | **+0.1** | | |
| RPN | **Rapa Nui** | **63.80** | **112** | P | **P** | **04 38 49.0** | **+0.7** | | |
| RPN | | | | IAmb | IAmb | 04 38 51.1 | | | |
| | comp=Z,574nm,0.9s | | | | | | | | |
| RPN | **Rapa Nui** | **63.80** | **112** | P | **P** | **04 38 49.0** | **+0.7** | | |
| RPN | | | | pmax | pmax | | | | |
| | comp=Z,574nm,1.0s | | | | | | | | |
| RPN | **Rapa Nui** | **63.80** | **112** | P | **P** | **04 38 50.2** | **+1.9** | | |
| RPN | | | | PcP | **PcP** | **04 39 22.2** | **+2.2** | | |
| JHJ2 | **Mitsune** | **64.05** | **321** | P | **P** | **04 38 50.2** | **+0.5** | | |
| JHJ2 | **Mitsune** | **64.05** | **321** | P | **P** | **04 38 49.5** | **-0.1** | | |
| JHJ | **Hachijo jima 2** | **64.08** | **321** | P | **P** | **04 38 49.8** | **0.0** | | |
| | comp=Z,2µm,0.9s,baz=218,slow=7.7,SNR=34 | | | | | | | | |
| | comp=Z,2µm,0.9s | | | | | | | | |
| JMZ | **Minamidaito 2** | **65.17** | **310** | P | **P** | **04 38 57.2** | **+0.3** | | |
| JMZ | **Minamidaito 2** | **65.17** | **310** | IAmb | IAmb | 04 39 18.7 | | | |
| | comp=Z,1µm,1.1s | | | | | | | | |
| DNP | **Denpasar** | **65.36** | **268** | P | **P** | **04 38 58.8** | **+0.4** | | |
| IGBI | **Denpasar** | **65.39** | **268** | P | **P** | **04 38 58.5** | **-0.1** | | |
| | comp=Z,3µm,1.2s,comp=Z,38µm | | | | | | | | |
| SRBI | **Singaraja** | **65.51** | **269** | P | **P** | **04 38 58.9** | **-0.5** | | |
| | comp=Z,3µm,1.4s | | | | | | | | |
| SMKI | **Samarinda** | **65.78** | **277** | P | **P** | **04 39 03.4** | **+2.3** | | |
| BKB | **Balikpapan** | **65.82** | **276** | P | **P** | **04 39 03.2** | **+1.8** | | |
| BKB | **Balikpapan** | **65.82** | **276** | P | **P** | **04 39 03.9** | **+2.5** | | |
| CCD | **Concordia, Ant** | **65.85** | **194** | P | **P** | **04 39 01.5** | **+0.6** | | |
| CCD | | | | PcP | **PcP** | **04 39 29.6** | **+1.6** | | |
| CCD | | | | pP | **pwP** | **04 40 34.5** | **+1.6** | | |
| JOD2 | **Odawara 2** | **65.99** | **322** | P | **P** | **04 39 01.0** | **-1.0** | | |
| JYT | **Yasato** | **66.03** | **324** | P | **P** | **04 39 02.0** | **-0.2** | | |
| JSG | **Sagara** | **66.11** | **321** | P | **P** | **04 39 02.9** | **+0.2** | | |
| JSG | **Sagara** | **66.11** | **321** | P | **P** | **04 39 02.9** | **+0.2** | | |
| JAGI | **Jajag, Banyuwa** | **66.43** | **268** | P | **P** | **04 39 03.8** | **-1.4** | | |
| JAGI | **Jajag, Banyuwa** | **66.43** | **268** | P | **P** | **04 39 03.8** | **-1.4** | | |
| | comp=Z,3µm,0.9s,comp=Z,31µm | | | | | | | | |
| MYLDM | **Dili Datu** | **66.44** | **284** | P | **P** | **04 39 06.8** | **+1.5** | | |
| JRY | **Ryogami san** | **66.62** | **323** | P | **P** | **04 39 05.5** | **-0.4** | | |
| JMM | **Marumori** | **66.89** | **325** | P | **P** | **04 39 07.0** | **-0.4** | | |
| JMM | **Marumori** | **66.89** | **325** | P | **P** | **04 39 06.7** | **-0.7** | | |
| CASY | **Casey** | **67.12** | **205** | P | **P** | **04 39 08.9** | **+0.4** | | |
| CASY | **Casey** | **67.12** | **205** | P | **P** | **04 39 08.8** | **+0.3** | | |
| JGF | **Kuroka** | **67.24** | **322** | P | **P** | **04 39 08.9** | **-0.9** | | |
| JGF | **Kuroka** | **67.24** | **322** | IAmb | IAmb | 04 39 12.4 | | | |
| | comp=Z,683nm,1.2s | | | | | | | | |
| JGF | **Kuroka** | **67.24** | **322** | P | **P** | **04 39 09.1** | **-0.7** | | |
| INU | **Inuyama** | **67.27** | **321** | P | **P** | **04 39 09.4** | **-0.5** | | |
| INU | **Inuyama** | **67.27** | **321** | P | **P** | **04 39 09.3** | **-0.5** | | |
| INU | | | | PcP | **PcP** | **04 39 34.5** | **+0.4** | | |
| INU | | | | pP | **pP** | **04 40 41.5** | **+1.4** | | |
| MJAR | **Matsushiro Arr** | **67.39** | **323** | P | **P** | **04 39 09.8** | **-0.8** | | |
| | comp=Z,461nm,0.9s,baz=155,slow=5.6,SNR=203 | | | | | | | | |
| MJAR | | | | pP | **pwP** | **04 40 42.7** | **-1.6** | | |
| | comp=Z,49nm,1.2s,baz=142,slow=6.6,SNR=1.3 | | | | | | | | |
| MJAR | | | | S | **S** | **04 47 32.0** | **+0.1** | | |
| | comp=Z,28nm,1.1s,baz=107,slow=16,SNR=16 | | | | | | | | |
| MJAR | | | | PKPPKP | **P'P'df** | **05 07 30.7** | **+0.6** | | |
| | comp=Z,82nm,1.3s,baz=310,slow=3.6,SNR=28 | | | | | | | | |
| | comp=Z,461nm,0.9s | | | | | | | | |
| MAJO | **Matsushiro** | **67.39** | **323** | P | **P** | **04 39 09.7** | **-1.0** | | |
| MAJO | **Matsushiro** | **67.39** | **323** | P | **P** | **04 39 09.9** | **-0.8** | | |
| MAJO | | | | IAmb | IAmb | 04 39 13.2 | | | |
| | comp=Z,632nm,0.9s | | | | | | | | |
| MAJO | **Matsushiro** | **67.39** | **323** | *d* iP | **P** | **04 39 10.0** | **-0.7** | | |
| MAJO | | | | pmax | pmax | | | | |
| | comp=Z,807nm,1.0s | | | | | | | | |
| MAJO | **Matsushiro** | **67.39** | **323** | P | **P** | **04 39 10.0** | **-0.7** | | |
| MAJO | | | | PcP | **PcP** | **04 39 34.8** | **+0.1** | | |
| MAJO | | | | pP | **pP** | **04 40 41.3** | **+0.4** | | |
| MAT | **Matsushiro** | **67.39** | **323** | P | **P** | **04 39 10.0** | **-0.7** | | |
| MJB9 | **Matsu-Tunnel** | **67.40** | **323** | IAmb | IAmb | 04 39 13.2 | | | |
| | comp=Z,636nm,0.9s | | | | | | | | |
| JGN | **Niukaw** | **67.69** | **322** | P | **P** | **04 39 11.9** | **-0.7** | | |
| JOM | **Ohasama** | **67.80** | **327** | P | **P** | **04 39 12.3** | **-0.7** | | |
| JOW | **Kunigami** | **67.92** | **309** | P | **P** | **04 39 14.9** | **+0.8** | | |
| JOW | **Kunigami** | **67.92** | **309** | P | **P** | **04 39 15.1** | **+0.9** | | |
| JOW | | | | IAmb | IAmb | 04 39 17.5 | | | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| JOW | **Kunigami** | **67.92** | **309** | S | **S** | **04 47 39.8** | **+1.4** | | |
| | comp=Z,48nm,0.2s,baz=210,slow=27,SNR=15 | | | | | | | | |
| JYA | **Atsumi** | **68.00** | **325** | P | **P** | **04 39 14.2** | **-0.1** | | |
| AMKA | **Amchitka** | **68.11** | **358** | P | **P** | **04 39 13.6** | **-1.1** | | |
| JMN | **Monobe** | **68.15** | **318** | P | **P** | **04 39 16.0** | **+0.6** | | |
| JMN | **Monobe** | **68.15** | **318** | P | **P** | **04 39 15.9** | **+0.5** | | |
| JMN | | | | IAmb | IAmb | 04 39 19.3 | | | |
| | comp=Z,837nm,1.0s | | | | | | | | |
| JMN | **Monobe** | **68.15** | **318** | P | **P** | **04 39 16.0** | **+0.6** | | |
| JWT | **Wachi** | **68.21** | **320** | P | **P** | **04 39 15.6** | **-0.1** | | |
| JSD | **Sado** | **68.41** | **324** | P | **P** | **04 39 16.5** | **-0.3** | | |
| JSD | **Sado** | **68.41** | **324** | P | **P** | **04 39 16.6** | **-0.2** | | |
| GRJI | **Gresik** | **68.43** | **269** | P | **P** | **04 39 18.1** | **+0.6** | | |
| | comp=Z,3µm,1.2s,comp=Z,40µm | | | | | | | | |
| JAD | **Aida** | **68.75** | **319** | P | **P** | **04 39 19.3** | **+0.3** | | |
| ERM | **Erimo** | **68.78** | **330** | P | **P** | **04 39 19.6** | **+0.6** | | |
| ERM | **Erimo** | **68.78** | **330** | P | **P** | **04 39 19.4** | **+0.4** | | |
| ERM | **Erimo** | **68.78** | **330** | *d* iP | **P** | **04 39 19.1** | **+0.1** | | |
| ERM | | | | pmax | pmax | | | | |
| | comp=Z,285nm,1.1s | | | | | | | | |
| JEM | **Erimo** | **68.78** | **330** | P | **

PET IAmb IAmb 04 41 20.2
comp=Z,1µm,1.7s
**PET Petropavlovsk 72.58 345** *e*P **P** **04 39 40.5 -0.8**
PET *e**PP **pwP** **04 41 15.8 -0.6**
PET *e*S **SKiKP** **04 48 29.9 -0.2**
PET pmax pmax
comp=Z,6µm,4.4s
PET pmax pmax
comp=Z,432nm,1.1s
PET pmax pmax
comp=Z,4µm,14.4s
PET MLR MLR
comp=Z,5µm,20.0s
**PET Petropavlovsk 72.58 345** P **P** **04 39 40.3 -1.0**
comp=Z,531nm,2.3s,comp=Z,12µm
**FALS False Pass 72.63 9** P **P** **04 39 40.4 -1.2**
**FALS False Pass 72.63 9** P **P** **04 39 40.2 -1.3**
baz=195,SNR=9.7
FALS S **SKiKP** **04 48 28.2 -1.9**
baz=195
**YSS Yuzh-Sakhalins 72.76 333** P **P** **04 39 42.8 +0.3**
**YSS Yuzh-Sakhalins 72.76 333** P **P** **04 39 42.6 0.0**
YSS IAmb IAmb 04 39 47.1
comp=Z,635nm,1.0s
**YSS Yuzh-Sakhalins 72.76 333** *ke*P **P** **04 39 43.1 +0.6**
YSS *e**PP **pwP** **04 41 17.4 -0.4**
YSS *e* 04 42 30.0
YSS *e*S **SKiKP** **04 48 27.0 -3.6**
YSS *e* 04 49 13.1
YSS *e*SS **SS** **04 53 20.6 -3.3**
YSS pmax pmax
comp=Z,9µm,3.6s
YSS pmax pmax
comp=N,3µm,3.7s
YSS pmax pmax
comp=E,2µm,2.5s
YSS pmax pmax
comp=Z,540nm,1.1s
YSS smax smax
comp=N,24µm,8.9s
YSS smax smax
comp=E,26µm,10.0s
**PEA0B Petropavlovsk- 72.89 345** IAmb IAmb 04 39 45.9
comp=Z,2µm,1.2s
**PEA0B Petropavlovsk- 72.89 345** *d* iP **P** **04 39 42.6 -0.6**
**PETK Petropavlovsk- 72.89 345** P **P** **04 39 42.5 -0.7**
**PETK Petropavlovsk- 72.89 345** P **P** **04 39 42.6 -0.6**
comp=Z,423nm,0.8s,baz=120,slow=7.4,SNR=147
PETK PKiKP **PKiKP** **04 45 37.2 -0.8**
comp=Z,16nm,1.0s,baz=106,slow=3.3,SNR=6.6
PETK S **S** **04 48 35.1 +1.0**
comp=Z,8.1nm,1.0s,baz=137,slow=16,SNR=2.0
comp=Z,423nm,0.8s
**BBJI Bungbulang 72.91 267** P **P** **04 39 43.1 -1.2**
**KSM Kuching 72.93 277** P **P** **04 39 44.7 +0.4**
**QSPA South Pole Qui 73.06 180** P **P** **04 39 44.4 +0.1**
QSPA IAmb IAmb 04 39 49.0
comp=Z,1µm,0.9s
**QSPA South Pole Qui 73.06 180** P **P** **04 39 44.8 +0.5**
comp=Z,782nm,0.8s,baz=33,slow=2.6,SNR=475
QSPA S **S** **04 48 37.9 +1.8**
comp=Z,27nm,1.0s,baz=43,slow=22,SNR=12
comp=Z,782nm,0.8s
**CHNA Chernabura Isl 73.24 11** P **P** **04 39 44.1 -1.0**
baz=198,SNR=10
CHNA S **S** **04 48 36.0 -1.8**
baz=198
**CNJI Cibinong 73.44 267** P **P** **04 39 46.5 -0.8**
comp=Z,2µm,1.1s,comp=Z,16µm
**SDPT Sand Point 73.57 10** P **P** **04 39 45.7 -1.3**
**SDPT Sand Point 73.57 10** IAmb IAmb 04 39 48.5
comp=Z,630nm,0.8s
**SDPT Sand Point 73.57 10** P **P** **04 39 45.9 -1.1**
baz=198,SNR=12
SDPT S **S** **04 48 39.4 -2.2**
baz=198
**P08K Saint George I 73.65 5** P **P** **04 39 45.8 -1.6**
baz=188,SNR=6.7
P08K S **S** **04 48 40.6 -1.7**
baz=188
P08K S **S** **04 48 40.6 -1.7**
baz=188
**S12K Black Hills 73.66 9** IAmb IAmb 04 39 48.4
comp=Z,1µm,1.5s
**S12K Black Hills 73.66 9** P **P** **04 39 46.3 -1.2**
baz=196,SNR=15
S12K S **S** **04 48 39.2 -3.3**
baz=196
**TJN Taejon 73.99 317** P **P** **04 39 49.8 -0.1**
**TJN Taejon 73.99 317** IAmb IAmb 04 39 52.3
comp=Z,2µm,1.6s
**TJN Taejon 73.99 317** *d* iP **P** **04 39 49.3 -0.6**
**XMI Christmas Isla 74.00 264** P **P** **04 39 50.7 +0.2**
**DBJI Dramaga 74.01 268** P **P** **04 39 50.3 -0.2**
comp=Z,5µm,1.6s
**XMIS Christmas Isla 74.03 264** P **P** **04 39 50.6 -0.1**
**XMIS Christmas Isla 74.03 264** IAmb IAmb 04 39 52.6
comp=Z,1µm,1.0s
**SKJI Sukabumi 74.07 267** P **P** **04 39 50.4 -0.5**
**SPIA Saint Paul Isl 74.17 4** P **P** **04 39 50.4 0.0**
**SPIA Saint Paul Isl 74.17 4** P **P** **04 39 49.7 -0.6**
baz=188,SNR=9.1
SPIA S **S** **04 48 47.2 -0.9**
baz=188
**TNG Tangerang 74.21 268** P **P** **04 39 52.6 +0.9**
comp=Z,4µm,1.5s
TNG P **P** **04 39 52.6 +0.9**
**TEY Ternei 74.22 328** ⇓ *e*P **P** **04 39 50.3 -0.7**
TEY *e* 04 48 49.7
TEY pmax pmax
comp=N,200nm,4.6s
TEY pmax pmax
comp=Z,800nm,5.1s
TEY pmax pmax
comp=E,200nm,5.0s
TEY pmax pmax
comp=Z,140nm,1.5s
TEY pmax pmax
comp=E,50nm,1.3s
TEY pmax pmax
comp=N,40nm,1.4s
TEY pmax pmax
comp=Z,700nm,7.9s
TEY pmax pmax
comp=E,900nm,8.2s
TEY pmax pmax
comp=N,800nm,9.0s
**KSRS Korea Array 74.26 318** P **P** **04 39 51.9 +0.5**
comp=N,214nm,0.9s,baz=129,slow=5.4,SNR=275
KSRS pP **pwP** **04 41 26.4 -0.8**
comp=N,33nm,1.2s,baz=129,slow=1.9,SNR=2.3
KSRS PKiKP **PKiKP** **04 45 40.2 -0.2**
comp=N,4.7nm,0.9s,baz=212,slow=0.8,SNR=5.2
KSRS PKPPKP **P'P'df** **05 07 12.6 -5.7**
comp=N,3.0nm,1.0s,baz=316,slow=2.4,SNR=8.1
comp=N,214nm,0.9s
**KSAR Wonju Array Be 74.28 318** P **P** **04 39 52.2 +0.7**
**KSAR Wonju Array Be 74.28 318** P **P** **04 39 52.2 +0.7**
**KS19 Wonju Array Si 74.32 318** IAmb IAmb 04 39 54.8
comp=Z,722nm,1.3s
**KNMB Chin-men Tao 74.43 302** IAmb IAmb 04 39 55.5
comp=Z,1µm,1.4s
**QZH Quanzhou 74.48 303** ⇓ *i*P **P** **04 39 53.6 +0.7**
QZH pP **pwP** **04 41 27.9 +0.2**
QZH PP **PP** **04 42 44.6 -2.1**
QZH S **S** **04 48 53.4 +0.5**
QZH pmax pmax
comp=Z,1µm,1.2s
**S14K Fog Glacier 74.63 11** P **P** **04 39 51.3 -1.8**
baz=198,SNR=14
S14K S **S** **04 48 51.5 -1.9**
baz=198
**UGL Uglegorsk 74.70 334** *e*P **P** **04 39 53.5 -0.1**
UGL *e* 04 41 25.6
UGL *e* 04 42 42.9
UGL *e*S **S** **04 48 55.7 +1.5**
UGL pmax pmax
comp=Z,8µm,5.5s
UGL pmax pmax
comp=Z,500nm,1.0s
**SBJI Serang 74.72 268** P **P** **04 39 54.3 -0.2**
comp=Z,5µm,1.4s
**CHGN Chignik 74.85 11** IAmb IAmb 04 39 55.3
comp=Z,941nm,1.3s
**CHGN Chignik 74.85 11** P **P** **04 39 53.1 -1.2**
baz=199,SNR=11
CHGN S **S** **04 48 52.8 -2.8**
baz=199
**H06S1 SOCORRO T 74.90 65** P **P** **04 39 57.4 +2.0**
SNR=38
**SNCC San Nicolas Is 74.90 48** P **P** **04 39 54.6 -0.5**
SNCC IAmb IAmb 04 41 44.0
comp=Z,2µm,1.9s
**H06E1 SOCORRO T-PHAS 74.94 65** P **P** **04 39 57.3 +1.6**
SNR=135
**INCN Inchon 75.11 317** P **P** **04 39 56.8 +0.5**
**INCN Inchon 75.11 317** P **P** **04 39 56.7 +0.5**
INCN IAmb IAmb 04 39 59.4
comp=Z,802nm,1.3s
**INCN Inchon 75.11 317** P **P** **04 39 57.3 +1.0**
INCN S **S** **04 49 02.4 +3.1**
**INCN Inchon 75.11 317** P **P** **04 39 56.7 +0.5**
INCN pmax pmax
comp=Z,802nm,1.3s
**SSE Sheshan 75.44 309** P **P** **04 39 58.1 -0.1**
SSE S **S** **04 48 58.8 -4.2**
SSE pmax pmax
comp=Z,110nm,0.9s
**MSHR Mys Shultsa 75.47 324** *d* iP **P** **04 39 58.9 +0.8**
MSHR pmax pmax
comp=Z,657nm,1.0s
**SAO San Andreas Ge 75.51 44** IAmb IAmb 04 40 01.1
comp=Z,611nm,0.9s
**PMPB Monarch Peak 75.64 45** P **P** **04 39 60.0 +0.7**
**BBGB Big Mountain B 75.68 44** P **P** **04 40 00.3 +0.8**
**PSTR Posyet 75.72 324** *d* iP **P** **04 40 00.3 +0.8**
**BLSI Bandar Lampung 75.77 269** P **P** **04 39 59.6 -0.9**
comp=Z,2µm,0.9s,comp=Z,16µm
**GDXM Geysers 75.81 41** IAmb IAmb 04 41 43.7
comp=Z,1µm,1.9s
**PPBI Pangkal Pinang 75.82 272** P **P** **04 40 01.3 +0.5**
comp=Z,2µm,1.1s,comp=Z,19µm
**TYV Tymovskoe 75.84 336** *e*P **P** **04 40 00.3 +0.3**
TYV *e*S **S** **04 49 00.3 -6.3**
TYV pmax pmax
comp=Z,4µm,4.0s
TYV pmax pmax
comp=Z,629nm,1.1s
TYV smax smax
comp=N,77nm,2.4s
TYV smax smax
comp=E,82nm,2.4s
TYV smax smax
comp=N,15µm,7.7s
TYV smax smax
comp=E,14µm,7.7s
**BCW Bitter Crk WRg 75.89 46** IAmb IAmb 04 41 53.7
comp=Z,1µm,1.6s
**KMPM Mount Pierce 75.94 39** IAmb IAmb 04 40 03.9
comp=Z,765nm,1.0s
**SII Sitkinak Islan 75.95 13** P **P** **04 40 00.4 -0.1**
**SII Sitkinak Islan 75.95 13** IAmb IAmb 04 40 02.3
comp=Z,899nm,1.0s
**SII Sitkinak Islan 75.95 13** P **P** **04 39 59.9 -0.6**
baz=204
SII S **S** **04 49 07.6 0.0**
baz=204
**USRK Ussuriysk Ar. 76.06 325** P **P** **04 40 01.6 +0.2**
**USRK Ussuriysk Ar. 76.06 325** P **P** **04 40 01.9 +0.5**
comp=Z,141nm,1.0s,baz=102,slow=3.7,SNR=109
USRK pP **pwP** **04 41 36.2 -1.7**
comp=Z,83nm,1.2s,baz=134,slow=5.5,SNR=3.3
USRK S **S** **04 49 10.1 +0.8**
comp=Z,2.7nm,0.7s,baz=58,slow=11,SNR=1.7
USRK PKPPKP **P'P'df** **05 07 15.8 +1.0**
comp=Z,2.4nm,0.9s,baz=132,slow=2.8,SNR=5.1
comp=Z,141nm,1.0s
**USA0B Ussuriysk Arra 76.06 325** IAmb IAmb 04 40 04.5
comp=Z,1µm,1.8s
**USA0B Ussuriysk Arra 76.06 325** *d* iP **P** **04 40 01.4 0.0**
**R16K Pilot Point 76.20 11** P **P** **04 40 01.3 -0.4**
baz=200
R16K S **S** **04 49 08.6 -1.5**
baz=200
R16K S **S** **04 49 08.6 -1.5**
baz=200
**TJX Tijuana 76.29 50** P **P** **04 40 04.1 +1.1**
**KASI Kota Agung 76.45 268** P **P** **04 40 03.1 -1.1**
**109C Camp Elliot, M 76.45 49** P **P** **04 40 04.9 +1.1**
baz=239
109C S **S** **04 49 17.4 +3.5**
baz=239
**KRPM Rodgers 76.45 39** IAmb IAmb 04 40 06.8
comp=Z,685nm,0.9s
**KHMM Horse Mountain 76.46 39** IAmb IAmb 04 40 07.8
comp=Z,790nm,1.2s
**CBX Cerro Bola 76.48 50** P **P** **04 40 04.5 +0.4**
**R17L Mt. Peulik Vol 76.49 12** P **P** **04 40 03.4 -0.1**
baz=201,SNR=29
R17L S **S** **04 49 12.4 -1.0**
baz=201
**PLK4 Peulik 4 76.49 12** IAmb IAmb 04 40 05.2
comp=Z,1µm,1.1s
**TKX Tecate 76.65 50** IAmb IAmb 04 41 46.6
comp=Z,1µm,2.0s
**VTX Valle De La Tr 76.67 51** P **P** **04 40 06.3 +1.1**
**OHAK Old Harbor 76.76 14** P **P** **04 40 04.8 -0.1**
**OHAK Old Harbor 76.76 14** IAmb IAmb 04 40 07.4
comp=Z,2µm,1.7s
**OHAK Old Harbor 76.76 14** P **P** **04 40 04.9 -0.1**
baz=204,SNR=30
OHAK S **S** **04 49 15.9 -0.3**
baz=204
**R18K Karluk 76.82 13** P **P** **04 40 05.1 -0.1**
baz=203,SNR=31
R18K S **S** **04 49 16.2 -0.6**
baz=203
R18K S **S** **04 49 16.2 -0.6**
baz=203
**PMBI Palembang 76.91 271** P **P** **04 40 08.0 +1.2**
**PMBI Palembang 76.91 271** IAmb IAmb 04 40 10.8
comp=Z,1µm,1.1s
**PMBI Palembang 76.91 271** P **P** **04 40 08.9 +2.1**
comp=Z,1µm,1.2s,comp=Z,33µm
**ISA Isabella, Lake 76.92 46** P **P** **04 40 07.0 +0.5**
ISA IAmb IAmb 04 41 47.2
comp=Z,1µm,1.8s
**ISA Isabella, Lake 76.92 46** P **P** **04 40 07.0 +0.5**
ISA pmax pmax
comp=Z,1µm,1.8s
**MONP2 Monument Peak 76.94 49** P **P** **04 40 08.0 +1.2**
baz=240,SNR=262
MONP2 S **S** **04 49 23.5 +3.8**
baz=240
**KBO Bosley Butte 76.97 38** IAmb IAmb 04 41 48.9
comp=Z,2µm,1.9s
**HKC Hong Kong Obse 76.98 298** ⇑ P **P** **04 40 08.0 +1.1**
**HKPS Hong Kong Po S 76.99 298** P **P** **04 40 08.4 +1.4**
**HKPS Hong Kong Po S 76.99 298** IAmb IAmb 04 40 10.8
comp=Z,1µm,1.2s
**LWLI Liwa 77.00 269** P **P** **04 40 06.5 -1.0**
**RMX La Rumorosa 77.05 50** IAmb IAmb 04 40 10.0
comp=Z,483nm,0.9s
**AFDM Forest Hills D 77.06 42** P **P** **04 40 07.0 0.0**
**ORV Oroville 77.06 41** IAmb IAmb 04 41 51.3
comp=Z,955nm,1.7s
**Q17K Contact Creek 77.17 12** P **P** **04 40 06.8 -0.5**
baz=202
Q17K S **S** **04 49 19.9 -0.9**
baz=202
**O14K Tigyukauivet M 77.19 9** IAmb IAmb 04 41 44.0
comp=Z,882nm,1.7s
**O14K Tigyukauivet M 77.19 9** P **P** **04 40 06.5 -0.7**
baz=196,SNR=18
O14K S **S** **04 49 18.3 -2.4**
baz=196
**SFX San Felipe 77.19 52** P **P** **04 40 08.8 +0.8**
**PFO Pinyon Flats O 77.28 49** P **P** **04 40 09.4 +0.8**
**PFO Pinyon Flats O 77.28 49** P **P** **04 40 09.7 +1.1**
baz=240,SNR=74
PFO S **S** **04 49 25.4 +2.3**
baz=240
**PFO Pinyon Flats O 77.28 49** P **P** **04 40 09.4 +0.8**
PFO pmax pmax
comp=Z,211nm,1.0s
**TPFO Pinon Flats 77.28 49** P **P** **04 40 09.8 +1.2**
baz=240,SNR=79
TPFO S **S** **04 49 26.6 +3.5**
baz=240
**L02F Cave Junction 77.30 38** IAmb IAmb 04 41 46.8
comp=Z,2µm,1.9s
**O15K Ungalikthiuk R 77.34 9** P **P** **04 40 07.5 -0.6**
baz=198,SNR=20
O15K S **S** **04 49 21.1 -1.3**
baz=198
**Q16K King Salmon 77.41 11** P **P** **04 40 08.1 -0.3**
baz=201,SNR=17
Q16K S **S** **04 49 23.2 +0.2**
baz=201
**KDAK Kodiak Island 77.42 14** P **P** **04 40 08.3 -0.3**
**KDAK Kodiak Island 77.42 14** P **P** **04 40 08.4 -0.1**
baz=205
KDAK S **S** **04 49 24.3 +1.0**
baz=205
**KDAK Kodiak Island 77.42 14** P **P** **04 40 08.3 -0.3**
KDAK pmax pmax
comp=Z,2µm,1.6s
**SRIG Santa Rosalia 77.49 56** IAmb IAmb 04 40 11.8
comp=Z,562nm,1.0s
**P16K Nushagak River 77.50 10** P **P** **04 40 08.6 -0.4**
baz=200,SNR=24
P16K S **S** **04 49 23.9 -0.1**
baz=200
P16K S **S** **04 49 23.9 -0.1**
baz=200
**MDPB Devils Postpil 77.57 44** P **P** **04 40 10.9 +0.7**
MDPB IAmb IAmb 04 40 12.6
comp=Z,495nm,1.0s
**YBH Yreka Blue Hor 77.58 39** IAmb IAmb 04 41 48.5
comp=Z,2µm,1.8s
**OMMB Old Mammoth Mi 77.61 44** P **P** **04 40 11.0 +0.5**
**EMB Emerald Bay 77.63 43** IAmb IAmb 04 41 55.1
comp=Z,1µm,1.8s
**NJ2 Nanjing 77.64 309** ⇓ *i*P **P** **04 40 11.1 +0.8**
NJ2 PcP **PcP** **04 40 19.8 +1.2**
NJ2 pP **pwP** **04 41 47.1 +0.9**
NJ2 S **S** **04 49 29.5 +2.9**
NJ2 ScS **SKKSac** **04 49 45.8 +1.8**
NJ2 sS **sS** **04 52 11.6 -1.5**
NJ2 pmax pmax
comp=Z,280nm,1.0s
**MDJ Mudanjiang 77.65 325** P **P** **04 40 10.3 +0.2**
**MDJ Mudanjiang 77.65 325** P **P** **04 40 11.0 +0.9**
MDJ pP pwP 04 41 46.5 -0.3
MDJ S **S** **04 49 30.3 +4.1**
MDJ pmax pmax
comp=Z,660nm,1.6s
MDJ pmax pmax
comp=Z,8µm,4.7s
**MDJ Mudanjiang 77.65 325** IAmb IAmb 04 40 14.1
comp=Z,654nm,1.1s
**M11K Mekoryuk 77.69 6** P **P** **04 40 10.5 +0.6**
baz=192,SNR=43
M11K S **S** **04 49 28.8 +2.8**
baz=192
**Q18K Katmai Hardscr 77.70 12** P **P** **04 40 09.8 -0.5**
baz=202,SNR=65
Q18K S **S** **04 49 25.0 -1.5**
baz=202
**J01E Myrtle Point 77.72 37** IAmb IAmb 04 41 51.4
comp=Z,1µm,1.5s
**N14K Kuskokwak Cree 77.78 8** P **P** **04 40 10.6 +0.2**
baz=196,SNR=90
N14K S **S** **04 49 25.8 -1.0**
baz=196
**SLBS Sierra La Lagu 77.79 60** P **P** **04 40 12.2 +0.7**
**MPK Martis Peak 77.86 42** IAmb IAmb 04 40 14.8
comp=Z,938nm,1.2s
**GSC Goldstone, Bar 77.89 47** IAmb IAmb 04 41 52.7
comp=Z,1µm,1.6s
**P17K Kvichak River 77.94 11** P **P** **04 40 11.0 -0.3**
baz=201,SNR=54
P17K S **S** **04 49 28.5 -0.1**
baz=201
P17K S **S** **04 49 28.5 -0.1**
baz=201
**HUMO Hull Mountain 77.96 38** IAmb IAmb 04 41 50.6
comp=Z,2µm,1.9s
**O16K Kokwok River B 78.02 10** P **P** **04 40 10.2 -1.6**
**O16K Kokwok River B 78.02 10** P **P** **04 40 10.7 -1.0**
baz=200,SNR=60
O16K S **S** **04 49 27.5 -2.0**
baz=200
**PNTR Pine Nut 78.02 43** IAmb IAmb 04 40 15.1
comp=Z,625nm,0.9s
**M13K Dall Lake 78.04 7** P **P** **04 40 12.3 +0.5**
baz=194,SNR=24
M13K S **S** **04 49 32.0 +2.4**
baz=194
**DSP Deep Springs 78.17 45** IAmb IAmb 04 40 15.9
comp=Z,620nm,1.0s
**YERR Yerington 78.20 43** IAmb IAmb 04 40 15.8
comp=Z,568nm,1.1s
**Q20K Shuyak Island 78.22 13** P **P** **04 40 12.9 +0.1**
baz=205,SNR=40
Q20K S **S** **04 49 32.2 +0.5**
baz=205
**SYI Shuyak Island 78.22 13** P **P** **04 40 12.6 -0.2**
SYI IAmb IAmb 04 40 15.0
comp=Z,1µm,1.4s
**Q19K Cape Douglas, 78.24 13** IAmb IAmb 04 40 14.8
comp=Z,1µm,1.1s
**Q19K Cape Douglas, 78.24 13** P **P** **04 40 12.7 -0.3**
baz=204,SNR=27
Q19K S **S** **04 49 32.5 +0.5**
baz=204
Q19K S **S** **04 49 32.5 +0.5**
baz=204
**MNAI Manna 78.24 269** P **P** **04 40 14.0 -0.1**
**MNAI Manna 78.24 269** P **P** **04 40 13.7 -0.4**
**N15K Kwethluk River 78.25 9** IAmb IAmb 04 40 16.0
comp=Z,2µm,1.8s
**N15K Kwethluk River 78.25 9** P **P** **04 40 13.1 0.0**
baz=198,SNR=51
N15K S **S** **04 49 31.9 0.0**
baz=198
**TPRI Tanjung Pinang 78.27 275** P **P** **04 40 14.8 +0.6**
comp=Z,700nm,0.9s
**LHV Little Huntoon 78.28 44** IAmb IAmb 04 40 16.6
comp=Z,708nm,1.0s
**P18K Big Mountain, 78.35 12** IAmb IAmb 04 40 15.1
comp=Z,1µm,1.1s
**P18K Big Mountain, 78.35 12** P **P** **04 40 13.2 -0.5**
baz=202,SNR=48
P18K S **S** **04 49 32.3 -0.8**
baz=202
**JMBI JAMBI 78.36 272** P **P** **04 40 16.7 +2.0**
**O17K Koliganek Bris 78.36 11** P **P** **04 40 12.9 -0.6**
baz=200,SNR=43
O17K S **S** **04 49 32.1 -0.9**
baz=200
**GRAC Grapevine Rang 78.38 45** IAmb IAmb 04 40 17.1
comp=Z,926nm,1.1s
**GRNR Gornyy 78.39 332** ⇓ *i*P **P** **04 40 14.8 +0.8**
GRNR *e* 04 41 47.6
GRNR *e*S **S** **04 49 29.3 -4.5**
GRNR pmax pmax
comp=E,140nm,1.0s
GRNR pmax pmax
comp=N,120nm,1.1s
GRNR pmax pmax
comp=Z,530nm,1.0s
GRNR smax smax
comp=N,7.0nm,0.9s
**GWY Greenwater Val 78.44 46** P **P** **04 40 15.1 +0.3**
**PIX Pinacate 78.49 52** IAmb IAmb 04 41 54.8
comp=Z,1µm,1.7s
**PAHR Pah Rah Range 78.50 42** IAmb IAmb 04 41 59.0
comp=Z,2µm,1.9s
**NVAR Mina Array Bea 78.51 44** P **P** **04 40 15.9 +0.6**
comp=Z,418nm,0.9s,baz=227,slow=8.2,SNR=499
NVAR pP **pwP** **04 41 51.4 -0.4**
comp=Z,76nm,1.0s,baz=229,slow=8.8,SNR=4.5
NVAR S **S** **04 49 39.1 +3.0**
comp=Z,4.1nm,1.2s,baz=340,slow=8.3,SNR=1.9
NVAR PKKPbc **PKKPbc** **04 59 09.6 +0.1**
comp=Z,1.1nm,0.5s,baz=215,slow=23,SNR=9.5
NVAR PKPPKP **P'P'df** **05 07 10.2 -0.9**
comp=Z,2.6nm,0.9s,baz=92,slow=4.2,SNR=6.0
comp=Z,418nm,0.9s
**M14K Bethel 78.54 8** P **P** **04 40 14.9 +0.4**
baz=196,SNR=130
M14K S **S** **04 49 37.1 +2.2**
baz=196
**NV11 Mina Array Sit 78.61 44** IAmb IAmb 04 40 18.2
comp=Z,563nm,1.0s
**GMN Gold Mountain 78.61 45** P **P** **04 40 16.3 +0.5**
**M15K Kasigluk River 78.66 9** P **P** **04 40 15.5 +0.3**
baz=197,SNR=142
M15K S **S** **04 49 36.8 +0.6**

baz=197
**K04D Chiloquin, OR 78.69 39** IAmb IAmb 04 41 57.0
comp=Z,2µm,1.9s
**N16K Nishlik Lake 78.74 10** P **P** **04 40 16.0 +0.3**
baz=199,SNR=58
N16K S **S** **04 49 37.6 +0.4**
baz=199
**O18K Koktuh Hills 78.78 12** P **P** **04 40 15.4 -0.6**
O18K IAmb IAmb 04 40 17.1
comp=Z,975nm,0.8s
**O18K Koktuh Hills 78.78 12** P **P** **04 40 15.6 -0.4**
baz=202,SNR=152
O18K S **S** **04 49 37.8 +0.2**
baz=202
O18K S **S** **04 49 37.8 +0.2**
baz=202
**113A Mohawk Valley, 78.83 51** IAmb IAmb 04 41 57.1
comp=Z,2µm,1.8s
**BUCK Buck Mountain 78.89 37** IAmb IAmb 04 40 19.5
comp=Z,581nm,1.0s
**COR Corvallis 78.95 36** P **P** **04 40 17.9 +0.9**
**COR Corvallis 78.95 36** P **P** **04 40 18.0 +0.9**
COR pmax pmax
comp=Z,2µm,1.9s
**P19K Oil Pt 78.99 13** P **P** **04 40 16.8 -0.2**
baz=204,SNR=24
P19K S **S** **04 49 40.5 +0.7**
baz=204
**L14K Kuka Creek 79.02 7** P **P** **04 40 17.5 +0.4**
baz=195,SNR=73
L14K S **S** **04 49 42.0 +2.2**
baz=195
**N17K Nushagak Hills 79.05 10** P **P** **04 40 17.1 -0.2**
baz=200,SNR=47
N17K S **S** **04 49 39.4 -0.9**
baz=200
**BTDF Bukit Timah Da 79.11 275** P **P** **04 40 19.3 +0.5**
**TPNV Topopah Spring 79.12 46** P **P** **04 40 18.9 +0.4**
**TPNV Topopah Spring 79.12 46** P **P** **04 40 19.6 +1.1**
baz=239,SNR=261
TPNV S **S** **04 49 45.9 +3.5**
baz=239
**TPNV Topopah Spring 79.12 46** P **P** **04 40 18.9 +0.4**
TPNV pmax pmax
comp=Z,286nm,0.8s
**214A Organ Pipe Nat 79.16 52** P **P** **04 40 20.3 +1.7**
baz=242,SNR=182
214A S **S** **04 49 47.4 +4.6**
baz=242
**MYKOM Kota Tinggi 79.17 275** IAmb IAmb 04 40 22.9
comp=Z,522nm,0.9s
**DL2 Dalian 79.17 316** P **P** **04 40 18.8 +0.3**
DL2 pP **pwP** **04 41 56.0 +0.6**
DL2 PP **PP** **04 43 23.3 -2.1**
DL2 S **S** **04 49 44.5 +2.0**
DL2 pmax pmax
comp=Z,560nm,1.1s
DL2 pmax pmax
comp=Z,4µm,6.2s
**M16K Timber Creek 79.23 9** P **P** **04 40 19.2 +0.9**
baz=198,SNR=199
M16K S **S** **04 49 44.0 +1.8**
baz=198
**O19K Port Alsworth 79.27 12** P **P** **04 40 18.0 -0.5**
**O19K Port Alsworth 79.27 12** P **P** **04 40 18.1 -0.4**
baz=203
O19K S **S** **04 49 42.4 -0.2**
baz=203
O19K S **S** **04 49 42.4 -0.2**
baz=203
**HOM Homer 79.34 13** P **P** **04 40 18.8 0.0**
baz=206,SNR=19
HOM S **S** **04 49 44.7 +1.4**
baz=206
**G03D McMinnville, O 79.35 36** IAmb IAmb 04 40 22.2
comp=Z,665nm,0.9s
**J05D Fort Rock, OR 79.38 38** P **P** **04 40 20.1 +0.4**
J05D IAmb IAmb 04 40 22.2
comp=Z,1µm,1.0s
**QIZ Qiongzhong 79.41 294** P **P** **04 40 21.0 +0.8**
**QIZ Qiongzhong 79.41 294** P **P** **04 40 20.3 +0.1**
QIZ pP **pP** **04 41 53.0 -1.7**
QIZ S **S** **04 49 46.9 +1.1**
QIZ pmax pmax
comp=Z,290nm,1.2s
QIZ pmax pmax
comp=Z,9µm,12.0s
**N18K Kilae Creek 79.43 11** IAmb IAmb 04 41 57.1
comp=Z,1µm,1.8s
**N18K Kilae Creek 79.43 11** P **P** **04 40 19.0 -0.4**
baz=202,SNR=49
N18K S **S** **04 49 44.4 +0.1**
baz=202
N18K S **S** **04 49 44.4 +0.1**
baz=202
**Q09A Carvers 79.47 44** IAmb IAmb 04 40 22.7
comp=Z,647nm,0.9s
**L15K Ungalak Mounta 79.50 8** P **P** **04 40 19.6 0.0**
baz=196,SNR=126
L15K S **S** **04 49 46.4 +1.5**
baz=196
**KLR Kul'dur 79.51 329** P **P** **04 40 20.3 +0.3**
comp=Z,144nm,1.0s,baz=112,slow=4.3,SNR=103
KLR pP **pP** **04 41 55.4 +1.4**
comp=Z,49nm,1.2s,baz=140,slow=4.6,SNR=2.1
KLR PP **PP** **04 43 32.3 +4.4**
comp=Z,58nm,1.3s,baz=147,slow=5.4,SNR=4.9
KLR PKiKP **PKiKP** **04 45 47.6 -0.4**
comp=Z,11nm,0.9s,baz=128,slow=3.9,SNR=5.9
KLR S **S** **04 49 46.5 +1.0**
comp=Z,16nm,1.2s,baz=309,slow=21,SNR=11
KLR PKKPbc **PKKPbc** **04 59 05.0 -2.7**
comp=Z,6.6nm,0.6s,baz=307,slow=2.4,SNR=12
comp=Z,144nm,1.0s
**KLR Kul'dur 79.51 329** *d i* P **P** **04 40 20.2 +0.2**
KLR pmax pmax
comp=Z,357nm,1.3s
**O20K Slope Mountain 79.51 13** P **P** **04 40 19.6 -0.3**
baz=205,SNR=36
O20K S **S** **04 49 45.6 +0.4**
baz=205
O20K S **S** **04 49 45.6 +0.4**
baz=205
**CN2 Changchun 79.52 322** P **P** **04 40 20.4 +0.2**
CN2 pP pwP 04 41 56.3 -0.7
CN2 S **S** **04 49 47.8 +1.9**
CN2 pmax pmax
comp=Z,670nm,1.2s
CN2 pmax pmax
comp=Z,5µm,3.0s
**SNY Shenyang 79.52 320** ⇓P **P** **04 40 20.6 +0.4**
SNY S **S** **04 49 44.5 -1.4**
SNY pmax pmax
comp=Z,320nm,1.4s
SNY pmax pmax
comp=Z,4µm,7.4s
**BNX BinXian 79.56 325** ⇓P **P** **04 40 20.3 0.0**
BNX pP **pP** **04 41 54.3 0.0**
BNX PP **PP** **04 43 28.1 -0.3**
BNX S **S** **04 49 49.1 +2.9**
BNX pmax pmax
comp=Z,740nm,1.1s
BNX pmax pmax
comp=Z,4µm,3.5s
**BRSE Bradley Lake S 79.61 14** P **P** **04 40 20.3 -0.1**
baz=206,SNR=86
BRSE S **S** **04 49 47.1 +0.9**
baz=206
**F03A Seaside 79.62 35** IAmb IAmb 04 40 23.1
comp=Z,706nm,0.9s
**H04A Detroit Lake 79.64 37** IAmb IAmb 04 41 59.0
comp=Z,3µm,2.0s
**N19K Bonanza Creek 79.81 11** P **P** **04 40 20.8 -0.7**
baz=203,SNR=83
N19K S **S** **04 49 47.2 -1.2**
baz=203
N19K S **S** **04 49 47.2 -1.2**
baz=203
**L16K Owhat River 79.81 9** IAmb IAmb 04 40 24.0
comp=Z,740nm,1.1s
**L16K Owhat River 79.81 9** P **P** **04 40 21.9 +0.5**
baz=198,SNR=152
L16K S **S** **04 49 50.8 +2.7**
baz=198
**RSO Redoubt South 79.83 12** P **P** **04 40 20.3 -1.5**
**M17K Holitna River 79.83 10** P **P** **04 40 22.6 +1.1**
baz=200,SNR=163
M17K S **S** **04 49 51.5 +3.1**
baz=200
**PINE Pine Mountain 79.85 38** IAmb IAmb 04 40 24.9
comp=Z,912nm,1.0s
**W13A Hualapai Mount 79.86 49** IAmb IAmb 04 42 04.5
comp=Z,996nm,1.8s
**SVW2 Sparrevohn 79.87 11** P **P** **04 40 20.8 -0.9**
**Y14A Wickenburg 79.95 50** IAmb IAmb 04 42 02.4
comp=Z,832nm,1.6s
**F04D Rainier, OR 80.02 35** IAmb IAmb 04 40 25.5
comp=Z,747nm,1.0s
**K15K Wolf Creek Mou 80.09 8** P **P** **04 40 23.6 +0.8**
baz=196,SNR=255
K15K S **S** **04 49 54.2 +3.3**
baz=196
**DIB Dawson Inlet, 80.14 26** IAmb IAmb 04 42 04.4
comp=Z,1µm,1.6s
**H02S1 DAWSON INLET T 80.14 26** P **P** **04 40 24.1 +0.9**
SNR=98
**PRN Pahroc Range 80.18 46** IAmb IAmb 04 42 08.3
comp=Z,1µm,1.6s
**M18K Stony River 80.19 11** P **P** **04 40 23.6 +0.2**
baz=202,SNR=77
M18K S **S** **04 49 53.4 +1.3**
baz=202
**SEW Seward 80.23 14** P **P** **04 40 23.0 -0.5**
baz=208,SNR=53
SEW S **S** **04 49 53.0 +0.5**
baz=208
**WISH Wishkah 80.23 34** IAmb IAmb 04 40 26.8
comp=Z,541nm,0.9s
**F04A Amboy 80.25 36** IAmb IAmb 04 42 13.7
comp=Z,1µm,1.6s
**J14K Nanvaranak Lak 80.28 7** P **P** **04 40 24.0 +0.2**
baz=194,SNR=56
J14K S **S** **04 49 54.5 +1.6**
baz=194
**BMN Battle Mountai 80.29 43** P **P** **04 40 25.4 +0.8**
**BMN Battle Mountai 80.29 43** P **P** **04 40 25.4 +0.8**
BMN pmax pmax
comp=Z,458nm,1.0s
**R11B Troy Canyon, C 80.29 45** P **P** **04 40 25.5 +0.9**
baz=239,SNR=104
R11B S **S** **04 49 56.9 +2.4**
baz=239
**HOLB Holberg 80.29 30** IAmb IAmb 04 40 26.2
comp=Z,645nm,1.1s
**C03A Quillayute Air 80.33 33** IAmb IAmb 04 40 27.4
comp=Z,922nm,1.1s
**HOOD Mount Hood Mea 80.33 37** IAmb IAmb 04 40 27.1
comp=Z,436nm,0.8s
**NLWA Neilton Lookou 80.35 34** IAmb IAmb 04 40 27.1
comp=Z,493nm,1.0s
**WHN Wuhan 80.36 306** P **P** **04 40 26.3 +1.4**
WHN pP **pP** **04 42 02.6 +3.2**
WHN PP **PP** **04 43 35.5 +0.3**
WHN S **S** **04 49 57.8 +2.7**
WHN pmax pmax
comp=Z,730nm,1.4s
**L17K Donlin 80.39 9** P **P** **04 40 25.7 +1.3**
baz=199,SNR=285
L17K S **S** **04 49 57.2 +3.1**
baz=199
**Q23K Middleton Isla 80.41 16** P **P** **04 40 24.3 -0.2**
baz=211
Q23K S **S** **04 49 54.5 +0.2**
baz=211
Q23K S **S** **04 49 54.5 +0.2**
baz=211
**MID Middleton Isla 80.41 16** P **P** **04 40 24.9 +0.4**
**MA2 Magadan 80.41 344** P **P** **04 40 23.3 -1.2**
**MA2 Magadan 80.41 344** P **P** **04 40 23.3 -1.2**
MA2 IAmb IAmb 04 40 25.9
comp=Z,937nm,1.3s
**MA2 Magadan 80.41 344** P **P** **04 40 23.6 -0.9**
comp=Z,314nm,0.9s,baz=154,slow=5.4,SNR=59
MA2 pP **pwP** **04 42 01.0 -0.6**
comp=Z,134nm,1.2s,baz=163,slow=5.7,SNR=3.4
comp=Z,314nm,0.9s
**MA2 Magadan 80.41 344** *d i* P **P** **04 40 23.4 -1.1**
MA2 pmax pmax
comp=Z,718nm,1.2s
**CAPN Captain Cook N 80.44 13** P **P** **04 40 24.5 -0.2**
baz=206
CAPN S **S** **04 49 57.9 +3.2**
baz=206
**CNSH ChangSha 80.46 303** P **P** **04 40 26.3 +0.8**
CNSH S **S** **04 49 57.4 +1.2**
CNSH pmax pmax
comp=Z,610nm,1.3s
**OZB Mount Ozzard 80.49 32** P **P** **04 40 25.3 0.0**
**O22K Cooper Landing 80.50 14** IAmb IAmb 04 40 31.3
comp=Z,683nm,0.8s
**O22K Cooper Landing 80.50 14** P **P** **04 40 24.4 -0.6**
baz=207,SNR=24
O22K S **S** **04 49 55.6 +0.3**
baz=207
**N20K Mount Spurr 80.61 12** P **P** **04 40 24.6 -1.1**
baz=205,SNR=70
N20K S **S** **04 49 54.4 -2.2**
baz=205
**SPCR Spurr Chakacha 80.61 12** P **P** **04 40 24.6 -1.1**
baz=205,SNR=65
SPCR S **S** **04 49 54.6 -2.0**
baz=205
**P23K Montague Islan 80.63 15** P **P** **04 40 25.2 -0.5**
baz=210,SNR=22
P23K S **S** **04 49 56.0 -0.6**
baz=210
P23K S **S** **04 49 56.0 -0.6**
baz=210
**GAMB Gambell 80.65 3** P **P** **04 40 26.1 +0.4**
baz=186,SNR=51
GAMB S **S** **04 49 58.2 +1.6**
baz=186
**L18K Granite Mounta 80.73 10** IAmb IAmb 04 40 29.1
comp=Z,829nm,0.9s
**L18K Granite Mounta 80.73 10** P **P** **04 40 27.1 +0.9**
baz=201,SNR=358
L18K S **S** **04 50 01.2 +3.6**
baz=201
L18K S **S** **04 50 01.2 +3.6**
baz=201
**M19K Big River Lodg 80.84 11** P **P** **04 40 25.8 -0.9**
**M19K Big River Lodg 80.84 11** P **P** **04 40 26.2 -0.5**
baz=203
M19K S **S** **04 49 58.3 -0.4**
baz=203
M19K S **S** **04 49 58.3 -0.4**
baz=203
**TUC Tucson 80.85 52** P **P** **04 40 29.8 +2.2**
baz=243
TUC S **SKSac** **04 50 06.2 +1.0**
baz=243
**G06A Carlson Farm, 80.86 37** IAmb IAmb 04 42 16.4
comp=Z,2µm,1.9s
**TIA Tai'an 80.90 312** P **P** **04 40 28.0 +0.3**
TIA S **S** **04 50 03.3 +2.9**
TIA pmax pmax
comp=Z,400nm,1.1s
**K17K Iditarod 80.94 9** P **P** **04 40 28.0 +0.7**
baz=199,SNR=203
K17K S **SKSac** **04 50 03.7 -0.6**
baz=199
**FIS Fire Island 80.99 13** P **P** **04 40 27.2 -0.3**
**L19K White Mountain 81.01 11** P **P** **04 40 26.9 -0.8**
**L19K White Mountain 81.01 11** P **P** **04 40 27.6 0.0**
baz=202,SNR=136
L19K S **S** **04 50 00.8 +0.3**
baz=202
L19K S **S** **04 50 00.8 +0.3**
baz=202
**RC01 Rabbit Creek A 81.04 13** P **P** **04 40 27.4 -0.5**
baz=207,SNR=96
RC01 S **S** **04 50 00.6 -0.3**
baz=207
**M20K Styx River 81.05 12** IAmb IAmb 04 42 06.0
comp=Z,2µm,1.9s
**M20K Styx River 81.05 12** P **P** **04 40 26.9 -1.1**
baz=204
M20K S **S** **04 49 59.6 -1.5**
baz=204
M20K S **S** **04 49 59.6 -1.5**
baz=204
**SUA Susitna One 81.16 13** IAmb IAmb 04 40 29.2
comp=Z,759nm,0.7s
**SUA Susitna One 81.16 13** P **P** **04 40 27.9 -0.6**
baz=206,SNR=141
SUA S **S** **04 50 01.8 -0.5**
baz=206
**J16K Anvik River 81.16 8** P **P** **04 40 29.2 +0.8**
baz=197,SNR=220
J16K S **SKSac** **04 50 06.4 +0.7**
baz=197
**PWL Port Wells 81.16 14** P **P** **04 40 27.2 -1.2**
**PWL Port Wells 81.16 14** P **P** **04 40 27.8 -0.7**
baz=209,SNR=109
PWL S **S** **04 50 01.8 -0.3**
baz=209
**HIN Hinchinbrook I 81.20 15** IAmb IAmb 04 40 30.8
comp=Z,534nm,0.9s
**CBB Campbell River 81.24 31** P **P** **04 40 29.6 +0.5**
**D05A Enumclaw 81.24 35** IAmb IAmb 04 42 11.9
comp=Z,2µm,1.5s
**X16A Lo Mia Camp, P 81.32 50** IAmb IAmb 04 42 11.6
comp=Z,1µm,1.6s
**BBB Bella Bella 81.34 28** P **P** **04 40 29.6 +0.1**
BBB IAmb IAmb 04 40 31.5
comp=Z,697nm,1.1s
**KAIM Kayak Island 81.34 16** P **P** **04 40 28.6 -0.8**
KAIM IAmb IAmb 04 40 31.7
comp=Z,1µm,1.2s
**KAIM Kayak Island 81.34 16** P **P** **04 40 29.6 +0.3**
baz=212,SNR=43
KAIM S **S** **04 50 04.5 +0.6**
baz=212
**GULI GuiLin 81.37 300** ⇑P **P** **04 40 31.8 +1.4**
GULI SKS **S** **04 50 07.8 +2.1**
GULI pmax pmax
comp=Z,760nm,1.4s
**BKNI Bangkinang 81.42 273** P **P** **04 40 30.9 0.0**
**BKNI Bangkinang 81.42 273** P P 04 40 21.7 -9.2
**BKNI Bangkinang 81.42 273** P **P** **04 40 31.5 +0.6**
comp=Z,2µm,1.1s,comp=Z,28µm
**L20K Farewell, AK 81.46 11** P **P** **04 40 29.7 -0.3**
baz=203,SNR=118
L20K S **S** **04 50 05.3 +0.2**
baz=203
L20K S **S** **04 50 05.3 +0.2**
baz=203
**SKT Skwentna 81.46 12** IAmb IAmb 04 42 07.4
comp=Z,2µm,1.8s
**SKT Skwentna 81.46 12** P **P** **04 40 28.4 -1.6**
baz=206,SNR=33
SKT S **S** **04 50 02.5 -2.6**
baz=206
**GLI Glacier Island 81.47 15** P **P** **04 40 28.9 -1.2**
GLI IAmb IAmb 04 40 30.9
comp=Z,763nm,0.8s
**GLI Glacier Island 81.47 15** P **P** **04 40 29.3 -0.7**
baz=210,SNR=132
GLI S **S** **04 50 05.0 -0.3**
baz=210
**J17K VABM Dome 81.48 9** P **P** **04 40 30.7 +0.7**
baz=198,SNR=223
J17K S **SKSac** **04 50 08.4 +0.6**
baz=198
J17K S **SKSac** **04 50 08.4 +0.6**
baz=198
**PPSI Pulau Pagai 81.51 270** P **P** **04 40 32.6 +1.2**
comp=Z,2µm,1.0s,comp=Z,30µm
**EYAK Cordova Ski Ar 81.52 15** P **P** **04 40 29.8 -0.5**
**EYAK Cordova Ski Ar 81.52 15** P **P** **04 40 29.8 -0.5**
baz=211,SNR=53
EYAK S **S** **04 50 04.8 -0.8**
baz=211
**CRAG Craig 81.53 24** P **P** **04 40 31.1 +0.7**
**CRAG Craig 81.53 24** P **P** **04 40 31.3 +0.8**
baz=223,SNR=52
CRAG S **SKSac** **04 50 09.0 +0.5**
baz=223
**M22K Willow 81.55 13** P **P** **04 40 30.0 -0.4**
**M22K Willow 81.55 13** P **P** **04 40 29.9 -0.5**
baz=207,SNR=90
M22K S **S** **04 50 05.8 -0.1**
baz=207
**PDSI Padang 81.61 272** P **P** **04 40 30.2 -1.7**
comp=Z,678nm,0.6s
**KNK Knik Glacier 81.62 14** P **P** **04 40 30.4 -0.4**
baz=208,SNR=72
KNK S **S** **04 50 06.1 -0.6**
baz=208
**PMR Palmer 81.63 14** P **P** **04 40 30.0 -0.8**
**PMR Palmer 81.63 14** P **P** **04 40 30.4 -0.4**
baz=208,SNR=116
PMR S **S** **04 50 06.1 -0.5**
baz=208
**SZCU Shurtz Canyon 81.63 47** P **P** **04 40 32.5 +0.8**
**U15A North Rim 81.64 48** IAmb IAmb 04 40 35.0
comp=Z,644nm,1.1s
**SUCK Suckling Hills 81.64 17** IAmb IAmb 04 42 15.4
comp=Z,1µm,1.8s
**I17K Unalakleet 81.73 8** P **P** **04 40 31.6 +0.3**
**I17K Unalakleet 81.73 8** P **P** **04 40 32.0 +0.7**
baz=197,SNR=81
I17K S **SKSac** **04 50 11.1 +1.7**
baz=197
**HMT Hamilton 81.73 16** P **P** **04 40 30.7 -0.7**
**BGLC Bering Glacier 81.82 17** P **P** **04 40 32.2 +0.4**
baz=213,SNR=8.1
BGLC S **S** **04 50 10.5 +1.9**
baz=213
**GHO Glory Hole Cre 81.83 14** P **P** **04 40 31.4 -0.6**
GHO IAmb IAmb 04 40 32.9
comp=Z,651nm,0.7s
**G08A Pilot Rock 81.86 38** P **P** **04 40 33.3 +0.7**
G08A IAmb IAmb 04 40 34.9
comp=Z,582nm,1.1s
**WUAZ Wupatki 81.87 49** P **P** **04 40 33.5 +0.6**
**WUAZ Wupatki 81.87 49** P **P** **04 40 34.6 +1.6**
baz=242,SNR=152
WUAZ S **S** **04 50 17.9 +7.2**
baz=242
**RUBB Prince Rupert 81.87 26** P **P** **04 40 33.0 +0.7**
**ANM Nome 81.88 5** P **P** **04 40 32.3 +0.3**
ANM IAmb IAmb 04 40 34.7
comp=Z,578nm,1.1s
**ANM Nome 81.88 5** P **P** **04 40 32.5 +0.4**
baz=192,SNR=21
ANM S **S** **04 50 10.8 +1.7**
baz=192
**ANM Nome 81.88 5** P **P** **04 40 32.3 +0.3**
ANM pmax pmax
comp=Z,578nm,1.1s
**SIT Sitka 81.89 22** P **P** **04 40 31.9 -0.3**
**SIT Sitka 81.89 22** P **P** **04 40 32.6 +0.4**
baz=221,SNR=50
SIT S **S** **04 50 10.4 +0.9**
baz=221
**J18K Innoko River 81.89 9** P **P** **04 40 32.1 -0.1**
**J18K Innoko River 81.89 9** P **P** **04 40 32.5 +0.3**
baz=201,SNR=276
J18K S **SKSac** **04 50 12.3 +1.7**
baz=201
**COCO West Island 81.94 260** P **P** **04 40 34.5 +1.0**
**COCO West Island 81.94 260** P **P** **04 40 33.6 +0.1**
**COCO West Island 81.94 260** P **P** **04 40 33.9 +0.5**
COCO S **SKSac** **04 50 14.5 +1.5**
**COCO West Island 81.94 260** P **P** **04 40 33.6 +0.1**
COCO pmax pmax
comp=Z,5µm,1.9s
**SNH Sunshine Point 81.99 17** IAmb IAmb 04 40 34.7
comp=Z,900nm,0.9s
**SML Sawmill 82.00 14** P **P** **04 40 31.9 -0.9**
SML IAmb IAmb 04 42 11.3
comp=Z,2µm,1.8s
**SML Sawmill 82.00 14** P **P** **04 40 32.2 -0.6**
baz=209,SNR=53
SML S **S** **04 50 10.6 0.0**
baz=209
**U33K Whale Pass 82.01 24** P **P** **04 40 33.6 +0.8**
baz=223,SNR=76
U33K S **SKSac** **04 50 12.8 +1.2**
baz=223
U33K S **SKSac** **04 50 12.8 +1.2**
baz=223
**LTY Liberty 82.01 35** IAmb IAmb 04 42 14.6
comp=Z,1µm,1.9s
**V35K Ketchikan 82.03 25** IAmb IAmb 04 42 14.9
comp=Z,2µm,1.9s
**V35K Ketchikan 82.03 25** P **P** **04 40 33.7 +0.7**
baz=224,SNR=62
V35K S **S** **04 50 12.5 +1.5**
baz=224

V35K S **S** **04 50 12.5 +1.5**
baz=224
**E07A** **Sunnyside** **82.06 36** IAmb IAmb 04 40 35.2
comp=Z,429nm,0.8s
**PKCU** **Pink Cliffs** **82.10 47** IAmb IAmb 04 40 38.0
comp=Z,1µm,1.1s
**CUT** **Chulitna** **82.10 13** P **P** **04 40 32.7 -0.6**
**CUT** **Chulitna** **82.10 13** P **P** **04 40 32.7 -0.6**
baz=207,SNR=84
CUT S **S** **04 50 10.4 -1.1**
baz=207
**M23K** **Glacier View** **82.12 14** P **P** **04 40 32.7 -0.7**
baz=209,SNR=30
M23K S **S** **04 50 11.5 -0.3**
baz=209
**HAWA** **Hanford** **82.15 37** IAmb IAmb 04 40 36.2
comp=Z,580nm,0.9s
**BMRM** **Bremner River** **82.18 16** P **P** **04 40 33.5 -0.3**
baz=212,SNR=113
BMRM S **S** **04 50 12.3 -0.1**
baz=212
**K20K** **Telida** **82.24 11** IAmb IAmb 04 40 36.1
comp=Z,1µm,1.1s
**K20K** **Telida** **82.24 11** P **P** **04 40 34.0 0.0**
baz=203
K20K S **S** **04 50 13.7 +0.8**
baz=203
K20K S **S** **04 50 13.7 +0.8**
baz=203
**MESA** **MESA** **82.24 17** IAmb IAmb 04 40 35.5
comp=Z,742nm,0.7s
**MESA** **MESA** **82.24 17** P **P** **04 40 34.7 +0.4**
baz=215,SNR=149
MESA S **S** **04 50 13.8 +0.4**
baz=215
**SCM** **Sheep Creek Mo** **82.25 14** P **P** **04 40 33.5 -0.6**
SCM IAmb IAmb 04 40 36.2
comp=Z,701nm,0.7s
**SCM** **Sheep Creek Mo** **82.25 14** P **P** **04 40 33.8 -0.3**
baz=210,SNR=5.3
SCM S **S** **04 50 13.1 -0.1**
baz=210
**SCM** **Sheep Creek Mo** **82.25 14** P **P** **04 40 33.5 -0.6**
SCM pmax pmax
comp=Z,701nm,0.7s
**S31K** **Pelican** **82.26 21** IAmb IAmb 04 40 36.7
comp=Z,460nm,0.9s
**S31K** **Pelican** **82.26 21** P **P** **04 40 34.7 +0.5**
baz=220,SNR=99
S31K S **SKSac** **04 50 14.7 +1.5**
baz=220
S31K S **SKSac** **04 50 14.7 +1.5**
baz=220
**H16K** **Elim** **82.27 7** P **P** **04 40 34.5 +0.4**
baz=195,SNR=174
H16K S **SKSac** **04 50 16.0 +3.0**
baz=195
**KLU** **Klutina** **82.29 15** IAmb IAmb 04 42 11.9
comp=Z,860nm,1.8s
**KLU** **Klutina** **82.29 15** P **P** **04 40 34.0 -0.3**
baz=211,SNR=8.3
KLU S **S** **04 50 13.5 -0.1**
baz=211
**HEH** **HeiHe** **82.32 328** *e*P **P** **04 40 34.6 -0.1**
HEH pP **pwP** **04 42 10.9 -1.5**
HEH sP **sP** **04 42 57.3 +4.0**
HEH S **SKSac** **04 50 12.5 -1.5**
HEH sS **sS** **04 53 02.4 -0.5**
HEH pmax pmax
comp=Z,530nm,1.5s
**YKU2** **Yakutat** **82.37 19** P **P** **04 40 35.5 +0.9**
**YKU2** **Yakutat** **82.37 19** P **P** **04 40 35.1 +0.5**
**CRQM** **Cirque** **82.39 16** IAmb IAmb 04 40 36.9
comp=Z,757nm,1.0s
**CRQE** **Cirque** **82.40 16** P **P** **04 40 34.9 -0.1**
baz=214,SNR=156
CRQE S **SKSac** **04 50 14.4 +0.1**
baz=214
**G15K** **Niukluk** **82.42 6** P **P** **04 40 35.3 +0.5**
baz=194
G15K S **SKSac** **04 50 14.6 +0.6**
baz=194
**S32K** **Killisnoo** **82.47 22** IAmb IAmb 04 42 17.1
comp=Z,2µm,1.9s
**S32K** **Killisnoo** **82.47 22** P **P** **04 40 35.4 +0.2**
baz=222,SNR=30
S32K S **SKSac** **04 50 15.5 +1.0**
baz=222
S32K S **SKSac** **04 50 15.5 +1.0**
baz=222
**MTPU** **Mount Pierson** **82.47 47** IAmb IAmb 04 40 39.0
comp=Z,546nm,1.0s
**ISLE** **Juniper Island** **82.48 17** IAmb IAmb 04 40 37.2
comp=Z,862nm,1.2s
**WRAK** **Wrangell Islan** **82.53 24** IAmb IAmb 04 42 16.5
comp=Z,1µm,1.9s
**WRAK** **Wrangell Islan** **82.53 24** P **P** **04 40 35.8 +0.3**
baz=224
WRAK S **S** **04 50 18.0 +2.1**
baz=224
**TCRU** **Three Creeks R** **82.56 46** P **P** **04 40 37.8 +1.3**
TCRU IAmb IAmb 04 40 39.5
comp=Z,452nm,0.9s
**J19K** **Poorman** **82.57 10** P **P** **04 40 36.1 +0.5**
baz=202,SNR=126
J19K S **SKSac** **04 50 16.3 +1.3**
baz=202
J19K S **SKSac** **04 50 16.3 +1.3**
baz=202
**PNL** **Peninsula** **82.58 19** P **P** **04 40 35.4 -0.4**
**PNL** **Peninsula** **82.58 19** P **P** **04 40 35.8 0.0**
baz=217,SNR=83
PNL S **SKSac** **04 50 16.3 +1.0**
baz=217
**T33K** **Petersburg** **82.58 23** P **P** **04 40 36.2 +0.4**
baz=223,SNR=8.3
T33K S **S** **04 50 17.5 +1.1**
baz=223
**HPIG** **82.65 59** P **P** **04 40 37.6 +0.4**
**TNA** **Tin City** **82.65 4** P **P** **04 40 36.4 +0.4**
baz=190,SNR=60
TNA S **SKSac** **04 50 15.6 +0.2**
baz=190
**PINM** **Pinnacle** **82.66 18** P **P** **04 40 36.1 -0.2**
baz=216,SNR=35
PINM S **SKSac** **04 50 16.9 +1.0**
baz=216
**IPM** **Ipoh** **82.67 277** P **P** **04 40 37.8 +0.5**
**IPM** **Ipoh** **82.67 277** IAmb IAmb 04 40 41.7
comp=Z,956nm,0.8s
**MVU** **Marysvale** **82.67 46** P **P** **04 40 37.4 +0.3**
**TABL** **Table Mountain** **82.68 17** IAmb IAmb 04 40 37.5
comp=Z,501nm,0.8s
**F14K** **Arctic Creek** **82.69 5** P **P** **04 40 36.7 +0.6**
baz=191,SNR=130
F14K S **SKSac** **04 50 16.9 +1.2**
baz=191
**N25K** **Chitina, Valde** **82.72 15** IAmb IAmb 04 40 37.4
comp=Z,385nm,0.7s
**N25K** **Chitina, Valde** **82.72 15** P **P** **04 40 36.5 -0.1**
baz=212,SNR=133
N25K S **SKSac** **04 50 16.9 +0.6**
baz=212
**BCPM** **Bancas Point** **82.73 18** IAmb IAmb 04 42 14.5
comp=Z,1µm,1.9s
**GRNC** **Granite Creek** **82.75 17** IAmb IAmb 04 42 15.8
comp=Z,2µm,1.7s
**M24K** **Tolsona, Glenn** **82.76 14** P **P** **04 40 36.6 -0.1**
**M24K** **Tolsona, Glenn** **82.76 14** P **P** **04 40 37.0 +0.3**
baz=211,SNR=113
M24K S **SKSac** **04 50 18.1 +1.6**
baz=211
**R31K** **City Hall, Gus** **82.78 21** P **P** **04 40 37.3 +0.6**
baz=220,SNR=5.6
R31K S **S** **04 50 19.3 +1.0**
baz=220
**GLB** **Gilahina Butte** **82.78 16** IAmb IAmb 04 42 15.6
comp=Z,2µm,1.8s
**SISI** **Saibi** **82.81 271** P **P** **04 40 38.8 +0.8**
comp=Z,811nm,1.1s
**WAT6** **Susitna Watana** **82.81 14** P **P** **04 40 36.7 -0.4**
baz=209,SNR=5.2
WAT6 S **SKSac** **04 50 16.5 -0.5**
baz=209
**H17K** **Granite Mounta** **82.84 8** IAmb IAmb 04 42 16.5
comp=Z,2µm,1.9s
**H17K** **Granite Mounta** **82.84 8** P **P** **04 40 37.0 0.0**
baz=197,SNR=158
H17K S **SKSac** **04 50 16.3 -0.4**
baz=197
**WAT1** **Susitna Watana** **82.85 13** P **P** **04 40 36.6 -0.5**
baz=208
WAT1 S **SKSac** **04 50 16.7 -0.3**
baz=208
**W18A** **Petrified Fore** **82.89 50** P **P** **04 40 38.5 +0.3**
W18A IAmb IAmb 04 40 41.0
comp=Z,543nm,1.1s
**W18A** **Petrified Fore** **82.89 50** P **P** **04 40 39.7 +1.5**
baz=244,SNR=52
W18A S **S** **04 50 22.8 +1.9**
baz=244
**MCARA** **McCarthy VSAT** **82.94 16** IAmb IAmb 04 42 16.6
comp=Z,2µm,1.9s
**MCARA** **McCarthy VSAT** **82.94 16** P **P** **04 40 37.5 0.0**
baz=214,SNR=64
MCARA S **SKSac** **04 50 18.8 +1.2**
baz=214
**SEY** **Seymchan** **82.96 347** P **P** **04 40 37.2 -0.4**
comp=Z,520nm,0.8s,baz=145,slow=5.7,SNR=375
SEY pP **pP** **04 42 13.9 +1.3**
comp=Z,111nm,1.0s,baz=149,slow=5.3,SNR=4.0
comp=Z,520nm,0.8s
**SEY** **Seymchan** **82.96 347** *d i*P **P** **04 40 37.1 -0.5**
SEY pmax pmax
comp=Z,1µm,1.0s
**J20K** **Nowinta River** **82.98 10** P **P** **04 40 37.8 +0.1**
baz=203,SNR=282
J20K S **SKSac** **04 50 18.6 +0.9**
baz=203
J20K S **SKSac** **04 50 18.6 +0.9**
baz=203
**G16K** **Koyuk River** **82.99 7** P **P** **04 40 37.7 0.0**
G16K IAmb IAmb 04 40 40.1
comp=Z,681nm,1.1s
**G16K** **Koyuk River** **82.99 7** P **P** **04 40 38.0 +0.4**
baz=195,SNR=112
G16K S **SKSac** **04 50 18.6 +1.0**
baz=195
**BELA** **Belgrano 2** **83.03 173** IAmb IAmb 04 40 38.8
comp=Z,678nm,1.0s
**LOGN** **Logan Glacier** **83.04 17** IAmb IAmb 04 40 40.3
comp=Z,489nm,0.9s
**CTG** **Chitna Glacier** **83.06 17** P **P** **04 40 38.3 -0.1**
baz=215,SNR=131
CTG S **SKSac** **04 50 19.7 +1.1**
baz=215
**CTGM** **Chitina Glacie** **83.06 17** IAmb IAmb 04 42 17.4
comp=Z,2µm,1.6s
**P29M** **Windy Craggy** **83.06 19** IAmb IAmb 04 42 17.9
comp=Z,2µm,1.7s
**P29M** **Windy Craggy** **83.06 19** P **P** **04 40 38.9 +0.6**
baz=218,SNR=97
**F15K** **North Star Dit** **83.06 6** IAmb IAmb 04 42 17.7
comp=Z,2µm,1.8s
**F15K** **North Star Dit** **83.06 6** P **P** **04 40 38.2 +0.1**
baz=193,SNR=53
**DUG** **Dugway, Tooele** **83.07 44** P **P** **04 40 39.8 +0.9**
baz=241,SNR=145
DUG S **S** **04 50 24.5 +2.0**
baz=241
**GCSA** **Galena City Sc** **83.08 9** P **P** **04 40 38.6 +0.5**
baz=200,SNR=110
**U35K** **Hyder** **83.08 25** IAmb IAmb 04 40 49.6
comp=Z,695nm,1.2s
**U35K** **Hyder** **83.08 25** P **P** **04 40 38.8 +0.5**
baz=226
**R32K** **Eaglecrest** **83.10 21** IAmb IAmb 04 42 19.5
comp=Z,2µm,1.9s
**R32K** **Eaglecrest** **83.10 21** P **P** **04 40 38.9 +0.5**
baz=222,SNR=34
**JIS** **Juneau Island** **83.14 22** P **P** **04 40 38.9 +0.3**
**HNS** **HongShan** **83.17 312** ⇓P **P** **04 40 39.9 +0.7**
HNS pP **pP** **04 42 16.8 +2.3**
HNS PP **PP** **04 43 56.5 -1.5**
HNS S **SKSac** **04 50 20.9 +0.9**
HNS pmax pmax
comp=Z,530nm,1.4s
**O28M** **Mount Upton** **83.23 18** P **P** **04 40 39.4 0.0**
baz=216,SNR=97
**121A** **Cookes Peak, D** **83.23 53** P **P** **04 40 41.2 +1.3**
121A IAmb IAmb 04 40 42.7
comp=Z,631nm,1.2s
**121A** **Cookes Peak, D** **83.23 53** P **P** **04 40 41.9 +1.9**
baz=245,SNR=157
**H18K** **Honhosa River** **83.25 8** IAmb IAmb 04 42 18.3
comp=Z,2µm,1.9s
**H18K** **Honhosa River** **83.25 8** P **P** **04 40 38.7 -0.3**
baz=199,SNR=96
**F10A** **Beach Ranch, E** **83.25 38** IAmb IAmb 04 40 41.4
comp=Z,688nm,0.9s
**HARP** **HAARP** **83.26 15** P **P** **04 40 39.1 0.0**
baz=212,SNR=99
**KULM** **Kulin** **83.27 278** IAmb IAmb 04 40 42.8
comp=Z,2µm,1.8s
**G17K** **Kiwalik Mounta** **83.29 7** P **P** **04 40 39.3 +0.1**
baz=197,SNR=145
**RND** **Reindeer** **83.30 13** P **P** **04 40 38.7 -0.7**
**RND** **Reindeer** **83.30 13** P **P** **04 40 38.7 -0.7**
RND pmax pmax
comp=Z,4µm,1.4s
**DHY** **Denali Highway** **83.33 14** P **P** **04 40 39.2 -0.4**
baz=209,SNR=69
**O29M** **Mount Kennedy** **83.33 19** P **P** **04 40 40.1 +0.4**
baz=218,SNR=8.7
**PLBC** **Pleasant Camp** **83.37 20** P **P** **04 40 40.4 +0.7**
baz=220,SNR=109
**BJT** **Baijiatuau** **83.38 315** P **P** **04 40 40.8 +0.5**
**BJT** **Baijiatuau** **83.38 315** IAmb IAmb 04 40 43.3
comp=Z,712nm,1.1s
**BJI** **Beijing** **83.39 315** P **P** **04 40 40.4 +0.1**
BJI pP **pwP** **04 42 18.8 +0.7**
BJI sP **sP** **04 43 02.4 +3.3**
BJI PP **PP** **04 43 55.9 -3.8**
BJI SKS **SKSac** **04 50 20.6 -0.7**
BJI S **SKKSac** **04 50 29.6 +2.6**
BJI SS **SS** **04 56 01.3 -1.4**
BJI pmax pmax
comp=Z,300nm,1.2s
**HMU** **Henry Mountain** **83.43 47** IAmb IAmb 04 40 43.4
comp=Z,734nm,1.6s
**BPAW** **Bear Paw Mtn.** **83.48 12** P **P** **04 40 38.8 -1.5**
**BPAW** **Bear Paw Mtn.** **83.48 12** P **P** **04 40 38.7 -1.5**
baz=206,SNR=5.2
**I20K** **Naaghedeneel** **83.50 10** IAmb IAmb 04 40 42.6
comp=Z,1µm,1.1s
**I20K** **Naaghedeneel** **83.50 10** P **P** **04 40 40.6 +0.4**
baz=203,SNR=163
**LYN** **LuoYang** **83.53 309** P **P** **04 40 42.1 +0.9**
LYN pP pP 04 42 20.1 +3.5
LYN sP sP 04 42 58.5 -2.0
LYN PP **PP** **04 44 06.3 +5.3**
LYN SKS **SKSac** **04 50 21.6 -0.9**
LYN S **SKKSac** **04 50 31.6 +3.2**
LYN sS sS 04 53 15.8 -0.1
LYN pmax pmax
comp=Z,460nm,1.7s
**MCK** **McKinley** **83.57 13** P **P** **04 40 40.1 -0.5**
baz=208,SNR=308
**PAX** **Paxson** **83.67 14** P **P** **04 40 40.6 -0.7**
baz=211,SNR=70
**P30M** **Million Dollar** **83.69 19** P **P** **04 40 42.0 +0.6**
baz=219
P30M S **S** **04 50 30.2 +2.7**
baz=219
**HLID** **Hailey** **83.70 41** P **P** **04 40 43.5 +1.5**
baz=240,SNR=343
**SKAG** **Skagway** **83.71 20** P **P** **04 40 42.2 +0.8**
**SKAG** **Skagway** **83.71 20** P **P** **04 40 42.5 +1.0**
baz=221,SNR=68
SKAG S **S** **04 50 29.9 +2.4**
baz=221
**TMUT** **Trail Mountain** **83.74 46** IAmb IAmb 04 40 45.4
comp=Z,848nm,1.0s
**T35M** **Bob Quinn** **83.74 24** IAmb IAmb 04 42 42.2
comp=Z,816nm,1.8s
**T35M** **Bob Quinn** **83.74 24** P **P** **04 40 42.5 +0.9**
baz=225,SNR=59
T35M S **S** **04 50 31.2 +3.2**
baz=225
**YUK8** **Steele Glacier** **83.77 18** P **P** **04 40 42.3 +0.2**
baz=217,SNR=59
YUK8 S **S** **04 50 30.2 +1.6**
baz=217
**MOIG** **Morelia** **83.80 67** IAmb IAmb 04 40 45.4
comp=Z,582nm,0.9s
**M26K** **Nabesna, AK** **83.80 16** P **P** **04 40 41.0 -1.0**
M26K IAmb IAmb 04 40 44.0
comp=Z,1µm,1.1s
**M26K** **Nabesna, AK** **83.80 16** P **P** **04 40 41.8 -0.1**
baz=214,SNR=430
M26K S **S** **04 50 29.6 +1.1**
baz=214
M26K S **S** **04 50 29.6 +1.1**
baz=214
**H19K** **Roundabout Mou** **83.87 9** P **P** **04 40 42.4 +0.3**
baz=201,SNR=190
H19K S **S** **04 50 32.4 +3.5**
baz=201
**YUK6** **Outpost Mounta** **83.91 18** P **P** **04 40 42.8 +0.1**
baz=218,SNR=6.3
YUK6 S **S** **04 50 30.7 +0.7**
baz=218
**G18K** **Tagagawik** **83.91 8** IAmb IAmb 04 42 21.8
comp=Z,2µm,1.8s
**G18K** **Tagagawik** **83.91 8** P **P** **04 40 42.0 -0.4**
baz=199,SNR=132
G18K S **S** **04 50 30.2 +0.8**
baz=199
**PBSI** **Pulau Batu** **83.95 272** P **P** **04 40 45.4 +1.7**
comp=Z,592nm,1.1s
**YUK3** **Moose Creek** **83.97 17** P **P** **04 40 43.0 +0.1**
baz=216,SNR=303
YUK3 S **S** **04 50 31.6 +1.1**
baz=216
**ENH** **Enshi** **84.06 304** P **P** **04 40 44.7 +0.8**
**M27K** **Edge Creek, AK** **84.06 16** P **P** **04 40 43.4 0.0**
M27K IAmb IAmb 04 40 45.8
comp=Z,1µm,1.2s
**M27K** **Edge Creek, AK** **84.06 16** P **P** **04 40 43.7 +0.4**
baz=215,SNR=266
M27K S **S** **04 50 32.1 +0.8**
baz=215
M27K S **S** **04 50 32.1 +0.8**
baz=215
**S34M** **Telegraph Cree** **84.06 23** IAmb IAmb 04 40 45.6
comp=Z,743nm,1.1s
**S34M** **Telegraph Cree** **84.06 23** P **P** **04 40 44.2 +0.9**
baz=225,SNR=272
S34M S **S** **04 50 33.6 +2.5**
baz=225
**H20K** **Anotleneega Mo** **84.08 9** P **P** **04 40 43.4 +0.2**
baz=202,SNR=153
H20K S **S** **04 50 33.0 +1.9**
baz=202
**SRU** **San Rafael Swe** **84.12 46** IAmb IAmb 04 40 46.6
comp=Z,520nm,1.0s
**F17K** **Baldwin Pennin** **84.12 7** P **P** **04 40 43.3 0.0**
baz=196,SNR=65
F17K S **S** **04 50 33.4 +2.1**
baz=196
**RPSI** **Rantau Prapat** **84.14 275** IAmb IAmb 04 40 47.7
comp=Z,632nm,0.9s
**YUK4** **Talbot Arm** **84.14 18** P **P** **04 40 44.2 +0.3**
baz=218,SNR=24
YUK4 S **S** **04 50 33.4 +1.1**
baz=218
**P17A** **Butcher Ranch,** **84.14 46** P **P** **04 40 44.5 +0.2**
P17A IAmb IAmb 04 42 23.9
comp=Z,1µm,1.8s
**PSI** **Prapat** **84.17 275** P **P** **04 40 44.3 -0.7**
**L26K** **Log Cabin Wild** **84.24 15** IAmb IAmb 04 40 46.1
comp=Z,445nm,0.9s
**L26K** **Log Cabin Wild** **84.24 15** P **P** **04 40 44.0 0.0**
baz=213,SNR=173
L26K S **S** **04 50 33.1 +0.4**
baz=213
L26K S **S** **04 50 33.1 +0.4**
baz=213
**NEA2** **Nenana** **84.30 12** P **P** **04 40 43.1 -1.2**
baz=208,SNR=95
NEA2 S **SKSac** **04 50 30.7 +4.5**
baz=208
**K24K** **Donnelly Dome** **84.32 14** P **P** **04 40 44.5 +0.1**
baz=211,SNR=386
K24K S **S** **04 50 33.8 +0.2**
baz=211
K24K S **S** **04 50 33.8 +0.2**
baz=211
**P32M** **Atlin** **84.36 21** P **P** **04 40 45.3 +0.6**
baz=222,SNR=78
P32M S **S** **04 50 36.1 +2.0**
baz=222
**G19K** **Purcell Mounta** **84.36 8** P **P** **04 40 44.2 -0.4**
**G19K** **Purcell Mounta** **84.36 8** P **P** **04 40 44.5 -0.1**
baz=200,SNR=7.4
G19K S **S** **04 50 35.6 +1.8**
baz=200
**MLY** **Manley** **84.37 11** IAmb IAmb 04 40 45.7
comp=Z,688nm,1.0s
**MLY** **Manley** **84.37 11** P **P** **04 40 43.7 -1.0**
baz=206,SNR=268
MLY S **SKSac** **04 50 31.4 +4.8**
baz=206
**Q32M** **Nakina River** **84.40 22** IAmb IAmb 04 42 27.8
comp=Z,1µm,1.6s
**Q32M** **Nakina River** **84.40 22** P **P** **04 40 45.9 +0.7**
baz=224,SNR=125
Q32M S **S** **04 50 36.3 +1.5**
baz=224
**TCUT** **Toone Canyon** **84.45 44** IAmb IAmb 04 40 48.5
comp=Z,1µm,1.2s
**F18K** **Selawik** **84.46 7** P **P** **04 40 44.3 -0.7**
baz=198,SNR=60
F18K S **S** **04 50 35.9 +1.3**
baz=198
**O30N** **Mendenhall** **84.47 19** P **P** **04 40 45.7 +0.4**
baz=220,SNR=52
O30N S **S** **04 50 36.7 +1.5**
baz=220
**RIDG** **Independent Ri** **84.48 14** P **P** **04 40 45.1 -0.2**
baz=212,SNR=144
RIDG S **S** **04 50 35.3 +0.2**
baz=212
**PMSA** **Palmer Station** **84.51 157** P **P** **04 40 46.0 +0.6**
PMSA IAmb IAmb 04 40 47.4
comp=Z,1µm,1.5s
**PMSA** **Palmer Station** **84.51 157** P **P** **04 40 46.2 +0.8**
comp=Z,153nm,1.0s,baz=244,slow=4.8,SNR=32
PMSA pP **pwP** **04 42 22.2 -1.1**
comp=Z,96nm,1.3s,baz=215,slow=5.7,SNR=2.3
comp=Z,153nm,1.0s
**PMSA** **Palmer Station** **84.51 157** *e*P **P** **04 40 46.4 +1.0**
**Y22D** **IRIS PASSCAL I** **84.53 52** P **P** **04 40 48.1 +1.7**
baz=245,SNR=5.9
Y22D S **S** **04 50 45.0 +7.8**
baz=245
**P18A** **Preston Nutter** **84.55 46** P **P** **04 40 46.5 0.0**
**NEW** **Newport** **84.56 36** P **P** **04 40 46.3 +0.3**
baz=237
NEW S **S** **04 50 35.9 -0.6**
baz=237
**ZEA** **Zeya** **84.56 331** *e*P **P** **04 40 46.3 +0.5**
ZEA *e* 04 42 22.3
ZEA pmax pmax
comp=N,220nm,1.3s
ZEA pmax pmax
comp=E,60nm,1.4s
ZEA pmax pmax
comp=Z,440nm,1.4s
**H21K** **Melozitna Rive** **84.57 10** P **P** **04 40 45.5 -0.2**
baz=204,SNR=122
H21K S **S** **04 50 37.2 +1.3**
baz=204
H21K S **S** **04 50 37.2 +1.3**
baz=204
**HDA** **Harding Lake** **84.58 13** P **P** **04 40 45.2 -0.5**
baz=210,SNR=360
HDA S **S** **04 50 35.1 -0.9**
baz=210
**L27K** **Beaver Creek,** **84.65 16** IAmb IAmb 04 42 25.8
comp=Z,2µm,1.9s
**L27K** **Beaver Creek,** **84.65 16** P **P** **04 40 46.1 0.0**
baz=215,SNR=77
L27K S **S** **04 50 37.8 +1.0**
baz=215
**E17K** **Hotham Inlet** **84.68 6** P **P** **04 40 45.8 -0.3**
baz=196,SNR=78
E17K S **S** **04 50 38.4 +1.6**
baz=196
**N30M** **Aishikik Lake** **84.69 18** P **P** **04 40 46.2 -0.2**
baz=219,SNR=30
N30M S **S** **04 50 37.8 +0.4**
baz=219

MVCO **Mesa Verde** **84.70 49** IAmb IAmb 04 42 44.4
comp=Z,1µm,2.0s
**MVCO Mesa Verde** **84.70 49** P **P** **04 40 48.0 +0.8**
baz=244,SNR=32
MVCO S **S** **04 50 43.4 +4.6**
baz=244
**VHRN Van Horn** **84.71 56** IAmb IAmb 04 40 49.9
comp=Z,622nm,1.0s
**I23K Minto, Yukon-K** **84.74 12** P **P** **04 40 45.2 -1.2**
baz=207,SNR=170
I23K S **S** **04 50 35.2 -2.2**
baz=207
I23K S **S** **04 50 35.2 -2.2**
baz=207
**MNTX Cornudas Mount** **84.75 55** P **P** **04 40 49.0 +1.6**
baz=246,SNR=263
MNTX S **S** **04 50 45.2 +6.1**
baz=246
**WHY Whitehorse** **84.77 20** IAmb IAmb 04 42 26.8
comp=Z,2µm,1.8s
**WHY Whitehorse** **84.77 20** P **P** **04 40 47.1 +0.3**
baz=221,SNR=125
WHY S **S** **04 50 40.3 +2.1**
baz=221
**COLA College** **84.80 12** P **P** **04 40 45.5 -1.1**
**COLA College** **84.80 12** P **P** **04 40 45.6 -1.1**
**COLA College** **84.80 12** P **P** **04 40 46.0 -0.7**
baz=209
COLA S **S** **04 50 36.3 -1.7**
baz=209
**COLA College** **84.80 12** P **P** **04 40 45.6 -1.1**
COLA pmax pmax
comp=Z,1µm,0.8s
**JRQG Juriquilla Cam** **84.80 67** P **P** **04 40 49.7 +1.7**
**MAW Mawson** **84.84 200** P **P** **04 40 47.4 +0.3**
comp=Z,137nm,0.5s,baz=126,slow=6.2,SNR=179
MAW PKKPbc **PKKPbc** **04 58 52.1 -3.0**
comp=Z,6.5nm,0.8s,baz=352,slow=2.8,SNR=6.8
comp=Z,137nm,0.5s
**DLBC Dease Lake** **84.85 23** IAmb IAmb 04 42 29.8
comp=Z,2µm,1.7s
**DLBC Dease Lake** **84.85 23** P **P** **04 40 47.7 +0.5**
baz=226,SNR=112
DLBC S **S** **04 50 42.1 +3.1**
baz=226
**SCRK Sand Creek** **84.88 14** P **P** **04 40 47.1 -0.2**
baz=212,SNR=252
SCRK S **S** **04 50 39.3 +0.1**
baz=212
**GYA Guiyang** **84.90 299** ⇓P **P** **04 40 48.5 +0.2**
GYA pP pP 04 42 26.5 +2.2
GYA PP **PP** **04 44 12.4 0.0**
GYA SKS **SKSac** **04 50 32.8 +0.9**
GYA S **ScS** **04 50 46.5 -2.8**
GYA pmax pmax
comp=Z,390nm,1.5s
**ILAR Eielson Array** **84.91 13** P **P** **04 40 46.5 -0.8**
comp=Z,732nm,1.1s,baz=228,slow=5.5,SNR=438
ILAR pP **pwP** **04 42 24.3 -0.7**
comp=Z,560nm,1.4s,baz=230,slow=4.8,SNR=7.5
ILAR PKiKP **PKiKP** **04 45 55.1 -1.0**
comp=Z,5.2nm,0.6s,baz=275,slow=2.4,SNR=6.2
ILAR S **SKSac** **04 50 28.6 -1.4**
comp=Z,124nm,1.3s,baz=229,slow=3.2,SNR=8.5
comp=Z,732nm,1.1s
**F19K Shaleruckik Mo** **84.92 8** P **P** **04 40 46.9 -0.4**
baz=199
F19K S **S** **04 50 38.9 -0.2**
baz=199
**TIY Taiyuan** **84.92 312** *e*P **P** **04 40 49.1 +1.0**
TIY pP **pwP** **04 42 27.9 +1.9**
TIY S **SKSac** **04 50 32.5 +1.1**
TIY pmax pmax
comp=Z,540nm,1.0s
**NONG Nongkai** **85.01 290** P **P** **04 40 49.5 +0.7**
**GSI Gunungsitoli** **85.02 273** P **P** **04 40 50.1 +1.1**
**GSI Gunungsitoli** **85.02 273** P **P** **04 40 49.9 +0.9**
comp=Z,2µm,0.7s,comp=Z,33µm
**H22K Ishtalitna Cre** **85.04 11** P **P** **04 40 47.7 -0.2**
baz=206,SNR=323
H22K S **S** **04 50 40.5 +0.1**
baz=206
H22K S **S** **04 50 40.5 +0.1**
baz=206
**M29M Somme Creek** **85.06 17** IAmb IAmb 04 42 28.1
comp=Z,2µm,1.9s
**M29M Somme Creek** **85.06 17** P **P** **04 40 48.4 +0.1**
baz=218,SNR=74
M29M S **S** **04 50 41.8 +0.8**
baz=218
**POKR Poker Plat Res** **85.10 12** P **P** **04 40 47.3 -0.9**
baz=209,SNR=113
POKR S **S** **04 50 39.0 -2.0**
baz=209
**J25K Salcha River,** **85.11 14** P **P** **04 40 48.0 -0.4**
baz=211,SNR=350
J25K S **S** **04 50 40.8 -0.4**
baz=211
J25K S **S** **04 50 40.8 -0.4**
baz=211
**N31M Braeburn, Yuko** **85.11 19** P **P** **04 40 47.6 -0.8**
N31M IAmb IAmb 04 40 50.7
comp=Z,615nm,1.1s
**N31M Braeburn, Yuko** **85.11 19** P **P** **04 40 48.8 +0.4**
baz=220,SNR=118
N31M S **S** **04 50 42.6 +1.2**
baz=220
**P33M Teslin, Yukon** **85.12 21** P **P** **04 40 48.9 +0.3**
baz=223,SNR=38
P33M S **S** **04 50 43.4 +1.8**
baz=223
**E18K Tukpahlearik C** **85.14 7** P **P** **04 40 48.2 -0.1**
baz=197,SNR=48
E18K S **S** **04 50 42.6 +1.3**
baz=197
**D17K Noatak River** **85.15 6** P **P** **04 40 48.5 +0.1**
baz=194,SNR=59
D17K S **S** **04 50 44.2 +2.9**
baz=194
**R33M Jennings River** **85.18 22** IAmb IAmb 04 42 31.8
comp=Z,2µm,1.7s
**R33M Jennings River** **85.18 22** P **P** **04 40 49.6 +0.7**
baz=225,SNR=107
R33M S **S** **04 50 43.5 +1.2**
baz=225
**TX31 Lajitas Ar. Si** **85.20 58** IAmb IAmb 04 40 52.7
comp=Z,1µm,1.1s
**TXAR Lajitas Array** **85.20 58** P **P** **04 40 51.5 +1.9**
**TXAR Lajitas Array** **85.20 58** P **P** **04 40 51.0 +1.4**
comp=Z,451nm,0.9s,baz=224,slow=5.1,SNR=858
TXAR pP **pwP** **04 42 28.1 +0.2**
comp=Z,198nm,1.2s,baz=228,slow=3.5,SNR=6.2
TXAR PKiKP **PKiKP** **04 45 57.8 0.0**
comp=Z,3.5nm,0.9s,baz=190,slow=1.6,SNR=2.4
TXAR S **SKSac** **04 50 33.9 +0.4**
comp=Z,2.2nm,0.9s,baz=299,slow=2.6,SNR=2.7
TXAR PKKPbc **PKKPbc** **04 58 52.4 -1.1**
comp=Z,3.8nm,0.8s,baz=106,slow=4.0,SNR=4.8
TXAR PKPPKP **P'P'df** **05 06 56.1 -3.2**
comp=Z,4.7nm,1.0s,baz=159,slow=2.6,SNR=9.0
comp=Z,451nm,0.9s
**ANMO Albuquerque** **85.24 51** P **P** **04 40 50.4 +0.5**
ANMO IAmb IAmb 04 42 30.6
comp=Z,1µm,1.6s
**ANMO Albuquerque** **85.24 51** P **P** **04 40 51.0 +1.0**
baz=246
ANMO S **S** **04 50 48.6 +4.5**
baz=246
**ANMO Albuquerque** **85.24 51** *c* *i*P **P** **04 40 50.9 +1.0**
ANMO pmax pmax
comp=Z,153nm,1.0s
**G21K Allakaket** **85.25 10** P **P** **04 40 48.8 -0.1**
baz=204,SNR=106
G21K S **S** **04 50 43.3 +0.9**
baz=204
**SRIT Nakonsritamara** **85.26 280** P **P** **04 40 51.7 +1.5**
**SRIT Nakonsritamara** **85.26 280** IAmb IAmb 04 40 54.1
comp=Z,528nm,0.8s
**XLT XiLinHaoTe** **85.30 319** *e*P **P** **04 40 50.3 +0.5**
XLT pP pwP 04 42 28.6 +0.4
XLT PP **PP** **04 44 12.4 -2.8**
XLT SKS **SKSac** **04 50 34.0 +0.5**
XLT pmax pmax
comp=Z,460nm,1.2s
**H23K Yukon River** **85.31 11** IAmb IAmb 04 42 28.4
comp=Z,2µm,1.9s
**H23K Yukon River** **85.31 11** P **P** **04 40 48.1 -1.2**
baz=207,SNR=94
H23K S **S** **04 50 40.8 -2.2**
baz=207
H23K S **S** **04 50 40.8 -2.2**
baz=207
**K27K Chicken** **85.39 15** P **P** **04 40 50.0 +0.3**
baz=214
K27K S **S** **04 50 45.1 +1.3**
baz=214
K27K S **S** **04 50 45.1 +1.3**
baz=214
**F20K Avaraart Lake** **85.41 9** IAmb IAmb 04 42 29.8
comp=Z,2µm,1.8s
**F20K Avaraart Lake** **85.41 9** P **P** **04 40 49.6 -0.1**
baz=201
F20K S **S** **04 50 44.5 +0.7**
baz=201
**SURA Surathani** **85.41 281** P **P** **04 40 52.6 +1.7**
**J26L Joseph Creek** **85.43 14** IAmb IAmb 04 40 52.9
comp=Z,777nm,0.8s
**J26L Joseph Creek** **85.43 14** P **P** **04 40 50.1 +0.1**
baz=213,SNR=285
J26L S **S** **04 50 45.9 +1.6**
baz=213
J26L S **S** **04 50 45.9 +1.6**
baz=213
**AHID Auburn Hatcher** **85.43 43** P **P** **04 40 50.8 +0.2**
AHID IAmb IAmb 04 42 30.1
comp=Z,898nm,1.8s
**RDMU Red Mountain** **85.44 45** IAmb IAmb 04 42 30.1
comp=Z,1µm,1.9s
**SLVN Son La** **85.44 294** IAmb IAmb 04 40 54.8
comp=Z,890nm,1.5s
**NAYO Nakonayok** **85.45 286** P **P** **04 40 52.2 +1.2**
**UNM Universidad Na** **85.46 68** IAmb IAmb 04 40 54.3
comp=Z,779nm,1.1s
**KCSI Kotane, Aceh** **85.48 275** P **P** **04 40 51.2 -0.1**
comp=Z,344nm,0.8s
**RDOG Red Dog Mine** **85.52 6** P **P** **04 40 50.2 0.0**
baz=194,SNR=11
RDOG S **S** **04 50 46.2 +1.3**
baz=194
**C16K Lisburne Hills** **85.52 5** P **P** **04 40 50.9 +0.8**
baz=192,SNR=16
C16K S **S** **04 50 46.4 +1.6**
baz=192
**BILL Bilibino** **85.56 354** P **P** **04 40 49.8 -0.6**
**BILL Bilibino** **85.56 354** *d* *i*P **P** **04 40 49.8 -0.6**
BILL *i* *PP **pP** **04 42 26.4 +0.3**
BILL *i* 04 44 15.8
BILL pmax pmax
comp=Z,1µm,0.9s
**E19K Redstone River** **85.58 8** P **P** **04 40 50.3 -0.3**
baz=200,SNR=85
E19K S **S** **04 50 46.1 +0.5**
baz=200
**ALPN Alpine** **85.62 57** IAmb IAmb 04 40 56.6
comp=Z,501nm,1.1s
**MSO Missoula** **85.64 38** IAmb IAmb 04 42 35.1
comp=Z,661nm,1.6s
**MSO Missoula** **85.64 38** P **P** **04 40 51.4 0.0**
baz=240,SNR=47
MSO S **S** **04 50 47.1 -0.1**
baz=240
**H24K Noodor Dome** **85.64 12** P **P** **04 40 49.0 -1.9**
baz=209,SNR=45
H24K S **S** **04 50 43.4 -2.9**
baz=209
H24K S **S** **04 50 43.4 -2.9**
baz=209
**DLMT Dillon** **85.72 40** P **P** **04 40 52.3 +0.3**
DLMT IAmb IAmb 04 40 54.3
comp=Z,692nm,1.1s
**N32M Quiet Lake** **85.72 20** IAmb IAmb 04 40 54.6
comp=Z,848nm,1.2s
**N32M Quiet Lake** **85.72 20** P **P** **04 40 51.8 +0.4**
baz=223
N32M S **S** **04 50 49.5 +2.2**
baz=223
**PECS Pecos** **85.82 56** P **P** **04 40 53.0 +0.4**
PECS IAmb IAmb 04 42 33.5
comp=Z,844nm,1.6s
**HIA Hailar** **85.83 324** P **P** **04 40 52.0 -0.2**
**HIA Hailar** **85.83 324** IAmb IAmb 04 40 54.9
comp=Z,517nm,1.3s
**PRP Porcupine Dome** **85.85 13** P **P** **04 40 51.2 -0.8**
baz=211,SNR=113
PRP S **S** **04 50 47.4 -1.1**
baz=211
**F21K Alatna River** **85.90 9** P **P** **04 40 51.4 -0.7**
baz=204,SNR=45
F21K S **S** **04 50 48.6 -0.1**
baz=204
**C17K DeLong Mountai** **85.90 5** P **P** **04 40 51.3 -0.8**
baz=194,SNR=11
C17K S **S** **04 50 49.4 +0.8**
baz=194
**G22K Bettles** **85.94 10** P **P** **04 40 52.1 -0.1**
baz=205
G22K S **S** **04 50 50.2 +1.2**
baz=205
**SNOW Snow King Moun** **85.98 42** IAmb IAmb 04 40 55.9
comp=Z,513nm,1.1s
**XAN Xi'an** **85.99 307** ⇓P **P** **04 40 54.3 +0.9**
XAN SKS **SKSac** **04 50 38.5 +0.4**
XAN S **S** **04 50 49.8 -1.2**
XAN SS **SS** **04 56 47.0 +5.9**
XAN pmax pmax
comp=Z,1µm,1.3s
XAN pmax pmax
comp=Z,28µm,10.9s
**G23K Bananza Creek** **86.01 11** P **P** **04 40 51.7 -1.0**
**G23K Bananza Creek** **86.01 11** P **P** **04 40 52.2 -0.5**
baz=207,SNR=66
G23K S **S** **04 50 50.3 +0.5**
baz=207
**IMW Indian Meadow** **86.06 42** IAmb IAmb 04 40 55.7
comp=Z,366nm,0.8s
**M31M Drury Creek, Y** **86.09 19** IAmb IAmb 04 42 32.6
comp=Z,786nm,1.8s
**M31M Drury Creek, Y** **86.09 19** P **P** **04 40 52.8 -0.3**
baz=221,SNR=23
M31M S **S** **04 50 50.1 -0.6**
baz=221
**DAWY Dawson** **86.11 16** IAmb IAmb 04 42 33.2
comp=Z,2µm,1.8s
**DAWY Dawson** **86.11 16** P **P** **04 40 53.2 0.0**
baz=217,SNR=132
DAWY S **S** **04 50 51.1 +0.3**
baz=217
**MG05 Puerto Natales** **86.12 143** P **P** **04 40 54.1 +0.5**
MG05 IAmb IAmb 04 40 55.8
comp=Z,663nm,1.2s
**S22A 4UR Ranch, Cre** **86.13 49** IAmb IAmb 04 42 35.2
comp=Z,1µm,1.6s
**S22A 4UR Ranch, Cre** **86.13 49** P **P** **04 40 55.4 +1.2**
baz=245,SNR=221
S22A S **S** **04 50 57.9 +5.2**
baz=245
**MG04 Isla Riesco** **86.19 144** P **P** **04 40 54.8 +0.9**
**I26K Coal Creek Min** **86.20 14** P **P** **04 40 53.5 0.0**
baz=213
I26K S **S** **04 50 51.8 +0.3**
baz=213
I26K S **S** **04 50 51.8 +0.3**
baz=213
**EGAK Eagle** **86.23 15** P **P** **04 40 53.5 -0.2**
baz=215,SNR=161
EGAK S **S** **04 50 52.6 +0.7**
baz=215
**C18K Utukok River** **86.26 6** IAmb IAmb 04 42 33.9
comp=Z,2µm,1.8s
**C18K Utukok River** **86.26 6** P **P** **04 40 53.1 -0.7**
baz=196
C18K S **S** **04 50 51.5 -0.6**
baz=196
**FLWY Flagg Ranch** **86.30 42** IAmb IAmb 04 40 57.0
comp=Z,426nm,0.9s
**YPP Pitchstone Pla** **86.32 42** IAmb IAmb 04 42 41.3
comp=Z,715nm,1.8s
**YHL Hebgen Lake** **86.36 41** IAmb IAmb 04 40 58.2
comp=Z,984nm,1.1s
**GO10 Punta Arenas** **86.36 145** P **P** **04 40 55.7 +0.9**
GO10 IAmb IAmb 04 40 57.8
comp=Z,1µm,1.3s
**F22K John River** **86.37 10** P **P** **04 40 54.2 -0.1**
baz=205
F22K S **S** **04 50 53.0 -0.1**
baz=205
**GO09 Cerro Castillo** **86.37 143** IAmb IAmb 04 40 57.3
comp=Z,1µm,1.7s
**BOZ Bozeman (W)** **86.43 40** P **P** **04 40 56.5 +1.2**
baz=241,SNR=292
BOZ S **S** **04 50 57.3 +2.3**
baz=241
**H25L Birch Creek** **86.43 12** P **P** **04 40 53.1 -1.5**
baz=211,SNR=25
H25L S **S** **04 50 53.5 -0.2**
baz=211
**K29M Barlow Dome** **86.44 17** P **P** **04 40 55.1 +0.3**
baz=218,SNR=122
K29M S **S** **04 50 53.5 -0.6**
baz=218
**BW06 Boulder Array** **86.44 43** P **P** **04 40 56.0 +0.5**
baz=243,SNR=125
BW06 S **S** **04 50 56.6 +1.3**
baz=243
**FARO Faro, Yukon** **86.44 19** P **P** **04 40 54.5 -0.3**
baz=222,SNR=33
FARO S **S** **04 50 53.5 -0.5**
baz=222
**PDAR Pinedale Array** **86.44 43** P **P** **04 40 55.6 +0.1**
comp=Z,73nm,0.6s,baz=214,slow=2.7,SNR=283
PDAR pP **pwP** **04 42 32.9 -1.5**
comp=Z,77nm,1.0s,baz=253,slow=2.7,SNR=4.9
PDAR PP **PP** **04 44 22.9 -1.5**
comp=Z,34nm,1.0s,baz=241,slow=6.2,SNR=4.0
PDAR S **SKSac** **04 50 42.1 +1.2**
comp=Z,1.3nm,0.9s,baz=270,slow=1.7,SNR=1.5
PDAR PKKPbc **PKKPbc** **04 58 49.7 -1.7**
comp=Z,5.6nm,0.8s,baz=115,slow=3.6,SNR=9.6
PDAR PKPPKP **P'P'df** **05 06 54.6 -2.0**
comp=Z,7.5nm,1.1s,baz=111,slow=3.8,SNR=8.6
comp=Z,73nm,0.6s
**COLD Coldfoot** **86.45 10** P **P** **04 40 54.9 +0.2**
baz=207,SNR=128
COLD S **S** **04 50 55.4 +1.5**
baz=207
**D19K Kuna River** **86.45 7** IAmb IAmb 04 42 34.8
comp=Z,1µm,1.6s
**D19K Kuna River** **86.45 7** P **P** **04 40 54.4 -0.4**
baz=199,SNR=55
D19K S **S** **04 50 53.8 -0.1**
baz=199
**WTLY Watson Lake, Y** **86.47 22** IAmb IAmb 04 42 37.1
comp=Z,1µm,1.6s
**WTLY Watson Lake, Y** **86.47 22** P **P** **04 40 55.2 +0.3**
baz=226,SNR=38
WTLY S **S** **04 50 56.0 +1.6**
baz=226
**E20K Nigu River** **86.47 8** P **P** **04 40 54.8 -0.1**
baz=201,SNR=181
E20K S **S** **04 50 54.3 +0.1**
baz=201
**G24K Hadweenzic Riv** **86.48 12** P **P** **04 40 54.5 -0.3**
baz=209,SNR=35
G24K S **S** **04 50 52.5 -1.7**
baz=209
**H17A Grant Village** **86.53 42** IAmb IAmb 04 40 59.4
comp=Z,422nm,0.9s
**H17A Grant Village** **86.53 42** P **P** **04 40 58.2 +2.3**
baz=242,SNR=212
H17A S **S** **04 51 02.1 +5.9**
baz=242
**SNSI Sinabang, Aceh** **86.53 274** P **P** **04 40 57.8 +1.5**
comp=Z,1µm,1.5s
**YNM Yellowstone No** **86.60 41** IAmb IAmb 04 40 59.8
comp=Z,582nm,1.2s
**YNR Norris Junctio** **86.61 41** P **P** **04 40 57.6 +1.3**
**SMCO Snowmass** **86.63 47** IAmb IAmb 04 42 46.7
comp=Z,1µm,1.8s
**MNHN Monahans** **86.68 56** IAmb IAmb 04 42 40.3
comp=Z,1µm,1.8s
**LKWY Lake** **86.72 41** P **P** **04 40 58.3 +1.4**
LKWY IAmb IAmb 04 41 00.5
comp=Z,511nm,1.1s
**LKWY Lake** **86.72 41** P **P** **04 40 58.3 +1.4**
LKWY pmax pmax
comp=Z,511nm,1.1s
**J29N Klondike Camp** **86.73 16** P **P** **04 40 56.5 +0.3**
baz=218,SNR=31
J29N S **S** **04 50 57.3 +0.5**
baz=218
**LHMI Lhok Sumawe** **86.77 276** P **P** **04 40 58.6 +1.1**
**LHMI Lhok Sumawe** **86.77 276** P **P** **04 40 58.5 +1.1**
comp=Z,985nm,1.2s,comp=Z,22µm
**I27K Kandik River** **86.81 14** P **P** **04 40 56.2 -0.3**
baz=215,SNR=35
I27K S **S** **04 50 57.4 0.0**
baz=215
I27K S **S** **04 50 57.4 0.0**
baz=215
**G25K Bearman Lake** **86.81 12** P **P** **04 40 55.5 -0.9**
baz=210,SNR=42
G25K S **S** **04 50 57.1 -0.2**
baz=210
**D20K Etivluk River** **86.85 8** P **P** **04 40 56.2 -0.4**
baz=200,SNR=52
D20K S **S** **04 50 57.5 -0.2**
baz=200
**C19K Lookout Ridge** **86.87 7** P **P** **04 40 56.6 -0.1**
baz=198,SNR=26
C19K S **S** **04 50 57.6 -0.3**
baz=198
**HHC Hu-ho-hao-te** **86.89 314** ⇓*i*P **P** **04 40 58.4 +0.9**
HHC pP pP 04 42 33.8 +0.1
HHC sP sP 04 43 18.3 +0.5
HHC S **S** **04 51 05.8 +6.4**
HHC pmax pmax
comp=Z,810nm,1.4s
HHC pmax pmax
comp=Z,6µm,7.9s
**B18K Kokolik River** **86.89 6** P **P** **04 40 56.4 -0.3**
baz=196,SNR=14
B18K S **S** **04 50 58.1 +0.1**
baz=196
**YMP Mirror Lake Pl** **86.95 41** IAmb IAmb 04 42 41.0
comp=Z,756nm,1.7s
**E21K Killik River** **86.95 9** IAmb IAmb 04 42 37.2
comp=Z,2µm,1.8s
**E21K Killik River** **86.95 9** P **P** **04 40 56.3 -0.8**
baz=203
E21K S **S** **04 50 58.5 -0.1**
baz=203
**TOAD Toad River Com** **86.98 24** P **P** **04 40 57.8 +0.4**
baz=230,SNR=78
TOAD S **S** **04 50 59.0 -0.3**
baz=230
**E22K Anaktuvuk Pass** **87.00 10** P **P** **04 40 57.2 -0.2**
baz=205,SNR=134
E22K S **S** **04 50 59.6 +0.4**
baz=205
**MLSI Meulaboh, Aceh** **87.00 275** P **P** **04 40 58.8 +0.3**
comp=Z,2µm,0.7s,comp=Z,11µm
**LIRD Liard River Hi** **87.00 24** P **P** **04 40 57.7 +0.2**
baz=229,SNR=38
LIRD S **S** **04 50 59.1 -0.3**
baz=229
**USHA Ushuaia** **87.07 147** P **P** **04 40 59.3 +1.3**
comp=Z,146nm,1.0s,baz=240,slow=7.8,SNR=15
comp=Z,146nm,1.0s
**I28M Miner Creek** **87.08 15** IAmb IAmb 04 42 37.8
comp=Z,2µm,1.9s
**I28M Miner Creek** **87.08 15** P **P** **04 40 57.3 -0.6**
baz=216,SNR=69
I28M S **S** **04 50 59.9 -0.2**
baz=216
**SDCO Great Sand Dun** **87.09 49** P **P** **04 40 58.8 0.0**
**SDCO Great Sand Dun** **87.09 49** P **P** **04 40 59.4 +0.5**
baz=246,SNR=104
SDCO S **S** **04 51 03.4 +1.6**
baz=246
**F24K Squaw Lake** **87.12 11** P **P** **04 40 58.0 +0.1**
baz=209,SNR=164
F24K S **S** **04 51 01.1 +0.8**
baz=209
**E23K Chandalar** **87.29 10** P **P** **04 40 58.7 -0.1**
baz=207,SNR=160
E23K S **S** **04 51 01.7 -0.3**
baz=207
**GO08 Villa O'Higgin** **87.32 140** IAmb IAmb 04 41 02.3
comp=Z,748nm,1.4s
**J30M Hart River** **87.33 17** IAmb IAmb 04 42 39.5
comp=Z,2µm,1.9s
**J30M Hart River** **87.33 17** P **P** **04 40 59.0 -0.1**

baz=220,SNR=25
J30M S **S** **04 51 02.9 +0.3**
baz=220
**H27K** **Steamboat Moun** **87.34 14** P **P** **04 40 59.0 0.0**
baz=215,SNR=82
H27K S **S** **04 51 03.1 +0.7**
baz=215
**I29M** **Ogilvie Camp,** **87.42 16** IAmb IAmb 04 42 39.3
comp=Z,1µm,1.7s
**I29M** **Ogilvie Camp,** **87.42 16** P **P** **04 40 58.8 -0.6**
baz=218,SNR=68
I29M S **S** **04 51 02.3 -0.9**
baz=218
**MG01** **Puerto William** **87.44 147** IAmb IAmb 04 41 02.0
comp=Z,842nm,1.3s
**G26K** **Porcupine Rive** **87.44 13** P **P** **04 40 59.6 +0.3**
baz=213,SNR=156
G26K S **S** **04 51 04.4 +1.2**
baz=213
**C21K** **Knifeblade Rid** **87.50 8** P **P** **04 40 59.6 0.0**
baz=202,SNR=128
C21K S **S** **04 51 04.3 +0.6**
baz=202
**E24K** **Your Creek** **87.50 11** IAmb IAmb 04 42 42.9
comp=Z,1µm,1.9s
**E24K** **Your Creek** **87.50 11** P **P** **04 40 59.6 -0.1**
baz=208
E24K S **S** **04 51 04.5 +0.6**
baz=208
**RWWY** **Rawlins** **87.53 45** P **P** **04 41 00.7 0.0**
RWWY IAmb IAmb 04 42 42.1
comp=Z,821nm,1.5s
**D22K** **Ayikyak River** **87.55 9** IAmb IAmb 04 41 02.4
comp=Z,422nm,0.8s
**D22K** **Ayikyak River** **87.55 9** P **P** **04 41 00.1 +0.2**
baz=204,SNR=119
D22K S **S** **04 51 04.5 +0.3**
baz=204
**F25K** **Christian Rive** **87.61 12** P **P** **04 41 00.6 +0.3**
baz=211,SNR=77
F25K S **S** **04 51 06.2 +1.2**
baz=211
**TGTN** **Hyland Airport** **87.63 21** P **P** **04 41 01.0 +0.5**
baz=227,SNR=72
TGTN S **S** **04 51 06.0 +0.7**
baz=227
**T25A** **Trinidad** **87.64 50** P **P** **04 41 01.6 +0.3**
baz=247,SNR=52
T25A S **S** **04 51 10.0 +3.1**
baz=247
**PAYG** **Puerto Ayora** **87.65 90** P **P** **04 41 03.1 +1.5**
PAYG IAmb IAmb 04 41 04.9
comp=Z,860nm,1.3s
**AY02** **Valle Explorad** **87.67 138** IAmb IAmb 04 41 09.1
comp=Z,816nm,1.1s
**BMAR** **Burnt Mountain** **87.69 12** P **P** **04 41 01.0 +0.4**
**RLMT** **Red Lodge** **87.69 41** P **P** **04 41 02.7 +1.3**
baz=243,SNR=170
RLMT S **S** **04 51 10.9 +3.9**
baz=243
**DRIO** **Del Rio** **87.70 58** IAmb IAmb 04 41 03.8
comp=Z,830nm,1.0s
**KMI** **Kunming** **87.74 297** ⇑P **P** **04 41 03.9 +1.9**
KMI pP pP 04 42 42.8 +4.1
KMI SKS **SKSac** **04 50 50.1 +0.7**
KMI S **ScS** **04 51 11.0 -2.1**
KMI SS **SS** **04 57 05.0 -2.1**
KMI pmax pmax
comp=Z,570nm,1.5s
**AY03** **Cochrane** **87.76 139** IAmb IAmb 04 41 04.5
comp=Z,848nm,1.4s
**A19K** **Wainwright** **87.77 6** P **P** **04 41 00.6 -0.2**
baz=196,SNR=20
A19K S **S** **04 51 06.4 +0.2**
baz=196
**G27K** **Doyon Strip** **87.79 14** IAmb IAmb 04 42 41.9
comp=Z,1µm,2.0s
**G27K** **Doyon Strip** **87.79 14** P **P** **04 41 01.1 0.0**
baz=215,SNR=57
G27K S **S** **04 51 07.8 +1.2**
baz=215
**TOLK** **Toolik Lake Re** **87.82 10** P **P** **04 41 00.9 -0.3**
baz=207,SNR=34
TOLK S **S** **04 51 06.6 -0.3**
baz=207
**I30M** **Mount Dempster** **87.82 16** IAmb IAmb 04 42 41.6
comp=Z,2µm,1.8s
**I30M** **Mount Dempster** **87.82 16** P **P** **04 41 01.0 -0.4**
baz=220,SNR=67
I30M S **S** **04 51 06.2 -1.0**
baz=220
**OZNA** **Ozona** **87.83 57** P **P** **04 41 02.6 +0.4**
**Q24A** **Divide** **87.84 48** IAmb IAmb 04 42 52.6
comp=Z,2µm,2.0s
**Q24A** **Divide** **87.84 48** P **P** **04 41 03.2 +0.9**
baz=246,SNR=62
Q24A S **S** **04 51 12.3 +3.5**
baz=246
**ISCO** **Idaho Springs** **87.85 47** P **P** **04 41 03.3 +1.0**
baz=246,SNR=13
ISCO S **S** **04 51 12.2 +3.3**
baz=246
**BTO** **Baotou** **87.85 314** ⇑*i*P **P** **04 41 04.1 +2.0**
BTO pP **pP** **04 42 41.8 +2.9**
BTO sP **sP** **04 43 23.6 +1.1**
BTO PP **PP** **04 44 33.3 -2.3**
BTO SKS **SKSac** **04 50 50.6 +1.4**
BTO S **S** **04 51 06.3 -2.1**
BTO pmax pmax
comp=Z,350nm,1.0s
BTO pmax pmax
comp=Z,6µm,4.1s
**D23K** **Nanushuk River** **87.93 10** P **P** **04 41 01.6 -0.1**
D23K IAmb IAmb 04 41 04.4
comp=Z,538nm,0.9s
**D23K** **Nanushuk River** **87.93 10** P **P** **04 41 01.9 +0.3**
baz=206,SNR=153
D23K S **S** **04 51 07.9 +0.1**
baz=206
**B21K** **Ikpikpuk River** **87.96 8** IAmb IAmb 04 42 44.6
comp=Z,982nm,1.6s
**B21K** **Ikpikpuk River** **87.96 8** P **P** **04 41 01.4 -0.3**
baz=202
B21K S **S** **04 51 07.8 -0.1**
baz=202
**H03S2** **Juan Fernandez** **88.00 125** P **P** **04 41 05.1 +2.6**
baz=314,slow=10,SNR=8.8
**B20K** **Meade River** **88.00 7** IAmb IAmb 04 42 42.6
comp=Z,2µm,1.9s
**B20K** **Meade River** **88.00 7** P **P** **04 41 01.7 -0.2**
baz=200
B20K S **S** **04 51 07.6 -0.7**
baz=200
**F26K** **Sheenjek River** **88.00 12** P **P** **04 41 02.5 +0.4**
baz=212,SNR=121
F26K S **S** **04 51 10.0 +1.5**
baz=212
**H03S1** **Juan Fernandez** **88.01 125** P **P** **04 41 05.7 +3.1**
baz=314,slow=10,SNR=8.2
**H03S3** **Juan Fernandez** **88.02 125** P **P** **04 41 05.4 +2.8**
baz=314,slow=10,SNR=4.6
**N23A** **Red Feather La** **88.06 46** IAmb IAmb 04 42 57.6
comp=Z,1µm,1.9s
**N23A** **Red Feather La** **88.06 46** P **P** **04 41 04.5 +1.2**
baz=246,SNR=72
N23A S **S** **04 51 12.4 +1.6**
baz=246
**H29M** **Whitestone** **88.09 15** IAmb IAmb 04 41 03.6
comp=Z,327nm,0.8s
**H29M** **Whitestone** **88.09 15** P **P** **04 41 02.2 -0.3**
baz=218,SNR=86
H29M S **S** **04 51 09.0 -0.3**
baz=218
**H03N2** **Juan Fernandez** **88.12 124** P **P** **04 41 04.6 +1.5**
baz=175,slow=17,SNR=2.3
**H03N3** **Juan Fernandez** **88.13 124** P **P** **04 41 04.4 +1.2**
baz=175,slow=17,SNR=4.5
**VA04** **Juan Fernndez** **88.14 125** P **P** **04 41 04.5 +1.0**
VA04 IAmb IAmb 04 41 06.0
comp=Z,1µm,1.2s
**H03N1** **Juan Fernandez** **88.14 124** P **P** **04 41 05.5 +2.3**
baz=175,slow=17,SNR=4.3
**CRAI** **Chiangrai** **88.19 292** IAmb IAmb 04 41 07.7
comp=Z,547nm,1.5s
**KOTAN** **Kotaneelee Air** **88.26 24** P **P** **04 41 03.3 -0.1**
baz=231,SNR=5.1
KOTAN S **S** **04 51 11.5 +0.4**
baz=231

**POST** **Post** **88.31 55** IAmb IAmb 04 41 05.5
comp=Z,307nm,0.8s
**833A** **Chaparral WMA,** **88.33 60** IAmb IAmb 04 41 06.8
comp=Z,519nm,1.1s
**833A** **Chaparral WMA,** **88.33 60** P **P** **04 41 06.1 +1.7**
baz=250,SNR=48
833A S **S** **04 51 16.6 +3.5**
baz=250
**D24K** **Happy Valley** **88.40 10** P **P** **04 41 03.9 0.0**
baz=208,SNR=61
D24K S **S** **04 51 11.7 -0.4**
baz=208
**RTBA** **Rita Blanca** **88.61 51** P **P** **04 41 05.2 -0.5**
**EPYK** **Eagle Plains** **88.62 15** P **P** **04 41 04.5 -0.5**
baz=219,SNR=121
EPYK S **S** **04 51 12.9 -1.5**
baz=219
**GO07** **Milladeo Hill,** **88.63 135** IAmb IAmb 04 41 08.2
comp=Z,1µm,1.2s
**EGMT** **Eagleton** **88.71 39** P **P** **04 41 05.7 -0.2**
**EGMT** **Eagleton** **88.71 39** P **P** **04 41 06.6 +0.7**
baz=243,SNR=34
EGMT S **S** **04 51 17.1 +1.1**
baz=243
**G29M** **Pine Creek** **88.72 15** P **P** **04 41 05.0 -0.4**
baz=218,SNR=79
G29M S **S** **04 51 15.5 +0.3**
baz=218
**C23K** **Itkillik River** **88.73 9** P **P** **04 41 05.5 +0.2**
baz=206,SNR=95
C23K S **S** **04 51 14.8 -0.3**
baz=206
**JCT** **Junction City** **88.74 58** P **P** **04 41 07.2 +0.8**
baz=250,SNR=54
JCT S **S** **04 51 20.8 +3.8**
baz=250
**COYC** **Coyhaique** **88.74 138** IAmb IAmb 04 41 09.0
comp=Z,1µm,1.2s
**B22K** **Teshekpuk Lake** **88.78 8** IAmb IAmb 04 41 07.8
comp=Z,328nm,0.8s
**B22K** **Teshekpuk Lake** **88.78 8** P **P** **04 41 05.4 -0.2**
baz=204,SNR=33
B22K S **S** **04 51 14.8 -0.7**
baz=204
**AMTX** **Amarillo** **88.83 53** P **P** **04 41 07.5 +0.7**
baz=248
AMTX S **S** **04 51 20.5 +2.7**
baz=248
**F28M** **Old Crow** **88.85 14** P **P** **04 41 05.9 -0.1**
baz=216,SNR=51
F28M S **S** **04 51 15.7 -0.7**
baz=216
**YAK** **Yakutsk** **88.86 338** P **P** **04 41 04.5 -1.6**
**YAK** **Yakutsk** **88.86 338** P **P** **04 41 04.8 -1.2**
comp=Z,286nm,0.9s,baz=95,slow=0.4,SNR=45
YAK PP **PP** **04 44 37.1 -5.8**
comp=Z,23nm,0.4s,baz=124,slow=7.7,SNR=8.9
comp=Z,286nm,0.9s
**YAK** **Yakutsk** **88.86 338** *e*P **P** **04 41 05.1 -1.0**
YAK *e**PP **pP** **04 42 41.9 -0.6**
YAK *e*S **SKSac** **04 50 53.1 -0.8**
YAK *e* 04 51 10.2
YAK *e*SS **SS** **04 57 22.9 +1.7**
YAK pmax pmax
comp=Z,346nm,1.0s
YAK pmax pmax
comp=N,56nm,1.0s
YAK pmax pmax
comp=E,31nm,0.9s
YAK pmax pmax
comp=Z,5µm,3.5s
YAK pmax pmax
comp=N,1µm,3.2s
YAK pmax pmax
comp=E,1µm,3.3s
YAK smax smax
comp=E,1µm,1.8s
YAK smax smax
comp=N,921nm,1.9s
**CD2** **Chengdu** **88.88 303** P **P** **04 41 08.3 +1.3**
CD2 SKS **SKSac** **04 50 55.3 -0.3**
CD2 S **ScS** **04 51 23.6 +1.7**
CD2 pmax pmax
comp=N,200nm,0.9s
**CM31** **Chiang Mai Arr** **88.92 290** IAmb IAmb 04 41 11.2
comp=Z,702nm,1.4s
**CMAR** **Chiang Mai Arr** **88.92 290** P **P** **04 41 08.3 +0.9**
comp=Z,396nm,1.2s,baz=110,slow=2.5,SNR=203
CMAR S **SKSac** **04 50 57.5 +1.3**
comp=Z,1.0nm,0.4s,baz=152,slow=5.9,SNR=1.3
CMAR PKKPbc **PKKPbc** **04 58 44.3 +0.4**
comp=Z,16nm,0.6s,baz=292,slow=4.2,SNR=20
CMAR PKPPKP **P'P'df** **05 06 47.9 -5.0**
comp=Z,16nm,1.3s,baz=294,slow=3.8,SNR=9.8
comp=Z,396nm,1.2s
**CMAR** **Chiang Mai Arr** **88.92 290** *i* P **P** **04 41 09.0 +1.6**
CMAR pmax pmax
comp=Z,376nm,1.2s
**C24K** **Franklin Bluff** **88.93 10** IAmb IAmb 04 41 08.8
comp=Z,608nm,0.9s
**C24K** **Franklin Bluff** **88.93 10** P **P** **04 41 06.3 +0.1**
baz=208
C24K S **S** **04 51 15.7 -1.2**
baz=208
**E27K** **Coleen River** **88.94 13** P **P** **04 41 06.6 +0.2**
baz=215,SNR=66
E27K S **S** **04 51 17.7 +0.5**
baz=215
**D25K** **Kavik River** **88.97 11** P **P** **04 41 05.8 -0.7**
baz=210
D25K S **S** **04 51 16.1 -1.4**
baz=210
**DKNS** **Dickens** **88.98 54** IAmb IAmb 04 42 51.3
comp=Z,1µm,1.9s
**LL06** **Loncomilla** **88.99 134** IAmb IAmb 04 41 10.0
comp=Z,814nm,1.1s
**PZH** **PanZhiHua** **89.04 298** P **P** **04 41 09.3 +1.3**
PZH SKS **SKSac** **04 50 55.5 -1.4**
PZH S **S** **04 51 16.9 -3.2**
PZH pmax pmax
comp=Z,330nm,1.5s
PZH pmax pmax
comp=Z,6µm,8.3s
**BRIGG** **Briggsdale** **89.07 47** IAmb IAmb 04 42 59.4
comp=Z,876nm,1.9s
**A22K** **Sinclair Lake** **89.20 7** P **P** **04 41 07.2 -0.3**
baz=202
A22K S **S** **04 51 17.5 -1.7**
baz=202
**G30M** **tAoh Zraii Nji** **89.22 15** IAmb IAmb 04 41 09.8
comp=Z,439nm,0.9s
**G30M** **tAoh Zraii Nji** **89.22 15** P **P** **04 41 07.3 -0.4**
baz=220,SNR=132
G30M S **S** **04 51 18.0 -1.8**
baz=220
**A21K** **Barrow** **89.30 7** S **S** **04 51 18.2 -2.0**
baz=200
**APMT** **Aspermont** **89.48 55** IAmb IAmb 04 41 11.1
comp=Z,300nm,0.8s
**G31M** **Satah River** **89.68 16** IAmb IAmb 04 41 12.4
comp=Z,264nm,0.7s
**G31M** **Satah River** **89.68 16** P **P** **04 41 09.4 -0.4**
baz=221,SNR=90
G31M S **S** **04 51 22.3 -1.5**
baz=221
**C27K** **Jago River** **89.72 11** P **P** **04 41 09.8 -0.2**
baz=213
C27K S **S** **04 51 22.9 -1.4**
baz=213
**E28M** **Babbage River** **89.73 13** P **P** **04 41 10.0 -0.1**
baz=216,SNR=108
E28M S **S** **04 51 24.6 +0.3**
baz=216
**C26K** **Camden Bay** **89.75 11** P **P** **04 41 10.2 +0.2**
baz=212
C26K S **S** **04 51 23.0 -1.4**
baz=212
**LL01** **San Ignacio de** **89.77 134** P **P** **04 41 10.8 -0.1**
LL01 IAmb IAmb 04 41 13.8
comp=Z,520nm,1.3s
**F30M** **Barrier River** **89.82 15** P **P** **04 41 09.9 -0.5**
baz=220,SNR=29
F30M S **S** **04 51 23.3 -1.9**
baz=220
**735A** **Kenedy** **89.82 60** IAmb IAmb 04 41 15.1
comp=Z,902nm,1.1s
**LL02** **Futaleuf** **89.83 135** IAmb IAmb 04 41 14.4
comp=Z,822nm,1.2s

**E29M** **Blow River** **89.92 14** P **P** **04 41 10.2 -0.7**
baz=218,SNR=28
E29M S **S** **04 51 23.8 -2.3**
baz=218
**D27M** **Malcolm River** **89.95 12** P **P** **04 41 11.3 +0.2**
baz=215
D27M S **S** **04 51 25.3 -1.1**
baz=215
**LR04** **Corral** **90.01 132** IAmb IAmb 04 41 14.3
comp=Z,694nm,1.5s
**ELIB** **Princess Elisa** **90.11 187** *d*P **P** **04 41 11.7 -0.5**
comp=Z,402nm,0.8s
ELIB *d*pP **pP** **04 42 50.3 +1.2**
**CMBY** **CAMPBELL BAY** **90.16 277** *e*P **P** **04 41 13.9 +0.7**
CMBY IAmb IAmb 04 41 16.2
comp=Z,493nm,0.9s
**F31M** **Tsiigehtchic** **90.20 16** P **P** **04 41 11.6 -0.6**
F31M IAmb IAmb 04 41 14.8
comp=Z,450nm,0.9s
**F31M** **Tsiigehtchic** **90.20 16** P **P** **04 41 12.0 -0.2**
baz=222,SNR=90
F31M S **S** **04 51 26.1 -2.4**
baz=222
**LL03** **Petrohue** **90.25 133** IAmb IAmb 04 41 15.9
comp=Z,771nm,1.1s
**LAO** **LASA Array** **90.28 41** IAmb IAmb 04 41 16.2
comp=Z,713nm,1.1s
**LAO** **LASA Array** **90.28 41** P **P** **04 41 14.9 +1.7**
baz=245,SNR=183
LAO S **S** **04 51 34.4 +4.0**
baz=245
**LL04** **Puerto Octay** **90.34 133** IAmb IAmb 04 41 15.6
comp=Z,597nm,1.2s
**WRGLY** **Wrigley** **90.44 22** P **P** **04 41 13.6 +0.3**
baz=231,SNR=12
WRGLY S **S** **04 51 30.0 -0.9**
baz=231
**D28M** **Stokes Point** **90.48 13** P **P** **04 41 13.0 -0.5**
baz=217,SNR=36
D28M S **S** **04 51 28.1 -2.9**
baz=217
**CIT** **Chita** **90.62 325** *e*P **P** **04 41 14.9 +0.3**
CIT pmax pmax
comp=Z,850nm,1.4s
**LZH** **Lanzhou** **90.62 308** ⇓P **P** **04 41 16.4 +1.3**
LZH pP pP **04 42 56.0 +3.6**
LZH SKS **SKSac** **04 51 05.8 +0.2**
LZH S **ScS** **04 51 39.4 +3.0**
LZH pmax pmax
comp=Z,430nm,1.7s
**435B** **Jarrell** **90.64 58** IAmb IAmb 04 41 17.2
comp=Z,387nm,0.9s
**435B** **Jarrell** **90.64 58** P **P** **04 41 16.6 +1.4**
baz=251
435B S **S** **04 51 39.7 +5.5**
baz=251
**RSSD** **Black Hills** **90.65 44** P **P** **04 41 15.6 +0.4**
baz=247
RSSD S **S** **04 51 36.0 +1.9**
baz=247
**OGNE** **Ogallala** **90.81 47** P **P** **04 41 16.4 +0.6**
baz=248,SNR=25
OGNE S **S** **04 51 37.1 +1.6**
baz=248
**CCIG** **Comitan** **90.86 73** P **P** **04 41 17.0 +0.3**
**INK** **Inuvik** **90.91 15** IAmb IAmb 04 41 17.5
comp=Z,404nm,1.2s
**INK** **Inuvik** **90.91 15** P **P** **04 41 14.7 -0.7**
baz=222,SNR=94
INK S **S** **04 51 31.1 -3.7**
baz=222
**WTFS** **Witchita Falls** **90.93 55** IAmb IAmb 04 41 17.9
comp=Z,357nm,1.1s
**ELIS** **Ellis County** **90.98 53** IAmb IAmb 04 41 19.2
comp=Z,475nm,1.1s
**FW03** **Perrin-Whitt E** **91.00 56** IAmb IAmb 04 41 19.2
comp=Z,696nm,1.1s
**WMOK** **Wichita Mounta** **91.01 54** P **P** **04 41 16.7 -0.1**
baz=250
WMOK S **S** **04 51 38.3 +0.9**
baz=250
**FW07** **Weatherford** **91.11 56** IAmb IAmb 04 41 19.0
comp=Z,375nm,1.1s
**TROLL** **Troll, Antarti** **91.23 180** ⇑P **P** **04 41 17.0 -0.3**
comp=Z,23µm,0.8s
TROLL ⇑x x 04 58 36.0
comp=Z,780nm,0.8s
**FW13** **Cleburne** **91.28 57** IAmb IAmb 04 41 20.4
comp=Z,501nm,1.1s
**TNCH** **TengChong** **91.33 296** ⇑*i*P **P** **04 41 19.8 +1.1**
TNCH pP pP **04 42 59.6 +3.6**
TNCH sP sP 04 43 39.5 -0.2
TNCH PP **PP** **04 45 07.9 +4.5**
TNCH SKS **SKSac** **04 51 11.9 +1.8**
TNCH S **S** **04 51 41.3 +0.4**
TNCH pmax pmax
comp=Z,260nm,1.4s
TNCH pmax pmax
comp=Z,6µm,14.8s
**FW06** **Azle** **91.38 56** IAmb IAmb 04 41 20.8
comp=Z,342nm,1.0s
**SNAA** **Sanae** **91.50 178** ⇑P **P** **04 41 18.2 -0.3**
comp=Z,4µm,0.6s
SNAA ⇑x x 04 58 35.3
comp=Z,317nm,0.8s
**SNAA** **Sanae** **91.50 178** P **P** **04 41 18.4 -0.1**
comp=Z,120nm,0.5s,baz=207,slow=6.2,SNR=184
SNAA PP **PP** **04 45 04.3 +1.6**
comp=Z,38nm,1.2s,baz=198,slow=8.9,SNR=5.1
SNAA S **SKSac** **04 51 09.7 +0.4**
comp=Z,12nm,1.0s,baz=184,slow=22,SNR=14
SNAA PKKP **PKKPdf** **04 58 34.6 +0.6**
comp=Z,13nm,0.8s,baz=260,slow=4.1,SNR=22
SNAA PKPPKP P'P'df 05 06 40.5 -9.1
comp=Z,10nm,1.2s,baz=21,slow=3.3,SNR=5.7
comp=Z,120nm,0.5s
**SNAA** **Sanae** **91.50 178** *c i*P **P** **04 41 17.8 -0.7**
SNAA pmax pmax
comp=Z,479nm,1.1s
**GO06** **Curarrehue** **91.52 132** IAmb IAmb 04 41 22.2
comp=Z,461nm,1.2s
**NOKA** **Waynoka** **91.54 52** IAmb IAmb 04 41 20.7
comp=Z,364nm,1.2s
**VNA3** **Neumayer Olymp** **91.63 176** ⇑P **P** **04 41 18.7 -0.3**
comp=Z,354nm,0.6s
VNA3 ⇑x x 04 58 34.2
comp=Z,12nm,0.7s
**CBKS** **Cedar Bluff** **91.69 50** IAmb IAmb 04 41 22.2
comp=Z,468nm,1.3s
**CBKS** **Cedar Bluff** **91.69 50** P **P** **04 41 20.5 +0.6**
baz=250
CBKS S **S** **04 51 42.1 -1.1**
baz=250
**PLCA** **Paso Flores** **91.70 134** IAmb IAmb 04 41 22.3
comp=Z,436nm,1.2s
**PLCA** **Paso Flores** **91.70 134** P **P** **04 41 21.2 +1.1**
comp=Z,137nm,1.0s,baz=251,slow=4.7,SNR=109
PLCA pP **pwP** **04 42 59.2 -0.5**
comp=Z,48nm,1.2s,baz=275,slow=4.8,SNR=4.2
PLCA PKKPbc **PKKPbc** **04 58 37.0 -0.6**
comp=Z,38nm,1.0s,baz=49,slow=3.4,SNR=18
comp=Z,137nm,1.0s
**PLCA** **Paso Flores** **91.70 134** *e*P **P** **04 41 21.0 +0.9**
**X34A** **Smith Ranch, M** **91.70 54** P **P** **04 41 20.5 +0.5**
X34A IAmb IAmb 04 41 22.1
comp=Z,438nm,1.1s
**Z35A** **Perchaven, San** **91.74 56** IAmb IAmb 04 41 22.3
comp=Z,514nm,1.1s
**FW16** **Waxahatchie** **91.75 57** IAmb IAmb 04 41 22.4
comp=Z,480nm,1.0s
**HKT** **Hockley** **91.80 59** P **P** **04 41 21.6 +1.1**
HKT IAmb IAmb 04 43 05.1
comp=Z,1µm,1.8s
**HKT** **Hockley** **91.80 59** *c i*P **P** **04 41 22.4 +2.0**
HKT pmax pmax
comp=Z,549nm,1.8s
**VNA2** **Neumayer--Watz** **92.08 177** ⇑P **P** **04 41 21.1 0.0**
comp=Z,258nm,0.6s,baz=192,slow=3.1
VNA2 ⇑x x 04 58 34.1
comp=Z,13nm,0.8s,baz=343,slow=3.5
**NVL** **N'lazarevskaya** **92.21 183** ⇓*i*P **P** **04 41 17.6 -4.0**
NVL *e* 04 45 08.2
NVL pmax pmax
comp=Z,188nm,1.0s
**FNO** **Franklin** **92.25 54** P **P** **04 41 22.8 +0.3**
FNO IAmb IAmb 04 41 24.8
comp=Z,322nm,1.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DGMT** | **Dagmar** | **92.26** | **40** | P | | **P** | **04 41 23.2** | **+1.0** | |
| | baz=247,SNR=213 | | | | | | | | |
| DGMT | | | | S | | **S** | **04 51 50.8** | **+3.0** | |
| | baz=247 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **92.30** | **177** | ⇑P | | **P** | **04 41 22.1** | **+0.1** | |
| | comp=Z,655nm,1.3s | | | | | | | | |
| VNA1 | | | | ⇑x | | x | 04 58 33.7 | | |
| | comp=Z,386nm,1.1s | | | | | | | | |
| **KAN08** | **Anthony NE Sta** | **92.47** | **52** | IAmb | | IAmb | 04 41 25.7 | | |
| | comp=Z,768nm,1.3s | | | | | | | | |
| **KAN12** | **Harper NE Stat** | **92.47** | **52** | IAmb | | IAmb | 04 41 25.7 | | |
| | comp=Z,878nm,1.5s | | | | | | | | |
| **TREL** | **Terrell** | **92.47** | **57** | P | | **P** | **04 41 24.9** | **+1.4** | |
| **KAN01** | **Argonia South** | **92.60** | **52** | P | | **P** | **04 41 24.8** | **+0.7** | |
| **PBA** | **Port Blair** | **92.62** | **281** | *eP* | | **P** | **04 41 24.4** | **-0.1** | |
| PBA | | | | IAmb | | IAmb | 04 41 27.0 | | |
| | comp=Z,205nm,0.7s | | | | | | | | |
| **PBA** | **Port Blair** | **92.62** | **281** | P | | **P** | **04 41 23.9** | **-0.7** | |
| **ULN** | **Ulaanbaatar** | **92.69** | **319** | P | | **P** | **04 41 23.8** | **-0.6** | |
| ULN | | | | IAmb | | IAmb | 04 41 27.3 | | |
| | comp=Z,361nm,1.2s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **92.69** | **319** | P | | **P** | **04 41 24.1** | **-0.3** | |
| ULN | | | | S | | **SKSac** | **04 51 19.3** | **+2.7** | |
| **ULN** | **Ulaanbaatar** | **92.69** | **319** | P | | **P** | **04 41 23.8** | **-0.6** | |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,361nm,1.2s | | | | | | | | |
| **BI02** | **San Fabin de** | **92.82** | **130** | P | | **P** | **04 41 24.9** | **-0.4** | |
| **BLOK** | **Blackwell** | **92.89** | **53** | P | | **P** | **04 41 25.4** | **0.0** | |
| **OK031** | **S. Brethren Rd** | **92.91** | **53** | IAmb | | IAmb | 04 41 26.8 | | |
| | comp=Z,301nm,1.2s | | | | | | | | |
| **ESQI** | **Esquipulas** | **92.94** | **76** | IAmb | | IAmb | 04 43 15.4 | | |
| | comp=Z,623nm,1.6s | | | | | | | | |
| **OK052** | **Battle Ridge R** | **92.95** | **53** | IAmb | | IAmb | 04 41 27.7 | | |
| | comp=Z,586nm,1.4s | | | | | | | | |
| **GO05** | **Huala** | **92.98** | **128** | IAmb | | IAmb | 04 41 28.6 | | |
| | comp=Z,1μm,1.9s | | | | | | | | |
| **OK048** | **Pawnee Station** | **92.98** | **53** | IAmb | | IAmb | 04 41 27.3 | | |
| | comp=Z,296nm,1.0s | | | | | | | | |
| **BOD** | **Bodaibo** | **93.05** | **330** | *eP* | | **P** | **04 41 24.3** | **-1.3** | |
| BOD | | | | pmax | | pmax | | | |
| | comp=Z,238nm,1.5s | | | | | | | | |
| **ML02** | **Panimavida** | **93.07** | **129** | IAmb | | IAmb | 04 41 28.0 | | |
| | comp=Z,507nm,1.4s | | | | | | | | |
| **QUOK** | **Quay** | **93.08** | **53** | IAmb | | IAmb | 04 41 28.3 | | |
| | comp=Z,282nm,1.2s | | | | | | | | |
| **SONM** | **Songino Array** | **93.09** | **319** | P | | **P** | **04 41 25.4** | **-0.8** | |
| **SONM** | **Songino Array** | **93.09** | **319** | P | | **P** | **04 41 25.9** | **-0.4** | |
| | comp=Z,77nm,1.0s,baz=133,slow=3.2,SNR=114 | | | | | | | | |
| SONM | | | | pP | | **pwP** | **04 43 05.3** | **-1.0** | |
| | comp=Z,78nm,1.4s,baz=129,slow=3.9,SNR=2.4 | | | | | | | | |
| SONM | | | | PP | | **PP** | **04 45 17.3** | **+0.7** | |
| | comp=Z,30nm,1.2s,baz=127,slow=7.3,SNR=3.5 | | | | | | | | |
| SONM | | | | PKiKP | | **PKiKP** | **04 46 09.8** | **-0.7** | |
| | comp=Z,4.2nm,0.5s,baz=74,slow=1.2,SNR=8.6 | | | | | | | | |
| SONM | | | | S | | **SKSac** | **04 51 19.8** | **+1.1** | |
| | comp=Z,94nm,1.3s,baz=151,slow=3.4,SNR=13 | | | | | | | | |
| SONM | | | | PKKPbc | | **PKKPdf** | **04 58 32.4** | **-0.5** | |
| | comp=Z,9.3nm,1.0s,baz=246,slow=2.9,SNR=7.9 | | | | | | | | |
| SONM | | | | PKPPKP | | **P'P'df** | **05 06 37.3** | **-6.6** | |
| | comp=Z,3.5nm,1.0s,baz=248,slow=1.6,SNR=6.1 | | | | | | | | |
| | comp=Z,77nm,1.0s | | | | | | | | |
| **OK051** | **E0350 and S346** | **93.09** | **53** | IAmb | | IAmb | 04 41 27.8 | | |
| | comp=Z,316nm,1.2s | | | | | | | | |
| **K30B** | **Basset** | **93.12** | **46** | P | | **P** | **04 41 26.2** | **-0.2** | |
| **DEOK** | **Depew** | **93.14** | **54** | IAmb | | IAmb | 04 41 28.5 | | |
| | comp=Z,413nm,1.2s | | | | | | | | |
| **NATX** | **Nacogdoches** | **93.32** | **58** | P | | **P** | **04 41 28.8** | **+1.3** | |
| | baz=252,SNR=28 | | | | | | | | |
| NATX | | | | S | | **S** | **04 52 03.2** | **+5.5** | |
| | baz=252 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.35** | **25** | P | | **P** | **04 41 26.0** | **-0.9** | |
| **YKA** | **Yellowknife Ar** | **93.35** | **25** | P | | **P** | **04 41 26.5** | **-0.4** | |
| | comp=Z,110nm,0.8s,baz=250,slow=4.3,SNR=141 | | | | | | | | |
| YKA | | | | pP | | **pwP** | **04 43 06.5** | **-0.3** | |
| | comp=Z,43nm,1.1s,baz=246,slow=4.3,SNR=5.8 | | | | | | | | |
| YKA | | | | PP | | **PP** | **04 45 17.2** | **-0.7** | |
| | comp=Z,10nm,0.9s,baz=244,slow=7.2,SNR=5.6 | | | | | | | | |
| YKA | | | | PKiKP | | **PKiKP** | **04 46 10.3** | **0.0** | |
| | comp=Z,2.5nm,0.6s,baz=272,slow=10,SNR=5.6 | | | | | | | | |
| YKA | | | | S | | **SKSac** | **04 51 19.4** | **+0.3** | |
| | comp=Z,3.4nm,1.1s,baz=229,slow=6.4,SNR=3.6 | | | | | | | | |
| YKA | | | | PKPPKP | | **P'P'df** | **05 06 44.8** | **+2.1** | |
| | comp=Z,3.7nm,0.8s,baz=48,slow=3.2,SNR=8.9 | | | | | | | | |
| | comp=Z,110nm,0.8s | | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **93.52** | **56** | IAmb | | IAmb | 04 43 12.5 | | |
| | comp=Z,748nm,1.6s | | | | | | | | |
| **X37A** | **Clayton** | **93.62** | **55** | P | | **P** | **04 41 28.7** | **-0.1** | |
| **VA05** | **Santo Domingo** | **93.75** | **127** | IAmb | | IAmb | 04 41 32.0 | | |
| | comp=Z,496nm,1.6s | | | | | | | | |
| **BO01** | **Tunca** | **93.86** | **128** | IAmb | | IAmb | 04 41 31.6 | | |
| | comp=Z,647nm,2.0s | | | | | | | | |
| **BO02** | **Sierra Bellavi** | **93.93** | **128** | IAmb | | IAmb | 04 41 32.2 | | |
| | comp=Z,517nm,1.8s | | | | | | | | |
| **MT01** | **Popeta** | **93.95** | **127** | IAmb | | IAmb | 04 41 33.2 | | |
| | comp=Z,444nm,1.2s | | | | | | | | |
| **VA01** | **Torpederas** | **93.97** | **126** | P | | **P** | **04 41 30.6** | **+0.1** | |
| VA01 | | | | IAmb | | IAmb | 04 41 33.4 | | |
| | comp=Z,737nm,1.8s | | | | | | | | |
| **EFI** | **East Falkland** | **94.04** | **147** | P | | **P** | **04 41 29.8** | **-0.6** | |
| **EFI** | **East Falkland** | **94.04** | **147** | P | | **P** | **04 41 29.8** | **-0.6** | |
| EFI | | | | pmax | | pmax | | | |
| | comp=Z,825nm,1.6s | | | | | | | | |
| **KSU1** | **Kansas State U** | **94.09** | **50** | P | | **P** | **04 41 32.1** | **+1.3** | |
| | baz=252 | | | | | | | | |
| KSU1 | | | | S | | **S** | **04 52 05.3** | **+1.2** | |
| | baz=252 | | | | | | | | |
| **C36M** | **Paulatuk** | **94.11** | **17** | IAmb | | IAmb | 04 41 31.6 | | |
| | comp=Z,403nm,1.1s | | | | | | | | |
| **C36M** | **Paulatuk** | **94.11** | **17** | P | | **P** | **04 41 29.4** | **-0.8** | |
| | baz=231,SNR=38 | | | | | | | | |
| C36M | | | | S | | **S** | **04 51 59.7** | **-3.2** | |
| | baz=231 | | | | | | | | |
| **MT09** | **Talagante** | **94.18** | **127** | IAmb | | IAmb | 04 41 34.3 | | |
| | comp=Z,473nm,1.5s | | | | | | | | |
| **MT02** | **Curacav** | **94.27** | **126** | P | | **P** | **04 41 32.4** | **+0.5** | |
| **RLO** | **Rose Lookout** | **94.38** | **54** | IAmb | | IAmb | 04 41 34.5 | | |
| | comp=Z,328nm,1.4s | | | | | | | | |
| **BO04** | **La Punta** | **94.39** | **127** | IAmb | | IAmb | 04 41 34.1 | | |
| | comp=Z,485nm,1.9s | | | | | | | | |
| **MT05** | **Renca** | **94.53** | **127** | IAmb | | IAmb | 04 41 38.8 | | |
| | comp=Z,901nm,1.9s | | | | | | | | |
| **PEL** | **Peldehue** | **94.67** | **127** | P | | **P** | **04 41 33.4** | **-0.4** | |
| PEL | | | | IAmb | | IAmb | 04 41 36.8 | | |
| | comp=Z,228nm,1.1s | | | | | | | | |
| **PEL** | **Peldehue** | **94.67** | **127** | P | | **P** | **04 41 33.4** | **-0.4** | |
| PEL | | | | pmax | | pmax | | | |
| | comp=Z,229nm,1.1s | | | | | | | | |
| **MT16** | **CCHEN** | **94.68** | **127** | IAmb | | IAmb | 04 41 36.8 | | |
| | comp=Z,340nm,1.4s | | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **94.72** | **77** | IAmb | | IAmb | 04 43 18.1 | | |
| | comp=Z,353nm,1.4s | | | | | | | | |
| **GTA** | **Gaotai** | **94.73** | **310** | *eP* | | **P** | **04 41 34.4** | **+0.5** | |
| GTA | | | | pP | | pP | 04 43 14.4 | +3.0 | |
| GTA | | | | sP | | sP | 04 43 58.6 | +3.6 | |
| GTA | | | | SKS | | **SKSac** | **04 51 27.1** | **-0.8** | |
| GTA | | | | S | | **ScS** | **04 52 12.3** | **+1.8** | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,98nm,1.4s | | | | | | | | |
| **LMEL** | **Las Meloas** | **94.75** | **127** | P | | **P** | **04 41 34.8** | **+0.5** | |
| **CNGN** | **Cerro Negro** | **94.83** | **78** | IAmb | | IAmb | 04 43 24.3 | | |
| | comp=Z,593nm,1.7s | | | | | | | | |
| **VA03** | **San Esteban** | **94.92** | **126** | IAmb | | IAmb | 04 41 38.0 | | |
| | comp=Z,349nm,1.4s | | | | | | | | |
| **U38A** | **Gravette** | **94.95** | **54** | IAmb | | IAmb | 04 43 15.9 | | |
| | comp=Z,546nm,1.6s | | | | | | | | |
| **MIAR** | **Mount Ida** | **95.02** | **56** | IAmb | | IAmb | 04 43 15.8 | | |
| | comp=Z,395nm,1.8s | | | | | | | | |
| **MIAR** | **Mount Ida** | **95.02** | **56** | P | | **P** | **04 41 36.0** | **+0.8** | |
| | baz=253,SNR=14 | | | | | | | | |
| MIAR | | | | S | | **S** | **04 52 14.4** | **+2.0** | |
| | baz=253 | | | | | | | | |
| **WLAR** | **White Oak Lake** | **95.14** | **56** | P | | **P** | **04 41 36.3** | **+0.6** | |
| **L34A** | **Svendsen Farm,** | **95.16** | **48** | IAmb | | IAmb | 04 41 36.9 | | |
| | comp=Z,259nm,0.9s | | | | | | | | |
| **MOKO** | **MOKOCHONG** | **95.16** | **296** | *eP* | | **P** | **04 41 35.7** | **-0.4** | |
| MOKO | | | | IAmb | | IAmb | 04 41 39.0 | | |
| | comp=Z,884nm,1.8s | | | | | | | | |
| **CO02** | **Combarbal** | **95.19** | **125** | IAmb | | IAmb | 04 43 25.1 | | |
| | comp=Z,460nm,1.4s | | | | | | | | |
| **IMP** | **Imphal** | **95.24** | **294** | *eP* | | **P** | **04 41 35.5** | **-0.9** | |
| IMP | | | | IAmb | | IAmb | 04 41 38.6 | | |
| | comp=Z,364nm,1.1s | | | | | | | | |
| **HHAR** | **Hobbs** | **95.25** | **54** | IAmb | | IAmb | 04 43 16.2 | | |
| | comp=Z,306nm,1.6s | | | | | | | | |
| **KOHI** | **KOHIMA** | **95.34** | **295** | *eP* | | **P** | **04 41 37.3** | **+0.2** | |
| KOHI | | | | IAmb | | IAmb | 04 41 39.2 | | |
| | comp=Z,367nm,1.5s | | | | | | | | |
| **TIXI** | **Tiksi** | **95.36** | **345** | P | | **P** | **04 41 34.6** | **-1.2** | |
| TIXI | | | | IAmb | | IAmb | 04 45 30.5 | | |
| | comp=Z,538nm,1.8s | | | | | | | | |
| **TIXI** | **Tiksi** | **95.36** | **345** | *d iP* | | **P** | **04 41 34.5** | **-1.3** | |
| TIXI | | | | pmax | | pmax | | | |
| | comp=Z,156nm,1.0s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **95.50** | **14** | P | | **P** | **04 41 36.4** | **0.0** | |
| | baz=230,SNR=42 | | | | | | | | |
| A36M | | | | S | | **S** | **04 52 11.5** | **-3.3** | |
| | baz=230 | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **95.54** | **46** | IAmb | | IAmb | 04 43 17.8 | | |
| | comp=Z,698nm,1.6s | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **95.54** | **46** | P | | **P** | **04 41 37.1** | **-0.2** | |
| | baz=252 | | | | | | | | |
| ECSD | | | | S | | **S** | **04 52 16.1** | **-0.3** | |
| | baz=252 | | | | | | | | |
| **CO03** | **El Pedregal** | **95.58** | **124** | IAmb | | IAmb | 04 43 26.5 | | |
| | comp=Z,368nm,1.4s | | | | | | | | |
| **X40A** | **Basin Creek Fa** | **95.59** | **56** | P | | **P** | **04 41 37.6** | **-0.1** | |
| X40A | | | | IAmb | | IAmb | 04 43 22.5 | | |
| | comp=Z,327nm,1.8s | | | | | | | | |
| **GO04** | **Tololo Observa** | **95.75** | **124** | IAmb | | IAmb | 04 43 27.4 | | |
| | comp=Z,338nm,1.4s | | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **95.78** | **79** | IAmb | | IAmb | 04 43 28.9 | | |
| | comp=Z,582nm,1.7s | | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **95.78** | **79** | P | | **P** | **04 41 37.4** | **-1.7** | |
| **JTS** | **Las Juntas de** | **95.86** | **81** | P | | **P** | **04 41 37.8** | **-1.7** | |
| JTS | | | | IAmb | | IAmb | 04 43 31.0 | | |
| | comp=Z,447nm,1.5s | | | | | | | | |
| **JTS** | **Las Juntas de** | **95.86** | **81** | P | | **P** | **04 41 37.8** | **-1.7** | |
| JTS | | | | pmax | | pmax | | | |
| | comp=Z,447nm,1.5s | | | | | | | | |
| **ZAK** | **Zakamensk** | **95.91** | **321** | *eP* | | **P** | **04 41 37.7** | **-1.2** | |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,56nm,1.3s | | | | | | | | |
| **IRK** | **Irkutsk** | **95.95** | **323** | *eP* | | **P** | **04 41 38.0** | **-0.9** | |
| IRK | | | | *eS* | | **SKSac** | **04 51 32.0** | **-1.4** | |
| **ZIRO** | **ZIRO** | **96.06** | **297** | *eP* | | **P** | **04 41 40.5** | **+0.3** | |
| ZIRO | | | | IAmb | | IAmb | 04 41 44.0 | | |
| | comp=Z,69nm,0.8s | | | | | | | | |
| **UALR** | **University of** | **96.06** | **56** | IAmb | | IAmb | 04 43 24.0 | | |
| | comp=Z,530nm,1.6s | | | | | | | | |
| **ITAN** | **ITANAGAR** | **96.07** | **296** | *eP* | | **P** | **04 41 41.9** | **+1.8** | |
| **ACON** | **Acoyapa** | **96.11** | **79** | P | | **P** | **04 41 40.4** | **-0.1** | |
| **S39A** | **Bolivar** | **96.13** | **53** | IAmb | | IAmb | 04 43 21.1 | | |
| | comp=Z,567nm,1.6s | | | | | | | | |
| **SOCE** | **Pocosol** | **96.20** | **81** | IAmb | | IAmb | 04 43 40.3 | | |
| | comp=Z,223nm,1.6s | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **96.25** | **55** | P | | **P** | **04 41 40.9** | **+0.2** | |
| **LCO** | **Las Campanas** | **96.29** | **123** | P | | **P** | **04 41 42.1** | **+0.6** | |
| LCO | | | | IAmb | | IAmb | 04 43 30.5 | | |
| | comp=Z,401nm,1.4s | | | | | | | | |
| **LCO** | **Las Campanas** | **96.29** | **123** | P | | **P** | **04 41 42.1** | **+0.6** | |
| LCO | | | | pmax | | pmax | | | |
| | comp=Z,401nm,1.4s | | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **96.40** | **44** | IAmb | | IAmb | 04 43 20.7 | | |
| | comp=Z,447nm,1.6s | | | | | | | | |
| **HDC** | **Heredia** | **96.57** | **82** | *eP* | | **P** | **04 41 44.2** | **+1.4** | |
| **AC05** | **El Transito** | **96.70** | **123** | IAmb | | IAmb | 04 43 32.5 | | |
| | comp=Z,385nm,1.4s | | | | | | | | |
| **MGMO** | **Mountain Grove** | **96.78** | **53** | P | | **P** | **04 41 43.1** | **0.0** | |
| **VBMS** | **Vicksburg** | **96.83** | **59** | P | | **P** | **04 41 44.3** | **+1.0** | |
| | baz=254 | | | | | | | | |
| VBMS | | | | S | | **S** | **04 52 29.4** | **+1.6** | |
| | baz=254 | | | | | | | | |
| **ZON** | **Zonda** | **96.87** | **126** | P | | **P** | **04 41 43.3** | **-0.5** | |
| **ZON** | **Zonda** | **96.87** | **126** | P | | **P** | **04 41 43.3** | **-0.5** | |
| ZON | | | | pmax | | pmax | | | |
| | comp=Z,141nm,1.4s | | | | | | | | |
| **NNA** | **Nana** | **96.99** | **105** | P | | **P** | **04 41 44.0** | **-0.6** | |
| NNA | | | | IAmb | | IAmb | 04 41 46.2 | | |
| | comp=Z,287nm,1.9s | | | | | | | | |
| **NNA** | **Nana** | **96.99** | **105** | P | | **P** | **04 41 45.0** | **+0.4** | |
| | comp=Z,5.4nm,0.5s,baz=251,slow=3.2,SNR=6.2 | | | | | | | | |
| NNA | | | | pP | | **pwP** | **04 43 24.1** | **-0.3** | |
| | comp=Z,2.0nm,0.3s,baz=260,slow=9.1,SNR=1.4 | | | | | | | | |
| **NNA** | **Nana** | **96.99** | **105** | P | | **P** | **04 41 44.0** | **-0.6** | |
| NNA | | | | pmax | | pmax | | | |
| | comp=Z,287nm,2.0s | | | | | | | | |
| **ATAH** | **Atahualpa** | **97.07** | **100** | P | | Pdif | 04 41 46.9 | +1.4 | |
| | comp=Z,5.7nm,0.7s,baz=291,slow=5.6,SNR=13 | | | | | | | | |
| ATAH | | | | pP | | pwP | 04 43 24.1 | -1.2 | |
| | comp=Z,23nm,1.2s,baz=330,slow=7.1,SNR=2.1 | | | | | | | | |
| **SHL** | **Shillong** | **97.23** | **294** | IAmb | | IAmb | 04 41 48.5 | | |
| | comp=Z,319nm,1.6s | | | | | | | | |
| **SHL** | **Shillong** | **97.23** | **294** | *eP* | | **P** | **04 41 44.1** | **-1.5** | |
| SHL | | | | IAmb | | IAmb | 04 41 48.1 | | |
| | comp=Z,190nm,1.4s | | | | | | | | |
| **SHL** | **Shillong** | **97.23** | **294** | P | | **P** | **04 41 45.4** | **-0.2** | |
| | SNR=34 | | | | | | | | |
| SHL | | | | S | | **SKSac** | **04 51 40.3** | **-1.3** | |
| **SCIA** | **State Center** | **97.39** | **49** | Pdiff | | Pdif | 04 41 46.4 | +0.7 | |
| | baz=254 | | | | | | | | |
| SCIA | | | | S | | **S** | **04 52 33.1** | **+0.8** | |
| | baz=254 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **97.42** | **42** | P | | **P** | **04 41 44.3** | **-1.4** | |
| AGMN | | | | IAmb | | IAmb | 04 43 25.8 | | |
| | comp=Z,328nm,1.6s | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **97.42** | **42** | Pdiff | | **P** | **04 41 44.9** | **-0.7** | |
| | baz=253 | | | | | | | | |
| AGMN | | | | S | | **S** | **04 52 31.8** | **-0.3** | |
| | baz=253 | | | | | | | | |
| **P40A** | **Paris** | **97.60** | **51** | P | | **P** | **04 41 46.6** | **0.0** | |
| P40A | | | | IAmb | | IAmb | 04 41 48.5 | | |
| | comp=Z,322nm,1.1s | | | | | | | | |
| **GOMU** | **GeErMu** | **97.60** | **305** | Pdif | | Pdif | 04 41 48.6 | +1.3 | |
| GOMU | | | | PP | | **PP** | **04 45 47.8** | **-3.9** | |
| GOMU | | | | SKS | | **SKSac** | **04 51 39.6** | **-3.8** | |
| GOMU | | | | AMB | | AMB | | | |
| | comp=Z,10μm,9.4s | | | | | | | | |
| **T42A** | **Van Buren** | **97.65** | **54** | IAmb | | IAmb | 04 43 30.0 | | |
| | comp=Z,386nm,1.7s | | | | | | | | |
| **MOY** | **Mondy** | **97.68** | **322** | *eP* | | **P** | **04 41 46.6** | **-0.3** | |
| MOY | | | | *e* | | | 04 43 26.2 | | |
| MOY | | | | pmax | | pmax | | | |
| | comp=Z,51nm,1.4s | | | | | | | | |
| **PASG** | **PASIGHAT** | **97.79** | **296** | *eP* | | P | 04 41 36.1 | -12 | |
| PASG | | | | IAmb | | IAmb | 04 41 38.6 | | |
| | comp=Z,170nm,0.8s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **97.81** | **53** | P | | Pdif | 04 41 47.8 | +0.2 | |
| CCM | | | | IAmb | | IAmb | 04 43 28.1 | | |
| | comp=Z,199nm,1.5s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **97.81** | **53** | Pdiff | | **P** | **04 41 47.3** | **-0.3** | |
| | baz=255 | | | | | | | | |
| **CCM** | **Cathedral Cave** | **97.81** | **53** | P | | Pdif | 04 41 47.8 | +0.2 | |
| CCM | | | | pmax | | pmax | | | |
| | comp=Z,199nm,1.5s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **97.98** | **40** | P | | **P** | **04 41 47.3** | **-0.7** | |
| | comp=Z,44nm,1.0s,baz=257,slow=4.8,SNR=23 | | | | | | | | |
| ULM | | | | pP | | **pP** | **04 43 26.4** | **+1.2** | |
| | comp=Z,64nm,1.3s,baz=253,slow=4.3,SNR=4.6 | | | | | | | | |
| ULM | | | | PP | | **PP** | **04 45 53.5** | **-0.2** | |
| | comp=Z,17nm,1.1s,baz=259,slow=9.8,SNR=3.8 | | | | | | | | |
| ULM | | | | PKiKP | | **PKiKP** | **04 46 18.2** | **-0.6** | |
| | comp=Z,13nm,1.0s,baz=251,slow=2.6,SNR=5.3 | | | | | | | | |
| ULM | | | | PKKPbc | | **PKKPbc** | **04 58 19.6** | **-2.1** | |
| | comp=Z,4.6nm,0.6s,baz=90,slow=2.5,SNR=4.4 | | | | | | | | |
| ULM | | | | PKPPKP | | **P'P'df** | **05 06 31.8** | **-2.7** | |
| | comp=Z,6.5nm,1.1s,baz=25,slow=3.3,SNR=3.1 | | | | | | | | |
| | comp=Z,44nm,1.0s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **98.10** | **54** | IAmb | | IAmb | 04 43 32.4 | | |
| | comp=Z,341nm,1.6s | | | | | | | | |
| **GNAR** | **Gosnell** | **98.21** | **55** | PKPpre | | PKPpre | 04 41 50.0 | | |
| **PB14** | **IPOC Station P** | **98.25** | **119** | P | | **P** | **04 41 46.5** | **-3.9** | |
| **OXF** | **Oxford** | **98.32** | **57** | Pdif | | Pdif | 04 41 49.7 | -0.3 | |
| **OXF** | **Oxford** | **98.32** | **57** | Pdiff | | **P** | **04 41 50.3** | **+0.3** | |
| | baz=255 | | | | | | | | |
| **OXF** | **Oxford** | **98.32** | **57** | *i* P | | Pdif | 04 41 49.7 | -0.3 | |
| OXF | | | | pmax | | pmax | | | |
| | comp=Z,414nm,1.4s | | | | | | | | |
| **LNXT** | **Lenox** | **98.66** | **55** | PKPpre | | PKPpre | 04 41 52.1 | | |
| **LNXT** | **Lenox** | **98.66** | **55** | Pdif | | **P** | **04 41 51.8** | **+0.3** | |
| LNXT | | | | IAmb | | IAmb | 04 43 36.5 | | |
| | comp=Z,1μm,1.7s | | | | | | | | |
| **GLAT** | **Glass** | **98.86** | **55** | PKPpre | | PKPpre | 04 41 53.3 | | |
| **GLAT** | **Glass** | **98.86** | **55** | Pdif | | **P** | **04 41 52.9** | **+0.6** | |
| GLAT | | | | IAmb | | IAmb | 04 43 36.5 | | |
| | comp=Z,843nm,1.5s | | | | | | | | |
| **LSA** | **Lhasa** | **98.92** | **298** | P | | **P** | **04 41 54.5** | **+1.1** | |
| **LSA** | **Lhasa** | **98.92** | **298** | P | | **P** | **04 41 55.1** | **+1.7** | |
| LSA | | | | S | | **SKSac** | **04 51 50.0** | **-0.5** | |
| **UTMT** | **University of** | **99.21** | **55** | Pdif | | **Pdif** | **04 41 54.1** | **+0.2** | |
| UTMT | | | | IAmb | | IAmb | 04 43 38.7 | | |
| | comp=Z,588nm,1.4s | | | | | | | | |
| **BRAL** | **Brewton** | **99.41** | **60** | Pdiff | | **Pdif** | **04 41 55.5** | **+0.5** | |
| | baz=256 | | | | | | | | |
| **JFWS** | **Jewell Farm** | **99.78** | **48** | Pdiff | | **Pdif** | **04 41 56.2** | **0.0** | |
| | baz=256 | | | | | | | | |
| **HDIL** | **Hopedale** | **99.90** | **51** | Pdiff | | **Pdif** | **04 41 57.1** | **+0.2** | |
| | baz=256 | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **99.91** | **58** | Pdiff | | **Pdif** | **04 41 57.7** | **+0.6** | |
| | baz=256 | | | | | | | | |
| **WVT** | **Waverly** | **99.97** | **55** | Pdiff | | **Pdif** | **04 41 57.9** | **+0.6** | |
| | baz=256 | | | | | | | | |
| **EYMN** | **Ely** | **100.14** | **43** | Pdiff | | **Pdif** | **04 41 57.4** | **-0.3** | |
| | baz=256 | | | | | | | | |
| **X48A** | **Hartselle** | **100.20** | **57** | Pdif | | **Pdif** | **04 41 58.2** | **-0.1** | |
| **LVC** | **Limon Verde** | **100.29** | **117** | P | | **Pdif** | **04 42 01.1** | **+1.5** | |
| | comp=Z,17nm,0.9s,baz=244,slow=4.2,SNR=13 | | | | | | | | |
| LVC | | | | PKKPbc | | **PKKPbc** | **04 58 13.8** | **-0.8** | |
| | comp=Z,16nm,0.7s,baz=13,slow=1.0,SNR=17 | | | | | | | | |
| LVC | | | | PKPPKP | | **P'P'df** | **05 06 28.4** | **-4.8** | |
| | comp=Z,4.9nm,0.7s,baz=90,slow=5.7,SNR=4.9 | | | | | | | | |
| **Y49A** | **Blount Mountai** | **100.57** | **58** | PKPdf | | **Pdif** | **04 41 59.9** | **-0.1** | |
| **Y49A** | **Blount Mountai** | **100.57** | **58** | Pdif | | **Pdif** | **04 42 00.3** | **+0.2** | |
| **L44A** | **Lake County Fo** | **101.29** | **49** | Pdiff | | **Pdif** | **04 42 03.4** | **+0.4** | |
| | baz=257 | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **101.64** | **53** | Pdiff | | **Pdif** | **04 42 05.0** | **+0.4** | |
| | baz=258 | | | | | | | | |
| **BOK** | **Bokaro** | **102.09** | **291** | *eP* | | **Pdif** | **04 42 07.3** | **+0.3** | |
| **PALK** | **Pallekele** | **102.83** | **274** | P | | **Pdif** | **04 42 14.3** | **+3.8** | |
| **GOGA** | **Godfrey** | **102.88** | **59** | Pdiff | | **Pdif** | **04 42 10.6** | **+0.3** | |
| | baz=258 | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **103.11** | **52** | Pdiff | | **Pdif** | **04 42 11.2** | **+0.1** | |
| | baz=259 | | | | | | | | |
| **LPAZ** | **La Paz** | **103.41** | **112** | Pdiff | | **Pdif** | **04 42 15.8** | **+2.0** | |
| | comp=Z,16nm,0.8s,baz=228,slow=3.0,SNR=29 | | | | | | | | |
| LPAZ | | | | PKiKP | | **PKiKP** | **04 46 30.6** | **+0.2** | |
| | comp=Z,8.7nm,0.8s,baz=260,slow=1.9,SNR=9.1 | | | | | | | | |
| LPAZ | | | | Sdiff | | | 04 52 11.7 | | |
| | comp=Z,5.0nm,0.8s,baz=126,slow=18,SNR=3.2 | | | | | | | | |
| LPAZ | | | | PKKPbc | | **PKKPbc** | **04 58 05.0** | **-0.8** | |
| | comp=Z,13nm,0.7s,baz=31,slow=3.3,SNR=16 | | | | | | | | |
| LPAZ | | | | PKPPKP | | **P'P'df** | **05 06 23.9** | **-3.7** | |
| | comp=Z,13nm,1.3s,baz=4.8,slow=8.6,SNR=6.8 | | | | | | | | |
| **TZTN** | **Tazewell** | **103.44** | **56** | Pdiff | | **Pdif** | **04 42 13.1** | **+0.4** | |
| | baz=259 | | | | | | | | |
| **DWPF** | **Disney Wildern** | **103.49** | **64** | Pdiff | | **Pdif** | **04 42 13.5** | **+0.4** | |
| | baz=258 | | | | | | | | |
| **GLMI** | **Grayling** | **104.15** | **47** | Pdiff | | **Pdif** | **04 42 16.2** | **+0.5** | |
| | baz=260 | | | | | | | | |
| **AAM** | **Ann Arbor** | **104.41** | **50** | Pdiff | | **Pdif** | **04 42 17.6** | **+0.8** | |
| | baz=260 | | | | | | | | |
| **ROSC** | **El Rosal** | **104.50** | **89** | Pdiff | | **Pdif** | **04 42 19.8** | **+1.4** | |
| | comp=Z,4.8nm,0.4s,baz=191,slow=16,SNR=4.2 | | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **104.55** | **52** | Pdiff | | **Pdif** | **04 42 18.1** | **+0.5** | |
| | baz=260 | | | | | | | | |
| **WMQ** | **Urumqi** | **104.59** | **312** | P | | **Pdif** | **04 42 18.4** | **+0.6** | |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,36nm,1.3s | | | | | | | | |
| **P52A** | **Corning** | **105.09** | **53** | PKiKP | | **PKiKP** | **04 46 31.7** | **-0.4** | |
| | baz=260 | | | | | | | | |
| **NHSC** | **New Hope** | **105.52** | **60** | PKiKP | | **PKiKP** | **04 46 32.6** | **-0.4** | |
| | baz=260 | | | | | | | | |
| **O53A** | **New Philadelph** | **105.89** | **52** | PKiKP | | **PKiKP** | **04 46 32.9** | **-0.6** | |
| | baz=261 | | | | | | | | |
| **BLA** | **Blacksburg** | **106.02** | **55** | PKiKP | | **PKiKP** | **04 46 33.5** | **-0.4** | |
| | baz=261 | | | | | | | | |
| **M53A** | **WI Miller and** | **106.47** | **51** | PKiKP | | **PKiKP** | **04 46 33.8** | **-0.8** | |
| | baz=262 | | | | | | | | |
| **MCWV** | **Mont Chateau** | **106.84** | **53** | PKiKP | | **PKiKP** | **04 46 34.7** | **-0.6** | |
| | baz=262 | | | | | | | | |
| **ZSN** | **Zaisan** | **107.07** | **315** | *e*PKiKP | | **PKiKP** | **04 46 34.9** | **-0.7** | |
| | baz=315 | | | | | | | | |
| ZSN | | | | *e*PP | | **PP** | **04 46 59.5** | **-1.6** | |
| | baz=315 | | | | | | | | |
| **ERPA** | **Erie** | **107.07** | **50** | PKiKP | | **PKiKP** | **04 46 35.0** | **-0.7** | |
| | baz=262 | | | | | | | | |
| **HYB** | **Hyderabad** | **107.36** | **283** | *e*PKiKP | | **PKiKP** | **04 46 35.7** | **-1.3** | |
| **ZALV** | **Zalesovo Beam** | **107.73** | **322** | Pdiff | | **Pdif** | **04 42 31.0** | **-0.4** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SNR=49 | | | | | | | |
| **KSH** | **Kashi** | **112.83** | **306** | PKP | **PKiKP** | **04 46 47.5** | **+0.7** |
| **LBNH** | **Lisbon** | **113.12** | **49** | PKiKP | **PKiKP** | **04 46 47.1** | **0.0** |
| | baz=268 | | | | | | | |
| **TKM2** | **Tokmak 2** | **113.28** | **310** | P | **PKiKP** | **04 46 47.1** | **-0.6** |
| | SNR=48 | | | | | | | |
| **TKM2** | **Tokmak 2** | **113.28** | **310** | PKiKP | **PKiKP** | **04 46 46.8** | **-0.9** |
| **HRV** | **Adam Dziewonsk** | **113.33** | **51** | PKiKP | **PKiKP** | **04 46 47.1** | **-0.3** |
| | baz=268 | | | | | | | |
| **KBK** | **Karagaybulak** | **113.75** | **310** | P | **PKiKP** | **04 46 48.6** | **0.0** |
| | SNR=13 | | | | | | | |
| **CHMS** | **Chumysh** | **113.90** | **310** | P | **PKiKP** | **04 46 48.1** | **-0.5** |
| | SNR=27 | | | | | | | |
| **UCH** | **Uchtor** | **114.06** | **309** | P | **PKiKP** | **04 46 49.7** | **+0.3** |
| | SNR=23 | | | | | | | |
| **AAK** | **Ala-Archa** | **114.08** | **310** | PKPdf | PKPdf | 04 46 48.4 | -0.7 |
| **AAK** | **Ala-Archa** | **114.08** | **310** | P | PKPdf | 04 46 48.7 | -0.4 |
| **AAK** | **Ala-Archa** | **114.08** | **310** | *c i*PKiKP | PKPdf | 04 46 48.5 | -0.6 |
| **USP** | **Ospenovka** | **114.09** | **310** | P | PKPdf | 04 46 48.2 | -0.7 |
| | SNR=29 | | | | | | | |
| **NEEM** | **North Greenlan** | **114.16** | **11** | *i* P | PKPdf | 04 46 46.0 | -2.4 |
| **KULLO** | **Kullorsuaq** | **114.26** | **15** | *i* P | PKPdf | 04 46 46.3 | -2.0 |
| **BTLS** | **Baital** | **114.43** | **312** | *e*PKiKP | PKPdf | 04 46 48.8 | -0.7 |
| | baz=312 | | | | | | | |
| **BTLS** | **Baital** | **114.43** | **312** | *i* PKiKP | PKPdf | 04 46 48.8 | -0.7 |
| **NIL** | **Nilore** | **114.60** | **300** | P | PKPdf | 04 46 49.3 | -0.9 |
| **EKS2** | **Erkin-Say** | **114.61** | **310** | P | PKPdf | 04 46 49.9 | -0.2 |
| | SNR=51 | | | | | | | |
| **AML** | **Almayashu** | **114.66** | **309** | P | PKPdf | 04 46 50.5 | -0.1 |
| | SNR=62 | | | | | | | |
| **WVL** | **Waterville** | **114.75** | **48** | | PKPdf | 04 46 48.9 | -1.2 |
| **NOR** | **Nord** | **114.87** | **3** | *i* P | PKPdf | 04 46 46.9 | -2.5 |
| **AOPR** | **Arecibo Observ** | **114.88** | **77** | PKiKP | PKPdf | 04 46 49.5 | -1.7 |
| **OBIP** | **Obispado Ponce** | **114.96** | **78** | | PKPdf | 04 46 48.8 | -2.5 |
| **CELP** | **Cerrillos** | **114.99** | **78** | PKPdf | PKPdf | 04 46 49.8 | -1.5 |
| **PKME** | **Peaks-Kenny Pk** | **115.00** | **48** | PKiKP | **PKPdf** | **04 46 50.4** | **-0.1** |
| | baz=271 | | | | | | | |
| **ARSB** | **Arslanbob** | **115.18** | **308** | PKPdf | **PKPdf** | **04 46 49.6** | **-1.7** |
| **ARSB** | **Arslanbob** | **115.18** | **308** | PKiKP | **PKPdf** | **04 46 49.6** | **-1.7** |
| **UPNV** | **Upernavik** | **115.32** | **16** | *i* P | **PKPdf** | **04 46 48.9** | **-1.5** |
| **PDPR** | **Patillas Dam,** | **115.50** | **78** | PKPdf | **PKPdf** | **04 46 50.7** | **-1.6** |
| **OTUK** | **Ortayu** | **115.52** | **316** | PKiKP | **PKPdf** | **04 46 50.6** | **-1.0** |
| **SCHQ** | **Schefferville** | **115.91** | **37** | PKP | **PKPdf** | **04 46 51.3** | **-0.8** |
| | comp=Z,43nm,0.9s,baz=328,slow=2.6,SNR=18 | | | | | | | |
| SCHQ | | | | PP | **PP** | **04 48 02.0** | **-1.5** |
| | comp=Z,33nm,1.0s,baz=289,slow=6.9,SNR=7.0 | | | | | | | |
| SCHQ | | | | PKKPbc | **PKKPbc** | **04 57 24.9** | **-1.5** |
| | comp=Z,5.0nm,0.6s,baz=77,slow=6.9,SNR=7.0 | | | | | | | |
| **ICQ** | **Pointe Anglais** | **116.18** | **43** | PKPdf | **PKPdf** | **04 46 51.4** | **-1.3** |
| **BVA0** | **Borovoye Array** | **116.36** | **321** | *i* PKiKP | **PKPdf** | **04 46 52.2** | **-0.8** |
| **BVAR** | **Borovoye Array** | **116.36** | **321** | PKP | **PKPdf** | **04 46 52.0** | **-0.9** |
| | comp=Z,126nm,0.5s,baz=106,slow=1.3,SNR=261 | | | | | | | |
| BVAR | | | | SKP | | 04 49 48.3 | | |
| | comp=Z,30nm,0.9s,baz=90,slow=1.7,SNR=3.8 | | | | | | | |
| BVAR | | | | PKKPbc | **PKKPbc** | **04 57 22.7** | **-2.1** |
| | comp=Z,4.6nm,0.7s,baz=350,slow=2.5,SNR=5.2 | | | | | | | |
| **BRVK** | **Borovoye** | **116.42** | **321** | PKPdf | **PKPdf** | **04 46 52.0** | **-1.1** |
| **BRVK** | **Borovoye** | **116.42** | **321** | P | **PKPdf** | **04 46 52.7** | **-0.4** |
| **BRVK** | **Borovoye** | **116.42** | **321** | *c i*PKiKP | **PKPdf** | **04 46 52.4** | **-0.7** |
| **NUUG** | **Nuugaatsiaq** | **116.70** | **17** | *i* P | **PKPdf** | **04 46 51.5** | **-1.5** |
| **BOAV** | **Boa Vista** | **116.98** | **96** | PKPdf | **PKPdf** | **04 46 54.6** | **-0.7** |
| **KK31** | **Karatay Array** | **117.01** | **310** | *i* PKiKP | **PKPdf** | **04 46 53.9** | **-0.7** |
| **UMMG** | **Uummannaq** | **117.43** | **18** | *i* P | **PKPdf** | **04 46 52.4** | **-2.1** |
| **BRLS** | **Borolday** | **117.50** | **310** | *e*PKiKP | **PKPdf** | **04 46 55.0** | **-0.5** |
| | baz=310 | | | | | | | |
| **BRLS** | **Borolday** | **117.50** | **310** | *i* PKiKP | **PKPdf** | **04 46 55.0** | **-0.5** |
| **VAO** | **Valinhos** | **117.80** | **128** | PKPdf | **PKPdf** | **04 46 55.8** | **-1.0** |
| **KBS** | **Kingsbay** | **117.84** | **358** | | **PKPdf** | **04 46 54.7** | **-0.4** |
| **KBS** | **Kingsbay** | **117.84** | **358** | *e*PKPdf | **PKPdf** | **04 46 55.2** | **0.0** |
| KBS | | | | *e*PP | **PP** | **04 48 12.4** | **-3.6** |
| **KBS** | **Kingsbay** | **117.84** | **358** | PKiKP | **PKPdf** | **04 46 54.7** | **-0.4** |
| **KBS** | **Kingsbay** | **117.84** | **358** | *i* P | **PKPdf** | **04 46 54.2** | **-1.0** |
| **KBL** | **Kabul** | **118.14** | **300** | PKPdf | **PKPdf** | **04 46 56.6** | **-0.6** |
| **KBL** | **Kabul** | **118.14** | **300** | P | **PKiKP** | **04 46 57.8** | **+0.5** |
| | SNR=74 | | | | | | | |
| **KBL** | **Kabul** | **118.14** | **300** | PKiKP | **PKPdf** | **04 46 56.7** | **-0.6** |
| **SIMJ** | **Simiganj** | **118.22** | **305** | PKPdf | **PKPdf** | **04 46 55.9** | **-1.4** |
| **SPA0** | **Spitsbergen Ar** | **118.37** | **357** | *e*PKPdf | **PKPdf** | **04 46 55.7** | **-0.5** |
| SPA0 | | | | *e*SKPdf | **SKPdf** | **04 49 45.7** | **-5.0** |
| SPA0 | | | | *e*SKSac | **SKSac** | **04 53 12.4** | **+2.7** |
| SPA0 | | | | *e*SS | **SS** | **05 04 02.4** | **+0.7** |
| **SPITS** | **Spitsbergen Ar** | **118.37** | **357** | PKP | **PKPdf** | **04 46 55.8** | **-0.5** |
| | comp=Z,194nm,0.9s,baz=72,slow=4.7,SNR=29 | | | | | | | |
| SPITS | | | | SKP | | 04 49 51.7 | | |
| | comp=Z,60nm,0.9s,baz=113,slow=12,SNR=6.4 | | | | | | | |
| SPITS | | | | PKKPbc | **PKKPbc** | **04 57 17.4** | **-0.8** |
| | comp=Z,7.9nm,0.6s,baz=158,slow=7.2,SNR=5.4 | | | | | | | |
| **GDHS** | **Morne Mazeau,** | **119.18** | **81** | PKPdf | **PKPdf** | **04 46 58.0** | **-1.5** |
| **DAG** | **Danmarks Havn** | **119.26** | **5** | *i* P | **PKPdf** | **04 46 56.0** | **-1.9** |
| **FOMA** | **Nahampoana Res** | **119.48** | **228** | PKPdf | **PKPdf** | **04 46 59.7** | **-0.2** |
| **FOMA** | **Nahampoana Res** | **119.48** | **228** | P | **PKiKP** | **04 47 01.0** | **+1.0** |
| | SNR=5.9 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **119.70** | **21** | PKPdf | **PKPdf** | **04 46 57.6** | **-1.4** |
| **SFJD** | **Kangerlussuaq** | **119.70** | **21** | PKiKP | **PKPdf** | **04 46 57.6** | **-1.4** |
| **SFJD** | **Kangerlussuaq** | **119.70** | **21** | *i* P | **PKPdf** | **04 46 57.5** | **-1.5** |
| **SUMG** | **Summit** | **119.76** | **13** | PKPdf | **PKPdf** | **04 46 59.5** | **0.0** |
| **SUMG** | **Summit** | **119.76** | **13** | PKiKP | **PKPdf** | **04 46 59.5** | **0.0** |
| **SUMG** | **Summit** | **119.76** | **13** | *i* P | **PKPdf** | **04 46 58.4** | **-1.1** |
| **NUUK** | **Nuuk** | **120.61** | **24** | *i* P | **PKPdf** | **04 46 59.2** | **-1.5** |
| **BDFB** | **Brasilia** | **121.00** | **121** | PKP | **PKPdf** | **04 47 02.6** | **-0.5** |
| | comp=Z,53nm,0.8s,baz=240,slow=2.2,SNR=46 | | | | | | | |
| BDFB | | | | PKKPbc | **PKKPbc** | **04 57 08.2** | **+0.7** |
| | comp=Z,21nm,0.8s,baz=91,slow=3.2,SNR=16 | | | | | | | |
| **SVE** | **Sverdlovsk** | **121.07** | **327** | *d i*PKiKP | **PKPdf** | **04 47 01.7** | **-0.2** |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,633nm,1.3s | | | | | | | |
| **DBG** | **Daneborg** | **121.37** | **7** | *i* P | **PKPdf** | **04 47 00.1** | **-1.9** |
| **DY2G** | **Dye2** | **121.45** | **21** | *i* P | **PKPdf** | **04 47 01.0** | **-1.7** |
| **VOI** | **Vohitsoka** | **121.51** | **230** | PKPdf | **PKPdf** | **04 47 03.0** | **-1.0** |
| **VOI** | **Vohitsoka** | **121.51** | **230** | P | **PKiKP** | **04 47 04.5** | **+0.3** |
| | SNR=17 | | | | | | | |
| **BJO1** | **Bjornoya** | **121.71** | **355** | *e*PKPdf | **PKPdf** | **04 47 01.5** | **-1.2** |
| **ICESG** | **Greenland Ices** | **121.86** | **16** | *i* P | **PKPdf** | **04 47 00.8** | **-2.8** |
| **ARU** | **Arti** | **122.28** | **327** | PKPdf | **PKPdf** | **04 47 03.2** | **-1.0** |
| **ARU** | **Arti** | **122.28** | **327** | *i* PKiKP | **PKPdf** | **04 47 03.8** | **-0.4** |
| ARU | | | | | | 04 48 45.4 | | |
| ARU | | | | | | 04 53 24.4 | | |
| ARU | | | | SS | SS | 05 04 55.8 | +3.4 |
| **ABPO** | **Ambohimpanom** | **122.90** | **233** | PKPdf | **PKPdf** | **04 47 05.8** | **-1.0** |
| **ABPO** | **Ambohimpanom** | **122.90** | **233** | PKiKP | **PKPdf** | **04 47 05.8** | **-1.0** |
| **MSEY** | **Mahe Island** | **122.94** | **253** | PKPdf | **PKiKP** | **04 47 07.0** | **-0.1** |
| **MSEY** | **Mahe Island** | **122.94** | **253** | PKiKP | **PKiKP** | **04 47 07.0** | **-0.1** |
| **IVI** | **Ivigtut** | **123.43** | **26** | *i* P | **PKPdf** | **04 47 03.6** | **-2.6** |
| **AB31** | **Akbulak array** | **123.49** | **318** | *i* PKiKP | **PKPdf** | **04 47 06.4** | **-0.4** |
| **ABKAR** | **Akbulak array** | **123.49** | **318** | PKPdf | **PKPdf** | **04 47 06.0** | **-0.8** |
| **SBV** | **Sambava** | **123.81** | **240** | P | **PKiKP** | **04 47 08.8** | **+0.1** |
| | SNR=5.7 | | | | | | | |
| **VADS** | **Vadso** | **124.30** | **349** | *e*PKPdf | **PKPdf** | **04 47 07.0** | **-0.7** |
| VADS | | | | *e*PP | **PP** | **04 48 57.2** | **-2.2** |
| VADS | | | | *e*SKSac | **SKSac** | **04 53 30.6** | **+0.8** |
| **ISOG** | **Isortoq, Green** | **124.39** | **19** | *i* P | **PKPdf** | **04 47 04.9** | **-3.0** |
| **NGCH** | **Negor - Chabah** | **124.57** | **289** | P | **PKiKP** | **04 47 11.7** | **+1.8** |
| | SNR=6.3 | | | | | | | |
| **SCO** | **Scoresbysund** | **124.57** | **10** | *i* P | **PKPdf** | **04 47 07.6** | **-0.7** |
| **HAMF** | **Hammerfest** | **124.76** | **351** | *e*PKPdf | **PKPdf** | **04 47 07.7** | **-0.9** |
| **ANGG** | **Ammassalik, Gr** | **124.77** | **19** | *i* P | **PKPdf** | **04 47 05.8** | **-2.9** |
| **LVZ** | **Lovozero** | **125.00** | **346** | PKPdf | **PKPdf** | **04 47 07.6** | **-1.6** |
| **LVZ** | **Lovozero** | **125.00** | **346** | *i*PKiKP | **PKPdf** | **04 47 07.1** | **-2.1** |
| **KEV** | **Kevo** | **125.03** | **350** | PKPdf | **PKPdf** | **04 47 07.7** | **-1.4** |
| **ARA0** | **ARCESS Array S** | **125.47** | **350** | *e*PKPdf | **PKPdf** | **04 47 09.6** | **-0.4** |
| ARA0 | | | | *ep*PKPdf | **pPKPdf** | **04 48 53.5** | **+1.4** |
| ARA0 | | | | *e*SKSac | **SKSac** | **04 53 33.5** | **0.0** |
| ARA0 | | | | *e*SP | **SP** | **04 58 18.4** | **-6.2** |
| **ARCES** | **ARCESS Array B** | **125.47** | **350** | PKP | **PKPdf** | **04 47 09.9** | **-0.2** |
| | comp=Z,76nm,0.4s,baz=27,slow=1.2,SNR=93 | | | | | | | |
| ARCES | | | | pPKP | **pPKPdf** | **04 48 54.2** | **+2.1** |
| | comp=Z,47nm,1.1s,baz=17,slow=1.3,SNR=3.2 | | | | | | | |
| ARCES | | | | SKPbc | SKPbc | 04 49 49.0 | | |
| | comp=Z,41nm,0.8s,baz=20,slow=3.9,SNR=5.7 | | | | | | | |
| ARCES | | | | SKP | | 04 50 05.6 | | |
| | comp=Z,57nm,0.9s,baz=4.8,slow=1.5,SNR=6.0 | | | | | | | |
| ARCES | | | | PKKPbc | **PKKPab** | **04 56 47.0** | **-0.9** |
| | comp=Z,13nm,0.7s,baz=213,slow=2.5,SNR=17 | | | | | | | |
| ARCES | | | | PKKP | **PKKPdf** | **04 57 29.8** | **-2.5** |
| | comp=Z,3.2nm,0.5s,baz=220,slow=1.7,SNR=7.6 | | | | | | | |
| **APA** | **Apatity** | **125.55** | **346** | *i*PKiKP | **PKPdf** | **04 47 08.0** | **-2.2** |
| APA | | | | *i* | | 04 49 13.8 | | |
| APA | | | | pmax | pmax | | | |
| | comp=Z,204nm,1.0s | | | | | | | |
| **JLN** | **Jalan Bani Buh** | **125.89** | **285** | P | **PKPdf** | **04 47 12.0** | **-0.2** |
| | SNR=24 | | | | | | | |
| **KIRV** | **Kirov** | **125.89** | **332** | *c i*PKiKP | **PKPdf** | **04 47 10.7** | **-0.4** |
| **KTK1** | **Kautokeino** | **126.31** | **351** | *e*PKPdf | **PKPdf** | **04 47 10.6** | **-1.1** |
| KTK1 | | | | *ep*PKPdf | **pPKPdf** | **04 48 55.7** | **+1.9** |
| KTK1 | | | | *e*SKSac | **SKSac** | **04 53 34.6** | **-1.4** |
| KTK1 | | | | *e*SP | **SP** | **04 58 30.9** | **-0.9** |
| **TRO** | **Tromso** | **126.33** | **353** | *e*PKPdf | **PKPdf** | **04 47 10.4** | **-1.2** |
| **WBK** | **Wadi Bani Khal** | **126.34** | **286** | P | **PKiKP** | **04 47 13.6** | **0.0** |
| | SNR=11 | | | | | | | |
| **ADZR** | **Andozero** | **126.95** | **341** | ⇑ *i*PKiKP | **PKPdf** | **04 47 12.0** | **-0.9** |
| ADZR | | | | pmax | pmax | | | |
| | comp=Z,363nm,1.3s | | | | | | | |
| **MHTO** | **MHTO** | **127.12** | **284** | P | **PKiKP** | **04 47 15.0** | **-0.1** |
| | SNR=28 | | | | | | | |
| **JMDO** | **Jabal Madar** | **127.12** | **285** | P | **PKiKP** | **04 47 15.0** | **-0.2** |
| | SNR=21 | | | | | | | |
| **BIDO** | **Bidbid** | **127.19** | **287** | P | **PKiKP** | **04 47 14.9** | **-0.3** |
| | SNR=27 | | | | | | | |
| **SMDO** | **Samad** | **127.22** | **286** | P | **PKPdf** | **04 47 15.0** | **+0.1** |
| | SNR=41 | | | | | | | |
| **DQM** | **DQM** | **127.40** | **282** | P | **PKiKP** | **04 47 16.0** | **+0.2** |
| | SNR=12 | | | | | | | |
| **JASK** | **Jask - Hormozg** | **127.55** | **290** | P | **PKiKP** | **04 47 16.2** | **+0.3** |
| | SNR=19 | | | | | | | |
| **SUR** | **Sutherland** | **127.70** | **200** | PKPdf | **PKPdf** | **04 47 15.2** | **-0.6** |
| **SUR** | **Sutherland** | **127.70** | **200** | P | **PKiKP** | **04 47 16.4** | **+0.1** |
| **HOQ** | **Hoqain** | **127.94** | **287** | P | **PKPdf** | **04 47 16.0** | **-0.1** |
| | SNR=35 | | | | | | | |
| **BSY** | **Bisya** | **127.98** | **286** | P | **PKPdf** | **04 47 16.0** | **-0.2** |
| | SNR=12 | | | | | | | |
| BSY | | | | P | **PKPdf** | **04 47 16.1** | **-0.2** |
| | SNR=23 | | | | | | | |
| **LOF** | **Lofoten** | **128.35** | **355** | *e*PKPdf | **PKPdf** | **04 47 14.9** | **-0.5** |
| LOF | | | | *e*SP | SP | 04 58 52.3 | +2.9 |
| **ARQ** | **Araqi** | **128.64** | **287** | P | **PKPdf** | **04 47 17.0** | **-0.5** |
| | SNR=22 | | | | | | | |
| **SOHO** | **SOHO** | **128.68** | **288** | PKPdf | **PKPdf** | **04 47 16.3** | **-1.2** |
| **SOHO** | **SOHO** | **128.68** | **288** | P | **PKPdf** | **04 47 17.3** | **-0.2** |
| **FAUS** | **Fauske** | **128.90** | **353** | *e*PKPdf | **PKiKP** | **04 47 17.0** | **-0.3** |
| FAUS | | | | *ep*PKPdf | **pPKPdf** | **04 48 58.5** | **-0.2** |
| FAUS | | | | *e*PP | **PP** | **04 49 31.1** | **+1.6** |
| **MDH** | **Madha** | **128.94** | **289** | *i* PKPdf | **PKPdf** | **04 47 17.2** | **-0.7** |
| | SNR=19 | | | | | | | |
| **MDH** | **Madha** | **128.94** | **289** | P | **PKPdf** | **04 47 18.0** | **0.0** |
| | SNR=18 | | | | | | | |
| **BANOM** | **Banah** | **128.96** | **290** | *i* PKPdf | **PKPdf** | **04 47 17.3** | **-0.7** |
| | SNR=24 | | | | | | | |
| **BANOM** | **Banah** | **128.96** | **290** | P | **PKPdf** | **04 47 18.0** | **0.0** |
| **SHAO** | **Shalim** | **128.97** | **280** | P | **PKPdf** | **04 47 15.5** | **-2.7** |
| **UOSS** | **Minazif** | **129.01** | **289** | PKPdf | **PKPdf** | **04 47 16.0** | **-2.1** |
| **UOSS** | **Minazif** | **129.01** | **289** | *i* PKPdf | **PKPdf** | **04 47 16.8** | **-1.3** |
| | SNR=28 | | | | | | | |
| **UOSS** | **Minazif** | **129.01** | **289** | P | **PKPdf** | **04 47 17.6** | **-0.5** |
| **MASF** | **Masafi** | **129.07** | **289** | P | **PKPdf** | **04 47 17.9** | **-0.3** |
| | SNR=21 | | | | | | | |
| **MSFE** | **Esma-Masafi** | **129.07** | **289** | *i* PKPdf | **PKPdf** | **04 47 17.1** | **-1.2** |
| | SNR=31 | | | | | | | |
| **HATD** | **Hatta, Dubai** | **129.07** | **288** | *i* PKPdf | **PKPdf** | **04 47 17.5** | **-0.7** |
| | SNR=29 | | | | | | | |
| **HATD** | **Hatta, Dubai** | **129.07** | **288** | P | **PKPdf** | **04 47 18.0** | **-0.2** |
| | SNR=36 | | | | | | | |
| **SHME** | **Shamm** | **129.10** | **290** | *i* PKPdf | **PKPdf** | **04 47 16.5** | **-1.7** |
| | SNR=12 | | | | | | | |
| **SHME** | **Shamm** | **129.10** | **290** | P | **PKPdf** | **04 47 18.5** | **+0.2** |
| | SNR=11 | | | | | | | |
| **ASHO** | **Ashiyiah** | **129.14** | **288** | *i* PKPdf | **PKPdf** | **04 47 17.5** | **-0.9** |
| | SNR=27 | | | | | | | |
| **ASHO** | **Ashiyiah** | **129.14** | **288** | P | **PKPdf** | **04 47 17.5** | **-0.9** |
| | SNR=36 | | | | | | | |
| **BOSA** | **Boshof** | **129.38** | **207** | PKhKP | PKPpre | 04 47 06.2 | | |
| | comp=Z,2.5nm,0.5s,baz=192,slow=1.9,SNR=8.2 | | | | | | | |
| BOSA | | | | PP | **PKPdf** | **04 47 19.3** | **+0.3** |
| | comp=Z,65nm,0.7s,baz=148,slow=2.6,SNR=36 | | | | | | | |
| BOSA | | | | PP | **PP** | **04 49 37.2** | **+4.2** |
| | comp=Z,92nm,0.8s,baz=162,slow=5.6,SNR=10 | | | | | | | |
| BOSA | | | | SKPbc | SKPbc | 04 50 01.3 | +1.1 |
| | comp=Z,35nm,0.8s,baz=153,slow=3.3,SNR=4.0 | | | | | | | |
| **ALNE** | **Al Ain** | **129.39** | **287** | *i* PKPdf | **PKPdf** | **04 47 18.0** | **-0.9** |
| | SNR=28 | | | | | | | |
| **ALNE** | **Al Ain** | **129.39** | **287** | P | **PKPdf** | **04 47 18.7** | **-0.1** |
| | SNR=54 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **129.51** | **289** | *i* PKiKP | **PKPdf** | **04 47 19.0** | **0.0** |
| | SNR=37 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **129.51** | **289** | P | **PKPdf** | **04 47 19.0** | **0.0** |
| | SNR=51 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **129.52** | **289** | *i* PKiKP | **PKiKP** | **04 47 19.7** | **-0.1** |
| | SNR=14 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **129.52** | **289** | P | **PKiKP** | **04 47 19.7** | **-0.1** |
| | SNR=13 | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **129.56** | **288** | *i* PKiKP | **PKPdf** | **04 47 19.0** | **-0.2** |
| | SNR=15 | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **129.56** | **288** | P | **PKPdf** | **04 47 18.8** | **-0.4** |
| | SNR=20 | | | | | | | |
| **DMTO** | **DMTO** | **129.57** | **279** | P | **PKPdf** | **04 47 18.7** | **-0.6** |
| **BORG** | **Borgarnes** | **129.74** | **13** | PKPdf | **PKPdf** | **04 47 18.2** | **0.0** |
| **BORG** | **Borgarnes** | **129.74** | **13** | PKiKP | **PKPdf** | **04 47 18.2** | **0.0** |
| **BELG** | **Belogornoye** | **129.74** | **325** | SKPbc | SKPbc | 04 50 01.9 | +1.4 |
| | comp=Z,3μm,1.1s,baz=151,slow=0.2,SNR=54 | | | | | | | |
| **BELG** | **Belogornoye** | **129.74** | **325** | *c i*PKiKP | **PKPdf** | **04 47 17.8** | **-0.8** |
| **JOF** | **Joensuu** | **129.79** | **343** | *e*P | **PKPdf** | **04 47 17.5** | **-0.9** |
| **ASUD** | **Al Ashush, Dub** | **129.80** | **288** | *i* PKiKP | **PKPdf** | **04 47 20.0** | **+0.4** |
| | SNR=17 | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **129.80** | **288** | P | **PKPdf** | **04 47 19.5** | **-0.1** |
| | SNR=27 | | | | | | | |
| **UMZA** | **Um Al Zommool** | **129.86** | **286** | P | **PKPdf** | **04 47 19.4** | **-0.4** |
| **KONS** | **Konsvik** | **129.98** | **354** | *e*PKPdf | **PKPdf** | **04 47 18.6** | **0.0** |
| **AJN** | **Ajban** | **130.11** | **288** | *i* PKPdf | **PKPdf** | **04 47 19.7** | **-0.5** |
| | SNR=19 | | | | | | | |
| **AJN** | **Ajban** | **130.11** | **288** | P | **PKPdf** | **04 47 19.5** | **-0.6** |
| | SNR=25 | | | | | | | |
| **STOK** | **Stokkvaagen** | **130.15** | **354** | *e*PKPdf | **PKPdf** | **04 47 18.8** | **-0.2** |
| **MOR8** | **Moi Rana** | **130.16** | **353** | *e*PKPdf | **PKPdf** | **04 47 17.5** | **-1.6** |
| MOR8 | | | | *ep*PKPdf | **pPKPdf** | **04 49 01.5** | **+0.3** |
| **RBK** | **Rabkut** | **130.24** | **279** | P | **PKiKP** | **04 47 21.3** | **-0.3** |
| | SNR=15 | | | | | | | |
| **DOK** | **Doka** | **130.45** | **280** | P | **PKPdf** | **04 47 21.0** | **+0.1** |
| | SNR=8.5 | | | | | | | |
| **WHFO** | **Wadi Hawf** | **130.71** | **279** | P | **PKPdf** | **04 47 21.5** | **0.0** |
| | SNR=7.9 | | | | | | | |
| **ABTO** | **Aybut** | **131.08** | **278** | P | **PKPdf** | **04 47 22.5** | **+0.2** |
| | SNR=9.6 | | | | | | | |
| **MZWR** | **Madinat Zayed** | **131.09** | **287** | P | **PKPdf** | **04 47 22.0** | **0.0** |
| **VALR** | **Valaam** | **131.15** | **342** | *de*PKiKP | **PKPdf** | **04 47 20.0** | **-1.0** |
| **MZR** | **Muzera** | **131.42** | **286** | *i* PKPdf | **PKPdf** | **04 47 22.4** | **-0.3** |
| | SNR=21 | | | | | | | |
| **MZR** | **Muzera** | **131.42** | **286** | P | **PKPdf** | **04 47 22.8** | **+0.1** |
| | SNR=36 | | | | | | | |
| **VAF** | **Ylistaro** | **131.79** | **348** | *e*P | **PKPdf** | **04 47 20.9** | **-1.3** |
| **GHWR** | **Ruwais** | **132.01** | **287** | P | **PKPdf** | **04 47 23.7** | **-0.1** |
| **NSS** | **Namsos** | **132.01** | **354** | *e*PKPdf | **PKPdf** | **04 47 21.7** | **-0.9** |
| NSS | | | | *e*SKPdf | **SKPab** | **04 50 10.2** | **+0.5** |
| NSS | | | | *e*SS | **SS** | **05 06 49.4** | **-1.6** |
| **JRN** | **Qarnain Island** | **132.06** | **288** | P | **PKPdf** | **04 47 23.4** | **-0.4** |
| | SNR=17 | | | | | | | |
| **KEF** | **Keuruu** | **132.08** | **346** | *e*P | **PKPdf** | **04 47 21.4** | **-1.4** |
| **CHIPN** | **CHIPINGE** | **132.30** | **220** | *i* P | PKPpre | 04 47 14.7 | | |
| **LBTB** | **Lobatse** | **132.32** | **209** | *i* P | PKPdf | 04 47 09.5 | -15 |
| **LBTB** | **Lobatse** | **132.32** | **209** | *i* P | PKPdf | 04 47 10.0 | -15 |
| **MUSN** | **Musina, Limpop** | **132.37** | **216** | *i* P | PKPdf | 04 47 14.1 | -11 |
| **FINES** | **FINESS Array B** | **132.40** | **345** | | PKPpre | 04 47 12.3 | | |
| **FINES** | **FINESS Array B** | **132.40** | **345** | PKhKP | PKPpre | 04 47 07.8 | | |
| | comp=Z,7.2nm,0.8s,baz=77,slow=3.3,SNR=19 | | | | | | | |
| FINES | | | | PKP | **PKPdf** | **04 47 23.8** | **+0.4** |
| | comp=Z,153nm,0.9s,baz=64,slow=2.0,SNR=30 | | | | | | | |
| FINES | | | | SKPbc | **SKPab** | **04 50 11.4** | **-0.1** |
| | comp=Z,898nm,1.2s,baz=45,slow=3.0,SNR=35 | | | | | | | |
| **PUL** | **Pulkovo** | **132.57** | **341** | *c i*PKiKP | **PKPdf** | **04 47 23.3** | **-0.4** |
| **MOS** | **Moscow** | **132.78** | **333** | *i* PKiKP | **PKPdf** | **04 47 21.4** | **-2.8** |
| MOS | | | | *e* | | 04 49 51.1 | | |
| MOS | | | | *e* | | 04 53 51.2 | | |
| MOS | | | | *e*SSS | SSS | 05 12 00.5 | | |
| MOS | | | | pmax | pmax | | | |
| | comp=Z,605nm,1.3s | | | | | | | |
| MOS | | | | pmax | pmax | | | |
| | comp=E,114nm,1.3s | | | | | | | |
| MOS | | | | pmax | pmax | | | |
| | comp=N,253nm,1.3s | | | | | | | |
| **SLWR** | **Sila** | **133.10** | **287** | P | **PKPdf** | **04 47 25.5** | **-0.3** |
| **TBLU** | **Trondheim** | **133.42** | **355** | *e*PKPdf | **PKPdf** | **04 47 25.1** | **-0.2** |
| TBLU | | | | *e*SKPdf | **SKPab** | **04 50 15.5** | **-0.4** |
| **VRH** | **Novokhopyorsk** | **133.51** | **326** | *e*PKiKP | **PKPdf** | **04 47 23.7** | **-2.1** |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,300nm,0.9s | | | | | | | |
| **SKOMA** | **Sekoma** | **133.52** | **208** | *i* P | PKPdf | 04 47 15.1 | -12 |
| **TRNA** | **Turayna** | **133.54** | **288** | P | **PKPdf** | **04 47 27.0** | **+0.3** |
| | SNR=20 | | | | | | | |
| **MAK** | **Makhachkala** | **133.57** | **314** | *e*P | **Pdif** | **04 44 26.6** | **+0.1** |
| MAK | | | | *i* | | 04 47 26.6 | | |
| MAK | | | | *e* | | 04 49 08.3 | | |
| MAK | | | | *e* | | 04 49 59.6 | | |
| MAK | | | | *e*PPP | PPP | 04 52 56.4 | | |
| MAK | | | | *e* | | 04 53 59.8 | | |
| MAK | | | | *e*SS | SS | 05 07 16.8 | +5.1 |
| MAK | | | | *e*SSS | SSS | 05 12 19.8 | | |
| MAK | | | | pmax | pmax | | | |
| | comp=Z,383nm,1.0s | | | | | | | |
| **OBN** | **Obninsk** | **133.65** | **333** | | **PKPdf** | **04 47 25.1** | **-0.7** |
| **OBN** | **Obninsk** | **133.65** | **333** | PKhKP | PKPpre | 04 47 16.6 | | |
| | comp=Z,11nm,0.4s,baz=148,slow=20,SNR=3.9 | | | | | | | |
| OBN | | | | PKP | **PKPdf** | **04 47 25.7** | **-0.2** |
| | comp=Z,427nm,1.0s,baz=98,slow=2.1,SNR=52 | | | | | | | |
| OBN | | | | SKPbc | **SKPbc** | **04 50 15.2** | **+1.1** |
| | comp=Z,538nm,1.1s,baz=46,slow=2.8,SNR=34 | | | | | | | |
| **OBN** | **Obninsk** | **133.65** | **333** | ⇓P | **PKPdf** | **04 47 26.1** | **+0.3** |
| **OBN** | **Obninsk** | **133.65** | **333** | *c i*PKiKP | **PKPdf** | **04 47 25.0** | **-0.9** |
| OBN | | | | *i* | | 04 49 56.5 | | |
| OBN | | | | *i* | | 04 53 02.6 | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,629nm,1.1s | | | | | | | |
| **SHMA** | **Al-Shehemyia** | **133.76** | **290** | P | **PKPdf** | **04 47 27.3** | **+0.3** |
| | SNR=14 | | | | | | | |
| **RAF** | **Rauma** | **133.79** | **347** | *e*P | **PKPdf** | **04 47 24.0** | **-2.0** |
| **MEF** | **Metsahovi** | **133.88** | **345** | *e*P | **PKPdf** | **04 47 24.9** | **-1.2** |
| **SMRA** | **Abu-Samra** | **133.90** | **288** | P | **PKPdf** | **04 47 27.0** | **-0.3** |
| | SNR=23 | | | | | | | |
| **ARBE** | **Arbavere** | **134.13** | **343** | *e*P | **PKPdf** | **04 47 26.1** | **-0.5** |
| **LPSR** | **Galich'ya Gora** | **134.15** | **329** | *e*PKiKP | **PKPdf** | **04 47 25.7** | **-1.2** |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,450nm,1.1s | | | | | | | |
| **SAKB** | **Bahrain** | **134.15** | **290** | P | **PKPdf** | **04 47 27.5** | **-0.2** |
| **MOL** | **Molde** | **134.30** | **356** | *e*PKPdf | **PKPdf** | **04 47 26.4** | **-0.4** |
| MOL | | | | IVmB_BB | | 04 47 27.7 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SNART | **Snartemo** | 138.53 | 356 | *e*PKPdf | **PKPdf** | 04 47 35.6 | +0.8 | |
| SNART | | | | *e*PP | **PP** | 04 50 31.0 | +0.9 | |
| SOC | **Sochi** | 138.53 | 318 | *e*PKIKP | **PKPdf** | 04 47 33.5 | -1.8 | |
| SOC | | | | *e* | | 04 50 29.1 | | |
| SOC | | | | *e*PPP | PPP | 04 53 35.1 | | |
| SOC | | | | pmax | pmax | | | |
| | comp=Z,230nm,1.0s | | | | | | | |
| KSANE | **Kasane** | 138.57 | 215 | *i* P | PKPdf | 04 47 24.8 | -12 | |
| RAYN | **Ar Rayn** | 138.76 | 286 | ⇑PKHKP | PKPpre | 04 47 28.7 | | |
| LSZ | **Lusaka** | 138.81 | 220 | PKPpre | PKPpre | 04 47 26.4 | | |
| LSZ | **Lusaka** | 138.81 | 220 | P | **PKPdf** | **04 47 37.6** | **+0.8** | |
| LSZ | **Lusaka** | 138.81 | 220 | PKHKP | PKPpre | 04 47 26.4 | | |
| OVD | **Ostervraa, Den** | 139.26 | 353 | *i* P | PKPpre | 04 47 29.3 | | |
| KPL | **Plockton** | 139.31 | 6 | *e*P | PKPpre | 04 47 27.4 | | |
| ANN | **Anapa** | 139.36 | 321 | *i* PKHKP | PKPpre | 04 47 31.1 | | |
| ANN | | | | *i* | | 04 50 33.5 | | |
| ANN | | | | *e* | | 04 53 59.6 | | |
| ANN | | | | *e*SS | SS | 05 08 16.2 | -3.3 | |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,240nm,1.4s | | | | | | | |
| SUW | **Suwalki** | 139.54 | 341 | *e*PKPdf | PKPpre | 04 47 28.9 | | |
| SUW | | | | *ep*PKPdf | pPKPdf | 04 49 19.4 | +0.1 | |
| SUW | | | | *e*PP | **PP** | **04 50 33.9** | **-2.6** | |
| SUW | **Suwalki** | 139.54 | 341 | *e*P | PKPpre | 04 47 29.3 | | |
| KIBK | **Kibwezi** | 139.55 | 245 | PKP | PKPpre | 04 47 28.9 | | |
| AKASG | **Malin Array Be** | 139.91 | 333 | PKPpre | PKPpre | 04 47 28.8 | | |
| AKASG | **Malin Array Be** | 139.91 | 333 | PKhKP | PKPpre | 04 47 28.3 | | |
| | comp=Z,22nm,0.5s,baz=43,slow=4.1,SNR=44 | | | | | | | |
| AKASG | | | | PKP | **PKPdf** | **04 47 37.6** | **-0.1** | |
| | comp=Z,81nm,0.7s,baz=41,slow=3.1,SNR=29 | | | | | | | |
| AKASG | | | | SKPbc | **SKPbc** | **04 50 33.9** | **+1.1** | |
| | comp=Z,72nm,0.9s,baz=35,slow=2.8,SNR=13 | | | | | | | |
| AKASG | | | | SKKPbc | **SKKPbc** | **04 59 08.2** | **-0.2** | |
| | comp=Z,7.8nm,0.9s,baz=229,slow=5.7,SNR=9.0 | | | | | | | |
| AKBB | **Malin Array Si** | 139.91 | 333 | *c i*PKIKP | **PKPdf** | **04 47 36.4** | **-1.2** | |
| KIEV | **Kiev** | 139.92 | 333 | PKPpre | PKPpre | 04 47 28.5 | | |
| KIEV | **Kiev** | 139.92 | 333 | *i* PKPdf | PKPpre | 04 47 28.9 | | |
| | SNR=43 | | | | | | | |
| KIEV | **Kiev** | 139.92 | 333 | ⇓P | PKPpre | 04 47 29.9 | | |
| KIEV | **Kiev** | 139.92 | 333 | PKHKP | PKPpre | 04 47 28.5 | | |
| DRUM | **Mains of Drumt** | 140.00 | 4 | *e*P | PKPpre | 04 47 29.2 | | |
| ATD | **Arta Tunnel** | 140.07 | 268 | PKPpre | PKPpre | 04 47 32.6 | | |
| ATD | **Arta Tunnel** | 140.07 | 268 | PKhKP | PKPpre | 04 47 31.9 | | |
| | comp=Z,2.1nm,1.0s,baz=280,slow=21,SNR=6.4 | | | | | | | |
| ATD | | | | SKPbc | **SKPbc** | **04 50 35.4** | **+1.0** | |
| | comp=Z,2.8nm,1.0s,baz=338,slow=1.9,SNR=5.0 | | | | | | | |
| MUD | **Monsted U'grnd** | 140.22 | 354 | *i* P | PKPpre | 04 47 31.7 | | |
| LAWE | **Loch Awe, Argy** | 140.40 | 6 | *e*P | PKPpre | 04 47 30.6 | | |
| COP | **Copenhagen** | 140.55 | 351 | *i* P | PKPpre | 04 47 31.3 | | |
| BSD | **Bornholm Skovb** | 140.66 | 348 | *e*P | PKPpre | 04 47 33.6 | | |
| BSD | **Bornholm Skovb** | 140.66 | 348 | *i* P | PKPpre | 04 47 30.9 | | |
| KMBO | **Kilima Mbogo** | 140.84 | 246 | PKhKP | PKPpre | 04 47 34.8 | | |
| | comp=Z,41nm,0.8s,baz=99,slow=3.5,SNR=68 | | | | | | | |
| KMBO | | | | SKPbc | **SKiKP** | **04 50 39.0** | **+0.2** | |
| | comp=Z,44nm,1.2s,baz=93,slow=3.2,SNR=3.3 | | | | | | | |
| TSUM | **Tsumeb** | 140.90 | 204 | PKPpre | PKPpre | 04 47 32.7 | | |
| TSUM | **Tsumeb** | 140.90 | 204 | SKPbc | **SKiKP** | **04 50 38.5** | **0.0** | |
| | comp=Z,38nm,0.8s,baz=112,slow=3.6,SNR=4.1 | | | | | | | |
| PGBU | **Glenifferbraes** | 140.93 | 6 | *e*P | PKPpre | 04 47 31.8 | | |
| EDI | **Edinburgh** | 140.94 | 5 | *e*P | PKPpre | 04 47 32.8 | | |
| ESY | **Stoneypath** | 140.98 | 4 | *e*P | PKPpre | 04 47 32.0 | | |
| SSRD | **Sdr. Stenderup** | 141.13 | 353 | *i* P | PKPpre | 04 47 32.4 | | |
| SIM | **Simferopol'** | 141.24 | 323 | *e*PKHKP | PKPpre | 04 47 34.1 | | |
| SIM | | | | | | 04 47 39.0 | | |
| SIM | | | | *e* | | 04 49 19.0 | | |
| SIM | | | | *e* | | 04 50 52.0 | | |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,38nm,0.7s | | | | | | | |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,510nm,5.2s | | | | | | | |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,2μm,7.2s | | | | | | | |
| IDGL | **Inch Island, C** | 141.29 | 9 | PKP | PKPpre | 04 47 34.0 | | |
| CLGH | **Cloghs, Cushen** | 141.47 | 7 | *e*P | PKPpre | 04 47 33.6 | | |
| RGN | **Rugen** | 141.50 | 349 | *e*P | **PKPdf** | **04 47 39.3** | **-1.0** | |
| EKA | **Eskdalemuir Ar** | 141.52 | 5 | PKhKP | PKPpre | 04 47 33.4 | | |
| | comp=Z,51nm,0.8s,baz=333,slow=2.8,SNR=79 | | | | | | | |
| EKA | | | | SKPbc | **SKiKP** | **04 50 39.0** | **+0.5** | |
| | comp=Z,219nm,1.2s,baz=347,slow=3.4,SNR=18 | | | | | | | |
| ESK | **Eskdalemuir** | 141.54 | 5 | | PKPpre | 04 47 33.7 | | |
| ESK | **Eskdalemuir** | 141.54 | 5 | *e*P | PKPpre | 04 47 33.7 | | |
| ESK | **Eskdalemuir** | 141.54 | 5 | PKHKP | PKPpre | 04 47 33.7 | | |
| NEWG | **New Galloway** | 141.64 | 6 | *e*P | PKPpre | 04 47 34.5 | | |
| GAL1 | **Galloway** | 141.84 | 6 | *e*P | PKPpre | 04 47 35.2 | | |
| GKP | **Gorka Klasztor** | 141.87 | 345 | *e*PKPdf | PKPpre | 04 47 36.7 | | |
| GKP | | | | *e*PP | **SKPbc** | **04 50 40.0** | **+2.3** | |
| GKP | **Gorka Klasztor** | 141.87 | 345 | *e*P | PKPpre | 04 47 36.5 | | |
| EDMD | **Edmundbyers** | 142.11 | 4 | *e*P | PKPpre | 04 47 36.3 | | |
| BEL | **Belsk** | 142.16 | 341 | *e*PKPdf | **PKPdf** | **04 47 37.7** | **-3.9** | |
| BEL | | | | *ep*PKPdf | **pPKPdf** | **04 49 19.6** | **-4.5** | |
| BEL | | | | *e*PP | **SKPbc** | **04 50 41.0** | **+2.5** | |
| SORM | **Soroca** | 142.17 | 331 | ⇑P | **PKPdf** | **04 47 38.1** | **-3.6** | |
| SORM | **Soroca** | 142.17 | 331 | ⇑PKHKP | PKPpre | 04 47 38.1 | | |
| KESW | **Keswick, Cumbr** | 142.27 | 5 | *e*P | PKPpre | 04 47 37.6 | | |
| DIKM | **Dikmen** | 142.35 | 318 | ⇓P | **PKPdf** | **04 47 42.4** | **+0.2** | |
| IOMK | **Kirk Michael** | 142.46 | 6 | *e*P | PKPpre | 04 47 37.2 | | |
| ILTH | **Belurgan, Co L** | 142.47 | 8 | PKP | PKPpre | 04 47 37.2 | | |
| ILTH | **Belurgan, Co L** | 142.47 | 8 | *e*P | PKPpre | 04 47 37.3 | | |
| PURM | **Purcari** | 142.55 | 328 | ⇓P | **PKPdf** | **04 47 40.7** | **-1.8** | |
| WIM | **Isle of Man** | 142.56 | 6 | *e*P | PKPpre | 04 47 37.9 | | |
| BSEG | **Bad Segeberg** | 142.56 | 352 | *e*PKPdf | **PKPdf** | **04 47 38.8** | **-3.4** | |
| | baz=18,slow=1.6 | | | | | | | |
| IGLA | **Glengowla, Co** | 142.58 | 11 | PKP | PKPpre | 04 47 37.0 | | |
| IGLA | **Glengowla, Co** | 142.58 | 11 | *e*P | PKPpre | 04 47 38.2 | | |
| GDLE | **Glaisdale, N Y** | 142.58 | 3 | *e*P | PKPpre | 04 47 37.7 | | |
| LVV | **L'vov** | 142.72 | 336 | *e*PHKHKP | PKPpre | 04 47 39.1 | | |
| LVV | | | | *e* | | 04 54 02.6 | | |
| DRBR | **Darabani** | 142.91 | 332 | ⇓P | **PKPdf** | **04 47 41.8** | **-1.3** | |
| BZK | **Bozkurt** | 142.98 | 319 | ⇑P | **PKPdf** | **04 47 41.9** | **-1.5** | |
| HPK | **Haverah Park** | 143.00 | 4 | *e*P | PKPpre | 04 47 38.1 | | |
| DSB | **Dublin** | 143.23 | 8 | PKP | PKPab | 04 47 39.4 | -1.5 | |
| DSB | **Dublin** | 143.23 | 8 | PKPpre | PKPpre | 04 47 39.7 | | |
| WPS | **Cemaes, Angles** | 143.31 | 6 | *e*P | PKPab | 04 47 41.3 | +0.1 | |
| WME | **Myndd Eilian** | 143.34 | 6 | *e*P | PKPab | 04 47 41.4 | +0.1 | |
| KWP | **Kalwaria Pacla** | 143.37 | 337 | *e*PKPdf | PKPab | 04 47 41.7 | +0.1 | |
| KWP | | | | *ep*PKPdf | pPKPdf | 04 49 21.7 | -4.6 | |
| KWP | | | | *e*PP | **SKPbc** | **04 50 42.6** | **+1.0** | |
| RUE | **Ruedersdorf** | 143.38 | 348 | *e*P | PKPab | 04 47 41.2 | -0.2 | |
| RUE | **Ruedersdorf** | 143.38 | 348 | *e*PKPdf | PKPbc | 04 47 41.6 | 0.0 | |
| | baz=18,slow=1.6 | | | | | | | |
| WLF1 | **Llynfaes** | 143.43 | 6 | *e*P | PKPab | 04 47 40.7 | -0.9 | |
| H07N1 | **FLORES T-PHASE** | 143.45 | 45 | *e*PKP | PKPbc | 04 47 43.1 | +0.7 | |
| H07N1 | **FLORES T-PHASE** | 143.45 | 45 | PKP | **PKPdf** | **04 47 43.8** | **-0.5** | |
| | SNR=194 | | | | | | | |
| H07S1 | **FLORES T-PHASE** | 143.54 | 46 | PKP | PKPbc | 04 47 43.6 | +0.8 | |
| | SNR=113 | | | | | | | |
| LBWR | **Ladybower, Pea** | 143.55 | 4 | *e*P | PKPab | 04 47 41.5 | -0.6 | |
| LMK | **Market Rasen** | 143.56 | 2 | *e*P | PKPab | 04 47 41.3 | -0.8 | |
| YLL | **Llanberis** | 143.60 | 6 | *e*P | PKPab | 04 47 41.5 | -0.8 | |
| CIDE | **Kastamonu/Cide** | 143.69 | 320 | ⇓P | PKPbc | 04 47 43.6 | +0.6 | |
| VAL | **Valentia** | 143.80 | 13 | PKP | PKPab | 04 47 42.6 | -0.4 | |
| VAL | **Valentia** | 143.80 | 13 | PKP | PKPab | 04 47 42.3 | -0.7 | |
| STNC | **Stoke** | 143.82 | 4 | *e*P | PKPab | 04 47 42.9 | -0.2 | |
| RETH | **Rethem/Aller,** | 143.85 | 352 | *e*PKPdf | PKPab | 04 47 43.1 | 0.0 | |
| | baz=18,slow=1.6 | | | | | | | |
| OJC | **Ojcow** | 143.87 | 341 | *e*PKPdf | PKPab | 04 47 43.3 | -0.1 | |
| OJC | | | | *ep*PKPdf | pPKPdf | 04 49 24.6 | -2.6 | |
| OJC | | | | *e*PP | **SKPbc** | **04 50 41.9** | **-0.8** | |
| VLDR | **Vladesti** | 143.93 | 329 | ⇓P | PKPab | 04 47 44.2 | +0.5 | |
| LLW | **Llanuwychllyn** | 143.94 | 6 | *e*P | PKPbc | 04 47 42.5 | -1.1 | |
| FOEL | **Foel Wylfa** | 143.94 | 5 | *e*P | PKPbc | 04 47 43.1 | -0.5 | |
| BUR08 | **Bucovina Ar. S** | 143.95 | 333 | | PKPbc | 04 47 43.7 | -0.2 | |
| BURAR | **Bucovina Array** | 143.97 | 333 | PKPdf | PKPbc | 04 47 43.7 | -0.2 | |
| BURAR | **Bucovina Array** | 143.97 | 333 | ⇓P | **PKPdf** | **04 47 44.7** | **-0.4** | |
| BURAR | **Bucovina Array** | 143.97 | 333 | ⇓PKIKP | **PKPdf** | **04 47 44.7** | **-0.4** | |
| FLTG | **Flechtingen** | 143.98 | 350 | *e*PKPdf | PKPbc | 04 47 43.0 | -0.6 | |
| | baz=18,slow=1.6 | | | | | | | |
| NRDL | **Niedersach Rie** | 143.99 | 352 | *e*PKPdf | PKPbc | 04 47 43.4 | -0.2 | |
| | baz=18,slow=1.6 | | | | | | | |
| VARL | **Varlezi** | 144.00 | 329 | ⇑P | **PKPdf** | **04 47 44.8** | **-0.3** | |
| TLCR | | 144.01 | 327 | ⇑P | **PKPdf** | **04 47 44.6** | **-0.4** | |
| TLCR | | 144.01 | 327 | ⇑PKIKP | **PKPdf** | **04 47 44.6** | **-0.4** | |
| SCTR | **Scanteiesti** | 144.09 | 328 | ⇓P | **PKPdf** | **04 47 44.8** | **-0.4** | |
| KOLS | **Kolonicke sedl** | 144.11 | 337 | *e*PKIKP | **PKPab** | **04 47 44.6** | **+0.3** | |
| KOLS | **Kolonicke sedl** | 144.11 | 337 | *e*PKP | **PKPab** | **04 47 44.6** | **+0.3** | |
| GHRR | | 144.11 | 329 | ⇑P | **PKPdf** | **04 47 45.6** | **+0.4** | |
| GIUM | **Giurgiulesti** | 144.11 | 328 | ⇓P | **PKPdf** | **04 47 45.4** | **+0.2** | |
| TESR | **Tescani** | 144.15 | 331 | ⇓P | PKPbc | 04 47 44.4 | 0.0 | |
| CWF | **Charnwood Fore** | 144.23 | 3 | *e*P | PKPbc | 04 47 43.7 | -0.7 | |
| NEGRR | **Negrea** | 144.24 | 328 | ⇓P | **PKPdf** | **04 47 45.6** | **+0.1** | |
| JURR | **Jurilovca** | 144.26 | 327 | ⇑P | **PKPab** | **04 47 45.2** | **+0.3** | |
| SLCR | **Slobozia Conac** | 144.26 | 328 | ⇑P | **PKPdf** | **04 47 46.0** | **+0.5** | |
| SCHL | **Schela** | 144.29 | 328 | ⇓P | **PKPdf** | **04 47 45.8** | **+0.3** | |
| IZVR | **Izvoarele** | 144.29 | 328 | ⇓P | **PKPab** | **04 47 45.0** | **-0.1** | |
| COSR | **Cosmesti PH** | 144.30 | 329 | ⇑P | **PKPdf** | **04 47 46.6** | **+1.0** | |
| TUDR | | 144.31 | 329 | ⇓P | **PKPdf** | **04 47 45.8** | **+0.2** | |
| SCHLR | **Schela** | 144.31 | 328 | ⇑P | **PKPdf** | **04 47 45.4** | **-0.2** | |
| WACR | **West Acre** | 144.32 | 1 | *e*P | PKPbc | 04 47 44.2 | -0.5 | |
| KSP | **Ksiaz** | 144.33 | 344 | *e*PKPdf | **PKPdf** | **04 47 45.3** | **-0.2** | |
| KSP | | | | *ep*PKPdf | **pPKPdf** | **04 49 26.7** | **-1.3** | |
| KSP | | | | *e*PP | **SKPbc** | **04 50 44.3** | **+0.5** | |
| HLM1 | **Long Mynd** | 144.34 | 5 | *e*P | PKPbc | 04 47 44.4 | -0.5 | |
| CFR | **Carcaliu** | 144.36 | 328 | ⇑P | **PKPdf** | **04 47 45.6** | **-0.1** | |
| PANC | **Panciu** | 144.37 | 329 | ⇓P | **PKPdf** | **04 47 46.2** | **+0.5** | |
| BR131 | **Keskin Array S** | 144.38 | 316 | *c i*PKIKP | PKPbc | 04 47 44.5 | -1.1 | |
| BRTR | **Keskin Array B** | 144.38 | 316 | PKP | PKPbc | 04 47 45.4 | -0.2 | |
| | comp=Z,1μm,1.1s,baz=112,slow=1.6,SNR=954 | | | | | | | |
| BRTR | | | | SKPbc | **SKiKP** | **04 50 46.1** | **+1.0** | |
| | comp=Z,51nm,0.9s,baz=118,slow=2.3,SNR=3.9 | | | | | | | |
| BRTR | | | | SKKPbc | **SKKPbc** | **04 58 50.5** | **+0.3** | |
| | comp=Z,10nm,1.1s,baz=197,slow=3.8,SNR=5.2 | | | | | | | |
| NIE | **Niedzica** | 144.40 | 339 | *e*PKPdf | **PKPdf** | **04 47 45.6** | **-0.1** | |
| NIE | | | | *ep*PKPdf | **pPKPdf** | **04 49 27.3** | **-0.8** | |
| NIE | | | | *e*PP | **SKPbc** | **04 50 44.9** | **+0.9** | |
| CRVS | **Cervenica-Dubn** | 144.43 | 338 | *e*PKIKP | **PKPdf** | **04 47 45.7** | **0.0** | |
| CRVS | **Cervenica-Dubn** | 144.43 | 338 | *e*PKP | **PKPdf** | **04 47 45.7** | **0.0** | |
| CRVS | | | | *e* | | 04 49 32.1 | | |
| CRVS | | | | *e* | | 04 50 46.4 | | |
| CRVS | | | | *e* | | 04 58 48.0 | | |
| TPGR | **Topolog** | 144.44 | 327 | ⇑P | **PKPdf** | **04 47 46.0** | **+0.1** | |
| IBBN | **Ibbenburen** | 144.46 | 354 | *e*PKPdf | **PKPab** | **04 47 45.4** | **0.0** | |
| | baz=18,slow=1.6 | | | | | | | |
| KIRS | **Kirsehir-Merke** | 144.49 | 315 | ⇑P | **PKPab** | **04 47 46.1** | **0.0** | |
| LODK | **Lodwar** | 144.56 | 251 | P | **PKPab** | **04 47 47.6** | **+0.5** | |
| | SNR=335 | | | | | | | |
| VRI | **Vrincioaia** | 144.58 | 330 | ⇑P | PKPbc | 04 47 45.6 | -0.3 | |
| VRI | **Vrincioaia** | 144.58 | 330 | ⇑PKIKP | PKPbc | 04 47 45.6 | -0.3 | |
| CLZ | **Clausthal** | 144.59 | 351 | *e*PKPdf | **PKPdf** | **04 47 45.9** | **0.0** | |
| | baz=18,slow=1.6 | | | | | | | |
| OSTC | **Ostas** | 144.61 | 344 | *e*PKP | **PKPab** | **04 47 46.3** | **+0.2** | |
| OSTC | | | | *e*SKKP | | 04 58 47.3 | | |
| CHVC | **Chvalec** | 144.62 | 344 | *e*PKP | **PKPab** | **04 47 46.3** | **+0.1** | |
| CHVC | | | | *ep*PKP | **pPKPdf** | **04 49 24.9** | **-3.6** | |
| CHVC | | | | *e*SKP | | 04 50 47.1 | | |
| CHVC | | | | *e*SKKP | | 04 58 47.2 | | |
| CHVC | **Chvalec** | 144.62 | 344 | *e*PKIKP | **PKPab** | **04 47 46.3** | **+0.1** | |
| CHVC | | | | *e* | | 04 49 24.9 | | |
| PLOR | **Plostina** | 144.62 | 330 | ⇓P | **PKPdf** | **04 47 46.2** | **0.0** | |
| PLOR | **Plostina** | 144.62 | 330 | ⇓PKIKP | **PKPdf** | **04 47 46.2** | **0.0** | |
| CLL | **Collm** | 144.64 | 348 | ⇓*i*PKPbc | PKPbc | 04 47 45.8 | -0.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| CLL | | | | *ex* | x | 04 48 06.0 | | |
| CLL | | | | *ep*PKPdf | pPKPdf | 04 49 29.0 | +0.6 | |
| CLL | | | | *ex* | x | 04 49 58.0 | | |
| | comp=Z,261nm,1.4s | | | | | | | |
| CLL | | | | *e*SKPdf | **SKPdf** | **04 50 40.0** | **+0.7** | |
| CLL | | | | *e*SKPbc | **SKiKP** | **04 50 46.0** | **+1.0** | |
| | comp=Z,719nm,1.2s | | | | | | | |
| CLL | | | | *ep*PP | | 04 52 41.0 | | |
| CLL | | | | *e*SKKSac | **SKKSac** | **04 57 15.0** | **-1.3** | |
| CLL | | | | *i* x | x | 04 57 54.1 | | |
| CLL | | | | *i* SKKPbc | **SKKPab** | **04 58 46.7** | **-1.0** | |
| CLL | | | | *ep*PPS | | 05 05 04.0 | | |
| CLL | **Collm** | 144.64 | 348 | ⇓*i*PKIKP | PKPbc | 04 47 45.8 | -0.1 | |
| CLL | | | | *e* | | 04 49 29.0 | | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,2μm,1.0s | | | | | | | |
| CLL | **Collm** | 144.64 | 348 | *e*PKPdf | **PKPdf** | **04 47 46.0** | **+0.1** | |
| | baz=18,slow=1.6 | | | | | | | |
| BMR | **Baia Mare** | 144.65 | 335 | ⇓P | **PKPab** | **04 47 46.2** | **-0.1** | |
| BMR | **Baia Mare** | 144.65 | 335 | ⇓PKIKP | **PKPab** | **04 47 46.2** | **-0.1** | |
| UPC | **Upice** | 144.71 | 344 | *e*PKP | **PKPab** | **04 47 46.5** | **0.0** | |
| UPC | **Upice** | 144.71 | 344 | *e*PKIKP | **PKPab** | **04 47 46.5** | **0.0** | |
| RSBS | **Rosebush, Pemb** | 144.71 | 7 | *e*P | PKPbc | 04 47 45.3 | -0.7 | |
| OKC | **Ostrava-Krasne** | 144.72 | 342 | *e*PKP | **PKPdf** | **04 47 46.3** | **+0.1** | |
| OKC | | | | *e*SKP | | 04 50 47.5 | | |
| OKC | **Ostrava-Krasne** | 144.72 | 342 | *e*PKIKP | **PKPdf** | **04 47 46.3** | **+0.1** | |
| ARCR | **ARCALIA** | 144.75 | 333 | ⇓P | PKPbc | 04 47 46.5 | +0.2 | |
| DPC | **Dobruska-Polom** | 144.77 | 344 | *e*PKP | **PKPab** | **04 47 47.0** | **+0.2** | |
| DPC | | | | *ep*PKP | **pPKPdf** | **04 49 27.3** | **-1.5** | |
| DPC | | | | *e*SKKP | | 04 58 46.7 | | |
| DPC | **Dobruska-Polom** | 144.77 | 344 | *e*PKIKP | **PKPab** | **04 47 47.0** | **+0.2** | |
| DPC | | | | *e* | | 04 49 27.3 | | |
| TURR | **Turia** | 144.78 | 331 | ⇓P | **PKPab** | **04 47 47.4** | **+0.4** | |
| HARR | **Harsova** | 144.80 | 327 | ⇑P | **PKPab** | **04 47 47.4** | **+0.4** | |
| GRER | | 144.81 | 329 | ⇑P | **PKPab** | **04 47 48.0** | **+1.0** | |
| BISRR | **Bisoca** | 144.81 | 329 | ⇑P | **PKPab** | **04 47 46.9** | **-0.2** | |
| TLBR | **Topalu** | 144.84 | 327 | ⇑P | **PKPab** | **04 47 47.2** | **0.0** | |
| COVR | **Voineasa-Covas** | 144.84 | 330 | ⇑P | **PKPab** | **04 47 47.2** | **0.0** | |
| EFOR | **EFORIE** | 144.85 | 326 | ⇑P | **PKPab** | **04 47 47.0** | **-0.2** | |
| MCH1 | **Michaelchurch** | 144.85 | 5 | *e*P | **PKPdf** | **04 47 45.9** | **-0.4** | |
| OZUR | | 144.86 | 331 | ⇓P | **PKPab** | **04 47 47.3** | **0.0** | |
| BRG | **Berggiesshubel** | 144.86 | 347 | *e*PKP | PKPbc | 04 47 46.8 | +0.2 | |
| BRG | | | | Amp | | 04 47 49.0 | | |
| | comp=Z,2μm,1.0s | | | | | | | |
| BRG | | | | pPKP | pPKPdf | 04 49 33.3 | +4.5 | |
| BRG | | | | Amp | | 04 49 38.0 | | |
| | comp=Z,459nm,1.5s | | | | | | | |
| BRG | **Berggiesshubel** | 144.86 | 347 | *e*PKPdf | **PKPab** | **04 47 46.8** | **-0.2** | |
| | baz=18,slow=1.6 | | | | | | | |
| ANTO | **Ankara** | 144.87 | 317 | P | PKPbc | 04 47 47.1 | +0.1 | |
| ANTO | **Ankara** | 144.87 | 317 | ⇑P | **PKPdf** | **04 47 46.8** | **0.0** | |
| ANTO | **Ankara** | 144.87 | 317 | ⇑PKIKP | **PKPdf** | **04 47 46.8** | **0.0** | |
| MFTR | **Murfatlar** | 144.89 | 326 | ⇓P | PKPbc | 04 47 47.0 | +0.1 | |
| KRLC | **Kraliky** | 144.90 | 343 | *e*PKIKP | **PKPab** | **04 47 47.5** | **+0.2** | |
| KRLC | | | | *e* | | 04 49 29.1 | | |
| LANS | **Liptovska Anna** | 144.91 | 340 | *e*PKIKP | **PKPab** | **04 47 48.0** | **+0.7** | |
| LANS | **Liptovska Anna** | 144.91 | 340 | *e*PKP | **PKPab** | **04 47 48.0** | **+0.7** | |
| BOSR | **Bodos** | 144.93 | 331 | ⇓P | **PKPab** | **04 47 47.4** | **-0.1** | |
| GTTG | **Gottingen** | 144.94 | 351 | *e*PKPdf | **PKPab** | **04 47 47.0** | **-0.3** | |
| | baz=18,slow=1.6 | | | | | | | |
| MORC | **Moravsky Berou** | 144.95 | 342 | *e*PKP | **PKPdf** | **04 47 46.5** | **-0.1** | |
| MORC | | | | *e* | | 04 49 27.9 | | |
| MORC | | | | *e* | | 04 50 47.2 | | |
| MORC | | | | *e* | | 04 50 49.0 | | |
| MORC | **Moravsky Berou** | 144.95 | 342 | ⇑P | **PKPab** | **04 47 47.6** | **+0.1** | |
| MORC | **Moravsky Berou** | 144.95 | 342 | ⇑PKIKP | **PKPab** | **04 47 47.6** | **+0.1** | |
| ELMS | **Elmsett, Ipswi** | 144.96 | 1 | *e*P | **PKPdf** | **04 47 46.1** | **-0.4** | |
| NEUB | **Neuenburg** | 144.97 | 349 | *e*PKPdf | PKPbc | 04 47 46.9 | +0.1 | |
| | baz=18,slow=1.6 | | | | | | | |
| MONM | **Monmouth** | 145.02 | 5 | *e*P | **PKPdf** | **04 47 46.4** | **-0.2** | |
| PVCC | **Panska Ves** | 145.04 | 346 | *e*PKP | **PKPbc** | **04 47 47.4** | **+0.3** | |
| PVCC | | | | *ep*PKP | pPKPbc | 04 49 27.9 | -0.4 | |
| PVCC | | | | *e*SKP | | 04 50 48.2 | | |
| PVCC | **Panska Ves** | 145.04 | 346 | *e*PKIKP | **PKPbc** | **04 47 47.4** | **+0.3** | |
| PVCC | | | | *e* | | 04 49 27.9 | | |
| CEI | **Carei** | 145.06 | 336 | ⇑P | **PKPab** | **04 47 48.0** | **+0.1** | |
| HWQ | **Hawqa** | 145.07 | 306 | *e*P | **PKPdf** | **04 47 46.7** | **-0.7** | |
| NEHR | **Nehoiu** | 145.10 | 330 | ⇑P | **PKPab** | **04 47 48.0** | **-0.2** | |
| TGMR | **Targu Mures** | 145.10 | 332 | ⇑P | **PKPbc** | **04 47 47.5** | **0.0** | |
| KECS | **Kecovo** | 145.13 | 338 | *e*PKP2 | **PKPab** | **04 47 48.3** | **+0.2** | |
| KECS | **Kecovo** | 145.13 | 338 | *e*PKP | **PKPab** | **04 47 48.3** | **+0.2** | |
| RICC | **Richard** | 145.13 | 346 | *e*PKP | **PKPbc** | **04 47 47.7** | **+0.3** | |
| STRD | **Stroud** | 145.13 | 4 | *e*P | **PKPdf** | **04 47 46.8** | **0.0** | |
| PGOR | **Pogoanele** | 145.13 | 328 | ⇑P | **PKPbc** | **04 47 47.7** | **+0.1** | |
| DOPR | **Dopca** | 145.14 | 331 | ⇓P | **PKPab** | **04 47 48.0** | **-0.3** | |
| ISR | **Istrita** | 145.21 | 329 | ⇓P | **PKPbc** | **04 47 47.6** | **-0.3** | |
| ISR | **Istrita** | 145.21 | 329 | ⇓PKP2 | **PKPbc** | **04 47 47.6** | **-0.3** | |
| HSKC | **Hora Svate Kat** | 145.22 | 347 | *e*PKP | **PKPbc** | **04 47 47.5** | **-0.2** | |
| HSKC | | | | *ep*PKP | pPKPbc | 04 49 29.1 | +0.2 | |
| HSKC | | | | *e*SKP | | 04 50 48.6 | | |
| MLR | **Muntele Rosu** | 145.23 | 330 | PKPdf | **PKPdf** | **04 47 47.0** | **-0.3** | |
| MLR | **Muntele Rosu** | 145.23 | 330 | PKPbc | **PKPdf** | **04 47 46.6** | **-0.8** | |
| | comp=Z,981nm,1.0s,baz=14,slow=2.8,SNR=223 | | | | | | | |
| MLR | | | | SKPbc | **SKiKP** | **04 50 48.2** | **+1.6** | |
| | comp=Z,256nm,1.2s,baz=328,slow=3.3,SNR=5.4 | | | | | | | |
| MLR | **Muntele Rosu** | 145.23 | 330 | ⇑P | **PKPbc** | **04 47 47.8** | **-0.3** | |
| MAUC | **Maruska** | 145.23 | 342 | *e*PKP | **PKPbc** | **04 47 47.8** | **0.0** | |
| MAUC | | | | *ep*PKP | pPKPab | 04 49 27.4 | 0.0 | |
| MAUC | | | | *e*SKP | | 04 50 48.8 | | |
| ICOR | **Ion Corvin** | 145.26 | 327 | ⇓P | **PKPbc** | **04 47 48.0** | **0.0** | |
| MESR | **Meseseni** | 145.29 | 335 | ⇓P | **PKPbc** | **04 47 48.0** | **0.0** | |
| CJR | **Cluj-Napoca** | 145.36 | 333 | ⇓P | **PKPbc** | **04 47 48.1** | **-0.2** | |
| CJR | **Cluj-Napoca** | 145.36 | 333 | ⇓PKP2 | **PKPbc** | **04 47 48.1** | **-0.2** | |
| BUG | **Bochum--Univer** | 145.37 | 354 | *e*PKPdf | **PKPbc** | **04 47 47.7** | **-0.3** | |
| | baz=18,slow=1.6 | | | | | | | |
| PSN | **Preselentsi** | 145.41 | 326 | P | **PKPdf** | **04 47 47.2** | **-0.3** | |
| SWN1 | **Swindon** | 145.42 | 4 | *e*P | **PKPdf** | **04 47 47.7** | **+0.4** | |
| BHL | **Bhannes** | 145.43 | 306 | *e*P | **PKPdf** | **04 47 47.6** | **-0.4** | |
| MDB | **Medias** | 145.46 | 332 | ⇑P | **PKPbc** | **04 47 48.9** | **+0.3** | |
| MDB | **Medias** | 145.46 | 332 | ⇑PKP2 | **PKPbc** | **04 47 48.9** | **+0.3** | |
| PRA | **Prague** | 145.50 | 346 | *e*PKP | **PKPbc** | **04 47 48.4** | **-0.1** | |
| PRA | | | | *ep*PKP | **pPKPdf** | **04 49 30.6** | **+0.6** | |
| PRA | **Prague** | 145.50 | 346 | *e*PKP2 | **PKPbc** | **04 47 48.4** | **-0.1** | |
| LTVH | **Ltavrtes, Hu** | 145.52 | 336 | ⇓P | **PKPbc** | **04 47 48.9** | **+0.3** | |
| LEHL | **Lehliu** | 145.52 | 328 | ⇑P | **PKPbc** | **04 47 48.6** | **-0.2** | |
| MOX | **Moxa** | 145.54 | 349 | *e*PKPdf | **PKPdf** | **04 47 47.9** | **+0.3** | |
| | baz=18,slow=1.6 | | | | | | | |
| MOX | | | | *e*PKPbc | **PKPbc** | **04 47 48.5** | **-0.1** | |
| | baz=16,slow=3.0 | | | | | | | |
| PRU | **Pruhonice** | 145.55 | 346 | *e*PKP | **PKPbc** | **04 47 48.3** | **-0.4** | |
| PRU | | | | *ep*PKP | pPKPab | 04 49 28.8 | +0.3 | |
| PRU | | | | *e*SKP | | 04 50 48.9 | | |
| GOPC | **GO Pecny, Ondr** | 145.56 | 345 | *e*PKP | **PKPbc** | **04 47 48.2** | **-0.5** | |
| GOPC | **GO Pecny, Ondr** | 145.56 | 345 | *e*PKIKP | **PKPbc** | **04 47 48.2** | **-0.5** | |
| PLN | **Plauen** | 145.59 | 348 | *e*PKPdf | **PKPdf** | **04 47 48.2** | **+0.5** | |
| | baz=18,slow=1.6 | | | | | | | |
| TANN | **Tannenbergstha** | 145.60 | 348 | *e*PKPdf | **PKPdf** | **04 47 48.0** | **+0.2** | |
| | baz=18,slow=1.6 | | | | | | | |
| TANN | | | | *e*PKPbc | **

CKRC *e*SKKP 04 58 38.2
**CKRC Cesky Krumlov 146.69 345** *e*PKHKP PKPpre 04 47 47.7
**WET Wettzell 146.72 347** *e*PKPdf **PKPdf 04 47 49.8 +0.2**
baz=18,slow=1.6
WET *e*PKPbc **PKPbc 04 47 52.7 +0.6**
baz=16,slow=3.0
WET *e*pPKPbc pPKPab 04 49 34.3 +1.0
**SURR Surduc 146.75 334** ⇓P **PKPdf 04 47 49.7 0.0**
**GZR Gura Zlata 146.75 333** ⇑P **PKPdf 04 47 50.7 +0.8**
**GZR Gura Zlata 146.75 333** ⇑PKIKP **PKPdf 04 47 50.7 +0.8**
**RCHB Rochefort 146.81 356** *d*PKPdf **PKPdf 04 47 49.6 -0.1**
RCHB *dp*PKP pPKPab 04 49 35.2 +1.7
**GEC2 GERESS Array S 146.81 346** *e*PKPdf **PKPdf 04 47 49.7 -0.1**
baz=18,slow=1.6
GEC2 *e*PKPbc **PKPbc 04 47 52.9 +0.5**
baz=16,slow=3.0
GEC2 *ep*PKPbc pPKPab 04 49 34.5 +1.1
**GERES GERESS Array B 146.81 346** PKPdf **PKPdf 04 47 49.6 -0.3**
**GERES GERESS Array B 146.81 346** PKPbc **PKPbc 04 47 52.1 -0.3**
comp=Z,502nm,1.0s,baz=170,slow=8.1,SNR=175
GERES pPKP pPKPab 04 49 34.5 +1.1
comp=Z,56nm,1.0s,baz=165,slow=11,SNR=2.3
GERES SKPbc **SKiKP 04 50 51.0 +1.2**
comp=Z,36nm,0.9s,baz=182,slow=4.5,SNR=3.6
**DOU Dourbes 146.90 357** *d*PKPdf **PKPdf 04 47 49.5 -0.3**
DOU *d*PKP **PKPbc 04 47 52.7 +0.3**
DOU *dp*PKP pPKPab 04 49 35.7 +1.8
**JMB Yambol 147.05 326** P **PKPdf 04 47 50.1 -0.2**
**VLAD Vladila 147.07 330** ⇑P **PKPdf 04 47 51.1 +0.8**
**BZS Buzias 147.07 334** ⇑P **PKPdf 04 47 51.1 +0.8**
**BZS Buzias 147.07 334** ⇑PKIKP **PKPdf 04 47 51.1 +0.8**
**ELND Elena 147.10 327** ⇑P **PKPdf 04 47 50.4 0.0**
**CONA Conrad Observa 147.10 343** *e*PKP **PKPdf 04 47 50.1 -0.3**
comp=Z,481nm,0.8s,SNR=765
CONA *ep*PKiKP **pPKiKP 04 49 37.7 +0.5**
comp=Z,1μm,1.5s
**SRE Strehaia 147.13 332** ⇑P **PKPdf 04 47 50.6 +0.2**
**SRE Strehaia 147.13 332** ⇑PKIKP **PKPdf 04 47 50.6 +0.2**
**TIM Timisoara 147.14 335** ⇓P **PKPbc 04 47 52.5 -0.7**
**TIM Timisoara 147.14 335** ⇓PKP2 **PKPbc 04 47 52.5 -0.7**
**RONA Rosalia, Austr 147.18 342** *e*PKP **PKPdf 04 47 50.1 -0.4**
comp=Z,614nm,1.2s,SNR=567
RONA *ep*PKiKP **pPKiKP 04 49 38.9 +1.6**
comp=Z,872nm,1.5s
**WLF Walferdange 147.23 355** PKP **PKPdf 04 47 49.0 -1.4**
**WLF Walferdange 147.23 355** *d*PKPdf **PKPdf 04 47 50.8 +0.4**
WLF *dp*PKP **pPKPab 04 49 37.2 +2.0**
**WLF Walferdange 147.23 355** *e*PKPdf **PKPdf 04 47 51.2 +0.8**
baz=18,slow=1.6
WLF *e*PKPbc **PKiKP 04 47 54.7 -0.5**
baz=16,slow=3.0
**EIL Elat 147.31 299** PKPbc **PKPdf 04 47 52.0 +0.8**
comp=Z,622nm,1.1s,baz=33,slow=1.3,SNR=71
**HERR Herculane 147.31 333** ⇓P **PKPdf 04 47 51.9 +1.2**
**EDRB Edirne 147.37 325** P **PKPdf 04 47 50.0 -0.9**
**DJES Djerdap 147.44 332** ⇓P **PKPdf 04 47 51.9 +0.9**
**BANR Banloc 147.46 335** ⇓P **PKPdf 04 47 52.1 +1.2**
**BAND Balkesir-Ban 147.54 321** ⇑P **PKPdf 04 47 50.9 -0.4**
**BAIL Bailesti 147.56 331** ⇑P **PKPdf 04 47 51.3 +0.2**
**MOA Molln 147.60 344** *e*PKP **PKPdf 04 47 50.4 -0.8**
comp=Z,308nm,1.1s,SNR=383
MOA *ep*PKiKP **pPKiKP 04 49 39.1 +0.9**
comp=Z,752nm,1.5s
**JLP Les Platons 147.66 5** *e*P **PKPdf 04 47 51.1 0.0**
**MDVR Moldovita 147.70 333** ⇓P **PKPdf 04 47 51.5 +0.1**
**JQE Queens East 147.70 5** *e*P **PKPdf 04 47 51.5 +0.3**
**JSA Saint Aubin 147.71 5** *e*P **PKPdf 04 47 50.9 -0.2**
**MORH Mrgy, Hungar 147.72 338** ⇑P **PKPdf 04 47 52.3 +1.0**
**STU Stuttgart 147.75 351** *e*PKPdf **PKPdf 04 47 52.0 +0.7**
baz=18,slow=1.6
STU *e*PKPbc **PKPbc 04 47 55.5 +0.8**
baz=16,slow=3.0
**ARSA Arzberg 147.81 343** *e*PKP **PKPdf 04 47 50.7 -0.8**
comp=Z,63nm,0.8s,SNR=239
ARSA *ep*PKiKP **pPKiKP 04 49 39.8 +1.2**
comp=Z,446nm,1.6s
**BIOA Bad Ischl, Aus 147.91 345** *e*PKP **PKPdf 04 47 50.8 -0.8**
comp=Z,290nm,1.2s,SNR=315
BIOA *ep*PKiKP **pPKiKP 04 49 39.8 +1.0**
comp=Z,570nm,1.7s
**FUR Furstenfeldbru 147.98 348** *e*PKPdf **PKPdf 04 47 51.6 -0.1**
baz=18,slow=1.6
FUR *e*PKPbc **PKPbc 04 47 56.0 +0.6**
baz=16,slow=3.0
**PSET Sete Cidades 148.03 44** *e*PKP **PKPdf 04 47 54.0 +1.9**
**RJOB Jochberg 148.06 346** *e*PKPdf **PKPdf 04 47 51.8 -0.2**
baz=18,slow=1.6
RJOB *e*PKPbc **PKPbc 04 47 56.1 +0.4**
baz=16,slow=3.0
**FRGS Fruska Gora 148.18 336** ⇑*i*P **PKPdf 04 47 51.7 -0.5**
**CMLA Cha da Macela 148.19 44** **PKPdf 04 47 54.1 +1.7**
**CMLA Cha da Macela 148.19 44** *e*PKP **PKPbc 04 47 54.6 -1.7**
**CMLA Cha da Macela 148.19 44** PKHKP PKPpre 04 47 54.1
**PCALD Caldeiras da R 148.20 44** *e*PKP **PKPbc 04 47 54.4 -1.9**
**PGRON Lagoa das Cont 148.28 44** *e*PKP **PKPdf 04 47 54.3 +1.7**
**KULA Kula-Manisa 148.29 318** P **PKPdf 04 47 51.6 -1.0**
**BFO Black Forest 148.31 352** PKPdf **PKPdf 04 47 51.8 -0.5**
**BFO Black Forest 148.31 352** PKHKP PKPpre 04 47 51.8
**BFO Black Forest 148.31 352** *e*PKPdf **PKPdf 04 47 52.2 -0.1**
baz=18,slow=1.6
BFO *e*PKPbc **PKPbc 04 47 56.9 +0.7**
baz=16,slow=3.0
**KOGS Kog 148.32 341** *i* PKPdf **PKPdf 04 47 51.5 -0.8**
KOGS *i* PKPbc **PKPbc 04 47 56.0 -0.3**
**LESA Schwarzleotal 148.39 346** *e*PKP **PKPdf 04 47 51.8 -0.7**
comp=Z,92nm,0.6s
LESA *ep*PKiKP **pPKiKP 04 49 41.6 +1.7**
comp=Z,829nm,1.5s
**ALN Alexandroupoli 148.39 324** P **PKPdf 04 47 51.0 -1.6**
**BART Pico Bartolome 148.42 44** *e*PKP **PKPdf 04 47 54.7 +1.8**
**ENEZ Enez 148.44 324** P **PKPdf 04 47 51.2 -1.5**
**CAVK Edirne/Enez-Ca 148.46 323** ⇑P **PKPdf 04 47 52.9 +0.2**
**SOKA Soboth 148.47 343** *e*PKP **PKPdf 04 47 51.9 -0.8**
comp=Z,321nm,1.0s,SNR=248
SOKA *ep*PKiKP **pPKiKP 04 49 41.4 +1.3**
comp=Z,845nm,1.5s
**KBA Koelnbreinsper 148.55 345** *e*PKP **PKPdf 04 47 51.8 -1.1**
comp=Z,351nm,0.7s,SNR=310
KBA *ep*PKiKP **pPKiKP 04 49 41.7 +1.4**
comp=Z,435nm,1.5s
**RZN Rozhen 148.56 326** P **PKPdf 04 47 52.2 -0.9**
**BOVS Bovan 148.61 332** ⇓P **PKPdf 04 47 52.6 -0.3**
**VTS Vitosha 148.66 329** P **PKPdf 04 47 52.6 -0.6**
**UBR Ueberruh 148.66 349** *e*PKPdf **PKPdf 04 47 52.7 -0.2**
baz=18,slow=1.6
UBR *e*PKPbc **PKPbc 04 47 57.6 +0.4**
baz=16,slow=3.0
**WATA Walderalm 148.71 347** *e*PKP **PKPdf 04 47 52.4 -0.7**
comp=Z,143nm,0.7s,SNR=252
WATA *ep*PKiKP **pPKPab 04 49 41.8 +0.7**
comp=Z,657nm,1.5s
**RETA Reutte 148.73 348** *e*PKP **PKPdf 04 47 52.4 -0.6**
comp=Z,82nm,0.7s,SNR=248
RETA *ep*PKP **pPKPab 04 49 41.1 +0.1**
comp=Z,228nm,1.3s
**OBKA Obir 148.76 343** *e*PKP **PKPdf 04 47 52.3 -0.9**
comp=Z,190nm,1.1s,SNR=104
OBKA *ep*PKP **pPKPab 04 49 41.0 -0.2**
comp=Z,354nm,1.5s
**OBKA Obir 148.76 343** ⇑*i*P **PKPdf 04 47 52.2 -0.9**
**WTTA Wattenberg 148.77 347** *e*PKP **PKPdf 04 47 52.7 -0.5**
comp=Z,172nm,0.3s,SNR=334
WTTA *ep*PKiKP **pPKPab 04 49 41.5 +0.2**
comp=Z,1μm,1.5s
**TEKS Tekeris 148.79 335** ⇑*i*P **PKPdf 04 47 52.5 -0.7**
**MOTA Moosalm 148.80 348** *e*PKP **PKPdf 04 47 52.7 -0.6**
comp=Z,198nm,0.9s
MOTA *ep*PKiKP **pPKPab 04 49 41.7 +0.3**
comp=Z,408nm,1.5s
**PSMA Santa Maria 148.87 45** *e*PKP **PKPdf 04 47 55.1 +1.6**
**MYKA Terra Mystica 148.89 344** *e*PKP **PKPdf 04 47 52.3 -1.1**
comp=Z,284nm,0.8s,SNR=223
MYKA *ep*PKiKP **pPKPab 04 49 42.0 +0.4**
comp=Z,487nm,1.5s
**SQTA Sankt Quirin 148.90 348** *e*PKP **PKPdf 04 47 52.6 -0.7**
comp=Z,271nm,0.7s,SNR=281
SQTA *ep*PKiKP **pPKPab 04 49 42.7 +0.9**
comp=Z,381nm,1.5s
**PSMN Pico do Norte, 148.91 45** *e*PKP **PKPdf 04 47 55.0 +1.4**
**EZN Ezine 148.93 322** P **PKPdf 04 47 51.7 -1.8**
**SMTH Samothraki Isl 148.97 324** P **PKPdf 04 47 51.7 -1.9**
**ABTA Abfaltersbach 149.06 346** *e*PKP **PKPdf 04 47 52.8 -0.8**
comp=Z,276nm,0.7s,SNR=303
ABTA *ep*PKiKP **pPKPab 04 49 42.1 -0.2**
comp=Z,613nm,1.7s

**DAVA Damuels 149.09 349** *e*PKP **PKPdf 04 47 53.4 -0.4**
comp=Z,653nm,1.4s,SNR=249
DAVA *ep*PKP **pPKPab 04 49 43.4 +0.9**
comp=Z,340nm,1.6s
**PRED Cave del Predi 149.09 344** **PKPdf 04 47 51.9 -1.7**
PRED **PKPbc 04 47 57.4 -0.9**
**KAVA Kavala 149.17 326** P **PKPdf 04 47 52.0 -1.8**
**FETA Feichten 149.19 348** *e*PKP **PKPdf 04 47 53.4 -0.5**
comp=Z,510nm,1.0s,SNR=193
FETA *ep*PKP **pPKPab 04 49 43.4 +0.4**
comp=Z,576nm,1.7s
**MMB Musomishta 149.19 327** P **PKPdf 04 47 52.6 -1.3**
**LJU Ljubljana 149.19 343** *i* PKPdf **PKPdf 04 47 53.4 -0.3**
LJU *i* PKPbc **PKPbc 04 47 58.5 0.0**
LJU *i* pPKPbc **pPKPbc 04 49 39.5 -0.3**
LJU *e* 04 50 48.4
LJU *e* 04 53 06.4
LJU *e* 04 56 16.6
LJU *e*SKKSac SKKSac 04 57 39.5 -2.5
**NVR Nevrokopi 149.27 327** P **PKPdf 04 47 53.6 -0.5**
**KKB Krupnik 149.29 328** P **PKPdf 04 47 52.6 -1.4**
**YER Yerkesik 149.32 316** P **PKPdf 04 47 53.4 -0.9**
**THAS Thassos island 149.33 325** P **PKPdf 04 47 52.9 -1.2**
**PRK Paraskevi 149.34 321** P **PKPdf 04 47 53.1 -1.0**
**A051A Mrakovica 149.37 339** ⇑*i*P **PKPdf 04 47 53.7 -0.4**
**HAPS Han Pijesak,Bl 149.41 336** ⇑*i*P **PKPdf 04 47 54.2 -0.1**
**BBLS Lazi&#263i 149.41 335** ⇑*i*P **PKPdf 04 47 53.8 -0.4**
**H10S3 ASCENSION HYDR 149.43 146** PKPbc **PKPbc 04 47 57.8 -1.9**
baz=95,slow=74,SNR=6.3
**H10S2 ASCENSION HYDR 149.43 146** PKPbc **PKPdf 04 47 57.1 +2.3**
baz=125,slow=74,SNR=10
**PRIJ Prijedor 149.47 339** ⇑*i*P **PKiKP 04 47 59.6 -0.4**
**BOJS Bojanci 149.47 341** *i* PKPdf **PKPdf 04 47 54.2 0.0**
BOJS *i* PKPbc **PKiKP 04 47 59.6 -0.4**
BOJS *i* pPKPbc **pPKPbc 04 49 40.2 -0.3**
BOJS *i* SKKSac SKKSac 04 57 42.3 -1.2
**BOJS Bojanci 149.47 341** ⇑*i*P **PKPdf 04 47 54.1 0.0**
**CEY Cerknica 149.50 343** ⇑*i*P **PKPdf 04 47 53.8 -0.5**
**BLY Banja Luka 149.50 338** ⇑*i*P **PKPdf 04 47 53.9 -0.4**
**LIA Lannos Island 149.55 323** P **PKPdf 04 47 53.6 -0.8**
**DAVOX Davos/Dischmat 149.57 349** PKP **PKPdf 04 47 53.8 -0.8**
comp=Z,190nm,1.0s,baz=350,slow=0.8,SNR=153
DAVOX PKPbc **PKPbc 04 47 59.9 +0.3**
comp=Z,892nm,0.8s,baz=298,slow=1.8,SNR=72
DAVOX *ep*PKPbc **pPKPbc 04 49 41.0 0.0**
comp=Z,42nm,0.9s,baz=21,slow=2.5,SNR=1.1
**KOKK Kokkinochori, 149.57 326** P **PKPdf 04 47 53.6 -0.9**
**SRS Serrai 149.58 327** P **PKPdf 04 47 52.2 -2.3**
**SIGR SIGRI 149.61 322** P **PKPdf 04 47 52.4 -2.2**
**RUDO Rudo 149.63 335** ⇓*i*P **PKPdf 04 47 53.3 -1.2**
**SJES Sjenica 149.67 333** ⇑*i*P **PKPdf 04 47 54.4 -0.3**
**SKDS Skadanscina 149.79 343** ⇑*i*P **PKPdf 04 47 54.0 -0.7**
**PLE Pljevlja 149.86 334** ⇑*i*PKP **PKPdf 04 47 54.8 -0.2**
**KNT Kendrikon 149.91 327** P **PKPdf 04 47 53.6 -1.4**
**SOH Sokhos 149.92 326** P **PKPdf 04 47 52.7 -2.4**
**CTI Castel Tesino 149.92 346** **PKPdf 04 47 54.0 -1.0**
CTI **PKPbc 04 48 00.3 -0.1**
**CTI Castel Tesino 149.92 346** PKIKP **PKPdf 04 47 54.0 -1.0**
**OUR Ouranopolis 149.92 325** P **PKPdf 04 47 53.0 -2.0**
**VAY Valandovo 149.96 328** *i* P **PKPdf 04 47 54.4 -0.7**
**A050A Klekovaca 149.97 339** ⇑*i*P **PKPdf 04 47 54.1 -1.0**
**BODT Bodrum 150.00 317** P **PKPdf 04 47 54.1 -1.2**
**CHOS Chios island 150.01 320** P **PKPdf 04 47 53.9 -1.5**
**DAT Datca 150.01 316** P **PKPdf 04 47 52.9 -2.6**
**IVA Berane 150.02 333** ⇑*i*PKP **PKPdf 04 47 54.4 -0.8**
**UPM Unac-Piva 150.16 335** ⇑*i*P **PKPdf 04 47 54.4 -1.2**
**UPM Unac-Piva 150.16 335** ⇑*i*PKP **PKPdf 04 47 54.6 -1.0**
**KOME Kolasin 150.20 334** ⇑*i*PKP **PKPdf 04 47 55.1 -0.4**
**PVY Plav 150.21 333** ⇑*i*PKP **PKPdf 04 47 54.8 -0.8**
**HORT Hortiatis 150.21 326** P **PKPdf 04 47 53.0 -2.6**
**THE Thessaloniki 150.26 327** P **PKPdf 04 47 53.6 -1.9**
**PAIG Palouri 150.37 325** P **PKPdf 04 47 53.7 -2.0**
**NISR Nisiros 150.38 316** P **PKPbc 04 48 00.0 -1.6**
**H10N3 ASCENSION HYDR 150.44 145** PKPbc **PKPbc 04 48 02.0 -0.1**
baz=204,slow=3.4,SNR=19
**ASCN Ascension 150.44 146** PKPdf **PKPdf 04 47 57.0 +0.3**
**H10N1 ASCENSION HYDR 150.45 145** PKPbc **PKPdf 04 47 58.9 +2.6**
baz=204,slow=3.4,SNR=18
**H10N2 ASCENSION HYDR 150.46 145** PKPbc **PKPbc 04 47 59.5 -2.6**
baz=204,slow=3.4,SNR=18
**NKME Nikolic 150.50 334** ⇑*i*PKP **PKPdf 04 47 55.2 -0.7**
**BRY Bratogost 150.56 335** ⇑*i*P **PKPdf 04 47 55.2 -0.9**
**BRY Bratogost 150.56 335** ⇑*i*PKP **PKPdf 04 47 55.3 -0.9**
**PDG Podgorica 150.65 333** ⇑*i*P **PKPdf 04 47 55.3 -0.8**
**PDG Podgorica 150.65 333** ⇓P **PKPdf 04 47 57.6 +1.5**
**PDG Podgorica 150.65 333** ⇑*i*PKP **PKPdf 04 47 55.5 -0.6**
**CEME Cevo 150.70 334** ⇑*i*PKP **PKPdf 04 47 55.4 -0.9**
**TREB Trebinje 150.79 335** ⇑*i*P **PKPbc 04 48 01.6 -0.8**
**DRME Dracevica, Mon 150.88 333** ⇑*i*P **PKPdf 04 47 55.9 -0.6**
**DRME Dracevica, Mon 150.88 333** ⇑*i*PKP **PKPdf 04 47 56.1 -0.4**
**BUM Brajici-Budva 150.91 334** ⇑*i*PKP **PKPdf 04 47 55.9 -0.7**
**STON Ston 150.92 336** ⇑*i*P **PKPdf 04 47 55.3 -1.2**
**KARP Karpathos 150.95 314** P **PKiKP 04 48 03.4 0.0**
**FNA Florina 150.96 329** PKPdf **PKPdf 04 47 55.1 -1.6**
FNA **PKPbc 04 48 02.3 -0.6**
**FNA Florina 150.96 329** P **PKPdf 04 47 55.7 -1.0**
**FNA Florina 150.96 329** PKIKP **PKPbc 04 48 02.3 -0.6**
**OHR Ohrid 150.99 329** P **PKPdf 04 47 57.1 +0.3**
**KYMI Kymi, Euboea I 151.02 322** P **PKPdf 04 47 55.6 -1.0**
**APE Apeiranthos 151.15 319** P **PKPdf 04 47 54.6 -2.5**
**TIR Tirane 151.25 331** P **PKPbc 04 48 03.4 0.0**
**TIR Tirane 151.25 331** ⇓P **PKPdf 04 47 57.3 +0.3**
**TIR Tirane 151.25 331** ⇓PKIKP **PKPdf 04 47 57.3 +0.3**
**LRSO Larissa Observ 151.25 326** P **PKPdf 04 47 56.2 -0.9**
**TYRN Tyrnavos 151.31 326** P **PKPdf 04 47 55.1 -2.1**
**KBN Korca 151.37 329** P **PKPdf 04 47 57.0 -0.4**
**NEST Nestorio 151.40 329** P **PKPdf 04 47 55.7 -1.8**
**DION Dionisos Attik 151.49 322** P **PKPdf 04 47 56.6 -1.0**
**PENT Pentalofos 151.52 328** P **PKPdf 04 47 57.0 -0.6**
**CMBO Columbo, Santo 151.59 318** P **PKPbc 04 48 03.5 -0.9**
**SNT1 Gialos, Santor 151.61 318** P **PKPbc 04 48 04.4 0.0**
**SANT Santorini 151.61 317** P **PKPbc 04 48 04.6 +0.1**
**SANT Santorini 151.61 317** ⇓P **PKPdf 04 47 57.6 -0.2**
**THR3 Thira Island, 151.63 318** P **PKPbc 04 48 03.2 -1.2**
**ATHU Athens Univers 151.65 322** P **PKPdf 04 47 56.3 -1.5**
**SAP3 Santorini-Thir 151.65 318** P **PKPbc 04 48 03.3 -1.2**
**ATH Athens Observa 151.68 322** P **PKPdf 04 48 03.6 -0.9**
**AXAR Agios Charalam 151.75 324** P **PKPdf 04 47 56.6 -1.3**
**VILL Villia 151.79 323** P **PKPdf 04 47 56.3 -1.7**
**ZKR Zakros 151.83 315** P **PKPdf 04 47 57.4 -0.7**
**MAKR Makrakomi, Fth 151.87 325** P **PKPdf 04 47 57.4 -0.7**
**VLC Villacollemand 151.99 347** PKP **PKPdf 04 47 56.1 -2.0**
**MHLO Agia Marina, M 152.09 319** P **PKPdf 04 47 56.3 -2.2**
**EVR Evrytania 152.11 326** P **PKPdf 04 47 59.0 +0.4**
**VLO Vlora 152.11 331** P **PKiKP 04 48 05.6 0.0**
**ANX Ano Chora 152.28 325** P **PKPdf 04 47 58.3 -0.5**
**SRN Sarande 152.33 329** P **PKPdf 04 47 57.7 -1.0**
**EFP Efpalio 152.41 325** P **PKPdf 04 47 58.0 -0.9**
**KRND KRANIDI 152.41 322** P **PKPdf 04 47 57.1 -1.8**
**IGT Igoumenitsa 152.43 328** P **PKPdf 04 47 58.4 -0.5**
**PVO Paravola 152.48 325** P **PKPdf 04 47 58.8 -0.2**
**KSTL Kastelli Herak 152.50 316** P **PKPbc 04 48 06.2 -0.2**
**GUR Goura 152.51 322** P **PKPdf 04 47 57.5 -1.7**
**KLV Kalavryta, Ach 152.54 324** P **PKPdf 04 47 58.8 -0.4**
**KEK Kerkira 152.56 329** **PKPdf 04 47 58.0 -1.0**
KEK **PKPbc 04 48 05.1 -1.4**
**KEK Kerkira 152.56 329** P **PKPdf 04 47 58.5 -0.6**
**UPR University Cam 152.57 325** P **PKPdf 04 48 02.5 +3.4**
**IDI Anoyia 152.62 316** P **PKPdf 04 47 58.5 -0.9**
**IDI Anoyia 152.62 316** PKP **PKPdf 04 47 58.0 -1.4**
**IDI Anoyia 152.62 316** PKP **PKPdf 04 47 59.4 0.0**
comp=Z,186nm,1.0s,baz=92,slow=3.0,SNR=17
IDI **PKPbc PKiKP 04 48 07.2 +0.3**
comp=Z,416nm,0.6s,baz=138,slow=1.7,SNR=37
**TSLK Tsoukalades, L 152.79 327** P **PKPdf 04 47 58.3 -1.1**
**LKD2 Lefkada island 152.82 327** P **PKPdf 04 47 59.2 -0.3**
**TMPK Timbaki Herakl 152.83 316** P **PKPdf 04 47 58.4 +0.1**
**NYDR Nydri-Lefkada 152.85 327** P **PKPdf 04 47 58.8 -0.7**
**CESX Cesi 152.90 343** PKPdf **PKPdf 04 47 57.7 -1.8**
CESX **PKPbc 04 48 05.4 -1.7**
**EVGI Lefkada island 152.94 327** P **PKPdf 04 47 59.4 -0.2**
**VLI Veliai 152.98 321** P **PKPdf 04 47 57.4 -2.4**
**FSK Fiskardo 153.11 326** P **PKPdf 04 47 59.1 -0.8**
**IMMV Iera Moni Meta 153.12 317** P **PKPdf 04 47 58.7 -1.3**
**MATE Matera 153.20 335** ⇑P **PKPdf 04 48 00.3 +0.4**
**KTHA Kythira Island 153.20 320** P **PKPdf 04 47 58.5 -1.6**
**RODP Rodopos 153.20 318** P **PKPdf 04 48 02.5 +2.4**
**KLMT Kalamata 153.27 322** P **PKPbc 04 48 07.8 -0.2**
**RTZL Ratzakli, Kefa 153.28 326** P **PKPdf 04 47 59.5 -0.6**
**ANKY Antikythira Is 153.30 319** P **PKPdf 04 47 59.1 -1.1**
**PSDA Pessada-Kefalo 153.35 326** P **PKPdf 04 47 59.1 -1.1**

**DMLN Damoulianata-K 153.38 326** P **PKPdf 04 47 59.2 -1.1**
**GVD Gavdhos 153.42 316** P **PKPdf 04 47 59.1 -1.3**
**LTHK Lithakia 153.51 325** P **PKPdf 04 47 59.5 -0.9**
**PYL PYLOS 153.57 322** P **PKPdf 04 47 58.1 -2.5**
**PGAV Gavieira, Arco 153.60 17** ⇑*i*PKPdf **PKPdf 04 48 01.0 +0.4**
**PGAV Gavieira, Arco 153.60 17** *e*PKPab **PKPab 04 48 23.2 0.0**
PGAV *i* LQ LQ 04 49 44.5
**PCAB Cabril 153.91 17** ⇑*i*PKPdf **PKPdf 04 48 01.5 +0.5**
**PCAB Cabril 153.91 17** *e*PKPab **PKPab 04 48 24.3 -0.2**
PCAB *i* LQ LQ 04 49 47.0
**ECAL Calabor 154.03 15** PKP **PKPdf 04 48 00.7 -0.6**
**PBRG Braganca 154.16 15** ⇑*i*PKPdf **PKPdf 04 48 01.1 -0.2**
**PBRG Braganca 154.16 15** *e*PKPab **PKPab 04 48 25.5 0.0**
**POLO Lamas de Olo 154.28 17** *i* PKPdf **PKPdf 04 48 01.6 0.0**
**POLO Lamas de Olo 154.28 17** *e*PKPab **PKPab 04 48 26.3 +0.1**
POLO *i* LQ LQ 04 49 46.6
**PVRL Vila Real 154.40 17** ⇑*i*PKPdf **PKPdf 04 48 01.7 0.0**
**PVRL Vila Real 154.40 17** *e*PKPab **PKPab 04 48 26.8 +0.2**
PVRL *i* LQ LQ 04 49 47.7
**TIP Timpagrande 154.40 333** ⇓P **PKPdf 04 48 01.9 +0.1**
**EJON La Jonquera 154.61 358** PKP **PKPdf 04 48 00.8 -1.1**
**MVO Moncorvo 154.69 16** ⇑*i*PKPdf **PKPdf 04 48 02.4 +0.3**
**MVO Moncorvo 154.69 16** *e*PKPab **PKPab 04 48 28.0 +0.1**
MVO *i* LQ LQ 04 49 46.9
**PVIS Viseu 154.86 18** ⇑*i*PKPdf **PKPdf 04 48 02.7 +0.4**
**PVIS Viseu 154.86 18** *e*PKPab **PKPab 04 48 28.8 +0.2**
PVIS *i* LQ LQ 04 49 47.2
**COI Coimbra 155.17 19** PKPdf **PKPdf 04 48 02.4 -0.3**
COI PKPab **PKPab 04 48 29.8 -0.1**
**COI Coimbra 155.17 19** ⇑*i*PKPdf **PKPdf 04 48 03.5 +0.8**
**COI Coimbra 155.17 19** *e*PKPab **PKPab 04 48 30.2 +0.4**
COI *i* LQ LQ 04 49 47.1
**MTE Manteigas 155.25 18** ⇑*i*PKPdf **PKPdf 04 48 03.3 +0.4**
**MTE Manteigas 155.25 18** *e*PKPab **PKPab 04 48 30.4 +0.1**
MTE *i* LQ LQ 04 49 45.9
**PCAS Casmilo, Conde 155.28 19** ⇑*i*PKPdf **PKPdf 04 48 03.3 +0.4**
**PCAS Casmilo, Conde 155.28 19** *e*PKPab **PKPab 04 48 30.3 -0.1**
PCAS *i* LQ LQ 04 49 46.7
**SACV Santiago Islan 155.33 91** PKPdf **PKPdf 04 48 02.6 -1.0**
SACV PKPab **PKPab 04 48 32.2 +0.8**
**PSBE So Bento 155.67 21** *i* PKPdf **PKPdf 04 48 03.5 +0.1**
**PSBE So Bento 155.67 21** *e*PKPab **PKPab 04 48 32.0 -0.1**
PSBE *i* LQ LQ 04 49 48.5
**PCBR Castelo Branco 155.79 18** ⇑*i*PKPdf **PKPdf 04 48 04.0 +0.5**
**PCBR Castelo Branco 155.79 18** *e*PKPab **PKPab 04 48 32.2 -0.3**
PCBR *i* LQ LQ 04 49 49.1
**PMRV Marv??o 156.20 18** ⇑*i*PKPdf **PKPdf 04 48 03.9 -0.2**
**PMRV Marv??o 156.20 18** *e*PKPab **PKPab 04 48 34.2 -0.1**
PMRV *i* LQ LQ 04 49 47.5
**LIS Lisbon 156.26 22** *e*PKPdf **PKPdf 04 48 04.7 +0.5**
**LIS Lisbon 156.26 22** *e*PKPab **PKPab 04 48 34.7 +0.1**
LIS *i* LQ LQ 04 49 49.0
**LIS Lisbon 156.26 22** *e*PKPdf **PKPdf 04 48 04.5 +0.3**
LIS **PKPab 04 48 35.1 +0.5**
**PMTG Montargil 156.26 20** ⇑*i*PKPdf **PKPdf 04 48 03.6 -0.6**
**PMTG Montargil 156.26 20** *e*PKPab **PKPab 04 48 34.2 -0.4**
PMTG *i* LQ LQ 04 49 47.5
**UCM Universidad Co 156.32 10** PKP **PKPdf 04 48 04.1 -0.2**
**PMOZ Porto Moniz, M 156.59 44** *e*PKPdf **PKPdf 04 48 06.0 +1.1**
**PMOZ Porto Moniz, M 156.59 44** *e*PKPab **PKPab 04 48 36.1 -0.3**
PMOZ *i* LQ LQ 04 49 50.8
**PMOZ Porto Moniz, M 156.59 44** PKP **PKPdf 04 48 05.3 +0.4**
**PESTR Estremoz 156.65 19** ⇑*i*PKPdf **PKPdf 04 48 04.8 +0.1**
**PESTR Estremoz 156.65 19** *e*PKPab **PKPab 04 48 36.2 -0.1**
PESTR *i* LQ LQ 04 49 49.7
**PESTR Estremoz 156.65 19** PKP **PKPdf 04 48 04.1 -0.7**
**ESDC Sonseca Array 156.81 12** PKPdf **PKPdf 04 48 04.7 -0.3**
**ESDC Sonseca Array 156.81 12** PKP **PKPdf 04 48 05.0 +0.1**
comp=Z,60nm,1.1s,baz=346,slow=3.0,SNR=150
ESDC PKPab **PKPab 04 48 36.7 -0.3**
comp=Z,78nm,1.1s,baz=337,slow=4.4,SNR=7.7
**EVO Evora 156.82 20** ⇑*i*PKPdf **PKPdf 04 48 05.3 +0.4**
**EVO Evora 156.82 20** *e*PKPab **PKPab 04 48 36.9 -0.1**
EVO *i* LQ LQ 04 49 50.2
**VAE Valguarnera 156.83 334** PKP **PKPdf 04 48 05.0 -0.1**
comp=Z,15nm,1.0s,baz=36,slow=3.8,SNR=13
**PMAR Madeira 156.84 44** *e*PKPdf **PKPdf 04 48 06.9 +1.5**
**PMAR Madeira 156.84 44** *e*PKPab **PKPab 04 48 36.9 -0.7**
PMAR *i* LQ LQ 04 49 49.9
**PAB San Pablo 156.86 13** PKPdf **PKPdf 04 48 05.3 +0.3**
**PAB San Pablo 156.86 13** PKIKP **PKPdf 04 48 05.3 +0.3**
**FUL Funchal 156.90 44** *e*PKPdf **PKPdf 04 48 05.7 +0.5**
**FUL Funchal 156.90 44** *e*PKPab **PKPab 04 48 37.7 +0.1**
FUL *i* LQ LQ 04 49 51.5
**PMPST Porto Santo, M 157.00 42** *e*PKPdf **PKPdf 04 48 06.2 +0.9**
**PMPST Porto Santo, M 157.00 42** *e*PKPab **PKPab 04 48 38.0 -0.1**
PMPST *i* LQ LQ 04 49 51.3
**PMPS Porto Santo 157.01 42** *e*PKPdf **PKPdf 04 48 06.2 +0.9**
**PMPS Porto Santo 157.01 42** *e*PKPab **PKPab 04 48 37.7 -0.4**
PMPS *i* LQ LQ 04 49 50.9
**PNCL Nicolau / Gran 157.02 22** ⇑*i*PKPdf **PKPdf 04 48 05.2 0.0**
**PNCL Nicolau / Gran 157.02 22** *e*PKPab **PKPab 04 48 37.6 -0.3**
PNCL *i* LQ LQ 04 49 50.1
**PBEJ Beja 157.33 20** ⇑*i*PKPdf **PKPdf 04 48 06.4 +0.8**
**PBEJ Beja 157.33 20** *e*PKPab **PKPab 04 48 39.3 +0.1**
PBEJ *i* LQ LQ 04 49 50.9
**MESJ Messejana 157.37 21** ⇑*i*PKPdf **PKPdf 04 48 06.2 +0.6**
**MESJ Messejana 157.37 21** *e*PKPab **PKPab 04 48 39.3 -0.1**
MESJ *i* LQ LQ 04 49 49.9
**MESJ Messejana 157.37 21** *e*PKPdf **PKPdf 04 48 05.8 +0.1**
MESJ **PKPab 04 48 39.8 +0.3**
**PTEO Sao Teotonio 157.46 23** ⇑*i*PKPdf **PKPdf 04 48 06.7 +1.0**
**PTEO Sao Teotonio 157.46 23** *e*PKPab **PKPab 04 48 39.8 0.0**
PTEO *i* LQ LQ 04 49 50.5
**PBAR Barrancos 157.46 19** ⇑*i*PKPdf **PKPdf 04 48 06.4 +0.7**
**PBAR Barrancos 157.46 19** *e*PKPab **PKPab 04 48 39.9 +0.1**
PBAR *i* LQ LQ 04 49 48.9
**PCVE Castro Verde 157.62 21** ⇑*i*PKPdf **PKPdf 04 48 06.0 +0.1**
**PCVE Castro Verde 157.62 21** *e*PKPab **PKPab 04 48 40.6 +0.1**
PCVE *i* LQ LQ 04 49 51.5
**MORF Marmelete 157.69 23** ⇑*i*PKPdf **PKPdf 04 48 06.9 +0.8**
**MORF Marmelete 157.69 23** *e*PKPab **PKPab 04 48 40.6 -0.3**
MORF *i* LQ LQ 04 49 50.7
**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CBBAR | **Babar** | **161.32** | **347** | P | **PKPdf** | **04 48 10.7** | **+0.3** |
| **ESMB** | **Sidi M'hamed B** | **161.45** | **4** | P | **PKPdf** | **04 48 11.0** | **+0.7** |
| **EBGR** | **Bougara** | **161.50** | **0** | P | **PKPdf** | **04 48 11.0** | **+0.5** |
| **OJGS** | **Djebel Guires** | **161.52** | **3** | P | **PKPdf** | **04 48 11.4** | **+0.9** |
| **CKTS** | **El Kantara** | **161.53** | **350** | P | **PKPdf** | **04 48 10.7** | **+0.2** |
| **ODJA** | **Bouhanifia** | **161.63** | **6** | P | **PKPdf** | **04 48 11.6** | **+1.0** |
| **AFDJ** | **Sidi Ladjel** | **161.65** | **358** | P | **PKPdf** | **04 48 11.1** | **+0.5** |
| **BBTS** | **Babate** | **162.05** | **95** | PKP | **PKPdf** | **04 48 11.6** | **+0.2** |
| | comp=Z,471nm,1.2s,baz=276,slow=0.1,SNR=26 | | | | | | |
| BBTS | | | | PKPab | **PKPab** | **04 49 00.5** | **-0.1** |
| | comp=Z,58nm,0.9s,baz=254,slow=0.9,SNR=4.8 | | | | | | |
| **ADCK** | **Dar Chioukh** | **162.10** | **356** | P | **PKPdf** | **04 48 12.0** | **+0.8** |
| **EZEK** | **Zmalet El Emir** | **162.19** | **359** | P | **PKPdf** | **04 48 12.0** | **+0.8** |
| **AFRS** | **Ain Fares** | **162.20** | **353** | P | **PKPdf** | **04 48 11.4** | **+0.2** |
| **CDCN** | **Doucen** | **162.25** | **351** | P | **PKPdf** | **04 48 11.7** | **+0.5** |
| **EASA** | **Ain Sidi Ali** | **162.90** | **1** | P | **PKPdf** | **04 48 13.0** | **+1.0** |
| **MDT** | **Midelt** | **163.16** | **19** | PKP | **PKPdf** | **04 48 12.7** | **+0.4** |
| | comp=Z,455nm,1.2s,baz=15,slow=1.2,SNR=148 | | | | | | |
| MDT | | | | PKPab | **PKPab** | **04 49 05.8** | **+0.9** |
| | comp=Z,205nm,1.0s,baz=338,slow=4.5,SNR=18 | | | | | | |
| **EKNA** | **AfricaArray -** | **165.42** | **210**⇓ | *eP* | **PKPdf** | **04 48 15.0** | **+0.3** |
| **LIC** | **Lamto** | **167.30** | **147**⇓ | *i*PKP1 | **PKPdf** | **04 48 14.9** | **-1.2** |
| | comp=Z,825nm,1.0s | | | | | | |
| **KIC** | **Kosan Boka** | **167.57** | **147**⇑ | *i*PKP1 | **PKPdf** | **04 48 15.7** | **-0.6** |
| | comp=Z,477nm,0.9s | | | | | | |
| **TIC** | **Toumodi** | **167.66** | **146**⇓ | *i*PKP1 | **PKPdf** | **04 48 15.2** | **-1.1** |
| | comp=Z,147nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **167.77** | **146** | PKPdf | **PKPdf** | **04 48 14.9** | **-1.5** |
| DBIC | | | | PKPab | **PKPab** | **04 49 25.6** | **-0.1** |
| **DBIC** | **Dimbokro** | **167.77** | **146** | PKP | **PKPdf** | **04 48 15.3** | **-1.1** |
| | comp=Z,230nm,1.0s,baz=157,slow=1.3,SNR=88 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **04 49 26.1** | **+0.5** |
| | comp=Z,72nm,1.0s,baz=205,slow=6.2,SNR=5.5 | | | | | | |
| DBIC | | | | PP | **PP** | **04 53 17.2** | **+3.1** |
| | comp=Z,44nm,1.2s,baz=224,slow=6.5,SNR=5.3 | | | | | | |
| **DBIC** | **Dimbokro** | **167.77** | **146** | PKIKP | **PKPdf** | **04 48 14.9** | **-1.5** |
| DBIC | | | | | | 04 49 25.6 | |
| **TORD** | **Torodi Ar. Bea** | **176.18** | **176** | PKPdf | **PKPdf** | **04 48 18.9** | **-1.3** |
| TORD | | | | PKPab | **PKPab** | **04 50 02.0** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **176.18** | **176** | PKP | **PKPdf** | **04 48 19.0** | **-1.1** |
| | comp=Z,195nm,1.0s,baz=180,slow=1.2,SNR=295 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **04 50 01.6** | **-1.1** |
| | comp=Z,33nm,1.0s,baz=204,slow=3.0,SNR=7.7 | | | | | | |
| TORD | | | | PP | **PP** | **04 53 55.1** | **+0.8** |
| | comp=Z,18nm,1.0s,baz=153,slow=0.9,SNR=7.6 | | | | | | |

*MOS* ***19*** *04:31:21.7±1.1,48.°21N×153.°69E,h99km,mb4.7/31, Error ellipse: s-maj=8.4km s-min=5.1km az=89.8*

*SKHL* ***19*** *04:31:21.0±0.7,47.°90N×154.°40E,h108km±8km,mb5.6/11, msha6.3/8*

*NEIC* ***19*** *04:31:22.3±1.6,48.°15N±0.°10×153.°8E±0.°1,h93km±6km, mb4.9/152, Error ellipse: s-maj=15.6km s-min=11.3km az=140.0*

*IDC* ***19*** *04:31:23.4±2.2,48.°11N×153.°90E,h110km±15km, mb4.4/18,mbtmp4.7/26, Error ellipse: s-maj=27.4km s-min=11.7km az=146.0*

**ISC 19 04:31:22.1±0.6, 48.°06N±0.°06×153.°90E±0.°06, h95km±3km, h95km:pP-P,n576,σ1¶26/564, mb4.9/132, 22C-19D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **3.00** | **28** | *e*P | | **Pn** | **04 32 07.8** | **+0.3** |
| SKR | | | | AMB | | AMB | 04 32 11.4 | |
| | 4μm,0.6s | | | | | | | |
| SKR | | | | *e*S | | **Sn** | **04 32 42.5** | **-0.1** |
| SKR | | | | A | | A | 04 32 45.1 | |
| | 2μm,0.4s | | | | | | | |
| SKR | | | | A | | A | 04 32 45.1 | |
| | 1μm,0.4s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **3.00** | **28** | *e*PN | | **Pn** | **04 32 07.8** | **+0.3** |
| SKR | | | | *e*S | | **Sn** | **04 32 42.4** | **-0.1** |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,2μm,0.4s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=E,1μm,0.4s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=N,2μm,0.9s | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **4.62** | **34** | *e*P | | **Pn** | **04 32 27.3** | **-2.1** |
| KDTR | | | | AMB | | AMB | 04 32 29.9 | |
| | comp=N,260nm,0.2s | | | | | | | |
| KDTR | | | | *e*S | | **Sn** | **04 33 17.3** | **-4.5** |
| KDTR | | | | A | | A | 04 33 18.3 | |
| | comp=N,3μm,0.5s | | | | | | | |
| KDTR | | | | A | | A | 04 33 18.3 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **5.03** | **238** | *e*P | | **Pn** | **04 32 37.3** | **+2.3** |
| KUR | | | | AMB | | AMB | 04 32 41.6 | |
| | comp=N,200nm,0.5s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **04 33 35.2** | **+3.4** |
| KUR | | | | A | | A | 04 33 47.4 | |
| | comp=N,520nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 04 33 47.4 | |
| | comp=N,320nm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **5.03** | **238** | *e*PN | | **Pn** | **04 32 37.3** | **+2.3** |
| KUR | | | | *e*S | | **Sn** | **04 33 35.2** | **+3.4** |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,198nm,0.5s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=N,72nm,0.3s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=N,517nm,0.4s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=E,319nm,0.6s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **5.60** | **24** | | | **Pn** | **04 32 43.2** | **+0.5** |
| **PEA0B** | **Petropavlovsk-** | **5.60** | **24** | *i* PN | | **Pn** | **04 32 43.1** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **5.60** | **24** | Pn | | **Pn** | **04 32 43.1** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **5.60** | **24** | P | | **Pn** | **04 32 42.8** | **0.0** |
| | comp=E,146nm,0.8s,baz=115,slow=22,SNR=166 | | | | | | | |
| PETK | | | | S | | **Sn** | **04 33 47.0** | **+1.3** |
| | comp=E,19nm,0.7s,baz=214,slow=17,SNR=0.9 | | | | | | | |
| **PET** | **Petropavlovsk** | **5.82** | **30** | Pn | | **Pn** | **04 32 44.5** | **-1.1** |
| **PET** | **Petropavlovsk** | **5.82** | **30** | *e*P | | **Pn** | **04 32 44.9** | **-0.8** |
| PET | | | | AMB | | AMB | 04 32 47.8 | |
| | comp=E,100nm,0.7s | | | | | | | |
| PET | | | | *e*S | | **Sn** | **04 33 48.9** | **-2.0** |
| PET | | | | A | | A | 04 33 50.2 | |
| | comp=E,600nm,0.7s | | | | | | | |
| PET | | | | A | | A | 04 33 50.2 | |
| | comp=E,480nm,0.7s | | | | | | | |
| **PET** | **Petropavlovsk** | **5.82** | **30** | *e*PN | | **Pn** | **04 32 44.8** | **-0.9** |
| PET | | | | *e*S | | **Sn** | **04 33 48.8** | **-2.1** |
| PET | | | | pmax | pmax | | | |
| | comp=Z,98nm,0.7s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=N,604nm,0.6s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=E,479nm,0.7s | | | | | | | |
| **SHO** | **Shikotan** | **6.47** | **232** | *e*P | | **Pn** | **04 32 53.1** | **-1.5** |
| SHO | | | | AMB | | AMB | 04 32 55.9 | |
| | comp=E,70nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **04 34 02.1** | **-4.8** |
| SHO | | | | A | | A | 04 34 09.1 | |
| | comp=E,260nm,0.4s | | | | | | | |
| SHO | | | | A | | A | 04 34 09.1 | |
| | comp=E,350nm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **6.47** | **232** | *e*PN | | **Pn** | **04 32 53.1** | **-1.5** |
| SHO | | | | pmax | pmax | | | |
| | comp=Z,66nm,0.3s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=E,75nm,0.4s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=N,40nm,0.2s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.89** | **237** | *e*P | | **Pn** | **04 33 01.0** | **+0.7** |
| YUK | | | | AMB | | AMB | 04 33 02.1 | |
| | comp=N,270nm,0.2s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **04 34 17.1** | **-0.2** |
| YUK | | | | A | | A | 04 34 20.6 | |
| | comp=N,580nm,0.5s | | | | | | | |
| YUK | | | | A | | A | 04 34 20.6 | |
| | comp=N,440nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.89** | **237** | *e*PN | | **Pn** | **04 33 01.1** | **+0.7** |
| YUK | | | | *e*S | | **Sn** | **04 34 17.0** | **-0.2** |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,274nm,0.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=N,55nm,0.3s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=E,116nm,0.1s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=E,437nm,0.4s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=N,575nm,0.5s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YSS** | **Yuzh-Sakhalins** | **7.63** | **266** | *e*P | Pn | 04 33 14.3 | +3.9 |
| YSS | | | | AMB | AMB | 04 33 16.9 | |
| | comp=N,20nm,0.4s | | | | | | |
| YSS | | | | *e*S | Sn | 04 34 42.7 | +7.5 |
| YSS | | | | A | A | 04 34 49.4 | |
| | comp=N,50nm,0.5s | | | | | | |
| YSS | | | | A | A | 04 34 49.4 | |
| | comp=N,40nm,0.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.63** | **266**⇓ | *e*PN | Pn | 04 33 15.8 | +5.4 |
| YSS | | | | *e*S | **Sn** | **04 34 41.8** | **+6.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,60nm,0.8s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,60nm,0.5s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,60μm,0.6s | | | | | | |
| **TYV** | **Tymovskoe** | **7.85** | **295** | *e*P | Pn | 04 33 17.8 | +4.5 |
| TYV | | | | AMB | AMB | 04 33 21.0 | |
| | comp=E,40nm,0.8s | | | | | | |
| **TYV** | **Tymovskoe** | **7.85** | **295** | *e*PN | Pn | 04 33 18.4 | +5.1 |
| TYV | | | | pmax | pmax | | |
| | comp=Z,33nm,0.6s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,400nm,5.8s | | | | | | |
| **UGL** | **Uglegorsk** | **7.92** | **282** | *e*P | Pn | 04 33 18.1 | +3.8 |
| UGL | | | | AMB | AMB | 04 33 24.9 | |
| | comp=Z,80nm,0.5s | | | | | | |
| **UGL** | **Uglegorsk** | **7.92** | **282** | *e*PN | **Pn** | **04 33 15.7** | **+1.4** |
| **JKA** | **Kamikawa-asahi** | **8.79** | **248** | Pn | **Pn** | **04 33 28.1** | **+1.9** |
| **JKA** | **Kamikawa-asahi** | **8.79** | **248** | *e*P | **Pn** | **04 33 28.1** | **+1.9** |
| **ASAJ** | **Asahikawa** | **8.79** | **248** | P | **Pn** | **04 33 29.0** | **+2.8** |
| | comp=Z,14nm,0.5s,baz=55,slow=11,SNR=17 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.79** | **248** | PN | **Pn** | **04 33 28.1** | **+1.9** |
| **ERM** | **Erimo** | **9.71** | **235** | Pn | **Pn** | **04 33 38.3** | **-0.5** |
| **ERM** | **Erimo** | **9.71** | **235** | *i* PN | **Pn** | **04 33 37.5** | **-1.2** |
| **KBG** | **Krutoberegovo** | **9.82** | **30** | *e*P | **Pn** | **04 33 38.5** | **-1.6** |
| KBG | | | | AMB | AMB | 04 33 40.4 | |
| | comp=Z,180nm,0.6s | | | | | | |
| **NKL** | **Nikolayevsk** | **9.82** | **306** | *e*P | Pn | 04 33 44.6 | +4.4 |
| **MA2** | **Magadan** | **11.68** | **352** | Pn | **Pn** | **04 34 04.2** | **-1.2** |
| **MA2** | **Magadan** | **11.68** | **352** | P | **Pn** | **04 34 06.7** | **+1.3** |
| | comp=Z,7.9nm,0.6s,baz=150,slow=10,SNR=5.1 | | | | | | |
| **MA2** | **Magadan** | **11.68** | **352** | *i* PN | **Pn** | **04 34 02.7** | **-2.6** |
| **JTM** | **Tenmabayashi** | **11.70** | **236** | Pn | **Pn** | **04 34 01.9** | **-3.8** |
| **SHEM** | **Shemya Is, Ala** | **13.69** | **63** | P | **Pn** | **04 34 31.7** | **-0.2** |
| | comp=Z,101nm,0.4s,baz=130,slow=1.9,SNR=29 | | | | | | |
| **KLR** | **Kul'dur** | **14.69** | **283** | P | **P** | **04 34 46.0** | **-2.5** |
| | comp=Z,3.3nm,1.0s,baz=78,slow=13,SNR=4.2 | | | | | | |
| **KLR** | **Kul'dur** | **14.69** | **283** | *e*P | **Pn** | **04 34 44.4** | **-0.4** |
| **KLR** | **Kul'dur** | **14.69** | **283** | *i* P | **Pn** | **04 34 44.4** | **-0.4** |
| **SEY** | **Seymchan** | **14.93** | **357** | P | **Pn** | **04 34 47.6** | **-0.1** |
| | comp=Z,13nm,0.6s,baz=168,slow=8.9,SNR=16 | | | | | | |
| **SEY** | **Seymchan** | **14.93** | **357** | *i* P | **Pn** | **04 34 47.7** | **-0.1** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.66** | **264** | | **Pn** | **04 34 57.0** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **15.66** | **264** | P | **P** | **04 34 57.5** | **-1.8** |
| | comp=Z,2.4nm,0.7s,baz=49,slow=12,SNR=2.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.66** | **264** | P | **Pn** | **04 34 57.0** | **-0.2** |
| **MJA0** | **Matsu Arr-Jizo** | **16.29** | **231** | *e*P | **Pn** | **04 35 03.7** | **-1.4** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **16.31** | **231** | Pn | **Pn** | **04 35 03.9** | **-1.5** |
| **MAJO** | **Matsushiro** | **16.31** | **231** | Pn | **Pn** | **04 35 04.3** | **-1.0** |
| **MAJO** | **Matsushiro** | **16.31** | **231** | *i* P | **Pn** | **04 35 04.4** | **-1.0** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **16.31** | **231** | P | **Pn** | **04 35 04.5** | **-0.9** |
| | comp=Z,1.9nm,0.7s,baz=33,slow=12,SNR=6.6 | | | | | | |
| **MSHR** | **Mys Shultsa** | **16.88** | **259** | *i* P | **Pn** | **04 35 11.0** | **-1.3** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **HEH** | **HeiHe** | **17.43** | **287** | *e*P | **P** | **04 35 21.3** | **+2.5** |
| **ZEA** | **Zeya** | **17.68** | **299** | *e*P | **Pn** | **04 35 23.9** | **+1.9** |
| **YAK** | **Yakutsk** | **19.53** | **325** | P | **P** | **04 35 41.5** | **-0.2** |
| | comp=Z,51nm,0.6s,baz=106,slow=2.3,SNR=7.0 | | | | | | |
| **YAK** | **Yakutsk** | **19.53** | **325** | *i* P | **P** | **04 35 39.7** | **-1.9** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,25nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **20.99** | **13** | *i* P | **P** | **04 35 55.4** | **-2.0** |
| BILL | | | | *i* *PP | **pP** | **04 36 19.8** | **+4.1** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,32nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **21.72** | **250** | P | **P** | **04 36 06.6** | **+1.2** |
| | comp=Z,1.4nm,0.6s,baz=54,slow=12,SNR=5.9 | | | | | | |
| **GAMB** | **Gambell** | **24.45** | **37** | P | **P** | **04 36 33.4** | **+1.9** |
| | baz=247 | | | | | | |
| **TIXI** | **Tiksi** | **26.37** | **342** | P | **P** | **04 36 47.8** | **-1.1** |
| **TIXI** | **Tiksi** | **26.37** | **342** | *e*P | **P** | **04 36 47.8** | **-1.1** |
| **TIXI** | **Tiksi** | **26.37** | **342** | P | **P** | **04 36 47.8** | **-1.1** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| **TNA** | **Tin City** | **26.65** | **35** | P | **P** | **04 36 55.3** | **+3.9** |
| | baz=248 | | | | | | |
| **M13K** | **Dall Lake** | **27.34** | **47** | P | **P** | **04 36 58.3** | **+0.6** |
| | baz=263 | | | | | | |
| **J14K** | **Nanvaranak Lak** | **27.64** | **42** | P | **P** | **04 37 01.7** | **+1.4** |
| | baz=258 | | | | | | |
| **L14K** | **Kuka Creek** | **27.79** | **45** | P | **P** | **04 37 03.2** | **+1.5** |
| | baz=262 | | | | | | |
| **G15K** | **Niukluk** | **27.99** | **37** | P | **P** | **04 37 05.3** | **+1.8** |
| | baz=254 | | | | | | |
| **M14K** | **Bethel** | **28.06** | **47** | P | **P** | **04 37 04.3** | **+0.2** |
| | baz=264 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **28.11** | **48** | P | **P** | **04 37 05.4** | **+0.8** |
| | baz=265 | | | | | | |
| **O14K** | **Tigyukauivet M** | **28.28** | **50** | P | **P** | **04 37 06.9** | **+0.9** |
| | baz=267 | | | | | | |
| **L15K** | **Ungalak Mounta** | **28.41** | **45** | P | **P** | **04 37 06.9** | **-0.2** |
| | baz=262 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **28.48** | **43** | P | **P** | **04 37 11.7** | **+3.8** |
| K15K | | | | lAmb | lAmb | 04 37 31.7 | |
| | comp=Z,53nm,1.8s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **28.48** | **43** | P | **P** | **04 37 09.6** | **+1.8** |
| | baz=261 | | | | | | |
| **H16K** | **Elim** | **28.64** | **39** | P | **P** | **04 37 11.1** | **+1.8** |
| | baz=256 | | | | | | |
| **C16K** | **Lisburne Hills** | **28.66** | **30** | P | **P** | **04 37 08.3** | **-1.0** |
| **C16K** | **Lisburne Hills** | **28.66** | **30** | P | **P** | **04 37 12.0** | **+2.7** |
| | baz=246 | | | | | | |
| **M15K** | **Kasigluk River** | **28.68** | **47** | P | **P** | **04 37 11.1** | **+1.5** |
| | baz=265 | | | | | | |
| **N15K** | **Kwethluk River** | **28.93** | **48** | P | **P** | **04 37 12.2** | **+0.4** |
| N15K | | | | lAmb | lAmb | 04 38 06.2 | |
| | comp=Z,71nm,1.8s | | | | | | |
| **I17K** | **Unalakleet** | **29.13** | **40** | P | **P** | **04 37 14.5** | **+0.9** |
| | baz=259 | | | | | | |
| **D17K** | **Noatak River** | **29.23** | **32** | P | **P** | **04 37 15.5** | **+1.1** |
| | baz=250 | | | | | | |
| **CHNA** | **Chernabura Isl** | **29.31** | **59** | P | **P** | **04 37 18.6** | **+3.4** |
| | baz=276 | | | | | | |
| **L16K** | **Owhat River** | **29.36** | **45** | P | **P** | **04 37 14.9** | **-0.8** |
| L16K | | | | lAmb | lAmb | 04 38 17.7 | |
| | comp=Z,39nm,1.8s | | | | | | |
| **L16K** | **Owhat River** | **29.36** | **45** | P | **P** | **04 37 16.0** | **+0.4** |
| | baz=264 | | | | | | |
| **RDOG** | **Red Dog Mine** | **29.41** | **32** | P | **P** | **04 37 17.6** | **+1.5** |
| | baz=249 | | | | | | |
| **C17K** | **DeLong Mountai** | **29.48** | **31** | P | **P** | **04 37 17.9** | **+1.3** |
| | baz=248 | | | | | | |
| **E17K** | **Hotham Inlet** | **29.48** | **34** | P | **P** | **04 37 18.6** | **+2.0** |
| | baz=252,SNR=8.1 | | | | | | |
| **G17K** | **Kiwalik Mounta** | **29.50** | **37** | P | **P** | **04 37 18.5** | **+1.7** |
| | baz=256 | | | | | | |
| **F17K** | **Baldwin Pennin** | **29.51** | **35** | P | **P** | **04 37 17.0** | **+0.2** |
| F17K | | | | lAmb | lAmb | 04 37 20.3 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **F17K** | **Baldwin Pennin** | **29.51** | **35** | P | **P** | **04 37 19.0** | **+2.1** |
| | baz=254 | | | | | | |
| **M16K** | **Timber Creek** | **29.55** | **46** | P | **P** | **04 37 16.1** | **-1.2** |
| M16K | | | | lAmb | lAmb | 04 37 43.3 | |
| | comp=Z,53nm,1.8s | | | | | | |
| **M16K** | **Timber Creek** | **29.55** | **46** | P | **P** | **04 37 17.4** | **+0.1** |
| | baz=266 | | | | | | |
| **N16K** | **Nishlik Lake** | **29.60** | **47** | P | **P** | **04 37 17.9** | **+0.1** |
| | baz=267 | | | | | | |
| **H17K** | **Granite Mounta** | **29.68** | **38** | P | **P** | **04 37 20.3** | **+1.9** |
| | baz=258 | | | | | | |
| **J17K** | **VABM Dome** | **29.76** | **42** | P | **P** | **04 37 20.2** | **+1.1** |
| | baz=262 | | | | | | |
| **L17K** | **Donlin** | **29.96** | **44** | P | **P** | **04 37 22.3** | **+1.4** |
| | baz=265 | | | | | | |
| **K17K** | **Iditarod** | **30.02** | **43** | P | **P** | **04 37 21.4** | **0.0** |
| K17K | | | | lAmb | lAmb | 04 37 48.9 | |
| | comp=Z,44nm,1.9s | | | | | | |
| **E18K** | **Tukpahlearik C** | **30.04** | **33** | P | **P** | **04 37 23.7** | **+2.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **E18K** | **Tukpahlearik C** | **30.04** | **33** | P | **P** | **04 37 23.1** | **+1.6** |
| | baz=253 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.16** | **155** | T | T | 05 09 33.2 | |
| | baz=341,slow=76,SNR=910 | | | | | | |
| **F18K** | **Selawik** | **30.17** | **35** | P | **P** | **04 37 24.4** | **+1.7** |
| | baz=256 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.18** | **155** | T | T | 05 09 37.5 | |
| | baz=341,slow=76,SNR=1050 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.18** | **155** | T | T | 05 09 34.9 | |
| | baz=341,slow=76,SNR=649 | | | | | | |
| **C18K** | **Utukok River** | **30.22** | **31** | P | **P** | **04 37 23.4** | **+0.2** |
| **C18K** | **Utukok River** | **30.22** | **31** | P | **P** | **04 37 23.7** | **+0.5** |
| | baz=250 | | | | | | |
| **B18K** | **Kokolik River** | **30.27** | **29** | P | **P** | **04 37 24.5** | **+1.0** |
| | baz=249 | | | | | | |
| **M17K** | **Holitna River** | **30.31** | **46** | P | **P** | **04 37 24.9** | **+0.9** |
| | baz=267 | | | | | | |
| **H18K** | **Honhosa River** | **30.37** | **38** | P | **P** | **04 37 25.4** | **+0.9** |
| **H18K** | **Honhosa River** | **30.37** | **38** | P | **P** | **04 37 26.0** | **+1.5** |
| | baz=259 | | | | | | |
| **N17K** | **Nushagak Hills** | **30.39** | **47** | P | **P** | **04 37 24.0** | **-0.7** |
| **N17K** | **Nushagak Hills** | **30.39** | **47** | P | **P** | **04 37 25.6** | **+0.9** |
| | baz=268 | | | | | | |
| **G18K** | **Tagagawik** | **30.40** | **37** | P | **P** | **04 37 25.2** | **+0.5** |
| G18K | | | | lAmb | lAmb | 04 37 28.5 | |
| | comp=Z,19nm,0.6s | | | | | | |
| **G18K** | **Tagagawik** | **30.40** | **37** | P | **P** | **04 37 26.9** | **+2.1** |
| | baz=258,SNR=11 | | | | | | |
| **O17K** | **Koliganek Bris** | **30.42** | **49** | P | **P** | **04 37 24.0** | **-1.0** |
| | baz=270 | | | | | | |
| **L18K** | **Granite Mounta** | **30.72** | **44** | P | **P** | **04 37 27.8** | **+0.2** |
| | baz=266 | | | | | | |
| **J18K** | **Innoko River** | **30.82** | **42** | P | **P** | **04 37 30.0** | **+1.5** |
| | baz=264 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **30.86** | **53** | P | **P** | **04 37 28.9** | **-0.1** |
| | baz=274 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **30.95** | **35** | P | **P** | **04 37 31.0** | **+1.4** |
| F19K | | | | lAmb | lAmb | 04 37 32.6 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **30.95** | **35** | P | **P** | **04 37 31.8** | **+2.2** |
| | baz=257 | | | | | | |
| **N18K** | **Kilae Creek** | **31.03** | **47** | P | **P** | **04 37 30.0** | **-0.5** |
| N18K | | | | lAmb | lAmb | 04 37 36.6 | |
| | comp=Z,74nm,1.9s | | | | | | |
| **N18K** | **Kilae Creek** | **31.03** | **47** | P | **P** | **04 37 29.8** | **-0.6** |
| | baz=269 | | | | | | |
| **G19K** | **Purcell Mounta** | **31.08** | **36** | P | **P** | **04 37 32.3** | **+1.6** |
| **G19K** | **Purcell Mounta** | **31.08** | **36** | P | **P** | **04 37 32.4** | **+1.6** |
| | baz=259,SNR=5.5 | | | | | | |
| **M18K** | **Stony River** | **31.09** | **46** | P | **P** | **04 37 32.1** | **+1.2** |
| | baz=268 | | | | | | |
| **H19K** | **Roundabout Mou** | **31.22** | **38** | P | **P** | **04 37 33.3** | **+1.3** |
| | baz=261,SNR=9.6 | | | | | | |
| **D19K** | **Kuna River** | **31.25** | **32** | P | **P** | **04 37 32.3** | **+0.1** |
| D19K | | | | lAmb | lAmb | 04 37 35.2 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **31.25** | **32** | P | **P** | **04 37 33.6** | **+1.4** |
| | baz=254 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.27** | **156** | T | T | 05 10 12.2 | |
| | baz=343,slow=75,SNR=1052 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.28** | **156** | T | T | 05 09 45.2 | |
| | baz=343,slow=75,SNR=34 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.29** | **156** | T | T | 05 10 14.6 | |
| | baz=343,slow=75,SNR=761 | | | | | | |
| **E19K** | **Redstone River** | **31.30** | **34** | P | **P** | **04 37 34.1** | **+1.4** |
| | baz=257,SNR=11 | | | | | | |
| **J19K** | **Poorman** | **31.36** | **41** | P | **P** | **04 37 32.8** | **-0.5** |
| J19K | | | | lAmb | lAmb | 04 37 53.8 | |
| | comp=Z,33nm,1.9s | | | | | | |
| **J19K** | **Poorman** | **31.36** | **41** | P | **P** | **04 37 33.2** | **-0.1** |
| | baz=264 | | | | | | |
| **SONM** | **Songino Array** | **31.42** | **288** | P | **P** | **04 37 33.4** | **-0.7** |
| | comp=Z,0.5nm,0.6s,baz=90,slow=40,SNR=3.2 | | | | | | |
| **L19K** | **White Mountain** | **31.57** | **44** | P | **P** | **04 37 39.0** | **+3.9** |
| L19K | | | | lAmb | lAmb | 04 38 21.7 | |
| | comp=Z,45nm,1.9s | | | | | | |
| **L19K** | **White Mountain** | **31.57** | **44** | P | **P** | **04 37 36.0** | **+0.8** |
| | baz=268 | | | | | | |
| **N19K** | **Bonanza Creek** | **31.72** | **47** | P | **P** | **04 37 37.1** | **+0.6** |
| | baz=270 | | | | | | |
| **M19K** | **Big River Lodg** | **31.78** | **45** | P | **P** | **04 37 37.6** | **+0.6** |
| | baz=269 | | | | | | |
| **F20K** | **Avaraart Lake** | **31.79** | **35** | P | **P** | **04 37 38.7** | **+1.8** |
| **F20K** | **Avaraart Lake** | **31.79** | **35** | P | **P** | **04 37 38.4** | **+1.5** |
| | baz=259 | | | | | | |
| **D20K** | **Etivluk River** | **31.84** | **32** | P | **P** | **04 37 38.5** | **+1.1** |
| | baz=255,SNR=8.4 | | | | | | |
| **H20K** | **Anotleneega Mo** | **31.86** | **38** | P | **P** | **04 37 38.6** | **+1.0** |
| | baz=262,SNR=5.9 | | | | | | |
| **E20K** | **Nigu River** | **31.88** | **33** | P | **P** | **04 37 39.6** | **+1.8** |
| | baz=257,SNR=18 | | | | | | |
| **I20K** | **Naaghedeneel** | **31.95** | **39** | P | **P** | **04 37 39.5** | **+1.2** |
| | baz=264 | | | | | | |
| **K20K** | **Telida** | **32.00** | **42** | P | **P** | **04 37 38.1** | **-0.8** |
| **K20K** | **Telida** | **32.00** | **42** | P | **P** | **04 37 39.1** | **+0.2** |
| | baz=267 | | | | | | |
| **B20K** | **Meade River** | **32.01** | **29** | P | **P** | **04 37 38.5** | **-0.3** |
| B20K | | | | lAmb | lAmb | 04 37 41.2 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **B20K** | **Meade River** | **32.01** | **29** | P | **P** | **04 37 39.7** | **+0.9** |
| | baz=253 | | | | | | |
| **J20K** | **Nowinta River** | **32.03** | **41** | P | **P** | **04 37 39.0** | **-0.1** |
| **J20K** | **Nowinta River** | **32.03** | **41** | P | **P** | **04 37 39.6** | **+0.6** |
| | baz=265 | | | | | | |
| **L20K** | **Farewell, AK** | **32.04** | **44** | P | **P** | **04 37 39.7** | **+0.4** |
| | baz=268 | | | | | | |
| **M20K** | **Styx River** | **32.38** | **45** | P | **P** | **04 37 42.8** | **+0.5** |
| **G21K** | **Allakaket** | **32.56** | **36** | P | **P** | **04 37 45.7** | **+2.0** |
| G21K | | | | lAmb | lAmb | 04 37 47.7 | |
| | comp=Z

comp=Z,52nm,1.9s
I23K **Minto, Yukon-K** 34.14 39 P P 04 37 57.8 +0.4
baz=268
C23K **Itkillik River** 34.17 31 P P 04 37 57.9 +0.3
C23K IAmb IAmb 04 37 59.1
comp=Z,24nm,1.1s
C23K **Itkillik River** 34.17 31 P P 04 37 58.3 +0.7
baz=260
NEA2 **Nenana** 34.25 40 P P 04 37 58.7 +0.3
baz=269,SNR=10
E23K **Chandalar** 34.26 34 P P 04 37 59.4 +0.8
baz=264,SNR=27
PMR **Palmer** 34.29 45 P P 04 37 58.8 0.0
baz=274
MCK **McKinley** 34.31 42 P P 04 37 58.6 -0.4
baz=271
RND **Reindeer** 34.35 42 IAmb IAmb 04 38 03.1
comp=Z,8.2nm,0.7s
TOLK **Toolik Lake Re** 34.35 33 P P 04 38 00.1 +0.9
baz=263,SNR=19
MDM **Murphy Dome** 34.62 39 P P 04 38 01.4 -0.3
KNK **Knik Glacier** 34.62 46 P P 04 38 01.4 -0.3
baz=274
SML **Sawmill** 34.66 45 P P 04 38 01.9 -0.1
baz=274,SNR=13
WRH **Wood River Hil** 34.67 40 IAmb IAmb 04 38 07.4
comp=Z,15nm,1.0s
D24K **Happy Valley** 34.68 32 P P 04 38 04.5 +2.4
baz=263,SNR=11
E24K **Your Creek** 34.69 34 P P 04 38 04.3 +2.1
baz=265
COLA **College** 34.78 40 P P 04 38 03.1 +0.1
baz=270
COLA **College** 34.78 40 P P 04 38 03.2 +0.3
H24K **Noodor Dome** 34.78 38 P P 04 38 03.4 +0.4
H24K **Noodor Dome** 34.78 38 P P 04 38 03.5 +0.4
baz=269
C24K **Franklin Bluff** 34.80 31 P P 04 38 03.8 +0.7
C24K **Franklin Bluff** 34.80 31 P P 04 38 04.1 +1.0
baz=262
F24K **Squaw Lake** 34.87 35 P P 04 38 03.9 +0.1
F24K IAmb IAmb 04 38 08.4
comp=Z,11nm,0.6s
F24K **Squaw Lake** 34.87 35 P P 04 38 04.5 +0.8
baz=266,SNR=12
M23K **Glacier View** 34.94 45 P P 04 38 05.0 +0.6
baz=274
POKR **Poker Plat Res** 34.96 39 IAmb IAmb 04 38 08.8
comp=Z,12nm,0.7s
POKR **Poker Plat Res** 34.96 39 P P 04 38 04.4 -0.1
baz=270
G24K **Hadweenzic Riv** 34.98 36 IAmb IAmb 04 38 09.2
comp=Z,22nm,0.8s
G24K **Hadweenzic Riv** 34.98 36 P P 04 38 05.6 +0.9
baz=268,SNR=18
DHY **Denali Highway** 35.03 43 P P 04 38 04.5 -0.8
DHY IAmb IAmb 04 38 06.7
comp=Z,23nm,1.5s
DHY **Denali Highway** 35.03 43 P P 04 38 04.6 -0.8
baz=273
SCM **Sheep Creek Mo** 35.13 45 P P 04 38 06.1 0.0
baz=275
HDA **Harding Lake** 35.17 40 P P 04 38 05.8 -0.6
HDA IAmb IAmb 04 38 06.6
comp=Z,8.9nm,0.5s
HDA **Harding Lake** 35.17 40 P P 04 38 06.2 -0.1
baz=271,SNR=8.3
IL31 **** 35.19 40 IAmb IAmb 04 38 11.5
comp=Z,8.8nm,0.8s
ILAR **Eielson Array** 35.19 40 P P 04 38 05.7 -0.8
comp=Z,5.7nm,0.8s,baz=266,slow=5.5,SNR=28
comp=Z,5.7nm,0.8s
ILAR **Eielson Array** 35.19 40 eP P 04 38 07.3 +0.8
ILAR pmax pmax
comp=Z,5.0nm,0.7s
G25K **Bearman Lake** 35.53 36 P P 04 38 09.4 +0.1
baz=269
D25K **Kavik River** 35.57 32 IAmb IAmb 04 38 19.5
comp=Z,11nm,0.7s
D25K **Kavik River** 35.57 32 P P 04 38 10.0 +0.3
baz=265
H25L **Birch Creek** 35.63 37 P P 04 38 10.6 +0.4
baz=270
M24K **Tolsona, Glenn** 35.65 44 P P 04 38 10.3 -0.2
M24K **Tolsona, Glenn** 35.65 44 P P 04 38 10.4 -0.2
baz=275
K24K **Donnelly Dome** 35.71 41 P P 04 38 10.7 -0.3
baz=273
F25K **Christian Rive** 35.73 35 P P 04 38 12.0 +0.8
F25K **Christian Rive** 35.73 35 P P 04 38 11.4 +0.3
baz=268,SNR=5.8
PRP **Porcupine Dome** 35.76 38 P P 04 38 11.4 -0.1
baz=271,SNR=6.0
KLU **Klutina** 35.83 45 P P 04 38 11.8 -0.3
baz=276
J25K **Salcha River,** 35.85 40 P P 04 38 10.4 -1.8
J25K IAmb IAmb 04 39 15.9
comp=Z,26nm,1.8s
J25K **Salcha River,** 35.85 40 P P 04 38 11.4 -0.8
baz=273
PAX **Paxson** 35.90 43 P P 04 38 12.9 +0.2
baz=275
HARP **HAARP** 36.10 44 P P 04 38 14.1 -0.2
baz=276
RIDG **Independent Ri** 36.12 41 P P 04 38 13.7 -0.9
RIDG IAmb IAmb 04 38 18.5
comp=Z,21nm,1.4s
RIDG **Independent Ri** 36.12 41 P P 04 38 13.9 -0.7
baz=274
BMAR **Burnt Mountain** 36.13 35 P P 04 38 15.2 +0.6
F26K **Sheenjek River** 36.30 35 P 04 38 16.8 +0.7
F26K **Sheenjek River** 36.30 35 P P 04 38 17.3 +1.3
baz=269
G26K **Porcupine Rive** 36.44 36 P P 04 38 18.4 +1.2
baz=271,SNR=13
N25K **Chitina, Valde** 36.45 45 P P 04 38 17.5 +0.1
baz=277
SCRK **Sand Creek** 36.49 41 P P 04 38 17.4 -0.3
baz=275
BMRM **Bremner River** 36.53 46 P P 04 38 18.6 +0.6
baz=278
RAGM **Ragged Mountai** 36.58 47 P 04 38 18.3 -0.1
RAGM IAmb IAmb 04 38 31.3
comp=Z,17nm,1.1s
J26L **Joseph Creek** 36.63 40 P 04 38 17.5 -1.4
J26L IAmb IAmb 04 38 20.1
comp=Z,23nm,1.9s
J26L **Joseph Creek** 36.63 40 P P 04 38 18.3 -0.6
baz=274
L26K **Log Cabin Wild** 36.86 43 P P 04 38 21.3 +0.5
baz=276
VRDI **Verde Repeater** 37.04 46 P 04 38 21.9 -0.6
M26K **Nabesna, AK** 37.10 44 P 04 38 23.8 +1.0
M26K **Nabesna, AK** 37.10 44 P P 04 38 23.6 +0.8
baz=278,SNR=7.7
CRQM **Cirque** 37.27 46 IAmb IAmb 04 38 26.3
comp=Z,31nm,1.2s
E27K **Coleen River** 37.27 34 P P 04 38 25.5 +1.3
baz=271
G27K **Doyon Strip** 37.29 36 P P 04 38 26.7 +2.4
baz=273
CRQE **Cirque** 37.29 46 P P 04 38 25.3 +0.7
baz=280
K27K **Chicken** 37.32 41 IAmb IAmb 04 38 29.1
comp=Z,9.6nm,0.8s
K27K **Chicken** 37.32 41 P P 04 38 25.3 +0.7
baz=276
H27K **Steamboat Moun** 37.37 37 P P 04 38 25.8 +0.7
baz=274
D27M **Malcolm River** 37.49 32 IAmb IAmb 04 38 29.4
comp=Z,8.5nm,0.7s
D27M **Malcolm River** 37.49 32 P P 04 38 27.8 +1.8
baz=270
L27K **Beaver Creek,** 37.55 42 IAmb IAmb 04 38 32.5
comp=Z,11nm,0.8s
L27K **Beaver Creek,** 37.55 42 P P 04 38 27.5 +0.9
baz=278,SNR=13
BCAR **Beaver Creek A** 37.56 42 P P 04 38 27.6 +0.8
M27K **Edge Creek, AK** 37.62 43 P P 04 38 28.1 +0.8
baz=278,SNR=6.4
EGAK **Eagle** 37.64 39 IAmb IAmb 04 38 27.5
comp=Z,10nm,0.8s
EGAK **Eagle** 37.64 39 P P 04 38 26.9 -0.4
baz=276,SNR=8.7
F28M **Old Crow** 37.94 35 P P 04 38 30.9 +1.0
F28M IAmb IAmb 04 38 34.0
comp=Z,7.6nm,0.7s
F28M **Old Crow** 37.94 35 P P 04 38 31.2 +1.4
baz=273
E28M **Babbage River** 38.02 33 P P 04 38 30.4 -0.1
E28M **Babbage River** 38.02 33 P P 04 38 31.5 +1.0
baz=272
I28M **Miner Creek** 38.09 38 IAmb IAmb 04 38 35.8
comp=Z,8.6nm,0.8s
I28M **Miner Creek** 38.09 38 P P 04 38 31.4 +0.2
baz=276,SNR=10
CTG **Chitna Glacier** 38.10 46 P P 04 38 31.8 +0.4
baz=281,SNR=6.2
CTGM **Chitina Glacie** 38.10 46 P P 04 38 31.5 +0.1
CTGM IAmb IAmb 04 38 32.6
comp=Z,11nm,0.8s
D28M **Stokes Point** 38.28 32 P P 04 38 34.0 +1.4
baz=272
YUK3 **Moose Creek** 38.37 44 P P 04 38 34.2 +0.5
baz=280
DAWY **Dawson** 38.49 40 P P 04 38 34.6 +0.1
baz=278
E29M **Blow River** 38.63 33 P P 04 38 37.5 +1.9
baz=274,SNR=6.0
H29M **Whitestone** 38.65 37 P P 04 38 36.2 +0.4
H29M IAmb IAmb 04 39 15.0
comp=Z,32nm,1.8s
H29M **Whitestone** 38.65 37 P P 04 38 36.6 +0.8
baz=276
O28M **Mount Upton** 38.69 46 P P 04 38 37.3 +0.8
baz=282
G29M **Pine Creek** 38.71 36 P P 04 38 37.3 +1.0
baz=276
I29M **Ogilvie Camp,** 38.77 38 P P 04 38 37.4 +0.6
baz=278
M29M **Somme Creek** 39.17 43 P P 04 38 40.8 +0.5
M29M **Somme Creek** 39.17 43 P P 04 38 41.1 +0.8
baz=281,SNR=5.3
EPYK **Eagle Plains** 39.29 37 IAmb IAmb 04 38 42.2
comp=Z,5nm,1.9s
EPYK **Eagle Plains** 39.29 37 P P 04 38 41.9 +0.7
baz=278
K29M **Barlow Dome** 39.34 41 P P 04 38 42.1 +0.4
K29M **Barlow Dome** 39.34 41 P P 04 38 42.2 +0.4
baz=280
G30M **tAoh Zraii Nji** 39.41 36 P P 04 38 42.7 +0.6
baz=277
F30M **Barrier River** 39.50 35 P P 04 38 44.7 +1.9
baz=277
O29M **Mount Kennedy** 39.57 46 P P 04 38 44.5 +0.9
baz=284
I30M **Mount Dempster** 39.60 38 P P 04 38 44.1 +0.2
baz=279,SNR=14
J30M **Hart River** 39.73 39 P P 04 38 45.3 +0.4
baz=280
N30M **Aishikik Lake** 40.01 44 P P 04 38 47.5 +0.3
baz=283
P29M **Windy Craggy** 40.14 47 P P 04 38 48.9 +0.6
baz=285
G31M **Satah River** 40.18 35 P P 04 38 48.8 +0.4
baz=279
INK **Inuvik** 40.26 33 P P 04 38 50.0 +0.9
baz=278
F31M **Tsiigehtchic** 40.30 35 P P 04 38 50.3 +0.9
baz=279
P30M **Million Dollar** 40.40 46 P P 04 38 51.4 +1.0
baz=285
N31M **Brurn, Yuko** 40.62 44 P P 04 38 52.5 +0.3
baz=284
O30N **Mendenhall** 40.65 45 P P 04 38 52.7 +0.2
O30N IAmb IAmb 04 40 11.2
comp=Z,15nm,1.1s
O30N **Mendenhall** 40.65 45 P P 04 38 53.5 +1.0
baz=285,SNR=6.2
PLBC **Pleasant Camp** 40.86 47 P P 04 38 55.2 +1.1
baz=286
M31M **Drury Creek, Y** 41.08 43 P P 04 38 56.5 +0.6
M31M IAmb IAmb 04 40 26.6
comp=Z,37nm,1.2s
M31M **Drury Creek, Y** 41.08 43 P P 04 38 56.7 +0.8
baz=284,SNR=5.6
WHY **Whitehorse** 41.25 45 P P 04 38 58.3 +0.8
baz=286
S31K **Pelican** 41.36 49 P P 04 38 59.8 +1.6
baz=288
SKAG **Skagway** 41.37 47 P P 04 38 59.3 +1.0
baz=287
FARO **Faro, Yukon** 41.55 42 P P 04 38 59.9 +0.1
FARO IAmb IAmb 04 40 23.8
comp=Z,26nm,1.1s
FARO **Faro, Yukon** 41.55 42 P P 04 39 00.5 +0.7
baz=285,SNR=5.1
R32K **Eaglecrest** 42.13 48 P P 04 39 05.7 +1.2
baz=289
ZALV **Zalesovo Beam** 42.29 305 P P 04 39 04.7 -1.2
comp=Z,4.6nm,0.4s,baz=58,slow=7.6,SNR=19
comp=Z,4.6nm,0.4s
ZALV **Zalesovo Beam** 42.29 305 eP P 04 39 05.0 -0.9
ZALV pmax pmax
comp=Z,5.0nm,0.4s
P33M **Teslin, Yukon** 42.36 45 P P 04 39 07.3 +0.8
baz=288,SNR=7.8
S32K **Killisnoo** 42.36 50 P P 04 39 08.1 +1.7
baz=289
A36M **Sachs Harbour** 42.44 27 P P 04 39 09.8 +2.9
baz=281
DGZ **Jazzator, Alta** 42.45 298 i P P 04 39 06.5 -0.9
DGZ pmax pmax
comp=Z,2.0nm,1.0s
Q32M **Nakina River** 43.02 47 P P 04 39 13.2 +1.2
Q32M **Nakina River** 43.02 47 P P 04 39 13.5 +1.5
baz=289
C36M **Paulatuk** 43.41 31 P P 04 39 16.5 +1.8
baz=285
T33K **Petersburg** 43.42 50 P P 04 39 17.2 +2.3
baz=291
R33M **Jennings River** 43.51 46 P P 04 39 17.5 +1.7
baz=290,SNR=8.1
U33K **Whale Pass** 43.58 51 P P 04 39 17.7 +1.5
baz=292
CRAG **Craig** 43.82 52 P P 04 39 20.1 +2.0
baz=292
WRAK **Wrangell Islan** 43.87 50 P P 04 39 20.9 +2.3
baz=292
S34M **Telegraph Cree** 43.94 48 P P 04 39 20.2 +1.1
baz=291
DLBC **Dease Lake** 44.30 47 P P 04 39 22.9 +0.8
DLBC **Dease Lake** 44.30 47 P P 04 39 23.5 +1.4
baz=291
T35M **Bob Quinn** 44.73 49 P P 04 39 27.1 +1.6
baz=293
HG4B **Hotspring** 46.16 55 P P 04 39 36.9 +0.1
MKAR **Makanchi Array** 46.82 297 P P 04 39 41.2 -0.9
MKAR **Makanchi Array** 46.82 297 P P 04 39 41.1 -1.0
comp=Z,3.5nm,0.7s,baz=69,slow=7.9,SNR=20
comp=Z,3.5nm,0.7s
MKAR **Makanchi Array** 46.82 297 eP P 04 39 41.4 -0.7
MKAR **Makanchi Array** 46.82 297 eP P 04 39 41.4 -0.7
MKAR pmax pmax
comp=Z,3.0nm,0.7s
KURK **Kurchatov** 47.09 303 P P 04 39 43.0 -1.0
KURK IAmb IAmb 04 39 44.0
comp=Z,11nm,0.5s
KURK **Kurchatov** 47.09 303 eP P 04 39 43.0 -1.0
KURK **Kurchatov** 47.09 303 P P 04 39 43.0 -1.0
KURK pmax pmax
comp=Z,11nm,0.5s
KURK **Kurchatov** 47.09 303 P P 04 39 43.3 -0.7
KURBB **Kurchatov Arra** 47.19 303 P P 04 39 44.1 -0.7
comp=Z,10nm,0.5s,baz=67,slow=8.4,SNR=28
comp=Z,10nm,0.5s
ALE **Alert** 48.38 6 P P 04 39 53.4 -0.2
ALE sP sP 04 40 25.2 -1.7
YKA **Yellowknife Ar** 49.55 38 P P 04 40 02.8 0.0
comp=Z,3.8nm,0.8s,baz=300,slow=7.6,SNR=6.7
comp=Z,3.8nm,0.8s
BVAR **Borovoye Array** 50.45 309 P P 04 40 09.2 -0.4
comp=Z,36nm,0.5s,baz=56,slow=7.9,SNR=125
comp=Z,36nm,0.5s
BRVK **Borovoye** 50.48 309 P P 04 40 09.6 -0.4
BRVK **Borovoye** 50.48 309 i P P 04 40 08.9 -1.0
BRVK pmax pmax
comp=Z,13nm,0.8s
BRVK **Borovoye** 50.48 309 P P 04 40 09.5 -0.4
BRVK pP pP 04 40 32.3 -0.2
BRVK sP sP 04 40 42.0 -1.0
KBS **Kingsbay** 51.28 351 P P 04 40 15.4 -0.1
KBS **Kingsbay** 51.28 351 eP P 04 40 15.5 -0.1
KBS **Kingsbay** 51.28 351 P P 04 40 15.4 -0.1
KBS pmax pmax
comp=Z,39nm,1.2s
SPA0 **Spitsbergen Ar** 51.42 350 eP P 04 40 15.7 -0.9
SPITS **Spitsbergen Ar** 51.42 350 P P 04 40 15.8 -0.9
comp=Z,7.5nm,0.5s,baz=66,slow=11,SNR=19
comp=Z,7.5nm,0.5s
SPITS **Spitsbergen Ar** 51.42 350 P P 04 40 15.5 -1.1
SPITS pmax pmax
comp=Z,245nm,1.9s
SPB2 **Spitsbergen Ar** 51.42 350 P P 04 40 15.4 -1.2
AAK **Ala-Archa** 53.74 296 P P 04 40 34.5 +0.1
ARU **Arti** 54.41 317 P P 04 40 38.0 -0.9
ARU **Arti** 54.41 317 eP P 04 40 38.0 -0.9
ARU **Arti** 54.41 317 c iP P 04 40 38.0 -0.9
ARU 04 42 37.2
ARU S S 04 48 09.6 -0.1
ARU SS SS 04 51 49.6 -2.9
ARU pmax pmax
comp=Z,27nm,0.6s
ARU **Arti** 54.41 317 P P 04 40 38.2 -0.7
LVZ **Lovozero** 55.78 336 P P 04 40 47.4 -1.2
KK31 **Karatay Array** 55.84 298 P P 04 40 49.0 -0.4
KK31 **Karatay Array** 55.84 298 P P 04 40 49.0 -0.4
KK31 pmax pmax
comp=Z,3.0nm,0.8s
KKAR **Karatay Array** 55.84 298 P P 04 40 48.3 -1.1
KKAR **Karatay Array** 55.84 298 P P 04 40 48.3 -1.1
ARA0 **ARCESS Array S** 56.79 341 eP P 04 40 54.8 -1.0
ARCES **ARCESS Array B** 56.79 341 P P 04 40 54.4 -1.3
ARCES **ARCESS Array B** 56.79 341 P P 04 40 54.4 -1.3
comp=Z,1.3nm,0.5s,baz=36,slow=6.6,SNR=8.7
comp=Z,1.3nm,0.5s
ARCES **ARCESS Array B** 56.79 341 eP P 04 40 55.1 -0.6
ARCES pmax pmax
comp=Z,2.0nm,0.6s
KTK1 **Kautokeino** 57.70 341 eP P 04 41 01.1 -1.0
ABKAR **Akbulak array** 58.00 310 P P 04 41 04.0 -0.5
TRO **Tromso** 58.08 343 eP P 04 41 03.6 -1.1
SUMG **Summit** 59.35 4 P P 04 41 13.6 -0.4
SUMG **Summit** 59.35 4 P P 04 41 13.6 -0.4
SUMG pmax pmax
comp=Z,30nm,1.2s
CHGR **Chuyangaron** 59.37 295 P P 04 41 14.7 +0.4
CHGR **Chuyangaron** 59.37 295 P P 04 41 14.7 +0.4
CHGR pmax pmax
comp=Z,22nm,1.2s
FFC **Flin Flon** 59.39 41 P P 04 41 14.1 +0.1
FFC **Flin Flon** 59.39 41 P P 04 41 14.1 +0.1
FFC pmax pmax
comp=Z,613nm,1.9s
FFC **Flin Flon** 59.39 41 P P 04 41 14.3 +0.2
FFC pP pP 04 41 37.6 +0.3
FFC sP sP 04 41 48.9 +1.2
SIMJ **Simiganj** 59.46 295 P P 04 41 14.3 -0.6
FCC **Fort Churchill** 59.87 34 P P 04 41 16.8 -0.4
FCC **Fort Churchill** 59.87 34 PKIKP P 04 41 16.8 -0.4
FCC **Fort Churchill** 59.87 34 pmax pmax
comp=Z,62nm,1.5s
STEI **Steigen** 60.24 343 eP P 04 41 18.1 -1.5
LOF **Lofoten** 60.39 344 eP P 04 41 19.9 -0.7
FAUS **Fauske** 60.71 343 eP P 04 41 22.0 -0.8
BELG **Belogornoye** 61.91 318 i P P 04 41 30.2 -1.0
BELG pmax pmax
comp=Z,3.0nm,0.9s
MOR8 **Moi Rana** 61.93 343 eP P 04 41 28.9 -2.2
FIA1 **FINESS Array S** 63.08 335 P P 04 41 38.2 -0.6
FINES **FINESS Array B** 63.08 335 P P 04 41 37.8 -1.0
FINES **FINESS Array B** 63.08 335 P P 04 41 38.0 -0.8
comp=Z,10nm,0.4s,baz=30,slow=7.7,SNR=88
comp=Z,10nm,0.4s
SFJD **Kangerlussuaq** 63.76 10 P P 04 41 44.1 +0.9
OBN **Obninsk** 64.53 326 i P P 04 41 46.1 -2.3
OBN pmax pmax
comp=Z,12nm,1.0s
TBLU **Trondheim** 65.36 343 eP P 04 41 51.9 -1.7
DOMB **Dombas** 66.69 343 eP P 04 42 02.0 -0.3
NC303 **NORSAR Array S** 66.96 341 P P 04 42 04.0 0.0
NC303 IAmb IAmb 04 42 04.5
comp=Z,15nm,0.6s
NC204 **NORSAR Array S** 67.04 342 P P 04 42 04.2 -0.3
NB2 **NORSAR Subarra** 67.16 341 P P 04 42 04.8 -0.5
comp=Z,14nm,0.5s,baz=29,slow=6.5
NB2 **NORSAR Subarra** 67.16 341 P P 04 42 04.8 -0.5
baz=29,slow=6.5
NB2 **NORSAR Subarra** 67.16 341 P P 04 42 05.1 -0.2
NOA **NORSAR Array B** 67.16 341 P P 04 42 05.0 -0.2
comp=Z,15nm,0.6s,baz=28,slow=6.5,SNR=61
comp=Z,15nm,0.6s
NOA **NORSAR Array B** 67.16 341 eP P 04 42 05.0 -0.2
NOA pmax pmax
comp=Z,17nm,0.7s
NC602 **NORSAR Array S** 67.36 341 P P 04 42 06.0 -0.5
NC602 **NORSAR Array S** 67.36 341 eP P 04 42 05.7 -0.8
HFS **Hagfors** 67.41 340 P P 04 42 06.3 -0.5
comp=Z,33nm,0.5s,baz=53,slow=5.6,SNR=250
comp=Z,33nm,0.5s
BORG **Borgarnes** 67.47 358 P P 04 42 08.5 +1.4
BORG **Borgarnes** 67.47 358 P P 04 42 08.5 +1.4
BORG pmax pmax
comp=Z,72nm,1.7s
BORG **Borgarnes** 67.47 358 P P 04 42 08.6 +1.6
HYA **Hoyanger** 68.05 344 eP P 04 42 10.2 -0.6
SKAR **Skarslia** 68.09 343 eP P 04 42 11.1 -0.1
OSL **Oslo** 68.26 341 eP P 04 42 12.3 +0.2
SUE **Sulen** 68.42 344 eP P 04 42 13.0 -0.1
KONO **Kongsberg** 68.76 341 P P 04 42 14.6 -0.6
KONO **Kongsberg** 68.76 341 eP P 04 42 15.0 -0.2
KONO **Kongsberg** 68.76 341 P P 04 42 14.6 -0.6
KONO pmax pmax
comp=Z,72nm,1.4s
KONO **Kongsberg** 68.76 341 P P 04 42 15.4 +0.1
BER **Bergen** 68.94 344 eP P 04 42 16.4 +0.1
ODD1 **Odda** 69.13 343 eP P 04 42 17.9 +0.3
BLS5 **Blasjo** 69.61 343 eP P 04 42 20.9 +0.3
IVI **Ivigtut** 69.64 11 P P 04 42 22.1 +1.5
IVI **Ivigtut** 69.64 11 P P 04 42 22.7 +2.1
HOMB **Homborsund** 70.26 341 eP P 04 42 24.9 +0.4
KIV **Kislovodsk** 70.27 314 eP P 04 42 24.1 -0.8
KIV **Kislovodsk** 70.27 314 eP P 04 42 24.1 -0.8
KIV pmax pmax
comp=Z,9.0nm,1.1s
KBZ **Khabaz** 70.33 314 eP P 04 42 23.7 -1.5
KBZ **Khabaz** 70.33 314 i P P 04 42 23.7 -1.5
KBZ pmax pmax
comp=Z,4.0nm,0.9s
SNART **Snartemo** 70.47 342 eP P 04 42 25.9 +0.2
AKASG **Malin Array Be** 70.75 326 P P 04 42 26.8 -0.9
AKASG **Malin Array Be** 70.75 326 P P 04 42 26.4 -1.2
comp=Z,8.8nm,0.4s,baz=35,slow=6.2,SNR=30
comp=Z,8.8nm,0.4s
AKASG **Malin Array Be** 70.75 326 eP P 04 42 26.6 -1.0
AKASG pmax pmax
comp=Z,18nm,0.6s
AKBB **Malin Array Si** 70.75 326 IAmb IAmb 04 42 27.4
comp=Z,24nm,0.7s
KIEV **Kiev** 70.76 326 P P 04 42 26.9 -0.8
KIEV IAmb IAmb 04 42 27.4
comp=Z,22nm,0.7s
KIEV **Kiev** 70.76 326 P P 04 42 26.9 -0.8
KIEV pmax pmax
comp=Z,22nm,0.7s
KIEV **Kiev** 70.76 326 P P 04 42 26.7 -1.0
KIEV PcP PcP 04 42 48.1 +0.2
KIEV pP pP 04 42 50.6 -1.0
AK05 **Malin Array Si** 70.83 326 P P 04 42 26.5 -1.5
SORM **Soroca** 73.18 325 ||P P 04 42 40.0 -2.1
SORM **Soroca** 73.18 325 ||P P 04 42 40.0 -2.1
LVV **L'vov** 73.35 329 eP P 04 42 42.5 -0.7
ASAR **Alice Springs** 73.62 199 P P 04 42 45.6 +0.7
ASAR **Alice Springs** 73.62 199 P P 04 42 45.6 +0.7
OJC **Ojcow** 74.43 331 P P 04 42 49.2 -0.2
OJC IAmb IAmb 04 42 50.5
comp=Z,10nm,0.6s
OJC **Ojcow** 74.43 331 P P 04 42 49.2 -0.2
OJC pmax pmax
comp=Z,11nm,0.6s
KOLS **Kolonicke sedl** 74.71 329 eP P 04 42 51.4 +0.3
KOLS pmax pmax
comp=Z,14nm,1.1s
KOLS **Kolonicke sedl** 74.71 329 eP P 04 42 51.4 +0.3
KOLS e 04 50 45.1
BUR08 **Bucovina Ar. S** 74.77 327 P P 04 42 51.0 -0.6
BUR08 IAmb IAmb 04 42 52.3

comp=Z,12nm,0.9s
BURAR **Bucovina Array** 74.79 327 P P 04 42 51.6 0.0
BURAR **Bucovina Array** 74.79 327 ⇓P P 04 42 51.8 +0.1
BURAR **Bucovina Array** 74.79 327 ⇓P P 04 42 51.8 +0.1
TESR **Tescani** 75.17 325 ⇓P P 04 42 53.3 -0.5
EKA **Eskdalemuir Ar** 75.19 347 P P 04 42 53.4 -0.3
comp=Z,3.7nm,0.4s,baz=23,slow=5.6,SNR=16
comp=Z,3.7nm,0.4s
EKB **Eskdalemuir** 75.19 347 P P 04 42 52.9 -0.8
ESK **Eskdalemuir** 75.21 347 P P 04 42 53.4 -0.4
ESK **Eskdalemuir** 75.21 347 P P 04 42 53.4 -0.4
ESK pmax pmax
comp=Z,84nm,1.8s
OSTC **Ostas** 75.24 334 *e*P P 04 42 53.5 -0.6
OSTC **Ostas** 75.24 334 *e*P P 04 42 53.5 -0.6
CHVC **Chvalec** 75.26 334 *e*P P 04 42 54.3 0.0
CHVC **Chvalec** 75.26 334 *e*P P 04 42 54.3 0.0
DPC **Dobruska-Polom** 75.39 333 *e*P P 04 42 55.4 +0.4
DPC **Dobruska-Polom** 75.39 333 *e*P P 04 42 55.4 +0.4
LANS **Liptovska Anna** 75.46 331 *e*P P 04 42 56.8 +1.3
LANS pmax pmax
comp=Z,8.0nm,0.9s
LANS **Liptovska Anna** 75.46 331 *e*P P 04 42 56.8 +1.3
CLL **Collm** 75.49 336 P P 04 42 54.8 -0.7
CLL lAmb lAmb 04 42 55.8
comp=Z,10nm,0.5s
CLL **Collm** 75.49 336 ⇑ *i*P P 04 42 55.1 -0.4
comp=Z,10.0nm,0.6s
CLL *ex* x 04 43 42.0
CLL **Collm** 75.49 336 P P 04 42 54.8 -0.7
CLL pmax pmax
comp=Z,10.0nm,0.5s
KRLC **Kraliky** 75.50 333 *e*P P 04 42 54.8 -0.8
KRLC **Kraliky** 75.50 333 *e*P P 04 42 54.8 -0.8
MORC **Moravsky Berou** 75.53 332 P P 04 42 55.5 -0.4
MORC **Moravsky Berou** 75.53 332 *e*P P 04 42 55.5 -0.3
MORC **Moravsky Berou** 75.53 332 ⇑P P 04 42 55.6 -0.2
MORC **Moravsky Berou** 75.53 332 P P 04 42 55.4 -0.4
MORC pmax pmax
comp=Z,10.0nm,0.9s
BRG **Berggiesshubel** 75.62 335 P P 04 42 56.1 -0.1
BRG Amp 04 42 56.7
comp=Z,3.0nm,0.8s
CFR **Carcaliu** 75.70 324 ⇓P P 04 42 56.7 -0.1
CFR **Carcaliu** 75.70 324 ⇓P P 04 42 56.7 -0.1
PLOR **Plostina** 75.72 325 ⇓P P 04 42 56.8 -0.2
PLOR **Plostina** 75.72 325 ⇓P P 04 42 56.8 -0.2
TURR **Turia** 75.80 325 ⇑P P 04 42 57.4 0.0
OZUR 75.85 326 ⇑P P 04 42 58.0 +0.3
TPGR **Topolog** 75.86 323 ⇓P P 04 42 57.6 -0.2
RICC **Richard** 75.87 335 *e*P P 04 42 57.9 +0.2
COVR **Voineasa-Covas** 75.90 325 ⇑P P 04 42 58.4 +0.4
CJR **Cluj-Napoca** 76.14 327 ⇑P P 04 42 59.7 +0.4
CJR **Cluj-Napoca** 76.14 327 ⇑P P 04 42 59.7 +0.4
VRAC **Vranov** 76.23 333 *e*P P 04 42 59.9 +0.1
VRAC **Vranov** 76.23 333 ⇓P P 04 43 00.3 +0.5
VRAC **Vranov** 76.23 333 ⇓P P 04 43 00.3 +0.5
GOPC **GO Pecny, Ondr** 76.23 334 *e*P P 04 43 00.1 +0.3
GOPC **GO Pecny, Ondr** 76.23 334 *e*P P 04 43 00.1 +0.3
PRU **Pruhonice** 76.24 334 *e*P P 04 42 59.7 -0.1
PRU **Pruhonice** 76.24 334 *e*P P 04 42 59.7 -0.1
VYHS **Vyhne** 76.24 331 *e*P P 04 43 00.1 +0.2
VYHS pmax pmax
comp=Z,6.0nm,0.8s
VYHS **Vyhne** 76.24 331 *e*P P 04 43 00.1 +0.2
MLR **Muntele Rosu** 76.30 325 P P 04 43 00.7 +0.3
MLR lAmb lAmb 04 43 02.3
comp=Z,10nm,0.5s
MLR **Muntele Rosu** 76.30 325 ⇑P P 04 43 00.7 +0.3
MLR **Muntele Rosu** 76.30 325 P P 04 43 00.7 +0.3
MLR pmax pmax
comp=Z,10.0nm,0.5s
DRGR 76.39 328 ⇑P P 04 42 58.5 -2.3
DRGR 76.39 328 ⇑P P 04 42 58.5 -2.3
KRUC **Moravsky** 76.51 333 *e*P P 04 43 01.5 +0.2
LDAQ **Lac Daran** 76.63 29 P P 04 43 01.2 -0.9
LDAQ lAmb lAmb 04 44 42.5
comp=Z,24nm,1.5s
VOIR 76.68 326 ⇑P P 04 43 02.7 +0.2
VOIR 76.68 326 ⇑P P 04 43 02.7 +0.2
ZVC **Zvikov** 76.83 334 *e*P P 04 43 03.4 +0.2
ARR **Arges** 76.90 326 ⇓P P 04 43 04.6 +0.9
SRO **Srobarova** 77.00 331 *e*P P 04 43 05.0 +0.9
SRO pmax pmax
comp=Z,11nm,0.9s
SRO **Srobarova** 77.00 331 *e*P P 04 43 05.0 +0.9
SRO *e* 04 58 39.4
KHC **Kasperske Hory** 77.29 335 P P 04 43 06.0 +0.3
KHC **Kasperske Hory** 77.29 335 *e*P P 04 43 06.2 +0.4
KHC **Kasperske Hory** 77.29 335 P P 04 43 06.0 +0.3
KHC pmax pmax
comp=Z,8.0nm,0.7s
LMQ **La Malbaie** 77.30 29 P P 04 43 04.9 -0.9
LMQ lAmb lAmb 04 44 58.3
comp=Z,16nm,1.2s
CKRC **Cesky Krumlov** 77.35 334 *e*P P 04 43 06.1 0.0
CKRC **Cesky Krumlov** 77.35 334 *e*P P 04 43 03.4 -2.7
GRA1 **Grafenberg Arr** 77.44 336 P P 04 43 06.3 -0.2
GRA1 lAmb lAmb 04 43 08.5
comp=Z,15nm,0.7s
GRF **Grafenberg Arr** 77.44 336 P P 04 43 06.3 -0.2
GRF pmax pmax
comp=Z,15nm,0.7s
GRFO **Grafenberg** 77.44 336 P P 04 43 06.6 +0.1
GRFO lAmb lAmb 04 43 08.4
comp=Z,14nm,0.7s
GRFO **Grafenberg** 77.44 336 P P 04 43 06.6 +0.1
GRFO pmax pmax
comp=Z,14nm,0.7s
GEC2 **GERESS Array S** 77.51 334 P P 04 43 06.9 -0.2
GERES **GERESS Array B** 77.51 334 P P 04 43 06.5 -0.6
GERES **GERESS Array B** 77.51 334 P P 04 43 06.8 -0.2
comp=Z,3.5nm,0.7s,baz=148,slow=7.8,SNR=15
comp=Z,3.5nm,0.7s
GERES **GERESS Array B** 77.51 334 P P 04 43 06.5 -0.6
GZR **Gura Zlata** 77.56 327 ⇓P P 04 43 06.5 -0.9
GZR **Gura Zlata** 77.56 327 ⇓P P 04 43 06.5 -0.9
CONA **Conrad Observa** 77.68 333 *e*P P 04 43 08.4 +0.4
comp=Z,3.5nm,0.5s,SNR=9.8
RONA **Rosalia, Austr** 77.75 332 *i*P P 04 43 09.0 +0.6
comp=Z,1.6nm,0.5s,SNR=5.4
BZS **Buzias** 77.79 328 ⇑P P 04 43 07.1 -1.5
BZS **Buzias** 77.79 328 ⇑P P 04 43 07.1 -1.5
BR131 **Keskin Array S** 77.80 317 P P 04 43 08.7 -0.2
BR131 lAmb lAmb 04 43 10.1
comp=Z,18nm,1.4s
BR131 **Keskin Array S** 77.80 317 P P 04 43 08.7 -0.2
BR131 pmax pmax
comp=Z,18nm,1.4s
BRTR **Keskin Array B** 77.80 317 P P 04 43 08.4 -0.5
BRTR **Keskin Array B** 77.80 317 P P 04 43 09.1 +0.1
comp=Z,4.4nm,0.9s,baz=19,slow=2.3,SNR=13
comp=Z,4.4nm,0.9s
D62A **Allapoint, All** 78.12 28 P P 04 43 09.3 -1.0
D62A lAmb lAmb 04 43 33.6
comp=Z,40nm,1.7s
HERR **Herculane** 78.13 327 ⇓P P 04 43 08.7 -1.8
KIRS **Kirsehir-Merke** 78.15 317 ⇓P P 04 43 10.2 -0.6
MOA **Molln** 78.23 334 *e*P P 04 43 11.0 0.0
comp=Z,3.7nm,0.8s,SNR=6.8
MORH **Mrgy, Hungar** 78.30 330 ⇓P P 04 43 10.2 -1.1
ARSA **Arzberg** 78.39 332 *i*P P 04 43 12.2 +0.3
comp=Z,1.8nm,0.4s
BATG **Bathurst New B** 78.87 26 P P 04 43 14.0 -0.5
BATG lAmb lAmb 04 43 56.6
comp=Z,53nm,1.7s
LESA **Schwarzleotal** 79.09 334 *i*P P 04 43 16.0 +0.3
comp=Z,3.8nm,0.6s
KBA **Koelnbreinsper** 79.20 334 *e*P P 04 43 17.1 +0.5
comp=Z,15nm,0.7s,SNR=16
OBKA **Obir** 79.35 333 *e*P P 04 43 17.7 +0.5
comp=Z,3.0nm,0.5s,SNR=4.0
BFO **Black Forest** 79.45 337 P P 04 43 18.4 +0.7
BFO **Black Forest** 79.45 337 P P 04 43 18.4 +0.7
BFO pmax pmax
comp=Z,7.0nm,0.8s
BOVS **Bovan** 79.47 327 ⇓P P 04 43 14.1 -3.7
WATA **Walderalm** 79.48 335 *i*P P 04 43 18.2 +0.1
comp=Z,7.6nm,0.5s,SNR=13
MYKA **Terra Mystica** 79.52 333 *e*P P 04 43 18.2 +0.1
comp=Z,2.3nm,0.4s
WTTA **Wattenberg** 79.53 335 *e*P P 04 43 18.6 +0.3
comp=Z,20nm,0.7s,SNR=26
RETA **Reutte** 79.57 336 *e*P P 04 43 18.4 0.0
comp=Z,1.9nm,0.5s,SNR=4.9
MOTA **Moosalm** 79.61 335 *i*P P 04 43 18.7 0.0
comp=Z,4.0nm,0.6s
SQTA **Sankt Quirin** 79.69 335 *e*P P 04 43 19.4 +0.3
comp=Z,9.4nm,0.8s,SNR=9.5
PRED **Cave del Predi** 79.71 333 P P 04 43 18.1 -1.0
PRED lAmb lAmb 04 43 20.0
comp=Z,9.0nm,0.6s
ABTA **Abfaltersbach** 79.75 334 *e*P P 04 43 18.7 -0.7
comp=Z,2.3nm,0.5s
DAVA **Damuels** 80.00 336 *i*PcP P 04 43 21.4 +0.6
comp=Z,10nm,0.8s
FETA **Feichten** 80.01 335 *e*P P 04 43 20.7 -0.2
comp=Z,2.8nm,0.6s,SNR=6.1
SABO **M.te Sabotino** 80.12 333 P P 04 43 20.9 -0.4
SABO lAmb lAmb 04 44 47.0
comp=Z,36nm,1.5s
STAL **STALIGIAL** 80.13 334 P P 04 43 19.6 -1.8
FUORN **Ofenpass-Fuorn** 80.50 336 P P 04 43 24.1 +0.4
CTI **Castel Tesino** 80.63 334 P P 04 43 22.8 -1.4
CTI lAmb lAmb 04 43 24.5
comp=Z,22nm,1.4s
CTI **Castel Tesino** 80.63 334 P P 04 43 22.8 -1.4
CTI pmax pmax
comp=Z,22nm,1.4s
TEOL **Teolo** 81.25 334 P P 04 43 27.9 +0.6
TEOL lAmb lAmb 04 43 32.0
comp=Z,23nm,0.9s
PDG **Podgorica** 81.40 328 P P 04 43 27.7 -0.4
PDG lAmb lAmb 04 43 28.9
comp=Z,15nm,0.5s
PDG **Podgorica** 81.40 328 ⇑P P 04 43 26.9 -1.3
PUK **Puka** 81.51 327 P P 04 43 29.8 +0.9
PUK lAmb lAmb 04 44 36.3
comp=Z,43nm,1.6s
CSS **Mathiatis** 81.79 314 P P 04 43 30.7 +0.3
CSS lAmb lAmb 04 43 33.2
comp=Z,69nm,2.0s
FNA **Florina** 82.05 326 P P 04 43 30.7 -1.0
FNA **Florina** 82.05 326 P P 04 43 30.7 -1.0
FNA pmax pmax
comp=Z,6.0nm,0.8s
MMAI **Mount Meron Ar** 82.34 312 P P 04 43 33.7 +0.3
comp=Z,3.1nm,0.5s,baz=45,slow=7.2,SNR=4.6
comp=Z,3.1nm,0.5s
KBN **Korca** 82.41 326 P P 04 43 33.0 -0.6
KBN lAmb lAmb 04 43 34.5
comp=Z,8.8nm,0.6s
KBN **Korca** 82.41 326 P P 04 43 33.0 -0.6
KBN pmax pmax
comp=Z,9.0nm,0.6s
MSSA **Maissana** 82.83 335 P P 04 43 36.9 +1.2
MSSA lAmb lAmb 04 43 38.2
comp=Z,11nm,0.9s
FDMO **Fiordimonte** 82.93 332 P P 04 43 36.1 0.0
FDMO lAmb lAmb 04 43 38.0
comp=Z,13nm,0.6s
NRCA **Norcia** 83.11 332 lAmb lAmb 04 43 39.2
comp=Z,19nm,0.8s
SGRT **San Giovanni R** 83.22 330 P P 04 43 37.2 -0.6
CAMP **Campotosto** 83.28 332 lAmb lAmb 04 43 40.3
comp=Z,12nm,0.7s
SCTE **Santa Cesarea** 83.75 327 P P 04 43 40.0 -0.5
ESDC **Sonseca Array** 90.46 343 P P 04 44 10.5 -2.4
comp=Z,1.4nm,0.7s,baz=355,slow=4.0,SNR=3.7
comp=Z,1.4nm,0.7s
KEST **Kesra** 90.77 332 P P 04 44 13.4 -1.1
comp=Z,6.9nm,0.7s,baz=3.5,slow=2.6,SNR=12
comp=Z,6.9nm,0.7s
MOPA **Mopani** 128.69 277 *i*P Pdif 04 47 06.0 +2.0
MOPA **Mopani** 128.69 277 *i*P Pdif 04 47 10.4 +6.4
MUSN **Musina, Limpop** 128.86 280 *i*P Pdif 04 47 08.5 +3.6
H03N2 **Juan Fernandez** 138.21 89 T T 07 24 21.1
baz=309,slow=77,SNR=27
H03N1 **Juan Fernandez** 138.23 89 T T 07 24 26.5
baz=309,slow=77,SNR=72
H03N3 **Juan Fernandez** 138.23 89 T T 07 24 25.0
baz=309,slow=77,SNR=22
TROLL **Troll, Antarti** 152.61 199 ⇑P PKiKP 04 51 07.7 +1.4
comp=Z,428nm,1.3s
SNAA **Sanae** 153.96 197 ⇑P PKPbc 04 51 08.8 -0.2
comp=Z,269nm,1.0s
VNA2 **Neumayer--Watz** 155.41 195 ⇑P PKPdf 04 51 11.7 +8.9
comp=Z,1.9nm,0.6s,baz=48,slow=4.9
VNA3 **Neumayer Olymp** 155.49 193 ⇑P PKPdf 04 51 09.1 +6.1
comp=Z,4.1nm,0.9s
VNA1 **Neumayer--Stat** 155.79 194 ⇑P PKPab 04 51 18.1 -12
comp=Z,8.0nm,1.0s

*LDG **19** 04:42:26.6±0.2, 42°.52N×5°.28E, h2km, Ml3.1/29, Error ellipse: s-maj=4.1km s-min=2.2km az=141.0*
*MDD **19** 04:42:27.1±0.6, 42°.38N×5°.41E, h16km±4km, mb_Lg3.2/37, Error ellipse: s-maj=4.0km s-min=2.5km az=150.0*
*STR **19** 04:42:29.9±0.8, 43°.N±6°×±°, h7km, MLv2.9/31, Error ellipse: s-maj=0.0km s-min=0.0km az=141.9, preliminary*

**ISC 19 04:42:26.4±1.3, 42°.58N±0°.04×5°.21E±0°.03, h15km±10km, n87, σ1°.78/122, Western Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LEPF | **PUYLOUBIER** | 1.01 | 21 | Pg | **Pg** | 04 42 46.6 | +0.7 |
| LEPF | | | | Sg | **Sb** | 04 43 00.4 | +1.6 |
| ARTF | **Artigues** | 1.10 | 23 | Pg | **Pg** | 04 42 48.4 | +0.7 |
| ARTF | | | | Sg | **Sb** | 04 43 02.9 | +1.6 |
| LMR | **La Mourre** | 1.22 | 51 | *e*Pn | **Pg** | 04 42 48.6 | -1.3 |
| LMR | | | | *e*Sn | **Sg** | 04 43 03.5 | -2.2 |
| | 197nm,0.2s | | | | | | |
| BSTF | **la Bastide-des** | 1.34 | 14 | Pg | **Pb** | 04 42 51.4 | +0.2 |
| BSTF | | | | Sg | **Sg** | 04 43 07.9 | -1.7 |
| SAUF | **chteau de Sau** | 1.36 | 357 | Pn | **Pn** | 04 42 52.0 | +1.1 |
| RUSF | **Rustrel** | 1.38 | 8 | Pn | **Pn** | 04 42 53.7 | +2.6 |
| SMRF | **Simiane la Rot** | 1.42 | 11 | *e*Pn | **Pn** | 04 42 53.1 | +1.3 |
| SMRF | | | | *e*Sn | **Sb** | 04 43 11.7 | +1.1 |
| | 52nm,0.3s | | | | | | |
| TRIGF | **Trigance** | 1.46 | 37 | Pn | **Pn** | 04 42 53.8 | +1.4 |
| TRIGF | | | | Sn | **Sb** | 04 43 12.9 | +1.1 |
| MLYF | **Mely** | 1.47 | 16 | P | **Pn** | 04 42 55.2 | +2.8 |
| BLAF | **les Blancs** | 1.50 | 24 | Pn | **Pn** | 04 42 55.2 | +2.4 |
| BLAF | | | | Sg | **Sg** | 04 43 15.0 | +0.2 |
| CLAF | **Gruissan** | 1.65 | 290 | P | **Pn** | 04 42 55.0 | +0.2 |
| SALSA | **La sagne** | 1.69 | 39 | P | **Pn** | 04 42 56.0 | +0.5 |
| CALF | **Calern** | 1.72 | 46 | P | **Pn** | 04 42 55.9 | 0.0 |
| EJON | **La Jonquera** | 1.72 | 266 | Pn | **Pn** | 04 42 55.7 | -0.2 |
| EJON | | | | Sn | **Sn** | 04 43 17.9 | +0.3 |
| EJON | | | | *i* Vmb_Lg | | 04 43 18.2 | |
| SJAF | **Saint Jean de** | 1.72 | 268 | P | **Pn** | 04 42 55.7 | -0.2 |
| ENAUX | **Enaux** | 1.91 | 36 | Pn | **Pn** | 04 43 00.9 | +2.3 |
| MVIF | **Mont Vial** | 1.94 | 47 | Pn | **Pn** | 04 43 00.8 | +1.8 |
| FILF | **Fillols** | 1.96 | 270 | P | **Pn** | 04 43 00.6 | +1.4 |
| SBF | **Sospel** | 2.07 | 51 | *e*Pn | **Pn** | 04 43 00.1 | -0.6 |
| SBF | | | | *e*Sn | **Sn** | 04 43 24.2 | -2.1 |
| | 69nm,0.2s | | | | | | |
| SPIF | **crte de Spivo** | 2.09 | 44 | P | **Pn** | 04 43 01.0 | -0.1 |
| TURF | **col de Turini** | 2.12 | 48 | P | **Pn** | 04 43 01.5 | 0.0 |
| CARF | **Carcanieres** | 2.29 | 274 | P | **Pn** | 04 43 03.6 | -0.2 |
| ENR | **Entracque** | 2.30 | 44 | Pn | **Pn** | 04 43 04.9 | +0.9 |
| VIVF | **Saint-Julien-l** | 2.31 | 351 | *e*Pn | **Pn** | 04 43 04.9 | +0.9 |
| VIVF | | | | *e*Sn | **Sn** | 04 43 32.7 | +0.6 |
| | 17nm,0.2s | | | | | | |
| MTLF | **Montolieu** | 2.32 | 290 | *e*Pn | **Pn** | 04 43 05.0 | +0.9 |
| MTLF | | | | *e*Sn | **Sn** | 04 43 32.1 | -0.3 |
| | 121nm,0.3s | | | | | | |
| VALC | **Valcebollere** | 2.35 | 266 | P | **Pn** | 04 43 05.2 | +0.5 |
| VALC | | | | S | **Sn** | 04 43 31.6 | -1.7 |
| ORIF | **Oris-en-Rattie** | 2.39 | 12 | *e*Pn | **Pn** | 04 43 06.8 | +1.7 |
| ORIF | | | | *e*Sn | **Sn** | 04 43 34.7 | +0.5 |
| | 60nm,1.0s | | | | | | |
| MBDF | **Montbardon** | 2.43 | 27 | *e*Pn | **Pn** | 04 43 06.5 | +0.8 |
| MBDF | | | | *e*Sn | **Sn** | 04 43 34.8 | -0.4 |
| | 27nm,0.5s | | | | | | |
| BHB | **Bricherasio** | 2.71 | 33 | Pn | **Pn** | 04 43 11.1 | +1.6 |
| SSB | **Saint Sauveur** | 2.74 | 350 | Pn | **Pn** | 04 43 11.0 | +1.1 |
| SSB | | | | S | **Sn** | 04 43 42.2 | -0.6 |
| PGF | **Pioggiola** | 2.80 | 89 | *e*Pn | Pn | 04 43 08.3 | -2.5 |
| PGF | | | | *e*Sn | Sn | 04 43 36.7 | -7.7 |
| | 17nm,0.2s | | | | | | |
| EMIR | **Miracle** | 2.81 | 258 | Pn | **Pn** | 04 43 12.1 | +1.1 |
| EMIR | | | | Sn | **Sn** | 04 43 44.8 | +0.1 |
| EMIR | | | | *i* Vmb_Lg | | 04 43 52.5 | |
| RSP | **Reno Superiore** | 2.97 | 29 | Pn | **Pn** | 04 43 15.3 | +2.2 |
| SALF | **Salau** | 2.97 | 275 | P | **Pn** | 04 43 14.6 | +1.5 |
| LBL | **Lubilhac** | 3.01 | 333 | Pn | **Pn** | 04 43 15.0 | +1.4 |
| LBL | | | | S | **Sn** | 04 43 49.2 | -0.2 |
OGSM **Saint Maurice** 3.05 6 Pn Pn 04 43 16.1 +2.0
OGSM S Sn 04 43 50.3 0.0
SMPL **Sampolo** 3.06 98 P Pn 04 43 12.5 -1.8
SMPL S Sn 04 43 43.9 -6.8
PCP **Piancastagn** 3.12 50 Pn Pn 04 43 15.3 +0.2
PCP Sn Sn 04 43 51.2 -0.9
LPG **La Plagne** 3.12 20 *e*P Pn 04 43 19.5 +4.1
LPG *e*Sn Sn 04 43 51.1 -1.4
9.6nm,0.5s
COLF **Collangettes** 3.13 340 Pn Pn 04 43 16.5 +1.1
LPL **La Plagne** 3.13 20 *e*P Pn 04 43 19.3 +3.8
LPL *e*Sn Sn 04 43 51.2 -1.6
11nm,0.5s
CAF **Calviac** 3.27 317 *e*Pn Pn 04 43 18.5 +1.3
CAF *e*Sn Sn 04 43 56.3 +0.5
5.0nm,0.2s
EPOB **Poblet** 3.31 250 Pn Pn 04 43 18.7 +0.9
EPOB Sn Sn 04 43 55.8 -1.1
EPOB *i* Vmb_Lg 04 43 58.6
ETOS **Mallorca** 3.34 214 Pn Pn 04 43 17.4 -0.7
ETOS Sn Sn 04 43 51.7 -5.9
ETOS *i* Vmb_Lg 04 43 53.7
FRNF **Fournols** 3.39 327 Pn Pn 04 43 20.7 +1.8
FRNF S Sn 04 43 59.3 +0.5
MONQ **Montcuq** 3.42 303 Pn Pn 04 43 20.6 +1.4
CRAS **Crastes** 3.47 291 Pn Pn 04 43 21.4 +1.5
EPF **Esparros** 3.61 279 *e*Pn Pn 04 43 22.5 +0.6
EPF *e*Sn Sn 04 44 01.9 -2.3
9.2nm,0.2s
ECHI **Chisagues Biel** 3.70 273 Pn Pn 04 43 26.6 +3.4
ECHI Sn Sn 04 44 09.2 +2.6
ECHI *i* Vmb_Lg 04 44 11.5
ECHI **Chisagues Biel** 3.70 273 Pn Pn 04 43 26.2 +3.0
RJF **Les Rejaudoux** 3.81 317 *e*Pn Pn 04 43 25.3 +0.7
RJF *e*Sn Sn 04 44 08.6 -0.5
12nm,0.4s
ERTA **Horta de San J** 3.99 248 Pn Pn 04 43 27.5 +0.5
ERTA Sn Sn 04 44 11.9 -1.7
ERTA *i* Vmb_Lg 04 44 15.1
SENIN **Lac Senin/Sane** 4.07 21 Pn Pn 04 43 30.3 +2.0
SENIN **Lac Senin/Sane** 4.07 21 P Pn 04 43 29.9 +1.6
CABF **La Chapelle** 4.08 9 *e*Pn Pn 04 43 29.0 +0.7
CABF *e*Sn Sn 04 44 13.0 -2.9
1.0nm,0.3s
SMF **Signal de Mont** 4.18 347 *e*Pn Pn 04 43 31.3 +1.6
SMF *e*Sn Sn 04 44 16.6 -1.6
2.1nm,0.2s
RIVEL **MONT RIVEL** 4.21 7 Pn Pn 04 43 31.8 +1.7
CANF **Canfranc** 4.23 274 Pn Pn 04 43 33.3 +2.9
ETSF **Etsaut** 4.26 276 *e*Pn Pn 04 43 29.6 -1.2
ETSF *e*Sn Sn 04 44 17.2 -3.1
25nm,0.3s
TCF **Toulx Ste Croi** 4.28 331 *e*Pn Pn 04 43 33.0 +1.9
TCF *e*Sn Sn 04 44 19.6 -1.2
4.8nm,0.4s
ESAC **San Caprasio** 4.31 260 Pn Pn 04 43 28.7 -2.8
ESAC Sn Sn 04 44 17.9 -3.6
ESAC *i* Vmb_Lg 04 44 40.6
BGF **Bois d'Agland** 4.32 338 *e*Pn Pn 04 43 33.9 +2.3
BGF *e*Sn Sn 04 44 20.7 -1.0
8.7nm,0.3s
MUGIO **Muggio** 4.33 38 Pn Pn 04 43 28.9 -2.8
ECOL **Islas Columbre** 4.34 233 Pn Pn 04 43 30.4 -1.3
ECOL Sn Sn 04 44 18.1 -3.9
AVF **Avril sur Loir** 4.41 343 *e*Pn Pn 04 43 32.6 -0.2
AVF *e*Sn Sn 04 44 21.9 -2.0
1.5nm,0.3s
EIBI **Ibiza** 4.60 221 Pn Pn 04 43 35.4 -0.1
EIBI Sn Sn 04 44 23.7 -5.0
SJPF **Ste Jean** 4.76 279 *e*Sn Sn 04 44 28.7 -3.8
7.7nm,0.3s
CHMF **Charmoille** 4.78 12 Pn Pn 04 43 39.1 +1.2
EMOS **Mosqueruela** 4.81 244 Pn Pn 04 43 39.4 +1.0
EMOS Sn Sn 04 44 33.4 -0.5
EMOS *i* Vmb_Lg 04 44 33.9
EORO **Oroz-Betelu** 4.81 276 Pn Pn 04 43 40.7 +2.4
EORO Sn Sn 04 44 36.5 +2.6
EORO *i* Vmb_Lg 04 44 41.4
HINF **Hinteralfeld** 5.36 12 *e*Pn Pn 04 43 45.6 -0.3
CHIF **Chize** 5.37 313 Pn Pn 04 43 48.0 +2.1
HAU **Haudompre** 5.49 8 *e*Pn Pn 04 43 48.0 +0.4
HAU *e*Sn Sn 04 44 47.3 -3.1
0.8nm,0.2s
ECHE **Chera** 5.54 239 Pn Pn 04 43 49.6 +1.2
ECHE *i* Vmb_Lg 04 45 18.3
MFF **Saint Martin d** 5.55 318 *e*Pn Pn 04 43 48.8 +0.4
MFF *e*Sn Sn 04 44 49.0 -2.9
1.5nm,0.3s
SLE **Schleitheim** 5.68 23 Pn Pn 04 43 50.9 +0.6
SLE Sn Sn 04 44 52.6 -2.6
EVIV **Cofrentes, Val** 5.82 237 Pn Pn 04 43 53.6 +1.3
EVIV *i* Vmb_Lg 04 48 08.9
CDF **Champ du Feu** 6.01 13 *e*Pn Pn 04 43 54.8 -0.1
LDF **La Druitiere** 7.08 330 *e*Pn Pn 04 44 10.0 +0.6
GRR **Gorron** 7.20 326 *e*Pn Pn 04 44 11.7 +0.6
GRR *e*Sn Sn 04 45 28.7 -3.9
0.5nm,0.2s
FLN **La Foliniere** 7.35 329 *e*Pn Pn 04 44 14.4 +1.2
BAIF **Baives** 7.51 355 *e*Pn Pn 04 44 16.4 +1.0
GIVF **Givet** 7.53 358 *e*Pn Pn 04 44 15.8 +0.2
EARI **Arriondas** 7.68 279 Pn Pn 04 44 18.7 +1.0
EARI Sn Sn 04 45 39.8 -4.6
EARI *i* Vmb_Lg 04 50 10.2
SGMF **Saint Gilles** 7.87 319 *e*Pn Pn 04 44 20.9 +0.6
SGMF *e*Sn Sn 04 45 44.4 -4.7
0.6nm,0.3s
QUIF **Quistinic** 7.96 315 *e*Pn Pn 04 44 21.9 +0.4
QUIF *e*Sn Sn 04 45 46.6 -4.6
1.7nm,0.3s
ROSF **Rostrenen** 8.28 317 *e*Pn Pn 04 44 26.7 +0.7
ROSF *e*Sn Sn 04 45 55.0 -4.2
0.2nm,0.2s

**IDC 19 04:42:47.4±56.0, 16°.41S×172°.43W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=1079.0km s-min=213.7km az=80.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| STKA | **Stephens Creek** | 44.36 | 241 | P | P | 04 51 00.3 | +0.6 |
| | 5.1nm,0.9s,baz=90,slow=8.1,SNR=2.7 | | | | | | |
| | 5.1nm,0.9s | | | | | | |
| WRA | **Warramunga Arr** | 50.53 | 257 | P | P | 04 51 47.5 | -0.5 |
| | 0.5nm,0.6s,baz=97,slow=7.0,SNR=1.4 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | 50.70 | 253 | P | P | 04 51 48.9 | -0.3 |
| | 3.9nm,0.5s,baz=91,slow=8.1,SNR=15 | | | | | | |
| | 3.9nm,0.5s | | | | | | |

**IDC 19 04:45:09.9±26.0, 15°.54S×173°.48W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=493.7km s-min=164.8km az=72.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CTA | **Charters Tower** | 38.54 | 257 | P | P | 04 52 34.2 | -0.4 |
| | 0.5nm,1.0s,baz=99,slow=13,SNR=2.3 | | | | | | |
| | 0.5nm,1.0s | | | | | | |
| STKA | **Stephens Creek** | 43.91 | 240 | P | P | 04 53 18.6 | 0.0 |
| | 3.8nm,0.6s,baz=90,slow=7.6,SNR=4.7 | | | | | | |
| | 3.8nm,0.6s | | | | | | |
| WRA | **Warramunga Arr** | 49.74 | 257 | P | P | 04 54 04.3 | -0.2 |
| | 2.5nm,0.5s,baz=93,slow=6.9,SNR=29 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | 50.00 | 252 | P | P | 04 54 06.6 | +0.1 |
| | 29nm,0.5s,baz=89,slow=8.3,SNR=155 | | | | | | |

*THE **19** 04:45:21.0, 36°.54N×26°.57E, h20km±4km, ML2.3/3, Error ellipse: s-maj=5.8km s-min=0.9km az=171.0*
*ISK **19** 04:45:21.6, 36°.85N×26°.64E, h8km, ML2.5/10*
*AFAD **19** 04:45:23.3±0.0, 37°.00N×27°.37E, h81km±2km, ML2.5*

**ISC 19 04:45:22.0±1.1, 36°.80N±0°.04×26°.66E±0°.03, h24km±12km, n21, σ0°.80/34, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NISR | **Nisiros** | 0.42 | 116 | P | **Pb** | 04 45 30.3 | -0.5 |
| NISR | | | | S | **Sb** | 04 45 37.2 | +0.4 |
| | 690nm,0.3s | | | | | | |
| BODT | **Bodrum** | 0.58 | 63 | Pg | **Pb** | 04 45 33.2 | -0.4 |
| BODT | | | | Sg | **Sb** | 04 45 41.8 | +0.3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BODT** | **Bodrum** | **0.58** | **63** | P | **Pn** | **04 45 35.1** | **+0.3** |
| **YKAV** | **Yalikavak-Bodr** | **0.59** | **57** | Pg | **Pb** | **04 45 33.1** | **-0.6** |
| YKAV | | | | Sg | **Sb** | **04 45 41.9** | **+0.2** |
| **YAZI** | **Mula-Dat§a-** | **0.65** | **100** | P | **Pn** | **04 45 35.2** | **-0.4** |
| YAZI | | | | S | **Sb** | **04 45 43.3** | **0.0** |
| **BDRM** | **Kayabasi** | **0.68** | **67** | P | **Pb** | **04 45 34.9** | **-0.3** |
| BDRM | | | | S | **Sb** | **04 45 44.4** | **+0.1** |
| **DAT** | **Datca** | **0.74** | **95** | Pg | **Pn** | **04 45 36.8** | **-0.2** |
| DAT | | | | Sg | **Sn** | **04 45 47.9** | **+0.3** |
| **DAT** | **Datca** | **0.74** | **95** | P | **Pn** | **04 45 36.7** | **-0.4** |
| DAT | | | | S | **Sn** | **04 45 46.8** | **-0.8** |
| **DAT** | **Datca** | **0.74** | **95** | P | **Pn** | **04 45 36.6** | **-0.4** |
| DAT | | | | S | **Sn** | **04 45 47.7** | **+0.1** |
| **DDIM** | **Aydin, Didim** | **0.80** | **35** | P | **Pn** | **04 45 37.1** | **-0.7** |
| DDIM | | | | S | **Sn** | **04 45 48.5** | **-0.5** |
| DDIM | | | | *i* AML | AML | 04 45 53.0 | |
| | comp=N,193nm,0.6s | | | | | | |
| DDIM | | | | *i* AML | AML | 04 45 55.0 | |
| | comp=E,161nm,0.8s | | | | | | |
| **APE** | **Apeiranthos** | **0.95** | **287** | Pg | **Pb** | **04 45 39.5** | **-0.3** |
| APE | | | | Sg | **Sn** | **04 45 52.7** | **+0.1** |
| **APE** | **Apeiranthos** | **0.95** | **287** | P | **Pn** | **04 45 38.8** | **-1.0** |
| APE | | | | S | **Sn** | **04 45 51.9** | **-0.7** |
| | 115nm,0.2s | | | | | | |
| **GCAM** | **G?zelcaml?** | **1.01** | **27** | Pg | **Pb** | **04 45 40.9** | **+0.1** |
| **GCAM** | **G?zelcaml?** | **1.01** | **27** | P | **Pb** | **04 45 40.3** | **-0.4** |
| GCAM | | | | S | **Sn** | **04 45 55.2** | **+1.2** |
| GCAM | | | | *i* AML | AML | 04 45 58.0 | |
| | comp=N,106nm,0.5s | | | | | | |
| **MLSB** | **Milas** | **1.02** | **61** | Pg | **Pb** | **04 45 40.9** | **-0.1** |
| **SANT** | **Santorini** | **1.06** | **247** | Pg | **Pb** | **04 45 42.5** | **+0.8** |
| **TURN** | **Turunc** | **1.27** | **91** | Pn | **Pb** | **04 45 46.4** | **+1.2** |
| **GMLD** | **Gumuldur** | **1.29** | **9** | Pn | **Pb** | **04 45 46.0** | **+0.4** |
| **URLA** | **Izmir** | **1.56** | **358** | Pn | **Pb** | **04 45 50.3** | **+0.1** |
| **DALY** | **Dalyan (Mula)** | **1.60** | **89** | Pn | **Pb** | **04 45 50.9** | **+0.1** |
| **CHOS** | **Chios island** | **1.66** | **343** | P | **Pb** | **04 45 50.3** | **-1.6** |
| CHOS | | | | S | **Sb** | **04 46 15.2** | **+2.8** |
| | 48nm,0.8s | | | | | | |

*IDC **19** 04:45:29.3±15.0, 8°.03S×116°.50E, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=290.2km s-min=173.6km az=3.0*
*NEIC **19** 04:45:33.8±2.6, 8°.48S±0°.09×116°.60E±0°.05, h10km±2km, mb4.3/6, Error ellipse: s-maj=17.2km s-min=4.7km az=152.0*
*DJA **19** 04:45:34.7±0.5, 8°.5S±7°×11°.7E±°, h10km±5km, M4.1/9, MLv4.1/9*

**ISC 19 04:45:33.5±0.8, 8°.46S±0°.10×116°.57E±0°.04, h10km, n25, σ0§94/25, mb4.0/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.41** | **131** | P | **Pb** | **04 45 43.6** | **+0.7** |
| **PLAI** | **Plampang** | **1.25** | **107** | P | **Pg** | **04 45 58.1** | **+0.6** |
| **DNP** | **Denpasar** | **1.36** | **261** | P | **Pb** | **04 46 00.1** | **+1.0** |
| **SRBI** | **Singaraja** | **1.39** | **286** | P | **Pb** | **04 46 00.4** | **+0.8** |
| **IGBI** | **Denpasar** | **1.45** | **256** | P | **Pg** | **04 46 02.2** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **270** | Pn | **Pn** | **04 46 12.5** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **270** | P | **Pn** | **04 46 11.8** | **-0.9** |
| **WBSI** | **Waikabubak, Su** | **3.02** | **113** | P | **Pn** | **04 46 22.7** | **+1.2** |
| **BSSI** | **Bau Bau, Buton** | **4.52** | **60** | P | **Pn** | **04 46 42.2** | **+0.1** |
| **KAPI** | **Kappang** | **4.66** | **43** | Pn | **Pn** | **04 46 43.8** | **-0.2** |
| **UGM** | **Wanagama** | **6.01** | **275** | Pn | **Pn** | **04 47 03.5** | **+0.9** |
| **MBWA** | **Marble Bar** | **12.99** | **167** | Pn | **Pn** | **04 48 36.6** | **-1.6** |
| **FITZ** | **Fitzroy Crossi** | **13.02** | **138** | Pn | **Pn** | **04 48 38.0** | **-0.7** |
| **GIRL** | **Giralia** | **14.28** | **189** | Pn | **Pn** | **04 48 54.8** | **-1.0** |
| **MTN** | **Manton Dam** | **14.96** | **108** | | **Pn** | **04 49 02.8** | **-2.4** |
| **WB0** | **Warramunga Arr** | **20.59** | **125** | P | **P** | **04 50 13.1** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 04 50 30.3 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.64** | **125** | P | **P** | **04 50 12.5** | **-0.9** |
| **WRA** | **Warramunga Arr** | **20.64** | **125** | P | **P** | **04 50 13.9** | **+0.5** |
| | comp=Z,4.9nm,0.5s,baz=299,slow=12,SNR=26 | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.65** | **125** | P | **P** | **04 50 13.5** | **0.0** |
| **WR0** | **Warramunga Arr** | **20.81** | **125** | P | **P** | **04 50 15.7** | **+0.4** |
| WR0 | | | | IAmb | IAmb | 04 50 16.6 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **22.45** | **134** | P | **P** | **04 50 33.5** | **+0.6** |
| AS31 | | | | IAmb | IAmb | 04 50 34.4 | |
| | comp=Z,8.4nm,1.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.45** | **134** | P | **P** | **04 50 33.6** | **+0.7** |
| | comp=Z,2.1nm,0.7s,baz=310,slow=9.3,SNR=5.8 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **32.92** | **139** | P | **P** | **04 52 08.9** | **+0.7** |
| STKA | | | | IAmb | IAmb | 04 52 15.6 | |
| | comp=Z,5.4nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.92** | **139** | P | **P** | **04 52 08.9** | **+0.7** |
| | comp=Z,2.8nm,0.6s,baz=320,slow=11,SNR=3.7 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.75** | **326** | P | **P** | **04 57 19.2** | **-0.2** |

**IDC 19 04:48:44.1±45.0, 15°.77S×173°.06W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=862.9km s-min=187.4km az=79.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **44.13** | **240** | P | P | 04 56 54.6 | 0.0 |
| | 1.7nm,0.4s,baz=60,slow=8.1,SNR=4.8 | | | | | | |
| | 1.7nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.08** | **257** | P | P | 04 57 41.0 | -0.2 |
| | 0.6nm,0.5s,baz=93,slow=7.0,SNR=6.3 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **50.30** | **252** | P | P | 04 57 42.9 | -0.1 |
| | 6.7nm,0.6s,baz=88,slow=8.2,SNR=36 | | | | | | |
| | 6.7nm,0.6s | | | | | | |

**RSNC 19 04:53:41.2±0.3, 2°.S±2°.×7°.8W±°, h166km±4km, M4.0, mb4.3, mB5.5, ML3.7, Mw(mB)4.9, Ecuador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PIAT** | **Ana Tenorio** | **0.70** | **347** | P | Pn | 04 54 06.1 | +0.2 |
| PIAT | | | | S | Sn | 04 54 24.4 | -0.5 |
| **PAC1** | **Pacto, Paraso** | **2.05** | **340** | P | Pn | 04 54 18.6 | +0.5 |
| PAC1 | | | | S | Sn | 04 54 47.0 | +0.3 |
| **BONI** | **La Bonita** | **2.19** | **15** | P | Pn | 04 54 20.0 | +0.2 |
| BONI | | | | S | Sn | 04 54 49.9 | +0.2 |
| **TULM** | **Tulcn-Chalpat** | **2.40** | **7** | P | Pn | 04 54 23.1 | +0.6 |
| TULM | | | | S | Sn | 04 54 57.5 | +3.1 |
| **CMBC** | **Cumbal** | **2.62** | **6** | P | Pn | 04 54 26.9 | +1.9 |
| **GCUF** | **Volcan Galeras** | **2.98** | **15** | P | Pn | 04 54 30.3 | +0.8 |
| **MCRA** | **Macar, Loja** | **3.25** | **215** | P | Pn | 04 54 31.8 | -0.6 |
| MCRA | | | | S | Sn | 04 55 11.4 | -0.9 |
| **CRUC** | **La Cruz** | **3.42** | **20** | P | Pn | 04 54 36.2 | +1.3 |
| **TUMC** | **Tumaco** | **3.54** | **350** | P | Pn | 04 54 36.0 | 0.0 |
| TUMC | | | | S | Sn | 04 55 17.4 | -1.3 |
| **BBAC** | **Balboa, Cauca** | **3.77** | **13** | P | Pn | 04 54 39.3 | +0.1 |
| BBAC | | | | S | Sn | 04 55 29.8 | +5.3 |
| **PTLC** | **Puerto Leguiza** | **3.78** | **61** | P | Pn | 04 54 36.8 | -2.3 |
| **FLOC** | **Florencia** | **4.06** | **37** | P | Pn | 04 54 42.6 | -0.1 |
| **POPC** | **Popayan, Colom** | **4.43** | **19** | P | Pn | 04 54 47.9 | +0.2 |
| POPC | | | | S | Sn | 04 55 39.8 | +0.2 |
| **GARC** | **Garzon, Huila** | **4.64** | **34** | P | Pn | 04 54 51.0 | +0.5 |
| **GR1C** | **Gorgona, Isla** | **4.65** | **359** | P | Pn | 04 54 50.6 | +0.2 |
| GR1C | | | | S | Sn | 04 55 37.6 | -6.9 |
| **JAMC** | **Jamundi, Valle** | **5.07** | **16** | P | Pn | 04 54 54.8 | -1.2 |
| | 23nm,0.9s | | | | | | |
| **MALC** | **Bahia Malaga** | **5.71** | **8** | P | Pn | 04 55 04.0 | -0.2 |
| MALC | | | | S | Sn | 04 56 09.4 | 0.0 |
| **YOTC** | **Yotoco, Valle** | **5.89** | **17** | P | Pn | 04 55 04.5 | -2.3 |
| | 24nm,0.6s | | | | | | |
| YOTC | | | | S | Sn | 04 56 10.1 | -3.9 |
| | 24nm,0.6s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **6.24** | **27** | P | Pn | 04 55 11.7 | +0.3 |
| | 68nm,1.1s | | | | | | |
| **PRAC** | **Prado** | **6.25** | **31** | P | Pn | 04 55 12.2 | +0.8 |
| **PLMC** | **San Jos del P** | **6.79** | **16** | P | Pn | 04 55 16.7 | -1.9 |
| **CBOC** | **Ciudad Bolivar** | **7.78** | **16** | P | Pn | 04 55 28.9 | -2.9 |
| | 8.1nm,1.8s | | | | | | |
| CBOC | | | | S | Sn | 04 56 51.4 | -7.7 |
| | 8.1nm,1.8s | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **8.06** | **138** | P | Pn | 04 55 36.0 | +0.5 |
| | 35nm,1.1s | | | | | | |
| CZSB | | | | S | Sn | 04 57 05.2 | -0.4 |
| | 35nm,1.1s | | | | | | |
| **CACAO** | **El Cacao, Vera** | **9.38** | **343** | P | Pn | 04 55 53.6 | +0.7 |
| | 32nm,1.0s,4µm | | | | | | |
| **NNA** | **Nana** | **10.32** | **173** | P | Pn | 04 56 08.7 | +3.5 |
| **BCIP** | **Isla Barro Col** | **10.91** | **351** | P | P | 04 56 17.4 | -3.4 |

*IDC **19** 04:53:45.7±53.0, 17°.08S×179°.52W, h0km, mb4.5/3, mbtmp4.5/3, Error ellipse: s-maj=966.8km s-min=141.3km az=77.0*
*NEIC **19** 04:54:30.1±0.9, 17°.8S±0°.2×177°.9W±0°.1, h613km±19km, mb4.4/24, Error ellipse: s-maj=32.9km s-min=17.7km az=172.0*

**ISC 19 04:54:29.9±0.8, 17°.9S±0°.2×178°.0W±0°.1, h600km, n40, σ1§24/41, mb4.5/19, 5C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.81** | **272** | P | **P** | **04 55 55.4** | **+1.2** |
| **AFI** | **Afiamalu** | **7.14** | **57** | P | **P** | **04 56 20.6** | **-0.8** |
| **LIFNC** | **LIFOU** | **14.27** | **256** | P | **P** | **04 57 29.9** | **-1.5** |
| **PINNC** | **Pines Island,** | **14.48** | **249** | P | **P** | **04 57 33.0** | **-0.3** |
| **DZM** | **Mont Dzumac** | **15.24** | **252** | P | **P** | **04 57 39.7** | **-0.7** |
| **QRZ** | **Quartz Range** | **24.28** | **198** | P | **P** | **04 59 02.1** | **+0.6** |
| **BSWZ** | **Blackbirch Sta** | **24.75** | **195** | P | **P** | **04 59 08.3** | **+2.6** |
| **THZ** | **Tophouse** | **25.04** | **196** | P | **P** | **04 59 08.3** | **0.0** |
| **LTZ** | **Lake Taylor** | **26.16** | **196** | P | **P** | **04 59 18.2** | **+0.1** |
| **MLZ** | **Mavora Lakes** | **29.76** | **200** | P | **P** | **04 59 49.7** | **+0.4** |
| **WHZ** | **Wether Hill Ro** | **30.28** | **200** | P | **P** | **04 59 53.9** | **+0.1** |
| **ARMA** | **Armidale** | **30.32** | **240** | P | **P** | **04 59 54.8** | **+0.3** |
| ARMA | | | | IAmb | IAmb | 05 00 00.9 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **34.06** | **233** | P | **P** | **05 00 26.0** | **+0.1** |
| CAN | | | | IAmb | IAmb | 05 00 51.3 | |
| | comp=Z,34nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **37.52** | **231** | P | **P** | **05 00 55.2** | **+0.9** |
| TOO | | | | IAmb | IAmb | 05 01 24.5 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **COEN** | **Coen** | **37.54** | **270** | P | **P** | **05 00 55.3** | **+0.5** |
| COEN | | | | IAmb | IAmb | 05 01 30.9 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **39.02** | **241** | P | **P** | **05 01 07.2** | **+0.7** |
| **STKA** | **Stephens Creek** | **39.02** | **241** | P | **P** | **05 01 06.9** | **+0.3** |
| | comp=Z,3.4nm,0.5s,baz=96,slow=11,SNR=9.8 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.79** | **241** | P | **P** | **05 01 43.7** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 05 02 26.4 | |
| | comp=Z,44nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.87** | **259** | P | **P** | **05 01 52.1** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 05 02 12.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.03** | **260** | P | **P** | **05 01 53.0** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 05 02 02.9 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.05** | **259** | P | **P** | **05 01 52.9** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 05 02 18.6 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.05** | **259** | P | **P** | **05 01 52.9** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 05 02 36.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.06** | **259** | P | **P** | **05 01 53.0** | **-1.0** |
| **WRA** | **Warramunga Arr** | **45.06** | **259** | P | **P** | **05 01 53.1** | **-0.9** |
| | comp=Z,1.6nm,0.3s,baz=94,slow=7.4,SNR=35 | | | | | | |
| | comp=Z,1.6nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **45.21** | **254** | P | **P** | **05 01 55.0** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.22** | **254** | P | **P** | **05 01 54.5** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.22** | **254** | P | **P** | **05 01 54.8** | **-0.3** |
| | comp=Z,8.2nm,0.6s,baz=86,slow=8.8,SNR=58 | | | | | | |
| | comp=Z,8.2nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.24** | **268** | P | **P** | **05 02 24.8** | **-0.5** |
| MTN | | | | IAmb | IAmb | 05 02 48.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **FORT** | **Forrest** | **50.41** | **245** | P | **P** | **05 02 32.0** | **-1.6** |
| FORT | | | | IAmb | IAmb | 05 02 33.7 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **50.92** | **264** | P | **P** | **05 02 37.1** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 05 03 18.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.46** | **260** | P | **P** | **05 02 54.9** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **58.34** | **255** | P | **P** | **05 03 28.4** | **-0.8** |
| **BELA** | **Belgrano 2** | **82.12** | **173** | P | **P** | **05 05 48.4** | **+0.1** |
| **ELIB** | **Princess Elisa** | **89.22** | **187** | *d*P | **P** | **05 06 24.7** | **+2.1** |
| ELIB | | | | *dp*P | **pP** | **05 08 31.2** | **-0.3** |
| **PZH** | **PanZhiHua** | **89.54** | **298** | P | **P** | **05 06 27.0** | **+2.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.32** | **180** | ⇑PKPdf | **P** | **05 06 25.9** | **-1.8** |
| | comp=Z,387nm,1.6s | | | | | | |
| **SNAA** | **Sanae** | **90.60** | **178** | ⇑PKPdf | **P** | **05 06 25.8** | **-3.0** |
| | comp=Z,89nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.72** | **176** | ⇑PKPdf | **P** | **05 06 33.0** | **+3.6** |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.17** | **177** | ⇑PKPdf | **P** | **05 06 31.9** | **+0.5** |
| | comp=Z,5.3nm,1.0s,baz=307,slow=1.5 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.39** | **177** | ⇑PKPdf | **P** | **05 06 31.7** | **-0.7** |
| | comp=Z,13nm,1.2s | | | | | | |

**IDC 19 04:56:09.0±2.2, 18°.36S×178°.55W, h0km, mb4.1/4, mbtmp4.1/4, Error ellipse: s-maj=126.4km s-min=28.3km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.42** | **260** | P | P | 05 04 21.1 | -0.9 |
| | 0.5nm,0.4s,baz=96,slow=7.0,SNR=7.7 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.54** | **255** | P | P | 05 04 22.5 | -0.4 |
| | 4.3nm,0.5s,baz=89,slow=8.7,SNR=31 | | | | | | |
| ASAR | | | | PcP | PP | 05 06 07.8 | +1.1 |
| | 0.4nm,0.5s,baz=90,slow=3.7,SNR=1.0 | | | | | | |
| | 4.3nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.35** | **58** | P | P | 05 08 55.0 | +1.5 |
| | 1.1nm,1.0s,baz=235,slow=6.4,SNR=3.3 | | | | | | |
| | 1.1nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **86.35** | **13** | P | P | 05 08 52.4 | -0.2 |
| | 2.0nm,1.1s,baz=219,slow=4.5,SNR=6.1 | | | | | | |
| | 2.0nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.00** | **314** | PKPbc | PKPab | 05 15 47.6 | -0.4 |
| | 0.3nm,0.4s,baz=56,slow=5.4,SNR=1.7 | | | | | | |
| **GERES** | **GERESS Array B** | **148.01** | **345** | PKPbc | PKPdf | 05 15 54.6 | +1.1 |
| | 0.5nm,0.5s,baz=29,slow=3.0,SNR=3.6 | | | | | | |

*IDC **19** 04:56:49.8±60.0, 17°.24S×179°.82E, h0km, mb4.8/3, mbtmp4.8/3, Error ellipse: s-maj=1084.0km s-min=147.6km az=77.0*
*NEIC **19** 04:57:28.3±1.5, 18°.0S±0°.2×177°.87W±0°.07, h598km±14km, mb4.5/26, Error ellipse: s-maj=34.8km s-min=9.9km az=181.0*

**ISC 19 04:57:28.2±1.2, 18°.1S±0°.2×177°.9W±0°.1, h590km, n34, σ0§97/34, mb4.5/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.84** | **275** | P | **P** | **04 58 53.6** | **+1.7** |
| **NIUE** | **Niue** | **7.66** | **99** | P | **P** | **04 59 23.5** | **-0.4** |
| **LIFNC** | **LIFOU** | **14.24** | **257** | P | **P** | **05 00 28.4** | **-1.2** |
| **PINNC** | **Pines Island,** | **14.43** | **249** | P | **P** | **05 00 30.7** | **-0.6** |
| **DZM** | **Mont Dzumac** | **15.20** | **252** | P | **P** | **05 00 39.7** | **+1.0** |
| **KOUNC** | **Koumac, New Ca** | **16.96** | **259** | P | **P** | **05 00 56.2** | **+1.3** |
| KOUNC | | | | IAmb | IAmb | 05 00 57.2 | |
| | comp=Z,38nm,1.5s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.18** | **193** | P | **P** | **05 01 49.0** | **-1.6** |
| **QRZ** | **Quartz Range** | **24.10** | **198** | P | **P** | **05 01 59.6** | **+0.9** |
| QRZ | | | | IAmb | IAmb | 05 02 20.5 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **NNZ** | **Nelson** | **24.23** | **196** | P | **P** | **05 02 00.2** | **+0.3** |
| **THZ** | **Tophouse** | **24.86** | **196** | P | **P** | **05 02 05.3** | **-0.2** |
| THZ | | | | IAmb | IAmb | 05 02 11.7 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **DSZ** | **Denniston Nort** | **25.16** | **198** | P | **P** | **05 02 08.1** | **0.0** |
| **FOZ** | **Fox Glacier** | **27.39** | **200** | P | **P** | **05 02 27.7** | **0.0** |
| **MLZ** | **Mavora Lakes** | **29.58** | **200** | P | **P** | **05 02 47.6** | **+0.9** |
| MLZ | | | | IAmb | IAmb | 05 02 56.6 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.10** | **200** | P | **P** | **05 02 50.8** | **-0.2** |
| **CAN** | **Canberra** | **33.95** | **233** | P | **P** | **05 03 25.2** | **+1.2** |
| CAN | | | | IAmb | IAmb | 05 03 51.8 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **COEN** | **Coen** | **37.56** | **270** | P | **P** | **05 03 54.0** | **+0.1** |
| COEN | | | | IAmb | IAmb | 05 03 55.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | **P** | **05 04 05.7** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | **P** | **05 04 05.5** | **+0.7** |
| | comp=Z,5.2nm,0.6s,baz=90,slow=10,SNR=9.9 | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **43.72** | **241** | P | **P** | **05 04 42.2** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 05 04 53.9 | |
| | comp=Z,47nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **05 04 50.8** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 05 04 55.8 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.01** | **260** | P | **P** | **05 04 51.7** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 05 04 52.6 | |
| | comp=Z,6.9nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.03** | **260** | P | **P** | **05 04 51.2** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 05 04 52.9 | |
| | comp=Z,6.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.05** | **260** | P | **P** | **05 04 51.5** | **-1.3** |
| **WRA** | **Warramunga Arr** | **45.05** | **260** | P | **P** | **05 04 52.0** | **-0.8** |
| | comp=Z,4.9nm,0.5s,baz=92,slow=8.3,SNR=37 | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.18** | **254** | P | **P** | **05 04 53.6** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 05 04 54.9 | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.18** | **254** | P | **P** | **05 04 52.9** | **-1.0** |
| **ASAR** | **Alice Springs** | **45.18** | **254** | P | **P** | **05 04 53.5** | **-0.3** |
| | comp=Z,24nm,0.7s,baz=87,slow=8.7,SNR=24 | | | | | | |
| | comp=Z,24nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **49.25** | **268** | P | **P** | **05 05 23.7** | **-0.6** |
| MTN | | | | IAmb | IAmb | 05 05 49.9 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **50.34** | **245** | P | **P** | **05 05 31.4** | **-0.7** |
| FORT | | | | IAmb | IAmb | 05 05 33.7 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.92** | **264** | P | **P** | **05 05 35.6** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **53.45** | **261** | P | **P** | **05 05 54.3** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **58.30** | **255** | P | **P** | **05 06 26.1** | **-1.9** |
| **MBWA** | **Marble Bar** | **58.47** | **256** | P | **P** | **05 06 28.0** | **-1.1** |
| **BELA** | **Belgrano 2** | **81.93** | **173** | P | **P** | **05 08 47.1** | **+0.6** |
| BELA | | | | IAmb | IAmb | 05 09 06.1 | |
| | comp=Z,17nm,1.5s | | | | | | |

*SJA **19** 05:00:07.4±0.6, 21°.75S×68°.63W, h129km±4km, ML3.5, MW3.5*
*GUC **19** 05:00:09.6±0.8, 21°.76S×68°.73W, h115km±8km, ML3.5*

**ISC 19 05:00:06.7±1.6, 21°.77S±0°.04×68°.67W±0°.05, h142km±12km, n20, σ1§70/34, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **0.87** | **195** | *e*P | **Pn** | **05 00 30.4** | **+0.3** |
| LVC | | | | *e*S | **Sn** | **05 00 47.1** | **-0.8** |
| **LVC** | **Limon Verde** | **0.87** | **195** | *e*P | **Pn** | **05 00 29.9** | **-0.2** |
| LVC | | | | *e*S | **Sn** | **05 00 46.2** | **-1.7** |
| **AF01** | **San Pedro de A** | **1.26** | **159** | *e*P | **Pn** | **05 00 34.5** | **+1.0** |
| AF01 | | | | IAML | | 05 01 11.5 | |
| | comp=Z,316nm,0.8s | | | | | | |
| **AF01** | **San Pedro de A** | **1.26** | **159** | *e*P | **Pn** | **05 00 34.8** | **+1.2** |
| AF01 | | | | *e*S | **Sn** | **05 00 54.7** | **+0.7** |
| AF01 | | | | IAML | | 05 01 13.3 | |
| | comp=N,638nm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **1.49** | **248** | *e*P | **Pn** | **05 00 36.8** | **+1.1** |
| PB04 | | | | *e*S | **Sn** | **05 00 59.3** | **+1.5** |
| PB04 | | | | IAML | | 05 01 00.9 | |
| | comp=Z,580nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **1.49** | **248** | *e*P | **Pn** | **05 00 36.8** | **+1.1** |
| PB04 | | | | *i* S | **Sn** | **05 00 58.6** | **+0.7** |
| PB04 | | | | IAML | | 05 01 00.2 | |
| | comp=E,584nm,0.1s | | | | | | |
| **TA01** | **Diego Aracena** | **1.85** | **310** | *e*P | **Pn** | **05 00 39.9** | **+0.2** |
| TA01 | | | | *e*S | **Sn** | **05 01 05.0** | **+0.1** |
| TA01 | | | | IAML | | 05 01 05.8 | |
| | comp=Z,192nm,0.6s | | | | | | |
| **TA01** | **Diego Aracena** | **1.85** | **310** | *e*P | **Pn** | **05 00 39.7** | **0.0** |
| TA01 | | | | *e*S | **Sn** | **05 01 02.9** | **-2.0** |
| TA01 | | | | IAML | | 05 01 06.5 | |
| | comp=E,565nm,0.4s | | | | | | |
| **HMBC** | **Humberstone** | **1.87** | **322** | *e*P | **Pn** | **05 00 39.7** | **-0.3** |
| HMBC | | | | IAML | | 05 01 05.3 | |
| | comp=Z,642nm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **1.87** | **322** | *e*P | **Pn** | **05 00 39.7** | **-0.3** |
| HMBC | | | | *i* S | **Sn** | **05 01 03.8** | **-1.7** |
| **TA02** | **Huaiquique** | **2.02** | **317** | *e*P | **Pn** | **05 00 42.5** | **+0.8** |
| TA02 | | | | *e*S | **Sn** | **05 01 10.0** | **+1.5** |
| TA02 | | | | IAML | | 05 01 13.1 | |
| | comp=Z,340nm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **2.02** | **317** | *e*P | **Pn** | **05 00 41.5** | **-0.2** |
| TA02 | | | | IAML | | 05 01 13.1 | |
| | comp=N,690nm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **2.15** | **347** | *e*P | **Pn** | **05 00 44.3** | **+0.6** |
| GO01 | | | | *e*S | **Sn** | **05 01 12.1** | **+0.1** |
| **GO01** | **Chusmiza** | **2.15** | **347** | *e*P | **Pn** | **05 00 44.0** | **+0.3** |
| GO01 | | | | *i* S | **Sn** | **05 01 11.9** | **-0.1** |
| GO01 | | | | IAML | | 05 01 13.7 | |
| | comp=N,603nm,0.2s | | | | | | |
| **YJA** | **Yavi** | **2.95** | **98** | *e*P | **Pn** | **05 00 55.2** | **+1.6** |
| YJA | | | | *e*S | **Sn** | **05 01 27.1** | **-2.7** |
| **PB14** | **IPOC Station P** | **3.26** | **209** | *e*P | **Pn** | **05 00 59.3** | **+1.8** |
| PB14 | | | | *e*S | **Sn** | **05 01 30.4** | **-6.3** |
| PB14 | | | | *e*S | | 05 01 37.9 | |
| PB14 |

comp=Z,1.8nm,0.3s,baz=93,slow=7.8,SNR=17
comp=Z,1.8nm,0.3s

| | | | | | | |
|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **49.36** | **268** | P | **P** | **05 08 10.2 -1.1** |
| MTN | | | | IAmb | IAmb | 05 08 11.5 |
| | comp=Z,32nm,1.4s | | | | | |
| **FORT** | **Forrest** | **50.48** | **245** | P | **P** | **05 08 17.8 -1.5** |
| FORT | | | | IAmb | IAmb | 05 08 40.2 |
| | comp=Z,26nm,1.1s | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.57** | **261** | P | **P** | **05 08 40.7 -0.9** |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | **P** | **05 10 39.6 +0.1** |
| QSPA | | | | IAmb | IAmb | 05 11 02.0 |
| | comp=Z,23nm,1.4s | | | | | |
| **PETK** | **Petropavlovsk-** | **73.92** | **345** | P | **P** | **05 10 49.4 -0.6** |

*IDC **19** 05:02:07.8±20.0, 17°.71S×177°.96W, h552km±172km, mb3.1/3, mbtmp4.1/3, Error ellipse: s-maj=295.8km s-min=61.7km az=137.0*

**ISC 19 05:02:10.2±5.5, 18°S±1°×178°.0W±1°.0, h600km, n6, σ2s 25/6, mb3.9/3, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.08** | **259** | P | **P** | **05 09 35.3** | **+0.9** |
| | 1.8nm,0.5s,baz=94,slow=6.9,SNR=11 | | | | | | |
| | 1.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.25** | **254** | P | **P** | **05 09 36.4** | **+0.6** |
| | 2.7nm,0.4s,baz=89,slow=7.9,SNR=9.2 | | | | | | |
| | 2.7nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **85.53** | **13** | P | **P** | **05 13 47.6** | **+2.2** |
| | 0.4nm,0.9s,baz=223,slow=4.9,SNR=2.3 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.87** | **315** | PKP | **PKiKP** | **05 20 42.4** | **-1.9** |
| | 0.5nm,0.7s,baz=60,slow=3.5,SNR=1.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.33** | **303** | PKPbc | **PKPab** | **05 20 46.9** | **-1.0** |
| | 1.3nm,0.5s,baz=97,slow=4.9,SNR=1.4 | | | | | | |
| **GERES** | **GERESS Array B** | **147.44** | **346** | PKPbc | **PKPab** | **05 20 49.7** | **-2.1** |
| | 0.3nm,0.5s,baz=85,slow=1.2,SNR=2.5 | | | | | | |

**IDC 19 05:03:08.5±7.1, 17°.14S×176°.72W, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=310.3km s-min=37.5km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **46.36** | **259** | P | P | 05 11 36.8 | -0.1 |
| | 0.6nm,0.5s,baz=95,slow=7.4,SNR=7.4 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.55** | **253** | P | P | 05 11 38.3 | -0.1 |
| | 2.7nm,0.6s,baz=86,slow=8.9,SNR=9.5 | | | | | | |
| | 2.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.78** | **12** | P | P | 05 15 44.3 | 0.0 |
| | 0.3nm,0.8s,baz=213,slow=6.5,SNR=5.5 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

**IDC 19 05:03:50.0±3.1, 18°.21S×177°.32W, h0km, mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=356.7km s-min=36.2km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.60** | **260** | P | P | 05 12 12.1 | -0.2 |
| | 0.3nm,0.4s,baz=96,slow=7.2,SNR=4.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.71** | **254** | P | P | 05 12 13.2 | 0.0 |
| | 1.9nm,0.6s,baz=88,slow=8.8,SNR=8.7 | | | | | | |
| | 1.9nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.28** | **57** | P | P | 05 16 29.2 | 0.0 |
| | 0.3nm,0.8s,baz=196,slow=5.3,SNR=2.1 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **136.78** | **354** | PKP | PKiKP | 05 23 25.1 | +9.2 |
| | comp=Z,15nm,1.1s,baz=11,slow=3.2 | | | | | | |

**IDC 19 05:05:00.6±10.0, 18°.00S×177°.86W, h438km±113km, mb3.1/5, mbtmp3.9/5, Error ellipse: s-maj=48.7km s-min=27.7km az=45.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.66** | **191** | P | P | 05 09 08.5 | 0.0 |
| | 2.4nm,0.3s,baz=346,slow=1.4,SNR=6.9 | | | | | | |
| | 2.4nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.13** | **260** | P | P | 05 12 36.1 | -0.6 |
| | 0.4nm,0.4s,baz=96,slow=7.0,SNR=5.1 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.27** | **254** | P | P | 05 12 37.9 | +0.1 |
| | 2.0nm,0.5s,baz=88,slow=8.6,SNR=12 | | | | | | |
| | 2.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | P | 05 15 38.9 | 0.0 |
| | 1.0nm,0.8s,baz=267,slow=1.8,SNR=6.1 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.86** | **13** | P | P | 05 16 52.1 | -0.1 |
| | 0.2nm,0.4s,baz=226,slow=4.6,SNR=5.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*IDC **19** 05:05:30.0±4.5, 18°.18S×178°.41W, h416km±47km, mb3.4/9, mbtmp4.1/9, Error ellipse: s-maj=28.6km s-min=18.0km az=50.0*

*NEIC **19** 05:05:41.9±0.7, 18°.5S±0°.1×178°.7W±0°.1, h533km±7km, mb4.2/17, Error ellipse: s-maj=20.1km s-min=17.4km az=180.0*

**ISC 19 05:05:41.9±0.7, 18°.4S±0°.1×178°.71W±0°.10, h550km, n36, σ1s 00/33, mb4.0/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.15** | **282** | P | **P** | **05 06 55.4** | **-2.6** |
| **NIUE** | **Niue** | **8.35** | **96** | P | **P** | **05 07 42.3** | **-0.8** |
| **RAO** | **Raoul Island** | **10.81** | **176** | P | P | 05 08 00.2 | -7.9 |
| **RAO** | **Raoul Island** | **10.81** | **176** | P | P | 05 07 57.8 | -10 |
| | 210nm,0.3s,baz=318,slow=18,SNR=6.0 | | | | | | |
| **PINNC** | **Pines Island,** | **13.62** | **250** | P | **P** | **05 08 36.6** | **-0.6** |
| **DZM** | **Mont Dzumac** | **14.40** | **253** | P | **P** | **05 08 44.5** | **-0.8** |
| **DZM** | **Mont Dzumac** | **14.40** | **253** | P | **P** | **05 08 44.1** | **-1.2** |
| | 3.7nm,0.7s,baz=77,slow=19,SNR=5.3 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.17** | **260** | P | **P** | **05 09 02.8** | **-0.3** |
| **URZ** | **Urewera** | **20.11** | **190** | P | **P** | **05 09 37.2** | **-1.6** |
| | 7.6nm,0.3s,baz=356,slow=2.1,SNR=20 | | | | | | |
| | 7.6nm,0.3s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.48** | **190** | P | **P** | **05 09 41.0** | **-1.3** |
| **QRZ** | **Quartz Range** | **23.57** | **197** | P | **P** | **05 10 09.8** | **0.0** |
| **EIDS** | **Eidsvold** | **28.83** | **251** | P | **P** | **05 10 57.2** | **+0.9** |
| EIDS | | | | IAmb | IAmb | 05 11 12.9 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **33.08** | **261** | P | **P** | **05 11 32.7** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=97,slow=9.3,SNR=10 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.08** | **261** | P | **P** | **05 11 33.1** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 05 11 33.8 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **JOHN** | **Johnston Islan** | **36.07** | **15** | P | **P** | **05 11 58.9** | **+1.2** |
| **COEN** | **Coen** | **36.83** | **271** | P | **P** | **05 12 04.6** | **+0.6** |
| COEN | | | | IAmb | IAmb | 05 12 05.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.14** | **242** | P | **P** | **05 12 15.2** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.14** | **242** | P | **P** | **05 12 14.3** | **-0.2** |
| | comp=Z,1.5nm,0.5s,baz=0.4,slow=6.4,SNR=3.4 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **42.91** | **241** | P | **P** | **05 12 53.0** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 05 13 12.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.07** | **260** | P | **P** | **05 12 59.7** | **-2.0** |
| WR0 | | | | IAmb | IAmb | 05 13 04.2 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.23** | **260** | P | **P** | **05 13 03.2** | **+0.2** |
| **WB2** | **Warramunga Arr** | **44.25** | **260** | P | **P** | **05 13 02.9** | **-0.2** |
| **WRA** | **Warramunga Arr** | **44.26** | **260** | P | **P** | **05 13 03.0** | **-0.2** |
| **WRA** | **Warramunga Arr** | **44.26** | **260** | P | **P** | **05 13 02.6** | **-0.6** |
| | comp=Z,1.5nm,0.5s,baz=95,slow=6.9,SNR=12 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.38** | **255** | P | **P** | **05 13 04.6** | **+0.5** |
| **ASAR** | **Alice Springs** | **44.38** | **255** | P | **P** | **05 13 04.3** | **+0.2** |
| | comp=Z,6.7nm,0.4s,baz=89,slow=8.5,SNR=39 | | | | | | |
| | comp=Z,6.7nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **49.53** | **245** | P | **P** | **05 13 43.3** | **+0.6** |
| FORT | | | | IAmb | IAmb | 05 14 01.2 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **50.15** | **265** | P | **P** | **05 13 48.0** | **+0.5** |
| KNRA | | | | IAmb | IAmb | 05 13 48.6 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **55.79** | **271** | P | **P** | **05 14 29.4** | **+1.6** |
| SOEI | | | | IAmb | IAmb | 05 14 45.5 | |
| | comp=Z,22nm,1.1s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **68.14** | **324** | P | **P** | **05 15 47.2 -0.2** |
| | comp=Z,1.8nm,0.6s,baz=150,slow=5.7,SNR=6.0 | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | |
| **QSPA** | **South Pole Qui** | **71.64** | **180** | P | **P** | **05 16 09.2 +1.3** |
| **QSPA** | **South Pole Qui** | **71.64** | **180** | P | **P** | **05 16 09.3 +1.3** |
| | comp=Z,2.1nm,0.6s,baz=301,slow=0.2,SNR=16 | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | |
| **KSRS** | **Korea Array** | **74.89** | **319** | P | **P** | **05 16 26.5 -0.2** |
| | comp=Z,0.6nm,0.8s,baz=126,slow=7.0,SNR=1.8 | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | |
| **BELA** | **Belgrano 2** | **81.70** | **173** | P | **P** | **05 17 03.1 +0.5** |
| BELA | | | | IAmb | IAmb | 05 17 03.9 |
| | comp=Z,4.1nm,0.9s | | | | | |
| **ILAR** | **Eielson Array** | **86.44** | **13** | P | **P** | **05 17 25.2 -0.7** |
| | comp=Z,0.4nm,0.8s,baz=216,slow=4.8,SNR=4.1 | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | |
| **BRTR** | **Keskin Array B** | **144.93** | **314** | PKP | PKPbc | 05 24 17.8 +0.1 |
| | comp=Z,0.4nm,0.4s,baz=113,slow=4.0,SNR=5.3 | | | | | |

*IDC **19** 05:06:39.0±4.5, 18°.04S×177°.99W, h518km±50km, mb3.4/12, mbtmp4.2/12, Error ellipse: s-maj=21.2km s-min=16.9km az=73.0*

*NEIC **19** 05:06:45.1±1.1, 18°.0S±0°.1×178°.0W±0°.1, h586km±6km, mb4.2/18, Error ellipse: s-maj=23.5km s-min=16.7km az=146.0*

**ISC 19 05:06:45.1±0.5, 18°.1S±0°.1×178°.08W±0°.09, h590km, n50, σ0s 80/50, mb4.1/22, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.71** | **275** | P | **P** | **05 08 07.8** | **-0.1** |
| **NIUE** | **Niue** | **7.79** | **99** | P | **P** | **05 08 41.5** | **-0.6** |
| **PINNC** | **Pines Island,** | **14.31** | **249** | P | **P** | **05 09 46.7** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.07** | **252** | P | **P** | **05 09 55.8** | **+1.4** |
| DZM | | | | IAmb | IAmb | 05 09 56.4 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **20.54** | **191** | P | **P** | **05 10 40.8** | **-3.2** |
| | comp=Z,9.4nm,0.4s,baz=359,slow=1.9,SNR=9.7 | | | | | | |
| | comp=Z,9.4nm,0.4s | | | | | | |
| **EIDS** | **Eidsvold** | **29.51** | **250** | P | **P** | **05 12 03.0** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 05 12 03.9 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **33.73** | **261** | P | **P** | **05 12 39.4** | **+0.2** |
| CTAO | | | | IAmb | IAmb | 05 12 52.9 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **33.85** | **233** | P | **P** | **05 12 40.9** | **+0.9** |
| CAN | | | | IAmb | IAmb | 05 12 53.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.31** | **231** | P | **P** | **05 13 09.7** | **+1.2** |
| **COEN** | **Coen** | **37.42** | **271** | P | **P** | **05 13 10.5** | **+0.8** |
| COEN | | | | IAmb | IAmb | 05 13 10.7 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.60** | **241** | P | **P** | **05 13 59.0** | **+0.5** |
| **WB0** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **05 14 08.7** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 05 14 25.5 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.90** | **260** | P | **P** | **05 14 09.1** | **+0.5** |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **05 14 08.6** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **05 14 08.5** | **-0.3** |
| | comp=Z,1.3nm,0.5s,baz=96,slow=7.3,SNR=9.7 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.05** | **254** | P | **P** | **05 14 10.4** | **+0.6** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **05 14 09.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **05 14 09.9** | **+0.1** |
| | comp=Z,5.1nm,0.7s,baz=86,slow=8.5,SNR=18 | | | | | | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **50.22** | **245** | P | **P** | **05 14 47.4** | **-0.7** |
| **KNRA** | **Kununurra** | **50.79** | **264** | P | **P** | **05 14 51.0** | **-1.5** |
| KNRA | | | | IAmb | IAmb | 05 14 52.2 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.31** | **261** | P | **P** | **05 15 10.2** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **68.23** | **323** | P | **P** | **05 16 47.8** | **-0.1** |
| | comp=Z,1.6nm,0.6s,baz=153,slow=6.4,SNR=6.5 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | **P** | **05 17 10.9** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 05 17 11.4 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | **P** | **05 17 10.6** | **+0.8** |
| | comp=Z,3.8nm,0.6s,baz=206,slow=1.0,SNR=19 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **72.59** | **303** | P | **P** | **05 17 13.6** | **-0.3** |
| SSLB | | | | IAmb | IAmb | 05 17 32.3 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.92** | **345** | P | **P** | **05 17 21.1** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **73.92** | **345** | P | **P** | **05 17 20.9** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **73.92** | **345** | P | **P** | **05 17 20.2** | **-0.5** |
| | comp=Z,1.5nm,0.6s,baz=118,slow=8.9,SNR=5.4 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.33** | **44** | P | **P** | **05 17 51.5** | **+0.6** |
| | comp=Z,0.8nm,0.7s,baz=226,slow=8.9,SNR=6.8 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **81.96** | **173** | P | **P** | **05 18 04.0** | **+0.4** |
| BELA | | | | IAmb | IAmb | 05 18 04.5 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **84.01** | **347** | P | **P** | **05 18 13.5** | **-0.3** |
| | comp=Z,2.5nm,0.6s,baz=107,slow=4.0,SNR=3.8 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.82** | **57** | P | **P** | **05 18 25.4** | **+1.8** |
| | comp=Z,0.8nm,0.7s,baz=217,slow=6.9,SNR=9.8 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.98** | **13** | P | **P** | **05 18 21.8** | **-1.5** |
| | comp=Z,0.4nm,0.4s,baz=221,slow=5.2,SNR=12 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.26** | **43** | P | **P** | **05 18 30.1** | **0.0** |
| | comp=Z,0.4nm,0.6s,baz=205,slow=2.8,SNR=4.3 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.14** | **180** | ⇑P | **P** | **05 18 43.0** | **0.0** |
| | comp=Z,86nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.42** | **178** | ⇑P | **P** | **05 18 43.7** | **-0.5** |
| | comp=Z,21nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.42** | **178** | P | **P** | **05 18 43.9** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=188,slow=12,SNR=10 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.55** | **176** | ⇑P | **P** | **05 18 44.9** | **+0.1** |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.99** | **177** | ⇑P | **P** | **05 18 47.5** | **+0.8** |
| | comp=Z,2.7nm,0.6s,baz=193,slow=5.1 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.22** | **177** | ⇑P | **P** | **05 18 48.1** | **+0.4** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.13** | **315** | PKPbc | **PKPbc** | **05 25 17.6** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=88,slow=2.8,SNR=5.5 | | | | | | |
| **ASF** | **Jabal al Asfar** | **145.54** | **301** | PKPbc | **PKPbc** | **05 25 18.9** | **-0.1** |
| | comp=Z,1.6nm,0.5s,baz=193,slow=4.1,SNR=6.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.86** | **345** | PKPbc | **PKPbc** | **05 25 25.3** | **+0.6** |
| | comp=Z,0.8nm,0.9s,baz=165,slow=6.9,SNR=6.1 | | | | | | |
| **CONA** | **Conrad Observa** | **148.12** | **342** | *e*PKP | **PKiKP** | **05 25 26.3** | **-0.3** |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.43** | **346** | *e*PKP | **PKPbc** | **05 25 28.5** | **-0.1** |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **149.82** | **347** | *e*PKP | **PKPbc** | **05 25 29.9** | **+0.3** |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.95** | **347** | *i* PKP | **PKPbc** | **05 25 30.1** | **+0.2** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.10** | **345** | *e*PKP | **PKPbc** | **05 25 29.7** | **-0.5** |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **150.24** | **348** | *e*PKP | **PKiKP** | **05 25 30.9** | **-0.2** |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.63** | **349** | PKPbc | **PKiKP** | **05 25 32.0** | **0.0** |
| | comp=Z,2.0nm,0.5s,baz=239,slow=2.8,SNR=8.1 | | | | | | |

*NEIC **19** 05:08:36.6±0.9, 17°.5S±0°.2×178°.01W±0°.10, h560km±16km, mb4.1/15, Error ellipse: s-maj=28.1km s-min=10.4km az=162.0*

*IDC **19** 05:08:41.7±9.0, 17°.61S×178°.44W, h605km±113km, mb3.2/6, mbtmp4.2/7, Error ellipse: s-maj=47.3km s-min=37.3km az=113.0*

**ISC 19 05:08:37.3±0.9, 17°.7S±0°.2×178°.2W±0°.1, h550km, n28, σ0s 80/27, mb4.0/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.58** | **269** | P | **P** | **05 09 57.9** | **+1.7** |
| **NIUE** | **Niue** | **7.98** | **101** | P | P | 05 10 32.5 | -2.3 |
| **RAO** | **Raoul Island** | **11.53** | **179** | P | **P** | **05 11 11.0** | **+0.2** |
| **PINNC** | **Pines Island,** | **14.35** | **248** | P | **P** | **05 11 41.3** | **+1.3** |
| **DZM** | **Mont Dzumac** | **15.09** | **251** | P | **P** | **05 11 48.8** | **+1.0** |
| DZM | | | | IAmb | IAmb | 05 11 51.2 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.09** | **251** | P | **P** | **05 11 48.2** | **+0.4** |
| | comp=Z,4.0nm,0.7s,baz=315,slow=22,SNR=8.4 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.80** | **257** | P | **P** | **05 12 04.3** | **+0.1** |
| KOUNC | | | | IAmb | IAmb | 05 12 21.2 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **29.54** | **250** | P | **P** | **05 13 57.5** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 05 13 57.7 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **30.23** | **240** | P | **P** | **05 14 03.7** | **-0.2** |
| **CTAO** | **Charters Tower** | **33.68** | **260** | P | **P** | **05 14 32.2** | **-1.0** |
| CTAO | | | | IAmb | IAmb | 05 14 38.9 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **34.00** | **232** | P | **P** | **05 14 35.3** | **-0.5** |
| CAN | | | | IAmb | IAmb | 05 14 47.6 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **COEN** | **Coen** | **37.30** | **270** | P | **P** | **05 15 03.5** | **+0.1** |
| COEN | | | | IAmb | IAmb | 05 15 04.1 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.47** | **231** | P | **P** | **05 15 04.9** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.92** | **241** | P | **P** | **05 15 16.4** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.92** | **241** | P | **P** | **05 15 16.4** | **+0.2** |
| | comp=Z,2.1nm,0.4s,baz=106,slow=11,SNR=7.4 | | | | | | |
| | comp=Z,2.1nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.86** | **259** | P | **P** | **05 16 02.2** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 05 16 02.6 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.87** | **259** | P | **P** | **05 16 02.4** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.87** | **259** | P | **P** | **05 16 01.9** | **-1.4** |
| | comp=Z,1.2nm,0.4s,baz=93,slow=7.0,SNR=16 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.05** | **254** | | **P** | **05 16 04.0** | **-0.7** |
| AS31 | | | | IAmb | IAmb | 05 16 04.5 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **05 16 03.7** | **-1.0** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **05 16 04.0** | **-0.6** |
| | comp=Z,9.9nm,0.6s,baz=88,slow=8.4,SNR=41 | | | | | | |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.29** | **244** | P | **P** | **05 16 42.8** | **-0.9** |
| **KNRA** | **Kununurra** | **50.71** | **264** | P | **P** | **05 16 46.3** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 05 17 02.2 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.38** | **180** | P | **P** | **05 19 07.6** | **0.0** |
| **QSPA** | **South Pole Qui** | **72.38** | **180** | P | **P** | **05 19 07.5** | **0.0** |
| | comp=Z,1.7nm,0.8s,baz=337,slow=2.9,SNR=3.5 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **82.37** | **173** | P | **P** | **05 20 00.8** | **-0.5** |
| **DLBC** | **Dease Lake** | **85.54** | **23** | P | **P** | **05 20 16.6** | **-0.6** |
| | comp=Z,0.7nm,0.5s,baz=247,slow=7.7,SNR=3.1 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.70** | **58** | P | **P** | **05 20 19.6** | **+0.8** |
| | comp=Z,0.3nm,0.7s,baz=224,slow=5.7,SNR=4.4 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |

**JMA 19 05:11:57.3±0.0, 43°.4N±0°.1×143°.1E±0°.2, h6km, MV0.8/7, TAISETSU MOUNTAINS REG, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFR** | **Furan** | **0.41** | **237** | S | Sg | 05 12 11.2 | +0.7 |

**IDC 19 05:14:45.7±2.9, 17°.15S×177°.93W, h0km, mb3.6/3, mbtmp3.6/3, Error ellipse: s-maj=349.2km s-min=34.5km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.22** | **259** | P | P | 05 23 04.8 | -0.3 |
| | 0.2nm,0.4s,baz=94,slow=7.7,SNR=1.6 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.44** | **253** | P | P | 05 23 06.8 | 0.0 |
| | 0.4nm,0.4s,baz=87,slow=8.7,SNR=5.9 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.20** | **58** | P | P | 05 27 24.6 | 0.0 |
| | 0.5nm,0.8s,baz=216,slow=4.5,SNR=4.8 | | | | | | |
| | 0.5nm,0.8s | | | | | | |

*BJI **19** 05:19:56.9±0.0, 17°.29S×179°.87W, h610km, mb4.9/31, mB5.6/3*

*IDC **19** 05:19:57.9±0.5, 17°.86S×179°.74W, h634km±5km, mb4.1/26, mbtmp5.2/29, Error ellipse: s-maj=8.0km s-min=7.2km az=117.0*

*NOU **19** 05:19:58.2, 17°.86S×179°.74W, h631km, ML5.5/121, Fiji Islands Region*

*NEIC **19** 05:19:58±1.6, 17°.9S±0°.1×179°.71W±0°.10, h626km±7km, mb4.7/223, Error ellipse: s-maj=14.9km s-min=13.3km az=182.0*

**ISC 19 05:19:57.1±0.4, 17°.85S±0°.05×179°.67W±0°.05, h626km±4km, h628km:pP-P, n573, σ1s 26/490, mb4.8/195, 28C-40D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.17** | **273** | P | **P** | **05 21 17.0** | **+2.4** |
| **MSVF** | **Nonsavu** | **2.17** | **273** | P | **P** | **05 21 17.2** | **+2.7** |
| **AFI** | **Afiamalu** | **8.54** | **64** | P | **P** | **05 22 01.2** | **-1.4** |
| **NIUE** | **Niue** | **9.33** | **99** | P | **P** | **05 22 10.9** | **+1.0** |
| **NIUE** | **Niue** | **9.33** | **99** | P | **P** | **05 22 10.9** | **+1.0** |
| **NIUE** | **Niue** | **9.33** | **99** | P | **P** | **05 22 10.5** | **+0.6** |
| | comp=Z,686nm,0.8s | | | | | | |
| **FUNA** | **Funafuti** | **9.33** | **353** | P | **P** | **05 22 09.6** | **-0.5** |
| **FUNA** | **Funafuti** | **9.33** | **353** | P | **P** | **05 22 09.5** | **-0.6** |
| **RTV** | **Rentapao** | **11.34** | **268** | P | **P** | **05 22 31.1** | **+1.6** |
| **RIZ** | **Raoul Island** | **11.46** | **172** | P | **P** | **05 22 28.7** | **-1.8** |
| **RAO** | **Raoul Island** | **11.47** | **172** | P | **P** | **05 22

QRZ **Quartz Range** 23.87 195 P **P** 05 24 24.5 +0.6
TKNZ **Takaka Hill** 23.96 194 P **P** 05 24 25.6 +0.9
TUWZ **Tuamarina** 24.13 192 P **P** 05 24 28.4 +2.2
MRNZ **Matariki Terra** 24.36 194 P **P** 05 24 28.8 +0.6
THZ **Tophouse** 24.67 193 P **P** 05 24 31.3 +0.3
THZ IAmb IAmb 05 24 55.2
comp=Z,28nm,0.7s
DSZ **Denniston Nort** 24.91 195 P **P** 05 24 34.5 +1.4
DSZ IAmb IAmb 05 24 36.0
comp=Z,34nm,0.7s
KHZ **Kahutara** 25.16 192 P **P** 05 24 35.4 +0.1
KHZ **Kahutara** 25.16 192 IAmb IAmb 05 24 36.0
comp=Z,34nm,0.7s
GVZ **Greta Valley S** 25.80 192 P **P** 05 24 40.3 -0.6
OXZ **Oxford** 26.35 194 P **P** 05 24 45.4 -0.3
GC1S **Gold Coast 1 S** 26.68 243 P **P** 05 24 49.4 +0.6
AUWSH **Wavell State H** 26.87 244 P **P** 05 24 51.5 +1.0
RPZ **Rata Peaks** 26.95 195 IAmb IAmb 05 24 55.2
comp=Z,22nm,0.7s
RPZ **Rata Peaks** 26.95 195 P **P** 05 24 50.6 -0.3
comp=Z,22nm,0.6s,baz=29,slow=1.2,SNR=14
RPZ S **S** 05 28 45.6 -0.3
comp=Z,36nm,0.9s,baz=344,slow=20,SNR=6.5
comp=Z,22nm,0.6s
LBZ **Lake Benmore** 27.80 196 IAmb IAmb 05 24 59.4
comp=Z,26nm,0.8s
GD1S **Gladstone Soft** 27.86 253 P **P** 05 24 59.6 +0.4
JCZ **Jackson Bay** 27.90 198 P **P** 05 25 00.2 +0.9
EIDS **Eidsvold** 28.16 249 P **P** 05 25 01.6 -0.1
EIDS **Eidsvold** 28.16 249 P **P** 05 25 01.6 -0.1
EIDS **Eidsvold** 28.16 249 P **P** 05 25 01.3 -0.4
comp=Z,232nm,0.8s
RK1H **Rockhampton Ha** 28.43 254 P **P** 05 25 03.9 -0.2
PPT **Papeete** 28.66 94 P **P** 05 25 07.1 +0.9
comp=Z,141nm,0.7s,baz=71,slow=4.3,SNR=34
comp=Z,141nm,0.7s
PPTF **Pamatai, Papee** 28.67 94 P **P** 05 25 09.1 +2.8
PPTF **Pamatai, Papee** 28.67 94 P **P** 05 25 07.5 +1.2
ARMA **Armidale** 28.94 239 P **P** 05 25 09.6 +1.1
ARMA **Armidale** 28.94 239 P **P** 05 25 09.6 +1.1
ARMA **Armidale** 28.94 239 P **P** 05 25 09.3 +0.9
comp=Z,267nm,0.8s
MLZ **Mavora Lakes** 29.27 198 P **P** 05 25 11.8 +0.8
DCZ **Deep Cove** 29.65 199 P **P** 05 25 14.5 +0.3
AUPHS **Peel High Scho** 29.76 238 P **P** 05 25 16.7 +1.2
NTLH **Newcastle Hard** 29.77 234 P **P** 05 25 16.6 +1.2
RMQ **Roma** 30.41 248 P **P** 05 25 22.2 +1.1
RMQ **Roma** 30.41 248 P **P** 05 25 22.0 +0.9
comp=Z,66nm,0.7s
RIV **Riverview** 30.56 233 P **P** 05 25 24.0 +1.8
RIV **Riverview** 30.56 233 P **P** 05 25 23.4 +1.2
comp=Z,219nm,0.9s
SYDH **Sydney Hard Ro** 30.85 233 P **P** 05 25 24.8 +0.1
WOLH **Wollongong Har** 31.01 232 P **P** 05 25 26.5 +0.5
AUAYR **Ayr State High** 31.20 262 P **P** 05 25 28.1 +0.3
AULRC **Lightning Ridg** 31.69 243 P **P** 05 25 32.4 +0.5
AUUHS **Ulladulla High** 31.71 231 P **P** 05 25 33.5 +1.5
TV1H **Townsville Har** 31.79 262 P **P** 05 25 32.7 -0.2
AUDCS **Dubbo College** 31.95 237 P **P** 05 25 34.5 +0.5
CTA **Charters Tower** 32.27 261 P **P** 05 25 36.9 -0.1
comp=Z,11nm,0.6s,baz=88,slow=9.6,SNR=208
CTA ScP **ScP** 05 30 53.0 +1.9
comp=Z,1.9nm,0.9s,baz=82,slow=2.2,SNR=10
comp=Z,11nm,0.6s
CTAO **Charters Tower** 32.27 261 P **P** 05 25 37.5 +0.6
CTAO **Charters Tower** 32.27 261 P **P** 05 25 37.1 +0.2
CNB **Canberra Magne** 32.52 232 P **P** 05 25 39.8 +0.9
CNB **Canberra Magne** 32.52 232 P **P** 05 25 39.6 +0.7
comp=Z,416nm,0.8s
KAVG **Kaveng** 32.69 294 P **P** 05 25 40.4 -0.1
CAN **Canberra** 32.79 232 P **P** 05 25 41.8 +0.7
CAN **Canberra** 32.79 232 P **P** 05 25 42.1 +1.0
CAN **Canberra** 32.79 232 P **P** 05 25 41.4 +0.3
comp=Z,125nm,1.1s
YNG **Young** 32.85 234 P **P** 05 25 42.9 +1.3
YNG **Young** 32.85 234 P **P** 05 25 42.2 +0.6
comp=Z,564nm,0.9s
PMG **Port Moresby** 33.26 280 P **P** 05 25 47.0 +1.7
PMG **Port Moresby** 33.26 280 P **P** 05 25 46.8 +1.5
PMG **Port Moresby** 33.26 280 P **P** 05 25 46.5 +1.2
PMG **Port Moresby** 33.26 280 P **P** 05 25 46.1 +0.8
comp=Z,280nm,0.8s,baz=76,slow=5.7,SNR=70
comp=Z,280nm,0.8s
MILA **Mila** 33.41 229 P **P** 05 25 46.6 +0.3
MILA **Mila** 33.41 229 P **P** 05 25 47.1 +0.8
comp=Z,190nm,1.0s
CMSA **Cobar Meteorol** 34.14 240 P **P** 05 25 52.7 +0.3
CMSA **Cobar Meteorol** 34.14 240 P **P** 05 25 52.4 0.0
comp=Z,446nm,0.8s
MTSU **Mount Surprise** 34.22 264 P **P** 05 25 53.2 -0.1
QLP **Quilpie** 34.43 249 P **P** 05 25 55.3 +0.4
QLP **Quilpie** 34.43 249 P **P** 05 25 54.6 -0.3
comp=Z,758nm,0.8s
AUSSC **Sale College,** 35.35 228 P **P** 05 26 04.2 +1.9
COEN **Coen** 35.90 271 P **P** 05 26 07.8 +0.6
COEN **Coen** 35.90 271 P **P** 05 26 07.8 +0.6
COEN **Coen** 35.90 271 P **P** 05 26 07.5 +0.3
comp=Z,408nm,0.8s
MANU **Manus Island** 35.96 292 P **P** 05 26 08.6 +1.0
GLAD **Gladstone** 36.06 223 P **P** 05 26 08.5 +0.4
TOO **Toolangi** 36.28 230 P **P** 05 26 10.5 +0.5
TOO **Toolangi** 36.28 230 P **P** 05 26 11.0 +1.0
TOO **Toolangi** 36.28 230 P **P** 05 26 10.5 +0.5
comp=Z,340nm,0.9s
AUMAG **Moama Anglican** 36.29 233 P **P** 05 26 10.5 +0.5
MLBS **Spotswood, Mel** 36.82 230 P **P** 05 26 14.9 +0.6
CORO **Coronation Par** 36.86 223 P **P** 05 26 15.8 +1.2
MOO **Moorlands** 37.33 222 P **P** 05 26 17.6 -0.8
MOO **Moorlands** 37.33 222 P **P** 05 26 19.3 +0.9
comp=Z,211nm,1.0s
GEXS **Deakin Univers** 37.40 230 P **P** 05 26 20.0 +1.0
BRAT **Ballarat** 37.42 231 P **P** 05 26 20.1 +0.9
TAU **Tasmania Unive** 37.49 221 P **P** 05 26 20.7 +1.0
TAU **Tasmania Unive** 37.49 221 P **P** 05 26 20.4 +0.8
STKA **Stephens Creek** 37.61 241 P **P** 05 26 21.1 +0.3
STKA **Stephens Creek** 37.61 241 P **P** 05 26 21.8 +0.9
STKA **Stephens Creek** 37.61 241 P **P** 05 26 21.5 +0.7
comp=Z,77nm,0.8s
STKA **Stephens Creek** 37.61 241 P **P** 05 26 21.7 +0.9
comp=Z,184nm,0.5s,baz=90,slow=10,SNR=356
comp=Z,184nm,0.5s
INKA **Innaminka** 37.66 248 P **P** 05 26 22.3 +1.0
QIS **Mount Isa** 38.48 259 P **P** 05 26 27.6 -0.5
QIS **Mount Isa** 38.48 259 P **P** 05 26 27.2 -0.9
comp=Z,51nm,0.7s
ARPS **Mount Arapiles** 38.72 233 P **P** 05 26 31.2 +1.5
ARPS **Mount Arapiles** 38.72 233 P **P** 05 26 29.9 +0.1
comp=Z,363nm,0.8s
TAOE **Nuku Hiva Isla** 39.41 82 P **P** 05 26 37.0 +1.4
HTT **Hallett** 40.14 239 P **P** 05 26 42.5 +1.3
HTT **Hallett** 40.14 239 P **P** 05 26 41.7 +0.5
comp=Z,370nm,0.8s
TABU **Tabubil** 40.20 283 P **P** 05 26 43.1 +1.2
LCRK **Leigh Creek** 40.20 244 P **P** 05 26 42.3 +0.7
GHSS **Government Hou** 40.73 237 P **P** 05 26 46.3 +0.5
PTPS **Port Pirie** 40.85 240 P **P** 05 26 47.2 +0.5
WHYH **Whyalla** 41.17 240 P **P** 05 26 49.3 +0.1
JAY **Jayapura** 41.73 287 P **P** 05 26 54.1 +0.1
comp=Z,194nm,0.6s
OOD **Oodnadatta** 42.12 248 P **P** 05 26 57.6 +0.8
GENI **Genyem** 42.19 286 P **P** 05 26 59.1 +1.6
GENI **Genyem** 42.19 286 P **P** 05 26 58.2 +0.7
comp=Z,394nm,0.7s
BBOO **Buckleboo** 42.38 241 P **P** 05 26 59.2 +0.5
BBOO **Buckleboo** 42.38 241 P **P** 05 26 59.3 +0.5
BBOO **Buckleboo** 42.38 241 P **P** 05 26 58.9 +0.2
comp=Z,605nm,0.8s
WR0 **Warramunga Arr** 43.27 260 P **P** 05 27 05.1 -0.7
WB0 **Warramunga Arr** 43.42 260 P **P** 05 27 06.3 -0.7
WB2 **Warramunga Arr** 43.45 260 P **P** 05 27 06.5 -0.7
WRAB **Tennant Creek** 43.45 260 P **P** 05 27 07.0 -0.2
WRA **Warramunga Arr** 43.46 260 P **P** 05 27 06.1 -1.2
WRA IAmb IAmb 05 27 07.8
comp=Z,11nm,0.7s
WRA **Warramunga Arr** 43.46 260 P **P** 05 27 06.7 -0.6
comp=Z,134nm,0.6s,baz=93,slow=7.0,SNR=675
WRA ScP **ScP** 05 31 33.5 -0.3
comp=Z,5.0nm,0.7s,baz=87,slow=4.6,SNR=9.3
comp=Z,134nm,0.6s
AS01 **Alice Springs** 43.61 254 P **P** 05 27 08.4 0.0
AS31 **Alice Springs** 43.65 254 P **P** 05 27 08.8 0.0
AS31 **Alice Springs** 43.65 254 P **P** 05 27 08.5 -0.2
comp=Z,531nm,0.7s
ASAR **Alice Springs** 43.65 254 P **P** 05 27 08.7 -0.1
comp=Z,1μm,0.6s,baz=88,slow=8.2,SNR=4678
ASAR ScP **ScP** 05 31 35.5 +0.9
comp=Z,9.0nm,0.8s,baz=103,slow=3.9,SNR=8.8
ASAR S **S** 05 32 54.0 -1.0
comp=Z,4.7nm,0.7s,baz=86,slow=16,SNR=7.4
MULG **Mulgathing** 43.75 245 P **P** 05 27 09.3 0.0
KDU **Kakadu** 46.35 269 P **P** 05 27 29.0 -0.3
KDU **Kakadu** 46.35 269 P **P** 05 27 28.7 -0.7
comp=Z,243nm,0.6s
GUMO **Guam** 46.90 309 P **P** 05 27 33.3 -0.1
comp=Z,94nm,0.6s,baz=146,slow=11,SNR=12
comp=Z,94nm,0.6s
MTN **Manton Dam** 47.60 269 P **P** 05 27 37.9 -0.7
MTN **Manton Dam** 47.60 269 P **P** 05 27 37.5 -1.1
MTN **Manton Dam** 47.60 269 P **P** 05 27 37.7 -1.0
comp=Z,173nm,0.7s
KMPI **Kaimana, Papua** 47.77 282 P **P** 05 27 38.9 -1.0
comp=Z,197nm,0.6s
DRS **Darwin Rock St** 47.91 269 P **P** 05 27 40.5 -0.4
SAUI **Saumlaki** 48.66 275 P **P** 05 27 46.4 -0.1
comp=Z,406nm,0.9s
WRKA **Warakurna** 48.72 252 P **P** 05 27 46.7 -0.2
WRKA **Warakurna** 48.72 252 P **P** 05 27 46.7 -0.2
comp=Z,736nm,0.9s
FORT **Forrest** 48.95 245 P **P** 05 27 48.4 0.0
FORT **Forrest** 48.95 245 P **P** 05 27 47.7 -0.6
FORT **Forrest** 48.95 245 P **P** 05 27 47.8 -0.6
comp=Z,774nm,0.7s
KNRA **Kununurra** 49.30 264 P **P** 05 27 50.8 -0.4
KNRA **Kununurra** 49.30 264 P **P** 05 27 50.5 -0.6
comp=Z,336nm,0.7s
FAKI **Fak Fak** 49.39 282 P **P** 05 27 51.0 -0.9
SWI **Sorong** 51.06 284 P **P** 05 28 03.7 -0.3
comp=Z,284nm,0.6s
FITZ **Fitzroy Crossi** 51.85 261 P **P** 05 28 09.7 +0.1
MSAI **Masohi** 52.34 280 P **P** 05 28 15.8 +2.6
NLAI **Namlea** 54.10 279 P **P** 05 28 25.5 -0.1
comp=Z,149nm,0.6s
KMBL **Kambalda** 54.26 244 P **P** 05 28 25.6 -0.8
KMBL **Kambalda** 54.26 244 P **P** 05 28 25.4 -1.0
comp=Z,134nm,0.9s
SOEI **Soe** 54.87 271 P **P** 05 28 32.6 +1.5
SOEI **Soe** 54.87 271 P **P** 05 28 31.9 +0.8
TNTI **Ternate** 55.28 284 P **P** 05 28 35.6 +1.9
TNTI **Ternate** 55.28 284 P **P** 05 28 33.1 -0.6
TNTI IAmb IAmb 05 28 35.6
comp=Z,78nm,0.8s
TNTI **Ternate** 55.28 284 P **P** 05 28 34.8 +1.1
comp=Z,119nm,0.8s
BATI **Baumata** 55.33 270 P **P** 05 28 35.6 +1.5
comp=Z,214nm,0.6s
SANI **Sanana** 55.55 280 P **P** 05 28 35.4 -0.2
SANI **Sanana** 55.55 280 P **P** 05 28 35.3 -0.3
comp=Z,152nm,0.8s,comp=Z,3μm
PSA00 **Pilbara Seismi** 56.76 256 P **P** 05 28 43.2 -0.6
PSA00 **Pilbara Seismi** 56.76 256 P **P** 05 28 43.2 -0.6
PSA00 **Pilbara Seismi** 56.76 256 P **P** 05 28 43.0 -0.8
PSA00 IAmb IAmb 05 28 44.7
comp=Z,65nm,0.9s
PSA00 **Pilbara Seismi** 56.76 256 P **P** 05 28 43.1 -0.8
comp=Z,278nm,0.7s
MBWA **Marble Bar** 56.92 256 P **P** 05 28 44.1 -0.8
MBWA **Marble Bar** 56.92 256 P **P** 05 28 44.4 -0.5
MBWA **Marble Bar** 56.92 256 P **P** 05 28 44.3 -0.7
comp=Z,166nm,0.7s
MMRI **Maumere** 57.09 271 P **P** 05 28 45.9 -0.3
MMRI **Maumere** 57.09 271 P **P** 05 28 45.2 -0.9
MMRI **Maumere** 57.09 271 P **P** 05 28 45.4 -0.8
comp=Z,190nm,0.6s,comp=Z,8μm
MEEK **Meekatharra** 57.33 249 P **P** 05 28 46.9 -0.8
MEEK **Meekatharra** 57.33 249 P **P** 05 28 46.3 -1.3
comp=Z,159nm,0.7s
EDFI **Ende, Flores** 57.58 271 P **P** 05 28 48.5 -1.1
comp=Z,127nm,0.8s,comp=Z,6μm
AUALB **St Joseph's Co** 57.60 240 P **P** 05 28 49.4 +0.1
KLBR **Kellerberrin** 57.78 244 P **P** 05 28 50.4 -0.2
KLBR **Kellerberrin** 57.78 244 P **P** 05 28 49.8 -0.8
comp=Z,752nm,0.7s
NWAO **Narrogin (SRO)** 58.18 242 P **P** 05 28 53.5 +0.3
NWAO **Narrogin (SRO)** 58.18 242 P **P** 05 28 53.2 0.0
NWAO IAmb IAmb 05 28 53.8
comp=Z,42nm,0.7s
NWAO **Narrogin (SRO)** 58.18 242 P **P** 05 28 52.9 -0.4
comp=Z,36nm,0.6s,baz=100,slow=4.6,SNR=43
comp=Z,36nm,0.6s
KMSI **Cibinong** 58.35 282 P **P** 05 28 54.7 +0.1
comp=Z,271nm,0.7s
RKGY **Rocky Gully** 58.36 240 P **P** 05 28 55.1 +0.7
RKGY **Rocky Gully** 58.36 240 P **P** 05 28 54.2 -0.2
comp=Z,207nm,0.9s
LUWI **Luwuk** 58.91 280 P **P** 05 28 58.4 0.0
LUWI **Luwuk** 58.91 280 P **P** 05 28 57.5 -0.9
LUWI **Luwuk** 58.91 280 P **P** 05 28 59.9 +1.5
comp=Z,211nm,1.1s,comp=Z,5μm
MUN **Mundaring** 59.08 243 P **P** 05 28 59.7 +0.4
MUN **Mundaring** 59.08 243 P **P** 05 28 58.9 -0.3
comp=Z,115nm,0.7s
GTOI **Gorontalo** 59.27 282 P **P** 05 29 01.6 +0.8
MTKN **Mount Kenneth** 59.45 243 P **P** 05 29 02.9 +1.2
MTKN **Mount Kenneth** 59.45 243 P **P** 05 29 02.9 +1.2
comp=Z,340nm,0.7s
WBSI **Waikabubak, Su** 59.54 269 P **P** 05 29 03.2 +0.6
BNSI **Bone** 60.34 275 P **P** 05 29 08.7 +0.9
KAPI **Kappang** 60.49 274 P **P** 05 29 09.0 +0.2
KAPI **Kappang** 60.49 274 P **P** 05 29 08.2 -0.6
KAPI IAmb IAmb 05 29 09.3
comp=Z,31nm,0.5s
KAPI **Kappang** 60.49 274 P **P** 05 29 08.6 -0.3
comp=Z,29nm,0.5s,baz=131,slow=4.4,SNR=8.5
comp=Z,29nm,0.5s
H01W1 **Cape Leeuwin H** 60.68 240 P **P** 05 29 10.7 +1.2
baz=113,slow=6.6,SNR=12
H01W3 **Cape Leeuwin H** 60.69 240 P **P** 05 29 10.7 +1.2
baz=113,slow=6.6,SNR=7.3
H01W2 **Cape Leeuwin H** 60.69 240 P **P** 05 29 10.8 +1.2
baz=113,slow=6.6,SNR=8.3
SPSI **Sidrap Palu** 60.79 276 P **P** 05 29 09.8 -1.0
comp=Z,76nm,0.7s
TOLI2 **Tolitoli** 61.52 281 P **P** 05 29 16.3 +0.7
TOLI2 **Tolitoli** 61.52 281 P **P** 05 29 15.2 -0.4
GIRL **Giralia** 61.76 253 P **P** 05 29 17.5 +0.5
GIRL **Giralia** 61.76 253 P **P** 05 29 17.1 +0.2
IGBI **Denpasar** 63.80 269 P **P** 05 29 30.1 -0.1
comp=Z,203nm,0.8s
SRBI **Singaraja** 63.93 270 P **P** 05 29 30.8 -0.2
comp=Z,139nm,1.0s
JAGI **Jajag, Banyuwa** 64.84 269 P **P** 05 29 36.5 -0.2
JAGI **Jajag, Banyuwa** 64.84 269 P **P** 05 29 34.9 -1.8
JAGI **Jajag, Banyuwa** 64.84 269 P **P** 05 29 34.8 -1.9
CASY **Casey** 65.69 205 P **P** 05 29 41.7 +0.6
CASY IAmb IAmb 05 29 43.3
comp=Z,37nm,0.8s
MJAR **Matsushiro Arr** 67.14 324 P **P** 05 29 50.0 -0.5
comp=Z,8.7nm,0.5s,baz=331,slow=10,SNR=5.9
comp=Z,8.7nm,0.5s
MAJO **Matsushiro** 67.15 324 P **P** 05 29 50.9 +0.4
MAJO **Matsushiro** 67.15 324 P **P** 05 29 50.0 -0.5
MAJO IAmb IAmb 05 29 50.3
comp=Z,20nm,0.5s
MJB9 **Matsu-Tunnel** 67.15 324 P **P** 05 29 49.9 -0.7
MJB9 IAmb IAmb 05 29 50.3
comp=Z,19nm,0.5s
PWJI **Pagerwojo** 67.20 269 P **P** 05 29 50.6 -0.7
comp=Z,174nm,0.6s
KKM **Kota Kinabalu** 67.56 285 P **P** 05 29 53.9 +0.3
KKM **Kota Kinabalu** 67.56 285 P **P** 05 29 52.9 -0.7
UGM **Wanagama** 68.45 268 P **P** 05 29 58.7 -0.2
UGM **Wanagama** 68.45 268 P **P** 05 30 00.2 +1.3
SMRI **Semarang** 68.76 269 P **P** 05 30 00.8 0.0
JNU **Nakatsue** 69.27 317 P **P** 05 30 03.1 -0.3
comp=Z,7.6nm,0.6s,baz=68,slow=0.4,SNR=9.5
comp=Z,7.6nm,0.6s
STKI **Sintang** 69.92 277 P **P** 05 30 08.7 +1.0
SBUM **Sibu** 70.01 279 P **P** 05 30 07.9 -0.3
KPJI **Karang Pucung** 70.12 269 P **P** 05 30 08.2 -0.6
comp=Z,154nm,0.7s
CMJI **Cimerak** 70.46 268 P **P** 05 30 11.0 +0.2
comp=Z,149nm,0.6s
TWG **Pinlang** 70.62 303 IAmb IAmb 05 30 21.5
comp=Z,55nm,1.3s
YULB **Yu-li** 70.73 303 P **P** 05 30 12.5 +0.3
NACB **Ninganchiao** 70.89 304 P **P** 05 30 13.6 +0.5
SSLB **Suanglung** 71.20 304 P **P** 05 30 14.2 -0.7
TPUB **Ta-pu** 71.21 303 P **P** 05 30 15.0 0.0
BBJI **Bungbulang** 71.31 268 P **P** 05 30 15.2 -0.7
YHNB **Yeheng** 71.31 305 IAmb IAmb 05 30 17.4
comp=Z,36nm,1.2s
KSM **Kuching** 71.48 278 P **P** 05 30 17.7 +0.9
KSM **Kuching** 71.48 278 P **P** 05 30 16.7 -0.1
CNJI **Cibinong** 71.84 268 P **P** 05 30 18.2 -0.7
comp=Z,105nm,0.6s
QSPA **South Pole Qui** 72.21 180 P **P** 05 30 20.6 +0.5
QSPA IAmb IAmb 05 30 22.5
comp=Z,48nm,0.9s
QSPA **South Pole Qui** 72.21 180 P **P** 05 30 20.9 +0.8
comp=Z,38nm,0.6s,baz=303,slow=0.3,SNR=314
comp=Z,38nm,0.6s
DBJI **Dramaga** 72.42 269 P **P** 05 30 21.7 -0.5
comp=Z,217nm,0.8s
SKJI **Sukabumi** 72.47 268 P **P** 05 30 21.7 -0.8
YSS **Yuzh-Sakhalins** 72.83 334 P **P** 05 30 24.2 +0.5
YSS IAmb IAmb 05 30 25.4
comp=Z,35nm,1.2s
PETK **Petropavlovsk-** 73.32 346 P **P** 05 30 26.3 -0.2
comp=Z,6.1nm,0.6s,baz=109,slow=8.1,SNR=18
comp=Z,6.1nm,0.6s
KSRS **Korea Array** 73.86 319 P **P** 05 30 30.2 +0.4
comp=Z,2.7nm,0.6s,baz=138,slow=6.6,SNR=13
comp=Z,2.7nm,0.6s
KSAR **Wonju Array Be** 73.88 319 P **P** 05 30 30.1 +0.2
PPBI **Pangkal Pinang** 74.29 273 P **P** 05 30 33.5 +0.7
comp=Z,83nm,0.8s,comp=Z,7μm
KASI **Kota Agung** 74.86 269 P **P** 05 30 34.6 -1.4
comp=Z,297nm,0.7s
LWLI **Liwa** 75.42 269 P **P** 05 30 38.2 -1.0
USRK **Ussuriysk Ar.** 75.89 326 P **P** 05 30 41.4 +0.4
comp=Z,5.0nm,0.5s,baz=134,slow=3.3,SNR=20
comp=Z,5.0nm,0.5s
NJ2 **Nanjing** 76.97 310 *e*P **P** 05 30 48.8 +1.6
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
PMPB **Monarch Peak** 77.35 45 IAmb IAmb 05 30 51.5
comp=Z,13nm,0.7s
MDJ **Mudanjiang** 77.45 325 P **P** 05 30 49.9 +0.5
MDJ **Mudanjiang** 77.45 325 P **P** 05 30 50.0 +0.5
MDJ pmax pmax
comp=Z,23nm,1.1s
BCW **Bitter Crk WRg** 77.61 47 IAmb IAmb 05 31 05.5
comp=Z,16nm,0.8s
YBH **Yreka Blue Hor** 79.24 40 P **P** 05 30 60.0 +0.8
YBH IAmb IAmb 05 31 01.4
comp=Z,9.6nm,0.6s
CN2 **Changchun** 79.24 323 P **P** 05 30 59.3 +0.3
CN2 pmax pmax
comp=Z,30nm,1.2s
WAKR **Walker** 79.51 44 IAmb IAmb 05 31 03.1
comp=Z,13nm,0.8s
MPK **Martis Peak** 79.55 43 IAmb IAmb 05 31 03.7
comp=Z,23nm,0.6s
SLBS **Sierra La Lagu** 79.58 61 P **P** 05 31 03.3 +2.0
SLBS IAmb IAmb 05 31 04.4
comp=Z,36nm,1.2s
HUMO **Hull Mountain** 79.60 39 P **P** 05 31 02.3 +1.4
PNTR **Pine Nut** 79.72 43 IAmb IAmb 05 31 04.1
comp=Z,43nm,1.2s
L04D **Klamath Falls** 79.77 39 P **P** 05 31 02.8 +0.8
L04D IAmb IAmb 05 31 03.1
comp=Z,26nm,1.4s
DSP **Deep Springs** 79.89 45 IAmb IAmb 05 31 04.1
comp=Z,28nm,1.4s
YERR **Yerington** 79.89 44 IAmb IAmb 05 31 04.7
comp=Z,20nm,0.6s
LHV **Little Huntoon** 79.99 44 IAmb IAmb 05 31 05.5
comp=Z,30nm,1.2s
PDSI **Padang** 80.07 272 P **P** 05 31 03.0 -1.1
comp=Z,64nm,0.6s
PAHR **Pah Rah Range** 80.19 43 IAmb IAmb 05 31 06.2
comp=Z,20nm,1.2s
NVAR **Mina Array Bea** 80.22 44 P **P** 05 31 05.4 +0.9
NVAR **Mina Array Bea** 80.22 44 P **P** 05 31 05.2 +0.7
comp=Z,4.8nm,0.7s,baz=227,slow=7.9,SNR=39
NVAR pP **pwP** 05 33 17.7 +0.5
comp=Z,2.2nm,0.8s,baz=229,slow=9.2,SNR=5.6
comp=Z,4.8nm,0.7s
NV11 **Mina Array Sit** 80.32 44 IAmb IAmb 05 31 06.9
comp=Z,17nm,1.1s
KVN **Kaiserville** 80.68 44 IAmb IAmb 05 31 08.7
comp=Z,11nm,0.7s
J05D **Fort Rock, OR** 81.03 39 P **P** 05 31 09.5 +1.0
J05D IAmb IAmb 05 31 10.7
comp=Z,28nm,0.7s
IPM **Ipoh** 81.22 278 P **P** 05 31 10.7 +0.7
H04A **Detroit Lake** 81.27 37 IAmb IAmb 05 31 10.9
comp=Z,16nm,0.7s
PINE **Pine Mountain** 81.49 39 IAmb IAmb 05 31 13.1
comp=Z,18nm,0.7s
S11A **Rachel** 81.54 46 IAmb IAmb 05 31 13.1
comp=Z,20nm,0.6s
I05D **Terrebonne, OR** 81.57 38 IAmb IAmb 05 31 12.9
comp=Z,15nm,1.1s
E03A **Lebam** 81.59 35 IAmb IAmb 05 31 13.4
comp=Z,16nm,0.8s
F04A **Amboy** 81.87 36 IAmb IAmb 05 31 14.0
comp=Z,38nm,1.3s
PRN **Pahroc Range** 81.91 47 IAmb IAmb 05 31 15.5
comp=Z,19nm,0.9s
BMN **Battle Mountai** 81.98 43 IAmb IAmb 05 31 15.3
comp=Z,20nm,1.1s
G05A **Wamic** 82.10 37 P **P** 05 31 14.4 +0.7
G05A IAmb IAmb 05 31 15.3
comp=Z,14nm,0.8s
WVOR **Wild Horse Val** 82.14 41 IAmb IAmb 05 31 16.1
comp=Z,27nm,1.2s
HEH **HeiHe** 82.23 329 *e*P **P** 05 31 14.1 -0.1
BELA **Belgrano 2** 82.38 173 P **P** 05 31 14.3 -0.3
BELA IAmb IAmb 05 31 15.9
comp=Z,36nm,0.9s
I07A **Izee** 82.51 39 IAmb IAmb 05 31 17.9
comp=Z,11nm,0.8s
HNS **HongShan** 82.59 313 ⇑P **P** 05 31 17.3 +1.0
HNS pmax pmax
comp=Z,17nm,1.7s
RPSI **Rantau Prapat** 82.65 275 IAmb IAmb 05 31 17.8
comp=Z,31nm,0.6s
PSI **Prapat** 82.68 275 P **P** 05 31 18.1 +0.6
J08A **Circle Bar Ran** 82.74 40 IAmb IAmb 05 31 19.0
comp=Z,15nm,0.6s
D05A **Enumclaw** 82.85 36 IAmb IAmb 05 31 20.3
comp=Z,54nm,1.5s
LYN **LuoYang** 82.86 310 P **P** 05 31 18.4 +0.7
LYN pmax pmax
comp=Z,46nm,1.0s
Q12A **Willow Creek R** 82.86 45 IAmb IAmb 05 31 19.8
comp=Z,13nm,0.8s
BJT **Baijiatuao** 82.89 316 P **P** 05 31 19.1 +1.3
BJT **Baijiatuao** 82.89 316 IAmb IAmb 05 31 19.2
comp=Z,23nm,1.1s
BJI **Beijing** 82.90 316 P **P** 05 31 17.6 -0.2
BJI pmax pmax
comp=Z,10.0nm,1.3s
GHO **Glory Hole Cre** 83.04 14 IAmb IAmb 05 31 18.6
comp=Z,12nm,0.8s
X16A **Lo Mia Camp, P** 83.07 51 IAmb IAmb 05 31 21.6
comp=Z,28nm,1.3s
ENH **Enshi** 83.24 305 P **P** 05 31 21.2 +1.4
ENH **Enshi** 83.24 305 IAmb IAmb 05 31 20.6
comp=Z,39nm,1.2s
PSUT **Pine Spring** 83.28 46 IAmb IAmb 05 31 21.9
comp=Z,7.5nm,0.6s
319A **Douglas** 83.36 54 IAmb IAmb 05 31 23.3
comp=Z,26nm,1.3s
U15A **North Rim** 83.38 49 IAmb IAmb 05 31 23.1
comp=Z,16nm,0.9s
SEY **Seymchan** 83.45 348 P **P** 05 31 19.7 -0.3
comp=Z,5.6nm,0.5s,baz=147,slow=5.3,SNR=13
comp=Z,5.6nm,0.5s
GSI **Gunungsitoli** 83.50 273 P **P** 05 31 23.3 +1.9
GSI **Gunungsitoli** 83.50 273 P **P** 05 31 22.6 +1.2
comp=Z,100nm,0.7s
G08A **Pilot Rock** 83.50 38 IAmb IAmb 05 31 22.6
comp=Z,8.8nm,0.7s
MAW **Mawson** 83.51 200 P **P** 05 31 21.2 +0.9
comp=Z,8.9nm,0.6s,baz=127,slow=6.4,SNR=16
comp=Z,8.9nm,0.6s
WUAZ **Wupatki** 83.62 50 IAmb IAmb 05 31 24.0
comp=Z,24nm,1.4s
E07A **Sunnyside** 83.69 37 IAmb IAmb 05 31 23.4
comp=Z,9.8nm,0.9s
HAWA **Hanford** 83.78 37 IAmb IAmb 05 31 23.9
comp=Z,12nm,0.9s
PKCU **Pink Cliffs** 83.83 48 IAmb IAmb 05 31 25.9

NONG Nongkai 83.85 291 P P 05 31 23.3 +0.3
SRIT Nakonsritamara 83.88 281 P P 05 31 24.5 +1.3
DUN6 Lazy B Ranch 84.01 53 IAmb IAmb 05 31 25.7
comp=Z,50nm,1.5s
NAYO Nakonayok 84.19 287 P P 05 31 26.8 +2.1
MVU Marysvale 84.40 47 IAmb IAmb 05 31 29.0
comp=Z,19nm,1.2s
D08A Wollman Farm, 84.50 37 IAmb IAmb 05 31 26.5
comp=Z,27nm,1.4s
F10A Beach Ranch, E 84.89 38 IAmb IAmb 05 31 28.9
comp=Z,32nm,1.4s
XLT XiLinHaoTe 84.91 319 eP P 05 31 27.8 +0.1
XLT pmax pmax
comp=Z,17nm,0.8s
XAN Xi'an 85.27 308 ⇓P P 05 31 30.1 +0.5
XAN sP sP 05 34 38.3 -4.8
XAN pmax pmax
comp=Z,51nm,1.5s
TMUT Trail Mountain 85.46 46 IAmb IAmb 05 31 33.0
comp=Z,8.8nm,0.7s
S34M Telegraph Cree 85.47 24 IAmb IAmb 05 31 31.8
comp=Z,7.9nm,0.7s
MLSI Meulaboh, Aceh 85.52 276 P P 05 31 31.6 +0.4
HVU Hansel Valley 85.56 44 IAmb IAmb 05 31 32.9
comp=Z,8.5nm,0.8s
SRU San Rafael Swe 85.85 47 IAmb IAmb 05 31 34.2
comp=Z,6.9nm,0.7s
ILAR Eielson Array 86.10 13 P P 05 31 31.4 -1.4
comp=Z,1.1nm,0.6s,baz=224,slow=5.6,SNR=24
ILAR pP pwP 05 33 48.8 +0.9
comp=Z,1.5nm,1.0s,baz=224,slow=6.0,SNR=2.3
comp=Z,1.1nm,0.6s
TCUT Toone Canyon 86.16 45 IAmb IAmb 05 31 36.0
comp=Z,16nm,0.5s
P18A Preston Nutter 86.27 46 IAmb IAmb 05 31 36.0
comp=Z,14nm,1.5s
HHC Hu-ho-hao-te 86.37 315 eP P 05 31 35.8 +1.1
HHC pP pP 05 33 41.8 -5.1
HHC pmax pmax
comp=Z,24nm,0.5s
VHRN Van Horn 86.48 56 IAmb IAmb 05 31 39.0
comp=Z,9.4nm,0.7s
J26L Joseph Creek 86.65 15 IAmb IAmb 05 31 36.5
comp=Z,5.3nm,0.6s
KMI Kunming 86.73 298 ⇑P P 05 31 38.0 +1.1
KMI pmax pmax
comp=Z,27nm,0.7s
TX31 Lajitas Ar. Si 86.98 58 IAmb IAmb 05 31 40.9
comp=Z,34nm,1.2s
TXAR Lajitas Array 86.98 58 P P 05 31 39.4 +1.5
comp=Z,13nm,1.0s,baz=211,slow=5.7,SNR=56
TXAR pP pwP 05 33 54.5 +0.8
comp=Z,0.9nm,0.9s,baz=226,slow=4.8,SNR=2.2
TXAR PKKPbc PKKPbc 05 49 27.0 0.0
comp=Z,0.2nm,0.7s,baz=129,slow=3.2,SNR=3.9
comp=Z,13nm,1.0s
ANMO Albuquerque 87.00 52 P P 05 31 38.2 +0.3
AHID Auburn Hatcher 87.12 43 IAmb IAmb 05 31 40.3
comp=Z,18nm,1.4s
MSO Missoula 87.29 39 IAmb IAmb 05 31 40.4
comp=Z,5.5nm,0.5s
BTO Baotou 87.31 314 eP P 05 31 41.6 +2.5
BTO sP sP 05 34 46.6 -6.9
BTO pmax pmax
comp=Z,21nm,0.6s
BTO pmax pmax
comp=Z,1μm,6.9s
DLMT Dillon 87.39 41 IAmb IAmb 05 31 41.4
comp=Z,8.3nm,0.8s
ALPN Alpine 87.40 57 IAmb IAmb 05 31 42.3
comp=Z,13nm,1.1s
TPAW Teton Pass 87.55 43 IAmb IAmb 05 31 41.5
comp=Z,17nm,1.3s
PECS Pecos 87.59 56 IAmb IAmb 05 31 42.6
comp=Z,19nm,1.5s
SNOW Snow King Moun 87.67 43 IAmb IAmb 05 31 43.1
comp=Z,20nm,1.3s
CMAR Chiang Mai Arr 87.73 290 P P 05 31 41.8 +0.3
CMAR Chiang Mai Arr 87.73 290 P P 05 31 42.2 +0.7
comp=Z,6.3nm,0.9s,baz=126,slow=2.8,SNR=22
comp=Z,6.3nm,0.9s
S22A 4UR Ranch, Cre 87.88 49 IAmb IAmb 05 31 44.4
comp=Z,19nm,1.3s
YHL Hebgen Lake 88.03 41 IAmb IAmb 05 31 45.2
comp=Z,19nm,1.3s
PZH PanZhiHua 88.07 298 P P 05 31 44.0 +1.0
PZH pmax pmax
comp=Z,10.0nm,0.5s
PD31 Pinedale Array 88.14 44 IAmb IAmb 05 31 44.4
comp=Z,10nm,1.1s
PDAR Pinedale Array 88.14 44 P P 05 31 42.4 -0.7
PDAR Pinedale Array 88.14 44 P P 05 31 43.0 -0.1
comp=Z,2.5nm,0.5s,baz=210,slow=3.2,SNR=33
PDAR pP pwP 05 33 59.8 +0.4
comp=Z,1.6nm,1.0s,baz=199,slow=3.1,SNR=3.9
comp=Z,2.5nm,0.5s
SMCO Snowmass 88.36 48 IAmb IAmb 05 31 46.4
comp=Z,8.5nm,0.8s
LKWY Lake 88.40 42 IAmb IAmb 05 31 47.5
comp=Z,8.1nm,1.1s
MNHN Monahans 88.46 56 IAmb IAmb 05 31 46.5
comp=Z,6.4nm,0.8s
SAND Sanderson 88.46 58 IAmb IAmb 05 31 46.7
comp=Z,6.9nm,0.8s
SDCO Great Sand Dun 88.84 50 IAmb IAmb 05 31 49.0
comp=Z,12nm,1.5s
ELIB Princess Elisa 89.08 187 dP P 05 31 46.8 -0.1
comp=Z,7.1nm,0.7s
COYC Coyhaique 89.16 138 P P 05 31 47.9 +0.3
RWWY Rawlins 89.25 46 IAmb IAmb 05 31 49.8
comp=Z,11nm,1.1s
RLMT Red Lodge 89.37 42 IAmb IAmb 05 31 50.8
comp=Z,7.0nm,1.2s
DRIO Del Rio 89.49 59 IAmb IAmb 05 31 52.1
comp=Z,20nm,1.0s
OZNA Ozona 89.61 57 IAmb IAmb 05 31 51.8
comp=Z,16nm,0.6s
N23A Red Feather La 89.79 47 IAmb IAmb 05 31 53.0
comp=Z,10nm,0.8s
LZH Lanzhou 89.90 308 eP P 05 31 52.6 +1.2
LZH pmax pmax
comp=Z,59nm,1.5s
POST Post 90.08 55 IAmb IAmb 05 31 53.3
comp=Z,11nm,0.6s
LL02 Futaleuf 90.31 136 P P 05 31 54.0 +1.0
TROLL Troll, Antarti 90.36 181 ⇓P P 05 31 52.6 -0.2
comp=Z,2μm,0.5s
RTBA Rita Blanca 90.37 52 P P 05 31 53.3 -0.2
RTBA IAmb IAmb 05 31 55.2
comp=Z,7.7nm,1.0s
JCT Junction City 90.52 58 IAmb IAmb 05 31 55.7
comp=Z,4.7nm,0.7s
AMTX Amarillo 90.60 54 IAmb IAmb 05 31 55.9
comp=Z,7.0nm,0.8s
HNDO Hondo 90.62 59 IAmb IAmb 05 31 57.8
comp=Z,16nm,0.9s
SNAA Sanae 90.68 179 P P 05 31 53.6 -0.6
SNAA IAmb IAmb 05 31 54.8
comp=Z,8.8nm,0.7s
SNAA Sanae 90.68 179 ⇓P P 05 31 53.6 -0.6
comp=Z,210nm,0.5s
SNAA Sanae 90.68 179 P P 05 31 53.9 -0.3
comp=Z,7.7nm,0.5s,baz=205,slow=7.4,SNR=118
comp=Z,7.7nm,0.5s
VNA3 Neumayer Olymp 90.87 177 ⇓P P 05 31 54.7 -0.3
comp=Z,49nm,0.7s
APMT Aspermont 91.26 55 IAmb IAmb 05 31 58.8
comp=Z,8.6nm,0.8s
VNA2 Neumayer--Watz 91.30 177 ⇓P P 05 31 56.7 -0.3
comp=Z,37nm,0.6s,baz=188,slow=4.7
BRDY Brady 91.45 58 IAmb IAmb 05 31 59.9
comp=Z,8.8nm,1.2s
VNA1 Neumayer--Stat 91.53 177 ⇓P P 05 31 58.2 +0.2
comp=Z,9.6nm,0.6s
LAO LASA Array 91.96 41 IAmb IAmb 05 32 02.7
comp=Z,11nm,0.8s
PLCA Paso Flores 92.24 134 P P 05 32 03.3 +1.2
comp=Z,3.1nm,0.6s,baz=231,slow=5.6,SNR=17
comp=Z,3.1nm,0.6s
SONM Songino Array 92.72 320 P P 05 32 03.8 -0.2
comp=Z,1.0nm,0.5s,baz=134,slow=5.5,SNR=5.5
comp=Z,1.0nm,0.5s
OK032 Salt Plains WL 93.91 53 IAmb IAmb 05 32 11.1
comp=Z,14nm,1.1s
GTA Gaotai 94.07 310 eP P 05 32 10.4 0.0
GTA pmax pmax
comp=Z,4.0nm,0.9s

LPAZ La Paz 104.53 113 Pdiff Pdif 05 33 02.9 +4.7
comp=Z,1.7nm,0.7s,baz=225,slow=3.3,SNR=9.8
ZALV Zalesovo Beam 107.44 322 PKiKP PKiKP 05 37 11.9 -1.8
comp=Z,1.4nm,0.6s,baz=188,slow=1.1,SNR=6.9
ZALV PKKPbc PKKPbc 05 48 29.9 -2.1
comp=Z,0.5nm,0.5s,baz=244,slow=2.4,SNR=3.6
MKAR Makanchi Array 108.23 314 PKiKP PKiKP 05 37 13.9 -1.6
comp=Z,1.6nm,0.5s,baz=215,slow=0.9,SNR=18
MKAR SKP 05 39 51.3
comp=Z,0.7nm,0.5s,baz=108,slow=4.0,SNR=3.7
MKAR PKKPbc PKKPbc 05 48 26.8 -2.7
comp=Z,0.6nm,0.5s,baz=287,slow=2.5,SNR=4.2
MKAR PKKP PKKPab 05 48 44.5 +0.7
comp=Z,0.8nm,0.5s,baz=268,slow=4.4,SNR=6.8
KURBB Kurchatov Arra 111.03 318 PKiKP PKiKP 05 37 19.1 -1.5
comp=Z,1.4nm,0.5s,baz=103,slow=1.6,SNR=21
KURBB SKP 05 39 57.0
comp=Z,0.2nm,0.3s,baz=102,slow=1.8,SNR=6.0
KURBB PKKPbc PKKPbc 05 48 19.7 -0.9
comp=Z,1.6nm,0.6s,baz=272,slow=4.2,SNR=21
BVAR Borovoye Array 116.04 321 PKP PKPdf 05 37 28.8 -1.4
comp=Z,2.7nm,0.3s,baz=113,slow=2.4,SNR=29
BVAR SKP 05 40 06.2
comp=Z,1.1nm,0.3s,baz=8.7,slow=2.0,SNR=5.2
BVAR PKKPbc PKKPab 05 48 10.0 +1.0
comp=Z,2.0nm,0.6s,baz=274,slow=3.6,SNR=9.2
SPITS Spitsbergen Ar 119.13 356 PKP PKPdf 05 37 34.7 -0.7
comp=Z,2.2nm,0.6s,baz=96,slow=5.1,SNR=5.5
BDFB Brasilia 121.89 122 PKP PKPdf 05 37 41.0 -1.6
comp=Z,2.7nm,0.5s,baz=275,slow=2.5,SNR=12
BDFB PKKPbc PKKPbc 05 47 43.0 -0.2
comp=Z,1.5nm,0.6s,baz=77,slow=5.8,SNR=5.4
AKTO Aktyubinsk 124.04 319 PKP PKPdf 05 37 44.8 -0.8
comp=Z,2.7nm,0.6s,baz=304,slow=1.1,SNR=6.4
ARCES ARCESS Array B 126.04 349 PKP PKPdf 05 37 47.9 -1.0
comp=Z,0.8nm,0.3s,baz=74,slow=1.9,SNR=20
BOSA Boshof 127.90 208 PKP PKPdf 05 37 53.0 -0.9
comp=Z,1.4nm,0.7s,baz=127,slow=5.1,SNR=1.6
BELG Belogornoye 129.54 324 pPKP pPKPdf 05 40 20.0 +1.0
comp=Z,54nm,0.9s,baz=275,slow=1.2,SNR=4.8
FINES FINESS Array B 132.79 343 PKhKP PKPpre 05 37 53.0
comp=Z,1.5nm,0.5s,baz=45,slow=0.8,SNR=9.8
FINES PKP PKPdf 05 38 02.0 +0.1
comp=Z,1.1nm,0.3s,baz=100,slow=1.8,SNR=3.7
FINES SKPbc SKPbc 05 40 31.9 -0.1
comp=Z,8.8nm,0.7s,baz=47,slow=3.7,SNR=13
KBZ Khabaz 135.92 315 SKPbc SKPbc 05 40 40.2 -2.2
comp=Z,6.0nm,0.9s,baz=197,slow=2.8,SNR=6.4
NOA NORSAR Array B 136.16 352 PKP PKiKP 05 38 09.9 -0.2
comp=Z,0.6nm,0.7s,baz=14,slow=4.1,SNR=2.1
NOA SKPbc SKPbc 05 40 42.7 0.0
comp=Z,0.3nm,0.4s,baz=59,slow=1.5,SNR=7.6
HFS Hagfors 136.68 350 PKhKP PKPpre 05 37 59.4
comp=Z,1.0nm,0.3s,baz=68,slow=3.4,SNR=17
HFS SKPbc SKPbc 05 40 44.4 +0.2
comp=Z,2.3nm,0.5s,baz=87,slow=1.7,SNR=8.3
STRU Stroemstad 138.11 352 iP PKPpre 05 38 02.7
TJOU Tjoern 139.01 351 iP PKPpre 05 38 04.4
KMBO Kilima Mbogo 139.06 246 PKhKP PKPpre 05 38 08.2
comp=Z,1.2nm,0.5s,baz=55,slow=14,SNR=4.6
BORU Boraas 139.21 350 iP PKPpre 05 38 04.0
ONAU Onsala 139.57 350 iP PKPpre 05 38 07.0
FABU Falkenberg 139.82 350 iP PKPpre 05 38 06.1
AKASG Malin Array Be 139.94 331 PKhKP PKPpre 05 38 07.2
comp=Z,1.7nm,0.4s,baz=43,slow=4.0,SNR=11
AKASG SKPbc SKPbc 05 40 52.4 -1.1
comp=Z,2.7nm,0.7s,baz=37,slow=3.0,SNR=7.9
KIEV Kiev 139.95 331 ⇑P PKPpre 05 38 07.3
DEL Delary 140.11 348 iP PKPpre 05 38 07.5
LUNU Lund 140.98 348 iP PKPpre 05 38 10.5
BEL Belsk 142.43 339 ePKP PKPdf 05 38 17.0 -2.8
EKA Eskdalemuir Ar 142.49 3 PKhKP PKPpre 05 38 15.9
comp=Z,1.1nm,0.5s,baz=358,slow=3.1,SNR=8.6
MILM Milestii Mici 142.72 327 ⇑P PKPdf 05 38 18.1 -2.4
LODK Lodwar 142.81 251 PKPdf 05 38 19.9 -1.8
KWP Kalwaria Pacla 143.52 335 ePKP PKPab 05 38 20.5 -0.3
BIR Birlad 143.76 327 ⇓P PKiKP 05 38 36.0 +10
VLDR Vladesti 143.81 327 ⇓P PKPab 05 38 21.9 -0.1
TLCR 143.84 325 ⇓P PKPbc 05 38 21.2 -0.8
BR131 Keskin Array S 143.88 314 PKPbc 05 38 21.2 -1.2
BRTR Keskin Array B 143.88 314 PKP PKPbc 05 38 21.8 -0.7
comp=Z,7.1nm,0.5s,baz=118,slow=3.2,SNR=80
BRTR SKPbc SKPbc 05 41 03.2 -0.6
comp=Z,4.6nm,0.8s,baz=112,slow=1.3,SNR=9.1
KIRS Kirsehir-Merke 143.96 313 ⇓P PKPbc 05 38 22.2 -0.4
SCTR Scanteiesti 143.96 326 ⇑P PKPbc 05 38 22.2 -0.1
BUR08 Bucovina Ar. S 143.97 331 PKPbc 05 38 22.2 -0.2
BURAR Bucovina Array 143.99 331 PKPbc 05 38 21.7 -0.7
BURAR Bucovina Array 143.99 331 ⇓P PKPdf 05 38 23.3 +0.5
GHRR 144.01 327 ⇑P PKPab 05 38 23.1 +0.3
TESR Tescani 144.09 329 ⇑P PKPbc 05 38 21.9 -0.7
ASF Jabal al Asfar 144.11 300 SKPbc SKPbc 05 41 04.1 -0.4
comp=Z,6.2nm,0.8s,baz=187,slow=0.4,SNR=5.6
OJC Ojcow 144.13 339 ePKP PKPbc 05 38 22.3 -0.4
SCHL Schela 144.17 326 ⇑P PKPab 05 38 23.2 -0.1
SCHLR Schela 144.19 326 ⇑P PKPbc 05 38 21.9 -1.0
CFR Carcaliu 144.21 326 ⇓P PKPbc 05 38 22.8 -0.2
KOLS Kolonicke sedl 144.25 335 ePKP PKPbc 05 38 23.1 0.0
KOLS e 05 39 08.4
TPGR Topolog 144.27 325 ⇓P PKPdf 05 38 23.0 -0.3
PANC Panciu 144.27 327 ⇓P PKPab 05 38 23.7 0.0
ONER Baraj Valea Uz 144.34 329 ⇓P PKPdf 05 38 23.0 -0.4
ANTO Ankara 144.39 315 ⇓P PKPdf 05 38 23.6 -0.1
BR231 Keskin MP Arra 144.41 315 PKPdf 05 38 23.9 +0.1
VRI Vrincioaia 144.49 328 ⇑P PKPdf 05 38 23.4 -0.2
PLOR Plostina 144.54 328 ⇑P PKPdf 05 38 23.7 0.0
CRVS Cervenica-Dubn 144.60 336 ePKP PKPab 05 38 24.6 -0.4
CRVS e 05 39 10.3
NIE Niedzica 144.62 337 ePKP PKPbc 05 38 24.4 +0.1
HARR Harsova 144.64 325 ⇑P PKPbc 05 38 24.2 -0.1
KSP Ksiaz 144.70 342 ePKP PKPbc 05 38 24.5 +0.1
TURR Turia 144.72 328 ⇓P PKPbc 05 38 25.0 +0.3
COVR Voineasa-Covas 144.77 328 ⇑P PKPdf 05 38 24.1 -0.1
ARCR ARCALIA 144.77 331 ⇓P PKPbc 05 38 24.8 0.0
TSMN Mangalia Port- 144.84 323 ⇑P PKiKP 05 38 28.4 +0.1
BOSR Bodos 144.88 329 ⇑P PKPbc 05 38 25.6 +0.5
OSTC Ostas 144.98 342 ePKP PKPbc 05 38 25.5 +0.2
CHVC Chvalec 145.00 342 ePKP PKPbc 05 38 25.0 -0.3
NEHR Nehoiu 145.01 327 ⇑P PKPbc 05 38 25.2 -0.4
UPC Upice 145.08 342 ePKP PKPbc 05 38 25.4 -0.1
DOPR Dopca 145.09 329 ⇑P PKPbc 05 38 25.9 +0.1
MMAI Mount Meron Ar 145.10 302 PKPbc PKPbc 05 38 26.2 0.0
comp=Z,23nm,0.5s,baz=64,slow=5.7,SNR=33
MMAI SKPbc SKiKP 05 41 07.2 0.0
comp=Z,13nm,0.8s,baz=72,slow=3.8,SNR=7.2
CLL Collm 145.13 346 iPKPbc PKPbc 05 38 25.1 -0.5
comp=Z,28nm,0.6s
CLL eSKPdf SKPdf 05 41 01.0 +0.5
DPC Dobruska-Polom 145.13 342 ePKP PKPbc 05 38 25.8 0.0
LANS Liptovska Anna 145.14 338 ePKP PKPab 05 38 26.6 -0.5
MDUB Mudurnu 145.15 317 PKPdf PKPdf 05 38 24.4 -0.7
MDUB PKPbc PKPbc 05 38 26.0 -0.2
MLR Muntele Rosu 145.15 328 PKPdf PKPdf 05 38 24.4 -0.6
MLR Muntele Rosu 145.15 328 PKPbc PKPdf 05 38 25.5 +0.5
comp=Z,10nm,0.5s,baz=352,slow=11,SNR=26
MLR SKPbc SKPbc 05 41 05.4 -1.2
comp=Z,1.7nm,0.4s,baz=115,slow=7.2,SNR=4.1
MLR Muntele Rosu 145.15 328 ⇓P PKPdf 05 38 25.4 +0.5
KRLC Kraliky 145.24 341 ePKP PKPbc 05 38 26.0 -0.1
MORC Moravsky Berou 145.26 340 PKPdf PKPdf 05 38 24.3 -0.6
MORC Moravsky Berou 145.26 340 ePKP PKPbc 05 38 25.7 -0.5
MORC Moravsky Berou 145.26 340 ⇑P PKPdf 05 38 25.0 +0.2
BRG Berggiesshubel 145.30 345 ePKP PKPbc 05 38 26.0 -0.2
BRG Amp 05 38 26.6
comp=Z,9.0nm,0.7s
CJR Cluj-Napoca 145.40 331 ⇑P PKPbc 05 38 26.2 -0.5
GHAJ Ghor Haditha 145.43 300 PKPdf 05 38 23.8 -1.8
PVCC Panska Ves 145.46 344 ePKP PKPbc 05 38 26.6 0.0
SULR 145.54 327 ⇑P PKPbc 05 38 26.6 -0.4
VOIR 145.64 329 ⇓P PKPbc 05 38 26.9 -0.5
DRGR 145.74 332 ⇓P PKPbc 05 38 27.1 -0.5
TNR Turnu Rosu 145.86 330 ⇑P PKPbc 05 38 28.7 +0.7
ARR Arges 145.89 329 ⇓P PKPbc 05 38 28.4 +0.3
VYHS Vyhne 145.92 338 ePKP PKPbc 05 38 28.1 +0.1
PRU Pruhonice 145.96 344 ePKP PKPbc 05 38 27.7 -0.3
GOPC GO Pecny, Ondr 145.96 343 ePKP PKPbc 05 38 27.8 -0.3
VRAC Vranov 145.97 341 ePKP PKPbc 05 38 27.9 -0.2
VRAC Vranov 145.97 341 ⇓P PKPdf 05 38 23.0 -3.0
PSZ Piszkesteto 146.01 336 ⇓P PKPpre 05 38 15.6
JAVC Velka Javorina 146.01 339 ePKP PKPbc 05 38 29.2 +0.9
CSS Mathiatis 146.08 307 PKPbc 05 38 27.9 -1.0
KRUC Moravsky 146.25 341 ePKP PKPbc 05 38 28.4 -0.5
EIL Elat 146.32 297 PKPbc PKPbc 05 38 28.9 -0.8
comp=Z,15nm,0.6s,baz=17,slow=5.1,SNR=12

ZVC Zvikov 146.55 344 ePKP PKPbc 05 38 29.7 0.0
SIRR Siria 146.60 333 ⇑P PKPbc 05 38 29.4 -0.5
GZR Gura Zlata 146.76 331 ⇓P PKPbc 05 38 29.8 -0.7
SURR Surduc 146.79 332 ⇑P PKPbc 05 38 30.1 -0.4
ELND Elena 146.92 325 ⇓P PKPab 05 38 34.6 +0.3
KHC Kasperske Hory 147.00 344 ePKP PKPbc 05 38 30.9 0.0
MEM Membach 147.00 353 dPKP PKPbc 05 38 30.0 -0.8
BTNL Ternell 147.01 353 dPKPdf PKPdf 05 38 27.3 -0.4
BTNL dPKP PKPbc 05 38 30.2 -0.7
GRF Grafenberg Arr 147.04 347 ePKP PKPbc 05 38 30.8 -0.2
baz=19,slow=2.1
BSTI Sart Tilman 147.07 354 dPKP PKPbc 05 38 30.3 -0.7
CKRC Cesky Krumlov 147.08 343 ePKP PKPbc 05 38 31.3 +0.2
SRE Strehaia 147.10 329 ⇑P PKPbc 05 38 31.0 -0.3
BZS Buzias 147.12 332 ⇓P PKPbc 05 38 30.6 -0.7
GERES GERESS Array B 147.23 344 PKPbc PKPbc 05 38 31.3 -0.3
comp=Z,4.4nm,0.5s,baz=168,slow=8.2,SNR=36
BCLA Clavier 147.26 354 dPKP PKPab 05 38 34.5 -1.0
BGES Gesves 147.31 354 dPKP PKPbc 05 38 30.8 -0.8
HERR Herculane 147.32 330 ⇓P PKPbc 05 38 31.2 -0.7
CONA Conrad Observa 147.42 340 ePKP PKPbc 05 38 31.7 -0.4
comp=Z,5.2nm,0.5s,SNR=7.5
BMRD Maredsous 147.43 355 dPKP PKPbc 05 38 31.4 -0.5
RONA Rosalia, Austr 147.48 340 iPKP PKPbc 05 38 32.0 -0.3
comp=Z,6.0nm,0.5s,SNR=5.8
DOU Dourbes 147.65 355 dPKP PKPbc 05 38 31.9 -0.5
MORH Mrgy, Hungar 147.89 336 ⇑P PKPpre 05 38 14.6
WLF Walferdange 147.91 353 PKiKP 05 38 33.9 -0.6
WLF Walferdange 147.91 353 dPKP PKPbc 05 38 32.9 -0.3
MOA Molln 147.97 342 iPKP PKPbc 05 38 32.6 -0.8
comp=Z,1.6nm,0.5s
ARSA Arzberg 148.12 340 iPKP PKPbc 05 38 32.6 -1.2
comp=Z,1.0nm,0.4s
BIOA Bad Ischl, Aus 148.30 343 ePKP PKPbc 05 38 33.3 -1.0
comp=Z,0.8nm,0.3s
BOVS Bovan 148.59 329 ⇑P PKPbc 05 38 34.1 -0.9
LESA Schwarzleotal 148.81 344 ePKP PKPbc 05 38 34.9 -0.7
comp=Z,4.2nm,0.3s
BFO Black Forest 148.90 350 PKPbc 05 38 35.5 -0.2
KBA Koelnbreinsper 148.94 343 iPKP PKPbc 05 38 34.5 -1.5
comp=Z,1.6nm,0.3s,SNR=5.7
WATA Walderalm 149.17 345 ePKP PKPbc 05 38 35.8 -0.7
comp=Z,5.6nm,0.5s,SNR=5.5
RETA Reutte 149.22 346 iPKP PKPbc 05 38 35.9 -0.7
comp=Z,3.5nm,0.5s
WTTA Wattenberg 149.22 345 iPKP PKPbc 05 38 36.0 -0.7
comp=Z,6.1nm,0.3s,SNR=6.0
MYKA Terra Mystica 149.26 342 iPKP PKPbc 05 38 35.2 -1.5
comp=Z,6.2nm,0.4s
MOTA Moosalm 149.28 346 iPKP PKPbc 05 38 35.8 -1.0
comp=Z,3.2nm,0.3s
SQTA Sankt Quirin 149.37 345 iPKP PKPbc 05 38 36.3 -0.7
comp=Z,3.5nm,0.3s,SNR=5.4
PRED Cave del Predi 149.45 342 PKPbc 05 38 36.1 -1.1
PRED PKPab PKPab 05 38 43.9 -0.9
ABTA Abfaltersbach 149.47 343 iPKP PKPbc 05 38 35.9 -1.3
comp=Z,6.6nm,0.6s
DAVA Damuels 149.60 347 iPKP PKPbc 05 38 37.3 -0.3
comp=Z,1.9nm,0.5s
FETA Feichten 149.67 346 iPKP PKPbc 05 38 37.1 -0.7
comp=Z,1.6nm,0.4s
SABO M.te Sabotino 149.86 341 PKPbc 05 38 37.5 -0.6
FUORN Ofenpass-Fuorn 150.15 346 PKiKP 05 38 39.4 -0.2
CTI Castel Tesino 150.35 344 PKPbc 05 38 39.4 +0.1
PDG Podgorica 150.67 331 ⇑P PKPbc 05 38 38.5 -1.5
OHR Ohrid 150.90 327 iP PKPbc 05 38 40.3 -0.4
IDI Anoyia 152.11 313 PKPbc PKPbc 05 38 42.7 -0.8
comp=Z,9.8nm,0.5s,baz=355,slow=3.2,SNR=14
KEST Kesra 160.47 338 PKPab PKPab 05 39 32.2 -0.2
comp=Z,2.4nm,0.7s,baz=46,slow=4.3,SNR=5.3
LIC Lamto 167.32 155 ⇓iPKP2 PKPab 05 40 03.6 +0.6
comp=Z,29nm,0.7s
KIC Kosan Boka 167.56 156 ⇓iPKP2 PKPab 05 40 04.8 +0.8
comp=Z,25nm,0.6s
TIC Toumodi 167.70 154 ⇑iPKP2 PKPab 05 40 03.6 -1.1
comp=Z,2.8nm,0.2s
DBIC Dimbokro 167.79 155 PKPab PKPab 05 40 05.7 +0.7
comp=Z,13nm,0.8s,baz=191,slow=5.1,SNR=10.0
TORD Torodi Ar. Bea 175.15 196 PKP PKPdf 05 38 56.8 -0.6
comp=Z,0.5nm,0.7s,baz=326,slow=1.9,SNR=3.9
TORD PKPab PKPab 05 40 38.0 +0.5
comp=Z,0.6nm,0.5s,baz=137,slow=3.9,SNR=5.6

*IDC* ***19*** *05:20:42.9±1.3, 17°.72S×179°.66W, h631km±15km, mb3.9/22, mbtmp4.9/23, Error ellipse: s-maj=16.4km s-min=11.2km az=157.0*
*NEIC* ***19*** *05:20:43.9±1.0, 17°.8S±0°.1×179°.67W±0°.09, h630km±7km, mb4.6/137, Error ellipse: s-maj=17.5km s-min=12.4km az=171.0*

**ISC 19 05:20:44.5±0.4, 17°.69S±0°.08×179°.64W±0°.07, h650km, n157, σ1°.08/120, mb4.5/88, 1C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 2.20 | 269 | P | P | 05 22 03.2 | -1.1 |
| AFI | Afiamalu | 8.45 | 65 | P | P | 05 22 45.8 | -4.1 |
| FUNA | Funafuti | 9.18 | 353 | P | P | 05 22 54.5 | -2.1 |
| NIUE | Niue | 9.32 | 100 | P | P | 05 22 56.4 | -1.4 |
| DZM | Mont Dzumac | 13.79 | 249 | P | P | 05 23 40.5 | +0.7 |
| | 59nm,0.7s,baz=121,slow=12,SNR=12 | | | | | | |
| PPT | Papeete | 28.64 | 94 | P | P | 05 25 52.2 | 0.0 |
| | 68nm,0.7s,baz=79,slow=4.6,SNR=4.4 | | | | | | |
| | 68nm,0.7s | | | | | | |
| CTA | Charters Tower | 32.33 | 260 | P | P | 05 26 22.8 | -0.7 |
| | 4.0nm,0.6s,baz=110,slow=8.3,SNR=6.9 | | | | | | |
| CTA | | | | ScP | ScP | 05 31 37.0 | +2.7 |
| | 0.8nm,0.9s,baz=25,slow=4.7,SNR=3.9 | | | | | | |
| | 4.0nm,0.6s | | | | | | |
| CAN | Canberra | 32.91 | 232 | P | P | 05 26 27.8 | -0.5 |
| PMG | Port Moresby | 33.27 | 280 | P | P | 05 26 32.3 | +0.9 |
| PMG | Port Moresby | 33.27 | 280 | P | P | 05 26 32.2 | +0.8 |
| | 165nm,0.8s,baz=85,slow=7.6,SNR=8.5 | | | | | | |
| | 165nm,0.8s | | | | | | |
| MANU | Manus Island | 35.93 | 292 | P | P | 05 26 54.2 | +0.8 |
| COEN | Coen | 35.93 | 271 | P | P | 05 26 53.7 | +0.3 |
| TOO | Toolangi | 36.40 | 230 | P | P | 05 26 56.8 | -0.2 |
| TAU | Tasmania Unive | 37.62 | 221 | P | P | 05 27 06.6 | -0.2 |
| STKA | Stephens Creek | 37.71 | 241 | P | P | 05 27 07.5 | -0.2 |
| STKA | | | | IAmb | IAmb | 05 27 08.3 | |
| | comp=Z,39nm,1.1s | | | | | | |
| STKA | Stephens Creek | 37.71 | 241 | P | P | 05 27 07.8 | +0.1 |
| | comp=Z,89nm,0.5s,baz=79,slow=10,SNR=12 | | | | | | |
| | comp=Z,89nm,0.5s | | | | | | |
| WAKE | Wake Island | 39.13 | 339 | P | P | 05 27 19.8 | +0.6 |
| TAOE | Nuku Hiva Isla | 39.36 | 82 | P | P | 05 27 21.7 | +0.5 |
| BBOO | Buckleboo | 42.49 | 241 | P | P | 05 27 45.0 | -0.5 |
| WR0 | Warramunga Arr | 43.33 | 259 | P | P | 05 27 51.8 | -0.3 |
| WB0 | Warramunga Arr | 43.48 | 260 | P | P | 05 27 53.0 | -0.3 |
| WB2 | Warramunga Arr | 43.51 | 259 | P | P | 05 27 52.9 | -0.6 |
| WRAB | Tennant Creek | 43.51 | 259 | P | P | 05 27 52.7 | -0.8 |
| WRA | Warramunga Arr | 43.52 | 259 | P | P | 05 27 52.7 | -0.9 |
| WRA | Warramunga Arr | 43.52 | 259 | P | P | 05 27 52.3 | -1.3 |
| | comp=Z,58nm,0.5s,baz=96,slow=6.9,SNR=15 | | | | | | |
| WRA | | | | ScP | ScP | 05 32 18.4 | +1.2 |
| | comp=Z,2.0nm,0.6s,baz=86,slow=4.2,SNR=4.7 | | | | | | |
| | comp=Z,58nm,0.5s | | | | | | |
| AS31 | Alice Springs | 43.72 | 254 | P | P | 05 27 54.6 | -0.6 |
| ASAR | Alice Springs | 43.72 | 254 | P | P | 05 27 54.7 | -0.4 |
| ASAR | Alice Springs | 43.72 | 254 | P | P | 05 27 54.6 | -0.6 |
| | comp=Z,602nm,0.6s,baz=89,slow=7.8,SNR=31 | | | | | | |
| ASAR | | | | ScP | ScP | 05 32 20.8 | +2.8 |
| | comp=Z,7.2nm,0.8s,baz=101,slow=3.7,SNR=5.5 | | | | | | |
| GUMO | Guam | 46.83 | 309 | P | P | 05 28 19.2 | +0.6 |
| MTN | Manton Dam | 47.63 | 269 | P | P | 05 28 23.3 | -1.4 |
| FORT | Forrest | 49.04 | 244 | P | P | 05 28 33.9 | -1.0 |
| KNRA | Kununurra | 49.34 | 264 | P | P | 05 28 36.7 | -0.6 |
| FITZ | Fitzroy Crossi | 51.91 | 261 | P | P | 05 28 55.2 | -0.6 |
| SOEI | Soe | 54.90 | 270 | P | P | 05 29 17.9 | +1.0 |
| TNTI | Ternate | 55.27 | 284 | P | P | 05 29 19.3 | -0.1 |
| PSA00 | Pilbara Seismi | 56.83 | 255 | P | P | 05 29 29.0 | -0.9 |
| PSA00 | | | | IAmb | IAmb | 05 29 29.6 | |
| | comp=Z,38nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 56.83 | 255 | P | P | 05 29 29.1 | -0.8 |
| PSA00 | | | | IAmb | IAmb | 05 29 29.6 | |
| | comp=Z,84nm,0.7s | | | | | | |
| MBWA | Marble Bar | 56.99 | 256 | P | P | 05 29 30.1 | -0.9 |
| MBWA | | | | IAmb | IAmb | 05 29 30.2 | |
| | comp=Z,49nm,0.8s | | | | | | |
| MMRI | Maumere | 57.12 | 271 | P | P | 05 29 31.3 | -0.7 |
| MMRI | | | | IAmb | IAmb | 05 29 31.7 | |
| | comp=Z,57nm,0.7s | | | | | | |
| NWAO | Narrogin (SRO) | 58.28 | 242 | P | P | 05 29 38.0 | -1.6 |
| | comp=Z,16nm,0.5s,baz=88,slow=9.1,SNR=3.2 | | | | | | |

comp=Z,16nm,0.5s
**MORW Morawa** 59.49 246 P P 05 29 46.8 -0.9
MORW IAmb IAmb 05 29 47.0
comp=Z,32nm,0.6s
**KAPI Kappang** 60.51 274 P P 05 29 53.4 -1.2
comp=Z,11nm,0.2s,baz=54,slow=17,SNR=1.5
comp=Z,11nm,0.2s
**TOLI2 Tolitoli** 61.52 281 P P 05 30 01.0 -0.2
TOLI2 IAmb IAmb 05 30 04.4
comp=Z,23nm,0.7s
**GIRL Giralia** 61.83 253 P 05 30 03.3 +0.2
**JAGI Jajag, Banyuwa** 64.87 269 P P 05 30 20.7 -1.8
**CASY Casey** 65.84 205 P P 05 30 27.3 -0.2
CASY IAmb IAmb 05 30 27.8
comp=Z,24nm,1.0s
**MJAR Matsushiro Arr** 67.04 324 P P 05 30 34.9 -0.4
comp=Z,8.6nm,0.7s,baz=155,slow=5.9,SNR=12
comp=Z,8.6nm,0.7s
**MAJO Matsushiro** 67.04 324 P P 05 30 35.7 +0.3
MAJO IAmb IAmb 05 30 35.9
comp=Z,13nm,0.8s
**MJB9 Matsu-Tunnel** 67.04 324 P P 05 30 35.6 +0.2
MJB9 IAmb IAmb 05 30 35.9
comp=Z,13nm,0.8s
**KKM Kota Kinabalu** 67.55 284 P P 05 30 38.9 -0.2
**JMN Monobe** 67.66 319 P P 05 30 40.4 +1.2
JMN IAmb IAmb 05 30 41.6
comp=Z,49nm,1.1s
**UGM Wanagama** 68.48 268 P P 05 30 44.1 -0.5
**JNU Nakatsue** 69.18 317 P P 05 30 48.8 +0.5
**YOJ Yonaguni jima** 69.86 305 P P 05 30 52.8 +0.4
**TPUB Ta-pu** 71.16 303 P P 05 30 59.3 -0.9
**KSM Kuching** 71.49 278 P 05 31 02.8 +0.5
**QSPA South Pole Qui** 72.36 180 P P 05 31 06.8 +0.4
**QSPA South Pole Qui** 72.36 180 P P 05 31 05.1 -1.4
comp=Z,7.4nm,0.8s,baz=336,slow=6.1,SNR=1.9
comp=Z,7.4nm,0.8s
**PETK Petropavlovsk-** 73.18 346 P P 05 31 11.3 +0.2
comp=Z,4.5nm,0.8s,baz=111,slow=6.5,SNR=2.3
comp=Z,4.5nm,0.8s
**KSRS Korea Array** 73.76 319 P P 05 31 15.6 +0.9
comp=Z,2.6nm,0.7s,baz=129,slow=6.3,SNR=8.2
comp=Z,2.6nm,0.7s
**USRK Ussuriysk Ar.** 75.78 326 P P 05 31 26.0 +0.3
comp=Z,3.7nm,0.6s,baz=118,slow=4.9,SNR=5.2
comp=Z,3.7nm,0.6s
**MNAI Manna** 76.70 270 P P 05 31 31.8 +0.3
**SAO San Andreas Ge** 77.09 44 P P 05 31 34.7 +1.6
SAO IAmb IAmb 05 31 34.9
comp=Z,13nm,0.8s
**PMPB Monarch Peak** 77.22 45 P P 05 31 35.5 +1.6
PMPB IAmb IAmb 05 31 36.0
comp=Z,13nm,0.9s
**CBX Cerro Bola** 78.11 50 P P 05 31 40.1 +1.3
CBX IAmb IAmb 05 31 40.1
comp=Z,16nm,0.8s
**O02D Mt. Diablo Mer** 78.15 41 P P 05 31 40.8 +2.0
O02D IAmb IAmb 05 31 41.2
comp=Z,9.1nm,0.8s
**VTX Valle De La Tr** 78.31 52 P P 05 31 40.7 +0.9
**ESJX Sierra Juarez** 78.48 51 P P 05 31 42.5 +1.6
**CMB Columbia Colle** 78.49 44 P P 05 31 41.6 +1.0
CMB IAmb IAmb 05 31 42.1
comp=Z,12nm,0.8s
**ISA Isabella, Lake** 78.52 47 P P 05 31 42.1 +1.3
ISA IAmb IAmb 05 31 42.7
comp=Z,14nm,0.9s
**AFDM Forest Hills D** 78.61 43 P P 05 31 42.1 +0.9
**L02F Cave Junction** 78.81 39 P P 05 31 43.2 +1.1
**YUH Yuha Desert** 78.82 50 P P 05 31 43.6 +1.2
**YBH Yreka Blue Hor** 79.10 40 P P 05 31 45.3 +1.5
YBH IAmb IAmb 05 31 45.5
comp=Z,8.0nm,0.7s
**CN2 Changchun** 79.14 323 P P 05 31 44.5 +0.7
CN2 pmax pmax
comp=Z,20nm,1.1s
**MDPB Devils Postpil** 79.14 45 P P 05 31 45.3 +1.0
MDPB IAmb IAmb 05 31 46.1
comp=Z,15nm,0.8s
**OMMB Old Mammoth Mi** 79.19 45 P P 05 31 45.5 +0.9
**BNX BinXian** 79.25 325 ⇑P P 05 31 44.8 +0.5
BNX pmax pmax
comp=Z,17nm,1.0s
**WAKR Walker** 79.37 44 P P 05 31 46.7 +1.2
WAKR IAmb IAmb 05 31 47.5
comp=Z,13nm,0.9s
**MPK Martis Peak** 79.42 43 P P 05 31 47.5 +1.8
MPK IAmb IAmb 05 31 48.1
comp=Z,22nm,0.8s
**SLBS Sierra La Lagu** 79.48 61 P P 05 31 48.0 +1.9
SLBS IAmb IAmb 05 31 48.2
comp=Z,13nm,0.7s
**PNTR Pine Nut** 79.58 43 P P 05 31 47.8 +1.3
PNTR IAmb IAmb 05 31 48.5
comp=Z,24nm,0.8s
**L04D Klamath Falls** 79.63 39 P P 05 31 47.8 +1.2
L04D IAmb IAmb 05 31 48.3
comp=Z,14nm,0.8s
**DSP Deep Springs** 79.75 45 P P 05 31 48.3 +1.2
DSP IAmb IAmb 05 31 49.2
comp=Z,19nm,1.1s
**YERR Yerington** 79.76 44 IAmb IAmb 05 31 48.7
comp=Z,13nm,0.6s
**GRAC Grapevine Rang** 79.97 46 P P 05 31 49.8 +1.4
GRAC IAmb IAmb 05 31 50.0
comp=Z,11nm,0.6s
**NVAR Mina Array Bea** 80.09 44 P P 05 31 50.2 +1.1
**NVAR Mina Array Bea** 80.09 44 P P 05 31 49.9 +0.8
comp=Z,7.2nm,0.8s,baz=227,slow=9.0,SNR=17
comp=Z,7.2nm,0.8s
**NV11 Mina Array Sit** 80.19 44 IAmb IAmb 05 31 51.4
comp=Z,14nm,1.1s
**MA2 Magadan** 80.68 345 P P 05 31 50.0 -1.4
comp=Z,5.9nm,0.7s,baz=40,slow=7.9,SNR=2.5
comp=Z,5.9nm,0.7s
**J05D Fort Rock, OR** 80.89 39 P P 05 31 54.4 +1.3
J05D IAmb IAmb 05 31 55.1
comp=Z,25nm,0.8s
**H04A Detroit Lake** 81.13 37 IAmb IAmb 05 31 55.2
comp=Z,13nm,0.6s
**S11A Rachel** 81.41 46 IAmb IAmb 05 31 57.5
comp=Z,16nm,0.7s
**I05D Terrebonne, OR** 81.43 38 IAmb IAmb 05 31 57.4
comp=Z,13nm,0.9s
**E03A Lebam** 81.45 35 IAmb IAmb 05 31 57.5
comp=Z,24nm,0.9s
**F04A Amboy** 81.73 36 IAmb IAmb 05 31 58.0
comp=Z,11nm,0.6s
**PRN Pahroc Range** 81.78 47 IAmb IAmb 05 31 59.9
comp=Z,19nm,0.9s
**HOOD Mount Hood Mea** 81.81 37 IAmb IAmb 05 31 59.0
comp=Z,14nm,0.9s
**BMN Battle Mountai** 81.85 43 IAmb IAmb 05 31 59.8
comp=Z,20nm,1.1s
**WVOR Wild Horse Val** 82.01 41 IAmb IAmb 05 32 00.6
comp=Z,14nm,0.9s
**I07A Izee** 82.37 39 IAmb IAmb 05 32 02.4
comp=Z,11nm,0.8s
**TUC Tucson** 82.50 53 P P 05 32 02.9 +1.5
**J08A Circle Bar Ran** 82.61 40 IAmb IAmb 05 32 03.0
comp=Z,9.4nm,0.7s
**LYN LuoYang** 82.78 310 P P 05 32 03.8 +1.1
LYN pmax pmax
comp=Z,41nm,0.9s
**319A Douglas** 83.25 54 IAmb IAmb 05 32 07.8
comp=Z,12nm,1.1s
**U15A North Rim** 83.25 49 IAmb IAmb 05 32 07.5
comp=Z,12nm,0.9s
**SEY Seymchan** 83.31 348 P P 05 32 04.8 +0.2
comp=Z,4.4nm,0.7s,baz=109,slow=6.7,SNR=4.6
comp=Z,4.4nm,0.7s
**WUAZ Wupatki** 83.50 50 IAmb IAmb 05 32 08.5
comp=Z,9.1nm,0.9s
**E07A Sunnyside** 83.54 37 IAmb IAmb 05 32 07.9
comp=Z,13nm,0.9s
**HAWA Hanford** 83.64 37 P P 05 32 07.7 +1.1
HAWA IAmb IAmb 05 32 08.3
comp=Z,14nm,0.9s
**MAW Mawson** 83.66 200 P P 05 32 06.5 +0.1
comp=Z,7.2nm,0.6s,baz=118,slow=4.6,SNR=7.4
comp=Z,7.2nm,0.6s
**D08A Wollman Farm,** 84.36 37 P P 05 32 11.2 +1.1
D08A IAmb IAmb 05 32 11.7
comp=Z,9.2nm,0.8s
**F10A Beach Ranch, E** 84.75 38 IAmb IAmb 05 32 13.3
comp=Z,17nm,0.8s

**HLID Hailey** 85.24 41 IAmb IAmb 05 32 16.6
comp=Z,7.6nm,0.8s
**S34M Telegraph Cree** 85.31 24 IAmb IAmb 05 32 16.3
comp=Z,8.7nm,0.8s
**TMUT Trail Mountain** 85.33 46 IAmb IAmb 05 32 18.4
comp=Z,6.2nm,0.7s
**ILAR Eielson Array** 85.94 13 P P 05 32 16.8 -0.5
comp=Z,1.1nm,0.8s,baz=235,slow=6.4,SNR=4.5
comp=Z,1.1nm,0.8s
**TCUT Toone Canyon** 86.03 45 IAmb IAmb 05 32 20.3
comp=Z,13nm,0.7s
**TXAR Lajitas Array** 86.87 58 P P 05 32 24.4 +1.8
**TXAR Lajitas Array** 86.87 58 P P 05 32 24.1 +1.4
comp=Z,9.1nm,0.9s,baz=222,slow=5.0,SNR=17
comp=Z,9.1nm,0.9s
**AHID Auburn Hatcher** 86.99 43 IAmb IAmb 05 32 27.4
comp=Z,8.2nm,1.1s
**DLMT Dillon** 87.25 41 IAmb IAmb 05 32 25.8
comp=Z,13nm,1.1s
**IMW Indian Meadow** 87.61 42 IAmb IAmb 05 32 27.9
comp=Z,9.3nm,0.9s
**CMAR Chiang Mai Arr** 87.71 290 P 05 32 27.1 +0.5
**CMAR Chiang Mai Arr** 87.71 290 P P 05 32 27.7 +1.1
comp=Z,6.3nm,0.9s,baz=112,slow=2.8,SNR=14
comp=Z,6.3nm,0.9s
**YHL Hebgen Lake** 87.90 41 IAmb IAmb 05 32 29.7
comp=Z,9.3nm,0.9s
**PD31 Pinedale Array** 88.00 44 IAmb IAmb 05 32 29.0
comp=Z,7.2nm,1.1s
**PDAR Pinedale Array** 88.00 44 P P 05 32 27.7 -0.1
comp=Z,3.7nm,0.9s,baz=225,slow=3.8,SNR=9.7
comp=Z,3.7nm,0.9s
**MNHN Monahans** 88.35 56 IAmb IAmb 05 32 30.8
comp=Z,7.1nm,0.8s
**SAND Sanderson** 88.35 58 IAmb IAmb 05 32 31.0
comp=Z,7.8nm,0.9s
**ODSA Odessa** 88.80 56 IAmb IAmb 05 32 33.5
comp=Z,16nm,1.1s
**OZNA Ozona** 89.50 57 IAmb IAmb 05 32 36.1
comp=Z,9.0nm,0.7s
**N23A Red Feather La** 89.66 47 IAmb IAmb 05 32 37.4
comp=Z,13nm,1.1s
**POST Post** 89.97 55 IAmb IAmb 05 32 37.6
comp=Z,7.6nm,0.7s
**RTBA Rita Blanca** 90.25 52 IAmb IAmb 05 32 39.5
comp=Z,5.9nm,0.9s
**APMT Aspermont** 91.14 55 IAmb IAmb 05 32 43.2
comp=Z,7.6nm,0.8s
**LAO LASA Array** 91.82 41 IAmb IAmb 05 32 47.1
comp=Z,8.7nm,0.8s
**PLCA Paso Flores** 92.33 134 P P 05 32 48.6 +0.9
comp=Z,1.0nm,0.6s,baz=267,slow=10,SNR=3.0
comp=Z,1.0nm,0.6s
**SONM Songino Array** 92.62 320 P P 05 32 49.4 +0.5
comp=Z,0.5nm,0.6s,baz=117,slow=5.0,SNR=1.6
comp=Z,0.5nm,0.6s
**KURBB Kurchatov Arra** 110.94 318 PKiKP **PKiKP** 05 38 04.0 -1.4
comp=Z,0.7nm,0.6s,baz=98,slow=1.7,SNR=4.7
**BVAR Borovoye Array** 115.94 321 PKP **PKPdf** 05 38 14.2 -0.8
comp=Z,2.5nm,0.7s,baz=222,slow=2.0,SNR=8.4
**AKTO Aktyubinsk** 123.94 319 PKP **PKPdf** 05 38 29.9 -0.5
comp=Z,3.1nm,0.7s,baz=23,slow=2.0,SNR=5.1
**FINES FINESS Array B** 132.65 344 PKhKP PKPpre 05 38 41.3
comp=Z,5.9nm,1.0s,baz=95,slow=2.1,SNR=3.6
**KWP Kalwaria Pacla** 143.40 336 **PKPdf** 05 39 05.8 -0.8
**BRTR Keskin Array B** 143.79 314 PKPab 05 39 07.3 -0.2
**BRTR Keskin Array B** 143.79 314 PKP PKPab 05 39 07.1 -0.4
comp=Z,5.1nm,0.7s,baz=117,slow=2.9,SNR=7.9
BRTR SKPbc **SKiKP** 05 41 48.5 +1.1
comp=Z,1.6nm,0.9s,baz=116,slow=3.3,SNR=3.5
**BURAR Sacovina Array** 143.87 331 **PKPdf** 05 39 07.7 +0.1
**OJC Ojcow** 143.99 339 PKPab 05 39 07.5 -0.3
**OSTC Ostas** 144.84 342 *ep*PKP **PKPab** 05 39 11.2 +0.2
**CLL Collm** 144.98 346 *i* PKPbc PKPbc 05 39 10.3 0.0
comp=Z,21nm,1.1s
**DPC Dobruska-Polom** 144.99 342 *ep*PKP **PKPab** 05 39 10.9 -0.8
**LANS Liptovska Anna** 145.01 338 *e* **PKPab** 05 39 11.5 -0.3
**MMAI Mount Meron Ar** 145.04 303 PKPbc **PKPbc** 05 39 11.4 +0.3
comp=Z,12nm,0.5s,baz=65,slow=4.0,SNR=6.6
**VYHS Vyhne** 145.79 338 *e* **PKPbc** 05 39 13.1 +0.4
**KHC Kasperske Hory** 146.86 344 *ep*PKP **PKPbc** 05 39 16.0 +0.4
**CKRC Cesky Krumlov** 146.94 343 *ep*PKP **PKPbc** 05 39 16.0 +0.2
**GERES GERESS Array B** 147.09 344 PKPbc **PKPbc** 05 39 16.2 -0.1
comp=Z,2.4nm,0.6s,baz=178,slow=4.0,SNR=6.8

*IDC **19** 05:28:07.6±4.1, 17°.7S×178°.16W, h512km±44km, mb3.4/12, mbtmp4.2/13, Error ellipse: s-maj=21.5km s-min=17.3km az=111.0*
*NEIC **19** 05:28:09.1±1.1, 17°.7S±0°.2×178°.0W±0°.1, h534km±8km, mb4.2/15, Error ellipse: s-maj=35.0km s-min=10.4km az=164.0*
**ISC 19 05:28:10.1**±0.5,**17°.7S**±0°.1×**178°.09W**±0°.09,**h550**km,**n61,**
σ1§**15**/63,**mb4.1/22,5C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.68** | **269** | P | **P** | **05 29 29.2** | **-0.5** |
| **AFI** | **Afiamalu** | **7.15** | **59** | P | **P** | **05 29 55.8** | **-3.9** |
| **NIUE** | **Niue** | **7.87** | **101** | P | **P** | **05 30 03.8** | **-2.8** |
| **LIFNC** | **LIFOU** | **14.19** | **255** | P | **P** | **05 31 08.3** | **-3.0** |
| **PINNC** | **Pines Island,** | **14.43** | **248** | P | **P** | **05 31 11.8** | **-1.9** |
| **DZM** | **Mont Dzumac** | **15.18** | **251** | P | **P** | **05 31 19.1** | **-2.5** |
| DZM | | | | IAmb | IAmb | 05 31 23.7 | |
| comp=Z,5.1nm,0.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.18** | **251** | P | **P** | **05 31 18.5** | **-3.1** |
| comp=Z,4.6nm,0.6s,baz=90,slow=19,SNR=1.6 | | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.89** | **258** | P | **P** | **05 31 37.3** | **-0.6** |
| **EIDS** | **Eidsvold** | **29.62** | **250** | P | **P** | **05 33 31.8** | **+0.3** |
| **ARMA** | **Armidale** | **30.31** | **240** | P | **P** | **05 33 37.4** | **0.0** |
| ARMA | | | | IAmb | IAmb | 05 33 50.5 | |
| comp=Z,9.1nm,1.1s | | | | | | | |
| **CAN** | **Canberra** | **34.07** | **232** | P | **P** | **05 34 09.3** | **+0.1** |
| CAN | | | | IAmb | IAmb | 05 34 21.7 | |
| comp=Z,7.2nm,1.0s | | | | | | | |
| **COEN** | **Coen** | **37.41** | **270** | P | **P** | **05 34 37.3** | **+0.3** |
| COEN | | | | IAmb | IAmb | 05 34 50.7 | |
| comp=Z,5.8nm,1.0s | | | | | | | |
| **TOO** | **Toolangi** | **37.54** | **231** | P | **P** | **05 34 38.3** | **+0.5** |
| TOO | | | | IAmb | IAmb | 05 34 42.9 | |
| comp=Z,11nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **39.00** | **241** | P | **P** | **05 34 48.9** | **-0.8** |
| comp=Z,3.7nm,0.8s,baz=65,slow=14,SNR=3.0 | | | | | | | |
| comp=Z,3.7nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.77** | **241** | P | **P** | **05 35 27.3** | **-0.2** |
| BBOO | | | | IAmb | IAmb | 05 35 35.6 | |
| comp=Z,6.5nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **05 35 37.0** | **+0.4** |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **05 35 36.4** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **05 35 36.3** | **-0.6** |
| comp=Z,0.7nm,0.3s,baz=90,slow=7.6,SNR=5.9 | | | | | | | |
| WRA | | | | PcP | **PcP** | **05 37 07.2** | **+0.8** |
| comp=Z,1.0nm,0.4s,baz=91,slow=3.8,SNR=6.4 | | | | | | | |
| comp=Z,0.7nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.14** | **254** | P | **P** | **05 35 37.2** | **-1.0** |
| **ASAR** | **Alice Springs** | **45.14** | **254** | P | **P** | **05 35 37.6** | **-0.5** |
| comp=Z,3.2nm,0.4s,baz=90,slow=7.8,SNR=16 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 37 07.5** | **+0.5** |
| comp=Z,2.8nm,0.5s,baz=102,slow=3.9,SNR=10.0 | | | | | | | |
| comp=Z,3.2nm,0.4s | | | | | | | |
| **MTN** | **Manton Dam** | **49.11** | **268** | P | **P** | **05 36 08.2** | **+0.1** |
| MTN | | | | IAmb | IAmb | 05 36 08.5 | |
| comp=Z,9.8nm,1.1s | | | | | | | |
| **MORW** | **Morawa** | **60.84** | **246** | P | **P** | **05 37 29.6** | **-0.2** |
| MORW | | | | IAmb | IAmb | 05 37 41.9 | |
| comp=Z,8.2nm,1.1s | | | | | | | |
| **CASY** | **Casey** | **66.45** | **205** | P | **P** | **05 38 05.5** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **67.92** | **323** | P | **P** | **05 38 13.9** | **-0.4** |
| comp=Z,1.0nm,0.6s,baz=154,slow=6.1,SNR=2.5 | | | | | | | |
| comp=Z,1.0nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.35** | **180** | P | **P** | **05 38 41.0** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 05 38 41.7 | |
| comp=Z,8.3nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.35** | **180** | P | **P** | **05 38 41.1** | **+0.8** |
| comp=Z,6.0nm,0.6s,baz=252,slow=0.8,SNR=26 | | | | | | | |
| comp=Z,6.0nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.06** | **44** | P | **P** | **05 39 19.7** | **+1.7** |
| comp=Z,1.0nm,0.7s,baz=222,slow=7.9,SNR=8.2 | | | | | | | |
| comp=Z,1.0nm,0.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **82.33** | **173** | P | **P** | **05 39 34.1** | **0.0** |
| **MAW** | **Mawson** | **84.16** | **200** | P | **P** | **05 39 43.8** | **+0.6** |
| comp=Z,1.8nm,0.6s,baz=84,slow=3.2,SNR=3.6 | | | | | | | |
| comp=Z,1.8nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.62** | **13** | P | **P** | **05 39 50.0** | **-0.2** |
| comp=Z,0.6nm,0.4s,baz=224,slow=5.4,SNR=14 | | | | | | | |
| comp=Z,0.6nm,0.4s | | | | | | | |

**TXAR Lajitas Array** 85.63 58 P P 05 39 53.7 +2.5
comp=Z,0.8nm,0.7s,baz=222,slow=6.9,SNR=11
comp=Z,0.8nm,0.7s
**PDAR Pinedale Array** 86.99 43 P P 05 39 58.5 +1.0
comp=Z,0.4nm,0.7s,baz=212,slow=2.2,SNR=4.6
comp=Z,0.4nm,0.7s
**CMAR Chiang Mai Arr** 89.10 290 P P 05 40 09.4 +1.8
comp=Z,6.6nm,0.3s,baz=111,slow=2.9,SNR=5.2
comp=Z,0.6nm,0.3s
**TROLL Troll, Antarti** 90.52 180 ⇑Pdiff P 05 40 12.9 -0.4
comp=Z,208nm,0.4s
**SNAA Sanae** 90.80 178 ⇑Pdiff P 05 40 14.0 -0.5
comp=Z,42nm,0.5s
**SNAA Sanae** 90.80 178 P P 05 40 14.3 -0.2
comp=Z,1.5nm,0.6s,baz=208,slow=9.0,SNR=21
comp=Z,1.5nm,0.6s
**VNA3 Neumayer Olymp** 90.93 176 ⇑Pdiff P 05 40 15.2 +0.1
comp=Z,10.0nm,0.7s
**VNA2 Neumayer--Watz** 91.37 177 ⇑Pdiff P 05 40 17.7 +0.6
comp=Z,6.3nm,0.6s,baz=184,slow=5.7
**VNA1 Neumayer--Stat** 91.60 177 ⇑Pdiff P 05 40 17.4 -0.7
comp=Z,4.9nm,0.6s
**ARCES ARCESS Array B** 126.16 350 PKP **PKPdf** 05 46 09.6 -0.1
comp=Z,1.7nm,0.8s,baz=36,slow=1.7,SNR=8.8
**BRTR Keskin Array B** 144.85 315 PKP **PKPab** 05 46 46.5 -0.1
comp=Z,1.3nm,0.7s,baz=120,slow=4.3,SNR=7.5
**OSTC Ostas** 145.28 344 *e*PKP **PKPab** 05 46 48.2 +0.6
**CLL Collm** 145.33 348 *i* PKPbc **PKPbc** 05 46 47.0 +0.5
comp=Z,6.0nm,0.6s
**DPC Dobruska-Polom** 145.44 344 *e*PKP **PKPab** 05 46 48.4 +0.1
**KRLC Kraliky** 145.56 343 *e*PKP **PKPab** 05 46 48.4 -0.4
**MMAI Mount Meron Ar** 146.28 303 PKPbc **PKPbc** 05 46 51.0 +1.1
comp=Z,1.5nm,0.4s,baz=103,slow=3.6,SNR=3.6
**KHC Kasperske Hory** 147.25 346 *e*PKP **PKiKP** 05 46 53.1 -0.6
**CKRC Cesky Krumlov** 147.36 345 *e*PKP **PKiKP** 05 46 53.2 -0.7
**GERES GERESS Array B** 147.49 345 PKPbc **PKiKP** 05 46 53.6 -0.7
comp=Z,1.8nm,0.6s,baz=166,slow=6.9,SNR=9.6
**CONA Conrad Observa** 147.76 342 *i* PKiKP **PKiKP** 05 46 54.0 -0.8
comp=Z,1.3nm,0.5s
**RONA Rosalia, Austr** 147.84 342 *i* PKiKP **PKiKP** 05 46 54.2 -0.8
comp=Z,1.6nm,0.5s
**LESA Schwarzleotal** 149.06 346 *i* PKiKP **PKiKP** 05 46 57.1 -0.5
comp=Z,1.8nm,0.4s
**KBA Koelnbreinsper** 149.22 345 *i* PKiKP **PKPbc** 05 46 56.9 -0.3
comp=Z,1.1nm,0.3s
**RETA Reutte** 149.41 348 *i* PKiKP **PKPbc** 05 46 57.7 +0.2
comp=Z,0.8nm,0.4s
**WTTA Wattenberg** 149.45 347 *i* PKiKP **PKiKP** 05 46 58.1 -0.4
comp=Z,2.6nm,0.3s
**MOTA Moosalm** 149.48 348 *e*PKiKP **PKPbc** 05 46 57.9 +0.1
comp=Z,1.0nm,0.3s
**SQTA Sankt Quirin** 149.58 347 *e*PKiKP **PKiKP** 05 46 58.2 -0.5
comp=Z,0.7nm,0.3s
**DAVA Damuels** 149.77 349 *e*PKiKP **PKiKP** 05 46 59.7 +0.6
comp=Z,2.6nm,0.6s
**FETA Feichten** 149.87 348 *i* PKiKP **PKiKP** 05 46 59.1 -0.2
comp=Z,0.8nm,0.4s
**DAVOX Davos/Dischmat** 150.26 349 PKPbc **PKiKP** 05 47 00.7 +0.5
comp=Z,5.7nm,0.4s,baz=246,slow=3.9,SNR=22
**TORD Torodi Ar. Bea** 175.47 177 PKPab **PKPab** 05 48 58.5 -0.4
comp=Z,0.5nm,0.5s,baz=194,slow=3.5,SNR=2.8

*IDC **19** 05:30:51.2±7.2, 18°.68S×178°.10W, h608km±90km, mb2.9/7, mbtmp4.0/8, Error ellipse: s-maj=46.9km s-min=29.8km az=37.0*
*NEIC **19** 05:30:53.4±0.8, 18°.4S±0°.1×178°.0W±0°.1, h650km±13km, mb4.0/18, Error ellipse: s-maj=26.9km s-min=9.1km az=138.0*
**ISC 19 05:30:52.9**±0.9,**18°.4S**±0°.2×**178°.0W**±0°.1,**h650**km,**n29,**
σ0§**85**/27,**mb4.0**/15,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.78** | **279** | P | **P** | **05 32 20.9** | **+0.1** |
| **AFI** | **Afiamalu** | **7.49** | **54** | P | **P** | **05 32 49.2** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.02** | **253** | P | **P** | **05 33 59.5** | **+0.1** |
| comp=Z,5.2nm,0.8s | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.86** | **198** | P | **P** | **05 35 42.4** | **-2.5** |
| 6.8nm,0.8s,baz=49,slow=16,SNR=2.0 | | | | | | | |
| 6.8nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **33.69** | **233** | P | **P** | **05 36 43.6** | **+0.4** |
| **CTA** | **Charters Tower** | **33.72** | **261** | P | **P** | **05 36 43.7** | **+0.1** |
| 0.2nm,0.3s,baz=90,slow=12,SNR=3.5 | | | | | | | |
| 0.2nm,0.3s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.72** | **261** | P | **P** | **05 36 44.1** | **+0.5** |
| CTAO | | | | IAmb | IAmb | 05 36 44.5 | |
| comp=Z,3.2nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **34.89** | **280** | P | **P** | **05 36 53.6** | **+0.3** |
| **TOO** | **Toolangi** | **37.14** | **231** | P | **P** | **05 37 12.4** | **+1.0** |
| **COEN** | **Coen** | **37.46** | **271** | P | **P** | **05 37 15.2** | **+0.8** |
| COEN | | | | IAmb | IAmb | 05 37 16.3 | |
| comp=Z,5.2nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.71** | **242** | | **P** | **05 37 25.1** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.71** | **242** | P | **P** | **05 37 22.1** | **-2.0** |
| comp=Z,1.0nm,0.4s,baz=73,slow=11,SNR=2.3 | | | | | | | |
| comp=Z,1.0nm,0.4s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.48** | **242** | P | **P** | **05 38 01.6** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 05 38 10.4 | |
| comp=Z,4.6nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **05 38 11.5** | **+0.4** |
| WR0 | | | | IAmb | IAmb | 05 38 28.6 | |
| comp=Z,4.9nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.86** | **260** | P | **P** | **05 38 12.4** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 05 38 12.7 | |
| comp=Z,3.6nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **05 38 12.6** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 05 38 13.0 | |
| comp=Z,5.5nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **05 38 12.6** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **05 38 12.5** | **0.0** |
| comp=Z,1.7nm,0.4s,baz=98,slow=7.1,SNR=15 | | | | | | | |
| comp=Z,1.7nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.00** | **255** | P | **P** | **05 38 12.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **45.00** | **255** | P | **P** | **05 38 13.5** | **+0.1** |
| comp=Z,3.3nm,0.5s,baz=91,slow=7.8,SNR=14 | | | | | | | |
| comp=Z,3.3nm,0.5s | | | | | | | |
| **MTN** | **Manton Dam** | **49.14** | **269** | P | **P** | **05 38 44.4** | **+0.2** |
| MTN | | | | IAmb | IAmb | 05 38 46.3 | |
| comp=Z,6.6nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **50.12** | **245** | P | **P** | **05 38 50.3** | **-0.8** |
| FORT | | | | IAmb | IAmb | 05 38 55.1 | |
| comp=Z,14nm,1.1s | | | | | | | |
| **FAKI** | **Fak Fak** | **51.02** | **281** | P | **P** | **05 38 57.2** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **53.30** | **261** | P | **P** | **05 39 14.7** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **58.13** | **256** | P | **P** | **05 39 47.3** | **+0.2** |
| PSA00 | | | | IAmb | IAmb | 05 40 05.2 | |
| comp=Z,15nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.66** | **180** | P | P | 05 41 12.1 | +1.3 |
| **QSPA** | **South Pole Qui** | **71.66** | **180** | P | **P** | **05 41 11.8** | **+0.9** |
| comp=Z,0.5nm,0.5s,baz=238,slow=2.7,SNR=1.3 | | | | | | | |
| comp=Z,0.5nm,0.5s | | | | | | | |
| **BELA** | **Belgrano 2** | **81.64** | **173** | P | **P** | **05 42 05.5** | **+0.9** |
| **TXAR** | **Lajitas Array** | **85.96** | **57** | P | P | 05 42 29.2 | +2.5 |
| comp=Z,0.2nm,0.7s,baz=246,slow=6.7,SNR=1.7 | | | | | | | |
| comp=Z,0.2nm,0.7s | | | | | | | |

*IDC **19** 05:32:14.5±6.8, 17°.96S×178°.34W, h625km±101km, mb2.7/6, mbtmp3.6/6, Error ellipse: s-maj=93.5km s-min=25.6km az=169.0*
**ISC 19 05:32:12.7**±0.9,**17°.8S**±0°.2×**178°.4W**±0°.2,**h600**km,**n8,**
σ0§**74**/8,**mb3.2**/6,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **11.42** | **178** | P | **P** | **05 34 45.6** | **+0.1** |
| 198nm,0.3s,baz=14,slow=23,SNR=6.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.68** | **259** | P | **P** | **05 39 34.9** | **+0.9** |
| 0.3nm,0.6s,baz=222,slow=34,SNR=1.6 | | | | | | | |
| 0.3nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.85** | **254** | P | **P** | **05 39 34.7** | **-0.6** |
| 0.3nm,0.5s,baz=89,slow=7.6,SNR=1.9 | | | | | | | |
| 0.3nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.32** | **44** | P | **P** | **05 43 18.0** | **+0.4** |
| 0.5nm,0.7s,baz=221,slow=7.3,SNR=5.3 | | | | | | | |
| 0.5nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.77** | **13** | P | **P** | **05 43 49.1** | **+0.1** |
| 0.3nm,0.4s,baz=224,slow=3.9,SNR=7.6 | | | | | | | |
| 0.3nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.91** | **58** | P | **P** | **05 43 50.9** | **+0.2** |
| 0.7nm,0.7s,baz=215,slow=6.6,SNR=11 | | | | | | | |
| 0.7nm,0.7s | | | | | |

1.4nm,0.9s,baz=54,slow=4.6,SNR=3.8

*IDC* ***19*** *05:32:38.0±1.9, 32.52N×47.74E, h0km, mb3.7/6, mbtmp3.8/10, ML3.1/4, Error ellipse: s-maj=41.4km s-min=21.2km az=5.0*
*ISN* ***19*** *05:32:39.1±0.4, 32.61N×47.77E, h14km±2km, ML3.5*
*TEH* ***19*** *05:32:40.1, 32.63N×47.78E, h10km±25km, ML3.7*
**ISC 19 05:32:40.7±0.7, 32.61N±0.04×47.74E±0.04, h10km, n49, σ1.09/52, mb3.6/6, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKFM** | **Kafar-mosalman** | **0.91** | **6** | Pg | **Pg** | **05 32 57.6** | **-0.7** |
| **IDOB** | **Doab** | **1.23** | **17** | Pg | **Pn** | **05 33 02.9** | **-1.2** |
| **AHWZ** | **Ahwaz** | **1.50** | **149** | Pg | **Pn** | **05 33 08.8** | **+1.3** |
| **IBDR** | **Badra** | **1.60** | **288** | *e*Pg | **Pn** | **05 33 08.5** | **-0.5** |
| IBDR | | | | *e*Sg | **Sn** | **05 33 30.5** | **+0.8** |
| IBDR | | | | AML | AML | 05 33 40.6 | |
| | comp=E,593nm,0.8s | | | | | | |
| IBDR | | | | AML | AML | 05 33 40.6 | |
| | comp=N,439nm,0.9s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **1.63** | **309** | Pg | **Pn** | **05 33 10.7** | **+1.1** |
| **RAFI** | **Al-Rafai** | **1.64** | **238** | *e*Pn | **Pn** | **05 33 09.5** | **0.0** |
| RAFI | | | | *e*Sn | **Sn** | **05 33 32.0** | **+1.3** |
| **HSAM** | **Samen** | **1.75** | **24** | Pg | **Pn** | **05 33 12.8** | **+1.5** |
| **KCHF** | **Cheshme Sefid,** | **1.76** | **341** | Pg | **Pn** | **05 33 12.5** | **+1.2** |
| **IBZA** | **Bozab** | **1.85** | **3** | Pn | **Pn** | **05 33 14.0** | **+1.2** |
| **IGHG** | **Ghaleghazi** | **1.97** | **331** | Pn | **Pn** | **05 33 16.0** | **+1.6** |
| **GLG1** | **Gilan-e-Gharb** | **2.14** | **315** | Pn | **Pn** | **05 33 18.2** | **+1.7** |
| **SNQR** | **Sonqor, Kerman** | **2.24** | **358** | Pn | **Pn** | **05 33 20.0** | **+1.9** |
| **IDHR** | **Dehrash** | **2.37** | **332** | Pn | **Pn** | **05 33 21.3** | **+1.6** |
| **ILIN** | **Lien** | **2.39** | **345** | Pn | **Pn** | **05 33 21.4** | **+1.3** |
| **HAGD** | **Aghdareh** | **2.49** | **28** | Pn | **Pn** | **05 33 22.6** | **+1.1** |
| **JHBN** | **Jahan bin** | **2.51** | **98** | Pn | **Pn** | **05 33 22.9** | **+1.1** |
| **KGS1** | **Ghasr-e-Shirin** | **2.60** | **317** | Pn | **Pn** | **05 33 24.6** | **+1.7** |
| **IPIR** | **Pirpir** | **2.66** | **88** | Pn | **Pn** | **05 33 25.2** | **+1.3** |
| **BHD** | **Baghdad** | **2.90** | **284** | *e*Pn | **Pn** | **05 33 27.0** | **+0.1** |
| BHD | | | | *e*Sn | **Sn** | **05 34 02.0** | **+0.3** |
| BHD | | | | AML | AML | 05 34 26.3 | |
| | comp=E,490nm,0.5s | | | | | | |
| **ABEH** | **Behbahan** | **2.94** | **132** | Pn | **Pn** | **05 33 28.6** | **+1.1** |
| **IBRJ** | **Brojen** | **3.07** | **102** | Pn | **Pn** | **05 33 29.8** | **+0.3** |
| **IKLH** | **Kolahrood** | **3.31** | **77** | Pn | **Pn** | **05 33 34.1** | **+1.3** |
| **IRAZ** | **Razeghan** | **3.33** | **33** | Pn | **Pn** | **05 33 34.3** | **+1.3** |
| **QABG** | **Abgarm-Qazvin** | **3.44** | **26** | Pn | **Pn** | **05 33 35.7** | **+1.0** |
| **IQOM** | **Qom** | **3.56** | **50** | Pn | **Pn** | **05 33 37.1** | **+0.9** |
| **IGAR** | **Gharneh** | **3.64** | **92** | Pn | **Pn** | **05 33 38.1** | **+0.7** |
| **KLNJ** | **Kolanjah** | **3.65** | **115** | Pn | **Pn** | **05 33 38.1** | **+0.5** |
| **IZEF** | **Zefreh** | **3.88** | **85** | Pn | **Pn** | **05 33 41.7** | **+1.0** |
| **KRSH** | **Karshahi** | **3.92** | **69** | Pn | **Pn** | **05 33 42.0** | **+0.8** |
| **IKRK** | **Kirkuk** | **3.96** | **315** | *e*Pn | **Pn** | **05 33 42.0** | **+0.5** |
| IKRK | | | | *e*Sn | **Sn** | **05 34 27.5** | **-0.5** |
| IKRK | | | | AML | AML | 05 34 30.1 | |
| | comp=N,82nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 05 35 04.3 | |
| | comp=E,151nm,0.6s | | | | | | |
| **IRAM** | **Ramesheh** | **4.02** | **100** | Pn | **Pn** | **05 33 43.3** | **+0.8** |
| **IVRN** | **Varamin** | **4.08** | **53** | Pn | **Pn** | **05 33 44.2** | **+0.9** |
| **ISFB** | **Sefidab** | **4.14** | **64** | Pn | **Pn** | **05 33 45.2** | **+1.1** |
| **IGZV** | **Ghazvin** | **4.28** | **28** | Pn | **Pn** | **05 33 46.6** | **+0.4** |
| **KAZ2** | **Kazeron-Fars-I** | **4.50** | **131** | Pn | **Pn** | **05 33 49.1** | **+0.1** |
| **AHBU** | **AHRAM** | **4.83** | **140** | Pn | **Pn** | **05 33 55.1** | **+1.6** |
| **ISAD** | **Sadrabad** | **5.09** | **96** | Pn | **Pn** | **05 33 57.5** | **+0.2** |
| **DSBU** | **Dashti - Bushe** | **5.21** | **143** | Pn | **Pn** | **05 33 59.4** | **+0.6** |
| **ICHK** | **Chekchek** | **5.65** | **92** | Pn | **Pn** | **05 34 05.4** | **+0.4** |
| **WSAR** | **Wadi Sarin** | **13.41** | **131** | Pn | Pn | 05 35 47.5 | -3.6 |
| | comp=E,1.0nm,0.3s,baz=297,slow=9.7,SNR=8.6 | | | | | | |
| WSAR | | | | Sn | Sn | 05 38 08.0 | -12 |
| | comp=E,0.5nm,0.3s,baz=20,slow=15,SNR=2.0 | | | | | | |
| | comp=E,2.7nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **13.41** | **306** | Pn | **Pn** | **05 35 52.4** | **+1.2** |
| | baz=114,slow=12,SNR=4.1 | | | | | | |
| | comp=E,1.0nm,0.9s | | | | | | |
| **IDI** | **Anoyia** | **19.14** | **284** | P | **P** | **05 37 04.8** | **+0.8** |
| | comp=E,0.5nm,0.3s,baz=99,slow=13,SNR=4.1 | | | | | | |
| | comp=E,9.1nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **19.36** | **20** | P | **P** | **05 37 06.4** | **0.0** |
| | comp=E,0.1nm,0.3s,baz=224,slow=11,SNR=2.5 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| **MLR** | **Muntele Rosu** | **21.17** | **314** | P | **P** | **05 37 26.8** | **+0.6** |
| | comp=E,4.0nm,0.7s,baz=186,slow=5.5 | | | | | | |
| | comp=E,4.0nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **22.65** | **328** | P | **P** | **05 37 39.9** | **-1.9** |
| | comp=E,1.1nm,0.5s,baz=138,slow=9.8,SNR=4.6 | | | | | | |
| | comp=E,1.1nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.85** | **52** | P | **P** | **05 38 47.3** | **-0.8** |
| | comp=E,0.7nm,0.7s,baz=258,slow=7.2,SNR=4.8 | | | | | | |
| | comp=E,0.7nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.84** | **40** | P | **P** | **05 39 23.2** | **+0.3** |
| | comp=E,0.7nm,0.5s,baz=231,slow=5.2,SNR=2.4 | | | | | | |
| | comp=E,0.7nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **41.86** | **295** | P | **P** | **05 40 30.3** | **-0.7** |
| | comp=E,0.7nm,0.7s,baz=80,slow=8.8,SNR=7.2 | | | | | | |
| | comp=E,0.7nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **41.89** | **318** | P | **P** | **05 40 29.6** | **-1.4** |
| | comp=E,0.3nm,0.3s,baz=106,slow=8.1,SNR=5.1 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |

**IDC 19 05:33:44.9±1.5, 23.25N×143.26E, h0km, mb4.1/6, mbtmp4.1/6, Error ellipse: s-maj=72.4km s-min=21.3km az=71.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.80** | **192** | P | P | 05 41 52.4 | -0.3 |
| | 0.4nm,0.3s,baz=4.3,slow=9.2,SNR=12 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.71** | **312** | P | P | 05 43 09.4 | +0.6 |
| | 0.8nm,0.6s,baz=89,slow=8.3,SNR=5.7 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **54.84** | **182** | P | P | 05 43 17.1 | +0.1 |
| | 1.8nm,0.7s,baz=16,slow=7.4,SNR=3.6 | | | | | | |
| | 1.8nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.45** | **316** | P | P | 05 43 28.5 | 0.0 |
| | 1.8nm,0.7s,baz=93,slow=8.0,SNR=18 | | | | | | |
| | 1.8nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.55** | **319** | P | P | 05 44 04.0 | +0.2 |
| | 3.9nm,0.5s,baz=95,slow=6.9,SNR=15 | | | | | | |
| | 3.9nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **81.82** | **334** | P | P | 05 46 04.2 | -1.4 |
| | 1.4nm,0.8s,baz=48,slow=2.1,SNR=3.5 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **146.71** | **130** | PKPbc | PKPbc | 05 53 28.4 | -0.6 |
| | 0.7nm,0.5s,baz=228,slow=4.9,SNR=5.9 | | | | | | |

**IDC 19 05:34:21.8±6.3, 17.73S×178.50W, h599km±73km, mb2.9/6, mbtmp3.8/6, Error ellipse: s-maj=94.5km s-min=24.5km az=154.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.58** | **259** | P | P | 05 41 41.8 | -0.6 |
| | 0.2nm,0.3s,baz=97,slow=6.8,SNR=1.7 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.76** | **254** | P | P | 05 41 44.1 | +0.4 |
| | 0.5nm,0.6s,baz=88,slow=9.3,SNR=2.4 | | | | | | |
| ASAR | | | | PcP | PcP | 05 43 11.8 | -0.9 |
| | 0.6nm,0.8s,baz=99,slow=4.8,SNR=2.8 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.36** | **44** | P | P | 05 45 26.7 | -0.3 |
| | 0.9nm,0.7s,baz=224,slow=9.3,SNR=8.2 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.74** | **13** | P | P | 05 45 58.5 | +0.4 |
| | 0.4nm,0.4s,baz=218,slow=5.0,SNR=13 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.97** | **58** | P | P | 05 46 00.4 | +0.2 |
| | 1.2nm,0.7s,baz=219,slow=6.4,SNR=14 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.28** | **43** | P | P | 05 46 06.1 | -0.1 |
| | 0.6nm,0.7s,baz=215,slow=1.8,SNR=5.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.13** | **350** | PKP | PKPdf | 05 52 15.9 | -0.5 |
| | 0.5nm,0.5s,baz=33,slow=2.5,SNR=5.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.60** | **315** | PKP | PKPab | 05 52 52.6 | -0.1 |
| | 0.8nm,0.6s,baz=141,slow=4.3,SNR=3.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.42** | **345** | PKPbc | PKPdf | 05 52 57.0 | +1.1 |
| | 0.8nm,0.6s,baz=165,slow=8.1,SNR=1.1 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.22** | **348** | PKPbc | PKiKP | 05 53 07.2 | +0.3 |
| | 0.9nm,0.3s,baz=202,slow=5.4,SNR=3.6 | | | | | | |

*IDC* ***19*** *05:38:48.8±6.8, 17.75S×177.78W, h514km±73km, mb3.2/4, mbtmp4.1/5, Error ellipse: s-maj=45.0km s-min=36.4km az=14.0*
**ISC 19 05:38:47.4±1.3, 17.7S±0.2×177.7W±0.3, h500km, n7, σ0.42/8, mb3.7/3, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.51** | **251** | P | **P** | **05 42 03.6** | **+0.6** |
| | 3.0nm,0.8s,baz=14,slow=19,SNR=2.2 | | | | | | |
| **URZ** | **Urewera** | **20.97** | **191** | P | **P** | **05 42 54.7** | **+0.1** |
| | 2.2nm,0.3s,baz=72,slow=6.4,SNR=2.6 | | | | | | |
| | 2.2nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.31** | **259** | P | **P** | **05 46 19.9** | **-0.4** |
| | 1.3nm,0.5s,baz=95,slow=7.2,SNR=24 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 47 49.2** | **-0.5** |
| | 0.8nm,1.0s,baz=81,slow=3.4,SNR=2.8 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.48** | **254** | P | **P** | **05 46 21.4** | **-0.1** |
| | 5.0nm,0.6s,baz=87,slow=8.6,SNR=56 | | | | | | |
| | 5.0nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.55** | **13** | P | **P** | **05 50 32.0** | **+0.3** |
| | 0.5nm,1.0s,baz=209,slow=5.2,SNR=4.5 | | | | | | |
| | 0.5nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.10** | **315** | PKPbc | **PKPdf** | **05 57 27.9** | **-0.1** |
| | 0.7nm,0.7s,baz=84,slow=5.0,SNR=2.7 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.33** | **349** | PKPbc | **PKPbc** | **05 57 41.9** | **-0.2** |
| | 1.6nm,0.5s,baz=45,slow=1.4,SNR=3.9 | | | | | | |

*BGR* ***19*** *05:45:22.8, 18.66S×177.20W, h500km*
*NEIC* ***19*** *05:45:26.7±2.0, 18.15S±0.09×178.2W±0.1, h523km±6km, mb4.8/351, Error ellipse: s-maj=14.0km s-min=13.6km az=84.0*
*NOU* ***19*** *05:45:26.3, 18.18S×178.26W, h524km, mb4.9/71, Fiji Islands Region*
*IDC* ***19*** *05:45:27.7±1.6, 18.19S×178.32W, h536km±17km, mb4.1/18, mbtmp5.0/20, Error ellipse: s-maj=12.4km s-min=8.8km az=158.0*
**ISC 19 05:45:26.9±0.5, 18.14S±0.05×178.27W±0.05, h533km±5km, n885, σ0.69/790, mb4.8/205, 41C-43D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.53** | **276** | P | **P** | **05 46 44.8** | **+0.6** |
| **MSVF** | **Nonsavu** | **3.53** | **276** | | **P** | **05 46 45.5** | **+1.2** |
| **AFI** | **Afiamalu** | **7.53** | **57** | P | **P** | **05 47 16.1** | **-3.5** |
| **NIUE** | **Niue** | **7.96** | **98** | P | **P** | **05 47 22.5** | **-1.3** |
| **NIUE** | **Niue** | **7.96** | **98** | | **P** | **05 47 22.7** | **-1.0** |
| **FUNA** | **Funafuti** | **9.87** | **345** | P | **P** | **05 47 42.7** | **-0.7** |
| **FUNA** | **Funafuti** | **9.87** | **345** | P | **P** | **05 47 42.3** | **-1.1** |
| **RAO** | **Raoul Island** | **11.06** | **178** | P | **P** | **05 47 57.4** | **+1.8** |
| **RAO** | **Raoul Island** | **11.06** | **178** | P | **P** | **05 47 57.2** | **+1.6** |
| | 544nm,0.3s,baz=72,slow=20,SNR=12 | | | | | | |
| **LIFNC** | **LIFOU** | **13.92** | **257** | P | **P** | **05 48 23.4** | **-2.0** |
| **LIFNC** | **LIFOU** | **13.92** | **257** | P | **P** | **05 48 23.9** | **-1.5** |
| **PINNC** | **Pines Island,** | **14.11** | **249** | P | **P** | **05 48 26.6** | **-0.9** |
| **PINNC** | **Pines Island,** | **14.11** | **249** | P | **P** | **05 48 26.9** | **-0.6** |
| **YATNC** | **Mamie plateau,** | **14.48** | **252** | P | **P** | **05 48 30.6** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | **P** | **05 48 34.1** | **-1.5** |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | **P** | **05 48 34.7** | **-0.9** |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | **P** | **05 48 34.2** | **-1.4** |
| | 11nm,0.7s,baz=156,slow=18,SNR=15 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.64** | **259** | P | **P** | **05 48 52.5** | **-0.7** |
| **KOUNC** | **Koumac, New Ca** | **16.64** | **259** | P | **P** | **05 48 53.0** | **-0.2** |
| **RAR** | **Rarotonga** | **17.68** | **103** | P | **P** | **05 49 02.5** | **-0.3** |
| **RAR** | **Rarotonga** | **17.68** | **103** | P | **P** | **05 49 02.8** | **0.0** |
| **RAR** | **Rarotonga** | **17.68** | **103** | P | **P** | **05 49 02.6** | **-0.3** |
| | 133nm,0.8s,baz=250,slow=8.2,SNR=19 | | | | | | |
| **URZ** | **Urewera** | **20.45** | **190** | P | **P** | **05 49 24.4** | **-3.3** |
| | 7.4nm,0.3s,baz=345,slow=0.8,SNR=19 | | | | | | |
| **TARA** | **Tarawa** | **21.23** | **335** | P | **P** | **05 49 34.4** | **-0.7** |
| **SNZO** | **South Karori** | **23.86** | **193** | P | **P** | **05 49 57.1** | **-1.3** |
| **TCW** | **Tory Channel** | **23.87** | **194** | P | **P** | **05 49 58.9** | **+0.5** |
| **QRZ** | **Quartz Range** | **23.95** | **197** | P | **P** | **05 49 59.5** | **+0.3** |
| **PPT** | **Papeete** | **27.30** | **93** | P | **P** | **05 50 29.0** | **-0.1** |
| | 78nm,0.9s,baz=67,slow=2.1,SNR=24 | | | | | | |
| | 78nm,0.9s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.31** | **93** | P | **P** | **05 50 29.1** | **-0.1** |
| **PPTF** | **Pamatai, Papee** | **27.31** | **93** | P | **P** | **05 50 29.1** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.32** | **250** | P | **P** | **05 50 46.4** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.32** | **250** | P | **P** | **05 50 46.7** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 05 50 47.3 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.42** | **200** | P | **P** | **05 50 47.0** | **-0.2** |
| MLZ | | | | IAmb | IAmb | 05 50 48.6 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **29.94** | **240** | P | **P** | **05 50 52.9** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 05 50 53.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KWJN** | **Gagan, Kwajale** | **30.60** | **332** | P | **P** | **05 50 58.8** | **+1.1** |
| **ALOT** | **Alotau** | **31.26** | **280** | P | **P** | **05 51 03.4** | **0.0** |
| **TV1H** | **Townsville Har** | **33.08** | **262** | P | **P** | **05 51 18.2** | **-0.6** |
| **CTA** | **Charters Tower** | **33.54** | **261** | P | **P** | **05 51 22.5** | **-0.2** |
| **CTAO** | **Charters Tower** | **33.54** | **261** | P | **P** | **05 51 22.6** | **-0.2** |
| **CTAO** | **Charters Tower** | **33.54** | **261** | P | **P** | **05 51 22.8** | **0.0** |
| CTAO | | | | IAmb | IAmb | 05 51 23.7 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **33.54** | **261** | P | **P** | **05 51 22.4** | **-0.3** |
| CTAO | | | | PcP | **PcP** | **05 53 48.2** | **+0.2** |
| **CAN** | **Canberra** | **33.67** | **233** | P | **P** | **05 51 24.6** | **+0.9** |
| CAN | | | | IAmb | IAmb | 05 51 33.7 | |
| | comp=Z,54nm,1.5s | | | | | | |
| **PATS** | **Pohnpei** | **33.92** | **315** | P | **P** | **05 51 26.7** | **+0.7** |
| PATS | | | | IAmb | IAmb | 05 51 27.3 | |
| | comp=Z,47nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **34.63** | **280** | P | **P** | **05 51 32.8** | **+0.8** |
| **PMG** | **Port Moresby** | **34.63** | **280** | P | **P** | **05 51 32.9** | **+0.9** |
| **PMG** | **Port Moresby** | **34.63** | **280** | P | **P** | **05 51 32.5** | **+0.5** |
| PMG | | | | IAmb | IAmb | 05 51 33.6 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.15** | **241** | P | **P** | **05 51 36.3** | **+0.2** |
| **MTSU** | **Mount Surprise** | **35.52** | **264** | P | **P** | **05 51 38.8** | **-0.5** |
| **QLP** | **Quilpie** | **35.58** | **250** | P | **P** | **05 51 39.7** | **0.0** |
| **TOO** | **Toolangi** | **37.13** | **231** | P | **P** | **05 51 53.5** | **+1.2** |
| TOO | | | | IAmb | IAmb | 05 52 03.3 | |
| | comp=Z,49nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.24** | **271** | P | **P** | **05 51 53.7** | **+0.2** |
| **COEN** | **Coen** | **37.24** | **271** | P | **P** | **05 51 53.8** | **+0.2** |
| COEN | | | | IAmb | IAmb | 05 51 54.5 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.64** | **241** | P | **P** | **05 52 05.3** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.64** | **241** | P | **P** | **05 52 05.6** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.64** | **241** | P | **P** | **05 52 05.3** | **+0.6** |
| | comp=Z,20nm,0.8s,baz=92,slow=9.5,SNR=23 | | | | | | |
| STKA | | | | PcP | **PcP** | **05 54 03.6** | **+0.3** |
| | comp=Z,2.8nm,0.6s,baz=0.0,slow=3.0,SNR=2.3 | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| **WAKE** | **Wake Island** | **40.03** | **338** | P | **P** | **05 52 16.0** | **0.0** |
| **WAKE** | **Wake Island** | **40.03** | **338** | P | **P** | **05 52 15.6** | **-0.4** |
| WAKE | | | | pP | **pP** | **05 53 50.2** | **+0.7** |
| **LCRK** | **Leigh Creek** | **41.28** | **244** | P | **P** | **05 52 26.1** | **+0.2** |
| **TABU** | **Tabubil** | **41.57** | **283** | P | **P** | **05 52 28.7** | **+0.2** |
| **WHYH** | **Whyalla** | **42.19** | **241** | P | **P** | **05 52 33.6** | **+0.6** |
| **OOD** | **Oodnadatta** | **43.26** | **249** | P | **P** | **05 52 41.9** | **+0.4** |
| **BBOO** | **Buckleboo** | **43.41** | **241** | P | **P** | **05 52 42.7** | **0.0** |
| **BBOO** | **Buckleboo** | **43.41** | **241** | P | **P** | **05 52 43.0** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 05 52 43.8 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **GENI** | **Genyem** | **43.56** | **286** | P | **P** | **05 52 44.7** | **+0.6** |
| **KIP** | **Kipapa** | **44.04** | **28** | P | **P** | **05 52 47.2** | **-0.4** |
| **WR0** | **Warramunga Arr** | **44.53** | **260** | P | **P** | **05 52 51.4** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 05 52 53.9 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **05 52 52.4** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 05 52 52.9 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.71** | **260** | P | **P** | **05 52 52.4** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 05 52 53.1 | |
| | comp=Z,36nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **05 52 52.3** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **05 52 52.5** | **-0.5** |
| | comp=Z,16nm,0.9s,baz=98,slow=6.6,SNR=138 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 54 23.9** | **-0.1** |
| | comp=Z,3.3nm,0.5s,baz=87,slow=3.8,SNR=7.5 | | | | | | |
| WRA | | | | S | **S** | **05 58 48.7** | **-2.5** |
| | comp=Z,1.1nm,0.8s,baz=93,slow=13,SNR=4.5 | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **AS01** | **Alice Springs** | **44.82** | **254** | P | **P** | **05 52 53.2** | **-0.5** |
| **MULG** | **Mulgathing** | **44.84** | **245** | P | **P** | **05 52 53.5** | **-0.2** |
| **AS31** | **Alice Springs** | **44.86** | **254** | P | **P** | **05 52 53.8** | **-0.2** |
| AS31 | | | | IAmb | IAmb | 05 52 55.0 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **44.86** | **254** | P | **P** | **05 52 54.0** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.86** | **254** | P | **P** | **05 52 53.6** | **-0.4** |
| | comp=Z,82nm,0.6s,baz=89,slow=8.2,SNR=689 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 54 24.5** | **0.0** |
| | comp=Z,5.8nm,0.6s,baz=110,slow=3.3,SNR=7.4 | | | | | | |
| ASAR | | | | S | **S** | **05 58 51.4** | **-1.7** |
| | comp=Z,4.8nm,1.0s,baz=88,slow=15,SNR=14 | | | | | | |
| | comp=Z,82nm,0.6s | | | | | | |
| **KDU** | **Kakadu** | **47.69** | **269** | P | **P** | **05 53 15.0** | **-0.5** |
| **GUMO** | **Guam** | **48.13** | **308** | P | **P** | **05 53 19.0** | **+0.3** |
| **GUMO** | **Guam** | **48.13** | **308** | P | **P** | **05 53 18.8** | **0.0** |
| **MTN** | **Manton Dam** | **48.93** | **269** | P | **P** | **05 53 24.2** | **-0.6** |
| **MTN** | **Manton Dam** | **48.93** | **269** | P | **P** | **05 53 24.7** | **-0.1** |
| MTN | | | | IAmb | IAmb | 05 53 24.9 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **DRS** | **Darwin Rock St** | **49.24** | **269** | P | **P** | **05 53 26.3** | **-0.8** |
| **WRKA** | **Warakurna** | **49.90** | **252** | P | **P** | **05 53 31.5** | **-0.4** |
| **FORT** | **Forrest** | **50.03** | **245** | P | **P** | **05 53 32.2** | **-0.5** |
| **FORT** | **Forrest** | **50.03** | **245** | P | **P** | **05 53 32.5** | **-0.2** |
| FORT | | | | IAmb | IAmb | 05 53 32.9 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **50.60** | **264** | P | **P** | **05 53 36.9** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 05 53 37.6 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **DRV** | **Dumont d'Urvil** | **55.49** | **199** | P | **P** | **05 54 10.9** | **0.0** |
| **SOEI** | **Soe** | **56.21** | **270** | P | **P** | **05 54 18.1** | **+1.0** |
| **SOEI** | **Soe** | **56.21** | **270** | P | **P** | **05 54 18.6** | **+1.6** |
| SOEI | | | | IAmb | IAmb | 05 54 19.3 | |
| | comp=Z,72nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **56.21** | **270** | P | **P** | **05 54 18.0** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **57.98** | **256** | P | **P** | **05 54 28.4** | **-0.6** |
| **MBWA** | **Marble Bar** | **58.15** | **256** | P | **P** | **05 54 29.4** | **-0.7** |
| **MBWA** | **Marble Bar** | **58.15** | **256** | P | **P** | **05 54 29.5** | **-0.6** |
| MBWA | | | | IAmb | IAmb | 05 54 30.5 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **58.15** | **256** | P | **P** | **05 54 29.3** | **-0.8** |
| MBWA | | | | PcP | **PcP** | **05 55 13.9** | **-0.7** |
| **MEEK** | **Meekatharra** | **58.48** | **249** | P | **P** | **05 54 31.4** | **-0.9** |
| **KLBR** | **Kellerberrin** | **58.85** | **244** | P | **P** | **05 54 34.1** | **-0.6** |
| **EDFI** | **Ende, Flores** | **58.93** | **271** | P | **P** | **05 54 34.9** | **-0.7** |
| | comp=Z,32nm,1.3s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.22** | **242** | P | **P** | **05 54 37.2** | **+0.1** |
| NWAO | | | | IAmb | IAmb | 05 54 37.8 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.22** | **242** | P | **P** | **05 54 36.9** | **-0.3** |
| NWAO | | | | PcP | **PcP** | **05 55 18.4** | **-0.3** |
| **MUN** | **Mundaring** | **60.14** | **243** | P | **P** | **05 54 43.4** | **+0.1** |
| **MORW** | **Morawa** | **60.51** | **246** | P | **P** | **05 54 45.5** | **-0.3** |
| **TOLI2** | **Tolitoli** | **62.89** | **281** | P | **P** | **05 55 01.3** | **-0.2** |
| **TOLI2** | **Tolitoli** | **62.89** | **281** | P | **P** | **05 55 01.9** | **+0.3** |
| **GIRL** | **Giralia** | **62.96** | **253** | P | **P** | **05 55 02.6** | **+0.8** |
| **CCD** | **Concordia, Ant** | **64.68** | **194** | P | **P** | **05 55 12.4** | **+0.1** |
| CCD | | | | pP | **pwP** | **05 57 01.3** | **-0.6** |
| **CASY** | **Casey** | **65.98** | **205** | P | **P** | **05 55 20.2** | **+0.1** |
| CASY | | | | PcP | **PcP** | **05 55 44.5** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **66.17** | **269** | P | **P** | **05 55 21.1** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **66.17** | **269** | P | **P** | **05 55 20.8** | **-1.5** |
| **JAGI** | **Jajag, Banyuwa** | **66.17** | **269** | P | **P** | **05 55 21.5** | **-0.8** |
| **JGF** | **Kuroka** | **68.01** | **322** | P | **P** | **05 55 33.3** | **+0.2** |
| JGF | | | | IAmb | IAmb | 05 55 33.9 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.17** | **323** | P | **P** | **05 55 33.9** | **-0.3** |
| | comp=Z,10nm,0.7s,baz=162,slow=5.6,SNR=35 | | | | | | |
| | comp=Z,10nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **68.18** | **323** | P | **P** | **05 55 34.0** | **-0.1** |
| **MAJO** | **Matsushiro** | **68.18** | **323** | | **P** | **05 55 33.8** | **-0.3** |
| MAJO | | | | IAmb | IAmb | 05 55 34.8 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **MAJO** | **Matsushiro** | **68.18** | **323** | P | **P** | **05 55 33.8** | **-0.3** |
| MAJO | | | | Pc

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=202 | | | | | | | |
| N14K | **Kuskokwak Cree** | 78.95 | 8 | P | P | 05 56 34.5 | -0.4 | |
| | baz=196,SNR=13 | | | | | | | |
| PNTR | **Pine Nut** | 79.02 | 43 | IAmb | IAmb | 05 56 37.9 | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| P17K | **Kvichak River** | 79.11 | 11 | P | P | 05 56 35.4 | -0.3 | |
| | baz=201 | | | | | | | |
| O16K | **Kokwok River B** | 79.19 | 10 | P | P | 05 56 35.4 | -0.8 | |
| | baz=199,SNR=9.1 | | | | | | | |
| M13K | **Dall Lake** | 79.21 | 7 | P | P | 05 56 36.7 | +0.5 | |
| | baz=194 | | | | | | | |
| Q20K | **Shuyak Island** | 79.39 | 13 | P | P | 05 56 37.5 | +0.3 | |
| | baz=205 | | | | | | | |
| Q19K | **Cape Douglas,** | 79.41 | 13 | P | P | 05 56 37.4 | 0.0 | |
| | baz=204 | | | | | | | |
| N15K | **Kwethluk River** | 79.42 | 9 | IAmb | IAmb | 05 56 38.6 | | |
| | comp=Z,36nm,0.6s | | | | | | | |
| N15K | **Kwethluk River** | 79.42 | 9 | P | P | 05 56 37.8 | +0.3 | |
| | baz=198,SNR=6.3 | | | | | | | |
| NVAR | **Mina Array Bea** | 79.50 | 44 | P | P | 05 56 39.0 | +0.4 | |
| NVAR | **Mina Array Bea** | 79.50 | 44 | P | P | 05 56 39.6 | +1.0 | |
| | comp=Z,6.5nm,0.8s,baz=226,slow=8.9,SNR=50 | | | | | | | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| P18K | **Big Mountain,** | 79.52 | 12 | P | P | 05 56 37.7 | -0.3 | |
| P18K | **Big Mountain,** | 79.52 | 12 | P | P | 05 56 37.2 | -0.8 | |
| | baz=202,SNR=6.7 | | | | | | | |
| O17K | **Koliganek Bris** | 79.53 | 11 | P | P | 05 56 37.6 | -0.3 | |
| | baz=200,SNR=6.3 | | | | | | | |
| M14K | **Bethel** | 79.71 | 8 | IAmb | IAmb | 05 56 40.7 | | |
| | comp=Z,53nm,1.1s | | | | | | | |
| M14K | **Bethel** | 79.71 | 8 | P | P | 05 56 39.2 | +0.3 | |
| | baz=196,SNR=6.7 | | | | | | | |
| M15K | **Kasigluk River** | 79.83 | 9 | P | P | 05 56 39.6 | 0.0 | |
| | baz=197,SNR=8.1 | | | | | | | |
| N16K | **Nishlik Lake** | 79.91 | 10 | P | P | 05 56 40.8 | +0.7 | |
| | baz=199,SNR=8.9 | | | | | | | |
| BUCK | **Buck Mountain** | 79.95 | 37 | IAmb | IAmb | 05 56 43.6 | | |
| | comp=Z,42nm,1.4s | | | | | | | |
| O18K | **Koktuh Hills** | 79.95 | 12 | P | P | 05 56 39.7 | -0.5 | |
| | baz=202,SNR=17 | | | | | | | |
| TPH | **Tonopah** | 80.02 | 45 | IAmb | IAmb | 05 56 43.1 | | |
| | comp=Z,36nm,1.0s | | | | | | | |
| 214A | **Organ Pipe Nat** | 80.05 | 52 | P | P | 05 56 42.2 | +0.7 | |
| | baz=241,SNR=5.1 | | | | | | | |
| TPNV | **Topopah Spring** | 80.08 | 46 | P | P | 05 56 42.5 | +0.8 | |
| | baz=238,SNR=7.5 | | | | | | | |
| P19K | **Oil Pt** | 80.16 | 13 | P | P | 05 56 41.0 | -0.4 | |
| | baz=204 | | | | | | | |
| L14K | **Kuka Creek** | 80.19 | 8 | IAmb | IAmb | 05 56 42.8 | | |
| | comp=Z,25nm,0.8s | | | | | | | |
| L14K | **Kuka Creek** | 80.19 | 8 | P | P | 05 56 42.1 | +0.7 | |
| | baz=195,SNR=7.9 | | | | | | | |
| N17K | **Nushagak Hills** | 80.22 | 10 | IAmb | IAmb | 05 56 42.2 | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| N17K | **Nushagak Hills** | 80.22 | 10 | P | P | 05 56 41.7 | +0.1 | |
| | baz=200,SNR=5.1 | | | | | | | |
| H04D | **Lebanon** | 80.29 | 37 | IAmb | IAmb | 05 56 44.2 | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| M16K | **Timber Creek** | 80.40 | 9 | P | P | 05 56 42.9 | +0.3 | |
| | baz=198,SNR=18 | | | | | | | |
| J05D | **Fort Rock, OR** | 80.42 | 38 | IAmb | IAmb | 05 56 45.2 | | |
| | comp=Z,46nm,1.0s | | | | | | | |
| O19K | **Port Alsworth** | 80.44 | 12 | P | P | 05 56 42.0 | -0.7 | |
| | baz=203 | | | | | | | |
| CNPM | **China Poot** | 80.48 | 14 | IAmb | IAmb | 05 56 43.3 | | |
| | comp=Z,40nm,0.9s | | | | | | | |
| HOM | **Homer** | 80.51 | 13 | P | P | 05 56 42.5 | -0.5 | |
| | baz=206 | | | | | | | |
| N18K | **Kilae Creek** | 80.60 | 11 | P | P | 05 56 43.0 | -0.6 | |
| | baz=202,SNR=6.8 | | | | | | | |
| L15K | **Ungalak Mounta** | 80.67 | 8 | P | P | 05 56 43.7 | -0.2 | |
| | baz=196,SNR=16 | | | | | | | |
| O20K | **Slope Mountain** | 80.68 | 13 | P | P | 05 56 43.9 | -0.2 | |
| | baz=205,SNR=5.1 | | | | | | | |
| H04A | **Detroit Lake** | 80.70 | 37 | IAmb | IAmb | 05 56 45.7 | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| BRSE | **Bradley Lake S** | 80.78 | 14 | P | P | 05 56 44.5 | -0.1 | |
| | baz=206,SNR=8.8 | | | | | | | |
| SMAI | **San Martin Ant** | 80.89 | 159 | P | P | 05 56 46.0 | +1.0 | |
| PINE | **Pine Mountain** | 80.89 | 38 | IAmb | IAmb | 05 56 47.8 | | |
| | comp=Z,33nm,0.9s | | | | | | | |
| I05D | **Terrebonne, OR** | 80.98 | 38 | IAmb | IAmb | 05 56 47.7 | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| L16K | **Owhat River** | 80.98 | 9 | P | P | 05 56 45.6 | +0.1 | |
| | baz=198,SNR=14 | | | | | | | |
| N19K | **Bonanza Creek** | 80.98 | 12 | IAmb | IAmb | 05 56 45.7 | | |
| | comp=Z,43nm,0.9s | | | | | | | |
| N19K | **Bonanza Creek** | 80.98 | 12 | P | P | 05 56 44.4 | -1.2 | |
| | baz=203,SNR=8.3 | | | | | | | |
| M17K | **Holitna River** | 81.01 | 10 | P | P | 05 56 46.6 | +1.0 | |
| | baz=200,SNR=20 | | | | | | | |
| E03A | **Lebam** | 81.07 | 35 | IAmb | IAmb | 05 56 48.5 | | |
| | comp=Z,34nm,1.0s | | | | | | | |
| PRN | **Pahroc Range** | 81.14 | 46 | IAmb | IAmb | 05 56 49.3 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| K15K | **Wolf Creek Mou** | 81.26 | 8 | P | P | 05 56 47.5 | +0.5 | |
| | baz=196,SNR=32 | | | | | | | |
| R11B | **Troy Canyon, C** | 81.26 | 45 | P | P | 05 56 48.6 | +0.8 | |
| | baz=239,SNR=10 | | | | | | | |
| BMN | **Battle Mountai** | 81.29 | 43 | IAmb | IAmb | 05 56 49.6 | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| F04A | **Amboy** | 81.32 | 36 | IAmb | IAmb | 05 56 49.0 | | |
| | comp=Z,42nm,1.4s | | | | | | | |
| M18K | **Stony River** | 81.37 | 11 | P | P | 05 56 47.6 | +0.2 | |
| | baz=202,SNR=6.6 | | | | | | | |
| HOOD | **Mount Hood Mea** | 81.38 | 37 | IAmb | IAmb | 05 56 49.5 | | |
| | comp=Z,30nm,1.1s | | | | | | | |
| SEW | **Seward** | 81.40 | 14 | P | P | 05 56 47.2 | -0.4 | |
| | baz=208 | | | | | | | |
| NLWA | **Neilton Lookou** | 81.43 | 34 | P | P | 05 56 49.1 | +0.9 | |
| J14K | **Nanvaranak Lak** | 81.45 | 7 | IAmb | IAmb | 05 56 49.7 | | |
| | comp=Z,36nm,1.2s | | | | | | | |
| J14K | **Nanvaranak Lak** | 81.45 | 7 | P | P | 05 56 48.7 | +0.8 | |
| | baz=194,SNR=6.3 | | | | | | | |
| MA2 | **Magadan** | 81.46 | 345 | P | P | 05 56 47.5 | -0.5 | |
| MA2 | **Magadan** | 81.46 | 345 | P | P | 05 56 47.5 | -0.5 | |
| MA2 | | | | IAmb | IAmb | 05 56 48.2 | | |
| | comp=Z,34nm,1.0s | | | | | | | |
| WVOR | **Wild Horse Val** | 81.50 | 40 | IAmb | IAmb | 05 56 50.6 | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| G05A | **Wamic** | 81.53 | 37 | IAmb | IAmb | 05 56 50.3 | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| L17K | **Donlin** | 81.56 | 9 | P | P | 05 56 49.4 | +0.8 | |
| | baz=199,SNR=20 | | | | | | | |
| O22K | **Cooper Landing** | 81.67 | 14 | P | P | 05 56 47.8 | -1.2 | |
| | baz=207,SNR=6.3 | | | | | | | |
| TUC | **Tucson** | 81.73 | 52 | P | P | 05 56 52.3 | +2.1 | |
| TUC | **Tucson** | 81.73 | 52 | P | P | 05 56 51.9 | +1.7 | |
| | baz=242 | | | | | | | |
| N20K | **Mount Spurr** | 81.79 | 12 | P | P | 05 56 48.8 | -1.0 | |
| | baz=205,SNR=6.0 | | | | | | | |
| SPCR | **Spurr Chakacha** | 81.79 | 12 | P | P | 05 56 48.9 | -0.9 | |
| | baz=205,SNR=5.5 | | | | | | | |
| P23K | **Montague Islan** | 81.80 | 15 | P | P | 05 56 49.4 | -0.4 | |
| | baz=210 | | | | | | | |
| SPU | **Mount Spurr** | 81.80 | 12 | P | P | 05 56 48.7 | -1.2 | |
| SPU | | | | IAmb | IAmb | 05 56 50.8 | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| GAMB | **Gambell** | 81.81 | 3 | P | P | 05 56 50.0 | +0.3 | |
| | baz=186 | | | | | | | |
| L18K | **Granite Mounta** | 81.90 | 10 | P | P | 05 56 50.5 | +0.3 | |
| | baz=201,SNR=30 | | | | | | | |
| I07A | **Izee** | 81.90 | 38 | IAmb | IAmb | 05 56 52.7 | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| BELA | **Belgrano 2** | 81.92 | 173 | P | P | 05 56 49.7 | -0.5 | |
| M19K | **Big River Lodg** | 82.01 | 11 | IAmb | IAmb | 05 56 51.1 | | |
| | comp=Z,28nm,0.8s | | | | | | | |
| M19K | **Big River Lodg** | 82.01 | 11 | P | P | 05 56 50.2 | -0.6 | |
| | baz=203 | | | | | | | |
| J08A | **Circle Bar Ran** | 82.11 | 40 | P | P | 05 56 52.5 | +0.6 | |
| J08A | | | | IAmb | IAmb | 05 56 53.6 | | |
| | comp=Z,30nm,1.1s | | | | | | | |
| K17K | **Iditarod** | 82.11 | 9 | IAmb | IAmb | 05 56 52.9 | | |
| | comp=Z,71nm,1.4s | | | | | | | |
| K17K | **Iditarod** | 82.11 | 9 | P | P | 05 56 51.6 | +0.3 | |
| | baz=199,SNR=7.9 | | | | | | | |
| Q12A | **Willow Creek R** | 82.12 | 45 | IAmb | IAmb | 05 56 53.9 | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| L19K | **White Mountain** | 82.18 | 11 | IAmb | IAmb | 05 56 53.5 | | |
| | comp=Z,34nm,1.0s | | | | | | | |
| L19K | **White Mountain** | 82.18 | 11 | P | P | 05 56 51.8 | 0.0 | |
| | baz=202,SNR=12 | | | | | | | |
| RC01 | **Rabbit Creek A** | 82.21 | 14 | IAmb | IAmb | 05 56 53.0 | | |
| | comp=Z,59nm,1.3s | | | | | | | |
| RC01 | **Rabbit Creek A** | 82.21 | 14 | P | P | 05 56 51.5 | -0.3 | |
| | baz=207,SNR=5.5 | | | | | | | |
| M20K | **Styx River** | 82.22 | 12 | P | P | 05 56 51.2 | -0.8 | |
| | baz=204 | | | | | | | |
| D05A | **Enumclaw** | 82.31 | 35 | IAmb | IAmb | 05 56 54.7 | | |
| | comp=Z,41nm,1.1s | | | | | | | |
| SUA | **Susitna One** | 82.33 | 13 | P | P | 05 56 52.0 | -0.6 | |
| | baz=206,SNR=12 | | | | | | | |
| PWL | **Port Wells** | 82.33 | 14 | P | P | 05 56 51.7 | -0.8 | |
| | baz=208,SNR=11 | | | | | | | |
| J16K | **Anvik River** | 82.33 | 8 | P | P | 05 56 52.8 | +0.4 | |
| | baz=197,SNR=16 | | | | | | | |
| CBB | **Campbell River** | 82.34 | 31 | IAmb | IAmb | 05 56 54.2 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| PGC | **Sidney** | 82.43 | 33 | P | P | 05 56 53.8 | +0.6 | |
| PGC | | | | IAmb | IAmb | 05 56 54.5 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| 319A | **Douglas** | 82.45 | 54 | IAmb | IAmb | 05 56 56.7 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| KAIM | **Kayak Island** | 82.51 | 16 | P | P | 05 56 53.5 | +0.1 | |
| | baz=212 | | | | | | | |
| U15A | **North Rim** | 82.57 | 48 | IAmb | IAmb | 05 56 56.9 | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| IPM | **Ipoh** | 82.58 | 277 | P | P | 05 56 55.6 | +0.7 | |
| SKT | **Skwentna** | 82.63 | 12 | IAmb | IAmb | 05 56 53.4 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| SKT | **Skwentna** | 82.63 | 12 | P | P | 05 56 52.8 | -1.1 | |
| | baz=206,SNR=6.2 | | | | | | | |
| L20K | **Farewell, AK** | 82.63 | 11 | P | P | 05 56 53.4 | -0.6 | |
| | baz=203,SNR=12 | | | | | | | |
| GLI | **Glacier Island** | 82.64 | 15 | P | P | 05 56 53.4 | -0.6 | |
| | baz=210,SNR=23 | | | | | | | |
| J17K | **VABM Dome** | 82.65 | 9 | IAmb | IAmb | 05 56 55.3 | | |
| | comp=Z,32nm,0.7s | | | | | | | |
| J17K | **VABM Dome** | 82.65 | 9 | P | P | 05 56 54.6 | +0.7 | |
| | baz=198,SNR=19 | | | | | | | |
| CRAG | **Craig** | 82.67 | 24 | P | P | 05 56 54.7 | +0.4 | |
| | baz=223 | | | | | | | |
| EYAK | **Cordova Ski Ar** | 82.69 | 16 | P | P | 05 56 54.0 | -0.2 | |
| EYAK | **Cordova Ski Ar** | 82.69 | 16 | P | P | 05 56 54.3 | +0.1 | |
| | baz=211 | | | | | | | |
| F07A | **Phinny Hill Vi** | 82.70 | 37 | IAmb | IAmb | 05 56 56.1 | | |
| | comp=Z,16nm,0.7s | | | | | | | |
| M22K | **Willow** | 82.72 | 13 | P | P | 05 56 53.9 | -0.5 | |
| | baz=207,SNR=14 | | | | | | | |
| KNK | **Knik Glacier** | 82.79 | 14 | IAmb | IAmb | 05 56 55.2 | | |
| | comp=Z,42nm,0.8s | | | | | | | |
| KNK | **Knik Glacier** | 82.79 | 14 | P | P | 05 56 54.7 | -0.1 | |
| | baz=208,SNR=10 | | | | | | | |
| WUAZ | **Wupatki** | 82.79 | 49 | P | P | 05 56 56.5 | +0.9 | |
| | baz=242,SNR=7.0 | | | | | | | |
| PMR | **Palmer** | 82.80 | 14 | P | P | 05 56 54.2 | -0.5 | |
| PMR | **Palmer** | 82.80 | 14 | P | P | 05 56 54.3 | -0.5 | |
| | baz=208,SNR=14 | | | | | | | |
| I17K | **Unalakleet** | 82.90 | 8 | P | P | 05 56 55.6 | +0.4 | |
| | baz=197 | | | | | | | |
| HMT | **Hamilton** | 82.90 | 16 | IAmb | IAmb | 05 56 56.0 | | |
| | comp=Z,33nm,1.0s | | | | | | | |
| G08A | **Pilot Rock** | 82.91 | 38 | IAmb | IAmb | 05 56 57.5 | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| SIT | **Sitka** | 83.04 | 22 | P | P | 05 56 56.6 | +0.5 | |
| SIT | **Sitka** | 83.04 | 22 | P | P | 05 56 56.3 | +0.3 | |
| | baz=221 | | | | | | | |
| PKCU | **Pink Cliffs** | 83.05 | 47 | IAmb | IAmb | 05 56 59.9 | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| J18K | **Innoko River** | 83.07 | 10 | P | P | 05 56 56.1 | 0.0 | |
| | baz=201,SNR=36 | | | | | | | |
| LTY | **Liberty** | 83.08 | 35 | IAmb | IAmb | 05 56 57.8 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| DUN6 | **Lazy B Ranch** | 83.12 | 53 | IAmb | IAmb | 05 56 59.9 | | |
| | comp=Z,47nm,1.5s | | | | | | | |
| E07A | **Sunnyside** | 83.12 | 36 | IAmb | IAmb | 05 56 58.4 | | |
| | comp=Z,31nm,1.0s | | | | | | | |
| U33K | **Whale Pass** | 83.15 | 24 | P | P | 05 56 56.8 | +0.2 | |
| | baz=223,SNR=9.6 | | | | | | | |
| V35K | **Ketchikan** | 83.16 | 25 | P | P | 05 56 56.9 | +0.2 | |
| | baz=224 | | | | | | | |
| SML | **Sawmill** | 83.17 | 14 | IAmb | IAmb | 05 57 10.0 | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| SML | **Sawmill** | 83.17 | 14 | P | P | 05 56 56.0 | -0.7 | |
| | baz=208,SNR=5.7 | | | | | | | |
| HAWA | **Hanford** | 83.21 | 37 | IAmb | IAmb | 05 56 58.8 | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| CUT | **Chulitna** | 83.28 | 13 | P | P | 05 56 56.1 | -1.0 | |
| | baz=207,SNR=15 | | | | | | | |
| M23K | **Glacier View** | 83.29 | 14 | P | P | 05 56 56.2 | -1.1 | |
| | baz=209,SNR=8.3 | | | | | | | |
| BMRM | **Bremner River** | 83.34 | 16 | P | P | 05 56 57.1 | -0.5 | |
| | baz=212,SNR=19 | | | | | | | |
| MESA | **MESA** | 83.40 | 17 | P | P | 05 56 57.8 | -0.3 | |
| | baz=214,SNR=22 | | | | | | | |
| K20K | **Telida** | 83.41 | 11 | P | P | 05 56 57.6 | -0.2 | |
| | baz=203,SNR=32 | | | | | | | |
| S31K | **Pelican** | 83.42 | 21 | P | P | 05 56 58.2 | +0.3 | |
| | baz=220,SNR=22 | | | | | | | |
| SCM | **Sheep Creek Mo** | 83.42 | 14 | P | P | 05 56 57.7 | -0.3 | |
| | baz=209,SNR=26 | | | | | | | |
| H16K | **Elim** | 83.44 | 7 | P | P | 05 56 57.6 | -0.3 | |
| | baz=195,SNR=13 | | | | | | | |
| KLU | **Klutina** | 83.46 | 15 | IAmb | IAmb | 05 56 58.8 | | |
| | comp=Z,32nm,1.1s | | | | | | | |
| KLU | **Klutina** | 83.46 | 15 | P | P | 05 56 57.3 | -0.9 | |
| | baz=211,SNR=9.2 | | | | | | | |
| CRQE | **Cirque** | 83.56 | 17 | P | P | 05 56 58.2 | -0.6 | |
| | baz=213,SNR=21 | | | | | | | |
| G15K | **Niukluk** | 83.59 | 6 | P | P | 05 56 58.4 | -0.3 | |
| | baz=194,SNR=9.0 | | | | | | | |
| S32K | **Killisnoo** | 83.62 | 22 | P | P | 05 56 58.8 | -0.1 | |
| | baz=221,SNR=6.9 | | | | | | | |
| MVU | **Marysvale** | 83.63 | 46 | IAmb | IAmb | 05 57 02.2 | | |
| | comp=Z,41nm,1.2s | | | | | | | |
| WRAK | **Wrangell Islan** | 83.67 | 24 | P | P | 05 56 59.4 | +0.2 | |
| | baz=223 | | | | | | | |
| J19K | **Poorman** | 83.74 | 10 | IAmb | IAmb | 05 57 00.5 | | |
| | comp=Z,33nm,1.0s | | | | | | | |
| J19K | **Poorman** | 83.74 | 10 | P | P | 05 56 59.6 | +0.2 | |
| | baz=202,SNR=18 | | | | | | | |
| PNL | **Peninsula** | 83.74 | 19 | P | P | 05 56 59.7 | +0.2 | |
| PNL | **Peninsula** | 83.74 | 19 | P | P | 05 56 59.0 | -0.6 | |
| | baz=217,SNR=15 | | | | | | | |
| MFID | **Camas Ranch** | 83.76 | 41 | IAmb | IAmb | 05 57 01.8 | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| TNA | **Tin City** | 83.81 | 4 | P | P | 05 56 59.8 | +0.1 | |
| | baz=190 | | | | | | | |
| PINM | **Pinnacle** | 83.83 | 18 | P | P | 05 56 59.7 | -0.4 | |
| | baz=216,SNR=8.4 | | | | | | | |
| F14K | **Arctic Creek** | 83.85 | 5 | P | P | 05 56 59.9 | -0.1 | |
| | baz=191 | | | | | | | |
| VRDI | **Verde Repeater** | 83.87 | 16 | IAmb | IAmb | 05 57 01.0 | | |
| | comp=Z,37nm,1.0s | | | | | | | |
| N25K | **Chitina, Valde** | 83.89 | 15 | P | P | 05 57 00.2 | -0.1 | |
| | baz=212,SNR=41 | | | | | | | |
| BCPM | **Bancas Point** | 83.89 | 18 | IAmb | IAmb | 05 57 01.2 | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| GRNC | **Granite Creek** | 83.92 | 17 | IAmb | IAmb | 05 57 01.4 | | |
| | comp=Z,49nm,1.0s | | | | | | | |
| M24K | **Tolsona, Glenn** | 83.93 | 15 | P | P | 05 57 00.3 | -0.2 | |
| | baz=210,SNR=14 | | | | | | | |
| D08A | **Wollman Farm,** | 83.94 | 36 | IAmb | IAmb | 05 57 02.4 | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| WAT6 | **Susitna Watana** | 83.98 | 14 | P | P | 05 57 00.5 | -0.4 | |
| | baz=209,SNR=43 | | | | | | | |
| H17K | **Granite Mounta** | 84.01 | 8 | P | P | 05 57 00.6 | -0.2 | |
| | baz=198,SNR=7.1 | | | | | | | |
| WAT1 | **Susitna Watana** | 84.02 | 13 | P | P | 05 57 00.7 | -0.2 | |
| | baz=208 | | | | | | | |
| PSI | **Prapat** | 84.04 | 275 | P | P | 05 57 02.3 | +0.1 | |
| BJT | **Baijiatuau** | 84.04 | 315 | P | P | 05 57 01.9 | +0.4 | |
| DUG | **Dugway, Tooele** | 84.05 | 44 | P | P | 05 57 01.2 | -0.5 | |
| | baz=240 | | | | | | | |
| 121A | **Cookes Peak, D** | 84.10 | 53 | P | P | 05 57 02.8 | +0.6 | |
| | baz=244 | | | | | | | |
| MCARA | **McCarthy VSAT** | 84.11 | 16 | IAmb | IAmb | 05 57 02.7 | | |
| | comp=Z,41nm,1.1s | | | | | | | |
| MCARA | **McCarthy VSAT** | 84.11 | 16 | P | P | 05 57 01.1 | -0.3 | |
| | baz=213,SNR=12 | | | | | | | |
| J20K | **Nowinta River** | 84.15 | 10 | P | P | 05 57 00.9 | -0.6 | |
| | baz=203,SNR=26 | | | | | | | |
| G16K | **Koyuk River** | 84.16 | 7 | IAmb | IAmb | 05 57 02.5 | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| G16K | **Koyuk River** | 84.16 | 7 | P | P | 05 57 01.4 | -0.1 | |
| | baz=195 | | | | | | | |
| LOGN | **Logan Glacier** | 84.20 | 17 | IAmb | IAmb | 05 57 02.8 | | |
| | comp=Z,48nm,1.0s | | | | | | | |
| CTG | **Chitna Glacier** | 84.22 | 17 | P | P | 05 57 02.0 | 0.0 | |
| | baz=215,SNR=32 | | | | | | | |
| P29M | **Windy Craggy** | 84.22 | 19 | P | P | 05 57 01.9 | 0.0 | |
| | baz=218,SNR=29 | | | | | | | |
| F15K | **North Star Dit** | 84.23 | 6 | P | P | 05 57 01.8 | 0.0 | |
| | baz=193 | | | | | | | |
| GCSA | **Galena City Sc** | 84.25 | 9 | P | P | 05 57 02.0 | +0.2 | |
| | baz=200,SNR=5.6 | | | | | | | |
| R32K | **Eaglecrest** | 84.25 | 22 | P | P | 05 57 01.9 | -0.2 | |
| | baz=221 | | | | | | | |
| JIS | **Juneau Island** | 84.30 | 22 | P | P | 05 57 02.8 | +0.6 | |
| F10A | **Beach Ranch, E** | 84.30 | 38 | IAmb | IAmb | 05 57 03.9 | | |
| | comp=Z,32nm,1.0s | | | | | | | |
| O28M | **Mount Upton** | 84.39 | 18 | P | P | 05 57 03.0 | -0.1 | |
| | baz=216,SNR=36 | | | | | | | |
| H18K | **Honhosa River** | 84.42 | 8 | P | P | 05 57 02.7 | 0.0 | |
| | baz=199 | | | | | | | |
| HARP | **HAARP** | 84.43 | 15 | P | P | 05 57 02.6 | -0.3 | |
| | baz=211,SNR=12 | | | | | | | |
| B08A | **Colville Reser** | 84.45 | 35 | IAmb | IAmb | 05 57 04.1 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| G17K | **Kiwalik Mounta** | 84.45 | 7 | P | P | 05 57 02.6 | -0.3 | |
| | baz=197 | | | | | | | |
| O29M | **Mount Kennedy** | 84.49 | 19 | IAmb | IAmb | 05 57 04.6 | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| O29M | **Mount Kennedy** | 84.49 | 19 | P | P | 05 57 03.5 | +0.1 | |
| | baz=218,SNR=12 | | | | | | | |
| DHY | **Denali Highway** | 84.50 | 14 | IAmb | IAmb | 05 57 03.2 | | |
| | comp=Z,23nm,0.5s | | | | | | | |
| DHY | **Denali Highway** | 84.50 | 14 | P | P | 05 57 02.9 | -0.5 | |
| | baz=209,SNR=22 | | | | | | | |
| ENH | **Enshi** | 84.51 | 304 | P | P | 05 57 05.1 | +1.0 | |
| PLBC | **Pleasant Camp** | 84.53 | 20 | P | P | 05 57 03.8 | +0.4 | |
| | baz=220,SNR=28 | | | | | | | |
| BPAW | **Bear Paw Mtn.** | 84.66 | 12 | IAmb | IAmb | 05 57 05.6 | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| BPAW | **Bear Paw Mtn.** | 84.66 | 12 | P | P | 05 57 02.6 | -1.3 | |
| | baz=206,SNR=12 | | | | | | | |
| I20K | **Naaghedeneel** | 84.67 | 10 | P | P | 05 57 04.2 | +0.2 | |
| | baz=203,SNR=10 | | | | | | | |
| HLID | **Hailey** | 84.72 | 41 | IAmb | IAmb | 05 57 06.9 | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| HLID | **Hailey** | 84.72 | 41 | P | P | 05 57 06.0 | +1.0 | |
| | baz=239,SNR=23 | | | | | | | |
| C09A | **Chrisman Ranch** | 84.72 | 36 | IAmb | IAmb | 05 57 05.8 | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| MCK | **McKinley** | 84.74 | 13 | P | P | 05 57 03.7 | -0.6 | |
| | baz=208,SNR=21 | | | | | | | |
| EPT | **El Paso** | 84.76 | 54 | IAmb | IAmb | 05 57 08.0 | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| PAX | **Paxson** | 84.84 | 14 | P | P | 05 57 04.3 | -0.7 | |
| | baz=211,SNR=16 | | | | | | | |
| SKAG | **Skagway** | 84.87 | 20 | P | P | 05 57 05.9 | +0.8 | |
| SKAG | **Skagway** | 84.87 | 20 | P | P | 05 57 05.5 | +0.5 | |
| SKAG | | | | IAmb | IAmb | 05 57 07.0 | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| SKAG | **Skagway** | 84.87 | 20 | P | P | 05 57 05.9 | +0.8 | |
| | baz=220,SNR=17 | | | | | | | |
| T35M | **Bob Quinn** | 84.88 | 24 | P | P | 05 57 06.0 | +0.8 | |
| | baz=225,SNR=6.3 | | | | | | | |
| YUK8 | **Steele Glacier** | 84.93 | 18 | P | P | 05 57 05.8 | +0.1 | |
| | baz=216,SNR=27 | | | | | | | |
| M26K | **Nabesna, AK** | 84.97 | 16 | P | P | 05 57 05.3 | -0.3 | |
| | baz=213,SNR=55 | | | | | | | |
| H19K | **Roundabout Mou** | 85.05 | 9 | IAmb | IAmb | 05 57 06.8 | | |
| | comp=Z,28nm,1.2s | | | | | | | |
| H19K | **Roundabout Mou** | 85.05 | 9 | P | P | 05 57 06.2 | +0.5 | |
| | baz=201,SNR=7.0 | | | | | | | |
| YUK6 | **Outpost Mounta** | 85.07 | 18 | P | P | 05 57 06.4 | +0.1 | |
| | baz=218,SNR=8.4 | | | | | | | |
| G18K | **Tagagawik** | 85.08 | 8 | P | P | 05 57 05.9 | -0.2 | |
| | baz=199,SNR=6.2 | | | | | | | |
| YUK3 | **Moose Creek** | 85.13 | 17 | P | P | 05 57 06.7 | +0.1 | |
| | baz=216,SNR=24 | | | | | | | |
| NONG | **Nongkai** | 85.20 | 291 | P | P | 05 57 08.4 | +0.8 | |
| S34M | **Telegraph Cree** | 85.21 | 23 | P | P | 05 57 07.5 | +0.8 | |
| | baz=224,SNR=53 | | | | | | | |
| M27K | **Edge Creek, AK** | 85.22 | 16 | P | P | 05 57 07.2 | +0.2 | |
| | baz=214,SNR=49 | | | | | | | |
| H20K | **Anotleneega Mo** | 85.25 | 10 | P | P | 05 57 07.2 | +0.3 | |
| | baz=202,SNR=8.4 | | | | | | | |
| F17K | **Baldwin Pennin** | 85.29 | 7 | IAmb | IAmb | 05 57 09.2 | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| F17K | **Baldwin Pennin** | 85.29 | 7 | P | P | 05 57 08.3 | +1.4 | |
| | baz=196 | | | | | | | |
| YUK4 | **Talbot Arm** | 85.30 | 18 | P | P | 05 57 08.0 | +0.6 | |
| | baz=218,SNR=12 | | | | | | | |
| L26K | **Log Cabin Wild** | 85.40 | 15 | IAmb | IAmb | 05 57 08.5 | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| L26K | **Log Cabin Wild** | 85.40 | 15 | P | P | 05 57 07.5 | -0.1 | |
| | baz=213,SNR=14 | | | | | | | |
| TCUT | **Toone Canyon** | 85.43 | 44 | IAmb | IAmb | 05 57 10.2 | | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| I21K | **Tanana** | 85.45 | 11 | P | P | 05 57 07.9 | +0.2 | |
| | baz=205 | | | | | | | |
| NEA2 | **Nenana** | 85.47 | 12 | IAmb | IAmb | 05 57 07.0 | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| NEA2 | **Nenana** | 85.47 | 12 | P | P | 05 57 06.4 | -1.5 | |
| | baz=208,SNR=7.6 | | | | | | | |
| K24K | **Donnelly Dome** | 85.49 | 14 | P | P | 05 57 08.1 | 0.0 | |
| | baz=211,SNR=23 | | | | | | | |
| P32M | **Atlin** | 85.51 | 21 | IAmb | IAmb | 05 57 09.7 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| P32M | **Atlin** | 85.51 | 21 | P | P | 05 57 08.9 | +0.7 | |
| | baz=222,SNR=11 | | | | | | | |
| G19K | **Purcell Mounta** | 85.53 | 8 | IAmb | IAmb | 05 57 10.0 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| G19K | **Purcell Mounta** | 85.53 | 8 | P | P | 05 57 08.5 | +0.4 | |
| | baz=200,SNR=9.6 | | | | | | | |
| MLY | **Manley** | 85.54 | 11 | IAmb | IAmb | 05 57 08.7 | | |
| | comp=Z,35nm,1.2s | | | | | | | |
| MLY | **Manley** | 85.54 | 11 | P | P | 05 57 07.0 | -1.2 | |
| | baz=206,SNR=15 | | | | | | | |
| Q32M | **Nakina River** | 85.55 | 22 | IAmb | IAmb | 05 57 10.1 | | |
| | comp=Z,28nm,0.7s | | | | | | | |
| Q32M | **Nakina River** | 85.55 | 22 | P | P | 05 57 09.2 | +0.6 | |
| | baz=223,SNR=27 | | | | | | | |
| MNTX | **Cornudas Mount** | 85.60 | 55 | P | P | 05 57 09.7 | +0.4 | |
| | baz=246 | | | | | | | |
| NEW | **Newport** | 85.62 | 36 | IAmb | IAmb | 05 57 09.9 | | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| NEW | **Newport** | 85.62 | 36 | P | P | 05 57 09.1 | +0.1 | |
| | baz=236,SNR=12 | | | | | | | |
| O30N | **Mendenhall** | 85.63 | 19 | IAmb | IAmb | 05 57 10.0 | | |
| | comp=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,20nm,0.9s | | | | | | | |
| SCRK | **Sand Creek** | 86.05 | 14 | IAmb | IAmb | 05 57 11.6 | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| SCRK | **Sand Creek** | 86.05 | 14 | P | **P** | **05 57 10.4** | **-0.4** | |
| | baz=212,SNR=16 | | | | | | | |
| ILAR | **Eielson Array** | 86.08 | 13 | P | **P** | **05 57 09.9** | **-0.9** | |
| | comp=Z,13nm,0.4s,baz=220,slow=5.2,SNR=154 | | | | | | | |
| | comp=Z,13nm,0.4s | | | | | | | |
| F19K | **Shaleruckik Mo** | 86.09 | 8 | IAmb | IAmb | 05 57 11.1 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| F19K | **Shaleruckik Mo** | 86.09 | 8 | P | **P** | **05 57 10.6** | **-0.1** | |
| | baz=199 | | | | | | | |
| ANMO | **Albuquerque** | 86.14 | 51 | P | **P** | **05 57 11.7** | **-0.4** | |
| ANMO | **Albuquerque** | 86.14 | 51 | P | **P** | **05 57 12.8** | **+0.8** | |
| | baz=245 | | | | | | | |
| H22K | **Ishtalitna Cre** | 86.21 | 11 | P | **P** | **05 57 11.3** | **-0.1** | |
| | baz=206 | | | | | | | |
| M29M | **Somme Creek** | 86.23 | 17 | P | **P** | **05 57 11.5** | **-0.2** | |
| M29M | | | | IAmb | IAmb | 05 57 13.7 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| M29M | **Somme Creek** | 86.23 | 17 | P | **P** | **05 57 11.6** | **-0.1** | |
| | baz=218,SNR=29 | | | | | | | |
| POKR | **Poker Plat Res** | 86.27 | 13 | P | **P** | **05 57 10.7** | **-1.0** | |
| | baz=209,SNR=8.8 | | | | | | | |
| N31M | **Braeburn, Yuko** | 86.28 | 19 | IAmb | IAmb | 05 57 13.1 | | |
| | comp=Z,38nm,1.0s | | | | | | | |
| N31M | **Braeburn, Yuko** | 86.28 | 19 | P | **P** | **05 57 11.7** | **-0.1** | |
| | baz=220,SNR=18 | | | | | | | |
| P33M | **Teslin, Yukon** | 86.28 | 21 | IAmb | IAmb | 05 57 13.1 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| P33M | **Teslin, Yukon** | 86.28 | 21 | P | **P** | **05 57 12.1** | **+0.1** | |
| | baz=223,SNR=20 | | | | | | | |
| J25K | **Salcha River,** | 86.28 | 14 | IAmb | IAmb | 05 57 11.8 | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| J25K | **Salcha River,** | 86.28 | 14 | P | **P** | **05 57 11.2** | **-0.6** | |
| | baz=211,SNR=22 | | | | | | | |
| E18K | **Tukpahlearik C** | 86.31 | 7 | P | **P** | **05 57 11.9** | **+0.1** | |
| | baz=197,SNR=8.0 | | | | | | | |
| D17K | **Noatak River** | 86.32 | 6 | P | **P** | **05 57 11.9** | **+0.1** | |
| | baz=194 | | | | | | | |
| R33M | **Jennings River** | 86.33 | 22 | IAmb | IAmb | 05 57 13.9 | | |
| | comp=Z,46nm,1.4s | | | | | | | |
| R33M | **Jennings River** | 86.33 | 22 | P | **P** | **05 57 12.9** | **+0.7** | |
| | baz=224,SNR=22 | | | | | | | |
| G21K | **Allakaket** | 86.42 | 10 | IAmb | IAmb | 05 57 13.0 | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| G21K | **Allakaket** | 86.42 | 10 | P | **P** | **05 57 12.2** | **-0.2** | |
| | baz=204,SNR=17 | | | | | | | |
| H23K | **Yukon River** | 86.48 | 11 | P | **P** | **05 57 12.2** | **-0.5** | |
| | baz=207 | | | | | | | |
| XAN | **Xi'an** | 86.51 | 307 | ⇓P | **P** | **05 57 14.5** | **+0.9** | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,55nm,1.0s | | | | | | | |
| K27K | **Chicken** | 86.56 | 15 | P | **P** | **05 57 13.9** | **+0.8** | |
| | baz=214 | | | | | | | |
| F20K | **Avaraart Lake** | 86.58 | 9 | P | **P** | **05 57 13.3** | **+0.3** | |
| | baz=201 | | | | | | | |
| J26L | **Joseph Creek** | 86.59 | 14 | IAmb | IAmb | 05 57 14.1 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| J26L | **Joseph Creek** | 86.59 | 14 | P | **P** | **05 57 13.5** | **+0.1** | |
| | baz=213,SNR=20 | | | | | | | |
| MSO | **Missoula** | 86.68 | 38 | P | **P** | **05 57 14.5** | **+0.2** | |
| | baz=239 | | | | | | | |
| RDOG | **Red Dog Mine** | 86.68 | 6 | P | **P** | **05 57 14.2** | **+0.6** | |
| | baz=195 | | | | | | | |
| DLMT | **Dillon** | 86.75 | 40 | IAmb | IAmb | 05 57 16.3 | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| E19K | **Redstone River** | 86.75 | 8 | P | **P** | **05 57 13.9** | **0.0** | |
| | baz=200,SNR=18 | | | | | | | |
| H24K | **Noodor Dome** | 86.81 | 12 | P | **P** | **05 57 13.3** | **-1.0** | |
| | baz=209 | | | | | | | |
| TPAW | **Teton Pass** | 86.87 | 42 | IAmb | IAmb | 05 57 16.2 | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| N32M | **Quiet Lake** | 86.88 | 20 | IAmb | IAmb | 05 57 16.2 | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| N32M | **Quiet Lake** | 86.88 | 20 | P | **P** | **05 57 15.7** | **+1.0** | |
| | baz=222 | | | | | | | |
| SNOW | **Snow King Moun** | 86.98 | 42 | IAmb | IAmb | 05 57 17.7 | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| PRP | **Porcupine Dome** | 87.02 | 13 | IAmb | IAmb | 05 57 21.6 | | |
| | comp=Z,13nm,0.6s | | | | | | | |
| PRP | **Porcupine Dome** | 87.02 | 13 | P | **P** | **05 57 15.4** | **0.0** | |
| | baz=211 | | | | | | | |
| S22A | **4UR Ranch, Cre** | 87.06 | 49 | P | **P** | **05 57 17.2** | **+0.8** | |
| | baz=244 | | | | | | | |
| C17K | **DeLong Mountai** | 87.07 | 6 | P | **P** | **05 57 15.5** | **+0.1** | |
| | baz=194 | | | | | | | |
| IMW | **Indian Meadow** | 87.07 | 42 | IAmb | IAmb | 05 57 18.2 | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| F21K | **Alatna River** | 87.07 | 9 | IAmb | IAmb | 05 57 15.8 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| F21K | **Alatna River** | 87.07 | 9 | P | **P** | **05 57 15.3** | **-0.1** | |
| | baz=204 | | | | | | | |
| G22K | **Bettles** | 87.12 | 10 | P | **P** | **05 57 16.0** | **+0.4** | |
| | baz=205 | | | | | | | |
| G23K | **Bananza Creek** | 87.19 | 11 | P | **P** | **05 57 16.5** | **+0.5** | |
| | baz=207 | | | | | | | |
| M31M | **Drury Creek, Y** | 87.25 | 19 | IAmb | IAmb | 05 57 17.0 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| M31M | **Drury Creek, Y** | 87.25 | 19 | P | **P** | **05 57 16.1** | **-0.3** | |
| | baz=221,SNR=11 | | | | | | | |
| DAWY | **Dawson** | 87.27 | 16 | IAmb | IAmb | 05 57 17.5 | | |
| | comp=Z,39nm,1.3s | | | | | | | |
| DAWY | **Dawson** | 87.27 | 16 | P | **P** | **05 57 16.6** | **+0.1** | |
| | baz=217,SNR=18 | | | | | | | |
| FLWY | **Flagg Ranch** | 87.31 | 42 | IAmb | IAmb | 05 57 19.5 | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| I26K | **Coal Creek Min** | 87.37 | 14 | IAmb | IAmb | 05 57 17.2 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| I26K | **Coal Creek Min** | 87.37 | 14 | P | **P** | **05 57 17.0** | **+0.2** | |
| | baz=213 | | | | | | | |
| YHL | **Hebgen Lake** | 87.37 | 41 | IAmb | IAmb | 05 57 20.2 | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| YFT | **Old Faithful** | 87.40 | 41 | IAmb | IAmb | 05 57 20.9 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| EGAK | **Eagle** | 87.40 | 15 | IAmb | IAmb | 05 57 17.8 | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| EGAK | **Eagle** | 87.40 | 15 | P | **P** | **05 57 17.0** | **0.0** | |
| | baz=215,SNR=14 | | | | | | | |
| BW06 | **Boulder Array** | 87.43 | 43 | P | **P** | **05 57 18.5** | **+0.5** | |
| | baz=242,SNR=16 | | | | | | | |
| C18K | **Utukok River** | 87.43 | 6 | P | **P** | **05 57 17.3** | **+0.2** | |
| | baz=196 | | | | | | | |
| PD31 | **Pinedale Array** | 87.43 | 43 | IAmb | IAmb | 05 57 19.1 | | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| PDAR | **Pinedale Array** | 87.43 | 43 | P | **P** | **05 57 17.8** | **-0.2** | |
| PDAR | **Pinedale Array** | 87.43 | 43 | P | **P** | **05 57 18.1** | **+0.1** | |
| | comp=Z,6.3nm,0.7s,baz=224,slow=2.5,SNR=49 | | | | | | | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| BOZ | **Bozeman (W)** | 87.46 | 40 | IAmb | IAmb | 05 57 19.8 | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| BOZ | **Bozeman (W)** | 87.46 | 40 | P | **P** | **05 57 18.8** | **+0.8** | |
| | baz=241,SNR=17 | | | | | | | |
| HHC | **Hu-ho-hao-te** | 87.53 | 314 | *e*P | **P** | **05 57 19.6** | **+1.3** | |
| HHC | | | | sP | sP | 06 00 02.4 | -6.7 | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.6s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.5s | | | | | | | |
| H17A | **Grant Village** | 87.53 | 42 | P | **P** | **05 57 20.9** | **+2.4** | |
| | baz=242,SNR=5.6 | | | | | | | |
| F22K | **John River** | 87.54 | 10 | P | **P** | **05 57 17.9** | **+0.3** | |
| | baz=205 | | | | | | | |
| FARO | **Faro, Yukon** | 87.60 | 19 | IAmb | IAmb | 05 57 18.2 | | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| FARO | **Faro, Yukon** | 87.60 | 19 | P | **P** | **05 57 17.9** | **-0.1** | |
| | baz=222,SNR=7.2 | | | | | | | |
| K29M | **Barlow Dome** | 87.60 | 17 | IAmb | IAmb | 05 57 19.4 | | |
| | comp=Z,31nm,1.2s | | | | | | | |
| K29M | **Barlow Dome** | 87.60 | 17 | P | **P** | **05 57 18.6** | **+0.4** | |
| | baz=218,SNR=19 | | | | | | | |
| H25L | **Birch Creek** | 87.61 | 13 | P | **P** | **05 57 16.8** | **-1.1** | |
| | baz=211 | | | | | | | |
| COLD | **Coldfoot** | 87.62 | 11 | P | **P** | **05 57 18.5** | **+0.5** | |
| | baz=206,SNR=18 | | | | | | | |
| WTLY | **Watson Lake, Y** | 87.62 | 22 | IAmb | IAmb | 05 57 19.6 | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| WTLY | **Watson Lake, Y** | 87.62 | 22 | P | **P** | **05 57 18.8** | **+0.6** | |
| | baz=226 | | | | | | | |
| D19K | **Kuna River** | 87.62 | 7 | IAmb | IAmb | 05 57 18.5 | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| D19K | **Kuna River** | 87.62 | 7 | P | **P** | **05 57 18.0** | **0.0** | |
| | baz=199,SNR=6.3 | | | | | | | |
| YNR | **Norris Junctio** | 87.62 | 41 | IAmb | IAmb | 05 57 22.4 | | |
| | comp=Z,7.8nm,0.9s | | | | | | | |
| E20K | **Nigu River** | 87.64 | 8 | P | **P** | **05 57 18.3** | **+0.1** | |
| | baz=201,SNR=26 | | | | | | | |
| G24K | **Hadweenzic Riv** | 87.65 | 12 | IAmb | IAmb | 05 57 18.4 | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| G24K | **Hadweenzic Riv** | 87.65 | 12 | P | **P** | **05 57 18.0** | **-0.1** | |
| | baz=209,SNR=7.7 | | | | | | | |
| LKWY | **Lake** | 87.73 | 42 | IAmb | IAmb | 05 57 22.4 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| J29N | **Klondike Camp** | 87.89 | 16 | P | **P** | **05 57 20.0** | **+0.6** | |
| | baz=218 | | | | | | | |
| I27K | **Kandik River** | 87.97 | 14 | P | **P** | **05 57 19.7** | **-0.1** | |
| | baz=215 | | | | | | | |
| G25K | **Bearman Lake** | 87.98 | 12 | P | **P** | **05 57 20.0** | **+0.3** | |
| | baz=210 | | | | | | | |
| FYU | **Fort Yukon** | 87.98 | 13 | IAmb | IAmb | 05 57 20.2 | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| SDCO | **Great Sand Dun** | 88.01 | 49 | P | **P** | **05 57 20.7** | **-0.2** | |
| | baz=245 | | | | | | | |
| D20K | **Etivluk River** | 88.02 | 8 | P | **P** | **05 57 19.9** | **+0.1** | |
| | baz=200,SNR=5.9 | | | | | | | |
| C19K | **Lookout Ridge** | 88.03 | 7 | P | **P** | **05 57 20.3** | **+0.3** | |
| | baz=198 | | | | | | | |
| TOAD | **Toad River Com** | 88.12 | 25 | P | **P** | **05 57 20.9** | **+0.3** | |
| | baz=229,SNR=26 | | | | | | | |
| E21K | **Killik River** | 88.12 | 9 | IAmb | IAmb | 05 57 20.8 | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| E21K | **Killik River** | 88.12 | 9 | P | **P** | **05 57 20.0** | **-0.4** | |
| | baz=203 | | | | | | | |
| LIRD | **Liard River Hi** | 88.15 | 24 | P | **P** | **05 57 21.2** | **+0.6** | |
| | baz=229 | | | | | | | |
| E22K | **Anaktuvuk Pass** | 88.17 | 10 | P | **P** | **05 57 20.6** | **-0.1** | |
| | baz=205,SNR=19 | | | | | | | |
| I28M | **Miner Creek** | 88.25 | 15 | IAmb | IAmb | 05 57 21.6 | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| I28M | **Miner Creek** | 88.25 | 15 | P | **P** | **05 57 21.1** | **0.0** | |
| | baz=216,SNR=5.9 | | | | | | | |
| F24K | **Squaw Lake** | 88.29 | 11 | P | **P** | **05 57 21.5** | **+0.3** | |
| | baz=209,SNR=21 | | | | | | | |
| E23K | **Chandalar** | 88.46 | 10 | IAmb | IAmb | 05 57 22.9 | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| E23K | **Chandalar** | 88.46 | 10 | P | **P** | **05 57 22.3** | **+0.2** | |
| | baz=207,SNR=14 | | | | | | | |
| DRIO | **Del Rio** | 88.50 | 58 | IAmb | IAmb | 05 57 25.5 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| J30M | **Hart River** | 88.50 | 17 | P | **P** | **05 57 22.7** | **+0.3** | |
| | baz=219,SNR=5.5 | | | | | | | |
| RWWY | **Rawlins** | 88.50 | 45 | IAmb | IAmb | 05 57 24.3 | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| H27K | **Steamboat Moun** | 88.51 | 14 | P | **P** | **05 57 23.5** | **+1.3** | |
| | baz=215,SNR=8.6 | | | | | | | |
| T25A | **Trinidad** | 88.55 | 50 | P | **P** | **05 57 23.4** | **0.0** | |
| | baz=246 | | | | | | | |
| I29M | **Ogilvie Camp,** | 88.59 | 16 | IAmb | IAmb | 05 57 23.0 | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| I29M | **Ogilvie Camp,** | 88.59 | 16 | P | **P** | **05 57 22.8** | **+0.2** | |
| | baz=218 | | | | | | | |
| G26K | **Porcupine Rive** | 88.61 | 13 | P | **P** | **05 57 22.9** | **+0.3** | |
| | baz=212,SNR=21 | | | | | | | |
| OZNA | **Ozona** | 88.64 | 57 | IAmb | IAmb | 05 57 25.4 | | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| C21K | **Knifeblade Rid** | 88.67 | 8 | P | **P** | **05 57 23.2** | **+0.3** | |
| | baz=202,SNR=8.5 | | | | | | | |
| E24K | **Your Creek** | 88.67 | 11 | IAmb | IAmb | 05 57 23.8 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| E24K | **Your Creek** | 88.67 | 11 | P | **P** | **05 57 23.4** | **+0.4** | |
| | baz=206 | | | | | | | |
| RLMT | **Red Lodge** | 88.70 | 41 | IAmb | IAmb | 05 57 25.8 | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| RLMT | **Red Lodge** | 88.70 | 41 | P | **P** | **05 57 24.9** | **+1.1** | |
| | baz=242,SNR=12 | | | | | | | |
| D22K | **Ayikyak River** | 88.72 | 9 | P | **P** | **05 57 23.6** | **+0.4** | |
| | baz=204,SNR=13 | | | | | | | |
| TGTN | **Hyland Airport** | 88.78 | 22 | P | **P** | **05 57 24.3** | **+0.7** | |
| | baz=227,SNR=10.0 | | | | | | | |
| F25K | **Kistian Rive** | 88.79 | 12 | P | **P** | **05 57 23.8** | **+0.3** | |
| | baz=211,SNR=12 | | | | | | | |
| BMAR | **Burnt Mountain** | 88.86 | 12 | P | **P** | **05 57 24.2** | **+0.4** | |
| ELIB | **Princess Elisa** | 88.94 | 187 | *d*P | **P** | **05 57 23.8** | **-0.7** | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| G27K | **Doyon Strip** | 88.96 | 14 | IAmb | IAmb | 05 57 25.2 | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| G27K | **Doyon Strip** | 88.96 | 14 | P | **P** | **05 57 24.7** | **+0.4** | |
| | baz=214,SNR=7.4 | | | | | | | |
| I30M | **Mount Dempster** | 88.99 | 16 | IAmb | IAmb | 05 57 25.3 | | |
| | comp=Z,26nm,1.0s | | | | | | | |
| I30M | **Mount Dempster** | 88.99 | 16 | P | **P** | **05 57 24.5** | **-0.1** | |
| | baz=219,SNR=13 | | | | | | | |
| TOLK | **Toolik Lake Re** | 88.99 | 10 | P | **P** | **05 57 24.4** | **-0.1** | |
| | baz=207,SNR=5.5 | | | | | | | |
| N23A | **Red Feather La** | 89.02 | 46 | IAmb | IAmb | 05 57 27.3 | | |
| | comp=Z,10nm,1.1s | | | | | | | |
| N23A | **Red Feather La** | 89.02 | 46 | P | **P** | **05 57 26.0** | **+0.5** | |
| | baz=245 | | | | | | | |
| CMAR | **Chiang Mai Arr** | 89.09 | 290 | P | **P** | **05 57 26.8** | **+0.8** | |
| CMAR | **Chiang Mai Arr** | 89.09 | 290 | P | **P** | **05 57 27.4** | **+1.5** | |
| | comp=Z,7.4nm,0.8s,baz=107,slow=2.6,SNR=32 | | | | | | | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| 833A | **Chaparral WMA,** | 89.10 | 60 | P | **P** | **05 57 26.1** | **+0.3** | |
| | baz=249 | | | | | | | |
| D23K | **Nanushuk River** | 89.10 | 10 | P | **P** | **05 57 26.0** | **+1.1** | |
| | baz=206 | | | | | | | |
| B21K | **Ikpikpuk River** | 89.13 | 8 | P | **P** | **05 57 25.2** | **+0.3** | |
| | baz=202 | | | | | | | |
| POST | **Post** | 89.16 | 55 | IAmb | IAmb | 05 57 27.0 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| B20K | **Meade River** | 89.17 | 7 | P | **P** | **05 57 25.3** | **+0.2** | |
| | baz=200 | | | | | | | |
| F26K | **Sheenjek River** | 89.17 | 12 | IAmb | IAmb | 05 57 26.7 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| F26K | **Sheenjek River** | 89.17 | 12 | P | **P** | **05 57 25.8** | **+0.5** | |
| | baz=212,SNR=9.1 | | | | | | | |
| H29M | **Whitestone** | 89.26 | 15 | P | **P** | **05 57 25.6** | **0.0** | |
| | baz=218,SNR=16 | | | | | | | |
| PZH | **PanZhiHua** | 89.39 | 298 | P | **P** | **05 57 28.0** | **+0.7** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| JCT | **Junction City** | 89.54 | 58 | IAmb | IAmb | 05 57 29.6 | | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| JCT | **Junction City** | 89.54 | 58 | P | **P** | **05 57 28.2** | **+0.3** | |
| | baz=249 | | | | | | | |
| D24K | **Happy Valley** | 89.57 | 10 | P | **P** | **05 57 27.6** | **+0.5** | |
| | baz=208 | | | | | | | |
| HNDO | **Hondo** | 89.62 | 59 | IAmb | IAmb | 05 57 30.7 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| AMTX | **Amarillo** | 89.70 | 53 | IAmb | IAmb | 05 57 29.7 | | |
| | comp=Z,6.8nm,0.7s | | | | | | | |
| AMTX | **Amarillo** | 89.70 | 53 | P | **P** | **05 57 29.0** | **+0.4** | |
| | baz=248 | | | | | | | |
| EGMT | **Eagleton** | 89.75 | 39 | P | **P** | **05 57 28.7** | **+0.2** | |
| | baz=242 | | | | | | | |
| EPYK | **Eagle Plains** | 89.79 | 16 | P | **P** | **05 57 28.0** | **-0.2** | |
| | baz=219,SNR=13 | | | | | | | |
| G29M | **Pine Creek** | 89.89 | 15 | P | **P** | **05 57 28.2** | **-0.4** | |
| | baz=218,SNR=7.3 | | | | | | | |
| C23K | **Itkillik River** | 89.90 | 9 | P | **P** | **05 57 28.7** | **+0.2** | |
| | baz=206,SNR=12 | | | | | | | |
| B22K | **Teshekpuk Lake** | 89.95 | 8 | P | **P** | **05 57 29.3** | **+0.6** | |
| | baz=204 | | | | | | | |
| F28M | **Old Crow** | 90.02 | 14 | IAmb | IAmb | 05 57 30.0 | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| F28M | **Old Crow** | 90.02 | 14 | P | **P** | **05 57 29.0** | **-0.2** | |
| | baz=216,SNR=7.2 | | | | | | | |
| TROLL | **Troll, Antarti** | 90.08 | 180 | ⇑P | **P** | **05 57 28.8** | **-1.0** | |
| | comp=Z,138nm,0.5s | | | | | | | |
| C24K | **Franklin Bluff** | 90.10 | 10 | P | **P** | **05 57 30.1** | **+0.7** | |
| | baz=208 | | | | | | | |
| E27K | **Coleen River** | 90.11 | 13 | P | **P** | **05 57 29.7** | **+0.1** | |
| | baz=215,SNR=5.4 | | | | | | | |
| D25K | **Kavik River** | 90.14 | 11 | P | **P** | **05 57 29.2** | **-0.6** | |
| | baz=210 | | | | | | | |
| APMT | **Aspermont** | 90.33 | 55 | IAmb | IAmb | 05 57 32.6 | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| SNAA | **Sanae** | 90.36 | 179 | ⇑P | **P** | **05 57 29.8** | **-1.1** | |
| | comp=Z,33nm,0.6s | | | | | | | |
| SNAA | **Sanae** | 90.36 | 179 | P | **P** | **05 57 29.8** | **-1.1** | |
| | comp=Z,1.3nm,0.6s,baz=212,slow=7.7,SNR=17 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| G30M | **tAoh Zraii Nji** | 90.39 | 15 | P | **P** | **05 57 30.9** | **0.0** | |
| | baz=220,SNR=30 | | | | | | | |
| VNA3 | **Neumayer Olymp** | 90.50 | 176 | ⇑P | **P** | **05 57 30.9** | **-0.6** | |
| | comp=Z,6.8nm,0.6s | | | | | | | |
| G31M | **Satah River** | 90.85 | 16 | P | **P** | **05 57 32.6** | **-0.3** | |
| | baz=221,SNR=30 | | | | | | | |
| C27K | **Jago River** | 90.90 | 11 | P | **P** | **05 57 32.7** | **-0.5** | |
| | baz=213,SNR=8.7 | | | | | | | |
| E28M | **Babbage River** | 90.90 | 13 | IAmb | IAmb | 05 57 34.1 | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| E28M | **Babbage River** | 90.90 | 13 | P | **P** | **05 57 33.2** | **0.0** | |
| | baz=216,SNR=18 | | | | | | | |
| C26K | **Camden Bay** | 90.92 | 11 | P | **P** | **05 57 33.3** | **+0.1** | |
| | baz=212 | | | | | | | |
| VNA2 | **Neumayer--Watz** | 90.94 | 177 | ⇑P | **P** | **05 57 33.4** | **-0.1** | |
| | comp=Z,4.7nm,0.6s,baz=188,slow=4.9 | | | | | | | |
| F30M | **Barrier River** | 90.99 | 15 | P | **P** | **05 57 33.6** | **0.0** | |
| | baz=220,SNR=6.2 | | | | | | | |
| PLCA | **Paso Flores** | 91.07 | 134 | P | **P** | **05 57 35.9** | **+1.0** | |
| | comp=Z,6nm,0.7s,baz=261,slow=5.1,SNR=10 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| E29M | **Blow River** | 91.09 | 14 | IAmb | IAmb | 05 57 34.4 | | |
| | comp=Z,16nm,1.2s | | | | | | | |
| E29M | **Blow River** | 91.09 | 14 | P | **P** | **05 57 33.8** | **-0.3** | |
| | baz=218,SNR=8.8 | | | | | | | |
| D27M | **Malcolm River** | 91.12 | 12 | IAmb | IAmb | 05 57 35.4 | | |
| | comp=Z,23nm,1.4s | | | | | | | |
| LZH | **Lanzhou** | 91.14 | 308 | *e*P | **P** | **05 57 36.8** | **+1.5** | |
| LZH | | | | pP | pP | 05 59 55.3 | +22 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.5s | | | | | | | |
| VNA1 | **Neumayer--Stat** | 91.17 | 177 | ⇑P | **P** | **05 57 34.5** | **-0.1** | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| LAO | **LASA Array** | 91.30 | 41 | P | **P** | **05 57 36.5** | **+0.8** | |
| | baz=245 | | | | | | | |
| F31M | **Tsiigehtchic** | 91.37 | 16 | P | **P** | **05 57 35.2** | **-0.1** | |
| | baz=222,SNR=21 | | | | | | | |
| WRGLY | **Wrigley** | 91.59 | 22 | P | **P** | **05 57 36.5** | **0.0** | |
| | baz=231 | | | | | | | |
| RSSD | **Black Hills** | 91.64 | 44 | P | **P** | **05 57 36.7** | **-0.8** | |
| RSSD | | | | IAmb | IAmb | 05 57 38.4 | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| RSSD | **Black Hills** | 91.64 | 44 | P | **P** | **05 57 37.5** | **+0.1** | |
| | baz=246 | | | | | | | |
| D28M | **Stokes Point** | 91.66 | 13 | P | **P** | **05 57 36.7** | **+0.1** | |
| | baz=217,SNR=7.3 | | | | | | | |
| FW03 | **Perrin-Whitt E** | 91.83 | 56 | IAmb | IAmb | 05 57 40.4 | | |
| | comp=Z,8.7nm,0.9s | | | | | | | |
| ELIS | **Ellis County** | 91.86 | 53 | IAmb | IAmb | 05 57 40.0 | | |
| | comp=Z,21nm,1.1s | | | | | | | |
| WMOK | **Wichita Mounta** | 91.87 | 54 | P | **P** | **05 57 38.0** | **-0.5** | |
| | baz=249 | | | | | | | |
| INK | **Inuvik** | 92.07 | 15 | P | **P** | **05 57 37.7** | **-0.8** | |
| | baz=222,SNR=16 | | | | | | | |
| CBKS | **Cedar Bluff** | 92.61 | 50 | P | **P** | **05 57 42.3** | **+0.5** | |
| | baz=249 | | | | | | | |
| DGMT | **Dagmar** | 93.29 | 40 | P | **P** | **05 57 45.7** | **+1.1** | |
| | baz=246 | | | | | | | |
| SONM | **Songino Array** | 93.82 | 319 | P | **P** | **05 57 47.0** | **-0.3** | |
| SONM | **Songino Array** | 93.82 | 319 | P | **P** | **05 57 47.2** | **-0.1** | |
| | comp=Z,1.3nm,0.8s,baz=132,slow=4.0,SNR=6.8 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| YKA | **Yellowknife Ar** | 94.49 | 25 | P | **P** | **05 57 48.9** | **-0.8** | |
| YKA | **Yellowknife Ar** | 94.49 | 25 | P | **P** | **05 57 49.6** | **-0.2** | |
| | comp=Z,5.9nm,0.8s,baz=252,slow=4.4,SNR=16 | | | | | | | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| KSU1 | **Kansas State U** | 94.99 | 51 | P | **P** | **05 57 53.5** | **+0.9** | |
| | baz=251 | | | | | | | |
| GTA | **Gaotai** | 95.29 | 310 | P | **P** | **05 57 54.6** | **+0.5** | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| ECSD | **EROS Data Cent** | 96.50 | 46 | P | **P** | **05 57 59.4** | **+0.1** | |
| | baz=251 | | | | | | | |
| CCM | **Cathedral Cave** | 98.68 | 53 | P | **P** | **05 58 09.5** | **+0.2** | |
| | baz=254 | | | | | | | |
| OXF | **Oxford** | 99.14 | 57 | P | **Pdif** | **05 58 11.5** | **+0.2** | |
| | baz=254 | | | | | | | |
| JFWS | **Jewell Farm** | 100.71 | 48 | P | **Pdif** | **05 58 18.6** | **+0.5** | |
| | baz=255 | | | | | | | |
| WVT | **Waverly** | 100.81 | 56 | P | **Pdif** | **05 58 19.1** | **+0.4** | |
| | baz=255 | | | | | | | |
| L44A | **Lake County Fo** | 102.20 | 50 | P | **Pdif** | **05 58 24.7** | **0.0** | |
| | baz=257 | | | | | | | |
| P49A | **Miami Univ. Ec** | 103.99 | 53 | P | **Pdif** | **05 58 33.2** | **+0.4** | |
| | baz=258 | | | | | | | |
| P52A | **Corning** | 105.97 | 53 | P | **PKiKP** | **06 02 50.4** | **-0.1** | |
| | baz=260 | | | | | | | |
| NHSC | **New Hope** | 106.29 | 60 | P | **PKiKP** | **06 02 51.1** | **-0.2** | |
| | baz=259 | | | | | | | |
| ZALV | **Zalesovo Beam** | 108.50 | 322 | PKiKP | **PKiKP** | **06 02 53.6** | **-1.1** | |
| | comp=Z,1.2nm,0.6s,baz=283,slow=0.6,SNR=5.9 | | | | | | | |
| MKAR | **Makanchi Array** | 109.39 | 314 | PKiKP | **PKiKP** | **06 02 55.1** | **-1.7** | |
| | comp=Z,1.7nm,0.5s,baz=250,slow=2.9,SNR=8.3 | | | | | | | |
| KURBB | **Kurchatov Arra** | 112.14 | 318 | PKiKP | **PKiKP** | **06 03 00.6** | **-1.1** | |
| | comp=Z,1.9nm,0.6s,baz=95,slow=1.7,SNR=24 | | | | | | | |
| BVAR | **Borovoye Array** | 117.11 | 321 | PKP | **PKPdf** | **06 03 10.6** | **-0.6** | |
| | comp=Z,5.1nm,0.4s,baz=102,slow=0.5,SNR=24 | | | | | | | |
| KK31 | **Karatay Array** | 117.57 | 310 | | **PKPdf** | **06 03 11.4** | **-1.1** | |
| KKAR | **Karatay Array** | 117.57 | 310 | | **PKPdf** | **06 03 11.6** | **-1.0** | |
| KKAR | **Karatay Array** | 117.57 | 310 | | **PKPdf** | **06 03 11.4** | **-1.0** | |
| ARU | **Arti** | 123.12 | 326 | PKPdf | **PKPdf** | **06 03 22.5** | **-0.2** | |
| ARCES | **ARCESS Array B** | 126.57 | 350 | PKP | **PKPdf** | **06 03 28.7** | **-0.3** | |
| | comp=Z,3.3nm,0.5s,baz=16,slow=1.4,SNR=21 | | | | | | | |
| BOSA | **Boshof** | 128.25 | 207 | PKP | **PKPdf** | **06 03 34.0** | **+0.4** | |
| | comp=Z,1.1nm,0.8s,baz=159,slow=8.6,SNR=4.2 | | | | | | | |
| FINES | **FINESS Array B** | 133.45 | 344 | PKiKP | PKPpre | 06 03 31.7 | | |
| | comp=Z,2.2nm,0.8s,baz=90,slow=0.1,SNR=3.6 | | | | | | | |
| FINES | | | | PKP | **PKPdf** | **06 03 42.9** | **+0.7** | |
| | comp=Z,2.6nm,0.6s,baz=76,slow=2.2,SNR=3.1 | | | | | | | |
| NB2 | **NORSAR Subarra** | 136.62 | 353 | PKPdf | PKPpre | 06 03 34.8 | | |
| | comp=Z,1.9nm,0.9s,baz=14,slow=1.8 | | | | | | | |
| NOA | **NORSAR Array B** | 136.62 | 353 | PKhKP | PKPpre | 06 03 35.1 | | |
| | comp=Z,1.2nm,0.7s,baz=14,slow=4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ARCR | ARCALIA | 145.67 | 332 | ⇓P | PKPbc | 06 04 06.8 | +0.6 |
| TLBR | Topalu | 145.68 | 326 | ⇑P | PKPbc | 06 04 06.9 | +0.7 |
| CLZ | Clausthal | 145.69 | 350 | *e*PKPdf | PKPdf | 06 04 04.7 | +0.1 |
| | baz=16,slow=1.6 | | | | | | |
| CLZ | | | | *e*PKPbc | PKPbc | 06 04 06.5 | +0.3 |
| | baz=16,slow=2.7 | | | | | | |
| CLL | Collm | 145.72 | 347 | *e*PKPdf | PKPdf | 06 04 05.0 | +0.4 |
| CLL | | | | ⇓*i*PKPbc | PKPbc | 06 04 06.3 | +0.1 |
| | comp=Z,77nm,0.9s | | | | | | |
| CLL | Collm | 145.72 | 347 | *e*PKPdf | PKPdf | 06 04 04.4 | -0.2 |
| | baz=16,slow=1.6 | | | | | | |
| CLL | | | | *e*PKPbc | PKPbc | 06 04 06.2 | +0.1 |
| | baz=16,slow=2.7 | | | | | | |
| COVR | Voineasa-Covas | 145.72 | 329 | ⇓P | PKPbc | 06 04 06.4 | 0.0 |
| OZUR | | 145.74 | 330 | ⇑P | PKPbc | 06 04 07.3 | +0.8 |
| DPC | Dobruska-Polom | 145.81 | 343 | ⇑*e*PKP | PKPbc | 06 04 07.1 | +0.6 |
| LANS | Liptovska Anna | 145.91 | 339 | *e*PKP | PKPab | 06 04 08.0 | -0.6 |
| BRG | Berggiesshubel | 145.92 | 346 | *e*PKP | PKPdf | 06 04 05.3 | +0.3 |
| BRG | | | | Amp | | 06 04 06.0 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| BRG | Berggiesshubel | 145.92 | 346 | P | PKPbc | 06 04 07.3 | +0.5 |
| BRG | | | | Amp | | 06 04 09.3 | |
| | comp=Z,39nm,1.0s | | | | | | |
| BRG | Berggiesshubel | 145.92 | 346 | P | PKiKP | 06 04 13.9 | +4.5 |
| BRG | | | | Amp | | 06 04 14.2 | |
| | comp=Z,10nm,1.0s | | | | | | |
| BRG | Berggiesshubel | 145.92 | 346 | *e*PKPdf | PKPdf | 06 04 05.1 | +0.1 |
| | baz=16,slow=1.6 | | | | | | |
| BRG | | | | *e*PKPbc | PKPbc | 06 04 07.0 | +0.2 |
| | baz=16,slow=2.7 | | | | | | |
| KRLC | Kralíky | 145.93 | 343 | ⇑*e*PKP | PKPbc | 06 04 07.2 | +0.3 |
| NEHR | Nehoiu | 145.97 | 328 | ⇓P | PKPbc | 06 04 07.7 | +0.6 |
| MORC | Moravsky Berou | 145.97 | 342 | *e*PKP | PKPbc | 06 04 06.9 | -0.1 |
| MORC | Moravsky Berou | 145.97 | 342 | ⇓P | PKPbc | 06 04 06.7 | -0.4 |
| DOPR | Dopca | 146.03 | 330 | ⇑P | PKPbc | 06 04 08.0 | +0.8 |
| GTTG | Gottingen | 146.04 | 351 | *e*PKPdf | PKPdf | 06 04 04.8 | -0.3 |
| | baz=16,slow=1.6 | | | | | | |
| GTTG | | | | *e*PKPbc | PKPbc | 06 04 07.3 | +0.2 |
| | baz=16,slow=2.7 | | | | | | |
| NEUB | Neuenburg | 146.06 | 349 | *e*PKPbc | PKPbc | 06 04 07.3 | +0.2 |
| | baz=16,slow=2.7 | | | | | | |
| ISR | Istrita | 146.07 | 328 | ⇓P | PKPbc | 06 04 07.8 | +0.3 |
| MLR | Muntele Rosu | 146.10 | 329 | PKPbc | PKPbc | 06 04 07.6 | 0.0 |
| | comp=Z,11nm,0.6s,baz=351,slow=12,SNR=18 | | | | | | |
| MLR | Muntele Rosu | 146.10 | 329 | ⇑P | PKPbc | 06 04 07.6 | 0.0 |
| MAUC | Maruska | 146.25 | 341 | ⇑*e*PKP | PKPbc | 06 04 08.4 | +0.6 |
| CBBR | Cluj-Babes-Bol | 146.26 | 333 | ⇑P | PKPdf | 06 04 05.0 | -0.7 |
| CJR | Cluj-Napoca | 146.29 | 333 | ⇓P | PKPbc | 06 04 08.6 | +0.6 |
| HSKC | Hora Svate Kat | 146.29 | 347 | ⇑*e*PKP | PKPbc | 06 04 08.2 | +0.4 |
| MMAI | Mount Meron Ar | 146.38 | 303 | PKPbc | PKPbc | 06 04 09.4 | +0.6 |
| | comp=Z,19nm,0.6s,baz=72,slow=5.4,SNR=24 | | | | | | |
| BUG | Bochum--Univer | 146.49 | 354 | *e*PKPdf | PKPdf | 06 04 06.1 | +0.2 |
| | baz=16,slow=1.6 | | | | | | |
| BUG | | | | *e*PKPbc | PKPbc | 06 04 08.3 | 0.0 |
| | baz=16,slow=2.7 | | | | | | |
| PCED | Cedros | 146.57 | 46 | *e*PKP | PKPbc | 06 04 09.7 | +0.7 |
| VOIR | | 146.58 | 330 | ⇑P | PKPbc | 06 04 08.7 | -0.1 |
| KASTN | Kahler Asten | 146.59 | 352 | *e*PKPdf | PKPdf | 06 04 06.4 | +0.3 |
| | baz=16,slow=1.6 | | | | | | |
| KASTN | | | | *e*PKPbc | PKPbc | 06 04 08.8 | +0.2 |
| | baz=16,slow=2.7 | | | | | | |
| CALA | Caldeira | 146.59 | 46 | *e*PKP | PKPbc | 06 04 09.9 | +0.8 |
| PRU | Pruhonice | 146.60 | 345 | ⇑*e*PKP | PKPbc | 06 04 09.1 | +0.4 |
| DRGR | | 146.61 | 333 | ⇑P | PKPbc | 06 04 09.2 | +0.3 |
| GOPC | GO Pecny, Ondr | 146.61 | 345 | ⇑*e*PKP | PKPbc | 06 04 09.2 | +0.5 |
| MOX | Moxa | 146.62 | 349 | *e*PKPdf | PKPdf | 06 04 06.0 | -0.2 |
| | baz=16,slow=1.6 | | | | | | |
| MOX | | | | *e*PKPbc | PKPbc | 06 04 09.0 | +0.2 |
| | baz=16,slow=2.7 | | | | | | |
| HOR | Horta | 146.67 | 46 | *e*PKP | PKPbc | 06 04 10.2 | +1.0 |
| PLN | Plauen | 146.67 | 348 | *e*PKPdf | PKPdf | 06 04 05.9 | -0.4 |
| | baz=16,slow=1.6 | | | | | | |
| PLN | | | | *e*PKPbc | PKPbc | 06 04 09.7 | +0.8 |
| | baz=16,slow=2.7 | | | | | | |
| VRAC | Vranov | 146.67 | 342 | *e*PKP | PKPbc | 06 04 09.0 | +0.1 |
| VRAC | Vranov | 146.67 | 342 | PKPbc | PKPbc | 06 04 09.5 | +0.6 |
| | comp=Z,18nm,0.8s,baz=6.0,slow=3.3,SNR=21 | | | | | | |
| VRAC | Vranov | 146.67 | 342 | ⇓P | PKPbc | 06 04 09.4 | +0.5 |
| TANN | Tannenbergstha | 146.68 | 347 | *e*PKPdf | PKPdf | 06 04 05.9 | -0.4 |
| | baz=16,slow=1.6 | | | | | | |
| TANN | | | | *e*PKPbc | PKPbc | 06 04 09.3 | +0.3 |
| | baz=16,slow=2.7 | | | | | | |
| VYHS | Vyhne | 146.68 | 339 | *e*PKP | PKPbc | 06 04 09.6 | +0.6 |
| UBBA | Unterbreizbach | 146.74 | 350 | *e*PKPdf | PKPdf | 06 04 05.9 | -0.3 |
| | baz=16,slow=1.6 | | | | | | |
| UBBA | | | | *e*PKPbc | PKPbc | 06 04 09.4 | +0.5 |
| | baz=16,slow=2.7 | | | | | | |
| JAVC | Velka Javorina | 146.75 | 341 | *e*PKP | PKiKP | 06 04 10.5 | -0.7 |
| TNR | Turnu Rosu | 146.78 | 331 | ⇓P | PKPbc | 06 04 08.9 | -0.4 |
| PCAN | Candelaria | 146.80 | 46 | *e*PKP | PKPbc | 06 04 10.0 | +0.4 |
| PSZ | Piszkesteto | 146.80 | 337 | ⇑P | PKPbc | 06 04 09.4 | 0.0 |
| PICO | Pico | 146.82 | 46 | *e*PKP | PKPbc | 06 04 10.6 | +0.9 |
| ARR | Arges | 146.83 | 330 | ⇑P | PKPbc | 06 04 09.6 | 0.0 |
| ROSA | Rosais | 146.84 | 46 | *e*PKP | PKPbc | 06 04 10.0 | +0.3 |
| PPNO | Prainha do Nor | 146.95 | 46 | *e*PKP | PKPbc | 06 04 11.0 | +0.9 |
| KRUC | Moravsky | 146.95 | 342 | *e*PKP | PKPbc | 06 04 09.7 | 0.0 |
| PMAN | Manadas | 146.99 | 46 | *e*PKP | PKPbc | 06 04 10.5 | +0.4 |
| PID | Ribeirinha | 147.06 | 46 | *e*PKP | PKPbc | 06 04 11.2 | +0.9 |
| MANZ | Manzenberg | 147.16 | 348 | *e*PKPbc | PKPbc | 06 04 10.3 | +0.1 |
| | baz=16,slow=2.7 | | | | | | |
| LOT | Lotru | 147.17 | 331 | ⇑P | PKPbc | 06 04 10.2 | -0.4 |
| ZVC | Zvikov | 147.20 | 345 | ⇑*e*PKP | PKPbc | 06 04 10.7 | +0.4 |
| ROTZ | Rotzenmuhle | 147.34 | 347 | *e*PKPdf | PKPdf | 06 04 06.3 | -1.1 |
| | baz=16,slow=1.6 | | | | | | |
| ROTZ | | | | *e*PKPbc | PKPbc | 06 04 11.1 | +0.4 |
| | baz=16,slow=2.7 | | | | | | |
| AHRW | Bad Neuenahr-A | 147.40 | 354 | *e*PKPdf | PKPdf | 06 04 06.9 | -0.5 |
| | baz=16,slow=1.6 | | | | | | |
| AHRW | | | | *e*PKPab | PKPab | 06 04 13.7 | -0.8 |
| | baz=12,slow=4.0 | | | | | | |
| MEM | Membach | 147.43 | 355 | *d*PKP | PKPbc | 06 04 10.0 | -0.8 |
| MEM | | | | *d*PKiKP | PKiKP | 06 04 11.4 | -1.1 |
| MEM | | | | *d*PKPab | PKPab | 06 04 13.4 | -1.2 |
| BTNL | Ternell | 147.44 | 355 | *d*PKP | PKPbc | 06 04 10.8 | -0.1 |
| SRO | Srobarova | 147.45 | 339 | *e*PKP | PKiKP | 06 04 11.9 | -0.7 |
| SIRR | Siria | 147.47 | 334 | ⇓P | PKPbc | 06 04 11.3 | +0.2 |
| BSTI | Sart Tilman | 147.49 | 355 | *d*PKP | PKPbc | 06 04 11.2 | +0.2 |
| PAGU | Agualva, Azore | 147.53 | 45 | *e*PKP | PKiKP | 06 04 12.6 | -0.5 |
| TNS | Taunus Mts | 147.55 | 352 | *e*PKPdf | PKPdf | 06 04 06.8 | -1.0 |
| | baz=16,slow=1.6 | | | | | | |
| TNS | | | | *e*PKPbc | PKPbc | 06 04 11.7 | +0.5 |
| | baz=16,slow=2.7 | | | | | | |
| TNS | | | | *e*PKPab | PKPab | 06 04 14.7 | -0.5 |
| | baz=12,slow=4.0 | | | | | | |
| ADH | Angra Heroismo | 147.55 | 45 | *e*PKP | PKiKP | 06 04 12.8 | -0.3 |
| PSCM | Serra do Cume | 147.61 | 45 | *e*PKP | PKiKP | 06 04 12.8 | -0.5 |
| GRF | Grafenberg Arr | 147.61 | 348 | *e*PKPdf | PKPdf | 06 04 07.7 | -0.2 |
| | baz=16,slow=1.6 | | | | | | |
| GRF | | | | *e*PKPbc | PKiKP | 06 04 12.3 | -0.6 |
| | baz=16,slow=2.7 | | | | | | |
| GRF | | | | *e*PKPab | PKPab | 06 04 15.7 | +0.2 |
| | baz=12,slow=4.0 | | | | | | |
| GRFO | Grafenberg | 147.61 | 348 | | PKPbc | 06 04 12.1 | +0.8 |
| KHC | Kasperske Hory | 147.64 | 345 | *e*PKPDF | PKPdf | 06 04 08.3 | +0.4 |
| KHC | | | | ⇑*e*PKP | PKPbc | 06 04 12.0 | +0.5 |
| EIL | Elat | 147.65 | 297 | PKPbc | PKPbc | 06 04 12.4 | +0.3 |
| | comp=Z,10nm,0.8s,baz=13,slow=5.4,SNR=8.1 | | | | | | |
| GZR | Gura Zlata | 147.67 | 332 | ⇑P | PKPbc | 06 04 11.4 | -0.3 |
| BCLA | Clavier | 147.67 | 356 | *d*PKP | PKPbc | 06 04 10.5 | -0.9 |
| BCLA | | | | *d*PKPab | PKPab | 06 04 14.4 | -1.1 |
| SURR | Surduc | 147.68 | 333 | ⇓P | PKPbc | 06 04 11.4 | -0.2 |
| BHOU | Houvegnez | 147.68 | 355 | *d*PKiKP | PKPbc | 06 04 12.0 | +0.5 |
| BHOU | | | | *d*PKPab | PKPab | 06 04 14.4 | -1.2 |
| BGES | Gesves | 147.72 | 356 | *d*PKP | PKPbc | 06 04 11.1 | -0.6 |
| CKRC | Cesky Krumlov | 147.74 | 344 | *e*PKPDF | PKPdf | 06 04 08.7 | +0.6 |
| CKRC | | | | ⇑*e*PKP | PKPbc | 06 04 12.2 | +0.4 |
| WET | Wettzell | 147.79 | 346 | *e*PKPdf | PKPdf | 06 04 07.5 | -0.7 |
| | baz=16,slow=1.6 | | | | | | |
| WET | | | | *e*PKPbc | PKPbc | 06 04 12.4 | +0.5 |
| | baz=16,slow=2.7 | | | | | | |
| WET | | | | *e*PKPab | PKPab | 06 04 16.5 | +0.3 |
| | baz=12,slow=4.0 | | | | | | |
| BMRD | Maredsous | 147.82 | 356 | *d*PKPdf | PKPdf | 06 04 08.2 | +0.1 |
| BMRD | | | | *d*PKP | PKPbc | 06 04 11.7 | -0.2 |
| GEC2 | GERESS Array S | 147.87 | 345 | PKPdf | PKPdf | 06 04 08.1 | -0.4 |
| GEC2 | | | | PKPbc | PKPbc | 06 04 12.4 | +0.2 |
| GEC2 | | | | PKPab | PKPab | 06 04 17.2 | +0.6 |
| GEC2 | GERESS Array S | 147.87 | 345 | *e*PKPdf | PKPdf | 06 04 07.8 | -0.5 |
| | baz=16,slow=1.6 | | | | | | |
| GEC2 | | | | *e*PKPbc | PKPbc | 06 04 12.1 | -0.1 |
| | baz=16,slow=2.7 | | | | | | |
| GEC2 | | | | *e*PKPab | PKPab | 06 04 17.5 | +0.9 |
| | baz=12,slow=4.0 | | | | | | |
| GERES | GERESS Array B | 147.87 | 345 | | PKPdf | 06 04 07.9 | -0.5 |
| GERES | | | | PKPbc | PKPbc | 06 04 12.7 | +0.5 |
| GERES | GERESS Array B | 147.87 | 345 | PKP | PKPdf | 06 04 08.3 | -0.1 |
| | comp=Z,11nm,0.7s,baz=165,slow=8.1,SNR=57 | | | | | | |
| GERES | | | | PKPbc | PKPbc | 06 04 12.3 | +0.1 |
| | comp=Z,7.5nm,0.5s,baz=163,slow=7.2,SNR=57 | | | | | | |
| ELND | Elena | 147.93 | 326 | ⇓P | PKPab | 06 04 18.0 | +1.1 |
| RCHB | Rochefort | 147.94 | 356 | *d*PKiKP | PKPbc | 06 04 12.2 | +0.1 |
| BZS | Buzias | 148.00 | 333 | ⇓P | PKPbc | 06 04 12.6 | +0.1 |
| DOU | Dourbes | 148.04 | 357 | *d*PKP | PKPbc | 06 04 11.6 | -0.9 |
| CONA | Conrad Observa | 148.13 | 342 | *i* PKP | PKPbc | 06 04 13.1 | +0.2 |
| | comp=Z,12nm,0.7s,SNR=19 | | | | | | |
| EDRB | Edirne | 148.16 | 323 | P | PKPbc | 06 04 12.8 | -0.2 |
| RONA | Rosalia, Austr | 148.20 | 341 | *e*PKP | PKPbc | 06 04 13.2 | +0.3 |
| | comp=Z,9.5nm,0.7s,SNR=17 | | | | | | |
| HERR | Herculane | 148.22 | 332 | ⇓P | PKPbc | 06 04 13.1 | 0.0 |
| WLF | Walferdange | 148.35 | 355 | *d*PKPdf | PKPdf | 06 04 09.0 | 0.0 |
| WLF | | | | *d*PKP | PKPbc | 06 04 13.3 | 0.0 |
| WLF | Walferdange | 148.35 | 355 | *e*PKPdf | PKPdf | 06 04 08.5 | -0.5 |
| | baz=16,slow=1.6 | | | | | | |
| WLF | | | | *e*PKPbc | PKPbc | 06 04 13.5 | +0.3 |
| | baz=16,slow=2.7 | | | | | | |
| WLF | | | | *e*PKPab | PKPab | 06 04 18.0 | -0.4 |
| | baz=12,slow=4.0 | | | | | | |
| MDVR | Moldovita | 148.62 | 332 | ⇓P | PKPbc | 06 04 14.4 | +0.3 |
| MOA | Molln | 148.65 | 344 | *i* PKP | PKPbc | 06 04 13.9 | -0.2 |
| | comp=Z,17nm,1.2s,SNR=7.8 | | | | | | |
| MORH | Mrgy, Hungar | 148.70 | 337 | ⇑P | PKPbc | 06 04 13.8 | -0.3 |
| ARSA | Arzberg | 148.84 | 342 | *i* PKP | PKPbc | 06 04 14.0 | -0.6 |
| | comp=Z,10nm,1.2s,SNR=7.6 | | | | | | |
| STU | Stuttgart | 148.85 | 350 | PKPdf | PKPdf | 06 04 08.3 | -1.6 |
| STU | | | | | PKPbc | 06 04 14.9 | +0.5 |
| STU | | | | PKPab | PKPab | 06 04 20.3 | -0.2 |
| STU | Stuttgart | 148.85 | 350 | *e*PKPbc | PKiKP | 06 04 15.1 | -0.4 |
| | baz=16,slow=2.7 | | | | | | |
| STU | | | | *e*PKPab | PKPab | 06 04 20.2 | -0.2 |
| | baz=12,slow=4.0 | | | | | | |
| BIOA | Bad Ischl, Aus | 148.96 | 344 | *e*PKP | PKPbc | 06 04 14.4 | -0.5 |
| | comp=Z,13nm,0.9s,SNR=11 | | | | | | |
| KULA | Kula-Manisa | 148.98 | 316 | P | PKPbc | 06 04 15.2 | -0.1 |
| FUR | Furstenfeldbru | 149.06 | 348 | *e*PKPbc | PKPbc | 06 04 15.4 | +0.4 |
| | baz=16,slow=2.7 | | | | | | |
| FUR | | | | *e*PKPab | PKPab | 06 04 21.6 | +0.2 |
| | baz=12,slow=4.0 | | | | | | |
| RJOB | Jochberg | 149.12 | 345 | *e*PKPbc | PKPbc | 06 04 15.4 | +0.1 |
| | baz=16,slow=2.7 | | | | | | |
| RJOB | | | | *e*PKPab | PKPab | 06 04 22.1 | +0.4 |
| | baz=12,slow=4.0 | | | | | | |
| FRGS | Fruska Gora | 149.13 | 335 | *e*P | PKPbc | 06 04 14.6 | -0.7 |
| ALN | Alexandroupoli | 149.18 | 322 | P | PKPbc | 06 04 14.7 | -0.8 |
| KOGS | Kog | 149.33 | 340 | *i* PKPbc | PKPbc | 06 04 15.2 | -0.5 |
| KOGS | | | | *i* PKPab | PKPab | 06 04 22.5 | 0.0 |
| BFO | Black Forest | 149.41 | 351 | | PKPbc | 06 04 16.1 | +0.2 |
| BFO | | | | PKPab | PKPab | 06 04 22.5 | -0.3 |
| BFO | Black Forest | 149.41 | 351 | *e*PKPbc | PKPbc | 06 04 16.3 | +0.4 |
| | baz=16,slow=2.7 | | | | | | |
| BFO | | | | *e*PKPab | PKPab | 06 04 22.1 | -0.8 |
| | baz=12,slow=4.0 | | | | | | |
| LESA | Schwarzleotal | 149.45 | 345 | *i* PKP | PKPbc | 06 04 15.5 | -0.5 |
| | comp=Z,13nm,0.7s | | | | | | |
| SOKA | Soboth | 149.50 | 342 | *i* PKP | PKPbc | 06 04 15.9 | -0.4 |
| | comp=Z,19nm,1.0s,SNR=8.8 | | | | | | |
| BOVS | Bovan | 149.51 | 331 | ⇑P | PKPbc | 06 04 15.5 | -0.7 |
| KBA | Koelnbreinsper | 149.60 | 344 | *i* PKP | PKPbc | 06 04 15.6 | -1.0 |
| | comp=Z,10.0nm,0.5s,SNR=11 | | | | | | |
| EZN | Ezine | 149.69 | 321 | P | PKPbc | 06 04 16.5 | -0.3 |
| TEKS | Tekeris | 149.74 | 334 | *e*P | PKPbc | 06 04 16.1 | -0.7 |
| UBR | Ueberruh | 149.75 | 349 | *e*PKPbc | PKPbc | 06 04 16.9 | +0.1 |
| | baz=16,slow=2.7 | | | | | | |
| WATA | Walderalm | 149.78 | 347 | *i* PKP | PKPbc | 06 04 16.7 | -0.2 |
| | comp=Z,22nm,0.7s,SNR=13 | | | | | | |
| OBKA | Obir | 149.79 | 342 | *i* PKP | PKPbc | 06 04 15.8 | -1.1 |
| | comp=Z,12nm,1.0s | | | | | | |
| OBKA | Obir | 149.79 | 342 | *e*P | PKPbc | 06 04 15.9 | -1.1 |
| RETA | Reutte | 149.81 | 348 | *i* PKP | PKPbc | 06 04 16.7 | -0.2 |
| | comp=Z,21nm,1.1s,SNR=9.2 | | | | | | |
| PSMA | Santa Maria | 149.84 | 46 | *e*PKP | PKPdf | 06 04 12.8 | +1.0 |
| WTTA | Wattenberg | 149.84 | 347 | *i* PKP | PKPbc | 06 04 16.9 | -0.2 |
| | comp=Z,20nm,0.7s,SNR=18 | | | | | | |
| MOTA | Moosalm | 149.88 | 347 | *i* PKP | PKPbc | 06 04 16.7 | -0.5 |
| | comp=Z,29nm,1.0s | | | | | | |
| MYKA | Terra Mystica | 149.94 | 344 | *i* PKP | PKPbc | 06 04 16.3 | -1.0 |
| | comp=Z,10nm,0.8s,SNR=6.4 | | | | | | |
| SQTA | Sankt Quirin | 149.97 | 347 | *i* PKP | PKPbc | 06 04 17.1 | -0.2 |
| | comp=Z,14nm,0.8s,SNR=12 | | | | | | |
| KAVA | Kavala | 149.98 | 324 | P | PKPbc | 06 04 17.3 | -0.1 |
| NVR | Nevrokopi | 150.10 | 325 | P | PKiKP | 06 04 18.4 | +0.1 |
| ABTA | Abfaltersbach | 150.12 | 345 | *i* PKP | PKPbc | 06 04 16.9 | -0.8 |
| | comp=Z,28nm,0.7s,SNR=16 | | | | | | |
| CRES | Cresnjev | 150.13 | 341 | *i* PKPbc | PKPbc | 06 04 17.4 | -0.3 |
| DAVA | Damuels | 150.17 | 349 | *i* PKP | PKPbc | 06 04 17.7 | -0.2 |
| | comp=Z,25nm,1.0s,SNR=16 | | | | | | |
| LJU | Ljubljana | 150.22 | 342 | *i* PKPbc | PKPbc | 06 04 17.6 | -0.3 |
| FETA | Feichten | 150.26 | 348 | *i* PKP | PKPbc | 06 04 18.0 | -0.1 |
| | comp=Z,24nm,0.9s,SNR=11 | | | | | | |
| BBLS | Lazi&#263i | 150.35 | 334 | *e*P | PKPbc | 06 04 17.9 | -0.4 |
| HAPS | Han Pijesak,Bl | 150.36 | 334 | *e*P | PKPbc | 06 04 18.5 | +0.1 |
| A051A | Mrakovica | 150.36 | 338 | *e*P | PKPbc | 06 04 17.9 | -0.4 |
| KOKK | Kokkinochori, | 150.39 | 324 | P | PKPbc | 06 04 17.8 | -0.6 |
| SRS | Serrai | 150.41 | 325 | P | PKPbc | 06 04 17.2 | -1.2 |
| BOJS | Bojanci | 150.49 | 341 | *e*P | PKPbc | 06 04 18.0 | -0.5 |
| BLY | Banja Luka | 150.49 | 337 | *e*P | PKPbc | 06 04 18.3 | -0.2 |
| CEY | Cerknica | 150.53 | 342 | *e*P | PKPbc | 06 04 18.0 | -0.6 |
| RUDO | Rudo | 150.56 | 333 | *e*P | PKPbc | 06 04 17.7 | -1.0 |
| SJES | Sjenica | 150.59 | 332 | *e*P | PKPbc | 06 04 18.4 | -0.5 |
| DAVOX | Davos/Dischmat | 150.66 | 349 | PKP | PKPdf | 06 04 13.0 | 0.0 |
| | comp=Z,2.3nm,0.7s,baz=285,slow=2.1,SNR=7.8 | | | | | | |
| DAVOX | | | | PKPbc | PKPbc | 06 04 19.2 | +0.1 |
| | comp=Z,29nm,0.6s,baz=334,slow=0.3,SNR=72 | | | | | | |
| BODT | Bodrum | 150.67 | 315 | P | PKPbc | 06 04 17.8 | -1.4 |
| CHOS | Chios island | 150.73 | 319 | P | PKPbc | 06 04 18.1 | -1.3 |
| KNT | Kendrikon | 150.75 | 326 | P | PKPbc | 06 04 18.0 | -1.2 |
| VAY | Valandovo | 150.81 | 327 | *i* P | PKPbc | 06 04 18.0 | -1.3 |
| SKDS | Skadanscina | 150.82 | 342 | *e*P | PKPbc | 06 04 16.8 | -2.5 |
| A050A | Klekovaca | 150.95 | 338 | *e*P | PKPbc | 06 04 18.4 | -1.3 |
| CTI | Castel Tesino | 150.98 | 346 | PKPdf | PKPdf | 06 04 13.1 | -0.3 |
| CTI | | | | | PKPbc | 06 04 19.4 | -0.4 |
| CTI | | | | PKPab | PKPab | 06 04 28.9 | -0.7 |
| HORT | Hortiatis | 151.04 | 325 | P | PKPbc | 06 04 18.6 | -1.4 |
| SENIN | Lac Senin/Sane | 151.48 | 352 | | PKiKP | 06 04 21.7 | +0.5 |
| SENIN | | | | PKPab | PKPab | 06 04 32.1 | +0.3 |
| BRY | Bratogost | 151.50 | 334 | *e*P | PKPbc | 06 04 20.1 | -0.9 |
| PDG | Podgorica | 151.57 | 332 | ⇑P | PKPbc | 06 04 20.7 | -0.3 |
| TREB | Trebinje | 151.73 | 334 | *e*P | PKPbc | 06 04 18.6 | -2.8 |
| DRME | Dracevica, Mon | 151.79 | 332 | *e*P | PKPbc | 06 04 21.0 | -0.5 |
| FNA | Florina | 151.81 | 327 | P | PKPbc | 06 04 21.0 | -0.7 |
| OHR | Ohrid | 151.86 | 328 | *i* P | PKPbc | 06 04 21.7 | -0.1 |
| STON | Ston | 151.87 | 335 | *e*P | PKPbc | 06 04 20.3 | -1.3 |
| NEST | Nestorio | 152.25 | 327 | P | PKPbc | 06 04 22.5 | -0.3 |
| ATHU | Athens Univers | 152.40 | 320 | P | PKPbc | 06 04 21.7 | -1.3 |
| EVR | Evrytania | 152.92 | 324 | P | PKiKP | 06 04 24.8 | +0.5 |
| ANX | Ano Chora | 153.08 | 323 | P | PKPbc | 06 04 24.6 | 0.0 |
| EFP | Efpalio | 153.20 | 323 | P | PKiKP | 06 04 25.2 | +0.4 |
| GUR | Goura | 153.28 | 322 | P | PKPbc | 06 04 24.5 | -0.6 |
| IDI | Anoyia | 153.28 | 314 | PKPbc | PKiKP | 06 04 25.6 | +0.4 |
| | comp=Z,6.7nm,0.6s,baz=7.1,slow=8.1,SNR=6.6 | | | | | | |
| PVO | Paravola | 153.29 | 324 | P | PKPbc | 06 04 24.8 | -0.1 |
| KLV | Kalavryta, Ach | 153.32 | 322 | P | PKPbc | 06 04 24.2 | -0.9 |
| NRCA | Norcia | 153.56 | 341 | | PKPbc | 06 04 40.9 | +0.3 |
| LKD2 | Lefkada island | 153.65 | 325 | P | PKPbc | 06 04 25.1 | -0.6 |
| FSK | Fiskardo | 153.93 | 325 | P | PKPdf | 06 04 14.8 | -3.0 |
| PYL | PYLOS | 154.33 | 321 | P | PKiKP | 06 04 26.1 | -1.1 |
| PGAV | Gavieira, Arco | 154.76 | 18 | *e*PKPab | PKPab | 06 04 46.7 | +0.9 |
| PCAB | Cabril | 155.07 | 18 | *e*PKPab | PKPab | 06 04 46.8 | -0.2 |
| PBRG | Bragança | 155.33 | 15 | *e*PKPab | PKPab | 06 04 48.0 | -0.1 |
| POLO | Lamas de Olo | 155.45 | 17 | *e*PKPab | PKPab | 06 04 48.9 | +0.2 |
| PVRL | Vila Real | 155.56 | 17 | *e*PKPab | PKPab | 06 04 49.3 | +0.1 |
| CEST | Esterri de Car | 155.62 | 1 | | PKPab | 06 04 49.9 | +0.5 |
| MVO | Moncorvo | 155.85 | 16 | *e*PKPab | PKPab | 06 04 50.7 | +0.2 |
| PVIS | Viseu | 156.02 | 18 | *e*PKPab | PKPab | 06 04 51.2 | 0.0 |
| COI | Coimbra | 156.33 | 20 | *e*PKPab | PKPab | 06 04 52.5 | +0.1 |
| MTE | Manteigas | 156.42 | 18 | *e*PKPab | PKPab | 06 04 52.8 | -0.1 |
| PCAS | Casmilo, Conde | 156.44 | 20 | *e*PKPab | PKPab | 06 04 52.8 | -0.2 |
| PSBE | So Bento | 156.83 | 21 | *e*PKPab | PKPab | 06 04 54.6 | -0.1 |
| PCBR | Castelo Branco | 156.95 | 18 | *e*PKPab | PKPab | 06 04 55.1 | -0.1 |
| PMRV | Marv??o | 157.36 | 19 | *e*PKPab | PKPab | 06 04 56.5 | -0.5 |
| PMTG | Montargil | 157.42 | 21 | *e*PKPab | PKPab | 06 04 56.8 | -0.4 |
| PESTR | Estremoz | 157.81 | 20 | *e*PKPab | PKPab | 06 04 58.6 | -0.3 |
| EVO | Evora | 157.98 | 21 | *e*PKPab | PKPab | 06 04 59.3 | -0.3 |
| ESDC | Sonseca Array | 157.98 | 12 | PKPab | PKPab | 06 04 59.5 | -0.2 |
| | comp=Z,7.5nm,0.9s,baz=341,slow=4.3,SNR=28 | | | | | | |
| PNCL | Nicolau / Gran | 158.17 | 22 | *e*PKPab | PKPab | 06 05 00.3 | -0.2 |
| PBEJ | Beja | 158.48 | 21 | *e*PKPab | PKPab | 06 05 02.0 | +0.1 |
| MESJ | Messejana | 158.53 | 22 | *e*PKPab | PKPab | 06 05 01.8 | -0.3 |
| PTEO | Sao Teotonio | 158.60 | 23 | *e*PKPab | PKPab | 06 05 02.3 | -0.1 |
| PBAR | Barrancos | 158.62 | 19 | *e*PKPab | PKPab | 06 05 02.5 | +0.1 |
| PCVE | Castro Verde | 158.78 | 22 | *e*PKPab | PKPab | 06 05 03.1 | -0.1 |
| PVAQ | Vaqueiros | 159.09 | 21 | *e*PKPab | PKPab | 06 05 04.7 | +0.2 |
| KEST | Kesra | 161.22 | 340 | PKPab | PKPab | 06 05 14.2 | +0.2 |
| | comp=Z,6.9nm,0.8s,baz=271,slow=2.5,SNR=7.3 | | | | | | |
| TORD | Torodi Ar. Bea | 175.03 | 180 | PKP | PKPdf | 06 04 35.6 | -0.9 |
| | comp=Z,1.6nm,0.9s,baz=359,slow=2.1,SNR=6.9 | | | | | | |
| TORD | | | | PKPab | PKPab | 06 06 15.3 | 0.0 |
| | comp=Z,0.5nm,0.8s,baz=172,slow=2.9,SNR=2.9 | | | | | | |

*HLW* ***19*** *05:46:09.5,36.˙23N×26.˙10E,h17km±18km,Md4.4,Ml5.0*
*IDC* ***19*** *05:46:10.3±0.7,36.˙32N×25.˙85E,h116km±8km,mb3.8/18, mbtmp4.2/26,Error ellipse: s-maj=11.3km s-min=9.8km az=159.0*
*NEIC* ***19*** *05:46:10.7±1.3,36.˙24N±0.˙10×25.˙8E±0.˙1,h135km±9km, mb4.2/20,Error ellipse: s-maj=14.4km s-min=11.8km az=180.0*
*ISK* ***19*** *05:46:11.6,36.˙20N×25.˙80E,h127km±1km,ML4.3/22*
*ATH* ***19*** *05:46:11.7,36.˙19N×25.˙82E,h130km±2km,ML4.1/13, Error ellipse: s-maj=2.4km s-min=1.3km az=138.0*
*TIR* ***19*** *05:46:12.7,36.˙85N×25.˙07E,h10km±47km,Ml4.1*
*THE* ***19*** *05:46:13.5,36.˙19N×25.˙81E,h134km±2km,ML4.0/18, Error ellipse: s-maj=2.3km s-min=0.6km az=154.0*
*AFAD* ***19*** *05:46:14.4±0.0,35.˙89N×26.˙07E,h28km±5km,MW4.9*
*GII* ***19*** *05:47:13.4±0.2,35.˙989N±0.˙001×26.˙263E±0.˙001,h40km, mB4.3/4,Md4.2/3,Mws4.3,confirmed*

**ISC 19 05:46:10.3**±0.5,**36˚20N**±0˚03×**25˚84E**±0˚03,**h130**km±5km, **n417**,σ2**s06**/493,**mb4.0**/19,**10D,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANT** | **Santorini** | **0.36** | **299** | Pg | **Pn** | **05 46 31.7** | **+3.0** |
| SANT | | | | Sg | **Sn** | **05 46 43.3** | **+0.8** |
| **SANT** | **Santorini** | **0.36** | **299** | | **Pn** | **05 46 31.3** | **+2.7** |
| SANT | | | | Sn | **Sn** | **05 46 44.3** | **+1.7** |
| **SANT** | **Santorini** | **0.36** | **299** | P | **Pn** | **05 46 31.6** | **+2.9** |
| **SANT** | **Santorini** | **0.36** | **299** | P | **Pn** | **05 46 31.0** | **+2.3** |
| SANT | | | | S | **Sn** | **05 46 43.4** | **+0.8** |
| SANT | | | | AML | AML | 05 46 45.6 | |
| | comp=N,6058μm,0.5s | | | | | | |
| SANT | | | | AML | AML | 05 46 46.0 | |
| | comp=E,9474μm,0.4s | | | | | | |
| **THR8** | **Santorini-Mono** | **0.36** | **306** | P | **Pn** | **05 46 30.2** | **+1.6** |
| **THR8** | **Santorini-Mono** | **0.36** | **306** | P | **Pn**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IMMV | | | | AML | AML | 05 47 08.8 | |
| | comp=N,6929µm,0.4s | | | | | | |
| **RODP** | **Rodopos** | **1.81** | **250** | P | **Pn** | **05 46 44.0** | **+2.0** |
| RODP | | | | S | Sn | 05 47 06.2 | +0.1 |
| | comp=N,978nm,0.3s | | | | | | |
| **GCAM** | **G?zelcaml?** | **1.87** | **36** | Pn | **Pn** | **05 46 44.8** | **+2.2** |
| **MLSB** | **Milas** | **1.90** | **54** | Pn | **Pn** | **05 46 45.4** | **+2.3** |
| **MRSB** | **Marmaris-Mugla** | **1.97** | **74** | Pn | **Pn** | **05 46 45.9** | **+2.0** |
| **GVD** | **Gavdhos** | **1.97** | **227** | Pn | **Pn** | **05 46 45.6** | **+1.7** |
| **GVD** | **Gavdhos** | **1.97** | **227** | P | **Pn** | **05 46 46.1** | **+2.2** |
| **GVD** | **Gavdhos** | **1.97** | **227** | P | **Pn** | **05 46 46.2** | **+2.2** |
| GVD | | | | S | Sn | 05 47 09.3 | -0.3 |
| GVD | | | | AML | AML | 05 47 19.0 | |
| | comp=N,2626µm,0.3s | | | | | | |
| GVD | | | | AML | AML | 05 47 20.2 | |
| | comp=E,3180µm,0.4s | | | | | | |
| **TURN** | **Turunc** | **2.02** | **73** | Pn | **Pn** | **05 46 46.6** | **+2.1** |
| **TURN** | **Turunc** | **2.02** | **73** | P | **Pn** | **05 46 46.6** | **+2.1** |
| TURN | | | | S | Sn | 05 47 11.0 | +0.4 |
| TURN | | | | *i* AML | AML | 05 47 12.0 | |
| | comp=E,615nm,0.2s | | | | | | |
| TURN | | | | *i* AML | AML | 05 47 13.0 | |
| | comp=E,842nm,0.7s | | | | | | |
| **GMLD** | **Gumuldur** | **2.06** | **24** | Pn | **Pn** | **05 46 46.9** | **+1.9** |
| **ANKY** | **Antikythira Is** | **2.09** | **262** | P | **Pn** | **05 46 46.7** | **+1.4** |
| ANKY | | | | S | Sn | 05 47 12.0 | -0.1 |
| | comp=E,2µm,0.4s | | | | | | |
| **ANKY** | **Antikythira Is** | **2.09** | **262** | P | **Pn** | **05 46 46.5** | **+1.2** |
| **YER** | **Yerkesik** | **2.17** | **64** | Pn | **Pn** | **05 46 49.2** | **+2.8** |
| **YER** | **Yerkesik** | **2.17** | **64** | P | **Pn** | **05 46 49.2** | **+2.8** |
| YER | | | | S | Sn | 05 47 16.1 | +2.0 |
| **CHOS** | **Chios island** | **2.19** | **4** | Pn | **Pn** | **05 46 48.5** | **+1.8** |
| **CHOS** | **Chios island** | **2.19** | **4** | P | **Pn** | **05 46 48.5** | **+1.8** |
| **CHOS** | **Chios island** | **2.19** | **4** | P | **Pn** | **05 46 48.5** | **+1.8** |
| **YDRA** | **Hydra** | **2.23** | **302** | P | **Pn** | **05 46 49.1** | **+2.1** |
| **URLA** | **Izmir** | **2.24** | **15** | Pn | **Pn** | **05 46 48.9** | **+1.6** |
| **KTHA** | **Kythira Island** | **2.25** | **272** | Pn | **Pn** | **05 46 48.9** | **+1.6** |
| **KTHA** | **Kythira Island** | **2.25** | **272** | P | **Pn** | **05 46 48.9** | **+1.6** |
| KTHA | | | | S | Sn | 05 47 15.8 | +0.1 |
| | comp=E,3µm,0.4s | | | | | | |
| **KTHA** | **Kythira Island** | **2.25** | **272** | P | **Pn** | **05 46 48.7** | **+1.4** |
| KTHA | | | | AML | AML | 05 47 15.2 | |
| | comp=N,7287µm,0.5s | | | | | | |
| KTHA | | | | AML | AML | 05 47 17.9 | |
| | comp=E,8110µm,0.5s | | | | | | |
| **MULA** | **Mugla, Merkez-** | **2.25** | **61** | P | **Pn** | **05 46 50.7** | **+3.2** |
| MULA | | | | S | Sn | 05 47 17.3 | +1.4 |
| MULA | | | | *i* AML | AML | 05 47 19.0 | |
| | comp=E,815nm,0.6s | | | | | | |
| MULA | | | | *i* AML | AML | 05 47 22.0 | |
| | comp=E,263nm,0.5s | | | | | | |
| **MNVA** | **Monemvasia** | **2.31** | **283** | P | **Pn** | **05 46 50.6** | **+2.5** |
| MNVA | | | | AML | AML | 05 47 18.6 | |
| | comp=N,3594µm,0.4s | | | | | | |
| MNVA | | | | AML | AML | 05 47 19.3 | |
| | comp=E,2980µm,0.3s | | | | | | |
| **DALY** | **Dalyan (Mula)** | **2.35** | **74** | Pn | **Pn** | **05 46 50.9** | **+2.4** |
| **EAG2** | **Marmaro, Chios** | **2.35** | **5** | P | **Pn** | **05 46 50.1** | **+1.5** |
| **VLI** | **Veliai** | **2.40** | **283** | P | **Pn** | **05 46 50.4** | **+1.2** |
| **VLI** | **Veliai** | **2.40** | **283** | P | **Pn** | **05 46 50.4** | **+1.2** |
| VLI | | | | AML | AML | 05 47 20.1 | |
| | comp=E,2843µm,0.4s | | | | | | |
| VLI | | | | AML | AML | 05 47 20.8 | |
| | comp=N,5020µm,0.3s | | | | | | |
| **ATHU** | **Athens Univers** | **2.42** | **318** | P | **Pn** | **05 46 51.6** | **+2.2** |
| ATHU | | | | S | Sn | 05 47 20.5 | +1.0 |
| | comp=N,300nm,1.1s | | | | | | |
| **DION** | **Dionisos Attik** | **2.42** | **321** | P | **Pn** | **05 46 52.6** | **+3.1** |
| DION | | | | S | Sn | 05 47 21.5 | +1.9 |
| | comp=N,2µm,0.7s | | | | | | |
| **DION** | **Dionisos Attik** | **2.42** | **321** | P | **Pn** | **05 46 52.3** | **+2.8** |
| **ATH** | **Athens Observa** | **2.46** | **317** | P | **Pn** | **05 46 52.3** | **+2.4** |
| ATH | | | | S | Sn | 05 47 21.4 | +1.0 |
| | comp=N,880nm,0.7s | | | | | | |
| **ATH** | **Athens Observa** | **2.46** | **317** | P | **Pn** | **05 46 52.0** | **+2.1** |
| **KRND** | **KRANIDI** | **2.47** | **300** | P | **Pn** | **05 46 51.9** | **+1.9** |
| KRND | | | | S | Sn | 05 47 21.3 | +0.8 |
| | comp=N,1µm,0.6s | | | | | | |
| **KRND** | **KRANIDI** | **2.47** | **300** | P | **Pn** | **05 46 51.9** | **+1.9** |
| KRND | | | | AML | AML | 05 47 22.3 | |
| | comp=N,2340µm,0.6s | | | | | | |
| KRND | | | | AML | AML | 05 47 23.1 | |
| | comp=E,2067µm,0.6s | | | | | | |
| **ESEN** | **Aydn-Nazilli** | **2.56** | **51** | P | **Pn** | **05 46 53.9** | **+2.7** |
| **SABU** | **Mula-Dalaman** | **2.59** | **75** | P | **Pn** | **05 46 54.2** | **+2.6** |
| SABU | | | | S | Sn | 05 47 22.9 | -0.7 |
| SABU | | | | *i* AML | AML | 05 47 26.0 | |
| | comp=E,591nm,0.2s | | | | | | |
| SABU | | | | *i* AML | AML | 05 47 28.0 | |
| | comp=E,1µm,0.4s | | | | | | |
| **NAZL** | **Nazilli-Aydin** | **2.64** | **47** | Pn | **Pn** | **05 46 54.8** | **+2.6** |
| **FETY** | **Fethiye** | **2.65** | **80** | Pn | **Pn** | **05 46 54.1** | **+1.7** |
| **FETY** | **Fethiye** | **2.65** | **80** | P | **Pn** | **05 46 54.7** | **+2.3** |
| FETY | | | | S | Sn | 05 47 24.3 | -0.5 |
| **ODEM** | **Odemis-Izmir** | **2.73** | **40** | Pn | **Pn** | **05 46 56.1** | **+2.6** |
| **IZZE** | **Mula-Seydike** | **2.74** | **84** | P | **Pn** | **05 46 55.0** | **+1.4** |
| IZZE | | | | S | Sn | 05 47 25.2 | -1.7 |
| IZZE | | | | *i* AML | AML | 05 47 28.0 | |
| | comp=E,2µm,0.5s | | | | | | |
| IZZE | | | | *i* AML | AML | 05 47 29.0 | |
| | comp=E,3µm,0.3s | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **2.77** | **62** | P | **Pn** | **05 46 56.3** | **+2.3** |
| TAVA | | | | S | Sn | 05 47 28.5 | +0.8 |
| TAVA | | | | *i* AML | AML | 05 47 30.0 | |
| | comp=E,178nm,0.2s | | | | | | |
| TAVA | | | | *i* AML | AML | 05 47 30.0 | |
| | comp=E,174nm,0.4s | | | | | | |
| **DNZT** | **Denizli-Tavas-** | **2.77** | **66** | P | **Pn** | **05 46 56.5** | **+2.5** |
| DNZT | | | | S | Sn | 05 47 27.0 | -0.7 |
| DNZT | | | | *i* AML | AML | 05 47 30.0 | |
| | comp=E,132nm,0.3s | | | | | | |
| DNZT | | | | *i* AML | AML | 05 47 40.0 | |
| | comp=E,127nm,1.0s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **2.80** | **331** | P | **Pn** | **05 46 56.3** | **+2.0** |
| **KYMI** | **Kymi, Euboea I** | **2.80** | **331** | P | **Pn** | **05 46 56.3** | **+2.0** |
| **VILL** | **Villia** | **2.82** | **315** | P | **Pn** | **05 46 56.9** | **+2.3** |
| **KIRA** | **zmir-Kiraz** | **2.86** | **45** | P | **Pn** | **05 46 57.4** | **+2.3** |
| **CAME** | **Cameli-Denizli** | **2.88** | **74** | Pn | **Pn** | **05 46 57.6** | **+2.1** |
| **DNIZ** | **Denizli-Tavas-** | **2.93** | **60** | P | **Pn** | **05 46 58.9** | **+2.9** |
| DNIZ | | | | S | Sn | 05 47 32.5 | +1.1 |
| DNIZ | | | | *i* AML | AML | 05 47 35.0 | |
| | comp=E,389nm,0.2s | | | | | | |
| DNIZ | | | | *i* AML | AML | 05 47 35.0 | |
| | comp=E,865nm,0.3s | | | | | | |
| **CAEL** | **Denizli, Camel** | **2.94** | **71** | P | **Pn** | **05 46 58.8** | **+2.5** |
| CAEL | | | | S | Sn | 05 47 32.2 | +0.5 |
| CAEL | | | | *i* AML | AML | 05 47 36.0 | |
| | comp=E,545nm,0.3s | | | | | | |
| CAEL | | | | *i* AML | AML | 05 47 43.0 | |
| | comp=E,607nm,1.1s | | | | | | |
| **DKL** | **Dikili** | **2.99** | **16** | Pn | **Pn** | **05 46 58.6** | **+1.9** |
| **SIGR** | **SIGRI** | **3.01** | **0** | P | **Pn** | **05 46 59.1** | **+2.1** |
| **SIGR** | **SIGRI** | **3.01** | **0** | P | **Pn** | **05 46 58.8** | **+1.8** |
| **AKAS** | **Kas** | **3.04** | **88** | Pn | **Pn** | **05 46 59.2** | **+1.6** |
| **AKAS** | **Kas** | **3.04** | **88** | P | **Pn** | **05 46 59.3** | **+1.7** |
| AKAS | | | | S | Sn | 05 47 32.5 | -1.5 |
| AKAS | | | | *i* AML | AML | 05 47 37.0 | |
| | comp=E,2µm,0.4s | | | | | | |
| AKAS | | | | *i* AML | AML | 05 47 38.0 | |
| | comp=E,2µm,0.4s | | | | | | |
| **APMY** | **Acipayam-Deniz** | **3.05** | **64** | Pn | **Pn** | **05 46 59.9** | **+2.2** |
| **PRK** | **Paraskevi** | **3.06** | **6** | P | **Pn** | **05 46 59.3** | **+1.6** |
| **PRK** | **Paraskevi** | **3.06** | **6** | P | **Pn** | **05 46 59.4** | **+1.7** |
| **KNIK** | **Mula-Seydike** | **3.07** | **77** | P | **Pn** | **05 47 00.1** | **+2.1** |
| KNIK | | | | S | Sn | 05 47 34.5 | -0.2 |
| KNIK | | | | *i* AML | AML | 05 47 37.0 | |
| | comp=E,643nm,0.5s | | | | | | |
| KNIK | | | | *i* AML | AML | 05 47 37.0 | |
| | comp=E,490nm,0.3s | | | | | | |
| **GOLH** | **Golhisar** | **3.16** | **70** | P | **Pn** | **05 47 01.5** | **+2.4** |
| GOLH | | | | S | Sn | 05 47 35.8 | -1.0 |
| GOLH | | | | *i* AML | AML | 05 47 40.0 | |
| | comp=E,336nm,0.4s | | | | | | |
| GOLH | | | | *i* AML | AML | 05 47 44.0 | |
| | comp=E,356nm,0.4s | | | | | | |
| **KLMT** | **Kalamata** | **3.16** | **287** | P | **Pn** | **05 47 01.6** | **+2.6** |
| KLMT | | | | S | Sn | 05 47 37.8 | +1.2 |
| | comp=E,665nm,0.4s | | | | | | |
| **KULA** | **Kula-Manisa** | **3.22** | **43** | Pn | **Pn** | **05 47 02.3** | **+2.4** |
| **KULA** | **Kula-Manisa** | **3.22** | **43** | P | **Pn** | **05 47 02.1** | **+2.2** |
| **GORD** | **Gordes-Manisa** | **3.28** | **34** | Pn | **Pn** | **05 47 03.1** | **+2.5** |
| **GUR** | **Goura** | **3.29** | **303** | P | **Pn** | **05 47 02.5** | **+1.7** |
| GUR | | | | S | Sn | 05 47 39.5 | -0.4 |
| | comp=E,1µm,0.5s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GUR** | **Goura** | **3.29** | **303** | P | **Pn** | **05 47 02.2** | **+1.4** |
| **ELL** | **Elmali** | **3.32** | **79** | Pn | **Pn** | **05 47 03.3** | **+2.1** |
| **ELL** | **Elmali** | **3.32** | **79** | | **Pn** | **05 47 03.1** | **+1.9** |
| **INCE** | **Denizli-Bozkur** | **3.35** | **62** | P | **Pn** | **05 47 03.7** | **+2.2** |
| INCE | | | | S | Sn | 05 47 41.6 | +0.5 |
| INCE | | | | *i* AML | AML | 05 47 43.0 | |
| | comp=E,182nm,0.3s | | | | | | |
| INCE | | | | *i* AML | AML | 05 47 44.0 | |
| | comp=E,249nm,0.4s | | | | | | |
| **PYL** | **PYLOS** | **3.38** | **283** | P | **Pn** | **05 47 02.5** | **+0.7** |
| PYL | | | | S | Sn | 05 47 40.9 | -0.7 |
| | comp=E,678nm,0.4s | | | | | | |
| **PYL** | **PYLOS** | **3.38** | **283** | P | **Pn** | **05 47 02.5** | **+0.7** |
| **KLV** | **Kalavryta, Ach** | **3.48** | **303** | P | **Pn** | **05 47 04.4** | **+1.2** |
| **KLV** | **Kalavryta, Ach** | **3.48** | **303** | P | **Pn** | **05 47 04.4** | **+1.2** |
| **AXAR** | **Agios Charalam** | **3.60** | **316** | P | **Pn** | **05 47 07.1** | **+2.3** |
| **ALIK** | **Aliki, Aigiali** | **3.62** | **306** | P | **Pn** | **05 47 06.5** | **+1.5** |
| **AKUM** | **Antalya-Kumluc** | **3.64** | **87** | P | **Pn** | **05 47 07.0** | **+1.8** |
| AKUM | | | | S | Sn | 05 47 46.7 | -1.0 |
| AKUM | | | | *i* AML | AML | 05 47 50.0 | |
| | comp=E,384nm,0.3s | | | | | | |
| AKUM | | | | *i* AML | AML | 05 47 51.0 | |
| | comp=E,501nm,0.2s | | | | | | |
| **BRDR** | **BURDUR-Merkez** | **3.69** | **65** | P | **Pn** | **05 47 08.1** | **+2.0** |
| **KORT** | **Korkueli** | **3.71** | **76** | Pn | **Pn** | **05 47 08.9** | **+2.5** |
| **KORT** | **Korkueli** | **3.71** | **76** | P | **Pn** | **05 47 08.7** | **+2.3** |
| KORT | | | | S | Sn | 05 47 48.3 | -1.5 |
| KORT | | | | *i* AML | AML | 05 47 54.0 | |
| | comp=E,299nm,0.5s | | | | | | |
| KORT | | | | *i* AML | AML | 05 47 55.0 | |
| | comp=E,359nm,0.5s | | | | | | |
| **EFP** | **Efpalio** | **3.85** | **307** | P | **Pn** | **05 47 09.5** | **+1.5** |
| **EFP** | **Efpalio** | **3.85** | **307** | P | **Pn** | **05 47 09.3** | **+1.3** |
| **UPR** | **University Cam** | **3.85** | **304** | P | **Pn** | **05 47 09.5** | **+1.5** |
| **ANX** | **Ano Chora** | **3.94** | **309** | P | **Pn** | **05 47 11.1** | **+1.9** |
| **ANX** | **Ano Chora** | **3.94** | **309** | P | **Pn** | **05 47 11.1** | **+1.9** |
| **ANTB** | **Antalya** | **3.94** | **78** | Pn | **Pn** | **05 47 11.9** | **+2.7** |
| **BUCA** | **Burdur, Bucak-** | **3.95** | **72** | P | **Pn** | **05 47 11.9** | **+2.5** |
| BUCA | | | | S | Sn | 05 47 53.9 | -1.4 |
| **BCK** | **Bucak** | **4.01** | **70** | Pn | **Pn** | **05 47 12.4** | **+2.2** |
| **MAKR** | **Makrakomi, Fth** | **4.07** | **315** | P | **Pn** | **05 47 13.4** | **+2.4** |
| **PAIG** | **Paliouri** | **4.10** | **336** | P | **Pn** | **05 47 13.7** | **+2.4** |
| **EVR** | **Evrytania** | **4.20** | **311** | P | **Pn** | **05 47 15.4** | **+2.6** |
| **PVO** | **Paravola** | **4.20** | **306** | P | **Pn** | **05 47 15.5** | **+2.8** |
| **LTHK** | **Lithakia** | **4.29** | **292** | P | **Pn** | **05 47 14.6** | **+0.8** |
| **OUR** | **Ouranopolis** | **4.38** | **341** | P | **Pn** | **05 47 17.2** | **+2.1** |
| **RTZL** | **Ratzakli, Kefa** | **4.47** | **296** | P | **Pn** | **05 47 16.9** | **+0.7** |
| **THAS** | **Thassos island** | **4.49** | **349** | P | **Pn** | **05 47 18.5** | **+2.0** |
| **TYRN** | **Tyrnavos** | **4.52** | **322** | P | **Pn** | **05 47 19.3** | **+2.3** |
| **PSDA** | **Pessada-Kefalo** | **4.62** | **296** | P | **Pn** | **05 47 18.4** | **+0.2** |
| **ALN** | **Alexandroupoli** | **4.70** | **2** | Pn | **Pn** | **05 47 20.7** | **+1.5** |
| **ALN** | **Alexandroupoli** | **4.70** | **2** | P | **Pn** | **05 47 21.3** | **+2.0** |
| **SLUM** | **Salum** | **4.72** | **187** | P | **Pn** | **05 47 20.6** | **+0.9** |
| | baz=190 | | | | | | |
| **FSK** | **Fiskardo** | **4.78** | **300** | P | **Pn** | **05 47 20.7** | **+0.3** |
| **EVGI** | **Lefkada island** | **4.79** | **302** | P | **Pn** | **05 47 20.8** | **+0.3** |
| **NYDR** | **Nydri-Lefkada** | **4.80** | **303** | P | **Pn** | **05 47 21.3** | **+0.6** |
| **DMLN** | **Damoulianata-K** | **4.82** | **297** | P | **Pn** | **05 47 21.0** | **+0.1** |
| **LKD2** | **Lefkada island** | **4.87** | **304** | P | **Pn** | **05 47 20.6** | **-1.0** |
| | baz=301 | | | | | | |
| LKD2 | | | | S | **Sn** | **05 48 09.8** | **-7.3** |
| | baz=301 | | | | | | |
| **LKD2** | **Lefkada island** | **4.87** | **304** | P | **Pn** | **05 47 22.5** | **+0.9** |
| **TSLK** | **Tsoukalades, L** | **4.89** | **304** | P | **Pn** | **05 47 23.0** | **+1.1** |
| **HORT** | **Hortiatis** | **4.89** | **335** | P | **Pn** | **05 47 24.3** | **+2.3** |
| **MATC** | **Matruh** | **4.97** | **166** | P | **Pn** | **05 47 23.9** | **+0.9** |
| | baz=168 | | | | | | |
| **SRS** | **Serrai** | **5.22** | **341** | P | **Pn** | **05 47 28.4** | **+2.1** |
| **NVR** | **Nevrokopi** | **5.37** | **344** | P | **Pn** | **05 47 31.3** | **+2.9** |
| **IGT** | **Igoumenitsa** | **5.49** | **309** | P | **Pn** | **05 47 28.6** | **-1.3** |
| | baz=308 | | | | | | |
| IGT | | | | S | **Sn** | **05 48 25.6** | **-6.3** |
| | baz=308 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=E,0.7nm,0.2s,baz=308 | | | | | | |
| **IGT** | **Igoumenitsa** | **5.49** | **309** | P | **Pn** | **05 47 29.8** | **-0.1** |
| **DB3** | **El Dabaa** | **5.62** | **156** | P | **Pn** | **05 47 31.9** | **+0.2** |
| | baz=158 | | | | | | |
| **NEST** | **Nestorio** | **5.65** | **320** | P | **Pn** | **05 47 34.1** | **+1.9** |
| **VAY** | **Valandovo** | **5.72** | **334** | *i* Pn | **Pn** | **05 47 35.5** | **+2.5** |
| **FNA** | **Florina** | **5.77** | **324** | | **Pn** | **05 47 33.6** | **-0.1** |
| **FNA** | **Florina** | **5.77** | **324** | P | **Pn** | **05 47 33.1** | **-0.6** |
| | baz=325 | | | | | | |
| FNA | | | | S | **Sn** | **05 48 31.7** | **-7.0** |
| | baz=325 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.2nm,0.3s,baz=325 | | | | | | |
| **FNA** | **Florina** | **5.77** | **324** | P | **Pn** | **05 47 35.0** | **+1.3** |
| **SRN** | **Sarande** | **5.90** | **310** | P | **Pn** | **05 47 33.6** | **-1.8** |
| | baz=309 | | | | | | |
| SRN | | | | S | **Sn** | **05 48 34.4** | **-7.4** |
| | baz=309 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,0.3nm,0.1s,baz=309 | | | | | | |
| **SRN** | **Sarande** | **5.90** | **310** | P | **Pn** | **05 47 35.2** | **-0.2** |
| **KEK** | **Kerkira** | **5.93** | **308** | | **Pn** | **05 47 34.5** | **-1.3** |
| **KEK** | **Kerkira** | **5.93** | **308** | P | **Pn** | **05 47 35.5** | **-0.3** |
| **KBN** | **Korca** | **5.94** | **320** | | **Pn** | **05 47 36.2** | **+0.2** |
| **KBN** | **Korca** | **5.94** | **320** | P | **Pn** | **05 47 34.5** | **-1.6** |
| | baz=320 | | | | | | |
| KBN | | | | S | **Sn** | **05 48 36.9** | **-6.1** |
| | baz=320 | | | | | | |
| **MDUB** | **Mudurnu** | **5.99** | **43** | Pn | **Pn** | **05 47 37.0** | **+0.2** |
| **CSS** | **Mathiatis** | **6.22** | **99** | | **Pn** | **05 47 39.1** | **-0.7** |
| **CSS** | **Mathiatis** | **6.22** | **99** | P | **Pn** | **05 47 39.1** | **-0.7** |
| **CSS** | **Mathiatis** | **6.22** | **99** | P | **Pn** | **05 47 38.8** | **-1.0** |
| **CSS** | **Mathiatis** | **6.22** | **99** | S | **Sn** | **05 48 44.5** | **-5.2** |
| **OHR** | **Ohrid** | **6.30** | **323** | *i* Pn | **Pn** | **05 47 42.0** | **+1.2** |
| **VLO** | **Vlora** | **6.56** | **312** | | **Pn** | **05 47 44.6** | **+0.3** |
| **VLO** | **Vlora** | **6.56** | **312** | P | **Pn** | **05 47 42.8** | **-1.5** |
| | baz=312 | | | | | | |
| VLO | | | | S | **Sn** | **05 48 52.5** | **-5.3** |
| | baz=312 | | | | | | |
| **SWA2** | | **6.94** | **183** | P | **Pn** | **05 47 49.7** | **+0.2** |
| | baz=185 | | | | | | |
| **TIR** | **Tirane** | **6.95** | **320** | Pn | **Pn** | **05 47 49.4** | **-0.1** |
| **TIR** | **Tirane** | **6.95** | **320** | P | **Pn** | **05 47 47.6** | **-1.8** |
| | baz=320 | | | | | | |
| **SCTE** | **Santa Cesarea** | **6.98** | **306** | | **Pn** | **05 47 49.1** | **-0.9** |
| **SCTE** | **Santa Cesarea** | **6.98** | **306** | P | **Pn** | **05 47 47.0** | **-3.0** |
| | baz=304 | | | | | | |
| SCTE | | | | S | **Sn** | **05 49 02.3** | **-5.6** |
| | baz=304 | | | | | | |
| **BRTR** | **Keskin Array B** | **7.09** | **58** | Pn | **Pn** | **05 47 55.4** | **+3.8** |
| **BRTR** | **Keskin Array B** | **7.09** | **58** | P | **Pn** | **05 47 53.9** | **+2.2** |
| | comp=E,2.2nm,0.5s,baz=241,slow=17,SNR=16 | | | | | | |
| BRTR | | | | S | **Sn** | **05 49 10.7** | **-0.2** |
| | comp=E,2.1nm,0.9s,baz=211,slow=22,SNR=2.9 | | | | | | |
| **PUK** | **Puka** | **7.45** | **323** | Pn | **Pn** | **05 47 56.5** | **+0.2** |
| **PUK** | **Puka** | **7.45** | **323** | P | **Pn** | **05 47 54.5** | **-1.8** |
| | baz=324 | | | | | | |
| PUK | | | | S | **Sn** | **05 49 15.3** | **-4.0** |
| | baz=324 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.6nm,0.3s,baz=324 | | | | | | |
| **BCI** | **Bajram Curri** | **7.62** | **326** | P | **Pn** | **05 47 57.2** | **-1.3** |
| | baz=327 | | | | | | |
| BCI | | | | S | **Sn** | **05 49 19.4** | **-3.9** |
| | baz=327 | | | | | | |
| **HMYD** | **Mayadein** | **7.62** | **145** | P | **Pn** | **05 47 58.3** | **-0.3** |
| | baz=147 | | | | | | |
| **HNAT** | **Natroun** | **7.68** | **147** | P | **Pn** | **05 47 59.6** | **+0.1** |
| | baz=148 | | | | | | |
| **TIP** | **Timpagrande** | **7.79** | **295** | | **Pn** | **05 48 00.2** | **-0.8** |
| **HLW** | **Helwan** | **7.83** | **142** | S | **Sn** | **05 49 23.6** | **-4.9** |
| | baz=143 | | | | | | |
| **DRME** | **Dracevica, Mon** | **7.91** | **321** | *e*Pn | **Pn** | **05 48 01.2** | **-1.2** |
| **KOT** | **Kottamia** | **8.02** | **140** | P | **Pn** | **05 48 03.1** | **-1.0** |
| | baz=141 | | | | | | |
| KOT | | | | S | **Sn** | **05 49 28.1** | **-5.1** |
| | baz=141 | | | | | | |
| **PDG** | **Podgorica** | **8.05** | **323** | Pn | **Pn** | **05 48 03.4** | **-0.9** |
| **PDG** | **Podgorica** | **8.05** | **323** | *e*Pn | **Pn** | **05 48 02.5** | **-1.8** |
| **HHAG** | **Hagoal** | **8.14** | **138** | P | **Pn** | **05 48 05.1** | **-0.6** |
| | baz=139 | | | | | | |
| HHAG | | | | S | **Sn** | **05 49 30.7** | **-5.5** |
| | baz=139 | | | | | | |
| **CEL** | **Celeste** | **8.20** | **288** | | **Pn** | **05 48 05.6** | **-0.9** |
| **HNTI** | **Hanita** | **8.29** | **109** | P | **Pn** | **05 48 05.2** | **-2.5** |
| **HNTI** | **Hanita** | **8.29** | **109** | P | **Pn** | **05 48 06.4** | **-1.3** |
| **HNTI** | **Hanita** | **8.29** | **109** | S | **Sn** | **05 49 34.5** | **-5.2** |
| **OFRI** | **`Ofer** | **8.35** | **113** | P | **Pn** | **05 48 07.0** | **-1.6** |
| **BHL** | **Bhannes** | **8.36** | **103** | *e*P | **Pn** | **05 48 06.5** | **-2.2** |
| **SJES** | **Sjenica** | **8.38** | **329** | *e*Pn | **Pn** | **05 48 09.0** | **+0.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HWQ** | **Hawqa** | **8.48** | **100** | *e*P | **Pn** | **05 48 09.2** | **-1.1** |
| **MMC7** | **Mount Meron ar** | **8.48** | **109** | P | **Pn** | **05 48 09.2** | **-1.2** |
| **MMA0B** | **Mount Meron ar** | **8.49** | **109** | S | **Sn** | **05 49 39.2** | **-5.5** |
| **MMA0B** | **Mount Meron ar** | **8.49** | **109** | P | **Pn** | **05 48 09.3** | **-1.2** |
| **MMAI** | **Mount Meron Ar** | **8.49** | **109** | P | **Pn** | **05 48 09.1** | **-1.4** |
| | comp=N,18nm,0.3s,baz=302,slow=12,SNR=40 | | | | | | |
| MMAI | | | | S | **Sn** | **05 49 39.1** | **-5.6** |
| | comp=N,8.1nm,0.3s,baz=305,slow=14,SNR=3.4 | | | | | | |
| **MMA0** | **Mount Meron ar** | **8.49** | **109** | P | **Pn** | **05 48 09.0** | **-1.5** |
| **SLTI** | **Sal'it** | **8.58** | **115** | P | **Pn** | **05 48 10.2** | **-1.3** |
| **SLTI** | **Sal'it** | **8.58** | **115** | S | **Sn** | **05 49 41.7** | **-4.9** |
| **BEIL** | **Beino** | **8.61** | **98** | *e*P | **Pn** | **05 48 10.9** | **-1.1** |
| **GEM** | **Giv'at Ha'Em** | **8.62** | **107** | P | **Pn** | **05 48 10.2** | **-1.8** |
| **GEM** | **Giv'at Ha'Em** | **8.62** | **107** | P | **Pn** | **05 48 10.7** | **-1.4** |
| **GEM** | **Giv'at Ha'Em** | **8.62** | **107** | S | **Sn** | **05 49 43.0** | **-4.6** |
| **NATI** | **Neve Ativ** | **8.65** | **107** | P | **Pn** | **05 48 11.5** | **-1.0** |
| **NATI** | **Neve Ativ** | **8.65** | **107** | P | **Pn** | **05 48 11.5** | **-1.0** |
| **NATI** | **Neve Ativ** | **8.65** | **107** | S | **Sn** | **05 49 44.0** | **-4.4** |
| **TREB** | **Trebinje** | **8.71** | **321** | *e*Pn | **Pn** | **05 48 10.7** | **-2.6** |
| **BRY** | **Bratogost** | **8.75** | **322** | *e*Pn | **Pn** | **05 48 12.2** | **-1.7** |
| **MMLI** | **Mount Malkishu** | **8.76** | **113** | P | **Pn** | **05 48 12.8** | **-1.3** |
| **MMLI** | **Mount Malkishu** | **8.76** | **113** | S | **Sn** | **05 49 45.9** | **-5.3** |
| **SALP** | **Salfit** | **8.77** | **115** | P | **Pn** | **05 48 13.4** | **-0.8** |
| **SALP** | **Salfit** | **8.77** | **115** | P | **Pn** | **05 48 13.0** | **-1.2** |
| **SALP** | **Salfit** | **8.77** | **115** | S | **Sn** | **05 49 45.9** | **-5.5** |
| **UPM** | **Unac-Piva** | **8.80** | **325** | *e*Pn | **Pn** | **05 48 14.0** | **-0.7** |
| **KSHT** | **Keshet** | **8.82** | **108** | S | **Sn** | **05 49 48.4** | **-4.2** |
| **KSHT** | **Keshet** | **8.82** | **108** | P | **Pn** | **05 48 13.8** | **-1.0** |
| **NBNS** | **Bani Suef** | **8.84** | **147** | P | **Pn** | **05 48 14.2** | **-1.0** |
| | baz=148 | | | | | | |
| **AMAZ** | **Amatzia** | **8.86** | **119** | P | **Pn** | **05 48 12.0** | **-3.4** |
| **AMAZ** | **Amatzia** | **8.86** | **119** | S | **Sn** | **05 49 48.6** | **-4.9** |
| **AMAZ** | **Amatzia** | **8.86** | **119** | P | **Pn** | **05 48 14.2** | **-1.1** |
| **KZIT** | **Kziot** | **8.87** | **124** | P | **Pn** | **05 48 14.1** | **-1.4** |
| **KZIT** | **Kziot** | **8.87** | **124** | S | **Sn** | **05 49 49.2** | **-4.7** |
| **KZIT** | **Kziot** | **8.87** | **124** | P | **Pn** | **05 48 14.1** | **-1.4** |
| **SHMJ** | **Saham** | **8.89** | **110** | P | **Pn** | **05 48 15.3** | **-0.5** |
| **RUDO** | **Rudo** | **8.92** | **328** | *e*Pn | **Pn** | **05 48 14.3** | **-1.8** |
| **QRNJ** | **Al-Qirein** | **8.93** | **113** | P | **Pn** | **05 48 14.5** | **-1.7** |
| **HMDT** | **Nahal Hemdat** | **8.93** | **113** | P | **Pn** | **05 48 15.5** | **-0.7** |
| **HMDT** | **Nahal Hemdat** | **8.93** | **113** | P | **Pn** | **05 48 15.1** | **-1.2** |
| **UJAP** | **Al Uja** | **9.03** | **115** | P | **Pn** | **05 48 17.2** | **-0.4** |
| **UJAP** | **Al Uja** | **9.03** | **115** | P | **Pn** | **05 48 16.4** | **-1.2** |
| **YTIR** | **Yattir** | **9.10** | **119** | P | **Pn** | **05 48 17.7** | **-0.9** |
| **YTIR** | **Yattir** | **9.10** | **119** | P | **Pn** | **05 48 17.6** | **-1.1** |
| **YTIR** | **Yattir** | **9.10** | **119** | S | **Sn** | **05 49 54.8** | **-4.5** |
| **BBLS** | **Lazi&#263i** | **9.11** | **329** | *e*Pn | **Pn** | **05 48 17.8** | **-0.9** |
| **STON** | **Ston** | **9.16** | **319** | *e*Pn | **Pn** | **05 48 15.5** | **-3.8** |
| **DSI** | **Dead Sea** | **9.17** | **117** | P | **Pn** | **05 48 18.6** | **-0.9** |
| **DSI** | **Dead Sea** | **9.17** | **117** | S | **Sn** | **05 49 56.3** | **-4.7** |
| **WDD** | **Wied Dalam** | **9.18** | **271** | | **Pn** | **05 48 19.3** | **-0.2** |
| **VAE** | **Valguarnera** | **9.26** | **281** | P | **Pn** | **05 48 23.0** | **+2.4** |
| | comp=N,11nm,0.4s,baz=291,slow=9.6,SNR=9.0 | | | | | | |
| **MLR** | **Muntele Rosu** | **9.29** | **0** | Pn | **Pn** | **05 48 20.5** | **-0.6** |
| **LISJ** | **El Lisan** | **9.42** | **119** | P | **Pn** | **05 48 22.6** | **-0.3** |
| **GHAJ** | **Ghor Haditha** | **9.45** | **118** | | **Pn** | **05 48 23.9** | **+0.7** |
| **GHAJ** | **Ghor Haditha** | **9.45** | **118** | P | **Pn** | **05 48 23.6** | **+0.4** |
| **HAPS** | **Han Pijesak,Bl** | **9.48** | **328** | *e*Pn | **Pn** | **05 48 22.6** | **-1.1** |
| **KRMI** | **Paran Flat** | **9.60** | **127** | S | **Sn** | **05 50 06.6** | **-4.8** |
| **KRMI** | **Paran Flat** | **9.60** | **127** | P | **Pn** | **05 48 23.7** | **-1.6** |
| **ZFRI** | **Zfri** | **9.62** | **123** | P | **Pn** | **05 48 23.5** | **-2.0** |
| **ZFRI** | **Zfri** | **9.62** | **123** | P | **Pn** | **05 48 24.3** | **-1.2** |
| **ZFRI** | **Zfri** | **9.62** | **123** | S | **Sn** | **05 50 06.9** | **-4.9** |
| **SGRT** | **San Giovanni R** | **9.62** | **308** | Pn | **Pn** | **05 48 23.8** | **-1.8** |
| **PRNI** | **Paran** | **9.63** | **125** | P | **Pn** | **05 48 24.3** | **-1.4** |
| **PRNI** | **Paran** | **9.63** | **125** | S | **Sn** | **05 50 07.1** | **-5.0** |
| **PRNI** | **Paran** | **9.63** | **125** | P | **Pn** | **05 48 24.6** | **-1.1** |
| **TEKS** | **Tekeris** | **9.63** | **332** | *e*Pn | **Pn** | **05 48 24.5** | **-1.1** |
| **HRFI** | **Mount Harif** | **9.85** | **126** | P | **Pn** | **05 48 27.1** | **-1.6** |
| **HRFI** | **Mount Harif** | **9.85** | **126** | P | **Pn** | **05 48 27.7** | **-1.0** |
| **HRFI** | **Mount Harif** | **9.85** | **126** | S | **Sn** | **05 50 12.7** | **-4.9** |
| **MBRI** | **Mt Berech** | **9.93** | **127** | P | **Pn** | **05 48 29.1** | **-0.8** |
| **MBRI** | **Mt Berech** | **9.93** | **127** | P | **Pn** | **05 48 28.9** | **-0.9** |
| **ASF** | **Jabal al Asfar** | **9.99** | **110** | P | **Pn** | **05 48 31.0** | **+0.3** |
| | comp=N,4.4nm,0.3s,baz=227,slow=0.0,SNR=13 | | | | | | |
| ASF | | | | S | **Sn** | **05 50 21.0** | **-0.1** |
| | comp=N,5.1nm,0.4s,baz=199,slow=0.2,SNR=2.9 | | | | | | |
| **ASF** | **Jabal al Asfar** | **9.99** | **110** | P | **Pn** | **05 48 31.6** | **+0.9** |
| **EIL** | **Elat** | **10.04** | **128** | P | **Pn** | **05 48 30.5** | **-0.7** |
| | comp=N,36nm,0.4s,baz=291,slow=2.3,SNR=185 | | | | | | |
| EIL | | | | S | **Sn** | **05 50 15.1** | **-7.0** |
| | comp=N,23nm,0.4s,baz=3.5,slow=21,SNR=9.7 | | | | | | |
| **EIL** | **Elat** | **10.04** | **128** | P | **Pn** | **05 48 30.2** | **-1.0** |
| **EIL** | **Elat** | **10.04** | **128** | S | **Sn** | **05 50 17.6** | **-4.5** |
| **EIL** | **Elat** | **10.04** | **128** | P | **Pn** | **05 48 30.2** | **-1.0** |
| **FRGS** | **Fruska Gora** | **10.05** | **335** | *e*Pn | **Pn** | **05 48 31.3** | **0.0** |
| **PAOL** | **Paolisi** | **10.06** | **302** | | **Pn** | **05 48 30.6** | **-0.8** |
| **AQBJ** | **Aqaba** | **10.07** | **127** | P | **Pn** | **05 48 31.7** | **+0.2** |
| **HSNJ** | **Maan** | **10.15** | **123** | P | **Pn** | **05 48 32.7** | **-0.1** |
| **CLTB** | **Caltabellotta** | **10.21** | **282** | Pn | **Pn** | **05 48 33.4** | **-0.1** |
| **BLY** | **Banja Luka** | **10.79** | **325** | *e*Pn | **Pn** | **05 48 39.6** | **-1.5** |
| **A050A** | **Klekovaca** | **10.90** | **322** | *e*Pn | **Pn** | **05 48 40.8** | **-1.9** |
| **INTR** | **Introdacqua** | **10.94** | **306** | Pn | **Pn** | **05 48 42.6** | **-0.6** |
| **A051A** | **Mrakovica** | **11.12** | **325** | *e*Pn | **Pn** | **05 48 43.1** | **-2.4** |
| **BUR08** | **Bucovina Ar. S** | **11.45** | **358** | Pn | **Pn** | **05 48 49.7** | **-0.3** |
| **CAMP** | **Campotosto** | **11.51** | **307** | | **Pn** | **05 48 50.1** | **-0.7** |
| **NRCA** | **Norcia** | **11.85** | **308** | | **Pn** | **05 48 54.4** | **-0.8** |
| **FDMO** | **Fiordimonte** | **11.97** | **309** | | **Pn** | **05 48 56.0** | **-0.8** |
| **CESX** | **Cesi** | **12.09** | **306** | Pn | **Pn** | **05 48 58.5** | **+0.2** |
| **BOJS** | **Bojanci** | **12.27** | **323** | *e*Pn | **Pn** | **05 48 58.6** | **-2.0** |
| **CEY** | **Cerknica** | **12.84** | **321** | *e*Pn | **Pn** | **05 49 05.5** | **-2.6** |
| **SKDS** | **Skadanscina** | **12.92** | **320** | *e*Pn | **Pn** | **05 49 06.1** | **-3.0** |
| **KOLS** | **Kolonicke sedl** | **13.00** | **349** | *e*P | **P** | **05 49 13.9** | **-1.6** |
| **VYHS** | **Vyhne** | **13.33** | **339** | *e*P | **Pn** | **05 49 16.1** | **+1.8** |
| **OBKA** | **Obir** | **13.33** | **324** | *e*Pn | **Pn** | **05 49 12.6** | **-1.8** |
| | comp=N,1.0nm,0.2s | | | | | | |
| **OBKA** | **Obir** | **13.33** | **324** | *e*Pn | **Pn** | **05 49 11.1** | **-3.3** |
| **KEST** | **Kesra** | **13.38** | **273** | P | **Pn** | **05 49 16.1** | **+1.1** |
| | comp=N,3.5nm,0.6s,baz=108,slow=13,SNR=9.5 | | | | | | |
| KEST | | | | S | **Sn** | **05 51 35.1** | **-7.6** |
| | comp=N,1.4nm,0.5s,baz=257,slow=5.5,SNR=2.4 | | | | | | |
| **VSL** | **Villasalto** | **13.42** | **289** | Pn | **Pn** | **05 49 15.0** | **-0.6** |
| **SABO** | **M.te Sabotino** | **13.43** | **320** | Pn | **Pn** | **05 49 14.0** | **-1.6** |
| **ARSA** | **Arzberg** | **13.45** | **328** | *e*Pn | **Pn** | **05 49 14.5** | **-1.4** |
| | comp=N,1.0nm,0.3s | | | | | | |
| **RONA** | **Rosalia, Austr** | **13.50** | **331** | *e*Pn | **Pn** | **05 49 15.7** | **-0.9** |
| | comp=N,2.9nm,0.5s | | | | | | |
| **PRED** | **Cave del Predi** | **13.76** | **322** | | **Pn** | **05 49 18.3** | **-1.7** |
| **CONA** | **Conrad Observa** | **13.86** | **331** | *e*Pn | **Pn** | **05 49 20.7** | **-0.4** |
| | comp=N,0.3nm,0.2s | | | | | | |
| **STAL** | **STALIGIAL** | **14.08** | **320** | | **Pn** | **05 49 22.2** | **-1.8** |
| **TEOL** | **Teolo** | **14.09** | **315** | | **Pn** | **05 49 22.0** | **-2.1** |
| **KARS** | **Kars** | **14.22** | **67** | Pn | **Pn** | **05 49 25.0** | **-0.9** |
| **KBA** | **Koelnbreinsper** | **14.32** | **323** | *e*Pn | **Pn** | **05 49 25.9** | **-1.2** |
| | comp=N,0.9nm,0.3s,SNR=8.3 | | | | | | |
| **MAUC** | **Maruska** | **14.40** | **339** | *e*P | **P** | **05 49 29.9** | **-1.3** |
| **MOA** | **Molln** | **14.46** | **327** | *e*Pn | **Pn** | **05 49 28.7** | **-0.1** |
| | comp=N,0.7nm,0.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **14.50** | **321** | *e*Pn | **Pn** | **05 49 27.4** | **-2.0** |
| | comp=N,5.6nm,0.5s,SNR=9.8 | | | | | | |
| **CTI** | **Castel Tesino** | **14.52** | **317** | Pn | **Pn** | **05 49 28.1** | **-1.5** |
| **KRUC** | **Moravsky** | **14.60** | **335** | *e*P | **Pn** | **05 49 31.2** | **+0.7** |
| **BIOA** | **Bad Ischl, Aus** | **14.62** | **326** | *e*Pn | **Pn** | **05 49 29.7** | **-1.1** |
| | comp=N,3.3nm,0.5s,SNR=6.2 | | | | | | |
| **OJC** | **Ojcow** | **14.69** | **345** | | **Pn** | **05 49 32.4** | **+0.8** |
| **KIEV** | **Kiev** | **14.70** | **8** | Pn | **Pn** | **05 49 31.4** | **-0.3** |
| **AKASG** | **Malin Array Be** | **14.70** | **8** | P | **Pn** | **05 49 32.5** | **+0.7** |
| **AKASG** | **Malin Array Be** | **14.70** | **8** | P | **Pn** | **05 49 32.3** | **+0.5** |
| | comp=N,3.0nm,0.5s,baz=199,slow=11,SNR=8.2 | | | | | | |
| **AKBB** | **Malin Array Si** | **14.70** | **8** | Pn | **Pn** | **05 49 32.0** | **+0.3** |
| **VRAC** | **Vranov** | **14.74** | **336** | *e*P | **Pn** | **05 49 33.0** | **+0.7** |
| **VRAC** | **Vranov** | **14.74** | **336** | P | **Pn** | **05 49 32.5** | **+0.2** |
| | comp=N,5.2nm,0.7s,baz=152,slow=7.7,SNR=6.5 | | | | | | |
| **MSSA** | **Maissana** | **14.85** | **308** | Pn | **Pn** | **05 49 32.9** | **-0.9** |
| **MORC** | **Moravsky Berou** | **14.86** | **339** | | **Pn** | **05 49 32.7** | **-1.1** |
| **MORC** | **Moravsky Berou** | **14.86** | **339** | *e*P | **Pn** | **05 49 34.8** | **+1.1** |
| **LESA** | **Schwarzleotal** | **14.88** | **323** | *e*Pn | **Pn** | **05 49 33.0** | **-1.1** |
| | comp=N,4.7nm,0.5s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **15.19** | **330** | *e*P | **P** | **05 49 39.2** | **-0.7** |
| **WTTA** | **Wattenberg** | **15.29** | **321** | *e*Pn | **Pn** | **05 49 39.8** | **+0.4** |
| | comp=N,7.6nm,0.4s,SNR=13 | | | | | | |
| **KRLC** | **Kraliky** | **15.35** | **337** | *e*P | **P** | **05 49 41.1** | **-0.6** |
| **WATA** | **Walderalm** | **15.37** | **321** | *i* Pn | **Pn** | **05 49 40.2** | **-0.1** |
| | comp=N,3.9nm,0.5s,SNR=7.1 | | | | | | |
| **GEC2** | **GERESS Array S** | **15.46** | **329** | | **Pn** | **05 49 41.9** | **+0.5** |
| GEC2 | | | | IAmb | IAmb | 05 49 45.6 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **15.46** | **329** | P | **Pn** | **05 49 40.9** | **-0.4** |
| **GERES** | **GERESS Array B** | **15.46** | **329** | P | **P** | **05 49 42.6** | **-0.4** |
| | comp=Z,5.0nm,0.7s,baz=157,slow=18,SNR=20 | | | | | | |
| **SQTA** | **Sankt Quirin** | **15.49** | **320** | *e*Pn | **Pn** | **05 49 42.0** | **+0.3** |
| | comp=Z,10.0nm,0.5s,SNR=8.8 | | | | | | |

**FETA Feichten** 15.62 318 *e*Pn P 05 49 44.3 -0.5
comp=Z,6.9nm,0.6s,SNR=19
**MOTA Moosalm** 15.62 320 *e*Pn Pn 05 49 43.9 +0.5
comp=Z,1.1nm,0.2s
**FUORN Ofenpass-Fuorn** 15.63 317 Pn Pn 05 49 42.2 -1.4
FUORN IAmb IAmb 05 49 48.2
comp=Z,8.5nm,0.9s
**ZVC Zvikov** 15.73 331 *e*P P 05 49 45.6 -0.2
**DPC Dobruska-Polom** 15.73 337 *e*P P 05 49 45.5 -0.4
**KHC Kasperske Hory** 15.73 329 Pn Pn 05 49 43.5 -1.1
KHC IAmb IAmb 05 49 49.3
comp=Z,13nm,1.1s
**KHC Kasperske Hory** 15.73 329 *e*P P 05 49 45.9 -0.1
**GOPC GO Pecny, Ondr** 15.89 333 *e*P P 05 49 47.4 -0.2
**RETA Reutte** 15.89 320 *e*Pn Pn 05 49 47.2 +0.5
comp=Z,1.9nm,0.4s,SNR=8.9
**DAVOX Davos/Dischmat** 15.94 316 P P 05 49 50.1 +1.8
comp=Z,5.0nm,0.5s,baz=112,slow=11,SNR=20
**UPC Upice** 15.97 337 *e*P P 05 49 50.2 +1.7
**PRU Pruhonice** 16.04 333 *e*P P 05 49 49.4 +0.1
**DAVA Damuels** 16.24 318 *e*Pn P 05 49 52.1 +0.4
comp=Z,3.6nm,0.3s,SNR=12
**BRG Berggiesshubel** 16.99 333 *e*P Pn 05 50 01.1 +1.1
BRG Amp 05 50 02.4
comp=Z,8.3nm,0.7s
**BNI Bardonecchia** 17.00 307 P P 05 49 58.5 -1.5
**GRA1 Grafenberg Arr** 17.18 326 P P 05 50 00.2 -1.6
GRA1 IAmb IAmb 05 50 06.2
comp=Z,29nm,1.5s
**GRFO Grafenberg** 17.18 326 P P 05 50 00.4 -1.4
GRFO IAmb IAmb 05 50 06.1
comp=Z,28nm,1.5s
**STU Stuttgart** 17.52 321 P P 05 50 04.9 -0.7
STU IAmb IAmb 05 50 08.8
comp=Z,15nm,0.8s
**CLL Collm** 17.68 333 P P 05 50 06.0 -1.3
CLL IAmb IAmb 05 50 09.9
comp=Z,14nm,0.7s
**CLL Collm** 17.68 333 *i* P Pn 05 50 09.0 +0.7
comp=Z,15nm,0.7s
CLL *ex* x 05 50 19.0
CLL *es*P **sP** 05 50 45.0 -1.7
**BFO Black Forest** 17.70 319 P P 05 50 06.5 -1.1
BFO IAmb IAmb 05 50 10.7
comp=Z,6.9nm,0.7s
**SUW Suwalki** 17.91 355 P P 05 50 08.8 -1.0
**ECH Echery** 18.27 317 P P 05 50 12.6 -1.3
**SSB Saint Sauveur** 18.47 306 P P 05 50 14.8 -1.3
**NACGM Naroch** 18.72 2 *e*P P 05 50 17.6 -1.1
comp=Z,618nm,0.7s,baz=182
**WLF Walferdange** 19.65 319 *d*P P 05 50 30.1 +1.3
comp=Z,7.8nm,0.8s
**BHOU Houvegnez** 20.13 321 *d*P Pn 05 50 35.7 -1.4
comp=Z,5.5nm,0.9s
**BTNL Ternell** 20.21 322 *d*P P 05 50 36.1 +1.2
comp=Z,8.0nm,0.9s
**MEM Membach** 20.29 321 *d*P P 05 50 37.1 +1.5
comp=Z,14nm,0.9s
**BSD Bornholm Skovb** 20.36 342 *i* P P 05 50 35.4 -0.9
BSD IAmb IAmb 05 50 58.9
comp=Z,44nm,1.2s
**RCHB Rochefort** 20.42 320 *d*P P 05 50 37.6 +0.6
comp=Z,5.1nm,0.9s
**BSTI Sart Tilman** 20.50 321 *d*P Pn 05 50 39.7 -1.6
comp=Z,2.4nm,0.9s
**BCLA Clavier** 20.53 320 *d*P P 05 50 39.3 +1.1
comp=Z,7.8nm,0.9s
**BGES Gesves** 20.62 320 *d*P P 05 50 40.8 +1.6
comp=Z,5.9nm,1.0s
**DOU Dourbes** 20.72 319 *d*P P 05 50 40.9 +0.6
comp=Z,9.5nm,0.7s
**BMRD Maredsous** 20.75 319 *d*P P 05 50 39.4 -1.2
comp=Z,3.4nm,0.7s
**LUNU Lund** 21.20 340 *i* P P 05 50 45.6 +0.2
**BJUU Bjuv** 21.71 340 *i* P P 05 50 50.4 -0.3
**DEL Delary** 21.84 342 *i* P P 05 50 49.0 -3.1
**FABU Falkenberg** 22.60 341 *i* P P 05 50 58.8 -1.0
**BORU Boraas** 23.15 342 *i* P P 05 51 03.6 -1.4
**ESDC Sonseca Array** 23.71 287 P P 05 51 11.6 +1.2
comp=Z,2.2nm,0.6s,baz=80,slow=10,SNR=35
comp=Z,2.2nm,0.6s
**TJOU Tjoern** 23.79 341 *i* P P 05 51 07.7 -3.1
**HFS Hagfors** 25.20 346 P P 05 51 22.4 -1.2
comp=Z,2.0nm,0.9s,baz=156,slow=11,SNR=9.0
comp=Z,2.0nm,0.9s
**FINES FINESS Array B** 25.27 0 P P 05 51 22.8 -1.4
comp=Z,1.8nm,0.9s,baz=162,slow=11,SNR=5.7
comp=Z,1.8nm,0.9s
**NOA NORSAR Array B** 26.55 344 P P 05 51 34.7 -1.1
comp=Z,0.8nm,0.8s,baz=146,slow=10,SNR=1.6
comp=Z,0.8nm,0.8s
**EKA Eskdalemuir Ar** 27.53 323 P P 05 51 45.0 +0.4
comp=Z,2.6nm,0.3s,baz=120,slow=9.2,SNR=18
comp=Z,2.6nm,0.3s
**ESK Eskdalemuir** 27.55 323 P P 05 51 44.0 -0.7
**EKB Eskdalemuir** 27.55 323 P P 05 51 44.5 -0.2
**TORD Torodi Ar. Bea** 31.58 230 P P 05 52 20.6 -0.2
TORD IAmb IAmb 05 52 23.4
comp=Z,5.2nm,1.5s
**TORD Torodi Ar. Bea** 31.58 230 P P 05 52 22.6 +1.8
comp=Z,2.5nm,0.3s,baz=32,slow=9.1,SNR=52
comp=Z,2.5nm,0.3s
**ARCES ARCESS Array B** 33.40 360 P P 05 52 35.3 -0.7
ARCES IAmb IAmb 05 52 48.6
comp=Z,9.5nm,1.4s
**ARCES ARCESS Array B** 33.40 360 P P 05 52 35.3 -0.7
comp=Z,0.6nm,0.4s,baz=171,slow=8.6,SNR=8.8
comp=Z,0.6nm,0.4s
**BVAR Borovoye Array** 35.23 47 P P 05 52 53.8 +1.7
comp=Z,0.3nm,0.4s,baz=247,slow=10,SNR=2.4
comp=Z,0.3nm,0.4s
**KSH Kashi** 39.31 70 P P 05 53 27.1 +0.3
KSH pmax pmax
comp=Z,5.0nm,0.5s
**KURBB Kurchatov Arra** 40.04 52 P P 05 53 33.8 +1.3
comp=Z,1.8nm,0.5s,baz=276,slow=8.6,SNR=18
comp=Z,1.8nm,0.5s
**DBIC Dimbokro** 40.65 231 P P 05 53 39.5 +1.6
comp=Z,6.1nm,0.7s,baz=26,slow=8.4,SNR=8.6
comp=Z,6.1nm,0.7s
**MK31 Makanchi Array** 42.74 58 P P 05 53 54.8 +0.2
**MKAR Makanchi Array** 42.74 58 P P 05 53 56.3 +1.6
comp=Z,1.3nm,0.4s,baz=282,slow=6.6,SNR=19
comp=Z,1.3nm,0.4s
**ZAA0 Zalesovo Array** 43.89 47 P P 05 54 03.6 0.0
**ZALV Zalesovo Beam** 43.89 47 P P 05 54 04.1 +0.4
**ZALV Zalesovo Beam** 43.89 47 P P 05 54 04.5 +0.8
comp=Z,1.3nm,0.3s,baz=270,slow=7.7,SNR=6.1
comp=Z,1.3nm,0.3s
**SONM Songino Array** 58.40 51 P P 05 55 54.0 +1.7
comp=Z,0.5nm,0.5s,baz=304,slow=10,SNR=2.0
comp=Z,0.5nm,0.5s
**SCHQ Schefferville** 62.76 319 P P 05 56 22.1 +0.6
comp=Z,2.2nm,0.5s,baz=65,slow=6.0,SNR=10.0
comp=Z,2.2nm,0.5s
**PZH PanZhiHua** 64.05 75 P P 05 56 30.1 -0.5
**BOSA Boshof** 64.47 181 P P 05 56 35.8 +2.7
comp=Z,2.4nm,0.4s,baz=3.4,slow=6.4,SNR=16
comp=Z,2.4nm,0.4s
**HHC Hu-ho-hao-te** 64.60 57 *e*P P 05 56 33.8 -0.2
**CMAR Chiang Mai Arr** 65.91 84 P P 05 56 43.9 +1.3
comp=Z,1.3nm,0.3s,baz=294,slow=8.3,SNR=4.1
comp=Z,1.3nm,0.3s
**KSRS Korea Array** 77.21 53 P P 05 57 51.0 +1.0
comp=Z,1.0nm,0.6s,baz=306,slow=4.9,SNR=4.9
comp=Z,1.0nm,0.6s
**BDFB Brasilia** 86.61 248 P P 05 58 42.5 +2.9
comp=Z,2.0nm,1.0s,baz=122,slow=9.5,SNR=3.4
comp=Z,2.0nm,1.0s
**QSPA South Pole Qui** 126.05 180 PKhKP PKPpre 06 04 54.0
comp=Z,0.3nm,0.4s,baz=222,slow=0.2,SNR=9.4
QSPA PKP **PKiKP** 06 04 56.9 +0.3
comp=Z,0.3nm,0.4s,baz=212,slow=0.7,SNR=1.2

*NEIC* ***19*** *05:49:40.4±0.8, 17.8°S±0.2°×177.9°W±0.1, h572km±13km, mb4.1/18, Error ellipse: s-maj=34.5km s-min=7.6km az=156.0*
*IDC* ***19*** *05:49:43.0±4.8, 18.03°S×178.16°W, h587km±57km, mb3.4/9, mbtmp4.3/10, Error ellipse: s-maj=28.6km s-min=22.4km az=132.0*
**ISC 19 05:49:42.3±0.7, 18.0°S±0.2°×178.01°W±0.1°0, h590km, n35, σ1°9°09/34, mb4.1/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**MSVF Nonsavu** 3.76 274 P P 05 51 02.9 -2.6
**AFI Afiamalu** 7.26 57 P P 05 51 29.1 -5.3
**NIUE Niue** 7.74 99 P P 05 51 36.3 -2.6
**DZM Mont Dzumac** 15.15 252 P P 05 52 53.1 +0.8
DZM IAmb IAmb 05 52 57.9
comp=Z,5.5nm,0.9s
**DZM Mont Dzumac** 15.15 252 P P 05 52 52.8 +0.5
comp=Z,4.4nm,0.6s,baz=124,slow=22,SNR=8.7
**EIDS Eidsvold** 29.58 250 P P 05 55 00.8 -0.3
EIDS IAmb IAmb 05 55 20.2
comp=Z,5.8nm,1.1s
**ARMA Armidale** 30.21 240 P P 05 55 06.5 0.0
ARMA IAmb IAmb 05 55 25.1
comp=Z,4.9nm,0.9s
**CTA Charters Tower** 33.80 261 P P 05 55 35.7 -1.2
comp=Z,0.4nm,0.6s,baz=82,slow=8.9,SNR=11
**CTAO Charters Tower** 33.80 261 P P 05 55 36.5 -0.5
CTAO IAmb IAmb 05 55 36.9
comp=Z,7.1nm,0.8s
**CAN Canberra** 33.94 233 P P 05 55 38.0 0.0
**TOO Toolangi** 37.39 231 P P 05 56 07.2 +0.8
TOO IAmb IAmb 05 56 17.3
comp=Z,12nm,1.1s
**COEN Coen** 37.48 270 P P 05 56 07.2 -0.2
**STKA Stephens Creek** 38.91 241 P P 05 56 19.2 +0.5
**STKA Stephens Creek** 38.91 241 P P 05 56 19.2 +0.5
comp=Z,4.8nm,0.5s,baz=102,slow=9.2,SNR=5.9
comp=Z,4.8nm,0.5s
**BBOO Buckleboo** 43.68 241 P P 05 56 56.1 -0.2
**WR0 Warramunga Arr** 44.79 260 P P 05 57 04.7 -0.3
**WB0 Warramunga Arr** 44.95 260 P P 05 57 05.8 -0.5
WB0 IAmb IAmb 05 57 05.9
comp=Z,6.3nm,0.8s
**WB2 Warramunga Arr** 44.97 260 P P 05 57 05.6 -0.9
WB2 IAmb IAmb 05 57 05.7
comp=Z,9.3nm,1.1s
**WRA Warramunga Arr** 44.98 260 P P 05 57 05.8 -0.7
**WRA Warramunga Arr** 44.98 260 P P 05 57 05.6 -0.9
comp=Z,2.9nm,0.5s,baz=96,slow=7.2,SNR=12
comp=Z,2.9nm,0.5s
**AS31 Alice Springs** 45.12 254 P P 05 57 07.4 -0.2
**ASAR Alice Springs** 45.12 254 P P 05 57 07.0 -0.6
**ASAR Alice Springs** 45.12 254 P P 05 57 07.2 -0.4
comp=Z,22nm,0.7s,baz=88,slow=8.7,SNR=42
comp=Z,22nm,0.7s
**KNRA Kununurra** 50.85 264 P P 05 57 49.6 -0.5
KNRA IAmb IAmb 05 57 50.2
comp=Z,4.9nm,0.7s
**PSA00 Pilbara Seismi** 58.24 255 P P 05 58 41.4 -0.4
PSA00 IAmb IAmb 05 58 42.2
comp=Z,11nm,1.1s
**NWAO Narrogin (SRO)** 59.49 242 P P 05 58 51.6 +1.7
comp=Z,12nm,1.0s,baz=108,slow=4.2,SNR=3.3
comp=Z,12nm,1.0s
**GIRL Giralia** 63.22 253 P P 05 59 15.7 +1.3
**QSPA South Pole Qui** 72.04 180 P P 06 00 08.6 +1.2
QSPA IAmb IAmb 06 00 08.9
comp=Z,2.7nm,0.8s
**QSPA South Pole Qui** 72.04 180 P P 06 00 08.4 +1.1
comp=Z,1.9nm,0.7s,baz=231,slow=2.2,SNR=9.7
comp=Z,1.9nm,0.7s
**NVAR Mina Array Bea** 79.24 44 P P 06 00 49.4 +1.7
comp=Z,0.7nm,0.7s,baz=227,slow=9.4,SNR=6.2
comp=Z,0.7nm,0.7s
**TXAR Lajitas Array** 85.74 57 P P 06 01 22.6 +2.2
comp=Z,1.4nm,0.9s,baz=216,slow=5.8,SNR=11
comp=Z,1.4nm,0.9s
**PDAR Pinedale Array** 87.17 43 P P 06 01 27.1 +0.1
comp=Z,0.4nm,0.7s,baz=212,slow=4.9,SNR=3.6
comp=Z,0.4nm,0.7s
**SNAA Sanae** 90.48 178 P P 06 01 40.8 -0.8
comp=Z,1.4nm,1.0s,baz=319,slow=3.5,SNR=5.3
comp=Z,1.4nm,1.0s
**BRTR Keskin Array B** 145.12 315 PKPbc PKPab 06 08 15.6 -0.4
comp=Z,0.4nm,0.4s,baz=90,slow=1.5,SNR=2.5
**MMAI Mount Meron Ar** 146.52 303 PKPbc PKPbc 06 08 18.8 -0.1
comp=Z,0.8nm,0.4s,baz=44,slow=4.4,SNR=2.0

*IDC* ***19*** *05:51:45.7±1.4, 33.13°N×88.69°E, h0km, mb3.7/6, mbtmp3.7/9, ML4.2/2, MS4.6/1, Error ellipse: s-maj=43.8km s-min=28.0km az=68.0*
**ISC 19 05:51:50.8±1.0, 33.2°N±0.2°×88.9°E±0.2°, h35km, n13, σ0°85/11, mb3.9/5, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**CMAR Chiang Mai Arr** 17.27 146 P Pn 05 55 49.6 +0.3
0.6nm,0.3s,baz=316,slow=13,SNR=5.1
0.8nm,0.3s
**KURBB Kurchatov Arra** 18.97 339 P Pn 05 56 08.7 -1.1
2.9nm,1.1s,baz=141,slow=12,SNR=8.9
**SONM Songino Array** 19.69 37 P Pn 05 56 18.6 0.0
0.3nm,0.3s,baz=213,slow=10,SNR=2.5
0.5nm,0.5s
**ZALV Zalesovo Beam** 20.91 353 P Pn 05 56 29.8 -2.8
0.5nm,0.4s,baz=163,slow=10,SNR=3.9
0.5nm,0.4s
**BVAR Borovoye Array** 23.81 332 P P 05 57 01.2 +1.0
0.4nm,0.5s,baz=148,slow=8.5,SNR=3.2
0.4nm,0.5s
**WSAR Wadi Sarin** 28.35 257 LR LR 06 10 29.3
comp=Z,1μm,20.9s,baz=192,slow=40
**ARCES ARCESS Array B** 50.00 336 P P 06 00 41.7 +0.5
0.8nm,0.5s,baz=82,slow=8.9,SNR=6.7
0.8nm,0.5s
**HFS Hagfors** 54.58 324 P P 06 01 15.2 0.0
2.8nm,0.8s,baz=339,slow=2.1,SNR=4.1
2.8nm,0.8s
**NOA NORSAR Array B** 55.68 325 P P 06 01 23.1 -0.2
1.0nm,0.7s,baz=83,slow=7.1,SNR=3.4
1.0nm,0.7s
**GERES GERESS Array B** 56.54 310 P P 06 01 30.3 +0.6
0.5nm,0.6s,baz=140,slow=10,SNR=5.2
0.5nm,0.6s
**CPUP Villa Florida** 149.95 274 PKPbc PKiKP 06 11 36.9 -1.7
1.0nm,0.7s,baz=96,slow=7.2,SNR=3.4
**LPAZ La Paz** 153.24 304 PKPbc PKiKP 06 11 46.4 -0.1
4.2nm,0.8s,baz=181,slow=2.9,SNR=19
**LPAZ La Paz** 153.24 304 P PKiKP 06 11 46.4 -0.1

**IDC 19 05:53:41.6±11.0, 18.20°S×178.17W, h497km±130km, mb2.9/5, mbtmp3.8/5, Error ellipse: s-maj=54.9km s-min=31.6km az=30.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**URZ Urewera** 20.41 191 P P 05 57 44.1 +0.1
2.7nm,0.5s,baz=342,slow=3.2,SNR=2.1
2.7nm,0.5s
**WRA Warramunga Arr** 44.80 260 P P 06 01 10.3 -0.5
0.2nm,0.3s,baz=94,slow=6.9,SNR=1.7
0.2nm,0.3s
**ASAR Alice Springs** 44.93 254 P P 06 01 11.9 +0.1
1.4nm,0.6s,baz=88,slow=8.9,SNR=9.3
1.4nm,0.6s
**QSPA South Pole Qui** 71.86 180 P P 06 04 13.4 -0.1
1.0nm,1.1s,baz=72,slow=6.4,SNR=1.4
1.0nm,1.1s
**TXAR Lajitas Array** 85.96 58 P P 06 05 29.2 +0.1
0.3nm,0.7s,baz=218,slow=6.7,SNR=3.7
0.3nm,0.7s

*IDC* ***19*** *05:55:04.3±22.0, 18.07°S×177.85W, h538km±190km, mb3.2/5, mbtmp4.1/5, Error ellipse: s-maj=219.3km s-min=28.2km az=41.0*
**ISC 19 05:55:06.1±5.5, 18.2°S±0.6°×178.0W±0.5°, h550km, n6, σ0°34/6, mb3.8/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**URZ Urewera** 20.46 191 P P 05 59 06.0 -0.1
4.8nm,1.0s,baz=19,slow=4.1,SNR=3.2
4.8nm,1.0s
**CTA Charters Tower** 33.82 261 P P 06 01 03.6 +0.3
0.2nm,0.6s,baz=99,slow=11,SNR=2.6
**STKA Stephens Creek** 38.87 242 P P 06 01 44.7 0.0
2.6nm,0.6s,baz=76,slow=8.2,SNR=3.1
2.6nm,0.6s
**WRA Warramunga Arr** 45.00 260 P P 06 02 32.7 -0.5
1.4nm,0.5s,baz=95,slow=7.0,SNR=19
1.4nm,0.5s
**ASAR Alice Springs** 45.13 254 P P 06 02 34.0 -0.1
4.9nm,0.6s,baz=89,slow=8.6,SNR=27
4.9nm,0.6s
**QSPA South Pole Qui** 71.87 180 P P 06 05 33.5 +0.1
0.9nm,1.0s,baz=64,slow=4.9,SNR=1.6
0.9nm,1.0s

**IDC 19 05:55:44.2±3.2, 17.10°S×178.05W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=394.2km s-min=36.3km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**WRA Warramunga Arr** 45.12 259 P P 06 04 02.8 +0.1
0.6nm,0.5s,baz=92,slow=7.3,SNR=2.1
0.6nm,0.5s
**ASAR Alice Springs** 45.34 253 P P 06 04 04.2 -0.3
5.3nm,0.5s,baz=88,slow=9.3,SNR=9.2
5.3nm,0.5s
**TXAR Lajitas Array** 85.28 58 P P 06 08 23.3 -0.1
0.2nm,0.7s,baz=236,slow=6.4,SNR=2.1
0.2nm,0.7s

*NOU* ***19*** *05:55:21.4, 15.60°S×175.08W, h213km, mb4.5/9, Tonga Islands*
*IDC* ***19*** *05:56:08.7±3.3, 17.90°S×177.92W, h519km±36km, mb3.4/14, mbtmp4.3/15, Error ellipse: s-maj=18.1km s-min=15.7km az=71.0*
*NEIC* ***19*** *05:56:12.4±2.2, 18.0°S±0.2°×177.9W±0.1, h553km±7km, mb4.3/21, Error ellipse: s-maj=22.0km s-min=16.9km az=166.0*
**ISC 19 05:56:12.1±0.5, 18.0°S±0.1°×177.98W±0.08, h550km, n75, σ2°03/70, mb4.1/24, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

**MSVF Nonsavu** 3.79 273 P P 05 57 34.8 +2.3
**AFI Afiamalu** 7.21 57 P P 05 58 00.9 -1.3
**NIUE Niue** 7.71 99 P P 05 58 07.0 0.0
**RAO Raoul Island** 11.22 180 S S 06 00 40.2 -6.0
206nm,0.3s,baz=267,slow=23,SNR=6.3
**LIFNC LIFOU** 14.22 256 P P 05 59 12.2 -1.4
**PINNC Pines Island,** 14.43 249 P P 05 59 15.2 -0.5
**DZM Mont Dzumac** 15.20 252 P P 05 59 22.5 -1.2
**DZM Mont Dzumac** 15.20 252 P P 05 59 22.7 -1.0
DZM IAmb IAmb 05 59 26.4
comp=Z,7.6nm,0.6s
**DZM Mont Dzumac** 15.20 252 P P 05 59 22.1 -1.6
comp=Z,6.2nm,0.6s,baz=275,slow=22,SNR=16
**NOUC Port Laguerre** 15.33 252 P P 05 59 24.6 -0.4
**KOUNC Koumac, New Ca** 16.94 258 P P 05 59 40.7 +0.4
**KOUNC Koumac, New Ca** 16.94 258 P P 05 59 41.0 +0.6
**OUZ Omahuta** 18.74 202 P P 05 59 59.3 +2.8
**KUZ Kuaotunu** 19.50 195 P P 06 00 04.5 +1.0
**URZ Urewera** 20.66 191 P P 06 00 11.8 -2.1
**URZ Urewera** 20.66 191 P P 06 00 11.3 -2.6
comp=Z,4.9nm,0.4s,baz=344,slow=2.1,SNR=12
comp=Z,4.9nm,0.4s
**HNR Honiara** 23.05 289 P P 06 00 27.0 -8.7
**EIDS Eidsvold** 29.63 250 P P 06 01 33.8 +0.4
EIDS IAmb IAmb 06 01 34.2
comp=Z,5.1nm,0.9s
**ARMA Armidale** 30.26 240 P P 06 01 39.7 +0.7
ARMA IAmb IAmb 06 01 49.9
comp=Z,8.2nm,1.1s
**CTA Charters Tower** 33.84 261 P P 06 02 09.1 -0.3
comp=Z,0.2nm,0.6s,baz=103,slow=6.4,SNR=6.6
**PMG Port Moresby** 34.88 279 P P 06 02 19.0 +0.9
PMG IAmb IAmb 06 02 30.8
comp=Z,15nm,1.1s
**TOO Toolangi** 37.45 231 P P 06 02 40.1 +1.0
**MANU Manus Island** 37.51 291 pwP 06 04 18.6 +1.5
**COEN Coen** 37.52 270 P P 06 02 40.5 +0.5
COEN IAmb IAmb 06 02 41.2
comp=Z,7.6nm,0.9s
**STKA Stephens Creek** 38.96 241 P P 06 02 52.2 +0.8
**STKA Stephens Creek** 38.96 241 P P 06 02 50.9 -0.5
comp=Z,1.9nm,0.5s,baz=87,slow=7.2,SNR=3.4
comp=Z,1.9nm,0.5s
**BBOO Buckleboo** 43.73 241 P P 06 03 28.8 -0.3
BBOO IAmb IAmb 06 03 47.4
comp=Z,10.0nm,1.1s
**WR0 Warramunga Arr** 44.83 260 P P 06 03 37.5 -0.4
WR0 IAmb IAmb 06 03 39.5
comp=Z,5.1nm,1.1s
**WB0 Warramunga Arr** 44.99 260 P P 06 03 38.5 -0.5
WB0 IAmb IAmb 06 03 38.6
comp=Z,5.9nm,0.7s
**WB2 Warramunga Arr** 45.01 260 P P 06 03 38.3 -0.9
WB2 IAmb IAmb 06 03 38.8
comp=Z,6.8nm,0.8s
**WRA Warramunga Arr** 45.02 260 P P 06 03 38.4 -0.9
**WRA Warramunga Arr** 45.02 260 P P 06 03 38.5 -0.8
comp=Z,3.7nm,0.5s,baz=95,slow=7.3,SNR=38
WRA PcP **PcP** 06 05 07.4 -1.2
comp=Z,1.1nm,0.8s,baz=87,slow=4.1,SNR=4.8
comp=Z,3.7nm,0.5s
**AS31 Alice Springs** 45.17 254 P P 06 03 40.0 -0.4
AS31 IAmb IAmb 06 03 40.8
comp=Z,4.7nm,0.7s
**ASAR Alice Springs** 45.17 254 P P 06 03 39.8 -0.6
comp=Z,18nm,0.6s,baz=87,slow=8.3,SNR=85
ASAR PcP **PcP** 06 05 08.2 -0.9
comp=Z,2.7nm,0.8s,baz=98,slow=4.1,SNR=7.7
comp=Z,18nm,0.6s
**MTN Manton Dam** 49.21 268 P P 06 04 09.3 -1.5
MTN IAmb IAmb 06 04 10.1
comp=Z,8.0nm,0.7s
MTN **pP** 06 05 53.2 +0.2
**FORT Forrest** 50.35 245 P P 06 04 18.0 -1.0
**FITZ Fitzroy Crossi** 53.42 261 P P 06 04 41.0 -0.3
**MORW Morawa** 60.83 246 P P 06 05 30.8 -0.9
**GIRL Giralia** 63.27 253 P P 06 05 48.0 +0.5
**MJAR Matsushiro Arr** 68.21 323 P P 06 06 15.8 -2.3
comp=Z,3.0nm,0.8s,baz=153,slow=5.7,SNR=9.9
comp=Z,3.0nm,0.8s
**QSPA South Pole Qui** 72.08 180 P P 06 06 40.9 +0.2
**QSPA South Pole Qui** 72.08 180 P P 06 06 41.1 +0.4
comp=Z,1.7nm,0.6s,baz=315,slow=0.3,SNR=16
comp=Z,1.7nm,0.6s
**PETK Petropavlovsk-** 73.85 345 P P 06 06 49.3 -1.4
comp=Z,5.7nm,0.8s,baz=174,slow=6.0,SNR=5.3
comp=Z,5.7nm,0.8s
**KSRS Korea Array** 75.03 318 P P 06 06 57.6 -0.1
comp=Z,0.9nm,0.7s,baz=130,slow=5.7,SNR=3.2
comp=Z,0.9nm,0.7s
**NVAR Mina Array Bea** 79.19 44 P P 06 07 20.3 -0.4
comp=Z,0.7nm,0.7s,baz=228,slow=8.2,SNR=7.1
comp=Z,0.7nm,0.7s
**BELA Belgrano 2** 82.04 173 P P 06 07 34.0 -0.5
**BWN Browne** 84.80 12 pP 06 09 44.6 -2.0
**JLU Jordanelle** 84.85 45 pwP 06 09 52.9 +2.2
**TXAR Lajitas Array** 85.69 57 P P 06 07 54.0 +0.5
comp=Z,0.7nm,0.7s,baz=216,slow=6.2,SNR=11
comp=Z,0.7nm,0.7s
**ILAR Eielson Array** 85.86 13 P P 06 07 51.0 -2.3
comp=Z,1.5nm,1.0s,baz=224,slow=6.4,SNR=6.0
comp=Z,1.5nm,1.0s
**PDAR Pinedale Array** 87.12 43 P P 06 07 59.2 -0.9
comp=Z,0.4nm,0.6s,baz=198,slow=4.2,SNR=5.1
comp=Z,0.4nm,0.6s
**CMAR Chiang Mai Arr** 89.30 290 P P 06 08 10.8 +0.2
comp=Z,1.8nm,0.6s,baz=109,slow=3.4,SNR=8.1
comp=Z,1.8nm,0.6s
**SNAA Sanae** 90.52 178 P P 06 08 14.2 -1.1
comp=Z,1.1nm,1.0s,baz=200,slow=17,SNR=5.1
comp=Z,1.1nm,1.0s
**HILA High Level** 91.09 27 P P 06 08 17.2 -0.6
**M44A Midewin, Midew** 101.61 50 pwP 06 11 09.1 -0.5
**AKASG Malin Array Be** 140.81 333 PP PP 06 17 45.9 -0.9
comp=Z,3.0nm,0.8s,baz=44,slow=4.2,SNR=4.0
**OJC Ojcow** 144.82 340 PKPdf 06 14 46.0 -0.6
**BUR08 Bucovina Ar. S** 144.85 332 PKPdf 06 14 47.3 +0.5
**BRTR Keskin Array B** 145.12 315 PKPbc PKPdf 06 14 47.1 -0.4
comp=Z,2.6nm,0.7s,baz=134,slow=4.5,SNR=13
**MMAI Mount Meron Ar** 146.53 303 PKPbc PKPdf 06 14 52.1 +2.0
comp=Z,3.8nm,0.5s,baz=55,slow=7.3,SNR=6.2
**GERES GERESS Array B** 147.78 345 PKPbc PKPdf 06 14 54.4 +2.7
comp=Z,2.4nm,0.8s,baz=162,slow=5.6,SNR=12
**CONA Conrad Observa** 148.06 342 *i* PKP PKPdf 06 14 55.0 +2.9
comp=Z,0.3nm,0.2s
**RONA Rosalia, Austr** 148.13 342 *i* PKP PKPdf 06 14 55.2 +3.0
comp=Z,1.8nm,0.5s
**ARSA Arzberg** 148.77 342 *i* PKP PKPdf 06 14 56.3 +3.1
comp=Z,0.4nm,0.4s
**LESA Schwarzleotal** 149.36 346 *e*PKP PKPdf 06 14 58.0 +3.7
comp=Z,1.7nm,0.6s
**KBA Koelnbreinsper** 149.52 345 *i* PKP PKPdf 06 14 57.5 +2.9

comp=Z,1.2nm,0.5s
**WATA Walderalm 149.69 347** *e*PKP **PKPdf 06 14 58.7 +3.9**
comp=Z,2.6nm,0.5s
**RETA Reutte 149.71 348** *e*PKP **PKPdf 06 14 58.7 +3.9**
comp=Z,1.4nm,0.5s
**WTTA Wattenberg 149.74 347** *e*PKP **PKPdf 06 14 59.0 +4.0**
comp=Z,4.8nm,0.6s
**MOTA Moosalm 149.78 348** *e*PKP **PKPdf 06 14 58.8 +3.8**
comp=Z,0.7nm,0.4s
**SQTA Sankt Quirin 149.87 347** *i* PKP **PKPdf 06 14 59.2 +4.1**
comp=Z,3.0nm,0.5s
**ABTA Abfaltersbach 150.03 345** *e*PKP **PKPdf 06 14 59.0 +3.7**
comp=Z,4.5nm,0.6s
**DAVA Damuels 150.06 349** *i* PKP **PKPdf 06 15 00.3 +4.8**
comp=Z,1.0nm,0.4s
**FETA Feichten 150.16 348** *i* PKP **PKPdf 06 15 00.3 +4.7**
comp=Z,0.9nm,0.4s
**DAVOX Davos/Dischmat 150.55 349** PKPbc **PKPdf 06 15 00.9 +4.6**
comp=Z,5.3nm,0.6s,baz=164,slow=0.9,SNR=19

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*IDC* ***19*** *05:56:12.6±3.0,23˚.37N×144˚.09E,h0km,mb4.2/7, mbtmp4.1/9,ML3.1/2, Error ellipse: s-maj=122.0km s-min=27.1km az=77.0*
*NEIC* ***19*** *05:56:18.0±1.1,23˚.38N±0˚.06×143˚.5E±0˚.2,h10km±2km, mb4.3/6, Error ellipse: s-maj=35.3km s-min=9.6km az=93.0*
**ISC 19 05:56:16.5**±1.3,**23˚.3N**±0˚.1×**143˚.6E**±0˚.3,**h10**km,**n22,** σ0**s77**/**22**,**mb4.3**/10,**Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSG** | **Sagara** | **12.25** | **339** | Pn | **Pn** | **05 59 11.4** | **+0.4** |
| **INU** | **Inuyama** | **13.27** | **336** | Pn | **Pn** | **05 59 25.5** | **+0.5** |
| **JMN** | **Monobe** | **13.41** | **323** | Pn | **Pn** | **05 59 26.6** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **13.96** | **342** | Pn | **Pn** | **05 59 33.8** | **-0.7** |
| | baz=162,slow=12,SNR=1.8 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **13.96** | **342** | Pn | **Pn** | **05 59 34.0** | **-0.5** |
| **MJB9** | **Matsu-Tunnel** | **13.97** | **342** | Pn | **Pn** | **05 59 34.0** | **-0.5** |
| **JMM** | **Marumori** | **14.68** | **351** | Pn | **Pn** | **05 59 44.7** | **+0.4** |
| **ERM** | **Erimo** | **18.63** | **359** | P | **P** | **06 00 35.1** | **+0.9** |
| ERM | | | | IAmb | IAmb | 06 00 41.4 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **19.47** | **320** | P | **P** | **06 00 44.4** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=135,slow=13,SNR=5.9 | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.93** | **192** | P | **P** | **06 04 24.4** | **+0.7** |
| **WRA** | **Warramunga Arr** | **43.95** | **193** | P | **P** | **06 04 22.5** | **-1.4** |
| | comp=Z,0.8nm,0.6s,baz=12,slow=8.3,SNR=5.0 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **49.96** | **210** | P | **P** | **06 05 11.9** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **50.27** | **209** | P | **P** | **06 05 13.7** | **+0.5** |
| PSA00 | | | | IAmb | IAmb | 06 05 14.5 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.18** | **321** | P | **P** | **06 05 34.1** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **53.18** | **321** | P | **P** | **06 05 33.8** | **-0.8** |
| | comp=Z,1.9nm,0.7s,baz=90,slow=8.3,SNR=5.7 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **53.88** | **312** | P | **P** | **06 05 39.8** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 06 05 40.6 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.88** | **312** | P | **P** | **06 05 40.0** | **0.0** |
| | comp=Z,2.0nm,0.7s,baz=94,slow=8.8,SNR=12 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **56.55** | **316** | P | **P** | **06 05 58.6** | **-0.5** |
| KURK | | | | IAmb | IAmb | 06 05 59.8 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.60** | **316** | P | **P** | **06 05 59.0** | **-0.4** |
| | comp=Z,2.0nm,0.6s,baz=92,slow=7.6,SNR=13 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.68** | **319** | P | **P** | **06 06 34.1** | **-0.6** |
| | comp=Z,3.8nm,0.7s,baz=90,slow=7.6,SNR=13 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **81.51** | **314** | P | **P** | **06 08 34.7** | **+0.5** |
| | comp=Z,2.4nm,0.7s,baz=349,slow=5.2,SNR=4.0 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **81.87** | **335** | P | **P** | **06 08 34.3** | **-1.5** |
| | comp=Z,3.8nm,0.9s,baz=107,slow=6.4,SNR=4.1 | | | | | | |
| | comp=Z,3.8nm,0.9s | | | | | | |

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*MOS* ***19*** *05:58:34.4±1.2, 18˚.00S×178˚.42W,h483km, mb5.2/27, Error ellipse: s-maj=9.8km s-min=8.8km az=31.1*
*NEIC* ***19*** *05:58:36.4±2.1,18˚.18S±0˚.09×178˚.29W±0˚.08, h497km±6km, mb4.9/489, Error ellipse: s-maj=14.1km s-min=9.7km az=152.0*
*NOU* ***19*** *05:58:36.8, 18˚.18S×178˚.27W,h510km, mb5.2/132, Fiji Islands Region*
*BGR* ***19*** *05:58:36.8, 18˚.55S×178˚.48W, h513km±5km*
*IDC* ***19*** *05:58:37.8±0.5, 18˚.18S×178˚.30W, h520km±5km, mb4.5/31, mbtmp5.3/33, Error ellipse: s-maj=10.1km s-min=8.1km az=162.0*
*BJI* ***19*** *05:58:37.5±0.0, 17˚.74S×178˚.03W, h524km, mb4.9/52, mB5.1/4*
**ISC 19 05:58:37.3**±0.3,**18˚.14S**±0˚.04×**178˚.30W**±0˚.04,
**h519**km±3km,**h521**km:**pP-P,n1153,**σ0**s91**/1016,**mb4.9**/314,
**43C-80D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.50** | **276** | P | **P** | **05 59 54.4** | **+1.1** |
| **MSVF** | **Nonsavu** | **3.50** | **276** | P | **P** | **05 59 54.7** | **+1.4** |
| **MSVF** | **Nonsavu** | **3.50** | **276** | P | **P** | **05 59 54.7** | **+1.4** |
| **AFI** | **Afiamalu** | **7.55** | **57** | P | **P** | **06 00 25.3** | **-4.5** |
| **AFI** | **Afiamalu** | **7.55** | **57** | P | **P** | **06 00 25.3** | **-4.5** |
| **NIUE** | **Niue** | **7.99** | **98** | P | **P** | **06 00 32.7** | **-1.4** |
| **NIUE** | **Niue** | **7.99** | **98** | P | **P** | **06 00 32.7** | **-1.4** |
| **NIUE** | **Niue** | **7.99** | **98** | P | **P** | **06 00 32.7** | **-1.4** |
| | comp=Z,3μm,1.1s | | | | | | |
| **FUNA** | **Funafuti** | **9.86** | **345** | P | **P** | **06 00 53.2** | **-0.3** |
| **FUNA** | **Funafuti** | **9.86** | **345** | P | **P** | **06 00 52.3** | **-1.2** |
| **RAO** | **Raoul Island** | **11.07** | **178** | S | **S** | **06 03 08.7** | **+0.5** |
| | comp=Z,108nm,0.4s,baz=229,slow=20,SNR=2.0 | | | | | | |
| **GLKZ** | **Green Lake** | **11.08** | **178** | P | **P** | **06 01 05.9** | **-0.1** |
| GLKZ | | | | S | **S** | **06 03 09.7** | **+1.3** |
| **RTV** | **Rentapao** | **12.64** | **270** | P | **P** | **06 01 22.8** | **+0.2** |
| **DVP** | **Devils Point** | **12.87** | **270** | P | **P** | **06 01 25.1** | **+0.1** |
| **MARNC** | **Mare, Loyalty** | **13.29** | **253** | P | **P** | **06 01 29.2** | **-0.1** |
| **LIFNC** | **LIFOU** | **13.89** | **257** | P | **P** | **06 01 34.4** | **-1.2** |
| **LIFNC** | **LIFOU** | **13.89** | **257** | P | **P** | **06 01 34.0** | **-1.7** |
| **PINNC** | **Pines Island,** | **14.08** | **249** | P | **P** | **06 01 37.1** | **-0.6** |
| **PINNC** | **Pines Island,** | **14.08** | **249** | P | **P** | **06 01 36.8** | **-0.9** |
| **YATNC** | **Mamie plateau,** | **14.45** | **252** | P | **P** | **06 01 40.2** | **-1.3** |
| **DZM** | **Mont Dzumac** | **14.85** | **252** | P | **P** | **06 01 44.4** | **-1.5** |
| **DZM** | **Mont Dzumac** | **14.85** | **252** | P | **P** | **06 01 44.9** | **-1.0** |
| | comp=Z,12nm,0.4s,baz=125,slow=2.0,SNR=23 | | | | | | |
| DZM | | | | S | **S** | **06 04 23.0** | **+1.7** |
| | comp=Z,12nm,1.0s,baz=100,slow=19,SNR=2.2 | | | | | | |
| **NOUC** | **Port Laguerre** | **14.99** | **252** | P | **P** | **06 01 46.4** | **-0.8** |
| **KOUNC** | **Koumac, New Ca** | **16.61** | **259** | P | **P** | **06 02 03.1** | **-0.7** |
| **KOUNC** | **Koumac, New Ca** | **16.61** | **259** | P | **P** | **06 02 02.9** | **-0.9** |
| **RAR** | **Rarotonga** | **17.71** | **103** | P | **P** | **06 02 13.9** | **-0.3** |
| **RAR** | **Rarotonga** | **17.71** | **103** | P | **P** | **06 02 13.5** | **-0.7** |
| **RAR** | **Rarotonga** | **17.71** | **103** | P | **P** | **06 02 13.7** | **-0.5** |
| | comp=Z,70nm,0.7s,baz=260,slow=9.8,SNR=10 | | | | | | |
| **RAR** | **Rarotonga** | **17.71** | **103** | P | **P** | **06 02 13.5** | **-0.7** |
| RAR | | | | pmax | pmax | | |
| | comp=Z,146nm,1.0s | | | | | | |
| **OUZ** | **Omahuta** | **18.47** | **201** | P | **P** | **06 02 23.9** | **+3.0** |
| **WCZ** | **Waipu Caves** | **18.89** | **199** | P | **P** | **06 02 26.7** | **+2.0** |
| **KUZ** | **Kuaotunu** | **19.27** | **195** | P | **P** | **06 02 29.1** | **+1.0** |
| **KUZ** | **Kuaotunu** | **19.27** | **195** | P | **P** | **06 02 29.0** | **+0.8** |
| **WIAZ** | **Waiheke Island** | **19.46** | **196** | P | **P** | **06 02 31.3** | **+1.4** |
| **MBAZ** | **Motutapu North** | **19.50** | **197** | P | **P** | **06 02 32.6** | **+2.3** |
| **MXZ** | **Matakaoa Point** | **19.58** | **188** | P | **P** | **06 02 28.2** | **-2.7** |
| **ETAZ** | **East Tamaki Re** | **19.67** | **196** | P | **P** | **06 02 33.5** | **+1.7** |
| **MKAZ** | **Moumakai** | **19.75** | **196** | P | **P** | **06 02 33.5** | **+1.0** |
| **WMGZ** | **Waiomatatini S** | **19.82** | **188** | P | **P** | **06 02 32.6** | **-0.6** |
| **HAZ** | **Te Kaha** | **19.84** | **189** | P | **P** | **06 02 32.2** | **-1.1** |
| HAZ | | | | S | **S** | **06 05 41.8** | **-3.3** |
| **AWAZ** | **Awhitu Peninsu** | **19.85** | **197** | P | **P** | **06 02 34.8** | **+1.4** |
| **RUGZ** | **Raukumara Rang** | **20.06** | **189** | P | **P** | **06 02 34.1** | **-1.4** |
| **TOZ** | **Tahuroa Road** | **20.26** | **194** | P | **P** | **06 02 38.2** | **+1.1** |
| TOZ | | | | IAmb | IAmb | 06 02 40.0 | |
| | comp=Z,50nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **20.44** | **190** | P | **P** | **06 02 36.6** | **-2.2** |
| **URZ** | **Urewera** | **20.44** | **190** | P | **P** | **06 02 35.9** | **-2.9** |
| | comp=Z,20nm,0.4s,baz=13,slow=2.3,SNR=36 | | | | | | |
| URZ | | | | S | **S** | **06 05 57.5** | **+2.8** |
| | comp=Z,12nm,0.9s,baz=112,slow=20,SNR=6.1 | | | | | | |
| **RTZ** | **Ruatahuna** | **20.81** | **190** | P | **P** | **06 02 39.9** | **-2.4** |
| RTZ | | | | IAmb | IAmb | 06 02 48.0 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **TARA** | **Tarawa** | **21.21** | **335** | P | **P** | **06 02 45.5** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **21.43** | **191** | P | **P** | **06 02 46.6** | **-1.2** |
| **KWHZ** | **Kaweka Forest** | **21.70** | **191** | P | **P** | **06 02 48.7** | **-1.6** |
| KWHZ | | | | S | **S** | **06 06 08.2** | **-6.5** |
| **MSWZ** | **Moikau Station** | **23.85** | **192** | P | **P** | **06 03 08.6** | **-0.8** |
| **BHW** | **Baring Head** | **23.92** | **193** | P | **P** | **06 03 08.7** | **-1.2** |
| BHW | | | | IAmb | IAmb | 06 03 09.3 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **THZ** | **Tophouse** | **24.72** | **196** | P | **P** | **06 03 17.0** | **-0.1** |
| THZ | | | | IAmb | IAmb | 06 03 22.1 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **DSZ** | **Denniston Nort** | **25.00** | **198** | P | **P** | **06 03 19.4** | **-0.3** |
| DSZ | | | | IAmb | IAmb | 06 03 19.7 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **KHZ** | **Kahutara** | **25.18** | **194** | P | **P** | **06 03 19.1** | **-1.9** |
| **KHZ** | **Kahutara** | **25.18** | **194** | P | **P** | **06 03 19.2** | **-1.9** |
| KHZ | | | | IAmb | IAmb | 06 03 22.1 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **LTZ** | **Lake Taylor** | **25.84** | **196** | P | **P** | **06 03 25.8** | **-1.3** |
| LTZ | | | | IAmb | IAmb | 06 03 28.9 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **INZ** | **Inchbonnie** | **26.01** | **197** | P | **P** | **06 03 27.5** | **-1.0** |
| INZ | | | | IAmb | IAmb | 06 03 27.8 | |
| | comp=Z,46nm,1.0s | | | | | | |
| **OXZ** | **Oxford** | **26.40** | **196** | P | **P** | **06 03 30.0** | **-1.9** |
| OXZ | | | | IAmb | IAmb | 06 03 30.6 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **PPT** | **Papeete** | **27.34** | **93** | P | **P** | **06 03 40.6** | **0.0** |
| | comp=Z,166nm,0.9s,baz=54,slow=2.5,SNR=22 | | | | | | |
| | comp=Z,166nm,0.9s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.34** | **93** | P | **P** | **06 03 40.5** | **-0.2** |
| **PPTF** | **Pamatai, Papee** | **27.34** | **93** | P | **P** | **06 03 40.7** | **0.0** |
| **AUWSH** | **Wavell State H** | **27.93** | **246** | P | **P** | **06 03 46.5** | **+0.9** |
| **GD1S** | **Gladstone Soft** | **29.03** | **253** | P | **P** | **06 03 55.8** | **+0.6** |
| **EIDS** | **Eidsvold** | **29.29** | **250** | P | **P** | **06 03 57.2** | **-0.3** |
| **EIDS** | **Eidsvold** | **29.29** | **250** | P | **P** | **06 03 57.3** | **-0.3** |
| **EIDS** | **Eidsvold** | **29.29** | **250** | P | **P** | **06 03 57.2** | **-0.3** |
| | comp=Z,104nm,0.9s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.41** | **200** | P | **P** | **06 03 58.2** | **-0.1** |
| MLZ | | | | IAmb | IAmb | 06 04 01.8 | |
| | comp=Z,89nm,1.4s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **29.61** | **254** | P | **P** | **06 04 00.1** | **-0.2** |
| **ARMA** | **Armidale** | **29.91** | **240** | P | **P** | **06 04 03.7** | **+0.7** |
| **ARMA** | **Armidale** | **29.91** | **240** | P | **P** | **06 04 04.0** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 06 04 04.9 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **29.91** | **240** | P | **P** | **06 04 03.8** | **+0.8** |
| | comp=Z,65nm,0.8s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.94** | **199** | IAmb | IAmb | 06 04 04.7 | |
| | comp=Z,56nm,1.1s | | | | | | |
| **KWJN** | **Gagan, Kwajale** | **30.59** | **332** | P | **P** | **06 04 09.5** | **+0.7** |
| **AUPHS** | **Peel High Scho** | **30.72** | **239** | P | **P** | **06 04 10.8** | **+0.9** |
| **SYDH** | **Sydney Hard Ro** | **31.73** | **235** | P | **P** | **06 04 18.8** | **+0.4** |
| **AUAYR** | **Ayr State High** | **32.45** | **262** | P | **P** | **06 04 24.8** | **+0.1** |
| **AULRC** | **Lightning Ridg** | **32.73** | **244** | P | **P** | **06 04 26.9** | **-0.1** |
| **AUDCS** | **Dubbo College** | **32.90** | **238** | P | **P** | **06 04 28.6** | **+0.2** |
| **TV1H** | **Townsville Har** | **33.05** | **262** | P | **P** | **06 04 29.5** | **-0.3** |
| **CNB** | **Canberra Magne** | **33.37** | **233** | P | **P** | **06 04 33.1** | **+0.7** |
| **CNB** | **Canberra Magne** | **33.37** | **233** | P | **P** | **06 04 33.2** | **+0.7** |
| | comp=Z,85nm,1.4s | | | | | | |
| **CTA** | **Charters Tower** | **33.51** | **261** | P | **P** | **06 04 33.6** | **-0.1** |
| **CTA** | **Charters Tower** | **33.51** | **261** | P | **P** | **06 04 33.7** | **-0.1** |
| | comp=Z,7.3nm,0.5s,baz=90,slow=9.6,SNR=140 | | | | | | |
| CTA | | | | ScP | **ScP** | **06 09 56.0** | **+0.9** |
| | comp=Z,0.5nm,0.9s,baz=96,slow=3.9,SNR=3.8 | | | | | | |
| | comp=Z,7.3nm,0.5s | | | | | | |
| **CTAO** | **Charters Tower** | **33.51** | **261** | P | **P** | **06 04 33.6** | **-0.1** |
| **CTAO** | **Charters Tower** | **33.51** | **261** | P | **P** | **06 04 33.8** | **0.0** |
| **CTAO** | **Charters Tower** | **33.51** | **261** | P | **P** | **06 04 33.8** | **0.0** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,195nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **33.51** | **261** | ⇓P | **P** | **06 04 33.5** | **-0.1** |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **06 04 35.2** | **+0.5** |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **06 04 35.3** | **+0.6** |
| CAN | | | | IAmb | IAmb | 06 04 36.4 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **06 04 35.1** | **+0.5** |
| | comp=Z,65nm,1.3s | | | | | | |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **06 04 35.3** | **+0.5** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,44nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **06 04 35.1** | **+0.5** |
| **PATS** | **Pohnpei** | **33.90** | **315** | P | **P** | **06 04 37.6** | **+0.6** |
| **PATS** | **Pohnpei** | **33.90** | **315** | P | **P** | **06 04 37.8** | **+0.8** |
| **PATS** | **Pohnpei** | **33.90** | **315** | P | **P** | **06 04 37.5** | **+0.5** |
| | comp=Z,246nm,2.6s | | | | | | |
| **KAVG** | **Kavieng** | **34.00** | **293** | P | **P** | **06 04 38.6** | **+0.7** |
| **PMG** | **Port Moresby** | **34.60** | **280** | P | **P** | **06 04 43.6** | **+0.7** |
| **PMG** | **Port Moresby** | **34.60** | **280** | P | **P** | **06 04 43.7** | **+0.8** |
| **PMG** | **Port Moresby** | **34.60** | **280** | P | **P** | **06 04 43.8** | **+0.9** |
| **PMG** | **Port Moresby** | **34.60** | **280** | P | **P** | **06 04 43.5** | **+0.5** |
| | comp=Z,151nm,1.0s,baz=83,slow=3.5,SNR=33 | | | | | | |
| | comp=Z,151nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **34.60** | **280** | *d* iP | **P** | **06 04 43.3** | **+0.3** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,247nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **34.60** | **280** | P | **P** | **06 04 43.2** | **+0.3** |
| **CMSA** | **Cobar Meteorol** | **35.13** | **241** | P | **P** | **06 04 47.5** | **+0.4** |
| **CMSA** | **Cobar Meteorol** | **35.13** | **241** | P | **P** | **06 04 47.3** | **+0.2** |
| | comp=Z,125nm,0.9s | | | | | | |
| **MTSU** | **Mount Surprise** | **35.49** | **264** | P | **P** | **06 04 50.0** | **-0.3** |
| **QLP** | **Quilpie** | **35.55** | **250** | P | **P** | **06 04 50.5** | **-0.2** |
| **QLP** | **Quilpie** | **35.55** | **250** | P | **P** | **06 04 50.6** | **-0.2** |
| | comp=Z,263nm,0.8s | | | | | | |
| **JOHN** | **Johnston Islan** | **35.71** | **14** | P | **P** | **06 04 52.2** | **+0.2** |
| **TOO** | **Toolangi** | **37.10** | **231** | P | **P** | **06 05 04.3** | **+0.8** |
| **TOO** | **Toolangi** | **37.10** | **231** | P | **P** | **06 05 04.7** | **+1.2** |
| **TOO** | **Toolangi** | **37.10** | **231** | P | **P** | **06 05 04.3** | **+0.8** |
| | comp=Z,114nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.10** | **231** | P | **P** | **06 05 04.7** | **+1.2** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,119nm,1.1s | | | | | | |
| **COEN** | **Coen** | **37.21** | **271** | P | **P** | **06 05 04.8** | **+0.2** |
| **COEN** | **Coen** | **37.21** | **271** | P | **P** | **06 05 05.1** | **+0.5** |
| **COEN** | **Coen** | **37.21** | **271** | P | **P** | **06 05 04.8** | **+0.2** |
| | comp=Z,330nm,0.9s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **38.16** | **81** | P | **P** | **06 05 12.3** | **-0.2** |
| **TAOE** | **Nuku Hiva Isla** | **38.16** | **81** | P | **P** | **06 05 12.3** | **-0.2** |
| **BRAT** | **Ballarat** | **38.26** | **232** | P | **P** | **06 05 14.1** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.61** | **241** | P | **P** | **06 05 16.3** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.61** | **241** | P | **P** | **06 05 16.7** | **+0.9** |
| STKA | | | | IAmb | IAmb | 06 05 17.6 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.61** | **241** | P | **P** | **06 05 16.4** | **+0.7** |
| | comp=Z,29nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **38.61** | **241** | P | **P** | **06 05 16.5** | **+0.7** |
| | comp=Z,51nm,0.5s,baz=88,slow=9.8,SNR=77 | | | | | | |
| | comp=Z,51nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **38.61** | **241** | *d* iP | **P** | **06 05 16.1** | **+0.3** |
| **INKA** | **Innaminka** | **38.76** | **248** | P | **P** | **06 05 17.7** | **+0.7** |
| **ARPS** | **Mount Arapiles** | **39.60** | **234** | P | **P** | **06 05 23.8** | **+0.1** |
| **ARPS** | **Mount Arapiles** | **39.60** | **234** | P | **P** | **06 05 24.0** | **+0.3** |
| | comp=Z,86nm,1.0s | | | | | | |
| **QIS** | **Mount Isa** | **39.71** | **259** | P | **P** | **06 05 24.1** | **-0.8** |
| **QIS** | **Mount Isa** | **39.71** | **259** | P | **P** | **06 05 24.0** | **-0.8** |
| | comp=Z,40nm,1.3s | | | | | | |
| **WAKE** | **Wake Island** | **40.02** | **338** | P | **P** | **06 05 27.0** | **-0.2** |
| **WAKE** | **Wake Island** | **40.02** | **338** | P | **P** | **06 05 26.5** | **-0.8** |
| **WAKE** | **Wake Island** | **40.02** | **338** | P | **P** | **06 05 26.6** | **-0.6** |
| **H11N3** | **WAKE ISLAND Hy** | **40.33** | **338** | P | **P** | **06 05 29.0** | **-0.5** |
| | baz=173,slow=10,SNR=15 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.33** | **338** | P | **P** | **06 05 29.1** | **-0.4** |
| | baz=173,slow=10,SNR=19 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.34** | **338** | P | **P** | **06 05 29.3** | **-0.3** |
| | baz=173,slow=10,SNR=12 | | | | | | |
| **HTT** | **Hallett** | **41.12** | **240** | P | **P** | **06 05 36.4** | **+0.4** |
| **HTT** | **Hallett** | **41.12** | **240** | P | **P** | **06 05 36.5** | **+0.5** |
| | comp=Z,141nm,1.1s | | | | | | |
| **LCRK** | **Leigh Creek** | **41.25** | **244** | P | **P** | **06 05 37.0** | **0.0** |
| **TABU** | **Tabubil** | **41.54** | **283** | P | **P** | **06 05 40.1** | **+0.5** |
| **WHYH** | **Whyalla** | **42.16** | **241** | P | **P** | **06 05 44.5** | **+0.3** |
| **JAY** | **Jayapura** | **43.07** | **286** | P | **P** | **06 05 51.4** | **-0.2** |
| | comp=Z,279nm,1.1s | | | | | | |
| **OOD** | **Oodnadatta** | **43.23** | **249** | P | **P** | **06 05 53.2** | **+0.6** |
| **BBOO** | **Buckleboo** | **43.38** | **241** | P | **P** | **06 05 53.9** | **+0.1** |
| **BBOO** | **Buckleboo** | **43.38** | **241** | P | **P** | **06 05 54.2** | **+0.4** |
| **BBOO** | **Buckleboo** | **43.38** | **241** | P | **P** | **06 05 53.9** | **+0.1** |
| | comp=Z,155nm,1.0s | | | | | | |
| **GENI** | **Genyem** | **43.53** | **286** | P | **P** | **06 05 56.4** | **+1.2** |
| **GENI** | **Genyem** | **43.53** | **286** | P | **P** | **06 05 56.7** | **+1.5** |
| **WR0** | **Warramunga Arr** | **44.50** | **260** | P | **P** | **06 06 02.1** | **-0.6** |
| **WB0** | **Warramunga Arr** | **44.66** | **260** | P | **P** | **06 06 03.0** | **-0.9** |
| **WB2** | **Warramunga Arr** | **44.68** | **260** | P | **P** | **06 06 03.4** | **-0.6** |
| **WRAB** | **Tennant Creek** | **44.68** | **260** | P | **P** | **06 06 03.5** | **-0.5** |
| **WRAB** | **Tennant Creek** | **44.68** | **260** | *d* iP | **P** | **06 06 02.8** | **-1.3** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,102nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **06 06 03.4** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **06 06 03.4** | **-0.7** |
| | comp=Z,69nm,0.9s,baz=97,slow=7.2,SNR=113 | | | | | | |
| WRA | | | | ScP | **ScP** | **06 10 41.4** | **+2.9** |
| | comp=Z,5.1nm,1.2s,baz=93,slow=4.2,SNR=5.5 | | | | | | |
| WRA | | | | S | **S** | **06 11 57.6** | **-5.2** |
| | comp=Z,1.5nm,0.8s,baz=103,slow=12,SNR=4.0 | | | | | | |
| | comp=Z,69nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **06 06 03.4** | **-0.7** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **AS01** | **Alice Springs** | **44.78** | **254** | P | **P** | **06 06 04.5** | **-0.3** |
| **MULG** | **Mulgathing** | **44.81** | **245** | P | **P** | **06 06 04.6** | **-0.2** |
| **AS31** | **Alice Springs** | **44.83** | **254** | P | **P** | **06 06 05.2** | **+0.1** |
| **AS31** | **Alice Springs** | **44.83** | **254** | P | **P** | **06 06 05.0** | **-0.2** |
| | comp=Z,192nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **44.83** | **254** | P | **P** | **06 06 05.5** | **+0.3** |
| **ASAR** | **Alice Springs** | **44.83** | **254** | P | **P** | **06 06 05.2** | **0.0** |
| | comp=Z,223nm,0.5s,baz=90,slow=8.4,SNR=603 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 07 36.0** | **-0.1** |
| | comp=Z,8.5nm,0.7s,baz=100,slow=4.2,SNR=4.4 | | | | | | |
| ASAR | | | | ScP | **ScP** | **06 10 42.5** | **+3.6** |
| | comp=Z,1.5nm,0.8s,baz=92,slow=5.2,SNR=4.1 | | | | | | |
| ASAR | | | | S | **S** | **06 11 59.9** | **-4.9** |
| | comp=Z,8.5nm,1.0s,baz=90,slow=17,SNR=19 | | | | | | |
| | comp=Z,223nm,0.5s | | | | | | |
| **KDU** | **Kakadu** | **47.66** | **269** | P | **P** | **06 06 26.4** | **-0.3** |
| **KDU** | **Kakadu** | **47.66** | **269** | P | **P** | **06 06 26.3** | **-0.3** |
| | comp=Z,259nm,0.7s | | | | | | |
| **GUMO** | **Guam** | **48.10** | **308** | P | **P** | **06 06 30.3** | **+0.3** |
| **GUMO** | **Guam** | **48.10** | **308** | P | **P** | **06 06 30.5** | **+0.5** |
| **GUMO** | **Guam** | **48.10** | **308** | P | **P** | **06 06 30.5** | **+0.5** |
| | comp=Z,403nm,0.8s,baz=177,slow=10,SNR=15 | | | | | | |
| | comp=Z,403nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **48.10** | **308** | P | **P** | **06 06 30.5** | **+0.5** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,464nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **48.10** | **308** | P | **P** | **06 06 30.3** | **+0.3** |
| **MTN** | **Manton Dam** | **48.90** | **269** | P | **P** | **06 06 35.6** | **-0.4** |
| **MTN** | **Manton Dam** | **48.90** | **269** | P | **P** | **06 06 35.9** | **-0.1** |
| **MTN** | **Manton Dam** | **48.90** | **269** | P | **P** | **06 06 35.5** | **-0.5** |
| | comp=Z,316nm,0.9s | | | | | | |
| **DRS** | **Darwin Rock St** | **49.21** | **269** | P | **P** | **06 06 37.9** | **-0.4** |
| **WRKA** | **Warakurna** | **49.87** | **252** | P | **P** | **06 06 43.1** | **0.0** |
| **WRKA** | **Warakurna** | **49.87** | **252** | P | **P** | **06 06 43.0** | **-0.1** |
| | comp=Z,358nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **50.00** | **245** | P | **P** | **06 06 43.3** | **-0.6** |
| **FORT** | **Forrest** | **50.00** | **245** | P | **P** | **06 06 43.6** | **-0.3** |
| **FORT** | **Forrest** | **50.00** | **245** | P | **P** | **06 06 43.2** | **-0.6** |
| | comp=Z,150nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.57** | **264** | P | **P** | **06 06 47.9** | **-0.3** |
| **KNRA** | **Kununurra** | **50.57** | **264** | P | **P** | **06 06 47.9** | **-0.3** |
| | comp=Z,318nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **50.72** | **281** | P | **P** | **06 06 49.3** | **-0.1** |
| **FAKI** | **Fak Fak** | **50.72** | **281** | P | **P** | **06 06 49.4** | **-0.1** |
| FAKI | | | | IAmb | IAmb | 06 06 50.5 | |
| | comp=Z,113nm,1.3s | | | | | | |
| **KMBL** | **Kambalda** | **55.30** | **244** | P | **P** | **06 07 21.7** | **-0.2** |
| **KMBL** | **Kambalda** | **55.30** | **244** | P | **P** | **06 07 21.2** | **-

JEM Erimo 69.64 330 P P 06 08 55.3 +0.9
KIWB Kanaga Island 69.70 1 P P 06 08 54.4 -0.1
JTM Tenmabayashi 69.72 328 P P 06 08 55.9 +1.0
JTM Tenmabayashi 69.72 328 IAmb IAmb 06 08 56.7
comp=Z,64nm,1.0s
SMRI Semarang 70.06 269 P P 06 08 58.2 +0.6
JNU Nakatsue 70.38 316 P P 06 08 59.4 +0.4
JNU Nakatsue 70.38 316 IAmb IAmb 06 09 01.2
comp=Z,28nm,1.1s
JNU Nakatsue 70.38 316 P P 06 08 59.2 +0.1
comp=Z,18nm,0.9s,baz=60,slow=4.6,SNR=6.7
comp=Z,18nm,0.9s
NIKH Nikolski High 71.29 6 P P 06 09 03.1 -0.8
baz=189
SBUM Sibu 71.34 279 P P 06 09 06.2 +1.1
JKA Kamikawa-asahi 71.53 331 IAmb IAmb 06 09 08.1
comp=Z,52nm,0.8s
ASAJ Asahikawa 71.53 331 P P 06 09 07.1 +1.6
comp=Z,42nm,0.8s,baz=214,slow=3.7,SNR=12
comp=Z,42nm,0.8s
TWGBT Beinan 71.87 302 P P 06 09 06.6 -1.4
TWG Pinlang 71.88 302 P P 06 09 07.3 -0.8
TWG IAmb IAmb 06 09 22.7
comp=Z,35nm,1.1s
QSPA South Pole Qui 71.91 180 P P 06 09 08.2 +0.6
QSPA IAmb IAmb 06 09 09.4
comp=Z,41nm,0.9s
QSPA South Pole Qui 71.91 180 P P 06 09 08.0 +0.4
comp=Z,32nm,0.9s,baz=30,slow=1.0,SNR=82
comp=Z,32nm,0.9s
QSPA South Pole Qui 71.91 180 P P 06 09 08.1 +0.4
QSPA PcP PcP 06 09 23.3 +0.5
QSPA pP pP 06 10 54.7 -1.2
YULB Yu-li 71.98 303 P P 06 09 07.9 -0.7
YULB Yu-li 71.98 303 P P 06 09 08.4 -0.2
YULB IAmb IAmb 06 09 11.1
comp=Z,23nm,0.8s
NACB Ninganchiao 72.13 304 P P 06 09 09.0 -0.4
NACB Ninganchiao 72.13 304 P P 06 09 09.4 0.0
UNV Unalaska Valle 72.41 7 P P 06 09 10.0 -0.3
baz=192
SSLB Suanglung 72.45 303 P P 06 09 10.4 -0.9
SSLB Suanglung 72.45 303 IAmb IAmb 06 09 11.3
comp=Z,44nm,0.8s
TPUB Ta-pu 72.47 302 P P 06 09 10.3 -1.2
YHNB Yeheng 72.55 304 P P 06 09 12.0 0.0
YHNB Yeheng 72.55 304 IAmb IAmb 06 09 12.8
comp=Z,67nm,0.9s
BBJI Bungbulang 72.60 268 P P 06 09 11.7 -0.8
TATO Taipei 72.61 304 P P 06 09 12.0 -0.2
KSM Kuching 72.82 277 P P 06 09 14.5 +0.8
PET Petropavlovsk 73.62 346 P P 06 09 17.4 +0.1
PET IAmb IAmb 06 09 17.5
comp=Z,48nm,0.7s
PET Petropavlovsk 73.62 346 *d* iP P 06 09 16.7 -0.6
PET pmax pmax
comp=Z,50nm,0.7s
YSS Yuzh-Sakhalins 73.67 333 P P 06 09 19.1 +1.4
YSS Yuzh-Sakhalins 73.67 333 P P 06 09 18.9 +1.1
YSS Yuzh-Sakhalins 73.67 333 *d* iP P 06 09 18.5 +0.8
YSS pmax pmax
comp=Z,80nm,1.0s
FALS False Pass 73.81 9 P P 06 09 18.1 -0.2
baz=195
PEA0B Petropavlovsk- 73.93 345 *i* P P 06 09 18.8 -0.3
PETK Petropavlovsk- 73.93 345 P P 06 09 19.1 0.0
PETK Petropavlovsk- 73.93 345 P P 06 09 18.4 -0.7
comp=Z,89nm,0.7s,baz=121,slow=7.3,SNR=121
comp=Z,89nm,0.7s
S12K Black Hills 74.83 9 P P 06 09 22.9 -1.2
baz=196
QZH Quanzhou 74.89 303 ⇓ *i* P P 06 09 25.8 +0.6
QZH pmax pmax
comp=Z,87nm,0.8s
KSRS Korea Array 74.94 318 P P 06 09 26.2 +1.1
comp=Z,5.4nm,0.7s,baz=128,slow=6.3,SNR=33
KSRS pP pP 06 11 17.6 +2.5
comp=Z,4.3nm,1.1s,baz=136,slow=5.8,SNR=4.6
comp=Z,5.4nm,0.7s
KSAR Wonju Array Be 74.96 318 P P 06 09 25.4 +0.1
SPIA Saint Paul Isl 75.33 5 P P 06 09 26.4 -0.4
baz=188
UGL Uglegorsk 75.62 334 *e* P P 06 09 29.1 +0.5
UGL pmax pmax
comp=Z,110nm,0.9s
S14K Fog Glacier 75.80 11 P P 06 09 29.6 -0.1
baz=198
CHGN Chignik 76.03 11 P P 06 09 30.3 -0.4
baz=199
MSHR Mys Shultsa 76.25 324 *d* iP P 06 09 33.6 +1.3
MSHR pmax pmax
comp=Z,64nm,1.3s
PSTR Posyet 76.49 324 *d* iP P 06 09 35.0 +1.4
SAO San Andreas Ge 76.52 44 IAmb IAmb 06 09 35.9
comp=Z,27nm,0.8s
PMPB Monarch Peak 76.64 45 IAmb IAmb 06 09 36.8
comp=Z,64nm,1.4s
TYV Tymovskoe 76.78 336 *e* P P 06 09 35.7 +0.7
TYV pmax pmax
comp=Z,300nm,2.8s
TYV pmax pmax
comp=Z,69nm,1.1s
USRK Ussuriysk Ar. 76.86 326 P P 06 09 36.1 +0.5
USRK Ussuriysk Ar. 76.86 326 P P 06 09 37.2 +1.6
comp=Z,5.8nm,0.6s,baz=147,slow=3.9,SNR=22
USRK pP pwP 06 11 28.1 -0.1
comp=Z,1.2nm,0.4s,baz=202,slow=4.1,SNR=3.6
comp=Z,5.8nm,0.6s
USA0B Ussuriysk Arra 76.86 326 P P 06 09 36.8 +1.1
USA0B Ussuriysk Arra 76.86 326 P P 06 09 36.8 +1.1
USA0B pmax pmax
comp=Z,25nm,1.4s
BCW Bitter Crk WRg 76.87 46 IAmb IAmb 06 09 38.2
comp=Z,24nm,0.8s
SII Sitkinak Islan 77.13 13 P P 06 09 37.1 +0.3
baz=203
109C Camp Elliot, M 77.39 49 P P 06 09 38.3 -0.5
baz=238
CBX Cerro Bola 77.42 50 IAmb IAmb 06 09 41.0
comp=Z,28nm,0.8s
R17L Mt. Peulik Vol 77.67 12 P P 06 09 40.1 +0.4
baz=201,SNR=6.0
MONP2 Monument Peak 77.89 49 P P 06 09 42.2 +0.4
baz=239,SNR=32
ISA Isabella, Lake 77.90 46 IAmb IAmb 06 09 43.5
comp=Z,28nm,0.9s
OHAK Old Harbor 77.93 14 P P 06 09 41.2 +0.1
baz=204
RMX La Rumorosa 77.99 50 IAmb IAmb 06 09 44.3
comp=Z,36nm,0.8s
R18K Karluk 78.00 13 P P 06 09 41.8 +0.4
baz=203
NJ2 Nanjing 78.17 309 ⇓ *i* P P 06 09 43.9 +0.9
NJ2 pmax pmax
comp=Z,33nm,0.9s
PFO Pinyon Flats O 78.23 49 P P 06 09 44.0 +0.5
PFO Pinyon Flats O 78.23 49 P P 06 09 43.7 +0.2
baz=239,SNR=7.7
PFO Pinyon Flats O 78.23 49 P P 06 09 44.0 +0.5
PFO pmax pmax
comp=Z,14nm,1.1s
TPFO Pinon Flats 78.23 49 P P 06 09 43.8 +0.3
baz=239,SNR=6.1
SRIG Santa Rosalia 78.34 56 IAmb IAmb 06 09 46.0
comp=Z,31nm,1.0s
O14K Tigyukauivet M 78.37 9 P P 06 09 43.5 +0.1
baz=196
MDJ Mudanjiang 78.44 325 P P 06 09 45.6 +1.4
MDJ Mudanjiang 78.44 325 P P 06 09 44.9 +0.7
MDJ pmax pmax
comp=Z,62nm,1.1s
MDJ Mudanjiang 78.44 325 IAmb IAmb 06 09 46.5
comp=Z,67nm,1.1s
O15K Ungalikthiuk R 78.51 10 P P 06 09 44.0 -0.2
baz=198
MDPB Devils Postpil 78.57 44 IAmb IAmb 06 09 47.1
comp=Z,30nm,0.8s
SLBS Sierra La Lagu 78.58 60 P P 06 09 47.0 +1.4
SLBS IAmb IAmb 06 09 47.5
comp=Z,24nm,0.7s
KDAK Kodiak Island 78.60 14 P P 06 09 45.2 +0.5
comp=Z,30nm,0.7s,baz=233,slow=6.3,SNR=15
comp=Z,30nm,0.7s
KDAK Kodiak Island 78.60 14 P P 06 09 44.8 +0.1
baz=205
P16K Nushagak River 78.68 11 P P 06 09 45.2 +0.1
baz=200
WAKR Walker 78.82 43 IAmb IAmb 06 09 48.7
comp=Z,31nm,0.8s
HATC Hat Creek Radi 78.86 40 IAmb IAmb 06 09 48.6
comp=Z,30nm,0.9s
M11K Mekoryuk 78.86 6 P P 06 09 47.0 +1.0
baz=192
Q18K Katmai Hardscr 78.88 12 P P 06 09 46.1 -0.3
baz=202,SNR=9.7
N14K Kuskokwak Cree 78.95 8 P P 06 09 46.8 +0.3
baz=196,SNR=12
BTDF Bukit Timah Da 78.96 275 P P 06 09 48.5 +0.8
PNTR Pine Nut 79.04 43 IAmb IAmb 06 09 49.7
comp=Z,50nm,0.8s
GLA Glamis 79.12 50 IAmb IAmb 06 09 50.6
comp=Z,32nm,0.9s
L04D Klamath Falls 79.17 39 IAmb IAmb 06 09 50.0
comp=Z,25nm,0.7s
O16K Kokwok River B 79.19 10 IAmb IAmb 06 09 47.8
comp=Z,34nm,0.6s
O16K Kokwok River B 79.19 10 P P 06 09 47.1 -0.7
baz=200,SNR=7.9
M13K Dall Lake 79.21 7 P P 06 09 48.0 +0.2
baz=194
YERR Yerington 79.22 43 IAmb IAmb 06 09 50.4
comp=Z,38nm,0.8s
LHV Little Huntoon 79.29 44 IAmb IAmb 06 09 51.1
comp=Z,32nm,0.9s
GRNR Gornyy 79.29 333 ⇓ *i* P P 06 09 49.5 +0.9
GRNR pmax pmax
comp=Z,70nm,1.0s
GRAC Grapevine Rang 79.37 45 IAmb IAmb 06 09 51.5
comp=Z,30nm,0.8s
Q20K Shuyak Island 79.40 13 P P 06 09 49.1 +0.2
baz=205
Q19K Cape Douglas, 79.42 13 P P 06 09 48.5 -0.6
baz=204
N15K Kwethluk River 79.42 9 IAmb IAmb 06 09 50.5
comp=Z,39nm,0.7s
N15K Kwethluk River 79.42 9 P P 06 09 48.8 -0.2
baz=198,SNR=5.6
NVAR Mina Array Bea 79.52 44 P P 06 09 51.1 +0.7
NVAR Mina Array Bea 79.52 44 P P 06 09 51.4 +1.0
comp=Z,18nm,0.7s,baz=224,slow=9.0,SNR=173
NVAR pP pwP 06 11 43.8 -0.6
comp=Z,2.6nm,0.9s,baz=225,slow=8.5,SNR=4.2
comp=Z,18nm,0.7s
P18K Big Mountain, 79.53 12 P P 06 09 49.2 -0.4
baz=202
O17K Koliganek Bris 79.54 11 P P 06 09 49.5 -0.1
baz=200
M14K Bethel 79.72 8 IAmb IAmb 06 09 51.9
comp=Z,69nm,1.1s
M14K Bethel 79.72 8 P P 06 09 50.9 +0.3
baz=196,SNR=8.6
M15K Kasigluk River 79.84 9 P P 06 09 51.1 -0.1
baz=197,SNR=8.1
N16K Nishlik Lake 79.92 10 P P 06 09 52.2 +0.5
baz=199
O18K Koktuh Hills 79.96 12 P P 06 09 51.5 -0.4
baz=202,SNR=20
TPH Tonopah 80.05 45 IAmb IAmb 06 09 54.9
comp=Z,71nm,0.9s
214A Organ Pipe Nat 80.08 52 P P 06 09 54.0 +0.8
baz=241,SNR=9.2
TPNV Topopah Spring 80.11 46 P P 06 09 53.8 +0.4
baz=238,SNR=20
P19K Oil Pt 80.17 13 P P 06 09 52.6 -0.5
baz=204
L14K Kuka Creek 80.19 8 IAmb IAmb 06 09 54.6
comp=Z,46nm,0.9s
L14K Kuka Creek 80.19 8 P P 06 09 53.7 +0.7
baz=195,SNR=13
N17K Nushagak Hills 80.23 10 IAmb IAmb 06 09 54.1
comp=Z,26nm,0.9s
N17K Nushagak Hills 80.23 10 P P 06 09 53.0 -0.3
baz=200,SNR=6.5
CN2 Changchun 80.27 322 P P 06 09 54.8 +0.9
CN2 pmax pmax
comp=Z,60nm,1.2s
BNX BinXian 80.34 325 ⇓ P P 06 09 54.5 +0.3
BNX pmax pmax
comp=Z,55nm,1.1s
KLR Kul'dur 80.36 329 *d* iP P 06 09 54.6 +0.4
KLR pmax pmax
comp=Z,26nm,1.2s
M16K Timber Creek 80.41 9 P P 06 09 55.0 +0.8
baz=199,SNR=25
J05D Fort Rock, OR 80.44 38 IAmb IAmb 06 09 57.0
comp=Z,52nm,0.6s
O19K Port Alsworth 80.45 12 P P 06 09 54.1 -0.3
baz=203
CNPM China Poot 80.48 14 IAmb IAmb 06 09 55.6
comp=Z,55nm,0.9s
HOM Homer 80.51 13 P P 06 09 54.9 +0.1
baz=206
N18K Kilae Creek 80.60 11 P P 06 09 55.1 -0.2
baz=202,SNR=5.6
L15K Ungalak Mounta 80.67 8 P P 06 09 55.8 +0.2
baz=196,SNR=14
O20K Slope Mountain 80.69 13 P P 06 09 55.1 -0.6
baz=205
H04A Detroit Lake 80.72 37 IAmb IAmb 06 09 57.4
comp=Z,19nm,0.6s
BRSE Bradley Lake S 80.79 14 P P 06 09 56.1 -0.1
baz=206,SNR=9.7
S11A Rachel 80.81 46 IAmb IAmb 06 09 58.8
comp=Z,30nm,0.9s
WHN Wuhan 80.83 306 P P 06 09 58.1 +1.0
WHN pmax pmax
comp=Z,50nm,0.9s
CNSH ChangSha 80.88 304 P P 06 09 58.0 +0.6
CNSH pmax pmax
comp=Z,38nm,1.1s
SMAI San Martin Ant 80.90 159 IAmb IAmb 06 09 59.0
comp=Z,53nm,0.9s
PINE Pine Mountain 80.91 38 IAmb IAmb 06 09 59.6
comp=Z,32nm,0.8s
L16K Owhat River 80.99 9 P P 06 09 58.1 +0.9
baz=198,SNR=18
N19K Bonanza Creek 80.99 12 IAmb IAmb 06 09 57.6
comp=Z,32nm,0.8s
N19K Bonanza Creek 80.99 12 P P 06 09 56.8 -0.6
baz=203,SNR=8.1
M17K Holitna River 81.01 10 P P 06 09 58.3 +1.0
baz=200,SNR=20
E03A Lebam 81.08 35 IAmb IAmb 06 10 00.2
comp=Z,25nm,0.9s
BKNI Bangkinang 81.22 273 P P 06 10 00.6 +1.0
K15K Wolf Creek Mou 81.26 8 P P 06 09 59.2 +0.7
baz=196,SNR=44
R11B Troy Canyon, C 81.28 45 P P 06 09 59.3 -0.2
baz=239,SNR=22
BMN Battle Mountai 81.31 43 IAmb IAmb 06 10 01.4
comp=Z,26nm,0.9s
F04A Amboy 81.34 36 IAmb IAmb 06 10 00.7
comp=Z,13nm,0.6s
M18K Stony River 81.37 11 P P 06 09 59.6 +0.5
baz=202,SNR=10
SEW Seward 81.41 14 P P 06 09 59.5 +0.1
baz=208
MA2 Magadan 81.45 345 P P 06 09 59.3 -0.3
MA2 Magadan 81.45 345 P P 06 09 58.5 -1.2
MA2 IAmb IAmb 06 10 00.0
comp=Z,51nm,0.8s
MA2 Magadan 81.45 345 *d* iP P 06 09 58.4 -1.2
MA2 pmax pmax
comp=Z,50nm,0.8s
J14K Nanvaranak Lak 81.46 7 IAmb IAmb 06 10 01.0
comp=Z,48nm,1.2s
J14K Nanvaranak Lak 81.46 7 P P 06 10 00.3 +0.8
baz=194,SNR=8.7
WVOR Wild Horse Val 81.52 40 IAmb IAmb 06 10 02.4
comp=Z,26nm,0.9s
L17K Donlin 81.57 9 P P 06 10 01.2 +1.0
baz=199,SNR=33
O22K Cooper Landing 81.68 14 P P 06 10 00.2 -0.5
baz=207,SNR=5.4
TUC Tucson 81.76 52 P P 06 10 03.3 +1.3
TUC IAmb IAmb 06 10 04.7
comp=Z,31nm,0.9s
TUC Tucson 81.76 52 P P 06 10 03.2 +1.3
baz=242
TUC Tucson 81.76 52 P P 06 10 03.3 +1.3
TUC pmax pmax
comp=Z,31nm,0.9s
N20K Mount Spurr 81.79 12 P P 06 10 00.8 -0.6
baz=205,SNR=7.2
SPCR Spurr Chakacha 81.79 12 P P 06 10 00.8 -0.6
baz=205,SNR=6.0
P23K Montague Islan 81.81 15 P P 06 10 01.1 -0.4
baz=210
SPU Mount Spurr 81.81 13 IAmb IAmb 06 10 01.4
comp=Z,33nm,1.1s
GAMB Gambell 81.81 3 P P 06 10 02.0 +0.6
baz=186,SNR=5.9
L18K Granite Mounta 81.91 10 P P 06 10 02.4 +0.5
baz=201,SNR=28
BELA Belgrano 2 81.92 173 P P 06 10 01.6 -0.3
BELA IAmb IAmb 06 10 02.8
comp=Z,39nm,0.9s
I07A Izee 81.92 39 IAmb IAmb 06 10 04.5
comp=Z,27nm,0.8s
M19K Big River Lodg 82.01 11 IAmb IAmb 06 10 03.0
comp=Z,31nm,0.8s
M19K Big River Lodg 82.01 11 P P 06 10 02.2 -0.2
baz=203
K17K Iditarod 82.12 9 IAmb IAmb 06 10 04.7
comp=Z,99nm,1.4s
K17K Iditarod 82.12 9 P P 06 10 03.8 +0.8
baz=199,SNR=14
J08A Circle Bar Ran 82.13 40 IAmb IAmb 06 10 05.4
comp=Z,21nm,0.7s
Q12A Willow Creek R 82.15 45 IAmb IAmb 06 10 05.7
comp=Z,23nm,0.7s
L19K White Mountain 82.19 11 IAmb IAmb 06 10 05.4
comp=Z,50nm,1.0s
L19K White Mountain 82.19 11 P P 06 10 03.4 0.0
baz=202,SNR=16
LCMT Little Creek M 82.21 47 IAmb IAmb 06 10 06.2
comp=Z,22nm,0.8s
RC01 Rabbit Creek A 82.22 14 IAmb IAmb 06 10 04.2
comp=Z,41nm,1.1s
RC01 Rabbit Creek A 82.22 14 P P 06 10 04.1 +0.5
baz=207,SNR=5.9
M20K Styx River 82.23 12 P P 06 10 03.5 -0.2
baz=204
X16A Lo Mia Camp, P 82.25 50 IAmb IAmb 06 10 07.0
comp=Z,25nm,0.9s
J16K Anvik River 82.33 8 P P 06 10 04.6 +0.5
baz=197,SNR=30
SUA Susitna One 82.34 13 P P 06 10 03.4 -0.9
baz=206,SNR=14
PWL Port Wells 82.34 14 IAmb IAmb 06 10 04.6
comp=Z,59nm,0.8s
PWL Port Wells 82.34 14 P P 06 10 03.9 -0.2
baz=209,SNR=11
CCUT Cedar City 82.40 47 IAmb IAmb 06 10 07.5
comp=Z,22nm,0.8s
PGC Sidney 82.45 33 P P 06 10 05.7 +0.8
BBB Bella Bella 82.47 28 P P 06 10 05.8 +0.8
comp=Z,16nm,1.1s,baz=221,slow=11,SNR=1.5
comp=Z,16nm,1.1s
319A Douglas 82.48 54 IAmb IAmb 06 10 08.4
comp=Z,52nm,0.9s
KNB Kanab 82.51 47 IAmb IAmb 06 10 07.9
comp=Z,26nm,0.8s
KAIM Kayak Island 82.52 16 P P 06 10 05.0 -0.1
baz=212
PSUT Pine Spring 82.55 46 IAmb IAmb 06 10 07.6
comp=Z,21nm,0.7s
IPM Ipoh 82.55 277 P P 06 10 07.2 +0.9
U15A North Rim 82.60 48 IAmb IAmb 06 10 08.7
comp=Z,52nm,0.7s
L20K Farewell, AK 82.64 11 P P 06 10 05.0 -0.6
baz=203,SNR=14
SKT Skwentna 82.64 12 P P 06 10 04.6 -1.0
baz=206,SNR=6.4
GLI Glacier Island 82.65 15 P P 06 10 05.4 -0.3
baz=210,SNR=17
J17K VABM Dome 82.65 9 IAmb IAmb 06 10 07.2
comp=Z,43nm,0.7s
J17K VABM Dome 82.65 9 P P 06 10 06.0 +0.4
baz=198,SNR=19
EYAK Cordova Ski Ar 82.70 16 P P 06 10 06.0 +0.1
EYAK Cordova Ski Ar 82.70 16 P P 06 10 06.5 +0.6
baz=211,SNR=5.5
M22K Willow 82.73 13 P P 06 10 05.6 -0.4
baz=207,SNR=11
KNK Knik Glacier 82.80 14 IAmb IAmb 06 10 07.1
comp=Z,43nm,0.8s
KNK Knik Glacier 82.80 14 P P 06 10 06.4 0.0
baz=208,SNR=8.9
PMR Palmer 82.80 14 P P 06 10 06.0 -0.4
PMR Palmer 82.80 14 IAmb IAmb 06 10 06.5
comp=Z,26nm,0.7s
PMR Palmer 82.80 14 P P 06 10 05.6 -0.8
baz=208,SNR=13
WUAZ Wupatki 82.82 49 IAmb IAmb 06 10 10.2
comp=Z,24nm,0.9s
WUAZ Wupatki 82.82 49 P P 06 10 08.0 +0.7
baz=242,SNR=17
I17K Unalakleet 82.90 8 IAmb IAmb 06 10 08.6
comp=Z,36nm,1.1s
I17K Unalakleet 82.90 8 P P 06 10 07.2 +0.3
baz=197
HMT Hamilton 82.91 16 IAmb IAmb 06 10 08.0
comp=Z,37nm,1.0s
G08A Pilot Rock 82.93 38 IAmb IAmb 06 10 09.3
comp=Z,16nm,0.7s
SIT Sitka 83.05 22 P P 06 10 08.0 +0.3
baz=221
J18K Innoko River 83.07 10 P P 06 10 08.0 +0.2
baz=201,SNR=50
PKCU Pink Cliffs 83.07 47 IAmb IAmb 06 10 11.7
comp=Z,42nm,0.9s
E07A Sunnyside 83.14 36 IAmb IAmb 06 10 10.2
comp=Z,22nm,0.7s
U33K Whale Pass 83.16 24 P P 06 10 08.8 +0.5
baz=223,SNR=6.2
HEH HeiHe 83.16 328 *e* P P 06 10 08.8 +0.3
HEH PP PP 06 13 34.8 +5.3
HEH pmax pmax
comp=Z,36nm,1.4s
KULM Kulim 83.17 278 IAmb IAmb 06 10 11.3
comp=Z,85nm,1.4s
SML Sawmill 83.17 14 IAmb IAmb 06 10 21.9
comp=Z,18nm,0.8s
SML Sawmill 83.17 14 P P 06 10 07.9 -0.5
baz=208,SNR=7.7
V35K Ketchikan 83.18 25 P P 06 10 09.4 +1.0
baz=224
HAWA Hanford 83.23 37 IAmb IAmb 06 10 10.7
comp=Z,21nm,0.7s
CUT Chulitna 83.28 13 P P 06 10 08.1 -0.7
baz=207,SNR=10.0
M23K Glacier View 83.30 14 P P 06 10 08.4 -0.5
baz=209,SNR=8.1
BMRM Bremner River 83.35 16 P P 06 10 09.0 -0.3
baz=212,SNR=14
X18A Snowflake 83.39 51 IAmb IAmb 06 10 12.4
comp=Z,15nm,0.7s
MESA MESA 83.41 17 P P 06 10 10.0 +0.2
baz=214,SNR=15
K20K Telida 83.41 11 P P 06 10 09.6 +0.1
baz=203,SNR=42
SCM Sheep Creek Mo 83.43 14 P P 06 10 09.5 -0.2
baz=210,SNR=26
S31K Pelican 83.43 21 IAmb IAmb 06 10 11.4
comp=Z,22nm,0.9s
S31K Pelican 83.43 21 P P 06 10 10.1 +0.5
baz=220,SNR=14
H16K Elim 83.44 7 P P 06 10 10.0 +0.4
baz=195,SNR=14
MTPU Mount Pierson 83.45 47 IAmb IAmb 06 10 13.4
comp=Z,25nm,0.8s
KLU Klutina 83.47 15 IAmb IAmb 06 10 10.7
comp=Z,24nm,1.0s
KLU Klutina 83.47 15 P P 06 10 09.9 0.0
baz=211,SNR=8.5
E08A Dider Farm, El 83.55 37 IAmb IAmb 06 10 12.1
comp=Z,18nm,0.7s
PMSA Palmer Station 83.56 157 P P 06 10 11.1 +0.8
PMSA IAmb IAmb 06 10 12.2
comp=Z,37nm,1.1s
CRQM Cirque 83.56 17 IAmb IAmb 06 10 11.5
comp=Z,60nm,1.0s
CRQE Cirque 83.57 17 P P 06 10 10.2 -0.3
baz=213,SNR=19
G15K Niukluk 83.59 6 P P 06 10 10.4 +0.1
baz=194,SNR=9.7
S32K Killisnoo 83.63 22 P P 06 10 11.1 +0.5
S32K Killisnoo 83.63 22 P P 06 10 11.0 +0.4
baz=221
TGL Tana Glacier 83.65 17 IAmb IAmb 06 10 11.9
comp=Z,57nm,1.0s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ISLE | Juniper Island | 83.65 | 17 | IAmb | IAmb | 06 10 11.9 | | | | |
| | comp=Z,49nm,0.9s | | | | | | | | | |
| MAW | Mawson | 83.68 | 200 | P | P | 06 10 11.1 | +0.3 | | | |
| | comp=Z,4.9nm,0.9s,baz=65,slow=3.6,SNR=5.4 | | | | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | | | | |
| WRAK | Wrangell Islan | 83.68 | 24 | P | P | 06 10 11.5 | +0.6 | | | |
| | baz=223 | | | | | | | | | |
| J19K | Poorman | 83.74 | 10 | IAmb | IAmb | 06 10 12.5 | | | | |
| | comp=Z,28nm,0.8s | | | | | | | | | |
| J19K | Poorman | 83.74 | 10 | P | P | 06 10 11.6 | +0.5 | | | |
| | baz=202,SNR=19 | | | | | | | | | |
| PNL | Peninsula | 83.75 | 19 | P | P | 06 10 11.6 | +0.3 | | | |
| PNL | Peninsula | 83.75 | 19 | P | P | 06 10 11.0 | -0.2 | | | |
| | baz=217,SNR=12 | | | | | | | | | |
| HNS | HongShan | 83.75 | 312 | ⇓P | P | 06 10 12.8 | +1.1 | | | |
| HNS | | | | pmax | pmax | | | | | |
| | comp=Z,31nm,1.5s | | | | | | | | | |
| TNA | Tin City | 83.82 | 4 | P | P | 06 10 11.5 | +0.1 | | | |
| | baz=190 | | | | | | | | | |
| PINM | Pinnacle | 83.83 | 18 | P | P | 06 10 11.7 | 0.0 | | | |
| | baz=216,SNR=6.7 | | | | | | | | | |
| F14K | Arctic Creek | 83.85 | 5 | P | P | 06 10 11.9 | +0.3 | | | |
| | baz=191 | | | | | | | | | |
| VRDI | Verde Repeater | 83.87 | 16 | IAmb | IAmb | 06 10 12.9 | | | | |
| | comp=Z,35nm,1.0s | | | | | | | | | |
| N25K | Chitina, Valde | 83.90 | 15 | P | P | 06 10 12.1 | +0.1 | | | |
| | baz=212,SNR=40 | | | | | | | | | |
| GRNC | Granite Creek | 83.92 | 17 | IAmb | IAmb | 06 10 13.4 | | | | |
| | comp=Z,39nm,1.0s | | | | | | | | | |
| M24K | Tolsona, Glenn | 83.94 | 15 | P | P | 06 10 12.4 | +0.2 | | | |
| | baz=210,SNR=15 | | | | | | | | | |
| D08A | Wollman Farm, | 83.95 | 36 | IAmb | IAmb | 06 10 14.1 | | | | |
| | comp=Z,15nm,0.7s | | | | | | | | | |
| GLB | Gilahina Butte | 83.96 | 16 | IAmb | IAmb | 06 10 13.1 | | | | |
| | comp=Z,39nm,0.7s | | | | | | | | | |
| RPSI | Rantau Prapat | 83.97 | 275 | P | P | 06 10 12.9 | -0.6 | | | |
| RPSI | | | | IAmb | IAmb | 06 10 14.2 | | | | |
| | comp=Z,54nm,0.9s | | | | | | | | | |
| WAT6 | Susitna Watana | 83.99 | 14 | P | P | 06 10 12.4 | -0.2 | | | |
| | baz=209,SNR=33 | | | | | | | | | |
| PSI | Prapat | 84.01 | 275 | P | P | 06 10 13.0 | -0.8 | | | |
| PSI | Prapat | 84.01 | 275 | P | P | 06 10 12.9 | -0.8 | | | |
| PSI | | | | pmax | pmax | | | | | |
| | comp=Z,55nm,0.9s | | | | | | | | | |
| H17K | Granite Mounta | 84.01 | 8 | IAmb | IAmb | 06 10 13.4 | | | | |
| | comp=Z,30nm,1.2s | | | | | | | | | |
| H17K | Granite Mounta | 84.01 | 8 | P | P | 06 10 12.3 | -0.1 | | | |
| | baz=198,SNR=6.8 | | | | | | | | | |
| BJT | Baijiatuau | 84.02 | 315 | P | P | 06 10 13.8 | +0.8 | | | |
| BJT | Baijiatuau | 84.02 | 315 | IAmb | IAmb | 06 10 14.3 | | | | |
| | comp=Z,22nm,0.9s | | | | | | | | | |
| BJI | Beijing | 84.02 | 315 | P | P | 06 10 13.5 | +0.5 | | | |
| BJI | | | | pmax | pmax | | | | | |
| | comp=Z,14nm,1.4s | | | | | | | | | |
| SEY | Seymchan | 84.03 | 347 | *d i* P | P | 06 10 12.0 | -0.5 | | | |
| SEY | | | | pmax | pmax | | | | | |
| | comp=Z,111nm,0.8s | | | | | | | | | |
| WAT1 | Susitna Watana | 84.03 | 13 | P | P | 06 10 12.0 | -0.6 | | | |
| | baz=208 | | | | | | | | | |
| LYN | LuoYang | 84.05 | 309 | ⇓P | P | 06 10 14.6 | +1.3 | | | |
| LYN | | | | pP | pP | 06 12 09.1 | +2.6 | | | |
| LYN | | | | pmax | pmax | | | | | |
| | comp=Z,130nm,0.8s | | | | | | | | | |
| DUG | Dugway, Tooele | 84.07 | 44 | P | P | 06 10 13.3 | -0.2 | | | |
| | baz=240,SNR=8.4 | | | | | | | | | |
| MCARA | McCarthy VSAT | 84.12 | 16 | IAmb | IAmb | 06 10 14.2 | | | | |
| | comp=Z,40nm,1.1s | | | | | | | | | |
| MCARA | McCarthy VSAT | 84.12 | 16 | P | P | 06 10 13.2 | +0.2 | | | |
| | baz=213,SNR=9.3 | | | | | | | | | |
| 121A | Cookes Peak, D | 84.13 | 53 | P | P | 06 10 14.8 | +0.8 | | | |
| | baz=244,SNR=15 | | | | | | | | | |
| G16K | Koyuk River | 84.16 | 7 | P | P | 06 10 13.2 | +0.1 | | | |
| | baz=195 | | | | | | | | | |
| J20K | Nowinta River | 84.16 | 10 | P | P | 06 10 13.2 | +0.1 | | | |
| | baz=203,SNR=39 | | | | | | | | | |
| LOGN | Logan Glacier | 84.21 | 17 | IAmb | IAmb | 06 10 14.7 | | | | |
| | comp=Z,37nm,1.0s | | | | | | | | | |
| CTG | Chitna Glacier | 84.23 | 17 | P | P | 06 10 14.0 | +0.2 | | | |
| | baz=215,SNR=19 | | | | | | | | | |
| F15K | North Star Dit | 84.23 | 6 | P | P | 06 10 13.5 | 0.0 | | | |
| | baz=193 | | | | | | | | | |
| P29M | Windy Craggy | 84.23 | 19 | IAmb | IAmb | 06 10 15.4 | | | | |
| | comp=Z,31nm,0.8s | | | | | | | | | |
| P29M | Windy Craggy | 84.23 | 19 | P | P | 06 10 13.9 | +0.2 | | | |
| | baz=218,SNR=17 | | | | | | | | | |
| CTGM | Chitina Glacie | 84.23 | 17 | IAmb | IAmb | 06 10 14.8 | | | | |
| | comp=Z,40nm,0.9s | | | | | | | | | |
| GCSA | Galena City Sc | 84.25 | 9 | P | P | 06 10 13.7 | +0.2 | | | |
| | baz=200 | | | | | | | | | |
| R32K | Eaglecrest | 84.26 | 22 | P | P | 06 10 13.9 | +0.1 | | | |
| | baz=221,SNR=7.0 | | | | | | | | | |
| JIS | Juneau Island | 84.31 | 22 | P | P | 06 10 14.8 | +0.8 | | | |
| F10A | Beach Ranch, E | 84.32 | 38 | IAmb | IAmb | 06 10 16.1 | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| O28M | Mount Upton | 84.40 | 18 | P | P | 06 10 15.0 | +0.2 | | | |
| | baz=216,SNR=26 | | | | | | | | | |
| H18K | Honhosa River | 84.42 | 8 | P | P | 06 10 14.4 | 0.0 | | | |
| | baz=199 | | | | | | | | | |
| HARP | HAARP | 84.44 | 15 | P | P | 06 10 14.6 | 0.0 | | | |
| | baz=211,SNR=12 | | | | | | | | | |
| G17K | Kiwalik Mounta | 84.46 | 7 | P | P | 06 10 15.0 | +0.4 | | | |
| | baz=197,SNR=6.5 | | | | | | | | | |
| B08A | Colville Reser | 84.47 | 35 | IAmb | IAmb | 06 10 15.9 | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| ENH | Enshi | 84.49 | 304 | P | P | 06 10 16.3 | +0.7 | | | |
| DHY | Denali Highway | 84.50 | 14 | P | P | 06 10 14.8 | -0.2 | | | |
| | baz=209,SNR=13 | | | | | | | | | |
| O29M | Mount Kennedy | 84.50 | 19 | IAmb | IAmb | 06 10 16.6 | | | | |
| | comp=Z,22nm,1.2s | | | | | | | | | |
| O29M | Mount Kennedy | 84.50 | 19 | P | P | 06 10 15.0 | -0.1 | | | |
| | baz=218,SNR=9.5 | | | | | | | | | |
| PLBC | Pleasant Camp | 84.54 | 20 | P | P | 06 10 15.8 | +0.7 | | | |
| | baz=220,SNR=21 | | | | | | | | | |
| BPAW | Bear Paw Mtn. | 84.66 | 12 | P | P | 06 10 13.9 | -1.7 | | | |
| | baz=206,SNR=12 | | | | | | | | | |
| I20K | Naaghedeneel | 84.67 | 10 | IAmb | IAmb | 06 10 17.5 | | | | |
| | comp=Z,54nm,0.9s | | | | | | | | | |
| I20K | Naaghedeneel | 84.67 | 10 | P | P | 06 10 15.2 | -0.4 | | | |
| | baz=203,SNR=14 | | | | | | | | | |
| TMUT | Trail Mountain | 84.72 | 46 | IAmb | IAmb | 06 10 19.0 | | | | |
| | comp=Z,42nm,1.5s | | | | | | | | | |
| HLID | Hailey | 84.74 | 41 | P | P | 06 10 16.6 | -0.1 | | | |
| | baz=239,SNR=30 | | | | | | | | | |
| MCK | McKinley | 84.75 | 13 | P | P | 06 10 15.6 | -0.5 | | | |
| | baz=208,SNR=29 | | | | | | | | | |
| EPT | El Paso | 84.79 | 54 | IAmb | IAmb | 06 10 19.3 | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| GSI | Gunungsitoli | 84.82 | 273 | P | P | 06 10 18.8 | +1.2 | | | |
| PAX | Paxson | 84.85 | 14 | P | P | 06 10 16.0 | -0.7 | | | |
| | baz=211,SNR=19 | | | | | | | | | |
| P30M | Million Dollar | 84.86 | 19 | P | P | 06 10 17.2 | +0.4 | | | |
| | baz=219 | | | | | | | | | |
| SKAG | Skagway | 84.88 | 20 | P | P | 06 10 18.0 | +1.2 | | | |
| SKAG | Skagway | 84.88 | 20 | P | P | 06 10 17.8 | +1.1 | | | |
| | baz=220,SNR=10.0 | | | | | | | | | |
| T35M | Bob Quinn | 84.89 | 24 | P | P | 06 10 17.5 | +0.5 | | | |
| | baz=225 | | | | | | | | | |
| YUK8 | Steele Glacier | 84.94 | 18 | P | P | 06 10 17.7 | +0.3 | | | |
| | baz=216,SNR=34 | | | | | | | | | |
| M26K | Nabesna, AK | 84.98 | 16 | IAmb | IAmb | 06 10 19.0 | | | | |
| | comp=Z,58nm,1.0s | | | | | | | | | |
| M26K | Nabesna, AK | 84.98 | 16 | P | P | 06 10 17.4 | +0.1 | | | |
| | baz=213,SNR=39 | | | | | | | | | |
| H19K | Roundabout Mou | 85.05 | 9 | IAmb | IAmb | 06 10 18.1 | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | | |
| H19K | Roundabout Mou | 85.05 | 9 | P | P | 06 10 17.9 | +0.5 | | | |
| | baz=201,SNR=9.2 | | | | | | | | | |
| YUK6 | Outpost Mounta | 85.08 | 18 | P | P | 06 10 18.3 | +0.3 | | | |
| | baz=218,SNR=6.7 | | | | | | | | | |
| G18K | Tagagawik | 85.09 | 8 | P | P | 06 10 17.3 | -0.4 | | | |
| | baz=199,SNR=6.7 | | | | | | | | | |
| SRU | San Rafael Swe | 85.10 | 46 | IAmb | IAmb | 06 10 20.1 | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | | |
| YUK3 | Moose Creek | 85.14 | 17 | P | P | 06 10 18.2 | -0.1 | | | |
| | baz=216,SNR=18 | | | | | | | | | |
| NONG | Nongkai | 85.17 | 291 | P | P | 06 10 19.8 | +0.6 | | | |
| S34M | Telegraph Cree | 85.22 | 23 | IAmb | IAmb | 06 10 20.5 | | | | |
| | comp=Z,26nm,0.8s | | | | | | | | | |
| S34M | Telegraph Cree | 85.22 | 23 | P | P | 06 10 18.9 | +0.4 | | | |
| | baz=224,SNR=28 | | | | | | | | | |
| SRIT | Nakonsritamara | 85.22 | 281 | P | P | 06 10 21.5 | +2.0 | | | |
| M27K | Edge Creek, AK | 85.23 | 16 | P | P | 06 10 19.1 | +0.4 | | | |
| | baz=214,SNR=48 | | | | | | | | | |
| H20K | Anotleneega Mo | 85.26 | 10 | P | P | 06 10 18.7 | +0.2 | | | |
| | baz=202,SNR=10 | | | | | | | | | |
| F17K | Baldwin Pennin | 85.30 | 7 | IAmb | IAmb | 06 10 21.6 | | | | |
| | comp=Z,28nm,0.8s | | | | | | | | | |
| F17K | Baldwin Pennin | 85.30 | 7 | P | P | 06 10 19.6 | +1.0 | | | |
| | baz=196 | | | | | | | | | |
| YUK4 | Talbot Arm | 85.31 | 18 | P | P | 06 10 19.4 | +0.2 | | | |
| | baz=218,SNR=9.4 | | | | | | | | | |
| SURA | Surathani | 85.38 | 281 | P | P | 06 10 22.2 | +1.9 | | | |
| L26K | Log Cabin Wild | 85.41 | 15 | IAmb | IAmb | 06 10 20.5 | | | | |
| | comp=Z,27nm,1.1s | | | | | | | | | |
| L26K | Log Cabin Wild | 85.41 | 15 | P | P | 06 10 19.6 | +0.3 | | | |
| | baz=213,SNR=17 | | | | | | | | | |
| ZEA | Zeya | 85.44 | 331 | *e*P | P | 06 10 20.4 | +0.8 | | | |
| ZEA | | | | pmax | pmax | | | | | |
| | comp=N,20nm,1.3s | | | | | | | | | |
| ZEA | | | | pmax | pmax | | | | | |
| | comp=Z,40nm,1.4s | | | | | | | | | |
| TCUT | Toone Canyon | 85.46 | 44 | IAmb | IAmb | 06 10 23.6 | | | | |
| | comp=Z,22nm,0.8s | | | | | | | | | |
| I21K | Tanana | 85.46 | 11 | IAmb | IAmb | 06 10 20.3 | | | | |
| | comp=Z,70nm,1.3s | | | | | | | | | |
| I21K | Tanana | 85.46 | 11 | P | P | 06 10 19.4 | 0.0 | | | |
| | baz=205 | | | | | | | | | |
| NEA2 | Nenana | 85.48 | 12 | P | P | 06 10 18.7 | -0.9 | | | |
| | baz=208,SNR=8.3 | | | | | | | | | |
| K24K | Donnelly Dome | 85.50 | 14 | P | P | 06 10 19.1 | -0.6 | | | |
| | baz=211,SNR=30 | | | | | | | | | |
| P32M | Atlin | 85.52 | 21 | P | P | 06 10 20.8 | +0.8 | | | |
| | baz=222,SNR=8.2 | | | | | | | | | |
| NAYO | Nakonayok | 85.53 | 287 | P | P | 06 10 22.5 | +1.6 | | | |
| G19K | Purcell Mounta | 85.54 | 8 | IAmb | IAmb | 06 10 21.9 | | | | |
| | comp=Z,39nm,0.8s | | | | | | | | | |
| G19K | Purcell Mounta | 85.54 | 8 | P | P | 06 10 19.9 | +0.1 | | | |
| | baz=200,SNR=16 | | | | | | | | | |
| MLY | Manley | 85.55 | 11 | P | P | 06 10 19.9 | -0.1 | | | |
| | baz=206,SNR=20 | | | | | | | | | |
| Q32M | Nakina River | 85.56 | 22 | IAmb | IAmb | 06 10 22.1 | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | | |
| Q32M | Nakina River | 85.56 | 22 | P | P | 06 10 21.2 | +0.9 | | | |
| | baz=223,SNR=18 | | | | | | | | | |
| VHRN | Van Horn | 85.56 | 56 | IAmb | IAmb | 06 10 22.9 | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| MNTX | Cornudas Mount | 85.63 | 55 | P | P | 06 10 20.8 | -0.3 | | | |
| | baz=246 | | | | | | | | | |
| F18K | Selawik | 85.63 | 7 | P | P | 06 10 19.7 | -0.5 | | | |
| | baz=198 | | | | | | | | | |
| NEW | Newport | 85.64 | 36 | P | P | 06 10 21.0 | +0.2 | | | |
| | baz=237,SNR=9.9 | | | | | | | | | |
| O30N | Mendenhall | 85.64 | 19 | IAmb | IAmb | 06 10 22.0 | | | | |
| | comp=Z,49nm,0.8s | | | | | | | | | |
| O30N | Mendenhall | 85.64 | 19 | P | P | 06 10 20.8 | +0.3 | | | |
| | baz=220,SNR=27 | | | | | | | | | |
| MVCO | Mesa Verde | 85.66 | 49 | P | P | 06 10 21.2 | -0.3 | | | |
| | baz=243 | | | | | | | | | |
| RIDG | Independent Ri | 85.66 | 14 | P | P | 06 10 19.9 | -0.7 | | | |
| | baz=212,SNR=19 | | | | | | | | | |
| SLVN | Son La | 85.67 | 294 | IAmb | IAmb | 06 10 23.9 | | | | |
| | comp=Z,19nm,1.0s | | | | | | | | | |
| H21K | Melozitna Rive | 85.75 | 10 | IAmb | IAmb | 06 10 23.1 | | | | |
| | comp=Z,49nm,1.5s | | | | | | | | | |
| H21K | Melozitna Rive | 85.75 | 10 | P | P | 06 10 20.3 | -0.6 | | | |
| | baz=204,SNR=12 | | | | | | | | | |
| HDA | Harding Lake | 85.76 | 13 | IAmb | IAmb | 06 10 21.4 | | | | |
| | comp=Z,36nm,0.8s | | | | | | | | | |
| HDA | Harding Lake | 85.76 | 13 | P | P | 06 10 20.0 | -0.9 | | | |
| | baz=210,SNR=28 | | | | | | | | | |
| L27K | Beaver Creek, | 85.83 | 16 | P | P | 06 10 21.4 | +0.1 | | | |
| | baz=214,SNR=6 | | | | | | | | | |
| BCAR | Beaver Creek A | 85.84 | 16 | P | P | 06 10 21.6 | +0.2 | | | |
| E17K | Hotham Inlet | 85.85 | 6 | P | P | 06 10 20.9 | -0.4 | | | |
| | baz=196,SNR=10 | | | | | | | | | |
| N30M | Aishikik Lake | 85.86 | 18 | P | P | 06 10 21.3 | -0.3 | | | |
| | baz=219,SNR=10 | | | | | | | | | |
| IMAR | Indian Mountai | 85.89 | 10 | P | P | 06 10 21.4 | -0.2 | | | |
| I23K | Minto, Yukon-K | 85.92 | 12 | IAmb | IAmb | 06 10 22.7 | | | | |
| | comp=Z,35nm,1.4s | | | | | | | | | |
| I23K | Minto, Yukon-K | 85.92 | 12 | P | P | 06 10 21.0 | -0.6 | | | |
| | baz=207,SNR=15 | | | | | | | | | |
| WHY | Whitehorse | 85.94 | 20 | IAmb | IAmb | 06 10 23.6 | | | | |
| | comp=Z,17nm,1.0s | | | | | | | | | |
| WHY | Whitehorse | 85.94 | 20 | P | P | 06 10 22.2 | +0.2 | | | |
| | baz=221,SNR=6.7 | | | | | | | | | |
| MDM | Murphy Dome | 85.97 | 12 | IAmb | IAmb | 06 10 22.1 | | | | |
| | comp=Z,44nm,1.0s | | | | | | | | | |
| COLA | College | 85.98 | 13 | P | P | 06 10 21.2 | -0.7 | | | |
| COLA | College | 85.98 | 13 | P | P | 06 10 21.2 | -0.7 | | | |
| COLA | College | 85.98 | 13 | P | P | 06 10 21.2 | -0.7 | | | |
| | baz=209 | | | | | | | | | |
| COLA | College | 85.98 | 13 | *d i* P | P | 06 10 21.0 | -0.9 | | | |
| COLA | | | | pmax | pmax | | | | | |
| | comp=Z,70nm,1.1s | | | | | | | | | |
| XLT | XiLinHaoTe | 85.99 | 319 | *e*P | P | 06 10 22.8 | +0.1 | | | |
| XLT | | | | pmax | pmax | | | | | |
| | comp=Z,33nm,1.4s | | | | | | | | | |
| XLT | | | | pmax | pmax | | | | | |
| | comp=Z,670nm,12.2s | | | | | | | | | |
| DLBC | Dease Lake | 86.00 | 23 | P | P | 06 10 23.4 | +1.0 | | | |
| | comp=Z,4.8nm,0.7s,baz=222,slow=5.3,SNR=16 | | | | | | | | | |
| | comp=Z,4.8nm,0.7s | | | | | | | | | |
| DLBC | Dease Lake | 86.00 | 23 | P | P | 06 10 22.6 | +0.2 | | | |
| | baz=225,SNR=7.1 | | | | | | | | | |
| TXAR | Lajitas Array | 86.03 | 58 | P | P | 06 10 24.8 | +1.6 | | | |
| | comp=Z,30nm,0.8s,baz=218,slow=6.0,SNR=319 | | | | | | | | | |
| TXAR | | | | pP | pP | 06 12 16.8 | +0.6 | | | |
| | comp=Z,0.7nm,0.9s,baz=236,slow=9.7,SNR=1.5 | | | | | | | | | |
| | comp=Z,30nm,0.8s | | | | | | | | | |
| SCRK | Sand Creek | 86.06 | 14 | IAmb | IAmb | 06 10 23.5 | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | | |
| SCRK | Sand Creek | 86.06 | 14 | P | P | 06 10 22.5 | 0.0 | | | |
| | baz=212,SNR=16 | | | | | | | | | |
| IL31 | | 86.09 | 13 | IAmb | IAmb | 06 10 22.8 | | | | |
| | comp=Z,26nm,0.8s | | | | | | | | | |
| ILAR | Eielson Array | 86.09 | 13 | P | P | 06 10 22.0 | -0.5 | | | |
| ILAR | Eielson Array | 86.09 | 13 | P | P | 06 10 21.8 | -0.7 | | | |
| | comp=Z,24nm,0.9s,baz=225,slow=4.7,SNR=112 | | | | | | | | | |
| ILAR | | | | pP | pP | 06 12 16.5 | +0.8 | | | |
| | comp=Z,6.8nm,1.1s,baz=240,slow=5.9,SNR=5.5 | | | | | | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| F19K | Shaleruckik Mo | 86.09 | 8 | IAmb | IAmb | 06 10 23.0 | | | | |
| | comp=Z,18nm,0.7s | | | | | | | | | |
| F19K | Shaleruckik Mo | 86.09 | 8 | P | P | 06 10 22.2 | -0.2 | | | |
| | baz=200,SNR=16 | | | | | | | | | |
| ANMO | Albuquerque | 86.16 | 51 | P | P | 06 10 24.4 | +0.6 | | | |
| ANMO | Albuquerque | 86.16 | 51 | P | P | 06 10 23.0 | -0.8 | | | |
| | baz=245 | | | | | | | | | |
| ANMO | Albuquerque | 86.16 | 51 | P | P | 06 10 24.4 | +0.6 | | | |
| ANMO | | | | pmax | pmax | | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| H22K | Ishtalitna Cre | 86.21 | 11 | P | P | 06 10 23.1 | 0.0 | | | |
| | baz=206 | | | | | | | | | |
| M29M | Somme Creek | 86.24 | 17 | IAmb | IAmb | 06 10 25.7 | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| M29M | Somme Creek | 86.24 | 17 | P | P | 06 10 23.5 | +0.1 | | | |
| | baz=218,SNR=22 | | | | | | | | | |
| POKR | Poker Flat Res | 86.28 | 13 | P | P | 06 10 22.6 | -0.8 | | | |
| | baz=209,SNR=15 | | | | | | | | | |
| J25K | Salcha River, | 86.28 | 14 | P | P | 06 10 23.3 | -0.3 | | | |
| | baz=211,SNR=32 | | | | | | | | | |
| N31M | Braeburn, Yuko | 86.29 | 19 | P | P | 06 10 23.6 | 0.0 | | | |
| | baz=220,SNR=13 | | | | | | | | | |
| P33M | Teslin, Yukon | 86.29 | 21 | P | P | 06 10 24.1 | +0.4 | | | |
| | baz=223,SNR=11 | | | | | | | | | |
| E18K | Tukpahlearik C | 86.31 | 7 | IAmb | IAmb | 06 10 24.8 | | | | |
| | comp=Z,26nm,0.8s | | | | | | | | | |
| E18K | Tukpahlearik C | 86.31 | 7 | P | P | 06 10 23.6 | +0.1 | | | |
| | baz=197,SNR=7.9 | | | | | | | | | |
| D17K | Noatak River | 86.32 | 6 | P | P | 06 10 23.7 | +0.2 | | | |
| | baz=194 | | | | | | | | | |
| R33M | Jennings River | 86.34 | 22 | IAmb | IAmb | 06 10 25.9 | | | | |
| | comp=Z,28nm,1.4s | | | | | | | | | |
| R33M | Jennings River | 86.34 | 22 | P | P | 06 10 24.1 | +0.1 | | | |
| | baz=224,SNR=16 | | | | | | | | | |
| G21K | Allakaket | 86.42 | 10 | IAmb | IAmb | 06 10 24.9 | | | | |
| | comp=Z,30nm,0.8s | | | | | | | | | |
| G21K | Allakaket | 86.42 | 10 | P | P | 06 10 24.1 | 0.0 | | | |
| | baz=204,SNR=35 | | | | | | | | | |
| ALPN | Alpine | 86.46 | 57 | IAmb | IAmb | 06 10 27.6 | | | | |
| | comp=Z,67nm,1.5s | | | | | | | | | |
| XAN | Xi'an | 86.48 | 307 | ⇓P | P | 06 10 26.3 | +1.1 | | | |
| XAN | | | | pmax | pmax | | | | | |
| | comp=Z,130nm,1.0s | | | | | | | | | |
| H23K | Yukon River | 86.49 | 11 | P | P | 06 10 23.9 | -0.5 | | | |
| | baz=207,SNR=6.8 | | | | | | | | | |
| K27K | Chicken | 86.57 | 15 | IAmb | IAmb | 06 10 26.4 | | | | |
| | comp=Z,24nm,1.1s | | | | | | | | | |
| K27K | Chicken | 86.57 | 15 | P | P | 06 10 24.7 | -0.1 | | | |
| | baz=214 | | | | | | | | | |
| F20K | Avaraart Lake | 86.58 | 9 | IAmb | IAmb | 06 10 25.6 | | | | |
| | comp=Z,17nm,0.8s | | | | | | | | | |
| F20K | Avaraart Lake | 86.58 | 9 | P | P | 06 10 24.6 | -0.2 | | | |
| | baz=201 | | | | | | | | | |
| J26L | Joseph Creek | 86.60 | 14 | IAmb | IAmb | 06 10 26.0 | | | | |
| | comp=Z,24nm,0.8s | | | | | | | | | |
| J26L | Joseph Creek | 86.60 | 14 | P | P | 06 10 25.2 | +0.2 | | | |
| | baz=213,SNR=34 | | | | | | | | | |
| BILL | Bilibino | 86.67 | 354 | *i* P | P | 06 10 23.8 | -1.4 | | | |
| BILL | | | | pmax | pmax | | | | | |
| | comp=Z,41nm,0.9s | | | | | | | | | |
| PECS | Pecos | 86.68 | 56 | IAmb | IAmb | 06 10 28.1 | | | | |
| | comp=Z,22nm,1.4s | | | | | | | | | |
| MSO | Missoula | 86.70 | 38 | P | P | 06 10 25.8 | -0.2 | | | |
| | baz=239,SNR=7.6 | | | | | | | | | |
| E19K | Redstone River | 86.76 | 8 | P | P | 06 10 25.5 | -0.1 | | | |
| | baz=200,SNR=31 | | | | | | | | | |
| DLMT | Dillon | 86.77 | 40 | IAmb | IAmb | 06 10 28.2 | | | | |
| | comp=Z,17nm,0.7s | | | | | | | | | |
| H24K | Noodor Dome | 86.82 | 12 | P | P | 06 10 24.9 | -1.1 | | | |
| | baz=209,SNR=7.2 | | | | | | | | | |
| N32M | Quiet Lake | 86.89 | 20 | IAmb | IAmb | 06 10 28.2 | | | | |
| | comp=Z,13nm,1.1s | | | | | | | | | |
| N32M | Quiet Lake | 86.89 | 20 | P | P | 06 10 27.1 | +0.7 | | | |
| | baz=222,SNR=13 | | | | | | | | | |
| SNOW | Snow King Moun | 87.00 | 42 | IAmb | IAmb | 06 10 29.6 | | | | |
| | comp=Z,21nm,0.9s | | | | | | | | | |
| PRP | Porcupine Dome | 87.03 | 13 | IAmb | IAmb | 06 10 33.5 | | | | |
| | comp=Z,14nm,0.6s | | | | | | | | | |
| PRP | Porcupine Dome | 87.03 | 13 | P | P | 06 10 26.5 | -0.6 | | | |
| | baz=211 | | | | | | | | | |
| AY03 | Cochrane | 87.07 | 139 | IAmb | IAmb | 06 10 30.9 | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| F21K | Alatna River | 87.08 | 9 | IAmb | IAmb | 06 10 27.8 | | | | |
| | comp=Z,14nm,0.8s | | | | | | | | | |
| F21K | Alatna River | 87.08 | 9 | P | P | 06 10 26.6 | -0.6 | | | |
| | baz=204,SNR=13 | | | | | | | | | |
| S22A | 4UR Ranch, Cre | 87.08 | 49 | P | P | 06 10 28.2 | 0.0 | | | |
| | baz=244,SNR=21 | | | | | | | | | |
| IMW | Indian Meadow | 87.09 | 42 | IAmb | IAmb | 06 10 30.1 | | | | |
| | comp=Z,21nm,0.8s | | | | | | | | | |
| G22K | Bettles | 87.12 | 10 | P | P | 06 10 27.1 | -0.2 | | | |
| | baz=205 | | | | | | | | | |
| G23K | Bananza Creek | 87.19 | 11 | IAmb | IAmb | 06 10 28.8 | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | | |
| G23K | Bananza Creek | 87.19 | 11 | P | P | 06 10 27.6 | -0.1 | | | |
| | baz=207,SNR=11 | | | | | | | | | |
| M31M | Drury Creek, Y | 87.26 | 19 | P | P | 06 10 27.8 | -0.3 | | | |
| | baz=221,SNR=10.0 | | | | | | | | | |
| DAWY | Dawson | 87.28 | 16 | IAmb | IAmb | 06 10 29.5 | | | | |
| | comp=Z,37nm,1.3s | | | | | | | | | |
| DAWY | Dawson | 87.28 | 16 | P | P | 06 10 28.4 | +0.1 | | | |
| | baz=217,SNR=16 | | | | | | | | | |
| FLWY | Flagg Ranch | 87.33 | 42 | IAmb | IAmb | 06 10 31.3 | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| I26K | Coal Creek Min | 87.38 | 14 | IAmb | IAmb | 06 10 29.2 | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| I26K | Coal Creek Min | 87.38 | 14 | P | P | 06 10 29.2 | +0.6 | | | |
| | baz=213 | | | | | | | | | |
| YHL | Hebgen Lake | 87.39 | 41 | IAmb | IAmb | 06 10 32.0 | | | | |
| | comp=Z,25nm,0.8s | | | | | | | | | |
| EGAK | Eagle | 87.41 | 15 | IAmb | IAmb | 06 10 29.8 | | | | |
| | comp=Z,22nm,0.9s | | | | | | | | | |
| EGAK | Eagle | 87.41 | 15 | P | P | 06 10 28.8 | 0.0 | | | |
| | baz=215,SNR=19 | | | | | | | | | |
| YFT | Old Faithful | 87.42 | 41 | IAmb | IAmb | 06 10 32.7 | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| C18K | Utukok River | 87.43 | 6 | P | P | 06 10 28.0 | -0.8 | | | |
| | baz=196 | | | | | | | | | |
| BW06 | Boulder Array | 87.45 | 43 | P | P | 06 10 30.0 | +0.2 | | | |
| | baz=242,SNR=19 | | | | | | | | | |
| PD31 | Pinedale Array | 87.45 | 43 | IAmb | IAmb | 06 10 30.9 | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| PDAR | Pinedale Array | 87.45 | 43 | P | P | 06 10 29.8 | +0.1 | | | |
| PDAR | Pinedale Array | 87.45 | 43 | P | P | 06 10 30.1 | +0.4 | | | |
| | comp=Z,9.3nm,0.7s,baz=216,slow=2.6,SNR=92 | | | | | | | | | |
| PDAR | | | | pP | pP | 06 12 23.8 | +0.4 | | | |
| | comp=Z,1.5nm,0.9s,baz=210,slow=7.1,SNR=4.0 | | | | | | | | | |
| | comp=Z,9.3nm,0.7s | | | | | | | | | |
| BOZ | Bozeman (W) | 87.48 | 40 | P | P | 06 10 30.4 | +0.7 | | | |
| | baz=241,SNR=19 | | | | | | | | | |
| HHC | Hu-ho-hao-te | 87.51 | 314 | *e*P | P | 06 10 31.3 | +1.4 | | | |
| HHC | | | | sP | sP | 06 13 20.4 | +3.6 | | | |
| HHC | | | | pmax | pmax | | | | | |
| | comp=Z,32nm,1.0s | | | | | | | | | |
| SAND | Sanderson | 87.51 | 58 | IAmb | IAmb | 06 10 32.0 | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | | |
| MNHN | Monahans | 87.53 | 56 | IAmb | IAmb | 06 10 31.9 | | | | |
| | comp=Z,26nm,1.4s | | | | | | | | | |
| F22K | John River | 87.54 | 10 | P | P | 06 10 29.4 | +0.1 | | | |
| | baz=205 | | | | | | | | | |
| H17A | Grant Village | 87.56 | 42 | IAmb | IAmb | 06 10 33.2 | | | | |
| | comp=Z,17nm,0.8s | | | | | | | | | |
| H17A | Grant Village | 87.56 | 42 | P | P | 06 10 31.8 | +1.5 | | | |
| | baz=242,SNR=5.1 | | | | | | | | | |
| FARO | Faro, Yukon | 87.61 | 19 | P | P | 06 10 30.0 | +0.2 | | | |
| | baz=222 | | | | | | | | | |
| K29M | Barlow Dome | 87.61 | 17 | IAmb | IAmb | 06 10 31.4 | | | | |
| | comp=Z,47nm,1.4s | | | | | | | | | |
| K29M | Barlow Dome | 87.61 | 17 | P | P | 06 10 30.4 | +0.5 | | | |
| | baz=218,SNR=16 | | | | | | | | | |
| H25L | Birch Creek | 87.61 | 13 | P | P | 06 10 28.7 | -0.9 | | | |
| | baz=211,SNR=8.8 | | | | | | | | | |
| COLD | Coldfoot | 87.62 | 11 | P | P | 06 10 30.2 | +0.5 | | | |
| | baz=207,SNR=36 | | | | | | | | | |
| D19K | Kuna River | 87.63 | 7 | IAmb | IAmb | 06 10 30.4 | | | | |
| | comp=Z,26nm,0.8s | | | | | | | | | |
| D19K | Kuna River | 87.63 | 7 | P | P | 06 10 29.6 | -0.1 | | | |
| | baz=199,SNR=10.0 | | | | | | | | | |
| W

| | | | | | | |
|---|---|---|---|---|---|---|
| **I29M** | **Ogilvie Camp,** comp=Z,22nm,1.0s | **88.60** | **16** | IAmb | IAmb | 06 10 35.0 |
| **I29M** | **Ogilvie Camp,** baz=218 | **88.60** | **16** | P | **P** | **06 10 34.3 0.0** |
| **G26K** | **Porcupine Rive** baz=213,SNR=42 | **88.62** | **13** | P | **P** | **06 10 35.0 +0.7** |
| **OZNA** | **Ozona** comp=Z,25nm,0.8s | **88.67** | **57** | IAmb | IAmb | 06 10 37.2 |
| **C21K** | **Knifeblade Rid** baz=202,SNR=13 | **88.68** | **8** | P | **P** | **06 10 35.0 +0.5** |
| **E24K** | **Your Creek** comp=Z,13nm,0.7s | **88.68** | **11** | IAmb | IAmb | 06 10 35.7 |
| **E24K** | **Your Creek** baz=208 | **88.68** | **11** | P | **P** | **06 10 35.1 +0.5** |
| **RLMT** | **Red Lodge** baz=242,SNR=8.7 | **88.72** | **41** | P | **P** | **06 10 36.6 +1.0** |
| **D22K** | **Ayikyak River** baz=204,SNR=24 | **88.72** | **9** | P | **P** | **06 10 35.3 +0.5** |
| **TGTN** | **Hyland Airport** baz=227 | **88.79** | **22** | P | **P** | **06 10 36.1 +0.8** |
| **F25K** | **Christian Rive** comp=Z,18nm,0.9s | **88.79** | **12** | IAmb | IAmb | 06 10 36.6 |
| **F25K** | **Christian Rive** baz=211,SNR=23 | **88.79** | **12** | P | **P** | **06 10 35.7 +0.5** |
| **BMAR** | **Burnt Mountain** | **88.86** | **12** | P | **P** | **06 10 36.1 +0.5** |
| **ELIB** | **Princess Elisa** comp=Z,18nm,0.9s | **88.94** | **187** | *d*P | **P** | **06 10 35.9 -0.3** |
| **G27K** | **Doyon Strip** baz=214,SNR=10 | **88.97** | **14** | P | **P** | **06 10 36.3 +0.2** |
| **TOLK** | **Toolik Lake Re** comp=Z,19nm,0.8s | **89.00** | **10** | IAmb | IAmb | 06 10 37.1 |
| **TOLK** | **Toolik Lake Re** baz=207,SNR=11 | **89.00** | **10** | P | **P** | **06 10 36.2 +0.1** |
| **I30M** | **Mount Dempster** comp=Z,26nm,1.1s | **89.00** | **16** | IAmb | IAmb | 06 10 37.2 |
| **I30M** | **Mount Dempster** baz=219,SNR=20 | **89.00** | **16** | P | **P** | **06 10 36.2 -0.1** |
| **N23A** | **Red Feather La** baz=245,SNR=8.1 | **89.05** | **46** | P | **P** | **06 10 38.0 +0.7** |
| **CM31** | **Chiang Mai Arr** comp=Z,37nm,1.0s | **89.06** | **290** | IAmb | IAmb | 06 10 39.9 |
| **CMAR** | **Chiang Mai Arr** | **89.06** | **290** | P | **P** | **06 10 38.6 +1.1** |
| **CMAR** | **Chiang Mai Arr** comp=Z,22nm,0.9s,baz=109,slow=2.9,SNR=77 | **89.06** | **290** | P | **P** | **06 10 38.8 +1.2** |
| CMAR | comp=Z,3.5nm,0.8s,baz=112,slow=3.3,SNR=3.7 | | | pP | **pwP** | **06 12 35.1 +0.3** |
| CMAR | comp=Z,0.7nm,0.4s,baz=107,slow=4.8,SNR=1.3 | | | PP | **PP** | **06 14 14.7 -2.4** |
| **CMAR** | **Chiang Mai Arr** comp=Z,22nm,0.9s | **89.06** | **290** | *i* P | **P** | **06 10 38.7 +1.2** |
| CMAR | comp=Z,23nm,0.9s | | | pmax | pmax | |
| **D23K** | **Nanushuk River** baz=206 | **89.11** | **10** | P | **P** | **06 10 37.1 +0.5** |
| **833A** | **Chaparral WMA,** baz=249 | **89.13** | **60** | P | **P** | **06 10 38.8 +1.2** |
| **B21K** | **Ikpikpuk River** comp=Z,17nm,0.8s | **89.13** | **8** | IAmb | IAmb | 06 10 37.6 |
| **B21K** | **Ikpikpuk River** baz=202 | **89.13** | **8** | P | **P** | **06 10 37.2 +0.6** |
| **LL01** | **San Ignacio de** comp=Z,33nm,1.2s | **89.14** | **135** | IAmb | IAmb | 06 10 40.5 |
| **B20K** | **Meade River** baz=200 | **89.17** | **7** | P | **P** | **06 10 37.2 +0.4** |
| **F26K** | **Sheenjek River** comp=Z,18nm,0.9s | **89.18** | **12** | IAmb | IAmb | 06 10 38.6 |
| **F26K** | **Sheenjek River** baz=212,SNR=20 | **89.18** | **12** | P | **P** | **06 10 37.6 +0.7** |
| **POST** | **Post** comp=Z,26nm,0.7s | **89.18** | **55** | IAmb | IAmb | 06 10 38.9 |
| **LL02** | **Futaleuf** | **89.19** | **135** | P | **P** | **06 10 39.2 +1.5** |
| **H29M** | **Whitestone** baz=218,SNR=26 | **89.27** | **15** | P | **P** | **06 10 37.5 +0.2** |
| **HBVL** | **Hebbronville** comp=Z,45nm,1.3s | **89.28** | **61** | IAmb | IAmb | 06 10 41.5 |
| **PZH** | **PanZhiHua** | **89.36** | **298** | P | **P** | **06 10 39.8 +0.9** |
| PZH | comp=Z,10.0nm,0.6s | | | pmax | pmax | |
| **JCT** | **Junction City** comp=Z,17nm,0.8s | **89.57** | **58** | IAmb | IAmb | 06 10 41.0 |
| **JCT** | **Junction City** baz=249 | **89.57** | **58** | P | **P** | **06 10 40.1 +0.4** |
| **D24K** | **Happy Valley** comp=Z,23nm,0.8s | **89.58** | **10** | IAmb | IAmb | 06 10 40.0 |
| **D24K** | **Happy Valley** baz=208,SNR=9.9 | **89.58** | **10** | P | **P** | **06 10 38.8 +0.1** |
| **SN05** | **Snyder 5** comp=Z,23nm,0.8s | **89.59** | **55** | IAmb | IAmb | 06 10 40.8 |
| **SN07** | **Snyder 07** comp=Z,14nm,0.9s | **89.67** | **55** | IAmb | IAmb | 06 10 40.9 |
| **AMTX** | **Amarillo** comp=Z,28nm,1.2s | **89.73** | **53** | IAmb | IAmb | 06 10 41.5 |
| **AMTX** | **Amarillo** baz=248 | **89.73** | **53** | P | **P** | **06 10 40.7 +0.3** |
| **EPYK** | **Eagle Plains** baz=219,SNR=17 | **89.80** | **16** | P | **P** | **06 10 39.9 0.0** |
| **YAK** | **Yakutsk** | **89.83** | **338** | ⇑*i* P | **P** | **06 10 39.6 -0.4** |
| YAK | comp=Z,22nm,0.7s | | | pmax | pmax | |
| **DKNS** | **Dickens** comp=Z,7.8nm,0.7s | **89.85** | **54** | IAmb | IAmb | 06 10 42.0 |
| **G29M** | **Pine Creek** comp=Z,25nm,1.0s | **89.90** | **15** | IAmb | IAmb | 06 10 41.2 |
| **G29M** | **Pine Creek** baz=218,SNR=10 | **89.90** | **15** | P | **P** | **06 10 40.4 +0.1** |
| **C23K** | **Itkillik River** baz=206,SNR=15 | **89.90** | **9** | P | **P** | **06 10 40.7 +0.5** |
| **B22K** | **Teshekpuk Lake** baz=204,SNR=5.6 | **89.96** | **8** | P | **P** | **06 10 40.9 +0.4** |
| **F28M** | **Old Crow** comp=Z,9.9nm,0.9s | **90.03** | **14** | IAmb | IAmb | 06 10 41.9 |
| **F28M** | **Old Crow** baz=216,SNR=7.9 | **90.03** | **14** | P | **P** | **06 10 41.3 +0.4** |
| **TROLL** | **Troll, Antarti** comp=Z,604nm,0.7s | **90.08** | **180** | ⇑P | **P** | **06 10 40.8 -0.6** |
| **C24K** | **Franklin Bluff** baz=208 | **90.10** | **10** | P | **P** | **06 10 41.5 +0.3** |
| **E27K** | **Coleen River** comp=Z,9.3nm,0.8s | **90.12** | **13** | IAmb | IAmb | 06 10 42.2 |
| **E27K** | **Coleen River** baz=215,SNR=12 | **90.12** | **13** | P | **P** | **06 10 41.7 +0.3** |
| **D25K** | **Kavik River** comp=Z,11nm,0.9s | **90.15** | **11** | IAmb | IAmb | 06 10 41.9 |
| **D25K** | **Kavik River** baz=210,SNR=7.2 | **90.15** | **11** | P | **P** | **06 10 41.1 -0.4** |
| **APMT** | **Aspermont** comp=Z,22nm,0.8s | **90.35** | **55** | IAmb | IAmb | 06 10 44.4 |
| **SNAA** | **Sanae** | **90.36** | **179** | P | **P** | **06 10 42.0 -0.7** |
| SNAA | comp=Z,22nm,1.5s | | | IAmb | IAmb | 06 10 43.2 |
| **SNAA** | **Sanae** comp=Z,133nm,0.8s | **90.36** | **179** | ⇑P | **P** | **06 10 41.8 -0.8** |
| **SNAA** | **Sanae** comp=Z,4.7nm,0.7s,baz=198,slow=4.4,SNR=29 | **90.36** | **179** | P | **P** | **06 10 42.0 -0.7** |
| **SNAA** | **Sanae** comp=Z,4.7nm,0.7s | **90.36** | **179** | P | **P** | **06 10 42.0 -0.7** |
| SNAA | comp=Z,22nm,1.5s | | | pmax | pmax | |
| **A22K** | **Sinclair Lake** baz=202 | **90.37** | **7** | P | **P** | **06 10 42.5 +0.1** |
| **G30M** | **tAoh Zraii Nji** baz=220,SNR=30 | **90.40** | **15** | P | **P** | **06 10 42.5 -0.2** |
| **VNA3** | **Neumayer Olymp** comp=Z,29nm,0.7s | **90.50** | **176** | ⇑P | **P** | **06 10 42.8 -0.5** |
| **BRDY** | **Brady** comp=Z,20nm,1.1s | **90.50** | **57** | IAmb | IAmb | 06 10 45.4 |
| **G31M** | **Satah River** baz=221,SNR=31 | **90.85** | **16** | P | **P** | **06 10 44.6 0.0** |
| **E28M** | **Babbage River** comp=Z,21nm,0.9s | **90.91** | **13** | IAmb | IAmb | 06 10 46.0 |
| **E28M** | **Babbage River** baz=216,SNR=25 | **90.91** | **13** | P | **P** | **06 10 45.0 +0.1** |
| **SMWD** | **Samnorwood** comp=Z,18nm,1.2s | **90.91** | **53** | IAmb | IAmb | 06 10 47.0 |
| **C26K** | **Camden Bay** baz=212 | **90.93** | **11** | P | **P** | **06 10 45.5 +0.5** |
| **VNA2** | **Neumayer--Watz** comp=Z,16nm,0.7s,baz=194,slow=3.9 | **90.94** | **177** | ⇑P | **P** | **06 10 44.9 -0.3** |
| **F30M** | **Barrier River** baz=220,SNR=5.4 | **90.99** | **15** | P | **P** | **06 10 46.4 +1.0** |
| **NVL** | **N'lazarevskaya** | **91.04** | **183** | *e*P | **P** | **06 10 44.2 -1.5** |
| NVL | comp=Z,19nm,1.0s | | | pmax | pmax | |
| **PLCA** | **Paso Flores** comp=Z,18nm,0.7s,baz=233,slow=5.1,SNR=59 | **91.10** | **134** | P | **P** | **06 10 48.1 +1.4** |
| **E29M** | **Blow River** comp=Z,11nm,0.9s | **91.10** | **14** | IAmb | IAmb | 06 10 47.7 |
| **E29M** | **Blow River** baz=218,SNR=8.5 | **91.10** | **14** | P | **P** | **06 10 45.6 -0.2** |
| **LZH** | **Lanzhou** | **91.11** | **308** | *e*P | **P** | **06 10 47.8 +0.9** |
| LZH | | | | sP | sP | 06 13 37.1 +3.2 |
| LZH | comp=Z,57nm,1.4s | | | pmax | pmax | |
| **D27M** | **Malcolm River** comp=Z,30nm,1.4s | **91.12** | **12** | IAmb | IAmb | 06 10 48.3 |
| **D27M** | **Malcolm River** baz=215 | **91.12** | **12** | P | **P** | **06 10 46.0 0.0** |
| **VNA1** | **Neumayer--Stat** comp=Z,29nm,0.9s | **91.17** | **177** | ⇑P | **P** | **06 10 45.9 -0.3** |
| **LAO** | **LASA Array** comp=Z,19nm,0.8s | **91.32** | **41** | IAmb | IAmb | 06 10 49.7 |
| **LAO** | **LASA Array** baz=245,SNR=7.3 | **91.32** | **41** | P | **P** | **06 10 47.9 +0.5** |
| **F31M** | **Tsiigehtchic** baz=222,SNR=24 | **91.38** | **16** | P | **P** | **06 10 47.0 0.0** |
| **435B** | **Jarrell** comp=Z,14nm,0.8s | **91.47** | **58** | IAmb | IAmb | 06 10 50.1 |
| **435B** | **Jarrell** baz=250 | **91.47** | **58** | P | **P** | **06 10 49.2 +0.8** |
| **RSSD** | **Black Hills** baz=246 | **91.66** | **44** | P | **P** | **06 10 49.7 +0.4** |
| **D28M** | **Stokes Point** baz=217,SNR=10 | **91.66** | **13** | P | **P** | **06 10 48.6 +0.3** |
| **WTFS** | **Witchita Falls** comp=Z,18nm,1.1s | **91.80** | **55** | IAmb | IAmb | 06 10 51.1 |
| **WMOK** | **Wichita Mounta** baz=249 | **91.90** | **54** | P | **P** | **06 10 50.5 +0.2** |
| **INK** | **Inuvik** comp=Z,28nm,0.9s,baz=236,slow=4.1,SNR=35 | **92.08** | **15** | P | **P** | **06 10 50.1 -0.2** |
| **INK** | **Inuvik** comp=Z,28nm,0.9s | **92.08** | **15** | P | **P** | **06 10 50.2 -0.1** |
| **FW13** | **Cleburne** baz=222,SNR=19 | **92.13** | **57** | IAmb | IAmb | 06 10 52.8 |
| **FW06** | **Azle** comp=Z,13nm,0.8s | **92.24** | **56** | IAmb | IAmb | 06 10 53.4 |
| **BI02** | **San Fabin de** comp=Z,21nm,1.1s | **92.29** | **130** | IAmb | IAmb | 06 10 54.1 |
| **HKT** | **Hockley** comp=Z,13nm,0.9s | **92.61** | **59** | P | **P** | **06 10 55.1 +1.5** |
| HKT | comp=Z,22nm,1.4s | | | IAmb | IAmb | 06 10 56.0 |
| **HKT** | **Hockley** | **92.61** | **59** | P | **P** | **06 10 55.1 +1.5** |
| HKT | comp=Z,22nm,1.5s | | | pmax | pmax | |
| **CBKS** | **Cedar Bluff** baz=249 | **92.63** | **50** | P | **P** | **06 10 54.5 +0.9** |
| **DGMT** | **Dagmar** baz=246,SNR=5.0 | **93.31** | **40** | P | **P** | **06 10 57.7 +1.3** |
| **ULN** | **Ulaanbaatar** comp=Z,11nm,1.1s | **93.40** | **319** | P | **P** | **06 10 57.1 +0.1** |
| ULN | | | | IAmb | IAmb | 06 10 58.1 |
| **ULN** | **Ulaanbaatar** comp=Z,18nm,1.6s | **93.40** | **319** | ⇓*e*P | **P** | **06 10 56.7 -0.4** |
| ULN | | | | pmax | pmax | |
| **W35A** | **Tecumseh** comp=Z,26nm,1.3s | **93.51** | **54** | IAmb | IAmb | 06 10 59.2 |
| **KAN01** | **Argonia South** comp=Z,17nm,0.8s | **93.51** | **52** | IAmb | IAmb | 06 10 59.1 |
| **SONM** | **Songino Array** | **93.79** | **319** | P | **P** | **06 10 58.7 -0.1** |
| **SONM** | **Songino Array** comp=Z,1.9nm,0.6s,baz=135,slow=4.3,SNR=12 | **93.79** | **319** | P | **P** | **06 10 58.7 -0.1** |
| SONM | comp=Z,0.6nm,0.8s,baz=79,slow=3.2,SNR=3.6 | | | pP | **pP** | **06 12 54.5 +0.7** |
| SONM | comp=Z,2.3nm,1.1s,baz=107,slow=7.9,SNR=4.4 | | | PP | **PP** | **06 14 50.0 -3.4** |
| **SONM** | **Songino Array** comp=Z,1.9nm,0.6s | **93.79** | **319** | P | **P** | **06 10 58.7 -0.1** |
| SONM | comp=Z,4.0nm,0.9s | | | pmax | pmax | |
| **YKA** | **Yellowknife Ar** comp=Z,2.7nm,0.9s,baz=248,slow=4.6,SNR=7.0 | **94.50** | **25** | P | **P** | **06 11 01.3 -0.2** |
| **KSU1** | **Kansas State U** baz=251 | **95.02** | **51** | P | **P** | **06 11 05.4 +0.9** |
| **GTA** | **Gaotai** | **95.26** | **310** | *e*P | **P** | **06 11 06.4 +0.7** |
| GTA | comp=Z,10.0nm,0.9s | | | pmax | pmax | |
| **C36M** | **Paulatuk** baz=231 | **95.29** | **17** | P | **P** | **06 11 05.7 +0.8** |
| **ECSD** | **EROS Data Cent** comp=Z,4.4nm,0.7s | **96.52** | **46** | IAmb | IAmb | 06 11 11.7 |
| **ECSD** | **EROS Data Cent** baz=251 | **96.52** | **46** | P | **P** | **06 11 11.2 +0.1** |
| **S39A** | **Bolivar** comp=Z,3.3nm,0.8s | **97.03** | **53** | IAmb | IAmb | 06 11 15.2 |
| **MGMO** | **Mountain Grove** comp=Z,8.5nm,1.1s | **97.67** | **54** | IAmb | IAmb | 06 11 18.8 |
| **CCM** | **Cathedral Cave** baz=254 | **98.71** | **53** | P | **P** | **06 11 21.2 +0.1** |
| **ULM** | **Lac du Bonnet** comp=Z,1.3nm,0.5s,baz=287,slow=2.9,SNR=4.1 | **99.02** | **40** | P | **Pdif** | **06 11 22.8 +0.8** |
| **JFWS** | comp=Z,1.3nm,0.5s **Jewell Farm** baz=255 | **100.73** | **48** | P | **Pdif** | **06 11 30.7 +0.8** |
| **LPAZ** | **La Paz** comp=Z,3.9nm,1.3s,baz=272,slow=5.2,SNR=3.9 | **103.22** | **112** | PP | **PP** | **06 16 04.3 -0.8** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.2nm,0.6s,baz=34,slow=1.9,SNR=5.2 | **108.48** | **322** | PKiKP | **PKiKP** | **06 16 05.4 -1.1** |
| ZALV | comp=Z,1.1nm,0.6s,baz=77,slow=9.6,SNR=4.6 | | | PP | **PP** | **06 16 37.9 -4.2** |
| **MKAR** | **Makanchi Array** comp=Z,1.3nm,0.6s,baz=199,slow=0.6,SNR=12 | **109.37** | **314** | PKiKP | **PKiKP** | **06 16 07.4 -1.1** |
| MKAR | comp=Z,0.7nm,0.8s,baz=94,slow=5.1,SNR=2.3 | | | PP | **PP** | **06 16 41.1 -7.6** |
| MKAR | comp=Z,1.4nm,0.7s,baz=271,slow=3.0,SNR=12 | | | PKKPbc | **PKKPbc** | **06 27 15.8 -0.7** |
| **KURK** | **Kurchatov** | **112.07** | **318** | *i* PKiKP | **PKiKP** | **06 16 12.0 -1.4** |
| **KURBB** | **Kurchatov Arra** comp=Z,2.4nm,0.7s,baz=99,slow=1.5,SNR=25 | **112.12** | **318** | PKiKP | **PKiKP** | **06 16 12.6 -1.0** |
| KURBB | comp=Z,2.0nm,1.1s,baz=92,slow=5.9,SNR=6.1 | | | PP | **PP** | 06 16 58.3 -10 |
| KURBB | comp=Z,1.4nm,0.8s,baz=269,slow=3.7,SNR=12 | | | PKKPbc | **PKKPbc** | **06 27 04.3 -3.4** |
| **AAK** | **Ala-Archa** | **114.61** | **309** | ⇓*i* PKiKP | **PKiKP** | **06 16 18.8 0.0** |
| **BVAR** | **Borovoye Array** comp=Z,4.1nm,0.6s,baz=94,slow=2.1,SNR=20 | **117.09** | **321** | PKP | **PKPdf** | **06 16 22.4 -0.6** |
| BVAR | comp=Z,1.4nm,0.7s,baz=72,slow=4.7,SNR=2.6 | | | PP | **PP** | **06 17 40.8 -1.6** |
| BVAR | comp=Z,1.6nm,0.7s,baz=265,slow=3.7,SNR=7.7 | | | PKKPab | **PKKPab** | **06 26 55.8 +1.6** |
| **BRVK** | **Borovoye** | **117.15** | **321** | ⇓*i* PKiKP | **PKPdf** | **06 16 22.2 -0.9** |
| **KK31** | **Karatay Array** | **117.54** | **310** | PKPdf | **PKPdf** | **06 16 23.5 -0.7** |
| **KK31** | **Karatay Array** | **117.54** | **310** | PKiKP | **PKPdf** | **06 16 23.5 -0.7** |
| **KKAR** | **Karatay Array** | **117.54** | **310** | PKPdf | **PKPdf** | **06 16 23.5 -0.7** |
| **KKAR** | **Karatay Array** | **117.54** | **310** | PKiKP | **PKPdf** | **06 16 23.5 -0.7** |
| **SUMG** | **Summit** | **120.94** | **13** | PKPdf | **PKiKP** | **06 16 30.6 +0.1** |
| **SUMG** | **Summit** | **120.94** | **13** | PKiKP | **PKiKP** | **06 16 30.6 +0.1** |
| **ARU** | **Arti** comp=Z,7.3nm,0.6s,baz=81,slow=1.2,SNR=12 | **123.10** | **326** | PKP | **PKPdf** | **06 16 34.2 -0.3** |
| ARU | comp=Z,2.4nm,0.3s,baz=129,slow=1.4,SNR=4.1 | | | PP | **PP** | **06 18 20.0 -2.8** |
| **ARU** | **Arti** | **123.10** | **326** | *i* PKiKP | **PKPdf** | **06 16 33.4 -1.0** |
| ARU | | | | | | 06 18 22.5 |
| ARU | | | | | | 06 22 55.1 |
| **ABKAR** | **Akbulak array** | **124.17** | **318** | PKPdf | **PKPdf** | **06 16 36.7 0.0** |
| **AKTO** | **Aktyubinsk** comp=Z,3.6nm,0.7s,baz=139,slow=0.2,SNR=9.6 | **125.11** | **319** | PKP | **PKPdf** | **06 16 38.3 -0.2** |
| **ARCES** | **ARCESS Array B** comp=Z,8.0nm,0.8s,baz=5.4,slow=2.6,SNR=13 | **126.56** | **350** | PKP | **PKPdf** | **06 16 40.2 -0.6** |
| **KIRV** | **Kirov** | **126.78** | **331** | ⇑*e*PKiKP | **PKPdf** | **06 16 41.3 -0.1** |
| **BELG** | **Belogornoye** comp=Z,29nm,1.1s,baz=204,slow=4.6,SNR=4.3 | **130.53** | **325** | PKP | **PKiKP** | **06 16 49.2 -0.4** |
| **FINES** | **FINESS Array B** comp=Z,1.4nm,0.7s,baz=19,slow=2.1,SNR=5.7 | **133.44** | **344** | PKhKP | PKPpre | 06 16 45.2 |
| FINES | comp=Z,5.6nm,0.8s,baz=16,slow=0.5,SNR=7.7 | | | PKP | **PKPdf** | **06 16 54.0 +0.1** |
| FINES | comp=Z,6.6nm,1.0s,baz=339,slow=7.4,SNR=3.2 | | | PP | **PP** | **06 19 34.0 +5.0** |
| **OBN** | **Obninsk** | **134.55** | **333** | ⇓*i* PKiKP | **PKPdf** | **06 16 56.5 +0.3** |
| OBN | | | | *i* | | 06 19 38.5 |
| OBN | comp=Z,6.0nm,0.7s | | | pmax | pmax | |
| **NB2** | **NORSAR Subarra** comp=Z,20nm,2.0s,baz=14,slow=1.8 | **136.62** | **353** | PKPdf | PKPpre | 06 16 48.1 |
| NB2 | comp=Z,1.4nm,0.9s,baz=5.7,slow=2.5 | | | SKPa | | 06 19 47.5 |
| **NB2** | **NORSAR Subarra** baz=14,slow=1.8 | **136.62** | **353** | PKPdf | PKPpre | 06 16 48.1 |
| **NOA** | **NORSAR Array B** comp=Z,1.1nm,0.9s,baz=16,slow=3.9,SNR=2.3 | **136.62** | **353** | PKhKP | PKPpre | 06 16 49.0 |
| NOA | comp=Z,1.9nm,0.8s,baz=15,slow=4.1,SNR=4.8 | | | PKP | **PKiKP** | **06 17 01.4 -0.5** |
| NOA | comp=Z,4.3nm,1.1s,baz=6.3,slow=4.0,SNR=4.9 | | | SKP | | 06 19 48.0 |
| **KBZ** | **Khabaz** comp=Z,0.7nm,0.3s,baz=180,slow=2.0,SNR=2.3 | **137.04** | **316** | PKhKP | PKPpre | 06 16 51.7 |
| KBZ | comp=Z,1.3nm,0.6s,baz=123,slow=4.7,SNR=3.8 | | | PKP | **PKiKP** | **06 17 02.5 -0.6** |
| **KBZ** | **Khabaz** | **137.04** | **316** | ⇓*e*PKiKP | **PKiKP** | **06 17 02.3 -0.8** |
| **HFS** | **Hagfors** comp=Z,1.6nm,0.5s,baz=64,slow=3.4,SNR=9.3 | **137.18** | **351** | PKhKP | PKPpre | 06 16 49.4 |
| **AKASG** | **Malin Array Be** comp=Z,3.3nm,0.6s,baz=43,slow=4.3,SNR=12 | **140.81** | **332** | PKhKP | PKPpre | 06 17 01.1 |
| AKASG | comp=Z,0.9nm,0.3s,baz=40,slow=3.3,SNR=6.6 | | | PKP | **PKPdf** | **06 17 08.8 +0.9** |
| AKASG | comp=Z,3.3nm,0.8s,baz=42,slow=3.9,SNR=3.9 | | | SKPab | **SKPab** | **06 20 10.8 +1.1** |
| **AKASG** | **Malin Array Be** | **140.81** | **332** | *i* PKiKP | **PKiKP** | **06 17 09.8 -0.9** |
| AKASG | comp=Z,1.0nm,0.3s | | | pmax | pmax | |
| **KIEV** | **Kiev** | **140.82** | **332** | ⇓P | PKPpre | 06 17 00.8 |
| **KIEV** | **Kiev** | **140.82** | **332** | ⇓PKHKP | PKPpre | 06 17 00.8 |
| **LAWE** | **Loch Awe, Argy** | **141.57** | **6** | *e*P | **PKPdf** | **06 17 04.1 -4.9** |
| **SIM** | **Simferopol'** | **141.99** | **322** | *e*PKHKP | PKPpre | 06 17 07.4 |
| SIM | | | | *e* | | 06 17 13.0 |
| SIM | comp=Z,28nm,1.0s | | | pmax | pmax | |
| **EKA** | **Eskdalemuir Ar** comp=Z,7.4nm,0.7s,baz=331,slow=3.0,SNR=18 | **142.69** | **5** | PKhKP | PKPpre | 06 17 07.5 |
| **GKP** | **Gorka Klasztor** | **142.91** | **345** | *e*PKP | **PKPdf** | **06 17 08.9 -2.6** |
| **DIKM** | **Dikmen** | **143.01** | **316** | ⇑P | PKPab | 06 17 05.7 -3.8 |
| **GAL1** | **Galloway** | **143.01** | **6** | *e*P | PKPab | 06 17 08.7 -0.2 |
| **SORM** | **Soroca** | **143.04** | **330** | ⇓P | PKPab | 06 17 08.9 -0.4 |
| **SORM** | **Soroca** | **143.04** | **330** | ⇓PKHKP | PKPpre | 06 17 08.9 |
| **BEL** | **Belsk** | **143.16** | **340** | *e*PKP | PKPbc | 06 17 10.4 +0.3 |
| **PURM** | **Purcari** | **143.38** | **327** | ⇓P | PKPbc | 06 17 11.1 +0.1 |
| **KESW** | **Keswick, Cumbr** | **143.43** | **5** | *e*P | PKPab | 06 17 10.4 -0.2 |
| **ILTH** | **Belurgan, Co L** | **143.65** | **8** | *e*P | PKPab | 06 17 11.1 -0.3 |
| **LVV** | **L'vov** | **143.66** | **335** | *e*P | **Pdif** | **06 14 40.7 +0.1** |
| **WIM** | **Isle of Man** | **143.73** | **6** | *e*P | PKPab | 06 17 11.3 -0.4 |
| **IGLA** | **Glengowla, Co** | **143.75** | **11** | *e*P | PKPab | 06 17 11.5 -0.3 |
| **LODK** | **Lodwar** | **143.94** | **250** | | PKPbc | 06 17 13.7 -0.1 |
| **HPK** | **Haverah Park** | **144.16** | **3** | *e*P | PKPbc | 06 17 13.2 +0.1 |
| **KWP** | **Kalwaria Pacla** | **144.32** | **336** | *e*PKP | **PKPdf** | **06 17 14.0 -0.1** |
| **KWP** | **Kalwaria Pacla** | **144.32** | **336** | | **PKPdf** | **06 17 14.0 -0.1** |
| **KWP** | **Kalwaria Pacla** | **144.32** | **336** | PKiKP | **PKPdf** | **06 17 14.0 -0.1** |
| **RUE** | **Ruedersdorf** baz=23,slow=1.7 | **144.44** | **347** | *e*PKPdf | **PKPdf** | **06 17 14.2 0.0** |
| **WPS** | **Cemaes, Angles** | **144.48** | **6** | *e*P | PKPbc | 06 17 13.9 -0.2 |
| **WME** | **Myndd Eilian** | **144.51** | **6** | *e*P | PKPbc | 06 17 14.0 -0.2 |
| **PRAR** | **RÂSCA** | **144.59** | **331** | ⇑P | **PKPdf** | **06 17 14.3 -0.4** |
| **WLF1** | **Llynfaes** | **144.60** | **6** | *e*P | PKPbc | 06 17 14.5 -0.1 |
| **LBWR** | **Ladybower, Pea** | **144.71** | **4** | *e*P | **PKPdf** | **06 17 14.3 -0.4** |
| **LMK** | **Market Rasen** | **144.72** | **2** | *e*P | **PKPdf** | **06 17 14.4 -0.2** |
| **VLDR** | **Vladesti** | **144.76** | **327** | ⇓P | **PKPab** | **06 17 15.8 -0.1** |
| **YLL** | **Llanberis** | **144.77** | **6** | *e*P | **PKPab** | **06 17 15.6 -0.1** |
| **TLCR** | | **144.82** | **326** | ⇓P | **PKPdf** | **06 17 14.9 -0.1** |
| **TLCR** | | **144.82** | **326** | ⇓PKiKP | **PKPdf** | **06 17 14.9 -0.1** |
| **OJC** | **Ojcow** | **144.87** | **340** | *e*PKP | PKPbc | 06 17 15.6 +0.1 |
| **BURAR** | **Bucovina Array** | **144.87** | **332** | PKPdf | PKPbc | 06 17 15.7 -0.1 |
| **BURAR** | **Bucovina Array** | **144.87** | **332** | ⇓P | **PKPab** | **06 17 16.6 +0.2** |
| **GHRR** | | **144.96** | **328** | ⇓P | **PKPab** | **06 17 17.7 +1.0** |
| **RETH** | **Rethem/Aller,** baz=23,slow=1.7 | **144.96** | **352** | *e*PKPdf | PKPbc | 06 17 15.9 +0.3 |
| **STNC** | **Stoke** | **144.99** | **4** | *e*P | **PKPab** | **06 17 16.1 -0.4** |
| **TESR** | **Tescani** | **145.01** | **329** | ⇓P | **PKPbc** | **06 17 15.8 -0.3** |
| **BR131** | **Keskin Array S** | **145.02** | **315** | PKPdf | **PKPdf** | **06 17 15.6 -0.2** |
| **BR131** | **Keskin Array S** | **145.02** | **315** | PKiKP | **PKPdf** | **06 17 15.6 -0.2** |
| **BRTR** | **Keskin Array B** | **145.02** | **315** | PKPdf | **PKPdf** | **06 17 15.0 -0.8** |
| **BRTR** | **Keskin Array B** comp=Z,25nm,1.0s,baz=144,slow=4.7,SNR=68 | **145.02** | **315** | PKPbc | **PKPdf** | **06 17 15.8 0.0** |
| BRTR | comp=Z,2.7nm,0.9s,baz=265,slow=1.6,SNR=3.6 | | | pPKPbc | pPKPbc | 06 19 16.3 -0.6 |
| **KOLS** | **Kolonicke sedl** | **145.06** | **336** | *e*PKiKP | **PKPab** | **06 17 16.7 -0.3** |
| **KOLS** | **Kolonicke sedl** | **145.06** | **336** | *e*PKP | **PKPab** | **06 17 16.7 -0.3** |
| **FLTG** | **Flechtingen** baz=23,slow=1.7 | **145.07** | **350** | *e*PKPdf | **PKPbc** | **06 17 15.9 -0.1** |
| **NRDL** | **Niedersach Rie** baz=23,slow=1.7 | **145.09** | **351** | *e*PKPdf | **PKPbc** | **06 17 16.2 +0.2** |
| **SLCR** | **Slobozia Conac** | **145.10** | **327** | ⇓P | **PKPab** | **06 17 17.5 +0.3** |
| **KIRS** | **Kirsehir-Merke** | **145.11** | **314** | ⇓P | **PKPbc** | **06 17 16.3 -0.4** |
| **FOEL** | **Foel Wylfa** | **145.11** | **5** | *e*P | **PKPbc** | **06 17 16.3 +0.1** |
| **IZVR** | **Izvoarele** | **145.13** | **327** | ⇓P | **PKPab** | **06 17 18.0 +0.5** |
| **CFR** | **Carcaliu** | **145.19** | **327** | ⇓P | **PKPab** | **06 17 17.5 -0.1** |
| **PANC** | **Panciu** | **145.22** | **328** | ⇓P | **PKPab** | **06 17 18.2 +0.5** |
| **TPGR** | **Topolog** | **145.25** | **326** | ⇓P | **PKPbc** | **06 17 16.6 -0.2** |
| **ONER** | **Baraj Valea Uz** | **145.26** | **329** | ⇓P | **PKPbc** | **06 17 17.1 +0.3** |
| **KSP** | **Ksiaz** | **145.36** | **344** | *e*PKP | **PKPab** | **06 17 17.5 -0.5** |
| **NIE** | **Niedzica** | **145.38** | **338** | *e*PKP | **PKPbc** | **06 17 17.0 -0.1** |
| **CRVS** | **Cervenica-Dubn** | **145.39** | **337** | *e*PKP2 | **PKPab** | **06 17 17.7 -0.6** |
| **CRVS** | **Cervenica-Dubn** | **145.39** | **337** | *e*PKP | **PKPab** | **06 17 17.7 -0.6** |
| **CWF** | **Charnwood Fore** | **145.40** | **3** | *e*P | **PKPdf** | **06 17 16.2 +0.5** |
| **VRI** | **Vrincioaia** | **145.43** | **329** | ⇑P | **PKPbc** | **06 17 17.7 +0.3** |
| **VRI** | **Vrincioaia** | **145.43** | **329** | ⇑PKiKP | **PKPbc** | **06 17 17.7 +0.3** |
| **WACR** | **West Acre** | **145.48** | **1** | *e*P | **PKPbc** | **06 17 16.9 -0.3** |
| **PLOI** | **Plostina** | **145.48** | **329** | ⇑P | **PKPbc** | **06 17 17.0 -0.5** |
| **PLOR** | **Plostina** | **145.48** | **329** | ⇑PKiKP | **PKPbc** | **06 17 17.0 -0.5** |
| **HLM1** | **Long Mynd** | **145.51** | **5** | *e*P | **PKPbc** | **06 17 17.3 0.0** |
| **ANTO** | **Ankara** | **145.52** | **315** | | **PKPdf** | **06 17 16.4 -0.2** |
| ANTO | | | | PKPbc | **PKPbc** | **06 17 18.1 +0.3** |
| **ANTO** | **Ankara** | **145.52** | **315** | ⇓P | **PKPbc** | **06 17 18.0 +0.1** |
| **ANTO** | **Ankara** | **145.52** | **315** | PKiKP | **PKPbc** | **06 17 18.1 +0.3** |
| **BMR** | **Baia Mare** | **145.57** | **334** | ⇑P | **PKPab** | **06 17 18.3 -0.7** |
| **IBBN** | **Ibbenburen** baz=23,slow=1.7 | **145.57** | **353** | *e*PKPdf | **PKPbc** | **06 17 17.4 0.0** |
| **HARR** | **Harsova** | **145.62** | **326** | ⇑P | **P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MESR | Meseseni | 146.21 | 334 | ⇓P | | PKPab | 06 17 20.5 | -1.0 |
| CBBR | Cluj-Babes-Bol | 146.25 | 333 | ⇑P | | PKPdf | 06 17 15.6 | -1.8 |
| CJR | Cluj-Napoca | 146.27 | 332 | ⇓P | | PKPbc | 06 17 20.4 | +0.6 |
| CJR | Cluj-Napoca | 146.27 | 332 | ⇓PKP2 | | PKPbc | 06 17 20.4 | +0.6 |
| HSKC | Hora Svate Kat | 146.28 | 347 | ⇑ePKP | | PKPbc | 06 17 19.8 | +0.2 |
| MMAI | Mount Meron Ar | 146.35 | 303 | PKPbc | | PKPbc | 06 17 20.9 | +0.5 |
| | comp=Z,40nm,0.7s,baz=59,slow=4.0,SNR=31 | | | | | | | |
| MMAI | | | | pPKPbc | | pPKPab | 06 19 20.3 | +0.1 |
| | comp=Z,4.6nm,0.8s,baz=328,slow=3.0,SNR=3.4 | | | | | | | |
| BUG | Bochum--Univer | 146.48 | 354 | ePKPdf | | PKPbc | 06 17 19.0 | -1.1 |
| | baz=23,slow=1.7 | | | | | | | |
| VOIR | | 146.56 | 330 | ⇓P | | PKPbc | 06 17 20.5 | -0.1 |
| KASTN | Kahler Asten | 146.58 | 352 | ePKPdf | | PKPdf | 06 17 18.4 | +0.5 |
| | baz=23,slow=1.7 | | | | | | | |
| KASTN | | | | ePKPab | | PKiKP | 06 17 22.7 | +0.1 |
| | baz=14,slow=4.2 | | | | | | | |
| SWN1 | Swindon | 146.59 | 4 | ePKP | | PKPbc | 06 17 20.5 | +0.2 |
| DRGR | | 146.59 | 333 | ⇑P | | PKPbc | 06 17 20.5 | -0.1 |
| PCED | Cedros | 146.59 | 46 | ePKP | | PKPbc | 06 17 21.5 | +0.7 |
| PRU | Pruhonice | 146.60 | 345 | ⇑ePKP | | PKPbc | 06 17 20.5 | +0.1 |
| PRU | | | | ePKPAB | | PKPab | 06 17 23.4 | +0.4 |
| PRU | Pruhonice | 146.60 | 345 | ePKIKP | | PKPbc | 06 17 20.5 | +0.1 |
| PRU | | | | e | | | 06 17 23.4 | |
| GOPC | GO Pecny, Ondr | 146.60 | 345 | ⇑ePKP | | PKPbc | 06 17 20.9 | +0.4 |
| GOPC | GO Pecny, Ondr | 146.60 | 345 | ePKP2 | | PKPbc | 06 17 20.9 | +0.4 |
| CALA | Caldeira | 146.62 | 46 | ePKP | | PKPbc | 06 17 21.5 | +0.5 |
| MOX | Moxa | 146.62 | 349 | ePKPdf | | PKPdf | 06 17 18.3 | +0.3 |
| | baz=23,slow=1.7 | | | | | | | |
| MOX | | | | ePKPbc | | PKPbc | 06 17 20.9 | +0.4 |
| | baz=19,slow=2.6 | | | | | | | |
| MOX | | | | ePKPab | | PKiKP | 06 17 22.7 | 0.0 |
| | baz=14,slow=4.2 | | | | | | | |
| VRAC | Vranov | 146.66 | 342 | ePKP | | PKPbc | 06 17 20.7 | 0.0 |
| VRAC | Vranov | 146.66 | 342 | ⇑P | | PKPbc | 06 17 19.8 | -0.8 |
| VRAC | Vranov | 146.66 | 342 | ⇑PKIKP | | PKPbc | 06 17 19.8 | -0.8 |
| PLN | Plauen | 146.66 | 348 | ePKPdf | | PKPdf | 06 17 18.1 | 0.0 |
| | baz=23,slow=1.7 | | | | | | | |
| PLN | | | | ePKPbc | | PKPbc | 06 17 20.5 | -0.1 |
| | baz=19,slow=2.6 | | | | | | | |
| PLN | | | | ePKPab | | PKPab | 06 17 23.4 | +0.1 |
| | baz=14,slow=4.2 | | | | | | | |
| TANN | Tannenbergstha | 146.67 | 347 | ePKPdf | | PKPdf | 06 17 18.3 | +0.2 |
| | baz=23,slow=1.7 | | | | | | | |
| TANN | | | | ePKPbc | | PKPbc | 06 17 21.2 | +0.5 |
| | baz=19,slow=2.6 | | | | | | | |
| TANN | | | | ePKPab | | PKiKP | 06 17 23.1 | +0.2 |
| | baz=14,slow=4.2 | | | | | | | |
| VYHS | Vyhne | 146.67 | 339 | ePKP2 | | PKPbc | 06 17 21.4 | +0.7 |
| VYHS | Vyhne | 146.67 | 339 | ePKP | | PKPbc | 06 17 21.4 | +0.7 |
| VYHS | | | | e | | | 06 19 21.4 | |
| UBBA | Unterbreizbach | 146.73 | 350 | ePKPdf | | PKPdf | 06 17 18.4 | +0.4 |
| | baz=23,slow=1.7 | | | | | | | |
| UBBA | | | | ePKPbc | | PKPbc | 06 17 21.1 | +0.4 |
| | baz=19,slow=2.6 | | | | | | | |
| UBBA | | | | ePKPab | | PKPab | 06 17 24.4 | +1.0 |
| | baz=14,slow=4.2 | | | | | | | |
| UBBA | | | | epPKPbc | | pPKPdf | 06 19 19.8 | -0.2 |
| JAVC | Velka Javorina | 146.74 | 341 | ePKP | | PKPbc | 06 17 21.9 | +1.0 |
| BORR | Bors | 146.74 | 335 | ⇑P | | PKiKP | 06 17 22.0 | -0.9 |
| TNR | Turnu Rosu | 146.77 | 331 | ⇓P | | PKPbc | 06 17 20.0 | -1.1 |
| TNR | Turnu Rosu | 146.77 | 331 | ⇓PKIKP | | PKPbc | 06 17 20.0 | -1.1 |
| PSZ | Piszkesteto | 146.79 | 337 | | | PKPdf | 06 17 18.4 | -0.1 |
| PSZ | | | | PKPbc | | PKPbc | 06 17 21.8 | +0.6 |
| PSZ | Piszkesteto | 146.79 | 337 | ⇓P | | PKPbc | 06 17 21.5 | +0.4 |
| PSZ | Piszkesteto | 146.79 | 337 | PKIKP | | PKPdf | 06 17 18.4 | -0.1 |
| PSZ | | | | | | | 06 17 21.8 | |
| ARR | Arges | 146.81 | 330 | ⇓P | | PKPbc | 06 17 21.9 | +0.6 |
| WOL | Wolverton | 146.82 | 3 | eP | | PKPbc | 06 17 20.9 | -0.1 |
| PCAN | Candelaria | 146.82 | 46 | ePKP | | PKPbc | 06 17 22.4 | +0.9 |
| PICO | Pico | 146.84 | 46 | ePKP | | PKPbc | 06 17 22.0 | +0.4 |
| ROSA | Rosais | 146.86 | 46 | ePKP | | PKPbc | 06 17 22.4 | +0.9 |
| KRUC | Moravsky | 146.94 | 342 | ePKP | | PKPbc | 06 17 21.1 | -0.3 |
| PPNO | Prainha do Nor | 146.97 | 46 | ePKP | | PKiKP | 06 17 23.2 | -0.6 |
| PMAN | Manadas | 147.01 | 46 | ePKP | | PKPbc | 06 17 22.7 | +0.8 |
| PID | Ribeirinha | 147.08 | 46 | ePKP | | PKPbc | 06 17 22.7 | +0.5 |
| MANZ | Manzenberg | 147.15 | 348 | ePKPbc | | PKPbc | 06 17 22.3 | +0.3 |
| | baz=19,slow=2.6 | | | | | | | |
| MANZ | | | | ePKPab | | PKPab | 06 17 25.2 | -0.1 |
| | baz=14,slow=4.2 | | | | | | | |
| MANZ | | | | epPKPbc | | pPKPbc | 06 19 21.7 | -0.4 |
| LOT | Lotru | 147.16 | 331 | ⇑P | | PKPbc | 06 17 22.7 | +0.5 |
| ZVC | Zvikov | 147.19 | 345 | ePKPAB | | PKPab | 06 17 25.6 | +0.2 |
| HUMR | Humele | 147.25 | 328 | ⇓P | | PKPbc | 06 17 22.0 | -0.3 |
| CSS | Mathiatis | 147.30 | 307 | | | PKPbc | 06 17 22.8 | -0.1 |
| ROTZ | Rotzenmuhle | 147.34 | 347 | ePKPdf | | PKPdf | 06 17 19.7 | +0.6 |
| | baz=23,slow=1.7 | | | | | | | |
| ROTZ | | | | ePKPbc | | PKPbc | 06 17 22.8 | +0.4 |
| | baz=19,slow=2.6 | | | | | | | |
| ROTZ | | | | epPKPbc | | pPKPab | 06 19 23.2 | -0.1 |
| AHRW | Bad Neuenahr-A | 147.39 | 354 | ePKPdf | | PKPdf | 06 17 20.4 | +1.1 |
| | baz=23,slow=1.7 | | | | | | | |
| AHRW | | | | ePKPbc | | PKiKP | 06 17 23.4 | -0.8 |
| | baz=19,slow=2.6 | | | | | | | |
| AHRW | | | | ePKPab | | PKPab | 06 17 26.1 | 0.0 |
| | baz=14,slow=4.2 | | | | | | | |
| MEM | Membach | 147.43 | 355 | dPKP | | PKPbc | 06 17 22.2 | -0.4 |
| SRO | Srobarova | 147.44 | 339 | ePKP2 | | PKiKP | 06 17 23.7 | -0.7 |
| SRO | Srobarova | 147.44 | 339 | ePKP | | PKiKP | 06 17 23.6 | -0.8 |
| BTNL | Ternell | 147.44 | 355 | dPKP | | PKPbc | 06 17 22.7 | 0.0 |
| SIRR | Siria | 147.45 | 334 | ⇓P | | PKPdf | 06 17 20.0 | +0.5 |
| BSTI | Sart Tilman | 147.49 | 355 | dPKP | | PKPbc | 06 17 23.1 | +0.3 |
| TNS | Taunus Mts | 147.54 | 352 | ePKPbc | | PKPbc | 06 17 23.5 | +0.4 |
| | baz=19,slow=2.6 | | | | | | | |
| TNS | | | | ePKPab | | PKPab | 06 17 27.0 | +0.1 |
| | baz=14,slow=4.2 | | | | | | | |
| TNS | | | | epPKPbc | | pPKPbc | 06 19 23.3 | +0.1 |
| PAGU | Agualva, Azore | 147.55 | 45 | ePKP | | PKPbc | 06 17 24.1 | +0.8 |
| GRF | Grafenberg Arr | 147.60 | 348 | ePKPdf | | PKPdf | 06 17 20.0 | +0.3 |
| | baz=23,slow=1.7 | | | | | | | |
| GRF | | | | ePKPbc | | PKPbc | 06 17 23.7 | +0.5 |
| | baz=19,slow=2.6 | | | | | | | |
| GRF | | | | ePKPab | | PKPab | 06 17 27.7 | +0.6 |
| | baz=14,slow=4.2 | | | | | | | |
| GRF | | | | epPKPbc | | pPKPbc | 06 19 23.7 | +0.1 |
| GRFO | Grafenberg | 147.60 | 348 | | | PKiKP | 06 17 24.2 | -0.5 |
| GRFO | Grafenberg | 147.60 | 348 | PKP2 | | PKiKP | 06 17 24.2 | -0.5 |
| KHC | Kasperske Hory | 147.63 | 345 | ePKPAB | | PKPdf | 06 17 19.8 | +0.1 |
| KHC | | | | ⇑ePKP | | PKPbc | 06 17 23.7 | +0.4 |
| KHC | | | | ePKPAB | | PKPab | 06 17 28.2 | +1.0 |
| KHC | Kasperske Hory | 147.63 | 345 | ePKIKP | | PKPdf | 06 17 19.8 | +0.1 |
| KHC | | | | e | | | 06 17 28.2 | |
| PSCM | Serra do Cume | 147.63 | 45 | ePKP | | PKiKP | 06 17 25.0 | -0.1 |
| GZR | Gura Zlata | 147.65 | 332 | ⇓P | | PKPbc | 06 17 23.1 | -0.4 |
| SURR | Surduc | 147.66 | 333 | ⇓P | | PKPbc | 06 17 23.1 | -0.3 |
| BCLA | Clavier | 147.67 | 356 | dPKP | | PKPbc | 06 17 22.8 | -0.4 |
| BHOU | Houvegnez | 147.68 | 355 | dPKP | | PKPbc | 06 17 23.9 | +0.6 |
| BHOU | | | | dpPKP | | pPKPab | 06 19 24.1 | -0.3 |
| BGES | Gesves | 147.72 | 356 | dPKP | | PKPbc | 06 17 23.0 | -0.4 |
| CKRC | Cesky Krumlov | 147.73 | 344 | ⇑ePKP | | PKPbc | 06 17 23.7 | +0.2 |
| CKRC | Cesky Krumlov | 147.73 | 344 | ePKIKP | | PKPdf | 06 17 20.1 | +0.2 |
| WET | Wettzell | 147.78 | 346 | ePKPdf | | PKPdf | 06 17 20.4 | +0.4 |
| | baz=23,slow=1.7 | | | | | | | |
| WET | | | | ePKPbc | | PKPbc | 06 17 23.9 | +0.3 |
| | baz=19,slow=2.6 | | | | | | | |
| WET | | | | ePKPab | | PKPab | 06 17 28.4 | +0.5 |
| | baz=14,slow=4.2 | | | | | | | |
| WET | | | | epPKPbc | | pPKPbc | 06 19 24.1 | -0.3 |
| GEC2 | GERESS Array S | 147.86 | 345 | ePKPdf | | PKPdf | 06 17 20.2 | 0.0 |
| | baz=23,slow=1.7 | | | | | | | |
| GEC2 | | | | ePKPbc | | PKPbc | 06 17 24.1 | +0.1 |
| | baz=19,slow=2.6 | | | | | | | |
| GEC2 | | | | ePKPab | | PKPab | 06 17 29.2 | +0.9 |
| | baz=14,slow=4.2 | | | | | | | |
| GEC2 | | | | epPKPbc | | pPKPbc | 06 19 24.1 | -0.6 |
| GERES | GERESS Array B | 147.86 | 345 | PKPdf | | PKPdf | 06 17 20.7 | +0.5 |
| GERES | | | | PKPbc | | PKPbc | 06 17 24.5 | +0.6 |
| GERES | GERESS Array B | 147.86 | 345 | PKPbc | | PKPbc | 06 17 24.2 | +0.3 |
| | comp=Z,15nm,0.8s,baz=168,slow=6.8,SNR=54 | | | | | | | |
| GERES | GERESS Array B | 147.86 | 345 | PKP2 | | PKPbc | 06 17 24.5 | +0.6 |
| ELND | Elena | 147.91 | 326 | ⇓P | | PKPbc | 06 17 24.2 | +0.1 |
| RCHB | Rochefort | 147.94 | 356 | dPKP | | PKPbc | 06 17 24.0 | 0.0 |
| BZS | Buzias | 147.99 | 333 | ⇑P | | PKPbc | 06 17 24.1 | -0.1 |
| BZS | Buzias | 147.99 | 333 | ⇑PKIKP | | PKPbc | 06 17 24.1 | -0.1 |
| DOU | Dourbes | 148.04 | 356 | dPKP | | PKPbc | 06 17 24.1 | -0.1 |
| CONA | Conrad Observa | 148.12 | 342 | ePKP | | PKPbc | 06 17 25.0 | +0.4 |
| | comp=Z,12nm,0.8s,SNR=23 | | | | | | | |
| RONA | Rosalia, Austr | 148.19 | 341 | ePKP | | PKPbc | 06 17 25.0 | +0.3 |
| | comp=Z,11nm,0.7s,SNR=21 | | | | | | | |
| HERR | Herculane | 148.21 | 331 | ⇓P | | PKPbc | 06 17 24.8 | -0.1 |
| WLF | Walferdange | 148.35 | 354 | dPKP | | PKiKP | 06 17 25.7 | -0.5 |
| WLF | Walferdange | 148.35 | 354 | ePKPdf | | PKPdf | 06 17 21.9 | +1.1 |
| | baz=23,slow=1.7 | | | | | | | |
| WLF | | | | ePKPbc | | PKiKP | 06 17 26.1 | -0.1 |
| | baz=19,slow=2.6 | | | | | | | |
| WLF | | | | ePKPab | | PKPab | 06 17 30.2 | +0.1 |
| | baz=14,slow=4.2 | | | | | | | |
| WLF | | | | epPKPbc | | pPKPab | 06 19 26.7 | -0.2 |
| MDVR | Moldovita | 148.60 | 332 | ⇑P | | PKPbc | 06 17 25.8 | -0.1 |
| MOA | Molln | 148.64 | 344 | ePKP | | PKPbc | 06 17 25.7 | -0.1 |
| | comp=Z,7.0nm,0.8s,SNR=14 | | | | | | | |
| MORH | Mrgy, Hungar | 148.69 | 337 | ⇑P | | PKPdf | 06 17 22.0 | +0.6 |
| JLP | Les Platons | 148.82 | 5 | eP | | PKPbc | 06 17 25.4 | -0.7 |
| ARSA | Arzberg | 148.83 | 342 | ePKP | | PKPbc | 06 17 26.0 | -0.3 |
| | comp=Z,2.2nm,0.6s,SNR=11 | | | | | | | |
| STU | Stuttgart | 148.85 | 350 | ePKPdf | | PKPdf | 06 17 22.0 | +0.4 |
| | baz=23,slow=1.7 | | | | | | | |
| STU | | | | ePKPbc | | PKiKP | 06 17 26.9 | -0.4 |
| | baz=19,slow=2.6 | | | | | | | |
| STU | | | | ePKPab | | PKPab | 06 17 32.2 | 0.0 |
| | baz=14,slow=4.2 | | | | | | | |
| JSA | Saint Aubin | 148.87 | 5 | eP | | PKPbc | 06 17 25.4 | -0.9 |
| BIOA | Bad Ischl, Aus | 148.95 | 344 | ePKP | | PKPbc | 06 17 26.2 | -0.4 |
| | comp=Z,12nm,1.0s,SNR=12 | | | | | | | |
| FUR | Furstenfeldbru | 149.05 | 347 | ePKPdf | | PKPdf | 06 17 21.7 | -0.4 |
| | baz=23,slow=1.7 | | | | | | | |
| FUR | | | | ePKPbc | | PKiKP | 06 17 27.4 | -0.4 |
| | baz=19,slow=2.6 | | | | | | | |
| FUR | | | | ePKPab | | PKPab | 06 17 33.6 | +0.5 |
| | baz=14,slow=4.2 | | | | | | | |
| RJOB | Jochberg | 149.12 | 345 | ePKPbc | | PKPbc | 06 17 27.0 | 0.0 |
| | baz=19,slow=2.6 | | | | | | | |
| RJOB | | | | ePKPab | | PKPab | 06 17 34.1 | +0.7 |
| | baz=14,slow=4.2 | | | | | | | |
| PGRON | Lagoa das Cont | 149.29 | 45 | ePKP | | PKPdf | 06 17 22.2 | -0.6 |
| BFO | Black Forest | 149.41 | 351 | | | PKPbc | 06 17 27.9 | +0.2 |
| BFO | | | | PKPab | | PKPab | 06 17 34.5 | -0.1 |
| BFO | Black Forest | 149.41 | 351 | PKHKP | | PKPpre | 06 17 27.9 | |
| BFO | | | | | | | 06 17 34.5 | |
| BFO | Black Forest | 149.41 | 351 | ePKPbc | | PKPbc | 06 17 28.0 | +0.4 |
| | baz=19,slow=2.6 | | | | | | | |
| BFO | | | | ePKPab | | PKPab | 06 17 34.4 | -0.1 |
| | baz=14,slow=4.2 | | | | | | | |
| LESA | Schwarzleotal | 149.44 | 345 | *i* PKP | | PKPbc | 06 17 27.4 | -0.4 |
| | comp=Z,4.3nm,0.4s | | | | | | | |
| SOKA | Sototh | 149.49 | 342 | *i* PKP | | PKPbc | 06 17 27.6 | -0.4 |
| | comp=Z,2.0nm,0.3s,SNR=11 | | | | | | | |
| PERS | Pernice | 149.50 | 342 | *i* PKPbc | | PKPbc | 06 17 27.5 | -0.5 |
| KBA | Koelnbreinsper | 149.59 | 344 | *i* PKP | | PKPbc | 06 17 27.5 | -0.9 |
| | comp=Z,10.0nm,0.6s,SNR=11 | | | | | | | |
| UBR | Ueberruh | 149.74 | 349 | ePKPbc | | PKPbc | 06 17 28.6 | +0.1 |
| | baz=19,slow=2.6 | | | | | | | |
| WATA | Walderalm | 149.77 | 347 | *i* PKP | | PKPbc | 06 17 28.4 | -0.3 |
| | comp=Z,6.8nm,0.5s,SNR=17 | | | | | | | |
| OBKA | Obir | 149.78 | 342 | *i* PKP | | PKPbc | 06 17 28.0 | -0.7 |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| RETA | Reutte | 149.80 | 348 | *i* PKP | | PKPbc | 06 17 28.7 | 0.0 |
| | comp=Z,2.5nm,0.5s,SNR=12 | | | | | | | |
| WTTA | Wattenberg | 149.83 | 346 | *i* PKP | | PKPbc | 06 17 28.9 | -0.1 |
| | comp=Z,20nm,0.7s,SNR=19 | | | | | | | |
| MOTA | Moosalm | 149.87 | 347 | *i* PKP | | PKPbc | 06 17 28.6 | -0.4 |
| | comp=Z,14nm,0.9s | | | | | | | |
| MYKA | Terra Mystica | 149.93 | 343 | *i* PKP | | PKPbc | 06 17 28.1 | -0.9 |
| | comp=Z,6.8nm,0.5s,SNR=9.2 | | | | | | | |
| SQTA | Sankt Quirin | 149.96 | 347 | ePKP | | PKPbc | 06 17 29.1 | -0.1 |
| | comp=Z,9.5nm,0.6s,SNR=14 | | | | | | | |
| ABTA | Abfaltersbach | 150.11 | 345 | ePKP | | PKPbc | 06 17 28.7 | -0.8 |
| | comp=Z,30nm,0.9s,SNR=15 | | | | | | | |
| DAVA | Damuels | 150.16 | 349 | *i* PKP | | PKPbc | 06 17 29.5 | -0.1 |
| | comp=Z,16nm,0.9s,SNR=20 | | | | | | | |
| LJU | Ljubljana | 150.21 | 342 | *i* PKPbc | | PKPbc | 06 17 29.6 | 0.0 |
| FETA | Feichten | 150.25 | 348 | *i* PKP | | PKPbc | 06 17 29.9 | 0.0 |
| | comp=Z,22nm,1.0s,SNR=10 | | | | | | | |
| VAY | Valandovo | 150.79 | 327 | *i* P | | PKPab | 06 17 40.7 | +0.2 |
| PDG | Podgorica | 151.55 | 332 | ⇓P | | PKPbc | 06 17 32.4 | -0.4 |
| OHR | Ohrid | 151.85 | 328 | *i* P | | PKiKP | 06 17 33.8 | 0.0 |
| BNI | Bardonecchia | 152.85 | 352 | PKPdf | | PKPdf | 06 17 28.2 | +0.2 |
| BNI | | | | | | PKiKP | 06 17 36.0 | +0.1 |
| BNI | | | | PKPab | | PKPab | 06 17 49.9 | +0.7 |
| BNI | Bardonecchia | 152.85 | 352 | PKP2 | | PKPab | 06 17 49.9 | +0.7 |
| PGAV | Gavieira, Arco | 154.77 | 18 | ePKPab | | PKPab | 06 17 58.6 | +1.1 |
| PCAB | Cabril | 155.08 | 17 | ePKPab | | PKPab | 06 17 59.8 | +1.0 |
| TIP | Timpagrande | 155.29 | 331 | ⇑P | | PKPab | 06 17 59.7 | -0.1 |
| PBRG | Braganca | 155.34 | 15 | ePKPab | | PKPab | 06 17 59.7 | -0.2 |
| POLO | Lamas de Olo | 155.46 | 17 | ePKPab | | PKPab | 06 18 01.2 | +0.7 |
| PVRL | Vila Real | 155.57 | 17 | ePKPab | | PKPab | 06 18 01.9 | +1.0 |
| CEST | Esterri de Car | 155.62 | 1 | PKPdf | | PKPdf | 06 17 32.4 | +0.5 |
| CEST | | | | PKPab | | PKPab | 06 18 01.6 | +0.5 |
| MVO | Moncorvo | 155.86 | 16 | ePKPab | | PKPab | 06 18 02.6 | +0.4 |
| PVIS | Viseu | 156.03 | 18 | ePKPab | | PKPab | 06 18 03.1 | +0.2 |
| MTE | Manteigas | 156.43 | 18 | | | PKPab | 06 18 04.8 | +0.1 |
| MTE | Manteigas | 156.43 | 18 | ePKPab | | PKPab | 06 18 05.1 | +0.4 |
| PCAS | Casmilo, Conde | 156.45 | 20 | ePKPab | | PKPab | 06 18 04.6 | -0.1 |
| PSBE | So Bento | 156.84 | 21 | ePKPab | | PKPab | 06 18 07.2 | +0.8 |
| PCBR | Castelo Branco | 156.96 | 18 | ePKPdf | | PKPdf | 06 17 34.9 | +1.3 |
| PCBR | Castelo Branco | 156.96 | 18 | ePKPab | | PKPab | 06 18 06.9 | 0.0 |
| PMRV | Marv??o | 157.37 | 19 | ePKPab | | PKPab | 06 18 09.1 | +0.4 |
| PMTG | Montargil | 157.43 | 20 | ePKPab | | PKPab | 06 18 08.6 | -0.4 |
| PESTR | Estremoz | 157.82 | 20 | ePKPdf | | PKPdf | 06 17 35.5 | +0.8 |
| PESTR | Estremoz | 157.82 | 20 | ePKPab | | PKPab | 06 18 10.6 | -0.1 |
| ESBB | Sonseca Array | 157.99 | 12 | PKPab | | PKPab | 06 18 11.5 | +0.1 |
| EVO | Evora | 157.99 | 21 | ePKPab | | PKPab | 06 18 11.4 | 0.0 |
| ESDC | Sonseca Array | 157.99 | 12 | | | PKPab | 06 18 11.6 | +0.2 |
| ESDC | Sonseca Array | 157.99 | 12 | PKP | | PKPdf | 06 17 35.2 | +0.3 |
| | comp=Z,0.6nm,0.8s,baz=349,slow=3.4,SNR=6.2 | | | | | | | |
| ESDC | | | | PKPab | | PKPab | 06 18 11.4 | 0.0 |
| | comp=Z,8.6nm,0.9s,baz=344,slow=4.3,SNR=31 | | | | | | | |
| ESDC | | | | PP | | PP | 06 21 51.5 | -0.8 |
| | comp=Z,1.0nm,1.0s,baz=338,slow=5.9,SNR=3.8 | | | | | | | |
| PNCL | Nicolau / Gran | 158.18 | 22 | ePKPdf | | PKPdf | 06 17 36.2 | +1.1 |
| PNCL | Nicolau / Gran | 158.18 | 22 | ePKPab | | PKPab | 06 18 12.2 | 0.0 |
| PBAR | Barrancos | 158.63 | 19 | ePKPdf | | PKPdf | 06 17 36.9 | +1.3 |
| PBAR | Barrancos | 158.63 | 19 | ePKPab | | PKPab | 06 18 14.3 | +0.1 |
| PCVE | Castro Verde | 158.79 | 22 | ePKPab | | PKPab | 06 18 15.2 | +0.3 |
| PVAQ | Vaqueiros | 159.10 | 21 | ePKPab | | PKPab | 06 18 16.9 | +0.6 |
| KEST | Kesra | 161.21 | 340 | PKPab | | PKPab | 06 18 25.8 | +0.1 |
| | comp=Z,15nm,1.1s,baz=242,slow=1.8,SNR=9.3 | | | | | | | |
| DBIC | Dimbokro | 166.93 | 150 | PKPab | | PKPab | 06 18 50.9 | -0.3 |
| | comp=Z,9.3nm,0.8s,baz=165,slow=5.7,SNR=5.6 | | | | | | | |
| TORD | Torodi Ar. Bea | 175.03 | 180 | PKP | | PKPdf | 06 17 46.6 | -1.7 |
| | comp=Z,1.1nm,0.7s,baz=332,slow=2.2,SNR=5.2 | | | | | | | |
| TORD | | | | PKPab | | PKPab | 06 19 27.1 | +0.1 |
| | comp=Z,1.2nm,0.7s,baz=178,slow=3.0,SNR=3.9 | | | | | | | |
| TORD | | | | PP | | PP | 06 23 19.3 | +0.8 |
| | comp=Z,1.0nm,1.0s,baz=181,slow=1.8,SNR=3.7 | | | | | | | |

*NEIC* ***19*** *06:03:34.1±1.3, 18.3°S±0.1°×178.1°W±0.1, h483km±10km, mb4.0/32, Error ellipse: s-maj=21.8km s-min=16.3km az=147.0*

*IDC* ***19*** *06:03:39.1±5.1, 18.22°S×178.39W, h546km±61km, mb3.4/9, mbtmp4.3/9, Error ellipse: s-maj=29.9km s-min=20.5km az=180.0*

**ISC 19 06:03:39.2±0.6, 18.1°S±0.1°×178.5°W±0.1°, h550km, n91, σ1°25/86, mb4.0/24, 1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.33 | 276 | P | P | 06 04 53.4 | -3.0 |
| AFI | Afiamalu | 7.67 | 58 | P | P | 06 05 22.5 | -11 |
| NIUE | Niue | 8.16 | 98 | P | P | 06 05 22.8 | -16 |
| FUNA | Funafuti | 9.79 | 346 | P | P | 06 05 49.4 | -5.6 |
| PINNC | Pines Island, | 13.94 | 249 | P | P | 06 06 35.1 | -2.6 |
| DZM | Mont Dzumac | 14.70 | 252 | P | P | 06 06 43.3 | -2.5 |
| KOUNC | Koumac, New Ca | 16.45 | 259 | P | P | 06 07 01.0 | -2.0 |
| GRZ | Great Barrier | 18.85 | 195 | P | P | 06 07 25.8 | +1.2 |
| KUZ | Kuaotunu | 19.26 | 194 | P | P | 06 07 17.1 | -11 |
| WIAZ | Waiheke Island | 19.45 | 196 | P | P | 06 07 31.6 | +1.5 |
| ETAZ | East Tamaki Re | 19.65 | 196 | P | P | 06 07 33.9 | +1.9 |
| WTAZ | Wiatarua | 19.73 | 197 | P | P | 06 07 34.4 | +1.7 |
| MKAZ | Moumakai | 19.73 | 195 | P | P | 06 07 34.1 | +1.4 |
| AWAZ | Awhitu Peninsu | 19.83 | 196 | P | P | 06 07 35.2 | +1.6 |
| HAZ | Te Kaha | 19.85 | 189 | P | P | 06 07 32.6 | -1.1 |
| RUGZ | Raukumara Rang | 20.07 | 189 | P | P | 06 07 35.1 | -0.8 |
| URZ | Urewera | 20.45 | 190 | P | P | 06 07 36.9 | -2.2 |
| | 6.2nm,0.3s,baz=348,slow=3.5,SNR=10 | | | | | | |
| | 6.2nm,0.3s | | | | | | |
| URZ | Urewera | 20.45 | 190 | P | P | 06 07 36.8 | -2.2 |
| MWZ | Matawai | 20.45 | 189 | P | P | 06 07 38.5 | -0.8 |
| RAGZ | Rawiri | 20.63 | 189 | P | P | 06 07 40.3 | -0.6 |
| BKZ | Black Stump Fm | 21.43 | 191 | P | P | 06 07 44.6 | -3.5 |
| BKZ | | | | IAmb | IAmb | 06 07 52.6 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| BKZ | Black Stump Fm | 21.43 | 191 | P | P | 06 07 45.5 | -2.6 |
| TCW | Tory Channel | 23.85 | 194 | P | P | 06 08 06.4 | -3.2 |
| SNZO | South Karori | 23.85 | 193 | P | P | 06 08 06.9 | -2.7 |
| EIDS | Eidsvold | 29.14 | 250 | P | P | 06 08 57.0 | +0.7 |
| EIDS | | | | IAmb | IAmb | 06 08 58.5 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| ARMA | Armidale | 29.79 | 240 | P | P | 06 09 02.0 | +0.1 |
| CTA | Charters Tower | 33.35 | 261 | P | P | 06 09 33.2 | +0.8 |
| | comp=Z,0.1nm,0.5s,baz=98,slow=10,SNR=2.4 | | | | | | |
| CTAO | Charters Tower | 33.35 | 261 | P | P | 06 09 33.2 | +0.8 |
| CTAO | | | | IAmb | IAmb | 06 09 41.2 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| PMG | Port Moresby | 34.43 | 280 | P | P | 06 09 42.9 | +1.4 |
| TOO | Toolangi | 36.99 | 231 | P | P | 06 10 02.2 | -0.3 |
| COEN | Coen | 37.04 | 271 | P | P | 06 10 04.6 | +1.5 |
| STKA | Stephens Creek | 38.48 | 241 | P | P | 06 10 15.6 | +1.0 |
| | comp=Z,4.6nm,1.0s,baz=78,slow=9.3,SNR=2.5 | | | | | | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| BBOO | Buckleboo | 43.25 | 241 | P | P | 06 10 53.9 | +1.4 |
| BBOO | | | | IAmb | IAmb | 06 11 02.0 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| WR0 | Warramunga Arr | 44.34 | 260 | P | P | 06 11 02.6 | +1.5 |
| WR0 | | | | IAmb | IAmb | 06 11 03.5 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| WB0 | Warramunga Ar | 44.50 | 260 | P | P | 06 11 04.0 | +1.6 |
| WB0 | | | | IAmb | IAmb | 06 11 07.7 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 44.52 | 260 | P | P | 06 11 03.6 | +1.1 |
| WB2 | | | | IAmb | IAmb | 06 11 05.1 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 44.53 | 260 | P | P | 06 11 01.6 | -1.0 |
| WRA | Warramunga Arr | 44.53 | 260 | P | P | 06 11 01.2 | -1.4 |
| | comp=Z,1.1nm,0.3s,baz=97,slow=7.2,SNR=5.1 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| AS31 | Alice Springs | 44.67 | 254 | P | P | 06 11 04.3 | +0.6 |
| AS31 | | | | IAmb | IAmb | 06 11 05.1 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| ASAR | Alice Springs | 44.68 | 254 | P | P | 06 11 04.0 | +0.3 |
| ASAR | Alice Springs | 44.68 | 254 | P | P | 06 11 04.6 | +0.9 |
| | comp=Z,10nm,0.4s,baz=89,slow=8.0,SNR=28 | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | |
| FORT | Forrest | 49.87 | 245 | P | P | 06 11 43.3 | +0.8 |
| KNRA | Kununurra | 50.41 | 264 | P | P | 06 11 47.7 | +1.0 |
| KNRA | | | | IAmb | IAmb | 06 11 48.1 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| FITZ | Fitzroy Crossi | 52.93 | 261 | P | P | 06 12 06.8 | +2.0 |
| PSA00 | Pilbara Seismi | 57.80 | 256 | P | P | 06 12 40.1 | +1.5 |
| PSA00 | | | | IAmb | IAmb | 06 12 40.4 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| QSPA | South Pole Qui | 71.95 | 180 | P | P | 06 14 07.3 | +0.3 |
| QSPA | South Pole Qui | 71.95 | 180 | P | P | 06 14 08.4 | +1.4 |
| | comp=Z,0.9nm,0.7s,baz=133,slow=1.0,SNR=2.0 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| MDPB | Devils Postpil | 78.66 | 44 | P | P | 06 14 45.0 | 0.0 |
| WAKR | Walker | 78.91 | 43 | P | P | 06 14 46.5 | +0.3 |
| WAKR | | | | IAmb | IAmb | 06 14 47.0 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| PNTR | Pine Nut | 79.13 | 43 | P | P | 06 14 47.6 | +0.2 |
| PNTR | | | | IAmb | IAmb | 06 14 48.2 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| LHV | Little Huntoon | 79.38 | 44 | P | P | 06 14 48.8 | +0.3 |
| LHV | | | | IAmb | IAmb | 06 14 49.5 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| GRAC | Grapevine Rang

*NEIC **19** 06:06:58.0±2.0, 18°.4S±0°.1×178°.5W±0°.1, h636km±8km, mb4.4/145, Error ellipse: s-maj=16.1km s-min=13.9km az=147.0*
*IDC **19** 06:06:59.2±1.9, 18°.29S×178°.65W, h657km±24km, mb3.8/17, mbtmp4.8/18, Error ellipse: s-maj=15.1km s-min=10.2km az=153.0*

**ISC 19 06:06:58.5±0.4, 18°.42S±0°.06×178°.54W±0°.06, h650km, n215, σ1°.14/180, mb4.4/91, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.32** | **281** | P | **P** | **06 09 23.6** | **-0.1** |
| **AFI** | **Afiamalu** | **7.89** | **56** | P | **P** | **06 08 56.4** | **-2.5** |
| **NIUE** | **Niue** | **8.19** | **96** | P | **P** | **06 08 59.5** | **-1.8** |
| **FUNA** | **Funafuti** | **10.08** | **347** | P | **P** | **06 09 16.3** | **-2.9** |
| **RAO** | **Raoul Island** | **10.80** | **177** | S | **S** | **06 11 24.5** | **-2.1** |
| | 139nm,0.3s,baz=96,slow=22,SNR=3.5 | | | | | | |
| **GLKZ** | **Green Lake** | **10.81** | **177** | S | **S** | **06 11 27.2** | **+0.4** |
| **RTV** | **Rentapao** | **12.41** | **271** | P | **P** | **06 09 41.2** | **+0.2** |
| **DVP** | **Devils Point** | **12.64** | **271** | P | **P** | **06 09 43.3** | **+0.1** |
| **MARNC** | **Mare, Loyalty** | **12.99** | **254** | P | **P** | **06 09 45.4** | **-0.9** |
| **LIFNC** | **LIFOU** | **13.61** | **258** | P | **P** | **06 09 50.7** | **-1.3** |
| **LIFNC** | **LIFOU** | **13.61** | **258** | P | **P** | **06 09 50.9** | **-1.1** |
| **PINNC** | **Pines Island,** | **13.78** | **250** | P | **P** | **06 09 53.8** | **+0.2** |
| **YATNC** | **Mamie plateau,** | **14.14** | **253** | P | **P** | **06 09 56.3** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.55** | **253** | P | **P** | **06 10 00.9** | **+0.1** |
| **DZM** | **Mont Dzumac** | **14.55** | **253** | P | **P** | **06 10 00.9** | **+0.1** |
| **DZM** | **Mont Dzumac** | **14.55** | **253** | P | **P** | **06 10 00.7** | **-0.2** |
| | 19nm,0.5s,baz=167,slow=1.5,SNR=43 | | | | | | |
| **NOUC** | **Port Laguerre** | **14.69** | **253** | P | **P** | **06 10 02.6** | **+0.7** |
| **KOUNC** | **Koumac, New Ca** | **16.33** | **260** | P | **P** | **06 10 18.5** | **+1.5** |
| **KOUNC** | **Koumac, New Ca** | **16.33** | **260** | P | **P** | **06 10 18.5** | **+1.5** |
| **OUZ** | **Omahuta** | **18.13** | **201** | P | **P** | **06 10 32.9** | **-0.3** |
| **GRZ** | **Great Barrier** | **18.54** | **195** | P | **P** | **06 10 37.9** | **+1.1** |
| **KUZ** | **Kuaotunu** | **18.94** | **194** | P | **P** | **06 10 41.3** | **+0.8** |
| **KUZ** | **Kuaotunu** | **18.94** | **194** | P | **P** | **06 10 42.2** | **+1.7** |
| **WIAZ** | **Waiheke Island** | **19.13** | **196** | P | **P** | **06 10 44.2** | **+2.0** |
| **MBAZ** | **Motutapu North** | **19.17** | **196** | P | **P** | **06 10 45.2** | **+2.7** |
| **MXZ** | **Matakaoa Point** | **19.27** | **188** | P | **P** | **06 10 41.9** | **-1.5** |
| **MXZ** | **Matakaoa Point** | **19.27** | **188** | P | **P** | **06 10 41.8** | **-1.5** |
| **WTAZ** | **Waiatarua** | **19.41** | **197** | P | **P** | **06 10 47.0** | **+2.3** |
| **WMGZ** | **Waiomatatini S** | **19.51** | **187** | P | **P** | **06 10 45.0** | **-0.6** |
| **HAZ** | **Te Kaha** | **19.53** | **189** | P | **P** | **06 10 44.1** | **-1.7** |
| HAZ | | | | S | **S** | **06 13 44.4** | **-4.6** |
| **PKGZ** | **Pakihiroa** | **19.60** | **188** | P | **P** | **06 10 45.6** | **-0.8** |
| **TOZ** | **Tahuroa Road** | **19.94** | **194** | P | **P** | **06 10 51.8** | **+2.4** |
| **URZ** | **Urewera** | **20.13** | **190** | P | **P** | **06 10 48.4** | **-2.7** |
| **URZ** | **Urewera** | **20.13** | **190** | P | **P** | **06 10 47.9** | **-3.2** |
| | 15nm,0.3s,baz=340,slow=2.2,SNR=19 | | | | | | |
| **MWZ** | **Matawai** | **20.14** | **189** | P | **P** | **06 10 49.9** | **-1.4** |
| MWZ | | | | S | **S** | **06 13 55.4** | **-3.2** |
| **RTZ** | **Ruatahuna** | **20.50** | **190** | P | **P** | **06 10 53.5** | **-1.1** |
| **HIZ** | **Hauiti** | **20.83** | **195** | P | **P** | **06 10 57.4** | **0.0** |
| **BKZ** | **Black Stump Fm** | **21.12** | **191** | P | **P** | **06 10 58.1** | **-1.9** |
| **BKZ** | **Black Stump Fm** | **21.12** | **191** | P | **P** | **06 10 58.3** | **-1.7** |
| BKZ | | | | IAmb | IAmb | 06 10 58.9 | |
| | comp=Z,11nm,0.5s | | | | | | |
| **BFZ** | **Birch Farm** | **22.64** | **190** | P | **P** | **06 11 11.9** | **-1.5** |
| **MRZ** | **Mangatainoka R** | **22.74** | **192** | P | **P** | **06 11 12.6** | **-1.7** |
| **SNZO** | **South Karori** | **23.54** | **193** | P | **P** | **06 11 20.5** | **-0.8** |
| **SNZO** | **South Karori** | **23.54** | **193** | P | **P** | **06 11 20.6** | **-0.8** |
| **QRZ** | **Quartz Range** | **23.61** | **197** | P | **P** | **06 11 22.5** | **+0.5** |
| **TKNZ** | **Takaka Hill** | **23.69** | **196** | P | **P** | **06 11 22.3** | **-0.4** |
| **TUWZ** | **Tuamarina** | **23.82** | **194** | P | **P** | **06 11 23.8** | **-0.1** |
| **THZ** | **Tophouse** | **24.39** | **196** | P | **P** | **06 11 29.7** | **+0.8** |
| **KHZ** | **Kahutara** | **24.85** | **194** | P | **P** | **06 11 32.0** | **-0.9** |
| **GVZ** | **Greta Valley S** | **25.49** | **194** | P | **P** | **06 11 38.5** | **0.0** |
| **LTZ** | **Lake Taylor** | **25.51** | **196** | P | **P** | **06 11 37.9** | **-0.8** |
| **INZ** | **Inchbonnie** | **25.68** | **197** | P | **P** | **06 11 40.0** | **-0.2** |
| **RPZ** | **Rata Peaks** | **26.70** | **197** | P | **P** | **06 11 48.9** | **-0.2** |
| **PPT** | **Papeete** | **27.55** | **93** | P | **P** | **06 11 56.6** | **-0.2** |
| | comp=Z,13nm,0.6s,baz=84,slow=21,SNR=4.5 | | | | | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **JCZ** | **Jackson Bay** | **27.71** | **200** | P | **P** | **06 11 57.7** | **-0.2** |
| **ODZ** | **Otahua Downs** | **28.04** | **196** | P | **P** | **06 11 59.9** | **-0.8** |
| **WKZ** | **Wanaka** | **28.31** | **199** | P | **P** | **06 12 02.5** | **-0.5** |
| **EIDS** | **Eidsvold** | **28.98** | **251** | P | **P** | **06 12 08.9** | **-0.1** |
| **EIDS** | **Eidsvold** | **28.98** | **251** | P | **P** | **06 12 09.0** | **-0.1** |
| **MLZ** | **Mavora Lakes** | **29.08** | **200** | P | **P** | **06 12 10.6** | **+1.0** |
| **ARMA** | **Armidale** | **29.58** | **241** | P | **P** | **06 12 15.1** | **+0.8** |
| **ARMA** | **Armidale** | **29.58** | **241** | P | **P** | **06 12 15.3** | **+1.0** |
| **SYZ** | **Scrubby Hill** | **29.83** | **197** | P | **P** | **06 12 16.2** | **+0.2** |
| **TV1H** | **Townsville Har** | **32.79** | **263** | P | **P** | **06 12 40.7** | **-0.7** |
| **CNB** | **Canberra Magne** | **33.02** | **233** | P | **P** | **06 12 44.3** | **+1.0** |
| **CTA** | **Charters Tower** | **33.24** | **261** | P | **P** | **06 12 45.0** | **-0.2** |
| **CTA** | **Charters Tower** | **33.24** | **261** | P | **P** | **06 12 45.3** | **0.0** |
| | comp=Z,1.3nm,0.3s,baz=83,slow=10,SNR=50 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **CTAO** | **Charters Tower** | **33.24** | **261** | P | **P** | **06 12 45.1** | **-0.2** |
| **CTAO** | **Charters Tower** | **33.24** | **261** | P | **P** | **06 12 45.3** | **0.0** |
| **CAN** | **Canberra** | **33.30** | **233** | P | **P** | **06 12 46.4** | **+0.8** |
| **CAN** | **Canberra** | **33.30** | **233** | P | **P** | **06 12 46.7** | **+1.2** |
| **PMG** | **Port Moresby** | **34.42** | **280** | P | **P** | **06 12 55.8** | **+0.7** |
| **PMG** | **Port Moresby** | **34.42** | **280** | P | **P** | **06 12 55.0** | **-0.1** |
| | comp=Z,30nm,0.8s,baz=52,slow=6.9,SNR=7.5 | | | | | | |
| | comp=Z,30nm,0.8s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **34.79** | **241** | P | **P** | **06 12 58.3** | **+0.3** |
| **QLP** | **Quilpie** | **35.24** | **250** | P | **P** | **06 13 01.7** | **0.0** |
| **TOO** | **Toolangi** | **36.75** | **231** | P | **P** | **06 13 15.5** | **+1.5** |
| TOO | | | | IAmb | IAmb | 06 13 19.3 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **COEN** | **Coen** | **36.99** | **271** | P | **P** | **06 13 16.3** | **+0.2** |
| **COEN** | **Coen** | **36.99** | **271** | P | **P** | **06 13 16.5** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.28** | **242** | P | **P** | **06 13 27.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.28** | **242** | P | **P** | **06 13 27.3** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.28** | **242** | P | **P** | **06 13 27.2** | **+0.9** |
| | comp=Z,14nm,0.5s,baz=97,slow=9.7,SNR=20 | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **38.43** | **81** | P | **P** | **06 13 28.8** | **+1.0** |
| **INKA** | **Innaminka** | **38.44** | **248** | P | **P** | **06 13 28.7** | **+1.0** |
| **QIS** | **Mount Isa** | **39.44** | **260** | P | **P** | **06 13 35.0** | **-0.8** |
| **HTT** | **Hallett** | **40.78** | **240** | P | **P** | **06 13 46.9** | **+0.6** |
| **LCRK** | **Leigh Creek** | **40.92** | **245** | P | **P** | **06 13 47.6** | **+0.3** |
| **TABU** | **Tabubil** | **41.38** | **283** | P | **P** | **06 13 47.8** | **-3.4** |
| **OOD** | **Oodnadatta** | **42.92** | **249** | P | **P** | **06 14 03.6** | **+0.7** |
| **BBOO** | **Buckleboo** | **43.05** | **241** | P | **P** | **06 14 04.0** | **+0.1** |
| **BBOO** | **Buckleboo** | **43.05** | **241** | P | **P** | **06 14 04.2** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 06 14 33.2 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.23** | **260** | P | **P** | **06 14 13.0** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 06 14 26.9 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.39** | **260** | P | **P** | **06 14 13.9** | **-0.4** |
| **WB2** | **Warramunga Arr** | **44.41** | **260** | P | **P** | **06 14 14.1** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 06 14 14.5 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.42** | **260** | P | **P** | **06 14 14.2** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.42** | **260** | P | **P** | **06 14 14.0** | **-0.6** |
| | comp=Z,13nm,0.6s,baz=96,slow=6.8,SNR=53 | | | | | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **MULG** | **Mulgathing** | **44.48** | **245** | P | **P** | **06 14 14.7** | **-0.2** |
| **AS01** | **Alice Springs** | **44.49** | **255** | P | **P** | **06 14 14.9** | **-0.2** |
| **AS31** | **Alice Springs** | **44.53** | **255** | P | **P** | **06 14 15.6** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 06 14 16.4 | |
| | comp=Z,11nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.53** | **255** | P | **P** | **06 14 14.9** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.53** | **255** | P | **P** | **06 14 15.3** | **-0.2** |
| | comp=Z,19nm,0.4s,baz=90,slow=8.5,SNR=68 | | | | | | |
| ASAR | | | | S | **S** | **06 20 04.4** | **-1.7** |
| | comp=Z,3.9nm,0.7s,baz=91,slow=15,SNR=22 | | | | | | |
| | comp=Z,19nm,0.4s | | | | | | |
| **WRKA** | **Warakurna** | **49.57** | **253** | P | **P** | **06 14 52.6** | **-0.4** |
| **FORT** | **Forrest** | **49.68** | **245** | P | **P** | **06 14 53.0** | **-0.6** |
| **FORT** | **Forrest** | **49.68** | **245** | P | **P** | **06 14 53.3** | **-0.3** |
| **KNRA** | **Kununurra** | **50.32** | **265** | P | **P** | **06 14 58.0** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 06 15 24.8 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **SOEI** | **Soe** | **55.95** | **271** | P | **P** | **06 15 39.5** | **+1.3** |
| SOEI | | | | IAmb | IAmb | 06 15 40.0 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.66** | **256** | P | **P** | **06 15 49.3** | **-0.3** |
| **MBWA** | **Marble Bar** | **57.83** | **256** | P | **P** | **06 15 50.2** | **-0.6** |
| **JCJ** | **Chichijima** | **59.14** | **319** | P | **P** | **06 16 00.9** | **+1.6** |
| **GIRL** | **Giralia** | **62.63** | **254** | P | **P** | **06 16 23.3** | **+1.1** |
| **CASY** | **Casey** | **65.62** | **205** | P | **P** | **06 16 41.1** | **+0.9** |
| CASY | | | | IAmb | IAmb | 06 16 41.9 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.24** | **324** | P | **P** | **06 16 55.8** | **-0.9** |
| | comp=Z,2.2nm,0.6s,baz=163,slow=6.5,SNR=4.9 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **68.24** | **324** | P | **P** | **06 16 56.4** | **-0.3** |
| MAJO | | | | IAmb | IAmb | 06 17 01.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.25** | **324** | P | **P** | **06 16 56.2** | **-0.6** |
| MJB9 | | | | IAmb | IAmb | 06 17 01.7 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **UGM** | **Wanagama** | **69.51** | **268** | P | **P** | **06 17 04.5** | **-0.3** |
| **AMKA** | **Amchitka** | **69.52** | **359** | P | **P** | **06 17 02.9** | **-1.0** |
| **QSPA** | **South Pole Qui** | **71.64** | **180** | P | **P** | **06 17 17.4** | **+1.0** |
| **QSPA** | **South Pole Qui** | **71.64** | **180** | P | **P** | **06 17 17.6** | **+1.2** |
| | comp=Z,25nm,0.8s,baz=241,slow=0.5,SNR=104 | | | | | | |
| | comp=Z,25nm,0.8s | | | | | | |
| **SSLB** | **Suanglung** | **72.41** | **303** | P | **P** | **06 17 20.2** | **-1.3** |
| SSLB | | | | IAmb | IAmb | 06 17 31.0 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.14** | **345** | P | **P** | **06 17 30.3** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **74.14** | **345** | P | **P** | **06 17 29.6** | **-0.9** |
| | comp=Z,3.3nm,0.7s,baz=109,slow=8.1,SNR=6.1 | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **SAO** | **San Andreas Ge** | **76.88** | **44** | P | **P** | **06 17 47.1** | **+1.1** |
| SAO | | | | IAmb | IAmb | 06 17 47.8 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.97** | **326** | P | **P** | **06 17 46.9** | **+0.7** |
| **HOPS** | **Hopland Field** | **77.14** | **41** | P | **P** | **06 17 48.3** | **+0.9** |
| **ESJX** | **Sierra Juarez** | **78.13** | **50** | P | **P** | **06 17 54.0** | **+0.9** |
| **ISA** | **Isabella, Lake** | **78.26** | **46** | P | **P** | **06 17 55.0** | **+1.5** |
| ISA | | | | IAmb | IAmb | 06 17 55.4 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **CMB** | **Columbia Colle** | **78.29** | **43** | P | **P** | **06 17 54.3** | **+0.7** |
| **AFDM** | **Forest Hills D** | **78.44** | **42** | P | **P** | **06 17 55.5** | **+1.1** |
| **YUH** | **Yuha Desert** | **78.48** | **50** | P | **P** | **06 17 55.6** | **+1.0** |
| **KDAK** | **Kodiak Island** | **78.92** | **14** | P | **P** | **06 17 55.1** | **-1.2** |
| | comp=Z,9.2nm,0.8s,baz=244,slow=5.5,SNR=4.2 | | | | | | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **MDPB** | **Devils Postpil** | **78.93** | **44** | IAmb | IAmb | 06 17 58.8 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **WAKR** | **Walker** | **79.18** | **43** | IAmb | IAmb | 06 18 00.4 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **PNTR** | **Pine Nut** | **79.40** | **43** | P | **P** | **06 18 00.7** | **+1.0** |
| PNTR | | | | IAmb | IAmb | 06 18 01.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **O16K** | **Kokwok River B** | **79.51** | **10** | P | **P** | **06 17 58.3** | **-1.1** |
| O16K | | | | IAmb | IAmb | 06 18 19.4 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **DSP** | **Deep Springs** | **79.52** | **45** | P | **P** | **06 18 01.1** | **+1.1** |
| **L04D** | **Klamath Falls** | **79.53** | **39** | P | **P** | **06 18 01.2** | **+1.0** |
| L04D | | | | IAmb | IAmb | 06 18 01.3 | |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **YERR** | **Yerington** | **79.57** | **43** | IAmb | IAmb | 06 18 01.7 | |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **GWY** | **Greenwater Val** | **79.78** | **46** | P | **P** | **06 18 02.7** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **79.88** | **44** | P | **P** | **06 18 02.8** | **+0.6** |
| | comp=Z,4.5nm,0.7s,baz=224,slow=8.9,SNR=35 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **PAHR** | **Pah Rah Range** | **79.88** | **42** | IAmb | IAmb | 06 18 03.8 | |
| | comp=Z,9.5nm,1.3s | | | | | | |
| **TPH** | **Tonopah** | **80.40** | **45** | IAmb | IAmb | 06 18 06.5 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **SMAI** | **San Martin Ant** | **80.72** | **159** | P | **P** | **06 18 07.5** | **+1.8** |
| SMAI | | | | IAmb | IAmb | 06 18 07.9 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.80** | **39** | P | **P** | **06 18 07.6** | **+0.9** |
| **H04A** | **Detroit Lake** | **81.07** | **37** | P | **P** | **06 18 08.2** | **+0.3** |
| H04A | | | | IAmb | IAmb | 06 18 08.9 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **S11A** | **Rachel** | **81.17** | **46** | IAmb | IAmb | 06 18 10.3 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **I05D** | **Terrebonne, OR** | **81.36** | **38** | IAmb | IAmb | 06 18 11.0 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **PRN** | **Pahroc Range** | **81.52** | **46** | IAmb | IAmb | 06 18 12.6 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **BMN** | **Battle Mountai** | **81.67** | **43** | IAmb | IAmb | 06 18 12.9 | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **BELA** | **Benavo 2** | **81.68** | **173** | P | **P** | **06 18 11.0** | **+0.5** |
| **F04A** | **Amboy** | **81.69** | **36** | IAmb | IAmb | 06 18 12.3 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **J14K** | **Nanvaranak Lak** | **81.76** | **7** | P | **P** | **06 18 11.0** | **+0.2** |
| J14K | | | | IAmb | IAmb | 06 18 11.7 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **81.76** | **37** | IAmb | IAmb | 06 18 12.8 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **C03A** | **Quillayute Air** | **81.78** | **33** | P | **P** | **06 18 12.6** | **+1.2** |
| **NLWA** | **Neilton Lookou** | **81.80** | **34** | P | **P** | **06 18 12.8** | **+1.3** |
| NLWA | | | | IAmb | IAmb | 06 18 13.3 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **WVOR** | **Wild Horse Val** | **81.88** | **40** | P | **P** | **06 18 12.9** | **+0.7** |
| WVOR | | | | IAmb | IAmb | 06 18 13.9 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **L18K** | **Granite Mounta** | **82.22** | **10** | P | **P** | **06 18 13.8** | **+0.6** |
| L18K | | | | IAmb | IAmb | 06 18 14.4 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **I07A** | **Izee** | **82.28** | **39** | P | **P** | **06 18 15.1** | **+0.9** |
| I07A | | | | IAmb | IAmb | 06 18 15.4 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **G06A** | **Carlson Farm,** | **82.29** | **37** | P | **P** | **06 18 14.4** | **+0.4** |
| **K17K** | **Iditarod** | **82.43** | **9** | P | **P** | **06 18 14.6** | **+0.4** |
| K17K | | | | IAmb | IAmb | 06 18 40.9 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **GNW** | **Green Mountain** | **82.47** | **34** | P | **P** | **06 18 15.3** | **+0.5** |
| GNW | | | | IAmb | IAmb | 06 18 16.3 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **J08A** | **Circle Bar Ran** | **82.49** | **40** | P | **P** | **06 18 16.0** | **+0.8** |
| J08A | | | | IAmb | IAmb | 06 18 16.9 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **L19K** | **White Mountain** | **82.50** | **11** | P | **P** | **06 18 15.0** | **+0.3** |
| L19K | | | | IAmb | IAmb | 06 18 35.4 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **Q12A** | **Willow Creek R** | **82.50** | **45** | IAmb | IAmb | 06 18 17.1 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **82.60** | **50** | IAmb | IAmb | 06 18 18.4 | |
| | comp=Z,7.9nm,1.2s | | | | | | |
| **J16K** | **Anvik River** | **82.64** | **8** | P | **P** | **06 18 15.6** | **+0.3** |
| J16K | | | | IAmb | IAmb | 06 18 34.8 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **PWL** | **Port Wells** | **82.66** | **14** | P | **P** | **06 18 14.8** | **-0.7** |
| PWL | | | | IAmb | IAmb | 06 18 15.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **PGC** | **Sidney** | **82.80** | **33** | P | **P** | **06 18 16.7** | **+0.3** |
| PGC | | | | IAmb | IAmb | 06 18 17.3 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **319A** | **Douglas** | **82.83** | **54** | IAmb | IAmb | 06 18 19.8 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **U15A** | **North Rim** | **82.95** | **48** | IAmb | IAmb | 06 18 20.1 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **J17K** | **VABM Dome** | **82.96** | **9** | P | **P** | **06 18 17.1** | **+0.3** |
| J17K | | | | IAmb | IAmb | 06 18 31.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **PMR** | **Palmer** | **83.12** | **14** | P | **P** | **06 18 17.1** | **-0.6** |
| PMR | | | | IAmb | IAmb | 06 18 17.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **MAW** | **Mawson** | **83.34** | **200** | P | **P** | **06 18 19.7** | **+0.9** |
| | comp=Z,4.8nm,0.4s,baz=149,slow=4.7,SNR=14 | | | | | | |
| | comp=Z,4.8nm,0.4s | | | | | | |
| **PKCU** | **Pink Cliffs** | **83.43** | **47** | IAmb | IAmb | 06 18 23.0 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **E07A** | **Sunnyside** | **83.50** | **36** | IAmb | IAmb | 06 18 21.5 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **HAWA** | **Hanford** | **83.59** | **37** | IAmb | IAmb | 06 18 22.0 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **MVU** | **Marysvale** | **84.01** | **46** | IAmb | IAmb | 06 18 24.6 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **N25K** | **Chitina, Valde** | **84.22** | **16** | IAmb | IAmb | 06 18 23.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **D08A** | **Wollman Farm,** | **84.31** | **36** | IAmb | IAmb | 06 18 25.4 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **CTGM** | **Chitina Glacie** | **84.56** | **17** | IAmb | IAmb | 06 18 25.1 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **F10A** | **Beach Ranch, E** | **84.68** | **38** | IAmb | IAmb | 06 18 26.8 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **M26K** | **Nabesna, AK** | **85.31** | **16** | IAmb | IAmb | 06 18 47.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **S34M** | **Telegraph Cree** | **85.56** | **23** | IAmb | IAmb | 06 18 31.2 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **85.89** | **13** | IAmb | IAmb | 06 18 30.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **86.11** | **13** | IAmb | IAmb | 06 18 31.2 | |
| | comp=Z,6.5nm,0.5s | | | | | | |
| **DLBC** | **Dease Lake** | **86.35** | **23** | P | **P** | **06 18 34.0** | **+0.5** |
| | comp=Z,1.4nm,0.8s,baz=224,slow=10.0,SNR=3.3 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **86.37** | **58** | IAmb | IAmb | 06 18 37.1 | |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.37** | **58** | | **P** | **06 18 36.2** | **+1.9** |
| **TXAR** | **Lajitas Array** | **86.37** | **58** | P | **P** | **06 18 35.9** | **+1.6** |
| | comp=Z,5.9nm,0.8s,baz=219,slow=6.0,SNR=54 | | | | | | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **SCRK** | **Sand Creek** | **86.38** | **15** | P | **P** | **06 18 33.0** | **-0.6** |
| **ILAR** | **Eielson Array** | **86.41** | **13** | P | **P** | **06 18 32.2** | **-1.3** |
| | comp=Z,2.8nm,0.8s,baz=233,slow=5.8,SNR=16 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **86.51** | **52** | | **P** | **06 18 34.8** | **-0.1** |
| **ALPN** | **Alpine** | **86.81** | **57** | IAmb | IAmb | 06 18 38.6 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **J26L** | **Joseph Creek** | **86.93** | **14** | IAmb | IAmb | 06 18 36.9 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **SNOW** | **Snow King Moun** | **87.36** | **42** | IAmb | IAmb | 06 18 40.7 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.54** | **315** | *e*P | **P** | **06 18 41.0** | **+1.5** |
| HHC | | | | sP | PP | 06 22 10.6 | -7.1 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **87.74** | **15** | IAmb | IAmb | 06 18 40.2 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **YHL** | **Hebgen Lake** | **87.75** | **41** | IAmb | IAmb | 06 18 43.0 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **PD31** | **Pinedale Array** | **87.81** | **43** | IAmb | IAmb | 06 18 41.9 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.81** | **43** | P | **P** | **06 18 41.0** | **+0.1** |
| | comp=Z,3.0nm,0.6s,baz=217,slow=3.3,SNR=29 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.83** | **40** | IAmb | IAmb | 06 18 42.7 | |
| | comp=Z,5.8nm,1.3s | | | | | | |
| **MNHN** | **Monahans** | **87.88** | **56** | IAmb | IAmb | 06 18 42.9 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **DRIO** | **Del Rio** | **88.86** | **59** | IAmb | IAmb | 06 18 47.7 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **89.29** | **298** | P | **P** | **06 18 50.0** | **+2.0** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.80** | **180** | ⇑P | **P** | **06 18 49.8** | **+0.2** |
| | comp=Z,552nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.09** | **179** | P | **P** | **06 18 51.1** | **+0.3** |
| SNAA | | | | IAmb | IAmb | 06 18 51.6 | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.09** | **179** | ⇑P | **P** | **06 18 50.7** | **-0.1** |
| | comp=Z,126nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.09** | **179** | P | **P** | **06 18 50.8** | **0.0** |
| | comp=Z,4.6nm,0.6s,baz=207,slow=7.3,SNR=69 | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.24** | **176** | ⇑P | **P** | **06 18 51.9** | **+0.5** |
| | comp=Z,26nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.68** | **177** | ⇑P | **P** | **06 18 53.8** | **+0.3** |
| | comp=Z,11nm,0.7s,baz=184,slow=4.0 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.91** | **177** | ⇑P | **P** | **06 18 55.3** | **+0.8** |
| | comp=Z,21nm,1.0s | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.79** | **350** | PKP | **PKiKP** | **06 24 49.0** | **-0.9** |
| | comp=Z,1.7nm,0.8s,baz=352,slow=5.5,SNR=4.1 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.98** | **4** | PKhKP | PKPpre | 06 25 16.6 | |
| | comp=Z,1.3nm,0.4s,baz=337,slow=2.7,SNR=14 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.05** | **314** | PKP | **PKPbc** | **06 25 24.1** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=150,slow=4.9,SNR=2.1 | | | | | | |
| **GERES** | **GERESS Array B** | **148.07** | **345** | PKPbc | **PKiKP** | **06 25 32.9** | **-1.1** |
| | comp=Z,0.3nm,0.4s,baz=191,slow=3.0,SNR=2.9 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.88** | **348** | PKPbc | **PKiKP** | **06 25 39.5** | **-0.5** |
| | comp=Z,1.7nm,0.4s,baz=210,slow=9.4,SNR=4.6 | | | | | | |
| **ESDC** | **Sonseca Array**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **60.26** | **28** | P | | **P** | | **06 19 15.7** | **+0.8** |
| | comp=Z,0.8nm,0.7s,baz=260,slow=7.0,SNR=2.6 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.57** | **319** | P | | **P** | | **06 19 24.8** | **+0.8** |
| | comp=Z,19nm,0.6s,baz=89,slow=7.7,SNR=38 | | | | | | | | |
| **BRVK** | **Borovoye** | **61.63** | **319** | P | | **P** | | **06 19 23.4** | **-1.0** |
| BRVK | | | | IAmb | IAmb | | 06 19 26.1 | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **KK31** | **Karatay Array** | **62.26** | **308** | P | | **P** | | **06 19 28.8** | **-0.2** |
| KK31 | | | | IAmb | IAmb | | 06 19 44.0 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | | |
| **KKAR** | **Karatay Array** | **62.26** | **308** | P | | **P** | | **06 19 28.7** | **-0.3** |
| **GAR** | **Garm** | **62.99** | **303** | P | | **P** | | **06 19 34.3** | **+0.3** |
| **BCPM** | **Bancas Point** | **63.34** | **33** | P | | **P** | 06 19 22.6 | -13 | |
| **CHGR** | **Chuyangaron** | **63.94** | **303** | P | | **P** | | **06 19 39.9** | **-0.3** |
| **SIMJ** | **Simiganj** | **64.06** | **303** | P | | **P** | | **06 19 41.0** | **-0.1** |
| **KBL** | **Kabul** | **64.82** | **298** | P | | **P** | | **06 19 45.6** | **-0.6** |
| **ARU** | **Arti** | **68.06** | **323** | P | | **P** | | **06 20 04.7** | **-1.5** |
| ARU | | | | IAmb | IAmb | | 06 20 07.3 | | |
| | comp=Z,8.6nm,0.7s | | | | | | | | |
| **ARU** | **Arti** | **68.06** | **323** | P | | **P** | | **06 20 06.7** | **+0.4** |
| | comp=Z,7.8nm,0.6s,baz=1.5,slow=17,SNR=3.8 | | | | | | | | |
| | comp=Z,7.8nm,0.6s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **68.54** | **316** | P | | **P** | | **06 20 08.5** | **-0.9** |
| **YKA** | **Yellowknife Ar** | **74.68** | **28** | P | | **P** | | **06 20 47.3** | **+1.2** |
| | comp=Z,1.0nm,0.8s,baz=314,slow=4.0,SNR=4.5 | | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.34** | **341** | P | | **P** | | **06 21 02.1** | **+0.9** |
| | comp=Z,1.6nm,0.6s,baz=79,slow=8.8,SNR=5.9 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **KBZ** | **Khabaz** | **81.41** | **314** | P | | **P** | | **06 21 25.1** | **+1.3** |
| | comp=Z,2.9nm,0.7s,baz=74,slow=4.7,SNR=4.5 | | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.71** | **52** | P | | **P** | | **06 21 27.8** | **+1.9** |
| | comp=Z,0.7nm,0.7s,baz=279,slow=5.4,SNR=7.1 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **81.73** | **334** | P | | **P** | | **06 21 25.0** | **-0.2** |
| | comp=Z,2.9nm,0.8s,baz=59,slow=7.4,SNR=4.5 | | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.83** | **45** | P | | **P** | | **06 21 49.7** | **+2.7** |
| | comp=Z,0.2nm,0.4s,baz=251,slow=2.8,SNR=2.2 | | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **89.39** | **314** | P | | **P** | | **06 22 04.0** | **0.0** |
| | comp=Z,0.7nm,0.8s,baz=74,slow=6.2,SNR=2.1 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| **PLCA** | **Paso Flores** | **146.61** | **129** | PKPbc | | **PKPbc** | | **06 28 49.2** | **+0.4** |
| | comp=Z,1.7nm,0.6s,baz=264,slow=5.0,SNR=11 | | | | | | | | |
| **LPAZ** | **La Paz** | **149.34** | **82** | PKPbc | | **PKiKP** | | **06 28 58.5** | **-0.1** |
| | comp=Z,0.9nm,0.6s,baz=251,slow=5.6,SNR=6.2 | | | | | | | | |

*NEIC **19** 06:14:03.3±1.7, 18.4S±0.1×177.2W±0.2, h551km±14km, mb4.0/15, Error ellipse: s-maj=21.7km s-min=19.8km az=103.0*
*IDC **19** 06:14:12.7±8.9, 18.36S×178.12W, h599km±120km, mb3.1/5, mbtmp4.1/6, Error ellipse: s-maj=61.6km s-min=37.1km az=10.0*

**ISC 19 06:14:02.8±0.9, 18.3S±0.2×177.2W±0.1, h550km, n25, σ1.9s51/26, mb4.0/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.52** | **276** | P | | **P** | **06 15 28.9** | **0.0** |
| **AFI** | **Afiamalu** | **6.80** | **51** | P | | **P** | **06 15 50.7** | **+1.6** |
| **NIUE** | **Niue** | **6.97** | **98** | P | | **P** | **06 15 49.0** | **-1.5** |
| **PINNC** | **Pines Island,** | **15.00** | **251** | P | | **P** | **06 17 09.8** | **-2.5** |
| **DZM** | **Mont Dzumac** | **15.79** | **253** | P | | **P** | **06 17 21.2** | **+0.8** |
| DZM | | | | IAmb | IAmb | | 06 17 37.6 | |
| | comp=Z,5.2nm,1.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.79** | **253** | P | | **P** | **06 17 20.5** | **0.0** |
| | comp=Z,3.1nm,0.6s,baz=72,slow=20,SNR=3.1 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.59** | **260** | P | | **P** | **06 17 35.2** | **-1.8** |
| **URZ** | **Urewera** | **20.53** | **193** | P | | **P** | **06 18 04.8** | **+4.9** |
| | comp=Z,1.1nm,0.3s,baz=30,slow=8.1,SNR=1.5 | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| **ARMA** | **Armidale** | **30.74** | **241** | P | | **P** | **06 19 33.5** | **-0.3** |
| ARMA | | | | IAmb | IAmb | | 06 19 35.4 | |
| | comp=Z,8.4nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **38.23** | **270** | P | | **P** | **06 20 36.6** | **+0.1** |
| COEN | | | | IAmb | IAmb | | 06 20 45.0 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **39.45** | **242** | P | | **P** | **06 20 46.3** | **+0.2** |
| **STKA** | **Stephens Creek** | **39.45** | **242** | P | | **P** | **06 20 47.1** | **+1.0** |
| | comp=Z,2.6nm,0.7s,baz=86,slow=9.3,SNR=4.3 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **44.22** | **242** | P | | **P** | **06 21 24.8** | **+1.1** |
| **WR0** | **Warramunga Arr** | **45.48** | **260** | P | | **P** | **06 21 33.0** | **-0.5** |
| WR0 | | | | IAmb | IAmb | | 06 21 51.1 | |
| | comp=Z,3.4nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.64** | **260** | P | | **P** | **06 21 34.0** | **-0.8** |
| WB0 | | | | IAmb | IAmb | | 06 21 35.1 | |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| WB0 | | | | PcP | | **PcP** | **06 22 59.7** | **-1.8** |
| **WB2** | **Warramunga Arr** | **45.66** | **260** | P | | **P** | **06 21 35.1** | **+0.1** |
| WB2 | | | | IAmb | IAmb | | 06 21 49.6 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| WB2 | | | | PcP | | **PcP** | **06 22 59.3** | **-2.3** |
| **WRA** | **Warramunga Arr** | **45.67** | **260** | P | | **P** | **06 21 34.4** | **-0.6** |
| | comp=Z,1.6nm,0.6s,baz=96,slow=6.8,SNR=21 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **AS31** | **Alice Springs** | **45.78** | **255** | P | | **P** | **06 21 36.2** | **+0.5** |
| AS31 | | | | IAmb | IAmb | | 06 21 39.8 | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.78** | **255** | P | | **P** | **06 21 35.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.78** | **255** | P | | **P** | **06 21 36.0** | **+0.3** |
| | comp=Z,9.9nm,0.5s,baz=89,slow=8.2,SNR=59 | | | | | | | |
| | comp=Z,9.9nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **50.87** | **245** | P | | **P** | **06 22 13.9** | **+0.4** |
| FORT | | | | IAmb | IAmb | | 06 22 17.1 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **51.57** | **264** | P | | **P** | **06 22 19.2** | **+0.5** |
| KNRA | | | | IAmb | IAmb | | 06 22 32.5 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.80** | **180** | P | | **P** | **06 24 29.6** | **-0.2** |
| **BELA** | **Belgrano 2** | **81.67** | **173** | P | | **P** | **06 25 22.3** | **-1.1** |
| **ILAR** | **Eielson Array** | **85.98** | **13** | P | | P | 06 25 51.6 | +6.9 |
| | comp=Z,0.3nm,0.9s,baz=226,slow=6.2,SNR=2.3 | | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | | |

**IDC 19 06:14:34.4±7.9, 17.96S×176.99W, h0km, mb3.9/3, mbtmp3.9/3, MS4.4/1, Error ellipse: s-maj=348.4km s-min=38.7km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.87** | **193** | LR | | LR | 06 25 46.9 | |
| | comp=Z,1μm,19.5s,baz=325,slow=32 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.95** | **259** | P | | P | 06 22 59.1 | -0.4 |
| | 0.4nm,0.5s,baz=95,slow=6.9,SNR=5.7 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **46.07** | **254** | P | | P | 06 23 00.6 | +0.1 |
| | 3.7nm,0.6s,baz=88,slow=8.4,SNR=16 | | | | | | | |
| | 3.7nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.64** | **12** | P | | P | 06 27 14.5 | 0.0 |
| | 0.2nm,0.6s,baz=219,slow=4.3,SNR=4.6 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |

**RHSSO 19 06:15:10.0±0.2, 44.29N×17.77E, h6km±3km, ML1.9/10, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **BLY** | **Banja Luka** | **0.62** | **318** | *e*Pg | | Pg | 06 15 21.5 | -0.4 |
| BLY | | | | *e*Sg | | Sg | 06 15 30.4 | +0.4 |
| **HAPS** | **Han Pijesak,BI** | **0.87** | **103** | *e*Pg | | Pg | 06 15 26.2 | -0.6 |
| HAPS | | | | *e*Sg | | Sg | 06 15 38.0 | -0.1 |
| **A050A** | **Klekovaca** | **0.91** | **282** | *e*Pg | | Pg | 06 15 25.9 | -1.5 |
| A050A | | | | *e*Sg | | Sg | 06 15 38.5 | -0.7 |
| **RICI** | **Ricice** | **0.92** | **210** | *e*Pg | | Pg | 06 15 27.1 | -0.6 |
| RICI | | | | Sg | | Sg | 06 15 40.0 | +0.4 |
| **A051A** | **Mrakovica** | **0.95** | **320** | *e*Pg | | Pg | 06 15 27.4 | -0.8 |
| A051A | | | | *e*Sg | | Sg | 06 15 40.6 | +0.1 |
| **KIJV** | **Kijevo** | **1.02** | **254** | *e*Pg | | Pg | 06 15 29.4 | -0.3 |
| KIJV | | | | Sg | | Sg | 06 15 43.1 | +0.2 |
| **MAKA** | **Makarska** | **1.14** | **209** | *e*Pg | | Pg | 06 15 30.6 | -1.2 |
| MAKA | | | | Sg | | Sg | 06 15 46.8 | +0.1 |
| **BBLS** | **Lazi&#263i** | **1.25** | **109** | *e*Pg | | Pg | 06 15 32.2 | -1.8 |
| BBLS | | | | *e*Sg | | Sg | 06 15 49.7 | -0.5 |
| **RUDO** | **Rudo** | **1.34** | **120** | *e*Pg | | Pn | 06 15 34.1 | -1.2 |
| RUDO | | | | *e*Sg | | Sb | 06 15 52.3 | -0.6 |
| **STON** | **Ston** | **1.42** | **182** | *e*Pn | | Pn | 06 15 36.3 | -0.1 |
| STON | | | | Sg | | Sg | 06 15 56.1 | +0.5 |
| **STON** | **Ston** | **1.42** | **182** | *e*Pg | | Pn | 06 15 35.8 | -0.6 |
| STON | | | | *e*Sg | | Sb | 06 15 55.3 | +0.1 |
| **HVAR** | **Hvar** | **1.47** | **221** | Sn | | Sg | 06 15 58.2 | +1.0 |
| **MOSL** | **Moslavina** | **1.51** | **332** | *e*Pg | | Pg | 06 15 38.7 | -0.1 |
| MOSL | | | | Sg | | Sg | 06 15 59.5 | +1.1 |
| **MORI** | **Morici** | **1.55** | **255** | *i* Pn | | Pg | 06 15 39.5 | -0.2 |
| MORI | | | | Sn | | Sg | 06 16 00.7 | +1.0 |
| **TREB** | **Trebinje** | **1.63** | **165** | *e*Pn | | Pn | 06 15 38.7 | -0.6 |
| TREB | | | | *e*Sn | | Sb | 06 16 01.2 | -0.1 |
| **PLIT** | **Plitvice** | **1.64** | **292** | *e*Pn | | Pb | 06 15 40.8 | +0.1 |
| PLIT | | | | Sn | | Sg | 06 16 03.1 | +0.3 |
| **DBRK** | **Dubrovnik** | **1.65** | **170** | *i* Pn | | Pn | 06 15 40.1 | +0.6 |
| DBRK | | | | Sn | | Sg | 06 16 03.3 | +0.5 |
| **LSTV** | **Lastovo** | **1.65** | **203** | *e*Pn | | Pb | 06 15 41.0 | +0.1 |
| LSTV | | | | Sn | | Sg | 06 16 03.5 | +0.5 |
| **ZIRJ** | **Zirje** | **1.66** | **248** | *i* Pn | | Pb | 06 15 41.3 | +0.3 |
| ZIRJ | | | | Sn | | Sg | 06 16 03.5 | +0.1 |
| **FRGS** | **Fruska Gora** | **1.69** | **59** | *e*Pn | | Pn | 06 15 39.6 | -0.6 |
| FRGS | | | | *e*Sn | | Sn | 06 16 02.2 | 0.0 |
| **VIRC** | **Vir** | **1.95** | **271** | *e*Pg | | Pb | 06 15 46.1 | +0.2 |
| VIRC | | | | Sn | | Sb | 06 16 11.3 | +0.8 |
| **DUGI** | **Dugi Otok** | **1.98** | **262** | *i* Pg | | Pb | 06 15 46.0 | -0.4 |
| DUGI | | | | Sn | | Sb | 06 16 11.5 | +0.2 |
| **DRME** | **Dracevica, Mon** | **2.34** | **153** | *e*Pn | | Pn | 06 15 49.5 | +0.4 |
| DRME | | | | *e*Sn | | Sn | 06 16 18.3 | +0.1 |

*IDC **19** 06:19:16.9±2.2, 18.07S×177.96W, h558km±25km, mb3.7/19, mbtmp4.6/20, Error ellipse: s-maj=13.5km s-min=12.4km az=16.0*
*NOU **19** 06:19:18.2, 18.18S×177.88W, h576km, mb4.9/59, Fiji Islands Region*
*NEIC **19** 06:19:18.8±2.5, 18.1S±0.1×178.00W±0.05, h571km±6km, mb4.6/60, Error ellipse: s-maj=15.9km s-min=6.3km az=177.0*

**ISC 19 06:19:19.6±0.3, 18.08S±0.06×178.01W±0.07, h590km, n260, σ0.87/245, mb4.5/48, 22C-28D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.77** | **275** | P | | **P** | **06 20 43.9** | **+1.0** |
| **AFI** | **Afiamalu** | **7.28** | **56** | P | | **P** | **06 21 08.8** | **-3.3** |
| **NIUE** | **Niue** | **7.73** | **99** | P | | **P** | **06 21 14.9** | **-1.1** |
| **FUNA** | **Funafuti** | **9.88** | **344** | P | | **P** | **06 21 37.8** | **+0.7** |
| **FUNA** | **Funafuti** | **9.88** | **344** | P | | **P** | **06 21 38.4** | **+1.3** |
| **GLKZ** | **Green Lake** | **11.13** | **180** | S | | **S** | **06 23 54.0** | **+1.5** |
| **RTV** | **Rentapao** | **12.92** | **269** | P | | **P** | **06 22 08.1** | **+0.4** |
| **DVP** | **Devils Point** | **13.15** | **269** | P | | **P** | **06 22 10.3** | **+0.2** |
| **LIFNC** | **LIFOU** | **14.17** | **257** | P | | **P** | **06 22 18.1** | **-2.3** |
| **LIFNC** | **LIFOU** | **14.17** | **257** | P | | **P** | **06 22 17.9** | **-2.5** |
| **PINNC** | **Pines Island,** | **14.37** | **249** | P | | **P** | **06 22 21.1** | **-1.1** |
| **PINNC** | **Pines Island,** | **14.37** | **249** | P | | **P** | **06 22 21.2** | **-0.9** |
| **YATNC** | **Mamie plateau,** | **14.73** | **252** | P | | **P** | **06 22 24.8** | **-0.8** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **06 22 29.1** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **06 22 28.6** | **-0.9** |
| DZM | | | | IAmb | IAmb | | 06 22 35.4 | |
| | comp=Z,18nm,0.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **06 22 28.8** | **-0.8** |
| | comp=Z,18nm,0.6s,baz=116,slow=23,SNR=56 | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.27** | **252** | P | | **P** | **06 22 30.5** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | | **P** | **06 22 46.6** | **+1.0** |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | | **P** | **06 22 47.0** | **+1.4** |
| **KUZ** | **Kuaotunu** | **19.40** | **195** | P | | **P** | **06 23 08.7** | **+0.6** |
| **MXZ** | **Matakaoa Point** | **19.68** | **189** | P | | **P** | **06 23 10.2** | **-0.5** |
| **MXZ** | **Matakaoa Point** | **19.68** | **189** | P | | **P** | **06 23 10.0** | **-0.7** |
| **MKAZ** | **Moumakai** | **19.88** | **196** | P | | **P** | **06 23 13.4** | **+0.8** |
| **WMGZ** | **Waiomatatini S** | **19.91** | **188** | P | | **P** | **06 23 12.5** | **-0.3** |
| **HAZ** | **Te Kaha** | **19.95** | **190** | P | | **P** | **06 23 11.3** | **-1.8** |
| **AWAZ** | **Awhitu Peninsu** | **19.99** | **197** | P | | **P** | **06 23 14.7** | **+1.2** |
| **RUGZ** | **Raukumara Rang** | **20.17** | **190** | P | | **P** | **06 23 13.7** | **-1.6** |
| **PUZ** | **Puketiti** | **20.18** | **189** | P | | **P** | **06 23 10.9** | **-4.5** |
| **URZ** | **Urewera** | **20.55** | **191** | P | | **P** | **06 23 15.7** | **-2.9** |
| | comp=Z,8.5nm,0.3s,baz=7.1,slow=2.9,SNR=19 | | | | | | | |
| | comp=Z,8.5nm,0.3s | | | | | | | |
| **MWZ** | **Matawai** | **20.55** | **190** | P | | **P** | **06 23 16.1** | **-2.6** |
| **RAGZ** | **Rawiri** | **20.73** | **190** | P | | **P** | **06 23 18.4** | **-1.9** |
| **RTZ** | **Ruatahuna** | **20.92** | **191** | P | | **P** | **06 23 20.5** | **-1.5** |
| RTZ | | | | IAmb | IAmb | | 06 23 20.7 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **HIZ** | **Hauiti** | **21.29** | **196** | P | | **P** | **06 23 23.6** | **-1.6** |
| **KHZ** | **Kahutara** | **25.30** | **195** | P | | **P** | **06 23 58.7** | **-2.1** |
| **PPT** | **Papeete** | **27.06** | **93** | P | | **P** | **06 24 15.7** | **-0.9** |
| | comp=Z,22nm,0.8s,baz=77,slow=24,SNR=5.0 | | | | | | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **AUWSH** | **Wavell State H** | **28.21** | **246** | P | | **P** | **06 24 26.7** | **+0.2** |
| **MLZ** | **Mavora Lakes** | **29.57** | **200** | P | | **P** | **06 24 37.6** | **-0.4** |
| **EIDS** | **Eidsvold** | **29.57** | **250** | P | | **P** | **06 24 37.5** | **-0.8** |
| **EIDS** | **Eidsvold** | **29.57** | **250** | P | | **P** | **06 24 37.6** | **-0.6** |
| **RK1H** | **Rockhampton Ha** | **29.89** | **254** | P | | **P** | **06 24 40.4** | **-0.6** |
| **DCZ** | **Deep Cove** | **29.98** | **201** | P | | **P** | **06 24 42.0** | **+0.6** |
| DCZ | | | | IAmb | IAmb | | 06 25 00.7 | |
| | comp=Z,37nm,1.2s | | | | | | | |
| **ARMA** | **Armidale** | **30.19** | **240** | P | | **P** | **06 24 44.4** | **+0.8** |
| **ARMA** | **Armidale** | **30.19** | **240** | P | | **P** | **06 24 44.2** | **+0.6** |
| ARMA | | | | IAmb | IAmb | | 06 24 44.6 | |
| | comp=Z,23nm,0.6s | | | | | | | |
| **AUPHS** | **Peel High Scho** | **31.00** | **239** | P | | **P** | **06 24 50.8** | **+0.4** |
| **AULRC** | **Lightning Ridg** | **33.00** | **244** | P | | **P** | **06 25 07.2** | **-0.2** |
| **TV1H** | **Townsville Har** | **33.33** | **262** | P | | **P** | **06 25 10.8** | **+0.5** |
| **CNB** | **Canberra Magne** | **33.63** | **233** | P | | **P** | **06 25 13.3** | **+0.6** |
| **CTA** | **Charters Tower** | **33.80** | **261** | P | | **P** | **06 25 13.7** | **-0.5** |
| **CTA** | **Charters Tower** | **33.80** | **261** | P | | **P** | **06 25 13.8** | **-0.5** |
| | comp=Z,2.5nm,0.7s,baz=98,slow=9.7,SNR=45 | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.80** | **261** | P | | **P** | **06 25 13.7** | **-0.5** |
| **CTAO** | **Charters Tower** | **33.80** | **261** | P | | **P** | **06 25 13.9** | **-0.3** |
| **CAN** | **Canberra** | **33.91** | **233** | P | | **P** | **06 25 15.4** | **+0.5** |
| **CAN** | **Canberra** | **33.91** | **233** | P | | **P** | **06 25 15.5** | **+0.5** |
| **CMSA** | **Cobar Meteorol** | **35.40** | **241** | P | | **P** | **06 25 27.4** | **0.0** |
| **QLP** | **Quilpie** | **35.83** | **250** | P | | **P** | **06 25 30.9** | **-0.1** |
| **TOO** | **Toolangi** | **37.36** | **231** | P | | **P** | **06 25 43.9** | **+0.5** |
| **TOO** | **Toolangi** | **37.36** | **231** | P | | **P** | **06 25 44.1** | **+0.7** |
| **AUMAG** | **Moama Anglican** | **37.42** | **234** | P | | **P** | **06 25 43.3** | **-0.6** |
| **COEN** | **Coen** | **37.49** | **271** | P | | **P** | **06 25 45.1** | **+0.4** |
| **COEN** | **Coen** | **37.49** | **271** | P | | **P** | **06 25 45.3** | **+0.6** |
| **BRAT** | **Ballarat** | **38.51** | **232** | P | | **P** | **06 25 53.7** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.88** | **241** | P | | **P** | **06 25 56.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.88** | **241** | P | | **P** | **06 25 56.4** | **+0.6** |
| STKA | | | | IAmb | IAmb | | 06 25 57.2 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.88** | **241** | P | | **P** | **06 25 56.2** | **+0.4** |
| | comp=Z,49nm,0.8s,baz=93,slow=10,SNR=70 | | | | | | | |
| | comp=Z,49nm,0.8s | | | | | | | |
| **INKA** | **Innaminka** | **39.04** | **248** | P | | **P** | **06 25 57.8** | **+0.7** |
| **QIS** | **Mount Isa** | **40.00** | **259** | P | | **P** | **06 26 05.5** | **+0.6** |
| **HTT** | **Hallett** | **41.39** | **240** | P | | **P** | **06 26 16.0** | **+0.2** |
| **LCRK** | **Leigh Creek** | **41.53** | **244** | P | | **P** | **06 26 16.7** | **-0.1** |
| **WHYH** | **Whyalla** | **42.43** | **241** | P | | **P** | **06 26 24.0** | **+0.1** |
| **OOD** | **Oodnadatta** | **43.51** | **248** | P | | **P** | **06 26 32.9** | **+0.5** |
| **BBOO** | **Buckleboo** | **43.66** | **241** | P | | **P** | **06 26 33.4** | **0.0** |
| **BBOO** | **Buckleboo** | **43.66** | **241** | P | | **P** | **06 26 33.5** | **+0.1** |
| **MULG** | **Mulgathing** | **45.09** | **245** | P | | **P** | **06 26 43.8** | **-0.6** |
| **AS31** | **Alice Springs** | **45.11** | **254** | P | | **P** | **06 26 44.4** | **-0.4** |
| AS31 | | | | IAmb | IAmb | | 06 26 45.5 | |
| | comp=Z,30nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.11** | **254** | P | | **P** | **06 26 44.7** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.11** | **254** | P | | **P** | **06 26 44.4** | **-0.4** |
| | comp=Z,102nm,0.6s,baz=87,slow=8.7,SNR=854 | | | | | | | |
| ASAR | | | | S | | **S** | **06 32 40.4** | **-1.8** |
| | comp=Z,1.4nm,0.7s,baz=87,slow=16,SNR=3.7 | | | | | | | |
| **WRKA** | **Warakurna** | **50.16** | **252** | P | | **P** | **06 27 21.7** | **-0.7** |
| **FORT** | **Forrest** | **50.28** | **245** | P | | **P** | **06 27 22.2** | **-0.9** |
| **FORT** | **Forrest** | **50.28** | **245** | P | | **P** | **06 27 22.3** | **-0.9** |
| **KMBL** | **Kambalda** | **55.58** | **244** | P | | **P** | **06 27 59.8** | **-0.9** |
| **SOEI** | **Soe** | **56.45** | **270** | IAmb | IAmb | | 06 28 17.9 | |
| | comp=Z,64nm,0.8s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.24** | **255** | P | | **P** | **06 28 18.2** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **58.24** | **255** | P | | **P** | **06 28 18.3** | **-0.7** |
| PSA00 | | | | IAmb | IAmb | | 06 28 51.1 | |
| | comp=Z,42nm,1.1s | | | | | | | |
| **MBWA** | **Marble Bar** | **58.40** | **256** | P | | **P** | **06 28 19.3** | **-0.8** |
| **MBWA** | **Marble Bar** | **58.40** | **256** | P | | **P** | **06 28 19.4** | **-0.7** |
| **MEEK** | **Meekatharra** | **58.73** | **249** | P | | **P** | **06 28 21.1** | **-1.2** |
| **KLBR** | **Kellerberrin** | **59.10** | **244** | P | | **P** | **06 28 23.6** | **-1.0** |
| **NWAO** | **Narrogin (SRO)** | **59.47** | **242** | P | | **P** | **06 28 26.2** | **-0.8** |
| NWAO | | | | IAmb | IAmb | | 06 28 28.0 | |
| | comp=Z,55nm,1.5s | | | | | | | |
| **MUN** | **Mundaring** | **60.39** | **243** | P | | **P** | **06 28 33.0** | **-0.1** |
| **MORW** | **Morawa** | **60.76** | **246** | P | | **P** | **06 28 35.4** | **-0.3** |
| **GIRL** | **Giralia** | **63.21** | **253** | P | | **P** | **06 28 52.5** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **68.27** | **323** | P | | **P** | **06 29 22.2** | **-0.5** |
| | comp=Z,7.2nm,0.8s,baz=159,slow=5.9,SNR=23 | | | | | | | |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **MAJO** | **Matsushiro** | **68.27** | **323** | P | | **P** | **06 29 22.4** | **-0.3** |
| **MAJO** | **Matsushiro** | **68.27** | **323** | P | | **P** | **06 29 22.2** | **-0.5** |
| MAJO | | | | IAmb | IAmb | | 06 29 23.1 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.28** | **323** | P | | **P** | **06 29 22.1** | **-0.6** |
| MJB9 | | | | IAmb | IAmb | | 06 29 23.1 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **JOW** | **Kunigami** | **68.62** | **309** | P | | **P** | **06 29 26.4** | **+1.4** |
| **SBUM** | **Sibu** | **71.61** | **279** | P | | **P** | **06 29 43.1** | **+0.1** |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | | **P** | **06 29 44.6** | **+0.3** |
| QSPA | | | | IAmb | IAmb | | 06 29 45.4 | |
| | comp=Z,7.6nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | | **P** | **06 29 44.9** | **+0.6** |
| | comp=Z,7.7nm,0.6s,baz=309,slow=0.3,SNR=70 | | | | | | | |
| | comp=Z,7.7nm,0.6s | | | | | | | |
| **NACB** | **Ninganchiao** | **72.33** | **304** | P | | **P** | **06 29 47.5** | **+0.6** |
| **NACB** | **Ninganchiao** | **72.33** | **304** | P | | **P** | **06 29 46.5** | **-0.4** |
| NACB | | | | IAmb | IAmb | | 06 29 47.1 | |
| | comp=Z,54nm,1.3s | | | | | | | |
| **TPUB** | **Ta-pu** | **72.67** | **302** | P | | **P** | **06 29 49.4** | **+0.5** |
| **TPUB** | **Ta-pu** | **72.67** | **302** | IAmb | IAmb | | 06 29 48.4 | |
| | comp=Z,45nm,0.8s | | | | | | | |
| **KSM** | **Kuching** | **73.09** | **277** | P | | **P** | **06 29 52.4** | **+0.9** |
| **KSM** | **Kuching** | **73.09** | **277** | P | | **P** | **06 29 51.2** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **73.94** | **345** | P | | **P** | **06 29 55.1** | **-0.3** |
| | comp=Z,9.3nm,0.7s,baz=124,slow=7.9,SNR=7.9 | | | | | | | |
| | comp=Z,9.3nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **75.08** | **318** | P | | **P** | **06 30 02.9** | **+0.7** |
| | comp=Z,2.0nm,0.8s,baz=140,slow=6.3,SNR=8.4 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **75.10** | **318** | P | | **P** | **06 30 03.0** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **76.97** | **326** | P | | **P** | **06 30 13.3** | **+0.9** |
| | comp=Z,2.8nm,0.7s,baz=70,slow=8.7,SNR=4.6 | | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.55** | **325** | P | | **P** | **06 30 22.5** | **+1.7** |
| **MDJ** | **Mudanjiang** | **78.55** | **325** | P | | **P** | **06 30 21.0** | **+0.1** |
| MDJ | | | | IAmb | IAmb | | 06 30 22.6 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.28** | **44** | P | | **P** | **06 30 24.9** | **-0.3** |
| | comp=Z,1.1nm,0.5s,baz=228,slow=8.1,SNR=3.9 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **SMAI** | **San Martin Ant** | **80.86** | **159** | P | | **P** | **06 30 33.2** | **+0.6** |
| SMAI | | | | IAmb | IAmb | | 06 30 34.6 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **I07A** | **Izee** | **81.70** | **38** | P | | **P** | **06 30 37.9** | **+0.4** |
| **J08A** | **Circle Bar Ran** | **81.91** | **39** | P | | **P** | **06 30 39.2** | **+0.7** |
| **BELA** | **Belgrano 2** | **81.95** | **173** | P | | **P** | **06 30 38.1** | **+0.1** |
| **K17K** | **Iditarod** | **82.01** | **9** | P | | **P** | **06 30 38.7** | **+0.3** |
| **L19K** | **White Mountain** | **82.07** | **11** | P | | **P** | **06 30 39.1** | **+0.3** |
| L19K | | | | IAmb | IAmb | | 06 30 40.7 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **SUA** | **Susitna One**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASF** | **Jabal al Asfar** | **145.59** | **301** | PKPbc | **PKPbc** | **06 37 53.9** | **+0.2** |
| | comp=Z,9.3nm,0.8s,baz=56,slow=0.1,SNR=10.0 | | | | | | |
| **BMR** | **Baia Mare** | **145.64** | **334** | ⇓P | **PKPbc** | **06 37 53.3** | **+0.1** |
| **OSTC** | **Ostas** | **145.66** | **344** | *e*PKP | **PKPbc** | **06 37 53.8** | **+0.6** |
| **CHVC** | **Chvalec** | **145.68** | **344** | *e*PKP | **PKPbc** | **06 37 53.2** | **0.0** |
| **CLL** | **Collm** | **145.71** | **348** | ⇓*i*PKPbc | **PKPbc** | **06 37 53.1** | **-0.1** |
| | comp=Z,25nm,0.9s | | | | | | |
| **HARR** | **Harsova** | **145.72** | **326** | ⇓P | **PKPbc** | **06 37 53.8** | **+0.3** |
| **ARCR** | **ARCALIA** | **145.73** | **333** | ⇑P | **PKPbc** | **06 37 54.0** | **+0.6** |
| **TURR** | **Turia** | **145.73** | **330** | ⇑P | **PKPab** | **06 37 54.9** | **-0.5** |
| **UPC** | **Upice** | **145.76** | **344** | *e*PKP | **PKPbc** | **06 37 53.6** | **+0.2** |
| **COVR** | **Voineasa-Covas** | **145.79** | **329** | ⇓P | **PKPbc** | **06 37 53.1** | **-0.6** |
| **DPC** | **Dobruska-Polom** | **145.82** | **344** | *e*PKP | **PKPbc** | **06 37 54.1** | **+0.4** |
| **BRG** | **Berggiesshubel** | **145.92** | **346** | *e*PKP | **PKPbc** | **06 37 53.9** | **0.0** |
| BRG | | | | Amp | | 06 37 54.8 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **LANS** | **Liptovska Anna** | **145.94** | **339** | *e*PKP | **PKPbc** | **06 37 54.9** | **+0.9** |
| **KRLC** | **Kraliky** | **145.94** | **343** | *e*PKP | **PKPbc** | **06 37 53.8** | **-0.2** |
| **MORC** | **Moravsky Berou** | **145.99** | **342** | *e*PKP | **PKPbc** | **06 37 53.9** | **-0.3** |
| **MORC** | **Moravsky Berou** | **145.99** | **342** | ⇑P | **PKPbc** | **06 37 54.1** | **0.0** |
| **DOPR** | **Dopca** | **146.09** | **330** | ⇑P | **PKPbc** | **06 37 55.3** | **+0.8** |
| **PVCC** | **Panska Ves** | **146.10** | **346** | *e*PKP | **PKPbc** | **06 37 54.8** | **+0.4** |
| **ISR** | **Istrita** | **146.14** | **328** | ⇑P | **PKPbc** | **06 37 55.7** | **+0.9** |
| **MLR** | **Muntele Rosu** | **146.18** | **329** | PKPbc | **PKPbc** | **06 37 54.0** | **-0.9** |
| | comp=Z,6.8nm,0.7s,baz=150,slow=2.7,SNR=6.9 | | | | | | |
| **MLR** | **Muntele Rosu** | **146.18** | **329** | ⇓P | **PKPbc** | **06 37 55.5** | **+0.6** |
| **CJR** | **Cluj-Napoca** | **146.34** | **333** | ⇓P | **PKPbc** | **06 37 55.7** | **+0.4** |
| **MMAI** | **Mount Meron Ar** | **146.56** | **303** | PKPbc | **PKPbc** | **06 37 56.6** | **+0.3** |
| | comp=Z,13nm,0.6s,baz=64,slow=5.7,SNR=15 | | | | | | |
| **PRU** | **Pruhonice** | **146.61** | **345** | *e*PKP | **PKPbc** | **06 37 55.9** | **+0.1** |
| **VOIR** | | **146.65** | **330** | ⇑P | **PKPbc** | **06 37 56.2** | **+0.1** |
| **DRGR** | | **146.66** | **334** | ⇓P | **PKPbc** | **06 37 56.2** | **0.0** |
| **VRAC** | **Vranov** | **146.69** | **343** | *e*PKP | **PKPbc** | **06 37 55.7** | **-0.3** |
| **VRAC** | **Vranov** | **146.69** | **343** | PKPbc | **PKPbc** | **06 37 55.7** | **-0.3** |
| | comp=Z,2.6nm,0.5s,baz=28,slow=8,2,SNR=4.3 | | | | | | |
| **VRAC** | **Vranov** | **146.69** | **343** | ⇑P | **PKPdf** | **06 37 52.8** | **-0.5** |
| **VYHS** | **Vyhne** | **146.71** | **339** | *e*PKP | **PKPbc** | **06 37 56.1** | **0.0** |
| **JAVC** | **Velka Javorina** | **146.77** | **341** | *e*PKP | **PKiKP** | **06 37 57.4** | **-0.9** |
| **PSZ** | **Piszkesteto** | **146.84** | **338** | ⇑P | **PKPbc** | **06 37 56.7** | **+0.1** |
| **ARR** | **Arges** | **146.90** | **330** | ⇑P | **PKPbc** | **06 37 57.6** | **+0.8** |
| **KRUC** | **Moravsky** | **146.97** | **343** | *e*PKP | **PKPbc** | **06 37 56.4** | **-0.4** |
| **LOT** | **Lotru** | **147.24** | **331** | ⇑P | **PKPbc** | **06 37 57.0** | **-0.7** |
| **MEM** | **Membach** | **147.39** | **355** | *d*PKP | **PKPbc** | **06 37 57.1** | **-0.6** |
| **BTNL** | **Ternell** | **147.40** | **355** | *d*PKP | **PKPbc** | **06 37 57.0** | **-0.8** |
| **BSTI** | **Sart Tilman** | **147.45** | **356** | *d*PKP | **PKPbc** | **06 37 57.7** | **-0.2** |
| **CSS** | **Mathiatis** | **147.49** | **307** | | **PKPbc** | **06 37 58.4** | **-0.2** |
| **SIRR** | **Siria** | **147.52** | **334** | ⇑P | **PKPbc** | **06 37 58.2** | **-0.1** |
| **GRFO** | **Grafenberg** | **147.60** | **349** | | **PKPbc** | **06 37 58.8** | **+0.4** |
| **KHC** | **Kasperske Hory** | **147.64** | **346** | *e*PKP | **PKPbc** | **06 37 58.4** | **-0.1** |
| **BHOU** | **Houvegnez** | **147.64** | **355** | *d*PKP | **PKPbc** | **06 37 57.7** | **-0.8** |
| **GZR** | **Gura Zlata** | **147.73** | **332** | ⇑P | **PKPbc** | **06 37 58.9** | **-0.1** |
| **SURR** | **Surduc** | **147.73** | **333** | ⇓P | **PKPbc** | **06 37 58.7** | **-0.1** |
| **CKRC** | **Cesky Krumlov** | **147.75** | **345** | *e*PKP | **PKPbc** | **06 37 58.9** | **+0.1** |
| **EIL** | **Elat** | **147.84** | **297** | PKPbc | **PKPbc** | **06 37 58.5** | **-1.1** |
| | comp=Z,9.1nm,0.9s,baz=32,slow=6.2,SNR=4.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.88** | **345** | PKPbc | **PKPbc** | **06 37 59.3** | **+0.1** |
| | comp=Z,5.4nm,0.6s,baz=161,slow=8.5,SNR=26 | | | | | | |
| **RCHB** | **Rochefort** | **147.90** | **356** | *d*PKP | **PKPbc** | **06 37 59.0** | **0.0** |
| **DOU** | **Dourbes** | **147.99** | **357** | *d*PKP | **PKPbc** | **06 37 59.1** | **-0.2** |
| **BZS** | **Buzias** | **148.06** | **334** | ⇓P | **PKPdf** | **06 37 55.8** | **+0.2** |
| **CONA** | **Conrad Observa** | **148.14** | **342** | *e*PKP | **PKPbc** | **06 37 60.0** | **+0.1** |
| | comp=Z,3.9nm,0.6s,SNR=8.5 | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.22** | **342** | *e*PKP | **PKPbc** | **06 38 00.2** | **+0.2** |
| | comp=Z,4.9nm,0.7s,SNR=6.2 | | | | | | |
| **HERR** | **Herculane** | **148.29** | **332** | ⇓P | **PKPbc** | **06 38 00.1** | **-0.2** |
| **WLF** | **Walferdange** | **148.31** | **355** | *d*PKP | **PKPbc** | **06 38 00.6** | **+0.4** |
| **MOA** | **Molln** | **148.66** | **344** | *i* PKP | **PKPbc** | **06 38 00.8** | **-0.4** |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **MDVR** | **Moldovita** | **148.68** | **332** | ⇑P | **PKPbc** | **06 38 00.6** | **-0.7** |
| **MORH** | **Mrgy, Hungar** | **148.74** | **337** | ⇓P | **PKPbc** | **06 38 00.9** | **-0.4** |
| **BFO** | **Black Forest** | **149.39** | **352** | | **PKPbc** | **06 38 02.8** | **0.0** |
| BFO | | | | PKPab | **PKPab** | **06 38 09.9** | **-0.2** |
| **LESA** | **Schwarzleotal** | **149.45** | **346** | *i* PKP | **PKPbc** | **06 38 02.3** | **-0.8** |
| | comp=Z,3.7nm,0.4s | | | | | | |
| **BOVS** | **Bovan** | **149.57** | **331** | ⇓P | **PKPbc** | **06 38 02.6** | **-0.8** |
| **KBA** | **Koelnbreinsper** | **149.61** | **345** | *e*PKP | **PKPbc** | **06 38 02.5** | **-1.1** |
| | comp=Z,1.8nm,0.3s,SNR=5.8 | | | | | | |
| **WATA** | **Walderalm** | **149.78** | **347** | *e*PKP | **PKPbc** | **06 38 03.4** | **-0.6** |
| | comp=Z,3.6nm,0.4s,SNR=5.2 | | | | | | |
| **RETA** | **Reutte** | **149.80** | **348** | *i* PKP | **PKPbc** | **06 38 03.5** | **-0.4** |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **149.81** | **343** | *i* PKP | **PKPbc** | **06 38 03.2** | **-0.8** |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **149.83** | **347** | *e*PKP | **PKPbc** | **06 38 03.6** | **-0.6** |
| | comp=Z,12nm,0.4s,SNR=9.9 | | | | | | |
| **MOTA** | **Moosalm** | **149.87** | **348** | *i* PKP | **PKPbc** | **06 38 03.4** | **-0.8** |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **MYKA** | **Terra Mystica** | **149.95** | **344** | *e*PKP | **PKPbc** | **06 38 03.0** | **-1.3** |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.97** | **347** | *e*PKP | **PKPbc** | **06 38 04.1** | **-0.3** |
| | comp=Z,5.8nm,0.5s,SNR=6.5 | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.12** | **345** | *i* PKP | **PKPbc** | **06 38 03.8** | **-0.9** |
| | comp=Z,7.0nm,0.5s,SNR=9.6 | | | | | | |
| **DAVA** | **Damuels** | **150.16** | **349** | *e*PKP | **PKPbc** | **06 38 05.1** | **+0.2** |
| | comp=Z,4.2nm,0.4s | | | | | | |
| **FETA** | **Feichten** | **150.25** | **348** | *i* PKP | **PKPbc** | **06 38 04.9** | **-0.2** |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.65** | **349** | PKPbc | **PKPbc** | **06 38 06.1** | **0.0** |
| | comp=Z,14nm,0.6s,baz=284,slow=4.2,SNR=28 | | | | | | |
| **ESDC** | **Sonseca Array** | **157.87** | **12** | PKPab | **PKPab** | **06 38 46.1** | **-0.5** |
| | comp=Z,1.2nm,0.9s,baz=356,slow=3.3,SNR=6.3 | | | | | | |
| **KEST** | **Kesra** | **161.25** | **341** | PKPab | **PKPab** | **06 39 00.8** | **-0.8** |
| | comp=Z,3.7nm,0.7s,baz=298,slow=5.7,SNR=4.8 | | | | | | |

*IDC* ***19*** *06:21:04.0±4.9, 18°.09S×178°.01W,h591km±59km, mb3.4/10,mbtmp4.3/10,Error ellipse: s-maj=27.7km s-min=21.6km az=93.0*

*NEIC* ***19*** *06:21:06.6±1.9, 18°.2S±0°.1×177°.59W±0°.10,h623km±9km, mb4.0/39,Error ellipse: s-maj=15.5km s-min=12.9km az=198.0*

**ISC 19 06:21:06.5±0.5, 18°.20S±0°.09×177°.74W±0°.09, h623km, n84,σ0°95/81, mb3.9/29, 1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.04** | **276** | P | **P** | **06 22 34.8** | **+0.8** |
| **AFI** | **Afiamalu** | **7.14** | **54** | P | **P** | **06 22 58.7** | **-0.3** |
| **NIUE** | **Niue** | **7.46** | **98** | P | **P** | **06 22 58.6** | **-3.1** |
| **LIFNC** | **LIFOU** | **14.39** | **257** | P | **P** | **06 24 08.1** | **-0.2** |
| **PINNC** | **Pines Island,** | **14.56** | **250** | P | **P** | **06 24 09.8** | **0.0** |
| **DZM** | **Mont Dzumac** | **15.35** | **253** | P | **P** | **06 24 18.0** | **+1.0** |
| **MXZ** | **Matakaoa Point** | **19.60** | **189** | S | **P** | **06 24 55.9** | **+0.5** |
| **HAZ** | **Te Kaha** | **19.88** | **190** | S | **P** | **06 24 57.6** | **-0.2** |
| **RUGZ** | **Raukumara Rang** | **20.10** | **191** | S | **P** | **06 25 00.0** | **0.0** |
| **URZ** | **Urewera** | **20.49** | **192** | P | **P** | **06 25 01.9** | **-1.5** |
| | 2.4nm,0.3s,baz=270,slow=2.0,SNR=2.1 2.4nm,0.3s | | | | | | |
| **PLWZ** | **Palliser** | **24.05** | **193** | P | **P** | **06 25 34.6** | **-0.5** |
| **KHZ** | **Kahutara** | **25.26** | **195** | P | **P** | **06 25 45.5** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.77** | **251** | P | P | 06 26 31.2 | +6.1 |
| **ARMA** | **Armidale** | **30.35** | **241** | P | **P** | **06 26 31.0** | **+0.8** |
| ARMA | | | | IAmb | IAmb | 06 26 31.4 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **34.03** | **261** | P | **P** | **06 27 01.3** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 06 27 19.4 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **34.04** | **233** | P | **P** | **06 27 01.2** | **+0.1** |
| **TOO** | **Toolangi** | **37.48** | **231** | P | **P** | **06 27 30.1** | **+0.7** |
| **COEN** | **Coen** | **37.74** | **271** | P | **P** | **06 27 31.9** | **+0.2** |
| COEN | | | | IAmb | IAmb | 06 27 36.4 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **HMH** | **Humu'ula Sheep** | **43.46** | **31** | P | **P** | **06 28 16.9** | **-0.2** |
| **KEKH** | **Kekaha** | **43.66** | **25** | P | **P** | **06 28 17.8** | **-0.4** |
| **WB2** | **Warramunga Arr** | **45.20** | **260** | | **P** | **06 28 29.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **45.33** | **254** | P | **P** | **06 28 30.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.33** | **254** | P | **P** | **06 28 29.6** | **-1.5** |
| | comp=Z,6.7nm,0.7s,baz=85,slow=7.9,SNR=1.0 comp=Z,6.7nm,0.7s | | | | | | |
| **JHJ2** | **Mitsune** | **65.17** | **321** | P | **P** | **06 30 48.1** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **68.52** | **323** | P | **P** | **06 31 07.3** | **-1.1** |
| | comp=Z,1.8nm,0.6s,baz=150,slow=5.5,SNR=2.1 comp=Z,1.8nm,0.6s | | | | | | |
| **AMKA** | **Amchitka** | **69.32** | **358** | P | **P** | **06 31 11.7** | **-1.1** |
| **KIWB** | **Kanaga Island** | **69.75** | **0** | P | **P** | **06 31 14.4** | **-1.0** |
| **UGM** | **Wanagama** | **70.27** | **268** | P | **P** | **06 31 18.6** | **-0.8** |
| **QSPA** | **South Pole Qui** | **71.86** | **180** | P | **P** | **06 31 28.9** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 06 31 29.8 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.86** | **180** | P | **P** | **06 31 29.2** | **+1.5** |
| | comp=Z,2.4nm,0.6s,baz=288,slow=0.1,SNR=6.4 comp=Z,2.4nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.12** | **345** | P | **P** | **06 31 39.8** | **-0.8** |
| | comp=Z,4.2nm,0.6s,baz=128,slow=6.4,SNR=3.8 comp=Z,4.2nm,0.6s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.35** | **39** | P | **P** | **06 32 05.2** | **+1.1** |
| **WAKR** | **Walker** | **78.50** | **43** | P | **P** | **06 32 06.9** | **+1.9** |
| **MPK** | **Martis Peak** | **78.56** | **42** | P | **P** | **06 32 07.3** | **+1.8** |
| MPK | | | | IAmb | IAmb | 06 32 08.3 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **YERR** | **Yerington** | **78.89** | **43** | P | **P** | **06 32 08.5** | **+1.3** |
| YERR | | | | IAmb | IAmb | 06 32 08.5 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **GRAC** | **Grapevine Rang** | **79.03** | **45** | P | **P** | **06 32 09.8** | **+2.0** |
| GRAC | | | | IAmb | IAmb | 06 32 09.8 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.19** | **44** | P | **P** | **06 32 10.0** | **+1.2** |
| | comp=Z,1.4nm,0.7s,baz=226,slow=8.9,SNR=7.5 comp=Z,1.4nm,0.7s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.15** | **38** | P | **P** | **06 32 15.1** | **+1.5** |
| J05D | | | | IAmb | IAmb | 06 32 15.2 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **L14K** | **Kuka Creek** | **80.18** | **7** | P | **P** | **06 32 13.9** | **+0.9** |
| **M16K** | **Timber Creek** | **80.38** | **9** | P | **P** | **06 32 14.8** | **+0.7** |
| **H04A** | **Detroit Lake** | **80.44** | **37** | P | **P** | **06 32 15.5** | **+0.6** |
| H04A | | | | IAmb | IAmb | 06 32 15.6 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **E03A** | **Lebam** | **80.83** | **35** | P | **P** | **06 32 17.9** | **+1.1** |
| **L16K** | **Owhat River** | **80.96** | **9** | P | **P** | **06 32 17.4** | **+0.3** |
| **I07A** | **Izee** | **81.64** | **38** | P | **P** | **06 32 22.6** | **+1.4** |
| I07A | | | | IAmb | IAmb | 06 32 22.6 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **81.80** | **173** | P | **P** | **06 32 22.3** | **+1.0** |
| BELA | | | | IAmb | IAmb | 06 32 22.4 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **L18K** | **Granite Mounta** | **81.87** | **10** | P | **P** | **06 32 22.0** | **+0.3** |
| **K17K** | **Iditarod** | **82.09** | **9** | P | **P** | **06 32 22.9** | **+0.1** |
| **L19K** | **White Mountain** | **82.14** | **11** | P | **P** | **06 32 23.7** | **+0.5** |
| L19K | | | | IAmb | IAmb | 06 32 43.5 | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **J16K** | **Anvik River** | **82.32** | **8** | P | **P** | **06 32 24.3** | **+0.3** |
| **J17K** | **VABM Dome** | **82.63** | **8** | P | **P** | **06 32 25.7** | **+0.2** |
| J17K | | | | IAmb | IAmb | 06 32 32.2 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **PMR** | **Palmer** | **82.73** | **13** | P | **P** | **06 32 25.4** | **-0.6** |
| PMR | | | | IAmb | IAmb | 06 32 25.5 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.94** | **13** | P | **P** | **06 32 26.7** | **-0.5** |
| GHO | | | | IAmb | IAmb | 06 32 27.1 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.35** | **14** | P | **P** | **06 32 28.8** | **-0.5** |
| **K20K** | **Telida** | **83.37** | **10** | P | **P** | **06 32 29.0** | **-0.2** |
| K20K | | | | IAmb | IAmb | 06 32 29.1 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **J19K** | **Poorman** | **83.71** | **10** | P | **P** | **06 32 30.9** | **+0.1** |
| **N25K** | **Chitina, Valde** | **83.81** | **15** | P | **P** | **06 32 31.6** | **0.0** |
| **GRNC** | **Granite Creek** | **83.82** | **17** | P | **P** | **06 32 31.7** | **0.0** |
| GRNC | | | | IAmb | IAmb | 06 32 31.8 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **M27K** | **Edge Creek, AK** | **85.14** | **16** | P | **P** | **06 32 38.0** | **-0.1** |
| M27K | | | | IAmb | IAmb | 06 32 38.4 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **I21K** | **Tanana** | **85.41** | **11** | P | **P** | **06 32 38.0** | **-1.1** |
| **Q32M** | **Nakina River** | **85.41** | **22** | P | **P** | **06 32 39.9** | **+0.4** |
| Q32M | | | | IAmb | IAmb | 06 32 40.4 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **O30N** | **Mendenhall** | **85.52** | **19** | P | **P** | **06 32 39.5** | **-0.2** |
| O30N | | | | IAmb | IAmb | 06 32 40.8 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.61** | **57** | P | **P** | **06 32 43.0** | **+1.9** |
| **TXAR** | **Lajitas Array** | **85.61** | **57** | P | **P** | **06 32 43.3** | **+2.2** |
| | comp=Z,1.2nm,0.7s,baz=218,slow=5.6,SNR=13 comp=Z,1.2nm,0.7s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.73** | **12** | P | **P** | **06 32 39.3** | **-1.2** |
| CCB | | | | IAmb | IAmb | 06 32 39.6 | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **BCAR** | **Beaver Creek A** | **85.75** | **16** | P | **P** | **06 32 40.9** | **+0.1** |
| **ILAR** | **Eielson Array** | **86.03** | **13** | P | **P** | **06 32 40.7** | **-1.3** |
| | comp=Z,1.1nm,0.4s,baz=218,slow=4.9,SNR=20 comp=Z,1.1nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.12** | **43** | P | **P** | **06 32 48.5** | **+0.4** |
| | comp=Z,0.6nm,0.6s,baz=233,slow=3.0,SNR=7.4 comp=Z,0.6nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.29** | **178** | P | **P** | **06 33 01.6** | **-0.5** |
| | comp=Z,0.7nm,0.9s,baz=204,slow=13,SNR=1.4 comp=Z,0.7nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **141.11** | **333** | PKhKP | PKPpre | 06 39 19.4 | |
| | comp=Z,0.7nm,0.4s,baz=37,slow=3.8,SNR=4.4 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.70** | **5** | PKhKP | PKPpre | 06 39 25.8 | |
| | comp=Z,0.6nm,0.5s,baz=329,slow=2.2,SNR=4.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.44** | **315** | PKPbc | **PKPbc** | **06 39 36.4** | **-0.4** |
| | comp=Z,1.6nm,0.8s,baz=127,slow=3.6,SNR=4.4 | | | | | | |
| **CLL** | **Collm** | **145.88** | **348** | ⇓*i*PKPbc | **PKPbc** | **06 39 36.9** | **-0.5** |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **148.05** | **346** | PKPbc | **PKPbc** | **06 39 43.0** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=178,slow=5.9,SNR=4.4 | | | | | | |
| **CONA** | **Conrad Observa** | **148.33** | **342** | *e*PKP | **PKPbc** | **06 39 44.0** | **-0.1** |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.41** | **342** | *e*PKP | **PKPbc** | **06 39 43.9** | **-0.3** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.62** | **346** | *i* PKP | **PKPbc** | **06 39 46.8** | **-0.4** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **WATA** | **Walderalm** | **149.95** | **347** | *e*PKP | **PKPbc** | **06 39 47.7** | **-0.4** |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **150.01** | **347** | *e*PKP | **PKPbc** | **06 39 47.7** | **-0.5** |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **150.04** | **348** | *i* PKP | **PKPbc** | **06 39 47.7** | **-0.5** |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **MYKA** | **Terra Mystica** | **150.13** | **344** | *e*PKP | **PKPbc** | **06 39 47.3** | **-1.1** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.14** | **348** | *e*PKP | **PKPbc** | **06 39 47.9** | **-0.6** |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.30** | **346** | *e*PKP | **PKPbc** | **06 39 47.6** | **-1.2** |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **FETA** | **Feichten** | **150.42** | **348** | *e*PKP | **PKPbc** | **06 39 48.7** | **-0.5** |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.81** | **349** | PKPbc | **PKPbc** | **06 39 49.1** | **-1.0** |
| | comp=Z,1.4nm,0.5s,baz=276,slow=9.2,SNR=3.5 | | | | | | |

*IDC* ***19*** *06:21:47.8±2.0,5°.04S×151°.84E,h46km±17km,mb4.3/15, mbtmp4.5/17,ML2.6/2,Error ellipse: s-maj=17.7km s-min=12.1km az=105.0*

*BJI* ***19*** *06:21:48.0±0.0,5°.20S×151°.90E,h51km,mb4.8/30, mB5.3/4,Ms5.3/3,Ms7 4.9/3*

*NEIC* ***19*** *06:21:48.8±2.5,5°.14S±0°.07×151°.96E±0°.09,h44km±5km, mb5.0/91,Error ellipse: s-maj=13.1km s-min=8.7km az=116.0*

*DJA* ***19*** *06:21:52.9±0.5,7°S±5°×15°1E±°,h10km,M5.0/15,mB5.4/5, mb5.1/15,Mw(mB)4.9/5*

**ISC 19 06:21:47.7±0.4, 5°.21S±0°.05×152°.09E±0°.06, h44km±3km, h44km:pP-P,n153,σ1°63/137, mb5.0/73, 1C-2D, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I40PG** | **Keravat** | **0.91** | **355** | P | **Pn** | **06 22 04.1** | **0.0** |
| | baz=179,slow=22,SNR=6.9 | | | | | | |
| I40PG | | | | I | I | 06 28 20.0 | |
| | baz=211,slow=308,SNR=0.5 | | | | | | |
| **RABL** | **Rabaul** | **1.02** | **4** | Pn | **Pn** | **06 22 08.3** | **+2.6** |
| **MANU** | **Manus Island** | **5.67** | **304** | | **Pn** | **06 23 14.1** | **+4.6** |
| **PMG** | **Port Moresby** | **6.42** | **229** | Pn | **Pn** | **06 23 22.7** | **+2.8** |
| **PMG** | **Port Moresby** | **6.42** | **229** | P | **Pn** | **06 23 18.1** | **-1.8** |
| | 1.9nm,0.3s,baz=251,slow=9.8,SNR=3.2 | | | | | | |
| PMG | | | | S | **Sn** | **06 24 30.9** | **-1.0** |
| | 396nm,0.6s,baz=274,slow=21,SNR=9.4 40nm,0.8s | | | | | | |
| **JAY** | **Jayapura** | **11.67** | **283** | P | **Pn** | **06 24 34.2** | **+2.4** |
| | 53nm,1.2s | | | | | | |
| **GENI** | **Genyem** | **12.17** | **282** | P | **Pn** | **06 24 43.0** | **+4.3** |
| | 126nm,1.6s | | | | | | |
| **COEN** | **Coen** | **12.35** | **225** | Pn | **Pn** | **06 24 43.4** | **+2.2** |
| **CTA** | **Charters Tower** | **15.84** | **200** | P | **Pn** | **06 25 29.0** | **+1.2** |
| | 0.1nm,0.3s,baz=30,slow=12,SNR=9.9 1.7nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **20.07** | **183** | P | Pn | 06 26 19.8 | +0.2 |
| EIDS | | | | IAmb | IAmb | 06 26 23.3 | |
| | comp=Z,101nm,1.1s | | | | | | |
| **SWI** | **Sorong** | **21.24** | **281** | P | P | 06 26 38.3 | +8.0 |
| | comp=Z,154nm,1.3s,comp=Z,4μm | | | | | | |
| **LIFNC** | **LIFOU** | **21.35** | **138** | P | **P** | **06 26 33.2** | **+1.8** |
| LIFNC | | | | IAmb | IAmb | 06 26 50.3 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.77** | **142** | P | **P** | **06 26 37.3** | **+1.3** |
| **DZM** | **Mont Dzumac** | **21.77** | **142** | P | **P** | **06 26 38.3** | **+2.3** |
| | comp=Z,9.2nm,0.5s,baz=325,slow=12,SNR=17 comp=Z,9.2nm,0.5s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **22.03** | **248** | P | **P** | **06 26 37.3** | **-1.4** |
| **WB0** | **Warramunga Arr** | **22.50** | **228** | P | **P** | **06 26 42.8** | **-1.0** |
| **WR0** | **Warramunga Arr** | **22.50** | **228** | P | **P** | **06 26 41.3** | **-2.6** |
| **WRAB** | **Tennant Creek** | **22.63** | **228** | P | **P** | **06 26 43.3** | **-1.9** |
| **WB2** | **Warramunga Arr** | **22.63** | **228** | P | **P** | **06 26 43.2** | **-2.0** |
| **WRA** | **Warramunga Arr** | **22.64** | **228** | P | **P** | **06 26 42.9** | **-2.5** |
| **WRA** | **Warramunga Arr** | **22.64** | **228** | P | **P** | **06 26 42.7** | **-2.6** |
| | comp=Z,32nm,0.7s,baz=96,slow=7.4,SNR=306 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.64** | **228** | S | **S** | **06 30 46.6** | **-3.9** |
| | comp=Z,37nm,1.2s,baz=55,slow=18,SNR=24 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.64** | **228** | | | | |
| | comp=Z,32nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **25.08** | **181** | P | **P** | **06 27 10.2** | **+1.8** |
| ARMA | | | | IAmb | IAmb | 06 27 25.2 | |
| | comp=Z,82nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **25.15** | **244** | P | **P** | **06 27 08.6** | **-0.5** |
| **AS31** | **Alice Springs** | **25.37** | **222** | P | **P** | **06 27 11.6** | **+0.5** |
| AS31 | | | | IAmb | IAmb | 06 27 26.4 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **25.37** | **222** | P | **P** | **06 27 11.7** | **+0.6** |
| **ASAR** | **Alice Springs** | **25.37** | **222** | P | **P** | **06 27 11.1** | **0.0** |
| | comp=Z,30nm,0.8s,baz=57,slow=8.3,SNR=19 | | | | | | |
| ASAR | | | | S | **S** | | |
| | comp=Z,1.0nm,0.8s,baz=29,slow=23,SNR=1.8 | | | | | | |
| ASAR | | | | ScP | **ScP** | **06 34 18.0** | **-0.9** |
| | comp=Z,1.3nm,0.8s,baz=69,slow=2.4,SNR=4.8 comp=Z,30nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **27.94** | **259** | P | **P** | **06 27 36.6** | **+2.1** |
| | comp=Z,46nm,1.2s | | | | | | |
| **MSVF** | **Nonsavu** | **28.27** | **118** | P | **P** | **06 27 39.8** | **+2.5** |
| **STKA** | **Stephens Creek** | **28.29** | **199** | P | **P** | **06 27 37.6** | **+0.4** |
| **STKA** | **Stephens Creek** | **28.29** | **199** | P | **P** | **06 27 37.9** | **+0.6** |
| | comp=Z,3.3nm,0.5s,baz=7.1,slow=8.1,SNR=2.3 comp=Z,3.3nm,0.5s | | | | | | |
| **EDFI** | **Ende, Flores** | **30.37** | **262** | P | **P** | **06 27 55.1** | **-0.9** |
| | comp=Z,57nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **31.27** | **207** | P | **P** | **06 28 02.5** | **-1.1** |
| BBOO | | | | IAmb | IAmb | 06 28 16.7 | |
| | comp=Z,36nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **35.15** | **240** | P | **P** | **06 28 36.0** | **-1.6** |
| **PSA0** | **Pilbara Seismi** | **35.21** | **239** | P | **P** | **06 28 36.8** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **35.21** | **239** | P | **P** | **06 28 36.6** | **-1.5** |
| **JOW** | **Kunigami** | **39.32** | **325** | P | **P** | **06 29 13.2** | **+0.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **83.69** | **322** | P | **P** | | **06 34 09.9** | **-2.0** | |
| | comp=Z,1.5nm,0.7s,baz=113,slow=4.2,SNR=14 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| M27K | **Edge Creek, AK** | **83.75** | **25** | IAmb | IAmb | | 06 34 48.4 | | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| F24K | **Squaw Lake** | **83.80** | **20** | IAmb | IAmb | | 06 34 40.5 | | |
| | comp=Z,31nm,1.9s | | | | | | | | |
| QSPA | **South Pole Qui** | **84.75** | **180** | P | **P** | | **06 34 17.6** | **+0.4** | |
| QSPA | **South Pole Qui** | **84.75** | **180** | P | **P** | | **06 34 17.9** | **+0.7** | |
| | comp=Z,9.3nm,0.8s,baz=320,slow=0.7,SNR=44 | | | | | | | | |
| | comp=Z,9.3nm,0.8s | | | | | | | | |
| BMAR | **Burnt Mountain** | **84.88** | **20** | P | **P** | | **06 34 17.7** | **0.0** | |
| MAW | **Mawson** | **84.92** | **203** | P | **P** | | **06 34 18.0** | **+0.2** | |
| | comp=Z,4.9nm,0.5s,baz=102,slow=6.1,SNR=19 | | | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | | | |
| ARSB | **Arslanbob** | **85.27** | **312** | IAmb | IAmb | | 06 34 35.5 | | |
| | comp=Z,27nm,1.9s | | | | | | | | |
| K29M | **Barlow Dome** | **86.14** | **25** | P | **P** | | **06 34 24.6** | **+0.5** | |
| I29M | **Ogilvie Camp,** | **86.36** | **23** | IAmb | IAmb | | 06 35 33.1 | | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| D27M | **Malcolm River** | **86.86** | **19** | IAmb | IAmb | | 06 34 31.9 | | |
| | comp=Z,5.1nm,0.6s | | | | | | | | |
| J30M | **Hart River** | **86.88** | **24** | IAmb | IAmb | | 06 34 47.8 | | |
| | comp=Z,7.1nm,0.8s | | | | | | | | |
| E28M | **Babbage River** | **87.09** | **20** | IAmb | IAmb | | 06 35 24.4 | | |
| | comp=Z,21nm,1.8s | | | | | | | | |
| N32M | **Quiet Lake** | **87.28** | **28** | P | **P** | | **06 34 29.5** | **-0.2** | |
| N32M | | | | IAmb | IAmb | | 06 35 04.0 | | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| KK31 | **Karatay Array** | **87.40** | **314** | P | **P** | | **06 34 29.1** | **-1.5** | |
| KK31 | | | | IAmb | IAmb | | 06 34 45.0 | | |
| | comp=Z,15nm,1.6s | | | | | | | | |
| KKAR | **Karatay Array** | **87.40** | **314** | P | **P** | | **06 34 28.8** | **-1.8** | |
| BVAR | **Borovoye Array** | **89.14** | **323** | P | **P** | | **06 34 36.5** | **-2.2** | |
| | comp=Z,4.4nm,0.7s,baz=108,slow=4.8,SNR=16 | | | | | | | | |
| | comp=Z,4.4nm,0.7s | | | | | | | | |
| GNW | **Green Mountain** | **90.50** | **42** | IAmb | IAmb | | 06 34 48.1 | | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| AFDM | **Forest Hills D** | **90.86** | **51** | P | **P** | | **06 34 47.7** | **+0.7** | |
| I05D | **Terrebonne, OR** | **91.15** | **46** | IAmb | IAmb | | 06 34 49.8 | | |
| | comp=Z,8.1nm,0.9s | | | | | | | | |
| PNTR | **Pine Nut** | **91.94** | **51** | IAmb | IAmb | | 06 35 08.2 | | |
| | comp=Z,7.2nm,1.0s | | | | | | | | |
| YERR | **Yerington** | **92.21** | **51** | IAmb | IAmb | | 06 35 09.8 | | |
| | comp=Z,5.2nm,1.2s | | | | | | | | |
| MDPB | **Devils Postpil** | **92.22** | **53** | IAmb | IAmb | | 06 34 55.9 | | |
| | comp=Z,16nm,1.8s | | | | | | | | |
| LHV | **Little Huntoon** | **92.72** | **52** | IAmb | IAmb | | 06 34 58.3 | | |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| NVAR | **Mina Array Bea** | **92.89** | **52** | P | **P** | | **06 34 57.9** | **+1.2** | |
| NVAR | **Mina Array Bea** | **92.89** | **52** | P | **P** | | **06 34 58.2** | **+1.5** | |
| | comp=Z,3.5nm,0.7s,baz=253,slow=6.5,SNR=37 | | | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| G08A | **Pilot Rock** | **92.93** | **45** | IAmb | IAmb | | 06 34 58.4 | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| WVOR | **Wild Horse Val** | **92.94** | **48** | IAmb | IAmb | | 06 34 58.2 | | |
| | comp=Z,8.7nm,1.2s | | | | | | | | |
| NV11 | **Mina Array Sit** | **93.01** | **52** | IAmb | IAmb | | 06 35 12.9 | | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| MZP | **Montezuma Peak** | **93.57** | **53** | IAmb | IAmb | | 06 35 03.0 | | |
| | comp=Z,16nm,1.8s | | | | | | | | |
| GMN | **Gold Mountain** | **93.64** | **53** | IAmb | IAmb | | 06 35 02.6 | | |
| | comp=Z,12nm,2.0s | | | | | | | | |
| WCT | **Wildcat Mounta** | **94.11** | **54** | IAmb | IAmb | | 06 35 18.7 | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| MFID | **Camas Ranch** | **95.06** | **47** | IAmb | IAmb | | 06 35 22.6 | | |
| | comp=Z,7.7nm,1.4s | | | | | | | | |
| SHPR | **Sheep Range** | **95.28** | **54** | P | **P** | | **06 35 09.6** | **+2.0** | |
| SPR3 | **Spring Creek 3** | **96.03** | **51** | P | **P** | | **06 35 11.0** | **-0.1** | |
| SPR3 | | | | IAmb | IAmb | | 06 35 28.1 | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| HLID | **Hailey** | **96.09** | **47** | IAmb | IAmb | | 06 35 17.3 | | |
| | comp=Z,13nm,1.9s | | | | | | | | |
| ELIB | **Princess Elisa** | **96.23** | **194** | *d*P | **P** | | **06 35 10.8** | **-0.3** | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| ELIB | | | | *d*pP | **pP** | | **06 35 24.7** | **+0.1** | |
| KNB | **Kanab** | **97.17** | **53** | IAmb | IAmb | | 06 35 32.6 | | |
| | comp=Z,10nm,1.3s | | | | | | | | |
| TMUT | **Trail Mountain** | **98.46** | **51** | IAmb | IAmb | | 06 35 38.5 | | |
| | comp=Z,6.4nm,1.2s | | | | | | | | |
| PDAR | **Pinedale Array** | **99.65** | **48** | P | **Pdif** | | **06 35 27.5** | **+0.2** | |
| | comp=Z,1.0nm,0.7s,baz=242,slow=1.6,SNR=14 | | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| TXAR | **Lajitas Array** | **104.95** | **61** | PKiKP | **PKiKP** | | **06 40 04.5** | **-1.4** | |
| | comp=Z,0.1nm,0.6s,baz=222,slow=1.2,SNR=3.5 | | | | | | | | |
| BOSA | **Boshof** | **118.81** | **233** | PKP | **PKPdf** | | **06 40 31.3** | **-0.9** | |
| | comp=Z,2.7nm,0.8s,baz=5.4,slow=2.4,SNR=4.7 | | | | | | | | |
| PLCA | **Paso Flores** | **119.87** | **144** | PKP | **PKPdf** | | **06 40 33.7** | **-0.2** | |
| | comp=Z,3.8nm,1.3s,baz=264,slow=2.4,SNR=3.1 | | | | | | | | |
| SCHQ | **Schefferville** | **121.46** | **25** | PKP | **PKPdf** | | **06 40 34.5** | **-1.9** | |
| | comp=Z,2.6nm,0.7s,baz=259,slow=5.2,SNR=1.9 | | | | | | | | |
| BRG | **Berggiesshel** | **122.67** | **330** | Amp | | | 06 40 53.3 | | |
| | comp=Z,2.4nm,0.9s | | | | | | | | |
| BRG | | | | P | **pPKPdf** | | **06 40 52.4** | **-0.2** | |
| CLL | **Collm** | **122.86** | **331** | *i* PKPdf | **PKPdf** | | **06 40 38.1** | **-1.1** | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| CLL | | | | *i* x | x | | 06 40 41.4 | | |
| CLL | | | | *ep*PKPdf | **pPKPdf** | | **06 40 53.0** | **+0.1** | |
| CLL | | | | *es*PKPdf | **sPKPdf** | | **06 41 00.0** | **+2.2** | |
| RONA | **Rosalia, Austr** | **123.28** | **326** | *ep*PKP | pPKPdf | | 06 40 53.7 | -0.2 | |
| | comp=Z,0.4nm,0.3s | | | | | | | | |
| CONA | **Conrad Observa** | **123.40** | **326** | *ep*PKP | pPKPdf | | 06 40 53.7 | -0.5 | |
| | comp=Z,0.6nm,0.5s | | | | | | | | |
| FNA | **Florina** | **123.50** | **316** | | **PKPdf** | | **06 40 39.8** | **-1.0** | |
| GEC2 | **GERESS Array S** | **124.03** | **328** | PKPdf | **PKPdf** | | **06 40 41.4** | **-0.2** | |
| GERES | **GERESS Array B** | **124.03** | **328** | PKP | **PKPdf** | | **06 40 41.1** | **-0.5** | |
| | comp=Z,1.7nm,0.7s,baz=165,slow=11,SNR=6.9 | | | | | | | | |
| EKA | **Eskdalemuir Ar** | **126.22** | **343** | PKP | **PKPdf** | | **06 40 45.2** | **-0.3** | |
| | comp=Z,1.1nm,0.7s,baz=6.9,slow=2.8,SNR=4.0 | | | | | | | | |
| MOTA | **Moosalm** | **126.33** | **328** | *i* pPKP | pPKPdf | | 06 40 59.7 | -0.2 | |
| | comp=Z,1.9nm,0.6s | | | | | | | | |
| SQTA | **Sankt Quirin** | **126.35** | **328** | *i* pPKP | pPKPdf | | 06 40 59.9 | 0.0 | |
| | comp=Z,0.3nm,0.2s | | | | | | | | |
| FETA | **Feichten** | **126.73** | **328** | *i* pPKP | pPKPdf | | 06 41 00.9 | +0.2 | |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| DAVOX | **Davos/Dischmat** | **127.33** | **328** | PKP | **PKPdf** | | **06 40 46.2** | **-2.0** | |
| | comp=Z,1.5nm,0.4s,baz=315,slow=5.7,SNR=3.8 | | | | | | | | |
| ROSC | **El Rosal** | **133.78** | **88** | PKP | **PKPdf** | | **06 41 01.7** | **+0.1** | |
| | comp=Z,7.8nm,0.6s,baz=168,slow=21,SNR=6.9 | | | | | | | | |
| LPAZ | **La Paz** | **134.84** | **119** | PKP | **PKiKP** | | **06 41 04.8** | **-0.4** | |
| | comp=Z,1.7nm,0.5s,baz=25,slow=1.0,SNR=9.9 | | | | | | | | |
| ESDC | **Sonseca Array** | **139.45** | **331** | PKP | **PKPdf** | | **06 41 10.1** | **-0.8** | |
| | comp=Z,0.3nm,0.5s,baz=31,slow=3.7,SNR=3.0 | | | | | | | | |
| OBIP | **Obispado Ponce** | **140.12** | **68** | | **PKPdf** | | **06 41 12.4** | **-0.2** | |
| PTLB | **Pontes e Lacer** | **142.88** | **124** | PKPdf | **PKPdf** | | **06 41 14.7** | **-2.9** | |
| MDT | **Midelt** | **144.97** | **325** | PKP | **PKPab** | | **06 41 19.1** | **-1.2** | |
| | comp=Z,1.0nm,0.3s,baz=348,slow=1.4,SNR=12 | | | | | | | | |
| MACA | **Manacapuru-AM** | **146.22** | **104** | | **PKPab** | | **06 41 25.4** | **0.0** | |
| TORD | **Torodi Ar. Bea** | **149.75** | **287** | PKP | **PKPdf** | | **06 41 28.1** | **-1.1** | |
| | comp=Z,15nm,0.8s,baz=9.6,slow=2.8,SNR=51 | | | | | | | | |
| TORD | | | | PKPbc | **PKPbc** | | **06 41 32.5** | **-1.6** | |
| | comp=Z,15nm,0.8s,baz=46,slow=3.6,SNR=37 | | | | | | | | |
| BDFB | **Brasilia** | **151.27** | **136** | | **PKiKP** | | **06 41 38.2** | **-0.1** | |
| BDFB | **Brasilia** | **151.27** | **136** | PKPbc | **PKPbc** | | **06 41 37.6** | **-0.1** | |
| | comp=Z,7.1nm,0.7s,baz=284,slow=2.2,SNR=16 | | | | | | | | |

**DJA 19 06:26:08.9±0.3, 8°S±5°×117°E±°, h10km, M3.7/7, mb4.0/1, MLv3.5/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | **0.44** | **134** | P | Pb | 06 26 18.9 | +0.1 |
| TWSI | | | | S | Sb | 06 26 24.8 | -0.7 |
| PLAI | **Plampang** | **1.27** | **108** | P | Pn | 06 26 32.2 | -0.5 |
| IGBI | **Denpasar** | **1.45** | **254** | P | Pb | 06 26 35.9 | -0.1 |
| JAGI | **Jajag, Banyuwa** | **2.38** | **269** | Pg | Pg | 06 26 53.7 | -0.9 |
| JAGI | | | | Pn | Pn | 06 26 48.1 | 0.0 |
| WBSI | **Waikabubak, Su** | **3.04** | **114** | Pn | Pn | 06 26 55.8 | -1.4 |
| BSSI | **Bau Bau, Buton** | **4.51** | **60** | P | Pn | 06 27 16.8 | -0.6 |
| EDFI | **Ende, Flores** | **5.08** | **94** | P | Pn | 06 27 25.5 | +0.2 |

**IDC 19 06:26:42.0±2.5, 17°13S×177°86W, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=138.3km s-min=31.5km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | **Warramunga Arr** | **45.30** | **259** | P | P | 06 35 01.9 | 0.0 |
| | 0.6nm,0.8s,baz=96,slow=6.7,SNR=1.7 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | **45.51** | **253** | P | P | 06 35 03.5 | -0.2 |
| | 0.9nm,0.6s,baz=88,slow=8.6,SNR=4.6 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| ILAR | **Eielson Array** | **85.01** | **13** | P | P | 06 39 18.6 | -0.4 |
| | 0.2nm,0.4s,baz=218,slow=4.9,SNR=6.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| TXAR | **Lajitas Array** | **85.14** | **57** | P | P | 06 39 21.0 | +0.5 |
| | 0.2nm,0.6s,baz=215,slow=4.4,SNR=2.4 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*NAO* ***19*** *06:28:27.7, 38°.72N×15°.40E, h33km, mb4.4*
*ROM* ***19*** *06:29:05.1±0.3, 39°.35N±0°.01×13°.37E±0°.03, h526km±2km, ML4.6/146, Error ellipse: s-maj=2.0km s-min=1.4km az=120.0*
*LDG* ***19*** *06:29:06.3±0.1, 39°.33N×13°.43E, h530km, Error ellipse: s-maj=6.3km s-min=2.5km az=50.0*
*MOS* ***19*** *06:29:11.1±0.8, 39°.47N×12°.93E, h507km, mb4.4/25, Error ellipse: s-maj=6.9km s-min=3.8km az=73.5*
*CRAAG* ***19*** *06:29:11.2, 39°.39N×12°.86E, Ml4.6, Mer-Tyrrhenian*
*IDC* ***19*** *06:29:11.8±0.6, 39°.51N×12°.89E, h500km±7km, mb3.7/25, mbtmp4.6/37, Error ellipse: s-maj=7.9km s-min=7.5km az=163.0*
*NEIC* ***19*** *06:29:11.8±2.2, 39°.50N±0°.10×12°.9E±0°.1, h491km±7km, mb4.4/191, Error ellipse: s-maj=14.3km s-min=13.4km az=169.0*
*MCSM* ***19*** *06:29:11.5±0.5, 39°N±6°×1°3E±°, h498km±8km, mb4.5, mB4.9, MLv4.4, Mw(mB)4.2*
*TUN* ***19*** *06:29:15.5, 39°.31N×13°.12E, h452km, MD4.6*
*STR* ***19*** *06:29:16.6±0.6, 40°N±13°×1°3E±°, h448km, MLv4.7/32, Error ellipse: s-maj=0.0km s-min=0.0km az=32.7, preliminary*

**ISC 19 06:29:11.6±0.4, 39°.47N±0°.05×12°.97E±0°.04, h496km±4km, n1160, σ1°21/1182, mb4.4/128, 97C-76D, Tyrrhenian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| USI | **Ustica** | **0.78** | **168** | ⇑P | **P** | **06 30 12.8** | **+0.8** |
| USI | | | | S | **S** | **06 31 01.7** | **+0.8** |
| USI | | | | AML | AML | | |
| | comp=E,370μm,0.7s | | | | | | |
| USI | | | | AML | AML | | |
| | comp=N,1240μm,1.3s | | | | | | |
| USI | | | | AML | AML | | |
| | comp=N,1240μm,0.7s | | | | | | |
| USI | | | | AML | AML | | |
| | comp=E,546μm,1.0s | | | | | | |
| MPG | **Monte Pellegri** | **1.34** | **167** | ⇑P | **P** | **06 30 14.2** | **+0.5** |
| MPG | | | | S | **S** | **06 31 04.2** | **+0.3** |
| MPG | | | | AML | AML | | |
| | comp=N,728μm,0.8s | | | | | | |
| MPG | | | | AML | AML | | |
| | comp=E,882μm,1.0s | | | | | | |
| MPG | | | | AML | AML | | |
| | comp=N,728μm,1.2s | | | | | | |
| VENT | **Ventotene** | **1.37** | **15** | P | **P** | **06 30 15.1** | **+1.6** |
| IACL | **Alicudi** | **1.43** | **130** | ⇑P | **P** | **06 30 14.2** | **+0.4** |
| IACL | | | | AML | AML | | |
| | comp=N,1335μm,1.1s | | | | | | |
| IACL | | | | AML | AML | | |
| | comp=N,1335μm,0.9s | | | | | | |
| IACL | | | | AML | AML | | |
| | comp=E,1500μm,0.4s | | | | | | |
| ERC | **Erice** | **1.46** | **192** | ⇑P | **P** | **06 30 14.8** | **+0.7** |
| ERC | | | | AML | AML | | |
| | comp=E,340μm,0.5s | | | | | | |
| ERC | | | | AML | AML | | |
| | comp=N,453μm,0.6s | | | | | | |
| ERC | | | | AML | AML | | |
| | comp=N,453μm,1.4s | | | | | | |
| ERC | | | | AML | AML | | |
| | comp=E,340μm,1.5s | | | | | | |
| MBFT | **Monte Bonifato** | **1.52** | **180** | ⇑P | **P** | **06 30 15.0** | **+0.7** |
| MBFT | | | | S | **S** | **06 31 05.6** | **+0.5** |
| MBFT | | | | AML | AML | | |
| | comp=E,331μm,1.3s | | | | | | |
| MBFT | | | | AML | AML | | |
| | comp=N,250μm,0.6s | | | | | | |
| MBFT | | | | AML | AML | | |
| | comp=N,294μm,1.6s | | | | | | |
| MBFT | | | | AML | AML | | |
| | comp=N,294μm,1.6s | | | | | | |
| MBFT | | | | AML | AML | | |
| | comp=N,294μm,0.4s | | | | | | |
| MTGR | **Montagna Grand** | **1.58** | **186** | P | **P** | **06 30 15.5** | **+0.9** |
| MTGR | | | | AML | AML | | |
| | comp=E,51450μm,0.5s | | | | | | |
| MTGR | | | | AML | AML | | |
| | comp=N,57750μm,1.6s | | | | | | |
| CORL | **Corleone** | **1.59** | **170** | ⇑P | **P** | **06 30 15.4** | **+0.8** |
| CORL | | | | S | **S** | **06 31 07.5** | **+1.9** |
| CORL | | | | AML | AML | | |
| | comp=E,2440μm,0.4s | | | | | | |
| CORL | | | | AML | AML | | |
| | comp=N,2875μm,0.8s | | | | | | |
| CRJA | **Costa Raja** | **1.66** | **179** | ⇑P | **P** | **06 30 16.0** | **+1.1** |
| CRJA | | | | S | **S** | **06 31 08.5** | **+2.3** |
| MFNL | **Monte Finestre** | **1.67** | **181** | ⇑P | **P** | **06 30 16.1** | **+1.1** |
| MFNL | | | | S | **S** | **06 31 08.6** | **+2.4** |
| MFNL | | | | AML | AML | | |
| | comp=N,498μm,0.4s | | | | | | |
| MFNL | | | | AML | AML | | |
| | comp=E,532μm,0.6s | | | | | | |
| MFNL | | | | AML | AML | | |
| | comp=N,498μm,0.4s | | | | | | |
| MFNL | | | | AML | AML | | |
| | comp=E,532μm,1.4s | | | | | | |
| PLLN | **Pollina** | **1.74** | **148** | ⇑P | **P** | **06 30 14.4** | **-0.8** |
| PLLN | | | | S | **S** | **06 31 05.6** | **-1.2** |
| PLLN | | | | AML | AML | | |
| | comp=E,832μm,0.5s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=E,1390μm,0.9s | | | | | | |
| PLLN | | | | AML | AML | | |
| | comp=N,1016μm,0.3s | | | | | | |
| MARS | **Marsala (TP) I** | **1.74** | **191** | ⇑P | **P** | **06 30 16.6** | **+1.4** |
| CSLB | **Castelbuono** | **1.75** | **150** | ⇑P | **P** | **06 30 14.3** | **-0.9** |
| CSLB | | | | S | **S** | **06 31 05.1** | **-1.7** |
| CSLB | | | | AML | AML | | |
| | comp=E,202μm,0.3s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=N,250μm,0.4s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=N,251μm,0.4s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=E,206μm,0.7s | | | | | | |
| CAVT | **Castelvetrano** | **1.79** | **185** | P | **P** | **06 30 16.6** | **+1.2** |
| MMGO | **Monte Magaggia** | **1.80** | **180** | ⇑P | **P** | **06 30 16.0** | **+0.5** |
| MMGO | | | | S | **S** | **06 31 08.1** | **+0.9** |
| MMGO | | | | AML | AML | | |
| | comp=E,387μm,0.6s | | | | | | |
| MMGO | | | | AML | AML | | |
| | comp=N,346μm,0.9s | | | | | | |
| MMGO | | | | AML | AML | | |
| | comp=N,346μm,0.9s | | | | | | |
| MMGO | | | | AML | AML | | |
| | comp=E,387μm,1.4s | | | | | | |
| MMGO | | | | AML | AML | | |
| | comp=N,346μm,1.1s | | | | | | |
| ALJA | **Alia** | **1.82** | **160** | ⇑P | **P** | **06 30 16.2** | **+0.6** |
| ALJA | | | | S | **S** | **06 31 09.3** | **+1.8** |
| ALJA | | | | AML | AML | | |
| | comp=N,4360μm,0.5s | | | | | | |
| ALJA | | | | AML | AML | | |
| | comp=E,2805μm,0.5s | | | | | | |
| LLI | **Lipari** | **1.85** | **123** | ⇑P | **P** | **06 30 16.1** | **+0.5** |
| LLI | | | | AML | AML | | |
| | comp=N,14650μm,1.0s | | | | | | |
| LLI | | | | AML | AML | | |
| | comp=E,10600μm,0.5s | | | | | | |
| PETRA | **Petralia Sopra** | **1.86** | **151** | ⇑P | **P** | **06 30 15.6** | **-0.3** |
| PETRA | | | | S | **S** | **06 31 07.7** | **-0.3** |
| PETRA | | | | AML | AML | | |
| | comp=N,1185μm,0.3s | | | | | | |
| PETRA | | | | AML | AML | | |
| | comp=E,1140μm,0.7s | | | | | | |
| IST3 | **Stromboli F** | **1.88** | **110** | ⇑P | **P** | **06 30 16.1** | **+0.4** |
| IST3 | | | | AML | AML | | |
| | comp=E,479μm,0.7s | | | | | | |
| IST3 | | | | AML | AML | | |
| | comp=N,706μm,0.3s | | | | | | |
| IST3 | | | | AML | AML | | |
| | comp=E,479μm,1.3s | | | | | | |
| CLTB | **Caltabellotta** | **1.90** | **174** | | **P** | **06 30 16.7** | **+0.8** |
| CLTB | **Caltabellotta** | **1.90** | **174** | ⇑P | **P** | **06 30 16.8** | **+0.8** |
| CLTB | | | | S | **S** | **06 31 09.4** | **+1.2** |
| CLTB | | | | AML | AML | | |
| | comp=N,15050μm,0.5s | | | | | | |
| CLTB | | | | AML | AML | | |
| | comp=E,5515μm,0.6s | | | | | | |
| VPL | **Vulcano Piano** | **1.91** | **124** | P | **P** | **06 30 15.5** | **-0.4** |
| VPL | | | | AML | AML | | |
| | comp=E,1695μm,1.2s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=N,2640μm,0.5s | | | | | | |
| VPL | | | | AML | AML | | |
| | comp=E,1695μm,0.8s | | | | | | |
| BULG | **Bulgheria - Ca** | **1.96** | **71** | ⇑P | **P** | **06 30 17.3** | **+1.2** |
| BULG | | | | AML | AML | | |
| | comp=E,614μm,1.0s | | | | | | |
| BULG | | | | AML | AML | | |
| | comp=E,623μm,1.0s | | | | | | |
| BULG | | | | AML | AML | | |
| | comp=N,805μm,0.6s | | | | | | |
| BULG | | | | AML | AML | | |
| | comp=N,776μm,0.6s | | | | | | |
| PIGN | **Pignataro Magg** | **1.96** | **28** | P | **P** | **06 30 17.5** | **+1.6** |
| PIGN | | | | S | **S** | **06 31 09.8** | **+1.2** |
| PIGN | | | | AML | AML | | |
| | comp=E,98μm,0.4s | | | | | | |
| PIGN | | | | AML | AML | | |
| | comp=N,83μm,1.0s | | | | | | |
| PIGN | | | | AML | AML | | |
| | comp=N,83μm,1.0s | | | | | | |
| PAOL | **Paolisi** | **1.99** | **38** | | **P** | **06 30 17.5** | **+1.3** |
| PAOL | **Paolisi** | **1.99** | **38** | ⇑P | **P** | **06 30 17.6** | **+1.4** |
| CMPR | **Campora** | **1.99** | **64** | ⇑P | **P** | **06 30 17.4** | **+1.3** |
| CMPR | | | | AML | AML | | |
| | comp=E,416μm,0.4s | | | | | | |
| CMPR | | | | AML | AML | | |
| | comp=N,664μm,0.4s | | | | | | |
| RESU | **Resuttano** | **2.01** | **154** | ⇑P | **P** | **06 30 17.2** | **+0.7** |
| RESU | | | | AML | AML | | |
| | comp=E,620μm,0.5s | | | | | | |
| RESU | | | | AML | AML | | |
| | comp=N,746μm,0.4s | | | | | | |
| LATB | **Latina** | **2.03** | **360** | P | **P** | **06 30 17.7** | **+1.5** |
| MNO | **Monte Soro** | **2.04** | **138** | P | **P** | **06 30 16.4** | **-0.4** |
| MNO | | | | AML | AML | | |
| | comp=E,514μm,1.2s | | | | | | |
| MNO | | | | AML | AML | | |
| | comp=N,956μm,0.6s | | | | | | |
| MNO | | | | AML | AML | | |
| | comp=E,514μm,0.8s | | | | | | |
| MUCR | **Ucria** | **2.06** | **133** | P | **P** | **06 30 16.1** | **-0.7** |
| MUCR | | | | AML | AML | | |
| | comp=E,554μm,0.3s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=N,858μm,0.4s | | | | | | |
| GIUL | **Giuliano Di Ro** | **2.10** | **6** | P | **P** | **06 30 18.2** | **+1.5** |
| MGR | **Morigerati** | **2.10** | **71** | ⇑P | **P** | **06 30 17.8** | **+1.1** |
| MGR | | | | AML | AML | | |
| | comp=E,1163μm,1.1s | | | | | | |
| MGR | | | | AML | AML | | |
| | comp=N,1195μm,1.1s | | | | | | |
| CMDO | **Montedoro** | **2.11** | **161** | ⇑P | **P** | **06 30 18.4** | **+1.4** |
| CMDO | | | | AML | AML | | |
| | comp=N,596μm,1.2s | | | | | | |
| CMDO | | | | AML | AML | | |
| | comp=N,596μm,1.2s | | | | | | |
| CMDO | | | | AML | AML | | |
| | comp=E,406μm,0.9s | | | | | | |
| MTMR | **Montemarano** | **2.13** | **46** | ⇑P | **P** | **06 30 18.6** | **+1.7** |
| MILZ | **Milazzo** | **2.13** | **123** | P | **P** | **06 30 15.6** | **-1.4** |
| MILZ | | | | AML | AML | | |
| | comp=E,992μm,0.5s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=N,801μm,0.5s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=E,992μm,0.5s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=E,992μm,1.5s | | | | | | |
| MILZ | | | | AML | AML | | |
| | comp=N,800μm,0.5s | | | | | | |
| VITU | **Vitulano (BN)** | **2.13** | **36** | ⇑P | **P** | **06 30 18.2** | **+1.3** |
| VITU | | | | AML | AML | | |
| | comp=E,728μm,1.1s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,818μm,1.5s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,470μm,1.6s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,608μm,0.3s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,818μm,0.5s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,728μm,0.9s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,470μm,0.4s | | | | | | |
| MCRV | **Calabrutti - M** | **2.14** | **51** | ⇑P | **P** | **06 30 18.5** | **+1.5** |
| GALF | **Gagliano Caste** | **2.15** | **144** | P | **P** | **06 30 17.0** | **-0.3** |
| GALF | | | | AML | AML | | |
| | comp=N,406μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,428μm,1.2s | | | | | | |
| EPZF | **Pizzo Felice** | **2.21** | **137** | P | **P** | **06 30 17.2** | **-0.4** |
| EPZF | | | | AML | AML | | |
| | comp=E,453μm,0.7s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,554μm,0.7s | | | | | | |
| NOV | **Novara** | **2.22** | **130** | P | **P** | **06 30 16.5** | **-1.1** |
| NOV | | | | AML | AML | | |
| | comp=E,1505μm,0.5s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,1265μm,0.3s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=E,2025μm,0.9s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,2450μm,0.9s | | | | | | |
| GRIS | **Grisolia** | **2.25** | **82** | ⇑P | **P** | **06 30 18.3** | **+0.7** |
| SLCN | **Sala Consilina** | **2.25** | **65** | ⇑P | **P** | **06 30 18.8** | **+1.2** |
| SLCN | | | | AML | AML | | |
| | comp=N,610μm,0.4s | | | | | | |
| SLCN | | | | AML | AML | | |
| | comp=N,698μm,0.4s | | | | | | |
| SLCN | | | | AML | AML | | |
| | comp=E,1120μm,0.5s | | | | | | |
| SLCN | | | | AML | AML | | |
| | comp=E,1235μm,0.5s | | | | | | |
| SNAL | **S. Angelo Dei** | **2.25** | **49** | ⇑P | **P** | **06 30 19.2** | **+1.6** |
| SNAL | | | | AML | AML | | |
| | comp=N,611μm,1.2s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,659μm,0.5s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,632μm,0.5s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=N,603μm,1.2s | | | | | | |
| FAVR | **Favara** | **2.26** | **166** | ⇑P | **P** | **06 30 19.1** | **+1.4** |
| FAVR | | | | AML | AML | | |
| | comp=E,1295μm,0.9s | | | | | | |
| FAVR | | | | AML | AML | | |
| | comp=E,674μm,0.9s | | | | | | |
| FAVR | | | | AML | AML | | |
| | comp=N,894μm,0.5s | | | | | | |
| FAVR | | | | AML | AML | | |
| | comp=E,674μm,1.1s | | | | | | |
| FAVR | | | | AML | AML | | |
| | comp=N,891μm,0.5s | | | | | | |
| FAVR | | | | AML | AML | | |
| | comp=E,1295μm,1.1s | | | | | | |
| CERA | **Filignano** | **2.27** | **20** | P | **P** | **06 30 20.4** | **+2.8** |
| CERA | | | | AML | AML | | |
| | comp=N,168μm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,188μm,0.4s | | | | | | |
| MPNC | **Port Mandanici** | **2.28** | **125** | P | **P** | **06 30 16.4** | **-1.5** |
| MPNC | | | | S | **S** | **06 31 12.0** | **+0.4** |
| MPNC | | | | AML | AML | | |
| | comp=N,1460μm,0.5s | | | | | | |
| MPNC | | | | AML | AML | | |
| | comp=N,1460μm,1.5s | | | | | | |
| MPNC | | | | AML | AML | | |
| | comp=E,918μm,0.4s | | | | | | |
| VAE | **Valguarnera** | **2.29** | **150** | P | **P** | **06 30 19.1** | **+1.1** |
| | comp=E,46nm,0.3s,baz=326,slow=9.2,SNR=28 | | | | | | |
| MTSN | **Montesano sull** | **2.29** | **69** | ⇑P | **P** | **06 30 18.6** | **+0.7** |
| MTSN | | | | AML | AML | | |
| | comp=E,486μm,0.6s | | | | | | |
| MTSN | | | | AML | AML | | |
| | comp=N,631μm,0.4s | | | | | | |
| CET2 | **Cetraro** | **2.31** | **88** | ⇑P | **P** | **06 30 18.3** | **+0.4** |
| CET2 | | | | S | **S** | **06 31 12.4** | **+0.4** |
| CET2 | | | | AML | AML | | |

comp=N,5680µm,0.7s
CET2 AML AML
comp=N,5680µm,1.3s
CET2 AML AML
comp=E,2995µm,0.7s
**AIO Antillo 2.32 129** ⇑P **P 06 30 17.1 -1.0**
AIO AML AML
comp=N,380µm,0.6s
AIO AML AML
comp=E,334µm,0.7s
**POFI Posta Fibreno 2.32 14** ⇑P **P 06 30 19.8 +1.9**
POFI AML AML
comp=E,111µm,0.5s
POFI AML AML
comp=N,79µm,1.2s
POFI AML AML
comp=N,79µm,0.8s
**MSRU Castanea 2.32 120** P **P 06 30 16.3 -1.7**
MSRU S **S 06 31 10.8 -1.2**
MSRU AML AML
comp=E,1275µm,0.4s
MSRU AML AML
comp=N,976µm,0.4s
MSRU AML AML
comp=E,1275µm,1.6s
**CAFE Carife 2.33 47** ⇑P **P 06 30 19.8 +1.7**
CAFE S **S 06 31 14.2 +1.9**
CAFE AML AML
comp=E,829µm,0.6s
CAFE AML AML
comp=N,506µm,0.5s
CAFE AML AML
comp=E,920µm,0.6s
CAFE AML AML
comp=N,514µm,0.5s
**MCEL Monticello 2.34 68** P **P 06 30 21.0 +2.9**
MCEL AML AML
comp=E,1315µm,0.5s
MCEL AML AML
comp=N,1190µm,0.5s
MCEL AML AML
comp=N,1150µm,0.5s
MCEL AML AML
comp=E,1345µm,0.5s
**MMN Mormanno 2.37 79** ⇑P **P 06 30 18.9 +0.7**
MMN AML AML
comp=E,496µm,1.3s
MMN AML AML
comp=E,496µm,0.7s
MMN AML AML
comp=N,542µm,0.4s
**ESML S. M. di Licod 2.38 140** P **P 06 30 17.7 -0.7**
ESML AML AML
comp=N,380µm,0.9s
ESML AML AML
comp=N,380µm,1.1s
ESML AML AML
comp=E,472µm,0.6s
**RCAV Rocca di Cave 2.38 360** P **P 06 30 20.0 +1.7**
**BSSO Busso 2.42 30** ⇑P **P 06 30 20.5 +2.0**
BSSO AML AML
comp=E,94µm,1.5s
BSSO AML AML
comp=N,95µm,0.8s
BSSO AML AML
comp=N,95µm,1.2s
BSSO AML AML
comp=E,94µm,0.5s
**JOPP Joppolo 2.43 110** ⇑P **P 06 30 17.7 -1.0**
JOPP S **S 06 31 11.2 -2.0**
JOPP AML AML
comp=N,1123µm,0.9s
JOPP AML AML
comp=E,958µm,0.5s
JOPP AML AML
comp=N,1122µm,0.9s
**CLTA Licata 2.43 161** ⇑P **P 06 30 19.1 +0.4**
CLTA AML AML
comp=E,601µm,0.2s
CLTA AML AML
comp=N,932µm,1.5s
CLTA AML AML
comp=E,601µm,1.8s
**SGTA Sant Agata di 2.48 47** P **P 06 30 21.1 +2.3**
SGTA AML AML
comp=N,675µm,0.7s
SGTA AML AML
comp=E,790µm,0.5s
SGTA AML AML
comp=N,675µm,1.3s
SGTA AML AML
comp=N,642µm,0.4s
SGTA AML AML
comp=E,762µm,0.5s
**CERT Cerreto 2.48 0** P **P 06 30 20.6 +1.7**
CERT AML AML
comp=E,82µm,0.4s
CERT AML AML
comp=N,54µm,0.5s
CERT AML AML
comp=N,54µm,1.5s
**CAR1 CAROLEI 2.52 94** ⇑P **P 06 30 18.7 -0.5**
CAR1 S **S 06 31 12.8 -1.4**
CAR1 AML AML
comp=N,5535µm,0.5s
CAR1 AML AML
comp=E,4020µm,0.8s
CAR1 AML AML
comp=N,5795µm,0.5s
CAR1 AML AML
comp=E,4860µm,0.6s
**MOCO Biccari - m.te 2.53 41** P **P 06 30 20.8 +1.6**
MOCO AML AML
comp=E,358µm,0.6s
MOCO AML AML
comp=E,370µm,0.6s
MOCO AML AML
comp=N,219µm,0.6s
MOCO AML AML
comp=E,370µm,1.4s
MOCO AML AML
comp=N,200µm,0.6s
MOCO AML AML
comp=E,358µm,1.4s
**MTCE Montecelio 2.56 356** P **P 06 30 21.5 +2.3**
**CEL Celeste 2.58 117** P **P 06 30 17.8 -1.8**
**CEL Celeste 2.58 117** P **P 06 30 18.2 -1.4**
**GMB Gambarie 2.58 119** AML AML
comp=E,4445µm,0.9s
GMB AML AML
comp=N,2865µm,1.5s
**MTTG Motta San Giov 2.58 124** ⇑P **P 06 30 18.3 -1.3**
MTTG S **S 06 31 13.8 -1.1**
MTTG AML AML
comp=N,752µm,0.6s
MTTG AML AML
comp=N,752µm,1.4s
MTTG AML AML
comp=E,896µm,0.7s
**HLNI Lentini 2.59 144** ⇑P **P 06 30 18.5 -1.1**
HLNI AML AML
comp=N,378µm,0.2s
HLNI AML AML
comp=E,334µm,0.2s
**SPS2 Spezzano della 2.62 93** P **P 06 30 19.5 -0.3**
SPS2 S **S 06 31 14.3 -1.0**
SPS2 AML AML
comp=N,1200µm,0.8s
SPS2 AML AML
comp=E,1110µm,0.5s
**ACER Acerenza 2.63 59** P **P 06 30 20.4 +0.6**
ACER AML AML
comp=N,278µm,0.5s
ACER AML AML
comp=E,759µm,0.8s
ACER AML AML
comp=N,300µm,0.6s
ACER AML AML
comp=N,300µm,1.4s
ACER AML AML
comp=N,278µm,1.5s
ACER AML AML
comp=E,776µm,0.8s
**CIGN Sant'Elia a Pi 2.64 33** P **P 06 30 21.0 +1.2**
CIGN AML AML
comp=E,125µm,0.8s
CIGN AML AML
comp=N,120µm,1.4s
**SALB San Lorenzo Be 2.64 80** ⇑P **P 06 30 20.6 +0.6**
SALB S **S 06 31 16.2 +0.5**
SALB AML AML
comp=E,1307µm,1.5s
SALB AML AML
comp=E,1307µm,0.5s
SALB AML AML
comp=N,854µm,0.9s
**INTR Introdacqua 2.64 15** P **P 06 30 21.2 +1.4**
**INTR Introdacqua 2.64 15** ⇓P **P 06 30 21.7 +1.9**
INTR AML AML
comp=E,690µm,1.6s
INTR AML AML
comp=E,113µm,1.2s
INTR AML AML
comp=E,690µm,0.4s
INTR AML AML
comp=N,464µm,0.8s
INTR AML AML
comp=N,193µm,0.5s
**TOLF Tolfa 2.70 345** P **P 06 30 22.2 +2.1**
**PALZ Palazzo San Ge 2.73 56** ⇑P **P 06 30 21.1 +0.8**
PALZ AML AML
comp=E,1430µm,1.1s
PALZ AML AML
comp=N,778µm,1.2s
PALZ AML AML
comp=N,778µm,0.8s
PALZ AML AML
comp=E,1430µm,0.9s
**LPEL Lama dei Pelig 2.74 19** P **P 06 30 22.6 +2.2**
LPEL AML AML
comp=E,150µm,1.3s
LPEL AML AML
comp=N,149µm,0.9s
**ORI Oriolo Calabro 2.75 76** P **P 06 30 21.6 +1.1**
**CAPA Cerignola FG 2.76 51** ⇓P **P 06 30 21.9 +1.4**
CAPA AML AML
comp=E,818µm,1.5s
CAPA AML AML
comp=N,1345µm,1.3s
**GRI Girifalco 2.76 102** P **P 06 30 20.3 -0.3**
GRI S **S 06 31 14.6 -2.3**
GRI AML AML
comp=N,2360µm,1.6s
GRI AML AML
comp=N,2360µm,0.4s
GRI AML AML
comp=E,2015µm,0.7s
**HAGA Augusta 2.77 141** ⇑P **P 06 30 19.6 -1.2**
HAGA AML AML
comp=N,230µm,0.5s
HAGA AML AML
comp=N,236µm,1.1s
HAGA AML AML
comp=E,270µm,0.5s
**VSL Villasalto 2.78 272** **P 06 30 22.2 +1.5**
**VSL Villasalto 2.78 272** ⇓P **P 06 30 22.2 +1.5**
**SOI Samo 2.79 119** ⇑P **P 06 30 19.2 -1.7**
SOI S **S 06 31 14.5 -2.7**
SOI AML AML
comp=E,920µm,0.6s
SOI AML AML
comp=N,711µm,0.6s
**T0110 Collepietro 2.83 12** P **P 06 30 22.7 +1.8**
T0110 AML AML
comp=N,196µm,1.1s
T0110 AML AML
comp=E,222µm,1.3s
T0110 AML AML
comp=N,196µm,0.9s
**FAGN Fagnano 2.84 9** P **P 06 30 23.1 +2.0**
FAGN AML AML
comp=N,390µm,0.3s
FAGN AML AML
comp=E,328µm,0.4s
**HMDC Modica 2.88 150** ⇑P **P 06 30 21.3 -0.2**
HMDC AML AML
comp=E,433µm,1.0s
HMDC AML AML
comp=N,412µm,0.5s
HMDC AML AML
comp=E,433µm,1.0s
**PLAC Placanica 2.89 109** ⇑P **P 06 30 20.2 -1.3**
PLAC S **S 06 31 15.0 -3.4**
PLAC AML AML
comp=E,1600µm,1.0s
PLAC AML AML
comp=N,1435µm,0.5s
PLAC AML AML
comp=E,1485µm,0.5s
PLAC AML AML
comp=N,1625µm,1.0s
PLAC AML AML
comp=N,1625µm,1.0s
PLAC AML AML
comp=E,1600µm,1.0s
**SERS Sersale 2.92 97** ⇑P **P 06 30 21.3 -0.5**
SERS S **S 06 31 16.5 -2.5**
SERS AML AML
comp=N,2050µm,0.6s
SERS AML AML
comp=E,2115µm,0.6s
SERS AML AML
comp=N,3765µm,0.9s
SERS AML AML
comp=E,3685µm,0.9s
**TIP Timpagrande 2.95 94** **P 06 30 21.9 -0.1**
**TIP Timpagrande 2.95 94** ⇑P **P 06 30 21.6 -0.3**
TIP S **S 06 31 16.6 -2.7**
TIP AML AML
comp=E,2240µm,0.9s
TIP AML AML
comp=E,2765µm,0.9s
TIP AML AML
comp=E,2765µm,1.1s
TIP AML AML
comp=E,2240µm,1.1s
TIP AML AML
comp=N,2320µm,0.6s
TIP AML AML
comp=N,1890µm,0.6s
**TIP Timpagrande 2.95 94** P **P 06 30 21.8 -0.2**
**PIPA Pietrapaola 2.98 88** P **P 06 30 22.5 +0.4**
PIPA AML AML
comp=E,1480µm,0.7s
PIPA AML AML
comp=E,1480µm,0.7s
PIPA AML AML
comp=N,1675µm,1.5s
PIPA AML AML
comp=E,1480µm,1.3s
PIPA AML AML
comp=E,1480µm,1.3s
PIPA AML AML
comp=N,1630µm,1.0s
**VCEL Villa Celiera 3.00 12** P **P 06 30 25.0 +2.8**
VCEL AML AML
comp=E,232µm,0.4s
VCEL AML AML
comp=N,206µm,0.3s
**APRC Apricena 3.01 40** P **P 06 30 22.3 +0.1**
APRC AML AML
comp=E,212µm,0.9s
APRC AML AML
comp=N,320µm,0.7s
APRC AML AML
comp=N,320µm,1.3s
APRC AML AML
comp=E,212µm,1.1s
**GIGS Gran Sasso 3.02 8** P **P 06 30 24.4 +2.2**
GIGS AML AML
comp=E,58µm,0.5s
GIGS AML AML
comp=N,54µm,0.4s
**CAMP Campotosto 3.08 6** P **P 06 30 25.1 +2.3**
**MATE Matera 3.10 66** P **P 06 30 23.6 +0.8**
MATE S **S 06 31 19.1 -1.8**
MATE AML AML
comp=E,565µm,1.6s
MATE AML AML
comp=N,588µm,0.5s
MATE AML AML
comp=E,565µm,0.4s
**MATE Matera 3.10 66** *i* P **P 06 30 23.0 +0.3**
**SGRT San Giovanni R 3.11 42** P **P 06 30 23.4 +0.4**
**SGRT San Giovanni R 3.11 42** P **P 06 30 23.3 +0.4**
SGRT S **S 06 31 20.6 -0.7**
SGRT AML AML
comp=E,349µm,1.0s
SGRT AML AML
comp=N,406µm,1.6s
SGRT AML AML
comp=N,406µm,0.4s
**LADO San Nicola del 3.12 92** P **P 06 30 22.6 -0.4**
LADO AML AML
comp=E,171µm,0.7s
LADO AML AML
comp=N,120µm,1.0s
**AMUR Altamura 3.14 62** ⇓P **P 06 30 23.6 +0.6**
AMUR S **S 06 31 20.1 -1.3**
AMUR AML AML
comp=E,432µm,1.4s
AMUR AML AML
comp=N,288µm,0.7s
AMUR AML AML
comp=N,288µm,1.3s
AMUR AML AML
comp=E,432µm,0.6s
**CESX Cesi 3.15 355** **P 06 30 24.9 +1.8**
**LTRZ Laterza 3.17 68** P **P 06 30 23.4 +0.1**
LTRZ S **S 06 31 19.6 -2.2**
LTRZ AML AML
comp=E,571µm,0.6s
LTRZ AML AML
comp=N,224µm,1.6s
LTRZ AML AML
comp=E,571µm,1.4s
**MSAG Monte S. Angel 3.17 44** ⇓P **P 06 30 23.9 +0.5**
MSAG S **S 06 31 22.1 +0.1**
MSAG AML AML
comp=E,1322µm,0.7s
MSAG AML AML
comp=N,1355µm,0.7s
MSAG AML AML
comp=E,536µm,0.7s
MSAG AML AML
comp=E,536µm,1.3s
MSAG AML AML
comp=N,579µm,0.7s
MSAG AML AML
comp=E,1322µm,1.3s
**SMA1 SAN MARTINO 3.17 5** P **P 06 30 26.5 +3.1**
SMA1 AML AML
comp=E,198µm,0.3s
SMA1 AML AML
comp=N,138µm,0.3s
SMA1 AML AML
comp=E,198µm,1.7s
**TERO Teramo 3.19 8** P **P 06 30 25.5 +2.0**
**HPAC Pachino 3.24 148** ⇑P **P 06 30 23.8 -0.1**
HPAC AML AML
comp=N,566µm,0.4s
HPAC AML AML
comp=E,452µm,0.4s
**MTRA Matera 3.30 5** P **P 06 30 26.5 +2.3**
**AGLI Aglientu 3.34 301** ⇓P **P 06 30 25.8 +1.3**
**NRCA Norcia 3.37 2** P **P 06 30 26.2 +1.5**
**NRCA Norcia 3.37 2** P **P 06 30 26.4 +1.7**
NRCA AML AML
comp=E,453µm,0.9s
NRCA AML AML
comp=N,356µm,0.4s
NRCA AML AML
comp=N,356µm,1.6s
NRCA AML AML
comp=E,453µm,1.1s
**NOCI Noci 3.41 66** ⇓P **P 06 30 25.4 +0.4**
NOCI S **S 06 31 22.8 -2.1**
NOCI AML AML
comp=E,673µm,1.6s
NOCI AML AML
comp=N,434µm,0.6s
NOCI AML AML
comp=E,673µm,0.4s
**SACS San Casciano d 3.47 347** P **P 06 30 27.2 +1.7**
**TAR1 Taranto 3.48 71** ⇓P **P 06 30 25.6 +0.1**
TAR1 S **S 06 31 23.0 -2.9**
TAR1 AML AML
comp=N,858µm,0.7s
TAR1 AML AML
comp=E,1055µm,0.5s
**SU26 Carbonia-Igles 3.49 266** ⇓P **P 06 30 26.4 +0.8**
**ARCI Arcidosso 3.56 342** P **P 06 30 29.2 +3.0**
**FDMO Fiordimonte 3.57 1** P **P 06 30 27.5 +1.3**
**GUMA Gualdo di Mace 3.60 4** P **P 06 30 28.0 +1.6**
**CASP Castiglione de 3.68 335** P **P 06 30 28.3 +1.3**
**CASP Castiglione de 3.68 335** P **P 06 30 28.3 +1.3**
**WDD Wied Dalam 3.83 161** **P 06 30 28.3 -0.1**
**TRIF Trifonti 3.96 338** ⇑P **P 06 30 30.9 +1.6**
**FROS Frosini 3.98 341** P **P 06 30 30.8 +1.5**
**A318A Donoratico (LI 4.07 334** P **P 06 30 31.5 +1.4**
**MAGO Bibbona 4.18 336** P **P 06 30 32.4 +1.4**
**BLIT Baltah 4.19 230** *i* P **P 06 30 32.6 +1.3**
**SCTE Santa Cesarea 4.28 80** **P 06 30 32.1 +0.2**
**PGF Pioggiola 4.30 317** *e*P **P 06 30 33.0 +0.8**
PGF *e*S S 06 31 47.9 +10
comp=E,35nm,1.2s
**KRIT Krib 4.38 226** *i* P **P 06 30 34.3 +1.3**
**MORSI Morsiglia 4.42 323** P **P 06 30 34.7 +1.7**
**CBOGS Bougous 4.53 234** P **P 06 30 35.0 +0.9**
**KEST Kesra 4.71 219** P **P 06 30 36.9 +1.0**
comp=E,56nm,0.5s,baz=342,slow=2.8,SNR=163
KEST S **S 06 31 44.9 +0.3**
comp=E,39nm,0.8s,baz=330,slow=4.4,SNR=14
**GHAT Ghardimaou 4.73 233** *i* P **P 06 30 37.2 +1.2**
**TROT Trozza 4.73 216** *i* P **P 06 30 36.9 +0.8**
**VLC Villacollemand 5.07 338** P **P 06 30 39.3 +0.5**
**ZCCA Zocca 5.10 344** P **P 06 30 40.8 +1.7**
**VLO Vlora 5.12 77** P **P 06 30 41.3 +2.0**
**VLO Vlora 5.12 77** P **P 06 30 41.3 +2.0**
**CMAH Djebel Manchou 5.22 239** P **P 06 30 41.3 +0.9**
**KEK Kerkira 5.28 85** P **P 06 30 41.3 +0.5**
**KEK Kerkira 5.28 85** P **P 06 30 41.0 +0.1**
**SRN Sarande 5.44 83** P **P 06 30 42.7 +0.4**
**MSSA Maissana 5.49 333** P **P 06 30 43.3 +0.6**
**CAEH 'Ain El Ouahch 5.52 243** P **P 06 30 44.0 +0.9**
**CBST Bordj Sabath 5.55 238** P **P 06 30 44.8 +1.2**
**TIR Tirane 5.59 68** P **P 06 30 44.9 +1.2**
**TIR Tirane 5.59 68** P **P 06 30 44.5 +0.8**
**TIR Tirane 5.59 68** P **P 06 30 44.9 +1.2**
**TIR Tirane 5.59 68** P **P 06 30 44.8 +1.1**
comp=E,339nm,0.8s,comp=E,1.2nm
**PDG Podgorica 5.61 56** **P 06 30 45.1 +1.3**
**CRHA Rehia 5.61 230** P **P 06 30 45.8 +1.7**
**PRMA PARMA 5.65 340** P **P 06 30 45.4 +1.3**
**IGT Igoumenitsa 5.70 87** P **P 06 30 45.4 +0.7**
**GORR Gorreto 5.82 333** P **P 06 30 46.1 +0.3**
**PUK Puka 5.86 62** P **P 06 30 47.4 +1.1**
**CBOS Bilal Ibnou Ra 5.88 245** P **P 06 30 49.0 +2.4**
**DMLN Damoulianata-K 5.91 100** P **P 06 30 47.1 +0.3**
**CSGS Sigus 5.97 238** P **P 06 30 48.6 +1.1**
**TEOL Teolo 5.97 351** P **P 06 30 46.5 -0.7**
**FSK Fiskardo 6.00 97** P **P 06 30 48.2 +0.5**
**TSLK Tsoukalades, L 6.01 94** P **P 06 30 49.4 +1.6**
**LKD2 Lefkada island 6.02 94** P **P 06 30 48.5 +0.6**
**CBHR Beni Haroun da 6.03 243** P **P 06 30 47.0 -1.0**
**SBF Sospel 6.04 318** *e*P **P 06 30 48.7 +0.7**
**CASM Ain Smara 6.04 240** P P 06 30 58.2 +10
**EVGI Lefkada island 6.04 96** P **P 06 30 48.9 +0.8**
**PCP Piancastagn 6.05 328** P **P 06 30 48.5 +0.4**
**NYDR Nydri-Lefkada 6.06 95** P **P 06 30 48.7 +0.5**
**SAOF Saorge 6.06 320** P **P 06 30 49.6 +1.4**
**PSDA Pessada-Kefalo 6.10 100** P **P 06 30 49.1 +0.5**
**KBN Korca 6.11 77** P **P 06 30 50.4 +1.6**
**KBN Korca 6.11 77** P **P 06 30 50.6 +1.8**
**KBN Korca 6.11 77** P **P 06 30 50.4 +1.6**
**GBOS Grotte di Boss 6.12 323** P **P 06 30 51.0 +2.3**
**TURF col de Turini 6.14 319** P **P 06 30 50.1 +1.0**
**COAT Oued Athmania 6.19 241** P **P 06 30 50.9 +1.2**
**LMR La Mourre 6.21 311** *e*P **P 06 30 50.3 +0.8**
**CTEI Djebel Teioual 6.21 239** P **P 06 30 51.0 +1.1**
**CALF Calern 6.23 315** P **P 06 30 51.5 +1.5**
**BOJS Bojanci 6.27 15** *i* P **P 06 30 50.8 +0.7**
**NEST Nestorio 6.28 79** P **P 06 30 52.6 +2.1**
**SGNT Sidi Gnaou 6.31 204** *i* P **P 06 30 52.3 +1.6**
**DFRA Djebel Bou Aff 6.31 245** P **P 06 30 52.0 +1.1**
**PENT Pentalofos 6.33 81** P **P 06 30 52.9 +1.9**

TRIGF **Trigance** 6.51 313 P P 06 30 54.0 +1.3
SABO **M.te Sabotino** 6.53 4 P P 06 30 53.1 +0.4
ENAUX **Enaux** 6.55 317 P P 06 30 54.8 +1.7
FNA **Florina** 6.58 76 P P 06 30 54.4 +1.1
FNA **Florina** 6.58 76 P P 06 30 54.5 +1.1
FNA **Florina** 6.58 76 P P 06 30 54.4 +1.1
CTI **Castel Tesino** 6.65 352 P P 06 30 53.5 -0.5
CTI **Castel Tesino** 6.65 352 P P 06 30 53.5 -0.5
PZZ **Stroppo** 6.66 321 P P 06 30 54.7 +0.5
LJU **Ljubljana** 6.67 9 *i* P P 06 30 54.5 +0.4
LJU *eS* S 06 32 16.8 -1.5
PVO **Paravola** 6.72 95 P P 06 30 56.4 +1.7
ARTF **Artigues** 6.77 310 P P 06 30 56.9 +1.7
JAUF **Jausiers** 6.79 319 P P 06 30 57.7 +2.2
JAUF S S 06 32 24.3 +3.6
STAL **STALIGIAL** 6.79 358 P P 06 30 54.8 -0.5
CKHR **Kef el Ahmar** 6.84 242 P P 06 30 55.2 -0.9
BHB **Bricherasio** 6.84 324 P P 06 30 55.4 -0.4
EVR **Evrytania** 6.89 92 P P 06 30 59.8 +3.2
AGRP **Agrapidokambos** 6.91 96 P P 06 30 58.1 +1.5
CREF **Crivoux** 6.94 319 P P 06 30 58.8 +1.8
UPR **University Cam** 6.98 97 P P 06 31 00.2 +2.8
PRED **Cave del Predi** 6.99 3 P P 06 30 57.9 +0.6
MBDF **Montbardon** 6.99 321 *e*P P 06 30 58.9 +1.4
MBDF *eS* S 06 32 25.6 +1.2
comp=E,36nm,0.9s
ANX **Ano Chora** 7.03 94 P P 06 31 00.1 +2.2
EFP **Efpalio** 7.04 96 P P 06 30 59.8 +1.8
ROD3 **Rodini, Patras** 7.06 97 P P 06 31 00.1 +1.9
RSP **Reno Superiore** 7.08 325 P P 06 30 57.4 +0.9
MG00 **Magoula, Dorid** 7.08 96 P P 06 31 00.5 +2.2
ZIRI **Ziria, Aigiali** 7.10 97 P P 06 31 00.5 +1.9
RRL **Rocca Remolon** 7.12 322 P P 06 31 00.2 +1.3
MAKR **Makrakomi, Fth** 7.13 91 P P 06 31 00.9 +2.0
SMRF **Simiane la Rot** 7.13 312 *e*P P 06 31 00.2 +1.4
SMRF *eS* S 06 32 29.1 +2.3
comp=E,22nm,0.9s
OBKA **Obir** 7.13 9 *e*Pn P 06 30 59.4 +0.6
comp=E,7.8nm,0.2s,SNR=8.6
OBKA *eSn* S 06 32 25.8 -1.1
comp=E,39nm,0.8s
TATN **Tatauine** 7.15 197 P P 06 30 56.8 -2.5
TYRN **Tyrnavos** 7.16 85 P P 06 31 00.2 +1.0
RUSF **Rustrel** 7.16 311 P P 06 31 00.4 +1.2
TRAV **Traversella** 7.17 329 P P 06 30 58.5 -0.7
CKTS **El Kantara** 7.17 236 P P 06 31 00.8 +1.3
MYKA **Terra Mystica** 7.18 4 *e*Pn P 06 31 00.0 +0.8
comp=E,35nm,0.6s,SNR=20
MYKA *eSn* S 06 32 28.4 +0.7
comp=E,15nm,0.8s
AGEO **AgiosGiorgios,** 7.20 97 P P 06 31 01.5 +1.9
AIOA **Agios Ioannis,** 7.21 97 P P 06 31 01.3 +1.6
ALIK **Aliki, Aigiali** 7.24 97 P P 06 31 01.9 +2.0
ALIK **Aliki, Aigiali** 7.24 97 P P 06 31 02.1 +2.2
TEME **Temeni, Aigial** 7.25 97 P P 06 31 02.3 +2.2
BNI **Bardonecchia** 7.27 322 P P 06 31 01.7 +1.4
BNI **Bardonecchia** 7.27 322 P P 06 31 01.7 +1.4
ABTA **Abfaltersbach** 7.29 358 *e*Pn P 06 31 00.8 +0.4
comp=E,11nm,0.4s,SNR=17
ABTA *eSn* S 06 32 28.7 -1.0
comp=E,23nm,0.8s
KLV **Kalavryta, Ach** 7.32 98 P P 06 31 02.6 +1.7
PANR **Panormos, Dori** 7.32 96 P P 06 31 02.3 +1.5
SOKA **Soboth** 7.37 11 *e*Pn P 06 31 01.0 -0.2
comp=E,14nm,1.0s,SNR=5.9
SOKA *eSn* S 06 32 29.6 -1.6
comp=E,3.5nm,0.4s
LSD **Lago del Serru** 7.38 326 P P 06 31 02.3 +0.7
KOGS **Kog** 7.38 18 *i* P P 06 31 02.4 +1.2
KOGS *i* S S 06 32 30.4 -0.9
OGMO **Fort Saint-Gob** 7.39 323 P P 06 31 03.7 +2.2
GUR **Goura** 7.49 99 P P 06 31 03.9 +1.2
AXAR **Agios Charalam** 7.57 92 P P 06 31 04.8 +1.4
ORIF **Oris-en-Rattie** 7.57 318 *e*P P 06 31 04.0 +0.6
ORIF *eS* S 06 32 36.6 +1.5
comp=E,76nm,1.4s
ORIF **Oris-en-Rattie** 7.57 318 P P 06 31 04.3 +0.9
LPG **La Plagne** 7.58 325 *e*P P 06 31 04.1 +0.5
LPG *eS* S 06 32 36.3 +0.7
comp=E,76nm,1.1s
LPL **La Plagne** 7.60 325 *e*P P 06 31 04.0 +0.2
LPL *eS* S 06 32 35.2 -0.7
comp=E,21nm,0.6s
KBA **Koelnbreinsper** 7.61 2 *e*Pn P 06 31 04.3 +0.5
comp=E,7.1nm,0.4s,SNR=19
KBA *eSn* S 06 32 35.6 -0.5
comp=E,19nm,0.8s
DAVOX **Davos/Dischmat** 7.65 344 P P 06 31 04.3 +0.1
comp=E,13nm,0.3s,baz=152,slow=10,SNR=45
DAVOX S S 06 32 34.9 -1.8
comp=E,11nm,0.7s,baz=158,slow=13,SNR=4.2
REMY **Saint-Rhmy-en** 7.67 328 P P 06 31 04.8 +0.3
FETA **Feichten** 7.73 349 *e*Pn P 06 31 05.0 +0.1
comp=E,5.2nm,0.4s,SNR=7.8
EMBD **Embd, Matterta** 7.73 332 P P 06 31 05.4 +0.5
THE **Thessaloniki** 7.76 78 P P 06 31 05.6 +0.4
ATAF **Djebel Tarf** 7.77 245 P P 06 31 06.4 +0.8
DIX **Grande Dixence** 7.77 330 P P 06 31 05.6 0.0
KNT **Kendrikon** 7.78 74 P P 06 31 06.4 +1.0
RSL **Roselend** 7.78 325 P P 06 31 05.9 +0.4
ETOS **Mallorca** 7.84 275 P P 06 31 07.0 +0.8
WTTA **Wattenberg** 7.85 353 *i* Pn P 06 31 06.8 +0.5
comp=E,29nm,0.6s,SNR=32
WTTA Sn S 06 32 40.8 +0.2
comp=E,7.8nm,0.6s
SQTA **Sankt Quirin** 7.86 351 *e*Pn P 06 31 06.3 +0.1
comp=E,7.3nm,0.4s,SNR=14
HORT **Hortiatis** 7.86 79 P P 06 31 06.8 +0.4
MORH **Mrgy, Hungar** 7.93 30 P P 06 31 08.0 +1.1
comp=E,160nm,0.9s,comp=E,1µm
WATA **Walderalm** 7.93 353 *e*Pn P 06 31 06.8 -0.2
comp=E,12nm,0.6s,SNR=12
CDCN **Doucen** 7.94 235 P P 06 31 06.5 -0.8
CDCN P P 06 31 16.3 +9.0
LESA **Schwarzleotal** 7.96 359 *i* Pn P 06 31 08.3 +1.0
comp=E,49nm,0.5s
LESA *eSn* S 06 32 42.3 0.0
comp=E,15nm,0.7s
AKET **Djebel Ketaf** 7.96 247 P P 06 31 08.0 +0.3
MOTA **Moosalm** 7.99 351 *e*Pn P 06 31 07.3 -0.5
comp=E,19nm,0.7s
ARSA **Arzberg** 8.00 13 *i* Pn P 06 31 09.4 +1.7
comp=E,6.8nm,0.4s,SNR=20
ARSA *eSn* S 06 32 43.1 0.0
comp=E,6.3nm,1.0s
OGSI **Sixt** 8.02 327 P P 06 31 07.5 -0.4
AKED **El Kharrouba** 8.04 253 P P 06 31 08.3 0.0
SENIN **Lac Senin/Sane** 8.05 331 P P 06 31 07.7 -0.7
SOH **Sokhos** 8.07 77 P P 06 31 09.2 +0.6
KKB **Krupnik** 8.08 70 ⇓*i*P P 06 31 10.1 +1.5
DAVA **Damuels** 8.13 345 *e*Pn P 06 31 08.2 -1.0
comp=E,6.6nm,0.3s,SNR=27
OGSM **Saint Maurice** 8.15 321 P P 06 31 09.1 -0.2
RETA **Reutte** 8.18 349 *e*Pn P 06 31 08.9 -0.7
comp=E,14nm,0.5s,SNR=15
VIVF **Saint-Julien-l** 8.18 314 *e*P P 06 31 09.9 +0.3
EJON **La Jonquera** 8.19 295 P P 06 31 08.1 -1.6
ADJB **Djebel Djouab** 8.23 249 P P 06 31 10.4 0.0
BIOA **Bad Ischl, Aus** 8.24 3 *i* Pn P 06 31 11.0 +0.9
comp=E,16nm,0.3s,SNR=30
PAIG **Paliouri** 8.27 83 P P 06 31 10.8 +0.2
AFRS **Ain Fares** 8.29 238 P P 06 31 10.3 -0.7
SRS **Serrai** 8.29 75 P P 06 31 11.2 +0.4
VLI **Veliai** 8.33 106 P P 06 31 12.5 +1.3
VTS **Vitosha** 8.37 65 ⇓*i*P P 06 31 12.8 +1.0
MPLH **Magyarpolny** 8.39 22 P P 06 31 13.2 +1.5
comp=E,73nm,1.3s
MDVR **Moldovita** 8.39 48 ⇓P P 06 31 13.2 +1.4
MOA **Molln** 8.43 6 *e*Pn P 06 31 12.8 +0.7
comp=E,23nm,0.3s,SNR=35
MOA *eSn* S 06 32 50.5 -0.8
comp=E,6.3nm,0.7s
MMB **Musomishta** 8.47 72 ⇓*i*P P 06 31 14.1 +1.4
OUR **Ouranopolis** 8.51 81 P P 06 31 13.8 +0.7
ZUR **Degenried** 8.52 339 P P 06 31 12.4 -0.6
SSB **Saint Sauveur** 8.52 316 P P 06 31 13.5 +0.4
SSB **Saint Sauveur** 8.52 316 P P 06 31 13.8 +0.7
SSB **Saint Sauveur** 8.52 316 P P 06 31 13.5 +0.4
TORNY **Torny/Romont** 8.52 331 P P 06 31 11.6 -1.5
NVR **Nevrokopi** 8.52 74 P P 06 31 15.3 +2.1
ACHR **Chrea** 8.53 252 P P 06 31 13.2 -0.4
OG35 **Corcelles** 8.53 323 P P 06 31 11.6 -1.6
ATH **Athens Observa** 8.54 97 P P 06 31 14.0 +0.6

KOKK **Kokkinochori,** 8.56 77 P P 06 31 14.0 +0.4
RONA **Rosalia, Austr** 8.58 15 *i* Pn P 06 31 15.3 +1.6
comp=E,3.2nm,0.4s,SNR=9.7
ATHU **Athens Univers** 8.59 97 P P 06 31 14.3 +0.3
GIMEL **St. Georges /** 8.60 327 P P 06 31 12.7 -1.3
DION **Dionisos Attik** 8.68 96 P P 06 31 16.4 +1.5
KYMI **Kymi, Euboea I** 8.70 92 P P 06 31 15.7 +0.6
ABRIN **Birine** 8.71 247 P P 06 31 15.5 +0.2
CONA **Conrad Observa** 8.71 13 *e*Pn P 06 31 16.7 +1.5
comp=E,3.9nm,0.5s,SNR=9.3
CONA *eSn* S 06 32 59.5 +2.7
comp=E,5.4nm,0.7s
CABF **La Chapelle** 8.74 327 *e*P P 06 31 14.6 -0.8
CABF *eS* S 06 32 52.5 -4.8
comp=E,28nm,0.7s
SULZ **Cheisacher** 8.79 338 P P 06 31 15.0 -1.0
SULZ **Cheisacher** 8.79 338 S S 06 32 54.7 -3.6
DJES **Djerdap** 8.80 51 ⇓P P 06 31 17.9 +1.9
BRANT **Les Verrieres** 8.84 330 P P 06 31 15.0 -1.6
BRANT **Les Verrieres** 8.84 330 S S 06 32 54.9 -4.5
HERR **Herculane** 8.86 49 ⇓P P 06 31 18.0 +1.4
BZS **Buzias** 8.86 43 ⇓P P 06 31 18.2 +1.6
SLE **Schleitheim** 8.90 340 P P 06 31 15.9 -1.2
ABKD **Sidi Amar** 8.91 254 P P 06 31 17.0 -0.3
RIVEL **MONT RIVEL** 8.92 327 P P 06 31 16.4 -1.0
BOURR **Bourrignon** 8.95 334 P P 06 31 16.4 -1.3
MTLF **Montolieu** 8.96 299 *e*P P 06 31 17.9 +0.2
MTLF **Montolieu** 8.96 299 P P 06 31 18.2 +0.5
KAVA **Kavala** 8.96 76 P P 06 31 18.5 +0.7
MPEP **Malo Peshtene** 8.98 61 ⇓*i*P P 06 31 19.3 +1.4
EIBI **Ibiza** 9.03 271 P P 06 31 19.3 +0.7
CHMF **Charmoille** 9.03 331 P P 06 31 17.0 -1.5
CHMF S S 06 32 59.1 -3.8
GUT **Gutenstein** 9.04 343 P P 06 31 17.5 -1.0
ENDD **Endenburg** 9.07 337 P P 06 31 18.2 -0.6
THAS **Thassos island** 9.09 79 P P 06 31 19.5 +0.4
COLF **Collangettes** 9.13 314 P P 06 31 20.3 +0.7
FELD **Feldberg im Sc** 9.14 338 P P 06 31 18.7 -1.0
BOUC **Bouclans** 9.18 330 P P 06 31 19.1 -0.9
SRE **Strehaia** 9.21 52 ⇓P P 06 31 22.0 +1.6
LBL **Lubilhac** 9.21 312 P P 06 31 21.4 +0.9
SURR **Surduc** 9.22 44 ⇓P P 06 31 21.8 +1.4
RZN **Rozhen** 9.23 72 ⇓*i*P P 06 31 21.7 +0.9
KIZ **Kirchzarten** 9.24 338 P P 06 31 19.4 -1.2
SIRR **Siria** 9.32 40 ⇓P P 06 31 22.9 +1.4
GZR **Gura Zlata** 9.36 48 ⇑P P 06 31 23.5 +1.6
MOF **Molkenrain** 9.38 335 P P 06 31 21.4 -0.8
CEST **Esterri de Car** 9.39 293 P P 06 31 24.6 +2.2
GEC2 **GERESS Array S** 9.39 3 P P 06 31 22.8 +0.5
GERES **GERESS Array B** 9.39 3 P P 06 31 22.9 +0.6
comp=E,32nm,0.4s,baz=173,slow=24,SNR=308
CKRC **Cesky Krumlov** 9.40 5 *e*P P 06 31 23.2 +0.9
CKRC **Cesky Krumlov** 9.40 5 *e*P P 06 31 23.2 +0.9
RODP **Rodopos** 9.42 111 P P 06 31 24.6 +1.9
VOGT **Vogtsburg - To** 9.42 338 P P 06 31 21.7 -0.8
RONF **Ronchamp** 9.43 333 P P 06 31 21.6 -1.0
MHLO **Agia Marina, M** 9.43 104 P P 06 31 22.8 0.0
WALT **Westhalten** 9.44 336 P P 06 31 21.9 -0.3
HINF **Hinteralfeld** 9.45 334 *e*P P 06 31 21.9 -0.9
HINF *eS* S 06 33 09.8 -1.1
comp=E,7.9nm,0.6s
BFO **Black Forest** 9.47 341 P P 06 31 22.5 -0.5
BFO **Black Forest** 9.47 341 P P 06 31 22.5 -0.5
EBNR **Beni Rached** 9.58 254 P P 06 31 26.0 +1.5
EBGR **Bougara** 9.59 249 P P 06 31 24.7 +0.1
IMMV **Iera Moni Meta** 9.62 111 P P 06 31 25.9 +1.0
OPP **Oppenau** 9.66 341 P P 06 31 24.1 -0.9
KDZ **Kurdzhali** 9.66 73 ⇓*i*P P 06 31 26.4 +1.2
VLAD **Vladila** 9.67 58 ⇓P P 06 31 26.6 +1.4
KHC **Kasperske Hory** 9.67 2 P P 06 31 25.9 +0.7
KHC **Kasperske Hory** 9.67 2 *e* P P 06 31 25.9 +0.7
KHC **Kasperske Hory** 9.67 2 *e*/P P 06 31 25.7 +0.5
KHC **Kasperske Hory** 9.67 2 P P 06 31 25.8 +0.7
comp=E,41nm,0.6s,comp=E,1µm
ECH **Echery** 9.70 336 P P 06 31 25.6 +0.2
ECH **Echery** 9.70 336 P P 06 31 25.4 -0.1
ECH **Echery** 9.70 336 P P 06 31 25.6 +0.2
DEV **Deva** 9.72 46 ⇓P P 06 31 27.6 +1.9
CAF **Calviac** 9.75 308 *e*P P 06 31 26.4 +0.3
CAF *eS* S 06 33 16.8 -0.1
comp=E,56nm,1.6s
HAU **Haudompre** 9.78 333 *e*P P 06 31 25.5 -0.9
HAU *eS* S 06 33 16.2 -1.2
comp=E,9.5nm,0.6s
SMF **Signal de Mont** 9.80 320 *e*P P 06 31 25.6 -0.9
SMF *eS* S 06 33 15.6 -2.0
comp=E,2.1nm,0.4s
PSZ **Piszkesteto** 9.82 28 P P 06 31 28.0 +1.2
PSZ **Piszkesteto** 9.82 28 ⇑P P 06 31 28.3 +1.5
PSZ **Piszkesteto** 9.82 28 P P 06 31 28.0 +1.2
CDF **Champ du Feu** 9.84 337 *e*P P 06 31 26.4 -0.6
BABA **Baden-Baden-Ne** 9.87 341 P P 06 31 28.3 +1.1
KRUC **Moravsky** 9.90 13 *e*P P 06 31 28.7 +1.1
KRUC *eS* S 06 33 19.2 -0.4
VYHS **Vyhne** 9.96 23 *e*P P 06 31 29.3 +1.0
VYHS **Vyhne** 9.96 23 *e*P P 06 31 29.3 +1.0
LOT **Lotru** 9.97 50 ⇓P P 06 31 30.5 +2.0
JAVC **Velka Javorina** 9.98 18 *e*P P 06 31 30.5 +2.0
SIGR **SIGRI** 9.99 87 P P 06 31 29.6 +0.9
HOHE **HOHENGOEFT** 10.00 339 P P 06 31 29.8 +1.2
ZVC **Zvikov** 10.01 5 *e*P P 06 31 30.1 +1.3
XAFF **Xaffevillers** 10.04 335 P P 06 31 29.7 +0.7
ALN **Alexandroupoli** 10.11 78 P P 06 31 31.1 +1.2
ALN **Alexandroupoli** 10.11 78 P P 06 31 30.9 +1.0
ALN **Alexandroupoli** 10.11 78 P P 06 31 31.1 +1.2
AVF **Avril sur Loir** 10.14 319 *e*P P 06 31 29.2 -0.9
AVF *eS* S 06 33 21.5 -2.8
comp=E,38nm,1.3s
EPF **Esparros** 10.15 295 *e*P P 06 31 30.5 +0.1
EPF *eS* S 06 33 25.3 +0.6
comp=E,65nm,1.6s
APE **Apeiranthos** 10.16 100 P P 06 31 30.9 +0.2
APE **Apeiranthos** 10.16 100 ⇑P P 06 31 31.2 +0.5
APE **Apeiranthos** 10.16 100 *d*/P P 06 31 30.9 +0.2
VRAC **Vranov** 10.18 14 *e*P P 06 31 31.6 +1.1
VRAC *eS* S 06 33 24.8 -0.1
VRAC **Vranov** 10.18 14 P P 06 31 31.9 +1.4
comp=E,20nm,0.6s,baz=198,slow=10,SNR=37
VRAC S S 06 33 24.5 -0.4
comp=E,2.0nm,0.4s,baz=314,slow=18,SNR=9.7
VRAC **Vranov** 10.18 14 ⇓P P 06 31 31.8 +1.3
ENEZ **Enez** 10.18 79 P P 06 31 31.9 +1.2
CIEL **Dossenheim-sur** 10.19 339 P P 06 31 31.1 +0.5
CAVK **Edirne/Enez-Ca** 10.19 79 ⇑P P 06 31 32.1 +1.3
DRGR 10.21 41 ⇓P P 06 31 32.5 +1.5
LOR **Lormes** 10.23 323 *e*P P 06 31 30.3 -0.8
LOR *eS* S 06 33 22.0 -4.0
comp=E,133nm,1.9s
LTVH **Ltavrtes, Hu** 10.23 36 ⇑P P 06 31 32.7 +1.6
BGF **Bois d'Agland** 10.25 317 *e*P P 06 31 30.9 -0.4
SSF **Saint Saulge** 10.25 321 *e*P P 06 31 30.5 -0.8
SSF *eS* S 06 33 22.1 -4.3
comp=E,71nm,1.4s
CHOS **Chios island** 10.26 92 P P 06 31 32.5 +0.9
COPA **Copaceanca** 10.26 59 ⇑P P 06 31 33.3 +1.8
HUMR **Humele** 10.27 57 ⇓P P 06 31 33.5 +1.9
RJF **Les Rejaudoux** 10.28 308 *e*P P 06 31 32.2 +0.5
RJF *eS* S 06 33 25.8 -1.3
comp=E,16nm,0.9s
GRFO **Grafenberg** 10.30 354 P P 06 31 32.9 +1.1
GRFO **Grafenberg** 10.30 354 P P 06 31 32.9 +1.1
GRA1 **Grafenberg Arr** 10.30 354 P P 06 31 33.0 +1.2
GRF **Grafenberg Arr** 10.30 354 P P 06 31 33.0 +1.2
PRK **Paraskevi** 10.31 87 P P 06 31 33.0 +0.9
EZN **Ezine** 10.31 84 P P 06 31 33.1 +1.0
EZN **Ezine** 10.31 84 P P 06 31 33.0 +1.0
comp=E,153nm,0.8s,comp=E,2µm
ELND **Elena** 10.32 66 ⇑P P 06 31 33.5 +1.3
SANT **Santorini** 10.34 103 P P 06 31 34.2 +1.7
SANT **Santorini** 10.34 103 ⇑P P 06 31 34.1 +1.6
IDI **Anoyia** 10.36 110 P P 06 31 33.3 +0.5
IDI **Anoyia** 10.36 110 P P 06 31 32.8 0.0
IDI **Anoyia** 10.36 110 P P 06 31 32.9 +0.1
IDI S S 06 33 25.2 -3.8
IDI **Anoyia** 10.36 110 P P 06 31 32.9 +0.1
comp=E,25nm,0.3s,baz=238,slow=8.6,SNR=39
IDI S S 06 33 28.8 -0.2
comp=E,47nm,0.7s,baz=117,slow=18,SNR=16
TNR **Turnu Rosu** 10.38 50 ⇓P P 06 31 34.2 +1.5
STFAR **Stefanesti-Arg** 10.40 55 ⇓P P 06 31 35.7 +2.6
TCF **Toulx Ste Croi** 10.42 314 *e*P P 06 31 33.1 -0.1

SFTF **Sexfontaines** 10.44 329 *e*P P 06 31 32.6 -0.7
SFTF *eS* S 06 33 28.9 -1.2
comp=E,87nm,1.6s
ARR **Arges** 10.44 52 ⇓P P 06 31 35.7 +2.2
PAGF **Fort de Pagny** 10.47 333 *e*P P 06 31 33.5 -0.1
SZH **Strazhitsa** 10.49 65 ⇓*i*P P 06 31 35.0 +1.1
KECS **Kecovo** 10.51 29 *e*P P 06 31 35.6 +1.5
KECS **Kecovo** 10.51 29 *e*P P 06 31 35.6 +1.5
GOPC **GO Pecny, Ondr** 10.53 6 *e*P P 06 31 35.3 +1.1
GOPC **GO Pecny, Ondr** 10.53 6 *e*P P 06 31 35.3 +1.1
PRU **Pruhonice** 10.58 6 *e*P P 06 31 35.6 +0.8
PRU **Pruhonice** 10.58 6 *e*P P 06 31 35.6 +0.8
CJR **Cluj-Napoca** 10.62 44 ⇑P P 06 31 36.8 +1.5
MTUR **Matau** 10.64 53 ⇑P P 06 31 38.0 +2.4
PRA **Prague** 10.65 5 *e*P P 06 31 36.7 +1.2
PRA **Prague** 10.65 5 *e*P P 06 31 36.7 +1.2
MEZF **Maizieres J'vi** 10.68 330 *e*P P 06 31 36.1 +0.3
MEZF *eS* S 06 33 33.8 -0.8
comp=E,18nm,0.8s
JMB **Yambol** 10.69 69 ⇓*i*P P 06 31 37.3 +1.2
MDB **Medias** 10.71 48 ⇓P P 06 31 38.2 +2.0
VOIR 10.73 52 ⇑P P 06 31 38.9 +2.3
VOIR 10.73 52 P P 06 31 38.6 +2.0
comp=E,244nm,0.9s
EDRB **Edirne** 10.73 73 P P 06 31 38.1 +1.5
LANS **Liptovska Anna** 10.74 24 *e*P P 06 31 38.9 +2.4
LANS **Liptovska Anna** 10.74 24 *e*P P 06 31 38.9 +2.4
ETSF **Etsaut** 10.76 293 *e*P P 06 31 37.4 +0.5
ETSF *eS* S 06 33 37.0 +0.5
comp=E,58nm,1.0s
ECHE **Chera** 10.77 275 P P 06 31 37.7 +0.7
SGRR **Singureni** 10.80 60 ⇑P P 06 31 39.1 +1.9
MORC **Moravsky Berou** 10.81 16 P P 06 31 38.7 +1.4
MORC **Moravsky Berou** 10.81 16 *e*P P 06 31 38.4 +1.1
MORC *eS* S 06 33 37.6 +0.3
MORC **Moravsky Berou** 10.81 16 ⇓P P 06 31 38.8 +1.5
MORC **Moravsky Berou** 10.81 16 P P 06 31 38.7 +1.4
BUC1 **Bucharest** 10.88 59 ⇑P P 06 31 39.7 +1.6
KRLC **Kraliky** 10.95 13 *e*P P 06 31 40.2 +1.5
KRLC **Kraliky** 10.95 13 *e*P P 06 31 40.2 +1.5
RICC **Richard** 11.11 4 *e*P P 06 31 41.5 +1.2
PLAR **PLOIESTI** 11.11 56 ⇓P P 06 31 42.4 +2.0
PVCC **Panska Ves** 11.12 5 *e*P P 06 31 41.7 +1.2
PVCC **Panska Ves** 11.12 5 *e*P P 06 31 41.7 +1.2
DPC **Dobruska-Polom** 11.14 11 *e*P P 06 31 41.8 +1.0
DPC **Dobruska-Polom** 11.14 11 *e*P P 06 31 41.8 +1.0
DPC **Dobruska-Polom** 11.14 11 P P 06 31 41.7 +1.0
comp=E,21nm,0.9s
HSKC **Hora Svate Kat** 11.15 2 *e*P P 06 31 41.9 +1.1
SULR 11.16 58 ⇓P P 06 31 42.7 +1.7
BERU **Beregovo** 11.20 35 P P 06 31 42.5 +1.1
BMR **Baia Mare** 11.20 39 ⇑P P 06 31 43.1 +1.7
DOPR **Dopca** 11.21 51 ⇑P P 06 31 42.7 +1.2
CRVS **Cervenica-Dubn** 11.22 30 *e*P P 06 31 43.7 +2.0
CRVS **Cervenica-Dubn** 11.22 30 *e*P P 06 31 43.7 +2.0
EMUR **La Murta** 11.23 266 P P 06 31 41.1 -0.8
NIE **Niedzica** 11.24 25 *e*P P 06 31 43.8 +2.0
NIE *eS* S 06 33 48.9 +3.3
NIE **Niedzica** 11.24 25 P P 06 31 44.2 +2.4
comp=E,16nm,0.9s
TRSU **Trosnyk** 11.24 37 P P 06 31 43.6 +1.8
UPC **Upice** 11.25 10 *e*P P 06 31 43.1 +1.2
UPC **Upice** 11.25 10 *e*P P 06 31 43.1 +1.2
ARCR **ARCALIA** 11.26 44 ⇓P P 06 31 43.5 +1.5
SJPF **Ste Jean** 11.28 293 *e*P P 06 31 43.0 +0.6
SJPF *eS* S 06 33 46.6 0.0
comp=E,33nm,1.0s
WLF **Walferdange** 11.29 337 P P 06 31 42.8 +0.5
WLF **Walferdange** 11.29 337 P P 06 31 41.3 -1.0
WLF **Walferdange** 11.29 337 *d*P P 06 31 42.4 +0.1
comp=E,28nm,0.9s
WLF **Walferdange** 11.29 337 P P 06 31 42.8 +0.5
HOLU **Holmets** 11.31 34 P P 06 31 44.1 +1.6
MLR **Muntele Rosu** 11.31 54 P P 06 31 44.9 +2.0
MLR **Muntele Rosu** 11.31 54 P P 06 31 44.6 +1.8
comp=E,84nm,0.5s,baz=232,slow=3.3,SNR=151
MLR S S 06 33 48.8 +1.4
comp=E,28nm,0.9s,baz=152,slow=22,SNR=8.5
MLR **Muntele Rosu** 11.31 54 ⇓P P 06 31 44.8 +2.0
MLR **Muntele Rosu** 11.31 54 P P 06 31 44.3 +1.5
comp=E,210nm,0.9s
ETOB **Tobarra** 11.32 270 P P 06 31 43.3 +0.4
OSTC **Ostas** 11.32 11 *e*P P 06 31 44.0 +1.3
OSTC **Ostas** 11.32 11 *e*P P 06 31 44.0 +1.3
CHVC **Chvalec** 11.33 10 *e*P P 06 31 43.9 +1.1
CHVC **Chvalec** 11.33 10 *e*P P 06 31 43.9 +1.1
UZHM **Uzhgorod** 11.35 33 P P 06 31 44.4 +1.5
KORU **Korolevo** 11.37 37 P P 06 31 44.8 +1.7
MUKU **Mukachevo** 11.38 35 P P 06 31 44.6 +1.3
BOSR **Bodos** 11.42 51 ⇑P P 06 31 45.6 +1.7
BRG **Berggiesshubel** 11.43 3 *e*P P 06 31 45.1 +1.3
BRG Amp 06 31 46.0
comp=E,24nm,0.7s
BRIU **Brid** 11.45 36 P P 06 31 45.7 +1.7
LEHL **Lehliu** 11.46 60 ⇑P P 06 31 46.0 +1.8
PRD **Provadia** 11.47 67 ⇓*i*P P 06 31 45.7 +1.4
NEHR **Nehoiu** 11.50 54 ⇑P P 06 31 46.4 +1.7
OZUR 11.51 51 ⇑P P 06 31 46.5 +1.8
ISR **Istrita** 11.53 56 ⇓P P 06 31 46.9 +1.9
ISR **Istrita** 11.53 56 P P 06 31 46.5 +1.5
comp=E,198nm,1.2s
BODT **Bodrum** 11.53 98 P P 06 31 44.3 -0.8
CLF **Chambon-Foret** 11.53 321 P P 06 31 45.1 +0.2
KOLS **Kolonicke sedl** 11.57 32 *e*P P 06 31 46.3 +0.9
KOLS **Kolonicke sedl** 11.57 32 *e*P P 06 31 46.3 +0.9
KSP **Ksiaz** 11.62 11 *e*P P 06 31 46.7 +1.0
KSP **Ksiaz** 11.62 11 P P 06 31 46.5 +0.8
comp=E,31nm,0.7s
TURR **Turia** 11.63 51 ⇓P P 06 31 47.7 +1.7
COVR **Voineasa-Covas** 11.64 53 ⇓P P 06 31 47.4 +1.2
BAND **Balkesir-Ban** 11.66 81 ⇓P P 06 31 47.9 +1.5
RAKU **Rahkiv** 11.77 40 P P 06 31 48.1 +0.6
OJC **Ojcow** 11.79 22 *e*P P 06 31 48.6 +1.0
OJC **Ojcow** 11.79 22 P P 06 31 49.2 +1.6
OJC **Ojcow** 11.79 22 P P 06 31 49.2 +1.6
OJC **Ojcow** 11.79 22 P P 06 31 48.9 +1.3
comp=E,26nm,0.9s
MEZ **Mezhgor'ye** 11.80 37 P P 06 31 49.7 +1.9
BISRR **Bisoca** 11.82 55 ⇑P P 06 31 49.4 +1.3
BISRR **Bisoca** 11.82 55 P P 06 31 49.0 +0.9
comp=E,151nm,0.7s
CLL **Collm** 11.84 0 P P 06 31 49.4 +1.3
CLL **Collm** 11.84 0 ⇑*i*P P 06 31 49.3 +1.1
comp=E,82nm,0.8s
CLL *eS* S 06 33 58.0 +0.8
CLL **Collm** 11.84 0 ⇑*i*P P 06 31 49.3 +1.1
CLL *eS* S 06 33 58.0 +0.8
CLL pmax pmax
comp=E,82nm,0.8s
CLL **Collm** 11.84 0 P P 06 31 49.2 +1.1
comp=E,100nm,1.0s,comp=E,1µm
CTYL **Yalikoy Yolu** 11.84 75 P P 06 31 49.6 +1.3
comp=E,151nm,0.7s
AMRR **Amara** 11.85 60 ⇓P P 06 31 50.0 +1.6
PLOR3 **Plostina Array** 11.91 53 P P 06 31 49.5 +0.4
comp=E,44nm,0.8s
PLOR **Plostina** 11.92 53 ⇑P P 06 31 49.9 +0.8
PLOR5 **Plostina Array** 11.92 53 P P 06 31 49.8 +0.6
KARP **Karpathos** 11.93 105 P P 06 31 49.0 -0.4
BHOU **Houvegnez** 11.95 338 *d*P P 06 31 49.2 -0.1
comp=E,16nm,0.8s
MFF **Saint Martin d** 11.95 311 *e*P P 06 31 49.0 -0.3
VRI **Vrincioaia** 11.97 53 ⇑P P 06 31 50.5 +0.8
VRI **Vrincioaia** 11.97 53 P P 06 31 50.1 +0.4
comp=E,49nm,0.8s,comp=Z,874nm
ONER **Baraj Valea Uz** 11.99 51 ⇓P P 06 31 51.9 +2.0
ICOR **Ion Corvin** 12.01 62 ⇓P P 06 31 51.5 +1.5
RCHB **Rochefort** 12.01 335 *d*P P 06 31 49.3 -0.6
BURAR **Bucovina Array** 12.04 43 P P 06 31 52.7 +2.2
BURAR **Bucovina Array** 12.04 43 ⇑P P 06 31 52.8 +2.3
BUR08 **Bucovina Ar. S** 12.05 43 P P 06 31 52.8 +2.2
GIVF **Givet** 12.10 334 *e*P P 06 31 49.3 -1.6
BTNL **Ternell** 12.12 339 *d*P P 06 31 51.8 +0.7
comp=E,58nm,0.8s
DOU **Dourbes** 12.17 334 *d*P P 06 31 50.2 -1.5
comp=E,22nm,0.9s
DOU *dx* x 06 31 57.7
DOU *dx* x 06 32 03.9
MEM **Membach** 12.17 339 *d*P P 06 31 52.3 +0.6
comp=E,39nm,0.0s
ENIJ **Nijar** 12.19 263 P P 06 31 51.3 -0.9
BCLA **Clavier** 12.21 336 *d*P P 06 31 51.7 -0.4

comp=Z,17nm,0.9s
TESR Tescani 12.23 50 ⇑P P 06 31 54.8 +2.3
TESR Tescani 12.23 50 P P 06 31 54.5 +2.1
comp=Z,61nm,0.8s
PANC Panciu 12.24 54 ⇑P P 06 31 53.4 +1.0
KULA Kula-Manisa 12.25 89 P P 06 31 54.3 +1.5
BGES Gesves 12.25 336 dP P 06 31 52.0 -0.5
comp=Z,28nm,0.5s
BGES dx x 06 31 58.8
SHIU Shidnytsya 12.26 34 P P 06 31 54.9 +2.3
YER Yerkesik 12.26 96 P P 06 31 53.7 +0.8
BAIF Baives 12.27 333 eP P 06 31 51.2 -1.6
HARR Harsova 12.28 60 ⇑P P 06 31 53.6 +0.7
BSTI Sart Tilman 12.28 337 dP P 06 31 52.9 +0.1
comp=Z,5.6nm,0.7s
BSTI dx x 06 31 59.4
BMRD Maredsous 12.29 335 dP P 06 31 51.1 -1.8
comp=Z,12nm,0.7s
COSR Cosmesti PH 12.33 54 ⇑P P 06 31 54.5 +1.1
KSV Kosov 12.41 41 P P 06 31 56.7 +2.4
MORS Morshin 12.42 35 P P 06 31 56.0 +1.7
BEBN Eben Emael 12.44 338 dP P 06 31 55.7 +1.3
comp=Z,146nm,0.6s
MFTR Murfatlar 12.45 63 ⇑P P 06 31 55.7 +1.0
GHRR 12.48 53 ⇑P P 06 31 55.8 +0.7
GHRR 12.48 53 P P 06 31 55.6 +0.6
SCHLR Schela 12.50 57 ⇑P P 06 31 54.7 -0.6
NEGRR Negrea 12.56 56 ⇑P P 06 31 55.8 0.0
CFR Carcaliu 12.59 58 ⇓P P 06 31 56.1 0.0
YLV Yalova 12.63 80 P P 06 31 57.3 +0.5
comp=Z,68nm,0.9s
TPGR Topolog 12.66 60 ⇑P P 06 31 57.4 +0.4
SCTR Scanteiesti 12.69 56 ⇑P P 06 31 57.7 +0.5
BIR Birlad 12.71 53 ⇑P P 06 31 58.4 +0.9
EBER Berja 12.74 263 P P 06 31 57.7 -0.4
VLDR Vladesti 12.81 55 ⇑P P 06 31 58.0 -0.5
LVV L'vov 12.99 34 eP P 06 32 01.4 +1.0
TLCR 13.04 59 ⇑P P 06 32 01.4 +0.5
ESBB Sonseca Array 13.07 276 P P 06 32 01.1 -0.3
ESDC Sonseca Array 13.07 276 P P 06 32 01.0 -0.4
ESDC Sonseca Array 13.07 276 P P 06 32 01.2 -0.2
comp=Z,29nm,0.7s,baz=75,slow=11,SNR=312
ESDC S S 06 34 21.8 +0.3
comp=Z,3.2nm,1.1s,baz=83,slow=18,SNR=6.9
ESDC ScP ScP 06 39 36.2 -2.0
comp=Z,1.2nm,1.0s,baz=11,slow=2.6,SNR=4.8
LDF La Druitiere 13.10 318 eP P 06 32 00.1 -1.4
KMPD K-Podol'skiy 13.29 42 P P 06 32 04.1 +0.6
KMPD P P 06 32 03.8 +0.3
ELGU Los Guajares, 13.31 264 P P 06 32 03.6 -0.5
GRR Gorron 13.36 316 eP P 06 32 02.7 -1.5
PAB San Pablo 13.38 276 P P 06 32 04.8 +0.1
PAB San Pablo 13.38 276 P P 06 32 04.8 +0.1
FLN La Foliniere 13.39 318 eP P 06 32 02.8 -1.8
ELL Elmali 13.62 96 P P 06 32 07.8 +0.5
ELL Elmali 13.62 96 P P 06 32 07.8 +0.5
EGOR Sierra Gorda, 13.62 265 P P 06 32 06.1 -1.3
HORU Horodok 13.68 40 P P 06 32 08.2 +0.5
MILM Milestii Mici 13.74 52 ⇑P P 06 32 08.1 -0.2
EADA Adamuz 13.74 270 P P 06 32 08.4 -0.2
MDUB Mudurnu 14.02 80 P P 06 32 12.8 +1.2
SORM Soroca 14.07 47 ⇓P P 06 32 11.8 0.0
SORM Soroca 14.07 47 P P 06 32 11.3 -0.5
SGMF Saint Gilles 14.21 313 eP P 06 32 11.5 -1.8
QUIF Quistinic 14.39 311 eP P 06 32 13.8 -1.3
ECAB El Cabril 14.41 270 P P 06 32 11.2 -0.4
ROSF Rostrenen 14.66 313 eP P 06 32 16.4 -1.6
RGN Rugen 15.09 1 P P 06 32 22.1 -0.3
PBRG Braganca 15.14 285 eP P 06 32 22.7 -0.6
MVO Moncorvo 15.35 283 eP P 06 32 24.6 -0.8
EMIN Mina Concepcio 15.45 270 P P 06 32 25.5 -1.0
PBAR Barrancos 15.65 272 eP P 06 32 27.3 -1.2
comp=Z,38nm,2.0s
MDT Midelt 15.66 250 P P 06 32 27.5 -1.3
comp=Z,19nm,0.8s,baz=82,slow=12,SNR=41
BSD Bornholm Skovb 15.71 4 eP P 06 32 27.5 -1.4
BSD Bornholm Skovb 15.71 4 iP P 06 32 26.9 -2.0
BSD IAmb IAmb 06 32 28.2
comp=Z,45nm,0.9s
PMRV Marv?2o 15.73 276 eP P 06 32 28.0 -1.4
comp=Z,19nm,1.9s
PCBR Castelo Branco 15.75 278 eP P 06 32 28.2 -1.4
MTE Manteigas 15.76 280 P P 06 32 28.6 -1.2
MTE IAmb IAmb 06 32 29.2
comp=Z,10nm,0.8s
MTE Manteigas 15.76 280 eP P 06 32 28.5 -1.2
BR131 Keskin Array S 15.94 82 P P 06 32 32.4 +0.7
BR131 Keskin Array S 15.94 82 diP P 06 32 31.7 0.0
BRTR Keskin Array B 15.94 82 P P 06 32 32.5 +0.8
BRTR Keskin Array B 15.94 82 P P 06 32 31.9 +0.2
comp=Z,13nm,0.7s,baz=266,slow=7.7,SNR=75
BRTR Keskin Array B 15.94 82 iP P 06 32 31.8 0.0
BRTR pmax pmax
comp=Z,14nm,0.7s
PESTR Estremoz 15.96 274 P P 06 32 30.4 -1.3
PESTR IAmb IAmb 06 32 32.1
comp=Z,13nm,0.8s
PESTR Estremoz 15.96 274 eP P 06 32 30.0 -1.8
PESTR Estremoz 15.96 274 P P 06 32 29.7 -2.1
KIEV Kiev 16.01 40 P P 06 32 31.0 -1.1
KIEV Kiev 16.01 40 P P 06 32 31.0 -1.1
KIEV pmax pmax
comp=Z,43nm,0.5s
PVIS Viseu 16.02 281 eP P 06 32 31.1 -1.3
AKBB Malin Array Si 16.02 40 P P 06 32 30.8 -1.4
AKBB Malin Array Si 16.02 40 diP P 06 32 30.4 -1.8
AKBB pmax pmax
comp=Z,32nm,0.6s
AKASG Malin Array Be 16.02 40 P P 06 32 30.8 -1.4
AKASG Malin Array Be 16.02 40 P P 06 32 30.6 -1.6
comp=Z,14nm,0.4s,baz=240,slow=9.3,SNR=89
AKASG S S 06 35 14.1 -3.6
comp=Z,14nm,0.8s,baz=231,slow=20,SNR=13
AKASG Malin Array Be 16.02 40 P P 06 32 30.8 -1.4
AKASG pmax pmax
comp=Z,36nm,0.6s
SUW Suwalki 16.12 22 eP P 06 32 32.5 -0.7
SUW eS S 06 35 17.5 -1.9
SUW Suwalki 16.12 22 P P 06 32 32.7 -0.5
SUW Suwalki 16.12 22 eP P 06 32 31.8 -1.4
SUW Suwalki 16.12 22 P P 06 32 32.7 -0.5
SUW pmax pmax
comp=Z,64nm,0.5s
EGRO El Granado 16.13 270 P P 06 32 31.4 -2.1
KIRS Kirsehir-Merke 16.22 85 ⇑P P 06 32 35.3 +0.7
COP Copenhagen 16.23 359 iP P 06 32 33.0 -1.4
PBEJ Beja 16.32 272 eP P 06 32 34.3 -1.3
comp=Z,54nm,1.0s
EVO Evora 16.34 273 eP P 06 32 33.8 -2.0
PVAQ Vaqueiros 16.34 269 P P 06 32 34.2 -1.6
PVAQ Vaqueiros 16.34 269 eP P 06 32 33.9 -1.9
comp=Z,83nm,2.4s
PVAQ Vaqueiros 16.34 269 P P 06 32 33.8 -1.9
PMTG Montargil 16.42 275 eP P 06 32 34.4 -2.2
PCVE Castro Verde 16.54 270 eP P 06 32 35.9 -1.9
PBDV Barranco-do-Ve 16.54 269 eP P 06 32 37.4 -0.6
comp=Z,107nm,1.9s
SIM Simferopol' 16.58 64 eP P 06 32 38.4 +0.2
SIM pmax pmax
comp=Z,65nm,0.9s
MESJ Messejana 16.63 271 P P 06 32 37.2 -1.7
MESJ Messejana 16.63 271 eP P 06 32 37.1 -1.7
MESJ Messejana 16.63 271 P P 06 32 37.2 -1.7
MESJ pmax pmax
comp=Z,18nm,0.7s
PNCL Nicolau / Gran 16.81 272 eP P 06 32 39.3 -1.4
CSS Mathiatis 16.83 99 P P 06 32 40.4 -0.5
DEL Delary 17.03 2 iP P 06 32 40.0 -2.5
PTEO Sao Teotonio 17.09 270 eP P 06 32 42.1 -1.3
MORF Marmelete 17.09 270 eP P 06 32 42.7 -0.8
MUD Monsted U'grnd 17.18 353 iP P 06 32 41.9 -2.1
MUD IAmb IAmb 06 32 44.6
comp=Z,74nm,0.7s
PFVI Vila Bisbo 17.26 269 P P 06 32 43.6 -1.6
PFVI Vila Bisbo 17.26 269 eP P 06 32 43.1 -2.1
BNN Bunyan 17.75 85 P P 06 32 51.0 +1.1
TAM Tamanrasset 17.79 203 P P 06 32 52.0 +1.5
TAM Tamanrasset 17.79 203 P P 06 32 52.0 +1.5
TAM pmax pmax
comp=Z,32nm,1.4s
NACGM Naroch 18.02 26 eP P 06 32 51.7 -0.2
comp=Z,457nm,0.8s,baz=217
VSVD Vaisvydziai 18.06 20 eP P 06 32 51.8 -0.4

IIGN Ignalina 18.20 25 eP P 06 32 50.5 -3.1
ISAL Salakas 18.35 24 eP P 06 32 52.4 -2.5
IZAR Zarasai 18.53 24 eP P 06 32 55.0 -1.7
IWEX Carrickbyrne, 18.77 320 P P 06 32 57.7 -1.1
ANN Anapa 18.88 66 eP P 06 32 58.2 -1.8
ANN eS S 06 36 04.9 -1.2
ANN pmax pmax
comp=Z,146nm,0.9s
HOMB Homborsund 19.04 353 eP P 06 33 01.2 0.0
DSB Dublin 19.10 323 P P 06 33 00.7 -1.2
DSB Dublin 19.10 323 P P 06 33 01.2 -0.7
GAZ Gaziantep 19.12 89 P P 06 33 04.9 +2.3
SLIT Siltere, Latvi 19.16 15 eP P 06 33 01.6 -0.7
MMAI Mount Meron Ar 19.18 103 P P 06 33 04.3 +1.3
comp=Z,29nm,0.4s,baz=302,slow=9.6,SNR=62
EKA Eskdalemuir Ar 19.19 331 P P 06 33 01.5 -1.1
comp=Z,23nm,0.5s,baz=147,slow=11,SNR=159
ESK Eskdalemuir 19.19 331 P P 06 33 02.0 -0.7
ESK Eskdalemuir 19.19 331 P P 06 33 02.0 -0.7
ESK pmax pmax
comp=Z,57nm,1.1s
SNART Snartemo 19.25 351 eP P 06 33 03.8 +0.6
ILTH Belurgan, Co L 19.58 324 P P 06 33 06.1 -0.1
KONO Kongsberg 20.32 355 P P 06 33 11.9 -0.9
KONO Kongsberg 20.32 355 eP P 06 33 12.1 -0.7
KONO Kongsberg 20.32 355 ceP P 06 33 13.0 +0.2
KONO pmax pmax
comp=Z,105nm,3.0s
KMY Karmoy 20.37 349 eP P 06 33 13.8 +0.5
BLS5 Blasjo 20.40 350 eP P 06 33 12.9 -0.7
SOC Sochi 20.41 70 eP P 06 33 13.4 -0.5
SOC e*SP sP 06 35 27.2 +3.7
SOC eS S 06 36 31.6 +0.8
MTSE Matsula 20.48 16 eP P 06 33 14.1 -0.3
EIL Elat 20.53 112 P P 06 33 16.0 +0.8
comp=Z,6.9nm,0.8s,baz=302,slow=7.1,SNR=5.5
comp=Z,6.9nm,0.8s
OSL Oslo 20.54 357 eP P 06 33 14.1 -0.8
IGLA Glengowla, Co 20.66 320 P P 06 33 14.8 -1.2
ASF Jabal al Asfar 20.69 103 P P 06 33 18.0 +1.2
comp=Z,19nm,0.8s,baz=224,slow=0.1,SNR=19
comp=Z,19nm,0.8s
HFS Hagfors 20.70 1 P P 06 33 15.2 -1.1
comp=Z,19nm,0.4s,baz=182,slow=9.5,SNR=133
comp=Z,19nm,0.4s
IDGL Inch Island, C 20.78 325 P P 06 33 16.1 -1.0
ODD1 Odda 20.86 351 eP P 06 33 17.4 -0.5
VSU Vasula 20.97 20deP P 06 33 18.3 -0.5
VSU pmax pmax
comp=Z,37nm,0.6s
NC602 NORSAR Array S 21.31 358 P P 06 33 21.4 -0.5
NC602 NORSAR Array S 21.31 358 eP P 06 33 21.1 -0.7
SKAR Skarslia 21.44 354 eP P 06 33 23.1 0.0
NAO01 NORSAR Array S 21.44 357 P P 06 33 22.3 -0.8
BER Bergen 21.48 350 eP P 06 33 24.0 +0.6
NB2 NORSAR Subarra 21.63 358 P P 06 33 23.6 -1.2
comp=Z,7.6nm,0.4s,baz=171,slow=10
NB2 NORSAR Subarra 21.63 358 P P 06 33 23.6 -1.2
baz=171,slow=10
NOA NORSAR Array B 21.63 358 P P 06 33 23.8 -0.9
comp=Z,8.8nm,0.8s,baz=194,slow=18,SNR=56
comp=Z,8.8nm,0.8s
ARBE Arbavere 21.63 18 eP P 06 33 27.6 +2.8
NBO00 NORSAR Array S 21.63 357 P P 06 33 24.2 -0.6
NB201 NORSAR Array S 21.63 358 P P 06 33 24.6 -0.2
NC405 NORSAR Array S 21.69 358 P P 06 33 25.3 +0.1
VSR Storozhevoye 21.72 49 eP P 06 33 23.9 -1.8
VSR pmax pmax
comp=Z,10.0nm,0.8s
NC303 NORSAR Array S 21.81 358 P P 06 33 26.1 -0.2
NC204 NORSAR Array S 21.88 357 P P 06 33 27.1 0.0
MEF Metsahovi 21.98 15 eP P 06 33 27.9 0.0
HYA Hoyanger 22.13 351 eP P 06 33 28.5 -0.7
LPSR Galich'ya Gora 22.15 45 eP P 06 33 28.5 -1.1
LPSR pmax pmax
comp=Z,10.0nm,0.8s
SUE Sulen 22.21 349 eP P 06 33 30.4 +0.5
OBN Obninsk 22.23 37 iP P 06 33 31.0 +0.8
OBN pmax pmax
comp=Z,8.0nm,0.5s
RAF Rauma 22.26 11 eP P 06 33 29.0 -1.4
SHA1 Shidzhatmaz 22.55 69diP P 06 33 34.6 +1.1
KIV Kislovodsk 22.57 69 eP P 06 33 34.7 +1.1
KIV pmax pmax
comp=Z,10.0nm,1.1s
KBZ Khabaz 22.72 69 P P 06 33 35.8 +1.0
comp=Z,5.1nm,0.8s,baz=273,slow=9.9,SNR=7.8
comp=Z,5.1nm,0.8s
KBZ Khabaz 22.72 69deP P 06 33 36.0 +1.2
KBZ pmax pmax
comp=Z,8.0nm,0.9s
DOMB Dombas 22.73 355 eP P 06 33 35.6 +1.0
VRH Novokhopyorsk 23.21 50 eP P 06 33 35.7 -3.4
VRH pmax pmax
comp=Z,20nm,0.7s
NCK Nalchik 23.23 70⇓eP P 06 33 41.2 +1.8
NCK pmax pmax
comp=Z,13nm,0.3s
FINES FINESS Array B 23.44 16 P P 06 33 41.0 0.0
FINES FINESS Array B 23.44 16 P P 06 33 40.5 -0.4
comp=Z,19nm,0.5s,baz=186,slow=9.2,SNR=144
comp=Z,19nm,0.5s
FINES FINESS Array B 23.44 16 P P 06 33 41.0 0.0
FIA1 FINESS Array S 23.44 16 P P 06 33 41.0 0.0
KEF Keuruu 23.86 14 eP P 06 33 43.6 -1.2
VAF Ylistaro 24.32 11 eP P 06 33 47.9 -0.9
GNI Garni 24.36 78⇓eP P 06 33 49.2 -0.4
GNI pmax pmax
comp=Z,18nm,1.1s
NSS Namsos 25.11 359 eP P 06 33 55.5 -0.2
JOF Joensuu 25.95 19 eP P 06 34 02.5 -0.8
MAK Makhachkala 26.11 71 eP P 06 34 03.4 -1.5
MAK e*SP sP 06 36 25.1 -1.0
MAK eS S 06 37 59.9 -0.7
MAK pmax pmax
comp=Z,302nm,1.3s
MOR8 Moi Rana 26.77 1 eP P 06 34 10.8 +0.4
STOK Stokkvaagen 26.91 0 eP P 06 34 11.2 -0.4
BELG Belogornoye 27.07 50⇓eP P 06 34 13.2 0.0
BELG pmax pmax
comp=Z,3.0nm,0.9s
KONS Konsvik 27.08 0 eP P 06 34 12.1 -1.0
FAUS Fauske 28.00 2 eP P 06 34 20.9 -0.2
TORD Torodi Ar. Bea 28.04 204 P P 06 34 22.1 -0.1
TORD IAmb IAmb 06 34 22.5
comp=Z,5.9nm,0.7s
TORD Torodi Ar. Bea 28.04 204 P P 06 34 21.7 -0.5
comp=Z,15nm,0.5s,baz=16,slow=9.6,SNR=101
comp=Z,15nm,0.5s
STEI Steigen 28.55 2 eP P 06 34 26.1 +0.2
LOF Lofoten 28.72 0 eP P 06 34 26.7 -0.8
KIRV Kirov 30.07 38⇑eP P 06 34 38.3 -1.0
KTK1 Kautokeino 30.12 7 eP P 06 34 39.0 -0.6
TRO Tromso 30.40 4 eP P 06 34 41.0 -0.9
ARA0 ARCESS Array S 30.86 9 eP P 06 34 45.2 -0.9
ARCES ARCESS Array B 30.86 9 P P 06 34 45.3 -0.8
ARCES IAmb IAmb 06 34 45.8
comp=Z,8.0nm,0.8s
ARCES ARCESS Array B 30.86 9 P P 06 34 45.0 -1.0
comp=Z,8.9nm,0.7s,baz=189,slow=8.1,SNR=63
comp=Z,8.9nm,0.7s
ARCES ARCESS Array B 30.86 9 P P 06 34 45.3 -0.8
ARCES pmax pmax
comp=Z,8.0nm,0.8s
LVZ Lovozero 30.89 16 P P 06 34 46.2 -0.1
LVZ IAmb IAmb 06 34 47.4
comp=Z,14nm,0.9s
LVZ Lovozero 30.89 16⇓eP P 06 34 45.6 -0.7
LVZ pmax pmax
comp=Z,16nm,0.9s
KEV Kevo 31.25 9 P P 06 34 49.0 -0.3
KEV IAmb IAmb 06 34 59.0
comp=Z,23nm,1.3s
KEV Kevo 31.25 9 P P 06 34 49.1 -0.3
KEV pmax pmax
comp=Z,23nm,1.3s
HAMF Hammerfest 31.74 7 eP P 06 34 52.4 -1.1
RAYN Ar Rayn 31.76 110 P P 06 34 55.2 +0.7
RAYN Ar Rayn 31.76 110 P P 06 34 55.2 +0.7
RAYN pmax pmax
comp=Z,4.0nm,0.6s
VADS Vadso 31.91 11 eP P 06 34 55.7 +0.7
ARU Arti 34.18 45 P P 06 35 14.2 -0.2
ARU IAmb IAmb 06 35 14.9
comp=Z,7.0nm,0.4s
ARU Arti 34.18 45c iP P 06 35 13.1 -1.3
ARU 06 36 49.0
ARU S S 06 40 03.9 -0.9
ARU SS SS 06 43 02.2 +1.1
ARU pmax pmax
comp=Z,3.0nm,0.4s
AB31 Akbulak array 34.48 58 eP P 06 35 16.4 -0.7
ABKAR Akbulak array 34.48 58 P P 06 35 16.8 -0.3
SCO Scoresbysund 35.95 341 P P 06 35 30.3 +1.3
SCO Scoresbysund 35.95 341 P P 06 35 30.3 +1.3
SCO pmax pmax
comp=Z,45nm,1.2s
DBIC Dimbokro 36.38 211 P P 06 35 32.9 -0.4
DBIC Dimbokro 36.38 211 P P 06 35 32.8 -0.5
comp=Z,20nm,0.5s,baz=19,slow=8.6,SNR=58
comp=Z,20nm,0.5s
DBIC Dimbokro 36.38 211 P P 06 35 32.9 -0.4
DBIC pmax pmax
comp=Z,24nm,0.6s
SPB3 Spitsbergen Ar 38.84 1 P P 06 35 53.3 +0.6
SPB2 Spitsbergen Ar 38.84 1 P P 06 35 53.6 +0.9
SPA0 Spitsbergen Ar 38.85 1 eP P 06 35 53.3 +0.6
SPITS Spitsbergen Ar 38.85 1 P P 06 35 53.4 +0.6
comp=Z,12nm,0.4s,baz=160,slow=10,SNR=48
comp=Z,12nm,0.4s
UOSS Minazif 38.97 99 P P 06 35 53.9 -0.6
KBS Kingsbay 39.58 360 P P 06 35 59.3 +0.7
KBS Kingsbay 39.58 360 eP P 06 35 59.6 +1.0
KBS Kingsbay 39.58 360 P P 06 35 59.3 +0.7
KBS pmax pmax
comp=Z,24nm,0.8s
BRVK Borovoye 40.79 51 P P 06 36 08.7 0.0
BRVK Borovoye 40.79 51⇓eP P 06 36 08.8 0.0
BRVK pmax pmax
comp=Z,5.0nm,0.9s
BVAR Borovoye Array 40.86 51 P P 06 36 09.6 +0.3
comp=Z,1.3nm,0.6s,baz=292,slow=8.8,SNR=5.0
comp=Z,1.3nm,0.6s
SUMG Summit 41.49 339 P P 06 36 15.4 +0.9
SUMG IAmb IAmb 06 36 20.1
comp=Z,19nm,1.4s
KK31 Karatay Array 42.67 66 P P 06 36 23.6 -0.2
KK31 Karatay Array 42.67 66 P P 06 36 23.6 -0.2
KK31 pmax pmax
comp=Z,8.0nm,1.2s
KKAR Karatay Array 42.67 66 P P 06 36 23.6 -0.2
KKAR Karatay Array 42.67 66 P P 06 36 23.6 -0.2
KKAR pmax pmax
comp=Z,8.0nm,1.2s
CHGR Chuyangaron 43.02 72 P P 06 36 26.5 -0.2
CHGR IAmb IAmb 06 36 27.2
comp=Z,12nm,0.7s
CHGR Chuyangaron 43.02 72 P P 06 36 26.5 -0.2
CHGR pmax pmax
comp=Z,12nm,0.7s
GAR Garm 43.76 72 P P 06 36 33.5 +1.0
GAR IAmb IAmb 06 36 35.1
comp=Z,19nm,1.1s
KBL Kabul 44.44 78 P P 06 36 37.7 -0.3
KBL IAmb IAmb 06 36 38.6
comp=Z,5.5nm,0.6s
KBL Kabul 44.44 78 P P 06 36 37.7 -0.3
KBL pmax pmax
comp=Z,6.0nm,0.6s
KURBB Kurchatov Arra 46.21 53 P P 06 36 50.6 -0.3
comp=Z,2.5nm,0.8s,baz=279,slow=8.4,SNR=8.4
KURBB PcP PcP 06 38 16.1 -0.5
comp=Z,0.6nm,0.8s,baz=273,slow=4.3,SNR=4.5
KURBB S S 06 42 58.7 -1.6
comp=Z,0.8nm,0.7s,baz=285,slow=16,SNR=5.3
comp=Z,2.5nm,0.8s
KURK Kurchatov 46.25 53⇓eP P 06 36 50.6 -0.7
KURK pmax pmax
comp=Z,4.0nm,0.8s
ZALV Zalesovo Beam 49.22 48 P P 06 37 13.3 -0.3
ZALV Zalesovo Beam 49.22 48 P P 06 37 12.6 -1.0
comp=Z,1.9nm,0.3s,baz=284,slow=6.5,SNR=11
comp=Z,1.9nm,0.3s
ZALV Zalesovo Beam 49.22 48 iP P 06 37 13.1 -0.4
ZALV pmax pmax
comp=Z,2.0nm,0.3s
MAKZ Makanchi 49.42 58 P P 06 37 15.1 -0.1
MAKZ Makanchi 49.42 58 P P 06 37 15.1 -0.1
MAKZ pmax pmax
comp=Z,3.0nm,0.8s
MK31 Makanchi Array 49.62 58 P P 06 37 16.1 -0.6
MK31 Makanchi Array 49.62 58 P P 06 37 16.1 -0.6
MK31 pmax pmax
comp=Z,3.0nm,0.8s
MKAR Makanchi Array 49.62 58 P P 06 37 16.5 -0.2
MKAR Makanchi Array 49.62 58 P P 06 37 16.2 -0.5
comp=Z,3.2nm,0.6s,baz=285,slow=7.0,SNR=29
MKAR PcP PcP 06 38 28.8 -0.5
comp=Z,0.5nm,0.5s,baz=271,slow=5.5,SNR=2.1
MKAR ScP ScP 06 41 35.0 -1.9
comp=Z,0.6nm,0.8s,baz=323,slow=2.2,SNR=3.5
comp=Z,3.2nm,0.6s
DGZ Jazzator, Alta 51.97 53⇑eP P 06 37 34.3 +0.4
DGZ pmax pmax
comp=Z,5.0nm,1.8s
SCHQ Schefferville 53.44 315 P P 06 37 43.3 -0.9
SCHQ IAmb IAmb 06 37 43.6
comp=Z,17nm,0.5s
SCHQ Schefferville 53.44 315 P P 06 37 43.2 -1.0
comp=Z,16nm,0.6s,baz=71,slow=5.4,SNR=50
comp=Z,16nm,0.6s
HAL Halifax 55.13 302 P P 06 37 56.0 -0.2
HAL Halifax 55.13 302 P P 06 37 56.0 -0.2
HAL pmax pmax
comp=Z,52nm,1.3s
LMN Caledonia Moun 55.43 304 P P 06 37 57.5 -0.9
LMN IAmb IAmb 06 37 58.1
comp=Z,11nm,0.8s
BATG Bathurst New B 55.67 306 P P 06 37 59.4 -0.6
PKME Peaks-Kenny Pk 58.54 305 P P 06 38 18.3 -1.3
baz=64
LBNH Lisbon 60.68 305 P P 06 38 32.7 -1.4
baz=62
HRV Adam Dziewonsk 61.26 303 P P 06 38 37.0 -0.9
baz=61
TRQ Mont Tremblant 61.39 308 P P 06 38 38.5 -0.3
TRQ IAmb IAmb 06 38 38.8
comp=Z,6.6nm,0.6s
L61B Northampton 62.02 303 P P 06 38 42.8 0.0
baz=61
LONY Lake Ozonia 62.17 306 P P 06 38 43.4 -0.5
baz=61
PAL Palisades 63.53 302 P P 06 38 52.5 -0.1
baz=60
SONM Songino Array 64.11 48 P P 06 38 57.1 +0.7
comp=Z,1.1nm,0.8s,baz=303,slow=8.0,SNR=3.7
comp=Z,1.1nm,0.8s
BINY Binghamton 64.27 304 P P 06 38 57.0 -0.4
baz=59
SADO Sadowa 64.91 308 P P 06 39 01.2 -0.1
SADO IAmb IAmb 06 39 01.6
comp=Z,7.9nm,0.7s
SSPA Standing Stone 66.30 304 P P 06 39 10.0 -0.1
baz=58
ERPA Erie 66.84 306 P P 06 39 13.3 -0.1
baz=57
C36M Paulatuk 66.99 345 P P 06 39 13.9 +0.1
baz=35
MCWV Mont Chateau 68.09 304 P P 06 39 21.2 0.0
baz=56
GLMI Grayling 68.16 311 P P 06 39 21.5 0.0
baz=56
O53A New Philadelph 68.64 305 P P 06 39 25.0 +0.4
baz=56
AAM Ann Arbor 69.01 308 P P 06 39 26.2 -0.4
baz=55
CNNC Cliffs of the 69.26 299 P P 06 39 27.8 -0.5
baz=56
D28M Stokes Point 69.53 350 P P 06 39 30.3 +1.0
baz=23
P52A Corning 69.57 305 P P 06 39 29.0 -1.1
baz=55
INK Inuvik 69.65 347 P P 06 39 29.5 -0.5
baz=27
ACSO Alum Creek Sta 69.77 306 P P 06 39 30.8 -0.5
baz=55
C27K Jago River 69.88 352 P P 06 39 32.7 +1.2
baz=19,SNR=14
D27M Malcolm River 69.90 350 IAmb IAmb 06 39 33.1
comp=Z,7.4nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D27M | **Malcolm River** | 69.90 | 350 | P | P | 06 39 32.7 | +1.0 |
| | baz=21,SNR=9.4 | | | | | | |
| COWI | **Conover** | 70.02 | 314 | IAmb | IAmb | 06 39 33.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| YKA | **Yellowknife Ar** | 70.03 | 337 | P | P | 06 39 32.5 | 0.0 |
| | comp=Z,3.6nm,0.6s,baz=26,slow=7.6,SNR=22 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| EYMN | **Ely** | 70.20 | 316 | IAmb | IAmb | 06 39 34.3 | |
| | comp=Z,19nm,1.4s | | | | | | |
| EYMN | **Ely** | 70.20 | 316 | P | P | 06 39 33.6 | -0.2 |
| | baz=53,SNR=5.4 | | | | | | |
| E29M | **Blow River** | 70.27 | 349 | P | P | 06 39 34.6 | +0.8 |
| | baz=24,SNR=32 | | | | | | |
| C24K | **Franklin Bluff** | 70.30 | 353 | P | P | 06 39 34.9 | +1.0 |
| | baz=15 | | | | | | |
| E28M | **Babbage River** | 70.31 | 350 | P | P | 06 39 34.8 | +0.7 |
| | baz=22,SNR=7.0 | | | | | | |
| C23K | **Itkillik River** | 70.35 | 354 | IAmb | IAmb | 06 39 36.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| C23K | **Itkillik River** | 70.35 | 354 | P | P | 06 39 35.8 | +1.6 |
| | baz=14,SNR=8.5 | | | | | | |
| D25K | **Kavik River** | 70.46 | 352 | IAmb | IAmb | 06 39 36.6 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| D25K | **Kavik River** | 70.46 | 352 | P | P | 06 39 35.9 | +1.0 |
| | baz=17,SNR=6.5 | | | | | | |
| F31M | **Tsiigehtchic** | 70.46 | 347 | P | P | 06 39 35.3 | +0.4 |
| | baz=27,SNR=9.7 | | | | | | |
| B20K | **Meade River** | 70.60 | 356 | P | P | 06 39 36.9 | +1.2 |
| | baz=8.1 | | | | | | |
| F30M | **Barrier River** | 70.66 | 348 | P | P | 06 39 36.2 | +0.1 |
| | baz=25 | | | | | | |
| B21K | **Ikpikpuk River** | 70.84 | 355 | P | P | 06 39 38.7 | +1.5 |
| | baz=10 | | | | | | |
| D24K | **Happy Valley** | 70.86 | 353 | P | P | 06 39 38.3 | +1.0 |
| | baz=15 | | | | | | |
| BILL | **Bilibino** | 70.95 | 10 *i* | P | P | 06 39 41.3 | +3.5 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| E27K | **Coleen River** | 70.98 | 350 | P | P | 06 39 38.6 | +0.6 |
| | baz=21,SNR=5.8 | | | | | | |
| G31M | **Satah River** | 71.02 | 347 | P | P | 06 39 38.2 | 0.0 |
| | baz=26 | | | | | | |
| ULM | **Lac du Bonnet** | 71.04 | 320 | P | P | 06 39 37.9 | -0.8 |
| ULM | | | | IAmb | IAmb | 06 39 38.9 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| ULM | **Lac du Bonnet** | 71.04 | 320 | P | P | 06 39 38.1 | -0.6 |
| | comp=Z,7.5nm,0.6s,baz=59,slow=5.5,SNR=16 | | | | | | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| ULM | **Lac du Bonnet** | 71.04 | 320 | P | P | 06 39 37.9 | -0.8 |
| ULM | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| HHC | **Hu-ho-hao-te** | 71.05 | 52 *e* | P | P | 06 39 41.0 | +1.9 |
| HHC | | | | sP | sP | 06 42 14.3 | -1.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,3.5s | | | | | | |
| N47A | **Urbana** | 71.07 | 308 | P | P | 06 39 38.3 | -0.7 |
| N47A | | | | IAmb | IAmb | 06 39 38.8 | |
| | comp=Z,13nm,0.7s | | | | | | |
| D23K | **Nanushuk River** | 71.20 | 354 | P | P | 06 39 40.1 | +0.8 |
| | baz=13 | | | | | | |
| P49A | **Miami Univ. Ec** | 71.26 | 306 | P | P | 06 39 39.0 | -1.1 |
| | baz=54 | | | | | | |
| F28M | **Old Crow** | 71.28 | 349 | P | P | 06 39 40.3 | +0.5 |
| F28M | | | | IAmb | IAmb | 06 39 40.8 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| F28M | **Old Crow** | 71.28 | 349 | P | P | 06 39 40.3 | +0.5 |
| | baz=22 | | | | | | |
| G30M | **tAoh Zraii Nji** | 71.30 | 348 | IAmb | IAmb | 06 39 48.4 | |
| | comp=Z,14nm,1.4s | | | | | | |
| G30M | **tAoh Zraii Nji** | 71.30 | 348 | P | P | 06 39 40.2 | +0.3 |
| | baz=25 | | | | | | |
| C21K | **Knifeblade Rid** | 71.31 | 355 | P | P | 06 39 40.7 | +0.8 |
| | baz=10.0 | | | | | | |
| ZEA | **Zeya** | 71.33 | 35 *e* | P | P | 06 39 41.1 | +0.8 |
| B18K | **Kokolik River** | 71.42 | 358 | P | P | 06 39 41.9 | +1.4 |
| | baz=4.3 | | | | | | |
| TOLK | **Toolik Lake Re** | 71.42 | 353 | P | P | 06 39 42.0 | +1.3 |
| | baz=14,SNR=9.4 | | | | | | |
| D22K | **Ayikyak River** | 71.44 | 355 | P | P | 06 39 42.0 | +1.2 |
| | baz=12 | | | | | | |
| C19K | **Lookout Ridge** | 71.61 | 357 | P | P | 06 39 42.8 | +1.1 |
| | baz=6.1 | | | | | | |
| G29M | **Pine Creek** | 71.65 | 348 | P | P | 06 39 42.4 | +0.4 |
| | baz=23,SNR=9.0 | | | | | | |
| F26K | **Sheenjek River** | 71.77 | 351 | IAmb | IAmb | 06 39 44.8 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| F26K | **Sheenjek River** | 71.77 | 351 | P | P | 06 39 44.0 | +1.3 |
| | baz=18,SNR=7.5 | | | | | | |
| D20K | **Etivluk River** | 71.86 | 356 | P | P | 06 39 44.3 | +1.1 |
| | baz=8.5 | | | | | | |
| E24K | **Your Creek** | 71.87 | 353 | P | P | 06 39 44.0 | +0.7 |
| | baz=15 | | | | | | |
| WRGLY | **Wrigley** | 71.91 | 341 | P | P | 06 39 44.5 | +1.0 |
| | baz=34,SNR=5.9 | | | | | | |
| EPYK | **Eagle Plains** | 71.94 | 348 | IAmb | IAmb | 06 39 44.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| EPYK | **Eagle Plains** | 71.94 | 348 | P | P | 06 39 44.0 | +0.2 |
| | baz=24,SNR=7.1 | | | | | | |
| E21K | **Killik River** | 71.97 | 355 | P | P | 06 39 44.2 | +0.4 |
| | baz=11 | | | | | | |
| E23K | **Chandalar** | 72.00 | 353 | IAmb | IAmb | 06 39 45.6 | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| E23K | **Chandalar** | 72.00 | 353 | P | P | 06 39 44.8 | +0.8 |
| | baz=14 | | | | | | |
| F25K | **Christian Rive** | 72.04 | 352 | P | P | 06 39 45.7 | +1.4 |
| | baz=17,SNR=5.6 | | | | | | |
| E22K | **Anaktuvuk Pass** | 72.11 | 354 | IAmb | IAmb | 06 39 45.8 | |
| | comp=Z,5.7nm,0.5s | | | | | | |
| E22K | **Anaktuvuk Pass** | 72.11 | 354 | P | P | 06 39 45.5 | +0.8 |
| | baz=12 | | | | | | |
| C18K | **Utukok River** | 72.12 | 358 | P | P | 06 39 45.7 | +0.9 |
| | baz=4.8 | | | | | | |
| D19K | **Kuna River** | 72.15 | 357 | P | P | 06 39 45.9 | +1.0 |
| | baz=7.3 | | | | | | |
| AGMN | **Agassiz Nation** | 72.28 | 318 | P | P | 06 39 45.9 | 0.0 |
| | baz=50 | | | | | | |
| G27K | **Doyon Strip** | 72.28 | 350 | P | P | 06 39 46.9 | +1.2 |
| | baz=20,SNR=5.4 | | | | | | |
| E20K | **Nigu River** | 72.29 | 356 | P | P | 06 39 46.7 | +0.9 |
| | baz=8.8 | | | | | | |
| C17K | **DeLong Mountai** | 72.34 | 359 | P | P | 06 39 47.3 | +1.3 |
| | baz=3.2 | | | | | | |
| H29M | **Whitestone** | 72.35 | 348 | IAmb | IAmb | 06 39 47.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| H29M | **Whitestone** | 72.35 | 348 | P | P | 06 39 46.4 | +0.3 |
| | baz=23,SNR=14 | | | | | | |
| F24K | **Squaw Lake** | 72.35 | 352 | IAmb | IAmb | 06 39 48.3 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| F24K | **Squaw Lake** | 72.35 | 352 | P | P | 06 39 47.6 | +1.6 |
| | baz=16,SNR=8.8 | | | | | | |
| G26K | **Porcupine Rive** | 72.43 | 351 | P | P | 06 39 48.0 | +1.6 |
| | baz=19,SNR=12 | | | | | | |
| JFWS | **Jewell Farm** | 72.57 | 311 | P | P | 06 39 47.3 | -0.5 |
| | baz=52 | | | | | | |
| C16K | **Lisburne Hills** | 72.57 | 359 | P | P | 06 39 47.4 | +0.2 |
| | baz=1.4 | | | | | | |
| F22K | **John River** | 72.75 | 354 | P | P | 06 39 49.6 | +1.2 |
| | baz=12 | | | | | | |
| RDOG | **Red Dog Mine** | 72.76 | 358 | P | P | 06 39 48.9 | +0.6 |
| | baz=3.4 | | | | | | |
| PZH | **PanZhiHua** | 72.79 | 70 | P | P | 06 39 50.1 | +0.6 |
| H27K | **Steamboat Moun** | 72.81 | 349 | P | P | 06 39 50.1 | +1.3 |
| | baz=20,SNR=7.4 | | | | | | |
| COLD | **Coldfoot** | 72.86 | 353 | P | P | 06 39 49.9 | +0.9 |
| | baz=14,SNR=7.7 | | | | | | |
| G25K | **Bearman Lake** | 72.89 | 351 | P | P | 06 39 50.8 | +1.7 |
| | baz=17,SNR=5.4 | | | | | | |
| I30M | **Mount Dempster** | 72.93 | 347 | IAmb | IAmb | 06 39 50.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| I30M | **Mount Dempster** | 72.93 | 347 | P | P | 06 39 50.1 | +0.5 |
| | baz=24,SNR=18 | | | | | | |
| WCI | **Wyandotte Cave** | 73.02 | 306 | P | P | 06 39 50.3 | -0.1 |
| | baz=53 | | | | | | |
| G24K | **Hadweenzic Riv** | 73.10 | 352 | P | P | 06 39 51.4 | +1.0 |
| | baz=16 | | | | | | |
| D17K | **Noatak River** | 73.12 | 358 | P | P | 06 39 50.9 | +0.5 |
| | baz=3.2 | | | | | | |
| I29M | **Ogilvie Camp,** | 73.13 | 348 | IAmb | IAmb | 06 39 51.7 | |
| | comp=Z,15nm,0.9s | | | | | | |
| I29M | **Ogilvie Camp,** | 73.13 | 348 | P | P | 06 39 50.9 | +0.3 |
| | baz=23,SNR=15 | | | | | | |
| F21K | **Alatna River** | 73.14 | 355 | IAmb | IAmb | 06 39 52.6 | |
| | comp=Z,18nm,0.9s | | | | | | |
| F21K | **Alatna River** | 73.14 | 355 | P | P | 06 39 52.0 | +1.4 |
| | baz=11,SNR=16 | | | | | | |
| E19K | **Redstone River** | 73.14 | 356 | P | P | 06 39 51.7 | +1.1 |
| | baz=8.0,SNR=8.0 | | | | | | |
| G22K | **Bettles** | 73.28 | 354 | P | P | 06 39 52.2 | +0.9 |
| | baz=12 | | | | | | |
| I28M | **Miner Creek** | 73.31 | 349 | P | P | 06 39 52.4 | +0.7 |
| | baz=22,SNR=7.4 | | | | | | |
| E18K | **Tukpahlearik C** | 73.33 | 357 | P | P | 06 39 52.9 | +1.2 |
| | baz=5.2 | | | | | | |
| H25L | **Birch Creek** | 73.33 | 351 | P | P | 06 39 53.1 | +1.5 |
| | baz=17 | | | | | | |
| G23K | **Bananza Creek** | 73.35 | 353 | P | P | 06 39 53.0 | +1.2 |
| | baz=14,SNR=9.3 | | | | | | |
| I27K | **Kandik River** | 73.41 | 349 | P | P | 06 39 53.2 | +0.9 |
| | baz=20,SNR=5.7 | | | | | | |
| HDIL | **Hopedale** | 73.45 | 309 | P | P | 06 39 52.5 | -0.3 |
| | baz=52 | | | | | | |
| F20K | **Avaraart Lake** | 73.46 | 355 | P | P | 06 39 53.2 | +0.8 |
| | baz=9.2 | | | | | | |
| J30M | **Hart River** | 73.52 | 347 | IAmb | IAmb | 06 39 54.7 | |
| | comp=Z,8.7nm,0.9s | | | | | | |
| J30M | **Hart River** | 73.52 | 347 | P | P | 06 39 53.8 | +0.8 |
| | baz=24,SNR=7.1 | | | | | | |
| E17K | **Hotham Inlet** | 73.70 | 358 | P | P | 06 39 54.1 | +0.3 |
| | baz=4.2 | | | | | | |
| F19K | **Shaleruckik Mo** | 73.79 | 356 | P | P | 06 39 54.8 | +0.5 |
| | baz=7.5,SNR=5.6 | | | | | | |
| G21K | **Allakaket** | 73.83 | 354 | P | P | 06 39 54.9 | +0.3 |
| | baz=11 | | | | | | |
| I26K | **Coal Creek Min** | 73.91 | 350 | P | P | 06 39 56.0 | +1.0 |
| | baz=19,SNR=5.4 | | | | | | |
| J29N | **Klondike Camp** | 73.96 | 347 | P | P | 06 39 56.1 | +0.8 |
| | baz=23 | | | | | | |
| H24K | **Noodor Dome** | 73.98 | 352 | P | P | 06 39 56.0 | +0.6 |
| | baz=15,SNR=5.2 | | | | | | |
| PRP | **Porcupine Dome** | 74.02 | 351 | P | P | 06 39 56.5 | +0.7 |
| | baz=17 | | | | | | |
| F18K | **Selawik** | 74.11 | 357 | P | P | 06 39 55.9 | -0.2 |
| | baz=6.0 | | | | | | |
| EGAK | **Eagle** | 74.12 | 349 | P | P | 06 39 56.4 | +0.2 |
| | baz=21 | | | | | | |
| H23K | **Yukon River** | 74.17 | 353 | IAmb | IAmb | 06 39 58.5 | |
| | comp=Z,24nm,1.4s | | | | | | |
| H23K | **Yukon River** | 74.17 | 353 | P | P | 06 39 57.7 | +1.2 |
| | baz=14,SNR=13 | | | | | | |
| H22K | **Ishtalitna Cre** | 74.27 | 353 | P | P | 06 39 58.1 | +1.1 |
| | baz=13 | | | | | | |
| K29M | **Barlow Dome** | 74.40 | 347 | P | P | 06 39 58.8 | +0.9 |
| | baz=23,SNR=5.1 | | | | | | |
| G19K | **Purcell Mounta** | 74.44 | 356 | P | P | 06 39 59.1 | +1.1 |
| | baz=8.0 | | | | | | |
| DAWY | **Dawson** | 74.51 | 348 | IAmb | IAmb | 06 40 00.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| DAWY | **Dawson** | 74.51 | 348 | P | P | 06 39 59.1 | +0.7 |
| | baz=22,SNR=14 | | | | | | |
| TGTN | **Hyland Airport** | 74.55 | 342 | P | P | 06 40 00.2 | +1.4 |
| | baz=30 | | | | | | |
| H21K | **Melozitna Rive** | 74.63 | 354 | IAmb | IAmb | 06 40 02.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| H21K | **Melozitna Rive** | 74.63 | 354 | P | P | 06 40 00.7 | +1.6 |
| | baz=11,SNR=10.0 | | | | | | |
| POKR | **Poker Plat Res** | 74.63 | 352 | P | P | 06 39 59.6 | +0.5 |
| | baz=16 | | | | | | |
| KOTAN | **Kotaneelee Air** | 74.66 | 339 | P | P | 06 40 00.4 | +1.0 |
| | baz=33 | | | | | | |
| J26L | **Joseph Creek** | 74.73 | 350 | P | P | 06 40 00.5 | +0.7 |
| | baz=19,SNR=12 | | | | | | |
| G18K | **Tagagawik** | 74.77 | 356 | P | P | 06 40 00.8 | +1.0 |
| | baz=6.8 | | | | | | |
| I23K | **Minto, Yukon-K** | 74.81 | 352 | P | P | 06 40 00.8 | +0.8 |
| | baz=14,SNR=5.1 | | | | | | |
| J25K | **Salcha River,** | 74.86 | 351 | P | P | 06 40 01.1 | +0.7 |
| | baz=17 | | | | | | |
| ILAR | **Eielson Array** | 74.90 | 351 | P | P | 06 40 00.9 | +0.3 |
| | comp=Z,2.1nm,0.9s,baz=344,slow=4.4,SNR=26 | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| H20K | **Anotleneega Mo** | 74.95 | 355 | P | P | 06 40 02.0 | +1.2 |
| | baz=9.8,SNR=5.2 | | | | | | |
| K27K | **Chicken** | 74.97 | 349 | P | P | 06 40 02.2 | +1.2 |
| | baz=20 | | | | | | |
| H19K | **Roundabout Mou** | 75.02 | 355 | IAmb | IAmb | 06 40 02.7 | |
| | comp=Z,7.7nm,0.7s | | | | | | |
| H19K | **Roundabout Mou** | 75.02 | 355 | P | P | 06 40 02.5 | +1.3 |
| | baz=8.5,SNR=5.4 | | | | | | |
| I21K | **Tanana** | 75.03 | 353 | IAmb | IAmb | 06 40 02.9 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| I21K | **Tanana** | 75.03 | 353 | P | P | 06 40 02.5 | +1.2 |
| | baz=12 | | | | | | |
| MLY | **Manley** | 75.06 | 353 | P | P | 06 40 02.5 | +0.9 |
| | baz=13,SNR=5.7 | | | | | | |
| FARO | **Faro, Yukon** | 75.07 | 344 | P | P | 06 40 03.0 | +1.4 |
| | baz=26,SNR=7.8 | | | | | | |
| F15K | **North Star Dit** | 75.14 | 359 | P | P | 06 40 02.1 | +0.2 |
| | baz=2.0 | | | | | | |
| L29M | **L29M** | 75.19 | 347 | P | P | 06 40 02.5 | +0.2 |
| | baz=23 | | | | | | |
| G17K | **Kiwalik Mounta** | 75.25 | 357 | P | P | 06 40 02.6 | +0.1 |
| | baz=5.2 | | | | | | |
| HDA | **Harding Lake** | 75.26 | 351 | IAmb | IAmb | 06 40 03.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| HDA | **Harding Lake** | 75.26 | 351 | P | P | 06 40 02.8 | +0.2 |
| | baz=16,SNR=11 | | | | | | |
| SCRK | **Sand Creek** | 75.29 | 350 | P | P | 06 40 04.0 | +1.1 |
| SCRK | | | | IAmb | IAmb | 06 40 04.3 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| SCRK | **Sand Creek** | 75.29 | 350 | P | P | 06 40 04.0 | +1.1 |
| | baz=18,SNR=7.3 | | | | | | |
| M31M | **Drury Creek, Y** | 75.31 | 345 | P | P | 06 40 04.6 | +1.6 |
| | baz=26,SNR=7.0 | | | | | | |
| NEA2 | **Nenana** | 75.32 | 352 | P | P | 06 40 03.4 | +0.5 |
| | baz=14 | | | | | | |
| MA2 | **Magadan** | 75.34 | 21 | P | P | 06 40 03.2 | +0.1 |
| | comp=Z,8.0nm,0.7s,baz=323,slow=13,SNR=4.5 | | | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| F14K | **Arctic Creek** | 75.39 | 360 | P | P | 06 40 04.4 | +1.1 |
| | baz=0.6 | | | | | | |
| G16K | **Koyuk River** | 75.41 | 358 | P | P | 06 40 03.9 | +0.4 |
| | baz=3.8 | | | | | | |
| CMAR | **Chiang Mai Arr** | 75.48 | 78 | P | P | 06 40 05.7 | +1.0 |
| | comp=Z,0.8nm,0.3s,baz=278,slow=8.1,SNR=1.7 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| H18K | **Honhosa River** | 75.50 | 356 | P | P | 06 40 04.4 | +0.5 |
| | baz=7.0 | | | | | | |
| I20K | **Naaghedeneel** | 75.61 | 354 | P | P | 06 40 05.4 | +0.9 |
| | baz=10.0 | | | | | | |
| RIDG | **Independent Ri** | 75.63 | 350 | P | P | 06 40 05.8 | +1.0 |
| | baz=18,SNR=7.1 | | | | | | |
| ECSD | **EROS Data Cent** | 75.64 | 315 | IAmb | IAmb | 06 40 05.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| ECSD | **EROS Data Cent** | 75.64 | 315 | P | P | 06 40 05.1 | -0.1 |
| | baz=49 | | | | | | |
| H17K | **Granite Mounta** | 75.78 | 357 | P | P | 06 40 06.3 | +0.7 |
| | baz=5.7 | | | | | | |
| GCSA | **Galena City Sc** | 75.82 | 356 | P | P | 06 40 06.1 | +0.5 |
| | baz=8.1 | | | | | | |
| LIRD | **Liard River Hi** | 75.82 | 340 | P | P | 06 40 06.5 | +0.7 |
| | baz=32 | | | | | | |
| BCAR | **Beaver Creek A** | 75.83 | 348 | P | P | 06 40 07.4 | +1.5 |
| L27K | **Beaver Creek,** | 75.84 | 348 | P | P | 06 40 07.2 | +1.3 |
| | baz=20,SNR=8.4 | | | | | | |
| G15K | **Niukluk** | 75.85 | 359 | P | P | 06 40 06.5 | +0.7 |
| | baz=2.4 | | | | | | |
| M29M | **Somme Creek** | 75.86 | 347 | IAmb | IAmb | 06 40 08.3 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| M29M | **Somme Creek** | 75.86 | 347 | P | P | 06 40 07.5 | +1.3 |
| | baz=22,SNR=14 | | | | | | |
| WTLY | **Watson Lake, Y** | 75.91 | 341 | IAmb | IAmb | 06 40 09.1 | |
| | comp=Z,16nm,1.4s | | | | | | |
| WTLY | **Watson Lake, Y** | 75.91 | 341 | P | P | 06 40 07.3 | +1.0 |
| | baz=30 | | | | | | |
| N32M | **Quiet Lake** | 75.98 | 344 | P | P | 06 40 08.0 | +1.2 |
| | baz=26,SNR=13 | | | | | | |
| BPAW | **Bear Paw Mtn.** | 75.99 | 353 | P | P | 06 40 06.9 | +0.1 |
| | baz=13 | | | | | | |
| TOAD | **Toad River Com** | 76.06 | 339 | P | P | 06 40 08.1 | +0.8 |
| | baz=32,SNR=7.4 | | | | | | |
| L26K | **Log Cabin Wild** | 76.10 | 349 | P | P | 06 40 08.3 | +0.9 |
| | baz=19,SNR=5.5 | | | | | | |
| PLAL | **Pickwick Lake** | 76.14 | 304 | IAmb | IAmb | 06 40 07.8 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| MCK | **McKinley** | 76.14 | 352 | P | P | 06 40 08.2 | +0.7 |
| | baz=14 | | | | | | |
| H16K | **Elim** | 76.17 | 358 | P | P | 06 40 08.4 | +0.8 |
| | baz=3.9 | | | | | | |
| J20K | **Nowinta River** | 76.19 | 354 | P | P | 06 40 08.9 | +1.1 |
| | baz=10 | | | | | | |
| CCM | **Cathedral Cave** | 76.20 | 308 | P | P | 06 40 07.8 | -0.5 |
| CCM | **Cathedral Cave** | 76.20 | 308 | P | P | 06 40 07.9 | -0.5 |
| | baz=50 | | | | | | |
| CCM | **Cathedral Cave** | 76.20 | 308 | P | P | 06 40 07.8 | -0.5 |
| CCM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| N31M | **Braeburn, Yuko** | 76.24 | 345 | P | P | 06 40 07.8 | -0.4 |
| | baz=24 | | | | | | |
| PAX | **Paxson** | 76.45 | 350 | P | P | 06 40 09.6 | +0.3 |
| | baz=17 | | | | | | |
| J19K | **Poorman** | 76.48 | 355 | P | P | 06 40 10.6 | +1.2 |
| | baz=9.1 | | | | | | |
| M27K | **Edge Creek, AK** | 76.51 | 348 | P | P | 06 40 10.8 | +1.0 |
| | baz=20 | | | | | | |
| N30M | **Aishikik Lake** | 76.52 | 346 | IAmb | IAmb | 06 40 11.7 | |
| | comp=Z,16nm,1.4s | | | | | | |
| N30M | **Aishikik Lake** | 76.52 | 346 | P | P | 06 40 10.6 | +0.9 |
| | baz=23,SNR=6.2 | | | | | | |
| P38A | **Dawn** | 76.56 | 310 | IAmb | IAmb | 06 40 10.7 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| DHY | **Denali Highway** | 76.60 | 351 | P | P | 06 40 10.9 | +0.7 |
| | baz=16,SNR=15 | | | | | | |
| M26K | **Nabesna, AK** | 76.64 | 349 | P | P | 06 40 11.4 | +1.0 |
| | baz=19,SNR=6.1 | | | | | | |
| LRAL | **Lakeview Retre** | 76.65 | 302 | P | P | 06 40 10.6 | -0.3 |
| | baz=52 | | | | | | |
| P33M | **Teslin, Yukon** | 76.77 | 343 | P | P | 06 40 12.1 | +0.9 |
| | baz=27,SNR=10 | | | | | | |
| WHY | **Whitehorse** | 76.81 | 344 | P | P | 06 40 11.7 | +0.3 |
| | baz=25 | | | | | | |
| YUK3 | **Moose Creek** | 76.83 | 347 | P | P | 06 40 12.5 | +0.9 |
| | baz=21 | | | | | | |
| YUK4 | **Talbot Arm** | 76.91 | 346 | P | P | 06 40 12.4 | +0.3 |
| | baz=22 | | | | | | |
| O30N | **Mendenhall** | 76.95 | 345 | P | P | 06 40 12.7 | +0.6 |
| | baz=24 | | | | | | |
| K20K | **Telida** | 77.00 | 354 | P | P | 06 40 12.6 | +0.4 |
| | baz=10 | | | | | | |
| R33M | **Jennings River** | 77.07 | 342 | P | P | 06 40 14.6 | +1.8 |
| | baz=28,SNR=12 | | | | | | |
| J18K | **Innoko River** | 77.08 | 355 | P | P | 06 40 13.8 | +1.0 |
| | baz=8.2 | | | | | | |
| WAT6 | **Susitna Watana** | 77.12 | 351 | P | P | 06 40 13.5 | +0.4 |
| | baz=15 | | | | | | |
| YUK8 | **Steele Glacier** | 77.17 | 347 | P | P | 06 40 13.5 | -0.1 |
| | baz=21 | | | | | | |
| YUK6 | **Outpost Mounta** | 77.23 | 346 | P | P | 06 40 14.3 | +0.4 |
| | baz=22 | | | | | | |
| J17K | **VABM Dome** | 77.28 | 356 | P | P | 06 40 14.3 | +0.5 |
| | baz=6.3 | | | | | | |
| OXF | **Oxford** | 77.29 | 304 | IAmb | IAmb | 06 40 14.3 | |
| | comp=Z,26nm,1.3s | | | | | | |
| OXF | **Oxford** | 77.29 | 304 | P | P | 06 40 13.5 | -0.9 |
| | baz=51 | | | | | | |
| M24K | **Tolsona, Glenn** | 77.38 | 350 | P | P | 06 40 15.3 | +0.8 |
| | baz=16 | | | | | | |
| J16K | **Anvik River** | 77.46 | 357 | P | P | 06 40 14.1 | -0.6 |
| | baz=5.1 | | | | | | |
| P32M | **Atlin** | 77.53 | 343 | P | P | 06 40 15.4 | +0.2 |
| | baz=26 | | | | | | |
| MCARA | **McCarthy VSAT** | 77.62 | 348 | P | P | 06 40 16.1 | +0.5 |
| | baz=19 | | | | | | |
| N25K | **Chitina, Valde** | 77.64 | 349 | P | P | 06 40 16.2 | +0.4 |
| | baz=18 | | | | | | |
| DLBC | **Dease Lake** | 77.69 | 341 | P | P | 06 40 17.2 | +1.0 |
| | baz=28 | | | | | | |
| P30M | **Million Dollar** | 77.72 | 345 | P | P | 06 40 17.6 | +1.3 |
| | baz=23 | | | | | | |
| O28M | **Mount Upton** | 77.72 | 347 | P | P | 06 40 16.7 | +0.1 |
| | baz=21 | | | | | | |
| CTG | **Chitna Glacier** | 77.74 | 348 | P | P | 06 40 17.5 | +1.0 |
| | baz=20 | | | | | | |
| Q32M | **Nakina River** | 77.77 | 342 | P | P | 06 40 18.0 | +1.2 |
| | baz=27 | | | | | | |
| SCM | **Sheep Creek Mo** | 77.79 | 351 | P | P | 06 40 17.4 | +0.7 |
| | baz=18 | | | | | | |
| LOGN | **Logan Glacier** | 77.82 | 347 | IAmb | IAmb | 06 40 18.8 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| L20K | **Farewell, AK** | 77.85 | 354 | P | P | 06 40 17.7 | +0.8 |
| | baz=10 | | | | | | |
| O29M | **Mount Kennedy** | 77.87 | 346 | P | P | 06 40 17.7 | +0.5 |
| | baz=22 | | | | | | |
| M23K | **Glacier View** | 77.88 | 351 | P | P | 06 40 17.4 | +0.3 |
| | baz=15 | | | | | | |
| KLU | **Klutina** | 77.94 | 350 | P | P | 06 40 17.8 | +0.4 |
| | baz=17 | | | | | | |
| SML | **Sawmill** | 77.94 | 351 | P | P | 06 40 17.5 | +0.1 |
| | baz=15 | | | | | | |
| SKAG | **Skagway** | 78.00 | 344 | P | P | 06 40 18.4 | +0.7 |
| | baz=25 | | | | | | |
| GRNC | **Granite Creek** | 78.03 | 348 | IAmb | IAmb | 06 40 20.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| J14K | **Nanvaranak Lak** | 78.09 | 358 | P | P | 06 40 18.3 | +0.2 |
| | baz=2.8 | | | | | | |
| SKT | **Skwentna** | 78.12 | 353 | P | P | 06 40 17.9 | -0.5 |
| | baz=12 | | | | | | |
| M22K | **Willow** | 78.20 | 352 | P | P | 06 40 19.1 | +0.4 |
| | baz=13 | | | | | | |
| TABL | **Table Mountain** | 78.20 | 347 | IAmb | IAmb | 06 40 21.0 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| PLBC | **Pleasant Camp** | 78.22 | 345 | P | P | 06 40 19.7 | +0.8 |
| | baz=24 | | | | | | |
| L19K | **White Mountain** | 78.22 | 354 | P | P | 06 40 19.4 | +0.4 |
| | baz=9.6 | | | | | | |
| CRQE | **Cirque** | 78.23 | 348 | P | P | 06 40 20.3 | +1.2 |
| | baz=19 | | | | | | |
| PMR | **Palmer** | 78.25 | 351 | P | P | 06 40 20.1 | +1.1 |
| | baz=14 | | | | | | |
| BMRM | **Bremner River** | 78.25 | 349 | P | P | 06 40 19.5 | +0.4 |
| | baz=18 | | | | | | |
| L18K | **Granite Mounta** | 78.32 | 355 | P | P | 06 40 20.8 | +1.4 |
| | baz=8.2 | | | | | | |
| P29M | **Windy Craggy** | 78.33 | 345 | P | P | 06 40 20.7 | +1.1 |
| | baz=23,SNR=8.7 | | | | | | |
| PINM | **Pinnacle** | 78.37 | 347 | P | P | 06 40 21.3 | +1.5 |
| | baz=21,SNR=5.6 | | | | | | |
| M20K | **Styx River** | 78.37 | 353 | P | P | 06 40 20.0 | +0.1 |
| | baz=11 | | | | | | |
| S34M | **Telegraph Cree** | 78.42 | 341 | P | P | 06 40 21.2 | +1.1 |
| | baz=28,SNR=5.2 | | | | | | |
| M19K | **Big River Lodg** | 78.46 | 354 | P | P | 06 40 20.9 | +0.7 |
| | baz=10.0 | | | | | | |
| K15K | **Wolf Creek Mou** | 78.49 | 357 | P | P | 06 40 21.0 | +0.7 |
| | baz=4.4 | | | | | | |
| L17K | **Donlin** | 78.50 | 356 | P | P | 06 40 21.2 | +0.8 |
| | baz=6.9 | | | | | | |
| LAO | **LASA Array** | 78.50 | 322 | P | P | 06 40 21.1 | +0.3 |
| | baz=44 | | | | | | |
| MESA | **MESA** | 78.58 | 348 | P | P | 06 40 21.6 | +0.4 |
| | baz=20 | | | | | | |
| WHAR | **Wooly Hollow** | 78.61 | 306 | IAmb | IAmb | 06 40 21.9 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| PNL | **Peninsula** | 78.61 | 346 | P | P | 06 40 21.7 | +0.7 |
| | baz=22,SNR=6.2 | | | | | | |
| GLI | **Glacier Island** | 78.68 | 350 | P | P | 06 40 21.7 | +0.3 |
| | baz=16 | | | | | | |
| KSU1 | **Kansas State U** | 78.71 | 312 | IAmb | IAmb | 06 40 22.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| KSU1 | **Kansas State U** | 78.71 | 312 | P | P | 06 40 21.8 | -0.1 |
| | baz=48 | | | | | | |
| RC01 | **Rabbit Creek A** | 78.81 | 352 | P | P | 06 40 22.6 | +0.6 |
| | baz=14 | | | | | | |
| EYAK | **Cordova Ski Ar** | 78.82 | 349 | P | P | 06 40 22.7 | +0.6 |
| | baz=17 | | | | | | |
| BGLC | **Bering Glacier** | 78.86 | 348 | P | P | 06 40 22.9 | +0.6 |
| | baz=18 | | | | | | |
| PWL | **Port Wells** | 78.86 | 351 | P | P | 06 40 22.7 | +0.3 |
| | baz=15 | | | | | | |
| R32K | **Eaglecrest** | 78.90 | 343 | P | P | 06 40 23.7 | +1.1 |
| | baz=25 | | | | | | |
| M18K | **Stony River** | 78.98 | 355 | P | P | 06 40 24.0 | +1.0 |
| | baz=8.8 | | | | | | |
| T35M | **Bob Quinn** | 79.03 | 340 | P | P | 06 40 24.4 | +1.1 |
| | baz=28 | | | | | | |
| L15K | **Ungalak Mounta** | 79.11 | 357 | P

| | | | | | | |
|---|---|---|---|---|---|---|
| S31K | Pelican | 79.56 344 | P | P | 06 40 27.3 | +1.3 |
| | baz=24,SNR=5.1 | | | | | |
| S32K | Killisnoo | 79.64 343 | P | P | 06 40 27.3 | +0.8 |
| | baz=25 | | | | | |
| M16K | Timber Creek | 79.65 356 | P | P | 06 40 27.4 | +0.9 |
| | baz=6.4 | | | | | |
| SEW | Seward | 79.73 351 | P | P | 06 40 27.0 | 0.0 |
| | baz=14 | | | | | |
| N18K | Kilae Creek | 79.79 354 | P | P | 06 40 27.3 | 0.0 |
| | baz=8.8 | | | | | |
| MIAR | Mount Ida | 79.90 307 | P | P | 06 40 28.8 | +0.5 |
| | baz=49 | | | | | |
| N17K | Nushagak Hills | 80.03 355 | P | P | 06 40 28.8 | +0.2 |
| | baz=7.8 | | | | | |
| M14K | Bethel | 80.05 357 | P | P | 06 40 29.3 | +0.7 |
| | baz=4.0 | | | | | |
| M15K | Kasigluk River | 80.06 357 | P | P | 06 40 29.2 | +0.6 |
| | baz=5.0 | | | | | |
| WRAK | Wrangell Islan | 80.06 341 | P | P | 06 40 29.5 | +0.8 |
| | baz=27 | | | | | |
| O20K | Slope Mountain | 80.10 353 | P | P | 06 40 29.5 | +0.5 |
| | baz=11 | | | | | |
| N16K | Nishlik Lake | 80.18 356 | P | P | 06 40 30.5 | +1.1 |
| | baz=6.5 | | | | | |
| SIT | Sitka | 80.19 343 | P | P | 06 40 30.4 | +1.0 |
| | baz=24 | | | | | |
| M13K | Dall Lake | 80.43 358 | P | P | 06 40 31.4 | +0.9 |
| | baz=2.9 | | | | | |
| U33K | Whale Pass | 80.53 342 | P | P | 06 40 32.4 | +1.3 |
| | baz=26 | | | | | |
| KAN09 | Caldwell North | 80.62 311 | IAmb | IAmb | 06 40 33.2 | |
| | comp=Z,19nm,0.9s | | | | | |
| CBKS | Cedar Bluff | 80.69 313 | P | P | 06 40 32.8 | +0.4 |
| | baz=46 | | | | | |
| QUOK | Quay | 80.73 309 | IAmb | IAmb | 06 40 33.7 | |
| | comp=Z,16nm,1.2s | | | | | |
| OK052 | Battle Ridge R | 80.90 309 | IAmb | IAmb | 06 40 34.2 | |
| | comp=Z,10nm,0.6s | | | | | |
| OK031 | S. Brethren Rd | 80.95 309 | IAmb | IAmb | 06 40 34.9 | |
| | comp=Z,13nm,1.0s | | | | | |
| P18K | Big Mountain, | 81.01 354 | P | P | 06 40 34.3 | +0.6 |
| | baz=9.3 | | | | | |
| RLMT | Red Lodge | 81.09 323 | P | P | 06 40 35.5 | +0.8 |
| | baz=41 | | | | | |
| CRAG | Craig | 81.11 341 | P | P | 06 40 35.1 | +0.9 |
| | baz=26 | | | | | |
| P17K | Kvichak River | 81.30 355 | P | P | 06 40 36.4 | +1.3 |
| | baz=8.3 | | | | | |
| P16K | Nushagak River | 81.57 355 | P | P | 06 40 36.9 | +0.4 |
| | baz=7.1 | | | | | |
| Q18K | Katmai Hardscr | 81.73 354 | P | P | 06 40 37.2 | -0.3 |
| | baz=9.4 | | | | | |
| BOZ | Bozeman (W) | 81.82 324 | IAmb | IAmb | 06 40 40.0 | |
| | comp=Z,7.5nm,0.9s | | | | | |
| BOZ | Bozeman (W) | 81.82 324 | P | P | 06 40 39.2 | +0.9 |
| | baz=40 | | | | | |
| MSO | Missoula | 81.89 326 | P | P | 06 40 38.6 | 0.0 |
| | baz=39 | | | | | |
| PHWY | Pilot Hill | 82.03 318 | IAmb | IAmb | 06 40 41.3 | |
| | comp=Z,14nm,0.8s | | | | | |
| LKWY | Lake | 82.05 323 | IAmb | IAmb | 06 40 43.1 | |
| | comp=Z,10nm,0.8s | | | | | |
| NEW | Newport | 82.07 329 | P | P | 06 40 39.9 | +0.5 |
| | baz=37 | | | | | |
| H17A | Grant Village | 82.26 323 | IAmb | IAmb | 06 40 44.8 | |
| | comp=Z,8.3nm,0.9s | | | | | |
| H17A | Grant Village | 82.26 323 | P | P | 06 40 42.8 | +2.1 |
| | baz=40 | | | | | |
| YFT | Old Faithful | 82.33 323 | IAmb | IAmb | 06 40 45.5 | |
| | comp=Z,6.8nm,0.9s | | | | | |
| DLMT | Dillon | 82.44 325 | IAmb | IAmb | 06 40 43.2 | |
| | comp=Z,8.1nm,1.0s | | | | | |
| YPP | Pitchstone Pla | 82.46 323 | IAmb | IAmb | 06 40 45.0 | |
| | comp=Z,8.1nm,1.0s | | | | | |
| N23A | Red Feather La | 82.58 318 | P | P | 06 40 43.1 | +0.7 |
| | baz=43 | | | | | |
| RWWY | Rawlins | 82.64 319 | IAmb | IAmb | 06 40 44.0 | |
| | comp=Z,6.4nm,0.8s | | | | | |
| KSRS | Korea Array | 82.91 47 | P | P | 06 40 43.9 | +0.1 |
| | comp=Z,0.7nm,0.7s,baz=325,slow=5.9,SNR=4.2 | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | |
| WMOK | Wichita Mounta | 82.94 310 | P | P | 06 40 44.3 | +0.3 |
| | baz=46 | | | | | |
| BW06 | Boulder Array | 83.00 321 | P | P | 06 40 44.6 | +0.2 |
| | baz=41 | | | | | |
| PD31 | Pinedale Array | 83.00 321 | IAmb | IAmb | 06 40 45.1 | |
| | comp=Z,8.5nm,1.1s | | | | | |
| PDAR | Pinedale Array | 83.00 321 | P | P | 06 40 44.2 | -0.3 |
| PDAR | Pinedale Array | 83.00 321 | P | P | 06 40 43.9 | -0.6 |
| | comp=Z,3.7nm,0.8s,baz=59,slow=5.5,SNR=29 | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | |
| SII | Sitkinak Islan | 83.72 353 | P | P | 06 40 46.4 | -1.1 |
| | baz=10.0 | | | | | |
| PLPT | Palo Pinto | 83.98 308 | IAmb | IAmb | 06 40 50.3 | |
| | comp=Z,15nm,1.2s | | | | | |
| RTBA | Rita Blanca | 84.05 313 | IAmb | IAmb | 06 40 50.8 | |
| | comp=Z,8.7nm,1.1s | | | | | |
| PGC | Sidney | 84.15 333 | IAmb | IAmb | 06 40 51.0 | |
| | comp=Z,10nm,0.7s | | | | | |
| P08K | Saint George I | 84.28 1 | P | P | 06 40 49.0 | -1.1 |
| | baz=358 | | | | | |
| CHGN | Chignik | 84.32 355 | P | P | 06 40 49.5 | -0.8 |
| | baz=6.7 | | | | | |
| S14K | Fog Glacier | 84.40 356 | P | P | 06 40 49.9 | -1.1 |
| | baz=5.8 | | | | | |
| T25A | Trinidad | 84.48 315 | P | P | 06 40 51.8 | -0.1 |
| | baz=44 | | | | | |
| E07A | Sunnyside | 84.54 329 | IAmb | IAmb | 06 40 53.3 | |
| | comp=Z,6.8nm,0.8s | | | | | |
| AMTX | Amarillo | 84.55 311 | P | P | 06 40 52.5 | +0.4 |
| | baz=45 | | | | | |
| SDCO | Great Sand Dun | 84.64 316 | P | P | 06 40 53.2 | +0.5 |
| | baz=43 | | | | | |
| HLID | Hailey | 84.66 325 | P | P | 06 40 53.2 | +0.6 |
| | baz=38 | | | | | |
| RDMU | Red Mountain | 84.66 320 | IAmb | IAmb | 06 40 53.5 | |
| | comp=Z,6.1nm,0.7s | | | | | |
| APMT | Aspermont | 84.72 309 | IAmb | IAmb | 06 40 53.8 | |
| | comp=Z,6.4nm,0.7s | | | | | |
| GNW | Green Mountain | 84.83 332 | IAmb | IAmb | 06 40 56.3 | |
| | comp=Z,6.5nm,0.5s | | | | | |
| S22A | 4UR Ranch, Cre | 85.36 316 | P | P | 06 40 56.6 | +0.3 |
| | baz=42 | | | | | |
| JLU | Jordanelle | 85.57 321 | IAmb | IAmb | 06 40 57.9 | |
| | comp=Z,3.7nm,0.7s | | | | | |
| P18A | Preston Nutter | 85.72 320 | IAmb | IAmb | 06 40 58.5 | |
| | comp=Z,5.2nm,1.0s | | | | | |
| SRU | San Rafael Swe | 86.25 319 | IAmb | IAmb | 06 41 00.7 | |
| | comp=Z,7.5nm,0.7s | | | | | |
| TMUT | Trail Mountain | 86.45 320 | IAmb | IAmb | 06 41 03.3 | |
| | comp=Z,3.8nm,0.7s | | | | | |
| JCT | Junction City | 86.51 307 | P | P | 06 41 02.3 | +0.7 |
| | baz=46 | | | | | |
| DUG | Dugway, Tooele | 86.54 321 | IAmb | IAmb | 06 41 02.6 | |
| | comp=Z,5.4nm,0.8s | | | | | |
| DUG | Dugway, Tooele | 86.54 321 | P | P | 06 41 02.2 | +0.5 |
| | baz=39 | | | | | |
| MVCO | Mesa Verde | 86.64 317 | P | P | 06 41 02.9 | +0.5 |
| | baz=41 | | | | | |
| ANMO | Albuquerque | 87.22 314 | P | P | 06 41 05.6 | +0.6 |
| | baz=42 | | | | | |
| HMU | Henry Mountain | 87.25 319 | IAmb | IAmb | 06 41 05.6 | |
| | comp=Z,8.1nm,0.8s | | | | | |
| TCRU | Three Creeks R | 87.59 320 | IAmb | IAmb | 06 41 08.1 | |
| | comp=Z,8.4nm,0.7s | | | | | |
| DRIO | Del Rio | 87.75 307 | P | P | 06 41 07.8 | +0.4 |
| DRIO | | | IAmb | IAmb | 06 41 08.2 | |
| | comp=Z,7.6nm,0.8s | | | | | |
| I04A | Tendick Farm, | 87.84 329 | P | P | 06 41 07.6 | 0.0 |
| I04A | | | IAmb | IAmb | 06 41 08.5 | |
| | comp=Z,14nm,1.3s | | | | | |
| MTPU | Mount Pierson | 87.90 320 | IAmb | IAmb | 06 41 09.9 | |
| | comp=Z,6.4nm,0.8s | | | | | |
| PECS | Pecos | 88.33 310 | IAmb | IAmb | 06 41 12.7 | |
| | comp=Z,8.9nm,1.3s | | | | | |
| PSUT | Pine Spring | 88.34 321 | IAmb | IAmb | 06 41 11.8 | |
| | comp=Z,7.5nm,0.8s | | | | | |
| Q12A | Willow Creek R | 88.41 322 | IAmb | IAmb | 06 41 12.1 | |
| | comp=Z,6.7nm,0.8s | | | | | |
| MNTX | Cornudas Mount | 88.98 311 | P | P | 06 41 13.4 | +0.3 |
| | baz=43 | | | | | |
| U15A | North Rim | 89.20 319 | IAmb | IAmb | 06 41 15.1 | |
| | comp=Z,3.4nm,0.7s | | | | | |
| R11B | Troy Canyon, C | 89.32 322 | P | P | 06 41 15.3 | +0.5 |
| | baz=37 | | | | | |
| WUAZ | Wupatki | 89.43 318 | P | P | 06 41 16.1 | +0.8 |
| | baz=40 | | | | | |
| TX31 | Lajitas Ar. Si | 89.68 309 | IAmb | IAmb | 06 41 18.0 | |
| | comp=Z,6.4nm,1.4s | | | | | |
| TXAR | Lajitas Array | 89.68 309 | P | P | 06 41 16.9 | +0.4 |
| | comp=Z,6.6nm,0.6s,baz=60,slow=4.6,SNR=10.0 | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | |
| 121A | Cookes Peak, D | 89.74 313 | P | P | 06 41 17.6 | +0.8 |
| | baz=42 | | | | | |
| NVAR | Mina Array Bea | 90.53 324 | P | P | 06 41 20.6 | +0.2 |
| | comp=Z,0.6nm,0.6s,baz=34,slow=5.8,SNR=5.7 | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | |
| TPNV | Topopah Spring | 90.75 322 | P | P | 06 41 21.2 | -0.2 |
| | baz=37 | | | | | |
| GWY | Greenwater Val | 91.57 321 | IAmb | IAmb | 06 41 26.9 | |
| | comp=Z,3.7nm,0.8s | | | | | |
| TUC | Tucson | 91.57 315 | P | P | 06 41 25.1 | 0.0 |
| | baz=40 | | | | | |
| 214A | Organ Pipe Nat | 92.94 316 | P | P | 06 41 31.6 | +0.2 |
| | baz=39 | | | | | |
| MONP2 | Monument Peak | 94.08 319 | P | P | 06 41 36.5 | -0.3 |
| | baz=37 | | | | | |

*MOS* ***19*** *06:36:52.6±1.1, 18°.09S×178°.39W, h509km, mb5.5/33, Error ellipse: s-maj=9.0km s-min=7.2km az=129.4*
*BJI* ***19*** *06:36:54.7±0.0, 17°.86S×178°.03W, h537km, mb5.4/81, mB5.2/19*
*NEIC* ***19*** *06:36:54.3±1.9, 18°.17S±0°.09×178°.27W±0°.09, h518km±6km, mb5.2/563, Error ellipse: s-maj=13.3km s-min=12.6km az=134.0*
*BGR* ***19*** *06:36:55.0, 18°.31S×177°.14W, h534km±4km*
*NOU* ***19*** *06:36:54.7, 18°.17S×178°.25W, h527km, ML5.7/148, Fiji Islands Region*
*IDC* ***19*** *06:36:55.5±0.5, 18°.17S×178°.36W, h534km±4km, mb4.9/30, mbtmp5.8/32, Error ellipse: s-maj=8.4km s-min=6.9km az=174.0*

**ISC 19 06:36:55.3±0.3, 18°.23S±0°.04×178°.28W±0°.04, h537km±2km, h538km; pP-P, n1597, σ1.917/1494, mb5.2/394, 119C-99D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.53 | 277 | P | P | P | 06 38 13.8 | +0.9 |
| MSVF | Nonsavu | 3.53 | 277 | | P | P | 06 38 14.5 | +1.6 |
| MSVF | Nonsavu | 3.53 | 277 | *d i* | P | P | 06 38 14.3 | +1.4 |
| AFI | Afiamalu | 7.58 | 56 | | P | P | 06 38 44.5 | -4.2 |
| AFI | Afiamalu | 7.58 | 56 | P | P | P | 06 38 44.5 | -4.2 |
| NIUE | Niue | 7.96 | 97 | | P | P | 06 38 51.6 | -0.7 |
| NIUE | Niue | 7.96 | 97 | P | P | P | 06 38 51.7 | -0.7 |
| | comp=Z,48016µmcomp=Z,15µm,1.0s | | | | | | | |
| FUNA | Funafuti | 9.95 | 345 | P | P | P | 06 39 10.6 | -2.1 |
| FUNA | Funafuti | 9.95 | 345 | P | P | P | 06 39 10.3 | -2.4 |
| RIZ | Raoul Island | 10.97 | 178 | P | P | P | 06 39 21.4 | -1.7 |
| RAO | Raoul Island | 10.98 | 178 | P | P | P | 06 39 21.6 | -1.5 |
| RAO | Raoul Island | 10.98 | 178 | P | P | P | 06 39 21.9 | -1.2 |
| | comp=Z,1µm,0.3s,baz=7.2,slow=1.3,SNR=36 | | | | | | | |
| RAO | | | | S | | S | 06 41 24.7 | +0.1 |
| | comp=Z,442nm,0.6s,baz=90,slow=20,SNR=2.6 | | | | | | | |
| GLKZ | Green Lake | 10.99 | 178 | P | P | P | 06 39 20.8 | -2.4 |
| RTV | Rentapao | 12.66 | 270 | P | P | P | 06 39 40.8 | +0.1 |
| DVP | Devils Point | 12.89 | 270 | P | P | P | 06 39 43.3 | +0.2 |
| LIFNC | LIFOU | 13.89 | 257 | P | P | P | 06 39 52.1 | -1.4 |
| LIFNC | LIFOU | 13.89 | 257 | | P | P | 06 39 51.6 | -1.9 |
| PINNC | Pines Island, | 14.07 | 250 | P | P | P | 06 39 55.0 | -0.4 |
| PINNC | Pines Island, | 14.07 | 250 | P | P | P | 06 39 54.8 | -0.5 |
| YATNC | Mamie plateau, | 14.44 | 252 | P | P | P | 06 39 57.9 | -1.3 |
| DZM | Mont Dzumac | 14.85 | 253 | P | P | P | 06 40 02.8 | -0.8 |
| DZM | Mont Dzumac | 14.85 | 253 | P | P | P | 06 40 02.3 | -1.3 |
| | comp=Z,560nm,0.7s,baz=128,slow=20,SNR=205 | | | | | | | |
| DZM | | | | ScP | | ScP | 06 47 21.2 | +3.0 |
| | comp=Z,34nm,0.9s,baz=53,slow=16,SNR=8.0 | | | | | | | |
| NOUC | Port Laguerre | 14.98 | 253 | P | P | P | 06 40 03.9 | -0.9 |
| NFK | Norfolk Island | 16.58 | 227 | P | P | P | 06 40 22.5 | +1.8 |
| KOUNC | Koumac, New Ca | 16.61 | 259 | P | P | P | 06 40 20.8 | -0.4 |
| KOUNC | Koumac, New Ca | 16.61 | 259 | | P | P | 06 40 20.7 | -0.4 |
| RAR | Rarotonga | 17.67 | 103 | P | P | P | 06 40 31.0 | +0.1 |
| RAR | Rarotonga | 17.67 | 103 | P | P | P | 06 40 30.7 | -0.2 |
| RAR | Rarotonga | 17.67 | 103 | P | P | P | 06 40 31.2 | +0.3 |
| | comp=Z,226nm,0.9s,baz=266,slow=7.9,SNR=27 | | | | | | | |
| OUZ | Omahuta | 18.40 | 202 | P | P | P | 06 40 38.1 | +0.8 |
| OUZ | Omahuta | 18.40 | 202 | P | P | P | 06 40 40.2 | +2.8 |
| GRZ | Great Barrier | 18.79 | 196 | P | P | P | 06 40 42.0 | +1.2 |
| WCZ | Waipu Caves | 18.81 | 199 | P | P | P | 06 40 44.2 | +3.1 |
| KUZ | Kuaotunu | 19.19 | 195 | P | P | P | 06 40 45.8 | +1.3 |
| KUZ | Kuaotunu | 19.19 | 195 | P | P | P | 06 40 46.2 | +1.7 |
| ABAZ | Army Bay | 19.28 | 197 | P | P | P | 06 40 48.1 | +2.7 |
| WIAZ | Waiheke Island | 19.38 | 196 | P | P | P | 06 40 48.5 | +2.2 |
| MBAZ | Motutapu North | 19.42 | 197 | P | P | P | 06 40 49.3 | +2.6 |
| MXZ | Matakaoa Point | 19.49 | 188 | P | P | P | 06 40 46.3 | -1.0 |
| MXZ | Matakaoa Point | 19.49 | 188 | P | P | P | 06 40 46.2 | -1.1 |
| MXZ | Matakaoa Point | 19.49 | 188 | P | P | P | 06 40 45.8 | -1.5 |
| RVAZ | Riverhead Bore | 19.51 | 197 | P | P | P | 06 40 49.5 | +2.1 |
| HBAZ | Herne Bay Bore | 19.55 | 197 | P | P | P | 06 40 50.1 | +2.3 |
| HBAZ | Herne Bay Bore | 19.55 | 197 | P | P | P | 06 40 50.3 | +2.6 |
| EPAZ | Eden Park BICE | 19.57 | 197 | P | P | P | 06 40 50.3 | +2.3 |
| EPAZ | Eden Park BICE | 19.57 | 197 | P | P | P | 06 40 50.2 | +2.3 |
| ETAZ | East Tamaki Re | 19.59 | 196 | P | P | P | 06 40 50.5 | +2.4 |
| ETAZ | East Tamaki Re | 19.59 | 196 | P | P | P | 06 40 50.6 | +2.4 |
| WIZ | White Island | 19.63 | 191 | P | P | P | 06 40 49.1 | +0.5 |
| WTAZ | Waiatarua | 19.66 | 197 | P | P | P | 06 40 51.2 | +2.3 |
| WTAZ | Waiatarua | 19.66 | 197 | P | P | P | 06 40 51.0 | +2.1 |
| MKAZ | Moumakai | 19.67 | 196 | P | P | P | 06 40 50.9 | +2.0 |
| MKAZ | Moumakai | 19.67 | 196 | P | P | P | 06 40 51.0 | +2.1 |
| WMGZ | Waiomatatini S | 19.73 | 188 | P | P | P | 06 40 48.7 | -0.7 |
| HAZ | Te Kaha | 19.76 | 189 | P | P | P | 06 40 48.1 | -1.6 |
| AWAZ | Awhitu Peninsu | 19.77 | 197 | P | P | P | 06 40 51.9 | +2.0 |
| AWAZ | Awhitu Peninsu | 19.77 | 197 | P | P | P | 06 40 51.8 | +2.0 |
| PKGZ | Pakihiroa | 19.82 | 189 | P | P | P | 06 40 48.9 | -1.5 |
| RUGZ | Raukumara Rang | 19.98 | 189 | P | P | P | 06 40 49.4 | -2.5 |
| RUGZ | Raukumara Rang | 19.98 | 189 | P | P | P | 06 40 49.8 | -2.1 |
| WHRZ | Whale Island | 19.99 | 191 | P | P | P | 06 40 52.3 | +0.5 |
| PUZ | Puketiti | 20.00 | 188 | P | P | P | 06 40 50.9 | -1.1 |
| TGRZ | Tauranga | 20.01 | 193 | P | P | P | 06 40 53.3 | +1.3 |
| OPRZ | Ohinepanea | 20.06 | 192 | P | P | P | 06 40 51.2 | -1.2 |
| TWGZ | Tauwhareparae | 20.14 | 189 | P | P | P | 06 40 51.9 | -1.3 |
| MARZ | Manawahe | 20.17 | 192 | P | P | P | 06 40 53.8 | +0.3 |
| TOZ | Tahuroa Road | 20.18 | 194 | P | P | P | 06 40 54.3 | +0.8 |
| KMRZ | Kaimai | 20.19 | 193 | P | P | P | 06 40 54.6 | +0.9 |
| EDRZ | Edgecumbe | 20.28 | 191 | P | P | P | 06 40 53.5 | -1.0 |
| KARZ | Kaharoa | 20.29 | 193 | P | P | P | 06 40 56.1 | +1.5 |
| OMRZ | Omania | 20.35 | 192 | P | P | P | 06 40 55.6 | +0.5 |
| URZ | Urewera | 20.36 | 190 | P | P | P | 06 40 52.8 | -2.3 |
| URZ | Urewera | 20.36 | 190 | P | P | P | 06 40 52.3 | -2.8 |
| | comp=Z,591nm,0.5s,baz=10,slow=2.0,SNR=277 | | | | | | | |
| URZ | | | | S | | S | 06 44 07.2 | -2.3 |
| | comp=Z,242nm,0.9s,baz=213,slow=23,SNR=7.0 | | | | | | | |
| URZ | Urewera | 20.36 | 190 | P | P | P | 06 40 52.5 | -2.6 |
| MKRZ | Makatiti | 20.36 | 192 | P | P | P | 06 40 56.6 | +1.3 |
| MWZ | Matawai | 20.36 | 190 | P | P | P | 06 40 53.0 | -2.2 |
| MWZ | Matawai | 20.36 | 190 | P | P | P | 06 40 53.6 | -1.7 |
| NGRZ | Ngongotaha | 20.38 | 193 | P | P | P | 06 40 56.2 | +0.7 |
| CNGZ | Carnagh Statio | 20.41 | 188 | P | P | P | 06 40 55.4 | -0.2 |
| TKGZ | Te Karaka | 20.42 | 189 | P | P | P | 06 40 55.5 | -0.2 |
| TARZ | Mount Tarawera | 20.45 | 192 | P | P | P | 06 40 55.4 | -0.6 |
| UTU | Utuhina | 20.45 | 193 | P | P | P | 06 40 55.7 | -0.3 |
| RAGZ | Rawiri | 20.54 | 190 | P | P | P | 06 40 55.0 | -1.9 |
| RRRZ | Republican Roa | 20.55 | 192 | P | P | P | 06 40 56.1 | -0.8 |
| HSRZ | Hossack Road | 20.57 | 192 | P | P | P | 06 40 57.9 | +0.8 |
| MUGZ | Murupara | 20.63 | 191 | P | P | P | 06 40 56.0 | -1.6 |
| GRRZ | Galatos Road | 20.64 | 193 | P | P | P | 06 40 58.9 | +1.2 |
| HRRZ | Handcock Road | 20.64 | 192 | P | P | P | 06 40 57.5 | -0.3 |
| RIGZ | Rimuhau | 20.69 | 189 | P | P | P | 06 40 56.5 | -1.8 |
| RTZ | Ruatahuna | 20.73 | 191 | P | P | P | 06 40 56.4 | -2.2 |
| RTZ | Ruatahuna | 20.73 | 191 | P | P | P | 06 40 55.5 | -3.1 |
| TLZ | Tolley Road | 20.74 | 194 | P | P | P | 06 40 59.6 | +0.9 |
| ALRZ | Allen Road | 20.80 | 192 | P | P | P | 06 40 58.7 | -0.5 |
| SNGZ | Shannon Statio | 20.83 | 190 | P | P | P | 06 40 57.1 | -2.3 |
| KUTZ | Kaahu Road | 20.83 | 193 | P | P | P | 06 41 00.1 | +0.7 |
| PRGZ | Paritu Road | 20.89 | 188 | P | P | P | 06 40 58.2 | -1.7 |
| WHTZ | Whakaora | 20.97 | 193 | P | P | P | 06 41 01.1 | +0.3 |
| MTHZ | Maungataniwha | 20.98 | 191 | P | P | P | 06 40 59.2 | -1.7 |
| KNZ | Kokohu | 21.02 | 189 | P | P | P | 06 40 59.4 | -1.6 |
| MRHZ | Matea Rd | 21.04 | 192 | P | P | P | 06 40 59.6 | -1.8 |
| WATZ | Wairara | 21.06 | 193 | P | P | P | 06 41 01.9 | +0.4 |
| HIZ | Hauiti | 21.08 | 195 | P | P | P | 06 41 03.0 | +1.3 |
| HIZ | Hauiti | 21.08 | 195 | P | P | P | 06 41 03.8 | +2.1 |
| MHGZ | Mahia Peninsul | 21.11 | 188 | P | P | P | 06 41 01.8 | -0.2 |
| WHHZ | Waihua | 21.14 | 190 | P | P | P | 06 41 00.4 | -1.7 |
| HATZ | Hinemaiaia | 21.16 | 192 | P | P | P | 06 41 01.7 | -0.7 |
| RATZ | Rangitukua | 21.20 | 193 | P | P | P | 06 41 00.5 | -2.4 |
| NMHZ | Naumai | 21.23 | 191 | P | P | P | 06 41 01.2 | -1.9 |
| TARA | Tarawa | 21.30 | 335 | P | P | P | 06 41 02.8 | -1.2 |
| KATZ | Kakaramea | 21.32 | 193 | P | P | P | 06 41 03.8 | -0.3 |
| BKZ | Black Stump Fm | 21.35 | 191 | P | P | P | 06 41 02.1 | -2.1 |
| BKZ | Black Stump Fm | 21.35 | 191 | P | P | P | 06 41 01.4 | -2.8 |
| BKZ | Black Stump Fm | 21.35 | 191 | P | P | P | 06 41 01.1 | -3.1 |
| ARHZ | Aropaoanui | 21.36 | 190 | P | P | P | 06 41 02.3 | -1.9 |
| NTVZ | North Tongarir | 21.45 | 193 | P | P | P | 06 41 03.0 | -2.1 |
| TMVZ | Te Maari | 21.46 | 193 | P | P | P | 06 41 04.0 | -1.3 |
| TWVZ | Taurewa | 21.47 | 193 | P | P | P | 06 41 04.3 | -1.0 |
| ETVZ | East Tongariro | 21.48 | 193 | P | P | P | 06 41 04.1 | -1.3 |
| WTVZ | West Tongariro | 21.48 | 193 | P | P | P | 06 41 03.8 | -1.6 |
| NNVZ | North Ngauruho | 21.49 | 193 | P | P | P | 06 41 04.4 | -1.2 |
| OTVZ | Oturere | 21.51 | 193 | P | P | P | 06 41 03.8 | -2.0 |
| SNVZ | South Ngauruho | 21.54 | 193 | P | P | P | 06 41 04.3 | -1.7 |
| COVZ | Chateau Observ | 21.57 | 193 | P | P | P | 06 41 05.3 | -1.0 |
| COVZ | | | | S | | S | 06 43 48.2 | -41 |
| MCHZ | McNeill Hill | 21.58 | 191 | P | P | P | 06 41 04.0 | -2.2 |
| KWHZ | Kaweka Forest | 21.61 | 191 | P | P | P | 06 41 04.7 | -1.9 |
| TUVZ | Tukino | 21.61 | 193 | P | P | P | 06 41 05.5 | -1.2 |
| MAVZ | Matarangi | 21.64 | 193 | P | P | P | 06 41 06.1 | -1.0 |
| WHVZ | Whangaehu Hut | 21.64 | 193 | P | P | P | 06 41 03.9 | -3.2 |
| TRVZ | Turoa | 21.67 | 193 | P | P | P | 06 41 04.0 | -3.3 |
| VRZ | Vera Road | 21.68 | 195 | P | P | P | 06 41 07.1 | 0.0 |
| WNVZ | Wahianoa | 21.68 | 193 | P | P | P | 06 41 05.7 | -1.7 |
| PKVZ | Pokaka | 21.70 | 193 | P | P | P | 06 41 05.5 | -1.9 |
| MOVZ | Moawhango | 21.73 | 193 | P | P | P | 06 41 05.7 | -1.9 |
| MOVZ | | | | S | | S | 06 44 27.3 | -4.1 |
| CKHZ | Cape Kidnapper | 21.73 | 190 | P | P | P | 06 41 06.6 | -0.9 |
| CKHZ | | | | S | | S | 06 44 28.7 | -2.5 |
| MHEZ | Mangahewa | 21.75 | 196 | P | P | P | 06 41 10.1 | +2.5 |
| MTVZ | Mangateitei | 21.77 | 193 | P | P | P | 06 41 07.2 | -0.7 |
| KRHZ | Kereru | 21.84 | 191 | P | P | P | 06 41 05.4 | -3.1 |
| KRHZ | | | | S | | S | 06 44 26.0 | -6.9 |
| DRHZ | Durham Road | 21.88 | 196 | P | P | P | 06 41 11.8 | +2.9 |
| KAHZ | Kahuranaki | 21.89 | 190 | P | P | P | 06 41 07.9 | -1.2 |
| KAHZ | | | | S | | S | 06 44 31.6 | -2.3 |
| PKE | Pukeiti | 21.94 | 196 | P | P | P | 06 41 12.0 | +2.5 |
| NEZ | North Egmont | 21.99 | 196 | P | P | P | 06 41 12.7 | +2.8 |
| KHEZ | Kahui Hut | 22.03 | 196 | P | P | P | 06 41 12.1 | +1.8 |
| KHEZ | Kahui Hut | 22.03 | 196 | P | P | P | 06 41 12.8 | +2.4 |
| PREZ | Palmer Road | 22.04 | 196 | P | P | P | 06 41 12.8 | +2.5 |
| NBEZ | Newall Road No | 22.05 | 196 | P | P | P | 06 41 13.0 | +2.6 |
| LREZ | Lake Rotokare | 22.09 | 195 | P | P | P | 06 41 12.0 | +1.3 |
| PXZ | Pawanui | 22.13 | 190 | P | P | P | 06 41 09.8 | -1.3 |
| PXZ | | | | S | | S | 06 44 33.4 | -4.0 |
| PNHZ | Pukenui | 22.13 | 191 | P | P | P | 06 41 09.2 | -2.0 |
| PNHZ | | | | S | | S | 06 44 33.9 | -3.7 |
| NMEZ | Namu Road | 22.18 | 196 | P | P | P | 06 41 14.6 | +3.1 |
| WAZ | Wanganui | 22.23 | 194 | P | P | P | 06 41 11.4 | -0.6 |
| WPHZ | Waipukurau | 22.23 | 191 | P | P | P | 06 41 10.7 | -1.4 |
| WPHZ | | | | S | | S | 06 44 37.0 | -2.1 |
| PRHZ | Porangahau | 22.39 | 190 | P | P | P | 06 41 11.8 | -1.7 |
| PRHZ | | | | S | | S | 06 44 39.3 | -2.4 |
| DVHZ | Dannevirke | 22.51 | 191 | P | P | P | 06 41 12.3 | -2.2 |
| DVHZ | | | | S | | S | 06 44 38.1 | -5.4 |
| OHWZ | Ohakea | 22.59 | 193 | P | P | P | 06 41 14.1 | -1.0 |
| ANWZ | Angora Road | 22.61 | 190 | P | P | P | 06 41 14.1 | -1.2 |
| POWZ | Post Office Ro | 22.68 | 192 | P | P | P | 06 41 14.3 | -1.7 |
| PRWZ | Pori Road | 22.79 | 191 | P | P | P | 06 41 15.3 | -1.8 |
| HNR | Honiara | 22.86 | 290 | P | P | P | 06 41 19.5 | +1.5 |
| HNR | Honiara | 22.86 | 290 | P | P | P | 06 41 16.6 | -1.4 |
| HNR | Honiara | 22.86 | 290 | P | P | P | 06 41 16.6 | -1.4 |
| BFZ | Birch Farm | 22.87 | 191 | P | P | P | 06 41 16.1 | -1.6 |
| BFZ | Birch Farm | 22.87 | 191 | P | P | P | 06 41 15.9 | -1.8 |
| TIWZ | Tintock | 23.02 | 191 | P | P | P | 06 41 18.2 | -0.9 |
| OGWZ | Otaki Gorge | 23.20 | 193 | P | P | P | 06 41 18.5 | -2.1 |
| HOWZ | Holdsworth Sta | 23.21 | 192 | P | P | P | 06 41 18.7 | -2.0 |
| SNZO | South Karori | 23.78 | 193 | P | P | P | 06 41 24.1 | -0.8 |
| QRZ | Quartz Range | 23.87 | 197 | P | P | P | 06 41 27.1 | -0.5 |
| LHI | Lord Howe Isla | 24.38 | 233 | P | P | P | 06 41 31.4 | +0.1 |
| KHZ | Kahutara | 25.09 | 194 | P | P | P | 06 41 36.2 | -1.2 |
| CTZ | Chatham Island | 25.47 | 177 | P | P | P | 06 41 43.2 | +2.5 |
| RPZ | Rata Peaks | 26.95 | 197 | P | P | P | 06 41 53.1 | -0.7 |
| PPT | Papeete | 27.31 | 93 | P | P | P | 06 41 57.8 | +0.5 |
| | comp=Z,71nm,0.5s,baz=79,slow=4.0,SNR=46 | | | | | | | |
| PPT | | | | ScP | | ScP | 06 47 52.8 | +3.7 |
| | comp=Z,92nm,0.9s,baz=328,slow=2.8,SNR=9.3 | | | | | | | |
| | comp=Z,71nm,0.5s | | | | | | | |
| PPTF | Pamatai, Papee | 27.32 | 93 | P | P | P | 06 41 58.4 | +0.9 |
| PPTF | Pamatai, Papee | 27.32 | 93 | P | P | P | 06 41 56.8 | -0.7 |
| JCZ | Jackson Bay | 27.97 | 200 | P | P | P | 06 42 03.2 | +0.4 |
| JCZ | Jackson Bay | 27.97 | 200 | P | P | P | 06 42 03.1 | +0.3 |
| ODZ | Otahua Downs | 28.29 | 197 | P | P | P | 06 42 05.0 | -0.5 |
| WKZ | Wanaka | 28.57 | 199 | P | P | P | 06 42 07.5 | -0.4 |
| XMAS | Kiritimati | 28.75 | 48 | P | P | P | 06 42 08.9 | -1.0 |
| XMAS | Kiritimati | 28.75 | 48 | P | P | P | 06 42 08.4 | -1.5 |
| MSZ | Milford Sound | 28.79 | 201 | P | P | P | 06 42 10.3 | +0.5 |
| EAZ | Earnscleugh | 28.85 | 198 | P | P | P | 06 42 09.8 | -0.5 |
| EIDS | Eidsvold | 29.27 | 251 | P | P | P | 06 42 14.1 | -0.3 |
| EIDS | Eidsvold | 29.27 | 251 | P | P | P | 06 42 14.2 | -0.1 |
| EIDS | Eidsvold | 29.27 | 251 | P | P | P | 06 42 14.3 | -0.1 |
| | comp=Z,1µm,0.8s | | | | | | | |
| MLZ | Mavora L

PMG pP **pwP** 06 44 38.1 +3.1
PMG ScP **ScP** 06 48 15.7 +1.9
**CMSA Cobar Meteorol 35.10 241** P **P** 06 43 04.5 +0.7
**CMSA Cobar Meteorol 35.10 241** P **P** 06 43 04.5 +0.7
comp=Z,2µm,0.8s
**MTSU Mount Surprise 35.50 264** P **P** 06 43 07.2 -0.1
**QLP Quilpie 35.54 250** P **P** 06 43 08.1 +0.6
**QLP Quilpie 35.54 250** P **P** 06 43 07.7 +0.2
comp=Z,2µm,1.0s
**GLAD Gladstone 36.71 225** P **P** 06 43 17.9 +0.9
**TOO Toolangi 37.06 231** P **P** 06 43 21.0 +1.0
**TOO Toolangi 37.06 231** P **P** 06 43 21.2 +1.2
**TOO Toolangi 37.06 231** P **P** 06 43 20.9 +1.0
comp=Z,901nm,1.1s
**TOO Toolangi 37.06 231** P **P** 06 43 21.2 +1.2
TOO pmax pmax
comp=Z,1µm,1.2s
**COEN Coen 37.23 271** P **P** 06 43 21.8 +0.2
**COEN Coen 37.23 271** P **P** 06 43 22.0 +0.3
**COEN Coen 37.23 271** P **P** 06 43 22.0 +0.3
comp=Z,2µm,0.8s
**MANU Manus Island 37.33 292** P **P** 06 43 22.4 0.0
**MOO Moorlands 37.94 223** P **P** 06 43 28.1 +1.0
**MOO Moorlands 37.94 223** P **P** 06 43 27.2 +0.2
comp=Z,176nm,1.0s
**TAU Tasmania Unive 38.09 222** P **P** 06 43 28.7 +0.5
**TAU Tasmania Unive 38.09 222** P **P** 06 43 29.0 +0.8
**TAOE Nuku Hiva Isla 38.15 81** P **P** 06 43 29.9 +0.6
**TAOE Nuku Hiva Isla 38.15 81** P **P** 06 43 28.9 -0.4
**TAOE Nuku Hiva Isla 38.15 81** P **P** 06 43 29.4 +0.2
TAOE pP **pwP** 06 45 08.4 +2.0
**GEXS Deakin Univers 38.18 231** P **P** 06 43 29.6 +0.6
**BRAT Ballarat 38.22 232** P **P** 06 43 29.9 +0.6
**STKA Stephens Creek 38.58 242** P **P** 06 43 33.6 +1.1
**STKA Stephens Creek 38.58 242** P **P** 06 43 33.5 +1.1
**STKA Stephens Creek 38.58 242** P **P** 06 43 33.6 +1.1
comp=Z,830nm,0.7s,baz=91,slow=10.0,SNR=1179
STKA S **S** 06 48 49.5 -0.8
comp=Z,40nm,1.1s,baz=219,slow=19,SNR=4.9
comp=Z,830nm,0.7s
**STKA Stephens Creek 38.58 242** P **P** 06 43 33.5 +1.1
STKA pmax pmax
comp=Z,260nm,1.0s
**INKA Innaminka 38.74 248** P **P** 06 43 35.1 +1.3
**ARPS Mount Arapiles 39.56 234** P **P** 06 43 41.0 +0.8
**QIS Mount Isa 39.72 260** P **P** 06 43 41.1 -0.7
**WAKE Wake Island 40.11 338** P **P** 06 43 43.3 -1.5
**WAKE Wake Island 40.11 338** P **P** 06 43 43.8 -0.9
**H11N3 WAKE ISLAND Hy 40.42 338** P **P** 06 43 46.0 -1.0
baz=175,slow=10,SNR=16
**H11N1 WAKE ISLAND Hy 40.43 338** P **P** 06 43 45.8 -1.2
baz=175,slow=10,SNR=18
**H11N2 WAKE ISLAND Hy 40.43 338** P **P** 06 43 46.1 -1.0
baz=175,slow=10,SNR=7.7
**HTT Hallett 41.09 240** P **P** 06 43 53.4 +0.8
**LCRK Leigh Creek 41.23 244** P **P** 06 43 54.3 +0.6
**MMPI Merauke 41.29 278** P **P** 06 43 54.7 +0.4
**TABU Tabubil 41.58 283** P **P** 06 43 57.9 +1.2
**GHSS Government Hou 41.65 238** P **P** 06 43 57.8 +0.9
**PTPS Port Pirie 41.81 240** P **P** 06 43 58.6 +0.4
**WHYH Whyalla 42.13 241** P **P** 06 44 01.3 +0.6
**JAY Jayapura 43.11 286** P **P** 06 44 08.6 -0.2
comp=Z,1µm,1.5s,comp=Z,10µm
**OOD Oodnadatta 43.22 249** P **P** 06 44 10.4 +1.1
**BBOO Buckleboo 43.36 241** P **P** 06 44 11.1 +0.7
**BBOO Buckleboo 43.36 241** P **P** 06 44 10.7 +0.3
**GENI Genyem 43.57 286** P **P** 06 44 13.8 +1.5
**GENI Genyem 43.57 286** P **P** 06 44 12.4 +0.1
**DHH Diamond Head 44.08 28** P **P** 06 44 16.2 +0.3
**DHH Diamond Head 44.08 28** P **P** 06 44 16.3 +0.3
**KIP Kipapa 44.12 28** P **P** 06 44 16.1 -0.2
KIP IAmb IAmb 06 44 17.9
comp=Z,118nm,1.1s
**KIP Kipapa 44.12 28** P **P** 06 44 16.2 -0.2
KIP pmax pmax
comp=Z,117nm,1.2s
**KIP Kipapa 44.12 28** P **P** 06 44 16.7 +0.4
**WR0 Warramunga Arr 44.51 260** P **P** 06 44 18.6 -0.8
**WB0 Warramunga Arr 44.66 260** P **P** 06 44 19.6 -1.1
**WB2 Warramunga Arr 44.69 260** P **P** 06 44 20.1 -0.8
**WRAB Tennant Creek 44.69 260** P **P** 06 44 20.1 -0.8
**WRAB Tennant Creek 44.69 260***d* iP **P** 06 44 20.0 -0.8
WRAB pmax pmax
comp=Z,934nm,1.1s
**WRA Warramunga Arr 44.70 260** P **P** 06 44 19.8 -1.2
WRA IAmb IAmb 06 44 21.3
comp=Z,137nm,1.2s
**WRA Warramunga Arr 44.70 260** P **P** 06 44 19.8 -1.2
comp=Z,423nm,0.7s,baz=96,slow=7.0,SNR=1410
WRA PcP **PcP** 06 45 51.1 -0.8
comp=Z,57nm,0.9s,baz=95,slow=5.5,SNR=5.5
WRA ScP **ScP** 06 48 54.7 +1.5
comp=Z,30nm,1.2s,baz=96,slow=4.3,SNR=6.8
WRA S **S** 06 50 16.1 -2.6
comp=Z,15nm,0.9s,baz=96,slow=13,SNR=6.4
comp=Z,423nm,0.7s
**WRA Warramunga Arr 44.70 260** P **P** 06 44 19.8 -1.2
WRA pmax pmax
comp=Z,137nm,1.2s
**AS01 Alice Springs 44.78 255** P **P** 06 44 21.7 +0.1
**MULG Mulgathing 44.79 245** P **P** 06 44 21.9 +0.4
**AS31 Alice Springs 44.82 255** P **P** 06 44 21.9 0.0
**ASAR Alice Springs 44.82 255** P **P** 06 44 21.4 -0.6
**ASAR Alice Springs 44.82 255** P **P** 06 44 22.0 +0.1
comp=Z,3µm,0.6s,baz=89,slow=8.2
ASAR S **S** 06 50 18.9 -1.5
comp=Z,40nm,1.0s,baz=86,slow=14,SNR=9.7
**PTCN Pitcairn Islan 45.11 107** P **P** 06 44 25.5 +1.5
**KDU Kakadu 47.68 269** P **P** 06 44 43.4 -0.2
**GUMO Guam 48.17 308** P **P** 06 44 47.0 -0.3
**GUMO Guam 48.17 308** P **P** 06 44 46.2 -1.0
**GUMO Guam 48.17 308** P **P** 06 44 46.9 -0.3
comp=Z,974nm,0.7s,baz=158,slow=7.5,SNR=51
comp=Z,974nm,0.7s
**GUMO Guam 48.17 308** P **P** 06 44 46.2 -1.0
GUMO pmax pmax
comp=Z,1µm,0.8s
**GUMO Guam 48.17 308** P **P** 06 44 46.9 -0.3
GUMO PcP **PcP** 06 46 04.0 -0.3
**MTN Manton Dam 48.91 269** P **P** 06 44 52.3 -0.5
**MTN Manton Dam 48.91 269** P **P** 06 44 52.0 -0.8
**KMPI Kaimana, Papua 49.14 281** P **P** 06 44 54.9 +0.4
comp=Z,1µm,0.9s,comp=Z,12µm
**DRS Darwin Rock St 49.23 269** P **P** 06 44 54.5 -0.6
**WRKA Warakurna 49.86 252** P **P** 06 45 00.0 +0.2
**FORT Forrest 49.98 245** P **P** 06 45 00.3 -0.2
**FORT Forrest 49.98 245** P **P** 06 44 59.9 -0.5
**SAUI Saumlaki 50.01 275** P **P** 06 45 00.2 -0.7
**SAUI Saumlaki 50.01 275** P **P** 06 45 01.7 +0.8
comp=Z,1µm,1.2s,comp=Z,16µm
**KNRA Kununurra 50.58 264** P **P** 06 45 03.7 -1.3
**BNDI Bandanaira 52.40 279** P **P** 06 45 17.8 -0.5
comp=Z,1µm,1.2s,comp=Z,17µm
**SWI Sorong 52.44 283** P **P** 06 45 18.1 -0.4
**MSAI Masohi 53.72 279** P **P** 06 45 26.7 -0.9
comp=Z,398nm,0.7s,comp=Z,8µm
**KMBL Kambalda 55.28 244** P **P** 06 45 38.1 -0.3
**DRV Dumont d'Urvil 55.40 199** ⇑P **P** 06 45 39.4 +0.9
DRV ScP **ScP** 06 49 41.1 +2.9
**NLAI Namlea 55.47 279** P **P** 06 45 39.5 -0.4
comp=Z,658nm,0.7s,comp=Z,7µm
**LBMI Labuha 56.01 282** P **P** 06 45 44.0 +0.4
comp=Z,703nm,0.9s,comp=Z,6µm
**SOEI Soe 56.20 270** P **P** 06 45 46.6 +1.5
**SOEI Soe 56.20 270** P **P** 06 45 45.5 +0.5
**SOEI Soe 56.20 270** P **P** 06 45 45.9 +0.8
**BATI Baumata 56.65 270** P **P** 06 45 49.2 +1.1
comp=Z,573nm,0.8s,comp=Z,6µm
**TNTI Ternate 56.66 283** P **P** 06 45 49.6 +1.5
**TNTI Ternate 56.66 283** P **P** 06 45 48.0 -0.2
**TNTI Ternate 56.66 283** P **P** 06 45 47.9 -0.2
comp=Z,788nm,1.0s,comp=Z,7µm
**SANI Sanana 56.92 280** P **P** 06 45 49.6 -0.3
**SANI Sanana 56.92 280** P **P** 06 45 48.9 -1.0
comp=Z,1µm,0.9s,comp=Z,8µm
**PSA00 Pilbara Seismi 57.95 256** P **P** 06 45 56.6 -0.2
**PSA00 Pilbara Seismi 57.95 256** P **P** 06 45 56.6 -0.2
**PSA00 Pilbara Seismi 57.95 256** P **P** 06 45 55.7 -1.1
PSA00 IAmb IAmb 06 45 57.6
comp=Z,228nm,0.9s
**MBWA Marble Bar 58.12 256** P **P** 06 45 57.7 -0.3
**MBWA Marble Bar 58.12 256** P **P** 06 45 57.3 -0.6
**MBWA Marble Bar 58.12 256** ⇓P **P** 06 45 57.7 -0.3

**MMRI Maumere 58.43 271** P **P** 06 45 59.8 -0.4
**MMRI Maumere 58.43 271** P **P** 06 45 59.5 -0.7
**MMRI Maumere 58.43 271** P **P** 06 45 59.4 -0.7
comp=Z,751nm,0.9s,comp=Z,7µm
**MEEK Meekatharra 58.44 250** P **P** 06 45 59.7 -0.4
**KLBR Kellerberrin 58.80 244** P **P** 06 46 02.1 -0.3
**EDFI Ende, Flores 58.91 271** P **P** 06 46 02.3 -1.3
comp=Z,625nm,1.0s,comp=Z,5µm
**BBSI Bau Bau 59.02 275** P **P** 06 46 06.2 +2.0
**NWAO Narrogin (SRO) 59.17 242** P **P** 06 46 04.8 -0.1
**NWAO Narrogin (SRO) 59.17 242** P **P** 06 46 05.0 +0.1
**NWAO Narrogin (SRO) 59.17 242** P **P** 06 46 04.3 -0.6
**NWAO Narrogin (SRO) 59.17 242** P **P** 06 46 04.3 -0.6
NWAO pmax pmax
comp=Z,396nm,1.3s
**NWAO Narrogin (SRO) 59.17 242** P **P** 06 46 04.9 +0.1
**RKGY Rocky Gully 59.32 240** P **P** 06 46 06.4 +0.6
**SGSI Sangihe 59.48 286** P **P** 06 46 06.4 -0.8
comp=Z,1µm,0.8s,comp=Z,10µm
**BASI Baing, Sumba 59.58 269** P **P** 06 46 08.3 +0.4
comp=Z,1µm,1.4s,comp=Z,10µm
**KMSI Cibinong 59.72 282** P **P** 06 46 08.2 -0.6
**BLDU Balldu 59.76 245** P **P** 06 46 08.5 -0.3
**MUN Munaseng 60.09 243** P **P** 06 46 11.2 +0.2
**LUWI Luwuk 60.28 279** P **P** 06 46 13.2 +0.7
**LUWI Luwuk 60.28 279** P **P** 06 46 12.3 -0.2
**LUWI Luwuk 60.28 279** P **P** 06 46 12.7 +0.2
comp=Z,1µm,1.1s,comp=Z,10µm
**MTKN Mount Kenneth 60.46 243** P **P** 06 46 14.3 +0.8
**MORW Morawa 60.47 246** P **P** 06 46 13.4 -0.2
**MORW Morawa 60.47 246** P **P** 06 46 13.1 -0.5
**GTOI Gorontalo 60.65 281** P **P** 06 46 15.2 +0.2
comp=Z,232nm,0.9s
**BSSI Bau Bau, Buton 60.80 273** P **P** 06 46 15.3 -0.7
comp=Z,376nm,1.1s,comp=Z,3µm
**WBSI Waikubak, Su 60.86 269** P **P** 06 46 15.9 -0.5
comp=Z,316nm,1.2s
**H01W1 Cape Leeuwin H 61.63 240** P **P** 06 46 22.7 +1.9
baz=107,slow=5.8,SNR=16
**H01W3 Cape Leeuwin H 61.64 240** P **P** 06 46 22.7 +1.8
baz=107,slow=5.8,SNR=21
**H01W2 Cape Leeuwin H 61.64 240** P **P** 06 46 22.9 +2.0
baz=107,slow=5.8,SNR=16
**BNSI Bone 61.69 275** P **P** 06 46 21.5 -0.3
comp=Z,530nm,1.1s,comp=Z,6µm
**KAPI Kappang 61.84 274** P **P** 06 46 21.9 -0.9
**KAPI Kappang 61.84 274** P **P** 06 46 22.6 -0.2
comp=Z,92nm,0.6s,baz=131,slow=3.8,SNR=36
KAPI PP **PP** 06 48 42.0 -5.8
comp=Z,62nm,0.8s,baz=108,slow=6.3,SNR=5.5
comp=Z,92nm,0.6s
**KAPI Kappang 61.84 274** P **P** 06 46 21.9 -0.9
KAPI pmax pmax
comp=Z,523nm,1.6s
**SPSI Sidrap Palu 62.15 275** P **P** 06 46 23.4 -1.4
comp=Z,325nm,0.9s
**PLAI Plampang 62.61 269** P **P** 06 46 27.3 -0.5
comp=Z,1µm,0.8s
**TOLI2 Tolitoli 62.90 281** P **P** 06 46 29.6 0.0
**TOLI2 Tolitoli 62.90 281** P **P** 06 46 29.0 -0.7
**GIRL Giralia 62.92 253** P **P** 06 46 30.8 +1.1
**GIRL Giralia 62.92 253** P **P** 06 46 30.1 +0.5
**TWSI Taliwang, Sumb 63.49 269** P **P** 06 46 32.6 -0.8
comp=Z,1µm,0.9s,comp=Z,9µm
**RPN Rapa Nui 63.55 112** P **P** 06 46 35.5 +1.8
comp=Z,199nm,0.7s,baz=280,slow=6.3,SNR=13
comp=Z,199nm,0.7s
**RPN Rapa Nui 63.55 112** P **P** 06 46 35.5 +1.8
**CCD Concordia, Ant 64.59 194** ⇑P **P** 06 46 40.8 +1.0
**JHJ2 Mitsune 64.87 322** P **P** 06 46 41.4 -0.4
**JHJ Hachijo jima 2 64.90 322** P **P** 06 46 41.6 -0.4
comp=Z,756nm,0.8s,baz=168,slow=6.9,SNR=8.5
comp=Z,756nm,0.8s
**DNP Denpasar 65.09 269** P **P** 06 46 43.7 +0.1
**IGBI Denpasar 65.12 269** P **P** 06 46 43.2 -0.6
comp=Z,1µm,0.9s,comp=Z,9µm
**SRBI Singaraja 65.25 269** P **P** 06 46 43.9 -0.7
comp=Z,558nm,1.2s,comp=Z,6µm
**SMKI Samarinda 65.71 278** P **P** 06 46 49.8 +2.3
comp=Z,597nm,1.1s
**JMZ Minamidaito 2 65.78 310** P **P** 06 46 47.4 -0.2
**CASY Casey 65.90 205** P **P** 06 46 47.9 +0.2
CASY IAmb IAmb 06 46 49.5
comp=Z,135nm,1.1s
**CASY Casey 65.90 205** ⇑P **P** 06 46 48.4 +0.7
**JAGI Jajag, Banyuwa 66.16 269** P **P** 06 46 50.1 -0.2
**JAGI Jajag, Banyuwa 66.16 269** P **P** 06 46 48.4 -1.9
comp=Z,954nm,0.8s,comp=Z,9µm
**MYLDM Lahad Datu 66.51 284** P **P** 06 46 54.0 +1.6
**MTKI Muara Teweh, K 67.72 277** P **P** 06 47 00.0 0.0
comp=Z,233nm,1.0s
**JMM Marumori 67.77 326** P **P** 06 46 59.5 -0.2
**JMM Marumori 67.77 326** P **P** 06 46 59.1 -0.6
JMM IAmb IAmb 06 47 00.1
comp=Z,104nm,1.0s
**JGF Kuroka 68.07 322** P **P** 06 47 01.1 -0.5
**JGF Kuroka 68.07 322** P **P** 06 47 01.2 -0.5
JGF IAmb IAmb 06 47 01.9
comp=Z,67nm,0.7s
**INU Inuyama 68.09 322** IAmb IAmb 06 47 02.3
comp=Z,91nm,1.2s
**INU Inuyama 68.09 322** P **P** 06 47 01.0 -0.7
INU PcP **PcP** 06 47 23.5 +0.4
**GRJI Gresik 68.18 270** P **P** 06 47 03.5 +0.8
comp=Z,655nm,0.9s,comp=Z,7µm
**MJAR Matsushiro Arr 68.24 323** P **P** 06 47 01.6 -0.9
comp=Z,90nm,0.8s,baz=157,slow=5.8,SNR=264
comp=Z,90nm,0.8s
**MAJO Matsushiro 68.24 323** P **P** 06 47 02.0 -0.6
**MAJO Matsushiro 68.24 323** P **P** 06 47 02.1 -0.6
**MAJO Matsushiro 68.24 323***d* iP **P** 06 47 01.8 -0.8
MAJO pmax pmax
comp=Z,122nm,0.9s
**MAJO Matsushiro 68.24 323** P **P** 06 47 01.9 -0.6
MAJO PcP **PcP** 06 47 24.1 +0.3
**MJB9 Matsu-Tunnel 68.24 323** P **P** 06 47 02.1 -0.6
**PWJI Pagerwojo 68.51 268** P **P** 06 47 04.1 -0.6
comp=Z,461nm,0.8s,comp=Z,5µm
**JOW Kunigami 68.52 310** P **P** 06 47 04.8 +0.4
**JOW Kunigami 68.52 310** P **P** 06 47 04.9 +0.4
comp=Z,106nm,0.8s,baz=146,slow=5.3,SNR=24
comp=Z,106nm,0.8s
**JMN Monobe 68.91 319** P **P** 06 47 07.2 +0.4
**JMN Monobe 68.91 319** P **P** 06 47 07.0 +0.2
**KKM Kota Kinabalu 68.94 284** P **P** 06 47 07.4 0.0
**KKM Kota Kinabalu 68.94 284** P **P** 06 47 07.0 -0.4
**NGJI Ngawi 69.02 269** P **P** 06 47 09.3 +1.5
comp=Z,366nm,0.9s,comp=Z,5µm
**JSD Sado 69.27 324** P **P** 06 47 08.9 +0.2
**JSD Sado 69.27 324** IAmb IAmb 06 47 09.4
comp=Z,82nm,0.7s
**AMKA Amchitka 69.34 358** P **P** 06 47 07.8 -1.0
**ERM Erimo 69.73 330** P **P** 06 47 11.2 -0.2
ERM IAmb IAmb 06 47 13.6
comp=Z,44nm,0.9s
**ERM Erimo 69.73 330***ce* P **P** 06 47 12.3 +1.0
ERM pmax pmax
comp=Z,60nm,1.0s
**ERM Erimo 69.73 330** P **P** 06 47 12.4 +1.0
**UGM Wanagama 69.76 268** P **P** 06 47 12.1 -0.2
**UGM Wanagama 69.76 268** P **P** 06 47 11.8 -0.5
**UWJI Ujung Watu 69.78 270** P **P** 06 47 12.8 +0.4
comp=Z,645nm,1.2s
**KIWB Kanaga Island 69.79 1** P **P** 06 47 10.6 -0.9
**JTM Tenmabayashi 69.81 328** P **P** 06 47 13.4 +1.5
**JTM Tenmabayashi 69.81 328** IAmb IAmb 06 47 13.1
comp=Z,130nm,1.1s
**SMRI Semarang 70.08 269** P **P** 06 47 14.8 +0.6
**SMRI Semarang 70.08 269** P **P** 06 47 14.4 +0.2
comp=Z,839nm,0.8s,comp=Z,8µm
**JNU Nakatsue 70.46 316** P **P** 06 47 15.6 -0.4
**JNU Nakatsue 70.46 316** P **P** 06 47 15.4 -0.6
comp=Z,44nm,0.9s,baz=121,slow=3.4,SNR=16
comp=Z,44nm,0.9s
**YOJ Yoguni jima 71.23 305** P **P** 06 47 20.8 +0.2
**STKI Sintang 71.28 276** P **P** 06 47 21.8 +0.6
comp=Z,636nm,0.9s
**NIKH Nikolski High 71.37 6** P **P** 06 47 19.6 -1.2
baz=189
**SBUM Sibu 71.38 279** P **P** 06 47 22.4 +0.6
SBUM IAmb IAmb 06 47 23.4
comp=Z,58nm,0.8s
**KPJI Karang Pucung 71.44 268** P **P** 06 47 21.7 -0.4
comp=Z,566nm,0.8s,comp=Z,5µm
**JKA Kamikawa-asahi 71.62 331** IAmb IAmb 06 47 24.4
comp=Z,116nm,1.0s
**ASAJ Asahikawa 71.62 331** P **P** 06 47 23.0 +0.5
comp=Z,81nm,0.8s,baz=218,slow=5.3,SNR=58
comp=Z,81nm,0.8s
**CMJI Cimerak 71.77 268** P **P** 06 47 22.9 -1.1
comp=Z,472nm,0.9s,comp=Z,5µm
**QSPA South Pole Qui 71.83 180** P **P** 06 47 24.8 +1.3
**QSPA South Pole Qui 71.83 180** P **P** 06 47 24.9 +1.3
comp=Z,290nm,0.8s,baz=3.8,slow=0.6,SNR=1166
comp=Z,290nm,0.8s
**QSPA South Pole Qui 71.83 180** ⇑P **P** 06 47 24.9 +1.3
**TWGBT Beinan 71.94 302** P **P** 06 47 23.7 -1.1
**TWG Pinlang 71.95 302** P **P** 06 47 23.3 -1.5
**YULB Yu-li 72.05 303** P **P** 06 47 25.0 -0.5
**NACB Ninganchiao 72.20 304** P **P** 06 47 25.8 -0.5
**JTU Tsushima 72.29 317** P **P** 06 47 26.1 -0.5
**JCJI Jatiwangi 72.31 269** P **P** 06 47 26.8 -0.4
comp=Z,1µm,0.9s,comp=Z,12µm
**UNV Unalaska Valle 72.49 7** P **P** 06 47 26.8 -0.5
**UNV Unalaska Valle 72.49 7** P **P** 06 47 26.0 -1.3
baz=192
**SSLB Suanglung 72.51 303** P **P** 06 47 27.6 -0.6
**TPUB Ta-pu 72.53 302** P **P** 06 47 27.6 -0.7
**BBJI Bungbulang 72.62 268** P **P** 06 47 28.6 -0.5
**YHNB Yeheng 72.62 304** P **P** 06 47 28.5 -0.3
**TATO Taipei 72.68 304** P **P** 06 47 29.0 -0.1
**TATO Taipei 72.68 304** P **P** 06 47 28.5 -0.6
**KSM Kuching 72.85 277** P **P** 06 47 31.7 +1.4
**KSM Kuching 72.85 277** P **P** 06 47 30.8 +0.5
**CNJI Cibinong 73.15 268** P **P** 06 47 31.2 -0.8
comp=Z,370nm,1.0s
**PET Petropavlovsk 73.72 346** P **P** 06 47 33.6 -0.7
**PET Petropavlovsk 73.72 346** P **P** 06 47 33.5 -0.8
PET IAmb IAmb 06 47 34.2
comp=Z,166nm,1.4s
**PET Petropavlovsk 73.72 346***d* iP **P** 06 47 32.0 -2.3
PET pmax pmax
comp=Z,142nm,1.5s
**DBJI Dramaga 73.73 268** P **P** 06 47 35.1 -0.3
comp=Z,1µm,1.0s
**YSS Yuzh-Sakhalins 73.76 333** P **P** 06 47 34.8 +0.2
YSS IAmb IAmb 06 47 36.2
comp=Z,108nm,0.9s
**YSS Yuzh-Sakhalins 73.76 333***d* iP **P** 06 47 34.9 +0.2
YSS pmax pmax
comp=Z,123nm,0.9s
**SKJI Sukabumi 73.79 268** P **P** 06 47 35.1 -0.6
**FALS False Pass 73.89 9** P **P** 06 47 34.4 -0.9
baz=195
**PEA0B Petropavlovsk- 74.02 345** P **P** 06 47 35.3 -0.8
**PEA0B Petropavlovsk- 74.02 345***d* iP **P** 06 47 35.2 -0.8
**PETK Petropavlovsk- 74.02 345** P **P** 06 47 35.4 -0.7
**PETK Petropavlovsk- 74.02 345** P **P** 06 47 35.1 -1.0
comp=Z,90nm,0.7s,baz=128,slow=7.5,SNR=97
PETK pP **pP** 06 49 28.3 +0.3
comp=Z,25nm,1.0s,baz=114,slow=9.9,SNR=6.5
PETK PP **PP** 06 50 29.3 -2.0
comp=Z,8.0nm,0.9s,baz=119,slow=5.1,SNR=2.5
comp=Z,90nm,0.7s
**SBJI Serang 74.45 269** P **P** 06 47 39.2 -0.2
comp=Z,834nm,1.2s,comp=Z,9µm
**CHNA Chernabura Isl 74.50 11** P **P** 06 47 36.7 -2.0
baz=198
**TJN Taejon 74.73 317***de* P **P** 06 47 39.7 -0.8
**SDPT Sand Point 74.83 10** P **P** 06 47 39.8 -0.8
**SDPT Sand Point 74.83 10** P **P** 06 47 39.3 -1.3
baz=198
**P08K Saint George I 74.90 5** P **P** 06 47 39.5 -1.4
baz=189
**S12K Black Hills 74.91 9** P **P** 06 47 39.7 -1.3
baz=196
**QZH Quanzhou 74.96 303** ⇓*i* P **P** 06 47 42.3 +0.3
QZH pmax pmax
comp=Z,230nm,0.7s
**KSRS Korea Array 75.02 318** P **P** 06 47 42.5 +0.4
comp=Z,21nm,0.7s,baz=129,slow=6.3,SNR=124
KSRS pP **pP** 06 49 34.5 -0.5
comp=Z,6.1nm,1.0s,baz=126,slow=5.4,SNR=1.6
comp=Z,21nm,0.7s
**KSAR Wonju Array Be 75.04 318** P **P** 06 47 42.5 +0.3
**KSAR Wonju Array Be 75.04 318** P **P** 06 47 42.5 +0.3
**KS19 Wonju Array Si 75.09 318** P **P** 06 47 42.5 0.0
KS19 IAmb IAmb 06 47 44.9
comp=Z,46nm,1.0s
**TEY Ternei 75.15 329** ⇓*e* P **P** 06 47 41.8 -0.8
TEY pmax pmax
comp=Z,20nm,1.0s
**PPBI Pangkal Pinang 75.64 272** P **P** 06 47 46.5 +0.4
comp=Z,357nm,0.7s
**UGL Uglegorsk 75.71 334** *e* P **P** 06 47 45.4 -0.2
UGL pmax pmax
comp=Z,140nm,0.9s
**INCN Inchon 75.86 318** P **P** 06 47 46.9 +0.1
INCN IAmb IAmb 06 47 47.7
comp=Z,48nm,0.9s
**INCN Inchon 75.86 318** P **P** 06 47 46.9 +0.1
INCN pmax pmax
comp=Z,48nm,0.9s
**S14K Fog Glacier 75.89 11** P **P** 06 47 46.1 -0.4
baz=198
**CHGN Chignik 76.11 11** P **P** 06 47 46.8 -0.9
baz=199
**KASI Kota Agung 76.18 269** P **P** 06 47 48.3 -0.7
comp=Z,911nm,1.0s,comp=Z,7µm
**MSHR Mys Shultsa 76.33 324***d* iP **P** 06 47 49.8 +0.6
MSHR pmax pmax
comp=Z,124nm,0.9s
**SAO San Andreas Ge 76.57 44** IAmb IAmb 06 47 52.7
comp=Z,48nm,0.9s
**PSTR Posyet 76.58 324***d* iP **P** 06 47 51.2 +0.7
**PMPB Monarch Peak 76.69 44** IAmb IAmb 06 47 53.7
comp=Z,69nm,1.2s
**BBGB Big Mountain B 76.73 44** IAmb IAmb 06 47 54.4
comp=Z,69nm,1.2s
**TYV Tymovskoe 76.87 336** *e* P **P** 06 47 52.1 +0.1
TYV *eS* **S** 06 56 50.4 -5.5
TYV pmax pmax
comp=Z,83nm,1.1s
TYV pmax pmax
comp=Z,200nm,3.2s
TYV smax smax
comp=N,11nm,1.7s
TYV smax smax
comp=N,300nm,4.2s
TYV smax smax
comp=E,400nm,4.2s
**USA0B Ussuriysk Arra 76.95 326** P **P** 06 47 52.9 +0.3
USA0B IAmb IAmb 06 47 55.3
comp=Z,93nm,1.2s
**USA0B Ussuriysk Arra 76.95 326***d* iP **P** 06 47 52.8 +0.3
**USRK Ussuriysk Ar. 76.95 326** P **P** 06 47 53.0 +0.5
comp=Z,34nm,0.8s,baz=111,slow=3.8,SNR=48
comp=Z,34nm,0.8s
**KMPM Mount Pierce 77.05 39** IAmb IAmb 06 47 55.7
comp=Z,69nm,1.1s
**KMRM Mail Ridge 77.18 40** IAmb IAmb 06 47 56.4
comp=Z,90nm,1.0s
**SII Sitkinak Islan 77.21 13** P **P** 06 47 53.5 -0.2
baz=203
**HKPS Hong Kong Po S 77.38 299** P **P** 06 47 55.5 +0.1
**109C Camp Elliot, M 77.44 49** P **P** 06 47 56.6 +1.1
baz=238,SNR=6.2
**CBX Cerro Bola 77.46 50** IAmb IAmb 06 47 57.9
comp=Z,70nm,1.2s
**R16K Pilot Point 77.46 11** P **P** 06 47 54.8 -0.2
baz=200
**R17L Mt. Peulik Vol 77.75 12** P **P** 06 47 56.4 -0.2
baz=201
**MONP2 Monument Peak 77.93 49** P **P** 06 47 59.8 +1.4
baz=239,SNR=44
**ISA Isabella, Lake 77.95 46** IAmb IAmb 06 48 00.4
comp=Z,53nm,1.0s
**OHAK Old Harbor 78.02 14** P **P** 06 47 57.9 0.0
baz=204
**R18K Karluk 78.08 13** P **P** 06 47 58.2 -0.1
baz=203
**TPRI Tanjung Pinang 78.13 275** P **P** 06 48 00.3 +0.6
comp=Z,247nm,0.8s
**NJ2 Nanjing 78.24 309** ⇓*i* P **P** 06 48 00.3 +0.5
NJ2 pmax pmax
comp=Z,110nm,0.7s
**PFO Pinyon Flats O 78.27 49** P **P** 06 48 00.8 +0.7
**PFO Pinyon Flats O 78.27 49** P **P** 06 48 00.9 +0.7
baz=239,SNR=12
**PFO Pinyon Flats O 78.27 49***d* iP **P** 06 48 00.6 +0.4
PFO pmax pmax

comp=Z,43nm,1.2s
TPFO Pinon Flats 78.27 49 P P 06 48 01.2 +1.0
baz=239,SNR=11
Q17K Contact Creek 78.43 12 P P 06 48 00.1 -0.3
baz=202
O14K Tigyukauivet M 78.45 9 P P 06 47 59.7 -0.6
baz=196
MDJ Mudanjiang 78.52 325 P P 06 48 01.5 +0.5
MDJ S S 06 57 18.8 +5.2
MDJ pmax pmax
comp=Z,230nm,0.8s
MDJ pmax pmax
comp=Z,500nm,3.5s
O15K Ungalikthiuk R 78.60 10 P P 06 48 01.0 -0.1
baz=198
SLBS Sierra La Lagu 78.61 60 P P 06 48 02.5 +0.3
SLBS IAmb IAmb 06 48 04.5
comp=Z,39nm,0.8s
MDPB Devils Postpil 78.62 44 IAmb IAmb 06 48 04.0
comp=Z,50nm,0.9s
Q16K King Salmon 78.67 11 P P 06 48 01.7 +0.2
baz=201
KDAK Kodiak Island 78.68 14 P P 06 48 01.5 -0.1
baz=205
P16K Nushagak River 78.76 11 P P 06 48 02.1 +0.1
baz=200
WAKR Walker 78.87 43 IAmb IAmb 06 48 05.5
comp=Z,56nm,1.0s
HATC Hat Creek Radi 78.91 40 IAmb IAmb 06 48 05.4
comp=Z,86nm,1.1s
MPK Martis Peak 78.93 42 IAmb IAmb 06 48 06.2
comp=Z,112nm,1.2s
M11K Mekoryuk 78.95 6 P P 06 48 03.5 +0.7
baz=192
Q18K Katmai Hardscr 78.96 12 P P 06 48 02.3 -0.9
baz=202
BTDF Bukit Timah Da 78.99 275 P P 06 48 05.1 +0.8
N14K Kuskokwak Cree 79.04 8 P P 06 48 03.1 -0.3
baz=196,SNR=12
PNTR Pine Nut 79.09 43 IAmb IAmb 06 48 06.6
comp=Z,83nm,0.9s
GLA Glamis 79.17 50 IAmb IAmb 06 48 07.5
comp=Z,54nm,1.0s
P17K Kvichak River 79.20 11 P P 06 48 03.4 -0.8
baz=201
L04D Klamath Falls 79.23 39 IAmb IAmb 06 48 06.8
comp=Z,52nm,1.0s
YERR Yerington 79.27 43 IAmb IAmb 06 48 07.2
comp=Z,67nm,1.0s
O16K Kokwok River B 79.28 10 IAmb IAmb 06 48 04.1
comp=Z,37nm,0.6s
O16K Kokwok River B 79.28 10 P P 06 48 03.5 -1.2
baz=200,SNR=8.7
M13K Dall Lake 79.29 7 P P 06 48 05.0 +0.3
baz=194
LHV Little Huntoon 79.34 44 IAmb IAmb 06 48 08.0
comp=Z,64nm,1.0s
GRNR Gornyy 79.38 333 ⇓*i*P P 06 48 06.0 +0.5
GRNR pmax pmax
comp=E,30nm,0.9s
GRNR pmax pmax
comp=Z,130nm,0.9s
GRAC Grapevine Rang 79.42 45 IAmb IAmb 06 48 08.4
comp=Z,50nm,0.9s
Q20K Shuyak Island 79.48 13 P P 06 48 05.0 -0.8
baz=205
Q19K Cape Douglas, 79.50 13 P P 06 48 05.1 -0.8
baz=204
N15K Kwethluk River 79.50 9 IAmb IAmb 06 48 06.9
comp=Z,42nm,0.6s
N15K Kwethluk River 79.50 9 P P 06 48 05.9 0.0
baz=198,SNR=7.0
NVAR Mina Array Bea 79.57 44 P P 06 48 07.6 +0.6
NVAR Mina Array Bea 79.57 44 P P 06 48 08.0 +0.9
comp=Z,29nm,0.8s,baz=225,slow=9.2,SNR=204
NVAR pP pP 06 50 01.6 +0.5
comp=Z,6.9nm,0.9s,baz=217,slow=8.9,SNR=3.4
NVAR PKKPbc PKKPbc 07 06 53.3 +1.5
comp=Z,0.3nm,0.5s,baz=89,slow=4.1,SNR=4.4
comp=Z,29nm,0.8s
P18K Big Mountain, 79.61 12 IAmb IAmb 06 48 06.5
comp=Z,104nm,0.8s
P18K Big Mountain, 79.61 12 P P 06 48 05.5 -1.0
baz=202
O17K Koliganek Bris 79.62 11 P P 06 48 05.9 -0.6
baz=200,SNR=5.8
QIZ Qiongzhong 79.69 294 P P 06 48 07.8 0.0
QIZ S S 06 57 31.3 +4.6
QIZ sS sS 07 00 54.4 +3.3
QIZ pmax pmax
comp=Z,55nm,1.4s
QIZ Qiongzhong 79.69 294 IAmb IAmb 06 48 09.4
comp=Z,246nm,1.9s
M14K Bethel 79.80 8 P P 06 48 07.5 +0.1
baz=196,SNR=6.7
DL2 Dalian 79.91 317 P P 06 48 08.8 +0.3
DL2 pmax pmax
comp=Z,110nm,0.8s
M15K Kasigluk River 79.92 9 P P 06 48 08.2 +0.1
baz=197,SNR=9.4
N16K Nishlik Lake 80.00 10 P P 06 48 08.8 +0.3
baz=199,SNR=8.0
O18K Koktuh Hills 80.04 12 P P 06 48 07.8 -0.9
baz=202,SNR=21
TPH Tonopah 80.09 45 IAmb IAmb 06 48 11.8
comp=Z,134nm,1.0s
214A Organ Pipe Nat 80.11 52 P P 06 48 11.3 +1.5
baz=241,SNR=12
TPNV Topopah Spring 80.15 46 P P 06 48 11.0 +1.0
baz=238,SNR=29
P19K Oil Pt 80.25 13 P P 06 48 08.8 -1.1
baz=204
L14K Kuka Creek 80.28 8 P P 06 48 09.9 +0.1
baz=195,SNR=8.5
SNY Shenyang 80.31 320 ⇓P P 06 48 10.3 -0.2
SNY pP pP 06 50 08.3 +2.8
SNY sP sP 06 50 59.4 -0.8
SNY S S 06 57 25.9 -6.2
SNY pmax pmax
comp=Z,37nm,1.0s
SNY pmax pmax
comp=Z,500nm,12.0s
N17K Nushagak Hills 80.31 10 IAmb IAmb 06 48 11.2
comp=Z,80nm,1.6s
N17K Nushagak Hills 80.31 10 P P 06 48 09.6 -0.5
baz=200
CN2 Changchun 80.35 322 P P 06 48 10.9 +0.2
CN2 pP pP 06 50 06.3 +0.7
CN2 S S 06 57 35.3 +2.9
CN2 pmax pmax
comp=Z,150nm,1.2s
CN2 pmax pmax
comp=Z,500nm,3.0s
BNX BinXian 80.43 325 ⇓P P 06 48 10.8 -0.3
BNX S S 06 57 37.0 +3.9
BNX pmax pmax
comp=Z,190nm,0.8s
KLR Kul'dur 80.45 329 P P 06 48 11.3 +0.2
comp=Z,32nm,1.1s,baz=100,slow=4.1,SNR=43
KLR PKKPbc PKKPbc 07 06 46.9 -3.3
comp=Z,2.1nm,0.5s,baz=297,slow=4.8,SNR=7.0
comp=Z,32nm,1.1s
KLR Kul'dur 80.45 329 *d i*P P 06 48 11.3 +0.2
KLR pmax pmax
comp=Z,60nm,1.5s
G03D McMinnville, O 80.49 36 IAmb IAmb 06 48 13.3
comp=Z,77nm,1.2s
M16K Timber Creek 80.49 9 IAmb IAmb 06 48 12.8
comp=Z,121nm,1.1s
M16K Timber Creek 80.49 9 P P 06 48 11.8 +0.7
baz=199,SNR=19
J05D Fort Rock, OR 80.50 38 IAmb IAmb 06 48 13.8
comp=Z,99nm,1.1s
O19K Port Alsworth 80.53 12 P P 06 48 10.8 -0.4
baz=203
CNPM China Poot 80.56 14 IAmb IAmb 06 48 11.5
comp=Z,41nm,0.8s
ILSW Iliamna Southw 80.57 13 IAmb IAmb 06 48 11.5
comp=Z,107nm,0.8s
HOM Homer 80.59 13 P P 06 48 11.1 -0.5
baz=206
N18K Kilae Creek 80.69 11 P P 06 48 11.4 -0.7
baz=202,SNR=5.5
L15K Ungalak Mounta 80.76 8 P P 06 48 12.4 0.0
baz=196,SNR=11
O20K Slope Mountain 80.77 13 P P 06 48 11.9 -0.7
baz=205
H04A Detroit Lake 80.78 37 IAmb IAmb 06 48 14.2
comp=Z,96nm,1.5s
BRLK Bradley Lake 80.86 14 IAmb IAmb 06 48 13.3
comp=Z,67nm,0.8s
S11A Rachel 80.86 46 IAmb IAmb 06 48 15.7
comp=Z,54nm,0.9s
BRSE Bradley Lake S 80.87 14 P P 06 48 12.3 -0.8
baz=206,SNR=8.8
WHN Wuhan 80.89 306 P P 06 48 14.4 +0.6
WHN S S 06 57 41.5 +3.0
WHN pmax pmax
comp=Z,130nm,0.9s
CNSH ChangSha 80.94 304 P P 06 48 14.8 +0.7
CNSH pmax pmax
comp=Z,100nm,1.1s
PINE Pine Mountain 80.97 38 IAmb IAmb 06 48 16.4
comp=Z,73nm,1.0s
I05D Terrebonne, OR 81.06 38 IAmb IAmb 06 48 16.3
comp=Z,38nm,1.0s
L16K Owhat River 81.07 9 IAmb IAmb 06 48 15.3
comp=Z,92nm,1.1s
L16K Owhat River 81.07 9 P P 06 48 14.1 +0.1
baz=198,SNR=18
N19K Bonanza Creek 81.07 12 P P 06 48 13.2 -1.0
baz=203,SNR=10.0
M17K Holitna River 81.09 10 IAmb IAmb 06 48 15.9
comp=Z,123nm,0.9s
M17K Holitna River 81.09 10 P P 06 48 14.6 +0.5
baz=200,SNR=21
E03A Lebam 81.15 35 IAmb IAmb 06 48 16.6
comp=Z,61nm,1.1s
R11B Troy Canyon, C 81.33 45 P P 06 48 16.9 +0.7
baz=239,SNR=31
K15K Wolf Creek Mou 81.34 8 P P 06 48 16.0 +0.6
baz=196,SNR=38
BMN Battle Mountai 81.36 43 IAmb IAmb 06 48 18.2
comp=Z,51nm,0.9s
F04A Amboy 81.40 36 IAmb IAmb 06 48 17.7
comp=Z,67nm,1.4s
M18K Stony River 81.45 11 P P 06 48 16.0 0.0
baz=202,SNR=9.5
HOOD Mount Hood Mea 81.46 37 IAmb IAmb 06 48 18.1
comp=Z,51nm,1.1s
SEW Seward 81.49 14 P P 06 48 15.1 -1.1
baz=208
MA2 Magadan 81.54 345 P P 06 48 15.5 -1.0
MA2 Magadan 81.54 345 P P 06 48 15.5 -1.0
comp=Z,52nm,0.9s,baz=141,slow=6.3,SNR=21
MA2 pP pP 06 50 11.6 +0.5
comp=Z,10nm,1.0s,baz=149,slow=5.9,SNR=2.3
comp=Z,52nm,0.9s
MA2 Magadan 81.54 345 *d i*P P 06 48 15.1 -1.4
MA2 pmax pmax
comp=Z,75nm,1.0s
MA2 Magadan 81.54 345 P P 06 48 15.2 -1.3
comp=Z,38nm,0.9s,comp=Z,2µm
J14K Nanvaranak Lak 81.54 7 P P 06 48 16.5 +0.1
baz=194,SNR=6.9
TIA Tai'an 81.56 312 P P 06 48 17.0 -0.1
TIA pmax pmax
comp=Z,61nm,1.0s
WVOR Wild Horse Val 81.57 40 IAmb IAmb 06 48 19.2
comp=Z,58nm,1.0s
G05A Wamic 81.60 37 IAmb IAmb 06 48 24.4
comp=Z,38nm,1.0s
L17K Donlin 81.65 9 P P 06 48 17.9 +0.9
baz=199,SNR=18
CAPN Captain Cook N 81.70 13 P P 06 48 18.0 +0.8
baz=206
O22K Cooper Landing 81.76 14 IAmb IAmb 06 48 17.6
comp=Z,74nm,0.6s
O22K Cooper Landing 81.76 14 P P 06 48 17.2 -0.3
baz=207,SNR=7.0
GULI GuiLin 81.78 300 ⇓P P 06 48 19.6 +1.1
TUC Tucson 81.80 52 P P 06 48 19.7 +1.1
TUC IAmb IAmb 06 48 21.5
comp=Z,59nm,1.0s
TUC Tucson 81.80 52 P P 06 48 20.2 +1.6
baz=242
TUC Tucson 81.80 52 P P 06 48 19.7 +1.1
TUC pmax pmax
comp=Z,59nm,1.0s
BELA Belgrano 2 81.83 173 P P 06 48 18.4 +0.5
N20K Mount Spurr 81.87 12 P P 06 48 16.9 -1.4
baz=205,SNR=8.7
SPCR Spur Chakacha 81.87 12 P P 06 48 16.6 -1.6
baz=205,SNR=7.1
P23K Montague Islan 81.89 15 P P 06 48 17.2 -1.0
baz=210
SPU Mount Spurr 81.89 12 P P 06 48 16.7 -1.6
GAMB Gambell 81.90 3 P P 06 48 18.5 +0.3
baz=186
I07A Izee 81.98 38 IAmb IAmb 06 48 21.3
comp=Z,47nm,0.9s
L18K Granite Mounta 81.99 10 IAmb IAmb 06 48 20.1
comp=Z,135nm,1.4s
L18K Granite Mounta 81.99 10 P P 06 48 18.9 +0.2
baz=201,SNR=23
M19K Big River Lodg 82.10 11 IAmb IAmb 06 48 19.4
comp=Z,31nm,0.8s
M19K Big River Lodg 82.10 11 P P 06 48 18.2 -1.1
baz=203
J08A Circle Bar Ran 82.19 40 IAmb IAmb 06 48 22.2
comp=Z,68nm,1.1s
Q12A Willow Creek I 82.20 45 IAmb IAmb 06 48 22.5
comp=Z,87nm,1.3s
K17K Iditarod 82.20 9 IAmb IAmb 06 48 21.2
comp=Z,79nm,1.4s
K17K Iditarod 82.20 9 P P 06 48 20.5 +0.7
baz=199,SNR=8.5
LCMT Little Creek M 82.26 47 IAmb IAmb 06 48 23.1
comp=Z,38nm,0.9s
L19K White Mountain 82.27 11 IAmb IAmb 06 48 21.8
comp=Z,43nm,1.0s
L19K White Mountain 82.27 11 P P 06 48 19.7 -0.5
baz=202,SNR=13
X16A Lo Mia Camp, P 82.29 50 IAmb IAmb 06 48 23.9
comp=Z,51nm,1.0s
RC01 Rabbit Creek A 82.30 14 IAmb IAmb 06 48 20.6
comp=Z,48nm,1.0s
RC01 Rabbit Creek A 82.30 14 P P 06 48 19.4 -0.9
baz=207,SNR=6.7
M20K Styx River 82.31 12 P P 06 48 20.0 -0.5
baz=204
D05A Enumclaw 82.39 35 IAmb IAmb 06 48 23.3
comp=Z,110nm,1.3s
SUA Susitna One 82.42 13 IAmb IAmb 06 48 21.0
comp=Z,60nm,0.7s
SUA Susitna One 82.42 13 P P 06 48 20.1 -0.9
baz=206,SNR=16
PWL Port Wells 82.42 14 IAmb IAmb 06 48 21.0
comp=Z,58nm,0.8s
PWL Port Wells 82.42 14 P P 06 48 19.9 -1.1
baz=209,SNR=11
J16K Anvik River 82.42 8 IAmb IAmb 06 48 22.2
comp=Z,60nm,0.8s
J16K Anvik River 82.42 8 P P 06 48 21.0 +0.1
baz=197,SNR=23
CCUT Cedar City 82.44 47 IAmb IAmb 06 48 24.4
comp=Z,37nm,0.9s
HIN Hinchinbrook I 82.46 15 IAmb IAmb 06 48 21.4
comp=Z,119nm,1.4s
319A Douglas 82.52 54 IAmb IAmb 06 48 25.4
comp=Z,96nm,1.0s
KNB Kanab 82.55 47 IAmb IAmb 06 48 24.3
comp=Z,37nm,0.8s
IPM Ipoh 82.58 277 P P 06 48 23.6 +0.7
PSUT Pine Spring 82.59 46 IAmb IAmb 06 48 24.5
comp=Z,30nm,0.7s
KAIM Kayak Island 82.60 16 IAmb IAmb 06 48 22.8
comp=Z,82nm,0.9s
KAIM Kayak Island 82.60 16 P P 06 48 21.7 -0.2
baz=212
U15A North Rim 82.64 48 IAmb IAmb 06 48 25.6
comp=Z,93nm,0.9s
SKT Skwentna 82.72 12 P P 06 48 20.5 -2.0
baz=206,SNR=7.9
L20K Farewell, AK 82.72 11 P P 06 48 21.9 -0.6
baz=203,SNR=11
GLI Glacier Island 82.73 15 IAmb IAmb 06 48 22.5
comp=Z,78nm,0.7s
GLI Glacier Island 82.73 15 P P 06 48 21.7 -0.8
baz=210,SNR=17
J17K VABM Dome 82.73 9 IAmb IAmb 06 48 23.2
comp=Z,35nm,0.7s
J17K VABM Dome 82.73 9 P P 06 48 22.5 +0.1
baz=198,SNR=18
CRAG Craig 82.76 24 P P 06 48 23.4 +0.7
baz=223
EYAK Cordova Ski Ar 82.78 16 P P 06 48 22.1 -0.6
EYAK Cordova Ski Ar 82.78 16 P P 06 48 22.0 -0.6
baz=211,SNR=5.2
M22K Willow 82.81 13 IAmb IAmb 06 48 23.4
comp=Z,122nm,0.9s
M22K Willow 82.81 13 P P 06 48 21.9 -0.9
baz=207,SNR=16
WUAZ Wupatki 82.86 49 IAmb IAmb 06 48 26.5
comp=Z,49nm,1.0s
WUAZ Wupatki 82.86 49 P P 06 48 25.4 +1.5
baz=242,SNR=31
KNK Knik Glacier 82.88 14 IAmb IAmb 06 48 23.5
comp=Z,47nm,0.8s
KNK Knik Glacier 82.88 14 P P 06 48 22.7 -0.6
baz=208,SNR=8.8
PMR Palmer 82.88 14 P P 06 48 22.6 -0.6
PMR Palmer 82.88 14 IAmb IAmb 06 48 22.9
comp=Z,33nm,0.6s
PMR Palmer 82.88 14 P P 06 48 22.4 -0.9
baz=208,SNR=21
RAGM Ragged Mountai 82.92 16 IAmb IAmb 06 48 24.2
comp=Z,59nm,1.2s
HMT Hamilton 82.99 16 IAmb IAmb 06 48 23.9
comp=Z,29nm,0.8s
I17K Unalakleet 82.99 8 P P 06 48 23.7 +0.1
baz=197
G08A Pilot Rock 82.99 38 IAmb IAmb 06 48 26.1
comp=Z,64nm,1.2s
PKCU Pink Cliffs 83.12 47 IAmb IAmb 06 48 28.6
comp=Z,80nm,1.0s
SIT Sitka 83.13 22 P P 06 48 25.4 +0.9
SIT Sitka 83.13 22 P P 06 48 24.8 +0.3
baz=221,SNR=5.3
ANM Nome 83.13 6 P P 06 48 25.6 +1.2
baz=192
J18K Innoko River 83.15 10 IAmb IAmb 06 48 25.4
comp=Z,72nm,0.8s
J18K Innoko River 83.15 10 P P 06 48 24.4 -0.2
baz=201,SNR=41
DUN6 Lazy B Ranch 83.19 53 IAmb IAmb 06 48 28.7
comp=Z,109nm,1.0s
KULM Kulim 83.20 278 IAmb IAmb 06 48 27.1
comp=Z,91nm,0.7s
E07A Sunnyside 83.20 36 IAmb IAmb 06 48 27.1
comp=Z,63nm,1.2s
U33K Whale Pass 83.23 24 P P 06 48 25.7 +0.6
baz=223,SNR=12
SNH Sunshine Point 83.24 17 IAmb IAmb 06 48 26.3
comp=Z,102nm,0.9s
V35K Ketchikan 83.25 25 P P 06 48 26.3 +1.1
baz=224
HEH HeiHe 83.25 328 *e*P P 06 48 25.1 -0.2
HEH pP pP 06 50 22.8 +1.3
HEH PP PP 06 51 51.3 +4.3
HEH S SKSac 06 57 56.3 +0.3
HEH pmax pmax
comp=Z,75nm,1.3s
SML Sawmill 83.25 14 P P 06 48 24.2 -0.9
baz=208,SNR=6.0
HAWA Hanford 83.29 37 IAmb IAmb 06 48 27.5
comp=Z,62nm,1.1s
CUT Chulitna 83.36 13 P P 06 48 24.6 -1.0
baz=207,SNR=18
M23K Glacier View 83.38 14 P P 06 48 24.6 -1.2
baz=208,SNR=8.6
BMRM Bremner River 83.43 16 P P 06 48 25.7 -0.4
baz=212,SNR=16
X18A Snowflake 83.44 51 IAmb IAmb 06 48 28.8
comp=Z,26nm,0.7s
WAX Waxell Ridge 83.46 17 IAmb IAmb 06 48 27.2
comp=Z,92nm,1.0s
PMSA Palmer Station 83.47 157 P P 06 48 27.4 +1.1
PMSA Palmer Station 83.47 157 *e*P P 06 48 27.2 +1.0
MESA MESA 83.49 17 P P 06 48 26.8 +0.2
baz=214,SNR=20
MTPU Mount Pierson 83.50 47 IAmb IAmb 06 48 30.2
comp=Z,40nm,0.9s
K20K Telida 83.50 11 IAmb IAmb 06 48 26.9
comp=Z,70nm,0.8s
K20K Telida 83.50 11 P P 06 48 25.8 -0.5
baz=203
S31K Pelican 83.50 21 IAmb IAmb 06 48 27.8
comp=Z,37nm,1.0s
S31K Pelican 83.50 21 P P 06 48 26.8 +0.4
baz=220,SNR=27
SCM Sheep Creek Mo 83.51 14 P P 06 48 25.7 -0.8
baz=209,SNR=25
H16K Elim 83.52 7 P P 06 48 26.3 -0.1
baz=195,SNR=11
KLU Klutina 83.55 15 P P 06 48 26.1 -0.5
baz=211,SNR=10
TCRU Three Creeks R 83.59 46 IAmb IAmb 06 48 30.3
comp=Z,35nm,1.0s
MAW Mawson 83.60 200 P P 06 48 27.6 +0.8
comp=Z,23nm,0.5s,baz=133,slow=6.1,SNR=50
comp=Z,23nm,0.5s
E08A Dider Farm, El 83.61 37 P P 06 48 27.5 +0.3
E08A IAmb IAmb 06 48 28.9
comp=Z,86nm,1.5s
CRQM Cirque 83.64 17 P P 06 48 26.8 -0.5
CRQM IAmb IAmb 06 48 27.9
comp=Z,75nm,1.0s
CRQE Cirque 83.65 17 P P 06 48 27.0 -0.3
baz=213,SNR=23
G15K Niukluk 83.68 6 P P 06 48 27.1 0.0
baz=194,SNR=12
MVU Marysvale 83.70 46 IAmb IAmb 06 48 30.9
comp=Z,125nm,1.0s
S32K Killisnoo 83.71 22 P P 06 48 27.5 +0.1
baz=221,SNR=8.6
ISLE Juniper Island 83.73 17 IAmb IAmb 06 48 28.3
comp=Z,60nm,0.9s
WRAK Wrangell Islan 83.75 24 P P 06 48 28.2 +0.5
baz=223
PNL Peninsula 83.82 19 P P 06 48 27.9 -0.1
PNL Peninsula 83.82 19 P P 06 48 27.7 -0.4
baz=217,SNR=14
J19K Poorman 83.83 10 IAmb IAmb 06 48 28.8
comp=Z,23nm,0.7s
J19K Poorman 83.83 10 P P 06 48 27.9 0.0
baz=202,SNR=15
HNS HongShan 83.83 312 ⇓P P 06 48 28.8 +0.3
HNS pP pP 06 50 27.3 +2.4
HNS pmax pmax
comp=Z,98nm,1.3s
MFID Camas Ranch 83.84 41 IAmb IAmb 06 48 30.5
comp=Z,37nm,1.0s
W18A Petrified Fore 83.86 50 P P 06 48 30.2 +1.2
baz=243
TNA Tin City 83.90 4 P P 06 48 28.1 -0.1
baz=190
PINM Pinnacle 83.91 18 P P 06 48 28.1 -0.5
baz=216,SNR=7.5
TABL Table Mountain 83.94 18 IAmb IAmb 06 48 29.5
comp=Z,66nm,0.7s
F14K Arctic Creek 83.94 5 P P 06 48 28.2 -0.2
baz=191
VRDI Verde Repeater 83.95 16 IAmb IAmb 06 48 29.3
comp=Z,74nm,1.3s
N25K Chitina, Valde 83.98 15 IAmb IAmb 06 48 29.3
comp=Z,67nm,0.7s
N25K Chitina, Valde 83.98 15 P P 06 48 28.5 -0.3
baz=212,SNR=44
GRNC Granite Creek 84.00 17 IAmb IAmb 06 48 29.8
comp=Z,55nm,1.1s
M24K Tolsona, Glenn 84.02 15 P P 06 48 29.0 0.0
baz=210,SNR=21
R31K City Hall, Gus 84.02 21 P P 06 48 29.2 +0.3
baz=220
GLB Gilahina Butte 84.04 16 IAmb IAmb 06 48 29.5
comp=Z,44nm,0.6s
WAT6 Susitna Watana 84.07 14 P P 06 48 28.7 -0.7
baz=209,SNR=39
BJT Baijiatuau 84.09 315 P P 06 48 29.9 +0.1
BJT Baijiatuau 84.09 315 P P 06 48 29.9 +0.1
BJT pmax pmax
comp=Z,298nm,1.8s
H17K Granite Mounta 84.09 8 P P 06 48 28.4 -0.8
baz=198,SNR=8.2
BJI Beijing 84.10 315 P P 06 48 30.0 +0.2
BJI pP pP 06 50 27.4 +1.2
BJI pmax pmax
comp=Z,42nm,1.3s
WAT1 Susitna Watana 84.11 13 P P 06 48 28.5 -0.9
baz=208
SEY Seymchan 84.12 347 *d i*P P 06 48 28.7 -0.6

SEY pmax pmax
comp=Z,115nm,0.8s
DUG Dugway, Tooele 84.12 44 P P 06 48 30.7 +0.6
baz=240,SNR=11
LYN LuoYang 84.12 309 ⇓P P 06 48 30.8 +0.7
LYN pP pP 06 50 28.8 +2.3
LYN SKS SKSac 06 58 01.4 -0.9
LYN S ScS 06 58 15.3 -3.8
LYN pmax pmax
comp=Z,450nm,0.8s
E09A Wood Farm, Sta 84.15 37 IAmb IAmb 06 48 31.4
comp=Z,66nm,1.7s
121A Cookes Peak, D 84.17 53 IAmb IAmb 06 48 33.3
comp=Z,28nm,0.8s
121A Cookes Peak, D 84.17 53 P P 06 48 32.0 +1.4
baz=244,SNR=20
MCARA McCarthy VSAT 84.20 16 IAmb IAmb 06 48 30.5
comp=Z,50nm,1.1s
MCARA McCarthy VSAT 84.20 16 P P 06 48 29.6 -0.2
baz=213,SNR=11
J20K Nowinta River 84.24 10 IAmb IAmb 06 48 30.6
comp=Z,42nm,0.8s
J20K Nowinta River 84.24 10 P P 06 48 29.6 -0.4
baz=203,SNR=29
G16K Koyuk River 84.24 7 P P 06 48 29.7 -0.2
baz=195
LOGN Logan Glacier 84.29 17 IAmb IAmb 06 48 31.1
comp=Z,55nm,1.1s
CHUM Lake Minchumin 84.30 11 P P 06 48 28.9 -1.3
baz=205
P29M Windy Craggy 84.31 19 IAmb IAmb 06 48 31.8
comp=Z,40nm,0.8s
P29M Windy Craggy 84.31 19 P P 06 48 30.9 +0.5
baz=218,SNR=26
CTG Chitna Glacier 84.31 17 P P 06 48 30.5 -0.1
baz=215,SNR=26
CTGM Chitina Glacie 84.31 17 IAmb IAmb 06 48 31.2
comp=Z,48nm,0.9s
F15K North Star Dit 84.32 6 P P 06 48 30.5 +0.2
baz=193
GCSA Galena City Sc 84.33 9 P P 06 48 30.3 0.0
baz=200
R32K Eaglecrest 84.33 22 P P 06 48 30.5 -0.1
baz=221
F10A Beach Ranch, E 84.38 38 IAmb IAmb 06 48 32.5
comp=Z,62nm,1.1s
ZAIG Zacatecas 84.44 64 IAmb IAmb 06 48 35.0
comp=Z,37nm,0.8s
O28M Mount Upton 84.48 18 P P 06 48 31.4 -0.2
baz=216,SNR=32
MOIG Morelia 84.49 67 IAmb IAmb 06 48 34.2
comp=Z,67nm,0.8s
H18K Honhosa River 84.51 8 P P 06 48 30.4 -0.8
baz=199
HARP HAARP 84.52 15 P P 06 48 30.9 -0.5
baz=211,SNR=13
G17K Kiwalik Mounta 84.54 7 P P 06 48 30.7 -0.7
baz=197,SNR=5.1
ENH Enshi 84.55 304 P P 06 48 32.5 +0.2
O29M Mount Kennedy 84.58 19 P P 06 48 32.0 +0.1
baz=218,SNR=9.1
DHY Denali Highway 84.58 14 IAmb IAmb 06 48 32.1
comp=Z,122nm,1.8s
DHY Denali Highway 84.58 14 P P 06 48 31.1 -0.8
baz=209,SNR=22
PLBC Pleasant Camp 84.61 20 P P 06 48 32.2 +0.4
baz=220,SNR=31
BPAW Bear Paw Mtn. 84.74 12 P P 06 48 30.2 -2.2
baz=206,SNR=14
I20K Naaghedeneel 84.76 10 IAmb IAmb 06 48 33.4
comp=Z,53nm,0.9s
I20K Naaghedeneel 84.76 10 P P 06 48 32.2 -0.3
baz=203,SNR=13
TMUT Trail Mountain 84.77 46 IAmb IAmb 06 48 35.4
comp=Z,26nm,0.7s
HLID Hailey 84.79 41 P P 06 48 34.5 +1.2
baz=239,SNR=46
EPT El Paso 84.82 54 IAmb IAmb 06 48 36.2
comp=Z,50nm,1.0s
MCK McKinley 84.83 13 P P 06 48 31.9 -1.0
baz=208,SNR=32
GSI Gunungsitoli 84.84 273 P P 06 48 35.3 +1.2
GSI Gunungsitoli 84.84 273 P P 06 48 33.7 -0.4
GSI Gunungsitoli 84.84 273 P P 06 48 35.0 +0.9
comp=Z,504nm,1.0s
PAX Paxson 84.93 14 P P 06 48 32.4 -1.0
baz=211,SNR=18
P30M Million Dollar 84.94 19 P P 06 48 34.1 +0.5
baz=219
SKAG Skagway 84.96 20 IAmb IAmb 06 48 35.4
comp=Z,94nm,1.7s
SKAG Skagway 84.96 20 P P 06 48 34.3 +0.8
baz=220,SNR=18
T35M Bob Quinn 84.96 24 P P 06 48 34.1 +0.4
baz=225,SNR=5.7
YUK8 Steele Glacier 85.02 18 P P 06 48 34.2 +0.1
baz=216,SNR=28
M26K Nabesna, AK 85.06 16 IAmb IAmb 06 48 35.4
comp=Z,67nm,1.1s
M26K Nabesna, AK 85.06 16 P P 06 48 33.8 -0.3
baz=213,SNR=43
BWN Browne 85.11 12 IAmb IAmb 06 48 34.2
comp=Z,111nm,1.1s
H19K Roundabout Mou 85.13 9 IAmb IAmb 06 50 36.4
comp=Z,78nm,1.4s
H19K Roundabout Mou 85.13 9 P P 06 48 34.0 -0.2
baz=201,SNR=9.3
SRU San Rafael Swe 85.15 46 IAmb IAmb 06 48 36.9
comp=Z,27nm,0.7s
YUK6 Outpost Mounta 85.15 18 P P 06 48 34.3 -0.5
baz=218,SNR=5.9
G18K Tagagawik 85.17 8 P P 06 48 33.7 -0.8
baz=199,SNR=8.3
YUK3 Moose Creek 85.22 17 P P 06 48 34.8 -0.3
baz=216,SNR=16
S34M Telegraph Cree 85.29 23 IAmb IAmb 06 48 36.9
comp=Z,44nm,0.8s
S34M Telegraph Cree 85.29 23 P P 06 48 35.9 +0.7
baz=224,SNR=51
GYA Guiyang 85.30 300 ⇓P P 06 48 36.8 +0.6
GYA pmax pmax
comp=Z,120nm,1.0s
M27K Edge Creek, AK 85.31 16 IAmb IAmb 06 48 36.5
comp=Z,74nm,1.1s
M27K Edge Creek, AK 85.31 16 P P 06 48 35.5 +0.1
baz=214,SNR=47
H20K Anotleneega Mo 85.34 10 P P 06 48 35.1 -0.2
baz=202,SNR=10
F17K Baldwin Pennin 85.38 7 P P 06 48 35.1 -0.3
baz=196
YUK4 Talbot Arm 85.39 18 P P 06 48 36.1 +0.2
baz=218,SNR=9.1
L26K Log Cabin Wild 85.49 15 IAmb IAmb 06 48 36.9
comp=Z,34nm,1.1s
L26K Log Cabin Wild 85.49 15 P P 06 48 35.9 -0.3
baz=213,SNR=18
TCUT Toone Canyon 85.50 44 IAmb IAmb 06 50 41.3
comp=Z,96nm,1.3s
ZEA Zeya 85.53 331 eP P 06 48 36.8 +0.4
ZEA pmax pmax
comp=E,20nm,1.1s
ZEA pmax pmax
comp=N,50nm,0.8s
ZEA pmax pmax
comp=Z,90nm,0.8s
I21K Tanana 85.54 11 IAmb IAmb 06 48 36.6
comp=Z,72nm,1.4s
I21K Tanana 85.54 11 P P 06 48 35.5 -0.7
baz=205
NEA2 Nenana 85.56 12 P P 06 48 34.8 -1.6
baz=208,SNR=9.5
TIY Taiyuan 85.57 312 eP P 06 48 37.9 +0.7
TIY pmax pmax
comp=Z,130nm,0.8s
K24K Donnelly Dome 85.58 14 P P 06 48 36.1 -0.4
baz=211,SNR=26
P32M Atlin 85.60 21 P P 06 48 37.1 +0.4
baz=222,SNR=14
VHRN Van Horn 85.60 56 IAmb IAmb 06 48 39.8
comp=Z,41nm,1.1s
G19K Purcell Mounta 85.62 8 IAmb IAmb 06 50 38.8
comp=Z,64nm,1.3s
G19K Purcell Mounta 85.62 8 P P 06 48 36.1 -0.5
baz=200,SNR=15
MLY Manley 85.63 11 P P 06 48 35.3 -1.5
baz=206,SNR=19
Q32M Nakina River 85.64 22 IAmb IAmb 06 48 38.5
comp=Z,27nm,0.7s
Q32M Nakina River 85.64 22 P P 06 48 37.3 +0.2
baz=223,SNR=31
WRH Wood River Hil 85.66 13 IAmb IAmb 06 48 36.8
comp=Z,116nm,1.3s
MNTX Cornudas Mount 85.66 55 P P 06 48 39.1 +1.4
baz=246
NEW Newport 85.70 36 P P 06 48 37.6 +0.1
baz=237,SNR=9.8
MVCO Mesa Verde 85.70 49 P P 06 48 38.3 +0.3
baz=243,SNR=7.6
O30N Mendenhall 85.72 19 IAmb IAmb 06 48 38.4
comp=Z,26nm,0.8s
O30N Mendenhall 85.72 19 P P 06 48 37.2 0.0
baz=220,SNR=38
F18K Selawik 85.72 7 P P 06 48 36.1 -0.9
baz=198
SLVN Son La 85.72 294 IAmb IAmb 06 48 40.4
comp=Z,86nm,1.2s
RIDG Independent Ri 85.74 14 P P 06 48 36.7 -0.6
baz=212,SNR=23
H21K Melozitna Rive 85.83 10 IAmb IAmb 06 50 40.0
comp=Z,72nm,1.6s
H21K Melozitna Rive 85.83 10 P P 06 48 37.2 -0.4
baz=204,SNR=7.7
HDA Harding Lake 85.84 13 IAmb IAmb 06 48 37.7
comp=Z,38nm,0.9s
HDA Harding Lake 85.84 13 P P 06 48 36.7 -1.1
baz=210,SNR=25
CCB Clear Creek Bu 85.87 13 IAmb IAmb 06 48 37.6
comp=Z,87nm,1.2s
L27K Beaver Creek, 85.91 16 P P 06 48 37.8 -0.3
baz=214,SNR=16
BCAR Beaver Creek A 85.92 16 P P 06 48 37.5 -0.7
E17K Hotham Inlet 85.94 6 P P 06 48 37.6 -0.4
baz=196,SNR=8.9
N30M Aishikik Lake 85.94 18 P P 06 48 38.0 -0.4
baz=219,SNR=12
IMAR Indian Mountai 85.98 10 P P 06 48 37.5 -0.8
I23K Minto, Yukon-K 86.00 12 IAmb IAmb 06 50 40.8
comp=Z,65nm,1.6s
I23K Minto, Yukon-K 86.00 12 P P 06 48 37.0 -1.5
baz=207,SNR=15
WHY Whitehorse 86.02 20 P P 06 48 39.0 +0.2
baz=221,SNR=12
MDM Murphy Dome 86.06 12 IAmb IAmb 06 48 38.5
comp=Z,48nm,1.0s
COLA College 86.06 13 P P 06 48 37.8 -0.9
COLA College 86.06 13 P P 06 48 37.6 -1.1
COLA College 86.06 13 P P 06 48 37.4 -1.3
baz=209
COLA College 86.06 13 d iP P 06 48 37.4 -1.3
COLA pmax pmax
comp=Z,84nm,1.3s
TLIG Tlapa 86.06 70 IAmb IAmb 06 48 42.5
comp=Z,54nm,1.0s
TXAR Lajitas Array 86.06 58 P P 06 48 41.3 +1.6
comp=Z,59nm,0.7s,baz=220,slow=6.0,SNR=673
comp=Z,59nm,0.7s
XLT XiLinHaoTe 86.07 319 eP P 06 48 39.1 -0.3
XLT SKS SKSac 06 58 13.8 -0.4
XLT pmax pmax
comp=Z,99nm,1.1s
DLBC Dease Lake 86.08 23 IAmb IAmb 06 48 40.5
comp=Z,63nm,1.8s
DLBC Dease Lake 86.08 23 P P 06 48 39.5 +0.4
baz=225,SNR=12
SCRK Sand Creek 86.14 14 P P 06 48 38.7 -0.6
baz=212,SNR=20
IL31 86.17 13 IAmb IAmb 06 48 39.1
comp=Z,26nm,0.8s
ILAR Eielson Array 86.17 13 P P 06 48 37.9 -1.4
comp=Z,12nm,0.5s,baz=222,slow=4.8,SNR=177
ILAR pP pP 06 50 36.3 +0.6
comp=Z,14nm,1.1s,baz=230,slow=5.8,SNR=6.7
ILAR PKKP PKKPdf 07 06 31.7 +1.2
comp=Z,0.9nm,0.6s,baz=304,slow=2.1,SNR=8.5
comp=Z,12nm,0.5s
F19K Shaleruckik Mo 86.18 8 IAmb IAmb 06 50 41.4
comp=Z,75nm,1.5s
F19K Shaleruckik Mo 86.18 8 P P 06 48 38.2 -1.0
baz=200,SNR=16
ANMO Albuquerque 86.20 51 P P 06 48 40.4 0.0
ANMO IAmb IAmb 06 48 42.3
comp=Z,25nm,0.9s
ANMO Albuquerque 86.20 51 P P 06 48 41.1 +0.8
baz=245
ANMO Albuquerque 86.20 51 d iP P 06 48 41.2 +0.8
ANMO pmax pmax
comp=Z,14nm,0.9s
H22K Ishtalitna Cre 86.30 11 P P 06 48 39.0 -0.8
baz=206,SNR=18
M29M Somme Creek 86.32 17 P P 06 48 39.9 -0.3
baz=218,SNR=22
POKR Poker Flat Res 86.36 13 IAmb IAmb 06 48 39.7
comp=Z,29nm,0.6s
POKR Poker Flat Res 86.36 13 P P 06 48 38.8 -1.4
baz=209,SNR=8.7
P33M Teslin, Yukon 86.36 21 P P 06 48 40.1 -0.2
baz=223,SNR=15
N31M Braeburn, Yuko 86.36 19 IAmb IAmb 06 48 41.5
comp=Z,35nm,0.9s
N31M Braeburn, Yuko 86.36 19 P P 06 48 40.1 -0.2
baz=220,SNR=18
J25K Salcha River, 86.36 14 IAmb IAmb 06 48 40.0
comp=Z,19nm,0.7s
J25K Salcha River, 86.36 14 P P 06 48 39.6 -0.7
baz=211,SNR=30
SNSI Sinabang, Aceh 86.37 274 P P 06 48 43.6 +2.2
E18K Tukpahlearik C 86.40 7 IAmb IAmb 06 50 42.8
comp=Z,101nm,1.7s
E18K Tukpahlearik C 86.40 7 P P 06 48 39.5 -0.7
baz=197,SNR=7.8
D17K Noatak River 86.41 6 P P 06 48 39.8 -0.5
baz=194,SNR=5.1
R33M Jennings River 86.41 22 IAmb IAmb 06 48 42.4
comp=Z,43nm,1.4s
R33M Jennings River 86.41 22 P P 06 48 41.2 +0.5
baz=224,SNR=26
ALPN Alpine 86.50 57 IAmb IAmb 06 48 44.7
comp=Z,113nm,1.4s
AHID Auburn Hatcher 86.50 43 IAmb IAmb 06 49 27.9
comp=Z,25nm,0.4s
G21K Allakaket 86.50 10 IAmb IAmb 06 48 41.2
comp=Z,27nm,0.8s
G21K Allakaket 86.50 10 P P 06 48 40.2 -0.6
baz=204,SNR=22
XAN Xi'an 86.55 307 ⇓P P 06 48 42.8 +0.9
XAN SKS SKSac 06 58 16.6 -0.9
XAN S ScS 06 58 39.0 -0.4
XAN sS sS 07 02 02.6 +1.1
XAN pmax pmax
comp=Z,420nm,1.0s
H23K Yukon River 86.57 11 P P 06 48 40.5 -0.6
baz=207,SNR=6.4
K27K Chicken 86.65 15 P P 06 48 42.3 +0.8
baz=214
F20K Avaraart Lake 86.66 9 P P 06 48 41.1 -0.4
baz=201
LHMI Lhok Sumawe 86.67 277 P P 06 48 44.0 +1.2
comp=Z,650nm,0.8s
J26L Joseph Creek 86.68 14 IAmb IAmb 06 48 42.8
comp=Z,143nm,1.6s
J26L Joseph Creek 86.68 14 P P 06 48 41.8 0.0
baz=213,SNR=49
HIA Hailar 86.70 325 P P 06 48 42.2 0.0
HIA IAmb IAmb 06 48 43.4
comp=Z,60nm,1.2s
HIA Hailar 86.70 325 P P 06 48 42.2 0.0
HIA pmax pmax
comp=Z,60nm,1.2s
PECS Pecos 86.71 56 IAmb IAmb 06 48 45.2
comp=Z,50nm,1.5s
MSO Missoula 86.76 38 P P 06 48 42.4 -0.2
baz=239
BILL Bilibino 86.76 354 P P 06 48 41.6 -0.3
BILL IAmb IAmb 06 48 43.2
comp=Z,40nm,0.9s
BILL Bilibino 86.76 354 ⇓iP P 06 48 41.3 -0.7
BILL i 06 52 13.9
BILL pmax pmax
comp=Z,42nm,0.9s
RDOG Red Dog Mine 86.77 6 P P 06 48 41.6 -0.4
baz=195
C16K Lisburne Hills 86.77 5 P P 06 48 42.2 +0.2
baz=192
DLMT Dillon 86.82 40 IAmb IAmb 06 48 45.0
comp=Z,32nm,0.9s
E19K Redstone River 86.84 8 IAmb IAmb 06 48 42.8
comp=Z,32nm,0.7s
E19K Redstone River 86.84 8 P P 06 48 42.1 -0.3
baz=200,SNR=19
MLSI Meulaboh, Aceh 86.88 275 P P 06 48 43.9 +0.1
comp=Z,521nm,0.9s,comp=Z,5µm
H24K Noodor Dome 86.90 12 P P 06 48 41.8 -1.0
baz=209
N32M Quiet Lake 86.97 20 IAmb IAmb 06 48 44.6
comp=Z,49nm,1.3s
N32M Quiet Lake 86.97 20 P P 06 48 43.4 +0.2
baz=222
AY03 Cochrane 86.99 139 IAmb IAmb 06 48 46.3
comp=Z,60nm,0.9s
SNOW Snow King Moun 87.05 42 IAmb IAmb 06 48 46.4
comp=Z,47nm,1.0s
PRP Porcupine Dome 87.11 13 IAmb IAmb 06 50 45.1
comp=Z,36nm,1.4s
PRP Porcupine Dome 87.11 13 P P 06 48 43.0 -0.9
baz=211
S22A 4UR Ranch, Cre 87.13 49 IAmb IAmb 06 50 50.3
comp=Z,90nm,1.6s
S22A 4UR Ranch, Cre 87.13 49 P P 06 48 45.6 +0.8
baz=244,SNR=41
IMW Indian Meadow 87.14 42 IAmb IAmb 06 48 46.9
comp=Z,39nm,0.8s
C17K DeLong Mountai 87.16 6 P P 06 48 43.4 -0.5
baz=194
F21K Alatna River 87.16 9 P P 06 48 43.3 -0.6
baz=204,SNR=10
G22K Bettles 87.20 10 P P 06 48 44.0 0.0
baz=205
G23K Banaza Creek 87.27 11 IAmb IAmb 06 50 48.2
comp=Z,50nm,1.4s
G23K Banaza Creek 87.27 11 P P 06 48 44.1 -0.4
baz=207,SNR=10
M31M Drury Creek, Y 87.34 19 P P 06 48 44.3 -0.6
baz=221,SNR=13
DAWY Dawson 87.36 16 IAmb IAmb 06 48 45.9
comp=Z,45nm,1.3s
DAWY Dawson 87.36 16 P P 06 48 44.7 -0.2
baz=217,SNR=23
FLWY Flagg Ranch 87.38 42 IAmb IAmb 06 48 48.2
comp=Z,45nm,0.9s
YHL Hebgen Lake 87.45 41 IAmb IAmb 06 48 48.8
comp=Z,49nm,0.9s
I26K Coal Creek Min 87.46 14 IAmb IAmb 06 50 48.0
comp=Z,92nm,1.6s
I26K Coal Creek Min 87.46 14 P P 06 48 45.1 -0.2
baz=213,SNR=20
YFT Old Faithful 87.47 41 IAmb IAmb 06 48 49.5
comp=Z,30nm,0.9s
EGAK Eagle 87.49 15 IAmb IAmb 06 48 46.1
comp=Z,54nm,1.4s
EGAK Eagle 87.49 15 P P 06 48 45.1 -0.3
baz=215,SNR=23
BW06 Boulder Array 87.50 43 P P 06 48 46.8 +0.4
baz=242,SNR=44
PD31 Pinedale Array 87.50 43 IAmb IAmb 06 48 47.7
comp=Z,21nm,0.8s
PDAR Pinedale Array 87.50 43 P P 06 48 46.2 -0.2
PDAR Pinedale Array 87.50 43 P P 06 48 46.6 +0.2
comp=Z,17nm,0.7s,baz=219,slow=2.8,SNR=178
PDAR pP pP 06 50 43.0 -0.1
comp=Z,3.9nm,1.0s,baz=220,slow=3.5,SNR=4.2
comp=Z,17nm,0.7s
C18K Utukok River 87.52 6 P P 06 48 46.0 +0.4
baz=196
BOZ Bozeman (W) 87.53 40 IAmb IAmb 06 48 48.4
comp=Z,26nm,1.1s
BOZ Bozeman (W) 87.53 40 P P 06 48 47.2 +0.9
baz=241,SNR=27
SAND Sanderson 87.54 58 IAmb IAmb 06 48 48.9
comp=Z,67nm,1.1s
MNHN Monahans 87.57 56 IAmb IAmb 06 48 48.3
comp=Z,25nm,0.9s
HHC Hu-ho-hao-te 87.58 314 ⇓iP P 06 48 47.3 +0.7
HHC pP pP 06 50 44.3 0.0
HHC S S 06 58 49.5 +6.1
HHC pmax pmax
comp=Z,71nm,0.8s
H17A Grant Village 87.61 42 IAmb IAmb 06 48 50.0
comp=Z,34nm,0.8s
H17A Grant Village 87.61 42 P P 06 48 48.9 +2.1
baz=242,SNR=8.6
F22K John River 87.63 10 P P 06 48 46.2 +0.1
baz=205
FARO Faro, Yukon 87.68 19 IAmb IAmb 06 48 47.3
comp=Z,59nm,1.9s
FARO Faro, Yukon 87.68 19 P P 06 48 46.4 -0.1
baz=222,SNR=7.5
K29M Barlow Dome 87.69 17 IAmb IAmb 06 48 47.8
comp=Z,70nm,1.6s
K29M Barlow Dome 87.69 17 P P 06 48 46.6 +0.1
baz=218,SNR=29
H25L Birch Creek 87.69 13 P P 06 48 44.7 -1.6
baz=211,SNR=8.7
WTLY Watson Lake, Y 87.70 22 IAmb IAmb 06 48 48.1
comp=Z,32nm,1.5s
WTLY Watson Lake, Y 87.70 22 P P 06 48 46.7 0.0
baz=226,SNR=9.0
COLD Coldfoot 87.71 11 P P 06 48 46.1 -0.3
baz=207,SNR=39
D19K Kuna River 87.71 7 IAmb IAmb 06 48 46.3
comp=Z,22nm,0.8s
D19K Kuna River 87.71 7 P P 06 48 45.8 -0.7
baz=199,SNR=9.2
E20K Nigu River 87.73 8 P P 06 48 46.4 -0.3
baz=201,SNR=20
G24K Hadweenzic Riv 87.74 12 P P 06 48 45.8 -0.9
baz=209,SNR=10
LKWY Lake 87.80 42 IAmb IAmb 06 48 51.1
comp=Z,29nm,0.9s
PAYG Puerto Ayora 87.89 90 P P 06 48 51.0 +2.4
J29N Klondike Camp 87.98 16 IAmb IAmb 06 50 58.0
comp=Z,27nm,1.0s
J29N Klondike Camp 87.98 16 P P 06 48 48.3 +0.4
baz=218
COYC Coyhaique 87.99 138 P P 06 48 50.2 +1.8
ODSA Odessa 88.04 55 IAmb IAmb 06 48 51.0
comp=Z,94nm,1.4s
YMP Mirror Lake Pl 88.04 41 IAmb IAmb 06 49 02.6
comp=Z,27nm,1.4s
I27K Kandik River 88.06 14 P P 06 48 48.5 +0.3
baz=215,SNR=7.3
G25K Bearman Lake 88.07 12 P P 06 48 47.1 -1.0
baz=210,SNR=9.4
FYU Fort Yukon 88.07 13 IAmb IAmb 06 48 48.4
comp=Z,15nm,0.6s
SDCO Great Sand Dun 88.08 49 P P 06 48 49.6 +0.4
baz=245,SNR=18
KMI Kunming 88.09 297 ⇓P P 06 48 50.5 +1.0
KMI pmax pmax
comp=Z,110nm,1.1s
D20K Etivluk River 88.11 8 P P 06 48 48.0 -0.4
baz=200,SNR=8.4
C19K Lookout Ridge 88.12 7 IAmb IAmb 06 51 17.1
comp=Z,110nm,1.8s
C19K Lookout Ridge 88.12 7 P P 06 48 48.4 0.0
baz=198
TOAD Toad River Com 88.20 25 P P 06 48 49.2 +0.3
baz=229,SNR=33
E21K Killik River 88.21 9 IAmb IAmb 06 48 49.0
comp=Z,25nm,0.9s
E21K Killik River 88.21 9 P P 06 48 47.8 -1.0
baz=203
LIRD Liard River Hi 88.23 24 P P 06 48 49.2 +0.1
baz=229
E22K Anaktuvuk Pass 88.26 10 IAmb IAmb 06 48 49.6
comp=Z,45nm,1.1s
E22K Anaktuvuk Pass 88.26 10 P P 06 48 48.7 -0.4
baz=205,SNR=27
I28M Miner Creek 88.34 15 P P 06 48 49.0 -0.6
baz=216,SNR=15
F24K Squaw Lake 88.38 11 IAmb IAmb 06 48 50.4
comp=Z,26nm,0.7s
F24K Squaw Lake 88.38 11 P P 06 48 49.6 0.0
baz=209,SNR=26
BTO Baotou 88.53 314 eP P 06 48 52.1 +1.0
BTO pP pP 06 50 51.6 +2.6
BTO PP PP 06 52 32.3 +2.9
BTO S S 06 58 45.5 -6.6
BTO pmax pmax
comp=Z,82nm,1.0s
BTO pmax pmax
comp=Z,350nm,4.9s
E23K Chandalar 88.55 10 IAmb IAmb 06 48 51.1
comp=Z,32nm,0.9s

E23K Chandalar 88.55 10 P P 06 48 50.2 -0.3
baz=207,SNR=21
RWWY Rawlins 88.57 45 IAmb IAmb 06 48 53.0
comp=Z,40nm,1.2s
J30M Hart River 88.59 17 IAmb IAmb 06 48 51.9
comp=Z,44nm,1.7s
J30M Hart River 88.59 17 P P 06 48 50.6 -0.1
baz=219,SNR=11
H27K Steamboat Moun 88.60 14 P P 06 48 50.6 -0.1
baz=215,SNR=12
T25A Trinidad 88.62 50 IAmb IAmb 06 48 54.0
comp=Z,15nm,0.8s
T25A Trinidad 88.62 50 P P 06 48 52.1 +0.4
baz=246,SNR=16
I29M Ogilvie Camp, 88.68 16 IAmb IAmb 06 51 00.7
comp=Z,50nm,1.4s
I29M Ogilvie Camp, 88.68 16 P P 06 48 50.4 -0.7
baz=218,SNR=19
G26K Porcupine Rive 88.70 13 P P 06 48 51.1 0.0
baz=213,SNR=39
C21K Knifeblade Rid 88.76 8 P P 06 48 51.4 0.0
baz=202,SNR=13
E24K Your Creek 88.76 11 P P 06 48 51.4 -0.1
baz=208
RLMT Red Lodge 88.77 41 IAmb IAmb 06 48 54.5
comp=Z,26nm,1.0s
RLMT Red Lodge 88.77 41 P P 06 48 53.5 +1.2
baz=242,SNR=11
D22K Ayikyak River 88.81 9 IAmb IAmb 06 48 52.4
comp=Z,40nm,0.7s
D22K Ayikyak River 88.81 9 P P 06 48 51.3 -0.3
baz=204,SNR=29
Q24A Divide 88.84 48 P P 06 48 53.7 +0.9
baz=245
ELIB Princess Elisa 88.86 187 dP P 06 48 52.3 +0.2
comp=Z,182nm,0.8s
TGTN Hyland Airport 88.86 22 P P 06 48 52.7 +0.7
baz=227,SNR=8.9
F25K Christian Rive 88.87 12 P P 06 48 52.1 +0.1
baz=211,SNR=16
BMAR Burnt Mountain 88.94 12 P P 06 48 52.4 +0.2
G27K Doyon Strip 89.05 14 IAmb IAmb 06 51 03.2
comp=Z,40nm,1.9s
G27K Doyon Strip 89.05 14 P P 06 48 52.6 -0.2
baz=214,SNR=11
LL01 San Ignacio de 89.07 135 IAmb IAmb 06 48 55.8
comp=Z,66nm,1.1s
SGCY Sterling City 89.08 56 IAmb IAmb 06 48 54.9
comp=Z,28nm,0.7s
I30M Mount Dempster 89.08 16 IAmb IAmb 06 48 53.6
comp=Z,33nm,1.1s
I30M Mount Dempster 89.08 16 P P 06 48 52.6 -0.4
baz=219,SNR=20
TOLK Toolik Lake Re 89.08 10 IAmb IAmb 06 48 53.5
comp=Z,18nm,0.9s
TOLK Toolik Lake Re 89.08 10 P P 06 48 52.6 -0.3
baz=207,SNR=7.4
N23A Red Feather La 89.09 46 IAmb IAmb 06 48 56.1
comp=Z,37nm,1.1s
N23A Red Feather La 89.09 46 P P 06 48 55.0 +1.1
baz=245,SNR=18
CMAR Chiang Mai Arr 89.11 290 P P 06 48 54.9 +0.8
CMAR Chiang Mai Arr 89.11 290 P P 06 48 55.2 +1.1
comp=Z,76nm,0.9s,baz=110,slow=2.9,SNR=147
CMAR PP PP 06 52 30.0 -4.3
comp=Z,6.2nm,0.9s,baz=117,slow=6.0,SNR=4.6
comp=Z,76nm,0.9s
CMAR Chiang Mai Arr 89.11 290 ceP P 06 48 55.2 +1.1
CMAR pmax pmax
comp=Z,75nm,0.9s
833A Chaparral WMA, 89.15 60 IAmb IAmb 06 48 56.0
comp=Z,42nm,0.8s
833A Chaparral WMA, 89.15 60 P P 06 48 55.1 +1.0
baz=249
D23K Nanushuk River 89.19 10 IAmb IAmb 06 48 54.3
comp=Z,47nm,1.0s
D23K Nanushuk River 89.19 10 P P 06 48 53.4 +0.1
baz=206
B21K Ikpikpuk River 89.22 8 IAmb IAmb 06 48 54.2
comp=Z,57nm,1.4s
B21K Ikpikpuk River 89.22 8 P P 06 48 53.0 -0.4
baz=202,SNR=5.1
B20K Meade River 89.26 7 P P 06 48 53.3 -0.2
baz=200
F26K Sheenjek River 89.26 12 P P 06 48 53.9 +0.2
baz=212,SNR=16
H29M Whitestone 89.35 15 IAmb IAmb 06 48 54.8
comp=Z,36nm,0.8s
H29M Whitestone 89.35 15 P P 06 48 53.9 -0.2
baz=218,SNR=19
PZH PanZhiHua 89.42 298 P P 06 48 55.9 +0.4
PZH pmax pmax
comp=Z,80nm,1.2s
KOTAN Kotaneelee Air 89.49 24 P P 06 48 55.3 +0.4
baz=230
JCT Junction City 89.60 58 IAmb IAmb 06 48 57.9
comp=Z,37nm,0.8s
JCT Junction City 89.60 58 P P 06 48 56.7 +0.5
baz=249
SN05 Snyder 5 89.62 55 IAmb IAmb 06 48 57.6
comp=Z,43nm,0.8s
D24K Happy Valley 89.66 10 IAmb IAmb 06 48 56.3
comp=Z,21nm,0.8s
D24K Happy Valley 89.66 10 P P 06 48 55.5 0.0
baz=208,SNR=9.4
AMTX Amarillo 89.77 53 IAmb IAmb 06 48 57.9
comp=Z,29nm,0.8s
AMTX Amarillo 89.77 53 P P 06 48 57.2 +0.3
baz=248
EGMT Eagleton 89.82 39 P P 06 48 57.3 +0.5
baz=242
EPYK Eagle Plains 89.88 16 IAmb IAmb 06 48 57.2
comp=Z,40nm,1.0s
EPYK Eagle Plains 89.88 16 P P 06 48 56.2 -0.4
baz=219,SNR=17
DKNS Dickens 89.89 54 IAmb IAmb 06 48 58.4
comp=Z,17nm,0.8s
YAK Yakutsk 89.92 338 P P 06 48 55.3 -1.5
comp=Z,34nm,0.7s,baz=124,slow=2.5,SNR=7.4
comp=Z,34nm,0.7s
YAK Yakutsk 89.92 338 eP P 06 48 55.0 -1.8
YAK pmax pmax
comp=Z,24nm,0.8s
YAK pmax pmax
comp=N,3.0nm,0.9s
YAK pmax pmax
comp=E,7.0nm,1.0s
G29M Pine Creek 89.98 15 IAmb IAmb 06 48 57.6
comp=Z,27nm,1.0s
G29M Pine Creek 89.98 15 P P 06 48 56.5 -0.5
baz=218,SNR=14
C23K Itkillik River 89.99 9 IAmb IAmb 06 48 57.8
comp=Z,49nm,1.0s
C23K Itkillik River 89.99 9 P P 06 48 56.8 -0.1
baz=206,SNR=16
TROLL Troll, Antarti 89.99 180 ⇑P P 06 48 57.6 +0.3
comp=Z,5μm,0.5s
TROLL ⇑SKSac SKSac 06 58 37.3 +0.6
comp=Z,63nm,0.8s
B22K Teshekpuk Lake 90.04 8 IAmb IAmb 06 48 57.8
comp=Z,36nm,1.0s
B22K Teshekpuk Lake 90.04 8 P P 06 48 56.9 -0.3
baz=204,SNR=6.4
BRIGG Briggsdale 90.08 47 IAmb IAmb 06 48 59.7
comp=Z,11nm,0.7s
F28M Old Crow 90.11 14 IAmb IAmb 06 51 08.3
comp=Z,25nm,1.3s
F28M Old Crow 90.11 14 P P 06 48 57.1 -0.5
baz=216,SNR=6.5
C24K Franklin Bluff 90.19 10 IAmb IAmb 06 48 58.8
comp=Z,49nm,0.9s
C24K Franklin Bluff 90.19 10 P P 06 48 57.6 -0.3
baz=208,SNR=16
E27K Coleen River 90.20 13 IAmb IAmb 06 51 09.3
comp=Z,26nm,1.2s
E27K Coleen River 90.20 13 P P 06 48 58.1 0.0
baz=215,SNR=11
D25K Kavik River 90.23 11 P P 06 48 57.4 -0.8
baz=210,SNR=12
SNAA Sanae 90.27 179 P P 06 48 58.3 -0.3
SNAA Sanae 90.27 179 ⇑P P 06 48 58.4 -0.2
comp=Z,850nm,0.5s
SNAA ⇑SKSac SKSac 06 58 39.0 +0.8
comp=Z,81nm,0.8s
SNAA Sanae 90.27 179 P P 06 48 58.4 -0.2
comp=Z,39nm,0.6s,baz=205,slow=6.2,SNR=386
SNAA PP PP 06 52 43.3 +1.9
comp=Z,16nm,1.1s,baz=194,slow=8.1,SNR=6.4
comp=Z,39nm,0.6s
SNAA Sanae 90.27 179 P P 06 48 58.3 -0.3
SNAA pmax pmax
comp=Z,139nm,1.3s
VNA3 Neumayer Olymp 90.41 176 ⇑P P 06 48 59.2 0.0
comp=Z,265nm,0.6s
VNA3 ⇑SKSac SKSac 06 58 38.8 0.0
comp=Z,0.5nm,0.3s
A22K Sinclair Lake 90.46 7 P P 06 48 58.9 -0.1
baz=202
G30M tAoh Zraii Nji 90.48 15 P P 06 48 58.9 -0.5
baz=220,SNR=30
BRDY Brady 90.53 57 IAmb IAmb 06 49 02.2
comp=Z,29nm,0.9s
VNA2 Neumayer--Watz 90.85 177 ⇑P P 06 49 01.5 +0.3
comp=Z,185nm,0.6s,baz=186,slow=4.3
VNA2 ⇑SKSac SKSac 06 58 41.4 +0.1
comp=Z,0.0nm,0.1s,baz=44,slow=5.4
G31M Satah River 90.93 16 P P 06 49 01.0 -0.4
baz=221,SNR=29
SMWD Samnorwood 90.94 53 IAmb IAmb 06 49 03.9
comp=Z,22nm,0.9s
NVL N'lazarevskaya 90.96 183 ⇓iP P 06 49 00.3 -1.3
NVL eS SKSac 06 58 46.5 +4.7
NVL pmax pmax
comp=Z,113nm,0.8s
C27K Jago River 90.98 11 P P 06 49 01.5 -0.1
baz=213
E28M Babbage River 90.99 13 P P 06 49 01.3 -0.4
E28M IAmb IAmb 06 49 02.4
comp=Z,24nm,1.0s
E28M Babbage River 90.99 13 P P 06 49 01.4 -0.3
baz=216,SNR=26
C26K Camden Bay 91.01 11 P P 06 49 02.5 +0.8
baz=212
PLCA Paso Flores 91.02 134 P P 06 49 03.5 +0.8
PLCA Paso Flores 91.02 134 P P 06 49 04.1 +1.4
comp=Z,36nm,0.9s,baz=234,slow=4.7,SNR=84
PLCA PP PP 06 52 47.0 -1.3
comp=Z,8.2nm,1.2s,baz=351,slow=4.3,SNR=3.5
comp=Z,36nm,0.9s
PLCA Paso Flores 91.02 134 P P 06 49 03.5 +0.8
PLCA pmax pmax
comp=Z,109nm,1.4s
PLCA Paso Flores 91.02 134 eP P 06 49 02.1 -0.6
F30M Barrier River 91.07 15 P P 06 49 02.6 +0.5
baz=232,SNR=7.4
VNA1 Neumayer--Stat 91.08 177 ⇑P P 06 49 02.4 +0.3
comp=Z,262nm,0.9s
VNA1 ⇑SKSac SKSac 06 58 38.0 -4.5
comp=Z,6.9nm,0.8s
E29M Blow River 91.18 14 P P 06 49 01.9 -0.7
baz=218,SNR=9.4
LZH Lanzhou 91.18 308 ⇓P P 06 49 04.5 +1.0
LZH pP pP 06 51 04.5 +2.9
LZH pmax pmax
comp=Z,170nm,1.5s
D27M Malcolm River 91.21 12 IAmb IAmb 06 49 04.6
comp=Z,43nm,1.6s
D27M Malcolm River 91.21 12 P P 06 49 02.7 0.0
baz=215,SNR=11
LAO LASA Array 91.37 41 IAmb IAmb 06 49 06.5
comp=Z,43nm,0.9s
LAO LASA Array 91.37 41 P P 06 49 05.4 +1.4
baz=245,SNR=9.7
CCIG Comitan 91.44 73 IAmb IAmb 06 49 07.3
comp=Z,32nm,0.9s
F31M Tsiigehtchic 91.46 16 P P 06 49 03.3 -0.5
baz=222,SNR=31
435B Jarrell 91.49 58 P P 06 49 05.5 +0.7
baz=250
CIT Chita 91.49 325 eP P 06 49 04.3 -0.1
CIT pmax pmax
comp=Z,137nm,2.0s
TNCH TengChong 91.65 296 eP P 06 49 06.3 +0.4
TNCH pmax pmax
comp=Z,170nm,1.8s
WRGLY Wrigley 91.68 22 P P 06 49 06.7 +1.9
baz=231
RSSD Black Hills 91.71 44 P P 06 49 05.2 -0.6
RSSD IAmb IAmb 06 49 07.0
comp=Z,24nm,0.8s
RSSD Black Hills 91.71 44 P P 06 49 05.9 0.0
baz=246
RSSD Black Hills 91.71 44 P P 06 49 05.3 -0.6
RSSD pmax pmax
comp=Z,24nm,0.9s
D28M Stokes Point 91.74 13 P P 06 49 04.5 -0.6
baz=217,SNR=7.2
OGNE Ogallala 91.82 47 IAmb IAmb 06 49 07.9
comp=Z,25nm,1.2s
OGNE Ogallala 91.82 47 P P 06 49 07.0 +0.7
baz=247
WTFS Witchita Falls 91.83 55 IAmb IAmb 06 49 07.4
comp=Z,23nm,0.9s
WMOK Wichita Mounta 91.93 54 P P 06 49 07.0 +0.2
baz=249
FW13 Cleburne 92.16 57 IAmb IAmb 06 49 09.1
comp=Z,30nm,0.8s
INK Inuvik 92.16 15 IAmb IAmb 06 49 07.1
comp=Z,27nm,0.9s
INK Inuvik 92.16 15 P P 06 49 06.2 -0.8
baz=222,SNR=15
FW06 Azle 92.27 56 IAmb IAmb 06 49 10.2
comp=Z,29nm,0.8s
FW14 Alvarado 92.36 57 IAmb IAmb 06 49 10.4
comp=Z,21nm,1.0s
NOKA Waynoka 92.49 52 IAmb IAmb 06 49 10.4
comp=Z,29nm,0.7s
OK038 West end E0370 92.58 53 IAmb IAmb 06 49 10.9
comp=Z,34nm,0.8s
X34A Smith Ranch, M 92.62 55 IAmb IAmb 06 49 11.6
comp=Z,38nm,1.2s
HKT Hockley 92.64 59 P P 06 49 09.2 -0.8
HKT IAmb IAmb 06 51 15.7
comp=Z,56nm,1.8s
HKT Hockley 92.64 59 ⇑eP P 06 49 10.8 +0.8
HKT pmax pmax
comp=Z,21nm,1.5s
CBKS Cedar Bluff 92.67 50 IAmb IAmb 06 49 11.8
comp=Z,29nm,0.7s
CBKS Cedar Bluff 92.67 50 P P 06 49 10.7 +0.6
baz=249
EFI East Falkland 93.13 147 P P 06 49 12.2 +0.2
EFI East Falkland 93.13 147 P P 06 49 12.2 +0.2
EFI pmax pmax
comp=Z,124nm,1.2s
CROK Carrier 93.16 53 IAmb IAmb 06 49 14.0
comp=Z,28nm,1.0s
KAN14 Manchester OK 93.33 52 IAmb IAmb 06 49 14.0
comp=Z,14nm,0.6s
DGMT Dagmar 93.36 40 P P 06 49 14.0 +1.0
baz=246
MTO3 Montecristo 93.41 76 IAmb IAmb 06 49 15.7
comp=Z,24nm,1.1s
KAN08 Anthony NE Sta 93.42 52 IAmb IAmb 06 49 15.3
comp=Z,44nm,1.1s
ULN Ulaanbaatar 93.48 319 P P 06 49 12.6 -1.2
ULN IAmb IAmb 06 49 14.5
comp=Z,32nm,0.9s
ULN Ulaanbaatar 93.48 319 dP P 06 49 12.9 -0.9
ULN pmax pmax
comp=Z,35nm,0.9s
KAN01 Argonia South 93.55 52 IAmb IAmb 06 49 15.4
comp=Z,31nm,0.9s
BLOK Blackwell 93.83 53 IAmb IAmb 06 49 17.4
comp=Z,28nm,1.0s
SONM Songino Array 93.87 319 P P 06 49 14.7 -0.9
SONM IAmb IAmb 06 49 16.1
comp=Z,24nm,1.2s
SONM Songino Array 93.87 319 P P 06 49 14.7 -0.9
comp=Z,5.3nm,0.6s,baz=116,slow=3.8,SNR=31
SONM pP pP 06 51 15.3 +1.2
comp=Z,5.5nm,1.1s,baz=127,slow=3.9,SNR=4.8
SONM PKKP PKKPdf 07 06 15.1 -1.2
comp=Z,1.6nm,0.7s,baz=321,slow=0.9,SNR=5.1
comp=Z,5.3nm,0.6s
SONM Songino Array 93.87 319 P P 06 49 14.7 -0.9
SONM pmax pmax
comp=Z,24nm,1.2s
OK052 Battle Ridge R 93.88 53 IAmb IAmb 06 49 17.2
comp=Z,16nm,1.1s
OK048 Pawnee Station 93.92 53 IAmb IAmb 06 49 16.8
comp=Z,48nm,1.6s
NATX Nacogdoches 94.18 58 P P 06 49 17.7 +0.6
baz=251
YKA Yellowknife Ar 94.57 25 P P 06 49 17.7 -0.4
YKA Yellowknife Ar 94.57 25 P P 06 49 17.6 -0.5
comp=Z,4.8nm,0.9s,baz=249,slow=4.2,SNR=12
comp=Z,4.8nm,0.9s
YKA Yellowknife Ar 94.57 25 P P 06 49 17.7 -0.4
KSU1 Kansas State U 95.06 51 P P 06 49 22.0 +1.1
baz=251
GTA Gaotai 95.33 310 eP P 06 49 22.6 +0.2
GTA pP pwP 06 51 25.4 +2.7
GTA pmax pmax
comp=Z,26nm,1.1s
U38A Gravette 95.88 54 IAmb IAmb 06 49 27.1
comp=Z,5.7nm,0.7s
JTS Las Juntas de 96.28 81 P P 06 49 28.7 +1.6
JTS IAmb IAmb 06 49 30.2
comp=Z,13nm,0.8s
JTS Las Juntas de 96.28 81 P P 06 49 28.7 +1.6
JTS pmax pmax
comp=Z,13nm,0.8s
N35A Tabor 96.33 49 IAmb IAmb 06 49 28.9
comp=Z,26nm,1.1s
TIXI Tiksi 96.50 345 ⇓eP P 06 49 25.8 -0.8
TIXI pmax pmax
comp=Z,30nm,1.4s
ECSD EROS Data Cent 96.56 46 IAmb IAmb 06 49 28.4
comp=Z,8.7nm,0.6s
ECSD EROS Data Cent 96.56 46 P P 06 49 27.6 -0.1
baz=251
ZAK Zakamensk 96.72 321 eP P 06 49 26.9 -1.4
ZAK pmax pmax
comp=Z,10.0nm,1.2s
ZAK pmax pmax
comp=Z,10.0nm,1.5s
LCR2 La Lucha 2 97.01 82 P Pdif 06 49 32.2 +1.6
LCR2 IAmb IAmb 06 49 33.7
comp=Z,9.7nm,0.7s
F33A 5 Mile Ranch, 97.45 44 IAmb IAmb 06 51 34.2
comp=Z,16nm,1.3s
GOMU GeErMu 98.13 305 P P 06 49 36.3 +1.0
GOMU PP PP 06 53 49.3 +5.6
CCM Cathedral Cave 98.75 53 P P 06 49 38.7 +1.1
baz=254
ULM Lac du Bonnet 99.08 40 P Pdif 06 49 39.9 +1.2
comp=Z,1.3nm,0.6s,baz=241,slow=5.7,SNR=1.6
comp=Z,1.3nm,0.6s
JFWS Jewell Farm 100.78 48 P Pdif 06 49 47.3 +0.9
baz=255
PALK Pallekele 102.67 274 PP PKiKP 06 54 13.1 -0.1
comp=Z,21nm,0.8s,baz=207,slow=6.5,SNR=4.2
LPAZ La Paz 103.16 112 Pdiff Pdif 06 49 58.5 +0.1
comp=Z,4.9nm,0.8s,baz=231,slow=3.5,SNR=19
LPAZ PP PKiKP 06 54 14.7 -0.1
comp=Z,2.5nm,0.9s,baz=222,slow=5.0,SNR=3.6
LPAZ PKKPbc PKKPbc 07 05 51.1 -0.6
comp=Z,2.0nm,0.7s,baz=15,slow=2.7,SNR=6.2
LPAZ La Paz 103.16 112 eP Pdif 06 49 54.8 -3.7
LPAZ La Paz 103.16 112 eP PKiKP 06 54 11.7 -3.1
WMQ Urumqi 105.24 312 Pdif Pdif 06 50 01.3 -5.0
CPUP Villa Florida 107.55 126 PKiKP PKiKP 06 54 20.9 -1.0
comp=Z,0.9nm,0.6s,baz=180,slow=5.1,SNR=3.2
CPUP PP PP 06 54 44.1 -8.0
comp=Z,4.1nm,1.1s,baz=264,slow=4.7,SNR=2.9
CPUP PKKP PKKPab 07 05 52.5 -3.1
comp=Z,3.4nm,0.9s,baz=48,slow=6.4,SNR=4.8
ZSN Zaisan 107.78 315 ePKiKP PKiKP 06 54 20.6 -1.0
baz=315
ZALV Zalesovo Beam 108.56 322 Pdiff Pdif 06 50 20.6 -0.2
comp=Z,1.5nm,0.7s,baz=104,slow=9.3,SNR=6.4
ZALV PKiKP PKiKP 06 54 21.6 -1.2
comp=Z,4.5nm,0.6s,baz=97,slow=0.4,SNR=5.6
ZALV PKKPbc PKKPbc 07 05 33.7 -1.7
comp=Z,1.3nm,0.6s,baz=265,slow=3.3,SNR=5.1
ZALV PKKPab PKKPab 07 05 46.6 -1.7
comp=Z,1.8nm,0.8s,baz=230,slow=6.9,SNR=3.9
MKAR Makanchi Array 109.45 314 Pdiff Pdif 06 50 24.2 -0.7
comp=Z,1.3nm,0.6s,baz=95,slow=6.0,SNR=14
MKAR PKiKP PKiKP 06 54 23.8 -1.0
comp=Z,4.6nm,0.5s,baz=199,slow=0.6,SNR=22
MKAR PP PP 06 55 03.2 -2.7
comp=Z,1.7nm,0.8s,baz=108,slow=4.0,SNR=3.9
MKAR PKKPbc PKKPbc 07 05 31.7 -0.8
comp=Z,2.7nm,0.7s,baz=276,slow=3.4,SNR=15
SHLS Shalkode 111.08 310 ePKiKP PKiKP 06 54 26.3 -1.9
baz=310
SHLS Shalkode 111.08 310 i PKiKP PKiKP 06 54 26.2 -1.9
SEM Semipalatinsk 111.09 318 ePKiKP PKiKP 06 54 26.9 -1.2
baz=318
SEM Semipalatinsk 111.09 318 i PKiKP PKiKP 06 54 26.8 -1.2
UZB Uzynbulak 111.39 310 ePKiKP PKiKP 06 54 27.6 -1.2
baz=310
UZB ePP PP 06 55 18.6 -1.4
baz=310
UZB Uzynbulak 111.39 310 i PKiKP PKiKP 06 54 27.6 -1.2
UZB e 06 55 18.6
KPKS Kokpek 111.67 310 ePKiKP PKiKP 06 54 28.1 -1.1
baz=310
KPKS ePP PP 06 55 20.5 -1.4
baz=310
KPKS Kokpek 111.67 310 i PKiKP PKiKP 06 54 28.1 -1.1
KPKS e 06 55 20.4
ZHN Zhinishke 111.83 310 ePKiKP PKiKP 06 54 28.3 -1.3
baz=310
ZHN Zhinishke 111.83 310 i PKiKP PKiKP 06 54 28.2 -1.3
KURK Kurchatov 112.15 318 d iPKiKP PKiKP 06 54 28.3 -1.4
KURK pmax pmax
comp=Z,10.0nm,0.8s
KURBB Kurchatov Arra 112.20 318 Pdiff Pdif 06 50 37.3 +0.3
comp=Z,0.2nm,0.5s,baz=57,slow=3.3,SNR=0.9
KURBB PKiKP PKiKP 06 54 28.7 -1.2
comp=Z,8.1nm,0.7s,baz=91,slow=1.7,SNR=43
KURBB PP PP 06 55 14.3 -11
comp=Z,4.9nm,1.0s,baz=93,slow=6.5,SNR=4.3
KURBB PKKPbc PKKPbc 07 05 23.1 -0.5
comp=Z,3.4nm,0.6s,baz=272,slow=4.1,SNR=14
KURBB PKKPab PKKPab 07 05 33.3 +1.1
comp=Z,2.2nm,0.7s,baz=274,slow=4.9,SNR=7.4
MDOK Medeo 112.84 310 ePKiKP PKiKP 06 54 30.2 -1.4
baz=310
MDOK Medeo 112.84 310 i PKiKP PKiKP 06 54 30.1 -1.4
TNSS Tian-Shan 112.90 310 ePKiKP PKiKP 06 54 30.4 -1.7
baz=310
TNSS Tian-Shan 112.90 310 i PKiKP PKiKP 06 54 30.3 -1.7
KSH Kashi 113.37 306 PKP PKiKP 06 54 32.4 -0.2
ULHL Ulahol 113.37 309 P PKiKP 06 54 32.6 -0.1
SNR=6.9
TKM2 Tokmak 2 113.88 309 P PKiKP 06 54 32.7 -1.0
SNR=8.9
AAK Ala-Archa 114.68 309 ⇑i PKiKP PKPdf 06 54 33.3 -1.8
AAK pmax pmax
comp=Z,14nm,2.5s
USP Ospenovka 114.70 310 P PKPdf 06 54 34.0 -1.0
SNR=8.4
BTLS Baital 115.08 312 ePKiKP PKPdf 06 54 34.6 -1.0
baz=312
BTLS ePP PP 06 55 44.2 -1.3
baz=312
BTLS Baital 115.08 312 i PKiKP PKPdf 06 54 34.5 -1.0
BTLS e 06 55 44.2
EKS2 Erkin-Say 115.21 309 P PKPdf 06 54 35.5 -0.6
SNR=6.4
AML Almayashu 115.25 309 P PKPdf 06 54 35.9 -0.7
SNR=9.5
BVAR Borovoye Array 117.17 321 PKP PKPdf 06 54 38.4 -0.9
comp=Z,14nm,0.5s,baz=98,slow=1.1,SNR=40
BVAR PP PP 06 56 02.5 +2.9
comp=Z,7.0nm,0.8s,baz=86,slow=7.7,SNR=6.4
BVAR PKKPbc PKKPbc 07 05 05.4 -1.6
comp=Z,1.3nm,0.7s,baz=270,slow=5.8,SNR=5.4
BVAR PKKPab PKKPab 07 05 11.3 +1.1
comp=Z,3.1nm,0.6s,baz=286,slow=3.4,SNR=11
BRVK Borovoye 117.23 321 ⇓i PKiKP PKPdf 06 54 38.3 -1.2
BRVK pmax pmax
comp=Z,12nm,0.7s
KK31 Karatay Array 117.62 310 i PKiKP PKPdf 06 54 39.2 -1.4
KKAR Karatay Array 117.62 310 PKPdf 06 54 39.5 -1.1
KKAR Karatay Array 117.62 310 PKiKP PKPdf 06 54 39.5 -1.1
BRLS Borolday 118.11 310 ePKiKP PKPdf 06 54 40.8 -0.8
baz=309
BRLS ePP PP 06 56 06.0 -0.5
baz=309
BRLS Borolday 118.11 310 i PKiKP PKPdf 06 54 40.7 -0.8
BRLS e 06 56 05.9
CHM Chimkent 118.29 309 ePKiKP PKPdf 06 54 41.1 -0.8
baz=309
CHM Chimkent 118.29 309 i PKiKP PKPdf 06 54 41.1 -0.8
KBL Kabul 118.55 300 PKPdf 06 54 42.4 -0.5
KBL Kabul 118.55 300 PKiKP PKPdf 06 54 42.4 -0.5

**SIMJ Simiganj 118.73 305 PKPdf 06 54 42.2 -0.8**
**SPITS Spitsbergen Ar 119.59 357** PKP **PKPdf 06 54 43.0 -0.4**
comp=Z,11nm,0.7s,baz=181,slow=3.3,SNR=6.1
**SPITS Spitsbergen Ar 119.59 357** PKIKP **PKPdf 06 54 43.0 -0.4**
**BDFB Brasilia 120.56 121 PKPdf 06 54 46.7 -0.4**
**BDFB Brasilia 120.56 121** PKP **PKPdf 06 54 46.5 -0.7**
comp=Z,4.4nm,0.6s,baz=223,slow=2.3,SNR=10
BDFB PKKPbc **PKKPbc 07 04 54.5 0.0**
comp=Z,8.3nm,0.9s,baz=101,slow=1.9,SNR=12
**BDFB Brasilia 120.56 121** PKIKP **PKPdf 06 54 46.7 -0.4**
**SUMG Summit 121.02 13 PKiKP 06 54 47.2 +0.3**
**SUMG Summit 121.02 13** PKIKP **PKiKP 06 54 47.2 +0.3**
**SVE Sverdlovsk 121.97 326** *e*PKIKP **PKPdf 06 54 47.9 -0.6**
SVE pmax pmax
comp=Z,29nm,0.8s
**ARU Arti 123.19 326 PKPdf 06 54 50.5 -0.3**
**ARU Arti 123.19 326** PKKPbc PKKPbc 07 04 44.1 -1.0
comp=Z,6.8nm,0.5s,baz=236,slow=3.6,SNR=11
**ARU Arti 123.19 326** *i* PKIKP **PKPdf 06 54 49.8 -1.0**
ARU 06 56 39.0
ARU 07 01 09.1
**AB31 Akbulak array 124.25 318** *i* PKIKP **PKPdf 06 54 52.5 -0.6**
**ABKAR Akbulak array 124.25 318 PKPdf 06 54 52.8 -0.3**
**LVZ Lovozero 126.14 345** ⇓*i*PKIKP **PKPdf 06 54 55.9 -0.3**
**ARCES ARCESS Array B 126.65 350** PKhKP PKPpre 06 54 46.7
comp=Z,1.2nm,0.8s,baz=48,slow=1.8,SNR=3.6
ARCES PKP **PKPdf 06 54 56.7 -0.4**
comp=Z,17nm,0.8s,baz=48,slow=1.8,SNR=31
**KIRV Kirov 126.87 331** *d i* PKIKP **PKPdf 06 54 57.1 -0.6**
**BOSA Boshof 128.17 207 PKPdf 06 55 01.8 +0.3**
**BOSA Boshof 128.17 207** PKP **PKPdf 06 55 01.4 -0.1**
comp=Z,5.9nm,0.8s,baz=170,slow=2.7,SNR=10
**BOSA Boshof 128.17 207** PKIKP **PKPdf 06 55 01.8 +0.3**
**BELG Belogornoye 130.62 325** *de*PKIKP **PKPdf 06 55 04.9 -0.2**
**JOF Joensuu 130.90 343** *e*P **PKPdf 06 55 04.9 -0.4**
**VALR Valaam 132.25 342** *de*PKIKP **PKPdf 06 55 06.9 -1.0**
**VAF Ylistaro 132.94 347** *e*P **PKPdf 06 55 09.4 +0.3**
**KEF Keuruu 133.21 345** *e*P **PKPdf 06 55 08.8 -0.9**
**FINES FINESS Array B 133.53 344** PKhKP PKPpre 06 54 55.4
comp=Z,2.0nm,0.6s,baz=90,slow=0.4,SNR=8.5
FINES PKP **PKPdf 06 55 09.3 -1.0**
comp=Z,14nm,0.8s,baz=93,slow=2.8,SNR=8.9
FINES PP **PP 06 57 46.8 +0.6**
comp=Z,7.5nm,0.8s,baz=101,slow=3.5,SNR=3.4
**MOS Moscow 133.78 333** *i* PKIKP **PKPdf 06 55 10.8 -0.1**
MOS *e* 06 57 49.5
MOS pmax pmax
comp=Z,41nm,0.8s
**VRH Novokhopyorsk 134.41 326** *e*PKIKP **PKPdf 06 55 10.6 -1.6**
VRH *e* 06 57 51.8
VRH pmax pmax
comp=Z,18nm,1.5s
**NBCA Caruaru-PE 134.41 122** *e*P **SKPbc 06 57 52.8 -0.5**
**OBN Obninsk 134.64 333** *i* PKIKP **PKPdf 06 55 09.0 -3.5**
OBN *i* 06 57 52.7
OBN pmax pmax
comp=Z,15nm,0.8s
**NBCL Cascavel-CE 134.69 116** *e*P **SKPbc 06 57 54.3 +0.3**
**MEF Metsahovi 135.01 344** *e*P **PKPdf 06 55 12.1 -1.0**
**LPSR Galich'ya Gora 135.08 329** *e*PKIKP **PKPdf 06 55 11.6 -1.9**
LPSR *e* 06 57 54.6
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**ARBE Arbavere 135.24 343** *e*P **PKPdf 06 55 12.9 -0.6**
**VORR Voronezh 135.47 327** *e*PKIKP **PKPdf 06 55 12.4 -1.8**
VORR *e* 06 57 55.3
VORR pmax pmax
comp=Z,20nm,0.9s
**VSR Storozhevoye 135.75 327** *e*PKIKP **PKPdf 06 55 12.2 -2.6**
VSR *e* 06 57 55.9
VSR pmax pmax
comp=Z,20nm,1.1s
**VORD Divnogorie 135.83 326** *e*PKIKP **PKPdf 06 55 12.2 -2.7**
VORD *e* 06 57 55.5
VORD pmax pmax
comp=Z,10.0nm,0.9s
**VSU Vasula 135.83 341** *ce*PKIKP **PKPdf 06 55 15.5 +0.8**
**RCBR Riachuelo 135.86 119** SKPbc **SKPbc 06 57 58.8 +1.2**
comp=Z,19nm,1.1s,baz=64,slow=8.3,SNR=6.2
**RCBR Riachuelo 135.86 119** *e*P **SKPbc 06 57 58.7 +1.0**
**NB2 NORSAR Subarra 136.71 353** PKPdf PKPpre 06 55 04.2
comp=Z,2.9nm,0.9s,baz=14,slow=1.8
NB2 SKPa 06 57 59.6
comp=Z,1.6nm,0.7s,baz=9.5,slow=3.1
**NOA NORSAR Array B 136.71 353** PKhKP PKPpre 06 55 04.5
comp=Z,1.6nm,0.7s,baz=14,slow=4.3,SNR=4.4
NOA PKP **PKPdf 06 55 15.8 -0.5**
comp=Z,4.4nm,0.7s,baz=14,slow=4.1,SNR=11
NOA SKPbc **SKPbc 06 57 59.1 +0.4**
comp=Z,3.5nm,0.9s,baz=11,slow=4.1,SNR=5.4
**NCK Nalchik 136.74 315** ⇑*e*PKIKP **PKPdf 06 55 17.1 +0.2**
**GNI Garni 137.08 310** ⇓*e*PKIKP **PKPdf 06 55 17.5 -0.3**
**KBZ Khabaz 137.12 315** PKhKP PKPpre 06 55 06.9
comp=Z,3.8nm,0.8s,baz=227,slow=3.3,SNR=2.8
KBZ PKP **PKiKP 06 55 18.9 -0.6**
comp=Z,4.6nm,0.8s,baz=69,slow=3.5,SNR=5.9
KBZ SKP 06 58 02.1
comp=Z,4.0nm,0.8s,baz=50,slow=1.9,SNR=4.5
**KBZ Khabaz 137.12 315** ⇓*e*PKIKP **PKiKP 06 55 18.6 -0.9**
**KIV Kislovodsk 137.17 316** *e*PKIKP **PKPdf 06 55 17.7 -0.1**
KIV pmax pmax
comp=Z,10.0nm,1.1s
**HFS Hagfors 137.27 351** PKhKP PKPpre 06 55 04.4
comp=Z,4.2nm,0.5s,baz=50,slow=4.6,SNR=18
HFS SKP 06 58 01.0
comp=Z,5.3nm,0.7s,baz=57,slow=5.5,SNR=3.5
**SHA1 Shidzhatmaz 137.28 316** *de*PKIKP **PKPdf 06 55 17.8 -0.4**
**MNK Minsk 138.60 337** *i* LRM MLR 07 56 26.1
comp=E,199nm,20.0s
**MNK Minsk 138.60 337** *e*PKIKP **PKPdf 06 55 20.0 +0.1**
**MNK Minsk 138.60 337** *i* PKP **PKPdf 06 55 20.1 +0.1**
baz=39
**MNK Minsk 138.60 337** *i* PKP **PKPdf 06 55 20.1 +0.1**
comp=Z,17nm,0.8s
**MNK Minsk 138.60 337** *i* PKP **PKPdf 06 55 20.1 +0.2**
comp=E,19nm,0.8s
**MNK Minsk 138.60 337** *i* PKiKP **PKiKP 06 55 22.8 +0.6**
**MNK Minsk 138.60 337** *i* pPKP pPKPdf 06 57 22.6 -3.3
**MNK Minsk 138.60 337** *i* SKP 06 58 03.0
**MNK Minsk 138.60 337** *i* PP PP 06 58 18.5 +0.9
**MNK Minsk 138.60 337** *i* PKS 06 58 56.8
**MNK Minsk 138.60 337** *i* PPP PPP 07 01 27.3
**MNK Minsk 138.60 337** *i* SKS **SKSdf 07 01 38.6 -0.8**
**MNK Minsk 138.60 337** *i* SKKS 07 11 10.6
**MNK Minsk 138.60 337** *i* SS SS 07 15 52.6 +3.7
**MNK Minsk 138.60 337** *i* SSS SSS 07 21 12.7
**MNK Minsk 138.60 337** *i* LRM MLR 07 50 45.1
comp=Z,819nm,34.1s
**MNK Minsk 138.60 337** *i* LRM MLR 07 51 31.6
comp=N,288nm,21.9s
**SOC Sochi 139.28 317** *e*PKIKP **PKPdf 06 55 20.3 -1.2**
SOC *e* 06 58 25.7
SOC *e*PPP PPP 07 01 30.2
SOC *e*SS SS 07 15 56.4 -1.6
**KMBO Kilima Mbogo 140.11 245** PKhKP PKPpre 06 55 18.1
comp=N,3.4nm,0.7s,baz=39,slow=5.4,SNR=8.9
KMBO SKPbc **SKiKP 06 58 11.2 -1.0**
comp=N,7.0nm,0.8s,baz=75,slow=6.0,SNR=9.4
**SUW Suwalki 140.63 340** *e*P **PKPdf 06 55 20.1 -3.4**
**DEL Delary 140.74 349** *i* P PKPpre 06 55 16.0
**AKASG Malin Array Be 140.90 332** PKhKP PKPpre 06 55 17.3
comp=N,13nm,0.7s,baz=44,slow=4.1,SNR=46
AKASG PKP **PKPdf 06 55 24.3 +0.1**
comp=N,8.2nm,0.5s,baz=42,slow=3.3,SNR=10
AKASG SKPbc **SKPbc 06 58 10.1 -0.4**
comp=N,2.8nm,0.7s,baz=33,slow=2.9,SNR=4.3
**AKBB Malin Array Si 140.90 332** *ce*PKHKP PKPpre 06 55 16.9
**KIEV Kiev 140.91 332** PKPpre 06 55 17.7
**KIEV Kiev 140.91 332** ⇓P PKPpre 06 55 17.9
**KIEV Kiev 140.91 332** PKHKP PKPpre 06 55 17.7
**BSD Bornholm Skovb 141.83 348** *e*P PKPpre 06 55 20.8
**SIM Simferopol' 142.07 322** *ce*PKHKP PKPpre 06 55 23.2
SIM *e* 06 55 28.0
SIM pmax pmax
comp=Z,79nm,0.9s
**EKA Eskdalemuir Ar 142.78 5** PKhKP PKPpre 06 55 23.7
comp=Z,9.7nm,0.7s,baz=337,slow=2.8,SNR=26
**GKP Gorka Klasztor 143.00 345** *e*PKP PKPbc 06 55 25.6 -0.2
**GKP Gorka Klasztor 143.00 345** *e*P PKPbc 06 55 25.7 -0.1
**DIKM Dikmen 143.09 316** ⇓P PKPbc 06 55 27.2 +0.7
**SORM Soroca 143.13 330** ⇑P PKPab 06 55 25.7 -0.2
**SORM Soroca 143.13 330** ⇑PKIKP PKPab 06 55 25.7 -0.2
**BEL Belsk 143.25 340** *e*PKP PKPbc 06 55 26.6 0.0
**PURM Purcari 143.47 327** ⇑P PKPbc 06 55 27.5 +0.1

**ILTH Belurgan, Co L 143.73 8** PKP PKPab 06 55 26.2 -1.8
**MILM Milestii Mici 143.75 328** ⇑P PKPab 06 55 27.8 -0.5
**MILM Milestii Mici 143.75 328** ⇑PKIKP PKPab 06 55 27.8 -0.5
**BSEG Bad Segeberg 143.75 351** *e*PKPdf PKPab 06 55 27.9 -0.1
baz=24,slow=1.8
**BZK Bozkurt 143.75 318** ⇑P PKPbc 06 55 28.0 -0.4
**LVV L'vov 143.75 335** *e*PKHKP PKPpre 06 55 26.5
**IGLA Glengowla, Co 143.84 11** PKP PKPbc 06 55 27.3 -1.1
**KWP Kalwaria Pacla 144.41 336** *e*PKP PKPbc 06 55 30.3 -0.1
**CIDE Kastamonu/Cide 144.46 318** ⇑P **PKPdf 06 55 30.9 +0.2**
**H07N1 FLORES T-PHASB 144.48 46** *e*PKP **PKPab 06 55 31.8 +0.4**
**DSB Dublin 144.49 8** PKP **PKPdf 06 55 29.0 -1.4**
**GORT1 Trebel 144.51 350** *e*PKPdf **PKPdf 06 55 30.1 -0.3**
baz=24,slow=1.8
**RUE Ruedersdorf 144.53 347** *e*P **PKPdf 06 55 30.3 -0.2**
**RUE Ruedersdorf 144.53 347** *e*PKPdf **PKPdf 06 55 30.3 -0.2**
baz=24,slow=1.8
**H07S1 FLORES T-PHASB 144.57 47** *e*PKP **PKPab 06 55 31.5 -0.2**
**PRAR RASCA 144.68 331** ⇑P PKPbc 06 55 31.2 -0.1
**VLDR Vladesti 144.85 327** ⇓P **PKPab 06 55 32.4 -0.2**
**TLCR 144.91 326** ⇑P PKPbc 06 55 32.3 +0.4
**TLCR 144.91 326** ⇑PKIKP PKPbc 06 55 32.3 +0.3
**BURAR Bucovina Array 144.95 332** ⇑P **PKPab 06 55 33.6 +0.5**
**OJC Ojcow 144.96 340** *e*PKP **PKPdf 06 55 31.4 +0.1**
**SCTR Scanteiesti 145.01 327** ⇑P **PKPab 06 55 33.0 -0.2**
**GHRR 145.04 328** ⇑P **PKPab 06 55 33.6 +0.3**
**RETH Rethem/Aller, 145.05 352** *e*PKPdf **PKPdf 06 55 31.7 +0.4**
baz=24,slow=1.8
**BR131 Keskin Array S 145.09 315** *d i* PKIKP **PKPdf 06 55 32.3 +0.2**
**BRTR Keskin Array B 145.09 315 PKPdf 06 55 31.7 -0.4**
**BRTR Keskin Array B 145.09 315** PKP **PKPdf 06 55 31.4 -0.7**
comp=Z,62nm,0.8s,baz=139,slow=4.3,SNR=170
**BRTR Keskin Array B 145.09 315** PKIKP **PKPdf 06 55 31.7 -0.4**
**TESR Tescani 145.10 329** ⇑P **PKPbc 06 55 32.7 +0.2**
**KOLS Kolonicke sedl 145.15 336** *e*PKIKP **PKPbc 06 55 33.1 +0.5**
**KOLS Kolonicke sedl 145.15 336** *e*PKP **PKPbc 06 55 33.1 +0.5**
**JURR Jurilovca 145.15 325** ⇑P **PKPbc 06 55 32.5 -0.2**
**FLTG Flechtingen 145.16 350** *e*PKPdf **PKPdf 06 55 31.8 +0.2**
baz=24,slow=1.8
**NEGRR Negrea 145.16 327** ⇑P **PKPab 06 55 33.4 -0.4**
**NRDL Niedersach Rie 145.18 351** *e*PKPdf **PKPdf 06 55 32.0 +0.4**
baz=24,slow=1.8
**SLCR Slobozia Conac 145.18 327** ⇓P **PKPab 06 55 33.7 -0.1**
**KIRS Kirsehir-Merke 145.18 313** ⇑P **PKPbc 06 55 33.2 0.0**
**IZVR Izvoarele 145.22 327** ⇑P **PKPab 06 55 33.6 -0.4**
**COSR Cosmesti PH 145.23 328** ⇑P **PKPab 06 55 34.2 +0.2**
**SCHLR Schela 145.23 327** ⇑P **PKPbc 06 55 33.5 +0.5**
**CFR Carcaliu 145.27 326** ⇑P **PKPbc 06 55 33.3 +0.2**
**CFR Carcaliu 145.27 326** ⇑PKP2 **PKPbc 06 55 33.3 +0.2**
**IWEX Carrickbyrne, 145.28 9** PKP **PKPdf 06 55 31.8 0.0**
**PANC Panciu 145.30 328** ⇑P **PKPab 06 55 34.0 -0.3**
**TPGR Topolog 145.34 326** ⇑P **PKPbc 06 55 33.9 +0.6**
**ONER Baraj Valea Uz 145.35 329** ⇓P **PKPab 06 55 34.1 -0.4**
**KSP Ksiaz 145.45 344** *e*PKP **PKPbc 06 55 32.9 +0.6**
**NIE Niedzica 145.47 338** *e*PKP **PKPdf 06 55 32.6 +0.3**
**CRVS Cervenica-Dubn 145.48 337** *e*PKP2 **PKPbc 06 55 33.6 0.0**
**CRVS Cervenica-Dubn 145.48 337** *e*PKP **PKPbc 06 55 33.6 0.0**
CRVS *e* 06 57 39.9
**VRI Vrincioaia 145.52 329** ⇑P **PKPbc 06 55 34.0 +0.2**
**VRI Vrincioaia 145.52 329** ⇑PKP2 **PKPbc 06 55 34.0 +0.2**
**PLOR Plostina 145.57 329** ⇑P **PKPbc 06 55 34.1 +0.1**
**PLOR Plostina 145.57 329** ⇑PKP2 **PKPbc 06 55 34.1 +0.1**
**ANTO Ankara 145.59 315** ⇑P **PKPbc 06 55 34.7 +0.4**
**ANTO Ankara 145.59 315** ⇑PKP2 **PKPbc 06 55 34.7 +0.4**
**HWQ Hawqa 145.59 304** *e*P **PKPbc 06 55 34.3 -0.2**
**BMR Baia Mare 145.66 334** ⇑P **PKPbc 06 55 34.5 +0.4**
**BMR Baia Mare 145.66 334** ⇑PKP2 **PKPbc 06 55 34.5 +0.4**
**IBBN Ibbenburen 145.66 353** *e*PKPdf **PKPbc 06 55 33.6 -0.4**
baz=24,slow=1.8
**HARR Harsova 145.71 326** ⇑P **PKPbc 06 55 34.8 +0.5**
**HARR Harsova 145.71 326** ⇑PKP2 **PKPbc 06 55 34.8 +0.5**
**TURR Turia 145.73 329** ⇑P **PKPab 06 55 35.3 -0.7**
**OSTC Ostas 145.73 344** ⇑*e*PKP **PKPbc 06 55 34.8 +0.5**
**OSTC Ostas 145.73 344** *e*PKP2 **PKPbc 06 55 34.8 +0.5**
**ARCR ARCALIA 145.74 332** ⇑P **PKPbc 06 55 35.0 +0.7**
**CHVC Chvalec 145.75 344** ⇑*e*PKP **PKPbc 06 55 34.7 +0.4**
**CHVC Chvalec 145.75 344** *e*PKP2 **PKPbc 06 55 34.7 +0.4**
**BISRR Bisoca 145.75 328** ⇓P **PKPab 06 55 35.4 -0.8**
**CLZ Clausthal 145.77 350** *e*PKPdf **PKPdf 06 55 33.0 +0.3**
baz=24,slow=1.8
CLZ *e*PKPbc **PKPbc 06 55 34.5 +0.1**
baz=17,slow=2.6
**COVR Voineasa-Covas 145.79 329** ⇓P **PKPbc 06 55 34.3 -0.3**
**CLL Collm 145.80 347** *e*PKPdf **PKPdf 06 55 33.0 +0.3**
CLL ⇓*i*PKPbc **PKPbc 06 55 34.4 0.0**
comp=Z,204nm,0.9s
CLL *e*pPKiKP **pPKPdf 06 57 39.0 +0.3**
CLL *ex* x 06 57 57.0
CLL *e*SKPdf **SKPdf 06 58 18.0 +1.9**
CLL *e*PP **PP 06 59 03.0 +2.7**
**CLL Collm 145.80 347** ⇓*e*PKIKP **PKPdf 06 55 33.0 +0.3**
CLL *i* 06 55 34.4
CLL pmax pmax
comp=Z,204nm,0.9s
**CLL Collm 145.80 347** *e*PKPdf **PKPdf 06 55 32.4 -0.3**
baz=24,slow=1.8
CLL *e*PKPbc **PKPbc 06 55 34.4 0.0**
baz=17,slow=2.6
CLL *e*PKPab **PKPab 06 55 35.8 -0.3**
baz=12,slow=4.2
**OZUR 145.81 330** ⇓P **PKPbc 06 55 35.2 +0.5**
**OKC Ostrava-Krasne 145.82 341** ⇑*e*PKP **PKPbc 06 55 34.7 +0.2**
**OKC Ostrava-Krasne 145.82 341** *e*PKP2 **PKPbc 06 55 34.7 +0.2**
**UPC Upice 145.83 344** ⇑*e*PKP **PKPbc 06 55 34.9 +0.4**
**UPC Upice 145.83 344** *e*PKP2 **PKPbc 06 55 34.9 +0.4**
**BOSR Bodos 145.89 330** ⇑P **PKPab 06 55 35.9 -0.8**
**DPC Dobruska-Polom 145.89 343** ⇑*e*PKP **PKPbc 06 55 35.2 +0.4**
**DPC Dobruska-Polom 145.89 343** *e*PKP2 **PKPbc 06 55 35.2 +0.4**
**MANR Mangalia 145.92 324** ⇑P **PKiKP 06 55 38.2 +0.7**
**BHL Bhannes 145.94 304** *e*P **PKPbc 06 55 35.5 0.0**
**LANS Liptovska Anna 145.98 339** *e*PKP2 **PKPab 06 55 36.2 -0.7**
**LANS Liptovska Anna 145.98 339** *e*PKP **PKPab 06 55 36.2 -0.7**
**BRG Berggiesshubel 146.01 346** *e*PKP **PKPdf 06 55 33.4 +0.3**
BRG Amp 06 55 34.3
comp=Z,9.3nm,0.9s
**BRG Berggiesshubel 146.01 346** P **PKPbc 06 55 35.5 +0.4**
BRG Amp 06 55 36.2
comp=Z,81nm,0.9s
**BRG Berggiesshubel 146.01 346** *e*PKPdf **PKPdf 06 55 32.7 -0.3**
baz=24,slow=1.8
BRG *e*PKPbc **PKPbc 06 55 35.1 +0.1**
baz=17,slow=2.6
BRG *e*PKPab **PKPab 06 55 36.8 -0.1**
baz=12,slow=4.2
**KRLC Kraliky 146.01 343** ⇑*e*PKP **PKPbc 06 55 35.4 +0.3**
**KRLC Kraliky 146.01 343** *e*PKP2 **PKPbc 06 55 35.4 +0.3**
**NEHR Nehoiu 146.04 328** ⇓P **PKPbc 06 55 35.9 +0.6**
**MORC Moravsky Berou 146.05 342** *e*PKP **PKPdf 06 55 33.3 0.0**
MORC *e* 06 57 39.3
**MORC Moravsky Berou 146.05 342** ⇑P **PKPbc 06 55 35.6 +0.3**
**MORC Moravsky Berou 146.05 342** ⇑PKP2 **PKPbc 06 55 35.6 +0.3**
**DOPR Dopca 146.09 330** ⇑P **PKPbc 06 55 36.3 +0.9**
**GTTG Gottingen 146.12 351** *e*PKPdf **PKPdf 06 55 33.4 +0.1**
baz=24,slow=1.8
GTTG *e*PKPbc **PKPbc 06 55 35.5 +0.2**
baz=17,slow=2.6
**ISR Istrita 146.13 328** ⇑P **PKPbc 06 55 36.0 +0.4**
**ISR Istrita 146.13 328** ⇑PKP2 **PKPbc 06 55 36.0 +0.4**
**NEUB Neuenburg 146.14 349** *e*PKPdf **PKPdf 06 55 33.2 -0.1**
baz=24,slow=1.8
NEUB *e*PKPbc **PKPbc 06 55 35.4 0.0**
baz=17,slow=2.6
NEUB *e*PKPab **PKPab 06 55 36.8 -0.6**
baz=12,slow=4.2
**MLR Muntele Rosu 146.17 329** ⇑P **PKPbc 06 55 35.6 -0.2**
**MLR Muntele Rosu 146.17 329** ⇑PKP2 **PKPbc 06 55 35.6 -0.2**
**PVCC Panska Ves 146.18 345** ⇑*e*PKP **PKPbc 06 55 35.9 +0.4**
PVCC ⇑*e*PKP **PKPab 06 55 36.1 -1.5**
**PVCC Panska Ves 146.18 345** *e*PKP2 **PKPbc 06 55 35.9 +0.4**
**RICC Richard 146.28 346** ⇑*e*PKP **PKPbc 06 55 36.1 +0.3**
**MAUC Maruska 146.33 341** ⇑*e*PKP **PKPbc 06 55 36.4 +0.4**
**CBBR Cluj-Babes-Bol 146.34 333** ⇓P **PKPdf 06 55 33.1 -0.7**
**CJR Cluj-Napoca 146.36 332** ⇑P **PKPbc 06 55 36.8 +0.6**
**CJR Cluj-Napoca 146.36 332** ⇑PKP2 **PKPbc 06 55 36.8 +0.6**
**HSKC Hora Svate Kat 146.37 346** ⇑*e*PKP **PKPbc 06 55 35.8 -0.3**
**MMAI Mount Meron Ar 146.42 303** PKPbc **PKPbc 06 55 37.2 +0.3**
comp=Z,101nm,0.6s,baz=64,slow=5.7,SNR=104
MMAI pPKPbc pPKPab 06 57 40.0 -0.5
comp=Z,6.2nm,0.6s,baz=323,slow=0.7,SNR=3.8
**PLAR PLOIESTI 146.54 328** ⇑P **PKPbc 06 55 37.1 +0.5**
**BUG Bochum--Univer 146.57 354** *e*PKPdf **PKPdf 06 55 34.7 +0.7**
baz=24,slow=1.8

BUG *e*PKPbc **PKPbc 06 55 36.4 -0.1**
baz=17,slow=2.6
BUG *e*PKPab **PKiKP 06 55 37.7 -0.9**
baz=12,slow=4.2
**PRA Prague 146.64 345** ⇑*e*PKP **PKPbc 06 55 36.5 -0.3**
**PRA Prague 146.64 345** *e*PKP2 **PKPbc 06 55 36.5 -0.3**
**PCED Cedros 146.64 46** *e*PKP **PKPbc 06 55 37.6 +0.4**
**VOIR 146.65 330** ⇑P **PKPbc 06 55 37.2 +0.2**
**VOIR 146.65 330** ⇑PKP2 **PKPbc 06 55 37.2 +0.2**
**CALA Caldeira 146.66 46** *e*PKP **PKPbc 06 55 38.1 +0.8**
**KASTN Kahler Asten 146.67 352** *e*PKPdf **PKPdf 06 55 34.4 +0.1**
baz=24,slow=1.8
KASTN *e*PKPbc **PKPbc 06 55 36.7 -0.1**
baz=17,slow=2.6
KASTN *e*PKPab **PKiKP 06 55 38.4 -0.5**
baz=12,slow=4.2
**DRGR 146.68 333** ⇑P **PKPbc 06 55 37.2 +0.1**
**PRU Pruhonice 146.69 345** ⇑*e*PKP **PKPbc 06 55 37.0 +0.1**
**PRU Pruhonice 146.69 345** *e*PKP2 **PKPbc 06 55 37.0 +0.1**
**MOX Moxa 146.71 349** *e*PKPdf **PKPdf 06 55 34.1 -0.2**
baz=24,slow=1.8
MOX *e*PKPbc **PKPbc 06 55 37.0 0.0**
baz=17,slow=2.6
MOX *e*PKPab **PKiKP 06 55 39.3 +0.3**
baz=12,slow=4.2
**VRAC Vranov 146.75 342** *e*PKP **PKPdf 06 55 34.5 +0.1**
VRAC *e* 06 57 41.5
**VRAC Vranov 146.75 342** ⇑P **PKPbc 06 55 37.7 +0.5**
**VRAC Vranov 146.75 342** ⇑PKP2 **PKPbc 06 55 37.7 +0.5**
**PLN Plauen 146.75 348** *e*PKPdf **PKPdf 06 55 34.2 -0.1**
baz=24,slow=1.8
PLN *e*PKPbc **PKPbc 06 55 36.8 -0.3**
baz=17,slow=2.6
PLN *e*PKPab **PKPab 06 55 40.0 +0.1**
baz=12,slow=4.2
**TANN Tannenbergstha 146.76 347** *e*PKPdf **PKPdf 06 55 34.2 -0.2**
baz=24,slow=1.8
TANN *e*PKPbc **PKPbc 06 55 37.2 0.0**
baz=17,slow=2.6
TANN *e*pPKPbc pPKPab 06 57 41.1 +0.2
**VYHS Vyhne 146.76 339** *e*PKIKP **PKPdf 06 55 34.5 0.0**
VYHS *e* 06 55 40.4
**VYHS Vyhne 146.76 339** *e*PKP **PKPdf 06 55 34.5 0.0**
VYHS *e* 06 55 37.5
VYHS *e* 06 55 40.4
VYHS *e* 06 57 41.9
**UBBA Unterbreizbach 146.82 350** *e*PKPdf **PKPdf 06 55 34.5 +0.1**
baz=24,slow=1.8
UBBA *e*PKPbc **PKPbc 06 55 37.1 0.0**
baz=17,slow=2.6
UBBA *e*PKPab **PKiKP 06 55 39.2 +0.1**
baz=12,slow=4.2
**JAVC Velka Javorina 146.82 341** *e*PKP **PKPdf 06 55 35.9 +1.3**
JAVC *e* 06 57 43.0
**TNR Turnu Rosu 146.85 331** ⇑P **PKPbc 06 55 38.0 +0.4**
**TNR Turnu Rosu 146.85 331** ⇑PKP2 **PKPbc 06 55 38.0 +0.4**
**PCAN Candelaria 146.87 46** *e*PKP **PKPbc 06 55 38.4 +0.6**
**PSZ Piszkesteto 146.88 337** ⇑P **PKPbc 06 55 37.9 +0.3**
**PSZ Piszkesteto 146.88 337** ⇑PKP2 **PKPbc 06 55 37.9 +0.3**
**PICO Pico 146.89 46** *e*PKP **PKPbc 06 55 38.6 +0.7**
**ARR Arges 146.90 330** ⇑P **PKPbc 06 55 38.6 +0.9**
**ROSA Rosais 146.91 46** *e*PKP **PKPbc 06 55 38.4 +0.5**
**PRD Provadia 147.00 324** ⇓*i*P **PKPbc 06 55 37.9 0.0**
**PPNO Prainha do Nor 147.02 46** *e*PKP **PKPbc 06 55 38.9 +0.6**
**KRUC Moravsky 147.03 342** *e*PKP **PKPdf 06 55 34.8 -0.1**
KRUC *e* 06 57 42.3
**SGRR Singureni 147.05 327** ⇑P **PKPbc 06 55 38.0 -0.1**
**PMAN Manadas 147.06 46** *e*PKP **PKPbc 06 55 38.4 +0.1**
**TREC Trest 147.08 343** ⇑*e*PKP **PKPbc 06 55 38.0 0.0**
**TREC Trest 147.08 343** *e*PKP2 **PKPbc 06 55 38.0 0.0**
**PID Ribeirinha 147.13 46** *e*PKP **PKPbc 06 55 38.9 +0.4**
**SMOL Smolenice 147.21 341** *e*PKP2 **PKiKP 06 55 39.4 -0.7**
**MANZ Manzenberg 147.24 348** *e*PKPdf **PKPdf 06 55 35.3 0.0**
baz=24,slow=1.8
MANZ *e*PKPbc **PKPbc 06 55 38.6 +0.1**
baz=17,slow=2.6
MANZ *e*pPKPbc **pPKPbc 06 57 41.9 -0.3**
**LOT Lotru 147.24 331** ⇑P **PKiKP 06 55 39.8 -0.7**
**ZVC Zvikov 147.28 345** ⇑*e*PKP **PKPbc 06 55 38.7 +0.2**
ZVC *e*PKPAB **PKPab 06 55 42.2 +0.1**
**HUMR Humele 147.34 328** ⇑P **PKPbc 06 55 38.4 -0.5**
**ISK Istanbul-Kandi 147.34 320** P **PKPbc 06 55 38.2 -0.7**
**ROTZ Rotzenmuhle 147.43 347** *e*PKPdf **PKPdf 06 55 35.5 0.0**
baz=24,slow=1.8
ROTZ *e*PKPbc **PKPbc 06 55 39.0 +0.1**
baz=17,slow=2.6
ROTZ *e*pPKPbc **pPKPbc 06 57 42.4 -0.4**
**AHRW Bad Neuenahr-A 147.48 354** *e*PKPdf **PKPdf 06 55 36.6 +1.0**
baz=24,slow=1.8
AHRW *e*PKPbc **PKPbc 06 55 39.3 +0.3**
baz=17,slow=2.6
AHRW *e*PKPab **PKPab 06 55 41.7 -1.1**
baz=12,slow=4.2
**MEM Membach 147.51 355** *d*PKP **PKPbc 06 55 38.7 -0.4**
MEM *dp*PKP **pPKPbc 06 57 43.0 +0.2**
**SRO Srobarova 147.53 339** *e*PKP2 **PKPbc 06 55 39.5 +0.3**
**SRO Srobarova 147.53 339** *e*PKP **PKPbc 06 55 39.5 +0.3**
SRO *e* 06 55 43.9
**BTNL Ternell 147.53 355** *d*PKPdf **PKPdf 06 55 35.4 -0.3**
BTNL *d*PKP **PKPbc 06 55 38.8 -0.3**
BTNL *dp*PKP **pPKPab 06 57 43.5 -0.1**
**SIRR Siria 147.54 334** ⇑P **PKPbc 06 55 39.9 +0.6**
**BSTI Sart Tilman 147.57 355** *d*PKP **PKPbc 06 55 39.1 -0.1**
BSTI *dp*PKP **pPKPbc 06 57 43.1 +0.1**
**ZST Bratislava 147.59 341** *e*PKP2 **PKPbc 06 55 39.8 +0.5**
**ZST Bratislava 147.59 341** *e*PKP **PKPbc 06 55 39.8 +0.5**
ZST *e* 06 55 44.2
**PAGU Agualva, Azore 147.60 45** *e*PKP **PKPbc 06 55 40.4 +0.7**
**TNS Taunus Mts 147.63 352** *e*PKPdf **PKPdf 06 55 36.3 +0.3**
baz=24,slow=1.8
TNS *e*PKPbc **PKPbc 06 55 39.5 0.0**
baz=17,slow=2.6
TNS *e*PKPab **PKPab 06 55 43.1 -0.4**
baz=12,slow=4.2
TNS *e*pPKPbc **pPKPbc 06 57 43.6 +0.2**
**PSCM Serra do Cume 147.68 45** *e*PKP **PKiKP 06 55 40.7 -0.7**
**GRF Grafenberg Arr 147.69 348** *e*PKPdf **PKPdf 06 55 35.7 -0.3**
baz=24,slow=1.8
GRF *e*PKPbc **PKPbc 06 55 39.7 +0.1**
baz=17,slow=2.6
GRF *e*PKPab **PKPab 06 55 43.6 -0.1**
baz=12,slow=4.2
GRF *e*pPKPbc **pPKPbc 06 57 43.3 -0.5**
**SZH Strazhitsa 147.71 326** ⇓*i*P **PKPbc 06 55 39.6 -0.2**
**KHC Kasperske Hory 147.72 345** *e*PKPdf **PKPdf 06 55 36.1 0.0**
KHC ⇑*e*PKP **PKPbc 06 55 40.1 +0.4**
**KHC Kasperske Hory 147.72 345** *d i* PKHKP PKPpre 06 55 34.9
**GZR Gura Zlata 147.74 332** ⇑P **PKPbc 06 55 39.7 -0.2**
**GZR Gura Zlata 147.74 332** ⇑PKHKP PKPpre 06 55 39.7
**SURR Surduc 147.75 333** ⇑P **PKPbc 06 55 39.8 0.0**
**BCLA Clavier 147.76 356** *d*PKP **PKPbc 06 55 38.2 -1.5**
BCLA *d*PKPab **PKPab 06 55 43.0 -0.9**
BCLA *dp*PKP **pPKPab 06 57 43.9 -0.4**
**BHOU Houvegnez 147.77 355** *d*PKPdf **PKPdf 06 55 36.1 0.0**
BHOU *d*PKP **PKPbc 06 55 39.8 +0.1**
BHOU *dp*PKP **pPKPab 06 57 44.5 +0.1**
**BGES Gesves 147.81 356** *d*PKP **PKPbc 06 55 38.9 -0.9**
BGES *dp*PKiKP **pPKPab 06 57 44.6 +0.1**
**CKRC Cesky Krumlov 147.82 344** *e*PKPDF **PKPdf 06 55 36.4 +0.2**
CKRC ⇑*e*PKP **PKPbc 06 55 40.3 +0.3**
**CKRC Cesky Krumlov 147.82 344** *e*PKIKP **PKPdf 06 55

| | | | | | | |
|---|---|---|---|---|---|---|
| BZS | Buzias | 148.07 333 | ⇑P | PKPbc | 06 55 40.7 | +0.1 |
| BZS | Buzias | 148.07 333 | ⇑PKP2 | PKPbc | 06 55 40.7 | +0.1 |
| SRE | Strehaia | 148.10 330 | ⇓P | PKPbc | 06 55 40.9 | +0.1 |
| SRE | Strehaia | 148.10 330 | ⇓PKP2 | PKPbc | 06 55 40.9 | +0.1 |
| DOU | Dourbes | 148.13 356 | *d*PKP | PKPbc | 06 55 40.6 | 0.0 |
| DOU | | | *d*pPKP | pPKPbc | 06 57 44.5 | -0.1 |
| CONA | Conrad Observa | 148.21 342 | *e*PKiKP | PKPbc | 06 55 41.3 | +0.3 |
| | comp=Z,33nm,0.6s,SNR=54 | | | | | |
| EDRB | Edirne | 148.23 323 | P | PKPbc | 06 55 40.7 | -0.5 |
| RONA | Rosalia, Austr | 148.28 341 | *e*PKP | PKPbc | 06 55 41.3 | +0.1 |
| | comp=Z,37nm,0.7s,SNR=36 | | | | | |
| HERR | Herculane | 148.29 331 | ⇑P | PKPbc | 06 55 41.2 | 0.0 |
| BAND | Balkesir-Ban | 148.35 320 | ⇓P | PKPbc | 06 55 41.3 | -0.2 |
| WLF | Walferdange | 148.44 354 | | PKPdf | 06 55 37.8 | +0.6 |
| WLF | | | PKPbc | PKiKP | 06 55 42.2 | -0.4 |
| WLF | Walferdange | 148.44 354 | *d*PKP | PKPbc | 06 55 41.6 | +0.2 |
| WLF | | | *d*pPKP | pPKPbc | 06 57 46.1 | +0.6 |
| WLF | Walferdange | 148.44 354 | PKP2 | PKiKP | 06 55 42.2 | -0.4 |
| WLF | Walferdange | 148.44 354 | *e*PKPdf | PKPdf | 06 55 38.2 | +1.1 |
| | baz=24,slow=1.8 | | | | | |
| WLF | | | *e*PKPbc | PKiKP | 06 55 42.1 | -0.4 |
| | baz=17,slow=2.6 | | | | | |
| WLF | | | *e*pPKPbc | pPKPbc | 06 57 46.1 | +0.6 |
| MDVR | Moldovita | 148.69 332 | ⇑P | PKPbc | 06 55 42.2 | -0.1 |
| VALD | Valchedram | 148.71 329 | *i* P | PKPbc | 06 55 42.5 | +0.2 |
| MOA | Molln | 148.73 344 | *e*PKP | PKPbc | 06 55 42.0 | -0.3 |
| | comp=Z,10nm,0.7s,SNR=26 | | | | | |
| MORH | Mrgy, Hungar | 148.78 337 | ⇑P | PKPbc | 06 55 42.3 | -0.1 |
| MPEP | Malo Peshtene | 148.80 328 | ⇓*i* P | PKPbc | 06 55 42.5 | -0.1 |
| ARSA | Arzberg | 148.92 342 | *e*PKP | PKPbc | 06 55 42.3 | -0.4 |
| | comp=Z,11nm,0.8s,SNR=18 | | | | | |
| STU | Stuttgart | 148.94 350 | *e*PKPdf | PKPdf | 06 55 38.2 | +0.2 |
| | baz=24,slow=1.8 | | | | | |
| STU | | | *e*PKPbc | PKPbc | 06 55 42.8 | +0.1 |
| | baz=17,slow=2.6 | | | | | |
| STU | | | *e*PKPab | PKPab | 06 55 48.2 | -0.6 |
| | baz=12,slow=4.2 | | | | | |
| STU | | | *e*pPKPbc | pPKPbc | 06 57 47.1 | +0.1 |
| BIOA | Bad Ischl, Aus | 149.04 344 | *e*PKP | PKPbc | 06 55 42.5 | -0.6 |
| | comp=Z,23nm,0.9s,SNR=18 | | | | | |
| KULA | Kula-Manisa | 149.04 316 | P | PKPbc | 06 55 43.3 | -0.1 |
| FUR | Furstenfeldbru | 149.14 347 | *e*PKPdf | PKPdf | 06 55 38.3 | -0.1 |
| | baz=24,slow=1.8 | | | | | |
| FUR | | | *e*PKPbc | PKPbc | 06 55 43.3 | 0.0 |
| | baz=17,slow=2.6 | | | | | |
| FUR | | | *e*PKPab | PKPab | 06 55 49.4 | -0.4 |
| | baz=12,slow=4.2 | | | | | |
| KDZ | Kurdzhali | 149.16 324 | ⇓*i* P | PKPbc | 06 55 42.9 | -0.6 |
| PGB | Panagyurishte | 149.18 327 | ⇓*i* P | PKPbc | 06 55 43.3 | -0.2 |
| RJOB | Jochberg | 149.21 345 | *e*PKPbc | PKPbc | 06 55 43.2 | -0.3 |
| | baz=17,slow=2.6 | | | | | |
| RJOB | | | *e*PKPab | PKPab | 06 55 50.1 | 0.0 |
| | baz=12,slow=4.2 | | | | | |
| ALN | Alexandroupoli | 149.24 322 | P | PKPbc | 06 55 42.4 | -1.3 |
| ENEZ | Enez | 149.28 322 | P | PKPbc | 06 55 42.8 | -1.0 |
| CAVK | Edirne/Enez-Ca | 149.30 322 | ⇑P | PKPbc | 06 55 43.4 | -0.5 |
| KOGS | Kog | 149.41 340 | *i* PKPbc | PKPbc | 06 55 43.3 | -0.6 |
| KOGS | | | *i* PKPab | PKPab | 06 55 50.5 | -0.4 |
| RZN | Rozhen | 149.45 325 | ⇓*i* P | PKPbc | 06 55 43.6 | -0.8 |
| BFO | Black Forest | 149.50 351 | PKPbc | PKPbc | 06 55 44.0 | -0.1 |
| BFO | Black Forest | 149.50 351 | PKHKP | PKPpre | 06 55 44.0 | |
| BFO | Black Forest | 149.50 351 | *e*PKPdf | PKPdf | 06 55 39.6 | +0.7 |
| | baz=24,slow=1.8 | | | | | |
| BFO | | | *e*PKPbc | PKPbc | 06 55 44.0 | -0.1 |
| | baz=17,slow=2.6 | | | | | |
| BFO | | | *e*PKPab | PKPab | 06 55 50.5 | -0.8 |
| | baz=12,slow=4.2 | | | | | |
| BFO | | | *e*pPKPbc | pPKPbc | 06 57 48.9 | +0.3 |
| LESA | Schwarzleotal | 149.53 345 | *i* PKP | PKPbc | 06 55 43.6 | -0.7 |
| | comp=Z,27nm,0.6s | | | | | |
| SOKA | Soboth | 149.58 342 | *i* PKP | PKPbc | 06 55 43.8 | -0.7 |
| | comp=Z,24nm,0.7s,SNR=16 | | | | | |
| BOVS | Bovan | 149.58 331 | ⇑P | PKPbc | 06 55 43.8 | -0.6 |
| VTS | Vitosha | 149.59 328 | ⇓*i* P | PKPbc | 06 55 44.4 | -0.3 |
| KBA | Koelnbreinsper | 149.68 344 | *i* PKP | PKPbc | 06 55 43.8 | -1.0 |
| | comp=Z,31nm,0.7s,SNR=25 | | | | | |
| EZN | Ezine | 149.75 320 | P | PKPbc | 06 55 44.5 | -0.4 |
| ECH | Echery | 149.76 353 | | PKPbc | 06 55 44.4 | -0.3 |
| ECH | | | PKPab | PKPab | 06 55 51.6 | -0.7 |
| ECH | Echery | 149.76 353 | PKHKP | PKPpre | 06 55 44.4 | |
| ECH | | | | | 06 55 51.6 | |
| SMTH | Samothraki Isl | 149.81 322 | P | PKPbc | 06 55 43.3 | -1.8 |
| UBR | Ueberruh | 149.83 349 | *e*PKPdf | PKPdf | 06 55 39.0 | -0.5 |
| | baz=24,slow=1.8 | | | | | |
| UBR | | | *e*PKPbc | PKPbc | 06 55 45.0 | 0.0 |
| | baz=17,slow=2.6 | | | | | |
| WATA | Walderalm | 149.87 347 | *e*PKP | PKPbc | 06 55 44.6 | -0.5 |
| | comp=Z,30nm,0.6s,SNR=20 | | | | | |
| OBKA | Obir | 149.87 342 | *i* PKP | PKPbc | 06 55 44.3 | -0.9 |
| | comp=Z,11nm,0.8s,SNR=6.6 | | | | | |
| RETA | Reutte | 149.89 348 | *i* PKP | PKPbc | 06 55 44.8 | -0.4 |
| | comp=Z,16nm,0.6s,SNR=17 | | | | | |
| PSMA | Santa Maria | 149.91 46 | *e*PKP | PKPdf | 06 55 41.2 | +1.3 |
| WTTA | Wattenberg | 149.92 346 | *i* PKP | PKPbc | 06 55 45.0 | -0.3 |
| | comp=Z,64nm,0.6s,SNR=35 | | | | | |
| MOTA | Moosalm | 149.96 347 | *i* PKP | PKPbc | 06 55 44.8 | -0.6 |
| | comp=Z,27nm,0.7s | | | | | |
| MYKA | Terra Mystica | 150.02 343 | *i* PKP | PKPbc | 06 55 44.4 | -1.1 |
| | comp=Z,32nm,0.6s,SNR=20 | | | | | |
| YER | Yerkesik | 150.03 314 | P | PKPbc | 06 55 45.7 | -0.1 |
| KAVA | Kavala | 150.05 324 | P | PKPbc | 06 55 45.0 | -0.6 |
| SQTA | Sankt Quirin | 150.05 347 | *i* PKP | PKPbc | 06 55 45.3 | -0.3 |
| | comp=Z,42nm,0.6s,SNR=25 | | | | | |
| MMB | Musomishta | 150.09 326 | ⇓*i* P | PKPbc | 06 55 45.1 | -0.6 |
| PRK | Paraskevi | 150.14 320 | P | PKPbc | 06 55 45.5 | -0.3 |
| NVR | Nevrokopi | 150.16 325 | P | PKPbc | 06 55 46.1 | +0.2 |
| THAS | Thassos island | 150.19 323 | P | PKPbc | 06 55 43.3 | -2.6 |
| ABTA | Abfaltersbach | 150.20 345 | *i* PKP | PKPbc | 06 55 44.9 | -1.0 |
| | comp=Z,48nm,0.6s,SNR=44 | | | | | |
| KKB | Krupnik | 150.21 327 | ⇓*i* P | PKPbc | 06 55 45.6 | -0.4 |
| DAVA | Damuels | 150.26 349 | *e*PKP | PKPbc | 06 55 45.8 | -0.3 |
| | comp=Z,36nm,0.7s,SNR=29 | | | | | |
| LJU | Ljubljana | 150.30 342 | *i* PKPbc | PKPbc | 06 55 45.6 | -0.4 |
| FETA | Feichten | 150.34 347 | *i* PKP | PKPbc | 06 55 46.1 | -0.2 |
| | comp=Z,27nm,0.7s,SNR=23 | | | | | |
| KOKK | Kokkinochori, | 150.45 324 | P | PKPbc | 06 55 45.6 | -0.9 |
| SRS | Serrai | 150.47 325 | P | PKPbc | 06 55 44.9 | -1.7 |
| CEY | Cerknica | 150.61 342 | *i* PKPbc | PKPbc | 06 55 46.4 | -0.4 |
| DAT | Datca | 150.72 314 | P | PKPbc | 06 55 46.0 | -1.5 |
| BODT | Bodrum | 150.73 315 | P | PKPbc | 06 55 46.3 | -1.0 |
| CHOS | Chios island | 150.79 318 | P | PKPbc | 06 55 47.0 | -0.5 |
| OUR | Ouranopolis | 150.79 324 | P | PKPbc | 06 55 45.4 | -1.9 |
| SOH | Sokhos | 150.81 325 | P | PKPbc | 06 55 46.0 | -1.4 |
| KNT | Kendrikon | 150.81 326 | P | PKPbc | 06 55 45.8 | -1.6 |
| VAY | Valandovo | 150.87 327 | *i* P | PKPbc | 06 55 46.4 | -1.1 |
| HORT | Hortiatis | 151.10 325 | P | PKPbc | 06 55 46.7 | -1.4 |
| THE | Thessaloniki | 151.15 325 | P | PKPbc | 06 55 46.7 | -1.4 |
| PAIG | Pallouri | 151.24 323 | P | PKPbc | 06 55 46.5 | -1.8 |
| PDG | Podgorica | 151.64 332 | ⇓P | PKPbc | 06 55 48.8 | -0.4 |
| FNA | Florina | 151.88 327 | P | PKPbc | 06 55 46.8 | -1.1 |
| OHR | Ohrid | 151.93 328 | *i* P | PKPbc | 06 55 49.8 | -0.1 |
| TYRN | Tyrnavos | 152.19 325 | P | PKPbc | 06 55 48.8 | -1.7 |
| DION | Dionisos Attik | 152.30 320 | P | PKPbc | 06 55 50.4 | -0.4 |
| KBN | Korca | 152.30 328 | P | PKPbc | 06 55 50.6 | -0.2 |
| NEST | Nestorio | 152.32 327 | P | PKPbc | 06 55 50.2 | -0.7 |
| ATHU | Athens Univers | 152.46 320 | P | PKPbc | 06 55 49.8 | -1.4 |
| AXAR | Agios Charalam | 152.60 323 | P | PKPbc | 06 55 49.7 | -1.8 |
| VILL | Villia | 152.62 321 | P | PKPbc | 06 55 50.2 | -1.3 |
| LOUT | Loutraki | 152.93 321 | P | PKPbc | 06 55 50.7 | -1.5 |
| EVR | Evrytania | 152.98 324 | P | PKiKP | 06 55 52.9 | +0.4 |
| ANX | Ano Chora | 153.14 323 | P | PKiKP | 06 55 52.9 | +0.1 |
| KRND | KRANIDI | 153.22 320 | P | PKPbc | 06 55 51.3 | -1.5 |
| EFP | Efpalio | 153.27 323 | P | PKiKP | 06 55 53.1 | +0.2 |
| IDI | Anoyia | 153.34 314 | P | PKPbc | 06 55 52.1 | -1.1 |
| GUR | Goura | 153.34 322 | P | PKPbc | 06 55 52.3 | -0.9 |
| IGT | Igoumenitsa | 153.34 327 | P | PKPbc | 06 55 52.3 | -0.7 |
| KLV | Kalavryta, Ach | 153.38 322 | P | PKPbc | 06 55 52.5 | -0.7 |
| KEK | Kerkira | 153.49 328 | P | PKPbc | 06 55 52.5 | -0.8 |
| NRCA | Norcia | 153.64 341 | PKPdf | PKPdf | 06 55 44.7 | -0.6 |
| NRCA | | | | PKPbc | 06 55 53.6 | 0.0 |
| NRCA | | | PKPab | PKPab | 06 56 09.0 | +0.1 |
| LKD2 | Lefkada island | 153.71 325 | P | PKPbc | 06 55 53.1 | -0.7 |
| NYDR | Nydri-Lefkada | 153.74 325 | P | PKPbc | 06 55 53.3 | -0.5 |
| IMMV | Iera Moni Meta | 153.85 315 | P | PKPbc | 06 55 53.7 | -0.5 |
| FSK | Fiskardo | 154.00 325 | P | PKPbc | 06 55 52.1 | -2.3 |
| ANKY | Antikythira Is | 154.06 317 | P | PKPbc | 06 55 53.3 | -1.3 |
| PYL | PYLOS | 154.39 321 | P | PKiKP | 06 55 53.9 | -1.4 |
| PCAB | Cabril | 155.16 18 | *e*PKPab | PKPab | 06 56 16.1 | +0.7 |
| PBRG | Braganca | 155.41 15 | *e*PKPab | PKPab | 06 56 16.3 | -0.3 |
| POLO | Lamas de Olo | 155.53 17 | *e*PKPab | PKPab | 06 56 17.2 | +0.1 |
| PVRL | Vila Real | 155.65 17 | *e*PKPab | PKPab | 06 56 17.8 | +0.2 |
| CEST | Esterri de Car | 155.71 1 | | PKPab | 06 56 17.8 | -0.1 |
| MVO | Moncorvo | 155.94 16 | *e*PKPab | PKPab | 06 56 19.1 | +0.2 |
| PVIS | Viseu | 156.11 18 | *e*PKPab | PKPab | 06 56 19.5 | -0.1 |
| MTE | Manteigas | 156.51 18 | *e*PKPdf | PKPdf | 06 55 50.4 | +1.1 |
| MTE | Manteigas | 156.51 18 | *e*PKPab | PKPab | 06 56 20.8 | -0.5 |
| PCAS | Casmilo, Conde | 156.53 20 | *e*PKPab | PKPab | 06 56 20.9 | -0.5 |
| PSBE | So Bento | 156.91 21 | *e*PKPab | PKPab | 06 56 22.9 | -0.2 |
| PCBR | Castelo Branco | 157.04 18 | *e*PKPdf | PKPdf | 06 55 50.8 | +1.0 |
| PCBR | Castelo Branco | 157.04 18 | *e*PKPab | PKPab | 06 56 20.4 | -3.2 |
| PMRV | Marv??o | 157.44 19 | *e*PKPab | PKPab | 06 56 25.0 | -0.4 |
| PMTG | Montargil | 157.51 21 | *e*PKPab | PKPab | 06 56 24.8 | -0.8 |
| PESTR | Estremoz | 157.90 20 | *e*PKPab | PKPab | 06 56 26.1 | -1.2 |
| EVO | Evora | 158.06 21 | *e*PKPab | PKPab | 06 56 27.6 | -0.5 |
| ESDC | Sonseca Array | 158.07 12 | PKP | PKPdf | 06 55 51.5 | +0.3 |
| | comp=Z,0.7nm,0.8s,baz=339,slow=2.6,SNR=7.0 | | | | | |
| ESDC | | | PKPab | PKPab | 06 56 27.6 | -0.5 |
| | comp=Z,9.1nm,0.9s,baz=340,slow=4.0,SNR=28 | | | | | |
| ESDC | | | SKP | | 06 58 30.2 | |
| | comp=Z,1.5nm,0.9s,baz=328,slow=3.5,SNR=3.1 | | | | | |
| PNCL | Nicolau / Gran | 158.26 22 | *e*PKPab | PKPab | 06 56 28.5 | -0.4 |
| MESJ | Messejana | 158.61 22 | *e*PKPdf | PKPdf | 06 55 52.8 | +1.0 |
| PBAR | Barrancos | 158.70 19 | *e*PKPab | PKPab | 06 56 30.3 | -0.5 |
| PCVE | Castro Verde | 158.86 22 | *e*PKPab | PKPab | 06 56 31.6 | 0.0 |
| PVAQ | Vaqueiros | 159.18 22 | *e*PKPab | PKPab | 06 56 32.5 | -0.4 |
| KEST | Kesra | 161.30 340 | PKPab | PKPab | 06 56 42.3 | -0.1 |
| | comp=Z,18nm,0.7s,baz=318,slow=0.8,SNR=15 | | | | | |
| BBTS | Babate | 162.14 99 | PKPab | PKPab | 06 56 46.3 | -0.4 |
| | comp=Z,51nm,1.0s,baz=144,slow=3.7,SNR=3.6 | | | | | |
| LIC | Lamto | 166.37 150 | ⇑*i* PKIKP | PKPdf | 06 55 58.9 | -1.1 |
| | comp=Z,16nm,0.5s | | | | | |
| LIC | Lamto | 166.37 150 | ⇑*i* P | PKPab | 06 57 05.2 | +0.1 |
| | comp=Z,19nm,0.6s | | | | | |
| KIC | Kosan Boka | 166.62 151 | ⇑*i* PKIKP | PKPdf | 06 55 59.3 | -0.9 |
| | comp=Z,17nm,0.7s | | | | | |
| KIC | Kosan Boka | 166.62 151 | ⇑*i* P | PKPab | 06 57 06.5 | +0.3 |
| | comp=Z,48nm,0.7s | | | | | |
| TIC | Toumodi | 166.74 149 | ⇑*i* PKIKP | PKPdf | 06 55 59.5 | -0.8 |
| | comp=Z,2.4nm,0.2s | | | | | |
| TIC | Toumodi | 166.74 149 | ⇑*i* P | PKPab | 06 57 06.9 | +0.1 |
| | comp=Z,4.3nm,0.3s | | | | | |
| DBIC | Dimbokro | 166.84 150 | PKP | PKPdf | 06 55 59.3 | -1.1 |
| | comp=Z,6.8nm,0.6s,baz=114,slow=1.0,SNR=15 | | | | | |
| DBIC | | | PKPab | PKPab | 06 57 07.5 | +0.3 |
| | comp=Z,12nm,0.7s,baz=196,slow=4.6,SNR=8.2 | | | | | |
| TORD | Torodi Ar. Bea | 174.95 180 | PKP | PKPdf | 06 56 03.3 | -1.2 |
| | comp=Z,2.6nm,0.7s,baz=350,slow=2.0,SNR=13 | | | | | |
| TORD | | | PKPab | PKPab | 06 57 43.2 | +0.2 |
| | comp=Z,4.8nm,0.5s,baz=193,slow=3.3,SNR=20 | | | | | |
| TORD | | | PP | PP | 07 01 35.5 | +1.1 |
| | comp=Z,7.9nm,0.8s,baz=174,slow=3.6,SNR=11 | | | | | |

**WEL 19 06:40:14.4±1.2, 39°S±7°×17°5E±1°, 0, h6km±13km, M2.1/13, ML1.4/13, MLv2.1/13, Error ellipse: s-maj=0.0km s-min=0.0km az=122.4, confirmed, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWVZ | Taurewa | 0.12 | 69 | P | Pg | 06 40 17.9 | +0.9 |
| PKVZ | Pokaka | 0.18 | 169 | P | Pg | 06 40 18.8 | +0.7 |
| PKVZ | | | | S | Sg | 06 40 22.1 | +1.5 |
| WTVZ | West Tongariro | 0.23 | 91 | P | Pg | 06 40 19.6 | +0.7 |
| WTVZ | | | | S | Sg | 06 40 23.2 | +1.3 |
| NGZ | Ngauruhoe | 0.24 | 105 | P | Pg | 06 40 19.9 | +0.6 |
| NGZ | | | | S | Sg | 06 40 24.5 | +2.0 |
| NNVZ | North Ngauruho | 0.25 | 95 | P | Pg | 06 40 20.0 | +0.7 |
| NNVZ | | | | S | Sg | 06 40 24.2 | +1.6 |
| MAVZ | Matarangi | 0.26 | 128 | P | Pb | 06 40 21.1 | -0.5 |
| KRVZ | Karewarewa | 0.27 | 86 | P | Pg | 06 40 20.2 | +0.6 |
| KRVZ | | | | S | Sg | 06 40 24.1 | +0.9 |
| TRVZ | Turoa | 0.27 | 134 | P | Pg | 06 40 20.3 | +0.6 |
| TRVZ | | | | S | Sg | 06 40 24.0 | +0.6 |
| SNVZ | South Ngauruho | 0.28 | 106 | P | Pg | 06 40 20.5 | +0.6 |
| WHVZ | Whangaehu Hut | 0.28 | 127 | P | Pn | 06 40 24.0 | -1.3 |
| OTVZ | Oturere | 0.29 | 100 | P | Pg | 06 40 20.8 | +0.6 |
| NTVZ | North Tongarir | 0.29 | 88 | P | Pg | 06 40 20.8 | +0.6 |
| MTVZ | Mangateitei | 0.30 | 154 | P | Pg | 06 40 20.6 | +0.2 |
| TMVZ | Te Maari | 0.31 | 91 | P | Pg | 06 40 21.2 | +0.6 |
| WNVZ | Wahianoa | 0.32 | 133 | P | Pg | 06 40 21.1 | +0.5 |
| TUVZ | Tukino | 0.32 | 120 | P | Pn | 06 40 25.7 | 0.0 |
| ETVZ | East Tongariro | 0.32 | 94 | P | Pg | 06 40 21.3 | +0.6 |
| KATZ | Kakaramea | 0.34 | 66 | P | Pg | 06 40 21.4 | +0.4 |
| RATZ | Rangitukua | 0.44 | 57 | P | Pg | 06 40 23.2 | +0.3 |
| WAZ | Wanganui | 0.69 | 201 | P | Pg | 06 40 27.5 | -0.1 |
| HIZ | Hauiti | 0.69 | 330 | P | Pg | 06 40 27.4 | -0.3 |
| TLZ | Tolley Road | 0.80 | 13 | P | Pg | 06 40 28.5 | -1.4 |
| TOZ | Tahuroa Road | 1.39 | 7 | P | Pn | 06 40 38.5 | -1.8 |
| MRZ | Mangatainoka R | 1.56 | 172 | P | Pn | 06 40 43.1 | +0.4 |
| OGWZ | Otaki Gorge | 1.71 | 183 | P | Pn | 06 40 45.1 | +0.5 |
| CAW | Cannon Point | 2.00 | 185 | P | Pb | 06 40 50.5 | -0.7 |

**IDC 19 06:42:40.3±11.0, 17°95S×178°52W, h514km±125km, mb3.6/7, mbtmp4.4/7, Error ellipse: s-maj=41.1km s-min=35.2km az=102.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ASAR | Alice Springs | 44.68 | 254 | P | P | 06 50 07.5 | +0.1 |
| | 30nm,0.5s,baz=89,slow=8.3,SNR=19 | | | | | | |
| | 30nm,0.5s | | | | | | |
| PETK | Petropavlovsk- | 73.69 | 345 | P | P | 06 53 21.5 | +0.3 |
| | 4.6nm,0.6s,baz=109,slow=11,SNR=6.9 | | | | | | |
| | 4.6nm,0.6s | | | | | | |
| ILAR | Eielson Array | 85.95 | 13 | P | P | 06 54 24.4 | -1.0 |
| | 0.4nm,0.3s,baz=222,slow=5.5,SNR=9.1 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| TXAR | Lajitas Array | 86.11 | 58 | P | P | 06 54 27.1 | +0.1 |
| | 0.9nm,0.7s,baz=215,slow=6.2,SNR=5.0 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| PDAR | Pinedale Array | 87.45 | 43 | P | P | 06 54 33.8 | +0.5 |
| | 0.2nm,0.5s,baz=179,slow=3.6,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| PLCA | Paso Flores | 91.38 | 134 | P | P | 06 54 51.2 | -0.2 |
| | 1.6nm,0.6s,baz=240,slow=5.9,SNR=4.6 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| BRTR | Keskin Array B | 144.74 | 315 | PKP | PKPdf | 07 01 17.9 | -0.9 |
| | 0.5nm,0.4s,baz=114,slow=2.9,SNR=4.0 | | | | | | |
| GERES | GERESS Array B | 147.63 | 345 | PKPbc | PKPbc | 07 01 26.6 | -0.2 |
| | 0.3nm,0.3s,baz=145,slow=7.0,SNR=1.9 | | | | | | |

*DJA 19 06:43:01.8±0.4, 4°S±3°×10°1E±°, h10km, M4.7/12, mb4.8/7, mB5.1/1, MLv4.7/12, Mw(mB)4.5/1*

*IDC 19 06:43:02.3±3.2, 3°18S×100°65E, h0km, mb4.4/9, mbtmp4.4/9, MS4.1/1, Error ellipse: s-maj=70.3km s-min=39.2km az=16.0*

*NEIC 19 06:43:04.1±0.8, 3°75S±0°06×100°70E±0°06, h35km±2km, mb4.7/30, Error ellipse: s-maj=11.9km s-min=7.2km az=139.0*

**ISC 19 06:43:02.3±0.8, 3°74S±0°09×100°53E±0°08, h29km, n71, σ1§44/60, mb4.7/23, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PPSI | Pulau Pagai | 1.10 | 332 | P | Pn | 06 43 20.4 | -1.5 |
| SISI | Saibi | 2.80 | 329 | P | Pn | 06 43 44.6 | -0.6 |
| PDSI | Padang | 2.81 | 359 | P | Pn | 06 43 44.6 | -0.8 |
| PDSI | | | | S | Sn | 06 44 15.0 | -3.4 |
| LWLI | Liwa | 3.74 | 110 | P | Pn | 06 44 00.4 | +2.2 |
| BKNI | Bangkinang | 4.07 | 7 | Pn | Pn | 06 44 03.3 | +0.6 |
| PBSI | Pulau Batu | 4.30 | 328 | P | Pn | 06 44 05.6 | -0.2 |
| PMBI | Palembang | 4.31 | 79 | Pn | Pn | 06 44 03.6 | -2.4 |
| KASI | Kota Agung | 4.33 | 114 | P | Pn | 06 44 09.4 | +3.2 |
| GSI | Gunungsitoli | 5.82 | 329 | Pn | Pn | 06 44 29.1 | +2.3 |
| GSI | Gunungsitoli | 5.82 | 329 | P | Pn | 06 44 26.2 | -0.6 |
| | 33nm,0.9s,0.3nm | | | | | | |
| SBJI | Serang | 6.06 | 113 | P | Pb | 06 44 38.9 | -8.3 |
| MYKOM | Kota Tinggi | 6.42 | 31 | Pn | Pn | 06 44 34.5 | -0.4 |
| RPSI | Rantau Prapat | 6.59 | 346 | Pn | Pn | 06 44 39.0 | +1.6 |
| CNJI | Cibinong | 7.46 | 119 | P | Pn | 06 44 50.7 | +1.4 |
| | 51nm,1.1s,0.2nm | | | | | | |
| IPM | Ipoh | 8.18 | 3 | Pn | Pn | 06 44 59.8 | +0.6 |
| XMIS | Christmas Isla | 8.40 | 143 | Pn | Pn | 06 45 00.8 | -1.4 |
| KPJI | Karang Pucung | 9.09 | 113 | P | Pn | 06 45 15.0 | +3.4 |
| | 60nm,1.0s | | | | | | |
| UGM | Wanagama | 10.77 | 113 | P | Pn | 06 45 36.4 | +1.7 |
| BKB | Balikpapan | 16.53 | 82 | Pn | Pn | 06 46 49.4 | -2.9 |
| PHRA | Phrae | 22.10 | 359 | P | P | 06 47 56.0 | +0.5 |
| PHRA | | | | IAmb | IAmb | 06 47 59.8 | |
| | comp=Z,78nm,1.0s | | | | | | |
| CM31 | Chiang Mai Arr | 22.12 | 356 | P | P | 06 47 56.0 | +0.3 |
| CMAR | Chiang Mai Arr | 22.12 | 356 | P | P | 06 47 55.9 | +0.3 |
| CMAR | Chiang Mai Arr | 22.12 | 356 | P | P | 06 47 52.1 | -3.5 |
| | comp=Z,1.1nm,0.2s,baz=180,slow=8.9,SNR=2.3 | | | | | | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| PALK | Pallekele | 22.61 | 299 | LR | LR | 06 55 52.4 | |
| | comp=Z,424nm,19.2s,baz=91,slow=34 | | | | | | |
| CRAI | Chiangrai | 23.82 | 360 | P | P | 06 48 13.9 | +0.8 |
| H08S2 | Diego Garcia H | 28.16 | 261 | T | T | 07 18 17.0 | |
| | baz=83,slow=75,SNR=636 | | | | | | |
| H08S3 | Diego Garcia H | 28.17 | 261 | T | T | 07 18 17.0 | |
| | baz=83,slow=75,SNR=1169 | | | | | | |
| H08S1 | Diego Garcia H | 28.18 | 261 | T | T | 07 18 17.5 | |
| | baz=83,slow=75,SNR=123 | | | | | | |
| KNRA | Kununurra | 30.20 | 115 | P | P | 06 49 10.2 | -0.3 |
| SHL | Shillong | 30.32 | 344 | P | P | 06 49 12.0 | +0.3 |
| SHL | | | | IAmb | IAmb | 06 49 14.8 | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| H01W3 | Cape Leeuwin H | 33.46 | 159 | T | T | 07 24 58.4 | |
| | baz=336,slow=76,SNR=9.7 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.47 | 159 | T | T | 07 25 02.2 | |
| | baz=336,slow=76,SNR=12 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.47 | 159 | T | T | 07 25 02.5 | |
| | baz=336,slow=76,SNR=11 | | | | | | |
| WB0 | Warramunga Arr | 36.66 | 118 | P | P | 06 50 05.9 | -0.9 |
| WRA | Warramunga Arr | 36.67 | 119 | P | P | 06 50 05.8 | -1.2 |
| WRA | Warramunga Arr | 36.67 | 119 | P | P | 06 50 05.6 | -1.3 |
| | comp=Z,10nm,0.8s,baz=98,slow=6.7,SNR=5.7 | | | | | | |
| WRA | Warramunga Arr | 36.67 | 119 | | | | |
| | comp=Z,10nm,0.8s | | | | | | |
| WRAB | Tennant Creek | 36.68 | 119 | P | P | 06 50 05.5 | -1.5 |
| WB2 | Warramunga Arr | 36.69 | 119 | P | P | 06 50 05.5 | -1.6 |
| WR0 | Warramunga Arr | 36.86 | 119 | P | P | 06 50 06.8 | -1.7 |
| WR0 | | | | IAmb | IAmb | 06 50 14.4 | |
| | comp=Z,26nm,0.9s | | | | | | |
| KSRS | Korea Array | 48.25 | 29 | P | P | 06 51 41.1 | +0.4 |
| | comp=Z,11nm,1.2s,baz=219,slow=8.1,SNR=15 | | | | | | |
| | comp=Z,11nm,1.2s | | | | | | |
| NRN | Naryn | 50.22 | 336 | P | P | 06 51 56.2 | +0.1 |
| NRN | | | | IAmb | IAmb | 06 51 58.2 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| GAR | Garm | 50.86 | 330 | P | P | 06 52 01.6 | +0.8 |
| GAR | | | | IAmb | IAmb | 06 52 05.5 | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| BOOM | Boomskoye usch | 51.13 | 337 | P | P | 06 52 03.8 | +1.0 |
| BOOM | | | | IAmb | IAmb | 06 52 05.0 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| BTK | Batken | 51.42 | 331 | P | P | 06 52 05.9 | +1.0 |
| SONM | Songino Array | 51.62 | 5 | P | P | 06 52 07.8 | +1.5 |
| SONM | | | | IAmb | IAmb | 06 52 16.8 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| SONM | Songino Array | 51.62 | 5 | P | P | 06 52 07.9 | +1.6 |
| | comp=Z,6.4nm,0.7s,baz=190,slow=9.5,SNR=11 | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| AAK | Ala-Archa | 51.84 | 336 | P | P | 06 52 09.2 | +1.1 |
| AAK | | | | IAmb | IAmb | 06 52 23.7 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| MK31 | Makanchi Array | 52.84 | 344 | P | P | 06 52 15.4 | +0.1 |
| MKAR | Makanchi Array | 52.84 | 344 | P | P | 06 52 15.3 | +0.1 |
| MKAR | Makanchi Array | 52.84 | 344 | P | P | 06 52 16.4 | +1.2 |
| | comp=Z,2.2nm,0.4s,baz=155,slow=8.9,SNR=22 | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | |
| MAKZ | Makanchi | 52.94 | 344 | P | P | 06 52 16.9 | +0.9 |
| MJAR | Matsushiro Arr | 53.30 | 38 | P | P | 06 52 18.6 | -0.3 |
| | comp=Z,1.3nm,0.5s,baz=216,slow=7.2,SNR=4.9 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| KK31 | Karatay Array | 53.94 | 333 | P | P | 06 52 25.5 | +2.1 |
| KK31 | | | | IAmb | IAmb | 06 52 37.1 | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| KKAR | Karatay Array | 53.94 | 333 | P | P | 06 52 24.3 | +0.8 |
| USA0B | Ussuriysk Arra | 55.45 | 27 | P | P | 06 52 34.6 | +0.4 |
| USA0B | | | | IAmb | IAmb | 06 52 47.8 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 55.45 | 27 | P | P | 06 52 34.6 | +0.4 |
| USRK | Ussuriysk Ar. | 55.45 | 27 | P | P | 06 52 34.3 | 0.0 |
| | comp=Z,3.0nm,0.5s,baz=217,slow=3.9,SNR=8.2 | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 57.36 | 344 | P | P | 06

comp=Z,5.3nm,0.8s,baz=87,slow=8.5,SNR=5.4
comp=Z,5.3nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BELA** | **Belgrano 2** | **81.93** | **173** | P | **P** | **06 56 55.4** | **-0.1** |
| **SEY** | **Seymchan** | **84.05** | **347** | P | **P** | **06 57 05.5** | **-0.5** |
| | comp=Z,2.9nm,0.5s,baz=122,slow=9.5,SNR=3.8 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.73** | **57** | P | **P** | **06 57 16.9** | **+1.7** |
| | comp=Z,0.8nm,0.7s,baz=218,slow=6.3,SNR=8.0 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.97** | **13** | P | **P** | **06 57 14.2** | **-1.1** |
| | comp=Z,0.7nm,0.4s,baz=220,slow=4.9,SNR=12 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.21** | **315** | PKPbc | **PKPdf** | **07 04 08.8** | **0.0** |
| | comp=Z,0.9nm,0.4s,baz=144,slow=4.2,SNR=7.7 | | | | | | |
| **GERES** | **GERESS Array B** | **147.89** | **345** | PKPbc | **PKPbc** | **07 04 16.4** | **-0.4** |
| | comp=Z,0.5nm,0.4s,baz=88,slow=4.1,SNR=4.1 | | | | | | |

**IDC 19 06:50:08.7±58.0, 16.°00S×172.°78W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=1121.0km s-min=200.7km az=79.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **44.26** | **241** | P | P | 06 58 20.7 | +0.5 |
| | 1.2nm,0.4s,baz=99,slow=13,SNR=3.3 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.29** | **257** | P | P | 06 59 07.0 | -0.4 |
| | 1.3nm,0.7s,baz=98,slow=6.7,SNR=18 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **50.49** | **252** | P | P | 06 59 08.8 | -0.2 |
| | 2.0nm,0.4s,baz=89,slow=8.5,SNR=27 | | | | | | |
| | 2.0nm,0.4s | | | | | | |

*IDC **19** 07:01:31.0±4.6, 18.°14S×177.°96W, h525km±51km, mb3.3/8, mbtmp4.1/9, Error ellipse: s-maj=26.0km s-min=20.2km az=45.0*
*NEIC **19** 07:01:34.8±1.1, 18.°1S±0.°3×178.°0W±0.°1, h566km±22km, mb4.1/16, Error ellipse: s-maj=50.4km s-min=14.7km az=183.0*

**ISC 19 07:01:36.6±0.8, 18.°2S±0.°2×178.°2W±0.°1, h590km, n33, σ1s05/32, mb3.9/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.64** | **276** | P | **P** | **07 02 56.4** | **-2.7** |
| **NIUE** | **Niue** | **7.85** | **98** | P | P | 07 03 29.6 | -4.6 |
| **DZM** | **Mont Dzumac** | **14.98** | **252** | P | **P** | **07 04 44.3** | **-0.8** |
| | 2.7nm,0.6s,baz=98,slow=18,SNR=8.8 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.74** | **259** | P | **P** | **07 05 01.4** | **+0.2** |
| KOUNC | | | | IAmb | IAmb | 07 05 02.4 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **URZ** | **Urewera** | **20.44** | **191** | P | **P** | **07 05 31.7** | **-2.9** |
| | comp=Z,4.2nm,0.5s,baz=348,slow=3.6,SNR=7.9 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **EIDS** | **Eidsvold** | **29.41** | **250** | P | **P** | **07 06 54.7** | **+0.8** |
| **ARMA** | **Armidale** | **30.02** | **240** | P | **P** | **07 06 59.5** | **+0.3** |
| **CTA** | **Charters Tower** | **33.65** | **261** | P | **P** | **07 07 29.2** | **-0.8** |
| | comp=Z,0.1nm,0.4s,baz=89,slow=11,SNR=7.0 | | | | | | |
| **CTAO** | **Charters Tower** | **33.65** | **261** | P | **P** | **07 07 30.4** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 07 07 30.7 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **33.74** | **233** | P | **P** | **07 07 31.7** | **+1.1** |
| **PMG** | **Port Moresby** | **34.74** | **280** | P | **P** | **07 07 39.7** | **+0.5** |
| **COEN** | **Coen** | **37.35** | **271** | P | **P** | **07 08 01.4** | **+0.7** |
| COEN | | | | IAmb | IAmb | 07 08 01.7 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.72** | **242** | P | **P** | **07 08 12.5** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.72** | **242** | P | **P** | **07 08 11.9** | **+0.4** |
| | comp=Z,2.6nm,0.7s,baz=67,slow=8.5,SNR=4.4 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.49** | **241** | P | **P** | **07 08 50.2** | **+1.1** |
| BBOO | | | | IAmb | IAmb | 07 09 06.8 | |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.63** | **260** | P | **P** | **07 08 58.4** | **+0.3** |
| **WB0** | **Warramunga Arr** | **44.79** | **260** | P | **P** | **07 08 59.6** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 07 09 16.9 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.81** | **260** | P | **P** | **07 08 59.4** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 07 08 59.9 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **07 08 59.4** | **-0.2** |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **07 08 59.2** | **-0.4** |
| | comp=Z,2.0nm,0.7s,baz=96,slow=7.0,SNR=27 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **44.95** | **254** | P | **P** | **07 09 01.2** | **+0.6** |
| AS31 | | | | IAmb | IAmb | 07 09 01.8 | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.96** | **254** | P | **P** | **07 09 00.6** | **0.0** |
| **ASAR** | **Alice Springs** | **44.96** | **254** | P | **P** | **07 09 00.8** | **+0.2** |
| | comp=Z,11nm,0.7s,baz=88,slow=8.6,SNR=140 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **50.12** | **245** | P | **P** | **07 09 39.1** | **+0.1** |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **07 12 02.4** | **+1.6** |
| QSPA | | | | IAmb | IAmb | 07 12 04.2 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **07 12 01.5** | **+0.8** |
| | comp=Z,2.2nm,0.5s,baz=327,slow=2.6,SNR=29 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.44** | **44** | P | **P** | **07 12 41.9** | **-1.2** |
| | comp=Z,0.2nm,0.6s,baz=226,slow=6.2,SNR=3.8 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **BELA** | **Belgrano 2** | **81.87** | **173** | P | **P** | **07 12 55.3** | **+0.6** |
| **TXAR** | **Lajitas Array** | **85.93** | **58** | P | **P** | **07 13 15.9** | **+0.3** |
| | comp=Z,0.5nm,0.7s,baz=220,slow=7.1,SNR=6.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.33** | **179** | P | **P** | **07 13 34.9** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=203,slow=17,SNR=7.2 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **140.91** | **332** | PKP | **PKPdf** | **07 19 59.8** | **-0.4** |
| | comp=Z,0.5nm,0.4s,baz=48,slow=1.4,SNR=1.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.14** | **315** | PKPbc | **PKPab** | **07 20 11.3** | **+0.9** |
| | comp=Z,0.3nm,0.5s,baz=8.6,slow=4.8,SNR=1.9 | | | | | | |
| **GERES** | **GERESS Array B** | **147.93** | **345** | PKPbc | **PKPdf** | **07 20 14.4** | **+2.0** |
| | comp=Z,0.2nm,0.4s,baz=305,slow=3.5,SNR=1.8 | | | | | | |

*NEIC **19** 07:02:33.2±0.3, 17.°8S±0.°4×177.°88W±0.°09, h590km±21km, mb4.0/16, Error ellipse: s-maj=58.2km s-min=6.1km az=189.0*
*IDC **19** 07:02:34.2±7.2, 17.°96S×178.°19W, h592km±91km, mb3.2/7, mbtmp4.1/8, Error ellipse: s-maj=42.7km s-min=27.4km az=125.0*

**ISC 19 07:02:33.7±0.8, 18.°0S±0.°2×178.°02W±0.°10, h590km, n28, σ0s88/28, mb3.8/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.76** | **274** | P | **P** | **07 03 56.8** | **-0.1** |
| **NIUE** | **Niue** | **7.74** | **99** | P | **P** | **07 04 28.5** | **-1.7** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | **P** | **07 05 42.5** | **-1.2** |
| | 3.0nm,0.5s,baz=99,slow=18,SNR=7.1 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.90** | **259** | P | **P** | **07 06 00.7** | **+1.0** |
| KOUNC | | | | IAmb | IAmb | 07 06 01.6 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **29.58** | **250** | P | **P** | **07 07 52.0** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 07 08 07.2 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.20** | **240** | P | **P** | **07 07 58.7** | **+0.8** |
| **CTA** | **Charters Tower** | **33.80** | **261** | P | **P** | **07 08 26.9** | **-1.5** |
| | comp=Z,0.1nm,0.4s,baz=89,slow=7.3,SNR=5.4 | | | | | | |
| **CTAO** | **Charters Tower** | **33.80** | **261** | P | **P** | **07 08 28.3** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 07 08 32.3 | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **33.93** | **233** | P | **P** | **07 08 30.0** | **+0.7** |
| **TOO** | **Toolangi** | **37.39** | **231** | P | **P** | **07 08 58.6** | **+0.9** |
| **COEN** | **Coen** | **37.48** | **270** | P | **P** | **07 08 59.3** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.90** | **241** | P | **P** | **07 09 10.8** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.90** | **241** | P | **P** | **07 09 10.0** | **0.0** |
| | comp=Z,3.3nm,0.7s,baz=60,slow=5.8,SNR=5.0 | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.68** | **241** | P | **P** | **07 09 47.6** | **0.0** |
| BBOO | | | | IAmb | IAmb | 07 09 53.3 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **07 09 57.5** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 07 10 12.8 | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **07 09 57.6** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 07 10 12.8 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **07 09 57.7** | **-0.2** |
| **WRA** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **07 09 56.7** | **-1.2** |
| | comp=Z,1.4nm,0.5s,baz=96,slow=7.2,SNR=12 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.12** | **254** | P | **P** | **07 09 59.0** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 07 09 59.6 | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **07 09 58.6** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **07 09 58.3** | **-0.6** |
| | comp=Z,7.9nm,0.7s,baz=86,slow=8.7,SNR=30 | | | | | | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.24** | **255** | P | **P** | **07 11 32.2** | **-0.9** |
| PSA00 | | | | IAmb | IAmb | 07 11 35.0 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | **07 12 59.8** | **+1.2** |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | **07 12 59.5** | **+0.8** |
| | comp=Z,2.0nm,0.8s,baz=22,slow=0.8,SNR=5.5 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.25** | **44** | P | **P** | **07 13 38.8** | **-0.3** |
| | comp=Z,0.5nm,0.8s,baz=242,slow=5.8,SNR=4.5 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **82.00** | **173** | P | **P** | **07 13 53.0** | **+0.6** |
| **TXAR** | **Lajitas Array** | **85.74** | **57** | P | **P** | **07 14 13.7** | **+1.9** |
| | comp=Z,0.7nm,0.8s,baz=213,slow=6.6,SNR=8.8 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **90.47** | **178** | P | **P** | **07 14 32.6** | **-0.4** |
| | comp=Z,0.5nm,0.7s,baz=219,slow=0.3,SNR=1.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |

**IDC 19 07:04:28.8±1.0, 17.°00S×178.°33W, h0km, mb3.8/8, mbtmp3.8/8, Error ellipse: s-maj=49.6km s-min=20.9km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **21.56** | **190** | P | P | 07 09 19.5 | -0.3 |
| | 1.8nm,0.3s,baz=300,slow=23,SNR=2.0 | | | | | | |
| | 1.8nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **39.14** | **240** | P | P | 07 11 58.5 | +0.2 |
| | 1.0nm,0.4s,baz=48,slow=12,SNR=3.2 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.88** | **259** | P | P | 07 12 45.6 | +0.1 |
| | 0.1nm,0.3s,baz=96,slow=7.7,SNR=1.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.12** | **253** | P | P | 07 12 47.0 | -0.3 |
| | 2.6nm,0.6s,baz=89,slow=8.3,SNR=16 | | | | | | |
| | 2.6nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.72** | **44** | P | P | 07 16 35.3 | +1.9 |
| | 0.4nm,0.7s,baz=229,slow=8.0,SNR=4.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **84.99** | **13** | P | P | 07 17 04.8 | -0.8 |
| | 0.2nm,0.5s,baz=219,slow=5.3,SNR=5.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.44** | **58** | P | P | 07 17 08.6 | -0.3 |
| | 0.7nm,0.8s,baz=215,slow=6.2,SNR=6.3 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **86.64** | **43** | P | P | 07 17 13.3 | -1.3 |
| | 0.2nm,0.6s,baz=242,slow=1.9,SNR=2.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **19** 07:04:58.5±7.2, 18.°20S×178.°39W, h672km±102km, mb2.8/7, mbtmp3.8/7, Error ellipse: s-maj=65.3km s-min=25.8km az=176.0*

**ISC 19 07:04:51.5±0.9, 17.°8S±0.°2×178.°4W±0.°2, h579km, n10, σ0s88/10, mb3.4/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.78** | **190** | P | **P** | **07 08 52.5** | **-0.5** |
| | 1.3nm,0.3s,baz=341,slow=4.0,SNR=1.4 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.65** | **259** | P | **P** | **07 12 14.4** | **+0.5** |
| | 0.3nm,0.3s,baz=94,slow=7.2,SNR=5.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.82** | **254** | P | **P** | **07 12 16.1** | **+0.9** |
| | 0.6nm,0.4s,baz=94,slow=7.3,SNR=5.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.34** | **44** | P | **P** | **07 15 59.2** | **+0.9** |
| | 0.4nm,0.7s,baz=233,slow=8.9,SNR=3.9 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.76** | **13** | P | **P** | **07 16 29.0** | **-0.7** |
| | 0.4nm,0.5s,baz=218,slow=4.9,SNR=7.4 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.94** | **58** | P | **P** | **07 16 32.6** | **+1.1** |
| | 0.8nm,0.9s,baz=223,slow=7.4,SNR=6.3 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.27** | **43** | P | **P** | **07 16 37.4** | **-0.2** |
| | 0.3nm,0.6s,baz=188,slow=4.0,SNR=4.2 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **140.44** | **332** | PKP | **PKPdf** | **07 23 14.8** | **-0.6** |
| | 0.7nm,0.5s,baz=62,slow=3.1,SNR=1.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.69** | **315** | PKPbc | **PKPdf** | **07 23 22.8** | **-0.6** |
| | 0.9nm,0.9s,baz=67,slow=1.9,SNR=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **147.49** | **345** | PKPbc | **PKPbc** | **07 23 30.3** | **-0.9** |
| | 0.5nm,0.5s,baz=163,slow=7.1,SNR=3.9 | | | | | | |

*IDC **19** 07:06:17.0±6.0, 18.°22S×178.°29W, h512km±63km, mb3.2/6, mbtmp4.1/7, Error ellipse: s-maj=38.9km s-min=23.0km az=38.0*

**ISC 19 07:06:16.2±1.0, 18.°2S±0.°2×178.°2W±0.°2, h500km, n11, σ1s26/12, mb3.5/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.88** | **253** | P | **P** | **07 09 27.0** | **+1.7** |
| | 2.9nm,0.9s,baz=125,slow=19,SNR=1.8 | | | | | | |
| **URZ** | **Urewera** | **20.36** | **191** | P | **P** | **07 10 17.0** | **-0.8** |
| | 2.1nm,0.3s,baz=351,slow=2.7,SNR=6.0 | | | | | | |
| | 2.1nm,0.3s | | | | | | |
| **CTA** | **Charters Tower** | **33.56** | **261** | P | **P** | **07 12 13.5** | **-0.7** |
| | 0.1nm,0.5s,baz=86,slow=13,SNR=1.7 | | | | | | |
| **STKA** | **Stephens Creek** | **38.62** | **242** | P | **P** | **07 12 55.8** | **-0.2** |
| | 3.1nm,0.7s,baz=87,slow=10.0,SNR=5.4 | | | | | | |
| | 3.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.74** | **260** | P | **P** | **07 13 43.9** | **-0.8** |
| | 0.8nm,0.5s,baz=98,slow=6.7,SNR=15 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 15 15.3** | **-1.2** |
| | 0.4nm,1.0s,baz=84,slow=4.0,SNR=1.6 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.86** | **255** | P | **P** | **07 13 45.5** | **-0.2** |
| | 7.1nm,0.6s,baz=88,slow=8.2,SNR=45 | | | | | | |
| | 7.1nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | **P** | **07 16 48.2** | **+0.7** |
| | 1.8nm,0.9s,baz=58,slow=19,SNR=7.4 | | | | | | |
| | 1.8nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.03** | **58** | P | **P** | **07 18 04.0** | **+0.2** |
| | 0.2nm,0.7s,baz=213,slow=6.5,SNR=2.3 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **119.61** | **357** | PKP | **PKPdf** | **07 24 07.6** | **-0.4** |
| | 12nm,1.0s,baz=66,slow=15,SNR=5.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.13** | **315** | PKPbc | **PKPdf** | **07 24 55.3** | **-1.5** |
| | 0.5nm,0.6s,baz=119,slow=5.1,SNR=3.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.97** | **345** | PKPbc | **PKPdf** | **07 25 03.5** | **+2.3** |
| | 0.4nm,0.4s,baz=14,slow=12,SNR=3.0 | | | | | | |

*IDC **19** 07:08:25.7±7.4, 16.°23S×174.°28W, h355km±75km, mb3.1/7, mbtmp3.8/8, Error ellipse: s-maj=28.7km s-min=27.2km az=91.0*

**ISC 19 07:08:25.2±0.9, 16.°2S±0.°2×174.°3W±0.°2, h350km, n8, σ0s90/8, mb3.2/7, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **19.13** | **249** | P | **P** | **07 12 25.1** | **+0.7** |
| | 2.6nm,0.9s,baz=79,slow=18,SNR=1.8 | | | | | | |
| **URZ** | **Urewera** | **23.25** | **197** | P | **P** | **07 13 01.8** | **-0.7** |
| | 3.3nm,0.4s,baz=334,slow=1.2,SNR=5.7 | | | | | | |
| | 3.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.86** | **258** | P | **P** | **07 16 36.8** | **-0.2** |
| | 0.7nm,0.6s,baz=94,slow=7.8,SNR=6.3 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **49.08** | **253** | P | **P** | **07 16 38.4** | **-0.2** |
| | 4.6nm,0.7s,baz=86,slow=7.7,SNR=26 | | | | | | |
| | 4.6nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.84** | **180** | P | **P** | **07 19 22.5** | **+0.3** |
| | 1.9nm,0.9s,baz=8.7,slow=3.8,SNR=7.6 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.75** | **56** | P | **P** | **07 20 07.2** | **+1.2** |
| | 0.3nm,0.9s,baz=213,slow=6.5,SNR=2.6 | | | | | | |
| | 0.3nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **83.39** | **11** | P | **P** | **07 20 13.3** | **-0.2** |
| | 0.2nm,0.6s,baz=224,slow=5.0,SNR=1.3 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **83.42** | **42** | P | **P** | **07 20 13.3** | **-1.1** |
| | 0.2nm,0.6s,baz=237,slow=3.1,SNR=2.9 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**IDC 19 07:13:21.3±7.7, 18.°28S×177.°95W, h471km±86km,**

**mb3.1/4, mbtmp4.0/5, Error ellipse: s-maj=128.1km s-min=39.4km az=157.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.13** | **253** | P | P | 07 16 33.6 | +0.1 |
| | 2.4nm,0.9s,baz=75,slow=20,SNR=1.8 | | | | | | |
| **STKA** | **Stephens Creek** | **38.83** | **242** | P | P | 07 20 04.2 | -0.6 |
| | 1.6nm,0.6s,baz=98,slow=15,SNR=4.6 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.99** | **260** | P | P | 07 20 53.2 | -0.6 |
| | 0.7nm,0.6s,baz=94,slow=7.1,SNR=11 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.11** | **255** | P | P | 07 20 55.2 | +0.5 |
| | 6.8nm,0.6s,baz=88,slow=8.2,SNR=73 | | | | | | |
| | 6.8nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.83** | **57** | P | P | 07 25 10.7 | 0.0 |
| | 0.3nm,0.9s,baz=216,slow=8.7,SNR=2.1 | | | | | | |
| | 0.3nm,0.9s | | | | | | |

*IDC **19** 07:14:13.4±3.0, 23.°42N×143.°42E, h0km, mb4.0/5, mbtmp3.8/7, ML2.7/2, Error ellipse: s-maj=122.6km s-min=25.8km az=77.0*

**ISC 19 07:14:13.5±2.2, 23.°5N±0.°2×143.°9E±0.°6, h10km, n7, σ0s58/7, mb4.1/5, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **13.85** | **341** | Pn | **Pn** | **07 17 29.2** | **-0.7** |
| | baz=151,slow=13,SNR=1.6 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **19.47** | **319** | P | **Pn** | **07 18 41.5** | **-0.3** |
| | baz=122,slow=12,SNR=1.4 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.20** | **193** | P | **P** | **07 22 22.6** | **-0.4** |
| | 0.4nm,0.5s,baz=6.2,slow=7.7,SNR=7.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.93** | **312** | P | **P** | **07 23 37.3** | **0.0** |
| | 0.5nm,0.7s,baz=89,slow=9.2,SNR=5.6 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.62** | **316** | P | **P** | **07 23 56.7** | **+0.1** |
| | 1.7nm,0.8s,baz=93,slow=7.8,SNR=11 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.69** | **319** | P | **P** | **07 24 32.4** | **+0.6** |
| | 2.9nm,0.5s,baz=88,slow=6.5,SNR=16 | | | | | | |
| | 2.9nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **81.79** | **335** | P | **P** | **07 26 32.9** | **+0.5** |
| | 2.3nm,1.0s,baz=63,slow=7.9,SNR=1.2 | | | | | | |
| | 2.3nm,1.0s | | | | | | |

*SNET **19** 07:20:56.0, 12.°75N×88.°32W, h50km, ML4.6*
*IDC **19** 07:20:56.7±1.3, 12.°91N×88.°02W, h63km±12km, mb3.5/10, mbtmp3.8/12, Error ellipse: s-maj=34.7km s-min=8.5km az=46.0*
*CATAC **19** 07:20:56.2±0.3, 12.°66N×88.°32W, h39km±7km, ML4.6*
*NEIC **19** 07:20:57.8±1.9, 12.°76N±0.°06×88.°22W±0.°06, h62km±8km, mb4.2/41, Error ellipse: s-maj=9.5km s-min=7.0km az=214.0*
*GCG **19** 07:20:58.2±0.4, 12.°83N×88.°43W, h117km±43km, MD4.4*
*UCR **19** 07:21:03.2±1.1, 11.°31N×88.°37W, h0km±999km, MW3.8*

**ISC 19 07:20:56.7±0.8, 12.°3N±0.°05×88.°29W±0.°03, h63km±7km, n200, σ1s24/241, mb4.1/26, 2C-13D, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LCY** | **Lacayo** | **0.69** | **360** | *i* P | **Pn** | **07 21 10.8** | **-0.3** |
| **LCND** | **La Caada** | **0.69** | **34** | *e* P | **Pn** | **07 21 10.7** | **-0.4** |
| LCND | | | | *e* S | **Sn** | **07 21 22.3** | **+0.7** |
| **LCND** | **La Caada** | **0.69** | **34** | *i* P | **Pn** | **07 21 10.7** | **-0.4** |
| LCND | | | | *i* S | **Sn** | **07 21 22.7** | **+1.1** |
| LCND | | | | IAML | | 07 21 26.6 | |
| | comp=Z,19µm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **0.70** | **39** | *e* P | **Pn** | **07 21 12.1** | **+0.8** |
| **CNCH** | **Conchagua** | **0.70** | **39** | *i* P | **Pn** | **07 21 10.9** | **-0.4** |
| CNCH | | | | *i* S | **Sn** | **07 21 22.4** | **+0.4** |
| CNCH | | | | IAML | | 07 21 25.6 | |
| | comp=Z,36µm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **0.71** | **4** | *e* P | **Pn** | **07 21 11.2** | **-0.1** |
| **CNRM** | **Centro Naciona** | **0.75** | **9** | *e* P | **Pn** | **07 21 11.6** | **-0.1** |
| **CNRM** | **Centro Naciona** | **0.75** | **9** | *i* P | **Pn** | **07 21 11.8** | **+0.1** |
| CNRM | | | | *i* S | **Sn** | **07 21 23.6** | **+0.9** |
| CNRM | | | | IAML | | 07 21 26.0 | |
| | comp=Z,160µm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **0.79** | **345** | *i* P | **Pn** | **07 21 12.0** | **-0.4** |
| **PQSS** | **Presa 15 de Se** | **0.93** | **344** | *e* P | **Pn** | **07 21 13.8** | **-0.1** |
| **PQSS** | **Presa 15 de Se** | **0.93** | **344** | *i* P | **Pn** | **07 21 13.8** | **-0.1** |
| PQSS | | | | *i* S | **Sn** | **07 21 27.5** | **+0.9** |
| PQSS | | | | IAML | | 07 21 29.4 | |
| | comp=Z,15µm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.93** | **329** | *e* P | **Pn** | **07 21 13.2** | **-0.8** |
| **TECO** | **Alcaldia de Te** | **0.93** | **329** | *i* P | **Pn** | **07 21 13.1** | **-0.9** |
| TECO | | | | *i* S | **Sn** | **07 21 26.5** | **-0.3** |
| TECO | | | | IAML | | 07 21 27.9 | |
| | comp=Z,6µm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **1.02** | **332** | *e* P | **Pn** | **07 21 14.7** | **-0.4** |
| **UESV** | **Universidad de** | **1.02** | **332** | *i* P | **Pn** | **07 21 14.9** | **-0.3** |
| UESV | | | | *i* S | **Sn** | **07 21 29.4** | **+0.5** |
| UESV | | | | IAML | | 07 21 35.9 | |
| | comp=Z,11µm,1.0s | | | | | | |
| **SNVI** | **San Vicente** | **1.02** | **329** | *e

PMON **Piamonte** 1.39 315 *i* P Pn 07 21 19.7 -0.5
PMON *i* S Sn 07 21 37.7 0.0
PMON IAML 07 21 45.9
comp=Z,11µm,1.0s
QUEN **Al S del Volca** 1.41 95 *i* P Pn 07 21 20.1 -0.2
QUEN IAML 07 21 40.5
comp=Z,10µm,1.0s
HERN **Volcan Telica** 1.43 95 *i* P Pn 07 21 20.0 -0.6
HERN *i* S Sn 07 21 38.2 -0.4
HERN IAML 07 21 43.7
comp=Z,10µm,1.0s
TELN **Telica** 1.43 95 *i* P Pn 07 21 20.0 -0.6
TELN *i* S Sn 07 21 39.2 +0.6
TELN IAML 07 21 44.2
comp=Z,680nm,1.0s
JAYA **Jayaque - finc** 1.45 309 ⇓*i* P Pn 07 21 20.0 -1.0
JAYA **Jayaque - finc** 1.45 309 *i* P Pn 07 21 20.1 -0.9
JAYA IAML 07 21 41.7
comp=Z,14µm,1.0s
QUEZ **Alcaldia de Qu** 1.45 319 *eP* Pn 07 21 20.9 +0.1
QUEZ **Alcaldia de Qu** 1.45 319 *i* P Pn 07 21 21.0 +0.1
QUEZ *i* S Sn 07 21 39.9 +0.8
QUEZ IAML 07 21 48.8
comp=Z,21µm,1.0s
CEDA **San Andres** 1.51 315 ⇓*i* P Pn 07 21 21.3 -0.3
CEDA **San Andres** 1.51 315 *i* P Pn 07 21 21.4 -0.3
CEDA IAML 07 21 48.8
comp=Z,11µm,1.0s
ROCN **Rota Cerro Neg** 1.53 98 *i* P Pn 07 21 21.4 -0.4
ROCN *i* S Sn 07 21 41.0 +0.2
ROCN IAML 07 21 45.7
comp=Z,4µm,1.0s
ILCN **San Idelfonso** 1.56 95 *i* P Pn 07 21 21.7 -0.6
ILCN *i* S Sn 07 21 41.6 0.0
ILCN IAML 07 21 49.3
comp=Z,2µm,1.0s
CNGA **Al SSO del Vol** 1.57 98 *i* P Pn 07 21 19.2 -3.2
CNGA IAML 07 21 48.7
comp=Z,9µm,1.0s
CNGN **Cerro Negro** 1.57 98 Pn 07 21 21.8 -0.7
CNGN **Cerro Negro** 1.57 98 *i* P Pn 07 21 21.9 -0.6
CNGN IAML 07 21 43.9
comp=Z,4µm,1.0s
TGUH **Tegucigalpa,Un** 1.65 37 Pn Pn 07 21 24.3 +0.7
CEVE **Cerro Verde** 1.69 310 *eP* Pn 07 21 24.1 -0.2
CEVE **Cerro Verde** 1.69 310 *i* P Pn 07 21 23.8 -0.5
CEVE *i* S Sn 07 21 48.2 +3.0
CEVE IAML 07 21 51.8
comp=Z,6µm,1.0s
SBLS **San Blas** 1.70 311 *eP* Pn 07 21 24.3 -0.1
SNJE **San Jose** 1.71 312 *eP* Pn 07 21 24.3 -0.2
BC84 **Volcan Momotom** 1.74 101 *i* P Pn 07 21 24.4 -0.3
BC84 IAML 07 22 49.9
comp=Z,5µm,1.0s
UNIC **Universidad Ca** 1.74 316 *eP* Pn 07 21 24.8 -0.1
UNIC **Universidad Ca** 1.74 316 *i* P Pn 07 21 24.7 -0.1
UNIC *i* S Sn 07 21 47.0 +0.9
UNIC IAML 07 21 49.9
comp=Z,1µm,1.0s
COPN **Copaltepe** 1.75 108 *i* P Pn 07 21 24.0 -0.8
COPN IAML 07 21 47.9
comp=Z,2µm,1.0s
BC86 **Nagarote** 1.75 105 *i* P Pn 07 21 24.0 -0.8
BC86 *i* S Sn 07 21 45.2 -0.9
BC86 IAML 07 21 48.2
comp=Z,7µm,1.0s
RTR **El Retiro** 1.75 311 *eP* Pn 07 21 25.0 0.0
MOM2 **El Cardon** 1.79 99 *i* P Pn 07 21 25.0 -0.3
MOM2 *i* S Sn 07 21 47.1 0.0
MOM2 IAML 07 21 52.0
comp=Z,2µm,1.0s
NUBE **Las Nubes** 1.86 309 *eP* Pn 07 21 26.0 -0.4
NUBE **Las Nubes** 1.86 309 *i* P Pn 07 21 26.0 -0.4
NUBE *i* S Sn 07 21 49.1 +0.1
NUBE IAML 07 21 51.2
comp=Z,8µm,1.0s
BRAN **Las Pilas** 1.90 90 *i* P Pn 07 21 27.0 +0.2
BRAN *i* S Sn 07 21 50.5 +0.8
BRAN IAML 07 21 55.8
comp=Z,4µm,1.0s
LIMN **Finca el Limon** 1.91 80 *i* P Pn 07 21 26.9 -0.1
LOAL **Lomas de Alarc** 1.92 311 *i* P Pn 07 21 26.3 -0.9
LOAL IAML 07 21 59.6
comp=Z,4µm,1.0s
SAPS **Ciudad Sandino** 1.93 107 *i* P Pn 07 21 26.5 -0.7
SAPS *i* S Sn 07 21 50.2 -0.2
SAPS IAML 07 21 54.1
comp=Z,8µm,1.0s
APQ3 **Volcan Apoyequ** 1.93 103 *i* P Pn 07 21 27.0 -0.3
APQ3 *i* S Sn 07 21 50.8 +0.2
APQ3 IAML 07 21 55.8
comp=Z,4µm,1.0s
SLOZ **Alcaldia de Sa** 1.94 312 *eP* Pn 07 21 27.3 -0.1
MTO3 **Montecristo** 1.96 328 Pn 07 21 27.9 0.0
MTO3 **Montecristo** 1.96 328 ⇓*i* P Pn 07 21 28.0 +0.1
MTO3 **Montecristo** 1.96 328 *i* P Pn 07 21 28.1 +0.3
MTO3 IAML 07 22 00.0
comp=Z,800nm,1.0s
APYN **Apoyeque** 1.96 104 *i* P Pn 07 21 27.5 -0.2
APYN IAML 07 21 54.2
comp=Z,100nm,1.0s
APQ2 **Apoyeque** 1.99 105 *i* P Pn 07 21 27.3 -0.8
APQ2 *i* S Sn 07 21 52.6 +0.6
APQ2 IAML 07 21 59.0
comp=Z,3µm,1.0s
ALLN **Telcor Managua** 2.05 106 *i* P Pn 07 21 28.9 0.0
ALLN *i* S Sn 07 21 52.6 -0.9
ALLN IAML 07 21 55.1
comp=Z,9µm,1.0s
TISN **Laguna Tiscapa** 2.06 106 *i* P Pn 07 21 28.6 -0.4
TISN IAML 07 21 59.0
comp=Z,330nm,1.0s
USIM **UNAN** 2.06 107 *i* P Pn 07 21 28.8 -0.3
USIM *i* S Sn 07 21 53.0 -0.8
USIM IAML 07 21 58.7
comp=Z,10µm,1.0s
UNAN **Cigeo UNAN** 2.07 107 *i* P Pn 07 21 28.6 -0.6
UNAN *i* S Sn 07 21 53.0 -0.9
UNAN IAML 07 21 59.7
comp=Z,19µm,1.0s
RA5A7 **El Crucero** 2.07 111 *i* P Pn 07 21 29.1 -0.2
RA5A7 IAML 07 22 06.1
comp=Z,14µm,1.0s
ENAN **Enatrel Managu** 2.08 107 *i* P Pn 07 21 29.4 +0.1
ENAN *i* S Sn 07 21 53.9 -0.2
ENAN IAML 07 22 01.5
comp=Z,10µm,1.0s
MGA1 **Managua** 2.08 106 *i* P Pn 07 21 28.7 -0.6
MGA1 IAML 07 21 33.2
comp=Z,7µm,1.0s
MGA1 *i* S Sn 07 21 53.6 -0.5
R4DEC **Barrio San Lui** 2.08 106 *i* P Pn 07 21 28.7 -0.6
R4DEC *i* P Pn 07 21 28.7 -0.6
R4DEC *i* S Sn 07 21 52.9 -1.2
R4DEC IAML 07 21 59.9
comp=Z,2µm,1.0s
R4DEC IAML 07 21 59.9
comp=Z,2µm,1.0s
CRUN **El Crucero** 2.08 111 *i* P Pn 07 21 27.8 -1.6
CRUN IAML 07 22 05.6
comp=Z,52µm,1.0s
ESQI **Esquipulas** 2.08 331 Pn 07 21 30.0 +0.6
ESQI **Esquipulas** 2.08 331 ⇓*i* P Pn 07 21 30.2 +0.7
ESQI **Esquipulas** 2.08 331 *i* P Pn 07 21 30.2 +0.7
ESQI *i* S Sn 07 21 57.0 +2.6
ESQI IAML 07 22 05.0
comp=Z,2µm,1.0s
R0529 **La Mascota** 2.10 107 *i* P Pn 07 21 29.0 -0.5
R0529 IAML 07 21 58.7
comp=Z,4µm,1.0s
HUEN **2.11 100** *i* P Pn 07 21 29.3 -0.3
HUEN IAML 07 21 58.0
comp=Z,840nm,1.0s
MASN **Masaya** 2.22 109 *i* P Pn 07 21 32.3 +1.1
MASN IAML 07 22 02.2
comp=Z,960nm,1.0s
BOAB **BOACO BROADBAN 2.58 96** Pn Pn 07 21 35.4 -0.7
BOAB **BOACO BROADBAN 2.58 96** *i* P Pn 07 21 35.6 -0.5
BOAB IAML 07 22 21.2
comp=Z,390nm,1.0s
MRL **Marmol** 2.70 330 *eP* Pn 07 21 39.7 +1.7
NBG **Las Nubes** 2.72 313 *eP* Pn 07 21 40.0 +1.7
JAPN **Al SSO del Vol** 2.82 115 *i* P Pn 07 21 39.7 +0.3
JAPN IAML 07 22 30.6
comp=Z,870nm,1.0s
FUG **Fuego 3** 3.01 305 *eP* Pn 07 21 43.2 +1.0
FUG *eS* Sn 07 22 18.7 +1.5
APG **El Apazote** 3.09 317 P Pn 07 21 44.0 +0.7
comp=Z,1.1nm,0.4s,baz=118,slow=11,SNR=46
APG S Sn 07 22 21.4 +2.2
comp=Z,6.9nm,0.6s,baz=143,slow=20,SNR=4.3
ACON **Acoyapa** 3.14 104 Pn 07 21 42.9 -0.8
ACON **Acoyapa** 3.14 104 *i* P Pn 07 21 43.2 -0.6
ACON IAML 07 22 33.6
comp=Z,220nm,1.0s
SULM **Suchitepequez,** 3.55 297 *eP* Pn 07 21 50.1 +0.8
COLC **Colonia** 3.66 124 *eP* Pn 07 21 51.6 +0.8
COLC *eS* Sn 07 22 34.4 +1.6
JUD3 **Juan Diaz 3** 3.71 133 Pn 07 21 52.0 +0.3
STG3 **Santiaguito 3,** 3.75 302 *eP* Pn 07 21 51.5 -0.7
STG3 *eS* Sn 07 22 36.4 +1.2
RTAL **Retalhuleu** 3.76 299 Pn 07 21 53.5 +1.3
NICO **Nicoya** 3.80 132 *eP* Pn 07 21 53.2 +0.4
ESPN **Las Esperanzas** 3.94 97 Pn 07 21 54.6 0.0
JTS **Las Juntas de** 4.07 126 Pn Pn 07 21 56.3 -0.3
JTS **Las Juntas de** 4.07 126 P Pn 07 21 55.5 -1.0
comp=Z,11nm,0.4s,baz=288,slow=23,SNR=44
JTS S Sn 07 22 42.3 -0.7
comp=Z,32nm,0.3s,baz=245,slow=21,SNR=1.2
SOCE **Pocosol** 4.29 123 Pn 07 21 59.8 +0.3
PETF **Flores** 4.43 340 Pn 07 22 02.0 +0.5
TRB2 **Turrubares** 4.70 126 *eP* Pn 07 22 06.1 +1.0
TCS1 **Tacares** 4.74 124 *eP* Pn 07 22 08.4 +2.7
BELE **Belen** 4.87 124 *eP* Pn 07 22 09.8 +2.3
SANTA **Santa Ana** 4.89 124 *eP* Pn 07 22 11.5 +3.6
HDC **Heredia** 4.91 123 Pn 07 22 08.4 +0.2
DOMI **Santo Domingo** 4.94 123 *eP* Pn 07 22 12.9 +4.4
ACOS **Acosta** 4.99 125 *eP* Pn 07 22 12.0 +2.8
LUJA **Lujan** 4.99 124 *eP* Pn 07 22 12.6 +3.4
LUPE **Guadalupe** 4.99 123 *eP* Pn 07 22 12.8 +3.6
CORON **Coronado** 5.02 123 *eP* Pn 07 22 12.8 +3.2
RITA **Parrita** 5.03 129 *eP* Pn 07 22 11.5 +1.9
TRIO **Tres Rios** 5.07 123 *eP* Pn 07 22 13.5 +3.2
CCIG **Comitan** 5.13 314 Pn Pn 07 22 13.0 +1.9
ABE2 **San Pablo** 5.13 125 *eP* Pn 07 22 13.4 +2.2
LCR2 **La Lucha 2** 5.15 125 Pn Pn 07 22 12.7 +1.2
LCR2 **La Lucha 2** 5.15 125 *eP* Pn 07 22 13.8 +2.3
RAFA **San Farael, Vo** 5.19 122 *eP* Pn 07 22 15.5 +3.4
LLNJ **Naranjito** 5.23 128 *eP* Pn 07 22 14.3 +1.9
VINA **Juan Vinas** 5.28 122 *eP* Pn 07 22 16.9 +3.7
VERB **Verbena** 5.29 121 *eP* Pn 07 22 17.7 +4.4
TURIB **Turrialba** 5.32 121 *eP* Pn 07 22 17.4 +3.8
BUS1 **Rivas** 5.46 125 *eP* Pn 07 22 17.9 +1.8
ZELE **Perez Zeledon** 5.60 126 *eP* Pn 07 22 19.6 +2.0
BURE **Buenos Aires** 6.01 126 *eP* Pn 07 22 25.2 +2.0
DRK0 **Durika** 6.04 124 *eP* Pn 07 22 25.1 +1.5
EDBA **Buenos Aires** 6.07 125 *eP* Pn 07 22 25.3 +1.4
EDP2 **Potrero Grande** 6.24 126 *eP* Pn 07 22 28.1 +2.0
CMIG **Matias Romero** 7.71 305 P Pn 07 22 48.2 +1.9
comp=Z,1.8nm,0.3s,baz=158,slow=12,SNR=3.6
CMIG S Sn 07 24 13.0 +0.9
comp=Z,5.4nm,0.3s,baz=159,slow=3.6,SNR=2.4
TLIG **Tlapa** 11.02 297 Pn Pn 07 23 34.4 +2.6
SOR **Soroa** 11.20 26 Pn Pn 07 23 34.1 +0.1
TULM **Tulcn-Chalpat** 15.84 138 P P 07 24 37.9 -1.2
TULM IAmb IAmb 07 24 45.5
comp=Z,16nm,1.2s
IMBA **Imbabura, San** 15.91 140 Pn 07 24 37.9 +0.6
IMBA IAmb IAmb 07 24 44.9
comp=Z,31nm,1.1s
PULU **Pululahua** 15.93 142 P 07 24 39.5 -0.5
ANTS **Antisana-Sarah** 16.54 142 Pn Pn 07 24 45.2 -0.1
ANTS IAmb IAmb 07 24 54.1
comp=Z,12nm,0.9s
HBVL **Hebbronville** 17.26 327 P P 07 24 54.2 -0.1
146A **Union** 19.83 358 P P 07 25 22.2 -0.1
146A IAmb IAmb 07 25 41.7
comp=Z,16nm,0.9s
152A **Waverly Hall** 20.11 9 P P 07 25 26.5 +1.1
DRIO **Del Rio** 20.17 327 P Pn 07 25 28.2 -0.3
BAUV **El Baul** 20.24 99 P P 07 25 25.0 -2.0
BAUV IAmb IAmb 07 25 29.1
comp=Z,19nm,1.1s
BRDY **Brady** 20.94 334 P P 07 25 34.9 +0.5
Y49A **Blount Mountai** 21.10 4 P P 07 25 38.1 +2.0
Y49A IAmb IAmb 07 25 55.7
comp=Z,8.1nm,0.7s
OZNA **Ozona** 21.64 329 P P 07 25 43.3 +1.4
TXAR **Lajitas Array** 21.84 322 P P 07 25 45.5 +1.4
comp=Z,2.0nm,0.6s,baz=139,slow=9.3,SNR=34
TXAR PcP PcP 07 29 43.3 +1.3
comp=Z,0.2nm,0.7s,baz=142,slow=4.6,SNR=2.3
TXAR ScP ScP 07 33 15.1 +1.1
comp=Z,0.2nm,0.8s,baz=170,slow=2.7,SNR=2.1
comp=Z,2.0nm,0.6s
TX31 **Lajitas Ar. Si** 21.84 322 P P 07 25 45.7 +1.6
PLPT **Palo Pinto** 22.00 337 P P 07 25 47.5 +1.8
HODGE **Hodges** 22.10 13 P P 07 25 48.6 +1.9
HODGE IAmb IAmb 07 25 50.8
comp=Z,5.8nm,0.8s
MIAR **Mount Ida** 22.24 348 P P 07 25 49.5 +1.2
MIAR IAmb IAmb 07 26 10.6
comp=Z,6.2nm,0.8s
ALPN **Alpine** 22.58 323 P P 07 25 53.2 +1.1
WHAR **Wooly Hollow** 22.75 352 P P 07 25 53.8 +0.1
MNHN **Monahans** 22.82 327 P P 07 25 55.7 +1.1
MNHN IAmb IAmb 07 26 11.4
comp=Z,5.0nm,0.6s
TKL **Tuckaleechee C** 23.19 9 P P 07 25 59.3 +1.1
X34A **Smith Ranch, M** 23.43 340 P P 07 26 01.3 +0.9
X34A IAmb IAmb 07 26 02.0
comp=Z,6.1nm,0.7s
W57A **Gilead** 23.55 17 P P 07 26 01.8 +0.3
W57A IAmb IAmb 07 26 19.9
comp=Z,7.0nm,1.0s
HHAR **Hobbs** 24.00 349 P P 07 26 06.4 +0.8
PBMO **Poplar Bluff** 24.02 356 P P 07 26 06.2 +0.5
PBMO IAmb IAmb 07 26 24.2
comp=Z,5.4nm,0.8s
TZTN **Tazewell** 24.09 9 P P 07 26 06.3 -0.1
U54A **Nelsons Funny** 24.39 13 P P 07 26 10.1 +0.8
U54A IAmb IAmb 07 26 13.2
comp=Z,7.7nm,0.6s
AMTX **Amarillo** 25.17 333 IAmb IAmb 07 26 21.7
comp=Z,4.5nm,0.7s
S39A **Bolivar** 25.26 351 IAmb IAmb 07 26 35.8
comp=Z,8.1nm,0.7s
ETMB **Extrema** 31.35 135 P P 07 27 11.5 0.0
SAML **Samuel** 32.96 130 P P 07 27 24.6 -1.0
SAML IAmb IAmb 07 27 25.3
comp=Z,7.2nm,1.1s
LPAZ **La Paz** 35.05 145 P P 07 27 44.6 +0.1
comp=Z,0.6nm,0.5s,baz=333,slow=14,SNR=2.8
comp=Z,0.6nm,0.5s
PDAR **Pinedale Array** 35.14 332 P P 07 27 44.3 -0.3
comp=Z,0.4nm,0.6s,baz=128,slow=9.6,SNR=5.6
PDAR PcP PcP 07 30 14.3 -0.6
comp=Z,0.1nm,0.5s,baz=142,slow=3.4,SNR=1.6
comp=Z,0.4nm,0.6s
HWUT **Hardware Ranch** 35.21 329 IAmb IAmb 07 27 48.6
comp=Z,2.3nm,0.7s
LOHW **Long Hollow** 36.28 332 IAmb IAmb 07 28 11.4
comp=Z,2.8nm,0.9s
TPAW **Teton Pass** 36.34 332 IAmb IAmb 07 27 56.5
comp=Z,3.2nm,0.8s
NVAR **Mina Array Bea** 36.95 319 P P 07 28 01.3 +1.2
comp=Z,0.5nm,0.7s,baz=128,slow=8.0,SNR=5.8
NVAR PcP PcP 07 30 21.0 +0.7
comp=Z,0.6nm,0.6s,baz=123,slow=3.3,SNR=7.4
comp=Z,0.5nm,0.7s
YHL **Hebgen Lake** 37.51 333 IAmb IAmb 07 28 08.2
comp=Z,3.0nm,0.7s
VILB **Vilhena** 37.78 131 P P 07 28 07.1 0.0
ULM **Lac du Bonnet** 37.92 352 P P 07 28 05.7 -2.2
comp=Z,1.5nm,0.6s,baz=191,slow=10,SNR=2.0
comp=Z,1.5nm,0.6s
BOZ **Bozeman (W)** 38.28 333 IAmb IAmb 07 28 28.4
comp=Z,5.9nm,1.4s
SCHQ **Schefferville** 45.25 17 P P 07 29 05.5 -2.3
comp=Z,2.5nm,0.8s,baz=242,slow=11,SNR=2.4
comp=Z,2.5nm,0.8s
AQDB **Aquidauana** 46.00 135 P P 07 29 13.9 -0.2
H03N2 **Juan Fernandez** 46.77 169 T T 08 19 32.7
baz=348
H03N1 **Juan Fernandez** 46.78 169 T T 08 19 32.6
baz=348
H03N3 **Juan Fernandez** 46.79 169 T T 08 19 33.0
baz=348
BDFB **Brasilia** 48.81 124 P P 07 29 34.8 -1.4
comp=Z,1.8nm,0.5s,baz=281,slow=9.2,SNR=8.3
comp=Z,1.8nm,0.5s
YKA **Yellowknife Ar** 53.13 345 P P 07 30 06.5 -1.2
comp=Z,0.9nm,0.8s,baz=67,slow=3.9,SNR=7.9
comp=Z,0.9nm,0.8s
DLBC **Dease Lake** 55.30 335 P P 07 30 24.6 +0.9
PLCA **Paso Flores** 55.67 164 P P 07 30 25.4 -1.2
comp=Z,1.9nm,0.9s,baz=337,slow=3.6,SNR=5.0
comp=Z,1.9nm,0.9s
ILAR **Eielson Array** 65.43 336 P P 07 31 31.5 -1.2
comp=Z,0.3nm,0.8s,baz=168,slow=4.6,SNR=6.0
comp=Z,0.3nm,0.8s
ASAR **Alice Springs** 138.61 249 PKP PKPdf 07 40 16.3 +0.1
comp=Z,0.5nm,0.7s,baz=127,slow=2.4,SNR=2.2

*IDC* ***19*** *07:25:50.5±2.1, 18°.00S×178°.57W, h518km±23km, mb3.7/16, mbtmp4.6/17, Error ellipse: s-maj=14.1km s-min=13.0km az=116.0*
*NOU* ***19*** *07:25:51.3, 17°.85S×178°.23W, h541km, mb4.6/5, Fiji Islands Region*
*NEIC* ***19*** *07:25:52.9±1.9, 18°.0S±0°.1×178°.6W±0°.1, h534km±7km, mb4.3/184, Error ellipse: s-maj=18.1km s-min=14.8km az=137.0*
**ISC 19 07:25:53.0±0.3, 17°.97S±0°.06×178°.55W±0°.07, h550km, n494, σ1$00/439, mb4.3/110, 49C-26D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.25 | 274 | P | P | 07 27 09.3 | -0.4 |
| MSVF | Nonsavu | 3.25 | 274 | P | P | 07 27 09.2 | -0.6 |
| AFI | Afiamalu | 7.66 | 59 | P | P | 07 27 46.4 | -1.2 |
| NIUE | Niue | 8.25 | 99 | P | P | 07 27 51.6 | -1.7 |
| FUNA | Funafuti | 9.64 | 347 | P | P | 07 28 05.3 | -2.1 |
| FUNA | Funafuti | 9.64 | 347 | P | P | 07 28 05.6 | -1.9 |
| GLKZ | Green Lake | 11.25 | 177 | P | P | 07 28 20.7 | -3.0 |
| GLKZ | | | | S | S | 07 30 26.4 | -1.3 |
| DZM | Mont Dzumac | 14.68 | 251 | P | P | 07 28 58.2 | -1.2 |
| DZM | Mont Dzumac | 14.68 | 251 | P | P | 07 28 57.4 | -2.0 |
| | 1.6nm,0.8s,baz=72,slow=20,SNR=1.2 | | | | | | |
| RAR | Rarotonga | 17.98 | 103 | P | P | 07 29 30.6 | -0.2 |
| | 36nm,1.0s,baz=228,slow=14,SNR=3.6 | | | | | | |
| KUZ | Kuaotunu | 19.37 | 194 | P | P | 07 29 44.7 | +1.5 |
| KUZ | Kuaotunu | 19.37 | 194 | P | P | 07 29 44.8 | +1.6 |
| WIAZ | Waiheke Island | 19.56 | 195 | P | P | 07 29 46.5 | +1.6 |
| MBAZ | Motutapu North | 19.60 | 196 | P | P | 07 29 47.0 | +1.8 |
| MXZ | Matakaoa Point | 19.71 | 187 | P | P | 07 29 46.0 | -0.3 |
| MXZ | Matakaoa Point | 19.71 | 187 | P | P | 07 29 44.7 | -1.6 |
| ETAZ | East Tamaki Re | 19.76 | 196 | P | P | 07 29 48.6 | +1.9 |
| AWAZ | Awhitu Peninsu | 19.94 | 196 | P | P | 07 29 50.1 | +1.7 |
| WMGZ | Waiomatatini S | 19.95 | 187 | P | P | 07 29 48.5 | 0.0 |
| WMGZ | | | | S | S | 07 30 07.4 | +8.2 |
| HAZ | Te Kaha | 19.97 | 189 | P | P | 07 29 47.7 | -1.0 |
| PKGZ | Pakihiroa | 20.04 | 188 | P | P | 07 29 47.3 | -1.9 |
| TWGZ | Tauwhareparae | 20.36 | 188 | P | P | 07 29 52.8 | +0.6 |
| TOZ | Tahuroa Road | 20.36 | 194 | P | P | 07 29 53.7 | +1.5 |
| URZ | Urewera | 20.57 | 190 | P | P | 07 29 53.2 | -0.8 |
| URZ | Urewera | 20.57 | 190 | P | P | 07 29 51.2 | -2.8 |
| | 7.3nm,0.3s,baz=3.0,slow=1.7,SNR=19 | | | | | | |
| URZ | | | | S | S | 07 33 03.1 | -6.0 |
| | 5.0nm,0.9s,baz=324,slow=20,SNR=2.2 | | | | | | |
| | 7.3nm,0.3s | | | | | | |
| URZ | Urewera | 20.57 | 190 | P | P | 07 29 51.6 | -2.4 |
| ARMA | Armidale | 29.79 | 240 | P | P | 07 31 15.3 | -0.5 |
| WHZ | Wether Hill Ro | 30.02 | 199 | P | P | 07 31 18.2 | +0.8 |
| CTAO | Charters Tower | 33.31 | 261 | P | P | 07 31 45.8 | 0.0 |
| CTAO | | | | IAmb | IAmb | 07 32 09.8 | |
| | comp=Z,13nm,1.4s | | | | | | |
| COEN | Coen | 36.98 | 271 | P | P | 07 32 16.4 | 0.0 |
| COEN | | | | IAmb | IAmb | 07 32 26.1 | |
| | comp=Z,13nm,1.1s | | | | | | |
| TOO | Toolangi | 37.03 | 231 | P | P | 07 32 17.9 | +1.4 |
| STKA | Stephens Creek | 38.48 | 241 | P | P | 07 32 29.4 | +1.0 |
| STKA | Stephens Creek | 38.48 | 241 | P | P | 07 32 28.1 | -0.3 |
| | comp=Z,1.5nm,0.5s,baz=86,slow=13,SNR=3.1 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| BBOO | Buckleboo | 43.26 | 241 | P | P | 07 33 06.9 | +0.5 |
| BBOO | | | | IAmb | IAmb | 07 33 33.7 | |
| | comp=Z,16nm,1.2s | | | | | | |
| WR0 | Warramunga Arr | 44.30 | 260 | P | P | 07 33 14.3 | -0.3 |
| WB0 | Warramunga Arr | 44.46 | 260 | P | P | 07 33 16.1 | +0.2 |
| WB2 | Warramunga Arr | 44.48 | 260 | P | P | 07 33 15.7 | -0.3 |
| WRA | Warramunga Arr | 44.49 | 260 | P | P | 07 33 15.8 | -0.3 |
| WRA | Warramunga Arr | 44.49 | 260 | P | P | 07 33 15.0 | -1.1 |
| | comp=Z,1.8nm,0.5s,baz=96,slow=7.1,SNR=22 | | | | | | |
| WRA | | | | S | S | 07 39 10.8 | -1.0 |
| | comp=Z,0.6nm,0.7s,baz=96,slow=14,SNR=2.1 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| AS31 | Alice Springs | 44.65 | 254 | P | P | 07 33 17.5 | +0.2 |
| ASAR | Alice Springs | 44.65 | 254 | P | P | 07 33 16.9 | -0.4 |
| ASAR | Alice Springs | 44.65 | 254 | P | P | 07 33 17.2 | -0.1 |
| | comp=Z,12nm,0.5s,baz=89,slow=8.1,SNR=106 | | | | | | |
| ASAR | | | | ScP | ScP | 07 37 50.7 | +2.5 |
| | comp=Z,0.6nm,0.8s,baz=93,slow=5.2,SNR=3.9 | | | | | | |
| ASAR | | | | S | S | 07 39 12.4 | -1.5 |
| | comp=Z,2.0nm,1.1s,baz=87,slow=16,SNR=5.2 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| MTN | Manton Dam | 48.67 | 269 | P | P | 07 33 46.4 | -1.3 |
| MTN | | | | IAmb | IAmb | 07 33 47.3 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| FORT | Forrest | 49.86 | 245 | P | P | 07 33 56.5 | +0.2 |
| KNRA | Kununurra | 50.35 | 264 | P | P | 07 33 59.9 | -0.1 |
| KNRA | | | | IAmb | IAmb | 07 34 00.5 | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| PSA00 | Pilbara Seismi | 57.77 | 255 | P | P | 07 34 52.1 | -0.1 |
| PSA00 | | | | IAmb | IAmb | 07 34 53.1 | |
| | comp=Z,13nm,1.0s | | | | | | |
| MBWA | Marble Bar | 57.93 | 256 | P | P | 07 34 53.1 | -0.3 |
| NWAO | Narrogin (SRO) | 59.06 | 242 | P | P | 07 35 01.4 | +0.6 |
| NWAO | | | | IAmb | IAmb | 07 35 09.9 | |
| | comp=Z,22nm,1.5s | | | | | | |
| MORW | Morawa | 60.34 | 246 | P | P | 07 35 09.5 | +0.2 |
| GIRL | Giralia | 62.75 | 253 | P | P | 07 35 26.6 | +1.4 |
| JGF | Kuroka | 67.71 | 322 | P | P | 07 35 56.3 | +0.3 |
| MJAR | Matsushiro Arr | 67.88 | 323 | P | P | 07 35 56.7 | -0.3 |
| | comp=Z,9.0nm,0.7s,baz=154,slow=5.6,SNR=33 | | | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| MAJO | Matsushiro | 67.88 | 323 | P | P | 07 35 57.1 | +0.1 |
| MJB9 | Matsu-Tunnel | 67.89 | 323 | P | P | 07 35 57.1 | +0.1 |
| MJB9 | | | | IAmb | IAmb | 07 35 57.6 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| KKM | Kota Kinabalu | 68.63 | 284 | P | P | 07 36 02.8 | +0.7 |
| KKM | | | | IAmb | IAmb | 07 36 05.0 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| AMKA | Amchitka | 69.08 | 359 | P | P | 07 36 03.3 | -0.5 |
| UGM | Wanagama | 69.51 | 268 | P | P | 07 36 07.7 | +0.3 |
| YOJ | Yonaguni jima | 70.88 | 305 | P | P | 07 36 15.5 | +0.4 |
| JKA | Kamikawa-asahi | 71.27 | 332 | P | P | 07 36 18.9 | +1.9 |
| JKA | | | | IAmb | IAmb | 07 36 27.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 72.08 | 180 | P | P | 07 36 22.8 | +1.2 |
| | comp=Z,6.7nm,0.8s,baz=36,slow=1.3,SNR=31 | | | | | | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| SSLB | Suanglung | 72.16 | 303 | P | P | 07 36 22.1 | -0.6 |
| KSM | Kuching | 72.56 | 277 | P | P | 07 36 25.5 | +0.3 |
| PEA0B | Petropavlovsk- | 73.71 | 345 | P | P | 07 36 31.6 | +0.8 |
| PETK | Petropavlovsk- | 73.71 | 345 | P | P | 07 36 30.8 | -0.1 |
| PETK | Petropavlovsk- | 73.71 | 345 | P | P | 07 36 31.1 | +0.2 |
| | comp=Z,10nm,0.7s,baz=141,slow=8.3,SNR=12 | | | | | | |
| | comp=Z,10nm,0.7s | | | | | | |
| SDPT | Sand Point | 74.63 | 11 | P | P | 07 36 38.7 | +2.7 |
| | baz=198 | | | | | | |
| KSRS | Korea Array | 74.66 | 318 | P | P | 07 36 37.4 | +0.8 |
| | comp=Z,1.8nm,0.7s,baz=129,slow=6.4,SNR=10.0 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| SAO | San Andreas Ge | 76.56 | 44 | P | P | 07 36 48.8 | +1.6 |
| SAO | | | | IAmb | IAmb | 07 36 49.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 76.60 | 326 | P | P | 07 36 48.4 | +1.2 |
| | comp=Z,2.4nm,0.6s,baz=112,slow=3.3,SNR=7.1 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| PMPB | Monarch Peak | 76.68 | 45 | P | P | 07 36 49.6 | +1.6 |
| ISA | Isabella, Lake | 77.96 | 46 | P | P | 07 36 56.5 | +1.7 |
| ISA | | | | IAmb | IAmb | 07 36 57.1 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| MONP2 | Monument Peak | 77.96 | 50 | P | P | 07 36 56.0 | +0.9 |
| | baz=239,SNR=8.6 | | | | | | |
| CMB | Columbia Colle | 77.98 | 43 | P | P | 07 36 56.4 | +1.5 |
| AFDM | Forest Hills D | 78.11 | 42 | P | P | 07 36 56.7 | +1.1 |
| ORV | Oroville | 78.13 | 42 | P | P | 07 36 56.6 | +1.0 |
| MDJ | Mudanjiang | 78.17 | 325 | P | P | 07 36 56.4 | +0.7 |
| MDJ | | | | IAmb | IAmb | 07 36 57.9 | |
| | comp=Z,15nm,0.8s | | | | | | |

YUH **Yuha Desert** 78.20 50 P P 07 36 57.3 +1.2
PFO **Pinyon Flats O** 78.30 49 P P 07 36 58.1 +1.3
baz=239
TPFO **Pinon Flats** 78.30 49 P P 07 36 58.0 +1.2
baz=239
KDAK **Kodiak Island** 78.50 14 P P 07 36 58.8 +1.7
baz=205
P16K **Nushagak River** 78.56 11 P P 07 36 58.9 +1.5
baz=200
MDPB **Devils Postpil** 78.61 44 P P 07 36 59.9 +1.3
MDPB IAmb IAmb 07 37 00.7
comp=Z,10nm,0.9s
OMMB **Old Mammoth Mi** 78.66 44 P P 07 37 00.5 +1.7
YBH **Yreka Blue Hor** 78.66 39 P P 07 36 59.9 +1.4
Q18K **Katmai Hardscr** 78.77 12 P P 07 36 58.9 +0.2
baz=203
N14K **Kuskokwak Cree** 78.82 9 P P 07 36 59.2 +0.4
baz=196
WAKR **Walker** 78.86 43 P P 07 37 01.3 +1.6
WAKR IAmb IAmb 07 37 02.2
comp=Z,11nm,0.9s
MPK **Martis Peak** 78.92 42 P P 07 37 02.2 +2.0
MPK IAmb IAmb 07 37 02.9
comp=Z,16nm,0.8s
HUMO **Hull Mountain** 79.03 38 P P 07 37 02.1 +1.7
HUMO IAmb IAmb 07 37 02.9
comp=Z,12nm,1.1s
O16K **Kokwok River B** 79.07 10 P P 07 37 00.3 +0.2
baz=200
PNTR **Pine Nut** 79.08 43 P P 07 37 01.9 +0.9
DSP **Deep Springs** 79.21 45 P P 07 37 02.8 +1.4
DSP IAmb IAmb 07 37 03.9
comp=Z,11nm,1.0s
YERR **Yerington** 79.25 43 IAmb IAmb 07 37 03.9
comp=Z,12nm,0.9s
N15K **Kwethluk River** 79.29 9 P P 07 37 02.0 +0.7
baz=198
LHV **Little Huntoon** 79.33 44 IAmb IAmb 07 37 04.7
comp=Z,14nm,1.0s
O17K **Koliganek Bris** 79.42 11 P P 07 37 02.0 0.0
baz=201
GRAC **Grapevine Rang** 79.42 46 IAmb IAmb 07 37 05.1
comp=Z,11nm,1.1s
NVAR **Mina Array Bea** 79.56 44 P P 07 37 04.5 +1.0
NVAR **Mina Array Bea** 79.56 44 P P 07 37 04.6 +1.1
comp=Z,5.5nm,0.8s,baz=225,slow=8.6,SNR=46
comp=Z,5.5nm,0.8s
M14K **Bethel** 79.58 8 P P 07 37 03.2 +0.4
baz=196
NV11 **Mina Array Sit** 79.66 44 IAmb IAmb 07 37 06.1
comp=Z,11nm,1.1s
M15K **Kasigluk River** 79.71 9 P P 07 37 03.8 +0.4
baz=197
N16K **Nishlik Lake** 79.79 10 P P 07 37 03.5 -0.5
baz=199
O18K **Koktuh Hills** 79.84 12 P P 07 37 03.9 -0.4
baz=202
CN2 **Changchun** 79.99 322 P P 07 37 06.3 +0.9
CN2 pmax pmax
comp=Z,10.0nm,1.0s
KVN **Kaiserville** 80.03 43 P P 07 37 06.9 +1.0
L14K **Kuka Creek** 80.06 8 P P 07 37 06.6 +1.4
baz=195
BNX **BinXian** 80.07 325 ⇑P P 07 37 06.0 +0.3
BNX pmax pmax
comp=Z,16nm,0.7s
N17K **Nushagak Hills** 80.11 11 P P 07 37 06.5 +1.0
baz=201
214A **Organ Pipe Nat** 80.16 52 P P 07 37 06.3 -0.3
baz=242
TPNV **Topopah Spring** 80.16 46 P P 07 37 06.8 +0.1
baz=239,SNR=5.7
M16K **Timber Creek** 80.28 10 P P 07 37 07.5 +1.0
baz=199
O19K **Port Alsworth** 80.33 12 P P 07 37 07.0 +0.3
baz=203
J05D **Fort Rock, OR** 80.45 39 P P 07 37 09.5 +1.5
N18K **Kilae Creek** 80.48 11 P P 07 37 07.7 +0.2
baz=202
L15K **Ungalak Mounta** 80.54 8 P P 07 37 08.8 +1.0
baz=196
BRSE **Bradley Lake S** 80.68 14 P P 07 37 08.6 0.0
baz=207
H04A **Detroit Lake** 80.72 37 IAmb IAmb 07 37 10.3
comp=Z,6.3nm,0.7s
L16K **Owhat River** 80.86 9 P P 07 37 10.1 +0.7
baz=198
S11A **Rachel** 80.86 46 IAmb IAmb 07 37 12.4
comp=Z,6.7nm,0.9s
N19K **Bonanza Creek** 80.87 12 P P 07 37 09.8 +0.2
baz=203
M17K **Holitna River** 80.89 10 P P 07 37 09.4 -0.2
baz=200
I05D **Terrebonne, OR** 81.01 38 IAmb IAmb 07 37 12.3
comp=Z,14nm,1.2s
K15K **Wolf Creek Mou** 81.13 8 P P 07 37 11.0 +0.2
baz=196
R11B **Troy Canyon, C** 81.33 45 P P 07 37 12.6 -0.1
baz=239,SNR=5.6
BMN **Battle Mountai** 81.34 43 IAmb IAmb 07 37 14.8
comp=Z,9.7nm,1.0s
L17K **Donlin** 81.44 9 P P 07 37 12.4 0.0
baz=199
WVOR **Wild Horse Val** 81.54 40 IAmb IAmb 07 37 15.8
comp=Z,14nm,1.1s
GAMB **Gambell** 81.66 3 P P 07 37 14.5 +1.1
baz=187
L18K **Granite Mounta** 81.78 10 P P 07 37 14.8 +0.6
baz=201
TUC **Tucson** 81.84 52 P P 07 37 17.0 +1.7
TUC **Tucson** 81.84 52 P P 07 37 14.4 -0.9
baz=243
M19K **Big River Lodg** 81.89 11 P P 07 37 15.3 +0.6
baz=203
I07A **Izee** 81.94 39 IAmb IAmb 07 37 17.8
comp=Z,10nm,0.9s
K17K **Iditarod** 81.99 9 P P 07 37 15.5 +0.3
baz=199
L19K **White Mountain** 82.07 11 P P 07 37 15.9 +0.2
baz=203
RC01 **Rabbit Creek A** 82.11 14 P P 07 37 15.8 -0.1
baz=208
BELA **Belgrano 2** 82.12 173 P P 07 37 16.4 +0.6
J08A **Circle Bar Ran** 82.15 40 IAmb IAmb 07 37 18.8
comp=Z,16nm,1.1s
Q12A **Willow Creek R** 82.19 45 IAmb IAmb 07 37 24.3
comp=Z,11nm,1.1s
J16K **Anvik River** 82.20 8 IAmb IAmb 07 37 18.0
comp=Z,12nm,0.8s
J16K **Anvik River** 82.20 8 P P 07 37 17.2 +1.0
baz=197
SUA **Susitna One** 82.23 13 P P 07 37 16.7 +0.1
baz=207
PWL **Port Wells** 82.23 14 P P 07 37 16.4 -0.1
PWL IAmb IAmb 07 37 16.9
comp=Z,11nm,0.9s
PWL **Port Wells** 82.23 14 P P 07 37 15.9 -0.6
baz=209
LCMT **Little Creek M** 82.27 47 P P 07 37 18.9 +1.5
LCMT IAmb IAmb 07 37 19.8
comp=Z,7.0nm,0.9s
X16A **Lo Mia Camp, P** 82.33 50 P P 07 37 19.7 +1.9
X16A IAmb IAmb 07 37 21.2
comp=Z,7.5nm,0.9s
KAIM **Kayak Island** 82.42 17 P P 07 37 16.7 -0.7
baz=213
PGC **Sidney** 82.44 33 P P 07 37 18.9 +1.1
PGC IAmb IAmb 07 37 22.9
comp=Z,20nm,1.5s
SPR3 **Spring Creek 3** 82.51 45 P P 07 37 20.2 +1.4
L20K **Farewell, AK** 82.52 11 P P 07 37 17.1 -0.8
baz=204
J17K **VABM Dome** 82.52 9 P P 07 37 18.7 +0.8
J17K IAmb IAmb 07 37 27.2
comp=Z,16nm,1.4s
J17K **VABM Dome** 82.52 9 P P 07 37 17.5 -0.4
baz=199
GLI **Glacier Island** 82.55 15 P P 07 37 17.9 -0.2
GLI **Glacier Island** 82.55 15 P P 07 37 17.4 -0.7
baz=210
KNB **Kanab** 82.57 47 IAmb IAmb 07 37 21.6
comp=Z,7.3nm,1.0s
319A **Douglas** 82.57 54 IAmb IAmb 07 37 22.2
comp=Z,12nm,1.0s
M22K **Willow** 82.62 13 P P 07 37 18.2 -0.2
baz=207
U15A **North Rim** 82.66 48 IAmb IAmb 07 37 22.4
comp=Z,13nm,0.9s
SZCU **Shurtz Canyon** 82.66 47 IAmb IAmb 07 37 22.1
comp=Z,11nm,1.3s
KNK **Knik Glacier** 82.69 14 P P 07 37 18.1 -0.7
baz=209
PMR **Palmer** 82.70 14 P P 07 37 18.6 -0.1
PMR IAmb IAmb 07 37 19.3
comp=Z,14nm,1.4s
PMR **Palmer** 82.70 14 P P 07 37 18.4 -0.4
baz=208
WUAZ **Wupatki** 82.89 49 IAmb IAmb 07 37 23.8
comp=Z,7.3nm,0.9s
WUAZ **Wupatki** 82.89 49 P P 07 37 20.2 -0.4
baz=242
G08A **Pilot Rock** 82.94 38 P P 07 37 22.0 +1.4
G08A IAmb IAmb 07 37 22.6
comp=Z,17nm,1.3s
J18K **Innoko River** 82.95 10 P P 07 37 20.2 +0.1
baz=201,SNR=6.6
LTY **Liberty** 83.10 36 P P 07 37 22.1 +0.8
U33K **Whale Pass** 83.10 24 P P 07 37 21.3 +0.4
baz=223
V35K **Ketchikan** 83.12 25 P P 07 37 21.1 0.0
baz=224
PKCU **Pink Cliffs** 83.13 47 IAmb IAmb 07 37 25.3
comp=Z,14nm,1.0s
E07A **Sunnyside** 83.15 36 IAmb IAmb 07 37 23.6
comp=Z,11nm,1.0s
CUT **Chulitna** 83.17 13 P P 07 37 20.7 -0.4
baz=207
M23K **Glacier View** 83.20 14 P P 07 37 20.8 -0.5
baz=209
HAWA **Hanford** 83.23 37 IAmb IAmb 07 37 23.9
comp=Z,11nm,1.0s
BMRM **Bremner River** 83.26 16 P P 07 37 22.0 +0.3
BMRM **Bremner River** 83.26 16 P P 07 37 21.6 -0.1
baz=212
K20K **Telida** 83.29 11 P P 07 37 22.1 +0.3
baz=203
H16K **Elim** 83.30 7 P P 07 37 22.0 +0.2
baz=196
SCM **Sheep Creek Mo** 83.32 14 P P 07 37 22.6 +0.6
SCM **Sheep Creek Mo** 83.32 14 P P 07 37 22.5 +0.4
baz=210,SNR=6.2
S31K **Pelican** 83.36 21 P P 07 37 22.8 +0.7
S31K IAmb IAmb 07 37 24.0
comp=Z,7.7nm,0.9s
S31K **Pelican** 83.36 21 P P 07 37 22.9 +0.8
baz=220
KLU **Klutina** 83.37 15 P P 07 37 22.2 0.0
baz=211
G15K **Niukluk** 83.45 6 P P 07 37 22.1 -0.3
baz=194
CRQE **Cirque** 83.48 17 P P 07 37 22.3 -0.6
baz=214
MTPU **Mount Pierson** 83.51 47 IAmb IAmb 07 37 27.0
comp=Z,7.9nm,1.0s
E08A **Dider Farm, El** 83.56 37 IAmb IAmb 07 37 24.9
comp=Z,5.3nm,0.8s
S32K **Killisnoo** 83.57 22 P P 07 37 23.1 -0.1
baz=222
J19K **Poorman** 83.62 10 P P 07 37 24.1 +0.7
J19K **Poorman** 83.62 10 P P 07 37 23.3 -0.1
baz=202
WRAK **Wrangell Islan** 83.62 24 P P 07 37 23.5 +0.1
baz=224
PNL **Peninsula** 83.67 19 P P 07 37 23.8 +0.1
baz=217
PINM **Pinnacle** 83.75 18 P P 07 37 24.4 +0.3
baz=216
VRDI **Verde Repeater** 83.78 16 IAmb IAmb 07 37 25.4
comp=Z,11nm,1.2s
N25K **Chitina, Valde** 83.80 16 P P 07 37 24.1 -0.3
baz=212,SNR=8.0
MFID **Camas Ranch** 83.81 41 IAmb IAmb 07 37 27.0
comp=Z,9.1nm,1.1s
M24K **Tolsona, Glenn** 83.84 15 P P 07 37 24.5 0.0
baz=211
GLB **Gilahina Butte** 83.86 16 IAmb IAmb 07 37 25.5
comp=Z,7.9nm,0.7s
WAT6 **Susitna Watana** 83.88 14 P P 07 37 24.3 -0.6
baz=209,SNR=8.1
WAT1 **Susitna Watana** 83.92 13 P P 07 37 24.5 -0.4
baz=209
D08A **Wollman Farm,** 83.96 36 IAmb IAmb 07 37 27.5
comp=Z,8.1nm,0.9s
G16K **Koyuk River** 84.02 7 P P 07 37 25.5 +0.2
baz=196
MCARA **McCarthy VSAT** 84.02 16 P P 07 37 25.2 -0.2
baz=214
J20K **Nowinta River** 84.04 10 P P 07 37 26.0 +0.6
baz=203,SNR=5.1
DUG **Dugway, Tooele** 84.12 45 P P 07 37 26.2 -0.4
baz=241
CTG **Chitna Glacier** 84.14 17 P P 07 37 26.0 -0.2
baz=215,SNR=5.8
CTGM **Chitina Glacie** 84.14 17 IAmb IAmb 07 37 27.3
comp=Z,9.0nm,0.9s
P29M **Windy Craggy** 84.15 19 IAmb IAmb 07 37 27.9
comp=Z,10.0nm,0.9s
P29M **Windy Craggy** 84.15 19 P P 07 37 26.3 +0.2
baz=219,SNR=6.1
R32K **Eaglecrest** 84.19 22 P P 07 37 26.3 0.0
baz=222
121A **Cookes Peak, D** 84.22 53 P P 07 37 26.2 -1.1
baz=244
O28M **Mount Upton** 84.31 18 P P 07 37 27.6 +0.4
baz=216,SNR=7.1
G17K **Kiwalik Mounta** 84.32 7 P P 07 37 27.3 +0.5
baz=197
HARP **HAARP** 84.33 15 P P 07 37 27.4 +0.5
baz=212
DHY **Denali Highway** 84.40 14 IAmb IAmb 07 37 27.5
comp=Z,5.2nm,0.8s
DHY **Denali Highway** 84.40 14 P P 07 37 27.4 0.0
baz=210
O29M **Mount Kennedy** 84.42 19 P P 07 37 26.8 -0.7
baz=218
PLBC **Pleasant Camp** 84.46 20 P P 07 37 27.4 -0.1
baz=220,SNR=6.7
B08A **Colville Reser** 84.47 35 IAmb IAmb 07 37 29.1
comp=Z,6.2nm,0.8s
BPAW **Bear Paw Mtn.** 84.55 12 P P 07 37 27.8 -0.2
baz=206
MCK **McKinley** 84.63 13 P P 07 37 28.2 -0.1
baz=208,SNR=5.5
C09A **Chrisman Ranch** 84.74 36 IAmb IAmb 07 37 30.9
comp=Z,8.6nm,1.2s
PAX **Paxson** 84.75 15 P P 07 37 29.1 0.0
baz=211
HLID **Hailey** 84.77 41 IAmb IAmb 07 37 32.1
comp=Z,5.3nm,0.9s
HLID **Hailey** 84.77 41 P P 07 37 29.3 -0.5
baz=239,SNR=11
P30M **Million Dollar** 84.78 19 P P 07 37 29.4 +0.1
baz=219
SKAG **Skagway** 84.81 21 IAmb IAmb 07 37 31.6
comp=Z,13nm,1.3s
SKAG **Skagway** 84.81 21 P P 07 37 29.7 +0.4
baz=221
T35M **Bob Quinn** 84.84 24 P P 07 37 29.3 -0.2
baz=226
YUK8 **Steele Glacier** 84.85 18 P P 07 37 30.2 +0.4
baz=217
M26K **Nabesna, AK** 84.88 16 IAmb IAmb 07 37 30.9
comp=Z,12nm,0.9s
M26K **Nabesna, AK** 84.88 16 P P 07 37 30.1 +0.4
baz=214,SNR=10
H19K **Roundabout Mou** 84.92 9 P P 07 37 30.6 +0.9
baz=201
YUK3 **Moose Creek** 85.05 17 P P 07 37 30.8 +0.1
baz=216
H20K **Anotleneega Mo** 85.13 10 P P 07 37 31.6 +0.8
baz=202
M27K **Edge Creek, AK** 85.14 16 IAmb IAmb 07 37 32.6
comp=Z,11nm,1.1s
M27K **Edge Creek, AK** 85.14 16 P P 07 37 31.9 +0.9
baz=215,SNR=6.8
S34M **Telegraph Cree** 85.16 23 P P 07 37 32.3 +1.3
baz=225,SNR=14
L26K **Log Cabin Wild** 85.31 15 IAmb IAmb 07 37 32.9
comp=Z,7.7nm,1.1s
L26K **Log Cabin Wild** 85.31 15 P P 07 37 32.1 +0.4
baz=213
I21K **Tanana** 85.34 11 IAmb IAmb 07 37 32.7
comp=Z,4.7nm,0.8s
I21K **Tanana** 85.34 11 P P 07 37 32.1 +0.3
baz=205
NEA2 **Nenana** 85.37 12 P P 07 37 32.2 +0.3
baz=208
K24K **Donnelly Dome** 85.39 14 P P 07 37 32.4 +0.3
baz=211
G19K **Purcell Mounta** 85.41 9 P P 07 37 32.6 +0.6
baz=200
MLY **Manley** 85.43 11 P P 07 37 32.4 +0.1
baz=206
P32M **Atlin** 85.45 21 P P 07 37 32.9 +0.4
baz=222
WRH **Wood River Hil** 85.46 13 IAmb IAmb 07 37 32.1
comp=Z,6.5nm,0.9s
Q32M **Nakina River** 85.49 22 P P 07 37 32.7 -0.2
baz=224,SNR=6.6
F18K **Selawik** 85.50 7 P P 07 37 33.0 +0.6
baz=198
TCUT **Toone Canyon** 85.50 44 IAmb IAmb 07 37 35.0
comp=Z,7.6nm,1.1s
RIDG **Independent Ri** 85.55 14 P P 07 37 32.8 -0.1
baz=212
O30N **Mendenhall** 85.56 19 P P 07 37 34.0 +1.0
baz=220,SNR=5.0
H21K **Melozitna Rive** 85.63 10 P P 07 37 34.1 +1.0
baz=204
NEW **Newport** 85.64 36 P P 07 37 33.9 +0.2
baz=237
HDA **Harding Lake** 85.65 13 IAmb IAmb 07 37 33.8
comp=Z,6.0nm,0.8s
HDA **Harding Lake** 85.65 13 P P 07 37 34.0 +0.7
baz=210,SNR=5.2
CCB **Clear Creek Bu** 85.68 13 IAmb IAmb 07 37 34.8
comp=Z,6.5nm,0.8s
E17K **Hotham Inlet** 85.71 6 P P 07 37 34.4 +0.9
baz=196
MNTX **Cornudas Mount** 85.72 55 P P 07 37 34.1 -0.3
baz=246
MVCO **Mesa Verde** 85.72 49 P P 07 37 34.2 -0.4
baz=244
L27K **Beaver Creek,** 85.73 16 P P 07 37 34.4 +0.7
baz=215
N30M **Aishikik Lake** 85.78 19 P P 07 37 35.0 +0.9
baz=219
WHY **Whitehorse** 85.86 20 P P 07 37 34.6 +0.1
baz=221
MDM **Murphy Dome** 85.86 12 IAmb IAmb 07 37 34.4
comp=Z,8.2nm,1.1s
COLA **College** 85.87 13 P P 07 37 33.9 -0.3
COLA IAmb IAmb 07 37 35.5
comp=Z,8.9nm,0.9s
COLA **College** 85.87 13 P P 07 37 33.8 -0.5
baz=209
DLBC **Dease Lake** 85.94 23 IAmb IAmb 07 37 36.7
comp=Z,5.2nm,0.9s
DLBC **Dease Lake** 85.94 23 P P 07 37 35.2 +0.3
baz=226
SCRK **Sand Creek** 85.96 15 P P 07 37 34.5 -0.4
baz=213
F19K **Shaleruckik Mo** 85.96 8 P P 07 37 34.4 -0.2
baz=200
IL31 85.98 13 IAmb IAmb 07 37 35.0
comp=Z,4.7nm,0.8s
ILAR **Eielson Array** 85.98 13 P P 07 37 34.4 -0.5
ILAR **Eielson Array** 85.98 13 P P 07 37 34.0 -0.9
comp=Z,2.6nm,0.8s,baz=224,slow=4.8,SNR=30
comp=Z,2.6nm,0.8s
H22K **Ishtalitna Cre** 86.09 11 P P 07 37 34.9 -0.4
baz=206
TX31 **Lajitas Ar. Si** 86.14 58 IAmb IAmb 07 37 39.9
comp=Z,10nm,1.1s
TXAR **Lajitas Array** 86.14 58 P P 07 37 38.1 +1.6
TXAR **Lajitas Array** 86.14 58 P P 07 37 38.7 +2.1
comp=Z,4.3nm,0.8s,baz=220,slow=5.9,SNR=52
comp=Z,4.3nm,0.8s
M29M **Somme Creek** 86.15 17 IAmb IAmb 07 37 38.3
comp=Z,4.6nm,0.8s
M29M **Somme Creek** 86.15 17 P P 07 37 35.7 -0.1
baz=218,SNR=6.1
E18K **Tukpahlearik C** 86.17 7 P P 07 37 35.7 0.0
baz=197
J25K **Salcha River,** 86.18 14 P P 07 37 35.5 -0.3
baz=211,SNR=5.4
D17K **Noatak River** 86.18 6 P P 07 37 35.9 +0.3
baz=195
XAN **Xi'an** 86.20 307 ⇓P P 07 37 38.4 +1.8
XAN pmax pmax
comp=Z,23nm,1.0s
N31M **Braeburn, Yuko** 86.20 19 P P 07 37 36.1 +0.1
baz=220
P33M **Teslin, Yukon** 86.22 21 P P 07 37 36.5 +0.3
baz=223
ANMO **Albuquerque** 86.24 52 P P 07 37 37.6 +0.6
ANMO **Albuquerque** 86.24 52 P P 07 37 37.3 +0.2
baz=245
R33M **Jennings River** 86.27 22 IAmb IAmb 07 37 38.6
comp=Z,10nm,1.2s
R33M **Jennings River** 86.27 22 P P 07 37 36.6 +0.1
baz=225,SNR=6.6
G21K **Allakaket** 86.30 10 IAmb IAmb 07 37 37.2
comp=Z,5.7nm,0.8s
G21K **Allakaket** 86.30 10 P P 07 37 36.2 -0.1
baz=204
H23K **Yukon River** 86.37 12 P P 07 37 36.5 -0.2
baz=208
F20K **Avaraart Lake** 86.45 9 P P 07 37 37.2 +0.2
baz=202
K27K **Chicken** 86.47 15 IAmb IAmb 07 37 38.9
comp=Z,8.3nm,1.2s
K27K **Chicken** 86.47 15 P P 07 37 36.8 -0.4
baz=214
J26L **Joseph Creek** 86.50 14 IAmb IAmb 07 37 38.4
comp=Z,5.7nm,0.8s
J26L **Joseph Creek** 86.50 14 P P 07 37 37.6 +0.2
baz=213,SNR=6.6
C16K **Lisburne Hills** 86.54 5 P P 07 37 37.3 -0.1
baz=193
ALPN **Alpine** 86.57 57 IAmb IAmb 07 37 41.5
comp=Z,14nm,1.4s
E19K **Redstone River** 86.62 8 P P 07 37 38.0 +0.2
baz=200
H24K **Noodor Dome** 86.71 12 P P 07 37 37.5 -0.8
baz=209
DLMT **Dillon** 86.79 40 IAmb IAmb 07 37 41.5
comp=Z,7.5nm,0.9s
N32M **Quiet Lake** 86.82 20 IAmb IAmb 07 37 40.8
comp=Z,11nm,1.2s
N32M **Quiet Lake** 86.82 20 P P 07 37 38.7 -0.2
baz=223
F21K **Alatna River** 86.95 10 P P 07 37 39.5 +0.1
baz=204
G22K **Bettles** 87.00 10 P P 07 37 39.9 +0.3
baz=206
SNOW **Snow King Moun** 87.03 42 IAmb IAmb 07 37 43.0
comp=Z,8.3nm,1.0s
G23K **Bananza Creek** 87.07 11 P P 07 37 40.7 +0.7
baz=207
S22A **4UR Ranch, Cre** 87.15 49 P P 07 37 42.4 +1.0
baz=245
M31M **Drury Creek, Y** 87.18 19 P P 07 37 41.0 +0.4
baz=222
DAWY **Dawson** 87.19 16 P P 07 37 41.0 +0.5
baz=217
HHC **Hu-ho-hao-te** 87.22 315 *e*P P 07 37 43.3 +1.9
HHC pmax pmax
comp=Z,26nm,0.5s
HHC pmax pmax
comp=Z,160nm,4.5s
I26K **Coal Creek Min** 87.27 14 P P 07 37 40.8 -0.1
baz=214
EGAK **Eagle** 87.31 15 P P 07 37 41.4 +0.3
baz=215
F22K **John River** 87.42 10 P P 07 37 42.2 +0.6
baz=205
BW06 **Boulder Array** 87.49 43 P P 07 37 42.9 +0.1
baz=243,SNR=6.1
PDAR **Pinedale Array** 87.49 43 P P 07 37 43.1 +0.3
PDAR **Pinedale Array** 87.49 43 P P 07 37 43.4 +0.6
comp=Z,2.8nm,0.8s,baz=218,slow=3.1,SNR=25
comp=Z,2.8nm,0.8s
D19K **Kuna River** 87.49 7 P P 07 37 41.7 -0.2
baz=199
H25L **Birch Creek** 87.50 13 P P 07 37 42.1 +0.1
baz=211
BOZ **Bozeman (W)** 87.50 40 IAmb IAmb 07 37 44.9
comp=Z,5.6nm,1.2s
BOZ **Bozeman (W)** 87.50 40 P P 07 37 43.4 +0.8
baz=241,SNR=6.5
COLD **Coldfoot** 87.50 11 P P 07 37 42.5 +0.6
baz=207,SNR=5.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| E20K | Nigu River | 87.52 | 8 | P | | P | 07 37 42.5 | +0.4 |
| | baz=201 | | | | | | | |
| K29M | Barlow Dome | 87.52 | 17 | P | | P | 07 37 41.7 | -0.6 |
| | baz=219 | | | | | | | |
| G24K | Hadweenzic Riv | 87.54 | 12 | P | | P | 07 37 41.3 | -0.9 |
| | baz=209 | | | | | | | |
| H17A | Grant Village | 87.59 | 42 | P | | P | 07 37 44.6 | +1.4 |
| | baz=242 | | | | | | | |
| SAND | Sanderson | 87.62 | 58 | IAmb | | IAmb | 07 37 45.8 | |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| G25K | Bearman Lake | 87.87 | 12 | P | | P | 07 37 44.1 | +0.5 |
| | baz=211 | | | | | | | |
| E22K | Anaktuvuk Pass | 88.05 | 10 | P | | P | 07 37 44.6 | +0.1 |
| | baz=205 | | | | | | | |
| TOAD | Toad River Com | 88.08 | 25 | P | | P | 07 37 45.3 | +0.5 |
| | baz=230 | | | | | | | |
| LIRD | Liard River Hi | 88.10 | 24 | P | | P | 07 37 45.4 | +0.5 |
| | baz=229 | | | | | | | |
| SDCO | Great Sand Dun | 88.11 | 49 | P | | P | 07 37 45.3 | -0.5 |
| | baz=246 | | | | | | | |
| I28M | Miner Creek | 88.16 | 15 | P | | P | 07 37 45.8 | +0.6 |
| | baz=216 | | | | | | | |
| F24K | Squaw Lake | 88.18 | 11 | P | | P | 07 37 45.9 | +0.8 |
| | baz=209 | | | | | | | |
| E23K | Chandalar | 88.35 | 10 | P | | P | 07 37 47.3 | +1.3 |
| | baz=207 | | | | | | | |
| J30M | Hart River | 88.42 | 17 | P | | P | 07 37 46.9 | +0.4 |
| | baz=220 | | | | | | | |
| I29M | Ogilvie Camp, | 88.50 | 16 | P | | P | 07 37 46.4 | -0.3 |
| | baz=218 | | | | | | | |
| G26K | Porcupine Rive | 88.51 | 13 | P | | P | 07 37 47.5 | +0.8 |
| | baz=213,SNR=7.2 | | | | | | | |
| C21K | Knifeblade Rid | 88.55 | 8 | P | | P | 07 37 47.3 | +0.5 |
| | baz=203 | | | | | | | |
| E24K | Your Creek | 88.56 | 11 | P | | P | 07 37 47.3 | +0.4 |
| | baz=208 | | | | | | | |
| D22K | Ayikyak River | 88.59 | 9 | P | | P | 07 37 47.3 | +0.2 |
| | baz=204 | | | | | | | |
| T25A | Trinidad | 88.65 | 50 | P | | P | 07 37 47.5 | -0.8 |
| | baz=246 | | | | | | | |
| F25K | Christian Rive | 88.68 | 12 | P | | P | 07 37 47.8 | +0.3 |
| | baz=211 | | | | | | | |
| TGTN | Hyland Airport | 88.72 | 22 | P | | P | 07 37 49.0 | +1.2 |
| | baz=227 | | | | | | | |
| RLMT | Red Lodge | 88.75 | 41 | IAmb | | IAmb | 07 37 51.0 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| RLMT | Red Lodge | 88.75 | 41 | P | | P | 07 37 48.4 | -0.1 |
| | baz=243 | | | | | | | |
| BMAR | Burnt Mountain | 88.75 | 12 | P | | P | 07 37 48.5 | +0.6 |
| OZNA | Ozona | 88.78 | 57 | IAmb | | IAmb | 07 37 51.0 | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| CMAR | Chiang Mai Arr | 88.78 | 290 | P | | P | 07 37 49.3 | +0.3 |
| CMAR | Chiang Mai Arr | 88.78 | 290 | P | | P | 07 37 50.6 | +1.6 |
| | comp=Z,1.4nm,0.3s,baz=129,slow=2.7,SNR=14 | | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | | |
| G27K | Doyon Strip | 88.86 | 14 | P | | P | 07 37 48.1 | -0.2 |
| | baz=215 | | | | | | | |
| TOLK | Toolik Lake Re | 88.87 | 10 | P | | P | 07 37 48.4 | 0.0 |
| | baz=207 | | | | | | | |
| I30M | Mount Dempster | 88.90 | 16 | P | | P | 07 37 48.9 | +0.2 |
| | baz=220 | | | | | | | |
| D23K | Nanushuk River | 88.98 | 10 | P | | P | 07 37 49.2 | +0.4 |
| | baz=206 | | | | | | | |
| F26K | Sheenjek River | 89.07 | 12 | P | | P | 07 37 49.1 | -0.2 |
| | baz=212 | | | | | | | |
| PZH | PanZhiHua | 89.07 | 298 | PKP | | | 07 40 18.4 | |
| PZH | PanZhiHua | 89.07 | 298 | P | | P | 07 37 51.8 | +1.4 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| ELIB | Princess Elisa | 89.08 | 187 | *d*P | | P | 07 37 49.9 | +0.3 |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| N23A | Red Feather La | 89.10 | 46 | P | | P | 07 37 50.9 | +0.5 |
| | baz=245 | | | | | | | |
| H29M | Whitestone | 89.17 | 15 | P | | P | 07 37 49.4 | -0.3 |
| | baz=218 | | | | | | | |
| JCT | Junction City | 89.68 | 58 | P | | P | 07 37 51.7 | -1.3 |
| | baz=249 | | | | | | | |
| EPYK | Eagle Plains | 89.70 | 16 | P | | P | 07 37 52.1 | -0.1 |
| | baz=219 | | | | | | | |
| C23K | Itkillik River | 89.78 | 9 | P | | P | 07 37 52.1 | -0.3 |
| | baz=206 | | | | | | | |
| B22K | Teshekpuk Lake | 89.83 | 8 | P | | P | 07 37 52.1 | -0.5 |
| | baz=204 | | | | | | | |
| TROLL | Troll, Antarti | 90.24 | 180 | ⇑P | | P | 07 37 55.1 | +0.1 |
| | comp=Z,68nm,0.4s | | | | | | | |
| G30M | tAoh Zraii Nji | 90.30 | 15 | P | | P | 07 37 55.3 | +0.3 |
| | baz=220,SNR=7.0 | | | | | | | |
| SNAA | Sanae | 90.53 | 179 | ⇑P | | P | 07 37 56.2 | 0.0 |
| | comp=Z,17nm,0.5s | | | | | | | |
| SNAA | Sanae | 90.53 | 179 | P | | P | 07 37 56.2 | 0.0 |
| | comp=Z,1.6nm,0.9s,baz=183,slow=6.1,SNR=4.4 | | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| VNA3 | Neumayer Olymp | 90.68 | 176 | ⇑P | | P | 07 37 57.3 | +0.5 |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| G31M | Satah River | 90.76 | 16 | P | | P | 07 37 57.2 | +0.2 |
| | baz=222 | | | | | | | |
| E28M | Babbage River | 90.80 | 13 | P | | P | 07 37 57.3 | 0.0 |
| | baz=217 | | | | | | | |
| VNA2 | Neumayer--Watz | 91.12 | 177 | ⇑P | | P | 07 38 00.4 | +1.5 |
| | comp=Z,3.0nm,0.8s,baz=178,slow=2.5 | | | | | | | |
| F31M | Tsiigehtchic | 91.28 | 16 | P | | P | 07 37 59.8 | +0.3 |
| | baz=222 | | | | | | | |
| LAO | LASA Array | 91.35 | 41 | P | | P | 07 38 00.3 | -0.1 |
| | baz=245 | | | | | | | |
| VNA1 | Neumayer--Stat | 91.35 | 177 | ⇑P | | P | 07 37 57.8 | -2.1 |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| INK | Inuvik | 91.98 | 15 | P | | P | 07 38 02.1 | -0.5 |
| | baz=222 | | | | | | | |
| SONM | Songino Array | 93.52 | 319 | P | | P | 07 38 10.3 | 0.0 |
| | comp=Z,0.5nm,0.5s,baz=134,slow=4.2,SNR=2.3 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| ZALV | Zalesovo Beam | 108.20 | 322 | PKiKP | | PKiKP | 07 43 17.7 | -0.8 |
| | comp=Z,0.9nm,0.5s,baz=97,slow=3.8,SNR=2.8 | | | | | | | |
| MKAR | Makanchi Array | 109.09 | 314 | PKiKP | | PKiKP | 07 43 19.4 | -1.0 |
| | comp=Z,0.8nm,0.5s,baz=167,slow=0.5,SNR=12 | | | | | | | |
| KURBB | Kurchatov Arra | 111.84 | 318 | PKiKP | | PKiKP | 07 43 24.5 | -1.0 |
| | comp=Z,1.3nm,0.6s,baz=92,slow=1.8,SNR=13 | | | | | | | |
| BVAR | Borovoye Array | 116.81 | 321 | PKP | | PKPdf | 07 43 34.9 | -0.2 |
| | comp=Z,1.1nm,0.5s,baz=116,slow=1.0,SNR=13 | | | | | | | |
| SPITS | Spitsbergen Ar | 119.33 | 357 | PKP | | PKPdf | 07 43 37.9 | -1.3 |
| | comp=Z,20nm,1.0s,baz=349,slow=4.4,SNR=5.4 | | | | | | | |
| ARCES | ARCESS Array B | 126.36 | 350 | PKP | | PKPdf | 07 43 52.8 | -0.1 |
| | comp=Z,1.5nm,0.7s,baz=45,slow=1.4,SNR=6.8 | | | | | | | |
| FINES | FINESS Array B | 133.22 | 344 | PKP | | PKPdf | 07 44 05.1 | -0.9 |
| | comp=Z,1.8nm,0.7s,baz=48,slow=2.3,SNR=7.1 | | | | | | | |
| NOA | NORSAR Array B | 136.43 | 353 | PKP | | PKPdf | 07 44 12.8 | +0.7 |
| | comp=Z,0.4nm,0.7s,baz=7.0,slow=4.0,SNR=1.2 | | | | | | | |
| HFS | Hagfors | 136.98 | 351 | PKhKP | | PKPpre | 07 44 02.5 | |
| | comp=Z,1.7nm,0.8s,baz=119,slow=5.4,SNR=4.3 | | | | | | | |
| EKA | Eskdalemuir Ar | 142.54 | 4 | PKhKP | | PKPpre | 07 44 18.9 | |
| | comp=Z,1.4nm,0.6s,baz=328,slow=3.0,SNR=4.2 | | | | | | | |
| SORM | Soroca | 142.78 | 330 | ⇑P | | PKPdf | 07 44 21.4 | -2.5 |
| BNN | Bunyan | 143.60 | 312 | PKPdf | | PKPbc | 07 44 25.0 | +0.3 |
| VLDR | Vladesti | 144.50 | 327 | ⇑P | | PKPab | 07 44 28.7 | +1.1 |
| TLCR | | 144.55 | 326 | ⇑P | | PKPab | 07 44 28.1 | +0.3 |
| BURAR | Bucovina Array | 144.61 | 332 | PKPdf | | PKPab | 07 44 28.3 | +0.2 |
| BURAR | Bucovina Array | 144.61 | 332 | ⇑P | | PKPab | 07 44 29.3 | +1.2 |
| GHRR | | 144.69 | 328 | ⇓P | | PKPab | 07 44 29.2 | +0.8 |
| BIZ | Bicaz | 144.70 | 330 | ⇓P | | PKPab | 07 44 29.2 | +0.9 |
| BR131 | Keskin Array S | 144.74 | 315 | PKPdf | | PKPbc | 07 44 28.0 | -0.3 |
| BRTR | Keskin Array B | 144.74 | 315 | PKPdf | | PKPbc | 07 44 27.9 | -0.4 |
| BRTR | Keskin Array B | 144.74 | 315 | PKP | | PKPab | 07 44 28.4 | -0.5 |
| | comp=Z,7.7nm,0.8s,baz=54,slow=2.5,SNR=34 | | | | | | | |
| TESR | Tescani | 144.75 | 329 | ⇓P | | PKPab | 07 44 28.5 | -0.1 |
| KOLS | Kolonicke sedl | 144.81 | 336 | *e*PKP | | PKPab | 07 44 28.8 | +0.1 |
| KIRS | Kirsehir-Merke | 144.82 | 314 | ⇑P | | PKPab | 07 44 29.5 | +0.3 |
| SLCR | Slobozia Conac | 144.83 | 327 | ⇓P | | PKPab | 07 44 29.9 | +1.0 |
| SCHL | Schela | 144.86 | 327 | ⇓P | | PKPdf | 07 44 22.5 | -5.2 |
| IZVR | Izvoarele | 144.86 | 327 | ⇑P | | PKPdf | 07 44 27.4 | -0.2 |
| TUDR | | 144.88 | 327 | ⇑P | | PKPab | 07 44 29.4 | +0.4 |
| CFR | Carcaliu | 144.92 | 326 | ⇑P | | PKPab | 07 44 29.6 | +0.3 |
| PANC | Panciu | 144.95 | 328 | ⇑P | | PKPab | 07 44 30.3 | +1.0 |
| TPGR | Topolog | 144.98 | 326 | ⇓P | | PKPab | 07 44 29.9 | +0.3 |
| ONER | Baraj Valea Uz | 145.00 | 329 | ⇑P | | PKPab | 07 44 29.9 | +0.3 |
| CRVS | Cervenica-Dubn | 145.15 | 337 | *e*PKP | | PKPab | 07 44 29.8 | -0.2 |
| VRI | Vrincioaia | 145.17 | 329 | ⇑P | | PKPab | 07 44 30.1 | -0.2 |
| PLOR | Plostina | 145.22 | 329 | ⇓P | | PKPab | 07 44 30.2 | -0.2 |
| SPBR | Spulber | 145.24 | 328 | ⇑P | | PKPab | 07 44 30.8 | +0.3 |
| BMR | Baia Mare | 145.32 | 334 | ⇑P | | PKPab | 07 44 30.3 | -0.4 |
| HARR | Harsova | 145.35 | 326 | ⇑P | | PKPab | 07 44 31.1 | +0.1 |
| TURR | Turia | 145.38 | 329 | ⇑P | | PKPab | 07 44 30.5 | -0.6 |
| TLBR | Topalu | 145.39 | 326 | ⇓P | | PKPab | 07 44 31.1 | 0.0 |
| ARCR | ARCALIA | 145.40 | 332 | ⇓P | | PKPab | 07 44 31.2 | +0.1 |
| OSTC | Ostas | 145.42 | 343 | ⇑*e*PKP | | PKPab | 07 44 31.3 | +0.3 |
| CHVC | Chvalec | 145.43 | 344 | ⇑*e*PKP | | PKPab | 07 44 30.8 | -0.3 |
| COVR | Voineasa-Covas | 145.44 | 329 | ⇑P | | PKPab | 07 44 30.8 | -0.5 |
| OZUR | | 145.46 | 330 | ⇓P | | PKPab | 07 44 31.9 | +0.5 |
| CLL | Collm | 145.50 | 347 | *i* PKPbc | | PKPbc | 07 44 30.2 | +0.3 |
| | comp=Z,24nm,1.0s | | | | | | | |
| DPC | Dobruska-Polom | 145.57 | 343 | ⇑*e*PKP | | PKPab | 07 44 31.3 | -0.4 |
| LANS | Liptovska Anna | 145.65 | 339 | *e*PKP | | PKPab | 07 44 32.0 | -0.1 |
| KRLC | Kraliky | 145.69 | 342 | ⇑*e*PKP | | PKPab | 07 44 31.4 | -0.8 |
| BRG | Berggiesshubel | 145.70 | 346 | *e*PKP | | PKPab | 07 44 31.4 | -0.7 |
| BRG | | | | | Amp | | 07 44 32.8 | |
| | comp=Z,9.6nm,0.9s | | | | | | | |
| MORC | Moravsky Berou | 145.73 | 341 | *e*PKP | | PKPbc | 07 44 31.3 | +0.6 |
| MORC | Moravsky Berou | 145.73 | 341 | ⇑P | | PKPab | 07 44 32.0 | -0.3 |
| DOPR | Dopca | 145.75 | 330 | ⇑P | | PKPab | 07 44 32.7 | +0.2 |
| ISR | Istrita | 145.78 | 328 | ⇑P | | PKPab | 07 44 32.5 | -0.2 |
| MLR | Muntele Rosu | 145.82 | 329 | ⇑P | | PKPab | 07 44 32.1 | -0.8 |
| PVCC | Panska Ves | 145.87 | 345 | ⇑*e*PKP | | PKPab | 07 44 32.1 | -0.7 |
| MESR | Meseseni | 145.96 | 333 | ⇑P | | PKPab | 07 44 32.8 | -0.4 |
| CJR | Cluj-Napoca | 146.01 | 332 | ⇑P | | PKPab | 07 44 32.6 | -0.9 |
| MMAI | Mount Meron Ar | 146.07 | 303 | PKPbc | | PKPbc | 07 44 33.0 | +0.8 |
| | comp=Z,10nm,0.6s,baz=73,slow=5.0,SNR=10 | | | | | | | |
| VOIR | | 146.30 | 329 | ⇑P | | PKPbc | 07 44 32.6 | +0.2 |
| DRGR | | 146.34 | 333 | ⇓P | | PKPbc | 07 44 33.3 | +0.8 |
| PRU | Pruhonice | 146.37 | 345 | ⇑*e*PKP | | PKPbc | 07 44 33.2 | +0.8 |
| GOPC | GO Pecny, Ondr | 146.38 | 344 | ⇑*e*PKP | | PKPbc | 07 44 33.2 | +0.7 |
| VRAC | Vranov | 146.43 | 342 | ⇑P | | PKPbc | 07 44 33.5 | +0.9 |
| VYHS | Vyhne | 146.43 | 339 | *e*PKP | | PKiKP | 07 44 33.6 | -1.3 |
| JAVC | Velka Javorina | 146.50 | 340 | *e*PKP | | PKiKP | 07 44 34.5 | -0.6 |
| PSZ | Piszkesteto | 146.54 | 337 | ⇑P | | PKiKP | 07 44 34.4 | -0.8 |
| ARR | Arges | 146.55 | 330 | ⇓P | | PKiKP | 07 44 35.0 | -0.3 |
| KRUC | Moravsky | 146.71 | 342 | *e*PKP | | PKPbc | 07 44 34.0 | +0.6 |
| SRO | Srobarova | 147.20 | 339 | *e*PKP | | PKiKP | 07 44 35.8 | -0.6 |
| SIRR | Siria | 147.20 | 334 | ⇓P | | PKiKP | 07 44 36.1 | -0.4 |
| MEM | Membach | 147.24 | 355 | *d*PKP | | PKPbc | 07 44 34.9 | +0.2 |
| BTNL | Ternell | 147.25 | 354 | *d*PKP | | PKiKP | 07 44 35.5 | -1.0 |
| BSTI | Sart Tilman | 147.30 | 355 | *d*PKP | | PKiKP | 07 44 35.5 | -1.0 |
| GRF | Grafenberg Arr | 147.39 | 348 | *e*PKP | | PKPbc | 07 44 35.8 | +0.6 |
| | baz=18,slow=2.0 | | | | | | | |
| GZR | Gura Zlata | 147.39 | 332 | ⇑P | | PKPbc | 07 44 35.5 | +0.1 |
| SURR | Surduc | 147.40 | 333 | ⇑P | | PKiKP | 07 44 36.3 | -0.7 |
| KHC | Kasperske Hory | 147.41 | 345 | *e*PKPDF | | PKPdf | 07 44 33.2 | +1.3 |
| KHC | | | | ⇑*e*PKP | | PKiKP | 07 44 36.0 | -0.9 |
| KHC | | | | *e*PKPAB | | PKPab | 07 44 39.4 | +0.3 |
| BCLA | Clavier | 147.48 | 355 | *d*PKP | | PKPab | 07 44 38.5 | -0.8 |
| CKRC | Cesky Krumlov | 147.51 | 344 | ⇑*e*PKP | | PKiKP | 07 44 36.5 | -0.6 |
| ELND | Elena | 147.64 | 325 | ⇑P | | PKPbc | 07 44 34.9 | -1.1 |
| BMRD | Maredsous | 147.64 | 356 | *d*PKP | | PKPbc | 07 44 36.1 | +0.4 |
| GERES | GERESS Array B | 147.64 | 345 | PKPbc | | PKPbc | 07 44 36.5 | +0.5 |
| | comp=Z,6.2nm,0.6s,baz=166,slow=6.9,SNR=34 | | | | | | | |
| VLAD | Vladila | 147.66 | 328 | ⇑P | | PKPbc | 07 44 34.7 | -1.3 |
| BZS | Buzias | 147.73 | 333 | ⇑P | | PKiKP | 07 44 36.8 | -0.8 |
| RCHB | Rochefort | 147.75 | 355 | *d*PKP | | PKPbc | 07 44 36.5 | +0.5 |
| DOU | Dourbes | 147.86 | 356 | *d*PKP | | PKiKP | 07 44 36.9 | -0.8 |
| DOU | | | | *d*PKPab | | PKPab | 07 44 40.1 | -0.7 |
| CONA | Conrad Observa | 147.88 | 342 | *e*PKP | | PKiKP | 07 44 37.4 | -0.5 |
| | comp=Z,5.7nm,0.6s,SNR=8.3 | | | | | | | |
| HERR | Herculane | 147.95 | 331 | ⇑P | | PKiKP | 07 44 37.2 | -0.9 |
| RONA | Rosalia, Austr | 147.96 | 341 | *i* PKP | | PKiKP | 07 44 37.6 | -0.5 |
| | comp=Z,6.2nm,0.6s,SNR=7.4 | | | | | | | |
| WLF | Walferdange | 148.16 | 354 | *d*PKP | | PKiKP | 07 44 38.1 | -0.3 |
| MDVR | Moldovita | 148.34 | 332 | ⇑P | | PKPbc | 07 44 37.5 | -0.3 |
| MOA | Molln | 148.41 | 343 | *e*PKP | | PKiKP | 07 44 38.3 | -0.7 |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| MORH | Mrgy, Hungar | 148.44 | 337 | ⇑P | | PKPbc | 07 44 38.2 | +0.3 |
| BIOA | Bad Ischl, Aus | 148.72 | 344 | *e*PKP | | PKPbc | 07 44 38.9 | +0.2 |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| LESA | Schwarzleotal | 149.22 | 345 | *i* PKP | | PKiKP | 07 44 40.5 | -0.3 |
| | comp=Z,4.5nm,0.4s | | | | | | | |
| BOVS | Bovan | 149.23 | 331 | ⇓P | | PKiKP | 07 44 40.2 | -0.6 |
| KBA | Koelnbreinsper | 149.37 | 344 | *e*PKP | | PKPbc | 07 44 40.1 | -0.3 |
| | comp=Z,5.0nm,0.5s,SNR=5.2 | | | | | | | |
| WATA | Walderalm | 149.56 | 346 | *e*PKP | | PKiKP | 07 44 41.0 | -0.5 |
| | comp=Z,4.8nm,0.5s,SNR=7.3 | | | | | | | |
| RETA | Reutte | 149.59 | 347 | *i* PKP | | PKiKP | 07 44 41.0 | -0.5 |
| | comp=Z,2.5nm,0.5s | | | | | | | |
| WTTA | Wattenberg | 149.61 | 346 | *e*PKP | | PKiKP | 07 44 41.2 | -0.5 |
| | comp=Z,12nm,0.6s,SNR=10 | | | | | | | |
| MOTA | Moosalm | 149.65 | 347 | *e*PKP | | PKPbc | 07 44 41.0 | 0.0 |
| | comp=Z,3.1nm,0.5s | | | | | | | |
| MYKA | Terra Mystica | 149.70 | 343 | *i* PKP | | PKPbc | 07 44 40.7 | -0.3 |
| | comp=Z,7.1nm,0.6s | | | | | | | |
| SQTA | Sankt Quirin | 149.75 | 347 | *e*PKP | | PKiKP | 07 44 41.4 | -0.5 |
| | comp=Z,7.2nm,0.6s,SNR=7.1 | | | | | | | |
| ABTA | Abfaltersbach | 149.89 | 345 | *i* PKP | | PKPbc | 07 44 41.3 | -0.2 |
| | comp=Z,12nm,0.7s,SNR=7.1 | | | | | | | |
| DAVA | Damuels | 149.96 | 349 | *i* PKP | | PKiKP | 07 44 42.6 | +0.3 |
| | comp=Z,3.1nm,0.5s | | | | | | | |
| FETA | Feichten | 150.04 | 347 | *e*PKP | | PKiKP | 07 44 42.5 | -0.1 |
| | comp=Z,4.3nm,0.6s,SNR=5.5 | | | | | | | |
| FUORN | Ofenpass-Fuorn | 150.52 | 348 | | | PKiKP | 07 44 44.3 | +0.6 |
| CTI | Castel Tesino | 150.75 | 345 | | | PKiKP | 07 44 43.8 | -0.2 |
| CTI | | | | | PKPab | PKPab | 07 44 53.2 | +0.1 |
| PDG | Podgorica | 151.30 | 332 | ⇑P | | PKiKP | 07 44 45.5 | +0.5 |
| FNA | Florina | 151.53 | 327 | | | PKiKP | 07 44 45.5 | -0.2 |
| SANT | Santorini | 151.99 | 316 | ⇓P | | PKPdf | 07 44 36.9 | -2.5 |
| ESDC | Sonseca Array | 157.87 | 11 | PKPab | | PKPab | 07 45 22.6 | -1.1 |
| | comp=Z,0.2nm,0.7s,baz=329,slow=3.2,SNR=7.0 | | | | | | | |
| KEST | Kesra | 160.98 | 340 | PKPab | | PKPab | 07 45 37.3 | -0.1 |
| | comp=Z,3.1nm,0.9s,baz=72,slow=6.5,SNR=4.4 | | | | | | | |

*IDC* ***19*** *07:30:34.8±5.2, 18.06S×177.85W, h546km±52km, mb3.7/6, mbtmp4.6/7, Error ellipse: s-maj=38.5km s-min=20.4km az=39.0*

*NEIC* ***19*** *07:30:38.0±0.5, 17.8S±0.3×177.9W±0.1, h589km±18km, mb4.4/23, Error ellipse: s-maj=40.3km s-min=19.6km az=178.0*

*NOU* ***19*** *07:30:40.3, 18.61S×178.29W, h498km, mb4.5/15, Fiji Islands Region*

**ISC 19 07:30:38.5±0.7, 18.0S±0.1×177.98W±0.09, h590km, n47, σ1§41/51, mb4.4/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.79 | 274 | P | P | 07 32 01.8 | -0.1 |
| AFI | Afiamalu | 7.22 | 57 | P | P | 07 32 27.2 | -3.1 |
| NIUE | Niue | 7.71 | 99 | P | P | 07 32 36.1 | +1.4 |
| NIUE | Niue | 7.71 | 99 | P | P | 07 32 33.1 | -1.6 |
| DVP | Devils Point | 13.18 | 269 | P | P | 07 33 29.4 | +0.2 |
| LIFNC | LIFOU | 14.22 | 256 | P | P | 07 33 37.2 | -2.4 |
| YATNC | Mamie plateau, | 14.78 | 252 | P | P | 07 33 44.0 | -0.9 |
| DZM | Mont Dzumac | 15.18 | 252 | P | P | 07 33 48.6 | -0.2 |
| DZM | Mont Dzumac | 15.18 | 252 | P | P | 07 33 48.8 | -0.1 |
| DZM | | | | IAmb | IAmb | 07 33 55.4 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| DZM | Mont Dzumac | 15.18 | 252 | P | P | 07 33 47.8 | -1.0 |
| | comp=Z,7.7nm,0.6s,baz=93,slow=19,SNR=23 | | | | | | |
| NOUC | Port Laguerre | 15.32 | 252 | P | P | 07 33 49.8 | -0.2 |
| KOUNC | Koumac, New Ca | 16.93 | 259 | P | P | 07 34 06.2 | +1.4 |
| KOUNC | | | | IAmb | IAmb | 07 34 07.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| OUZ | Omahuta | 18.71 | 202 | P | P | 07 34 21.4 | +0.6 |
| KUZ | Kuaotunu | 19.48 | 195 | P | P | 07 34 29.5 | +1.7 |
| URZ | Urewera | 20.63 | 191 | P | P | 07 34 36.7 | -1.5 |
| URZ | Urewera | 20.63 | 191 | P | P | 07 34 35.0 | -3.1 |
| | comp=Z,5.7nm,0.4s,baz=357,slow=3.1,SNR=16 | | | | | | |
| URZ | | | | S | S | 07 37 46.1 | -5.6 |
| | comp=Z,4.0nm,0.8s,baz=257,slow=22,SNR=2.0 | | | | | | |
| | comp=Z,5.7nm,0.4s | | | | | | |
| BFZ | Birch Farm | 23.14 | 191 | P | P | 07 35 01.7 | +1.1 |
| JCZ | Jackson Bay | 28.28 | 200 | P | P | 07 35 45.5 | -0.3 |
| EIDS | Eidsvold | 29.62 | 250 | P | P | 07 35 57.8 | +0.2 |
| EIDS | | | | IAmb | IAmb | 07 35 58.0 | |
| | comp=Z,7.7nm,0.5s | | | | | | |
| ARMA | Armidale | 30.25 | 240 | P | P | 07 36 03.7 | +0.6 |
| ARMA | | | | IAmb | IAmb | 07 36 11.5 | |
| | comp=Z,18nm,1.1s | | | | | | |
| PYZ | Puysegur Point | 30.83 | 201 | P | P | 07 36 10.0 | +2.4 |
| CTAO | Charters Tower | 33.83 | 261 | P | P | 07 36 33.6 | +0.2 |
| CTAO | | | | IAmb | IAmb | 07 36 34.2 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| CAN | Canberra | 33.97 | 233 | P | P | 07 36 35.3 | +0.9 |
| PMG | Port Moresby | 34.88 | 279 | P | P | 07 36 44.0 | +1.8 |
| TOO | Toolangi | 37.42 | 231 | P | P | 07 37 03.2 | +0.3 |
| COEN | Coen | 37.51 | 270 | P | P | 07 37 04.9 | +1.1 |
| STKA | Stephens Creek | 38.94 | 241 | P | P | 07 37 15.8 | +0.7 |
| STKA | Stephens Creek | 38.94 | 241 | P | P | 07 37 15.9 | +0.8 |
| | comp=Z,6.4nm,0.5s,baz=90,slow=9.6,SNR=13 | | | | | | |
| | comp=Z,6.4nm,0.5s | | | | | | |
| BBOO | Buckleboo | 43.72 | 241 | P | P | 07 37 53.1 | +0.3 |
| BBOO | | | | IAmb | IAmb | 07 37 53.6 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| WR0 | Warramunga Arr | 44.83 | 260 | P | P | 07 38 01.4 | -0.1 |
| WB0 | Warramunga Arr | 44.98 | 260 | P | P | 07 38 02.5 | -0.2 |
| WB0 | | | | IAmb | IAmb | 07 38 02.9 | |
| | comp=Z,8.5nm,0.5s | | | | | | |
| WB2 | Warramunga Arr | 45.01 | 260 | P | P | 07 38 02.4 | -0.5 |
| WB2 | | | | IAmb | IAmb | 07 38 03.1 | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 45.02 | 260 | P | P | 07 38 02.6 | -0.4 |
| WRA | Warramunga Arr | 45.02 | 260 | P | P | 07 38 02.6 | -0.4 |
| | comp=Z,4.9nm,0.5s,baz=96,slow=7.3,SNR=86 | | | | | | |
| WRA | | | | PcP | PcP | 07 39 31.5 | +0.3 |
| | comp=Z,0.3nm,0.3s,baz=88,slow=3.6,SNR=1.9 | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| AS31 | Alice Springs | 45.16 | 254 | P | P | 07 38 04.0 | -0.1 |
| AS31 | | | | IAmb | IAmb | 07 38 05.0 | |
| | comp=Z,7.4nm,0.5s | | | | | | |
| ASAR | Alice Springs | 45.16 | 254 | P | P | 07 38 04.0 | 0.0 |
| | comp=Z,18nm,0.5s,baz=87,slow=8.7,SNR=141 | | | | | | |
| ASAR | | | | PcP | PcP | 07 39 31.5 | -0.1 |
| | comp=Z,0.7nm,0.6s,baz=94,slow=3.4,SNR=3.0 | | | | | | |
| ASAR | | | | S | S | 07 43 59.0 | -2.7 |
| | comp=Z,0.8nm,0.8s,baz=87,slow=16,SNR=4.5 | | | | | | |
| | comp=Z,18nm,0.5s | | | | | | |
| MTN | Manton Dam | 49.20 | 268 | P | P | 07 38 33.9 | -0.4 |
| MTN | | | | IAmb | IAmb | 07 38 34.9 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| FORT | Forrest | 50.34 | 245 | P | P | 07 38 42.2 | -0.2 |
| KNRA | Kununurra | 50.88 | 264 | P | P | 07 38 46.5 | 0.0 |
| KNRA | | | | IAmb | IAmb | 07 38 46.7 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| PSA00 | Pilbara Seismi | 58.28 | 255 | P | P | 07 39 38.1 | -0.1 |
| MBWA | Marble Bar | 58.45 | 256 | P | P | 07 39 39.2 | -0.1 |
| QSPA | South Pole Qui | 72.05 | 180 | P | P | 07 41 04.8 | +1.3 |
| QSPA | | | | IAmb | IAmb | 07 41 05.2 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 72.05 | 180 | P | P | 07 41 04.1 | +0.5 |
| | comp=Z,3.2nm,0.8s,baz=15,slow=1.0,SNR=28 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| BELA | Belgrano 2 | 82.02 | 173 | P | P | 07 41 57.9 | +0.6 |
| BELA | | | | IAmb | IAmb | 07 41 58.5 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 85.70 | 57 | P | P | 07 42 17.3 | +0.9 |
| | comp=Z,0.1nm,0.7s,baz=228,slow=3.5,SNR=2.0 | | | | | | |
| SNAA | Sanae | 90.49 | 178 | P | P | 07 42 37.7 | -0.2 |
| | comp=Z,0.5nm,0.6s,baz=193,slow=14,SNR=6.0 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| BRTR | Keskin Array B | 145.14 | 315 | PKPbc | PKPdf | 07 49 09.6 | -0.4 |
| | comp=Z,0.3nm,0.3s,baz=29,slow=6.6,SNR=2.2 | | | | | | |

**DJA 19 07:26:37.4±0.3, 8°S±4°×117°E±°, h10km, M3.6/9, mb3.6/1, MLv3.5/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.49 | 147 | P | Pb | 07 26 47.7 | -0.5 |
| TWSI | | | | S | Sb | 07 26 55.3 | -0.2 |
| PLAI | Plampang | 1.26 | 114 | P | Pn | 07 26 58.6 | -2.5 |
| PLAI | | | | S | Sb | 07 27 17.2 | -0.3 |
| SRBI | Singaraja | 1.40 | 279 | P | Pn | 07 27 03.1 | +0.1 |
| SRBI | | | | S | Sb | 07 27 21.8 | +0.1 |
| DNP | Denpasar | 1.43 | 256 | P | Pg | 07 27 05.8 | +0.9 |
| DNP | | | | S | Sg | 07 27 24.0 | +0.6 |
| IGBI | Denpasar | 1.53 | 251 | P | Pn | 07 27 04.2 | -0.6 |
| JAGI | Jajag, Banyuwa | 2.44 | 266 | P | Pn | 07 27 16.5 | -0.8 |
| WBSI | Waikabubak, Su | 3.04 | 116 | P | Pn | 07 27 26.3 | +0.6 |
| BSSI | Bau Bau, Buton | 4.42 | 61 | P | Pn | 07 27 43.8 | -0.7 |
| PWJI | Pagerwojo | 4.77 | 273 | P | Pn | 07 27 49.4 | 0.0 |
| EDFI | Ende, Flores | 5.04 | 95 | P | Pn | 07 27 53.3 | 0.0 |

*NEIC* ***19*** *07:27:23.9±2.6, 17.4S±0.1×177.9W±0.2, h598

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.24** | **252** | P | **P** | **07 40 05.1** | **-0.5** |
| DZM | | | | IAmb | IAmb | 07 40 07.6 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.24** | **252** | P | **P** | **07 40 05.0** | **-0.5** |
| | comp=Z,4.2nm,0.5s,baz=79,slow=18,SNR=14 | | | | | | |
| **URZ** | **Urewera** | **20.61** | **191** | P | **P** | **07 40 51.8** | **-2.3** |
| | comp=Z,1.1nm,0.3s,baz=20,slow=18,SNR=1.1 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **LHI** | **Lord Howe Isla** | **24.78** | **233** | P | **P** | **07 41 31.5** | **+0.1** |
| **EIDS** | **Eidsvold** | **29.68** | **250** | P | **P** | **07 42 14.4** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 07 42 15.0 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.29** | **240** | P | **P** | **07 42 20.4** | **+0.8** |
| ARMA | | | | IAmb | IAmb | 07 42 35.9 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **33.90** | **261** | P | **P** | **07 42 50.0** | **-0.2** |
| CTAO | | | | IAmb | IAmb | 07 42 50.7 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **CAN** | **Canberra** | **34.01** | **233** | P | **P** | **07 42 51.4** | **+0.5** |
| CAN | | | | IAmb | IAmb | 07 43 01.5 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **34.96** | **279** | P | **P** | **07 42 58.1** | **-0.9** |
| **TOO** | **Toolangi** | **37.46** | **231** | P | **P** | **07 43 20.5** | **+1.2** |
| **COEN** | **Coen** | **37.59** | **270** | P | **P** | **07 43 21.2** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.99** | **241** | P | **P** | **07 43 32.7** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.99** | **241** | P | **P** | **07 43 31.9** | **+0.2** |
| | comp=Z,9.1nm,0.7s,baz=95,slow=9.2,SNR=14 | | | | | | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.76** | **241** | P | **P** | **07 44 09.7** | **+0.4** |
| **WR0** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **07 44 17.8** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 07 44 20.1 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.05** | **260** | P | **P** | **07 44 19.1** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 07 44 19.4 | |
| | comp=Z,8.9nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.07** | **260** | P | **P** | **07 44 19.1** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 07 44 19.6 | |
| | comp=Z,9.2nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.08** | **260** | P | **P** | **07 44 19.2** | **-0.4** |
| **WRA** | **Warramunga Arr** | **45.08** | **260** | P | **P** | **07 44 18.9** | **-0.7** |
| | comp=Z,7.0nm,0.6s,baz=95,slow=7.2,SNR=89 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 45 47.8** | **+0.3** |
| | comp=Z,0.3nm,0.3s,baz=89,slow=3.3,SNR=2.6 | | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.22** | **254** | P | **P** | **07 44 20.8** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 07 44 21.6 | |
| | comp=Z,7.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.22** | **254** | P | **P** | **07 44 20.8** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.22** | **254** | P | **P** | **07 44 20.6** | **-0.1** |
| | comp=Z,18nm,0.6s,baz=87,slow=8.6,SNR=104 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 45 48.2** | **+0.2** |
| | comp=Z,0.9nm,0.7s,baz=90,slow=5.6,SNR=2.6 | | | | | | |
| | comp=Z,18nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.38** | **245** | P | **P** | **07 44 58.4** | **-0.5** |
| FORT | | | | IAmb | IAmb | 07 44 59.0 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **50.95** | **264** | P | **P** | **07 45 02.9** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 07 45 03.2 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.34** | **255** | P | **P** | **07 45 54.5** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 07 45 55.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **58.51** | **256** | P | **P** | **07 45 55.6** | **-0.2** |
| **CASY** | **Casey** | **66.22** | **205** | P | **P** | **07 46 44.7** | **0.0** |
| **QSPA** | **South Pole Qui** | **72.01** | **180** | P | **P** | **07 47 20.9** | **+1.4** |
| QSPA | | | | IAmb | IAmb | 07 47 21.3 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.01** | **180** | P | **P** | **07 47 20.5** | **+0.9** |
| | comp=Z,1.3nm,0.5s,baz=97,slow=17,SNR=17 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **BELA** | **Belgrano 2** | **81.97** | **173** | P | **P** | **07 48 14.0** | **+0.8** |
| **TXAR** | **Lajitas Array** | **85.66** | **57** | P | **P** | **07 48 34.0** | **+1.6** |
| | comp=Z,0.5nm,0.8s,baz=207,slow=5.8,SNR=6.1 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.22** | **315** | PKPbc | **PKPdf** | **07 55 25.3** | **-1.0** |
| | comp=Z,0.9nm,0.8s,baz=49,slow=4.8,SNR=4.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.86** | **346** | PKPbc | **PKPbc** | **07 55 34.7** | **+0.5** |
| | comp=Z,0.2nm,0.3s,baz=167,slow=34,SNR=2.1 | | | | | | |

*IDC* ***19*** *07:39:42.3±3.9, 18°.02S×177°.99W, h550km±44km, mb3.2/10, mbtmp4.1/11, Error ellipse: s-maj=21.6km s-min=20.2km az=144.0*

**ISC 19 07:39:45.1±0.7, 18°.0S±0°.2×178°.1W±0°.2, h590km, n18, σ1§16/18, mb3.7/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.04** | **252** | P | **P** | **07 42 53.1** | **-1.0** |
| | 2.2nm,0.5s,baz=94,slow=19,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **20.58** | **191** | P | **P** | **07 43 41.7** | **-2.6** |
| | 7.9nm,1.0s,baz=0.0,slow=3.0,SNR=2.7 | | | | | | |
| | 7.9nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **38.80** | **241** | P | **P** | **07 46 22.3** | **+1.6** |
| | 1.9nm,0.5s,baz=67,slow=8.4,SNR=6.0 | | | | | | |
| | 1.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.87** | **260** | P | **P** | **07 47 09.1** | **+0.7** |
| | 1.5nm,0.5s,baz=96,slow=7.2,SNR=16 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.01** | **254** | P | **P** | **07 47 10.4** | **+0.9** |
| | 6.0nm,0.6s,baz=86,slow=8.6,SNR=28 | | | | | | |
| | 6.0nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | **07 50 11.3** | **+1.2** |
| | 3.7nm,1.0s,baz=25,slow=4.3,SNR=16 | | | | | | |
| | 3.7nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.33** | **44** | P | **P** | **07 50 51.5** | **+0.6** |
| | 0.8nm,0.7s,baz=225,slow=8.7,SNR=8.2 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.84** | **58** | P | **P** | **07 51 25.4** | **+1.7** |
| | 1.3nm,0.8s,baz=216,slow=6.1,SNR=14 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.95** | **13** | P | **P** | **07 51 22.5** | **-0.7** |
| | 0.3nm,0.4s,baz=222,slow=5.3,SNR=10 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.26** | **43** | P | **P** | **07 51 29.9** | **-0.3** |
| | 0.5nm,0.7s,baz=245,slow=1.9,SNR=5.6 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.47** | **179** | P | **P** | **07 51 44.5** | **+0.1** |
| | 0.3nm,0.5s,baz=191,slow=17,SNR=1.5 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.41** | **314** | PKiKP | **PKiKP** | **07 57 08.5** | **-0.7** |
| | 0.1nm,0.4s,baz=95,slow=1.6,SNR=2.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.11** | **321** | PKP | **PKiKP** | **07 57 23.5** | **-0.2** |
| | 0.4nm,0.4s,baz=90,slow=2.9,SNR=2.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.48** | **350** | PKP | **PKiKP** | **07 57 41.3** | **-0.5** |
| | 1.8nm,1.0s,baz=44,slow=8.2,SNR=3.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **140.79** | **332** | PKP | **PKPdf** | **07 58 07.2** | **-1.2** |
| | 0.3nm,0.3s,baz=30,slow=27,SNR=2.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.05** | **315** | PKPbc | **PKPab** | **07 58 18.1** | **-0.4** |
| | 1.0nm,0.6s,baz=138,slow=4.2,SNR=5.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.43** | **303** | PKPbc | **PKiKP** | **07 58 22.9** | **-0.6** |
| | 1.6nm,0.3s,baz=79,slow=7.5,SNR=1.9 | | | | | | |
| **GERES** | **GERESS Array B** | **147.80** | **345** | PKPbc | **PKiKP** | **07 58 25.4** | **-0.5** |
| | 0.7nm,0.5s,baz=6.7,slow=11,SNR=5.3 | | | | | | |

*IDC* ***19*** *07:42:12.9±4.9, 18°.00S×177°.95W, h586km±55km, mb3.1/8, mbtmp4.1/9, Error ellipse: s-maj=31.5km s-min=22.9km az=48.0*

*NEIC* ***19*** *07:42:15.7±0.8, 17°.8S±0°.2×177°.9W±0°.1, h628km±19km, mb4.0/15, Error ellipse: s-maj=29.4km s-min=11.4km az=215.0*

**ISC 19 07:42:13.9±0.6, 18°.0S±0°.1×178°.01W±0°.10, h590km, n31, σ1§05/31, mb4.0/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.76** | **274** | P | P | 07 43 42.2 | +5.1 |
| **AFI** | **Afiamalu** | **7.26** | **57** | P | **P** | **07 44 06.9** | **+0.8** |
| **NIUE** | **Niue** | **7.74** | **99** | P | **P** | **07 44 12.7** | **+2.4** |
| **FUNA** | **Funafuti** | **9.83** | **344** | P | **P** | **07 44 31.6** | **+0.7** |
| **PINNC** | **Pines Island,** | **14.38** | **249** | P | **P** | **07 45 17.9** | **+1.3** |
| **DZM** | **Mont Dzumac** | **15.15** | **252** | P | **P** | **07 45 25.1** | **+1.3** |
| DZM | | | | IAmb | IAmb | 07 45 26.7 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.15** | **252** | P | **P** | **07 45 24.6** | **+0.8** |
| | comp=Z,5.1nm,0.8s,baz=83,slow=18,SNR=7.7 | | | | | | |
| **URZ** | **Urewera** | **20.60** | **191** | P | **P** | **07 46 11.2** | **-2.0** |
| | comp=Z,4.7nm,0.8s,baz=25,slow=3.3,SNR=1.6 | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **29.58** | **250** | P | **P** | **07 47 33.1** | **+0.5** |
| EIDS | | | | IAmb | IAmb | 07 47 41.6 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.21** | **240** | P | **P** | **07 47 39.2** | **+1.1** |
| **CTAO** | **Charters Tower** | **33.80** | **261** | P | **P** | **07 48 08.6** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 07 48 09.0 | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **33.93** | **233** | P | **P** | **07 48 10.7** | **+1.2** |
| **COEN** | **Coen** | **37.48** | **270** | P | **P** | **07 48 39.8** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.90** | **241** | P | **P** | **07 48 51.4** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.90** | **241** | P | **P** | **07 48 50.5** | **+0.3** |
| | comp=Z,5.2nm,0.8s,baz=92,slow=10,SNR=6.4 | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.68** | **241** | P | **P** | **07 49 27.9** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 07 49 38.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.79** | **260** | P | **P** | **07 49 36.7** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 07 49 46.3 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **07 49 37.5** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 07 49 37.7 | |
| | comp=Z,4.7nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **07 49 37.5** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 07 49 43.5 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **07 49 37.5** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **07 49 37.4** | **-0.6** |
| | comp=Z,3.7nm,0.6s,baz=95,slow=7.1,SNR=31 | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.12** | **254** | P | **P** | **07 49 39.1** | **0.0** |
| AS31 | | | | IAmb | IAmb | 07 49 40.5 | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **07 49 38.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **07 49 38.9** | **-0.3** |
| | comp=Z,5.2nm,0.4s,baz=85,slow=8.5,SNR=32 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 51 05.4** | **-1.4** |
| | comp=Z,0.4nm,0.5s,baz=101,slow=4.2,SNR=1.5 | | | | | | |
| | comp=Z,5.2nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **07 52 39.4** | **+0.6** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **07 52 38.9** | **+0.1** |
| | comp=Z,1.5nm,0.6s,baz=6.1,slow=1.2,SNR=15 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **BELA** | **Belgrano 2** | **82.00** | **173** | P | **P** | **07 53 31.9** | **-0.6** |
| BELA | | | | IAmb | IAmb | 07 53 32.7 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.74** | **57** | P | **P** | **07 53 52.2** | **+0.3** |
| | comp=Z,0.2nm,0.7s,baz=196,slow=3.5,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | **P** | **07 53 50.0** | **-1.9** |
| | comp=Z,0.1nm,0.4s,baz=226,slow=4.4,SNR=4.2 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.47** | **178** | P | **P** | **07 54 12.2** | **-1.0** |
| | comp=Z,0.3nm,0.4s,baz=229,slow=11,SNR=1.8 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.14** | **315** | PKPbc | **PKPbc** | **08 00 45.0** | **-1.4** |
| | comp=Z,0.5nm,0.5s,baz=130,slow=2.3,SNR=2.4 | | | | | | |

*IDC* ***19*** *07:44:21.7±5.2, 17°.81S×177°.96W, h595km±62km, mb2.8/7, mbtmp3.8/8, Error ellipse: s-maj=39.2km s-min=25.9km az=151.0*

**ISC 19 07:44:21.1±0.9, 17°.8S±0°.3×178°.0W±0°.2, h590km, n11, σ0§93/11, mb3.3/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.29** | **251** | P | **P** | **07 47 33.7** | **+1.3** |
| | 2.0nm,0.9s,baz=44,slow=22,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.09** | **259** | P | **P** | **07 51 45.8** | **-0.3** |
| | 0.6nm,0.4s,baz=94,slow=6.9,SNR=5.0 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.25** | **254** | P | **P** | **07 51 47.1** | **-0.2** |
| | 2.1nm,0.6s,baz=87,slow=8.6,SNR=9.8 | | | | | | |
| | 2.1nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.30** | **180** | P | **P** | **07 54 46.9** | **-0.7** |
| | 0.8nm,1.0s,baz=180,slow=3.2,SNR=1.6 | | | | | | |
| | 0.8nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.02** | **44** | P | **P** | **07 55 26.0** | **+0.7** |
| | 0.4nm,0.7s,baz=219,slow=6.9,SNR=4.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.55** | **57** | P | **P** | **07 55 59.7** | **+1.5** |
| | 0.5nm,0.8s,baz=221,slow=7.1,SNR=6.6 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.64** | **13** | P | **P** | **07 55 56.5** | **-1.2** |
| | 0.3nm,0.4s,baz=224,slow=5.1,SNR=8.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **86.95** | **43** | P | **P** | **07 56 04.1** | **-0.6** |
| | 0.2nm,0.7s,baz=267,slow=4.5,SNR=2.4 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.98** | **315** | PKPbc | **PKPbc** | **08 02 53.0** | **-0.2** |
| | 0.6nm,0.5s,baz=120,slow=4.0,SNR=3.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.42** | **303** | PKPbc | **PKPbc** | **08 02 57.3** | **-0.1** |
| | 1.7nm,0.3s,baz=52,slow=2.4,SNR=2.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.58** | **346** | PKPbc | **PKPbc** | **08 02 60.0** | **0.0** |
| | 0.6nm,0.4s,baz=146,slow=9.7,SNR=4.8 | | | | | | |

**IDC 19 07:44:29.8±2.0, 6°.44S×129°.00E, h0km, mb3.9/1, mbtmp3.7/3, ML3.8/2, MS4.1/1, Error ellipse: s-maj=114.4km s-min=30.5km az=67.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.39** | **159** | Pn | Pn | 07 47 54.6 | -0.3 |
| | 0.4nm,0.3s,baz=338,slow=14,SNR=8.8 | | | | | | |
| WRA | | | | Sn | Sn | 07 50 22.3 | -13 |
| | 0.3nm,0.3s,baz=330,slow=22,SNR=2.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **17.77** | **165** | P | Pn | 07 48 39.0 | +0.2 |
| | 0.5nm,0.3s,baz=347,slow=9.4,SNR=12 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.54** | **201** | LR | LR | 08 03 02.6 | |
| | comp=Z,357nm,21.3s,baz=96,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.22** | **327** | P | P | 07 55 25.9 | 0.0 |
| | 0.6nm,0.4s,baz=122,slow=8.3,SNR=9.8 | | | | | | |
| | 0.6nm,0.4s | | | | | | |

*IDC* ***19*** *07:45:44.6±6.0, 18°.07S×178°.23W, h586km±67km, mb3.0/7, mbtmp3.9/8, Error ellipse: s-maj=39.0km s-min=26.2km az=104.0*

**ISC 19 07:45:45.7±1.0, 18°.1S±0°.2×178°.3W±0°.2, h600km, n11, σ0§74/12, mb3.5/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | **P** | **07 48 52.7** | **-0.2** |
| | 1.7nm,0.4s,baz=125,slow=16,SNR=9.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **07 53 06.7** | **-0.4** |
| | 0.5nm,0.5s,baz=94,slow=6.9,SNR=1.4 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 54 36.7** | **+0.4** |
| | 0.2nm,0.3s,baz=92,slow=3.5,SNR=2.3 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.85** | **254** | P | **P** | **07 53 08.3** | **+0.1** |
| | 0.6nm,0.4s,baz=89,slow=8.6,SNR=7.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Ar** | **68.08** | **323** | P | **P** | **07 55 47.2** | **+0.4** |
| | 1.2nm,0.5s,baz=156,slow=5.4,SNR=4.9 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.00** | **180** | P | **P** | **07 56 10.1** | **+0.4** |
| | 1.2nm,1.1s,baz=166,slow=18,SNR=1.9 | | | | | | |
| | 1.2nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.85** | **345** | P | **P** | **07 56 21.3** | **+1.1** |
| | 1.7nm,0.6s,baz=115,slow=8.0,SNR=5.0 | | | | | | |
| | 1.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.01** | **13** | P | **P** | **07 57 22.6** | **-0.6** |
| | 0.4nm,0.4s,baz=222,slow=4.9,SNR=16 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.39** | **43** | P | **P** | **07 57 30.7** | **+0.2** |
| | 0.3nm,0.7s,baz=225,slow=9.9,SNR=2.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **133.36** | **344** | PKP | **PKPdf** | **08 03 53.5** | **-0.5** |
| | 1.8nm,0.8s,baz=120,slow=29,SNR=1.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.96** | **315** | PKPbc | **PKPab** | **08 04 17.5** | **-0.4** |
| | 1.0nm,0.9s,baz=51,slow=9.7,SNR=3.6 | | | | | | |
| **GERES** | **GERESS Array B** | **147.78** | **345** | PKPbc | **PKPbc** | **08 04 22.7** | **-1.4** |
| | 0.7nm,0.6s,baz=256,slow=2.2,SNR=4.5 | | | | | | |

*BGR* ***19*** *07:48:46.1, 18°.72S×177°.57W, h500km*

*NEIC* ***19*** *07:48:51.5±2.1, 18°.51S±0°.10×178°.1W±0°.1, h542km±6km, mb4.9/404, Error ellipse: s-maj=14.3km s-min=13.7km az=144.0*

*NOU* ***19*** *07:48:52.4, 18°.46S×178°.02W, h558km, mb4.9/91, Fiji Islands Region*

*IDC* ***19*** *07:48:53.5±1.3, 18°.44S×178°.05W, h576km±15km, mb4.2/24, mbtmp5.1/26, Error ellipse: s-maj=11.7km s-min=8.6km az=159.0*

**ISC 19 07:48:52.6±0.5, 18°.41S±0°.04×178°.05W±0°.05, h565km±5km, h566km: pP-P, n967, σ1§03/862, mb4.9/236, 65C-49D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.77** | **280** | P | **P** | **07 50 15.3** | **+1.2** |
| **MSVF** | **Nonsavu** | **3.77** | **280** | P | **P** | **07 50 15.2** | **+1.2** |
| **AFI** | **Afiamalu** | **7.50** | **54** | P | **P** | **07 50 43.3** | **-2.9** |
| **NIUE** | **Niue** | **7.72** | **96** | P | **P** | **07 50 47.6** | **-0.6** |
| **NIUE** | **Niue** | **7.72** | **96** | P | **P** | **07 50 47.6** | **-0.6** |
| **FUNA** | **Funafuti** | **10.18** | **344** | P | **P** | **07 51 12.1** | **-0.6** |
| **FUNA** | **Funafuti** | **10.18** | **344** | P | **P** | **07 51 11.7** | **-1.0** |
| **GLKZ** | **Green Lake** | **10.80** | **179** | P | **P** | **07 51 16.9** | **-1.9** |
| GLKZ | | | | S | **S** | **07 53 17.5** | **-1.6** |
| **RTV** | **Rentapao** | **12.88** | **271** | P | **P** | **07 51 42.0** | **+1.7** |
| **DVP** | **Devils Point** | **13.11** | **271** | P | **P** | **07 51 43.5** | **+0.8** |
| **MARNC** | **Mare, Loyalty** | **13.44** | **255** | P | **P** | **07 51 44.1** | **-2.0** |
| **LIFNC** | **LIFOU** | **14.06** | **258** | P | **P** | **07 51 51.1** | **-1.3** |
| **LIFNC** | **LIFOU** | **14.06** | **258** | P | **P** | **07 51 50.6** | **-1.8** |
| **PINNC** | **Pines Island,** | **14.22** | **250** | P | **P** | **07 51 53.1** | **-0.9** |
| **YATNC** | **Mamie plateau,** | **14.59** | **253** | P | **P** | **07 51 57.1** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.00** | **253** | P | **P** | **07 52 01.6** | **-0.3** |
| **DZM** | **Mont Dzumac** | **15.00** | **253** | P | **P** | **07 52 01.0** | **-0.9** |
| **DZM** | **Mont Dzumac** | **15.00** | **253** | P | **P** | **07 52 00.5** | **-1.4** |
| | 15nm,0.5s,baz=82,slow=19,SNR=55 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.13** | **253** | P | **P** | **07 52 03.1** | **-0.1** |
| **KOUNC** | **Koumac, New Ca** | **16.79** | **260** | P | **P** | **07 52 20.0** | **+1.1** |
| **KOUNC** | **Koumac, New Ca** | **16.79** | **260** | P | **P** | **07 52 19.1** | **+0.2** |
| **RAR** | **Rarotonga** | **17.42** | **102** | P | **P** | **07 52 25.0** | **+0.4** |
| **RAR** | **Rarotonga** | **17.42** | **102** | P | **P** | **07 52 24.4** | **-0.1** |
| **RAR** | **Rarotonga** | **17.42** | **102** | P | **P** | **07 52 23.3** | **-1.3** |
| | 28nm,0.7s,baz=257,slow=6.8,SNR=7.5 | | | | | | |
| **OUZ** | **Omahuta** | **18.31** | **202** | P | **P** | **07 52 33.9** | **+1.4** |
| **OUZ** | **Omahuta** | **18.31** | **202** | P | **P** | **07 52 34.8** | **+2.3** |
| **WCZ** | **Waipu Caves** | **18.71** | **200** | P | **P** | **07 52 37.9** | **+1.8** |
| **KUZ** | **Kuaotunu** | **19.07** | **195** | P | **P** | **07 52 40.3** | **+0.9** |
| **MXZ** | **Matakaoa Point** | **19.35** | **189** | P | **P** | **07 52 40.5** | **-1.4** |
| **MXZ** | **Matakaoa Point** | **19.35** | **189** | P | **P** | **07 52 40.2** | **-1.6** |
| **MXZ** | **Matakaoa Point** | **19.35** | **189** | P | **P** | **07 52 40.0** | **-1.9** |
| **MKAZ** | **Moumakai** | **19.56** | **196** | P | **P** | **07 52 45.2** | **+1.4** |
| **RUGZ** | **Raukumara Rang** | **19.84** | **190** | P | **P** | **07 52 43.4** | **-3.1** |
| RUGZ | | | | S | **S** | **07 56 06.4** | **+10** |
| **PUZ** | **Puketiti** | **19.86** | **189** | P | **P** | **07 52 44.9** | **-1.7** |
| **WHRZ** | **Whale Island** | **19.86** | **192** | P | **P** | **07 52 46.4** | **-0.1** |
| **TGRZ** | **Tauranga** | **19.88** | **193** | P | **P** | **07 52 47.0** | **+0.3** |
| **OPRZ** | **Ohinepanea** | **19.93** | **193** | P | **P** | **07 52 44.4** | **-2.8** |
| **TWGZ** | **Tauwhareparae** | **20.00** | **189** | P | **P** | **07 52 45.5** | **-2.4** |
| **TOZ** | **Tahuroa Road** | **20.06** | **195** | P | **P** | **07 52 49.2** | **+0.9** |
| **EDRZ** | **Edgecumbe** | **20.15** | **192** | P | **P** | **07 52 46.7** | **-2.6** |
| **OMRZ** | **Omania** | **20.22** | **193** | P | **P** | **07 52 48.2** | **-1.7** |
| **MWZ** | **Matawai** | **20.23** | **190** | P | **P** | **07 52 47.3** | **-2.6** |
| **URZ** | **Urewera** | **20.23** | **191** | P | **P** | **07 52 47.3** | **-2.5** |
| **URZ** | **Urewera** | **20.23** | **191** | P | **P** | **07 52 46.3** | **-3.5** |
| | 110nm,0.5s,baz=14,slow=2.6,SNR=80 | | | | | | |
| URZ | | | | S | **S** | **07 55 54.7** | **-7.1** |
| | 5.8nm,0.7s,baz=300,slow=20,SNR=2.0 | | | | | | |
| **URZ** | **Urewera** | **20.23** | **191** | P | **P** | **07 52 46.5** | **-3.3** |
| **NGRZ** | **Ngongotaha** | **20.26** | **193** | P | **P** | **07 52 49.7** | **-0.5** |
| **CNGZ** | **Carnagh Statio** | **20.27** | **189** | P | **P** | **07 52 49.2** | **-1.0** |
| **TKGZ** | **Te Karaka** | **20.28** | **189** | P | **P** | **07 52 49.9** | **-0.4** |
| **TARZ** | **Mount Tarawera** | **20.32** | **192** | P | **P** | **07 52 49.7** | **-1.1** |
| **RAGZ** | **Rawiri** | **20.40** | **190** | P | **P** | **07 52 49.9** | **-1.6** |
| **RRRZ** | **Republican Roa** | **20.42** | **192** | P | **P** | **07 52 50.0** | **-0.9** |
| **HSRZ** | **Hossack Road** | **20.45** | **193** | P | **P** | **07 52 52.1** | **+0.3** |
| **MUGZ** | **Murupara** | **20.50** | **192** | P | **P** | **07 52 50.5** | **-1.8** |
| **GRRZ** | **Galatos Road** | **20.51** | **193** | P | **P** | **07 52 53.3** | **+0.8** |
| **HRRZ** | **Handcock Road** | **20.51** | **193** | P | **P** | **07 52 51.8** | **-0.8** |
| **RIGZ** | **Rimuhau** | **20.55** | **189** | P | **P** | **07 52 50.5** | **-2.4** |
| RIGZ | | | | S | **S** | **07 56 10.8** | **+3.7** |
| **RTZ** | **Ruatahuna** | **20.59** | **191** | P | **P** | **07 52 49.9** | **-3.4** |
| **RTZ** | **Ruatahuna** | **20.59** | **191** | P | **P** | **07 52 49.1** | **-4.2** |
| **TLZ** | **Tolley Road** | **20.62** | **194** | P | **P** | **07 52 54.7** | **+1.2** |
| **ALRZ** | **Allen Road** | **20.67** | **193** | P | **P** | **07 52 52.3** | **-1.6** |
| **S

QLP **Quilpie** 35.68 250 P P 07 55 04.6 +0.3
GLAD **Gladstone** 36.74 225 P P 07 55 12.7 0.0
TOO **Toolangi** 37.12 231 P P 07 55 15.8 -0.2
TOO **Toolangi** 37.12 231 P P 07 55 16.6 +0.5
COEN **Coen** 37.45 271 P P 07 55 18.9 -0.1
COEN **Coen** 37.45 271 P P 07 55 19.4 +0.5
COEN IAmb IAmb 07 55 20.5
comp=Z,44nm,0.9s
MANU **Manus Island** 37.60 292 P P 07 55 20.8 +0.6
MOO **Moorlands** 37.96 223 P P 07 55 22.9 +0.2
TAU **Tasmania Unive** 38.10 223 P P 07 55 23.3 -0.5
BRAT **Ballarat** 38.28 232 P P 07 55 23.9 -1.5
STKA **Stephens Creek** 38.69 242 P P 07 55 30.0 +1.2
STKA **Stephens Creek** 38.69 242 P P 07 55 29.5 +0.7
STKA **Stephens Creek** 38.69 242 P P 07 55 29.3 +0.5
comp=Z,22nm,0.7s,baz=88,slow=9.7,SNR=28
comp=Z,22nm,0.7s
ARPS **Mount Arapiles** 39.63 234 P P 07 55 36.9 +0.6
QIS **Mount Isa** 39.90 260 P P 07 55 39.1 +0.4
WAKE **Wake Island** 40.36 337 P P 07 55 42.4 +0.2
WAKE **Wake Island** 40.36 337 P P 07 55 41.8 -0.4
HTT **Hallett** 41.19 240 P P 07 55 50.0 +1.2
LCRK **Leigh Creek** 41.35 245 P P 07 55 50.6 +0.6
OOD **Oodnadatta** 43.35 249 P P 07 56 07.2 +1.4
BBOO **Buckleboo** 43.47 242 P P 07 56 06.7 +0.1
WB0 **Warramunga Arr** 44.85 260 IAmb IAmb 07 56 17.8
comp=Z,19nm,0.6s
WB2 **Warramunga Arr** 44.87 260 IAmb IAmb 07 56 18.0
comp=Z,17nm,0.6s
WRA **Warramunga Arr** 44.88 260 P P 07 56 17.0 -0.7
WRA **Warramunga Arr** 44.88 260 P P 07 56 16.8 -1.0
comp=Z,15nm,0.6s,baz=97,slow=6.7,SNR=178
WRA PcP PcP 07 57 46.0 -1.1
comp=Z,4.6nm,0.6s,baz=91,slow=2.7,SNR=9.4
WRA S S 08 02 09.1 -6.0
comp=Z,1.8nm,0.8s,baz=92,slow=13,SNR=8.2
comp=Z,15nm,0.6s
MULG **Mulgathing** 44.91 245 P P 07 56 17.6 -0.2
AS01 **Alice Springs** 44.94 255 P P 07 56 18.4 +0.2
AS31 **Alice Springs** 44.98 255 P P 07 56 18.7 +0.2
ASAR **Alice Springs** 44.99 255 P P 07 56 18.7 +0.2
ASAR **Alice Springs** 44.99 255 P P 07 56 18.4 -0.1
comp=Z,22nm,0.7s,baz=85,slow=8.7,SNR=127
ASAR PcP PcP 07 57 47.1 -0.4
comp=Z,8.2nm,0.7s,baz=98,slow=4.1,SNR=11
ASAR ScP ScP 08 00 43.3 -3.2
comp=Z,0.6nm,0.8s,baz=108,slow=5.0,SNR=1.5
ASAR S S 08 02 15.2 -1.4
comp=Z,10nm,1.0s,baz=88,slow=16,SNR=40
comp=Z,22nm,0.7s
KDU **Kakadu** 47.89 269 P P 07 56 40.7 +0.2
GUMO **Guam** 48.45 308 P P 07 56 45.1 +0.5
MTN **Manton Dam** 49.13 269 P P 07 56 49.6 -0.1
MTN IAmb IAmb 07 56 49.8
comp=Z,38nm,0.7s
DRS **Darwin Rock St** 49.44 269 P P 07 56 52.6 +0.6
WRKA **Warakurna** 50.02 252 P P 07 56 56.5 +0.4
FORT **Forrest** 50.10 245 P P 07 56 57.0 +0.4
KNRA **Kununurra** 50.78 265 P P 07 57 01.5 -0.2
KNRA IAmb IAmb 07 57 02.3
comp=Z,34nm,0.7s
FAKI **Fak Fak** 51.01 281 P P 07 57 03.4 -0.1
FAKI IAmb IAmb 07 58 07.9
comp=Z,52nm,1.2s
DRV **Dumont d'Urvil** 55.30 199 P P 07 57 33.2 +0.3
SOEI **Soe** 56.41 270 P P 07 57 42.3 +0.6
SOEI **Soe** 56.41 270 P P 07 57 43.3 +1.6
TNTI **Ternate** 56.91 283 P P 07 57 45.2 +0.3
TNTI IAmb IAmb 07 57 46.1
comp=Z,66nm,0.9s
PSA00 **Pilbara Seismi** 58.12 256 P P 07 57 53.2 +0.1
PSA00 **Pilbara Seismi** 58.12 256 P P 07 57 52.9 -0.2
MBWA **Marble Bar** 58.28 256 P P 07 57 54.1 -0.1
MBWA **Marble Bar** 58.28 256 P P 07 57 53.5 -0.7
MBWA **Marble Bar** 58.28 256 P P 07 57 53.6 -0.7
MBWA PcP PcP 07 58 37.7 -0.1
MEEK **Meekatharra** 58.58 250 P P 07 57 56.2 0.0
KLBR **Kellerberrin** 58.91 244 P P 07 57 58.8 +0.5
BLDU **Ballidu** 59.88 245 P P 07 58 04.8 +0.1
LUWI **Luwuk** 60.52 279 P P 07 58 09.7 +0.5
MORW **Morawa** 60.59 247 P P 07 58 08.8 -0.7
KAPI **Kappang** 62.07 274 P P 07 58 19.4 +0.1
KAPI IAmb IAmb 07 58 19.8
comp=Z,91nm,2.0s
GIRL **Giralia** 63.08 253 P P 07 58 26.7 +1.0
GIRL **Giralia** 63.08 253 P P 07 58 26.8 +1.0
TOLI2 **Tolitoli** 63.15 281 P P 07 58 26.6 +0.3
TOLI2 **Tolitoli** 63.15 281 P P 07 58 26.6 +0.3
TOLI2 IAmb IAmb 07 58 27.0
comp=Z,26nm,0.9s
CCD **Concordia, Ant** 64.47 194 P P 07 58 34.5 +0.4
CCD pP pP 08 00 27.1 +0.4
JHJ2 **Mitsune** 65.15 322 P P 07 58 38.3 -0.2
JHJ2 **Mitsune** 65.15 322 P P 07 58 39.0 +0.4
CASY **Casey** 65.83 205 P P 07 58 42.8 +0.5
CASY IAmb IAmb 08 00 16.0
comp=Z,33nm,0.6s
CASY **Casey** 65.83 205 P P 07 58 42.4 +0.1
JAGI **Jajag, Banyuwa** 66.37 269 P P 07 58 45.1 -1.5
JAGI **Jajag, Banyuwa** 66.37 269 P P 07 58 45.5 -1.1
MYLDM **Lahad Datu** 66.76 284 IAmb IAmb 07 58 52.9
comp=Z,74nm,1.6s
JMM **Marumori** 68.04 326 P P 07 58 56.6 +0.3
JGF **Kuroka** 68.34 322 P P 07 58 58.7 +0.5
JGF **Kuroka** 68.34 322 P P 07 58 58.7 +0.5
JGF IAmb IAmb 07 58 59.0
comp=Z,24nm,0.8s
INU **Inuyama** 68.37 322 P P 07 58 58.4 +0.1
INU PcP PcP 07 59 20.3 +1.4
MJAR **Matsushiro Arr** 68.51 323 P P 07 58 58.7 -0.5
comp=Z,30nm,0.7s,baz=157,slow=5.8,SNR=90
comp=Z,30nm,0.7s
MAJO **Matsushiro** 68.51 323 P P 07 58 59.5 +0.3
MAJO **Matsushiro** 68.51 323 P P 07 58 59.5 +0.3
MAJO IAmb IAmb 07 58 59.9
comp=Z,37nm,0.8s
MAJO **Matsushiro** 68.51 323 P P 07 58 58.9 -0.3
MJB9 **Matsu-Tunnel** 68.52 323 P P 07 58 59.5 +0.3
MJB9 IAmb IAmb 07 58 59.9
comp=Z,35nm,0.8s
JMN **Monobe** 69.19 318 P P 07 59 03.8 +0.4
JMN **Monobe** 69.19 318 IAmb IAmb 07 59 05.3
comp=Z,38nm,0.9s
KKM **Kota Kinabalu** 69.19 284 P P 07 59 04.1 +0.2
KKM **Kota Kinabalu** 69.19 284 P P 07 59 04.0 +0.1
KKM IAmb IAmb 07 59 04.9
comp=Z,23nm,0.6s
JSD **Sado** 69.54 324 IAmb IAmb 07 59 06.5
comp=Z,29nm,0.8s
UGM **Wanagama** 69.97 268 P P 07 59 08.4 0.0
UGM **Wanagama** 69.97 268 P P 07 59 08.4 0.0
JTM **Tenmabayashi** 70.07 328 IAmb IAmb 07 59 09.5
comp=Z,47nm,1.0s
JNU **Nakatsue** 70.73 316 P P 07 59 12.9 +0.4
JNU **Nakatsue** 70.73 316 IAmb IAmb 08 01 41.4
comp=Z,62nm,1.6s
YOJ **Yonaguni jima** 71.51 305 P P 07 59 17.7 +0.5
NIKH **Nikolski High** 71.53 6 P P 07 59 15.7 -0.9
baz=189
QSPA **South Pole Qui** 71.65 180 P P 07 59 18.1 +0.7
QSPA IAmb IAmb 07 59 18.8
comp=Z,26nm,0.7s
QSPA **South Pole Qui** 71.65 180 P P 07 59 18.1 +0.7
comp=Z,22nm,0.6s,baz=19,slow=7.0,SNR=190
comp=Z,22nm,0.6s
QSPA **South Pole Qui** 71.65 180 P P 07 59 18.2 +0.7
QSPA pP pP 08 01 13.8 +0.8
TWG **Pinlang** 72.22 302 IAmb IAmb 07 59 22.8
comp=Z,24nm,0.6s
YULB **Yu-li** 72.33 303 IAmb IAmb 07 59 21.9
comp=Z,18nm,0.7s
NACB **Ninganchiao** 72.48 304 P P 07 59 24.0 +1.2
JTU **Tsushima** 72.57 317 P P 07 59 24.0 +0.9
UNV **Unalaska Valle** 72.64 7 P P 07 59 22.8 -0.2
UNV **Unalaska Valle** 72.64 7 P P 07 59 22.6 -0.4
baz=191
SSLB **Suanglung** 72.79 303 P P 07 59 24.4 -0.3
SSLB **Suanglung** 72.79 303 P P 07 59 23.8 -0.9
YHNB **Yeheng** 72.90 304 P P 07 59 26.7 +1.4
YHNB **Yeheng** 72.90 304 IAmb IAmb 07 59 26.0
comp=Z,40nm,1.0s
KSM **Kuching** 73.09 277 P P 07 59 27.4 +0.9
YSS **Yuzh-Sakhalins** 74.01 333 P P 07 59 31.8 +0.7
YSS IAmb IAmb 07 59 33.0
comp=Z,55nm,1.1s
FALS **False Pass** 74.03 9 P P 07 59 30.5 -0.5
baz=194
PETK **Petropavlovsk-** 74.25 345 P P 07 59 32.1 -0.1
PETK **Petropavlovsk-** 74.25 345 P P 07 59 31.8 -0.5
comp=Z,41nm,0.7s,baz=127,slow=7.3,SNR=41
comp=Z,41nm,0.7s
SDPT **Sand Point** 74.97 10 P P 07 59 35.9 -0.3
baz=197
S12K **Black Hills** 75.05 9 P P 07 59 35.9 -0.8
baz=196
KSRS **Korea Array** 75.30 318 P P 07 59 39.5 +1.1
comp=Z,6.4nm,0.8s,baz=132,slow=6.5,SNR=32
comp=Z,6.4nm,0.8s
KSAR **Wonju Array Be** 75.32 318 P P 07 59 39.2 +0.6
S14K **Fog Glacier** 76.02 11 P P 07 59 42.4 +0.2
baz=198
CHGN **Chignik** 76.24 11 P P 07 59 43.9 +0.7
baz=199
PMPB **Monarch Peak** 76.66 44 IAmb IAmb 07 59 47.9
comp=Z,19nm,0.7s
BBGB **Big Mountain B** 76.71 44 IAmb IAmb 07 59 49.9
comp=Z,54nm,1.4s
USA0B **Ussuriysk Arra** 77.22 326 P P 07 59 49.8 +0.9
USA0B IAmb IAmb 07 59 51.1
comp=Z,62nm,1.6s
USRK **Ussuriysk Ar.** 77.22 326 P P 07 59 49.8 +0.9
comp=Z,3.7nm,0.4s,baz=128,slow=3.1,SNR=20
comp=Z,3.7nm,0.4s
PASC **Pasadena Art C** 77.31 47 IAmb IAmb 07 59 51.1
comp=Z,17nm,0.6s
SII **Sitkinak Islan** 77.33 13 P P 07 59 50.4 +1.2
baz=203
109C **Camp Elliot, M** 77.39 49 P P 07 59 49.8 -0.3
baz=238
R16K **Pilot Point** 77.59 11 P P 07 59 52.2 +1.7
baz=200
R17L **Mt. Peulik Vol** 77.88 12 P P 07 59 51.7 -0.5
baz=201
MONP2 **Monument Peak** 77.88 49 P P 07 59 53.9 +0.9
baz=238,SNR=21
OHAK **Old Harbor** 78.14 13 P P 07 59 54.0 +0.5
baz=204
R18K **Karluk** 78.20 13 P P 07 59 53.6 -0.2
baz=203
PFO **Pinyon Flats O** 78.23 49 P P 07 59 54.6 -0.2
baz=238,SNR=7.0
TPFO **Pinon Flats** 78.23 49 P P 07 59 54.8 +0.1
baz=238,SNR=6.3
SLBS **Sierra La Lagu** 78.51 60 P P 07 59 58.0 +1.6
NJ2 **Nanjing** 78.52 309 ⇑P P 07 59 57.5 +1.4
NJ2 pmax pmax
comp=Z,27nm,0.6s
Q17K **Contact Creek** 78.56 12 P P 07 59 55.3 -0.6
baz=201
O14K **Tigyukauivet M** 78.59 9 P P 07 59 56.0 +0.1
MDPB **Devils Postpil** 78.60 44 IAmb IAmb 07 59 58.6
comp=Z,25nm,0.8s
OMMB **Old Mammoth Mi** 78.64 44 P P 07 59 58.3 +1.2
O15K **Ungalikthiuk R** 78.74 9 P P 07 59 56.4 -0.3
baz=198
MDJ **Mudanjiang** 78.79 325 P P 07 59 58.3 +1.0
MDJ pmax pmax
comp=Z,75nm,0.9s
MDJ **Mudanjiang** 78.79 325 P P 07 59 58.2 +0.9
MDJ IAmb IAmb 07 59 59.5
comp=Z,55nm,0.9s
KDAK **Kodiak Island** 78.81 14 P P 07 59 57.4 +0.3
KDAK **Kodiak Island** 78.81 14 P P 07 59 57.0 0.0
comp=Z,25nm,0.7s,baz=231,slow=6.5,SNR=6.8
comp=Z,25nm,0.7s
KDAK **Kodiak Island** 78.81 14 P P 07 59 56.8 -0.2
baz=204
WAKR **Walker** 78.85 43 P P 07 59 59.4 +1.4
WAKR IAmb IAmb 08 00 00.2
comp=Z,29nm,0.8s
P16K **Nushagak River** 78.90 10 P P 07 59 57.3 -0.2
baz=199
MPK **Martis Peak** 78.92 42 IAmb IAmb 08 00 01.0
comp=Z,77nm,1.2s
PNTR **Pine Nut** 79.08 42 IAmb IAmb 08 00 01.3
comp=Z,54nm,0.9s
HUMO **Hull Mountain** 79.08 38 IAmb IAmb 08 00 01.3
comp=Z,37nm,1.2s
Q18K **Kamai Hardscr** 79.09 12 P P 07 59 58.2 -0.5
baz=202
M11K **Mekoryuk** 79.10 6 P P 07 59 59.1 +0.6
baz=191
N14K **Kuskokwak Cree** 79.18 8 P P 07 59 59.1 +0.1
baz=196,SNR=8.9
L04D **Klamath Falls** 79.23 39 IAmb IAmb 08 00 01.7
comp=Z,31nm,0.8s
YERR **Yerington** 79.25 43 IAmb IAmb 08 00 01.9
comp=Z,34nm,0.7s
LHV **Little Huntoon** 79.32 44 IAmb IAmb 08 00 02.6
comp=Z,31nm,1.0s
P17K **Kvichak River** 79.33 11 P P 07 59 59.5 -0.3
baz=201
O16K **Kokwok River B** 79.42 10 P P 07 59 59.6 -0.7
baz=199
M13K **Dall Lake** 79.44 7 P P 08 00 00.3 0.0
baz=194
I03D **Drain, OR** 79.52 37 IAmb IAmb 08 00 03.1
comp=Z,45nm,1.2s
NVAR **Mina Array Bea** 79.55 44 P P 08 00 02.2 +0.5
NVAR **Mina Array Bea** 79.55 44 P P 08 00 02.6 +0.8
comp=Z,15nm,0.7s,baz=224,slow=9.0,SNR=158
comp=Z,15nm,0.7s
Q20K **Shuyak Island** 79.60 13 P P 08 00 01.1 -0.1
baz=205
Q19K **Cape Douglas,** 79.63 13 P P 08 00 00.8 -0.7
baz=203
N15K **Kwethluk River** 79.65 9 P P 08 00 01.8 +0.3
baz=197
P18K **Big Mountain,** 79.74 12 P P 08 00 00.9 -1.1
baz=202
O17K **Koliganek Bris** 79.75 11 P P 08 00 01.3 -0.7
baz=200
M14K **Bethel** 79.95 8 IAmb IAmb 08 00 04.4
comp=Z,63nm,1.2s
M14K **Bethel** 79.95 8 P P 08 00 03.8 +0.9
baz=196
BUCK **Buck Mountain** 80.04 37 IAmb IAmb 08 00 06.0
comp=Z,42nm,1.0s
214A **Organ Pipe Nat** 80.05 52 P P 08 00 04.8 +0.5
baz=241,SNR=6.6
M15K **Kasiglux River** 80.06 9 P P 08 00 03.9 +0.3
baz=197,SNR=5.9
TPNV **Topopah Spring** 80.12 46 P P 08 00 05.1 +0.3
baz=238,SNR=19
N16K **Nishlik Lake** 80.14 10 P P 08 00 04.4 +0.3
baz=198,SNR=5.6
O18K **Koktuh Hills** 80.17 11 P P 08 00 03.5 -0.8
baz=202,SNR=13
P19K **Oil Pt** 80.38 12 P P 08 00 04.9 -0.5
baz=204
H04D **Lebanon** 80.38 37 IAmb IAmb 08 00 07.7
comp=Z,52nm,1.2s
L14K **Kuka Creek** 80.42 7 IAmb IAmb 08 00 07.1
comp=Z,27nm,0.9s
L14K **Kuka Creek** 80.42 7 P P 08 00 05.4 0.0
baz=195
N17K **Nushagak Hills** 80.45 10 P P 08 00 05.6 0.0
baz=200
SMAI **San Martin Ant** 80.57 159 P P 08 00 07.3 +1.0
SMAI IAmb IAmb 08 00 08.4
comp=Z,26nm,0.8s
CN2 **Changchun** 80.62 322 P P 08 00 07.5 +0.6
CN2 pmax pmax
comp=Z,50nm,1.0s
M16K **Timber Creek** 80.63 9 P P 08 00 07.1 +0.5
baz=198,SNR=15
O19K **Port Alsworth** 80.66 12 P P 08 00 06.3 -0.4
baz=203
BNX **BinXian** 80.70 325 ⇑P P 08 00 07.9 +0.6
BNX pmax pmax
comp=Z,58nm,1.0s
K13K **Kusilvak Mount** 80.78 6 IAmb IAmb 08 00 09.0
comp=Z,38nm,1.3s
K13K **Kusilvak Mount** 80.78 6 P P 08 00 07.9 +0.6
baz=193
H04A **Detroit Lake** 80.79 37 IAmb IAmb 08 00 08.8
comp=Z,22nm,0.7s
N18K **Kilae Creek** 80.82 11 P P 08 00 07.3 -0.3
baz=201
S11A **Rachel** 80.83 45 IAmb IAmb 08 00 10.2
comp=Z,30nm,0.9s
O20K **Slope Mountain** 80.89 13 P P 08 00 07.9 -0.2
baz=204
L15K **Ungalak Mounta** 80.90 8 P P 08 00 08.2 +0.2
baz=196,SNR=9.9
BRLK **Bradley Lake** 80.98 14 IAmb IAmb 08 00 09.1
comp=Z,37nm,0.9s
BRSE **Bradley Lake S** 80.99 14 P P 08 00 08.8 +0.3
baz=206,SNR=5.0
I05D **Terrebonne, OR** 81.06 37 IAmb IAmb 08 00 11.2
comp=Z,38nm,1.0s
E03A **Lebam** 81.17 35 IAmb IAmb 08 00 11.6
comp=Z,60nm,1.0s
PRN **Pahroc Range** 81.18 46 IAmb IAmb 08 00 12.5
comp=Z,37nm,1.0s
N19K **Bonanza Creek** 81.20 11 P P 08 00 09.1 -0.5
baz=202,SNR=5.6
L16K **Owhat River** 81.21 9 P P 08 00 10.0 +0.4
baz=198,SNR=15
CNSH **ChangSha** 81.22 303 P P 08 00 11.4 +1.0
CNSH pmax pmax
comp=Z,17nm,1.2s
M17K **Holitna River** 81.23 10 P P 08 00 10.5 +0.9
baz=200,SNR=16
R11B **Troy Canyon, C** 81.31 45 P P 08 00 11.4 +0.6
baz=238,SNR=20
BMN **Battle Mountai** 81.34 42 IAmb IAmb 08 00 12.9
comp=Z,35nm,1.0s
WISH **Wishkah** 81.41 34 IAmb IAmb 08 00 13.3
comp=Z,33nm,0.9s
F04A **Amboy** 81.42 36 IAmb IAmb 08 00 12.6
comp=Z,51nm,1.2s
HOOD **Mount Hood Mea** 81.47 36 IAmb IAmb 08 00 13.0
comp=Z,49nm,1.1s
K15K **Wolf Creek Mou** 81.49 8 P P 08 00 12.0 +1.0
baz=196,SNR=32
NLWA **Neilton Lookou** 81.53 34 IAmb IAmb 08 00 13.6
comp=Z,32nm,1.1s
WVOR **Wild Horse Val** 81.57 40 IAmb IAmb 08 00 14.0
comp=Z,39nm,1.1s
M18K **Stony River** 81.59 11 P P 08 00 11.5 +0.1
baz=201,SNR=5.3
SEW **Seward** 81.61 14 P P 08 00 11.0 -0.5
baz=207
G05A **Wamic** 81.62 37 IAmb IAmb 08 00 19.9
comp=Z,29nm,0.9s
BELA **Belgrano 2** 81.63 173 P P 08 00 11.8 +0.2
BELA IAmb IAmb 08 00 12.5
comp=Z,25nm,0.8s
J14K **Nanvaranak Lak** 81.69 7 P P 08 00 12.5 +0.6
J14K IAmb IAmb 08 00 13.3
comp=Z,29nm,1.1s
J14K **Nanvaranak Lak** 81.69 7 P P 08 00 12.5 +0.6
baz=194,SNR=7.6
OZB **Mount Ozzard** 81.70 32 P P 08 00 13.4 +1.0
TUC **Tucson** 81.73 52 P P 08 00 14.7 +1.7
TUC IAmb IAmb 08 00 15.9
comp=Z,26nm,1.0s
TUC **Tucson** 81.73 52 P P 08 00 14.7 +1.7
baz=242
L17K **Donlin** 81.79 9 P P 08 00 13.0 +0.5
baz=199,SNR=16
O22K **Cooper Landing** 81.88 14 P P 08 00 12.5 -0.4
baz=207
I07A **Izee** 81.98 38 IAmb IAmb 08 00 16.1
comp=Z,34nm,0.9s
G06A **Carlson Farm,** 82.00 37 IAmb IAmb 08 00 15.7
comp=Z,23nm,1.0s
N20K **Mount Spurr** 82.00 12 P P 08 00 12.7 -1.0
baz=205,SNR=5.5
SPCR **Spurr Chakacha** 82.00 12 P P 08 00 13.2 -0.5
baz=205
P23K **Montague Islan** 82.00 15 P P 08 00 13.1 -0.5
baz=209
SPU **Mount Spurr** 82.02 12 IAmb IAmb 08 00 13.5
comp=Z,29nm,1.2s
GAMB **Gambell** 82.07 3 P P 08 00 14.3 +0.5
baz=186
L18K **Granite Mounta** 82.13 10 IAmb IAmb 08 00 15.9
comp=Z,35nm,0.8s
L18K **Granite Mounta** 82.13 10 P P 08 00 14.5 +0.3
baz=200,SNR=15
Q12A **Willow Creek R** 82.17 45 IAmb IAmb 08 00 17.0
comp=Z,50nm,1.3s
J08A **Circle Bar Ran** 82.19 39 IAmb IAmb 08 00 17.1
comp=Z,56nm,1.2s
GNW **Green Mountain** 82.20 34 IAmb IAmb 08 00 16.6
comp=Z,29nm,0.9s
M19K **Big River Lodg** 82.23 11 IAmb IAmb 08 00 15.2
comp=Z,20nm,0.8s
M19K **Big River Lodg** 82.23 11 P P 08 00 14.8 +0.1
baz=203
X16A **Lo Mia Camp, P** 82.24 50 IAmb IAmb 08 00 18.3
comp=Z,25nm,1.1s
CLRS **Cowichan Lake** 82.30 33 IAmb IAmb 08 00 17.0
comp=Z,23nm,0.9s
K17K **Iditarod** 82.34 9 IAmb IAmb 08 00 16.9
comp=Z,102nm,1.7s
K17K **Iditarod** 82.34 9 P P 08 00 16.1 +0.8
baz=199,SNR=6.5
L19K **White Mountain** 82.40 11 IAmb IAmb 08 00 17.0
comp=Z,87nm,1.5s
L19K **White Mountain** 82.40 11 P P 08 00 15.2 -0.5
baz=204,SNR=12
RC01 **Rabbit Creek A** 82.42 13 IAmb IAmb 08 00 16.4
comp=Z,66nm,1.2s
RC01 **Rabbit Creek A** 82.42 13 P P 08 00 15.0 -0.7
baz=207
M20K **Styx River** 82.44 12 P P 08 00 15.9 0.0
baz=204
319A **Douglas** 82.45 54 IAmb IAmb 08 00 19.6
comp=Z,50nm,1.0s
CBB **Campbell River** 82.46 31 IAmb IAmb 08 00 17.9
comp=Z,30nm,1.0s
KNB **Kanab** 82.52 47 IAmb IAmb 08 00 19.3
comp=Z,18nm,0.8s
PWL **Port Wells** 82.54 14 IAmb IAmb 08 00 16.8
comp=Z,57nm,1.0s
PWL **Port Wells** 82.54 14 P P 08 00 15.4 -0.9
baz=208,SNR=6.8
PGC **Sidney** 82.54 33 IAmb IAmb 08 00 18.1
comp=Z,29nm,0.9s
SUA **Susitna One** 82.54 13 IAmb IAmb 08 00 16.8
comp=Z,43nm,0.8s
SUA **Susitna One** 82.54 13 P P 08 00 15.5 -1.0
baz=206,SNR=6.8
J16K **Anvik River** 82.57 8 IAmb IAmb 08 00 18.1
comp=Z,65nm,1.2s
J16K **Anvik River** 82.57 8 P P 08 00 16.4 +0.1
baz=197,SNR=14
BBB **Bella Bella** 82.59 28 P P 08 00 16.6 -0.1
comp=Z,23nm,1.0s,baz=268,slow=3.4,SNR=5.1
comp=Z,23nm,1.0s
U15A **North Rim** 82.60 48 IAmb IAmb 08 00 20.0
comp=Z,39nm,0.8s
KAIM **Kayak Island** 82.71 16 P P 08 00 16.8 -0.3
baz=212
F07A **Phinny Hill Vi** 82.79 37 IAmb IAmb 08 00 19.6
comp=Z,21nm,0.9s
WUAZ **Wupatki** 82.81 49 IAmb IAmb 08 00 21.4
comp=Z,26nm,1.1s
WUAZ **Wupatki** 82.81 49 P P 08 00 19.0 +0.5
baz=241,SNR=13
CRAG **Craig** 82.83 24 P P 08 00 17.9 +0.1
baz=222
SKT **Skwentna** 82.85 12 P P 08 00 16.7 -1.2
baz=205
GLI **Glacier Island** 82.85 15 P P 08 00 17.0 -0.9
baz=209,SNR=9.1
L20K **Farewell, AK** 82.85 11 P P 08 00 17.5 -0.4
baz=203,SNR=7.7
J17K **VABM Dome** 82.88 8 IAmb IAmb 08 00 19.4
comp=Z,21nm,0.8s
J17K **VABM Dome** 82.88 8 P P 08 00 18.1 +0.1
baz=198,SNR=9.2
EYAK **Cordova Ski Ar** 82.89 15 P P 08 00 17.0 -1.1
baz=211
M22K **Willow** 82.94 13 P P 08 00 17.2 -1.0
baz=207,SNR=9.1
G08A **Pilot Rock** 83.00 38 IAmb IAmb 08 00 20.9
comp=Z,47nm,1.3s
KNK **Knik Glacier** 83.00 14 IAmb IAmb 08 00 19.2
comp=Z,36nm,0.8s
KNK **Knik Glacier** 83.00 14 P P 08 00 18.2 -0.4
baz=208,SNR=6.5
PMR **Palmer** 83.01 13 P P 08 00 18.7 +0.1
PMR **Palmer** 83.01 13 IAmb IAmb 08 00 19.1
comp=Z,69nm,1.4s
PMR **Palmer** 83.01 13 P P 08 00 17.8 -0.8
baz=208,SNR=9.0

RAGM **Ragged Mountai** 83.03 16 lAmb lAmb 08 00 19.7
comp=Z,54nm,1.2s
PKCU **Pink Cliffs** 83.08 47 lAmb lAmb 08 00 23.0
comp=Z,37nm,1.0s
HMT **Hamilton** 83.10 16 lAmb lAmb 08 00 20.0
comp=Z,32nm,0.8s
I17K **Unalakleet** 83.13 8 P **P** **08 00 19.1 0.0**
baz=196
LTY **Liberty** 83.18 35 lAmb lAmb 08 00 21.3
comp=Z,25nm,1.1s
SIT **Sitka** 83.21 22 P **P** **08 00 19.5 -0.2**
baz=220
E07A **Sunnyside** 83.22 36 lAmb lAmb 08 00 21.9
comp=Z,33nm,1.0s
J18K **Innoko River** 83.29 9 P **P** **08 00 19.6 -0.5**
baz=200,SNR=30
HAWA **Hanford** 83.30 36 lAmb lAmb 08 00 22.4
comp=Z,42nm,1.1s
U33K **Whale Pass** 83.31 23 P **P** **08 00 20.6 +0.4**
baz=222,SNR=10
V35K **Ketchikan** 83.32 25 P **P** **08 00 20.8 +0.5**
baz=224
SML **Sawmill** 83.38 14 P **P** **08 00 20.1 -0.5**
baz=208
MTPU **Mount Pierson** 83.46 46 lAmb lAmb 08 00 24.7
comp=Z,17nm,0.9s
CUT **Chulitna** 83.49 13 P **P** **08 00 20.1 -0.9**
baz=206,SNR=10
M23K **Glacier View** 83.50 14 P **P** **08 00 20.3 -0.8**
baz=209
MAW **Mawson** 83.51 200 P **P** **08 00 21.0 -0.2**
comp=Z,2.3nm,0.4s,baz=116,slow=5.2,SNR=7.0
comp=Z,2.3nm,0.4s
HEH **HeiHe** 83.52 328 *e*P **P** **08 00 21.6 +0.2**
HEH pmax pmax
comp=Z,24nm,1.2s
BMRM **Bremner River** 83.54 16 P **P** **08 00 20.6 -0.8**
baz=212,SNR=14
PPLA **Purkeypile** 83.55 12 P **P** **08 00 20.5 -1.0**
baz=205
S31K **Pelican** 83.59 21 lAmb lAmb 08 00 23.2
comp=Z,31nm,1.0s
S31K **Pelican** 83.59 21 P **P** **08 00 21.6 0.0**
baz=220,SNR=17
MESA **MESA** 83.59 17 P **P** **08 00 21.9 0.0**
baz=214,SNR=17
SCM **Sheep Creek Mo** 83.63 14 P **P** **08 00 21.6 -0.2**
baz=209,SNR=11
K20K **Telida** 83.63 11 P **P** **08 00 21.6 -0.1**
baz=203,SNR=26
KLU **Klutina** 83.67 15 lAmb lAmb 08 00 22.8
comp=Z,24nm,1.0s
KLU **Klutina** 83.67 15 P **P** **08 00 21.9 -0.1**
baz=210
H16K **Elim** 83.67 7 P **P** **08 00 21.7 -0.2**
baz=195,SNR=8.3
CRQE **Cirque** 83.76 16 P **P** **08 00 22.0 -0.5**
baz=213,SNR=15
S32K **Killisnoo** 83.79 22 lAmb lAmb 08 00 24.1
comp=Z,26nm,1.4s
S32K **Killisnoo** 83.79 22 P **P** **08 00 22.9 +0.3**
baz=221,SNR=7.3
W18A **Petrified Fore** 83.81 50 P **P** **08 00 23.7 +0.2**
baz=242
WRAK **Wrangell Islan** 83.83 24 P **P** **08 00 23.0 +0.2**
baz=223
MFID **Camas Ranch** 83.83 40 lAmb lAmb 08 00 25.1
comp=Z,20nm,1.0s
G15K **Niukluk** 83.83 6 P **P** **08 00 22.4 -0.3**
baz=193
T33K **Petersburg** 83.89 23 P **P** **08 00 23.4 +0.3**
baz=222
PNL **Peninsula** 83.92 19 P **P** **08 00 24.9 +1.6**
PNL **Peninsula** 83.92 19 P **P** **08 00 23.5 +0.2**
baz=216,SNR=14
J19K **Poorman** 83.96 10 lAmb lAmb 08 00 24.6
comp=Z,18nm,0.8s
J19K **Poorman** 83.96 10 P **P** **08 00 23.7 +0.4**
baz=201,SNR=7.9
PINM **Pinnacle** 84.01 18 P **P** **08 00 23.7 -0.1**
baz=216,SNR=5.6
D08A **Wollman Farm,** 84.03 36 lAmb lAmb 08 00 25.9
comp=Z,28nm,1.0s
VRDI **Verde Repeater** 84.06 16 lAmb lAmb 08 00 25.0
comp=Z,31nm,0.8s
BCPM **Bancas Point** 84.08 18 lAmb lAmb 08 00 25.1
comp=Z,31nm,1.0s
N25K **Chitina, Valde** 84.09 15 P **P** **08 00 23.9 -0.3**
baz=212,SNR=27
DUG **Dugway, Tooele** 84.10 44 P **P** **08 00 24.9 +0.1**
baz=240
121A **Cookes Peak, D** 84.10 53 P **P** **08 00 25.4 +0.4**
baz=244
F14K **Arctic Creek** 84.10 5 P **P** **08 00 24.2 +0.3**
baz=191
GRNC **Granite Creek** 84.11 17 lAmb lAmb 08 00 25.3
comp=Z,42nm,1.0s
HNS **HongShan** 84.11 312 ⇓P **P** **08 00 25.4 +0.8**
HNS pmax pmax
comp=Z,29nm,1.4s
M24K **Tolsona, Glenn** 84.14 14 P **P** **08 00 24.1 -0.2**
baz=210,SNR=9.1
E09A **Wood Farm, Sta** 84.16 37 lAmb lAmb 08 00 26.2
comp=Z,31nm,1.3s
WAT6 **Susitna Watana** 84.19 14 P **P** **08 00 24.1 -0.6**
baz=209,SNR=24
WAT1 **Susitna Watana** 84.23 13 P **P** **08 00 23.9 -0.8**
baz=208
H17K **Granite Mounta** 84.24 8 lAmb lAmb 08 00 25.5
comp=Z,27nm,1.4s
H17K **Granite Mounta** 84.24 8 P **P** **08 00 24.2 -0.5**
baz=197
MCARA **McCarthy VSAT** 84.31 16 lAmb lAmb 08 00 26.1
comp=Z,41nm,1.1s
MCARA **McCarthy VSAT** 84.31 16 P **P** **08 00 24.6 -0.5**
baz=213,SNR=9.9
BJT **Baijiatuau** 84.37 315 P **P** **08 00 26.5 +0.6**
BJT lAmb lAmb 08 00 27.8
comp=Z,56nm,1.4s
J20K **Nowinta River** 84.38 10 lAmb lAmb 08 00 26.4
comp=Z,25nm,0.8s
J20K **Nowinta River** 84.38 10 P **P** **08 00 24.5 -0.8**
baz=203,SNR=17
BJI **Beijing** 84.38 315 P **P** **08 00 26.4 +0.5**
BJI pmax pmax
comp=Z,13nm,1.2s
F10A **Beach Ranch, E** 84.38 38 lAmb lAmb 08 00 27.2
comp=Z,33nm,0.9s
KTH **Kantishna Hill** 84.39 12 lAmb lAmb 08 00 25.2
comp=Z,35nm,0.9s
LOGN **Logan Glacier** 84.39 17 lAmb lAmb 08 00 26.7
comp=Z,38nm,0.9s
G16K **Koyuk River** 84.39 7 P **P** **08 00 25.8 +0.4**
baz=195
P29M **Windy Craggy** 84.40 19 lAmb lAmb 08 00 27.2
comp=Z,34nm,0.8s
P29M **Windy Craggy** 84.40 19 P **P** **08 00 25.6 -0.1**
baz=218,SNR=25
LYN **LuoYang** 84.41 309 P **P** **08 00 27.4 +1.2**
LYN pmax pmax
comp=Z,89nm,0.8s
HMU **Henry Mountain** 84.41 47 lAmb lAmb 08 00 28.2
comp=Z,40nm,1.8s
CTG **Chitna Glacier** 84.42 17 P **P** **08 00 25.9 +0.1**
baz=215,SNR=23
CTGM **Chitina Glacie** 84.42 17 lAmb lAmb 08 00 26.8
comp=Z,38nm,0.8s
R32K **Eaglecrest** 84.42 21 P **P** **08 00 25.8 0.0**
baz=221,SNR=10
F15K **North Star Dit** 84.47 6 P **P** **08 00 26.0 +0.2**
baz=193
GCSA **Galena City Sc** 84.48 9 P **P** **08 00 26.3 +0.5**
baz=200
B08A **Colville Reser** 84.55 35 lAmb lAmb 08 00 27.6
comp=Z,26nm,0.9s
O28M **Mount Upton** 84.58 18 P **P** **08 00 26.7 -0.1**
baz=216,SNR=25
HARP **HAARP** 84.63 15 P **P** **08 00 26.2 -0.5**
baz=211,SNR=5.6
H18K **Honhosa River** 84.65 8 P **P** **08 00 26.3 -0.4**
baz=199
O29M **Mount Kennedy** 84.68 19 lAmb lAmb 08 00 28.5
comp=Z,26nm,1.1s
O29M **Mount Kennedy** 84.68 19 P **P** **08 00 27.5 +0.4**
baz=217,SNR=11
G17K **Kiwalik Mounta** 84.69 7 P **P** **08 00 26.4 -0.5**
baz=196
DHY **Denali Highway** 84.70 13 P **P** **08 00 26.7 -0.6**
baz=209,SNR=10
PLBC **Pleasant Camp** 84.71 20 P **P** **08 00 27.6 +0.6**
baz=219,SNR=21
TMUT **Trail Mountain** 84.74 46 lAmb lAmb 08 00 30.3
comp=Z,33nm,1.4s
EPT **El Paso** 84.75 54 lAmb lAmb 08 00 30.3
comp=Z,37nm,1.3s
HLID **Hailey** 84.78 41 P **P** **08 00 29.0 +0.9**
baz=238,SNR=28
C09A **Chrisman Ranch** 84.81 36 lAmb lAmb 08 00 29.3
comp=Z,19nm,0.8s
ENH **Enshi** 84.83 304 P **P** **08 00 28.7 +0.2**
BPAW **Bear Paw Mtn.** 84.88 12 P **P** **08 00 27.3 -0.6**
baz=206
I20K **Naaghedeneel** 84.90 10 lAmb lAmb 08 00 29.2
comp=Z,39nm,1.1s
I20K **Naaghedeneel** 84.90 10 P **P** **08 00 27.7 -0.1**
baz=202,SNR=7.3
MCK **McKinley** 84.95 13 P **P** **08 00 27.6 -0.7**
baz=208,SNR=17
P30M **Million Dollar** 85.03 19 P **P** **08 00 29.2 +0.4**
baz=219
T35M **Bob Quinn** 85.04 24 P **P** **08 00 29.3 +0.5**
baz=225,SNR=6.3
SKAG **Skagway** 85.05 20 lAmb lAmb 08 00 30.8
comp=Z,43nm,1.3s
SKAG **Skagway** 85.05 20 P **P** **08 00 29.6 +0.9**
baz=220,SNR=18
PAX **Paxson** 85.05 14 P **P** **08 00 27.8 -1.0**
baz=211,SNR=13
YUK8 **Steele Glacier** 85.12 17 P **P** **08 00 29.3 -0.1**
baz=216
M26K **Nabesna, AK** 85.17 16 lAmb lAmb 08 00 31.0
comp=Z,44nm,1.0s
M26K **Nabesna, AK** 85.17 16 P **P** **08 00 29.1 -0.3**
baz=213,SNR=30
YUK6 **Outpost Mounta** 85.25 18 P **P** **08 00 29.8 -0.2**
baz=217,SNR=6.3
H19K **Roundabout Mou** 85.28 9 lAmb lAmb 08 00 30.8
comp=Z,39nm,1.6s
H19K **Roundabout Mou** 85.28 9 P **P** **08 00 30.1 +0.4**
baz=200,SNR=6.4
G18K **Tagagawik** 85.32 8 P **P** **08 00 29.6 -0.3**
baz=198
YUK3 **Moose Creek** 85.33 17 P **P** **08 00 30.1 -0.2**
baz=216,SNR=26
S34M **Telegraph Cree** 85.37 23 lAmb lAmb 08 00 32.2
comp=Z,32nm,0.8s
S34M **Telegraph Cree** 85.37 23 P **P** **08 00 30.8 +0.5**
baz=224,SNR=32
Y22D **IRIS PASSCAL I** 85.42 52 lAmb lAmb 08 00 33.7
comp=Z,18nm,1.0s
Y22D **IRIS PASSCAL I** 85.42 52 P **P** **08 00 32.6 +1.2**
baz=244
M27K **Edge Creek, AK** 85.42 16 P **P** **08 00 30.9 +0.3**
baz=214,SNR=31
H20K **Anotleneega Mo** 85.48 9 P **P** **08 00 31.1 +0.4**
baz=202,SNR=7.4
TCUT **Toone Canyon** 85.48 44 lAmb lAmb 08 00 33.4
comp=Z,14nm,0.9s
YUK4 **Talbot Arm** 85.49 18 P **P** **08 00 31.3 +0.2**
baz=217,SNR=8.3
VHRN **Van Horn** 85.52 56 lAmb lAmb 08 00 35.5
comp=Z,36nm,1.0s
F17K **Baldwin Pennin** 85.53 7 P **P** **08 00 32.1 +1.2**
baz=196
GYA **Guiyang** 85.58 300 P **P** **08 00 33.5 +1.3**
GYA pmax pmax
comp=Z,45nm,0.6s
MNTX **Cornudas Mount** 85.58 55 P **P** **08 00 33.4 +1.3**
baz=245,SNR=18
L26K **Log Cabin Wild** 85.61 15 lAmb lAmb 08 00 32.5
comp=Z,30nm,1.3s
L26K **Log Cabin Wild** 85.61 15 P **P** **08 00 31.4 0.0**
baz=213,SNR=12
MVCO **Mesa Verde** 85.65 49 P **P** **08 00 31.8 -0.7**
baz=243
I21K **Tanana** 85.67 11 P **P** **08 00 31.4 -0.2**
baz=205
P32M **Atlin** 85.69 21 lAmb lAmb 08 00 33.5
comp=Z,16nm,0.9s
P32M **Atlin** 85.69 21 P **P** **08 00 31.8 -0.1**
baz=222,SNR=9.8
NEA2 **Nenana** 85.69 12 lAmb lAmb 08 00 31.6
comp=Z,39nm,1.8s
NEA2 **Nenana** 85.69 12 P **P** **08 00 30.8 -0.9**
baz=207,SNR=5.6
K24K **Donnelly Dome** 85.70 14 P **P** **08 00 31.7 -0.1**
baz=210,SNR=10.0
NEW **Newport** 85.71 36 P **P** **08 00 32.0 -0.2**
baz=236,SNR=5.9
Q32M **Nakina River** 85.72 22 lAmb lAmb 08 00 33.9
comp=Z,17nm,0.8s
Q32M **Nakina River** 85.72 22 P **P** **08 00 32.7 +0.5**
baz=223,SNR=18
MLY **Manley** 85.76 11 lAmb lAmb 08 00 32.7
comp=Z,21nm,1.2s
MLY **Manley** 85.76 11 P **P** **08 00 30.8 -1.3**
baz=206,SNR=11
G19K **Purcell Mounta** 85.77 8 P **P** **08 00 31.8 -0.2**
baz=200,SNR=5.9
O30N **Mendenhall** 85.81 19 lAmb lAmb 08 00 33.9
comp=Z,22nm,0.8s
O30N **Mendenhall** 85.81 19 P **P** **08 00 32.3 -0.2**
baz=219,SNR=26
RIDG **Independent Ri** 85.86 14 P **P** **08 00 31.6 -1.0**
baz=211,SNR=14
F18K **Selawik** 85.87 7 P **P** **08 00 32.2 -0.2**
baz=197
HDA **Harding Lake** 85.97 13 P **P** **08 00 32.5 -0.6**
HDA lAmb lAmb 08 00 33.3
comp=Z,24nm,0.8s
HDA **Harding Lake** 85.97 13 P **P** **08 00 32.5 -0.6**
baz=209,SNR=12
H21K **Melozitna Rive** 85.97 10 lAmb lAmb 08 00 35.1
comp=Z,50nm,1.6s
H21K **Melozitna Rive** 85.97 10 P **P** **08 00 32.9 -0.2**
baz=204,SNR=6.0
TX31 **Lajas Ar. Si** 85.97 57 lAmb lAmb 08 00 36.9
comp=Z,30nm,0.9s
TXAR **Lajitas Array** 85.97 57 P **P** **08 00 35.2 +1.2**
TXAR **Lajitas Array** 85.97 57 P **P** **08 00 35.8 +1.7**
comp=Z,20nm,0.8s,baz=219,slow=6.2,SNR=245
comp=Z,20nm,0.8s
L27K **Beaver Creek,** 86.02 16 P **P** **08 00 33.2 -0.2**
baz=214,SNR=13
BCAR **Beaver Creek A** 86.03 16 P **P** **08 00 33.1 -0.3**
N30M **Aishikik Lake** 86.04 18 P **P** **08 00 33.4 -0.2**
baz=218,SNR=11
E17K **Hotham Inlet** 86.09 6 P **P** **08 00 33.6 +0.1**
baz=195,SNR=6.3
WHY **Whitehorse** 86.11 20 lAmb lAmb 08 00 35.4
comp=Z,23nm,1.1s
WHY **Whitehorse** 86.11 20 P **P** **08 00 34.4 +0.4**
baz=220,SNR=9.3
IMAR **Indian Mountai** 86.11 10 P **P** **08 00 33.5 -0.2**
I23K **Minto, Yukon-K** 86.13 12 lAmb lAmb 08 00 33.9
comp=Z,27nm,1.4s
I23K **Minto, Yukon-K** 86.13 12 P **P** **08 00 33.1 -0.6**
baz=207,SNR=6.4
ANMO **Albuquerque** 86.14 51 P **P** **08 00 35.0 +0.2**
ANMO **Albuquerque** 86.14 51 P **P** **08 00 35.4 +0.6**
baz=244
DLBC **Dease Lake** 86.16 23 lAmb lAmb 08 00 35.8
comp=Z,52nm,1.8s
DLBC **Dease Lake** 86.16 23 P **P** **08 00 34.7 +0.6**
comp=Z,6.3nm,0.7s,baz=229,slow=3.7,SNR=22
comp=Z,6.3nm,0.7s
DLBC **Dease Lake** 86.16 23 P **P** **08 00 34.7 +0.6**
baz=225,SNR=11
COLA **College** 86.19 12 P **P** **08 00 35.1 +1.1**
COLA **College** 86.19 12 P **P** **08 00 33.5 -0.5**
COLA **College** 86.19 12 P **P** **08 00 33.0 -1.0**
baz=208
SCRK **Sand Creek** 86.26 14 P **P** **08 00 34.2 -0.4**
SCRK **Sand Creek** 86.26 14 P **P** **08 00 34.1 -0.5**
baz=212,SNR=7.1
IL31 **** 86.30 13 lAmb lAmb 08 00 34.8
comp=Z,31nm,1.0s
ILAR **Eielson Array** 86.30 13 P **P** **08 00 33.5 -1.1**
comp=Z,8.8nm,0.4s,baz=219,slow=4.9,SNR=64
ILAR PP **PP** **08 04 08.3 +1.8**
comp=Z,1.8nm,1.0s,baz=223,slow=7.7,SNR=4.9
comp=Z,8.8nm,0.4s
F19K **Shaleruckik Mo** 86.33 8 lAmb lAmb 08 00 35.8
comp=Z,11nm,0.7s
F19K **Shaleruckik Mo** 86.33 8 P **P** **08 00 34.3 -0.3**
baz=199
XLT **XiLinHaoTe** 86.35 319 *e*P **P** **08 00 35.9 +0.5**
XLT pmax pmax
comp=Z,28nm,1.0s
XLT pmax pmax
comp=Z,82nm,5.2s
ALPN **Alpine** 86.41 57 lAmb lAmb 08 00 38.5
comp=Z,18nm,0.8s
M29M **Somme Creek** 86.42 17 P **P** **08 00 35.2 -0.2**
baz=217,SNR=21
H22K **Ishtalitna Cre** 86.43 11 P **P** **08 00 34.9 -0.3**
baz=205,SNR=12
P33M **Teslin, Yukon** 86.45 21 P **P** **08 00 35.5 0.0**
baz=222,SNR=12
N31M **Braeburn, Yuko** 86.46 19 lAmb lAmb 08 00 36.9
comp=Z,37nm,1.1s
N31M **Braeburn, Yuko** 86.46 19 P **P** **08 00 36.0 +0.5**
baz=220,SNR=16
POKR **Poker Plat Res** 86.49 12 lAmb lAmb 08 00 35.4
comp=Z,24nm,0.8s
POKR **Poker Plat Res** 86.49 12 P **P** **08 00 34.9 -0.6**
baz=209,SNR=7.9
J25K **Salcha River,** 86.49 13 P **P** **08 00 35.5 -0.1**
baz=211,SNR=14
R33M **Jennings River** 86.50 22 lAmb lAmb 08 00 37.7
comp=Z,44nm,1.4s
R33M **Jennings River** 86.50 22 P **P** **08 00 36.2 +0.3**
baz=224,SNR=18
E18K **Tukpahlearik C** 86.55 7 P **P** **08 00 36.0 +0.3**
baz=196,SNR=5.2
D17K **Noatak River** 86.56 6 P **P** **08 00 35.9 +0.2**
baz=194
G21K **Allakaket** 86.64 10 P **P** **08 00 36.5 +0.3**
baz=203,SNR=12
H23K **Yukon River** 86.70 11 P **P** **08 00 36.3 -0.2**
baz=207
K27K **Chicken** 86.76 15 lAmb lAmb 08 00 38.5
comp=Z,31nm,1.2s
K27K **Chicken** 86.76 15 P **P** **08 00 37.4 +0.6**
baz=214
MSO **Missoula** 86.76 38 P **P** **08 00 37.3 -0.1**
baz=239
J26L **Joseph Creek** 86.80 14 P **P** **08 00 37.5 +0.4**
baz=212,SNR=20
F20K **Avaraart Lake** 86.81 9 P **P** **08 00 37.2 +0.3**
baz=201,SNR=7.2
DLMT **Dillon** 86.82 40 lAmb lAmb 08 00 39.6
comp=Z,26nm,0.9s
XAN **Xi'an** 86.83 307 ⇓P **P** **08 00 39.0 +1.1**
XAN pmax pmax
comp=Z,70nm,1.1s
TPAW **Teton Pass** 86.92 42 lAmb lAmb 08 00 39.4
comp=Z,18nm,1.1s
E19K **Redstone River** 86.99 8 lAmb lAmb 08 00 38.6
comp=Z,19nm,0.7s
E19K **Redstone River** 86.99 8 P **P** **08 00 37.9 +0.1**
baz=200,SNR=10
H24K **Noodor Dome** 87.03 12 P **P** **08 00 37.7 -0.4**
baz=208
SNOW **Snow King Moun** 87.04 42 lAmb lAmb 08 00 41.0
comp=Z,30nm,1.1s
N32M **Quiet Lake** 87.06 20 lAmb lAmb 08 00 39.9
comp=Z,35nm,1.2s
N32M **Quiet Lake** 87.06 20 P **P** **08 00 39.0 +0.7**
baz=222
S22A **4UR Ranch, Cre** 87.08 49 P **P** **08 00 39.8 +0.5**
baz=244,SNR=23
IMW **Indian Meadow** 87.13 42 lAmb lAmb 08 00 41.5
comp=Z,28nm,1.0s
LOHW **Long Hollow** 87.20 42 lAmb lAmb 08 00 41.4
comp=Z,36nm,1.6s
PRP **Porcupine Dome** 87.23 13 lAmb lAmb 08 00 39.5
comp=Z,20nm,1.3s
PRP **Porcupine Dome** 87.23 13 P **P** **08 00 38.1 -1.1**
baz=211,SNR=5.7
F21K **Alatna River** 87.30 9 P **P** **08 00 39.2 -0.1**
baz=203,SNR=7.6
G22K **Bettles** 87.34 10 P **P** **08 00 40.1 +0.7**
baz=205
G23K **Bananza Creek** 87.41 11 lAmb lAmb 08 00 40.8
comp=Z,16nm,1.1s
G23K **Bananza Creek** 87.41 11 P **P** **08 00 39.4 -0.5**
baz=206,SNR=10
M31M **Drury Creek,** 87.44 19 lAmb lAmb 08 00 40.8
comp=Z,14nm,1.0s
M31M **Drury Creek, Y** 87.44 19 P **P** **08 00 39.7 -0.4**
baz=221,SNR=12
SAND **Sanderson** 87.45 57 lAmb lAmb 08 00 42.9
comp=Z,16nm,0.9s
YFT **Old Faithful** 87.46 41 lAmb lAmb 08 00 44.1
comp=Z,25nm,1.0s
DAWY **Dawson** 87.47 16 P **P** **08 00 40.6 +0.4**
DAWY **Dawson** 87.47 16 P **P** **08 00 40.5 +0.3**
baz=216,SNR=17
BW06 **Boulder Array** 87.48 43 P **P** **08 00 40.5 -0.5**
baz=242,SNR=24
PD31 **Pinedale Array** 87.48 43 lAmb lAmb 08 00 42.2
comp=Z,14nm,0.9s
PDAR **Pinedale Array** 87.48 43 P **P** **08 00 41.5 +0.6**
PDAR **Pinedale Array** 87.48 43 P **P** **08 00 41.4 +0.4**
comp=Z,8.9nm,0.8s,baz=214,slow=2.9,SNR=89
comp=Z,8.9nm,0.8s
MNHN **Monahans** 87.49 56 lAmb lAmb 08 00 42.9
comp=Z,13nm,1.0s
BOZ **Bozeman (W)** 87.53 40 lAmb lAmb 08 00 43.0
comp=Z,25nm,1.1s
BOZ **Bozeman (W)** 87.53 40 P **P** **08 00 41.6 +0.5**
baz=240,SNR=30
I26K **Coal Creek Min** 87.58 14 lAmb lAmb 08 00 41.7
comp=Z,32nm,1.2s
I26K **Coal Creek Min** 87.58 14 P **P** **08 00 40.6 0.0**
baz=213
H17A **Grant Village** 87.60 42 P **P** **08 00 43.2 +1.7**
baz=241,SNR=6.1
EGAK **Eagle** 87.61 15 lAmb lAmb 08 00 41.7
comp=Z,25nm,0.9s
EGAK **Eagle** 87.61 15 P **P** **08 00 40.5 -0.2**
baz=215,SNR=14
YNR **Norris Junctio** 87.69 41 lAmb lAmb 08 00 45.7
comp=Z,18nm,1.1s
F22K **John River** 87.77 10 P **P** **08 00 41.7 +0.3**
baz=204
FARO **Faro, Yukon** 87.78 19 P **P** **08 00 42.1 +0.4**
FARO lAmb lAmb 08 00 42.6
comp=Z,55nm,1.9s
FARO **Faro, Yukon** 87.78 19 P **P** **08 00 42.0 +0.4**
baz=222,SNR=12
WTLY **Watson Lake, Y** 87.78 22 lAmb lAmb 08 00 43.3
comp=Z,33nm,1.4s
WTLY **Watson Lake, Y** 87.78 22 P **P** **08 00 41.7 0.0**
baz=226,SNR=6.0
LKWY **Lake** 87.79 41 lAmb lAmb 08 00 45.6
comp=Z,26nm,1.1s
K29M **Barlow Dome** 87.80 17 P **P** **08 00 42.3 +0.5**
K29M **Barlow Dome** 87.80 17 P **P** **08 00 42.0 +0.2**
baz=218,SNR=16
H25L **Birch Creek** 87.82 12 P **P** **08 00 41.4 -0.3**
baz=210
COLD **Coldfoot** 87.84 10 P **P** **08 00 42.4 +0.7**
COLD **Coldfoot** 87.84 10 P **P** **08 00 42.5 +0.7**
baz=206,SNR=26
D19K **Kuna River** 87.86 7 lAmb lAmb 08 00 42.6
comp=Z,12nm,0.8s
D19K **Kuna River** 87.86 7 P **P** **08 00 41.8 -0.1**
baz=199
HHC **Hu-ho-hao-te** 87.86 314 *e*P **P** **08 00 43.5 +0.8**
HHC pmax pmax
comp=Z,19nm,0.8s
HHC pmax pmax
comp=Z,100nm,4.3s
G24K **Hadweenzic Riv** 87.87 12 P **P** **08 00 41.2 -0.8**
baz=209,SNR=6.8
E20K **Nigu River** 87.88 8 P **P** **08 00 41.8 -0.2**
baz=201,SNR=21
ODSA **Odessa** 87.96 55 lAmb lAmb 08 00 45.1
comp=Z,24nm,1.1s
YMP **Mirror Lake Pl** 88.03 41 lAmb lAmb 08 01 02.0
comp=Z,14nm,1.2s
SDCO **Great Sand Dun** 88.03 49 P **P** **08 00 43.4 -0.4**
baz=245,SNR=11
J29N **Klondike Camp** 88.09 16 P **P** **08 00 43.0 -0.2**
baz=217
I27K **Kandik River** 88.18 14 P **P** **08 00 43.4 -0.1**
baz=214,SNR=5.7
G25K **Bearman Lake** 88.19 12 P **P** **08 00 43.7 +0.3**
baz=210
D20K **Etivluk River** 88.25 8 P **P** **08 00 44.0 +0.3**
baz=200,SNR=6.5
TOAD **Toad River Com** 88.27 24 P **P** **08 00 44.4 +0.3**

baz=229,SNR=33
C19K **Lookout Ridge** 88.28 7 P P 08 00 43.8 -0.1
baz=198
LIRD **Liard River Hi** 88.31 24 P P 08 00 44.3 +0.2
baz=228,SNR=6.5
E21K **Killik River** 88.35 9 IAmb IAmb 08 00 44.8
comp=Z,25nm,1.1s
E21K **Killik River** 88.35 9 P P 08 00 44.3 +0.1
baz=203
KMI **Kunming** 88.36 297 ⇑P P 08 00 46.9 +1.4
KMI pmax pmax
comp=Z,20nm,1.3s
E22K **Anaktuvuk Pass** 88.40 10 P P 08 00 44.8 +0.3
baz=205
I28M **Miner Creek** 88.46 15 P P 08 00 44.6 -0.2
baz=216,SNR=11
F24K **Squaw Lake** 88.51 11 IAmb IAmb 08 00 46.1
comp=Z,19nm,0.7s
F24K **Squaw Lake** 88.51 11 P P 08 00 44.8 -0.1
baz=208,SNR=16
RWWY **Rawlins** 88.54 45 IAmb IAmb 08 00 47.5
comp=Z,26nm,1.1s
T25A **Trinidad** 88.57 50 P P 08 00 46.1 -0.1
baz=246,SNR=6.0
OZNA **Ozona** 88.62 57 IAmb IAmb 08 00 48.1
comp=Z,15nm,0.8s
E23K **Chandalar** 88.69 10 P P 08 00 45.8 -0.1
baz=207,SNR=17
J30M **Hart River** 88.69 17 IAmb IAmb 08 00 47.1
comp=Z,26nm,1.4s
J30M **Hart River** 88.69 17 P P 08 00 46.5 +0.5
baz=219,SNR=7.3
CRAI **Chiangrai** 88.70 292 IAmb IAmb 08 00 49.7
comp=Z,11nm,1.0s
ELIB **Princess Elisa** 88.70 187 *d*P P 08 00 45.7 -0.4
comp=Z,16nm,0.8s
H27K **Steamboat Moun** 88.72 14 P P 08 00 46.5 +0.5
baz=214,SNR=10
RLMT **Red Lodge** 88.76 41 IAmb IAmb 08 00 49.0
comp=Z,18nm,1.0s
RLMT **Red Lodge** 88.76 41 P P 08 00 48.0 +1.2
baz=242,SNR=15
I29M **Ogilvie Camp,** 88.79 16 IAmb IAmb 08 00 46.9
comp=Z,24nm,1.1s
I29M **Ogilvie Camp,** 88.79 16 P P 08 00 45.8 -0.5
baz=217,SNR=14
Q24A **Divide** 88.79 48 P P 08 00 47.9 +0.6
baz=245
G26K **Porcupine Rive** 88.83 13 P P 08 00 46.6 +0.3
baz=212,SNR=22
E24K **Your Creek** 88.90 11 P P 08 00 47.2 +0.5
baz=208,SNR=6.8
C21K **Knifeblade Rid** 88.91 8 P P 08 00 46.7 -0.1
baz=202,SNR=11
D22K **Ayikyak River** 88.95 9 P P 08 00 47.6 +0.7
baz=204
TGTN **Hyland Airport** 88.95 21 P P 08 00 47.7 +0.5
baz=226,SNR=7.4
F25K **Christian Rive** 89.00 12 P P 08 00 47.5 +0.3
baz=210,SNR=9.0
833A **Chaparral WMA,** 89.06 60 P P 08 00 48.9 +0.6
baz=248
N23A **Red Feather La** 89.06 46 P P 08 00 49.5 +1.0
baz=244,SNR=8.5
BMAR **Burnt Mountain** 89.07 12 P P 08 00 48.0 +0.4
POST **Post** 89.14 55 IAmb IAmb 08 00 49.9
comp=Z,18nm,0.8s
G27K **Doyon Strip** 89.17 14 P P 08 00 48.5 +0.5
baz=214,SNR=9.4
A19K **Wainwright** 89.18 6 P P 08 00 47.7 -0.2
baz=196
I30M **Mount Dempster** 89.19 16 P P 08 00 48.1 -0.1
baz=219,SNR=14
HBVL **Hebbronville** 89.20 61 IAmb IAmb 08 00 52.8
comp=Z,25nm,1.1s
TOLK **Toolik Lake Re** 89.22 10 P P 08 00 48.1 -0.1
baz=207
D23K **Nanushuk River** 89.33 10 P P 08 00 49.3 +0.6
baz=206
B21K **Ikpikpuk River** 89.36 8 P P 08 00 49.4 +0.7
baz=202
CMAR **Chiang Mai Arr** 89.37 290 P P 08 00 50.7 +0.7
CMAR **Chiang Mai Arr** 89.37 290 P P 08 00 51.6 +1.6
comp=Z,8.9nm,0.8s,baz=111,slow=2.8,SNR=44
comp=Z,8.9nm,0.8s
F26K **Sheenjek River** 89.39 12 P P 08 00 49.9 +0.9
baz=212,SNR=12
B20K **Meade River** 89.41 7 P P 08 00 48.6 -0.3
baz=200
H29M **Whitestone** 89.46 15 P P 08 00 49.4 +0.1
baz=217,SNR=22
JCT **Junction City** 89.51 58 IAmb IAmb 08 00 51.8
comp=Z,9.2nm,0.8s
JCT **Junction City** 89.51 58 P P 08 00 50.6 +0.2
baz=248
PZH **PanZhiHua** 89.69 298 P P 08 00 53.0 +1.5
PZH pmax pmax
comp=Z,20nm,0.5s
AMTX **Amarillo** 89.70 53 IAmb IAmb 08 00 52.6
comp=Z,18nm,1.1s
AMTX **Amarillo** 89.70 53 P P 08 00 51.0 -0.3
baz=247
D24K **Happy Valley** 89.80 10 IAmb IAmb 08 00 52.0
comp=Z,19nm,0.9s
D24K **Happy Valley** 89.80 10 P P 08 00 51.5 +0.6
baz=208,SNR=5.7
TROLL **Troll, Antarti** 89.81 180 ⇑P P 08 00 51.0 -0.2
comp=Z,288nm,0.4s
EGMT **Eagleton** 89.82 39 IAmb IAmb 08 00 53.2
comp=Z,17nm,1.4s
EGMT **Eagleton** 89.82 39 P P 08 00 52.2 +0.7
baz=242
EPYK **Eagle Plains** 89.99 15 P P 08 00 51.7 -0.1
baz=219,SNR=15
SNAA **Sanae** 90.09 178 ⇑P P 08 00 51.8 -0.6
comp=Z,65nm,0.5s
SNAA **Sanae** 90.09 178 P P 08 00 51.8 -0.6
comp=Z,3.2nm,0.6s,baz=195,slow=7.0,SNR=30
comp=Z,3.2nm,0.6s
G29M **Pine Creek** 90.10 15 P P 08 00 52.0 -0.3
baz=218,SNR=9.8
C23K **Itkillik River** 90.13 9 P P 08 00 52.1 -0.2
baz=206,SNR=12
B22K **Teshekpuk Lake** 90.19 8 P P 08 00 52.4 -0.1
baz=203
VNA3 **Neumayer Olymp** 90.22 176 ⇑P P 08 00 52.6 -0.3
comp=Z,21nm,0.6s
F28M **Old Crow** 90.23 14 P P 08 00 52.8 -0.1
baz=216
APMT **Aspermont** 90.31 55 IAmb IAmb 08 00 55.4
comp=Z,14nm,0.8s
C24K **Franklin Bluff** 90.32 10 P P 08 00 52.9 -0.3
baz=208
E27K **Coleen River** 90.33 13 P P 08 00 53.4 0.0
baz=214,SNR=11
D25K **Kavik River** 90.37 11 P P 08 00 53.0 -0.5
baz=210
BRDY **Brady** 90.45 57 IAmb IAmb 08 00 56.2
comp=Z,15nm,1.2s
G30M **tAoh Zrail Nji** 90.59 15 P P 08 00 54.4 -0.3
baz=219,SNR=26
VNA2 **Neumayer--Watz** 90.66 177 ⇑P P 08 00 55.5 +0.4
comp=Z,14nm,0.7s,baz=188,slow=5.0
PLCA **Paso Flores** 90.74 134 P P 08 00 56.3 +0.2
comp=Z,3.6nm,1.1s,baz=198,slow=3.2,SNR=3.7
comp=Z,3.6nm,1.1s
SMWD **Samnorwood** 90.88 53 IAmb IAmb 08 00 58.1
comp=Z,9.6nm,0.9s
VNA1 **Neumayer--Stat** 90.89 177 ⇑P P 08 00 56.5 +0.5
comp=Z,19nm,0.9s
G31M **Satah River** 91.05 16 P P 08 00 56.3 -0.3
baz=221,SNR=27
E28M **Babbage River** 91.11 13 IAmb IAmb 08 00 58.0
comp=Z,19nm,0.9s
E28M **Babbage River** 91.11 13 P P 08 00 57.1 +0.1
baz=216,SNR=19
C27K **Jago River** 91.11 11 P P 08 00 57.1 +0.2
baz=212
F30M **Barrier River** 91.19 15 P P 08 00 56.8 -0.5
baz=220
E29M **Blow River** 91.30 14 P P 08 00 57.1 -0.7
baz=218,SNR=9.1
D27M **Malcolm River** 91.33 12 P P 08 00 58.3 +0.3
baz=215
LAO **LASA Array** 91.36 41 P P 08 00 59.7 +1.0
baz=244
435B **Jarrell** 91.40 58 P P 08 01 00.0 +0.8
baz=249

LZH **Lanzhou** 91.47 308 *e*P P 08 01 01.0 +1.5
LZH sP sP 08 03 53.8 -5.1
LZH pmax pmax
comp=Z,45nm,1.4s
F31M **Tsiigehtchic** 91.57 16 P P 08 00 58.9 -0.2
baz=222,SNR=21
RSSD **Black Hills** 91.69 44 P P 08 01 00.1 -0.3
RSSD IAmb IAmb 08 01 01.5
comp=Z,13nm,0.8s
RSSD **Black Hills** 91.69 44 P P 08 01 00.3 -0.1
baz=246
WRGLY **Wrigley** 91.76 22 P P 08 00 59.7 -0.3
baz=231
OGNE **Ogallala** 91.78 47 P P 08 01 00.9 +0.1
baz=247
WMOK **Wichita Mounta** 91.86 54 P P 08 01 01.2 -0.1
baz=249
D28M **Stokes Point** 91.87 13 P P 08 01 00.3 0.0
baz=217
INK **Inuvik** 92.28 15 P P 08 01 01.5 -0.7
INK **Inuvik** 92.28 15 P P 08 01 01.6 -0.7
comp=Z,20nm,1.0s,baz=205,slow=5.1,SNR=19
comp=Z,20nm,1.0s
INK **Inuvik** 92.28 15 P P 08 01 02.0 -0.2
baz=222,SNR=15
CBKS **Cedar Bluff** 92.62 50 P P 08 01 04.7 +0.1
baz=248
DGMT **Dagmar** 93.36 40 P P 08 01 08.0 +0.2
baz=246
ULN **Ulaanbaatar** 93.75 319 P P 08 01 09.8 +0.1
ULN IAmb IAmb 08 01 10.7
comp=Z,10nm,1.1s
SONM **Songino Array** 94.15 319 P P 08 01 11.5 0.0
SONM IAmb IAmb 08 01 13.3
comp=Z,19nm,1.8s
SONM **Songino Array** 94.15 319 P P 08 01 10.7 -0.8
comp=Z,1.6nm,0.7s,baz=114,slow=4.3,SNR=8.8
SONM PP PP 08 05 07.2 -1.1
comp=Z,1.3nm,0.9s,baz=115,slow=9.7,SNR=4.6
comp=Z,1.6nm,0.7s
YKA **Yellowknife Ar** 94.64 25 P P 08 01 13.6 +0.4
YKA **Yellowknife Ar** 94.64 25 P P 08 01 11.7 -1.5
comp=Z,3.5nm,0.8s,baz=247,slow=4.1,SNR=9.8
comp=Z,3.5nm,0.8s
KSU1 **Kansas State U** 95.00 51 P P 08 01 15.9 +0.5
baz=250
GTA **Gaotai** 95.61 310 P P 08 01 18.8 +0.5
GTA pmax pmax
comp=Z,6.0nm,1.2s
ECSD **EROS Data Cent** 96.53 46 P P 08 01 22.3 +0.1
baz=251
F33A **5 Mile Ranch,** 97.43 44 IAmb IAmb 08 01 26.7
comp=Z,12nm,1.4s
CCM **Cathedral Cave** 98.68 53 P Pdif 08 01 31.7 -0.2
baz=253
JFWS **Jewell Farm** 100.73 48 P **Pdif** 08 01 41.2 +0.3
baz=255
ZALV **Zalesovo Beam** 108.84 322 PKiKP **PKiKP** 08 06 16.2 -1.6
comp=Z,1.2nm,0.5s,baz=75,slow=2.2,SNR=6.1
MKAR **Makanchi Array** 109.73 314 Pdiff **Pdif** 08 02 20.3 -0.5
comp=Z,0.2nm,0.4s,baz=111,slow=3.2,SNR=2.5
MKAR PKiKP **PKiKP** 08 06 18.7 -1.1
comp=Z,1.9nm,0.4s,baz=113,slow=0.4,SNR=31
MKAR PP PP 08 07 01.3 -1.8
comp=Z,0.9nm,0.9s,baz=97,slow=8.7,SNR=3.7
KURBB **Kurchatov Arra** 112.48 318 PKiKP **PKiKP** 08 06 23.4 -1.5
comp=Z,2.5nm,0.7s,baz=95,slow=1.8,SNR=25
KURBB PP PP 08 07 22.4 +0.1
comp=Z,1.8nm,0.8s,baz=91,slow=7.1,SNR=7.2
NEEM **North Greenlan** 115.55 11 *i*P **PKPdf** 08 06 29.3 -1.1
BVAR **Borovoye Array** 117.45 321 PKP **PKPdf** 08 06 33.5 -0.9
BVAR PP PP 08 07 52.6 -4.0
comp=Z,4.3nm,0.4s,baz=115,slow=1.5,SNR=31
comp=Z,2.3nm,0.7s,baz=91,slow=7.4,SNR=6.8
BRVK **Borovoye** 117.51 321 PKPdf **PKPdf** 08 06 34.1 -0.4
KK31 **Karatay Array** 117.90 310 PKPdf **PKPdf** 08 06 35.0 -0.5
KKAR **Karatay Array** 117.90 310 PKPdf **PKPdf** 08 06 35.2 -0.4
SPITS **Spitsbergen Ar** 119.78 357 PKP **PKPdf** 08 06 36.6 -1.7
comp=Z,3.1nm,0.5s,baz=90,slow=4.6,SNR=5.4
SFJD **Kangerlussuaq** 121.03 21 *i*P **PKiKP** 08 06 43.0 +2.0
NUUK **Nuuk** 121.90 25 *i*P **PKPdf** 08 06 41.3 -1.2
DY2G **Dye2** 122.78 21 *i*P **PKPdf** 08 06 43.0 -1.6
ICESG **Greenland Ices** 123.22 17 *i*P **PKPdf** 08 06 43.4 -2.1
ABKAR **Akbulak array** 124.53 318 PKPdf **PKPdf** 08 06 47.4 -0.6
ABKAR **Akbulak array** 124.53 318 PKPdf **PKPdf** 08 06 48.0 0.0
ARCES **ARCESS Array B** 126.86 350 PKP **PKPdf** 08 06 51.3 -0.7
comp=Z,4.3nm,0.4s,baz=29,slow=2.1,SNR=62
FINES **FINESS Array B** 133.76 344 PKP **PKPdf** 08 07 04.5 -0.6
comp=Z,6.4nm,0.7s,baz=64,slow=3.2,SNR=18
NB2 **NORSAR Subarra** 136.91 353 PKPdf PKPpre 08 07 00.6
comp=Z,8.6nm,1.4s,baz=14,slow=1.8
NB2 **NORSAR Subarra** 136.91 353 PKPdf PKPpre 08 07 00.6
baz=14,slow=1.8
NOA **NORSAR Array B** 136.91 353 PKhKP PKPpre 08 07 00.2
comp=Z,1.0nm,0.8s,baz=31,slow=1.8,SNR=2.2
NOA PKP **PKPdf** 08 07 11.8 +0.6
comp=Z,0.5nm,0.5s,baz=11,slow=3.4,SNR=6.6
HFS **Hagfors** 137.48 351 PKhKP PKPpre 08 07 01.6
comp=Z,3.0nm,0.6s,baz=69,slow=4.9,SNR=10
STRU **Stroemstad** 138.87 353 *i*P PKPpre 08 07 06.9
BORU **Boraas** 140.02 351 *i*P PKPpre 08 07 07.8
ONAU **Onsala** 140.37 352 *i*P PKPpre 08 07 09.8
FABU **Falkenberg** 140.63 351 *i*P PKPpre 08 07 10.5
DEL **Delary** 140.96 350 *i*P PKPpre 08 07 12.0
AKASG **Malin Array Be** 141.16 332 PKhKP PKPpre 08 07 13.2
comp=Z,5.6nm,0.4s,baz=42,slow=3.9,SNR=53
KIEV **Kiev** 141.17 332 ⇓P PKPpre 08 07 13.9
LUNU **Lund** 141.83 349 *i*P PKPpre 08 07 14.8
EKA **Eskdalemuir Ar** 142.94 5 PKhKP PKPpre 08 07 19.1
comp=Z,3.5nm,0.4s,baz=327,slow=7.2,SNR=41
GKP **Gorka Klasztor** 143.23 345 *e*PKP PKPab 08 07 20.6 -0.1
DIKM **Dikmen** 143.37 316 ⇑P **PKPdf** 08 07 23.7 +0.3
SORM **Soroca** 143.39 330 ⇓P PKPbc 08 07 21.7 0.0
BEL **Belsk** 143.49 340 *e*PKP PKPbc 08 07 22.1 +0.2
PURM **Purcari** 143.73 327 ⇑P PKPbc 08 07 20.3 -2.6
MILM **Milestii Mici** 144.01 328 ⇑P PKPbc 08 07 23.4 -0.3
KWP **Kalwaria Pacla** 144.66 337 *e*PKP PKPbc 08 07 25.9 +0.2
GORT1 **Trebel** 144.72 350 *e*PKPdf PKPbc 08 07 25.9 +0.2
baz=23,slow=1.3
RUE **Ruedersdorf** 144.76 347 *e*PKPdf PKPbc 08 07 26.0 +0.2
baz=23,slow=1.3
VLDR **Vladesti** 145.12 327 ⇑P **PKPab** 08 07 28.2 0.0
TLCR 145.18 326 ⇑P **PKPab** 08 07 28.3 -0.1
OJC **Ojcow** 145.20 340 *e*PKP **PKPbc** 08 07 26.9 -0.3
BURAR **Bucovina Array** 145.21 332 ⇑P **PKPab** 08 07 29.0 +0.3
RETH **Rethem/Aller,** 145.25 352 *e*PKPdf **PKPbc** 08 07 27.3 +0.1
baz=23,slow=1.3
SCTR **Scanteiesti** 145.28 327 ⇓P **PKPab** 08 07 29.0 +0.2
GHRR 145.31 328 ⇑P **PKPab** 08 07 29.4 +0.4
TESR **Tescani** 145.36 329 ⇑P **PKPbc** 08 07 28.3 +0.5
BRTR **Keskin Array B** 145.38 315 PKPdf **PKPdf** 08 07 26.3 -0.8
BRTR **Keskin Array B** 145.38 315 PKPbc **PKPbc** 08 07 27.8 -0.5
comp=Z,16nm,0.9s,baz=135,slow=3.3,SNR=52
BRTR SKPbc **SKPbc** 08 10 12.2 -1.6
comp=Z,1.5nm,0.9s,baz=83,slow=4.5,SNR=4.4
KOLS **Kolonicke sedl** 145.40 336 *e*PKP **PKPab** 08 07 29.1 -0.1
NEGRR **Negrea** 145.43 327 ⇑P **PKPab** 08 07 28.5 +0.5
SLCR **Slobozia Conac** 145.45 327 ⇑P **PKPab** 08 07 29.9 +0.4
KIRS **Kirsehir-Merke** 145.46 313 ⇑P **PKPbc** 08 07 28.3 -0.2
SCHL **Schela** 145.48 327 ⇓P **PKPab** 08 07 30.0 +0.4
IZVR **Izvoarele** 145.48 327 ⇑P **PKPab** 08 07 29.6 0.0
COSR **Cosmesti PH** 145.50 328 ⇑P **PKPab** 08 07 29.2 -0.5
TUDR 145.50 327 ⇑P **PKPab** 08 07 30.1 +0.4
SCHLR **Schela** 145.50 327 ⇑P **PKPab** 08 07 29.8 +0.1
CFR **Carcaliu** 145.54 327 ⇑P **PKPbc** 08 07 28.7 +0.3
PANC **Panciu** 145.57 328 ⇑P **PKPab** 08 07 29.4 -0.6
TPGR **Topolog** 145.60 326 ⇑P **PKPbc** 08 07 29.1 +0.5
ONER **Baraj Valea Uz** 145.61 329 ⇑P **PKPab** 08 07 29.8 -0.4
ASSE **Asse, Remlinge** 145.66 350 *e*PKPbc **PKPbc** 08 07 28.8 +0.4
baz=16,slow=2.5
KSP **Ksiaz** 145.68 344 *e*PKP **PKPbc** 08 07 28.8 +0.1
VRI **Vrincioaia** 145.78 329 ⇑P **PKPab** 08 07 30.0 -0.8
PLOR **Plostina** 145.83 329 ⇑P **PKPbc** 08 07 29.7 +0.4
IBBN **Ibbenburen** 145.87 354 *e*PKPdf **PKPbc** 08 07 29.0 -0.1
baz=23,slow=1.3
ANTO **Ankara** 145.87 315 PKPdf **PKPdf** 08 07 27.9 +0.2
ANTO **Ankara** 145.87 315 ⇑P **PKPbc** 08 07 29.5 -0.1
OSTC **Ostas** 145.96 344⇑ *e*PKP **PKPbc** 08 07 30.0 +0.5
HARR **Harsova** 145.97 326 ⇑P **PKPbc** 08 07 30.5 +0.9
CLZ **Clausthal** 145.98 351 *e*PKPbc **PKPbc** 08 07 29.9 +0.4
baz=16,slow=2.5
TURR **Turia** 145.99 329 ⇓P **PKPab** 08 07 31.2 -0.5
ARCR **ARCALIA** 146.00 332 ⇑P **PKPab** 08 07 30.6 -1.0
CLL **Collm** 146.02 348 ⇓ *i*PKPbc **PKPbc** 08 07 29.5 0.0
comp=Z,97nm,0.8s

CLL **Collm** 146.02 348 *e*PKPbc **PKPbc** 08 07 30.1 +0.6
baz=16,slow=2.5
MFTR **Murfatlar** 146.05 325 ⇓P **PKPbc** 08 07 29.7 -0.1
COVR **Voineasa-Covas** 146.05 329 ⇓P **PKPbc** 08 07 30.4 +0.5
OKC **Ostrava-Krasne** 146.05 341⇑ *e*PKP **PKPbc** 08 07 30.2 +0.5
UPC **Upice** 146.06 344⇑ *e*PKP **PKPbc** 08 07 30.1 +0.4
DPC **Dobruska-Polom** 146.12 343⇑ *e*PKP **PKPbc** 08 07 30.4 +0.5
TSMN **Mangalia Port-** 146.20 324 ⇑P **PKPbc** 08 07 30.4 +0.1
LANS **Liptovska Anna** 146.23 339 *e*PKP **PKPab** 08 07 31.5 -1.0
BRG **Bergglesshubel** 146.23 346 *e*PKP **PKPdf** 08 07 28.4 +0.5
BRG Amp 08 07 29.0
comp=Z,10nm,1.3s
BRG **Bergglesshubel** 146.23 346 P **PKPbc** 08 07 30.8 +0.6
BRG Amp 08 07 31.4
comp=Z,36nm,0.9s
BRG **Bergglesshubel** 146.23 346 P **PKiKP** 08 07 32.9 +0.4
BRG Amp 08 07 33.2
comp=Z,23nm,0.8s
BRG **Bergglesshubel** 146.23 346 *e*PKPbc **PKPbc** 08 07 30.7 +0.6
baz=16,slow=2.5
BRG *e*PKPab **PKiKP** 08 07 32.5 0.0
baz=14,slow=4.2
KRLC **Kraliky** 146.25 343⇑ *e*PKP **PKPbc** 08 07 30.9 +0.6
MORC **Moravsky Berou** 146.29 342 *e*PKP **PKPbc** 08 07 30.5 +0.1
MORC **Moravsky Berou** 146.29 342 ⇑P **PKPbc** 08 07 31.1 +0.7
NEHR **Nehoiu** 146.31 328 ⇑P **PKPbc** 08 07 31.6 +1.0
GTTG **Gottingen** 146.33 351 *e*PKPbc **PKPbc** 08 07 31.0 +0.6
baz=16,slow=2.5
NEUB **Neuenburg** 146.36 349 *e*PKPdf **PKPbc** 08 07 29.6 -0.9
baz=23,slow=1.3
NEUB *e*PKPbc **PKiKP** 08 07 31.0 -1.7
baz=16,slow=2.5
ISR **Istrita** 146.40 328 ⇑P **PKPbc** 08 07 31.6 +0.7
PVCC **Panska Ves** 146.41 345⇑ *e*PKP **PKPbc** 08 07 31.2 +0.6
MLR **Muntele Rosu** 146.43 329 ⇑P **PKPbc** 08 07 31.4 +0.3
MESR **Meseseni** 146.55 334 ⇓P **PKiKP** 08 07 32.6 -0.7
MAUC **Maruska** 146.57 341⇑ *e*PKP **PKiKP** 08 07 32.2 -1.1
CBBR **Cluj-Babes-Bol** 146.59 333 ⇑P **PKPdf** 08 07 27.1 -1.6
HSKC **Hora Svate Kat** 146.59 347⇑ *e*PKP **PKPbc** 08 07 31.4 +0.2
MDUB **Mudurnu** 146.61 317 PKPdf **PKPdf** 08 07 29.1 +0.1
MDUB **PKPbc** 08 07 31.8 +0.2
MDUB PKPab **PKPab** 08 07 35.6 +1.2
CJR **Cluj-Napoca** 146.62 333 ⇑P **PKPbc** 08 07 31.9 +0.5
MMAI **Mount Meron Ar** 146.70 302 PKPbc **PKPbc** 08 07 32.6 +0.5
comp=Z,19nm,0.5s,baz=69,slow=5.7,SNR=24
BUG **Bochum--Univer** 146.77 354 *e*PKPbc **PKPbc** 08 07 31.9 +0.3
baz=16,slow=2.5
LTVH **Ltavrtes, Hu** 146.80 335 ⇑P **PKiKP** 08 07 32.8 -0.9
KASTN **Kahler Asten** 146.88 353 *e*PKPbc **PKPbc** 08 07 32.1 +0.2
baz=16,slow=2.5
KASTN *e*PKPab **PKPab** 08 07 34.5 -0.5
baz=14,slow=4.2
VOIR 146.91 330 ⇓P **PKPbc** 08 07 32.6 +0.3
PRU **Pruhonice** 146.91 345⇑ *e*PKP **PKPbc** 08 07 32.3 +0.3
GOPC **GO Pecny, Ondr** 146.92 345⇑ *e*PKP **PKPbc** 08 07 32.3 +0.2
MOX **Moxa** 146.93 349 *e*PKPdf **PKPdf** 08 07 29.7 +0.6
baz=23,slow=1.3
MOX *e*PKPbc **PKPbc** 08 07 32.5 +0.4
baz=16,slow=2.5
MOX *e*PKPab **PKPab** 08 07 34.8 -0.5
baz=14,slow=4.2
DRGR 146.94 333 ⇑P **PKPbc** 08 07 32.7 +0.4
PLN **Plauen** 146.97 348 *e*PKPdf **PKPdf** 08 07 29.6 +0.4
baz=23,slow=1.3
PLN *e*PKPbc **PKPbc** 08 07 32.7 +0.5
baz=16,slow=2.5
PLN *e*PKPab **PKPab** 08 07 35.2 -0.3
baz=14,slow=4.2
TANN **Tannenbergstha** 146.98 348 *e*PKPdf **PKPdf** 08 07 29.5 +0.2
baz=23,slow=1.3
TANN *e*PKPbc **PKPbc** 08 07 32.7 +0.4
baz=16,slow=2.5
TANN *e*PKPab **PKPab** 08 07 35.4 -0.1
baz=14,slow=4.2
VRAC **Vranov** 146.99 342 *e*PKP **PKPbc** 08 07 32.4 +0.1
VRAC **Vranov** 146.99 342 ⇑P **PKPbc** 08 07 32.9 +0.7
VYHS **Vyhne** 147.00 339 *e*PKP **PKPbc** 08 07 33.0 +0.7
UBBA **Unterbreizbach** 147.03 351 *e*PKPdf **PKPdf** 08 07 29.4 +0.2
baz=23,slow=1.3
UBBA *e*PKPbc **PKPbc** 08 07 32.5 +0.3
baz=16,slow=2.5
JAVC **Velka Javorina** 147.06 341 *e*PKP **PKiKP** 08 07 33.7 -0.6
TNR **Turnu Rosu** 147.12 331 ⇓P **PKiKP** 08 07 33.6 -0.9
PSZ **Piszkesteto** 147.13 338 ⇑P **PKPbc** 08 07 33.4 +0.6
ARR **Arges** 147.16 330 ⇓P **PKiKP** 08 07 34.0 -0.7
KRUC **Moravsky** 147.27 342 *e*PKP **PKPbc** 08 07 32.9 -0.1
MANZ **Manzenberg** 147.46 348 *e*PKPdf **PKPdf** 08 07 30.0 0.0
baz=23,slow=1.3
MANZ *e*PKPbc **PKPbc** 08 07 34.2 +0.7
baz=16,slow=2.5
MANZ *e*PKPab **PKPab** 08 07 37.4 -0.1
baz=14,slow=4.2
LOT **Lotru** 147.50 331 ⇓P **PKPbc** 08 07 33.9 0.0
DEV **Deva** 147.56 332 ⇓P **PKPbc** 08 07 34.3 +0.4
HUMR **Humele** 147.60 329 ⇓P **PKPbc** 08 07 34.3 +0.3
ROTZ **Rotzenmuhle** 147.65 348 *e*PKPdf **PKPdf** 08 07 30.4 +0.1
baz=23,slow=1.3
ROTZ *e*PKPbc **PKPbc** 08 07 34.2 +0.2
baz=16,slow=2.5
ROTZ *e*PKPab **PKPab** 08 07 38.1 -0.1
baz=14,slow=4.2
AHRW **Bad Neuenahr-A** 147.68 354 *e*PKPbc **PKiKP** 08 07 34.7 -0.8
baz=16,slow=2.5
MEM **Membach** 147.71 355 *d*PKPdf **PKPdf** 08 07 30.0 -0.4
MEM *d*PKP **PKPbc** 08 07 34.1 0.0
MEM *d*PKPab **PKPab** 08 07 37.8 -0.6
MEM *dp*PKP **pPKPdf** 08 09 41.4 -0.2
BTNL **Ternell** 147.72 355 *d*PKPbc **PKPdf** 08 07 30.1 -0.3
BTNL *d*PKP **PKPbc** 08 07 34.0 -0.2
BTNL *d*PKPab **PKPab** 08 07 38.0 -0.5
BSTI **Sart Tilman** 147.77 356 *d*PKP **PKPbc** 08 07 34.4 +0.2
BSTI *d*PKPab **PKPab** 08 07 38.3 -0.3
SRO **Srobarova** 147.77 339 *e*PKP **PKiKP** 08 07 35.3 -0.4
SIRR **Siria** 147.79 334 ⇑P **PKPbc** 08 07 34.9 +0.5
ZST **Bratislava** 147.83 341 *e*PKP **PKiKP** 08 07 35.2 -0.6
TNS **Taunus Mts** 147.84 352 *e*PKPdf **PKPdf** 08 07 31.0 +0.3
baz=23,slow=1.3
TNS *e*PKPbc **PKPbc** 08 07 34.9 +0.4
baz=16,slow=2.5
GRF **Grafenberg Arr** 147.91 349 *e*PKPdf **PKPdf** 08 07 30.3 -0.5
baz=23,slow=1.3
GRF *e*PKPbc **PKPbc** 08 07 35.1 +0.4
baz=16,slow=2.5
GRF *e*PKPab **PKPab** 08 07 39.4 +0.1
baz=14,slow=4.2
GRFO **Grafenberg** 147.91 349 **PKiKP** 08 07 35.6 -0.4
KHC **Kasperske Hory** 147.94 346 PKPdf **PKPdf** 08 07 30.3 -0.6
KHC PKPbc **PKiKP** 08 07 35.5 -0.7
KHC PKPab **PKPab** 08 07 40.5 +1.0
KHC **Kasperske Hory** 147.94 346 *e*PKPDF **PKPdf** 08 07 31.4 +0.5
KHC ⇑*e*PKP **PKPbc** 08 07 35.3 +0.5
KHC *e*PKPAB **PKPab** 08 07 40.2 +0.7
BCLA **Clavier** 147.95 356 *d*PKP **PKPbc** 08 07 34.7 0.0
BCLA *d*PKPab **PKPab** 08 07 38.7 -0.7
BHOU **Houvegnez** 147.96 355 *d*PKPdf **PKPdf** 08 07 30.6 -0.3
BHOU *d*PKP **PKPbc** 08 07 35.1 +0.4
BHOU *d*PKPab **PKPab** 08 07 39.5 0.0
GZR **Gura Zlata** 148.00 332 ⇓P **PKPbc** 08 07 35.1 0.0
BGES **Gesves** 148.00 356 *d*PKP **PKPbc** 08 07 34.4 -0.5
BGES *d*PKPab **PKPab** 08 07 39.0 -0.6
SURR **Surduc** 148.00 333 ⇑P **PKPbc** 08 07 35.4 +0.5
CKRC **Cesky Krumlov** 148.05 344⇑ *e*PKP **PKPbc** 08 07 35.2 +0.2
WET **Wettzell** 148.09 346 *e*PKPdf **PKPdf** 08 07 30.5 -0.6
baz=23,slow=1.3
WET *e*PKPbc **PKPbc** 08 07 35.4 +0.2
baz=16,slow=2.5
WET *e*PKPab **PKPab** 08 07 40.4 +0.3
baz=14,slow=4.2
BMRD **Maredsous** 148.10 357 *d*PKP **PKPbc** 08 07 35.3 +0.3
BMRD *d*PKPab **PKPab** 08 07 39.6 -0.4
GEC2 **GERESS Array S** 148.18 345 *e*PKPdf **PKPdf** 08 07 30.5 -0.9
baz=23,slow=1.3
GEC2 *e*PKPbc **PKPbc** 08 07 35.6 +0.1
baz=16,slow=2.5
GERES **GERESS Array B** 148.18 345 **PKPbc** 08 07 35.7 +0.3
GERES **GERESS Array B** 148.18 345 PKPbc **PKPbc** 08 07 34.9 -0.6
comp=Z,18nm,0.8s,baz=160,slow=9.0,SNR=60
RCHB **Rochefort** 148.22 356 *d*PKPdf **PKPdf** 08 07 30.9 -0.3
RCHB *d*PKP **PKPbc** 08 07 35.0 -0.3
RCHB *d*PKPab **PKPab** 08 07 40.0 -0.5
VLAD **Vladila** 148.27 328 ⇑P **PKPbc** 08 07 35.2 -0.5
DOU **Dourbes** 148.32 357 *d*PKPdf **PKPdf** 08 07 30.1 -1.3
DOU *d*PKP **PKPbc** 08 07 35.8 +0.2
DOU *d*PKPab **PKPab** 08 07 40.5 -0.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DOU | | | | *dp*PKP | **pPKPdf** | 08 09 43.0 | +0.4 |
| **BZS** | **Buzias** | **148.33 333** | | ⇑P | **PKPbc** | 08 07 35.9 | +0.2 |
| **SRE** | **Strehaia** | **148.36 330** | | ⇑P | **PKPbc** | 08 07 36.2 | +0.3 |
| **CONA** | **Conrad Observa** | **148.44 342** | | *e*PKP | **PKPbc** | 08 07 36.2 | 0.0 |
| | comp=Z,26nm,1.2s,SNR=20 | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.52 341** | | *e*PKP | **PKPbc** | 08 07 36.3 | +0.1 |
| | comp=Z,24nm,0.9s,SNR=24 | | | | | | |
| **HERR** | **Herculane** | **148.56 332** | | ⇑P | **PKPbc** | 08 07 36.3 | -0.1 |
| **BAND** | **Balkesir-Ban** | **148.62 320** | | ⇑P | **PKPbc** | 08 07 36.7 | 0.0 |
| **WLF** | **Walferdange** | **148.64 355** | | *d*PKPdf | **PKPdf** | 08 07 32.4 | +0.5 |
| WLF | | | | *d*PKP | **PKPbc** | 08 07 36.9 | +0.4 |
| WLF | | | | *d*PKPab | **PKPab** | 08 07 41.9 | -0.3 |
| WLF | | | | *dp*PKP | **pPKPab** | 08 09 47.4 | -0.3 |
| **WLF** | **Walferdange** | **148.64 355** | | *e*PKPdf | **PKPdf** | 08 07 32.0 | +0.1 |
| | baz=23,slow=1.3 | | | | | | |
| WLF | | | | *e*PKPbc | **PKiKP** | 08 07 37.4 | -0.1 |
| | baz=16,slow=2.5 | | | | | | |
| WLF | | | | *e*PKPab | **PKPab** | 08 07 42.5 | +0.3 |
| | baz=14,slow=4.2 | | | | | | |
| **MDVR** | **Moldovita** | **148.95 332** | | ⇑P | **PKPbc** | 08 07 36.8 | -0.6 |
| **MOA** | **Molln** | **148.96 344** | | *e*PKP | **PKPbc** | 08 07 36.8 | -0.5 |
| | comp=Z,7.3nm,0.7s,SNR=8.8 | | | | | | |
| **MORH** | **Mrgy, Hungar** | **149.02 337** | | ⇓P | **PKiKP** | 08 07 38.0 | -0.4 |
| **STU** | **Stuttgart** | **149.15 351** | | *e*PKPdf | **PKPdf** | 08 07 32.1 | -0.6 |
| | baz=23,slow=1.3 | | | | | | |
| STU | | | | *e*PKPbc | **PKiKP** | 08 07 38.2 | -0.4 |
| | baz=16,slow=2.5 | | | | | | |
| STU | | | | *e*PKPab | **PKPab** | 08 07 43.7 | -0.7 |
| | baz=14,slow=4.2 | | | | | | |
| **ARSA** | **Arzberg** | **149.15 342** | | *e*PKP | **PKPbc** | 08 07 37.5 | -0.3 |
| | comp=Z,2.4nm,0.6s,SNR=5.5 | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.27 344** | | *e*PKP | **PKPbc** | 08 07 37.6 | -0.5 |
| | comp=Z,5.9nm,0.6s,SNR=11 | | | | | | |
| **FUR** | **Furstenfeldbru** | **149.36 348** | | *e*PKPbc | **PKiKP** | 08 07 38.7 | -0.4 |
| | baz=16,slow=2.5 | | | | | | |
| **RJOB** | **Jochberg** | **149.43 346** | | *e*PKPbc | **PKPbc** | 08 07 38.4 | -0.1 |
| | baz=16,slow=2.5 | | | | | | |
| RJOB | | | | *e*PKPab | **PKPab** | 08 07 45.9 | +0.2 |
| | baz=14,slow=4.2 | | | | | | |
| **BFO** | **Black Forest** | **149.71 352** | | | **PKPbc** | 08 07 39.1 | 0.0 |
| BFO | | | | PKPab | **PKPab** | 08 07 46.9 | +0.1 |
| **BFO** | **Black Forest** | **149.71 352** | | *e*PKPbc | **PKPbc** | 08 07 39.3 | +0.2 |
| | baz=16,slow=2.5 | | | | | | |
| BFO | | | | *e*PKPab | **PKPab** | 08 07 46.4 | -0.3 |
| | baz=14,slow=4.2 | | | | | | |
| **LESA** | **Schwarzleotal** | **149.75 345** | | *i* PKP | **PKPbc** | 08 07 38.7 | -0.6 |
| | comp=Z,10nm,0.5s | | | | | | |
| **SOKA** | **Soboth** | **149.81 342** | | *i* PKP | **PKPbc** | 08 07 39.0 | -0.5 |
| | comp=Z,6.2nm,0.4s,SNR=9.4 | | | | | | |
| **BOVS** | **Bovan** | **149.84 331** | | ⇑P | **PKPbc** | 08 07 38.8 | -0.7 |
| **KBA** | **Koelnbreinsper** | **149.91 344** | | *e*PKP | **PKPbc** | 08 07 39.1 | -0.7 |
| | comp=Z,12nm,0.5s,SNR=12 | | | | | | |
| **UBR** | **Ueberruh** | **150.05 349** | | *e*PKPbc | **PKPbc** | 08 07 40.1 | +0.1 |
| | baz=16,slow=2.5 | | | | | | |
| **WATA** | **Walderalm** | **150.09 347** | | *i* PKP | **PKPbc** | 08 07 40.0 | -0.1 |
| | comp=Z,11nm,0.5s,SNR=13 | | | | | | |
| **OBKA** | **Obir** | **150.11 342** | | *e*PKP | **PKPbc** | 08 07 39.5 | -0.6 |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **RETA** | **Reutte** | **150.11 348** | | *i* PKP | **PKPbc** | 08 07 40.1 | -0.1 |
| | comp=Z,5.9nm,0.5s,SNR=12 | | | | | | |
| **WTTA** | **Wattenberg** | **150.14 347** | | *i* PKP | **PKPbc** | 08 07 40.1 | -0.3 |
| | comp=Z,17nm,0.4s,SNR=16 | | | | | | |
| **MOTA** | **Moosalm** | **150.18 347** | | *i* PKP | **PKPbc** | 08 07 40.1 | -0.3 |
| | comp=Z,17nm,0.7s | | | | | | |
| **MYKA** | **Terra Mystica** | **150.25 344** | | *i* PKP | **PKPbc** | 08 07 39.5 | -0.9 |
| | comp=Z,16nm,0.6s,SNR=8.9 | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.28 347** | | *i* PKP | **PKPbc** | 08 07 40.4 | -0.2 |
| | comp=Z,13nm,0.6s,SNR=14 | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.43 345** | | *i* PKP | **PKPbc** | 08 07 40.3 | -0.6 |
| | comp=Z,32nm,0.6s,SNR=16 | | | | | | |
| **DAVA** | **Damuels** | **150.47 349** | | *i* PKP | **PKPbc** | 08 07 40.7 | -0.4 |
| | comp=Z,9.0nm,0.4s,SNR=14 | | | | | | |
| **FETA** | **Feichten** | **150.56 348** | | *e*PKP | **PKPbc** | 08 07 41.1 | -0.3 |
| | comp=Z,18nm,0.8s,SNR=9.8 | | | | | | |
| **VAY** | **Valandovo** | **151.14 327** | | *i* P | **PKPbc** | 08 07 41.9 | -0.7 |
| **PDG** | **Podgorica** | **151.90 332** | | ⇑P | **PKPbc** | 08 07 41.8 | -2.4 |
| **TEOL** | **Teolo** | **151.93 345** | | | **PKPbc** | 08 07 43.7 | -0.5 |
| TEOL | | | | | **PKPab** | 08 07 56.4 | +0.2 |
| **OHR** | **Ohrid** | **152.20 328** | | *i* P | **PKiKP** | 08 07 45.2 | 0.0 |
| **BNI** | **Bardonecchia** | **153.14 353** | | | **PKiKP** | 08 07 48.2 | +1.1 |
| BNI | | | | PKPab | **PKPab** | 08 08 02.1 | +0.6 |
| **NRCA** | **Norcia** | **153.88 341** | | | **PKPab** | 08 08 00.1 | +0.4 |
| **INTR** | **Introdacqua** | **154.36 339** | | PKPdf | **PKPdf** | 08 07 40.5 | -0.3 |
| INTR | | | | PKPbc | **PKiKP** | 08 07 49.1 | -0.6 |
| INTR | | | | PKPab | **PKPab** | 08 08 07.4 | +0.6 |
| **PBRG** | **Braganca** | **155.53 16** | | *e*PKPab | **PKPab** | 08 08 12.0 | +0.3 |
| **POLO** | **Lamas de Olo** | **155.64 18** | | *e*PKPab | **PKPab** | 08 08 12.5 | +0.2 |
| **CEST** | **Esterri de Car** | **155.88 1** | | PKPab | **PKPab** | 08 08 13.6 | +0.3 |
| **MVO** | **Moncorvo** | **156.05 17** | | *e*PKPab | **PKPab** | 08 08 14.3 | +0.3 |
| **PVIS** | **Viseu** | **156.21 19** | | *e*PKPab | **PKPab** | 08 08 14.6 | -0.1 |
| **MTE** | **Manteigas** | **156.61 18** | | *e*PKPab | **PKPab** | 08 08 16.4 | 0.0 |
| **PCAS** | **Casmilo, Conde** | **156.62 21** | | *e*PKPab | **PKPab** | 08 08 16.5 | +0.1 |
| **PSBE** | **So Bento** | **157.00 22** | | *e*PKPab | **PKPab** | 08 08 18.4 | +0.3 |
| **PCBR** | **Castelo Branco** | **157.14 19** | | *e*PKPab | **PKPab** | 08 08 18.3 | -0.4 |
| **PMRV** | **Marv??o** | **157.54 19** | | *e*PKPab | **PKPab** | 08 08 20.1 | -0.4 |
| **PMTG** | **Montargil** | **157.59 21** | | *e*PKPab | **PKPab** | 08 08 20.3 | -0.4 |
| **PESTR** | **Estremoz** | **157.99 20** | | *e*PKPab | **PKPab** | 08 08 22.1 | -0.3 |
| **EVO** | **Evora** | **158.15 21** | | *e*PKPab | **PKPab** | 08 08 23.1 | 0.0 |
| **ESDC** | **Sonseca Array** | **158.20 12** | | PKP | **PKPdf** | 08 07 46.0 | +0.2 |
| | comp=Z,1.1nm,1.1s,baz=320,slow=4.4,SNR=4.7 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | 08 08 22.0 | -1.3 |
| | comp=Z,5.6nm,1.0s,baz=348,slow=4.3,SNR=22 | | | | | | |
| **PNCL** | **Nicolau / Gran** | **158.34 23** | | *e*PKPab | **PKPab** | 08 08 24.0 | +0.1 |
| **PBEJ** | **Beja** | **158.65 22** | | *e*PKPab | **PKPab** | 08 08 25.5 | +0.2 |
| **MESJ** | **Messejana** | **158.69 23** | | *e*PKPab | **PKPab** | 08 08 25.4 | -0.1 |
| **PCVE** | **Castro Verde** | **158.94 23** | | *e*PKPab | **PKPab** | 08 08 25.9 | -0.7 |
| **PVAQ** | **Vaqueiros** | **159.26 22** | | *e*PKPab | **PKPab** | 08 08 28.2 | +0.2 |
| **KEST** | **Kesra** | **161.54 341** | | PKPab | **PKPab** | 08 08 38.1 | 0.0 |
| | comp=Z,6.9nm,0.8s,baz=32,slow=2.5,SNR=8.4 | | | | | | |
| **DBIC** | **Dimbokro** | **166.58 150** | | PKP | **PKPdf** | 08 07 53.6 | -1.0 |
| | comp=Z,9.9nm,1.1s,baz=232,slow=2.1,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **174.76 177** | | PKP | **PKPdf** | 08 07 57.0 | -1.9 |
| | comp=Z,2.7nm,1.1s,baz=234,slow=1.2,SNR=7.6 | | | | | | |
| TORD | | | | PKPab | **PKPab** | 08 09 35.7 | -1.1 |
| | comp=Z,0.4nm,0.8s,baz=173,slow=3.2,SNR=3.9 | | | | | | |

*NOU* ***19*** *07:56:17.9,30˚.13S×175˚.99W,h28km,mb5.3/45, Kermadec Islands Region*
*MOS* ***19*** *07:56:31.5±1.3,30˚.34S×178˚.11W,h38km,mb5.5/18, Error ellipse: s-maj=12.0km s-min=10.1km az=106.2*
*NEIC* ***19*** *07:56:31.8±1.4,30˚.22S±0˚.07×178˚.0W±0˚.1, h35km±2km, mb5.3/110, Error ellipse: s-maj=18.2km s-min=11.0km az=95.0*
*IDC* ***19*** *07:56:34.5±0.6,30˚.25S×177˚.94W,h62km±5km, mb4.5/18, mbtmp4.8/20, MS4.5/11, Error ellipse: s-maj=14.7km s-min=14.0km az=75.0*

**ISC 19 07:56:32.2**±0.4,**30˚.37S**±0˚.04×**177˚.95W**±0˚.06,**h40**km±3km, **h40**km:**pP-P,n714,**σ1²**62**/653,**mb5.3**/105,**MS4.5**/12, **21C-17D,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **1.10** | **1** | P | **Pn** | **07 56 48.6** | **-2.5** |
| GLKZ | | | | S | **Sn** | **07 57 00.1** | **-5.1** |
| **RAO** | **Raoul Island** | **1.12** | **1** | P | **Pn** | **07 56 48.8** | **-2.6** |
| **RAO** | **Raoul Island** | **1.12** | **1** | | **Pn** | **07 56 48.7** | **-2.6** |
| RAO | | | | Sn | **Sn** | **07 57 01.1** | **-4.4** |
| **RAO** | **Raoul Island** | **1.12** | **1** | P | **Pn** | **07 56 48.7** | **-2.6** |
| | 14µm,0.4s,baz=197,slow=20,SNR=256 | | | | | | |
| RAO | | | | S | **Sn** | **07 57 00.6** | **-4.9** |
| | 42µm,0.2s,baz=211,slow=19,SNR=22 | | | | | | |
| RAO | | | | LR | LR | 07 57 18.6 | |
| | comp=Z,20µm,18.0s,baz=250,slow=44 | | | | | | |
| **RAO** | **Raoul Island** | **1.12** | **1** | P | **Pn** | **07 56 48.7** | **-2.6** |
| RAO | | | | | | 07 57 01.1 | |
| **RIZ** | **Raoul Island** | **1.12** | **1** | P | **Pn** | **07 56 49.0** | **-2.4** |
| RIZ | | | | S | **Sn** | **07 57 01.4** | **-4.2** |
| **MXZ** | **Matakaoa Point** | **7.82** | **202** | Pn | **Pn** | **07 58 20.9** | **-2.4** |
| **MXZ** | **Matakaoa Point** | **7.82** | **202** | P | **Pn** | **07 58 20.8** | **-2.6** |
| MXZ | | | | S | **Sn** | **07 59 48.6** | **-1.9** |
| **WMGZ** | **Waiomatatini S** | **8.02** | **201** | P | **Pn** | **07 58 24.2** | **-1.9** |
| WMGZ | | | | S | **Sn** | **07 59 53.7** | **-1.7** |
| **PKGZ** | **Pakihiroa** | **8.17** | **203** | P | **Pn** | **07 58 25.7** | **-2.5** |
| PKGZ | | | | S | **Sn** | **07 59 57.5** | **-1.7** |
| **HAZ** | **Te Kaha** | **8.17** | **205** | P | **Pn** | **07 58 26.4** | **-1.8** |
| HAZ | | | | S | **Sn** | **08 00 01.2** | **+2.0** |
| **KUZ** | **Kuaotunu** | **8.27** | **218** | P | **Pn** | **07 58 33.6** | **+4.1** |
| **PUZ** | **Puketiti** | **8.30** | **201** | P | **Pn** | **07 58 27.1** | **-2.9** |
| PUZ | | | | S | **Sn** | **08 00 00.7** | **-1.7** |
| **RUGZ** | **Raukumara Rang** | **8.40** | **204** | P | **Pn** | **07 58 28.7** | **-2.7** |
| RUGZ | | | | S | **Sn** | **08 00 04.6** | **-0.4** |
| **TWGZ** | **Tauwhareparae** | **8.48** | **202** | P | **Pn** | **07 58 29.9** | **-2.6** |
| TWGZ | | | | S | **Sn** | **08 00 05.5** | **-1.5** |
| **WCZ** | **Waipu Caves** | **8.52** | **227** | P | **Pn** | 07 58 39.5 | +6.5 |
| **WHRZ** | **Whale Island** | **8.57** | **208** | P | **Pn** | **07 58 35.5** | **+1.8** |
| WHRZ | | | | S | **Sn** | **08 00 10.6** | **+1.6** |
| **OUZ** | **Omahuta** | **8.61** | **234** | P | **Pn** | 07 58 42.1 | +8.0 |
| **OUZ** | **Omahuta** | **8.61** | **234** | P | **Pn** | 07 58 42.1 | +8.0 |
| **CNGZ** | **Carnagh Statio** | **8.69** | **200** | P | **Pn** | **07 58 33.5** | **-1.8** |
| **OPRZ** | **Ohinepanea** | **8.74** | **210** | P | **Pn** | **07 58 35.7** | **-0.2** |
| **TKGZ** | **Te Karaka** | **8.77** | **202** | P | **Pn** | 07 58 33.0 | -3.3 |
| TKGZ | | | | S | **Sn** | **08 00 12.0** | **-1.8** |
| **TGRZ** | **Tauranga** | **8.77** | **212** | P | **Pn** | **07 58 38.4** | **+2.0** |
| **MWZ** | **Matawai** | **8.78** | **204** | P | **Pn** | **07 58 33.2** | **-3.3** |
| MWZ | | | | S | **Sn** | **08 00 12.1** | **-2.1** |
| **URZ** | **Urewera** | **8.87** | **206** | P | **Pn** | **07 58 34.8** | **-2.9** |
| | 16nm,0.3s,baz=15,slow=7.8,SNR=35 | | | | | | |
| URZ | | | | S | **Sn** | **08 00 15.7** | **-0.6** |
| | 273nm,0.6s,baz=18,slow=20,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **8.87** | **206** | P | **Pn** | **07 58 34.6** | **-3.1** |
| URZ | | | | S | **Sn** | **08 00 14.2** | **-2.0** |
| **RAGZ** | **Rawiri** | **8.96** | **204** | P | **Pn** | **07 58 36.7** | **-2.4** |
| RAGZ | | | | S | **Sn** | **08 00 15.9** | **-2.9** |
| **RIGZ** | **Rimuhau** | **9.04** | **202** | P | **Pn** | **07 58 37.0** | **-3.0** |
| **TARZ** | **Mount Tarawera** | **9.09** | **209** | P | **Pn** | **07 58 42.0** | **+1.2** |
| **TOZ** | **Tahuroa Road** | **9.13** | **215** | Pn | **Pn** | **07 58 44.8** | **+3.5** |
| **TOZ** | **Tahuroa Road** | **9.13** | **215** | P | **Pn** | **07 58 40.1** | **-1.2** |
| **MUGZ** | **Murupara** | **9.19** | **207** | P | **Pn** | **07 58 38.8** | **-3.3** |
| **PRGZ** | **Paritu Road** | **9.20** | **201** | P | **Pn** | **07 58 38.7** | **-3.6** |
| **RTZ** | **Ruatahuna** | **9.23** | **206** | Pn | **Pn** | **07 58 38.9** | **-3.8** |
| **RTZ** | **Ruatahuna** | **9.23** | **206** | P | **Pn** | **07 58 39.1** | **-3.7** |
| **SNGZ** | **Shannon Statio** | **9.24** | **204** | P | **Pn** | **07 58 39.5** | **-3.4** |
| **KNZ** | **Kokohu** | **9.35** | **201** | P | **Pn** | **07 58 41.4** | **-3.0** |
| **MHGZ** | **Mahia Peninsul** | **9.40** | **200** | P | **Pn** | **07 58 41.6** | **-3.4** |
| **ALRZ** | **Allen Road** | **9.43** | **208** | P | **Pn** | **07 58 45.0** | **-0.4** |
| **MTHZ** | **Maungataniwha** | **9.49** | **205** | P | **Pn** | **07 58 43.8** | **-2.4** |
| **WHHZ** | **Waihua** | **9.55** | **203** | P | **Pn** | **07 58 44.7** | **-2.3** |
| **TLZ** | **Tolley Road** | **9.59** | **212** | P | **Pn** | **07 58 46.1** | **-1.6** |
| **MRHZ** | **Matea Rd** | **9.63** | **207** | P | **Pn** | **07 58 45.4** | **-2.8** |
| **NMHZ** | **Naumai** | **9.71** | **205** | P | **Pn** | **07 58 46.1** | **-3.3** |
| **ARHZ** | **Aropaoanui** | **9.79** | **204** | P | **Pn** | **07 58 47.5** | **-2.9** |
| **BKZ** | **Black Stump Fm** | **9.89** | **206** | Pn | **Pn** | **07 58 47.9** | **-3.9** |
| **BKZ** | **Black Stump Fm** | **9.89** | **206** | P | **Pn** | **07 58 47.8** | **-4.0** |
| **RATZ** | **Rangitukua** | **9.93** | **210** | P | **Pn** | **07 58 52.5** | **+0.2** |
| **HIZ** | **Hauiti** | **10.06** | **214** | P | **Pn** | **07 58 56.8** | **+2.7** |
| **HIZ** | **Hauiti** | **10.06** | **214** | Pn | **Pn** | **07 58 54.2** | **+0.2** |
| **HIZ** | **Hauiti** | **10.06** | **214** | P | **Pn** | **07 58 56.7** | **+2.6** |
| **MCHZ** | **McNeill Hill** | **10.06** | **204** | P | **Pn** | **07 58 50.3** | **-3.7** |
| **CKHZ** | **Cape Kidnapper** | **10.12** | **202** | P | **Pn** | **07 58 50.8** | **-4.1** |
| **KWHZ** | **Kaweka Forest** | **10.14** | **206** | P | **Pn** | **07 58 52.7** | **-2.6** |
| **NTVZ** | **North Tongarir** | **10.16** | **209** | P | **Pn** | **07 58 54.0** | **-1.5** |
| **TMVZ** | **Te Maari** | **10.16** | **209** | P | **Pn** | **07 58 54.2** | **-1.4** |
| **ETVZ** | **East Tongariro** | **10.18** | **209** | P | **Pn** | **07 58 55.6** | **-0.2** |
| **WTVZ** | **West Tongariro** | **10.21** | **210** | P | **Pn** | **07 58 55.9** | **-0.4** |
| **NNVZ** | **North Ngauruho** | **10.22** | **209** | P | **Pn** | **07 58 56.7** | **+0.3** |
| **OTVZ** | **Oturere** | **10.22** | **209** | P | **Pn** | **07 58 54.0** | **-2.4** |
| **TWVZ** | **Taurewa** | **10.24** | **210** | P | **Pn** | **07 58 58.3** | **+1.7** |
| **SNVZ** | **South Ngauruho** | **10.25** | **209** | P | **Pn** | **07 58 55.7** | **-1.1** |
| **NGZ** | **Ngauruhoe** | **10.26** | **209** | P | **Pn** | **07 58 56.6** | **-0.4** |
| **KAHZ** | **Kahuranaki** | **10.31** | **203** | P | **Pn** | **07 58 53.0** | **-4.5** |
| **FWVZ** | **Far West T-bar** | **10.35** | **209** | P | **Pn** | **07 58 55.6** | **-2.6** |
| **WHVZ** | **Whangaehu Hut** | **10.35** | **209** | P | **Pn** | **07 59 01.9** | **+3.6** |
| **KRHZ** | **Kereru** | **10.36** | **205** | P | **Pn** | **07 58 53.7** | **-4.4** |
| **WNVZ** | **Wahianoa** | **10.39** | **209** | P | **Pn** | **07 58 57.5** | **-1.2** |
| **MOVZ** | **Moawhango** | **10.39** | **208** | P | **Pn** | **07 58 56.7** | **-2.0** |
| **PXZ** | **Pawanui** | **10.53** | **202** | P | **Pn** | **07 58 58.9** | **-1.5** |
| **VRZ** | **Vera Road** | **10.59** | **213** | P | **Pn** | **07 59 04.2** | **+2.9** |
| **PNHZ** | **Pukenui** | **10.65** | **205** | P | **Pn** | 07 58 57.2 | -5.0 |
| **WPHZ** | **Waipukurau** | **10.70** | **204** | P | **Pn** | **07 58 59.0** | **-3.8** |
| **PRHZ** | **Porangahau** | **10.82** | **203** | P | **Pn** | 07 58 58.6 | -5.8 |
| **WAZ** | **Wanganui** | **11.00** | **210** | P | **Pn** | **07 59 05.1** | **-1.9** |
| **DVHZ** | **Dannevirke** | **11.01** | **204** | P | **Pn** | **07 59 03.3** | **-3.7** |
| **NEZ** | **North Egmont** | **11.02** | **214** | P | **Pn** | **07 59 10.8** | **+3.5** |
| **ANWZ** | **Angora Road** | **11.04** | **203** | P | **Pn** | **07 59 03.5** | **-4.0** |
| **PRWZ** | **Pori Road** | **11.30** | **204** | P | **Pn** | **07 59 08.0** | **-3.0** |
| **BFZ** | **Birch Farm** | **11.32** | **203** | | **Pn** | 07 59 05.0 | -6.3 |
| **BFZ** | **Birch Farm** | **11.32** | **203** | P | **Pn** | 07 59 05.1 | -6.1 |
| **TIWZ** | **Tintock** | **11.53** | **204** | P | **Pn** | **07 59 10.2** | **-3.9** |
| **MRZ** | **Mangatainoka R** | **11.54** | **205** | P | **Pn** | 07 59 08.1 | -6.2 |
| **HOWZ** | **Holdsworth Sta** | **11.77** | **205** | P | **Pn** | 07 59 11.3 | -6.1 |
| **TMWZ** | **Te Maipa** | **11.82** | **203** | P | **Pn** | 07 59 11.7 | -6.4 |
| **TRWZ** | **Traveller** | **12.15** | **203** | P | **Pn** | 07 59 16.9 | -5.7 |
| **DUWZ** | **D'Urville Isla** | **12.33** | **210** | P | **Pn** | **07 59 28.3** | **-3.5** |
| **NFK** | **Norfolk Island** | **12.34** | **273** | P | **P** | **07 59 33.2** | **-3.5** |
| **NFK** | **Norfolk Island** | **12.34** | **273** | P | **P** | **07 59 32.1** | **-4.6** |
| **BHW** | **Baring Head** | **12.45** | **206** | P | **Pn** | **07 59 23.5** | **-3.2** |
| **PLWZ** | **Palliser** | **12.45** | **204** | P | **Pn** | 07 59 20.5 | -6.3 |
| **TUWZ** | **Tuamarina** | **12.84** | **209** | | **Pn** | **07 59 34.3** | **+2.3** |
| **TUWZ** | **Tuamarina** | **12.84** | **209** | P | **Pn** | 07 59 27.3 | -4.7 |
| **TKNZ** | **Takaka Hill** | **12.94** | **212** | P | **Pn** | **07 59 33.4** | **-0.1** |
| **QRZ** | **Quartz Range** | **12.98** | **214** | P | **Pn** | **07 59 32.9** | **-1.2** |
| **MSVF** | **Nonsavu** | **13.10** | **343** | ⇑*e*P | **Pn** | **07 59 36.9** | **+1.1** |
| **CTZ** | **Chatham Island** | **13.38** | **176** | | **Pn** | **07 59 39.2** | **-0.2** |
| **NIUE** | **Niue** | **13.39** | **35** | P | **Pn** | 07 59 32.7 | -7.0 |
| **THZ** | **Tophouse** | **13.55** | **211** | Pn | **Pn** | 07 59 36.0 | -5.8 |
| **KHZ** | **Kahutara** | **13.83** | **207** | Pn | **Pn** | **07 59 43.4** | **-2.1** |
| **DSZ** | **Denniston Nort** | **14.04** | **213** | P | **Pn** | **07 59 45.5** | **-3.0** |
| **GVZ** | **Greta Valley S** | **14.49** | **207** | | **Pn** | **07 59 57.3** | **+2.7** |
| **LTZ** | **Lake Taylor** | **14.65** | **210** | P | **P** | **08 00 00.8** | **-1.6** |
| **LTZ** | **Lake Taylor** | **14.65** | **210** | P | **Pn** | **07 59 52.5** | **-4.2** |
| **AMZ** | **Amberley** | **14.82** | **208** | P | **Pn** | **07 59 57.5** | **-1.4** |
| **PINNC** | **Pines Island,** | **15.18** | **297** | P | **P** | **08 00 08.6** | **+0.4** |
| **PINNC** | **Pines Island,** | **15.18** | **297** | P | **P** | **08 00 07.4** | **-0.8** |
| **WACZ** | **Wakanui South** | **15.79** | **208** | P | **Pn** | **08 00 08.6** | **-2.9** |
| **YATNC** | **Mamie plateau,** | **15.92** | **298** | P | **P** | **08 00 17.9** | **+1.5** |
| **RPZ** | **Rata Peaks** | **15.93** | **210** | P | **Pn** | **08 00 14.0** | **+0.6** |
| **RPZ** | **Rata Peaks** | **15.93** | **210** | P | **Pn** | **08 00 12.1** | **-1.2** |
| | 16nm,0.4s,baz=359,slow=1.3,SNR=9.7 | | | | | | |
| RPZ | | | | S | Sn | 08 02 55.6 | -13 |
| | 18nm,0.4s,baz=342,slow=19,SNR=4.0 | | | | | | |
| **RPZ** | **Rata Peaks** | **15.93** | **210** | P | **Pn** | **08 00 09.7** | **-3.7** |
| **ARCZ** | **Arundel** | **16.07** | **210** | P | **Pn** | **08 00 11.9** | **-3.2** |
| **DZM** | **Mont Dzumac** | **16.25** | **297** | P | **P** | **08 00 22.5** | **+2.2** |
| **DZM** | **Mont Dzumac** | **16.25** | **297** | P | **P** | **08 00 19.3** | **-0.9** |
| **DZM** | **Mont Dzumac** | **16.25** | **297** | P | **P** | **08 00 20.0** | **-0.2** |
| | 80nm,1.1s,baz=113,slow=15,SNR=27 | | | | | | |
| DZM | | | | LR | LR | 08 05 16.2 | |
| | comp=Z,3µm,19.8s,baz=172,slow=32 | | | | | | |
| **NOUC** | **Port Laguerre** | **16.34** | **297** | P | **P** | **08 00 23.2** | **+2.0** |
| **FOZ** | **Fox Glacier** | **16.35** | **213** | P | **Pn** | **08 00 16.9** | **-1.8** |
| **LIFNC** | **LIFOU** | **16.41** | **302** | P | **P** | **08 00 23.0** | **+1.1** |
| **LIFNC** | **LIFOU** | **16.41** | **302** | P | **P** | **08 00 20.9** | **-1.0** |
| LIFNC | | | | | IAmb | IAmb | 08 00 25.5 |
| | comp=Z,440nm,1.5s | | | | | | |
| **LBZ** | **Lake Benmore** | **16.85** | **211** | P | **Pn** | **08 00 23.3** | **-1.6** |
| **JCZ** | **Jackson Bay** | **17.25** | **214** | P | **Pn** | **08 00 29.1** | **-1.0** |
| **EAZ** | **Earnscleugh** | **17.90** | **210** | P | **Pn** | **08 00 30.4** | **+0.2** |
| **TUZ** | **Tuapaka** | **18.33** | **208** | P | **Pn** | **08 00 45.3** | **+2.1** |
| **MLZ** | **Maipora Lakes** | **18.54** | **212** | P | **P** | **08 00 45.5** | **+0.3** |
| **RAR** | **Rarotonga** | **18.71** | **65** | P | **P** | **08 00 46.1** | **-1.2** |
| **RAR** | **Rarotonga** | **18.71** | **65** | P | **P** | **08 00 46.2** | **-1.2** |
| | comp=Z,13nm,0.4s,baz=248,slow=16,SNR=3.8 | | | | | | |
| **RAR** | **Rarotonga** | **18.71** | **65** | P | **P** | **08 00 46.1** | **-1.2** |
| RAR | | | | pmax | pmax | | |
| | comp=Z,83nm,1.1s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **18.77** | **297** | P | **Pn** | **08 00 50.6** | **+1.9** |
| **KOUNC** | **Koumac, New Ca** | **18.77** | **297** | | **Pn** | **08 00 48.6** | **-0.1** |
| **SYZ** | **Scrubby Hill** | **19.01** | **208** | P | **Pn** | **08 00 52.6** | **+1.3** |
| **GC1S** | **Gold Coast 1 S** | **24.97** | **268** | P | **P** | **08 01 55.1** | **+3.1** |
| **AUWSH** | **Wavell State H** | **25.55** | **269** | P | **P** | **08 02 00.0** | **+2.8** |
| **ARMA** | **Armidale** | **26.21** | **262** | P | **P** | **08 02 06.1** | **+2.7** |
| **ARMA** | **Armidale** | **26.21** | **262** | P | **P** | **08 02 02.1** | **-1.3** |
| **ARMA** | **Armidale** | **26.21** | **262** | P | **P** | **08 02 06.1** | **+2.7** |
| | comp=Z,34nm,0.8s | | | | | | |
| **WOLH** | **Wollongong Har** | **26.58** | **253** | P | **P** | **08 02 08.8** | **+2.3** |
| **SYDH** | **Sydney Hard Ro** | **26.70** | **255** | P | **P** | **08 02 10.8** | **+3.2** |
| **AUPHS** | **Peel High Scho** | **26.76** | **260** | P | **P** | **08 02 11.1** | **+2.9** |
| **EIDS** | **Eidsvold** | **27.78** | **273** | P | **P** | **08 02 19.4** | **+2.0** |
| **EIDS** | **Eidsvold** | **27.78** | **273** | P | **P** | **08 02 17.1** | **-0.3** |
| **EIDS** | **Eidsvold** | **27.78** | **273** | P | **P** | **08 02 18.3** | **+0.9** |
| | comp=Z,39nm,1.7s | | | | | | |
| **CNB** | **Canberra Magne** | **27.83** | **251** | P | **P** | **08 02 19.1** | **+1.2** |
| | comp=Z,36nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **28.13** | **251** | P | **P** | **08 02 23.0** | **+2.5** |
| **CAN** | **Canberra** | **28.13** | **251** | P | **P** | **08 02 19.2** | **-1.2** |
| **CAN** | **Canberra** | **28.13** | **251** | P | **P** | **08 02 22.6** | **+2.1** |
| **CAN** | **Canberra** | **28.13** | **251** | P | **P** | **08 02 19.3** | **-1.2** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,34nm,0.9s | | | | | | |
| **AUDCS** | **Dubbo College** | **28.56** | **258** | P | **P** | **08 02 27.3** | **+3.0** |
| **YNG** | **Young** | **28.63** | **253** | P | **P** | **08 02 27.2** | **+2.3** |
| **YNG** | **Young** | **28.63** | **253** | P | **P** | **08 02 26.7** | **+1.8** |
| | comp=Z,147nm,1.4s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **28.93** | **276** | P | **P** | **08 02 29.9** | **+2.3** |
| **MCQ** | **Macquarie Isla** | **29.27** | **208** | P | **P** | **08 02 30.6** | **+0.3** |
| | comp=Z,140nm,1.8s | | | | | | |
| **AULRC** | **Lightning Ridg** | **29.49** | **263** | P | **P** | **08 02 34.7** | **+2.1** |
| **TAU** | **Tasmania Unive** | **30.34** | **236** | P | **P** | **08 02 38.6** | **-1.3** |
| TAU | | | | IAmb | IAmb | 08 02 41.8 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **TAU** | **Tasmania Unive** | **30.34** | **236** | P | **P** | **08 02 38.6** | **-1.3** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,37nm,1.0s | | | | | | |
| **TAU** | **Tasmania Unive** | **30.34** | **236** | P | **P** | **08 02 40.5** | **+0.7** |
| **TOO** | **Toolangi** | **31.02** | **247** | P | **P** | **08 02 45.5** | **-0.5** |
| TOO | | | | IAmb | IAmb | 08 02 50.3 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **31.02** | **247** | P | **P** | **08 02 47.1** | **+1.1** |
| | comp=Z,45nm,1.6s | | | | | | |
| **TOO** | **Toolangi** | **31.02** | **247** | P | **P** | **08 02 45.5** | **-0.5** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,38nm,1.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.12** | **258** | P | **P** | **08 02 49.0** | **+2.1** |
| **CMSA** | **Cobar Meteorol** | **31.12** | **258** | P | **P** | **08 02 48.3** | **+1.4** |
| | comp=Z,57nm,1.4s | | | | | | |
| **AUAYR** | **Ayr State

comp=Z,14nm,0.8s
EDFI **Ende, Flores** 60.10 278 P P 08 06 35.1 -0.8
comp=Z,18nm,0.8s,comp=Z,1µm
GIRL **Giralia** 60.40 260 P P 08 06 37.6 0.0
KAPI **Kappang** 63.65 280 LR LR 08 35 38.5
comp=Z,301nm,18.5s,baz=110,slow=37
BELA **Belgrano 2** 69.81 172 P P 08 07 40.9 +3.0
PMSA **Palmer Station** 72.27 156 P P 08 07 54.0 +1.1
PMSA **Palmer Station** 72.27 156 LR LR 08 33 15.5
comp=Z,472nm,19.3s,baz=176,slow=30
MAW **Mawson** 72.35 201 P P 08 07 53.9 +0.5
comp=Z,8.4nm,0.8s,baz=102,slow=6.7,SNR=14
MAW LR LR 08 37 36.0
comp=Z,204nm,21.1s,baz=324,slow=34
comp=Z,8.4nm,0.8s
KKM **Kota Kinabalu** 72.59 288 P P 08 07 54.3 -1.5
SBUM **Sibu** 73.96 283 P P 08 08 01.8 -2.0
KSM **Kuching** 75.06 281 P P 08 08 08.9 -1.3
ELIB **Princess Elisa** 76.88 187 dP P 08 08 19.9 +0.1
comp=Z,18nm,0.7s
AY03 **Cochrane** 77.74 138 IAmb IAmb 08 08 27.5
comp=Z,29nm,1.1s
TROLL **Troll, Antarti** 77.90 180 ⇑P P 08 08 25.9 +0.4
comp=Z,1µm,0.8s
JGF **Kuroka** 77.93 324 P P 08 08 27.3 +1.4
SNAA **Sanae** 78.18 178 P P 08 08 28.2 +1.2
SNAA IAmb IAmb 08 08 45.5
comp=Z,20nm,1.0s
SNAA **Sanae** 78.18 178 ⇑P P 08 08 27.4 +0.4
comp=Z,496nm,1.1s
SNAA **Sanae** 78.18 178 P P 08 08 27.2 +0.2
comp=Z,7.5nm,1.0s,baz=205,slow=8.2,SNR=34
comp=Z,7.5nm,1.0s
SNAA **Sanae** 78.18 178 ceP P 08 08 27.3 +0.4
SNAA pmax pmax
comp=Z,23nm,1.1s
MJAR **Matsushiro Arr** 78.25 325 P P 08 08 27.4 -0.2
comp=Z,6.5nm,0.8s,baz=160,slow=5.4,SNR=15
comp=Z,6.5nm,0.8s
MAJO **Matsushiro** 78.25 325 ⇓eP P 08 08 27.2 -0.4
MAJO pmax pmax
comp=Z,21nm,1.2s
VNA3 **Neumayer Olymp** 78.33 176 ⇑P P 08 08 27.9 +0.2
comp=Z,34nm,0.8s
VNA2 **Neumayer--Watz** 78.77 177 ⇑P P 08 08 31.3 +1.2
comp=Z,23nm,0.6s,baz=185,slow=4.4
NVL **N'lazarevskaya** 78.91 183 eP P 08 08 33.4 +2.5
NVL pmax pmax
comp=Z,21nm,0.8s
COYC **Coyhaique** 78.92 136 P P 08 08 33.1 +1.7
COYC IAmb IAmb 08 08 34.0
comp=Z,51nm,1.2s
VNA1 **Neumayer--Stat** 79.00 177 ⇑P P 08 08 31.9 +0.5
comp=Z,24nm,0.8s
JSD **Sado** 79.40 326 P P 08 08 32.5 -1.4
JSD IAmb IAmb 08 08 32.6
comp=Z,14nm,0.6s
JTM **Tenmabayashi** 80.33 330 IAmb IAmb 08 08 40.6
comp=Z,45nm,1.0s
LL02 **Futaleuf** 80.34 135 P P 08 08 39.8 +0.7
LL02 IAmb IAmb 08 08 41.4
comp=Z,36nm,1.2s
H03S2 **Juan Fernandez** 80.44 124 T T 09 37 53.4
baz=238,slow=74
H03S1 **Juan Fernandez** 80.45 124 T T 09 37 53.5
baz=238,slow=74
H03S3 **Juan Fernandez** 80.46 124 T T 09 37 52.4
baz=238,slow=74
H03N3 **Juan Fernandez** 80.63 123 T T 09 38 06.3
baz=241,slow=73,SNR=95
H03N2 **Juan Fernandez** 80.64 123 T T 09 38 06.3
baz=241,slow=73,SNR=83
H03N1 **Juan Fernandez** 80.65 123 T T 09 38 03.1
baz=241,slow=73,SNR=99
LR05 **Currie** 81.84 132 P P 08 08 47.8 +0.6
LR03 **Panguipulli** 81.94 131 IAmb IAmb 08 08 50.8
comp=Z,61nm,1.4s
PLCA **Paso Flores** 82.49 133 P P 08 08 51.3 +0.6
PLCA IAmb IAmb 08 08 53.1
comp=Z,50nm,1.4s
PLCA **Paso Flores** 82.49 133 P P 08 08 51.4 +0.6
comp=Z,18nm,1.2s,baz=228,slow=7.3,SNR=10
comp=Z,18nm,1.2s
PLCA **Paso Flores** 82.49 133 P P 08 08 51.3 +0.6
PLCA pmax pmax
comp=Z,50nm,1.4s
KSRS **Korea Array** 84.36 320 P P 08 08 59.1 -0.9
comp=Z,4.8nm,0.9s,baz=139,slow=6.1,SNR=16
comp=Z,4.8nm,0.9s
KSAR **Wonju Array Be** 84.37 320 P P 08 09 00.9 +0.9
KSAR **Wonju Array Be** 84.37 320 P P 08 09 00.9 +0.9
YSS **Yuzh-Sakhalins** 84.74 334 eP P 08 09 03.4 +1.7
YSS pmax pmax
comp=Z,30nm,0.9s
109C **Camp Elliot, M** 85.27 47 P P 08 09 04.7 0.0
baz=229
MONP2 **Monument Peak** 85.71 48 P P 08 09 07.2 0.0
baz=230,SNR=7.3
PETK **Petropavlovsk-** 85.80 346 P P 08 09 06.9 +0.1
PETK **Petropavlovsk-** 85.80 346 P P 08 09 07.6 +0.8
comp=Z,18nm,0.7s,baz=134,slow=6.2,SNR=9.4
comp=Z,18nm,0.7s
YUH **Yuha Desert** 85.87 48 IAmb IAmb 08 09 26.6
comp=Z,28nm,1.2s
TPFO **Pinon Flats** 86.15 47 P P 08 09 08.7 -0.5
baz=230,SNR=7.1
PFO **Pinyon Flats O** 86.15 47 P P 08 09 09.1 -0.2
baz=230,SNR=8.2
PFO **Pinyon Flats O** 86.15 47 ⇑eP P 08 09 09.0 -0.2
NJ2 **Nanjing** 86.26 311 eP P 08 09 10.6 +1.0
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
CHNA **Chernabura Isl** 86.31 11 P P 08 09 10.3 +1.0
baz=196
LMEL **Las Melosas** 86.58 127 IAmb IAmb 08 09 29.6
comp=Z,38nm,1.4s
PSTR **Posyet** 86.59 325 ceP P 08 09 13.0 +2.0
SDPT **Sand Point** 86.68 10 P P 08 09 11.0 0.0
baz=195
CMB **Columbia Colle** 86.71 42 IAmb IAmb 08 09 29.9
comp=Z,29nm,1.0s
S12K **Black Hills** 86.80 9 P P 08 09 11.9 +0.2
baz=194
O02D **Mt. Diablo Mer** 86.84 39 P P 08 09 12.5 0.0
USA0B **Ussuriysk Arra** 87.16 326 P P 08 09 15.4 +1.7
USA0B IAmb IAmb 08 09 16.1
comp=Z,20nm,1.1s
USA0B **Ussuriysk Arra** 87.16 326 ciP P 08 09 14.5 +0.8
USRK **Ussuriysk Ar.** 87.16 326 P P 08 09 15.6 +1.9
USRK **Ussuriysk Ar.** 87.16 326 P P 08 09 14.8 +1.1
comp=Z,8.2nm,0.8s,baz=149,slow=3.4,SNR=14
comp=Z,8.2nm,0.8s
MDPB **Devils Postpil** 87.20 43 IAmb IAmb 08 09 32.9
comp=Z,23nm,1.2s
DSP **Deep Springs** 87.68 44 IAmb IAmb 08 09 35.1
comp=Z,25nm,1.2s
GWY **Greenwater Val** 87.69 45 IAmb IAmb 08 09 35.1
comp=Z,22nm,1.0s
LHV **Little Huntoon** 87.95 43 IAmb IAmb 08 09 36.3
comp=Z,28nm,1.0s
YERR **Yerington** 88.01 42 IAmb IAmb 08 09 36.3
comp=Z,20nm,1.0s
GMN **Gold Mountain** 88.06 44 IAmb IAmb 08 09 36.9
comp=Z,18nm,1.2s
NVAR **Mina Array Bea** 88.19 43 P P 08 09 18.5 -0.6
NVAR **Mina Array Bea** 88.19 43 P P 08 09 18.6 -0.5
comp=Z,2.2nm,0.9s,baz=221,slow=8.0,SNR=14
NVAR pP sP 08 09 36.6 +2.0
comp=Z,16nm,0.8s,baz=229,slow=7.2,SNR=37
comp=Z,2.2nm,0.9s
NV11 **Mina Array Sit** 88.27 43 P P 08 09 19.0 -0.5
NV11 IAmb IAmb 08 09 37.7
comp=Z,24nm,1.1s
TPNV **Topopah Spring** 88.44 45 P P 08 09 19.7 -0.6
baz=230,SNR=8.5
V12A **Nelson** 88.52 47 IAmb IAmb 08 09 39.7
comp=Z,24nm,1.2s
Y14A **Wickenburg** 88.58 49 IAmb IAmb 08 09 40.0
comp=Z,22nm,1.0s
MDJ **Mudanjiang** 88.63 325 P P 08 09 21.9 +1.2
MDJ pmax pmax
comp=Z,15nm,1.2s
SHPR **Sheep Range** 88.83 46 IAmb IAmb 08 09 41.3
comp=Z,13nm,1.3s
TUC **Tucson** 89.06 51 P P 08 09 22.4 -0.8
TUC **Tucson** 89.06 51 P P 08 09 22.8 -0.4
baz=233
TUC **Tucson** 89.06 51 P P 08 09 22.4 -0.8
TUC pmax pmax
comp=Z,56nm,1.5s
R17L **Mt. Peulik Vol** 89.53 11 P P 08 09 25.2 +0.6
baz=199,SNR=5.7
R11B **Troy Canyon, C** 89.75 44 P P 08 09 26.4 0.0
baz=230
X16A **Lo Mia Camp, P** 89.90 49 IAmb IAmb 08 09 46.7
comp=Z,30nm,1.0s
BMN **Battle Mountai** 90.14 42 IAmb IAmb 08 09 46.3
comp=Z,32nm,1.3s
CN2 **Changchun** 90.15 323 P P 08 09 28.8 +0.9
CN2 pmax pmax
comp=Z,30nm,0.9s
LCMT **Little Creek M** 90.34 46 IAmb IAmb 08 09 48.1
comp=Z,14nm,1.0s
KDAK **Kodiak Island** 90.37 13 P P 08 09 29.3 +0.7
baz=202
BNX **BinXian** 90.51 325 ⇓P P 08 09 30.0 +0.5
BNX pmax pmax
comp=Z,22nm,0.9s
U15A **North Rim** 90.58 47 IAmb IAmb 08 09 49.7
comp=Z,20nm,0.9s
CCUT **Cedar City** 90.60 46 IAmb IAmb 08 09 49.6
comp=Z,14nm,1.1s
KNB **Kanab** 90.61 47 IAmb IAmb 08 09 49.6
comp=Z,24nm,1.1s
WUAZ **Wupatki** 90.61 48 IAmb IAmb 08 09 49.7
comp=Z,28nm,1.2s
WUAZ **Wupatki** 90.61 48 P P 08 09 30.6 +0.2
baz=232
Q12A **Willow Creek R** 90.64 44 IAmb IAmb 08 09 49.0
comp=Z,24nm,1.1s
WVOR **Wild Horse Val** 90.67 40 IAmb IAmb 08 09 48.7
comp=Z,29nm,1.2s
SPR3 **Spring Creek 3** 90.92 44 IAmb IAmb 08 09 50.0
comp=Z,14nm,1.1s
KLR **Kul'dur** 91.03 330 P P 08 09 31.1 -0.8
comp=Z,9.4nm,0.9s,baz=144,slow=4.3,SNR=14
KLR LR LR 08 44 43.8
comp=Z,158nm,20.4s,baz=190,slow=32
comp=Z,9.4nm,0.9s
KLR **Kul'dur** 91.03 330 ⇓eP P 08 09 31.9 0.0
KLR pmax pmax
comp=Z,14nm,0.9s
121A **Cookes Peak, D** 91.23 53 IAmb IAmb 08 09 52.7
comp=Z,15nm,1.1s
121A **Cookes Peak, D** 91.23 53 P P 08 09 33.0 -0.4
baz=234
P18K **Big Mountain,** 91.39 11 P P 08 09 34.0 +0.7
baz=200
ELK **Elko** 91.49 42 IAmb IAmb 08 09 52.5
comp=Z,12nm,1.1s
GYA **Guiyang** 91.58 300 P P 08 09 36.5 +1.4
GYA pmax pmax
comp=Z,35nm,0.6s
MTPU **Mount Pierson** 91.64 46 IAmb IAmb 08 09 54.9
comp=Z,22nm,1.2s
M15K **Kasigluk River** 91.83 8 P P 08 09 36.1 +0.9
baz=195
O18K **Koktuh Hills** 91.83 11 P P 08 09 36.0 +0.7
baz=200
N16K **Nishlik Lake** 91.87 9 P P 08 09 35.5 -0.1
baz=196
P19K **Oil Pt** 91.99 12 P P 08 09 36.0 -0.1
baz=201
LYN **LuoYang** 92.02 309 P P 08 09 38.1 +1.3
LYN pmax pmax
comp=Z,14nm,0.8s
L14K **Kuka Creek** 92.22 7 P P 08 09 36.5 -0.6
baz=193
HNS **HongShan** 92.25 313 ⇑P P 08 09 36.9 -0.8
HNS pmax pmax
comp=Z,15nm,0.5s
TX31 **Lajitas Ar. Si** 92.33 57 IAmb IAmb 08 09 57.3
comp=Z,12nm,1.2s
TXAR **Lajitas Array** 92.33 57 P P 08 09 38.0 -0.5
TXAR **Lajitas Array** 92.33 57 P P 08 09 38.7 +0.2
comp=Z,1.5nm,1.1s,baz=223,slow=4.9,SNR=9.1
TXAR pP sP 08 09 56.4 +2.2
comp=Z,4.2nm,1.0s,baz=216,slow=6.2,SNR=17
comp=Z,1.5nm,1.1s
G08A **Pilot Rock** 92.41 37 P P 08 09 38.1 -0.4
MNTX **Cornudas Mount** 92.42 54 P P 08 09 37.5 -1.3
baz=236
DUG **Duway, Tooele** 92.58 44 P P 08 09 38.6 -0.9
baz=232
K13K **Kusilvak Mount** 92.60 6 P P 08 09 38.8 0.0
baz=192
L15K **Ungalak Mounta** 92.69 8 P P 08 09 39.8 +0.6
baz=194
MFID **Camas Ranch** 92.87 40 IAmb IAmb 08 09 58.7
comp=Z,18nm,1.0s
M17K **Holitna River** 92.95 10 P P 08 09 39.0 -1.5
M17K IAmb IAmb 08 09 41.5
comp=Z,21nm,0.9s
M17K **Holitna River** 92.95 10 P P 08 09 40.8 +0.3
baz=198
M17K **Holitna River** 92.95 10 P P 08 09 39.0 -1.5
MA2 **Magadan** 93.28 345 P P 08 09 39.3 -2.7
comp=Z,7.1nm,0.9s,baz=116,slow=10,SNR=3.5
comp=Z,7.1nm,0.9s
K15K **Wolf Creek Mou** 93.28 8 P P 08 09 42.9 +1.0
baz=194
SRU **San Rafael Swe** 93.32 46 IAmb IAmb 08 10 01.1
comp=Z,10.0nm,0.9s
CMAR **Chiang Mai Arr** 93.44 289 P P 08 09 44.5 +0.8
comp=Z,0.7nm,0.3s,baz=145,slow=3.4,SNR=7.1
comp=Z,0.7nm,0.3s
CMAR **Chiang Mai Arr** 93.44 289 iP P 08 09 45.9 +2.2
CMAR pmax pmax
comp=Z,1.0nm,0.2s
ANMO **Albuquerque** 93.52 51 P P 08 09 43.6 -0.4
ANMO **Albuquerque** 93.52 51 P P 08 09 43.7 -0.3
baz=235
ANMO **Albuquerque** 93.52 51 iP P 08 09 43.3 -0.7
ANMO pmax pmax
comp=Z,3.0nm,1.6s
HVU **Hansel Valley** 93.58 43 IAmb IAmb 08 10 02.2
comp=Z,22nm,1.0s
HEH **HeiHe** 93.71 328 eP P 08 09 44.1 -0.1
HLID **Hailey** 93.75 41 P P 08 09 45.5 +0.7
baz=231,SNR=11
L18K **Granite Mounta** 93.84 10 P P 08 09 44.6 +0.1
baz=198
M19K **Big River Lodg** 93.90 11 P P 08 09 44.7 -0.1
baz=200
GAMB **Gambell** 93.96 3 P P 08 09 45.4 +0.5
baz=185
RC01 **Rabbit Creek A** 93.99 13 P P 08 09 45.0 -0.2
baz=204
PWL **Port Wells** 94.07 14 P P 08 09 45.5 -0.1
baz=205
L19K **White Mountain** 94.09 11 P P 08 09 45.4 -0.3
baz=200
K17K **Iditarod** 94.09 9 P P 08 09 45.8 +0.1
baz=197
V35K **Ketchikan** 94.12 24 P P 08 09 46.3 +0.4
baz=219
SUA **Susitna One** 94.14 13 P P 08 09 47.0 +0.9
baz=203
U33K **Wide Pass** 94.21 23 P P 08 09 46.7 +0.4
baz=218
SIT **Sitka** 94.24 22 P P 08 09 47.1 +0.7
baz=216
GLI **Glacier Island** 94.35 15 P P 08 09 46.0 -0.9
baz=206
J16K **Anvik River** 94.35 8 P P 08 09 45.9 -0.9
baz=195
EYAK **Cordova Ski Ar** 94.35 15 P P 08 09 46.3 -0.5
baz=208
SKT **Skwentna** 94.47 12 P P 08 09 47.3 -0.1
baz=203
M22K **Willow** 94.52 13 P P 08 09 48.3 +0.7
baz=204
L20K **Farewell, AK** 94.53 11 P P 08 09 47.6 -0.1
baz=201
KNK **Knik Glacier** 94.54 14 P P 08 09 47.1 -0.7
baz=205
PMR **Palmer** 94.57 13 P P 08 09 47.9 +0.1
baz=205
J17K **VABM Dome** 94.65 8 P P 08 09 48.9 +0.7
baz=196
WRAK **Wrangell Islan** 94.72 23 P P 08 09 48.7 +0.1
baz=218
S32K **Killisnoo** 94.81 22 P P 08 09 48.5 -0.6
baz=217
S22A **4UR Ranch, Cre** 94.87 49 P P 08 09 49.6 -0.7
baz=235
BMRM **Bremner River** 94.99 16 P P 08 09 50.0 +0.1
baz=208,SNR=5.1
J18K **Innoko River** 95.03 9 P P 08 09 50.6 +0.6
baz=198
KLU **Klutina** 95.16 15 P P 08 09 50.7 0.0
baz=207
SCM **Sheep Creek Mo** 95.16 14 P P 08 09 51.0 +0.3
baz=206
PNL **Peninsula** 95.19 19 P P 08 09 50.9 +0.1
baz=213
PPLA **Purkeypile** 95.20 12 P P 08 09 51.1 +0.1
baz=202
PINM **Pinnacle** 95.32 18 P P 08 09 52.8 +1.3
baz=212
K20K **Telida** 95.32 11 P P 08 09 52.5 +1.2
baz=201
NEW **Newport** 95.32 36 P P 08 09 51.7 0.0
baz=229
PZH **PanZhiHua** 95.33 297 P P 08 09 53.6 +1.2
PZH pmax pmax
comp=Z,10.0nm,0.5s
R32K **Eaglecrest** 95.48 21 P P 08 09 53.2 +1.1
baz=217
N25K **Chitina, Valde** 95.55 15 P P 08 09 54.6 +2.1
baz=208
P29M **Windy Craggy** 95.62 19 P P 08 09 53.9 +1.1
baz=214
G15K **Niukluk** 95.67 6 P P 08 09 55.1 +2.3
baz=192
MCARA **McCarthy VSAT** 95.73 16 P P 08 09 54.5 +1.3
baz=210
SDCO **Great Sand Dun** 95.74 49 P P 08 09 54.3 0.0
baz=236
WAT6 **Susitna Watana** 95.75 14 P P 08 09 53.9 +0.4
baz=206
JCT **Junction City** 95.77 58 P P 08 09 53.6 -0.6
baz=238
CTG **Chitna Glacier** 95.78 17 P P 08 09 55.0 +1.4
baz=211
PLBC **Pleasant Camp** 95.87 20 P P 08 09 54.0 +0.1
baz=215
T35M **Bob Quinn** 95.88 24 P P 08 09 53.7 -0.3
baz=220
O28M **Mount Upton** 95.91 18 P P 08 09 54.1 -0.3
baz=212
O29M **Mount Kennedy** 95.95 19 P P 08 09 54.4 +0.1
baz=214
SEY **Seymchan** 95.96 347 P P 08 09 54.0 -0.1
comp=Z,2.5nm,0.8s,baz=166,slow=14,SNR=4.0
comp=Z,2.5nm,0.8s
SEY **Seymchan** 95.96 347 ⇓eP P 08 09 55.2 +1.0
SEY pmax pmax
comp=Z,8.0nm,1.3s
H17K **Granite Mounta** 96.03 8 P P 08 09 54.8 +0.3
baz=196
J20K **Nowinta River** 96.08 10 P P 08 09 54.1 -0.6
baz=201
BW06 **Boulder Array** 96.08 44 P P 08 09 54.5 -1.1
baz=234
PDAR **Pinedale Array** 96.08 44 P P 08 09 55.0 -0.6
comp=Z,0.3nm,0.8s,baz=189,slow=4.6,SNR=2.0
PDAR pP sP 08 10 11.9 +0.8
comp=Z,1.6nm,0.8s,baz=212,slow=3.7,SNR=10
PDAR PKKPbc PKKPbc 08 26 43.1 -0.7
comp=Z,1.0nm,0.8s,baz=84,slow=4.6,SNR=6.5
comp=Z,0.3nm,0.8s
CD2 **Chengdu** 96.11 302 eP P 08 09 56.0 +0.2
T25A **Trinidad** 96.12 50 P P 08 09 54.3 -1.6
baz=236
SKAG **Skagway** 96.19 20 P P 08 09 54.9 -0.4
baz=216
G16K **Koyuk River** 96.22 6 P P 08 09 54.8 -0.5
baz=194
ZEA **Zeya** 96.24 331 eP P 08 09 57.0 +1.3
HHC **Hu-ho-hao-te** 96.25 314 eP P 08 09 58.3 +2.1
HHC S S 08 21 16.3 +3.5
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,170nm,3.6s
P30M **Million Dollar** 96.25 19 P P 08 09 56.3 +0.7
baz=215
DHY **Denali Highway** 96.27 13 P P 08 09 56.9 +1.0
baz=206
S34M **Telegraph Cree** 96.30 23 P P 08 09 56.2 +0.3
baz=219
F15K **North Star Dit** 96.32 5 P P 08 09 55.6 -0.1
baz=192
H18K **Honhosa River** 96.42 8 P P 08 09 57.5 +1.2
baz=197
YUK8 **Steele Glacier** 96.45 17 P P 08 09 58.5 +1.6
baz=213
G17K **Kiwalik Mounta** 96.50 7 P P 08 09 57.7 +1.1
baz=195
BPAW **Bear Paw Mtn.** 96.53 12 P P 08 09 56.0 -0.8
baz=203
YUK6 **Outpost Mounta** 96.54 18 P P 08 09 57.7 +0.5
baz=214
MCK **McKinley** 96.56 13 P P 08 09 58.1 +1.2
baz=205
PAX **Paxson** 96.57 14 P P 08 09 57.8 +0.7
baz=208
BOZ **Bozeman (W)** 96.57 40 P P 08 09 58.7 +1.1
baz=233,SNR=7.8
I20K **Naaghedeneel** 96.61 10 P P 08 09 57.4 +0.3
baz=200
M26K **Nabesna, AK** 96.62 16 P P 08 09 57.8 +0.5
baz=210
Q24A **Divide** 96.65 49 P P 08 09 58.6 +0.3
baz=236
YUK3 **Moose Creek** 96.69 17 P P 08 09 58.7 +0.9
baz=212
Q32M **Nakina River** 96.74 22 P P 08 09 59.3 +1.2
baz=218
AMTX **Amarillo** 96.76 54 P P 08 10 00.3 +1.6
baz=238
P32M **Atlin** 96.78 21 P P 08 09 59.2 +1.1
baz=217
YUK4 **Talbot Arm** 96.80 18 P P 08 10 00.5 +2.1
baz=214
ISCO **Idaho Springs** 96.81 48 P P 08 09 59.2 +0.1
baz=236
M27K **Edge Creek, AK** 96.84 16 P P 08 09 60.0 +1.6
baz=211,SNR=5.7
O30N **Mendenhall** 97.03 19 P Pdif 08 09 59.6 +0.4
baz=216
H19K **Roundabout Mou** 97.03 9 P Pdif 08 10 00.0 +1.0
baz=199
BTO **Baotou** 97.08 313 eP Pdif 08 10 02.1 +2.0
BTO pP pwP 08 10 14.0 -0.5
BTO sP sP 08 10 20.6 +4.7
BTO S S 08 21 23.3 +3.3
BTO pmax pmax
comp=Z,24nm,0.6s
BTO pmax pmax
comp=Z,130nm,4.8s
BTO LR LR
comp=Z,250nm,5.1s
BTO LR LR
comp=Z,250nm,5.0s
BTO LR LR
comp=Z,2µm,19.2s
DLBC **Dease Lake** 97.08 23 P Pdif 08 10 01.0 +1.4
baz=220
L26K **Log Cabin Wild** 97.08 15 P Pdif 08 09 59.5 0.0
baz=210
G18K **Tagagawik** 97.10 8 P Pdif 08 10 00.8 +1.3
baz=197
H20K **Anotleneega Mo** 97.21 9 P Pdif 08 10 01.7 +1.8
baz=200
N23A **Red Feather La** 97.22 47 P Pdif 08 10 01.0 +0.1
baz=236
K24K **Donnelly Dome** 97.24 14 P Pdif 08 10 01.6 +1.5
baz=208
WHY **Whitehorse** 97.29 20 P Pdif 08 10 02.4 +1.9
baz=216
N30M **Aishikik Lake** 97.31 18 P Pdif 08 10 01.9 +1.4
baz=215
NEA2 **Nenana** 97.32 12 P Pdif 08 10 01.7 +1.3
baz=205
F17K **Baldwin Pennin** 97.35 7 P Pdif 08 10 01.2 +0.8
baz=194
I21K **Tanana** 97.36 11 P Pdif 08 10 02.1 +1.6
baz=202
RIDG **Independent Ri** 97.38 14 P Pdif 08 10 02.2 +1.4
baz=208
MLY **Manley** 97.43 11 P Pdif 08 10 02.8 +1.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=204 | | | | | | | |
| L27K | Beaver Creek, baz=211 | 97.46 | 16 | P | | Pdif | 08 10 03.0 | +1.8 |
| R33M | Jennings River baz=220 | 97.50 | 22 | P | | P | 08 10 00.3 | -1.1 |
| G19K | Purcell Mounta baz=198 | 97.53 | 8 | P | | P | 08 10 00.7 | -0.6 |
| HDA | Harding Lake baz=207 | 97.55 | 13 | P | | P | 08 10 00.8 | -0.6 |
| P33M | Teslin, Yukon baz=218 | 97.55 | 21 | P | | P | 08 10 01.3 | -0.2 |
| 435B | Jarrell baz=239 | 97.56 | 59 | P | | P | 08 10 00.8 | -1.5 |
| RLMT | Red Lodge baz=234 | 97.63 | 42 | P | | P | 08 10 01.1 | -1.5 |
| F18K | Selawik baz=196 | 97.67 | 7 | P | | Pdif | 08 10 02.9 | +1.0 |
| H21K | Melozitna Rive baz=202 | 97.67 | 10 | P | | Pdif | 08 10 02.1 | +0.1 |
| N31M | Braeburn, Yuko baz=216 | 97.70 | 19 | P | | Pdif | 08 10 02.6 | +0.4 |
| M29M | Somme Creek baz=214 | 97.77 | 17 | P | | P | 08 10 01.9 | -0.6 |
| I23K | Minto, Yukon-K baz=205 | 97.77 | 12 | P | | Pdif | 08 10 03.5 | +1.2 |
| SCRK | Sand Creek baz=209 | 97.77 | 14 | P | | P | 08 10 01.7 | -0.8 |
| COLA | College baz=206 | 97.80 | 12 | P | | Pdif | 08 10 02.6 | +0.2 |
| ILAR | Eielson Array comp=Z,0.4nm,0.5s,baz=26,slow=2.3,SNR=3.6 | 97.89 | 13 | PKKPbc | | PKKPbc | 08 26 37.7 | -1.7 |
| E17K | Hotham Inlet baz=194 | 97.92 | 6 | P | | Pdif | 08 10 03.8 | +0.8 |
| J25K | Salcha River, baz=208 | 98.05 | 14 | P | | Pdif | 08 10 04.8 | +1.0 |
| POKR | Poker Plat Res baz=206 | 98.09 | 13 | P | | Pdif | 08 10 06.3 | +2.5 |
| F19K | Shaleruckik Mo baz=198 | 98.11 | 8 | P | | Pdif | 08 10 05.2 | +1.4 |
| H22K | Ishtalitna Cre baz=203 | 98.12 | 11 | P | | Pdif | 08 10 04.7 | +0.7 |
| N32M | Quiet Lake baz=218 | 98.21 | 20 | P | | Pdif | 08 10 06.5 | +1.9 |
| K27K | Chicken baz=211 | 98.24 | 15 | P | | Pdif | 08 10 06.2 | +1.7 |
| J26L | Joseph Creek baz=210 | 98.32 | 14 | P | | Pdif | 08 10 05.8 | +0.8 |
| H23K | Yukon River baz=205 | 98.36 | 11 | P | | Pdif | 08 10 06.3 | +1.3 |
| E18K | Tukpahlearik C baz=195 | 98.36 | 7 | P | | Pdif | 08 10 06.3 | +1.3 |
| G21K | Allakaket baz=201 | 98.37 | 10 | P | | Pdif | 08 10 07.0 | +1.9 |
| F20K | Avaraart Lake baz=199 | 98.57 | 9 | P | | Pdif | 08 10 08.3 | +2.4 |
| H24K | Noodor Dome baz=206 | 98.66 | 12 | P | | P | 08 10 05.4 | -1.0 |
| M31M | Drury Creek, Y baz=217 | 98.67 | 19 | P | | P | 08 10 06.3 | -0.2 |
| E19K | Redstone River baz=198 | 98.77 | 8 | P | | Pdif | 08 10 07.3 | +0.5 |
| C16K | Lisburne Hills baz=191 | 98.79 | 5 | P | | Pdif | 08 10 07.4 | +0.6 |
| PRP | Porcupine Dome baz=208 | 98.82 | 13 | P | | Pdif | 08 10 07.4 | +0.1 |
| BILL | Bilibino | 98.82 | 354 | *i* P | | Pdif | 08 10 08.2 | +1.2 |
| BILL | comp=Z,8.0nm,1.3s | | | pmax | | pmax | | |
| DAWY | Dawson baz=213 | 98.90 | 16 | P | | Pdif | 08 10 08.9 | +1.4 |
| FARO | Faro, Yukon baz=218 | 98.99 | 19 | P | | Pdif | 08 10 09.5 | +1.5 |
| F21K | Alatna River baz=201 | 99.04 | 9 | P | | Pdif | 08 10 09.5 | +1.5 |
| EGMT | Eagleton baz=234 | 99.05 | 39 | P | | Pdif | 08 10 09.8 | +1.1 |
| G23K | Bananza Creek baz=204 | 99.09 | 11 | P | | Pdif | 08 10 11.0 | +2.7 |
| EGAK | Eagle baz=212 | 99.09 | 15 | P | | Pdif | 08 10 10.6 | +2.3 |
| I26K | Coal Creek Min baz=210 | 99.11 | 14 | P | | Pdif | 08 10 09.5 | +1.1 |
| K29M | Barlow Dome baz=215 | 99.17 | 17 | P | | Pdif | 08 10 09.3 | +0.5 |
| F22K | John River baz=202 | 99.49 | 10 | P | | Pdif | 08 10 11.3 | +1.3 |
| C18K | Utukok River baz=195 | 99.50 | 6 | P | | Pdif | 08 10 10.8 | +0.7 |
| J29N | Klondike Camp baz=214 | 99.50 | 16 | P | | Pdif | 08 10 11.4 | +1.2 |
| G24K | Hadweenzic Riv baz=206 | 99.51 | 12 | P | | Pdif | 08 10 11.4 | +1.3 |
| COLD | Coldfoot baz=204 | 99.53 | 11 | P | | Pdif | 08 10 09.9 | -0.3 |
| E20K | Nigu River baz=199 | 99.66 | 8 | P | | Pdif | 08 10 11.5 | +0.6 |
| D19K | Kuna River baz=197 | 99.66 | 7 | P | | Pdif | 08 10 13.3 | +2.5 |
| I27K | Kandik River baz=211 | 99.70 | 14 | P | | Pdif | 08 10 14.1 | +3.0 |
| I28M | Miner Creek baz=213 | 99.94 | 15 | P | | Pdif | 08 10 13.7 | +1.5 |
| TGTN | Hyland Airport baz=222 | 99.99 | 22 | P | | Pdif | 08 10 14.4 | +1.9 |
| G26K | Porcupine Rive baz=210 | 100.42 | 13 | P | | Pdif | 08 10 15.0 | +0.9 |
| E24K | Your Creek baz=206 | 100.58 | 11 | P | | Pdif | 08 10 15.7 | +0.8 |
| I30M | Mount Dempster baz=216 | 100.59 | 17 | P | | Pdif | 08 10 15.4 | +0.2 |
| F25K | Christian Rive baz=208 | 100.64 | 12 | P | | Pdif | 08 10 16.4 | +1.2 |
| C21K | Knifeblade Rid baz=200 | 100.68 | 8 | P | | Pdif | 08 10 16.2 | +0.9 |
| D22K | Ayikyak River baz=202 | 100.70 | 9 | P | | Pdif | 08 10 15.8 | +0.5 |
| G27K | Doyon Strip baz=211 | 100.72 | 14 | P | | Pdif | 08 10 15.9 | +0.4 |
| TOLK | Toolik Lake Re baz=205 | 100.92 | 10 | P | | Pdif | 08 10 17.2 | +0.8 |
| H29M | Whitestone baz=214 | 100.94 | 15 | P | | Pdif | 08 10 16.5 | 0.0 |
| F26K | Sheenjek River baz=209 | 101.00 | 12 | P | | Pdif | 08 10 17.6 | +0.8 |
| A19K | Wainwright baz=195 | 101.02 | 6 | P | | Pdif | 08 10 19.3 | +2.5 |
| B21K | Ikpikpuk River baz=200 | 101.14 | 8 | P | | Pdif | 08 10 18.4 | +1.2 |
| B20K | Meade River baz=198 | 101.22 | 7 | P | | Pdif | 08 10 18.9 | +1.4 |
| EPYK | Eagle Plains baz=216 | 101.44 | 16 | P | | Pdif | 08 10 21.0 | +2.2 |
| G29M | Pine Creek baz=214 | 101.59 | 15 | P | | Pdif | 08 10 21.4 | +2.0 |
| F28M | Old Crow baz=213 | 101.78 | 14 | P | | Pdif | 08 10 22.3 | +2.0 |
| C23K | Ikillik River baz=204 | 101.87 | 9 | P | | Pdif | 08 10 22.4 | +1.9 |
| G30M | tAoh Zraii Nji baz=216 | 102.06 | 16 | P | | Pdif | 08 10 22.1 | +0.6 |
| MIAR | Mount Ida baz=242 | 102.36 | 57 | P | | Pdif | 08 10 23.7 | +0.1 |
| DGMT | Dagmar baz=238 | 102.39 | 41 | P | | Pdif | 08 10 22.3 | -1.1 |
| KSU1 | Kansas State U baz=241 | 102.40 | 52 | P | | Pdif | 08 10 23.7 | +0.1 |
| G31M | Satah River baz=218 | 102.47 | 16 | P | | Pdif | 08 10 23.7 | +0.5 |
| F30M | Barrier River baz=216 | 102.67 | 15 | P | | Pdif | 08 10 26.2 | +2.0 |
| WRGLY | Wrigley baz=226 | 102.78 | 22 | P | | Pdif | 08 10 26.5 | +1.8 |
| E29M | Blow River baz=215 | 102.84 | 14 | P | | Pdif | 08 10 26.3 | +1.4 |
| F31M | Tsiigehtchic baz=218 | 103.01 | 16 | P | | Pdif | 08 10 25.7 | +0.1 |
| VBMS | Vicksburg baz=243 | 103.53 | 61 | P | | Pdif | 08 10 27.7 | -1.1 |
| INK | Inuvik baz=219 | 103.74 | 16 | P | | Pdif | 08 10 28.3 | -0.6 |
| ECSD | EROS Data Cent baz=242 | 104.60 | 48 | P | | Pdif | 08 10 32.3 | -1.1 |
| OXF | Oxford baz=244 | 105.40 | 59 | P | | PKiKP | 08 14 48.8 | -1.9 |
| CCM | Cathedral Cave baz=244 | 105.64 | 55 | P | | PKiKP | 08 14 50.5 | -0.6 |
| LRAL | Lakeview Retre baz=244 | 106.56 | 61 | P | | PKiKP | 08 14 51.0 | -2.0 |
| WVT | Waverly baz=245 | 107.26 | 58 | P | | PKiKP | 08 14 53.1 | -1.1 |
| HDIL | Hopedale baz=245 | 108.08 | 53 | P | | PKiKP | 08 14 54.8 | -0.7 |
| JFWS | Jewell Farm baz=246 | 108.41 | 51 | P | | PKiKP | 08 14 55.6 | -0.5 |
| WCI | Wyandotte Cave baz=246 | 109.25 | 56 | P | | PKiKP | 08 14 56.4 | -1.4 |
| GOGA | Godfrey baz=246 | 109.40 | 62 | P | | PKiKP | 08 14 56.7 | -1.6 |
| EYMN | Ely baz=246 | 109.66 | 45 | P | | PKiKP | 08 14 57.4 | -0.9 |
| TZTN | Tazewell baz=247 | 110.58 | 59 | P | | PKiKP | 08 15 01.3 | +0.9 |
| P49A | Miami Univ. Ec baz=248 | 110.89 | 56 | P | | PKiKP | 08 15 01.5 | +0.6 |
| NHSC | New Hope baz=247 | 111.81 | 64 | P | | PKiKP | 08 15 03.4 | +0.7 |
| ACSO | Alum Creek Sta baz=249 | 112.39 | 56 | P | | PKiKP | 08 15 03.9 | +0.2 |
| AAM | Ann Arbor baz=249 | 112.66 | 53 | P | | PKiKP | 08 15 05.3 | +1.1 |
| P52A | Corning baz=249 | 112.78 | 56 | P | | PKiKP | 08 15 04.7 | +0.2 |
| GLMI | Grayling baz=250 | 112.90 | 50 | P | | PKiKP | 08 15 05.5 | +1.0 |
| BLA | Blacksburg baz=249 | 113.16 | 59 | P | | PKiKP | 08 15 05.4 | +0.1 |
| WMQ | Urumqi | 113.25 | 308 | *e*PKP | | PKiKP | 08 15 05.6 | +0.3 |
| O53A | New Philadelph baz=250 | 113.66 | 56 | P | | PKiKP | 08 15 07.4 | +1.2 |
| CNNC | Cliffs of the baz=249 | 114.36 | 62 | P | | PKiKP | 08 15 08.1 | +0.6 |
| MCWV | Mont Chateau baz=250 | 114.44 | 57 | P | | PKiKP | 08 15 08.9 | +1.2 |
| ERPA | Erie baz=251 | 115.16 | 54 | P | | PKiKP | 08 15 10.8 | +1.9 |
| DGZ | Jazzator, Alta | 115.33 | 314 | ⫛ *i* PKiKP | | PKiKP | 08 15 09.9 | +0.7 |
| CBN | Corbin Frederi baz=251 | 115.77 | 59 | P | | PKiKP | 08 15 11.8 | +1.6 |
| SSPA | Standing Stone baz=252 | 116.18 | 57 | P | | PKiKP | 08 15 12.4 | +1.4 |
| ZSN | Zaisan baz=311 | 116.29 | 311 | *e*PKP | | PKiKP | 08 15 12.0 | +1.0 |
| ZSN | baz=311 | | | *e*PP | | PP | 08 16 17.5 | -0.2 |
| ZSN | Zaisan | 116.29 | 311 | *e*PKiKP | | PKiKP | 08 15 11.9 | +1.0 |
| ZSN | | | | *e* | | | 08 16 17.5 | |
| BOSA | Boshof | 117.31 | 203 | PKP | | PKPdf | 08 15 13.3 | -0.5 |
| | comp=Z,1.1nm,0.4s,baz=170,slow=5.6,SNR=9.3 | | | | | | | |
| MK31 | Makanchi Array | 117.79 | 310 | *c i* PKiKP | | PKiKP | 08 15 14.3 | +0.4 |
| MKAR | Makanchi Array | 117.79 | 310 | PKP | | PKPdf | 08 15 11.4 | -2.4 |
| | comp=Z,1.5nm,0.6s,baz=114,slow=1.7,SNR=12 | | | | | | | |
| BINY | Binghamton baz=253 | 118.02 | 55 | P | | PKiKP | 08 15 16.3 | +1.8 |
| ZALV | Zalesovo Beam | 118.04 | 318 | PKP | | PKPdf | 08 15 12.4 | -1.7 |
| | comp=Z,1.2nm,0.5s,baz=106,slow=3.2,SNR=5.1 | | | | | | | |
| SHLS | Shalkode baz=306 | 118.73 | 305 | *e*PKP | | PKPdf | 08 15 15.9 | -0.1 |
| SHLS | Shalkode | 118.73 | 305 | *e*PKiKP | | PKPdf | 08 15 15.9 | -0.1 |
| PAL | Palisades baz=254 | 119.17 | 57 | P | | PKiKP | 08 15 18.5 | +1.8 |
| KPKS | Kokpek baz=306 | 119.36 | 306 | *e*PKP | | PKiKP | 08 15 17.9 | +0.7 |
| KPKS | Kokpek | 119.36 | 306 | *e*PKiKP | | PKiKP | 08 15 17.9 | +0.7 |
| LONY | Lake Ozonia baz=256 | 119.66 | 53 | P | | PKiKP | 08 15 20.2 | +2.6 |
| SEM | Semipalatinsk baz=314 | 119.98 | 314 | *e*PKP | | PKiKP | 08 15 18.7 | +0.4 |
| SEM | Semipalatinsk | 119.98 | 314 | *e*PKiKP | | PKiKP | 08 15 18.7 | +0.4 |
| KSH | Kashi | 120.27 | 301 | PKP | | PKiKP | 08 15 20.9 | +1.8 |
| MDOK | Medeo baz=305 | 120.44 | 305 | *e*PKP | | PKiKP | 08 15 20.1 | +0.7 |
| MDOK | Medeo | 120.44 | 305 | *e*PKiKP | | PKiKP | 08 15 20.0 | +0.7 |
| TNSS | Tian-Shan baz=305 | 120.48 | 305 | *e*PKP | | PKiKP | 08 15 19.9 | +0.1 |
| TNSS | Tian-Shan | 120.48 | 305 | *e*PKiKP | | PKiKP | 08 15 19.8 | +0.1 |
| KURK | Kurchatov | 121.06 | 314 | ⫛ *i* PKiKP | | PKiKP | 08 15 20.9 | +0.8 |
| KURBB | Kurchatov Arra | 121.10 | 314 | PKP | | PKPdf | 08 15 18.0 | -2.1 |
| | comp=Z,2.5nm,0.3s,baz=103,slow=1.8,SNR=18 | | | | | | | |
| AAK | Ala-Archa | 122.14 | 304 | ⫛ *i* PKiKP | | PKiKP | 08 15 23.0 | +0.3 |
| BTLS | Baital baz=306 | 122.97 | 307 | *e*PKP | | PKiKP | 08 15 24.8 | +0.7 |
| BTLS | baz=306 | | | *e*PP | | PP | 08 17 03.6 | -0.1 |
| BTLS | Baital | 122.97 | 307 | *e*PKiKP | | PKiKP | 08 15 24.7 | +0.7 |
| BTLS | | | | *e* | | | 08 17 03.5 | |
| BRLS | Borolday baz=303 | 125.57 | 303 | *e*PKP | | PKiKP | 08 15 30.0 | +0.7 |
| BRLS | Borolday | 125.57 | 303 | *e*PKiKP | | PKiKP | 08 15 30.0 | +0.7 |
| BVAR | Borovoye Array | 126.42 | 316 | PKP | | PKPdf | 08 15 28.8 | -1.4 |
| | comp=Z,7.3nm,0.6s,baz=95,slow=1.6,SNR=23 | | | | | | | |
| BRVK | Borovoye | 126.48 | 316 | *c i* PKiKP | | PKiKP | 08 15 30.8 | 0.0 |
| SPITS | Spitsbergen Ar | 131.68 | 356 | PKP | | PKPdf | 08 15 38.5 | -1.0 |
| | comp=Z,10nm,0.9s,baz=38,slow=2.6,SNR=2.1 | | | | | | | |
| ABKAR | Akbulak array | 132.93 | 311 | | | PKiKP | 08 15 45.9 | +2.0 |
| ARU | Arti | 133.10 | 321 | *i* PKiKP | | PKiKP | 08 15 43.5 | -0.5 |
| ARU | | | | | | | 08 18 10.4 | |
| KMBO | Kilima Mbogo | 134.13 | 233 | PKP | | PKiKP | 08 15 47.6 | -0.1 |
| | comp=Z,1.6nm,0.4s,baz=38,slow=12,SNR=5.7 | | | | | | | |
| KMBO | | | | SKPbc | | SKPbc | 08 19 11.8 | -0.8 |
| | comp=Z,1.3nm,0.3s,baz=63,slow=3.4,SNR=4.6 | | | | | | | |
| KIRV | Kirov | 137.32 | 325 | ⫛ *i* PKiKP | | PKiKP | 08 15 53.7 | +1.3 |
| ARCES | ARCESS Array B | 138.57 | 348 | PKhKP | | PKPpre | 08 15 47.8 | |
| | comp=Z,3.2nm,0.7s,baz=48,slow=1.3,SNR=5.5 | | | | | | | |
| BELG | Belogornoye | 140.20 | 317 | ⫛ *e*PKiKP | | PKiKP | 08 15 58.4 | -0.1 |
| JOF | Joensuu | 142.41 | 338 | *e*P | | PKiKP | 08 16 01.9 | -0.9 |
| MOR8 | Moi Rana | 143.38 | 352 | *e*PKPdf | | PKiKP | 08 16 05.8 | +1.1 |
| VRH | Novokhopyorsk | 144.06 | 317 | *e*PKiKP | | PKPab | 08 16 00.3 | -0.2 |
| VRH | comp=Z,10.0nm,0.5s | | | pmax | | pmax | | |
| GNI | Garni | 144.10 | 298 | ⫛ *e*PKiKP | | PKPdf | 08 16 03.3 | -0.4 |
| MOS | Moscow | 144.34 | 326 | *e*PKiKP | | PKPab | 08 16 01.3 | -0.1 |
| MOS | comp=Z,30nm,0.9s | | | pmax | | pmax | | |
| NCK | Nalchik | 144.66 | 303 | ⫛ *i* PKiKP | | PKPdf | 08 16 05.0 | +0.7 |
| PUL | Pulkovo | 144.99 | 335 | *ce*PKiKP | | PKPdf | 08 16 05.4 | +1.1 |
| LPSR | Galich'ya Gora | 145.12 | 320 | *e*PKP2 | | PKPbc | 08 16 02.3 | -2.0 |
| LPSR | comp=Z,40nm,1.1s | | | pmax | | pmax | | |
| FINES | FINESS Array B | 145.13 | 340 | PKPbc | | PKPbc | 08 16 01.7 | -2.4 |
| | comp=Z,46nm,0.6s,baz=51,slow=3.8,SNR=88 | | | | | | | |
| KBZ | Khabaz | 145.13 | 304 | PKPbc | | PKPbc | 08 16 03.5 | -1.1 |
| | comp=Z,19nm,1.0s,baz=122,slow=1.7,SNR=18 | | | | | | | |
| KBZ | Khabaz | 145.13 | 304 | *i* PKiKP | | PKPdf | 08 16 05.1 | 0.0 |
| OBN | Obninsk | 145.17 | 325 | *i* PKHKP | | PKPpre | 08 15 55.2 | |
| OBN | comp=Z,48nm,1.0s | | | pmax | | pmax | | |
| KIV | Kislovodsk | 145.25 | 304 | *e*PKiKP | | PKPbc | 08 16 05.0 | -0.2 |
| KIV | comp=Z,21nm,1.1s | | | pmax | | pmax | | |
| NSS | Namsos | 145.26 | 352 | *e*PKPbc | | PKPbc | 08 16 02.5 | -1.9 |
| SHA1 | Shidzhatmaz | 145.31 | 304 | *ce*PKiKP | | PKPbc | 08 16 05.4 | -0.2 |
| VORR | Voronezh | 145.34 | 319 | *e*PKiKP | | PKPbc | 08 16 05.0 | -0.1 |
| VORR | comp=Z,26nm,1.2s | | | pmax | | pmax | | |
| VSR | Storozhevoye | 145.55 | 318 | *e*PKP2 | | PKPdf | 08 16 04.1 | -1.4 |
| VSR | comp=Z,40nm,0.9s | | | pmax | | pmax | | |
| VORD | Divnogorie | 145.57 | 317 | *e*PKiKP | | PKPdf | 08 16 05.3 | -0.3 |
| VORD | comp=Z,30nm,0.6s | | | pmax | | pmax | | |
| MEF | Metsahovi | 146.61 | 340 | *e*P | | PKPab | 08 16 09.7 | -0.1 |
| RAF | Rauma | 146.68 | 343 | *e*P | | PKPab | 08 16 09.7 | -0.4 |
| TBLU | Trondheim | 146.69 | 353 | *e*PKPbc | | PKPbc | 08 16 08.3 | -0.5 |
| ARBE | Arbavere | 146.73 | 338 | *e*P | | PKPbc | 08 16 09.1 | +0.1 |
| VSU | Vasula | 147.22 | 336 | *c i* PKP2 | | PKPab | 08 16 11.7 | -0.5 |
| SOC | Sochi | 147.43 | 304 | *e*PKiKP | | PKPdf | 08 16 08.3 | -0.7 |
| SOC | | | | *e* | | | 08 19 36.2 | |
| SOC | | | | *e*SS | | SS | 08 38 31.0 | -7.4 |
| SOC | | | | *e*SSS | | SSS | 08 44 09.6 | |
| SOC | comp=Z,40nm,0.9s | | | pmax | | pmax | | |
| MOL | Molde | 147.59 | 355 | *e*PKPbc | | PKPbc | 08 16 11.8 | +0.5 |
| DOMB | Dombas | 147.99 | 354 | *e*PKPbc | | PKPbc | 08 16 12.2 | -0.4 |
| MTSE | Matsula | 148.00 | 339 | *e*P | | PKPbc | 08 16 13.2 | +0.7 |
| FOO | Floro | 148.70 | 357 | *e*PKPbc | | PKPbc | 08 16 14.8 | +0.5 |
| NB2 | NORSAR Subarra | 148.73 | 351 | PKP | | PKPdf | 08 16 12.3 | +1.6 |
| | comp=Z,19nm,0.8s,baz=16,slow=4.4 | | | | | | | |
| NOA | NORSAR Array B | 148.73 | 351 | PKPbc | | PKPdf | 08 16 12.3 | +1.6 |
| | comp=Z,12nm,0.7s,baz=15,slow=4.3,SNR=25 | | | | | | | |
| NC602 | NORSAR Array S | 148.98 | 351 | *e*PKPbc | | PKPbc | 08 16 14.6 | -0.5 |
| HFS | Hagfors | 149.22 | 349 | PKPbc | | PKPdf | 08 16 13.3 | +1.9 |
| | comp=Z,29nm,0.8s,baz=60,slow=3.5,SNR=20 | | | | | | | |
| SUE | Sulen | 149.26 | 357 | *e*PKPbc | | PKiKP | 08 16 16.8 | -0.1 |
| SKAR | Skarslia | 149.40 | 354 | *e*PKPbc | | PKPbc | 08 16 15.0 | -1.2 |
| ISAL | Salakas | 149.57 | 333 | *e*P | | PKPbc | 08 16 16.9 | +0.3 |
| MNK | Minsk | 149.58 | 330 | *i* PKP2 | | PKiKP | 08 16 18.4 | +0.6 |
| MNK | | | | *i* | | | 08 19 50.7 | |
| MNK | | | | *i* PPP | | PPP | 08 23 11.6 | |
| MNK | | | | *i* | | | 08 23 17.8 | |
| MNK | | | | *i* SS | | SS | 08 39 04.0 | +3.0 |
| MNK | | | | *i* SSS | | SSS | 08 44 43.1 | |
| MNK | comp=E,28nm,1.1s | | | pmax | | pmax | | |
| MNK | comp=N,28nm,1.2s | | | pmax | | pmax | | |
| MNK | comp=Z,64nm,0.8s | | | MLR | | MLR | | |
| IIGN | comp=Z,298nm,23.0s Ignalina | 149.69 | 332 | *e*P | | PKPbc | 08 16 16.6 | -0.3 |
| BER | Bergen | 149.91 | 357 | *e*PKPbc | | PKPbc | 08 16 16.1 | -1.2 |
| VSVD | Vaisvydziai | 150.10 | 335 | *e*P | | PKPbc | 08 16 18.0 | +0.1 |
| KONO | Kongsberg | 150.28 | 352 | *e*PKPbc | | PKPbc | 08 16 16.9 | -1.3 |
| STRU | Stroemstad | 150.67 | 350 | *i* P | | PKiKP | 08 16 20.0 | +0.2 |
| PBUR | Paburge | 150.76 | 337 | *e*P | | PKPbc | 08 16 19.6 | +0.1 |
| BLS5 | Blasjo | 150.80 | 355 | *e*PKPbc | | PKiKP | 08 16 21.1 | +0.9 |
| SIM | Simferopol' | 150.96 | 309 | *e*PKiKP | | PKiKP | 08 16 22.7 | +1.7 |
| SIM | | | | *e* | | | 08 16 26.0 | |
| SIM | comp=Z,51nm,0.9s | | | pmax | | pmax | | |
| AKASG | Malin Array Be | 151.31 | 323 | PKPbc | | PKPbc | 08 16 18.9 | -2.1 |
| | comp=Z,22nm,0.7s,baz=48,slow=2.4,SNR=38 | | | | | | | |
| AKBB | Malin Array Si | 151.31 | 323 | ⫛ *e*PKiKP | | PKPbc | 08 16 18.6 | -2.4 |
| MMAI | Mount Meron Ar | 151.57 | 284 | PKPbc | | PKPbc | 08 16 22.1 | -0.2 |
| | comp=Z,95nm,1.0s,baz=80,slow=8.0,SNR=25 | | | | | | | |
| BORU | Boraas | 151.75 | 348 | *i* P | | PKiKP | 08 16 22.7 | +0.5 |
| HOMB | Homborsund | 151.75 | 353 | *e*PKPbc | | PKPbc | 08 16 20.4 | -1.3 |
| HOMB | Homborsund | 151.75 | 353 | *i* P | | PKiKP | 08 16 23.4 | +1.3 |
| SNART | Snartemo | 151.81 | 354 | *e*PKPbc | | PKPbc | 08 16 19.7 | -2.1 |
| SNART | Snartemo | 151.81 | 354 | *i* P | | PKiKP | 08 16 24.3 | +2.1 |
| SUW | Suwalki | 151.87 | 333 | *e*P | | PKPbc | 08 16 22.0 | -0.2 |
| ONAU | Onsala | 152.12 | 349 | *i* P | | PKiKP | 08 16 23.4 | +0.6 |
| FABU | Falkenberg | 152.35 | 347 | *i* P | | PKiKP | 08 16 24.3 | +0.9 |
| DEL | Delary | 152.62 | 346 | *i* P | | PKiKP | 08 16 25.0 | +1.0 |
| BRTR | Keskin Array B | 152.63 | 299 | PKPbc | | PKPbc | 08 16 22.4 | -2.1 |
| | comp=Z,9.1nm,0.8s,baz=144,slow=4.7,SNR=15 | | | | | | | |
| BJUU | Bjuv | 153.16 | 346 | *i* P | | PKiKP | 08 16 26.5 | +1.4 |
| BSD | Bornholm Skovb | 153.62 | 343 | *i* P | | PKiKP | 08 16 26.6 | +0.5 |
| LVV | L'vov | 154.47 | 326 | *e*PKP2 | | PKPab | 08 16 43.0 | +0.5 |
| EKA | Eskdalemuir Ar | 154.77 | 7 | PKPab | | PKPab | 08 16 43.3 | -0.3 |
| | comp=Z,1.7nm,0.7s,baz=309,slow=2.9,SNR=5.7 | | | | | | | |
| DBIC | Dimbokro | 155.54 | 163 | PKPab | | PKPab | 08 16 48.0 | +0.1 |
| | comp=Z,6.8nm,0.8s,baz=283,slow=1.3,SNR=4.3 | | | | | | | |
| KOLS | Kolonicke sedl | 155.92 | 326 | *e*PKiKP | | PKPdf | 08 16 34.7 | +13 |
| KOLS | | | | *e* | | | 08 16 50.5 | |
| CRVS | Cervenica-Dubn | 156.33 | 327 | *e*PKP2 | | PKPab | 08 16 51.7 | +1.2 |
| CRVS | Cervenica-Dubn | 156.33 | 327 | *e*PKP | | PKPab | 08 16 51.7 | +1.2 |
| LANS | Liptovska Anna | 157.06 | 330 | *e*PKP2 | | PKPab | 08 16 56.5 | +2.8 |
| LANS | Liptovska Anna | 157.06 | 330 | *e*PKP | | PKPab | 08 16 56.5 | +2.8 |
| OSTC | Ostas | 157.21 | 336 | *e*PKPAB | | PKPab | 08 16 56.3 | +2.1 |
| OSTC | Ostas | 157.21 | 336 | *e*PKP2 | | PKPab | 08 16 56.3 | +2.1 |
| UPC | Upice | 157.33 | 336 | *e*PKPAB | | PKPab | 08 16 56.2 | +1.5 |
| UPC | Upice | 157.33 | 336 | *e*PKP2 | | PKPab | 08 16 56.2 | +1.5 |
| DPC | Dobruska-Polom | 157.35 | 336 | *e*PKPAB | | PKPab | 08 16 56.5 | +1.6 |
| DPC | Dobruska-Polom | 157.35 | 336 | *e*PKP2 | | PKPab | 08 16 56.5 | +1.6 |
| MORC | Moravsky Berou | 157.36 | 333 | *e*PKP | | PKPab | 08 16 55.5 | +0.5 |
| KRLC | Kraliky | 157.41 | 335 | *e*PKPAB | | PKPab | 08 16 56.3 | +1.2 |
| KRLC | Kraliky | 157.41 | 335 | *e*PKP2 | | PKPab | 08 16 56.3 | +1.2 |
| CLL | Collm | 157.55 | 342 | ⫛ *e*PKiKP | | PKPdf | 08 16 37.0 | +13 |
| CLL | comp=Z,20nm,0.9s | | | pmax | | pmax | | |
| BRG | Berggiesshubel | 157.68 | 340 | *e*PKP | | PKPdf | 08 16 25.2 | +1.4 |
| BRG | comp=Z,3.8nm,1.1s | | | Amp | | | 08 16 27.0 | |
| BRG | Berggiesshubel | 157.68 | 340 | *e*P | | PKPab | 08 16 57.7 | +1.5 |
| BRG | comp=Z,9.6nm,0.7s | | | Amp | | | 08 16 58.4 | |
| VYHS | Vyhne | 157.82 | 329 | *e*PKP2 | | PKPab | 08 16 58.1 | +1.1 |
| VYHS | Vyhne | 157.82 | 329 | *e*PKP | | PKPab | 08 16 58.1 | +1.1 |
| RICC | Richard | 157.92 | 339 | *e*PKPAB | | PKPab | 08 16 59.2 | +2.0 |
| JAVC | Velka Javorina | 158.04 | 332 | *e*PKP | | PKPab | 08 16 59.5 | +1.6 |
| VRAC | Vranov | 158.11 | 334 | *e*PKP | | PKPab | 08 16 59.5 | +1.4 |
| PRU | Pruhonice | 158.26 | 338 | *e*PKPAB | | PKPab | 08 17 00.4 | +1.7 |
| PRU | Pruhonice | 158.26 | 338 | *e*PKP2 | | PKPab | 08 17 00.4 | +1.7 |
| KRUC | Moravsky | 158.38 | 334 | *e*PKP | | PKPab | 08 17 00.1 | +0.8 |
| ZVC | Zvikov | 158.85 | 338 | *e*PKPAB | | PKPab | 08 17 02.5 | +1.2 |
| KHC | Kasperske Hory | 159.32 | 338 | *e*PKPAB | | PKPab | 08 17 04.9 | +1.5 |
| KHC | Kasperske Hory | 159.32 | 338 | *e*PKP2 | | PKPab | 08 17 04.9 | +1.5 |
| CKRC | Cesky Krumlov | 159.34 | 337 | *e*PKPAB | | PKPab | 08 17 04.8 | +1.3 |
| CKRC | Cesky Krumlov | 159.34 | 337 | *e*PKP2 | | PKPab | 08 17 02.5 | -1.0 |
| GRF | Grafenberg Arr baz=23,slow=3.9 | 159.50 | 343 | *e*PKP | | PKPab | 08 17 05.4 | +1.2 |
| CONA | Conrad Observa | 159.51 | 333 | *i* PKP | | PKPab | 08 17 05.5 | +1.2 |
| | comp=Z,3.8nm,0.7s,SNR=6.6 | | | | | | | |
| RONA | Rosalia, Austr | 159.52 | 332 | *e*PKP | | PKPab | 08 17 05.6 | +1.2 |
| | comp=Z,3.1nm,0.6s,SNR=5.5 | | | | | | | |
| GERES | GERESS Array B | 159.53 | 338 | PKPab | | PKPab | 08 17 04.8 | +0.4 |
| | comp=Z,2.1nm,0.7s,baz=153,slow=6.6,SNR=11 | | | | | | | |
| BHOU | Houvegnez | 159.82 | 353 | *d*PKP | | PKPab | 08 17 07.1 | +1.6 |
| BCLA | Clavier | 159.82 | 354 | *d*PKP | | PKPab | 08 17 04.9 | -0.6 |
| BCLA | | | | *dp*PKP | | *p*PKPab | 08 17 16.1 | -0.9 |
| BCLA | | | | *ds*PKP | | | 08 17 19.0 | |
| BGES | Gesves | 159.88 | 354 | *d*PKP | | PKPab | 08 17 05.5 | -0.2 |
| BGES | | | | *dp*PKP | | *p*PKPab | 08 17 15.6 | -1.6 |
| BMRD | Maredsous | 159.99 | 355 | *d*PKP | | PKPab | 08 17 06.7 | +0.6 |
| MOA | Molln | 160.18 | 335 | *e*PKP | | PKPab | 08 17 08.6 | +1.4 |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| BIOA | Bad Ischl, Aus | 160.54 | 336 | *e*PKP | | PKPab | 08 17 10.4 | +1.6 |
| | comp=Z,2.1nm,0.4s,SNR=6.3 | | | | | | | |
| LESA | Schwarzleotal | 161.10 | 337 | *i* PKP | | PKPab | 08 17 12.3 | +1.0 |
| | comp=Z,2.2nm,0.5s | | | | | | | |
| MYKA | Terra Mystica | 161.44 | 334 | *i* PKP | | PKPab | 08 17 13.1 | +0.3 |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| WATA | Walderalm | 161.53 | 339 | *e*PKP | | PKPab | 08 17 14.1 | +0.9 |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| WTTA | Wattenberg | 161.58 | 339 | *e*PKP | | PKPab | 08 17 14.8 | +1.3 |
| | comp=Z,7.3nm,0.9s | | | | | | | |
| RETA | Reutte | 161.64 | 341 | *e*PKP | | PKPab | 08 17 14.9 | +1.3 |
| | comp=Z,6.6nm,0.7s,SNR=7.1 | | | | | | | |
| MOTA | Moosalm | 161.67 | 340 | *e*PKP | | PKPab | 08 17 14.7 | +0.8 |
| | comp=Z,9.8nm,0.8s | | | | | | | |
| SQTA | Sankt Quirin | 161.75 | 340 | *e*PKP | | PKPab | 08 17 14.5 | +0.4 |
| | comp=Z,4.3nm,0.6s | | | | | | | |
| DAVA | Damuels | 162.06 | 342 | *i* PKP | | P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CTAO | | | | | IAmb | IAmb | 08 06 10.9 | | |
| | comp=Z,7.2nm,0.9s | | | | | | | | |
| **CAN** | **Canberra** | **33.59** | **233** | P | **P** | **08 06 10.3** | **+0.9** | | |
| CAN | | | | | IAmb | IAmb | 08 06 14.9 | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **PATS** | **Pohnpei** | **34.01** | **315** | P | **P** | **08 06 13.6** | **+0.5** | | |
| **PMG** | **Port Moresby** | **34.65** | **280** | P | **P** | **08 06 18.8** | **+0.3** | | |
| **STKA** | **Stephens Creek** | **38.58** | **242** | P | **P** | **08 06 51.2** | **+0.7** | | |
| | comp=Z,4.2nm,0.8s,baz=84,slow=11,SNR=2.3 | | | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **08 07 38.9** | **-0.2** | | |
| WB2 | | | | | IAmb | IAmb | 08 07 43.2 | | |
| | comp=Z,6.7nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **08 07 38.9** | **-0.2** | | |
| **WRA** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **08 07 38.3** | **-0.8** | | |
| | comp=Z,2.5nm,0.5s,baz=96,slow=6.9,SNR=3.8 | | | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **44.82** | **255** | P | **P** | **08 07 40.3** | **+0.3** | | |
| AS31 | | | | | IAmb | IAmb | 08 07 40.6 | | |
| | comp=Z,4.3nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.83** | **255** | P | **P** | **08 07 40.5** | **+0.4** | | |
| **ASAR** | **Alice Springs** | **44.83** | **255** | P | **P** | **08 07 40.0** | **0.0** | | |
| | comp=Z,11nm,0.5s,baz=89,slow=8.2,SNR=25 | | | | | | | | |
| ASAR | | | | | S | **S** | **08 13 36.8** | **-1.1** | |
| | comp=Z,2.1nm,0.9s,baz=84,slow=15,SNR=5.7 | | | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | | | |
| **MTN** | **Manton Dam** | **48.92** | **269** | P | **P** | **08 08 10.4** | **-0.5** | | |
| MTN | | | | | IAmb | IAmb | 08 08 11.0 | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **FORT** | **Forrest** | **49.98** | **245** | P | **P** | **08 08 19.0** | **+0.5** | | |
| **KNRA** | **Kununurra** | **50.59** | **264** | P | **P** | **08 08 23.5** | **+0.3** | | |
| KNRA | | | | | IAmb | IAmb | 08 08 23.6 | | |
| | comp=Z,9.2nm,0.6s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.95** | **256** | P | **P** | **08 09 14.8** | **-0.1** | | |
| PSA00 | | | | | IAmb | IAmb | 08 09 15.3 | | |
| | comp=Z,8.5nm,0.7s | | | | | | | | |
| **MBWA** | **Marble Bar** | **58.12** | **256** | P | **P** | **08 09 16.1** | **+0.1** | | |
| **NWAO** | **Narrogin (SRO)** | **59.16** | **242** | P | **P** | **08 09 23.3** | **+0.4** | | |
| **GIRL** | **Giralia** | **62.92** | **253** | P | **P** | **08 09 49.2** | **+1.5** | | |
| **JGF** | **Kuroka** | **68.10** | **322** | P | **P** | **08 10 19.4** | **-0.3** | | |
| JGF | | | | | IAmb | IAmb | 08 10 20.1 | | |
| | comp=Z,6.3nm,0.7s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.28** | **323** | P | **P** | **08 10 19.8** | **-1.0** | | |
| | comp=Z,5.4nm,0.6s,baz=153,slow=5.5,SNR=10 | | | | | | | | |
| | comp=Z,5.4nm,0.6s | | | | | | | | |
| **MAJO** | **Matsushiro** | **68.28** | **323** | P | **P** | **08 10 20.8** | **0.0** | | |
| MAJO | | | | | IAmb | IAmb | 08 10 20.9 | | |
| | comp=Z,6.9nm,0.6s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.28** | **323** | P | **P** | **08 10 20.5** | **-0.3** | | |
| MJB9 | | | | | IAmb | IAmb | 08 10 20.9 | | |
| | comp=Z,6.6nm,0.6s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **71.66** | **331** | P | **P** | **08 10 41.2** | **+0.6** | | |
| | comp=Z,6.5nm,0.7s,baz=236,slow=7.3,SNR=4.3 | | | | | | | | |
| | comp=Z,6.5nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.79** | **180** | P | **P** | **08 10 42.1** | **+0.8** | | |
| QSPA | | | | | IAmb | IAmb | 08 10 42.7 | | |
| | comp=Z,4.6nm,0.8s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.79** | **180** | P | **P** | **08 10 42.1** | **+0.8** | | |
| | comp=Z,4.0nm,0.8s,baz=109,slow=5.1,SNR=4.1 | | | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **SSLB** | **Suanglung** | **72.55** | **303** | P | **P** | **08 10 45.3** | **-0.9** | | |
| **KSM** | **Kuching** | **72.86** | **277** | P | **P** | **08 10 49.0** | **+0.7** | | |
| **PETK** | **Petropavlovsk-** | **74.06** | **345** | P | **P** | **08 10 52.9** | **-1.4** | | |
| | comp=Z,5.4nm,0.6s,baz=128,slow=9.3,SNR=4.3 | | | | | | | | |
| | comp=Z,5.4nm,0.6s | | | | | | | | |
| **KSRS** | **Korea Array** | **75.06** | **318** | P | **P** | **08 11 00.8** | **+0.6** | | |
| | comp=Z,1.5nm,0.6s,baz=128,slow=6.3,SNR=7.3 | | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| **KS19** | **Wonju Array Si** | **75.12** | **318** | P | **P** | **08 11 01.2** | **+0.7** | | |
| **USRK** | **Ussuriysk Ar.** | **76.99** | **326** | P | **P** | **08 11 11.7** | **+1.1** | | |
| | comp=Z,2.0nm,0.6s,baz=146,slow=2.8,SNR=4.0 | | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.56** | **325** | P | **P** | **08 11 20.3** | **+1.1** | | |
| MDJ | | | | | IAmb | IAmb | 08 11 20.9 | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.59** | **44** | P | **P** | **08 11 25.5** | **+0.5** | | |
| | comp=Z,1.0nm,0.8s,baz=224,slow=7.5,SNR=2.6 | | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **KLR** | **Kul'dur** | **80.49** | **329** | P | **P** | **08 11 29.1** | **0.0** | | |
| | comp=Z,1.2nm,0.6s,baz=248,slow=5.4,SNR=1.6 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| **BELA** | **Belgrano 2** | **81.79** | **173** | P | **P** | **08 11 35.9** | **+0.3** | | |
| BELA | | | | | IAmb | IAmb | 08 11 36.5 | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **I07A** | **Izee** | **82.00** | **38** | P | **P** | **08 11 38.4** | **+1.2** | | |
| **L18K** | **Granite Mounta** | **82.02** | **10** | P | **P** | **08 11 37.3** | **+0.5** | | |
| **SEY** | **Seymchan** | **84.16** | **347** | P | **P** | **08 11 46.8** | **-0.6** | | |
| | comp=Z,6.7nm,0.6s,baz=139,slow=6.8,SNR=12 | | | | | | | | |
| | comp=Z,6.7nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.07** | **58** | P | **P** | **08 11 59.0** | **+1.4** | | |
| | comp=Z,2.5nm,0.8s,baz=219,slow=6.1,SNR=14 | | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.21** | **13** | P | **P** | **08 11 55.7** | **-1.6** | | |
| | comp=Z,1.7nm,0.7s,baz=220,slow=4.4,SNR=8.1 | | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | |
| **XAN** | **Xi'an** | **86.58** | **307** | ⇑P | **P** | **08 12 01.1** | **+1.2** | | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.52** | **43** | P | **P** | **08 12 04.3** | **+0.1** | | |
| | comp=Z,0.4nm,0.7s,baz=186,slow=1.7,SNR=3.1 | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.13** | **290** | P | **P** | **08 12 11.7** | **-0.4** | | |
| | comp=Z,1.0nm,0.3s,baz=107,slow=2.9,SNR=6.4 | | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **SNAA** | **Sanae** | **90.23** | **179** | P | **P** | **08 12 15.4** | **-0.8** | | |
| | comp=Z,1.8nm,0.8s,baz=199,slow=8.4,SNR=2.7 | | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.48** | **314** | PKiKP | **PKiKP** | **08 17 40.6** | **-2.0** | | |
| | comp=Z,0.2nm,0.4s,baz=72,slow=4.7,SNR=1.9 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.21** | **321** | PKP | **PKPdf** | **08 17 56.2** | **-0.9** | | |
| | comp=Z,0.6nm,0.4s,baz=77,slow=6.4,SNR=2.0 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **119.63** | **357** | PKP | **PKPdf** | **08 18 00.9** | **-0.3** | | |
| | comp=Z,1.5nm,1.0s,baz=55,slow=13,SNR=2.4 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.69** | **350** | PKP | **PKPdf** | **08 18 14.2** | **-0.7** | | |
| | comp=Z,1.3nm,0.7s,baz=46,slow=2.6,SNR=1.8 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.13** | **315** | PKPbc | **PKPdf** | **08 18 50.6** | **+0.7** | | |
| | comp=Z,2.0nm,0.6s,baz=88,slow=2.1,SNR=6.6 | | | | | | | | |
| **OSTC** | **Ostas** | **145.77** | **344** | *e*PKP | **PKPbc** | **08 18 52.9** | **+0.8** | | |
| **DPC** | **Dobruska-Polom** | **145.93** | **343** | *e*PKP | **PKPbc** | **08 18 52.9** | **+0.3** | | |
| **KRLC** | **Kraliky** | **146.05** | **343** | *e*PKP | **PKPbc** | **08 18 53.0** | **0.0** | | |
| **MMAI** | **Mount Meron Ar** | **146.45** | **303** | PKPbc | **PKPdf** | **08 18 53.4** | **+1.2** | | |
| | comp=Z,2.1nm,0.4s,baz=68,slow=8.0,SNR=3.8 | | | | | | | | |
| **PRU** | **Pruhonice** | **146.73** | **345** | *e*PKP | **PKPbc** | **08 18 55.1** | **+0.4** | | |
| **KHC** | **Kasperske Hory** | **147.76** | **345** | *e*PKP | **PKPbc** | **08 18 57.8** | **+0.3** | | |
| **CKRC** | **Cesky Krumlov** | **147.86** | **344** | *e*PKP | **PKPbc** | **08 18 58.1** | **+0.3** | | |
| **GERES** | **GERESS Array B** | **147.99** | **345** | PKPbc | **PKPbc** | **08 18 58.1** | **-0.1** | | |
| | comp=Z,2.5nm,0.7s,baz=163,slow=9.4,SNR=8.5 | | | | | | | | |
| **CONA** | **Conrad Observa** | **148.25** | **342** | *e*PKP | **PKPbc** | **08 18 59.1** | **+0.2** | | |
| | comp=Z,2.3nm,0.7s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.32** | **341** | *e*PKP | **PKPbc** | **08 18 59.2** | **+0.2** | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.57** | **345** | *i* PKP | **PKPbc** | **08 19 02.2** | **+0.1** | | |
| | comp=Z,1.3nm,0.3s | | | | | | | | |
| **KBA** | **Koelnbrnsper** | **149.72** | **344** | *e*PKP | **PKPbc** | **08 19 01.9** | **-0.7** | | |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **WATA** | **Walderalm** | **149.91** | **347** | *e*PKP | **PKPbc** | **08 19 02.8** | **-0.2** | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **RETA** | **Reutte** | **149.93** | **348** | *i* PKP | **PKPbc** | **08 19 02.8** | **-0.1** | | |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.96** | **346** | *i* PKP | **PKPbc** | **08 19 03.0** | **-0.1** | | |
| | comp=Z,3.6nm,0.4s | | | | | | | | |
| **MOTA** | **Moosalm** | **150.00** | **347** | *i* PKP | **PKPbc** | **08 19 02.7** | **-0.5** | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.06** | **343** | *e*PKP | **PKPbc** | **08 19 02.5** | **-0.8** | | |
| | comp=Z,1.5nm,0.3s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.09** | **347** | *e*PKP | **PKPbc** | **08 19 03.0** | **-0.4** | | |
| | comp=Z,3.4nm,0.5s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.24** | **345** | *e*PKP | **PKPbc** | **08 19 02.8** | **-0.9** | | |
| | comp=Z,4.8nm,0.6s | | | | | | | | |
| **FETA** | **Feichten** | **150.38** | **347** | *i* PKP | **PKPbc** | **08 19 04.2** | **+0.1** | | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.78** | **348** | PKPbc | **PKPbc** | **08 19 05.2** | **+0.1** | | |
| | comp=Z,7.5nm,0.8s,baz=337,slow=7.7,SNR=6.6 | | | | | | | | |

*IDC **19** 08:03:46.4±0.9,23°.43N×143°.69E,h0km,mb4.0/7, mbtmp3.9/10,ML3.4/3,MS4.1/2,Error ellipse: s-maj=36.7km s-min=17.5km az=76.0*

**ISC 19 08:03:50.8±0.9,23°.6N±0°.1×143°.6E±0°.2,h31km,n18, σ1§58/14,mb4.1/8,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.75** | **340** | Pn | | **Pn** | **08 04 45.8** | **-0.7** |
| | 7.7nm,0.3s,baz=297,slow=18,SNR=1.6 | | | | | | | |
| JCJ | | | | Sn | | **Sn** | **08 05 26.3** | **-3.2** |
| | 16nm,0.3s,baz=269,slow=22,SNR=1.5 | | | | | | | |
| | 51nm,0.5s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.75** | **341** | Pn | | **Pn** | **08 07 04.5** | **+0.9** |
| | baz=160,slow=13,SNR=2.0 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **KSRS** | **Korea Array** | **19.32** | **319** | P | | **Pn** | **08 08 15.5** | **+1.0** |
| | 0.1nm,0.3s,baz=133,slow=12,SNR=4.1 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.09** | **99** | T | | T | 08 31 39.9 | |
| | baz=283 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.10** | **99** | T | | T | 08 31 40.7 | |
| | baz=283 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.11** | **99** | T | | T | 08 31 37.6 | |
| | baz=283 | | | | | | | |
| **YAK** | **Yakutsk** | **39.60** | **350** | P | | **P** | **08 11 20.0** | **+0.9** |
| | 35nm,0.4s,baz=157,slow=2.6,SNR=3.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.19** | **193** | P | | **P** | **08 11 55.7** | **-1.3** |
| | 1.9nm,0.6s,baz=13,slow=8.6,SNR=14 | | | | | | | |
| | 1.9nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.90** | **192** | P | | **P** | **08 12 24.7** | **-1.5** |
| | 0.3nm,0.6s,baz=12,slow=6.2,SNR=4.5 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **50.51** | **152** | LR | | LR | 08 32 44.5 | |
| | comp=Z,135nm,21.0s,baz=264,slow=34 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.02** | **321** | P | | **P** | **08 13 05.0** | **+0.4** |
| | 0.8nm,0.4s,baz=100,slow=7.5,SNR=5.1 | | | | | | | |
| | 0.8nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.76** | **312** | P | | **P** | **08 13 12.0** | **+1.8** |
| | 1.7nm,0.7s,baz=93,slow=9.1,SNR=11 | | | | | | | |
| | 1.7nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.46** | **316** | P | | **P** | **08 13 31.4** | **+1.8** |
| | 1.3nm,0.2s,baz=92,slow=7.0,SNR=8.1 | | | | | | | |
| | 1.3nm,0.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.19** | **28** | P | | **P** | **08 13 55.5** | **+0.1** |
| | 0.5nm,0.9s,baz=234,slow=5.5,SNR=2.3 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.53** | **319** | P | | **P** | **08 14 06.4** | **+1.6** |
| | 3.9nm,0.7s,baz=89,slow=7.6,SNR=13 | | | | | | | |
| | 3.9nm,0.7s | | | | | | | |
| **SCHQ** | **Schefferville** | **97.66** | **17** | LR | | LR | 09 07 04.9 | |
| | comp=Z,126nm,19.1s,baz=282,slow=39 | | | | | | | |
| **PLCA** | **Paso Flores** | **146.64** | **129** | PKPbc | | **PKPab** | **08 23 30.1** | **-0.7** |
| | 2.9nm,1.1s,baz=207,slow=2.3,SNR=4.6 | | | | | | | |
| **LPAZ** | **La Paz** | **149.32** | **82** | PKPbc | | **PKiKP** | **08 23 39.5** | **+0.2** |
| | 0.9nm,0.8s,baz=349,slow=5.2,SNR=2.4 | | | | | | | |

*MOS **19** 08:04:08.4±0.9,51°.20N×158°.25E,h53km,mb4.5/6,Error ellipse: s-maj=12.5km s-min=4.5km az=80.9*
*KRSC **19** 08:04:08.5±1.1,51°.30N×158°.26E,h56km±14km,Ml5.3, Felt [III] at lighthouse Krugliy; [II] at cape Lopatka.*
*NEIC **19** 08:04:10.0±1.5,51°.27N±0°.09×158°.1E±0°.2,h53km±9km, mb4.4/67,Error ellipse: s-maj=19.5km s-min=11.2km az=119.0*
*IDC **19** 08:04:11.3±2.0,51°.49N×158°.02E,h67km±18km,mb3.7/17, mbtmp4.0/19,Error ellipse: s-maj=20.9km s-min=10.9km az=150.0*

**ISC 19 08:04:10.3±0.8,51°.32N±0°.05×158°.22E±0°.05,h57km±7km, n161,σ1§41/157,mb4.4/47,2C-4D,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KDTR** | **Khodutka, Kamc** | **0.49** | **350** | *i* | P | | **Pn** | **08 04 22.1** | **+0.1** |
| KDTR | | | | | eS | | **Sn** | **08 04 30.5** | **0.0** |
| **KDTR** | **Khodutka, Kamc** | **0.49** | **350** | | PN | | **Pn** | **08 04 22.0** | **+0.1** |
| KDTR | | | | | S | | **Sn** | **08 04 30.4** | **0.0** |
| **ASAK** | **Asacha** | **1.08** | **350** | *e* | P | | **Pn** | **08 04 29.8** | **+0.4** |
| **ASAK** | **Asacha** | **1.08** | **350** | | PN | | **Pn** | **08 04 29.8** | **+0.4** |
| **MTVR** | **Mutnovka** | **1.16** | **359** | *i* | P | | **Pn** | **08 04 30.9** | **+0.3** |
| **MTVR** | **Mutnovka** | **1.16** | **359** | | PN | | **Pn** | **08 04 30.8** | **+0.3** |
| **GRL** | **Gorelyy** | **1.23** | **356** | *e* | P | | **Pn** | **08 04 32.0** | **+0.5** |
| GRL | | | | | eS | | **Sn** | **08 04 48.3** | **+1.1** |
| **GRL** | **Gorelyy** | **1.23** | **356** | | PN | | **Pn** | **08 04 31.9** | **+0.5** |
| GRL | | | | | S | | **Sn** | **08 04 48.3** | **+1.1** |
| **SKR** | **Severo-Kuril's** | **1.47** | **245** | *e* | P | | **Pn** | **08 04 34.5** | **0.0** |
| SKR | | | | | eS | | **Sn** | **08 04 52.5** | **-0.2** |
| **SKR** | **Severo-Kuril's** | **1.47** | **245** | *e* | PN | | **Pn** | **08 04 34.4** | **-0.1** |
| SKR | | | | | eS | | **Sn** | **08 04 52.3** | **-0.4** |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,673nm,0.4s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=E,21μm,0.5s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=N,14μm,0.8s | | | | | | | | |
| **PET** | **Petropavlovsk** | **1.73** | **9** | | | | **Pn** | **08 04 38.4** | **+0.4** |
| PET | | | | | Sn | | **Sn** | **08 05 00.1** | **+1.2** |
| **PET** | **Petropavlovsk** | **1.73** | **9** | *e* | P | | **Pn** | **08 04 38.1** | **+0.2** |
| PET | | | | | eS | | **Sn** | **08 04 59.8** | **+1.0** |
| **PET** | **Petropavlovsk** | **1.73** | **9** | ‖ *i* | PN | | **Pn** | **08 04 38.4** | **+0.4** |
| PET | | | | | eS | | **Sn** | **08 04 59.7** | **+0.9** |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=N,2μm,0.5s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=E,3μm,0.5s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=E,4μm,0.5s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=N,3μm,0.5s | | | | | | | | |
| **APC** | **Apacha** | **1.73** | **338** | *e* | P | | **Pn** | **08 04 38.6** | **+0.6** |
| APC | | | | | eS | | **Sn** | **08 04 59.7** | **+0.7** |
| **APC** | **Apacha** | **1.73** | **338** | | PN | | **Pn** | **08 04 38.6** | **+0.6** |
| APC | | | | | S | | **Sn** | **08 04 59.7** | **+0.7** |
| **DALK** | **Dalny** | **1.74** | **11** | *e* | P | | **Pn** | **08 04 38.7** | **+0.5** |
| **DALK** | **Dalny** | **1.74** | **11** | | PN | | **Pn** | **08 04 38.6** | **+0.5** |
| **PEA0B** | **Petropavlovsk-** | **1.82** | **350** | | | | **Pn** | **08 04 40.1** | **+0.8** |
| **PEA0B** | **Petropavlovsk-** | **1.82** | **350** | *d* | PN | | **Pn** | **08 04 40.0** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **1.82** | **350** | | | | **Pn** | **08 04 39.0** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **1.82** | **350** | | P | | **Pn** | **08 04 38.6** | **-0.6** |
| | comp=N,271nm,0.5s,baz=147,slow=15,SNR=246 | | | | | | | | |
| PETK | | | | | S | | **Sn** | **08 04 54.8** | **-6.3** |
| | comp=N,906nm,0.6s,baz=178,slow=20,SNR=26 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **1.82** | **350** | | PN | | **Pn** | **08 04 39.0** | **-0.2** |
| **UGLR** | **Uglovaya** | **1.93** | **11** | *e* | P | | **Pn** | **08 04 41.9** | **+1.0** |
| **UGLR** | **Uglovaya** | **1.93** | **11** | | PN | | **Pn** | **08 04 41.8** | **+1.0** |
| **AVH** | **Avacha** | **1.97** | **9** | *e* | P | | **Pn** | **08 04 42.7** | **+1.3** |
| **AVH** | **Avacha** | **1.97** | **9** | | PN | | **Pn** | **08 04 42.7** | **+1.3** |
| **SMAR** | **Somma** | **1.98** | **10** | *e* | P | | **Pn** | **08 04 42.3** | **+0.7** |
| **SMAR** | **Somma** | **1.98** | **10** | | PN | | **Pn** | **08 04 42.3** | **+0.7** |
| **NLC** | **Nalytchevo** | **1.98** | **20** | *e* | P | | **Pn** | **08 04 40.6** | **-0.8** |
| NLC | | | | | eS | | **Sn** | **08 05 03.5** | **-1.5** |
| **NLC** | **Nalytchevo** | **1.98** | **20** | | PN | | **Pn** | **08 04 40.5** | **-0.8** |
| NLC | | | | | S | | **Sn** | **08 05 03.5** | **-1.5** |
| **KOK** | **Koryaka** | **1.99** | **7** | *i* | P | | **Pn** | **08 04 43.3** | **+1.6** |
| **KOK** | **Koryaka** | **1.99** | **7** | | PN | | **Pn** | **08 04 43.2** | **+1.6** |
| **SPN** | **Mys Shipunski** | **2.10** | **31** | *e* | P | | **Pn** | **08 04 43.7** | **+0.6** |
| SPN | | | | | eS | | **Sn** | **08 05 08.7** | **+0.8** |
| **SPN** | **Mys Shipunski** | **2.10** | **31** | | PN | | **Pn** | **08 04 43.6** | **+0.6** |
| SPN | | | | | S | | **Sn** | **08 05 08.7** | **+0.8** |
| **GNL** | **Ganaly** | **2.38** | **356** | *e* | P | | **Pn** | **08 04 48.0** | **+1.0** |
| **GNL** | **Ganaly** | **2.38** | **356** | | PN | | **Pn** | **08 04 48.0** | **+1.0** |
| **KII** | **Karymskiy** | **2.82** | **15** | *e* | P | | **Pn** | **08 04 54.7** | **+1.8** |
| **KII** | **Karymskiy** | **2.82** | **15** | | PN | | **Pn** | **08 04 54.7** | **+1.8** |
| **TUMD** | **Tumrok D** | **4.10** | **18** | *e* | P | | **Pn** | **08 05 13.1** | **+2.6** |
| **TUMR** | **Tumrok** | **4.13** | **15** | *e* | P | | **Pn** | **08 05 13.5** | **+2.6** |
| **TUMR** | **Tumrok** | **4.13** | **15** | | PN | | **Pn** | **08 05 13.5** | **+2.6** |
| **KMNR** | **Kamenistaya** | **4.60** | **14** | *e* | P | | **Pn** | **08 05 21.3** | **+4.0** |
| **KMNR** | **Kamenistaya** | **4.60** | **14** | | PN | | **Pn** | **08 05 21.3** | **+4.0** |
| **SRDR** | **Sredinnyy** | **5.08** | **9** | *e* | P | | **Pn** | **08 05 26.0** | **+2.1** |
| **SRDR** | **Sredinnyy** | **5.08** | **9** | | PN | | **Pn** | **08 05 25.9** | **+2.1** |
| **KBTR** | **Krutoberegovo** | **5.60** | **27** | *e* | P | | **Pn** | **08 05 31.9** | **+1.0** |
| **KBTR** | **Krutoberegovo** | **5.60** | **27** | | PN | | **Pn** | **08 05 31.9** | **+1.0** |
| **KUR** | **Kuril'sk** | **9.20** | **233** | *d* | PN | | **Pn** | **08 06 24.6** | **+4.4** |
| **SHEM** | **Shemya Is, Ala** | **9.89** | **76** | P | | | **Pn** | **08 06 30.4** | **+0.8** |
| | comp=N,51nm,0.5s,baz=324,slow=0.8,SNR=13 | | | | | | | | |
| SHEM | | | | | S | | **Sn** | **08 08 13.8** | **-5.2** |
| | comp=N,51nm,0.3s,baz=279,slow=19,SNR=17 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **11.03** | **253** | *e* | PN | | **Pn** | **08 06 45.3** | **+0.2** |
| **JKA** | **Kamikawa-asahi** | **12.73** | **242** | | Pn | | **Pn** | **08 07 08.4** | **0.0** |
| **ASAJ** | **Asahikawa** | **12.73** | **242** | | P | | **Pn** | **08 07 09.2** | **+0.8** |
| | comp=N,12nm,0.8s,baz=72,slow=13,SNR=7.1 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **12.73** | **242** | | PN | | **Pn** | **08 07 08.4** | **0.0** |
| **AMKA** | **Amchitka** | **13.18** | **82** | | Pn | | **Pn** | **08 07 14.4** | **0.0** |
| **ERM** | **Erimo** | **13.89** | **234** | | | | **Pn** | **08 07 21.6** | **-2.5** |
| **ERM** | **Erimo** | **13.89** | **234** | | P | | **Pn** | **08 07 21.6** | **-2.5** |
| **JTM** | **Tenmabayashi** | **15.86** | **235** | | Pn | | **Pn** | **08 07 45.3** | **-4.3** |
| **KLR** | **Kul'dur** | **17.02** | **273** | | P | | **P** | **08 08 05.4** | **+0.2** |
| | comp=N,0.9nm,0.5s,baz=57,slow=7.6,SNR=4.5 | | | | | | | | |
| **KLR** | **Kul'dur** | **17.02** | **273** | *e* | P | | **P** | **08 08 05.7** | **+0.5** |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.8s | | | | | | | | |
| **BILL** | **Bilibino** | **17.23** | **10** | | P | | **P** | **08 08 07.6** | **+0.2** |
| BILL | | | | | IAmb | IAmb | 08 08 21.7 | | |
| | comp=Z,16nm,0.4s | | | | | | | | |
| **JMM** | **Marumori** | **18.24** | **229** | | P | | **P** | **08 08 18.2** | **-0.6** |
| JMM | | | | | IAmb | IAmb | 08 08 32.6 | | |
| | comp=Z,46nm,1.4s | | | | | | | | |
| **ZEA** | **Zeya** | **18.92** | **289** | *e* | P | | Pn | 08 08 40.0 | +13 |
| ZEA | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **18.95** | **258** | | P | | **P** | **08 08 26.8** | **+0.3** |
| **USA0B** | **Ussuriysk Arra** | **18.95** | **258** | | P | | **P** | **08 08 26.8** | **+0.3** |
| USA0B | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **18.95** | **258** | | P | | **P** | **08 08 26.6** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **18.95** | **258** | | P | | **P** | **08 08 27.0** | **+0.5** |
| | comp=Z,1.7nm,0.6s,baz=77,slow=15,SNR=2.4 | | | | | | | | |
| **HEH** | **HeiHe** | **19.44** | **279** | *e* | P | | **Pn** | **08 08 32.8** | **-0.7** |
| HEH | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **20.54** | **232** | | P | | **P** | **08 08 44.1** | **+0.3** |
| MJB9 | | | | | IAmb | IAmb | 08 08 44.8 | | |
| | comp=Z,43nm,1.3s | | | | | | | | |
| **MAJO** | **Matsushiro** | **20.54** | **232** | | P | | **P** | **08 08 44.3** | **+0.4** |
| MAJO | | | | | IAmb | IAmb | 08 08 44.8 | | |
| | comp=Z,43nm,1.3s | | | | | | | | |
| **MAJO** | **Matsushiro** | **20.54** | **232** | ‖ *e* | P | | Pn | 08 08 46.3 | -0.3 |
| MAJO | | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.54** | **232** | | P | | **P** | **08 08 43.8** | **-0.1** |
| | comp=Z,8.5nm,0.9s,baz=34,slow=7.9,SNR=20 | | | | | | | | |
| | comp=Z,8.5nm,0.9s | | | | | | | | |
| **JGF** | **Kuroka** | **21.70** | **232** | | P | | **P** | **08 08 57.2** | **+0.8** |
| JGF | | | | | IAmb | IAmb | 08 08 59.8 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **INU** | **Inuyama** | **22.07** | **232** | | P | | **P** | **08 08 59.1** | **-1.2** |
| **K13K** | **Kusilvak Mount** | **22.68** | **48** | | P | | **P** | **08 09 06.6** | **0.0** |
| **M13K** | **Dall Lake** | **23.09** | **52** | | P | | **P** | **08 09 12.1** | **+1.3** |
| **L14K** | **Kuka Creek** | **23.52** | **50** | | P | | **P** | **08 09 16.1** | **+1.3** |
| L14K | | | | | IAmb | IAmb | 08 09 18.9 | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **M14K** | **Bethel** | **23.80** | **51** | | P | | **P** | **08 09 18.5** | **+1.0** |
| **O14K** | **Tigyukauivet M** | **24.07** | **55** | | P | | **P** | **08 09 21.3** | **+1.4** |
| **K15K** | **Wolf Creek Mou** | **24.19** | **47** | | P | | **P** | **08 09 22.0** | **+1.0** |
| K15K | | | | | IAmb | IAmb | 08 

comp=Z,1.8nm,0.6s,baz=302,slow=7.3,SNR=18
comp=Z,1.8nm,0.6s

**TPAW Teton Pass 58.17 59 P P 08 13 59.3 +0.9**
TPAW IAmb IAmb 08 14 00.2
comp=Z,2.8nm,0.9s

**REDW Red Top Meadow 58.31 59 IAmb IAmb** 08 14 01.9
comp=Z,2.5nm,0.9s

**SPR3 Spring Creek 3 59.35 65 P P 08 14 08.9 +2.2**
SPR3 IAmb IAmb 08 14 09.3
comp=Z,2.7nm,0.8s

**PD31 Pinedale Array 59.41 59** IAmb IAmb 08 14 08.7
comp=Z,2.7nm,0.9s

**PDAR Pinedale Array 59.41 59 P P 08 14 07.7 +0.7**
comp=Z,1.6nm,0.7s,baz=319,slow=3.6,SNR=13
comp=Z,1.6nm,0.7s

**GWY Greenwater Val 59.94 69 P P 08 14 11.5 +1.0**
GWY IAmb IAmb 08 14 12.3
comp=Z,2.8nm,0.8s

**ULM Lac du Bonnet 60.88 45 P P 08 14 16.0 -0.6**
comp=Z,1.7nm,0.5s,baz=315,slow=4.3,SNR=6.2
comp=Z,1.7nm,0.5s

**ULM Lac du Bonnet 60.88 45** *e*P P **08 14 16.6 0.0**
ULM pmax pmax
comp=Z,2.0nm,0.5s

**TMUT Trail Mountain 60.91 63** IAmb IAmb 08 14 19.2
comp=Z,3.2nm,0.8s

**SRU San Rafael Swe 61.41 62** IAmb IAmb 08 14 22.4
comp=Z,3.6nm,0.8s

**ECSD EROS Data Cent 65.33 50 P P 08 14 46.1 -0.1**
ECSD IAmb IAmb 08 14 46.6
comp=Z,4.5nm,0.9s

**SMWD Samnorwood 69.95 59** IAmb IAmb 08 15 16.6
comp=Z,4.5nm,0.8s

**MNHN Monahans 71.41 63** IAmb IAmb 08 15 25.2
comp=Z,2.8nm,0.5s

**TXAR Lajitas Array 72.41 65 P P 08 15 31.3 +0.8**
**TXAR Lajitas Array 72.41 65 P P 08 15 30.7 +0.2**
comp=Z,2.0nm,0.6s,baz=302,slow=4.1,SNR=27
comp=Z,2.0nm,0.6s

**TXAR Lajitas Array 72.41 65 P P 08 15 31.3 +0.8**
**EKA Eskdalemuir Ar 72.59 349 P P 08 15 29.5 -1.4**
comp=Z,0.4nm,0.4s,baz=14,slow=4.8,SNR=4.7
comp=Z,0.4nm,0.4s

**WRA Warramunga Arr 73.99 203 P P 08 15 40.0 +0.5**
comp=Z,0.4nm,0.5s,baz=20,slow=6.3,SNR=2.3
comp=Z,0.4nm,0.5s

**ASAR Alice Springs 77.67 203 P P 08 16 01.5 +1.0**
comp=Z,0.5nm,0.7s,baz=12,slow=5.2,SNR=2.8
comp=Z,0.5nm,0.7s

**ESDC Sonseca Array 88.05 346 P P 08 16 52.5 -1.8**
comp=Z,2.5nm,1.2s,baz=1.4,slow=1.9,SNR=7.0
comp=Z,2.5nm,1.2s

**H03N2 Juan Fernandez 135.37 89 T T** 10 53 54.1
baz=314,slow=77,SNR=705

**H03N1 Juan Fernandez 135.38 89 T T** 10 53 55.4
baz=314,slow=77,SNR=527

**H03N3 Juan Fernandez 135.39 89 T T** 10 53 54.8
baz=314,slow=77,SNR=551

**PLCA Paso Flores 145.13 92 PKPbc PKPbc 08 23 39.9 -0.5**
comp=Z,2.7nm,0.7s,baz=284,slow=4.5,SNR=9.3

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*IDC **19** 08:05:34.3±2.2, 18°.09S×177°.99W, h570km±26km, mb3.8/21, mbtmp4.6/22, Error ellipse: s-maj=13.7km s-min=12.0km az=169.0*
*NEIC **19** 08:05:36.5±2.0, 18°.1S±0°.1×178°.0W±0°.1, h592km±6km, mb4.4/125, Error ellipse: s-maj=16.7km s-min=14.7km az=133.0*
*NOU **19** 08:05:49.8, 18°.46S×179°.43W, h631km, mb4.6/14, Fiji Islands Region*

**ISC 19 08:05:35.9±0.4, 18°.17S±0°.07×178°.00W±0°.06, h590km, n374, σ=0.88/350, mb4.4/86, 2C-8D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.79** | **276** | P | **P** | **08 07 01.9** | **+2.7** |
| **AFI** | **Afiamalu** | **7.33** | **56** | P | **P** | **08 07 27.8** | **-0.9** |
| **NIUE** | **Niue** | **7.70** | **98** | P | **P** | **08 07 32.4** | **+0.4** |
| **FUNA** | **Funafuti** | **9.97** | **344** | P | **P** | **08 07 53.4** | **-0.9** |
| **LIFNC** | **LIFOU** | **14.16** | **257** | P | **P** | **08 08 35.7** | **-0.8** |
| **PINNC** | **Pines Island,** | **14.34** | **250** | P | **P** | **08 08 39.1** | **+0.9** |
| **YATNC** | **Mamie plateau,** | **14.71** | **252** | P | **P** | **08 08 42.0** | **+0.3** |
| **DZM** | **Mont Dzumac** | **15.12** | **253** | P | **P** | **08 08 46.8** | **+1.1** |
| **DZM** | **Mont Dzumac** | **15.12** | **253** | P | **P** | **08 08 45.8** | **+0.2** |
| | 4.3nm,0.6s,baz=81,slow=18,SNR=14 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **08 09 02.2** | **+0.4** |
| KOUNC | | | | IAmb | IAmb | 08 09 04.8 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.30** | **195** | P | **P** | **08 09 34.3** | **+1.7** |
| TOZ | | | | IAmb | IAmb | 08 09 35.0 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| **URZ** | **Urewera** | **20.46** | **191** | P | **P** | **08 09 32.4** | **-1.7** |
| | comp=Z,13nm,0.5s,baz=18,slow=3.2,SNR=8.4 | | | | | | |
| URZ | | | | S | **S** | **08 12 40.6** | **-5.8** |
| | comp=Z,7.1nm,0.9s,baz=344,slow=15,SNR=1.9 | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **HNR** | **Honiara** | **23.09** | **289** | P | **P** | **08 09 56.9** | **-1.0** |
| **SNZO** | **South Karori** | **23.89** | **194** | P | **P** | **08 10 03.7** | **-0.9** |
| **PPT** | **Papeete** | **27.05** | **93** | P | **P** | **08 10 32.4** | **-0.3** |
| | comp=Z,11nm,0.5s,baz=216,slow=19,SNR=5.9 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.09** | **198** | P | **P** | **08 10 32.8** | **+0.1** |
| | comp=Z,11nm,0.7s,baz=5.5,slow=17,SNR=6.1 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **29.55** | **251** | P | **P** | **08 10 55.1** | **+0.8** |
| EIDS | | | | IAmb | IAmb | 08 10 55.3 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.15** | **240** | P | **P** | **08 11 00.9** | **+1.3** |
| ARMA | | | | IAmb | IAmb | 08 11 16.8 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **CTA** | **Charters Tower** | **33.79** | **261** | P | **P** | **08 11 30.7** | **+0.2** |
| **CTA** | **Charters Tower** | **33.79** | **261** | P | **P** | **08 11 29.7** | **-0.7** |
| | comp=Z,0.8nm,0.6s,baz=78,slow=8.2,SNR=26 | | | | | | |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **08 11 30.5** | **0.0** |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **08 11 30.8** | **+0.4** |
| **CAN** | **Canberra** | **33.86** | **233** | P | **P** | **08 11 32.2** | **+1.4** |
| **PMG** | **Port Moresby** | **34.89** | **280** | P | **P** | **08 11 40.9** | **+1.2** |
| **PMG** | **Port Moresby** | **34.89** | **280** | P | **P** | **08 11 40.8** | **+1.1** |
| **PMG** | **Port Moresby** | **34.89** | **280** | P | **P** | **08 11 41.1** | **+1.5** |
| **CMSA** | **Cobar Meteorol** | **35.36** | **241** | P | **P** | **08 11 44.1** | **+0.7** |
| **QLP** | **Quilpie** | **35.81** | **250** | P | **P** | **08 11 47.3** | **+0.2** |
| **TOO** | **Toolangi** | **37.31** | **231** | P | **P** | **08 12 00.9** | **+1.6** |
| **COEN** | **Coen** | **37.50** | **271** | P | **P** | **08 12 01.9** | **+0.8** |
| **COEN** | **Coen** | **37.50** | **271** | P | **P** | **08 12 02.1** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.85** | **242** | P | **P** | **08 12 12.7** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.85** | **242** | P | **P** | **08 12 13.0** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.85** | **242** | P | **P** | **08 12 12.7** | **+0.9** |
| | comp=Z,12nm,0.5s,baz=75,slow=10,SNR=24 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **INKA** | **Innaminka** | **39.01** | **248** | P | **P** | **08 12 14.3** | **+1.2** |
| **LCRK** | **Leigh Creek** | **41.49** | **244** | P | **P** | **08 12 33.5** | **+0.6** |
| **BBOO** | **Buckleboo** | **43.62** | **241** | P | **P** | **08 12 49.9** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 08 12 50.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **08 12 58.4** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 08 12 59.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **08 12 59.4** | **-0.3** |
| **WB2** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **08 12 59.6** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | | **P** | **08 12 59.4** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **08 12 59.5** | **-0.5** |
| | comp=Z,12nm,0.5s,baz=95,slow=7.1,SNR=171 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 14 28.1** | **-0.3** |
| | comp=Z,1.5nm,0.4s,baz=96,slow=3.3,SNR=6.6 | | | | | | |
| WRA | | | | S | **S** | **08 18 54.5** | **-2.1** |
| | comp=Z,1.5nm,1.0s,baz=97,slow=13,SNR=6.3 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.10** | **254** | P | **P** | **08 13 01.2** | **+0.3** |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **08 13 01.2** | **+0.3** |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **08 13 01.0** | **0.0** |
| | comp=Z,40nm,0.6s,baz=89,slow=8.4,SNR=222 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 14 28.7** | **-0.1** |
| | comp=Z,3.1nm,0.5s,baz=99,slow=4.0,SNR=8.2 | | | | | | |
| ASAR | | | | S | **S** | **08 18 56.7** | **-1.6** |
| | comp=Z,3.6nm,0.9s,baz=88,slow=15,SNR=14 | | | | | | |
| | comp=Z,40nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.18** | **269** | P | **P** | **08 13 31.2** | **-0.3** |
| **FORT** | **Forrest** | **50.25** | **245** | P | **P** | **08 13 39.2** | **+0.1** |
| **KNRA** | **Kununurra** | **50.85** | **264** | P | **P** | **08 13 43.7** | **0.0** |
| KNRA | | | | IAmb | IAmb | 08 13 44.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **51.01** | **281** | P | **P** | **08 13 43.8** | **-1.2** |
| **FITZ** | **Fitzroy Crossi** | **53.37** | **261** | P | **P** | **08 14 02.0** | **+0.3** |
| **SOEI** | **Soe** | **56.46** | **270** | P | **P** | **08 14 25.2** | **+1.7** |
| **PSA00** | **Pilbara Seismi** | **58.22** | **256** | P | **P** | **08 14 35.2** | **0.0** |
| PSA00 | | | | IAmb | IAmb | 08 14 35.6 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **MBWA** | **Marble Bar** | **58.39** | **256** | P | **P** | **08 14 36.0** | **-0.3** |
| MBWA | | | | IAmb | IAmb | 08 14 36.1 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.43** | **242** | P | **P** | **08 14 43.5** | **+0.4** |
| **MORW** | **Morawa** | **60.73** | **246** | P | **P** | **08 14 51.8** | **0.0** |
| **KAPI** | **Kappang** | **62.10** | **274** | P | **P** | **08 15 00.8** | **0.0** |
| KAPI | | | | IAmb | IAmb | 08 15 16.5 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **TOLI2** | **Tolitoli** | **63.15** | **281** | P | **P** | **08 15 08.1** | **+0.5** |
| TOLI2 | | | | IAmb | IAmb | 08 15 11.1 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **GIRL** | **Giralia** | **63.19** | **253** | P | **P** | **08 15 09.0** | **+1.2** |
| **JHJ2** | **Mitsune** | **65.00** | **322** | P | **P** | **08 15 19.0** | **+0.1** |
| **CASY** | **Casey** | **66.06** | **205** | P | **P** | **08 15 22.7** | **-2.2** |
| **JAGI** | **Jajag, Banyuwa** | **66.43** | **269** | P | **P** | **08 15 27.1** | **-1.1** |
| **JGF** | **Kuroka** | **68.19** | **322** | P | **P** | **08 15 38.2** | **-0.3** |
| JGF | | | | IAmb | IAmb | 08 16 03.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.35** | **323** | P | **P** | **08 15 38.6** | **-0.9** |
| | comp=Z,6.6nm,0.6s,baz=155,slow=5.9,SNR=21 | | | | | | |
| | comp=Z,6.6nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **68.35** | **323** | P | **P** | **08 15 39.0** | **-0.4** |
| MAJO | | | | IAmb | IAmb | 08 15 39.3 | |
| | comp=Z,9.8nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.36** | **323** | P | **P** | **08 15 39.2** | **-0.3** |
| MJB9 | | | | IAmb | IAmb | 08 15 39.2 | |
| | comp=Z,9.4nm,0.6s | | | | | | |
| **AMKA** | **Amchitka** | **69.29** | **358** | P | **P** | **08 15 44.1** | **-0.5** |
| **KIWB** | **Kanaga Island** | **69.73** | **1** | P | **P** | **08 15 46.5** | **-0.8** |
| **UGM** | **Wanagama** | **70.03** | **268** | P | **P** | **08 15 49.9** | **-0.1** |
| **JNU** | **Nakatsue** | **70.60** | **316** | P | **P** | **08 15 52.7** | **-0.2** |
| JNU | | | | IAmb | IAmb | 08 16 06.0 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **JNU** | **Nakatsue** | **70.60** | **316** | P | **P** | **08 15 52.6** | **-0.4** |
| | comp=Z,6.6nm,0.9s,baz=83,slow=6.6,SNR=2.0 | | | | | | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **YOJ** | **Yonaguni jima** | **71.42** | **305** | P | **P** | **08 15 57.9** | **+0.1** |
| **ASAJ** | **Asahikawa** | **71.70** | **331** | P | **P** | **08 15 58.9** | **-0.1** |
| | comp=Z,6.0nm,0.8s,baz=121,slow=17,SNR=5.4 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **08 16 01.0** | **+1.0** |
| | comp=Z,3.5nm,0.6s,baz=19,slow=1.1,SNR=24 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **NACB** | **Ninganchiao** | **72.39** | **304** | P | **P** | **08 16 03.5** | **0.0** |
| NACB | | | | IAmb | IAmb | 08 16 04.0 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **SSLB** | **Suanglung** | **72.71** | **303** | P | **P** | **08 16 04.4** | **-1.0** |
| SSLB | | | | IAmb | IAmb | 08 16 06.0 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **TPUB** | **Ta-pu** | **72.73** | **302** | P | **P** | **08 16 04.4** | **-1.1** |
| **KSM** | **Kuching** | **73.11** | **277** | P | **P** | **08 16 07.7** | **-0.1** |
| **PEA0B** | **Petropavlovsk-** | **74.03** | **345** | P | **P** | **08 16 12.2** | **0.0** |
| **PETK** | **Petropavlovsk-** | **74.03** | **345** | P | **P** | **08 16 12.3** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **74.03** | **345** | P | **P** | **08 16 11.2** | **-1.0** |
| | comp=Z,9.0nm,0.7s,baz=136,slow=6.8,SNR=12 | | | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **75.16** | **318** | P | **P** | **08 16 18.8** | **-0.1** |
| | comp=Z,1.3nm,0.7s,baz=133,slow=6.8,SNR=5.8 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.05** | **326** | P | **P** | **08 16 30.2** | **+1.1** |
| | comp=Z,2.0nm,0.6s,baz=114,slow=3.5,SNR=4.1 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **78.43** | **44** | P | **P** | **08 16 37.9** | **+0.8** |
| **YBH** | **Yreka Blue Hor** | **78.48** | **39** | P | **P** | **08 16 38.0** | **+1.0** |
| **WAKR** | **Walker** | **78.64** | **43** | P | **P** | **08 16 38.9** | **+0.8** |
| **HUMO** | **Hull Mountain** | **78.87** | **38** | P | **P** | **08 16 40.0** | **+1.1** |
| **N14K** | **Kuskokwak Cree** | **78.94** | **8** | P | **P** | **08 16 37.7** | **-1.1** |
| | baz=196 | | | | | | |
| **O16K** | **Kokwok River B** | **79.17** | **10** | P | **P** | **08 16 39.0** | **-1.0** |
| O16K | | | | IAmb | IAmb | 08 17 06.9 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **M13K** | **Dall Lake** | **79.20** | **7** | P | **P** | **08 16 39.4** | **-0.8** |
| | baz=194 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.34** | **44** | P | **P** | **08 16 42.1** | **+0.4** |
| | comp=Z,2.1nm,0.7s,baz=228,slow=8.1,SNR=18 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **Q20K** | **Shuyak Island** | **79.36** | **13** | P | **P** | **08 16 40.2** | **-0.9** |
| | baz=205 | | | | | | |
| **O17K** | **Koliganek Bris** | **79.52** | **11** | P | **P** | **08 16 41.3** | **-0.5** |
| | baz=200 | | | | | | |
| **M14K** | **Bethel** | **79.71** | **8** | P | **P** | **08 16 43.0** | **+0.2** |
| | baz=195 | | | | | | |
| **M15K** | **Kasigluk River** | **79.83** | **9** | P | **P** | **08 16 43.1** | **-0.4** |
| | baz=197 | | | | | | |
| **TPNV** | **Topopah Spring** | **79.92** | **46** | P | **P** | **08 16 43.7** | **-1.0** |
| | baz=238 | | | | | | |
| **O18K** | **Koktuh Hills** | **79.93** | **11** | P | **P** | **08 16 43.7** | **-0.4** |
| O18K | | | | IAmb | IAmb | 08 16 44.0 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **O18K** | **Koktuh Hills** | **79.93** | **11** | P | **P** | **08 16 42.2** | **-1.9** |
| | baz=202 | | | | | | |
| **P19K** | **Oil Pt** | **80.14** | **12** | P | **P** | **08 16 42.5** | **-2.7** |
| | baz=204 | | | | | | |
| **L14K** | **Kuka Creek** | **80.19** | **7** | P | **P** | **08 16 43.5** | **-1.8** |
| | baz=195 | | | | | | |
| **N17K** | **Nushagak Hills** | **80.21** | **10** | P | **P** | **08 16 43.7** | **-1.8** |
| | baz=200 | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.28** | **38** | P | **P** | **08 16 47.6** | **+1.1** |
| J05D | | | | IAmb | IAmb | 08 16 48.1 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **M16K** | **Timber Creek** | **80.39** | **9** | P | **P** | **08 16 46.9** | **+0.5** |
| **M16K** | **Timber Creek** | **80.39** | **9** | P | **P** | **08 16 46.2** | **-0.2** |
| | baz=198,SNR=5.8 | | | | | | |
| **CNPM** | **China Poot** | **80.45** | **13** | P | **P** | **08 16 46.6** | **-0.1** |
| CNPM | | | | IAmb | IAmb | 08 17 12.7 | |
| | comp=Z,36nm,1.3s | | | | | | |
| **CN2** | **Changchun** | **80.47** | **322** | P | **P** | **08 16 47.8** | **+0.6** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **BNX** | **BinXian** | **80.54** | **325** | ⇑P | **P** | **08 16 47.4** | **-0.1** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **80.54** | **329** | P | **P** | **08 16 47.8** | **+0.4** |
| | comp=Z,1.3nm,0.6s,baz=128,slow=12,SNR=4.2 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **H04A** | **Detroit Lake** | **80.57** | **37** | P | **P** | **08 16 47.9** | **+0.1** |
| **PINE** | **Pine Mountain** | **80.76** | **38** | IAmb | IAmb | 08 16 50.6 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **SMAI** | **San Martin Ant** | **80.77** | **159** | P | **P** | **08 16 50.1** | **+1.7** |
| SMAI | | | | IAmb | IAmb | 08 16 50.8 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **N19K** | **Bonanza Creek** | **80.96** | **11** | P | **P** | **08 16 48.4** | **-1.1** |
| | baz=202 | | | | | | |
| **L16K** | **Owhat River** | **80.97** | **9** | P | **P** | **08 16 49.7** | **+0.3** |
| L16K | | | | IAmb | IAmb | 08 16 50.8 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **L16K** | **Owhat River** | **80.97** | **9** | P | **P** | **08 16 48.6** | **-0.8** |
| | baz=198 | | | | | | |
| **M17K** | **Holitna River** | **80.99** | **10** | P | **P** | **08 16 49.6** | **+0.1** |
| | baz=200 | | | | | | |
| **R11B** | **Troy Canyon, C** | **81.10** | **45** | P | **P** | **08 16 50.3** | **-0.6** |
| | baz=238 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.25** | **8** | P | **P** | **08 16 51.3** | **+0.5** |
| | baz=196,SNR=5.4 | | | | | | |
| **TUC** | **Tucson** | **81.55** | **52** | P | **P** | **08 16 54.9** | **+1.7** |
| **TUC** | **Tucson** | **81.55** | **52** | P | **P** | **08 16 54.0** | **+0.9** |
| | baz=242 | | | | | | |
| **L17K** | **Donlin** | **81.55** | **9** | P | **P** | **08 16 53.1** | **+0.8** |
| | baz=199 | | | | | | |
| **I07A** | **Izee** | **81.77** | **38** | IAmb | IAmb | 08 16 55.5 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **BELA** | **Belgrano 2** | **81.85** | **173** | P | **P** | **08 16 54.1** | **+0.3** |
| **L18K** | **Granite Mounta** | **81.89** | **10** | P | **P** | **08 16 54.5** | **+0.4** |
| L18K | | | | IAmb | IAmb | 08 16 55.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **L18K** | **Granite Mounta** | **81.89** | **10** | P | **P** | **08 16 54.1** | **+0.1** |
| | baz=200 | | | | | | |
| **J08A** | **Circle Bar Ran** | **81.97** | **39** | P | **P** | **08 16 55.8** | **+0.7** |
| **M19K** | **Big River Lodg** | **81.99** | **11** | P | **P** | **08 16 53.4** | **-1.2** |
| | baz=203 | | | | | | |
| **K17K** | **Iditarod** | **82.10** | **9** | P | **P** | **08 16 54.8** | **-0.4** |
| | baz=199 | | | | | | |
| **L19K** | **White Mountain** | **82.16** | **11** | P | **P** | **08 16 54.8** | **-0.7** |
| | baz=202 | | | | | | |
| **SUA** | **Susitna One** | **82.30** | **13** | P | **P** | **08 16 55.0** | **-1.4** |
| | baz=206 | | | | | | |
| **J16K** | **Anvik River** | **82.33** | **8** | P | **P** | **08 16 55.8** | **-0.4** |
| | baz=197 | | | | | | |
| **KAIM** | **Kayak Island** | **82.47** | **16** | P | **P** | **08 16 56.8** | **-0.3** |
| | baz=212 | | | | | | |
| **GLI** | **Glacier Island** | **82.61** | **15** | P | **P** | **08 16 56.5** | **-1.3** |
| | baz=209 | | | | | | |
| **J17K** | **VABM Dome** | **82.64** | **8** | P | **P** | **08 16 58.0** | **+0.2** |
| J17K | | | | IAmb | IAmb | 08 16 58.6 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **J17K** | **VABM Dome** | **82.64** | **8** | P | **P** | **08 16 57.4** | **-0.5** |
| | baz=198 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **82.65** | **15** | P | **P** | **08 16 56.9** | **-1.0** |
| | baz=211 | | | | | | |
| **M22K** | **Willow** | **82.69** | **13** | P | **P** | **08 16 57.2** | **-0.8** |
| | baz=207 | | | | | | |
| **KNK** | **Knik Glacier** | **82.76** | **14** | P | **P** | **08 16 57.9** | **-0.6** |
| | baz=208 | | | | | | |
| **PMR** | **Palmer** | **82.77** | **13** | P | **P** | **08 16 57.3** | **-1.2** |
| | baz=208 | | | | | | |
| **G08A** | **Pilot Rock** | **82.78** | **38** | IAmb | IAmb | 08 17 00.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.97** | **13** | IAmb | IAmb | 08 16 59.5 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **J18K** | **Innoko River** | **83.05** | **9** | P | **P** | **08 16 59.7** | **-0.2** |
| | baz=200,SNR=6.6 | | | | | | |
| **U33K** | **Whale Pass** | **83.08** | **23** | P | **P** | **08 17 00.4** | **+0.3** |
| | baz=222 | | | | | | |
| **HAWA** | **Hanford** | **83.08** | **36** | IAmb | IAmb | 08 17 01.8 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **V35K** | **Ketchikan** | **83.08** | **25** | P | **P** | **08 16 59.7** | **-0.4** |
| | baz=224 | | | | | | |
| **CUT** | **Chulitna** | **83.25** | **13** | P | **P** | **08 16 59.7** | **-1.2** |
| | baz=206 | | | | | | |
| **M23K** | **Glacier View** | **83.26** | **14** | P | **P** | **08 16 59.7** | **-1.3** |
| | baz=209 | | | | | | |
| **BMRM** | **Bremner River** | **83.30** | **16** | P | **P** | **08 17 00.6** | **-0.7** |
| | baz=212 | | | | | | |
| **PPLA** | **Purkeypile** | **83.31** | **12** | P | **P** | **08 17 00.8** | **-0.6** |
| | baz=205 | | | | | | |
| **MESA** | **MESA** | **83.36** | **17** | P | **P** | **08 17 01.2** | **-0.5** |
| | baz=214 | | | | | | |
| **S31K** | **Pelican** | **83.36** | **21** | P | **P** | **08 17 01.7** | **+0.2** |
| | baz=220 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.39** | **14** | P | **P** | **08 17 01.4** | **-0.3** |
| | baz=209 | | | | | | |
| **K20K** | **Telida** | **83.39** | **11** | IAmb | IAmb | 08 17 01.8 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **K20K** | **Telida** | **83.39** | **11** | P | **P** | **08 17 01.7** | **+0.1** |
| | baz=203,SNR=5.2 | | | | | | |
| **KLU** | **Klutina** | **83.42** | **15** | P | **P** | **08 17 02.2** | **+0.3** |
| | baz=210 | | | | | | |
| **H16K** | **Elim** | **83.44** | **7** | P | **P** | **08 17 01.5** | **-0.2** |
| | baz=195 | | | | | | |
| **CRQM** | **Cirque** | **83.51** | **16** | IAmb | IAmb | 08 17 02.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **CRQE** | **Cirque** | **83.52** | **16** | P | **P** | **08 17 01.5** | **-0.9** |
| | baz=213 | | | | | | |
| **WRAK** | **Wrangell Islan** | **83.59** | **24** | P | **P** | **08 17 02.6** | **0.0** |
| | baz=223 | | | | | | |
| **G15K** | **Niukluk** | **83.59** | **6** | P | **P** | **08 17 02.2** | **-0.3** |
| | baz=193 | | | | | | |
| **PNL** | **Peninsula** | **83.69** | **19** | P | **P** | **08 17 02.8** | **-0.4** |
| | baz=217 | | | | | | |
| **J19K** | **Poorman** | **83.72** | **10** | P | **P** | **08 17 02.3** | **-0.9** |
| | baz=201 | | | | | | |
| **VRDI** | **Verde Repeater** | **83.82** | **16** | P | **P** | **08 17 03.7** | **-0.3** |
| VRDI | | | | IAmb | IAmb | 08 17 04.1 | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.85** | **15** | P | **P** | **08 17 03.6** | **-0.4** |
| | baz=212,SNR=7.2 | | | | | | |
| **F14K** | **Arctic Creek** | **83.86** | **5** | P | **P** | **08 17 03.8** | **0.0** |
| | baz=191 | | | | | | |
| **GRNC** | **Granite Creek** | **83.87** | **17** | IAmb | IAmb | 08 17 04.6 | |
| | comp=Z,9.8nm,1.0s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **83.90** | **14** | P | **P** | **08 17 04.1** | **-0.1** |
| | baz=210 | | | | | | |
| **GLB** | **Gilahina Butte** | **83.91** | **16** | IAmb | IAmb | 08 17 04.4 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| **WAT6** | **Susitna Watana** | **83.95** | **14** | P | **P** | **08 17 03.6** | **-0.9** |
| | baz=209,SNR=6.6 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **84.07** | **16** | P | **P** | **08 17 04.7** | **-0.3** |
| | baz=213 | | | | | | |
| **J20K** | **Nowinta River** | **84.14** | **10** | P | **P** | **08 17 05.3** | **+0.1** |
| J20K | | | | IAmb | IAmb | 08 17 05.6 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **J20K** | **Nowinta River** | **84.14** | **10** | P | **P** | **08 17 05.1** | **-0.1** |
| | baz=203,SNR=5.0 | | | | | | |
| **P29M** | **Windy Craggy** | **84.17** | **19** | P | **P** | **08 17 05.6** | **0.0** |
| | baz=218,SNR=5.3 | | | | | | |
| **CTG** | **Chitna Glacier** | **84.18** | **17** | P | **P** | **08 17 05.6** | **-0.1** |
| | baz=215 | | | | | | |
| **R32K** | **Eaglecrest** | **84.18** | **21** | P | **P** | **08 17 05.2** | **-0.4** |
| | baz=221 | | | | | | |
| **LYN** | **LuoYang** | **84.30** | **309** | P | **P** | **08 17 07.6** | **+0.9** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,31nm,0.8s | | | | | | |
| **O28M** | **Mount Upton** | **84.34** | **18** | P | **P** | **08 17 05.7** | **-0.9** |
| | baz=216,SNR=6.2 | | | | | | |
| **HARP** | **HAARP** | **84.39** | **15** | P | **P** | **08 17 06.3** | **-0.3** |
| | baz=211 | | | | | | |
| **O29M** | **Mount Kennedy** | **84.44** | **19** | P | **P** | **08 17 06.9** | **-0.1** |
| | baz=217 | | | | | | |
| **DHY** | **Denali Highway** | **84.47** | **13** | P | **P** | **08 17 06.6** | **-0.4** |
| | baz=209 | | | | | | |
| **PLBC** | **Pleasant Camp** | **84.47** | **20** | P | **P** | **08 17 06.6** | **-0.4** |
| | baz=219 | | | | | | |
| **HLID** | **Hailey** | **84.57** | **41** | P | **P** | **08 17 08.8** | **+0.7** |
| **HLID** | **Hailey** | **84.57** | **41** | P | **P** | **08 17 07.5** | **-0.6** |
| | baz=239 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **84.64** | **12** | P | **P** | **08 17 06.9** | **-0.8** |
| | baz=206 | | | | | | |
| **I20K** | **Naaghedeneel** | **84.66** | **10** | P | **P** | **08 17 07.9** | **+0.2** |
| | baz=202 | | | | | | |
| **MCK** | **McKinley** | **84.71** | **13** | P | **P** | **08 17 06.8** | **-1.3** |
| | baz=208 | | | | | | |
| **P30M** | **Million Dollar** | **84.80** | **19** | P | **P** | **08 17 08.0** | **-0.6** |
| | baz=219 | | | | | | |
| **PAX** | **Paxson** | **84.81** | **14** | P | **P** | **08 17 07.2** | **-1.4** |
| | baz=211 | | | | | | |

baz=219
**TXAR Lajitas Array 85.81 57** P **P** **08 17 15.5 +1.2**
comp=Z,1.8nm,0.7s,baz=216,slow=4.5,SNR=14
comp=Z,1.8nm,0.7s
**E17K Hotham Inlet 85.85 6** P **P** **08 17 12.9 -0.5**
baz=195
**WHY Whitehorse 85.87 20** P **P** **08 17 12.9 -0.9**
baz=221
**I23K Minto, Yukon-K 85.89 12** P **P** **08 17 12.6 -1.0**
baz=207
**DLBC Dease Lake 85.92 23** P **P** **08 17 13.4 -0.6**
baz=225
**MDM Murphy Dome 85.94 12** IAmb IAmb 08 17 13.3
comp=Z,6.1nm,0.9s
**COLA College 85.95 12** P **P** **08 17 12.9 -1.0**
COLA IAmb IAmb 08 17 13.3
comp=Z,9.5nm,0.8s
**COLA College 85.95 12** P **P** **08 17 13.0 -1.0**
baz=208
**ANMO Albuquerque 85.95 51** P **P** **08 17 14.7 -0.3**
**ANMO Albuquerque 85.95 51** P **P** **08 17 14.1 -0.8**
baz=245
**SCRK Sand Creek 86.02 14** P **P** **08 17 12.9 -1.5**
baz=212
**IL31 86.06 13** IAmb IAmb 08 17 14.0
comp=Z,4.5nm,0.6s
**ILAR Eielson Array 86.06 13** P **P** **08 17 13.2 -1.3**
comp=Z,2.1nm,0.4s,baz=220,slow=5.0,SNR=50
comp=Z,2.1nm,0.4s
**F19K Shaleruckik Mo 86.09 8** IAmb IAmb 08 17 15.0
comp=Z,3.3nm,0.7s
**F19K Shaleruckik Mo 86.09 8** P **P** **08 17 13.0 -1.6**
baz=199
**M29M Somme Creek 86.18 17** IAmb IAmb 08 17 15.4
comp=Z,3.6nm,0.8s
**M29M Somme Creek 86.18 17** P **P** **08 17 13.7 -1.6**
baz=217
**H22K Ishtalitna Cre 86.19 11** P **P** **08 17 13.9 -1.2**
baz=205
**P33M Teslin, Yukon 86.21 21** P **P** **08 17 14.6 -0.8**
baz=222
**N31M Braeburn, Yuko 86.22 19** P **P** **08 17 14.9 -0.5**
baz=220
**J25K Salcha River, 86.25 13** IAmb IAmb 08 17 15.0
comp=Z,3.8nm,0.7s
**J25K Salcha River, 86.25 13** P **P** **08 17 14.5 -1.0**
baz=211
**R33M Jennings River 86.26 22** P **P** **08 17 15.5 -0.2**
baz=224
**E18K Tukpahlearik C 86.31 7** P **P** **08 17 14.7 -0.9**
baz=196
**G21K Allakaket 86.40 10** IAmb IAmb 08 17 15.9
comp=Z,4.9nm,0.8s
**G21K Allakaket 86.40 10** P **P** **08 17 15.1 -1.0**
baz=203
**H23K Yukon River 86.46 11** P **P** **08 17 14.7 -1.7**
baz=207
**MSO Missoula 86.55 38** P **P** **08 17 16.7 -0.7**
baz=239
**J26L Joseph Creek 86.56 14** IAmb IAmb 08 17 18.5
comp=Z,5.2nm,0.7s
**J26L Joseph Creek 86.56 14** P **P** **08 17 17.0 0.0**
baz=212,SNR=7.9
**F20K Avaraart Lake 86.57 9** P **P** **08 17 15.9 -0.9**
baz=201
**XAN Xi'an 86.73 307** ⇑P **P** **08 17 19.5 +1.1**
XAN pmax pmax
comp=Z,19nm,1.1s
**E19K Redstone River 86.75 8** P **P** **08 17 17.8 +0.1**
baz=200
**N32M Quiet Lake 86.82 20** P **P** **08 17 17.7 -0.5**
baz=222
**SNOW Snow King Moun 86.83 42** IAmb IAmb 08 17 20.5
comp=Z,4.3nm,1.1s
**S22A 4UR Ranch, Cre 86.89 49** P **P** **08 17 18.3 -1.1**
baz=244
**IMW Indian Meadow 86.92 42** IAmb IAmb 08 17 20.9
comp=Z,4.9nm,0.9s
**PRP Porcupine Dome 86.99 13** P **P** **08 17 18.0 -1.1**
baz=211
**F21K Alatna River 87.06 9** P **P** **08 17 18.9 -0.3**
baz=203
**G22K Bettles 87.10 10** P **P** **08 17 18.7 -0.6**
baz=205
**G23K Bananza Creek 87.17 11** P **P** **08 17 18.9 -0.8**
baz=206
**M31M Drury Creek, Y 87.20 19** P **P** **08 17 19.9 0.0**
baz=221
**YHL Hebgen Lake 87.23 41** IAmb IAmb 08 17 22.9
comp=Z,5.2nm,0.9s
**DAWY Dawson 87.23 16** P **P** **08 17 20.1 0.0**
DAWY IAmb IAmb 08 17 20.6
comp=Z,8.0nm,1.3s
**DAWY Dawson 87.23 16** P **P** **08 17 20.1 0.0**
baz=216,SNR=6.6
**BW06 Boulder Array 87.27 43** P **P** **08 17 19.3 -1.7**
baz=242
**PDAR Pinedale Array 87.27 43** P **P** **08 17 20.9 -0.1**
comp=Z,1.3nm,0.7s,baz=224,slow=2.5,SNR=12
comp=Z,1.3nm,0.7s
**BOZ Bozeman (W) 87.31 40** IAmb IAmb 08 17 22.5
comp=Z,5.1nm,1.2s
**BOZ Bozeman (W) 87.31 40** P **P** **08 17 20.0 -1.1**
baz=241
**I26K Coal Creek Min 87.34 14** P **P** **08 17 20.5 0.0**
baz=213
**EGAK Eagle 87.37 15** IAmb IAmb 08 17 20.6
comp=Z,8.7nm,1.2s
**EGAK Eagle 87.37 15** P **P** **08 17 20.3 -0.3**
baz=215
**F22K John River 87.53 10** P **P** **08 17 20.5 -0.9**
baz=204
**FARO Faro, Yukon 87.54 19** P **P** **08 17 20.8 -0.8**
baz=222
**K29M Barlow Dome 87.56 17** IAmb IAmb 08 17 22.6
comp=Z,6.2nm,1.2s
**K29M Barlow Dome 87.56 17** P **P** **08 17 21.2 -0.5**
baz=218
**H25L Birch Creek 87.58 12** P **P** **08 17 20.2 -1.3**
baz=210
**COLD Coldfoot 87.60 10** P **P** **08 17 21.4 -0.3**
baz=206
**D19K Kuna River 87.62 7** P **P** **08 17 20.8 -1.0**
baz=199
**G24K Hadweenzic Riv 87.63 12** P **P** **08 17 21.2 -0.7**
baz=209
**E20K Nigu River 87.64 8** P **P** **08 17 21.2 -0.7**
baz=201
**HHC Hu-ho-hao-te 87.74 314** *e*P **P** **08 17 22.9 -0.2**
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,140nm,4.5s
**G25K Bearman Lake 87.95 12** P **P** **08 17 22.3 -1.0**
baz=210
**D20K Etiviuk River 88.01 8** P **P** **08 17 23.3 -0.3**
baz=200
**TOAD Toad River Com 88.04 24** P **P** **08 17 22.9 -1.0**
baz=229,SNR=6.0
**B18K Kokolik River 88.06 6** P **P** **08 17 23.6 -0.1**
baz=195
**E21K Killik River 88.11 9** P **P** **08 17 24.0 -0.1**
baz=203
**E22K Anaktuvuk Pass 88.16 10** P **P** **08 17 23.6 -0.7**
baz=205
**I28M Miner Creek 88.22 15** P **P** **08 17 24.2 -0.5**
baz=216
**F24K Squaw Lake 88.27 11** IAmb IAmb 08 17 25.3
comp=Z,4.5nm,0.7s
**F24K Squaw Lake 88.27 11** P **P** **08 17 24.6 -0.3**
baz=208
**DRIO Del Rio 88.30 58** IAmb IAmb 08 17 27.5
comp=Z,3.3nm,0.8s
**E23K Chandalar 88.45 10** P **P** **08 17 25.5 -0.2**
baz=207
**J30M Hart River 88.45 17** P **P** **08 17 25.2 -0.7**
baz=219
**H27K Steamboat Moun 88.48 14** P **P** **08 17 25.6 -0.2**
baz=214
**I29M Ogilvie Camp, 88.55 16** P **P** **08 17 26.1 -0.1**
baz=217
**G26K Porcupine Rive 88.59 13** P **P** **08 17 25.6 -0.7**
baz=212
**E24K Your Creek 88.66 11** P **P** **08 17 25.9 -0.7**
baz=208
**C21K Knifeblade Rid 88.67 8** P **P** **08 17 26.3 -0.3**
baz=202
**D22K Ayikyak River 88.71 9** P **P** **08 17 26.0 -0.8**
baz=204
**TGTN Hyland Airport 88.71 21** P **P** **08 17 26.0 -1.1**
baz=226
**F25K Christian Rive 88.76 12** P **P** **08 17 27.1 -0.1**
baz=210
**N23A Red Feather La 88.86 46** P **P** **08 17 26.7 -1.8**
baz=245
**G27K Doyon Strip 88.93 14** P **P** **08 17 27.5 -0.4**
baz=214
**I30M Mount Dempster 88.95 16** IAmb IAmb 08 17 28.4
comp=Z,6.8nm,1.1s
**I30M Mount Dempster 88.95 16** P **P** **08 17 27.2 -0.9**
baz=219
**TOLK Toolik Lake Re 88.98 10** P **P** **08 17 27.4 -0.7**
baz=207
**D23K Nanushuk River 89.09 10** P **P** **08 17 27.7 -0.9**
baz=206
**B21K Ikpikpuk River 89.12 8** P **P** **08 17 28.8 +0.1**
baz=202
**H29M Whitestone 89.22 15** IAmb IAmb 08 17 29.6
comp=Z,8.1nm,0.8s
**H29M Whitestone 89.22 15** P **P** **08 17 29.2 -0.1**
baz=217
**CMAR Chiang Mai Arr 89.34 290** P **P** **08 17 31.9 +1.0**
comp=Z,1.5nm,0.3s,baz=108,slow=2.9,SNR=14
comp=Z,1.5nm,0.3s
**PZH PanZhiHua 89.63 298** P **P** **08 17 33.1 +0.9**
PZH pmax pmax
comp=Z,10.0nm,0.7s
**EPYK Eagle Plains 89.75 15** P **P** **08 17 31.3 -0.5**
baz=219
**G29M Pine Creek 89.86 15** P **P** **08 17 31.1 -1.1**
baz=218
**C23K Itkillik River 89.89 9** P **P** **08 17 31.6 -0.7**
baz=206
**F28M Old Crow 89.99 14** P **P** **08 17 32.9 +0.1**
baz=216
**C24K Franklin Bluff 90.08 10** P **P** **08 17 34.2 +1.1**
baz=208
**G30M tAoh Zraii Nji 90.35 15** P **P** **08 17 34.3 -0.2**
**G30M tAoh Zraii Nji 90.35 15** P **P** **08 17 34.7 +0.2**
baz=219
**G31M Satah River 90.81 16** P **P** **08 17 36.1 -0.4**
baz=221
**E28M Babbage River 90.87 13** P **P** **08 17 37.4 +0.5**
E28M IAmb IAmb 08 17 37.8
comp=Z,3.5nm,1.1s
**E28M Babbage River 90.87 13** P **P** **08 17 37.1 +0.3**
baz=216
**LAO LASA Array 91.15 41** P **P** **08 17 38.1 -0.6**
baz=244
**F31M Tsiigehtchic 91.33 16** P **P** **08 17 38.8 -0.1**
**F31M Tsiigehtchic 91.33 16** P **P** **08 17 39.2 +0.3**
baz=222
**RSSD Black Hills 91.48 44** P **P** **08 17 40.1 -0.4**
baz=246
**WRGLY Wrigley 91.53 22** P **P** **08 17 40.3 +0.4**
baz=231
**INK Inuvik 92.04 15** P **P** **08 17 41.4 -0.8**
INK IAmb IAmb 08 17 42.0
comp=Z,9.3nm,1.2s
**INK Inuvik 92.04 15** P **P** **08 17 41.2 -0.9**
comp=Z,2.7nm,0.6s,baz=210,slow=4.7,SNR=4.3
comp=Z,2.7nm,0.6s
**INK Inuvik 92.04 15** P **P** **08 17 41.9 -0.2**
baz=222
**DGMT Dagmar 93.14 40** P **P** **08 17 48.3 +0.6**
baz=246
**SONM Songino Array 94.01 319** P **P** **08 17 52.1 +0.3**
comp=Z,0.4nm,0.4s,baz=103,slow=4.6,SNR=2.0
comp=Z,0.4nm,0.4s
**KSU1 Kansas State U 94.81 51** P **P** **08 17 56.4 +0.9**
baz=251
**BVAR Borovoye Array 117.30 321** PKP **PKPdf** **08 23 13.6 -1.3**
comp=Z,1.6nm,0.5s,baz=119,slow=1.8,SNR=7.8
**ARCES ARCESS Array B 126.64 350** PKP **PKPdf** **08 23 31.6 -0.7**
comp=Z,0.8nm,0.4s,baz=31,slow=2.1,SNR=14
**FINES FINESS Array B 133.55 344** PKP **PKPdf** **08 23 44.6 -1.0**
comp=Z,2.0nm,0.8s,baz=54,slow=2.4,SNR=6.3
**AKASG Malin Array Be 140.97 332** PKhKP PKPpre 08 23 52.6
comp=Z,0.9nm,0.4s,baz=41,slow=3.3,SNR=7.1
**EKA Eskdalemuir Ar 142.70 5** PKhKP PKPpre 08 23 58.6
comp=Z,0.5nm,0.5s,baz=318,slow=2.0,SNR=5.6
**BNN Bunyan 144.12 312** PKPbc 08 24 05.7 +0.4
**BURAR Bucovina Array 145.03 332** PKPbc 08 24 08.1 +0.3
**BR131 Keskin Array S 145.25 315** **PKPdf** **08 24 07.7 +0.1**
**BRTR Keskin Array B 145.25 315** **PKPdf** **08 24 08.5 +0.9**
**BRTR Keskin Array B 145.25 315** PKPbc **PKPdf** **08 24 08.3 +0.7**
comp=Z,5.8nm,0.7s,baz=93,slow=2.9,SNR=27
**OSTC Ostas 145.75 344** *e*PKP **PKPbc** **08 24 10.2 +0.5**
**UPC Upice 145.85 344** *e*PKP **PKPbc** **08 24 10.1 +0.1**
**DPC Dobruska-Polom 145.91 344** *e*PKP **PKPbc** **08 24 10.1 -0.1**
**KRLC Kraliky 146.04 343** *e*PKP **PKPbc** **08 24 09.9 -0.6**
**MMAI Mount Meron Ar 146.62 303** PKPbc **PKPbc** **08 24 12.9 +0.2**
comp=Z,2.7nm,0.5s,baz=32,slow=3.4,SNR=4.7
**PRU Pruhonice 146.70 345** *e*PKP **PKPbc** **08 24 11.9 -0.4**
**MEM Membach 147.48 355** *d*PKP **PKPbc** **08 24 13.8 -0.4**
**GRF Grafenberg Arr 147.69 349** *e*PKP **PKPbc** **08 24 14.7 -0.2**
baz=16,slow=2.0
**BCLA Clavier 147.72 356** *d*PKPab **PKPab** **08 24 18.3 -1.1**
**KHC Kasperske Hory 147.73 346** *e*PKP **PKPbc** **08 24 14.9 -0.1**
**BHOU Houvegnez 147.74 355** *d*PKP **PKPbc** **08 24 14.4 -0.6**
BHOU *d*PKPab **PKPab** **08 24 18.7 -0.8**
**BGES Gesves 147.77 356** *d*PKP **PKPbc** **08 24 14.6 -0.4**
BGES *d*PKPab **PKiKP** **08 24 18.0 +1.6**
**CKRC Cesky Krumlov 147.84 345** *e*PKP **PKPbc** **08 24 15.1 -0.2**
**BMRD Maredsous 147.87 357** *d*PKP **PKPbc** **08 24 15.1 -0.2**
**GEC2 GERESS Array S 147.97 345** **PKPbc** **08 24 15.8 0.0**
**GERES GERESS Array B 147.97 345** PKPbc **PKPbc** **08 24 15.0 -0.8**
comp=Z,5.4nm,0.7s,baz=50,slow=1.5,SNR=27
**DOU Dourbes 148.09 357** *d*PKP **PKPbc** **08 24 15.8 -0.1**
**CONA Conrad Observa 148.24 342** *e*PKP **PKPbc** **08 24 16.3 -0.1**
comp=Z,6.6nm,1.1s,SNR=7.3
**RONA Rosalia, Austr 148.31 341** *e*PKP **PKPbc** **08 24 16.5 0.0**
comp=Z,4.9nm,0.8s,SNR=6.0
**MOA Molln 148.75 344** *i* PKP **PKPbc** **08 24 17.2 -0.4**
comp=Z,0.4nm,0.3s
**BFO Black Forest 149.48 352** **PKPbc** **08 24 19.4 0.0**
**LESA Schwarzleotal 149.54 346** *i* PKP **PKPbc** **08 24 18.7 -0.9**
comp=Z,3.9nm,0.5s
**KBA Koelnbreinsper 149.70 345** *i* PKP **PKPbc** **08 24 18.8 -1.3**
comp=Z,4.0nm,0.5s
**WATA Walderalm 149.87 347** *e*PKP **PKPbc** **08 24 19.7 -0.8**
comp=Z,5.9nm,0.6s
**RETA Reutte 149.89 348** *e*PKP **PKPbc** **08 24 19.9 -0.5**
comp=Z,2.4nm,0.6s
**WTTA Wattenberg 149.93 347** *e*PKP **PKPbc** **08 24 20.2 -0.4**
comp=Z,12nm,0.5s,SNR=8.5
**MOTA Moosalm 149.96 348** *i* PKP **PKPbc** **08 24 19.8 -0.8**
comp=Z,4.0nm,0.8s
**MYKA Terra Mystica 150.04 344** *i* PKP **PKPbc** **08 24 19.3 -1.4**
comp=Z,7.1nm,0.6s
**SQTA Sankt Quirin 150.06 347** *i* PKP **PKPbc** **08 24 20.4 -0.5**
comp=Z,5.6nm,0.6s
**ABTA Abfaltersbach 150.21 345** *e*PKP **PKPbc** **08 24 19.8 -1.4**
comp=Z,6.5nm,0.6s,SNR=8.7
**DAVA Damuels 150.25 349** *e*PKP **PKPbc** **08 24 20.9 -0.5**
comp=Z,3.8nm,0.5s,SNR=5.7
**FETA Feichten 150.35 348** *i* PKP **PKPbc** **08 24 21.1 -0.5**
comp=Z,3.7nm,0.6s
**DAVOX Davos/Dischmat 150.74 349** PKPbc **PKPbc** **08 24 22.5 0.0**
comp=Z,12nm,0.6s,baz=0.0,slow=6.1,SNR=31
**FUORN Ofenpass-Fuorn 150.82 348** PKPdf **PKPdf** **08 24 15.9 -0.7**
FUORN **PKPbc** **08 24 23.0 +0.1**
FUORN PKPab **PKPab** **08 24 30.1 -2.7**
**FNA Florina 151.98 328** **PKPbc** **08 24 24.4 -0.9**
**ESDC Sonseca Array 157.96 12** PKPab **PKPab** **08 25 02.4 -0.9**
comp=Z,1.5nm,1.0s,baz=343,slow=4.1,SNR=5.7

*IDC **19** 08:10:46.0±9.9, 18°.03S×178°.72W, h622km±134km, mb2.8/5, mbtmp3.9/6, Error ellipse: s-maj=128.6km s-min=43.0km az=156.0*
**ISC 19 08:10:42.8±1.6, 18°.0S±0°.9×178°.6W±0°.5, h579km, n6, σ1s09/6, mb3.4/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.64** | **251** | P | | **P** | **P** | **08 13 49.6** | **+1.3** |
| | 3.1nm,0.9s,baz=76,slow=19,SNR=2.6 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.45** | **241** | P | | **P** | **P** | **08 17 15.7** | **-0.4** |
| | 1.3nm,0.5s,baz=86,slow=14,SNR=1.4 | | | | | | | | |
| | 1.3nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.45** | **260** | P | | **P** | **P** | **08 18 02.5** | **-1.2** |
| | 0.6nm,0.5s,baz=96,slow=6.9,SNR=8.5 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.61** | **254** | P | | **P** | **P** | **08 18 04.4** | **-0.5** |
| | 4.4nm,0.6s,baz=89,slow=9.6,SNR=33 | | | | | | | | |
| | 4.4nm,0.6s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.59** | **44** | P | | **P** | **P** | **08 21 51.3** | **+0.3** |
| | 0.2nm,0.6s,baz=234,slow=7.4,SNR=1.4 | | | | | | | | |
| | 0.2nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.18** | **58** | P | | **P** | **P** | **08 22 23.8** | **-0.1** |
| | 0.4nm,0.8s,baz=210,slow=5.2,SNR=3.4 | | | | | | | | |
| | 0.4nm,0.8s | | | | | | | | |

*IDC **19** 08:11:12.9±6.0, 18°.24S×178°.25W, h553km±75km, mb3.1/8, mbtmp4.0/9, Error ellipse: s-maj=31.8km s-min=25.8km az=3.0*
**ISC 19 08:11:12.7±0.9, 18°.2S±0°.2×178°.2W±0°.1, h550km, n10, σ0s87/10, mb3.4/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.90** | **253** | P | | **P** | **P** | **08 14 22.7** | **+1.4** |
| | 1.4nm,0.7s,baz=75,slow=20,SNR=1.6 | | | | | | | | |
| **URZ** | **Urewera** | **20.36** | **191** | P | | **P** | **P** | **08 15 11.0** | **-0.9** |
| | 6.5nm,1.0s,baz=0.0,slow=19,SNR=1.5 | | | | | | | | |
| | 6.5nm,1.0s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.58** | **261** | P | | **P** | **P** | **08 17 07.6** | **-0.3** |
| | 0.1nm,0.4s,baz=90,slow=7.1,SNR=1.5 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.64** | **242** | P | | **P** | **P** | **08 17 48.7** | **-0.7** |
| | 3.2nm,0.9s,baz=72,slow=3.2,SNR=3.4 | | | | | | | | |
| | 3.2nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.76** | **260** | P | | **P** | **P** | **08 18 37.0** | **-0.8** |
| | 0.8nm,0.5s,baz=97,slow=6.9,SNR=11 | | | | | | | | |
| | 0.8nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.88** | **255** | P | | **P** | **P** | **08 18 38.6** | **-0.2** |
| | 6.1nm,0.5s,baz=89,slow=9.0,SNR=38 | | | | | | | | |
| | 6.1nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | | **P** | **P** | **08 21 40.7** | **+1.0** |
| | 2.2nm,1.2s,baz=47,slow=4.5,SNR=2.7 | | | | | | | | |
| | 2.2nm,1.2s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.53** | **44** | P | | **P** | **P** | **08 22 23.5** | **+0.4** |
| | 0.5nm,0.7s,baz=229,slow=8.2,SNR=5.4 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.01** | **58** | P | | **P** | **P** | **08 22 55.7** | **0.0** |
| | 0.4nm,0.7s,baz=238,slow=5.2,SNR=5.1 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.46** | **43** | P | | **P** | **P** | **08 23 01.8** | **-0.5** |
| | 0.1nm,0.3s,baz=244,slow=5.8,SNR=2.0 | | | | | | | | |
| | 0.1nm,0.3s | | | | | | | | |

*IDC **19** 08:12:49.9±8.6, 17°.94S×178°.23W, h608km±82km, mb3.0/6, mbtmp4.0/7, Error ellipse: s-maj=88.1km s-min=36.5km az=118.0*
**ISC 19 08:12:48.3±2.4, 18°.0S±0°.4×178°.0W±0°.4, h600km, n8, σ0s54/10, mb3.7/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | | **P** | **P** | **08 15 58.6** | **+0.7** |
| | 1.5nm,0.6s,baz=74,slow=18,SNR=1.8 | | | | | | | | |
| **CTA** | **Charters Tower** | **33.79** | **261** | P | | **P** | **P** | **08 18 41.9** | **-0.4** |
| | 0.4nm,0.9s,baz=90,slow=8.1,SNR=4.3 | | | | | | | | |
| | 0.4nm,0.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.89** | **241** | P | | **P** | **P** | **08 19 24.3** | **+0.4** |
| | 2.0nm,0.5s,baz=84,slow=9.2,SNR=5.9 | | | | | | | | |
| | 2.0nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | | **P** | **P** | **08 20 11.0** | **-0.8** |
| | 2.0nm,0.5s,baz=95,slow=7.1,SNR=33 | | | | | | | | |
| WRA | | | | | PcP | | **PcP** | **08 21 39.6** | **-0.2** |
| | 0.3nm,0.6s,baz=90,slow=4.2,SNR=1.8 | | | | | | | | |
| | 2.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.11** | **254** | P | | **P** | **P** | **08 20 12.5** | **-0.3** |
| | 4.4nm,0.4s,baz=88,slow=8.5,SNR=27 | | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **08 21 40.1** | **-0.2** |
| | 0.5nm,0.4s,baz=106,slow=3.9,SNR=5.4 | | | | | | | | |
| | 4.4nm,0.4s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.22** | **323** | P | | **P** | **P** | **08 22 50.7** | **+0.4** |
| | 1.1nm,0.7s,baz=152,slow=7.1,SNR=2.4 | | | | | | | | |
| | 1.1nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | | **P** | **P** | **08 24 25.1** | **-0.2** |
| | 0.2nm,0.4s,baz=224,slow=5.0,SNR=2.5 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.13** | **315** | PKP | | **PKPbc** | **P** | **08 31 20.3** | **+0.4** |
| | 0.4nm,0.5s,baz=62,slow=3.3,SNR=2.4 | | | | | | | | |

*IDC **19** 08:13:29.0±8.9, 17°.95S×178°.18W, h588km±82km, mb2.9/4, mbtmp3.8/5, Error ellipse: s-maj=98.2km s-min=38.9km az=123.0*
**ISC 19 08:13:27.8±2.8, 18°.1S±0°.5×178°.0W±0°.5, h590km, n6, σ0s29/8, mb3.4/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.17** | **252** | P | | **P** | **P** | **08 16 38.4** | **+0.4** |
| | 1.9nm,0.9s,baz=81,slow=15,SNR=1.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.02** | **260** | P | | **P** | **P** | **08 20 51.8** | **-0.5** |
| | 0.6nm,0.5s,baz=95,slow=7.0,SNR=6.6 | | | | | | | | |
| WRA | | | | | PcP | | **PcP** | **08 22 20.5** | **+0.1** |
| | 0.3nm,0.8s,baz=97,slow=1.9,SNR=1.5 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.15** | **254** | P | | **P** | **P** | **08 20 53.2** | **0.0** |
| | 1.3nm,0.6s,baz=87,slow=8.6,SNR=5.4 | | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **08 22 20.8** | **-0.2** |
| | 0.2nm,0.4s,baz=103,slow=4.0,SNR=2.1 | | | | | | | | |
| | 1.3nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.29** | **323** | P | | **P** | **P** | **08 23 31.1** | **0.0** |
| | 0.5nm,0.4s,baz=134,slow=7.0,SNR=1.6 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.95** | **13** | P | | **P** | **P** | **08 25 05.9** | **0.0** |
| | 0.2nm,0.4s,baz=220,slow=4.8,SNR=1.9 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.20** | **315** | PKP | | **PKPab** | **P** | **08 32 02.0** | **+0.2** |
| | 0.5nm,0.6s,baz=77,slow=2.7,SNR=2.3 | | | | | | | | |

*NOU **19** 08:17:38.9, 17°.79S×177°.58W, h570km, mb4.9/50, Fiji Islands Region*
*NEIC **19** 08:17:42.6±1.8, 18°.13S±0°.08×178°.26W±0°.09, h541km±6km, mb4.9/476, Error ellipse: s-maj=13.6km s-min=10.6km az=121.0*
*MOS **19** 08:17:43.4±1.6, 17°.99S×178°.34W, h559km, mb5.0/27, Error ellipse: s-maj=9.7km s-min=8.6km az=131.7*
*IDC **19** 08:17:44.4±1.5, 18°.08S×178°.32W, h574km±17km, mb4.4/27, mbtmp5.3/29, Error ellipse: s-maj=11.0km s-min=7.8km az=151.0*
**ISC 19 08:17:43.4±0.4, 18°.16S±0°.04×178°.22W±0°.05, h565km±4km, h567km:pP-P, n1185, σ1s05/1003, mb4.9/317, 89C-54D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.57** | **276** | P | | **P** | **P** | **08 19 04.5** | **+1.1** |
| **MSVF** | **Nonsavu** | **3.57** | **276** | P | | **P** | **P** | **08 19 04.9** | **+1.4** |
| **MSVF** | **Nonsavu** | **3.57** | **276** | *d*P | | **P** | **P** | **08 19 04.2** | **+0.8** |
| **AFI** | **Afiamalu** | **7.50** | **57** | | | **P** | **P** | **08 19 35.0** | **-1.9** |
| **AFI** | **Afiamalu** | **7.50** | **57** | P | | **P** | **P** | **08 19 35.0** | **-1.9** |
| **NIUE** | **Niue** | **7.92** | **98** | P | | **P** | **P** | **08 19 41.1** | **+0.3** |
| **NIUE** | **Niue** | **7.92** | **98** | | | **P** | **P** | **08 19 41.1** | **+0.3** |
| **FUNA** | **Funafuti** | **9.90** | **345** | P | | **P** | **P** | **08 19 58.7** | **-1.9** |
| **FUNA** | **Funafuti** | **9.90** | **345** | | | **P** | **P** | **08 19 59.1** | **-1.5** |
| **RAO** | **Raoul Island** | **11.05** | **179** | P | | **P** | **P** | **08 20 11.3** | **-0.8** |
| **RAO** | **Raoul Island** | **11.05** | **179** | S | | **S** | **S** | **08 22 12.8** | **-1.6** |
| | 229nm,0.4s,baz=287,slow=19,SNR=7.5 | | | | | | | | |
| **RAO** | **Raoul Island** | **11.05** | **179** | P | | **P** | **P** | **08 20 11.3** | **-0.8** |
| **GLKZ** | **Green Lake** | **11.06** | **179** | P | | **P** | **P** | **08 20 10.4** | **-1.7** |
| GLKZ | | | | S | | **S** | **S** | **08 22 11.7** | **-2.9** |
| **RTV** | **Rentapao** | **12.71** | **270** | P | | **P** | **P** | **08 20 31.2** | **+1.9** |
| **RTV** | **Rentapao** | **12.71** | **270** | P | | **P** | **P** | **08 20 29.1** | **-0.2** |
| **DVP** | **Devils Point** | **12.94** | **270** | P | | **P** | **P** | **08 20 32.5** | **+0.8** |
| **LIFNC** | **LIFOU** | **13.96** | **257** | P | | **P** | **P** | **08 20 40.9** | **-1.2** |
| **LIFNC** | **LIFOU** | **13.96** | **257** | P | | **P** | **P** | **08 20 40.4** | **-1.7** |
| **PINNC** | **Pines Island,** | **14.15** | **249** | P | | **P** | **P** | **08 20 44.2** | **+0.2** |
| **PINNC** | **Pines Island,** | **14.15** | **249** | P | | **P** | **P** | **08 20 43.4** | **-0.6** |
| **YATNC** | **Mamie plateau,** | **14.51** | **252** | P | | **P** | **P** | **08 20 48.0** | **+0.3** |
| **DZM** | **Mont Dzumac** | **14.92** | **252** | P | | **P** | **P** | **08 20 51.6** | **-0.2** |
| **DZM** | **Mont Dzumac** | **14.92** | **252** | P | | **P** | **P** | **08 20 51.3** | **-0.6** |
| **DZM** | **Mont Dzumac** | **14.92** | **252** | P | | **P** | **P** | **08 20 50.5** | **-1.3** |
| | 13nm,0.9s,baz=78,slow=20,SNR=26 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.05** | **252** | P | | **P** | **P** | **08 20 53.0** | **-0.1** |
| **KOUNC** | **Koumac, New Ca** | **16.68** | **259** | P | | **P** | **P** | **08 21 09.3** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **16.68** | **259** | P | | **P** | **P** | **08 21 09.4** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **16.68** | **259** | P | | **P** | **P** | **08 21 09.4** | **+0.8** |
| **RAR** | **Rarotonga** | **17.64** | **103** | P | | **P** | **P** | **08 21 18.4** | **+1.2** |
| **RAR** | **Rarotonga** | **17.64** | **103** | P | | **P** | **P** | **08 21 17.8** | **+0.6** |
| **RAR** | **Rarotonga** | **17.64** | **103** | P | | **P** | **P** | **08 21 18.1** | **+0.8** |
| | 118nm,0.7s,baz=251,slow=4.3,SNR=8.2 | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RAR | **Rarotonga** | **17.64** | 103 | P | **P** | **08 21 17.8** | **+0.6** |
| RAR | | | | pmax | pmax | | | |
| | comp=Z,185nm,0.9s | | | | | | | |
| **OUZ** | **Omahuta** | **18.49** | 202 | P | **P** | **08 21 25.8** | **+1.0** |
| **OUZ** | **Omahuta** | **18.49** | 202 | P | **P** | **08 21 27.8** | **+3.0** |
| **GRZ** | **Great Barrier** | **18.87** | 196 | P | **P** | **08 21 29.9** | **+1.7** |
| **WCZ** | **Waipu Caves** | **18.90** | 199 | P | **P** | **08 21 31.1** | **+2.6** |
| **KUZ** | **Kuaotunu** | **19.27** | 195 | P | **P** | **08 21 34.0** | **+2.1** |
| **KUZ** | **Kuaotunu** | **19.27** | 195 | P | **P** | **08 21 33.8** | **+1.9** |
| **KUZ** | **Kuaotunu** | **19.27** | 195 | P | **P** | **08 21 33.6** | **+1.7** |
| **WIAZ** | **Waiheke Island** | **19.47** | 196 | P | **P** | **08 21 35.8** | **+2.1** |
| **MBAZ** | **Motutapu North** | **19.51** | 197 | P | **P** | **08 21 36.4** | **+2.4** |
| **MXZ** | **Matakaoa Point** | **19.57** | 188 | P | **P** | **08 21 33.4** | **-1.2** |
| **MXZ** | **Matakaoa Point** | **19.57** | 188 | P | **P** | **08 21 34.1** | **-0.6** |
| MXZ | | | | S | **S** | **08 24 44.9** | **+2.8** |
| **ETAZ** | **East Tamaki Re** | **19.67** | 196 | P | **P** | **08 21 37.8** | **+2.3** |
| **HAZ** | **Te Kaha** | **19.84** | 189 | P | **P** | **08 21 36.4** | **-0.7** |
| HAZ | | | | S | **S** | **08 24 40.3** | **-6.0** |
| **PKGZ** | **Pakihiroa** | **19.90** | 189 | P | **P** | **08 21 37.0** | **-0.6** |
| PKGZ | | | | S | **S** | **08 24 46.3** | **-1.2** |
| **TOZ** | **Tahuroa Road** | **20.26** | 194 | P | **P** | **08 21 42.6** | **+1.7** |
| TOZ | | | | IAmb | IAmb | 08 21 43.4 | | |
| | comp=Z,44nm,0.9s | | | | | | | |
| **URZ** | **Urewera** | **20.44** | 191 | P | **P** | **08 21 41.0** | **-1.5** |
| **URZ** | **Urewera** | **20.44** | 191 | P | **P** | **08 21 41.2** | **-1.3** |
| **URZ** | **Urewera** | **20.44** | 191 | P | **P** | **08 21 40.0** | **-2.5** |
| | comp=Z,55nm,0.5s,baz=13,slow=3.5,SNR=50 | | | | | | | |
| URZ | | | | S | **S** | **08 24 50.8** | **-5.1** |
| | comp=Z,15nm,0.9s,baz=335,slow=8.9,SNR=3.7 | | | | | | | |
| **URZ** | **Urewera** | **20.44** | 191 | P | **P** | **08 21 39.9** | **-2.6** |
| URZ | | | | S | **S** | **08 24 51.8** | **-4.2** |
| **RTZ** | **Ruatahuna** | **20.81** | 191 | P | **P** | **08 21 44.9** | **-1.0** |
| RTZ | | | | IAmb | IAmb | 08 21 45.6 | | |
| | comp=Z,40nm,0.9s | | | | | | | |
| **HIZ** | **Hauiti** | **21.16** | 195 | P | **P** | **08 21 49.3** | **+0.3** |
| **TARA** | **Tarawa** | **21.26** | 335 | P | **P** | **08 21 49.1** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **21.43** | 191 | P | **P** | **08 21 51.4** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **21.43** | 191 | P | **P** | **08 21 49.7** | **-1.8** |
| **BFZ** | **Birch Farm** | **22.95** | 191 | P | **P** | **08 22 04.1** | **-0.9** |
| **BFZ** | **Birch Farm** | **22.95** | 191 | P | **P** | **08 22 04.6** | **-0.4** |
| **BFZ** | **Birch Farm** | **22.95** | 191 | P | **P** | **08 22 04.0** | **-1.0** |
| BFZ | | | | IAmb | IAmb | 08 22 06.0 | | |
| | comp=Z,32nm,1.0s | | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.05** | 192 | P | **P** | **08 22 04.1** | **-1.8** |
| MRZ | | | | IAmb | IAmb | 08 22 05.7 | | |
| | comp=Z,27nm,0.6s | | | | | | | |
| **MSWZ** | **Moikau Station** | **23.85** | 192 | P | **P** | **08 22 12.1** | **-0.9** |
| **SNZO** | **South Karori** | **23.86** | 193 | P | **P** | **08 22 12.8** | **-0.2** |
| **SNZO** | **South Karori** | **23.86** | 193 | P | **P** | **08 22 12.5** | **-0.5** |
| **SNZO** | **South Karori** | **23.86** | 193 | P | **P** | **08 22 12.0** | **-1.0** |
| **TCW** | **Tory Channel** | **23.86** | 194 | P | **P** | **08 22 12.4** | **-0.6** |
| **BHW** | **Baring Head** | **23.92** | 193 | | **P** | **08 22 12.8** | **-0.8** |
| **QRZ** | **Quartz Range** | **23.95** | 197 | P | **P** | **08 22 14.5** | **+0.6** |
| **QRZ** | **Quartz Range** | **23.95** | 197 | | **P** | **08 22 14.7** | **+0.8** |
| QRZ | | | | IAmb | IAmb | 08 22 15.2 | | |
| | comp=Z,39nm,0.7s | | | | | | | |
| **THZ** | **Tophouse** | **24.72** | 196 | | **P** | **08 22 21.0** | **+0.2** |
| THZ | | | | IAmb | IAmb | 08 22 25.6 | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **KHZ** | **Kahutara** | **25.18** | 194 | P | **P** | **08 22 23.8** | **-0.9** |
| **KHZ** | **Kahutara** | **25.18** | 194 | | **P** | **08 22 23.6** | **-1.1** |
| KHZ | | | | IAmb | IAmb | 08 22 25.9 | | |
| | comp=Z,44nm,0.8s | | | | | | | |
| **CTZ** | **Chatham Island** | **25.54** | 177 | P | **P** | **08 22 25.0** | **-2.8** |
| **LTZ** | **Lake Taylor** | **25.84** | 196 | IAmb | IAmb | 08 22 33.2 | | |
| | comp=Z,42nm,0.8s | | | | | | | |
| **OXZ** | **Oxford** | **26.41** | 196 | IAmb | IAmb | 08 22 37.0 | | |
| | comp=Z,34nm,0.8s | | | | | | | |
| **RPZ** | **Rata Peaks** | **27.04** | 197 | P | **P** | **08 22 40.7** | **-0.4** |
| **RPZ** | **Rata Peaks** | **27.04** | 197 | IAmb | IAmb | 08 22 47.6 | | |
| | comp=Z,21nm,0.6s | | | | | | | |
| **RPZ** | **Rata Peaks** | **27.04** | 197 | P | **P** | **08 22 41.2** | **+0.1** |
| | comp=Z,12nm,0.6s,baz=18,slow=6.1,SNR=11 | | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **PPT** | **Papeete** | **27.26** | 93 | P | **P** | **08 22 43.9** | **+0.6** |
| | comp=Z,93nm,0.6s,baz=148,slow=5.8,SNR=25 | | | | | | | |
| | comp=Z,93nm,0.6s | | | | | | | |
| **PPT** | **Papeete** | **27.26** | 93 | P | **P** | **08 22 44.0** | **+0.6** |
| **PPTF** | **Pamatai, Papee** | **27.27** | 93 | P | **P** | **08 22 44.5** | **+1.0** |
| **PPTF** | **Pamatai, Papee** | **27.27** | 93 | P | **P** | **08 22 44.3** | **+0.8** |
| **LBZ** | **Lake Benmore** | **27.90** | 198 | IAmb | IAmb | 08 22 52.0 | | |
| | comp=Z,42nm,0.9s | | | | | | | |
| **JCZ** | **Jackson Bay** | **28.06** | 200 | P | **P** | **08 22 51.2** | **+1.2** |
| **ODZ** | **Otahua Downs** | **28.38** | 197 | P | **P** | **08 22 52.1** | **-0.6** |
| **WKZ** | **Wanaka** | **28.66** | 199 | IAmb | IAmb | 08 23 11.0 | | |
| | comp=Z,44nm,0.8s | | | | | | | |
| **EIDS** | **Eidsvold** | **29.35** | 250 | P | **P** | **08 23 01.9** | **+0.4** |
| **EIDS** | **Eidsvold** | **29.35** | 250 | P | **P** | **08 23 01.6** | **+0.1** |
| **EIDS** | **Eidsvold** | **29.35** | 250 | P | **P** | **08 23 00.9** | **-0.6** |
| | comp=Z,19nm,1.0s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.42** | 200 | IAmb | IAmb | 08 23 03.7 | | |
| | comp=Z,37nm,0.7s | | | | | | | |
| **DCZ** | **Deep Cove** | **29.83** | 201 | P | **P** | **08 23 05.9** | **+0.7** |
| DCZ | | | | IAmb | IAmb | 08 23 06.9 | | |
| | comp=Z,34nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **29.97** | 240 | P | **P** | **08 23 08.7** | **+1.8** |
| **ARMA** | **Armidale** | **29.97** | 240 | P | **P** | **08 23 08.3** | **+1.4** |
| **SYZ** | **Scrubby Hill** | **30.17** | 197 | P | **P** | **08 23 07.4** | **-0.7** |
| **AULRC** | **Lightning Ridg** | **32.78** | 244 | P | **P** | **08 23 32.1** | **+1.4** |
| **TV1H** | **Townsville Har** | **33.12** | 262 | P | **P** | **08 23 33.8** | **+0.1** |
| **CNB** | **Canberra Magne** | **33.42** | 233 | P | **P** | **08 23 37.1** | **+1.0** |
| **CTA** | **Charters Tower** | **33.58** | 261 | P | **P** | **08 23 37.4** | **-0.2** |
| | comp=Z,2.2nm,0.6s,baz=94,slow=11,SNR=53 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.58** | 261 | P | **P** | **08 23 37.9** | **+0.3** |
| **CTAO** | **Charters Tower** | **33.58** | 261 | P | **P** | **08 23 38.7** | **+1.1** |
| **CTAO** | **Charters Tower** | **33.58** | 261 | | **P** | **08 23 37.8** | **+0.2** |
| CTAO | | | | IAmb | IAmb | 08 23 38.5 | | |
| | comp=Z,34nm,0.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.58** | 261 | P | **P** | **08 23 37.8** | **+0.2** |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.58** | 261 | P | **P** | **08 23 37.6** | **0.0** |
| CTAO | | | | PcP | **PcP** | **08 26 01.3** | **-0.1** |
| **CAN** | **Canberra** | **33.70** | 233 | P | **P** | **08 23 40.0** | **+1.6** |
| CAN | | | | IAmb | IAmb | 08 23 57.8 | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **CAN** | **Canberra** | **33.70** | 233 | P | **P** | **08 23 40.0** | **+1.6** |
| CAN | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **PATS** | **Pohnpei** | **33.96** | 315 | P | **P** | **08 23 41.3** | **+0.6** |
| **PMG** | **Port Moresby** | **34.67** | 280 | P | **P** | **08 23 47.4** | **+0.6** |
| **PMG** | **Port Moresby** | **34.67** | 280 | P | **P** | **08 23 47.6** | **+0.8** |
| **PMG** | **Port Moresby** | **34.67** | 280 | P | **P** | **08 23 47.9** | **+1.1** |
| **PMG** | **Port Moresby** | **34.67** | 280 | | **P** | **08 23 47.9** | **+1.1** |
| **PMG** | **Port Moresby** | **34.67** | 280 | *d* iP | **P** | **08 23 46.9** | **+0.1** |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,84nm,0.8s | | | | | | | |
| **PMG** | **Port Moresby** | **34.67** | 280 | P | **P** | **08 23 47.4** | **+0.6** |
| **CMSA** | **Cobar Meteorol** | **35.18** | 241 | P | **P** | **08 23 51.7** | **+0.9** |
| **CMSA** | **Cobar Meteorol** | **35.18** | 241 | P | **P** | **08 23 52.1** | **+1.3** |
| **CMSA** | **Cobar Meteorol** | **35.18** | 241 | P | **P** | **08 23 51.2** | **+0.4** |
| | comp=Z,30nm,0.9s | | | | | | | |
| **MTSU** | **Mount Surprise** | **35.56** | 264 | P | **P** | **08 23 54.5** | **+0.4** |
| **QLP** | **Quilpie** | **35.61** | 250 | P | **P** | **08 23 55.5** | **+1.1** |
| **QLP** | **Quilpie** | **35.61** | 250 | P | **P** | **08 23 55.2** | **+0.8** |
| **QLP** | **Quilpie** | **35.61** | 250 | P | **P** | **08 23 54.2** | **-0.3** |
| | comp=Z,100nm,0.9s | | | | | | | |
| **JOHN** | **Johnston Islan** | **35.71** | 14 | P | **P** | **08 23 55.2** | **0.0** |
| **JOHN** | **Johnston Islan** | **35.71** | 14 | P | **P** | **08 23 55.0** | **-0.2** |
| **TOO** | **Toolangi** | **37.15** | 231 | P | **P** | **08 24 08.0** | **+1.0** |
| **TOO** | **Toolangi** | **37.15** | 231 | P | **P** | **08 24 09.0** | **+2.0** |
| TOO | | | | IAmb | IAmb | 08 24 13.3 | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **TOO** | **Toolangi** | **37.15** | 231 | P | **P** | **08 24 09.0** | **+2.0** |
| TOO | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **37.28** | 271 | P | **P** | **08 24 07.3** | **-1.0** |
| **COEN** | **Coen** | **37.28** | 271 | P | **P** | **08 24 09.3** | **+1.0** |
| **COEN** | **Coen** | **37.28** | 271 | P | **P** | **08 24 09.1** | **+0.8** |
| **COEN** | **Coen** | **37.28** | 271 | P | **P** | **08 24 08.4** | **+0.1** |
| | comp=Z,75nm,0.8s | | | | | | | |
| **MANU** | **Manus Island** | **37.35** | 291 | P | **P** | **08 24 09.5** | **+0.6** |
| **TAOE** | **Nuku Hiva Isla** | **38.09** | 81 | P | **P** | **08 24 15.8** | **+0.8** |
| **TAOE** | **Nuku Hiva Isla** | **38.09** | 81 | P | **P** | **08 24 15.9** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.67** | 241 | P | **P** | **08 24 20.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.67** | 241 | P | **P** | **08 24 20.8** | **+1.5** |
| **STKA** | **Stephens Creek** | **38.67** | 241 | P | **P** | **08 24 20.9** | **+1.5** |
| **STKA** | **Stephens Creek** | **38.67** | 241 | P | **P** | **08 24 19.7** | **+0.3** |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.67** | 241 | P | **P** | **08 24 20.4** | **+1.1** |
| | comp=Z,29nm,0.8s,baz=83,slow=9.6,SNR=38 | | | | | | | |
| | comp=Z,29nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.67** | 241 | P | **P** | **08 24 20.9** | **+1.6** |
| STKA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **INKA** | **Innaminka** | **38.82** | 248 | P | **P** | **08 24 22.4** | **+1.8** |
| **INKA** | **Innaminka** | **38.82** | 248 | P | **P** | **08 24 22.2** | **+1.6** |
| **QIS** | **Mount Isa** | **39.78** | 259 | P | **P** | **08 24 28.0** | **-0.4** |
| **QIS** | **Mount Isa** | **39.78** | 259 | P | **P** | **08 24 28.1** | **-0.4** |
| **QIS** | **Mount Isa** | **39.78** | 259 | P | **P** | **08 24 27.5** | **-1.0** |
| | comp=Z,7.9nm,0.7s | | | | | | | |
| **WAKE** | **Wake Island** | **40.06** | 337 | P | **P** | **08 24 31.5** | **+0.9** |
| **WAKE** | **Wake Island** | **40.06** | 337 | P | **P** | **08 24 29.7** | **-0.9** |
| **WAKE** | **Wake Island** | **40.06** | 337 | P | **P** | **08 24 29.8** | **-0.8** |
| **H11N3** | **WAKE ISLAND Hy** | **40.37** | 338 | P | **P** | **08 24 31.8** | **-1.0** |
| | baz=173,slow=10,SNR=6.4 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.37** | 338 | P | **P** | **08 24 31.8** | **-1.0** |
| | baz=173,slow=10,SNR=5.2 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.38** | 338 | P | **P** | **08 24 32.0** | **-1.0** |
| | baz=173,slow=10,SNR=3.7 | | | | | | | |
| **HTT** | **Hallett** | **41.17** | 240 | P | **P** | **08 24 40.1** | **+0.7** |
| **HTT** | **Hallett** | **41.17** | 240 | P | **P** | **08 24 41.2** | **+1.8** |
| **HTT** | **Hallett** | **41.17** | 240 | P | **P** | **08 24 39.7** | **+0.2** |
| **LCRK** | **Leigh Creek** | **41.31** | 244 | P | **P** | **08 24 41.2** | **+0.8** |
| **LCRK** | **Leigh Creek** | **41.31** | 244 | P | **P** | **08 24 41.3** | **+0.8** |
| **TABU** | **Tabubil** | **41.61** | 283 | P | **P** | **08 24 44.2** | **+1.1** |
| **WHYH** | **Whyalla** | **42.22** | 241 | P | **P** | **08 24 48.2** | **+0.7** |
| **OOD** | **Oodnadatta** | **43.29** | 249 | P | **P** | **08 24 57.5** | **+1.4** |
| **OOD** | **Oodnadatta** | **43.29** | 249 | P | **P** | **08 24 57.4** | **+1.4** |
| **BBOO** | **Buckleboo** | **43.44** | 241 | P | **P** | **08 24 57.6** | **+0.5** |
| **BBOO** | **Buckleboo** | **43.44** | 241 | P | **P** | **08 24 57.3** | **+0.1** |
| | comp=Z,53nm,1.2s | | | | | | | |
| **GENI** | **Genyem** | **43.60** | 286 | P | **P** | **08 25 00.7** | **+2.1** |
| **POHA** | **Pohakuloa** | **43.77** | 32 | P | **P** | **08 25 00.4** | **+0.4** |
| **KIP** | **Kipapa** | **44.03** | 28 | P | **P** | **08 25 03.0** | **+1.2** |
| **KIP** | **Kipapa** | **44.03** | 28 | P | **P** | **08 25 01.8** | **+0.1** |
| **WR0** | **Warramunga Arr** | **44.57** | 260 | P | **P** | **08 25 05.9** | **-0.2** |
| **WB0** | **Warramunga Arr** | **44.73** | 260 | P | **P** | **08 25 07.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 08 25 07.5 | | |
| | comp=Z,36nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.75** | 260 | P | **P** | **08 25 07.1** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 08 25 07.8 | | |
| | comp=Z,36nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.75** | 260 | *d* iP | **P** | **08 25 06.4** | **-1.0** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,27nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.76** | 260 | P | **P** | **08 25 07.2** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.76** | 260 | P | **P** | **08 25 06.7** | **-0.9** |
| | comp=Z,27nm,0.7s,baz=96,slow=7.0,SNR=266 | | | | | | | |
| WRA | | | | PcP | **PcP** | **08 26 37.5** | **0.0** |
| | comp=Z,7.1nm,0.8s,baz=93,slow=2.7,SNR=7.1 | | | | | | | |
| WRA | | | | S | **S** | **08 31 01.4** | **-2.7** |
| | comp=Z,3.5nm,0.9s,baz=100,slow=12,SNR=4.9 | | | | | | | |
| | comp=Z,27nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.76** | 260 | P | **P** | **08 25 07.2** | **-0.3** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **AS01** | **Alice Springs** | **44.85** | 254 | P | **P** | **08 25 08.3** | **+0.1** |
| **MULG** | **Mulgathing** | **44.87** | 245 | P | **P** | **08 25 08.6** | **+0.4** |
| **AS31** | **Alice Springs** | **44.89** | 254 | P | **P** | **08 25 08.8** | **+0.3** |
| **AS31** | **Alice Springs** | **44.89** | 254 | P | **P** | **08 25 08.2** | **-0.3** |
| | comp=Z,71nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.90** | 254 | P | **P** | **08 25 09.1** | **+0.6** |
| **ASAR** | **Alice Springs** | **44.90** | 254 | P | **P** | **08 25 08.5** | **0.0** |
| | comp=Z,165nm,0.6s,baz=88,slow=8.5,SNR=1409 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 26 38.1** | **+0.2** |
| | comp=Z,8.2nm,0.7s,baz=90,slow=3.9,SNR=6.5 | | | | | | | |
| ASAR | | | | S | **S** | **08 31 03.9** | **-2.1** |
| | comp=Z,12nm,0.9s,baz=89,slow=16,SNR=34 | | | | | | | |
| | comp=Z,165nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.90** | 254 | P | **P** | **08 25 09.1** | **+0.6** |
| **KDU** | **Kakadu** | **47.73** | 269 | P | **P** | **08 25 29.9** | **-0.1** |
| **KDU** | **Kakadu** | **47.73** | 269 | P | **P** | **08 25 30.1** | **+0.1** |
| **KDU** | **Kakadu** | **47.73** | 269 | P | **P** | **08 25 29.0** | **-0.9** |
| | comp=Z,73nm,0.9s | | | | | | | |
| **GUMO** | **Guam** | **48.17** | 308 | P | **P** | **08 25 33.3** | **+0.1** |
| **GUMO** | **Guam** | **48.17** | 308 | P | **P** | **08 25 33.3** | **+0.1** |
| GUMO | | | | pmax | pmax | | | |
| | comp=Z,252nm,0.8s | | | | | | | |
| **GUMO** | **Guam** | **48.17** | 308 | P | **P** | **08 25 33.2** | **+0.1** |
| **MTN** | **Manton Dam** | **48.97** | 269 | P | **P** | **08 25 39.1** | **-0.1** |
| **MTN** | **Manton Dam** | **48.97** | 269 | P | **P** | **08 25 38.9** | **-0.3** |
| MTN | | | | IAmb | IAmb | 08 25 39.3 | | |
| | comp=Z,52nm,0.8s | | | | | | | |
| **MTN** | **Manton Dam** | **48.97** | 269 | P | **P** | **08 25 38.6** | **-0.6** |
| | comp=Z,71nm,0.8s | | | | | | | |
| **DRS** | **Darwin Rock St** | **49.28** | 269 | P | **P** | **08 25 41.0** | **-0.5** |
| **DRS** | **Darwin Rock St** | **49.28** | 269 | P | **P** | **08 25 41.2** | **-0.3** |
| **WRKA** | **Warakurna** | **49.94** | 252 | P | **P** | **08 25 46.5** | **+0.2** |
| **WRKA** | **Warakurna** | **49.94** | 252 | P | **P** | **08 25 46.1** | **-0.2** |
| | comp=Z,106nm,0.9s | | | | | | | |
| **FORT** | **Forrest** | **50.06** | 245 | P | **P** | **08 25 47.0** | **0.0** |
| **FORT** | **Forrest** | **50.06** | 245 | P | **P** | **08 25 47.7** | **+0.7** |
| **FORT** | **Forrest** | **50.06** | 245 | P | **P** | **08 25 47.0** | **0.0** |
| FORT | | | | IAmb | IAmb | 08 25 47.5 | | |
| | comp=Z,48nm,0.7s | | | | | | | |
| **FORT** | **Forrest** | **50.06** | 245 | P | **P** | **08 25 46.4** | **-0.6** |
| | comp=Z,70nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **50.64** | 264 | P | **P** | **08 25 51.4** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 08 25 52.0 | | |
| | comp=Z,48nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **50.64** | 264 | P | **P** | **08 25 50.9** | **-0.5** |
| | comp=Z,75nm,0.8s | | | | | | | |
| **FAKI** | **Fak Fak** | **50.80** | 281 | P | **P** | **08 25 52.5** | **-0.1** |
| FAKI | | | | IAmb | IAmb | 08 26 00.4 | | |
| | comp=Z,29nm,0.9s | | | | | | | |
| **SWI** | **Sorong** | **52.47** | 283 | P | **P** | **08 26 04.6** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **53.16** | 261 | P | **P** | **08 26 10.0** | **+0.5** |
| **KMBL** | **Kambalda** | **55.36** | 244 | P | **P** | **08 26 24.1** | **-0.7** |
| | comp=Z,24nm,1.1s | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **55.49** | 199 | P | **P** | **08 26 25.7** | **+0.8** |
| DRV | | | | pP | **pwP** | **08 28 15.0** | **-0.4** |
| **NLAI** | **Namlea** | **55.51** | 279 | P | **P** | **08 26 26.1** | **+0.1** |
| | comp=Z,81nm,0.7s,comp=Z,1μm | | | | | | | |
| **SOEI** | **Soe** | **56.25** | 270 | P | **P** | **08 26 31.4** | **+0.1** |
| **SOEI** | **Soe** | **56.25** | 270 | P | **P** | **08 26 32.0** | **+0.7** |
| **SOEI** | **Soe** | **56.25** | 270 | P | **P** | **08 26 31.7** | **+0.4** |
| **SOEI** | **Soe** | **56.25** | 270 | P | **P** | **08 26 32.0** | **+0.7** |
| **TNTI** | **Ternate** | **56.69** | 283 | P | **P** | **08 26 34.7** | **+0.5** |
| **SANI** | **Sanana** | **56.96** | 280 | P | **P** | **08 26 36.2** | **+0.2** |
| **SANI** | **Sanana** | **56.96** | 280 | P | **P** | **08 26 34.9** | **-1.1** |
| | comp=Z,127nm,0.8s,comp=Z,1μm | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.02** | 256 | P | **P** | **08 26 42.7** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **58.02** | 256 | P | **P** | **08 26 42.7** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **58.02** | 256 | IAmb | IAmb | 08 26 43.7 | | |
| | comp=Z,38nm,0.8s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.02** | 256 | P | **P** | **08 26 42.4** | **-0.8** |
| | comp=Z,62nm,0.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **58.19** | 256 | P | **P** | **08 26 43.9** | **-0.3** |
| **MBWA** | **Marble Bar** | **58.19** | 256 | P | **P** | **08 26 44.0** | **-0.3** |
| **MBWA** | **Marble Bar** | **58.19** | 256 | P | **P** | **08 26 43.9** | **-0.3** |
| **MBWA** | **Marble Bar** | **58.19** | 256 | P | **P** | **08 26 43.8** | **-0.5** |
| | comp=Z,43nm,1.3s | | | | | | | |
| **MBWA** | **Marble Bar** | **58.19** | 256 | P | **P** | **08 26 43.8** | **-0.3** |
| MBWA | | | | pP | **pwP** | **08 28 36.4** | **-0.5** |
| **MEEK** | **Meekatharra** | **58.51** | 249 | P | **P** | **08 26 46.5** | **+0.1** |
| **MEEK** | **Meekatharra** | **58.51** | 249 | P | **P** | **08 26 46.3** | **-0.1** |
| **MEEK** | **Meekatharra** | **58.51** | 249 | P | **P** | **08 26 45.4** | **-1.1** |
| | comp=Z,39nm,1.4s | | | | | | | |
| **KLBR** | **Kellerberrin** | **58.88** | 244 | P | **P** | **08 26 48.0** | **-0.8** |
| **KLBR** | **Kellerberrin** | **58.88** | 244 | P | **P** | **08 26 49.1** | **+0.3** |
| **KLBR** | **Kellerberrin** | **58.88** | 244 | P | **P** | **08 26 48.2** | **-0.6** |
| | comp=Z,129nm,0.7s | | | | | | | |
| **EDFI** | **Ende, Flores** | **58.97** | 271 | P | **P** | **08 26 48.1** | **-1.6** |
| | comp=Z,67nm,0.9s,comp=Z,970nm | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.25** | 242 | P | **P** | **08 26 51.3** | **+0.1** |
| **NWAO** | **Narrogin (SRO)** | **59.25** | 242 | P | **P** | **08 26 51.6** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **59.25** | 242 | P | **P** | **08 26 51.6** | **+0.4** |
| NWAO | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.25** | 242 | P | **P** | **08 26 51.3** | **+0.1** |
| NWAO | | | | PcP | **PcP** | **08 27 32.5** | **+0.3** |
| **BLDU** | **Ballidu** | **59.84** | 245 | P | **P** | **08 26 55.0** | **-0.2** |
| **BLDU** | **Ballidu** | **59.84** | 245 | P | **P** | **08 26 55.4** | **+0.2** |
| **BLDU** | **Ballidu** | **59.84** | 245 | P | **P** | **08 26 54.4** | **-0.8** |
| | comp=Z,23nm,1.0s | | | | | | | |
| **MUN** | **Mundaring** | **60.17** | 243 | P | **P** | **08 26 56.2** | **-1.1** |
| **MUN** | **Mundaring** | **60.17** | 243 | P | **P** | **08 26 58.3** | **+1.0** |
| **MUN** | **Mundaring** | **60.17** | 243 | P | **P** | **08 26 57.1** | **-0.3** |
| | comp=Z,32nm,1.3s | | | | | | | |
| **LUWI** | **Luwuk** | **60.32** | 279 | P | **P** | **08 27 00.0** | **+1.4** |
| **LUWI** | **Luwuk** | **60.32** | 279 | P | **P** | **08 26 59.1** | **+0.5** |
| **LUWI** | **Luwuk** | **60.32** | 279 | P | **P** | **08 26 58.5** | **-0.1** |
| | comp=Z,156nm,1.0s,comp=Z,2μm | | | | | | | |
| **MORW** | **Morawa** | **60.54** | 246 | P | **P** | **08 26 58.7** | **-1.2** |
| **MORW** | **Morawa** | **60.54** | 246 | P | **P** | **08 26 59.9** | **0.0** |
| **MORW** | **Morawa** | **60.54** | 246 | P | **P** | **08 27 00.0** | **+0.2** |
| **MORW** | **Morawa** | **60.54** | 246 | P | **P** | **08 26 58.6** | **-1.2** |
| | comp=Z,25nm,0.9s | | | | | | | |
| **GTOI** | **Gorontalo** | **60.69** | 281 | P | **P** | **08 27 01.6** | **+0.6** |
| | comp=Z,36nm,0.9s | | | | | | | |
| **BNSI** | **Bone** | **61.74** | 275 | P | **P** | **08 27 07.3** | **-0.6** |
| | comp=Z,53nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **61.89** | 274 | P | **P** | **08 27 08.9** | **0.0** |
| **KAPI** | **Kappang** | **61.89** | 274 | P | **P** | **08 27 08.9** | **0.0** |
| KAPI | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **62.19** | 275 | P | **P** | **08 27 10.5** | **-0.4** |
| **TOLI2** | **Tolitoli** | **62.94** | 281 | P | **P** | **08 27 16.1** | **+0.5** |
| **TOLI2** | **Tolitoli** | **62.94** | 281 | P | **P** | **08 27 15.3** | **-0.3** |
| TOLI2 | | | | IAmb | IAmb | 08 27 16.3 | | |
| | comp=Z,25nm,0.8s | | | | | | | |
| **GIRL** | **Giralia** | **62.99** | 253 | P | **P** | **08 27 17.1** | **+1.2** |
| **TWSI** | **Taliwang, Sumb** | **63.54** | 269 | P | **P** | **08 27 18.9** | **-0.6** |
| | comp=Z,130nm,1.1s | | | | | | | |
| **CCD** | **Concordia, Ant** | **64.67** | 194 | P | **P** | **08 27 27.0** | **+0.9** |
| CCD | | | | pP | **pP** | **08 29 20.2** | **+1.6** |
| **JHJ2** | **Mitsune** | **64.85** | 322 | P | **P** | **08 27 27.6** | **+0.2** |
| **SRBI** | **Singaraja** | **65.31** | 269 | P | **P** | **08 27 29.9** | **-0.8** |
| | comp=Z,67nm,1.1s | | | | | | | |
| **CASY** | **Casey** | **65.99** | 205 | P | **P** | **08 27 34.5** | **+0.6** |
| CASY | | | | pP | **pwP** | **08 29 29.6** | **-1.0** |
| **JAGI** | **Jajag, Banyuwa** | **66.21** | 269 | P | **P** | **08 27 35.6** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **66.21** | 269 | P | **P** | **08 27 35.4** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **66.21** | 269 | P | **P** | **08 27 33.4** | **-2.9** |
| | comp=Z,111nm,0.8s | | | | | | | |
| **JMM** | **Marumori** | **67.74** | 326 | P | **P** | **08 27 45.6** | **+0.4** |
| **JMM** | **Marumori** | **67.74** | 326 | IAmb | IAmb | 08 27 45.9 | | |
| | comp=Z,37nm,0.9s | | | | | | | |
| **JGF** | **Kuroka** | **68.04** | 322 | P | **P** | **08 27 47.0** | **-0.1** |
| **JGF** | **Kuroka** | **68.04** | 322 | IAmb | IAmb | 08 27 47.7 | | |
| | comp=Z,24nm,0.7s | | | | | | | |
| **INU** | **Inuyama** | **68.07** | 322 | P | **P** | **08 27 47.1** | **-0.1** |
| **INU** | **Inuyama** | **68.07** | 322 | IAmb | IAmb | 08 27 48.1 | | |
| | comp=Z,53nm,1.4s | | | | | | | |
| **INU** | **Inuyama** | **68.07** | 322 | P | **P** | **08 27 46.9** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **68.21** | 323 | P | **P** | **08 27 47.5** | **-0.6** |
| | comp=Z,34nm,0.6s,baz=150,slow=6.1,SNR=118 | | | | | | | |
| | comp=Z,34nm,0.6s | | | | | | | |
| **MAJO** | **Matsushiro** | **68.21** | 323 | P | **P** | **08 27 48.2** | **+0.1** |
| **MAJO** | **Matsushiro** | **68.21** | 323 | P | **P** | **08 27 48.2** | **+0.1** |
| MAJO | | | | IAmb | IAmb | 08 27 48.6 | | |
| | comp=Z,48nm,0.9s | | | | | | | |
| **MAJO** | **Matsush

comp=Z,37nm,1.3s
USA0B **Ussuriysk Arra** 76.92 326 P P 08 28 38.5 +0.6
USA0B **Ussuriysk Arra** 76.92 326 P P 08 28 38.6 +0.6
USA0B pmax pmax
comp=Z,29nm,1.2s
USRK **Ussuriysk Ar.** 76.92 326 P P 08 28 38.4 +0.4
comp=Z,13nm,0.8s,baz=134,slow=4.2,SNR=23
comp=Z,13nm,0.8s
SII **Sitkinak Islan** 77.12 13 P P 08 28 39.1 +0.3
baz=203
109C **Camp Elliot, M** 77.35 49 P P 08 28 39.9 -0.6
baz=238
R16K **Pilot Point** 77.38 11 P P 08 28 40.3 +0.2
baz=200
KHMM **Horse Mountain** 77.47 39 IAmb IAmb 08 28 44.4
comp=Z,36nm,1.1s
TKX **Tecate** 77.54 50 IAmb IAmb 08 28 43.2
comp=Z,19nm,0.5s
O02D **Mt. Diablo Mer** 77.63 40 IAmb IAmb 08 28 44.8
comp=Z,50nm,1.2s
R17L **Mt. Peulik Vol** 77.67 12 P P 08 28 41.9 +0.2
baz=201
MONP2 **Monument Peak** 77.84 49 P P 08 28 43.1 -0.4
baz=239,SNR=21
ISA **Isabella, Lake** 77.86 46 IAmb IAmb 08 28 45.6
comp=Z,33nm,0.9s
CMB **Columbia Colle** 77.90 43 IAmb IAmb 08 28 45.3
comp=Z,27nm,0.9s
OHAK **Old Harbor** 77.93 14 IAmb IAmb 08 28 43.6
comp=Z,48nm,0.8s
OHAK **Old Harbor** 77.93 14 P P 08 28 43.4 +0.4
baz=204
R18K **Karluk** 77.99 13 P P 08 28 43.6 +0.1
baz=203
PFO **Pinyon Flats O** 78.19 49 P P 08 28 45.0 -0.3
baz=239,SNR=6.8
TPFO **Pinon Flats** 78.19 49 P P 08 28 44.1 -1.2
baz=239,SNR=6.8
NJ2 **Nanjing** 78.23 309 *e*P P 08 28 46.3 +1.0
NJ2 pmax pmax
comp=Z,13nm,0.6s
Q17K **Contact Creek** 78.35 12 P P 08 28 44.9 -0.6
baz=202
O14K **Tigyukauivet M** 78.37 9 P P 08 28 45.0 -0.4
baz=196
MDJ **Mudanjiang** 78.49 325 P P 08 28 47.7 +1.3
MDJ **Mudanjiang** 78.49 325 P P 08 28 47.3 +0.9
MDJ pmax pmax
comp=Z,100nm,0.9s
O15K **Ungalikthiuk R** 78.52 10 P P 08 28 45.8 -0.4
baz=198
SLBS **Sierra La Lagu** 78.53 60 P P 08 28 48.8 +1.6
MDPB **Devils Postpil** 78.53 44 IAmb IAmb 08 28 49.2
comp=Z,36nm,0.9s
KDAK **Kodiak Island** 78.60 14 P P 08 28 46.9 +0.2
KDAK IAmb IAmb 08 28 48.5
comp=Z,51nm,0.8s
KDAK **Kodiak Island** 78.60 14 P P 08 28 46.6 -0.1
comp=Z,36nm,0.7s,baz=218,slow=5.5,SNR=11
comp=Z,36nm,0.7s
KDAK **Kodiak Island** 78.60 14 P P 08 28 47.1 +0.4
baz=205
KDAK **Kodiak Island** 78.60 14 P P 08 28 46.9 +0.2
KDAK pmax pmax
comp=Z,51nm,0.9s
P16K **Nushagak River** 78.68 11 P P 08 28 46.5 -0.5
baz=200
J01E **Myrtle Point** 78.76 37 IAmb IAmb 08 28 49.9
comp=Z,33nm,0.9s
WAKR **Walker** 78.78 43 IAmb IAmb 08 28 50.7
comp=Z,40nm,0.9s
HATC **Hat Creek Radi** 78.82 40 IAmb IAmb 08 28 50.6
comp=Z,54nm,0.9s
MPK **Martis Peak** 78.84 42 IAmb IAmb 08 28 51.4
comp=Z,76nm,1.1s
M11K **Mekoryuk** 78.87 6 P P 08 28 47.4 -0.6
baz=192
Q18K **Katmai Hardscr** 78.88 12 P P 08 28 47.9 -0.4
baz=202
N14K **Kuskokwak Cree** 78.96 8 P P 08 28 48.1 -0.4
baz=196,SNR=11
HUMO **Hull Mountain** 78.99 38 IAmb IAmb 08 28 51.6
comp=Z,42nm,1.1s
PNTR **Pine Nut** 79.00 43 IAmb IAmb 08 28 51.8
comp=Z,64nm,0.9s
P17K **Kvichak River** 79.11 11 P P 08 28 48.4 -1.0
baz=201
L04D **Klamath Falls** 79.14 39 IAmb IAmb 08 28 52.0
comp=Z,46nm,0.8s
YERR **Yerington** 79.18 43 IAmb IAmb 08 28 52.4
comp=Z,45nm,0.9s
O16K **Kokwok River B** 79.20 10 IAmb IAmb 08 28 49.5
comp=Z,30nm,0.8s
O16K **Kokwok River B** 79.20 10 P P 08 28 48.7 -1.1
baz=200,SNR=6.9
M13K **Dall Lake** 79.21 7 P P 08 28 49.6 -0.3
baz=194
LHV **Little Huntoon** 79.25 44 IAmb IAmb 08 28 53.1
comp=Z,46nm,1.0s
GRAC **Grapevine Rang** 79.33 45 IAmb IAmb 08 28 53.1
comp=Z,25nm,0.8s
GRNR **Gornyy** 79.34 333 ⇓*i*P P 08 28 51.6 +0.8
GRNR pmax pmax
comp=Z,50µm,0.9s
Q20K **Shuyak Island** 79.39 13 P P 08 28 50.5 -0.4
baz=205
I03D **Drain, OR** 79.42 37 IAmb IAmb 08 28 53.4
comp=Z,42nm,1.1s
N15K **Kwethluk River** 79.42 9 P P 08 28 50.4 -0.6
baz=198
NVAR **Mina Array Bea** 79.48 44 P P 08 28 52.9 +0.8
comp=Z,18nm,0.8s,baz=225,slow=8.8,SNR=160
comp=Z,18nm,0.8s
PAHR **Pah Rah Range** 79.49 42 IAmb IAmb 08 28 54.1
comp=Z,40nm,1.2s
P18K **Big Mountain,** 79.53 12 P P 08 28 50.8 -0.8
baz=202
O17K **Koliganek Bris** 79.54 11 P P 08 28 50.7 -0.9
baz=200,SNR=5.9
NV11 **Mina Array Sit** 79.58 44 IAmb IAmb 08 28 54.6
comp=Z,43nm,1.2s
K04D **Chiloquin, OR** 79.71 39 IAmb IAmb 08 29 11.6
comp=Z,27nm,0.6s
M14K **Bethel** 79.72 8 IAmb IAmb 08 28 53.8
comp=Z,68nm,1.2s
M14K **Bethel** 79.72 8 P P 08 28 52.3 -0.2
baz=196,SNR=7.0
M15K **Kasigluk River** 79.84 9 P P 08 28 52.7 -0.4
baz=197,SNR=7.8
N16K **Nishlik Lake** 79.92 10 P P 08 28 54.1 +0.5
baz=199,SNR=9.0
BUCK **Buck Mountain** 79.93 37 IAmb IAmb 08 28 56.3
comp=Z,59nm,1.0s
O18K **Koktuh Hills** 79.96 12 P P 08 28 53.6 -0.3
baz=202,SNR=16
I04A **Tendick Farm,** 80.02 37 IAmb IAmb 08 28 56.1
comp=Z,26nm,0.9s
214A **Organ Pipe Nat** 80.03 52 P P 08 28 55.6 +0.8
baz=241,SNR=8.2
TPNV **Topopah Spring** 80.06 46 P P 08 28 55.6 +0.5
baz=238,SNR=18
P19K **Oil Pt** 80.17 13 P P 08 28 54.2 -0.8
baz=204
L14K **Kuka Creek** 80.20 8 IAmb IAmb 08 28 56.5
comp=Z,41nm,0.9s
L14K **Kuka Creek** 80.20 8 P P 08 28 54.3 -0.6
baz=195
N17K **Nushagak Hills** 80.23 10 P P 08 28 54.8 -0.4
baz=200,SNR=5.4
H04D **Lebanon** 80.27 37 IAmb IAmb 08 28 57.9
comp=Z,44nm,1.0s
CN2 **Changchun** 80.32 322 P P 08 28 56.3 +0.2
CN2 pmax pmax
comp=Z,60nm,1.0s
BNX **BinXian** 80.40 325 ⇓P P 08 28 56.6 +0.2
BNX pmax pmax
comp=Z,81nm,0.8s
M16K **Timber Creek** 80.41 9 P P 08 28 56.1 0.0
baz=199,SNR=22
KLR **Kul'dur** 80.41 329 *d*iP P 08 28 56.6 +0.2
KLR pmax pmax
comp=Z,22nm,1.3s
O19K **Port Alsworth** 80.45 12 P P 08 28 55.3 -1.0
baz=203
CNPM **China Poot** 80.48 14 IAmb IAmb 08 28 57.4
comp=Z,66nm,1.0s
HOM **Homer** 80.51 13 P P 08 28 56.0 -0.6
baz=206

K13K **Kusilvak Mount** 80.55 6 P P 08 28 56.4 -0.4
baz=193
N18K **Kilae Creek** 80.60 11 P P 08 28 56.1 -1.1
baz=202
F03A **Seaside** 80.68 35 IAmb IAmb 08 28 59.9
comp=Z,54nm,1.1s
L15K **Ungalak Mounta** 80.68 8 P P 08 28 56.9 -0.6
baz=196,SNR=10
H04A **Detroit Lake** 80.68 37 IAmb IAmb 08 28 59.0
comp=Z,32nm,0.7s
O20K **Slope Mountain** 80.69 13 P P 08 28 56.9 -0.7
baz=205
S11A **Rachel** 80.77 45 IAmb IAmb 08 29 00.8
comp=Z,34nm,0.9s
BRLK **Bradley Lake** 80.77 14 IAmb IAmb 08 28 58.7
comp=Z,53nm,0.8s
BRSE **Bradley Lake S** 80.79 14 P P 08 28 57.6 -0.6
baz=206
SMAI **San Martin Ant** 80.86 159 P P 08 28 59.9 +1.4
SMAI IAmb IAmb 08 29 01.3
comp=Z,55nm,0.9s
WHN **Wuhan** 80.89 306 P P 08 28 59.8 +0.5
WHN pmax pmax
comp=Z,40nm,1.0s
CNSH **ChangSha** 80.94 304 P P 08 29 00.5 +0.8
CNSH pmax pmax
comp=Z,26nm,1.0s
I05D **Terrebonne, OR** 80.97 37 IAmb IAmb 08 29 01.5
comp=Z,42nm,1.0s
N19K **Bonanza Creek** 80.99 12 P P 08 28 58.5 -0.8
baz=203,SNR=6.9
L16K **Owhat River** 80.99 9 P P 08 28 59.0 -0.1
baz=198,SNR=16
M17K **Holitna River** 81.01 10 P P 08 28 59.9 +0.6
baz=200,SNR=21
F04D **Rainier, OR** 81.07 35 IAmb IAmb 08 29 01.8
comp=Z,48nm,1.0s
PRN **Pahroc Range** 81.12 46 IAmb IAmb 08 29 03.1
comp=Z,36nm,0.9s
R11B **Troy Canyon, C** 81.24 45 P P 08 29 01.5 +0.2
baz=239,SNR=19
K15K **Wolf Creek Mou** 81.27 8 P P 08 29 00.8 +0.3
baz=196,SNR=32
BMN **Battle Mountai** 81.27 42 IAmb IAmb 08 29 03.4
comp=Z,39nm,1.0s
H02S1 **DAWSON INLET T** 81.27 26 P P 08 29 01.0 +0.3
WISH **Wishkah** 81.30 34 IAmb IAmb 08 29 03.0
comp=Z,35nm,0.8s
F04A **Amboy** 81.31 36 IAmb IAmb 08 29 02.8
comp=Z,74nm,1.3s
HOOD **Mount Hood Mea** 81.37 37 IAmb IAmb 08 29 03.3
comp=Z,62nm,1.1s
M18K **Stony River** 81.37 11 P P 08 29 01.3 +0.2
baz=202,SNR=7.0
SEW **Seward** 81.41 14 P P 08 29 00.8 -0.4
baz=208
NLWA **Neilton Lookou** 81.42 34 IAmb IAmb 08 29 03.8
comp=Z,43nm,1.1s
J14K **Nanvaranak Lak** 81.46 7 IAmb IAmb 08 29 02.8
comp=Z,52nm,1.3s
J14K **Nanvaranak Lak** 81.46 7 P P 08 29 01.8 +0.3
baz=194,SNR=7.0
MA2 **Magadan** 81.48 345 P P 08 29 01.1 -0.6
MA2 **Magadan** 81.48 345 P P 08 29 00.6 -1.1
comp=Z,30nm,0.9s,baz=133,slow=8.6,SNR=13
comp=Z,30nm,0.9s
MA2 **Magadan** 81.48 345 *d*iP P 08 29 00.3 -1.4
MA2 pmax pmax
comp=Z,41nm,1.0s
MA2 **Magadan** 81.48 345 P P 08 29 00.6 -1.1
comp=Z,63nm,1.1s,comp=Z,3µm
WVOR **Wild Horse Val** 81.48 40 IAmb IAmb 08 29 04.4
comp=Z,55nm,1.1s
G05A **Wamic** 81.51 37 IAmb IAmb 08 29 04.1
comp=Z,41nm,0.9s
L17K **Donlin** 81.57 9 P P 08 29 02.8 +0.7
baz=199,SNR=23
O22K **Cooper Landing** 81.68 14 P P 08 29 02.2 -0.4
baz=207,SNR=5.0
TUC **Tucson** 81.71 52 P P 08 29 05.4 +1.8
TUC **Tucson** 81.71 52 P P 08 29 05.5 +1.9
baz=242
TUC **Tucson** 81.71 52 P P 08 29 05.4 +1.8
TUC pmax pmax
comp=Z,24nm,1.1s
N20K **Mount Spurr** 81.79 12 P P 08 29 02.3 -1.1
baz=205,SNR=5.9
SPCR **Spurr Chakacha** 81.79 12 P P 08 29 02.3 -1.1
baz=205,SNR=5.5
P23K **Montague Islan** 81.80 15 P P 08 29 02.3 -1.0
baz=210
SPU **Mount Spurr** 81.81 12 IAmb IAmb 08 29 03.1
comp=Z,41nm,1.1s
GAMB **Gambell** 81.82 3 P P 08 29 02.6 -0.6
baz=186
I07A **Izee** 81.89 38 IAmb IAmb 08 29 06.4
comp=Z,48nm,0.8s
BELA **Belgrano 2** 81.90 173 P P 08 29 04.2 +0.5
BELA IAmb IAmb 08 29 05.1
comp=Z,49nm,0.8s
G06A **Carlson Farm,** 81.90 37 IAmb IAmb 08 29 06.0
comp=Z,29nm,1.0s
L18K **Granite Mounta** 81.91 10 P P 08 29 04.1 +0.3
baz=201,SNR=23
M19K **Big River Lodg** 82.01 11 IAmb IAmb 08 29 04.8
comp=Z,28nm,0.8s
M19K **Big River Lodg** 82.01 11 P P 08 29 03.7 -0.7
baz=203
GNW **Green Mountain** 82.08 34 P P 08 29 05.6 +0.6
GNW IAmb IAmb 08 29 06.8
comp=Z,36nm,0.9s
J08A **Circle Bar Ran** 82.10 40 IAmb IAmb 08 29 07.4
comp=Z,64nm,1.1s
Q12A **Willow Creek R** 82.11 45 IAmb IAmb 08 29 07.6
comp=Z,62nm,1.3s
K17K **Iditarod** 82.12 9 IAmb IAmb 08 29 05.9
comp=Z,24nm,0.8s
K17K **Iditarod** 82.12 9 P P 08 29 05.0 +0.2
baz=199,SNR=8.6
LCMT **Little Creek M** 82.17 47 IAmb IAmb 08 29 08.2
comp=Z,21nm,0.9s
L19K **White Mountain** 82.19 11 IAmb IAmb 08 29 07.2
comp=Z,41nm,1.0s
L19K **White Mountain** 82.19 11 P P 08 29 05.4 +0.1
baz=202,SNR=11
X16A **Lo Mia Camp, P** 82.20 50 IAmb IAmb 08 29 09.0
comp=Z,25nm,1.0s
RC01 **Rabbit Creek A** 82.22 14 IAmb IAmb 08 29 06.0
comp=Z,65nm,1.1s
RC01 **Rabbit Creek A** 82.22 14 P P 08 29 04.7 -0.7
baz=207,SNR=6.1
M20K **Styx River** 82.23 12 IAmb IAmb 08 29 05.7
comp=Z,32nm,1.2s
M20K **Styx River** 82.23 12 P P 08 29 04.8 -0.8
baz=204,SNR=5.7
CBB **Campbell River** 82.33 31 IAmb IAmb 08 29 08.0
comp=Z,35nm,1.0s
PWL **Port Wells** 82.33 14 P P 08 29 05.2 -0.9
baz=209,SNR=11
SUA **Susitna One** 82.33 13 IAmb IAmb 08 29 06.4
comp=Z,47nm,0.7s
SUA **Susitna One** 82.33 13 P P 08 29 04.9 -1.2
baz=206,SNR=13
J16K **Anvik River** 82.34 8 IAmb IAmb 08 29 07.6
comp=Z,56nm,0.9s
J16K **Anvik River** 82.34 8 P P 08 29 05.8 -0.2
baz=197,SNR=17
PGC **Sidney** 82.42 33 IAmb IAmb 08 29 08.3
comp=Z,32nm,1.0s
319A **Douglas** 82.43 54 IAmb IAmb 08 29 10.4
comp=Z,32nm,0.9s
BBB **Bella Bella** 82.45 28 P P 08 29 06.3 -0.5
comp=Z,11nm,0.6s,baz=230,slow=7.9,SNR=8.3
comp=Z,11nm,0.6s
KAIM **Kayak Island** 82.51 16 P P 08 29 06.5 -0.4
baz=212
U15A **North Rim** 82.55 48 IAmb IAmb 08 29 10.7
comp=Z,43nm,0.9s
IPM **Ipoh** 82.63 277 P P 08 29 09.7 +1.1
SKT **Skwentna** 82.64 12 P P 08 29 06.3 -1.2
baz=206,SNR=6.8
L20K **Farewell, AK** 82.64 11 P P 08 29 07.4 -0.2
baz=203,SNR=5.9
GLI **Glacier Island** 82.65 15 P P 08 29 06.8 -0.7
baz=210,SNR=15
J17K **VABM Dome** 82.66 9 IAmb IAmb 08 29 08.6
comp=Z,30nm,0.7s
J17K **VABM Dome** 82.66 9 P P 08 29 08.1 +0.6

baz=198,SNR=14
CRAG **Craig** 82.67 24 P P 08 29 08.8 +1.0
CRAG **Craig** 82.67 24 IAmb IAmb 08 29 09.7
comp=Z,28nm,1.0s
CRAG **Craig** 82.67 24 P P 08 29 08.2 +0.5
baz=223,SNR=5.8
F07A **Phinny Hill Vi** 82.69 37 IAmb IAmb 08 29 09.9
comp=Z,27nm,0.8s
EYAK **Cordova Ski Ar** 82.69 16 P P 08 29 08.9 +1.1
EYAK **Cordova Ski Ar** 82.69 16 P P 08 29 07.3 -0.5
baz=211
M22K **Willow** 82.73 13 P P 08 29 07.5 -0.5
baz=207,SNR=14
WUAZ **Wupatki** 82.77 49 IAmb IAmb 08 29 12.2
comp=Z,27nm,1.1s
WUAZ **Wupatki** 82.77 49 P P 08 29 09.9 +0.9
baz=242,SNR=17
KNK **Knik Glacier** 82.79 14 IAmb IAmb 08 29 08.9
comp=Z,42nm,0.8s
KNK **Knik Glacier** 82.79 14 P P 08 29 08.1 -0.3
baz=208,SNR=8.0
PMR **Palmer** 82.80 14 P P 08 29 09.3 +1.0
PMR **Palmer** 82.80 14 IAmb IAmb 08 29 08.8
comp=Z,82nm,1.4s
PMR **Palmer** 82.80 14 P P 08 29 07.8 -0.5
baz=208,SNR=17
RAGM **Ragged Mountai** 82.83 16 IAmb IAmb 08 29 09.5
comp=Z,57nm,1.1s
MXC **Moxie City** 82.88 36 IAmb IAmb 08 29 10.9
comp=Z,34nm,1.2s
G08A **Pilot Rock** 82.90 38 IAmb IAmb 08 29 11.2
comp=Z,68nm,1.3s
HMT **Hamilton** 82.90 16 IAmb IAmb 08 29 09.8
comp=Z,35nm,0.9s
I17K **Unalakleet** 82.91 8 P P 08 29 09.1 +0.3
baz=197
BGLC **Bering Glacier** 82.98 17 P P 08 29 09.4 +0.2
baz=213
PKCU **Pink Cliffs** 83.03 47 IAmb IAmb 08 29 13.7
comp=Z,48nm,1.1s
SIT **Sitka** 83.04 22 P P 08 29 10.6 +1.0
SIT **Sitka** 83.04 22 IAmb IAmb 08 29 11.1
comp=Z,32nm,1.3s
SIT **Sitka** 83.04 22 P P 08 29 09.5 0.0
baz=221,SNR=8.4
ANM **Nome** 83.05 6 P P 08 29 08.7 -0.9
baz=192
LTY **Liberty** 83.07 35 IAmb IAmb 08 29 11.5
comp=Z,26nm,1.0s
J18K **Innoko River** 83.07 10 P P 08 29 09.8 +0.2
baz=201,SNR=36
DUN6 **Lazy B Ranch** 83.10 53 IAmb IAmb 08 29 13.7
comp=Z,50nm,1.1s
E07A **Sunnyside** 83.11 36 IAmb IAmb 08 29 12.2
comp=Z,58nm,1.1s
U33K **Whale Pass** 83.15 24 IAmb IAmb 08 29 11.9
comp=Z,40nm,1.0s
U33K **Whale Pass** 83.15 24 P P 08 29 10.5 +0.4
baz=223,SNR=14
V35K **Ketchikan** 83.16 25 IAmb IAmb 08 29 12.0
comp=Z,37nm,1.1s
V35K **Ketchikan** 83.16 25 P P 08 29 10.6 +0.3
baz=224,SNR=7.2
SML **Sawmill** 83.17 14 IAmb IAmb 08 29 24.1
comp=Z,38nm,1.3s
SML **Sawmill** 83.17 14 P P 08 29 09.8 -0.4
baz=208,SNR=5.7
HAWA **Hanford** 83.20 37 IAmb IAmb 08 29 12.6
comp=Z,54nm,1.1s
HEH **HeiHe** 83.22 328 *e*P P 08 29 10.8 +0.2
HEH pmax pmax
comp=Z,34nm,1.3s
CUT **Chuilitna** 83.28 13 P P 08 29 09.9 -0.8
baz=207,SNR=13
M23K **Glacier View** 83.30 14 P P 08 29 09.9 -0.9
baz=209,SNR=8.2
BMRM **Bremner River** 83.35 16 P P 08 29 10.5 -0.6
baz=212,SNR=18
MESA **MESA** 83.40 17 P P 08 29 12.1 +0.5
baz=214,SNR=20
MTPU **Mount Pierson** 83.41 47 IAmb IAmb 08 29 15.3
comp=Z,22nm,1.0s
K20K **Telida** 83.42 11 P P 08 29 10.9 -0.5
baz=203,SNR=37
S31K **Pelican** 83.42 21 IAmb IAmb 08 29 13.1
comp=Z,46nm,1.0s
S31K **Pelican** 83.42 21 P P 08 29 12.0 +0.6
baz=220,SNR=28
SCM **Sheep Creek Mo** 83.42 14 P P 08 29 11.5 0.0
baz=209,SNR=23
H16K **Elim** 83.44 7 P P 08 29 11.7 +0.2
baz=195,SNR=14
KLU **Klutina** 83.46 15 IAmb IAmb 08 29 12.5
comp=Z,30nm,1.1s
KLU **Klutina** 83.46 15 P P 08 29 11.6 -0.2
baz=211,SNR=9.7
E08A **Dider Farm, El** 83.52 37 IAmb IAmb 08 29 14.1
comp=Z,26nm,0.7s
CRQE **Cirque** 83.56 17 P P 08 29 11.9 -0.4
baz=213,SNR=22
G15K **Niukluk** 83.60 6 P P 08 29 12.4 +0.2
baz=194
S32K **Killisnoo** 83.62 22 P P 08 29 12.9 +0.5
baz=221,SNR=10.0
WRAK **Wrangell Islan** 83.66 24 P P 08 29 13.2 +0.5
baz=223
MAW **Mawson** 83.69 200 P P 08 29 13.7 +0.9
comp=Z,6.3nm,0.9s,baz=159,slow=7.4,SNR=8.9
comp=Z,6.3nm,0.9s
T33K **Petersburg** 83.72 23 P P 08 29 13.8 +0.8
baz=223
PNL **Peninsula** 83.74 19 P P 08 29 14.1 +1.0
PNL **Peninsula** 83.74 19 P P 08 29 12.9 -0.2
baz=217,SNR=15
J19K **Poorman** 83.74 10 IAmb IAmb 08 29 14.2
comp=Z,28nm,0.9s
J19K **Poorman** 83.74 10 P P 08 29 13.3 +0.3
baz=202,SNR=13
MFID **Camas Ranch** 83.75 41 IAmb IAmb 08 29 15.6
comp=Z,38nm,1.1s
W18A **Petrified Fore** 83.77 50 P P 08 29 15.1 +1.0
baz=243
HNS **HongShan** 83.82 312 ⇓P P 08 29 14.8 +0.9
HNS pmax pmax
comp=Z,30nm,1.4s
TNA **Tin City** 83.83 4 P P 08 29 13.3 0.0
baz=190
PINM **Pinnacle** 83.83 18 P P 08 29 13.6 +0.1
baz=216,SNR=6.3
F14K **Arctic Creek** 83.86 5 P P 08 29 13.4 -0.1
baz=191
N25K **Chitina, Valde** 83.89 15 P P 08 29 13.3 -0.6
baz=212,SNR=36
BCPM **Bancas Point** 83.89 18 IAmb IAmb 08 29 14.9
comp=Z,29nm,1.0s
D08A **Wollman Farm,** 83.92 36 IAmb IAmb 08 29 16.1
comp=Z,35nm,0.9s
M24K **Tolsona, Glenn** 83.93 15 P P 08 29 14.1 +0.1
baz=210,SNR=18
WAT6 **Susitna Watana** 83.98 14 P P 08 29 13.4 -1.0
baz=209,SNR=38
H17K **Granite Mounta** 84.01 8 IAmb IAmb 08 29 15.1
comp=Z,26nm,1.3s
H17K **Granite Mounta** 84.01 8 P P 08 29 13.9 -0.3
baz=198,SNR=7.2
WAT1 **Susitna Watana** 84.03 13 P P 08 29 13.8 -0.7
baz=208
DUG **Dugway, Tooele** 84.03 44 P P 08 29 15.8 +0.7
baz=240,SNR=6.4
E09A **Wood Farm, Sta** 84.06 37 IAmb IAmb 08 29 16.5
comp=Z,43nm,1.4s
SEY **Seymchan** 84.06 347 P P 08 29 14.1 -0.4
comp=Z,56nm,0.8s,baz=146,slow=7.3,SNR=58
comp=Z,56nm,0.8s
SEY **Seymchan** 84.06 347 *d*iP P 08 29 14.1 -0.4
SEY pmax pmax
comp=Z,97nm,1.3s
BJT **Baijiatuau** 84.08 315 P P 08 29 16.9 +1.7
BJT **Baijiatuau** 84.08 315 IAmb IAmb 08 29 16.9
comp=Z,47nm,1.3s
121A **Cookes Peak, D** 84.08 53 P P 08 29 16.9 +1.3
baz=244
PSI **Prapat** 84.08 275 P P 08 29 16.6 +0.6
BJI **Beijing** 84.08 315 P P 08 29 15.8 +0.6
BJI pmax pmax
comp=Z,14nm,1.3s
MCARA **McCarthy VSAT** 84.11 16 P P 08 29 14.8 0.0
baz=213,SNR=15

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LYN | **LuoYang** | 84.12 | 309 | P | P | 08 29 16.4 | +0.9 | |
| LYN | comp=Z,140nm,0.8s | | | pmax | pmax | | | |
| J20K | **Nowinta River** | 84.16 | 10 | IAmb | IAmb | 08 29 15.9 | | |
| | comp=Z,40nm,0.8s | | | | | | | |
| J20K | **Nowinta River** | 84.16 | 10 | P | P | 08 29 14.4 | -0.6 | |
| | baz=203,SNR=26 | | | | | | | |
| G16K | **Koyuk River** | 84.17 | 7 | IAmb | IAmb | 08 29 16.2 | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| G16K | **Koyuk River** | 84.17 | 7 | P | P | 08 29 14.8 | -0.2 | |
| | baz=195,SNR=5.2 | | | | | | | |
| KTH | **Kantishna Hill** | 84.18 | 12 | IAmb | IAmb | 08 29 15.2 | | |
| | comp=Z,40nm,0.8s | | | | | | | |
| P29M | **Windy Craggy** | 84.22 | 19 | P | P | 08 29 15.4 | -0.1 | |
| | baz=218,SNR=26 | | | | | | | |
| CTG | **Chitna Glacier** | 84.22 | 17 | P | P | 08 29 15.7 | +0.1 | |
| | baz=215,SNR=29 | | | | | | | |
| F15K | **North Star Dit** | 84.24 | 6 | IAmb | IAmb | 08 29 16.8 | | |
| | comp=Z,43nm,1.4s | | | | | | | |
| F15K | **North Star Dit** | 84.24 | 6 | P | P | 08 29 15.8 | +0.5 | |
| | baz=193 | | | | | | | |
| R32K | **Eaglecrest** | 84.25 | 22 | P | P | 08 29 15.5 | -0.1 | |
| | baz=221,SNR=13 | | | | | | | |
| GCSA | **Galena City Sc** | 84.25 | 9 | P | P | 08 29 15.5 | 0.0 | |
| | baz=200,SNR=5.2 | | | | | | | |
| JIS | **Juneau Island** | 84.30 | 22 | P | P | 08 29 16.8 | +1.1 | |
| O28M | **Mount Upton** | 84.39 | 18 | P | P | 08 29 16.7 | +0.1 | |
| | baz=216,SNR=28 | | | | | | | |
| HARP | **HAARP** | 84.43 | 15 | P | P | 08 29 16.4 | 0.0 | |
| | baz=211,SNR=13 | | | | | | | |
| B08A | **Colville Reser** | 84.44 | 35 | IAmb | IAmb | 08 29 17.8 | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| G17K | **Kiwalik Mounta** | 84.46 | 7 | P | P | 08 29 15.9 | -0.6 | |
| | baz=197 | | | | | | | |
| O29M | **Mount Kennedy** | 84.49 | 19 | IAmb | IAmb | 08 29 17.8 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| O29M | **Mount Kennedy** | 84.49 | 19 | P | P | 08 29 17.3 | +0.4 | |
| | baz=218,SNR=10 | | | | | | | |
| DHY | **Denali Highway** | 84.50 | 14 | IAmb | IAmb | 08 29 16.8 | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| DHY | **Denali Highway** | 84.50 | 14 | P | P | 08 29 16.2 | -0.7 | |
| | baz=209,SNR=15 | | | | | | | |
| PLBC | **Pleasant Camp** | 84.53 | 20 | P | P | 08 29 17.6 | +0.7 | |
| | baz=220,SNR=33 | | | | | | | |
| ENH | **Enshi** | 84.56 | 304 | P | P | 08 29 19.2 | +1.4 | |
| ENH | **Enshi** | 84.56 | 304 | IAmb | IAmb | 08 29 24.7 | | |
| | comp=Z,38nm,1.0s | | | | | | | |
| BPAW | **Bear Paw Mtn.** | 84.66 | 12 | IAmb | IAmb | 08 29 18.8 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| BPAW | **Bear Paw Mtn.** | 84.66 | 12 | P | P | 08 29 16.7 | -0.8 | |
| | baz=206,SNR=12 | | | | | | | |
| I20K | **Naaghedeneel** | 84.68 | 10 | P | P | 08 29 16.8 | -0.7 | |
| | baz=203,SNR=10.0 | | | | | | | |
| HLID | **Hailey** | 84.70 | 41 | IAmb | IAmb | 08 29 20.6 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| HLID | **Hailey** | 84.70 | 41 | P | P | 08 29 19.3 | +0.9 | |
| | baz=239,SNR=30 | | | | | | | |
| C09A | **Chrisman Ranch** | 84.71 | 36 | IAmb | IAmb | 08 29 19.6 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| MCK | **McKinley** | 84.74 | 13 | P | P | 08 29 17.2 | -0.7 | |
| | baz=208,SNR=29 | | | | | | | |
| PAX | **Paxson** | 84.84 | 14 | P | P | 08 29 17.8 | -0.7 | |
| | baz=211,SNR=18 | | | | | | | |
| P30M | **Million Dollar** | 84.85 | 19 | P | P | 08 29 19.7 | +1.1 | |
| | baz=219 | | | | | | | |
| SKAG | **Skagway** | 84.87 | 20 | P | P | 08 29 20.0 | +1.5 | |
| SKAG | **Skagway** | 84.87 | 20 | IAmb | IAmb | 08 29 20.1 | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| SKAG | **Skagway** | 84.87 | 20 | P | P | 08 29 19.5 | +1.0 | |
| | baz=220,SNR=22 | | | | | | | |
| T35M | **Bob Quinn** | 84.88 | 24 | P | P | 08 29 19.0 | +0.3 | |
| | baz=225,SNR=10 | | | | | | | |
| GSI | **Gunungsitoli** | 84.89 | 273 | P | P | 08 29 21.7 | +1.9 | |
| GSI | **Gunungsitoli** | 84.89 | 273 | P | P | 08 29 20.2 | +0.4 | |
| | comp=Z,77nm,0.9s | | | | | | | |
| YUK8 | **Steele Glacier** | 84.93 | 18 | P | P | 08 29 18.9 | -0.3 | |
| | baz=216,SNR=23 | | | | | | | |
| M26K | **Nabesna, AK** | 84.97 | 16 | P | P | 08 29 18.9 | -0.2 | |
| | baz=213,SNR=51 | | | | | | | |
| H19K | **Roundabout Mou** | 85.05 | 9 | P | P | 08 29 19.3 | 0.0 | |
| | baz=201,SNR=6.6 | | | | | | | |
| YUK6 | **Outpost Mounta** | 85.07 | 18 | P | P | 08 29 19.6 | -0.3 | |
| | baz=218,SNR=8.2 | | | | | | | |
| G18K | **Tagagawik** | 85.09 | 8 | P | P | 08 29 18.6 | -0.9 | |
| | baz=199,SNR=5.7 | | | | | | | |
| YUK3 | **Moose Creek** | 85.13 | 17 | P | P | 08 29 20.2 | +0.1 | |
| | baz=216,SNR=48 | | | | | | | |
| S34M | **Telegraph Cree** | 85.20 | 23 | P | P | 08 29 20.5 | +0.3 | |
| | baz=224,SNR=47 | | | | | | | |
| M27K | **Edge Creek, AK** | 85.23 | 16 | P | P | 08 29 20.8 | +0.4 | |
| | baz=214,SNR=47 | | | | | | | |
| NONG | **Nongkai** | 85.25 | 291 | P | P | 08 29 22.2 | +0.8 | |
| H20K | **Anotleneega Mo** | 85.26 | 10 | P | P | 08 29 20.4 | +0.1 | |
| | baz=202,SNR=12 | | | | | | | |
| SRIT | **Nakonsritamara** | 85.30 | 281 | P | P | 08 29 23.9 | +2.2 | |
| YUK4 | **Talbot Arm** | 85.30 | 18 | P | P | 08 29 21.5 | +0.6 | |
| | baz=218,SNR=11 | | | | | | | |
| GYA | **Guiyang** | 85.31 | 300 | P | P | 08 29 22.8 | +1.1 | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| Y22D | **IRIS PASSCAL I** | 85.39 | 52 | P | P | 08 29 22.3 | +0.4 | |
| | baz=245 | | | | | | | |
| L26K | **Log Cabin Wild** | 85.41 | 15 | IAmb | IAmb | 08 29 22.2 | | |
| | comp=Z,42nm,1.2s | | | | | | | |
| L26K | **Log Cabin Wild** | 85.41 | 15 | P | P | 08 29 21.2 | +0.1 | |
| | baz=213,SNR=16 | | | | | | | |
| TCUT | **Toone Canyon** | 85.42 | 44 | IAmb | IAmb | 08 29 23.9 | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| SURA | **Surathani** | 85.45 | 281 | P | P | 08 29 24.3 | +1.9 | |
| I21K | **Tanana** | 85.46 | 11 | IAmb | IAmb | 08 29 22.0 | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| I21K | **Tanana** | 85.46 | 11 | P | P | 08 29 20.5 | -0.7 | |
| | baz=205 | | | | | | | |
| NEA2 | **Nenana** | 85.48 | 12 | P | P | 08 29 20.1 | -1.3 | |
| | baz=208,SNR=9.5 | | | | | | | |
| ZEA | **Zeya** | 85.49 | 331 | *e*P | P | 08 29 22.4 | +0.7 | |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,30nm,0.6s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.8s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.6s | | | | | | | |
| K24K | **Donnelly Dome** | 85.49 | 14 | P | P | 08 29 21.6 | 0.0 | |
| | baz=211,SNR=18 | | | | | | | |
| P32M | **Atlin** | 85.51 | 21 | IAmb | IAmb | 08 29 23.3 | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| P32M | **Atlin** | 85.51 | 21 | P | P | 08 29 22.3 | +0.6 | |
| | baz=222,SNR=18 | | | | | | | |
| G19K | **Purcell Mounta** | 85.54 | 8 | P | P | 08 29 21.2 | -0.5 | |
| | baz=200,SNR=7.7 | | | | | | | |
| Q32M | **Nakina River** | 85.55 | 22 | IAmb | IAmb | 08 29 23.8 | | |
| | comp=Z,31nm,0.7s | | | | | | | |
| Q32M | **Nakina River** | 85.55 | 22 | P | P | 08 29 22.0 | -0.1 | |
| | baz=223,SNR=36 | | | | | | | |
| MLY | **Manley** | 85.55 | 11 | IAmb | IAmb | 08 29 22.3 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| MLY | **Manley** | 85.55 | 11 | P | P | 08 29 20.7 | -1.1 | |
| | baz=206,SNR=18 | | | | | | | |
| MNTX | **Cornudas Mount** | 85.58 | 55 | P | P | 08 29 24.2 | +1.5 | |
| | baz=246 | | | | | | | |
| NAYO | **Nakonayok** | 85.60 | 287 | P | P | 08 29 24.5 | +1.4 | |
| NEW | **Newport** | 85.61 | 36 | IAmb | IAmb | 08 29 23.6 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| NEW | **Newport** | 85.61 | 36 | P | P | 08 29 22.4 | -0.1 | |
| | baz=237,SNR=19 | | | | | | | |
| MVCO | **Mesa Verde** | 85.61 | 49 | P | P | 08 29 23.2 | +0.2 | |
| | baz=243 | | | | | | | |
| O30N | **Mendenhall** | 85.63 | 19 | IAmb | IAmb | 08 29 23.7 | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| O30N | **Mendenhall** | 85.63 | 19 | P | P | 08 29 22.8 | +0.5 | |
| | baz=220,SNR=36 | | | | | | | |
| F18K | **Selawik** | 85.64 | 7 | P | P | 08 29 21.7 | -0.3 | |
| | baz=198 | | | | | | | |
| RIDG | **Independent Ri** | 85.65 | 14 | P | P | 08 29 22.1 | -0.3 | |
| | baz=212,SNR=18 | | | | | | | |
| H21K | **Melozitna Rive** | 85.75 | 10 | P | P | 08 29 22.6 | -0.1 | |
| | baz=204,SNR=10 | | | | | | | |
| HDA | **Harding Lake** | 85.76 | 13 | IAmb | IAmb | 08 29 23.1 | | |
| | comp=Z,31nm,0.8s | | | | | | | |
| HDA | **Harding Lake** | 85.76 | 13 | P | P | 08 29 22.2 | -0.6 | |
| | baz=210,SNR=24 | | | | | | | |
| L27K | **Beaver Creek,** | 85.82 | 16 | IAmb | IAmb | 08 29 24.2 | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| L27K | **Beaver Creek,** | 85.82 | 16 | P | P | 08 29 23.0 | -0.1 | |
| | baz=214,SNR=17 | | | | | | | |
| BCAR | **Beaver Creek A** | 85.84 | 16 | P | P | 08 29 23.4 | +0.1 | |
| N30M | **Aishikik Lake** | 85.86 | 18 | IAmb | IAmb | 08 29 25.8 | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| N30M | **Aishikik Lake** | 85.86 | 18 | P | P | 08 29 23.1 | -0.3 | |
| | baz=219,SNR=12 | | | | | | | |
| E17K | **Hotham Inlet** | 85.86 | 6 | P | P | 08 29 23.0 | -0.1 | |
| | baz=196,SNR=6.8 | | | | | | | |
| IMAR | **Indian Mountai** | 85.89 | 10 | P | P | 08 29 23.3 | -0.1 | |
| I23K | **Minto, Yukon-K** | 85.92 | 12 | IAmb | IAmb | 08 29 23.6 | | |
| | comp=Z,33nm,1.4s | | | | | | | |
| I23K | **Minto, Yukon-K** | 85.92 | 12 | P | P | 08 29 22.4 | -1.0 | |
| | baz=207,SNR=13 | | | | | | | |
| WHY | **Whitehorse** | 85.93 | 20 | P | P | 08 29 24.6 | +0.8 | |
| WHY | | | | IAmb | IAmb | 08 29 25.3 | | |
| | comp=Z,29nm,1.1s | | | | | | | |
| WHY | **Whitehorse** | 85.93 | 20 | P | P | 08 29 24.3 | +0.5 | |
| | baz=221,SNR=8.9 | | | | | | | |
| COLA | **College** | 85.98 | 12 | P | P | 08 29 23.7 | 0.0 | |
| COLA | **College** | 85.98 | 12 | P | P | 08 29 22.6 | -1.1 | |
| | baz=209 | | | | | | | |
| COLA | **College** | 85.98 | 12 | *d i*P | P | 08 29 22.5 | -1.2 | |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.2s | | | | | | | |
| TX31 | **Lajitas Ar. Si** | 85.98 | 58 | IAmb | IAmb | 08 29 27.9 | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| TXAR | **Lajitas Array** | 85.98 | 58 | P | P | 08 29 26.9 | +2.2 | |
| TXAR | **Lajitas Array** | 85.98 | 58 | P | P | 08 29 26.5 | +1.7 | |
| | comp=Z,11nm,0.8s,baz=220,slow=5.4,SNR=136 | | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| TXAR | **Lajitas Array** | 85.98 | 58 | P | P | 08 29 26.9 | +2.2 | |
| DLBC | **Dease Lake** | 85.99 | 23 | IAmb | IAmb | 08 29 25.2 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| DLBC | **Dease Lake** | 85.99 | 23 | P | P | 08 29 24.6 | +0.5 | |
| | comp=Z,13nm,0.9s,baz=226,slow=4.7,SNR=40 | | | | | | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| DLBC | **Dease Lake** | 85.99 | 23 | P | P | 08 29 24.8 | +0.7 | |
| | baz=225,SNR=16 | | | | | | | |
| XLT | **XiLinHaoTe** | 86.05 | 319 | *e*P | P | 08 29 24.8 | +0.1 | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| SCRK | **Sand Creek** | 86.06 | 14 | IAmb | IAmb | 08 29 25.2 | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| SCRK | **Sand Creek** | 86.06 | 14 | P | P | 08 29 24.2 | -0.1 | |
| | baz=212,SNR=13 | | | | | | | |
| IL31 | | 86.09 | 13 | P | P | 08 29 23.6 | -0.7 | |
| IL31 | | | | IAmb | IAmb | 08 29 24.4 | | |
| | comp=Z,24nm,0.8s | | | | | | | |
| ILAR | **Eielson Array** | 86.09 | 13 | P | P | 08 29 23.4 | -0.9 | |
| ILAR | **Eielson Array** | 86.09 | 13 | P | P | 08 29 23.2 | -1.1 | |
| | comp=Z,17nm,0.8s,baz=221,slow=5.5,SNR=113 | | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| ILAR | **Eielson Array** | 86.09 | 13 | P | P | 08 29 23.4 | -0.9 | |
| F19K | **Shaleruckik Mo** | 86.10 | 8 | P | P | 08 29 23.8 | -0.5 | |
| | baz=200,SNR=16 | | | | | | | |
| F19K | **Shaleruckik Mo** | 86.10 | 8 | P | P | 08 29 23.6 | -0.7 | |
| ANMO | **Albuquerque** | 86.11 | 51 | P | P | 08 29 25.8 | +0.4 | |
| ANMO | **Albuquerque** | 86.11 | 51 | P | P | 08 29 25.8 | +0.4 | |
| | baz=245 | | | | | | | |
| ANMO | **Albuquerque** | 86.11 | 51 | P | P | 08 29 25.8 | +0.4 | |
| ANMO | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| H22K | **Ishtalitna Cre** | 86.21 | 11 | P | P | 08 29 24.6 | -0.3 | |
| | baz=206,SNR=19 | | | | | | | |
| M29M | **Somme Creek** | 86.23 | 17 | IAmb | IAmb | 08 29 27.4 | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| M29M | **Somme Creek** | 86.23 | 17 | P | P | 08 29 25.4 | +0.2 | |
| | baz=218,SNR=32 | | | | | | | |
| P33M | **Teslin, Yukon** | 86.28 | 21 | IAmb | IAmb | 08 29 26.7 | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| P33M | **Teslin, Yukon** | 86.28 | 21 | P | P | 08 29 25.1 | -0.3 | |
| | baz=223,SNR=27 | | | | | | | |
| N31M | **Braeburn, Yuko** | 86.28 | 19 | P | P | 08 29 25.8 | +0.4 | |
| | baz=220,SNR=25 | | | | | | | |
| POKR | **Poker Plat Res** | 86.28 | 13 | IAmb | IAmb | 08 29 25.1 | | |
| | comp=Z,22nm,0.7s | | | | | | | |
| POKR | **Poker Plat Res** | 86.28 | 13 | P | P | 08 29 24.3 | -0.9 | |
| | baz=209,SNR=12 | | | | | | | |
| J25K | **Salcha River,** | 86.28 | 14 | IAmb | IAmb | 08 29 25.4 | | |
| | comp=Z,19nm,0.7s | | | | | | | |
| J25K | **Salcha River,** | 86.28 | 14 | P | P | 08 29 24.8 | -0.5 | |
| | baz=211,SNR=20 | | | | | | | |
| E18K | **Tukpahlearik C** | 86.32 | 7 | IAmb | IAmb | 08 29 26.8 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| E18K | **Tukpahlearik C** | 86.32 | 7 | P | P | 08 29 24.9 | -0.4 | |
| | baz=197,SNR=8.0 | | | | | | | |
| R33M | **Jennings River** | 86.33 | 22 | IAmb | IAmb | 08 29 27.7 | | |
| | comp=Z,54nm,1.4s | | | | | | | |
| R33M | **Jennings River** | 86.33 | 22 | P | P | 08 29 26.0 | +0.3 | |
| | baz=224,SNR=31 | | | | | | | |
| D17K | **Noatak River** | 86.33 | 6 | P | P | 08 29 25.6 | +0.2 | |
| | baz=194 | | | | | | | |
| ALPN | **Alpine** | 86.41 | 57 | IAmb | IAmb | 08 29 29.5 | | |
| | comp=Z,27nm,1.4s | | | | | | | |
| G21K | **Allakaket** | 86.42 | 10 | IAmb | IAmb | 08 29 26.6 | | |
| | comp=Z,26nm,0.8s | | | | | | | |
| G21K | **Allakaket** | 86.42 | 10 | P | P | 08 29 25.3 | -0.6 | |
| | baz=204,SNR=21 | | | | | | | |
| H23K | **Yukon River** | 86.49 | 11 | P | P | 08 29 25.5 | -0.7 | |
| | baz=207,SNR=6.9 | | | | | | | |
| XAN | **Xi'an** | 86.55 | 307 | ⇓P | P | 08 29 28.4 | +1.1 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,120nm,1.1s | | | | | | | |
| K27K | **Chicken** | 86.56 | 15 | IAmb | IAmb | 08 29 28.2 | | |
| | comp=Z,31nm,1.1s | | | | | | | |
| K27K | **Chicken** | 86.56 | 15 | P | P | 08 29 27.2 | +0.6 | |
| | baz=214 | | | | | | | |
| F20K | **Avaraart Lake** | 86.58 | 9 | IAmb | IAmb | 08 29 27.3 | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| F20K | **Avaraart Lake** | 86.58 | 9 | P | P | 08 29 26.1 | -0.5 | |
| | baz=201,SNR=9.5 | | | | | | | |
| F20K | **Avaraart Lake** | 86.58 | 9 | P | P | 08 29 26.2 | -0.3 | |
| J26L | **Joseph Creek** | 86.60 | 14 | IAmb | IAmb | 08 29 27.7 | | |
| | comp=Z,29nm,0.8s | | | | | | | |
| J26L | **Joseph Creek** | 86.60 | 14 | P | P | 08 29 26.9 | +0.1 | |
| | baz=213,SNR=37 | | | | | | | |
| MSO | **Missoula** | 86.67 | 38 | IAmb | IAmb | 08 29 28.5 | | |
| | comp=Z,25nm,1.5s | | | | | | | |
| MSO | **Missoula** | 86.67 | 38 | P | P | 08 29 27.3 | -0.4 | |
| | baz=239,SNR=8.2 | | | | | | | |
| HIA | **Hailar** | 86.67 | 325 | P | P | 08 29 29.6 | +2.1 | |
| RDOG | **Red Dog Mine** | 86.69 | 6 | P | P | 08 29 27.5 | +0.4 | |
| | baz=195 | | | | | | | |
| BILL | **Bilibino** | 86.69 | 354 | ⇑*i*P | P | 08 29 26.4 | -0.7 | |
| BILL | | | | *i* *PP | pP | 08 31 28.9 | +0.1 | |
| BILL | | | | *i* | | 08 33 01.6 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| DLMT | **Dillon** | 86.73 | 40 | IAmb | IAmb | 08 29 30.0 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| E19K | **Redstone River** | 86.76 | 8 | P | P | 08 29 27.1 | -0.3 | |
| | baz=200 | | | | | | | |
| H24K | **Noodor Dome** | 86.82 | 12 | P | P | 08 29 26.9 | -0.9 | |
| | baz=209,SNR=6.0 | | | | | | | |
| TPAW | **Teton Pass** | 86.85 | 42 | IAmb | IAmb | 08 29 29.9 | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| FXWY | **Fox Creek** | 86.87 | 42 | IAmb | IAmb | 08 29 31.9 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| N32M | **Quiet Lake** | 86.88 | 20 | IAmb | IAmb | 08 29 29.9 | | |
| | comp=Z,44nm,1.1s | | | | | | | |
| N32M | **Quiet Lake** | 86.88 | 20 | P | P | 08 29 28.5 | +0.3 | |
| | baz=222 | | | | | | | |
| MLSI | **Meulaboh, Aceh** | 86.93 | 275 | P | P | 08 29 29.5 | 0.0 | |
| SNOW | **Snow King Moun** | 86.96 | 42 | IAmb | IAmb | 08 29 31.5 | | |
| | comp=Z,37nm,1.1s | | | | | | | |
| PRP | **Porcupine Dome** | 87.03 | 13 | P | P | 08 29 28.0 | -0.9 | |
| | baz=211 | | | | | | | |
| S22A | **4UR Ranch, Cre** | 87.04 | 49 | P | P | 08 29 31.0 | +1.2 | |
| | baz=244 | | | | | | | |
| IMW | **Indian Meadow** | 87.05 | 42 | IAmb | IAmb | 08 29 31.9 | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| F21K | **Alatna River** | 87.08 | 9 | P | P | 08 29 28.5 | -0.5 | |
| | baz=204,SNR=12 | | | | | | | |
| G22K | **Bettles** | 87.12 | 10 | P | P | 08 29 28.8 | -0.3 | |
| | baz=205 | | | | | | | |
| G23K | **Bananza Creek** | 87.19 | 11 | IAmb | IAmb | 08 29 30.6 | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| G23K | **Bananza Creek** | 87.19 | 11 | P | P | 08 29 29.3 | -0.2 | |
| | baz=207,SNR=12 | | | | | | | |
| M31M | **Drury Creek, Y** | 87.25 | 19 | IAmb | IAmb | 08 29 30.6 | | |
| | comp=Z,21nm,1.1s | | | | | | | |
| M31M | **Drury Creek, Y** | 87.25 | 19 | P | P | 08 29 29.6 | -0.3 | |
| | baz=221,SNR=19 | | | | | | | |
| DAWY | **Dawson** | 87.28 | 16 | IAmb | IAmb | 08 29 31.2 | | |
| | comp=Z,44nm,1.2s | | | | | | | |
| DAWY | **Dawson** | 87.28 | 16 | P | P | 08 29 29.7 | -0.3 | |
| | baz=217,SNR=24 | | | | | | | |
| FLWY | **Flagg Ranch** | 87.29 | 42 | IAmb | IAmb | 08 29 33.2 | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| I26K | **Coal Creek Min** | 87.37 | 14 | IAmb | IAmb | 08 29 30.9 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| I26K | **Coal Creek Min** | 87.37 | 14 | P | P | 08 29 30.1 | -0.3 | |
| | baz=213 | | | | | | | |
| YFT | **Old Faithful** | 87.38 | 41 | IAmb | IAmb | 08 29 34.5 | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| EGAK | **Eagle** | 87.41 | 15 | IAmb | IAmb | 08 29 31.5 | | |
| | comp=Z,41nm,1.1s | | | | | | | |
| EGAK | **Eagle** | 87.41 | 15 | P | P | 08 29 30.4 | -0.1 | |
| | baz=215,SNR=27 | | | | | | | |
| BW06 | **Boulder Array** | 87.41 | 43 | P | P | 08 29 31.3 | 0.0 | |
| | baz=242,SNR=26 | | | | | | | |
| PD31 | **Pinedale Array** | 87.41 | 43 | IAmb | IAmb | 08 29 32.8 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| PDAR | **Pinedale Array** | 87.41 | 43 | P | P | 08 29 31.9 | +0.6 | |
| PDAR | **Pinedale Array** | 87.41 | 43 | P | P | 08 29 31.4 | +0.1 | |
| | comp=Z,9.4nm,0.7s,baz=224,slow=2.5,SNR=109 | | | | | | | |
| | comp=Z,9.4nm,0.7s | | | | | | | |
| BOZ | **Bozeman (W)** | 87.44 | 40 | IAmb | IAmb | 08 29 33.5 | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| BOZ | **Bozeman (W)** | 87.44 | 40 | P | P | 08 29 32.1 | +0.7 | |
| | baz=241,SNR=33 | | | | | | | |
| H17A | **Grant Village** | 87.52 | 42 | IAmb | IAmb | 08 29 35.1 | | |
| | comp=Z,28nm,0.8s | | | | | | | |
| H17A | **Grant Village** | 87.52 | 42 | P | P | 08 29 33.6 | +1.7 | |
| | baz=242,SNR=9.1 | | | | | | | |
| F22K | **John River** | 87.55 | 10 | P | P | 08 29 30.9 | -0.3 | |
| | baz=205 | | | | | | | |
| HHC | **Hu-ho-hao-te** | 87.57 | 314 | *e*P | P | 08 29 33.0 | +1.0 | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.9s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,140nm,3.5s | | | | | | | |
| FARO | **Faro, Yukon** | 87.60 | 19 | P | P | 08 29 31.5 | 0.0 | |
| | baz=222,SNR=14 | | | | | | | |
| K29M | **Barlow Dome** | 87.60 | 17 | P | P | 08 29 31.5 | -0.2 | |
| | baz=218,SNR=28 | | | | | | | |
| YNR | **Norris Junctio** | 87.61 | 41 | IAmb | IAmb | 08 29 36.2 | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| H25L | **Birch Creek** | 87.61 | 13 | P | P | 08 29 30.7 | -0.7 | |
| | baz=211,SNR=5.7 | | | | | | | |
| WTLY | **Watson Lake, Y** | 87.61 | 22 | IAmb | IAmb | 08 29 33.3 | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| WTLY | **Watson Lake, Y** | 87.61 | 22 | P | P | 08 29 32.2 | +0.5 | |
| | baz=226,SNR=8.1 | | | | | | | |
| COLD | **Coldfoot** | 87.62 | 11 | P | P | 08 29 31.6 | +0.1 | |
| | baz=207,SNR=31 | | | | | | | |
| D19K | **Kuna River** | 87.63 | 7 | IAmb | IAmb | 08 29 32.1 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| D19K | **Kuna River** | 87.63 | 7 | P | P | 08 29 30.5 | -1.1 | |
| | baz=199 | | | | | | | |
| E20K | **Nigu River** | 87.65 | 8 | P | P | 08 29 31.1 | -0.5 | |
| | baz=201,SNR=14 | | | | | | | |
| G24K | **Hadweenzic Riv** | 87.66 | 12 | IAmb | IAmb | 08 29 32.0 | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| G24K | **Hadweenzic Riv** | 87.66 | 12 | P | P | 08 29 30.8 | -0.8 | |
| | baz=209,SNR=8.2 | | | | | | | |
| LKWY | **Lake** | 87.71 | 41 | IAmb | IAmb | 08 29 36.1 | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| J29N | **Klondike Camp** | 87.90 | 16 | P | P | 08 29 32.6 | -0.3 | |
| | baz=218 | | | | | | | |
| YMP | **Mirror Lake Pl** | 87.95 | 41 | IAmb | IAmb | 08 29 50.9 | | |
| | comp=Z,17nm,1.2s | | | | | | | |
| ODSA | **Odessa** | 87.95 | 55 | IAmb | IAmb | 08 29 35.9 | | |
| | comp=Z,21nm,1.1s | | | | | | | |
| I27K | **Kandik River** | 87.98 | 14 | P | P | 08 29 33.1 | -0.2 | |
| | baz=215,SNR=9.1 | | | | | | | |
| G25K | **Bearman Lake** | 87.98 | 12 | P | P | 08 29 32.7 | -0.5 | |
| | baz=210,SNR=7.7 | | | | | | | |
| FYU | **Fort Yukon** | 87.99 | 13 | IAmb | IAmb | 08 29 33.8 | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| SDCO | **Great Sand Dun** | 87.99 | 49 | P | P | 08 29 34.2 | -0.1 | |
| | baz=245 | | | | | | | |
| D20K | **Etivluk River** | 88.03 | 8 | P | P | 08 29 33.3 | -0.1 | |
| | baz=200,SNR=6.2 | | | | | | | |
| C19K | **Lookout Ridge** | 88.05 | 7 | P | P | 08 29 33.5 | +0.1 | |
| | baz=198 | | | | | | | |
| KMI | **Kunming** | 88.10 | 297 | ⇑P | P | 08 29 36.9 | +1.9 | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,25nm,0.7s | | | | | | | |
| TOAD | **Toad River Com** | 88.11 | 25 | P | P | 08 29 33.9 | -0.1 | |
| | baz=229,SNR=39 | | | | | | | |
| E21K | **Killik River** | 88.13 | 9 | P | P | 08 29 33.0 | -0.9 | |
| | baz=203 | | | | | | | |
| LIRD | **Liard River Hi** | 88.14 | 24 | P | P | 08 29 34.6 | +0.5 | |
| | baz=229,SNR=8.7 | | | | | | | |
| E22K | **Anaktuvuk Pass** | 88.18 | 10 | P | P | 08 29 33.7 | -0.4 | |
| | baz=205 | | | | | | | |
| I28M | **Miner Creek** | 88.26 | 15 | IAmb | IAmb | 08 29 35.3 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| I28M | **Miner Creek** | 88.26 | 15 | P | P | 08 29 34.2 | -0.4 | |
| | baz=216,SNR=18 | | | | | | | |
| F24K | **Squaw Lake** | 88.30 | 11 | P | P | 08 29 34.6 | -0.1 | |
| | baz=209,SNR=20 | | | | | | | |
| CRAI | **Chiangrai** | 88.45 | 292 | IAmb | IAmb | 08 29 38.6 | | |
| | comp=Z,19nm,1.3s | | | | | | | |
| DRIO | **Del Rio** | 88.47 | 58 | IAmb | IAmb | 08 29 38.7 | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| E23K | **Chandalar** | 88.47 | 10 | P | P | 08 29 35.5 | 0.0 | |
| | baz=207,SNR=18 | | | | | | | |
| E23K | **Chandalar** | 88.47 | 10 | P | P | 08 29 34.7 | -0.9 | |
| RWWY | **Rawlins** | 88.48 | 45 | IAmb | IAmb | 08 29 38.1 | | |
| | comp=Z,32nm,1.2s | | | | | | | |
| J30M | **Hart River** | 88.50 | 17 | IAmb | IAmb | 08 29 37.8 | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| J30M | **Hart River** | 88.50 | 17 | P | P | 08 29 35.8 | 0.0 | |
| | baz=219,SNR=12 | | | | | | | |
| H27K | **Steamboat Moun** | 88.52 | 14 | P | P | 08 29 35.5 | -0.2 | |
| | baz=215,SNR=13 | | | | | | | |
| T25A | **Trinidad** | 88.53 | 50 | P | P | 08 29 36.8 | +0.1 | |
| | baz=246 | | | | | | | |
| I29M | **Ogilvie Camp,** | 88.59 | 16 | IAmb | IAmb | 08 29 36.7 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| I29M | **Ogilvie Camp,** | 88.59 | 16 | P | P | 08 29 35.7 | -0.4 | |
| | baz=218,SNR=20 | | | | | | | |
| OZNA | **Ozona** | 88.62 | 57 | IAmb | IAmb | 08 29 39.0 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| G26K | **Porcupine Rive** | 88.62 | 13 | P | P | 08 29 36.2 | +0.1 | |
| | baz=213,SNR=21 | | | | | | | |
| C21K | **Knifeblade Rid** | 88.68 | 8 | P | P | 08 29 36.5 | +0.1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| B20K | **Meade River** | 89.18 | 7 | P | | P | | 08 29 38.5 | -0.1 | |
| | baz=200 | | | | | | | | | |
| H29M | **Whitestone** | 89.26 | 15 | P | | P | | 08 29 39.2 | +0.1 | |
| | baz=218,SNR=21 | | | | | | | | | |
| KOTAN | **Kotaneelee Air** | 89.40 | 24 | P | | P | | 08 29 40.6 | +0.7 | |
| | baz=230 | | | | | | | | | |
| PZH | **PanZhiHua** | 89.43 | 298 | P | | P | | 08 29 41.8 | +0.8 | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,30nm,0.8s | | | | | | | | | |
| JCT | **Junction City** | 89.52 | 58 | P | | P | | 08 29 41.9 | +0.7 | |
| | baz=249 | | | | | | | | | |
| D24K | **Happy Valley** | 89.58 | 10 | P | | P | | 08 29 40.6 | +0.1 | |
| | baz=208 | | | | | | | | | |
| HNDO | **Hondo** | 89.59 | 59 | IAmb | | IAmb | | 08 29 44.3 | | |
| | comp=Z,17nm,0.9s | | | | | | | | | |
| AMTX | **Amarillo** | 89.68 | 53 | IAmb | | IAmb | | 08 29 43.5 | | |
| | comp=Z,13nm,1.1s | | | | | | | | | |
| AMTX | **Amarillo** | 89.68 | 53 | P | | P | | 08 29 42.8 | +0.8 | |
| | baz=248 | | | | | | | | | |
| EGMT | **Eagleton** | 89.73 | 39 | P | | P | | 08 29 43.0 | +1.2 | |
| | baz=242 | | | | | | | | | |
| EPYK | **Eagle Plains** | 89.79 | 15 | P | | P | | 08 29 41.4 | -0.2 | |
| | baz=219,SNR=24 | | | | | | | | | |
| YAK | **Yakutsk** | 89.87 | 338 | P | | P | | 08 29 40.7 | -1.3 | |
| | comp=Z,18nm,0.4s,baz=101,slow=5.1,SNR=6.7 | | | | | | | | | |
| | comp=Z,18nm,0.4s | | | | | | | | | |
| YAK | **Yakutsk** | 89.87 | 338 | *de*P | | P | | 08 29 40.7 | -1.3 | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=Z,33nm,0.8s | | | | | | | | | |
| G29M | **Pine Creek** | 89.90 | 15 | P | | P | | 08 29 41.5 | -0.6 | |
| | baz=218,SNR=15 | | | | | | | | | |
| C23K | **Itkillik River** | 89.91 | 9 | P | | P | | 08 29 42.3 | +0.3 | |
| | baz=206,SNR=9.8 | | | | | | | | | |
| B22K | **Teshekpuk Lake** | 89.96 | 8 | P | | P | | 08 29 41.6 | -0.7 | |
| | baz=204 | | | | | | | | | |
| F28M | **Old Crow** | 90.03 | 14 | IAmb | | IAmb | | 08 29 43.7 | | |
| | comp=Z,25nm,1.3s | | | | | | | | | |
| F28M | **Old Crow** | 90.03 | 14 | P | | P | | 08 29 42.1 | -0.6 | |
| | baz=216 | | | | | | | | | |
| TROLL | **Troll, Antarti** | 90.06 | 180 | ⇑P | | P | | 08 29 43.4 | +0.3 | |
| | comp=Z,756nm,0.7s | | | | | | | | | |
| C24K | **Franklin Bluff** | 90.10 | 10 | P | | P | | 08 29 43.0 | +0.1 | |
| | baz=208 | | | | | | | | | |
| E27K | **Coleen River** | 90.12 | 13 | IAmb | | IAmb | | 08 29 43.8 | | |
| | comp=Z,9.4nm,0.8s | | | | | | | | | |
| E27K | **Coleen River** | 90.12 | 13 | P | | P | | 08 29 43.1 | 0.0 | |
| | baz=215 | | | | | | | | | |
| LR05 | **Currie** | 90.23 | 133 | P | | P | | 08 29 45.3 | +0.9 | |
| APMT | **Aspermont** | 90.30 | 55 | IAmb | | IAmb | | 08 29 46.2 | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| SNAA | **Sanae** | 90.35 | 179 | P | | P | | 08 29 44.5 | +0.2 | |
| SNAA | | | | IAmb | | IAmb | | 08 29 45.4 | | |
| | comp=Z,31nm,1.5s | | | | | | | | | |
| SNAA | **Sanae** | 90.35 | 179 | ⇑P | | P | | 08 29 44.2 | -0.2 | |
| | comp=Z,165nm,0.7s | | | | | | | | | |
| SNAA | **Sanae** | 90.35 | 179 | P | | P | | 08 29 44.1 | -0.2 | |
| | comp=Z,5.5nm,0.6s,baz=193,slow=6.9,SNR=36 | | | | | | | | | |
| | comp=Z,5.5nm,0.6s | | | | | | | | | |
| SNAA | **Sanae** | 90.35 | 179 | P | | P | | 08 29 44.5 | +0.2 | |
| SNAA | | | | pmax | | pmax | | | | |
| | comp=Z,31nm,1.5s | | | | | | | | | |
| G30M | **tAoh Zraii Nji** | 90.39 | 15 | P | | P | | 08 29 44.1 | -0.3 | |
| | baz=220,SNR=33 | | | | | | | | | |
| BRDY | **Brady** | 90.45 | 57 | IAmb | | IAmb | | 08 29 47.2 | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| VNA3 | **Neumayer Olymp** | 90.48 | 176 | ⇑P | | P | | 08 29 45.3 | +0.4 | |
| | comp=Z,40nm,0.7s | | | | | | | | | |
| G31M | **Satah River** | 90.85 | 16 | P | | P | | 08 29 46.3 | -0.1 | |
| | baz=221,SNR=34 | | | | | | | | | |
| SMWD | **Samnorwood** | 90.86 | 53 | IAmb | | IAmb | | 08 29 48.8 | | |
| | comp=Z,7.5nm,0.9s | | | | | | | | | |
| C27K | **Jago River** | 90.90 | 11 | P | | P | | 08 29 46.7 | 0.0 | |
| | baz=213 | | | | | | | | | |
| E28M | **Babbage River** | 90.91 | 13 | P | | P | | 08 29 46.7 | 0.0 | |
| | baz=216,SNR=7.6 | | | | | | | | | |
| VNA2 | **Neumayer--Watz** | 90.92 | 177 | ⇑P | | P | | 08 29 47.8 | +0.9 | |
| | comp=Z,23nm,0.6s,baz=188,slow=5.1 | | | | | | | | | |
| C26K | **Camden Bay** | 90.93 | 11 | P | | P | | 08 29 46.8 | +0.1 | |
| | baz=212 | | | | | | | | | |
| F30M | **Barrier River** | 90.99 | 15 | P | | P | | 08 29 48.5 | +1.4 | |
| | baz=220,SNR=6.3 | | | | | | | | | |
| NVL | **N'lazarevskaya** | 91.03 | 183 | *e*P | | P | | 08 29 46.5 | -0.9 | |
| NVL | | | | pmax | | pmax | | | | |
| | comp=Z,19nm,0.9s | | | | | | | | | |
| PLCA | **Paso Flores** | 91.03 | 134 | P | | P | | 08 29 49.6 | +1.4 | |
| | comp=Z,5.0nm,0.9s,baz=231,slow=4.4,SNR=8.6 | | | | | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| E29M | **Blow River** | 91.10 | 14 | IAmb | | IAmb | | 08 29 48.9 | | |
| | comp=Z,31nm,1.4s | | | | | | | | | |
| E29M | **Blow River** | 91.10 | 14 | P | | P | | 08 29 47.1 | -0.5 | |
| | baz=218,SNR=10 | | | | | | | | | |
| D27M | **Malcolm River** | 91.12 | 12 | IAmb | | IAmb | | 08 29 50.0 | | |
| | comp=Z,30nm,1.4s | | | | | | | | | |
| D27M | **Malcolm River** | 91.12 | 12 | P | | P | | 08 29 47.7 | -0.1 | |
| | baz=215,SNR=5.8 | | | | | | | | | |
| VNA1 | **Neumayer--Stat** | 91.15 | 177 | ⇑P | | P | | 08 29 48.8 | +0.9 | |
| | comp=Z,34nm,0.9s | | | | | | | | | |
| LZH | **Lanzhou** | 91.18 | 308 | ⇑P | | P | | 08 29 50.4 | +1.5 | |
| LZH | | | | pmax | | pmax | | | | |
| | comp=Z,41nm,1.4s | | | | | | | | | |
| LAO | **LASA Array** | 91.28 | 41 | P | | P | | 08 29 49.7 | +0.7 | |
| | baz=245 | | | | | | | | | |
| F31M | **Tsiigehtchic** | 91.38 | 16 | P | | P | | 08 29 48.6 | -0.2 | |
| | baz=222,SNR=23 | | | | | | | | | |
| 435B | **Jarrell** | 91.41 | 58 | P | | P | | 08 29 50.6 | +0.7 | |
| | baz=250 | | | | | | | | | |
| PLPT | **Palo Pinto** | 91.53 | 56 | IAmb | | IAmb | | 08 29 52.3 | | |
| | comp=Z,19nm,1.0s | | | | | | | | | |
| WRGLY | **Wrigley** | 91.59 | 22 | IAmb | | IAmb | | 08 29 51.9 | | |
| | comp=Z,9.8nm,1.0s | | | | | | | | | |
| WRGLY | **Wrigley** | 91.59 | 22 | P | | P | | 08 29 50.0 | +0.1 | |
| | baz=231 | | | | | | | | | |
| RSSD | **Black Hills** | 91.62 | 44 | P | | P | | 08 29 51.4 | +0.5 | |
| RSSD | | | | IAmb | | IAmb | | 08 29 52.1 | | |
| | comp=Z,14nm,0.8s | | | | | | | | | |
| RSSD | **Black Hills** | 91.62 | 44 | P | | P | | 08 29 51.0 | +0.1 | |
| | baz=246 | | | | | | | | | |
| RSSD | **Black Hills** | 91.62 | 44 | P | | P | | 08 29 51.4 | +0.5 | |
| RSSD | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| D28M | **Stokes Point** | 91.66 | 13 | P | | P | | 08 29 50.2 | +0.1 | |
| | baz=217 | | | | | | | | | |
| OGNE | **Ogallala** | 91.73 | 47 | P | | P | | 08 29 51.7 | +0.4 | |
| | baz=247 | | | | | | | | | |
| FW03 | **Perrin-Whitt E** | 91.81 | 56 | IAmb | | IAmb | | 08 29 53.6 | | |
| | comp=Z,15nm,1.0s | | | | | | | | | |
| WMOK | **Wichita Mounta** | 91.85 | 54 | P | | P | | 08 29 52.3 | +0.5 | |
| | baz=249 | | | | | | | | | |
| INK | **Inuvik** | 92.08 | 15 | P | | P | | 08 29 51.1 | -0.9 | |
| | comp=Z,26nm,0.9s,baz=222,slow=4.7,SNR=34 | | | | | | | | | |
| | comp=Z,26nm,0.9s | | | | | | | | | |
| INK | **Inuvik** | 92.08 | 15 | P | | P | | 08 29 51.4 | -0.6 | |
| | baz=222,SNR=19 | | | | | | | | | |
| CBKS | **Cedar Bluff** | 92.58 | 50 | IAmb | | IAmb | | 08 29 56.8 | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| CBKS | **Cedar Bluff** | 92.58 | 50 | P | | P | | 08 29 55.2 | 0.0 | |
| | baz=249 | | | | | | | | | |
| DGMT | **Dagmar** | 93.27 | 40 | P | | P | | 08 29 58.4 | +0.3 | |
| | baz=246 | | | | | | | | | |
| ULN | **Ulaanbaatar** | 93.46 | 319 | P | | P | | 08 29 58.6 | -0.5 | |
| ULN | | | | IAmb | | IAmb | | 08 30 00.0 | | |
| | comp=Z,10nm,0.9s | | | | | | | | | |
| ULN | **Ulaanbaatar** | 93.46 | 319 | ⇑*i*P | | P | | 08 29 59.3 | +0.2 | |
| ULN | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| BLOK | **Blackwell** | 93.74 | 53 | IAmb | | IAmb | | 08 30 02.4 | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| SONM | **Songino Array** | 93.85 | 319 | P | | P | | 08 30 00.3 | -0.6 | |
| SONM | | | | IAmb | | IAmb | | 08 30 01.7 | | |
| | comp=Z,6.7nm,1.1s | | | | | | | | | |
| SONM | **Songino Array** | 93.85 | 319 | P | | P | | 08 30 00.2 | -0.7 | |
| | comp=Z,2.2nm,0.6s,baz=125,slow=4.4,SNR=12 | | | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | | | |
| SONM | **Songino Array** | 93.85 | 319 | P | | P | | 08 30 00.3 | -0.6 | |
| SONM | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | | |
| YKA | **Yellowknife Ar** | 94.48 | 25 | P | | P | | 08 30 02.8 | -0.3 | |
| YKA | **Yellowknife Ar** | 94.48 | 25 | P | | P | | 08 30 02.3 | -0.8 | |
| | comp=Z,5.3nm,0.8s,baz=247,slow=4.6,SNR=14 | | | | | | | | | |
| YKA | | | | PP | | PP | | 08 33 57.5 | -3.5 | |
| | comp=Z,3.5nm,1.1s,baz=240,slow=6.2,SNR=4.1 | | | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | | | |
| YKA | **Yellowknife Ar** | 94.48 | 25 | P | | P | | 08 30 02.8 | -0.3 | |
| C36M | **Paulatuk** | 95.28 | 17 | P | | P | | 08 30 07.1 | +0.5 | |
| | baz=231 | | | | | | | | | |
| GTA | **Gaotai** | 95.33 | 310 | *e*P | | P | | 08 30 08.3 | +0.5 | |
| GTA | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ECSD | **EROS Data Cent** | 96.48 | 46 | IAmb | | IAmb | | 08 30 13.5 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | | | |
| ECSD | **EROS Data Cent** | 96.48 | 46 | P | | P | | 08 30 11.9 | -0.8 | |
| | baz=251 | | | | | | | | | |
| A36M | **Sachs Harbour** | 96.67 | 14 | P | | P | | 08 30 12.5 | -0.4 | |
| | baz=230 | | | | | | | | | |
| F33A | **5 Mile Ranch,** | 97.36 | 44 | IAmb | | IAmb | | 08 30 17.3 | | |
| | comp=Z,8.1nm,1.2s | | | | | | | | | |
| LPAZ | **La Paz** | 103.14 | 112 | Pdiff | | Pdif | | 08 30 46.2 | +2.5 | |
| | comp=Z,1.3nm,0.9s,baz=236,slow=3.6,SNR=4.2 | | | | | | | | | |
| ZALV | **Zalesovo Beam** | 108.54 | 322 | PKiKP | | PKiKP | | 08 35 07.0 | -1.0 | |
| | comp=Z,1.7nm,0.6s,baz=107,slow=0.8,SNR=6.9 | | | | | | | | | |
| MKAR | **Makanchi Array** | 109.43 | 314 | Pdiff | | Pdif | | 08 31 11.7 | +1.4 | |
| | comp=Z,0.4nm,0.6s,baz=96,slow=5.8,SNR=3.8 | | | | | | | | | |
| MKAR | | | | PKiKP | | PKiKP | | 08 35 09.0 | -1.0 | |
| | comp=Z,2.1nm,0.5s,baz=80,slow=1.8,SNR=20 | | | | | | | | | |
| KURK | **Kurchatov** | 112.13 | 318 | *d* *i* PKiKP | | PKiKP | | 08 35 14.0 | -0.9 | |
| KURK | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | | |
| KURBB | **Kurchatov Arra** | 112.18 | 318 | PKiKP | | PKiKP | | 08 35 13.8 | -1.1 | |
| | comp=Z,3.8nm,0.7s,baz=93,slow=1.8,SNR=37 | | | | | | | | | |
| KURBB | | | | PP | | PP | | 08 36 06.2 | -4.8 | |
| | comp=Z,1.4nm,0.8s,baz=92,slow=6.5,SNR=7.1 | | | | | | | | | |
| AAK | **Ala-Archa** | 114.67 | 309 | ⇑*i* PKiKP | | PKPdf | | 08 35 19.9 | -0.4 | |
| AAK | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,2.5s | | | | | | | | | |
| BVAR | **Borovoye Array** | 117.15 | 321 | PKP | | PKPdf | | 08 35 23.7 | -0.8 | |
| | comp=Z,5.7nm,0.5s,baz=86,slow=2.0,SNR=32 | | | | | | | | | |
| BVAR | | | | PP | | PP | | 08 36 47.2 | +1.9 | |
| | comp=Z,2.4nm,0.8s,baz=92,slow=6.5,SNR=5.7 | | | | | | | | | |
| BRVK | **Borovoye** | 117.21 | 321 | *d* *i* PKiKP | | PKPdf | | 08 35 23.6 | -1.0 | |
| BRVK | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | | |
| KK31 | **Karatay Array** | 117.61 | 310 | PKPdf | | PKPdf | | 08 35 25.2 | -0.4 | |
| KK31 | **Karatay Array** | 117.61 | 310 | PKiKP | | PKPdf | | 08 35 25.3 | -0.4 | |
| KKAR | **Karatay Array** | 117.61 | 310 | PKPdf | | PKPdf | | 08 35 25.2 | -0.5 | |
| KKAR | **Karatay Array** | 117.61 | 310 | PKiKP | | PKPdf | | 08 35 25.2 | -0.5 | |
| ARU | **Arti** | 123.15 | 326 | *i* PKiKP | | PKPdf | | 08 35 35.2 | -0.7 | |
| ARU | | | | | | | | 08 37 24.3 | | |
| ARU | | | | | | | | 08 41 53.4 | | |
| ARU | | | | SS | | SS | | 08 53 26.5 | -0.8 | |
| ARU | **Arti** | 123.15 | 326 | PKP | | PKPdf | | 08 35 35.4 | -0.5 | |
| ABKAR | **Akbulak array** | 124.23 | 318 | PKPdf | | PKPdf | | 08 35 38.0 | -0.2 | |
| ARCES | **ARCESS Array B** | 126.59 | 350 | PKPdf | | PKPdf | | 08 35 42.2 | 0.0 | |
| ARCES | **ARCESS Array B** | 126.59 | 350 | PKiKP | | PKPdf | | 08 35 41.8 | -0.3 | |
| | comp=Z,9.1nm,0.7s,baz=38,slow=1.6,SNR=21 | | | | | | | | | |
| ARCES | **ARCESS Array B** | 126.59 | 350 | PKiKP | | PKPdf | | 08 35 42.2 | 0.0 | |
| KIRV | **Kirov** | 126.83 | 331 | *c* *i* PKiKP | | PKPdf | | 08 35 42.6 | -0.2 | |
| BELG | **Belogornoye** | 130.59 | 325 | *ce* PKiKP | | PKPdf | | 08 35 49.2 | -1.0 | |
| FINES | **FINESS Array B** | 133.47 | 344 | PKhKP | | PKPpre | | 08 35 48.0 | | |
| | comp=Z,3.5nm,0.9s,baz=38,slow=2.5,SNR=7.7 | | | | | | | | | |
| FINES | | | | PKP | | PKPdf | | 08 35 54.6 | -0.8 | |
| | comp=Z,4.6nm,0.9s,baz=29,slow=3.2,SNR=4.3 | | | | | | | | | |
| OBN | **Obninsk** | 134.60 | 333 | *e* PKiKP | | PKPdf | | 08 35 58.3 | +0.7 | |
| OBN | | | | *i* | | | | 08 38 36.1 | | |
| OBN | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| NB2 | **NORSAR Subarra** | 136.64 | 353 | PKPdf | | PKPdf | | 08 35 50.1 | -11 | |
| | comp=Z,5.1nm,1.2s,baz=14,slow=1.8 | | | | | | | | | |
| NOA | **NORSAR Array B** | 136.64 | 353 | PKP | | PKPdf | | 08 36 00.7 | -0.7 | |
| | comp=Z,2.3nm,0.8s,baz=15,slow=3.8,SNR=5.9 | | | | | | | | | |
| NCK | **Nalchik** | 136.73 | 315 | ⇓*e* PKiKP | | PKPdf | | 08 36 00.7 | -1.3 | |
| KBZ | **Khabaz** | 137.10 | 316 | PKP | | PKPdf | | 08 36 03.5 | +0.9 | |
| | comp=Z,3.2nm,0.7s,baz=105,slow=2.0,SNR=5.0 | | | | | | | | | |
| KBZ | **Khabaz** | 137.10 | 316 | *c* *i* PKiKP | | PKiKP | | 08 36 05.0 | +0.4 | |
| KIV | **Kislovodsk** | 137.16 | 316 | *e* PKiKP | | PKiKP | | 08 36 04.7 | -0.2 | |
| KIV | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | | |
| HFS | **Hagfors** | 137.20 | 351 | PKhKP | | PKPpre | | 08 35 51.3 | | |
| | comp=Z,2.6nm,0.5s,baz=20,slow=4.6,SNR=3.2 | | | | | | | | | |
| HFS | | | | PKP | | PKPdf | | 08 36 02.2 | -0.2 | |
| | comp=Z,4.0nm,0.8s,baz=49,slow=4.6,SNR=5.0 | | | | | | | | | |
| SHA1 | **Shidzhatmaz** | 137.26 | 316 | ⇑*e* PKiKP | | PKPdf | | 08 36 01.5 | -1.8 | |
| STRU | **Struoemstad** | 138.60 | 353 | *i* P | | PKPdf | | 08 35 54.6 | -10 | |
| TJOU | **Tjoern** | 139.52 | 352 | *i* P | | PKPdf | | 08 35 57.3 | -9.3 | |
| SNART | **Snartemo** | 139.68 | 356 | *i* P | | PKPdf | | 08 36 01.0 | -5.9 | |
| BORU | **Boraas** | 139.74 | 351 | *i* P | | PKPdf | | 08 35 57.0 | -10 | |
| ONAU | **Onsala** | 140.10 | 351 | *i* P | | PKPdf | | 08 35 58.8 | -8.9 | |
| KMBO | **Kilima Mbogo** | 140.19 | 245 | PKhKP | | PKPpre | | 08 36 03.7 | | |
| | comp=Z,1.1nm,0.5s,baz=226,slow=1.6,SNR=4.0 | | | | | | | | | |
| FABU | **Falkenberg** | 140.36 | 351 | *i* P | | PKPdf | | 08 36 00.6 | -7.5 | |
| KPL | **Plockton** | 140.49 | 6 | *e*P | | PKPdf | | 08 36 01.6 | -6.8 | |
| DEL | **Delary** | 140.68 | 349 | *i* P | | PKPdf | | 08 36 01.0 | -7.8 | |
| AKASG | **Malin Array Be** | 140.86 | 332 | PKhKP | | PKPpre | | 08 36 02.2 | | |
| | comp=Z,1.4nm,0.3s,baz=44,slow=4.1,SNR=20 | | | | | | | | | |
| KIEV | **Kiev** | 140.87 | 332 | ⇑P | | PKPdf | | 08 36 03.4 | -5.8 | |
| KIEV | **Kiev** | 140.87 | 332 | ⇑PKHKP | | PKPpre | | 08 36 03.4 | | |
| LUNU | **Lund** | 141.55 | 349 | *i* P | | PKPdf | | 08 36 04.5 | -5.9 | |
| LAWE | **Lweh Awe, Argy** | 141.58 | 6 | *e*P | | PKPdf | | 08 36 04.9 | -5.4 | |
| BSD | **Bornholm Skovb** | 141.77 | 348 | *i* P | | PKPdf | | 08 36 05.2 | -5.6 | |
| SIM | **Simferopol'** | 142.05 | 322 | *e* PKHKP | | PKPpre | | 08 36 08.8 | | |
| SIM | | | | *e* | | | | 08 36 12.0 | | |
| SIM | | | | pmax | | pmax | | | | |
| | comp=Z,38nm,1.0s | | | | | | | | | |
| EKA | **Eskdalemuir Ar** | 142.70 | 5 | PKhKP | | PKPpre | | 08 36 08.8 | | |
| | comp=Z,6.9nm,0.7s,baz=343,slow=2.2,SNR=15 | | | | | | | | | |
| DIKM | **Dikmen** | 143.07 | 317 | ⇑P | | PKPbc | | 08 36 12.6 | +0.8 | |
| SORM | **Soroca** | 143.09 | 330 | ⇓P | | PKPab | | 08 36 10.9 | -0.1 | |
| SORM | **Soroca** | 143.09 | 330 | ⇓PKHKP | | PKPpre | | 08 36 10.9 | | |
| SORM | **Soroca** | 143.09 | 330 | PKP | | PKPab | | 08 36 10.9 | -0.2 | |
| BEL | **Belsk** | 143.19 | 340 | *e*PKP | | PKPbc | | 08 36 11.9 | +0.2 | |
| EDMD | **Edmundbyers** | 143.28 | 4 | *e*P | | PKPab | | 08 36 12.6 | -1.2 | |
| LVV | **Lvov** | 143.70 | 336 | *e*PKiKP | | PKPbc | | 08 36 12.6 | -0.8 | |
| MILM | **Milestii Mici** | 143.71 | 328 | ⇑P | | PKPbc | | 08 36 13.3 | -0.2 | |
| MILM | **Milestii Mici** | 143.71 | 328 | ⇑PKiKP | | PKPbc | | 08 36 13.3 | -0.2 | |
| HPK | **Haverah Park** | 144.17 | 3 | *e*P | | PKPbc | | 08 36 14.2 | -0.4 | |
| KWP | **Kalwaria Pacla** | 144.37 | 337 | *e*PKP | | PKPdf | | 08 36 15.5 | 0.0 | |
| WME | **Myndd Eilian** | 144.51 | 6 | *e*P | | PKPdf | | 08 36 14.7 | -0.9 | |
| WLF1 | **Llynfaes** | 144.61 | 6 | *e*P | | PKPdf | | 08 36 14.1 | -1.6 | |
| LBWR | **Ladybower, Pea** | 144.72 | 4 | *e*P | | PKPdf | | 08 36 15.6 | -0.4 | |
| LMK | **Market Rasen** | 144.73 | 2 | *e*P | | PKPdf | | 08 36 15.5 | -0.5 | |
| VLDR | **Vladesti** | 144.82 | 327 | ⇓P | | PKPab | | 08 36 17.7 | -0.1 | |
| TLCR | | 144.88 | 326 | ⇑P | | PKPab | | 08 36 17.7 | -0.3 | |
| OJC | **Ojcow** | 144.91 | 340 | *e*PKP | | PKPbc | | 08 36 17.0 | -0.1 | |
| BURAR | **Bucovina Array** | 144.91 | 332 | ⇑P | | PKPab | | 08 36 18.0 | -0.2 | |
| BURAR | **Bucovina Array** | 144.91 | 332 | ⇑PKiKP | | PKPab | | 08 36 18.0 | -0.2 | |
| SCTR | **Scanteiesti** | 144.98 | 327 | ⇑P | | PKPab | | 08 36 18.4 | 0.0 | |
| GHRR | | 145.01 | 328 | ⇑P | | PKPab | | 08 36 18.8 | +0.3 | |
| TESR | **Tescani** | 145.06 | 330 | ⇓P | | PKPab | | 08 36 18.4 | -0.3 | |
| BRTR | **Keskin Array B** | 145.08 | 315 | PKP | | PKPdf | | 08 36 16.8 | -0.4 | |
| | comp=Z,22nm,0.8s,baz=83,slow=2.7,SNR=95 | | | | | | | | | |
| KOLS | **Kolonicke sedl** | 145.10 | 336 | *e*PKiKP | | PKPab | | 08 36 18.4 | -0.4 | |
| KOLS | **Kolonicke sedl** | 145.10 | 336 | *e*PKP | | PKPab | | 08 36 18.4 | -0.4 | |
| LLW | **Llanuwychllyn** | 145.12 | 6 | *e*P | | PKPdf | | 08 36 16.6 | -0.1 | |
| JURR | **Jurilovca** | 145.12 | 325 | ⇓P | | PKPdf | | 08 36 17.0 | +0.1 | |
| NEGRR | **Negrea** | 145.13 | 327 | ⇑P | | PKPab | | 08 36 18.9 | -0.1 | |
| SLCR | **Slobozia Conac** | 145.15 | 327 | ⇑P | | PKPab | | 08 36 19.9 | +0.9 | |
| KIRS | **Kirsehir-Merke** | 145.17 | 314 | ⇓P | | PKPdf | | 08 36 17.8 | +0.4 | |
| CFR | **Carculiu** | 145.24 | 327 | ⇑P | | PKPbc | | 08 36 18.6 | +0.4 | |
| CFR | **Carculiu** | 145.24 | 327 | ⇑PKiKP | | PKPbc | | 08 36 18.6 | +0.4 | |
| PANC | **Panciu** | 145.27 | 328 | ⇓P | | PKPbc | | 08 36 18.4 | +0.1 | |
| TPGR | **Topolog** | 145.30 | 326 | ⇑P | | PKPab | | 08 36 19.4 | -0.3 | |
| ONER | **Baraj Valea Uz** | 145.31 | 330 | ⇓P | | PKPab | | 08 36 19.2 | -0.5 | |
| KSP | **Ksiaz** | 145.40 | 344 | *e*PKP | | PKPbc | | 08 36 19.0 | +0.5 | |
| CWF | **Charnwood Fore** | 145.41 | 9 | *e*P | | PKPdf | | 08 36 17.2 | 0.0 | |
| NIE | **Niedzica** | 145.42 | 339 | *e*PKP | | PKPbc | | 08 36 18.8 | -0.1 | |
| CRVS | **Cervenica-Dubn** | 145.43 | 337 | *e*PKiKP | | PKPbc | | 08 36 19.2 | +0.5 | |
| CRVS | **Cervenica-Dubn** | 145.43 | 337 | *e*PKP | | PKPbc | | 08 36 19.2 | +0.5 | |
| ASF | **Jabal al Asfar** | 145.46 | 301 | PKPbc | | PKPdf | | 08 36 16.8 | -1.2 | |
| | comp=Z,22nm,0.8s,baz=32,slow=0.4,SNR=16 | | | | | | | | | |
| VRI | **Vrincioaia** | 145.48 | 329 | ⇑P | | PKPbc | | 08 36 19.2 | +0.3 | |
| VRI | **Vrincioaia** | 145.48 | 329 | ⇑PKiKP | | PKPbc | | 08 36 19.2 | +0.3 | |
| WACR | **West Acre** | 145.49 | 1 | *e*P | | PKPdf | | 08 36 16.4 | -0.9 | |
| HLM1 | **Long Mynd** | 145.51 | 5 | *e*P | | PKPdf | | 08 36 17.8 | +0.4 | |
| PLOR | **Plostina** | 145.53 | 329 | ⇑P | | PKPbc | | 08 36 19.0 | -0.1 | |
| PLOR | **Plostina** | 145.53 | 329 | ⇑PKiKP | | PKPbc | | 08 36 19.0 | -0.1 | |
| ANTO | **Ankara** | 145.58 | 315 | | | PKPdf | | 08 36 17.9 | -0.1 | |
| ANTO | **Ankara** | 145.58 | 315 | ⇑P | | PKPbc | | 08 36 20.1 | +0.6 | |
| ANTO | **Ankara** | 145.58 | 315 | PKiKP | | PKPdf | | 08 36 17.9 | -0.1 | |
| BMR | **Baia Mare** | 145.62 | 334 | ⇑P | | PKPbc | | 08 36 19.9 | +0.7 | |
| BMR | **Baia Mare** | 145.62 | 334 | ⇑PKP2 | | PKPbc | | 08 36 19.9 | +0.7 | |
| HARR | **Harsova** | 145.67 | 326 | ⇑P | | PKPbc | | 08 36 20.2 | +0.7 | |
| HARR | **Harsova** | 145.67 | 326 | ⇑PKP2 | | PKPbc | | 08 36 20.2 | +0.7 | |
| OSTC | **Ostas** | 145.68 | 344 | ⇑*e*PKP | | PKPbc | | 08 36 20.1 | +0.7 | |
| OSTC | **Ostas** | 145.68 | 344 | *e*PKP2 | | PKPbc | | 08 36 20.1 | +0.7 | |
| CHVC | **Chvalec** | 145.69 | 344 | ⇑*e*PKP | | PKPbc | | 08 36 20.1 | +0.7 | |
| CHVC | **Chvalec** | 145.69 | 344 | *e*PKP2 | | PKPbc | | 08 36 20.1 | +0.7 | |
| TURR | **Turia** | 145.69 | 330 | ⇓P | | PKPab | | 08 36 20.9 | -0.3 | |
| ARCR | **ARCALIA** | 145.70 | 332 | ⇑P | | PKPab | | 08 36 20.6 | -0.6 | |
| CLL | **Collm** | 145.74 | 347 | ⇓*i* PKPbc | | PKPbc | | 08 36 19.6 | +0.1 | |
| | comp=Z,110nm,0.9s | | | | | | | | | |
| CLL | | | | *e* SKPbc | | SKiKP | | 08 39 07.0 | +2.0 | |
| CLL | **Collm** | 145.74 | 347 | ⇓*i* PKiKP | | PKPbc | | 08 36 19.6 | +0.1 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| CLL | | | | pmax | | pmax | | | | |
| | comp=Z,110nm,0.9s | | | | | | | | | |
| COVR | **Voineasa-Covas** | 145.75 | 329 | ⇑P | | PKPbc | | 08 36 19.9 | +0.2 | |
| OKC | **Ostrava-Krasne** | 145.76 | 341 | ⇑*e*PKP | | PKPbc | | 08 36 19.8 | +0.2 | |
| OKC | **Ostrava-Krasne** | 145.76 | 341 | *e*PKiKP | | PKPbc | | 08 36 19.8 | +0.2 | |
| OZUR | | 145.78 | 330 | ⇑P | | PKPbc | | 08 36 20.6 | +0.8 | |
| UPC | **Upice** | 145.78 | 344 | ⇑*e*PKP | | PKPbc | | 08 36 20.1 | +0.5 | |
| UPC | **Upice** | 145.78 | 344 | *e*PKiKP | | PKPbc | | 08 36 20.1 | +0.5 | |
| DPC | **Dobruska-Polom** | 145.84 | 343 | ⇑*e*PKP | | PKPbc | | 08 36 20.6 | +0.7 | |
| DPC | **Dobruska-Polom** | 145.84 | 343 | *e*PKP2 | | PKPbc | | 08 36 20.6 | +0.7 | |
| LANS | **Liptovska Anna** | 145.93 | 339 | *e*PKP2 | | PKPab | | 08 36 21.6 | -0.5 | |
| LANS | **Liptovska Anna** | 145.93 | 339 | *e*PKP | | PKPab | | 08 36 21.6 | -0.5 | |
| BRG | **Berggiesshubel** | 145.95 | 346 | *e*PKP | | PKPdf | | 08 36 18.6 | +0.5 | |
| BRG | | | | Amp | | | | 08 36 19.5 | | |
| | comp=Z,6.6nm,0.9s | | | | | | | | | |
| BRG | **Berggiesshubel** | 145.95 | 346 | P | | PKPbc | | 08 36 20.8 | +0.7 | |
| BRG | | | | Amp | | | | 08 36 21.5 | | |
| | comp=Z,49nm,1.0s | | | | | | | | | |
| BRG | **Berggiesshubel** | 145.95 | 346 | P | | PKiKP | | 08 36 27.3 | +4.7 | |
| BRG | | | | Amp | | | | 08 36 29.3 | | |
| | comp=Z,13nm,0.8s | | | | | | | | | |
| KRLC | **Kraliky** | 145.96 | 343 | ⇑*e*PKP | | PKPbc | | 08 36 20.6 | +0.4 | |
| KRLC | **Kraliky** | 145.96 | 343 | *e*PKiKP | | PKPbc | | 08 36 20.6 | +0.4 | |
| MORC | **Moravsky Berou** | 146.00 | 342 | *e*PKP | | PKPbc | | 08 36 20.2 | -0.1 | |
| MORC | **Moravsky Berou** | 146.00 | 342 | ⇓P | | PKPbc | | 08 36 20.7 | +0.4 | |
| MORC | **Moravsky Berou** | 146.00 | 342 | ⇓PKiKP | | PKPbc | | 08 36 20.7 | +0.4 | |
| MCH1 | **Michaelchurch** | 146.02 | 5 | *e*P | | PKPdf | | 08 36 18.9 | +0.7 | |
| DOPR | **Dopca** | 146.06 | 330 | ⇓P | | PKPbc | | 08 36 21.6 | +1.0 | |
| ISR | **Istrita** | 146.10 | 328 | ⇑P

comp=Z,28nm,0.5s,SNR=29
**MOTA Moosalm 149.90 347** *i* PKP **PKPbc 08 36 30.0 -0.4**
comp=Z,24nm,0.7s
**MYKA Terra Mystica 149.96 344** *i* PKP **PKPbc 08 36 29.7 -0.8**
comp=Z,13nm,0.5s,SNR=15
**SQTA Sankt Quirin 149.99 347** *i* PKP **PKPbc 08 36 30.5 -0.2**
comp=Z,21nm,0.6s,SNR=19
**ABTA Abfaltersbach 150.14 345** *i* PKP **PKPbc 08 36 30.3 -0.6**
comp=Z,47nm,0.7s,SNR=18
**DAVA Damuels 150.19 349** *i* PKP **PKPbc 08 36 31.0 -0.2**
comp=Z,14nm,0.5s,SNR=20
**LJU Ljubljana 150.25 342** *i* PKPbc **PKPbc 08 36 31.0 -0.1**
**FETA Feichten 150.28 348** *i* PKP **PKPbc 08 36 31.2 -0.1**
comp=Z,15nm,0.7s,SNR=13
**BOJS Bojanci 150.51 341** *i* PKPbc **PKiKP 08 36 31.9 -0.2**
**DAVOX Davos/Dischmat 150.68 349** PKP **PKPdf 08 36 26.1 -0.1**
comp=Z,5.9nm,0.9s,baz=42,slow=6.6,SNR=16
DAVOX PKPbc **PKPbc 08 36 32.1 -0.2**
comp=Z,57nm,0.7s,baz=90,slow=1.0,SNR=91
**VAY Valandovo 150.84 327** *i* P **PKPbc 08 36 32.6 0.0**
**PDG Podgorica 151.60 332** ⇓P **PKPbc 08 36 33.8 -0.5**
**TEOL Teolo 151.65 345** PKPdf **PKPdf 08 36 26.5 -0.9**
TEOL **PKiKP 08 36 34.4 -0.1**
TEOL **PKPab 08 36 45.9 +0.2**
**APE Apeiranthos 151.88 317** ⇑P PKPdf 08 36 17.5 -11
**APE Apeiranthos 151.88 317** ⇑PKIKP PKPdf 08 36 17.5 -11
**OHR Ohrid 151.90 328** *i* P **PKiKP 08 36 36.1 +0.8**
**IDI Anoyia 153.32 314** PKPbc **PKPbc 08 36 37.8 -0.6**
comp=Z,14nm,0.7s,baz=135,slow=1.4,SNR=9.2
**PCAB Cabril 155.07 18** *e*PKPab **PKPab 08 37 01.4 +1.0**
**PBRG Braganca 155.33 15** *e*PKPab **PKPab 08 37 01.7 +0.1**
**TIP Timpagrande 155.34 331** ⇓P PKPdf 08 36 42.5 +10
**POLO Lamas de Olo 155.45 18** *e*PKPab **PKPab 08 37 02.6 +0.4**
**PVRL Vila Real 155.56 17** *e*PKPab **PKPab 08 37 03.1 +0.5**
**CEST Esterri de Car 155.63 1** PKPab **PKPab 08 37 03.1 +0.2**
**MVO Moncorvo 155.85 16** *e*PKPab **PKPab 08 37 04.4 +0.5**
**PVIS Viseu 156.03 18** *e*PKPab **PKPab 08 37 03.6 -1.0**
**MTE Manteigas 156.42 18** *e*PKPab **PKPab 08 37 06.5 +0.2**
**PCAS Casmilo, Conde 156.44 20** *e*PKPab **PKPab 08 37 06.2 -0.2**
**PSBE So Bento 156.83 21** *e*PKPab **PKPab 08 37 07.7 -0.4**
**PCBR Castelo Branco 156.95 18** *e*PKPdf **PKPdf 08 36 35.4 +0.5**
**PCBR Castelo Branco 156.95 18** *e*PKPab **PKPab 08 37 08.6 0.0**
**PMRV Marv??o 157.36 19** *e*PKPab **PKPab 08 37 09.9 -0.5**
**PMTG Montargil 157.42 21** *e*PKPab **PKPab 08 37 10.1 -0.5**
**PESTR Estremoz 157.81 20** *e*PKPab **PKPab 08 37 11.9 -0.5**
**EVO Evora 157.97 21** *e*PKPdf **PKPdf 08 36 36.9 +0.7**
**EVO Evora 157.97 21** *e*PKPab **PKPab 08 37 12.3 -0.8**
**ESBB Sonseca Array 157.99 12** PKPab **PKPab 08 37 13.2 0.0**
**ESDC Sonseca Array 157.99 12** **PKPdf 08 36 36.7 +0.5**
ESDC **PKPab 08 37 13.2 0.0**
**ESDC Sonseca Array 157.99 12** PKP **PKPdf 08 36 36.3 0.0**
comp=Z,0.7nm,0.8s,baz=336,slow=1.6,SNR=7.1
ESDC PKPab **PKPab 08 37 12.9 -0.2**
comp=Z,8.0nm,1.0s,baz=336,slow=3.4,SNR=24
ESDC PP **PP 08 40 56.7 +2.4**
comp=Z,1.4nm,1.1s,baz=353,slow=6.0,SNR=4.6
**PNCL Nicolau / Gran 158.17 22** *e*PKPab **PKPab 08 37 13.7 -0.2**
**PTEO Sao Teotonio 158.60 23** *e*PKPab **PKPab 08 37 16.0 +0.2**
**PBAR Barrancos 158.62 19** *e*PKPab **PKPab 08 37 15.8 -0.1**
**PCVE Castro Verde 158.77 22** *e*PKPab **PKPab 08 37 16.6 0.0**
**MORF Marmelete 158.84 24** *e*PKPab **PKPab 08 37 17.0 +0.1**
**PFVI Vila Bisbo 158.92 24** *e*PKPab **PKPab 08 37 17.4 +0.2**
**PVAQ Vaqueiros 159.09 22** *e*PKPab **PKPab 08 37 18.4 +0.5**
**KEST Kesra 161.25 341** PKPab **PKPab 08 37 27.5 -0.1**
comp=Z,9.9nm,0.7s,baz=36,slow=2.6,SNR=11
**TORD Torodi Ar. Bea 175.02 179** PKP **PKPdf 08 36 48.5 -1.2**
comp=Z,1.4nm,0.8s,baz=206,slow=0.7,SNR=6.6
TORD PKPab **PKPab 08 38 29.2 +0.5**
comp=Z,0.7nm,0.7s,baz=179,slow=3.1,SNR=3.2

*IDC* ***19*** *08:18:19.8±0.5, 33°.00N×88°.81E, h0km, mb4.4/20, mbtmp4.4/24, ML3.8/4, MS4.0/1, Error ellipse: s-maj=19.2km s-min=13.0km az=38.0*
*BJI* ***19*** *08:18:21.4±0.0, 33°.27N×88°.75E, h8km, mb4.4/39, mB4.8/11, Ms4.4/29, Ms7 4.1/24*
*NDI* ***19*** *08:18:22.3±3.3, 33°.36N×88°.74E, h25km, mb4.5, mb4.8(NEIC)*
*NEIC* ***19*** *08:18:24.5±1.5, 33°.15N±0°.09×88°.83E±0°.09, h27km±4km, mb4.8/46, Error ellipse: s-maj=14.0km s-min=9.3km az=211.0*
*BGR* ***19*** *08:18:27.6, 33°.92N×89°.47E, h33km, mb4.8*

**ISC 19 08:18:21.9±0.3, 33°.17N±0°.05×88°.84E±0°.04, h10km, n172, σ1s36/181, mb4.6/52, MS4.0/4, 15C-9D, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSA** | **Lhasa** | **3.99** | **150** | Pn | **Pn** | **08 19 28.0** | **+4.5** |
| LSA | | | | Sn | **Sb** | **08 20 19.9** | **-1.1** |
| LSA | | | | LR | LR | | |
| | comp=N,3μm,7.3s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,4μm,8.1s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,2μm,6.3s | | | | | | |
| **LSA** | **Lhasa** | **3.99** | **150** | Pn | **Pn** | **08 19 25.2** | **+1.7** |
| **GOMU** | **GeErMu** | **5.78** | **57** | Pn | Pn | 08 19 52.8 | +4.8 |
| GOMU | | | | Sg | **Sg** | **08 21 25.3** | **-2.1** |
| GOMU | | | | LR | LR | | |
| | comp=N,4μm,4.5s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=E,5μm,4.5s | | | | | | |
| **GTK** | **Tadong** | **5.84** | **182** | *e*P | **Pn** | **08 19 52.2** | **+3.5** |
| **PASG** | **PASIGHAT** | **6.10** | **154** | *e*P | **Pb** | **08 20 12.9** | **+4.6** |
| **SHL** | **Shillong** | **8.03** | **160** | Pn | **Pn** | **08 20 18.3** | **-0.6** |
| **LKP** | **Lekhapani** | **8.40** | **132** | *e*P | **Pn** | **08 20 24.4** | **+0.6** |
| **MOKO** | **MOKOCHONG** | **8.43** | **143** | *e*P | **Pn** | **08 20 25.3** | **+1.1** |
| MOKO | | | | IAmb | IAmb | 08 20 27.1 | |
| | comp=Z,22nm,0.5s | | | | | | |
| MOKO | | | | *e*S | **Sn** | **08 21 54.1** | **-5.4** |
| **KOHI** | **KOHIMA** | **8.73** | **147** | *e*P | **Pn** | **08 20 28.7** | **+0.3** |
| KOHI | | | | IAmb | IAmb | 08 20 31.5 | |
| | comp=Z,29nm,0.7s | | | | | | |
| KOHI | | | | *ex* | x | 08 22 03.7 | |
| **IMP** | **Imphal** | **9.44** | **150** | *e*P | **Pn** | **08 20 38.4** | **+0.4** |
| IMP | | | | IAmb | IAmb | 08 20 39.7 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **10.67** | **356** | *e*P | **Pn** | **08 20 59.0** | **+4.2** |
| WMQ | | | | pP | | 08 21 04.1 | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,23nm,0.6s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,840nm,12.3s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,810nm,13.3s | | | | | | |
| **GTA** | **Gaotai** | **10.82** | **52** | P | Pn | 08 21 01.9 | +4.9 |
| GTA | | | | LR | LR | | |
| | comp=Z,910nm,13.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,530nm,14.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,460nm,13.5s | | | | | | |
| **PRZ** | **Przheval'sk** | **12.42** | **321** | Pn | **Pn** | **08 21 21.2** | **+2.4** |
| **LZH** | **Lanzhou** | **12.70** | **73** | *e*P | **Pn** | **08 21 22.8** | **+0.1** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.4s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,850nm,11.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,820nm,10.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,950nm,11.7s | | | | | | |
| **PZH** | **PanZhiHua** | **13.02** | **117** | P | **Pn** | **08 21 28.3** | **+1.2** |
| PZH | | | | S | **Sn** | **08 23 54.3** | **+2.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.1s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,1μm,13.3s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,730nm,12.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,690nm,9.8s | | | | | | |
| **NIL** | **Nilore** | **13.03** | **276** | Pn | **Pn** | **08 21 26.6** | **-0.5** |
| **NRN** | **Naryn** | **13.12** | **313** | Pn | **Pn** | **08 21 26.5** | **-2.1** |
| **BOOM** | **Boomskoye usch** | **13.78** | **316** | Pn | **Pn** | **08 21 34.7** | **-2.8** |
| **MK31** | **Makanchi Array** | **14.49** | **342** | Pn | **Pn** | **08 21 47.1** | **+0.1** |
| **MKAR** | **Makanchi Array** | **14.49** | **342** | Pn | **Pn** | **08 21 46.3** | **-0.7** |
| **MKAR** | **Makanchi Array** | **14.49** | **342** | Pn | **Pn** | **08 21 46.5** | **-0.5** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=14,SNR=19 | | | | | | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | **14.59** | **341** | | **Pn** | **08 21 47.2** | **-1.1** |
| **RAGD** | **RAYAGADA** | **14.68** | **200** | IAmb | IAmb | 08 21 48.1 | |
| | comp=Z,20nm,0.9s | | | | | | |
| RAGD | | | | *e*P | **Pn** | **08 21 48.6** | **-1.1** |
| **AAK** | **Ala-Archa** | **14.73** | **314** | Pn | **Pn** | **08 21 52.7** | **+2.3** |
| **DRK** | **Karamyk** | **15.10** | **299** | Pn | **Pn** | **08 21 57.0** | **+1.5** |
| DRK | | | | IAmb | IAmb | 08 22 19.6 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **BTK** | **Batken** | **16.00** | **301** | | **Pn** | **08 22 07.8** | **+0.6** |
| BTK | | | | IAmb | IAmb | 08 22 23.0 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **CRAI** | **Chiangrai** | **16.49** | **139** | | **Pn** | **08 22 11.4** | **-2.0** |
| **KBL** | **Kabul** | **16.50** | **280** | Pn | **Pn** | **08 22 13.8** | **+0.1** |
| **XAN** | **Xi'an** | **16.76** | **82** | ⇓P | **Pn** | **08 22 16.0** | **-0.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,610nm,12.7s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,10.6s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,11.7s | | | | | | |
| **GYA** | **Guiyang** | **16.85** | **109** | P | **P** | **08 22 20.1** | **-0.1** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,61nm,1.1s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,390nm,3.2s | | | | | | |
| **SIMJ** | **Simiganj** | **16.96** | **294** | P | **Pn** | **08 22 19.6** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **17.23** | **146** | P | **Pn** | **08 22 22.0** | **-0.8** |
| **CMAR** | **Chiang Mai Arr** | **17.23** | **146** | P | **Pn** | **08 22 20.9** | **-1.9** |
| | comp=Z,0.2nm,0.3s,baz=329,slow=12,SNR=17 | | | | | | |
| CMAR | | | | PcP | **PcP** | **08 27 06.0** | **-0.3** |
| | comp=Z,1.1nm,0.3s,baz=303,slow=2.9,SNR=4.5 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **17.46** | **310** | P | **P** | **08 22 26.1** | **-0.7** |
| **KKAR** | **Karatay Array** | **17.46** | **310** | P | **P** | **08 22 25.9** | **-0.8** |
| **KKAR** | **Karatay Array** | **17.46** | **310** | | **P** | **08 22 26.1** | **-0.7** |
| **PHRA** | **Phrae** | **17.83** | **142** | P | **Pn** | **08 22 30.2** | **0.0** |
| PHRA | | | | IAmb | IAmb | 08 22 34.1 | |
| | comp=Z,157nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **19.02** | **340** | P | **Pn** | **08 22 44.2** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=150,slow=12,SNR=50 | | | | | | |
| KURBB | | | | PcP | **PcP** | **08 27 08.3** | **-0.3** |
| | comp=Z,2.2nm,1.0s,baz=163,slow=1.8,SNR=8.1 | | | | | | |
| | comp=Z,19nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **19.07** | **340** | P | **Pn** | **08 22 44.5** | **-0.6** |
| KURK | | | | IAmb | IAmb | 08 22 47.5 | |
| | comp=Z,44nm,1.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **19.67** | **61** | *e*P | **Pn** | **08 22 53.4** | **+0.9** |
| HHC | | | | pP | sP | 08 23 00.0 | +2.7 |
| HHC | | | | *e*S | **S** | **08 26 28.3** | **-4.7** |
| HHC | | | | sS | sS | 08 26 42.1 | +2.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,150nm,4.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,460nm,12.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,290nm,12.4s | | | | | | |
| **LYN** | **LuoYang** | **19.67** | **79** | P | **Pn** | **08 22 56.1** | **+3.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,26nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **19.75** | **37** | P | **P** | **08 22 52.4** | **+0.4** |
| **SONM** | **Songino Array** | **19.75** | **37** | P | **Pn** | **08 22 53.6** | **+0.2** |
| | comp=Z,0.6nm,0.3s,baz=227,slow=12,SNR=18 | | | | | | |
| SONM | | | | PcP | **PcP** | **08 27 10.7** | **+0.5** |
| | comp=Z,0.6nm,0.4s,baz=197,slow=4.5,SNR=2.6 | | | | | | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **20.11** | **38** | | **P** | **08 22 56.0** | **+0.1** |
| ULN | | | | IAmb | IAmb | 08 23 05.5 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **20.96** | **353** | P | **P** | **08 23 05.1** | **+0.1** |
| ZAA0 | | | | IAmb | IAmb | 08 23 11.2 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.96** | **353** | P | **P** | **08 23 04.8** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **20.96** | **353** | P | **P** | **08 23 05.6** | **+0.7** |
| | comp=Z,12nm,1.0s,baz=170,slow=14,SNR=21 | | | | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **HNS** | **HongShan** | **21.51** | **71** | ⇓P | **P** | **08 23 11.8** | **+0.8** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,230nm,7.2s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,520nm,11.9s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,810nm,16.3s | | | | | | |
| **HRA** | **Herat** | **22.12** | **281** | P | **P** | **08 23 17.8** | **0.0** |
| **BJI** | **Beijing** | **22.94** | **65** | P | **P** | **08 23 28.6** | **+2.4** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **QIZ** | **Qiongzhong** | **23.48** | **122** | P | **P** | **08 23 31.0** | **-0.9** |
| QIZ | | | | S | **S** | **08 27 46.4** | **+0.8** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,300nm,15.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,350nm,16.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,2μm,58.4s | | | | | | |
| **XLT** | **XiLinHaoTe** | **23.75** | **55** | *e*P | **P** | **08 23 35.9** | **+1.5** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,30nm,15.8s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=Z,210nm,14.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **23.85** | **332** | P | **P** | **08 23 35.2** | **0.0** |
| | comp=Z,5.7nm,0.8s,baz=140,slow=11,SNR=15 | | | | | | |
| BVAR | | | | PcP | **PcP** | **08 27 18.4** | **+0.4** |
| | comp=Z,1.9nm,0.9s,baz=140,slow=4.9,SNR=5.9 | | | | | | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **23.92** | **332** | P | **P** | **08 23 35.7** | **-0.1** |
| **NJ2** | **Nanjing** | **25.27** | **84** | *e*P | **P** | **08 23 50.0** | **+1.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **26.81** | **315** | P | **P** | **08 24 02.5** | **+0.4** |
| **INCN** | **Inchon** | **31.00** | **71** | P | **P** | **08 24 40.1** | **+0.6** |
| INCN | | | | IAmb | IAmb | 08 24 40.8 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **ARU** | **Arti** | **31.22** | **327** | P | **P** | **08 24 42.1** | **+0.9** |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **KS19** | **Wonju Array Si** | **31.98** | **71** | P | **P** | **08 24 48.1** | **0.0** |
| KS19 | | | | IAmb | IAmb | 08 24 49.6 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **31.99** | **71** | P | **P** | **08 24 48.0** | **-0.3** |
| **KSRS** | **Korea Array** | **32.02** | **71** | P | **P** | **08 24 48.4** | **-0.1** |
| | comp=Z,5.0nm,0.6s,baz=275,slow=9.4,SNR=32 | | | | | | |
| KSRS | | | | PcP | **PcP** | **08 27 37.8** | **-0.4** |
| | comp=Z,1.4nm,0.6s,baz=263,slow=2.1,SNR=9.2 | | | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **GNI** | **Garni** | **35.76** | **294** | P | **P** | **08 25 23.6** | **+2.4** |
| | comp=Z,11nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **40.30** | **71** | P | **P** | **08 25 59.1** | **-0.3** |
| | comp=Z,2.3nm,0.8s,baz=280,slow=9.4,SNR=7.4 | | | | | | |
| MJAR | | | | LR | LR | 08 42 30.3 | |
| | comp=Z,198nm,18.9s,baz=34,slow=36 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **KIRS** | **Kirsehir-Merke** | **44.17** | **294** | ⇑P | **P** | **08 26 26.4** | **-4.7** |
| **BR131** | **Keskin Array S** | **44.29** | **295** | IAmb | IAmb | 08 26 33.4 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **44.29** | **295** | P | **P** | **08 26 31.4** | **-0.6** |
| **BRTR** | **Keskin Array B** | **44.29** | **295** | P | **P** | **08 26 32.0** | **0.0** |
| | comp=Z,3.0nm,0.9s,baz=97,slow=7.4,SNR=8.9 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **BR104** | **Keskin Array S** | **44.29** | **295** | P | **P** | **08 26 33.0** | **+1.0** |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **BR106** | **Keskin Array S** | **44.30** | **295** | P | **P** | **08 26 33.1** | **+1.0** |
| | comp=Z,5.1nm,1.1s,comp=Z,44nm | | | | | | |
| **BR105** | **Keskin Array S** | **44.30** | **295** | P | **P** | **08 26 33.1** | **+1.0** |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **ANTO** | **Ankara** | **44.90** | **295** | P | **P** | **08 26 38.4** | **+1.5** |
| | comp=Z,8.0nm,1.3s | | | | | | |
| **ANTO** | **Ankara** | **44.90** | **295** | ⇑P | **P** | **08 26 37.4** | **+0.5** |
| **AK09** | **Malin Array Si** | **46.33** | **311** | P | **P** | **08 26 48.0** | **+0.2** |
| **AK08** | **Malin Array Si** | **46.34** | **311** | P | **P** | **08 26 48.2** | **+0.2** |
| **AK10** | **Malin Array Si** | **46.35** | **311** | P | **P** | **08 26 48.2** | **+0.2** |
| **AKASG** | **Malin Array Be** | **46.36** | **311** | P | **P** | **08 26 48.1** | **0.0** |
| | comp=Z,3.2nm,0.7s,baz=81,slow=6.8,SNR=17 | | | | | | |
| AKASG | | | | PcP | **PcP** | **08 28 22.6** | **-0.4** |
| | comp=Z,0.6nm,0.4s,baz=76,slow=2.9,SNR=4.7 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **AKBB** | **Malin Array Si** | **46.36** | **311** | IAmb | IAmb | 08 26 49.2 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **46.36** | **311** | P | **P** | **08 26 48.1** | **0.0** |
| **AK03** | **Malin Array Si** | **46.36** | **311** | P | **P** | **08 26 47.9** | **-0.2** |
| **AK01** | **Malin Array Si** | **46.37** | **311** | P | **P** | **08 26 48.0** | **-0.2** |
| **KIEV** | **Kiev** | **46.37** | **311** | P | **P** | **08 26 46.8** | **-1.4** |
| KIEV | | | | IAmb | IAmb | 08 26 49.2 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **AK02** | **Malin Array Si** | **46.38** | **311** | P | **P** | **08 26 48.6** | **+0.4** |
| **AK05** | **Malin Array Si** | **46.38** | **311** | P | **P** | **08 26 48.4** | **+0.2** |
| **AK07** | **Malin Array Si** | **46.38** | **311** | P | **P** | **08 26 48.6** | **+0.4** |
| **AK04** | **Malin Array Si** | **46.40** | **311** | P | **P** | **08 26 48.5** | **+0.1** |
| **AK11** | **Malin Array Si** | **46.40** | **311** | P | **P** | **08 26 48.5** | **+0.1** |
| **AK12** | **Malin Array Si** | **46.41** | **311** | P | **P** | **08 26 48.6** | **+0.1** |
| **AK14** | **Malin Array Si** | **46.44** | **311** | P | **P** | **08 26 48.8** | **+0.1** |
| **AK22** | **Malin Array Si** | **46.46** | **311** | P | **P** | **08 26 48.9** | **0.0** |
| **AK18** | **Malin Array Si** | **46.46** | **311** | P | **P** | **08 26 48.7** | **-0.2** |
| **AK21** | **Malin Array Si** | **46.48** | **311** | P | **P** | **08 26 49.0** | **0.0** |
| **AK19** | **Malin Array Si** | **46.50** | **311** | P | **P** | **08 26 49.1** | **-0.1** |
| **MI30** | **MI30,Zelenitsa** | **47.02** | **311** | P | **P** | **08 26 53.2** | **-0.1** |
| **SORM** | **Soroca** | **47.07** | **307** | P | **P** | **08 26 53.5** | **-0.2** |
| **SORM** | **Soroca** | **47.07** | **307** | ⇓P | **P** | **08 26 53.7** | **+0.1** |
| **NACGM** | **Naroch** | **47.81** | **316** | *e*P | **P** | **08 27 00.3** | **+1.0** |
| **TESR** | **Tescani** | **48.38** | **305** | ⇓P | **P** | **08 27 04.5** | **+0.5** |
| **VRI** | **Vrincioaia** | **48.41** | **304** | ⇑P | **P** | **08 27 04.6** | **+0.4** |
| **PLOR** | **Plostina** | **48.47** | **304** | ⇑P | **P** | **08 27 06.0** | **+1.4** |
| **FINES** | **FINESS Array B** | **48.54** | **325** | P | **P** | **08 27 05.6** | **+0.7** |
| | comp=Z,3.1nm,0.8s,baz=95,slow=4.5,SNR=7.0 | | | | | | |
| FINES | | | | PcP | **PcP** | **08 28 31.2** | **+0.6** |
| | comp=Z,6.0nm,0.9s,baz=92,slow=3.3,SNR=5.6 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **COVR** | **Voineasa-Covas** | **48.78** | **304** | ⇓P | **P** | **08 27 08.7** | **+1.6** |
| **MLR** | **Muntele Rosu** | **49.01** | **304** | P | **P** | **08 27 09.1** | **+0.2** |
| **MLR** | **Muntele Rosu** | **49.01** | **304** | ⇓P | **P** | **08 27 10.7** | **+1.8** |
| **BURAR** | **Bucovina Array** | **49.22** | **307** | P | **P** | **08 27 09.2** | **-1.3** |
| **DOPR** | **Dopca** | **49.33** | **305** | ⇓P | **P** | **08 27 12.6** | **+1.4** |
| **VOIR** | | **49.64** | **304** | ⇑P | **P** | **08 27 14.7** | **+1.0** |
| **ARCR** | **ARCALIA** | **49.87** | **306** | ⇑P | **P** | **08 27 16.5** | **+1.1** |
| **SUW** | **Suwalki** | **49.93** | **315** | *e*P | **P** | **08 27 15.1** | **-0.5** |
| **ARCES** | **ARCESS Array B** | **50.04** | **336** | P | **P** | **08 27 17.1** | **+0.8** |
| ARCES | | | | IAmb | IAmb | 08 27 22.7 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **50.04** | **336** | P | **P** | **08 27 16.8** | **+0.5** |
| | comp=Z,5.6nm,0.8s,baz=99,slow=5.6,SNR=16 | | | | | | |
| ARCES | | | | PcP | **PcP** | **08 28 35.0** | **-0.9** |
| | comp=Z,2.9nm,0.8s,baz=96,slow=2.7,SNR=3.9 | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **50.99** | **309** | *e*P | **P** | **08 27 24.5** | **+0.7** |
| **DRGR** | | **51.03** | **306** | ⇑P | **P** | **08 27 25.8** | **+1.6** |
| **GZR** | **Gura Zlata** | **51.23** | **304** | ⇓P | **P** | **08 27 26.5** | **+0.9** |
| **SURR** | **Surduc** | **51.61** | **305** | ⇑P | **P** | **08 27 30.4** | **+1.9** |
| **BLKB** | **Belogradchik** | **51.64** | **302** | ⇓P | **P** | **08 27 30.2** | **+1.4** |
| **SIRR** | **Siria** | **51.83** | **306** | ⇑P | **P** | **08 27 31.3** | **+1.1** |
| **BZS** | **Buzias** | **51.98** | **305** | ⇑P | **P** | **08 27 32.6** | **+1.3** |
| **MDVR** | **Moldovita** | **52.08** | **304** | ⇑P | **P** | **08 27 32.3** | **+0.2** |
| **NIE** | **Niedzica** | **52.20** | **310** | *e*P | **P** | **08 27 33.9** | **+1.1** |
| **BOVS** | **Bovas** | **52.33** | **302** | ⇑P | **P** | **08 27 34.7** | **+0.9** |
| **OJC** | **Ojcow** | **52.40** | **311** | *e*P | **P** | **08 27 36.8** | **+2.5** |
| **OJC** | **Ojcow** | **52.40** | **311** | IAmb | IAmb | 08 27 38.7 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **VYHS** | **Vyhne** | **53.31** | **309** | *e*P | **P** | **08 27 42.3** | **+1.2** |
| **MORH** | **Mrgy, Hungar** | **53.90** | **306** | ⇑P | **P** | **08 27 46.1** | **+0.7** |
| **MORC** | **Moravsky Berou** | **53.91** | **311** | IAmb | IAmb | 08 27 47.5 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **MORC** | **Moravsky Berou** | **53.91** | **311** | *e*P | **P** | **08 27 46.4** | **+0.9** |
| **MORC** | **Moravsky Berou** | **53.91** | **311** | ⇑P | **P** | **08 27 46.9** | **+1.4** |
| **JAVC** | **Velka Javorina** | **54.00** | **309** | *e*P | **P** | **08 27 47.9** | **+1.7** |
| **KSP** | **Ksiaz** | **54.50** | **312** | *e*P | **P** | **08 27 48.9** | **-0.8** |
| **VRAC** | **Vranov** | **54.61** | **310** | *e*P | **P** | **08 27 51.6** | **+1.1** |
| **VRAC** | **Vranov** | **54.61** | **310** | ⇑P | **P** | **08 27 52.2** | **+1.7** |
| **HFS** | **Hagfors** | **54.61** | **324** | P | **P** | **08 27 50.6** | **+0.3** |
| | comp=Z,10nm,0.7s,baz=86,slow=7.4,SNR=15 | | | | | | |
| HFS | | | | PcP | **PcP** | **08 28 53.8** | **+0.6** |
| | comp=Z,6.0nm,1.0s,baz=84,slow=5.9,SNR=2.6 | | | | | | |
| | comp=Z,10nm,0.7s | | | | | | |
| **KRUC** | **Moravsky** | **54.78** | **310** | *e*P | **P** | **08 27 52.8** | **+1.0** |
| **RONA** | **Rosalia, Austr** | **55.14** | **308** | *e*P | **P** | **08 27 55.1** | **+0.6** |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **CONA** | **Conrad Observa** | **55.38** | **309** | *e*P | **P** | **08 27 56.6** | **+0.5** |
| | comp=Z,11nm,1.0s | | | | | | |
| **NC405** | **NORSAR Array S** | **55.47** | **325** | P | **P** | **08 27 57.1** | **+0.6** |
| NC405 | | | | IAmb | IAmb | 08 27 57.9 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **55.72** | **325** | P | **P** | **08 27 58.7** | **+0.3** |
| | comp=Z,4.3nm,0.6s,baz=83,slow=7.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **55.72** | **325** | P | **P** | **08 27 58.3** | **-0.1** |
| | comp=Z,6.6nm,0.7s,baz=83,slow=7.2,SNR=23 | | | | | | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **ARSA** | **Arzberg** | **55.75** | **308** | *e*P | **P** | **08 27 59.2** | **+0.4** |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **BRG** | **Berggiesshubel** | **55.95** | **312** | P | **P** | **08 28 01.2** | **+1.1** |
| BRG | | | | Amp | | 08 28 02.8 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **SOKA** | **Soboth** | **56.22** | **307** | *e*P | **P** | **08 28 02.1** | **-0.1** |
| | comp=Z,11nm,1.1s | | | | | | |
| **MOA** | **Molln** | **56.44** | **309** | *e*P | **P** | **08 28 04.0** | **+0.3** |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **CLL** | **Collm** | **56.44** | **313** | *i* P | **P** | **08 28 03.8** | **+0.2** |
| | comp

*NEIC **19** 08:21:10.4±1.5, 17°.7S×0°.1×179°.5W±0°.1, h610km±8km, mb4.4/122, Error ellipse: s-maj=17.5km s-min=14.8km az=139.0*
*IDC **19** 08:21:11.3±3.4, 17°.71S×179°.60W, h625km±40km, mb3.6/15, mbtmp4.6/16, Error ellipse: s-maj=22.0km s-min=17.2km az=102.0*

**ISC 19 08:21:09.5**±0.4, **17.72S**±0°.08×**179°.51W**±0°.08, **h600**km, **n153**, σ1§**20**/116, **mb4.3**/79, **3C-1D**, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.32** | **269** | | **P** | **P** | **08 22 29.8** | **+4.5** |
| **AFI** | **Afiamalu** | **8.35** | **64** | P | | **P** | **08 23 12.3** | **-0.1** |
| **NIUE** | **Niue** | **9.20** | **100** | P | | **P** | **08 23 20.5** | **+0.1** |
| **FUNA** | **Funafuti** | **9.22** | **352** | P | | **P** | **08 23 20.5** | **-0.2** |
| **LIFNC** | **LIFOU** | **12.87** | **254** | P | | **P** | **08 23 57.0** | **-0.1** |
| **PINNC** | **Pines Island,** | **13.17** | **246** | P | | **P** | **08 24 00.8** | **+0.7** |
| **DZM** | **Mont Dzumac** | **13.90** | **250** | P | | **P** | **08 24 06.6** | **-0.9** |
| **DZM** | **Mont Dzumac** | **13.90** | **250** | P | | **P** | **08 24 06.4** | **-1.1** |
| | 10nm,0.7s,baz=73,slow=19,SNR=16 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **15.56** | **257** | P | | **P** | **08 24 21.8** | **-1.0** |
| **QRZ** | **Quartz Range** | **24.03** | **195** | P | | **P** | **08 25 38.8** | **-0.1** |
| **SNZO** | **South Karori** | **24.03** | **191** | P | | **P** | **08 25 38.0** | **-0.9** |
| **DSZ** | **Denniston Nort** | **25.07** | **195** | P | | **P** | **08 25 48.8** | **+0.5** |
| **KHZ** | **Kahutara** | **25.32** | **192** | P | | **P** | **08 25 50.1** | **-0.2** |
| **GVZ** | **Greta Valley S** | **25.95** | **193** | P | | **P** | **08 25 55.0** | **-0.9** |
| **INZ** | **Inchbonnie** | **26.09** | **195** | P | | **P** | **08 25 56.6** | **-0.4** |
| **FOZ** | **Fox Glacier** | **27.27** | **197** | P | | **P** | **08 26 07.2** | **-0.2** |
| **EIDS** | **Eidsvold** | **28.34** | **249** | P | | **P** | **08 26 17.0** | **0.0** |
| EIDS | | | | | IAmb | IAmb | 08 26 18.4 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **29.13** | **239** | P | | **P** | **08 26 24.8** | **+0.9** |
| **MLZ** | **Mavora Lakes** | **29.44** | **198** | P | | **P** | **08 26 27.3** | **+1.1** |
| **WHZ** | **Wether Hill Ro** | **29.97** | **198** | P | | **P** | **08 26 31.2** | **+0.5** |
| **CTA** | **Charters Tower** | **32.44** | **260** | P | | **P** | **08 26 52.0** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=91,slow=12,SNR=6.8 | | | | | | | |
| **CTAO** | **Charters Tower** | **32.44** | **260** | P | | **P** | **08 26 52.0** | **-0.2** |
| CTAO | | | | | IAmb | IAmb | 08 26 53.6 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **32.99** | **232** | P | | **P** | **08 26 57.3** | **+0.7** |
| **PMG** | **Port Moresby** | **33.39** | **280** | P | | **P** | **08 26 59.9** | **-0.3** |
| **PMG** | **Port Moresby** | **33.39** | **280** | P | | **P** | **08 27 00.0** | **-0.1** |
| | comp=Z,11nm,0.4s,baz=95,slow=8.5,SNR=7.3 | | | | | | | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **COEN** | **Coen** | **36.05** | **270** | P | | **P** | **08 27 22.8** | **+0.6** |
| **TOO** | **Toolangi** | **36.48** | **230** | P | | **P** | **08 27 26.6** | **+1.1** |
| **STKA** | **Stephens Creek** | **37.80** | **241** | P | | **P** | **08 27 37.2** | **+0.8** |
| **STKA** | **Stephens Creek** | **37.80** | **241** | P | | **P** | **08 27 36.7** | **+0.4** |
| | comp=Z,14nm,0.4s,baz=71,slow=8.6,SNR=26 | | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | | |
| **BBOO** | **Buckleboo** | **42.58** | **241** | P | | **P** | **08 28 14.3** | **0.0** |
| **WR0** | **Warramunga Arr** | **43.44** | **259** | P | | **P** | **08 28 20.8** | **-0.3** |
| WR0 | | | | | IAmb | IAmb | 08 28 22.0 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.60** | **260** | P | | **P** | **08 28 22.2** | **-0.2** |
| WB0 | | | | | IAmb | IAmb | 08 28 22.4 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.62** | **259** | P | | **P** | **08 28 21.8** | **-0.8** |
| **WRA** | **Warramunga Arr** | **43.63** | **259** | P | | **P** | **08 28 21.6** | **-1.1** |
| **WRA** | **Warramunga Arr** | **43.63** | **259** | P | | **P** | **08 28 21.6** | **-1.1** |
| | comp=Z,7.2nm,0.4s,baz=96,slow=7.0,SNR=19 | | | | | | | |
| | comp=Z,7.2nm,0.4s | | | | | | | |
| **AS31** | **Alice Springs** | **43.83** | **254** | P | | **P** | **08 28 24.0** | **-0.2** |
| **ASAR** | **Alice Springs** | **43.83** | **254** | P | | **P** | **08 28 24.1** | **0.0** |
| **ASAR** | **Alice Springs** | **43.83** | **254** | P | | **P** | **08 28 23.8** | **-0.4** |
| | comp=Z,43nm,0.5s,baz=89,slow=7.8,SNR=52 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **08 29 56.0** | **-1.0** |
| | comp=Z,1.1nm,0.5s,baz=101,slow=4.3,SNR=2.2 | | | | | | | |
| | comp=Z,43nm,0.5s | | | | | | | |
| **MTN** | **Manton Dam** | **47.75** | **269** | P | | **P** | **08 28 53.4** | **-0.5** |
| MTN | | | | | IAmb | IAmb | 08 28 54.0 | |
| | comp=Z,28nm,1.3s | | | | | | | |
| **FORT** | **Forrest** | **49.14** | **244** | P | | **P** | **08 29 03.4** | **-0.6** |
| **KNRA** | **Kununurra** | **49.46** | **264** | P | | **P** | **08 29 06.3** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **52.02** | **261** | P | | **P** | **08 29 24.1** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **56.94** | **255** | P | | **P** | **08 29 58.9** | **-0.4** |
| PSA00 | | | | | IAmb | IAmb | 08 29 59.6 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | **57.10** | **256** | P | | **P** | **08 29 59.5** | **-1.0** |
| **MORW** | **Morawa** | **59.59** | **246** | P | | **P** | **08 30 16.2** | **-0.8** |
| MORW | | | | | IAmb | IAmb | 08 30 16.5 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **GIRL** | **Giralia** | **61.94** | **253** | P | | **P** | **08 30 33.2** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **64.99** | **269** | P | | **P** | **08 30 50.8** | **-1.3** |
| JAGI | | | | | IAmb | IAmb | 08 31 14.8 | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **CASY** | **Casey** | **65.87** | **205** | P | | **P** | **08 30 57.1** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **67.13** | **324** | P | | **P** | **08 31 03.8** | **-1.0** |
| | comp=Z,2.0nm,0.5s,baz=157,slow=5.7,SNR=9.0 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **MAJO** | **Matsushiro** | **67.13** | **324** | P | | **P** | **08 31 04.8** | **-0.1** |
| **MJB9** | **Matsu-Tunnel** | **67.14** | **324** | P | | **P** | **08 31 04.5** | **-0.4** |
| **KKM** | **Kota Kinabalu** | **67.67** | **284** | P | | **P** | **08 31 08.9** | **+0.2** |
| KKM | | | | | IAmb | IAmb | 08 31 24.4 | |
| | comp=Z,9.8nm,0.9s | | | | | | | |
| **UGM** | **Wanagama** | **68.60** | **268** | P | | **P** | **08 31 14.1** | **-0.2** |
| **JKA** | **Kamikawa-asahi** | **70.61** | **332** | P | | **P** | **08 31 26.8** | **+1.3** |
| JKA | | | | | IAmb | IAmb | 08 31 31.3 | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **SSLB** | **Suanglung** | **71.25** | **304** | P | | **P** | **08 31 28.2** | **-1.5** |
| SSLB | | | | | IAmb | IAmb | 08 31 56.8 | |
| | comp=Z,32nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.33** | **180** | P | | **P** | **08 31 35.8** | **+0.4** |
| **QSPA** | **South Pole Qui** | **72.33** | **180** | P | | **P** | **08 31 35.7** | **+0.4** |
| | comp=Z,4.2nm,0.8s,baz=344,slow=1.9,SNR=6.4 | | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **PET** | **Petropavlovsk** | **72.94** | **346** | P | | **P** | **08 31 38.9** | **+0.1** |
| **KSRS** | **Korea Array** | **73.86** | **319** | P | | **P** | **08 31 45.6** | **+1.2** |
| | comp=Z,0.6nm,0.6s,baz=123,slow=4.5,SNR=1.8 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **75.87** | **326** | P | | **P** | **08 31 56.3** | **+0.9** |
| | comp=Z,1.3nm,0.6s,baz=116,slow=3.4,SNR=3.1 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **CMB** | **Columbia Colle** | **78.43** | **44** | P | | **P** | **08 32 09.9** | **+0.4** |
| **ISA** | **Isabella, Lake** | **78.45** | **47** | P | | **P** | **08 32 09.7** | **0.0** |
| ISA | | | | | IAmb | IAmb | 08 32 11.4 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **AFDM** | **Forest Hills D** | **78.55** | **43** | P | | **P** | **08 32 09.7** | **-0.4** |
| **MDPB** | **Devils Postpil** | **79.08** | **45** | P | | **P** | **08 32 13.8** | **+0.6** |
| MDPB | | | | | IAmb | IAmb | 08 32 14.8 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **79.12** | **45** | P | | **P** | **08 32 14.1** | **+0.6** |
| **WAKR** | **Walker** | **79.31** | **44** | P | | **P** | **08 32 14.8** | **+0.5** |
| WAKR | | | | | IAmb | IAmb | 08 32 16.2 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **MPK** | **Martis Peak** | **79.35** | **43** | IAmb | | IAmb | 08 32 16.9 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| **PNTR** | **Pine Nut** | **79.52** | **43** | P | | **P** | **08 32 16.1** | **+0.6** |
| PNTR | | | | | IAmb | IAmb | 08 32 17.2 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **YERR** | **Yerington** | **79.70** | **43** | IAmb | | IAmb | 08 32 17.9 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **LHV** | **Little Huntoon** | **79.79** | **44** | IAmb | | IAmb | 08 32 18.7 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **GRAC** | **Grapevine Rang** | **79.91** | **46** | IAmb | | IAmb | 08 32 19.2 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.02** | **44** | P | | **P** | **08 32 18.0** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **80.02** | **44** | P | | **P** | **08 32 18.4** | **+0.3** |
| | comp=Z,3.6nm,0.9s,baz=230,slow=7.9,SNR=9.6 | | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | | |
| **KVN** | **Kaiserville** | **80.48** | **44** | IAmb | | IAmb | 08 32 21.9 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.83** | **39** | P | | **P** | **08 32 22.6** | **+0.5** |
| J05D | | | | | IAmb | IAmb | 08 32 23.9 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **S11A** | **Rachel** | **81.35** | **46** | IAmb | | IAmb | 08 32 26.4 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **BMN** | **Battle Mountai** | **81.79** | **43** | IAmb | | IAmb | 08 32 28.6 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **81.95** | **41** | IAmb | | IAmb | 08 32 29.4 | |
| | comp=Z,9.9nm,1.1s | | | | | | | |
| **I07A** | **Izee** | **82.32** | **39** | IAmb | | IAmb | 08 32 31.2 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **BELA** | **Belgrano 2** | **82.48** | **173** | P | | **P** | **08 32 29.1** | **-0.6** |
| **J08A** | **Circle Bar Ran** | **82.55** | **40** | | | **P** | **08 32 31.6** | **+0.8** |
| J08A | | | | | IAmb | IAmb | 08 32 32.2 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **J18K** | **Innoko River** | **82.85** | **10** | P | | **P** | **08 32 31.8** | **+0.1** |
| **X16A** | **Lo Mia Camp, P** | **82.87** | **51** | IAmb | | IAmb | 08 32 35.4 | |
| | comp=Z,9.5nm,1.1s | | | | | | | |
| **LYN** | **LuoYang** | **82.89** | **310** | P | | **P** | **08 32 35.5** | **+3.0** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **CCUT** | **Cedar City** | **82.95** | **47** | IAmb | | IAmb | 08 32 35.1 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **KNB** | **Kanab** | **83.08** | **48** | IAmb | | IAmb | 08 32 35.6 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **319A** | **Douglas** | **83.17** | **54** | IAmb | | IAmb | 08 32 36.6 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **U15A** | **North Rim** | **83.18** | **48** | IAmb | | IAmb | 08 32 36.3 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **K20K** | **Telida** | **83.22** | **11** | P | | **P** | **08 32 33.2** | **-0.3** |
| K20K | | | | | IAmb | IAmb | 08 32 38.0 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **U33K** | **Whale Pass** | **83.25** | **24** | P | | **P** | **08 32 33.9** | **+0.2** |
| U33K | | | | | IAmb | IAmb | 08 32 34.0 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **BMRM** | **Bremner River** | **83.27** | **16** | P | | **P** | **08 32 33.2** | **-0.6** |
| BMRM | | | | | IAmb | IAmb | 08 32 40.6 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **G08A** | **Pilot Rock** | **83.31** | **38** | | | **P** | **08 32 35.0** | **+0.5** |
| G08A | | | | | IAmb | IAmb | 08 32 35.9 | |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.31** | **15** | P | | **P** | **08 32 33.9** | **-0.1** |
| SCM | | | | | IAmb | IAmb | 08 32 50.7 | |
| | comp=Z,29nm,1.5s | | | | | | | |
| **SEY** | **Seymchan** | **83.36** | **347** | P | | **P** | **08 32 33.4** | **-0.7** |
| | comp=Z,1.6nm,0.5s,baz=165,slow=9.7,SNR=2.4 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **WUAZ** | **Wupatki** | **83.42** | **50** | IAmb | | IAmb | 08 32 37.3 | |
| | comp=Z,7.9nm,1.1s | | | | | | | |
| **E07A** | **Sunnyside** | **83.49** | **37** | IAmb | | IAmb | 08 32 36.7 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **HAWA** | **Hanford** | **83.59** | **37** | | | **P** | **08 32 35.6** | **-0.1** |
| HAWA | | | | | IAmb | IAmb | 08 32 37.7 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **PKCU** | **Pink Cliffs** | **83.64** | **48** | IAmb | | IAmb | 08 32 39.2 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **MAW** | **Mawson** | **83.68** | **200** | P | | **P** | **08 32 36.0** | **+0.2** |
| | comp=Z,2.7nm,0.7s,baz=128,slow=6.7,SNR=4.1 | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **MFID** | **Camas Ranch** | **84.22** | **41** | IAmb | | IAmb | 08 32 40.4 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **84.70** | **38** | IAmb | | IAmb | 08 32 42.1 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **C09A** | **Chrisman Ranch** | **85.08** | **36** | IAmb | | IAmb | 08 32 43.8 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **HVU** | **Hansel Valley** | **85.37** | **44** | IAmb | | IAmb | 08 32 45.9 | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.94** | **13** | P | | **P** | **08 32 45.0** | **-1.7** |
| | comp=Z,1.2nm,0.8s,baz=216,slow=6.7,SNR=4.3 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **TCUT** | **Toone Canyon** | **85.96** | **45** | IAmb | | IAmb | 08 32 50.6 | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **86.09** | **44** | IAmb | | IAmb | 08 32 51.8 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **VHRN** | **Van Horn** | **86.29** | **56** | IAmb | | IAmb | 08 32 52.4 | |
| | comp=Z,7.3nm,1.2s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **86.39** | **315** | *e*P | | **P** | **08 32 47.3** | **-2.2** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,300nm,6.8s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **86.78** | **58** | IAmb | | IAmb | 08 32 54.2 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.79** | **58** | | | **P** | **08 32 52.6** | **+1.0** |
| **TXAR** | **Lajitas Array** | **86.79** | **58** | P | | **P** | **08 32 52.3** | **+0.7** |
| | comp=Z,7.5nm,1.1s,baz=218,slow=4.2,SNR=16 | | | | | | | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **ANMO** | **Albuquerque** | **86.81** | **52** | | | **P** | **08 32 51.8** | **+0.1** |
| ANMO | | | | | IAmb | IAmb | 08 32 53.0 | |
| | comp=Z,6.9nm,1.3s | | | | | | | |
| **DLMT** | **Dillon** | **87.20** | **40** | IAmb | | IAmb | 08 33 00.1 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **ALPN** | **Alpine** | **87.20** | **57** | IAmb | | IAmb | 08 32 55.6 | |
| | comp=Z,8.0nm,1.3s | | | | | | | |
| **TPAW** | **Teton Pass** | **87.36** | **43** | IAmb | | IAmb | 08 33 00.4 | |
| | comp=Z,8.9nm,1.2s | | | | | | | |
| **FXWY** | **Fox Creek** | **87.38** | **43** | IAmb | | IAmb | 08 33 01.7 | |
| | comp=Z,6.9nm,1.1s | | | | | | | |
| **SNOW** | **Snow King Moun** | **87.47** | **43** | IAmb | | IAmb | 08 32 56.4 | |
| | comp=Z,6.9nm,1.0s | | | | | | | |
| **IMW** | **Indian Meadow** | **87.55** | **42** | IAmb | | IAmb | 08 32 56.8 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **87.68** | **49** | IAmb | | IAmb | 08 32 57.7 | |
| | comp=Z,7.7nm,1.4s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **87.79** | **42** | IAmb | | IAmb | 08 33 05.2 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **YHL** | **Hebgen Lake** | **87.84** | **41** | IAmb | | IAmb | 08 32 58.5 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.91** | **41** | IAmb | | IAmb | 08 32 58.1 | |
| | comp=Z,5.6nm,1.2s | | | | | | | |
| **PD31** | **Pinedale Array** | **87.94** | **44** | IAmb | | IAmb | 08 32 57.8 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.94** | **44** | P | | **P** | **08 32 56.4** | **-0.5** |
| | comp=Z,3.3nm,1.0s,baz=222,slow=3.6,SNR=8.9 | | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | | |
| **PZH** | **PanZhiHua** | **88.14** | **298** | P | | **P** | **08 32 58.6** | **+0.6** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,80nm,4.5s | | | | | | | |
| **ELIB** | **Princess Elisa** | **89.22** | **187** | *d*P | | **P** | **08 33 01.3** | **-0.9** |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.49** | **181** | ⇑P | | **P** | **08 33 07.3** | **-0.8** |
| | comp=Z,213nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.81** | **179** | ⇑P | | **P** | **08 33 07.8** | **-1.6** |
| | comp=Z,19nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.81** | **179** | P | | **P** | **08 33 07.7** | **-1.8** |
| | comp=Z,0.7nm,0.6s,baz=183,slow=16,SNR=1.7 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.99** | **177** | ⇑P | | **P** | **08 33 09.8** | **-0.5** |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **108.25** | **314** | PKiKP | | **PKiKP** | **08 38 28.1** | **-2.4** |
| | comp=Z,0.2nm,0.5s,baz=120,slow=0.5,SNR=4.2 | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.03** | **321** | PKP | | **PKPdf** | **08 38 43.5** | **-1.6** |
| | comp=Z,0.6nm,0.3s,baz=102,slow=2.1,SNR=3.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **125.94** | **349** | PKP | | **PKPdf** | **08 39 02.6** | **-1.0** |
| | comp=Z,0.9nm,0.7s,baz=40,slow=1.5,SNR=4.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **132.71** | **344** | PKP | | **PKPdf** | **08 39 15.7** | **-0.9** |
| | comp=Z,2.1nm,0.8s,baz=56,slow=2.5,SNR=4.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **139.90** | **332** | PKP | | **PKPdf** | **08 39 29.2** | **-1.0** |
| | comp=Z,0.5nm,0.3s,baz=56,slow=1.9,SNR=2.0 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.35** | **3** | PKhKP | | PKPpre | 08 39 30.0 | |
| | comp=Z,2.2nm,0.9s,baz=343,slow=2.6,SNR=2.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **143.90** | **314** | PKP | | PKPbc | 08 39 36.6 | -0.7 |
| | comp=Z,1.0nm,0.4s,baz=33,slow=3.4,SNR=8.9 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.16** | **303** | PKPbc | | **PKPdf** | **08 39 41.0** | **+0.8** |
| | comp=Z,2.8nm,0.5s,baz=65,slow=5.1,SNR=4.5 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.15** | **344** | PKPbc | | **PKPdf** | **08 39 45.3** | **+2.3** |
| | comp=Z,1.2nm,0.5s,baz=57,slow=3.6,SNR=6.5 | | | | | | | |
| **CONA** | **Conrad Observa** | **147.35** | **341** | *e*PKP | | **PKPdf** | **08 39 46.0** | **+2.6** |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.41** | **340** | *i* PKP | | **PKPbc** | **08 39 46.5** | **-0.5** |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **LESA** | **Schwarzleotal** | **148.72** | **344** | *i* PKP | | **PKPbc** | **08 39 49.1** | **-1.1** |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.86** | **343** | *e*PKP | | **PKPdf** | **08 39 49.0** | **+3.0** |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **OBKA** | **Obir** | **149.02** | **341** | *e*PKP | | **PKPbc** | **08 39 49.8** | **-1.3** |
| | comp=Z,0.8nm,0.2s | | | | | | | |
| **WATA** | **Walderalm** | **149.09** | **345** | *e*PKP | | **PKPdf** | **08 39 49.7** | **+3.4** |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **RETA** | **Reutte** | **149.13** | **346** | *e*PKP | | **PKPbc** | **08 39 50.2** | **-1.0** |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.14** | **345** | *e*PKP | | **PKPbc** | **08 39 50.4** | **-1.0** |
| | comp=Z,2.4nm,0.3s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.18** | **342** | *e*PKP | | **PKPdf** | **08 39 49.1** | **+2.7** |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **149.19** | **346** | *e*PKP | | **PKPdf** | **08 39 49.1** | **+2.6** |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.28** | **346** | *i* PKP | | **PKPdf** | **08 39 49.7** | **+3.1** |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.39** | **344** | *e*PKP | | **PKPdf** | **08 39 49.6** | **+2.8** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **149.58** | **346** | *i* PKP | | **PKPbc** | **08 39 51.4** | **-1.0** |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.00** | **347** | PKPbc | | **PKPbc** | **08 39 51.9** | **-1.5** |
| | comp=Z,4.6nm,0.4s,baz=27,slow=2.3,SNR=15 | | | | | | | |

*IDC **19** 08:25:31.5±4.6, 18°.14S×178°.15W, h522km±53km, mb3.2/10, mbtmp4.1/11, Error ellipse: s-maj=22.6km s-min=21.1km az=10.0*
*NEIC **19** 08:25:34.4±1.8, 18°.3S±0°.2×178°.20W±0°.09, h544km±13km, mb4.2/23, Error ellipse: s-maj=34.6km s-min=11.8km az=170.0*
*NOU **19** 08:25:38.1, 18°.16S×178°.68W, h557km, mb4.4/21, Fiji Islands Region*
**ISC 19 08:25:35.9**±0.6, **18°.1S**±0°.1×**178°.20W**±0°.09, **h590**km, **n64,**
**σ1§42/66, mb4.1/22, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.60** | **276** | P | | **P** | **08 26 55.5** | **-2.5** |
| **AFI** | **Afiamalu** | **7.47** | **57** | P | | **P** | **08 27 25.2** | **-4.8** |
| **NIUE** | **Niue** | **7.89** | **98** | P | | **P** | **08 27 31.3** | **-2.6** |
| **LIFNC** | **LIFOU** | **13.98** | **257** | | | **P** | **08 28 31.8** | **-3.1** |
| **PINNC** | **Pines Island,** | **14.18** | **249** | | | **P** | **08 28 34.4** | **-2.3** |
| **YATNC** | **Mamie plateau,** | **14.54** | **252** | P | | **P** | **08 28 38.3** | **-1.8** |
| **DZM** | **Mont Dzumac** | **14.95** | **252** | P | | **P** | **08 28 41.8** | **-2.2** |
| **DZM** | **Mont Dzumac** | **14.95** | **252** | | | **P** | **08 28 42.2** | **-1.8** |
| **DZM** | **Mont Dzumac** | **14.95** | **252** | P | | **P** | **08 28 42.0** | **-2.0** |
| | 9.0nm,0.7s,baz=85,slow=18,SNR=15 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.71** | **259** | P | | **P** | **08 29 00.2** | **0.0** |
| **OUZ** | **Omahuta** | **18.51** | **202** | P | | **P** | **08 29 18.4** | **+2.0** |
| **URZ** | **Urewera** | **20.46** | **191** | P | | **P** | **08 29 32.4** | **-1.6** |
| | 3.2nm,0.5s,baz=353,slow=15,SNR=1.5 | | | | | | | |
| URZ | | | | S | | **S** | **08 32 43.5** | **-2.9** |
| | 11nm,1.0s,baz=66,slow=20,SNR=2.9 | | | | | | | |
| | 3.2nm,0.5s | | | | | | | |
| **EIDS** | **Eidsvold** | **29.38** | **250** | P | | **P** | **08 30 53.1** | **+0.2** |
| EIDS | | | | | IAmb | IAmb | 08 30 53.5 | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **ARMA** | **Armidale** | **30.00** | **240** | P | | **P** | **08 30 59.2** | **+0.9** |
| **ARMA** | **Armidale** | **30.00** | **240** | P | | **P** | **08 30 59.4** | **+1.1** |
| ARMA | | | | | IAmb | IAmb | 08 30 59.6 | |
| | comp=Z,7.9nm,0.6s | | | | | | | |
| **CNB** | **Canberra Magne** | **33.45** | **233** | P | | **P** | **08 31 28.4** | **+0.9** |
| **CTA** | **Charters Tower** | **33.61** | **261** | P | | **P** | **08 31 29.0** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=96,slow=12,SNR=15 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.61** | **261** | P | | **P** | **08 31 29.1** | **+0.1** |
| **CTAO** | **Charters Tower** | **33.61** | **261** | P | | **P** | **08 31 28.8** | **-0.1** |
| CTAO | | | | | IAmb | IAmb | 08 31 29.4 | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **CAN** | **Canberra** | **33.73** | **233** | P | | **P** | **08 31 30.4** | **+0.6** |
| **CAN** | **Canberra** | **33.73** | **233** | P | | **P** | **08 31 30.2** | **+0.5** |
| CAN | | | | | IAmb | IAmb | 08 31 47.6 | |
| | comp=Z,5.2nm,1.0s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.21** | **241** | P | | **P** | **08 31 42.5** | **+0.4** |
| **QLP** | **Quilpie** | **35.64** | **250** | P | | **P** | **08 31 46.1** | **+0.3** |
| **TOO** | **Toolangi** | **37.18** | **231** | P | | **P** | **08 31 59.2** | **+0.9** |
| **TOO** | **Toolangi** | **37.18** | **231** | P | | **P** | **08 31 59.5** | **+1.2** |
| **COEN** | **Coen** | **37.31** | **271** | P | | **P** | **08 32 00.3** | **+0.7** |
| COEN | | | | | IAmb | IAmb | 08 32 01.1 | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **BRAT** | **Ballarat** | **38.34** | **232** | P | | **P** | **08 32 09.4** | **+1.9** |
| **STKA** | **Stephens Creek** | **38.70** | **241** | P | | **P** | **08 32 11.6** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.70** | **241** | P | | **P** | **08 32 11.8** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.70** | **241** | P | | **P** | **08 32 11.4** | **+0.9** |
| | comp=Z,9.3nm,0.7s,baz=80,slow=6.8,SNR=15 | | | | | | | |
| | comp=Z,9.3nm,0.7s | | | | | | | |
| **INKA** | **Innaminka** | **38.85** | **248** | P | | **P** | **08 32 13.2** | **+1.4** |
| **QIS** | **Mount Isa** | **39.81** | **259** | P | | **P** | **08 32 20.0** | **+0.3** |
| **HTT** | **Hallett** | **41.20** | **240** | P | | **P** | **08 32 31.4** | **+0.8** |
| **LCRK** | **Leigh Creek** | **41.34** | **244** | P | | **P** | **08 32 32.1** | **+0.5** |
| **OOD** | **Oodnadatta** | **43.32** | **249** | P | |

baz=238
EWUT eS **Sb** **08 26 35.7 +0.4**
baz=238
**TWE Neicheng 0.77 266** eP **Pg** **08 26 25.1 -0.2**
baz=260
**ENA Nanau 0.78 244** eS **Sb** **08 26 36.5 +0.2**
baz=238
**FUSB Fushanzhiwuyua 0.84 269** eP **Pb** **08 26 26.9 0.0**
baz=264
**ENTT Nioudou 0.87 261** *i* P **Pb** **08 26 27.5 +0.2**
baz=256
ENTT eS **Sb** **08 26 39.5 +0.6**
baz=256
**NWLT Wulai 0.92 270** eP **Pb** **08 26 28.1 0.0**
baz=280
NWLT eS **Sg** **08 26 39.8 -0.3**
baz=280
**NDT Datong Townshi 0.93 259** eP **Pb** **08 26 28.2 -0.1**
baz=255
**LATG Datong 0.93 255** eP **Pg** **08 26 28.1 -0.2**
baz=251
**NACB Ninganchiao 1.03 234** eP **Pb** **08 26 29.4 -0.7**
baz=220
**YHNB Yeheng 1.04 264** eP **Pb** **08 26 29.9 -0.4**
baz=272
**NSK Sanguang 1.05 265** eP **Pb** **08 26 30.3 -0.2**
baz=275
NSK eS **Sg** **08 26 44.6 +0.1**
baz=275
**NNSB Datong 1.08 252** eP **Pb** **08 26 30.9 -0.2**
baz=248
**NNS Nan Shan 1.09 252** eP **Pb** **08 26 31.1 0.0**
baz=248
**ETLH Xiulin Townshi 1.10 239** eP **Pb** **08 26 31.1 -0.1**
baz=235
**IRIF Iriomote-Funau 1.19 111** P **Pn** **08 26 33.0 +0.3**
IRIF eS **Sb** **08 26 48.2 0.0**
**LXIB Xiulin Townshi 1.25 233** eP **Pn** **08 26 33.8 +0.1**
baz=229
**FUSS Fushou 1.27 246** eP **Pb** **08 26 34.4 +0.1**
baz=242
FUSS eS **Sg** **08 26 51.3 0.0**
baz=242
**WHF Hehuan Shan 1.30 241** P **Pb** **08 26 34.8 -0.1**
baz=238
**WUSB Renai 1.49 239** eP **Pb** **08 26 37.7 -0.3**
baz=216
**WHP Taichung City 1.51 251** eP **Pb** **08 26 38.7 +0.4**
baz=248
**VWDT VWDT 1.61 231** eP **Pn** **08 26 39.1 +0.5**
baz=212

*IDC **19** 08:27:06.5±6.0, 17°.62S×178°.20W, h625km±67km, mb2.8/5, mbtmp3.9/6, Error ellipse: s-maj=115.4km s-min=40.2km az=157.0*
**ISC 19 08:27:04.2**±1.5, **17°.5S**±0°.8×**178°.1W**±0°.4, **h600**km, **n7, σ0°79/9, mb3.9**/5, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.21** | **250** | P | **P** | **08 30 15.5** | **+1.1** |
| | 2.3nm,0.6s,baz=81,slon=18,SNR=1.6 | | | | | | |
| **CTA** | **Charters Tower** | **33.77** | **260** | P | **P** | **08 32 58.2** | **+0.1** |
| | 0.1nm,0.3s,baz=98,slow=9.6,SNR=3.6 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **39.05** | **241** | P | **P** | **08 33 40.8** | **-0.3** |
| | 2.5nm,0.6s,baz=75,slow=12,SNR=3.6 | | | | | | |
| | 2.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **08 34 27.6** | **0.0** |
| | 1.6nm,0.4s,baz=96,slow=6.8,SNR=9.0 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 35 55.6** | **-0.1** |
| | 0.1nm,0.3s,baz=94,slow=3.4,SNR=1.5 | | | | | | |
| | 1.6nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.15** | **254** | P | **P** | **08 34 28.9** | **-0.1** |
| | 2.5nm,0.4s,baz=84,slow=8.8,SNR=6.5 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 35 55.7** | **-0.7** |
| | 0.4nm,0.5s,baz=97,slow=3.2,SNR=2.8 | | | | | | |
| | 2.5nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.56** | **58** | P | **P** | **08 38 41.2** | **+0.7** |
| | 0.1nm,0.6s,baz=224,slow=5.0,SNR=2.1 | | | | | | |
| | 0.1nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.69** | **315** | PKP | **PKPdf** | **08 45 32.8** | **-1.2** |
| | 0.4nm,0.5s,baz=74,slow=4.0,SNR=1.4 | | | | | | |

*IDC **19** 08:33:09.6±7.2, 23°.51N×144°.10E, h0km, mb3.8/4, mbtmp3.7/5, ML3.2/1, Error ellipse: s-maj=282.8km s-min=28.5km az=75.0*
*NEIC **19** 08:33:09.2±1.0, 23°.76N±0°.08×144°.1E±0°.1, h10km±2km, mb4.2/7, Error ellipse: s-maj=21.0km s-min=10.1km az=117.0*
**ISC 19 08:33:12.0**±1.3, **23°.7N**±0°.1×**144°.1E**±0°.2, **h28**km, **n14, σ2°08/14, mb4.3/9, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **3.79** | **334** | Pn | **Pn** | **08 34 07.0** | **-1.6** |
| **KSRS** | **Korea Array** | **19.48** | **318** | P | **Pn** | **08 37 40.8** | **+2.7** |
| | 0.1nm,0.3s,baz=124,slow=11,SNR=1.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **TWG** | **Pinlang** | **21.14** | **272** | P | **P** | **08 37 53.6** | **-1.3** |
| TWG | | | | IAmb | IAmb | 08 37 55.0 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.73** | **337** | P | **P** | **08 38 09.9** | **-1.8** |
| **PEA0B** | **Petropavlovsk-** | **31.15** | **16** | P | **P** | **08 39 26.9** | **-1.3** |
| PEA0B | | | | IAmb | IAmb | 08 39 52.1 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **31.15** | **16** | P | **P** | **08 39 27.2** | **-1.1** |
| **QIZ** | **Qiongzhong** | **32.15** | **268** | P | **P** | **08 39 35.0** | **-2.5** |
| QIZ | | | | IAmb | IAmb | 08 39 59.2 | |
| | comp=Z,7.2nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **38.36** | **318** | P | **P** | **08 40 30.1** | **-0.6** |
| **WR0** | **Warramunga Arr** | **44.37** | **193** | P | **P** | **08 41 20.1** | **0.0** |
| WR0 | | | | IAmb | IAmb | 08 41 37.5 | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.39** | **193** | P | **P** | **08 41 19.9** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 08 41 27.0 | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.39** | **193** | P | **P** | **08 41 20.8** | **+0.5** |
| | comp=Z,0.7nm,1.0s,baz=14,slow=9.3,SNR=6.1 | | | | | | |
| | comp=Z,0.7nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.97** | **312** | P | **P** | **08 42 35.7** | **+2.3** |
| | comp=Z,0.4nm,0.7s,baz=96,slow=7.8,SNR=4.5 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.64** | **316** | P | **P** | **08 42 55.4** | **+2.9** |
| | comp=Z,1.0nm,0.3s,baz=92,slow=8.0,SNR=6.5 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.70** | **319** | P | **P** | **08 43 30.7** | **+3.1** |
| | comp=Z,1.5nm,0.6s,baz=89,slow=7.9,SNR=8.0 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |

*NOU **19** 08:33:35.5, 13°.07S×172°.58W, h4km, mb4.3/11, Samoa Islands*
*IDC **19** 08:35:12.8±4.6, 18°.08S×177°.87W, h512km±51km, mb3.4/12, mbtmp4.3/13, Error ellipse: s-maj=25.4km s-min=16.7km az=57.0*
*NEIC **19** 08:35:18.1±0.8, 17°.8S±0°.3×177°.91W±0°.08, h587km±12km, mb4.2/16, Error ellipse: s-maj=38.9km s-min=5.4km az=166.0*
**ISC 19 08:35:18.6**±0.6, **18°.0S**±0°.1×**178°.02W**±0°.08, **h590**km, **n48, σ1°33/49, mb4.1**/17, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.76** | **273** | P | **P** | **08 36 41.7** | **-0.1** |
| **AFI** | **Afiamalu** | **7.25** | **57** | P | **P** | **08 37 07.4** | **-3.3** |
| **NIUE** | **Niue** | **7.75** | **99** | P | **P** | **08 37 13.8** | **-1.4** |
| **LIFNC** | **LIFOU** | **14.19** | **256** | P | **P** | **08 38 17.3** | **-2.2** |
| **LIFNC** | **LIFOU** | **14.19** | **256** | | **P** | **08 38 17.3** | **-2.2** |
| **PINNC** | **Pines Island,** | **14.39** | **249** | P | **P** | **08 38 19.8** | **-1.6** |
| **YATNC** | **Mamie plateau,** | **14.75** | **252** | P | **P** | **08 38 25.0** | **+0.2** |
| **DZM** | **Mont Dzumac** | **15.15** | **252** | P | **P** | **08 38 30.0** | **+1.3** |
| **DZM** | **Mont Dzumac** | **15.15** | **252** | P | **P** | **08 38 28.3** | **-0.4** |
| DZM | | | | IAmb | IAmb | 08 38 34.8 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.15** | **252** | P | **P** | **08 38 27.1** | **-1.6** |
| | comp=Z,5.7nm,0.6s,baz=81,slow=18,SNR=24 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.29** | **252** | P | **P** | **08 38 31.7** | **+1.9** |
| **KOUNC** | **Koumac, New Ca** | **16.90** | **259** | P | **P** | **08 38 45.7** | **+1.0** |
| **OUZ** | **Omahuta** | **18.70** | **202** | P | **P** | **08 39 03.2** | **+2.3** |
| **KUZ** | **Kuaotunu** | **19.48** | **195** | P | **P** | **08 39 07.8** | **-0.1** |
| **URZ** | **Urewera** | **20.63** | **191** | P | **P** | **08 39 16.5** | **-1.8** |
| **URZ** | **Urewera** | **20.63** | **191** | P | **P** | **08 39 14.2** | **-4.1** |
| | comp=Z,7.5nm,0.4s,baz=21,slow=2.2,SNR=15 | | | | | | |
| | comp=Z,7.5nm,0.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.63** | **192** | P | **P** | **08 39 25.7** | **-1.6** |
| **KHZ** | **Kahutara** | **25.38** | **195** | P | **P** | **08 39 58.4** | **-2.1** |
| **ARMA** | **Armidale** | **30.22** | **240** | P | **P** | **08 40 43.7** | **+0.7** |
| ARMA | | | | IAmb | IAmb | 08 40 52.7 | |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **33.80** | **261** | P | **P** | **08 41 13.3** | **0.0** |
| | comp=Z,0.5nm,0.6s,baz=96,slow=10,SNR=16 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.80** | **261** | P | **P** | **08 41 13.1** | **-0.2** |
| **CAN** | **Canberra** | **33.95** | **233** | P | **P** | **08 41 15.1** | **+0.7** |
| **PMG** | **Port Moresby** | **34.84** | **279** | P | **P** | **08 41 22.7** | **+0.6** |
| | comp=Z,22nm,0.8s,baz=130,slow=7.9,SNR=4.5 | | | | | | |
| | comp=Z,22nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.48** | **270** | P | **P** | **08 41 44.5** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | **P** | **08 41 55.4** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | **P** | **08 41 55.8** | **+0.7** |
| | comp=Z,4.2nm,0.5s,baz=88,slow=12,SNR=15 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **08 42 42.4** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 08 42 42.9 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **08 42 42.3** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 08 42 43.1 | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **08 42 42.5** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **08 42 42.3** | **-0.6** |
| | comp=Z,9nm,0.7s,baz=96,slow=7.3,SNR=81 | | | | | | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **45.13** | **254** | P | **P** | **08 42 44.0** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 08 42 45.1 | |
| | comp=Z,5.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **08 42 43.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **08 42 43.9** | **0.0** |
| | comp=Z,16nm,0.6s,baz=93,slow=7.8,SNR=188 | | | | | | |
| ASAR | | | | S | **S** | **08 48 40.5** | **-1.0** |
| | comp=Z,1.1nm,0.8s,baz=91,slow=15,SNR=8.8 | | | | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.17** | **268** | P | **P** | **08 43 13.5** | **-0.7** |
| **FORT** | **Forrest** | **50.31** | **245** | P | **P** | **08 43 22.3** | **-0.1** |
| FORT | | | | IAmb | IAmb | 08 43 27.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.85** | **264** | P | **P** | **08 43 26.8** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 08 43 27.1 | |
| | comp=Z,4.5nm,0.6s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.25** | **255** | P | **P** | **08 44 18.3** | **+0.2** |
| **MBWA** | **Marble Bar** | **58.42** | **256** | P | **P** | **08 44 19.2** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **68.20** | **323** | P | **P** | **08 45 21.6** | **+0.3** |
| | comp=Z,1.2nm,0.6s,baz=168,slow=7.2,SNR=4.8 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **08 45 44.9** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 08 45 45.4 | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **08 45 44.8** | **+1.0** |
| | comp=Z,3.8nm,0.6s,baz=356,slow=2.7,SNR=44 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **BELA** | **Belgrano 2** | **82.03** | **173** | P | **P** | **08 46 38.0** | **+0.5** |
| **TXAR** | **Lajitas Array** | **85.73** | **57** | P | **P** | **08 46 58.8** | **+2.2** |
| | comp=Z,0.5nm,0.8s,baz=214,slow=6.2,SNR=6.9 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.89** | **13** | P | **P** | **08 46 56.5** | **0.0** |
| | comp=Z,0.4nm,0.8s,baz=216,slow=5.7,SNR=3.1 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.16** | **43** | P | **P** | **08 47 04.7** | **+1.4** |
| | comp=Z,0.1nm,0.5s,baz=246,slow=3.8,SNR=1.9 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.50** | **178** | P | **P** | **08 47 18.3** | **+0.3** |
| | comp=Z,0.7nm,0.5s,baz=196,slow=15,SNR=7.5 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **HRA** | **Herat** | **124.27** | **300** | | **PKPdf** | **08 53 11.0** | **-0.9** |
| **BRTR** | **Keskin Array B** | **145.11** | **315** | PKPbc | **PKPab** | **08 53 52.0** | **-0.3** |
| | comp=Z,0.4nm,0.7s,baz=11,slow=2.9,SNR=4.3 | | | | | | |

**UCR 19 08:41:12.7**±0.8, **8°.58N×83°.21W, h18**km±2km, **MW3.5, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.07** | **49** | eS | Sg | 08 41 17.7 | -0.8 |
| FITO | | | | eP | Pg | 08 41 15.6 | -0.6 |
| **EDAD** | **Golfito** | **0.09** | **30** | eS | Sg | 08 41 18.0 | -0.8 |
| EDAD | | | | eP | Pg | 08 41 15.7 | -0.6 |
| **PTJ1** | **Puerto Jimnez** | **0.10** | **246** | eP | Pg | 08 41 16.6 | +0.2 |
| **PTJ1** | **Puerto Jimnez** | **0.10** | **246** | *i* S | Pg | 08 41 16.8 | +0.4 |
| **JIME** | **Puerto Jimenez** | **0.12** | **251** | eP | Pg | 08 41 16.8 | +0.2 |
| **NELY** | **Ciudad Neily** | **0.27** | **74** | eP | Pb | 08 41 18.9 | -0.1 |
| **VITO** | **San Vito** | **0.34** | **45** | eP | Pg | 08 41 20.1 | +0.1 |
| **EDP2** | **Potrero Grande** | **0.44** | **4** | eS | Sb | 08 41 28.4 | +0.2 |
| EDP2 | | | | eP | Pg | 08 41 21.5 | -0.2 |
| **EDPN** | **Palmar Norte** | **0.45** | **327** | eS | Sg | 08 41 28.0 | -0.2 |
| EDPN | | | | eP | Pg | 08 41 21.2 | -0.8 |
| **BRU2** | **Volcan** | **0.56** | **67** | eP | Pg | 08 41 23.5 | -0.4 |
| **BRU2** | **Volcan** | **0.56** | **67** | IAML | | 08 41 36.4 | |
| | comp=Z,780nm,1.0s | | | | | | |
| BRU2 | | | | *i* S | Sg | 08 41 23.4 | -8.1 |
| **EDBA** | **Buenos Aires** | **0.59** | **354** | eS | Sb | 08 41 32.6 | +0.2 |
| EDBA | | | | eP | Pb | 08 41 24.0 | -0.4 |
| **DRK0** | **Durika** | **0.68** | **357** | eP | Pb | 08 41 25.2 | -1.0 |
| **DRK0** | **Durika** | **0.68** | **357** | IAML | | 08 41 42.4 | |
| | comp=Z,2µm,1.0s | | | | | | |
| DRK0 | | | | *i* S | Pb | 08 41 25.1 | -1.1 |

*IDC **19** 08:42:35.7±0.8, 18°.38S×174°.06W, h0km, mb4.0/8, mbtmp4.0/8, Error ellipse: s-maj=31.4km s-min=20.6km az=137.0*
**ISC 19 08:42:42.1**±0.8, **18°.6S**±0°.1×**174°.0W**±0°.2, **h43**km, **n47, σ2°74/51, mb3.9/9, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **18.69** | **256** | P | **P** | **08 46 58.1** | **+1.1** |
| | 2.6nm,1.0s,baz=78,slow=16,SNR=1.9 | | | | | | |
| **OUZ** | **Omahuta** | **19.91** | **211** | P | P | 08 47 05.5 | -4.6 |
| **GRZ** | **Great Barrier** | **19.92** | **206** | P | **P** | **08 47 10.6** | **+0.4** |
| **MXZ** | **Matakaoa Point** | **20.09** | **198** | P | **P** | **08 47 14.6** | **+2.7** |
| **KUZ** | **Kuaotunu** | **20.24** | **205** | P | **P** | **08 47 17.4** | **+3.8** |
| **WMGZ** | **Waiomatatini S** | **20.29** | **198** | P | **P** | **08 47 11.3** | **-2.9** |
| WMGZ | | | | S | S | 08 50 49.3 | -10 |
| **HAZ** | **Te Kaha** | **20.42** | **199** | P | **P** | **08 47 17.9** | **+2.3** |
| HAZ | | | | S | **S** | **08 51 03.0** | **+1.0** |
| **PKGZ** | **Pakihiroa** | **20.43** | **198** | P | **P** | **08 47 18.0** | **+2.2** |
| **WIAZ** | **Waiheke Island** | **20.52** | **206** | P | **P** | **08 47 20.3** | **+3.6** |
| **PUZ** | **Puketiti** | **20.57** | **198** | P | **P** | **08 47 20.3** | **+3.1** |
| PUZ | | | | S | S | 08 50 54.6 | -10 |
| **MBAZ** | **Motutapu North** | **20.60** | **206** | P | **P** | **08 47 21.3** | **+3.8** |
| **RUGZ** | **Raukumara Rang** | **20.65** | **199** | P | **P** | **08 47 21.0** | **+2.8** |
| **ETAZ** | **East Tamaki Re** | **20.74** | **206** | P | **P** | **08 47 23.2** | **+4.2** |
| **TWGZ** | **Tauwhareparae** | **20.75** | **198** | P | **P** | **08 47 23.1** | **+3.9** |
| **MKAZ** | **Moumakai** | **20.78** | **205** | P | **P** | **08 47 22.9** | **+3.5** |
| **OPRZ** | **Ohinepanea** | **20.91** | **201** | P | **P** | **08 47 25.0** | **+4.2** |
| **AWAZ** | **Awhitu Peninsu** | **20.95** | **206** | P | **P** | **08 47 24.8** | **+3.5** |
| **MWZ** | **Matawai** | **21.03** | **199** | P | **P** | **08 47 25.0** | **+2.7** |
| MWZ | | | | S | **S** | **08 51 08.4** | **-5.7** |
| **TKGZ** | **Te Karaka** | **21.03** | **198** | P | **P** | **08 47 25.7** | **+3.5** |
| **URZ** | **Urewera** | **21.09** | **200** | P | **P** | **08 47 23.7** | **+0.8** |
| | 10nm,0.3s,baz=20,slow=1.8,SNR=33 | | | | | | |
| URZ | | | | S | **S** | **08 51 11.4** | **-3.9** |
| | 9.3nm,1.0s,baz=318,slow=22,SNR=1.8 | | | | | | |
| | 10nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **21.09** | **200** | P | **P** | **08 47 23.8** | **+1.0** |
| URZ | | | | S | **S** | **08 51 11.0** | **-4.2** |
| **TOZ** | **Tahuroa Road** | **21.19** | **204** | P | **P** | **08 47 27.8** | **+3.9** |
| **RAGZ** | **Rawiri** | **21.21** | **199** | P | **P** | **08 47 27.8** | **+3.5** |
| **RIGZ** | **Rimuhau** | **21.30** | **198** | P | **P** | **08 47 28.2** | **+3.0** |
| **SNGZ** | **Shannon Statio** | **21.50** | **199** | P | **P** | **08 47 29.7** | **+2.4** |
| **TLZ** | **Tolley Road** | **21.70** | **203** | P | **P** | **08 47 31.0** | **+1.6** |
| **MTHZ** | **Maungataniwha** | **21.72** | **200** | P | **P** | **08 47 32.5** | **+2.9** |
| **MRHZ** | **Matea Rd** | **21.84** | **201** | P | **P** | **08 47 32.7** | **+1.7** |
| **NMHZ** | **Naumai** | **21.96** | **199** | P | **P** | **08 47 35.4** | **+3.2** |
| **RATZ** | **Rangitukua** | **22.09** | **202** | P | **P** | **08 47 34.7** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **22.12** | **200** | P | **P** | **08 47 34.4** | **+0.5** |
| **MCHZ** | **McNeill Hill** | **22.31** | **199** | P | **P** | **08 47 37.8** | **+1.9** |
| **KWHZ** | **Kaweka Forest** | **22.38** | **200** | P | **P** | **08 47 38.8** | **+2.1** |
| **SNVZ** | **South Ngauruho** | **22.42** | **202** | P | **P** | **08 47 38.8** | **+1.4** |
| **FWVZ** | **Far West T-bar** | **22.52** | **202** | P | **P** | **08 47 40.8** | **+2.4** |
| **WHVZ** | **Whangaehu Hut** | **22.53** | **202** | P | **P** | **08 47 40.7** | **+2.2** |
| **WNVZ** | **Wahianoa** | **22.57** | **201** | P | **P** | **08 47 35.9** | **-2.9** |
| **PKVZ** | **Pokaka** | **22.62** | **202** | P | **P** | **08 47 41.6** | **+2.3** |
| **CTA** | **Charters Tower** | **37.50** | **261** | P | **P** | **08 49 52.2** | **+0.2** |
| | 0.1nm,0.7s,baz=69,slow=8.6,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.66** | **259** | P | **P** | **08 51 21.1** | **-1.2** |
| | 0.8nm,0.4s,baz=97,slow=6.2,SNR=35 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **48.67** | **255** | P | **P** | **08 51 21.3** | **-1.1** |
| | 1.3nm,0.5s,baz=88,slow=8.6,SNR=19 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 52 47.0** | **-0.3** |
| | 0.4nm,0.5s,baz=103,slow=3.7,SNR=2.4 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.48** | **180** | P | **P** | **08 53 59.8** | **+1.7** |
| | 1.2nm,0.8s,baz=31,slow=0.3,SNR=10 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.05** | **42** | P | **P** | **08 54 30.5** | **-0.5** |
| | 0.7nm,0.9s,baz=216,slow=9.0,SNR=5.5 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **82.83** | **56** | P | **P** | **08 55 02.8** | **+0.4** |
| | 0.4nm,0.8s,baz=215,slow=7.7,SNR=5.3 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.65** | **11** | P | **P** | **08 55 14.1** | **-1.6** |
| | 0.3nm,0.6s,baz=220,slow=5.2,SNR=6.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **89.78** | **177** | P | **P** | **08 55 35.3** | **-0.4** |
| | 0.8nm,0.7s,baz=35,slow=13,SNR=1.7 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **148.19** | **317** | PKPbc | **PKPbc** | **09 02 23.9** | **+0.1** |
| | 0.6nm,0.6s,baz=90,slow=2.0,SNR=1.9 | | | | | | |

*IDC **19** 08:46:38.2±0.8, 28°.16N×129°.98E, h0km, mb3.8/14, mbtmp3.8/16, ML3.3/2, MS3.8/1, Error ellipse: s-maj=26.1km s-min=15.2km az=93.0*
*JMA **19** 08:46:40.1±0.1, 28.0N±0.0×130.2E±0.6, h30km±1km, MV3.5/23, NEAR AMAMI-OSHIMA ISLAND*
**ISC 19 08:46:40.1**±2.0, **28.01N**±0.04×**130.20E**±0.05, **h17**km±12km, **n39, σ0°90/46, mb3.9**/15, **Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JZK** | **Kikaishima** | **0.37** | **327** | P | **Pb** | **08 46 48.5** | **+0.3** |
| **JAM** | **Amami Oshima** | **0.66** | **308** | P | **Pb** | **08 46 53.2** | **0.0** |
| JAM | | | | S | **Sg** | **08 47 02.2** | **+0.3** |
| **JAMN** | **Amaminishikomi** | **0.93** | **285** | P | **Pb** | **08 46 57.4** | **-0.5** |
| JAMN | | | | S | **Sg** | **08 47 10.3** | **-0.2** |
| **JTK** | **Tokunoshima** | **1.12** | **259** | P | **Pn** | **08 47 00.5** | **-0.6** |
| **JTAJ** | **Takarajima** | **1.44** | **323** | P | **Pn** | **08 47 04.9** | **-0.5** |
| **JOKE** | **Okinoerabujima** | **1.58** | **246** | P | **Pn** | **08 47 07.7** | **+0.4** |
| **JYRO** | **Yoronjima** | **1.83** | **238** | P | **Pn** | **08 47 10.3** | **-0.5** |
| JYRO | | | | eS | **Sn** | **08 47 33.4** | **-0.2** |
| **JOW** | **Kunigami** | **2.07** | **236** | Pn | **Pn** | **08 47 13.6** | **-0.5** |
| | 14nm,0.3s,baz=95,slow=13,SNR=30 | | | | | | |
| JOW | | | | Sn | **Sn** | **08 47 40.7** | **+1.1** |
| | 26nm,0.3s,baz=80,slow=18,SNR=6.9 | | | | | | |
| | 25nm,0.3s | | | | | | |
| **JOW** | **Kunigami** | **2.07** | **236** | P | **Pn** | **08 47 14.0** | **-0.1** |
| **JIH** | **Iheya** | **2.20** | **244** | P | **Pn** | **08 47 15.5** | **-0.5** |
| **JYAK** | **Yakushimahirau** | **2.24** | **7** | P | **Pn** | **08 47 16.7** | **+0.2** |
| JYAK | | | | S | **Sn** | **08 47 43.2** | **-0.6** |
| **JKDJ** | **Kitadaitoujima** | **2.27** | **154** | eS | **Sn** | **08 47 43.3** | **-1.2** |
| **JMZ** | **Minamidaito 2** | **2.36** | **157** | P | **Pn** | **08 47 17.2** | **-0.9** |
| JMZ | | | | S | **Sn** | **08 47 45.1** | **-1.6** |
| **JNTH** | **Nagotoyohara** | **2.44** | **233** | P | **Pn** | **08 47 18.9** | **-0.3** |
| **JMTN** | **Minamitane** | **2.46** | **14** | P | **Pn** | **08 47 19.4** | **-0.1** |
| JMTN | | | | eS | **Sn** | **08 47 49.1** | **0.0** |
| **JTN** | **Tanegashima 3** | **2.73** | **14** | P | **Pn** | **08 47 23.5** | **+0.4** |
| JTN | | | | S | **Sn** | **08 47 55.9** | **+0.2** |
| **JAGN** | **Aguni-jima** | **2.98** | **242** | P | **Pn** | **08 47 26.1** | **-0.6** |
| **JKE** | **Kume jima 2** | **3.47** | **242** | P | **Pn** | **08 47 33.1** | **-0.3** |
| **JNU** | **Nakatsue** | **5.13** | **6** | Pn | **Pn** | **08 47 56.6** | **+0.3** |
| | 1.3nm,0.3s,baz=192,slow=4.4,SNR=14 | | | | | | |
| JNU | | | | Sn | **Sn** | **08 48 54.7** | **-0.5** |
| | 0.8nm,0.3s,baz=214,slow=19,SNR=5.7 | | | | | | |
| | 16nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **9.61** | **349** | Pn | **Pn** | **08 48 58.0** | **+0.3** |
| | baz=168,slow=12 | | | | | | |
| **PETK** | **Petropavlovsk-** | **32.27** | **31** | P | **P** | **08 53 07.5** | **-0.3** |
| | 1.3nm,0.3s,baz=226,slow=7.8,SNR=6.1 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.45** | **96** | T | T | 09 29 54.9 | |
| | baz=290,slow=75,SNR=5.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.46** | **96** | T | T | 09 29 53.1 | |
| | baz=290,slow=75,SNR=4.8 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.47** | **96** | T | T | 09 29 56.3 | |
| | baz=290,slow=75,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.70** | **310** | P | **P** | **08 54 26.4** | **-1.6** |
| | 0.3nm,0.6s,baz=96,slow=7.8,SNR=3.7 | | | | | | |
| MKAR | | | | PcP | **PcP** | **08 56 24.2** | **-0.2** |
| | 0.5nm,0.7s,baz=96,slow=2.9,SNR=4.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.81** | **315** | P | **P** | **08 54 50.9** | **-2.2** |
| | 0.3nm,0.5s,baz=100,slow=8.8,SNR=5.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.83** | **175** | P | **P** | **08 55 18.1** | **+1.0** |
| | 0.3nm,0.6s,baz=352,slow=8.2,SNR=1.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **50.14** | **317** | P | **P** | **08 55 33.0** | **-1.5** |
| | 0.5nm,0.5s,baz=72,slow=9.5,SNR=2.8 | | | | | | |
| BVAR | | | | PcP | **PcP** | **08 56 54.1** | **+0.3** |
| | 1.4nm,0.7s,baz=96,slow=4.5,SNR=6.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **PALK** | **Pallekele** | **51.06** | **256** | LR | LR | 09 20 10.9 | |
| | comp=Z,81nm,18.1s,baz=315,slow=40 | | | | | | |
| **ASAR** | **Alice Springs** | **51.50** | **176** | P | **P** | **08 55 46.7** | **+1.7** |
| | 0.3nm,0.7s,baz=6.0,slow=12,SN

JCJ Sn 09 06 56.6 +0.3
**JCJ Chichijima 3.71 342** Pn **Pn** 09 06 11.9 -1.6
31nn,0.3s,baz=207,slow=20,SNR=5.8
JCJ Sn **Sn** 09 06 51.7 -4.6
49nn,0.3s,baz=291,slow=22,SNR=9.3
130nn,0.5s
**INU Inuyama 13.03 336** Pn **Pn** 09 08 18.5 -2.7
**JGF Kuroka 13.13 337** Pn **Pn** 09 08 20.0 -2.7
**MJAR Matsushiro Arr 13.72 342** Pn **Pn** 09 08 27.9 -2.8
0.1nn,0.3s,baz=162,slow=11,SNR=11
1.9nn,0.6s
**MAJO Matsushiro 13.72 342** Pn **Pn** 09 08 28.1 -2.6
**MJB9 Matsu-Tunnel 13.72 342** **Pn** 09 08 27.7 -3.1
**JOW Kunigami 14.16 286** **P** 09 08 45.9 +2.0
**JOW Kunigami 14.16 286** Pn **P** 09 08 46.2 +2.3
2.4nn,0.3s,baz=136,slow=9.9,SNR=8.8
**JMM Marumori 14.45 351** Pn **Pn** 09 08 39.4 -1.2
**JNU Nakatsue 14.62 313** Pn **P** 09 08 52.7 +3.6
0.3nn,0.3s,baz=148,slow=11,SNR=3.6
**JTM Tenmabayashi 17.30 354** P **Pn** 09 09 18.2 +0.8
**ERM Erimo 18.41 359** P **P** 09 09 30.3 -0.5
**KSRS Korea Array 19.25 320** P **P** 09 09 40.1 0.0
0.4nn,0.3s,baz=140,slow=12,SNR=20
3.1nn,0.6s
**KSAR Wonju Array Be 19.26 319** P **Pn** 09 09 41.2 -0.2
**KS19 Wonju Array Si 19.31 320** P **P** 09 09 38.3 -2.5
**ASAJ Asahikawa 20.52 358** P **P** 09 09 55.0 +1.0
6.7nn,0.8s,baz=186,slow=18,SNR=2.0
ASAJ LR LR 09 20 56.0
comp=Z,69nn,18.3s,baz=135,slow=46
6.7nn,0.8s
**USRK Ussuriysk Ar. 22.65 338** P **P** 09 10 16.9 0.0
**USRK Ussuriysk Ar. 22.65 338** P **P** 09 10 16.2 -0.6
6.4nn,0.7s,baz=170,slow=9.6,SNR=11
6.4nn,0.7s
**NJ2 Nanjing 23.34 297** *eP* **P** 09 10 24.9 +0.9
NJ2 pmax pmax
comp=Z,12nn,1.1s
**MDJ Mudanjiang 23.89 335** P **P** 09 10 31.0 +1.9
MDJ pmax pmax
comp=Z,13nn,1.0s
**BNX BinXian 25.69 333** ||P **P** 09 10 46.4 +0.9
BNX pmax pmax
comp=Z,9.0nn,0.7s
**HNS HongShan 28.26 306** *eP* **P** 09 11 12.1 +3.4
**HEH HeiHe 29.45 339** *eP* **P** 09 11 20.8 +1.6
HEH pmax pmax
comp=Z,21nn,1.0s
**PETK Petropavlovsk- 31.41 16** LR LR 09 24 44.5
comp=Z,81nn,19.4s,baz=208,slow=37
**HHC Hu-ho-hao-te 31.82 310** *eP* **P** 09 11 40.3 -0.1
HHC pmax pmax
comp=Z,16nn,0.5s
HHC pmax pmax
comp=Z,230nn,4.3s
**PZH PanZhiHua 37.83 283** P **P** 09 12 35.0 +2.6
PZH pmax pmax
comp=Z,10.0nn,0.5s
PZH pmax pmax
comp=Z,80nn,3.7s
**SONM Songino Array 38.11 319** P **P** 09 12 34.6 0.0
1.2nn,0.6s,baz=137,slow=7.9,SNR=7.0
1.2nn,0.6s
**YAK Yakutsk 39.59 350** LR LR 09 29 48.5
comp=Z,140nn,21.6s,baz=170,slow=37
**CMAR Chiang Mai Arr 41.78 272** P **P** 09 13 04.9 -0.3
1.0nn,0.5s,baz=62,slow=7.4,SNR=4.7
1.0nn,0.5s
**CTA Charters Tower 43.47 176** P **P** 09 13 17.1 -1.6
0.2nn,0.6s,baz=356,slow=13,SNR=4.2
**WRA Warramunga Arr 44.15 192** P **P** 09 13 22.7 -1.6
1.3nn,0.5s,baz=16,slow=9.1,SNR=26
WRA PcP **PP** 09 15 08.2 +0.5
1.1nn,0.6s,baz=3.8,slow=3.6,SNR=5.4
1.3nn,0.5s
**FITZ Fitzroy Crossi 44.93 204** P **P** 09 13 29.3 -1.2
**KULM Kulim 45.06 253** P **P** 09 13 30.9 -0.8
**AS31 Alice Springs 47.86 192** P **P** 09 13 55.2 +1.7
**ASAR Alice Springs 47.86 192** P **P** 09 13 53.9 +0.4
**ASAR Alice Springs 47.86 192** P **P** 09 13 52.5 -0.9
0.3nn,0.4s,baz=14,slow=12,SNR=8.3
ASAR PcP **PcP** 09 15 21.2 -0.7
0.6nn,0.8s,baz=17,slow=4.2,SNR=2.3
0.3nn,0.4s
**ZALV Zalesovo Beam 52.95 321** P **P** 09 14 30.8 -0.8
1.3nn,0.4s,baz=106,slow=9.0,SNR=7.6
1.3nn,0.4s
**MK31 Makanchi Array 53.67 312** P **P** 09 14 38.0 +0.8
**MKAR Makanchi Array 53.67 312** P **P** 09 14 36.8 -0.3
**MKAR Makanchi Array 53.67 312** P **P** 09 14 37.4 +0.3
3.1nn,0.7s,baz=89,slow=8.7,SNR=19
3.1nn,0.7s
**MAKZ Makanchi 53.88 312** P **P** 09 14 38.6 -0.1
MAKZ IAmb IAmb 09 14 40.3
comp=Z,6.4nn,0.9s
**STKA Stephens Creek 55.16 182** P **P** 09 14 46.7 -1.2
comp=Z,0.8nn,0.4s,baz=13,slow=8.1,SNR=6.4
comp=Z,0.8nn,0.4s
**KURK Kurchatov 56.33 316** P **P** 09 14 56.5 +0.3
**KURBB Kurchatov Arra 56.38 316** P **P** 09 14 56.8 +0.3
comp=Z,11nn,0.7s,baz=93,slow=7.8,SNR=99
comp=Z,11nn,0.7s
**J20K Nowinta River 57.06 28** P **P** 09 15 02.5 +1.4
J20K IAmb IAmb 09 15 03.7
comp=Z,14nn,1.1s
**F20K Avaraart Lake 57.23 24** P **P** 09 15 02.9 +0.6
**BOOM Boomskoye usch 58.23 306** P **P** 09 15 11.5 +1.5
BOOM IAmb IAmb 09 15 12.2
comp=Z,8.4nn,0.7s
**NRN Naryn 58.26 305** P **P** 09 15 10.9 +0.5
NRN IAmb IAmb 09 15 12.8
comp=Z,12nn,1.4s
**BPAW Bear Paw Mtn. 58.39 28** P **P** 09 15 11.7 +1.2
BPAW IAmb IAmb 09 15 26.2
comp=Z,7.4nn,1.2s
**KSH Kashi 58.45 303** P **P** 09 15 16.0 +4.5
KSH pP pP 09 15 20.4 +0.8
KSH sP sP 09 15 24.4 +1.7
KSH pmax pmax
comp=Z,18nn,0.8s
**H24K Noodor Dome 60.01 26** P **P** 09 15 22.9 +1.1
H24K IAmb IAmb 09 15 38.2
comp=Z,4.4nn,0.9s
**IL31 60.26 28** P **P** 09 15 23.3 -0.1
IL31 IAmb IAmb 09 15 39.2
comp=Z,8.6nn,1.4s
**ILAR Eielson Array 60.26 28** P **P** 09 15 23.1 -0.3
comp=Z,1.5nn,0.7s,baz=264,slow=5.5,SNR=13
comp=Z,1.5nn,0.7s
**G24K Hadweenzic Riv 60.31 25** P **P** 09 15 24.9 +1.1
G24K IAmb IAmb 09 15 41.1
comp=Z,7.7nn,1.1s
**ARSB Arslanbob 60.53 305** P **P** 09 15 27.4 +1.5
ARSB IAmb IAmb 09 15 28.2
comp=Z,5.1nn,1.2s
**SCRK Sand Creek 61.42 29** P **P** 09 15 31.9 +0.4
SCRK IAmb IAmb 09 15 45.0
comp=Z,4.7nn,0.8s
**BVAR Borovoye Array 61.46 319** P **P** 09 15 32.5 +0.7
comp=Z,22nn,0.5s,baz=88,slow=7.7,SNR=114
**BRVK Borovoye 61.52 319** P **P** 09 15 33.0 +0.8
**KK31 Karatay Array 62.14 308** P **P** 09 15 36.9 +0.3
**KKAR Karatay Array 62.14 308** P **P** 09 15 37.0 +0.4
**KKAR Karatay Array 62.14 308** P **P** 09 15 37.1 +0.5
KKAR IAmb IAmb 09 15 38.4
comp=Z,15nn,1.3s
**GAR Garm 62.87 303** P **P** 09 15 42.5 +0.8
**I28M Miner Creek 63.24 27** P **P** 09 15 44.9 +1.3
I28M IAmb IAmb 09 16 03.6
comp=Z,3.3nn,1.1s
**E28M Babbage River 63.53 24** P **P** 09 15 47.5 +2.1
E28M IAmb IAmb 09 16 02.9
comp=Z,7.7nn,1.1s
**CHGR Chuyangaron 63.82 303** P **P** 09 15 48.9 +1.0
**SIMJ Simiganj 63.94 303** P **P** 09 15 49.0 +0.3
**KBL Kabul 64.70 298** P **P** 09 15 54.0 +0.1
**I30M Mount Dempster 64.74 27** P **P** 09 15 54.9 +1.4
I30M IAmb IAmb 09 16 13.4
comp=Z,5.3nn,1.4s
**J30M Hart River 64.78 28** P **P** 09 15 55.0 +1.2
J30M IAmb IAmb 09 16 09.1
comp=Z,3.1nn,0.9s
**ARU Arti 67.95 323** P **P** 09 16 14.1 0.0
**ABKAR Akbulak array 68.42 316** P **P** 09 16 17.5 +0.3
ABKAR IAmb IAmb 09 16 18.0
comp=Z,4.5nn,0.6s

**ABKAR Akbulak array 68.42 316** P **P** 09 16 16.9 -0.3
**DLBC Dease Lake 68.42 34** P **P** 09 16 19.6 +2.5
**DLBC Dease Lake 68.42 34** LR LR 09 45 47.0
comp=Z,42nn,19.9s,baz=274,slow=36
**YKA Yellowknife Ar 74.68 28** P **P** 09 16 54.9 +0.3
comp=Z,1.5nn,0.6s,baz=297,slow=6.2,SNR=9.5
comp=Z,1.5nn,0.6s
**ARCES ARCESS Array B 77.26 341** P **P** 09 17 09.6 +0.4
comp=Z,5.2nn,0.7s,baz=73,slow=8.2,SNR=10
comp=Z,5.2nn,0.7s
**B08A Colville Reser 77.30 43** P **P** 09 17 10.2 +0.3
B08A IAmb IAmb 09 17 23.2
comp=Z,3.4nn,0.8s
**J05D Fort Rock, OR 77.88 48** P **P** 09 17 14.4 +1.1
J05D IAmb IAmb 09 17 15.4
comp=Z,7.1nn,0.9s
**PINE Pine Mountain 77.89 47** P **P** 09 17 15.2 +1.7
PINE IAmb IAmb 09 17 15.8
comp=Z,8.4nn,0.8s
**J08A Circle Bar Ran 79.72 47** P **P** 09 17 24.0 +0.5
J08A IAmb IAmb 09 17 25.3
comp=Z,5.2nn,0.9s
**BMO Blue Mountains 79.92 45** P **P** 09 17 23.9 -0.6
**WVOR Wild Horse Val 79.97 48** P **P** 09 17 25.1 +0.3
**CMB Columbia Colle 80.41 53** P **P** 09 17 27.8 +0.6
CMB IAmb IAmb 09 17 28.7
comp=Z,4.5nn,0.7s
**PAHR Pah Rah Range 80.49 51** P **P** 09 17 27.5 -0.2
**PNTR Pine Nut 80.57 52** P **P** 09 17 29.5 +1.2
PNTR IAmb IAmb 09 17 30.0
comp=Z,4.8nn,0.8s
**KBZ Khabaz 81.29 314** P **P** 09 17 31.9 +0.3
comp=Z,4.5nn,0.8s,baz=43,slow=3.8,SNR=7.0
comp=Z,4.5nn,0.8s
**MFID Camas Ranch 81.47 46** P **P** 09 17 33.6 +0.8
MFID IAmb IAmb 09 17 34.5
comp=Z,4.5nn,0.8s
**FIA1 FINESS Array S 81.63 334** P **P** 09 17 32.3 -0.8
**FINES FINESS Array B 81.63 334** P **P** 09 17 32.9 -0.2
**FINES FINESS Array B 81.63 334** P **P** 09 17 32.8 -0.3
comp=Z,1.7nn,0.4s,baz=72,slow=4.8,SNR=12
comp=Z,1.7nn,0.4s
**KVN Kaiserville 81.66 51** P **P** 09 17 34.6 +0.6
**NVAR Mina Array Bea 81.76 52** P **P** 09 17 35.1 +0.5
**NVAR Mina Array Bea 81.76 52** P **P** 09 17 35.5 +0.9
comp=Z,2.0nn,0.8s,baz=276,slow=5.7,SNR=22
comp=Z,2.0nn,0.8s
**TPH Tonopah 82.69 52** P **P** 09 17 38.2 -1.2
TPH IAmb IAmb 09 17 41.0
comp=Z,8.8nn,1.0s
**GMN Gold Mountain 82.97 52** P **P** 09 17 40.8 -0.2
**GWY Greenwater Val 83.86 53** P **P** 09 17 45.5 0.0
GWY IAmb IAmb 09 17 46.8
comp=Z,4.1nn,0.8s
**IMW Indian Meadow 84.45 44** P **P** 09 17 49.0 +0.5
**SHPR Sheep Range 84.83 52** P **P** 09 17 50.6 +0.2
**DUG Dugway, Tooele 84.88 48** P **P** 09 17 50.9 +0.4
DUG IAmb IAmb 09 17 52.0
comp=Z,3.2nn,0.8s
**PFO Pinyon Flats O 85.10 56** LR LR 09 52 10.5
comp=Z,37nn,18.6s,baz=342,slow=33
**JLU Jordanelle 85.63 48** P **P** 09 17 54.6 +0.3
JLU IAmb IAmb 09 17 55.8
comp=Z,5.3nn,0.9s
**CCUT Cedar City 85.67 51** P **P** 09 17 55.3 +0.7
CCUT IAmb IAmb 09 17 56.5
comp=Z,5.8nn,1.3s
**PDAR Pinedale Array 85.87 45** P **P** 09 17 55.6 0.0
comp=Z,0.7nn,0.8s,baz=235,slow=3.1,SNR=6.4
comp=Z,0.7nn,0.8s
**LCMT Little Creek M 86.00 51** P **P** 09 17 55.5 -0.7
**LAO LASA Array 86.02 40** P **P** 09 17 56.1 +0.1
**MVU Marysvale 86.06 50** P **P** 09 17 56.8 +0.2
**KNB Kanab 86.30 51** P **P** 09 17 58.8 +1.1
KNB IAmb IAmb 09 17 59.6
comp=Z,7.5nn,0.8s
**Q16A Castle Valley 86.59 49** P **P** 09 17 59.8 +0.6
Q16A IAmb IAmb 09 18 00.4
comp=Z,3.3nn,0.7s
**P17A Butcher Ranch, 86.63 48** P **P** 09 17 59.6 +0.3
P17A IAmb IAmb 09 18 00.7
comp=Z,3.8nn,0.7s
**P18A Preston Nutter 86.90 48** P **P** 09 18 01.3 +0.5
**U15A North Rim 86.94 52** P **P** 09 18 01.5 +0.6
U15A IAmb IAmb 09 18 02.6
comp=Z,2.6nn,0.7s
**SRU San Rafael Swe 86.95 49** P **P** 09 18 01.4 +0.5
SRU IAmb IAmb 09 18 01.9
comp=Z,4.0nn,0.7s
**HFS Hagfors 87.13 337** P **P** 09 17 59.8 -1.2
comp=Z,1.8nn,0.8s,baz=79,slow=9.0,SNR=4.8
comp=Z,1.8nn,0.8s
**NOA NORSAR Array B 87.32 339** P **P** 09 18 00.3 -1.7
comp=Z,1.0nn,0.9s,baz=43,slow=5.0,SNR=3.1
comp=Z,1.0nn,0.9s
**HMU Henry Mountain 87.35 50** P **P** 09 18 02.5 -0.4
HMU IAmb IAmb 09 18 03.8
comp=Z,2.7nn,0.8s
**Y14A Wickenburg 87.55 54** P **P** 09 18 03.8 +0.1
Y14A IAmb IAmb 09 18 05.3
comp=Z,4.7nn,0.9s
**BRTR Keskin Array B 89.28 313** P **P** 09 18 10.5 -1.4
comp=Z,0.8nn,0.9s,baz=27,slow=8.1,SNR=2.4
comp=Z,0.8nn,0.9s
**TXAR Lajitas Array 96.73 54** P **P** 09 18 45.6 -0.8
comp=Z,0.1nn,0.6s,baz=309,slow=4.3,SNR=2.0
comp=Z,0.1nn,0.6s
**TORD Torodi Ar. Bea 127.78 310** PKP **PKPdf** 09 24 20.7 -0.9
comp=Z,0.7nn,0.9s,baz=19,slow=3.5,SNR=3.5
**PLCA Paso Flores 146.73 129** PKPbc **PKPbc** 09 24 57.7 +0.3
comp=Z,2.0nn,0.6s,baz=236,slow=4.7,SNR=12
**LPAZ La Paz 149.44 82** PKPbc **PKPbc** 09 25 06.3 +0.4
comp=Z,2.8nn,0.6s,baz=334,slow=2.8,SNR=14

*IDC **19** 09:07:03.2±0.9, 14.°09N×56.°91E, h0km, mb4.0/9, mbtmp4.0/9, MS3.7/1, Error ellipse: s-maj=30.6km s-min=21.1km az=47.0*
*NEIC **19** 09:07:08.2±2.2, 14.°17N±0.°08×56.°7E±0.°1, h10km±1km, mb4.6/28, Error ellipse: s-maj=21.5km s-min=9.4km az=123.0*
**ISC 19 09:07:06.3±0.7, 14.°0N±0.°1×56.°82E±0.°10, h15km, n55, σt 9s14/51, mb4.4/32, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAYN** | **Ar Rayn** | **14.27** | **313** | Pn | **Pn** | **09 10 27.4** | **-0.6** |
| **HMDM** | **Hanimaadhoo** | **17.63** | **113** | P | **Pn** | **09 11 10.7** | **-0.8** |
| **HRA** | **Herat** | **20.84** | **13** | P | Pn | 09 11 51.5 | +1.2 |
| **KMBO** | **Kilima Mbogo** | **24.56** | **234** | P | **P** | **09 12 26.2** | **+0.2** |
| **KMBO** | **Kilima Mbogo** | **24.56** | **234** | P | **P** | **09 12 26.6** | **+0.5** |
| | 1.1nn,0.6s,baz=30,slow=9.1,SNR=4.8 | | | | | | |
| | 1.1nn,0.6s | | | | | | |
| **GHAJ** | **Ghor Haditha** | **25.99** | **315** | P | **P** | **09 12 40.2** | **+1.6** |
| GHAJ | | | | IAmb | IAmb | 09 12 43.0 | |
| | comp=Z,21nn,1.1s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **27.70** | **334** | P | **P** | **09 12 55.8** | **+1.6** |
| **BTK** | **Batken** | **28.68** | **23** | P | **P** | **09 13 04.2** | **+1.3** |
| BTK | | | | IAmb | IAmb | 09 13 35.5 | |
| | comp=Z,6.9nn,0.9s | | | | | | |
| **KSH** | **Kashi** | **30.46** | **30** | P | **P** | **09 13 16.1** | **-2.6** |
| KSH | | | | pP | pP | 09 13 20.6 | -1.6 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,6.0nn,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **31.90** | **341** | P | **P** | **09 13 30.4** | **-0.7** |
| | comp=Z,5.3nn,0.9s,baz=162,slow=6.6,SNR=7.6 | | | | | | |
| KBZ | | | | LR | LR | 09 28 51.0 | |
| | comp=Z,118nn,19.8s,baz=24,slow=41 | | | | | | |
| | comp=Z,5.3nn,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **32.70** | **326** | P | **P** | **09 13 39.7** | **+1.3** |
| **BRTR** | **Keskin Array B** | **32.70** | **326** | P | **P** | **09 13 36.3** | **-2.1** |
| | comp=Z,0.8nn,0.8s,baz=141,slow=4.5,SNR=3.5 | | | | | | |
| | comp=Z,0.8nn,0.8s | | | | | | |
| **BR131** | **Keskin Array S** | **32.70** | **326** | P | **P** | **09 13 39.5** | **+1.1** |
| BR131 | | | | IAmb | IAmb | 09 13 40.7 | |
| | comp=Z,8.0nn,1.2s | | | | | | |
| **BOOM** | **Boomskoye usch** | **32.81** | **27** | P | **P** | **09 13 41.1** | **+1.8** |
| BOOM | | | | IAmb | IAmb | 09 13 42.9 | |
| | comp=Z,7.3nn,1.3s | | | | | | |
| **ELL** | **Elmali** | **33.00** | **318** | P | **P** | **09 13 42.6** | **+1.6** |
| **KARP** | **Karpathos** | **34.18** | **314** | P | **P** | **09 13 51.6** | **+0.3** |
| **ABKAR** | **Akbulak array** | **35.21** | **4** | P | **P** | **09 14 00.1** | **+0.2** |
| **MAKZ** | **Makanchi** | **38.87** | **28** | P | **P** | **09 14 32.4** | **+1.3** |
| **MLR** | **Muntele Rosu** | **40.78** | **326** | P | **P** | **09 14 49.2** | **+2.2** |
| MLR | | | | IAmb | IAmb | 09 14 51.0 | |

comp=Z,16nn,1.4s
**AKASG Malin Array Be 42.86 334** P **P** 09 15 03.7 -0.2
comp=Z,2.3nn,0.8s,baz=136,slow=7.4,SNR=11
comp=Z,2.3nn,0.8s
**AKBB Malin Array Si 42.86 334** P **P** 09 15 03.9 0.0
AKBB IAmb IAmb 09 15 04.8
comp=Z,7.5nn,0.9s
**KIEV Kiev 42.86 334** P **P** 09 15 03.9 0.0
KIEV IAmb IAmb 09 15 04.8
comp=Z,6.8nn,0.9s
**ZAA0 Zalesovo Array 45.49 23** P **P** 09 15 24.9 -0.1
**RONA Rosalia, Austr 47.46 323** *eP* **P** 09 15 41.0 +0.4
comp=Z,4.1nn,0.8s
**ARSA Arzberg 47.69 323** *eP* **P** 09 15 42.7 +0.4
comp=Z,2.2nn,0.8s
**SUW Suwalki 47.82 334** P **P** 09 15 43.9 +0.7
**CONA Conrad Observa 47.83 323** *eP* **P** 09 15 43.8 +0.3
comp=Z,8.6nn,1.1s
**MORC Moravsky Berou 47.89 326** P **P** 09 15 43.7 -0.2
MORC IAmb IAmb 09 15 45.5
comp=Z,11nn,1.4s
**MOA Molln 48.72 323** *eP* **P** 09 15 49.5 -0.8
comp=Z,2.4nn,1.0s
**KBA Koelnbreinsper 48.91 321** *eP* **P** 09 15 51.8 -0.2
comp=Z,7.3nn,1.7s
**STAL STALIGIAL 48.92 320** P **P** 09 15 51.2 -0.7
STAL IAmb IAmb 09 15 53.0
comp=Z,15nn,1.4s
**BIOA Bad Ischl, Aus 49.02 322** *eP* **P** 09 15 52.6 0.0
comp=Z,1.8nn,0.6s
**TAM Tamanrasset 49.24 288** P **P** 09 15 54.9 +0.1
TAM IAmb IAmb 09 15 57.7
comp=Z,9.4nn,1.4s
**ABTA Abfaltersbach 49.26 321** *eP* **P** 09 15 53.9 -0.7
comp=Z,3.7nn,1.0s
**CTI Castel Tesino 49.50 319** P **P** 09 15 56.0 -0.3
CTI IAmb IAmb 09 15 58.4
comp=Z,12nn,1.5s
**KHC Kasperske Hory 49.75 324** P **P** 09 15 57.5 -0.6
**WATA Walderalm 50.10 321** *eP* **P** 09 15 59.5 -1.5
comp=Z,2.8nn,0.7s
**MOTA Moosalm 50.39 321** *eP* **P** 09 16 01.8 -1.4
comp=Z,6.5nn,1.0s
**RETA Reutte 50.66 321** *eP* **P** 09 16 03.8 -1.3
comp=Z,3.0nn,1.1s
**DAVA Damuels 51.12 320** *i* P **P** 09 16 07.6 -1.1
comp=Z,3.2nn,0.9s
**CLL Collm 51.16 326** P **P** 09 16 08.6 -0.1
CLL IAmb IAmb 09 16 10.9
comp=Z,9.9nn,1.4s
**CLL Collm 51.16 326** *i* P **P** 09 16 09.6 +0.9
comp=Z,18nn,1.8s
**FINES FINESS Array B 52.25 342** P **P** 09 16 16.4 -0.2
comp=Z,5.2nn,1.0s,baz=141,slow=12,SNR=7.4
comp=Z,5.2nn,1.0s
**BOSA Boshof 52.25 216** P **P** 09 16 19.0 +1.7
**SENIN Lac Senin/Sane 52.40 318** P **P** 09 16 18.1 -0.3
**SONM Songino Array 52.97 40** P **P** 09 16 24.6 +2.1
**TORD Torodi Ar. Bea 53.49 276** P **P** 09 16 26.9 +0.3
comp=Z,1.4nn,1.0s,baz=58,slow=6.5,SNR=6.2
comp=Z,1.4nn,1.0s
**ESDC Sonseca Array 58.74 308** P **P** 09 17 02.0 -1.9
comp=Z,1.5nn,0.9s,baz=87,slow=5.8,SNR=9.6
comp=Z,1.5nn,0.9s
**H01W3 Cape Leeuwin H 72.92 134** T T 10 38 01.1
baz=302,slow=75,SNR=15
**H01W2 Cape Leeuwin H 72.93 134** T T 10 38 01.6
baz=302,slow=75,SNR=21
**H01W1 Cape Leeuwin H 72.94 134** T T 10 37 57.8
baz=302,slow=75,SNR=16
**WRA Warramunga Arr 83.36 112** P **P** 09 19 32.0 -1.4
comp=Z,1.1nn,0.8s,baz=299,slow=4.3,SNR=9.0
comp=Z,1.1nn,0.8s
**ASAR Alice Springs 84.10 116** P **P** 09 19 36.1 -1.1
comp=Z,0.7nn,0.5s,baz=294,slow=5.2,SNR=9.6
comp=Z,0.7nn,0.5s
**NVAR Mina Array Bea 127.61 355** PKP **PKiKP** 09 26 12.7 +0.4
comp=Z,0.5nn,0.7s,baz=40,slow=2.3,SNR=5.3
**TXAR Lajitas Array 132.94 337** PKP **PKPdf** 09 26 20.8 -1.1
comp=Z,0.5nn,1.1s,baz=100,slow=2.7,SNR=3.7

*IDC **19** 09:18:00.7±6.5, 18.°20S×178.°37W, h577km±84km, mb3.1/7, mbtmp4.0/8, Error ellipse: s-maj=48.1km s-min=26.0km az=175.0*
*NEIC **19** 09:18:00.1±1.5, 17.°8S±0.°2×178.°4W±0.°2, h575km±8km, mb4.5/13, Error ellipse: s-maj=29.3km s-min=21.2km az=157.0*
**ISC 19 09:18:00.2±0.6, 17.°9S±0.°1×178.°4W±0.°1, h579km, n26, σt 9s39/25, mb3.6/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.39** | **273** | P | **P** | **09 19 19.4** | **-0.7** |
| **AFI** | **Afiamalu** | **7.52** | **59** | P | **P** | **09 19 51.7** | **-2.7** |
| **NIUE** | **Niue** | **8.11** | **99** | P | **P** | **09 19 59.0** | **-0.9** |
| **DZM** | **Mont Dzumac** | **14.83** | **251** | P | **P** | **09 21 08.9** | **+1.4** |
| | 1.3nn,0.6s,baz=251,slow=22,SNR=1.2 | | | | | | |
| **URZ** | **Urewera** | **20.62** | **190** | P | **P** | **09 21 57.6** | **-2.7** |
| | 5.7nn,0.8s,baz=261,slow=16,SNR=1.5 | | | | | | |
| | 5.7nn,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.62** | **241** | P | **P** | **09 24 35.4** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.62** | **241** | P | **P** | **09 24 35.4** | **+0.4** |
| | 2.8nn,1.1s,baz=78,slow=13,SNR=4.9 | | | | | | |
| | 2.8nn,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **43.40** | **241** | P | **P** | **09 25 12.5** | **-0.2** |
| **WR0** | **Warramunga Arr** | **44.45** | **260** | P | **P** | **09 25 17.9** | **-3.1** |
| **WB0** | **Warramunga Arr** | **44.60** | **260** | P | P | 09 25 15.1 | -7.1 |
| **WB2** | **Warramunga Arr** | **44.63** | **260** | P | **P** | **09 25 21.9** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **09 25 22.5** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **09 25 22.2** | **-0.2** |
| | 1.0nn,0.5s,baz=94,slow=7.2,SNR=6.9 | | | | | | |
| | 1.0nn,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.79** | **254** | P | **P** | **09 25 23.7** | **0.0** |
| **ASAR** | **Alice Springs** | **44.79** | **254** | P | **P** | **09 25 23.5** | **-0.2** |
| **ASAR** | **Alice Springs** | **44.79** | **254** | P | **P** | **09 25 23.9** | **+0.2** |
| | 11nn,0.5s,baz=88,slow=8.3,SNR=149 | | | | | | |
| | 11nn,0.5s | | | | | | |
| **FORT** | **Forrest** | **50.00** | **245** | P | **P** | **09 26 01.7** | **-0.8** |
| **KNRA** | **Kununurra** | **50.50** | **264** | P | **P** | **09 26 06.6** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **57.91** | **255** | P | **P** | **09 26 57.8** | **-0.5** |
| **MORW** | **Morawa** | **60.48** | **246** | P | **P** | **09 27 14.2** | **-1.0** |
| MORW | | | | IAmb | IAmb | 09 27 19.6 | |
| | comp=Z,19nn,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.11** | **180** | P | **P** | **09 28 28.1** | **+1.5** |
| **PLK4** | **Peulik 4** | **77.49** | **12** | P | **P** | **09 28 55.9** | **-0.7** |
| **NVAR** | **Mina Array Bea** | **79.44** | **44** | P | **P** | **09 29 09.3** | **+1.8** |
| | comp=Z,0.5nn,0.7s,baz=224,slow=6.7,SNR=5.1 | | | | | | |
| | comp=Z,0.5nn,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | **P** | **09 29 39.0** | **-0.2** |
| | comp=Z,0.2nn,0.4s,baz=216,slow=5.4,SNR=6.2 | | | | | | |
| | comp=Z,0.2nn,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.00** | **58** | P | **P** | **09 29 43.0** | **+2.6** |
| | comp=Z,0.4nn,0.7s,baz=206,slow=6.4,SNR=5.5 | | | | | | |
| | comp=Z,0.4nn,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **147.65** | **345** | PKPbc | **PKiKP** | **09 36 41.4** | **-0.4** |
| | comp=Z,0.7nn,0.5s,baz=1.4,slow=3.9,SNR=4.4 | | | | | | |

*IDC **19** 09:18:29.8±1.9, 17.°94S×177.°88W, h590km±21km, mb3.5/18, mbtmp4.5/19, Error ellipse: s-maj=14.8km s-min=13.0km az=100.0*
*NOU **19** 09:18:30.6, 17.°98S×177.°66W, h623km, mb4.6/24, Fiji Islands Region*
*NEIC **19** 09:18:32.0±1.1, 18.°08S±0.°09×177.°9W±0.°1, h610km±10km, mb4.5/30, Error ellipse: s-maj=17.5km s-min=12.2km az=77.0*
**ISC 19 09:18:30.1±0.4, 18.°05S±0.°08×177.°94W±0.°07, h590km, n93, σt 9s44/98, mb4.5/39, 5C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.83** | **274** | P | P | 09 19 59.3 | +5.5 |
| **MSVF** | **Nonsavu** | **3.83** | **274** | P | **P** | **09 19 58.4** | **+4.5** |
| **AFI** | **Afiamalu** | **7.22** | **56** | P | **P** | **09 20 22.9** | **+1.0** |
| **NIUE** | **Niue** | **7.67** | **99** | P | **P** | **09 20 28.0** | **+2.1** |
| **RTV** | **Rentapao** | **12.98** | **269** | P | **P** | **09 21 21.8** | **+2.9** |
| **DVP** | **Devils Point** | **13.21** | **269** | P | **P** | **09 21 23.9** | **+2.6** |
| **LIFNC** | **LIFOU** | **14.24** | **257** | P | **P** | **09 21 31.7** | **+0.2** |
| **PINNC** | **Pines Island,** | **14.44** | **249** | P | **P** | **09 21 34.4** | **+1.0** |
| **DZM** | **Mont Dzumac** | **15.21** | **252** | P | **P** | **09 21 42.4** | **+1.7** |
| **DZM** | **Mont Dzumac** | **15.21** | **252** | P | **P** | **09 21 42.3** | **+1.6** |
| DZM | | | | IAmb | IAmb | 09 21 44.3 | |
| | comp=Z,22nn,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.21** | **252** | P | **P** | **09 21 42.2** | **+1.6** |

comp=Z,22nm,0.8s,baz=80,slow=17,SNR=19
**NOUC Port Laguerre 15.34 252** P **P** **09 21 43.6 +1.8**
**KOUNC Koumac, New Ca 16.96 259** P **P** **09 21 58.1 +1.3**
**KOUNC Koumac, New Ca 16.96 259** P **P** **09 21 59.7 +2.9**
**OUZ Omahuta 18.68 202** P **P** **09 22 13.0 +0.8**
**MXZ Matakaoa Point 19.71 189** P **P** **09 22 21.9 +0.3**
**URZ Urewera 20.59 191** P **P** **09 22 29.0 -0.5**
comp=Z,11nm,0.6s,baz=45,slow=1.7,SNR=9.6
URZ S **S** **09 25 38.7 -4.0**
comp=Z,10nm,1.0s,baz=39,slow=14,SNR=1.4
comp=Z,11nm,0.6s
**BKZ Black Stump Fm 21.59 192** P **P** **09 22 37.5 -1.0**
**BFZ Birch Farm 23.10 191** P **P** **09 22 52.0 +0.1**
**QRZ Quartz Range 24.13 198** P **P** **09 23 02.2 +1.2**
**KHZ Kahutara 25.35 195** P **P** **09 23 11.2 -0.5**
**LTZ Lake Taylor 26.02 197** P **P** **09 23 17.2 -0.4**
**RPZ Rata Peaks 27.22 198** P **P** **09 23 29.4 +1.3**
**EIDS Eidsvold 29.64 250** P **P** **09 23 50.2 +0.8**
**EIDS Eidsvold 29.64 250** P **P** **09 23 50.4 +1.0**
EIDS IAmb IAmb 09 23 50.9
comp=Z,13nm,0.7s
**ARMA Armidale 30.26 240** P **P** **09 23 56.6 +1.8**
**CNB Canberra Magne 33.69 233** P **P** **09 24 25.8 +2.0**
**CTA Charters Tower 33.86 261** P **P** **09 24 25.7 +0.4**
comp=Z,9nm,0.6s,baz=99,slow=9.3,SNR=28
comp=Z,0.9nm,0.6s
**CTAO Charters Tower 33.86 261** P **P** **09 24 25.4 +0.1**
**CTAO Charters Tower 33.86 261** P **P** **09 24 26.1 +0.8**
CTAO IAmb IAmb 09 24 26.9
comp=Z,16nm,0.8s
**CAN Canberra 33.97 233** P **P** **09 24 27.6 +1.5**
**PMG Port Moresby 34.92 280** P **P** **09 24 34.2 0.0**
**CMSA Cobar Meteorol 35.47 241** P **P** **09 24 40.0 +1.5**
**MTSU Mount Surprise 35.84 264** P **P** **09 24 42.4 +0.6**
**QLP Quilpie 35.90 249** P **P** **09 24 43.1 +1.0**
**COEN Coen 37.55 270** P **P** **09 24 57.1 +1.3**
**STKA Stephens Creek 38.95 241** P **P** **09 25 08.5 +1.5**
**STKA Stephens Creek 38.95 241** P **P** **09 25 08.4 +1.5**
comp=Z,14nm,0.8s,baz=84,slow=8.2,SNR=22
comp=Z,14nm,0.8s
**INKA Innaminka 39.11 248** P **P** **09 25 09.9 +1.7**
**WR0 Warramunga Arr 44.85 260** P **P** **09 25 53.2 -0.1**
WR0 IAmb IAmb 09 25 53.9
comp=Z,20nm,1.4s
**WB0 Warramunga Arr 45.01 260** P **P** **09 25 54.5 0.0**
WB0 IAmb IAmb 09 25 55.1
comp=Z,19nm,0.8s
**WB2 Warramunga Arr 45.03 260** P **P** **09 25 54.9 +0.2**
**WRAB Tennant Creek 45.04 260** P **P** **09 25 54.8 +0.1**
WRAB IAmb IAmb 09 25 55.3
comp=Z,25nm,1.1s
**WRA Warramunga Arr 45.05 260** P **P** **09 25 54.7 -0.1**
**WRA Warramunga Arr 45.05 260** P **P** **09 25 54.5 -0.4**
comp=Z,13nm,0.6s,baz=95,slow=7.0,SNR=96
WRA ScP **ScP** **09 30 19.3 -0.5**
comp=Z,0.9nm,0.8s,baz=77,slow=4.4,SNR=4.4
WRA S **S** **09 31 45.9 -6.0**
comp=Z,0.9nm,0.7s,baz=95,slow=13,SNR=4.1
comp=Z,13nm,0.6s
**AS31 Alice Springs 45.18 254** P **P** **09 25 56.2 +0.4**
AS31 IAmb IAmb 09 25 57.4
comp=Z,16nm,1.3s
**ASAR Alice Springs 45.18 254** P **P** **09 25 56.2 +0.3**
**ASAR Alice Springs 45.18 254** P **P** **09 25 56.0 +0.1**
comp=Z,32nm,0.8s,baz=85,slow=8.4,SNR=86
ASAR PcP **PcP** **09 27 22.6 -0.8**
comp=Z,0.7nm,0.6s,baz=104,slow=5.8,SNR=1.9
ASAR ScP **ScP** **09 30 19.9 -0.5**
comp=Z,1.2nm,0.8s,baz=105,slow=4.5,SNR=5.8
ASAR S **S** **09 31 50.6 -3.1**
comp=Z,2.4nm,0.7s,baz=91,slow=15,SNR=17
comp=Z,32nm,0.8s
**MTN Manton Dam 49.24 268** P **P** **09 26 25.9 -0.4**
MTN IAmb IAmb 09 26 26.5
comp=Z,21nm,0.8s
**FORT Forrest 50.35 245** P **P** **09 26 34.2 0.0**
FORT IAmb IAmb 09 26 34.7
comp=Z,20nm,0.7s
**KNRA Kununurra 50.92 264** P **P** **09 26 38.1 -0.4**
KNRA IAmb IAmb 09 26 39.1
comp=Z,14nm,0.8s
**SOEI Soe 56.52 270** P **P** **09 27 17.8 -0.3**
**PSA00 Pilbara Seismi 58.31 255** P **P** **09 27 29.7 -0.3**
**MBWA Marble Bar 58.47 256** P **P** **09 27 30.4 -0.7**
MBWA IAmb IAmb 09 27 31.6
comp=Z,25nm,1.4s
**MORW Morawa 60.83 246** P **P** **09 27 46.1 -0.5**
**GIRL Giralia 63.28 253** P **P** **09 28 02.5 -0.1**
**MJAR Matsushiro Arr 68.29 323** P **P** **09 28 32.1 -1.2**
comp=Z,4.3nm,0.8s,baz=160,slow=6.3,SNR=11
comp=Z,4.3nm,0.8s
**UGM Wanagama 70.09 268** P **P** **09 28 43.1 -1.5**
**QSPA South Pole Qui 72.00 180** P **P** **09 28 54.7 -0.2**
QSPA IAmb IAmb 09 28 56.7
comp=Z,12nm,0.8s
**QSPA South Pole Qui 72.00 180** P **P** **09 28 55.8 +0.9**
comp=Z,10.0nm,0.6s,baz=335,slow=0.5,SNR=110
comp=Z,10.0nm,0.6s
**KSM Kuching 73.15 277** P **P** **09 29 01.7 -0.6**
KSM IAmb IAmb 09 29 03.6
comp=Z,17nm,0.9s
**PETK Petropavlovsk- 73.93 345** P **P** **09 29 04.4 -1.5**
comp=Z,2.6nm,0.6s,baz=123,slow=5.3,SNR=3.0
comp=Z,2.6nm,0.6s
**KSRS Korea Array 75.11 318** P **P** **09 29 12.8 +0.1**
comp=Z,1.0nm,0.6s,baz=131,slow=7.0,SNR=5.8
comp=Z,1.0nm,0.6s
**NJ2 Nanjing 78.38 309** *eP* **P** **09 29 33.5 +2.8**
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
**MDJ Mudanjiang 78.56 325** P **P** **09 29 31.4 -0.1**
MDJ pmax pmax
comp=Z,12nm,1.0s
**NVAR Mina Array Bea 79.22 44** P **P** **09 29 35.5 +0.1**
comp=Z,0.7nm,0.7s,baz=224,slow=9.1,SNR=7.4
comp=Z,0.7nm,0.7s
**SMAI San Martin Ant 80.86 159** P **P** **09 29 43.7 +0.6**
SMAI IAmb IAmb 09 29 45.1
comp=Z,20nm,1.0s
**U15A North Rim 82.28 48** P **P** **09 29 51.6 +0.3**
**MAW Mawson 83.88 200** P **P** **09 29 58.2 -0.1**
comp=Z,3.4nm,0.8s,baz=107,slow=5.8,SNR=5.5
comp=Z,3.4nm,0.8s
**HNS HongShan 83.95 312** *eP* **P** **09 29 58.0 -1.2**
**SEY Seymchan 84.02 347** P **P** **09 29 57.6 -1.3**
comp=Z,3.2nm,0.5s,baz=150,slow=9.5,SNR=8.0
comp=Z,3.2nm,0.5s
**LYN LuoYang 84.27 309** P **P** **09 30 01.3 +0.5**
LYN pmax pmax
comp=Z,17nm,0.7s
**TX31 Lajitas Ar. Si 85.69 57** P **P** **09 30 08.7 +0.7**
**TXAR Lajitas Array 85.69 57** P **P** **09 30 08.4 +0.4**
comp=Z,2.3nm,0.9s,baz=227,slow=6.7,SNR=21
comp=Z,2.3nm,0.9s
**ILAR Eielson Array 85.93 13** P **P** **09 30 06.2 -2.0**
comp=Z,0.6nm,0.4s,baz=219,slow=5.3,SNR=13
comp=Z,0.6nm,0.4s
**XAN Xi'an 86.70 307** ⇓P **P** **09 30 13.8 +1.2**
XAN pmax pmax
comp=Z,10.0nm,1.4s
**PDAR Pinedale Array 87.15 43** P **P** **09 30 13.2 -1.5**
comp=Z,0.3nm,0.7s,baz=206,slow=6.1,SNR=3.5
comp=Z,0.3nm,0.7s
**HHC Hu-ho-hao-te 87.69 314** *eP* **P** **09 30 19.3 +2.2**
HHC sP sP 09 33 34.0 +11
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,68nm,4.6s
**DRIO Del Rio 88.19 58** P **P** **09 30 18.8 -0.8**
DRIO IAmb IAmb 09 30 20.6
comp=Z,3.7nm,0.9s
**ELIB Princess Elisa 89.07 186** *dP* **P** **09 30 22.7 -0.4**
comp=Z,8.5nm,0.8s
**CMAR Chiang Mai Arr 89.35 290** P **P** **09 30 25.6 +0.4**
comp=Z,0.9nm,0.3s,baz=88,slow=2.5,SNR=9.6
comp=Z,0.9nm,0.3s
**PZH PanZhiHua 89.62 298** P **P** **09 30 28.0 +1.6**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.0s
**TROLL Troll, Antarti 90.17 180** ⇑P **P** **09 30 27.8 -0.3**
comp=Z,344nm,0.8s
**SNAA Sanae 90.44 178** P **P** **09 30 28.9 -0.4**
SNAA IAmb IAmb 09 30 29.7
comp=Z,8.0nm,1.3s
**SNAA Sanae 90.44 178** ⇑P **P** **09 30 28.4 -0.9**
comp=Z,55nm,0.6s
**SNAA Sanae 90.44 178** P **P** **09 30 28.9 -0.4**
comp=Z,2.3nm,0.6s,baz=213,slow=5.1,SNR=15
comp=Z,2.3nm,0.6s
**VNA3 Neumayer Olymp 90.57 176** ⇑P **P** **09 30 29.6 -0.3**
comp=Z,13nm,0.7s
**PLCA Paso Flores 90.91 134** P **P** **09 30 32.1 -0.1**
comp=Z,2.0nm,1.1s,baz=180,slow=6.1,SNR=3.0
comp=Z,2.0nm,1.1s
**VNA2 Neumayer--Watz 91.01 177** ⇑P **P** **09 30 31.9 0.0**
comp=Z,9.1nm,0.6s,baz=195,slow=6.8
**VNA1 Neumayer--Stat 91.24 177** ⇑P **P** **09 30 33.4 +0.5**
comp=Z,11nm,0.9s
**BRTR Keskin Array B 145.20 315** PKPbc **PKPdf** **09 37 01.9 +0.1**
comp=Z,7.3nm,1.2s,baz=67,slow=2.4,SNR=6.9
**GERES GERESS Array B 147.87 345** PKPbc **PKPbc** **09 37 08.5 -1.2**
comp=Z,0.5nm,0.5s,baz=46,slow=4.2,SNR=3.1
**TORD Torodi Ar. Bea 175.11 176** PKPab **PKPab** **09 39 13.0 -0.7**
comp=Z,0.9nm,0.9s,baz=167,slow=4.3,SNR=4.4

*IDC **19** 09:19:37.4±1.4, 5.04N×125.79E, h0km, **mb3.5**/3, **mbtmp3.5**/4, **ML3.8/1**, Error ellipse: s-maj=98.5km s-min=19.5km az=76.0, Mindanao*

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **2.03** | **354** | Pn | Pb | 09 20 14.2 | -1.0 |
| DAV | 32nm,0.3s,baz=92,slow=8.2,SNR=1.5 | | | Sn | Sn | 09 20 40.0 | +1.0 |
| **WRA** | 59nm,0.3s,baz=21,slow=20,SNR=2.2<br>88nm,0.4s<br>**Warramunga Arr** | **26.21** | **162** | P | P | 09 25 14.1 | 0.0 |
| **ASAR** | 0.2nm,0.3s,baz=343,slow=10,SNR=12<br>0.2nm,0.3s<br>**Alice Springs** | **29.61** | **165** | P | P | 09 25 44.9 | +0.3 |
| **MKAR** | 0.3nm,0.4s,baz=341,slow=7.2,SNR=4.5<br>0.3nm,0.4s<br>**Makanchi Array** | **55.95** | **325** | P | P | 09 29 16.6 | -1.0 |
| | 0.3nm,0.5s,baz=120,slow=7.6,SNR=2.6<br>0.3nm,0.5s | | | | | | |

*IDC **19** 09:20:22.1±0.7, 23.50N×143.39E, h0km, mb4.1/15, mbtmp4.1/18, ML3.6/3, Error ellipse: s-maj=28.4km s-min=13.8km az=73.0*

**ISC 19 09:20:26.6±0.7, 23.61N±0.09×143.4E±0.2, h31km, n20, σ1s30/21, mb4.1/15, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.63** | **343** | Pn | **Pn** | **09 21 19.4** | **-1.3** |
| JCJ | 9.1nm,0.3s,baz=252,slow=21,SNR=1.4 | | | Sn | **Sn** | **09 21 59.9** | **-2.6** |
| **MJAR** | 43nm,0.3s,baz=97,slow=23,SNR=7.3<br>55nm,0.6s<br>**Matsushiro Arr** | **13.63** | **342** | Pn | **Pn** | **09 23 36.5** | **-1.3** |
| **KSRS** | 0.1nm,0.3s,baz=161,slow=10,SNR=11<br>1.5nm,0.5s<br>**Korea Array** | **19.12** | **320** | P | **P** | **09 24 48.7** | **+1.6** |
| **USRK** | 0.2nm,0.3s,baz=141,slow=12,SNR=11<br>1.3nm,0.6s<br>**Ussuriysk Ar.** | **22.56** | **338** | P | **P** | **09 25 25.2** | **+1.0** |
| **KLR** | 1.2nm,0.5s,baz=161,slow=9.2,SNR=3.0<br>1.2nm,0.5s<br>**Kul'dur** | **27.16** | **343** | P | **P** | **09 26 09.0** | **+2.0** |
| **WRA** | 2.1nm,0.6s,baz=141,slow=11,SNR=7.0<br>2.1nm,0.6s<br>**Warramunga Arr** | **44.17** | **192** | P | **P** | **09 28 31.6** | **-1.1** |
| **ASAR** | 1.8nm,0.6s,baz=14,slow=8.5,SNR=11<br>1.8nm,0.6s<br>**Alice Springs** | **47.88** | **192** | P | **P** | **09 29 01.2** | **-0.8** |
| **DZM** | 0.8nm,0.6s,baz=15,slow=11,SNR=7.4<br>0.8nm,0.6s<br>**Mont Dzumac** | **50.66** | **152** | P | **P** | **09 29 22.7** | **-0.6** |
| **ZALV** | 3.6nm,1.0s,baz=331,slow=10,SNR=3.1<br>3.6nm,1.0s<br>**Zalesovo Beam** | **52.83** | **321** | P | **P** | **09 29 39.6** | **+0.6** |
| **MKAR** | 0.9nm,0.4s,baz=108,slow=9.5,SNR=3.6<br>0.9nm,0.4s<br>**Makanchi Array** | **53.54** | **312** | P | **P** | **09 29 45.9** | **+1.4** |
| **STKA** | 0.7nm,0.5s,baz=90,slow=8.9,SNR=7.4<br>0.7nm,0.5s<br>**Stephens Creek** | **55.20** | **182** | P | **P** | **09 29 55.2** | **-1.3** |
| **KURBB** | 1.9nm,0.8s,baz=331,slow=10,SNR=3.0<br>1.9nm,0.8s<br>**Kurchatov Arra** | **56.25** | **316** | P | **P** | **09 30 04.9** | **+1.0** |
| **ILAR** | 2.3nm,0.7s,baz=95,slow=8.0,SNR=19<br>2.3nm,0.7s<br>**Eielson Array** | **60.27** | **28** | P | **P** | **09 30 32.2** | **+0.4** |
| **BVAR** | 0.6nm,0.7s,baz=252,slow=6.3,SNR=5.6<br>0.6nm,0.7s<br>**Borovoye Array** | **61.34** | **319** | P | **P** | **09 30 40.7** | **+1.4** |
| **ARCES** | 5.8nm,0.6s,baz=92,slow=8.1,SNR=30<br>5.8nm,0.6s<br>**ARCESS Array B** | **77.17** | **341** | P | **P** | **09 32 18.4** | **+1.4** |
| **KBZ** | 1.2nm,0.6s,baz=46,slow=3.5,SNR=5.9<br>1.2nm,0.6s<br>**Khabaz** | **81.16** | **314** | P | **P** | **09 32 39.9** | **+0.6** |
| **FINES** | 2.8nm,0.9s,baz=108,slow=6.4,SNR=5.5<br>2.8nm,0.9s<br>**FINESS Array B** | **81.53** | **334** | P | **P** | **09 32 41.1** | **+0.2** |
| **NVAR** | 6.5nm,1.1s,baz=116,slow=6.6,SNR=7.4<br>6.5nm,1.1s<br>**Mina Array Bea** | **81.83** | **52** | P | **P** | **09 32 44.0** | **+0.8** |
| **PLCA** | 0.5nm,0.8s,baz=270,slow=5.1,SNR=4.6<br>0.5nm,0.8s<br>**Paso Flores** | **146.87** | **129** | PKPbc | **PKPbc** | **09 40 06.2** | **+0.1** |
| **LPAZ** | 1.1nm,0.8s,baz=252,slow=3.2,SNR=1.6<br>**La Paz** | **149.57** | **82** | PKPbc | **PKiKP** | **09 40 15.4** | **-0.2** |
| | 1.2nm,0.7s,baz=212,slow=4.4,SNR=6.4 | | | | | | |

*NEIC **19** 09:25:40.5±1.6, 18.2S±0.2×178.2W±0.2, h583km±13km, mb4.2/13, Error ellipse: s-maj=26.1km s-min=21.6km az=166.0*
*IDC **19** 09:25:42.9±9.8, 17.58S×178.52W, h615km±132km, mb3.0/5, mbtmp4.0/6, Error ellipse: s-maj=111.8km s-min=39.8km az=157.0*

**ISC 19 09:25:40.8±0.7, 18.2S±0.1×178.2W±0.1, h600km, n24, σ1s02/24, mb4.0/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.61** | **276** | P | **P** | **09 27 02.4** | **-1.4** |
| **NIUE** | **Niue** | **7.88** | **98** | P | **P** | **09 27 37.4** | **-1.5** |
| **RAO** | **Raoul Island** | **11.03** | **179** | P | **P** | **09 28 09.6** | **0.0** |
| **DZM** | **Mont Dzumac** | **14.95** | **252** | | **P** | **09 28 46.9** | **-1.8** |
| **DZM** | **Mont Dzumac** | **14.95** | **252** | P | **P** | **09 28 50.0** | **+1.3** |
| | 1.7nm,0.7s,baz=126,slow=21,SNR=1.9 | | | | | | |
| **GVZ** | **Greta Valley S** | **25.81** | **195** | P | **P** | **09 30 27.9** | **+1.9** |
| **EIDS** | **Eidsvold** | **29.38** | **250** | P | **P** | **09 30 56.9** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 09 30 59.6 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **CTAO** | **Charters Tower** | **33.62** | **261** | P | **P** | **09 31 32.7** | **-0.7** |
| CTAO | | | | IAmb | IAmb | 09 31 42.7 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **38.69** | **242** | P | **P** | **09 32 15.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.69** | **242** | P | **P** | **09 32 15.8** | **+1.0** |
| | comp=Z,2.0nm,0.7s,baz=90,slow=7.9,SNR=5.1<br>comp=Z,2.0nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.47** | **241** | P | **P** | **09 32 52.1** | **-0.3** |
| **WR0** | **Warramunga Arr** | **44.61** | **260** | P | **P** | **09 33 01.7** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 09 33 13.2 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.77** | **260** | P | **P** | **09 33 02.0** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 09 33 44.4 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.79** | **260** | P | **P** | **09 33 02.4** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 09 33 10.7 | |
| | comp=Z,6.6nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **09 33 02.3** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **09 33 02.2** | **-0.7** |
| | comp=Z,1.0nm,0.5s,baz=96,slow=7.4,SNR=30<br>comp=Z,1.0nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.93** | **254** | P | **P** | **09 33 03.9** | **0.0** |
| **ASAR** | **Alice Springs** | **44.93** | **254** | P | **P** | **09 33 03.5** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.93** | **254** | P | **P** | **09 33 04.0** | **+0.2** |
| | comp=Z,4.1nm,0.6s,baz=86,slow=8.9,SNR=45<br>comp=Z,4.1nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.09** | **245** | P | **P** | **09 33 41.6** | **-0.6** |
| FORT | | | | IAmb | IAmb | 09 34 20.4 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **50.68** | **264** | P | **P** | **09 33 47.0** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 09 34 11.2 | |
| | comp=Z,7.7nm,0.5s | | | | | | |
**NVAR Mina Array Bea 79.47 44** P **P** **09 36 45.9 -0.6**
comp=Z,0.6nm,0.8s,baz=220,slow=8.3,SNR=5.4
comp=Z,0.6nm,0.8s
**TXAR Lajitas Array 85.95 58** P **P** **09 37 19.9 +0.9**
comp=Z,0.6nm,0.7s,baz=214,slow=6.1,SNR=7.7
comp=Z,0.6nm,0.7s
**C16K Lisburne Hills 86.71 5** P **P** **09 37 23.5 +2.0**

*JMA **19** 09:27:45.2±0.4, 47°N±3°×14°8E±°, h437km, MV3.7/22, SOUTHERN SEA OF OKHOTSK*
*IDC **19** 09:27:47.7±1.5, 47.83N×147.55E, h385km±19km, mb3.1/10, mbtmp3.8/16, Error ellipse: s-maj=23.6km s-min=13.5km az=167.0*

**ISC 19 09:27:46.5±0.8, 47.42N±0.09×147.8E±0.1, h400km, n33, σ1s59/35, mb3.4/10, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JRA** | **Rausu** | **3.94** | **209** | P | **Pn** | **09 28 58.8** | **+0.8** |
| **NEM2** | **Nemuro 2** | **4.29** | **200** | P | **Pn** | **09 29 00.3** | **-1.2** |
| **JTKR** | **Abashiri--Toko** | **4.38** | **219** | P | **Pn** | **09 29 03.7** | **+1.4** |
| JTKR | | | | *eS* | **S** | **09 30 05.3** | **+1.6** |
| **JNK** | **Nakash** | **4.39** | **210** | P | **Pn** | **09 29 02.9** | **+0.5** |
| JNK | | | | *eS* | **S** | **09 30 04.0** | **0.0** |
| **JMP** | **Maruseppu** | **4.59** | **224** | *eP* | **Pn** | **09 29 06.0** | **+1.5** |
| **ASAJ** | **Asahikawa** | **4.89** | **229** | P | **Pn** | **09 29 09.8** | **+2.4** |
| | 9.1nm,0.6s,baz=44,slow=8.2,SNR=12 | | | | | | |
| **JAK** | **Akkeshi** | **4.92** | **207** | P | **Pn** | **09 29 07.4** | **-0.3** |
| JAK | | | | *eS* | **S** | **09 30 11.0** | **-2.7** |
| **JAR** | **Ashorobuto** | **4.99** | **216** | P | **Pn** | **09 29 09.4** | **+0.9** |
| JAR | | | | *eS* | **S** | **09 30 15.0** | **0.0** |
| **JCH** | **Churui** | **5.72** | **215** | P | **Pn** | **09 29 15.8** | **-0.4** |
| JCH | | | | S | **S** | **09 30 24.8** | **-4.4** |
| **JBT2** | **Biratori 2** | **6.01** | **221** | *eP* | **Pn** | **09 29 19.9** | **+0.6** |
| JBT2 | | | | *eS* | **S** | **09 30 32.4** | **-2.4** |
| **JNBK** | **Urakawa-nobuka** | **6.25** | **216** | P | **Pn** | **09 29 21.3** | **-0.5** |
| JNBK | | | | *eS* | S | 09 30 32.6 | -7.0 |
| **JEW** | **Eniwo** | **6.39** | **227** | *eS* | **S** | **09 30 42.1** | **-0.4** |
| **JOT** | **Ohata** | **7.71** | **221** | P | **Pn** | **09 29 37.8** | **-0.4** |
| JOT | | | | S | S | 09 31 03.0 | -6.6 |
| **JSI2** | **Shiura 2** | **8.26** | **222** | *eS* | S | 09 31 14.6 | -6.5 |
| **JANG** | **Nango** | **8.36** | **215** | *eP* | **Pn** | **09 29 45.5** | **-0.2** |
| JANG | | | | *eS* | S | 09 31 16.4 | -6.8 |
| **PETK** | **Petropavlovsk-** | **8.54** | **45** | P | **P** | **09 29 46.7** | **-1.0** |
| | 4.6nm,1.0s,baz=241,slow=11,SNR=2.3 | | | | | | |
| **JIW** | **Iwasaki** | **8.81** | **222** | P | **P** | **09 29 51.5** | **+0.5** |
| JIW | | | | *eS* | S | 09 31 26.8 | -6.1 |
| **KLR** | **Kul'dur** | **10.81** | **286** | P | **Pn** | **09 30 11.1** | **-2.7** |
| | 2.2nm,0.7s,baz=104,slow=14,SNR=4.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.46** | **259** | P | **Pn** | **09 30 20.2** | **-1.2** |
| | 2.5nm,0.6s,baz=58,slow=12,SNR=4.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **12.97** | **217** | P | **Pn** | **09 30 40.6** | **+1.6** |
| | 2.0nm,0.6s,baz=16,slow=11,SNR=7.6 | | | | | | |
| **KSRS** | **Korea Array** | **17.66** | **243** | P | **P** | **09 31 30.6** | **+3.3** |
| | 1.2nm,0.6s,baz=50,slow=9.6,SNR=7.0 | | | | | | |
| **SONM** | **Songino Array** | **27.64** | **286** | P | **P** | **09 32 59.8** | **+0.3** |
| | 0.2nm,0.3s,baz=79,slow=7.5,SNR=1.5<br>0.2nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **38.32** | **39** | P | **P** | **09 34 30.5** | **+0.2** |
| | 1.1nm,0.8s,baz=273,slow=8.1,SNR=10<br>1.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.35** | **294** | P | **P** | **09 35 11.8** | **+0.7** |
| | 1.0nm,0.8s,baz=65,slow=7.4,SNR=7.3<br>1.0nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **55.96** | **339** | P | **P** | **09 36 43.8** | **-0.6** |
| | 0.5nm,0.5s,baz=44,slow=8.0,SNR=3.7<br>0.5nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **61.81** | **332** | P | **P** | **09 37 23.8** | **-0.4** |
| | 2.3nm,0.7s,baz=58,slow=4.7,SNR=9.5<br>2.3nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.31** | **60** | P | P | 09 37 49.9 | +2.4 |
| | 0.5nm,0.6s,baz=306,slow=5.8,SNR=5.8<br>0.5nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **66.34** | **339** | P | **P** | **09 37 52.8** | **-0.5** |
| | 0.6nm,0.5s,baz=32,slow=6.6,SNR=4.6<br>0.6nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **66.47** | **337** | P | **P** | **09 37 53.5** | **-0.6** |
| | 4.2nm,1.0s,baz=66,slow=12,SNR=5.3<br>4.2nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **67.25** | **51** | P | P | 09 38 01.4 | +1.9 |
| | 0.7nm,0.7s,baz=302,slow=1.4,SNR=8.1<br>0.7nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.28** | **57** | P | P | 09 39 16.3 | +2.0 |
| | 0.6nm,0.8s,baz=280,slow=3.3,SNR=6.8<br>0.6nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **137.16** | **180** | PKP | **PKiKP** | **09 46 25.0** | **+1.5** |
| | 1.7nm,1.1s,baz=189,slow=1.1,SNR=2.1 | | | | | | |
| **PLCA** | **Paso Flores** | **151.90** | **90** | PKPbc | **PKiKP** | **09 46 56.7** | **+2.0** |
| | 1.1nm,0.8s,baz=331,slow=7.9,SNR=3.0 | | | | | | |

*IDC **19** 09:30:29.7±0.9, 8.30S×116.90E, h0km, mb4.0/7, mbtmp4.0/8, ML3.7/1, Error ellipse: s-maj=32.3km s-min=17.7km az=59.0*
*DJA **19** 09:30:30.7±0.4, 8°S±5°×11°7E±°, h14km±4km, M4.4/13, mb4.6/2, mB6.2/1, MLv4.2/13, Mw(mB)5.8/1*
*NEIC **19** 09:30:30.0±1.6, 8.35S±0.06×116.76E±0.07, h4km±4km, mb4.3/11, Error ellipse: s-maj=10.5km s-min=8.9km az=62.0*

**ISC 19 09:30:30.4±0.6, 8.28S±0.06×116.72E±0.04, h10km, n42, σ1s28/46, mb4.2/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.48** | **160** | P | **Pg** | **09 30 40.6** | **+0.8** |
| TWSI | | | | S | **Sg** | **09 30 47.6** | **+1.4** |
| **PLAI** | **Plampang** | **1.18** | **117** | P | **Pb** | **09 30 53.1** | **+0.2** |
| PLAI | | | | S | **Sb** | **09 31 09.8** | **+1.5** |
| **SRBI** | **Singaraja** | **1.50** | **277** | P | **Pn** | **09 30 56.8** | **-0.6** |
| SRBI | | | | S | **Sn** | **09 31 15.9** | **-1.2** |
| **DNP** | **Denpasar** | **1.54** | **255** | P | **Pn** | **09 30 56.5** | **-1.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.54** | **266** | | **Pn** | **09 31 11.2** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.54** | **266** | P | **Pn** | **09 31 11.0** | **-0.8** |
| JAGI | | | | S | **Sn** | **09 31 40.6** | **-2.3** |
| **WBSI** | **Waikabubak, Su** | **2.97** | **117** | P | **Pn** | **09 31 17.1** | **-0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.30** | **61** | P | **Pn** | **09 31 35.6** | **-0.4** |
| **GRJI** | **Gresik** | **4.42** | **288** | P | **Pn** | **09 31 37.3** | **-0.2** |
| **KAPI** | **Kappang** | **4.43** | **43** | | **Pn** | **09 31 37.6** | **-0.1** |
| **KAPI** | **Kappang** | **4.43** | **43** | Pn | **Pn** | **09 31 37.4** | **-0.3** |
| | 4.0nm,0.3s,baz=200,slow=7.6,SNR=7.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **09 32 27.0** | **-2.5** |
| | 12nm,0.3s,baz=313,slow=22,SNR=6.1<br>9.1nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.87** | **273** | P | **Pn** | **09 31 45.0** | **+1.2** |
| **EDFI** | **Ende, Flores** | **4.94** | **96** | P | **Pn** | **09 31 45.7** | **+0.8** |
| **UGM** | **Wanagama** | **6.14** | **273** | Pn | **Pn** | **09 32 03.6** | **+2.2** |
| **UGM** | **Wanagama** | **6.14** | **273** | P | **Pn** | **09 32 03.6** | **+2.2** |
| | 140nm,2.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.06** | **139** | Pn | **Pn** | **09 33 34.8** | **-1.3** |
| **MBWA** | **Marble Bar** | **13.13** | **168** | | Pn | 09 33 33.9 | -3.2 |
| **PSA00** | **Pilbara Seismi** | **13.55** | **167** | Pn | **Pn** | **09 33 41.4** | **-1.5** |
| **GIRL** | **Giralia** | **14.48** | **189** | Pn | **Pn** | **09 33 53.0** | **-2.5** |
| **WB0** | **Warramunga Arr** | **20.57** | **126** | P | **P** | **09 35 08.9** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 09 35 09.8 | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.62** | **126** | P | **P** | **09 35 09.4** | **-0.8** |
| **WRA** | **Warramunga Arr** | **20.62** | **126** | P | **P** | **09 35 09.6** | **-0.6** |
| | comp=Z,3.6nm,0.7s,baz=301,slow=12,SNR=52<br>comp=Z,3.6nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.63** | **126** | P | **P** | **09 35 09.6** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 09 35 15.7 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.79** | **126** | P | **P** | **09 35 11.5** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 09 35 12.2 | |
| | comp=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **62.81 334** | P | **P** | **09 40 56.0** | **-0.3** |
| **MKAR** | **Makanchi Array** | **62.81 334** | P | **P** | **09 40 56.7** | **+0.4** |
| | comp=Z,0.9nm,0.8s,baz=153,slow=8.2,SNR=6.2 | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.59 340** | P | **P** | **09 41 28.7** | **+1.6** |
| | comp=Z,0.8nm,0.4s,baz=127,slow=3.9,SNR=3.9 | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | |
| **NIUE** | **Niue** | **71.66 107** | P | **P** | **09 41 52.0** | **-1.0** |
| **ABKAR** | **Akbulak array** | **75.69 326** | P | **P** | **09 42 16.4** | **+0.4** |
| **QSPA** | **South Pole Qui** | **81.71 180** | P | **P** | **09 42 49.8** | **+0.7** |
| QSPA | | | IAmb | IAmb | 09 42 52.2 | |
| | comp=Z,4.5nm,1.2s | | | | | |
| **QSPA** | **South Pole Qui** | **81.71 180** | P | **P** | **09 42 49.5** | **+0.5** |
| | comp=Z,2.0nm,1.1s,baz=302,slow=2.3,SNR=3.0 | | | | | |
| | comp=Z,2.0nm,1.1s | | | | | |
| **SNAA** | **Sanae** | **91.07 196** | P | **P** | **09 43 34.0** | **-1.0** |
| SNAA | | | IAmb | IAmb | 09 43 59.5 | |
| | comp=Z,4.2nm,1.5s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.11 281** | PKP | **PKPdf** | **09 49 17.8** | **+2.9** |
| | comp=Z,0.3nm,0.5s,baz=62,slow=3.4,SNR=2.1 | | | | | |
| **CPUP** | **Villa Florida** | **145.11 189** | PKPbc | **PKPab** | **09 50 07.8** | **-0.6** |
| | comp=Z,1.6nm,0.7s,baz=150,slow=4.1,SNR=5.6 | | | | | |

*IDC **19** 09:30:48.9±9.7, 18°.10S×178°.21W, h610km±123km, mb3.0/4, mbtmp3.9/5, Error ellipse: s-maj=48.5km s-min=41.0km az=101.0*

**ISC 19 09:30:47.4**±1.3, **18°.1S**±0°.4×**178°.1W**±0°.2, **h590**km, **n6, σ0s49/6, mb3.4**/5, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.01** | **252** | P | **P** | **09 33 56.7** | **+0.6** |
| | 1.4nm,0.7s,baz=18,slow=23,SNR=1.7 | | | | | | |
| **CTA** | **Charters Tower** | **33.67** | **261** | P | **P** | **09 36 40.9** | **-0.1** |
| | 0.2nm,0.7s,baz=7.2,slow=17,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **09 38 10.0** | **-0.6** |
| | 0.9nm,0.5s,baz=95,slow=7.3,SNR=12 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.99** | **254** | P | **P** | **09 38 11.4** | **-0.2** |
| | 2.7nm,0.6s,baz=86,slow=9.0,SNR=17 | | | | | | |
| | 2.7nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | **P** | **09 41 11.9** | **-0.1** |
| | 0.8nm,0.6s,baz=146,slow=3.6,SNR=8.8 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.88** | **58** | P | **P** | **09 42 26.2** | **+0.1** |
| | 0.4nm,0.8s,baz=241,slow=5.2,SNR=4.4 | | | | | | |
| | 0.4nm,0.8s | | | | | | |

*TAP **19** 09:34:08.8, 24°.65N×122°.70E, h116km, ML2.8, C*
*JMA **19** 09:34:09.5±0.1, 24°.1N±1°.1×122°.7E±0°.4, h112km, MV2.0/13, NW OFF ISHIGAKIJIMA IS*

**ISC 19 09:34:09.4**±1.6, **24°.60N**±0°.05×**122°.70E**±0°.03, **h113**km±9km, **n61, σ0s79/118, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.27** | **124** | *eP* | **Pn** | **09 34 25.4** | **-0.1** |
| JYNG | | | | *eS* | **Sn** | **09 34 37.1** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **0.32** | **116** | P | **Pn** | **09 34 25.4** | **-0.2** |
| | baz=131 | | | | | | |
| YOJ | | | | *i* S | **Sn** | **09 34 37.8** | **+0.1** |
| | baz=131 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.32** | **116** | P | **Pn** | **09 34 25.5** | **-0.1** |
| YOJ | | | | S | **Sn** | **09 34 37.6** | **-0.1** |
| **EOS2** | **EOS2** | **0.46** | **247** | *eP* | **Pn** | **09 34 28.1** | **+1.9** |
| | baz=251 | | | | | | |
| EOS2 | | | | S | **Sn** | **09 34 39.9** | **+1.1** |
| | baz=251 | | | | | | |
| **EOS3** | **EOS3** | **0.47** | **228** | *eP* | **Pn** | **09 34 26.9** | **+0.7** |
| | baz=234 | | | | | | |
| EOS3 | | | | *i* S | **Sn** | **09 34 40.1** | **+1.3** |
| | baz=234 | | | | | | |
| **EOS4** | **EOS4** | **0.59** | **216** | *i* P | **Pn** | **09 34 26.9** | **+0.1** |
| | baz=213 | | | | | | |
| EOS4 | | | | S | **Sn** | **09 34 40.7** | **+0.9** |
| | baz=213 | | | | | | |
| **EGS** | | **0.74** | **289** | *i* P | **Pn** | **09 34 28.3** | **-0.1** |
| | baz=277 | | | | | | |
| EGS | | | | *i* S | **Sn** | **09 34 42.2** | **-0.5** |
| | baz=277 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.76** | **302** | *eP* | **Pn** | **09 34 28.6** | **0.0** |
| | baz=299 | | | | | | |
| TWB1 | | | | *i* S | **Sn** | **09 34 42.4** | **-0.6** |
| | baz=299 | | | | | | |
| **TWC** | **Suao** | **0.77** | **271** | *i* P | **Pn** | **09 34 28.2** | **-0.5** |
| | baz=263 | | | | | | |
| TWC | | | | S | **Sn** | **09 34 41.8** | **-1.4** |
| | baz=263 | | | | | | |
| **ESAO** | **Su ao** | **0.78** | **268** | *eP* | **Pn** | **09 34 29.1** | **+0.3** |
| | baz=262 | | | | | | |
| ESAO | | | | *eS* | **Sn** | **09 34 42.2** | **-1.1** |
| | baz=262 | | | | | | |
| **EWUT** | **Wuta** | **0.85** | **260** | *eP* | **Pn** | **09 34 31.1** | **+1.7** |
| | baz=252 | | | | | | |
| EWUT | | | | *i* S | **Sn** | **09 34 44.3** | **-0.2** |
| | baz=252 | | | | | | |
| **TIPB** | **Shuangxi** | **0.87** | **295** | P | **Pn** | **09 34 29.7** | **0.0** |
| | baz=287 | | | | | | |
| TIPB | | | | *eS* | **Sn** | **09 34 43.8** | **-1.1** |
| | baz=287 | | | | | | |
| **ILA** | **Ilan** | **0.88** | **281** | *eS* | **Sn** | **09 34 42.3** | **-2.6** |
| | baz=275 | | | | | | |
| **ENA** | **Nanau** | **0.89** | **259** | *eP* | **Pn** | **09 34 27.9** | **-1.9** |
| | baz=250 | | | | | | |
| ENA | | | | *eS* | **Sn** | **09 34 45.0** | **-0.1** |
| | baz=250 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.89** | **303** | *eP* | **Pn** | **09 34 30.5** | **+0.6** |
| | baz=294 | | | | | | |
| SXI1 | | | | *eS* | **Sn** | **09 34 47.3** | **+2.0** |
| | baz=294 | | | | | | |
| **EAHA** | **Aohua** | **0.92** | **253** | *i* S | **Sn** | **09 34 45.7** | **+0.2** |
| | baz=246 | | | | | | |
| **TWE** | **Neicheng** | **0.94** | **277** | *i* P | **Pn** | **09 34 30.2** | **-0.1** |
| | baz=272 | | | | | | |
| TWE | | | | *i* S | **Sn** | **09 34 45.7** | **-0.4** |
| | baz=272 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.95** | **299** | *eP* | **Pn** | **09 34 30.1** | **-0.4** |
| | baz=291 | | | | | | |
| NWF | | | | *eS* | **Sn** | **09 34 46.2** | **-0.2** |
| | baz=291 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.98** | **106** | P | **Pn** | **09 34 30.8** | **+0.2** |
| IRIF | | | | S | **Sn** | **09 34 46.4** | **-0.2** |
| **FUSB** | **Fushanzhiwuyua** | **1.02** | **279** | *eP* | **Pn** | **09 34 31.4** | **+0.2** |
| | baz=281 | | | | | | |
| FUSB | | | | *i* S | **Sn** | **09 34 46.5** | **-1.0** |
| | baz=281 | | | | | | |
| **ENTT** | **Nioudou** | **1.03** | **272** | P | **Pn** | **09 34 31.6** | **+0.5** |
| | baz=267 | | | | | | |
| ENTT | | | | S | **Sn** | **09 34 47.2** | **-0.4** |
| | baz=267 | | | | | | |
| **LATG** | **Datong** | **1.07** | **267** | *i* P | **Pn** | **09 34 31.9** | **+0.2** |
| | baz=261 | | | | | | |
| LATG | | | | *eS* | **Sn** | **09 34 48.5** | **0.0** |
| | baz=261 | | | | | | |
| **ETL** | **Fush Village** | **1.07** | **246** | *eP* | **Pn** | **09 34 31.1** | **-0.6** |
| | baz=237 | | | | | | |
| ETL | | | | *eS* | **Sn** | **09 34 47.4** | **-1.1** |
| | baz=237 | | | | | | |
| **NDT** | **Datong Townshi** | **1.08** | **270** | *i* P | **Pn** | **09 34 32.4** | **+0.7** |
| | baz=266 | | | | | | |
| NDT | | | | S | **Sn** | **09 34 48.7** | **+0.2** |
| | baz=266 | | | | | | |
| **NACB** | **Ninganchiao** | **1.09** | **247** | *eP* | **Pn** | **09 34 31.4** | **-0.4** |
| | baz=244 | | | | | | |
| NACB | | | | S | **Sn** | **09 34 47.9** | **-0.8** |
| | baz=244 | | | | | | |
| **NWLT** | **Wulai** | **1.10** | **279** | *eP* | **Pn** | **09 34 32.3** | **+0.4** |
| | baz=282 | | | | | | |
| NWLT | | | | S | **Sn** | **09 34 47.9** | **-1.1** |
| | baz=282 | | | | | | |
| **TWD** | **Chiawan** | **1.13** | **243** | *eP* | **Pn** | **09 34 31.9** | **-0.3** |
| | baz=236 | | | | | | |
| TWD | | | | S | **Sn** | **09 34 49.1** | **-0.3** |
| | baz=236 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.18** | **251** | *eP* | **Pn** | **09 34 32.5** | **-0.3** |
| | baz=247 | | | | | | |
| ETLH | | | | *eS* | **Sn** | **09 34 49.7** | **-0.8** |
| | baz=247 | | | | | | |
| **YHNB** | **Yeheng** | **1.21** | **273** | P | **Pn** | **09 34 33.4** | **+0.3** |
| | baz=265 | | | | | | |
| YHNB | | | | S | **Sn** | **09 34 50.7** | **-0.3** |
| | baz=265 | | | | | | |
| **NNSB** | **Datong** | **1.21** | **262** | *eP* | **Pn** | **09 34 33.3** | **+0.1** |
| | baz=253 | | | | | | |
| NNSB | | | | S | **Sn** | **09 34 50.7** | **-0.5** |
| | baz=253 | | | | | | |
| **NNS** | **Nan Shan** | **1.22** | **263** | *eP* | **Pn** | **09 34 33.7** | **+0.4** |
| | baz=254 | | | | | | |
| NNS | | | | *i* S | **Sn** | **09 34 51.1** | **-0.3** |
| | baz=254 | | | | | | |
| **NSK** | **Sanguang** | **1.22** | **274** | *eP* | **Pn** | **09 34 33.5** | **+0.2** |
| | baz=265 | | | | | | |
| NSK | | | | *eS* | **Sn** | **09 34 50.8** | **-0.6** |
| | baz=265 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.24** | **234** | *eS* | **Sn** | **09 34 52.0** | **+0.3** |
| | baz=235 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.25** | **107** | S | **Sn** | **09 34 52.0** | **+0.2** |
| **ETM** | **Tongmen** | **1.27** | **240** | *eP* | **Pn** | **09 34 33.5** | **-0.2** |
| | baz=232 | | | | | | |
| ETM | | | | *eS* | **Sn** | **09 34 51.3** | **-0.9** |
| | baz=232 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.31** | **244** | *eP* | **Pn** | **09 34 33.8** | **-0.6** |
| | baz=241 | | | | | | |
| LXIB | | | | *eS* | **Sn** | **09 34 51.8** | **-1.4** |
| | baz=241 | | | | | | |
| **SHUL** | **Shoufeng** | **1.32** | **232** | *eP* | **Pn** | **09 34 35.6** | **+1.3** |
| | baz=235 | | | | | | |
| SHUL | | | | *eS* | **Sn** | **09 34 53.7** | **+0.6** |
| | baz=235 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.34** | **100** | P | **Pn** | **09 34 34.6** | **+0.1** |
| JIJ | | | | S | **Sn** | **09 34 52.8** | **-0.8** |
| **FUSS** | **Fushou** | **1.37** | **255** | *eP* | **Pn** | **09 34 35.6** | **+0.4** |
| | baz=249 | | | | | | |
| FUSS | | | | S | **Sn** | **09 34 54.4** | **-0.2** |
| | baz=249 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.38** | **251** | *i* P | **Pn** | **09 34 35.4** | **-0.1** |
| | baz=248 | | | | | | |
| WHF | | | | S | **Sn** | **09 34 54.4** | **-0.8** |
| | baz=248 | | | | | | |
| **ESL** | **Shilin** | **1.40** | **236** | *eP* | **Pn** | **09 34 34.7** | **-0.5** |
| | baz=233 | | | | | | |
| ESL | | | | *eS* | **Sn** | **09 34 54.3** | **-0.4** |
| | baz=233 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.44** | **271** | *i* P | **Pn** | **09 34 36.0** | **+0.2** |
| | baz=274 | | | | | | |
| NFF | | | | S | **Sn** | **09 34 55.1** | **-0.6** |
| | baz=274 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.47** | **90** | *eP* | **Pn** | **09 34 36.1** | **+0.1** |
| JISG | | | | S | **Sn** | **09 34 55.7** | **-0.5** |
| **EGFH** | **Guangfu** | **1.49** | **232** | *eP* | **Pn** | **09 34 35.9** | **-0.4** |
| | baz=229 | | | | | | |
| EGFH | | | | *eS* | **Sn** | **09 34 55.8** | **-0.9** |
| | baz=229 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.49** | **234** | *eP* | **Pn** | **09 34 35.8** | **-0.5** |
| | baz=231 | | | | | | |
| WARBT | | | | *eS* | **Sn** | **09 34 55.4** | **-1.3** |
| | baz=231 | | | | | | |
| **CHGB** | **Renai** | **1.49** | **249** | *i* P | **Pn** | **09 34 36.7** | **+0.2** |
| | baz=241 | | | | | | |
| CHGB | | | | *eS* | **Sn** | **09 34 57.1** | **+0.1** |
| | baz=241 | | | | | | |
| **LIOB** | **Emei** | **1.53** | **272** | *eP* | **Pn** | **09 34 37.1** | **+0.3** |
| | baz=270 | | | | | | |
| LIOB | | | | *eS* | **Sn** | **09 34 56.7** | **-0.9** |
| | baz=270 | | | | | | |
| **OWD** | **Renai** | **1.53** | **245** | P | **Pn** | **09 34 36.8** | **-0.1** |
| | baz=239 | | | | | | |
| OWD | | | | *eS* | **Sn** | **09 34 57.5** | **-0.3** |
| | baz=239 | | | | | | |
| **WUSB** | **Renai** | **1.56** | **247** | P | **Pn** | **09 34 37.8** | **+0.5** |
| | baz=241 | | | | | | |
| WUSB | | | | S | **Sn** | **09 34 58.2** | **-0.3** |
| | baz=241 | | | | | | |
| **HGSD** | **Ruisui** | **1.61** | **227** | *eP* | **Pn** | **09 34 37.4** | **-0.3** |
| | baz=224 | | | | | | |
| HGSD | | | | *i* S | **Sn** | **09 34 59.9** | **+0.7** |
| | baz=224 | | | | | | |
| **WHP** | **Taichung City** | **1.63** | **259** | *eP* | **Pn** | **09 34 38.8** | **+0.7** |
| | baz=255 | | | | | | |
| WHP | | | | *eS* | **Sn** | **09 35 00.2** | **+0.4** |
| | baz=255 | | | | | | |
| **VWDT** | **VWDT** | **1.65** | **240** | *eP* | **Pn** | **09 34 38.8** | **+0.5** |
| | baz=233 | | | | | | |
| VWDT | | | | *eS* | **Sn** | **09 35 00.2** | **+0.1** |
| | baz=233 | | | | | | |
| **EHY** | **Hungye** | **1.67** | **229** | P | **Pn** | **09 34 38.2** | **-0.3** |
| | baz=226 | | | | | | |
| EHY | | | | *eS* | **Sn** | **09 35 01.1** | **+0.6** |
| | baz=226 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.72** | **252** | *eP* | **Pn** | **09 34 40.4** | **+1.4** |
| | baz=254 | | | | | | |
| WCS | | | | *eS* | **Sn** | **09 35 02.9** | **+1.4** |
| | baz=254 | | | | | | |
| **YULB** | **Yu-li** | **1.76** | **227** | P | **Pn** | **09 34 38.8** | **-0.8** |
| | baz=231 | | | | | | |
| YULB | | | | *eS* | **Sn** | **09 35 01.7** | **-0.8** |
| | baz=231 | | | | | | |
| **EYUL** | **Yuli** | **1.78** | **226** | *eP* | **Pn** | **09 34 40.9** | **+1.1** |
| | baz=230 | | | | | | |
| EYUL | | | | *i* S | **Sn** | **09 35 02.0** | **-0.8** |
| | baz=230 | | | | | | |
| **TYC** | **Yuchr** | **1.82** | **248** | *eP* | **Pn** | **09 34 41.6** | **+1.3** |
| | baz=241 | | | | | | |
| TYC | | | | *eS* | **Sn** | **09 35 05.3** | **+1.5** |
| | baz=241 | | | | | | |
| **JTJ** | **Tarama** | **1.82** | **88** | P | **Pn** | **09 34 40.8** | **+0.5** |
| JTJ | | | | S | **Sn** | **09 35 03.9** | **0.0** |
| **FULB** | **Fuli** | **1.90** | **223** | P | **Pn** | **09 34 41.0** | **-0.3** |
| | baz=215 | | | | | | |
| FULB | | | | *eS* | **Sn** | **09 35 05.6** | **-0.1** |
| | baz=215 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.91** | **242** | *eP* | **Pn** | **09 34 42.7** | **+1.2** |
| | baz=239 | | | | | | |
| WHYT | | | | *eS* | **Sn** | **09 35 07.5** | **+1.6** |
| | baz=239 | | | | | | |
| **EDH** | **Donghe** | **2.06** | **218** | *eP* | **Pn** | **09 34 42.6** | **-0.8** |
| | baz=210 | | | | | | |
| EDH | | | | *eS* | **Sn** | **09 35 08.0** | **-1.3** |
| | baz=210 | | | | | | |

*IDC **19** 09:43:21.8±1.7, 18°.21S×178°.03W, h600km±21km, mb3.5/20, mbtmp4.5/21, Error ellipse: s-maj=13.3km s-min=10.6km az=162.0*
*NEIC **19** 09:43:21.6±1.4, 18°.1S±0°.2×178°.0W±0°.1, h598km±12km, mb4.6/27, Error ellipse: s-maj=30.0km s-min=18.6km az=167.0*
*NOU **19** 09:43:22.0, 18°.21S×177°.96W, h605km, mb4.3/58, Fiji Islands Region*

**ISC 19 09:43:21.0**±0.4, **18°.22S**±0°.08×**177°.99W**±0°.07, **h590**km, **n152, σ0s98/154, mb4.4**/31, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.80** | **277** | P | **P** | **09 44 47.1** | **+2.6** |
| **MSVF** | **Nonsavu** | **3.80** | **277** | P | **P** | **09 44 46.5** | **+2.0** |
| **AFI** | **Afiamalu** | **7.35** | **55** | P | **P** | **09 45 12.3** | **-1.7** |
| **NIUE** | **Niue** | **7.69** | **98** | P | **P** | **09 45 18.0** | **+0.9** |
| **NIUE** | **Niue** | **7.69** | **98** | P | **P** | **09 45 16.4** | **-0.6** |
| **LIFNC** | **LIFOU** | **14.16** | **257** | P | **P** | **09 46 20.9** | **-0.8** |
| **LIFNC** | **LIFOU** | **14.16** | **257** | P | **P** | **09 46 20.4** | **-1.3** |
| **PINNC** | **Pines Island,** | **14.34** | **250** | P | **P** | **09 46 22.8** | **-0.5** |
| **YATNC** | **Mamie plateau,** | **14.71** | **252** | P | **P** | **09 46 27.8** | **+1.0** |
| **DZM** | **Mont Dzumac** | **15.11** | **253** | P | **P** | **09 46 31.6** | **+0.9** |
| **DZM** | **Mont Dzumac** | **15.11** | **253** | P | **P** | **09 46 31.2** | **+0.5** |
| DZM | | | | IAmb | IAmb | 09 46 38.0 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.11** | **253** | P | **P** | **09 46 30.9** | **+0.1** |
| | comp=Z,3.8nm,0.4s,baz=121,slow=9.8,SNR=19 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.25** | **253** | P | **P** | **09 46 33.2** | **+1.3** |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **09 46 48.9** | **+1.9** |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **09 46 47.8** | **+0.8** |
| **OUZ** | **Omahuta** | **18.51** | **202** | P | **P** | **09 47 01.9** | **+0.3** |
| **KUZ** | **Kuaotunu** | **19.27** | **195** | P | **P** | **09 47 10.5** | **+2.0** |
| **KUZ** | **Kuaotunu** | **19.27** | **195** | P | **P** | **09 47 09.2** | **+0.7** |
| **MBAZ** | **Motutapu North** | **19.52** | **197** | P | **P** | **09 47 12.9** | **+2.2** |
| **MXZ** | **Matakaoa Point** | **19.55** | **189** | P | **P** | **09 47 10.1** | **-0.9** |
| **MXZ** | **Matakaoa Point** | **19.55** | **189** | P | **P** | **09 47 10.4** | **-0.6** |
| **ETAZ** | **East Tamaki Re** | **19.68** | **197** | P | **P** | **09 47 14.7** | **+2.5** |
| **MKAZ** | **Moumakai** | **19.76** | **196** | P | **P** | **09 47 14.4** | **+1.5** |
| **WMGZ** | **Waiomatatini S** | **19.78** | **188** | P | **P** | **09 47 13.9** | **+0.8** |
| **HAZ** | **Te Kaha** | **19.82** | **190** | P | **P** | **09 47 13.2** | **-0.2** |
| **AWAZ** | **Awhitu Peninsu** | **19.86** | **198** | P | **P** | **09 47 16.2** | **+2.3** |
| **PKGZ** | **Pakihiroa** | **19.88** | **189** | P | **P** | **09 47 15.1** | **+1.1** |
| **RUGZ** | **Raukumara Rang** | **20.04** | **190** | P | **P** | **09 47 15.9** | **+0.4** |
| **TWGZ** | **Tauwhareparae** | **20.20** | **189** | P | **P** | **09 47 17.9** | **+1.0** |
| **TOZ** | **Tahuroa Road** | **20.26** | **195** | P | **P** | **09 47 17.6** | **+0.2** |
| **MWZ** | **Matawai** | **20.42** | **190** | P | **P** | **09 47 17.7** | **-1.3** |
| **URZ** | **Urewera** | **20.42** | **191** | P | **P** | **09 47 18.9** | **0.0** |
| **URZ** | **Urewera** | **20.42** | **191** | P | **P** | **09 47 17.5** | **-1.3** |
| | comp=Z,12nm,0.6s,baz=162,slow=1.4,SNR=17 | | | | | | |
| URZ | | | | S | **S** | **09 50 26.1** | **-4.8** |
| | comp=Z,6.6nm,0.8s,baz=60,slow=20,SNR=1.3 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **URZ** | **Urewera** | **20.42** | **191** | P | **P** | **09 47 17.2** | **-1.7** |
| **BKZ** | **Black Stump Fm** | **21.42** | **192** | P | **P** | **09 47 26.7** | **-1.2** |
| **BFZ** | **Birch Farm** | **22.93** | **191** | P | **P** | **09 47 41.8** | **+0.5** |
| **SNZO** | **South Karori** | **23.86** | **194** | P | **P** | **09 47 49.7** | **+0.3** |
| **QRZ** | **Quartz Range** | **23.96** | **198** | P | **P** | **09 47 51.2** | **+0.8** |
| **KHZ** | **Kahutara** | **25.18** | **195** | P | **P** | **09 48 00.6** | **-0.5** |
| **PPT** | **Papeete** | **27.04** | **93** | P | **P** | **09 48 18.0** | **+0.2** |
| | comp=Z,12nm,0.5s,baz=64,slow=8.9,SNR=5.8 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.04** | **93** | P | **P** | **09 48 18.9** | **+1.0** |
| **RPZ** | **Rata Peaks** | **27.05** | **198** | P | **P** | **09 48 17.7** | **+0.1** |
| **JCZ** | **Jackson Bay** | **28.08** | **201** | P | **P** | **09 48 27.4** | **+0.8** |
| **ODZ** | **Otahua Downs** | **28.39** | **197** | P | **P** | **09 48 28.9** | **-0.3** |
| **ARMA** | **Armidale** | **30.14** | **240** | P | **P** | **09 48 45.3** | **+0.6** |
| ARMA | | | | IAmb | IAmb | 09 49 03.7 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **CTA** | **Charters Tower** | **33.79** | **261** | P | **P** | **09 49 15.9** | **+0.3** |
| **CTA** | **Charters Tower** | **33.79** | **261** | P | **P** | **09 49 15.4** | **-0.2** |
| | comp=Z,0.6nm,0.4s,baz=89,slow=11,SNR=22 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **09 49 16.6** | **+1.0** |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **09 49 15.5** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 09 49 16.7 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **33.84** | **233** | P | **P** | **09 49 15.6** | **-0.3** |
| **CAN** | **Canberra** | **33.84** | **233** | P | **P** | **09 49 16.3** | **+0.4** |
| **PMG** | **Port Moresby** | **34.91** | **280** | P | **P** | **09 49 24.6** | **-0.3** |
| **PMG** | **Port Moresby** | **34.91** | **280** | P | **P** | **09 49 25.1** | **+0.2** |
| | comp=Z,33nm,0.8s,baz=13,slow=5.3,SNR=6.6 | | | | | | |
| | comp=Z,33nm,0.8s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.35** | **241** | P | **P** | **09 49 29.5** | **+1.1** |
| **QLP** | **Quilpie** | **35.80** | **250** | P | **P** | **09 49 33.1** | **+0.9** |
| **TOO** | **Toolangi** | **37.29** | **231** | P | **P** | **09 49 44.9** | **+0.6** |
| TOO | | | | IAmb | IAmb | 09 49 47.0 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **COEN** | **Coen** | **37.51** | **271** | | **P** | **09 49 46.7** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.84** | **242** | P | **P** | **09 49 57.8** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.84** | **242** | P | **P** | **09 49 57.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.84** | **242** | P | **P** | **09 49 57.7** | **+0.8** |
| | comp=Z,5.0nm,0.3s,baz=87,slow=9.7,SNR=46 | | | | | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| **QIS** | **Mount Isa** | **39.99** | **260** | P | **P** | **09 50 05.7** | **-0.6** |
| **HTT** | **Hallett** | **41.34** | **240** | P | **P** | **09 50 18.3** | **+1.5** |
| **LCRK** | **Leigh Creek** | **41.48** | **244** | P | **P** | **09 50 18.6** | **+0.7** |
| **BBOO** | **Buckleboo** | **43.61** | **241** | P | **P** | **09 50 34.8** | **+0.3** |
| **BBOO** | **Buckleboo** | **43.61** | **241** | P | **P** | **09 50 34.6** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 09 50 35.9 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **09 50 43.5** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 09 50 44.1 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | | **P** | **09 50 44.1** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 09 50 45.3 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.96** | **260** | | **P** | **09 50 43.8** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 09 50 45.5 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.96** | **260** | P | **P** | **09 50 43.8** | **-1.3** |
| WRAB | | | | IAmb | IAmb | 09 50 45.5 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | | **P** | **09 50 44.1** | **-1.0** |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **09 50 44.4** | **-0.7** |
| | comp=Z,7.7nm,0.4s,baz=95,slow=6.7,SNR=379 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 52 13.0** | **-0.5** |
| | comp=Z,1.1nm,0.3s,baz=90,slow=3.5,SNR=4.1 | | | | | | |
| | comp=Z,7.7nm,0.4s | | | | | | |
| **MULG** | **Mulgathing** | **45.05** | **245** | P | **P** | **09 50 45.6** | **+0.1** |
| **AS01** | **Alice Springs** | **45.05** | **255** | P | **P** | **09 50 45.4** | **-0.4** |
| **AS31** | **Alice Springs** | **45.09** | **255** | | **P** | **09 50 45.8** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 09 50 47.0 | |
| | comp=Z,11nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.09** | **255** | P | **P** | **09 50 45.9** | **-0.2** |
| | comp=Z,36nm,0.8s,baz=91,slow=7.9,SNR=400 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 52 13.5** | **-0.4** |
| | comp=Z,2.0nm,0.3s,baz=104,slow=3.9,SNR=6.5 | | | | | | |
| ASAR | | | | S | **S** | **09 56 41.5** | **-1.9** |
| | comp=Z,3.6nm,1.0s,baz=85,slow=14,SNR=4.5 | | | | | | |
| | comp=Z,36nm,0.8s | | | | | | |
| **KDU** | **Kakadu** | **47.95** | **269** | P | **P** | **09 51 07.2** | **-0.4** |
| **MTN** | **Manton Dam** | **49.19** | **269** | P | **P** | **09 51 16.2** | **-0.6** |
| **MTN** | **Manton Dam** | **49.19** | **269** | | **P** | **09 51 15.8** | **-1.0** |
| MTN | | | | IAmb | IAmb | 09 51 17.4 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **DRS** | **Darwin Rock St** | **49.51** | **269** | P | **P** | **09 51 18.3** | **-0.8** |
| **WRKA** | **Warakurna** | **50.13** | **252** | P | **P** | **09 51 23.4** | **-0.2** |
| **FORT** | **Forrest** | **50.24** | **245** | P | **P** | **09 51 24.2** | **0.0** |
| **FORT** | **Forrest** | **50.24** | **245** | P | **P** | **09 51 23.3** | **-0.9** |
| FORT | | | | IAmb | IAmb | 09 51 24.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.86** | **264** | P | **P** | **09 51 28.4** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 09 51 30.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **51.03** | **281** | P | **P** | **09 51 30.2** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **53.37** | **261** | P | **P** | **09 51 47.3** | **+0.4** |
| **KMBL** | **Kambalda** | **55.54** | **244** | P | **P** | **09 52 01.6** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **58.22** | **256** | P | **P** | **09 52 19.8** | **-0.5** |
| **MBWA** | **Marble Bar** | **58.39** | **256** | P | **P** | **09 52 21.1** | **-0.3** |
| **MBWA** | **Marble Bar** | **58.39** | **256** | P | **P** | **09 52 21.0** | **-0.5** |
| MBWA | | | | IAmb | IAmb | 09 52 22.0 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **MEEK** | **Meekatharra** | **58.70** | **249** | P | **P** | **09 52 23.0** | **-0.5** |
| **KLBR** | **Kellerberrin** | **59.05** | **244** | P | **P** | **09 52 25.2** | **-0.5** |
| **NWAO** | **Narrogin (SRO)** | **59.42** | **242** | P | **P** | **09 52 27.7** | **-0.5** |
| **NWAO** | **Narrogin (SRO)** | **59.42** | **242** | P | **P** | **09 52 27.6** | **-0.6** |
| **BLDU** | **Ballidu** | **60.01** | **245** | P | **P** | **09 52 31.7** | **-0.4** |
| **MUN** | **Mundaring** | **60.34** | **243** | P | **P** | **09 52 35.0** | **+0.7** |
| **MORW** | **Morawa** | **60

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ARCES | **ARCESS Array B** | **126.69** | **350** | PKP | **PKPdf** | **10 01 16.4** | **-1.2** |
| | comp=Z,0.7nm,0.3s,baz=58,slow=0.9,SNR=24 | | | | | | |
| FINES | **FINESS Array B** | **133.59** | **344** | PKhKP | PKPpre | 10 01 25.1 | |
| | comp=Z,1.9nm,0.7s,baz=67,slow=5.0,SNR=5.5 | | | | | | |
| FINES | | | | PKP | **PKPdf** | **10 01 29.7** | **-1.1** |
| | comp=Z,0.9nm,0.4s,baz=106,slow=4.9,SNR=1.6 | | | | | | |
| NOA | **NORSAR Array B** | **136.73** | **353** | PKP | **PKPdf** | **10 01 36.9** | **+0.1** |
| | comp=Z,0.2nm,0.4s,baz=39,slow=2.1,SNR=1.5 | | | | | | |
| HFS | **Hagfors** | | **137.30 351** | PKhKP | PKPpre | 10 01 30.6 | |
| | comp=Z,2.4nm,1.0s,baz=25,slow=3.8,SNR=5.8 | | | | | | |
| AKASG | **Malin Array Be** | **141.02** | **332** | PKhKP | PKPpre | 10 01 38.4 | |
| | comp=Z,0.8nm,0.4s,baz=43,slow=3.9,SNR=4.9 | | | | | | |
| AKASG | | | | PKP | **PKPdf** | **10 01 46.1** | **+1.3** |
| | comp=Z,0.5nm,0.5s,baz=44,slow=3.1,SNR=4.9 | | | | | | |
| EKA | **Eskdalemuir Ar** | **142.74** | **5** | PKhKP | PKPpre | 10 01 43.9 | |
| | comp=Z,0.5nm,0.5s,baz=323,slow=2.5,SNR=6.0 | | | | | | |
| BRTR | **Keskin Array B** | **145.28** | **315** | PKPbc | **PKPdf** | **10 01 53.2** | **+0.4** |
| | comp=Z,1.9nm,0.4s,baz=130,slow=3.2,SNR=25 | | | | | | |
| OSTC | **Ostas** | **145.80** | **344** | *e*PKP | **PKPbc** | **10 01 55.1** | **+0.1** |
| DPC | **Dobruska-Polom** | **145.96** | **344** | *e*PKP | **PKPbc** | **10 01 55.2** | **-0.3** |
| KRLC | **Kraliky** | **146.08** | **343** | *e*PKP | **PKPbc** | **10 01 55.5** | **-0.3** |
| MMAI | **Mount Meron Ar** | **146.65** | **303** | PKPbc | **PKPbc** | **10 01 57.5** | **-0.4** |
| | comp=Z,2.7nm,0.4s,baz=64,slow=6.7,SNR=2.5 | | | | | | |
| PRU | **Pruhonice** | **146.74** | **345** | *e*PKP | **PKPbc** | **10 01 57.0** | **-0.6** |
| KHC | **Kasperske Hory** | **147.77** | **346** | *e*PKP | **PKPbc** | **10 01 59.9** | **-0.4** |
| CKRC | **Cesky Krumlov** | **147.88** | **345** | *e*PKP | **PKPbc** | **10 02 00.1** | **-0.5** |
| EIL | **Elat** | **147.92** | **297** | PKPbc | **PKPdf** | **10 01 58.3** | **+1.0** |
| | comp=Z,2.6nm,0.4s,baz=90,slow=3.0,SNR=5.3 | | | | | | |
| GERES | **GERESS Array B** | **148.01** | **345** | PKPbc | **PKPbc** | **10 02 00.1** | **-0.9** |
| | comp=Z,1.3nm,0.4s,baz=344,slow=0.7,SNR=15 | | | | | | |
| CONA | **Conrad Observa** | **148.28** | **342** | *e*PKP | **PKPbc** | **10 02 01.1** | **-0.6** |
| | comp=Z,1.1nm,1.2s | | | | | | |
| RONA | **Rosalia, Austr** | **148.35** | **341** | *e*PKiKP | **PKPbc** | **10 02 01.6** | **-0.2** |
| | comp=Z,7.2nm,1.1s | | | | | | |
| MOA | **Molln** | **148.79** | **344** | *e*PKP | **PKPbc** | **10 02 02.4** | **-0.5** |
| | comp=Z,3.9nm,1.1s | | | | | | |
| ARSA | **Arzberg** | **148.99** | **342** | *e*PKP | **PKPbc** | **10 02 01.4** | **-2.0** |
| | comp=Z,4.5nm,1.5s | | | | | | |
| LESA | **Schwarzleotal** | **149.58** | **346** | *i* PKiKP | **PKPbc** | **10 02 04.5** | **-0.3** |
| | comp=Z,1.8nm,0.3s | | | | | | |
| KBA | **Koelnbreinsper** | **149.74** | **345** | *i* PKP | **PKPbc** | **10 02 04.5** | **-0.8** |
| | comp=Z,1.3nm,0.3s | | | | | | |
| WATA | **Walderalm** | **149.91** | **347** | *e*PKP | **PKPbc** | **10 02 04.9** | **-0.8** |
| | comp=Z,1.8nm,0.4s,SNR=4.2 | | | | | | |
| RETA | **Reutte** | **149.94** | **348** | *i* PKP | **PKPbc** | **10 02 04.9** | **-0.8** |
| | comp=Z,1.9nm,0.5s | | | | | | |
| WTTA | **Wattenberg** | **149.97** | **347** | *e*PKP | **PKPbc** | **10 02 05.0** | **-0.9** |
| | comp=Z,3.8nm,0.4s,SNR=8.0 | | | | | | |
| MOTA | **Moosalm** | **150.00** | **348** | *e*PKP | **PKPbc** | **10 02 05.2** | **-0.8** |
| | comp=Z,0.8nm,0.4s | | | | | | |
| MYKA | **Terra Mystica** | **150.08** | **344** | *e*PKP | **PKPbc** | **10 02 04.7** | **-1.3** |
| | comp=Z,1.3nm,0.3s | | | | | | |
| ABTA | **Abfaltersbach** | **150.26** | **345** | *e*PKP | **PKPbc** | **10 02 05.2** | **-1.3** |
| | comp=Z,2.5nm,0.6s,SNR=4.7 | | | | | | |
| FETA | **Feichten** | **150.39** | **348** | *e*PKiKP | **PKPbc** | **10 02 06.2** | **-0.7** |
| | comp=Z,1.2nm,0.4s | | | | | | |

*IDC* ***19*** *09:44:05.3±5.7, 18°.02S×178°.24W, h501km±64km, mb3.2/9, mbtmp4.1/10, Error ellipse: s-maj=26.4km s-min=22.3km az=57.0*

*NEIC* ***19*** *09:44:05.8±1.2, 17°.9S±0°.2×178°.1W±0°.1, h512km±17km, mb4.4/20, Error ellipse: s-maj=32.1km s-min=19.6km az=184.0*

**ISC 19 09:44:05.1**±0.7,**18°.0S**±0°.1×**178°.16W**±0°.09,**h500**km,**n44,** σ1ᵎ**16**/44,**mb4.1**/16,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.62** | **273** | P | **P** | **09 45 24.4** | **+3.7** |
| **AFI** | **Afiamalu** | **7.35** | **58** | P | **P** | **09 45 53.2** | **-1.8** |
| **NIUE** | **Niue** | **7.88** | **99** | P | **P** | **09 46 01.1** | **+0.8** |
| **LIFNC** | **LIFOU** | **14.06** | **256** | P | **P** | **09 47 03.8** | **-1.7** |
| **PINNC** | **Pines Island,** | **14.27** | **249** | P | **P** | **09 47 07.8** | **+0.1** |
| **DZM** | **Mont Dzumac** | **15.03** | **252** | P | **P** | **09 47 16.1** | **+0.4** |
| | 2.6nm,0.6s,baz=74,slow=20,SNR=1.6 | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.77** | **258** | P | **P** | **09 47 32.9** | **-0.9** |
| KOUNC | | | | IAmb | IAmb | 09 47 43.2 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **MXZ** | **Matakaoa Point** | **19.76** | **188** | S | **P** | **09 47 58.1** | **-3.3** |
| **MKAZ** | **Moumakai** | **19.94** | **196** | S | **P** | **09 48 04.7** | **+1.6** |
| **PKGZ** | **Pakihiroa** | **20.09** | **189** | S | **P** | **09 48 02.8** | **-1.6** |
| **RUGZ** | **Raukumara Rang** | **20.25** | **190** | S | **P** | **09 48 05.7** | **-0.3** |
| **URZ** | **Urewera** | **20.63** | **191** | P | **P** | **09 48 07.9** | **-1.4** |
| | comp=Z,4.5nm,0.3s,baz=283,slow=12,SNR=1.9 | | | | | | |
| | comp=Z,4.5nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **20.63** | **191** | S | **P** | **09 48 08.3** | **-1.0** |
| **MWZ** | **Matawai** | **20.63** | **190** | S | **P** | **09 48 08.5** | **-0.8** |
| **RTZ** | **Ruatahuna** | **21.00** | **191** | P | **P** | **09 48 12.6** | **-0.1** |
| **TCW** | **Tory Channel** | **24.05** | **194** | P | **P** | **09 48 40.6** | **+0.6** |
| **LTZ** | **Lake Taylor** | **26.03** | **196** | P | **P** | **09 48 57.4** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.47** | **250** | P | **P** | **09 49 27.6** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 09 49 44.8 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **ARMA** | **Armidale** | **30.11** | **240** | P | **P** | **09 49 33.6** | **0.0** |
| **CTA** | **Charters Tower** | **33.67** | **261** | P | **P** | **09 50 03.6** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=95,slow=9.7,SNR=8.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.67** | **261** | P | **P** | **09 50 03.4** | **-0.7** |
| CTAO | | | | IAmb | IAmb | 09 50 04.1 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.31** | **231** | P | **P** | **09 50 34.4** | **+0.2** |
| **COEN** | **Coen** | **37.34** | **270** | P | **P** | **09 50 34.6** | **-0.1** |
| COEN | | | | IAmb | IAmb | 09 50 35.8 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.81** | **241** | P | **P** | **09 50 46.5** | **+0.1** |
| **STKA** | **Stephens Creek** | **38.81** | **241** | P | **P** | **09 50 45.9** | **-0.6** |
| | comp=Z,3.3nm,0.5s,baz=85,slow=9.0,SNR=4.6 | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.58** | **241** | P | **P** | **09 51 24.3** | **-0.1** |
| BBOO | | | | IAmb | IAmb | 09 51 45.5 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.82** | **260** | P | **P** | **09 51 33.2** | **-1.0** |
| **WB2** | **Warramunga Arr** | **44.84** | **260** | P | **P** | **09 51 33.2** | **-1.2** |
| WB2 | | | | IAmb | IAmb | 09 51 33.7 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.85** | **260** | P | **P** | **09 51 32.5** | **-2.0** |
| WRAB | | | | IAmb | IAmb | 09 51 37.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **09 51 33.8** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **09 51 33.1** | **-1.3** |
| | comp=Z,3.7nm,0.5s,baz=95,slow=7.6,SNR=11 | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.00** | **254** | P | **P** | **09 51 35.1** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 09 51 35.8 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.00** | **254** | P | **P** | **09 51 35.1** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.00** | **254** | P | **P** | **09 51 35.2** | **-0.4** |
| | comp=Z,33nm,0.6s,baz=89,slow=8.2,SNR=40 | | | | | | |
| **FORT** | **Forrest** | **50.19** | **245** | P | **P** | **09 52 13.9** | **-0.6** |
| FORT | | | | IAmb | IAmb | 09 52 19.9 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.72** | **264** | P | **P** | **09 52 18.2** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **53.25** | **261** | P | **P** | **09 52 36.6** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | **P** | **09 54 38.5** | **+0.5** |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | **P** | **09 54 38.6** | **+0.6** |
| | comp=Z,2.5nm,0.7s,baz=204,slow=0.6,SNR=8.4 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **74.91** | **318** | P | **P** | **09 54 54.4** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=134,slow=5.1,SNR=2.6 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.31** | **44** | P | **P** | **09 55 19.1** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=218,slow=9.0,SNR=4.9 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.83** | **58** | P | **P** | **09 55 52.6** | **+0.9** |
| | comp=Z,0.6nm,0.7s,baz=210,slow=4.9,SNR=6.8 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.52** | **179** | P | **P** | **09 56 12.2** | **-0.7** |
| SNAA | | | | IAmb | IAmb | 09 56 45.5 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **90.52** | **179** | P | **P** | **09 56 12.0** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=207,slow=11,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |

*IDC* ***19*** *09:49:35.8±5.8, 17°.85S×177°.63W, h504km±59km, mb3.4/8, mbtmp4.2/9, Error ellipse: s-maj=36.9km s-min=20.2km az=61.0*

*NEIC* ***19*** *09:49:43.8±1.8, 17°.9S±0°.3×177°.8W±0°.1, h602km±15km, mb4.3/11, Error ellipse: s-maj=37.7km s-min=14.7km az=166.0*

**ISC 19 09:49:43.2**±0.7,**17°.9S**±0°.1×**177°.9W**±0°.1,**h600**km,**n28,** σ1ᵎ**22**/29,**mb3.9**/11,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.89** | **271** | P | **P** | **09 51 08.1** | **0.0** |
| **AFI** | **Afiamalu** | **7.06** | **57** | P | **P** | **09 51 31.6** | **-2.4** |
| **NIUE** | **Niue** | **7.63** | **100** | P | **P** | **09 51 38.8** | **-0.3** |
| **LIFNC** | **LIFOU** | **14.35** | **256** | P | **P** | **09 52 42.8** | **-2.7** |
| **DZM** | **Mont Dzumac** | **15.33** | **252** | P | **P** | **09 52 53.7** | **-0.8** |
| | 1.5nm,0.7s,baz=100,slow=14,SNR=2.1 | | | | | | |
| KOUNC | **Koumac, New Ca** | **17.07** | **258** | P | **P** | **09 53 11.8** | **+1.4** |
| KOUNC | | | | IAmb | IAmb | 09 53 22.5 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **20.79** | **191** | P | **P** | **09 53 40.6** | **-3.3** |
| | comp=Z,13nm,1.0s,baz=357,slow=1.2,SNR=5.8 | | | | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.81** | **200** | P | **P** | **09 55 02.9** | **-0.3** |
| MLZ | | | | IAmb | IAmb | 09 55 11.1 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.33** | **200** | P | **P** | **09 55 08.3** | **+0.7** |
| WHZ | | | | IAmb | IAmb | 09 55 50.7 | |
| | comp=Z,38nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **34.14** | **233** | P | **P** | **09 55 39.1** | **-0.9** |
| **TOO** | **Toolangi** | **37.60** | **231** | P | **P** | **09 56 08.8** | **+0.4** |
| **STKA** | **Stephens Creek** | **39.10** | **241** | P | **P** | **09 56 21.4** | **+0.8** |
| STKA | | | | IAmb | IAmb | 09 56 53.0 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **39.10** | **241** | P | **P** | **09 56 21.4** | **+0.8** |
| | comp=Z,2.7nm,0.7s,baz=97,slow=11,SNR=8.3 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.13** | **259** | P | **P** | **09 57 08.2** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 09 57 46.5 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.15** | **259** | P | **P** | **09 57 07.4** | **-0.6** |
| **WRA** | **Warramunga Arr** | **45.15** | **259** | P | **P** | **09 57 08.3** | **+0.2** |
| | comp=Z,1.2nm,0.3s,baz=95,slow=7.3,SNR=5.1 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **45.30** | **254** | P | **P** | **09 57 09.2** | **0.0** |
| AS31 | | | | IAmb | IAmb | 09 57 10.2 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **45.30** | **254** | P | **P** | **09 57 08.3** | **-0.9** |
| **ASAR** | **Alice Springs** | **45.30** | **254** | P | **P** | **09 57 09.6** | **+0.4** |
| | comp=Z,5.9nm,0.5s,baz=86,slow=8.6,SNR=9.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 58 37.1** | **+1.1** |
| | comp=Z,0.9nm,0.4s,baz=108,slow=4.3,SNR=3.6 | | | | | | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.18** | **323** | P | **P** | **09 59 45.5** | **+0.5** |
| | comp=Z,1.1nm,0.9s,baz=158,slow=6.0,SNR=1.3 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.19** | **180** | P | **P** | **10 00 09.9** | **+1.6** |
| **QSPA** | **South Pole Qui** | **72.19** | **180** | P | **P** | **10 00 09.9** | **+1.6** |
| | comp=Z,1.4nm,0.5s,baz=220,slow=1.2,SNR=23 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.73** | **13** | P | **P** | **10 01 20.1** | **+0.7** |
| | comp=Z,0.2nm,0.4s,baz=220,slow=5.1,SNR=4.1 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.63** | **178** | P | **P** | **10 01 43.1** | **+0.7** |
| SNAA | | | | IAmb | IAmb | 10 01 44.0 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **90.63** | **178** | P | **P** | **10 01 42.7** | **+0.3** |
| | comp=Z,2.7nm,1.2s,baz=198,slow=13,SNR=3.1 | | | | | | |
| | comp=Z,2.7nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.11** | **315** | PKPbc | **PKPab** | **10 08 16.6** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=125,slow=3.3,SNR=4.4 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.55** | **303** | PKPbc | **PKiKP** | **10 08 21.0** | **0.0** |
| | comp=Z,1.0nm,0.3s,baz=90,slow=5.8,SNR=3.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.70** | **346** | PKPbc | **PKiKP** | **10 08 23.3** | **+0.4** |
| | comp=Z,0.5nm,0.6s,baz=23,slow=5.3,SNR=3.8 | | | | | | |

*IDC* ***19*** *09:50:07.9±0.5, 8°.33S×116°.71E, h0km, mb4.3/18, mbtmp4.3/19, ML4.1/1, MS3.4/3, Error ellipse: s-maj=20.0km s-min=11.0km az=65.0*

*NEIC* ***19*** *09:50:10.9±2.0, 8°.35S±0°.09×116°.78E±0°.06, h10km±1km, mb4.7/23, Error ellipse: s-maj=14.7km s-min=10.5km az=356.0*

*DJA* ***19*** *09:50:10.5±0.2, 8°.5±2°×117°.7E±°, h10km, M4.9/18, mb5.0/8, mB5.3/4, MLv4.8/18, Mw(mB)4.8/4*

**ISC 19 09:50:10.2**±0.4,**8°.33S**±0°.04×**116°.76E**±0°.04,**h10**km,**n120,** σ1ᵎ**45**/124,**mb4.7**/30,**MS3.7**/3,**2C,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.43** | **163** | P | **Pb** | **09 50 19.8** | **-0.1** |
| TWSI | | | | S | **Sb** | **09 50 26.3** | **-0.1** |
| **PLAI** | **Plampang** | **1.12** | **116** | P | **Pn** | **09 50 32.5** | **+0.4** |
| **PLAI** | **Plampang** | **1.12** | **116** | P | **Pn** | **09 50 32.4** | **+0.4** |
| PLAI | | | | S | **Sn** | **09 50 48.7** | **+1.2** |
| **SRBI** | **Singaraja** | **1.55** | **279** | P | **Pn** | **09 50 37.6** | **-0.2** |
| SRBI | | | | S | **Sn** | **09 50 57.8** | **-0.2** |
| **DNP** | **Denpasar** | **1.57** | **257** | P | **Pn** | **09 50 38.3** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.58** | **267** | P | **Pn** | **09 50 51.2** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.58** | **267** | | **Pn** | **09 50 50.8** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.58** | **267** | P | **Pn** | **09 50 50.8** | **-1.3** |
| **WBSI** | **Waikabuk, Su** | **2.91** | **117** | P | **Pn** | **09 50 57.3** | **+0.6** |
| **BASI** | **Baing, Sumba** | **4.21** | **117** | P | **Pn** | **09 51 17.8** | **+3.3** |
| **BSSI** | **Bau Bau, Buton** | **4.29** | **60** | P | **Pn** | **09 51 15.9** | **+0.3** |
| **KAPI** | **Kappang** | **4.43** | **42** | Pn | **Pn** | **09 51 17.0** | **-0.5** |
| **KAPI** | **Kappang** | **4.43** | **42** | Pn | **Pn** | **09 51 17.3** | **-0.2** |
| | 10nm,0.3s,baz=210,slow=7.3,SNR=28 | | | | | | |
| KAPI | | | | Sn | **Sn** | **09 52 07.2** | **-2.0** |
| | 65nm,0.3s,baz=160,slow=21,SNR=11 | | | | | | |
| | 27nm,0.3s | | | | | | |
| **GRJI** | **Gresik** | **4.47** | **288** | P | **Pn** | **09 51 17.2** | **-0.8** |
| **EDFI** | **Ende, Flores** | **4.90** | **95** | P | **Pn** | **09 51 24.9** | **+0.9** |
| **PWJI** | **Pagerwojo** | **4.91** | **273** | P | **Pn** | **09 51 23.3** | **-0.9** |
| **BNSI** | **Bone** | **5.13** | **41** | P | **Pn** | **09 51 28.6** | **+1.5** |
| | 252nm,0.9s,3μm1.9nm | | | | | | |
| **NGJI** | **Ngawi** | **5.33** | **280** | P | **Pn** | **09 51 29.3** | **-0.6** |
| | 73nm,0.9s,0.7nm | | | | | | |
| **MMRI** | **Maumere** | **5.43** | **94** | Pn | **Pn** | **09 51 31.6** | **+0.3** |
| **MMRI** | **Maumere** | **5.43** | **94** | P | **Pn** | **09 51 32.1** | **+0.8** |
| **UGM** | **Wanagama** | **6.19** | **273** | P | **Pn** | **09 51 44.3** | **+2.6** |
| **UGM** | **Wanagama** | **6.19** | **273** | Pn | **Pn** | **09 51 43.2** | **+1.5** |
| **UGM** | **Wanagama** | **6.19** | **273** | P | **Pn** | **09 51 41.6** | **-0.1** |
| | 125nm,1.0s | | | | | | |
| **BATI** | **Baumata** | **7.07** | **106** | P | **Pn** | **09 51 56.4** | **+2.6** |
| | 100nm,0.5s,2μm0.4nm | | | | | | |
| **BBJI** | **Bungbulang** | **9.06** | **275** | P | **Pn** | **09 52 23.0** | **+1.7** |
| **FITZ** | **Fitzroy Crossi** | **13.00** | **139** | Pn | **Pn** | **09 53 15.0** | **-0.1** |
| **MBWA** | **Marble Bar** | **13.08** | **168** | P | **Pn** | **09 53 15.6** | **-0.6** |
| **MBWA** | **Marble Bar** | **13.08** | **168** | Pn | **Pn** | **09 53 13.9** | **-2.2** |
| **PSA00** | **Pilbara Seismi** | **13.50** | **168** | P | **Pn** | **09 53 20.9** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **13.50** | **168** | Pn | **Pn** | **09 53 20.8** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **13.50** | **168** | | **Pn** | **09 53 19.3** | **-2.6** |
| **KNRA** | **Kununurra** | **13.82** | **123** | Pn | **Pn** | **09 53 25.6** | **-0.7** |
| **GIRL** | **Giralia** | **14.44** | **189** | P | **Pn** | **09 53 33.0** | **-1.8** |
| **GIRL** | **Giralia** | **14.44** | **189** | Pn | **Pn** | **09 53 32.3** | **-2.5** |
| **MTN** | **Manton Dam** | **14.82** | **109** | | **Pn** | **09 53 38.1** | **-2.0** |
| **FAKI** | **Fak Fak** | **16.32** | **72** | P | **Pn** | **09 54 01.1** | **+1.5** |
| FAKI | | | | IAmb | IAmb | 09 54 39.6 | |
| | comp=Z,54nm,1.3s | | | | | | |
| **MEEK** | **Meekatharra** | **18.30** | **175** | P | **Pn** | **09 54 24.4** | **+0.1** |
| **WB0** | **Warramunga Arr** | **20.52** | **126** | P | **P** | **09 54 48.7** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 09 54 49.5 | |
| | comp=Z,28nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.57** | **126** | | **P** | **09 54 48.9** | **-0.5** |
| **WRA** | **Warramunga Arr** | **20.57** | **126** | P | **P** | **09 54 49.3** | **0.0** |
| | comp=Z,24nm,0.7s,baz=301,slow=12,SNR=104 | | | | | | |
| WRA | | | | S | **S** | **09 58 37.0** | **-2.5** |
| | comp=Z,1.2nm,0.8s,baz=290,slow=24,SNR=3.4 | | | | | | |
| | comp=Z,24nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.57** | **126** | P | **P** | **09 54 49.0** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 09 54 50.2 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.57** | **126** | P | **P** | **09 54 49.2** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 09 54 50.1 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **20.64** | **182** | P | **P** | **09 54 50.5** | **+0.4** |
| **MORW** | **Morawa** | **20.64** | **182** | | **P** | **09 54 51.5** | **+1.5** |
| **WR0** | **Warramunga Arr** | **20.74** | **126** | P | **P** | **09 54 51.0** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 09 54 52.0 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **BLDU** | **Ballidu** | **22.18** | **180** | P | **P** | **09 55 06.4** | **-0.2** |
| **ASAR** | **Alice Springs** | **22.41** | **135** | P | **P** | **09 55 09.2** | **-0.1** |
| | comp=Z,33nm,0.8s,baz=312,slow=9.5,SNR=158 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 59 02.6** | **-1.6** |
| | comp=Z,1.3nm,0.8s,baz=316,slow=1.5,SNR=3.9 | | | | | | |
| ASAR | | | | S | **S** | **09 59 16.1** | **+0.5** |
| | comp=Z,1.3nm,0.8s,baz=302,slow=21,SNR=2.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **10 02 39.7** | **-2.4** |
| | comp=Z,0.8nm,0.9s,baz=332,slow=3.0,SNR=4.2 | | | | | | |
| | comp=Z,33nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.42** | **135** | P | **P** | **09 55 09.3** | **+0.1** |
| **AS01** | **Alice Springs** | **22.45** | **135** | P | **P** | **09 55 09.5** | **-0.1** |
| **KLBR** | **Kellerberrin** | **23.17** | **178** | P | **P** | **09 55 17.8** | **+0.8** |
| **KMBL** | **Kambalda** | **23.42** | **169** | P | **P** | **09 55 19.3** | **-0.3** |
| **NWAO** | **Narrogin (SRO)** | **24.48** | **179** | P | **P** | **09 55 30.1** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **24.48** | **179** | P | **P** | **09 55 29.4** | **-0.3** |
| NWAO | | | | IAmb | IAmb | 09 56 07.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **24.71** | **156** | P | **P** | **09 55 32.7** | **+1.0** |
| **FORT** | **Forrest** | **24.71** | **156** | P | **P** | **09 55 32.0** | **+0.3** |
| **QIS** | **Mount Isa** | **25.20** | **121** | P | **P** | **09 55 37.4** | **+1.1** |
| **OOD** | **Oodnadatta** | **26.36** | **140** | P | **P** | **09 55 46.8** | **+0.1** |
| **COEN** | **Coen** | **26.50** | **105** | P | **P** | **09 55 49.0** | **+0.9** |
| **COEN** | **Coen** | **26.50** | **105** | P | **P** | **09 55 47.4** | **-0.8** |
| COEN | | | | IAmb | IAmb | 09 55 53.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **INKA** | **Innaminka** | **29.77** | **133** | P | **P** | **09 56 18.8** | **+1.6** |
| **LCRK** | **Leigh Creek** | **29.79** | **141** | P | **P** | **09 56 17.7** | **+0.4** |
| **BBOO** | **Buckleboo** | **30.22** | **146** | P | **P** | **09 56 21.1** | **0.0** |
| **BBOO** | **Buckleboo** | **30.22** | **146** | P | **P** | **09 56 20.8** | **-0.3** |
| **CTA** | **Charters Tower** | **30.83** | **115** | LR | LR | 10 11 01.7 | |
| | comp=Z,17nm,19.5s,baz=210,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.90** | **327** | P | **P** | **09 56 40.2** | **+4.2** |
| **CMAR** | **Chiang Mai Arr** | **31.90** | **327** | P | **P** | **09 56 35.8** | **-0.3** |
| | comp=Z,0.6nm,0.3s,baz=152,slow=6.8,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **HTT** | **Hallett** | **32.30** | **144** | P | **P** | **09 56 40.4** | **+0.9** |
| **STKA** | **Stephens Creek** | **32.90** | **139** | P | **P** | **09 56 45.1** | **+0.4** |
| **STKA** | **Stephens Creek** | **32.90** | **139** | P | **P** | **09 56 44.4** | **-0.4** |
| **STKA** | **Stephens Creek** | **32.90** | **139** | P | **P** | **09 56 44.8** | **+0.1** |
| | comp=Z,11nm,0.8s,baz=314,slow=10,SNR=20 | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **ARPS** | **Mount Arapiles** | **36.35** | **145** | P | **P** | **09 57 14.8** | **+0.3** |
| **PZH** | **PanZhiHua** | **37.57** | **338** | P | **P** | **09 57 28.9** | **+3.8** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | |
| **TOO** | **Toolangi** | **39.03** | **143** | P | **P** | **09 57 38.8** | **+1.6** |
| **TOO** | **Toolangi** | **39.03** | **143** | P | **P** | **09 57 38.8** | **+1.6** |
| TOO | | | | IAmb | IAmb | 09 57 56.2 | |
| | comp=Z,42nm,1.4s | | | | | | |
| **PALK** | **Pallekele** | **39.14** | **292** | LR | LR | 10 14 36.1 | |
| | comp=Z,114nm,20.5s,baz=255,slow=38 | | | | | | |
| **NJ2** | **Nanjing** | **40.20** | **3** | *e*P | **P** | **09 57 49.6** | **+2.7** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **GLAD** | **Gladstone** | **42.74** | **145** | P | **P** | **09 58 08.7** | **+1.0** |
| **LYN** | **LuoYang** | **42.84** | **355** | P | **P** | 09 58 14.0 | +5.5 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **HNS** | **HongShan** | **45.52** | **358** | *e*P | **P** | **09 58 30.1** | **+0.1** |
| **LZH** | **Lanzhou** | **45.82** | **345** | *e*P | **P** | **09 58 36.9** | **+4.3** |
| LZH | | | | sP | sP | 09 58 53.4 | +16 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,12nm,1.5s | | | | | | |
| **KSRS** | **Korea Array** | **46.72** | **12** | P | **P** | **09 58 40.4** | **+0.9** |
| | comp=Z,1.7nm,0.9s,baz=193,slow=8.4,SNR=8.9 | | | | | | |
| | comp

1.0nm,0.8s,baz=43,slow=7.8,SNR=13
1.0nm,0.8s
**STKA Stephens Creek 26.06 188** P P 10 11 21.7 +0.6
1.4nm,0.5s,baz=34,slow=11,SNR=3.6
1.4nm,0.5s
**QSPA South Pole Qui 83.98 180** P P 10 18 15.8 -0.5
0.5nm,0.5s,baz=2.2,slow=0.8,SNR=10.0
0.5nm,0.5s

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*IDC **19** 10:07:01.7±4.5, 17°.77S×179°.83W, h650km±53km, mb3.2/7, mbtmp4.2/8, Error ellipse: s-maj=29.1km s-min=26.0km az=93.0*
*NEIC **19** 10:07:01.5±1.0, 17°.8S±0°.3×179°.7W±0°.2, h649km±12km, mb4.2/21, Error ellipse: s-maj=42.2km s-min=27.4km az=201.0*

**ISC 19 10:07:01.7**±0.8, **17°.8S**±0°.2×**179°.8W**±0°.1, **h650**km, **n38, σ0°52/39, mb4.1/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.03** | **271** | P | | **P** | **10 08 20.8** | **-0.1** |
| **LIFNC** | **LIFOU** | **12.58** | **254** | P | | **P** | **10 09 45.0** | **-0.8** |
| **PINNC** | **Pines Island,** | **12.89** | **246** | P | | **P** | **10 09 48.2** | **-0.3** |
| **DZM** | **Mont Dzumac** | **13.61** | **249** | P | | **P** | **10 09 56.0** | **+0.6** |
| **DZM** | **Mont Dzumac** | **13.61** | **249** | P | | **P** | **10 09 55.4** | **+0.1** |
| | 5.1nm,0.5s,baz=97,slow=20,SNR=16 | | | | | | | |
| KOUNC | **Koumac, New Ca** | **15.27** | **257** | P | | **P** | **10 10 11.9** | **+1.4** |
| KOUNC | | | | IAmb | | IAmb | 10 10 55.9 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **CTA** | **Charters Tower** | **32.15** | **260** | P | | **P** | **10 12 39.0** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=90,slow=10,SNR=9.8 | | | | | | | |
| **CTAO** | **Charters Tower** | **32.15** | **260** | P | | **P** | **10 12 39.3** | **0.0** |
| CTAO | | | | IAmb | | IAmb | 10 12 40.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **35.76** | **271** | P | | **P** | **10 13 09.9** | **+0.6** |
| COEN | | | | IAmb | | IAmb | 10 13 11.2 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **TOO** | **Toolangi** | **36.22** | **230** | P | | **P** | **10 13 13.8** | **+0.9** |
| **STKA** | **Stephens Creek** | **37.52** | **241** | P | | **P** | **10 13 24.3** | **+0.9** |
| **STKA** | **Stephens Creek** | **37.52** | **241** | P | | **P** | **10 13 23.9** | **+0.4** |
| | comp=Z,6.7nm,0.4s,baz=82,slow=11,SNR=25 | | | | | | | |
| | comp=Z,6.7nm,0.4s | | | | | | | |
| **BBOO** | **Buckleboo** | **42.30** | **241** | P | | **P** | **10 14 01.7** | **+0.5** |
| **WR0** | **Warramunga Arr** | **43.15** | **260** | P | | **P** | **10 14 07.6** | **-0.4** |
| **WB0** | **Warramunga Arr** | **43.30** | **260** | P | | **P** | **10 14 08.8** | **-0.4** |
| WB0 | | | | IAmb | | IAmb | 10 14 09.7 | |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.33** | **260** | P | | **P** | **10 14 08.9** | **-0.5** |
| WB2 | | | | IAmb | | IAmb | 10 14 09.9 | |
| | comp=Z,6.6nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.34** | **260** | P | | **P** | **10 14 09.1** | **-0.4** |
| **WRA** | **Warramunga Arr** | **43.34** | **260** | P | | **P** | **10 14 09.1** | **-0.4** |
| | comp=Z,4.5nm,0.5s,baz=98,slow=6.9,SNR=114 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **10 15 42.3** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=90,slow=3.3,SNR=3.3 | | | | | | | |
| | comp=Z,4.5nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **43.53** | **254** | P | | **P** | **10 14 10.8** | **-0.2** |
| **ASAR** | **Alice Springs** | **43.54** | **254** | P | | **P** | **10 14 11.3** | **+0.4** |
| | comp=Z,46nm,0.6s,baz=88,slow=8.1,SNR=609 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **10 15 43.2** | **-0.4** |
| | comp=Z,0.6nm,0.6s,baz=101,slow=3.3,SNR=3.3 | | | | | | | |
| **MTN** | **Manton Dam** | **47.46** | **269** | P | | **P** | **10 14 40.2** | **-0.5** |
| MTN | | | | IAmb | | IAmb | 10 15 01.9 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **48.85** | **244** | P | | **P** | **10 14 50.1** | **-0.7** |
| FORT | | | | IAmb | | IAmb | 10 14 51.2 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **49.17** | **264** | P | | **P** | **10 14 53.2** | **0.0** |
| KNRA | | | | IAmb | | IAmb | 10 15 36.7 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.73** | **261** | P | | **P** | **10 15 11.9** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **56.64** | **256** | P | | **P** | **10 15 45.5** | **-0.4** |
| PSA00 | | | | IAmb | | IAmb | 10 15 46.6 | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **58.09** | **242** | P | | **P** | **10 15 55.3** | **-0.2** |
| NWAO | | | | IAmb | | IAmb | 10 16 10.6 | |
| | comp=Z,26nm,1.4s | | | | | | | |
| **MORW** | **Morawa** | **59.31** | **246** | P | | **P** | **10 16 03.2** | **-0.5** |
| **GIRL** | **Giralia** | **61.65** | **253** | P | | **P** | **10 16 19.2** | **+0.1** |
| **QSPA** | **South Pole Qui** | **72.28** | **180** | P | | **P** | **10 17 23.8** | **+0.5** |
| **QSPA** | **South Pole Qui** | **72.28** | **180** | P | | **P** | **10 17 23.3** | **+0.1** |
| | comp=Z,0.7nm,0.6s,baz=202,slow=1.4,SNR=14 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.26** | **44** | P | | **P** | **10 18 07.2** | **-0.2** |
| | comp=Z,0.4nm,0.8s,baz=245,slow=9.9,SNR=2.9 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **MAW** | **Mawson** | **83.53** | **200** | P | | **P** | **10 18 23.2** | **+0.3** |
| | comp=Z,1.3nm,0.5s,baz=146,slow=11,SNR=2.5 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.06** | **58** | P | | **P** | **10 18 41.2** | **+0.4** |
| | comp=Z,0.5nm,0.9s,baz=203,slow=9.1,SNR=4.2 | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **90.76** | **179** | P | | **P** | **10 18 56.3** | **-0.8** |
| SNAA | | | | IAmb | | IAmb | 10 19 10.5 | |
| | comp=Z,3.4nm,1.3s | | | | | | | |
| **SNAA** | **Sanae** | **90.76** | **179** | P | | **P** | **10 18 56.6** | **-0.5** |
| | comp=Z,0.8nm,0.6s,baz=190,slow=7.7,SNR=2.9 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **132.68** | **343** | PKP | | **PKPdf** | **10 25 04.4** | **+0.5** |
| | comp=Z,6.8nm,1.2s,baz=80,slow=1.6,SNR=3.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **143.73** | **314** | PKP | | PKPbc | 10 25 24.0 | -0.3 |
| | comp=Z,0.6nm,0.6s,baz=162,slow=3.0,SNR=3.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.12** | **343** | PKPbc | | **PKPbc** | **10 25 33.5** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=92,slow=2.9,SNR=3.1 | | | | | | | |

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**IDC 19 10:08:47.8**±52.0, **15°.94S×172°.25W, h0**km, **mb4.3/3, mbtmp4.3/3, Error ellipse: s-maj=1013.0km s-min=189.7km az=79.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **44.73** | **241** | P | | P | 10 17 03.6 | +0.5 |
| | 1.5nm,0.5s,baz=65,slow=5.8,SNR=3.1 | | | | | | | |
| | 1.5nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.80** | **257** | P | | P | 10 17 50.1 | -0.3 |
| | 1.7nm,0.4s,baz=96,slow=7.0,SNR=9.8 | | | | | | | |
| | 1.7nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **51.00** | **252** | P | | P | 10 17 51.5 | -0.4 |
| | 5.5nm,0.6s,baz=90,slow=8.0,SNR=6.9 | | | | | | | |
| | 5.5nm,0.6s | | | | | | | |

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*IDC **19** 10:09:43.4±3.2, 17°.03S×178°.11W, h404km±32km, mb3.6/13, mbtmp4.3/14, Error ellipse: s-maj=18.8km s-min=12.5km az=100.0*
*NEIC **19** 10:09:45.7±1.0, 17°.0S±0°.1×177°.9W±0°.1, h429km±8km, mb4.4/23, Error ellipse: s-maj=19.3km s-min=14.9km az=54.0*

**ISC 19 10:09:47.0**±0.5, **16°.96S**±0°.09×**178°.00W**±0°.09, **h450**km, **n66, σ1°27/69, mb4.3/25, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.85** | **258** | | | **P** | **10 10 59.2** | **-1.8** |
| **AFI** | **Afiamalu** | **6.72** | **64** | P | | **P** | **10 11 24.8** | **-4.2** |
| **NIUE** | **Niue** | **7.96** | **107** | P | | **P** | **10 11 39.5** | **-2.6** |
| **PINNC** | **Pines Island,** | **14.81** | **245** | P | | **P** | **10 12 55.2** | **-0.9** |
| **DZM** | **Mont Dzumac** | **15.52** | **248** | P | | **P** | **10 13 04.2** | **+0.4** |
| DZM | | | | IAmb | | IAmb | 10 13 06.9 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.52** | **248** | P | | **P** | **10 13 01.2** | **-2.7** |
| | comp=Z,3.5nm,0.8s,baz=68,slow=21,SNR=9.1 | | | | | | | |
| **KUZ** | **Kuaotunu** | **20.48** | **195** | P | | **P** | **10 13 53.5** | **+0.8** |
| **MXZ** | **Matakaoa Point** | **20.78** | **188** | P | | **P** | **10 13 53.7** | **-1.7** |
| **ETAZ** | **East Tamaki Re** | **20.88** | **196** | P | | **P** | **10 13 58.1** | **+1.8** |
| **MKAZ** | **Moumakai** | **20.96** | **195** | P | | **P** | **10 13 58.3** | **+1.3** |
| **WMGZ** | **Waiomatatini S** | **21.02** | **188** | P | | **P** | **10 13 57.9** | **+0.3** |
| **HAZ** | **Te Kaha** | **21.05** | **189** | P | | **P** | **10 13 57.0** | **-0.8** |
| **PKGZ** | **Pakihiroa** | **21.11** | **189** | P | | **P** | **10 13 57.9** | **-0.6** |
| **RUGZ** | **Raukumara Rang** | **21.27** | **189** | P | | **P** | **10 13 58.6** | **-1.4** |
| **PUZ** | **Puketiti** | **21.29** | **188** | P | | **P** | **10 13 59.7** | **-0.3** |
| **TWGZ** | **Tauwhareparae** | **21.43** | **189** | P | | **P** | **10 14 02.0** | **+0.6** |
| **TOZ** | **Tahuroa Road** | **21.47** | **194** | P | | **P** | **10 14 03.1** | **+1.4** |
| **TOZ** | **Tahuroa Road** | **21.47** | **194** | P | | **P** | **10 14 03.5** | **+1.8** |
| **URZ** | **Urewera** | **21.65** | **190** | P | | **P** | **10 14 00.6** | **-2.6** |
| | comp=Z,18nm,0.3s,baz=353,slow=3.1,SNR=61 | | | | | | | |
| URZ | | | | S | | **S** | **10 17 32.2** | **+0.8** |
| | comp=Z,9.0nm,0.9s,baz=291,slow=14,SNR=1.8 | | | | | | | |
| | comp=Z,18nm,0.3s | | | | | | | |
| **URZ** | **Urewera** | **21.65** | **190** | P | | **P** | **10 14 01.1** | **-2.2** |
| **MWZ** | **Matawai** | **21.66** | **190** | P | | **P** | **10 14 01.5** | **-1.9** |
| **CNGZ** | **Carnagh Statio** | **21.70** | **188** | P | | **P** | **10 14 03.6** | **-0.1** |
| **TOO** | **Toolangi** | **38.07** | **230** | | | **P** | **10 16 25.5** | **-0.2** |
| TOO | | | | IAmb | | IAmb | 10 16 35.2 | |
| | comp=Z,61nm,1.4s | | | | | | | |
| **WAKE** | **Wake Island** | **39.05** | **337** | P | | **P** | **10 16 33.7** | **-0.1** |
| **STKA** | **Stephens Creek** | **39.44** | **240** | P | | **P** | **10 16 36.2** | **-0.7** |
| **STKA** | **Stephens Creek** | **39.44** | **240** | P | | **P** | **10 16 35.5** | **-1.4** |
| | comp=Z,2.6nm,0.4s,baz=83,slow=10,SNR=8.8 | | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | | |
| **BBOO** | **Buckleboo** | **44.21** | **240** | P | | **P** | **10 17 14.8** | **0.0** |
| BBOO | | | | IAmb | | IAmb | 10 17 15.4 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **45.01** | **259** | P | | **P** | **10 17 20.4** | **-0.9** |
| **WB0** | **Warramunga Arr** | **45.16** | **259** | P | | **P** | **10 17 22.0** | **-0.4** |
| **WB2** | **Warramunga Arr** | **45.19** | **259** | P | | **P** | **10 17 22.8** | **+0.2** |
| **WRA** | **Warramunga Arr** | **45.20** | **259** | P | | **P** | **10 17 22.3** | **-0.4** |
| **WRA** | **Warramunga Arr** | **45.20** | **259** | P | | **P** | **10 17 21.2** | **-1.5** |
| | comp=Z,4.9nm,0.9s,baz=94,slow=7.8,SNR=19 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **10 18 54.3** | **+0.4** |
| | comp=Z,0.9nm,0.6s,baz=92,slow=3.6,SNR=3.6 | | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **45.43** | **253** | P | | **P** | **10 17 24.3** | **-0.2** |
| AS31 | | | | IAmb | | IAmb | 10 17 25.9 | |
| | comp=Z,6.2nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.43** | **253** | P | | **P** | **10 17 24.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.43** | **253** | P | | **P** | **10 17 23.7** | **-0.8** |
| | comp=Z,23nm,0.6s,baz=90,slow=7.8,SNR=91 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **10 18 55.4** | **+0.8** |
| | comp=Z,1.8nm,0.5s,baz=102,slow=4.0,SNR=7.4 | | | | | | | |
| | comp=Z,23nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **49.23** | **268** | P | | **P** | **10 17 53.2** | **-0.1** |
| MTN | | | | IAmb | | IAmb | 10 18 16.0 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **FORT** | **Forrest** | **50.77** | **244** | P | | **P** | **10 18 04.0** | **-0.4** |
| FORT | | | | IAmb | | IAmb | 10 18 05.2 | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **50.98** | **263** | P | | **P** | **10 18 05.8** | **-0.4** |
| KNRA | | | | IAmb | | IAmb | 10 18 07.3 | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.58** | **260** | P | | **P** | **10 18 25.8** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **58.53** | **255** | P | | **P** | **10 18 59.3** | **-0.1** |
| PSA00 | | | | IAmb | | IAmb | 10 19 00.8 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **60.00** | **241** | P | | **P** | **10 19 08.9** | **-0.3** |
| NWAO | | | | IAmb | | IAmb | 10 19 45.2 | |
| | comp=Z,30nm,1.5s | | | | | | | |
| **MORW** | **Morawa** | **61.22** | **246** | P | | **P** | **10 19 17.0** | **-0.3** |
| MORW | | | | IAmb | | IAmb | 10 19 58.3 | |
| | comp=Z,22nm,1.5s | | | | | | | |
| **GIRL** | **Giralia** | **63.55** | **253** | P | | **P** | **10 19 33.1** | **+0.6** |
| **CASY** | **Casey** | **67.16** | **205** | P | | **P** | **10 19 55.6** | **+1.1** |
| CASY | | | | IAmb | | IAmb | 10 19 56.3 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.39** | **323** | P | | **P** | **10 19 55.9** | **-0.6** |
| | comp=Z,21nm,0.8s,baz=156,slow=6.0,SNR=7.2 | | | | | | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **70.64** | **331** | P | | **P** | **10 20 17.5** | **+1.6** |
| **QSPA** | **South Pole Qui** | **73.09** | **180** | P | | **P** | **10 20 31.4** | **+1.3** |
| QSPA | | | | IAmb | | IAmb | 10 20 33.6 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **73.09** | **180** | P | | **P** | **10 20 31.0** | **+0.8** |
| | comp=Z,8.3nm,0.9s,baz=43,slow=2.9,SNR=50 | | | | | | | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **74.26** | **318** | P | | **P** | **10 20 38.2** | **+1.1** |
| | comp=Z,0.5nm,0.6s,baz=132,slow=8.2,SNR=2.7 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.47** | **44** | P | | **P** | **10 21 02.5** | **+1.8** |
| | comp=Z,0.4nm,0.7s,baz=236,slow=7.1,SNR=4.8 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.88** | **13** | P | | **P** | **10 21 33.0** | **+0.2** |
| | comp=Z,1.2nm,1.0s,baz=235,slow=5.3,SNR=9.2 | | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | | |
| **MAW** | **Mawson** | **84.88** | **200** | P | | **P** | **10 21 33.5** | **+0.6** |
| | comp=Z,3.3nm,0.7s,baz=151,slow=8.0,SNR=8.0 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.16** | **58** | P | | **P** | **10 21 37.5** | **+2.5** |
| | comp=Z,0.7nm,0.7s,baz=211,slow=6.5,SNR=7.6 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **86.39** | **43** | P | | **P** | **10 21 41.9** | **+1.0** |
| | comp=Z,0.2nm,0.6s,baz=225,slow=3.3,SNR=2.2 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.25** | **180** | ⇑P | | **P** | **10 22 03.4** | **+0.4** |
| | comp=Z,139nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **91.53** | **178** | P | | **P** | **10 22 04.6** | **+0.4** |
| SNAA | | | | IAmb | | IAmb | 10 22 06.4 | |
| | comp=Z,7.1nm,1.4s | | | | | | | |
| **SNAA** | **Sanae** | **91.53** | **178** | ⇑P | | **P** | **10 22 04.3** | **+0.1** |
| | comp=Z,37nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **91.53** | **178** | P | | **P** | **10 22 04.4** | **+0.2** |
| | comp=Z,1.4nm,0.6s,baz=203,slow=9.2,SNR=13 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.66** | **176** | ⇑P | | **P** | **10 22 05.2** | **+0.5** |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.10** | **177** | ⇑P | | **P** | **10 22 07.5** | **+0.7** |
| | comp=Z,3.7nm,0.5s,baz=191,slow=4.8 | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.36** | **321** | PKP | | **PKiKP** | **10 27 38.8** | **+0.4** |
| | comp=Z,1.1nm,0.3s,baz=106,slow=2.0,SNR=7.4 | | | | | | | |
| **ARU** | **Arti** | **122.28** | **327** | PKP | | **PKiKP** | **10 27 50.0** | **+0.2** |
| | comp=Z,2.0nm,0.2s,baz=102,slow=19,SNR=3.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **125.45** | **350** | PKP | | **PKiKP** | **10 27 56.1** | **+0.3** |
| | comp=Z,0.5nm,0.5s,baz=37,slow=0.8,SNR=6.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.39** | **316** | PKP | | **PKiKP** | **10 28 32.4** | **-3.0** |
| | comp=Z,1.1nm,0.7s,baz=170,slow=3.8,SNR=6.1 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.95** | **304** | PKPbc | | **PKPab** | **10 28 36.9** | **-0.6** |
| | comp=Z,1.8nm,0.4s,baz=79,slow=4.5,SNR=4.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **176.20** | **175** | PKP | | **PKPdf** | **10 29 05.7** | **+0.2** |
| | comp=Z,0.5nm,0.8s,baz=189,slow=4.5,SNR=2.4 | | | | | | | |

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**IDC 19 10:14:34.6**±49.0, **16°.87S×177°.84W, h0**km, **mb4.3/3, mbtmp4.3/3, Error ellipse: s-maj=903.3km s-min=163.3km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **39.61** | **240** | P | | P | 10 22 08.3 | +0.2 |
| | 1.3nm,0.6s,baz=74,slow=15,SNR=2.9 | | | | | | | |
| | 1.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.37** | **258** | P | | P | 10 22 55.0 | -0.2 |
| | 1.3nm,0.4s,baz=94,slow=7.2,SNR=51 | | | | | | | |
| | 1.3nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.60** | **253** | P | | P | 10 22 56.6 | -0.3 |
| | 5.3nm,0.6s,baz=87,slow=8.9,SNR=74 | | | | | | | |
| | 5.3nm,0.6s | | | | | | | |

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**IDC 19 10:26:02.8**±46.0, **16°.44S×172°.28W, h0**km, **mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=898.8km s-min=184.7km az=80.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **44.47** | **241** | P | | P | 10 34 16.5 | +0.5 |
| | 0.9nm,0.4s,baz=87,slow=11,SNR=4.0 | | | | | | | |
| | 0.9nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.67** | **257** | P | | P | 10 35 03.8 | -0.5 |
| | 0.9nm,0.6s,baz=97,slow=6.8,SNR=18 | | | | | | | |
| | 0.9nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **50.83** | **253** | P | | P | 10 35 05.4 | -0.1 |
| | 6.2nm,0.6s,baz=89,slow=8.5,SNR=60 | | | | | | | |
| | 6.2nm,0.6s | | | | | | | |

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*HEL **19** 10:27:23.6±0.1, 67°.73N×34°.09E, h0km, ML2.2, Explosion*
*KOLA **19** 10:27:23.6, 67°.62N×34°.28E, h0km, ML2.3, Error ellipse: s-maj=11.2km s-min=3.7km az=140.0, Murmansk region, Kirovsk district*
*IDC **19** 10:27:25.1±2.9, 67°.77N×33°.94E, h0km, mbtmp2.8/2, ML2.0/2, Error ellipse: s-maj=30.5km s-min=11.8km az=71.0*

**ISC 19 10:27:23.1**±1.0, **67°.70N**±0°.04×**34°.16E**±0°.04, **h0**km, **n21, σ1°19/38, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **LVZ** | **Lovozero** | **0.28** | **42** | P | | **Pg** | **10 27 28.9** | **+0.5** |
| LVZ | | | | S | | **Sg** | **10 27 33.3** | **+1.4** |
| **LVZ** | **Lovozero** | **0.28** | **42** | *e*P | | **Pg** | **10 27 28.1** | **-0.3** |
| LVZ | | | | *e*S | | **Sg** | **10 27 32.6** | **+0.7** |
| **APA** | **Apatity** | **0.32** | **247** | P | | **Pg** | **10 27 29.4** | **+0.3** |
| APA | | | | S | | **Sg** | **10 27 34.2** | **+1.1** |
| **APA0** | **Apatity Array** | **0.46** | **259** | P | | **Pg** | **10 27 31.4** | **-0.4** |
| APA0 | | | | S | | **Sg** | **10 27 39.2** | **+1.6** |
| **TERR** | **Teriberka** | **1.55** | **13** | P | | **Pn** | **10 27 52.3** | **+0.4** |
| TERR | | | | S | | **Sg** | **10 28 13.1** | **+0.1** |
| **VRF** | **Varrio** | **1.74** | **274** | *e*P | | **Pn** | **10 27 54.2** | **-0.2** |
| VRF | | | | *e*SN | | **Sn** | **10 28 17.3** | **+0.1** |
| VRF | | | | MSG | | | 10 28 20.1 | |
| | comp=Z,11nm,0.1s | | | | | | | |
| **OLKF** | **Oulanka, Finla** | **2.32** | **236** | *e*PB | | **Pn** | **10 28 04.0** | **+1.5** |
| OLKF | | | | *e*SG | | **Sb** | **10 28 34.4** | **-0.6** |
| **RAJF** | **Raja-Jooseppi** | **2.33** | **292** | *e*P | | **Pn** | **10 28 02.7** | **+0.1** |
| RAJF | | | | *e*SB | | **Sn** | **10 28 32.1** | **+0.2** |
| **KU6** | **Riekki** | **2.38** | **227** | *e*P | | **Pn** | **10 28 04.2** | **+0.9** |
| KU6 | | | | *e*S | | **Sn** | **10 28 33.5** | **+0.5** |
| KU6 | | | | MSG | | | 10 28 38.0 | |
| | comp=Z,11nm,0.1s | | | | | | | |
| **MSF** | **Maaselka** | **2.71** | **231** | *e*PB | | **Pn** | **10 28 09.7** | **+1.9** |
| MSF | | | | *e*SB | | **Sb** | **10 28 44.9** | **-1.1** |
| **SGF** | **Sodankyl** | **2.94** | **269** | *e*PB | | **Pn** | **10 28 13.7** | **+2.7** |
| SGF | | | | *e*SB | | **Sb** | **10 28 50.6** | **-2.0** |
| **VADS** | **Vadso** | **2.99** | **327** | P | | **Pb** | **10 28 15.4** | **-1.8** |
| VADS | | | | S | | **Sn** | **10 28 49.9** | **+1.7** |
| **KEV** | **Kevo** | **3.33** | **312** | *e*P | | **Pn** | **10 28 16.9** | **+0.6** |
| KEV | | | | *e*S | | **Sn** | **10 28 55.2** | **-1.2** |
| KEV | | | | *e*SG | | **Sb** | **10 29 04.1** | **+0.3** |
| KEV | | | | MSG | | | 10 29 07.4 | |
| | comp=Z,8.1nm,0.2s | | | | | | | |
| **RNF** | **Rovaniemi** | **3.36** | **255** | *e*P | | **Pn** | **10 28 17.2** | **+0.4** |
| **RANF** | **Ranua** | **3.37** | **243** | *e*P | | **Pn** | **10 28 17.3** | **+0.5** |
| **ARCES** | **ARCESS Array B** | **3.67** | **304** | P | | **Pn** | **10 28 21.1** | **0.0** |
| ARCES | | | | S | | **Sn** | **10 29 04.4** | **-0.5** |
| **ARCES** | **ARCESS Array B** | **3.67** | **304** | Pn | | **Pn** | **10 28 21.0** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=118,slow=14,SNR=37 | | | | | | | |
| ARCES | | | | Sn | | **Sn** | **10 29 04.7** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=120,slow=27,SNR=8.1 | | | | | | | |
| ARCES | | | | Lg | Lg | | 10 29 15.5 | |
| | comp=Z,1.4nm,0.3s,baz=112,slow=33,SNR=13 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **KLF** | **Kolari** | **3.95** | **268** | *e*P | | **Pn** | **10 28 25.4** | **+0.6** |
| **HEF** | **Hetta** | **4.01** | **285** | *e*P | | **Pn** | **10 28 25.2** | **-0.4** |
| HEF | | | | *e*SG | | **Sb** | **10 29 26.2** | **+2.8** |
| **I37NO** | **I37NO** | **5.91** | **291** | I | | I | 11 04 04.6 | |
| | baz=95,slow=324 | | | | | | | |
| **FINES** | **FINESS Array B** | **7.17** | **213** | Pn | | **Pn** | **10 29 09.4** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=30,slow=13,SNR=1.4 | | | | | | | |
| FINES | | | | Sn | | **Sn** | **10 30 28.8** | **-2.3** |
| | comp=Z,0.1nm,0.3s,baz=28,slow=22,SNR=2.2 | | | | | | | |
| FINES | | | | Lg | Lg | | 10 31 01.9 | |
| | comp=Z,0.1nm,0.3s,baz=46,slow=28,SNR=3.0 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |

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*IDC **19** 10:29:51.0±3.1, 18°.17S×178°.07W, h549km±35km, mb3.6/16, mbtmp4.4/17, Error ellipse: s-maj=17.3km s-min=14.1km az=90.0*
*NEIC **19** 10:29:54.1±1.6, 18°.1S±0°.1×178°.2W±0°.1, h576km±9km, mb4.3/40, Error ellipse: s-maj=19.5km s-min=14.6km az=179.0*
*NOU **19** 10:30:00.5, 18°.54S×178°.91W, h567km, mb4.5/6, Fiji Islands Region*

**ISC 19 10:29:54.6**±0.5, **18°.16S**±0°.10×**178°.20W**±0°.09, **h590**km, **n126, σ0°77/127, mb4.2/36, 15C-9D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.60** | **276** | P | | **P** | **10 31 17.0** | **+0.3** |
| **MSVF** | **Nonsavu** | **3.60** | **276** | P | | **P** | **10 31 16.9** | **+0.2** |
| **AFI** | **Afiamalu** | **7.48** | **57** | | | **P** | **10 31 45.2** | **-3.6** |
| **NIUE** | **Niue** | **7.90** | **98** | P | | **P** | **10 31 52.9** | **+0.4** |
| **LIFNC** | **LIFOU** | **13.98** | **257** | P | | **P** | **10 32 51.5** | **-1.9** |
| **LIFNC** | **LIFOU** | **13.98** | **257** | P | | **P** | **10 32 51.0** | **-2.4** |
| **PINNC** | **Pines Island,** | **14.17** | **249** | P | | **P** | **10 32 53.5** | **-1.7** |
| **DZM** | **Mont Dzumac** | **14.94** | **252** | P | | **P** | **10 33 02.3** | **-0.3** |
| **DZM** | **Mont Dzumac** | **14.94** | **252** | P | | **P** | **10 33 01.9** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.94** | **252** | P | | **P** | **10 33 01.8** | **-0.9** |
| | 5.7nm,0.6s,baz=91,slow=16,SNR=15 | | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.70** | **259** | P | | **P** | **10 33 20.0** | **+1.1** |
| KOUNC | | | | IAmb | | IAmb | 10 33 29.4 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **URZ** | **Urewera** | **20.44** | **191** | P | | **P** | **10 33 49.7** | **-2.8** |
| | comp=Z,32nm,1.3s,baz=18,slow=2.3,SNR=1.8 | | | | | | | |
| | comp=Z,32nm,1.3s | | | | | | | |
| **QRZ** | **Quartz Range** | **23.95** | **198** | P | | **P** | **10 34 25.9** | **+2.0** |
| **ARMA** | **Armidale** | **29.99** | **240** | P | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **K17K** | **Iditarod** | **82.12** | **9** | P | | **P** | | **10 41 14.2** | **+0.3** |
| **G08A** | **Pilot Rock** | **82.89** | **38** | P | | **P** | | **10 41 18.6** | **+0.3** |
| **J18K** | **Innoko River** | **83.08** | **10** | P | | **P** | | **10 41 18.8** | **0.0** |
| J18K | | | | IAmb | | IAmb | | 10 41 19.8 | |
| | comp=Z,8.7nm,0.8s | | | | | | | | |
| **J20K** | **Nowinta River** | **84.16** | **10** | P | | **P** | | **10 41 24.3** | **+0.3** |
| J20K | | | | IAmb | | IAmb | | 10 41 24.9 | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **RND** | **Reindeer** | **84.47** | **13** | P | | **P** | | **10 41 25.5** | **-0.2** |
| **M27K** | **Edge Creek, AK** | **85.23** | **16** | P | | **P** | | **10 41 29.9** | **+0.4** |
| M27K | | | | IAmb | | IAmb | | 10 41 31.3 | |
| | comp=Z,7.5nm,1.0s | | | | | | | | |
| **Q32M** | **Nakina River** | **85.55** | **22** | P | | **P** | | **10 41 31.9** | **+0.7** |
| Q32M | | | | IAmb | | IAmb | | 10 41 32.6 | |
| | comp=Z,4.6nm,0.8s | | | | | | | | |
| **O30N** | **Mendenhall** | **85.63** | **19** | P | | **P** | | **10 41 32.0** | **+0.7** |
| O30N | | | | IAmb | | IAmb | | 10 41 32.7 | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.96** | **58** | P | | **P** | | **10 41 33.9** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=218,slow=5.9,SNR=6.7 comp=Z,0.7nm,0.7s | | | | | | | | |
| **IL31** | | **86.09** | **13** | P | | **P** | | **10 41 32.1** | **-1.1** |
| IL31 | | | | IAmb | | IAmb | | 10 41 33.5 | |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.09** | **13** | P | | **P** | | **10 41 32.8** | **-0.5** |
| **ILAR** | **Eielson Array** | **86.09** | **13** | P | | **P** | | **10 41 32.4** | **-0.9** |
| | comp=Z,1.6nm,0.4s,baz=221,slow=4.8,SNR=32 comp=Z,1.6nm,0.4s | | | | | | | | |
| **J25K** | **Salcha River,** | **86.28** | **14** | P | | **P** | | **10 41 34.3** | **-0.1** |
| **PDAR** | **Pinedale Array** | **87.40** | **43** | P | | **P** | | **10 41 40.1** | **-0.2** |
| | comp=Z,1.0nm,0.7s,baz=227,slow=2.4,SNR=13 comp=Z,1.0nm,0.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.16** | **290** | P | | **P** | | **10 41 49.9** | **+1.1** |
| | comp=Z,1.2nm,0.5s,baz=110,slow=3.3,SNR=8.2 comp=Z,1.2nm,0.5s | | | | | | | | |
| **H29M** | **Whitestone** | **89.26** | **15** | P | | **P** | | **10 41 48.5** | **+0.3** |
| **TROLL** | **Troll, Antarti** | **90.05** | **180** | ⇑P | | **P** | | **10 41 51.9** | **-0.2** |
| | comp=Z,86nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **90.34** | **179** | P | | **P** | | **10 41 52.7** | **-0.6** |
| SNAA | | | | IAmb | | IAmb | | 10 42 06.8 | |
| | comp=Z,5.8nm,1.4s | | | | | | | | |
| **SNAA** | **Sanae** | **90.34** | **179** | ⇑P | | **P** | | **10 41 52.7** | **-0.6** |
| | comp=Z,18nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **90.34** | **179** | P | | **P** | | **10 41 52.9** | **-0.4** |
| | comp=Z,1.2nm,0.8s,baz=202,slow=13,SNR=7.4 comp=Z,1.2nm,0.8s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.47** | **176** | ⇑P | | **P** | | **10 41 54.1** | **+0.2** |
| | comp=Z,4.9nm,0.7s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.91** | **177** | ⇑P | | **P** | | **10 41 56.0** | **+0.1** |
| | comp=Z,2.8nm,0.6s,baz=189,slow=6.3 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.14** | **177** | ⇑P | | **P** | | **10 41 55.4** | **-1.5** |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.17** | **321** | PKP | | **PKPdf** | | **10 47 32.6** | **-0.7** |
| | comp=Z,1.1nm,0.8s,baz=82,slow=2.0,SNR=4.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.60** | **350** | PKP | | **PKPdf** | | **10 47 50.7** | **-0.3** |
| | comp=Z,2.1nm,0.8s,baz=29,slow=2.8,SNR=4.4 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **140.88** | **332** | PKhKP | | PKPpre | | 10 48 11.6 | |
| | comp=Z,0.4nm,0.4s,baz=49,slow=2.7,SNR=5.0 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.71** | **5** | PKhKP | | PKPpre | | 10 48 17.7 | |
| | comp=Z,0.3nm,0.4s,baz=267,slow=1.2,SNR=1.8 | | | | | | | | |
| **BURAR** | **Bucovina Array** | **144.93** | **332** | ⇓P | | **PKPab** | | **10 48 27.3** | **0.0** |
| **GHRR** | | **145.03** | **328** | ⇑P | | **PKPab** | | **10 48 28.1** | **+0.6** |
| **TESR** | **Tescani** | **145.08** | **330** | ⇑P | | **PKPab** | | **10 48 27.3** | **-0.4** |
| **BRTR** | **Keskin Array B** | **145.10** | **315** | PKPbc | | **PKPbc** | | **10 48 27.1** | **0.0** |
| | comp=Z,2.7nm,0.7s,baz=137,slow=5.0,SNR=13 | | | | | | | | |
| **CFR** | **Carcaliu** | **145.26** | **327** | ⇓P | | **PKPbc** | | **10 48 27.4** | **+0.3** |
| **TPGR** | **Topolog** | **145.32** | **326** | ⇑P | | **PKPbc** | | **10 48 27.9** | **+0.6** |
| **ONER** | **Baraj Valea Uz** | **145.33** | **330** | ⇓P | | **PKPab** | | **10 48 28.3** | **-0.4** |
| **PLOR** | **Plostina** | **145.55** | **329** | ⇓P | | **PKPbc** | | **10 48 27.6** | **-0.4** |
| **BMR** | **Baia Mare** | **145.63** | **334** | ⇑P | | **PKPbc** | | **10 48 28.9** | **+0.8** |
| **OSTC** | **Ostas** | **145.69** | **344** | *e*PKP | | **PKPab** | | **10 48 29.6** | **-0.4** |
| **CLL** | **Collm** | **145.75** | **347** | ⇓*i*PKPbc | | **PKPbc** | | **10 48 28.6** | **+0.3** |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.85** | **343** | *e*PKP | | **PKPbc** | | **10 48 29.6** | **+0.9** |
| **BRG** | **Berggiesshubel** | **145.96** | **346** | *e*P | | **PKPbc** | | **10 48 29.6** | **+0.7** |
| BRG | | | | Amp | | | | 10 48 30.3 | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| **KRLC** | **Kraliky** | **145.97** | **343** | *e*PKP | | **PKPbc** | | **10 48 29.2** | **+0.1** |
| **MORC** | **Moravsky Berou** | **146.02** | **342** | *e*PKP | | **PKPbc** | | **10 48 29.8** | **+0.6** |
| **MORC** | **Moravsky Berou** | **146.02** | **342** | ⇓P | | **PKPbc** | | **10 48 29.1** | **-0.1** |
| **DOPR** | **Dopca** | **146.08** | **330** | ⇑P | | **PKPbc** | | **10 48 30.1** | **+0.6** |
| **MLR** | **Muntele Rosu** | **146.15** | **329** | ⇓P | | **PKPbc** | | **10 48 30.3** | **+0.4** |
| **MMAI** | **Mount Meron Ar** | **146.45** | **303** | PKPbc | | **PKPbc** | | **10 48 31.1** | **+0.1** |
| | comp=Z,3.5nm,0.5s,baz=61,slow=6.8,SNR=5.4 | | | | | | | | |
| **VOIR** | | **146.63** | **330** | ⇓P | | **PKPbc** | | **10 48 32.0** | **+0.9** |
| **PRU** | **Pruhonice** | **146.64** | **345** | *e*PKP | | **PKPbc** | | **10 48 31.3** | **+0.5** |
| **DRGR** | | **146.66** | **334** | ⇑P | | **PKPbc** | | **10 48 31.3** | **+0.2** |
| **VRAC** | **Vranov** | **146.71** | **342** | *e*PKP | | **PKPbc** | | **10 48 31.5** | **+0.4** |
| **ARR** | **Arges** | **146.88** | **330** | ⇑P | | **PKiKP** | | **10 48 33.0** | **-0.6** |
| **KRUC** | **Moravsky** | **146.99** | **342** | *e*PKP | | **PKPbc** | | **10 48 32.2** | **+0.4** |
| **ZVC** | **Zvikov** | **147.24** | **345** | *e*PKP | | **PKPab** | | **10 48 36.9** | **+0.7** |
| **SIRR** | **Siria** | **147.51** | **334** | ⇓P | | **PKPbc** | | **10 48 33.6** | **+0.4** |
| **KHC** | **Kasperske Hory** | **147.67** | **345** | *e*PKP | | **PKPbc** | | **10 48 34.3** | **+0.7** |
| **CKRC** | **Cesky Krumlov** | **147.78** | **344** | *e*PKP | | **PKiKP** | | **10 48 34.7** | **-0.6** |
| **GERES** | **GERESS Array B** | **147.91** | **345** | PKPbc | | **PKPbc** | | **10 48 34.2** | **-0.1** |
| | comp=Z,2.8nm,0.7s,baz=168,slow=8.2,SNR=16 | | | | | | | | |
| **BZS** | **Buzias** | **148.05** | **333** | ⇑P | | **PKPbc** | | **10 48 34.8** | **+0.2** |
| **CONA** | **Conrad Observa** | **148.17** | **342** | *i* PKP | | **PKiKP** | | **10 48 35.6** | **-0.6** |
| | comp=Z,2.2nm,0.7s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.24** | **341** | *e*PKP | | **PKiKP** | | **10 48 35.7** | **-0.6** |
| | comp=Z,1.7nm,0.5s | | | | | | | | |
| **MOA** | **Molln** | **148.69** | **344** | *i* PKP | | **PKPbc** | | **10 48 36.4** | **+0.2** |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **148.74** | **337** | ⇑P | | **PKPbc** | | **10 48 36.5** | **+0.2** |
| **LESA** | **Schwarzleotal** | **149.48** | **345** | *i* PKP | | **PKPbc** | | **10 48 38.2** | **0.0** |
| | comp=Z,1.8nm,0.4s | | | | | | | | |
| **SOKA** | **Soboth** | **149.54** | **342** | *e*PKP | | **PKPbc** | | **10 48 38.2** | **-0.2** |
| | comp=Z,0.9nm,0.4s | | | | | | | | |
| **BOVS** | **Bovan** | **149.56** | **331** | ⇑P | | **PKPbc** | | **10 48 38.2** | **-0.2** |
| **KBA** | **Koelnbreinsper** | **149.64** | **344** | *e*PKP | | **PKPbc** | | **10 48 38.8** | **+0.1** |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| **WATA** | **Walderalm** | **149.82** | **347** | *i* PKP | | **PKPbc** | | **10 48 39.0** | **0.0** |
| | comp=Z,2.4nm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.87** | **347** | *i* PKP | | **PKPbc** | | **10 48 39.4** | **+0.2** |
| | comp=Z,3.6nm,0.4s | | | | | | | | |
| **MOTA** | **Moosalm** | **149.91** | **347** | *i* PKP | | **PKPbc** | | **10 48 39.3** | **0.0** |
| | comp=Z,1.2nm,0.5s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.98** | **344** | *i* PKP | | **PKPbc** | | **10 48 38.9** | **-0.5** |
| | comp=Z,2.4nm,0.5s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.01** | **347** | *i* PKP | | **PKPbc** | | **10 48 39.6** | **+0.2** |
| | comp=Z,2.2nm,0.4s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.16** | **345** | *i* PKP | | **PKPbc** | | **10 48 39.5** | **-0.3** |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **DAVA** | **Damuels** | **150.21** | **349** | *i* PKP | | **PKiKP** | | **10 48 40.4** | **-0.1** |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| **FETA** | **Feichten** | **150.30** | **348** | *i* PKP | | **PKiKP** | | **10 48 40.5** | **-0.2** |
| | comp=Z,2.4nm,0.6s | | | | | | | | |

**IDC 19 10:34:48.0±59.0, 16°05S×178°86W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=1073.0km s-min=164.2km az=76.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **39.17** | **239** | P | P | | 10 42 17.2 | -0.6 |
| | 1.5nm,0.6s,baz=100,slow=8.8,SNR=2.9 1.5nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.57** | **258** | P | P | | 10 43 02.4 | +0.2 |
| | 0.2nm,0.3s,baz=90,slow=7.7,SNR=11 0.2nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.90** | **252** | P | P | | 10 43 04.7 | -0.2 |
| | 1.9nm,0.6s,baz=88,slow=7.7,SNR=23 1.9nm,0.6s | | | | | | | |

**IDC 19 10:37:39.2±13.0, 17°93S×178°55W, h550km±152km, mb2.8/4, mbtmp3.7/4, Error ellipse: s-maj=60.6km s-min=37.0km az=73.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.50** | **260** | P | P | | 10 45 02.4 | 0.0 |
| | 0.2nm,0.4s,baz=93,slow=7.9,SNR=13 0.2nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.66** | **254** | P | P | | 10 45 03.5 | -0.1 |
| | 1.3nm,0.6s,baz=90,slow=7.9,SNR=12 | | | | | | | |
| ASAR | | | | PcP | PcP | | 10 46 33.0 | -1.4 |
| | 0.6nm,1.2s,baz=95,slow=4.0,SNR=1.6 1.3nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.13** | **180** | P | P | | 10 48 08.2 | +0.1 |
| | 1.7nm,1.0s,baz=220,slow=1.1,SNR=6.5 1.7nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.94** | **13** | P | P | | 10 49 21.0 | +0.2 |
| | 0.2nm,0.7s,baz=226,slow=7.5,SNR=1.6 0.2nm,0.7s | | | | | | | |

# 2018 AUG

*IDC **19** 10:42:13.8±0.5, 8°18S×116°63E, h0km, mb4.3/18, mbtmp4.4/19, ML4.4/1, MS3.4/3, Error ellipse: s-maj=19.8km s-min=10.7km az=79.0*
*DJA **19** 10:42:17.2±0.3, 8°S±2°×117°7E°, h13km±2km, M4.8/24, mB5.3/8, mb4.9/24, MLv4.9/18, Mw(mB)4.7/8*
*NEIC **19** 10:42:18.0±1.9, 8°26S±0°06×116°65E±0°07, h19km±4km, mb4.7/19, Error ellipse: s-maj=10.2km s-min=8.5km az=48.0*

**ISC 19 10:42:16.1±0.4, 8°26S±0°04×116°65E±0°04, h10km, n114, σ1°30/119, mb4.6/28, MS3.5/3, 2C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.52** | **154** | P | P | **Pg** | **10 42 27.3** | **+1.0** |
| TWSI | | | | S | S | **Sg** | **10 42 35.0** | **+1.7** |
| **PLAI** | **Plampang** | **1.25** | **117** | P | P | **Pn** | **10 42 40.2** | **+0.6** |
| **PLAI** | **Plampang** | **1.25** | **117** | P | P | **Pn** | **10 42 40.5** | **+0.9** |
| PLAI | | | | S | S | **Sg** | **10 42 58.2** | **+1.9** |
| **SRBI** | **Singaraja** | **1.43** | **277** | P | P | **Pn** | **10 42 41.7** | **-0.5** |
| SRBI | | | | S | S | **Sn** | **10 43 02.2** | **+1.1** |
| **DNP** | **Denpasar** | **1.48** | **254** | P | P | **Pn** | **10 42 43.9** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **265** | P | P | **Pn** | **10 42 56.4** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **265** | Pn | Pn | **Pn** | **10 42 56.1** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **265** | P | P | **Pn** | **10 42 56.2** | **-0.4** |
| JAGI | | | | S | S | **Sn** | **10 43 25.1** | **-1.9** |
| **WBSI** | **Waikabubak, Su** | **3.03** | **117** | P | P | **Pn** | **10 43 04.8** | **+0.5** |
| **BASI** | **Baing, Sumba** | **4.34** | **117** | P | P | **Pn** | **10 43 24.0** | **+1.9** |
| **GRJI** | **Gresik** | **4.35** | **288** | P | P | **Pn** | **10 43 23.1** | **+0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.35** | **61** | P | P | **Pn** | **10 43 22.4** | **0.0** |
| **KAPI** | **Kappang** | **4.46** | **44** | P | P | **Pn** | **10 43 23.8** | **-0.1** |
| **KAPI** | **Kappang** | **4.46** | **44** | | | **Pn** | **10 43 23.7** | **-0.1** |
| **KAPI** | **Kappang** | **4.46** | **44** | Pn | | **Pn** | **10 43 23.4** | **-0.5** |
| | 20nm,0.3s,baz=187,slow=5.0,SNR=122 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **10 44 14.1** | **-1.8** |
| | 34nm,0.3s,baz=182,slow=20,SNR=10 49nm,0.3s | | | | | | | |
| **PWJI** | **Pagerwojo** | **4.80** | **273** | P | | **Pn** | **10 43 29.8** | **+1.2** |
| **EDFI** | **Ende, Flores** | **5.01** | **96** | P | | **Pn** | **10 43 32.7** | **+1.2** |
| **BNSI** | **Bone** | **5.15** | **42** | P | | **Pn** | **10 43 35.3** | **+2.0** |
| | 140nm,0.7s,3μm1.3nm | | | | | | | |
| **MMRI** | **Maumere** | **5.54** | **94** | P | | **Pn** | **10 43 40.2** | **+1.5** |
| **MMRI** | **Maumere** | **5.54** | **94** | Pn | | **Pn** | **10 43 38.9** | **+0.2** |
| **UGM** | **Wanagama** | **6.08** | **273** | P | | **Pn** | **10 43 46.5** | **+0.4** |
| **UGM** | **Wanagama** | **6.08** | **273** | Pn | | **Pn** | **10 43 46.8** | **+0.6** |
| **UGM** | **Wanagama** | **6.08** | **273** | P | | **Pn** | **10 43 47.3** | **+1.2** |
| **BATI** | **Baumata** | **7.19** | **106** | P | | **Pn** | **10 44 03.1** | **+1.7** |
| | 104nm,0.8s,0.4nm | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.48** | **346** | P | | **Pn** | **10 44 06.1** | **+0.7** |
| | 103nm,0.6s | | | | | | | |
| **SOEI** | **Soe** | **7.67** | **102** | P | | **Pn** | **10 44 09.6** | **+1.5** |
| | 164nm,1.0s | | | | | | | |
| **KPJI** | **Karang Pucung** | **7.70** | **276** | P | | **Pn** | **10 44 10.3** | **+1.9** |
| | 66nm,0.8s,0.2nm | | | | | | | |
| **CMJI** | **Cimerak** | **8.14** | **273** | P | | **Pn** | **10 44 16.3** | **+1.9** |
| | 90nm,0.9s | | | | | | | |
| **BBJI** | **Bungbulang** | **8.95** | **274** | P | | **Pn** | **10 44 28.0** | **+2.4** |
| **LUWI** | **Luwuk** | **9.42** | **41** | P | | **Pn** | **10 44 33.0** | **+1.1** |
| | 38nm,1.0s,2μm | | | | | | | |
| **CNJI** | **Cibinong** | **9.48** | **275** | P | | **Pn** | **10 44 33.8** | **+1.0** |
| **SANI** | **Sanana** | **11.16** | **57** | P | | **Pn** | **10 44 59.5** | **+3.7** |
| | 38nm,1.2s,1μm | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.12** | **139** | P | | **Pn** | **10 45 21.8** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **13.12** | **139** | Pn | | **Pn** | **10 45 21.7** | **-0.8** |
| **MBWA** | **Marble Bar** | **13.16** | **167** | P | | **Pn** | **10 45 21.6** | **-1.6** |
| **MBWA** | **Marble Bar** | **13.16** | **167** | Pn | | **Pn** | **10 45 21.4** | **-1.8** |
| **PSA00** | **Pilbara Seismi** | **13.59** | **167** | P | | **Pn** | **10 45 27.3** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **13.59** | **167** | Pn | | **Pn** | **10 45 27.3** | **-1.7** |
| **KNRA** | **Kununurra** | **13.95** | **123** | Pn | | **Pn** | **10 45 33.0** | **-1.0** |
| **GIRL** | **Giralia** | **14.48** | **189** | P | | **Pn** | **10 45 39.3** | **-2.0** |
| **GIRL** | **Giralia** | **14.48** | **189** | Pn | | Pn | 10 45 38.2 | -3.1 |
| **MTN** | **Manton Dam** | **14.95** | **109** | Pn | | Pn | 10 45 44.6 | -3.1 |
| **MEEK** | **Meekatharra** | **18.37** | **174** | P | | **Pn** | **10 46 31.6** | **+0.5** |
| **WRKA** | **Warakurna** | **20.04** | **148** | P | | **P** | **10 46 50.6** | **+1.1** |
| **WB0** | **Warramunga Arr** | **20.64** | **125** | | | **P** | **10 46 56.0** | **0.0** |
| WB0 | | | | IAmb | | IAmb | 10 47 18.0 | |
| | comp=Z,25nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.69** | **126** | | | **P** | **10 46 56.5** | **-0.1** |
| **WRA** | **Warramunga Arr** | **20.69** | **126** | P | | **P** | **10 46 56.1** | **-0.5** |
| | comp=Z,11nm,0.8s,baz=299,slow=12,SNR=85 | | | | | | | |
| WRA | | | | S | | **S** | **10 50 44.4** | **-3.5** |
| | comp=Z,0.8nm,0.7s,baz=297,slow=20,SNR=2.4 comp=Z,11nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.69** | **126** | P | | **P** | **10 46 56.7** | **+0.1** |
| WRAB | | | | IAmb | | IAmb | 10 47 02.3 | |
| | comp=Z,24nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.70** | **126** | | | **P** | **10 46 56.6** | **0.0** |
| WB2 | | | | IAmb | | IAmb | 10 47 08.4 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **MORW** | **Morawa** | **20.70** | **182** | P | | **P** | **10 46 57.2** | **+0.6** |
| **MORW** | **Morawa** | **20.70** | **182** | | | **P** | **10 46 57.2** | **+0.6** |
| MORW | | | | IAmb | | IAmb | 10 47 02.9 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.86** | **126** | P | | **P** | **10 46 58.5** | **+0.1** |
| **BLDU** | **Ballidu** | **22.24** | **180** | P | | **P** | **10 47 13.2** | **+0.1** |
| **AS31** | **Alice Springs** | **22.54** | **135** | P | | **P** | **10 47 16.2** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.54** | **135** | P | | **P** | **10 47 16.2** | **-0.2** |
| | comp=Z,19nm,0.8s,baz=311,slow=7.0,SNR=96 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **10 51 09.2** | **-1.1** |
| | comp=Z,1.2nm,0.7s,baz=330,slow=1.4,SNR=4.2 | | | | | | | |
| ASAR | | | | S | | **S** | **10 51 22.4** | **-1.4** |
| | comp=Z,1.8nm,0.9s,baz=300,slow=20,SNR=1.6 comp=Z,19nm,0.8s | | | | | | | |
| **KLBR** | **Kellerberrin** | **23.23** | **178** | P | | **P** | **10 47 25.2** | **+1.6** |
| **KMBL** | **Kambalda** | **23.50** | **169** | P | | **P** | **10 47 26.2** | **-0.1** |
| **MUN** | **Mundaring** | **23.60** | **181** | P | | **P** | **10 47 27.4** | **+0.2** |
| **NWAO** | **Narrogin (SRO)** | **24.55** | **179** | P | | **P** | **10 47 36.2** | **0.0** |
| **NWAO** | **Narrogin (SRO)** | **24.55** | **179** | | | **P** | **10 47 36.1** | **0.0** |
| NWAO | | | | IAmb | | IAmb | 10 48 10.7 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.55** | **179** | P | | **P** | **10 47 35.7** | **-0.4** |
| | comp=Z,6.9nm,0.8s,baz=4.0,slow=7.7,SNR=5.5 | | | | | | | |
| NWAO | | | | S | | **S** | **10 51 59.0** | **+2.1** |
| | comp=Z,8.1nm,1.0s,baz=299,slow=19,SNR=2.6 comp=Z,6.9nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **24.81** | **156** | P | | **P** | **10 47 39.5** | **+1.0** |
| **FORT** | **Forrest** | **24.81** | **156** | P | | **P** | **10 47 39.3** | **+0.8** |
| **QIS** | **Mount Isa** | **25.33** | **121** | P | | **P** | **10 47 44.8** | **+1.5** |
| **OOD** | **Oodnadatta** | **26.48** | **140** | P | | **P** | **10 47 53.5** | **-0.2** |
| **COEN** | **Coen** | **26.62** | **105** | P | | **P** | **10 47 55.4** | **+0.3** |
| **COEN** | **Coen** | **26.62** | **105** | P | | **P** | **10 47 54.9** | **-0.2** |
| COEN | | | | IAmb | | IAmb | 10 48 00.6 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.33** | **146** | P | | **P** | **10 48 27.6** | **-0.4** |
| **BBOO** | **Buckleboo** | **30.33** | **146** | P | | **P** | **10 48 26.9** | **-1.1** |
| BBOO | | | | IAmb | | IAmb | 10 48 28.6 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **CTA** | **Charters Tower** | **30.95** | **115** | P | | **P** | **10 48 33.5** | **-0.2** |
| | comp=Z,0.3nm,1.0s,baz=259,slow=10,SNR=3.6 | | | | | | | |
| CTA | | | | LR | | LR | 11 03 18.9 | |
| | comp=Z,19nm,18.4s,baz=262,slow=41 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.79** | **327** | P | | **P** | **10 48 43.0** | **+2.0** |
| **CMAR** | **Chiang Mai Arr** | **31.79** | **327** | P | | **P** | **10 48 40.0** | **-0.9** |
| | comp=Z,1.6nm,0.8s,baz=160,slow=6.8,SNR=8.7 comp=Z,1.6nm,0.8s | | | | | | | |
| **HTT** | **Hallett** | **32.41** | **144** | P | | **P** | **10 48 47.0** | **+0.6** |
| **STKA** | **Stephens Creek** | **33.01** | **139** | P | | **P** | **10 48 51.8** | **+0.2** |
| **STKA** | **Stephens Creek** | **33.01** | **139** | P | | **P** | **10 48 51.9** | **+0.2** |
| **STKA** | **Stephens Creek** | **33.01** | **139** | P | | **P** | **10 48 51.4** | **-0.2** |
| | comp=Z,5.8nm,0.6s,baz=314,slow=9.5,SNR=15 | | | | | | | |
| STKA | | | | LR | | LR | 11 03 00.5 | |
| | comp=Z,165nm,19.9s,baz=74,slow=38 comp=Z,5.8nm,0.6s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **36.46** | **145** | P | | **P** | **10 49 21.9** | **+0.6** |
| **TOO** | **Toolangi** | **39.14** | **143** | P | | **P** | **10 49 43.6** | **-0.5** |
| **NJ2** | **Nanjing** | **40.14** | **3** | *e*P | | **P** | **10 49 56.3** | **+4.0** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **SHL** | **Shillong** | **41.37** | **325** | P | | **P** | **10 50 03.1** | **+0.3** |
| SHL | | | | IAmb | | IAmb | 10 50 04.6 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **HNS** | **HongShan** | **45.46** | **358** | *e*P | | **P** | **10 50 35.4** | **0.0** |
| **LZH** | **Lanzhou** | **45.73** | **345** | *e*P | | P | 10 50 28.5 | -9.3 |
| LZH | | | | sP | | pP | 10 50 37.1 | -3.7 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **KSRS** | **Korea Array** | **46.69** | **12** | P | | **P** | **10 50 42.8** | **-2.3** |
| | comp=Z,0.8nm,0.8s,baz=195,slow=6.9,SNR=4.0 comp=Z,0.8nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.95** | **23** | P | | **P** | **10 51 01.9** | **-0.9** |
| | comp=Z,1.5nm,0.7s,baz=194,slow=8.8,SNR=3.8 comp=Z,1.5nm,0.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.09** | **355** | *e*P | | **P** | **10 51 07.6** | **+3.8** |
| HHC | | | | pP | | sP | 10 51 13.5 | +5.5 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,77nm,4.3s | | | | | | | |
| **GTA** | **Gaotai** | **49.94** | **343** | P | | **P** | **10 51 13.0** | **+2.6** |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **MDJ** | **Mudanjiang** | **53.92** | **11** | P | | **P** | **10 51 40.0** | **+0.2** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.03** | **14** | P | | **P** | **10 51 38.4** | **-2.2** |
| | comp=Z,3.1nm,0.7s,baz=181,slow=8.4,SNR=8.0 comp=Z,3.1nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **56.59** | **352** | P | | **P** | **10 51 58.2** | **-0.9** |
| | comp=Z,1.6nm,0.7s,baz=172,slow=7.4,SNR=6.4 comp=Z,1.6nm,0.7s | | | | | | | |
| **HEH** | **HeiHe** | **59.02** | **8** | *e*P | | **P** | **10 52 16.5** | **+0.5** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **62.77** | **334** | P | | **P** | **10 52 41.1** | **-0.5** |
| MK31 | | | | IAmb | | IAmb | 10 52 43.4 | |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.77** | **334** | P | | **P** | **10 52 41.6** | **0.0** |
| **MKAR** | **Makanchi Array** | **62.77** | **334** | P | | **P** | **10 52 40.2** | **-1.4** |
| | comp=Z,2.9nm,0.8s,baz=145,slow=5.6,SNR=18 comp=Z,2.9nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.30** | **335** | P | | **P** | **10 53 10.7** | **-0.3** |
| | comp=Z,2.2nm,0.2s,baz=143,slow=5.0,SNR=4.4 comp=Z,2.2nm,0.2s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.55** | **340** | P | | **P** | **10 53 11.4** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **67.55** | **340** | P | | **P** | **10 53 10.8** | **-1.7** |
| | comp=Z,1.4nm,0.6s,baz=147,slow=4.6,SNR=5.8 comp=Z,1.4nm,0.6s | | | | | | | |
| **MAW** | **Mawson** | **69.14** | **199** | P | | **P** | **10 53 22.5** | **+0.2** |
| | comp=Z,6.9nm,0.8s,baz=40,slow=9.5,SNR=12 comp=Z,6.9nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.36** | **25** | LR | | LR | 11 24 12.1 | |
| | comp=Z,27nm,20.8s,baz=158,slow=36 | | | | | | | |
| **BVAR** | **Borovoye Array** | **72.57** | **333** | P | | **P** | **10 53 41.8** | **-1.6** |
| | comp=Z,1.1nm,0.7s,baz=124,slow=7.4,SNR=5.2 comp=Z,1.1nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **75.64** | **326** | P | | **P** | **10 53 59.3** | **-2.1** |
| **QSPA** | **South Pole Qui** | **81.73** | **180** | P | | **P** | **10 54 35.2** | **+0.4** |
| QSPA | | | | IAmb | | IAmb | 10 54 37.6 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.73** | **180** | P | | **P** | **10 54 34.7** | **-0.1** |
| | comp=Z,6.0nm,1.0s,baz=318,slow=3.5,SNR=9.3 comp=Z,6.0nm,1.0s | | | | | | | |
| **POGA** | **Pongola** | **81.79** | **244** | P | | **P** | **10 54 36.2** | **+0.3** |
| **BOSA** |

MTHZ **Maungataniwha** 21.31 191 P P 10 48 58.5 -0.7
MRHZ **Matea Rd** 21.37 192 P P 10 48 59.3 -0.5
HIZ **Hauiti** 21.42 196 P P 10 49 03.6 +3.4
NMHZ **Naumai** 21.55 191 P P 10 49 01.1 -0.3
BKZ **Black Stump Fm** 21.68 192 P P 10 49 01.1 -1.4
TMVZ **Te Maari** 21.79 193 P P 10 49 04.0 +0.4
ETVZ **East Tongariro** 21.81 193 P P 10 49 03.5 -0.3
TWVZ **Taurewa** 21.81 194 P P 10 49 04.1 +0.3
WTVZ **West Tongariro** 21.82 194 P P 10 49 04.9 +1.0
NNVZ **North Ngauruho** 21.83 194 P P 10 49 04.9 +0.9
OTVZ **Oturere** 21.85 193 P P 10 49 03.3 -0.9
NGZ **Ngauruhoe** 21.87 194 P P 10 49 04.9 +0.5
SNVZ **South Ngauruho** 21.87 194 P P 10 49 04.7 +0.3
MCHZ **McNeill Hill** 21.91 191 P P 10 49 04.4 -0.1
KWHZ **Kaweka Forest** 21.94 192 P P 10 49 04.3 -0.6
FWVZ **Far West T-bar** 21.96 194 P P 10 49 05.0 -0.2
WHVZ **Whangaehu Hut** 21.98 194 P P 10 49 05.1 -0.3
WNVZ **Wahianoa** 22.02 193 P P 10 49 05.3 -0.5
VRZ **Vera Road** 22.02 195 P P 10 49 08.0 +2.4
MOVZ **Moawhango** 22.06 193 P P 10 49 06.2 +0.3
KRHZ **Kereru** 22.16 192 P P 10 49 06.5 -0.3
KAHZ **Kahuranaki** 22.21 191 P P 10 49 07.3 0.0
NEZ **North Egmont** 22.33 196 P P 10 49 12.0 +3.5
NBEZ **Newall Road No** 22.39 197 P P 10 49 12.8 +3.9
PXZ **Pawanui** 22.45 191 P P 10 49 09.3 0.0
PNHZ **Pukenui** 22.46 192 P P 10 49 08.9 -0.5
NMEZ **Namu Road** 22.53 197 P P 10 49 13.8 +3.7
WAZ **Wanganui** 22.57 194 P P 10 49 12.1 +1.7
DVHZ **Dannevirke** 22.84 192 P P 10 49 12.9 +0.1
ANWZ **Angora Road** 22.93 191 P P 10 49 13.8 +0.2
BFZ **Birch Farm** 23.19 191 P P 10 49 15.3 -0.6
MRZ **Mangatainoka R** 23.30 193 P P 10 49 15.4 -1.5
HOWZ **Holdsworth Sta** 23.54 193 P P 10 49 18.8 -0.3
SNZO **South Karori** 24.11 194 P P 10 49 23.5 -0.6
QRZ **Quartz Range** 24.22 198 P P 10 49 26.5 +1.5
KHZ **Kahutara** 25.43 195 P P 10 49 35.7 0.0
INZ **Inchbonnie** 26.28 198 P P 10 49 43.4 +0.2
PPT **Papeete** 26.99 94 P P 10 49 51.1 +1.3
comp=Z,29nm,0.7s,baz=54,slow=5.1,SNR=9.1
comp=Z,29nm,0.7s
PPTF **Pamatai, Papee** 27.00 94 P P 10 49 51.0 +1.1
RPZ **Rata Peaks** 27.31 198 P P 10 49 53.6 +1.4
JCZ **Jackson Bay** 28.33 200 P P 10 50 02.5 +1.3
ODZ **Otahua Downs** 28.64 197 P P 10 50 04.2 +0.5
EIDS **Eidsvold** 29.68 250 P P 10 50 13.9 +0.9
EIDS **Eidsvold** 29.68 250 P 10 50 13.5 +0.5
EIDS IAmb IAmb 10 50 14.1
comp=Z,19nm,0.7s
ARMA **Armidale** 30.31 240 P P 10 50 19.5 +1.0
ARMA **Armidale** 30.31 240 P 10 50 20.0 +1.5
AUPHS **Peel High Scho** 31.12 239 P P 10 50 27.0 +1.7
SYDH **Sydney Hard Ro** 32.12 235 P P 10 50 34.8 +1.1
AULRC **Lightning Ridg** 33.12 243 P P 10 50 43.0 +0.8
AUDCS **Dubbo College** 33.30 238 P P 10 50 44.6 +0.9
CNB **Canberra Magne** 33.76 233 P P 10 50 49.4 +1.8
CTA **Charters Tower** 33.89 261 P P 10 50 49.0 +0.2
comp=Z,0.2nm,0.7s,baz=87,slow=12,SNR=6.6
CTAO **Charters Tower** 33.89 261 P P 10 50 48.8 0.0
CTAO IAmb IAmb 10 50 53.1
comp=Z,11nm,1.3s
CAN **Canberra** 34.03 233 P P 10 50 51.3 +1.4
CAN **Canberra** 34.03 233 P 10 50 51.2 +1.4
PMG **Port Moresby** 34.92 279 P P 10 50 58.5 +1.1
PMG **Port Moresby** 34.92 279 P P 10 50 58.2 +0.8
PMG **Port Moresby** 34.92 279 P P 10 50 57.4 0.0
PMG **Port Moresby** 34.92 279 P P 10 50 57.9 +0.4
comp=Z,47nm,0.8s,baz=86,slow=8.4,SNR=11
comp=Z,47nm,0.8s
CMSA **Cobar Meteorol** 35.52 241 P P 10 51 03.4 +1.2
QLP **Quilpie** 35.94 249 P P 10 51 06.5 +0.8
GLAD **Gladstone** 37.13 225 P P 10 51 16.2 +1.0
TOO **Toolangi** 37.49 231 P P 10 51 19.6 +1.9
TOO **Toolangi** 37.49 231 P P 10 51 19.6 +1.3
MANU **Manus Island** 37.55 291 P P 10 51 19.6 +0.6
COEN **Coen** 37.56 270 P P 10 51 20.4 +1.2
COEN **Coen** 37.56 270 P 10 51 20.0 +0.9
COEN IAmb IAmb 10 51 20.8
comp=Z,27nm,0.8s
CORO **Coronation Par** 37.93 224 P P 10 51 22.9 +1.2
TAU **Tasmania Unive** 38.51 222 P P 10 51 27.4 +1.0
BRAT **Ballarat** 38.65 232 P P 10 51 29.2 +1.7
STKA **Stephens Creek** 39.01 241 P P 10 51 31.9 +1.3
STKA **Stephens Creek** 39.01 241 P P 10 51 31.5 +0.9
STKA IAmb IAmb 10 51 32.8
comp=Z,11nm,0.9s
STKA **Stephens Creek** 39.01 241 P P 10 51 31.9 +1.3
comp=Z,35nm,0.8s,baz=89,slow=9.5,SNR=31
comp=Z,35nm,0.8s
INKA **Innaminka** 39.15 248 P P 10 51 33.4 +1.6
ARPS **Mount Arapiles** 39.99 234 P P 10 51 39.5 +1.2
HTT **Hallett** 41.51 240 P P 10 51 51.6 +1.0
LCRK **Leigh Creek** 41.64 244 P P 10 51 52.7 +1.1
TABU **Tabubil** 41.84 282 P P 10 51 54.3 +0.9
WHYH **Whyalla** 42.55 241 P P 10 51 59.5 +0.9
OOD **Oodnadatta** 43.62 248 P P 10 52 08.4 +1.4
BBOO **Buckleboo** 43.78 241 P P 10 52 08.8 +0.6
BBOO **Buckleboo** 43.78 241 P 10 52 08.6 +0.5
GENI **Genyem** 43.82 286 P P 10 52 09.4 +0.7
WR0 **Warramunga Arr** 44.88 260 P P 10 52 17.1 +0.3
WR0 IAmb IAmb 10 52 56.3
comp=Z,16nm,1.2s
WB0 **Warramunga Arr** 45.04 260 P P 10 52 17.9 -0.2
WB0 IAmb IAmb 10 52 18.3
comp=Z,28nm,1.2s
WB2 **Warramunga Arr** 45.06 260 P P 10 52 18.1 -0.2
WB2 IAmb IAmb 10 52 18.5
comp=Z,39nm,1.2s
WRA **Warramunga Arr** 45.07 260 P P 10 52 17.4 -0.9
comp=Z,9.9nm,0.4s,baz=96,slow=7.3,SNR=109
WRA PcP PcP 10 53 45.5 -0.7
comp=Z,2.1nm,0.5s,baz=89,slow=3.2,SNR=5.4
WRA S S 10 58 10.2 -5.3
comp=Z,3.0nm,0.7s,baz=95,slow=13,SNR=6.6
comp=Z,9.9nm,0.4s
AS01 **Alice Springs** 45.17 254 P P 10 52 19.4 +0.3
MULG **Mulgathing** 45.20 245 P P 10 52 19.3 +0.2
AS31 **Alice Springs** 45.22 254 P 10 52 19.5 +0.1
AS31 IAmb IAmb 10 52 20.1
comp=Z,22nm,1.1s
ASAR **Alice Springs** 45.22 254 P P 10 52 19.6 +0.3
ASAR **Alice Springs** 45.22 254 P P 10 52 19.4 +0.1
comp=Z,106nm,1.0s,baz=92,slow=7.6,SNR=252
ASAR PcP PcP 10 53 46.0 -0.8
comp=Z,6.4nm,0.6s,baz=106,slow=3.5,SNR=9.7
ASAR S S 10 58 14.4 -3.0
comp=Z,12nm,0.7s,baz=89,slow=15,SNR=37
comp=Z,106nm,1.0s
GUMO **Guam** 48.27 308 P P 10 52 42.0 -0.3
WRKA **Warakurna** 50.26 252 P P 10 52 57.2 +0.2
FORT **Forrest** 50.40 245 P P 10 52 58.5 +0.7
FORT **Forrest** 50.40 245 P 10 52 57.4 -0.4
KNRA **Kununurra** 50.94 264 P P 10 53 00.8 -1.1
PSA00 **Pilbara Seismi** 58.34 255 P P 10 53 53.1 -0.4
PSA00 **Pilbara Seismi** 58.34 255 P P 10 53 52.9 -0.6
PSA00 IAmb IAmb 10 53 53.6
comp=Z,18nm,0.7s
MBWA **Marble Bar** 58.51 256 P P 10 53 54.3 -0.3
MBWA IAmb IAmb 10 53 54.3
comp=Z,15nm,0.5s
KLBR **Kellerberrin** 59.22 244 P P 10 53 58.8 -0.4
NWAO **Narrogin (SRO)** 59.59 242 P P 10 54 01.3 -0.3
NWAO **Narrogin (SRO)** 59.59 242 P P 10 54 01.4 -0.3
comp=Z,9.1nm,0.7s,baz=122,slow=5.7,SNR=6.8
comp=Z,9.1nm,0.7s
MORW **Morawa** 60.88 246 P P 10 54 09.7 -0.6
CASY **Casey** 66.28 205 P P 10 54 44.2 +0.4
CASY IAmb IAmb 10 54 45.8
comp=Z,16nm,0.7s
MJAR **Matsushiro Arr** 68.23 323 P P 10 54 54.8 -1.4
comp=Z,3.9nm,0.6s,baz=163,slow=5.8,SNR=23
comp=Z,3.9nm,0.6s
JNU **Nakatsue** 70.50 316 P P 10 55 08.8 -1.0
comp=Z,16nm,1.2s,baz=309,slow=2.7,SNR=5.1
comp=Z,16nm,1.2s
QSPA **South Pole Qui** 72.09 180 P P 10 55 19.2 +0.4
QSPA IAmb IAmb 10 55 20.5
comp=Z,20nm,0.7s
QSPA **South Pole Qui** 72.09 180 P P 10 55 19.7 +0.9
comp=Z,21nm,0.6s,baz=41,slow=1.6,SNR=92
comp=Z,21nm,0.6s
KSRS **Korea Array** 75.05 318 P P 10 55 35.8 0.0
comp=Z,0.2nm,0.3s,baz=142,slow=7.6,SNR=4.5
SAO **San Andreas Ge** 76.15 44 P P 10 55 42.5 +0.6
SAO IAmb IAmb 10 55 43.4
comp=Z,12nm,0.8s
R16K **Pilot Point** 77.13 11 P P 10 55 49.1 +2.4
baz=200
VTX **Valle De La Tr** 77.20 51 P P 10 55 48.8 +0.9
MONP2 **Monument Peak** 77.50 49 P P 10 55 50.5 +0.9
baz=239
ISA **Isabella, Lake** 77.53 46 P P 10 55 49.3 -0.2
PFO **Pinyon Flats O** 77.85 49 P P 10 55 51.2 -0.2
comp=Z,2.5nm,0.7s,baz=128,slow=3.3,SNR=4.1
comp=Z,2.5nm,0.7s
PFO **Pinyon Flats O** 77.85 49 P P 10 55 51.4 +0.1
baz=239
TPFO **Pinon Flats** 77.85 49 P P 10 55 51.5 +0.2
baz=239
MDPB **Devils Postpil** 78.20 44 P P 10 55 53.7 +0.4
MDPB IAmb IAmb 10 55 54.5
comp=Z,12nm,0.9s
OMMB **Old Mammoth Mi** 78.24 44 P P 10 55 53.7 +0.1
YBH **Yreka Blue Hor** 78.28 39 P P 10 55 53.8 +0.3
comp=Z,5.9nm,0.6s,baz=174,slow=1.7,SNR=24
comp=Z,5.9nm,0.6s
Q18K **Katmai Hardscr** 78.64 12 P P 10 55 56.5 +1.5
baz=202
M11K **Mekoryuk** 78.65 6 P P 10 55 56.6 +1.8
baz=197
GWY **Greenwater Val** 79.04 46 P P 10 55 58.0 +0.3
RYN **Ryan** 79.11 43 P P 10 55 58.3 +0.3
NVAR **Mina Array Bea** 79.15 44 P P 10 55 58.5 +0.2
comp=Z,5.9nm,0.7s,baz=224,slow=8.7,SNR=58
comp=Z,5.9nm,0.7s
214A **Organ Pipe Nat** 79.69 52 P P 10 56 01.5 +0.5
baz=241
O18K **Koktuh Hills** 79.72 11 P P 10 56 00.1 -0.4
baz=202
TPNV **Topopah Spring** 79.73 46 P P 10 56 01.6 +0.3
baz=238
N17K **Nushagak Hills** 79.99 10 P P 10 56 02.1 +0.2
baz=200
J05D **Fort Rock, OR** 80.08 38 P P 10 56 03.5 +0.6
J05D IAmb IAmb 10 56 04.3
comp=Z,21nm,0.7s
M16K **Timber Creek** 80.18 9 P P 10 56 03.0 +0.2
M16K IAmb IAmb 10 56 12.7
comp=Z,21nm,1.2s
M16K **Timber Creek** 80.18 9 P P 10 56 03.2 +0.4
baz=198
O19K **Port Alsworth** 80.20 12 P P 10 56 01.7 -1.3
baz=203
L15K **Ungalak Mounta** 80.45 8 P P 10 56 03.8 -0.4
baz=196
BRSE **Bradley Lake S** 80.53 14 P P 10 56 04.5 -0.3
baz=206
L16K **Owhat River** 80.76 9 P P 10 56 06.0 +0.2
baz=198
M17K **Holitna River** 80.78 10 P P 10 56 06.2 +0.3
baz=200
R11B **Troy Canyon, C** 80.91 45 P P 10 56 06.6 -0.8
baz=238
K15K **Wolf Creek Mou** 81.04 8 P P 10 56 07.1 -0.2
K15K IAmb IAmb 10 56 08.2
comp=Z,18nm,0.8s
K15K **Wolf Creek Mou** 81.04 8 P P 10 56 07.9 +0.6
baz=196
HOOD **Mount Hood Mea** 81.05 36 P P 10 56 07.3 -0.6
HOOD IAmb IAmb 10 56 08.8
comp=Z,17nm,1.1s
J14K **Nanvaranak Lak** 81.24 7 P P 10 56 08.3 +0.1
baz=194
Q23K **Middleton Isla** 81.31 16 P P 10 56 08.7 0.0
baz=210
L17K **Donlin** 81.34 9 P P 10 56 09.0 +0.3
baz=199
TUC **Tucson** 81.37 52 P P 10 56 10.8 +1.1
baz=242
L18K **Granite Mounta** 81.67 10 P P 10 56 10.8 +0.3
baz=200
M19K **Big River Lodg** 81.77 11 P P 10 56 09.7 -1.3
baz=202
K17K **Iditarod** 81.89 9 P P 10 56 10.9 -0.7
baz=199
L19K **White Mountain** 81.95 11 P P 10 56 11.9 -0.1
baz=202
BELA **Belgrano 2** 82.05 173 P P 10 56 12.6 +0.3
BELA IAmb IAmb 10 56 13.4
comp=Z,20nm,0.7s
SUA **Susitna One** 82.08 13 P P 10 56 11.8 -1.0
baz=206
319A **Douglas** 82.09 54 P P 10 56 14.5 +1.0
319A IAmb IAmb 10 56 15.8
comp=Z,14nm,0.9s
J16K **Anvik River** 82.11 8 P P 10 56 11.2 -1.5
baz=197
ELK **Elko** 82.39 43 P P 10 56 15.0 +0.1
comp=Z,4.9nm,0.8s,baz=246,slow=5.0,SNR=21
comp=Z,4.9nm,0.8s
J17K **VABM Dome** 82.42 8 P P 10 56 13.8 -0.4
baz=198
WUAZ **Wupatki** 82.43 49 P P 10 56 15.9 +0.7
baz=242
PMR **Palmer** 82.55 13 P P 10 56 14.1 -0.8
baz=208
J18K **Innoko River** 82.84 9 P P 10 56 16.0 -0.3
baz=200,SNR=5.5
U33K **Whale Pass** 82.86 23 P P 10 56 16.1 -0.5
baz=222
MTPU **Mount Pierson** 83.07 46 P P 10 56 19.8 +1.2
BMRM **Bremner River** 83.09 16 P P 10 56 17.4 -0.3
baz=212
MESA **MESA** 83.14 17 P P 10 56 17.1 -1.1
baz=214
S31K **Pelican** 83.14 21 P P 10 56 17.6 -0.3
baz=220
SCM **Sheep Creek Mo** 83.17 14 P P 10 56 16.7 -1.5
baz=209
K20K **Telida** 83.17 11 P P 10 56 17.5 -0.5
baz=203,SNR=6.0
CRQE **Cirque** 83.30 16 P P 10 56 17.5 -1.4
baz=213
S32K **Killisnoo** 83.34 22 P P 10 56 18.6 -0.3
baz=221
WRAK **Wrangell Islan** 83.38 24 P P 10 56 18.8 -0.3
baz=223
PNL **Peninsula** 83.47 19 P P 10 56 19.3 -0.3
baz=217
J19K **Poorman** 83.51 10 P P 10 56 19.2 -0.5
baz=201
N25K **Chitina, Valde** 83.63 15 P P 10 56 19.9 -0.6
baz=212,SNR=6.3
M24K **Tolsona, Glenn** 83.68 14 P P 10 56 20.3 -0.3
baz=210
DUG **Dugway, Tooele** 83.70 44 P P 10 56 21.5 +0.1
baz=240
WAT6 **Susitna Watana** 83.73 14 P P 10 56 19.8 -1.3
baz=209,SNR=5.9
WAT1 **Susitna Watana** 83.77 13 P P 10 56 20.5 -0.6
baz=208
J20K **Nowinta River** 83.92 10 P P 10 56 21.2 -0.5
baz=203,SNR=5.7
P29M **Windy Craggy** 83.95 19 P P 10 56 22.1 +0.1
baz=218,SNR=5.5
CTG **Chitna Glacier** 83.96 17 P P 10 56 21.6 -0.5
baz=215
MAW **Mawson** 83.96 200 P P 10 56 22.6 +0.6
comp=Z,6.1nm,0.5s,baz=131,slow=5.7,SNR=22
comp=Z,6.1nm,0.5s
O28M **Mount Upton** 84.12 18 P P 10 56 22.5 -0.7
baz=216
HARP **HAARP** 84.17 15 P P 10 56 22.0 -1.0
baz=211
O29M **Mount Kennedy** 84.22 19 P P 10 56 22.8 -0.6
baz=217
DHY **Denali Highway** 84.25 13 P P 10 56 23.1 -0.4
baz=209
PLBC **Pleasant Camp** 84.25 20 P P 10 56 23.3 -0.1
baz=219,SNR=5.8
TMUT **Trail Mountain** 84.34 46 P P 10 56 25.0 +0.2
HLID **Hailey** 84.37 41 P P 10 56 24.8 +0.1
HLID **Hailey** 84.37 41 P P 10 56 25.2 +0.6
baz=239
MCK **McKinley** 84.50 13 P P 10 56 23.6 -1.0
baz=208
P30M **Million Dollar** 84.58 19 P P 10 56 25.4 +0.3
baz=219
T35M **Bob Quinn** 84.59 24 P P 10 56 25.5 +0.4
baz=225
PAX **Paxson** 84.59 14 P P 10 56 24.0 -1.1
baz=211
SKAG **Skagway** 84.59 20 P P 10 56 25.6 +0.5
baz=220
YUK8 **Steele Glacier** 84.66 17 P P 10 56 25.4 -0.3
baz=216
M26K **Nabesna, AK** 84.71 16 P P 10 56 24.9 -0.8
baz=213,SNR=7.6
YUK6 **Outpost Mounta** 84.80 18 P P 10 56 25.7 -0.7
baz=217
YUK3 **Moose Creek** 84.87 17 P P 10 56 26.0 -0.6
baz=216,SNR=9.0
S34M **Telegraph Cree** 84.92 23 P P 10 56 27.1 +0.5
baz=224,SNR=10
M27K **Edge Creek, AK** 84.97 16 P P 10 56 26.9 -0.2
baz=214,SNR=8.3
H20K **Anotleneega Mo** 85.02 9 P P 10 56 27.5 +0.4
baz=202
YUK4 **Talbot Arm** 85.03 18 P P 10 56 27.5 0.0
baz=217
TCUT **Toone Canyon** 85.08 44 P P 10 56 28.8 +0.5
TCUT IAmb IAmb 10 56 29.3
comp=Z,5.9nm,0.7s
L26K **Log Cabin Wild** 85.15 15 P P 10 56 27.8 0.0
baz=213
I21K **Tanana** 85.22 11 P P 10 56 27.1 -0.8
baz=205
P32M **Atlin** 85.23 21 P P 10 56 28.2 -0.1
baz=222
MNTX **Cornudas Mount** 85.23 55 P P 10 56 28.8 -0.1
baz=246
K24K **Donnelly Dome** 85.24 14 P P 10 56 27.5 -0.7
baz=210
Q32M **Nakina River** 85.27 22 P P 10 56 28.2 -0.4
Q32M IAmb IAmb 10 56 29.3
comp=Z,7.0nm,0.7s
Q32M **Nakina River** 85.27 22 P P 10 56 28.6 0.0
baz=223,SNR=7.6
MVCO **Mesa Verde** 85.27 49 P P 10 56 28.7 -0.5
baz=243
NEW **Newport** 85.29 36 P P 10 56 28.3 -0.5
comp=Z,3.2nm,0.7s,baz=226,slow=5.3,SNR=8.8
comp=Z,3.2nm,0.7s
NEW **Newport** 85.29 36 P P 10 56 28.6 -0.2
baz=236
MLY **Manley** 85.31 11 P P 10 56 27.1 -1.4
baz=206
G19K **Purcell Mounta** 85.31 8 P P 10 56 27.7 -0.7
baz=200
O30N **Mendenhall** 85.36 19 P P 10 56 28.5 -0.3
baz=220,SNR=7.1
RIDG **Independent Ri** 85.40 14 P P 10 56 28.6 -0.4
baz=211
HDA **Harding Lake** 85.51 13 P P 10 56 28.4 -1.0
baz=209
H21K **Melozitna Rive** 85.51 10 P P 10 56 28.3 -1.1
baz=204
L27K **Beaver Creek,** 85.56 16 P P 10 56 29.4 -0.4
baz=214
N30M **Aishikik Lake** 85.59 18 P P 10 56 29.4 -0.5
baz=219
TXAR **Lajitas Array** 85.64 57 P P 10 56 32.0 +1.0
comp=Z,6.7nm,0.7s,baz=221,slow=5.9,SNR=42
comp=Z,6.7nm,0.7s
WHY **Whitehorse** 85.65 20 P P 10 56 30.5 +0.1
baz=221
I23K **Minto, Yukon-K** 85.67 12 P P 10 56 28.8 -1.3
baz=207
DLBC **Dease Lake** 85.70 23 P P 10 56 30.5 -0.1
baz=225
COLA **College** 85.73 12 P P 10 56 29.1 -1.3
baz=208
ANMO **Albuquerque** 85.77 51 P P 10 56 31.4 -0.2
comp=Z,3.8nm,0.9s,baz=294,slow=6.4,SNR=18
comp=Z,3.8nm,0.9s
ANMO **Albuquerque** 85.77 51 P P 10 56 32.3 +0.7
baz=245
SCRK **Sand Creek** 85.80 14 P P 10 56 30.1 -0.8
baz=212
ILAR **Eielson Array** 85.84 13 P P 10 56 29.1 -1.9
comp=Z,1.6nm,0.4s,baz=223,slow=5.0,SNR=33
comp=Z,1.6nm,0.4s
F19K **Shaleruckik Mo** 85.87 8 P P 10 56 30.6 -0.5
baz=199
M29M **Somme Creek** 85.97 17 P P 10 56 31.2 -0.5
baz=217,SNR=5.7
H22K **Ishtalitna Cre** 85.97 11 P P 10 56 30.7 -0.9
baz=205
P33M **Teslin, Yukon** 86.00 21 P P 10 56 31.6 -0.3
baz=222,SNR=5.1
N31M **Braeburn, Yuko** 86.00 19 P P 10 56 31.4 -0.5
baz=220
J25K **Salcha River,** 86.03 13 P P 10 56 30.9 -1.1
J25K **Salcha River,** 86.03 13 P P 10 56 31.3 -0.7
baz=211
R33M **Jennings River** 86.04 22 P P 10 56 32.4 +0.1
R33M IAmb IAmb 10 56 33.2
comp=Z,13nm,1.5s
R33M **Jennings River** 86.04 22 P P 10 56 32.2 0.0
baz=224,SNR=5.3
E18K **Tukpahlearik C** 86.09 7 P P 10 56 32.5 +0.4
baz=196
G21K **Allakaket** 86.19 10 P P 10 56 31.9 -0.7
baz=203
K27K **Chicken** 86.30 15 P P 10 56 33.2 0.0
baz=214
J26L **Joseph Creek** 86.34 14 P P 10 56 33.1 -0.4
baz=212
MSO **Missoula** 86.34 38 P P 10 56 32.5 -1.5
baz=239
E19K **Redstone River** 86.53 8 P P 10 56 33.1 -1.1
baz=200
H24K **Noodor Dome** 86.57 12 P P 10 56 34.8 +0.3
baz=208
N32M **Quiet Lake** 86.61 20 P P 10 56 34.7 0.0
baz=222
S22A **4UR Ranch, Cre** 86.70 49 P P 10 56 36.5 +0.4
baz=244
F21K **Alatna River** 86.84 9 P P 10 56 34.9 -0.8
baz=203
G22K **Bettles** 86.89 10 P P 10 56 35.9 +0.1
baz=205
M31M **Drury Creek, Y** 86.98 19 P P 10 56 35.5 -1.0
baz=221
DAWY **Dawson** 87.02 16 P P 10 56 35.6 -1.0
DAWY IAmb IAmb 10 56 36.7
comp=Z,7.8nm,1.3s
DAWY **Dawson** 87.02 16 P P 10 56 36.5 -0.1
baz=216
OVMT **Ovando** 87.02 38 P P 10 56 36.4 -0.7
BW06 **Boulder Array** 87.08 43 P P 10 56 37.4 -0.3
baz=242
PD31 **Pinedale Array** 87.08 43 P P 10 56 37.2 -0.5
PDAR **Pinedale Array** 87.08 43 P P 10 56 36.8 -0.9
PDAR **Pinedale Array** 87.08 43 P P 10 56 37.0 -0.6
comp=Z,3.4nm,0.7s,baz=220,slow=2.9,SNR=47
comp=Z,3.4nm,0.7s
BOZ **Bozeman (W)** 87.11 40 P P 10 56 37.7 +0.1
baz=241
I26K **Coal Creek Min** 87.12 14 P P 10 56 37.0 0.0
baz=213
EGAK **Eagle** 87.15 15 P P 10 56 36.8 -0.4
baz=215
H17A **Grant Village** 87.19 41 P P 10 56 39.0 +0.8
baz=242
FARO **Faro, Yukon** 87.32 19 P P 10 56 37.2 -0.9
baz=222
K29M **Barlow Dome** 87.34 17 P P 10 56 38.5 +0.3
baz=218,SNR=6.6
COLD **Coldfoot** 87.38 10 P P 10 56 38.3 +0.1
baz=206
E20K **Nigu River** 87.42 8 P P 10 56 37.7 -0.7
baz=201
HHC **Hu-ho-hao-te** 87.64 314 eP P 10 56 40.8 +0.6
HHC pmax pmax
comp=Z,8.0nm,0.6s
HHC pmax pmax
comp=Z,80nm,5.5s
HHC **Hu-ho-hao-te** 87.64 314 pmax pmax
comp=Z,53nm,5.3s
HHC pmax pmax
comp=Z,9.0nm,0.5s
SDCO **Great Sand Dun** 87.65 49 P P 10 56 40.5 0.0
baz=245
I27K **Kandik River** 87.72 14 P P 10 56 38.7 -1.2
baz=214
TOAD **Toad River Com** 87.82 24 P P 10 56 40.2 -0.3
baz=229
E22K **Anaktuvuk Pass** 87.94 9 P P 10 56 39.9 -1.0
baz=205

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **I28M** | **Miner Creek** baz=216 | **88.00** | **15** | P | | **P** | **10 56 40.7** | **-0.5** |
| **F24K** | **Squaw Lake** baz=208 | **88.06** | **11** | P | | **P** | **10 56 41.0** | **-0.4** |
| **DRIO** | **Del Rio** | **88.13** | **58** | P | | **P** | **10 56 42.8** | **+0.2** |
| DRIO | comp=Z,14nm,0.8s | | | IAmb | | IAmb | 10 56 44.2 | |
| **T25A** | **Trinidad** baz=246 | **88.19** | **50** | P | | **P** | **10 56 41.8** | **-1.2** |
| **E23K** | **Chandalar** baz=207 | **88.23** | **10** | P | | **P** | **10 56 42.0** | **-0.3** |
| **J30M** | **Hart River** baz=219 | **88.24** | **17** | P | | **P** | **10 56 42.2** | **-0.2** |
| **H27K** | **Steamboat Moun** baz=214 | **88.26** | **14** | P | | **P** | **10 56 41.9** | **-0.4** |
| **OZNA** | **Ozona** | **88.28** | **57** | P | | **P** | **10 56 43.0** | **-0.3** |
| OZNA | comp=Z,8.7nm,0.8s | | | IAmb | | IAmb | 10 56 44.4 | |
| **I29M** | **Ogilvie Camp,** baz=217 | **88.33** | **16** | P | | **P** | **10 56 41.8** | **-0.9** |
| **RLMT** | **Red Lodge** baz=242 | **88.35** | **41** | P | | **P** | **10 56 43.6** | **0.0** |
| **G26K** | **Porcupine Rive** baz=212 | **88.37** | **13** | P | | **P** | **10 56 42.7** | **0.0** |
| **D22K** | **Ayikyak River** baz=204 | **88.49** | **9** | P | | **P** | **10 56 42.7** | **-0.7** |
| **N23A** | **Red Feather La** baz=245 | **88.67** | **46** | P | | **P** | **10 56 45.6** | **+0.5** |
| **I30M** | **Mount Dempster** baz=219 | **88.73** | **16** | P | | **P** | **10 56 43.4** | **-1.3** |
| **D23K** | **Nanushuk River** baz=206 | **88.87** | **10** | P | | **P** | **10 56 44.6** | **-0.5** |
| **H29M** | **Whitestone** baz=217 | **89.00** | **15** | P | | **P** | **10 56 45.7** | **-0.1** |
| **ELIB** | **Princess Elisa** comp=Z,19nm,0.7s | **89.16** | **186** | *d*P | | **P** | **10 56 46.3** | **-0.4** |
| **JCT** | **Junction City** baz=249 | **89.18** | **58** | P | | **P** | **10 56 47.1** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** comp=Z,0.8nm,0.3s,baz=109,slow=3.0,SNR=4.5 comp=Z,0.8nm,0.3s | **89.33** | **290** | P | | **P** | **10 56 48.0** | **-0.5** |
| **AMTX** | **Amarillo** baz=248 | **89.34** | **53** | P | | **P** | **10 56 47.9** | **-0.2** |
| **EPYK** | **Eagle Plains** baz=219 | **89.53** | **15** | P | | **P** | **10 56 47.1** | **-1.2** |
| **PZH** | **PanZhiHua** | **89.59** | **298** | P | | **P** | **10 56 50.1** | **+0.5** |
| PZH | comp=Z,10.0nm,0.5s | | | pmax | | pmax | | |
| PZH | comp=Z,100nm,4.5s | | | pmax | | pmax | | |
| **PZH** | **PanZhiHua** comp=Z,100nm,4.5s | **89.59** | **298** | pmax | | pmax | | |
| PZH | comp=Z,10.0nm,0.5s | | | pmax | | pmax | | |
| **C23K** | **Itkillik River** baz=206 | **89.67** | **9** | P | | **P** | **10 56 47.7** | **-1.0** |
| **C24K** | **Franklin Bluff** baz=208 | **89.87** | **10** | P | | **P** | **10 56 48.9** | **-0.7** |
| **G30M** | **tAoh Zrail Nji** baz=219 | **90.14** | **15** | P | | **P** | **10 56 50.2** | **-0.9** |
| **TROLL** | **Troll, Antarti** comp=Z,886nm,0.9s | **90.25** | **180** | ⇓P | | **P** | **10 56 51.9** | **+0.1** |
| **SNAA** | **Sanae** | **90.53** | **178** | P | | **P** | **10 56 53.0** | **0.0** |
| SNAA | comp=Z,6.0nm,0.8s | | | IAmb | | IAmb | 10 56 53.7 | |
| **SNAA** | **Sanae** comp=Z,120nm,0.6s | **90.53** | **178** | ⇑P | | **P** | **10 56 52.3** | **-0.7** |
| **SNAA** | **Sanae** comp=Z,4.5nm,0.6s,baz=204,slow=11,SNR=23 comp=Z,4.5nm,0.6s | **90.53** | **178** | P | | **P** | **10 56 52.7** | **-0.3** |
| **G31M** | **Satah River** baz=221 | **90.59** | **16** | P | | **P** | **10 56 52.0** | **-1.0** |
| **VNA3** | **Neumayer Olymp** comp=Z,16nm,0.4s | **90.65** | **176** | ⇑P | | **P** | **10 56 53.5** | **0.0** |
| **E29M** | **Blow River** baz=218 | **90.84** | **14** | P | | **P** | **10 56 54.0** | **-0.3** |
| **LAO** | **LASA Array** baz=245 | **90.95** | **41** | P | | **P** | **10 56 55.5** | **+0.2** |
| **VNA2** | **Neumayer--Watz** comp=Z,18nm,0.6s,baz=190,slow=4.2 | **91.10** | **177** | ⇑P | | **P** | **10 56 55.7** | **+0.1** |
| **F31M** | **Tsiigehtchic** baz=222 | **91.11** | **16** | P | | **P** | **10 56 54.4** | **-1.0** |
| **RSSD** | **Black Hills** baz=246 | **91.29** | **44** | P | | **P** | **10 56 56.5** | **-0.7** |
| **VNA1** | **Neumayer--Stat** comp=Z,18nm,0.9s | **91.32** | **177** | ⇑P | | **P** | **10 56 57.5** | **+0.9** |
| **WMOK** | **Wichita Mounta** baz=249 | **91.50** | **54** | P | | **P** | **10 56 58.1** | **0.0** |
| **INK** | **Inuvik** baz=222 | **91.82** | **15** | P | | **P** | **10 56 57.9** | **-0.7** |
| **CBKS** | **Cedar Bluff** baz=249 | **92.24** | **50** | P | | **P** | **10 57 00.4** | **-1.0** |
| **DGMT** | **Dagmar** baz=246 | **92.94** | **40** | P | | **P** | **10 57 04.6** | **+0.2** |
| **YKA** | **Yellowknife Ar** comp=Z,0.9nm,0.7s,baz=248,slow=4.3,SNR=5.2 comp=Z,0.9nm,0.7s | **94.19** | **25** | P | | **P** | **10 57 07.7** | **-1.9** |
| **KSU1** | **Kansas State U** baz=251 | **94.63** | **51** | P | | **P** | **10 57 12.8** | **+0.5** |
| **ECSD** | **EROS Data Cent** baz=251 | **96.14** | **46** | P | | **P** | **10 57 18.5** | **-0.5** |
| **MKAR** | **Makanchi Array** comp=Z,0.5nm,0.5s,baz=90,slow=0.2,SNR=7.8 | **109.50** | **314** | PKiKP | | **PKiKP** | **11 02 15.6** | **-2.1** |
| **KURBB** | **Kurchatov Arra** comp=Z,1.1nm,0.7s,baz=92,slow=2.1,SNR=9.3 | **112.23** | **318** | PKiKP | | **PKiKP** | **11 02 20.7** | **-2.0** |
| **BVAR** | **Borovoye Array** comp=Z,1.5nm,0.5s,baz=123,slow=0.8,SNR=8.2 | **117.18** | **321** | PKP | | **PKPdf** | **11 02 30.4** | **-1.7** |
| **ARCES** | **ARCESS Array B** comp=Z,1.7nm,0.4s,baz=37,slow=1.3,SNR=13 | **126.45** | **350** | PKP | | **PKPdf** | **11 02 48.0** | **-1.4** |
| **BOSA** | **Boshof** comp=Z,3.1nm,0.8s,baz=141,slow=2.8,SNR=3.9 | **128.56** | **206** | PKP | | **PKPdf** | **11 02 54.2** | **-0.7** |
| **FINES** | **FINESS Array B** comp=Z,1.7nm,0.7s,baz=80,slow=1.6,SNR=3.6 | **133.37** | **344** | PKP | | **PKPdf** | **11 03 01.6** | **-1.2** |
| **NB2** | **NORSAR Subarra** comp=Z,0.6nm,0.4s,baz=36,slow=2.6 | **136.48** | **354** | PKP | | **PKPdf** | **11 03 08.5** | **-0.1** |
| **NOA** | **NORSAR Array B** comp=Z,2.3nm,1.1s,baz=39,slow=2.0,SNR=4.3 | **136.48** | **354** | PKP | | **PKPdf** | **11 03 08.6** | **-0.1** |
| **HFS** | **Hagfors** comp=Z,4.6nm,0.9s,baz=102,slow=6.2,SNR=4.9 | **137.06** | **351** | PKhKP | | PKPpre | 11 02 58.3 | |
| **EKA** | **Eskdalemuir Ar** comp=Z,1.0nm,0.6s,baz=336,slow=1.8,SNR=4.3 | **142.49** | **5** | PKhKP | | PKPpre | 11 03 14.1 | |
| **GAZ** | **Gaziantep** | **143.73** | **309** | | | PKPbc | 11 03 20.6 | -1.0 |
| **BNN** | **Bunyan** | **144.03** | **312** | | | PKPbc | 11 03 21.2 | -1.4 |
| **LODK** | **Lodwar** | **144.34** | **250** | PKPdf | | PKPbc | 11 03 23.2 | -1.0 |
| **OJC** | **Ojcow** | **144.82** | **340** | PKPdf | | **PKPdf** | **11 03 23.1** | **-0.7** |
| **BUR08** | **Bucovina Ar. S** | **144.86** | **333** | PKPdf | | **PKPdf** | **11 03 23.6** | **-0.5** |
| **BURAR** | **Bucovina Array** | **144.88** | **332** | | | **PKPdf** | **11 03 23.9** | **-0.3** |
| **KOLS** | **Kolonicke sedl** | **145.04** | **337** | *e*PKP | | **PKPbc** | **11 03 24.8** | **-0.4** |
| **BR131** | **Keskin Array S** | **145.15** | **315** | PKPdf | | **PKPdf** | **11 03 24.4** | **-0.6** |
| **BRTR** | **Keskin Array B** | **145.15** | **315** | | | **PKPdf** | **11 03 24.2** | **-0.7** |
| **BRTR** | **Keskin Array B** comp=Z,4.3nm,0.6s,baz=153,slow=4.6,SNR=25 | **145.15** | **315** | PKPbc | | **PKPdf** | **11 03 24.9** | **-0.1** |
| **CRVS** | **Cervenica-Dubn** | **145.37** | **337** | *e*PKP | | **PKPbc** | **11 03 25.6** | **-0.6** |
| CRVS | | | | *e* | | | 11 03 30.8 | |
| **OSTC** | **Ostas** | **145.57** | **344** | *e*PKP | | **PKPbc** | **11 03 26.9** | **+0.2** |
| **CLL** | **Collm** | **145.62** | **348** | | | **PKPdf** | **11 03 25.9** | **+0.8** |
| **CLL** | **Collm** comp=Z,22nm,0.8s | **145.62** | **348** | ⇓*i*PKPbc | | **PKPdf** | **11 03 25.8** | **+0.6** |
| **UPC** | **Upice** | **145.67** | **344** | *e*PKP | | **PKPbc** | **11 03 26.4** | **-0.6** |
| **DPC** | **Dobruska-Polom** | **145.73** | **344** | *e*PKP | | **PKPbc** | **11 03 26.8** | **-0.4** |
| **BRG** | **Berggiesshubel** | **145.83** | **347** | *e*PKP | | **PKPbc** | **11 03 26.9** | **-0.4** |
| BRG | comp=Z,9.1nm,0.7s | | | Amp | | | 11 03 27.6 | |
| **LANS** | **Liptovska Anna** | **145.85** | **340** | *e*PKP | | **PKPbc** | **11 03 27.8** | **+0.2** |
| **KRLC** | **Kraliky** | **145.86** | **343** | *e*PKP | | **PKPbc** | **11 03 27.1** | **-0.5** |
| **MORC** | **Moravsky Berou** | **145.91** | **342** | | | **PKPdf** | **11 03 26.1** | **+0.3** |
| **MORC** | **Moravsky Berou** | **145.91** | **342** | *e*PKP | | **PKPbc** | **11 03 26.8** | **-0.9** |
| **PVCC** | **Panska Ves** | **146.01** | **346** | *e*PKP | | **PKPbc** | **11 03 27.2** | **-0.7** |
| **MLR** | **Muntele Rosu** | **146.12** | **329** | | | **PKPdf** | **11 03 26.2** | **-0.2** |
| **HSKC** | **Hora Svate Kat** | **146.19** | **347** | *e*PKP | | **PKPbc** | **11 03 27.4** | **-1.0** |
| **MBAR** | **Mbarara** | **146.30** | **240** | | | **PKPbc** | **11 03 29.1** | **-0.9** |
| **PRU** | **Pruhonice** | **146.52** | **345** | *e*PKP | | **PKPbc** | **11 03 28.8** | **-0.5** |
| **MMAI** | **Mount Meron Ar** comp=Z,7.3nm,0.5s,baz=68,slow=5.5,SNR=14 | **146.56** | **303** | PKPbc | | **PKPbc** | **11 03 29.4** | **-0.6** |
| **VRAC** | **Vranov** | **146.60** | **343** | *e*PKP | | **PKPbc** | **11 03 28.5** | **-1.1** |
| **VYHS** | **Vyhne** | **146.63** | **340** | *e*PKP | | **PKPbc** | **11 03 29.3** | **-0.4** |
| **KRUC** | **Moravsky** | **146.88** | **343** | *e*PKP | | **PKPbc** | **11 03 29.3** | **-1.0** |
| **MEM** | **Membach** | **147.28** | **355** | *d*PKP | | **PKPbc** | **11 03 30.2** | **-1.1** |
| **BTNL** | **Ternell** | **147.29** | **355** | *d*PKP | | **PKPbc** | **11 03 30.4** | **-1.0** |
| **BSTI** | **Sart Tilman** | **147.34** | **356** | *d*PKP | | **PKPbc** | **11 03 30.8** | **-0.7** |
| **GRF** | **Grafenberg Arr** baz=16,slow=2.1 | **147.50** | **349** | *e*PKP | | **PKPbc** | **11 03 31.3** | **-0.6** |
| **BCLA** | **Clavier** | **147.52** | **356** | *d*PKPdf | | **PKPdf** | **11 03 27.2** | **-1.1** |
| **KHC** | **Kasperske Hory** | **147.54** | **346** | PKPdf | | **PKPdf** | **11 03 26.6** | **-1.9** |
| KHC | | | | PKPbc | | **PKPbc** | **11 03 30.9** | **-1.2** |
| **KHC** | **Kasperske Hory** | **147.54** | **346** | *e*PKP | | **PKPbc** | **11 03 31.7** | **-0.4** |
| **CKRC** | **Cesky Krumlov** | **147.66** | **345** | *e*PKP | | **PKPbc** | **11 03 32.1** | **-0.3** |
| **BMRD** | **Maredsous** | **147.67** | **357** | *d*PKP | | **PKPbc** | **11 03 30.9** | **-1.4** |
| **GERES** | **GERESS Array B** comp=Z,5.7nm,0.6s,baz=9.7,slow=7.0,SNR=35 | **147.78** | **346** | PKPbc | | **PKPbc** | **11 03 31.9** | **-0.9** |
| **RCHB** | **Rochefort** | **147.78** | **356** | *d*PKP | | **PKPbc** | **11 03 31.7** | **-0.9** |
| **DOU** | **Dourbes** | **147.88** | **357** | *d*PKPbc | | **PKPbc** | **11 03 31.8** | **-1.0** |
| **CONA** | **Conrad Observa** comp=Z,4.9nm,0.5s,SNR=6.0 | **148.06** | **342** | *e*PKP | | **PKPbc** | **11 03 32.9** | **-0.6** |
| **RONA** | **Rosalia, Austr** comp=Z,4.7nm,0.5s,SNR=5.5 | **148.13** | **342** | *e*PKP | | **PKPbc** | **11 03 33.0** | **-0.7** |
| **WLF** | **Walferdange** | **148.21** | **355** | *d*PKP | | **PKPbc** | **11 03 33.1** | **-0.5** |
| **MOA** | **Molln** comp=Z,1.5nm,0.5s | **148.57** | **344** | *e*PKP | | **PKPbc** | **11 03 33.1** | **-1.6** |
| **BIOA** | **Bad Ischl, Aus** comp=Z,1.6nm,0.4s | **148.87** | **345** | *i* PKP | | **PKPbc** | **11 03 33.9** | **-1.5** |
| **LESA** | **Schwarzleotal** comp=Z,3.7nm,0.5s | **149.35** | **346** | *i* PKP | | **PKPbc** | **11 03 35.5** | **-1.2** |
| **SOKA** | **Soboth** comp=Z,2.0nm,0.5s | **149.43** | **342** | *i* PKP | | **PKPbc** | **11 03 35.4** | **-1.5** |
| **KBA** | **Koelnbreinsper** comp=Z,5.2nm,0.5s | **149.52** | **345** | *i* PKP | | **PKPbc** | **11 03 35.5** | **-1.7** |
| **WATA** | **Walderalm** comp=Z,5.4nm,0.5s,SNR=5.2 | **149.68** | **347** | *i* PKP | | **PKPbc** | **11 03 36.3** | **-1.3** |
| **RETA** | **Reutte** comp=Z,3.1nm,0.4s | **149.70** | **348** | *i* PKP | | **PKPbc** | **11 03 36.4** | **-1.1** |
| **OBKA** | **Obir** comp=Z,1.0nm,0.5s | **149.72** | **343** | *e*PKP | | **PKPbc** | **11 03 35.6** | **-2.0** |
| **WTTA** | **Wattenberg** comp=Z,14nm,0.6s,SNR=8.9 | **149.74** | **347** | *e*PKP | | **PKPbc** | **11 03 36.7** | **-1.0** |
| **MOTA** | **Moosalm** comp=Z,1.8nm,0.4s | **149.77** | **348** | *e*PKP | | **PKPbc** | **11 03 36.4** | **-1.4** |
| **MYKA** | **Terra Mystica** comp=Z,8.1nm,0.6s | **149.86** | **344** | *i* PKP | | **PKPbc** | **11 03 36.0** | **-1.9** |
| **SQTA** | **Sankt Quirin** comp=Z,8.6nm,0.6s,SNR=6.7 | **149.87** | **348** | *e*PKP | | **PKPbc** | **11 03 36.7** | **-1.3** |
| **ABTA** | **Abfaltersbach** comp=Z,8.7nm,0.6s,SNR=8.8 | **150.03** | **346** | *e*PKP | | **PKPbc** | **11 03 36.8** | **-1.5** |
| **DAVA** | **Damuels** comp=Z,5.6nm,0.5s,SNR=5.0 | **150.06** | **349** | *i* PKP | | **PKPbc** | **11 03 37.9** | **-0.5** |
| **FETA** | **Feichten** comp=Z,6.9nm,0.7s,SNR=5.9 | **150.16** | **348** | *e*PKP | | **PKPbc** | **11 03 37.4** | **-1.3** |
| **ESDC** | **Sonseca Array** comp=Z,1.1nm,0.9s,baz=352,slow=5.5,SNR=6.7 | **157.74** | **12** | PKPab | | **PKPab** | **11 04 18.4** | **-1.5** |
| **DBIC** | **Dimbokro** comp=Z,5.2nm,0.7s,baz=160,slow=3.6,SNR=4.5 | **166.90** | **148** | PKP | | **PKPdf** | **11 03 51.0** | **-2.1** |
| **TORD** | **Torodi Ar. Bea** comp=Z,2.8nm,1.0s,baz=0.4,slow=2.0,SNR=8.5 | **175.20** | **176** | PKP | | **PKPdf** | **11 03 55.5** | **-1.8** |
| TORD | comp=Z,1.5nm,0.8s,baz=194,slow=2.6,SNR=7.3 | | | PKPab | | **PKPab** | **11 05 37.0** | **-0.3** |

*IDC **19** 10:46:45.5±10.0, 18°.07S×177°.90W, h454km±115km, mb3.1/6, mbtmp3.9/6, Error ellipse: s-maj=66.7km s-min=36.0km az=153.0*

**ISC 19 10:46:44.9±1.9, 18°.1S±0°.5×177°.9W±0°.3, h450km, n8, σ0°46/8, mb3.4/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** 0.5nm,0.4s,baz=99,slow=6.9,SNR=1.1 0.5nm,0.4s | **45.09** | **260** | P | **P** | **10 54 20.1** | **+0.3** |
| **ASAR** | **Alice Springs** 2.0nm,0.5s,baz=88,slow=9.2,SNR=2.7 2.0nm,0.5s | **45.22** | **254** | P | **P** | **10 54 20.6** | **-0.1** |
| **MJAR** | **Matsushiro Arr** 1.5nm,0.6s,baz=149,slow=5.1,SNR=5.6 1.5nm,0.6s | **68.36** | **323** | P | **P** | **10 57 00.2** | **-0.1** |
| **NVAR** | **Mina Array Bea** 0.7nm,0.8s,baz=218,slow=6.9,SNR=1.9 0.7nm,0.8s | **79.22** | **44** | P | **P** | **10 58 03.3** | **+0.7** |
| **ILAR** | **Eielson Array** 0.6nm,0.7s,baz=225,slow=5.0,SNR=5.1 0.6nm,0.7s | **85.97** | **13** | P | **P** | **10 58 35.8** | **-0.1** |
| **PDAR** | **Pinedale Array** 0.2nm,0.6s,baz=199,slow=2.5,SNR=2.7 0.2nm,0.6s | **87.15** | **43** | P | **P** | **10 58 41.8** | **-0.5** |
| **BRTR** | **Keskin Array B** 0.6nm,0.4s,baz=56,slow=2.9,SNR=4.3 | **145.28** | **315** | PKPbc | **PKPdf** | **11 05 30.6** | **-0.3** |
| **GERES** | **GERESS Array B** 0.1nm,0.3s,baz=39,slow=6.3,SNR=3.9 | **147.93** | **346** | PKPbc | **PKPbc** | **11 05 38.7** | **+0.1** |

*IDC **19** 10:49:37.1±2.0, 20°.64S×178°.21W, h528km±22km, mb3.6/19, mbtmp4.5/21, Error ellipse: s-maj=14.8km s-min=12.7km az=145.0*

*NEIC **19** 10:49:38.4±1.8, 20°.6S±0°.1×178°.1W±0°.1, h542km±8km, mb4.4/41, Error ellipse: s-maj=17.9km s-min=14.0km az=140.0*

**ISC 19 10:49:38.6±0.4, 20°.72S±0°.06×178°.20W±0°.07, h550km, n185, σ1$24/187, mb4.3/44, 34C-14D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.62** | **309** | P | **P** | **10 51 04.9** | **-0.7** |
| **NIUE** | **Niue** | **7.95** | **80** | P | **P** | **10 51 37.9** | **+2.0** |
| **RAO** | **Raoul Island** | **8.50** | **178** | P | **P** | **10 51 40.1** | **-1.2** |
| **RAO** | **Raoul Island** 78nm,0.2s,baz=37,slow=20,SNR=1.7 | **8.50** | **178** | S | **S** | **10 53 18.9** | **-3.0** |
| **GLKZ** | **Green Lake** | **8.51** | **178** | P | P | 10 51 24.3 | -17 |
| GLKZ | | | | S | **S** | **10 53 19.9** | **-2.1** |
| **AFI** | **Afiamalu** | **9.13** | **43** | P | **P** | **10 51 43.3** | **-4.6** |
| **PININC** | **Pines Island,** | **13.48** | **259** | P | **P** | **10 52 33.7** | **+1.2** |
| **DZM** | **Mont Dzumac** 2.3nm,0.7s,baz=83,slow=17,SNR=1.5 | **14.37** | **262** | P | **P** | **10 52 40.4** | **-1.4** |
| **OUZ** | **Omahuta** | **16.15** | **205** | P | **P** | **10 52 59.1** | **-0.4** |
| **KOUNC** | **Koumac, New Ca** | **16.40** | **267** | P | **P** | **10 53 03.3** | **+1.4** |
| **WCZ** | **Waipu Caves** | **16.52** | **202** | P | **P** | **10 53 04.8** | **+2.0** |
| **MXZ** | **Matakaoa Point** | **17.06** | **190** | P | **P** | **10 53 05.9** | **-1.8** |
| MXZ | | | | S | S | 10 56 26.6 | +28 |
| **WMGZ** | **Waiomatatini S** | **17.29** | **189** | P | **P** | **10 53 08.6** | **-1.2** |
| WMGZ | | | | S | S | 10 56 28.4 | +26 |
| **HAZ** | **Te Kaha** | **17.33** | **191** | P | **P** | **10 53 10.2** | **0.0** |
| HAZ | | | | S | S | 10 56 23.7 | +21 |
| **PKGZ** | **Pakihiroa** | **17.39** | **190** | P | **P** | **10 53 09.7** | **-1.1** |
| PKGZ | | | | S | S | 10 56 22.6 | +19 |
| **RUGZ** | **Raukumara Rang** | **17.56** | **191** | P | **P** | **10 53 13.1** | **+0.7** |
| RUGZ | | | | S | S | 10 56 34.1 | +28 |
| **TGRZ** | **Tauranga** | **17.62** | **195** | P | **P** | **10 53 15.0** | **+2.1** |
| **TWGZ** | **Tauwhareparae** | **17.71** | **190** | P | **P** | **10 53 14.9** | **+1.2** |
| TWGZ | | | | S | S | 10 56 32.4 | +23 |
| **KMRZ** | **Kaimai** | **17.81** | **195** | P | **P** | **10 53 17.4** | **+2.8** |
| **TOZ** | **Tahuroa Road** | **17.81** | **197** | P | **P** | **10 53 16.7** | **+2.1** |
| **URZ** | **Urewera** 12nm,0.3s,baz=347,slow=4.1,SNR=16 | **17.95** | **192** | P | **P** | **10 53 14.4** | **-1.4** |
| URZ | 12nm,1.1s,baz=347,slow=18,SNR=1.5 | | | S | **S** | **10 56 07.1** | **-5.6** |
| **URZ** | **Urewera** | **17.95** | **192** | P | **P** | **10 53 14.4** | **-1.4** |
| URZ | | | | S | S | 10 56 36.7 | +24 |
| **TKGZ** | **Te Karaka** | **17.99** | **190** | P | **P** | **10 53 16.6** | **+0.4** |
| TKGZ | | | | S | S | 10 56 37.3 | +24 |
| **MUGZ** | **Murupara** | **18.23** | **193** | P | **P** | **10 53 17.6** | **-0.8** |
| **CTA** | **Charters Tower** 0.7nm,0.5s,baz=95,slow=10,SNR=19 0.7nm,0.5s | **33.28** | **265** | P | **P** | **10 55 31.7** | **+0.4** |
| **CTAO** | **Charters Tower** | **33.28** | **265** | P | **P** | **10 55 31.4** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 10 55 32.1 | |
| **PMG** | **Port Moresby** comp=Z,9.2nm,0.6s | **35.21** | **283** | P | **P** | **10 55 46.8** | **-0.6** |
| | comp=Z,10nm,0.6s,baz=189,slow=11,SNR=2.3 comp=Z,10nm,0.6s | | | | | | |
| **COEN** | **Coen** | **37.41** | **274** | P | **P** | **10 56 05.3** | **-0.3** |
| COEN | comp=Z,19nm,1.3s | | | IAmb | IAmb | 10 56 18.9 | |
| **STKA** | **Stephens Creek** comp=Z,1.5nm,0.5s,baz=139,slow=7.5,SNR=2.8 comp=Z,1.5nm,0.5s | **37.53** | **244** | P | **P** | **10 56 06.8** | **+0.5** |
| **WR0** | **Warramunga Arr** | **44.20** | **262** | P | **P** | **10 56 59.0** | **-0.4** |
| **AS31** | **Alice Springs** | **44.29** | **257** | P | **P** | **10 57 00.2** | **+0.1** |
| **ASAR** | **Alice Springs** | **44.29** | **257** | P | **P** | **10 56 59.8** | **-0.3** |
| **ASAR** | **Alice Springs** comp=Z,11nm,0.8s,baz=88,slow=8.3,SNR=22 | **44.29** | **257** | P | **P** | **10 57 00.3** | **+0.2** |
| ASAR | | | | S | **S** | **11 02 53.1** | **-1.4** |
| | comp=Z,1.3nm,0.9s,baz=94,slow=16,SNR=8.2 comp=Z,11nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.37** | **263** | P | **P** | **10 57 00.6** | **-0.2** |
| WB0 | comp=Z,12nm,0.6s | | | IAmb | IAmb | 10 57 01.0 | |
| **WB2** | **Warramunga Arr** | **44.38** | **262** | P | **P** | **10 57 00.7** | **-0.2** |
| WB2 | comp=Z,7.4nm,0.8s | | | IAmb | IAmb | 10 57 01.1 | |
| **WRA** | **Warramunga Arr** | **44.39** | **262** | P | **P** | **10 57 00.6** | **-0.4** |
| **WRA** | **Warramunga Arr** comp=Z,6.1nm,0.6s,baz=97,slow=7.4,SNR=32 | **44.39** | **262** | P | **P** | **10 57 00.3** | **-0.6** |
| WRA | | | | S | **S** | **11 02 52.8** | **-3.1** |
| | comp=Z,0.8nm,1.0s,baz=97,slow=13,SNR=2.7 comp=Z,6.1nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **48.98** | **271** | P | **P** | **10 57 35.5** | **-0.1** |
| MTN | comp=Z,16nm,0.8s | | | IAmb | IAmb | 10 57 36.1 | |
| **KNRA** | **Kununurra** | **50.46** | **266** | P | **P** | **10 57 46.4** | **-0.1** |
| KNRA | comp=Z,7.0nm,0.6s | | | IAmb | IAmb | 10 57 47.1 | |
| **FAKI** | **Fak Fak** | **51.37** | **283** | P | **P** | **10 57 56.2** | **+3.1** |
| **FITZ** | **Fitzroy Crossi** | **52.81** | **263** | P | **P** | **10 58 03.8** | **+0.4** |
| **SOEI** | **Soe** | **56.32** | **272** | P | **P** | **10 58 29.5** | **+1.3** |
| **MBWA** | **Marble Bar** | **57.62** | **258** | P | **P** | **10 58 36.5** | **-0.3** |
| MBWA | comp=Z,16nm,1.1s | | | IAmb | IAmb | 10 58 37.9 | |
| **GIRL** | **Giralia** | **62.31** | **255** | P | **P** | **10 59 08.8** | **+0.9** |
| **TOLI2** | **Tolitoli** | **63.47** | **282** | P | **P** | **10 59 16.6** | **+1.1** |
| TOLI2 | comp=Z,6.1nm,0.7s | | | IAmb | IAmb | 10 59 19.3 | |
| **QSPA** | **South Pole Qui** | **69.35** | **180** | P | **P** | **10 59 52.8** | **+1.5** |
| QSPA | comp=Z,7.7nm,0.8s | | | IAmb | IAmb | 10 59 53.8 | |
| **QSPA** | **South Pole Qui** comp=Z,7.0nm,0.6s,baz=347,slow=0.2,SNR=29 comp=Z,7.0nm,0.6s | **69.35** | **180** | P | **P** | **10 59 52.7** | **+1.5** |
| **UGM** | **Wanagama** | **69.77** | **269** | P | **P** | **10 59 54.0** | **-0.5** |
| **MJAR** | **Matsushiro Arr** comp=Z,2.4nm,0.6s,baz=158,slow=5.8,SNR=11 comp=Z,2.4nm,0.6s | **70.27** | **324** | P | **P** | **10 59 56.1** | **-0.9** |
| **AMKA** | **Amchitka** | **71.81** | **358** | P | **P** | **11 00 04.3** | **-1.2** |
| **KIWB** | **Kanaga Island** | **72.26** | **1** | P | **P** | **11 00 07.1** | **-1.1** |
| **JKA** | **Kamikawa-asahi** | **73.83** | **332** | P | **P** | **11 00 18.1** | **+0.8** |
| JKA | comp=Z,18nm,0.9s | | | IAmb | IAmb | 11 00 19.4 | |
| **PEA0B** | **Petropavlovsk-** | **76.43** | **345** | P | **P** | **11 00 31.6** | **0.0** |
| PEA0B | comp=Z,22nm,0.9s | | | IAmb | IAmb | 11 00 31.7 | |
| **PETK** | **Petropavlovsk-** | **76.43** | **345** | P | **P** | **11 00 30.9** | **-0.7** |
| **PETK** | **Petropavlovsk-** comp=Z,9.1nm,0.6s,baz=131,slow=6.4,SNR=16 comp=Z,9.1nm,0.6s | **76.43** | **345** | P | **P** | **11 00 31.3** | **-0.3** |
| **KSRS** | **Korea Array** comp=Z,2.3nm,0.7s,baz=127,slow=5.8,SNR=14 comp=Z,2.3nm,0.7s | **76.93** | **319** | P | **P** | **11 00 35.1** | **+0.4** |
| **SMAI** | **San Martin Ant** | **78.47** | **159** | P | **P** | **11 00 44.6** | **+2.0** |
| **USRK** | **Ussuriysk Ar.** | **79.04** | **326** | P | **P** | **11 00 46.5** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** comp=Z,6.3nm,0.7s,baz=105,slow=3.3,SNR=14 comp=Z,6.3nm,0.7s | **79.04** | **326** | P | **P** | **11 00 46.3** | **+0.4** |
| **BELA** | **Belgrano 2** | **79.37** | **173** | P | **P** | **11 00 48.0** | **+0.8** |
| **YBH** | **Yreka Blue Hor** comp=Z,7.3nm,0.7s,baz=155,slow=2.5,SNR=20 comp=Z,7.3nm,0.7s | **80.58** | **39** | P | **P** | **11 00 55.1** | **+1.0** |
| **DSP** | **Deep Springs** | **80.92** | **44** | P | **P** | **11 00 56.6** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **81.31** | **43** | P | **P** | **11 00 58.4** | **+0.2** |
| **NVAR** | **Mina Array Bea** comp=Z,3.4nm,0.9s,baz=225,slow=9.4,SNR=22 comp=Z,3.4nm,0.9s | **81.31** | **43** | P | **P** | **11 00 58.9** | **+0.7** |
| **KVN** | **Kaiserville** | **81.80** | **43** | P | **P** | **11 01 01.3** | **+0.6** |
| **J05D** | **Fort Rock, OR** | **82.39** | **38** | P | **P** | **11 01 04.9** | **+1.4** |
| J05D | comp=Z,19nm,0.8s | | | IAmb | IAmb | 11 01 05.6 | |
| **BNX** | **BinXian** | **82.49** | **325** | ⇑P | **P** | **11 01 03.9** | **+0.2** |
| BNX | comp=Z,11nm,0.8s | | | pmax | pmax | | |
| **H04A** | **Detroit Lake** | **82.71** | **37** | P | **P** | **11 01 05.1** | **+0.2** |
| **NLWA** | **Neilton Lookou** | **83.52** | **34** | P | **P** | **11 01 09.6** | **+0.7** |
| NLWA | comp=Z,14nm,1.1s | | | IAmb | IAmb | 11 01 10.9 | |
| **C03A** | **Quillayute Air** | **83.52** | **33** | P | **P** | **11 01 10.1** | **+1.3** |
| **ELK** | **Elko** comp=Z,1.0nm,0.6s,baz=254,slow=3.4,SNR=5.4 comp=Z,1.0nm,0.6s | **84.57** | **43** | P | **P** | **11 01 14.9** | **+0.4** |
| **J16K** | **Anvik River** | **84.86** | **8** | P | **P** | **11 01 15.2** | **+0.2** |
| J16K | comp=Z,12nm,1.4s | | | IAmb | IAmb | 11 01 41.4 | |
| **G08A** | **Pilot Rock** | **84.90** | **38** | P | **P** | **11 01 16.7** | **+0.8** |
| **GHO** | **Glory Hole Cre** | **85.48** | **13** | P | **P** | **11 01 17.7** | **-0.5** |
| **BMO** | **Blue Mountains** | **85.60** | **39** | P | **P** | **11 01 19.3** | **+0.1** |
| **LYN** | **LuoYang** | **85.75** | **309** | P | **P** | **11 01 21.3** | **+1.3** |
| LYN | comp=Z,14nm,0.6s | | | pmax | pmax | | |
| **J19K** | **Poorman** | **86.25** | **10** | P | **P** | **11 01 21.2** | **-0.5** |
| J19K | comp=Z,14nm,1.5s | | | IAmb | IAmb | 11 01 25.0 | |
| **F10A** | **Beach Ranch, E** | **86.29** | **38** | P | **P** | **11 01 22.8** | **+0.3** |
| F10A | comp=Z,13nm,0.8s | | | IAmb | IAmb | 11 01 23.6 | |
| **ELIB** | **Princess Elisa** comp=Z,3.2nm,0.7s | **86.41** | **187** | *d*P | **P** | **11 01 23.2** | **+0.5** |
| **TXAR** | **Lajitas Array** comp=Z,1.9nm,0.8s,baz

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TESR | Tescani | 147.25 328 | ⇑P | PKPbc | 11 08 19.9 | -0.6 |
| SCHLR | Schela | 147.33 325 | ⇑P | PKPab | 11 08 23.8 | -0.6 |
| CFR | Carcaliu | 147.35 324 | ⇑P | PKPbc | 11 08 20.9 | +0.2 |
| TPGR | Topolog | 147.40 324 | ⇓P | PKiKP | 11 08 21.8 | -0.7 |
| KOLS | Kolonicke sedl | 147.43 335 | *e*PKP | PKiKP | 11 08 21.5 | -1.0 |
| ONER | Baraj Valea Uz | 147.50 328 | ⇑P | PKiKP | 11 08 22.0 | -0.7 |
| VRI | Vrincioaia | 147.65 327 | ⇑P | PKPbc | 11 08 19.7 | -1.8 |
| PLOR | Plostina | 147.70 327 | ⇓P | PKiKP | 11 08 23.0 | -0.2 |
| MMAI | Mount Meron Ar | 147.76 299 | PKPbc | PKPbc | 11 08 22.4 | +0.1 |
| | comp=Z,5.3nm,0.5s,baz=71,slow=5.4,SNR=10 | | | | | |
| CRVS | Cervenica-Dubn | 147.77 335 | *e*PKP | PKiKP | 11 08 22.2 | -1.0 |
| HARR | Harsova | 147.78 324 | ⇑P | PKPdf | 11 08 19.6 | +1.4 |
| TURR | Turia | 147.88 328 | ⇑P | PKPab | 11 08 21.9 | +1.2 |
| COVR | Voineasa-Covas | 147.93 327 | ⇑P | PKPbc | 11 08 21.0 | -1.3 |
| ARCR | ARCALIA | 147.94 330 | ⇑P | PKPab | 11 08 25.6 | -1.3 |
| OZUR | | 147.97 328 | ⇑P | PKiKP | 11 08 23.0 | -0.7 |
| OSTC | Ostas | 148.12 343 | *e*PKP | PKiKP | 11 08 23.2 | -0.7 |
| CLL | Collm | 148.23 347 | ⇓*i*PKPbc | PKPbc | 11 08 22.8 | 0.0 |
| | comp=Z,15nm,0.8s | | | | | |
| CLL | | | *i* PKPab | PKPab | 11 08 27.0 | -0.9 |
| | comp=Z,8.0nm,0.8s | | | | | |
| DOPR | Dopca | 148.25 328 | ⇑P | PKiKP | 11 08 24.1 | -0.2 |
| DPC | Dobruska-Polom | 148.28 342 | *e*PKP | PKiKP | 11 08 23.5 | -0.7 |
| MLR | Muntele Rosu | 148.30 327 | ⇑P | PKiKP | 11 08 24.1 | -0.5 |
| LANS | Liptovska Anna | 148.31 338 | *e*PKP | PKiKP | 11 08 24.2 | -0.1 |
| KRLC | Kraliky | 148.33 341 | *e*PKP | PKPbc | 11 08 22.8 | -0.5 |
| MORC | Moravsky Berou | 148.42 340 | *e*PKP | PKPbc | 11 08 23.1 | -0.3 |
| BRG | Berggiesshubel | 148.42 345 | *e*PKP | PKiKP | 11 08 23.8 | -0.7 |
| BRG | | | Amp | | 11 08 24.4 | |
| | comp=Z,6.5nm,0.8s | | | | | |
| BRG | Berggiesshubel | 148.42 345 | P | PKPab | 11 08 28.7 | 0.0 |
| BRG | | | Amp | | 11 08 29.2 | |
| | comp=Z,6.6nm,0.8s | | | | | |
| MAUC | Maruska | 148.69 340 | *e*PKP | PKiKP | 11 08 24.7 | -0.4 |
| VOIR | | 148.79 328 | ⇑P | PKiKP | 11 08 24.7 | -0.8 |
| DRGR | | 148.91 332 | ⇓P | PKPbc | 11 08 24.4 | -0.3 |
| ARR | Arges | 149.05 328 | ⇓P | PKiKP | 11 08 26.2 | +0.2 |
| PRU | Pruhonice | 149.09 344 | *e*PKP | PKiKP | 11 08 25.4 | -0.4 |
| VYHS | Vyhne | 149.09 338 | *e*PKP | PKiKP | 11 08 25.4 | -0.5 |
| GOPC | GO Pecny, Ondr | 149.09 344 | *e*PKP | PKiKP | 11 08 25.3 | -0.6 |
| VRAC | Vranov | 149.12 341 | *e*PKP | PKPbc | 11 08 24.9 | -0.2 |
| VRAC | Vranov | 149.12 341 | ⇓P | PKiKP | 11 08 25.6 | -0.4 |
| JAVC | Velka Javorina | 149.18 339 | *e*PKP | PKiKP | 11 08 26.6 | +0.5 |
| KRUC | Moravsky | 149.40 341 | *e*PKP | PKPbc | 11 08 25.4 | -0.3 |
| SIRR | Siria | 149.78 332 | ⇑P | PKPbc | 11 08 26.3 | -0.4 |
| GZR | Gura Zlata | 149.93 330 | ⇑P | PKPbc | 11 08 27.1 | -0.1 |
| MEM | Membach | 149.99 355 | *d*PKP | PKiKP | 11 08 27.0 | -0.6 |
| BTNL | Ternell | 150.00 354 | *d*PKP | PKPbc | 11 08 26.9 | -0.2 |
| ELND | Elena | 150.04 323 | ⇑P | PKPdf | 11 08 18.0 | -3.9 |
| BSTI | Sart Tilman | 150.05 355 | *d*PKP | PKiKP | 11 08 27.3 | -0.5 |
| KHC | Kasperske Hory | 150.12 344 | *e*PKP | PKiKP | 11 08 27.8 | -0.3 |
| GRF | Grafenberg Arr | 150.13 348 | *e*PKPbc | PKiKP | 11 08 27.7 | -0.3 |
| | baz=17,slow=1.7 | | | | | |
| GRF | | | *e*PKPab | PKPab | 11 08 35.7 | -0.2 |
| | baz=24,slow=3.8 | | | | | |
| CKRC | Cesky Krumlov | 150.22 343 | *e*PKP | PKiKP | 11 08 28.0 | -0.3 |
| SRE | Strehaia | 150.26 328 | ⇑P | PKiKP | 11 08 28.5 | +0.1 |
| BZS | Buzias | 150.30 331 | ⇑P | PKPbc | 11 08 25.7 | -2.2 |
| GERES | GERESS Array B | 150.36 344 | PKPbc | PKPbc | 11 08 27.9 | -0.2 |
| | comp=Z,2.9nm,0.7s,baz=170,slow=8.1,SNR=13 | | | | | |
| BMRD | Maredsous | 150.38 356 | *d*PKP | PKiKP | 11 08 28.1 | -0.4 |
| HERR | Herculane | 150.49 329 | ⇑P | PKPbc | 11 08 28.1 | -0.3 |
| CONA | Conrad Observa | 150.57 341 | *i* PKP | PKiKP | 11 08 28.8 | -0.3 |
| | comp=Z,4.0nm,0.6s,SNR=11 | | | | | |
| DOU | Dourbes | 150.60 356 | *d*PKP | PKiKP | 11 08 28.4 | -0.6 |
| RONA | Rosalia, Austr | 150.64 340 | *i* PKP | PKiKP | 11 08 28.8 | -0.3 |
| | comp=Z,5.7nm,0.4s,SNR=12 | | | | | |
| MORH | Mrgy, Hungar | 151.07 335 | ⇑P | PKPbc | 11 08 29.0 | -0.7 |
| MOA | Molln | 151.12 342 | *i* PKP | PKPbc | 11 08 29.5 | -0.3 |
| | comp=Z,2.4nm,0.5s,SNR=4.0 | | | | | |
| BIOA | Bad Ischl, Aus | 151.43 343 | *i* PKP | PKPbc | 11 08 29.9 | -0.6 |
| | comp=Z,1.4nm,0.3s | | | | | |
| BOVS | Bovan | 151.75 329 | ⇑P | PKPbc | 11 08 30.6 | -0.7 |
| LESA | Schwarzleotal | 151.93 344 | *i* PKP | PKiKP | 11 08 31.4 | -0.5 |
| | comp=Z,3.4nm,0.5s | | | | | |
| SOKA | Soboth | 151.94 340 | *e*PKP | PKPbc | 11 08 31.0 | -0.7 |
| | comp=Z,0.8nm,0.3s | | | | | |
| KBA | Koelnbreinsper | 152.08 343 | *i* PKP | PKPbc | 11 08 31.0 | -1.2 |
| | comp=Z,1.4nm,0.4s | | | | | |
| WATA | Walderalm | 152.28 346 | *i* PKP | PKPbc | 11 08 31.9 | -0.6 |
| | comp=Z,0.8nm,0.3s | | | | | |
| WTTA | Wattenberg | 152.34 345 | *i* PKP | PKPbc | 11 08 32.4 | -0.4 |
| | comp=Z,2.5nm,0.4s | | | | | |
| MOTA | Moosalm | 152.38 346 | *i* PKP | PKPbc | 11 08 32.3 | -0.5 |
| | comp=Z,1.2nm,0.4s | | | | | |
| MYKA | Terra Mystica | 152.40 342 | *i* PKP | PKPbc | 11 08 31.7 | -1.1 |
| | comp=Z,1.5nm,0.4s | | | | | |
| SQTA | Sankt Quirin | 152.48 346 | *i* PKP | PKPbc | 11 08 32.5 | -0.4 |
| | comp=Z,1.2nm,0.3s | | | | | |
| ABTA | Abfaltersbach | 152.60 344 | *i* PKP | PKPbc | 11 08 32.4 | -0.8 |
| | comp=Z,4.1nm,0.5s,SNR=7.7 | | | | | |
| FETA | Feichten | 152.77 347 | *i* PKP | PKiKP | 11 08 33.4 | -0.4 |
| | comp=Z,1.8nm,0.5s | | | | | |
| APE | Apeiranthos | 153.71 313 | ⇑P | PKPbc | 11 08 33.1 | -2.7 |
| ESDC | Sonseca Array | 160.47 13 | PKPab | PKPab | 11 09 20.1 | -0.5 |
| | comp=Z,0.8nm,1.0s,baz=328,slow=3.8,SNR=7.7 | | | | | |

**IDC 19 10:56:20.2±45.0, 15°.11S×176°.49W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=853.4km s-min=174.6km az=76.0, Fiji Islands region**

| Code | Station Name | Δ° AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|
| | | | Op | ISC | h m s | ISC |
| STKA | Stephens Creek | 41.62 239 | P | P | 11 04 09.3 | -1.0 |
| | 0.8nm,0.4s,baz=96,slow=10,SNR=1.8 | | | | | |
| | 0.8nm,0.4s | | | | | |
| WRA | Warramunga Arr | 47.01 257 | P | P | 11 04 54.1 | +0.4 |
| | 0.3nm,0.4s,baz=90,slow=8.1,SNR=11 | | | | | |
| | 0.3nm,0.4s | | | | | |
| ASAR | Alice Springs | 47.37 252 | P | P | 11 04 56.4 | -0.1 |
| | 2.8nm,0.4s,baz=90,slow=7.6,SNR=43 | | | | | |
| | 2.8nm,0.4s | | | | | |

*NOU **19** 10:58:41.6, 16°.62S×176°.70W, h495km, mB4.6/11, Fiji Islands Region*
*NEIC **19** 10:58:57.9±1.8, 18°.1S±0°.2×178°.1W±0°.1, h512km±10km, mb4.3/24, Error ellipse: s-maj=24.6km s-min=19.4km az=164.0*
*IDC **19** 10:58:57.2±2.3, 18°.00S×178°.12W, h520km±26km, mb3.7/13, mbtmp4.5/14, Error ellipse: s-maj=18.0km s-min=13.1km az=166.0*

**ISC 19 10:58:56.2±0.4, 17°.95S±0°.08×178°.12W±0°.08, h500km, n121, σ1§62/117, mb4.4/28, 5C-1D, Fiji Islands region**

| Code | Station Name | Δ° AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|
| | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.65 273 | P | P | 11 00 17.5 | +5.4 |
| MSVF | Nonsavu | 3.65 273 | | P | 11 00 17.7 | +5.7 |
| AFI | Afiamalu | 7.30 58 | | P | 11 00 45.2 | -0.5 |
| NIUE | Niue | 7.86 99 | P | P | 11 00 53.4 | +2.2 |
| FUNA | Funafuti | 9.72 344 | P | P | 11 01 13.3 | +2.5 |
| RAO | Raoul Island | 11.25 179 | P | P | 11 01 29.0 | +2.2 |
| RAO | Raoul Island | 11.25 179 | P | P | 11 01 28.3 | +1.5 |
| | 160nm,0.3s,baz=227,slow=20,SNR=5.5 | | | | | |
| GLKZ | Green Lake | 11.26 179 | P | P | 11 01 28.8 | +2.0 |
| LIFNC | LIFOU | 14.10 256 | P | P | 11 01 56.5 | -0.6 |
| PINNC | Pines Island, | 14.31 249 | P | P | 11 01 59.8 | +0.6 |
| DZM | Mont Dzumac | 15.07 252 | P | P | 11 02 10.4 | +3.0 |
| DZM | Mont Dzumac | 15.07 252 | P | P | 11 02 08.1 | +0.7 |
| | 4.4nm,0.4s,baz=94,slow=13,SNR=8.6 | | | | | |
| NOUC | Port Laguerre | 15.21 252 | P | P | 11 02 13.7 | +5.1 |
| KOUNC | Koumac, New Ca | 16.81 258 | P | P | 11 02 25.2 | -0.2 |
| KOUNC | Koumac, New Ca | 16.81 258 | P | P | 11 02 26.2 | +0.8 |
| KOUNC | | | IAmb | IAmb | 11 02 26.3 | |
| | comp=Z,10nm,0.7s | | | | | |
| OUZ | Omahuta | 18.71 202 | P | P | 11 02 45.5 | +2.5 |
| GRZ | Great Barrier | 19.09 196 | P | P | 11 02 47.8 | +1.3 |
| KUZ | Kuaotunu | 19.50 195 | P | P | 11 02 51.3 | +1.2 |
| KUZ | Kuaotunu | 19.50 195 | P | P | 11 02 51.5 | +1.3 |
| KUZ | Kuaotunu | 19.50 195 | P | P | 11 02 51.4 | +1.3 |
| WIAZ | Waiheke Island | 19.69 196 | P | P | 11 02 54.0 | +2.1 |
| MBAZ | Motutapu North | 19.73 197 | P | P | 11 02 53.9 | +1.6 |
| MXZ | Matakaoa Point | 19.79 188 | P | P | 11 02 53.2 | +0.4 |
| MXZ | Matakaoa Point | 19.79 188 | P | P | 11 02 52.7 | -0.1 |
| RVAZ | Riverhead Bore | 19.82 198 | P | P | 11 02 54.8 | +1.7 |
| ETAZ | East Tamaki Re | 19.90 197 | P | P | 11 02 55.7 | +1.9 |
| WTAZ | Waiatarua | 19.98 197 | P | P | 11 02 56.4 | +1.8 |
| WMGZ | Waiomatatini S | 20.03 188 | P | P | 11 02 54.6 | -0.3 |
| HAZ | Te Kaha | 20.06 190 | P | P | 11 02 54.1 | -1.1 |
| PKGZ | Pakihiroa | 20.12 189 | P | P | 11 02 54.4 | -1.5 |
| RUGZ | Raukumara Rang | 20.28 190 | P | P | 11 02 56.0 | -1.4 |
| TOZ | Tahuroa Road | 20.49 195 | P | P | 11 03 00.8 | +1.7 |
| URZ | Urewera | 20.66 191 | P | P | 11 02 58.7 | -2.0 |
| URZ | Urewera | 20.66 191 | P | P | 11 02 58.5 | -2.2 |
| | comp=Z,17nm,0.3s,baz=359,slow=2.8,SNR=52 | | | | | |
| | comp=Z,17nm,0.3s | | | | | |
| HIZ | Hauiti | 21.39 195 | P | P | 11 03 08.1 | +0.8 |
| BKZ | Black Stump Fm | 21.65 191 | P | P | 11 03 08.1 | -1.7 |
| BFZ | Birch Farm | 23.17 191 | P | P | 11 03 23.1 | -0.2 |
| QRZ | Quartz Range | 24.18 198 | P | P | 11 03 32.2 | -0.1 |
| PPT | Papeete | 27.18 94 | P | P | 11 03 59.5 | +0.4 |
| | comp=Z,15nm,0.5s,baz=96,slow=6.4,SNR=7.3 | | | | | |
| | comp=Z,15nm,0.5s | | | | | |
| RPZ | Rata Peaks | 27.27 197 | P | P | 11 03 59.8 | +0.2 |
| ODZ | Otahua Downs | 28.60 197 | P | P | 11 04 10.4 | -0.8 |
| EIDS | Eidsvold | 29.51 250 | P | P | 11 04 19.3 | -0.1 |
| EIDS | | | IAmb | IAmb | 11 04 20.2 | |
| | comp=Z,6.8nm,0.8s | | | | | |
| ARMA | Armidale | 30.16 240 | P | P | 11 04 26.1 | +1.0 |
| ARMA | Armidale | 30.16 240 | P | P | 11 04 25.6 | +0.5 |
| ARMA | | | IAmb | IAmb | 11 04 26.5 | |
| | comp=Z,11nm,0.7s | | | | | |
| CNB | Canberra Magne | 33.62 233 | P | P | 11 04 55.1 | +0.5 |
| CTAO | Charters Tower | 33.71 261 | P | P | 11 04 49.2 | -6.3 |
| CTAO | Charters Tower | 33.71 261 | P | P | 11 04 55.4 | -0.1 |
| CAN | Canberra | 33.90 233 | P | P | 11 04 57.4 | +0.5 |
| CAN | Canberra | 33.90 233 | P | P | 11 04 57.5 | +0.5 |
| CAN | | | IAmb | IAmb | 11 04 57.8 | |
| | comp=Z,12nm,0.7s | | | | | |
| CMSA | Cobar Meteorol | 35.37 241 | P | P | 11 05 09.3 | 0.0 |
| QLP | Quilpie | 35.78 249 | P | P | 11 05 12.5 | -0.2 |
| GLAD | Gladstone | 37.01 224 | P | P | 11 05 22.8 | +0.1 |
| TOO | Toolangi | 37.36 231 | P | P | 11 05 26.3 | +0.7 |
| TOO | Toolangi | 37.36 231 | P | P | 11 05 26.4 | +0.7 |
| TOO | Toolangi | 37.36 231 | P | P | 11 05 26.4 | +0.7 |
| COEN | Coen | 37.38 270 | P | P | 11 05 26.2 | +0.1 |
| BRAT | Ballarat | 38.51 232 | P | P | 11 05 36.1 | +1.1 |
| STKA | Stephens Creek | 38.85 241 | P | P | 11 05 38.3 | +0.4 |
| STKA | Stephens Creek | 38.85 241 | P | P | 11 05 38.5 | +0.5 |
| STKA | Stephens Creek | 38.85 241 | P | P | 11 05 38.4 | +0.4 |
| | comp=Z,16nm,0.7s,baz=91,slow=10,SNR=27 | | | | | |
| | comp=Z,16nm,0.7s | | | | | |
| HTT | Hallett | 41.36 240 | P | P | 11 05 58.5 | +0.4 |
| LCRK | Leigh Creek | 41.48 244 | P | P | 11 05 59.1 | 0.0 |
| WHYH | Whyalla | 42.40 240 | P | P | 11 06 06.3 | 0.0 |
| BBOO | Buckleboo | 43.63 241 | P | P | 11 06 15.6 | -0.3 |
| WR0 | Warramunga Arr | 44.70 260 | P | P | 11 06 23.7 | -0.8 |
| WB0 | Warramunga Arr | 44.86 260 | P | P | 11 06 24.9 | -0.8 |
| WB0 | | | IAmb | IAmb | 11 06 25.4 | |
| | comp=Z,5.2nm,0.8s | | | | | |
| WB2 | Warramunga Arr | 44.88 260 | P | P | 11 06 24.9 | -0.9 |
| WB2 | | | IAmb | IAmb | 11 06 25.3 | |
| | comp=Z,7.4nm,0.6s | | | | | |
| WRA | Warramunga Arr | 44.89 260 | P | P | 11 06 24.8 | -1.1 |
| WRA | Warramunga Arr | 44.89 260 | P | P | 11 06 24.6 | -1.4 |
| | comp=Z,4.3nm,0.5s,baz=93,slow=6.9,SNR=134 | | | | | |
| | comp=Z,4.3nm,0.5s | | | | | |
| AS31 | Alice Springs | 45.04 254 | P | P | 11 06 26.5 | -0.6 |
| AS31 | | | IAmb | IAmb | 11 06 27.0 | |
| | comp=Z,13nm,0.7s | | | | | |
| ASAR | Alice Springs | 45.04 254 | P | P | 11 06 26.4 | -0.6 |
| | comp=Z,46nm,0.6s,baz=88,slow=8.0,SNR=480 | | | | | |
| | comp=Z,46nm,0.6s | | | | | |
| FORT | Forrest | 50.24 245 | P | P | 11 07 05.0 | -0.9 |
| KNRA | Kununurra | 50.76 264 | P | P | 11 07 09.4 | -0.6 |
| KNRA | | | IAmb | IAmb | 11 07 09.7 | |
| | comp=Z,6.8nm,0.7s | | | | | |
| FITZ | Fitzroy Crossi | 53.29 261 | P | P | 11 07 28.0 | -0.2 |
| PSA00 | Pilbara Seismi | 58.16 255 | P | P | 11 08 01.0 | -1.1 |
| PSA00 | | | IAmb | IAmb | 11 08 01.6 | |
| | comp=Z,8.3nm,0.7s | | | | | |
| MBWA | Marble Bar | 58.33 256 | P | P | 11 08 02.1 | -1.1 |
| NWAO | Narrogin (SRO) | 59.43 242 | P | P | 11 08 09.8 | -0.7 |
| NWAO | | | IAmb | IAmb | 11 08 12.0 | |
| | comp=Z,9.8nm,1.0s | | | | | |
| MORW | Morawa | 60.72 246 | P | P | 11 08 18.0 | -1.1 |
| MORW | | | IAmb | IAmb | 11 08 18.3 | |
| | comp=Z,4.9nm,0.6s | | | | | |
| GIRL | Giralia | 63.15 253 | P | P | 11 08 35.2 | +0.2 |
| UGM | Wanagama | 69.92 268 | P | P | 11 09 16.4 | -0.9 |
| QSPA | South Pole Qui | 72.11 180 | P | P | 11 09 28.8 | -0.4 |
| QSPA | | | IAmb | IAmb | 11 09 30.3 | |
| | comp=Z,16nm,1.1s | | | | | |
| QSPA | South Pole Qui | 72.11 180 | P | P | 11 09 28.9 | -0.3 |
| | comp=Z,7.5nm,0.5s,baz=221,slow=1.0,SNR=131 | | | | | |
| | comp=Z,7.5nm,0.5s | | | | | |
| NVAR | Mina Array Bea | 79.26 44 | P | P | 11 10 08.8 | -0.8 |
| | comp=Z,0.6nm,0.7s,baz=225,slow=9.0,SNR=6.2 | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | |
| MAW | Mawson | 83.91 200 | P | P | 11 10 31.9 | -0.8 |
| | comp=Z,3.2nm,0.6s,baz=142,slow=6.1,SNR=9.9 | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | |
| TXAR | Lajitas Array | 85.79 58 | P | P | 11 10 43.2 | +0.5 |
| | comp=Z,0.5nm,0.7s,baz=232,slow=4.4,SNR=4.2 | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | |
| ILAR | Eielson Array | 85.86 13 | P | P | 11 10 40.1 | -2.0 |
| | comp=Z,0.5nm,0.4s,baz=222,slow=5.4,SNR=27 | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | |
| PDAR | Pinedale Array | 87.19 43 | P | P | 11 10 48.4 | -0.8 |
| | comp=Z,0.2nm,0.5s,baz=203,slow=2.9,SNR=3.9 | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | |
| HHC | Hu-ho-hao-te | 87.50 314 | *e*P | P | 11 10 51.4 | +0.9 |
| HHC | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | |
| HHC | | | pmax | pmax | | |
| | comp=Z,81nm,5.7s | | | | | |
| ELIB | Princess Elisa | 89.15 187 | *d*P | P | 11 10 56.7 | -1.0 |
| | comp=Z,13nm,0.7s | | | | | |
| CMAR | Chiang Mai Arr | 89.16 290 | P | P | 11 10 58.6 | 0.0 |
| | comp=Z,1.4nm,0.7s,baz=131,slow=3.7,SNR=8.1 | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | |
| PZH | PanZhiHua | 89.42 298 | P | P | 11 11 01.8 | +2.0 |
| PZH | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | |
| TROLL | Troll, Antarti | 90.27 180 | ⇑P | P | 11 11 01.9 | -1.0 |
| | comp=Z,252nm,0.4s | | | | | |
| SNAA | Sanae | 90.55 179 | ⇑P | P | 11 11 03.1 | -1.1 |
| | comp=Z,56nm,0.5s | | | | | |
| SNAA | Sanae | 90.55 179 | P | P | 11 11 02.7 | -1.5 |
| | comp=Z,2.4nm,0.6s,baz=192,slow=8.7,SNR=20 | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | |
| VNA3 | Neumayer Olymp | 90.68 176 | ⇑P | P | 11 11 03.7 | -1.1 |
| | comp=Z,17nm,0.6s | | | | | |
| VNA2 | Neumayer--Watz | 91.12 177 | ⇑P | P | 11 11 06.0 | -0.7 |
| | comp=Z,13nm,0.8s,baz=177,slow=3.7 | | | | | |
| VNA1 | Neumayer--Stat | 91.35 177 | ⇑P | P | 11 11 07.5 | -0.2 |
| | comp=Z,16nm,1.0s | | | | | |
| BVAR | Bororoye Array | 117.05 321 | PKP | PKPdf | 11 16 41.6 | -2.2 |
| | comp=Z,1.1nm,0.5s,baz=149,slow=0.8,SNR=7.7 | | | | | |
| ARCES | ARCESS Array B | 126.40 350 | PKP | PKPdf | 11 16 59.7 | -1.6 |
| | comp=Z,0.5nm,0.4s,baz=48,slow=1.8,SNR=6.8 | | | | | |
| FINES | FINESS Array B | 133.30 344 | PKhKP | PKPpre | 11 17 08.7 | |
| | comp=Z,1.1nm,0.7s,baz=85,slow=3.3,SNR=1.2 | | | | | |
| FINES | | | PKP | PKPdf | 11 17 12.9 | -1.6 |
| | comp=Z,1.9nm,0.9s,baz=29,slow=4.4,SNR=3.3 | | | | | |
| BNN | Bunyan | 143.88 312 | | PKPbc | 11 17 33.5 | -0.3 |
| BUR08 | Bucovina Ar. S | 144.76 332 | | PKPdf | 11 17 35.5 | -0.4 |
| BR131 | Keskin Array S | 145.00 315 | | PKPdf | 11 17 36.1 | -0.5 |
| BRTR | Keskin Array B | 145.00 315 | PKPbc | PKPdf | 11 17 35.5 | -1.1 |
| | comp=Z,3.4nm,0.8s,baz=151,slow=5.3,SNR=19 | | | | | |
| CLL | Collm | 145.56 348 | | PKPdf | 11 17 37.1 | +0.1 |
| CLL | Collm | 145.56 348 | *i* PKPbc | PKPdf | 11 17 37.0 | +0.1 |
| | comp=Z,5.0nm,0.6s | | | | | |
| MMAI | Mount Meron Ar | 146.39 303 | PKPbc | PKPdf | 11 17 40.2 | +1.1 |
| | comp=Z,6.9nm,0.5s,baz=82,slow=5.6,SNR=12 | | | | | |
| GRF | Grafenberg Arr | 147.45 349 | *e*PKP | PKPdf | 11 17 42.6 | +2.4 |
| | baz=17,slow=2.2 | | | | | |
| GERES | GERESS Array B | 147.72 345 | PKPbc | PKPdf | 11 17 43.0 | +2.2 |
| | comp=Z,1.3nm,0.5s,baz=21,slow=8.4,SNR=8.4 | | | | | |
| CONA | Conrad Observa | 147.99 342 | *i* PKiKP | PKPdf | 11 17 44.3 | +3.0 |
| | comp=Z,1.5nm,0.5s | | | | | |
| RONA | Rosalia, Austr | 148.06 341 | *i* PKiKP | PKPdf | 11 17 44.3 | +3.0 |
| | comp=Z,1.0nm,0.4s | | | | | |
| LESA | Schwarzleotal | 149.29 346 | *i* PKP | PKPdf | 11 17 46.8 | +3.4 |
| | comp=Z,0.8nm,0.3s | | | | | |
| SOKA | Soboth | 149.36 342 | *i* PKP | PKPdf | 11 17 46.7 | +3.2 |
| | comp=Z,0.2nm,0.2s | | | | | |
| KBA | Koelnbreinsper | 149.45 344 | *i* PKP | PKPdf | 11 17 46.9 | +3.2 |
| | comp=Z,0.8nm,0.3s | | | | | |
| WTTA | Wattenberg | 149.68 347 | *i* PKiKP | PKPdf | 11 17 47.8 | +3.7 |
| | comp=Z,1.6nm,0.3s | | | | | |
| MOTA | Moosalm | 149.72 348 | *i* PKP | PKPdf | 11 17 47.6 | +3.5 |
| | comp=Z,1.1nm,0.5s | | | | | |
| MYKA | Terra Mystica | 149.79 344 | *i* PKP | PKPdf | 11 17 47.5 | +3.3 |
| | comp=Z,1.8nm,0.4s | | | | | |
| SQTA | Sankt Quirin | 149.81 347 | *i* PKiKP | PKPdf | 11 17 48.1 | +3.9 |
| | comp=Z,2.3nm,0.4s | | | | | |
| ABTA | Abfaltersbach | 149.97 345 | *i* PKP | PKPdf | 11 17 48.1 | +3.6 |
| | comp=Z,1.9nm,0.4s | | | | | |
| FETA | Feichten | 150.10 348 | *i* PKP | PKPdf | 11 17 48.1 | +3.3 |
| | comp=Z,1.2nm,0.6s | | | | | |
| TORD | Torodi Ar. Bea | 175.22 178 | PKP | PKPdf | 11 18 07.2 | -2.0 |
| | comp=Z,2.0nm,1.0s,baz=12,slow=4.3,SNR=6.3 | | | | | |

**NNC 19 10:59:26.4±3.7, 37°.12N×71°.16E, h175km±72km, mb2.7, mpv3.7,1C-2D, Error ellipse: s-maj=39.8km s-min=29.1km az=11.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|
| | | | Op | ISC | h m s | ISC |
| KK31 | Karatay Array | 6.00 355 | P | Pn | 11 00 53.4 | +0.2 |
| | 2.7nm,0.3s,baz=180,slow=13,SNR=72 | | | | | |
| KK31 | | | ⇓S | Sn | 11 02 02.2 | +0.5 |
| | 2.9nm,0.4s,baz=180,slow=26,SNR=4.8 | | | | | |
| AAK | Ala-Archa | 6.08 24 | P | Pn | 11 00 54.3 | -0.2 |
| | 2.3nm,0.3s | | | | | |
| AAK | | | ⇓S | Sn | 11 02 04.2 | +0.4 |
| | 9.2nm,0.7s | | | | | |
| AB31 | Akbulak array | 14.61 330 | ⇑P | Pn | 11 02 44.7 | 0.0 |
| | 0.4nm,0.4s,baz=100,slow=5.0,SNR=15 | | | | | |

*MOS **19** 11:00:29.7±1.3, 17°.96S×178°.08W, h538km, mb4.8/12, Error ellipse: s-maj=9.8km s-min=9.3km az=2.1*
*NEIC **19** 11:00:30.9±1.9, 18°.03S±0°.10×177°.96W±0°.10, h544km±6km, mb5.2/83, Error ellipse: s-maj=14.4km s-min=13.2km az=165.0*
*IDC **19** 11:00:31.4±0.6, 18°.04S×178°.07W, h553km±6km, mb4.5/19, mbtmp5.4/22, Error ellipse: s-maj=9.5km s-min=7.5km az=167.0*
*BJI **19** 11:00:31.0±0.0, 18°.10S×178°.00W, h560km, mb4.9/47, mB4.8/18*
*NOU **19** 11:00:32.3, 18°.01S×177°.99W, h560km, ML5.1/142, Fiji Islands Region*

**ISC 19 11:00:31.2±0.4, 18°.08S±0°.04×177°.99W±0°.04, h555km±3km, h556km: pP-P, n885, σ1§16/949, mb5.2/138, 89C-36D, Fiji Islands region**

| Code | Station Name | Δ° AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|
| | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.78 275 | P | P | 11 01 53.9 | +1.9 |
| MSVF | Nonsavu | 3.78 275 | P | P | 11 01 54.1 | +2.1 |
| MSVF | Nonsavu | 3.78 275 | *c iP* | P | 11 01 53.9 | +1.9 |
| AFI | Afiamalu | 7.27 56 | P | P | 11 02 19.2 | -2.9 |
| AFI | Afiamalu | 7.27 56 | P | P | 11 02 19.2 | -2.9 |
| NIUE | Niue | 7.71 99 | P | P | 11 02 26.8 | +0.5 |
| NIUE | Niue | 7.71 99 | P | P | 11 02 26.5 | +0.2 |
| FUNA | Funafuti | 9.88 344 | P | P | 11 02 49.4 | +1.3 |
| FUNA | Funafuti | 9.88 344 | | P | 11 02 47.5 | -0.6 |
| RAO | Raoul Island | 11.13 180 | P | P | 11 03 00.1 | -0.5 |
| RAO | Raoul Island | 11.13 180 | P | P | 11 03 00.4 | -0.3 |
| | 136nm,0.3s,baz=52,slow=19,SNR=2.8 | | | | | |
| RAO | | | S | S | 11 05 04.3 | +0.7 |
| | 165nm,0.5s,baz=98,slow=21,SNR=4.1 | | | | | |
| GLKZ | Green Lake | 11.14 180 | P | P | 11 02 59.2 | -1.6 |
| GLKZ | | | S | S | 11 05 04.5 | +0.7 |
| RTV | Rentapao | 12.93 269 | P | P | 11 03 21.7 | +2.3 |
| DVP | Devils Point | 13.16 269 | P | P | 11 03 23.5 | +1.7 |
| MARNC | Mare, Loyalty | 13.59 253 | P | P | 11 03 26.0 | -0.2 |
| LIFNC | LIFOU | 14.19 257 | P | P | 11 03 31.7 | -0.7 |
| LIFNC | LIFOU | 14.19 257 | P | P | 11 03 30.8 | -1.6 |
| PINNC | Pines Island, | 14.38 249 | P | P | 11 03 34.3 | 0.0 |
| PINNC | Pines Island, | 14.38 249 | P | P | 11 03 33.5 | -0.8 |
| YATNC | Mamie plateau, | 14.74 252 | P | P | 11 03 37.8 | -0.2 |
| DZM | Mont Dzumac | 15.15 252 | P | P | 11 03 42.0 | -0.3 |
| DZM | Mont Dzumac | 15.15 252 | P | P | 11 03 41.0 | -1.3 |
| | 99nm,0.6s,baz=94,slow=11,SNR=56 | | | | | |
| DZM | | | S | S | 11 06 18.2 | -1.1 |
| | 22nm,1.1s,baz=227,slow=18,SNR=2.1 | | | | | |
| DZM | | | ScP | ScP | 11 10 53.6 | +2.3 |
| | 14nm,0.8s,baz=47,slow=15,SNR=10.0 | | | | | |
| NOUC | Port Laguerre | 15.29 252 | P | P | 11 03 44.5 | +0.9 |
| NFK | Norfolk Island | 16.88 227 | P | P | 11 04 00.9 | +2.3 |
| NFK | Norfolk Island | 16.88 227 | P | P | 11 04 00.9 | +2.3 |
| | comp=Z,1µm,1.5s | | | | | |
| KOUNC | Koumac, New Ca | 16.91 259 | P | P | 11 03 59.9 | +0.9 |
| KOUNC | Koumac, New Ca | 16.91 259 | P | P | 11 03 59.5 | +0.5 |
| RAR | Rarotonga | 17.44 103 | P | P | 11 04 04.4 | +0.6 |
| RAR | Rarotonga | 17.44 103 | P | P | 11 04 04.6 | +0.8 |
| RAR | Rarotonga | 17.44 103 | P | P | 11 04 04.2 | +0.4 |
| | comp=Z,2.6nm,1.0s,baz=244,slow=6.8,SNR=24 | | | | | |
| OUZ | Omahuta | 18.64 202 | P | P | 11 04 17.2 | +2.6 |
| KUZ | Kuaotunu | 19.41 195 | P | P | 11 04 23.6 | +2.1 |
| MXZ | Matakaoa Point | 19.68 189 | P | P | 11 04 22.9 | -1.2 |
| WIZ | White Island | 19.84 191 | P | P | 11 04 25.9 | +0.4 |
| HAZ | Te Kaha | 19.95 190 | P | P | 11 04 25.1 | -1.4 |
| HAZ | | | S | S |

SNVZ **South Ngauruho** 21.75 193 P **P** 11 04 42.1 -0.9
COVZ **Chateau Observ** 21.79 194 P **P** 11 04 42.1 -1.0
MCHZ **McNeill Hill** 21.79 191 S **S** 11 08 06.9 +0.7
KWHZ **Kaweka Forest** 21.82 192 P **P** 11 04 41.9 -1.5
KWHZ S **S** 11 08 03.2 -3.6
FWVZ **Far West T-bar** 21.84 194 P **P** 11 04 42.5 -1.2
WHVZ **Whangaehu Hut** 21.86 193 P **P** 11 04 43.0 -0.9
WNVZ **Wahianoa** 21.90 193 P **P** 11 04 42.6 -1.6
VRZ **Vera Road** 21.90 195 P **P** 11 04 45.3 +1.3
CKHZ **Cape Kidnapper** 21.93 190 P **P** 11 04 43.7 -0.6
MOVZ **Moawhango** 21.94 193 P **P** 11 04 43.0 -1.5
KRHZ **Kereru** 22.04 192 P **P** 11 04 43.7 -1.6
KAHZ **Kahuranaki** 22.09 191 P **P** 11 04 45.1 -0.8
DREZ **Durham Road** 22.11 196 P **P** 11 04 49.2 +3.3
NEZ **North Egmont** 22.21 196 P **P** 11 04 49.7 +2.8
KHEZ **Kahui Hut** 22.25 197 P **P** 11 04 50.2 +2.9
NBEZ **Newall Road No** 22.27 197 P **P** 11 04 50.5 +3.2
LREZ **Lake Rotokare** 22.31 196 P **P** 11 04 48.9 +1.2
PXZ **Pawanui** 22.33 190 P **P** 11 04 46.8 -1.0
PXZ S **S** 11 08 13.1 -1.5
PNHZ **Pukenui** 22.34 192 P **P** 11 04 46.5 -1.5
PNHZ S **S** 11 08 15.3 +0.4
NMEZ **Namu Road** 22.40 197 P **P** 11 04 51.5 +3.0
WPHZ **Waipukurau** 22.44 191 P **P** 11 04 49.3 +0.5
WPHZ S **S** 11 08 18.1 +1.7
WAZ **Wanganui** 22.44 194 P **P** 11 04 48.7 -0.2
PRHZ **Porangahau** 22.60 191 P **P** 11 04 49.7 -0.5
DVHZ **Dannevirke** 22.71 192 P **P** 11 04 48.4 -2.9
DVHZ S **S** 11 08 20.8 0.0
ANWZ **Angora Road** 22.81 191 P **P** 11 04 51.5 -0.6
ANWZ S **S** 11 08 22.8 +0.6
PRWZ **Pori Road** 23.00 192 P **P** 11 04 54.0 +0.2
HNR **Honiara** 23.07 289 P **P** 11 04 55.4 +0.6
BFZ **Birch Farm** 23.07 191 P **P** 11 04 53.3 -1.2
BFZ S **S** 11 08 24.1 -2.3
MRZ **Mangatainoka R** 23.18 192 P **P** 11 04 53.4 -2.0
MRZ S **S** 11 08 24.8 -3.3
SNZO **South Karori** 23.99 194 P **P** 11 05 02.0 -0.6
PPT **Papeete** 27.05 93 P **P** 11 05 30.4 +0.4
comp=Z,149nm,0.7s,baz=225,slow=2.9,SNR=34
comp=Z,149nm,0.7s
PPTF **Pamatai, Papee** 27.06 93 P **P** 11 05 31.1 +1.0
PPTF **Pamatai, Papee** 27.06 93 P **P** 11 05 30.3 +0.2
RPZ **Rata Peaks** 27.18 198 P **P** 11 05 31.5 +0.7
GC1S **Gold Coast 1 S** 28.00 244 P **P** 11 05 39.5 +1.4
comp=Z,146nm,0.9s
JCZ **Jackson Bay** 28.21 200 P **P** 11 05 40.3 +0.5
AUWSH **Wavell State H** 28.23 246 P **P** 11 05 41.4 +1.3
ODZ **Otahua Downs** 28.52 197 P **P** 11 05 42.3 -0.1
GD1S **Gladstone Soft** 29.33 253 P **P** 11 05 50.5 +0.8
comp=Z,159nm,0.8s
EIDS **Eidsvold** 29.58 250 P **P** 11 05 52.2 +0.3
EIDS **Eidsvold** 29.58 250 P **P** 11 05 51.6 -0.3
EIDS IAmb IAmb 11 05 52.9
comp=Z,135nm,0.8s
EIDS **Eidsvold** 29.58 250 P **P** 11 05 51.7 -0.3
comp=Z,176nm,1.2s
RK1H **Rockhampton Ha** 29.91 254 P **P** 11 05 54.6 -0.1
comp=Z,80nm,0.9s
ARMA **Armidale** 30.20 240 P **P** 11 05 58.9 +1.6
ARMA **Armidale** 30.20 240 P **P** 11 05 58.4 +1.1
ARMA **Armidale** 30.20 240 P **P** 11 05 58.2 +0.9
comp=Z,224nm,0.9s
SYZ **Scrubby Hill** 30.31 198 P **P** 11 05 58.8 +1.0
NTLH **Newcastle Hard** 30.95 236 P **P** 11 06 05.6 +2.1
comp=Z,289nm,0.9s
AUPHS **Peel High Scho** 31.01 239 P **P** 11 06 05.6 +1.5
RIV **Riverview** 31.71 234 P **P** 11 06 11.1 +1.0
comp=Z,174nm,1.3s
SYDH **Sydney Hard Ro** 32.01 235 P **P** 11 06 13.9 +1.3
comp=Z,203nm,1.0s
WOLH **Wollongong Har** 32.15 233 P **P** 11 06 15.2 +1.5
comp=Z,152nm,0.7s
AUAYR **Ayr State High** 32.75 262 P **P** 11 06 20.0 +1.0
AULRC **Lightning Ridg** 33.02 244 P **P** 11 06 22.0 +0.8
AUDCS **Dubbo College** 33.18 238 P **P** 11 06 24.4 +1.8
TV1H **Townsville Har** 33.35 262 P **P** 11 06 23.8 -0.3
comp=Z,73nm,1.0s
CNB **Canberra Magne** 33.64 233 P **P** 11 06 28.0 +1.5
CNB **Canberra Magne** 33.64 233 P **P** 11 06 27.5 +1.0
comp=Z,521nm,1.2s
CTA **Charters Tower** 33.81 261 P **P** 11 06 28.2 +0.2
CTA **Charters Tower** 33.81 261 PcP **PcP** 11 08 49.5 -1.5
comp=Z,1.4nm,1.0s,baz=124,slow=3.6,SNR=4.9
CTA S **S** 11 11 10.9 -2.4
comp=Z,0.3nm,0.8s,baz=213,slow=19,SNR=2.5
CTA ScP **ScP** 11 11 44.7 +1.3
comp=Z,2.2nm,1.1s,baz=72,slow=2.2,SNR=11
CTAO **Charters Tower** 33.81 261 P **P** 11 06 28.2 +0.2
CTAO **Charters Tower** 33.81 261 P **P** 11 06 28.0 0.0
CTAO IAmb IAmb 11 06 29.0
comp=Z,139nm,0.8s
CTAO **Charters Tower** 33.81 261 P **P** 11 06 28.0 0.0
CTAO pmax pmax
comp=Z,139nm,0.9s
CTAO **Charters Tower** 33.81 261 P **P** 11 06 28.0 0.0
CTAO pP **pwP** 11 08 02.2 -2.3
CTAO PcP **PcP** 11 08 51.4 +0.4
CTAO ScP **ScP** 11 11 46.0 +2.6
CAN **Canberra** 33.92 233 P **P** 11 06 30.2 +1.4
CAN **Canberra** 33.92 233 P **P** 11 06 29.3 +0.5
CAN **Canberra** 33.92 233 P **P** 11 06 29.2 +0.4
comp=Z,327nm,1.1s
CAN **Canberra** 33.92 233 P **P** 11 06 29.3 +0.5
CAN pmax pmax
comp=Z,326nm,1.1s
CAN **Canberra** 33.92 233 P **P** 11 06 29.7 +0.9
YNG **Young** 34.02 235 P **P** 11 06 30.9 +1.3
YNG **Young** 34.02 235 P **P** 11 06 30.0 +0.4
comp=Z,461nm,1.3s
PATS **Pohnpei** 34.06 315 P **P** 11 06 30.5 +0.4
PATS IAmb IAmb 11 06 53.7
comp=Z,76nm,1.0s
PATS **Pohnpei** 34.06 315 P **P** 11 06 29.5 -0.6
KAVG **Kavieng** 34.24 293 P **P** 11 06 32.2 +0.5
MILA **Mila** 34.48 230 P **P** 11 06 34.3 +0.9
comp=Z,128nm,1.7s
PMG **Port Moresby** 34.88 280 P **P** 11 06 38.6 +1.6
PMG **Port Moresby** 34.88 280 P **P** 11 06 38.5 +1.6
PMG **Port Moresby** 34.88 280 P **P** 11 06 37.4 +0.4
PMG **Port Moresby** 34.88 280 P **P** 11 06 37.2 +0.2
comp=Z,258nm,0.9s,baz=94,slow=8.2,SNR=50
PMG S **S** 11 11 28.9 -0.6
comp=Z,9.0nm,0.9s,baz=222,slow=22,SNR=7.9
comp=Z,258nm,0.9s
PMG **Port Moresby** 34.88 280*d* iP **P** 11 06 37.2 +0.2
PMG pmax pmax
comp=Z,376nm,1.0s
PMG **Port Moresby** 34.88 280 P **P** 11 06 37.8 +0.8
PMG PcP **PcP** 11 08 54.6 +0.5
CMSA **Cobar Meteorol** 35.41 241 P **P** 11 06 42.1 +0.9
CMSA **Cobar Meteorol** 35.41 241 P **P** 11 06 41.6 +0.4
comp=Z,376nm,0.9s
MTSU **Mount Surprise** 35.78 264 P **P** 11 06 44.8 +0.3
QLP **Quilpie** 35.85 249 P **P** 11 06 45.6 +0.7
QLP **Quilpie** 35.85 249 P **P** 11 06 44.9 0.0
comp=Z,681nm,0.7s
GLAD **Gladstone** 37.01 225 P **P** 11 06 55.2 +1.0
comp=Z,217nm,0.9s
TOO **Toolangi** 37.37 231 P **P** 11 06 58.8 +1.5
TOO **Toolangi** 37.37 231 P **P** 11 06 58.4 +1.1
TOO **Toolangi** 37.37 231 P **P** 11 06 58.1 +0.8
comp=Z,531nm,1.3s
TOO **Toolangi** 37.37 231 P **P** 11 06 58.4 +1.1
TOO pmax pmax
comp=Z,442nm,1.0s
AUMAG **Moama Anglican** 37.43 234 P **P** 11 06 59.5 +1.7
COEN **Coen** 37.50 270 P **P** 11 06 59.4 +0.8
COEN **Coen** 37.50 270 P **P** 11 06 59.0 +0.3
COEN **Coen** 37.50 270 P **P** 11 06 59.0 +0.3
comp=Z,249nm,1.1s
MANU **Manus Island** 37.53 291 P **P** 11 06 59.9 +1.0
CORO **Coronation Par** 37.80 225 P **P** 11 07 02.2 +1.5
comp=Z,335nm,0.9s
TAOE **Nuku Hiva Isla** 37.86 81 P **P** 11 07 02.7 +1.0
comp=Z,204nm,1.0s
TAOE **Nuku Hiva Isla** 37.86 81 P **P** 11 07 01.8 +0.1
TAOE **Nuku Hiva Isla** 37.86 81 P **P** 11 07 02.2 +0.6
MLBS **Spotswood, Mel** 37.91 231 P **P** 11 07 02.6 +1.0
comp=Z,337nm,0.8s
MOO **Moorlands** 38.24 223 P **P** 11 07 05.3 +1.1
MOO **Moorlands** 38.24 223 P **P** 11 07 05.5 +1.2
comp=Z,259nm,1.2s

AUTAR **Taroona High S** 38.37 222 P **P** 11 07 05.7 +0.4
TAU **Tasmania Unive** 38.38 222 P **P** 11 07 06.8 +1.4
TAU **Tasmania Unive** 38.38 222 P **P** 11 07 05.4 0.0
TAU IAmb IAmb 11 07 07.2
comp=Z,151nm,1.1s
TAU **Tasmania Unive** 38.38 222 P **P** 11 07 05.4 0.0
TAU pmax pmax
comp=Z,151nm,1.1s
TAU **Tasmania Unive** 38.38 222 P **P** 11 07 06.3 +0.9
GEXS **Deakin Univers** 38.48 231 P **P** 11 07 08.0 +1.7
comp=Z,470nm,1.6s
BRAT **Ballarat** 38.53 232 P **P** 11 07 08.2 +1.6
comp=Z,295nm,1.0s
STKA **Stephens Creek** 38.90 241 P **P** 11 07 10.8 +1.1
STKA **Stephens Creek** 38.90 241 P **P** 11 07 10.9 +1.2
STKA IAmb IAmb 11 07 11.9
comp=Z,108nm,1.1s
STKA **Stephens Creek** 38.90 241 P **P** 11 07 10.2 +0.5
comp=Z,95nm,1.1s
STKA **Stephens Creek** 38.90 241 P **P** 11 07 10.6 +0.8
comp=Z,291nm,0.9s,baz=82,slow=8.6,SNR=183
STKA ScP **ScP** 11 12 03.4 +1.1
comp=Z,14nm,1.0s,baz=37,slow=6.2,SNR=5.3
STKA S **S** 11 12 25.4 -3.2
comp=Z,5.3nm,1.0s,baz=217,slow=17,SNR=1.5
comp=Z,291nm,0.9s
INKA **Innaminka** 39.05 248 P **P** 11 07 12.3 +1.3
ARPS **Mount Arapiles** 39.87 234 P **P** 11 07 18.5 +1.0
ARPS **Mount Arapiles** 39.87 234 P **P** 11 07 17.9 +0.4
comp=Z,226nm,1.1s
QIS **Mount Isa** 40.01 259 P **P** 11 07 18.5 -0.4
QIS **Mount Isa** 40.01 259 P **P** 11 07 18.0 -0.8
comp=Z,53nm,1.6s
WAKE **Wake Island** 40.07 337 P **P** 11 07 18.3 -0.9
HTT **Hallett** 41.40 240 P **P** 11 07 30.9 +1.1
HTT **Hallett** 41.40 240 P **P** 11 07 30.2 +0.4
comp=Z,369nm,1.3s
LCRK **Leigh Creek** 41.54 244 P **P** 11 07 31.6 +0.8
TABU **Tabubil** 41.81 283 P **P** 11 07 33.8 +0.6
GHSS **Government Hou** 41.96 238 P **P** 11 07 35.2 +1.2
comp=Z,268nm,0.9s
PTPS **Port Pirie** 42.12 240 P **P** 11 07 37.7 +2.3
comp=Z,535nm,0.9s
WHYH **Whyalla** 42.45 241 P **P** 11 07 38.6 +0.7
comp=Z,332nm,0.9s
OOD **Oodnadatta** 43.53 248 P **P** 11 07 48.2 +1.8
BBOO **Buckleboo** 43.67 241 P **P** 11 07 48.3 +0.8
BBOO **Buckleboo** 43.67 241 P **P** 11 07 47.8 +0.3
BBOO **Buckleboo** 43.67 241 P **P** 11 07 47.7 +0.3
comp=Z,437nm,1.0s
GENI **Genyem** 43.79 286 P **P** 11 07 49.1 +0.4
WR0 **Warramunga Arr** 44.80 260 P **P** 11 07 56.4 -0.1
WR0 IAmb IAmb 11 07 56.9
comp=Z,214nm,1.4s
WB0 **Warramunga Arr** 44.96 260 P **P** 11 07 56.9 -0.7
WB2 **Warramunga Arr** 44.98 260 P **P** 11 07 56.6 -1.1
WRAB **Tennant Creek** 44.98 260 P **P** 11 07 57.7 -0.1
WRAB IAmb IAmb 11 07 58.2
comp=Z,148nm,0.8s
WRAB **Tennant Creek** 44.98 260*d* iP **P** 11 07 56.8 -1.0
WRAB pmax pmax
comp=Z,266nm,1.3s
WRA **Warramunga Arr** 44.99 260 P **P** 11 07 57.2 -0.7
WRA **Warramunga Arr** 44.99 260 P **P** 11 07 57.1 -0.7
comp=Z,103nm,0.8s,baz=93,slow=7.2,SNR=173
WRA PcP **PcP** 11 09 27.2 0.0
comp=Z,29nm,0.9s,baz=90,slow=4.0,SNR=7.4
WRA ScP **ScP** 11 12 27.9 +0.9
comp=Z,12nm,1.1s,baz=91,slow=4.5,SNR=12
WRA S **S** 11 13 54.8 -1.7
comp=Z,4.5nm,1.1s,baz=99,slow=13,SNR=5.8
WRA ScS **ScS** 11 16 48.0 -6.1
comp=Z,2.0nm,1.2s,baz=109,slow=4.8,SNR=2.9
comp=Z,103nm,0.8s
WRA **Warramunga Arr** 44.99 260 P **P** 11 07 57.2 -0.7
WRA pmax pmax
comp=Z,20nm,0.9s
AS01 **Alice Springs** 45.09 254 P **P** 11 07 58.2 -0.4
comp=Z,996nm,0.8s
MULG **Mulgathing** 45.10 245 P **P** 11 07 58.8 +0.3
AS31 **Alice Springs** 45.13 254 P **P** 11 07 59.0 +0.1
AS31 **Alice Springs** 45.13 254 P **P** 11 07 58.6 -0.3
comp=Z,229nm,0.8s
ASAR **Alice Springs** 45.13 254 P **P** 11 07 59.4 +0.5
ASAR **Alice Springs** 45.13 254 P **P** 11 07 58.8 -0.2
comp=Z,676nm,0.8s,baz=84,slow=8.6,SNR=504
ASAR PcP **PcP** 11 09 27.9 +0.4
comp=Z,37nm,0.8s,baz=104,slow=3.7,SNR=9.1
ASAR ScP **ScP** 11 12 28.8 +1.2
comp=Z,14nm,0.9s,baz=99,slow=4.2,SNR=11
ASAR S **S** 11 13 56.5 -1.9
comp=Z,22nm,1.1s,baz=87,slow=16,SNR=23
ASAR ScS **ScS** 11 16 50.3 -4.7
comp=Z,2.4nm,1.1s,baz=69,slow=6.2,SNR=4.9
ASAR P4KPbc 11 45 38.0
comp=Z,0.5nm,0.8s,baz=97,slow=3.8,SNR=5.4
KDU **Kakadu** 47.95 269 P **P** 11 08 20.4 +0.1
KDU **Kakadu** 47.95 269 P **P** 11 08 19.5 -0.8
comp=Z,187nm,1.3s
GUMO **Guam** 48.29 308 P **P** 11 08 22.7 0.0
GUMO **Guam** 48.29 308 P **P** 11 08 22.7 0.0
GUMO pmax pmax
comp=Z,157nm,0.8s
GUMO **Guam** 48.29 308 P **P** 11 08 22.6 -0.1
MTN **Manton Dam** 49.19 268 P **P** 11 08 29.3 -0.2
MTN **Manton Dam** 49.19 268 P **P** 11 08 28.7 -0.7
MTN IAmb IAmb 11 08 29.6
comp=Z,132nm,0.8s
MTN **Manton Dam** 49.19 268 P **P** 11 08 28.3 -1.1
comp=Z,185nm,1.0s
DRS **Darwin Rock St** 49.51 269 P **P** 11 08 31.2 -0.6
comp=Z,79nm,0.8s
WRKA **Warakurna** 50.17 252 P **P** 11 08 36.9 +0.3
WRKA **Warakurna** 50.17 252 P **P** 11 08 36.2 -0.4
comp=Z,512nm,0.9s
FORT **Forrest** 50.30 245 P **P** 11 08 37.7 +0.4
FORT **Forrest** 50.30 245 P **P** 11 08 36.7 -0.6
FORT **Forrest** 50.30 245 P **P** 11 08 36.4 -0.9
comp=Z,432nm,1.0s
KNRA **Kununurra** 50.87 264 P **P** 11 08 41.2 -0.5
KNRA IAmb IAmb 11 08 42.3
comp=Z,134nm,0.8s
KNRA **Kununurra** 50.87 264 P **P** 11 08 41.1 -0.6
comp=Z,193nm,1.0s
FAKI **Fak Fak** 51.00 281 P **P** 11 08 43.5 +0.8
FAKI **Fak Fak** 51.00 281 P **P** 11 08 42.4 -0.4
FAKI IAmb IAmb 11 08 43.5
comp=Z,201nm,1.4s
FITZ **Fitzroy Crossi** 53.39 261 P **P** 11 08 59.6 -0.2
comp=Z,157nm,1.4s
FITZ **Fitzroy Crossi** 53.39 261 P **P** 11 08 59.5 -0.3
KMBL **Kambalda** 55.59 244 P **P** 11 09 14.7 -0.4
KMBL **Kambalda** 55.59 244 P **P** 11 09 13.8 -1.3
comp=Z,146nm,1.2s
DRV **Dumont d'Urvil** 55.63 199 P **P** 11 09 15.2 +0.6
DRV PcP **PcP** 11 10 06.3 +0.4
DRV ScP **ScP** 11 13 13.8 +2.0
SOEI **Soe** 56.47 270 P **P** 11 09 22.5 +1.0
SOEI **Soe** 56.47 270 P **P** 11 09 22.0 +0.5
TNTI **Ternate** 56.88 283 P **P** 11 09 25.7 +1.5
SANI **Sanana** 57.16 279 P **P** 11 09 26.1 0.0
PSA00 **Pilbara Seismi** 58.25 255 P **P** 11 09 32.9 -0.5
PSA00 **Pilbara Seismi** 58.25 255 P **P** 11 09 33.1 -0.3
PSA00 IAmb IAmb 11 09 34.0
comp=Z,161nm,0.9s
PSA00 **Pilbara Seismi** 58.25 255 P **P** 11 09 32.6 -0.8
comp=Z,216nm,1.1s
MBWA **Marble Bar** 58.42 256 P **P** 11 09 34.1 -0.4
MBWA **Marble Bar** 58.42 256 P **P** 11 09 33.8 -0.7
MBWA IAmb IAmb 11 09 35.1
comp=Z,302nm,1.5s
MBWA **Marble Bar** 58.42 256 P **P** 11 09 33.7 -0.7
comp=Z,152nm,1.3s
MBWA **Marble Bar** 58.42 256 P **P** 11 09 33.7 -0.8
MBWA PcP **PcP** 11 10 17.8 -0.2
MBWA ScP **ScP** 11 13 26.9 +1.7
MMRI **Maumere** 58.70 271 P **P** 11 09 36.8 +0.3
MMRI **Maumere** 58.70 271 P **P** 11 09 35.6 -0.9
MMRI IAmb IAmb 11 09 36.9
comp=Z,139nm,0.9s
MEEK **Meekatharra** 58.75 249 P **P** 11 09 36.5 -0.2
MEEK **Meekatharra** 58.75 249 P **P** 11 09 35.6 -1.1
comp=Z,151nm,1.4s
AUALB **St Joseph's Co** 58.86 240 P **P** 11 09 38.6 +1.4
KLBR **Kellerberin** 59.11 244 P **P** 11 09 39.3 +0.3

KLBR **Kellerberin** 59.11 244 P **P** 11 09 38.1 -0.9
comp=Z,582nm,0.9s
NWAO **Narrogin (SRO)** 59.48 242 P **P** 11 09 41.6 +0.1
NWAO **Narrogin (SRO)** 59.48 242 P **P** 11 09 41.4 -0.1
NWAO IAmb IAmb 11 09 42.5
comp=Z,118nm,1.0s
NWAO **Narrogin (SRO)** 59.48 242 P **P** 11 09 41.4 -0.1
NWAO pmax pmax
comp=Z,118nm,1.0s
NWAO **Narrogin (SRO)** 59.48 242 P **P** 11 09 41.1 -0.3
NWAO pP **pwP** 11 11 32.0 -2.2
RKGY **Rocky Gully** 59.63 240 P **P** 11 09 42.9 +0.5
RKGY **Rocky Gully** 59.63 240 P **P** 11 09 42.6 +0.2
comp=Z,235nm,0.9s
BLDU **Ballidu** 60.07 245 P **P** 11 09 45.1 -0.3
BLDU **Ballidu** 60.07 245 P **P** 11 09 44.5 -0.9
comp=Z,139nm,1.2s
MUN **Mundaring** 60.40 243 P **P** 11 09 47.8 +0.2
MUN **Mundaring** 60.40 243 P **P** 11 09 47.1 -0.5
comp=Z,154nm,0.9s
LUWI **Luwuk** 60.52 279 P **P** 11 09 49.9 +1.3
LUWI **Luwuk** 60.52 279 P **P** 11 09 48.7 +0.1
AUHAR **St Anne's Scho** 60.60 242 P **P** 11 09 50.2 +1.4
MTKN **Mount Kenneth** 60.77 243 P **P** 11 09 52.1 +2.1
comp=Z,438nm,0.9s
MTKN **Mount Kenneth** 60.77 243 P **P** 11 09 51.3 +1.3
comp=Z,438nm,0.9s
MORW **Morawa** 60.78 246 P **P** 11 09 50.4 +0.3
MORW **Morawa** 60.78 246 P **P** 11 09 49.9 -0.3
MORW IAmb IAmb 11 09 50.8
comp=Z,80nm,1.0s
MORW **Morawa** 60.78 246 P **P** 11 09 49.1 -1.0
comp=Z,109nm,1.1s
KAPI **Kappang** 62.10 274 P **P** 11 10 00.0 +1.0
KAPI **Kappang** 62.10 274 P **P** 11 09 58.2 -0.7
KAPI IAmb IAmb 11 09 59.8
comp=Z,119nm,1.4s
KAPI **Kappang** 62.10 274 P **P** 11 09 58.5 -0.4
comp=Z,34nm,0.8s,baz=143,slow=8.3,SNR=6.6
comp=Z,34nm,0.8s
KAPI **Kappang** 62.10 274 P **P** 11 09 58.2 -0.7
KAPI pmax pmax
comp=Z,119nm,1.4s
TOLI2 **Tolitoli** 63.14 281 P **P** 11 10 06.4 +0.8
TOLI2 **Tolitoli** 63.14 281 P **P** 11 10 06.1 +0.4
TOLI2 IAmb IAmb 11 10 06.3
comp=Z,94nm,1.0s
GIRL **Giralia** 63.23 253 P **P** 11 10 07.0 +0.9
GIRL **Giralia** 63.23 253 P **P** 11 10 06.7 +0.6
CCD **Concordia, Ant** 64.81 194 P **P** 11 10 16.4 +0.7
CCD PcP **PcP** 11 10 43.9 +0.4
CASY **Casey** 66.15 205 P **P** 11 10 24.0 +0.3
CASY IAmb IAmb 11 10 25.4
comp=Z,106nm,1.1s
CASY **Casey** 66.15 205 P **P** 11 10 24.4 +0.7
JAGI **Jajag, Banyuwa** 66.43 268 P **P** 11 10 25.6 -0.8
MJAR **Matsushiro Arr** 68.28 323 P **P** 11 10 36.3 -1.0
comp=Z,11nm,0.7s,baz=156,slow=5.8,SNR=43
comp=Z,11nm,0.7s
MAJO **Matsushiro** 68.28 323 P **P** 11 10 36.6 -0.7
MAJO **Matsushiro** 68.28 323 P **P** 11 10 36.6 -0.7
MAJO **Matsushiro** 68.28 323*d* iP **P** 11 10 36.1 -1.1
MAJO pmax pmax
comp=Z,14nm,0.7s
MAJO **Matsushiro** 68.28 323 P **P** 11 10 36.5 -0.7
MJB9 **Matsu-Tunnel** 68.28 323 P **P** 11 10 37.4 +0.2
KKM **Kota Kinabalu** 69.17 284 P **P** 11 10 43.5 +0.3
KKM **Kota Kinabalu** 69.17 284 P **P** 11 10 43.4 +0.2
KKM IAmb IAmb 11 10 44.2
comp=Z,78nm,0.9s
UGM **Wanagama** 70.04 268 P **P** 11 10 48.8 +0.5
UGM **Wanagama** 70.04 268 P **P** 11 10 48.0 -0.4
YOJ **Yonaguni jima** 71.37 304 P **P** 11 10 55.7 -0.1
YOJ IAmb IAmb 11 12 23.2
comp=Z,232nm,1.5s
YOJ **Yonaguni jima** 71.37 304 P **P** 11 10 55.7 -0.1
YOJ pmax pmax
comp=Z,232nm,1.5s
SBUM **Sibu** 71.62 279 P **P** 11 10 58.1 +0.5
SBUM IAmb IAmb 11 10 59.3
comp=Z,28nm,0.9s
QSPA **South Pole Qui** 71.98 180 P **P** 11 11 00.0 +1.2
QSPA IAmb IAmb 11 11 01.3
comp=Z,89nm,0.9s
QSPA **South Pole Qui** 71.98 180 P **P** 11 11 00.1 +1.2
comp=Z,81nm,1.0s,baz=27,slow=1.1,SNR=90
QSPA S **SKiKP** 11 19 37.2 +0.6
comp=Z,5.0nm,1.0s,baz=1.6,slow=23,SNR=21
comp=Z,81nm,1.0s
QSPA **South Pole Qui** 71.98 180 P **P** 11 11 00.3 +1.4
QSPA pP **pwP** 11 12 55.1 -0.9
TWG **Pinlang** 72.09 302 P **P** 11 10 58.9 -1.2
TWG IAmb IAmb 11 10 59.0
comp=Z,24nm,0.7s
YULB **Yu-li** 72.19 303 P **P** 11 11 00.7 0.0
YULB **Yu-li** 72.19 303 P **P** 11 10 59.8 -0.9
NACB **Ninganchiao** 72.34 304 P **P** 11 11 02.5 +1.0
SSLB **Suanglung** 72.66 303 P **P** 11 11 02.8 -0.6
TPUB **Ta-pu** 72.68 302 P **P** 11 11 02.6 -0.9
YHNB **Yeheng** 72.76 304 P **P** 11 11 04.6 +0.6
BBJI **Bungbulang** 72.89 268 P **P** 11 11 04.9 -0.1
KSM **Kuching** 73.10 277 P **P** 11 11 06.9 +0.8
KSM **Kuching** 73.10 277 P **P** 11 11 06.6 +0.4
YSS **Yuzh-Sakhalins** 73.74 333‖ *e*P **P** 11 11 10.5 +1.5
YSS pmax pmax
comp=Z,24nm,1.7s
PEA0B **Petropavlovsk-** 73.94 345‖ *e*P **P** 11 11 09.0 -1.0
PETK **Petropavlovsk-** 73.94 345 P **P** 11 11 09.5 -0.5
comp=Z,18nm,0.8s,baz=111,slow=7.3,SNR=32
comp=Z,18nm,0.8s
SDPT **Sand Point** 74.63 10 P **P** 11 11 12.6 -1.2
baz=197
KSRS **Korea Array** 75.09 318 P **P** 11 11 17.4 +0.6
comp=Z,3.7nm,0.7s,baz=129,slow=6.5,SNR=24
comp=Z,3.7nm,0.7s
KSAR **Wonju Array Be** 75.11 318 P **P** 11 11 17.2 +0.3
KSAR **Wonju Array Be** 75.11 318 P **P** 11 11 17.2 +0.3
SAO **San Andreas Ge** 76.27 44 P **P** 11 11 24.1 +0.7
SAO IAmb IAmb 11 11 25.1
comp=Z,39nm,0.9s
SAO **San Andreas Ge** 76.27 44 P **P** 11 11 24.1 +0.7
SAO pmax pmax
comp=Z,39nm,0.9s
PMPB **Monarch Peak** 76.38 44 P **P** 11 11 23.9 -0.2
USA0B **Ussuriysk Arra** 76.98 326 *de*P **P** 11 11 27.4 +0.4
USRK **Ussuriysk Ar.** 76.98 326 P **P** 11 11 27.4 +0.3
USRK **Ussuriysk Ar.** 76.98 326 P **P** 11 11 27.6 +0.6
comp=Z,2.6nm,0.7s,baz=109,slow=3.2,SNR=5.8
USRK **Ussuriysk Ar.** 76.98 326 P **P** 11 11 27.4 +0.3
PASC **Pasadena Art C** 77.04 47 P **P** 11 11 27.8 +0.1
109C **Camp Elliot, M** 77.13 49 P **P** 11 11 28.4 +0.3
109C **Camp Elliot, M** 77.13 49 P **P** 11 11 28.1 -0.1
baz=238,SNR=5.7
MONP2 **Monument Peak** 77.62 49 P **P** 11 11 31.4 +0.3
baz=239,SNR=33
PFO **Pinyon Flats O** 77.97 49 P **P** 11 11 33.1 +0.2
baz=239,SNR=9.5
PFO **Pinyon Flats O** 77.97 49*c* iP **P** 11 11 32.8 -0.1
PFO pmax pmax
comp=Z,35nm,1.3s
TPFO **Pinon Flats** 77.97 49 P **P** 11 11 33.3 +0.4
baz=239,SNR=10
SLBS **Sierra La Lagu** 78.30 60 P **P** 11 11 35.4 +0.6
MDPB **Devils Postpil** 78.32 44 P **P** 11 11 35.2 +0.4
MDPB IAmb IAmb 11 11 36.3
comp=Z,35nm,0.9s
NJ2 **Nanjing** 78.35 309 *e*P **P** 11 11 35.3 +0.6
NJ2 pmax pmax
comp=Z,19nm,0.8s
MDJ **Mudanjiang** 78.55 325 P **P** 11 11 35.8 +0.3
MDJ **Mudanjiang** 78.55 325 P **P** 11 11 36.3 +0.8
MDJ S **SKSac** 11 20 52.1 -5.6
MDJ pmax pmax
comp=Z,27nm,0.8s
Q18K **Katmai Hardscr** 78.75 12 P **P** 11 11 36.6 +0.2
baz=202
N14K **Kuskokwak Cree** 78.85 8 P **P** 11 11 37.0 +0.3
baz=196
O16K **Kokwok River B** 79.08 10 P **P** 11 11 37.5 -0.5
baz=199
GRAC **Grapevine Rang** 79.12 45 P **P** 11 11 38.6 -0.2
GRAC IAmb IAmb 11 11 40.7
comp=Z,41nm,1.1s
GWY **Greenwater Val** 79.16 46 P **P** 11 11 39.3 +0.1
BTDF **Bukit Timah Da** 79.24 275 P **P** 11 11 40.7 +0.8

NVAR **Mina Array Bea** 79.27 44 P P 11 11 40.1 +0.3
comp=Z,19nm,0.8s,baz=225,slow=9.2,SNR=143
NVAR pP **pP** 11 13 38.0 +1.3
comp=Z,1.2nm,0.9s,baz=72,slow=20,SNR=2.7
NVAR PKKPbc **PKKPbc** 11 30 25.9 -0.7
comp=Z,0.2nm,0.6s,baz=50,slow=4.9,SNR=3.6
comp=Z,19nm,0.8s
**Q19K Cape Douglas,** 79.29 13 P P 11 11 38.9 -0.3
baz=204
**O17K Koligansk Bris** 79.42 11 P P 11 11 40.1 +0.4
baz=200
**M14K Bethel** 79.61 8 P P 11 11 41.6 +0.9
baz=196
**M15K Kasigluk River** 79.73 9 P P 11 11 41.0 -0.4
baz=197
**N16K Nishlik Lake** 79.80 10 P P 11 11 42.6 +0.8
baz=198
**214A Organ Pipe Nat** 79.81 52 P P 11 11 43.5 +0.9
baz=241
**O18K Koktuh Hills** 79.84 11 P P 11 11 41.8 -0.2
baz=202
**TPNV Topopah Spring** 79.85 46 P P 11 11 43.3 +0.5
baz=238,SNR=18
**P19K Oil Pt** 80.04 12 P P 11 11 42.4 -0.7
baz=204
**H04D Lebanon** 80.08 37 P P 11 11 43.9 +0.3
**L14K Kuka Creek** 80.09 7 P P 11 11 43.4 +0.1
baz=195
**N17K Nushagak Hills** 80.11 10 P P 11 11 43.1 -0.3
baz=200
**G03D McMinnville, O** 80.20 36 P P 11 11 44.8 +0.6
G03D lAmb lAmb 11 11 45.7
comp=Z,62nm,1.1s
**J05D Fort Rock, OR** 80.20 38 P P 11 11 45.2 +0.7
J05D lAmb lAmb 11 11 46.2
comp=Z,53nm,0.8s
**M16K Timber Creek** 80.30 9 P P 11 11 44.4 +0.1
baz=198
**O19K Port Alsworth** 80.32 12 P P 11 11 44.1 -0.4
baz=203
**CN2 Changchun** 80.39 322 P P 11 11 45.6 +0.3
CN2 pmax pmax
comp=Z,10.0nm,0.7s
**KLR Kul'dur** 80.46 329⇓ *e*P P 11 11 45.6 +0.1
KLR pmax pmax
comp=Z,5.0nm,1.3s
**BNX BinXian** 80.46 325 ⇑P P 11 11 45.6 0.0
BNX pmax pmax
comp=Z,22nm,0.7s
**O20K Slope Mountain** 80.56 13 P P 11 11 45.9 +0.1
baz=204
**L15K Ungalak Mounta** 80.57 8 P P 11 11 46.1 +0.3
baz=196
**BRSE Bradley Lake S** 80.66 14 P P 11 11 46.0 -0.3
baz=206
**N19K Bonanza Creek** 80.86 11 P P 11 11 47.3 -0.1
baz=203
**L16K Owhat River** 80.88 9 P P 11 11 47.5 +0.1
baz=198,SNR=5.4
**M17K Holitna River** 80.90 10 P P 11 11 47.9 +0.4
baz=200
**WHN Wuhan** 81.02 306 P P 11 11 49.5 +0.7
WHN pmax pmax
comp=Z,40nm,1.4s
**R11B Troy Canyon, C** 81.03 45 P P 11 11 48.4 -0.6
baz=238
**BMN Battle Mountai** 81.06 42 P P 11 11 49.2 +0.2
BMN lAmb lAmb 11 11 50.5
comp=Z,36nm,1.0s
**BMN Battle Mountai** 81.06 42 P P 11 11 49.2 +0.2
BMN pmax pmax
comp=Z,36nm,1.0s
**F04A Amboy** 81.11 36 P P 11 11 48.9 0.0
F04A lAmb lAmb 11 11 50.1
comp=Z,48nm,1.3s
**K15K Wolf Creek Mou** 81.16 8 P P 11 11 49.7 +0.9
baz=196,SNR=10.0
**M18K Stony River** 81.25 11 P P 11 11 49.6 +0.3
baz=201
**SEW Seward** 81.27 14 P P 11 11 49.9 +0.5
baz=207
**J14K Nanvaranak Lak** 81.36 7 P P 11 11 50.6 +0.8
baz=194
**L17K Donlin** 81.45 9 P P 11 11 50.7 +0.4
baz=199,SNR=7.3
**MA2 Magadan** 81.46 345⇑ *i*P P 11 11 49.2 -1.2
MA2 pmax pmax
comp=Z,23nm,2.5s
**TUC Tucson** 81.49 52 P P 11 11 52.3 +1.0
baz=242
**N20K Mount Spurr** 81.67 12 P P 11 11 50.1 -1.4
baz=205
**SPCR Spurr Chakacha** 81.67 12 P P 11 11 50.7 -0.9
baz=205
**L18K Granite Mounta** 81.79 10 P P 11 11 51.9 -0.1
baz=200
**M19K Big River Lodg** 81.89 11 P P 11 11 52.0 -0.5
baz=203
**BELA Belgrano 2** 81.95 173 P P 11 11 53.1 +0.4
BELA lAmb lAmb 11 11 54.4
comp=Z,54nm,0.8s
**X16A Lo Mia Camp, P** 81.98 50 P P 11 11 54.6 +0.7
X16A lAmb lAmb 11 11 56.1
comp=Z,32nm,1.0s
**CLRS Cowichan Lake** 81.99 33 P P 11 11 53.4 0.0
**K17K Iditarod** 82.01 9 P P 11 11 53.1 0.0
baz=199
**L19K White Mountain** 82.07 11 P P 11 11 53.7 +0.2
baz=202
**M20K Styx River** 82.11 12 P P 11 11 53.9 +0.1
baz=204
**D05A Enumclaw** 82.11 35 P P 11 11 54.4 +0.4
D05A lAmb lAmb 11 11 56.5
comp=Z,54nm,1.2s
**CCUT Cedar City** 82.14 46 P P 11 11 54.8 +0.1
CCUT lAmb lAmb 11 11 56.7
comp=Z,27nm,0.9s
**PWL Port Wells** 82.20 14 P P 11 11 53.1 -1.1
baz=208
**SUA Susitna One** 82.21 13 P P 11 11 52.9 -1.4
baz=206
**J16K Anvik River** 82.23 8 P P 11 11 52.9 -1.3
baz=197
**KAIM Kayak Island** 82.37 16 P P 11 11 53.9 -1.1
baz=212
**GLI Glacier Island** 82.51 15 P P 11 11 55.4 -0.3
baz=210
**J17K VABM Dome** 82.54 8 P P 11 11 56.5 +0.7
baz=198
**WUAZ Wupatki** 82.55 49 P P 11 11 57.3 +0.5
baz=242
**EYAK Cordova Ski Ar** 82.56 15 P P 11 11 55.1 -0.8
baz=211
**M22K Willow** 82.60 13 P P 11 11 55.6 -0.5
baz=207
**KNK Knik Glacier** 82.66 14 P P 11 11 56.4 -0.1
baz=208
**PMR Palmer** 82.67 13 P P 11 11 55.5 -1.0
baz=208
**IPM Ipoh** 82.83 277 P P 11 11 59.2 +0.7
**SIT Sitka** 82.88 22 P P 11 11 57.7 +0.1
baz=220
**ANM Nome** 82.95 5 P P 11 11 58.3 +0.5
baz=192
**J18K Innoko River** 82.96 9 P P 11 11 57.8 -0.1
baz=200,SNR=13
**U33K Whale Pass** 82.98 23 P P 11 11 58.8 +0.6
baz=222,SNR=5.6
**V35K Ketchikan** 82.99 25 P P 11 11 58.8 +0.6
baz=224
**SNH Sunshine Point** 83.02 17 P P 11 11 55.9 -2.4
SNH lAmb lAmb 11 11 59.3
comp=Z,37nm,0.9s
**X18A Snowflake** 83.13 50 P P 11 11 59.2 -0.5
**CUT Chulitna** 83.15 13 P P 11 11 58.3 -0.5
baz=206
**M23K Glacier View** 83.17 14 P P 11 11 58.9 -0.1
baz=209
**BMRM Bremner River** 83.21 16 P P 11 11 58.6 -0.7
baz=212,SNR=5.5
**MESA MESA** 83.26 17 P P 11 12 00.1 +0.4
baz=214,SNR=5.7
**S31K Pelican** 83.26 21 P P 11 11 60.0 +0.5
baz=220,SNR=9.4
**HEH HeiHe** 83.26 328 *e*P P 11 11 59.4 -0.3
**SCM Sheep Creek Mo** 83.29 14 P P 11 11 59.0 -0.7
baz=209,SNR=6.7

**K20K Telida** 83.30 11 P P 11 11 59.0 -0.6
baz=203,SNR=8.6
**KLU Klutina** 83.33 15 P P 11 11 59.5 -0.4
baz=210
**H16K Elim** 83.34 7 P P 11 11 59.7 0.0
baz=195
**CRQE Cirque** 83.42 16 P P 11 12 00.4 0.0
baz=213,SNR=5.3
**S32K Killisnoo** 83.46 22 P P 11 12 00.5 0.0
baz=221
**G15K Niukluk** 83.50 6 P P 11 12 00.6 0.0
baz=193
**PMSA Palmer Station** 83.50 157 *e*P P 11 12 02.3 +1.6
**WRAK Wrangell Islan** 83.50 24 P P 11 12 00.9 +0.2
baz=223
**W18A Petrified Fore** 83.55 50 P P 11 12 01.8 0.0
baz=243
**PNL Peninsula** 83.59 19 P P 11 12 01.5 +0.3
**PNL Peninsula** 83.59 19 P P 11 12 01.5 +0.3
baz=217,SNR=6.3
**J19K Poorman** 83.63 10 P P 11 12 01.4 +0.1
baz=201
**PINM Pinnacle** 83.68 18 P P 11 12 01.6 0.0
baz=216
**N25K Chitina, Valde** 83.76 15 P P 11 12 01.9 -0.1
baz=212,SNR=8.6
**M24K Tolsona, Glenn** 83.80 14 P P 11 12 02.5 +0.3
baz=210
**DUG Dugway, Tooele** 83.82 44 P P 11 12 03.0 +0.1
baz=240,SNR=9.2
**MAW Mawson** 83.84 200 P P 11 12 03.1 +0.8
comp=Z,29nm,0.8s,baz=112,slow=5.9,SNR=36
comp=Z,29nm,0.8s
**121A Cookes Peak, D** 83.86 53 P P 11 12 04.1 +0.8
baz=244
**WAT6 Susitna Watana** 83.86 14 P P 11 12 02.1 -0.5
baz=209,SNR=9.7
**WAT1 Susitna Watana** 83.90 13 P P 11 12 01.7 -0.9
baz=208
**H17K Granite Mounta** 83.91 8 P P 11 12 02.5 0.0
baz=197
**HNS HongShan** 83.92 312 ⇑P P 11 12 04.4 +1.1
HNS pmax pmax
comp=Z,28nm,1.4s
**MCARA McCarthy VSAT** 83.97 16 P P 11 12 02.8 -0.2
baz=213
**SEY Seymchan** 84.03 347 *de*P P 11 12 02.3 -0.9
SEY pmax pmax
comp=Z,10.0nm,0.7s
**J20K Nowinta River** 84.04 10 P P 11 12 02.3 -0.9
**J20K Nowinta River** 84.04 10 P P 11 12 03.0 -0.3
baz=203,SNR=7.0
**LOGN Logan Glacier** 84.06 17 P P 11 12 03.0 -0.6
**P29M Windy Craggy** 84.07 19 P P 11 12 03.7 +0.2
baz=218,SNR=12
**CTG Chitna Glacier** 84.08 17 P P 11 12 03.6 -0.1
baz=215,SNR=11
**R32K Eaglecrest** 84.09 21 P P 11 12 03.4 -0.3
baz=221
**JIS Juneau Island** 84.14 21 P P 11 12 04.4 +0.6
**BJT Baijiatuau** 84.18 315 P P 11 12 05.1 +0.6
**BJI Beijing** 84.18 315 P P 11 12 04.5 0.0
BJI pmax pmax
comp=Z,7.0nm,1.5s
**LYN LuoYang** 84.24 309 ⇑P P 11 12 06.1 +1.2
LYN S S 11 21 48.1 +3.5
LYN pmax pmax
comp=Z,65nm,1.4s
LYN pmax pmax
comp=Z,220nm,4.3s
**O28M Mount Upton** 84.25 18 P P 11 12 04.5 -0.3
baz=216,SNR=11
**PSI Prapat** 84.29 275 P P 11 12 05.6 -0.2
**HARP HAARP** 84.30 15 P P 11 12 04.5 -0.1
baz=211
**H18K Honhosa River** 84.31 8 P P 11 12 04.5 -0.1
baz=199
**O29M Mount Kennedy** 84.35 19 P P 11 12 04.6 -0.4
baz=217
**DHY Denali Highway** 84.37 13 P P 11 12 04.5 -0.6
baz=209
**PLBC Pleasant Camp** 84.38 20 P P 11 12 05.2 +0.2
baz=219,SNR=12
**HLID Hailey** 84.50 41 P P 11 12 07.0 +0.8
baz=239
**BPAW Bear Paw Mtn.** 84.54 12 P P 11 12 04.5 -1.2
baz=206
**I20K Naghedeneel** 84.56 10 P P 11 12 05.6 -0.2
baz=202
**MCK McKinley** 84.62 13 P P 11 12 05.4 -0.7
baz=208,SNR=5.4
**ENH Enshi** 84.69 304 P P 11 12 07.7 +0.4
**ENH Enshi** 84.69 304 P P 11 12 07.3 0.0
ENH lAmb lAmb 11 12 09.1
comp=Z,145nm,1.2s
**P30M Million Dollar** 84.70 19 P P 11 12 07.1 +0.4
baz=219
**T35M Bob Quinn** 84.71 24 P P 11 12 07.9 +1.2
baz=225
**PAX Paxson** 84.71 14 P P 11 12 05.5 -1.2
baz=211,SNR=5.6
**SKAG Skagway** 84.72 20 P P 11 12 07.5 +0.9
comp=Z,9.4nm,0.9s
**SKAG Skagway** 84.72 20 P P 11 12 07.3 +0.7
baz=220,SNR=10
**YUK8 Steele Glacier** 84.79 17 P P 11 12 07.5 +0.1
baz=216,SNR=9.7
**M26K Nabesna, AK** 84.83 16 P P 11 12 07.2 -0.1
baz=213,SNR=18
**YUK6 Outpost Mounta** 84.92 18 P P 11 12 07.5 -0.5
baz=218
**G18K Tagagawik** 84.98 8 P P 11 12 06.8 -1.1
baz=198
**YUK3 Moose Creek** 84.99 17 P P 11 12 08.0 -0.3
baz=216,SNR=23
**S34M Telegraph Cree** 85.04 23 P P 11 12 07.9 -0.4
S34M lAmb lAmb 11 12 09.7
comp=Z,23nm,0.9s
**S34M Telegraph Cree** 85.04 23 P P 11 12 08.7 +0.4
baz=224,SNR=22
**M27K Edge Creek, AK** 85.09 16 P P 11 12 08.3 -0.3
**M27K Edge Creek, AK** 85.09 16 P P 11 12 08.6 0.0
baz=214,SNR=17
**GSI Gunungsitoli** 85.11 273 P P 11 12 10.0 +0.3
**GSI Gunungsitoli** 85.11 273 P P 11 12 10.1 +0.5
**H20K Anotleneega Mo** 85.14 9 P P 11 12 08.3 -0.4
baz=202
**YUK4 Talbot Arm** 85.16 18 P P 11 12 09.5 +0.5
baz=217,SNR=5.2
**Y22D IRIS PASSCAL I** 85.17 52 P P 11 12 10.1 +0.4
baz=244
**L26K Log Cabin Wild** 85.27 15 P P 11 12 09.1 -0.3
baz=213,SNR=7.3
**I21K Tanana** 85.34 11 P P 11 12 09.4 -0.1
baz=205
**MNTX Cornudas Mount** 85.35 55 P P 11 12 11.2 +0.7
baz=246
**NEA2 Nenana** 85.36 12 P P 11 12 07.8 -1.9
baz=207
**P32M Atlin** 85.36 21 P P 11 12 10.3 +0.5
baz=222,SNR=5.3
**K24K Donnelly Dome** 85.36 14 P P 11 12 09.8 +0.1
baz=210,SNR=5.7
**Q32M Nakina River** 85.39 22 P P 11 12 10.6 +0.3
baz=223,SNR=13
**MVCO Mesa Verde** 85.39 49 P P 11 12 10.0 -0.8
baz=243
**NEW Newport** 85.41 36 P P 11 12 10.1 -0.3
baz=236
**MLY Manley** 85.43 11 P P 11 12 08.7 -1.4
baz=206
**G19K Purcell Mounta** 85.43 8 P P 11 12 08.9 -1.1
baz=200
**GYA Guiyang** 85.46 300 P P 11 12 12.1 +0.9
GYA pmax pmax
comp=Z,36nm,1.0s
**O30N Mendenhall** 85.48 19 P P 11 12 10.7 +0.3
baz=220,SNR=13
**SRIT Nakonsritamara** 85.50 280 P P 11 12 12.2 +0.7
**RIDG Independent Ri** 85.52 14 P P 11 12 10.0 -0.5
baz=211
**ZEA Zeya** 85.53 331 *e*P P 11 12 10.9 +0.2
ZEA pmax pmax
comp=Z,10.0nm,0.7s
**HDA Harding Lake** 85.63 13 P P 11 12 10.3 -0.7
baz=209,SNR=7.4
**H21K Melozitna Rive** 85.63 10 P P 11 12 10.9 -0.1

baz=204
**SURA Surathani** 85.66 281 P P 11 12 12.8 +0.6
**L27K Beaver Creek,** 85.69 16 P P 11 12 10.6 -0.8
baz=214,SNR=6.5
**N30M Aishikik Lake** 85.71 18 P P 11 12 11.4 -0.1
baz=219
**TXAR Lajitas Array** 85.75 57 P P 11 12 13.8 +1.2
comp=Z,35nm,0.9s,baz=224,slow=5.2,SNR=194
comp=Z,35nm,0.9s
**WHY Whitehorse** 85.78 20 P P 11 12 11.6 -0.3
baz=221,SNR=6.3
**NAYO Nakonayok** 85.79 286 P P 11 12 13.5 +0.7
**I23K Minto, Yukon-K** 85.79 12 P P 11 12 11.8 +0.1
baz=207
**DLBC Dease Lake** 85.83 23 P P 11 12 12.0 -0.2
baz=225,SNR=5.9
**COLA College** 85.85 12 P P 11 12 12.4 +0.4
**COLA College** 85.85 12 P P 11 12 11.0 -1.0
baz=209
**COLA College** 85.85 12 *ce*P P 11 12 10.4 -1.6
COLA pmax pmax
comp=Z,13nm,0.9s
**ANMO Albuquerque** 85.89 51 P P 11 12 13.8 +0.6
baz=245
**ANMO Albuquerque** 85.89 51 *c i*P P 11 12 13.5 +0.3
ANMO pmax pmax
comp=Z,9.0nm,1.0s
**SCRK Sand Creek** 85.92 14 P P 11 12 11.7 -0.9
baz=212
**IL31** 85.96 13 P P 11 12 11.2 -1.3
IL31 lAmb lAmb 11 14 15.6
comp=Z,54nm,1.9s
**ILAR Eielson Array** 85.96 13 P P 11 12 10.9 -1.6
**ILAR Eielson Array** 85.96 13 P P 11 12 11.4 -1.1
comp=Z,2.9nm,0.5s,baz=219,slow=5.2,SNR=37
ILAR pP **pP** 11 14 12.4 +0.3
comp=Z,5.6nm,1.2s,baz=231,slow=5.7,SNR=3.4
comp=Z,2.9nm,0.5s
**F19K Shaleruckik Mo** 85.99 8 P P 11 12 12.0 -0.6
baz=199
**M29M Somme Creek** 86.09 17 P P 11 12 12.0 -1.3
**M29M Somme Creek** 86.09 17 P P 11 12 13.1 -0.2
baz=217,SNR=9.5
**H22K Ishtalitna Cre** 86.09 11 P P 11 12 12.7 -0.5
baz=205
**P33M Teslin, Yukon** 86.12 21 P P 11 12 12.6 -0.9
**P33M Teslin, Yukon** 86.12 21 P P 11 12 13.7 +0.2
baz=222,SNR=9.5
**N31M Braeburn, Yuko** 86.13 19 P P 11 12 13.8 +0.3
baz=220,SNR=10
**XLT XiLinHaoTe** 86.14 319 *e*P P 11 12 14.4 +0.4
XLT sS sS 11 25 42.8 +6.6
XLT pmax pmax
comp=Z,16nm,0.9s
XLT pmax pmax
comp=Z,67nm,3.9s
**J25K Salcha River,** 86.15 13 P P 11 12 13.0 -0.5
baz=211,SNR=5.8
**R33M Jennings River** 86.17 22 P P 11 12 14.4 +0.6
baz=224,SNR=12
**E18K Tukpahlearik C** 86.21 7 P P 11 12 13.2 -0.5
baz=196
**G21K Allakaket** 86.31 10 P P 11 12 14.0 -0.1
baz=203
**K27K Chicken** 86.43 15 P P 11 12 15.3 +0.5
baz=214
**J26L Joseph Creek** 86.47 14 P P 11 12 14.9 -0.2
baz=213,SNR=9.7
**MSO Missoula** 86.47 38 P P 11 12 14.6 -0.9
baz=239
**F20K Avaraart Lake** 86.47 9 P P 11 12 14.3 -0.6
baz=201
**E19K Redstone River** 86.65 8 P P 11 12 15.1 -0.6
baz=200
**XAN Xi'an** 86.68 307 ⇓P P 11 12 17.4 +0.7
XAN S S 11 22 12.5 +4.5
XAN pmax pmax
comp=Z,79nm,1.1s
**N32M Quiet Lake** 86.73 20 P P 11 12 16.5 +0.2
baz=222,SNR=10
**S22A 4UR Ranch, Cre** 86.82 49 P P 11 12 17.8 +0.1
baz=244
**F21K Alatna River** 86.96 9 P P 11 12 16.6 -0.7
baz=203
**G22K Bettles** 87.00 10 P P 11 12 17.3 -0.1
baz=205
**G23K Bananza Creek** 87.07 11 P P 11 12 17.6 -0.2
baz=206
**FLWY Flagg Ranch** 87.09 42 P P 11 12 18.4 -0.2
FLWY lAmb lAmb 11 12 20.5
comp=Z,33nm,1.0s
**M31M Drury Creek, Y** 87.10 19 P P 11 12 17.5 -0.5
baz=221
**DAWY Dawson** 87.14 16 P P 11 12 18.2 0.0
baz=216,SNR=7.8
**BW06 Boulder Array** 87.20 43 P P 11 12 19.0 -0.2
baz=242,SNR=18
**PD31 Pinedale Array** 87.20 43 P P 11 12 18.8 -0.4
**PDAR Pinedale Array** 87.20 43 P P 11 12 18.7 -0.4
**PDAR Pinedale Array** 87.20 43 P P 11 12 18.9 -0.4
comp=Z,9.7nm,0.8s,baz=220,slow=2.8,SNR=92
PDAR pP **pwP** 11 14 21.6 -1.4
comp=Z,2.0nm,0.9s,baz=201,slow=4.8,SNR=6.8
PDAR PKKPbc **PKKPbc** 11 30 06.7 -1.7
comp=Z,0.8nm,0.9s,baz=72,slow=4.8,SNR=4.8
comp=Z,9.7nm,0.8s
**BOZ Bozeman (W)** 87.24 40 P P 11 12 19.6 +0.4
baz=241,SNR=18
**I26K Coal Creek Min** 87.24 14 P P 11 12 18.2 -0.4
baz=213
**EGAK Eagle** 87.27 15 P P 11 12 18.7 0.0
baz=215
**H17A Grant Village** 87.31 42 P P 11 12 21.2 +1.5
baz=242,SNR=9.0
**C18K Utukok River** 87.33 6 P P 11 12 19.0 0.0
baz=196
**F22K John River** 87.43 10 P P 11 12 19.3 -0.1
baz=204,SNR=5.4
**FARO Faro, Yukon** 87.45 19 P P 11 12 19.4 -0.3
baz=222,SNR=6.4
**WTLY Watson Lake, Y** 87.46 22 P P 11 12 20.0 +0.3
baz=226
**K29M Barlow Dome** 87.46 17 P P 11 12 20.1 +0.3
baz=218,SNR=10
**H25L Birch Creek** 87.48 12 P P 11 12 18.8 -0.9
baz=210
**COLD Coldfoot** 87.50 10 P P 11 12 20.0 +0.2
baz=206,SNR=9.8
**G24K Hadweenzic Riv** 87.53 12 P P 11 12 19.7 -0.2
baz=209
**E20K Nigu River** 87.54 8 P P 11 12 20.0 0.0
baz=201
**HHC Hu-ho-hao-te** 87.67 314 *e*P P 11 12 22.0 +0.7
HHC pP pP 11 14 29.3 +7.1
HHC sP sP 11 15 21.8 +3.8
HHC S **S** 11 22 22.5 +5.3
HHC sS sS 11 25 54.6 +3.7
HHC pmax pmax
comp=Z,15nm,0.7s
HHC pmax pmax
comp=Z,83nm,4.5s
**SDCO Great Sand Dun** 87.77 49 P P 11 12 22.4 +0.3
baz=245
**SRDT SRDT** 87.81 286 P P 11 12 22.4 +0.1
**I27K Kandik River** 87.85 14 P P 11 12 20.9 -0.6
baz=214
**G25K Bearman Lake** 87.86 12 P P 11 12 20.7 -0.6
baz=210
**D20K Etivluk River** 87.92 8 P P 11 12 21.3 -0.3
baz=200
**TOAD Toad River Com** 87.95 24 P P 11 12 22.5 +0.5
baz=229
**LIRD Liard River Hi** 87.98 24 P P 11 12 22.2 +0.1
baz=228
**E21K Killik River** 88.02 9 P P 11 12 21.0 -1.2
baz=203
**E22K Anaktuvuk Pass** 88.06 10 P P 11 12 21.7 -0.7
**E22K Anaktuvuk Pass** 88.06 10 P P 11 12 22.3 -0.1
baz=205,SNR=6.2
**I28M Miner Creek** 88.12 15 P P 11 12 21.5 -1.3
I28M lAmb lAmb 11 14 27.9
comp=Z,39nm,2.0s
**I28M Miner Creek** 88.12 15 P P 11 12 22.3 -0.5
baz=216,SNR=5.1
**F24K Squaw Lake** 88.18 11 P P 11 12 23.1 +0.2
baz=208,SNR=7.8
**KMI Kunming** 88.26 297 ⇓P P 11 12 25.9 +1.3

KMI pmax pmax
comp=Z,35nm,1.3s
**T25A Trinidad 88.31 50** P **P** **11 12 25.4 +0.9**
baz=246
**E23K Chandalar 88.35 10** P **P** **11 12 23.3 -0.6**
baz=207
**J30M Hart River 88.36 17** P **P** **11 12 24.3 +0.3**
baz=219
**H27K Steamboat Moun 88.39 14** P **P** **11 12 25.1 +1.2**
baz=214
**I29M Ogilvie Camp, 88.46 16** P **P** **11 12 23.8 -0.5**
baz=217,SNR=6.5
**RLMT Red Lodge 88.48 41** P **P** **11 12 25.7 +0.6**
baz=242,SNR=16
**G26K Porcupine Rive 88.49 13** P **P** **11 12 24.6 +0.3**
baz=212,SNR=9.8
**Q24A Divide 88.53 48** P **P** **11 12 25.9 +0.3**
baz=245
**E24K Your Creek 88.56 11** P **P** **11 12 24.4 -0.3**
baz=208
**C21K Knifeblade Rid 88.57 8** P **P** **11 12 24.8 +0.1**
baz=202
**D22K Ayikyak River 88.61 9** P **P** **11 12 24.7 -0.2**
baz=204
**TGTN Hyland Airport 88.62 21** P **P** **11 12 26.2 +1.0**
baz=226
**BTO Baotou 88.62 314** *e*P **P** **11 12 27.5 +1.8**
BTO sP **sP** **11 15 21.8 -0.8**
BTO S **S** **11 22 19.8 -6.1**
BTO SS **SS** **11 28 37.8 +3.3**
BTO pmax pmax
comp=Z,14nm,0.7s
BTO pmax pmax
comp=Z,290nm,4.4s
**F25K Christian Rive 88.67 12** P **P** **11 12 25.5 +0.2**
baz=211,SNR=5.4
**N23A Red Feather La 88.79 46** P **P** **11 12 27.2 +0.5**
baz=245
**G27K Doyon Strip 88.84 14** P **P** **11 12 26.0 0.0**
baz=214
**833A Chaparral WMA, 88.84 60** P **P** **11 12 27.7 +0.8**
baz=249
**I30M Mount Dempster 88.85 16** P **P** **11 12 26.0 -0.2**
baz=219,SNR=6.2
**TOLK Toolik Lake Re 88.88 10** P **P** **11 12 25.7 -0.5**
baz=207
**B21K Ikpikpuk River 89.03 8** P **P** **11 12 26.4 -0.4**
baz=202
**LL02 Futaleuf 89.03 135** P **P** **11 12 28.7 +1.1**
LL02 IAmb IAmb 11 12 30.1
comp=Z,42nm,0.9s
**ELIB Princess Elisa 89.04 187** *d*P **P** **11 12 27.3 +0.1**
comp=Z,59nm,0.8s
**F26K Sheenjek River 89.05 12** P **P** **11 12 27.5 +0.5**
baz=212,SNR=5.5
**H29M Whitestone 89.13 15** P **P** **11 12 27.2 -0.2**
H29M IAmb IAmb 11 12 27.9
comp=Z,12nm,0.9s
**H29M Whitestone 89.13 15** P **P** **11 12 27.3 -0.1**
baz=217,SNR=8.5
**KOTAN Kotaneelee Air 89.24 24** P **P** **11 12 28.5 +0.5**
baz=230
**JCT Junction City 89.29 58** P **P** **11 12 28.8 -0.2**
baz=248
**CMAR Chiang Mai Arr 89.31 290** P **P** **11 12 30.4 +1.1**
comp=Z,27nm,0.9s,baz=108,slow=2.9,SNR=91
CMAR PP **PP** **11 16 14.9 +4.4**
comp=Z,1.4nm,0.7s,baz=116,slow=6.1,SNR=4.7
CMAR PKKPbc **PKKPbc** **11 30 01.4 -0.5**
comp=Z,0.4nm,0.3s,baz=288,slow=4.8,SNR=5.6
comp=Z,27nm,0.9s
**AMTX Amarillo 89.46 53** P **P** **11 12 29.7 -0.1**
baz=248
**D24K Happy Valley 89.46 10** P **P** **11 12 28.4 -0.5**
baz=208
**EGMT Eagleton 89.53 39** P **P** **11 12 29.2 -0.5**
baz=242
**PZH PanZhiHua 89.58 298** P **P** **11 12 31.8 +1.2**
PZH pmax pmax
comp=Z,30nm,1.2s
PZH pmax pmax
comp=Z,60nm,3.5s
**EPYK Eagle Plains 89.66 15** P **P** **11 12 29.5 -0.4**
baz=219,SNR=7.0
**G29M Pine Creek 89.76 15** P **P** **11 12 29.8 -0.6**
baz=218,SNR=5.9
**C23K Itkillik River 89.79 9** P **P** **11 12 30.2 -0.1**
baz=206
**YAK Yakutsk 89.88 338**⇑ *e*P **P** **11 12 31.7 +0.8**
YAK pmax pmax
comp=Z,10.0nm,0.8s
**C24K Franklin Bluff 89.99 10** P **P** **11 12 30.9 -0.3**
baz=208
**E27K Coleen River 89.99 13** P **P** **11 12 31.2 -0.1**
baz=214
**TROLL Troll, Antarti 90.14 180**⇑P **P** **11 12 32.8 +0.4**
comp=Z,1µm,0.6s
**G30M tAoh Zraii Nji 90.26 15** P **P** **11 12 31.8 -0.9**
baz=219,SNR=12
**SNAA Sanae 90.42 178** P **P** **11 12 32.9 -0.6**
SNAA IAmb IAmb 11 12 34.7
comp=Z,40nm,1.3s
**SNAA Sanae 90.42 178**⇑P **P** **11 12 33.3 -0.3**
comp=Z,250nm,0.6s
**SNAA Sanae 90.42 178** P **P** **11 12 33.2 -0.3**
comp=Z,11nm,0.6s,baz=191,slow=8.1,SNR=37
comp=Z,11nm,0.6s
**SNAA Sanae 90.42 178** *d*/P **P** **11 12 33.3 -0.3**
SNAA pmax pmax
comp=Z,40nm,1.4s
**VNA3 Neumayer Olymp 90.55 176**⇑P **P** **11 12 34.5 +0.4**
comp=Z,55nm,0.7s
**G31M Satah River 90.71 16** P **P** **11 12 33.9 -0.7**
baz=221,SNR=13
**E28M Babbage River 90.78 13** P **P** **11 12 35.0 +0.1**
baz=216,SNR=6.6
**F30M Barrier River 90.86 15** P **P** **11 12 35.5 +0.2**
baz=220
**PLCA Paso Flores 90.93 134** P **P** **11 12 37.4 +0.8**
comp=Z,14nm,0.9s,baz=233,slow=4.9,SNR=23
comp=Z,14nm,0.9s
**PLCA Paso Flores 90.93 134** *e*P **P** **11 12 38.0 +1.4**
**E29M Blow River 90.97 14** P **P** **11 12 35.5 -0.3**
baz=218
**D27M Malcolm River 91.00 12** P **P** **11 12 35.7 -0.3**
baz=215
**LAO LASA Array 91.08 41** P **P** **11 12 37.3 +0.4**
baz=245,SNR=13
**NVL N'lazarevskaya 91.13 183** *e*P **P** **11 12 35.2 -1.5**
NVL pmax pmax
comp=Z,34nm,0.9s
**435B Jarrell 91.18 58** P **P** **11 12 37.8 +0.1**
baz=250
**VNA1 Neumayer--Stat 91.22 177**⇑P **P** **11 12 38.1 +1.0**
comp=Z,57nm,0.9s
**F31M Tsiigehtchic 91.24 16** P **P** **11 12 36.3 -0.7**
baz=222,SNR=5.6
**LZH Lanzhou 91.31 308**⇓P **P** **11 12 39.3 +0.9**
LZH pP pP 11 14 45.3 +5.3
LZH S **S** **11 22 55.0 +4.7**
LZH pmax pmax
comp=Z,35nm,1.4s
**RSSD Black Hills 91.41 44** P **P** **11 12 39.0 +0.3**
baz=246
**WMOK Wichita Mounta 91.62 54** P **P** **11 12 39.8 +0.2**
baz=249
**INK Inuvik 91.94 15** P **P** **11 12 39.6 -0.6**
baz=222,SNR=5.8
**CBKS Cedar Bluff 92.36 50** P **P** **11 12 42.8 -0.2**
baz=249
**DGMT Dagmar 93.07 40** P **P** **11 12 46.1 +0.1**
baz=246
**ULN Ulaanbaatar 93.54 319** *c*e P **P** **11 12 48.4 +0.1**
ULN pmax pmax
comp=Z,5.0nm,1.2s
**NATX Nacogdoches 93.87 58** P **P** **11 12 50.6 +0.7**
baz=251
**SONM Songino Array 93.94 319** P **P** **11 12 49.5 -0.6**
comp=Z,1.1nm,0.8s,baz=159,slow=4.3,SNR=8.5
comp=Z,1.1nm,0.8s
**YKA Yellowknife Ar 94.32 25** P **P** **11 12 50.6 -0.7**
comp=Z,4.1nm,0.9s,baz=249,slow=4.5,SNR=11
comp=Z,4.1nm,0.9s
**KSU1 Kansas State U 94.75 51** P **P** **11 12 54.3 +0.5**
baz=251
**GTA Gaotai 95.45 310** P **P** **11 13 00.3 +3.2**
GTA pmax pmax
comp=Z,6.0nm,1.1s

**ECSD EROS Data Cent 96.26 46** P **P** **11 13 00.1 -0.5**
baz=251
**ZALV Zalesovo Beam 108.61 322** PKiKP **PKiKP** **11 17 55.9 -1.1**
comp=Z,1.0nm,0.5s,baz=132,slow=2.1,SNR=4.8
ZALV PP **PP** **11 18 35.3 +1.1**
comp=Z,0.9nm,0.6s,baz=114,slow=6.6,SNR=3.8
**MKAR Makanchi Array 109.53 314** PKiKP **PKiKP** **11 17 57.9 -1.2**
comp=Z,1.4nm,0.6s,baz=125,slow=6.4,SNR=7.2
MKAR SKiKP **SKiKP** **11 20 42.5 +0.3**
comp=Z,1.1nm,0.8s,baz=64,slow=3.4,SNR=3.8
MKAR PKKPbc **PKKPbc** **11 29 05.1 -1.2**
comp=Z,1.7nm,0.7s,baz=274,slow=3.8,SNR=14
**KURK Kurchatov 112.21 318** *i* PKiKP **PKiKP** **11 18 02.8 -1.2**
**KURBB Kurchatov Arra 112.27 318** PKiKP **PKiKP** **11 18 02.8 -1.3**
comp=Z,2.6nm,0.8s,baz=95,slow=2.0,SNR=24
KURBB PP **PP** **11 18 54.6 -5.7**
comp=Z,1.5nm,0.8s,baz=90,slow=7.0,SNR=8.6
KURBB PKKPbc **PKKPbc** **11 28 55.9 -1.7**
comp=Z,1.6nm,0.8s,baz=274,slow=3.9,SNR=13
KURBB SKKPbc SKKPbc 11 31 47.1 -3.4
comp=Z,1.4nm,0.9s,baz=262,slow=3.8,SNR=9.0
**AAK Ala-Archa 114.80 309**⇑ *i* PKiKP PKPdf 11 18 09.1 -0.3
AAK pmax pmax
comp=Z,6.0nm,1.7s
**BVAR Borovoye Array 117.22 321** PKP **PKPdf** **11 18 12.3 -1.2**
comp=Z,4.3nm,0.6s,baz=81,slow=1.9,SNR=19
BVAR SKP 11 20 56.6
comp=Z,1.3nm,0.7s,baz=29,slow=3.3,SNR=4.3
BVAR PKKPbc **PKKPbc** **11 28 39.6 -1.3**
comp=Z,0.5nm,0.6s,baz=286,slow=5.4,SNR=2.4
**BRVK Borovoye 117.28 321** *d i* PKiKP **PKPdf** **11 18 12.5 -1.2**
**KK31 Karatay Array 117.73 310** PKPdf **PKPdf** **11 18 13.3 -1.6**
**KK31 Karatay Array 117.73 310** PKiKP **PKPdf** **11 18 13.3 -1.6**
**KKAR Karatay Array 117.73 310** PKPdf **PKPdf** **11 18 13.9 -0.9**
**KKAR Karatay Array 117.73 310** PKPdf **PKPdf** **11 18 14.1 -0.8**
**KKAR Karatay Array 117.73 310** PKiKP **PKPdf** **11 18 14.0 -0.9**
**GAR Garm 117.86 305** PKPdf **PKPdf** **11 18 14.2 -1.2**
**KBL Kabul 118.71 300** **PKPdf** **11 18 16.3 -1.0**
**KBL Kabul 118.71 300** PKiKP **PKPdf** **11 18 16.3 -1.0**
**BDFB Brasilia 120.41 121** PKP **PKPdf** **11 18 19.8 -1.2**
comp=Z,1.6nm,0.4s,baz=199,slow=11,SNR=3.8
**ARU Arti 123.21 326** PKPdf **PKPdf** **11 18 24.3 -0.7**
**ARU Arti 123.21 326** *i* PKiKP **PKPdf** **11 18 24.3 -0.7**
ARU 11 20 16.9
ARU 11 24 41.8
ARU SS SS 11 36 21.6 +4.3
**MCPB Macapa, AP 123.80 103** *e*P **PKPdf** **11 18 27.0 -0.4**
**SJMB Sao Joao De Ma 123.99 129** *e*P **PKPdf** **11 18 26.1 -1.5**
**ABKAR Akbulak array 124.32 318** PKPdf **PKPdf** **11 18 26.4 -0.9**
**ABKAR Akbulak array 124.32 318** PKPdf **PKPdf** **11 18 26.7 -0.6**
**NAN01 Guarapari, ES 125.31 128** *e*P **PKPdf** **11 18 29.5 -0.6**
**ARCES ARCESS Array B 126.55 350** PKP **PKPdf** **11 18 30.9 -0.2**
comp=Z,5.2nm,0.8s,baz=57,slow=0.9,SNR=12
**KIRV Kirov 126.86 331**⇓ *e*PKiKP **PKiKP** **11 18 32.1 -0.3**
**BOSA Boshof 128.43 306** PKP **PKPdf** **11 18 35.4 -0.7**
comp=Z,4.6nm,0.8s,baz=160,slow=2.9,SNR=5.3
BOSA SKPbc SKPbc 11 21 05.0
comp=Z,6.9nm,1.0s,baz=134,slow=5.4,SNR=5.1
**BELG Belogornoye 130.65 325** *de*PKiKP **PKiKP** **11 18 40.1 -0.1**
**FINES FINESS Array B 133.46 344** PKhKP PKPpre 11 18 35.9
comp=Z,1.4nm,0.6s,baz=67,slow=6.4,SNR=3.7
FINES SKPbc **SKPbc** **11 21 21.2 +0.1**
comp=Z,5.6nm,1.1s,baz=111,slow=7.6,SNR=4.5
**OBN Obninsk 134.63 333** *i* PKiKP **PKPdf** **11 18 46.0 -0.6**
OBN *i* 11 21 27.1
OBN pmax pmax
comp=Z,8.0nm,1.1s
**VSU Vasula 135.77 342**⇓ *e*PKiKP **PKPdf** **11 18 49.1 +0.5**
**NOA NORSAR Array B 136.59 353** PKhKP PKPpre 11 18 45.2
comp=Z,0.6nm,0.5s,baz=13,slow=3.9,SNR=3.2
**HFS Hagfors 137.16 351** PKhKP PKPpre 11 18 38.1
comp=Z,1.4nm,0.6s,baz=54,slow=6.0,SNR=4.4
**KBZ Khabaz 137.20 316** SKPbc **SKPbc** **11 21 33.7 +0.5**
comp=Z,4.6nm,1.0s,baz=37,slow=5.1,SNR=6.4
**KBZ Khabaz 137.20 316** *c i* PKiKP **PKPdf** **11 18 52.4 +0.6**
**SHA1 Shidzhatmaz 137.36 316**⇑ *i* PKiKP **PKPdf** **11 18 52.6 +0.2**
**KMBO Kilima Mbogo 140.42 245** PKhKP PKPpre 11 18 53.6
comp=Z,5.4nm,0.9s,baz=180,slow=6.3,SNR=11
KMBO SKPbc **SKPbc** **11 21 43.8 +0.4**
comp=Z,7.6nm,0.8s,baz=111,slow=5.5,SNR=9.7
**AKASG Malin Array Be 140.89 333** PKhKP PKPpre 11 18 51.2
comp=Z,1.1nm,0.4s,baz=44,slow=4.2,SNR=3.6
**AKBB Malin Array Si 140.89 333** PKPdf **PKPdf** **11 18 57.4 -0.9**
**AKBB Malin Array Si 140.89 333**⇓ *e*PKiKP **PKPdf** **11 18 55.0 -3.3**
**KIEV Kiev 140.90 333**⇑P PKPpre 11 18 50.4
**EKA Eskdalemuir Ar 142.60 5** PKhKP PKPpre 11 18 56.7
comp=Z,1.7nm,0.6s,baz=347,slow=2.9,SNR=4.7
**SORM Soroca 143.13 330**⇓P PKPab 11 18 59.4 -0.7
**BEL Belsk 143.19 341** *e*PKP **PKPdf** **11 19 02.1 -0.2**
**LVV L'vov 143.72 336** *e*PKiKP PKPab 11 19 02.2 -0.1
**GAZ Gaziantep 143.75 309** PKPab 11 19 03.0 0.0
**MILM Milestii Mici 143.76 328**⇑P PKPbc 11 19 01.8 -0.8
**MILM Milestii Mici 143.76 328**⇑PKiKP PKPbc 11 19 01.8 -0.7
**BNN Bunyan 144.06 312** **PKPab** **11 19 04.1 -0.1**
**LODK Lodwar 144.24 250** **PKPab** **11 19 05.5 0.0**
**KWP Kalwaria Pacla 144.38 337** *e*PKP PKPbc 11 19 04.1 -0.3
**KWP Kalwaria Pacla 144.38 337** PKPbc 11 19 04.0 -0.4
**KWP Kalwaria Pacla 144.38 337** PKiKP PKPbc 11 19 04.0 -0.4
**VLDR Vladesti 144.87 328**⇑P **PKPab** **11 19 07.7 +0.9**
**OJC Ojcow 144.91 340** *e*PKP PKPbc 11 19 05.9 -0.1
**OJC Ojcow 144.91 340** PKPbc 11 19 05.8 -0.2
**OJC Ojcow 144.91 340** PKiKP PKPbc 11 19 05.8 -0.2
**BUR08 Bucovina Ar. S 144.93 332** PKPdf PKPbc 11 19 06.0 -0.3
**TLCR 144.93 326**⇓P **PKPab** **11 19 08.1 +1.0**
**TLCR 144.93 326**⇓PKiKP **PKPab** **11 19 08.1 +1.0**
**BURAR Bucovina Array 144.94 332** PKPdf PKPbc 11 19 06.3 -0.1
**BURAR Bucovina Array 144.94 332**⇑P **PKPab** **11 19 07.6 +0.4**
**BURAR Bucovina Array 144.94 332**⇑PKiKP **PKPab** **11 19 07.6 +0.4**
**SCTR Scanteiesti 145.03 328**⇑P **PKPab** **11 19 08.4 +1.0**
**BIZ Bicaz 145.05 331**⇑P PKPpre 11 18 57.7
**GHRR 145.05 329**⇑P **PKPab** **11 19 07.2 -0.3**
**TESR Tescani 145.10 330**⇑P **PKPbc** **11 19 06.7 0.0**
**KOLS Kolonicke sedl 145.12 336** *e*PKiKP **PKPab** **11 19 07.3 -0.4**
**KOLS Kolonicke sedl 145.12 336** *e*PKP **PKPab** **11 19 07.3 -0.4**
**JURR Jurilovca 145.18 326**⇑P **PKPab** **11 19 07.9 -0.1**
**BR131 Keskin Array S 145.18 315** PKPdf **PKPdf** **11 19 06.3 -0.1**
**BR131 Keskin Array S 145.18 315** *d i* PKiKP **PKPdf** **11 19 06.7 +0.3**
**BRTR Keskin Array B 145.18 315** PKPdf **PKPdf** **11 19 05.7 -0.6**
**BRTR Keskin Array B 145.18 315** PKPbc **PKPdf** **11 19 06.7 +0.3**
comp=Z,22nm,1.0s,baz=133,slow=2.4,SNR=51
BRTR SKPbc **SKiKP** **11 21 54.4 +0.1**
comp=Z,4.0nm,0.9s,baz=136,slow=2.3,SNR=6.6
BRTR SKKPbc **SKKPbc** **11 29 54.5 -0.3**
comp=Z,4.0nm,1.1s,baz=223,slow=4.5,SNR=12
**IZVR Izvoarele 145.23 328**⇑P **PKPab** **11 19 08.8 +0.6**
**KIRS Kirsehir-Merke 145.27 314**⇑P **PKPbc** **11 19 07.0 -0.5**
**CFR Carcaliu 145.29 327**⇑P **PKPab** **11 19 08.5 0.0**
**CFR Carcaliu 145.29 327**⇑PKP2 **PKPab** **11 19 08.5 0.0**
**PANC Panciu 145.31 329**⇑P **PKPdf** **11 19 03.7 -2.5**
**ONER Baraj Valea Uz 145.35 330**⇓P **PKPbc** **11 19 07.7 +0.3**
**TPGR Topolog 145.36 326**⇑P **PKPab** **11 19 08.2 -0.6**
**KSP Ksiaz 145.38 344** *e*PKP **PKPbc** **11 19 07.0 -0.4**
**NIE Niedzica 145.42 339** *e*PKP **PKPbc** **11 19 07.0 -0.6**
**CRVS Cervenica-Dubn 145.44 337** *e*PKP2 **PKPbc** **11 19 07.8 +0.1**
**CRVS Cervenica-Dubn 145.44 337** *e*PKP **PKPbc** **11 19 07.8 +0.1**
**VRI Vrincioaia 145.53 329**⇑P **PKPab** **11 19 08.9 -0.5**
**VRI Vrincioaia 145.53 329**⇑PKP2 **PKPab** **11 19 08.9 -0.5**
**PLOR Plostina 145.57 329**⇑P **PKPab** **11 19 09.2 -0.5**
**PLOR Plostina 145.57 329**⇑PKP2 **PKPab** **11 19 09.2 -0.5**
**BMR Baia Mare 145.64 334**⇑P **PKPab** **11 19 09.6 -0.2**
**BMR Baia Mare 145.64 334**⇑PKP2 **PKPab** **11 19 09.6 -0.2**
**ANTO Ankara 145.68 316** **PKPdf** **11 19 07.1 0.0**
**ANTO Ankara 145.68 316**⇑P **PKPbc** **11 19 09.0 +0.3**
**ANTO Ankara 145.68 316** PKiKP **PKPdf** **11 19 07.1 0.0**
**CHVC Chvalec 145.68 344**⇑ *e*PKP **PKPbc** **11 19 08.8 +0.5**
**CHVC Chvalec 145.68 344** *e*PKP2 **PKPbc** **11 19 08.8 +0.5**
**CLL Collm 145.71 348** PKPdf **PKPdf** **11 19 06.8 +0.1**
**CLL Collm 145.71 348** *i* PKPbc **PKPbc** **11 19 08.2 -0.1**
comp=Z,36nm,1.1s
CLL *e*pPKPdf **pPKPdf** **11 21 17.0 +1.3**
**CLL Collm 145.71 348** *i* PKiKP **PKPbc** **11 19 08.2 -0.1**
CLL pmax pmax
comp=Z,36nm,1.1s
**ARCR ARCALIA 145.73 333**⇑P **PKPab** **11 19 10.1 -0.1**
**HARR Harsova 145.73 326**⇑P **PKPbc** **11 19 08.4 -0.1**
**HARR Harsova 145.73 326**⇑PKiKP **PKPbc** **11 19 08.4 -0.1**
**TLBR Topalu 145.77 326**⇑P **PKPbc** **11 19 09.2 +0.6**
**COVR Voineasa-Covas 145.80 329**⇑P **PKPdf** **11 19 04.0 -3.1**
**OZUR 145.82 330**⇓P **PKPab** **11 19 09.8 -0.8**
**DPC Dobruska-Polom 145.82 344**⇑ *e*PKP **PKPbc** **11 19 08.8 +0.1**
**DPC Dobruska-Polom 145.82 344** *e*PKP2 **PKPbc** **11 19 08.8 +0.1**
**BRG Berggiesshubel 145.92 346** *e*PKP **PKPdf** **11 19 07.5 +0.5**
BRG Amp 11 19 08.3
comp=Z,5.4nm,1.1s
**BRG Berggiesshubel 145.92 346** P **PKPbc** **11 19 09.5 +0.6**
BRG Amp 11 19 10.3
comp=Z,18nm,1.1s
**LANS Liptovska Anna 145.94 339** *e*PKP2 **PKPab** **11 19 10.3 -0.7**
**LANS Liptovska Anna 145.94 339** *e*PKP **PKPab** **11 19 10.3 -0.7**
**KRLC Kraliky 145.94 343**⇑ *e*PKP **PKPbc** **11 19 08.3 -0.8**
**KRLC Kraliky 145.94 343** *e*PKiKP **PKPbc** **11 19 08.3 -0.8**
**MORC Moravsky Berou 145.99 342** PKPdf **PKPdf** **11 19 07.6 +0.3**
**MORC Moravsky Berou 145.99 342** *e*PKP **PKPdf** **11 19 07.6 +0.3**
**MORC Moravsky Berou 145.99 342**⇑P **PKPdf** **11 19 04.6 -2.7**
**MORC Moravsky Berou 145.99 342**⇑PKHKP PKPpre 11 19 04.6
**NEHR Nehoiu 146.05 329**⇑P **PKPbc** **11 19 08.9 -0.6**
**DOPR Dopca 146.10 330**⇓P **PKPab** **11 19 11.1 -0.6**
**ISR Istrita 146.15 328**⇑P **PKPab** **11 19 11.3 -0.7**
**ISR Istrita 146.15 328**⇑PKP2 **PKPab** **11 19 11.3 -0.7**
**MLR Muntele Rosu 146.18 329**⇑P **PKPbc** **11 19 10.1 +0.1**
**MLR Muntele Rosu 146.18 329**⇑PKP2 **PKPbc** **11 19 10.1 +0.1**
**CBBR Cluj-Babes-Bol 146.32 333**⇑P **PKPdf** **11 19 07.5 -0.3**
**CJR Cluj-Napoca 146.35 333**⇑P **PKiKP** **11 19 11.7 -0.9**
**CJR Cluj-Napoca 146.35 333**⇑PKP2 **PKiKP** **11 19 11.7 -0.9**
**MMAI Mount Meron Ar 146.57 303** PKPbc **PKPbc** **11 19 11.4 +0.1**
comp=Z,44nm,0.8s,baz=46,slow=4.8,SNR=30
MMAI SKPbc **SKiKP** **11 21 57.4 +0.1**
comp=Z,3.1nm,0.6s,baz=43,slow=3.9,SNR=3.7
**PRU Pruhonice 146.61 345**⇑ *e*PKP **PKPbc** **11 19 10.8 0.0**
**PRU Pruhonice 146.61 345** *e*PKP2 **PKPbc** **11 19 10.8 0.0**
**GOPC GO Pecny, Ondr 146.62 345**⇑ *e*PKP **PKPbc** **11 19 11.5 +0.6**
**GOPC GO Pecny, Ondr 146.62 345** *e*PKP2 **PKPbc** **11 19 11.5 +0.6**
**VOIR 146.65 330**⇑P **PKiKP** **11 19 12.6 -0.7**
**VOIR 146.65 330**⇑PKP2 **PKiKP** **11 19 12.6 -0.7**
**DRGR 146.66 334**⇑P **PKPdf** **11 19 09.2 +0.7**
**DRGR 146.66 334**⇑PKiKP **PKPdf** **11 19 09.2 +0.7**
**VRAC Vranov 146.69 343** *e*PKP **PKPdf** **11 19 08.7 +0.3**
**VRAC Vranov 146.69 343**⇑P **PKPbc** **11 19 10.6 -0.5**
**VRAC Vranov 146.69 343**⇑PKiKP **PKPbc** **11 19 10.6 -0.5**
**VYHS Vyhne 146.71 339** *e*PKP2 **PKPbc** **11 19 11.7 +0.5**
**VYHS Vyhne 146.71 339** *e*PKP **PKPbc** **11 19 11.7 +0.5**
**JAVC Velka Javorina 146.77 341** *e*PKP **PKPdf** **11 19 09.7 +1.1**
**PSZ Piszkesteto 146.84 338**⇑P **PKPbc** **11 19 12.3 +0.7**
**PSZ Piszkesteto 146.84 338**⇑PKP2 **PKPbc** **11 19 12.3 +0.7**
**ARR Arges 146.90 330**⇑P **PKiKP** **11 19 13.0 +0.2**
**KRUC Moravsky 146.97 343** *e*PKP **PKPdf** **11 19 08.9 -1.0**
**SGRR Singureni 147.07 328**⇓P **PKPdf** **11 19 08.9 -0.2**
**MEM Membach 147.38 355** *d*PKP **PKPbc** **11 19 12.8 0.0**
**BTNL Ternell 147.40 355** *d*PKP **PKPbc** **11 19 12.1 -0.8**
**BSTI Sart Tilman 147.44 356** *d*PKP **PKPbc** **11 19 13.4 +0.4**
**CSS Mathiatis 147.50 307** PKPdf **PKPdf** **11 19 09.1 -1.1**
CSS PKPbc **PKPbc** **11 19 13.2 -0.5**
CSS PKPab **PKPab** **11 19 17.5 -0.2**
**COPA Copaceanca 147.51 328**⇑P PKPpre 11 19 03.9
**SIRR Siria 147.52 334**⇑P **PKPdf** **11 19 10.9 +1.0**
**GRF Grafenberg Arr 147.60 349** *e*PKP **PKPbc** **11 19 13.8 +0.3**
baz=16,slow=1.9
**BCLA Clavier 147.62 356** *d*PKP **PKiKP** **11 19 16.0 +1.0**
**KHC Kasperske Hory 147.64 346** PKPdf **PKPdf** **11 19 09.3 -0.7**
KHC PKPbc **PKPbc** **11 19 13.8 +0.2**
**KHC Kasperske Hory 147.64 346**⇑ *e*PKP **PKPbc** **11 19 13.8 +0.2**
**KHC Kasperske Hory 147.64 346** PKHKP PKPpre 11 19 09.3
**BHOU Houvegnez 147.64 355** *d*PKPbc **PKPbc** **11 19 12.6 -0.9**
BHOU *d*PKiKP **PKiKP** **11 19 14.2 -0.9**
**GZR Gura Zlata 147.73 332**⇑P **PKPbc** **11 19 13.8 -0.2**
**GZR Gura Zlata 147.73 332**⇑PKHKP PKPpre 11 19 13.8
**SURR Surduc 147.73 333**⇓P **PKPbc** **11 19 14.2 +0.2**
**CKRC Cesky Krumlov 147.75 345** *e*PKPDF **PKPdf** **11 19 10.8 +0.6**
CKRC *e*PKPDF **PKPbc** **11 19 11.0 -2.9**
CKRC ⇑ *e*PKP **PKiKP** **11 19 13.7 -1.7**
**CKRC Cesky Krumlov 147.75 345** *e*PKHKP PKPpre 11 19 10.8
CKRC *e* 11 19 11.0
**BMRD Maredsous 147.77 357** *d*PKP **PKPbc** **11 19 13.8 0.0**
**GEC2 GERESS Array S 147.87 345** PKPdf **PKPdf** **11 19 08.2 -2.3**
GEC2 PKPbc **PKPbc** **11 19 14.6 +0.3**
**GERES GERESS Array B 147.87 345** **PKPdf** **11 19 08.8 -1.6**
GERES PKPbc **PKPbc** **11 19 14.2 -0.1**
GERES PKPab **PKPab** **11 19 18.9 +0.1**
**GERES GERESS Array B 147.87 345** PKPbc **PKPbc** **11 19 14.3 -0.1**
comp=Z,4.6nm,0.5s,baz=163,slow=9.4,SNR=17
**GERES GERESS Array B 147.87 345** PKiKP **PKPdf** **11 19 08.9 -1.6**
GERES 11 19 19.0
**RCHB Rochefort 147.89 356** *d*PKP **PKPbc** **11 19 14.2 0.0**
**DOU Dourbes 147.99 357** *d*PKP **PKPbc** **11 19 14.6 +0.1**
**ELND Elena 148.02 326**⇑P **PKPbc** **11 19 15.0 +0.3**
**BZS Buzias 148.06 334**⇑P **PKPdf** **11 19 10.8 0.0**
**BZS Buzias 148.06 334**⇑PKHKP PKPpre 11 19 10.8
**SRE Strehaia 148.10 331**⇑P **PKiKP** **11 19 15.6 -0.6**
**SRE Strehaia 148.10 331**⇑PKP2 **PKiKP** **11 19 15.6 -0.6**
**CONA Conrad Observa 148.14 342** *i* PKP **PKPbc** **11 19 15.4 +0.4**
comp=Z,21nm,1.2s,SNR=19
**RONA Rosalia, Austr 148.22 342** *e*PKP **PKPbc** **11 19 15.5 +0.4**
comp=Z,9.1nm,0.8s,SNR=12
**HERR Herculane 148.29 332**⇑P **PKiKP** **11 19 16.4 -0.2**
**WLF Walferdange 148.31 355** *d*PKiKP **PKiKP** **11 19 15.9 -0.5**
**BAND Balkesir-Ban 148.40 320**⇑P **PKPdf** **11 19 11.7 +0.2**
**MOA Molln 148.66 344** *i* PKP **PKPbc** **11 19 16.0 -0.2**
comp=Z,13nm,1.4s,SNR=5.7
**MDVR Moldovita 148.68 332**⇑P **PKiKP** **11 19 17.6 +0.2**
**MORH Mrgy, Hungar 148.74 337**⇑P **PKPdf** **11 19 11.7 -0.2**
**ARSA Arzberg 148.85 342** *e*PKP **PKPbc** **11 19 16.6 -0.1**
comp=Z,9.1nm,1.2s,SNR=6.3
**BIOA Bad Ischl, Aus 148.96 345** *i* PKP **PKPbc** **11 19 16.3 -0.7**
comp=Z,6.8nm,0.9s
**LESA Schwarzleotal 149.45 346** *e*PKP **PKPbc** **11 19 17.9 -0.3**
comp=Z,6.3nm,0.6s
**SOKA Soboth 149.52 342** *e*PKP **PKPbc** **11 19 17.9 -0.5**
comp=Z,21nm,1.3s,SNR=8.9
**BOVS Bovan 149.58 331**⇑P **PKiKP** **11 19 18.9 -0.4**
**KBA Koelnbreinsper 149.61 345** *e*PKP **PKPbc** **11 19 17.4 -1.3**
comp=Z,18nm,1.1s,SNR=6.8
**WATA Walderalm 149.78 347** *e*PKP **PKPbc** **11 19 18.7 -0.4**
comp=Z,6.9nm,0.6s,SNR=7.8
**RETA Reutte 149.80 348** *e*PKP **PKPbc** **11 19 18.7 -0.3**
comp=Z,3.1nm,0.5s,SNR=6.9
**WTTA Wattenberg 149.83 347** *i* PKP **PKPbc** **11 19 19.1 -0.2**
comp=Z,13nm,0.5s,SNR=12
**MOTA Moosalm 149.87 348** *i* PKP **PKPbc** **11 19 18.9 -0.4**
comp=Z,9.8nm,0.8s
**MYKA Terra Mystica 149.95 344** *e*PKP **PKPbc** **11 19 18.5 -0.9**
comp=Z,9.2nm,0.6s
**SQTA Sankt Quirin 149.96 347** *e*PKP **PKPbc** **11 19 19.1 -0.4**
comp=Z,10nm,0.7s,SNR=6.6
**ABTA Abfaltersbach 150.12 345** *e*PKP **PKPbc** **11 19 18.8 -1.1**
comp=Z,20nm,0.7s,SNR=5.9
**DAVA Damuels 150.16 349** *e*PKP **PKPbc** **11 19 20.1 +0.1**
comp=Z,9.2nm,0.7s,SNR=8.6
**FETA Feichten 150.25 348** *e*PKP **PKPbc** **11 19 19.9 -0.3**
comp=Z,12nm,1.0s,SNR=5.8
**STAL STALIGIAL 150.53 345** **PKPdf** **11 19 13.1 -1.6**
STAL PKPbc **PKPbc** **11 19 20.0 -0.7**
**FUORN Ofenpass-Fuorn 150.73 348** PKPdf **PKPdf** **11 19 14.4 -0.9**
FUORN PKPbc **PKPbc** **11 19 21.5 0.0**
**VAY Valandovo 150.89 327** *i* P **PKPbc** **11 19 21.1 -0.6**
**CTI Castel Tesino 150.98 346** **PKPdf** **11 19 14.3 -1.1**
**CTI Castel Tesino 150.98 346** PKiKP **PKPdf** **11 19 14.4 -1.1**
**PDG Podgorica 151.63 332**⇑P **PKPbc** **11 19 23.1 -0.2**
**OHR Ohrid 151.94 329** *i* P **PKiKP** **11 19 24.4 +0.1**
**PBRG Braganca 155.19 16** *e*PKPab **PKPab** **11 19 49.6 -0.2**
**MVO Moncorvo 155.72 17** *e*PKPdf **PKPdf** **11 19 22.6 +0.3**
**MVO Moncorvo 155.72 17** *e*PKPab **PKPab** **11 19 51.4 -0.7**
**PSBE So Bento 156.67 21** *e*PKPab **PKPab** **11 19 56.0 -0.3**
**PCBR Castelo Branco 156.81 19** *e*PKPdf **PKPdf** **11 19 24.6 +1.0**
**PMRV Marv??o 157.21 19** *e*PKPab **PKPab** **11 19 58.2 -0.4**
**PESTR Estremoz 157.66 20** *e*PKPab **PKPab** **11 20 00.2 -0.4**
**ESDC Sonseca Array 157.86 12** PKP **PKPdf** **11 19 24.8 -0.3**
comp=Z,0.5nm,0.8s,baz=357,slow=3.1,SNR=6.8
ESDC PKPab **PKPab** **11 20 00.7 -0.8**
comp=Z,1.8nm,1.0s,baz=356,slow=1.5,SNR=8.4
**PAB San Pablo 157.91 

*s-min=74.1km az=80.0*
*NEIC **19** 11:10:40.4±0.9, 17.°9S±0.°4×177.°8W±0.°2, h579km±23km, mb4.3/15, Error ellipse: s-maj=55.8km s-min=24.2km az=174.0*

**ISC 19 11:10:40.6±1.0, 17.°6S±0.°2×177.°9W±0.°1, h600km, n23, σ0s73/23, mb4.2/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.87** | **268** | P | **P** | | | **11 12 03.7** | **-1.5** |
| **AFI** | **Afiamalu** | **6.95** | **59** | P | **P** | | | **11 12 30.2** | **0.0** |
| **DZM** | **Mont Dzumac** | **15.39** | **251** | P | **P** | | | **11 13 53.7** | **+1.3** |
| **DZM** | **Mont Dzumac** | **15.39** | **251** | P | **P** | | | **11 13 53.2** | **+0.8** |
| | 1.1nm,0.4s,baz=98,slow=17,SNR=5.8 | | | | | | | | |
| | 1.1nm,0.4s | | | | | | | | |
| **EIDS** | **Eidsvold** | **29.83** | **250** | P | **P** | | | **11 16 00.3** | **-0.6** |
| EIDS | | | | | IAmb | IAmb | | 11 16 10.3 | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.98** | **260** | P | **P** | | | **11 16 36.7** | **+0.5** |
| | comp=Z,0.2nm,0.7s,baz=68,slow=8.7,SNR=6.3 | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.98** | **260** | P | **P** | | | **11 16 36.4** | **+0.3** |
| CTAO | | | | | IAmb | IAmb | | 11 16 37.7 | |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| **CAN** | **Canberra** | **34.27** | **232** | P | **P** | | | **11 16 37.8** | **-0.6** |
| **TOO** | **Toolangi** | **37.73** | **231** | P | **P** | | | **11 17 06.8** | **-0.1** |
| **STKA** | **Stephens Creek** | **39.20** | **241** | P | **P** | | | **11 17 18.7** | **0.0** |
| **STKA** | **Stephens Creek** | **39.20** | **241** | P | **P** | | | **11 17 19.0** | **+0.3** |
| | comp=Z,2.7nm,0.5s,baz=97,slow=9.3,SNR=5.8 | | | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.98** | **241** | P | **P** | | | **11 17 56.1** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.98** | **259** | P | **P** | | | **11 18 04.8** | **+0.7** |
| WR0 | | | | | IAmb | IAmb | | 11 18 23.0 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.13** | **259** | P | **P** | | | **11 18 05.7** | **+0.4** |
| WB0 | | | | | IAmb | IAmb | | 11 18 27.7 | |
| | comp=Z,10.0nm,1.3s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **45.16** | **259** | P | **P** | | | **11 18 06.1** | **+0.7** |
| WB2 | | | | | IAmb | IAmb | | 11 18 46.1 | |
| | comp=Z,9.7nm,1.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.17** | **259** | P | **P** | | | **11 18 06.2** | **+0.7** |
| **WRA** | **Warramunga Arr** | **45.17** | **259** | P | **P** | | | **11 18 06.2** | **+0.7** |
| | comp=Z,1.3nm,0.5s,baz=97,slow=7.1,SNR=26 | | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.34** | **254** | P | **P** | | | **11 18 07.8** | **+1.0** |
| AS31 | | | | | IAmb | IAmb | | 11 18 08.6 | |
| | comp=Z,3.2nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **254** | P | **P** | | | **11 18 07.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.34** | **254** | P | **P** | | | **11 18 07.7** | **+0.8** |
| | comp=Z,6.8nm,0.6s,baz=88,slow=8.9,SNR=94 | | | | | | | | |
| | comp=Z,6.8nm,0.6s | | | | | | | | |
| **FORT** | **Forrest** | **50.58** | **244** | P | **P** | | | **11 18 45.0** | **-0.6** |
| FORT | | | | | IAmb | IAmb | | 11 19 03.9 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.44** | **180** | P | **P** | | | **11 21 06.7** | **-0.3** |
| QSPA | | | | | IAmb | IAmb | | 11 21 07.3 | |
| | comp=Z,15nm,1.5s | | | | | | | | |
| **SNAA** | **Sanae** | **90.88** | **178** | P | **P** | | | **11 22 41.8** | **+0.9** |
| SNAA | | | | | IAmb | IAmb | | 11 22 45.4 | |
| | comp=Z,6.3nm,1.4s | | | | | | | | |

**DJA 19 11:22:15.1±0.3, 8.°S±3.°×12.°0E±.°, h56km±25km, M3.9/10, MLv3.9/10, Flores region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **1.36** | **188** | P | P | | Pn | 11 22 37.8 | -0.2 |
| WBSI | | | | S | | | Sn | 11 22 55.1 | 0.0 |
| **PLAI** | **Plampang** | **1.86** | **253** | P | P | | Pn | 11 22 45.4 | +0.7 |
| **EDFI** | **Ende, Flores** | **2.14** | **103** | P | P | | Pn | 11 22 49.0 | +0.5 |
| EDFI | | | | S | | | Sn | 11 23 14.9 | +0.9 |
| **BASI** | **Baing, Sumba** | **2.16** | **153** | P | P | | Pn | 11 22 48.6 | -0.2 |
| **BSSI** | **Bau Bau, Buton** | **2.31** | **23** | P | P | | Pn | 11 22 50.8 | +0.1 |
| BSSI | | | | S | | | Sn | 11 23 16.0 | -2.0 |
| **MMRI** | **Maumere** | **2.65** | **98** | P | P | | Pn | 11 22 55.8 | +0.3 |
| MMRI | | | | S | | | Sn | 11 23 26.5 | 0.0 |
| **TWSI** | **Taliwang, Sumb** | **2.71** | **260** | P | P | | Pn | 11 22 56.1 | -0.1 |
| **BNSI** | **Bone** | **3.89** | **8** | P | P | | Pn | 11 23 14.4 | +2.0 |
| **BBSI** | **Bau Bau** | **4.06** | **47** | P | P | | Pn | 11 23 15.1 | +0.3 |
| BBSI | | | | S | | | Sn | 11 23 59.6 | -1.5 |
| **JAGI** | **Jajag, Banyuwa** | **5.37** | **268** | P | P | | Pn | 11 23 32.6 | -0.2 |

*NEIC **19** 11:22:43.8±1.0, 17.°9S±0.°4×177.°9W±0.°2, h620km±24km, mb4.1/16, Error ellipse: s-maj=55.9km s-min=16.3km az=204.0*
*IDC **19** 11:22:45.7±3.5, 17.°95S×178.°17W, h628km±42km, mb2.9/7, mbtmp3.9/7, Error ellipse: s-maj=29.0km s-min=23.8km az=12.0*

**ISC 19 11:22:46.1±1.1, 17.°8S±0.°2×178.°1W±0.°2, h650km, n29, σ0s88/28, mb3.9/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **11.37** | **179** | P | **P** | | | **11 25 18.5** | **-0.3** |
| | 147nm,0.3s,baz=70,slow=15,SNR=5.1 | | | | | | | | |
| **PINNC** | **Pines Island,** | **14.36** | **248** | P | **P** | | | **11 25 45.2** | **-1.4** |
| **DZM** | **Mont Dzumac** | **15.12** | **251** | P | **P** | | | **11 25 53.9** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **16.85** | **258** | P | **P** | | | **11 26 07.6** | **-1.7** |
| **CTA** | **Charters Tower** | **33.74** | **260** | P | **P** | | | **11 28 37.3** | **+0.3** |
| | 0.1nm,0.4s,baz=85,slow=12,SNR=2.3 | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.74** | **260** | P | **P** | | | **11 28 37.0** | **0.0** |
| CTAO | | | | | IAmb | IAmb | | 11 28 38.9 | |
| | comp=Z,7.6nm,1.2s | | | | | | | | |
| **COEN** | **Coen** | **37.39** | **270** | P | P | | | 11 29 08.6 | +1.6 |
| COEN | | | | | IAmb | IAmb | | 11 29 09.2 | |
| | comp=Z,6.1nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | **P** | | | **11 29 19.8** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | **P** | | | **11 29 18.8** | **-0.2** |
| | comp=Z,1.8nm,0.5s,baz=78,slow=14,SNR=3.5 | | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.69** | **241** | P | **P** | | | **11 29 56.5** | **+0.1** |
| **WR0** | **Warramunga Arr** | **44.73** | **259** | P | **P** | | | **11 30 05.5** | **+0.9** |
| WR0 | | | | | IAmb | IAmb | | 11 30 11.2 | |
| | comp=Z,7.3nm,1.2s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.89** | **260** | P | **P** | | | **11 30 06.2** | **+0.5** |
| WB0 | | | | | IAmb | IAmb | | 11 30 21.3 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.91** | **259** | P | **P** | | | **11 30 06.2** | **+0.2** |
| WB2 | | | | | IAmb | IAmb | | 11 30 30.4 | |
| | comp=Z,9.6nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.92** | **259** | P | **P** | | | **11 30 06.0** | **0.0** |
| | comp=Z,1.7nm,0.6s,baz=96,slow=6.9,SNR=41 | | | | | | | | |
| WRA | | | | | PcP | | **PcP** | **11 31 34.4** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=93,slow=3.9,SNR=1.6 | | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.08** | **254** | P | **P** | | | **11 30 07.8** | **+0.6** |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | **P** | | | **11 30 07.1** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | **P** | | | **11 30 07.5** | **+0.2** |
| | comp=Z,3.3nm,0.5s,baz=89,slow=8.4,SNR=54 | | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **11 31 34.8** | **+1.3** |
| | comp=Z,0.4nm,0.4s,baz=103,slow=4.0,SNR=4.5 | | | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | | | |
| **MTN** | **Manton Dam** | **49.09** | **268** | P | **P** | | | **11 30 37.0** | **-0.1** |
| MTN | | | | | IAmb | IAmb | | 11 30 41.9 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.78** | **264** | P | **P** | | | **11 30 49.7** | **+0.4** |
| KNRA | | | | | IAmb | IAmb | | 11 31 06.7 | |
| | comp=Z,8.6nm,1.2s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.32** | **260** | P | **P** | | | **11 31 08.3** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **58.20** | **255** | P | **P** | | | **11 31 40.9** | **0.0** |
| PSA00 | | | | | IAmb | IAmb | | 11 32 00.7 | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.02** | **323** | P | P | | | 11 32 44.5 | +1.5 |
| | comp=Z,0.5nm,0.5s,baz=161,slow=5.4,SNR=2.2 | | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | | |
| **UGM** | **Wanagama** | **69.93** | **268** | P | **P** | | | **11 32 55.1** | **+0.2** |
| **QSPA** | **South Pole Qui** | **72.22** | **180** | P | **P** | | | **11 33 07.4** | **0.0** |
| **QSPA** | **South Pole Qui** | **72.22** | **180** | P | **P** | | | **11 33 07.4** | **0.0** |
| | comp=Z,0.9nm,1.0s,baz=76,slow=2.5,SNR=5.0 | | | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.72** | **58** | P | P | | | 11 34 20.2 | +1.4 |
| | comp=Z,0.1nm,0.5s,baz=210,slow=6.3,SNR=1.4 | | | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.75** | **13** | P | **P** | | | **11 34 18.9** | **+0.9** |
| | comp=Z,0.2nm,0.4s,baz=222,slow=9.1,SNR=1.7 | | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.93** | **315** | PKP | | | **PKiKP** | **11 41 14.5** | **-1.1** |
| | comp=Z,1.1nm,0.8s,baz=120,slow=3.8,SNR=3.9 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.61** | **345** | PKPbc | | | **PKPab** | **11 41 21.7** | **-2.3** |
| | comp=Z,0.5nm,0.6s,baz=153,slow=6.6,SNR=3.3 | | | | | | | | |

*IDC **19** 11:22:54.8±12.0, 18.°05S×177.°95W, h506km±131km, mb3.2/7, mbtmp4.1/7, Error ellipse: s-maj=53.4km*

*s-min=21.4km az=76.0*
*NEIC **19** 11:23:01.0±1.5, 18.°2S±0.°2×178.°0W±0.°2, h588km±18km, mb4.5/12, Error ellipse: s-maj=31.9km s-min=22.1km az=180.0*

**ISC 19 11:23:01.0±0.7, 18.°2S±0.°1×178.°1W±0.°1, h590km, n25, σ0s97/25, mb3.9/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.72** | **276** | P | **P** | | | **11 24 24.4** | **+0.5** |
| **AFI** | **Afiamalu** | **7.38** | **56** | P | **P** | | | **11 24 52.7** | **-1.6** |
| **LIFNC** | **LIFOU** | **14.09** | **257** | P | **P** | | | **11 25 58.1** | **-2.8** |
| **KOUNC** | **Koumac, New Ca** | **16.82** | **259** | P | **P** | | | **11 26 26.5** | **+0.2** |
| KOUNC | | | | | IAmb | IAmb | | 11 27 06.8 | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.46** | **200** | P | **P** | | | **11 28 18.4** | **-0.1** |
| **ARMA** | **Armidale** | **30.09** | **240** | P | **P** | | | **11 28 24.8** | **+0.6** |
| **CAN** | **Canberra** | **33.80** | **233** | P | **P** | | | **11 28 54.3** | **-1.2** |
| **TOO** | **Toolangi** | **37.26** | **231** | P | **P** | | | **11 29 24.8** | **+0.8** |
| TOO | | | | | IAmb | IAmb | | 11 29 25.7 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.79** | **242** | P | **P** | | | **11 29 37.0** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.79** | **242** | P | **P** | | | **11 29 37.3** | **+0.9** |
| | comp=Z,1.6nm,0.5s,baz=90,slow=4.0,SNR=3.0 | | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.56** | **241** | P | **P** | | | **11 30 13.7** | **-0.4** |
| BBOO | | | | | IAmb | IAmb | | 11 30 43.1 | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.90** | **260** | P | **P** | | | **11 30 24.6** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=92,slow=7.5,SNR=5.0 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.03** | **254** | P | **P** | | | **11 30 26.2** | **+0.7** |
| **ASAR** | **Alice Springs** | **45.03** | **254** | P | **P** | | | **11 30 26.0** | **+0.5** |
| **ASAR** | **Alice Springs** | **45.03** | **254** | P | **P** | | | **11 30 26.0** | **+0.5** |
| | comp=Z,2.6nm,0.6s,baz=89,slow=8.5,SNR=12 | | | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | | | |
| **MTN** | **Manton Dam** | **49.11** | **269** | P | **P** | | | **11 30 56.1** | **-0.1** |
| MTN | | | | | IAmb | IAmb | | 11 31 31.1 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **FORT** | **Forrest** | **50.19** | **245** | P | **P** | | | **11 31 03.6** | **-0.2** |
| FORT | | | | | IAmb | IAmb | | 11 31 22.7 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.30** | **323** | P | **P** | | | **11 33 04.7** | **+0.4** |
| | comp=Z,1.2nm,0.6s,baz=157,slow=5.6,SNR=5.7 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.89** | **180** | P | **P** | | | **11 33 26.0** | **+0.8** |
| **QSPA** | **South Pole Qui** | **71.89** | **180** | P | **P** | | | **11 33 26.8** | **+1.6** |
| | comp=Z,0.9nm,0.5s,baz=227,slow=1.2,SNR=19 | | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.01** | **345** | P | **P** | | | **11 33 38.1** | **+0.9** |
| | comp=Z,2.5nm,0.7s,baz=127,slow=9.3,SNR=2.8 | | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.06** | **13** | P | **P** | | | **11 34 40.1** | **+0.5** |
| | comp=Z,0.5nm,0.4s,baz=221,slow=4.8,SNR=7.5 | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| **SNAA** | **Sanae** | **90.33** | **178** | P | **P** | | | **11 34 59.2** | **-0.5** |
| SNAA | | | | | IAmb | IAmb | | 11 35 00.4 | |
| | comp=Z,7.6nm,1.5s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.19** | **315** | PKPbc | | | **PKPab** | **11 41 34.9** | **0.0** |
| | comp=Z,0.4nm,0.4s,baz=78,slow=1.6,SNR=4.2 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.94** | **345** | PKPbc | | | **PKiKP** | **11 41 42.3** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=31,slow=4.6,SNR=3.7 | | | | | | | | |

*NEIC **19** 11:24:47.0±1.7, 17.°8S±0.°2×177.°9W±0.°2, h541km±16km, mb4.4/24, Error ellipse: s-maj=35.2km s-min=21.1km az=183.0*
*IDC **19** 11:25:23.9±9.2, 18.°50S×178.°23E, h675km±81km, mb3.4/5, mbtmp4.6/6, Error ellipse: s-maj=110.8km s-min=40.0km az=102.0*

**ISC 19 11:24:47.2±0.9, 17.°7S±0.°2×178.°0W±0.°1, h550km, n38, σ1s26/35, mb4.2/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.80** | **269** | P | **P** | | | **11 26 09.8** | **+2.1** |
| **AFI** | **Afiamalu** | **7.05** | **58** | P | **P** | | | **11 26 34.4** | **-1.5** |
| **NIUE** | **Niue** | **7.75** | **101** | P | **P** | | | **11 26 42.1** | **-0.4** |
| **LIFNC** | **LIFOU** | **14.30** | **255** | P | **P** | | | **11 27 47.2** | **-2.3** |
| **PINNC** | **Pines Island,** | **14.54** | **248** | P | **P** | | | **11 27 47.3** | **-4.6** |
| **DZM** | **Mont Dzumac** | **15.29** | **251** | P | **P** | | | **11 28 01.2** | **+1.4** |
| DZM | | | | | IAmb | IAmb | | 11 28 03.1 | |
| | comp=Z,8.6nm,0.7s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.29** | **251** | P | **P** | | | **11 27 58.2** | **-1.6** |
| | comp=Z,7.5nm,0.6s,baz=245,slow=18,SNR=4.7 | | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.01** | **258** | P | **P** | | | **11 28 15.8** | **-0.3** |
| KOUNC | | | | | IAmb | IAmb | | 11 28 45.9 | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **EIDS** | **Eidsvold** | **29.73** | **250** | P | **P** | | | **11 30 08.3** | **-1.2** |
| EIDS | | | | | IAmb | IAmb | | 11 30 35.4 | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **ARMA** | **Armidale** | **30.41** | **240** | P | **P** | | | **11 30 15.7** | **+0.4** |
| **CTA** | **Charters Tower** | **33.90** | **260** | P | **P** | | | **11 30 44.8** | **-0.2** |
| | comp=Z,0.2nm,0.7s,baz=116,slow=9.3,SNR=7.4 | | | | | | | | |
| **CAN** | **Canberra** | **34.16** | **233** | P | **P** | | | **11 30 46.3** | **-0.7** |
| **PMG** | **Port Moresby** | **34.85** | **279** | P | **P** | | | **11 30 54.0** | **+1.0** |
| **PMG** | **Port Moresby** | **34.85** | **279** | P | **P** | | | **11 30 54.5** | **+1.5** |
| | comp=Z,21nm,0.9s,baz=160,slow=12,SNR=3.8 | | | | | | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **COEN** | **Coen** | **37.53** | **270** | P | **P** | | | **11 31 15.5** | **+0.3** |
| COEN | | | | | IAmb | IAmb | | 11 31 47.4 | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| **TOO** | **Toolangi** | **37.62** | **231** | P | **P** | | | **11 31 16.5** | **+0.9** |
| **STKA** | **Stephens Creek** | **39.09** | **241** | P | **P** | | | **11 31 28.4** | **+0.8** |
| **STKA** | **Stephens Creek** | **39.09** | **241** | P | **P** | | | **11 31 28.5** | **+0.8** |
| | comp=Z,2.7nm,0.4s,baz=82,slow=9.4,SNR=9.7 | | | | | | | | |
| | comp=Z,2.7nm,0.4s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.87** | **241** | P | **P** | | | **11 32 05.4** | **+0.1** |
| BBOO | | | | | IAmb | IAmb | | 11 32 08.3 | |
| | comp=Z,28nm,1.4s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.90** | **259** | P | **P** | | | **11 32 13.0** | **-0.4** |
| **WB0** | **Warramunga Arr** | **45.05** | **260** | P | **P** | | | **11 32 14.5** | **-0.1** |
| **WB2** | **Warramunga Arr** | **45.08** | **259** | P | **P** | | | **11 32 14.0** | **-0.8** |
| WB2 | | | | | IAmb | IAmb | | 11 32 15.1 | |
| | comp=Z,8.9nm,1.1s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.09** | **259** | P | **P** | | | **11 32 14.6** | **-0.3** |
| | comp=Z,2.8nm,0.4s,baz=95,slow=7.5,SNR=59 | | | | | | | | |
| | comp=Z,2.8nm,0.4s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.25** | **254** | P | **P** | | | **11 32 16.6** | **+0.4** |
| AS31 | | | | | IAmb | IAmb | | 11 32 17.1 | |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.25** | **254** | P | **P** | | | **11 32 16.0** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.25** | **254** | P | **P** | | | **11 32 16.6** | **+0.4** |
| | comp=Z,20nm,0.6s,baz=88,slow=8.4,SNR=139 | | | | | | | | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| **MTN** | **Manton Dam** | **49.23** | **268** | P | **P** | | | **11 32 45.9** | **-0.2** |
| MTN | | | | | IAmb | IAmb | | 11 32 46.3 | |
| | comp=Z,7.4nm,0.8s | | | | | | | | |
| **FORT** | **Forrest** | **50.47** | **244** | P | **P** | | | **11 32 54.5** | **-0.5** |
| FORT | | | | | IAmb | IAmb | | 11 33 19.1 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.93** | **264** | P | **P** | | | **11 32 58.9** | **+0.4** |
| KNRA | | | | | IAmb | IAmb | | 11 33 00.8 | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.48** | **260** | P | **P** | | | **11 33 17.2** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **58.37** | **255** | P | **P** | | | **11 33 50.2** | **-0.3** |
| PSA00 | | | | | IAmb | IAmb | | 11 34 29.4 | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **MBWA** | **Marble Bar** | **58.53** | **256** | P | **P** | | | **11 33 51.4** | **-0.3** |
| MBWA | | | | | IAmb | IAmb | | 11 34 17.0 | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| **MORW** | **Morawa** | **60.95** | **246** | P | **P** | | | **11 34 07.4** | **-0.2** |
| **GIRL** | **Giralia** | **63.36** | **253** | P | **P** | | | **11 34 24.4** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **68.01** | **323** | P | P | | | 11 35 09.8 | +18 |
| | comp=Z,0.9nm,0.7s,baz=146,slow=6.8,SNR=1.9 | | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.33** | **180** | P | **P** | | | **11 35 18.5** | **+1.2** |
| **USRK** | **Ussuriysk Ar.** | **76.70** | **325** | P | P | | | 11 35 48.5 | +6.6 |
| **USA0B** | **Ussuriysk Arra** | **76.70** | **325** | P | P | | | 11 35 49.4 | +7.5 |

**IDC 19 11:27:38.6±25.0, 24.°01S×173.°52W, h0km, mb4.1/4, mbtmp4.1/4, Error ellipse: s-maj=459.7km s-min=144.6km az=79.0, South of Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **37.40** | **268** | P | P | | | 11 34 53.9 | +0.2 |
| | 0.1nm,0.3s,baz=103,slow=11,SNR=9.8 | | | | | | | | |
| | 0.1nm,0.3s | | | | | | | | |
| **STKA** | **Stephens Creek** | **40.20** | **248** | P | P | | | 11 35 16.2 | -0.7 |
| | 1.4nm,0.5s,baz=102,slow=9.3,SNR=4.2 | | | | | | | | |
| | 1.4nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **47.85** | **259** | P | P | | | 11 36 18.3 | -0.3 |
| | 2.2nm,0.4s,baz=103,slow=7.6,SNR=66 | | | | | | | | |
| | 2.2nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.31** | **264** | P | P | | | 11 36 22.2 | +0.1 |
| | 3.8nm,0.5s,baz=102,slow=7.6,SNR=57 | | | | | | | | |
| | 3.8nm,0.5s | | | | | | | | |

*IDC **19** 11:30:30.9±57.0, 17.°71S×177.°71W, h540km±292km, mb3.0/4, mbtmp4.0/5, Error ellipse: s-maj=661.4km s-min=119.3km az=72.0*
*NEIC **19** 11:30:33.6±0.9, 18.°0S±0.°2×177.°6W±0.°2, h583km±19km, mb4.2/16, Error ellipse: s-maj=36.3km s-min=17.5km az=47.0*

**ISC 19 11:30:33.8±2.8, 17.°7S±0.°3×177.°7W±0.°3, h600km, n48, σ1s31/42, mb4.1/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.09** | **269** | P | **P** | | | **11 31 59.6** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.57** | **251** | P | **P** | | | **11 33 46.9** | **-0.4** |
| **DZM** | **Mont Dzumac** | **15.57** | **251** | P | **P** | | | **11 33 45.5** | **-1.8** |
| | 2.5nm,0.6s,baz=77,slow=17,SNR=5.2 | | | | | | | | |
| **RTZ** | **Ruatahuna** | **21.34** | **192** | P | P | | | 11 34 46.7 | +7.2 |
| **MTHZ** | **Maungataniwha** | **21.60** | **192** | P | **P** | | | **11 34 42.9** | **+1.2** |
| **MRHZ** | **Matea Rd** | **21.66** | **193** | P | **P** | | | **11 34 44.7** | **+2.4** |
| **ARHZ** | **Aropaoanui** | **21.96** | **191** | P | P | | | 11 34 49.6 | +4.7 |
| **BKZ** | **Black Stump Fm** | **21.97** | **192** | P | **P** | | | **11 34 46.5** | **+1.5** |
| **OTVZ** | **Oturere** | **22.14** | **194** | P | **P** | | | **11 34 46.2** | **-0.5** |
| **SNVZ** | **South Ngauruho** | **22.17** | **194** | P | **P** | | | **11 34 46.3** | **-0.7** |
| **MCHZ** | **McNeill Hill** | **22.20** | **192** | P | **P** | | | **11 34 49.7** | **+2.7** |
| **KWHZ** | **Kaiweka Forest** | **22.23** | **192** | P | **P** | | | **11 34 48.4** | **+1.0** |
| **WNVZ** | **Wahianoa** | **22.32** | **194** | P | **P** | | | **11 34 47.0** | **-1.3** |
| **MOVZ** | **Moawhango** | **22.36** | **194** | P | **P** | | | **11 34 47.0** | **-1.5** |
| **KRHZ** | **Kereru** | **22.45** | **192** | P | **P** | | | **11 34 49.7** | **+0.4** |
| **KAHZ** | **Kahuranaki** | **22.50** | **191** | P | **P** | | | **11 34 52.8** | **+3.1** |
| **PXZ** | **Pawanui** | **22.73** | **191** | P | **P** | | | **11 34 48.2** | **-3.5** |
| **PNHZ** | **Pukenui** | **22.75** | **192** | P | **P** | | | **11 34 51.6** | **-0.3** |
| **BFZ** | **Birch Farm** | **23.48** | **192** | P | **P** | | | **11 34 58.6** | **+0.3** |
| **MRZ** | **Mangatainoka R** | **23.59** | **193** | P | **P** | | | **11 34 57.2** | **-2.2** |
| **MRZ** | **Mangatainoka R** | **23.59** | **193** | P | **P** | | | **11 34 58.2** | **-1.2** |
| **CPWZ** | **Castlepoint** | **23.71** | **192** | P | P | | | 11 35 05.3 | +5.0 |
| **OGWZ** | **Otaki Gorge** | **23.83** | **194** | P | **P** | | | **11 35 00.4** | **-1.1** |
| **KIW** | **Kapiti Island** | **23.93** | **194** | P | **P** | | | **11 35 01.0** | **-1.4** |
| **CAW** | **Cannon Point** | **24.13** | **194** | P | **P** | | | **11 35 03.4** | **-0.7** |
| **MSWZ** | **Moikau Station** | **24.39** | **193** | P | **P** | | | **11 35 06.2** | **-0.2** |
| **TCW** | **Tory Channel** | **24.42** | **195** | P | **P** | | | **11 35 06.7** | **+0.1** |
| **TUWZ** | **Tuamarina** | **24.71** | **195** | P | **P** | | | **11 35 11.2** | **+2.0** |
| **KHZ** | **Kahutara** | **25.74** | **195** | P | P | | | 11 35 22.7 | +4.4 |
| **ARMA** | **Armidale** | **30.66** | **240** | P | **P** | | | **11 36 00.9** | **-0.4** |
| **CTA** | **Charters Tower** | **34.19** | **260** | P | **P** | | | **11 36 31.0** | **-0.1** |
| | 0.2nm,0.6s,baz=96,slow=12,SNR=5.4 | | | | | | | | |
| | 0.2nm,0.6s | | | | | | | | |
| **CTAO** | **Charters Tower** | **34.19** | **260** | P | **P** | | | **11 36 31.0** | **-0.1** |
| CTAO | | | | | IAmb | IAmb | | 11 36 32.5 | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **COEN** | **Coen** | **37.82** | **270** | P | **P** | | | **11 37 01.5** | **+0.5** |
| COEN | | | | | IAmb | IAmb | | 11 37 22.2 | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **TOO** | **Toolangi** | **37.85** | **231** | P | **P** | | | **11 37 00.7** | **-0.2** |
| **STKA** | **Stephens Creek** | **39.35** | **241** | P | **P** | | | **11 37 13.8** | **+0.7** |
| | comp=Z,0.6nm,0.3s,baz=94,slow=11,SNR=3.1 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **BBOO** | **Buckleboo** | **44.13** | **241** | P | **P** | | | **11 37 51.2** | **+0.6** |
| BBOO | | | | | IAmb | IAmb | | 11 38 10.9 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **45.18** | **259** | P | **P** | | | **11 37 59.2** | **+0.4** |
| WR0 | | | | | IAmb | IAmb | | 11 38 34.1 | |
| | comp=Z,9.2nm,1.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.34** | **260** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JANG | | | | ⇓S | | Sn | 11 32 54.5 | +0.7 |
| **JKZ** | **Kuzumaki** | **0.74** | **239** | ⇓*i*P | | Pn | 11 32 49.9 | +0.6 |
| JKZ | | | | ⇓S | | Sn | 11 33 00.6 | +1.0 |
| **JARK** | **Aomorirokkasho** | **0.88** | **317** | ⇓*i*P | | Pn | 11 32 50.9 | -0.2 |
| JARK | | | | ⇓S | | Sn | 11 33 02.6 | -0.1 |
| **JTM** | **Tenmabayashi** | **0.93** | **297** | ⇓*i*P | | Pn | 11 32 51.9 | +0.1 |
| JTM | | | | ⇓*e*S | | Sn | 11 33 04.8 | +0.8 |
| **JOM** | **Ohasama** | **1.12** | **217** | ⇓P | | Pn | 11 32 54.8 | +0.5 |
| JOM | | | | ⇓S | | Sn | 11 33 09.2 | +0.7 |
| **JAH** | **Hinai** | **1.18** | **262** | ⇓P | | Pn | 11 32 56.0 | +0.8 |
| JAH | | | | ⇓S | | Sn | 11 33 11.5 | +1.5 |
| **JOT** | **Ohata** | **1.32** | **321** | P | | Pn | 11 32 56.9 | -0.1 |
| JOT | | | | *e*S | | Sn | 11 33 14.2 | +0.8 |
| **ASAJ** | **Asahikawa** | **3.76** | **5** | P | | Pn | 11 33 31.1 | +0.6 |
| | 3.7nm,0.3s,baz=198,slow=9.5,SNR=12 | | | | | | | |
| ASAJ | | | | S | | Sn | 11 34 17.1 | +3.7 |
| | 3.8nm,0.5s,baz=127,slow=20,SNR=1.4 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.92** | **220** | P | | Pn | 11 33 49.6 | +3.1 |
| | 1.5nm,0.6s,baz=30,slow=14,SNR=6.8 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.52** | **127** | T | | T | 12 09 24.6 | |
| | baz=319,slow=75,SNR=28 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.53** | **127** | T | | T | 12 09 20.6 | |
| | baz=319,slow=75,SNR=31 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.54** | **127** | T | | T | 12 09 27.1 | |
| | baz=319,slow=75,SNR=30 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.34** | **129** | T | | T | 12 10 37.0 | |
| | baz=321,slow=76,SNR=8.1 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.34** | **129** | T | | T | 12 10 57.2 | |
| | baz=321,slow=76,SNR=8.0 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.35** | **129** | T | | T | 12 10 36.8 | |
| | baz=321,slow=76,SNR=5.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.92** | **299** | P | | **P** | **11 40 28.3** | **-0.9** |
| | 0.5nm,0.7s,baz=90,slow=8.5,SNR=3.7 | | | | | | | |
| MKAR | | | | LR | | LR | 12 00 22.8 | |
| | comp=Z,41nm,21.1s,baz=88,slow=39 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.48** | **305** | P | | **P** | **11 40 39.7** | **-1.9** |
| | 1.1nm,0.8s,baz=79,slow=8.2,SNR=5.5 | | | | | | | |
| | 1.1nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.81** | **310** | P | | **P** | **11 41 15.0** | **-0.4** |
| | 0.5nm,0.3s,baz=80,slow=8.9,SNR=3.0 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.44** | **188** | P | | **P** | **11 42 38.6** | **-1.4** |
| | 0.5nm,1.0s,baz=5.7,slow=7.6,SNR=2.6 | | | | | | | |
| | 0.5nm,1.0s | | | | | | | |

**IDC 19 11:39:41.1**±6.8,**16°18S**×**178°40W**,**h584**km±92km,
**mb2.7/3, mbtmp3.7/3, Error ellipse: s-maj=81.1km**
**s-min=36.9km az=163.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **13.02** | **178** | P | P | 11 42 30.3 | +0.2 |
| | 100nm,0.3s,baz=249,slow=22,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.98** | **258** | P | P | 11 47 05.7 | -0.1 |
| | 0.3nm,0.3s,baz=94,slow=7.3,SNR=17 | | | | | | |
| WRA | | | | PcP | PcP | 11 48 34.1 | -0.1 |
| | 0.4nm,1.0s,baz=79,slow=4.4,SNR=1.7 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.29** | **253** | P | P | 11 47 07.8 | -0.3 |
| | 1.4nm,0.6s,baz=89,slow=8.4,SNR=34 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.21** | **13** | P | P | 11 51 11.3 | -0.1 |
| | 0.3nm,0.9s,baz=200,slow=5.6,SNR=1.6 | | | | | | |
| | 0.3nm,0.9s | | | | | | |

*SJA **19** 11:40:29.7±0.7, 23°.99S×66°.60W, h226km±9km, ML3.7, MW3.5*
**ISC 19 11:40:31.8**±1.2,**23°.93S**±0°.05×**66°.69W**±0°.04,**h195**km,**n16,**
σ1°.43/29,**2C, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.33** | **126** | *e*P | **Pn** | **11 41 04.6** | **+0.9** |
| **AZAP** | **Zapla** | **1.51** | **102** | *e*P | **Pn** | **11 41 05.9** | **+0.5** |
| AZAP | | | | *e*S | **Sn** | **11 41 28.6** | **-2.8** |
| **YJA** | **Yavi** | **2.05** | **32** | *e*P | **Pn** | **11 41 12.0** | **+1.1** |
| YJA | | | | *e*S | **Sn** | **11 41 43.8** | **+2.4** |
| **FSA** | **Cafayete** | **2.26** | **164** | *e*P | **Pn** | **11 41 13.0** | **+0.1** |
| FSA | | | | *e*S | **Sn** | **11 41 44.5** | **-0.6** |
| **LVC** | **Limon Verde** | **2.43** | **302** | *e*P | **Pn** | **11 41 16.8** | **+1.8** |
| **LVC** | **Limon Verde** | **2.43** | **302**↑ | *e*P | **Pn** | **11 41 16.3** | **+1.3** |
| LVC | | | | *e*S | **Sn** | **11 41 51.2** | **+2.6** |
| LVC | | | | IAML | | 11 41 53.1 | |
| | 339nm,0.5s | | | | | | |
| **GO02** | **Mina Guanaco** | **2.92** | **245** | *e*P | **Pn** | **11 41 21.6** | **+1.1** |
| GO02 | | | | *e*S | **Sn** | **11 41 59.8** | **+1.3** |
| **GO02** | **Mina Guanaco** | **2.92** | **245**↑ | *e*P | **Pn** | **11 41 21.3** | **+0.8** |
| GO02 | | | | *e*S | **Sn** | **11 41 59.8** | **+1.3** |
| GO02 | | | | IAML | | 11 42 00.8 | |
| | comp=N,440nm,0.1s | | | | | | |
| **PB14** | **IPOC Station P** | **3.46** | **258** | *e*P | **Pn** | **11 41 27.6** | **+0.6** |
| PB14 | | | | *e*S | **Sn** | **11 42 10.1** | **-0.2** |
| PB14 | | | | IAML | | 11 42 12.5 | |
| | comp=Z,84nm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **3.56** | **296** | *e*P | **Pn** | **11 41 29.1** | **+0.9** |
| PB04 | | | | *e*S | **Sn** | **11 42 12.2** | **0.0** |
| PB04 | | | | IAML | | 11 42 13.2 | |
| | comp=Z,135nm,0.1s | | | | | | |
| **PB04** | **IPOC Station P** | **3.56** | **296** | *e*P | **Pn** | **11 41 28.5** | **+0.4** |
| PB04 | | | | *e*S | **Sn** | **11 42 11.7** | **-0.6** |
| PB04 | | | | IAML | | 11 42 17.6 | |
| | comp=N,219nm,0.1s | | | | | | |
| **AC01** | **Pan de Azucar** | **4.18** | **237** | *e*P | **Pn** | **11 41 34.9** | **-0.7** |
| AC01 | | | | *e*S | **Sn** | **11 42 24.1** | **-1.7** |
| AC01 | | | | IAML | | 11 43 08.2 | |
| | comp=Z,50nm,2.3s | | | | | | |
| **TA01** | **Diego Aracena** | **4.66** | **315** | *e*P | **Pn** | **11 41 41.2** | **-0.5** |
| TA01 | | | | *e*S | **Sn** | **11 42 35.1** | **-1.6** |
| TA01 | | | | IAML | | 11 42 36.0 | |
| | comp=Z,30nm,0.5s | | | | | | |
| **TA01** | **Diego Aracena** | **4.66** | **315** | *e*P | **Pn** | **11 41 41.0** | **-0.7** |
| TA01 | | | | *e*S | **Sn** | **11 42 34.0** | **-2.7** |
| **HMBC** | **Humberstone** | **4.69** | **320** | *e*P | **Pn** | **11 41 41.5** | **-0.8** |
| HMBC | | | | *e*S | **Sn** | **11 42 36.0** | **-1.8** |
| HMBC | | | | IAML | | 11 42 39.9 | |
| | comp=Z,57nm,0.2s | | | | | | |
| **HMBC** | **Humberstone** | **4.69** | **320** | *e*P | **Pn** | **11 41 41.6** | **-0.7** |

*NEIC **19** 11:42:30.3±1.7, 18°.4S±0°.3×178°.2W±0°.2, h590km±18km, mb4.1/14, Error ellipse: s-maj=42.8km s-min=17.7km az=202.0*
*IDC **19** 11:42:39.5±70.0, 17°.85S×179°.41W, h620km±338km, mb3.2/3, mbtmp4.2/4, Error ellipse: s-maj=874.5km s-min=124.1km az=74.0*
**ISC 19 11:42:31.1**±2.7,**18°.2S**±0°.4×**178°.3W**±0°.3,**h600**km,**n22,**
σ0°.83/22,**mb4.0**/11,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.47** | **277** | P | **P** | **11 43 52.6** | **-0.6** |
| **LIFNC** | **LIFOU** | **13.85** | **257** | P | **P** | **11 45 26.6** | **-1.9** |
| **PINNC** | **Pines Island,** | **14.04** | **249** | P | **P** | **11 45 30.5** | **+0.2** |
| **DZM** | **Mont Dzumac** | **14.81** | **252** | P | **P** | **11 45 37.6** | **0.0** |
| | 1.5nm,0.5s,baz=74,slow=17,SNR=2.1 | | | | | | |
| **CTAO** | **Charters Tower** | **33.47** | **261** | P | **P** | **11 48 22.9** | **+0.5** |
| CTAO | | | | IAmb | IAmb | 11 48 56.7 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **COEN** | **Coen** | **37.18** | **271** | P | **P** | **11 48 53.9** | **+0.8** |
| COEN | | | | IAmb | IAmb | 11 48 54.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.56** | **241** | P | **P** | **11 49 04.9** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.56** | **241** | P | **P** | **11 49 05.3** | **+1.3** |
| | comp=Z,1.6nm,0.5s,baz=92,slow=12,SNR=4.0 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.33** | **241** | P | **P** | **11 49 42.1** | **+0.3** |
| **WR0** | **Warramunga Arr** | **44.46** | **260** | P | **P** | **11 49 50.2** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 11 50 07.0 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.62** | **260** | P | **P** | **11 49 51.4** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 11 49 51.8 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **11 49 51.6** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 11 50 02.4 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **11 49 51.7** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **11 49 51.8** | **-0.3** |
| | comp=Z,1.4nm,0.5s,baz=95,slow=7.2,SNR=58 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.78** | **255** | P | **P** | **11 49 53.3** | **+0.2** |
| AS31 | | | | IAmb | IAmb | 11 49 54.2 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.78** | **255** | P | **P** | **11 49 52.6** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.78** | **255** | P | **P** | **11 49 53.2** | **+0.2** |
| | comp=Z,4.0nm,0.4s,baz=89,slow=8.5,SNR=87 | | | | | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| **KNRA** | **Kunnurra** | **50.53** | **264** | P | **P** | **11 50 35.4** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 11 50 45.0 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.05** | **261** | P | **P** | **11 50 53.5** | **-0.4** |
| **MBWA** | **Marble Bar** | **58.07** | **256** | P | **P** | **11 51 27.6** | **-1.0** |
| MBWA | | | | IAmb | IAmb | 11 52 06.7 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **UGM** | **Wanagama** | **69.71** | **268** | P | **P** | **11 52 44.2** | **+1.7** |
| **QSPA** | **South Pole Qui** | **71.87** | **180** | P | **P** | **11 52 53.8** | **-0.5** |

*NEIC **19** 11:45:02.4±0.7, 18°.0S±0°.2×177°.79W±0°.09, h616km±17km, mb4.2/17, Error ellipse: s-maj=30.9km s-min=9.5km az=197.0*
*IDC **19** 11:45:03.2±6.1, 18°.04S×178°.04W, h610km±68km, mb3.2/6, mbtmp4.2/7, Error ellipse: s-maj=40.0km s-min=22.8km az=74.0*
**ISC 19 11:45:01.0**±0.8,**17°.9S**±0°.1×**177°.9W**±0°.1,**h590**km,**n29,**
σ0°.71/30,**mb4.1**/14,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.87** | **272** | P | **P** | 11 46 29.5 | +4.5 |
| **NIUE** | **Niue** | **7.64** | **100** | P | **P** | **11 46 55.9** | **-0.7** |
| **RAO** | **Raoul Island** | **11.28** | **180** | P | **P** | **11 47 34.1** | **+1.8** |
| **LIFNC** | **LIFOU** | **14.32** | **256** | P | **P** | **11 48 02.4** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.29** | **252** | P | **P** | **11 48 12.8** | **+0.5** |
| DZM | | | | IAmb | IAmb | 11 48 14.8 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.29** | **252** | P | **P** | **11 48 12.7** | **+0.4** |
| | comp=Z,3.5nm,0.6s,baz=84,slow=5.3,SNR=8.8 | | | | | | |
| **HNR** | **Honiara** | **23.11** | **288** | P | **P** | **11 49 23.7** | **+0.5** |
| **MLZ** | **Mavora Lakes** | **29.76** | **200** | P | **P** | **11 50 20.5** | **-0.4** |
| **CTAO** | **Charters Tower** | **33.93** | **260** | P | **P** | **11 50 56.6** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 11 50 57.7 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.60** | **270** | P | **P** | **11 51 28.0** | **+1.0** |
| COEN | | | | IAmb | IAmb | 11 51 29.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **39.06** | **241** | P | **P** | **11 51 38.4** | **-0.2** |
| **STKA** | **Stephens Creek** | **39.06** | **241** | P | **P** | **11 51 38.4** | **-0.2** |
| | comp=Z,2.8nm,0.7s,baz=90,slow=20,SNR=4.4 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.84** | **241** | P | **P** | **11 52 15.4** | **-0.7** |
| **WR0** | **Warramunga Arr** | **44.93** | **259** | P | **P** | **11 52 24.2** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 11 52 39.6 | |
| | comp=Z,9.4nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.09** | **260** | P | **P** | **11 52 25.9** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 11 52 26.2 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.11** | **259** | P | **P** | **11 52 25.6** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 11 52 39.4 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.12** | **259** | P | **P** | **11 52 25.9** | **-0.3** |
| **WRA** | **Warramunga Arr** | **45.12** | **259** | P | **P** | **11 52 25.5** | **-0.7** |
| | comp=Z,2.9nm,0.6s,baz=96,slow=6.8,SNR=40 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 53 53.2** | **-0.8** |
| | comp=Z,0.4nm,0.8s,baz=92,slow=4.0,SNR=1.9 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.26** | **254** | P | **P** | **11 52 27.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.27** | **254** | P | **P** | **11 52 26.9** | **-0.4** |
| | comp=Z,5.9nm,0.6s,baz=87,slow=8.3,SNR=49 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 53 54.2** | **-0.2** |
| | comp=Z,0.3nm,0.5s,baz=101,slow=4.3,SNR=1.8 | | | | | | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.29** | **268** | P | **P** | **11 52 57.0** | **-0.5** |
| MTN | | | | IAmb | IAmb | 11 52 58.1 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.98** | **264** | P | **P** | **11 53 09.4** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 11 53 33.7 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.52** | **260** | P | **P** | **11 53 27.7** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **68.21** | **323** | P | **P** | **11 55 04.6** | **+0.9** |
| | comp=Z,1.4nm,0.6s,baz=161,slow=5.7,SNR=5.6 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.14** | **180** | P | **P** | **11 55 27.0** | **+0.5** |
| **QSPA** | **South Pole Qui** | **72.14** | **180** | P | **P** | **11 55 26.6** | **+0.1** |
| | comp=Z,1.7nm,0.5s,baz=228,slow=0.9,SNR=25 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.79** | **13** | P | **P** | **11 56 39.1** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=219,slow=5.1,SNR=5.4 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.58** | **178** | P | **P** | **11 56 59.7** | **-1.0** |
| SNAA | | | | IAmb | IAmb | 11 57 01.5 | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.14** | **315** | PKPbc | **PKPab** | **12 03 33.4** | **-1.3** |
| | comp=Z,1.0nm,0.8s,baz=46,slow=2.6,SNR=4.8 | | | | | | |

**IDC 19 11:45:30.2**±8.5,**16°.88S**×**176°.21W**,**h0**km,**mb3.9**/2,
**mbtmp3.9**/2, **Error ellipse: s-maj=355.4km**
**s-min=69.2km az=141.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **46.89** | **258** | P | P | 11 54 02.5 | -0.2 |
| | 0.5nm,0.5s,baz=94,slow=7.2,SNR=7.0 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **47.09** | **253** | P | P | 11 54 04.2 | -0.1 |
| | 1.6nm,0.6s,baz=87,slow=8.5,SNR=9.1 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.50** | **317** | PKPbc | PKPdf | 12 05 10.0 | -0.8 |
| | 0.5nm,0.8s,baz=77,slow=3.1,SNR=2.3 | | | | | | |

*JMA **19** 11:48:59.0±0.1, 38°.3N±0°.3×141°.6E±0°.5, h54km, MV3.6/40, KINKAZAN REGION*
*JMA Felt I J1 at KINKAZAN REGION .*
*IDC **19** 11:48:59.2±2.7, 38°.33N×141°.91E, h72km±19km, mb3.5/5, mbtmp3.6/9, Error ellipse: s-maj=31.3km s-min=12.7km az=115.0*
**ISC 19 11:48:58.1**±1.1,**38°.30N**±0°.05×**141°.76E**±0°.09,**h50**km±7km,
**n28,**σ1°.31/34,**mb3.8/5,15D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **0.23** | **273** | *i* P | **Pn** | **11 49 07.4** | **+0.7** |
| JIKH | | | | S | **Sn** | **11 49 13.2** | **+0.4** |
| **JIO** | **Ouri** | **0.36** | **296** | ⇓*i*P | **Pn** | **11 49 08.2** | **+0.4** |
| JIO | | | | ⇓S | **Sn** | **11 49 14.6** | **-0.2** |
| **JKMT** | **Kesennumamotoy** | **0.56** | **336** | ⇓*i*P | **Pn** | **11 49 10.6** | **+0.5** |
| JKMT | | | | ⇓S | **Sn** | **11 49 18.6** | **-0.1** |
| **JMK** | **Ichinoseki** | **0.78** | **327** | ⇓*i*P | **Pn** | **11 49 13.2** | **+0.3** |
| JMK | | | | ⇓S | **Sn** | **11 49 23.2** | **-0.4** |
| **OFUJ** | **Ofunato** | **0.78** | **355** | ⇓*i*P | **Pn** | **11 49 13.5** | **+0.5** |
| OFUJ | | | | ⇓S | **Sn** | **11 49 23.8** | **0.0** |
| **JOU** | **Okura** | **0.87** | **275** | ⇓*i*P | **Pn** | **11 49 13.7** | **-0.3** |
| JOU | | | | ⇓S | **Sn** | **11 49 24.8** | **-1.0** |
| **JMM** | **Marumori** | **0.88** | **241** | P | **Pn** | **11 49 13.7** | **-0.5** |
| JMM | | | | S | **Sn** | **11 49 24.6** | **-1.4** |
| **JFK** | **Kawauchi** | **1.17** | **217** | *i* P | **Pn** | **11 49 18.2** | **+0.1** |
| JFK | | | | S | **Sn** | **11 49 32.5** | **-0.5** |
| **JOM** | **Ohasama** | **1.23** | **343** | ⇓*i*P | **Pn** | **11 49 19.3** | **+0.4** |
| **JYK** | **Kaneyama** | **1.26** | **300** | ⇓*i*P | **Pn** | **11 49 19.1** | **-0.3** |
| **JYS** | **Shirataka** | **1.34** | **267** | ⇓*i*P | **Pn** | **11 49 20.3** | **-0.2** |
| JYS | | | | ⇓S | **Sn** | **11 49 36.3** | **-0.8** |
| **JOTO** | **OTAMA OYAMA** | **1.35** | **237** | *i* P | **Pn** | **11 49 20.7** | **+0.1** |
| **JRG** | **Rokugo** | **1.41** | **322** | ⇓*i*P | **Pn** | **11 49 21.7** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **3.33** | **239** | P | **Pn** | **11 49 49.4** | **+1.7** |
| | 1.3nm,0.3s,baz=36,slow=14,SNR=35 | | | | | | |
| MJAR | | | | S | **Sn** | **11 50 30.8** | **+4.8** |
| | 2.5nm,0.7s,baz=119,slow=20,SNR=4.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.85** | **6** | P | **Pn** | **11 50 21.9** | **-0.3** |
| | 1.5nm,0.3s,baz=166,slow=19,SNR=12 | | | | | | |
| ASAJ | | | | S | **Sn** | **11 51 29.6** | **+1.8** |
| | 3.8nm,0.5s,baz=333,slow=30,SNR=2.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.43** | **312** | P | **Pn** | **11 51 11.9** | **+0.7** |
| | 1.1nm,0.4s,baz=125,slow=13,SNR=5.5 | | | | | | |
| **KSRS** | **Korea Array** | **10.97** | **270** | P | **Pn** | **11 51 35.5** | **+3.1** |
| | 0.6nm,0.7s,baz=74,slow=14,SNR=2.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.58** | **123** | T | T | 12 25 02.1 | |
| | baz=316,slow=75,SNR=59 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.59** | **123** | T | T | 12 25 02.7 | |
| | baz=316,slow=75,SNR=107 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.60** | **123** | T | T | 12 25 03.4 | |
| | baz=316,slow=75,SNR=102 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.34** | **125** | T | T | 12 26 01.1 | |
| | baz=318,slow=76,SNR=20 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.34** | **125** | T | T | 12 26 04.8 | |
| | baz=318,slow=76,SNR=28 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.35** | **125** | T | T | 12 26 03.8 | |
| | baz=318,slow=76,SNR=28 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.28** | **311** | P | **P** | **11 56 37.3** | **-0.9** |
| | 0.8nm,0.4s,baz=88,slow=5.4,SNR=3.4 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.69** | **301** | P | **P** | **11 56 57.5** | **-0.5** |
| | 1.1nm,0.8s,baz=87,slow=10,SNR=7.8 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.45** | **307** | P | **P** | **11 57 11.3** | **-0.6** |
| | 2.5nm,0.7s,baz=82,slow=8.3,SNR=19 | | | | | | |
| KURBB | | | | pP | **sP** | **11 57 30.0** | **-1.2** |
| | 1.7nm,0.4s,baz=82,slow=8.3,SNR=5.4 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **49.93** | **312** | P | **P** | **11 57 45.4** | **-1.2** |
| | 0.5nm,0.5s,baz=54,slow=7.4,SNR=2.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.35** | **188** | P | **P** | **11 58 47.3** | **-0.8** |
| | 0.4nm,0.9s,baz=5.2,slow=7.2,SNR=5.7 | | | | | | |
| | 0.4nm,0.9s | | | | | | |

**IDC 19 11:52:18.6**±18.0,**17°.63S**×**177°.26W**,**h549**km±247km,
**mb2.7/3, mbtmp3.6/3, Error ellipse: s-maj=253.7km**
**s-min=29.7km az=172.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **11.58** | **183** | P | P | 11 54 52.7 | +0.1 |
| | 124nm,0.3s,baz=32,slow=19,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.76** | **259** | P | P | 11 59 51.2 | -0.3 |
| | 0.4nm,0.5s,baz=95,slow=7.0,SNR=15 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.92** | **254** | P | P | 11 59 52.6 | -0.1 |
| | 0.7nm,0.4s,baz=90,slow=8.3,SNR=30 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.92** | **57** | P | P | 12 03 56.4 | 0.0 |
| | 0.1nm,0.3s,baz=246,slow=6.8,SNR=1.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*IDC **19** 11:54:03.5±16.0, 17°.52S×177°.56W, h399km±149km, mb3.7/5, mbtmp4.5/5, Error ellipse: s-maj=104.3km s-min=26.9km az=40.0*
*NEIC **19** 11:54:18.1±1.2, 17°.8S±0°.1×177°.9W±0°.1, h555km±14km, mb4.3/25, Error ellipse: s-maj=25.3km s-min=14.2km az=221.0*
**ISC 19 11:54:17.8**±0.8,**17°.8S**±0°.2×**177°.9W**±0°.1,**h550**km,**n34,**
σ0°.93/36,**mb4.3/15,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.82** | **271** | P | **P** | **11 55 39.3** | **+0.8** |
| **AFI** | **Afiamalu** | **7.10** | **58** | P | **P** | **11 56 06.0** | **-1.0** |
| **DZM** | **Mont Dzumac** | **15.27** | **251** | P | **P** | **11 57 31.2** | **+1.0** |
| DZM | | | | IAmb | IAmb | 11 58 02.1 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.27** | **251** | P | **P** | **11 57 29.2** | **-1.0** |
| | comp=Z,2.0nm,0.6s,baz=84,slow=19,SNR=7.5 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.00** | **258** | P | **P** | **11 57 46.1** | **-0.5** |
| KOUNC | | | | IAmb | IAmb | 11 58 15.7 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **URZ** | **Urewera** | **20.80** | **191** | P | **P** | **11 58 18.2** | **-2.7** |
| | comp=Z,7.7nm,0.9s,baz=13,slow=3.0,SNR=8.8 | | | | | | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.63** | **199** | P | **P** | **11 59 20.1** | **-1.4** |
| **EIDS** | **Eidsvold** | **29.71** | **250** | P | **P** | **11 59 39.4** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 11 59 50.2 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **CTAO** | **Charters Tower** | **33.90** | **260** | P | **P** | **12 00 15.1** | **-0.5** |
| **CAN** | **Canberra** | **34.10** | **233** | P | **P** | **12 00 17.2** | **+0.1** |
| **TOO** | **Toolangi** | **37.56** | **231** | P | **P** | **12 00 46.8** | **+1.0** |
| **STKA** | **Stephens Creek** | **39.05** | **241** | P | **P** | **12 00 58.0** | **+0.1** |
| **STKA** | **Stephens Creek** | **39.05** | **241** | P | **P** | **12 00 58.2** | **+0.3** |
| | comp=Z,3.5nm,0.4s,baz=91,slow=10,SNR=12 | | | | | | |
| | comp=Z,3.5nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.83** | **241** | P | **P** | **12 01 35.7** | **0.0** |
| BBOO | | | | IAmb | IAmb | 12 01 56.7 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.89** | **259** | P | **P** | **12 01 43.9** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 12 02 18.9 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.05** | **260** | P | **P** | **12 01 44.9** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 12 02 10.1 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.07** | **259** | P | **P** | **12 01 44.6** | **-0.7** |
| **WRAB** | **Tennant Creek** | **45.07** | **259** | P | **P** | **12 01 44.1** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 12 02 19.1 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.08** | **259** | P | **P** | **12 01 45.0** | **-0.5** |
| **WRA** | **Warramunga Arr** | **45.08** | **259** | P | **P** | **12 01 45.0** | **-0.5** |
| | comp=Z,1.9nm,0.5s,baz=94,slow=6.8,SNR=68 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 03 15.9** | **+1.4** |
| | comp=Z,1.0nm,1.1s,baz=102,slow=3.5,SNR=3.1 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.23** | **254** | | **P** | **12 01 46.9** | **+

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AY02** | **Valle Explorad** | **3.12** | **146** | | | **Pn** | **11 58 01.0** | **+1.6** |
| **AY02** | **Valle Explorad** | **3.12** | **146** | *e*P | | **Pn** | **11 57 58.7** | **-0.8** |
| AY02 | | | | *i* S | | **Sn** | **11 58 34.7** | **-2.0** |
| AY02 | | | | IAML | | | 11 58 40.0 | |
| | comp=N,640nm,0.5s | | | | | | | |
| **LL03** | **Petrohue** | **3.72** | **42** | *e*P | | **Pn** | **11 58 08.5** | **+0.7** |
| LL03 | | | | *i* S | | **Sn** | **11 58 50.9** | **-0.8** |
| **LL04** | **Puerto Octay** | **3.90** | **40** | *e*P | | **Pn** | **11 58 11.0** | **+0.8** |
| LL04 | | | | *e*S | | **Sn** | **11 58 54.4** | **-1.6** |
| **AY03** | **Cochrane** | **3.98** | **148** | | | **Pn** | **11 58 12.8** | **+1.5** |
| **LR04** | **Corral** | **4.40** | **24** | | | **Pn** | **11 58 18.9** | **+1.8** |
| **LR04** | **Corral** | **4.40** | **24** | *e*P | | **Pn** | **11 58 19.4** | **+2.3** |
| LR04 | | | | *e*S | | **Sn** | **11 59 07.4** | **-1.1** |
| **LR05** | **Currie** | **4.62** | **38** | | | **Pn** | **11 58 22.6** | **+2.4** |
| **LR05** | **Currie** | **4.62** | **38** | *e*P | | **Pn** | **11 58 22.9** | **+2.7** |
| **LR03** | **Panguipulli** | **4.99** | **32** | | | **Pn** | **11 58 28.0** | **+2.8** |
| **PLCA** | **Paso Flores** | **5.00** | **52** | | | **Pn** | **11 58 27.9** | **+2.5** |
| **GO08** | **Villa O'Higgin** | **5.04** | **155** | Pn | | **Pn** | **11 58 27.8** | **+1.9** |
| **GO08** | **Villa O'Higgin** | **5.04** | **155** | *e*P | | **Pn** | **11 58 26.1** | **+0.2** |
| **GO06** | **Curarrehue** | **5.39** | **38** | | | **Pn** | **11 58 33.1** | **+2.3** |
| **LC02** | **Puerto Saavedr** | **5.43** | **20** | | | **Pn** | **11 58 33.6** | **+2.3** |
| **BI02** | **San Fabin de** | **8.02** | **27** | | | **Pn** | **11 59 08.7** | **+1.7** |
| **ML02** | **Panimavida** | **8.81** | **24** | | | **Pn** | **11 59 18.9** | **+1.2** |
| **GO05** | **Huala** | **9.38** | **19** | | | **Pn** | **11 59 26.3** | **+0.7** |
| **BO02** | **Sierra Bellavi** | **9.90** | **24** | | | **Pn** | **11 59 33.5** | **+0.8** |
| **BO01** | **Tunca** | **10.19** | **22** | | | **Pn** | **11 59 36.1** | **-0.4** |
| **MT01** | **Popeta** | **10.64** | **21** | | | **Pn** | **11 59 42.8** | **0.0** |
| **BO04** | **La Punta** | **10.70** | **24** | Pn | | **Pn** | **11 59 43.8** | **+0.2** |
| **MT09** | **Talagante** | **10.79** | **22** | | | **Pn** | **11 59 45.0** | **0.0** |
| **LMEL** | **Las Melosas** | **10.95** | **25** | | | **Pn** | **11 59 47.7** | **+0.5** |
| **MT13** | **San Alfonso** | **11.02** | **24** | | | **Pn** | **11 59 48.8** | **-0.3** |
| **MT02** | **Curacav** | **11.24** | **20** | Pn | | **Pn** | **11 59 50.2** | **-0.8** |
| **PEL** | **Peldehue** | **11.47** | **22** | | | **Pn** | **11 59 53.5** | **-0.7** |
| **VA03** | **San Esteban** | **11.87** | **22** | Pn | | **Pn** | **11 59 58.9** | **-0.7** |
| **CO02** | **Combarbal** | **13.25** | **18** | Pn | | **Pn** | **12 00 18.4** | **-0.1** |
| **CO03** | **El Pedregal** | **13.67** | **19** | | | **Pn** | **12 00 24.4** | **+0.1** |
| **LCO** | **Las Campanas** | **15.43** | **17** | Pn | | **Pn** | **12 00 47.8** | **-0.4** |
| **AC05** | **El Transito** | **15.69** | **18** | Pn | | **Pn** | **12 00 49.9** | **-1.7** |
| AC05 | | | | IAmb | | IAmb | 12 01 00.8 | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **CPUP** | **Villa Florida** | **23.04** | **46** | P | | **P** | **12 02 14.6** | **-1.1** |
| **SNAA** | **Sanae** | **43.69** | **154** | P | | **P** | **12 05 16.1** | **+1.2** |
| SNAA | | | | IAmb | | IAmb | 12 05 25.7 | |
| | comp=Z,5.5nm,1.5s | | | | | | | |

**IDC 19 12:00:48.5±20.0, 16°15S×174°59W, h400km±238km, mb3.0/3, mbtmp3.8/3, Error ellipse: s-maj=268.8km s-min=53.3km az=158.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **48.56** | **257** | P | P | 12 08 53.4 | -0.3 |
| | 0.4nm,0.5s,baz=97,slow=7.7,SNR=14 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **48.80** | **253** | P | P | 12 08 55.6 | +0.2 |
| | 2.2nm,0.6s,baz=87,slow=9.4,SNR=47 | | | | | | |
| | 2.2nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **83.58** | **42** | P | P | 12 12 33.7 | +0.3 |
| | 0.1nm,0.3s,baz=228,slow=8.0,SNR=1.5 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.99** | **319** | PKPbc | PKPdf | 12 19 41.1 | +0.1 |
| | 0.6nm,0.7s,baz=33,slow=5.8,SNR=3.6 | | | | | | |

*BER **19** 12:05:23.8±2.4, 82°.61N×5°.78W, h26km±342km, mb(Pn)3.6, Confirmed Earthquake*

**ISC 19 12:05:21.3±4.0, 82°.3N±0°.4×6°.49W±0°.06, h10km, n7, σ1s70/10, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOR** | **Nord** | **1.58** | **250** | *e*P | **Pg** | **12 05 50.4** | **-1.2** |
| NOR | | | | *e*S | **Sg** | **12 06 13.2** | **+1.1** |
| **NOR** | **Nord** | **1.58** | **250** | *i* P | **Pg** | **12 05 50.7** | **-1.0** |
| NOR | | | | *i* S | **Sg** | **12 06 12.6** | **+0.4** |
| **KBS** | **Kingsbay** | **4.48** | **129** | *e*P | **Pn** | **12 06 30.4** | **+1.2** |
| KBS | | | | *e*S | **Sn** | **12 07 18.9** | **-2.3** |
| KBS | | | | IAML | | 12 07 24.5 | |
| | comp=Z,7.3nm,0.5s | | | | | | |
| **BRBB** | **Barentsburg B** | **5.43** | **129** | *e*P | **Pn** | **12 06 43.6** | **+1.4** |
| **BRBA** | **Barentsburg A** | **5.46** | **129** | *e*P | **Pn** | **12 06 44.3** | **+1.8** |
| **SPA0** | **Spitsbergen Ar** | **5.59** | **125** | *e*P | **Pn** | **12 06 44.0** | **-0.4** |
| SPA0 | | | | IAML | | 12 07 39.1 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **HSPB** | **Hornsund (broa** | **6.54** | **132** | *e*P | **Pn** | **12 06 59.4** | **+2.1** |

*IDC **19** 12:16:28.4±5.9, 17°.91S×177°.80W, h496km±67km, mb3.2/7, mbtmp4.0/7, Error ellipse: s-maj=29.2km s-min=20.5km az=54.0*
*NEIC **19** 12:16:36.5±0.7, 18°.0S±0°.2×178°.0W±0°.2, h586km±12km, mb4.2/12, Error ellipse: s-maj=27.2km s-min=24.9km az=76.0*

**ISC 19 12:16:36.4±0.8, 18°.1S±0°.1×178°.0W±0°.2, h590km, n23, σ0s72/23, mb4.0/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.73** | **274** | P | **P** | **12 17 59.3** | **-0.1** |
| **URZ** | **Urewera** | **20.58** | **191** | P | **P** | **12 20 33.5** | **-2.1** |
| | 3.1nm,0.3s,baz=354,slow=1.5,SNR=10 | | | | | | |
| | 3.1nm,0.3s | | | | | | |
| **EIDS** | **Eidsvold** | **29.55** | **250** | P | **P** | **12 21 54.7** | **-0.1** |
| **MLZ** | **Mavora Lakes** | **29.59** | **200** | P | **P** | **12 21 55.2** | **+0.3** |
| **CTAO** | **Charters Tower** | **33.77** | **261** | P | **P** | **12 22 30.4** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 12 23 09.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.45** | **270** | P | **P** | **12 23 01.4** | **+0.2** |
| COEN | | | | IAmb | IAmb | 12 23 24.9 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.76** | **260** | P | **P** | **12 23 59.0** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 12 24 39.1 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **12 23 59.5** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 12 24 29.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **12 24 00.1** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 12 24 21.1 | |
| | comp=Z,9.8nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **12 23 59.8** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **12 24 00.7** | **+0.4** |
| | comp=Z,1.0nm,0.5s,baz=95,slow=7.3,SNR=26 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.09** | **254** | P | **P** | **12 24 01.1** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.09** | **254** | P | **P** | **12 24 00.9** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.09** | **254** | P | **P** | **12 24 01.9** | **+0.6** |
| | comp=Z,3.3nm,0.7s,baz=86,slow=8.8,SNR=56 | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **50.82** | **264** | P | **P** | **12 24 43.8** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 12 24 57.1 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.22** | **323** | P | **P** | **12 26 39.4** | **+0.2** |
| | comp=Z,1.0nm,0.5s,baz=159,slow=5.5,SNR=4.6 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.01** | **180** | P | **P** | **12 27 02.6** | **+1.3** |
| **QSPA** | **South Pole Qui** | **72.01** | **180** | P | **P** | **12 27 02.5** | **+1.3** |
| | comp=Z,2.0nm,0.7s,baz=236,slow=0.9,SNR=24 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.28** | **44** | P | **P** | **12 27 41.6** | **-0.3** |
| | comp=Z,0.3nm,0.6s,baz=224,slow=12,SNR=3.8 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **N15K** | **Kwethluk River** | **79.29** | **9** | P | **P** | **12 27 41.4** | **+0.2** |
| **ILAR** | **Eielson Array** | **85.94** | **13** | P | **P** | **12 28 13.8** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=221,slow=5.3,SNR=7.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.12** | **315** | PKPbc | **PKPbc** | **12 35 09.3** | **+0.4** |
| | comp=Z,2.8nm,1.1s,baz=101,slow=3.2,SNR=5.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.83** | **345** | PKPbc | **PKPbc** | **12 35 15.5** | **-0.4** |
| | comp=Z,0.7nm,0.6s,baz=23,slow=7.2,SNR=4.1 | | | | | | |

*IDC **19** 12:20:02.1±1.1, 36°.57N×5°.30E, h0km, mb3.6/5, mbtmp3.7/8, ML3.6/3, Error ellipse: s-maj=28.9km s-min=19.9km az=157.0*
*CRAAG **19** 12:20:02.9, 36°.51N×5°.33E, Ml4.1, Algerie 06km SE Darguina*
*MDD **19** 12:20:05.8±0.6, 36°.71N×5°.31E, h0km, Mb4.7/24, M_mb4.1/24, Error ellipse: s-maj=5.5km s-min=4.7km az=111.0*
*LDG **19** 12:20:06.1±0.5, 36°.66N×5°.42E, h10km, Ml3.8/21, Error ellipse: s-maj=11.4km s-min=6.0km az=156.0*

**ISC 19 12:20:04.2±0.6, 36°.64N±0°.04×5°.34E±0°.03, h19km, n116, σ2s43/152, mb3.9/5, 14C, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SET** | **Setif** | **0.44** | **173** | P | **Pg** | **12 20 10.0** | **-3.3** |
| **DFRA** | **Djebel Bou Aff** | **0.44** | **102** | P | **Pb** | **12 20 13.7** | **+0.1** |
| **CAZD** | **Ain Tagrout** | **0.48** | **198** | P | **Pb** | **12 20 11.8** | **-2.4** |
| **CKHR** | **Kef el Ahmar** | **0.64** | **167** | P | **Pb** | **12 20 15.7** | **-1.0** |
| **CBHR** | **Beni Haroun da** | **0.76** | **95** | P | **Pg** | **12 20 19.4** | **+0.4** |
| **COAT** | **Oued Athmania** | **0.86** | **117** | P | **Pb** | **12 20 20.3** | **-0.3** |
| **ATKJ** | **Tikjda** | **1.00** | **259** | P | **Pb** | **12 20 23.6** | **+0.6** |
| **CASM** | **Ain Smara** | **1.00** | **112** | P | **Pn** | **12 20 23.5** | **+0.2** |
| **CTEI** | **Djebel Teioual** | **1.04** | **123** | P | **Pb** | **12 20 23.9** | **+0.3** |
| **CKFL** | **Kef-Lekhel** | **1.14** | **102** | P | **Pg** | **12 20 26.1** | **-0.2** |
| **ATAF** | **Djebel Tarf** | **1.15** | **229** | P | **Pn** | **12 20 25.0** | **-0.3** |
| **CAEH** | **Ain El Ouahch** | **1.22** | **83** | P | **Pg** | **12 20 27.2** | **-0.7** |
| **AKET** | **Djebel Ketaf** | **1.31** | **244** | P | **Pn** | **12 20 27.6** | **-0.1** |
| **CKTS** | **El Kantara** | **1.44** | **168** | P | **Pn** | **12 20 30.7** | **+1.4** |
| **CBST** | **Bordj Sabath** | **1.44** | **99** | P | **Pb** | **12 20 30.3** | **-0.1** |
| **ADJB** | **Djebel Djouab** | **1.60** | **253** | P | **Pn** | **12 20 32.0** | **+0.4** |
| **CMAH** | **Djebel Manchou** | **1.68** | **90** | P | **Pb** | **12 20 33.6** | **-0.9** |
| **ABSA** | **Djebel Ababsia** | **1.76** | **101** | P | **Pn** | **12 20 34.8** | **+1.0** |
| **ADOR** | **Douera** | **1.95** | **271** | P | **Pg** | **12 20 41.8** | **+0.1** |
| **AFRS** | **Ain Fares** | **2.04** | **201** | P | **Pn** | **12 20 38.5** | **+0.9** |
| **CDCN** | **Doucen** | **2.05** | **185** | P | **Pn** | **12 20 38.8** | **+1.1** |
| **ABRIN** | **Birine** | **2.06** | **241** | P | **Pn** | **12 20 38.8** | **+1.0** |
| **CBBAR** | **Babar** | **2.12** | **134** | P | **Pb** | **12 20 42.9** | **+0.8** |
| **ADCK** | **Dar Chioukh** | **2.31** | **222** | P | **Pn** | **12 20 42.9** | **+1.6** |
| **ABKD** | **Sidi Amar** | **2.44** | **269** | P | **Pn** | **12 20 43.9** | **+0.9** |
| **CBOGS** | **Bougous** | **2.48** | **87** | P | **Pn** | **12 20 44.8** | **+1.3** |
| **AFDJ** | **Sidi Ladjel** | **2.56** | **242** | P | **Pn** | **12 20 45.3** | **+0.6** |
| **ADJF** | **Tadmit** | **3.03** | **218** | P | **Pn** | **12 20 52.0** | **+0.8** |
| **KEST** | **Kesra** | **3.37** | **104** | Pn | **Pn** | **12 20 58.0** | **+2.1** |
| | 22nm,0.3s,baz=236,slow=5.2,SNR=123 | | | | | | |
| KEST | | | | Sn | **Sn** | **12 21 37.9** | **+2.6** |
| | 1.9nm,0.3s,baz=148,slow=9.5,SNR=3.4 | | | | | | |
| | 76nm,0.5s | | | | | | |
| **ETOS** | **Mallorca** | **3.70** | **328** | P | **Pn** | **12 21 01.6** | **+1.2** |
| ETOS | | | | S | **Sn** | **12 21 42.8** | **-0.7** |
| **ETOS** | **Mallorca** | **3.70** | **328** | P | **Pn** | **12 21 01.4** | **+0.9** |
| ETOS | | | | ⇑*i*Vmb_V | | 12 21 02.7 | |
| | 2μm,SNR=11 | | | | | | |
| ETOS | | | | S | **Sn** | **12 21 42.4** | **-1.1** |
| **EIBI** | **Ibiza** | **3.96** | **308** | P | **Pn** | **12 21 05.2** | **+1.3** |
| EIBI | | | | ⇑*i*Vmb_V | | 12 21 07.4 | |
| | 1μm,SNR=6.2 | | | | | | |
| EIBI | | | | S | **Sn** | **12 21 49.5** | **-0.3** |
| **ECOL** | **Islas Columbre** | **4.90** | **313** | P | **Pn** | **12 21 18.3** | **+1.5** |
| ECOL | | | | S | **Sn** | **12 22 12.4** | **-0.6** |
| **ETRV** | **Los Montesinos** | **5.05** | **288** | P | **Pn** | **12 21 20.8** | **+1.9** |
| **CART** | **Cartagena** | **5.15** | **282** | P | **Pn** | **12 21 20.8** | **+0.5** |
| CART | | | | S | **Sn** | **12 22 16.5** | **-2.7** |
| **EMUR** | **La Murta** | **5.38** | **285** | P | **Pn** | **12 21 24.5** | **+1.0** |
| EMUR | | | | S | **Sn** | **12 22 24.2** | **-0.8** |
| **EMUR** | **La Murta** | **5.38** | **285** | P | **Pn** | **12 21 24.6** | **+1.0** |
| EMUR | | | | ⇑*i*Vmb_V | | 12 21 29.7 | |
| | 282nm,SNR=3.2 | | | | | | |
| EMUR | | | | S | **Sn** | **12 22 25.9** | **+0.9** |
| **EVIV** | **Cofrentes, Val** | **5.74** | **299** | P | **Pn** | **12 21 30.2** | **+1.8** |
| EVIV | | | | ⇑*i*Vmb_V | | 12 21 33.3 | |
| | 481nm,SNR=5.7 | | | | | | |
| **EPOB** | **Poblet** | **5.76** | **326** | P | **Pn** | **12 21 29.7** | **+1.0** |
| EPOB | | | | ⇑*i*Vmb_V | | 12 21 38.8 | |
| | 263nm,SNR=4.9 | | | | | | |
| EPOB | | | | S | **Sn** | **12 22 30.8** | **-3.5** |
| **ECHE** | **Chera** | **5.78** | **303** | P | **Pn** | **12 21 30.9** | **+2.0** |
| ECHE | | | | S | **Sn** | **12 22 33.7** | **-1.1** |
| **ECHE** | **Chera** | **5.78** | **303** | P | **Pn** | **12 21 31.0** | **+2.0** |
| ECHE | | | | ⇑*i*Vmb_V | | 12 21 31.8 | |
| | 531nm,SNR=6.7 | | | | | | |
| **ERTA** | **Horta de San J** | **5.82** | **319** | P | **Pn** | **12 21 31.3** | **+1.8** |
| ERTA | | | | S | **Sn** | **12 22 34.2** | **-1.5** |
| **ETOB** | **Tobarra** | **5.82** | **292** | P | **Pn** | **12 21 31.3** | **+1.7** |
| **ETOB** | **Tobarra** | **5.82** | **292** | P | **Pn** | **12 21 31.1** | **+1.6** |
| ETOB | | | | ⇑*i*Vmb_V | | 12 21 39.6 | |
| | 239nm,SNR=2.5 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.88** | **311** | P | **Pn** | **12 21 32.2** | **+1.7** |
| EMOS | | | | ⇑*i*Vmb_V | | 12 21 40.3 | |
| | 327nm,SNR=5.2 | | | | | | |
| EMOS | | | | S | **Sn** | **12 22 35.6** | **-1.9** |
| **EMIR** | **Miracle** | **6.04** | **332** | P | **Pn** | **12 21 34.8** | **+2.2** |
| EMIR | | | | S | **Sn** | **12 22 39.1** | **-2.1** |
| **ENIJ** | **Nijar** | **6.06** | **275** | P | **Pn** | **12 21 34.3** | **+1.4** |
| ENIJ | | | | S | **Sn** | **12 22 42.1** | **+0.4** |
| **EJON** | **La Jonquera** | **6.11** | **343** | P | **Pn** | **12 21 33.7** | **+0.3** |
| EJON | | | | S | **Sn** | **12 22 41.1** | **-1.6** |
| **EJON** | **La Jonquera** | **6.11** | **343** | P | **Pn** | **12 21 33.7** | **+0.3** |
| EJON | | | | ⇑*i*Vmb_V | | 12 21 35.6 | |
| | 353nm,SNR=2.7 | | | | | | |
| EJON | | | | S | **Sn** | **12 22 40.4** | **-2.3** |
| **E0901** | **Celadas (Terue** | **6.36** | **309** | P | **Pn** | **12 21 39.7** | **+2.8** |
| E0901 | | | | ⇑*i*Vmb_V | | 12 21 44.2 | |
| | 371nm,SNR=6.0 | | | | | | |
| **PGF** | **Pioggiola** | **6.54** | **24** | *e*Pn | **Pn** | **12 21 39.1** | **-0.4** |
| PGF | | | | *e*Sn | **Sn** | **12 22 49.7** | **-4.0** |
| | 22nm,0.5s | | | | | | |
| **EBER** | **Berja** | **6.61** | **275** | P | **Pn** | **12 21 40.7** | **+0.2** |
| EBER | | | | S | **Sn** | **12 22 55.2** | **-0.2** |
| **EBER** | **Berja** | **6.61** | **275** | P | **Pn** | **12 21 41.0** | **+0.6** |
| EBER | | | | ⇑*i*Vmb_V | | 12 21 44.5 | |
| | 335nm,SNR=1.4 | | | | | | |
| **LMR** | **La Mourre** | **6.75** | **7** | *e*Pn | **Pn** | **12 21 41.7** | **-0.5** |
| LMR | | | | *e*Sn | **Sn** | **12 22 54.9** | **-3.6** |
| | 16nm,0.3s | | | | | | |
| **ESAC** | **San Caprasio** | **6.79** | **320** | P | **Pn** | **12 21 41.4** | **-1.5** |
| ESAC | | | | S | **Sn** | **12 22 55.3** | **-4.4** |
| **MTLF** | **Montolieu** | **7.11** | **341** | *e*Pn | **Pn** | **12 21 47.2** | **0.0** |
| MTLF | | | | *e*Sn | **Sn** | **12 23 02.7** | **-4.8** |
| | 19nm,0.5s | | | | | | |
| **ECHI** | **Chisagues Biel** | **7.21** | **328** | P | **Pn** | **12 21 50.9** | **+2.2** |
| **SMRF** | **Simiane la Rot** | **7.33** | **1** | *e*Pn | **Pn** | **12 21 50.8** | **+0.5** |
| SMRF | | | | *e*Sn | **Sn** | **12 23 08.1** | **-4.9** |
| | 5.6nm,0.3s | | | | | | |
| **SBF** | **Sospel** | **7.39** | **12** | *e*Pn | **Pn** | **12 21 51.3** | **+0.2** |
| SBF | | | | *e*Sn | **Sn** | **12 23 10.4** | **-4.1** |
| | 14nm,0.3s | | | | | | |
| **EPF** | **Esparros** | **7.45** | **330** | *e*Pn | **Pn** | **12 21 54.2** | **+2.3** |
| EPF | | | | *e*Sn | **Sn** | **12 23 10.5** | **-5.4** |
| | 10nm,0.4s | | | | | | |
| **ETSF** | **Etsaut** | **7.73** | **326** | *e*Pn | **Pn** | **12 21 55.7** | **0.0** |
| ETSF | | | | *e*Sn | **Sn** | **12 23 17.3** | **-5.4** |
| | 8.0nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **7.93** | **295** | Pn | **Pn** | **12 21 60.0** | **+1.5** |
| | 0.4nm,0.3s,baz=109,slow=13,SNR=23 | | | | | | |
| ESDC | | | | Sn | **Sn** | **12 23 35.3** | **+7.6** |
| | 0.2nm,0.3s,baz=114,slow=24,SNR=4.4 | | | | | | |
| | 2.6nm,0.7s | | | | | | |
| **EORO** | **Oroz-Betelu** | **8.07** | **323** | P | **Pn** | **12 22 02.8** | **+2.4** |
| EORO | | | | ⇑*i*Vmb_V | | 12 22 04.4 | |
| | 217nm,SNR=2.4 | | | | | | |
| **MBDF** | **Montbardon** | **8.15** | **7** | *e*Pn | **Pn** | **12 22 01.7** | **+0.1** |
| MBDF | | | | *e*Sn | **Sn** | **12 23 30.4** | **-2.9** |
| | 14nm,0.5s | | | | | | |
| **PAB** | **San Pablo** | **8.17** | **294** | P | **Pn** | **12 22 03.5** | **+1.7** |
| PAB | | | | ⇑*i*Vmb_V | | 12 22 12.5 | |
| | 127nm,SNR=2.2 | | | | | | |
| **SJPF** | **Ste Jean** | **8.20** | **324** | *e*Pn | **Pn** | **12 22 03.2** | **+1.0** |
| SJPF | | | | *e*Sn | **Sn** | **12 23 28.3** | **-6.0** |
| | 7.2nm,0.4s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **8.23** | **357** | *e*Pn | **Pn** | **12 22 02.4** | **-0.1** |
| VIVF | | | | *e*Sn | **Sn** | **12 23 29.4** | **-5.5** |
| | 5.4nm,0.2s | | | | | | |
| **PCP** | **Piancastagn** | **8.26** | **16** | P | **Pn** | **12 22 05.7** | **+2.6** |
| **ORIF** | **Oris-en-Rattie** | **8.28** | **3** | *e*Pn | **Pn** | **12 22 05.6** | **+2.2** |
| ORIF | | | | *e*Sn | **Sn** | **12 23 32.5** | **-3.9** |
| | 3.8nm,0.5s | | | | | | |
| **CAF** | **Calviac** | **8.64** | **344** | *e*Pn | **Pn** | **12 22 09.1** | **+0.9** |
| CAF | | | | *e*Sn | **Sn** | **12 23 39.1** | **-6.1** |
| | 2.2nm,0.4s | | | | | | |
| **ECAB** | **El Cabril** | **8.69** | **283** | P | **Pn** | **12 22 09.2** | **+0.4** |
| **LPG** | **La Plagne** | **8.92** | **6** | *e*Pn | **Pn** | **12 22 11.8** | **-0.4** |
| **LPG** | **La Plagne** | **8.92** | **6** | *e*P | **Pn** | **12 22 15.5** | **+3.3** |
| LPG | | | | *e*Sn | **Sn** | **12 23 46.5** | **-5.7** |
| | 7.1nm,0.5s | | | | | | |
| **LPL** | **La Plagne** | **8.93** | **6** | *e*Pn | **Pn** | **12 22 11.6** | **-0.8** |
| **LPL** | **La Plagne** | **8.93** | **6** | *e*P | **Pn** | **12 22 15.6** | **+3.2** |
| LPL | | | | *e*Sn | **Sn** | **12 23 46.6** | **-6.0** |
| | 12nm,0.6s | | | | | | |
| **MDT** | **Midelt** | **9.03** | **248** | Pn | **Pn** | **12 22 12.4** | **-1.2** |
| | 0.1nm,0.3s,baz=93,slow=11,SNR=4.4 | | | | | | |
| | 2.4nm,0.8s | | | | | | |
| **RJF** | **Les Rejaudoux** | **9.13** | **343** | *e*Pn | **Pn** | **12 22 16.5** | **+1.7** |
| RJF | | | | *e*Sn | **Sn** | **12 23 52.8** | **-4.2** |
| | 2.2nm,0.3s | | | | | | |
| **ELAN** | **Lanestosa** | **9.42** | **317** | P | **Pn** | **12 22 21.4** | **+2.6** |
| ELAN | | | | ⇑*i*Vmb_V | | 12 22 25.8 | |
| | 155nm,SNR=1.3 | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **9.83** | **8** | P | **Pn** | **12 22 26.6** | **+1.9** |
| **TCF** | **Toulx Ste Croi** | **9.92** | **347** | *e*Pn | **Pn** | **12 22 26.9** | **+1.1** |
| **CABF** | **La Chapelle** | **9.98** | **3** | *e*Pn | **Pn** | **12 22 25.3** | **-1.3** |
| CABF | | | | *e*Sn | **Sn** | **12 24 12.1** | **-6.0** |
| | 6.9nm,0.7s | | | | | | |
| **SMF** | **Signal de Mont** | **10.06** | **354** | *e*Pn | **Pn** | **12 22 29.5** | **+1.8** |
| **BGF** | **Bois d'Agland** | **10.09** | **350** | *e*Pn | **Pn** | **12 22 29.8** | **+1.8** |
| **AVF** | **Avril sur Loir** | **10.25** | **352** | *e*Pn | **Pn** | **12 22 30.6** | **+0.4** |
| **PMRV** | **Marv??o** | **10.42** | **289** | *e*P | **Pn** | **12 22 34.6** | **+2.0** |
| **SSF** | **Saint Saulge** | **10.51** | **353** | *e*Pn | **Pn** | **12 22 35.3** | **+1.6** |
| **PCBR** | **Castelo Branco** | **10.57** | **291** | *e*P | **Pn** | **12 22 39.1** | **+4.4** |
| **MVO** | **Moncorvo** | **10.64** | **299** | *e*P | **Pn** | **12 22 37.8** | **+2.1** |
| **LOR** | **Lormes** | **10.68** | **355** | *e*Pn | **Pn** | **12 22 37.6** | **+1.5** |
| **DAVOX** | **Davos/Dischmat** | **10.69** | **17** | Pn | Pn | 12 22 40.9 | +4.5 |
| | 0.4nm,0.3s,baz=176,slow=17,SNR=3.4 | | | | | | |
| **PBRG** | **Braganca** | **10.69** | **303** | *e*P | **Pn** | **12 22 39.3** | **+2.9** |
| **MFF** | **Saint Martin d** | **10.77** | **339** | *e*Pn | **Pn** | **12 22 37.6** | **+0.3** |
| MFF | | | | *e*Sn | **Sn** | **12 24 31.4** | **-5.8** |
| | 1.1nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **10.88** | **280** | *e*P | **Pn** | **12 22 40.5** | **+1.7** |
| **PVRL** | **Vila Real** | **11.17** | **298** | *e*P | **Pn** | **12 22 45.7** | **+2.9** |
| **HINF** | **Hinteralfeld** | **11.23** | **5** | *e*Pn | **Pn** | **12 22 43.7** | **+0.1** |
| **POLO** | **Lamas de Olo** | **11.26** | **299** | *e*P | **Pn** | **12 22 45.6** | **+1.5** |
| **HAU** | **Haudompre** | **11.39** | **3** | *e*Pn | **Pn** | **12 22 45.4** | **-0.4** |
| **PCAS** | **Casmilo, Conde** | **11.39** | **292** | *e*P | **Pn** | **12 22 48.6** | **+2.8** |
| **SFTF** | **Sexfontaines** | **11.56** | **359** | *e*Pn | **Pn** | **12 22 49.1** | **+0.9** |
| **PGAV** | **Gavieira, Arco** | **11.80** | **301** | *e*P | **Pn** | **12 22 55.2** | **+3.6** |
| **CDF** | **Champ du Feu** | **11.85** | **6** | *e*Pn | **Pn** | **12 22 52.8** | **+0.6** |
| **MEZF** | **Maizieres J'vi** | **11.86** | **359** | *e*Pn | **Pn** | **12 22 52.6** | **+0.4** |
| **PAGF** | **Fort de Pagny** | **11.91** | **1** | *e*Pn | **Pn** | **12 22 53.4** | **+0.4** |
| **LDF** | **La Druitiere** | **12.60** | **343** | *e*Pn | **Pn** | **12 23 01.4** | **-1.0** |
| **FLN** | **La Foliniere** | **12.85** | **342** | *e*Pn | **Pn** | **12 23 04.4** | **-1.3** |
| **QUIF** | **Quistinic** | **12.90** | **334** | *e*Pn | **Pn** | **12 23 07.5** | **+1.1** |
| QUIF | | | | *e*Sn | **Sn** | **12 25 24.8** | **-4.6** |
| | 25nm,1.0s | | | | | | |
| **ROSF** | **Rostrenen** | **13.29** | **334** | *e*Pn | **Pn** | **12 23 10.8** | **-1.0** |
| **BAIF** | **Baives** | **13.44** | **357** | *e*Pn | **Pn** | **12 23 15.1** | **+1.3** |
| **GIVF** | **Givet** | **13.46** | **359** | *e*Pn | **Pn** | **12 23 14.0** | **-0.1** |
| **EKA** | **Eskdalemuir Ar** | **19.58** | **345** | P | **Pn** | **12 24 38.5** | **+6.2** |
| | 0.3nm,0.4s,baz=165,slow=6.9,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **22.42** | **73** | P | **P** | **12 25 02.9** | **+1.0** |
| | 0.6nm,0.8s,baz=244,slow=11,SNR=3.6 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **23.62** | **189** | P | **P** | **12 25 13.6** | **-0.5** |
| | 3.4nm,0.7s,baz=4.2,slow=12,SNR=19 | | | | | | |
| | 3.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **52.69** | **50** | P | **P** | **12 29 17.4** | **+0.3** |
| | 0.3nm,0.4s,baz=270,slow=8.0,SNR=1.9 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.52** | **45** | P | **P** | **12 29 39.3** | **+1.4** |
| | 0.5nm,0.3s,baz=260,slow=4.2,SNR=1.2 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.19** | **54** | P | **P** | **12 29 43.9** | **+1.2** |
| | 0.9nm,0.7s,baz=288,slow=6.0,SNR=4.6 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **126.51** | **180** | PKP

CBIJ *e*S **Sn** **13 01 15.6 +0.4**
**CBIJ** **Chichi jima** **1.67** **22** A **A** 13 00 54.0
comp=E,46nm,5.7s,comp=N,31nm,4.8s
**JCJ** **Chichijima** **1.67** **22** Pn **Pn** **13 00 53.8 +0.2**
JCJ Sn **Sn** **13 01 15.3 +0.1**
**JCJ** **Chichijima** **1.67** **22** Pn **Pn** 13 00 49.2 -4.5
comp=N,415nm,0.3s,baz=115,slow=6.1,SNR=67
JCJ Sn **Sn** **13 01 11.2 -4.0**
comp=N,334nm,0.3s,baz=211,slow=23,SNR=4.3
**JHJ** **Hachijo jima 2** **7.69** **349** LR LR 13 05 03.6
comp=N,1µm,18.2s,baz=281,slow=37
**JNY** **Yasuok** **10.27** **343** P Pn 13 02 57.2 +5.4
**JAO** **Obara** **10.35** **340** P Pn 13 02 58.0 +5.1
**JHU** **Hanno** **10.45** **350** *e*P **Pn** **13 02 56.1 +2.0**
**JMN** **Monobe** **10.49** **323** Pn **Pn** **13 02 57.5 +2.7**
**JGF** **Kuroka** **10.63** **342** Pn **Pn** **13 02 59.1 +2.4**
**JAG** **Ashikaga** **10.99** **351** *e*P **Pn** **13 03 00.8 -0.8**
**MJAR** **Matsushiro Arr** **11.32** **346** Pn **Pn** **13 03 05.0 -1.1**
baz=181,slow=14,SNR=2.9
MJAR LR LR 13 07 17.8
comp=N,1µm,18.3s,baz=165,slow=37
comp=N,1.8nm,0.7s
**MJAR** **Matsushiro Arr** **11.32** **346** P **Pn** **13 03 05.0 -1.1**
**MAJO** **Matsushiro** **11.32** **346**⇑ *e*P **Pn** **13 03 09.7 +3.6**
**JOW** **Kunigami** **11.93** **279** LR LR 13 07 00.6
comp=N,404nm,20.9s,baz=132,slow=34
**JNU** **Nakatsue** **11.93** **312** LR LR 13 07 17.0
comp=N,374nm,18.7s,baz=148,slow=36
**GUMO** **Guam** **12.31** **164** LR LR 13 07 27.0
comp=N,814nm,18.9s,baz=330,slow=34
**TJN** **Taejon** **16.20** **315** Pn **Pn** **13 04 12.4 +0.3**
**TJN** **Taejon** **16.20** **315** P **Pn** **13 04 12.4 +0.3**
TJN pmax pmax
comp=Z,314nm,1.4s
**KSRS** **Korea Array** **16.55** **319** Pn **P** **13 04 19.4 +0.4**
comp=Z,0.7nm,0.3s,baz=131,slow=10.0,SNR=80
KSRS LR LR 13 10 11.0
comp=Z,534nm,18.3s,baz=130,slow=36
**KSAR** **Wonju Array Be** **16.56** **319** P **P** **13 04 19.1 -0.1**
**KSAR** **Wonju Array Be** **16.56** **319** P **P** **13 04 19.1 -0.1**
**KS19** **Wonju Array Si** **16.61** **319** P **P** **13 04 20.3 +0.5**
**YULB** **Yu-li** **18.49** **268** P **P** **13 04 40.6 -0.1**
**ASAJ** **Asahikawa** **18.55** **3** P **P** **13 04 41.1 0.0**
comp=Z,0.2nm,0.3s,baz=18,slow=9.6,SNR=1.8
comp=Z,5.6nm,1.1s
**TEY** **Ternei** **19.84** **350** *e*P **P** **13 04 53.6 -1.7**
**USRK** **Ussuriysk Ar.** **20.15** **340** LR LR 13 12 18.3
comp=Z,294nm,18.5s,baz=158,slow=36
**NJ2** **Nanjing** **20.84** **293**⇓ *i*P **P** **13 05 07.1 +0.9**
NJ2 pP **pwP** **13 05 12.3 +3.6**
NJ2 pmax pmax
comp=Z,43nm,1.2s
NJ2 pmax pmax
comp=Z,440nm,4.7s
NJ2 LR LR
comp=Z,340nm,7.6s
NJ2 LR LR
comp=Z,210nm,5.2s
NJ2 LR LR
comp=Z,330nm,9.9s
**YSS** **Yuzh-Sakhalins** **21.39** **2** *e*P **P** **13 05 13.5 +1.5**
YSS *e*S **S** **13 09 02.7 -6.7**
YSS pmax pmax
comp=Z,20nm,1.1s
YSS MLR MLR
comp=Z,300nm,12.0s
**SNY** **Shenyang** **21.97** **322** ⇓P **P** **13 05 18.5 +0.3**
SNY S **S** **13 09 22.4 +1.7**
SNY pmax pmax
comp=Z,31nm,1.2s
SNY pmax pmax
comp=Z,460nm,5.6s
SNY LR LR
comp=Z,250nm,10.8s
SNY LR LR
comp=Z,240nm,6.3s
SNY LR LR
comp=Z,290nm,8.0s
**CN2** **Changchun** **22.41** **328** P **P** **13 05 22.4 -0.6**
CN2 S **S** **13 09 21.3 -7.9**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 pmax pmax
comp=Z,300nm,6.0s
CN2 LR LR
comp=Z,400nm,17.0s
CN2 LR LR
comp=Z,400nm,17.0s
CN2 LR LR
comp=Z,500nm,17.0s
**BNX** **BinXian** **23.11** **334** ⇓P **P** **13 05 33.5 +3.2**
BNX pmax pmax
comp=Z,6.0nm,0.8s
**TIA** **Tai'an** **23.39** **303** P **P** **13 05 33.9 +0.6**
TIA pmax pmax
comp=Z,34nm,0.7s
TIA pmax pmax
comp=Z,730nm,5.5s
TIA LR LR
comp=Z,290nm,11.3s
TIA LR LR
comp=Z,470nm,16.2s
TIA LR LR
comp=Z,400nm,12.3s
**H11N2** **WAKE ISLAND Hy** **24.14** **99** T T 13 30 53.3
baz=289,slow=75,SNR=100
**H11N1** **WAKE ISLAND Hy** **24.14** **99** T T 13 30 56.4
baz=289,slow=75,SNR=79
**H11N3** **WAKE ISLAND Hy** **24.16** **99** T T 13 30 54.9
baz=289,slow=75,SNR=82
**H11S3** **WAKE ISLAND Hy** **24.38** **102** T T 13 31 13.8
baz=291,slow=75,SNR=1091
**H11S1** **WAKE ISLAND Hy** **24.38** **102** T T 13 31 14.3
baz=291,slow=75,SNR=984
**H11S2** **WAKE ISLAND Hy** **24.39** **102** T T 13 31 15.1
baz=291,slow=75,SNR=1545
**WHN** **Wuhan** **24.43** **288** P **P** **13 05 43.3 +0.1**
WHN pmax pmax
comp=Z,60nm,1.6s
**KLR** **Kul'dur** **24.84** **345** LR LR 13 14 58.5
comp=Z,273nm,21.0s,baz=174,slow=36
**KLR** **Kul'dur** **24.84** **345**⇓ *i*P **P** **13 05 45.1 -1.6**
KLR pmax pmax
comp=Z,4.0nm,0.9s
**CNSH** **ChangSha** **25.58** **282** P **P** **13 05 53.9 +0.3**
CNSH S **S** **13 10 13.9 -7.7**
CNSH pmax pmax
comp=Z,17nm,1.6s
CNSH LR LR
comp=Z,260nm,5.6s
CNSH LR LR
comp=Z,360nm,5.5s
**HNS** **HongShan** **25.62** **304** ⇓P **P** **13 05 53.5 -0.4**
HNS S **S** **13 10 20.3 -1.8**
HNS pmax pmax
comp=Z,34nm,1.0s
HNS LR LR
comp=Z,410nm,15.9s
HNS LR LR
comp=Z,420nm,14.3s
HNS LR LR
comp=Z,520nm,16.7s
**LYN** **LuoYang** **26.59** **297** P **P** **13 06 05.1 +2.3**
LYN S **S** **13 10 40.3 +2.7**
LYN pmax pmax
comp=Z,37nm,0.9s
LYN pmax pmax
comp=Z,380nm,5.6s
LYN LR LR
comp=Z,360nm,13.7s
LYN LR LR
comp=Z,360nm,14.4s
LYN LR LR
comp=Z,470nm,14.4s
**HEH** **HeiHe** **26.96** **340** *e*P **P** **13 06 04.0 -1.9**
HEH pmax pmax
comp=Z,4.0nm,1.0s
**XLT** **XiLinHaoTe** **27.60** **318** *e*P **P** **13 06 10.3 -1.5**
XLT PP **PnPn** **13 06 56.3 -0.6**
XLT sS sS 13 11 05.5 +8.3
XLT pmax pmax
comp=Z,250nm,6.1s
XLT LR LR
comp=Z,350nm,14.2s
XLT LR LR
comp=Z,520nm,17.4s

**JAY** **Jayapura** **27.90** **182** P **P** **13 06 16.0 +1.3**
comp=Z,17nm,1.1s
**GENI** **Genyem** **28.00** **183** P **P** **13 06 18.2 +2.7**
**HHC** **Hu-ho-hao-te** **29.14** **309** *e*P **P** **13 06 25.9 +0.2**
HHC sP pwP 13 06 39.0 +7.6
HHC S **S** **13 11 24.0 +6.2**
HHC sS sS 13 11 32.8 +11
HHC pmax pmax
comp=Z,25nm,0.5s
HHC pmax pmax
comp=Z,270nm,5.3s
HHC LR LR
comp=Z,240nm,12.6s
HHC LR LR
comp=Z,320nm,10.6s
HHC LR LR
comp=Z,480nm,11.0s
**LBMI** **Labuha** **29.33** **210** P **P** **13 06 27.6 +0.3**
**XAN** **Xi'an** **29.40** **294**⇓ P **P** **13 06 31.0 +3.0**
XAN pP pwP 13 06 36.4 +2.7
XAN S **S** **13 11 21.8 -0.1**
XAN pmax pmax
comp=Z,19nm,1.2s
XAN pmax pmax
comp=Z,420nm,4.4s
XAN LR LR
comp=Z,420nm,15.1s
XAN LR LR
comp=Z,330nm,15.1s
XAN LR LR
comp=Z,440nm,17.2s
**FAKI** **Fak Fak** **29.67** **199** P **P** **13 06 32.2 +1.8**
comp=Z,41nm,1.1s
**KMSI** **Cibinong** **30.02** **217** P **P** **13 06 33.9 +0.4**
**ZEA** **Zeya** **30.10** **343** *e*P **P** **13 06 35.4 +1.6**
**BTO** **Baotou** **30.15** **308** *e*P **P** **13 06 35.6 +1.0**
BTO pP **pwP** **13 06 47.3 +7.0**
BTO sP sP 13 06 53.0 +15
BTO PP **PnPn** **13 07 34.0 +2.3**
BTO S **S** **13 11 33.8 +0.2**
BTO pmax pmax
comp=Z,24nm,0.5s
BTO pmax pmax
comp=Z,300nm,3.6s
BTO LR LR
comp=Z,530nm,6.6s
BTO LR LR
comp=Z,420nm,7.3s
BTO LR LR
comp=Z,790nm,13.3s
**GYA** **Guiyang** **31.25** **279** P **P** **13 06 45.1 +0.6**
GYA pmax pmax
comp=Z,23nm,0.8s
**LZH** **Lanzhou** **33.80** **297** *e*P **P** **13 07 08.5 +1.7**
LZH pP pwP 13 07 16.8 +4.2
LZH S **S** **13 12 29.0 -1.8**
LZH pmax pmax
comp=Z,18nm,1.5s
LZH pmax pmax
comp=Z,260nm,4.5s
LZH LR LR
comp=Z,270nm,10.6s
LZH LR LR
comp=Z,230nm,9.3s
LZH LR LR
comp=Z,110nm,9.3s
**MA2** **Magadan** **34.63** **8**⇓ *e*P **P** **13 07 12.7 -0.7**
MA2 pmax pmax
comp=Z,43nm,1.6s
**SLVN** **Son La** **34.65** **271** P **P** **13 07 13.7 -0.5**
SLVN IAmb IAmb 13 07 17.5
comp=Z,18nm,1.5s
**SAUI** **Saumlaki** **34.76** **198** P **P** **13 07 14.9 -0.1**
**KMI** **Kunming** **34.93** **278**⇓ P **P** **13 07 19.3 +2.5**
KMI S **S** **13 12 51.9 +3.3**
KMI pmax pmax
comp=Z,33nm,0.9s
**ULN** **Ulaanbaatar** **35.03** **318** P **P** **13 07 16.2 -1.2**
ULN IAmb IAmb 13 07 18.5
comp=Z,14nm,0.8s
**ULN** **Ulaanbaatar** **35.03** **318** *de*P **P** **13 07 17.3 0.0**
ULN pmax pmax
comp=Z,19nm,1.0s
**SONM** **Songino Array** **35.42** **318** P **P** **13 07 19.4 -1.2**
**SONM** **Songino Array** **35.42** **318** P **P** **13 07 19.9 -0.7**
comp=Z,4.8nm,0.6s,baz=138,slow=11,SNR=19
SONM LR LR 13 22 13.1
comp=Z,303nm,18.5s,baz=76,slow=37
**SONM** **Songino Array** **35.42** **318** P **P** **13 07 19.4 -1.2**
SONM pmax pmax
comp=Z,10.0nm,1.2s
**PZH** **PanZhiHua** **35.62** **280** P **P** **13 07 24.0 +1.4**
PZH S **S** **13 13 00.5 +1.5**
PZH pmax pmax
comp=Z,30nm,0.7s
PZH pmax pmax
comp=Z,260nm,4.7s
PZH LR LR
comp=Z,150nm,8.4s
PZH LR LR
comp=Z,130nm,8.8s
PZH LR LR
comp=Z,130nm,10.8s
**BBSI** **Bau Bau** **35.90** **213** P **P** **13 07 27.1 +2.3**
comp=Z,65nm,1.0s
**YAK** **Yakutsk** **37.34** **351** LR LR 13 22 50.5
comp=Z,271nm,18.4s,baz=149,slow=36
**GTA** **Gaotai** **37.44** **302** *e*P **P** **13 07 37.3 -0.7**
GTA pmax pmax
comp=Z,17nm,1.8s
GTA LR LR
comp=Z,100nm,16.4s
GTA LR LR
comp=Z,180nm,15.6s
GTA LR LR
comp=Z,270nm,16.7s
**CRAI** **Chiangrai** **38.13** **271** P **P** **13 07 42.8 -1.0**
CRAI IAmb IAmb 13 07 47.2
comp=Z,19nm,1.3s
**ZAK** **Zakamensk** **38.38** **320** *e*P **P** **13 07 44.9 -0.8**
ZAK pmax pmax
comp=Z,14nm,1.3s
**PHRA** **Phrae** **38.76** **268** P **P** **13 07 47.7 -1.4**
**MMRI** **Maumere** **38.79** **211** P **P** **13 07 48.6 -0.8**
**MMRI** **Maumere** **38.79** **211** P **P** **13 07 49.3 -0.1**
comp=Z,89nm,0.9s
**SOEI** **Soe** **38.88** **208** P **P** **13 07 50.3 0.0**
comp=Z,26nm,0.9s
**EDFI** **Ende, Flores** **39.15** **212** P **P** **13 07 51.9 -0.6**
comp=Z,51nm,0.8s,comp=Z,590nm
**MTN** **Manton Dam** **39.46** **196** P **P** **13 07 53.1 -1.8**
MTN IAmb IAmb 13 07 55.1
comp=Z,18nm,0.9s
**BATI** **Baumata** **39.54** **208** P **P** **13 07 55.7 0.0**
comp=Z,46nm,1.4s
**CMAR** **Chiang Mai Arr** **39.93** **269** P **P** **13 07 56.4 -2.6**
comp=Z,1.6nm,0.8s,baz=56,slow=6.9,SNR=8.1
comp=Z,1.6nm,0.8s
**CMAR** **Chiang Mai Arr** **39.93** **269** *i*P **P** **13 07 58.9 -0.1**
CMAR pmax pmax
comp=Z,1.0nm,0.6s
**GOMU** **GeErMu** **41.09** **296** P **P** **13 08 09.8 +1.0**
GOMU pmax pmax
comp=Z,75nm,1.1s
**KNGR** **Kungurtug, Tuv** **41.85** **318**⇓ *e*P **P** **13 08 14.3 -0.3**
**PWJI** **Pagerwojo** **44.12** **225** P **P** **13 08 33.9 +0.8**
comp=Z,40nm,2.2s
**WB0** **Warramunga Arr** **45.56** **189** P **P** **13 08 43.8 -0.8**
**CTAO** **Charters Tower** **45.59** **174** P **P** **13 08 43.6 -1.2**
CTAO IAmb IAmb 13 08 46.6
comp=Z,8.8nm,0.9s
**CTAO** **Charters Tower** **45.59** **174** P **P** **13 08 43.6 -1.2**
CTAO pmax pmax
comp=Z,9.0nm,1.0s
**WR0** **Warramunga Arr** **45.73** **189** P **P** **13 08 44.8 -1.1**
**WRAB** **Tennant Creek** **45.73** **189** P **P** **13 08 44.7 -1.2**
**WRAB** **Tennant Creek** **45.73** **189** *de*P **P** **13 08 45.0 -0.9**
WRAB pmax pmax
comp=Z,51nm,0.9s
**WB2** **Warramunga Arr** **45.74** **189** P **P** **13 08 44.7 -1.2**
**WRA** **Warramunga Arr** **45.74** **189** P **P** **13 08 45.3 -0.7**
comp=Z,44nm,0.9s,baz=8.9,slow=8.6,SNR=108
**CMJI** **Cimerak** **46.15** **229** P **P** **13 08 49.0 -0.3**
comp=Z,90nm,1.1s
**TIXI** **Tiksi** **46.69** **355** LR LR 13 28 49.7
comp=Z,101nm,18.3s,baz=12,slow=37

**PSI** **Prapat** **46.72** **248** P **P** **13 08 54.0 0.0**
PSI pmax pmax
comp=Z,13nm,0.9s
**RPSI** **Rantau Prapat** **46.78** **248** P **P** **13 08 54.0 -0.4**
RPSI IAmb IAmb 13 08 56.1
comp=Z,13nm,0.9s
**WMQ** **Urumqi** **46.98** **307** *e*P **P** **13 08 53.5 -2.1**
WMQ pP pwP 13 09 08.3 +6.9
WMQ pmax pmax
comp=Z,42nm,0.7s
WMQ pmax pmax
comp=Z,140nm,3.7s
**DGZ** **Jazzator, Alta** **47.89** **315** *d*iP **P** **13 09 03.3 +0.6**
DGZ pmax pmax
comp=Z,15nm,1.2s
**AS31** **Alice Springs** **49.46** **189** P **P** **13 09 14.0 -0.9**
**ASAR** **Alice Springs** **49.47** **189** P **P** **13 09 13.6 -1.3**
**ASAR** **Alice Springs** **49.47** **189** P **P** **13 09 14.1 -0.8**
comp=Z,5.0nm,1.0s,baz=11,slow=9.4,SNR=25
comp=Z,5.0nm,1.0s
**ASAR** **Alice Springs** **49.47** **189** P **P** **13 09 13.6 -1.3**
**ZALV** **Zalesovo Beam** **50.25** **320** P **P** **13 09 18.0 -2.5**
comp=Z,0.4nm,0.4s,baz=91,slow=10,SNR=2.7
ZALV PcP **PcP** **13 10 35.7 -3.8**
comp=Z,1.1nm,0.7s,baz=95,slow=1.8,SNR=4.4
ZALV LR LR 13 30 39.2
comp=Z,125nm,20.7s,baz=105,slow=36
comp=Z,0.4nm,0.4s
**MK31** **Makanchi Array** **50.98** **311** P **P** **13 09 24.6 -1.7**
**MK31** **Makanchi Array** **50.98** **311** *i*P **P** **13 09 25.7 -0.6**
**MKAR** **Makanchi Array** **50.98** **311** P **P** **13 09 24.5 -1.8**
**MKAR** **Makanchi Array** **50.98** **311** P **P** **13 09 25.0 -1.2**
comp=Z,4.7nm,0.7s,baz=93,slow=7.3,SNR=48
MKAR LR LR 13 32 18.7
comp=Z,132nm,18.3s,baz=76,slow=38
comp=Z,4.7nm,0.7s
**MKAR** **Makanchi Array** **50.98** **311** *i*P **P** **13 09 24.8 -1.5**
MKAR pmax pmax
comp=Z,5.0nm,0.7s
**MAKZ** **Makanchi** **51.20** **311** P **P** **13 09 26.7 -1.2**
MAKZ IAmb IAmb 13 09 29.5
comp=Z,19nm,1.4s
**MAKZ** **Makanchi** **51.20** **311** P **P** **13 09 26.7 -1.2**
MAKZ pmax pmax
comp=Z,19nm,1.4s
**SDPT** **Sand Point** **51.31** **38** P **P** **13 09 28.8 +0.3**
baz=259
**F14K** **Arctic Creek** **51.62** **25** P **P** **13 09 31.3 +0.6**
baz=246
**L14K** **Kuka Creek** **51.67** **31** P **P** **13 09 31.7 +0.6**
baz=252
**J14K** **Nanvaranak Lak** **51.73** **29** P **P** **13 09 32.7 +1.2**
baz=250
**M14K** **Bethel** **51.83** **31** P **P** **13 09 32.5 +0.3**
baz=254
**F15K** **North Star Dit** **52.36** **25** P **P** **13 09 37.6 +1.4**
F15K IAmb IAmb 13 09 41.1
comp=Z,22nm,1.1s
**F15K** **North Star Dit** **52.36** **25** P **P** **13 09 37.3 +1.1**
baz=247
**M15K** **Kasigluk River** **52.41** **32** P **P** **13 09 37.1 +0.4**
baz=255
**O15K** **Ungalikthiuk R** **52.46** **34** P **P** **13 09 37.7 +0.6**
baz=257
**K15K** **Wolf Creek Mou** **52.48** **30** P **P** **13 09 38.2 +1.1**
baz=253
**N15K** **Kwethluk River** **52.57** **32** P **P** **13 09 38.9 +1.0**
baz=256
**M16K** **Timber Creek** **53.32** **32** P **P** **13 09 44.1 +0.8**
baz=256
**P16K** **Nushagak River** **53.36** **34** P **P** **13 09 43.8 +0.2**
baz=259
**O16K** **Kokwok River B** **53.42** **33** P **P** **13 09 45.1 +1.1**
baz=258
**KURK** **Kurchatov** **53.63** **315** P **P** **13 09 44.3 -1.4**
KURK IAmb IAmb 13 09 47.4
comp=Z,10nm,0.9s
**KURK** **Kurchatov** **53.63** **315** *de*P **P** **13 09 45.4 -0.4**
KURK pmax pmax
comp=Z,19nm,1.3s
**KURBB** **Kurchatov Arra** **53.68** **315** P **P** **13 09 44.4 -1.7**
comp=Z,7.0nm,0.7s,baz=92,slow=7.7,SNR=52
comp=Z,7.0nm,0.7s
**D17K** **Noatak River** **53.70** **23** P **P** **13 09 47.5 +1.5**
baz=247
**J17K** **VABM Dome** **53.87** **29** P **P** **13 09 48.1 +0.8**
baz=254
**F17K** **Baldwin Pennin** **53.92** **25** P **P** **13 09 49.1 +1.5**
baz=250
**E17K** **Hotham Inlet** **53.93** **24** P **P** **13 09 48.7 +1.0**
baz=249
**K17K** **Iditarod** **54.03** **30** P **P** **13 09 49.3 +0.8**
baz=256
**N17K** **Nushagak Hills** **54.05** **32** P **P** **13 09 49.3 +0.6**
baz=258
**M17K** **Holitna River** **54.12** **31** P **P** **13 09 50.3 +1.1**
baz=257
**P17K** **Kvichak River** **54.17** **34** P **P** **13 09 50.8 +1.2**
baz=260
**E18K** **Tukpahlearik C** **54.49** **24** P **P** **13 09 53.0 +1.2**
baz=250
**F18K** **Selawik** **54.57** **25** P **P** **13 09 53.6 +1.2**
baz=252
**H18K** **Honhosa River** **54.65** **27** P **P** **13 09 53.8 +0.8**
baz=254
**N18K** **Kilae Creek** **54.71** **32** P **P** **13 09 54.5 +0.9**
baz=259
**C18K** **Utukok River** **54.72** **22** P **P** **13 09 54.6 +1.1**
baz=249
**G18K** **Tagagawik** **54.74** **26** P **P** **13 09 55.8 +2.1**
G18K IAmb IAmb 13 09 58.6
comp=Z,19nm,1.3s
**G18K** **Tagagawik** **54.74** **26** P **P** **13 09 54.9 +1.2**
baz=253,SNR=7.1
**B18K** **Kokolik River** **54.78** **21** P **P** **13 09 54.5 +0.6**
baz=248
**R18K** **Karluk** **54.96** **36** P **P** **13 09 55.8 +0.4**
baz=263
**F19K** **Shaleruckik Mo** **55.36** **25** P **P** **13 09 59.1 +1.1**
baz=253
**N19K** **Bonanza Creek** **55.42** **32** P **P** **13 09 59.4 +0.7**
baz=261
**J19K** **Poorman** **55.51** **28** P **P** **13 10 00.3 +1.1**
baz=257
**H19K** **Roundabout Mou** **55.52** **27** P **P** **13 10 00.8 +1.5**
H19K IAmb IAmb 13 10 04.7
comp=Z,14nm,1.2s
**H19K** **Roundabout Mou** **55.52** **27** P **P** **13 10 00.5 +1.3**
baz=256,SNR=5.7
**Q19K** **Cape Douglas,** **55.56** **35** P **P** **13 10 00.5 +0.8**
baz=263
**M19K** **Big River Lodg** **55.65** **31** P **P** **13 10 01.2 +0.9**
baz=260
**D19K** **Kuna River** **55.73** **23** P **P** **13 10 02.0 +1.2**
baz=252
**E19K** **Redstone River** **55.74** **24** P **P** **13 10 02.3 +1.5**
baz=253
**KSH** **Kashi** **55.84** **302** P **P** **13 10 03.9 +1.7**
KSH sP pwP 13 10 19.8 +12
KSH pmax pmax
comp=Z,15nm,0.8s
**P19K** **Oil Pt** **55.86** **34** P **P** **13 10 02.7 +0.8**
baz=262
**K20K** **Telida** **56.05** **29** IAmb IAmb 13 10 08.7
comp=Z,21nm,1.4s
**K20K** **Telida** **56.05** **29** P **P** **13 10 04.0 +0.8**
baz=259
**H20K** **Anotleneega Mo** **56.15** **27** P **P** **13 10 05.2 +1.4**
baz=257
**I20K** **Naaghedeneel** **56.16** **28** P **P** **13 10 05.3 +1.5**
baz=258
**Q20K** **Shuyak Island** **56.17** **35** P **P** **13 10 05.1 +1.1**
baz=264
**J20K** **Nowinta River** **56.18** **28** P **P** **13 10 04.7 +0.6**
J20K IAmb IAmb 13 10 09.0
comp=Z,12nm,0.9s
**J20K** **Nowinta River** **56.18** **28** P **P** **13 10 05.8 +1.7**
baz=259,SNR=7.9
**F20K** **Avaraart Lake** **56.19** **25** P **P** **13 10 05.4 +1.4**
baz=255
**O20K** **Slope Mountain** **56.22** **33** P **P** **13 10 05.2 +0.7**
baz=263
**D20K** **Etivluk River** **56.32** **23** P **P** **13 10 05.8 +0.8**
baz=253
**B20K** **Meade River** **56.53** **21** P **P** **13 10 07.1 +0.7**
baz=252
**AAK** **Ala-Archa** **56.63** **306**⇓ *e*P **P** **13 10 08.2 +0.4**

AAK pmax pmax
comp=Z,5.0nm,1.6s
**IMAR Indian Mountai 56.71 26 P P 13 10 08.5 +0.6**
**G21K Allakaket 56.92 26 P P 13 10 10.5 +1.2**
baz=258
**SKT Skwentna 56.99 31 P P 13 10 10.5 +0.6**
baz=262
**H21K Melozitna Rive 57.03 27 P P 13 10 11.9 +1.9**
H21K IAmb IAmb 13 10 14.4
comp=Z,16nm,1.2s
**H21K Melozitna Rive 57.03 27 P P 13 10 11.1 +1.0**
baz=259,SNR=9.4
**C21K Knifeblade Rid 57.08 22 P P 13 10 11.2 +0.8**
baz=255
**STKA Stephens Creek 57.10 180 P P 13 10 10.6 -0.3**
**STKA Stephens Creek 57.10 180 P P 13 10 10.6 -0.3**
comp=Z,7.7nm,1.0s,baz=349,slow=11,SNR=8.7
comp=Z,7.7nm,1.0s
**STKA Stephens Creek 57.10 180 P P 13 10 10.6 -0.3**
STKA pmax pmax
comp=Z,4.0nm,1.2s
**B21K Ikpikpuk River 57.26 22 P P 13 10 13.0 +1.4**
baz=255
**I21K Tanana 57.28 27 P P 13 10 13.3 +1.5**
baz=260
**SUA Susitna One 57.30 32 P P 13 10 12.7 +0.5**
baz=264
**BPAW Bear Paw Mtn. 57.53 29 P P 13 10 14.4 +0.7**
BPAW IAmb IAmb 13 10 18.8
comp=Z,9.7nm,1.2s
**BPAW Bear Paw Mtn. 57.53 29 P P 13 10 14.5 +0.9**
baz=262
**CUT Chulitna 57.63 31 P P 13 10 15.4 +1.0**
baz=263
**F22K John River 57.64 25 P P 13 10 15.3 +0.9**
baz=258
**H22K Ishtalitna Cre 57.65 27 P P 13 10 15.1 +0.7**
baz=260
**O22K Cooper Landing 57.70 33 P P 13 10 15.6 +0.7**
baz=265
**D22K Ayikyak River 57.75 23 P P 13 10 16.4 +1.3**
D22K IAmb IAmb 13 10 26.9
comp=Z,20nm,1.2s
**D22K Ayikyak River 57.75 23 P P 13 10 15.6 +0.5**
baz=257
**MLY Manley 57.77 28 P P 13 10 17.0 +1.6**
MLY IAmb IAmb 13 10 18.7
comp=Z,10nm,1.2s
**MLY Manley 57.77 28 P P 13 10 15.5 +0.1**
baz=261
**G22K Bettles 57.78 25 P P 13 10 15.8 +0.5**
baz=259
**ARSB Arslanbob 57.89 304 P P 13 10 16.2 -0.6**
**ARSB Arslanbob 57.89 304 P P 13 10 16.2 -0.6**
ARSB pmax pmax
comp=Z,6.0nm,1.3s
**E22K Anaktuvuk Pass 57.90 24 P P 13 10 16.0 -0.2**
baz=258
**G23K Bananza Creek 58.32 26 P P 13 10 20.8 +1.6**
G23K IAmb IAmb 13 10 24.0
comp=Z,18nm,1.6s
**G23K Bananza Creek 58.32 26 P P 13 10 19.3 +0.1**
baz=261,SNR=6.6
**COLD Coldfoot 58.34 25 P P 13 10 19.0 -0.2**
baz=260
**I23K Minto, Yukon-K 58.37 28 P P 13 10 21.4 +1.9**
I23K IAmb IAmb 13 11 13.0
comp=Z,6.9nm,0.9s
**I23K Minto, Yukon-K 58.37 28 P P 13 10 20.7 +1.3**
baz=263
**MCK McKinley 58.38 29 P P 13 10 20.5 +0.8**
baz=264
**H23K Yukon River 58.38 27 P P 13 10 21.2 +1.6**
H23K IAmb IAmb 13 10 23.3
comp=Z,11nm,1.3s
**H23K Yukon River 58.38 27 P P 13 10 20.5 +0.9**
baz=262
**NEA2 Nenana 58.42 28 P P 13 10 21.2 +1.3**
NEA2 IAmb IAmb 13 10 25.2
comp=Z,15nm,1.1s
**NEA2 Nenana 58.42 28 P P 13 10 21.0 +1.1**
baz=263,SNR=9.6
**WAT1 Susitna Watana 58.47 30 P P 13 10 20.9 +0.7**
baz=265
**D23K Nanushuk River 58.47 23 P P 13 10 21.8 +1.7**
D23K IAmb IAmb 13 10 23.1
comp=Z,8.2nm,0.8s
**D23K Nanushuk River 58.47 23 P P 13 10 20.8 +0.6**
baz=259
**SML Sawmill 58.48 32 P P 13 10 20.9 +0.5**
baz=266
**C23K Itkillik River 58.67 22 P P 13 10 22.6 +1.1**
**C23K Itkillik River 58.67 22 P P 13 10 21.8 +0.3**
baz=258
**E23K Chandalar 58.70 24 IAmb IAmb 13 11 14.2**
comp=Z,8.3nm,0.9s
**E23K Chandalar 58.70 24 P P 13 10 22.4 +0.6**
baz=260
**BVAR Borovoye Array 58.76 318 P P 13 10 20.0 -2.4**
comp=Z,8.2nm,0.7s,baz=92,slow=9.0,SNR=31
BVAR LR LR 13 36 45.2
comp=Z,144nm,18.5s,baz=108,slow=37
comp=Z,8.2nm,0.7s
**M23K Glacier View 58.77 32 P P 13 10 22.9 +0.6**
baz=266
**TOLK Toolik Lake Re 58.81 24 P P 13 10 23.2 +0.7**
baz=260
**MDM Murphy Dome 58.82 28 P P 13 10 23.3 +0.6**
MDM IAmb IAmb 13 10 26.4
comp=Z,14nm,1.3s
**BRVK Borovoye 58.82 318 P P 13 10 22.2 -0.7**
BRVK IAmb IAmb 13 10 24.4
comp=Z,9.2nm,0.8s
**BRVK Borovoye 58.82 318** *ce* **P P 13 10 23.1 +0.2**
BRVK pmax pmax
comp=Z,9.0nm,0.8s
**P23K Montague Islan 58.83 34 P P 13 10 23.1 +0.3**
baz=268
**NIL Nilore 58.93 295 P P 13 10 23.2 -0.8**
**NIL Nilore 58.93 295 P P 13 10 23.2 -0.8**
NIL pmax pmax
comp=Z,13nm,0.7s
**SCM Sheep Creek Mo 58.96 32 P P 13 10 24.2 +0.5**
baz=266
**DHY Denali Highway 59.02 30 P P 13 10 24.1 -0.2**
baz=266
**H24K Noodor Dome 59.07 27 P P 13 10 25.9 +1.5**
H24K IAmb IAmb 13 10 29.7
comp=Z,8.6nm,1.1s
**H24K Noodor Dome 59.07 27 P P 13 10 24.8 +0.4**
baz=264
**E24K Your Creek 59.12 24 P P 13 10 25.4 +0.6**
baz=262
**D24K Happy Valley 59.16 23 P P 13 10 25.9 +1.0**
baz=261
**POKR Poker Plat Res 59.17 28 P P 13 10 26.1 +1.0**
baz=264
**F24K Squaw Lake 59.27 25 P P 13 10 26.5 +0.7**
baz=262
**C24K Franklin Bluff 59.30 22 P P 13 10 26.0 +0.2**
baz=260
**HDA Harding Lake 59.32 29 P P 13 10 25.8 -0.3**
HDA IAmb IAmb 13 10 28.6
comp=Z,9.7nm,1.0s
**HDA Harding Lake 59.32 29 P P 13 10 26.6 +0.5**
baz=265
**G24K Hadweenzic Riv 59.33 26 P P 13 10 27.4 +1.2**
G24K IAmb IAmb 13 10 35.1
comp=Z,12nm,1.2s
**G24K Hadweenzic Riv 59.33 26 P P 13 10 26.7 +0.5**
baz=263
**IL31 59.38 28 P P 13 10 26.2 -0.2**
**ILAR Eielson Array 59.38 28 P P 13 10 26.1 -0.4**
**ILAR Eielson Array 59.38 28 P P 13 10 27.1 +0.6**
comp=Z,8.1nm,1.1s,baz=265,slow=5.6,SNR=25
ILAR PcP PcP 13 11 13.2 -1.1
comp=Z,1.2nm,0.8s,baz=281,slow=4.7,SNR=1.7
comp=Z,8.1nm,1.1s
**KK31 Karatay Array 59.48 307 P P 13 10 27.4 -0.2**
KK31 IAmb IAmb 13 10 28.6
comp=Z,9.7nm,0.8s
**KK31 Karatay Array 59.48 307 P P 13 10 27.4 -0.2**
KK31 pmax pmax
comp=Z,10.0nm,0.9s
**KKAR Karatay Array 59.48 307 P P 13 10 26.2 -1.4**
**KKAR Karatay Array 59.48 307** IAmb IAmb 13 10 28.6
comp=Z,9.6nm,0.8s
**KKAR Karatay Array 59.48 307 P P 13 10 26.2 -1.4**
**KLU Klutina 59.61 32 P P 13 10 28.7 +0.5**
baz=268
**EYAK Cordova Ski Ar 59.67 33 P P 13 10 28.9 +0.4**
baz=269
**K24K Donnelly Dome 59.79 29 P P 13 10 30.3 +0.9**
baz=267
**G25K Bearman Lake 59.88 26 P P 13 10 30.6 +0.7**
baz=265
**PAX Paxson 59.88 30 P P 13 10 30.8 +0.7**
baz=267
**H25L Birch Creek 59.95 27 P P 13 10 31.4 +1.0**
baz=265
**HARP HAARP 60.01 31 P P 13 10 31.3 +0.4**
baz=268
**J25K Salcha River, 60.01 28 P P 13 10 31.3 +0.3**
baz=267
**D25K Kavik River 60.05 23 P P 13 10 31.2 +0.1**
baz=263
**F25K Christian Rive 60.13 25 P P 13 10 31.6 -0.1**
baz=265
**RIDG Independent Ri 60.20 29 P P 13 10 32.8 +0.5**
baz=268
**BMRM Bremner River 60.24 33 P P 13 10 33.2 +0.7**
baz=269
**N25K Chitina, Valde 60.25 32 P P 13 10 33.1 +0.4**
baz=269
**GAR Garm 60.26 302 P P 13 10 32.0 -1.2**
**KAIM Kayak Island 60.33 34 P P 13 10 33.5 +0.4**
baz=270
**SCRK Sand Creek 60.59 29 P P 13 10 35.7 +0.7**
SCRK IAmb IAmb 13 10 37.5
comp=Z,11nm,1.0s
**SCRK Sand Creek 60.59 29 P P 13 10 35.6 +0.7**
baz=268,SNR=11
**GLB Gilahina Butte 60.62 32 P P 13 10 37.0 +1.8**
GLB IAmb IAmb 13 10 41.3
comp=Z,9.2nm,1.1s
**F26K Sheenjek River 60.71 25 P P 13 10 37.1 +1.5**
F26K IAmb IAmb 13 11 24.1
comp=Z,13nm,1.5s
**F26K Sheenjek River 60.71 25 P P 13 10 36.4 +0.7**
baz=266,SNR=6.8
**J26L Joseph Creek 60.79 29 P P 13 10 36.9 +0.5**
J26L IAmb IAmb 13 10 41.5
comp=Z,11nm,0.9s
**J26L Joseph Creek 60.79 29 P P 13 10 36.8 +0.5**
baz=268,SNR=12
**G26K Porcupine Rive 60.80 26 P P 13 10 36.7 +0.4**
baz=267
**L26K Log Cabin Wild 60.85 30 P P 13 10 37.3 +0.6**
baz=269
**CRQE Cirque 60.98 33 P P 13 10 38.1 +0.4**
baz=271
**I26K Coal Creek Min 60.99 28 P P 13 10 37.6 0.0**
baz=268
**MCARA McCarthy VSAT 61.00 32 P P 13 10 37.9 +0.2**
baz=270
**M26K Nabesna, AK 61.01 31 P P 13 10 37.7 -0.1**
baz=270
**TGL Tana Glacier 61.11 33 P P 13 10 40.2 +1.6**
TGL IAmb IAmb 13 10 41.4
comp=Z,11nm,1.0s
**CHGR Chuyangaron 61.21 302 P P 13 10 39.0 -0.6**
**CHGR Chuyangaron 61.21 302 P P 13 10 39.0 -0.6**
CHGR pmax pmax
comp=Z,34nm,0.9s
**SIMJ Simiganj 61.33 302 P P 13 10 39.9 -0.6**
**K27K Chicken 61.43 29 P P 13 10 41.0 +0.4**
baz=270
**M27K Edge Creek, AK 61.53 31 IAmb IAmb 13 10 47.8**
comp=Z,8.0nm,1.1s
**M27K Edge Creek, AK 61.53 31 P P 13 10 41.5 0.0**
baz=271
**L27K Beaver Creek, 61.55 30 IAmb IAmb 13 10 45.7**
comp=Z,5.8nm,1.0s
**L27K Beaver Creek, 61.55 30 P P 13 10 41.6 +0.1**
baz=271,SNR=5.7
**BCAR Beaver Creek A 61.57 30 P P 13 10 42.5 +1.0**
**I27K Kandik River 61.64 27 P P 13 10 42.0 +0.1**
baz=270
**G27K Doyon Strip 61.64 26 P P 13 10 42.8 +0.9**
baz=269
**H27K Steamboat Moun 61.68 27 P P 13 10 42.5 +0.2**
baz=269
**E27K Coleen River 61.70 24 P P 13 10 42.9 +0.6**
baz=268
**EGAK Eagle 61.83 28 P P 13 10 43.8 +0.6**
baz=270
**CTG Chitna Glacier 61.83 33 P P 13 10 44.1 +0.6**
baz=272
**D27M Malcolm River 61.96 23 IAmb IAmb 13 10 49.8**
comp=Z,5.7nm,0.8s
**D27M Malcolm River 61.96 23 P P 13 10 44.9 +0.8**
baz=268
**KBL Kabul 62.15 297 P P 13 10 45.6 -0.6**
**KBL Kabul 62.15 297 P P 13 10 45.6 -0.6**
KBL pmax pmax
comp=Z,16nm,0.9s
**YUK3 Moose Creek 62.22 32 P P 13 10 47.0 +0.8**
baz=273,SNR=5.9
**I28M Miner Creek 62.34 28 P P 13 10 47.9 +1.1**
I28M IAmb IAmb 13 10 49.6
comp=Z,4.4nm,0.8s
**I28M Miner Creek 62.34 28 P P 13 10 47.2 +0.4**
baz=271,SNR=6.0
**F28M Old Crow 62.34 25 IAmb IAmb 13 12 19.7**
comp=Z,7.1nm,0.9s
**F28M Old Crow 62.34 25 P P 13 10 47.5 +0.8**
baz=270
**O28M Mount Upton 62.40 33 P P 13 10 48.5 +1.0**
baz=273,SNR=5.3
**PINM Pinnacle 62.41 34 P P 13 10 48.4 +1.1**
baz=274
**E28M Babbage River 62.47 24 IAmb IAmb 13 10 51.4**
comp=Z,7.6nm,1.0s
**E28M Babbage River 62.47 24 P P 13 10 48.8 +1.3**
baz=270,SNR=5.2
**DAWY Dawson 62.61 29 P P 13 10 49.6 +1.0**
baz=272,SNR=6.4
**PNL Peninsula 62.87 34 P P 13 10 51.4 +1.1**
baz=275
**H29M Whitestone 62.96 27 P P 13 10 51.6 +0.8**
baz=272
**I29M Ogilvie Camp, 63.02 28 P P 13 10 52.0 +0.7**
baz=273
**G29M Pine Creek 63.07 26 P P 13 10 52.3 +0.8**
baz=272,SNR=6.0
**E29M Blow River 63.08 24 IAmb IAmb 13 10 55.1**
comp=Z,8.9nm,1.4s
**E29M Blow River 63.08 24 P P 13 10 52.0 +0.5**
baz=271
**YUK4 Talbot Arm 63.11 32 P P 13 10 52.6 +0.5**
baz=273,SNR=8.1
**M29M Somme Creek 63.12 31 IAmb IAmb 13 10 55.7**
comp=Z,8.1nm,0.9s
**M29M Somme Creek 63.12 31 P P 13 10 51.7 -0.3**
baz=274,SNR=12
**O29M Mount Kennedy 63.23 33 P P 13 10 53.4 +0.5**
baz=275,SNR=7.9
**YUK6 Outpost Mounta 63.28 33 P P 13 10 54.0 +0.7**
baz=275
**K29M Barlow Dome 63.45 29 P P 13 10 54.8 +0.6**
baz=274,SNR=10
**EPYK Eagle Plains 63.62 26 P P 13 10 56.7 +1.5**
baz=274,SNR=9.2
**P29M Windy Craggy 63.71 34 IAmb IAmb 13 10 59.7**
comp=Z,10.0nm,1.0s
**P29M Windy Craggy 63.71 34 P P 13 10 56.4 +0.5**
baz=276,SNR=5.0
**G30M tAoh Zrail Nji 63.78 26 P P 13 10 56.7 +0.5**
baz=274,SNR=8.1
**I30M Mount Dempster 63.84 28 IAmb IAmb 13 10 59.5**
comp=Z,5.1nm,0.9s
**I30M Mount Dempster 63.84 28 P P 13 10 58.0 +1.2**
baz=274,SNR=6.7
**N30M Aishikik Lake 63.85 32 P P 13 10 57.4 +0.6**
baz=276
**F30M Barrier River 63.91 25 P P 13 10 58.4 +1.4**
baz=274
**J30M Hart River 63.91 28 IAmb IAmb 13 11 18.4**
comp=Z,16nm,1.7s
**J30M Hart River 63.91 28 P P 13 10 57.6 +0.3**
baz=275
**P30M Million Dollar 64.05 33 P P 13 10 58.9 +0.7**
baz=276
**O30N Mendenhall 64.41 33 P P 13 11 01.3 +0.8**
baz=277
**PLBC Pleasant Camp 64.43 34 P P 13 11 01.3 +0.8**
baz=277,SNR=7.1
**N31M Braeburn, Yuko 64.47 32 P P 13 11 01.7 +0.9**
baz=277,SNR=5.9
**G31M Satah River 64.55 26 P P 13 11 02.3 +1.1**
baz=275,SNR=6.6
**S31K Pelican 64.70 36 P P 13 11 02.9 +0.6**
baz=278
**INK Inuvik 64.70 24 P P 13 11 02.8 +0.6**
baz=276
**SKAG Skagway 64.95 34 P P 13 11 04.5 +0.6**
baz=278
**WHY Whitehorse 65.01 33 P P 13 11 04.8 +0.3**
baz=278
**M31M Drury Creek, Y 65.03 31 IAmb IAmb 13 11 08.7**
comp=Z,5.5nm,0.8s
**M31M Drury Creek, Y 65.03 31 P P 13 11 05.2 +0.6**
baz=278,SNR=7.5
**ARU Arti 65.26 323** *c i* **P P 13 11 06.7 +0.7**
ARU 13 13 26.1
ARU S S 13 19 50.2 +0.8
ARU SS SS 13 24 01.6 -0.1
ARU pmax pmax
comp=Z,9.0nm,1.4s
**FARO Faro, Yukon 65.51 31 P P 13 11 08.2 +0.5**
baz=278,SNR=6.2
**R32K Eaglecrest 65.55 35 IAmb IAmb 13 11 13.3**
comp=Z,8.3nm,1.1s
**R32K Eaglecrest 65.55 35 P P 13 11 08.5 +0.6**
baz=279
**S32K Killisnoo 65.65 36 IAmb IAmb 13 11 12.6**
comp=Z,15nm,1.6s
**S32K Killisnoo 65.65 36 P P 13 11 08.4 -0.1**
baz=280
**P32M Atlin 65.75 34 P P 13 11 09.1 -0.1**
baz=279
**N32M Quiet Lake 65.81 32 P P 13 11 10.3 +0.7**
baz=279
**P33M Teslin, Yukon 66.09 33 P P 13 11 12.2 +0.7**
baz=280
**Q32M Nakina River 66.59 34 P P 13 11 14.7 -0.1**
baz=281
**AKTO Aktyubinsk 66.70 316 LR LR 13 41 03.7**
comp=Z,158nm,20.3s,baz=218,slow=37
**R33M Jennings River 67.16 34 P P 13 11 19.4 +1.0**
baz=282
**S34M Telegraph Cree 67.38 35 IAmb IAmb 13 11 25.2**
comp=Z,11nm,1.1s
**S34M Telegraph Cree 67.38 35 P P 13 11 20.8 +1.1**
baz=282,SNR=6.9
**V35K Ketchikan 67.68 38 P P 13 11 23.2 +1.6**
baz=283
**DLBC Dease Lake 67.84 35 IAmb IAmb 13 11 27.0**
comp=Z,7.9nm,1.1s
**DLBC Dease Lake 67.84 35 P P 13 11 24.2 +1.6**
baz=283,SNR=5.7
**TGTN Hyland Airport 68.01 31 P P 13 11 25.1 +1.5**
baz=283,SNR=5.8
**T35M Bob Quinn 68.05 36 P P 13 11 25.6 +1.6**
baz=283
**WTLY Watson Lake, Y 68.08 33 P P 13 11 25.8 +1.8**
baz=283,SNR=7.0
**KIRV Kirov 69.62 326 LR LR 13 44 34.8**
comp=Z,143nm,18.8s,baz=107,slow=38
**WRGLY Wrigley 69.74 29 IAmb IAmb 13 11 37.1**
comp=Z,10nm,0.8s
**WRGLY Wrigley 69.74 29 P P 13 11 35.7 +1.5**
baz=286
**TOAD Toad River Com 70.16 33 P P 13 11 38.5 +1.5**
baz=286,SNR=6.8
**URZ Urewera 71.72 151 LR LR 13 42 29.1**
comp=Z,47nm,18.1s,baz=23,slow=35
**SPITS Spitsbergen Ar 71.79 350 LR LR 13 44 07.4**
comp=Z,107nm,21.2s,baz=10,slow=37
**YKA Yellowknife Ar 73.81 28 P P 13 11 59.5 +0.8**
comp=Z,6.7nm,1.0s,baz=298,slow=6.2,SNR=11
comp=Z,6.7nm,1.0s
**YKA Yellowknife Ar 73.81 28** *i* **P P 13 11 59.2 +0.5**
YKA pmax pmax
comp=Z,7.0nm,1.0s
**ARCES ARCESS Array B 74.79 341 P P 13 12 02.4 -2.0**
comp=Z,2.5nm,0.8s,baz=69,slow=8.1,SNR=5.7
comp=Z,2.5nm,0.8s
**GNW Green Mountain 75.24 44 IAmb IAmb 13 12 13.0**
comp=Z,14nm,1.2s
**MAK Makhachkala 75.80 311** *e* **P P 13 12 09.6 -1.0**
MAK *e* 13 14 57.6
MAK *e* S S 13 21 49.6 -3.2
MAK *e* SS SS 13 26 49.0 +4.9
MAK *e* SSS SSS 13 30 06.0
MAK pmax pmax
comp=Z,242nm,1.1s
MAK MLR MLR
comp=Z,174nm,14.0s
**LTY Liberty 76.71 44 IAmb IAmb 13 12 23.4**
comp=Z,13nm,1.4s
**H04A Detroit Lake 76.74 47 IAmb IAmb 13 12 20.0**
comp=Z,15nm,1.3s
**HOOD Mount Hood Mea 76.84 46 IAmb IAmb 13 12 21.0**
comp=Z,14nm,1.1s
**MXC Moxie City 77.22 44 IAmb IAmb 13 12 23.9**
comp=Z,11nm,1.2s
**D08A Wollman Farm, 77.88 44 IAmb IAmb 13 12 26.2**
comp=Z,6.8nm,0.9s
**PINE Pine Mountain 77.91 47 IAmb IAmb 13 12 27.3**
comp=Z,9.9nm,1.0s
**C09A Chrisman Ranch 77.97 43 IAmb IAmb 13 12 27.2**
comp=Z,10nm,1.1s
**E08A Dider Farm, El 78.03 44 IAmb IAmb 13 12 28.2**
comp=Z,6.6nm,1.0s
**NEW Newport 78.48 42 P P 13 12 26.1 +0.4**
NEW IAmb IAmb 13 12 30.4
comp=Z,13nm,1.0s
**NEW Newport 78.48 42 P P 13 12 27.1 +1.5**
baz=295,SNR=16
**NEW Newport 78.48 42 P P 13 12 26.1 +0.4**
NEW pmax pmax
comp=Z,13nm,1.0s
**E09A Wood Farm, Sta 78.59 44 IAmb IAmb 13 12 31.4**
comp=Z,9.3nm,1.0s
**KBZ Khabaz 78.60 313** *i e* **P P 13 12 28.5 +2.2**
KBZ pmax pmax
comp=Z,4.0nm,1.0s
**GNI Garni 78.80 309 LR LR 13 49 38.8**
comp=Z,35nm,19.2s,baz=11,slow=38
**FINES FINESS Array B 79.05 334 P P 13 12 25.7 -2.8**
comp=Z,3.9nm,0.5s,baz=70,slow=5.0,SNR=32
comp=Z,3.9nm,0.5s
**FINES FINESS Array B 79.05 334** *i* **P P 13 12 25.6 -2.9**
FINES pmax pmax
comp=Z,4.0nm,0.5s
**MSO Missoula 81.05 42 P P 13 12 40.4 +0.6**
baz=298
**YERR Yerington 81.08 51 IAmb IAmb 13 12 43.3**
comp=Z,18nm,1.7s
**MFID Camas Ranch 81.43 46 IAmb IAmb 13 12 45.7**
comp=Z,8.9nm,1.1s
**KVN Kaiserville 81.85 51 IAmb IAmb 13 12 48.9**
comp=Z,19nm,1.8s
**NVAR Mina Array Bea 81.98 51 P P 13 12 46.0 +1.0**
**NVAR Mina Array Bea 81.98 51 P P 13 12 46.6 +1.7**
comp=Z,2.5nm,0.8s,baz=292,slow=5.1,SNR=20
comp=Z,2.5nm,0.8s
**HLID Hailey 82.28 45 P P 13 12 46.6 +0.3**
baz=298,SNR=6.4
**DLMT Dillon 82.57 43 IAmb IAmb 13 12 52.5**
comp=Z,6.9nm,1.1s
**EGMT Eagleton 82.95 40 P P 13 12 51.0 +1.3**
baz=300,SNR=8.2
**BOZ Bozeman (W) 83.05 43 IAmb IAmb 13 12 54.9**
comp=Z,20nm,1.9s
**BOZ Bozeman (W) 83.05 43 P P 13 12 50.7 +0.4**
baz=300,SNR=6.9
**GMN Gold Mountain 83.22 52 IAmb IAmb 13 12 56.0**
comp=Z,11nm,1.8s
**AKASG Malin Array Be 83.49 324 P P 13 12 49.0 -3.2**
comp=Z,2.1nm,0.7s,baz=50,slow=4.8,SNR=5.4
AKASG LR LR 13 52 44.3
comp=Z,90nm,19.3s,baz=146,slow=38
comp=Z,2.1nm,0.7s
**AKBB Malin Array Si 83.49 324 P P 13 12 48.1 -4.1**
AKBB IAmb IAmb 13 12 51.5
comp=Z,13nm,1.5s
**AKBB Malin Array Si 83.49 324** *i e* **P P 13 12 48.6 -3.6**
AKBB pmax pmax
comp=Z,9.0nm,1.5s
**KIEV Kiev 83.50 324 P P 13 12 48.3 -4.0**
KIEV IAmb IAmb 13 12 51.5

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,12nm,1.5s | | | | | | | | |
| **KIEV** | **Kiev** | **83.50** | **324** | P | | **P** | | **13 12 48.3** | **-4.0** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **WCT** | **Wildcat Mounta** | **83.90** | **52** | IAmb | | IAmb | | 13 12 59.5 | |
| | comp=Z,7.7nm,1.4s | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **83.92** | **50** | P | | **P** | | **13 12 55.1** | **+0.1** |
| | baz=298,SNR=8.6 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **84.10** | **52** | P | | **P** | | **13 12 56.4** | **+0.5** |
| | baz=298 | | | | | | | | |
| **Q12A** | **Willow Creek R** | **84.12** | **50** | IAmb | | IAmb | | 13 13 04.2 | |
| | comp=Z,7.7nm,1.2s | | | | | | | | |
| **GWY** | **Greenwater Val** | **84.15** | **53** | IAmb | | IAmb | | 13 12 59.6 | |
| | comp=Z,8.2nm,1.1s | | | | | | | | |
| **FXWY** | **Fox Creek** | **84.39** | **44** | IAmb | | IAmb | | 13 13 02.8 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **84.45** | **54** | IAmb | | IAmb | | 13 13 03.0 | |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| **TPAW** | **Teton Pass** | **84.52** | **44** | IAmb | | IAmb | | 13 13 02.2 | |
| | comp=Z,8.1nm,1.1s | | | | | | | | |
| **HFS** | **Hagfors** | **84.59** | **337** | P | | **P** | | **13 12 54.4** | **-3.3** |
| | comp=Z,4.3nm,0.9s,baz=115,slow=6.7,SNR=4.5 | | | | | | | | |
| HFS | | | | LR | | LR | | 13 52 38.8 | |
| | comp=Z,77nm,18.2s,baz=52,slow=37 | | | | | | | | |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| **LOHW** | **Long Hollow** | **84.67** | **44** | IAmb | | IAmb | | 13 13 03.2 | |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| **RLMT** | **Red Lodge** | **84.73** | **42** | IAmb | | IAmb | | 13 13 03.6 | |
| | comp=Z,8.1nm,0.8s | | | | | | | | |
| **RLMT** | **Red Lodge** | **84.73** | **42** | P | | **P** | | **13 12 59.2** | **+0.2** |
| | baz=301,SNR=11 | | | | | | | | |
| **PRN** | **Pahroc Range** | **84.73** | **51** | IAmb | | IAmb | | 13 13 04.5 | |
| | comp=Z,6.9nm,1.2s | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **84.78** | **45** | IAmb | | IAmb | | 13 13 03.0 | |
| | comp=Z,8.6nm,1.1s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **84.81** | **338** | P | | **P** | | **13 12 55.1** | **-3.8** |
| | comp=Z,10nm,1.1s,baz=44,slow=5.1 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **84.81** | **338** | P | | **P** | | **13 12 55.6** | **-3.2** |
| | comp=Z,2.6nm,0.8s,baz=46,slow=4.9,SNR=7.9 | | | | | | | | |
| NOA | | | | LR | | LR | | 13 54 48.0 | |
| | comp=Z,46nm,18.2s,baz=35,slow=39 | | | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **84.93** | **48** | IAmb | | IAmb | | 13 13 04.8 | |
| | comp=Z,8.8nm,1.1s | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **84.93** | **48** | P | | **P** | | **13 12 59.9** | **-0.1** |
| | baz=299,SNR=6.5 | | | | | | | | |
| **PSUT** | **Pine Spring** | **85.03** | **50** | IAmb | | IAmb | | 13 13 03.4 | |
| | comp=Z,6.1nm,1.2s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **85.06** | **46** | IAmb | | IAmb | | 13 13 05.0 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.49** | **55** | P | | **P** | | **13 13 03.2** | **+0.3** |
| | baz=298,SNR=5.3 | | | | | | | | |
| **TPFO** | **Pinon Flats** | **85.49** | **55** | P | | **P** | | **13 13 03.1** | **+0.1** |
| | baz=298,SNR=7.2 | | | | | | | | |
| **LAO** | **LASA Array** | **85.70** | **40** | P | | **P** | | **13 13 04.4** | **+0.8** |
| | baz=303 | | | | | | | | |
| **BW06** | **Boulder Array** | **85.76** | **44** | P | | **P** | | **13 13 05.7** | **+1.5** |
| | baz=301,SNR=9.5 | | | | | | | | |
| **PD31** | **Pinedale Array** | **85.76** | **44** | IAmb | | IAmb | | 13 13 08.3 | |
| | comp=Z,7.4nm,1.1s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.76** | **44** | P | | **P** | | **13 13 04.1** | **-0.2** |
| **PDAR** | **Pinedale Array** | **85.76** | **44** | P | | **P** | | **13 13 05.5** | **+1.3** |
| | comp=Z,5.9nm,1.1s,baz=270,slow=3.0,SNR=20 | | | | | | | | |
| | comp=Z,5.9nm,1.1s | | | | | | | | |
| **MONP2** | **Monument Peak** | **85.85** | **56** | P | | **P** | | **13 13 05.3** | **+0.5** |
| | baz=298 | | | | | | | | |
| **DGMT** | **Dagmar** | **85.85** | **37** | P | | **P** | | **13 13 04.9** | **+0.6** |
| | baz=304 | | | | | | | | |
| **BR131** | **Keskin Array S** | **86.58** | **313** | ⇓*e*P | | **P** | | **13 13 10.4** | **+2.2** |
| **BRTR** | **Keskin Array B** | **86.59** | **313** | P | | **P** | | **13 13 08.8** | **+0.6** |
| | comp=Z,1.1nm,0.9s,baz=99,slow=7.6,SNR=4.0 | | | | | | | | |
| BRTR | | | | LR | | LR | | 13 57 11.3 | |
| | comp=Z,26nm,18.9s,baz=81,slow=40 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **86.59** | **313** | *i* P | | **P** | | **13 13 10.3** | **+2.1** |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **Q16A** | **Castle Valley** | **86.67** | **48** | IAmb | | IAmb | | 13 13 14.3 | |
| | comp=Z,5.8nm,1.0s | | | | | | | | |
| **P17A** | **Butcher Ranch,** | **86.68** | **48** | IAmb | | IAmb | | 13 13 14.0 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **RDMU** | **Red Mountain** | **86.89** | **46** | IAmb | | IAmb | | 13 13 14.3 | |
| | comp=Z,6.6nm,1.0s | | | | | | | | |
| **SRU** | **San Rafael Swe** | **87.01** | **48** | IAmb | | IAmb | | 13 13 14.6 | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| **U15A** | **North Rim** | **87.14** | **51** | IAmb | | IAmb | | 13 13 18.1 | |
| | comp=Z,7.2nm,1.4s | | | | | | | | |
| **HMU** | **Henry Mountain** | **87.45** | **49** | IAmb | | IAmb | | 13 13 16.7 | |
| | comp=Z,6.8nm,1.3s | | | | | | | | |
| **113A** | **Mohawk Valley,** | **87.87** | **55** | IAmb | | IAmb | | 13 13 17.4 | |
| | comp=Z,4.5nm,1.1s | | | | | | | | |
| **WUAZ** | **Wupatki** | **88.24** | **51** | IAmb | | IAmb | | 13 13 21.2 | |
| | comp=Z,7.0nm,1.4s | | | | | | | | |
| **WUAZ** | **Wupatki** | **88.24** | **51** | P | | **P** | | **13 13 16.6** | **+0.3** |
| | baz=300 | | | | | | | | |
| **RSSD** | **Black Hills** | **88.41** | **41** | P | | **P** | | **13 13 17.7** | **+0.7** |
| | baz=305 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **88.97** | **55** | P | | **P** | | **13 13 20.1** | **+0.4** |
| | baz=300 | | | | | | | | |
| **N23A** | **Red Feather La** | **89.04** | **44** | P | | **P** | | **13 13 20.4** | **+0.2** |
| | baz=304 | | | | | | | | |
| **VYHS** | **Vyhne** | **90.22** | **326** | *e*P | | **P** | | **13 13 23.5** | **-1.7** |
| **VYHS** | **Vyhne** | **90.22** | **326** | *e*P | | **P** | | **13 13 23.5** | **-1.7** |
| **AGMN** | **Agassiz Nation** | **90.36** | **34** | P | | **P** | | **13 13 26.5** | **+0.7** |
| | baz=311 | | | | | | | | |
| **EIL** | **Elat** | **90.71** | **303** | LR | | LR | | 13 59 50.8 | |
| | comp=Z,37nm,18.1s,baz=84,slow=40 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **91.07** | **47** | P | | **P** | | **13 13 29.8** | **0.0** |
| | baz=304 | | | | | | | | |
| **ANMO** | **Albuquerque** | **91.97** | **50** | P | | **P** | | **13 13 34.6** | **+0.8** |
| | baz=303 | | | | | | | | |
| **T25A** | **Trinidad** | **92.13** | **47** | P | | **P** | | **13 13 35.2** | **+0.7** |
| | baz=304 | | | | | | | | |
| **GERES** | **GERESS Array B** | **92.50** | **328** | P | | **P** | | **13 13 33.2** | **-2.6** |
| | comp=Z,0.3nm,0.3s,baz=172,slow=7.9,SNR=5.0 | | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | | |
| **EYMN** | **Ely** | **92.77** | **33** | P | | **P** | | **13 13 37.7** | **+0.7** |
| | baz=314 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **95.78** | **329** | LR | | LR | | 14 02 14.1 | |
| | comp=Z,44nm,19.6s,baz=83,slow=39 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **125.10** | **310** | PKP | | **PKPdf** | | **13 19 23.6** | **-2.3** |
| | comp=Z,0.8nm,0.8s,baz=52,slow=3.3,SNR=4.0 | | | | | | | | |
| **PLCA** | **Paso Flores** | **149.40** | **128** | PKPbc | | **PKPbc** | | **13 20 13.8** | **0.0** |
| | comp=Z,9.0nm,1.1s,baz=251,slow=3.8,SNR=9.8 | | | | | | | | |
| **LPAZ** | **La Paz** | **150.91** | **77** | PKPbc | | **PKPbc** | | **13 20 19.5** | **+0.7** |
| | comp=Z,5.6nm,0.8s,baz=263,slow=1.3,SNR=21 | | | | | | | | |

*IDC **19** 13:04:08.9±6.8, 17.°97S×178.°04W, h579km±72km, mb3.3/6, mbtmp4.2/7, Error ellipse: s-maj=44.8km s-min=30.6km az=94.0*
*NEIC **19** 13:04:09.5±1.5, 18.°0S±0.°1×177.°9W±0.°1, h596km±7km, mb4.4/25, Error ellipse: s-maj=22.3km s-min=13.0km az=136.0*

**ISC 19 13:04:09.0±0.7, 18.°0S±0.°1×178.°0W±0.°1, h590km, n38, σ0s61/39, mb4.3/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.82** | **274** | P | **P** | **13 05 33.8** | **+1.2** |
| **AFI** | **Afiamalu** | **7.22** | **56** | P | **P** | **13 05 59.7** | **-1.1** |
| **DZM** | **Mont Dzumac** | **15.20** | **252** | P | **P** | **13 07 19.8** | **+0.2** |
| **DZM** | **Mont Dzumac** | **15.20** | **252** | P | **P** | **13 07 19.6** | **0.0** |
| | 4.4nm,0.8s,baz=114,slow=20,SNR=3.0 | | | | | | |
| **DSZ** | **Denniston Nort** | **25.20** | **198** | P | **P** | **13 08 48.7** | **-0.7** |
| **PPTF** | **Pamatai, Papee** | **27.02** | **93** | P | **P** | **13 09 06.3** | **+0.6** |
| **EIDS** | **Eidsvold** | **29.64** | **250** | P | **P** | **13 09 27.2** | **-1.0** |
| EIDS | | | | | IAmb | IAmb | 13 09 33.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.25** | **240** | P | **P** | **13 09 34.0** | **+0.4** |
| ARMA | | | | | IAmb | IAmb | 13 09 41.8 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.86** | **261** | P | **P** | **13 10 03.6** | **-0.6** |
| CTAO | | | | | IAmb | IAmb | 13 10 11.4 | |
| | comp=Z,9.7nm,1.3s | | | | | | |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **13 10 05.3** | **+0.4** |
| **TOO** | **Toolangi** | **37.43** | **231** | P | **P** | **13 10 33.9** | **+0.5** |
| **COEN** | **Coen** | **37.55** | **270** | P | **P** | **13 10 35.1** | **+0.5** |
| COEN | | | | | IAmb | IAmb | 13 10 36.0 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.95** | **241** | P | **P** | **13 10 46.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.95** | **241** | P | **P** | **13 10 45.8** | **+0.1** |
| | comp=Z,2.8nm,0.5s,baz=104,slow=12,SNR=5.4 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.73** | **241** | P | **P** | **13 11 23.1** | **-0.2** |
| BBOO | | | | | IAmb | IAmb | 13 11 24.5 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **13 11 31.3** | **-0.9** |
| **WB0** | **Warramunga Arr** | **45.01** | **260** | P | **P** | **13 11 32.4** | **-1.0** |
| WB0 | | | | | IAmb | IAmb | 13 12 02.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.03** | **260** | P | **P** | **13 11 32.7** | **-0.9** |
| WB2 | | | | | IAmb | IAmb | 13 11 48.7 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.04** | **260** | P | **P** | **13 11 33.1** | **-0.5** |
| | comp=Z,2.1nm,0.3s,baz=94,slow=7.3,SNR=80 | | | | | | |
| | comp=Z,2.1nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **45.18** | **254** | P | **P** | **13 11 34.3** | **-0.4** |
| AS31 | | | | | IAmb | IAmb | 13 11 35.6 | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.18** | **254** | P | **P** | **13 11 33.9** | **-0.8** |
| **ASAR** | **Alice Springs** | **45.18** | **254** | P | **P** | **13 11 34.9** | **+0.1** |
| | comp=Z,7.9nm,0.4s,baz=90,slow=8.2,SNR=163 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 13 02.6** | **+0.4** |
| | comp=Z,0.8nm,0.4s,baz=104,slow=4.0,SNR=5.6 | | | | | | |
| | comp=Z,7.9nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **49.23** | **268** | P | **P** | **13 12 04.5** | **-0.6** |
| MTN | | | | | IAmb | IAmb | 13 12 34.6 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **FORT** | **Forrest** | **50.35** | **245** | P | **P** | **13 12 12.4** | **-0.6** |
| FORT | | | | | IAmb | IAmb | 13 12 26.9 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.91** | **264** | P | **P** | **13 12 16.7** | **-0.6** |
| KNRA | | | | | IAmb | IAmb | 13 12 21.2 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **GIRL** | **Giralia** | **63.28** | **253** | P | **P** | **13 13 41.4** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **68.28** | **323** | P | **P** | **13 14 12.3** | **+0.2** |
| | comp=Z,0.8nm,0.6s,baz=154,slow=6.9,SNR=1.4 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **UGM** | **Wanagama** | **70.08** | **268** | P | **P** | **13 14 23.3** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.01** | **180** | P | **P** | **13 14 33.8** | **-0.2** |
| **QSPA** | **South Pole Qui** | **72.01** | **180** | P | **P** | **13 14 35.1** | **+1.2** |
| | comp=Z,1.6nm,1.1s,baz=248,slow=7.9,SNR=2.4 | | | | | | |
| | comp=Z,1.6nm,1.1s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.12** | **8** | P | **P** | **13 15 23.9** | **+0.7** |
| K15K | | | | | IAmb | IAmb | 13 15 26.9 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **J16K** | **Anvik River** | **82.19** | **8** | P | **P** | **13 15 28.4** | **-0.3** |
| J16K | | | | | IAmb | IAmb | 13 15 47.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **K20K** | **Telida** | **83.25** | **11** | P | **P** | **13 15 34.6** | **+0.5** |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | **P** | **13 15 47.3** | **+0.3** |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | **P** | **13 15 47.1** | **+0.1** |
| | comp=Z,0.2nm,0.4s,baz=223,slow=5.2,SNR=6.2 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **J25K** | **Salcha River,** | **86.11** | **13** | P | **P** | **13 15 48.0** | **+0.1** |
| **BRTR** | **Keskin Array B** | **145.19** | **315** | PKPbc | **PKPbc** | **13 22 41.6** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=123,slow=3.9,SNR=4.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.85** | **345** | PKPbc | **PKPbc** | **13 22 48.9** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=162,slow=13,SNR=5.0 | | | | | | |

*IDC **19** 13:10:00.8±0.9, 23.°50N×143.°49E, h0km, mb4.0/11, mbtmp3.9/13, ML3.3/2, Error ellipse: s-maj=32.0km s-min=18.2km az=80.0*
*NEIC **19** 13:10:03.9±0.5, 23.°5N±0.°1×143.°5E±0.°2, h18km±5km, mb4.4/10, Error ellipse: s-maj=21.0km s-min=16.6km az=75.0*

**ISC 19 13:10:05.8±0.8, 23.°62N±0.°10×143.°4E±0.°2, h31km, n29, σ1s25/29, mb4.2/16, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.63** | **343** | Pn | **Pn** | **13 10 59.8** | **0.0** |
| **JCJ** | **Chichijima** | **3.63** | **343** | Sn | **Sn** | **13 11 37.4** | **-4.2** |
| | 18nm,0.3s,baz=287,slow=19,SNR=1.9 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.63** | **342** | Pn | **Pn** | **13 13 18.1** | **+1.0** |
| | 0.1nm,0.3s,baz=160,slow=11,SNR=4.4 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **KSRS** | **Korea Array** | **19.13** | **320** | P | **P** | **13 14 27.1** | **+0.8** |
| | 0.2nm,0.3s,baz=143,slow=12,SNR=8.7 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.00** | **192** | P | **P** | **13 18 09.2** | **-1.4** |
| WB0 | | | | | IAmb | IAmb | 13 18 14.3 | |
| | comp=Z,9.3nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.16** | **192** | P | **P** | **13 18 10.1** | **-1.8** |
| WR0 | | | | | IAmb | IAmb | 13 18 49.2 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.18** | **192** | P | **P** | **13 18 10.4** | **-1.6** |
| **WRA** | **Warramunga Arr** | **44.18** | **192** | P | **P** | **13 18 10.5** | **-1.5** |
| | comp=Z,0.8nm,0.5s,baz=13,slow=8.2,SNR=16 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.93** | **204** | P | **P** | **13 18 16.6** | **-1.5** |
| **ASAR** | **Alice Springs** | **47.89** | **192** | P | **P** | **13 18 40.2** | **-1.1** |
| | comp=Z,0.3nm,0.5s,baz=16,slow=9.8,SNR=10 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.83** | **321** | P | **P** | **13 19 18.6** | **+0.4** |
| | comp=Z,0.5nm,0.4s,baz=116,slow=6.6,SNR=2.9 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.55** | **312** | P | **P** | **13 19 24.1** | **+0.4** |
| **MKAR** | **Makanchi Array** | **53.55** | **312** | P | **P** | **13 19 24.6** | **+0.9** |
| | comp=Z,0.4nm,0.5s,baz=88,slow=10,SNR=6.2 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.26** | **316** | P | **P** | **13 19 43.9** | **+0.7** |
| | comp=Z,1.3nm,0.6s,baz=94,slow=7.6,SNR=15 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **IMAR** | **Indian Mountai** | **57.68** | **26** | P | **P** | **13 19 54.0** | **+0.9** |
| **H21K** | **Melozitna Rive** | **57.98** | **26** | P | **P** | **13 19 55.2** | **+0.1** |
| H21K | | | | | IAmb | IAmb | 13 20 01.8 | |
| | comp=Z,5.6nm,1.3s | | | | | | |
| **NEA2** | **Nenana** | **59.31** | **28** | P | **P** | **13 20 04.2** | **-0.2** |
| NEA2 | | | | | IAmb | IAmb | 13 20 09.5 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **60.26** | **28** | P | **P** | **13 20 10.6** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=248,slow=5.5,SNR=6.2 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.34** | **319** | P | **P** | **13 20 19.8** | **+1.2** |
| | comp=Z,3.7nm,0.6s,baz=86,slow=8.1,SNR=17 | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **SCRK** | **Sand Creek** | **61.43** | **29** | P | **P** | **13 20 19.0** | **-0.1** |
| **J26L** | **Joseph Creek** | **61.66** | **28** | P | **P** | **13 20 20.3** | **-0.2** |
| **KKAR** | **Karatay Array** | **62.02** | **308** | P | **P** | **13 20 23.9** | **+0.6** |
| **ARU** | **Arti** | **67.83** | **323** | P | **P** | **13 21 01.7** | **+0.9** |
| | comp=Z,2.9nm,0.4s,baz=105,slow=21,SNR=4.4 | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.30** | **316** | P | **P** | **13 21 04.4** | **+0.5** |
| **ARCES** | **ARCESS Array B** | **77.17** | **341** | P | **P** | **13 21 57.0** | **+0.8** |
| **ARCES** | **ARCESS Array B** | **77.17** | **341** | P | **P** | **13 21 57.0** | **+0.8** |
| | comp=Z,1.1nm,0.6s,baz=74,slow=10,SNR=5.4 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **PINE** | **Pine Mountain** | **77.94** | **47** | P | **P** | **13 22 00.7** | **-0.6** |
| PINE | | | | | IAmb | IAmb | 13 22 07.9 | |
| | comp=Z,5.2nm,1.4s | | | | | | |
| **FINES** | **FINESS Array B** | **81.53** | **334** | P | **P** | **13 22 19.8** | **-0.3** |
| | comp=Z,2.6nm,0.8s,baz=51,slow=4.4,SNR=9.2 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.82** | **52** | P | **P** | **13 22 22.9** | **+0.6** |
| | comp=Z,0.5nm,0.8s,baz=285,slow=7.4,SNR=4.2 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |

*NNC **19** 13:20:42.6±0.5, 50.°01N×78.°75E, h0km, mb3.2, mpv2.8, Error ellipse: s-maj=14.8km s-min=2.2km az=71.0, Suspected Mining explosion.*
*IDC **19** 13:20:43.9±1.1, 50.°04N×78.°58E, h0km, mbtmp2.5/2, ML1.9/2, Error ellipse: s-maj=14.7km s-min=6.7km az=70.0*

**ISC 19 13:20:43.3±1.8, 50.°07N±0.°08×78.°6E±0.°2, h0km, n16, σ0s77/27, 15C-10D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.52** | **356** | ⇓P | **Pg** | **13 20 53.8** | **+0.6** |
| KUR07 | | | | ⇓S | **Sb** | **13 21 02.9** | **-0.5** |
| **KUR06** | **Kurchatov Arra** | **0.54** | **357** | ⇓P | **Pg** | **13 20 54.4** | **+0.7** |
| KUR06 | | | | ⇓S | **Sb** | **13 21 03.4** | **-0.5** |
| **KUR14** | **Kurchatov Arra** | **0.55** | **2** | ⇑P | **Pb** | **13 20 54.7** | **-1.1** |
| KUR14 | | | | ⇑S | **Sb** | **13 21 03.2** | **-1.0** |
| **KUR15** | **Kurchatov Arra** | **0.55** | **360** | ⇓P | **Pb** | **13 20 55.0** | **-0.8** |
| KUR15 | | | | ⇑S | **Sb** | **13 21 04.0** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **0.56** | **358** | Pg | **Pb** | **13 20 55.0** | **-1.0** |
| | 0.7nm,0.3s,baz=171,slow=18,SNR=31 | | | | | | |
| KURBB | | | | Lg | Lg | 13 21 03.9 | |
| | 1.1nm,0.3s,baz=176,slow=32,SNR=31 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.56** | **358** | ⇓P | **Pg** | **13 20 54.7** | **+0.7** |
| | 21nm,0.7s | | | | | | |
| KURBB | | | | ⇑S | **Sb** | **13 21 04.2** | **-0.3** |
| | 46nm,0.6s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.56** | **356** | ⇓P | **Pb** | **13 20 55.2** | **-0.8** |
| KUR16 | | | | ⇑S | **Sb** | **13 21 04.0** | **-0.6** |
| **KUR17** | **Kurchatov Arra** | **0.57** | **354** | ⇑P | **Pb** | **13 20 55.5** | **-0.6** |
| KUR17 | | | | ⇓S | **Sb** | **13 21 05.1** | **+0.2** |
| **KUR05** | **Kurchatov Arra** | **0.58** | **358** | ⇑P | **Pg** | **13 20 55.0** | **+0.7** |
| KUR05 | | | | ⇓S | **Sb** | **13 21 04.2** | **-0.8** |
| **KUR04** | **Kurchatov Arra** | **0.60** | **359** | ⇑P | **Pb** | **13 20 56.1** | **-0.6** |
| KUR04 | | | | ⇓S | **Sb** | **13 21 05.2** | **-0.4** |
| **KURK** | **Kurchatov** | **0.65** | **3** | ⇑P | **Pg** | **13 20 56.2** | **+0.4** |
| | 11nm,0.8s | | | | | | |
| KURK | | | | ⇑S | **Sb** | **13 21 06.4** | **-0.8** |
| | 77nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **3.97** | **144** | ⇑Pg | **Pb** | **13 21 53.8** | **-0.4** |
| | 2.3nm,0.7s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 13 22 42.5 | |
| | 18nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **4.11** | **141** | ⇑Pg | **Pb** | **13 21 55.5** | **-1.0** |
| | 1.1nm,0.5s,baz=329,slow=15,SNR=15 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **13 22 36.3** | **+0.2** |
| | 1.6nm,0.6s,baz=352,slow=22,SNR=6.0 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 13 22 49.2 | |
| | 13nm,0.6s,baz=333,slow=40,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.11** | **141** | Pn | **Pn** | **13 21 47.9** | **+0.6** |
| | 0.1nm,0.3s,baz=320,slow=10,SNR=9.3 | | | | | | |
| MKAR | | | | Pg | **Pb** | **13 21 55.2** | **-1.3** |
| | 0.2nm,0.3s,baz=328,slow=15,SNR=15 | | | | | | |
| MKAR | | | | Lg | Lg | 13 22 50.2 | |
| | 0.9nm,0.3s,baz=333,slow=24,SNR=16 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.48** | **42** | I | I | 14 00 10.0 | |
| | baz=224,slow=313,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.48** | **42** | Pn | **Pn** | **13 22 07.1** | **+1.0** |
| | 0.1nm,0.3s,baz=224,slow=18,SNR=2.6 | | | | | | |
| ZALV | | | | Lg | Lg | 13 23 31.6 | |
| | 0.2nm,0.3s,baz=229,slow=24,SNR=2.4 | | | | | | |
| | 0.6nm,0.5s | | | | | | |

*NEIC **19** 13:23:53.9±1.5, 17.°7S±0.°2×178.°0W±0.°2, h553km±14km, mb4.4/16, Error ellipse: s-maj=38.1km s-min=17.7km az=150.0*
*IDC **19** 13:24:05.6±14.0, 17.°06S×179.°16W, h636km±130km, mb3.5/2, mbtmp4.4/3, Error ellipse: s-maj=180.4km s-min=71.7km az=129.0*

**ISC 19 13:23:53.5±0.8, 17.°6S±0.°2×178.°0W±0.°1, h550km, n29, σ0s99/30, mb4.3/10, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.74** | **267** | P | **P** | **13 25 15.2** | **+1.6** |
| **AFI** | **Afiamalu** | **7.05** | **60** | P | **P** | **13 25 40.6** | **-1.6** |
| **NIUE** | **Niue** | **7.84** | **102** | P | **P** | **13 25 49.4** | **-0.3** |
| **LIFNC** | **LIFOU** | **14.27** | **255** | P | **P** | **13 26 53.2** | **-2.3** |
| **PINNC** | **Pines Island,** | **14.52** | **248** | P | **P** | **13 26 59.9** | **+1.9** |
| **DZM** | **Mont Dzumac** | **15.27** | **251** | P | **P** | **13 27 07.3** | **+1.4** |
| | 2.6nm,0.6s,baz=247,slow=15,SNR=2.3 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.97** | **257** | P | **P** | **13 27 21.3** | **-0.7** |
| KOUNC | | | | | IAmb | IAmb | 13 27 22.4 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.40** | **240** | P | **P** | **13 29 21.7** | **+0.1** |
| **CTA** | **Charters Tower** | **33.85** | **260** | P | **P** | **13 29 50.0** | **-0.9** |
| | comp=Z,0.1nm,0.7s,baz=96,slow=14,SNR=1.9 | | | | | | |
| **BBOO** | **Buckleboo** | **43.87** | **241** | P | **P** | **13 31 11.2** | **-0.4** |
| BBOO | | | | | IAmb | IAmb | 13 31 50.7 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.85** | **259** | P | **P** | **13 31 18.8** | **-0.6** |
| WR0 | | | | | IAmb | IAmb | 13 31 38.6 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.01** | **259** | P | **P** | **13 31 19.7** | **-0.8** |
| WB0 | | | | | IAmb | IAmb | 13 31 37.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.03** | **259** | P | **P** | **13 31 19.9** | **-0.9** |
| **WRAB** | **Tennant Creek** | **45.03** | **259** | P | **P** | **13 31 19.9** | **-0.8** |
| WRAB | | | | | IAmb | IAmb | 13 31 23.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.04** | **259** | P | **P** | **13 31 20.2** | **-0.7** |
| | comp=Z,1.7nm,0.4s,baz=91,slow=8.1,SNR=47 | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.22** | **254** | P | **P** | **13 31 21.7** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.22** | **254** | P | **P** | **13 31 21.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.22** | **254** | P | **P** | **13 31 21.9** | **-0.2** |
| | comp=Z,13nm,0.6s,baz=85,slow=6.5,SNR=287 | | | | | | |
| ASAR | | | | PcP |

comp=E,78µm,0.5s
C27K IAML 13 32 40.1
comp=N,89µm,0.4s
**D25K Kavik River 0.61 242 Pg 13 32 34.5 -1.3**
**D25K Kavik River 0.61 242 Sg 13 32 42.7 -1.1**
**C24K Franklin Bluff 1.35 276 Pn 13 32 49.2 +0.4**
C24K Sg 13 33 07.3 +0.1
**D27M Malcolm River 1.43 103 Sg 13 33 10.8 +0.9**
**D27M Malcolm River 1.43 103 Pn 13 32 49.9 -0.1**
**D27M Malcolm River 1.43 103** IAML 13 33 11.7
comp=N,11µm,0.7s
D27M IAML 13 33 14.7
comp=E,7µm,0.5s
**D24K Happy Valley 1.48 253 Sg 13 33 12.6 +1.1**
**D24K Happy Valley 1.48 253 Pn 13 32 47.9 -2.7**
**D24K Happy Valley 1.48 253** IAML 13 33 13.7
comp=N,5µm,0.6s
D24K IAML 13 33 15.0
comp=E,4µm,0.6s
**E27K Coleen River 1.86 139 Sb 13 33 21.5 +0.1**
**E27K Coleen River 1.86 139 Pn 13 32 53.5 -2.5**
**E27K Coleen River 1.86 139** IAML 13 33 27.4
comp=E,4µm,0.7s
E27K IAML 13 33 27.4
comp=N,3µm,0.6s
**F26K Sheenjek River 1.95 172 Sb 13 33 23.8 -0.1**
**F26K Sheenjek River 1.95 172 Pn 13 32 57.8 +0.6**
**F26K Sheenjek River 1.95 172** IAML 13 33 28.0
comp=E,4µm,1.2s
F26K IAML 13 33 29.0
comp=N,4µm,0.8s
**TOLK Toolik Lake Re 1.95 242 Pn 13 32 54.5 -2.8**
**C23K Itkillik River 2.02 279 Pn 13 32 58.5 +0.5**
C23K IAML 13 33 31.3
comp=N,5µm,1.3s
C23K IAML 13 33 35.1
comp=E,3µm,1.0s
**E24K Your Creek 2.03 222 Pn 13 32 58.9 +0.6**
**F25K Christian Rive 2.05 188 Pn 13 32 59.2 +0.6**
F25K IAML 13 33 30.7
comp=N,4µm,0.8s
F25K IAML 13 33 32.0
comp=E,4µm,1.1s
**F25K Christian Rive 2.05 188 Sb 13 33 25.6 -1.4**
**E28M Babbage River 2.16 116 Pn 13 33 00.8 +0.7**
E28M IAML 13 33 35.2
comp=N,4µm,0.8s
E28M IAML 13 33 42.6
comp=E,3µm,0.9s
**D23K Nanushuk River 2.17 255 Pn 13 33 00.7 +0.6**
**D28M Stokes Point 2.18 95 Pn 13 33 01.2 +0.9**
**BMAR Burnt Mountain 2.20 177 Pn 13 33 01.2 +0.6**
**E23K Chandalar 2.33 230 Sn 13 33 32.6 +1.5**
**E23K Chandalar 2.33 230 Pn 13 33 02.7 +0.2**
**F24K Squaw Lake 2.38 209 Pn 13 33 03.6 +0.5**
**F28M Old Crow 2.72 135** Pn **Pn 13 33 08.1 +0.3**
F28M IAML 13 33 55.4
comp=E,2µm,0.5s
**E29M Blow River 2.79 113 Pn 13 33 09.3 +0.6**
E29M IAML 13 34 02.2
comp=E,2µm,0.6s
**D22K Ayikyak River 2.88 259 Pn 13 33 10.3 +0.4**
D22K IAML 13 34 04.5
comp=E,1µm,1.3s
D22K IAML 13 34 09.6
comp=N,1µm,1.2s
**B22K Teshekpuk Lake 3.03 288 Pn 13 33 12.5 +0.6**
B22K IAML 13 34 06.0
comp=E,2µm,1.2s
B22K IAML 13 34 11.5
comp=N,1µm,1.4s
**G27K Doyon Strip 3.06 156 Pn 13 33 12.3 -0.2**
**FYU Fort Yukon 3.07 183 Pn 13 33 12.6 +0.1**
**G24K Hadweenzic Riv 3.09 200 Pn 13 33 12.4 -0.4**
G24K IAML 13 34 10.5
comp=E,2µm,1.1s
**COLD Coldfoot 3.11 222 Pn 13 33 13.6 +0.6**
**H25L Birch Creek 3.38 187 Pn 13 33 17.2 +0.4**
**B21K Ikpikpuk River 3.41 275** Pn **Pn 13 33 17.8 +0.6**
B21K IAML 13 34 25.4
comp=N,1µm,1.1s
B21K IAML 13 34 44.1
comp=E,805nm,1.2s
**E21K Killik River 3.48 254 Pn 13 33 18.4 +0.2**
E21K IAML 13 34 19.5
comp=N,821nm,1.4s
E21K IAML 13 34 21.2
comp=E,748nm,1.1s
**G23K Bananza Creek 3.50 216 Pn 13 33 18.4 0.0**
G23K IAML 13 34 18.5
comp=E,1µm,1.1s
**C21K Knifeblade Rid 3.54 267 Pn 13 33 19.9 +0.9**
**H27K Steamboat Moun 3.63 158 Pn 13 33 20.7 +0.5**
**G22K Bettles 3.67 226 Pn 13 33 21.1 +0.4**
**A22K Sinclair Lake 3.69 297 Pn 13 33 21.4 +0.3**
**F30M Barrier River 3.89 117 Pn 13 33 24.9 +1.1**
**H24K Noodor Dome 3.97 198** IAML 13 34 39.2
comp=E,791nm,1.3s
H24K IAML 13 34 40.0
comp=N,577nm,0.8s
**F21K Alatna River 3.99 237 Pn 13 33 25.6 +0.4**
**PRP Porcupine Dome 4.13 184 Pn 13 33 27.1 -0.1**
PRP IAML 13 34 36.4
comp=E,404nm,1.4s
PRP IAML 13 34 37.7
comp=N,560nm,0.8s
**G30M tAoh Zraii Nji 4.16 125** IAML 13 34 41.3
comp=N,669nm,0.8s
G30M IAML 13 34 51.1
comp=E,539nm,1.2s
**H29M Whitestone 4.20 141** Pn **Pn 13 33 28.8 +0.7**
**H23K Yukon River 4.21 207** IAML 13 34 45.9
comp=E,651nm,1.2s
H23K IAML 13 34 52.6
comp=N,468nm,1.3s
**B20K Meade River 4.28 281** Pn **Pn 13 33 29.8 +0.7**
B20K IAML 13 35 13.0
comp=N,612nm,1.5s
**INK Inuvik 4.29 102** Pn **Pn 13 33 29.1 -0.1**
**INK Inuvik 4.29 102** Pn **Pn 13 33 29.8 +0.6**
comp=N,4.9nm,0.3s,baz=315,slow=17,SNR=309
INK Sn **Sn 13 34 17.0 -2.3**
comp=N,23nm,0.3s,baz=249,slow=22,SNR=5.0
INK Lg Lg 13 34 38.9
comp=N,29nm,0.3s,baz=23,slow=20,SNR=5.3
INK LR LR 13 35 43.4
comp=N,269nm,20.9s,baz=294,slow=47
comp=N,32nm,0.5s
**D20K Etivluk River 4.29 263 Pn 13 33 30.7 +1.3**
**A21K Barrow 4.30 299 Pn 13 33 29.8 +0.4**
**E20K Nigu River 4.31 257 Pn 13 33 30.3 +0.7**
**I26K Coal Creek Min 4.38 171 Pn 13 33 30.9 +0.4**
**EPYK Eagle Plains 4.47 133 Pn 13 33 32.1 +0.3**
**H22K Ishtalitna Cre 4.48 217 Pn 13 33 32.0 +0.1**
**G21K Allakaket 4.49 230 Pn 13 33 31.9 -0.2**
**G21K Allakaket 4.49 230** IAML 13 35 12.4
comp=E,390nm,1.1s
**I28M Miner Creek 4.59 153** IAML 13 35 00.0
comp=E,509nm,1.0s
I28M IAML 13 35 01.5
comp=N,375nm,0.8s
**POKR Poker Plat Res 4.63 194 Pn 13 33 34.4 +0.5**
**POKR Poker Plat Res 4.63 194** IAML 13 34 55.2
comp=N,351nm,1.0s
**F31M Tsiigehtchic 4.63 113 Pn 13 33 34.3 +0.4**
**G31M Satah River 4.77 119 Pn 13 33 36.5 +0.6**
**F20K Avaraart Lake 4.78 243 Pn 13 33 36.5 +0.6**
**I23K Minto, Yukon-K 4.81 203** IAML 13 35 06.1
comp=E,401nm,1.2s
I23K IAML 13 35 11.7
comp=N,454nm,1.1s
**MDM Murphy Dome 4.86 197** IAML 13 34 57.1
comp=N,260nm,1.1s
MDM IAML 13 34 57.2
comp=E,414nm,1.0s
**D19K Kuna River 4.89 263 Pn 13 33 38.4 +0.9**
**D19K Kuna River 4.89 263** IAML 13 35 16.8
comp=E,297nm,1.4s
**COLA College 4.90 195 Pn 13 33 37.7 +0.1**
**ILAR Eielson Array 4.93 190 Pn 13 33 38.1 0.0**
**ILAR Eielson Array 4.93 190** Pn **Pn 13 33 38.4 +0.3**
comp=E,5.0nm,0.3s,baz=1.0,slow=10.0,SNR=170
ILAR Sn **Sn 13 34 35.7 +0.6**
comp=E,11nm,0.3s,baz=12,slow=19,SNR=4.9
ILAR LR LR 13 36 04.0
comp=E,112nm,21.0s,baz=7.5,slow=43
comp=E,30nm,0.6s
**I29M Ogilvie Camp, 4.96 146** IAML 13 34 40.8
comp=E,399nm,0.7s
I29M IAML 13 35 09.0
comp=N,394nm,0.9s
**IMAR Indian Mountai 4.96 227 Pn 13 33 37.5 -1.0**
**H21K Meloziina Rive 5.00 221** IAML 13 35 10.7
comp=N,298nm,1.4s
H21K IAML 13 35 15.3
comp=E,316nm,1.1s
**J25K Salcha River, 5.03 183** IAML 13 35 12.5
comp=N,232nm,1.0s
**E19K Redstone River 5.03 250 Pn 13 33 39.4 -0.1**
**E19K Redstone River 5.03 250** IAML 13 35 11.6
comp=N,240nm,1.3s
E19K IAML 13 35 35.4
comp=E,242nm,1.1s
**EGAK Eagle 5.07 162** IAML 13 34 40.8
comp=E,319nm,0.7s
EGAK IAML 13 35 22.5
comp=E,375nm,1.2s
**CCB Clear Creek Bu 5.12 194** IAML 13 35 11.3
comp=E,310nm,1.2s
CCB IAML 13 35 11.4
comp=N,199nm,1.2s
**MLY Manley 5.13 209 Pn 13 33 41.0 +0.1**
**J26L Joseph Creek 5.17 174** IAML 13 35 18.9
comp=N,211nm,0.9s
**I21K Tanana 5.23 215 Pn 13 33 42.6 +0.5**
**C19K Lookout Ridge 5.23 271** IAML 13 35 32.1
comp=E,185nm,1.5s
C19K IAML 13 35 33.4
comp=N,311nm,1.4s
**HDA Harding Lake 5.29 190 Pn 13 33 43.9 +0.8**
**HDA Harding Lake 5.29 190** IAML 13 35 26.6
comp=N,299nm,1.1s
**NEA2 Nenana 5.31 200 Pn 13 33 43.3 0.0**
**NEA2 Nenana 5.31 200** IAML 13 35 22.9
comp=E,199nm,1.3s
**WRH Wood River Hil 5.32 195** IAML 13 35 16.8
comp=N,200nm,0.9s
WRH IAML 13 35 32.2
comp=E,245nm,1.1s
**I30M Mount Dempster 5.49 139 Pn 13 33 46.0 +0.2**
**F19K Shaleruckik Mo 5.55 246 Pn 13 33 46.4 -0.2**
**A19K Wainwright 5.62 284 Pn 13 33 48.1 +0.7**
**K27K Chicken 5.72 168 Pn 13 33 49.8 +0.9**
**K24K Donnelly Dome 5.85 184 Pn 13 33 51.6 +0.9**
**RIDG Independent Ri 5.90 180 Pn 13 33 52.5 +1.0**
**C18K Utukok River 5.91 268 Pn 13 33 51.6 0.0**
**B18K Kokolik River 5.96 276 Pn 13 33 52.2 +0.1**
**DAWY Dawson 5.98 156 Pn 13 33 53.1 +0.7**
**E18K Tukpahlearik C 6.18 257 Pn 13 33 55.8 +0.5**
**RND Reindeer 6.44 196 Pn 13 33 59.5 +0.7**
**K29M Barlow Dome 6.48 150 Pn 13 34 00.5 +1.0**
**DHY Denali Highway 6.65 190 Pn 13 34 03.5 +1.7**
**C17K DeLong Mountai 6.66 269 Pn 13 34 00.9 -0.9**
**PAX Paxson 6.68 182 Pn 13 34 03.0 +0.8**
**BCAR Beaver Creek A 6.70 168** Pn **Pn 13 34 02.6 +0.3**
**RDOG Red Dog Mine 6.71 265 Pn 13 34 02.1 -0.4**
**GCSA Galena City Sc 6.75 229 Pn 13 34 03.8 +0.8**
**E17K Hotham Inlet 6.76 256 Pn 13 34 03.2 0.0**
**A36M Sachs Harbour 6.87 61** Pn **Pn 13 34 04.0 -0.6**
**D17K Noatak River 6.91 263 Pn 13 34 04.2 -1.0**
**F17K Baldwin Pennin 6.91 250 Pn 13 34 05.1 -0.1**
**WAT1 Susitna Watana 6.98 194 Pn 13 34 07.4 +1.2**
**WAT7 Susitna Watana 7.00 195 Pn 13 34 08.1 +1.6**
**J19K Poorman 7.06 222 Pn 13 34 08.0 +0.8**
**C36M Paulatuk 7.30 82 Pn 13 34 09.2 -1.3**
**G17K Kiwalik Mounta 7.30 243 Pn 13 34 10.3 -0.4**
**M27K Edge Creek, AK 7.39 169 Pn 13 34 12.9 +0.9**
**H17K Granite Mounta 7.47 238 Pn 13 34 13.1 +0.2**
**C16K Lisburne Hills 7.49 269 Pn 13 34 11.8 -1.2**
**G16K Koyuk River 7.92 246 Pn 13 34 18.5 -0.4**
**J14K Nanvaranak Lak 10.18 237** Pn **Pn 13 34 50.1 +0.2**
**WRGLY Wrigley 10.64 117** Pn **Pn 13 34 55.2 -1.1**
**P33M Teslin, Yukon 10.71 146** Pn **Pn 13 34 58.0 +0.7**
**P32M Atlin 11.12 149** Pn **Pn 13 35 03.1 +0.2**
**KDAK Kodiak Island 12.35 200** LR LR 13 40 27.3
comp=E,479nm,18.8s,baz=199,slow=39
**DLBC Dease Lake 12.91 143** Pn **Pn 13 35 28.3 +0.9**
comp=E,0.7nm,0.3s,baz=319,slow=9.4,SNR=16
DLBC LR LR 13 40 50.6
comp=E,152nm,18.0s,baz=316,slow=39
comp=E,4.8nm,0.5s
**SIT Sitka 13.29 157 Pn 13 35 33.0 +0.7**
**YKA Yellowknife Ar 14.06 106** Pn **Pn 13 35 39.1 -3.8**
**YKA Yellowknife Ar 14.06 106** Pn Pn 13 35 38.2 -4.7
comp=E,1.7nm,0.3s,baz=39,slow=12,SNR=30
YKA Sn Sn 13 38 04.9 -14
comp=E,3.4nm,0.3s,baz=298,slow=36,SNR=10
comp=E,7.8nm,0.6s
**RES Resolute Bay 15.67 49** Pn **Pn 13 36 01.5 -2.9**
comp=E,1.0nm,0.3s,baz=270,slow=20,SNR=2.5
comp=E,6.6nm,0.4s
**B08A Colville Reser 24.67 136 P P 13 37 45.4 +0.7**
B08A IAmb IAmb 13 38 01.6
comp=E,5.3nm,0.7s
**LTY Liberty 25.39 139** IAmb IAmb 13 37 58.0
comp=E,13nm,1.2s
**MSO Missoula 27.46 130 P P 13 38 08.8 -1.2**
**EGMT Eagleton 27.55 123** IAmb IAmb 13 38 14.4
comp=E,6.6nm,0.9s
**MA2 Magadan 27.95 282** LR LR 13 50 40.5
comp=Z,83nm,19.5s,baz=68,slow=39
**FRB Frobisher Bay 28.86 64** LR LR 13 50 46.8
comp=Z,112nm,19.4s,baz=256,slow=38
**PD31 Pinedale Array 32.41 127** IAmb IAmb 13 39 00.9
comp=Z,3.8nm,0.9s
**PDAR Pinedale Array 32.41 127 P P 13 38 55.0 +1.1**
**PDAR Pinedale Array 32.41 127 P P 13 38 56.0 +2.0**
comp=Z,1.6nm,0.6s,baz=5.7,slow=5.6,SNR=13
PDAR LR LR 13 53 41.4
comp=Z,25nm,19.0s,baz=265,slow=39
comp=Z,1.6nm,0.6s
**YAK Yakutsk 32.96 300** LR LR 13 53 03.0
comp=Z,64nm,19.2s,baz=60,slow=38
**NVAR Mina Array Bea 34.32 141 P P 13 39 12.8 +2.2**
comp=Z,1.2nm,0.8s,baz=344,slow=6.7,SNR=12
comp=Z,1.2nm,0.8s
**SCHQ Schefferville 36.29 73 P P 13 39 26.8 -0.3**
comp=Z,5.5nm,0.9s,baz=324,slow=9.9,SNR=4.3
comp=Z,5.5nm,0.9s
**JFWS Jewell Farm 38.33 105 P P 13 39 45.6 +1.1**
JFWS IAmb IAmb 13 39 50.5
comp=Z,8.4nm,0.8s
**ARCES ARCESS Array B 40.95 5 P P 13 40 04.7 -1.3**
comp=Z,2.3nm,0.9s,baz=10,slow=7.6,SNR=4.4
comp=Z,2.3nm,0.9s
**MGMO Mountain Grove 42.84 111 P P 13 40 22.7 +0.9**
MGMO IAmb IAmb 13 40 27.6
comp=Z,13nm,1.4s
**ASAJ Asahikawa 43.49 273** LR LR 13 59 58.9
comp=Z,79nm,20.8s,baz=89,slow=38
**WVT Waverly 45.24 107 P P 13 40 41.2 +0.2**
WVT IAmb IAmb 13 40 46.8
comp=Z,6.5nm,0.7s
**CLTN Cedars of Leba 45.78 105** IAmb IAmb 13 40 50.4
comp=Z,12nm,1.2s
**OXF Oxford 46.19 110 P P 13 40 49.1 +0.6**
**TXAR Lajitas Array 46.63 128 P P 13 40 53.1 +0.9**
comp=Z,0.4nm,0.6s,baz=353,slow=8.8,SNR=4.9
comp=Z,0.4nm,0.6s
**FINES FINESS Array B 49.07 6 P P 13 41 11.1 +0.5**
comp=Z,1.2nm,0.5s,baz=354,slow=8.7,SNR=11
comp=Z,1.2nm,0.5s
**HFS Hagfors 49.63 14 P P 13 41 15.3 +0.3**
comp=Z,2.0nm,0.5s,baz=356,slow=4.5,SNR=18
comp=Z,2.0nm,0.5s
**ZALV Zalesovo Beam 51.58 325 P P 13 41 29.8 +0.2**
comp=Z,0.6nm,0.4s,baz=27,slow=9.7,SNR=2.8
comp=Z,0.6nm,0.4s
**MJAR Matsushiro Arr 51.75 273 P P 13 41 32.6 +1.4**
comp=Z,3.3nm,0.9s,baz=8.4,slow=7.9,SNR=9.2
comp=Z,3.3nm,0.9s
**EKA Eskdalemuir Ar 52.30 27 P P 13 41 34.1 -0.9**
comp=Z,2.5nm,0.8s,baz=321,slow=6.7,SNR=6.0
comp=Z,2.5nm,0.8s
**JHJ Hachijo jima 2 54.29 269** LR LR 14 08 07.3
comp=Z,24nm,18.2s,baz=347,slow=39
**KSRS Korea Array 54.50 282 P P 13 41 51.5 +0.1**
comp=Z,1.1nm,0.8s,baz=16,slow=7.8,SNR=5.5
comp=Z,1.1nm,0.8s
**KURBB Kurchatov Arra 55.95 328 P P 13 42 03.7 +2.0**
comp=Z,1.2nm,0.7s,baz=11,slow=7.3,SNR=8.7
comp=Z,1.2nm,0.7s
**HHC Hu-ho-hao-te 56.78 298** *e*P **P 13 42 06.5 -1.4**
HHC pP sP 13 42 12.3 -0.4
HHC sP pP 13 42 16.8 +5.4
HHC pmax pmax
comp=Z,12nm,0.5s
HHC pmax pmax
comp=Z,68nm,4.9s
**MKAR Makanchi Array 58.88 324 P P 13 42 21.3 -1.2**
comp=Z,0.4nm,0.7s,baz=29,slow=5.2,SNR=2.4
comp=Z,0.4nm,0.7s
**AKASG Malin Array Be 59.92 4 P P 13 42 29.6 +0.1**
comp=Z,1.0nm,0.5s,baz=357,slow=6.6,SNR=4.4
comp=Z,1.0nm,0.5s
**ESDC Sonseca Array 67.31 32 P P 13 43 18.6 0.0**
comp=Z,0.6nm,0.8s,baz=341,slow=6.8,SNR=5.3
comp=Z,0.6nm,0.8s
**PZH PanZhiHua 73.08 301 P P 13 43 55.4 +1.2**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.5s
**CMAR Chiang Mai Arr 81.49 301 P P 13 44 43.5 +2.2**
comp=Z,1.6nm,0.6s,baz=357,slow=6.2,SNR=9.6
comp=Z,1.6nm,0.6s

**IDC 19 13:46:24.2±4.2, 22°.96S×178°.42W, h0km, mb3.9/4, mbtmp3.9/4, Error ellipse: s-maj=110.0km s-min=38.1km az=31.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **36.42** | **247** | P | P | 13 53 30.4 | -0.3 |
| | 1.0nm,0.5s,baz=74,slow=6.1,SNR=3.5 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **43.63** | **259** | P | P | 13 54 30.5 | -0.3 |
| | 0.8nm,0.6s,baz=96,slow=7.0,SNR=19 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.93** | **265** | P | P | 13 54 33.3 | +0.1 |
| | 2.0nm,0.5s,baz=104,slow=8.1,SNR=35 | | | | | | |
| | 2.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.12** | **180** | P | P | 13 57 19.8 | +0.2 |
| | 0.5nm,0.6s,baz=351,slow=0.5,SNR=7.1 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **141.89** | **350** | PKP | PKPdf | 14 05 56.1 | -1.4 |
| | 2.4nm,0.9s,baz=108,slow=4.7,SNR=5.7 | | | | | | |

*IDC **19** 14:12:56.9±6.3, 15°.34S×178°.67W, h385km±65km, mb3.5/9, mbtmp4.2/9, Error ellipse: s-maj=24.8km s-min=19.6km az=136.0*
*NEIC **19** 14:12:58.8±1.3, 15°.54S±0°.10×178°.4W±0°.1, h395km±6km, mb4.2/61, Error ellipse: s-maj=18.7km s-min=12.2km az=123.0*

**ISC 19 14:12:58.1±0.5, 15°.45S±0°.09×178°.5W±0°.1, h400km, n94, σ1s01/94, mb4.2/34, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.03** | **235** | Pn | Pn | **14 14 13.2** | **+2.6** |
| **AFI** | **Afiamalu** | **6.66** | **78** | Pn | Pn | **14 14 37.5** | **-0.7** |
| **NIUE** | **Niue** | **8.93** | **115** | | Pn | **14 15 02.4** | **-1.4** |
| **RAO** | **Raoul Island** | **13.75** | **178** | P | P | **14 15 56.1** | **-0.8** |
| **URZ** | **Urewera** | **23.05** | **189** | P | P | **14 17 29.1** | **-1.1** |
| | 6.4nm,0.7s,baz=0.0,slow=5.1,SNR=2.1 | | | | | | |
| | 6.4nm,0.7s | | | | | | |
| **RTZ** | **Ruatahuna** | **23.42** | **189** | P | P | **14 17 32.7** | **-1.0** |
| RTZ | | | | IAmb | IAmb | 14 18 13.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **BKZ** | **Black Stump Fm** | **24.04** | **190** | P | P | **14 17 38.6** | **-0.5** |
| BKZ | | | | IAmb | IAmb | 14 18 17.3 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **MRZ** | **Mangatainoka R** | **25.65** | **190** | P | P | **14 17 53.4** | **0.0** |
| **QRZ** | **Quartz Range** | **26.47** | **195** | P | P | **14 18 01.2** | **+0.5** |
| **GVZ** | **Greta Valley S** | **28.38** | **193** | P | P | **14 18 17.0** | **-0.5** |
| **OXZ** | **Oxford** | **28.95** | **194** | P | P | **14 18 22.4** | **-0.1** |
| **FOZ** | **Fox Glacier** | **29.72** | **197** | P | P | **14 18 29.5** | **+0.2** |
| **MLZ** | **Mavora Lakes** | **31.89** | **198** | P | P | **14 18 48.9** | **+0.7** |
| **HMH** | **Humu'ula Sheep** | **41.53** | **34** | P | P | **14 20 09.6** | **+0.6** |
| **WRA** | **Warramunga Arr** | **45.06** | **257** | P | P | **14 20 35.2** | **-1.4** |
| | comp=Z,0.4nm,0.6s,baz=96,slow=8.4,SNR=5.6 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.44** | **252** | P | P | **14 20 38.8** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.44** | **252** | P | P | **14 20 38.2** | **-1.3** |
| **ASAR** | **Alice Springs** | **45.44** | **252** | P | P | **14 20 38.9** | **-0.6** |
| | comp=Z,3.3nm,0.4s,baz=84,slow=8.7,SNR=139 | | | | | | |
| | comp=Z,3.3nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **51.03** | **243** | P | P | **14 21 20.9** | **-0.6** |
| FORT | | | | IAmb | IAmb | 14 21 58.2 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **71.30** | **345** | P | P | **14 23 34.5** | **-0.8** |
| | comp=Z,2.6nm,0.8s,baz=99,slow=9.1,SNR=2.3 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.59** | **180** | P | P | **14 23 56.0** | **+1.5** |
| QSPA | | | | IAmb | IAmb | 14 23 59.4 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.59** | **180** | P | P | **14 23 56.0** | **+1.5** |
| | comp=Z,3.4nm,1.1s,baz=117,slow=11,SNR=8.7 | | | | | | |
| | comp=Z,3.4nm,1.1s | | | | | | |
| **HOPS** | **Hopland Field** | **74.88** | **42** | P | P | **14 23 57.5** | **+1.1** |
| **KMRM** | **Mail Ridge** | **75.19** | **40** | P | P | **14 23 59.7** | **+1.6** |
| **O02D** | **Mt. Diablo Mer** | **75.74** | **41** | P | P | **14 24 02.7** | **+1.4** |
| **KSXB** | **Camp Six Broad** | **76.02** | **39** | P | P | **14 24 04.3** | **+1.5** |
| **CMB** | **Columbia Colle** | **76.11** | **44** | P | P | **14 24 04.2** | **+0.9** |
| **YBH** | **Yreka Blue Hor** | **76.67** | **39** | P | P | **14 24 07.7** | **+1.3** |
| YBH | | | | IAmb | IAmb | 14 24 21.2 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **WAKR** | **Walker** | **76.99** | **44** | P | P | **14 24 09.5** | **+1.1** |
| **MPK** | **Martis Peak** | **77.02** | **43** | P | P | **14 24 08.9** | **+0.3** |
| MPK | | | | IAmb | IAmb | 14 24 11.0 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **HUMO** | **Hull Mountain** | **77.03** | **39** | P | P | **14 24 09.5** | **+1.2** |
| HUMO | | | | IAmb | IAmb | 14 24 10.9 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **PNTR** | **Pine Nut** | **77.19** | **43** | P | P | **14 24 10.4** | **+0.9** |
| PNTR | | | | IAmb | IAmb | 14 24 11.8 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **L04D** | **Klamath Falls** | **77.20** | **39** | P | P | **14 24 10.3** | **+0.9** |
| L04D | | | | IAmb | IAmb | 14 24 11.5 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **DSP** | **Deep Springs** | **77.39** | **45** | P | P | **14 24 11.4** | **+1.1** |
| **I03D** | **Drain, OR** | **77.43** | **38** | P | P | **14 24 11.1** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **77.71** | **44** | P | P | **14 24 13.5** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **77.71** | **44** | P | P | **14 24 13.4** | **+1.0** |
| | comp=Z,2.2nm,0.8s,baz=227,slow=9.2,SNR=19 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **NV11** | **Mina Array Sit** | **77.81** | **44** | P | P | **14 24 13.8** | **+1.0** |
| **GMN** | **Gold Mountain** | **77.85** | **46** | P | P | **14 24 13.8** | **+0.6** |
| **MZP** | **Montezuma Peak** | **77.96** | **45** | P | P | **14 24 14.3** | **+0.4** |
| **KVN** | **Kaiserville** | **78.17** | **44** | P | P | **14 24 15.7** | **+0.8** |
| **TPH** | **Tonopah** | **78.26** | **45** | P | P | **14 24 16.4** | **+1.1** |
| **TPNV** | **Topopah Spring** | **78.37** | **46** | P | P | **14 24 16.6** | **+0.6** |
| TPNV | | | | IAmb | IAmb | 14 24 17.4 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **J05D** | **Fort Rock, OR** | **78.45** | **39** | P | P | **14 24 17.1** | **+0.9** |
| J05D | | | | IAmb | IAmb | 14 24 18.1 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **PINE** | **Pine Mountain** | **78.91** | **39** | P | P | **14 24 19.8** | **+1.1** |
| PINE | | | | IAmb | IAmb | 14 24 20.7 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **SHPR** | **Sheep Range** | **78.92** | **47** | P | P | **14 24 20.1** | **+1.2** |
| **L18K** | **Granite Mounta** | **79.30** | **10** | P | P | **14 24 20.6** | **+0.5** |
| L18K | | | | IAmb | IAmb | 14 24 21.2 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **R11B** | **Troy Canyon, C** | **79.52** | **45** | P | P | **14 24 23.3** | **+1.2** |
| **I07A** | **Izee** | **79.94** | **39** | P | P | **14 24 24.6** | **+0.5** |
| I07A | | | | IAmb | IAmb | 14 24 25.9 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **J18K** | **Innoko River** | **80.46** | **10** | P | P | **14 24 26.3** | **+0.1** |
| J18K | | | | IAmb | IAmb | 14 24 34.8 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **U33K** | **Whale Pass** | **80.78** | **24** | P | P | **14 24 29.1** | **+1.1** |
| U33K | | | | IAmb | IAmb | 14 24 41.9 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **G08A** | **Pilot Rock** | **80.92** | **38** | P | P | **14 24 29.6** | **+0.4** |
| G08A | | | | IAmb | IAmb | 14 24 30.8 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| **MTPU** | **Mount Pierson** | **81.74** | **47** | P | P | **14 24 35.3** | **+1.3** |
| MTPU | | | | IAmb | IAmb | 14 24 36.7 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **MVU** | **Marysvale** | **81.93** | **47** | P | P | **14 24 36.2** | **+1.5** |
| **MSU** | **Marysvale** | **81.95** | **47** | P | P | **14 24 36.7** | **+1.8** |
| **HLID** | **Hailey** | **82.83** | **41** | P | P | **14 24 39.6** | **+0.4** |
| **TMUT** | **Trail Mountain** | **82.98** | **46** | P | P | **14 24 41.7** | **+1.5** |
| TMUT | | | | IAmb | IAmb | 14 24 42.5 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,5.4nm,0.7s | | | | | | | |
| **HVU** | **Hansel Valley** | **83.05** | **43** | P | **P** | **14 24 41.3** | **+1.0** |
| HVU | | | | IAmb | IAmb | 14 24 42.0 | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **SCRK** | **Sand Creek** | **83.51** | **15** | P | **P** | **14 24 41.5** | **-0.6** |
| SCRK | | | | IAmb | IAmb | 14 24 42.7 | |
| | comp=Z,3.6nm,1.0s | | | | | | | |
| **IL31** | | **83.52** | **13** | P | **P** | **14 24 41.0** | **-0.8** |
| IL31 | | | | IAmb | IAmb | 14 24 41.3 | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.52** | **13** | P | **P** | **14 24 41.3** | **-0.7** |
| **ILAR** | **Eielson Array** | **83.52** | **13** | P | **P** | **14 24 41.0** | **-1.0** |
| | comp=Z,1.0nm,0.5s,baz=231,slow=5.5,SNR=14 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **J25K** | **Salcha River,** | **83.72** | **14** | P | **P** | **14 24 42.5** | **-0.5** |
| J25K | | | | IAmb | IAmb | 14 24 43.3 | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **J26L** | **Joseph Creek** | **84.05** | **14** | P | **P** | **14 24 44.8** | **+0.1** |
| J26L | | | | IAmb | IAmb | 14 24 45.6 | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **BELA** | **Belgrano 2** | **84.60** | **173** | P | **P** | **14 24 47.9** | **+0.6** |
| **TX31** | **Lajitas Ar. Si** | **84.74** | **58** | P | **P** | **14 24 50.4** | **+1.4** |
| **TXAR** | **Lajitas Array** | **84.74** | **58** | P | **P** | **14 24 50.5** | **+1.5** |
| **TXAR** | **Lajitas Array** | **84.74** | **58** | P | **P** | **14 24 50.7** | **+1.7** |
| | comp=Z,1.5nm,0.8s,baz=221,slow=5.9,SNR=21 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **DLMT** | **Dillon** | **84.83** | **40** | P | **P** | **14 24 49.8** | **+0.7** |
| DLMT | | | | IAmb | IAmb | 14 24 50.5 | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **FXWY** | **Fox Creek** | **85.04** | **42** | P | **P** | **14 24 51.2** | **+0.9** |
| **YHL** | **Hebgen Lake** | **85.48** | **41** | P | **P** | **14 24 53.4** | **+0.8** |
| YHL | | | | IAmb | IAmb | 14 24 54.9 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **PD31** | **Pinedale Array** | **85.62** | **44** | P | **P** | **14 24 53.4** | **+0.2** |
| PD31 | | | | IAmb | IAmb | 14 24 53.8 | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **85.62** | **44** | P | **P** | **14 24 53.4** | **+0.2** |
| | comp=Z,1.4nm,0.6s,baz=211,slow=3.0,SNR=16 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **LYMT** | **Lyon Mountain** | **85.77** | **39** | P | **P** | **14 24 53.9** | **+0.1** |
| **ARCES** | **ARCESS Array B** | **123.89** | **350** | PKP | **PKPdf** | **14 31 08.2** | **-0.7** |
| | comp=Z,1.1nm,0.6s,baz=56,slow=3.2,SNR=5.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **142.98** | **317** | PKP | **PKPdf** | **14 31 43.1** | **-2.4** |
| | comp=Z,1.2nm,0.9s,baz=88,slow=3.8,SNR=5.0 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **144.71** | **306** | PKP | **PKPab** | **14 31 48.9** | **0.0** |
| | comp=Z,6.0nm,0.5s,baz=71,slow=6.5,SNR=13 | | | | | | | |
| **GEC2** | **GERESS Array S** | **145.23** | **346** | | **PKPab** | **14 31 49.5** | **-0.8** |
| **GERES** | **GERESS Array B** | **145.23** | **346** | PKPbc | **PKPbc** | **14 31 48.9** | **-0.7** |
| | comp=Z,0.6nm,0.6s,baz=0.0,slow=1.0,SNR=6.4 | | | | | | | |
| **CONA** | **Conrad Observa** | **145.51** | **343** | *i* PKP | **PKPbc** | **14 31 50.2** | **-0.3** |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **145.59** | **342** | *e*PKP | **PKPbc** | **14 31 50.5** | **-1.1** |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **MOA** | **Molln** | **146.01** | **345** | *e*PKP | **PKPbc** | **14 31 51.6** | **-0.3** |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **LESA** | **Schwarzleotal** | **146.80** | **346** | *e*PKP | **PKPbc** | **14 31 53.5** | **-0.7** |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **SOKA** | **Soboth** | **146.88** | **343** | *e*PKP | **PKPbc** | **14 31 53.3** | **-1.1** |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **RETA** | **Reutte** | **147.15** | **348** | *i* PKiKP | **PKPbc** | **14 31 54.6** | **-0.5** |
| | comp=Z,0.4nm,0.2s | | | | | | | |
| **WTTA** | **Wattenberg** | **147.18** | **347** | *i* PKiKP | **PKPbc** | **14 31 54.9** | **-0.4** |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **147.21** | **348** | *i* PKiKP | **PKPbc** | **14 31 55.0** | **-0.3** |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| **MYKA** | **Terra Mystica** | **147.30** | **344** | *e*PKiKP | **PKPbc** | **14 31 54.4** | **-1.1** |
| | comp=Z,1.8nm,0.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **147.31** | **348** | *i* PKiKP | **PKPbc** | **14 31 55.4** | **-0.2** |
| | comp=Z,0.5nm,0.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **147.47** | **346** | *e*PKiKP | **PKPbc** | **14 31 54.9** | **-1.1** |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **147.60** | **348** | *i* PKiKP | **PKPbc** | **14 31 56.2** | **-0.2** |
| | comp=Z,0.1nm,0.2s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **148.07** | **349** | | **PKiKP** | **14 31 57.8** | **-1.4** |
| **FNA** | **Florina** | **149.43** | **330** | | **PKPbc** | **14 32 00.2** | **-0.8** |
| **TORD** | **Torodi Ar. Bea** | **177.71** | **184** | PKP | **PKPdf** | **14 32 21.3** | **-0.9** |
| | comp=Z,0.2nm,0.6s,baz=230,slow=3.5,SNR=3.4 | | | | | | | |

**IDC 19 14:14:00.1**±15.0,**17°.08S×178°.65W,h531**km±188km,
**mb2.8/3,mbtmp3.7/3,Error ellipse: s-maj=283.5km
s-min=58.1km az=162.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.56** | **259** | P | P | 14 21 25.0 | -0.2 |
| | 0.2nm,0.4s,baz=92,slow=7.1,SNR=5.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.80** | **253** | P | P | 14 21 26.8 | -0.2 |
| | 2.6nm,0.6s,baz=89,slow=8.4,SNR=9.3 | | | | | | |
| | 2.6nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.75** | **58** | P | P | 14 25 43.5 | -0.1 |
| | 0.4nm,0.9s,baz=198,slow=5.7,SNR=2.2 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.04** | **315** | PKP | PKPbc | 14 32 35.1 | 0.0 |
| | 0.6nm,0.9s,baz=55,slow=5.5,SNR=2.4 | | | | | | |

*NOU **19** 14:15:36.4, 17°.70S×177°.74W, h607km, mb4.6/18, Fiji Islands Region*
*IDC **19** 14:15:37.9±1.9, 17°.99S×177°.98W, h559km±22km, mb3.7/17, mbtmp4.6/19, Error ellipse: s-maj=13.4km s-min=11.1km az=171.0*
*NEIC **19** 14:15:37.9±1.7, 17°.9S±0°.1×178°.0W±0°.1, h555km±6km, mb4.3/86, Error ellipse: s-maj=17.4km s-min=14.2km az=158.0*

**ISC 19 14:15:39.9**±0.3,**18°.04S**±0°.08×**178°.00W**±0°.06,**h590**km,
**n202,σ0s97/203,mb4.3/58,3C-1D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.78** | **274** | P | **P** | **14 17 02.5** | **-0.8** |
| **MSVF** | **Nonsavu** | **3.78** | **274** | P | **P** | **14 17 02.0** | **-1.2** |
| **AFI** | **Afiamalu** | **7.25** | **56** | P | P | 14 17 26.6 | -5.4 |
| **NIUE** | **Niue** | **7.72** | **99** | P | **P** | **14 17 33.3** | **-3.0** |
| **RTV** | **Rentapao** | **12.93** | **269** | P | **P** | **14 18 28.6** | **+0.5** |
| **DVP** | **Devils Point** | **13.16** | **269** | P | **P** | **14 18 29.6** | **-0.9** |
| **MARNC** | **Mare, Loyalty** | **13.59** | **253** | P | **P** | **14 18 33.5** | **-1.4** |
| **LIFNC** | **LIFOU** | **14.19** | **257** | P | **P** | **14 18 38.2** | **-2.7** |
| **LIFNC** | **LIFOU** | **14.19** | **257** | P | **P** | **14 18 38.0** | **-2.9** |
| **PINNC** | **Pines Island,** | **14.39** | **249** | P | **P** | **14 18 41.3** | **-1.4** |
| **YATNC** | **Mamie plateau,** | **14.75** | **252** | P | **P** | **14 18 45.3** | **-0.9** |
| **DZM** | **Mont Dzumac** | **15.16** | **252** | P | **P** | **14 18 49.3** | **-0.8** |
| **DZM** | **Mont Dzumac** | **15.16** | **252** | P | **P** | **14 18 48.6** | **-1.4** |
| DZM | | | | IAmb | IAmb | 14 18 54.4 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.16** | **252** | P | **P** | **14 18 49.0** | **-1.1** |
| | comp=Z,7.6nm,0.5s,baz=128,slow=17,SNR=19 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.91** | **259** | P | **P** | **14 19 06.7** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **16.91** | **259** | P | **P** | **14 19 06.7** | **+0.6** |
| **RAR** | **Rarotonga** | **17.45** | **103** | P | **P** | **14 19 10.4** | **-0.6** |
| **RAR** | **Rarotonga** | **17.45** | **103** | P | **P** | **14 19 11.1** | **+0.1** |
| | comp=Z,16nm,0.8s,baz=275,slow=19,SNR=2.4 | | | | | | |
| **OUZ** | **Omahuta** | **18.68** | **202** | P | **P** | **14 19 22.9** | **+0.9** |
| **KUZ** | **Kuaotunu** | **19.44** | **195** | P | **P** | **14 19 30.3** | **+1.4** |
| **TOZ** | **Tahuroa Road** | **20.43** | **195** | P | **P** | **14 19 38.5** | **+0.7** |
| **URZ** | **Urewera** | **20.60** | **191** | P | **P** | **14 19 37.2** | **-2.1** |
| **URZ** | **Urewera** | **20.60** | **191** | P | **P** | **14 19 37.4** | **-1.9** |
| | comp=Z,13nm,0.5s,baz=10,slow=2.9,SNR=19 | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.59** | **192** | P | **P** | **14 19 45.9** | **-2.4** |
| **BFZ** | **Birch Farm** | **23.11** | **191** | P | **P** | **14 20 00.6** | **-1.1** |
| **MSWZ** | **Moikau Station** | **24.01** | **193** | P | **P** | **14 20 08.8** | **-0.9** |
| **BHW** | **Baring Head** | **24.08** | **193** | P | **P** | **14 20 09.2** | **-1.1** |
| **QRZ** | **Quartz Range** | **24.13** | **198** | P | **P** | **14 20 11.1** | **+0.3** |
| **QRZ** | **Quartz Range** | **24.13** | **198** | P | **P** | **14 20 11.3** | **+0.5** |
| **DSZ** | **Denniston Nort** | **25.19** | **198** | P | **P** | **14 20 20.5** | **+0.3** |
| **KHZ** | **Kahutara** | **25.35** | **195** | P | **P** | **14 20 20.1** | **-1.4** |
| **PPT** | **Papeete** | **27.05** | **93** | P | **P** | **14 20 36.7** | **-0.2** |
| | comp=Z,15nm,0.6s,baz=177,slow=11,SNR=6.9 | | | | | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.06** | **93** | P | **P** | **14 20 30.6** | **-6.4** |
| **PPTF** | **Pamatai, Papee** | **27.06** | **93** | P | **P** | **14 20 36.6** | **-0.4** |
| **EIDS** | **Eidsvold** | **29.59** | **250** | P | **P** | **14 20 59.2** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 14 20 60.0 | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.22** | **240** | P | **P** | **14 21 04.2** | **0.0** |
| ARMA | | | | IAmb | IAmb | 14 21 06.0 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **33.81** | **261** | P | **P** | **14 21 34.5** | **-0.2** |
| | comp=Z,0.2nm,0.6s,baz=68,slow=11,SNR=2.6 | | | | | | |
| **CTAO** | **Charters Tower** | **33.81** | **261** | P | **P** | **14 21 34.6** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 14 22 11.3 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **33.94** | **233** | P | **P** | **14 21 36.7** | **+1.1** |
| **PMG** | **Port Moresby** | **34.87** | **280** | P | **P** | **14 21 44.2** | **+0.7** |
| | comp=Z,16nm,0.8s,baz=134,slow=3.5,SNR=3.7 | | | | | | |
| | comp=Z,16nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.39** | **231** | P | **P** | **14 22 04.9** | **+0.8** |
| **COEN** | **Coen** | **37.50** | **270** | P | **P** | **14 22 05.1** | **-0.1** |
| COEN | | | | IAmb | IAmb | 14 22 06.7 | |
| | comp=Z,8.1nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | **P** | **14 22 17.4** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | **P** | **14 22 17.4** | **+1.0** |
| | comp=Z,19nm,0.8s,baz=91,slow=9.6,SNR=26 | | | | | | |
| | comp=Z,19nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.69** | **241** | P | **P** | **14 22 54.6** | **+0.6** |
| **WR0** | **Warramunga Arr** | **44.81** | **260** | P | **P** | **14 23 02.5** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 14 23 42.8 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **14 23 03.6** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 14 23 04.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **14 23 03.5** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 14 23 04.7 | |
| | comp=Z,7.8nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.99** | **260** | P | **P** | **14 23 03.8** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 14 23 04.7 | |
| | comp=Z,7.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.00** | **260** | P | **P** | **14 23 03.7** | **-0.5** |
| **WRA** | **Warramunga Arr** | **45.00** | **260** | P | **P** | **14 23 04.0** | **-0.3** |
| | comp=Z,6.2nm,0.5s,baz=96,slow=7.3,SNR=134 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 24 33.4** | **+0.9** |
| | comp=Z,3.6nm,0.7s,baz=88,slow=3.4,SNR=11 | | | | | | |
| WRA | | | | S | **S** | **14 28 55.6** | **-5.3** |
| | comp=Z,0.9nm,0.7s,baz=99,slow=12,SNR=4.0 | | | | | | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.13** | **254** | P | **P** | **14 23 05.5** | **+0.3** |
| AS31 | | | | IAmb | IAmb | 14 23 06.7 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **14 23 05.7** | **+0.4** |
| | comp=Z,32nm,0.6s,baz=87,slow=8.6,SNR=201 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 24 33.6** | **+0.6** |
| | comp=Z,5.4nm,0.6s,baz=101,slow=4.0,SNR=14 | | | | | | |
| ASAR | | | | S | **S** | **14 29 01.7** | **-1.2** |
| | comp=Z,4.2nm,0.8s,baz=90,slow=15,SNR=23 | | | | | | |
| | comp=Z,32nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.19** | **268** | P | **P** | **14 23 35.5** | **-0.2** |
| MTN | | | | IAmb | IAmb | 14 23 36.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **50.31** | **245** | P | **P** | **14 23 43.6** | **-0.1** |
| **KNRA** | **Kununurra** | **50.87** | **264** | P | **P** | **14 23 47.7** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 14 23 53.7 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.40** | **261** | P | **P** | **14 24 05.9** | **-0.1** |
| **SOEI** | **Soe** | **56.47** | **270** | P | **P** | **14 24 27.6** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **58.26** | **255** | P | **P** | **14 24 39.3** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | 14 24 40.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **58.42** | **256** | P | **P** | **14 24 40.4** | **-0.1** |
| MBWA | | | | IAmb | IAmb | 14 24 41.3 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.50** | **242** | P | **P** | **14 24 47.5** | **0.0** |
| NWAO | | | | IAmb | IAmb | 14 25 04.7 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **MORW** | **Morawa** | **60.79** | **246** | P | **P** | **14 24 56.1** | **0.0** |
| **GIRL** | **Giralia** | **63.23** | **253** | P | **P** | **14 25 12.9** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **68.25** | **323** | P | **P** | **14 25 42.1** | **-0.8** |
| | comp=Z,2.0nm,0.6s,baz=161,slow=6.0,SNR=9.9 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **68.25** | **323** | P | **P** | **14 25 42.5** | **-0.4** |
| **MJB9** | **Matsu-Tunnel** | **68.25** | **323** | P | **P** | **14 25 42.9** | **0.0** |
| **UGM** | **Wanagama** | **70.04** | **268** | P | **P** | **14 25 54.0** | **-0.1** |
| **JKA** | **Kamikawa-asahi** | **71.58** | **331** | P | **P** | **14 26 03.0** | **+0.6** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **14 26 06.4** | **+1.5** |
| QSPA | | | | IAmb | IAmb | 14 26 07.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **14 26 06.4** | **+1.5** |
| | comp=Z,9.8nm,0.6s,baz=324,slow=0.4,SNR=94 | | | | | | |
| | comp=Z,9.8nm,0.6s | | | | | | |
| **YULB** | **Yu-li** | **72.17** | **303** | P | **P** | **14 26 05.7** | **-0.6** |
| **TPUB** | **Ta-pu** | **72.66** | **302** | P | **P** | **14 26 08.5** | **-0.6** |
| **KSM** | **Kuching** | **73.09** | **277** | | **P** | **14 26 11.9** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **73.91** | **345** | P | **P** | **14 26 14.7** | **-0.8** |
| **PETK** | **Petropavlovsk-** | **73.91** | **345** | P | **P** | **14 26 15.2** | **-0.3** |
| | comp=Z,3.5nm,0.7s,baz=125,slow=9.3,SNR=4.3 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **75.06** | **318** | P | **P** | **14 26 23.1** | **+0.8** |
| | comp=Z,0.9nm,0.7s,baz=136,slow=6.6,SNR=5.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.38** | **39** | P | **P** | **14 26 41.4** | **+0.9** |
| **WAKR** | **Walker** | **78.55** | **43** | P | **P** | **14 26 42.2** | **+0.6** |
| **DSP** | **Deep Springs** | **78.89** | **45** | P | **P** | **14 26 44.1** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **79.25** | **44** | P | **P** | **14 26 45.5** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **79.25** | **44** | P | **P** | **14 26 46.2** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=224,slow=8.6,SNR=11 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NV11** | **Mina Array Sit** | **79.34** | **44** | P | **P** | **14 26 46.0** | **+0.3** |
| **KVN** | **Kaiseruille** | **79.72** | **43** | P | **P** | **14 26 48.1** | **+0.4** |
| **TPNV** | **Topopah Spring** | **79.83** | **46** | P | **P** | **14 26 49.4** | **+1.0** |
| **J05D** | **Fort Rock, OR** | **80.18** | **38** | P | **P** | **14 26 50.6** | **+0.6** |
| J05D | | | | IAmb | IAmb | 14 26 51.8 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **M16K** | **Timber Creek** | **80.26** | **9** | P | **P** | **14 26 50.4** | **+0.6** |
| M16K | | | | IAmb | IAmb | 14 26 55.6 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **H04A** | **Detroit Lake** | **80.46** | **37** | P | **P** | **14 26 51.3** | **+0.1** |
| **L16K** | **Owhat River** | **80.84** | **9** | P | **P** | **14 26 52.6** | **-0.1** |
| L16K | | | | IAmb | IAmb | 14 27 05.9 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **M17K** | **Holitna River** | **80.86** | **10** | P | **P** | **14 26 53.5** | **+0.6** |
| M17K | | | | IAmb | IAmb | 14 27 24.4 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **SMAI** | **San Martin Ant** | **80.89** | **159** | P | **P** | **14 26 55.2** | **+2.1** |
| SMAI | | | | IAmb | IAmb | 14 26 56.1 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.12** | **8** | P | **P** | **14 26 54.8** | **+0.6** |
| K15K | | | | IAmb | IAmb | 14 26 55.8 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **NLWA** | **Neilton Lookou** | **81.20** | **34** | P | **P** | **14 26 55.7** | **+0.7** |
| NLWA | | | | IAmb | IAmb | 14 27 34.9 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **I07A** | **Izee** | **81.66** | **38** | P | **P** | **14 26 57.8** | **+0.2** |
| **L18K** | **Granite Mounta** | **81.75** | **10** | P | **P** | **14 26 57.9** | **+0.5** |
| L18K | | | | IAmb | IAmb | 14 26 58.4 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **GNW** | **Green Mountain** | **81.86** | **34** | P | **P** | **14 26 59.0** | **+0.7** |
| **BELA** | **Belgrano 2** | **81.99** | **173** | P | **P** | **14 26 59.4** | **+0.8** |
| **J16K** | **Anvik River** | **82.19** | **8** | P | **P** | **14 27 00.1** | **+0.4** |
| J16K | | | | IAmb | IAmb | 14 27 04.4 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **ELK** | **Elko** | **82.48** | **43** | P | **P** | **14 27 02.1** | **+0.1** |
| **J17K** | **VABM Dome** | **82.51** | **8** | P | **P** | **14 27 01.5** | **+0.3** |
| J17K | | | | IAmb | IAmb | 14 27 45.6 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **G08A** | **Pilot Rock** | **82.67** | **38** | P | **P** | **14 27 03.2** | **+0.6** |
| **J18K** | **Innoko River** | **82.92** | **9** | P | **P** | **14 27 03.3** | **0.0** |
| J18K | | | | IAmb | IAmb | 14 27 04.6 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.26** | **14** | P | **P** | **14 27 04.7** | **-0.4** |
| SCM | | | | IAmb | IAmb | 14 27 05.3 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **K20K** | **Telida** | **83.26** | **11** | P | **P** | **14 27 04.9** | **-0.1** |
| K20K | | | | IAmb | IAmb | 14 27 05.6 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **J19K** | **Poorman** | **83.59** | **10** | P | **P** | **14 27 06.9** | **+0.3** |
| J19K | | | | IAmb | IAmb | 14 27 31.1 | |
| | comp=Z,8.8nm,1.5s | | | | | | |
| **TABL** | **Table Mountain** | **83.67** | **17** | P | **P** | **14 27 07.3** | **0.0** |
| TABL | | | | IAmb | IAmb | 14 27 08.0 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.72** | **15** | P | **P** | **14 27 07.2** | **-0.2** |
| N25K | | | | IAmb | IAmb | 14 27 07.6 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **83.77** | **14** | P | **P** | **14 27 08.0** | **+0.4** |
| **MAW** | **Mawson** | **83.87** | **200** | P | **P** | **14 27 08.6** | **+0.5** |
| | comp=Z,2.6nm,0.5s,baz=54,slow=11,SNR=7.7 | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **B08A** | **Colville Reser** | **84.22** | **35** | P | **P** | **14 27 09.8** | **-0.3** |
| **RND** | **Reindeer** | **84.31** | **13** | P | **P** | **14 27 09.8** | **-0.5** |
| RND | | | | IAmb | IAmb | 14 27 10.6 | |
| | comp=Z,6.9nm,0.6s | | | | | | |
| **DHY** | **Denali Highway** | **84.33** | **13** | P | **P** | **14 27 09.7** | **-0.8** |
| DHY | | | | IAmb | IAmb | 14 27 12.9 | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **GSI** | **Gunungsitoli** | **85.10** | **273** | P | **P** | **14 27 15.5** | **+0.3** |
| **I21K** | **Tanana** | **85.30** | **11** | P | **P** | **14 27 14.7** | **-0.2** |
| I21K | | | | IAmb | IAmb | 14 27 30.1 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **Q32M** | **Nakina River** | **85.36** | **22** | P | **P** | **14 27 16.1** | **+0.5** |
| **TXAR** | **Lajitas Array** | **85.73** | **57** | P | **P** | **14 27 19.8** | **+1.9** |
| | comp=Z,1.6nm,0.8s,baz=219,slow=5.8,SNR=18 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **85.74** | **10** | P | **P** | **14 27 16.1** | **-0.9** |
| **I23K** | **Minto, Yukon-K** | **85.76** | **12** | P | **P** | **14 27 16.1** | **-0.9** |
| **IL31** | | **85.92** | **13** | P | **P** | **14 27 16.7** | **-1.1** |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | **P** | **14 27 17.0** | **-0.9** |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | **P** | **14 27 16.9** | **-1.1** |
| | comp=Z,0.9nm,0.4s,baz=220,slow=5.2,SNR=16 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **M29M** | **Somme Creek** | **86.05** | **17** | P | **P** | **14 27 18.8** | **0.0** |
| **E19K** | **Redstone River** | **86.61** | **8** | P | **P** | **14 27 20.7** | **-0.4** |
| E19K | | | | IAmb | IAmb | 14 27 21.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **OVMT** | **Ovando** | **87.12** | **38** | P | **P** | **14 27 24.2** | **0.0** |
| **PDAR** | **Pinedale Array** | **87.17** | **43** | P | **P** | **14 27 24.9** | **+0.3** |
| | comp=Z,0.9nm,0.7s,baz=215,slow=3.3,SNR=6.8 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **88.02** | **10** | P | **P** | **14 27 27.5** | **-0.3** |
| E22K | | | | IAmb | IAmb | 14 27 31.0 | |
| | comp=Z,5.4nm,1.3s | | | | | | |
| **I28M** | **Miner Creek** | **88.09** | **15** | P | **P** | **14 27 28.4** | **+0.3** |
| I28M | | | | IAmb | IAmb | 14 27 59.9 | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **F24K** | **Squaw Lake** | **88.14** | **11** | P | **P** | **14 27 28.3** | **0.0** |
| F24K | | | | IAmb | IAmb | 14 27 30.2 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **D22K** | **Ayikyak River** | **88.57** | **9** | P | **P** | **14 27 30.3** | **0.0** |
| D22K | | | | IAmb | IAmb | 14 27 31.2 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **88.70** | **12** | P | **P** | **14 27 31.0** | **+0.1** |
| **I30M** | **Mount Dempster** | **88.82** | **16** | P | **P** | **14 27 31.3** | **-0.3** |
| I30M | | | | IAmb | IAmb | 14 27 32.3 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| **D23K** | **Nanushuk River** | **88.96** | **10** | P | **P** | **14 27 32.2** | **+0.1** |
| D23K | | | | IAmb | IAmb | 14 27 46.5 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **H29M** | **Whitestone** | **89.09** | **15** | P | **P** | **14 27 32.5** | **-0.2** |
| H29M | | | | IAmb | IAmb | 14 27 33.5 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Ar** | **89.30** | **290** | P | **P** | **14 27 36.2** | **+1.4** |
| | comp=Z,2.4nm,0.8s,baz=100,slow=2.1,SNR=15 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.18** | **180** | ⇑P | **P** | **14 27 38.7** | **+0.7** |
| | comp=Z,243nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.46** | **178** | P | **P** | **14 27 39.7** | **+0.5** |
| SNAA | | | | IAmb | IAmb | 14 27 40.6 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.46** | **178** | ⇑P | **P** | **14 27 39.2** | **0.0** |
| | comp=Z,59nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.46** | **178** | P | **P** | **14 27 39.8** | **+0.5** |
| | comp=Z,2.1nm,0.6s,baz=199,slow=11,SNR=17 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.58** | **176** | ⇑P | **P** | **14 27 40.9** | **+1.1** |
| | comp=Z,14nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.51** | **314** | PKiKP | **PKiKP** | **14 33 03.6** | **-0.6** |
| | comp=Z,0.6nm,0.5s,baz=124,slow=0.2,SNR=9.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **112.24** | **318** | PKiKP | **PKiKP** | **14 33 08.7** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=96,slow=1.9,SNR=8.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.19** | **321** | PKP | **PKPdf** | **14 33 18.6** | **-0.1** |
| | comp=Z,1.5nm,0.5s,baz=104,slow=4.3,SNR=6.3 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **119.42** | **357** | PKP | **PKiKP** | **14 33 22.5** | **0.0** |
| | comp=Z,8.7nm,1.0s,baz=94,slow=1.9,SNR=1.8 | | | | | | |
| **

*az=150.0*

**ISC 19 14:18:01.1±0.7, 18°0S±0°2×177°9W±0°1, h590km, n30, σ0s71/31, mb4.1/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.88 | 273 | P | P | 14 19 30.4 | +5.3 |
| CAN | Canberra | 34.07 | 233 | P | P | 14 23 58.8 | +0.9 |
| COEN | Coen | 37.60 | 270 | P | P | 14 24 28.5 | +1.3 |
| STKA | Stephens Creek | 39.04 | 241 | P | P | 14 24 39.3 | +0.7 |
| STKA | Stephens Creek<br>1.4nm,0.7s,baz=105,slow=16,SNR=4.2<br>1.4nm,0.7s | 39.04 | 241 | P | P | 14 24 40.0 | +1.4 |
| BBOO | Buckleboo | 43.82 | 241 | P | P | 14 25 16.2 | +0.1 |
| BBOO | | | | IAmb | IAmb | 14 25 22.5 | |
| | comp=Z,20nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 44.92 | 260 | P | P | 14 25 24.9 | +0.1 |
| WR0 | | | | IAmb | IAmb | 14 25 52.1 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| WB0 | Warramunga Arr | 45.08 | 260 | P | P | 14 25 25.9 | -0.1 |
| WB0 | | | | IAmb | IAmb | 14 26 03.3 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 45.10 | 260 | P | P | 14 25 26.0 | -0.2 |
| WB2 | | | | IAmb | IAmb | 14 25 53.4 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| WRA | Warramunga Arr<br>comp=Z,0.9nm,0.2s,baz=96,slow=7.6,SNR=12 | 45.11 | 260 | P | P | 14 25 26.3 | 0.0 |
| WRA | | | | PcP | PcP | 14 26 53.5 | -0.6 |
| | comp=Z,0.3nm,0.5s,baz=105,slow=3.6,SNR=1.0<br>comp=Z,0.9nm,0.2s | | | | | | |
| AS31 | Alice Springs | 45.26 | 254 | P | P | 14 25 27.1 | -0.3 |
| ASAR | Alice Springs | 45.26 | 254 | P | P | 14 25 27.3 | -0.1 |
| ASAR | Alice Springs<br>comp=Z,2.5nm,0.4s,baz=92,slow=7.7,SNR=7.7 | 45.26 | 254 | P | P | 14 25 27.5 | +0.1 |
| ASAR | | | | PcP | PcP | 14 26 54.0 | -0.6 |
| | comp=Z,0.5nm,0.4s,baz=103,slow=3.9,SNR=4.2<br>comp=Z,2.5nm,0.4s | | | | | | |
| FORT | Forrest | 50.44 | 245 | P | P | 14 26 04.8 | -0.9 |
| FORT | | | | IAmb | IAmb | 14 26 06.3 | |
| | comp=Z,19nm,1.1s | | | | | | |
| KNRA | Kununurra | 50.98 | 264 | P | P | 14 26 09.6 | -0.3 |
| KNRA | | | | IAmb | IAmb | 14 26 42.5 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| UGM | Wanagama | 70.14 | 268 | P | P | 14 28 15.2 | -0.7 |
| QSPA | South Pole Qui | 72.09 | 180 | P | P | 14 28 26.7 | +0.2 |
| QSPA | South Pole Qui<br>comp=Z,1.1nm,0.6s,baz=306,slow=3.8,SNR=2.6<br>comp=Z,1.1nm,0.6s | 72.09 | 180 | P | P | 14 28 26.7 | +0.2 |
| NVAR | Mina Array Bea | 79.12 | 44 | P | P | 14 29 06.7 | +0.8 |
| | comp=Z,0.3nm,0.7s,baz=228,slow=9.4,SNR=2.8<br>comp=Z,0.3nm,0.7s | | | | | | |
| K15K | Wolf Creek Mou | 81.03 | 8 | P | P | 14 29 15.3 | +0.4 |
| L18K | Granite Mounta | 81.66 | 10 | P | P | 14 29 18.2 | 0.0 |
| L18K | | | | IAmb | IAmb | 14 29 34.4 | |
| | comp=Z,15nm,1.4s | | | | | | |
| BELA | Belgrano 2 | 82.05 | 173 | P | P | 14 29 19.3 | -0.8 |
| TXAR | Lajitas Array<br>comp=Z,0.6nm,0.8s,baz=234,slow=6.3,SNR=6.4<br>comp=Z,0.6nm,0.8s | 85.60 | 57 | P | P | 14 29 39.6 | +1.1 |
| ILAR | Eielson Array<br>comp=Z,0.2nm,0.4s,baz=220,slow=4.4,SNR=4.3<br>comp=Z,0.2nm,0.4s | 85.83 | 13 | P | P | 14 29 37.3 | -1.3 |
| E19K | Redstone River | 86.53 | 8 | P | P | 14 29 41.2 | -0.7 |
| E19K | | | | IAmb | IAmb | 14 29 47.7 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| D22K | Ayikyak River | 88.48 | 9 | P | P | 14 29 50.6 | -0.4 |
| D22K | | | | IAmb | IAmb | 14 30 30.5 | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| H29M | Whitestone | 88.99 | 15 | P | P | 14 29 53.1 | -0.3 |
| H29M | | | | IAmb | IAmb | 14 29 53.3 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| BRTR | Keskin Array B | 145.18 | 315 | PKPbc | PKPbc | 14 36 33.1 | -0.7 |
| | comp=Z,0.7nm,0.5s,baz=137,slow=4.2,SNR=3.7 | | | | | | |
| MMAI | Mount Meron Ar<br>comp=Z,1.9nm,0.5s,baz=66,slow=8.2,SNR=2.6 | 146.59 | 303 | PKPbc | PKPbc | 14 36 37.3 | -0.6 |
| GERES | GERESS Array B | 147.79 | 346 | PKPbc | PKPbc | 14 36 39.8 | -0.8 |
| | comp=Z,0.6nm,0.5s,baz=7.7,slow=17,SNR=3.5 | | | | | | |

*IDC 19 14:23:05.9±1.3, 8°26S×116°70E, h0km, mb3.4/5, mbtmp3.5/6, ML3.5/1, Error ellipse: s-maj=38.9km s-min=21.8km az=54.0*

*DJA 19 14:23:07.8±0.3, 8°S±3°×11°7E±°, h10km, M3.9/10, MLv3.9/10*

**ISC 19 14:23:07.7±2.1, 8°28S±0°06×116°71E±0°04, h11km±15km, n15, σ0s44/23, mb3.5/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.49 | 159 | P | Pb | 14 23 18.3 | 0.0 |
| TWSI | | | | S | Sb | 14 23 24.9 | -0.6 |
| PLAI | Plampang | 1.19 | 117 | P | Pn | 14 23 30.4 | +0.1 |
| PLAI | | | | S | Sn | 14 23 46.8 | +0.4 |
| SRBI | Singaraja | 1.49 | 277 | P | Pn | 14 23 34.0 | -0.4 |
| SRBI | | | | S | Sg | 14 23 56.0 | +0.2 |
| DNP | Denpasar | 1.53 | 255 | P | Pn | 14 23 34.7 | -0.3 |
| DNP | | | | S | Sg | 14 23 56.9 | -0.2 |
| JAGI | Jajag, Banyuwa | 2.54 | 266 | P | Pn | 14 23 48.8 | 0.0 |
| JAGI | | | | S | Sn | 14 24 20.8 | +1.1 |
| WBSI | Waikabubak, Su | 2.98 | 117 | P | Pn | 14 23 54.9 | 0.0 |
| WBSI | | | | S | Sn | 14 24 31.1 | +0.4 |
| BSSI | Bau Bau, Buton | 4.31 | 61 | P | Pn | 14 24 13.4 | +0.2 |
| KAPI | Kappang<br>2.3nm,0.3s,baz=201,slow=7.2,SNR=6.2 | 4.43 | 43 | Pn | Pn | 14 24 15.2 | +0.3 |
| KAPI | | | | Sn | Sn | 14 25 06.0 | -0.6 |
| | 6.1nm,0.3s,baz=227,slow=19,SNR=3.8<br>7.1nm,0.2s | | | | | | |
| PWJI | Pagerwojo | 4.86 | 273 | P | Pn | 14 24 21.5 | +0.7 |
| EDFI | Ende, Flores | 4.95 | 96 | P | Pn | 14 24 22.5 | +0.4 |
| WRA | Warramunga Arr<br>1.1nm,0.7s,baz=301,slow=12,SNR=12<br>1.1nm,0.7s | 20.63 | 126 | P | P | 14 27 47.3 | -0.1 |
| ASAR | Alice Springs<br>1.1nm,0.6s,baz=309,slow=9.3,SNR=18 | 22.48 | 135 | P | P | 14 28 07.5 | +0.2 |
| ASAR | | | | PcP | PcP | 14 32 01.1 | -0.5 |
| | 0.2nm,0.8s,baz=304,slow=1.2,SNR=1.8<br>1.1nm,0.6s | | | | | | |
| MKAR | Makanchi Array<br>0.2nm,0.5s,baz=143,slow=8.0,SNR=2.6<br>0.2nm,0.5s | 62.80 | 334 | P | P | 14 33 33.2 | -0.1 |
| KURBB | Kurchatov Arra<br>0.2nm,0.7s,baz=141,slow=6.0,SNR=1.5<br>0.2nm,0.7s | 67.34 | 335 | P | P | 14 34 02.9 | +0.3 |
| ZALV | Zalesovo Beam<br>0.3nm,0.3s,baz=126,slow=7.3,SNR=1.8<br>0.3nm,0.3s | 67.58 | 340 | P | P | 14 34 03.9 | -0.2 |

**IDC 19 14:24:02.9±8.8, 17°99S×178°05W, h639km±108km, mb2.8/5, mbtmp3.9/5, Error ellipse: s-maj=46.4km s-min=40.4km az=48.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| STKA | Stephens Creek<br>1.7nm,0.8s,baz=99,slow=13,SNR=2.9<br>1.7nm,0.8s | 38.89 | 241 | P | P | 14 30 36.7 | +0.5 |
| WRA | Warramunga Arr<br>0.8nm,0.4s,baz=95,slow=7.0,SNR=28<br>0.8nm,0.4s | 44.95 | 260 | P | P | 14 31 23.4 | -0.3 |
| ASAR | Alice Springs<br>2.3nm,0.5s,baz=91,slow=7.9,SNR=49 | 45.10 | 254 | P | P | 14 31 24.9 | +0.2 |
| ASAR | | | | PcP | PcP | 14 32 51.1 | -0.1 |
| | 0.3nm,0.5s,baz=105,slow=4.0,SNR=4.6<br>2.3nm,0.5s | | | | | | |
| QSPA | South Pole Qui<br>0.5nm,0.6s,baz=42,slow=0.6,SNR=7.2<br>0.5nm,0.6s | 72.07 | 180 | P | P | 14 34 24.1 | +0.1 |
| TXAR | Lajitas Array<br>0.1nm,0.7s,baz=225,slow=8.7,SNR=1.7<br>0.1nm,0.7s | 85.75 | 57 | P | P | 14 35 36.8 | +0.1 |

*IDC 19 14:33:20.4±9.4, 17°63S×178°28W, h605km±111km, mb3.0/5, mbtmp4.0/6, Error ellipse: s-maj=54.7km s-min=35.4km az=76.0*

*NEIC 19 14:33:25.5±1.4, 18°5S±0°2×178°6W±0°2, h615km±3km, mb4.0/13, Error ellipse: s-maj=29.2km s-min=25.6km az=173.0*

**ISC 19 14:33:24.3±1.3, 17°8S±0°2×178°5W±0°2, h650km, n23, σ0s85/22, mb3.8/10, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.34 | 271 | P | P | 14 34 51.5 | +1.9 |
| DZM | Mont Dzumac | 14.82 | 251 | P | P | 14 36 28.3 | -0.8 |
| DZM | Mont Dzumac<br>2.0nm,0.5s,baz=122,slow=19,SNR=2.0 | 14.82 | 251 | P | P | 14 36 28.8 | -0.3 |
| FOZ | Fox Glacier | 27.50 | 199 | P | P | 14 38 19.7 | -2.1 |
| EIDS | Eidsvold | 29.27 | 250 | P | P | 14 38 36.9 | -0.5 |
| CTA | Charters Tower<br>0.1nm,0.9s,baz=110,slow=9.0,SNR=5.4 | 33.43 | 260 | P | P | 14 39 13.0 | +0.4 |
| CTAO | Charters Tower | 33.43 | 260 | P | P | 14 39 12.7 | +0.1 |
| CTAO | | | | IAmb | IAmb | 14 39 13.4 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| COEN | Coen | 37.07 | 270 | P | P | 14 39 44.3 | +1.7 |
| STKA | Stephens Creek | 38.65 | 241 | P | P | 14 39 54.4 | -0.7 |
| STKA | Stephens Creek<br>comp=Z,1.3nm,0.5s,baz=104,slow=12,SNR=4.1<br>comp=Z,1.3nm,0.5s | 38.65 | 241 | P | P | 14 39 55.5 | +0.4 |
| BBOO | Buckleboo | 43.42 | 241 | P | P | 14 40 32.3 | -0.2 |
| WB0 | Warramunga Arr | 44.58 | 260 | P | P | 14 40 41.6 | 0.0 |
| WB0 | | | | IAmb | IAmb | 14 40 45.2 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| WB2 | Warramunga Arr | 44.60 | 259 | P | P | 14 40 41.7 | -0.1 |
| WB2 | | | | IAmb | IAmb | 14 41 03.9 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 44.61 | 259 | P | P | 14 40 41.6 | -0.3 |
| WRA | Warramunga Arr<br>comp=Z,1.3nm,0.5s,baz=95,slow=7.2,SNR=16<br>comp=Z,1.3nm,0.5s | 44.61 | 259 | P | P | 14 40 42.1 | +0.2 |
| AS31 | Alice Springs | 44.78 | 254 | P | P | 14 40 43.3 | +0.2 |
| ASAR | Alice Springs | 44.78 | 254 | P | P | 14 40 43.0 | -0.1 |
| ASAR | Alice Springs<br>comp=Z,4.8nm,0.6s,baz=86,slow=8.4,SNR=37<br>comp=Z,4.8nm,0.6s | 44.78 | 254 | P | P | 14 40 43.5 | +0.3 |
| KNRA | Kununurra | 50.46 | 264 | P | P | 14 41 25.7 | +0.4 |
| KNRA | | | | IAmb | IAmb | 14 41 33.6 | |
| | comp=Z,13nm,1.3s | | | | | | |
| QSPA | South Pole Qui | 72.24 | 180 | P | P | 14 43 46.8 | +1.1 |
| QSPA | | | | IAmb | IAmb | 14 44 18.7 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| QSPA | South Pole Qui<br>comp=Z,1.1nm,1.1s,baz=0.0,slow=1.0,SNR=7.4<br>comp=Z,1.1nm,1.1s | 72.24 | 180 | P | P | 14 43 46.6 | +0.9 |
| BELA | Belgrano 2 | 82.27 | 173 | P | P | 14 44 40.1 | +0.9 |
| BELA | | | | IAmb | IAmb | 14 45 21.8 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| ILAR | Eielson Array<br>comp=Z,0.3nm,1.0s,baz=203,slow=5.9,SNR=1.4<br>comp=Z,0.3nm,1.0s | 85.80 | 13 | P | P | 14 44 55.4 | -1.1 |

*IDC 19 14:34:56.8±1.6, 8°30S×116°99E, h0km, mb3.7/4, mbtmp3.7/5, ML3.5/1, Error ellipse: s-maj=40.8km s-min=23.1km az=57.0*

*DJA 19 14:34:56.4±0.4, 8°S±4°×11°7E±°, h10km±3km, M4.0/12, MLv4.0/12*

**ISC 19 14:34:56.7±1.9, 8°30S±0°06×116°74E±0°04, h10km±13km, n23, σ1s28/29, mb3.7/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.46 | 161 | P | Pb | 14 35 06.5 | -0.4 |
| TWSI | | | | S | Sb | 14 35 13.2 | -0.5 |
| PLAI | Plampang | 1.16 | 117 | P | Pg | 14 35 19.4 | +0.5 |
| PLAI | Plampang | 1.16 | 117 | P | Pg | 14 35 19.3 | +0.4 |
| PLAI | | | | S | Sn | 14 35 35.3 | +0.5 |
| SRBI | Singaraja | 1.52 | 278 | P | Pn | 14 35 22.9 | -1.1 |
| SRBI | | | | S | Sn | 14 35 43.9 | 0.0 |
| DNP | Denpasar | 1.55 | 256 | P | Pn | 14 35 24.3 | -0.1 |
| DNP | | | | S | Sn | 14 35 44.3 | -0.4 |
| JAGI | Jajag, Banyuwa | 2.56 | 266 | P | Pn | 14 35 36.8 | -1.5 |
| JAGI | | | | S | Sn | 14 36 08.3 | -1.3 |
| WBSI | Waikabubak, Su | 2.94 | 117 | P | Pn | 14 35 43.8 | +0.2 |
| BASI | Baing, Sumba | 4.25 | 117 | P | Pn | 14 36 00.4 | -1.1 |
| BSSI | Bau Bau, Buton | 4.30 | 60 | P | Pn | 14 36 01.6 | -0.6 |
| KAPI | Kappang<br>2.7nm,0.3s,baz=228,slow=7.6,SNR=7.3 | 4.43 | 43 | Pn | Pn | 14 36 03.6 | -0.5 |
| KAPI | | | | Sn | Sn | 14 36 53.4 | -2.4 |
| | 7.8nm,0.3s,baz=244,slow=21,SNR=7.9<br>6.3nm,0.2s | | | | | | |
| GRJI | Gresik | 4.44 | 288 | P | Pn | 14 36 02.7 | -1.4 |
| PWJI | Pagerwojo | 4.89 | 273 | P | Pn | 14 36 11.6 | +1.3 |
| EDFI | Ende, Flores | 4.92 | 96 | P | Pn | 14 36 11.2 | +0.3 |
| UGM | Wanagama | 6.16 | 273 | P | Pn | 14 36 30.8 | +2.9 |
| MBWA | Marble Bar | 13.11 | 168 | P | Pn | 14 38 02.2 | -0.9 |
| PSA00 | Pilbara Seismi | 13.53 | 168 | P | Pn | 14 38 08.0 | -0.9 |
| GIRL | Giralia | 14.46 | 189 | P | Pn | 14 38 20.0 | -1.6 |
| MEEK | Meekatharra | 18.32 | 175 | P | P | 14 39 11.4 | +0.1 |
| WRKA | Warakurna | 19.97 | 148 | P | P | 14 39 29.5 | +0.2 |
| WRA | Warramunga Arr<br>2.0nm,0.7s,baz=303,slow=12,SNR=48<br>2.0nm,0.7s | 20.60 | 126 | P | P | 14 39 35.6 | -0.6 |
| ASAR | Alice Springs<br>1.4nm,0.5s,baz=310,slow=9.3,SNR=77<br>1.4nm,0.5s | 22.45 | 135 | P | P | 14 39 55.7 | -0.4 |
| MKAR | Makanchi Array<br>0.4nm,0.7s,baz=140,slow=7.9,SNR=4.4<br>0.4nm,0.7s | 62.84 | 334 | P | P | 14 45 25.3 | +2.6 |
| ZALV | Zalesovo Beam<br>0.6nm,0.5s,baz=140,slow=7.6,SNR=2.8<br>0.6nm,0.5s | 67.61 | 340 | P | P | 14 45 55.5 | +2.0 |

*IDC 19 14:56:22.9±0.3, 8°26S×116°53E, h0km, mb5.4/37, mbtmp5.4/39, ML5.2/2, MS6.6/62, Error ellipse: s-maj=12.9km s-min=9.8km az=74.0*

*MOS 19 14:56:23.3±1.1, 8°30S×116°54E, h14km, mb6.3/40, MS6.7/56, Error ellipse: s-maj=7.4km s-min=4.4km az=113.1*

*BJI 19 14:56:24.5±0.0, 8°44S×116°69E, h20km, mb5.7/93, mB6.6/81, Ms6.8/99, Ms7 6.7/99*

*NEIC 19 14:56:27.3, 8°33S×116°63E, h19km*

*NEIC 19 14:56:27.5±1.8, 8°32S±0°06×116°63E±0°05, h21km±1km, mb6.4/206, Ms_20 6.9/805, Mwb6.8/43, Mww6.9/30, Error ellipse: s-maj=10.6km s-min=8.8km az=183.0, Moment Tensor Solution. Moment tensor: Scale 10^19Nm; Mrr1.38; Mθθ-2.27; Mφφ0.89; Mrθ-1.00; Mθφ0.01; Mφr-0.15; Fault plane solution: M0 2.22000×10^19 NP1: ϕs260.55000°, δ60.20000°, λ77.66000°. NP2: ϕs104.30000°, δ32.04000°, λ110.45000°. Principal axes: T 1.6620, Plg72.0000°, Azm141.0000°; N 0.8630, Plg11.0000°, Azm267.0000°; P -2.5250, Plg14.0000°, Azm360.0000°;*

*DJA 19 14:56:27.0±0.2, 8°S±1°×11°7E±°, h18km±1km, M6.8/116, mb6.3/116, mB6.9/114, MLv7.0/27, Mw6.9/93, Mw(mB)6.8/114, MwMwp6.8/95, Mwp6.7/95*

*NEIC 19 14:56:27.4, 8°32S×116°62E, h30km*

*NEIC 19 14:56:27.4, 8°42S×116°92E, h30km, Moment Tensor Solution. Duration: 16s4 Moment tensor: Scale 10^19Nm; Mrr2.70; Mθθ-2.92; Mφφ0.22; Mrθ-1.61; Mθφ0.15; Mφr0.47; Fault plane solution: M0 3.28000×10^19 NP1: ϕs279.98000°, δ60.46000°, λ97.67000°. NP2: ϕs84.70000°, δ30.43000°, λ76.74000°. Principal axes: T 3.1873, Plg73.0000°, Azm209.0000°; N 0.1824, Plg7.0000°, Azm96.0000°; P -3.3697, Plg15.0000°, Azm4.0000°;*

*GCMT 19 14:56:35.5±0.0, 8°40S×116°75E, h24km, MW6.9/165, Moment Tensor Solution. s165,c440; s161,c672; Duration: 7s1 Moment tensor: Scale 10^19Nm; Mrr2.25±.01; Mθθ-2.50±.01; Mφφ0.24±.01; Mrθ-2.02±.02; Mθφ0.00±.01; Mφr-0.31±.02; Best double couple: M0 3.13400×10^19 NP1: ϕs264.00000°, δ65.00000°, λ85.00000°. NP2: ϕs97.00000°, δ25.00000°, λ102.00000°. Principal axes: T 3.0230, Plg69.0000°, Azm163.0000°; N 0.2160, Plg5.0000°, Azm266.0000°; P -3.2460, Plg20.0000°, Azm358.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 19 14:56:27.7±0.3, 8°38S±0°03×116°63E±0°03, h26km±1km, h26km:pP-P, n2046, σ2s31/1799, mb6.2/264, MS6.8/531, 137C-43D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWSI | Taliwang, Sumb | 0.43 | 145 | P | Pb | 14 56 35.9 | -0.9 |
| PLAI | Plampang | 1.21 | 111 | P | Pn | 14 56 48.2 | -0.8 |
| SRBI | Singaraja | 1.44 | 282 | P | Pn | 14 56 51.6 | -0.5 |
| DNP | Denpasar | 1.44 | 258 | P | Pb | 14 56 53.0 | -0.8 |
| JAGI | Jajag, Banyuwa | 2.46 | 268 | P | Pn | 14 57 08.0 | +1.9 |
| JAGI | Jajag, Banyuwa | 2.46 | 268 | Pn | Pn | 14 57 06.2 | +0.1 |
| JAGI | Jajag, Banyuwa | 2.46 | 268 | ⇑P | Pn | 14 57 06.3 | +0.1 |
| JAGI | Jajag, Banyuwa | 2.46 | 268 | P | Pn | 14 57 06.1 | 0.0 |
| WBSI | Waikabubak, Su | 3.00 | 115 | P | Pn | 14 57 13.0 | -0.6 |
| BASI | Baing, Sumba | 4.30 | 115 | P | Pn | 14 57 32.8 | +1.3 |
| GRJI | Gresik | 4.37 | 289 | P | Pn | 14 57 33.2 | +0.8 |
| BSSI | Bau Bau, Buton | 4.43 | 60 | P | Pn | 14 57 31.3 | -1.9 |
| KAPI | Kappang | 4.56 | 43 | Pn | Pn | 14 57 32.9 | -2.2 |
| KAPI | Kappang | 4.56 | 43 | ⇓P | Pn | 14 57 32.6 | -2.5 |
| KAPI | Kappang<br>48nm,0.3s,baz=204,slow=6.9,SNR=105 | 4.56 | 43 | Pn | Pn | 14 57 32.6 | -2.5 |
| KAPI | | | | Sn | Sn | 14 58 24.9 | -2.4 |
| | 1μm,0.3s,baz=211,slow=21,SNR=3.8 | | | | | | |
| KAPI | | | | LR | LR | 14 59 28.2 | |
| | comp=Z,543μm,21.5s,baz=197,slow=41<br>485nm,0.7s | | | | | | |
| KAPI | Kappang | 4.56 | 43 | P | Pn | 14 57 32.8 | -2.2 |
| PWJI | Pagerwojo | 4.79 | 274 | P | Pn | 14 57 38.9 | +0.6 |
| EDFI | Ende, Flores | 5.01 | 95 | P | Pn | 14 57 40.6 | -0.8 |
| NGJI | Ngawi<br>5μm,1.1s,203nm | 5.22 | 281 | P | Pn | 14 57 48.5 | +4.3 |
| BNSI | Bone<br>7μm,1.3s,299nm | 5.25 | 41 | P | Pn | 14 57 43.9 | -0.6 |
| MMRI | Maumere | 5.55 | 93 | P | Pn | 14 57 49.9 | +1.2 |
| MMRI | Maumere | 5.55 | 93 | Pn | Pn | 14 57 48.2 | -0.4 |
| MMRI | Maumere | 5.55 | 93 | ⇑P | Pn | 14 57 47.6 | -1.1 |
| MMRI | Maumere | 5.55 | 93 | P | Pn | 14 57 47.6 | -1.1 |
| UGM | Wanagama | 6.07 | 274 | P | Pn | 14 57 58.3 | +2.5 |
| UGM | Wanagama | 6.07 | 274 | Pn | Pn | 14 57 57.4 | +1.5 |
| UGM | Wanagama | 6.07 | 274 | P | Pn | 14 57 57.0 | +1.2 |
| SMRI | Semarang | 6.28 | 282 | P | Pn | 14 58 01.6 | +2.9 |
| SMRI | Semarang | 6.28 | 282 | | | 14 58 00.2 | +1.4 |
| SMRI | Semarang | 6.28 | 282 | ⇑P | Pn | 14 58 01.3 | +2.6 |
| SMRI | Semarang<br>3μm,0.6s,120μm127nm | 6.28 | 282 | P | Pn | 14 58 00.6 | +1.9 |
| BBSI | Bau Bau<br>6μm,1.0s,132μm30nm | 6.56 | 64 | P | Pn | 14 58 02.6 | +0.1 |
| BKB | Balikpapan | 7.08 | 2 | P | Pn | 14 58 13.6 | +3.9 |
| BKB | Balikpapan | 7.08 | 2 | ⇓P | Pn | 14 58 12.2 | +2.5 |
| BKB | Balikpapan<br>1μm,0.8s,55nm | 7.08 | 2 | P | Pn | 14 58 10.6 | +0.9 |
| BATI | Baumata | 7.17 | 105 | P | Pn | 14 58 11.4 | +0.4 |
| MTKI | Muara Teweh, K | 7.59 | 347 | P | Pn | 14 58 15.7 | -1.1 |
| SOEI | Soe | 7.66 | 101 | P | Pn | 14 58 18.7 | +0.9 |
| SOEI | Soe | 7.66 | 101 | Pn | Pn | 14 58 18.5 | +0.7 |
| SOEI | Soe | 7.66 | 101 | P | Pn | 14 58 20.6 | +2.8 |
| SOEI | Soe | 7.66 | 101 | ⇑P | Pn | 14 58 18.5 | +0.7 |
| SOEI | Soe | 7.66 | 101 | P | Pn | 14 58 18.4 | +0.6 |
| KPJI | Karang Pucung<br>2μm,0.5s,73μm23nm | 7.70 | 277 | P | Pn | 14 58 19.7 | +1.4 |
| SMKI | Samarinda<br>932nm,0.8s,21nm | 7.91 | 4 | P | Pn | 14 58 21.5 | +0.4 |
| CMJI | Cimerak<br>3μm,0.7s,45μm559μm | 8.13 | 274 | P | Pn | 14 58 24.5 | +0.4 |
| JCJI | Jatiwangi<br>2μm,1.0s,56μm | 8.50 | 282 | P | Pn | 14 58 31.9 | +2.6 |
| BBJI | Bungbulang | 8.95 | 275 | P | Pn | 14 58 38.3 | +2.9 |
| MPSI | Mapaga | 9.25 | 21 | P | Pn | 14 58 39.0 | -0.6 |
| CNJI | Cibinong<br>994nm,1.2s | 9.48 | 276 | P | Pn | 14 58 44.9 | +2.3 |
| LUWI | Luwuk | 9.52 | 40 | P | Pn | 14 58 42.4 | -0.7 |
| LUWI | Luwuk | 9.52 | 40 | Pn | Pn | 14 58 42.5 | -0.7 |
| LUWI | Luwuk | 9.52 | 40 | P | Pn | 14 58 43.3 | -0.1 |
| LUWI | Luwuk | 9.52 | 40 | ⇓P | Pn | 14 58 42.1 | -1.1 |
| LUWI | Luwuk<br>1μm,1.0s,60μm | 9.52 | 40 | P | Pn | 14 58 42.1 | -1.1 |
| STKI | Sintang<br>984nm,1.0s,38μm | 9.84 | 328 | P | Pn | 14 58 47.2 | -0.4 |
| DBJI | Dramaga | 9.97 | 280 | P | Pn | 14 58 51.4 | +2.0 |
| SKJI | Sukabumi<br>3μm,1.1s,71μm454μm | 10.08 | 277 | P | Pn | 14 58 51.5 | +0.6 |
| TNG | Tangerang<br>2μm,1.4s,37μm307μm | 10.15 | 282 | P | | 14 58 56.5 | |
| TNG | | | | P | Pn | 14 58 54.2 | +2.4 |
| | 3μm,1.4s,56μm557μm | | | | | | |
| TOLI2 | Tolitoli | 10.30 | 24 | P | Pn | 14 58 55.9 | +2.0 |
| TOLI2 | Tolitoli | 10.30 | 24 | | Pn | 14 58 54.0 | +0.1 |
| SBJI | Serang<br>2μm,1.2s,40μm278μm | 10.66 | 281 | P | Pn | 14 59 00.6 | +1.8 |
| GTOI | Gorontalo | 10.98 | 36 | P | Pn | 14 59 02.3 | -1.0 |
| XMI | Christmas Isla | 10.99 | 258 | P | Pn | 14 59 03.1 | -0.3 |
| XMIS | Christmas Isla | 11.03 | 258 | Pn | Pn | 14 59 01.1 | -2.9 |
| SANI | Sanana | 11.24 | 56 | P | Pn | 14 59 08.3 | +1.5 |
| SANI | Sanana | 11.24 | 56 | P | Pn | 14 59 04.9 | -1.9 |
| SANI | Sanana | 11.24 | 56 | ⇓P | Pn | 14 59 06.2 | -0.5 |
| SANI | Sanana<br>1μm,1.3s,25μm390μm | 11.24 | 56 | P | Pn | 14 59 07.3 | +0.5 |
| KMSI | Cibinong<br>809nm,0.8s,49μm | 11.52 | 40 | P | Pn | 14 59 11.2 | +0.5 |
| NLAI | Namlea<br>547nm,0.7s,36μm407μm | 11.60 | 64 | P | Pn | 14 59 14.5 | +2.8 |
| SBUM | Sibu | 11.63 | 338 | | Pn | 14 59 11.6 | -0.4 |
| SBUM | Sibu | 11.63 | 338 | ⇓P | Pn | 14 59 11.8 | -0.3 |
| KSM | Kuching | 11.65 | 327 | P | Pn | 14 59 14.6 | +2.2 |
| KSM | Kuching | 11.65 | 327 | | Pn | 14 59 12.3 | 0.0 |
| KSM | Kuching | 11.65 | 327 | ⇑P | Pn | 14 59 12.9 | +0.5 |
| BLSI | Bandar Lampung<br>564nm,0.9s,23μm342μm | 11.70 | 284 | P | Pn | 14 59 16.3 | +3.2 |
| PPBI | Pangkal Pinang<br>1μm,1.5s,26μm456μm | 12.14 | 300 | P | Pn | 14 59 21.1 | +2.0 |
| KASI | Kota Agung<br>1μm,0.8s,30μm369μm | 12.38 | 282 | P | Pn | 14 59 24.5 | +2.1 |
| LWLI | Liwa<br>2μm,0.8s,42μm383μm | 12.93 | 284 | P | Pn | 14 59 31.4 | +1.4 |
| PMBI | Palembang | 12.98 | 294 | P | Pn | 14 59 34.8 | +4.1 |
| PMBI | Palembang | 12.98 | 294 | P | Pn | 14 59 34.1 | +3.4 |
| FITZ | Fitzroy Crossi | 13.04 | 139 | P | Pn | 14 59 30.7 | -0.7 |
| FITZ | Fitzroy Crossi | 13.04 | 139 | Pn | Pn | 14 59 30.2 | -1.2 |
| MBWA | Marble Bar | 13.05 | 167 | P | Pn | 14 59 29.8 | -1.7 |
| MBWA | Marble Bar | 13.05 | 167 | Pn | Pn | 14 59 28.9 | -2.7 |
| MBWA | Marble Bar<br>comp=Z,192μmcomp=Z,0.0nmcomp=Z,3μm,0.8s | 13.05 | 167 | P | Pn | 14 59 28.7 | -2.8 |
| MBWA | Marble Bar | 13.05 | 167 | P | Pn | 14 59 31.0 | -0.6 |
| MBWA | | | | P | Pn | 14 59 31.0 | -0.6 |
| MBWA | | | | P | Pn | 14 59 31.0 | -0.6 |
| MSAI | Masohi<br>comp=Z,940nm,0.9s,comp=Z,34μmcomp=Z,244μm | 13.21 | 68 | P | Pn | 14 59 36.1 | +2.3 |
| LBMI | Labuha<br>comp=Z,2μm,1.5s,comp=Z,32μm | 13.28 | 55 | P | Pn | 14 59 33.7 | -1.0 |
| PSA00 | Pilbara Seismi | 13.47 | 167 | P | Pn | 14 59 36.1 | -1.2 |
| PSA00 | Pilbara Seismi | 13.47 | 167 | P | Pn | 14 59 35.2 | -2.1 |
| PSA00 | Pilbara Seismi<br>comp=Z,179μmcomp=Z,0.0nmcomp=Z,2μm,0.7s | 13.47 | 167 | P | Pn | 14 59 34.9 | -2.4 |
| MYLDM | Lahad Datu | 13.60 | 8 | | Pn | 14 59 38.6 | -0.5 |
| MYLDM | Lahad Datu | 13.60 | 8 | P | Pn | 14 59 41.4 | +2.4 |
| BNDI | Bandanaira | 13.73 | 75 | P | Pn | 14 59 41.5 | +0.6 |
| BNDI | Bandanaira | 13.73 | 75 | ⇑P | Pn | 14 59 41.5 | +0.6 |
| BNDI | Bandanaira | 13.73 | 75 | P | Pn | 14 59 42.4 | +1.5 |
| KNRA | Kununurra | 13.90 | 123 | Pn | Pn | 14 59 42.1 | -1.0 |
| KNRA | Kununurra<br>comp=Z,121μmcomp=Z,0.0nmcomp=Z,5μm,2.1s | 13.90 | 123 | P | Pn | 14 59 40.8 | -2.3 |
| TNTI | Ternate | 14.04 | 50 | P | Pn | 14 59 46.9 | +1.8 |
| TNTI | Ternate | 14.04 | 50 | ⇓P | Pn | 14 59 43.9 | -1.2 |
| TNTI |

**FAKI Fak Fak 16.45 72** P **Pn** **15 00 13.9 -3.1**
comp=Z,3µm,1.1s,comp=Z,46µmcomp=Z,294µm
**PPSI Pulau Pagai 17.46 288** P **Pn** **15 00 29.2 -0.4**
comp=Z,1µm,0.7s,comp=Z,39µm
**KMPI Kaimana, Papua 17.61 76** P **Pn** **15 00 29.6 -1.8**
comp=Z,3µm,1.4s,comp=Z,52µmcomp=Z,203µm
**PDSI Padang 17.73 294** P **Pn** **15 00 32.7 -0.3**
comp=Z,850nm,1.2s
**DAV Davao City (W) 17.75 30** P **P** **15 00 35.8 +1.9**
**DAV Davao City (W) 17.75 30** P **P** **15 00 34.9 +1.1**
**DAV Davao City (W) 17.75 30** P **Pn** **15 00 32.7 -0.5**
comp=Z,24nm,0.3s,baz=158,slow=5.1,SNR=13
DAV LR LR 15 08 57.5
comp=Z,359µm,18.2s,baz=168,slow=43
comp=Z,59nm,0.2s
**DAV Davao City (W) 17.75 30** P **P** **15 00 34.0 +0.1**
DAV P **P** **15 00 34.0 +0.1**
**DAV Davao City (W) 17.75 30** P **P** **15 00 35.0 +1.1**
**DAV Davao City (W) 17.75 30** S **S** **15 04 06.0 +8.9**
**BKNI Bangkinang 17.79 298** P **P** **15 00 38.1 +3.8**
**BKNI Bangkinang 17.79 298** P **Pn** **15 00 33.5 -0.2**
**BKNI Bangkinang 17.79 298** P **P** **15 00 35.8 +1.5**
comp=Z,3µm,1.2s,comp=Z,69µmcomp=Z,191µm
**MEEK Meekatharra 18.25 174** P **P** **15 00 40.2 +0.8**
**MEEK Meekatharra 18.25 174** P **Pn** **15 00 38.8 -0.5**
comp=Z,102µmcomp=Z,0.0nmcomp=Z,4µm,0.8s
**SISI Saibi 18.82 291** P **Pn** **15 00 48.9 +2.6**
comp=Z,912nm,1.5s,comp=Z,26µm
**COCO West Island 19.84 257** P **Pn** **15 00 59.2 +0.7**
**COCO West Island 19.84 257** P **Pn** **15 00 57.9 -0.6**
**COCO West Island 19.84 257** P **Pn** **15 00 59.8 +1.2**
COCO P **Pn** **15 00 59.8 +1.2**
**COCO West Island 19.84 257** P **Pn** **15 00 57.9 -0.6**
COCO pmax pmax
comp=Z,1µm,1.3s
**WRKA Warakurna 19.95 147** P **Pn** **15 00 59.1 -0.7**
**WRKA Warakurna 19.95 147** P **Pn** **15 00 58.9 -0.9**
comp=Z,138µmcomp=Z,0.0nmcomp=Z,3µm,1.1s
**PBSI Pulau Batu 20.07 293** P Pn 15 01 02.2 +0.9
comp=Z,2µm,1.6s,comp=Z,36µmcomp=Z,165µm
**IPM Ipoh 20.14 309** P Pn 15 01 03.5 +1.4
**IPM Ipoh 20.14 309** ⇑P Pn 15 01 03.1 +1.1
**MORW Morawa 20.59 181** P Pn 15 01 07.0 -0.1
**MORW Morawa 20.59 181** P **P** **15 01 05.2 +0.4**
MORW IAmb IAmb 15 01 20.9
comp=Z,1µm,1.0s
MORW IAMs_20 IAMs_20 15 08 25.0
comp=Z,389µm,22.0s
**MORW Morawa 20.59 181** P **P** **15 01 05.4 +0.6**
comp=Z,0.0nmcomp=Z,2µm,1.1s
**WB0 Warramunga Arr 20.59 125** IAmb IAmb 15 01 20.2
comp=Z,2µm,1.0s
**WRA Warramunga Arr 20.63 126** P **P** **15 01 05.1 -0.4**
**WRA Warramunga Arr 20.63 126** P **P** **15 01 04.4 -1.0**
comp=Z,1µm,0.9s,baz=301,slow=12,SNR=601
WRA S **S** **15 04 52.7 -2.3**
comp=Z,1µm,1.2s,baz=292,slow=23,SNR=9.5
WRA LR LR 15 09 59.8
comp=Z,500µm,18.7s,baz=300,slow=39
**WRA Warramunga Arr 20.63 126** P **P** **15 01 05.1 -0.4**
WRA pmax pmax
comp=Z,152nm,1.0s
**WRAB Tennant Creek 20.64 126** P **P** **15 01 04.6 -0.9**
WRAB IAmb IAmb 15 01 23.7
comp=Z,2µm,1.1s
WRAB IAMs_20 IAMs_20 15 09 39.2
comp=Z,489µm,19.0s
**WRAB Tennant Creek 20.64 126***c i*P **P** **15 01 05.4 -0.1**
WRAB pmax pmax
comp=Z,5µm,1.5s
WRAB MLR MLR
comp=Z,381µm,14.0s
**WB2 Warramunga Arr 20.64 126** IAmb IAmb 15 01 19.2
comp=Z,1µm,1.0s
**WB1 Warramunga Ar. 20.65 126** P **P** **15 01 06.0 +0.4**
**WR0 Warramunga Arr 20.80 125** IAmb IAmb 15 01 23.6
comp=Z,3µm,1.1s
**RPSI Rantau Prapat 20.81 301** P **P** **15 01 06.7 -0.6**
RPSI IAmb IAmb 15 01 23.2
comp=Z,2µm,1.3s
**PSI Prapat 20.86 301** P **P** **15 01 09.2 +1.1**
**PSI Prapat 20.86 301** P **P** **15 01 06.7 -1.4**
PSI pmax pmax
comp=Z,2µm,1.3s
PSI MLR MLR
comp=Z,286µm,22.0s
**KULM Kulim 20.94 310** Pn **P** **15 01 09.9 +1.1**
**KULM Kulim 20.94 310** ⇑P Pn 15 01 10.6 -0.9
**GSI Gunungsitoli 21.30 296** P **P** **15 01 16.9 +4.3**
**GSI Gunungsitoli 21.30 296** P **P** **15 01 12.8 +0.2**
comp=Z,809nm,1.7s,comp=Z,168µm
**BLDU Ballidu 22.12 180** P **P** **15 01 22.5 +1.2**
**BLDU Ballidu 22.12 180** P **P** **15 01 21.7 +0.4**
comp=Z,0.0nmcomp=Z,2µm,1.3s
**KCSI Kotacane, Aceh 22.22 301** P **P** **15 01 21.6 -1.0**
comp=Z,1µm,1.4s,comp=Z,27µmcomp=Z,173µm
**ASAR Alice Springs 22.46 135** P **P** **15 01 24.5 -0.7**
**ASAR Alice Springs 22.46 135** P **P** **15 01 24.6 -0.5**
comp=Z,298nm,0.5s,baz=311,slow=10.0,SNR=612
ASAR S **S** **15 05 33.2 +2.8**
comp=Z,70nm,0.8s,baz=319,slow=25,SNR=1.6
ASAR LR LR 15 10 26.0
comp=Z,527µm,20.3s,baz=310,slow=37
comp=Z,298nm,0.5s
**AS31 Alice Springs 22.46 135** P **P** **15 01 24.5 -0.7**
comp=Z,0.0nmcomp=Z,640nm,0.7s
**AS01 Alice Springs 22.50 134** P **P** **15 01 25.0 -0.5**
**SNSI Sinabang, Aceh 22.91 297** P **P** **15 01 31.8 +1.9**
comp=Z,2µm,1.0s,comp=Z,32µmcomp=Z,164µm
**KLBR Kellerberrin 23.12 178** P **P** **15 01 32.8 +1.0**
**KLBR Kellerberrin 23.12 178** P **P** **15 01 32.3 +0.5**
comp=Z,2µm,1.1s
**KMBL Kambalda 23.39 169** P **P** **15 01 34.6 +0.1**
**KMBL Kambalda 23.39 169** P **P** **15 01 34.0 -0.5**
comp=Z,0.0nmcomp=Z,3µm,1.1s
**MTKN Mount Kenneth 23.45 182** P **P** **15 01 37.3 +2.2**
**MTKN Mount Kenneth 23.45 182** P **P** **15 01 37.8 +2.8**
comp=Z,3µm,0.7s
**MUN Mundaring 23.48 181** P **P** **15 01 36.4 +0.9**
**MUN Mundaring 23.48 181** P **P** **15 01 35.9 +0.4**
comp=Z,0.0nmcomp=Z,1µm,1.0s
**MMPI Merauke 23.49 92** P **P** **15 01 32.9 -2.8**
comp=Z,2µm,1.3s,comp=Z,56µmcomp=Z,246µm
**MLSI Meulaboh, Aceh 23.77 301** P **P** **15 01 39.2 +0.8**
comp=Z,1µm,0.9s
**LHMI Lhok Sumawe 23.84 304** P **P** **15 01 40.6 +1.6**
**LHMI Lhok Sumawe 23.84 304** ⇑P **P** **15 01 39.4 +0.4**
**LHMI Lhok Sumawe 23.84 304** P **P** **15 01 39.9 +0.9**
comp=Z,3µm,1.0s,comp=Z,69µmcomp=Z,206µm
**SRIT Nakonsritamara 23.93 314** P **P** **15 01 42.7 +2.9**
**GENI Genyem 24.11 78** P **P** **15 01 41.9 +0.3**
**GENI Genyem 24.11 78** ⇑P **P** **15 01 38.6 -3.0**
**GENI Genyem 24.11 78** P **P** **15 01 38.7 -3.0**
comp=Z,3µm,1.4s,comp=Z,38µmcomp=Z,154µm
**SURA Surathani 24.31 315** P **P** **15 01 46.3 +2.9**
**NWAO Narrogin (SRO) 24.43 179** P **P** **15 01 46.5 +2.1**
**NWAO Narrogin (SRO) 24.43 179** P **P** **15 01 43.9 -0.5**
**NWAO Narrogin (SRO) 24.43 179** IAMs_20 IAMs_20 15 11 28.4
comp=Z,446µm,20.0s
**NWAO Narrogin (SRO) 24.43 179** P **P** **15 01 44.5 +0.1**
comp=Z,62nm,0.5s,baz=351,slow=7.7,SNR=32
NWAO S **S** **15 06 06.8 +3.9**
comp=Z,376nm,0.9s,baz=22,slow=18,SNR=2.3
NWAO LR LR 15 11 40.2
comp=Z,461µm,20.4s,baz=5.5,slow=37
comp=Z,62nm,0.5s
**NWAO Narrogin (SRO) 24.43 179** P **P** **15 01 44.8 +0.5**
NWAO P **P** **15 01 44.8 +0.5**
NWAO P **P** **15 01 44.8 +0.5**
**NWAO Narrogin (SRO) 24.43 179** P **P** **15 01 43.9 -0.5**
NWAO pmax pmax
comp=Z,3µm,1.5s
NWAO MLR MLR
comp=Z,446µm,20.0s
**AUHAR St Anne's Scho 24.60 182** P **P** **15 01 48.0 +2.2**
**TABU Tabubil 24.61 84** P **P** **15 01 45.1 -1.1**
**JAY Jayapura 24.65 78** P **P** **15 01 42.7 -3.9**
comp=Z,351nm,0.9s
**FORT Forrest 24.71 156** P **P** **15 01 48.7 +1.8**
**FORT Forrest 24.71 156** P **P** **15 01 46.9 0.0**
**FORT Forrest 24.71 156** ⇑P **P** **15 01 47.3 +0.5**
**FORT Forrest 24.71 156** P **P** **15 01 47.4 +0.5**
comp=Z,0.0nmcomp=Z,3µm,0.7s
**QIS Mount Isa 25.28 121** P **P** **15 01 52.9 +0.7**
**QIS Mount Isa 25.28 121** P **P** **15 01 51.3 -0.9**
comp=Z,0.0nmcomp=Z,3µm,1.1s
**UBPT Khong Chiam 25.98 335** P **P** **15 02 01.7 +3.2**
**UBPT Khong Chiam 25.98 335** P **P** **15 01 58.1 -0.4**
**SZP Santa 26.04 8** P **P** **15 02 02.6 +3.5**
**RKGY Rocky Gully 26.10 179** P **P** **15 02 01.7 +2.2**
**RKGY Rocky Gully 26.10 179** P **P** **15 02 01.8 +2.2**
comp=Z,1µm,1.0s
**OOD Oodnadatta 26.40 139** P **P** **15 02 01.8 -0.4**
**H01W3 Cape Leeuwin H 26.48 185** P **P** **15 02 06.8 +4.2**
baz=12,slow=7.8,SNR=141
**H01W1 Cape Leeuwin H 26.48 185** P **P** **15 02 07.1 +4.4**
baz=12,slow=7.8,SNR=145
**H01W2 Cape Leeuwin H 26.49 185** P **P** **15 02 07.1 +4.4**
baz=12,slow=7.8,SNR=174
**AUALB St Joseph's Co 26.52 178** P **P** **15 02 05.0 +1.8**
**COEN Coen 26.61 104** P **P** **15 02 03.1 -1.2**
**COEN Coen 26.61 104** P **P** **15 02 03.0 -1.3**
COEN IAmb IAmb 15 02 31.6
comp=Z,1µm,1.1s
**COEN Coen 26.61 104** ⇑P **P** **15 02 03.0 -1.3**
**COEN Coen 26.61 104** P **P** **15 02 02.9 -1.3**
comp=Z,0.0nmcomp=Z,1µm,1.0s
**NAYO Nakonayok 27.19 326** P **P** **15 02 12.8 +3.3**
**MULG Mulgathing 27.22 146** P **P** **15 02 09.3 -0.3**
**CMBY CAMPBELL BAY 27.32 303** *e*P **P** **15 02 11.5 +0.8**
CMBY IAmb IAmb 15 02 43.5
comp=Z,399nm,0.7s
**QIZ Qiongzhong 28.05 346** P **P** **15 02 20.7 +3.6**
**QIZ Qiongzhong 28.05 346** P **P** **15 02 17.4 +0.3**
QIZ S **S** **15 07 02.8 +2.4**
QIZ pmax pmax
comp=Z,140nm,1.6s
QIZ pmax pmax
comp=Z,19µm,12.0s
QIZ LR LR
comp=Z,88µm,16.9s
QIZ LR LR
comp=Z,78µm,15.2s
QIZ LR LR
comp=Z,99µm,16.9s
**QIZ Qiongzhong 28.05 346** IAmb IAmb 15 02 48.4
comp=Z,961nm,2.0s
**SRDT SRDT 28.49 322** P **P** **15 02 24.6 +3.5**
**MTSU Mount Surprise 28.60 113** P **P** **15 02 22.4 +0.3**
**AUCSH Cairns State H 29.63 110** P **P** **15 02 33.5 +2.2**
**LCRK Leigh Creek 29.82 140** P **P** **15 02 33.7 +0.9**
**INKA Innaminka 29.83 133** P **P** **15 02 34.2 +1.3**
**PMG Port Moresby 30.17 94** P **P** **15 02 38.3 +2.2**
**PMG Port Moresby 30.17 94** P **P** **15 02 38.0 +1.9**
**PMG Port Moresby 30.17 94** P **P** **15 02 35.9 -0.2**
PMG IAmb IAmb 15 03 38.6
comp=Z,410nm,1.1s
**PMG Port Moresby 30.17 94** IAMs_20 IAMs_20 15 16 52.2
comp=Z,208µm,18.0s
**PMG Port Moresby 30.17 94** ⇑P **P** **15 02 33.6 -2.5**
**PMG Port Moresby 30.17 94** P **P** **15 02 35.0 -1.0**
comp=Z,19nm,0.7s,baz=272,slow=5.5,SNR=8.3
PMG ScP **ScP** **15 09 18.6 +0.6**
comp=Z,40nm,1.0s,baz=21,slow=16,SNR=1.8
PMG LR LR 15 17 22.8
comp=Z,344µm,18.6s,baz=259,slow=42
comp=Z,19nm,0.7s
**PMG Port Moresby 30.17 94***c i*P **P** **15 02 33.3 -2.8**
PMG pmax pmax
comp=Z,304nm,1.2s
PMG MLR MLR
comp=Z,375µm,17.0s
**BBOO Buckleboo 30.24 146** P **P** **15 02 36.2 -0.3**
**BBOO Buckleboo 30.24 146** P **P** **15 02 36.1 -0.3**
comp=Z,0.0nmcomp=Z,1µm,0.9s
**MCO Taipa Grande 30.46 354** P **P** **15 02 41.0 +2.5**
**HKPS Hong Kong Po S 30.57 355** P **P** **15 02 42.9 +3.5**
**HKC Hong Kong Obse 30.59 356** ⇑P **P** **15 02 44.0 +4.4**
**CTA Charters Tower 30.92 115** P **P** **15 02 43.3 +0.7**
comp=Z,13nm,0.9s,baz=288,slow=9.8,SNR=35
CTA ScP **ScP** **15 09 22.6 +2.3**
comp=Z,4.8nm,0.9s,baz=8.8,slow=24,SNR=3.6
CTA LR LR 15 17 31.3
comp=Z,33µm,18.1s,baz=290,slow=41
comp=Z,13nm,0.9s
**CTAO Charters Tower 30.92 115** P **P** **15 02 43.0 +0.3**
**CTAO Charters Tower 30.92 115** P **P** **15 02 42.4 -0.3**
CTAO IAmb IAmb 15 03 49.4
comp=Z,501nm,1.1s
**CTAO Charters Tower 30.92 115** ⇑P **P** **15 02 42.6 0.0**
**CTAO Charters Tower 30.92 115** P **P** **15 02 42.4 -0.3**
CTAO pmax pmax
comp=Z,501nm,1.1s
CTAO MLR MLR
comp=Z,401µm,20.0s
**PBA Port Blair 31.00 310** IAMs_20 IAMs_20 15 16 36.8
comp=Z,252µm,20.0s
**PBA Port Blair 31.00 310** *e*P **P** **15 02 43.8 +0.5**
PBA IAmb IAmb 15 03 11.2
comp=Z,261nm,0.8s
**TV1H Townsville Har 31.16 113** P **P** **15 02 46.1 +1.3**
**WHYH Whyalla 31.26 145** P **P** **15 02 46.5 +1.1**
**TWGBT Bentinan 31.31 8** P **P** **15 02 49.3 +3.3**
**PTPS Port Pirie 31.60 144** P **P** **15 02 49.6 +1.1**
**TPUB Ta-pu 31.73 7** P **P** **15 02 52.5 +2.8**
**TPUB Ta-pu 31.73 7** P **P** **15 02 50.2 +0.5**
TPUB IAmb IAmb 15 03 06.4
comp=Z,444nm,1.1s
**AUAYR Ayr State High 31.81 114** P **P** **15 02 52.4 +1.9**
**QLP Quilpie 31.82 128** P **P** **15 02 52.5 +2.0**
**QLP Quilpie 31.82 128** ⇑P **P** **15 02 51.0 +0.4**
**QLP Quilpie 31.82 128** P **P** **15 02 51.3 +0.7**
comp=Z,0.0nmcomp=Z,761nm,1.1s
**CM31 Chiang Mai Arr 31.88 327** IAmb IAmb 15 03 09.8
comp=Z,1µm,1.4s
**CMAR Chiang Mai Arr 31.88 327** P **P** **15 02 52.5 +1.4**
**CMAR Chiang Mai Arr 31.88 327** P **P** **15 02 51.6 +0.6**
comp=Z,37nm,0.8s,baz=151,slow=6.3,SNR=104
CMAR ScP **ScP** **15 09 26.5 +3.0**
comp=Z,16nm,0.8s,baz=167,slow=3.7,SNR=3.2
CMAR LR LR 15 16 43.5
comp=Z,200µm,21.2s,baz=140,slow=38
**CMAR Chiang Mai Arr 31.88 327** P **P** **15 02 52.5 +1.4**
**YULB Yu-li 31.91 8** P **P** **15 02 54.5 +3.3**
**YULB Yu-li 31.91 8** IAmb IAmb 15 03 11.3
comp=Z,635nm,1.8s
**SSLB Suanglung 32.25 7** P **P** **15 02 57.3 +3.0**
**SSLB Suanglung 32.25 7** P **P** **15 02 56.0 +1.7**
SSLB IAmb IAmb 15 03 11.2
comp=Z,476nm,1.2s
**HTT Hallett 32.33 144** P **P** **15 02 55.4 +0.5**
**HTT Hallett 32.33 144** ⇑P **P** **15 02 55.2 +0.3**
**HTT Hallett 32.33 144** P **P** **15 02 54.3 -0.6**
comp=Z,980nm,1.2s
**CRAI Chiangrai 32.62 331** P **P** **15 02 58.8 +1.2**
CRAI IAmb IAmb 15 03 10.0
comp=Z,588nm,1.1s
**NACB Ninganchiao 32.72 8** P **P** **15 03 01.2 +2.9**
**STKA Stephens Creek 32.94 139** P **P** **15 03 00.5 +0.3**
**STKA Stephens Creek 32.94 139** P **P** **15 03 00.3 0.0**
comp=Z,0.0nmcomp=Z,132nm,1.3s
**STKA Stephens Creek 32.94 139** P **P** **15 03 00.0 -0.2**
comp=Z,212nm,0.6s,baz=315,slow=9.2,SNR=120
STKA S **S** **15 08 20.3 +3.4**
comp=Z,112nm,1.0s,baz=16,slow=19,SNR=2.5
STKA LR LR 15 17 12.3
comp=Z,411µm,20.3s,baz=302,slow=38
comp=Z,212nm,0.6s
**STKA Stephens Creek 32.94 139***c i*P **P** **15 03 00.9 +0.7**
**YHNB Yeheng 33.17 8** P **P** **15 03 05.3 +2.9**
**YHNB Yeheng 33.17 8** IAmb IAmb 15 03 33.6
comp=Z,568nm,1.1s
**QZH Quanzhou 33.18 3** P **P** **15 03 01.9 -0.4**
QZH PP **PP** **15 04 17.6 -0.1**
QZH S **S** **15 08 17.3 -3.3**
QZH pmax pmax
comp=Z,190nm,1.1s
QZH pmax pmax
comp=Z,16µm,10.0s
QZH LR LR
comp=Z,34µm,15.1s
QZH LR LR
comp=Z,58µm,17.5s
QZH LR LR
comp=Z,94µm,19.2s
**GHSS Government Hou 33.22 146** P **P** **15 03 03.7 +1.1**
**YOJ Yonaguni jima 33.23 11** P **P** **15 03 06.2 +3.4**
**TATO Taipei 33.49 8** P **P** **15 03 08.6 +3.5**
**TATO Taipei 33.49 8** P **P** **15 03 05.1 +0.1**
TATO IAmb IAmb 15 03 28.4
comp=Z,765nm,1.0s
**TATO Taipei 33.49 8** P **P** **15 03 06.5 +1.4**
TATO P **P** **15 03 06.5 +1.4**
**GULI GuiLin 34.02 350** ⇓P **P** **15 03 11.3 +1.6**
GULI S S 15 08 43.3 +10
GULI pmax pmax
comp=Z,140nm,2.1s
GULI pmax pmax
comp=Z,16µm,9.2s
GULI LR LR
comp=Z,92µm,19.7s
GULI LR LR
comp=Z,51µm,18.8s
GULI LR LR
comp=Z,95µm,19.4s
**KAVG Kavieng 34.48 82** P **P** **15 03 15.3 +1.4**
**RMQ Roma 35.39 125** P **P** **15 03 22.7 +1.1**
**RMQ Roma 35.39 125** P **P** **15 03 25.7 +4.1**
**CMSA Cobar Meteorol 35.52 134** P **P** **15 03 24.0 +1.3**
**CMSA Cobar Meteorol 35.52 134** P **P** **15 03 22.7 0.0**
comp=Z,0.0nmcomp=Z,556nm,1.5s
**GUMO Guam 35.53 52** P **P** **15 03 25.9 +3.0**
**GUMO Guam 35.53 52** P **P** **15 03 23.0 +0.2**
comp=Z,33nm,0.6s,baz=39,slow=23,SNR=1.5
GUMO LR LR 15 16 40.2
comp=Z,63µm,21.9s,baz=230,slow=34
comp=Z,33nm,0.6s
**RK1H Rockhampton Ha 35.70 119** P **P** **15 03 24.9 +0.6**
**KMI Kunming 35.95 338** ⇑P **P** **15 03 29.8 +3.2**
KMI S **S** **15 09 08.3 +4.5**
KMI pmax pmax
comp=Z,330nm,1.0s
KMI pmax pmax
comp=Z,16µm,10.1s
KMI LR LR
comp=Z,45µm,21.6s
KMI LR LR
comp=Z,116µm,17.1s
KMI LR LR
comp=Z,112µm,20.3s
**GYA Guiyang 35.96 345** ⇑P **P** **15 03 28.1 +1.5**
GYA S **S** **15 09 02.6 -1.2**
GYA pmax pmax
comp=Z,110nm,1.6s
GYA pmax pmax
comp=Z,18µm,10.2s
GYA LR LR
comp=Z,43µm,22.7s
GYA LR LR
comp=Z,89µm,21.1s
GYA LR LR
comp=Z,130µm,22.6s
**AULRC Lightning Ridg 36.10 130** P **P** **15 03 29.4 +1.7**
**ARPS Mount Arapiles 36.37 145** P **P** **15 03 31.6 +1.7**
**ARPS Mount Arapiles 36.37 145** P **P** **15 03 30.2 +0.3**
comp=Z,1µm,1.0s
**GD1S Gladstone Soft 36.43 119** P **P** **15 03 31.9 +1.4**
**CNSH ChangSha 36.52 355** P **P** **15 03 31.8 +0.6**
CNSH S **S** **15 09 14.3 +2.2**
CNSH pmax pmax
comp=Z,30nm,1.9s
CNSH LR LR
comp=Z,71µm,21.4s
CNSH LR LR
comp=Z,50µm,18.6s
CNSH LR LR
comp=Z,95µm,21.0s
**JOW Kunigami 36.78 18** P **P** **15 03 36.5 +3.1**
**JOW Kunigami 36.78 18** IAmb IAmb 15 03 51.2
comp=Z,447nm,1.2s
**JOW Kunigami 36.78 18** P **P** **15 03 33.6 +0.2**
comp=Z,11nm,0.4s,baz=338,slow=5.9,SNR=4.3
JOW LR LR 15 20 22.0
comp=Z,105µm,20.6s,baz=198,slow=39
comp=Z,11nm,0.4s
**JMZ Minamidaito 2 36.84 22** P **P** **15 03 37.3 +3.4**
**EIDS Eidsvold 36.88 121** P **P** **15 03 36.2 +1.8**
**EIDS Eidsvold 36.88 121** ⇑P **P** **15 03 34.8 +0.4**
**EIDS Eidsvold 36.88 121** P **P** **15 03 34.6 +0.2**
comp=Z,0.0nmcomp=Z,233nm,2.5s
**PZH PanZhiHua 37.57 338** P **P** **15 03 41.4 +1.1**
PZH sP **sP** **15 03 55.4 +4.2**
PZH pmax pmax
comp=Z,100nm,1.8s
PZH pmax pmax
comp=Z,16µm,9.2s
PZH LR LR
comp=Z,60µm,22.5s
PZH LR LR
comp=Z,74µm,21.1s
PZH LR LR
comp=Z,92µm,21.6s
**TNCH TengChong 37.61 332**⇑*i*P **P** **15 03 43.1 +2.4**
TNCH sP sP 15 03 51.0 -0.6
TNCH S **S** **15 09 29.9 +0.8**
TNCH sS ScP 15 09 43.8 -0.3
TNCH pmax pmax
comp=Z,330nm,2.0s
TNCH pmax pmax
comp=Z,2µm,3.0s
TNCH LR LR
comp=Z,39µm,28.0s
TNCH LR LR
comp=Z,68µm,24.6s
TNCH LR LR
comp=Z,115µm,24.9s
**AUMAG Moama Anglican 37.65 141** P **P** **15 03 42.7 +1.9**
**AUDCS Dubbo College 37.99 133** P **P** **15 03 45.5 +1.8**
**BRAT Ballarat 38.12 144** P **P** **15 03 46.0 +1.3**
**WHN Wuhan 38.77 357** P **P** **15 03 51.0 +0.9**
WHN pP **sP** **15 04 00.6 -0.5**
WHN PP **PnPn** **15 05 21.4 -0.1**
WHN S **S** **15 09 50.9 +4.9**
WHN pmax pmax
comp=Z,420nm,1.4s
WHN pmax pmax
comp=Z,16µm,8.1s
WHN LR LR
comp=Z,44µm,15.2s
WHN LR LR
comp=Z,25µm,13.2s
WHN LR LR
comp=Z,60µm,23.0s
**GEXS Deakin Univers 38.77 144** P **P** **15 03 51.6 +1.5**
**MLBS Spotswood, Mel 38.87 143** P **P** **15 03 52.7 +1.7**
**YNG Young 38.95 136** P **P** **15 03 53.7 +1.9**
**YNG Young 38.95 136** P **P** **15 03 53.0 +1.3**
comp=Z,0.0nmcomp=Z,4µm,1.3s
**ENH Enshi 39.04 350** P **P** **15 03 53.6 +1.1**
**ENH Enshi 39.04 350** IAmb IAmb 15 04 13.8
comp=Z,1µm,1.4s
**PALK Pallekele 39.05 292** P **P** **15 03 52.4 -0.4**
**PALK Pallekele 39.05 292** ⇓P **P** **15 03 53.1 +0.2**
**PALK Pallekele 39.05 292** LR LR 15 21 07.9
comp=Z,78µm,21.1s,baz=222,slow=38
**PALK Pallekele 39.05 292** P **P** **15 03 53.1 +0.2**
PALK P **P** **15 03 53.1 +0.2**
PALK P **P** **15 03 53.1 +0.2**
**PALK Pallekele 39.05 292***i* P **P** **15 03 48.2 -4.7**
**TOO Toolangi 39.06 143** P **P** **15 03 55.1 +2.5**
**TOO Toolangi 39.06 143** IAmb IAmb 15 04 10.5
comp=Z,828nm,1.1s
**TOO Toolangi 39.06 143** ⇓P **P** **15 03 54.4 +1.7**
**TOO Toolangi 39.06 143** P **P** **15 03 54.2 +1.5**
comp=Z,0.0nmcomp=Z,782nm,1.2s
**AUPHS Peel High Scho 39.11 130** P **P** **15 03 55.0 +1.9**
**AUWSH Wavell State H 39.26 124** P **P** **15 03 56.6 +2.2**
**ARMA Armidale 39.36 129** P **P** **15 03 57.3 +1.9**
**ARMA Armidale 39.36 129** ⇑P **P** **15 03 57.5 +2.1**
**ARMA Armidale 39.36 129** P **P** **15 03 56.0 +0.6**
comp=Z,0.0nmcomp=Z,414nm,1.0s
**SSE Sheshan 39.49 6** P **P** **15 03 57.6 +1.4**
SSE PP **PP** **15 05 26.8 -0.4**
SSE S **S** **15 09 54.6 -2.4**
SSE pmax pmax
comp=Z,160nm,1.9s
SSE pmax pmax
comp=Z,7µm,10.3s
**MALK Mahakanadarawa 39.64 294** P **P** **15 03 59.3 +1.6**
**IMP Imphal 39.74 327** *e*P **P** **15 03 59.8 +1.4**
IMP IAmb IAmb 15 04 14.8
comp=Z,389nm,0.9s
**GC1S Gold Coast 1 S 39.93 124** P **P** **15 04 01.2 +1.2**
**CAN Canberra 39.93 137** P **P** **15 04 01.3 +1.3**
**CAN Canberra 39.93 137** ⇑P **P** **15 04 01.4 +1.4**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CAN** | **Canberra** | **39.93** | **137** | P | **P** | **15 04 01.2** | **+1.2** |
| | comp=Z,410nm,1.2s | | | | | | |
| **CNB** | **Canberra Magne** | **40.18** | **137** | P | **P** | **15 04 03.8** | **+1.8** |
| **CNB** | **Canberra Magne** | **40.18** | **137** | P | **P** | **15 04 03.2** | **+1.2** |
| | comp=Z,0.0nmcomp=Z,548nm,1.5s | | | | | | |
| **NJ2** | **Nanjing** | **40.26** | **3** | ⇓*i*P | **P** | **15 04 03.5** | **+0.9** |
| NJ2 | | | | pP | **pP** | **15 04 11.9** | **+1.4** |
| NJ2 | | | | sP | **sP** | **15 04 16.5** | **+2.9** |
| NJ2 | | | | S | **S** | **15 10 07.9** | **-0.6** |
| NJ2 | | | | sS | **sS** | **15 10 21.1** | **+0.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,66nm,1.9s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,15μm,7.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,48μm,18.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,32μm,16.6s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,69μm,18.1s | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **40.30** | **134** | P | **P** | **15 04 04.7** | **+1.7** |
| **KOHI** | **KOHIMA** | **40.36** | **328** | *e*P | **P** | **15 04 04.8** | **+1.0** |
| KOHI | | | | IAmb | IAmb | 15 04 23.1 | |
| | comp=Z,4μm,1.5s | | | | | | |
| **AGT** | **Agartala** | **40.54** | **323** | *e*P | **P** | **15 04 04.5** | **-0.5** |
| AGT | | | | IAmb | IAmb | 15 04 32.3 | |
| | comp=Z,2μm,1.3s | | | | | | |
| **NTLH** | **Newcastle Hard** | **40.57** | **132** | P | **P** | **15 04 07.0** | **+1.8** |
| **RIV** | **Riverview** | **40.64** | **134** | P | **P** | **15 04 07.5** | **+1.7** |
| **RIV** | **Riverview** | **40.64** | **134** | ⇑P | **P** | **15 04 08.1** | **+2.3** |
| **RIV** | **Riverview** | **40.64** | **134** | P | **P** | **15 04 08.0** | **+2.3** |
| | comp=Z,0.0nmcomp=Z,644nm,1.2s | | | | | | |
| **WOLH** | **Wollongong Har** | **40.73** | **135** | P | **P** | **15 04 08.0** | **+1.5** |
| **LKP** | **Lekhapani** | **40.82** | **331** | *e*P | **P** | **15 04 08.6** | **+1.3** |
| LKP | | | | IAmb | IAmb | 15 04 28.9 | |
| | comp=Z,4μm,1.1s | | | | | | |
| **AUUHS** | **Ulladulla High** | **40.96** | **136** | P | **P** | **15 04 10.4** | **+2.0** |
| **CD2** | **Chengdu** | **40.97** | **343** | P | **P** | **15 04 09.3** | **+0.7** |
| CD2 | | | | pP | sP | 15 04 18.5 | -1.0 |
| CD2 | | | | sP | pP | 15 04 23.3 | +6.9 |
| CD2 | | | | S | **S** | **15 10 23.5** | **+4.2** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,16μm,9.6s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,85μm,19.6s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,89μm,18.2s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,95μm,18.0s | | | | | | |
| **MILA** | **Mila** | **41.03** | **139** | P | **P** | **15 04 08.1** | **-1.0** |
| **SHL** | **Shillong** | **41.46** | **325** | P | **P** | **15 04 12.5** | **-0.3** |
| SHL | | | | IAmb | IAmb | 15 04 34.7 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **SHL** | **Shillong** | **41.46** | **325** | *e*P | **P** | **15 04 13.0** | **+0.2** |
| SHL | | | | IAmb | IAmb | 15 04 34.5 | |
| | comp=Z,1μm,1.2s | | | | | | |
| **SHL** | **Shillong** | **41.46** | **325** | P | **P** | **15 04 13.7** | **+0.8** |
| | SNR=93 | | | | | | |
| **SHL** | **Shillong** | **41.46** | **325** | P | **P** | **15 04 12.5** | **-0.3** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,1μm,1.0s | | | | | | |
| **MDRS** | **Chennai** | **41.96** | **300** | *e*P | **P** | **15 04 17.0** | **+0.1** |
| MDRS | | | | IAmb | IAmb | 15 04 51.7 | |
| | comp=Z,490nm,1.6s | | | | | | |
| **ZIRO** | **ZIRO** | **41.97** | **329** | *e*P | **P** | **15 04 17.9** | **+0.9** |
| ZIRO | | | | IAmb | IAmb | 15 04 40.4 | |
| | comp=Z,914nm,1.3s | | | | | | |
| **CORO** | **Coronation Par** | **42.58** | **146** | P | **P** | **15 04 21.1** | **-0.5** |
| **GLAD** | **Gladstone** | **42.76** | **145** | P | **P** | **15 04 24.6** | **+1.5** |
| **HNR** | **Honiara** | **42.78** | **95** | P | **P** | **15 04 22.7** | **-0.9** |
| **HNR** | **Honiara** | **42.78** | **95** | P | **P** | **15 04 21.9** | **-1.8** |
| HNR | | | | IAMs_20 | IAMs_20 | 15 24 18.8 | |
| | comp=Z,121μm,20.0s | | | | | | |
| **HNR** | **Honiara** | **42.78** | **95** | ⇑P | **P** | **15 04 21.9** | **-1.8** |
| **HNR** | **Honiara** | **42.78** | **95** | LR | LR | 15 24 48.3 | |
| | comp=Z,1215μm,18.0s,baz=261,slow=40 | | | | | | |
| **HNR** | **Honiara** | **42.78** | **95** | P | **P** | **15 04 21.9** | **-1.8** |
| HNR | | | | pmax | pmax | | |
| | comp=Z,3μm,1.1s | | | | | | |
| HNR | | | | MLR | MLR | | |
| | comp=Z,121μm,20.0s | | | | | | |
| **XAN** | **Xi'an** | **42.82** | **351** | ⇓P | **P** | **15 04 23.6** | **0.0** |
| XAN | | | | pP | pP | 15 04 27.6 | -3.9 |
| XAN | | | | sP | sP | 15 04 30.5 | -4.1 |
| XAN | | | | PP | **PP** | **15 06 04.1** | **+0.8** |
| XAN | | | | PcP | **PcP** | **15 06 13.8** | **-0.8** |
| XAN | | | | S | **S** | **15 10 46.8** | **+0.3** |
| XAN | | | | sS | pS | 15 10 56.4 | +1.2 |
| XAN | | | | ScS | **ScS** | **15 14 22.6** | **-0.6** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,86nm,1.9s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,12μm,6.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,180μm,18.6s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,34μm,19.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,272μm,17.9s | | | | | | |
| **LYN** | **LuoYang** | **42.88** | **355** | P | **P** | **15 04 24.9** | **+0.9** |
| LYN | | | | pP | pP | 15 04 30.0 | -1.9 |
| LYN | | | | sP | sP | 15 04 33.8 | -1.2 |
| LYN | | | | S | **S** | **15 10 49.3** | **+2.1** |
| LYN | | | | sS | sS | 15 10 58.1 | -1.5 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,120nm,1.3s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,23μm,10.0s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,77μm,24.4s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,62μm,17.2s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,150μm,22.0s | | | | | | |
| **TRD** | **Trivandrum** | **42.95** | **292** | *e*P | **P** | **15 04 27.6** | **+2.7** |
| TRD | | | | IAmb | IAmb | 15 04 40.3 | |
| | comp=Z,124nm,0.8s | | | | | | |
| **SALM** | **Salem** | **43.09** | **297** | *e*P | **P** | **15 04 27.9** | **+1.9** |
| **JCJ** | **Chichijima** | **43.10** | **34** | P | **P** | **15 04 27.9** | **+2.0** |
| **JCJ** | **Chichijima** | **43.10** | **34** | ⇑P | **P** | **15 04 26.3** | **+0.4** |
| **JCJ** | **Chichijima** | **43.10** | **34** | P | **P** | **15 04 21.3** | **-4.6** |
| | comp=Z,279nm,0.7s,baz=270,slow=6.2,SNR=6.7 | | | | | | |
| JCJ | | | | LR | LR | 15 21 26.0 | |
| | comp=Z,58μm,21.3s,baz=210,slow=35 | | | | | | |
| **KOD** | **Kodaikanal** | **43.15** | **295** | *e*P | **P** | **15 04 26.3** | **-0.6** |
| KOD | | | | IAmb | IAmb | 15 05 04.0 | |
| | comp=Z,246nm,1.1s | | | | | | |
| **MOO** | **Moorlands** | **43.27** | **147** | P | **P** | **15 04 29.0** | **+1.8** |
| **MOO** | **Moorlands** | **43.27** | **147** | P | **P** | **15 04 29.3** | **+2.1** |
| | comp=Z,0.0nmcomp=Z,503nm,1.2s | | | | | | |
| **JNU** | **Nakatsue** | **43.44** | **17** | P | **P** | **15 04 30.1** | **+1.4** |
| **JNU** | **Nakatsue** | **43.44** | **17** | ⇑P | **P** | **15 04 28.6** | **-0.1** |
| **JNU** | **Nakatsue** | **43.44** | **17** | P | **P** | **15 04 28.7** | **0.0** |
| | comp=Z,42nm,0.8s,baz=146,slow=2.8,SNR=15 | | | | | | |
| JNU | | | | LR | LR | 15 22 57.6 | |
| | comp=Z,81μm,21.8s,baz=194,slow=37 | | | | | | |
| | comp=Z,42nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **43.44** | **17** | P | **P** | **15 04 29.6** | **+0.9** |
| **TAU** | **Tasmania Unive** | **43.66** | **147** | P | **P** | **15 04 32.4** | **+2.1** |
| **TAU** | **Tasmania Unive** | **43.66** | **147** | P | **P** | **15 04 30.3** | **0.0** |
| TAU | | | | IAmb | IAmb | 15 04 47.9 | |
| | comp=Z,584nm,1.4s | | | | | | |
| **TAU** | **Tasmania Unive** | **43.66** | **147** | ⇓P | **P** | **15 04 32.2** | **+1.9** |
| **TAU** | **Tasmania Unive** | **43.66** | **147** | P | **P** | **15 04 30.3** | **0.0** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,585nm,1.5s | | | | | | |
| TAU | | | | MLR | MLR | | |
| | comp=Z,504μm,22.0s | | | | | | |
| **DGAR** | **Diego Garcia** | **43.76** | **268** | P | **P** | **15 04 33.6** | **+2.1** |
| DGAR | | | | P | **P** | **15 04 33.6** | **+2.1** |
| **KNTI** | **KHUNTI** | **43.79** | **316** | IAmb | IAmb | 15 05 08.6 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **BOK** | **Bokaro** | **43.88** | **317** | *e*P | **P** | **15 04 33.3** | **+1.0** |
| BOK | | | | IAmb | IAmb | 15 05 05.2 | |
| | comp=Z,251nm,1.4s | | | | | | |
| BOK | | | | IAMs_20 | IAMs_20 | 15 14 56.9 | |
| | comp=Z,69μm,21.9s | | | | | | |
| **PATS** | **Pohnpei** | **44.22** | **71** | P | **P** | **15 04 36.1** | **+0.9** |
| **PATS** | **Pohnpei** | **44.22** | **71** | P | **P** | **15 04 34.4** | **-0.8** |
| PATS | | | | IAmb | IAmb | 15 04 53.0 | |
| | comp=Z,1μm,1.6s | | | | | | |
| **PATS** | **Pohnpei** | **44.22** | **71** | P | P | 15 04 40.3 | +5.1 |
| **JTU** | **Tsushima** | **44.35** | **15** | P | **P** | **15 04 38.9** | **+3.0** |
| **JTU** | **Tsushima** | **44.35** | **15** | ⇓P | **P** | **15 04 36.9** | **+1.0** |
| **TIA** | **Tai'an** | **44.36** | **1** | P | **P** | **15 04 35.8** | **-0.1** |
| TIA | | | | S | **S** | **15 11 03.8** | **-5.0** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,87nm,1.0s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=Z,18μm,8.6s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,68μm,20.1s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,36μm,19.6s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,130μm,18.6s | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **44.37** | **279** | P | **P** | **15 04 36.1** | **-0.3** |
| KAAM | | | | IAMs_20 | IAMs_20 | 15 21 11.8 | |
| | comp=Z,115μm,22.0s | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **44.37** | **279** | ⇑P | **P** | **15 04 37.2** | **+0.7** |
| **KAAM** | **Kaadhehdhoo** | **44.37** | **279** | P | **P** | **15 04 36.4** | **0.0** |
| **GTK** | **Tadong** | **44.69** | **324** | *e*P | **P** | **15 04 39.7** | **+0.8** |
| GTK | | | | IAmb | IAmb | 15 04 58.3 | |
| | comp=Z,1μm,1.4s | | | | | | |
| **JMN** | **Monobe** | **44.97** | **20** | P | **P** | **15 04 43.8** | **+2.9** |
| **JMN** | **Monobe** | **44.97** | **20** | ⇑P | **P** | **15 04 41.6** | **+0.8** |
| **LSA** | **Lhasa** | **45.11** | **328** | P | **P** | **15 04 44.5** | **+1.9** |
| LSA | | | | S | **S** | **15 11 19.3** | **-1.6** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,34nm,0.8s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,56μm,20.1s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,44μm,24.4s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,90μm,23.0s | | | | | | |
| **LSA** | **Lhasa** | **45.11** | **328** | IAmb | IAmb | 15 05 00.4 | |
| | comp=Z,334nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **45.11** | **328** | P | **P** | **15 04 42.9** | **+0.3** |
| **BLSP** | **Bilaspur** | **45.43** | **312** | *e*P | **P** | **15 04 43.5** | **-1.2** |
| BLSP | | | | IAmb | IAmb | 15 05 01.4 | |
| | comp=Z,300nm,1.4s | | | | | | |
| **HYB** | **Hyderabad** | **45.53** | **304** | *e*P | **P** | **15 04 44.0** | **-1.6** |
| HYB | | | | IVmB_BB | | 15 04 59.4 | |
| | comp=Z,4μm,11.2s | | | | | | |
| HYB | | | | *e*S | **S** | **15 11 25.8** | **-0.7** |
| HYB | | | | IVMs_BB | IVMs_BB | 15 21 41.6 | |
| | comp=Z,17μm,27.2s | | | | | | |
| **HNS** | **HongShan** | **45.58** | **358** | ⇓P | **P** | **15 04 45.4** | **-0.2** |
| HNS | | | | pP | **pP** | **15 04 52.4** | **-1.1** |
| HNS | | | | sP | **sP** | **15 04 53.5** | **-3.1** |
| HNS | | | | PP | **PcP** | **15 06 28.1** | **+4.3** |
| HNS | | | | S | **S** | **15 11 26.8** | **+0.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,89nm,1.1s | | | | | | |
| HNS | | | | pmax | pmax | | |
| | comp=Z,2μm,5.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,75μm,22.3s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,35μm,23.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,97μm,22.8s | | | | | | |
| **LHI** | **Lord Howe Isla** | **45.65** | **126** | IAMs_20 | IAMs_20 | 15 26 10.9 | |
| | comp=Z,141μm,19.0s | | | | | | |
| **TJN** | **Taejon** | **45.65** | **12** | P | **P** | **15 04 47.9** | **+1.7** |
| **TJN** | **Taejon** | **45.65** | **12** | IAmb | IAmb | 15 05 02.7 | |
| | comp=Z,415nm,0.8s | | | | | | |
| **TJN** | **Taejon** | **45.65** | **12** | ⇑*e*P | **P** | **15 04 46.2** | **0.0** |
| **AIS** | **Amsterdam Isla** | **45.81** | **224** | IAMs_20 | IAMs_20 | 15 21 25.8 | |
| | comp=Z,92μm,19.0s | | | | | | |
| **LZH** | **Lanzhou** | **45.84** | **346** | *e*P | **P** | **15 04 49.5** | **+1.6** |
| LZH | | | | pP | pP | 15 04 55.8 | 0.0 |
| LZH | | | | S | **S** | **15 11 33.3** | **+2.7** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,110nm,1.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,76μm,17.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,58μm,19.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,62μm,16.5s | | | | | | |
| **JHS** | **Saijyo** | **45.87** | **19** | P | **P** | **15 04 48.1** | **+0.1** |
| **TIY** | **Taiyuan** | **46.02** | **355** | *e*P | **P** | **15 04 49.8** | **+0.6** |
| TIY | | | | PP | **PP** | **15 06 38.3** | **+0.8** |
| TIY | | | | S | **S** | **15 11 33.3** | **+0.3** |
| TIY | | | | pmax | pmax | | |
| | comp=Z,120nm,1.2s | | | | | | |
| TIY | | | | pmax | pmax | | |
| | comp=Z,13μm,10.2s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,34μm,24.0s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,30μm,19.2s | | | | | | |
| TIY | | | | LR | LR | | |
| | comp=Z,57μm,22.0s | | | | | | |
| **JAD** | **Aida** | **46.17** | **20** | P | **P** | **15 04 50.6** | **+0.3** |
| **EVN** | **Everest** | **46.22** | **322** | ⇑P | **P** | **15 04 51.5** | **-0.2** |
| **INCN** | **Inchon** | **46.58** | **11** | P | **P** | **15 04 56.4** | **+2.9** |
| **INCN** | **Inchon** | **46.58** | **11** | P | **P** | **15 04 52.8** | **-0.7** |
| **INCN** | **Inchon** | **46.58** | **11** | P | **P** | **15 04 54.7** | **+1.2** |
| **INCN** | **Inchon** | **46.58** | **11** | P | **P** | **15 04 52.8** | **-0.7** |
| INCN | | | | pmax | pmax | | |
| | comp=Z,339nm,1.7s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **46.78** | **27** | P | **P** | **15 04 53.4** | **-1.8** |
| | comp=Z,199nm,0.8s,baz=104,slow=4.2,SNR=1.9 | | | | | | |
| JHJ | | | | LR | LR | 15 23 38.8 | |
| | comp=Z,50μm,20.8s,baz=230,slow=35 | | | | | | |
| | comp=Z,199nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.79** | **12** | P | **P** | **15 04 55.4** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **46.79** | **12** | P | **P** | **15 04 55.4** | **+0.3** |
| **KSRS** | **Korea Array** | **46.80** | **12** | P | **P** | **15 04 55.9** | **+0.6** |
| | comp=Z,29nn,0.8s,baz=191,slow=8.0,SNR=102 | | | | | | |
| KSRS | | | | S | **S** | **15 11 44.2** | **+0.2** |
| | comp=Z,4.4nm,1.0s,baz=193,slow=5.9,SNR=1.1 | | | | | | |
| KSRS | | | | LR | LR | 15 29 33.6 | |
| | comp=Z,31μm,18.2s,baz=180,slow=43 | | | | | | |
| **KS19** | **Wonju Array Si** | **46.84** | **12** | IAmb | IAmb | 15 05 40.4 | |
| | comp=Z,889nm,1.6s | | | | | | |
| **JWT** | **Wachi** | **46.91** | **21** | P | **P** | **15 04 56.2** | **+0.2** |
| **HJU** | **Haeju** | **46.96** | **10** | P | **P** | **15 04 57.6** | **+1.2** |
| HJU | | | | S | **S** | **15 11 49.2** | **+3.0** |
| HJU | | | | AmB | | | |
| | comp=Z,19μm,6.6s | | | | | | |
| HJU | | | | AMS | AMS | | |
| | comp=Z,33μm,21.8s | | | | | | |
| **NGP** | **Nagpur** | **47.16** | **309** | *e*P | **P** | **15 04 56.4** | **-2.0** |
| **DL2** | **Dalian** | **47.27** | **5** | P | **P** | **15 04 57.6** | **-1.3** |
| DL2 | | | | sP | **sP** | **15 05 11.8** | **+1.8** |
| DL2 | | | | PP | **PP** | **15 06 45.9** | **-4.4** |
| DL2 | | | | S | **S** | **15 11 51.1** | **+0.4** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,190nm,0.8s | | | | | | |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,3μm,8.8s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,51μm,18.6s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,32μm,18.6s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,62μm,19.2s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **47.53** | **110** | P | **P** | **15 05 02.6** | **+1.3** |
| **KOUNC** | **Koumac, New Ca** | **47.53** | **110** | P | **P** | **15 05 01.1** | **-0.2** |
| KOUNC | | | | IAmb | IAmb | 15 05 16.1 | |
| | comp=Z,736nm,1.3s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **47.53** | **110** | ⇑P | **P** | **15 05 01.6** | **+0.3** |
| **INU** | **Inuyama** | **47.56** | **23** | P | **P** | **15 05 02.2** | **+1.0** |
| **INU** | **Inuyama** | **47.56** | **23** | IAmb | IAmb | 15 05 21.0 | |
| | comp=Z,570nm,1.2s | | | | | | |
| **INU** | **Inuyama** | **47.56** | **23** | ⇑P | **P** | **15 05 01.5** | **+0.3** |
| **ALBI** | **Allahabad** | **47.65** | **316** | *e*P | **P** | **15 05 00.8** | **-1.3** |
| ALBI | | | | IAmb | IAmb | 15 05 30.4 | |
| | comp=Z,586nm,1.3s | | | | | | |
| **JGF** | **Kuroka** | **47.91** | **23** | P | **P** | **15 05 06.9** | **+2.9** |
| **JGF** | **Kuroka** | **47.91** | **23** | ⇑P | **P** | **15 05 04.2** | **+0.3** |
| **PYAG** | **Pyongyang** | **47.95** | **10** | P | **P** | **15 05 05.4** | **+1.3** |
| PYAG | | | | S | **S** | **15 12 03.7** | **+3.5** |
| PYAG | | | | AmB | | | |
| | comp=Z,13μm,7.0s | | | | | | |
| PYAG | | | | AMS | AMS | | |
| | comp=Z,32μm,18.9s | | | | | | |
| **BJT** | **Baijiatuan** | **48.16** | **360** | P | **P** | **15 05 07.0** | **+1.3** |
| **BJT** | **Baijiatuan** | **48.16** | **360** | IAmb | IAmb | 15 05 33.0 | |
| | comp=Z,346nm,1.0s | | | | | | |
| **BJI** | **Beijing** | **48.18** | **360** | P | **P** | **15 05 05.9** | **0.0** |
| BJI | | | | pP | **pP** | **15 05 14.3** | **+0.5** |
| BJI | | | | S | **S** | **15 12 06.0** | **+2.5** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,160nm,1.3s | | | | | | |
| BJI | | | | pmax | pmax | | |
| | comp=Z,8μm,10.7s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,43μm,22.3s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,17μm,19.9s | | | | | | |
| BJI | | | | LR | LR | | |
| | comp=Z,64μm,21.8s | | | | | | |
| **JGN** | **Niukaw** | **48.45** | **22** | P | **P** | **15 05 08.5** | **+0.4** |
| **AKL** | **Akola** | **48.50** | **307** | *e*P | **P** | **15 05 06.2** | **-2.5** |
| AKL | | | | IAmb | IAmb | 15 05 27.9 | |
| | comp=Z,174nm,1.3s | | | | | | |
| AKL | | | | IAMs_20 | IAMs_20 | 15 19 44.8 | |
| | comp=Z,11μm,21.8s | | | | | | |
| **SUJ** | **Sinuiju** | **48.79** | **8** | P | **P** | **15 05 10.6** | **+0.1** |
| SUJ | | | | S | **S** | **15 12 15.0** | **+3.0** |
| SUJ | | | | AmB | | | |
| | comp=Z,15μm,6.8s | | | | | | |
| SUJ | | | | AMS | AMS | | |
| | comp=Z,54μm,23.0s | | | | | | |
| **GOMU** | **GeErMu** | **48.87** | **336** | P | **P** | **15 05 13.3** | **+1.6** |
| GOMU | | | | pP | pP | 15 05 19.4 | -0.2 |
| GOMU | | | | S | **S** | **15 12 17.4** | **+3.3** |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,88nm,1.4s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,145μm,18.6s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,114μm,18.0s | | | | | | |
| GOMU | | | | LR | LR | | |
| | comp=Z,230μm,18.0s | | | | | | |
| **MAJO** | **Matsushiro** | **49.07** | **23** | P | **P** | **15 05 13.0** | **+0.1** |
| **MAJO** | **Matsushiro** | **49.07** | **23** | P | **P** | **15 05 12.4** | **-0.5** |
| MAJO | | | | IAmb | IAmb | 15 05 32.8 | |
| | comp=Z,664nm,1.2s | | | | | | |
| **MAJO** | **Matsushiro** | **49.07** | **23** | ⇑P | **P** | **15 05 12.8** | **0.0** |
| **MAJO** | **Matsushiro** | **49.07** | **23** | *c i*P | **P** | **15 05 12.9** | **+0.1** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,577nm,1.2s | | | | | | |
| MAJO | | | | MLR | MLR | | |
| | comp=Z,57μm,22.0s | | | | | | |
| **MAT** | **Matsushiro** | **49.07** | **23** | P | **P** | **15 05 12.9** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **49.07** | **23** | P | **P** | **15 05 10.8** | **-2.0** |
| | comp=Z,42nn,1.2s,baz=194,slow=7.7,SNR=63 | | | | | | |
| MJAR | | | | S | **S** | **15 12 16.0** | **-0.3** |
| | comp=Z,0.8nm,0.6s,baz=144,slow=49,SNR=1.2 | | | | | | |
| MJAR | | | | LR | LR | 15 25 25.8 | |
| | comp=Z,51μm,20.8s,baz=204,slow=36 | | | | | | |
| | comp=Z,42nm,1.2s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **49.07** | **23** | IAmb | IAmb | 15 05 33.8 | |
| | comp=Z,680nm,1.3s | | | | | | |
| **BTO** | **Baotou** | **49.12** | **353** | *e*P | **P** | **15 05 15.3** | **+2.0** |
| BTO | | | | pP | **pP** | **15 05 20.6** | **-0.7** |
| BTO | | | | sP | **sP** | **15 05 23.1** | **-1.3** |
| BTO | | | | SS | SS | 15 15 48.5 | -0.2 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,100nm,0.9s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,6μm,6.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,100μm,20.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,84μm,19.6s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,147μm,22.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.21** | **355** | ⇓*i*P | **P** | **15 05 14.3** | **+0.4** |
| HHC | | | | pP | pP | 15 05 22.8 | +0.9 |
| HHC | | | | sP | sP | 15 05 25.6 | +0.6 |
| HHC | | | | S | **S** | **15 12 21.4** | **+3.1** |
| HHC | | | | sS | sS | 15 12 29.8 | -0.9 |
| HHC | | | | ScS | **ScS** | **15 15 01.8** | **-2.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,73nm,1.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10μm,5.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,46μm,18.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,45μm,16.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,80μm,19.2s | | | | | | |
| **BHPL** | **Bhopal** | **49.58** | **310** | IAMs_20 | IAMs_20 | 15 22 36.6 | |
| | comp=Z,38μm,22.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **49.60** | **112** | P | **P** | **15 05 18.9** | **+1.7** |
| **DZM** | **Mont Dzumac** | **49.73** | **112** | P | **P** | **15 05 20.3** | **+2.0** |
| **DZM** | **Mont Dzumac** | **49.73** | **112** | IAmb | IAmb | 15 05 42.7 | |
| | comp=Z,623nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **49.73** | **112** | ⇑P | **P** | **15 05 19.4** | **+1.1** |
| **DZM** | **Mont Dzumac** | **49.73** | **112** | LR | LR | 15 28 14.1 | |
| | comp=Z,196μm,18.1s,baz=286,slow=38 | | | | | | |
| **POO** | **Poona** | **49.97** | **303** | *e*P | **P** | **15 05 21.4** | **+1.4** |
| POO | | | | IAmb | IAmb | 15 05 45.9 | |
| | comp=Z,508nm,1.8s | | | | | | |
| **GTA** | **Gaotai** | **50.05** | **343** | *e*P | **P** | **15 05 20.9** | **+0.5** |
| GTA | | | | pP | sP | 15 05 30.9 | -0.5 |
| GTA | | | | S | **S** | **15 12 34.8** | **+4.7** |
| GTA | | | | sS | sS | 15 12 44.3 | +1.7 |
| GTA | | | | SS | **SS** | **15 16 02.3** | **-1.4** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3μm,7.6s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,46μm,21.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,48μm,21.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,83μm,20.7s | | | | | | |
| **JHNI** | **Jhansi** | **50.06** | **313** | *e*P | **P** | **15 05 17.0** | **-3.6** |
| **YATNC** | **Mamie plateau,** | **50.14** | **112** | P | **P** | **15 05 23.2** | **+1.9** |
| **LIFNC** | **LIFOU** | **50.31** | **110** | P | **P** | **15 05 24.5** | **+1.9** |
| **SNY** | **Shenyang** | **50.37** | **7** | ⇑P | **P** | **15 05 22.3** | **-0.3** |
| SNY | | | | S | **S** | **15 12 34.1** | **-0.1** |
| SNY | | | | pmax | pmax | | |
| | comp=Z,98nm,1.7s | | | | | | |
| SNY | | | | pmax | pmax | | |
| | comp=Z,12μm,10.2s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,23μm,18.0s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,40μm,17.8s | | | | | | |
| SNY | | | | LR | LR | | |
| | comp=Z,43μm,19.4s | | | | | | |
| **JSD** | **Sado** | **50.40** | **22** | P | **P** | **15 05 23.4** | **+0.5** |
| **JSD** | **Sado** | **50.40** | **22** | IAmb | IAmb | 15 05 39.1 | |
| | comp=Z,367nm,1.0s | | | | | | |
| **JSD** | **Sado** | **50.40** | **22** | ⇑P | **P** | **15 05 23.1** | **+0.1** |
| **JSD** | **Sado** | **50.40** | **22** | P | **P** | **15 05 22.4** | **-0.5** |
| **GUNA** | **GUNA** | **50.46** | **312** | *e*P | **P** | **15 05 20.8** | **-2.9** |
| GUNA | | | | IAmb | IAmb | 15 05 46.2 | |
| | comp=Z,133nm,0.9s | | | | | | |
| **PINNC** | **Pines Island,** | **50.72** | **112** | P | **P** | **15 05 27.7** | **+2.0** |
| **PINNC** | **Pines Island,** | **50.72** | **112** | P | **P** | **15 05 26.1** | **+0.4** |
| **DVP** | **Devils Point** | **50.93** | **106** | P | **P** | **15 05 29.3** | **+2.0** |
| **MARNC** | **Mare, Loyalty** | **51.12** | **111** | P | **P** | **15 05 31.2** | **+2.5** |
| **MARNC** | **Mare, Loyalty** | **51.12** | **111** | ⇑P | **P** | **15 05 30.3** | **+1.6** |
| **RTV** | **Rentapao** | **51.16** | **106** | P | **P** | **15 05 30.7** | **+1.6** |
| **JMM** | **Marumori** | **51.25** | **25** | P | **P** | **15 05 30.2** | **+0.9** |
| **JMM** | **Marumori** | **51.25** | **25** | ⇑P | **P** | **15 05 28.8** | **-0.5** |
| **JMM** | **Marumori** | **51.25** | **25** | P | **P** | **15 05 30.1** | **+0.9** |
| **LGTI** | **Lohaghat** | **51.40** | **319** | *e*P | **P** | **15 05 29.5** | **-1.1** |
| **JYA** | **Atsumi** | **51.44** | **23** | P | **P** | **15 05 31.8** | **+1.1** |
| **PTH** | **Pithoragarh** | **51.48** | **319** | *e*P | **P** | **15 05 29.6** | **-1.9** |
| **XLT** | **XiLinHaoTe** | **52.04** | **359** | *e*P | **P** | **15 05 35.8** | **+0.6** |
| XLT | | | | sP | pP | 15 05 43.0 | -0.2 |
| XLT | | | | S | **S** | **15 13 02.1** | **+4.7** |
| XLT | | | | SS | **SS** | **15 16 34.3** | **-0.7** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,130nm,1.1s | | | | | | |
| XLT | | | | LR | LR | | |
| | comp=

CN2 pmax pmax
comp=Z,14µm,10.0s
CN2 LR LR
comp=Z,40µm,18.0s
CN2 LR LR
comp=Z,20µm,18.0s
CN2 LR LR
comp=Z,36µm,20.0s
ROCAM **Rodrigues Isla** 52.69 252 P **P** **15 05 40.8 +0.4**
BISR **Bishrakh** 52.73 316 *e*P **P** **15 05 36.8 -3.7**
SONA **Sohna** 52.78 315 *e*P **P** **15 05 38.6 -2.3**
NDI **New Delhi** 52.95 316 *e*P **P** **15 05 38.9 -3.3**
NPLP **NPLP New Delhi** 52.96 316 *e*P **P** **15 05 38.0 -4.2**
KUDL **Kundal** 53.13 315 *e*P **P** **15 05 42.7 -0.8**
DDI **Dehra Dun** 53.41 318 *e*P **P** **15 05 46.2 +0.6**
DDI IAmb IAmb 15 06 37.3
comp=Z,502nm,1.4s
AJM **Ajmer** 53.49 312 *e*P **P** **15 05 44.1 -2.2**
AJM IAmb IAmb 15 06 07.3
comp=Z,128nm,1.2s
JTM **Tenmabayashi** 53.86 23 P **P** **15 05 49.4 +0.8**
JTM **Tenmabayashi** 53.86 23 IAmb IAmb 15 06 09.2
comp=Z,565nm,1.0s
JTM IAMs_20 IAMs_20 15 27 23.0
comp=Z,76µm,21.0s
JTM **Tenmabayashi** 53.86 23 ⇓P **P** **15 05 48.0 -0.6**
MDJ **Mudanjiang** 54.04 11 P **P** **15 05 50.5 +0.7**
MDJ **Mudanjiang** 54.04 11 P **P** **15 05 49.5 -0.3**
MDJ sP sP 15 06 04.5 +3.5
MDJ S **S** **15 13 28.0 +3.6**
MDJ pmax pmax
comp=Z,160nm,1.5s
MDJ pmax pmax
comp=Z,3µm,3.7s
MDJ LR LR
comp=Z,99µm,22.0s
MDJ LR LR
comp=Z,29µm,22.3s
MDJ LR LR
comp=Z,60µm,18.9s
**MDJ** **Mudanjiang** 54.04 11 IAmb IAmb 15 06 08.4
comp=Z,486nm,0.8s
KLP **Kalpa** 54.06 319 *e*P **P** **15 05 47.9 -2.8**
USA0B **Ussuriysk Arra** 54.15 14*c i*P **P** **15 05 51.0 +0.3**
USRK **Ussuriysk Ar.** 54.15 14 P **P** **15 05 50.1 -0.6**
USRK **Ussuriysk Ar.** 54.15 14 P **P** **15 05 50.0 -0.7**
comp=Z,33nm,0.8s,baz=186,slow=6.6,SNR=63
USRK LR LR 15 31 10.2
comp=Z,26µm,19.2s,baz=197,slow=39
USRK PKPPKP P'P'df 15 36 13.5 +10
comp=Z,4.3nm,1.0s,baz=104,slow=0.8,SNR=4.4
comp=Z,33nm,0.8s
JOT **Ohata** 54.37 23 P **P** **15 05 53.3 +1.0**
HNLY **HANLEY** 54.42 321 *e*P **P** **15 05 52.1 -1.4**
SMLA **Simla** 54.51 318 *e*P **P** **15 05 51.1 -2.5**
SMLA IAmb IAmb 15 06 24.4
comp=Z,452nm,1.1s
**BNX** **BinXian** 54.74 9 ⇑P **P** **15 05 54.5 -0.4**
BNX PP **PP** **15 08 00.5 +2.6**
BNX S **S** **15 13 34.5 +0.7**
BNX sS **pS** **15 13 42.3 -0.6**
BNX pmax pmax
comp=Z,92nm,1.5s
BNX pmax pmax
comp=Z,16µm,11.7s
BNX LR LR
comp=Z,22µm,23.9s
BNX LR LR
comp=Z,27µm,22.9s
BNX LR LR
comp=Z,61µm,19.2s
**ERM** **Erimo** 55.73 24 P **P** **15 06 03.2 +1.1**
**ERM** **Erimo** 55.73 24 P **P** **15 06 01.8 -0.3**
ERM IAmb IAmb 15 06 31.5
comp=Z,486nm,1.4s
**ERM** **Erimo** 55.73 24 ⇑P **P** **15 06 02.3 +0.2**
**ERM** **Erimo** 55.73 24*c i*P **P** **15 06 02.0 -0.1**
ERM pmax pmax
comp=Z,466nm,1.4s
ERM MLR MLR
comp=Z,42µm,19.0s
**JEM** **Erimo** 55.73 24 P **P** **15 06 03.4 +1.3**
**JEM** **Erimo** 55.73 24 IAMs_20 IAMs_20 15 29 59.0
comp=Z,77nm,21.0s
DHRM **DHARAMSHALA** 55.79 318 *e*P **P** **15 06 00.6 -2.4**
DHRM IAmb IAmb 15 06 21.3
comp=Z,271nm,0.8s
**TEY** **Ternei** 56.13 17⇓*e*P **P** **15 06 05.8 +0.9**
TEY *e* 15 13 47.9
TEY pmax pmax
comp=E,10.0nm,1.5s
TEY pmax pmax
comp=N,30nm,1.6s
TEY pmax pmax
comp=Z,70nm,1.7s
**PAF** **Port-aux-Franc** 56.25 215 IAMs_20 IAMs_20 15 27 10.7
comp=Z,64µm,19.0s
**THN** **Thein Dam** 56.29 318 *e*P **P** **15 06 03.7 -2.6**
THN IAmb IAmb 15 06 31.7
comp=Z,3µm,2.1s
THN IAMs_20 IAMs_20 15 21 02.4
comp=Z,29µm,21.5s
**ULN** **Ulaanbaatar** 56.64 352 P **P** **15 06 09.0 +0.2**
ULN IAmb IAmb 15 06 32.3
comp=Z,858nm,1.6s
**ULN** **Ulaanbaatar** 56.64 352 ⇑P **P** **15 06 09.3 +0.5**
**ULN** **Ulaanbaatar** 56.64 352 P **P** **15 06 09.3 +0.5**
ULN P **P** **15 06 09.3 +0.5**
ULN P **P** **15 06 09.3 +0.5**
**ULN** **Ulaanbaatar** 56.64 352 P **P** **15 06 09.0 +0.2**
ULN pmax pmax
comp=Z,858nm,1.6s
ULN MLR MLR
comp=Z,49µm,21.0s
**SONM** **Songino Array** 56.70 352 P **P** **15 06 08.8 -0.4**
SONM IAmb IAmb 15 06 32.0
comp=Z,413nm,1.1s
**SONM** **Songino Array** 56.70 352 P **P** **15 06 08.3 -0.8**
comp=Z,58nm,0.9s,baz=171,slow=7.9,SNR=116
SONM LR LR 15 32 22.4
comp=Z,91µm,21.4s,baz=166,slow=38
SONM PKPPKP **P'P'df** **15 35 56.6 -3.4**
comp=Z,4.1nm,1.1s,baz=314,slow=1.7,SNR=5.7
SONM PKP2bc 15 36 15.8
comp=Z,6.4nm,1.0s,baz=35,slow=0.6,SNR=5.2
comp=Z,58nm,0.9s
**SONM** **Songino Array** 56.70 352 P **P** **15 06 08.8 -0.4**
SONM pmax pmax
comp=Z,413nm,1.1s
**PYZ** **Puysegur Point** 56.93 141 P **P** **15 06 13.0 +2.3**
**PYZ** **Puysegur Point** 56.93 141 IAmb IAmb 15 06 34.9
comp=Z,881nm,1.5s
**DCZ** **Deep Cove** 56.93 140 P **P** **15 06 11.5 +0.7**
DCZ IAmb IAmb 15 06 28.4
comp=Z,760nm,1.3s
**TARA** **Tarawa** 56.94 83 IAMs_20 IAMs_20 15 33 35.0
comp=Z,69µm,20.0s
**MCQ** **Macquarie Isla** 57.02 152 P **P** **15 06 13.5 +2.4**
**MCQ** **Macquarie Isla** 57.02 152 P **P** **15 06 12.2 +1.1**
**MCQ** **Macquarie Isla** 57.02 152 ⇑P **P** **15 06 13.6 +2.4**
**MCQ** **Macquarie Isla** 57.02 152 P **P** **15 06 12.9 +1.8**
comp=Z,0.0nmcomp=Z,583nm,1.0s
**MCQ** **Macquarie Isla** 57.02 152 P **P** **15 06 12.2 +1.1**
MCQ pmax pmax
comp=Z,2µm,1.6s
**ASAJ** **Asahikawa** 57.30 22 P **P** **15 06 12.8 -0.4**
comp=Z,62nm,1.0s,baz=246,slow=15,SNR=19
ASAJ LR LR 15 30 19.3
comp=Z,35µm,21.9s,baz=224,slow=36
comp=Z,62nm,1.0s
**ASAJ** **Asahikawa** 57.30 22 P **P** **15 06 13.2 0.0**
**JKA** **Kamikawa-asahi** 57.30 22 IAmb IAmb 15 06 21.6
comp=Z,535nm,1.1s
**JCZ** **Jackson Bay** 57.45 138 P **P** **15 06 16.7 +2.1**
**HIA** **Hailar** 57.47 2 P **P** **15 06 15.2 +0.8**
**HIA** **Hailar** 57.47 2 IAmb IAmb 15 06 37.0
comp=Z,534nm,1.3s
**CASY** **Casey** 57.96 183 P **P** **15 06 17.7 0.0**
CASY IAmb IAmb 15 06 38.9
comp=Z,231nm,1.0s
**CASY** **Casey** 57.96 183 ⇑P **P** **15 06 18.4 +0.8**
**WMQ** **Urumqi** 58.21 336 P **P** **15 06 20.3 +0.5**
WMQ sP sP 15 06 35.1 +4.2
WMQ S **S** **15 14 21.0 +0.9**
WMQ pmax pmax
comp=Z,110nm,1.5s
WMQ pmax pmax
comp=Z,2µm,3.7s
WMQ LR LR
comp=Z,55µm,23.5s
WMQ LR LR
comp=Z,52µm,19.3s
WMQ LR LR
comp=Z,71µm,23.5s
**OUZ** **Omahuta** 58.34 126 ⇑P **P** **15 06 23.3 +2.5**
**YUK** **Yuzh-Kuril'sk** 58.50 24 *e*P **P** **15 06 18.4 -3.3**
YUK *e* 15 07 09.0
YUK *e* 15 08 27.7
YUK *e*S **S** **15 14 22.8 -0.9**
YUK *e* 15 16 08.0
YUK *e*SS **SS** **15 18 17.1 +0.4**
YUK pmax pmax
comp=Z,490nm,1.4s
YUK pmax pmax
comp=E,416nm,1.3s
YUK pmax pmax
comp=N,464nm,1.4s
YUK pmax pmax
comp=Z,942nm,2.5s
**SYZ** **Scrubby Hill** 58.63 140 P **P** **15 06 24.7 +2.1**
**NIL** **Nilore** 58.67 318 P **P** **15 06 21.0 -2.2**
**NIL** **Nilore** 58.67 318 P **P** **15 06 21.0 -2.2**
NIL pmax pmax
comp=Z,189nm,1.1s
**INZ** **Inchbonnie** 58.80 135 IAmb IAmb 15 06 51.1
comp=Z,469nm,1.1s
**RPZ** **Rata Peaks** 58.86 136 P **P** **15 06 26.2 +1.9**
**RPZ** **Rata Peaks** 58.86 136 LR LR 15 30 52.9
comp=Z,174µm,21.8s,baz=286,slow=35
**KLR** **Kul'dur** 58.88 12 LR LR 15 36 42.5
comp=Z,30µm,18.0s,baz=214,slow=41
**KLR** **Kul'dur** 58.88 12*c i*P **P** **15 06 24.6 +0.3**
KLR pmax pmax
comp=Z,492nm,1.4s
KLR MLR MLR
comp=Z,45µm,19.0s
**QRZ** **Quartz Range** 58.98 133 P **P** **15 06 26.9 +1.7**
**ODZ** **Otahua Downs** 59.05 138 P **P** **15 06 27.5 +1.9**
**ODZ** **Otahua Downs** 59.05 138 IAmb IAmb 15 06 51.2
comp=Z,804nm,1.9s
**ODZ** **Otahua Downs** 59.05 138 ⇑P **P** **15 06 26.4 +0.8**
**HEH** **HeiHe** 59.14 8 *e*P **P** **15 06 26.0 0.0**
HEH pP **pP** **15 06 32.0 -2.2**
HEH S **S** **15 14 33.4 +1.6**
HEH sS **sS** **15 14 50.1 +5.2**
HEH pmax pmax
comp=Z,270nm,1.5s
HEH pmax pmax
comp=Z,16µm,6.2s
HEH LR LR
comp=Z,21µm,19.2s
HEH LR LR
comp=Z,34µm,18.5s
HEH LR LR
comp=Z,58µm,18.2s
**LTZ** **Lake Taylor** 59.39 135 IAmb IAmb 15 06 56.0
comp=Z,381nm,1.3s
**OXZ** **Oxford** 59.40 136 IAmb IAmb 15 06 48.5
comp=Z,447nm,0.9s
**ZAK** **Zakamensk** 59.66 350 *e*P **P** **15 06 29.6 -0.2**
ZAK pmax pmax
comp=Z,170nm,1.1s
**NNZ** **Nelson** 59.71 133 IAmb IAmb 15 06 52.3
comp=Z,568nm,1.3s
**YSS** **Yuzh-Sakhalins** 59.80 20 P **P** **15 06 30.9 +0.3**
**YSS** **Yuzh-Sakhalins** 59.80 20 P **P** **15 06 30.3 -0.3**
**YSS** **Yuzh-Sakhalins** 59.80 20 ⇑P **P** **15 06 30.4 -0.3**
**YSS** **Yuzh-Sakhalins** 59.80 20*oe*P **P** **15 06 30.4 -0.2**
YSS *e* 15 07 14.5
YSS *e* 15 08 42.6
YSS *e*S **S** **15 14 40.9 +0.6**
YSS *e*SS **SS** **15 18 42.0 +5.0**
YSS pmax pmax
comp=Z,9µm,7.3s
YSS pmax pmax
comp=N,4µm,6.0s
YSS pmax pmax
comp=E,3µm,5.8s
YSS pmax pmax
comp=Z,530nm,1.3s
YSS smax smax
comp=E,15µm,15.5s
**RER** **Riviere de l'E** 59.91 250 P **P** **15 06 32.9 +0.8**
**RER** **Riviere de l'E** 59.91 250 ⇓P **P** **15 06 34.6 +2.5**
**RER** **Riviere de l'E** 59.91 250 P **P** **15 06 34.5 +2.4**
SNR=6.2
**MQZ** **McQueen's Vall** 59.95 136 IAmb IAmb 15 06 54.4
comp=Z,660nm,1.3s
**GVZ** **Greta Valley S** 59.98 135 IAmb IAmb 15 07 01.5
comp=Z,406nm,1.0s
**HIZ** **Hauiti** 60.09 130 IAmb IAmb 15 07 22.2
comp=Z,395nm,1.1s
**KHZ** **Kahutara** 60.17 134 ⇑P **P** **15 06 34.0 +0.7**
**CIT** **Chita** 60.22 358 *e*P **P** **15 06 34.2 +0.7**
CIT *e* 15 06 44.6
CIT *e* 15 07 18.4
CIT *e*S **S** **15 14 54.0 +8.2**
CIT *e* 15 16 14.0
**KUR** **Kuril'sk** 60.31 25 *e*P **P** **15 06 35.0 +0.9**
KUR *e* 15 07 19.7
KUR *e*S **S** **15 14 45.3 -1.7**
KUR *i* SS **SS** **15 18 45.5 +0.5**
KUR pmax pmax
comp=Z,15µm,13.1s
KUR pmax pmax
comp=Z,1µm,1.4s
KUR pmax pmax
comp=N,541nm,1.8s
KUR pmax pmax
comp=E,246nm,2.3s
**MSVF** **Nonsavu** 60.33 106 P **P** **15 06 36.8 +1.8**
**MSVF** **Nonsavu** 60.33 106 P **P** **15 06 35.2 +0.2**
**MSVF** **Nonsavu** 60.33 106*c i*P **P** **15 06 36.0 +1.0**
MSVF pmax pmax
comp=Z,1µm,1.2s
**KUZ** **Kuaotunu** 60.36 128 P **P** **15 06 36.6 +1.8**
**WAZ** **Wanganui** 60.50 131 P **P** **15 06 37.9 +2.2**
**SNZO** **South Karori** 60.70 133 P **P** **15 06 38.5 +1.5**
**SNZO** **South Karori** 60.70 133 P **P** **15 06 36.5 -0.5**
**KSH** **Kashi** 60.74 325 P **P** **15 06 36.0 -1.4**
KSH pP pP 15 06 43.0 -2.6
KSH sP sP 15 06 45.8 -2.7
KSH PP **PP** **15 08 54.9 +3.3**
KSH S **S** **15 14 48.8 -4.2**
KSH pmax pmax
comp=Z,73nm,0.9s
KSH pmax pmax
comp=Z,10µm,12.4s
KSH LR LR
comp=Z,51µm,25.4s
KSH LR LR
comp=Z,27µm,24.7s
KSH LR LR
comp=Z,84µm,26.8s
**WTVZ** **West Tongariro** 60.79 130 P **P** **15 06 41.5 +3.7**
**FWVZ** **Far West T-bar** 60.80 130 P **P** **15 06 39.9 +1.8**
**TRVZ** **Turoa** 60.81 130 P **P** **15 06 42.6 +4.5**
**NNVZ** **North Ngauruho** 60.82 130 P **P** **15 06 40.6 +2.5**
**KRVZ** **Karewarewa** 60.83 130 P **P** **15 06 41.3 +3.2**
**WHVZ** **Whangaehu Hut** 60.83 130 P **P** **15 06 40.1 +1.8**
**BHW** **Baring Head** 60.84 133 IAmb IAmb 15 06 54.0
comp=Z,804nm,1.7s
**SNVZ** **South Ngauruho** 60.85 130 P **P** **15 06 39.5 +1.1**
**RATZ** **Rangitukua** 60.87 130 P **P** **15 06 42.5 +4.1**
**TMVZ** **Te Maari** 60.88 130 P **P** 15 06 43.5 +5.1
**ETVZ** **East Tongariro** 60.89 130 P **P** **15 06 40.6 +2.0**
**MOVZ** **Moawhango** 60.99 131 P **P** **15 06 40.2 +1.0**
**KNGR** **Kungurtug, Tuv** 61.05 346⇓*i*P **P** **15 06 39.8 +0.5**
**HSRZ** **Hossack Road** 61.11 129 P P 15 06 44.9 +5.0
**HRRZ** **Handcock Road** 61.16 129 P P 15 06 45.5 +5.2
**OMRZ** **Omania** 61.16 129 P **P** **15 06 44.8 +4.6**
**POWZ** **Post Office Ro** 61.24 132 P **P** **15 06 41.8 +1.1**
**MOY** **Mondy** 61.31 349 *e*P **P** **15 06 41.0 0.0**
MOY pmax pmax
comp=Z,458nm,2.6s
**IRK** **Irkutsk** 61.31 351 *e*P **P** **15 06 40.8 -0.1**
IRK *e*S **S** **15 15 08.3 +8.7**
IRK pmax pmax
comp=Z,763nm,3.0s
**MRHZ** **Matea Rd** 61.36 130 P **P** **15 06 41.6 0.0**
**GRNR** **Gornyy** 61.36 14⇑*i*P **P** **15 06 41.6 +0.4**
GRNR pmax pmax
comp=Z,60nm,1.2s
**UGL** **Uglegorsk** 61.42 19 *e*P **P** **15 06 42.1 +0.5**
UGL *e* 15 09 01.0
UGL *e*S **S** **15 14 53.6 -7.4**
UGL pmax pmax
comp=Z,400nm,1.3s
UGL pmax pmax
comp=Z,19µm,12.0s
**TIWZ** **Tintock** 61.42 132 P **P** **15 06 43.5 +1.5**
**PRWZ** **Pori Road** 61.43 132 P **P** **15 06 43.5 +1.5**
**PNHZ** **Pukenui** 61.44 131 P **P** **15 06 42.8 +0.7**
**BKZ** **Black Stump Fm** 61.49 130 P **P** **15 06 43.9 +1.4**
**BKZ** **Black Stump Fm** 61.49 130 P **P** **15 06 42.5 0.0**
**BKZ** **Black Stump Fm** 61.49 130 P **P** **15 06 42.6 +0.1**
**KWHZ** **Kaweka Forest** 61.49 130 P **P** **15 06 44.0 +1.4**
**KRHZ** **Kereru** 61.51 131 P **P** **15 06 43.4 +0.8**
**TMWZ** **Te Maipa** 61.51 132 P **P** **15 06 43.2 +0.6**
**DVHZ** **Dannevirke** 61.51 131 P **P** **15 06 43.6 +1.0**
**PDGK** **Podgornoye** 61.54 330 P **P** **15 06 42.0 -0.8**
**UZB** **Uzynbulak** 61.64 329 *e*P **P** **15 06 42.2 -1.3**
comp=Z,126nm,1.3s,baz=330
UZB *e*S **S** **15 15 04.7 +0.2**
baz=330
**UZB** **Uzynbulak** 61.64 329 *e*P **P** **15 06 42.2 -1.3**
UZB *e*S **S** **15 15 04.6 +0.2**
UZB pmax pmax
comp=Z,126nm,1.3s
**BFZ** **Birch Farm** 61.66 132 P **P** **15 06 45.8 +2.2**
**BFZ** **Birch Farm** 61.66 132 P **P** **15 06 44.3 +0.7**
**CPWZ** **Castlepoint** 61.68 132 P **P** **15 06 44.1 +0.4**
**MCHZ** **McNeill Hill** 61.71 130 P **P** **15 06 45.0 +1.1**
**NMHZ** **Naumai** 61.71 130 P **P** **15 06 45.0 +1.0**
**RTZ** **Ruatahuna** 61.74 129 P **P** **15 06 45.1 +0.9**
**URZ** **Urewera** 61.76 129 P **P** **15 06 46.4 +2.1**
**URZ** **Urewera** 61.76 129 ⇑P **P** **15 06 44.1 -0.2**
**URZ** **Urewera** 61.76 129 LR LR 15 35 21.7
comp=Z,278µm,18.5s,baz=18,slow=38
**FUNA** **Funafuti** 61.82 95 P **P** **15 06 46.7 +1.6**
**FUNA** **Funafuti** 61.82 95 P **P** **15 06 43.5 -1.5**
FUNA IAmb IAmb 15 06 52.5
comp=Z,518nm,1.2s
**SATY** **Saty** 61.89 329 *e*P **P** **15 06 44.1 -1.0**
baz=329
SATY *e*S **S** **15 15 07.8 +0.2**
baz=329
**SATY** **Saty** 61.89 329 *e*P **P** **15 06 44.1 -1.0**
SATY *e*S **S** **15 15 07.7 +0.2**
**KAHZ** **Kahuranaki** 61.92 131 P **P** **15 06 47.5 +2.1**
**ZHN** **Zhinishke** 61.95 329 *e*P **P** **15 06 44.1 -1.4**
baz=329
**ZHN** **Zhinishke** 61.95 329 *e*P **P** **15 06 44.1 -1.4**
**KBL** **Kabul** 62.02 316 P **P** **15 06 43.9 -2.4**
KBL IAmb IAmb 15 07 35.7
comp=Z,293nm,1.4s
**KBL** **Kabul** 62.02 316 P **P** **15 06 44.6 -1.7**
SNR=32
KBL P **P** **15 06 44.6 -1.7**
SNR=32
**KBL** **Kabul** 62.02 316 P **P** **15 06 43.9 -2.4**
KBL pmax pmax
comp=Z,293nm,1.4s
**KPKS** **Kokpek** 62.04 330 *e*P **P** **15 06 44.9 -1.3**
comp=Z,104nm,0.8s,baz=330
KPKS *e*S **S** **15 15 09.8 +0.4**
baz=330
**KPKS** **Kokpek** 62.04 330 *e*P **P** **15 06 44.8 -1.3**
KPKS *e*S **S** **15 15 09.8 +0.4**
KPKS pmax pmax
comp=Z,104nm,0.8s
**SNGZ** **Shannon Statio** 62.05 129 P **P** **15 06 46.8 +0.5**
**MWZ** **Matawai** 62.10 129 P **P** **15 06 46.7 +0.1**
**HAZ** **Te Kaha** 62.18 128 P **P** **15 06 47.5 +0.4**
**ZSN** **Zaisan** 62.32 336 *e*P **P** **15 06 46.8 -1.0**
comp=Z,219nm,1.3s,baz=336
ZSN *e*S **S** **15 15 13.6 +1.0**
baz=336
**ZSN** **Zaisan** 62.32 336 *e*P **P** **15 06 46.8 -1.0**
ZSN *e*S **S** **15 15 13.6 +1.0**
ZSN pmax pmax
comp=Z,219nm,1.3s
**KNZ** **Kokohu** 62.35 130 P **P** **15 06 50.9 +2.6**
**TKGZ** **Te Karaka** 62.37 129 P **P** **15 06 48.7 +0.4**
**ZEA** **Zeya** 62.53 7 *e*P **P** **15 06 49.4 +0.4**
ZEA *e* 15 09 12.9
ZEA *e*S **S** **15 15 16.5 +1.5**
ZEA pmax pmax
comp=N,150nm,1.6s
ZEA pmax pmax
comp=E,40nm,1.6s
ZEA pmax pmax
comp=Z,280nm,1.5s
ZEA pmax pmax
comp=N,3µm,6.2s
ZEA pmax pmax
comp=Z,6µm,6.0s
ZEA pmax pmax
comp=N,2µm,14.2s
ZEA pmax pmax
comp=Z,4µm,14.6s
**MXZ** **Matakaoa Point** 62.55 128 P **P** **15 06 51.6 +2.0**
**MXZ** **Matakaoa Point** 62.55 128 P **P** **15 06 49.8 +0.2**
**MXZ** **Matakaoa Point** 62.55 128 P **P** **15 06 50.2 +0.6**
**MHGZ** **Mahia Peninsul** 62.56 130 P **P** **15 06 50.0 +0.3**
**PUZ** **Puketiti** 62.61 129 P **P** **15 06 49.7 -0.3**
**TNSS** **Tian-Shan** 62.63 328 *e*P **P** **15 06 48.8 -1.7**
baz=328
**TNSS** **Tian-Shan** 62.63 328 *e*P **P** **15 06 48.7 -1.7**
**CNGZ** **Carnagh Statio** 62.65 129 P **P** **15 06 51.2 +1.0**
**MDOK** **Medeo** 62.66 328 *e*P **P** **15 06 48.8 -1.6**
baz=328
MDOK *e*S **S** **15 15 17.4 0.0**
baz=328
MDOK LR LR 15 36 10.8
comp=Z,19µm,19.0s,baz=328
**MDOK** **Medeo** 62.66 328 *e*P **P** **15 06 48.7 -1.6**
MDOK *e*S **S** **15 15 17.3 -0.1**
MDOK MLR MLR
comp=Z,19µm,19.0s
**WMGZ** **Waiomatatini S** 62.68 128 P **P** **15 06 50.9 +0.5**
**AAA** **Alma-Ata** 62.76 328 *e*P **P** **15 06 49.8 -1.2**
comp=Z,196nm,1.3s,baz=328
AAA LR LR 15 36 28.8
comp=Z,32µm,18.1s,baz=328
**AAA** **Alma-Ata** 62.76 328 *e*P **P** **15 06 47.5 -3.4**
**MK31** **Makanchi Array** 62.87 334 IAmb IAmb 15 07 24.5
comp=Z,271nm,1.1s
**MK31** **Makanchi Array** 62.87 334*c i*P **P** **15 06 50.1 -1.4**
**MKAR** **Makanchi Array** 62.87 334 P **P** **15 06 50.4 -1.0**
**MKAR** **Makanchi Array** 62.87 334 P **P** **15 06 50.1 -1.4**
comp=Z,31nm,0.8s,baz=145,slow=6.9,SNR=115
MKAR S **S** **15 15 20.8 +1.3**
comp=Z,1.9nm,0.7s,baz=131,slow=7.1,SNR=0.9
MKAR PKPPKP **P'P'df** **15 35 48.2 -3.0**
comp=Z,2.0nm,1.0s,baz=337,slow=1.6,SNR=4.2
MKAR PKP2bc 15 36 00.1
comp=Z,3.9nm,0.8s,baz=353,slow=1.7,SNR=6.6
MKAR LR LR 15 36 41.9
comp=Z,37µm,21.6s,baz=158,slow=39
comp=Z,31nm,0.8s
**MKAR** **Makanchi Array** 62.87 334 P **P** **15 06 50.4 -1.0**
**ARXS** **Arharly** 63.01 330 *e*P **P** **15 06 50.1 -2.5**
**MAKZ** **Makanchi** 63.01 334 P **P** **15 06 51.6 -0.8**
MAKZ IAmb IAmb 15 07 25.4
comp=Z,286nm,1.2s
**MAKZ** **Makanchi** 63.01 334 P **P** **15 06 51.6 -0.8**
MAKZ pmax pmax
comp=Z,286nm,1.3s
MAKZ MLR MLR
comp=Z,40µm,20.0s
**TYV** **Tymovskoe** 63.16 18 *e*P **P** **15 06 55.2 +1.9**
TYV *e*S **S** **15 15 28.6 +5.6**
TYV pmax pmax
comp=Z,162nm,1.5s
TYV pmax pmax
comp=Z,7µm,5.6s
TYV smax smax
comp=N,23nm,1.8s
TYV smax smax
comp=E,18nm,1.8s
TYV smax smax
comp=N,10µm,10.5s
TYV smax smax

comp=E,10μm,10.5s
**DRK Karamyk 63.17 322** IAmb IAmb 15 07 37.6
comp=Z,576nm,1.5s
**CHKK Chushkaly 63.18 329** *e*P **P** **15 06 52.4 -1.3**
baz=329
**CHKK Chushkaly 63.18 329** *e*P **P** **15 06 52.3 -1.3**
**DGZ Jazzator, Alta 63.21 339***c i*P **P** **15 06 53.6 -0.3**
DGZ pmax pmax
comp=Z,951nm,1.1s
DGZ MLR MLR
comp=Z,67μm,19.0s
**TKM2 Tokmak 2 63.26 327** P **P** **15 06 53.6 -0.8**
SNR=21
**TKM2 Tokmak 2 63.26 327** *i* P **P** **15 06 53.0 -1.4**
TKM2 pmax pmax
comp=Z,306nm,1.2s
**TDK Taldyqorghan 63.30 331** *e*P **P** **15 06 53.2 -1.2**
comp=Z,264nm,1.1s,baz=331
TDK LR LR 15 37 21.0
comp=Z,25μm,18.5s,baz=331
**TDK Taldyqorghan 63.30 331** *e*P **P** **15 06 53.2 -1.2**
TDK pmax pmax
comp=Z,264nm,1.1s
TDK MLR MLR
comp=Z,25μm,19.0s
**KBK Karagaybulak 63.43 327** P **P** **15 06 55.3 -0.2**
SNR=17
**KUU Kurty 63.54 329** *e*P **P** **15 06 54.8 -1.2**
comp=Z,285nm,1.3s,baz=329
KUU LR LR 15 36 59.4
comp=Z,34μm,17.2s,baz=329
**KUU Kurty 63.54 329** *e*P **P** **15 06 54.8 -1.2**
KUU pmax pmax
comp=Z,285nm,1.3s
KUU MLR MLR
comp=Z,34μm,17.0s
**NGCH Negor - Chabah 63.55 304** P **P** **15 06 58.7 +2.4**
**AAK Ala-Archa 63.66 326** P **P** **15 06 56.6 -0.4**
SNR=12
**AAK Ala-Archa 63.66 326** P **P** **15 06 56.3 -0.7**
**AAK Ala-Archa 63.66 326** IAMs_20 IAMs_20 15 38 50.4
comp=Z,88μm,22.0s
**AAK Ala-Archa 63.66 326** P **P** **15 06 56.1 -1.0**
**AAK Ala-Archa 63.66 326** LR LR 15 39 02.0
comp=Z,66μm,20.9s,baz=142,slow=40
**AAK Ala-Archa 63.66 326** P **P** **15 06 59.0 +2.0**
AAK P **P** **15 06 59.0 +2.0**
**AAK Ala-Archa 63.66 326***ce*P **P** **15 06 55.8 -1.2**
AAK pmax pmax
comp=Z,572nm,2.6s
AAK MLR MLR
comp=Z,82nm,21.0s
**FRU1 Bishkek 63.70 327** IAMs_20 IAMs_20 15 39 59.6
comp=Z,63μm,19.0s
**JLN Jalan Bani Buh 63.75 300** P **P** **15 06 58.3 +0.5**
JLN P **P** **15 06 58.3 +0.5**
**AML Almayashu 63.77 326** P **P** **15 06 56.9 -1.1**
SNR=20
**EKS2 Erkin-Say 64.07 326** P **P** **15 06 59.0 -0.6**
SNR=16
**USP Ospenovka 64.08 327** P **P** **15 06 58.6 -1.0**
SNR=20
**WBK Wadi Bani Khal 64.30 300** P **P** **15 07 04.3 +2.9**
SNR=9.0
WBK P **P** **15 07 04.3 +2.9**
SNR=9.0
WBK P **P** **15 07 04.3 +2.9**
SNR=9.0
**SIMJ Simiganj 64.41 320** P **P** **15 06 58.3 -3.7**
SIMJ IAmb IAmb 15 08 00.1
comp=Z,227nm,1.1s
**RAO Raoul Island 64.55 118** LR LR 15 35 59.8
comp=Z,143μm,19.4s,baz=258,slow=37
**MHTO MHTO 64.58 298** P **P** **15 07 01.5 -1.7**
SNR=11
MHTO P **P** **15 07 01.5 -1.7**
SNR=11
**DQM DQM 64.59 297** P **P** **15 07 04.8 +1.4**
DQM P **P** **15 07 04.8 +1.4**
**NKL Nikolayevsk 64.62 16** *e*P **P** **15 06 59.6 -3.2**
NKL *e*S **S** **15 15 40.3 -0.6**
NKL *e*SS **SS** **15 19 47.9 -4.3**
NKL pmax pmax
comp=N,399nm,1.5s
NKL pmax pmax
comp=E,227nm,1.5s
NKL pmax pmax
comp=Z,2μm,1.5s
NKL smax smax
comp=E,2μm,7.7s
NKL smax smax
comp=N,5μm,7.6s
NKL MLR MLR
comp=E,83μm,19.0s
NKL MLR MLR
comp=N,62μm,18.0s
NKL MLR MLR
comp=Z,99μm,18.0s
**WSAR Wadi Sarin 64.82 300** LR LR 15 35 31.5
comp=Z,59μm,20.5s,baz=134,slow=36
**JMDO Jabal Madar 64.95 299** P **P** **15 07 08.0 +2.3**
JMDO P **P** **15 07 08.0 +2.3**
JMDO P **P** **15 07 08.0 +2.3**
**SMDO Samad 65.25 300** P **P** **15 07 09.8 +2.1**
SNR=8.0
SMDO P **P** **15 07 09.8 +2.1**
SNR=8.0
**BIDO Bidbid 65.36 301** P **P** **15 07 09.0 +0.7**
SNR=19
BIDO P **P** **15 07 09.0 +0.7**
SNR=19
BIDO P **P** **15 07 09.0 +0.7**
SNR=19
**BTLS Baital 65.52 328** *e*P **P** **15 07 07.3 -1.7**
baz=328
**BTLS Baital 65.52 328** *e*P **P** **15 07 07.2 -1.7**
**SBV Sambava 65.54 259** P **P** **15 07 11.0 +1.4**
**SHAO Shalim 65.68 294** P **P** **15 07 12.9 +2.4**
SHAO P **P** **15 07 12.9 +2.4**
**BSY Bisya 65.87 299** P **P** **15 07 10.0 -1.6**
BSY P **P** **15 07 10.0 -1.6**
**BOD Bodaibo 66.01 358** *e*P **P** **15 07 11.4 -0.3**
BOD pmax pmax
comp=Z,595nm,1.4s
**HOQ Hoqain 66.08 300** P **P** **15 07 13.2 +0.3**
SNR=15
HOQ P **P** **15 07 13.2 +0.3**
SNR=15
**KK31 Karatay Array 66.19 325** *i* P **P** **15 07 11.5 -1.8**
**KKAR Karatay Array 66.19 325** P **P** **15 07 10.6 -2.7**
**KKAR Karatay Array 66.19 325** ⇑P **P** **15 07 11.0 -2.3**
KKAR ⇓P **pP** **15 07 16.6 -4.8**
**KKAR Karatay Array 66.19 325** P **P** **15 07 10.6 -2.7**
**DMTO DMTO 66.20 293** P **P** **15 07 12.3 -1.5**
**JASK Jask - Hormozg 66.46 303** P **P** **15 07 16.6 +1.3**
**SEM Semipalatinsk 66.52 336** *e*P **P** **15 07 14.2 -1.3**
comp=Z,155nm,1.1s,baz=336
SEM LR LR 15 37 35.4
comp=Z,25μm,18.8s,baz=336
**SEM Semipalatinsk 66.52 336** *e*P **P** **15 07 14.2 -1.3**
SEM pmax pmax
comp=Z,155nm,1.1s
SEM MLR MLR
comp=Z,25μm,19.0s
**BRLS Borolday 66.53 324** *e*P **P** **15 07 13.6 -1.9**
baz=324
**BRLS Borolday 66.53 324** *e*P **P** **15 07 13.5 -1.9**
**H04N2 CROZET ISLANDS 66.64 223** P P 15 07 21.7 +5.9
baz=87,slow=6.3,SNR=15
**H04N1 CROZET ISLANDS 66.65 223** P P 15 07 21.9 +6.0
baz=87,slow=6.3,SNR=14
**H04N3 CROZET ISLANDS 66.65 223** P P 15 07 21.3 +5.3
baz=87,slow=6.3,SNR=14
**ARQ Araqi 66.66 300** P **P** **15 07 16.3 -0.4**
ARQ P **P** **15 07 16.3 -0.4**
ARQ P **P** **15 07 16.3 -0.4**
**H04S1 CROZET ISLANDS 66.71 223** P P 15 07 21.6 +5.3
baz=79,slow=5.6,SNR=8.2
**H04S2 CROZET ISLANDS 66.73 223** P P 15 07 22.2 +5.8
baz=79,slow=5.6,SNR=7.1
**H04S3 CROZET ISLANDS 66.73 223** P P 15 07 21.9 +5.4
baz=79,slow=5.6,SNR=11
**RBK Rabkut 66.81 293** P **P** **15 07 19.2 +1.4**
RBK P **P** **15 07 19.2 +1.4**
**SOHO SOHO 66.94 301** P **P** **15 07 15.6 -2.8**
**SOHO SOHO 66.94 301** P **P** **15 07 17.4 -1.0**
SOHO P **P** **15 07 17.4 -1.0**
**KRAR Krasnoyarsk 67.12 346**⇑*e*P **P** **15 07 18.5 -0.4**
**DOK Doka 67.22 294** P **P** **15 07 18.5 -1.8**
**WHFO Wadi Hawf 67.33 293** P **P** **15 07 19.4 -1.7**
**KURBB Kurchatov Arra 67.40 335** P **P** **15 07 18.8 -2.0**
comp=Z,14nm,1.1s,baz=148,slow=5.4,SNR=72
KURBB PKP2bc 15 35 47.0
comp=Z,8.8nm,1.0s,baz=306,slow=3.3,SNR=9.4
KURBB LR LR 15 40 01.5
comp=Z,64μm,21.8s,baz=140,slow=39
comp=Z,14nm,1.1s
**KURK Kurchatov 67.43 335** P **P** **15 07 19.2 -1.8**
KURK IAmb IAmb 15 07 48.1
comp=Z,355nm,1.1s
**KURK Kurchatov 67.43 335** IAMs_20 IAMs_20 15 39 02.9
comp=Z,68μm,22.0s
**KURK Kurchatov 67.43 335** ⇑P **P** **15 07 19.6 -1.3**
**KURK Kurchatov 67.43 335** P **P** **15 07 20.2 -0.8**
KURK P **P** **15 07 20.2 -0.8**
KURK P **P** **15 07 20.2 -0.8**
**KURK Kurchatov 67.43 335***c i*P **P** **15 07 19.5 -1.5**
KURK pmax pmax
comp=Z,398nm,1.1s
KURK MLR MLR
comp=Z,84μm,22.0s
**CTZ Chatham Island 67.49 134** P **P** **15 07 23.4 +1.8**
**CTZ Chatham Island 67.49 134** P **P** **15 07 23.7 +2.2**
**UOSS Minazif 67.51 301** P **P** **15 07 20.8 -1.3**
UOSS IAmb IAmb 15 08 40.1
comp=Z,243nm,1.4s
**UOSS Minazif 67.51 301** P **P** **15 07 19.3 -2.8**
**HATD Hatta, Dubai 67.53 301** P **P** **15 07 19.6 -2.6**
**HATD Hatta, Dubai 67.53 301** P **P** **15 07 20.3 -1.9**
SNR=14
HATD P **P** **15 07 20.3 -1.9**
SNR=14
**ASHO Ashiyiah 67.54 301** P **P** **15 07 20.6 -1.6**
ASHO P **P** **15 07 20.6 -1.6**
**MDH Madha 67.56 302** P **P** **15 07 20.7 -1.6**
**ALNE Al Ain 67.58 300** P **P** **15 07 19.5 -3.0**
**ALNE Al Ain 67.58 300** P **P** **15 07 23.2 +0.7**
SNR=15
ALNE P **P** **15 07 23.2 +0.7**
SNR=15
ALNE P **P** **15 07 23.2 +0.7**
SNR=15
**ABTO Aybut 67.60 293** P **P** **15 07 21.3 -1.4**
**UMZA Um Al Zommool 67.62 299** P **P** **15 07 20.5 -2.2**
UMZA P **P** **15 07 20.5 -2.2**
**ZAA0 Zalesovo Array 67.66 340** IAmb IAmb 15 07 54.2
comp=Z,308nm,1.1s
**ZALV Zalesovo Beam 67.66 340** P **P** **15 07 20.2 -2.1**
comp=Z,12nm,0.5s,baz=143,slow=5.2,SNR=39
ZALV S **S** **15 16 18.4 +0.5**
comp=Z,3.1nm,0.9s,baz=133,slow=2.9,SNR=1.3
ZALV PKP2bc 15 35 46.4
comp=Z,14nm,1.1s,baz=295,slow=2.3,SNR=11
ZALV LR LR 15 40 25.9
comp=Z,29μm,20.6s,baz=162,slow=39
comp=Z,12nm,0.5s
**MSFE Esma-Masafi 67.70 302** P **P** **15 07 20.8 -2.4**
**MASF Masafi 67.70 302** P **P** **15 07 23.3 0.0**
MASF P **P** **15 07 23.3 0.0**
**ABPO Ambohimpanom 67.90 253** P **P** **15 07 24.8 -0.1**
ABPO IAmb IAmb 15 07 43.0
comp=Z,427nm,1.3s
**ABPO Ambohimpanom 67.90 253** P **P** **15 07 24.8 -0.1**
ABPO pmax pmax
comp=Z,427nm,1.3s
**FAQ Al Faqa, Dubai 67.96 301** P **P** **15 07 22.2 -2.6**
**FAQ Al Faqa, Dubai 67.96 301** P **P** **15 07 23.3 -1.6**
SNR=16
FAQ P **P** **15 07 23.3 -1.6**
SNR=16
FAQ P **P** **15 07 23.3 -1.6**
SNR=16
**SHME Shamm 67.97 302** P **P** **15 07 22.6 -2.3**
**SHME Shamm 67.97 302** P **P** **15 07 23.7 -1.2**
SHME P **P** **15 07 23.7 -1.2**
**NAZ Nazwa, Dubai 67.98 301** P **P** **15 07 22.8 -2.2**
**NAZ Nazwa, Dubai 67.98 301** P **P** **15 07 23.1 -1.9**
SNR=13
NAZ P **P** **15 07 23.1 -1.9**
SNR=13
NAZ P **P** **15 07 23.1 -1.9**
SNR=13
**SKR Severo-Kuril's 68.03 26** *e*P P 15 07 34.0 +9.3
SKR *e*PPP PPP 15 11 25.7
SKR *e*S **S** **15 16 18.6 -3.9**
SKR pmax pmax
comp=Z,13μm,15.4s
SKR MLR MLR
comp=Z,15μm,20.0s
**FOMA Nahampoana Res 68.10 247** ⇑P **P** **15 07 28.2 +2.5**
**FOMA Nahampoana Res 68.10 247** P **P** **15 07 27.1 +1.4**
SNR=13
**ASUD Al Ashush, Dub 68.14 301** P **P** **15 07 23.7 -2.3**
**ASUD Al Ashush, Dub 68.14 301** P **P** **15 07 24.2 -1.8**
SNR=13
ASUD P **P** **15 07 24.2 -1.8**
SNR=13
ASUD P **P** **15 07 24.2 -1.8**
SNR=13
**UMQ Umm Al-Quwin 68.18 302** P **P** **15 07 26.2 0.0**
UMQ P **P** **15 07 26.2 0.0**
**VOI Vohitsoka 68.26 250** IAmb IAmb 15 07 50.8
comp=Z,546nm,1.2s
**VOI Vohitsoka 68.26 250** P **P** **15 07 28.3 +1.3**
SNR=24
**AJN Ajban 68.41 300** P **P** **15 07 29.2 +1.5**
AJN P **P** **15 07 29.2 +1.5**
**MAW Mawson 69.03 199** P **P** **15 07 31.9 +1.2**
comp=Z,84nm,0.8s,baz=60,slow=7.4,SNR=84
MAW LR LR 15 31 25.2
comp=Z,101μm,21.8s,baz=61,slow=30
MAW PKPPKP **P'P'df** **15 35 42.7 -1.4**
comp=Z,8.6nm,1.0s,baz=226,slow=6.2,SNR=7.6
comp=Z,84nm,0.8s
**MZWR Madinat Zayed 69.08 299** P **P** **15 07 30.2 -1.7**
MZWR P **P** **15 07 30.2 -1.7**
**MZR Muzera 69.18 298** P **P** **15 07 30.7 -1.8**
**MZR Muzera 69.18 298** P **P** **15 07 31.0 -1.5**
SNR=15
MZR P **P** **15 07 31.0 -1.5**
SNR=15
**GHWR Ruwais 70.02 299** P **P** **15 07 36.3 -1.3**
GHWR P **P** **15 07 36.3 -1.3**
**AFI Afiamalu 70.24 102** P **P** **15 07 38.9 -0.4**
AFI IAmb IAmb 15 07 54.8
comp=Z,425nm,1.1s
**AFI Afiamalu 70.24 102** P **P** **15 07 38.9 -0.4**
AFI pmax pmax
comp=Z,425nm,1.1s
**JRN Qarnain Island 70.36 300** P **P** **15 07 37.8 -2.0**
JRN P **P** **15 07 37.8 -2.0**
**PEA0B Petropavlovsk- 70.47 25** IAmb IAmb 15 08 28.9
comp=Z,235nm,1.1s
**PEA0B Petropavlovsk- 70.47 25**⇓*e*P **P** **15 07 40.0 +0.1**
**PETK Petropavlovsk- 70.47 25** P **P** **15 07 38.8 -1.0**
**PETK Petropavlovsk- 70.47 25** P **P** **15 07 38.7 -1.1**
comp=Z,14nm,0.9s,baz=30,slow=0.2,SNR=13
PETK PKPPKP **P'P'df** **15 35 39.1 +0.7**
comp=Z,4.5nm,1.0s,baz=138,slow=52,SNR=3.4
comp=Z,14nm,0.9s
**PET Petropavlovsk 70.81 25** P **P** **15 07 44.8 +2.9**
**PET Petropavlovsk 70.81 25** P **P** **15 07 41.0 -0.9**
PET IAmb IAmb 15 08 29.7
comp=Z,268nm,1.3s
**PET Petropavlovsk 70.81 25** *e*P **P** **15 07 39.1 -2.8**
PET *e*S **S** **15 16 52.3 -2.9**
PET *e*SS **SS** **15 21 26.5 -1.6**
PET pmax pmax
comp=Z,137nm,1.0s
PET pmax pmax
comp=Z,11μm,14.0s
PET pmax pmax
comp=Z,13μm,13.9s
PET smax smax
comp=E,36μm,18.3s
PET smax smax
comp=N,21μm,19.3s
**YAK Yakutsk 70.93 6** P **P** **15 07 41.4 -1.0**
YAK IAmb IAmb 15 08 01.1
comp=Z,298nm,0.9s
**YAK Yakutsk 70.93 6** PKPPKP 15 35 37.1
comp=Z,9.7nm,0.8s,baz=183,slow=3.7,SNR=6.2
**YAK Yakutsk 70.93 6** *e*P **P** **15 07 41.2 -1.2**
YAK *e* 15 07 59.3
YAK *e* 15 10 21.7
YAK *e*S **S** **15 16 55.2 -1.0**
YAK *e* 15 17 33.1
YAK *e*SS **SS** **15 21 35.0 +5.4**
YAK pmax pmax
comp=Z,229nm,1.1s
YAK pmax pmax
comp=N,88nm,1.1s
YAK pmax pmax
comp=E,21nm,1.1s
YAK pmax pmax
comp=Z,1μm,4.0s
YAK pmax pmax
comp=N,791nm,3.5s
YAK pmax pmax
comp=E,578nm,4.1s
YAK smax smax
comp=N,24μm,13.8s
YAK MLR MLR
comp=Z,37μm,22.0s
**SLWR Sila 71.08 299** P **P** **15 07 42.3 -1.8**
SLWR P **P** **15 07 42.3 -1.8**
**TRNA Turayna 71.70 299** P **P** **15 07 46.8 -1.0**
**NIUE Niue 71.71 107** P **P** **15 07 50.1 +2.0**
**SMRA Abu-Samra 72.04 299** P **P** **15 07 51.3 +1.4**
SNR=10
**SHMA Al-Shehemyia 72.27 300** P **P** **15 07 52.0 +0.7**
**BVA0 Borovoye Array 72.67 333** *i* P **P** **15 07 50.9 -2.2**
**BVAR Borovoye Array 72.67 333** P **P** **15 07 51.0 -2.1**
comp=Z,21nm,0.8s,baz=139,slow=7.9,SNR=52
BVAR PKPPKP **P'P'df** **15 35 31.0 -3.8**
comp=Z,0.3nm,0.5s,baz=218,slow=43,SNR=2.1
BVAR LR LR 15 43 36.2
comp=Z,28μm,18.6s,baz=129,slow=39
comp=Z,21nm,0.8s
**BVAR Borovoye Array 72.67 333** P **P** **15 07 51.0 -2.1**
**SAKB Bahrain 72.68 300** P **P** **15 07 54.0 +0.3**
**BRVK Borovoye 72.74 333** P **P** **15 07 51.4 -2.1**
**BRVK Borovoye 72.74 333** P **P** **15 07 52.4 -1.1**
**BRVK Borovoye 72.74 333***c i*P **P** **15 07 51.2 -2.3**
BRVK pmax pmax
comp=Z,160nm,1.0s
BRVK MLR MLR
comp=Z,29μm,18.0s
**MA2 Magadan 73.01 17** P **P** **15 07 58.7 +3.7**
**MA2 Magadan 73.01 17** P **P** **15 07 53.5 -1.5**
MA2 IAmb IAmb 15 08 17.3
comp=Z,356nm,1.1s
**MA2 Magadan 73.01 17** LR LR 15 39 17.1
comp=Z,11μm,21.8s,baz=218,slow=35
**MA2 Magadan 73.01 17***c i*P **P** **15 07 55.4 +0.4**
MA2 pmax pmax
comp=Z,353nm,1.2s
MA2 MLR MLR
comp=Z,17μm,19.0s
**AB31 Akbulak array 75.72 326** *i* P **P** **15 08 08.3 -2.7**
**ABKAR Akbulak array 75.72 326** P **P** **15 08 08.8 -2.2**
**ABKAR Akbulak array 75.72 326** IAmb IAmb 15 08 36.1
comp=Z,243nm,0.9s
**ATD Arta Tunnel 76.00 284** IAmb IAmb 15 08 33.5
comp=Z,449nm,1.3s
**ATD Arta Tunnel 76.00 284** LR LR 15 40 29.4
comp=Z,337nm,18.2s,baz=95,slow=35
**KBD Kabd 76.07 303** P **P** **15 08 11.6 -1.8**
**SEY Seymchan 76.20 16***c i*P **P** **15 08 12.4 -1.0**
SEY pmax pmax
comp=Z,504nm,1.1s
**RAYN Ar Rayn 76.33 297** P **P** **15 08 11.9 -3.2**
**RAYN Ar Rayn 76.33 297** P **P** **15 08 13.5 -1.6**
**RAYN Ar Rayn 76.33 297** P **P** **15 08 13.5 -1.6**
**RAYN Ar Rayn 76.33 297** P **P** **15 08 11.9 -3.2**
RAYN pmax pmax
comp=Z,116nm,0.9s
RAYN MLR MLR
comp=Z,31μm,20.0s
**AKTO Aktyubinsk 77.40 326** P **P** **15 08 18.6 -1.8**
comp=Z,36nm,0.8s,baz=118,slow=3.3,SNR=44
AKTO PKPPKP **P'P'df** **15 35 27.4 +0.5**
comp=Z,1.4nm,0.8s,baz=1.4,slow=0.5,SNR=3.8
AKTO LR LR 15 46 29.4
comp=Z,57μm,21.6s,baz=123,slow=39
comp=Z,36nm,0.8s
**SHEM Shemya Is, Ala 77.96 32** LR LR 15 41 22.7
comp=Z,7μm,20.8s,baz=234,slow=35
**KIBK Kibwezi 78.38 269** IAmb IAmb 15 08 46.7
comp=Z,445nm,1.5s
**KIBK Kibwezi 78.38 269** P **P** **15 08 25.1 -1.8**
**KIBK Kibwezi 78.38 269** P **P** **15 08 26.9 +0.1**
SNR=26
**KMBO Kilima Mbogo 79.33 270** P **P** **15 08 31.2 -1.0**
comp=Z,21nm,0.8s,baz=68,slow=7.0,SNR=48
KMBO LR LR 15 40 11.1
comp=Z,25μm,19.8s,baz=96,slow=33
comp=Z,21nm,0.8s
**SVE Sverdlovsk 79.44 332** *e*P **P** **15 08 29.7 -1.9**
SVE *e*S **S** **15 18 26.6 -4.4**
SVE *e* 15 23 42.9
SVE pmax pmax
comp=Z,7μm,14.3s
SVE pmax pmax
comp=Z,321nm,1.1s
SVE MLR MLR
comp=Z,29μm,20.0s
**FURI Furi 79.53 281** IAMs_20 IAMs_20 15 40 08.4
comp=Z,71μm,22.0s
**FURI Furi 79.53 281** LR LR 15 40 08.9
comp=Z,70μm,22.0s,baz=94,slow=33
**DODT Dodoma, Tanzan 80.13 265** *i* P **P** **15 08 34.6 -1.8**
**ARU Arti 80.20 331** IAMs_20 IAMs_20 15 49 44.4
comp=Z,41μm,20.0s
**ARU Arti 80.20 331** P **P** **15 08 32.6 -3.1**
comp=Z,5.3nm,0.6s,baz=128,slow=3.1,SNR=15
ARU LR LR 15 48 26.2
comp=Z,22μm,21.3s,baz=125,slow=39
comp=Z,5.3nm,0.6s
**ARU Arti 80.20 331***c i*P **P** **15 08 33.3 -2.4**
ARU 15 11 36.3
ARU PPP PPP 15 13 25.2
ARU S **S** **15 18 39.5 +0.5**
ARU SS **SS** **15 23 48.0 -2.3**
ARU SSS SSS 15 27 15.7
ARU pmax pmax
comp=Z,41nm,1.5s
ARU pmax pmax
comp=Z,4μm,9.8s
**TIXI Tiksi 80.28 4** P **P** **15 08 33.9 -1.9**
TIXI IAmb IAmb 15 09 11.9
comp=Z,243nm,1.0s
**TIXI Tiksi 80.28 4** IAMs_20 IAMs_20 15 51 03.5
comp=Z,49μm,20.0s
**TIXI Tiksi 80.28 4** LR LR 15 47 32.8
comp=Z,37μm,20.4s,baz=201,slow=38
**TIXI Tiksi 80.28 4***c i*P **P** **15 08 33.4 -2.4**
TIXI pmax pmax
comp=Z,281nm,1.0s
**MAK Makhachkala 80.77 316** *e*P **P** **15 08 36.3 -2.7**
MAK *e* 15 11 39.3
MAK *e*S **S** **15 18 41.3 -4.2**
MAK pmax pmax
comp=Z,420nm,1.3s
MAK pmax pmax
comp=Z,4μm,5.4s
**RAR Rarotonga 81.08 110** P **P** **15 08 43.3 +2.1**
**RAR Rarotonga 81.08 110** IAMs_20 IAMs_20 15 41 42.9
comp=Z,40μm,21.0s
**RAR Rarotonga 81.08 110** P **P** **15 08 39.5 -1.7**
comp=Z,36nm,1.1s,baz=90,slow=17,SNR=3.0
RAR LR LR 15 41 33.0
comp=Z,39μm,22.0s,baz=258,slow=33
comp=Z,36nm,1.1s
**CHIPN CHIPINGE 81.54 251** *i* P **P** **15 08 43.7 -0.2**
**CHIPN CHIPINGE 81.54 251** *i* P **P** **15 08 43.7 -0.2**
**QSPA South Pole Qui 81.61 180** P **P** **15 08 44.0 +0.7**
**QSPA South Pole Qui 81.61 180** P **P** **15 08 43.1 -0.2**
comp=Z,85nm,1.0s,baz=311,slow=1.5,SNR=75
QSPA S **S** **15 18 57.9 +4.1**
comp=Z,15nm,1.2s,baz=328,slow=23,SNR=4.9
QSPA PKKPbc **PKKPbc** **15 27 19.5 +0.4**
comp=Z,4.6nm,0.9s,baz=346,slow=5.4,SNR=3.9
QSPA PKPPKP **P'P'df** **15 35 21.1 -0.8**
comp=Z,2.6nm,0.7s,baz=91,slow=2.3,SNR=4.5
QSPA LR LR 15 41 31.8
comp=Z,191μm,21.7s,baz=330,slow=33

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,85nm,1.0s | | | | | | | |
| **POGA** | **Pongola** | **81.72** | **244** | | IAmb | IAmb | 15 09 13.4 | |
| | comp=Z,601nm,1.0s | | | | | | | |
| POGA | | | | | IAMs_20 | IAMs_20 | 15 42 27.3 | |
| | comp=Z,46µm,20.0s | | | | | | | |
| **GNI** | **Garni** | **81.80** | **313** | | P | **P** | **15 08 44.8** | **0.0** |
| GNI | | | | | IAmb | IAmb | 15 10 18.8 | |
| | comp=Z,315nm,1.4s | | | | | | | |
| **GNI** | **Garni** | **81.80** | **313** | | P | **P** | **15 08 43.0** | **-1.8** |
| **GNI** | **Garni** | **81.80** | **313** | | LR | LR | 15 50 51.6 | |
| | comp=Z,11µm,18.4s,baz=108,slow=40 | | | | | | | |
| **GNI** | **Garni** | **81.80** | **313** | | P | **P** | **15 08 44.2** | **-0.6** |
| **GNI** | **Garni** | **81.80** | **313** | *c* | *i* P | **P** | **15 08 42.5** | **-2.3** |
| GNI | | | | | pmax | pmax | | |
| | comp=Z,225nm,1.4s | | | | | | | |
| GNI | | | | | MLR | MLR | | |
| | comp=Z,25µm,26.0s | | | | | | | |
| **LODK** | **Lodwar** | **81.88** | **275** | | P | **P** | **15 08 45.7** | **0.0** |
| | SNR=66 | | | | | | | |
| **PDHT** | **Panda Hill** | **82.24** | **262** | *i* | P | **P** | **15 08 46.2** | **-1.5** |
| **MOPA** | **Mopani** | **82.36** | **247** | *i* | P | **P** | **15 08 47.8** | **-0.3** |
| **MOPA** | **Mopani** | **82.36** | **247** | *i* | P | **P** | **15 08 47.8** | **-0.3** |
| **ELIB** | **Princess Elisa** | **83.11** | **198** | *d* | P | **P** | **15 08 52.5** | **+1.4** |
| | comp=Z,363nm,1.2s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **83.33** | **310** | | IAmb | IAmb | 15 09 57.8 | |
| | comp=Z,244nm,1.2s | | | | | | | |
| **NCK** | **Nalchik** | **83.64** | **316** | ⇑ | *i* P | **P** | **15 08 54.8** | **+0.6** |
| NCK | | | | | pmax | pmax | | |
| | comp=Z,353nm,1.6s | | | | | | | |
| **BILL** | **Bilibino** | **83.87** | **17** | *c* | *i* P | **P** | **15 08 53.7** | **-1.0** |
| BILL | | | | | *i* | | 15 09 00.4 | |
| BILL | | | | | *i* S | **SKSac** | **15 19 09.4** | **-6.3** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,98nm,1.2s | | | | | | | |
| BILL | | | | | MLR | MLR | | |
| | comp=Z,25µm,20.0s | | | | | | | |
| **MUSN** | **Musina, Limpop** | **83.90** | **248** | *i* | P | **P** | **15 08 57.8** | **+1.7** |
| **MUSN** | **Musina, Limpop** | **83.90** | **248** | *i* | P | **P** | **15 08 57.8** | **+1.7** |
| **BELG** | **Belogornoye** | **84.10** | **325** | | P | **P** | **15 08 54.6** | **-1.6** |
| | comp=Z,40nm,1.0s,baz=99,slow=2.3,SNR=8.1 | | | | | | | |
| BELG | | | | | LR | LR | 15 52 52.6 | |
| | comp=Z,26µm,19.3s,baz=104,slow=40 | | | | | | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **BELG** | **Belogornoye** | **84.10** | **325** | *c* | *i* P | **P** | **15 08 53.4** | **-2.8** |
| BELG | | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| **KBZ** | **Khabaz** | **84.20** | **316** | | P | **P** | **15 08 55.1** | **-1.8** |
| | comp=Z,12nm,0.9s,baz=121,slow=3.7,SNR=18 | | | | | | | |
| KBZ | | | | | S | **SKSac** | **15 19 19.8** | **+1.0** |
| | comp=Z,0.6nm,0.4s,baz=54,slow=16,SNR=1.0 | | | | | | | |
| KBZ | | | | | PKKPbc | **PKKPbc** | **15 27 11.6** | **-0.4** |
| | comp=Z,5.3nm,0.8s,baz=12,slow=4.5,SNR=2.5 | | | | | | | |
| KBZ | | | | | PKPPKP | **P'P'df** | **15 35 17.6** | **+2.2** |
| | comp=Z,0.9nm,0.4s,baz=240,slow=11,SNR=1.6 | | | | | | | |
| KBZ | | | | | LR | LR | 15 52 22.4 | |
| | comp=Z,10µm,18.6s,baz=106,slow=40 | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **KBZ** | **Khabaz** | **84.20** | **316** | *ce* | P | **P** | **15 08 55.9** | **-1.0** |
| **SHA1** | **Shidzhatmaz** | **84.36** | **316** | *c* | *i* P | **P** | **15 08 56.2** | **-1.9** |
| **KIV** | **Kislovodsk** | **84.41** | **316** | | P | **P** | **15 08 56.0** | **-2.2** |
| **KIV** | **Kislovodsk** | **84.41** | **316** | | P | **P** | **15 08 56.8** | **-1.4** |
| KIV | | | | | P | **P** | **15 08 56.8** | **-1.4** |
| **KIV** | **Kislovodsk** | **84.41** | **316** | ⇑ | P | **P** | **15 08 58.6** | **+0.5** |
| **KIV** | **Kislovodsk** | **84.41** | **316** | | *e*P | **P** | **15 08 56.0** | **-2.2** |
| KIV | | | | | *e* | | 15 12 09.2 | |
| KIV | | | | | *e* | | 15 19 18.9 | |
| KIV | | | | | *e*SS | SS | 15 24 53.5 | -0.2 |
| KIV | | | | | *e*SSS | SSS | 15 28 20.8 | |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **BCA** | **Borcka** | **84.44** | **313** | ⇓ | P | **P** | **15 08 58.6** | **+0.3** |
| **GOF** | **Gofitskoye** | **84.49** | **317** | *ce* | P | **P** | **15 08 56.4** | **-2.0** |
| GOF | | | | | *e*S | **S** | **15 19 28.1** | **+4.5** |
| **KRI** | **Karoi** | **84.78** | **254** | *i* | P | **P** | **15 09 01.2** | **+0.5** |
| **KRI** | **Karoi** | **84.78** | **254** | *i* | P | **P** | **15 09 01.2** | **+0.5** |
| **MATP** | **Matopo** | **85.39** | **250** | *i* | P | **P** | **15 09 05.8** | **+2.2** |
| **MATP** | **Matopo** | **85.39** | **250** | *i* | P | **P** | **15 09 05.8** | **+2.2** |
| **KIRV** | **Kirov** | **85.57** | **331** | | P | **P** | **15 09 01.4** | **-2.0** |
| | comp=Z,9.4nm,0.7s,baz=127,slow=7.3,SNR=9.6 | | | | | | | |
| KIRV | | | | | LR | LR | 15 52 36.5 | |
| | comp=Z,33µm,21.1s,baz=122,slow=40 | | | | | | | |
| | comp=Z,9.4nm,0.7s | | | | | | | |
| **KIRV** | **Kirov** | **85.57** | **331** | *c* | *i* P | **P** | **15 09 00.6** | **-2.8** |
| **GRHM** | **Grahamstown, E** | **85.68** | **237** | | P | **P** | **15 09 05.4** | **+0.6** |
| **ASF** | **Jabal al Asfar** | **85.83** | **303** | | LR | LR | 15 48 59.0 | |
| | comp=Z,26µm,21.9s,baz=324,slow=37 | | | | | | | |
| **MBAR** | **Mbarara** | **85.85** | **270** | | P | **P** | **15 09 05.4** | **-0.8** |
| MBAR | | | | | IAmb | IAmb | 15 09 23.8 | |
| | comp=Z,456nm,1.2s | | | | | | | |
| **MBAR** | **Mbarara** | **85.85** | **270** | | LR | LR | 15 44 49.9 | |
| | comp=Z,10µm,19.1s,baz=84,slow=34 | | | | | | | |
| **MBAR** | **Mbarara** | **85.85** | **270** | | P | **P** | **15 09 06.2** | **+0.1** |
| MBAR | | | | | P | **P** | **15 09 06.2** | **+0.1** |
| **MBAR** | **Mbarara** | **85.85** | **270** | *c* | *i* P | **P** | **15 09 05.3** | **-0.8** |
| MBAR | | | | | pmax | pmax | | |
| | comp=Z,416nm,1.3s | | | | | | | |
| MBAR | | | | | MLR | MLR | | |
| | comp=Z,9µm,18.0s | | | | | | | |
| **LABN** | **Labinsk** | **85.95** | **316** | | *e*P | **P** | **15 09 01.8** | **-4.0** |
| LABN | | | | | *e*PP | **PcP** | **15 09 06.0** | **-2.4** |
| LABN | | | | | *e*S | **SKSac** | **15 19 26.6** | **-3.4** |
| LABN | | | | | pmax | pmax | | |
| | comp=Z,35nm,0.6s | | | | | | | |
| **XMAS** | **Kiritimati** | **86.26** | **87** | | IAMs_20 | IAMs_20 | 15 46 23.3 | |
| | comp=Z,38µm,20.0s | | | | | | | |
| **LSZ** | **Lusaka** | **86.34** | **255** | | P | **P** | **15 09 07.5** | **-1.0** |
| LSZ | | | | | IAMs_20 | IAMs_20 | 15 42 25.0 | |
| | comp=Z,35µm,22.0s | | | | | | | |
| **LSZ** | **Lusaka** | **86.34** | **255** | | P | **P** | **15 09 08.4** | **0.0** |
| LSZ | | | | | P | **P** | **15 09 08.4** | **0.0** |
| **LSZ** | **Lusaka** | **86.34** | **255** | | P | **P** | **15 09 07.5** | **-1.0** |
| **SOC** | **Sochi** | **86.37** | **315** | *c* | *i* P | **P** | **15 09 05.1** | **-2.7** |
| SOC | | | | | *e* | | 15 12 24.0 | |
| SOC | | | | | *e*S | **SKSac** | **15 19 30.8** | **-1.9** |
| SOC | | | | | *e*SS | **SS** | **15 25 18.0** | **-4.4** |
| SOC | | | | | *e*SSS | SSS | 15 28 51.1 | |
| SOC | | | | | pmax | pmax | | |
| | comp=Z,95nm,0.8s | | | | | | | |
| SOC | | | | | MLR | MLR | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| **ERBR** | **Yeremizino-Bor** | **86.41** | **317** | | *e*P | **P** | **15 09 04.1** | **-3.9** |
| ERBR | | | | | *e*PP | **PcP** | **15 09 07.5** | **-2.9** |
| ERBR | | | | | *e*S | **SKSac** | **15 19 29.6** | **-3.2** |
| ERBR | | | | | pmax | pmax | | |
| | comp=Z,78nm,1.4s | | | | | | | |
| **SOE** | **Somerset East** | **86.43** | **238** | | IAMs_20 | IAMs_20 | 15 40 59.8 | |
| | comp=Z,60µm,21.0s | | | | | | | |
| **GAZ** | **Gaziantep** | **86.68** | **308** | | IAmb | IAmb | 15 09 36.8 | |
| | comp=Z,232nm,1.2s | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **86.75** | **302** | | IAMs_20 | IAMs_20 | 15 47 38.7 | |
| | comp=Z,48µm,21.0s | | | | | | | |
| **EIL** | **Elat** | **86.95** | **300** | | LR | LR | 15 47 18.7 | |
| | comp=Z,18µm,21.7s,baz=108,slow=35 | | | | | | | |
| **NVL** | **N'lazarevskaya** | **86.97** | **199** | | *e*P | **P** | **15 09 13.3** | **+3.1** |
| NVL | | | | | *e*S | **SKSac** | **15 19 40.4** | **+4.9** |
| NVL | | | | | pmax | pmax | | |
| | comp=Z,466nm,1.2s | | | | | | | |
| NVL | | | | | MLR | MLR | | |
| | comp=Z,45µm,18.0s | | | | | | | |
| **VRH** | **Novokhopyorsk** | **87.17** | **323** | | *e*P | **P** | **15 09 08.3** | **-3.2** |
| VRH | | | | | *e* | | 15 09 10.0 | |
| VRH | | | | | *e* | | 15 12 42.9 | |
| VRH | | | | | *e* | | 15 19 30.5 | |
| VRH | | | | | pmax | pmax | | |
| | comp=Z,100nm,0.7s | | | | | | | |
| VRH | | | | | MLR | MLR | | |
| | comp=Z,32µm,23.0s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **87.24** | **304** | | P | **P** | **15 09 11.4** | **-1.0** |
| | comp=Z,33nm,1.2s,baz=95,slow=5.1,SNR=11 | | | | | | | |
| MMAI | | | | | LR | LR | 15 50 19.2 | |
| | comp=Z,26µm,21.8s,baz=53,slow=37 | | | | | | | |
| | comp=Z,33nm,1.2s | | | | | | | |
| **BOSA** | **Boshof** | **87.24** | **242** | | P | **P** | **15 09 12.6** | **-0.1** |
| | comp=Z,106nm,0.8s,baz=103,slow=4.5,SNR=122 | | | | | | | |
| BOSA | | | | | LR | LR | 15 41 41.3 | |
| | comp=Z,71µm,21.8s,baz=104,slow=31 | | | | | | | |
| | comp=Z,106nm,0.8s | | | | | | | |
| **LBTB** | **Lobatse** | **87.44** | **245** | | IAmb | IAmb | 15 09 23.9 | |
| | comp=Z,267nm,0.8s | | | | | | | |
| **LBTB** | **Lobatse** | **87.44** | **245** | | LR | LR | 15 42 55.3 | |
| | comp=Z,20µm,20.5s,baz=108,slow=32 | | | | | | | |
| **LBTB** | **Lobatse** | **87.44** | **245** | *i* | P | **P** | **15 09 14.4** | **+0.8** |
| **LBTB** | **Lobatse** | **87.44** | **245** | *i* | P | **P** | **15 09 14.4** | **+0.8** |
| **NIKH** | **Nikolski High** | **87.45** | **36** | | P | **P** | **15 09 12.9** | **+0.1** |
| | baz=253 | | | | | | | |
| **SOOWA** | **Sowa** | **87.49** | **250** | *i* | P | **P** | **15 09 14.5** | **+0.6** |
| **SPIA** | **Saint Paul Isl** | **87.99** | **31** | | P | **P** | **15 09 15.5** | **+0.2** |
| | baz=251 | | | | | | | |
| **P08K** | **Saint George I** | **88.17** | **32** | | P | **P** | **15 09 17.0** | **+0.9** |
| | baz=252 | | | | | | | |
| **ANN** | **Anapa** | **88.27** | **316** | | *e*P | P | 15 09 09.1 | -7.8 |
| ANN | | | | | *e*PP | **PcP** | **15 09 14.7** | **-3.9** |
| ANN | | | | | *e* | | 15 12 37.7 | |
| ANN | | | | | *e*S | **SKSac** | **15 19 36.0** | **-8.1** |
| ANN | | | | | *e*SS | **SS** | **15 25 49.1** | **-0.9** |
| ANN | | | | | pmax | pmax | | |
| | comp=Z,86nm,1.5s | | | | | | | |
| **VORD** | **Divnogorie** | **88.57** | **322** | | *e*P | **P** | **15 09 14.8** | **-3.4** |
| VORD | | | | | *e* | | 15 09 16.7 | |
| VORD | | | | | *e* | | 15 12 53.3 | |
| VORD | | | | | *e* | | 15 19 43.8 | |
| VORD | | | | | pmax | pmax | | |
| | comp=Z,130nm,1.0s | | | | | | | |
| VORD | | | | | MLR | MLR | | |
| | comp=Z,29µm,26.0s | | | | | | | |
| **VSR** | **Storozhevoye** | **88.71** | **322** | | *e*P | **P** | **15 09 15.2** | **-3.7** |
| VSR | | | | | *e* | | 15 09 16.9 | |
| VSR | | | | | *e* | | 15 12 51.4 | |
| VSR | | | | | *e* | | 15 19 46.7 | |
| VSR | | | | | pmax | pmax | | |
| | comp=Z,160nm,1.2s | | | | | | | |
| VSR | | | | | MLR | MLR | | |
| | comp=Z,44µm,25.0s | | | | | | | |
| **KIP** | **Kipapa** | **88.73** | **68** | | P | **P** | **15 09 21.7** | **+2.0** |
| **VORR** | **Voronezh** | **88.81** | **323** | | *e*P | **P** | **15 09 15.9** | **-3.4** |
| VORR | | | | | *e* | | 15 09 16.4 | |
| VORR | | | | | *e* | | 15 12 50.5 | |
| VORR | | | | | *e* | | 15 19 49.5 | |
| VORR | | | | | pmax | pmax | | |
| | comp=Z,110nm,0.9s | | | | | | | |
| **KSANE** | **Kasane** | **88.87** | **252** | *i* | P | **P** | **15 09 21.3** | **+0.8** |
| **SKOMA** | **Sekoma** | **89.01** | **246** | *i* | P | **P** | **15 09 22.1** | **+1.0** |
| **UNV** | **Unalaska Valle** | **89.05** | **35** | | P | **P** | **15 09 21.7** | **+1.3** |
| | baz=254 | | | | | | | |
| **PHDHD** | **Phuduhudu** | **89.10** | **250** | *i* | P | **P** | **15 09 19.9** | **-1.6** |
| **LPSR** | **Galich'ya Gora** | **89.21** | **323** | | *e*P | **P** | **15 09 18.8** | **-2.4** |
| LPSR | | | | | *e* | | 15 09 20.5 | |
| LPSR | | | | | *e* | | 15 12 59.0 | |
| LPSR | | | | | *e* | | 15 19 41.0 | |
| LPSR | | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | | |
| LPSR | | | | | MLR | MLR | | |
| | comp=Z,32µm,22.0s | | | | | | | |
| **CSS** | **Mathiatis** | **89.30** | **305** | | IAmb | IAmb | 15 10 02.9 | |
| | comp=Z,194nm,1.4s | | | | | | | |
| CSS | | | | | IAMs_20 | IAMs_20 | 15 52 05.0 | |
| | comp=Z,38µm,21.0s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.31** | **196** | ⇑ | P | **P** | **15 09 23.0** | **+1.4** |
| | comp=Z,9µm,0.8s | | | | | | | |
| TROLL | | | | ⇓ | SKSac | **SKSac** | **15 19 55.3** | **+5.4** |
| | comp=Z,261nm,1.0s | | | | | | | |
| **LVA** | **Lava Point** | **89.40** | **35** | | IAMs_20 | IAMs_20 | 15 47 01.4 | |
| | comp=Z,46µm,22.0s | | | | | | | |
| **GAMB** | **Gambell** | **89.51** | **25** | | P | **P** | **15 09 23.3** | **+1.0** |
| | baz=250 | | | | | | | |
| **KIRS** | **Kirsehir-Merke** | **89.63** | **310** | ⇑ | P | **P** | **15 09 21.5** | **-2.1** |
| **BR131** | **Keskin Array S** | **89.95** | **310** | *c* | *i* P | **P** | **15 09 23.6** | **-1.6** |
| **BRTR** | **Keskin Array B** | **89.95** | **310** | | P | **P** | **15 09 23.6** | **-1.6** |
| **BRTR** | **Keskin Array B** | **89.95** | **310** | | P | **P** | **15 09 22.4** | **-2.8** |
| | comp=Z,7.6nm,0.9s,baz=123,slow=5.3,SNR=31 | | | | | | | |
| BRTR | | | | | LR | LR | 15 54 43.4 | |
| | comp=Z,16µm,20.1s,baz=113,slow=39 | | | | | | | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **BRTR** | **Keskin Array B** | **89.95** | **310** | *i* | P | **P** | **15 09 23.0** | **-2.2** |
| BRTR | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **KHLH** | **Kahului Airpor** | **90.11** | **69** | | IAMs_20 | IAMs_20 | 15 49 51.8 | |
| | comp=Z,41µm,20.0s | | | | | | | |
| **HLK** | **Haleakala** | **90.26** | **69** | | IAMs_20 | IAMs_20 | 15 50 05.6 | |
| | comp=Z,43µm,21.0s | | | | | | | |
| **SUR** | **Sutherland** | **90.44** | **237** | | P | **P** | **15 09 27.4** | **-0.4** |
| SUR | | | | | IAmb | IAmb | 15 09 49.1 | |
| | comp=Z,238nm,1.2s | | | | | | | |
| **SUR** | **Sutherland** | **90.44** | **237** | | LR | LR | 15 43 30.9 | |
| | comp=Z,71µm,21.3s,baz=106,slow=31 | | | | | | | |
| **SUR** | **Sutherland** | **90.44** | **237** | | P | **P** | **15 09 28.2** | **+0.4** |
| SUR | | | | | P | **P** | **15 09 28.2** | **+0.4** |
| **SIM** | **Simferopol'** | **90.60** | **315** | | *e*P | P | 15 09 37.6 | +10 |
| SIM | | | | | *e* | | 15 19 51.0 | |
| **ANTO** | **Ankara** | **90.62** | **310** | ⇑ | P | **P** | **15 09 27.4** | **-0.7** |
| **ANTO** | **Ankara** | **90.62** | **310** | ⇑ | P | **P** | **15 09 27.5** | **-0.7** |
| **MOS** | **Moscow** | **90.73** | **326** | | *e*P | **P** | **15 09 25.5** | **-2.7** |
| MOS | | | | | *e* | | 15 12 58.7 | |
| MOS | | | | | *e* | | 15 19 49.5 | |
| MOS | | | | | *e*S | **S** | **15 20 23.0** | **+0.2** |
| MOS | | | | | *e*PS | **PS** | **15 21 27.4** | **-6.1** |
| MOS | | | | | *e*SSS | SSS | 15 30 03.8 | |
| MOS | | | | | pmax | pmax | | |
| | comp=Z,74nm,2.0s | | | | | | | |
| **POHA** | **Pohakuloa** | **90.77** | **70** | | P | **P** | **15 09 31.8** | **+2.3** |
| **HMH** | **Humu'ula Sheep** | **90.79** | **70** | | P | **P** | **15 09 28.8** | **-0.9** |
| **HLP** | **Hilina Pali** | **90.91** | **71** | | IAMs_20 | IAMs_20 | 15 48 42.1 | |
| | comp=Z,35µm,21.0s | | | | | | | |
| **M11K** | **Mekoryuk** | **90.95** | **29** | | P | **P** | **15 09 29.6** | **+0.5** |
| | baz=255 | | | | | | | |
| **SNAA** | **Sanae** | **90.95** | **196** | | P | **P** | **15 09 29.6** | **+0.4** |
| **SNAA** | **Sanae** | **90.95** | **196** | ⇑ | P | **P** | **15 09 30.8** | **+1.7** |
| | comp=Z,5µm,1.0s | | | | | | | |
| SNAA | | | | ⇓ | SKSac | **SKSac** | **15 20 07.2** | **+8.0** |
| | comp=Z,157nm,1.3s | | | | | | | |
| **SNAA** | **Sanae** | **90.95** | **196** | | P | **P** | **15 09 29.7** | **+0.6** |
| | comp=Z,77nm,1.1s,baz=116,slow=4.2,SNR=74 | | | | | | | |
| SNAA | | | | | PKKPbc | **PKKPbc** | **15 26 54.7** | **-1.5** |
| | comp=Z,3.0nm,0.8s,baz=193,slow=4.1,SNR=2.8 | | | | | | | |
| SNAA | | | | | PKPPKP | **P'P'df** | **15 35 07.5** | **+2.9** |
| | comp=Z,2.9nm,0.8s,baz=345,slow=7.0,SNR=4.8 | | | | | | | |
| SNAA | | | | | LR | LR | 15 44 54.0 | |
| | comp=Z,156µm,22.0s,baz=111,slow=32 | | | | | | | |
| | comp=Z,77nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **90.95** | **196** | *c* | *i* P | **P** | **15 09 30.6** | **+1.4** |
| SNAA | | | | | pmax | pmax | | |
| | comp=Z,577nm,1.2s | | | | | | | |
| SNAA | | | | | MLR | MLR | | |
| | comp=Z,38µm,18.0s | | | | | | | |
| **BYL** | **Byron's Ledge** | **90.97** | **71** | | IAMs_20 | IAMs_20 | 15 48 43.7 | |
| | comp=Z,33µm,21.0s | | | | | | | |
| **HATHI** | **Halema'uma'u T** | **90.97** | **71** | | IAMs_20 | IAMs_20 | 15 48 32.7 | |
| | comp=Z,32µm,21.0s | | | | | | | |
| **FALS** | **False Pass** | **91.05** | **35** | | P | **P** | **15 09 30.2** | **+0.5** |
| | baz=257 | | | | | | | |
| **PPT** | **Papeete** | **91.09** | **108** | | P | **P** | **15 09 30.8** | **0.0** |
| | comp=Z,80nm,1.0s,baz=172,slow=21,SNR=4.7 | | | | | | | |
| PPT | | | | | LR | LR | 15 47 50.9 | |
| | comp=Z,29µm,21.7s,baz=256,slow=34 | | | | | | | |
| | comp=Z,80nm,1.0s | | | | | | | |
| **PPTF** | **Pamatai, Papee** | **91.09** | **108** | | P | **P** | **15 09 33.0** | **+2.1** |
| **PPTF** | **Pamatai, Papee** | **91.09** | **108** | | IAMs_20 | IAMs_20 | 15 47 49.3 | |
| | comp=Z,29µm,20.0s | | | | | | | |
| **STCH** | **Steam Cracks** | **91.09** | **71** | | IAMs_20 | IAMs_20 | 15 48 46.9 | |
| | comp=Z,37µm,21.0s | | | | | | | |
| **OBN** | **Obninsk** | **91.17** | **326** | | IAMs_20 | IAMs_20 | 15 57 35.1 | |
| | comp=Z,31µm,20.0s | | | | | | | |
| **OBN** | **Obninsk** | **91.17** | **326** | | P | **P** | **15 09 28.4** | **-1.8** |
| | comp=Z,14nm,0.4s,baz=116,slow=10,SNR=5.5 | | | | | | | |
| OBN | | | | | PKPPKP | **P'P'df** | **15 35 07.2** | **+5.4** |
| | comp=Z,9.3nm,0.4s,baz=99,slow=21,SNR=1.8 | | | | | | | |
| OBN | | | | | LR | LR | 15 54 44.0 | |
| | comp=Z,21µm,21.5s,baz=100,slow=38 | | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | | |
| **OBN** | **Obninsk** | **91.17** | **326** | ⇓ | P | **P** | **15 09 28.2** | **-2.1** |
| **OBN** | **Obninsk** | **91.17** | **326** | *i* | P | **P** | **15 09 29.2** | **-1.1** |
| OBN | | | | *i* | S | **SKSac** | **15 20 03.6** | **+3.0** |
| OBN | | | | *i* | SS | **SS** | **15 26 27.1** | **-4.5** |
| OBN | | | | | pmax | pmax | | |
| | comp=Z,191nm,1.7s | | | | | | | |
| OBN | | | | | MLR | MLR | | |
| | comp=Z,28µm,22.0s | | | | | | | |
| **JOKA** | **Jonika Flow** | **91.22** | **71** | | IAMs_20 | IAMs_20 | 15 48 50.1 | |
| | comp=Z,36µm,21.0s | | | | | | | |
| **TNA** | **Tin City** | **91.62** | **24** | | P | **P** | **15 09 32.6** | **+0.5** |
| | baz=253 | | | | | | | |
| **GRTLG** | **Ghanzi** | **91.98** | **248** | *i* | P | **P** | **15 09 34.3** | **-0.7** |
| **S12K** | **Black Hills** | **91.99** | **34** | | P | **P** | **15 09 34.6** | **+0.5** |
| | baz=258 | | | | | | | |
| **F14K** | **Arctic Creek** | **92.23** | **24** | | P | **P** | **15 09 35.9** | **+0.9** |
| | baz=255 | | | | | | | |
| **M13K** | **Dall Lake** | **92.33** | **29** | | P | **P** | **15 09 36.4** | **+0.9** |
| | baz=257 | | | | | | | |
| **ELL** | **Elmali** | **92.34** | **307** | | IAmb | IAmb | 15 10 08.0 | |
| | comp=Z,254nm,1.1s | | | | | | | |
| **ADZR** | **Andozero** | **92.39** | **334** | | *e*P | P | 15 09 48.1 | +12 |
| ADZR | | | | | pmax | pmax | | |
| | comp=Z,32nm,0.6s | | | | | | | |
| **ANM** | **Nome** | **92.39** | **25** | | P | **P** | **15 09 37.2** | **+1.4** |
| | baz=256 | | | | | | | |
| **BELA** | **Belgrano 2** | **92.40** | **186** | | P | **P** | **15 09 36.3** | **+0.7** |
| **J14K** | **Nanvaranak Lak** | **92.75** | **27** | | P | **P** | **15 09 38.7** | **+1.3** |
| | baz=257 | | | | | | | |
| **SDPT** | **Sand Point** | **92.81** | **35** | | IAMs_20 | IAMs_20 | 15 47 41.5 | |
| | comp=Z,33µm,22.0s | | | | | | | |
| **SDPT** | **Sand Point** | **92.81** | **35** | | P | **P** | **15 09 39.0** | **+1.2** |
| | baz=259 | | | | | | | |
| **L14K** | **Kuka Creek** | **92.85** | **28** | | P | **P** | **15 09 39.2** | **+1.4** |
| | baz=258 | | | | | | | |
| **F15K** | **North Star Dit** | **92.97** | **24** | | P | **P** | **15 09 40.1** | **+1.7** |
| | baz=256 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **92.99** | **196** | ⇑ | P | **P** | **15 09 39.3** | **+0.9** |
| | comp=Z,155nm,0.9s | | | | | | | |
| VNA1 | | | | ⇓ | SKSac | **SKSac** | **15 20 17.4** | **+6.9** |
| | comp=Z,12nm,0.9s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.01** | **195** | ⇑ | P | **P** | **15 09 40.0** | **+1.4** |
| | comp=Z,93nm,0.7s | | | | | | | |
| VNA3 | | | | ⇓ | SKSac | **SKSac** | **15 20 19.7** | **+8.9** |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **93.04** | **30** | | P | **P** | **15 09 39.9** | **+1.1** |
| | baz=259 | | | | | | | |
| **G15K** | **Niukluk** | **93.05** | **25** | | P | **P** | **15 09 39.9** | **+1.2** |
| | baz=257 | | | | | | | |
| **M14K** | **Bethel** | **93.07** | **29** | | P | **P** | **15 09 40.1** | **+1.2** |
| | baz=258 | | | | | | | |
| **O14K** | **Tigyukauivet M** | **93.12** | **31** | | P | **P** | **15 09 40.1** | **+1.0** |
| | baz=259 | | | | | | | |
| **CHNA** | **Chernabura Isl** | **93.21** | **35** | | P | **P** | **15 09 40.9** | **+1.2** |
| | baz=260 | | | | | | | |
| **C16K** | **Lisburne Hills** | **93.32** | **21** | | P | **P** | **15 09 41.2** | **+1.3** |
| | baz=256 | | | | | | | |
| **L15K** | **Ungalak Mounta** | **93.48** | **28** | | P | **P** | **15 09 41.6** | **+0.8** |
| | baz=259 | | | | | | | |
| **S14K** | **Fog Glacier** | **93.48** | **34** | | P | **P** | **15 09 41.3** | **+0.3** |
| | baz=260 | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **93.58** | **28** | | P | **P** | **15 09 42.2** | **+1.0** |
| | baz=259 | | | | | | | |
| **M15K** | **Kasigluk River** | **93.67** | **29** | | P | **P** | **15 09 42.2** | **+0.5** |
| | baz=260 | | | | | | | |
| **H16K** | **Elim** | **93.73** | **25** | | P | **P** | **15 09 43.1** | **+1.3** |
| | baz=258 | | | | | | | |
| **G16K** | **Koyuk River** | **93.83** | **24** | | P | **P** | **15 09 43.2** | **+0.8** |
| | baz=258 | | | | | | | |
| **O15K** | **Ungalikthiuk R** | **93.83** | **31** | | P | **P** | **15 09 43.2** | **+0.7** |
| | baz=260 | | | | | | | |
| **N15K** | **Kwethluk River** | **93.87** | **30** | | P | **P** | **15 09 43.1** | **+0.4** |
| | baz=260 | | | | | | | |
| **D17K** | **Noatak River** | **94.02** | **22** | | P | **P** | **15 09 43.8** | **+0.6** |
| | baz=258 | | | | | | | |
| **CHGN** | **Chignik** | **94.11** | **34** | | IAMs_20 | IAMs_20 | 15 50 02.0 | |
| | comp=Z,34µm,21.0s | | | | | | | |
| **CHGN** | **Chignik** | **94.11** | **34** | | P | **P** | **15 09 44.1** | **+0.3** |
| | baz=261 | | | | | | | |
| **C17K** | **DeLong Mountai** | **94.15** | **21** | | P | **P** | **15 09 44.6** | **+0.8** |
| | baz=258 | | | | | | | |
| **RDOG** | **Red Dog Mine** | **94.16** | **22** | | P | **P** | **15 09 44.4** | **+0.6** |
| | baz=258 | | | | | | | |
| **J16K** | **Anvik River** | **94.18** | **27** | | IAmb | IAmb | 15 10 05.2 | |
| | comp=Z,128nm,1.1s | | | | | | | |
| **J16K** | **Anvik River** | **94.18** | **27** | | P | **P** | **15 09 44.6** | **+0.6** |
| | baz=260 | | | | | | | |
| **I17K** | **Unalakleet** | **94.25** | **26** | | IAmb | IAmb | 15 10 05.7 | |
| | comp=Z,124nm,1.2s | | | | | | | |
| **I17K** | **Unalakleet** | **94.25** | **26** | | P | **P** | **15 09 45.5** | **+1.2** |
| | baz=260 | | | | | | | |
| **TLCR** | | **94.34** | **315** | ⇑ | P | P | 15 09 54.1 | +8.9 |
| **TLCR** | | **94.34** | **315** | ⇑ | P | P | 15 09 54.1 | +8.9 |
| **E17K** | **Hotham Inlet** | **94.37** | **23** | | P | **P** | **15 09 46.0** | **+1.2** |
| | baz=259 | | | | | | | |
| **L16K** | **Owhat River** | **94.43** | **28** | | P | **P** | **15 09 46.2** | **+1.1** |
| | baz=261 | | | | | | | |
| **F17K** | **Baldwin Pennin** | **94.48** | **24** | | P | **P** | **15 09 46.1** | **+0.8** |
| | baz=260 | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **94.55** | **25** | | P | **P** | **15 09 47.2** | **+1.6** |
| | baz=260 | | | | | | | |
| **M16K** | **Timber Creek** | **94.56** | **29** | | P | **P** | **15 09 46.9** | **+1.1** |
| | baz=261 | | | | | | | |
| **MILM** | **Milestii Mici** | **94.57** | **317** | | *e*P | **P** | **15 09 46.0** | **-0.2** |
| | comp=Z,2µm,8.8s | | | | | | | |
| **MILM** | **Milestii Mici** | **94.57** | **317** | | *e*PP | PP | 15 13 43.0 | +8.7 |
| MILM | | | | | *e*SKS | **SKSac** | **15 20 14.0** | **-5.9** |
| MILM | | | | | *e*S | **ScS** | **15 20 58.0** | **-0.5** |
| **MILM** | **Milestii Mici** | **94.57** | **317** | | *e*PS | PS | 15 22 16.0 | -0.4 |
| MILM | | | | | *e*LQ | LQ | 15 46 13.0 | |
| | comp=Z,19µm,25.0s | | | | | | | |
| MILM | | | | | LRM | MLR | 16 00 51.0 | |
| | comp=Z,11µm,15.0s | | | | | | | |
| **MILM** | **Milestii Mici** | **94.57** | **317** | ⇑ | P | **P** | **15 09 44.0** | **-2.1** |
| **MILM** | **Milestii Mici** | **94.57** | **317** | | *e*P | **P** | **15 09 46.0** | **-0.2** |
| MILM | | | | | *e* | | 15 20 14.0 | |
| MILM | | | | | *e*S | **ScS** | **15 20 58.0** | **-0.5** |
| MILM | | | | | *e*PS | **PS** | **15 22 16.0** | **-0.4** |
| MILM | | | | | pmax | pmax | | |
| | comp=Z,2µm,8.8s | | | | | | | |
| **N16K** | **Nishlik Lake** | **94.57** | **30** | | P | **P** | **15 09 46.9** | **+1.0** |
| | baz=261 | | | | | | | |
| **KIS** | **Kishinev** | **94.58** | **317** | ⇓ | *e*P | **P** | **15 09 45.0** | **-1.2** |
|

baz=262
F18K **Selawik** 95.14 23 P P 15 09 49.7 +1.4
baz=261
A19K **Wainwright** 95.22 20 P P 15 09 50.1 +1.5
baz=260
O17K **Koliganek Bris** 95.30 30 P P 15 09 49.9 +0.8
baz=263
M17K **Holitna River** 95.34 29 P P 15 09 50.1 +0.7
baz=262
N17K **Nushagak Hills** 95.35 30 P P 15 09 50.6 +1.2
baz=263
Q16K **King Salmon** 95.38 32 P P 15 09 50.7 +1.1
baz=263
R17L **Mt. Peulik Vol** 95.41 33 P P 15 09 51.6 +1.8
baz=263
G18K **Tagagawik** 95.43 24 P P 15 09 50.0 +0.2
baz=262
GHRR 95.43 316 ⇓P P 15 09 40.3 -10
H18K **Honhosa River** 95.44 25 P P 15 09 50.2 +0.5
baz=262
C19K **Lookout Ridge** 95.55 21 P P 15 09 51.6 +1.4
baz=261
P17K **Kvichak River** 95.56 31 P P 15 09 50.4 +0.1
baz=263
TSUM **Tsumeb** 95.72 250 P P 15 09 50.7 -1.6
TSUM IAmb IAmb 15 10 13.3
comp=Z,119nm,1.2s
TSUM **Tsumeb** 95.72 250 LR LR 15 47 32.3
comp=Z,26µm,21.9s,baz=104,slow=32
Q17K **Contact Creek** 95.74 32 P P 15 09 51.2 -0.2
baz=264
L18K **Granite Mounta** 95.80 28 P P 15 09 52.8 +1.3
baz=263
VRI **Vrincioaia** 95.88 315 ⇑P P 15 09 51.5 -0.8
VRI **Vrincioaia** 95.88 315 ⇑P P 15 09 51.5 -0.8
F19K **Shaleruckik Mo** 95.91 23 P P 15 09 53.0 +1.2
baz=263
PLOR **Plostina** 95.93 315 P P 15 10 03.6 +11
J18K **Innoko River** 95.94 27 P P 15 09 53.0 +1.0
baz=263
D19K **Kuna River** 95.99 22 P P 15 09 53.2 +0.9
baz=262
TESR **Tescani** 96.00 316 ⇑P P 15 09 51.1 -1.6
N18K **Kilae Creek** 96.01 30 P P 15 09 53.6 +1.1
baz=264
GCSA **Galena City Sc** 96.02 26 P P 15 09 53.4 +1.1
baz=263
MNK **Minsk** 96.03 324 *i* P P 15 09 51.0 -1.7
MNK *i* 15 13 43.7
MNK *i* PPP PPP 15 15 46.1
MNK *i* S **SKSac** 15 20 27.1 -0.2
MNK *i* SS **SS** 15 27 43.4 +2.3
MNK *i* SSS SSS 15 31 27.8
MNK pmax pmax
comp=N,15nm,1.0s
MNK pmax pmax
comp=E,14nm,0.9s
MNK pmax pmax
comp=Z,26nm,0.9s
MNK MLR MLR
comp=Z,25µm,25.0s
MNK MLR MLR
comp=E,39µm,22.0s
MNK MLR MLR
comp=N,22µm,23.0s
G19K **Purcell Mounta** 96.10 24 IAmb IAmb 15 10 18.7
comp=Z,266nm,1.6s
G19K **Purcell Mounta** 96.10 24 P P 15 09 53.0 +0.2
baz=263,SNR=13
M18K **Stony River** 96.13 29 P P 15 09 53.3 +0.4
baz=264
NEHR **Nehoiu** 96.14 315 ⇓P P 15 10 02.0 +8.5
ONER **Baraj Valea Uz** 96.16 316 ⇓P P 15 09 55.2 +1.7
E19K **Redstone River** 96.19 23 IAmb IAmb 15 10 19.3
comp=Z,236nm,1.6s
E19K **Redstone River** 96.19 23 P P 15 09 53.9 +0.7
baz=263
IDI **Anoyia** 96.19 305 P P 15 09 54.8 +0.8
IDI **Anoyia** 96.19 305 LR LR 15 57 33.4
comp=Z,12µm,21.8s,baz=80,slow=38
P18K **Big Mountain,** 96.20 31 P P 15 09 54.0 +0.6
baz=264
Q18K **Katmai Hardscr** 96.24 32 P P 15 09 53.8 +0.1
baz=264
COVR **Voineasa-Covas** 96.24 315 ⇑P P 15 09 57.5 +3.6
O18K **Koktuh Hills** 96.26 30 P P 15 09 53.5 -0.2
baz=264
H19K **Roundabout Mou** 96.29 25 IAmb IAmb 15 10 19.8
comp=Z,169nm,1.3s
H19K **Roundabout Mou** 96.29 25 P P 15 09 53.5 -0.1
baz=264,SNR=14
PRAR **RASCA** 96.37 317 ⇑P P 15 10 02.7 +8.3
MLR **Muntele Rosu** 96.39 315 IAMs_20 IAMs_20 16 00 39.0
comp=Z,33µm,21.0s
MLR **Muntele Rosu** 96.39 315 P P 15 09 52.2 -2.5
comp=Z,4.1nm,1.1s,baz=27,slow=4.2,SNR=2.5
MLR PP PP 15 13 47.5 -1.2
comp=Z,10nm,0.9s,baz=32,slow=3.8,SNR=3.3
MLR LR LR 16 00 59.0
comp=Z,20µm,19.0s,baz=86,slow=40
comp=Z,4.1nm,1.1s
MLR **Muntele Rosu** 96.39 315 ⇑P P 15 09 59.2 +4.5
TURR **Turia** 96.39 316 ⇑P P 15 10 01.3 +6.7
R18K **Karluk** 96.42 33 P P 15 09 55.8 +1.5
baz=265
SII **Sitkinak Islan** 96.48 34 IAMs_20 IAMs_20 15 51 28.5
comp=Z,32µm,21.0s
SII **Sitkinak Islan** 96.48 34 P P 15 09 55.1 +0.4
baz=265
J19K **Poorman** 96.48 26 P P 15 09 55.9 +1.4
baz=264
B20K **Meade River** 96.52 20 IAmb IAmb 15 10 21.0
comp=Z,208nm,1.4s
B20K **Meade River** 96.52 20 P P 15 09 55.7 +1.2
baz=264
D20K **Etivluk River** 96.57 22 P P 15 09 56.1 +1.2
baz=264
L19K **White Mountain** 96.65 28 P P 15 09 56.6 +1.2
baz=265
E20K **Nigu River** 96.68 22 P P 15 09 56.3 +0.9
baz=264
N19K **Bonanza Creek** 96.71 30 P P 15 09 57.0 +1.3
baz=265
O19K **Port Alsworth** 96.73 30 P P 15 09 56.4 +0.7
baz=265
F20K **Avaraart Lake** 96.73 23 P P 15 09 56.6 +1.0
baz=265
DOPR **Dopca** 96.82 315 ⇑P P 15 10 02.4 +5.9
A21K **Barrow** 96.84 19 P P 15 09 57.3 +1.4
baz=264
M19K **Big River Lodg** 96.84 28 P P 15 09 57.5 +1.2
baz=265
H20K **Anotleneega Mo** 96.93 25 P P 15 09 57.7 +1.2
baz=265,SNR=5.4
Q19K **Cape Douglas,** 96.97 32 P P 15 09 58.0 +1.1
baz=265
VOIR 97.01 315 ⇑P Pdif 15 10 06.0 +8.4
VOIR 97.01 315 P Pdif 15 10 06.0 +8.4
OHAK **Old Harbor** 97.02 33 P Pdif 15 09 57.9 +0.7
baz=266
I20K **Naaghedeneel** 97.05 26 P Pdif 15 09 57.9 +0.8
baz=265
BURAR **Bucovina Array** 97.08 317 P P 15 09 55.6 -2.1
BURAR **Bucovina Array** 97.08 317 ⇑P P 15 09 52.6 -5.1
K20K **Telida** 97.11 27 P Pdif 15 09 58.4 +0.9
baz=266
L20K **Farewell, AK** 97.13 28 P Pdif 15 09 58.7 +1.1
baz=266
J20K **Nowinta River** 97.14 26 IAmb IAmb 15 10 49.3
comp=Z,198nm,1.8s
J20K **Nowinta River** 97.14 26 P Pdif 15 09 58.7 +1.1
baz=266
P19K **Oil Pt** 97.23 31 P Pdif 15 09 58.5 +0.4
baz=266
C21K **Knifeblade Rid** 97.27 21 P Pdif 15 09 59.7 +1.6
baz=266
A22K **Sinclair Lake** 97.34 19 P Pdif 15 09 59.5 +1.2
baz=266
B21K **Ikpikpuk River** 97.36 21 IAmb IAmb 15 10 24.7
comp=Z,87nm,1.1s
B21K **Ikpikpuk River** 97.36 21 P Pdif 15 09 59.3 +0.9
baz=266
IMAR **Indian Mountai** 97.44 24 P P 15 09 58.6 -0.2
M20K **Styx River** 97.44 29 P Pdif 15 10 00.1 +1.0
baz=266
KDAK **Kodiak Island** 97.44 33 IAMs_20 IAMs_20 15 53 22.0
comp=Z,36µm,21.0s
KDAK **Kodiak Island** 97.44 33 P Pdif 15 10 00.1 +1.1
baz=266
E21K **Killik River** 97.51 22 P Pdif 15 09 60.0 +0.8
baz=266
FINES **FINESS Array B** 97.56 331 P P 15 09 58.4 -1.1
comp=Z,2.3nm,0.8s,baz=188,slow=12,SNR=3.6
FINES PKiKP PKiKP 15 14 33.5 -0.4
comp=Z,8.0nm,1.0s,baz=48,slow=2.8,SNR=1.6
FINES PKKPbc PKKPbc 15 26 36.6 -2.1
comp=Z,3.7nm,1.1s,baz=191,slow=3.9,SNR=3.4
FINES LR LR 16 01 40.0
comp=Z,25µm,19.2s,baz=98,slow=40
comp=Z,2.3nm,0.8s
G21K **Allakaket** 97.57 24 IAmb IAmb 15 10 25.4
comp=Z,118nm,1.6s
G21K **Allakaket** 97.57 24 P Pdif 15 10 00.9 +1.4
baz=266
O20K **Slope Mountain** 97.57 30 P Pdif 15 10 00.9 +1.2
baz=266
Q20K **Shuyak Island** 97.60 32 P Pdif 15 09 59.9 +0.2
baz=266
SYI **Shuyak Island** 97.60 32 IAMs_20 IAMs_20 15 53 06.0
comp=Z,35µm,22.0s
F21K **Alatna River** 97.62 23 P Pdif 15 09 59.8 +0.1
baz=267
KEV **Kevo** 97.67 339 IAMs_20 IAMs_20 16 01 44.1
comp=Z,38µm,20.0s
H21K **Melozitna Rive** 97.81 25 P Pdif 15 10 01.2 +0.6
baz=267,SNR=5.2
B22K **Teshekpuk Lake** 97.81 20 P Pdif 15 10 01.2 +0.8
baz=267
N20K **Mount Spurr** 97.84 29 P P 15 10 00.2 -0.6
baz=267
SPCR **Spurr Chakacha** 97.84 29 P Pdif 15 10 01.3 +0.4
baz=267
D22K **Ayikyak River** 98.00 21 P Pdif 15 10 02.8 +1.5
baz=268
LVV **L'vov** 98.02 319 *e*P P 15 10 00.4 -1.4
LVV *e* 15 20 34.8
LVV *e*S S 15 21 23.8 -3.2
LVV *e*SS SS 15 28 08.7 -0.7
HOM **Homer** 98.04 31 P P 15 10 01.5 -0.1
baz=267
CJR **Cluj-Napoca** 98.11 316 ⇓P P 15 09 52.6 -10
CJR **Cluj-Napoca** 98.11 316 ⇓P P 15 09 52.6 -10
F22K **John River** 98.14 23 P Pdif 15 10 03.3 +1.3
baz=268
ARCES **ARCESS Array B** 98.19 339 P P 15 10 01.4 -0.7
ARCES IAmb IAmb 15 10 41.8
comp=Z,121nm,1.7s
ARCES **ARCESS Array B** 98.19 339 P P 15 09 59.6 -2.5
comp=Z,3.3nm,0.8s,baz=58,slow=4.6,SNR=4.8
ARCES PKiKP PKiKP 15 14 33.6 -1.2
comp=Z,13nm,1.1s,baz=46,slow=3.5,SNR=2.3
ARCES PKKPbc PKKPbc 15 26 35.9 -1.3
comp=Z,0.7nm,0.4s,baz=266,slow=3.3,SNR=7.5
ARCES LR LR 16 02 16.4
comp=Z,23µm,18.4s,baz=100,slow=40
comp=Z,3.3nm,0.8s
SKT **Skwentna** 98.20 28 P P 15 10 02.0 -0.4
baz=268
BMR **Baia Mare** 98.24 317 ⇑P P 15 09 56.9 -5.9
BMR **Baia Mare** 98.24 317 ⇑P P 15 09 56.9 -5.9
E22K **Anaktuvuk Pass** 98.30 22 P P 15 10 02.6 -0.1
baz=268
CAPN **Captain Cook N** 98.33 30 Pdiff Pdif 15 10 02.9 0.0
baz=268
G22K **Bettles** 98.38 23 Pdiff Pdif 15 10 03.3 +0.3
baz=268
H22K **Ishtalitna Cre** 98.40 25 Pdiff Pdif 15 10 03.6 +0.4
baz=268
BRSE **Bradley Lake S** 98.50 31 Pdiff Pdif 15 10 03.8 0.0
baz=268
BPAW **Bear Paw Mtn.** 98.52 26 Pdiff Pdif 15 10 04.7 +0.9
baz=268
DEV **Deva** 98.55 315 ⇓P P 15 10 02.4 -1.8
SUA **Susitna One** 98.56 29 Pdiff Pdif 15 10 04.9 +0.8
baz=268
GZR **Gura Zlata** 98.61 315 ⇓P P 15 09 50.8 -14
MLY **Manley** 98.65 25 Pdiff Pdif 15 10 05.2 +0.9
baz=269
DRGR 98.73 316 ⇓P P 15 10 00.6 -4.6
DRGR 98.73 316 P P 15 10 00.6 -4.6
D23K **Nanushuk River** 98.73 21 Pdiff Pdif 15 10 05.6 +1.0
baz=270
SUW **Suwalki** 98.75 323 *e*Pdif P 15 10 01.9 -3.0
SUW *e*SKSac **SKSac** 15 20 41.0 -0.3
SUW *e*S S 15 21 28.9 -4.1
SUW *e*SP SP 15 22 57.3 -0.6
SUW *e*L L 15 56 05.8
comp=Z,29µm,27.8s
SUW **Suwalki** 98.75 323 IAMs_20 IAMs_20 16 03 13.5
comp=Z,24µm,19.0s
C23K **Itkillik River** 98.76 21 Pdiff Pdif 15 10 05.7 +1.1
baz=270
CUT **Chulitna** 98.80 28 Pdiff Pdif 15 10 05.2 +0.2
baz=269
M22K **Willow** 98.86 29 Pdiff P 15 10 04.7 -0.5
baz=269
KWP **Kalwaria Pacla** 98.86 319 *e*Pdif Pdif 15 10 08.6 +3.0
KWP *e*L L 15 58 24.9
comp=Z,17µm,23.7s
COLD **Coldfoot** 98.90 23 Pdiff Pdif 15 10 05.6 +0.3
baz=270
G23K **Bananza Creek** 98.97 24 Pdiff Pdif 15 10 06.5 +0.8
baz=270
O22K **Cooper Landing** 99.03 30 Pdiff Pdif 15 10 06.2 +0.2
baz=269
RC01 **Rabbit Creek A** 99.03 29 Pdiff Pdif 15 10 06.6 +0.5
baz=269
SURR **Surduc** 99.08 315 ⇑P Pdif 15 10 14.9 +8.2
E23K **Chandalar** 99.12 22 Pdiff Pdif 15 10 07.0 +0.5
baz=270
TOLK **Toolik Lake Re** 99.13 22 Pdiff Pdif 15 10 07.4 +0.9
baz=270
H23K **Yukon River** 99.16 25 IAmb IAmb 15 10 33.0
comp=Z,158nm,1.8s
H23K **Yukon River** 99.16 25 Pdiff Pdif 15 10 05.7 -0.9
baz=270
SEW **Seward** 99.16 30 Pdiff Pdif 15 10 06.6 0.0
baz=269
I23K **Minto, Yukon-K** 99.23 25 IAmb IAmb 15 10 33.8
comp=Z,235nm,1.6s
I23K **Minto, Yukon-K** 99.23 25 Pdiff Pdif 15 10 06.7 -0.2
baz=270
BOVS **Bovan** 99.28 313 ⇑P Pdif 15 10 06.1 -1.5
MDVR **Moldovita** 99.33 314 ⇓P Pdif 15 10 11.6 +3.8
PMR **Palmer** 99.33 29 Pdiff Pdif 15 10 07.3 0.0
baz=270
NEA2 **Nenana** 99.36 26 Pdiff Pdif 15 10 07.7 +0.2
baz=270
D24K **Happy Valley** 99.40 21 Pdiff Pdif 15 10 07.3 -0.2
baz=271
MCK **McKinley** 99.42 27 Pdiff Pdif 15 10 06.9 -0.9
baz=270
C24K **Franklin Bluff** 99.43 21 Pdiff Pdif 15 10 07.7 +0.1
baz=272
SIRR **Siria** 99.43 316 ⇑P Pdif 15 10 15.8 +7.6
E24K **Your Creek** 99.55 22 Pdiff Pdif 15 10 08.5 +0.2
baz=271
WAT1 **Susitna Watana** 99.60 28 Pdiff Pdif 15 10 07.4 -1.2
baz=270
CRVS **Cervenica-Dubn** 99.65 318 ⇑ *i*P Pdif 15 10 16.9 +7.8
CRVS *e* 15 20 42.8
CRVS *e* 15 23 07.0
CRVS *e*SS SS 15 28 32.9 +0.5
CRVS **Cervenica-Dubn** 99.65 318 *e*PDIFF Pdif 15 10 16.9 +7.8
CRVS *e*PP PP 15 14 22.8 +9.4
KNK **Knik Glacier** 99.65 29 Pdiff Pdif 15 10 07.6 -1.2
baz=270
SML **Sawmill** 99.71 29 Pdiff Pdif 15 10 08.2 -1.0
baz=270
PWL **Port Wells** 99.72 30 Pdiff Pdif 15 10 08.5 -0.7
baz=270
F24K **Squaw Lake** 99.79 23 Pdiff Pdif 15 10 08.4 -0.9
baz=272
H24K **Noodor Dome** 99.84 25 Pdiff Pdif 15 10 09.0 -0.6
baz=272
COLA **College** 99.88 26 Pdiff Pdif 15 10 09.2 -0.5
baz=271
G24K **Hadweenzic Riv** 99.98 24 Pdiff Pdif 15 10 10.0 -0.2
baz=272
WAT6 **Susitna Watana** 99.98 28 Pdiff Pdif 15 10 10.4 -0.1
baz=271
M23K **Glacier View** 100.00 29 Pdiff Pdif 15 10 10.8 +0.5
baz=271
POKR **Poker Plat Res** 100.05 25 Pdiff Pdif 15 10 11.4 +0.9
baz=272
DHY **Denali Highway** 100.13 27 Pdiff Pdif 15 10 10.6 -0.5
baz=272
P23K **Montague Islan** 100.19 31 Pdiff Pdif 15 10 10.6 -0.7
baz=271
SCM **Sheep Creek Mo** 100.19 29 Pdiff Pdif 15 10 10.6 -0.8
baz=271
SPITS **Spitsbergen Ar** 100.26 348 P Pdif 15 10 10.4 -0.9
comp=Z,5.1nm,0.7s,baz=90,slow=12,SNR=1.8
SPITS PKiKP PKiKP 15 14 36.2 -2.1
comp=Z,20nm,1.0s,baz=93,slow=9.1,SNR=2.7
SPITS PKKPbc PKKPbc 15 26 30.1 -1.4
comp=Z,16nm,1.1s,baz=29,slow=1.9,SNR=4.9
D25K **Kavik River** 100.26 21 Pdiff Pdif 15 10 11.6 +0.2
baz=274
HDA **Harding Lake** 100.28 26 Pdiff Pdif 15 10 11.7 +0.2
baz=272
ILAR **Eielson Array** 100.30 26 P Pdif 15 10 10.6 -1.1
comp=Z,0.3nm,0.6s,baz=270,slow=3.5,SNR=3.3
ILAR PP PP 15 14 16.1 -1.6
comp=Z,2.6nm,1.1s,baz=287,slow=6.1,SNR=2.2
ILAR PKKPbc PKKPbc 15 26 28.2 -2.8
comp=Z,2.6nm,0.8s,baz=73,slow=0.9,SNR=7.7
GLI **Glacier Island** 100.32 30 Pdiff Pdif 15 10 11.9 +0.1
baz=271
NIE **Niedzica** 100.43 319 *e*Pdif Pdif 15 10 09.9 -2.7
NIE *e*PP PP 15 14 24.4 +5.1
NIE *e*SKSac **SKSac** 15 20 47.3 -2.7
NIE *e*SP SP 15 23 13.4 -2.9
NIE *e*SS SS 15 28 37.4 -5.8
NIE *e*L L 15 56 12.6
comp=Z,13µm,28.1s
G25K **Bearman Lake** 100.52 24 Pdiff Pdif 15 10 12.9 +0.4
baz=273
HIN **Hinchinbrook I** 100.63 30 IAMs_20 IAMs_20 15 52 13.0
comp=Z,33µm,22.0s
F25K **Christian Rive** 100.65 23 Pdiff Pdif 15 10 13.6 +0.4
baz=274
H25L **Birch Creek** 100.66 24 Pdiff Pdif 15 10 13.5 +0.4
baz=274
PSZ **Piszkesteto** 100.68 317 ⇑P Pdif 15 10 22.9 +9.1
M24K **Tolsona, Glenn** 100.72 28 Pdiff Pdif 15 10 13.6 -0.1
baz=272
C26K **Camden Bay** 100.73 20 Pdiff Pdif 15 10 14.4 +1.0
baz=275
Q23K **Middleton Isla** 100.73 31 Pdiff Pdif 15 10 14.1 +0.5
baz=272
OJC **Ojcow** 100.76 320 *e*Pdif Pdif 15 10 19.9 +5.9
OJC *e*PP PP 15 14 23.0 +1.3
OJC *e*SKSac **SKSac** 15 20 47.8 -3.7
OJC *e*SP SP 15 23 16.2 -3.5
OJC *e*L L 15 56 49.6
comp=Z,19µm,26.9s
VLO **Vlora** 100.80 310 IAMs_20 IAMs_20 16 00 07.2
comp=Z,31µm,22.0s
K24K **Donnelly Dome** 100.82 27 Pdiff Pdif 15 10 13.4 -0.7
baz=273
PRP **Porcupine Dome** 100.83 25 Pdiff Pdif 15 10 14.1 0.0
baz=274
KLU **Klutina** 100.87 29 Pdiff Pdif 15 10 14.3 0.0
baz=273
J25K **Salcha River,** 100.95 26 Pdiff Pdif 15 10 12.2 -2.4
baz=274
KBS **Kingsbay** 100.99 349 IAMs_20 IAMs_20 16 02 09.4
comp=Z,49µm,22.0s
KBS **Kingsbay** 100.99 349 *i* PP PKiKP 15 14 31.6 -8.0
EYAK **Cordova Ski Ar** 101.00 30 Pdiff Pdif 15 10 13.6 -1.2
baz=272
PAX **Paxson** 101.01 27 Pdiff Pdif 15 10 14.6 -0.4
baz=273
PDG **Podgorica** 101.04 312 ⇑P Pdif 15 10 18.7 +3.3
C27K **Jago River** 101.17 21 Pdiff Pdif 15 10 15.4 0.0
baz=276
HARP **HAARP** 101.18 28 Pdiff Pdif 15 10 15.4 -0.3
baz=273
F26K **Sheenjek River** 101.21 23 Pdiff Pdif 15 10 15.4 -0.3
baz=275
RIDG **Independent Ri** 101.24 27 Pdiff Pdif 15 10 15.2 -0.7
baz=274
G26K **Porcupine Rive** 101.42 23 Pdiff Pdif 15 10 16.4 -0.1
baz=276
N25K **Chitina, Valde** 101.50 29 Pdiff Pdif 15 10 16.7 -0.4
baz=274
MORH **Mrgy, Hungar** 101.52 315 ⇑P Pdif 15 10 18.7 +1.2
BMRM **Bremner River** 101.53 29 Pdiff Pdif 15 10 17.3 0.0
baz=274
SCRK **Sand Creek** 101.60 26 Pdiff Pdif 15 10 17.2 -0.4
baz=275
TAOE **Nuku Hiva Isla** 101.62 101 IAMs_20 IAMs_20 15 56 39.5
comp=Z,32µm,21.0s
KAIM **Kayak Island** 101.69 31 Pdiff Pdif 15 10 17.5 -0.4
baz=274
J26L **Joseph Creek** 101.74 26 Pdiff Pdif 15 10 17.8 -0.4
baz=275
OKC **Ostrava-Krasne** 101.83 319 AMS AMS 16 02 30.0
comp=Z,31µm,20.7s
I26K **Coal Creek Min** 101.84 25 Pdiff Pdif 15 10 18.0 -0.4
baz=276
L26K **Log Cabin Wild** 101.97 27 Pdiff Pdif 15 10 18.8 -0.3
baz=275
MAUC **Maruska** 102.04 319 *e*PDIFF Pdif 15 10 21.4 +1.6
E27K **Coleen River** 102.11 22 Pdiff Pdif 15 10 19.4 -0.3
baz=278
D27M **Malcolm River** 102.19 21 Pdiff Pdif 15 10 19.7 -0.3
baz=279
M26K **Nabesna, AK** 102.19 28 Pdiff Pdif 15 10 20.1 0.0
baz=275
MORC **Moravsky Berou** 102.22 319 IAMs_20 IAMs_20 16 02 56.7
comp=Z,30µm,20.0s
MORC **Moravsky Berou** 102.22 319 ⇑P Pdif 15 10 19.1 -1.5
MORC **Moravsky Berou** 102.22 319 ⇑P Pdif 15 10 19.1 -1.5
BGLC **Bering Glacier** 102.25 30 Pdiff Pdif 15 10 19.5 -0.8
baz=275
MCARA **McCarthy VSAT** 102.27 29 Pdiff Pdif 15 10 19.8 -0.7
baz=275
G27K **Doyon Strip** 102.27 23 Pdiff Pdif 15 10 20.9 +0.4
baz=278
CRQE **Cirque** 102.29 30 Pdiff Pdif 15 10 19.8 -0.9
baz=275
H27K **Steamboat Moun** 102.40 24 Pdiff Pdif 15 10 21.4 +0.4
baz=278
K27K **Chicken** 102.44 26 Pdiff Pdif 15 10 22.0 +0.8
baz=276
I27K **Kandik River** 102.44 25 Pdiff Pdif 15 10 20.8 -0.5
baz=277
ZST **Bratislava** 102.55 317 *e*PP PKiKP 15 14 33.6 -10
L27K **Beaver Creek,** 102.66 27 Pdiff Pdif 15 10 22.0 -0.2
baz=276
KRLC **Kraliky** 102.70 319 AMS AMS 16 02 50.0
comp=Z,30µm,21.3s
KRLC **Kraliky** 102.70 319 *e*P Pdif 15 10 29.6 +6.9
KRLC MLR MLR
comp=Z,28µm,22.8s
M27K **Edge Creek, AK** 102.71 28 Pdiff Pdif 15 10 22.5 -0.1
baz=276
EGAK **Eagle** 102.74 25 Pdiff Pdif 15 10 21.8 -0.7
baz=278
E28M **Babbage River** 102.80 21 Pdiff Pdif 15 10 22.3 -0.4
baz=280
F28M **Old Crow** 102.84 22 Pdiff Pdif 15 10 22.5 -0.4
baz=279
VRAC **Vranov** 102.85 319 PP PP 15 14 35.9 -1.6
comp=Z,1.8nm,0.5s,baz=39,slow=3.4,SNR=4.4
MESA **MESA** 102.90 30 Pdiff Pdif 15 10 22.8 -0.7
baz=276
D28M **Stokes Point** 102.95 21 Pdiff Pdif 15 10 22.7 -0.6
baz=281
KSP **Ksiaz** 102.98 320 *e*Pdif Pdif 15 10 22.8 -1.1
KSP *e*PP PP 15 14 26.8 -12
KSP *e*SKSac **SKSac** 15 21 01.5 -0.5
KSP *e*SP SP 15 23 45.0 +1.7
KSP *e*SS SS 15 29 03.7 -15
KSP *e*L L 15 58 05.1
comp=Z,29µm,26.6s
DPC **Dobruska-Polom** 102.98 320 AMS AMS 16 02 50.0
comp=Z,24µm,20.7s
OSTC **Ostas** 103.04 320 AMS AMS 16 02 50.0
comp=Z,29µm,20.0s
RONA **Rosalia, Austr** 103.10 317 *e*pPdif Pdif 15 10 28.6 +4.1
comp=Z,2.9nm,0.9s
RONA *e*PP PP 15 14 35.5 -4.0
comp=Z,9.5nm,1.6s
RONA *e*PKKP PKKPbc 15 26 21.0 -1.4
comp=Z,2.5nm,0.8s
CTG **Chitna Glacier** 103.12 29 Pdiff Pdif 15 10 24.6 +0.2
baz=276
CHVC **Chvalec** 103.14 320 *e*PDIFF Pdif 15 10 22.1 -2.5

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CHVC | | | | | AMS | AMS | 16 03 00.0 | | |
| | comp=Z,29µm,20.3s | | | | | | | | |
| **CHVC** | **Chvalec** | **103.14** | **320** | *e*P | **Pdif** | **15 10 22.1** | **-2.5** | | |
| CHVC | | | | | MLR | MLR | | | |
| | comp=Z,29µm,20.3s | | | | | | | | |
| **I28M** | **Miner Creek** | **103.16** | **25** | Pdiff | **Pdif** | **15 10 24.2** | **-0.3** | | |
| | baz=279 | | | | | | | | |
| **UPC** | **Upice** | **103.17** | **320** | *e*PDIFF | **Pdif** | **15 10 25.1** | **+0.3** | | |
| UPC | | | | | AMS | AMS | 16 03 00.0 | | |
| | comp=Z,28µm,20.0s | | | | | | | | |
| **UPC** | **Upice** | **103.17** | **320** | *e*P | **Pdif** | **15 10 25.1** | **+0.3** | | |
| UPC | | | | | MLR | MLR | | | |
| | comp=Z,28µm,20.0s | | | | | | | | |
| **CONA** | **Conrad Observa** | **103.39** | **317** | *ep*Pdiff | **Pdif** | **15 10 30.0** | **+4.1** | | |
| | comp=Z,2.8nm,1.1s | | | | | | | | |
| CONA | | | | *e*PP | **PP** | **15 14 42.9** | **+1.2** | | |
| | comp=Z,27nm,2.2s | | | | | | | | |
| CONA | | | | *e*PKKP | **PKKPbc** | **15 26 21.0** | **-0.5** | | |
| | comp=Z,4.2nm,0.9s | | | | | | | | |
| **E29M** | **Blow River** | **103.43** | **22** | Pdiff | **Pdif** | **15 10 24.6** | **-0.9** | | |
| | baz=281 | | | | | | | | |
| **YUK3** | **Moose Creek** | **103.44** | **28** | Pdiff | **Pdif** | **15 10 24.9** | **-1.0** | | |
| | baz=278 | | | | | | | | |
| **BSD** | **Bornholm Skovb** | **103.53** | **325** | *i* PP | **PKiKP** | **15 14 51.6** | **+6.9** | | |
| **TREC** | **Trest** | **103.57** | **319** | *e*PDIFF | **Pdif** | **15 10 26.6** | **0.0** | | |
| TREC | | | | | AMS | AMS | 16 03 10.0 | | |
| | comp=Z,33µm,21.3s | | | | | | | | |
| **TREC** | **Trest** | **103.57** | **319** | *e*P | **Pdif** | **15 10 26.6** | **0.0** | | |
| TREC | | | | | MLR | MLR | | | |
| | comp=Z,33µm,21.3s | | | | | | | | |
| **DAWY** | **Dawson** | **103.60** | **26** | Pdiff | **Pdif** | **15 10 25.6** | **-0.8** | | |
| | baz=279 | | | | | | | | |
| **ARSA** | **Arzberg** | **103.65** | **317** | *i* Pdiff | **Pdif** | **15 10 29.7** | **+2.7** | | |
| | comp=Z,4.2nm,1.1s | | | | | | | | |
| ARSA | | | | *e*PKiKP | **PKiKP** | **15 14 44.8** | **-0.5** | | |
| | comp=Z,2.9nm,0.8s | | | | | | | | |
| ARSA | | | | *e*PKKP | **PKKPbc** | **15 26 19.8** | **-0.9** | | |
| | comp=Z,3.4nm,1.0s | | | | | | | | |
| **H29M** | **Whitestone** | **103.66** | **24** | Pdiff | **Pdif** | **15 10 26.2** | **-0.4** | | |
| | baz=280 | | | | | | | | |
| **HFS** | **Hagfors** | **103.67** | **330** | Pdiff | **Pdif** | **15 10 25.7** | **-1.0** | | |
| | comp=Z,3.2nm,0.9s,baz=56,slow=3.7,SNR=3.0 | | | | | | | | |
| HFS | | | | PP | **PP** | **15 14 44.1** | **+0.8** | | |
| | comp=Z,6.1nm,0.8s,baz=98,slow=11,SNR=2.5 | | | | | | | | |
| HFS | | | | PKKPbc | **PKKPbc** | **15 26 19.5** | **-1.5** | | |
| | comp=Z,6.7nm,1.2s,baz=180,slow=40,SNR=2.8 | | | | | | | | |
| **G29M** | **Pine Creek** | **103.67** | **23** | Pdiff | **Pdif** | **15 10 26.7** | **+0.1** | | |
| | baz=281 | | | | | | | | |
| **O28M** | **Mount Upton** | **103.70** | **29** | Pdiff | **Pdif** | **15 10 27.3** | **+0.1** | | |
| | baz=278 | | | | | | | | |
| **YUK8** | **Steele Glacier** | **103.84** | **29** | Pdiff | **Pdif** | **15 10 28.0** | **+0.2** | | |
| | baz=278 | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **103.84** | **25** | Pdiff | **Pdif** | **15 10 27.9** | **+0.5** | | |
| | baz=280 | | | | | | | | |
| **PERS** | **Pernice** | **103.95** | **316** | *e*Pdiff | **Pdif** | **15 10 34.3** | **+5.9** | | |
| PERS | | | | *e*PP | PP | 15 14 54.6 | +8.7 | | |
| **GOPC** | **GO Pecny, Ondr** | **103.99** | **319** | *e*PDIFF | **Pdif** | **15 10 32.5** | **+4.1** | | |
| GOPC | | | | | AMS | AMS | 16 03 40.0 | | |
| | comp=Z,29µm,19.9s | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **103.99** | **319** | *e*P | **Pdif** | **15 10 32.5** | **+4.1** | | |
| GOPC | | | | | MLR | MLR | | | |
| | comp=Z,29µm,19.9s | | | | | | | | |
| **SOKA** | **Soboth** | **104.01** | **316** | *e*Pdiff | **Pdif** | **15 10 31.6** | **+2.9** | | |
| | comp=Z,0.3nm,0.2s | | | | | | | | |
| SOKA | | | | *e*PP | **PP** | **15 14 49.5** | **+3.2** | | |
| | comp=Z,6.8nm,1.2s | | | | | | | | |
| SOKA | | | | *e*PKKP | **PKKPbc** | **15 26 22.0** | **+2.4** | | |
| | comp=Z,9.1nm,1.5s | | | | | | | | |
| **J29N** | **Klondike Camp** | **104.04** | **26** | Pdiff | **Pdif** | **15 10 28.1** | **-0.3** | | |
| | baz=280 | | | | | | | | |
| **NOR** | **Nord** | **104.07** | **354** | *i* PP | PKiKP | 15 14 53.7 | +8.6 | | |
| **PVCC** | **Panska Ves** | **104.09** | **320** | *e*SKS | **SKSac** | **15 21 12.5** | **+5.3** | | |
| PVCC | | | | | AMS | AMS | 16 00 30.0 | | |
| | comp=Z,23µm,25.2s | | | | | | | | |
| **PRU** | **Pruhonice** | **104.15** | **319** | *e*PDIFF | **Pdif** | **15 10 27.3** | **-1.8** | | |
| PRU | | | | *e*PP | **PP** | **15 14 46.8** | **-0.3** | | |
| PRU | | | | *e*SKS | **SKSac** | **15 21 06.9** | **-0.6** | | |
| PRU | | | | | AMS | AMS | 16 03 40.0 | | |
| | comp=Z,30µm,20.0s | | | | | | | | |
| **PRU** | **Pruhonice** | **104.15** | **319** | *e*P | **Pdif** | **15 10 27.3** | **-1.8** | | |
| **PRA** | **Prague** | **104.21** | **319** | | AMS | AMS | 16 03 40.0 | | |
| | comp=Z,32µm,20.0s | | | | | | | | |
| **PNL** | **Peninsula** | **104.24** | **31** | Pdiff | **Pdif** | **15 10 29.7** | **+0.4** | | |
| | baz=278 | | | | | | | | |
| **M29M** | **Somme Creek** | **104.27** | **28** | Pdiff | **Pdif** | **15 10 30.1** | **+0.5** | | |
| | baz=279 | | | | | | | | |
| **EPYK** | **Eagle Plains** | **104.29** | **23** | Pdiff | **Pdif** | **15 10 29.5** | **+0.1** | | |
| | baz=282 | | | | | | | | |
| **OBKA** | **Obir** | **104.35** | **316** | Pdiff | **Pdif** | **15 10 32.2** | **+2.0** | | |
| | comp=Z,2.9nm,1.2s | | | | | | | | |
| OBKA | | | | | pPKiKP | **pPKiKP** | **15 14 53.4** | **-2.1** | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| OBKA | | | | *e*PKKP | **PKKPbc** | **15 26 15.0** | **-3.7** | | |
| | comp=Z,4.2nm,0.9s | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **104.35** | **23** | Pdiff | **Pdif** | **15 10 30.4** | **+0.7** | | |
| | baz=283 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **104.36** | **29** | Pdiff | **Pdif** | **15 10 30.6** | **+0.6** | | |
| | baz=279 | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **104.38** | **318** | *e*PDIFF | **Pdif** | **15 10 28.8** | **-1.4** | | |
| CKRC | | | | | AMS | AMS | 16 05 40.0 | | |
| | comp=Z,23µm,19.9s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **104.38** | **318** | *e*P | **Pdif** | **15 10 28.8** | **-1.4** | | |
| CKRC | | | | | MLR | MLR | | | |
| | comp=Z,23µm,19.9s | | | | | | | | |
| **F30M** | **Barrier River** | **104.38** | **22** | Pdiff | **Pdif** | **15 10 30.5** | **+0.8** | | |
| | baz=283 | | | | | | | | |
| **LJU** | **Ljubljana** | **104.39** | **315** | *e*Pdiff | **Pdif** | **15 10 35.2** | **+4.9** | | |
| LJU | | | | *i* PP | PP | 15 14 58.3 | +9.2 | | |
| LJU | | | | *e*SKSac | **SKSac** | **15 21 05.3** | **-3.5** | | |
| LJU | | | | *e*Sdiff | **Sdif** | **15 22 24.7** | **+4.1** | | |
| LJU | | | | *e*SP | **SP** | **15 24 07.7** | **+9.4** | | |
| LJU | | | | *e*SS | **SS** | **15 29 37.3** | **-0.8** | | |
| **ZVC** | **Zvikov** | **104.41** | **319** | AMS | AMS | 16 03 40.0 | | | |
| | comp=Z,34µm,21.7s | | | | | | | | |
| **RUE** | **Ruedersdorf** | **104.43** | **322** | *e*Pdiff | **Pdif** | **15 10 36.2** | **+6.0** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| RUE | | | | *e*PP | **PP** | **15 14 51.3** | **+2.2** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| RUE | | | | *e*SKS | **SKSac** | **15 21 00.5** | **-8.0** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| RUE | | | | *e*SP | **SP** | **15 23 58.0** | **-0.3** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **K29M** | **Barlow Dome** | **104.45** | **26** | Pdiff | **Pdif** | **15 10 30.9** | **+0.6** | | |
| | baz=281 | | | | | | | | |
| **BRG** | **Berggiesshubel** | **104.46** | **320** | P | **PS** | **15 24 06.0** | **+3.4** | | |
| **BRG** | **Berggiesshubel** | **104.46** | **320** | *e*Pdiff | **Pdif** | **15 10 29.2** | **-1.3** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| BRG | | | | *e*SKS | **SKSac** | **15 21 01.6** | **-7.3** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| BRG | | | | *e*SP | **SP** | **15 23 57.5** | **-1.3** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **MOA** | **Molln** | **104.47** | **317** | *e*Pdiff | **Pdif** | **15 10 33.7** | **+3.1** | | |
| | comp=Z,3.2nm,1.1s | | | | | | | | |
| MOA | | | | *ep*PKiKP | **pPKiKP** | **15 14 52.6** | **-3.0** | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **CEY** | **Cerknica** | **104.47** | **315** | *e*Pdiff | **Pdif** | **15 10 36.3** | **+5.7** | | |
| CEY | | | | *i* PP | PP | 15 14 58.4 | +8.6 | | |
| **RGN** | **Rugen** | **104.50** | **324** | IAMs_20 | IAMs_20 | 16 04 39.8 | | | |
| | comp=Z,26µm,19.0s | | | | | | | | |
| **RGN** | **Rugen** | **104.50** | **324** | *e*Pdiff | **Pdif** | **15 10 34.4** | **+3.9** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| RGN | | | | *e*PP | **PP** | **15 14 53.0** | **+3.4** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| RGN | | | | *e*SKS | **SKSac** | **15 21 01.4** | **-7.4** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| **O29M** | **Mount Kennedy** | **104.56** | **30** | Pdiff | **Pdif** | **15 10 31.7** | **+0.9** | | |
| | baz=279 | | | | | | | | |
| **YUK6** | **Outpost Mounta** | **104.56** | **29** | Pdiff | **Pdif** | **15 10 31.4** | **+0.4** | | |
| | baz=279 | | | | | | | | |
| **I30M** | **Mount Dempster** | **104.67** | **25** | Pdiff | **Pdif** | **15 10 31.4** | **+0.2** | | |
| | baz=282 | | | | | | | | |
| **VAE** | **Valguarnera** | **104.74** | **306** | PP | **PP** | **15 14 52.1** | **0.0** | | |
| | comp=Z,5.0nm,0.4s,baz=179,slow=9.4,SNR=3.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **104.75** | **331** | Pdiff | **Pdif** | **15 10 31.3** | **-0.3** | | |
| | comp=Z,0.6nm,0.9s,baz=125,slow=6.4,SNR=1.9 | | | | | | | | |
| NOA | | | | PP | **PKiKP** | **15 14 48.2** | **+1.3** | | |
| | comp=Z,2.3nm,1.1s,baz=113,slow=6.9,SNR=2.8 | | | | | | | | |
| NOA | | | | PKKPbc | **PKKPbc** | **15 26 16.3** | **-1.5** | | |
| | comp=Z,1.9nm,1.0s,baz=60,slow=2.7,SNR=3.4 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **104.77** | **318** | *e*Pdiff | **Pdif** | **15 10 35.1** | **+3.0** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| GEC2 | | | | *e*PP | **PP** | **15 14 50.9** | **-1.1** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| GEC2 | | | | *e*SKS | **SKSac** | **15 21 02.3** | **-8.3** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| GEC2 | | | | *e*SP | **SP** | **15 24 03.1** | **+0.8** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **GERES** | **GERESS Array B** | **104.77** | **318** | Pdiff | **Pdif** | **15 10 36.7** | **+4.7** | | |
| | comp=Z,1.1nm,0.8s,baz=153,slow=9.0,SNR=5.6 | | | | | | | | |
| GERES | | | | PP | **PKiKP** | **15 14 46.8** | **-0.6** | | |
| | comp=Z,4.2nm,0.9s,baz=163,slow=9.8,SNR=5.5 | | | | | | | | |
| GERES | | | | PKKPbc | **PKKPbc** | **15 26 15.9** | **-1.5** | | |
| | comp=Z,1.5nm,0.7s,baz=186,slow=11,SNR=4.8 | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **104.81** | **320** | *e*PDIFF | **Pdif** | **15 10 29.6** | **-2.5** | | |
| HSKC | | | | | AMS | AMS | 16 00 50.0 | | |
| | comp=Z,28µm,22.8s | | | | | | | | |
| **J30M** | **Hart River** | **104.82** | **25** | Pdiff | **Pdif** | **15 10 31.4** | **-0.5** | | |
| | baz=282 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **104.83** | **319** | IAMs_20 | IAMs_20 | 16 04 47.0 | | | |
| | comp=Z,27µm,20.0s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **104.83** | **319** | *e*PDIFF | **Pdif** | **15 10 30.3** | **-1.9** | | |
| KHC | | | | *e*SKS | **SKSac** | **15 21 08.9** | **-1.9** | | |
| KHC | | | | | AMS | AMS | 16 04 30.0 | | |
| | comp=Z,27µm,18.9s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **104.83** | **319** | *e*P | **Pdif** | **15 10 30.3** | **-1.9** | | |
| KHC | | | | *e* | | 15 21 08.9 | | | |
| KHC | | | | | MLR | MLR | | | |
| | comp=Z,27µm,18.9s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **104.83** | **319** | *e*PKKP | | 15 26 16.0 | | | |
| **COP** | **Copenhagen** | **104.88** | **325** | *i* PP | PKiKP | 15 14 56.0 | +8.9 | | |
| **BIOA** | **Bad Ischl, Aus** | **104.90** | **317** | *i* pPKiKP | **PKiKP** | **15 14 54.7** | **+7.2** | | |
| | comp=Z,6.3nm,1.0s | | | | | | | | |
| BIOA | | | | *e*PKKP | **PKKPbc** | **15 26 16.6** | **-0.3** | | |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **104.97** | **316** | *e*Pdiff | **Pdif** | **15 10 36.8** | **+3.9** | | |
| | comp=Z,0.6nm,0.4s | | | | | | | | |
| MYKA | | | | pPKiKP | **pPKiKP** | **15 14 58.4** | **+1.8** | | |
| | comp=Z,17nm,1.8s | | | | | | | | |
| MYKA | | | | *e*PKKP | **PKKPbc** | **15 26 15.6** | **-1.2** | | |
| | comp=Z,2.6nm,0.6s | | | | | | | | |
| **CLL** | **Collm** | **105.02** | **321** | *e*P | **Pdif** | **15 10 33.0** | **+0.1** | | |
| CLL | | | | *e* | | 15 14 55.0 | | | |
| CLL | | | | *e* | | 15 21 03.0 | | | |
| CLL | | | | *e*S | **Sdif** | **15 22 30.0** | **+4.5** | | |
| **CLL** | **Collm** | **105.02** | **321** | *e*Pdiff | **Pdif** | **15 10 30.4** | **-2.5** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| CLL | | | | *e*PP | **PP** | **15 14 53.5** | **-0.1** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| CLL | | | | *e*SKS | **SKSac** | **15 21 02.1** | **-9.2** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| CLL | | | | *e*SP | **SP** | **15 24 03.0** | **-1.6** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **INK** | **Inuvik** | **105.03** | **21** | PKKPbc | PKKPbc | 15 26 16.6 | -0.4 | | |
| | comp=Z,2.1nm,0.6s,baz=187,slow=3.7,SNR=3.1 | | | | | | | | |
| **INK** | **Inuvik** | **105.03** | **21** | Pdiff | **Pdif** | **15 10 35.7** | **+3.2** | | |
| | baz=286 | | | | | | | | |
| INK | | | | PKiKP | **PKiKP** | **15 14 48.0** | **+0.9** | | |
| | baz=286 | | | | | | | | |
| **SABO** | **M.te Sabotino** | **105.03** | **315** | IAMs_20 | IAMs_20 | 16 05 33.0 | | | |
| | comp=Z,12µm,21.0s | | | | | | | | |
| **P29M** | **Windy Craggy** | **105.08** | **30** | Pdiff | **Pdif** | **15 10 35.0** | **+1.9** | | |
| | baz=279 | | | | | | | | |
| P29M | | | | PKiKP | **PKiKP** | **15 14 48.1** | **+0.6** | | |
| | baz=279 | | | | | | | | |
| **N30M** | **Aishikik Lake** | **105.08** | **29** | Pdiff | **Pdif** | **15 10 35.6** | **+2.5** | | |
| | baz=280 | | | | | | | | |
| N30M | | | | PKiKP | **PKiKP** | **15 14 48.7** | **+1.1** | | |
| | baz=280 | | | | | | | | |
| **G31M** | **Satah River** | **105.11** | **23** | Pdiff | **Pdif** | **15 10 36.2** | **+3.2** | | |
| | baz=284 | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **105.14** | **316** | *e*Pdiff | **Pdif** | **15 10 36.5** | **+2.7** | | |
| | comp=Z,3.8nm,1.3s | | | | | | | | |
| KBA | | | | | PKiKP | **PKiKP** | **15 14 50.6** | **+2.4** | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| KBA | | | | *e*PKKP | **PKKPbc** | **15 26 18.0** | **+1.6** | | |
| | comp=Z,3.1nm,0.6s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **105.18** | **22** | Pdiff | **Pdif** | **15 10 36.5** | **+3.2** | | |
| | baz=285 | | | | | | | | |
| **WET** | **Wettzell** | **105.29** | **319** | *e*Pdiff | **Pdif** | **15 10 36.2** | **+2.0** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| WET | | | | *e*PP | **PP** | **15 14 53.5** | **-2.3** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| WET | | | | *e*SKS | **SKSac** | **15 21 03.7** | **-9.1** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| WET | | | | *e*SP | **SP** | **15 24 03.8** | **-3.7** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **P30M** | **Million Dollar** | **105.38** | **30** | Pdiff | **Pdif** | **15 10 36.6** | **+2.1** | | |
| | baz=280 | | | | | | | | |
| **TANN** | **Tannenbergstha** | **105.44** | **320** | *e*Pdiff | **Pdif** | **15 10 38.6** | **+3.7** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| TANN | | | | *e*PP | **PKiKP** | **15 14 50.0** | **+1.5** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| TANN | | | | *e*SKS | **SKSac** | **15 21 04.4** | **-9.1** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| TANN | | | | *e*SP | **SP** | **15 24 05.3** | **-3.9** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **RJOB** | **Jochberg** | **105.46** | **317** | *e*Pdiff | **Pdif** | **15 10 32.7** | **-2.4** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| RJOB | | | | *e*PP | **PKiKP** | **15 14 52.6** | **+4.0** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| RJOB | | | | *e*SKS | **SKSac** | **15 21 06.0** | **-7.7** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| **LESA** | **Schwarzleotal** | **105.57** | **317** | Pdiff | **Pdif** | **15 10 36.6** | **+1.0** | | |
| | comp=Z,0.4nm,0.4s | | | | | | | | |
| LESA | | | | | PKiKP | **PKiKP** | **15 14 49.1** | **+0.2** | |
| | comp=Z,9.9nm,1.4s | | | | | | | | |
| LESA | | | | *e*PKKP | **PKKPbc** | **15 26 16.1** | **+1.2** | | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| **PLN** | **Plauen** | **105.63** | **320** | *e*Pdiff | **Pdif** | **15 10 38.6** | **+2.9** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| PLN | | | | *e*PP | **PKiKP** | **15 14 50.9** | **+2.1** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| PLN | | | | *e*SKS | **SKSac** | **15 21 05.1** | **-9.1** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| PLN | | | | *e*SP | **SP** | **15 24 08.9** | **-2.1** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **STAL** | **STALIGIAL** | **105.63** | **316** | IAMs_20 | IAMs_20 | 16 06 08.4 | | | |
| | comp=Z,26µm,21.0s | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **105.67** | **319** | *e*Pdiff | **Pdif** | **15 10 38.6** | **+2.7** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| ROTZ | | | | *e*PP | **PKiKP** | **15 14 51.7** | **+2.9** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| ROTZ | | | | *e*SKS | **SKSac** | **15 21 06.2** | **-8.2** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| ROTZ | | | | *e*SP | **SP** | **15 24 11.4** | **0.0** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **O30N** | **Mendenhall** | **105.69** | **29** | Pdiff | **Pdif** | **15 10 37.1** | **+1.4** | | |
| | baz=281 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **105.69** | **28** | Pdiff | **Pdif** | **15 10 37.8** | **+2.0** | | |
| | baz=282 | | | | | | | | |
| **MANZ** | **Manzenberg** | **105.71** | **320** | *e*Pdiff | **Pdif** | **15 10 42.1** | **+6.0** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| MANZ | | | | *e*PP | **PKiKP** | **15 14 52.2** | **+3.2** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| MANZ | | | | *e*SKS | **SKSac** | **15 21 07.6** | **-7.1** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **105.73** | **316** | *e*Pdiff | **Pdif** | **15 10 37.8** | **+1.4** | | |
| | comp=Z,3.7nm,1.6s | | | | | | | | |
| ABTA | | | | | PKiKP | **PKiKP** | **15 14 48.1** | **-1.1** | |
| | comp=Z,26nm,1.3s | | | | | | | | |
| ABTA | | | | | PKKP | **PKKPdf** | **15 26 27.4** | **+1.7** | |
| | comp=Z,27nm,1.6s | | | | | | | | |
| **KONO** | **Kongsberg** | **105.78** | **330** | IAMs_20 | IAMs_20 | 16 02 30.1 | | | |
| | comp=Z,32µm,22.0s | | | | | | | | |
| **NEUB** | **Neuenburg** | **105.80** | **321** | *e*Pdiff | **Pdif** | **15 10 37.4** | **+1.1** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| NEUB | | | | *e*PP | **PKiKP** | **15 14 52.2** | **+3.1** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| NEUB | | | | *e*SKS | **SKSac** | **15 21 07.8** | **-7.1** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **105.80** | **31** | Pdiff | **Pdif** | **15 10 38.5** | **+2.3** | | |
| | baz=280 | | | | | | | | |
| **GORT1** | **Trebel** | **105.87** | **323** | *e*Pdiff | **Pdif** | **15 10 40.2** | **+3.6** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| GORT1 | | | | *e*PP | **PKiKP** | **15 14 53.5** | **+4.4** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| **MOX** | **Moxa** | **105.96** | **320** | *e*Pdiff | **Pdif** | **15 10 38.6** | **+1.4** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| MOX | | | | *e*PP | **PKiKP** | **15 14 53.5** | **+4.1** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| MOX | | | | *e*SKS | **SKSac** | **15 21 08.6** | **-7.0** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| MOX | | | | *e*SP | **SP** | **15 24 11.1** | **-3.3** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| MOX | | | | *e*L | L | 16 06 44.9 | | | |
| | comp=Z,21µm,21.5s | | | | | | | | |
| **FLTG** | **Flechtingen** | **106.00** | **322** | *e*Pdiff | **Pdif** | **15 10 39.8** | **+2.6** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| FLTG | | | | *e*PP | **PKiKP** | **15 14 53.5** | **+4.1** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| FLTG | | | | *e*SKS | **SKSac** | **15 21 09.7** | **-6.0** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| FLTG | | | | *e*SP | **SP** | **15 24 13.7** | **-0.9** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **S31K** | **Pelican** | **106.14** | **32** | Pdiff | **Pdif** | **15 10 39.6** | **+2.0** | | |
| | baz=280 | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **106.19** | **27** | Pdiff | **Pdif** | **15 10 38.0** | **+0.1** | | |
| | baz=283 | | | | | | | | |
| **WTTA** | **Wattenberg** | **106.29** | **317** | *ep*Pdiff | **pPdif** | **15 10 43.4** | **-4.0** | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| WTTA | | | | | PKiKP | **PKiKP** | **15 14 48.4** | **-1.9** | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| WTTA | | | | *e*PKKP | **PKKPbc** | **15 26 17.0** | **+4.1** | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **WHY** | **Whitehorse** | **106.29** | **29** | Pdiff | **Pdif** | **15 10 39.1** | **+0.6** | | |
| | baz=282 | | | | | | | | |
| **R31K** | **City Hall, Gus** | **106.31** | **32** | Pdiff | **Pdif** | **15 10 40.5** | **+2.1** | | |
| | baz=281 | | | | | | | | |
| **GRA1** | **Grafenberg Arr** | **106.31** | **319** | IAMs_20 | IAMs_20 | 16 05 15.1 | | | |
| | comp=Z,25µm,20.0s | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **106.31** | **319** | *e*Pdiff | **Pdif** | **15 10 43.3** | **+4.5** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| GRF | | | | *e*PP | **PKiKP** | **15 14 53.0** | **+2.9** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| GRF | | | | *e*SKS | **SKSac** | **15 21 16.9** | **-0.4** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| GRF | | | | *e*SP | **SP** | **15 24 10.7** | **-7.4** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| GRF | | | | *e*L | L | 16 05 04.0 | | | |
| | comp=Z,26µm,21.8s | | | | | | | | |
| **GRFO** | **Grafenberg** | **106.31** | **319** | IAMs_20 | IAMs_20 | 16 05 15.1 | | | |
| | comp=Z,25µm,20.0s | | | | | | | | |
| **SKAG** | **Skagway** | **106.32** | **30** | Pdiff | **Pdif** | **15 10 41.1** | **+2.6** | | |
| | baz=281 | | | | | | | | |
| **WATA** | **Walderalm** | **106.32** | **317** | *e*Pdiff | **Pdif** | **15 10 42.4** | **+3.4** | | |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| WATA | | | | | PKiKP | **PKiKP** | **15 14 50.1** | **-0.2** | |
| | comp=Z,9.7nm,1.1s | | | | | | | | |
| WATA | | | | | PKKP | **PKKPbc** | **15 26 14.2** | **+1.4** | |
| | comp=Z,4.8nm,0.9s | | | | | | | | |
| **BSEG** | **Bad Segeberg** | **106.33** | **324** | *e*Pdiff | **Pdif** | **15 10 42.6** | **+4.0** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| BSEG | | | | *e*PP | **PKiKP** | **15 14 56.0** | **+6.1** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| BSEG | | | | *e*SKS | **SKSac** | **15 21 19.4** | **+2.3** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **106.42** | **17** | Pdiff | **Pdif** | **15 10 41.3** | **+2.6** | | |
| | baz=295 | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **106.44** | **318** | *e*Pdiff | **Pdif** | **15 10 43.3** | **+3.9** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| FUR | | | | *e*PP | **PKiKP** | **15 14 54.7** | **+4.4** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| FUR | | | | *e*SKS | **SKSac** | **15 21 20.2** | **+2.3** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| FUR | | | | *e*SP | **SP** | **15 24 15.1** | **-4.4** | | |
| | baz=83,slow=10.0 | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **106.58** | **317** | *ep*Pdiff | **pPdif** | **15 10 45.3** | **-3.4** | | |
| | comp=Z,1.1nm,0.8s | | | | | | | | |
| SQTA | | | | | PKiKP | **PKiKP** | **15 14 51.8** | **+1.0** | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| SQTA | | | | *e*PKKP | **PKKPbc** | **15 26 09.5** | **-2.4** | | |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| **CLZ** | **Clausthal** | **106.59** | **322** | *e*Pdiff | **Pdif** | **15 10 40.9** | **+1.0** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| CLZ | | | | *e*PP | **PKiKP** | **15 14 55.6** | **+5.0** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| CLZ | | | | *e*SKS | **SKSac** | **15 21 21.6** | **+3.2** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| **MOTA** | **Moosalm** | **106.64** | **317** | *ep*Pdiff | **pPdif** | **15 10 46.9** | **-2.1** | | |
| | comp=Z,4.3nm,1.0s | | | | | | | | |
| MOTA | | | | | PKiKP | **PKiKP** | **15 14 48.8** | **-2.1** | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| MOTA | | | | | PKKP | **PKKPbc** | **15 26 12.7** | **+0.9** | |
| | comp=Z,8.7nm,1.2s | | | | | | | | |
| **FARO** | **Faro, Yukon** | **106.66** | **27** | Pdiff | **Pdif** | **15 10 42.8** | **+2.8** | | |
| | baz=284 | | | | | | | | |
| **NRDL** | **Niedersach Rie** | **106.66** | **322** | *e*Pdiff | **Pdif** | **15 10 46.6** | **+6.6** | | |
| | baz=86,slow=5.2 | | | | | | | | |
| NRDL | | | | *e*PP | **PP** | **15 14 59.0** | **-6.5** | | |
| | baz=86,slow=7.5 | | | | | | | | |
| NRDL | | | | *e*SKS | **SKSac** | **15 21 20.4** | **+1.9** | | |
| | baz=87,slow=6.2 | | | | | | | | |
| **SIT** | **Sitka** | **106.78** | **33** | Pdiff | **Pdif** | **15 10 44.2** | **+3.6** | | |
| | baz=281 | | | | | | | | |
| **RETA** | **Reutte** | **106.86** | **317** | Pdiff | **Pdif** | **15 

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T33K | Petersburg | 108.11 | 33 | Pdiff | Pdif | 15 10 49.0 | +2.6 | | | | |
| | baz=283 | | | | | | | | | | |
| IBBN | Ibbenburen | 108.11 | 322 | ePdiff | Pdif | 15 10 50.4 | +3.7 | | | | |
| | baz=86,slow=5.2 | | | | | | | | | | |
| IBBN | | | | ePP | PP | 15 15 12.8 | -3.4 | | | | |
| | baz=86,slow=7.5 | | | | | | | | | | |
| IBBN | | | | eSKS | SKSac | 15 21 22.2 | -2.8 | | | | |
| | baz=87,slow=6.2 | | | | | | | | | | |
| IBBN | | | | eSP | SP | 15 24 32.0 | -4.3 | | | | |
| | baz=83,slow=10.0 | | | | | | | | | | |
| U33K | Whale Pass | 108.17 | 34 | Pdiff | Pdif | 15 10 48.6 | +1.8 | | | | |
| | baz=282 | | | | | | | | | | |
| CRAG | Craig | 108.30 | 34 | Pdiff | Pdif | 15 10 48.0 | +0.6 | | | | |
| | baz=282 | | | | | | | | | | |
| BFO | Black Forest | 108.38 | 318 | ePdiff | Pdif | 15 10 53.9 | +5.9 | | | | |
| | baz=86,slow=5.2 | | | | | | | | | | |
| BFO | | | | ePP | PP | 15 15 16.2 | -2.1 | | | | |
| | baz=86,slow=7.5 | | | | | | | | | | |
| BFO | | | | eSKS | SKSac | 15 21 21.1 | -5.3 | | | | |
| | baz=87,slow=6.2 | | | | | | | | | | |
| BFO | | | | eSP | SP | 15 24 38.7 | -0.6 | | | | |
| | baz=83,slow=10.0 | | | | | | | | | | |
| R33M | Jennings River | 108.50 | 30 | Pdiff | Pdif | 15 10 49.0 | +0.6 | | | | |
| | baz=285 | | | | | | | | | | |
| WRAK | Wrangell Islan | 108.52 | 33 | Pdiff | Pdif | 15 10 49.2 | +0.9 | | | | |
| | baz=283 | | | | | | | | | | |
| BUG | Bochum--Univer | 108.56 | 321 | ePdiff | Pdif | 15 10 55.1 | +6.4 | | | | |
| | baz=86,slow=5.2 | | | | | | | | | | |
| BUG | | | | ePP | PP | 15 15 18.8 | -0.7 | | | | |
| | baz=86,slow=7.5 | | | | | | | | | | |
| BUG | | | | eSKS | SKSac | 15 21 26.0 | -0.8 | | | | |
| | baz=87,slow=6.2 | | | | | | | | | | |
| BUG | | | | eSP | SP | 15 24 36.8 | -4.1 | | | | |
| | baz=83,slow=10.0 | | | | | | | | | | |
| S34M | Telegraph Cree | 108.80 | 31 | Pdiff | Pdif | 15 10 49.8 | +0.2 | | | | |
| | baz=285 | | | | | | | | | | |
| AHRW | Bad Neuenahr-A | 108.84 | 321 | ePdiff | Pdif | 15 10 53.9 | +4.0 | | | | |
| | baz=86,slow=5.2 | | | | | | | | | | |
| AHRW | | | | ePP | PP | 15 15 23.6 | +2.0 | | | | |
| | baz=86,slow=7.5 | | | | | | | | | | |
| AHRW | | | | eSKS | SKSac | 15 21 26.0 | -2.1 | | | | |
| | baz=87,slow=6.2 | | | | | | | | | | |
| KEST | Kesra | 108.87 | 305 | Pdiff | Pdif | 15 10 52.1 | +1.6 | | | | |
| | comp=Z,2.1nm,1.1s,baz=256,slow=19,SNR=1.5 | | | | | | | | | | |
| KEST | | | | PKiKP | PKiKP | 15 14 54.3 | -1.0 | | | | |
| | comp=Z,3.4nm,0.9s,baz=180,slow=1.0,SNR=2.2 | | | | | | | | | | |
| KEST | | | | PP | PP | 15 15 22.4 | -0.1 | | | | |
| | comp=Z,21nm,1.1s,baz=330,slow=18,SNR=5.3 | | | | | | | | | | |
| KEST | | | | PKKPbc | PKKPbc | 15 26 02.6 | -1.6 | | | | |
| | comp=Z,1.7nm,0.6s,baz=123,slow=5.4,SNR=1.6 | | | | | | | | | | |
| TGTN | Hyland Airport | 109.16 | 27 | Pdiff | Pdif | 15 10 51.7 | +0.5 | | | | |
| | baz=288 | | | | | | | | | | |
| V35K | Ketchikan | 109.17 | 34 | Pdiff | Pdif | 15 10 51.2 | -0.1 | | | | |
| | baz=283 | | | | | | | | | | |
| DLBC | Dease Lake | 109.23 | 31 | PKKPbc | PKKPbc | 15 26 02.4 | -1.4 | | | | |
| | comp=Z,2.1nm,0.8s,baz=188,slow=0.5,SNR=3.1 | | | | | | | | | | |
| DLBC | Dease Lake | 109.23 | 31 | Pdiff | Pdif | 15 10 52.7 | +1.1 | | | | |
| | baz=286 | | | | | | | | | | |
| WTLY | Watson Lake, Y | 109.35 | 29 | Pdiff | Pdif | 15 10 54.2 | +2.1 | | | | |
| | baz=288 | | | | | | | | | | |
| T35M | Bob Quinn | 109.50 | 32 | Pdiff | Pdif | 15 10 56.4 | +3.6 | | | | |
| | baz=285 | | | | | | | | | | |
| WLF | Walferdange | 109.58 | 320 | ePdiff | Pdif | 15 10 57.4 | +4.2 | | | | |
| | baz=86,slow=5.2 | | | | | | | | | | |
| WLF | | | | ePP | PP | 15 15 28.3 | +1.3 | | | | |
| | baz=86,slow=7.5 | | | | | | | | | | |
| U35K | Hyder | 109.90 | 33 | Pdiff | Pdif | 15 10 58.2 | +3.7 | | | | |
| | baz=285 | | | | | | | | | | |
| BNI | Bardonecchia | 109.97 | 315 | IAMs_20 | IAMs_20 | 16 09 34.3 | | | | | |
| | comp=Z,25µm,20.0s | | | | | | | | | | |
| DOU | Dourbes | 110.48 | 320 | dPKiKP | PKiKP | 15 14 57.2 | -0.6 | | | | |
| WRGLY | Wrigley | 110.64 | 25 | Pdiff | Pdif | 15 11 01.7 | +4.1 | | | | |
| | baz=294 | | | | | | | | | | |
| NEEM | North Greenlan | 110.66 | 357 | i PP | PP | 15 15 36.4 | +2.1 | | | | |
| LIRD | Liard River Hi | 110.87 | 29 | Pdiff | Pdif | 15 11 03.6 | +4.9 | | | | |
| | baz=290 | | | | | | | | | | |
| LRW | Lerwick | 110.88 | 332 | eP | PP | 15 15 38.8 | +2.8 | | | | |
| TOAD | Toad River Com | 111.48 | 30 | Pdiff | Pdif | 15 11 05.2 | +3.7 | | | | |
| | baz=290 | | | | | | | | | | |
| KOTAN | Kotaneelee Air | 111.58 | 28 | Pdiff | Pdif | 15 11 07.8 | +5.9 | | | | |
| | baz=292 | | | | | | | | | | |
| ELMS | Elmsett, Ipswi | 112.22 | 323 | eP | PP | 15 15 44.3 | -1.6 | | | | |
| ELMS | | | | IAMs_20 | IAMs_20 | 16 09 37.8 | | | | | |
| | comp=Z,32µm,22.0s | | | | | | | | | | |
| HOLB | Holberg | 112.35 | 39 | IAMs_20 | IAMs_20 | 15 57 16.7 | | | | | |
| | comp=Z,29µm,21.0s | | | | | | | | | | |
| ELSH | Elham, Standar | 112.38 | 322 | eP | PP | 15 15 44.0 | -3.1 | | | | |
| CLF | Chambon-Foret | 112.42 | 319 | IAMs_20 | IAMs_20 | 16 09 10.8 | | | | | |
| | comp=Z,24µm,21.0s | | | | | | | | | | |
| GDLE | Glaisdale, N Y | 112.59 | 326 | eP | PP | 15 15 44.2 | -4.1 | | | | |
| GDLE | | | | IAMs_20 | IAMs_20 | 16 07 42.4 | | | | | |
| | comp=Z,43µm,21.9s | | | | | | | | | | |
| DRUM | Mains of Drumt | 112.66 | 329 | eP | PP | 15 15 43.5 | -5.3 | | | | |
| DRUM | | | | IAMs_20 | IAMs_20 | 16 10 29.2 | | | | | |
| | comp=Z,29µm,20.9s | | | | | | | | | | |
| SCO | Scoresbysund | 112.69 | 346 | IAMs_20 | IAMs_20 | 16 07 07.6 | | | | | |
| | comp=Z,35µm,22.0s | | | | | | | | | | |
| BIGH | Upper Bighouse | 112.79 | 331 | eP | PP | 15 15 43.5 | -6.1 | | | | |
| BIGH | | | | IAMs_20 | IAMs_20 | 16 06 37.1 | | | | | |
| | comp=Z,55µm,23.0s | | | | | | | | | | |
| EDMD | Edmundbyers | 113.09 | 326 | eP | PP | 15 15 43.6 | -8.4 | | | | |
| EDMD | | | | IAMs_20 | IAMs_20 | 16 15 20.8 | | | | | |
| | comp=Z,22µm,18.0s | | | | | | | | | | |
| HPK | Haverah Park | 113.18 | 326 | eP | PP | 15 15 46.7 | -6.0 | | | | |
| HPK | | | | IAMs_20 | IAMs_20 | 16 08 00.4 | | | | | |
| | comp=Z,33µm,23.0s | | | | | | | | | | |
| EDI | Edinburgh | 113.37 | 328 | eP | PP | 15 15 42.2 | -12 | | | | |
| CWF | Charnwood Fore | 113.38 | 324 | eP | PP | 15 15 44.8 | -9.3 | | | | |
| CWF | | | | IAMs_20 | IAMs_20 | 16 00 50.4 | | | | | |
| | comp=Z,25µm,27.6s | | | | | | | | | | |
| EKA | Eskdalemuir Ar | 113.56 | 327 | PKiKP | PKiKP | 15 15 02.3 | -1.2 | | | | |
| | comp=Z,1.0nm,0.7s,baz=75,slow=3.2,SNR=2.9 | | | | | | | | | | |
| EKA | | | | PKKPbc | PKKPbc | 15 25 47.9 | -1.4 | | | | |
| | comp=Z,2.2nm,0.7s,baz=260,slow=2.2,SNR=6.9 | | | | | | | | | | |
| HOPE | Hope Point | 113.59 | 197 | IAMs_20 | IAMs_20 | 16 11 01.8 | | | | | |
| | comp=Z,35µm,19.0s | | | | | | | | | | |
| ESK | Eskdalemuir | 113.59 | 327 | IAMs_20 | IAMs_20 | 16 10 48.9 | | | | | |
| | comp=Z,27µm,21.0s | | | | | | | | | | |
| ESK | Eskdalemuir | 113.59 | 327 | eP | PP | 15 15 46.0 | -9.5 | | | | |
| ESK | | | | IAMs_20 | IAMs_20 | 16 05 10.0 | | | | | |
| | comp=Z,33µm,22.9s | | | | | | | | | | |
| INVG | Invergeldie, C | 113.63 | 329 | eP | PP | 15 15 47.2 | -8.6 | | | | |
| INVG | | | | IAMs_20 | IAMs_20 | 16 12 01.9 | | | | | |
| | comp=Z,14µm,20.0s | | | | | | | | | | |
| KULLO | Kullorsuaq | 113.75 | 358 | i PP | PP | 15 15 57.0 | +1.0 | | | | |
| KESW | Keswick, Cumbr | 113.79 | 326 | eP | PP | 15 15 47.6 | -9.4 | | | | |
| SWN1 | Swindon | 114.05 | 323 | eP | PP | 15 15 48.1 | -11 | | | | |
| KPL | Plockton | 114.10 | 330 | eP | PP | 15 15 47.2 | -12 | | | | |
| KPL | | | | IAMs_20 | IAMs_20 | 16 06 35.9 | | | | | |
| | comp=Z,42µm,24.4s | | | | | | | | | | |
| SUMG | Summit | 114.11 | 352 | IAMs_20 | IAMs_20 | 16 11 44.9 | | | | | |
| | comp=Z,27µm,22.0s | | | | | | | | | | |
| NEWG | New Galloway | 114.21 | 327 | eP | PP | 15 15 49.9 | -10 | | | | |
| NEWG | | | | IAMs_20 | IAMs_20 | 16 14 25.1 | | | | | |
| | comp=Z,25µm,18.7s | | | | | | | | | | |
| CBB | Campbell River | 114.22 | 39 | IAMs_20 | IAMs_20 | 15 58 11.3 | | | | | |
| | comp=Z,28µm,22.0s | | | | | | | | | | |
| CEST | Esterri de Car | 114.26 | 313 | IAMs_20 | IAMs_20 | 16 07 07.9 | | | | | |
| | comp=Z,13µm,22.0s | | | | | | | | | | |
| HLM1 | Long Mynd | 114.36 | 324 | eP | PP | 15 15 48.2 | -13 | | | | |
| HLM1 | | | | IAMs_20 | IAMs_20 | 16 10 29.5 | | | | | |
| | comp=Z,26µm,22.3s | | | | | | | | | | |
| FOEL | Foel Wyfa | 114.42 | 325 | eP | PP | 15 15 49.8 | -12 | | | | |
| MONM | Monmouth | 114.54 | 324 | eP | PP | 15 15 48.7 | -14 | | | | |
| GAL1 | Galloway | 114.56 | 327 | eP | PP | 15 15 50.8 | -12 | | | | |
| GAL1 | | | | IAMs_20 | IAMs_20 | 15 57 32.5 | | | | | |
| | comp=Z,33µm,35.5s | | | | | | | | | | |
| YKA | Yellowknife A | 114.58 | 23 | PKP | PKiKP | 15 15 04.0 | -1.2 | | | | |
| | comp=Z,6.3nm,0.8s,baz=317,slow=2.2,SNR=8.2 | | | | | | | | | | |
| YKA | | | | SKP | | 15 18 42.0 | | | | | |
| | comp=Z,0.9nm,0.8s,baz=228,slow=36,SNR=2.3 | | | | | | | | | | |
| YKA | | | | PKKPbc | PKKPbc | 15 25 44.6 | -1.4 | | | | |
| | comp=Z,1.4nm,0.7s,baz=103,slow=5.8,SNR=3.3 | | | | | | | | | | |
| IOMK | Kirk Michael | 114.71 | 326 | eP | PP | 15 15 49.3 | -14 | | | | |
| IOMK | | | | IAMs_20 | IAMs_20 | 16 09 01.8 | | | | | |
| | comp=Z,70µm,22.2s | | | | | | | | | | |
| EIBI | Ibiza | 114.84 | 309 | P | Pdif | 15 11 18.2 | +1.3 | | | | |
| CLGH | Cloghs, Cushen | 115.23 | 328 | eP | PP | 15 15 54.1 | -13 | | | | |
| C03A | Quillayute Air | 115.32 | 41 | IAMs_20 | IAMs_20 | 15 58 00.6 | | | | | |
| | comp=Z,25µm,21.0s | | | | | | | | | | |
| UPNV | Upernavik | 115.50 | 358 | i PP | PP | 15 16 10.8 | +2.5 | | | | |
| RSBS | Rosebush, Pemb | 115.63 | 324 | eP | PP | 15 15 49.8 | -20 | | | | |
| RSBS | | | | IAMs_20 | IAMs_20 | 16 09 43.8 | | | | | |
| | comp=Z,30µm,21.5s | | | | | | | | | | |
| DYA | Yadsworthy | 115.67 | 322 | eP | PP | 15 15 54.7 | -16 | | | | |
| ILTH | Belurgan, Co L | 115.76 | 327 | eP | PP | 15 15 55.1 | -16 | | | | |
| IDGL | Inch Island, C | 115.97 | 328 | eP | PP | 15 15 55.2 | -17 | | | | |
| B04A | Port Angeles | 115.97 | 40 | IAMs_20 | IAMs_20 | 16 04 14.7 | | | | | |
| | comp=Z,34µm,22.0s | | | | | | | | | | |
| TORD | Torodi Ar. Bea | 116.05 | 281 | | PKPdf | 15 15 07.5 | -1.9 | | | | |
| TORD | Torodi Ar. Bea | 116.05 | 281 | PKP | PKPdf | 15 15 07.3 | -2.2 | | | | |
| | comp=Z,16nm,0.8s,baz=49,slow=1.9,SNR=44 | | | | | | | | | | |
| TORD | | | | PP | PP | 15 16 16.4 | +2.1 | | | | |
| | comp=Z,15nm,1.0s,baz=68,slow=1.9,SNR=1.4 | | | | | | | | | | |
| TORD | | | | SKP | | 15 18 48.2 | | | | | |
| | comp=Z,8.5nm,1.0s,baz=332,slow=1.8,SNR=3.0 | | | | | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 15 25 38.0 | -1.6 | | | | |
| | comp=Z,2.4nm,0.8s,baz=314,slow=4.2,SNR=4.9 | | | | | | | | | | |
| DSB | Dublin | 116.08 | 326 | IAMs_20 | IAMs_20 | 16 09 38.9 | | | | | |
| | comp=Z,23µm,22.0s | | | | | | | | | | |
| BORG | Borgarnes | 116.49 | 341 | IAMs_20 | IAMs_20 | 16 11 14.3 | | | | | |
| | comp=Z,37µm,22.0s | | | | | | | | | | |
| ECHE | Chera | 116.50 | 310 | PKP | PKPdf | 15 15 08.5 | -1.2 | | | | |
| CCA1 | Carnmenellis | 116.53 | 322 | eP | PP | 15 15 54.1 | -22 | | | | |
| NUUG | Nuugaatsiaq | 116.59 | 356 | i PP | PP | 15 16 17.8 | +1.9 | | | | |
| HEBO | Mount Hebo | 116.62 | 43 | IAMs_20 | IAMs_20 | 15 58 16.2 | | | | | |
| | comp=Z,24µm,22.0s | | | | | | | | | | |
| IWEX | Carrickbyrne, | 116.64 | 325 | eP | PP | 15 15 52.9 | -24 | | | | |
| G03D | McMinnville, O | 116.95 | 43 | IAMs_20 | IAMs_20 | 15 58 38.0 | | | | | |
| | comp=Z,29µm,22.0s | | | | | | | | | | |
| J01E | Myrtle Point | 117.03 | 46 | IAMs_20 | IAMs_20 | 16 07 09.5 | | | | | |
| | comp=Z,28µm,20.0s | | | | | | | | | | |
| EMUR | La Murta | 117.05 | 308 | PKP | PKPdf | 15 15 08.2 | -2.6 | | | | |
| KBO | Bosley Butte | 117.06 | 47 | IAMs_20 | IAMs_20 | 15 59 48.2 | | | | | |
| | comp=Z,21µm,21.0s | | | | | | | | | | |
| ETOB | Tobarra | 117.13 | 309 | PKP | PKPdf | 15 15 09.6 | -1.4 | | | | |
| UMMG | Uummannaq | 117.36 | 356 | i PP | PP | 15 16 23.6 | +2.2 | | | | |
| ICESG | Greenland Ices | 117.41 | 351 | i PP | PP | 15 16 24.3 | +2.2 | | | | |
| JCC | Jacoby Creek, | 117.53 | 48 | IAMs_20 | IAMs_20 | 15 59 18.9 | | | | | |
| | comp=Z,34µm,22.0s | | | | | | | | | | |
| L02F | Cave Junction | 117.55 | 47 | IAMs_20 | IAMs_20 | 16 01 09.3 | | | | | |
| | comp=Z,25µm,21.0s | | | | | | | | | | |
| KMPM | Mount Pierce | 117.56 | 49 | IAMs_20 | IAMs_20 | 16 06 34.6 | | | | | |
| | comp=Z,20µm,20.0s | | | | | | | | | | |
| IGLA | Glengowla, Co | 117.66 | 327 | eP | PP | 15 15 55.1 | -29 | | | | |
| HUMO | Hull Mountain | 117.87 | 46 | | PKPdf | 15 15 12.0 | -0.3 | | | | |
| HUMO | | | | IAMs_20 | IAMs_20 | 16 00 17.6 | | | | | |
| | comp=Z,27µm,22.0s | | | | | | | | | | |
| KMRM | Mail Ridge | 117.91 | 49 | IAMs_20 | IAMs_20 | 16 05 19.0 | | | | | |
| | comp=Z,19µm,20.0s | | | | | | | | | | |
| ENIJ | Nijar | 117.97 | 307 | PKP | PKPdf | 15 15 10.5 | -2.1 | | | | |
| LTY | Liberty | 118.04 | 41 | IAMs_20 | IAMs_20 | 16 05 59.6 | | | | | |
| | comp=Z,23µm,21.0s | | | | | | | | | | |
| SHEL | Horse Pasture | 118.04 | 247 | IAMs_20 | IAMs_20 | 16 06 49.7 | | | | | |
| | comp=Z,25µm,18.0s | | | | | | | | | | |
| UCM | Universidad Co | 118.05 | 311 | PKP | PKPdf | 15 15 11.6 | -1.1 | | | | |
| G05A | Wamic | 118.26 | 43 | IAMs_20 | IAMs_20 | 15 59 31.5 | | | | | |
| | comp=Z,26µm,22.0s | | | | | | | | | | |
| YBH | Yreka Blue Hor | 118.27 | 47 | | PKPdf | 15 15 12.4 | -0.8 | | | | |
| YBH | Yreka Blue Hor | 118.27 | 47 | PKKPbc | PKKPbc | 15 25 32.5 | -0.1 | | | | |
| | comp=Z,3.6nm,0.9s,baz=101,slow=9.6,SNR=4.5 | | | | | | | | | | |
| YBH | Yreka Blue Hor | 118.27 | 47 | PKIKP | PKPdf | 15 15 12.4 | -0.8 | | | | |
| EBER | Berja | 118.52 | 307 | PKP | PKPdf | 15 15 11.6 | -2.3 | | | | |
| O02D | Mt. Diablo Mer | 118.60 | 49 | IAMs_20 | IAMs_20 | 16 11 38.3 | | | | | |
| | comp=Z,25µm,20.0s | | | | | | | | | | |
| G06A | Carlson Farm, | 118.72 | 43 | IAMs_20 | IAMs_20 | 15 59 34.7 | | | | | |
| | comp=Z,24µm,22.0s | | | | | | | | | | |
| K04D | Chiloquin, OR | 118.72 | 46 | IAMs_20 | IAMs_20 | 16 00 57.1 | | | | | |
| | comp=Z,27µm,22.0s | | | | | | | | | | |
| ESDC | Sonseca Array | 118.74 | 311 | PKP | PKPdf | 15 15 12.5 | -1.5 | | | | |
| | comp=Z,4.7nm,0.8s,baz=23,slow=2.6,SNR=22 | | | | | | | | | | |
| ESDC | | | | PKKPbc | PKKPbc | 15 25 30.7 | -0.1 | | | | |
| | comp=Z,1.0nm,1.0s,baz=50,slow=4.2,SNR=2.8 | | | | | | | | | | |
| ESDC | | | | SKKPbc | SKKPbc | 15 29 20.9 | +3.5 | | | | |
| | comp=Z,5.6nm,1.2s,baz=255,slow=4.5,SNR=5.2 | | | | | | | | | | |
| J05D | Fort Rock, OR | 118.90 | 45 | IAMs_20 | IAMs_20 | 16 08 02.7 | | | | | |
| | comp=Z,20µm,20.0s | | | | | | | | | | |
| MCCM | Marci Confer | 119.00 | 51 | IAMs_20 | IAMs_20 | 16 05 32.2 | | | | | |
| | comp=Z,22µm,21.0s | | | | | | | | | | |
| PAB | San Pablo | 119.06 | 311 | | PKPdf | 15 15 13.4 | -1.3 | | | | |
| PAB | San Pablo | 119.06 | 311 | PKIKP | PKPdf | 15 15 13.4 | -1.3 | | | | |
| C09A | Chrisman Ranch | 119.37 | 39 | IAMs_20 | IAMs_20 | 16 00 23.6 | | | | | |
| | comp=Z,22µm,22.0s | | | | | | | | | | |
| HATC | Hat Creek Radi | 119.42 | 48 | IAMs_20 | IAMs_20 | 16 00 20.8 | | | | | |
| | comp=Z,22µm,21.0s | | | | | | | | | | |
| ORV | Oroville | 119.72 | 49 | | PKPdf | 15 15 15.0 | -0.9 | | | | |
| ORV | Oroville | 119.72 | 49 | PKIKP | PKPdf | 15 15 15.0 | -0.9 | | | | |
| NEW | Newport | 119.91 | 38 | | PKPdf | 15 15 14.9 | -1.1 | | | | |
| NEW | Newport | 119.91 | 38 | PKP | PKPdf | 15 15 14.6 | -1.4 | | | | |
| | comp=Z,6.7nm,0.9s,baz=243,slow=1.5,SNR=8.9 | | | | | | | | | | |
| NEW | Newport | 119.91 | 38 | Pdiff | Pdif | 15 11 39.0 | -0.3 | | | | |
| | baz=293 | | | | | | | | | | |
| PBRG | Braganca | 120.21 | 314 | ePKPdf | PKPdf | 15 15 15.9 | -0.9 | | | | |
| PBRG | Braganca | 120.21 | 314 | ePP | PP | 15 16 51.9 | +10 | | | | |
| SAO | San Andreas Ge | 120.42 | 52 | IAMs_20 | IAMs_20 | 16 01 19.0 | | | | | |
| | comp=Z,26µm,22.0s | | | | | | | | | | |
| ISOG | Isortoq, Green | 120.45 | 348 | i PP | PP | 15 16 47.9 | +5.2 | | | | |
| MVO | Moncorvo | 120.60 | 313 | ePKPdf | PKPdf | 15 15 17.6 | 0.0 | | | | |
| MVO | Moncorvo | 120.60 | 313 | ePP | PP | 15 16 54.6 | +10 | | | | |
| MVO | Moncorvo | 120.60 | 313 | eSS | SS | 15 33 18.1 | +4.6 | | | | |
| MVO | Moncorvo | 120.60 | 313 | eLR | LR | 15 55 16.0 | | | | | |
| | comp=Z,12µm,20.0s | | | | | | | | | | |
| MDT | Midelt | 120.68 | 303 | PKP | PKPdf | 15 15 17.5 | -0.6 | | | | |
| | comp=Z,5.1nm,0.7s,baz=89,slow=0.7,SNR=16 | | | | | | | | | | |
| BBGB | Big Mountain B | 120.79 | 52 | IAMs_20 | IAMs_20 | 16 01 27.6 | | | | | |
| | comp=Z,35µm,21.0s | | | | | | | | | | |
| SFJD | Kangerlussuaq | 120.83 | 354 | IAMs_20 | IAMs_20 | 16 14 05.4 | | | | | |
| | comp=Z,33µm,22.0s | | | | | | | | | | |
| SFJD | Kangerlussuaq | 120.83 | 354 | ePP | PP | 15 16 50.2 | +5.0 | | | | |
| MPK | Martis Peak | 120.88 | 49 | IAMs_20 | IAMs_20 | 16 01 09.6 | | | | | |
| | comp=Z,33µm,22.0s | | | | | | | | | | |
| EMB | Emerald Bay | 120.91 | 49 | IAMs_20 | IAMs_20 | 16 01 19.6 | | | | | |
| | comp=Z,24µm,22.0s | | | | | | | | | | |
| WVOR | Wild Horse Val | 120.97 | 45 | IAMs_20 | IAMs_20 | 16 02 19.7 | | | | | |
| | comp=Z,28µm,22.0s | | | | | | | | | | |
| PVRL | Vila Real | 121.06 | 313 | ePKPdf | PKPdf | 15 15 18.2 | -0.3 | | | | |
| POLO | Lamas de Olo | 121.09 | 314 | ePKPdf | PKPdf | 15 15 18.0 | -0.6 | | | | |
| POLO | Lamas de Olo | 121.09 | 314 | ePP | PP | 15 16 52.7 | +4.4 | | | | |
| PCAB | Cabril | 121.15 | 314 | ePKPdf | PKiKP | 15 15 19.6 | +0.9 | | | | |
| PCAB | Cabril | 121.15 | 314 | ePP | PP | 15 17 00.2 | +12 | | | | |
| MTE | Manteigas | 121.20 | 312 | | PKPdf | 15 15 17.7 | -1.1 | | | | |
| MTE | Manteigas | 121.20 | 312 | ePKPdf | PKPdf | 15 15 18.6 | -0.2 | | | | |
| MTE | Manteigas | 121.20 | 312 | ePP | PP | 15 16 52.9 | +3.8 | | | | |
| MTE | Manteigas | 121.20 | 312 | eSS | SS | 15 33 22.0 | +0.8 | | | | |
| MTE | Manteigas | 121.20 | 312 | eLR | LR | 15 55 36.0 | | | | | |
| | comp=Z,14µm,20.0s | | | | | | | | | | |
| PGAV | Gavieira, Arco | 121.25 | 314 | ePKPdf | PKPdf | 15 15 18.4 | -0.5 | | | | |
| PGAV | Gavieira, Arco | 121.25 | 314 | ePP | PP | 15 16 59.2 | +10 | | | | |
| PGAV | Gavieira, Arco | 121.25 | 314 | eSS | SS | 15 33 21.3 | -0.4 | | | | |
| PGAV | Gavieira, Arco | 121.25 | 314 | eLR | LR | 15 55 58.4 | | | | | |
| | comp=Z,10µm,22.0s | | | | | | | | | | |
| PCBR | Castelo Branco | 121.31 | 312 | ePKPdf | PKPdf | 15 15 17.9 | -1.0 | | | | |
| PCBR | Castelo Branco | 121.31 | 312 | ePP | PP | 15 17 01.6 | +12 | | | | |
| PVIS | Viseu | 121.36 | 313 | ePKPdf | PKPdf | 15 15 18.7 | -0.4 | | | | |
| PVIS | Viseu | 121.36 | 313 | ePP | PP | 15 16 51.8 | +1.6 | | | | |
| PMRV | Marv??o | 121.36 | 311 | ePKPdf | PKPdf | 15 15 18.1 | -1.0 | | | | |
| PMRV | Marv??o | 121.36 | 311 | ePP | PP | 15 16 54.5 | +4.6 | | | | |
| PMRV | Marv??o | 121.36 | 311 | eSS | SS | 15 33 25.7 | +2.5 | | | | |
| PMRV | Marv??o | 121.36 | 311 | eLR | LR | 15 55 57.6 | | | | | |
| | comp=Z,9µm,18.0s | | | | | | | | | | |
| PBAR | Barrancos | 121.43 | 310 | ePKPdf | PKPdf | 15 15 18.9 | -0.3 | | | | |
| PBAR | Barrancos | 121.43 | 310 | ePP | PP | 15 16 51.3 | +0.6 | | | | |
| PESTR | Estremoz | 121.67 | 311 | ePKPdf | PKPdf | 15 15 19.1 | -0.6 | | | | |
| PESTR | Estremoz | 121.67 | 311 | ePP | PP | 15 16 56.7 | +4.4 | | | | |
| KIC | Kosan Boka | 121.87 | 272 | i/PKP1 | PKPdf | 15 15 19.1 | -1.6 | | | | |
| | comp=Z,46nm,0.9s | | | | | | | | | | |
| COI | Coimbra | 121.89 | 312 | ePKPdf | PKPdf | 15 15 19.8 | -0.2 | | | | |
| COI | Coimbra | 121.89 | 312 | ePP | PP | 15 17 03.9 | +10 | | | | |
| PCAS | Casmilo, Conde | 122.00 | 312 | ePKPdf | PKPdf | 15 15 19.8 | -0.5 | | | | |
| PCAS | Casmilo, Conde | 122.00 | 312 | ePP | PP | 15 17 03.0 | +8.5 | | | | |
| DBIC | Dimbokro | 122.01 | 273 | | PKPdf | 15 15 19.6 | -1.3 | | | | |
| DBIC | Dimbokro | 122.01 | 273 | PKP | PKPdf | 15 15 18.6 | -2.4 | | | | |
| | comp=Z,23nm,0.9s,baz=107,slow=2.5,SNR=12 | | | | | | | | | | |
| EVO | Evora | 122.08 | 310 | ePKPdf | PKPdf | 15 15 20.1 | -0.3 | | | | |
| EVO | Evora | 122.08 | 310 | ePP | PP | 15 17 03.3 | +8.3 | | | | |
| PMTG | Montargil | 122.08 | 311 | ePKPdf | PKPdf | 15 15 19.7 | -0.7 | | | | |
| PMTG | Montargil | 122.08 | 311 | ePP | PP | 15 17 03.0 | +7.9 | | | | |
| PBEJ | Beja | 122.10 | 310 | ePKPdf | PKiKP | 15 15 20.6 | -0.1 | | | | |
| PBEJ | Beja | 122.10 | 310 | ePP | PP | 15 17 05.4 | +10 | | | | |
| OMMB | Old Mammoth Mi | 122.11 | 51 | IAMs_20 | IAMs_20 | 16 02 19.4 | | | | | |
| | comp=Z,26µm,22.0s | | | | | | | | | | |
| LIC | Lamto | 122.14 | 272 | i/PKP1 | PKPdf | 15 15 18.4 | -2.8 | | | | |
| | comp=Z,60nm,0.9s | | | | | | | | | | |
| PVAQ | Vaqueiros | 122.15 | 309 | ePKPdf | PKPdf | 15 15 20.6 | 0.0 | | | | |
| PVAQ | Vaqueiros | 122.15 | 309 | ePP | PP | 15 17 02.3 | +6.7 | | | | |
| PVAQ | Vaqueiros | 122.15 | 309 | eSS | SS | 15 33 47.6 | +14 | | | | |
| PVAQ | Vaqueiros | 122.15 | 309 | eLR | LR | 15 56 26.5 | | | | | |
| TIC | Toumodi | 122.17 | 273 | ePKP1 | PKPdf | 15 15 19.2 | -2.1 | | | | |
| | comp=Z,5.0nm,0.3s | | | | | | | | | | |
| LHV | Little Huntoon | 122.32 | 50 | IAMs_20 | IAMs_20 | 16 03 51.7 | | | | | |
| | comp=Z,21µm,20.0s | | | | | | | | | | |
| PCVE | Castro Verde | 122.34 | 309 | ePKPdf | PKPdf | 15 15 20.6 | -0.4 | | | | |
| PCVE | Castro Verde | 122.34 | 309 | ePKPdf | PP | 15 17 02.3 | +5.4 | | | | |
| PBDV | Barranco-do-Ve | 122.36 | 309 | ePKPdf | PKiKP | 15 15 21.4 | +0.2 | | | | |
| PBDV | Barranco-do-Ve | 122.36 | 309 | ePP | PP | 15 17 05.4 | +8.3 | | | | |
| PSBE | So Bento | 122.38 | 312 | ePKPdf | PKPdf | 15 15 20.8 | -0.2 | | | | |
| PSBE | So Bento | 122.38 | 312 | ePP | PP | 15 17 06.8 | +10 | | | | |
| KVN | Kaiserville | 122.39 | 49 | IAMs_20 | IAMs_20 | 16 02 19.6 | | | | | |
| | comp=Z,19µm,21.0s | | | | | | | | | | |
| NVAR | Mina Array Bea | 122.42 | 50 | | PKPdf | 15 15 20.5 | -0.9 | | | | |
| NVAR | Mina Array Bea | 122.42 | 50 | PKP | PKPdf | 15 15 20.1 | -1.3 | | | | |
| | comp=Z,5.5nm,0.7s,baz=264,slow=2.3,SNR=23 | | | | | | | | | | |
| NVAR | | | | PKKPbc | PKKPab | 15 25 16.2 | -0.2 | | | | |
| | comp=Z,2.2nm,0.7s,baz=132,slow=5.0,SNR=7.0 | | | | | | | | | | |
| NVAR | | | | SKKPbc | SKKPbc | 15 29 09.7 | +4.1 | | | | |
| | comp=Z,1.4nm,0.9s,baz=129,slow=41,SNR=3.2 | | | | | | | | | | |
| MESJ | Messejana | 122.42 | 310 | ePKPdf | PKPdf | 15 15 20.6 | -0.5 | | | | |
| MESJ | Messejana | 122.42 | 310 | ePP | PP | 15 17 04.4 | +7.0 | | | | |
| MESJ | Messejana | 122.42 | 310 | ePKPdf | PKPdf | 15 15 20.8 | -0.3 | | | | |
| MESJ | | | | ePP | PP | 15 16 57.2 | -0.2 | | | | |
| MESJ | | | | IAMs_20 | IAMs_20 | 16 21 04.5 | | | | | |
| | comp=Z,19µm,24.5s | | | | | | | | | | |
| MSO | Missoula | 122.46 | 39 | | PKPdf | 15 15 19.5 | -1.6 | | | | |
| MSO | | | | IAMs_20 | IAMs_20 | 16 03 19.3 | | | | | |
| | comp=Z,26µm,22.0s | | | | | | | | | | |
| MSO | Missoula | 122.46 | 39 | PKiKP | PKPdf | 15 15 20.0 | -1.1 | | | | |
| | baz=295 | | | | | | | | | | |
| PNCL | Nicolau / Gran | 122.58 | 310 | ePKPdf | PKPdf | 15 15 21.3 | -0.1 | | | | |
| PNCL | Nicolau / Gran | 122.58 | 310 | ePP | PP | 15 17 04.0 | +5.5 | | | | |
| SNCC | San Nicolas Is | 122.74 | 56 | IAMs_20 | IAMs_20 | 16 02 19.6 | | | | | |
| | comp=Z,27µm,21.0s | | | | | | | | | | |
| LIS | Lisbon | 122.88 | 311 | ePP | PP | 15 17 00.2 | -0.2 | | | | |
| LIS | | | | IAMs_20 | IAMs_20 | 16 11 40.0 | | | | | |
| | comp=E,35µm,23.4s | | | | | | | | | | |
| PTEO | Sao Teotonio | 122.89 | 

baz=297
PDAR **Pinedale Array** 127.04 42 PKP PKPdf 15 15 28.6 -1.5
comp=Z,6.2nm,1.0s,baz=207,slow=0.7,SNR=18
PDAR PKKPbc PKKPbc 15 24 57.8
comp=Z,1.3nm,0.9s,baz=137,slow=7.4,SNR=2.4
PDAR SKKPbc SKKPbc 15 28 54.0 +3.8
comp=Z,7.2nm,0.9s,baz=119,slow=7.0,SNR=6.3
SFX **San Felipe** 127.10 57 IAMs_20 IAMs_20 16 13 41.3
comp=Z,16µm,19.0s
MTPU **Mount Pierson** 127.11 48 IAMs_20 IAMs_20 16 07 02.3
comp=Z,23µm,21.0s
LAO **LASA Array** 127.18 36 PKiKP PKPdf 15 15 29.8 -0.3
baz=302
PKCU **Pink Cliffs** 127.22 49 IAMs_20 IAMs_20 16 05 33.5
comp=Z,24µm,21.0s
DGMT **Dagmar** 127.33 33 IAMs_20 IAMs_20 16 06 30.3
comp=Z,28µm,22.0s
DGMT **Dagmar** 127.33 33 PKiKP PKPdf 15 15 29.8 -0.5
baz=306
113A **Mohawk Valley,** 127.55 55 IAMs_20 IAMs_20 16 08 50.8
comp=Z,28µm,20.0s
U15A **North Rim** 127.59 50 IAMs_20 IAMs_20 16 05 42.3
comp=Z,24µm,22.0s
Y14A **Wickenburg** 127.82 53 IAMs_20 IAMs_20 16 09 20.9
comp=Z,30µm,20.0s
P18A **Preston Nutter** 127.90 46 IAMs_20 IAMs_20 16 09 43.1
comp=Z,19µm,22.0s
SRU **San Rafael Swe** 127.91 46 IAMs_20 IAMs_20 16 06 31.4
comp=Z,19µm,21.0s
RDMU **Red Mountain** 127.99 44 IAMs_20 IAMs_20 16 13 48.2
comp=Z,18µm,21.0s
LL02 **Futaleuf** 128.10 172 PKPdf 15 15 31.6 -0.3
PIX **Pinacate** 128.12 56 IAMs_20 IAMs_20 16 13 09.2
comp=Z,17µm,19.0s
HMU **Henry Mountain** 128.20 48 IAMs_20 IAMs_20 16 08 35.3
comp=Z,21µm,20.0s
214A **Organ Pipe Nat** 128.54 56 IAMs_20 IAMs_20 16 07 44.4
comp=Z,21µm,20.0s
214A **Organ Pipe Nat** 128.54 56 PKiKP PKPdf 15 15 32.9 -0.2
baz=286
WUAZ **Wupatki** 128.59 51 PKiKP PKPdf 15 15 32.9 -0.3
baz=290
K22A **Casper** 129.07 41 IAMs_20 IAMs_20 16 07 35.3
comp=Z,23µm,21.0s
RWWY **Rawlins** 129.08 42 IAMs_20 IAMs_20 16 06 42.9
comp=Z,19µm,21.0s
RSSD **Black Hills** 129.87 38 PKPdf 15 15 33.7 -1.8
RSSD **Black Hills** 129.87 38 PKiKP PKPdf 15 15 34.3 -1.2
baz=303
RSSD **Black Hills** 129.87 38 PKIKP PKPdf 15 15 33.7 -1.8
W18A **Petrified Fore** 129.99 51 PKiKP PKPdf 15 15 35.1 -0.8
baz=291
X18A **Snowflake** 130.03 52 IAMs_20 IAMs_20 16 11 11.1
comp=Z,30µm,20.0s
TUC **Tucson** 130.09 55 IAMs_20 IAMs_20 16 10 17.1
comp=Z,28µm,21.0s
TUC **Tucson** 130.09 55 PKiKP PKPdf 15 15 36.3 +0.2
baz=288
MVCO **Mesa Verde** 130.13 48 PKiKP PKPdf 15 15 36.1 -0.1
baz=294
PMPST **Porto Santo, M** 130.16 306 *e*PP PP 15 17 58.6 +10
PMPS **Porto Santo** 130.16 306 *e*PP PP 15 18 03.0 +14
SRIG **Santa Rosalia** 130.18 61 IAMs_20 IAMs_20 16 07 28.2
comp=Z,27µm,21.0s
ULM **Lac du Bonnet** 130.29 27 PKhKP PKPpre 15 15 25.6
comp=Z,3.4nm,0.8s,baz=120,slow=19,SNR=2.6
ULM PKP PKPdf 15 15 35.7 -0.1
comp=Z,9.3nm,0.7s,baz=337,slow=2.5,SNR=6.3
ULM SKPbc SKPbc 15 18 59.3 +1.9
comp=Z,36nm,1.0s,baz=286,slow=5.7,SNR=4.5
N23A **Red Feather La** 130.30 42 PKiKP PKPdf 15 15 35.1 -1.3
baz=299
SMCO **Snowmass** 130.39 45 IAMs_20 IAMs_20 16 10 00.8
comp=Z,17µm,21.0s
PHWY **Pilot Hill** 130.42 42 IAMs_20 IAMs_20 16 07 25.3
comp=Z,21µm,21.0s
PLCA **Paso Flores** 130.68 173 PKP PKPdf 15 15 36.7 -0.3
comp=Z,18nm,1.0s,baz=1.1,slow=0.8,SNR=11
PLCA SKPbc SKPab 15 19 02.2 +2.9
comp=Z,36nm,1.1s,baz=216,slow=3.8,SNR=4.4
PMAR **Madeira** 130.73 306 *e*PP PP 15 18 01.3 +8.4
FUL **Funchal** 130.74 306 *e*PP PP 15 18 02.3 +10
PMOZ **Porto Moniz, M** 130.93 306 *e*PP PP 15 18 05.2 +11
PMOZ **Porto Moniz, M** 130.93 306 *e*SS SS 15 35 30.4 +6.9
PMOZ **Porto Moniz, M** 130.93 306 *e*LR LR 16 00 25.5
comp=Z,11µm,20.0s
ISCO **Idaho Springs** 131.04 43 IAMs_20 IAMs_20 16 08 06.9
comp=Z,29µm,22.0s
ISCO **Idaho Springs** 131.04 43 PKiKP PKPdf 15 15 37.7 -0.3
baz=298
S22A **4UR Ranch, Cre** 131.12 46 IAMs_20 IAMs_20 16 14 04.2
comp=Z,19µm,20.0s
S22A **4UR Ranch, Cre** 131.12 46 PKiKP PKPdf 15 15 37.8 -0.3
baz=296
AGMN **Agassiz Nation** 131.69 29 IAMs_20 IAMs_20 16 10 16.2
comp=Z,18µm,21.0s
AGMN **Agassiz Nation** 131.69 29 PKiKP PKPdf 15 15 36.5 -2.0
baz=315
Q24A **Divide** 131.75 44 PKiKP PKPdf 15 15 38.7 -0.7
baz=298
SDCO **Great Sand Dun** 132.06 46 IAMs_20 IAMs_20 16 07 29.2
comp=Z,22µm,21.0s
SDCO **Great Sand Dun** 132.06 46 PKiKP PKPdf 15 15 39.6 -0.3
baz=297
121A **Cookes Peak, D** 132.41 53 IAMs_20 IAMs_20 16 23 08.5
comp=Z,20µm,20.0s
121A **Cookes Peak, D** 132.41 53 PKiKP PKPdf 15 15 40.0 -0.6
baz=290
Y22D **IRIS PASSCAL I** 132.53 51 PKiKP PKPdf 15 15 40.2 -0.6
baz=292
ANMO **Albuquerque** 132.54 50 PKiKP PKPdf 15 15 40.3 -0.5
baz=294
SUSD **Miller** 132.64 35 IAMs_20 IAMs_20 16 18 06.9
comp=Z,20µm,22.0s
OGNE **Ogallala** 132.83 40 PKiKP PKPdf 15 15 39.3 -1.7
baz=303
SLBS **Sierra La Lagu** 132.95 65 IAMs_20 IAMs_20 16 14 27.1
comp=Z,25µm,20.0s
T25A **Trinidad** 133.11 46 PKiKP PKPdf 15 15 41.5 -0.3
baz=297
SCHQ **Schefferville** 133.59 3 PKP PKPdf 15 15 41.1 -0.8
comp=Z,7.8nm,0.8s,baz=36,slow=3.9,SNR=6.2
SCHQ SKPbc SKPab 15 19 11.8 +0.7
comp=Z,21nm,0.9s,baz=4.7,slow=10,SNR=2.6
EPT **El Paso** 133.70 54 IAMs_20 IAMs_20 16 11 25.5
comp=Z,25µm,22.0s
TRQA **Tornquist** 133.78 182 PKPdf 15 15 41.1 -1.8
TRQA **Tornquist** 133.78 182 PKiKP PKPdf 15 15 41.1 -1.8
TRQA MLR MLR
comp=Z,82µm,22.0s
EYMN **Ely** 133.94 26 PKiKP PKPdf 15 15 41.6 -1.2
baz=320
ECSD **EROS Data Cent** 134.40 34 IAMs_20 IAMs_20 16 21 25.3
comp=Z,20µm,22.0s
ECSD **EROS Data Cent** 134.40 34 PKiKP PKPdf 15 15 42.2 -1.6
baz=311
MNTX **Cornudas Mount** 134.62 53 PKiKP PKPdf 15 15 44.2 -0.3
baz=292
BART **Pico Bartolome** 134.79 316 *e*PKP PKiKP 15 15 57.7 +11
E38A **The Farm, Brul** 134.93 27 IAMs_20 IAMs_20 16 13 34.5
comp=Z,21µm,21.0s
PGRON **Lagoa das Cont** 134.93 316 *e*PKP PKiKP 15 15 56.4 +10
BGNE **Belgrade** 134.97 37 IAMs_20 IAMs_20 16 11 16.9
comp=Z,17µm,21.0s
CMLA **Cha da Macela** 135.04 317 IAMs_20 IAMs_20 16 22 30.3
comp=Z,15µm,20.0s
PSMA **Santa Maria** 135.15 315 *e*PKP PKiKP 15 15 56.0 +9.2
CBKS **Cedar Bluff** 135.47 41 IAMs_20 IAMs_20 16 18 14.6
comp=Z,20µm,20.0s
CBKS **Cedar Bluff** 135.47 41 PKiKP PKPdf 15 15 44.2 -1.8
baz=303
PSCM **Serra do Cume** 135.61 319 *e*PKP PKiKP 15 15 59.0 +11
PAGU **Agualva, Azore** 135.61 319 *e*PKP PKiKP 15 15 54.2 +6.5
MSTX **Muleshoe** 135.72 49 IAMs_20 IAMs_20 16 14 35.4
comp=Z,29µm,20.0s
AMTX **Amarillo** 136.11 47 IAMs_20 IAMs_20 16 21 42.6
comp=Z,22µm,21.0s
AMTX **Amarillo** 136.11 47 PKiKP PKPdf 15 15 46.9 -0.4
baz=298
PMAN **Manadas** 136.28 319 *e*PKP PKiKP 15 15 58.6 +10
ROSA **Rosais** 136.33 319 *e*PKP PKiKP 15 16 00.3 +11
COWI **Conover** 136.39 26 IAMs_20 IAMs_20 16 18 46.1
comp=Z,22µm,22.0s
PID **Ribeirinha** 136.40 319 *e*PKP PKiKP 15 16 00.3 +11
PPNO **Prainha do Nor** 136.48 319 *e*PKP PKiKP 15 16 01.2 +12
PICO **Pico** 136.57 319 *e*PKP PKiKP 15 15 59.0 +9.2
LPA **La Plata** 136.64 187 *ce*PKIKP PKPdf 15 15 42.0 -6.2
LPA PP PP 15 18 29.7 +1.1
LPA SKP 15 19 13.2
LPA SKIKS 15 23 08.1
LPA SDIFF 15 26 45.8
PCED **Cedros** 136.68 320 *e*PKP PKiKP 15 15 56.4 +6.5
N35A **Tabor** 136.79 36 IAMs_20 IAMs_20 16 11 16.1
comp=Z,24µm,22.0s
TXAR **Lajitas Array** 136.84 56 PKhKP PKPpre 15 15 37.6
comp=Z,1.4nm,0.7s,baz=294,slow=2.7,SNR=8.5
TXAR PKP PKPdf 15 15 47.2 -1.7
comp=Z,4.5nm,0.7s,baz=288,slow=2.4,SNR=11
TXAR SKPbc SKiKP 15 19 24.1 -1.2
comp=Z,2.9nm,0.8s,baz=338,slow=1.2,SNR=1.7
F42A **Maple Grove Fa** 137.09 26 IAMs_20 IAMs_20 16 13 46.5
comp=Z,22µm,21.0s
ELIS **Ellis County** 137.14 45 IAMs_20 IAMs_20 16 22 13.4
comp=Z,21µm,21.0s
KSU1 **Kansas State U** 137.30 39 IAMs_20 IAMs_20 16 28 11.8
comp=Z,18µm,20.0s
KSU1 **Kansas State U** 137.30 39 PKiKP PKPdf 15 15 48.7 -0.6
baz=307
OK038 **West end E0370** 137.39 44 IAMs_20 IAMs_20 16 12 13.9
comp=Z,19µm,22.0s
SCIA **State Center** 137.47 33 IAMs_20 IAMs_20 16 17 40.7
comp=Z,19µm,20.0s
SCIA **State Center** 137.47 33 PKiKP PKPdf 15 15 48.4 -1.1
baz=313
MT05 **Renca** 137.87 171 IAMs_20 IAMs_20 16 14 34.4
comp=Z,20µm,21.0s
CROK **Carrier** 137.89 43 IAMs_20 IAMs_20 16 21 39.1
comp=Z,16µm,18.0s
E46A **Sault Ste Mari** 138.11 22 IAMs_20 IAMs_20 16 20 28.1
comp=Z,18µm,21.0s
PEL **Peldehue** 138.12 171 IAMs_20 IAMs_20 16 11 22.1
comp=Z,30µm,22.0s
I42A **Draeger Farm,** 138.20 28 IAMs_20 IAMs_20 16 13 58.2
comp=Z,21µm,22.0s
N38A **Joes South For** 138.22 35 IAMs_20 IAMs_20 16 22 46.6
comp=Z,21µm,21.0s
H43A **Windswept, Lux** 138.26 26 IAMs_20 IAMs_20 16 21 16.8
comp=Z,21µm,22.0s
WMOK **Wichita Mounta** 138.27 46 IAMs_20 IAMs_20 16 28 59.4
comp=Z,21µm,20.0s
WMOK **Wichita Mounta** 138.27 46 PKiKP PKPdf 15 15 50.2 -1.1
baz=301
JFWS **Jewell Farm** 138.30 30 IAMs_20 IAMs_20 16 20 10.1
comp=Z,26µm,22.0s
JFWS **Jewell Farm** 138.30 30 PKiKP PKPdf 15 15 49.9 -1.1
baz=318
L40A **Anamosa** 138.43 32 IAMs_20 IAMs_20 16 27 39.6
comp=Z,24µm,22.0s
OK029 **Liberty Lake** 138.63 44 IAMs_20 IAMs_20 16 22 18.8
comp=Z,21µm,20.0s
OK048 **Pawnee Station** 138.64 42 IAMs_20 IAMs_20 16 13 44.8
comp=Z,19µm,22.0s
T35A **Sooner Cattle** 138.64 42 IAMs_20 IAMs_20 16 20 02.7
comp=Z,19µm,18.0s
VLDQ **Val d'Or** 138.65 14 IAMs_20 IAMs_20 16 19 29.9
comp=Z,20µm,21.0s
OK051 **E0350 and S346** 138.66 42 IAMs_20 IAMs_20 16 30 03.3
comp=Z,18µm,20.0s
ABTX **Abilene, Hawle** 138.66 49 IAMs_20 IAMs_20 16 12 34.4
comp=Z,28µm,21.0s
P38A **Dawn** 138.82 36 IAMs_20 IAMs_20 16 21 14.8
comp=Z,21µm,22.0s
ICQ **Pointe Anglais** 138.87 4 IAMs_20 IAMs_20 16 29 03.1
comp=Z,19µm,20.0s
DRLN **Deer Lake** 138.97 354 IAMs_20 IAMs_20 16 21 37.7
comp=Z,19µm,22.0s
OK031 **S. Brethren Rd** 138.97 43 IAMs_20 IAMs_20 16 12 06.5
comp=Z,25µm,22.0s
OK052 **Battle Ridge R** 138.97 43 IAMs_20 IAMs_20 16 12 07.6
comp=Z,25µm,22.0s
X34A **Smith Ranch, M** 139.01 45 IAMs_20 IAMs_20 16 17 15.0
comp=Z,26µm,19.0s
L42A **Oliver, Polo** 139.26 30 IAMs_20 IAMs_20 16 11 25.6
comp=Z,17µm,22.0s
I45A **Fountain** 139.28 25 IAMs_20 IAMs_20 16 17 03.4
comp=Z,18µm,22.0s
GLMI **Grayling** 139.29 23 PKiKP PKPdf 15 15 51.9 -0.9
baz=327
W35A **Tecumseh** 139.38 44 IAMs_20 IAMs_20 16 28 41.7
comp=Z,23µm,21.0s
K43A **Bunlington** 139.38 29 IAMs_20 IAMs_20 16 25 46.6
comp=Z,17µm,21.0s
JCT **Junction City** 139.49 52 IAMs_20 IAMs_20 16 12 31.8
comp=Z,27µm,22.0s
JCT **Junction City** 139.49 52 PKiKP PKPdf 15 15 52.7 -0.9
baz=295
N41A **Harden Midland** 139.58 33 IAMs_20 IAMs_20 16 28 20.5
comp=Z,24µm,21.0s
FW03 **Perrin-Whitt E** 139.63 48 IAMs_20 IAMs_20 16 13 29.8
comp=Z,19µm,21.0s
TUL3 **Leonard** 139.69 42 IAMs_20 IAMs_20 16 23 01.6
comp=Z,25µm,20.0s
ZAIG **Zacatecas** 139.77 65 IAMs_20 IAMs_20 16 13 29.8
comp=Z,20µm,20.0s
L44A **Lake County Fo** 139.99 29 IAMs_20 IAMs_20 16 25 46.6
comp=Z,18µm,20.0s
L44A **Lake County Fo** 139.99 29 PKiKP PKPdf 15 15 52.6 -1.5
baz=320
LDAQ **Lac Dauran** 139.99 8 IAMs_20 IAMs_20 16 28 13.0
comp=Z,26µm,21.0s
FW07 **Weatherford** 140.00 48 IAMs_20 IAMs_20 16 13 42.6
comp=Z,25µm,20.0s
RLO **Rose Lookout** 140.05 41 IAMs_20 IAMs_20 16 23 02.9
comp=Z,24µm,21.0s
Z35A **Perchaven, San** 140.07 47 IAMs_20 IAMs_20 16 28 51.4
comp=Z,25µm,21.0s
S39A **Bolivar** 140.20 38 IAMs_20 IAMs_20 16 30 08.4
comp=Z,28µm,21.0s
U38A **Gravette** 140.30 41 IAMs_20 IAMs_20 16 14 24.6
comp=Z,28µm,21.0s
HQIL **Hanson Quary C** 140.30 29 IAMs_20 IAMs_20 16 19 27.0
comp=Z,16µm,21.0s
R40A **Maddies Statio** 140.44 37 IAMs_20 IAMs_20 16 31 23.7
comp=Z,23µm,22.0s
HDIL **Hopedale** 140.52 32 IAMs_20 IAMs_20 16 22 36.0
comp=Z,18µm,21.0s
HDIL **Hopedale** 140.52 32 PKiKP PKPdf 15 15 54.4 -0.7
baz=317
J47A **Sunmer** 140.52 25 IAMs_20 IAMs_20 16 26 32.3
comp=Z,19µm,20.0s
SACV **Santiago Islan** 140.56 283 IAMs_20 IAMs_20 16 21 02.7
comp=Z,17µm,21.0s
WHTX **Lake Whitney,** 140.59 49 IAMs_20 IAMs_20 16 30 43.4
comp=Z,26µm,20.0s
HHAR **Hobbs** 140.69 40 IAMs_20 IAMs_20 16 31 18.6
comp=Z,24µm,20.0s
833A **Chaparral WMA,** 140.70 55 PKiKP PKPdf 15 15 55.7 -0.1
baz=293
X37A **Clayton** 140.72 44 IAMs_20 IAMs_20 16 32 47.1
comp=Z,26µm,20.0s
I49A **Point Hope** 140.72 22 IAMs_20 IAMs_20 16 28 15.4
comp=Z,20µm,22.0s
L46A **Eue Claire** 140.87 27 IAMs_20 IAMs_20 16 28 59.7
comp=Z,22µm,21.0s
GO04 **Tololo Observa** 141.01 170 IAMs_20 IAMs_20 16 13 23.5
comp=Z,23µm,22.0s
P43A **Skaggs, Pawnee** 141.06 33 IAMs_20 IAMs_20 16 13 40.6
comp=Z,21µm,22.0s
435B **Jarrell** 141.07 50 IAMs_20 IAMs_20 16 29 55.3
comp=Z,20µm,19.0s
435B **Jarrell** 141.07 50 PKiKP PKPdf 15 15 55.8 -0.6
baz=298
TRQ **Mont Tremblant** 141.09 12 IAMs_20 IAMs_20 16 29 43.4
comp=Z,15µm,21.0s
D62A **Allapoint, All** 141.13 6 IAMs_20 IAMs_20 16 20 58.1
comp=Z,27µm,22.0s
BATG **Bathurst New B** 141.17 3 IAMs_20 IAMs_20 16 26 19.1
comp=Z,26µm,22.0s
CO05 **La Serena** 141.17 169 IAMs_20 IAMs_20 16 15 42.9
comp=Z,28µm,21.0s
CCM **Cathedral Cave** 141.20 36 IAMs_20 IAMs_20 16 31 03.7
comp=Z,24µm,22.0s
CCM **Cathedral Cave** 141.20 36 PKiKP PKPdf 15 15 55.1 -1.3
baz=313
SADO **Sadowa** 141.25 18 IAMs_20 IAMs_20 16 28 57.0
comp=Z,21µm,20.0s
SLM **Saint Louis** 141.38 35 IAMs_20 IAMs_20 16 27 25.2
comp=Z,19µm,22.0s
PQI **Presque Isle** 141.64 5 IAMs_20 IAMs_20 16 29 20.5
comp=Z,20µm,21.0s
FVM **French Village** 141.72 35 IAMs_20 IAMs_20 16 28 37.5
comp=Z,21µm,20.0s
SFIN **Lafayette** 141.76 30 IAMs_20 IAMs_20 16 18 36.6
comp=Z,18µm,21.0s
AAM **Ann Arbor** 141.78 25 IAMs_20 IAMs_20 16 27 03.5
comp=Z,18µm,20.0s
AAM **Ann Arbor** 141.78 25 PKiKP PKPdf 15 15 56.4 -1.0
baz=326
K50A **Casco** 141.79 23 IAMs_20 IAMs_20 16 16 47.8
comp=Z,24µm,21.0s
237A **Washetta, Mont** 141.80 47 IAMs_20 IAMs_20 16 30 38.2
comp=Z,22µm,20.0s
Q44A **Meyer Farm, Va** 141.86 33 IAMs_20 IAMs_20 16 30 01.8
comp=Z,20µm,21.0s
DELO **Deloro Mine** 141.93 17 IAMs_20 IAMs_20 16 30 35.8
comp=Z,25µm,22.0s
MIAR **Mount Ida** 141.96 42 IAMs_20 IAMs_20 16 19 54.7
comp=Z,24µm,20.0s
MIAR **Mount Ida** 141.96 42 PKiKP PKPdf 15 15 56.5 -1.4
baz=306
MNTQ **Montreal, Queb** 141.97 12 IAMs_20 IAMs_20 16 29 59.6
comp=Z,17µm,22.0s
T42A **Van Buren** 141.98 37 IAMs_20 IAMs_20 16 32 38.4
comp=Z,21µm,20.0s
N47A **Urbana** 142.04 28 IAMs_20 IAMs_20 16 33 29.8
comp=Z,25µm,22.0s
WBO **Williamsburg** 142.09 14 IAMs_20 IAMs_20 16 22 50.7
comp=Z,18µm,20.0s
F62A **Pittston Farm,** 142.19 8 IAMs_20 IAMs_20 16 28 31.2
comp=Z,26µm,21.0s
P46A **Rosedale** 142.28 31 IAMs_20 IAMs_20 16 24 25.6
comp=Z,19µm,21.0s
WHAR **Wooly Hollow** 142.35 40 IAMs_20 IAMs_20 16 30 52.8
comp=Z,18µm,20.0s
F64A **Sherman** 142.41 6 IAMs_20 IAMs_20 16 26 56.9
comp=Z,25µm,22.0s
OLIL **Olney** 142.48 32 IAMs_20 IAMs_20 16 30 57.0
comp=Z,16µm,20.0s
X40A **Basin Creek Fa** 142.49 42 IAMs_20 IAMs_20 16 19 55.6
comp=Z,18µm,20.0s
PBMO **Poplar Bluff** 142.54 37 IAMs_20 IAMs_20 16 25 35.2
comp=Z,24µm,21.0s
S44A **Carbondale** 142.59 35 IAMs_20 IAMs_20 16 31 49.3
comp=Z,19µm,20.0s
SIUC **Southern Illin** 142.60 35 IAMs_20 IAMs_20 16 33 24.5
comp=Z,20µm,21.0s
LONY **Lake Ozonia** 142.61 13 PKiKP PKPdf 15 15 57.5 -1.3
baz=342
UALR **University of** 142.63 41 IAMs_20 IAMs_20 16 28 24.3
comp=Z,21µm,22.0s
CGM3 **Cape Girardeau** 142.64 36 IAMs_20 IAMs_20 16 21 09.6
comp=Z,24µm,22.0s
PECO **Prince Edward** 142.64 16 IAMs_20 IAMs_20 16 30 37.6
comp=Z,24µm,21.0s
NATX **Nacogdoches** 142.76 47 IAMs_20 IAMs_20 16 15 48.5
comp=Z,23µm,21.0s
NATX **Nacogdoches** 142.76 47 PKiKP PKPdf 15 15 58.5 -0.9
baz=302
WLAR **White Oak Lake** 142.77 43 IAMs_20 IAMs_20 16 15 50.3
comp=Z,24µm,21.0s
M50A **Fremont** 142.78 25 IAMs_20 IAMs_20 16 30 44.0
comp=Z,18µm,20.0s
G62A **West of Eustis** 142.78 8 IAMs_20 IAMs_20 16 26 03.8
comp=Z,20µm,20.0s
HKT **Hockley** 142.79 50 PKPdf 15 15 57.9 -1.5
HKT **Hockley** 142.79 50 IAMs_20 IAMs_20 16 30 40.7
comp=Z,25µm,19.0s
HKT **Hockley** 142.79 50 PKIKP PKPdf 15 15 57.9 -1.5
HKT MLR MLR
comp=Z,25µm,19.0s
PKME **Peaks-Kenny Pk** 142.90 7 PKiKP PKPdf 15 15 57.7 -1.5
baz=350
BLO **Bloomington** 142.97 30 IAMs_20 IAMs_20 16 30 39.7
comp=Z,25µm,22.0s
PARMO **Parma** 143.02 36 IAMs_20 IAMs_20 16 25 42.8
comp=Z,19µm,20.0s
GBN **Guysborough** 143.08 358 PKPdf 15 15 58.6 -0.9
GBN IAMs_20 IAMs_20 16 27 39.5
comp=Z,21µm,21.0s
HBAR **Harrisburg** 143.21 39 IAMs_20 IAMs_20 16 16 08.3
comp=Z,21µm,21.0s
O49A **Covington** 143.21 27 IAMs_20 IAMs_20 16 32 49.9
comp=Z,21µm,20.0s
PVMO **Portageville** 143.22 37 IAMs_20 IAMs_20 16 34 06.2
comp=Z,23µm,21.0s
VT1 **Waterbury** 143.27 11 IAMs_20 IAMs_20 16 34 20.1
comp=Z,19µm,22.0s
USIN **University of** 143.27 33 IAMs_20 IAMs_20 16 22 26.1
comp=Z,18µm,21.0s
P48A **Milroy** 143.28 29 IAMs_20 IAMs_20 16 31 08.9
comp=Z,19µm,20.0s
J56A **Wolcott** 143.29 17 IAMs_20 IAMs_20 16 34 27.7
comp=Z,20µm,20.0s
NCB **Newcomb** 143.30 13 IAMs_20 IAMs_20 16 23 57.9
comp=Z,24µm,21.0s
H62A **Milan** 143.31 9 IAMs_20 IAMs_20 16 28 08.0
comp=Z,20µm,21.0s
GNAR **Gosnell** 143.33 38 IAMs_20 IAMs_20 16 34 04.3
comp=Z,18µm,20.0s
M52A **Chesterland** 143.34 23 IAMs_20 IAMs_20 16 33 58.6
comp=Z,26µm,21.0s
ERPA **Erie** 143.34 21 IAMs_20 IAMs_20 16 26 20.4
comp=Z,20µm,21.0s
ERPA **Erie** 143.34 21 PKiKP PKPdf 15 15 58.8 -1.3
baz=332
J57A **Williamstown** 143.40 16 IAMs_20 IAMs_20 16 28 33.6
comp=Z,25µm,21.0s
HICK **Hickman** 143.41 36 IAMs_20 IAMs_20 16 34 10.1
comp=Z,21µm,20.0s
T45A **Paducah** 143.41 35 IAMs_20 IAMs_20 16 26 21.1
comp=Z,21µm,20.0s
N51A **Ashland** 143.46 24 IAMs_20 IAMs_20 16 32 50.0
comp=Z,22µm,20.0s
LBNH **Lisbon** 143.51 10 IAMs_20 IAMs_20 16 31 44.2
comp=Z,23µm,20.0s
LBNH **Lisbon** 143.51 10 PKiKP PKPdf 15 15 59.4 -1.0
baz=346
CCAR **Cane Creek** 143.53 42 IAMs_20 IAMs_20 16 20 05.2
comp=Z,26µm,21.0s
WVL **Waterville** 143.54 8 IAMs_20 IAMs_20 16 29 33.9
comp=Z,28µm,22.0s
WVNY **West Valley, N** 143.55 19 IAMs_20 IAMs_20 16 30 17.9
comp=Z,26µm,21.0s
LNXT **Lenox** 143.55 37 IAMs_20 IAMs_20 16 20 43.1
comp=Z,25µm,22.0s
GLAT **Glass** 143.56 36 IAMs_20 IAMs_20 16 34 21.2
comp=Z,22µm,21.0s
P49A **Miami Univ. Ec** 143.56 28 PKiKP PKPbc 15 15 59.0 +1.0
baz=323
J58A **Remsen** 143.63 15 IAMs_20 IAMs_20 16 34 35.6
comp=Z,20µm,20.0s
EMMW **East Machias** 143.64 5 IAMs_20 IAMs_20 16 33 11.4
comp=Z,17µm,21.0s
UNM **Universidad Na** 143.65 69 IAMs_20 IAMs_20 16 09 21.0
comp=Z,26µm,22.0s
M53A **WI Miller and** 143.68 22 IAMs_20 IAMs_20 16 17 58.6
comp=Z,25µm,22.0s
M53A **WI Miller and** 143.68 22 PKiKP PKPbc 15 15 59.4 +1.2
baz=330
ALLY **Alegheny Colle** 143.69 21 IAMs_20 IAMs_20 16 26 46.9
comp=Z,22µm,22.0s
UTMT **University of** 143.76 36 IAMs_20 IAMs_20 16 32 49.2
comp=Z,22µm,21.0s
HALT **Halls** 143.77 37 IAMs_20 IAMs_20 16 20 58.9
comp=Z,15µm,20.0s
ACSO **Alum Creek Sta** 143.78 26 IAMs_20 IAMs_20 16 27 53.6
comp=Z,20µm,22.0s
ACSO **Alum Creek Sta** 143.78 26 PKiKP PKPdf 15 16 00.2 -0.8
baz=326
WCI **Wyandotte Cave** 143.80 31 PKPpre 15 15 55.8
WCI **Wyandotte Cave** 143.80 31 IAMs_20 IAMs_20 16 15 41.8
comp=Z,25µm,22.0s
WCI **Wyandotte Cave** 143.80 31 PKiKP PKPdf 15 16 00.2 -0.8
baz=319
WCI **Wyandotte Cave** 143.80 31 PKIKP PKPab 15 15 55.8 -2.2
HDBT **Hernando Brdge** 143.84 39 IAMs_20 IAMs_20 16 27 25.0
comp=Z,20µm,20.0s
HAL **Halifax** 143.88 0 IAMs_20 IAMs_20 16 26 49.7
comp=Z,27µm,21.0s
K57A **Scipio Center** 143.89 17 IAMs_20 IAMs_20 16 24 18.6
comp=Z,20µm,20.0s
I63A **Otisfield** 143.92 9 IAMs_20 IAMs_20 16 29 27.9
comp=Z,17µm,22.0s
HNH **Hanover** 143.96 11 IAMs_20 IAMs_20 16 24 48.2
comp=Z,26µm,22.0s
I62A **Tamworth** 143.97 10 IAMs_20 IAMs_20 16 21 35.3
comp=Z,18µm,22.0s
ACCN **Adirondack Com** 143.99 13 IAMs_20 IAMs_20 16 31 48.9
comp=Z,14µm,20.0s
L56A **Greenwood** 144.12 18 IAMs_20 IAMs_20 16 31 43.0
comp=Z,21µm,21.0s
N53A **Lisbon** 144.17 23 IAMs_20 IAMs_20 16 34 28.6
comp=Z,20µm,21.0s

T47A **Sharon Grove** 144.29 34 IAMs_20 IAMs_20 16 33 34.1
comp=Z,21µm,21.0s
R49A **Shelbyville** 144.32 30 IAMs_20 IAMs_20 16 23 37.4
comp=Z,21µm,20.0s
O52A **Adamsville** 144.36 25 IAMs_20 IAMs_20 16 30 47.8
comp=Z,21µm,22.0s
P51A **Williamsport** 144.36 27 IAMs_20 IAMs_20 16 29 17.1
comp=Z,23µm,22.0s
441A **DeRidder** 144.36 47 IAMs_20 IAMs_20 16 23 54.0
comp=Z,17µm,21.0s
O53A **New Philadelph** 144.50 24 IAMs_20 IAMs_20 16 18 53.4
comp=Z,18µm,22.0s
O53A **New Philadelph** 144.50 24 PKiKP **PKPab** **15 15 59.4 -1.1**
baz=329
WVT **Waverly** 144.50 35 **PKPab** **15 15 59.0 -1.7**
WVT IAMs_20 IAMs_20 16 32 13.0
comp=Z,19µm,21.0s
WVT **Waverly** 144.50 35 PKiKP **PKPab** **15 15 59.2 -1.5**
baz=315
WVT **Waverly** 144.50 35 PKiKP **PKPab** **15 15 59.0 -1.7**
WVT MLR MLR
comp=Z,19µm,21.0s
BINY **Binghamton** 144.53 16 IAMs_20 IAMs_20 16 35 23.5
comp=Z,25µm,20.0s
BINY **Binghamton** 144.53 16 PKiKP **PKPab** **15 15 59.4 -1.1**
baz=338
TLIG **Tlapa** 144.56 72 IAMs_20 IAMs_20 16 21 19.5
comp=Z,27µm,21.0s
Q51A **Peebles** 144.60 27 IAMs_20 IAMs_20 16 28 41.6
comp=Z,21µm,21.0s
SPB **Sao Paulo** 144.61 206 PKPbc 15 16 01.7 +0.1
SPB IAMs_20 IAMs_20 16 12 16.7
comp=Z,26µm,20.0s
TRY **Troy** 144.61 13 IAMs_20 IAMs_20 16 28 44.4
comp=Z,21µm,22.0s
P52A **Corning** 144.64 25 PKiKP **PKPab** **15 15 59.7 -1.4**
baz=327
OXF **Oxford** 144.67 39 IAMs_20 IAMs_20 16 20 00.8
comp=Z,21µm,22.0s
OXF **Oxford** 144.67 39 PKiKP **PKPab** **15 15 59.3 -2.0**
baz=312
R50A **Paris** 144.74 29 IAMs_20 IAMs_20 16 34 59.4
comp=Z,25µm,21.0s
L59A **Walton** 144.79 15 IAMs_20 IAMs_20 16 30 11.3
comp=Z,20µm,20.0s
O54A **Avella** 144.88 23 IAMs_20 IAMs_20 16 21 59.5
comp=Z,21µm,22.0s
M57A **Sunshine Farm,** 144.98 18 IAMs_20 IAMs_20 16 23 49.8
comp=Z,22µm,20.0s
CPUP **Villa Florida** 145.00 189 PKPbc **PKPdf** **15 16 03.2 -0.3**
comp=Z,218nm,0.8s,baz=166,slow=2.8,SNR=243
CPUP SKPbc **SKiKP** **15 19 45.5 +3.4**
comp=Z,10nm,0.8s,baz=130,slow=3.9,SNR=0.9
Y45A **Yeager Farm, C** 145.00 40 IAMs_20 IAMs_20 16 17 18.9
comp=Z,24µm,22.0s
P53A **Whipple** 145.07 25 IAMs_20 IAMs_20 16 28 50.7
comp=Z,23µm,22.0s
L61B **Northampton** 145.09 12 IAMs_20 IAMs_20 16 27 23.1
comp=Z,16µm,22.0s
L61B **Northampton** 145.09 12 PKiKP **PKPbc** **15 16 00.5 -2.1**
baz=344
Q52A **Bidwell** 145.14 26 IAMs_20 IAMs_20 16 35 15.6
comp=Z,27µm,21.0s
KSPA **Keystone Colle** 145.18 16 IAMs_20 IAMs_20 16 27 57.9
comp=Z,26µm,22.0s
HRV **Adam Dziewonsk** 145.25 11 **PKPbc** **15 16 01.7 -1.4**
HRV **Adam Dziewonsk** 145.25 11 IAMs_20 IAMs_20 16 31 04.4
comp=Z,20µm,21.0s
HRV **Adam Dziewonsk** 145.25 11 PKiKP **PKPbc** **15 16 01.6 -1.4**
baz=346
HRV **Adam Dziewonsk** 145.25 11 PKiKP **PKPbc** **15 16 01.7 -1.4**
HRV MLR MLR
comp=Z,20µm,21.0s
V48A **Smith Brothers** 145.35 35 IAMs_20 IAMs_20 16 35 55.4
comp=Z,22µm,20.0s
U49A **Red Boiling Sp** 145.36 33 IAMs_20 IAMs_20 16 22 34.3
comp=Z,21µm,22.0s
CLTN **Cedars of Leba** 145.37 34 IAMs_20 IAMs_20 16 29 01.8
comp=Z,17µm,21.0s
SSPA **Standing Stone** 145.38 20 **PKPbc** **15 16 01.0 -2.6**
SSPA **Standing Stone** 145.38 20 IAMs_20 IAMs_20 16 27 22.3
comp=Z,24µm,22.0s
SSPA **Standing Stone** 145.38 20 PKiKP **PKPbc** **15 16 01.8 -1.8**
baz=334
VBMS **Vicksburg** 145.40 43 PKiKP **PKPbc** **15 16 03.4 -0.4**
baz=308
MCWV **Mont Chateau** 145.54 23 PKiKP **PKPdf** **15 16 02.6 -1.5**
baz=330
N58A **Sunbury** 145.56 18 IAMs_20 IAMs_20 16 26 48.1
comp=Z,26µm,22.0s
S51A **Beattyville** 145.60 29 IAMs_20 IAMs_20 16 32 38.2
comp=Z,19µm,21.0s
Q54A **Coxs Mills** 145.73 25 IAMs_20 IAMs_20 16 34 13.0
comp=Z,28µm,20.0s
UCCT **U. Connecticut** 145.81 12 IAMs_20 IAMs_20 16 33 10.2
comp=Z,21µm,20.0s
X48A **Hartselle** 146.14 37 IAMs_20 IAMs_20 16 20 00.5
comp=Z,19µm,20.0s
PAL **Palisades** 146.19 14 PKiKP **PKPdf** **15 16 04.2 -0.8**
baz=341
M63A **Gales Ferry** 146.22 12 IAMs_20 IAMs_20 16 31 38.1
comp=Z,25µm,20.0s
SWET **Sewanee** 146.23 34 IAMs_20 IAMs_20 16 29 36.6
comp=Z,22µm,21.0s
Q56A **Snyder Ridge,** 146.33 23 IAMs_20 IAMs_20 16 24 50.7
comp=Z,21µm,22.0s
M65A **Busby, Falmout** 146.33 10 IAMs_20 IAMs_20 16 32 58.9
comp=Z,20µm,19.0s
M65A **Busby, Falmout** 146.33 10 PKiKP **PKPdf** **15 16 05.4 +0.1**
baz=347
P57A **Homestead Farm** 146.36 21 IAMs_20 IAMs_20 16 32 19.5
comp=Z,20µm,20.0s
Z47A **Carrollton** 146.37 39 IAMs_20 IAMs_20 16 18 33.0
comp=Z,27µm,22.0s
TZTN **Tazewell** 146.49 30 IAMs_20 IAMs_20 16 35 55.8
comp=Z,24µm,22.0s
TZTN **Tazewell** 146.49 30 PKiKP **PKPdf** **15 16 05.1 -0.7**
baz=322
W50A **Signal Mountai** 146.59 34 IAMs_20 IAMs_20 16 18 04.0
comp=Z,22µm,22.0s
346A **Big Creek Wild** 146.61 43 IAMs_20 IAMs_20 16 34 23.0
comp=Z,16µm,21.0s
R55A **Marlinton** 146.62 24 IAMs_20 IAMs_20 16 32 36.5
comp=Z,21µm,20.0s
SDMD **Soldier's Deli** 146.83 19 IAMs_20 IAMs_20 16 31 56.6
comp=Z,17µm,22.0s
Y49A **Blount Mountai** 146.93 37 IAMs_20 IAMs_20 16 29 04.4
comp=Z,20µm,20.0s
LRAL **Lakeview Retre** 147.14 38 IAMs_20 IAMs_20 16 22 33.3
comp=Z,25µm,21.0s
LRAL **Lakeview Retre** 147.14 38 PKiKP **PKPdf** **15 16 06.2 -0.7**
baz=313
BLA **Blacksburg** 147.40 26 PKiKP **PKPdf** **15 16 05.7 -1.6**
baz=328
S57A **Dark Hollow, R** 147.53 23 IAMs_20 IAMs_20 16 31 28.7
comp=Z,25µm,21.0s
CBN **Corbin Frederi** 147.73 21 IAMs_20 IAMs_20 16 26 54.7
comp=Z,27µm,22.0s
CBN **Corbin Frederi** 147.73 21 PKiKP **PKPdf** **15 16 06.8 -0.9**
baz=334
BG3 **Lake Jocassee** 148.01 31 IAMs_20 IAMs_20 16 19 44.3
comp=Z,18µm,22.0s
BRAL **Brewton** 148.35 41 IAMs_20 IAMs_20 16 19 36.8
comp=Z,26µm,21.0s
BRAL **Brewton** 148.35 41 PKiKP **PKPdf** **15 16 08.2 -0.8**
baz=311
LVC **Limon Verde** 148.72 170 **PKPbc** **15 16 12.9 -1.2**
LVC **Limon Verde** 148.72 170 PKP2 **PKPbc** **15 16 12.9 -1.2**
GOGA **Godfrey** 148.94 34 PKiKP **PKPdf** **15 16 10.1 +0.2**
baz=319
HODGE **Hodges** 148.95 31 IAMs_20 IAMs_20 16 36 04.2
comp=Z,20µm,21.0s
RCBR **Riachuelo** 149.19 244 IAMs_20 IAMs_20 16 16 47.0
comp=Z,24µm,20.0s
W57A **Gilead** 149.31 27 IAMs_20 IAMs_20 16 27 58.1
comp=Z,24µm,22.0s
PB09 **IPOC Station P** 149.46 169 **PKPbc** **15 16 14.6 -1.1**
BIRD **Birdtown, Kers** 149.51 29 IAMs_20 IAMs_20 16 33 34.6
comp=Z,21µm,22.0s
451A **Vernon** 149.56 40 IAMs_20 IAMs_20 16 17 29.6
comp=Z,18µm,21.0s
CNNC **Cliffs of the** 150.14 24 PKiKP **PKPdf** **15 16 11.6 -0.1**
baz=330
553A **Crawfordville** 150.68 39 IAMs_20 IAMs_20 16 28 36.2
comp=Z,19µm,22.0s
NHSC **New Hope** 150.89 30 PKiKP **PKPdf** **15 16 13.0 0.0**
baz=324
BDFB **Brasilia** 151.70 213 PKP **PKPdf** **15 16 14.8 0.0**
comp=Z,13nm,0.8s,baz=205,slow=1.5,SNR=21
DWPF **Disney Wildern** 154.00 39 IAMs_20 IAMs_20 16 39 51.1
comp=Z,21µm,20.0s
DWPF **Disney Wildern** 154.00 39 PKiKP **PKPdf** **15 16 17.8 +0.1**
baz=316
LPAZ **La Paz** 155.04 169 PKP **PKPdf** **15 16 20.6 +0.4**
comp=Z,11nm,0.9s,baz=123,slow=1.2,SNR=30
SIV **San Ignacio** 155.68 185 PP **PP** **15 20 19.5 -1.9**
comp=Z,9.4nm,0.8s,baz=57,slow=16,SNR=1.6
TGUH **Tegucigalpa,Un** 155.89 74 IAMs_20 IAMs_20 16 20 53.1
comp=Z,18µm,20.0s
BBSR **BB Station** 156.10 3 IAMs_20 IAMs_20 16 41 53.2
comp=Z,19µm,21.0s
CNGN **Cerro Negro** 156.70 78 IAMs_20 IAMs_20 16 33 56.7
comp=Z,17µm,22.0s
ACON **Acoyapa** 158.25 79 IAMs_20 IAMs_20 16 24 13.8
comp=Z,23µm,21.0s
ESPN **Las Esperanzas** 159.06 78 IAMs_20 IAMs_20 16 33 05.3
comp=Z,15µm,20.0s
HDC **Heredia** 159.46 84 IAMs_20 IAMs_20 16 24 38.3
comp=Z,21µm,20.0s
SDDR **Presa de Saban** 166.96 35 *e*P PKPdf 15 16 21.7 -10
ROSC **El Rosal** 168.56 107 PKP **PKPdf** **15 16 33.6 -0.3**
comp=Z,6.6nm,0.5s,baz=314,slow=3.7,SNR=14
MDP **Montagnes des** 168.86 254 PKP **PKPdf** **15 16 33.5 -0.1**
comp=Z,14nm,1.0s,baz=106,slow=3.2,SNR=4.8
MDP PKPab **PKPab** **15 17 45.1 +0.7**
comp=Z,22nm,0.9s,baz=116,slow=1.9,SNR=4.4
AOPR **Arecibo Observ** 169.56 18 *e*P **PKPdf** **15 16 27.7 -6.2**
ANWB **Willy Bob** 170.64 351 *e*P **PKPdf** **15 16 30.7 -3.8**
ANBD **Bethesda, Anti** 171.25 350 *e*P **PKPdf** **15 16 27.7 -7.1**
MBWH 171.61 352 *e*P PKPdf 15 16 24.7 -10
TBG **Guadaloupe-3** 172.39 347 *e*P PKPdf 15 16 25.1 -10
SDV **Santo Domingo** 172.80 85 PKPab **PKPab** **15 18 02.4 +0.3**
comp=Z,24nm,0.8s,baz=44,slow=15,SNR=1.6
SVN **Savane Anatole** 173.23 342 *e*P **PKPdf** **15 16 30.7 -5.1**
SLBI **Saint Lucia, B** 173.92 337 *e*P **PKPdf** **15 16 28.9 -7.1**
BBGH **Gun Hill** 173.97 322 *e*P **PKPdf** **15 16 30.7 -5.4**
SLAC **Saint Lucia, A** 174.01 336 *e*P **PKPdf** **15 16 29.7 -6.3**
SVB **Belmont** 174.72 337 *e*P **PKPdf** **15 16 29.9 -6.4**
SVT **Saint Vincent** 174.81 336 *e*P **PKPdf** **15 16 33.0 -3.3**
BAUV **El Baul** 175.34 83 **PKPdf** **15 16 34.2 -2.3**
BAUV **El Baul** 175.34 83 *e*P PKPdf 15 16 27.7 -8.8
GCMP **Grenada, Carri** 175.50 335 *e*P **PKPdf** **15 16 31.1 -5.4**
GRHS **Sauteurs** 175.82 336 *e*P PKPdf 15 16 24.7 -12
GRW **Mount Saint Ca** 175.89 336 *e*P PKPdf 15 16 24.7 -12
GRGR **Grenville** 175.91 336 *e*P PKPdf 15 16 27.7 -8.9
TRN **Trinidad (W)** 177.03 319 *e*P **PKPdf** **15 16 34.6 -2.3**
PCRV **Puerto La Cruz** 177.82 35 PKP **PKPdf** **15 16 37.5 +0.5**
comp=Z,6.2nm,0.9s,baz=321,slow=2.9,SNR=1.3
PCRV PP **PP** **15 22 17.9 +1.7**
comp=Z,4.5nm,0.8s,baz=218,slow=11,SNR=1.1

*ISN **19** 14:57:50.8±0.6,34.˚66N×46.˚23E, h6km±6km, ML3.5*
*TEH **19** 14:57:51.9,34.˚62N×46.˚27E, h7km±64km, ML3.2*
**ISC 19 14:57:52.5±0.9,34.˚61N±0.˚03×46.˚25E±0.˚03, h10km, n25,**
**σ1°38/29, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| IDHR | **Dehrash** | 0.14 | 52 | Pg | **Pg** | 14 57 55.3 | -0.7 |
| IGHG | **Ghaleghazi** | 0.39 | 136 | Pg | **Pb** | 14 58 00.4 | -1.2 |
| KGS1 | **Ghasr-e-Shirin** | 0.55 | 259 | Pg | **Pg** | 14 58 02.9 | -0.4 |
| GLG1 | **Gilan-e-Gharb** | 0.57 | 210 | Pg | **Pg** | 14 58 03.4 | -0.1 |
| ILIN | **Lien** | 0.66 | 62 | Pg | **Pg** | 14 58 04.4 | -1.0 |
| KCHF | **Cheshme Sefid,** | 0.73 | 117 | Pg | **Pg** | 14 58 06.1 | -0.7 |
| ILBA | **Ilam Banvizeh** | 0.98 | 182 | Pg | **Pb** | 14 58 11.2 | -0.5 |
| SNQR | **Sonqor, Kerman** | 1.16 | 77 | Pg | **Pg** | 14 58 13.6 | -1.3 |
| IBZA | **Bozab** | 1.34 | 96 | Pg | **Pg** | 14 58 17.5 | -0.8 |
| IBDR | **Badra** | 1.52 | 190 | *e*Pn | **Pg** | 14 58 21.0 | -0.7 |
| IBDR | | | | *e*Sn | **Sg** | 14 58 42.5 | +1.1 |
| IBDR | | | | AML | AML | 14 58 47.4 | |
| | comp=E,836nm,0.3s | | | | | | |
| IBDR | | | | AML | AML | 14 58 50.3 | |
| | comp=N,353nm,0.7s | | | | | | |
| SDS1 | **Sardasht. Az.** | 1.66 | 338 | Pg | **Pb** | 14 58 22.4 | -0.8 |
| IKFM | **Kafar-mosalman** | 1.71 | 129 | Pg | **Pb** | 14 58 24.0 | -0.1 |
| IKRK | **Kirkuk** | 1.75 | 297 | *e*Pn | **Pn** | 14 58 23.0 | 0.0 |
| IKRK | | | | *e*Sn | **Sb** | 14 58 47.0 | +0.1 |
| IKRK | | | | AML | AML | 14 58 55.1 | |
| | comp=N,880nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 14 58 58.6 | |
| | comp=E,759nm,0.3s | | | | | | |
| IDOB | **Doab** | 1.80 | 117 | Pg | **Pb** | 14 58 25.4 | -0.2 |
| HSAM | **Samen** | 1.99 | 101 | Pn | **Pb** | 14 58 28.3 | -0.7 |
| BHD | **Baghdad** | 2.05 | 230 | *e*Pn | **Pn** | 14 58 28.0 | +1.0 |
| BHD | | | | *e*Sn | **Sb** | 14 58 55.0 | -0.3 |
| MAHB | **Mahabad** | 2.20 | 349 | Pn | **Pb** | 14 58 31.6 | -0.9 |
| RAFI | **Al-Rafai** | 2.88 | 182 | *e*Pn | **Pn** | 14 58 40.0 | +1.5 |
| RAFI | | | | *e*Sn | **Sb** | 14 59 16.0 | -3.3 |
| IAZR | **Azarshahr** | 3.07 | 356 | Pn | **Pn** | 14 58 43.0 | +1.7 |
| ISHB | **Shabestar** | 3.70 | 352 | Pn | **Pn** | 14 58 52.7 | +2.2 |
| IPIR | **Pirpir** | 4.32 | 115 | Pn | **Pn** | 14 59 00.0 | +1.4 |
| ZNGN | **Zangian** | 4.59 | 122 | Pn | **Pn** | 14 59 04.4 | +2.2 |
| KRSH | **Karshahi** | 4.92 | 96 | Pn | **Pn** | 14 59 09.0 | +2.3 |
| ISFB | **Sefidab** | 4.96 | 91 | Pn | **Pn** | 14 59 08.4 | +1.3 |
| IZEF | **Zefreh** | 5.35 | 107 | Pn | **Pn** | 14 59 14.6 | +2.0 |

*IDC **19** 15:04:00.2±0.5,8.˚25S×116.˚60E, h0km, mb4.8/21, mbtmp4.8/22, ML4.3/1, Error ellipse: s-maj=20.6km s-min=13.1km az=84.0*
*NEIC **19** 15:04:02.9±1.4,8.˚28S±0.˚09×116.˚59E±0.˚10, h10km±1km, mb5.6/25, Error ellipse: s-maj=17.7km s-min=13.5km az=57.0*
**ISC 19 15:04:02.2±0.4,8.˚23S±0.˚06×116.˚64E±0.˚07, h10km, n67,**
**σ0°98/69, mb5.3/29, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JAGI | **Jajag, Banyuwa** | 2.47 | 264 | Pn | **Pn** | 15 04 43.5 | +0.9 |
| KAPI | **Kappang** | 4.45 | 44 | Pn | **Pn** | 15 05 09.8 | +0.1 |
| KAPI | **Kappang** | 4.45 | 44 | Pn | **Pn** | 15 05 09.3 | -0.5 |
| | 16nm,0.3s,baz=196,slow=6.7,SNR=6.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | 15 05 59.2 | -2.4 |
| | 58nm,0.3s,baz=60,slow=24,SNR=8.1 | | | | | | |
| KAPI | | | | Lg | Lg | 15 06 18.9 | |
| | 43nm,0.3s,baz=247,slow=24,SNR=2.2 | | | | | | |
| | 52nm,0.3s | | | | | | |
| MMRI | **Maumere** | 5.55 | 95 | Pn | **Pn** | 15 05 28.2 | +3.2 |
| UGM | **Wanagama** | 6.07 | 273 | Pn | **Pn** | 15 05 32.8 | +0.7 |
| SMRI | **Semarang** | 6.25 | 280 | Pn | **Pn** | 15 05 34.7 | 0.0 |
| SBUM | **Sibu** | 11.49 | 337 | Pn | **Pn** | 15 06 48.0 | +1.5 |
| MBWA | **Marble Bar** | 13.20 | 167 | Pn | **Pn** | 15 07 09.1 | -0.8 |
| PSA00 | **Pilbara Seismi** | 13.62 | 167 | Pn | **Pn** | 15 07 14.8 | -0.8 |
| KKM | **Kota Kinabalu** | 14.19 | 358 | P | **P** | 15 07 31.8 | +0.8 |
| WRA | **Warramunga Arr** | 20.72 | 126 | P | **P** | 15 08 42.1 | -0.9 |
| | 84nm,0.8s,baz=305,slow=12,SNR=2.2 | | | | | | |
| | 84nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | 22.57 | 135 | P | **P** | 15 09 02.1 | -0.8 |
| | 122nm,0.9s,baz=310,slow=8.4,SNR=4.5 | | | | | | |
| ASAR | | | | PcP | **PcP** | 15 12 55.4 | -1.1 |
| | 12nm,0.8s,baz=337,slow=1.6,SNR=2.2 | | | | | | |
| | 122nm,0.9s | | | | | | |
| TOO | **Toolangi** | 39.18 | 143 | P | **P** | 15 11 31.6 | +1.1 |
| SHL | **Shillong** | 41.34 | 325 | P | **P** | 15 11 49.6 | +0.9 |
| SHL | | | | IAmb | IAmb | 15 11 56.7 | |
| | comp=Z,262nm,1.7s | | | | | | |
| JNU | **Nakatsue** | 43.30 | 18 | P | **P** | 15 12 05.8 | +1.4 |
| JNU | | | | IAmb | IAmb | 15 12 31.7 | |
| | comp=Z,212nm,2.0s | | | | | | |
| JNU | **Nakatsue** | 43.30 | 18 | P | **P** | 15 12 04.7 | +0.3 |
| | comp=Z,10nm,0.9s,baz=155,slow=14,SNR=1.9 | | | | | | |
| | comp=Z,10nm,0.9s | | | | | | |
| TAU | **Tasmania Unive** | 43.79 | 147 | P | **P** | 15 12 08.6 | +0.3 |
| KSRS | **Korea Array** | 46.66 | 12 | P | **P** | 15 12 30.1 | -0.9 |
| | comp=Z,4.8nm,0.9s,baz=187,slow=9.7,SNR=2.8 | | | | | | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| KOUNC | **Koumac, New Ca** | 47.58 | 110 | P | **P** | 15 12 39.2 | +0.6 |
| MAJO | **Matsushiro** | 48.93 | 23 | P | **P** | 15 12 48.7 | 0.0 |
| MAJO | | | | IAmb | IAmb | 15 12 50.6 | |
| | comp=Z,143nm,2.0s | | | | | | |
| MJAR | **Matsushiro Arr** | 48.93 | 23 | P | **P** | 15 12 48.3 | -0.4 |
| | comp=Z,4.7nm,0.9s,baz=195,slow=8.2,SNR=4.2 | | | | | | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| DZM | **Mont Dzumac** | 49.78 | 112 | P | **P** | 15 12 56.4 | +0.7 |
| DZM | | | | IAmb | IAmb | 15 13 06.2 | |
| | comp=Z,227nm,2.0s | | | | | | |
| DZM | **Mont Dzumac** | 49.78 | 112 | P | **P** | 15 12 55.2 | -0.4 |
| | comp=Z,23nm,0.9s,baz=279,slow=5.5,SNR=4.7 | | | | | | |
| | comp=Z,23nm,0.9s | | | | | | |
| JSD | **Sado** | 50.26 | 22 | P | **P** | 15 13 00.3 | +1.5 |
| JSD | | | | IAmb | IAmb | 15 13 18.5 | |
| | comp=Z,116nm,1.9s | | | | | | |
| LIFNC | **LIFOU** | 50.35 | 110 | P | **P** | 15 12 60.0 | +0.1 |
| MDJ | **Mudanjiang** | 53.88 | 11 | P | **P** | 15 13 26.7 | +1.1 |
| USRK | **Ussuriysk Ar.** | 54.00 | 14 | P | **P** | 15 13 27.3 | +0.8 |
| | comp=Z,12nm,1.0s,baz=190,slow=6.9,SNR=7.0 | | | | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| SONM | **Songino Array** | 56.55 | 352 | P | **P** | 15 13 45.7 | +0.6 |
| SONM | **Songino Array** | 56.55 | 352 | P | **P** | 15 13 45.1 | +0.1 |
| | comp=Z,9.1nm,0.8s,baz=168,slow=9.4,SNR=3.9 | | | | | | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| ASAJ | **Asahikawa** | 57.15 | 22 | P | **P** | 15 13 50.1 | +0.9 |
| | comp=Z,12nm,0.7s,baz=196,slow=8.3,SNR=10 | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | |
| JKA | **Kamikawa-asahi** | 57.16 | 22 | P | **P** | 15 13 49.8 | +0.6 |
| JKA | | | | IAmb | IAmb | 15 15 43.3 | |
| | comp=Z,192nm,2.0s | | | | | | |
| WHZ | **Wether Hill Ro** | 57.73 | 140 | P | **P** | 15 13 53.3 | -0.1 |
| WHZ | | | | IAmb | IAmb | 15 15 09.8 | |
| | comp=Z,87nm,1.4s | | | | | | |
| CASY | **Casey** | 58.12 | 183 | P | **P** | 15 13 55.3 | -0.4 |
| LBZ | **Lake Benmore** | 58.61 | 138 | P | **P** | 15 13 59.2 | -0.4 |
| LBZ | | | | IAmb | IAmb | 15 14 41.4 | |
| | comp=Z,114nm,1.5s | | | | | | |
| RPZ | **Rata Peaks** | 58.96 | 137 | P | **P** | 15 14 01.9 | -0.1 |
| RPZ | | | | IAmb | IAmb | 15 14 09.6 | |
| | comp=Z,60nm,1.0s | | | | | | |
| THZ | **Tophouse** | 59.63 | 134 | P | **P** | 15 14 06.9 | +0.2 |
| YSS | **Yuzh-Sakhalins** | 59.65 | 20 | P | **P** | 15 14 07.2 | +0.6 |
| YSS | | | | IAmb | IAmb | 15 14 14.3 | |
| | comp=Z,60nm,1.3s | | | | | | |
| HIZ | **Hauiti** | 60.19 | 130 | P | **P** | 15 14 11.5 | +1.0 |
| MRZ | **Mangatainoka R** | 61.26 | 132 | P | **P** | 15 14 17.3 | -0.6 |
| BKZ | **Black Stump Fm** | 61.58 | 130 | P | **P** | 15 14 19.7 | -0.4 |
| URZ | **Urewera** | 61.85 | 129 | P | **P** | 15 14 20.9 | -1.0 |
| | comp=Z,12nm,0.6s,baz=292,slow=2.8,SNR=8.4 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| MK31 | **Makanchi Array** | 62.73 | 334 | P | **P** | 15 14 27.1 | -0.4 |
| MKAR | **Makanchi Array** | 62.73 | 334 | P | **P** | 15 14 27.3 | -0.3 |
| MKAR | **Makanchi Array** | 62.73 | 334 | P | **P** | 15 14 26.9 | -0.7 |
| | comp=Z,8.7nm,0.8s,baz=158,slow=6.5,SNR=6.1 | | | | | | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| KURBB | **Kurchatov Arra** | 67.26 | 335 | P | **P** | 15 14 55.7 | -1.2 |
| | comp=Z,5.0nm,0.9s,baz=148,slow=5.6,SNR=3.0 | | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ZAA0 | **Zalesovo Array** | 67.51 | 340 | P | **P** | 15 14 58.3 | -0.2 |
| ZAA0 | | | | IAmb | IAmb | 15 17 21.2 | |
| | comp=Z,64nm,1.6s | | | | | | |
| ZALV | **Zalesovo Beam** | 67.51 | 340 | P | **P** | 15 14 58.6 | +0.1 |
| ZALV | **Zalesovo Beam** | 67.51 | 340 | P | **P** | 15 14 57.6 | -0.9 |
| | comp=Z,5.2nm,0.7s,baz=146,slow=4.7,SNR=3.1 | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| MAW | **Mawson** | 69.17 | 199 | P | **P** | 15 15 08.2 | -0.5 |
| | comp=Z,21nm,0.9s,baz=34,slow=6.6,SNR=5.4 | | | | | | |
| | comp=Z,21nm,0.9s | | | | | | |
| PETK | **Petropavlovsk-** | 70.33 | 25 | P | **P** | 15 15 16.4 | +0.4 |
| | comp=Z,3.2nm,0.9s,baz=230,slow=4.4,SNR=1.2 | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| BVAR | **Borovoye Array** | 72.53 | 333 | P | **P** | 15 15 29.0 | -0.4 |
| | comp=Z,4.2nm,0.7s,baz=123,slow=5.3,SNR=1.8 | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| ABKAR | **Akbulak array** | 75.60 | 326 | P | **P** | 15 15 45.3 | -2.0 |
| AKTO | **Aktyubinsk** | 77.28 | 326 | P | **P** | 15 15 55.8 | -1.0 |
| | comp=Z,6.4nm,0.9s,baz=93,slow=5.9,SNR=2.2 | | | | | | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| QSPA | **South Pole Qui** | 81.76 | 180 | P | **P** | 15 16 21.1 | -0.2 |
| QSPA | **South Pole Qui** | 81.76 | 180 | P | **P** | 15 16 21.0 | -0.2 |
| | comp=Z,11nm,0.9s,baz=248,slow=13,SNR=2.0 | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | |
| BOSA | **Boshof** | 87.32 | 242 | P | **P** | 15 16 50.1 | 0.0 |
| | comp=Z,17nm,0.8s,baz=93,slow=6.2,SNR=9.6 | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | |
| SNAA | **Sanae** | 91.10 | 196 | P | **P** | 15 17 07.5 | +0.6 |
| | comp=Z,15nm,1.0s,baz=193,slow=6.0,SNR=9.0 | | | | | | |
| | comp=Z,15nm,1.0s | | | | | | |
| FINES | **FINESS Array B** | 97.43 | 331 | P | **P** | 15 17 35.0 | -0.9 |
| | comp=Z,2.9nm,0.8s,baz=113,slow=3.2,SNR=1.3 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| TORD | **Torodi Ar. Bea** | 116.03 | 281 | PKP | **PKPdf** | 15 22 44.9 | -1.6 |
| | comp=Z,3.0nm,0.6s,baz=50,slow=2.0,SNR=8.5 | | | | | | |
| NVAR | **Mina Array Bea** | 122.31 | 50 | PKP | **PKPdf** | 15 22 56.9 | -1.4 |
| | comp=Z,0.6nm,0.7s,baz=17,slow=0.9,SNR=1.2 | | | | | | |
| PDAR | **Pinedale Array** | 126.92 | 42 | PKP | **PKPdf** | 15 23 06.2 | -0.9 |
| | comp=Z,1.1nm,0.7s,baz=221,slow=2.0,SNR=2.2 | | | | | | |
| PLCA | **Paso Flores** | 130.83 | 173 | PKP | **PKPdf** | 15 23 14.0 | -0.5 |
| | comp=Z,2.2nm,1.0s,baz=140,slow=22,SNR=1.6 | | | | | | |
| CPUP | **Villa Florida** | 145.15 | 189 | PKPbc | **PKPbc** | 15 23 40.5 | +0.2 |
| | comp=Z,48nm,0.7s,baz=178,slow=1.9,SNR=32 | | | | | | |
| RCBR | **Riachuelo** | 149.26 | 244 | PKPbc | **PKPdf** | 15 23 50.9 | +2.7 |
| | comp=Z,3.6nm,0.9s,baz=63,slow=20,SNR=1.6 | | | | | | |
| BDFB | **Brasilia** | 151.83 | 213 | PKPbc | **PKPbc** | 15 23 58.0 | -0.5 |
| | comp=Z,9.3nm,0.5s,baz=62,slow=1.9,SNR=8.3 | | | | | | |
| LPAZ | **La Paz** | 155.19 | 169 | PKPbc | PKPdf | 15 24 06.6 | +9.0 |
| | comp=Z,4.4nm,1.0s,baz=157,slow=10,SNR=1.7 | | | | | | |
| LPAZ | | | | PKPab | **PKPab** | 15 24 21.9 | -0.2 |
| | comp=Z,10nm,0.8s,baz=235,slow=3.8,SNR=5.7 | | | | | | |
| SIV | **San Ignacio** | 155.83 | 185 | PKPab | **PKPab** | 15 24 22.7 | -1.4 |
| | comp=Z,7.1nm,0.8s,baz=219,slow=20,SNR=3.2 | | | | | | |

*IDC **19** 15:09:02.2±10.0, 17.˚94S×177.˚81W, h433km±111km, mb3.8/7, mbtmp4.6/7, Error ellipse: s-maj=49.2km s-min=29.7km az=41.0*
**ISC 19 15:09:02.6±1.8,17.˚9S±0.˚2×177.˚7W±0.˚3, h450km, n9,**
**σ0°86/9, mb4.0/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| URZ | **Urewera** | 20.75 | 192 | P | **P** | 15 13 11.0 | +0.3 |
| | 3.1nm,0.3s,baz=348,slow=3.5,SNR=10 | | | | | | |
| | 3.1nm,0.3s | | | | | | |
| CTA | **Charters Tower** | 34.12 | 261 | P | **P** | 15 15 08.2 | -0.4 |
| | 6.5nm,1.1s,baz=117,slow=11,SNR=1.8 | | | | | | |
| | 6.5nm,1.1s | | | | | | |
| STKA | **Stephens Creek** | 39.22 | 241 | P | **P** | 15 15 51.4 | +0.6 |
| | 60nm,1.1s,baz=88,slow=8.0,SNR=5.4 | | | | | | |
| | 60nm,1.1s | | | | | | |
| WRA | **Warramunga Arr** | 45.31 | 259 | P | **P** | 15 16 38.5 | -0.7 |
| | 2.6nm,0.4s,baz=92,slow=7.5,SNR=20 | | | | | | |
| | 2.6nm,0.4s | | | | | | |
| ASAR | **Alice Springs** | 45.45 | 254 | P | **P** | 15 16 40.0 | -0.2 |
| | 31nm,0.5s,baz=88,slow=8.6,SNR=51 | | | | | | |
| | 31nm,0.5s | | | | | | |
| MJAR | **Matsushiro Arr** | 68.35 | 323 | P | **P** | 15 19 18.4 | +0.5 |
| | 1.3nm,0.5s,baz=162,slow=5.8,SNR=8.3 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| KSRS | **Korea Array** | 75.19 | 318 | P | **P** | 15 19 59.2 | +1.3 |
| | 0.6nm,0.6s,baz=128,slow=5.9,SNR=4.4 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AC01 | | | | *e*S | S | 15 13 07.2 | -3.9 | |
| AC01 | | | | IAML | | 15 13 40.2 | | |
| | comp=Z,38nm,1.6s | | | | | | | |

*CATAC **19** 15:11:56.1±0.5, 10.60N×83.05W, h10km, ML3.8*
*UCR **19** 15:11:59.1±0.6, 10.51N×83.08W, h23km±3km, MW3.6*
**ISC 19 15:11:56.3**±1.4**, 10.60N**±0.04×**83.03W**±0.07**, h20km, n26,**
**σ0.71/38, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRES** | **Siquirres** | **0.69** | **223** | *e*P | **Pn** | **15 12 11.1** | **+0.2** |
| **RVLA** | **Villa Bonita** | **0.74** | **228** | *e*P | **Pn** | **15 12 11.9** | **+0.4** |
| **VTCV** | **VTCV, Calle Va** | **0.92** | **228** | *e*P | **Pn** | **15 12 14.4** | **+0.1** |
| **CVTR** | **Volcan Turrial** | **0.92** | **231** | *e*P | **Pn** | **15 12 14.3** | **-0.2** |
| **CVTV** | **Tajo** | **0.93** | **230** | *e*P | **Pn** | **15 12 14.5** | **0.0** |
| **VTLA** | **Turrialba Volc** | **0.95** | **231** | *e*P | **Pn** | **15 12 14.7** | **-0.1** |
| **VICA** | **Volcano Irazu** | **1.01** | **233** | *e*P | **Pn** | **15 12 15.8** | **0.0** |
| **CVIMO** | **Finca Echandi** | **1.07** | **237** | *e*P | **Pn** | **15 12 16.7** | **+0.4** |
| **HDC3** | **Heredia 3** | **1.22** | **241** | *i* P | **Pb** | **15 12 19.3** | **+0.5** |
| HDC3 | | | | IAML | | 15 12 19.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| HDC3 | | | | *i* S | **Sb** | **15 12 33.8** | **-0.4** |
| **HDC** | **Heredia** | **1.22** | **241** | *i* P | **Pb** | **15 12 19.0** | **+0.2** |
| HDC | | | | *i* S | **Sb** | **15 12 34.1** | **-0.2** |
| HDC | | | | IAML | | 15 12 37.5 | |
| | comp=Z,920nm,1.0s | | | | | | |
| **HDC** | **Heredia** | **1.22** | **241** | *e*P | **Pb** | **15 12 19.4** | **+0.5** |
| **BUS1** | **Rivas** | **1.26** | **214** | *e*P | **Pn** | **15 12 19.4** | **+0.2** |
| BUS1 | | | | *e*S | **Sb** | **15 12 34.8** | **-0.9** |
| **LCR2** | **La Lucha 2** | **1.29** | **228** | *i* P | **Pb** | **15 12 19.9** | **-0.1** |
| LCR2 | | | | *i* S | **Sn** | **15 12 35.0** | **-1.1** |
| LCR2 | | | | IAML | | 15 12 36.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.29** | **228** | *e*P | **Pb** | **15 12 19.9** | **-0.1** |
| LCR2 | | | | *e*S | **Sn** | **15 12 35.2** | **-0.9** |
| **BELE** | **Belen** | **1.30** | **241** | *e*P | **Pb** | **15 12 20.3** | **+0.2** |
| **ABE2** | **San Pablo** | **1.35** | **229** | *e*P | **Pb** | **15 12 21.0** | **0.0** |
| **DRK0** | **Durika** | **1.35** | **189** | *i* P | **Pb** | **15 12 20.9** | **-0.1** |
| DRK0 | | | | *i* S | **Sn** | **15 12 37.6** | **0.0** |
| DRK0 | | | | IAML | | 15 12 39.2 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **1.35** | **275** | *i* P | **Pb** | **15 12 21.4** | **+0.4** |
| COVE | | | | *i* S | **Sn** | **15 12 37.6** | **+0.1** |
| COVE | | | | IAML | | 15 12 46.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **TCS1** | **Tacares** | **1.37** | **246** | *i* P | **Pb** | **15 12 21.9** | **+0.6** |
| TCS1 | | | | IAML | | 15 12 46.1 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **BLUN** | **Bluefields** | **1.57** | **332** | *i* P | **Pn** | **15 12 23.3** | **+0.2** |
| BLUN | | | | *i* S | **Sn** | **15 12 40.2** | **-2.7** |
| BLUN | | | | IAML | | 15 12 43.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **1.58** | **262** | *i* P | **Pb** | **15 12 25.3** | **+0.5** |
| SOCE | | | | *i* S | **Sb** | **15 12 44.2** | **-0.2** |
| SOCE | | | | IAML | | 15 12 48.1 | |
| | comp=Z,570nm,1.0s | | | | | | |
| **OCHAL** | **Ojochal** | **1.61** | **202** | *i* P | **Pb** | **15 12 25.9** | **+0.5** |
| OCHAL | | | | *i* S | **Sb** | **15 12 45.6** | **+0.2** |
| OCHAL | | | | IAML | | 15 12 46.6 | |
| | comp=Z,850nm,1.0s | | | | | | |
| **ARE1** | **Arenal 1** | **1.67** | **265** | *e*P | **Pb** | **15 12 26.9** | **+0.5** |
| **BRU2** | **Volcan** | **1.83** | **169** | *i* S | **Sn** | **15 12 50.0** | **+0.6** |
| **ACON** | **Acoyapa** | **2.50** | **303** | *i* P | **Pn** | **15 12 36.9** | **+1.0** |
| ACON | | | | *i* S | **Sn** | **15 13 06.4** | **+0.5** |
| ACON | | | | IAML | | 15 13 18.4 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **3.17** | **306** | *i* P | **Pn** | **15 12 46.5** | **+1.4** |
| BOAB | | | | *i* S | **Sb** | **15 13 29.1** | **-1.1** |
| BOAB | | | | IAML | | 15 13 40.2 | |
| | comp=Z,150nm,1.0s | | | | | | |

**ISC 19 15:12:14.6**±1.3**, 27.02N**±0.05×**111.41W**±0.08**, h10**km**, n9,**
**σ1.25/13, 2C-1D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SNIRB** | **San Nicol¡s** | **0.49** | **195** | *e*P | **Pg** | **15 12 25.1** | **+1.0** |
| SNIRB | | | | *e*S | **Sg** | **15 12 31.1** | **+0.5** |
| SNIRB | | | | ⇑*e* | | 15 12 36.1 | |
| SNIRB | | | | IAML | | 15 12 36.1 | |
| | comp=N,2μm,0.4s | | | | | | |
| SNIRB | | | | *e* | | 15 12 40.6 | |
| SNIRB | | | | IAML | | 15 12 40.6 | |
| | comp=E,2μm,0.3s | | | | | | |
| **SRIG** | **Santa Rosalia** | **0.80** | **292** | *e*P | **Pg** | **15 12 30.8** | **+0.7** |
| **NE77** | **Loreto B.C.S** | **1.00** | **178** | *e*P | **Pg** | **15 12 33.6** | **-0.1** |
| NE77 | | | | *e*S | **Sg** | **15 12 46.0** | **-0.8** |
| NE77 | | | | IAML | | 15 12 49.8 | |
| | comp=E,344nm,0.2s | | | | | | |
| NE77 | | | | ⇑*e* | | 15 12 49.8 | |
| **UAGRB** | **Rancho Ultima** | **1.45** | **175** | *e*P | **Pn** | **15 12 40.4** | **-0.5** |
| UAGRB | | | | *e*S | **Sn** | **15 12 57.3** | **-2.8** |
| **SFQB** | **San Francisqui** | **1.89** | **317** | *e*P | **Pn** | **15 12 46.4** | **-0.5** |
| **BKIRB** | **Bahia Kino** | **1.91** | **344** | *e*P | **Pn** | **15 12 47.0** | **-0.1** |
| **NE80** | **Navojoa** | **1.94** | **92** | *e*P | **Pn** | **15 12 47.5** | **-0.2** |
| **EVAR0** | **San Evaristo** | **2.19** | **163** | *e*P | **Pn** | **15 12 50.5** | **-0.5** |
| **SLBS** | **Sierra La Lagu** | **3.57** | **158** | *e*P | **Pn** | **15 13 11.8** | **+1.7** |
| SLBS | | | | *e*S | **Sn** | **15 13 53.7** | **+1.3** |

*IDC **19** 15:12:44.7±4.4, 18.12S×177.81W, h537km±49km, mb3.7/9, mbtmp4.5/10, Error ellipse: s-maj=32.1km s-min=23.4km az=85.0*
*NEIC **19** 15:12:47.0±1.2, 18.2S±0.1×177.8W±0.1, h560km±3km, mb4.9/34, Error ellipse: s-maj=18.5km s-min=16.4km az=126.0*
*NOU **19** 15:12:57.5, 18.79S×178.95W, h559km, mb4.8/11, Fiji Islands Region*
**ISC 19 15:12:48.4**±0.5**, 18.26S**±0.08×**177.79W**±0.09**, h600**km**,**
**n87, σ1.95/82, mb4.8/21, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.99** | **277** | P | **P** | **15 14 13.4** | **-0.5** |
| **MSVF** | **Nonsavu** | **3.99** | **277** | P | **P** | **15 14 12.9** | **-1.0** |
| **AFI** | **Afiamalu** | **7.22** | **54** | P | **P** | **15 14 36.0** | **-4.6** |
| **NIUE** | **Niue** | **7.50** | **97** | P | **P** | **15 14 39.9** | **-3.1** |
| **RAO** | **Raoul Island** | **10.95** | **181** | P | **P** | **15 15 15.5** | **-0.8** |
| **DVP** | **Devils Point** | **13.35** | **270** | P | **P** | **15 15 39.0** | **-1.8** |
| **LIFNC** | **LIFOU** | **14.34** | **257** | P | **P** | **15 15 47.2** | **-3.3** |
| **LIFNC** | **LIFOU** | **14.34** | **257** | P | **P** | **15 15 47.0** | **-3.4** |
| **PINNC** | **Pines Island,** | **14.50** | **250** | P | **P** | **15 15 49.1** | **-2.9** |
| **DZM** | **Mont Dzumac** | **15.28** | **253** | P | **P** | **15 15 58.7** | **-0.5** |
| **DZM** | **Mont Dzumac** | **15.28** | **253** | P | **P** | **15 15 57.8** | **-1.4** |
| **DZM** | **Mont Dzumac** | **15.28** | **253** | P | **P** | **15 15 58.0** | **-1.2** |
| | 8.6nm,0.6s,baz=111,slow=21,SNR=14 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.06** | **259** | P | **P** | **15 16 16.2** | **+0.7** |
| **KOUNC** | **Koumac, New Ca** | **17.06** | **259** | P | **P** | **15 16 15.4** | **-0.1** |
| **OUZ** | **Omahuta** | **18.55** | **203** | P | **P** | **15 16 32.0** | **+3.2** |
| **TOZ** | **Tahuroa Road** | **20.27** | **196** | P | **P** | **15 16 45.3** | **+0.9** |
| **URZ** | **Urewera** | **20.42** | **192** | P | **P** | **15 16 46.2** | **+0.5** |
| | 29nm,1.2s,baz=16,slow=20,SNR=2.6 29nm,1.2s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.05** | **193** | P | **P** | **15 17 09.8** | **+0.7** |
| **DSZ** | **Dennistion Nort** | **25.04** | **199** | P | **P** | **15 17 28.5** | **+1.7** |
| **EIDS** | **Eidsvold** | **29.70** | **251** | P | **P** | **15 18 07.8** | **+0.1** |
| **EIDS** | **Eidsvold** | **29.70** | **251** | P | **P** | **15 18 07.5** | **-0.2** |
| **WHZ** | **Wether Hill Ro** | **29.99** | **200** | P | **P** | **15 18 10.8** | **+1.0** |
| WHZ | | | | IAmb | IAmb | 15 19 05.0 | |
| | comp=Z,113nm,1.6s | | | | | | |
| **ARMA** | **Armidale** | **30.28** | **241** | P | **P** | **15 18 13.0** | **+0.4** |
| **ARMA** | **Armidale** | **30.28** | **241** | P | **P** | **15 18 13.3** | **+0.6** |
| **CAN** | **Canberra** | **33.96** | **233** | P | **P** | **15 18 44.4** | **+0.7** |
| **CAN** | **Canberra** | **33.96** | **233** | P | **P** | **15 18 44.4** | **+0.7** |
| **CTAO** | **Charters Tower** | **33.97** | **261** | P | **P** | **15 18 43.9** | **0.0** |
| **PMG** | **Port Moresby** | **35.10** | **280** | P | **P** | **15 18 53.3** | **0.0** |
| PMG | | | | IAmb | IAmb | 15 18 54.7 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **35.10** | **280** | P | **P** | **15 18 53.8** | **+0.5** |
| **TOO** | **Toolangi** | **37.41** | **231** | P | **P** | **15 19 12.8** | **+0.9** |
| **COEN** | **Coen** | **37.70** | **271** | P | **P** | **15 19 15.1** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.98** | **242** | P | **P** | **15 19 25.4** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.98** | **242** | P | **P** | **15 19 25.0** | **+0.3** |
| | comp=Z,19nm,1.0s,baz=92,slow=8.6,SNR=11 comp=Z,19nm,1.0s | | | | | | |
| **WAKE** | **Wake Island** | **40.31** | **337** | P | **P** | **15 19 35.1** | **-0.3** |
| **WAKE** | **Wake Island** | **40.31** | **337** | P | **P** | **15 19 36.4** | **+1.0** |
| **BBOO** | **Buckleboo** | **43.76** | **241** | P | **P** | **15 20 02.6** | **+0.3** |
| **AS31** | **Alice Springs** | **45.26** | **255** | P | **P** | **15 20 13.0** | **-1.0** |
| **ASAR** | **Alice Springs** | **45.27** | **255** | P | **P** | **15 20 12.7** | **-1.3** |
| **MJAR** | **Matsushiro Arr** | **68.54** | **323** | P | **P** | **15 22 52.4** | **+0.2** |
| | comp=Z,4.0nm,0.6s,baz=164,slow=5.8,SNR=23 comp=Z,4.0nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **68.54** | **323** | P | **P** | **15 22 52.2** | **-0.1** |
| **MAJO** | **Matsushiro** | **68.54** | **323** | P | **P** | **15 22 52.7** | **+0.5** |
| **MJB9** | **Matsu-Tunnel** | **68.54** | **323** | P | **P** | **15 22 52.9** | **+0.7** |
| **JMN** | **Monobe** | **69.24** | **318** | P | **P** | **15 22 57.9** | **+1.3** |
| **JKA** | **Kamikawa-asahi** | **71.86** | **331** | P | **P** | **15 23 12.6** | **+0.9** |
| JKA | | | | IAmb | IAmb | 15 24 48.6 | |
| | comp=Z,62nm,1.6s | | | | | | |
| **PET** | **Petropavlovsk** | **73.86** | **345** | P | **P** | **15 23 23.7** | **+0.9** |
| PET | | | | IAmb | IAmb | 15 24 00.4 | |
| | comp=Z,105nm,1.7s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **74.17** | **345** | P | **P** | **15 23 25.6** | **+1.0** |
| PEA0B | | | | IAmb | IAmb | 15 24 01.9 | |
| | comp=Z,125nm,1.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.17** | **345** | P | **P** | **15 23 25.6** | **+1.0** |
| **PETK** | **Petropavlovsk-** | **74.17** | **345** | P | **P** | **15 23 25.2** | **+0.7** |
| | comp=Z,5.7nm,0.7s,baz=112,slow=7.3,SNR=18 comp=Z,5.7nm,0.7s | | | | | | |
| **S12K** | **Black Hills** | **74.87** | **9** | P | **P** | **15 23 29.3** | **+0.9** |
| **KSRS** | **Korea Array** | **75.35** | **318** | P | **P** | **15 23 33.5** | **+2.0** |
| | comp=Z,1.3nm,0.6s,baz=130,slow=6.3,SNR=8.3 comp=Z,1.3nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.23** | **325** | P | **P** | **15 23 43.2** | **+1.5** |
| | comp=Z,0.8nm,0.4s,baz=126,slow=3.3,SNR=2.3 comp=Z,0.8nm,0.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.31** | **8** | P | P | 15 24 05.8 | +3.1 |
| **L18K** | **Granite Mounta** | **81.94** | **10** | P | P | 15 24 08.8 | +2.8 |
| L18K | | | | IAmb | IAmb | 15 26 04.1 | |
| | comp=Z,71nm,1.9s | | | | | | |
| **K17K** | **Iditarod** | **82.16** | **9** | P | P | 15 24 09.6 | +2.6 |
| **J16K** | **Anvik River** | **82.38** | **8** | P | P | 15 24 11.0 | +2.8 |
| **J17K** | **VABM Dome** | **82.69** | **8** | P | P | 15 24 12.3 | +2.6 |
| **GHO** | **Glory Hole Cre** | **83.01** | **13** | P | **P** | **15 24 13.3** | **+1.9** |
| GHO | | | | IAmb | IAmb | 15 27 14.6 | |
| | comp=Z,49nm,1.4s | | | | | | |
| **J18K** | **Innoko River** | **83.11** | **9** | P | **P** | **15 24 14.0** | **+2.2** |
| J18K | | | | IAmb | IAmb | 15 27 21.2 | |
| | comp=Z,52nm,1.9s | | | | | | |
| **K20K** | **Telida** | **83.44** | **11** | P | **P** | **15 24 15.4** | **+2.0** |
| **N25K** | **Chitina, Valde** | **83.88** | **15** | P | **P** | **15 24 17.9** | **+2.2** |
| N25K | | | | IAmb | IAmb | 15 27 05.5 | |
| | comp=Z,48nm,1.4s | | | | | | |
| **TMUT** | **Trail Mountain** | **84.45** | **46** | P | **P** | **15 24 20.2** | **+0.8** |
| **RND** | **Reindeer** | **84.48** | **13** | P | **P** | **15 24 20.6** | **+2.0** |
| RND | | | | IAmb | IAmb | 15 27 20.5 | |
| | comp=Z,45nm,1.4s | | | | | | |
| **M27K** | **Edge Creek, AK** | **85.21** | **16** | P | **P** | **15 24 24.2** | **+1.9** |
| M27K | | | | IAmb | IAmb | 15 27 00.3 | |
| | comp=Z,58nm,1.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.69** | **57** | P | **P** | **15 24 26.9** | **+1.6** |
| | comp=Z,1.1nm,0.8s,baz=235,slow=2.9,SNR=2.1 comp=Z,1.1nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.80** | **12** | P | **P** | **15 24 26.3** | **+1.5** |
| CCB | | | | IAmb | IAmb | 15 27 10.9 | |
| | comp=Z,29nm,1.6s | | | | | | |
| **IMAR** | **Indian Mountai** | **85.92** | **10** | P | **P** | **15 24 27.4** | **+2.0** |
| **IL31** | | **86.09** | **13** | P | **P** | **15 24 27.0** | **+0.8** |
| IL31 | | | | IAmb | IAmb | 15 26 47.3 | |
| | comp=Z,32nm,1.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.09** | **13** | P | **P** | **15 24 27.9** | **+1.7** |
| **ILAR** | **Eielson Array** | **86.09** | **13** | P | **P** | **15 24 27.8** | **+1.5** |
| | comp=Z,0.8nm,0.4s,baz=221,slow=4.9,SNR=7.1 comp=Z,0.8nm,0.4s | | | | | | |
| **E19K** | **Redstone River** | **86.80** | **8** | P | **P** | **15 24 31.7** | **+2.2** |
| **ULM** | **Lac du Bonnet** | **98.80** | **40** | P | **P** | **15 25 26.1** | **+1.3** |
| | comp=Z,1.9nm,0.7s,baz=269,slow=19,SNR=1.0 comp=Z,1.9nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.49** | **321** | PKP | **PKiKP** | **15 30 26.8** | **+0.1** |
| | comp=Z,1.2nm,0.5s,baz=68,slow=3.9,SNR=2.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.76** | **350** | PKP | **PKiKP** | **15 30 46.6** | **+2.0** |
| | comp=Z,4.9nm,1.0s,baz=51,slow=1.7,SNR=5.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.44** | **315** | PKPbc | **PKiKP** | **15 31 22.4** | **-1.3** |
| | comp=Z,1.9nm,0.5s,baz=114,slow=3.5,SNR=8.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.83** | **303** | PKPbc | **PKPab** | **15 31 26.4** | **-1.6** |
| | comp=Z,3.6nm,0.5s,baz=65,slow=5.9,SNR=4.8 | | | | | | |
| **GERES** | **GERESS Array B** | **148.10** | **346** | PKPbc | **PKPab** | **15 31 29.2** | **-3.5** |
| | comp=Z,2.7nm,0.8s,baz=157,slow=7.2,SNR=7.7 | | | | | | |
| **LESA** | **Schwarzleotal** | **149.67** | **346** | *i* PKP | **PKPab** | **15 31 33.4** | **-5.9** |
| | comp=Z,0.5nm,0.2s | | | | | | |
| **KBA** | **Konbreinsper** | **149.83** | **345** | *e*PKP | **PKPab** | **15 31 33.9** | **-6.1** |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **WATA** | **Walderalm** | **150.00** | **347** | *i* PKP | **PKiKP** | **15 31 34.1** | **+1.3** |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **150.05** | **347** | *i* PKP | **PKiKP** | **15 31 34.3** | **+1.3** |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **150.09** | **348** | *i* PKP | **PKiKP** | **15 31 34.3** | **+1.3** |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **MYKA** | **Terra Mystica** | **150.17** | **344** | *i* PKP | **PKiKP** | **15 31 33.6** | **+0.5** |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.34** | **346** | *e*PKP | **PKiKP** | **15 31 34.6** | **+1.1** |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **DAVA** | **Damuels** | **150.37** | **349** | *i* PKP | **PKPab** | **15 31 35.8** | **-6.5** |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **FETA** | **Feichten** | **150.47** | **348** | *e*PKP | **PKiKP** | **15 31 35.1** | **+1.3** |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.86** | **349** | PKPbc | **PKiKP** | **15 31 36.8** | **+2.1** |
| | comp=Z,4.8nm,0.7s,baz=278,slow=2.9,SNR=9.0 | | | | | | |
| **FNA** | **Florina** | **152.16** | **328** | | **PKiKP** | **15 31 38.3** | **+0.9** |

*IDC **19** 15:13:16.5±0.8, 8.21S×116.72E, h0km, mb4.0/9, mbtmp4.0/10, ML3.7/1, Error ellipse: s-maj=29.8km s-min=17.2km az=68.0*
**ISC 19 15:13:21.7**±0.9**, 8.3S**±0.1×**116.7E**±0.1**, h35**km**, n11,**
**σ0.70/12, mb4.0/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.39** | **43** | Pn | **Pn** | **15 14 25.7** | **-0.3** |
| | 4.3nm,0.3s,baz=242,slow=23,SNR=2.0 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 15 16.7** | **+0.8** |
| | 24nm,0.3s,baz=45,slow=22,SNR=8.2 13nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.62** | **126** | P | **P** | **15 17 57.4** | **-0.8** |
| | 9.8nm,0.7s,baz=300,slow=12,SNR=5.2 9.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.48** | **135** | P | **P** | **15 18 17.7** | **-0.5** |
| | 10nm,0.8s,baz=308,slow=9.3,SNR=16 10nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **32.96** | **139** | P | **P** | **15 19 53.3** | **+0.1** |
| | 6.1nm,0.5s,baz=309,slow=9.4,SNR=5.3 6.1nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **46.66** | **12** | P | **P** | **15 21 46.9** | **0.0** |
| | 0.6nm,0.7s,baz=194,slow=7.1,SNR=2.9 0.6nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.59** | **352** | P | **P** | **15 23 01.5** | **+0.4** |
| | 0.9nm,0.6s,baz=154,slow=11,SNR=2.7 0.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.80** | **334** | P | **P** | **15 23 42.5** | **-1.2** |
| | 0.9nm,0.7s,baz=157,slow=7.9,SNR=7.7 0.9nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.33** | **335** | P | **P** | **15 24 12.5** | **-0.5** |
| | 0.3nm,0.5s,baz=143,slow=6.2,SNR=1.7 0.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.57** | **340** | P | **P** | **15 24 14.2** | **-0.2** |
| | 0.6nm,0.5s,baz=165,slow=6.0,SNR=2.3 0.6nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **69.18** | **199** | P | **P** | **15 24 25.3** | **+1.0** |
| | 2.1nm,0.8s,baz=135,slow=21,SNR=2.8 2.1nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **145.14** | **189** | PKPbc | **PKPdf** | **15 32 56.4** | **+0.1** |
| | 3.3nm,0.7s,baz=132,slow=3.2,SNR=8.7 | | | | | | |

**IDC 19 15:14:24.9**±2.1**, 8.12S×116.11E, h0km, mb3.6/3,**
**mbtmp3.9/4, ML4.4/1, Error ellipse: s-maj=54.5km**
**s-min=28.6km az=54.0, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.75** | **50** | Pn | Pn | **15 15 37.7** | **-0.2** |
| | 16nm,0.3s,baz=230,slow=22,SNR=5.5 92nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.21** | **126** | P | P | 15 19 11.9 | -0.5 |
| | 2.7nm,0.4s,baz=300,slow=12,SNR=6.3 2.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **23.02** | **134** | P | P | 15 19 32.4 | +0.5 |
| | 1.6nm,0.6s,baz=308,slow=9.5,SNR=1.2 1.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.40** | **334** | P | P | 15 24 49.7 | +0.1 |
| | 0.2nm,0.5s,baz=132,slow=6.0,SNR=1.0 0.2nm,0.5s | | | | | | |

*IDC **19** 15:14:48.3±1.3, 8.27S×116.75E, h0km, mb3.9/7, mbtmp4.0/8, ML4.1/1, Error ellipse: s-maj=44.9km s-min=20.7km az=62.0*
**ISC 19 15:14:53.5**±1.1**, 8.3S**±0.1×**116.8E**±0.2**, h35**km**, n9,** σ0.90/9,
**mb3.8/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.35** | **42** | Pn | **Pn** | **15 15 57.1** | **+0.1** |
| | 11nm,0.3s,baz=53,slow=20,SNR=1.5 59nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.57** | **126** | P | **P** | **15 19 29.4** | **-0.1** |
| | 6.8nm,1.0s,baz=300,slow=12,SNR=2.6 6.8nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **22.43** | **135** | P | **P** | **15 19 49.7** | **+0.2** |
| | 3.1nm,0.9s,baz=307,slow=8.9,SNR=1.9 3.1nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **32.92** | **139** | P | **P** | **15 21 24.0** | **-0.6** |
| | 8.5nm,1.1s,baz=286,slow=15,SNR=1.2 8.5nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **46.64** | **12** | P | **P** | **15 23 17.6** | **-0.8** |
| | 0.2nm,0.4s,baz=178,slow=8.3,SNR=1.3 0.2nm,0.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **49.62** | **112** | P | **P** | **15 23 42.9** | **+1.0** |
| | 6.3nm,1.0s,baz=62,slow=22,SNR=2.1 6.3nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **56.60** | **352** | P | **P** | **15 24 32.2** | **-0.7** |
| | 0.5nm,0.6s,baz=153,slow=9.7,SNR=1.7 0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.83** | **334** | P | **P** | **15 25 17.1** | **+1.4** |
| | 0.5nm,0.8s,baz=138,slow=9.2,SNR=1.5 0.5nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **145.16** | **189** | PKPbc | **PKPab** | **15 34 27.1** | **-0.6** |
| | 2.3nm,0.6s,baz=137,slow=5.3,SNR=3.8 | | | | | | |

*IDC **19** 15:15:07.7±0.7, 8.15S×116.50E, h0km, mb4.2/13, mbtmp4.2/14, ML4.3/1, Error ellipse: s-maj=28.5km s-min=14.7km az=63.0*
*NEIC **19** 15:15:09.1±1.5, 8.13S±0.09×116.42E±0.05, h10km±1km, mb4.8/9, Error ellipse: s-maj=16.3km s-min=5.6km az=22.0*
**ISC 19 15:15:12.4**±0.5**, 8.19S**±0.07×**116.49E**±0.07**, h35**km**, n37,**
**σ1.22/38, mb4.0/12, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAGI** | **Jajag, Banyuwa** | **2.33** | **263** | Pn | **Pn** | **15 15 46.2** | **-2.0** |
| **KAPI** | **Kappang** | **4.53** | **46** | Pn | **Pn** | **15 16 17.8** | **-0.6** |
| **KAPI** | **Kappang** | **4.53** | **46** | Pn | **Pn** | **15 16 18.7** | **+0.3** |
| | 14nm,0.3s,baz=204,slow=5.8,SNR=7.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 17 07.0** | **-2.9** |
| | 30nm,0.3s,baz=204,slow=23,SNR=3.6 | | | | | | |
| KAPI | | | | Lg | Lg | 15 17 25.8 | |
| | 29nm,0.3s,baz=196,slow=18,SNR=3.8 53nm,0.2s | | | | | | |
| **MMRI** | **Maumere** | **5.71** | **95** | Pn | **Pn** | **15 16 33.7** | **-0.9** |
| **UGM** | **Wanagama** | **5.91** | **272** | Pn | **Pn** | **15 16 35.7** | **-1.9** |
| **MBWA** | **Marble Bar** | **13.27** | **167** | Pn | **Pn** | **15 18 19.2** | **+0.9** |
| **FITZ** | **Fitzroy Crossi** | **13.27** | **139** | Pn | **Pn** | **15 18 19.1** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **167** | Pn | **Pn** | **15 18 23.5** | **-0.6** |
| **KNRA** | **Kununurra** | **14.12** | **123** | Pn | **Pn** | **15 18 28.4** | **-1.6** |
| **GIRL** | **Giralia** | **14.53** | **188** | Pn | **Pn** | **15 18 34.9** | **-0.6** |
| **MTN** | **Manton Dam** | **15.12** | **109** | Pn | **Pn** | **15 18 41.5** | **-2.0** |
| MTN | | | | IAmb | IAmb | 15 18 49.4 | |
| | comp=Z,41nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **16.53** | **72** | P | **Pn** | **15 19 02.8** | **+1.1** |
| **WB0** | **Warramunga Arr** | **20.81** | **125** | P | **Pn** | **15 19 49.4** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 15 19 52.2 | |
| | comp=Z,74nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.86** | **126** | P | **P** | **15 19 50.4** | **-1.1** |
| | comp=Z,37nm,0.8s,baz=302,slow=12,SNR=17 comp=Z,37nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.86** | **126** | | **P** | **15 19 52.3** | **+0.8** |
| **WB2** | **Warramunga Arr** | **20.87** | **126** | | **P** | **15 19 52.1** | **+0.5** |
| **WR0** | **Warramunga Arr** | **21.03** | **126** | | **P** | **15 19 53.9** | **+0.5** |
| **ASAR** | **Alice Springs** | **22.70** | **135** | P | **P** | **15 20 10.5** | **-0.7** |
| | comp=Z,19nm,1.0s,baz=311,slow=8.5,SNR=11 comp=Z,19nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.62** | **178** | P | **P** | **15 20 29.8** | **+0.2** |
| | comp=Z,22nm,0.9s,baz=94,slow=22,SNR=1.1 comp=Z,22nm,0.9s | | | | | | |
| **COEN** | **Coen** | **26.80** | **105** | P | **P** | **15 20 49.4** | **-0.1** |
| **BBOO** | **Buckleboo** | **30.48** | **146** | P | **P** | **15 21 22.3** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **31.64** | **327** | P | **P** | **15 21 33.6** | **+1.2** |
| | comp=Z,0.5nm,0.4s,baz=155,slow=7.9,SNR=2.2 comp=Z,0.5nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **33.17** | **139** | P | **P** | **15 21 47.1** | **+1.3** |
| STKA | | | | IAmb | IAmb | 15 22 59.8 | |
| | comp=Z,18nm,1.6s | | | | | | |
| **STKA** | **Stephens Creek** | **33.17** | **139** | P | **P** | **15 21 47.2** | **+1.5** |

*mb5.7/109,mB6.3/3,MLv6.0/26,Mw5.5/144,Mw(mB)6.1/3*
*IDC* **19** *15:16:39.1±1.8,8°.30S×116°.55E,h44km±15km,mb5.4/32,*
*mbtmp5.6/33,ML5.3/1,Error ellipse: s-maj=14.4km*
*s-min=9.0km az=66.0*

**ISC 19 15:16:37.1±0.5,8°.38S±0°.03×116°.56E±0°.03,h29km±3km,**
**h30km:pP-P,n993,σt1♀43/1015,mb5.8/173,39C-21D,**
**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **1.28** | **110** | **P** | | **Pn** | **15 16 59.8** | **+0.7** |
| **PLAI** | **Plampang** | **1.28** | **110** | **P** | | **Pn** | **15 16 59.5** | **+0.4** |
| PLAI | | | | S | | **Sn** | **15 17 15.5** | **+0.1** |
| **DNP** | **Denpasar** | **1.36** | **258** | **P** | | **Pb** | **15 17 01.4** | **-0.6** |
| DNP | | | | S | | **Sb** | **15 17 20.3** | **+1.2** |
| **SRBI** | **Singaraja** | **1.36** | **282** | **P** | | **Pb** | **15 17 01.9** | **-0.1** |
| SRBI | | | | S | | **Sb** | **15 17 20.8** | **+1.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.38** | **268** | P | | **Pn** | **15 17 15.9** | **+1.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.38** | **268** | Pn | | **Pn** | **15 17 15.1** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.38** | **268** | P | | **Pn** | **15 17 15.5** | **+1.3** |
| **WBSI** | **Waikabubak, Su** | **3.07** | **114** | P | | **Pn** | **15 17 24.8** | **+1.1** |
| **GRJI** | **Gresik** | **4.30** | **290** | P | | **Pn** | **15 17 40.8** | **+0.2** |
| **BASI** | **Baing, Sumba** | **4.37** | **115** | P | | **Pn** | **15 17 44.7** | **+3.1** |
| **BSSI** | **Bau Bau, Buton** | **4.49** | **61** | P | | **Pn** | **15 17 42.8** | **-0.5** |
| **KAPI** | **Kappang** | **4.61** | **44** | Pn | | **Pn** | **15 17 44.9** | **0.0** |
| **KAPI** | **Kappang** | **4.61** | **44** | P | | **Pn** | **15 17 44.6** | **-0.4** |
| | 156nm,0.3s,baz=203,slow=6.1,SNR=12 | | | | | | | |
| KAPI | | | | S | | **Sn** | **15 18 34.5** | **-3.0** |
| | 863nm,0.4s,baz=30,slow=23,SNR=12 | | | | | | | |
| KAPI | | | | Lg | | Lg | 15 18 59.0 | |
| | 176nm,0.3s,baz=231,slow=23,SNR=1.6 | | | | | | | |
| | 590nm,0.4s | | | | | | | |
| **KAPI** | **Kappang** | **4.61** | **44** | P | | **Pn** | **15 17 41.5** | **-3.4** |
| KAPI | | | | S | | **Sn** | **15 18 36.0** | **-1.5** |
| **KAPI** | **Kappang** | **4.61** | **44** | ↑*e*P | | **Pn** | **15 17 45.2** | **+0.3** |
| **BWJI** | **Bawean** | **4.62** | **303** | P | | **Pn** | **15 17 46.2** | **+1.2** |
| **PWJI** | **Pagerwojo** | **4.72** | **274** | P | | **Pn** | **15 17 47.1** | **+0.7** |
| **EDFI** | **Ende, Flores** | **5.09** | **94** | P | | **Pn** | **15 17 50.7** | **-0.9** |
| | 1μm,0.9s,7.5nm | | | | | | | |
| **NGJI** | **Ngawi** | **5.15** | **281** | P | | **Pn** | **15 17 55.4** | **+3.1** |
| | 1μm,1.2s,16nm | | | | | | | |
| **BNSI** | **Bone** | **5.30** | **42** | P | | **Pn** | **15 17 51.8** | **-2.6** |
| | 1μm,0.7s,17nm | | | | | | | |
| **MMRI** | **Maumere** | **5.62** | **93** | P | | **Pn** | **15 18 00.0** | **+1.1** |
| **MMRI** | **Maumere** | **5.62** | **93** | Pn | | **Pn** | **15 17 59.4** | **+0.5** |
| **MMRI** | **Maumere** | **5.62** | **93** | P | | **Pn** | **15 17 59.0** | **+0.1** |
| **UGM** | **Wanagama** | **5.99** | **274** | P | | **Pn** | **15 18 08.5** | **+4.6** |
| **UGM** | **Wanagama** | **5.99** | **274** | Pn | | **Pn** | **15 18 04.2** | **+0.3** |
| **UGM** | **Wanagama** | **5.99** | **274** | P | | **Pn** | **15 18 02.8** | **-1.1** |
| | 2μm,1.2s,14nm | | | | | | | |
| **SMRI** | **Semarang** | **6.21** | **282** | P | | **Pn** | **15 18 10.3** | **+3.5** |
| **SMRI** | **Semarang** | **6.21** | **282** | | | **Pn** | **15 18 08.0** | **+1.2** |
| **SMRI** | **Semarang** | **6.21** | **282** | P | | **Pn** | **15 18 08.8** | **+2.0** |
| | 811nm,0.9s,6.4nm | | | | | | | |
| **BBSI** | **Bau Bau** | **6.63** | **65** | P | | **Pn** | **15 18 15.7** | **+3.1** |
| | 570nm,1.0s,3.4nm | | | | | | | |
| **BKB** | **Balikpapan** | **7.08** | **3** | Pn | | **Pn** | **15 18 20.7** | **+1.8** |
| **BKB** | **Balikpapan** | **7.08** | **3** | P | | Pn | 15 18 24.9 | +6.0 |
| | 441nm,1.2s | | | | | | | |
| **BATI** | **Baumata** | **7.24** | **105** | P | | **Pn** | **15 18 23.0** | **+1.9** |
| | 995nm,1.1s,4.2nm | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.58** | **347** | P | | **Pn** | **15 18 27.7** | **+2.0** |
| | 806nm,0.7s,3.5nm | | | | | | | |
| **KPJI** | **Karang Pucung** | **7.63** | **277** | P | | **Pn** | **15 18 28.5** | **+2.1** |
| | 391nm,1.0s,3.3nm | | | | | | | |
| **SOEI** | **Soe** | **7.74** | **101** | P | | **Pn** | **15 18 30.3** | **+2.3** |
| **SOEI** | **Soe** | **7.74** | **101** | | | **Pn** | **15 18 28.5** | **+0.6** |
| **SOEI** | **Soe** | **7.74** | **101** | P | | **Pn** | **15 18 29.4** | **+1.4** |
| | 1μm,0.9s | | | | | | | |
| **CMJI** | **Cimerak** | **8.05** | **274** | P | | **Pn** | **15 18 33.0** | **+0.8** |
| | 346nm,0.9s | | | | | | | |
| **BBJI** | **Bungbulang** | **8.87** | **275** | P | | **Pn** | **15 18 47.0** | **+3.5** |
| **MPSI** | **Mapaga** | **9.28** | **21** | P | | **Pn** | **15 18 51.8** | **+2.7** |
| **CNJI** | **Cibinong** | **9.40** | **276** | P | | **Pn** | **15 18 52.9** | **+2.2** |
| | 139nm,0.8s | | | | | | | |
| **LUWI** | **Luwuk** | **9.57** | **41** | P | | **Pn** | **15 18 56.4** | **+3.4** |
| **LUWI** | **Luwuk** | **9.57** | **41** | Pn | | **Pn** | **15 18 52.5** | **-0.5** |
| **LUWI** | **Luwuk** | **9.57** | **41** | P | | **Pn** | **15 18 55.4** | **+2.4** |
| | 225nm,1.2s | | | | | | | |
| **STKI** | **Sintang** | **9.80** | **329** | P | | **Pn** | **15 19 00.5** | **+4.3** |
| **DBJI** | **Dramaga** | **9.89** | **280** | P | | **Pn** | **15 19 00.5** | **+3.0** |
| | 627nm,1.1s | | | | | | | |
| **SKJI** | **Sukabumi** | **10.01** | **277** | P | | **Pn** | **15 19 01.6** | **+2.6** |
| **TOLI2** | **Tolitoli** | **10.33** | **24** | P | | **Pn** | **15 19 07.4** | **+3.9** |
| **TOLI2** | **Tolitoli** | **10.33** | **24** | Pn | | **Pn** | **15 19 03.4** | **-0.1** |
| **SBJI** | **Serang** | **10.59** | **282** | P | | Pn | 15 19 14.1 | +7.1 |
| | 376nm,1.3s | | | | | | | |
| **GTOI** | **Gorontalo** | **11.03** | **36** | P | | **Pn** | **15 19 15.9** | **+2.8** |
| **SANI** | **Sanana** | **11.30** | **57** | P | | **Pn** | **15 19 19.9** | **+3.1** |
| **SANI** | **Sanana** | **11.30** | **57** | P | | **Pn** | **15 19 19.4** | **+2.6** |
| | 258nm,1.1s | | | | | | | |
| **KMSI** | **Cibinong** | **11.57** | **40** | P | | **Pn** | **15 19 23.6** | **+3.1** |
| | 317nm,1.1s | | | | | | | |
| **KSM** | **Kuching** | **11.61** | **327** | P | | **Pn** | **15 19 24.6** | **+3.7** |
| **KSM** | **Kuching** | **11.61** | **327** | Pn | | **Pn** | **15 19 20.8** | **-0.1** |
| **BLSI** | **Bandar Lampung** | **11.62** | **284** | P | | Pn | 15 19 27.7 | +6.5 |
| | 134nm,0.5s | | | | | | | |
| **NLAI** | **Namlea** | **11.66** | **65** | P | | **Pn** | **15 19 25.1** | **+3.3** |
| **PPBI** | **Pangkal Pinang** | **12.07** | **300** | P | | **Pn** | **15 19 31.7** | **+4.3** |
| | 369nm,1.4s | | | | | | | |
| **KASI** | **Kota Agung** | **12.30** | **283** | P | | P | 15 19 36.5 | -5.9 |
| | 193nm,1.1s | | | | | | | |
| **LWLI** | **Liwa** | **12.85** | **284** | P | | **Pn** | **15 19 41.4** | **+3.3** |
| | 465nm,1.0s | | | | | | | |
| **MBWA** | **Marble Bar** | **13.07** | **167** | Pn | | **Pn** | **15 19 39.6** | **-1.2** |
| **MBWA** | **Marble Bar** | **13.07** | **167** | P | | **Pn** | **15 19 40.0** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **13.09** | **138** | | | **Pn** | **15 19 40.0** | **-1.1** |
| **MSAI** | **Masohi** | **13.28** | **69** | P | | **P** | **15 19 49.7** | **-3.6** |
| **LBMI** | **Labuha** | **13.34** | **55** | P | | **Pn** | **15 19 47.4** | **+2.7** |
| | 294nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.49** | **167** | Pn | | **Pn** | **15 19 45.1** | **-1.6** |
| **BNDI** | **Bandanaira** | **13.80** | **75** | P | | **Pn** | **15 19 52.7** | **+1.7** |
| **BNDI** | **Bandanaira** | **13.80** | **75** | P | | **Pn** | **15 19 54.5** | **+3.5** |
| **MNAI** | **Manna** | **14.09** | **286** | Pn | | **Pn** | **15 19 55.2** | **+0.3** |
| **MNAI** | **Manna** | **14.09** | **286** | P | | **Pn** | **15 19 55.3** | **+0.3** |
| | 425nm,1.7s | | | | | | | |
| **TNTI** | **Ternate** | **14.10** | **50** | P | | **Pn** | **15 19 57.6** | **+2.5** |
| **TNTI** | **Ternate** | **14.10** | **50** | P | | **Pn** | **15 19 57.9** | **+2.8** |
| | 248nm,1.3s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **14.34** | **359** | P | | **Pn** | **15 20 01.4** | **+3.0** |
| **KKM** | **Kota Kinabalu** | **14.34** | **359** | | | **Pn** | **15 19 57.4** | **-1.0** |
| **GIRL** | **Giralia** | **14.35** | **189** | P | | **Pn** | **15 19 59.7** | **+1.2** |
| **SAUI** | **Saumlaki** | **14.60** | **89** | | | **Pn** | **15 19 59.6** | **-2.3** |
| **DRS** | **Darwin Rock St** | **14.67** | **107** | P | | **Pn** | **15 20 02.6** | **-0.2** |
| **MTN** | **Manton Dam** | **14.99** | **108** | P | | **Pn** | **15 20 06.0** | **-1.2** |
| **MTN** | **Manton Dam** | **14.99** | **108** | Pn | | **Pn** | **15 20 04.5** | **-2.7** |
| MTN | | | | IAmb | | IAmb | 15 20 10.3 | |
| | comp=Z,202nm,0.5s | | | | | | | |
| **TPRI** | **Tanjung Pinang** | **15.14** | **307** | P | | **P** | **15 20 15.7** | **+1.8** |
| | comp=Z,316nm,1.4s | | | | | | | |
| **BTDF** | **Bukit Timah Da** | **16.00** | **307** | P | | **P** | **15 20 24.7** | **+1.1** |
| **MYKOM** | **Kota Tinggi** | **16.21** | **308** | P | | **P** | **15 20 24.8** | **-1.0** |
| **KDU** | **Kakadu** | **16.22** | **107** | P | | **Pn** | **15 20 24.3** | **+1.2** |
| **SWI** | **Sorong** | **16.44** | **64** | P | | **P** | **15 20 27.6** | **-0.8** |
| | comp=Z,320nm,1.0s | | | | | | | |
| **FAKI** | **Fak Fak** | **16.53** | **72** | P | | **Pn** | **15 20 27.8** | **+0.8** |
| **FAKI** | **Fak Fak** | **16.53** | **72** | Pn | | **Pn** | **15 20 27.1** | **0.0** |
| **FAKI** | **Fak Fak** | **16.53** | **72** | P | | **Pn** | **15 20 26.4** | **-0.6** |
| | comp=Z,398nm,1.1s | | | | | | | |
| **PPSI** | **Pulau Pagai** | **17.38** | **288** | P | | **P** | **15 20 39.3** | **+0.4** |
| | comp=Z,311nm,0.9s | | | | | | | |
| **PDSI** | **Padang** | **17.67** | **294** | P | | **P** | **15 20 42.7** | **+0.7** |
| **KMPI** | **Kaimana, Papua** | **17.68** | **76** | P | | **Pn** | **15 20 41.5** | **0.0** |
| | comp=Z,504nm,1.1s | | | | | | | |
| **BKNI** | **Bangkinang** | **17.72** | **298** | P | | **P** | **15 20 45.5** | **+2.9** |
| **BKNI** | **Bangkinang** | **17.72** | **298** | P | | **P** | **15 20 46.4** | **+3.8** |
| | comp=Z,402nm,1.4s,comp=Z,48μm | | | | | | | |
| **DAV** | **Davao City (W)** | **17.79** | **31** | P | | **P** | **15 20 44.8** | **+1.4** |
| **DAV** | **Davao City (W)** | **17.79** | **31** | P | | **P** | **15 20 46.4** | **+3.0** |
| | comp=Z,283nm,0.4s,baz=58,slow=1.0,SNR=10 | | | | | | | |
| **MEEK** | **Meekatharra** | **18.26** | **174** | P | | **Pn** | **15 20 49.7** | **+1.2** |
| **SISI** | **Saibi** | **18.75** | **291** | P | | **Pn** | **15 20 56.1** | **+1.5** |
| **COCO** | **West Island** | **19.77** | **257** | P | | **Pn** | **15 21 07.8** | **+1.1** |
| **WRKA** | **Warakurna** | **19.99** | **147** | P | | **P** | **15 21 06.5** | **-1.0** |
| **PBSI** | **Pulau Batu** | **20.00** | **294** | P | | Pn | 15 21 09.6 | +0.1 |
| **IPM** | **Ipoh** | **20.08** | **309** | P | | Pn | 15 21 11.8 | +1.4 |
| **IPM** | **Ipoh** | **20.08** | **309** | P | | **P** | **15 21 07.9** | **-0.6** |
| **MORW** | **Morawa** | **20.58** | **181** | P | | Pn | 15 21 15.5 | -0.7 |
| **MORW** | **Morawa** | **20.58** | **181** | P | | **P** | **15 21 14.5** | **+0.7** |
| **WB0** | **Warramunga Arr** | **20.65** | **125** | P | | **P** | **15 21 15.0** | **+0.4** |
| WB0 | | | | IAmb | | IAmb | 15 21 15.7 | |
| | comp=Z,671nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.69** | **126** | P | | **P** | **15 21 15.5** | **+0.3** |
| **WRA** | **Warramunga Arr** | **20.69** | **126** | P | | **P** | **15 21 15.2** | **0.0** |
| | comp=Z,620nm,0.9s,baz=299,slow=12,SNR=85 | | | | | | | |
| WRA | | | | S | | **S** | **15 24 58.4** | **-6.6** |
| | comp=Z,8.9nm,0.8s,baz=294,slow=21,SNR=2.0 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **15 25 24.7** | **0.0** |
| | comp=Z,19nm,0.9s,baz=309,slow=1.3,SNR=4.8 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **15 28 56.2** | **-3.3** |
| | comp=Z,4.7nm,0.9s,baz=294,slow=1.8,SNR=2.5 | | | | | | | |
| | comp=Z,620nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.70** | **126** | P | | **P** | **15 21 15.8** | **+0.6** |
| WRAB | | | | IAmb | | IAmb | 15 21 20.6 | |
| | comp=Z,763nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.70** | **126** | *c i*P | | **P** | **15 21 15.0** | **-0.2** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,910nm,1.0s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.70** | **126** | P | | **P** | **15 21 15.6** | **+0.4** |
| WB2 | | | | IAmb | | IAmb | 15 21 16.4 | |
| | comp=Z,553nm,0.7s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **20.74** | **301** | P | | **P** | **15 21 14.8** | **-0.9** |
| RPSI | | | | IAmb | | IAmb | 15 21 24.5 | |
| | comp=Z,919nm,1.8s | | | | | | | |
| **PSI** | **Prapat** | **20.80** | **302** | P | | Pn | 15 21 18.2 | -0.8 |
| **PSI** | **Prapat** | **20.80** | **302** | P | | **P** | **15 21 14.8** | **-1.6** |
| PSI | | | | pmax | | pmax | | |
| | comp=Z,919nm,1.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.86** | **125** | P | | **P** | **15 21 17.4** | **+0.4** |
| **GSI** | **Gunungsitoli** | **21.23** | **296** | P | | **P** | **15 21 22.3** | **+1.4** |
| **GSI** | **Gunungsitoli** | **21.23** | **296** | P | | **P** | **15 21 20.4** | **-0.5** |
| **GSI** | **Gunungsitoli** | **21.23** | **296** | P | | **P** | **15 21 21.9** | **+0.9** |
| | comp=Z,171nm,1.0s | | | | | | | |
| **BLDU** | **Balldu** | **22.12** | **180** | P | | **P** | **15 21 31.3** | **+1.0** |
| **KCSI** | **Kotacane, Aceh** | **22.16** | **302** | P | | **P** | **15 21 32.9** | **+2.0** |
| | comp=Z,422nm,1.2s | | | | | | | |
| **AS31** | **Alice Springs** | **22.52** | **134** | P | | **P** | **15 21 35.0** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.52** | **134** | P | | **P** | **15 21 35.1** | **+0.4** |
| | comp=Z,635nm,0.9s,baz=313,slow=8.6,SNR=47 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **15 25 28.6** | **+0.4** |
| | comp=Z,31nm,0.8s,baz=342,slow=2.1,SNR=11 | | | | | | | |
| ASAR | | | | S | | **S** | **15 25 36.5** | **-3.8** |
| | comp=Z,19nm,1.0s,baz=325,slow=24,SNR=4.1 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **15 29 00.4** | **-3.6** |
| | comp=Z,5.4nm,0.9s,baz=224,slow=2.6,SNR=3.6 | | | | | | | |
| | comp=Z,635nm,0.9s | | | | | | | |
| **AS01** | **Alice Springs** | **22.55** | **134** | P | | **P** | **15 21 36.1** | **+1.0** |
| **SNSI** | **Sinabang, Aceh** | **22.84** | **297** | P | | **P** | **15 21 40.0** | **+1.8** |
| | comp=Z,714nm,1.0s | | | | | | | |
| **KLBR** | **Kellerberrin** | **23.12** | **177** | P | | **P** | **15 21 42.9** | **+2.0** |
| **KMBL** | **Kambalda** | **23.40** | **168** | P | | **P** | **15 21 44.3** | **+0.6** |
| **MLSI** | **Meulaboh, Aceh** | **23.70** | **301** | P | | **P** | **15 21 47.0** | **+0.2** |
| | comp=Z,464nm,1.1s,comp=Z,5μm | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **23.78** | **304** | P | | **P** | **15 21 49.7** | **+2.2** |
| **LHMI** | **Lhok Sumawe** | **23.78** | **304** | P | | **P** | **15 21 46.9** | **-0.6** |
| LHMI | | | | IAmb | | IAmb | 15 21 50.0 | |
| | comp=Z,363nm,0.8s | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **23.78** | **304** | P | | **P** | **15 21 48.8** | **+1.3** |
| | comp=Z,536nm,0.9s | | | | | | | |
| **SRIT** | **Nakonsritamara** | **23.87** | **315** | P | | **P** | **15 21 50.4** | **+2.0** |
| **GENI** | **Genyem** | **24.19** | **78** | P | | **P** | **15 21 52.4** | **+1.1** |
| **GENI** | **Genyem** | **24.19** | **78** | P | | **P** | **15 21 51.3** | **0.0** |
| | comp=Z,410nm,1.1s | | | | | | | |
| **SURA** | **Surathani** | **24.25** | **316** | P | | **P** | **15 21 54.7** | **+2.8** |
| **NWAO** | **Narrogin (SRO)** | **24.43** | **179** | P | | **P** | **15 21 54.7** | **+1.3** |
| **NWAO** | **Narrogin (SRO)** | **24.43** | **179** | P | | **P** | **15 21 54.3** | **+1.0** |
| **NWAO** | **Narrogin (SRO)** | **24.43** | **179** | P | | **P** | **15 21 54.4** | **+1.0** |
| NWAO | | | | IAmb | | IAmb | 15 22 05.1 | |
| | comp=Z,384nm,1.6s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.43** | **179** | P | | **P** | **15 21 54.3** | **+1.0** |
| | comp=Z,57nm,0.8s,baz=343,slow=11,SNR=6.2 | | | | | | | |
| NWAO | | | | S | | **S** | **15 26 09.3** | **-2.2** |
| | comp=Z,20nm,0.7s,baz=114,slow=20,SNR=2.6 | | | | | | | |
| | comp=Z,57nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.43** | **179** | P | | **P** | **15 21 55.6** | **+2.2** |
| NWAO | | | | S | | **S** | **15 26 19.1** | **+7.6** |
| **NWAO** | **Narrogin (SRO)** | **24.43** | **179** | P | | **P** | **15 21 54.4** | **+1.0** |
| NWAO | | | | pmax | | pmax | | |
| | comp=Z,384nm,1.7s | | | | | | | |
| **JAY** | **Jayapura** | **24.73** | **78** | P | | **P** | **15 21 58.4** | **+2.1** |
| | comp=Z,109nm,1.0s | | | | | | | |
| **FORT** | **Forrest** | **24.74** | **156** | P | | **P** | **15 21 57.9** | **+1.7** |
| **FORT** | **Forrest** | **24.74** | **156** | P | | **P** | **15 21 57.1** | **+1.0** |
| **QIS** | **Mount Isa** | **25.34** | **121** | P | | **P** | **15 22 02.2** | **+0.4** |
| **UBPT** | **Khong Chiam** | **25.95** | **335** | P | | **P** | **15 22 11.3** | **+4.0** |
| **RKGY** | **Rocky Gully** | **26.10** | **179** | P | | **P** | **15 22 09.5** | **+1.0** |
| **OOD** | **Oodnadatta** | **26.45** | **139** | P | | **P** | **15 22 11.8** | **+0.1** |
| **COEN** | **Coen** | **26.68** | **104** | P | | **P** | **15 22 14.4** | **+0.4** |
| **COEN** | **Coen** | **26.68** | **104** | P | | **P** | **15 22 14.1** | **+0.1** |
| **NAYO** | **Nakonayok** | **27.15** | **326** | P | | **P** | **15 22 21.0** | **+2.9** |
| **MULG** | **Mulgathing** | **27.26** | **145** | P | | **P** | **15 22 19.6** | **+0.6** |
| **QIZ** | **Qiongzhong** | **28.03** | **346** | P | | **P** | **15 22 28.2** | **+2.2** |
| **QIZ** | **Qiongzhong** | **28.03** | **346** | P | | **P** | **15 22 28.4** | **+2.4** |
| QIZ | | | | sP | | **pP** | **15 22 33.3** | **-1.0** |
| QIZ | | | | S | | **S** | **15 27 13.6** | **+4.8** |
| QIZ | | | | pmax | | pmax | | |
| | comp=Z,35nm,1.5s | | | | | | | |
| **SRDT** | **SRDT** | **28.45** | **322** | P | | **P** | **15 22 32.6** | **+2.9** |
| **MTSU** | **Mount Surprise** | **28.67** | **113** | P | | **P** | **15 22 32.3** | **+0.6** |
| **LCRK** | **Leigh Creek** | **29.87** | **140** | P | | **P** | **15 22 43.2** | **+1.0** |
| **INKA** | **Innaminka** | **29.88** | **133** | P | | **P** | **15 22 44.8** | **+2.4** |
| **PMG** | **Port Moresby** | **30.25** | **94** | P | | **P** | **15 22 46.0** | **+0.2** |
| **PMG** | **Port Moresby** | **30.25** | **94** | P | | **P** | **15 22 47.6** | **+1.8** |
| **PMG** | **Port Moresby** | **30.25** | **94** | ↑*e*P | | **P** | **15 22 45.6** | **-0.2** |
| **BBOO** | **Buckleboo** | **30.28** | **146** | P | | **P** | **15 22 46.2** | **+0.3** |
| **BBOO** | **Buckleboo** | **30.28** | **146** | P | | **P** | **15 22 45.2** | **-0.6** |
| BBOO | | | | IAmb | | IAmb | 15 22 47.2 | |
| | comp=Z,230nm,1.0s | | | | | | | |
| **CTA** | **Charters Tower** | **30.98** | **115** | P | | **P** | **15 22 53.2** | **+1.0** |
| **CTAO** | **Charters Tower** | **30.98** | **115** | P | | **P** | **15 22 53.3** | **+1.0** |
| **TV1H** | **Townsville Har** | **31.23** | **113** | P | | **P** | **15 22 55.8** | **+1.4** |
| **WHYH** | **Whyalla** | **31.30** | **145** | P | | **P** | **15 22 56.2** | **+1.4** |
| **TWGBT** | **Beinan** | **31.32** | **8** | P | | **P** | **15 22 56.9** | **+1.8** |
| **PTPS** | **Port Pirie** | **31.64** | **144** | P | | **P** | **15 22 58.6** | **+0.8** |
| **TPUB** | **Ta-pu** | **31.74** | **7** | P | | **P** | **15 23 02.3** | **+3.5** |
| **CM31** | **Chiang Mai Arr** | **31.84** | **327** | IAmb | | IAmb | 15 23 04.5 | |
| | comp=Z,187nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.84** | **327** | P | | **P** | **15 22 59.1** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **31.84** | **327** | P | | **P** | **15 22 59.6** | **-0.1** |
| | comp=Z,104nm,0.9s,baz=152,slow=6.8,SNR=87 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **15 25 50.8** | **+0.4** |
| | comp=Z,18nm,0.9s,baz=185,slow=2.7,SNR=12 | | | | | | | |
| CMAR | | | | ScP | | **ScP** | **15 29 29.6** | **-2.3** |
| | comp=Z,7.3nm,0.9s,baz=170,slow=3.2,SNR=15 | | | | | | | |
| | comp=Z,104nm,0.9s | | | | | | | |
| **AUAYR** | **Ayr State High** | **31.88** | **114** | P | | **P** | **15 23 01.9** | **+1.8** |
| **QLP** | **Quilpie** | **31.88** | **128** | P | | **P** | **15 23 01.8** | **+1.7** |
| **YULB** | **Yu-li** | **31.92** | **8** | P | | **P** | **15 23 01.2** | **+0.8** |
| **SLVN** | **Son La** | **32.04** | **337** | P | | **P** | **15 23 00.1** | **-1.4** |
| SLVN | | | | IAmb | | IAmb | 15 23 06.6 | |
| | comp=Z,99nm,1.0s | | | | | | | |
| **SSLB** | **Suanglung** | **32.26** | **8** | P | | **P** | **15 23 06.3** | **+2.9** |
| **HTT** | **Hallett** | **32.37** | **144** | P | | **P** | **15 23 05.5** | **+1.2** |
| **CRAI** | **Chiangrai** | **32.59** | **331** | P | | **P** | **15 23 05.3** | **-1.0** |
| **NACB** | **Ninganchiao** | **32.73** | **9** | P | | **P** | **15 23 09.0** | **+1.6** |
| **NACB** | **Ninganchiao** | **32.73** | **9** | P | | **P** | **15 23 06.0** | **-1.4** |
| NACB | | | | IAmb | | IAmb | 15 23 16.5 | |
| | comp=Z,144nm,1.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **32.98** | **139** | P | | **P** | **15 23 10.5** | **+0.8** |
| **STKA** | **Stephens Creek** | **32.98** | **139** | P | | **P** | **15 23 10.5** | **+0.8** |
| | comp=Z,152nm,0.9s,baz=308,slow=9.1,SNR=36 | | | | | | | |
| STKA | | | | PcP | | **PcP** | **15 25 53.9** | **+0.6** |
| | comp=Z,52nm,0.8s,baz=336,slow=5.9,SNR=6.4 | | | | | | | |
| | comp=Z,152nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **32.98** | **139** | ↑*i*P | | **P** | **15 23 09.9** | **+0.2** |
| **QZH** | **Quanzhou** | **33.18** | **3** | P | | **P** | **15 23 14.9** | **+3.5** |
| QZH | | | | pmax | | pmax | | |
| | comp=Z,89nm,0.8s | | | | | | | |
| **YHNB** | **Yeheng** | **33.19** | **8** | P | | **P** | **15 23 13.5** | **+2.0** |
| **TATO** | **Taipei** | **33.50** | **8** | P | | **P** | **15 23 16.5** | **+2.3** |
| **TATO** | **Taipei** | **33.50** | **8** | P | | **P** | **15 23 12.9** | **-1.2** |
| **TATO** | **Taipei** | **33.50** | **8** | P | | **P** | **15 23 15.8** | **+1.6** |
| **CMSA** | **Cobar Meteorol** | **35.58** | **134** | P | | **P** | **15 23 33.4** | **+1.3** |
| **RK1H** | **Rockhampton Ha** | **35.77** | **119** | P | | **P** | **15 23 34.7** | **+0.9** |
| **KMI** | **Kunming** | **35.92** | **338** | ↑P | | **P** | **15 23 39.6** | **+4.2** |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,260nm,0.9s | | | | | | | |
| **GYA** | **Guiyang** | **35.94** | **345** | P | | **P** | **15 23 38.0** | **+2.6** |
| GYA | | | | pmax | | pmax | | |
| | comp=Z,210nm,1.0s | | | | | | | |
| **AULRC** | **Lightning Ridg** | **36.16** | **130** | P | | **P** | **15 23 38.4** | **+1.2** |
| **ARPS** | **Mount Arapiles** | **36.41** | **145** | P | | **P** | **15 23 40.7** | **+1.5** |
| **CNSH** | **ChangSha** | **36.52** | **355** | P | | **P** | **15 23 43.1** | **+3.0** |
| CNSH | | | | pmax | | pmax | | |
| | comp=Z,89nm,1.0s | | | | | | | |
| **JOW** | **Kunigami** | **36.81** | **18** | P | | **P** | **15 23 45.5** | **+2.9** |
| **EIDS** | **Eidsvold** | **36.95** | **121** | P | | **P** | **15 23 45.6** | **+1.7** |
| **PZH** | **PanZhiHua** | **37.54** | **338** | P | | **P** | **15 23 52.0** | **+2.9** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,180nm,0.9s | | | | | | | |
| **TNCH** | **TengChong** | **37.58** | **333** | ↓*i*P | | **P** | **15 23 53.3** | **+3.9** |
| TNCH | | | | pmax | | pmax | | |
| | comp=Z,290nm,1.2s | | | | | | | |
| **AUMAG** | **Moama Anglican** | **37.70** | **141** | P | | **P** | **15 23 51.7** | **+1.5** |
| **AUDCS** | **Dubbo College** | **38.05** | **133** | P | | **P** | **15 23 54.8** | **+1.6** |
| **BRAT** | **Ballarat** | **38.16** | **144** | P | | **P** | **15 23 55.3** | **+1.3** |
| **WHN** | **Wuhan** | **38.76** | **357** | P | | **P** | **15 24 02.5** | **+3.4** |
| WHN | | | | pmax | | pmax | | |
| | comp=Z,150nm,1.1s | | | | | | | |
| **GEXS** | **Deakin Univers** | **38.81** | **144** | P | | **P** | **15 24 00.4** | **+0.9** |
| **MLBS** | **Spotswood, Mel** | **38.92** | **143** | P | | **P** | **15 24 02.4** | **+2.0** |
| **PALK** | **Pallekele** | **38.98** | **293** | P | | **P** | **15 23 60.0** | **-1.3** |
| **PALK** | **Pallekele** | **38.98** | **293** | P | | **P** | **15 24 01.1** | **-0.2** |
| | comp=Z,76nm,1.1s,baz=193,slow=6.3,SNR=8.5 | | | | | | | |
| PALK | | | | PcP | | **PcP** | **15 26 12.1** | **+0.6** |
| | comp=Z,37nm,0.8s,baz=195,slow=1.3,SNR=8.8 | | | | | | | |
| | comp=Z,76nm,1.1s | | | | | | | |
| **PALK** | **Pallekele** | **38.98** | **293** | P | | **P** | **15 24 00.8** | **-0.5** |
| **PALK** | **Pallekele** | **38.98** | **293** | P | | **P** | **15 24 00.0** | **-1.3** |
| PALK | | | | pmax | | pmax | | |
| | comp=Z,122nm,1.2s | | | | | | | |
| **YNG** | **Young** | **39.00** | **136** | P | | **P** | **15 24 02.5** | **+1.3** |
| **ENH** | **Enshi** | **39.03** | **350** | P | | **P** | **15 24 03.6** | **+2.2** |
| **ENH** | **Enshi** | **39.03** | **350** | IAmb | | IAmb | 15 24 05.2 | |
| | comp=Z,173nm,0.8s | | | | | | | |
| **TOO** | **Toolangi** | **39.10** | **142** | P | | **P** | **15 24 04.2** | **+2.2** |
| **TOO** | **Toolangi** | **39.10** | **142** | IAmb | | IAmb | 15 24 05.2 | |
| | comp=Z,236nm,1.0s | | | | | | | |
| **AUPHS** | **Peel High Scho** | **39.17** | **130** | P | | **P** | **15 24 03.7** | **+1.1** |
| **AUWSH** | **Wavell State H** | **39.32** | **123** | P | | **P** | **15 24 05.2** | **+1.3** |
| **ARMA** | **Armidale** | **39.42** | **129** | P | | **P** | **15 24 06.3** | **+1.4** |
| **IMP** | **Imphal** | **39.70** | **327** | *e*P | | **P** | **15 24 07.3** | **+0.2** |
| **CAN** | **Canberra** | **39.98** | **137** | P | | **P** | **15 24 11.1** | **+1.7** |
| **GC1S** | **Gold Coast 1 S** | **39.99** | **124** | P | | **P** | **15 24 10.8** | **+1.3** |
| **CNB** | **Canberra Magne** | **40.23** | **137** | P | | **P** | **15 24 12.7** | **+1.2** |
| **NJ2** | **Nanjing** | **40.27** | **3** | ↑P | | **P** | **15 24 14.8** | **+3.2** |
| NJ2 | | | | sP | | **

BTO LR LR
comp=Z,34µm,17.3s
BTO LR LR
comp=Z,39µm,18.2s
**HHC Hu-ho-hao-te 49.20 355⇓** *i*P **P 15 25 24.9 +2.0**
HHC pP pP 15 25 30.8 -1.2
HHC pmax pmax
comp=Z,56nm,0.8s
**NOUC Port Laguerre 49.67 112** P **P 15 25 28.7 +2.0**
**DZM Mont Dzumac 49.80 112** P **P 15 25 28.8 +1.0**
**DZM Mont Dzumac 49.80 112** P **P 15 25 29.6 +1.8**
DZM IAmb IAmb 15 25 30.7
comp=Z,151nm,1.2s
**DZM Mont Dzumac 49.80 112** P **P 15 25 28.4 +0.6**
comp=Z,50nm,1.0s,baz=295,slow=7.5,SNR=23
DZM PKPPKP 15 56 19.7
comp=Z,7.7nm,0.7s,baz=135,slow=7.1,SNR=5.0
comp=Z,50nm,1.0s
**JHNI Jhansi 50.01 313** IAmb IAmb 15 25 27.9
comp=Z,1µm,3.0s
**GTA Gaotai 50.02 343** *e*P **P 15 25 28.8 -0.4**
GTA pP pP 15 25 31.8 -6.5
GTA pmax pmax
comp=Z,14nm,1.2s
**YATNC Mamie plateau, 50.21 112** P **P 15 25 32.1 +1.3**
**LIFNC LIFOU 50.38 110** P **P 15 25 33.0 +0.9**
**SNY Shenyang 50.38 7⇑** P **P 15 25 31.9 +0.3**
SNY pmax pmax
comp=Z,90nm,1.0s
**GUNA GUNA 50.40 312** *e*P **P 15 25 30.3 -1.9**
**JSD Sado 50.43 22** P **P 15 25 33.3 +1.2**
**PINNC Pines Island, 50.79 112** P **P 15 25 36.4 +1.2**
**DVP Devils Point 51.01 106** P **P 15 25 39.1 +2.2**
**MARNC Mare, Loyalty 51.19 111** P **P 15 25 40.5 +2.3**
**RTV Rentapao 51.24 106** P **P 15 25 40.1 +1.5**
**JMM Marumori 51.28 25** P **P 15 25 39.9 +1.4**
**LGTI Lohaghat 51.35 319** *e*P **P 15 25 37.8 -1.4**
LGTI IAmb IAmb 15 25 38.7
comp=Z,69nm,1.1s
**XLT XiLinHaoTe 52.04 360** *e*P **P 15 25 45.3 +1.1**
XLT pmax pmax
comp=Z,210nm,1.2s
**MSHR Mys Shultsa 52.44 14** *c e*P **P 15 25 48.0 +0.9**
MSHR pmax pmax
comp=Z,148nm,1.1s
**CN2 Changchun 52.56 8** P **P 15 25 48.1 +0.1**
CN2 pmax pmax
comp=Z,70nm,1.0s
**SONA Sohna 52.73 315** *e*P **P 15 25 47.0 -2.5**
**KUDL Kundal 53.08 315** *e*P **P 15 25 49.4 -2.7**
KUDL IAmb IAmb 15 25 50.1
comp=Z,99nm,1.0s
**AJM Ajmer 53.44 312** *e*P **P 15 25 52.5 -2.3**
AJM IAmb IAmb 15 25 54.4
comp=Z,45nm,0.9s
**JTM Tennabayashi 53.89 23** P **P 15 25 57.9 +0.1**
**KLP Kalpa 54.01 319⇑** *e*P **P 15 25 58.1 -1.2**
**MDJ Mudanjiang 54.05 11** P **P 15 26 00.5 +1.6**
**MDJ Mudanjiang 54.05 11** P **P 15 25 59.8 +0.9**
MDJ pmax pmax
comp=Z,430nm,0.9s
**USA0B Ussuriysk Arra 54.17 14** *c i*P **P 15 26 00.8 +1.0**
**USRK Ussuriysk Ar. 54.17 14** P **P 15 26 01.0 +1.2**
**USRK Ussuriysk Ar. 54.17 14** P **P 15 26 00.6 +0.8**
comp=Z,192nm,0.9s,baz=189,slow=6.6,SNR=110
comp=Z,192nm,0.9s
**HNLY HANLEY 54.37 321** *e*P **P 15 26 01.4 -0.7**
**SMLA Simla 54.46 318** *e*P **P 15 26 00.3 -1.8**
**BNX BinXian 54.75 9⇑** P **P 15 26 04.3 +0.3**
BNX pmax pmax
comp=Z,94nm,1.1s
**DHRM DHARAMSHALA 55.74 319** *e*P **P 15 26 10.0 -1.7**
DHRM IAmb IAmb 15 26 10.6
comp=Z,78nm,0.8s
**ERM Erimo 55.76 24** P **P 15 26 12.6 +1.3**
**ERM Erimo 55.76 24** *d i*P **P 15 26 12.3 +1.0**
ERM pmax pmax
comp=Z,146nm,1.7s
**JEM Erimo 55.76 24** P **P 15 26 12.5 +1.2**
**TEY Ternei 56.16 17⇓** *e*P **P 15 26 14.9 +0.8**
TEY pmax pmax
comp=E,20nm,1.2s
TEY pmax pmax
comp=N,90nm,1.0s
TEY pmax pmax
comp=Z,210nm,1.0s
**THN Thein Dam 56.24 318** *e*P **P 15 26 13.0 -1.9**
**ULN Ulaanbaatar 56.63 352** P **P 15 26 18.5 +0.8**
ULN IAmb IAmb 15 26 20.0
comp=Z,182nm,1.2s
**ULN Ulaanbaatar 56.63 352** P **P 15 26 18.9 +1.2**
**ULN Ulaanbaatar 56.63 352** P **P 15 26 18.5 +0.8**
ULN pmax pmax
comp=Z,181nm,1.3s
**SONM Songino Array 56.69 352** P **P 15 26 19.5 +1.4**
SONM IAmb IAmb 15 26 20.3
comp=Z,200nm,1.2s
**SONM Songino Array 56.69 352** P **P 15 26 18.8 +0.7**
comp=Z,105nm,0.9s,baz=172,slow=8.2,SNR=109
comp=Z,105nm,0.9s
**SONM Songino Array 56.69 352** P **P 15 26 19.5 +1.4**
SONM pmax pmax
comp=Z,200nm,1.2s
**PYZ Puysegur Point 56.97 140** P **P 15 26 21.5 +1.5**
**MCQ Macquarie Isla 57.05 152** P **P 15 26 23.1 +2.7**
**HIA Hailar 57.47 2** P **P 15 26 24.4 +1.0**
**HIA Hailar 57.47 2** IAmb IAmb 15 26 25.8
comp=Z,131nm,1.0s
**HIA Hailar 57.47 2** *d i*P **P 15 26 24.5 +1.0**
HIA pmax pmax
comp=Z,142nm,1.0s
**JCZ Jackson Bay 57.51 138** P **P 15 26 25.4 +1.5**
**CASY Casey 57.96 183** P **P 15 26 25.9 -0.7**
CASY IAmb IAmb 15 26 28.3
comp=Z,88nm,1.1s
**WMQ Urumqi 58.18 336⇑** *i*P **P 15 26 29.0 +0.5**
WMQ sP sP 15 26 39.8 -1.4
WMQ pmax pmax
comp=Z,150nm,0.7s
WMQ LR LR
comp=Z,9µm,19.9s
WMQ LR LR
comp=Z,10µm,21.1s
WMQ LR LR
comp=Z,10µm,24.3s
**NIL Nilore 58.62 318** P **P 15 26 29.3 -2.5**
**NIL Nilore 58.62 318** P **P 15 26 30.3 -1.5**
**NIL Nilore 58.62 318** P **P 15 26 29.3 -2.5**
NIL pmax pmax
comp=Z,30nm,1.1s
**SYZ Scrubby Hill 58.68 140** P **P 15 26 32.9 +0.9**
**KLR Kul'dur 58.90 12⇑** *i*P **P 15 26 33.3 0.0**
KLR pmax pmax
comp=Z,102nm,1.1s
**RPZ Rata Peaks 58.91 136** P **P 15 26 33.9 +0.2**
**HEH HeiHe 59.15 8** *e*P **P 15 26 35.4 +0.3**
HEH pmax pmax
comp=Z,280nm,1.4s
**TKNZ Takaka Hill 59.41 133** P **P 15 26 38.6 +1.5**
**ZAK Zakamensk 59.65 350** *e*P **P 15 26 38.3 -0.4**
ZAK pmax pmax
comp=Z,63nm,1.5s
**YSS Yuzh-Sakhalins 59.82 20** P **P 15 26 41.1 +1.3**
**YSS Yuzh-Sakhalins 59.82 20** P **P 15 26 39.9 +0.1**
**YSS Yuzh-Sakhalins 59.82 20** *d i*P **P 15 26 38.9 -0.9**
YSS pmax pmax
comp=Z,357nm,1.4s
**RER Riviere de l'E 59.84 250** P **P 15 26 42.7 +2.2**
**MQZ McQueen's Vall 60.00 136** P **P 15 26 41.2 +0.1**
**CIT Chita 60.22 358** *e*P **P 15 26 44.2 +1.7**
CIT *e* 15 26 53.4
CIT *e* 15 27 31.0
CIT *e* 15 28 49.2
CIT pmax pmax
comp=Z,376nm,1.6s
**MSVF Nonsavu 60.40 106** P **P 15 26 46.3 +1.8**
**KUZ Kuaotunu 60.42 128** P **P 15 26 45.7 +1.5**
**KSH Kashi 60.69 325** P **P 15 26 45.3 -0.8**
KSH sP pP 15 26 53.8 -1.5
KSH pmax pmax
comp=Z,29nm,0.9s
**SNZO South Karori 60.75 133** P **P 15 26 47.5 +1.2**
**SNZO South Karori 60.75 133** P **P 15 26 46.5 +0.2**
**BHW Baring Head 60.90 133** IAmb IAmb 15 26 48.4
comp=Z,143nm,1.0s
**KNGR Kungurtug, Tuv 61.03 346⇓** *i*P **P 15 26 48.9 +0.8**
**MOY Mondy 61.29 349** *e*P **P 15 26 50.6 +0.7**
MOY pmax pmax
comp=Z,168nm,2.1s
**IRK Irkutsk 61.30 351** *e*P **P 15 26 49.7 -0.1**
IRK pmax pmax
comp=Z,171nm,1.8s
**GRNR Gornyy 61.38 14⇑** *i*P **P 15 26 51.4 +1.1**
GRNR pmax pmax
comp=N,30nm,1.1s
GRNR pmax pmax
comp=Z,70nm,1.1s
**UGL Uglegorsk 61.44 19** *e*P **P 15 26 52.0 +1.3**
UGL pmax pmax
comp=Z,360nm,1.2s
**PDGK Podgornoye 61.50 330** P **P 15 26 50.8 -0.7**
**BKZ Black Stump Fm 61.55 130** P **P 15 26 52.8 +0.9**
**BKZ Black Stump Fm 61.55 130** P **P 15 26 52.6 +0.7**
**UZB Uzynbulak 61.60 330** *e*P **P 15 26 51.4 -0.8**
baz=330
UZB *e*S **S 15 35 14.1 +1.5**
baz=330
**UZB Uzynbulak 61.60 330** *e*P **P 15 26 51.4 -0.8**
UZB *e*S **S 15 35 14.1 +1.5**
**BFZ Birch Farm 61.72 132** P **P 15 26 54.6 +1.7**
**URZ Urewera 61.82 129** P **P 15 26 53.8 +0.2**
comp=Z,77nm,0.8s,baz=31,slow=3.3,SNR=20
URZ PKP2ab 15 56 19.6
comp=Z,8.7nm,0.9s,baz=41,slow=19,SNR=12
comp=Z,77nm,0.8s
**SATY Saty 61.85 329** *e*P **P 15 26 53.0 -0.8**
baz=329
SATY *e*S **S 15 35 17.4 +1.6**
baz=329
**SATY Saty 61.85 329** *e*P **P 15 26 53.0 -0.8**
SATY *e*S **S 15 35 17.3 +1.6**
**FUNA Funafuti 61.89 95** P **P 15 26 55.8 +1.3**
**ZHN Zhinishke 61.92 329** *e*P **P 15 26 53.6 -0.7**
comp=Z,45nm,1.2s,baz=329
**ZHN Zhinishke 61.92 329** *e*P **P 15 26 53.6 -0.7**
ZHN pmax pmax
comp=Z,45nm,1.2s
**KBL Kabul 61.97 316** P **P 15 26 53.5 -1.4**
**KBL Kabul 61.97 316** P **P 15 26 53.0 -2.0**
SNR=11
**KBL Kabul 61.97 316** P **P 15 26 53.5 -1.4**
KBL pmax pmax
comp=Z,30nm,1.0s
**KPKS Kokpek 62.01 330** *e*P **P 15 26 54.2 -0.7**
comp=Z,45nm,1.1s,baz=330
KPKS *e*S **S 15 35 19.2 +1.6**
baz=330
**KPKS Kokpek 62.01 330** *e*P **P 15 26 54.1 -0.7**
KPKS *e*S **S 15 35 19.2 +1.6**
KPKS pmax pmax
comp=Z,45nm,1.1s
**ZSN Zaisan 62.29 336** *e*P **P 15 26 56.4 -0.2**
comp=Z,88nm,1.2s,baz=336
**ZSN Zaisan 62.29 336** *e*P **P 15 26 56.3 -0.2**
ZSN pmax pmax
comp=Z,88nm,1.2s
**ULHL Ulahol 62.41 327** P **P 15 26 57.5 -0.2**
SNR=5.8
**ZEA Zeya 62.54 7** *e*P **P 15 26 58.9 +0.8**
ZEA pmax pmax
comp=E,20nm,1.9s
ZEA pmax pmax
comp=N,50nm,1.5s
ZEA pmax pmax
comp=Z,90nm,1.5s
**TNSS Tian-Shan 62.59 328** *e*P **P 15 26 57.8 -1.3**
baz=328
**TNSS Tian-Shan 62.59 328** *e*P **P 15 26 57.8 -1.3**
**MXZ Matakaoa Point 62.61 128** P **P 15 26 59.6 +0.7**
**MDOK Medeo 62.62 328** *e*P **P 15 26 58.2 -0.9**
baz=328
MDOK LR LR 15 56 36.5
comp=Z,3µm,16.5s,baz=328
**MDOK Medeo 62.62 328** *e*P **P 15 26 58.2 -0.9**
**AAA Alma-Ata 62.73 328** *e*P **P 15 26 58.9 -0.8**
baz=328
AAA LR LR 15 56 40.5
baz=328
**AAA Alma-Ata 62.73 328** *e*P **P 15 26 58.8 -0.8**
**MK31 Makanchi Array 62.83 334** IAmb IAmb 15 27 01.4
comp=Z,50nm,0.8s
**MK31 Makanchi Array 62.83 334** *c i*P **P 15 26 59.1 -1.1**
**MKAR Makanchi Array 62.83 334** P **P 15 27 00.1 -0.1**
comp=Z,69nm,0.8s,baz=144,slow=7.8,SNR=90
MKAR PKP2bc 15 56 02.1
comp=Z,2.3nm,0.9s,baz=318,slow=3.3,SNR=5.5
comp=Z,69nm,0.8s
**ARXS Arharly 62.97 330** *e*P **P 15 26 59.3 -2.0**
**MAKZ Makanchi 62.98 334** P **P 15 27 01.1 -0.1**
**MAKZ Makanchi 62.98 334** P **P 15 27 01.1 -0.1**
MAKZ pmax pmax
comp=Z,34nm,0.9s
**CHKK Chushkaly 63.14 329** *e*P **P 15 27 01.2 -1.1**
baz=329
**CHKK Chushkaly 63.14 329** *e*P **P 15 27 01.2 -1.1**
**DGZ Jazzator, Alta 63.19 339** *c i*P **P 15 27 03.0 +0.3**
DGZ pmax pmax
comp=Z,219nm,1.1s
**TYV Tymovskoe 63.19 18** *e*P **P 15 27 03.5 +1.1**
TYV pmax pmax
comp=Z,41nm,1.7s
TYV pmax pmax
comp=Z,2µm,7.9s
**TKM2 Tokmak 2 63.22 327** P **P 15 27 02.4 -0.7**
SNR=20
**TKM2 Tokmak 2 63.22 327** *i*P **P 15 27 01.8 -1.3**
TKM2 pmax pmax
comp=Z,56nm,1.2s
**TDK Taldyqorghan 63.26 331** *e*P **P 15 27 02.3 -0.8**
comp=Z,68nm,0.8s,baz=331
TDK LR LR 15 56 59.3
comp=Z,4µm,16.1s,baz=331
**TDK Taldyqorghan 63.26 331** *e*P **P 15 27 02.2 -0.8**
TDK pmax pmax
comp=Z,68nm,0.8s
TDK MLR MLR
comp=Z,4µm,16.0s
**KBK Kagaybulak 63.39 327** P **P 15 27 03.9 -0.3**
SNR=26
**NGCH Negor - Chabah 63.49 304** P **P 15 27 04.0 -1.0**
**KUU Kurty 63.50 329** *e*P **P 15 27 03.5 -1.2**
baz=329
KUU LR LR 15 57 07.4
comp=Z,6µm,17.0s,baz=329
**KUU Kurty 63.50 329** *e*P **P 15 27 03.5 -1.2**
**AAK Ala-Archa 63.62 327** P **P 15 27 05.8 +0.1**
SNR=15
**AAK Ala-Archa 63.62 327** P **P 15 27 05.1 -0.5**
**AAK Ala-Archa 63.62 327** PKP2bc 15 56 03.4
comp=Z,5.0nm,0.7s,baz=264,slow=4.7,SNR=5.9
**AAK Ala-Archa 63.62 327** P **P 15 27 05.6 -0.1**
AAK P **P 15 27 05.6 -0.1**
**AAK Ala-Archa 63.62 327⇑** *e*P **P 15 27 05.2 -0.5**
AAK pmax pmax
comp=Z,56nm,1.2s
**JLN Jalan Bani Buh 63.68 300** P **P 15 27 04.7 -1.6**
JLN P **P 15 27 04.7 -1.6**
**AML Almayashu 63.73 326** P **P 15 27 06.2 -0.5**
SNR=24
**CHMS Chumysh 63.73 327** P **P 15 27 05.5 -0.7**
SNR=6.1
**GAR Garm 63.74 321** IAmb IAmb 15 27 06.3
comp=Z,108nm,1.0s
**EKS2 Erkin-Say 64.03 326** P **P 15 27 08.0 -0.4**
SNR=29
**USP Ospenovka 64.04 327** P **P 15 27 07.8 -0.5**
SNR=25
**WBK Wadi Bani Khal 64.23 300** P **P 15 27 08.3 -1.6**
WBK P **P 15 27 08.3 -1.6**
**CHGR Chuyangaron 64.26 320** IAmb IAmb 15 27 44.5
comp=Z,66nm,0.8s
**SIMJ Simiganj 64.36 320** P **P 15 27 07.5 -3.1**
SIMJ IAmb IAmb 15 27 45.0
comp=Z,44nm,0.8s
**MHTO MHTO 64.51 298** P **P 15 27 10.2 -1.5**
SNR=5.6
MHTO P **P 15 27 10.2 -1.5**
SNR=5.6
**DQM DQM 64.52 297** P **P 15 27 10.5 -1.4**
DQM P **P 15 27 10.5 -1.4**
**WSAR Wadi Sarin 64.76 300** PKP2bc 15 55 58.9
comp=Z,3.7nm,0.8s,baz=292,slow=3.3,SNR=1.9
**JMDO Jabal Madar 64.89 299** P **P 15 27 13.2 -1.1**
JMDO P **P 15 27 13.2 -1.1**
**SMDO Samad 65.19 300** P **P 15 27 14.9 -1.3**
SMDO P **P 15 27 14.9 -1.3**
**BIDO Bidbid 65.29 301** P **P 15 27 15.6 -1.2**
SNR=10.0
**BTLS Baital 65.48 328** *e*P **P 15 27 16.4 -1.3**
baz=328
**BTLS Baital 65.48 328** *e*P **P 15 27 16.3 -1.3**
**BSY Bisya 65.80 299** P **P 15 27 18.3 -1.9**
BSY P **P 15 27 18.3 -1.9**
**HOQ Hoqain 66.01 300** P **P 15 27 20.4 -1.1**
SNR=8.7
HOQ P **P 15 27 20.4 -1.1**
SNR=8.7
**DMTO DMTO 66.13 294** P **P 15 27 21.4 -0.9**
**KK31 Karatay Array 66.15 325** *i*P **P 15 27 20.2 -1.8**
**KKAR Karatay Array 66.15 325** P **P 15 27 20.0 -2.0**
**KKAR Karatay Array 66.15 325** IAmb IAmb 15 27 22.7
comp=Z,24nm,1.3s
**KKAR Karatay Array 66.15 325** P **P 15 27 20.0 -2.0**
**BRLS Boroldday 66.49 324** *e*P **P 15 27 22.3 -1.9**
baz=324
**BRLS Boroldday 66.49 324** *e*P **P 15 27 22.3 -1.9**
**SEM Semipalatinsk 66.49 336** *e*P **P 15 27 23.1 -1.2**
baz=336
SEM LR LR 15 58 58.9
comp=Z,4µm,17.3s,baz=336
**SEM Semipalatinsk 66.49 336** *e*P **P 15 27 23.1 -1.2**
SEM MLR MLR
comp=Z,4µm,17.0s
**H04N2 CROZET ISLANDS 66.58 223** T T 16 39 51.6
SNR=9.5
**ARQ Araqi 66.60 300** P **P 15 27 24.0 -1.2**
ARQ P **P 15 27 24.0 -1.2**
**H04N1 CROZET ISLANDS 66.60 223** T T 16 39 35.4
SNR=10
**H04N3 CROZET ISLANDS 66.60 223** T T 16 40 02.9
SNR=7.9
**RBK Rabkut 66.74 293** P **P 15 27 25.5 -0.8**
**SOHO SOHO 66.87 301** P **P 15 27 25.0 -1.9**
SOHO P **P 15 27 25.0 -1.9**
**KRAR Krasnoyarsk 67.11 346⇑** *i*P **P 15 27 27.9 +0.2**
**DOK Doka 67.15 294** P **P 15 27 27.3 -1.5**
DOK P **P 15 27 27.3 -1.5**
**WHFO Wadi Hawf 67.26 293** P **P 15 27 28.2 -1.4**
WHFO P **P 15 27 28.2 -1.4**
**KURBB Kurchatov Arra 67.37 335** P **P 15 27 28.6 -0.9**
comp=Z,25nm,0.8s,baz=149,slow=5.4,SNR=69
KURBB PP **PP 15 29 58.2 -0.2**
comp=Z,5.0nm,1.1s,baz=139,slow=6.1,SNR=2.8
KURBB PKP2bc 15 55 52.7
comp=Z,4.4nm,1.1s,baz=310,slow=3.6,SNR=18
comp=Z,25nm,0.8s
**KURK Kurchatov 67.40 335** P **P 15 27 28.9 -0.9**
KURK IAmb IAmb 15 27 30.2
comp=Z,54nm,0.9s
**KURK Kurchatov 67.40 335** P **P 15 27 29.2 -0.5**
KURK P **P 15 27 29.2 -0.5**
**KURK Kurchatov 67.40 335** *c i*P **P 15 27 29.1 -0.6**
KURK pmax pmax
comp=Z,62nm,0.9s
**ABTO Aybut 67.53 293** P **P 15 27 30.3 -1.0**
ABTO P **P 15 27 30.3 -1.0**
**CTZ Chatham Island 67.54 134** P **P 15 27 32.5 +1.6**
**ZAA0 Zalesovo Array 67.63 340** IAmb IAmb 15 27 32.6
comp=Z,50nm,0.8s
**ZALV Zalesovo Beam 67.63 340** P **P 15 27 29.4 -1.6**
**ZALV Zalesovo Beam 67.63 340** P **P 15 27 30.1 -1.0**
comp=Z,50nm,0.8s,baz=144,slow=4.8,SNR=41
ZALV PP **PP 15 29 59.8 -0.8**
comp=Z,5.6nm,0.8s,baz=140,slow=9.5,SNR=4.1
ZALV PKP2bc 15 55 53.0
comp=Z,2.6nm,0.3s,baz=320,slow=3.9,SNR=4.4
comp=Z,50nm,0.8s
**ZALV Zalesovo Beam 67.63 340** P **P 15 27 29.5 -1.6**
**MASF Masafi 67.64 302** P **P 15 27 29.8 -2.0**
**ABPO Ambohimpanom 67.83 253** P **P 15 27 33.6 +0.2**
ABPO IAmb IAmb 15 27 35.6
comp=Z,92nm,1.1s
**ABPO Ambohimpanom 67.83 253** P **P 15 27 33.6 +0.2**
ABPO pmax pmax
comp=Z,92nm,1.1s
**OPO Ambohidratompo 67.88 253** PKP2bc 15 55 52.5
comp=Z,3.1nm,0.9s,baz=278,slow=7.1,SNR=3.6
**FAQ Al Faqa, Dubai 67.89 301** P **P 15 27 31.8 -1.6**
SNR=6.2
FAQ P **P 15 27 31.8 -1.6**
SNR=6.2
**SHME Shamm 67.90 302** P **P 15 27 30.5 -3.0**
**NAZ Nazwa, Dubai 67.92 301** P **P 15 27 31.8 -1.8**
NAZ P **P 15 27 31.8 -1.8**
**FOMA Nahampoana Res 68.03 247** P **P 15 27 36.9 +2.6**
SNR=6.4
**ASUD Al Ashush, Dub 68.07 301** P **P 15 27 32.4 -2.2**
ASUD P **P 15 27 32.4 -2.2**
**UMQ Umm Al-Quwin 68.11 302** P **P 15 27 33.8 -1.0**
**VOI Vohitsoka 68.19 250** P **P 15 27 37.0 +1.4**
**VOI Vohitsoka 68.19 250** P **P 15 27 37.5 +1.9**
SNR=6.7
**AJN Ajban 68.34 301** P **P 15 27 34.8 -1.5**
**OTUK Ortayu 68.51 330** P **P 15 27 35.9 -1.0**
**MAW Mawson 69.00 199** P **P 15 27 39.6 +0.1**
comp=Z,85nm,1.0s,baz=55,slow=7.7,SNR=37
MAW PKP2bc 15 55 48.5
comp=Z,5.6nm,1.1s,baz=261,slow=2.9,SNR=6.4
comp=Z,85nm,1.0s
**MZWR Madinat Zayed 69.02 299** P **P 15 27 38.8 -1.6**
MZWR P **P 15 27 38.8 -1.6**
**GHWR Ruwais 69.95 299** P **P 15 27 44.8 -1.4**
GHWR P **P 15 27 44.8 -1.4**
**JRN Qarnain Island 70.30 300** P **P 15 27 46.3 -2.0**
JRN P **P 15 27 46.3 -2.0**
**PEA0B Petropavlovsk- 70.51 25** IAmb IAmb 15 27 51.3
comp=Z,72nm,1.0s
**PEA0B Petropavlovsk- 70.51 25** *d i*P **P 15 27 49.7 +0.7**
**PETK Petropavlovsk- 70.51 25** P **P 15 27 50.0 +1.0**
**PETK Petropavlovsk- 70.51 25** P **P 15 27 48.9 -0.1**
comp=Z,47nm,0.9s,baz=210,slow=4.7,SNR=26
comp=Z,47nm,0.9s
**PET Petropavlovsk 70.85 25** P **P 15 27 52.1 +1.0**
**PET Petropavlovsk 70.85 25** P **P 15 27 51.8 +0.7**
PET IAmb IAmb 15 27 52.6
comp=Z,74nm,1.2s
**PET Petropavlovsk 70.85 25** *c e*P **P 15 27 50.9 -0.2**
PET pmax pmax
comp=Z,83nm,1.3s
**YAK Yakutsk 70.94 7** PKP2ab 15 55 45.0
comp=Z,7.4nm,0.9s,baz=355,slow=4.9,SNR=8.2
**YAK Yakutsk 70.94 7** *e*P **P 15 27 51.2 -0.2**
YAK pmax pmax
comp=Z,131nm,1.0s
YAK pmax pmax
comp=N,58nm,1.1s
YAK pmax pmax
comp=E,12nm,1.0s
**SLWR Sila 71.01 299** P **P 15 27 51.3 -1.4**
SLWR P **P 15 27 51.3 -1.4**
**TRNA Turayna 71.64 299** P **P 15 27 54.8 -1.6**
**NIUE Niue 71.78 107** P **P 15 27 59.3 +1.8**
**SMRA Abu-Samra 71.97 299** P **P 15 27 56.6 -1.9**
**SHMA Al-Shehemyia 72.21 300** P **P 15 27 58.0 -1.9**
**SAKB Bahrain 72.61 300** P **P 15 28 00.4 -1.8**
**BVA0 Borovoye Array 72.63 333** *i*P **P 15 28 00.5 -1.3**
**BVAR Borovoye Array 72.63 333** P **P 15 28 01.0 -0.8**
comp=E,66nm,0.8s,baz=140,slow=7.9,SNR=101
BVAR PKPPKP 15 55 41.5
comp=E,0.5nm,0.7s,baz=0.0,slow=1.4,SNR=4.6
comp=E,66nm,0.8s
**BRVK Borovoye 72.70 333** P **P 15 28 01.5 -0.7**
BRVK IAmb IAmb 15 28 02.4
comp=Z,64nm,0.9s
**BRVK Borovoye 72.70 333** P **P 15 28 01.7 -0.5**
**BRVK Borovoye 72.70 333** *c i*P **P 15 28 00.3 -1.9**
BRVK pmax pmax
comp=Z,78nm,1.0s
**MA2 Magadan 73.04 17** P **P 15 28 05.3 +1.2**
**MA2 Magadan 73.04 17** P **P 15 28 03.8 -0.3**
MA2 IAmb IAmb 15 28 05.8
comp=Z,86nm,0.9s
**MA2 Magadan 73.04 17** *d i*P **P 15 28 03.3 -0.8**
MA2 pmax pmax
comp=Z,90nm,0.9s

**AB31 Akbulak array** 75.68 326 *i* P **P** 15 28 18.2 -1.5
**SEY Seymchan** 76.22 16*c i* P **P** 15 28 22.4 -0.1
SEY pmax pmax
comp=Z,113nm,1.1s
**AKTO Aktyubinsk** 77.36 326 P **P** 15 28 28.3 -0.9
comp=Z,70nm,0.8s,baz=112,slow=3.3,SNR=37
AKTO PKPPKP 15 55 37.2
comp=Z,1.2nm,0.7s,baz=319,slow=5.2,SNR=4.0
comp=Z,70nm,0.8s
**KIBK Kibwezi** 78.30 269 IAmb IAmb 15 28 37.0
comp=Z,64nm,1.0s
**KIBK Kibwezi** 78.30 269 P **P** 15 28 35.9 +0.5
SNR=9.6
**KMBO Kilima Mbogo** 79.26 270 P **P** 15 28 41.2 +0.5
comp=Z,31nm,1.0s,baz=85,slow=6.5,SNR=39
comp=Z,31nm,1.0s
**SVE Sverdlovsk** 79.41 332 *e*P **P** 15 28 38.6 -1.7
SVE pmax pmax
comp=Z,79nm,1.1s
**ARU Arti** 80.16 331*c i* P **P** 15 28 42.9 -1.5
ARU 15 31 42.3
ARU S **S** 15 38 50.1 +2.9
ARU pmax pmax
comp=Z,66nm,1.3s
**TIXI Tiksi** 80.28 4⇓ *i* P **P** 15 28 43.3 -1.5
TIXI pmax pmax
comp=Z,54nm,0.9s
TIXI MLR MLR
comp=Z,10μm,18.0s
**MAK Makhachkala** 80.72 316 *e*P P 15 28 40.6 -7.1
MAK *e* 15 31 45.0
MAK *e*S S 15 38 42.3 -11
MAK *e*SS **SS** **15 44 03.2 -4.2**
MAK *e*SSS SSS 15 47 24.0
MAK pmax pmax
comp=Z,324nm,1.1s
**QSPA South Pole Qui** 81.61 180 P **P** 15 28 51.9 -0.4
QSPA IAmb IAmb 15 28 56.1
comp=Z,133nm,1.1s
**QSPA South Pole Qui** 81.61 180 P **P** 15 28 51.4 -0.8
comp=Z,95nm,1.1s,baz=320,slow=1.9,SNR=24
QSPA PKKPbc **PKKPbc** 15 47 24.2 -3.9
comp=Z,11nm,1.0s,baz=335,slow=0.5,SNR=9.1
comp=Z,95nm,1.1s
**LODK Lodwar** 81.80 275 P **P** 15 28 54.8 +0.6
SNR=9.9
**LODK Lodwar** 81.80 275 P **P** 15 28 54.6 +0.4
**ELIB Princess Elisa** 83.09 198 *d*P **P** 15 29 00.5 +0.6
comp=Z,66nm,1.1s
**NCK Nalchik** 83.59 316⇓ *e*P **P** 15 29 02.3 -0.5
NCK pmax pmax
comp=Z,67nm,1.8s
**BILL Bilibino** 83.89 17⇓ *e*P **P** 15 29 02.3 -1.5
BILL *i* 15 32 16.2
BILL pmax pmax
comp=Z,39nm,2.2s
**BELG Belogornoye** 84.06 325 P **P** 15 29 03.6 -1.3
comp=Z,84nm,0.9s,baz=138,slow=1.7,SNR=12
comp=Z,84nm,0.9s
**BELG Belogornoye** 84.06 325*c i* P **P** 15 29 03.2 -1.7
BELG pmax pmax
comp=Z,19nm,0.9s
**KBZ Khabaz** 84.14 316 P **P** 15 29 04.5 -1.1
comp=Z,17nm,0.9s,baz=85,slow=2.9,SNR=8.1
KBZ PKKPbc **PKKPbc** 15 47 20.4 -0.7
comp=Z,4.9nm,0.8s,baz=335,slow=1.6,SNR=6.9
KBZ PKPPKP **P'P'df** 15 55 25.3 +0.8
comp=Z,4.0nm,1.0s,baz=0.0,slow=1.0,SNR=4.5
comp=Z,17nm,0.9s
**KBZ Khabaz** 84.14 316*ce*P **P** 15 29 05.5 -0.1
**SHA1 Shidzhatmaz** 84.31 316⇓ *e*P **P** 15 29 05.9 -0.9
**KIV Kislovodsk** 84.36 316 P **P** 15 29 06.4 -0.4
KIV P **P** 15 29 06.4 -0.4
**KIV Kislovodsk** 84.36 316 *e*P **P** 15 29 04.8 -2.0
KIV pmax pmax
comp=Z,19nm,1.1s
**GOF Gofitskoye** 84.44 317*ce*P **P** 15 29 05.9 -1.2
**KIRV Kirov** 85.53 331*d i* P **P** 15 29 10.6 -1.6
**MBAR Mbarara** 85.78 270 P **P** 15 29 14.8 +0.1
MBAR P **P** 15 29 14.8 +0.1
**MBAR Mbarara** 85.78 270*c i* P **P** 15 29 15.1 +0.4
MBAR pmax pmax
comp=Z,181nm,1.5s
**LSZ Lusaka** 86.27 255 P **P** 15 29 17.0 -0.1
**LSZ Lusaka** 86.27 255 P **P** 15 29 17.3 +0.3
LSZ P **P** 15 29 17.3 +0.3
**LSZ Lusaka** 86.27 255 P **P** 15 29 17.0 -0.1
LSZ pmax pmax
comp=Z,119nm,0.9s
**SOC Sochi** 86.32 315 *e*P **P** 15 29 14.2 -2.3
SOC *e* 15 32 35.2
SOC *e*PPP PPP 15 34 31.7
SOC *e*S **SKSac** 15 39 39.9 -1.0
SOC pmax pmax
comp=Z,57nm,0.8s
**SOE Somerset East** 86.36 238 P **P** 15 29 18.1 +1.0
SOE IAmb IAmb 15 29 20.1
comp=Z,128nm,1.1s
**NVL N'lazarevskaya** 86.94 199 *e*P **P** 15 29 19.6 +0.5
NVL *e*S **SKSac** 15 39 45.7 +1.8
NVL pmax pmax
comp=Z,37nm,1.0s
NVL MLR MLR
comp=Z,9μm,18.0s
**VRH Novokhopyorsk** 87.12 323 *e*P **P** 15 29 17.7 -2.5
VRH pmax pmax
comp=Z,120nm,0.8s
**MMAI Mount Meron Ar** 87.17 304 P **P** 15 29 21.7 +0.7
comp=Z,8.9nm,0.5s,baz=102,slow=6.9,SNR=4.5
comp=Z,8.9nm,0.5s
**BOSA Boshof** 87.18 242 P **P** 15 29 22.5 +1.2
comp=Z,138nm,1.0s,baz=105,slow=4.8,SNR=63
comp=Z,138nm,1.0s
**ANN Anapa** 88.21 316 *e*P **P** 15 29 21.6 -4.0
ANN *e**PP **PcP** 15 29 26.4 -0.9
ANN *e*S **SKSac** 15 39 50.2 -2.2
ANN pmax pmax
comp=Z,70nm,0.8s
**VORD Divnogorie** 88.53 322 *e*P **P** 15 29 23.8 -3.1
VORD pmax pmax
comp=Z,50nm,0.6s
**VSR Storozhevoye** 88.67 322 *e*P **P** 15 29 24.5 -3.1
VSR pmax pmax
comp=Z,90nm,0.8s
**VORR Voronezh** 88.76 323 *e*P **P** 15 29 23.7 -4.3
VORR pmax pmax
comp=Z,50nm,0.5s
**KIP Kipapa** 88.80 68⇓ *e*P **P** 15 29 30.3 +1.4
KIP pmax pmax
comp=Z,96nm,2.3s
**LPSR Galich'ya Gora** 89.17 323 *e*P **P** 15 29 27.3 -2.6
LPSR pmax pmax
comp=Z,50nm,0.9s
**TROLL Troll, Antarti** 89.28 196 ⇑P **P** 15 29 31.5 +1.1
comp=Z,2μm,0.7s
**GAMB Gambell** 89.54 25 P **P** 15 29 31.5 +0.1
baz=250
**BR131 Keskin Array S** 89.89 310*ce*P **P** 15 29 31.9 -2.0
**BRTR Keskin Array B** 89.89 310 P **P** 15 29 31.8 -2.0
**BRTR Keskin Array B** 89.89 310 P **P** 15 29 32.4 -1.5
comp=Z,14nm,0.9s,baz=124,slow=5.0,SNR=9.7
BRTR PKKPbc **PKKPbc** 15 47 06.5 -0.6
comp=Z,2.1nm,0.9s,baz=264,slow=1.2,SNR=3.9
comp=Z,14nm,0.9s
**BRTR Keskin Array B** 89.89 310*ce*P **P** 15 29 32.4 -1.5
BRTR pmax pmax
comp=Z,15nm,0.9s
**SIM Simferopol'** 90.55 315 *e*P **P** 15 29 35.2 -1.4
SIM pmax pmax
comp=Z,30nm,0.9s
**SNAA Sanae** 90.93 196 ⇑P **P** 15 29 38.2 +0.2
comp=Z,867nm,0.9s
**SNAA Sanae** 90.93 196 P **P** 15 29 38.0 0.0
comp=Z,48nm,1.0s,baz=125,slow=4.2,SNR=29
SNAA PKPPKP **P'P'df** 15 55 06.3 -7.1
comp=Z,1.5nm,0.8s,baz=265,slow=3.9,SNR=6.2
comp=Z,48nm,1.0s
**SNAA Sanae** 90.93 196*c i* P **P** 15 29 39.2 +1.2
SNAA pmax pmax
comp=Z,92nm,1.1s
**M11K Mekoryuk** 90.98 29 P **P** 15 29 38.1 -0.1
baz=255
**FALS False Pass** 91.09 35 P **P** 15 29 38.5 -0.3
baz=257
**OBN Obninsk** 91.13 326 P **P** 15 29 39.9 +0.9
comp=Z,7.2nm,0.4s,baz=139,slow=19,SNR=3.6
comp=Z,7.2nm,0.4s
**OBN Obninsk** 91.13 326 *i* P **P** 15 29 36.4 -2.6
OBN pmax pmax
comp=Z,26nm,0.8s
**PPT Papeete** 91.16 108 P **P** 15 29 41.5 +1.4
comp=Z,50nm,1.0s,baz=41,slow=5.3,SNR=5.3
comp=Z,50nm,1.0s
**TNA Tin City** 91.65 24 P **P** 15 29 40.8 -0.4
baz=253
**S12K Black Hills** 92.03 34 P **P** 15 29 43.2 -0.1
baz=258
**F14K Arctic Creek** 92.27 24 P **P** 15 29 44.6 +0.5
baz=255
**M13K Dall Lake** 92.37 29 P **P** 15 29 44.3 -0.3
baz=257
**BELA Belgrano 2** 92.39 186 P **P** 15 29 44.5 -0.1
BELA IAmb IAmb 15 29 46.6
comp=Z,57nm,1.0s
**ANM Nome** 92.42 25 P **P** 15 29 44.6 -0.3
baz=256
**J14K Nanvaranak Lak** 92.79 27 P **P** 15 29 46.8 +0.3
baz=257
**SDPT Sand Point** 92.85 35 P **P** 15 29 47.0 +0.1
baz=260
**L14K Kuka Creek** 92.88 28 P **P** 15 29 47.0 +0.1
baz=258
**VNA1 Neumayer--Stat** 92.97 196 ⇑P **P** 15 29 48.3 +1.0
comp=Z,38nm,1.3s
**VNA3 Neumayer Olymp** 92.99 195 ⇑P **P** 15 29 48.0 +0.5
comp=Z,21nm,0.8s
**F15K North Star Dit** 93.00 24 P **P** 15 29 47.6 +0.1
baz=256
**N14K Kuskokwak Cree** 93.08 30 P **P** 15 29 47.9 0.0
baz=259
**G15K Niukluk** 93.08 25 P **P** 15 29 48.0 +0.1
baz=257
**M14K Bethel** 93.11 29 P **P** 15 29 48.2 +0.1
baz=258
**O14K Tigyukauivet M** 93.16 31 P **P** 15 29 48.3 -0.1
baz=259
**CHNA Chernabura Isl** 93.26 35 P **P** 15 29 48.7 -0.2
baz=260
**C16K Lisburne Hills** 93.35 21 P **P** 15 29 49.6 +0.6
baz=256
**L15K Ungalak Mounta** 93.51 28 P **P** 15 29 50.3 +0.3
baz=259
**S14K Fog Glacier** 93.53 34 P **P** 15 29 50.0 -0.2
baz=260
**K15K Wolf Creek Mou** 93.61 28 P **P** 15 29 50.5 +0.1
baz=259
**M15K Kasigluk River** 93.71 29 P **P** 15 29 50.8 0.0
baz=260
**H16K Elim** 93.76 25 P **P** 15 29 50.8 -0.2
baz=258,SNR=5.4
**G16K Koyuk River** 93.86 24 P **P** 15 29 51.7 +0.2
baz=258
**N15K Kwethluk River** 93.91 30 P **P** 15 29 51.7 -0.1
baz=260
**D17K Noatak River** 94.05 22 P **P** 15 29 52.5 +0.3
baz=258
**CHGN Chignik** 94.16 34 P **P** 15 29 52.1 -0.9
baz=261
**C17K DeLong Mountai** 94.18 21 P **P** 15 29 53.0 +0.1
baz=258
**RDOG Red Dog Mine** 94.19 22 P **P** 15 29 52.8 -0.1
baz=258
**J16K Anvik River** 94.21 27 IAmb IAmb 15 29 54.1
comp=Z,48nm,1.1s
**J16K Anvik River** 94.21 27 P **P** 15 29 53.4 +0.3
baz=260,SNR=8.9
**I17K Unalakleet** 94.28 26 P **P** 15 29 53.8 +0.4
baz=260,SNR=5.2
**E17K Hotham Inlet** 94.40 23 P **P** 15 29 54.6 +0.7
baz=259
**L16K Owhat River** 94.46 28 P **P** 15 29 54.5 +0.2
baz=261
**F17K Baldwin Pennin** 94.51 24 P **P** 15 29 54.5 +0.1
baz=260
**G17K Kiwalik Mounta** 94.58 25 P **P** 15 29 55.0 +0.3
baz=260
**M16K Timber Creek** 94.60 29 P **P** 15 29 54.8 -0.1
baz=260
**N16K Nishlik Lake** 94.61 30 P **P** 15 29 55.2 +0.1
baz=261
**AKASG Malin Array Be** 94.73 320 P **P** 15 29 53.4 -2.4
comp=Z,5.2nm,0.8s,baz=85,slow=4.4,SNR=12
AKASG PP **PP** 15 33 41.3 -3.1
comp=Z,0.9nm,0.6s,baz=95,slow=6.5,SNR=4.4
AKASG PKiKP **PKiKP** 15 34 37.6 -0.5
comp=Z,1.5nm,0.7s,baz=77,slow=2.3,SNR=4.6
comp=Z,5.2nm,0.8s
**AKASG Malin Array Be** 94.73 320 *i* P **P** 15 29 53.2 -2.6
AKASG pmax pmax
comp=Z,7.0nm,0.8s
**AKBB Malin Array Si** 94.73 320⇑ *e*P **P** 15 29 52.4 -3.4
AKBB pmax pmax
comp=Z,11nm,0.9s
**H17K Granite Mounta** 94.79 25 IAmb IAmb 15 29 56.7
comp=Z,47nm,1.0s
**H17K Granite Mounta** 94.79 25 P **P** 15 29 55.9 +0.1
baz=261,SNR=14
**O16K Kokwok River B** 94.81 31 P **P** 15 29 56.1 +0.2
baz=262
**B18K Kokolik River** 94.84 21 P **P** 15 29 56.4 +0.5
baz=259
**J17K VABM Dome** 94.91 27 P **P** 15 29 56.0 -0.3
**J17K VABM Dome** 94.91 27 P **P** 15 29 56.4 0.0
baz=261,SNR=5.0
**C18K Utukok River** 94.93 21 P **P** 15 29 56.3 0.0
baz=260
**E18K Tukpahlearik C** 94.93 23 IAmb IAmb 15 29 57.5
comp=Z,32nm,1.1s
**E18K Tukpahlearik C** 94.93 23 P **P** 15 29 56.8 +0.4
baz=260,SNR=6.3
**APA Apatity** 95.08 338⇓ *i* P **P** 15 29 59.5 +2.5
APA pmax pmax
comp=Z,7.0nm,1.0s
**L17K Donlin** 95.08 28 P **P** 15 29 57.0 -0.1
baz=262
**K17K Iditarod** 95.16 27 P **P** 15 29 57.8 +0.3
baz=262
**F18K Selawik** 95.17 23 P **P** 15 29 58.0 +0.7
baz=261
**O17K Koliganek Bris** 95.34 30 P **P** 15 29 57.9 -0.4
baz=263
**M17K Holitna River** 95.38 29 P **P** 15 29 59.0 +0.4
baz=262
**R17L Mt. Peulik Vol** 95.45 33 P **P** 15 29 58.5 -0.4
baz=263
**G18K Tagagawik** 95.46 24 P **P** 15 29 58.3 -0.5
baz=262
**H18K Honhosa River** 95.48 25 IAmb IAmb 15 29 59.5
comp=Z,32nm,1.2s
**H18K Honhosa River** 95.48 25 P **P** 15 29 58.7 -0.2
baz=262,SNR=5.2
**C19K Lookout Ridge** 95.58 21 P **P** 15 30 00.0 +0.7
baz=261
**Q17K Contact Creek** 95.78 32 P **P** 15 29 58.9 -1.6
baz=264
**L18K Granite Mounta** 95.84 28 P **P** 15 30 00.2 -0.4
baz=263
**F19K Shaleruckik Mo** 95.94 23 P **P** 15 30 00.3 -0.6
baz=263
**J18K Innoko River** 95.97 27 P **P** 15 30 00.5 -0.7
baz=263
**MNK Minsk** 95.99 324 *i* P **P** 15 29 58.3 -3.1
MNK *i* 15 33 49.3
MNK *i* PPP PPP 15 35 52.2
MNK *i* S **SKSac** **15 40 34.5 -1.2**
MNK *i* SS **SS** **15 47 47.9 -1.2**
MNK *i* SSS SSS 15 51 33.5
MNK pmax pmax
comp=N,17nm,1.0s
MNK pmax pmax
comp=Z,18nm,0.9s
MNK pmax pmax
comp=E,18nm,1.0s
MNK MLR MLR
comp=Z,8μm,18.0s
MNK MLR MLR
comp=N,9μm,18.0s
MNK MLR MLR
comp=E,5μm,17.0s
**D19K Kuna River** 96.02 22 P **P** 15 30 01.6 +0.2
baz=263
**GCSA Galena City Sc** 96.05 26 P **P** 15 30 01.5 0.0
baz=263,SNR=7.2
**G19K Purcell Mounta** 96.13 24 P **P** 15 30 01.9 +0.1
baz=263,SNR=9.0
**M18K Stony River** 96.16 29 P **P** 15 30 02.2 +0.2
baz=264
**E19K Redstone River** 96.22 23 P **P** 15 30 02.0 -0.2
baz=263
**H19K Roundabout Mou** 96.32 25 IAmb IAmb 15 30 03.6
comp=Z,38nm,0.9s
**H19K Roundabout Mou** 96.32 25 P **P** 15 30 02.9 +0.3
baz=264,SNR=14
**MLR Muntele Rosu** 96.34 315 PP **PP** 15 33 54.3 -3.0
comp=Z,8.8nm,1.1s,baz=73,slow=1.5,SNR=4.2
**J19K Poorman** 96.51 26 IAmb IAmb 15 30 04.3
comp=Z,29nm,1.1s
**J19K Poorman** 96.51 26 P **P** 15 30 03.6 0.0
baz=264
**B20K Meade River** 96.54 20 P **P** 15 30 03.6 0.0
baz=264
**D20K Etivluk River** 96.60 22 P **P** 15 30 04.1 +0.2
baz=264,SNR=5.8
**L19K White Mountain** 96.69 28 P **P** 15 30 04.4 -0.1
baz=265
**E20K Nigu River** 96.70 22 P **P** 15 30 04.6 +0.1
baz=264
**F20K Avaraart Lake** 96.77 23 P **P** 15 30 04.9 +0.2
baz=265
**A21K Barrow** 96.86 19 P **P** 15 30 05.3 +0.4
baz=264
**M19K Big River Lodg** 96.88 28 P **P** 15 30 05.3 0.0
baz=265
**H20K Anotleneega Mo** 96.97 25 P **P** 15 30 05.8 +0.1
baz=265
**VSU Vasula** 96.98 328⇓ *e*P **P** 15 30 03.8 -2.0
VSU pmax pmax
comp=Z,43nm,1.2s
**Q19K Cape Douglas,** 97.01 32 P **P** 15 30 06.0 0.0
baz=266
**BUR08 Bucovina Ar. S** 97.04 317 P **P** 15 30 05.8 -0.7
**OHAK Old Harbor** 97.07 33 P **P** 15 30 05.9 -0.3
baz=266
**I20K Naaghedeneel** 97.08 26 P Pdif 15 30 06.4 +0.2
baz=266
**K20K Telida** 97.15 27 P Pdif 15 30 06.7 0.0
baz=266
**L20K Farewell, AK** 97.17 28 P Pdif 15 30 06.7 0.0
baz=266
**J20K Nowinta River** 97.17 26 P Pdif 15 30 06.7 0.0
baz=266
**P19K Oil Pt** 97.28 31 P **P** 15 30 07.1 -0.1
baz=266
**C21K Knifeblade Rid** 97.29 21 P Pdif 15 30 07.4 +0.2
baz=266
**A22K Sinclair Lake** 97.37 19 P Pdif 15 30 07.7 +0.4
baz=266
**B21K Ikpikpuk River** 97.39 21 IAmb IAmb 15 31 16.6
comp=Z,41nm,1.5s
**B21K Ikpikpuk River** 97.39 21 P Pdif 15 30 07.6 +0.1
baz=266
**M20K Styx River** 97.48 29 P Pdif 15 30 08.2 0.0
baz=266
**KDAK Kodiak Island** 97.48 33 P **P** 15 30 07.5 -0.6
baz=266
**FINES FINESS Array B** 97.53 331 P **P** 15 30 06.0 -2.2
comp=Z,6.8nm,0.8s,baz=118,slow=2.8,SNR=5.0
FINES PKiKP **PKiKP** 15 34 41.7 -1.0
comp=Z,3.8nm,0.8s,baz=133,slow=4.1,SNR=7.2
comp=Z,6.8nm,0.8s
**FINES FINESS Array B** 97.53 331 *i* P **P** 15 30 06.5 -1.7
FINES pmax pmax
comp=Z,7.0nm,0.9s
**E21K Killik River** 97.54 22 IAmb IAmb 15 33 08.0
comp=Z,16nm,0.8s
**E21K Killik River** 97.54 22 P Pdif 15 30 08.6 +0.3
baz=266
**G21K Allakaket** 97.60 24 P Pdif 15 30 08.9 +0.4
baz=267
**O20K Slope Mountain** 97.61 30 P Pdif 15 30 08.8 0.0
baz=266
**Q20K Shuyak Island** 97.64 32 P Pdif 15 30 09.1 +0.3
baz=266
**F21K Alatna River** 97.65 23 P Pdif 15 30 09.3 +0.5
baz=267
**H21K Melozitna Rive** 97.84 25 IAmb IAmb 15 30 10.5
comp=Z,26nm,1.4s
**H21K Melozitna Rive** 97.84 25 P Pdif 15 30 10.1 +0.5
baz=267
**B22K Teshekpuk Lake** 97.84 20 P Pdif 15 30 09.8 +0.3
baz=267
**N20K Mount Spurr** 97.88 29 P **P** 15 30 09.1 -0.9
baz=267
**SPCR Spurr Chakacha** 97.88 29 P **P** 15 30 09.4 -0.5
baz=267
**D22K Ayikyak River** 98.03 21 P Pdif 15 30 10.9 +0.4
baz=268
**HOM Homer** 98.08 31 P Pdif 15 30 11.0 +0.2
baz=267
**ARCES ARCESS Array B** 98.16 339 P **P** 15 30 08.5 -2.4
comp=Z,10nm,0.9s,baz=91,slow=5.7,SNR=7.4
comp=Z,10nm,0.9s
**F22K John River** 98.17 23 P Pdif 15 30 11.6 +0.5
baz=268
**SKT Skwentna** 98.24 28 P **P** 15 30 09.6 -1.8
baz=268
**E22K Anaktuvuk Pass** 98.33 22 P Pdif 15 30 12.1 +0.3
baz=268,SNR=8.5
**G22K Bettles** 98.41 23 P **P** 15 30 11.7 -0.4
baz=268
**H22K Ishtalitna Cre** 98.44 25 P **P** 15 30 12.0 -0.2
baz=268
**BRSE Bradley Lake S** 98.54 31 P **P** 15 30 11.4 -1.5
baz=269
**BPAW Bear Paw Mtn.** 98.55 26 P **P** 15 30 12.6 -0.3
baz=268
**SUA Susitna One** 98.59 29 IAmb IAmb 15 30 12.3
comp=Z,31nm,1.1s
**SUA Susitna One** 98.59 29 P **P** 15 30 12.7 -0.5
baz=268
**MLY Manley** 98.68 25 P **P** 15 30 13.2 -0.2
baz=269,SNR=7.3
**D23K Nanushuk River** 98.76 21 P Pdif 15 30 14.0 +0.3
baz=270
**C23K Itkillik River** 98.79 21 P Pdif 15 30 14.1 +0.4
baz=270
**CUT Chulitna** 98.84 28 P Pdif 15 30 14.2 +0.1
baz=269
**TRF Thorofare Moun** 98.85 27 P **P** 15 30 14.2 -0.2
baz=269
**M22K Willow** 98.90 29 P **P** 15 30 13.4 -0.9
baz=269
**COLD Coldfoot** 98.93 23 P Pdif 15 30 14.5 0.0
baz=270
**G23K Bananza Creek** 99.00 24 P Pdif 15 30 14.9 +0.1
baz=270
**KOLS Kolonicke sedl** 99.07 318 *i* P **Pdif** **15 30 14.8 -0.7**
**KOLS Kolonicke sedl** 99.07 318 *e*PDIFF 15 10 13.1
KOLS *e*PDIFF **Pdif** **15 30 14.8 -0.7**
KOLS *e* 15 44 20.1
KOLS *e* 15 46 10.3
**E23K Chandalar** 99.15 22 P **Pdif** **15 30 16.0 +0.5**
baz=270,SNR=9.3
**TOLK Toolik Lake Re** 99.16 22 P **Pdif** **15 30 16.1 +0.6**
baz=270
**H23K Yukon River** 99.19 25 IAmb IAmb 15 33 12.8
comp=Z,21nm,1.1s
**H23K Yukon River** 99.19 25 P **Pdif** **15 30 15.4 -0.3**
baz=270
**SEW Seward** 99.20 30 P **Pdif** **15 30 15.5 -0.3**
baz=269
**I23K Minto, Yukon-K** 99.27 25 IAmb IAmb 15 30 17.5
comp=Z,54nm,1.5s
**I23K Minto, Yukon-K** 99.27 25 P **Pdif** **15 30 15.9 0.0**
baz=270,SNR=7.3
**PMR Palmer** 99.37 29 P **Pdif** **15 30 15.6 -0.9**
baz=270
**NEA2 Nenana** 99.39 26 P **Pdif** **15 30 16.1 -0.4**
baz=270
**D24K Happy Valley** 99.43 21 P **Pdif** **15 30 16.0 -0.6**
baz=271
**C24K Franklin Bluff** 99.45 21 P **Pdif** **15 30 16.7 0.0**
baz=272
**MCK McKinley** 99.46 27 P **Pdif** **15 30 16.0 -0.9**
baz=270
**E24K Your Creek** 99.58 22 P **Pdif** **15 30 17.2 -0.2**
baz=272
**WAT1 Susitna Watana** 99.64 28 P **Pdif** **15 30 17.5 -0.2**
baz=270
**KNK Knik Glacier** 99.69 29 P **Pdif** **15 30 17.8 -0.2**
baz=270
**SML Sawmill** 99.75 29 P **Pdif** **15 30 17.6 -0.7**

baz=270,SNR=5.2
PWL **Port Wells** 99.75 30 P Pdif 15 30 17.4 -0.8
baz=270
F24K **Squaw Lake** 99.82 23 P Pdif 15 30 19.1 +0.6
baz=272
H24K **Noodor Dome** 99.88 25 P Pdif 15 30 18.5 -0.2
baz=272
G24K **Hadweenzic Riv** 100.01 24 P Pdif 15 30 19.1 -0.2
baz=272
WAT6 **Susitna Watana** 100.02 28 P Pdif 15 30 18.8 -0.8
baz=271,SNR=5.3
M23K **Glacier View** 100.04 29 P Pdif 15 30 19.4 -0.1
baz=271
DHY **Denali Highway** 100.17 27 P Pdif 15 30 19.6 -0.7
baz=272
SCM **Sheep Creek Mo** 100.22 29 P Pdif 15 30 20.2 -0.2
baz=271
SPITS **Spitsbergen Ar** 100.24 348 P Pdif 15 30 18.6 -1.5
comp=Z,7.1nm,0.7s,baz=90,slow=5.8,SNR=2.5
D25K **Kavik River** 100.29 21 P Pdif 15 30 20.5 0.0
baz=274
HDA **Harding Lake** 100.32 26 P Pdif 15 30 20.0 -0.7
baz=272
ILAR **Eielson Array** 100.33 26 P Pdif 15 30 18.9 -1.9
comp=Z,0.8nm,0.7s,baz=250,slow=5.0,SNR=6.4
ILAR PP PP 15 34 26.7 -0.3
comp=Z,2.7nm,1.1s,baz=273,slow=4.1,SNR=4.4
ILAR PKKPbc PKKPbc 15 46 37.8 -2.1
comp=Z,2.3nm,0.8s,baz=111,slow=1.9,SNR=16
GLI **Glacier Island** 100.36 30 P Pdif 15 30 20.4 -0.6
baz=271
G25K **Bearman Lake** 100.55 24 P Pdif 15 30 21.7 +0.1
baz=273
F25K **Christian Rive** 100.68 23 P Pdif 15 30 22.7 +0.5
baz=274
H25L **Birch Creek** 100.69 24 P Pdif 15 30 22.8 +0.5
baz=274
M24K **Tolsona, Glenn** 100.76 28 P Pdif 15 30 23.1 +0.3
baz=272
K24K **Donnelly Dome** 100.86 27 P Pdif 15 30 23.4 +0.3
baz=273
PRP **Porcupine Dome** 100.86 25 P Pdif 15 30 23.4 +0.2
baz=274
KLU **Klutina** 100.91 29 P Pdif 15 30 23.0 -0.4
baz=273
J25K **Salcha River,** 100.99 26 P Pdif 15 30 23.2 -0.6
baz=274
EYAK **Cordova Ski Ar** 101.03 30 P Pdif 15 30 23.8 -0.1
baz=273
PAX **Paxson** 101.04 27 P Pdif 15 30 24.1 0.0
baz=273
C27K **Jago River** 101.20 21 P Pdif 15 30 25.1 +0.6
baz=276
HARP **HAARP** 101.22 28 P Pdif 15 30 24.9 +0.1
baz=273
F26K **Sheenjek River** 101.24 23 P Pdif 15 30 24.9 +0.1
baz=275
RIDG **Independent Ri** 101.28 27 P Pdif 15 30 24.8 -0.2
baz=274
G26K **Porcupine Rive** 101.45 23 P Pdif 15 30 25.9 +0.3
baz=276
N25K **Chitina, Valde** 101.53 29 P Pdif 15 30 26.3 0.0
baz=274
BMRM **Bremner River** 101.57 29 P Pdif 15 30 26.2 -0.2
baz=274
SCRK **Sand Creek** 101.64 26 P Pdif 15 30 26.2 -0.5
baz=275
KAIM **Kayak Island** 101.73 31 P Pdif 15 30 27.3 +0.3
baz=274
J26L **Joseph Creek** 101.77 26 P Pdif 15 30 27.1 -0.2
baz=275,SNR=6.9
I26K **Coal Creek Min** 101.87 25 P Pdif 15 30 27.8 +0.2
baz=276
L26K **Log Cabin Wild** 102.00 27 P Pdif 15 30 28.3 +0.1
baz=275
E27K **Coleen River** 102.14 22 P Pdif 15 30 28.9 +0.1
baz=278
D27M **Malcolm River** 102.21 21 P Pdif 15 30 29.4 +0.3
baz=279
M26K **Nabesna, AK** 102.22 28 P Pdif 15 30 29.1 -0.1
baz=275
G27K **Doyon Strip** 102.30 23 P Pdif 15 30 29.8 +0.3
baz=278
CRQE **Cirque** 102.33 30 P Pdif 15 30 29.7 -0.1
baz=275
H27K **Steamboat Moun** 102.43 24 P Pdif 15 30 30.5 +0.4
baz=278
K27K **Chicken** 102.47 26 P Pdif 15 30 31.1 +0.8
baz=277
I27K **Kandik River** 102.47 25 P Pdif 15 30 30.7 +0.3
baz=277
L27K **Beaver Creek,** 102.69 27 P Pdif 15 30 31.9 +0.6
baz=277,SNR=5.1
M27K **Edge Creek, AK** 102.75 28 P Pdif 15 30 31.7 0.0
baz=276
EGAK **Eagle** 102.77 25 P Pdif 15 30 32.0 +0.4
baz=278
E28M **Babbage River** 102.83 21 P Pdif 15 30 31.9 +0.1
baz=280
F28M **Old Crow** 102.87 22 P Pdif 15 30 31.8 -0.2
baz=279
MESA **MESA** 102.94 30 P Pdif 15 30 32.8 +0.1
baz=276
D28M **Stokes Point** 102.98 21 P Pdif 15 30 33.0 +0.7
baz=281
RONA **Rosalia, Austr** 103.05 317 PP PP 15 34 46.2 -1.9
comp=Z,9.6nm,1.6s
CTG **Chitna Glacier** 103.16 29 P Pdif 15 30 33.8 +0.2
baz=276
I28M **Miner Creek** 103.19 25 P Pdif 15 30 33.8 +0.3
baz=279
CONA **Conrad Observa** 103.34 317 *e*PP PP 15 34 47.5 -2.8
comp=Z,13nm,1.5s
E29M **Blow River** 103.46 22 P Pdif 15 30 35.7 +1.2
baz=281
YUK3 **Moose Creek** 103.48 28 P Pdif 15 30 35.6 +0.6
baz=278
HFS **Hagfors** 103.63 330 PP PP 15 34 51.2 -0.7
comp=Z,4.4nm,0.8s,baz=91,slow=10,SNR=3.8
DAWY **Dawson** 103.64 26 P Pdif 15 30 36.1 +0.6
baz=279
H29M **Whitestone** 103.69 24 P Pdif 15 30 36.3 +0.6
baz=280
G29M **Pine Creek** 103.70 23 P Pdif 15 30 36.4 +0.7
baz=281
O28M **Mount Upton** 103.74 29 P Pdif 15 30 36.7 +0.3
baz=278
YUK8 **Steele Glacier** 103.88 29 P Pdif 15 30 37.4 +0.5
baz=278
SOKA **Soboth** 103.95 316 *e*PKiKP PKiKP 15 34 54.0 -0.8
comp=Z,1.6nm,0.7s
OBKA **Obir** 104.30 316 *e*PKiKP PKiKP 15 34 53.8 -1.7
comp=Z,13nm,1.5s
EPYK **Eagle Plains** 104.32 23 P Pdif 15 30 38.7 +0.2
baz=282
G30M **tAoh Zraii Nji** 104.38 23 P Pdif 15 30 38.7 -0.1
baz=283
YUK4 **Talbot Arm** 104.40 29 P Pdif 15 30 38.7 -0.5
baz=279
F30M **Barrier River** 104.41 22 P Pdif 15 30 39.1 +0.3
baz=283
MOA **Molln** 104.41 317 *e*PKiKP PKiKP 15 34 55.4 -0.2
comp=Z,5.0nm,1.0s
BRG **Berggiesshubel** 104.42 320 *e*PKP PKiKP 15 34 55.4 0.0
BRG Amp 15 34 56.4
comp=Z,4.1nm,0.8s
K29M **Barlow Dome** 104.49 26 P Pdif 15 30 39.7 +0.3
baz=281
O29M **Mount Kennedy** 104.60 30 P Pdif 15 30 40.1 +0.1
baz=279
YUK6 **Outpost Mounta** 104.60 29 P Pdif 15 30 40.1 0.0
baz=279
VAE **Valguarnera** 104.68 306 PP PP 15 35 01.1 +0.5
comp=Z,5.5nm,0.5s,baz=224,slow=17,SNR=1.6
I30M **Mount Dempster** 104.70 25 P Pdif 15 30 40.2 -0.1
baz=282
NOA **NORSAR Array B** 104.71 331 PP PP 15 34 59.3 -0.7
comp=Z,2.1nm,0.8s,baz=78,slow=7.6,SNR=6.2
GERES **GERESS Array B** 104.72 318 PP PKiKP 15 34 55.6 -0.6
comp=Z,2.8nm,0.8s,baz=170,slow=9.5,SNR=9.5
J30M **Hart River** 104.85 25 P Pdif 15 30 40.9 -0.1
baz=282
CLL **Collm** 104.97 321 *e*Pdif Pdif 15 30 41.0 -0.6
CLL *e*PKiKP PKiKP 15 34 56.0 -0.4
INK **Inuvik** 105.06 21 PP PP 15 35 02.1 -0.1
comp=Z,9.5nm,1.1s,baz=261,slow=9.4,SNR=2.5
INK **Inuvik** 105.06 21 P PKiKP 15 34 56.7 +0.6
baz=286

KBA **Koelnbreinsper** 105.09 316 *e*PKiKP PKiKP 15 34 56.4 -0.6
comp=Z,8.2nm,1.1s
P29M **Windy Craggy** 105.12 30 P PKiKP 15 34 56.8 +0.3
baz=279
N30M **Aishikik Lake** 105.12 29 P PKiKP 15 34 56.9 +0.4
baz=280
G31M **Satah River** 105.14 23 P PKiKP 15 34 56.6 +0.4
baz=284
F31M **Tsiigehtchic** 105.21 22 P PKiKP 15 34 56.8 +0.4
baz=285
P30M **Million Dollar** 105.42 30 P PKiKP 15 34 57.5 +0.4
baz=280
ABTA **Abfaltersbach** 105.68 316 *e*PKiKP PKiKP 15 34 55.9 -2.2
comp=Z,3.4nm,0.7s
O30N **Mendenhall** 105.73 29 P PKiKP 15 34 58.0 +0.4
baz=281
N31M **Braeburn, Yuko** 105.73 28 P PKiKP 15 34 58.0 +0.4
baz=282
S31K **Pelican** 106.18 32 P PKiKP 15 34 58.6 +0.2
baz=280
WTTA **Wattenberg** 106.23 317 *e*PKiKP PKiKP 15 34 58.3 -0.8
comp=Z,4.3nm,0.6s
WATA **Walderalm** 106.27 317 *e*PKiKP PKiKP 15 34 57.3 -1.9
comp=Z,8.2nm,1.4s
WHY **Whitehorse** 106.33 29 P PKiKP 15 34 58.3 -0.5
baz=282
MOTA **Moosalm** 106.59 317 *e*PKiKP PKiKP 15 34 58.1 -1.6
comp=Z,9.1nm,1.2s
FARO **Faro, Yukon** 106.69 27 P PKiKP 15 34 59.6 +0.2
baz=284
SIT **Sitka** 106.82 33 P PKiKP 15 34 59.9 +0.3
baz=281
R32K **Eaglecrest** 107.01 32 P PKiKP 15 35 00.3 +0.3
baz=282
N32M **Quiet Lake** 107.08 28 P PKiKP 15 35 00.4 +0.3
baz=284
P32M **Atlin** 107.14 30 P PKiKP 15 35 00.2 -0.1
baz=283
DAVA **Damuels** 107.42 317 *e*PKiKP PKiKP 15 35 00.5 -0.8
comp=Z,2.3nm,0.3s
DAVOX **Davos/Dischmat** 107.48 316 PKiKP PKiKP 15 35 00.8 -0.7
comp=Z,3.2nm,0.7s,baz=59,slow=5.9,SNR=9.0
C36M **Paulatuk** 107.92 19 P PKiKP 15 35 02.7 +1.3
baz=295
Q32M **Nakina River** 108.00 31 P PKiKP 15 35 02.2 +0.1
baz=284
U33K **Whale Pass** 108.21 34 P PKiKP 15 35 02.3 0.0
baz=282
R33M **Jennings River** 108.54 30 P PKiKP 15 35 03.0 0.0
baz=285
WRAK **Wrangell Islan** 108.56 33 P PKiKP 15 35 03.5 +0.6
baz=283
KEST **Kesra** 108.81 305 PP PP 15 35 31.7 +0.7
comp=Z,7.7nm,1.1s,baz=41,slow=7.6,SNR=4.3
S34M **Telegraph Cree** 108.84 31 P PKiKP 15 35 04.0 +0.6
baz=285
TGTN **Hyland Airport** 109.20 27 P PKiKP 15 35 04.6 +0.5
baz=289
V35K **Ketchikan** 109.22 34 P PKiKP 15 35 04.6 +0.4
baz=284
DLBC **Dease Lake** 109.27 31 P PKiKP 15 35 04.7 +0.4
baz=286
WTLY **Watson Lake, Y** 109.39 29 P PKiKP 15 35 04.8 +0.4
baz=288
T35M **Bob Quinn** 109.55 32 P PKiKP 15 35 05.1 +0.3
baz=285
WRGLY **Wrigley** 110.68 25 P PKiKP 15 35 07.5 +0.8
baz=294
LIRD **Liard River Hi** 110.91 29 P PKiKP 15 35 07.9 +0.6
baz=290
KOTAN **Kotaneelee Air** 111.62 28 P PKiKP 15 35 09.4 +0.7
baz=292
EKA **Eskdalemuir Ar** 113.52 327 PKiKP PKiKP 15 35 11.4 -1.0
comp=Z,1.0nm,0.5s,baz=6.7,slow=2.9,SNR=4.8
EKA PKKPbc PKKPbc 15 45 57.1 -1.3
comp=Z,0.6nm,0.5s,baz=238,slow=2.4,SNR=5.7
YKA **Yellowknife Ar** 114.61 23 PKP PKiKP 15 35 13.2 -1.0
comp=Z,8.5nm,0.8s,baz=315,slow=2.2,SNR=16
TORD **Torodi Ar. Bea** 115.97 281 PKPdf 15 35 17.5 -0.8
TORD **Torodi Ar. Bea** 115.97 281 PKP PKPdf 15 35 17.3 -0.9
comp=Z,20nm,1.0s,baz=38,slow=2.6,SNR=40
TORD PKKPbc PKKPbc 15 45 48.5 -0.4
comp=Z,1.4nm,0.8s,baz=317,slow=5.2,SNR=6.2
H04A **Detroit Lake** 117.89 44 PKPdf 15 35 20.8 -0.4
B08A **Colville Reser** 118.56 39 PKPdf 15 35 21.8 -0.5
ESBB **Sonseca Array** 118.68 311 PKPdf 15 35 22.6 -0.2
ESDC **Sonseca Array** 118.68 311 PKPdf 15 35 22.5 -0.4
ESDC **Sonseca Array** 118.68 311 PKP PKPdf 15 35 22.6 -0.3
comp=Z,12nm,1.0s,baz=27,slow=2.6,SNR=44
ESDC PKKPbc PKKPab 15 45 40.8 -0.5
comp=Z,1.7nm,1.1s,baz=242,slow=3.9,SNR=7.1
PAB **San Pablo** 119.00 311 PKPdf 15 35 23.4 -0.1
PAB **San Pablo** 119.00 311 PKiKP PKPdf 15 35 23.4 -0.1
ORV **Oroville** 119.78 49 PKPdf 15 35 23.9 -1.0
ORV **Oroville** 119.78 49 PKiKP PKPdf 15 35 23.9 -1.0
NEW **Newport** 119.96 38 PKiKP 15 35 25.2 0.0
NEW **Newport** 119.96 38 P PKiKP 15 35 25.5 +0.3
baz=293
NEW **Newport** 119.96 38 PKiKP PKiKP 15 35 25.2 0.0
NEW **Newport** 119.96 38 P PKPdf 15 35 24.7 -0.4
PBRG **Braganca** 120.15 314 *e*PKPdf PKPdf 15 35 25.4 -0.2
MVO **Moncorvo** 120.55 313 *e*PKPdf PKiKP 15 35 26.6 +0.1
MDT **Midelt** 120.62 303 PKP PKPdf 15 35 26.5 -0.3
comp=Z,8.5nm,0.7s,baz=103,slow=1.7,SNR=20
PVRL **Vila Real** 121.01 313 *e*PKPdf PKiKP 15 35 27.6 +0.2
POLO **Lamas de Olo** 121.03 314 *e*PKPdf PKPdf 15 35 27.4 0.0
MTE **Manteigas** 121.14 312 *e*PKPdf PKiKP 15 35 27.7 0.0
PGAV **Gavieira, Arco** 121.19 314 *e*PKPdf PKPdf 15 35 27.7 0.0
PCBR **Castelo Branco** 121.25 312 *e*PKPdf PKiKP 15 35 27.8 -0.1
PMRV **Marv??o** 121.30 311 *e*PKPdf PKPdf 15 35 27.8 -0.1
PVIS **Viseu** 121.30 313 *e*PKPdf PKPdf 15 35 27.9 0.0
PBAR **Barrancos** 121.38 310 *e*PKPdf PKiKP 15 35 28.1 -0.1
PESTR **Estremoz** 121.61 311 PKPdf 15 35 28.4 -0.1
PESTR **Estremoz** 121.61 311 *e*PKPdf PKPdf 15 35 28.4 -0.1
KIC **Kosan Boka** 121.79 272 *e*PKP2 PKPdf 15 35 28.4 -1.1
comp=Z,5.7nm,0.3s
COI **Coimbra** 121.83 312 *e*PKPdf PKiKP 15 35 29.3 +0.3
DBIC **Dimbokro** 121.94 273 PKP PKPdf 15 35 29.1 -0.7
comp=Z,31nm,0.9s,baz=65,slow=2.6,SNR=13
DBIC PKKPbc PKKPbc 15 45 27.1 0.0
comp=Z,3.9nm,0.9s,baz=245,slow=5.5,SNR=3.8
PCAS **Casmilo, Conde** 121.94 312 *e*PKPdf PKPdf 15 35 29.0 -0.1
EVO **Evora** 122.02 310 *e*PKPdf PKiKP 15 35 29.4 0.0
PMTG **Montargil** 122.03 311 *e*PKPdf PKPdf 15 35 28.9 -0.3
PBEJ **Beja** 122.05 310 *e*PKPdf PKiKP 15 35 29.6 +0.1
LIC **Lamto** 122.06 272 *e*PKP2 PKPdf 15 35 27.3 -2.7
comp=Z,34nm,0.5s
PVAQ **Vaqueiros** 122.10 309 *e*PKPdf PKiKP 15 35 29.6 0.0
TIC **Toumodi** 122.10 273 *e*PKP2 PKPdf 15 35 27.1 -3.0
comp=Z,2.4nm,0.2s
PCVE **Castro Verde** 122.28 309 *e*PKPdf PKiKP 15 35 30.0 0.0
PBDV **Barranco-do-Ve** 122.30 309 *e*PKPdf PKiKP 15 35 30.1 0.0
PSBE **So Bento** 122.32 312 *e*PKPdf PKPdf 15 35 29.9 0.0
MESJ **Messejana** 122.36 310 *e*PKPdf PKiKP 15 35 30.2 +0.1
MESJ **Messejana** 122.36 310 *e*PKP PKPdf 15 35 29.8 -0.1
NVAR **Mina Array Bea** 122.48 50 PKP PKiKP 15 35 30.8 +0.2
comp=Z,14nm,0.8s,baz=247,slow=1.9,SNR=46
NVAR PP PP 15 37 07.8 +0.8
comp=Z,6.2nm,1.2s,baz=269,slow=6.4,SNR=4.2
NVAR PKKPbc PKKPbc 15 45 26.4 +0.5
comp=Z,2.5nm,0.8s,baz=132,slow=5.0,SNR=18
MSO **Missoula** 122.51 39 PKPdf 15 35 30.1 0.0
MSO **Missoula** 122.51 39 P PKPdf 15 35 29.8 -0.4
baz=295
PNCL **Nicolau / Gran** 122.52 310 *e*PKPdf PKiKP 15 35 30.4 0.0
PTEO **Sao Teotonio** 122.83 309 *e*PKPdf PKiKP 15 35 31.0 0.0
MORF **Marmelete** 122.84 309 *e*PKPdf PKiKP 15 35 31.3 +0.2
MORF **Marmelete** 122.84 309 *e*PKP PKPdf 15 35 30.6 -0.3
PFVI **Vila Bisbo** 123.02 309 *e*PKPdf PKiKP 15 35 31.6 +0.2
HLID **Hailey** 123.53 43 P PKiKP 15 35 33.0 +0.5
baz=293,SNR=37
TPNV **Topopah Spring** 124.46 51 P PKiKP 15 35 34.7 +0.2
baz=287
EGMT **Eagleton** 124.48 36 P PKiKP 15 35 34.2 +0.1
baz=300
BOZ **Bozeman (W)** 124.49 39 P PKiKP 15 35 34.3 0.0
baz=297,SNR=26
R11B **Troy Canyon, C** 124.54 49 P PKiKP 15 35 34.6 0.0
baz=289
FFC **Flin Flon** 124.54 26 PKPdf 15 35 33.6 0.0
FFC **Flin Flon** 124.54 26 PKiKP PKPdf 15 35 33.6 0.0
109C **Camp Elliot, M** 124.86 56 P PKPdf 15 35 34.9 0.0
baz=284
PFO **Pinyon Flats O** 125.21 55 P PKiKP 15 35 36.6 +0.5
baz=285,SNR=19
TPFO **Pinon Flats** 125.21 55 P PKiKP 15 35 36.4 +0.4

baz=285,SNR=19
MONP2 **Monument Peak** 125.42 56 P PKiKP 15 35 37.6 +1.0
baz=284,SNR=14
H17A **Grant Village** 125.70 40 P PKiKP 15 35 37.6 +0.8
baz=297,SNR=5.1
DUG **Dugway, Tooele** 125.92 46 P PKiKP 15 35 37.6 +0.3
baz=292
IVI **Ivigtut** 126.08 351 PKPdf 15 35 35.6 -0.7
RLMT **Red Lodge** 126.19 39 P PKiKP 15 35 37.8 0.0
baz=299,SNR=7.0
BW06 **Boulder Array** 127.09 42 P PKPdf 15 35 38.7 -0.5
baz=297
PDAR **Pinedale Array** 127.09 42 PKPdf 15 35 38.3 -0.9
PDAR **Pinedale Array** 127.09 42 PKP PKPdf 15 35 38.9 -0.3
comp=Z,12nm,1.0s,baz=207,slow=1.7,SNR=20
PDAR SKKPbc SKKPbc 15 48 55.8 -2.9
comp=Z,2.8nm,1.1s,baz=104,slow=3.7,SNR=4.7
LAO **LASA Array** 127.23 36 P PKiKP 15 35 39.8 +0.2
baz=302,SNR=23
DGMT **Dagmar** 127.37 33 P PKiKP 15 35 39.8 0.0
baz=306
214A **Organ Pipe Nat** 128.61 56 P PKPdf 15 35 42.3 +0.2
baz=286
WUAZ **Wupatki** 128.65 51 P PKiKP 15 35 42.9 0.0
baz=290,SNR=13
RSSD **Black Hills** 129.91 38 PKPdf 15 35 43.2 -1.3
RSSD **Black Hills** 129.91 38 P PKPdf 15 35 44.6 +0.1
baz=303
RSSD **Black Hills** 129.91 38 PKiKP PKPdf 15 35 43.2 -1.3
W18A **Petrified Fore** 130.05 51 P PKiKP 15 35 45.8 0.0
baz=291,SNR=13
TUC **Tucson** 130.15 55 P PKiKP 15 35 45.6 -0.3
baz=288
MVCO **Mesa Verde** 130.19 48 P PKiKP 15 35 45.9 -0.1
baz=294,SNR=14
ULM **Lac du Bonnet** 130.33 27 PKP PKPdf 15 35 43.7 -1.1
comp=Z,12nm,0.8s,baz=330,slow=2.7,SNR=8.7
N23A **Red Feather La** 130.35 42 P PKiKP 15 35 46.1 -0.3
baz=299
PLCA **Paso Flores** 130.69 173 PKP PKPdf 15 35 46.0 +0.1
comp=Z,12nm,0.9s,baz=276,slow=1.0,SNR=20
PLCA PP PP 15 38 00.9 +1.1
comp=Z,6.8nm,1.2s,baz=155,slow=4.5,SNR=2.8
ISCO **Idaho Springs** 131.09 43 P PKiKP 15 35 47.5 -0.4
baz=298
S22A **4UR Ranch, Cre** 131.17 46 P PKiKP 15 35 48.2 +0.1
baz=296,SNR=14
AGMN **Agassiz Nation** 131.72 29 P PKPdf 15 35 47.7 +0.2
baz=315
Q24A **Divide** 131.81 44 P PKPdf 15 35 48.7 +0.3
baz=298
SDCO **Great Sand Dun** 132.12 46 P PKPdf 15 35 49.3 +0.4
baz=297,SNR=14
121A **Cookes Peak, D** 132.48 53 P PKPdf 15 35 50.2 +0.5
baz=290
Y22D **IRIS PASSCAL I** 132.59 51 P PKiKP 15 35 50.6 -0.3
baz=292
ANMO **Albuquerque** 132.60 50 PKPdf 15 35 49.7 -0.1
ANMO **Albuquerque** 132.60 50 P PKiKP 15 35 50.6 -0.3
baz=294
ANMO **Albuquerque** 132.60 50 PKiKP PKPdf 15 35 49.7 -0.1
OGNE **Ogallala** 132.88 40 P PKPdf 15 35 50.1 +0.1
baz=303
T25A **Trinidad** 133.17 46 P PKPdf 15 35 50.7 -0.2
baz=297,SNR=15
SCHQ **Schefferville** 133.60 3 PKP PKPdf 15 35 50.7 -0.1
comp=Z,21nm,0.9s,baz=349,slow=1.8,SNR=16
SCHQ PP PP 15 38 17.9 -0.6
comp=Z,16nm,1.2s,baz=39,slow=8.4,SNR=5.3
EYMN **Ely** 133.97 26 P PKPdf 15 35 52.1 +0.4
baz=320
ECSD **EROS Data Cent** 134.44 34 P PKPdf 15 35 53.4 +0.6
baz=311,SNR=8.3
MNTX **Cornudas Mount** 134.68 53 P PKPdf 15 35 54.0 +0.4
baz=292
CBKS **Cedar Bluff** 135.52 41 P PKPdf 15 35 54.8 -0.2
baz=303
AMTX **Amarillo** 136.17 47 P PKPdf 15 35 56.1 -0.2
baz=298
BO02 **Sierra Bellavi** 136.50 171 PKPdf 15 35 55.8 -1.2
TXAR **Lajitas Array** 136.91 56 PKhKP PKPpre 15 35 47.7
comp=Z,2.0nm,0.6s,baz=265,slow=2.8,SNR=16
TXAR PKP PKPdf 15 35 57.9 0.0
comp=Z,8.9nm,0.9s,baz=194,slow=1.9,SNR=20
TXAR PP PP 15 38 43.5 +2.3
comp=Z,0.9nm,0.9s,baz=274,slow=2.6,SNR=3.3
KSU1 **Kansas State U** 137.35 39 P PKPdf 15 35 58.3 0.0
baz=307
SCIA **State Center** 137.52 33 P PKPdf 15 35 58.1 -0.4
baz=314
JFWS **Jewell Farm** 138.34 30 P PKPdf 15 35 59.4 -0.6
baz=318
OK031 **S. Brethren Rd** 139.02 43 PKPdf 15 36 00.3 -1.2
GLMI **Grayling** 139.32 23 P PKPdf 15 36 01.5 -0.3
baz=327
JCT **Junction City** 139.55 52 P PKPdf 15 36 02.2 -0.5
baz=295
L44A **Lake County Fo** 140.02 29 P PKPdf 15 36 02.5 -0.6
baz=320
HDIL **Hopedale** 140.56 32 P PKPdf 15 36 03.4 -0.8
baz=317
833A **Chaparral WMA,** 140.76 55 P PKPdf 15 36 04.0 -0.9
baz=294
435B **Jarrell** 141.13 50 P PKPdf 15 36 04.4 -1.0
baz=298
CCM **Cathedral Cave** 141.25 36 P PKPdf 15 36 04.3 -1.2
baz=313
AAM **Ann Arbor** 141.81 24 P PKPdf 15 36 05.5 -0.8
baz=327
HBVL **Hebbronville** 141.84 56 PKPdf 15 36 04.3 -2.5
HKT **Hockley** 142.85 50 PKPdf 15 36 06.1 -2.3
HKT **Hockley** 142.85 50 PKiKP PKPdf 15 36 06.1 -2.3
ITAB **Concordia** 142.93 197 PKPdf 15 36 06.3 -2.5
OSIA **New Philadelph** 144.53 24 P PKPab 15 36 09.3 -0.3
baz=329
WVT **Waverly** 144.55 35 P PKPab 15 36 09.1 -0.6
baz=315
BINY **Binghamton** 144.55 16 P PKPbc 15 36 09.9 +0.1
baz=338
P52A **Corning** 144.67 25 P PKPab 15 36 08.7 -1.4
baz=327
OXF **Oxford** 144.71 39 P PKPab 15 36 09.4 -1.0
baz=312
SSFO **Shawnee State** 144.97 27 PKPab 15 36 09.9 -1.4
CPUP **Villa Florida** 144.99 190 PKPbc PKPab 15 36 11.3 -0.3
comp=Z,328nm,1.0s,baz=176,slow=3.8,SNR=6.6
CPUP PP PP 15 39 30.1 +1.5
comp=Z,6.8nm,1.0s,baz=164,slow=6.1,SNR=3.0
L61B **Northampton** 145.11 12 P PKPbc 15 36 10.6 -1.0
baz=344
KSPA **Keystone Colle** 145.21 16 PKPbc 15 36 11.3 -0.6
HRV **Adam Dziewonsk** 145.27 11 PKPbc 15 36 11.4 -0.7
HRV **Adam Dziewonsk** 145.27 11 P PKPbc 15 36 11.4 -0.7
baz=346
HRV **Adam Dziewonsk** 145.27 11 PKiKP PKPbc 15 36 11.4 -0.7
SSPA **Standing Stone** 145.40 20 PKPbc 15 36 11.3 -1.3
SSPA **Standing Stone** 145.40 20 P PKPbc 15 36 11.6 -1.0
baz=334
VBMS **Vicksburg** 145.45 43 P PKPbc 15 36 12.8 -0.1
baz=308
MCWV **Mont Chateau** 145.57 23 P PKPdf 15 36 12.2 -0.8
baz=330
UCCT **U. Connecticut** 145.83 12 PKPbc PKPdf 15 36 13.5 +0.1
ODNJ **Ogdensburg** 145.96 15 PKPdf 15 36 13.6 0.0
TRNY **Table Rock, Ra** 146.00 15 PKPbc PKPdf 15 36 13.9 +0.2
PAL **Palisades** 146.21 14 P PKPbc 15 36 14.8 -0.3
baz=341
TZTN **Tazewell** 146.53 30 P PKPdf 15 36 15.1 +0.3
baz=322
CPCT **Cooper Cave** 146.87 32 PKPbc 15 36 16.3 -0.9
LRAL **Lakeview Retre** 147.19 38 P PKPdf 15 36 16.9 +0.9
baz=313
BLA **Blacksburg** 147.43 26 P PKPdf 15 36 17.4 +1.1
baz=328
W52A **Murphy** 147.46 32 PKPdf 15 36 17.5 +1.1
CBN **Corbin Frederi** 147.76 21 P PKPbc 15 36 18.6 -0.9
baz=334
BRAL **Brewton** 148.40 41 P PKPbc 15 36 21.0 -0.4
baz=311
PMNB **Patos De Minas** 148.42 212 *e*P PKPdf 15 36 19.4 +0.8
LVC **Limon Verde** 148.74 170 PKPab PKiKP 15 36 25.1 +0.6
LVC **Limon Verde** 148.74 170 PKP2 PKiKP 15 36 25.1 +0.6
GOGA **Godfrey** 148.98 34 P PKPbc 15 36 22.1 -0.8
baz=319
NBTA **Tacaratu-PE** 149.31 236 *e*P PKPdf 15 36 20.4 +0.4
MURT **Porto Murtinho** 149.60 191 *e*P PKPdf 15 36 20.4 +0.2
BDFB **Brasilia** 151.66 213 PKP PKPdf 15 36 23.4 -0.2

comp=Z,20nm,0.8s,baz=259,slow=1.2,SNR=19
BDFB PKPbc **PKiKP** **15 36 30.7 +0.3**
comp=Z,95nm,0.9s,baz=166,slow=2.8,SNR=44
BDFB PKPab **pPKPbc** **15 36 40.2 +0.3**
comp=Z,89nm,0.9s,baz=148,slow=6.1,SNR=14
**BDFB Brasilia 151.66 213** *eP* **PKPdf 15 36 23.6 -0.1**
**BBSD Serra de San D 154.44 186** *eP* **PKPdf 15 36 27.9 +0.3**
**NBPS Pedro II - PI 154.65 241** *eP* **PKPdf 15 36 27.8 -0.3**
**SALV Santo Antonio 154.68 198** *eP* **PKPdf 15 36 27.9 0.0**
**LPAZ La Paz 155.05 169** PKP **PKPdf 15 36 28.7 -0.5**
comp=Z,16nm,0.9s,baz=156,slow=0.4,SNR=19
LPAZ PKPbc **pPKPdf 15 36 39.5 +0.2**
comp=Z,17nm,0.9s,baz=118,slow=6.2,SNR=3.7
LPAZ PKPab **PKPab 15 36 54.0 +0.7**
comp=Z,47nm,1.1s,baz=179,slow=1.7,SNR=14
**LPAZ La Paz 155.05 169** *eP* **PKPdf 15 36 29.9 +0.7**
**PTLB Pontes e Lacer 155.94 190** *eP* **PKPdf 15 36 30.2 +0.6**
**NBBC Barra do Corda 157.22 233** *eP* **PKPdf 15 36 31.2 -0.2**
**PRPB Parauapebas 160.16 224** *eP* **PKPdf 15 36 34.8 -0.1**
**TMAB Tom-Au,PA,Br 161.34 236** *eP* **PKPdf 15 36 36.4 +0.3**
**CZSB Cruzeiro do Su 161.52 150** *eP* **PKPdf 15 36 36.6 +0.3**
**ETMB Extrema 161.71 171** *eP* **PKPdf 15 36 35.9 -0.7**
**NPGB Novo Progresso 162.68 208** *eP* **PKPdf 15 36 36.7 -0.9**
**SAML Samuel 162.78 181** *eP* **PKPdf 15 36 37.7 +0.1**
**TEFE Tefe 168.13 174** *eP* **PKPdf 15 36 41.4 -0.6**
**ROSC El Rosal 168.64 107** PKP **PKPdf 15 36 41.9 -1.0**
comp=Z,6.9nm,0.3s,baz=255,slow=20,SNR=9.1
ROSC PKPab **PKPab 15 37 50.8 -2.1**
comp=Z,5.3nm,0.3s,baz=270,slow=19,SNR=1.8
**BOAV Boa Vista 173.38 206** *eP* **PKPdf 15 36 43.9 -0.9**

*IDC* ***19*** *15:21:55.8±4.0, 18°.78S×177°.82W, h575km±44km, mb3.6/8, mbtmp4.5/10, Error ellipse: s-maj=28.0km s-min=21.8km az=20.0*
*NEIC* ***19*** *15:21:55.6±1.5, 18°.7S±0°.2×177°.7W±0°.1, h578km±12km, mb5.0/19, Error ellipse: s-maj=25.0km s-min=16.3km az=144.0*

**ISC 19 15:21:54.2±0.5, 18°.64S±0°.10×177°.76W±0°.09, h557km, n45, σ0°99/47, mb4.9/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.08** | **282** | P | **P** | **15 23 20.3** | **+3.0** |
| **AFI** | **Afiamalu** | **7.43** | **52** | P | **P** | **15 23 45.7** | **-1.0** |
| **NIUE** | **Niue** | **7.43** | **95** | P | **P** | **15 23 46.9** | **+0.2** |
| **DZM** | **Mont Dzumac** | **15.20** | **254** | P | **P** | **15 25 06.9** | **+1.2** |
| | 2.9nm,0.5s,baz=129,slow=16,SNR=8.5 | | | | | | |
| **URZ** | **Urewera** | **20.05** | **192** | P | **P** | **15 25 48.2** | **-2.0** |
| | 4.6nm,0.3s,baz=350,slow=1.9,SNR=8.8 | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.05** | **193** | P | **P** | **15 25 57.9** | **-1.4** |
| **NNZ** | **Nelson** | **23.75** | **197** | P | **P** | **15 26 22.8** | **-0.5** |
| **EIDS** | **Eidsvold** | **29.61** | **251** | P | **P** | **15 27 15.2** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 15 27 48.6 | |
| | comp=Z,109nm,1.9s | | | | | | |
| **ARMA** | **Armidale** | **30.12** | **241** | P | **P** | **15 27 20.5** | **+1.1** |
| ARMA | | | | IAmb | IAmb | 15 27 20.9 | |
| | comp=Z,47nm,1.3s | | | | | | |
| **CAN** | **Canberra** | **33.76** | **234** | P | **P** | **15 27 50.9** | **+0.7** |
| **CTAO** | **Charters Tower** | **33.94** | **262** | P | **P** | **15 27 51.8** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 15 28 12.8 | |
| | comp=Z,98nm,1.8s | | | | | | |
| **PMG** | **Port Moresby** | **35.19** | **280** | P | **P** | **15 28 03.0** | **+0.6** |
| **TOO** | **Toolangi** | **37.19** | **232** | P | **P** | **15 28 18.7** | **+0.1** |
| TOO | | | | IAmb | IAmb | 15 29 11.2 | |
| | comp=Z,47nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.73** | **271** | P | **P** | **15 28 23.5** | **+0.2** |
| COEN | | | | IAmb | IAmb | 15 29 17.1 | |
| | comp=Z,120nm,1.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.82** | **242** | P | **P** | **15 28 32.5** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.82** | **242** | P | **P** | **15 28 32.4** | **+0.4** |
| | comp=Z,7.9nm,0.5s,baz=87,slow=9.8,SNR=11 | | | | | | |
| | comp=Z,7.9nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.60** | **242** | P | **P** | **15 29 09.9** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 15 30 01.8 | |
| | comp=Z,44nm,0.7s | | | | | | |
| **DHH** | **Diamond Head** | **44.21** | **27** | P | **P** | **15 29 15.2** | **+0.7** |
| **DHH** | **Diamond Head** | **44.21** | **27** | P | **P** | **15 29 15.2** | **+0.7** |
| **WR0** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **15 29 19.3** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 15 29 40.4 | |
| | comp=Z,66nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.08** | **260** | P | **P** | **15 29 20.6** | **-0.7** |
| **WB2** | **Warramunga Arr** | **45.10** | **260** | P | **P** | **15 29 20.6** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 15 29 35.1 | |
| | comp=Z,91nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.11** | **260** | P | **P** | **15 29 20.7** | **-0.9** |
| | comp=Z,5.9nm,0.4s,baz=98,slow=6.7,SNR=31 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 30 49.3** | **-0.9** |
| | comp=Z,2.3nm,1.0s,baz=94,slow=3.4,SNR=1.7 | | | | | | |
| | comp=Z,5.9nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.19** | **255** | P | **P** | **15 29 22.1** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.19** | **255** | P | **P** | **15 29 21.9** | **-0.2** |
| | comp=Z,12nm,0.6s,baz=92,slow=7.9,SNR=23 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 30 49.6** | **-1.0** |
| | comp=Z,1.4nm,0.5s,baz=106,slow=3.9,SNR=2.6 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.40** | **269** | P | **P** | **15 29 52.9** | **-0.9** |
| MTN | | | | IAmb | IAmb | 15 31 54.1 | |
| | comp=Z,61nm,1.6s | | | | | | |
| **KNRA** | **Kununurra** | **51.03** | **265** | P | **P** | **15 30 05.0** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 15 30 23.5 | |
| | comp=Z,111nm,1.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.52** | **261** | P | **P** | **15 30 23.2** | **-0.2** |
| **DRV** | **Dumont d'Urvil** | **55.17** | **199** | P | **P** | **15 30 35.0** | **+0.8** |
| **LUWI** | **Luwuk** | **60.83** | **280** | P | **P** | **15 31 12.0** | **-1.4** |
| **TOLI2** | **Tolitoli** | **63.46** | **281** | P | **P** | **15 31 30.5** | **0.0** |
| **CCD** | **Concordia, Ant** | **64.31** | **194** | P | **P** | **15 31 36.1** | **+0.8** |
| **SMRI** | **Semarang** | **70.56** | **269** | P | **P** | **15 32 11.8** | **-2.4** |
| **QSPA** | **South Pole Qui** | **71.42** | **180** | P | **P** | **15 32 18.5** | **+0.2** |
| | comp=Z,5.9nm,0.9s,baz=326,slow=2.0,SNR=2.2 | | | | | | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **J01E** | **Myrtle Point** | **78.88** | **37** | P | **P** | **15 32 59.8** | **-0.3** |
| J01E | | | | IAmb | IAmb | 15 35 53.9 | |
| | comp=Z,79nm,1.6s | | | | | | |
| **N18K** | **Kilae Creek** | **80.99** | **11** | P | **P** | **15 33 11.2** | **+0.4** |
| **MAW** | **Mawson** | **83.38** | **200** | P | **P** | **15 33 23.2** | **+0.4** |
| | comp=Z,1.6nm,0.7s,baz=184,slow=2.0,SNR=2.4 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.87** | **57** | P | **P** | **15 33 37.3** | **+1.5** |
| | comp=Z,1.9nm,0.8s,baz=217,slow=6.6,SNR=14 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.46** | **43** | P | **P** | **15 33 43.5** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=199,slow=5.2,SNR=1.5 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **89.85** | **178** | P | **P** | **15 33 53.5** | **-0.2** |
| | comp=Z,2.3nm,1.1s,baz=186,slow=5.4,SNR=1.4 | | | | | | |
| | comp=Z,2.3nm,1.1s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.80** | **321** | PKP | **PKPdf** | **15 39 36.3** | **-1.1** |
| | comp=Z,1.2nm,0.9s,baz=43,slow=3.9,SNR=1.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.14** | **350** | PKP | **PKPdf** | **15 39 53.6** | **-1.2** |
| | comp=Z,2.6nm,0.9s,baz=35,slow=3.3,SNR=2.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.73** | **314** | PKPbc | **PKPdf** | **15 40 29.6** | **-0.4** |
| | comp=Z,1.0nm,0.9s,baz=66,slow=4.9,SNR=2.8 | | | | | | |
| **CLL** | **Collm** | **146.31** | **348** | *i* PKPbc | **PKPbc** | **15 40 31.9** | **-0.8** |
| **MMAI** | **Mount Meron Ar** | **147.05** | **302** | PKPbc | **PKPbc** | **15 40 35.2** | **-0.2** |
| | comp=Z,0.8nm,0.3s,baz=72,slow=9.3,SNR=2.2 | | | | | | |

*BJI* ***19*** *15:22:12.0±0.0, 37°.40N×36°.40E, h10km, mb4.6/22*
*IDC* ***19*** *15:22:13.2±0.6, 37°.37N×36°.34E, h0km, mb4.3/24, mbtmp4.3/35, ML3.9/8, Error ellipse: s-maj=10.8km s-min=10.4km az=33.0*
*MOS* ***19*** *15:22:13.2±1.0, 37°.33N×36°.37E, h12km, mb4.9/8, MS5.1/4, Error ellipse: s-maj=8.1km s-min=4.0km az=103.4*
*GII* ***19*** *15:22:14.9±0.4, 37°.36N±0°.06×35°.82E±0°.02, h1km, Mws4.9, confirmed*
*ISK* ***19*** *15:22:14.1, 37°.37N×36°.35E, h7km, ML4.8/24*
*NEIC* ***19*** *15:22:14.2±1.4, 37°.29N±0°.05×36°.36E±0°.04, h10km±1km, mb5.1/29, Error ellipse: s-maj=9.2km s-min=5.5km az=188.0*
*AFAD* ***19*** *15:22:14.0±0.0, 37°.38N×36°.39E, h10km±2km, MW4.8*
*DSN* ***19*** *15:22:16.2±0.3, 37°.29N×36°.39E, h12km, mb4.7/7, Ms6.0/7, Error ellipse: s-maj=8.0km s-min=3.7km az=47.0*
*NAO* ***19*** *15:22:20.8, 37°.94N×36°.97E, h33km, mb4.7*

**ISC 19 15:22:14.4±0.7, 37°.36N±0°.02×36°.37E±0°.01, h7km±4km, n367, σ1°63/406, mb4.7/48, MS5.2/4, 45C-16D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANDN** | **Andirin** | **0.22** | **356** | P | **Pg** | **15 22 18.7** | **-0.1** |
| ANDN | | | | S | **Sg** | **15 22 21.8** | **0.0** |
| **KAMA** | **Osmaniye** | **0.30** | **126** | P | **Pg** | **15 22 20.6** | **+0.4** |
| KAMA | | | | S | **Sg** | **15 22 24.5** | **+0.3** |
| **HCB** | **Kahramanmara** | **0.43** | **92** | P | **Pg** | **15 22 22.8** | **0.0** |
| HCB | | | | S | **Sg** | **15 22 28.1** | **-0.3** |
| **KHMR** | **Kahramanmara** | **0.43** | **92** | P | **Pg** | **15 22 22.7** | **0.0** |
| KHMR | | | | P | **Pg** | **15 22 22.8** | **0.0** |
| KHMR | | | | S | **Sg** | **15 22 27.8** | **-0.7** |
| **KAHM** | **Kahramanmaras,** | **0.52** | **73** | P | **Pg** | **15 22 24.1** | **-0.3** |
| KAHM | | | | S | **Sg** | **15 22 30.8** | **-0.4** |
| **CEYT** | **Ceyhan** | **0.61** | **235** | Pg | **Pg** | **15 22 26.2** | **+0.1** |
| **HASA** | **Hatay-Hassa-Ha** | **0.62** | **171** | P | **Pg** | **15 22 26.7** | **+0.3** |
| HASA | | | | S | **Sg** | **15 22 35.2** | **+0.8** |
| **KHMN** | **Narli-Kahraman** | **0.63** | **87** | Pg | **Pb** | **15 22 27.3** | **-0.5** |
| KHMN | | | | Sg | **Sb** | **15 22 36.4** | **-0.4** |
| **SAIM** | **ADANA** | **0.65** | **340** | P | **Pg** | **15 22 26.2** | **-0.8** |
| SAIM | | | | S | **Sg** | **15 22 34.5** | **-1.0** |
| **GAZ** | **Gaziantep** | **0.70** | **106** | Pg | **Pg** | **15 22 28.3** | **+0.4** |
| GAZ | | | | Sg | **Sb** | **15 22 38.4** | **-0.4** |
| **GAZ** | **Gaziantep** | **0.70** | **106** | Pg | **Pg** | **15 22 27.8** | **-0.1** |
| GAZ | | | | Sg | **Sg** | **15 22 36.5** | **-0.5** |
| **AKO** | **Adana** | **0.74** | **278** | P | **Pg** | **15 22 28.3** | **-0.4** |
| AKO | | | | S | **Sg** | **15 22 38.9** | **+0.7** |
| **YURE** | **YUREGIR** | **0.80** | **228** | P | **Pg** | **15 22 30.0** | **+0.3** |
| YURE | | | | S | **Sn** | **15 22 42.8** | **-1.3** |
| **KUZU** | **Kuzuini** | **0.82** | **136** | P | **Pb** | **15 22 30.8** | **-0.1** |
| KUZU | | | | S | **Sg** | **15 22 41.3** | **+0.6** |
| **GZT** | **Gaziantep** | **0.95** | **90** | P | **Pg** | **15 22 32.4** | **-0.3** |
| GZT | | | | S | **Sg** | **15 22 44.6** | **-0.5** |
| **TAHT** | **Tahtakopru-Hat** | **1.00** | **188** | Pg | **Pb** | **15 22 33.8** | **-0.1** |
| TAHT | | | | Sg | **Sb** | **15 22 47.7** | **+0.5** |
| **SARI** | **SarD1z-Kayseri** | **1.04** | **2** | Pg | **Pg** | **15 22 34.3** | **-0.1** |
| SARI | | | | Sg | **Sb** | **15 22 49.1** | **+0.3** |
| **KARA** | **Karaisali** | **1.05** | **265** | Pg | **Pg** | **15 22 34.5** | **-0.1** |
| KARA | | | | Sg | **Sb** | **15 22 49.2** | **+0.3** |
| **YAHY** | **KAYSERI_Yahyal** | **1.08** | **313** | P | **Pg** | **15 22 33.8** | **-1.4** |
| YAHY | | | | S | **Sb** | **15 22 50.2** | **+0.4** |
| **NZIP** | **Nizip/Gaziante** | **1.09** | **107** | P | **Pg** | **15 22 35.3** | **-0.1** |
| NZIP | | | | S | **Sb** | **15 22 50.0** | **-0.2** |
| **RHAN** | **Hatay/Reyhanl** | **1.12** | **170** | P | **Pg** | **15 22 35.8** | **0.0** |
| RHAN | | | | S | **Sg** | **15 22 49.7** | **-0.6** |
| **CMRD** | **Camardi-Nigde** | **1.13** | **286** | Pn | **Pg** | **15 22 35.5** | **-0.7** |
| **AKCA** | **Adyaman/G¶l** | **1.14** | **67** | P | **Pg** | **15 22 35.5** | **-0.7** |
| AKCA | | | | S | **Sb** | **15 22 51.2** | **-0.1** |
| **ELBS** | **KAHRAMANMARAS** | **1.14** | **32** | P | **Pg** | **15 22 35.6** | **-0.6** |
| ELBS | | | | S | **Sg** | **15 22 50.6** | **-0.4** |
| **ASUZ** | **Hatay-Arsuz** | **1.17** | **204** | P | **Pg** | **15 22 36.4** | **-0.3** |
| ASUZ | | | | S | **Sn** | **15 22 54.0** | **+0.8** |
| **GULE** | **Gulek** | **1.27** | **267** | P | **Pn** | **15 22 38.6** | **-0.1** |
| GULE | | | | S | **Sn** | **15 22 56.7** | **+0.6** |
| **DED** | **Mersin** | **1.31** | **253** | P | **Pn** | **15 22 39.1** | **-2.1** |
| DED | | | | S | **Sg** | **15 22 56.5** | **-0.1** |
| **NIDE** | **Nigde/Merkez-G** | **1.41** | **297** | P | **Pn** | **15 22 39.7** | **-1.0** |
| NIDE | | | | S | **Sg** | **15 23 01.5** | **+1.7** |
| **DARE** | **Darende-Malaty** | **1.50** | **36** | Pn | **Pn** | **15 22 42.1** | **+0.4** |
| DARE | | | | S | **Sn** | **15 23 02.7** | **+0.2** |
| **CUGUR** | **Gurin_SVAS** | **1.54** | **27** | P | **Pg** | **15 22 43.6** | **-0.2** |
| CUGUR | | | | S | **Sg** | **15 23 03.6** | **-0.2** |
| **ATAB** | **Bozova** | **1.54** | **85** | P | **Pn** | **15 22 42.6** | **+0.3** |
| ATAB | | | | S | **Sb** | **15 23 02.8** | **-0.1** |
| **BNN** | **Bunyan** | **1.54** | **345** | Pn | **Pn** | **15 22 42.8** | **+0.4** |
| BNN | | | | Sn | **Sb** | **15 23 03.3** | **+0.1** |
| **BNN** | **Bunyan** | **1.54** | **345** | Pn | **Pn** | **15 22 42.3** | **-0.2** |
| **AKCD** | **Akcadag** | **1.54** | **52** | P | **Pn** | **15 22 41.7** | **-0.7** |
| AKCD | | | | S | **Sn** | **15 23 01.8** | **-1.0** |
| **AZEY** | **Adyaman-Merk** | **1.56** | **73** | P | **Pn** | **15 22 41.6** | **-1.0** |
| AZEY | | | | S | **Sb** | **15 23 03.5** | **-0.1** |
| **NIG** | **Nigde** | **1.58** | **299** | Pn | **Pn** | **15 22 42.9** | **-0.1** |
| **GUNE** | **Kayseri** | **1.64** | **339** | P | **Pb** | **15 22 45.2** | **+0.1** |
| GUNE | | | | S | **Sg** | **15 23 08.5** | **+1.2** |
| **KERG** | **Konya-Eregli** | **1.79** | **272** | P | **Pb** | **15 22 47.1** | **-0.4** |
| KERG | | | | S | **Sg** | **15 23 11.1** | **-0.7** |
| **SURC** | **SANLIURFA_SURC** | **1.86** | **104** | P | **Pn** | **15 22 45.2** | **-1.5** |
| **AVNS** | **Nevsehir-Avano** | **1.87** | **321** | P | **Pn** | **15 22 47.6** | **+0.7** |
| **BSIR** | **Belisirma, Guz** | **1.88** | **299** | P | **Pn** | **15 22 47.1** | **+0.1** |
| BSIR | | | | S | **Sg** | **15 23 14.1** | **-0.7** |
| **MAYA** | **Malatya/Merkez** | **1.89** | **59** | P | **Pn** | **15 22 46.4** | **-0.8** |
| MAYA | | | | S | **Sb** | **15 23 13.0** | **-0.2** |
| **CUAYA** | **Sivas-Altinyay** | **1.92** | **9** | P | **Pn** | **15 22 47.8** | **+0.1** |
| CUAYA | | | | S | **Sb** | **15 23 14.2** | **+0.1** |
| **NARI** | **Adyaman-Kaht** | **1.97** | **74** | P | **Pn** | **15 22 46.5** | **-1.8** |
| NARI | | | | S | **Sb** | **15 23 16.0** | **+0.6** |
| **KIZK** | **Mersin** | **1.99** | **244** | Pn | **Pn** | **15 22 48.8** | **+0.4** |
| **KIZK** | **Mersin** | **1.99** | **244** | P | **Pn** | **15 22 47.8** | **-0.5** |
| **HANM** | **anlurfa/Hi** | **2.01** | **83** | P | **Pn** | **15 22 47.4** | **-1.4** |
| HANM | | | | S | **Sg** | **15 23 12.9** | **-1.2** |
| **CUSAR** | **Sarkisla-SIVAS** | **2.06** | **357** | P | **Pn** | **15 22 50.4** | **+0.9** |
| CUSAR | | | | S | **Sn** | **15 23 16.4** | **+0.9** |
| **SANL** | **SANLIURFA_Merk** | **2.10** | **94** | P | **Pn** | **15 22 48.4** | **-1.6** |
| SANL | | | | S | **Sb** | **15 23 18.4** | **-0.7** |
| **YESY** | **Yesilyurt** | **2.13** | **282** | Pn | **Pn** | **15 22 50.7** | **+0.3** |
| **CUKAN** | **kangal_SIVAS** | **2.13** | **24** | P | **Pn** | **15 22 50.1** | **-0.5** |
| CUKAN | | | | S | **Sb** | **15 23 20.6** | **+0.4** |
| **SLFK** | **Silifke-Mersin** | **2.17** | **244** | Pn | **Pn** | **15 22 51.4** | **+0.5** |
| **SIRC** | **Yozgat** | **2.19** | **334** | P | **Pn** | **15 22 51.6** | **+0.2** |
| **SILI** | **Silifke-Mersin** | **2.20** | **244** | Pn | **Pn** | **15 22 51.7** | **+0.4** |
| **MCUR** | **KIREHR** | **2.31** | **322** | P | **Pn** | **15 22 54.2** | **+1.3** |
| MCUR | | | | S | **Sn** | **15 23 23.0** | **+1.4** |
| **KEBE** | **Keben-Mersin** | **2.31** | **248** | Pn | **Pn** | **15 22 53.6** | **+0.6** |
| **ARPR** | **Arapgir-MALATY** | **2.32** | **41** | | **Pn** | **15 22 52.5** | **-0.7** |
| **ELZG** | **Elazig** | **2.36** | **61** | P | **Pn** | **15 22 52.9** | **-0.8** |
| ELZG | | | | S | **Sb** | **15 23 27.7** | **+1.0** |
| **SULT** | **Sultanhani-AKS** | **2.41** | **291** | Pn | **Pn** | **15 22 54.6** | **+0.3** |
| **AKSY** | **AKSARAY - Alti** | **2.43** | **303** | P | **Pn** | **15 22 55.1** | **+0.7** |
| **IKL** | **Isikli** | **2.43** | **243** | Pn | **Pn** | **15 22 55.2** | **+0.8** |
| **TISA** | **Tisan-Mersin** | **2.47** | **242** | Pn | **Pn** | **15 22 55.7** | **+0.7** |
| **YESI** | **Yesilovacik-Me** | **2.48** | **243** | Pn | **Pn** | **15 22 55.7** | **+0.6** |
| **KRMN** | **Karaman** | **2.48** | **267** | Pn | **Pn** | **15 22 55.8** | **+0.5** |
| **TEVE** | **Tevekalti-Mers** | **2.52** | **249** | Pn | **Pn** | **15 22 56.3** | **+0.5** |
| **KEMA** | **Kemaliye** | **2.53** | **41** | P | **Pn** | **15 22 55.2** | **-0.8** |
| KEMA | | | | S | **Sb** | **15 23 32.1** | **+0.4** |
| **EREN** | **Erenkoy** | **2.55** | **225** | Pn | **Pn** | **15 22 56.9** | **+0.8** |
| **GULN** | **MERSIN_Gulnar** | **2.55** | **243** | P | **Pn** | **15 22 55.3** | **-0.9** |
| GULN | | | | S | **Sn** | **15 23 24.8** | **-2.6** |
| **AKKU** | **Akkuyu-Mersin** | **2.56** | **243** | Pn | **Pn** | **15 22 56.8** | **+0.5** |
| **SCER** | **sogukcermik** | **2.56** | **13** | P | **Pn** | **15 22 57.0** | **+0.5** |
| SCER | | | | S | **Sg** | **15 23 35.2** | **-1.6** |
| **YORU** | **Yoruktepe-Mers** | **2.67** | **244** | Pn | **Pn** | **15 22 58.5** | **+0.7** |
| **KKBE** | **Karaman, Kazim** | **2.74** | **268** | P | **Pn** | **15 22 59.8** | **+1.0** |
| **CDAG** | **Cicekdag** | **2.75** | **326** | P | **Pn** | **15 22 59.8** | **+0.8** |
| **BEIN** | **Beino** | **2.82** | **183** | *eP* | **Pn** | **15 23 30.3** | **+0.4** |
| **AKPI** | **Kirsehir/Akpin** | **2.83** | **320** | P | **Pn** | **15 23 01.1** | **+1.0** |
| **TOKA** | **Tokat** | **2.96** | **2** | Pn | **Pn** | **15 23 01.8** | **0.0** |
| **COAL** | **Corum-Alaca** | **3.08** | **340** | P | **Pn** | **15 23 04.2** | **+0.6** |
| **HWQ** | **Hawqa** | **3.10** | **186** | *eP* | **Pn** | **15 23 04.2** | **+0.4** |
| **KESK** | **Krkkale-Ke** | **3.15** | **317** | P | **Pn** | **15 23 05.7** | **+1.2** |
| **BRTR** | **Keskin Array B** | **3.18** | **319** | Pn | **Pn** | **15 23 05.7** | **+0.7** |
| **BRTR** | **Keskin Array B** | **3.18** | **319** | Pn | **Pn** | **15 23 06.0** | **+1.1** |
| | 6.4nm,0.3s,baz=146,slow=15,SNR=134 | | | | | | |
| BRTR | | | | | Lg | Lg | 15 23 53.2 |
| | 17nm,0.3s,baz=140,slow=27,SNR=6.0 | | | | | | |
| | 49nm,0.6s | | | | | | |
| **BR131** | **Keskin Array S** | **3.18** | **319** | Pn | **Pn** | **15 23 05.3** | **+0.3** |
| **BR131** | **Keskin Array S** | **3.18** | **319** | *eP* | **Pn** | **15 23 05.9** | **+0.9** |
| **DELI** | **KIRIKKALE** | **3.25** | **325** | P | **Pn** | **15 23 07.2** | **+1.3** |
| **BBAL** | **Bala** | **3.35** | **312** | P | **Pn** | **15 23 08.6** | **+1.3** |
| **CSS** | **Mathiatis** | **3.43** | **227** | Pn | **Pn** | **15 23 05.8** | **-2.4** |
| **CSS** | **Mathiatis** | **3.43** | **227** | P | **Pn** | **15 23 08.5** | **+0.2** |
| **GAZI** | **Gazipasa** | **3.44** | **252** | P | **Pn** | **15 23 09.4** | **+1.0** |
| **BHL** | **Bhannes** | **3.50** | **190** | *eP* | **Pn** | **15 23 09.2** | **-0.1** |
| **MARD** | **Mardin** | **3.52** | **89** | Pn | **Pn** | **15 23 08.0** | **-1.6** |
| **ZAHL** | **Zahle** | **3.52** | **187** | *eP* | **Pn** | **15 23 10.4** | **+0.8** |
| **SEDI** | **Konya, Seydise** | **3.67** | **273** | P | **Pn** | **15 23 12.0** | **+0.3** |
| **BR231** | **Keskin MP Arra** | **3.75** | **312** | | **Pn** | **15 23 13.3** | **+0.7** |
| **ANTO** | **Ankara** | **3.75** | **313** | | **Pn** | **15 23 13.8** | **+1.0** |
| **ANTO** | **Ankara** | **3.75** | **313** | ⇑P | **Pg** | **15 23 25.1** | **-1.2** |
| **ANTO** | **Ankara** | **3.75** | **313** | P | **Pn** | **15 23 13.8** | **+1.0** |
| **QRWL** | **Qaraoun** | **3.85** | **189** | *eP* | **Pn** | **15 23 14.4** | **+0.4** |
| **RCY** | **Rachaya** | **3.88** | **187** | *eP* | **Pn** | **15 23 15.2** | **+0.7** |
| **NATI** | **Neve Ativ** | **4.12** | **187** | P | **Pn** | **15 23 18.4** | **+0.6** |
| **NATI** | **Neve Ativ** | **4.12** | **187** | P | **Pn** | **15 23 19.0** | **+1.2** |
| **GEM** | **Giv'at Ha'Em** | **4.18** | **188** | P | **Pn** | **15 23 19.5** | **+1.0** |
| **GEM** | **Giv'at Ha'Em** | **4.18** | **188** | S | **Sn** | **15 24 09.6** | **+1.9** |
| **GEM** | **Giv'at Ha'Em** | **4.18** | **188** | P | **Pn** | **15 23 19.6** | **+1.0** |
| **ILGA** | **Ilgaz** | **4.22** | **332** | Pn | **Pn** | **15 23 19.9** | **+0.6** |
| **DIKM** | **Dikmen** | **4.37** | **349** | ⇑P | **Pg** | **15 23 41.0** | **+2.9** |
| **HNTI** | **Hanita** | **4.38** | **193** | P | **Pn** | **15 23 21.2** | **-0.1** |
| **HNTI** | **Hanita** | **4.38** | **193** | S | **Sn** | **15 24 12.1** | **-0.5** |
| **HNTI** | **Hanita** | **4.38** | **193** | P | **Pn** | **15 23 21.4** | **+0.1** |
| **KSHT** | **Keshet** | **4.39** | **186** | P | **Pn** | **15 23 22.6** | **+1.0** |
| **MMC7** | **Mount Meron ar** | **4.40** | **191** | P | **Pn** | **15 23 22.0** | **+0.3** |
| **MMA0** | **Mount Meron ar** | **4.41** | **191** | P | **Pn** | **15 23 22.4** | **+0.6** |
| **MMA0B** | **Mount Meron ar** | **4.41** | **191** | S | **Sn** | **15 24 14.3** | **+0.9** |
| **MMA0B** | **Mount Meron Ar** | **4.41** | **191** | P | **Pn** | **15 23 22.1** | **+0.3** |
| **MMAI** | **Mount Meron Ar** | **4.41** | **191** | Pn | **Pn** | **15 23 22.1** | **+0.4** |
| | 33nm,0.3s,baz=13,slow=13,SNR=182 | | | | | | |
| MMAI | | | | Sn | **Sn** | **15 24 13.5** | **+0.1** |
| | 134nm,0.3s,baz=0.2,slow=28,SNR=14 | | | | | | |
| **SHMJ** | **Saham** | **4.65** | **186** | P | **Pn** | **15 23 26.2** | **+1.2** |
| **BLGI** | **Bet Lehem HaGe** | **4.72** | **192** | P | **Pn** | **15 23 27.1** | **+1.2** |
| **BLGI** | **Bet Lehem HaGe** | **4.72** | **192** | P | **Pn** | **15 23 26.7** | **+0.7** |
| **OFRI** | **`Ofer** | **4.87** | **194** | P | **Pn** | **15 23 27.9** | **-0.1** |
| **OFRI** | **`Ofer** | **4.87** | **194** | P | **Pn** | **15 23 27.8** | **-0.1** |
| **OFRI** | **`Ofer** | **4.87** | **194** | S | **Sn** | **15 24 24.4** | **-0.2** |
| **BZK** | **Bozkurt** | **4.94** | **339** | ⇑P | **Pb** | **15 23 36.4** | **-4.7** |
| **MMLI** | **Mount Malkishu** | **4.97** | **189** | P | **Pn** | **15 23 30.5** | **+1.0** |
| **QRNJ** | **Al-Qirein** | **5.06** | **188** | P | **Pn** | **15 23 33.2** | **+2.6** |
| **MDUB** | **Mudurnu** | **5.09** | **309** | | **Pn** | **15 23 31.6** | **+0.5** |
| **HMDT** | **Nahal Hemdat** | **5.14** | **188** | P | **Pn** | **15 23 32.6** | **+0.8** |
| **HMDT** | **Nahal Hemdat** | **5.14** | **188** | P | **Pn** | **15 23 33.3** | **+1.5** |
| **ASF** | **Jabal al Asfar** | **5.20** | **175** | Pn | **Pn** | **15 23 34.1** | **+1.5** |
| | 9.8nm,0.3s,baz=222,slow=0.0,SNR=59 | | | | | | |
| ASF | | | | Lg | Lg | 15 25 02.4 | |
| | 41nm,0.3s,baz=202,slow=0.0,SNR=3.7 | | | | | | |
| | 32nm,0.6s | | | | | | |
| **ASF** | **Jabal al Asfar** | **5.20** | **175** | P | **Pn** | **15 23 33.9** | **+1.3** |
| **ELL** | **Elmali** | **5.20** | **265** | | **Pn** | **15 23 32.2** | **-0.5** |
| **ELL** | **Elmali** | **5.20** | **265** | P | **Pn** | **15 23 32.2** | **-0.5** |
| **SLTI** | **Sal'it** | **5.22** | **192** | P | **Pn** | **15 23 33.5** | **+0.6** |
| **SLTI** | **Sal'it** | **5.22** | **192** | P | **Pn** | **15 23 33.7** | **+0.8** |
| **CIDE** | **Kastamonu/Cide** | **5.23** | **331** | ⇑P | **Pn** | **15 23 37.3** | **+4.3** |
| **HSUJ** | **Al Zarqa** | **5.25** | **182** | P | **Pn** | **15 23 33.8** | **+0.5** |
| **SALP** | **Salfit** | **5.37** | **191** | P | **Pn** | **15 23 36.2** | **+1.3** |
| **UJAP** | **Al Uja** | **5.45** | **188** | P | **Pn** | **15 23 38.2** | **+2.3** |
| **BCA** | **Borcka** | **5.76** | **43** | ⇑P | **Pb** | **15 23 56.0** | **+0.8** |
| **DSI** | **Dead Sea** | **5.84** | **188** | P | **Pn** | **15 23 41.7** | **+0.4** |
| **DSI** | **Dead Sea** | **5.84** | **188** | P | **Pn** | **15 23 42.3** | **+1.0** |
| **AMAZ** | **Amatzia** | **5.94** | **192** | P | **Pn** | **15 23 42.6** | **-0.1** |
| **AMAZ** | **Amatzia** | **5.94** | **192** | S | **Sn** | **15 24 52.7** | **+1.6** |
| **AMAZ** | **Amatzia** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DRGR | | 13.82 317 | ⇓P | | P | | 15 25 39.9 | +0.6 |
| DRGR | | 13.82 317 | ⇓P | | P | | 15 25 39.9 | +0.6 |
| BMR | Baia Mare | 13.99 321 | ⇑P | | P | | 15 25 43.1 | +2.1 |
| BMR | Baia Mare | 13.99 321 | ⇑P | | P | | 15 25 43.1 | +2.1 |
| PDG | Podgorica | 14.07 296 | ⇑P | | P | | 15 25 40.2 | -1.8 |
| AK05 | Malin Array Si | 14.21 341 | Pn | | Pn | | 15 25 36.0 | +0.1 |
| KIEV | Kiev | 14.28 341 | Pn | | Pn | | 15 25 37.2 | +0.4 |
| KIEV | Kiev | 14.28 341 | Pn | | Pn | | 15 25 39.5 | +2.7 |
| KIEV | Kiev | 14.28 341 | P | | Pn | | 15 25 39.5 | +2.7 |
| KIEV | Kiev | 14.28 341 | ⇑P | | P | | 15 25 47.4 | +3.2 |
| KIEV | Kiev | 14.28 341 | P | | Pn | | 15 25 37.2 | +0.4 |
| AKASG | Malin Array Be | 14.28 341 | Pn | | Pn | | 15 25 36.2 | -0.6 |
| | comp=Z,0.9nm,0.3s,baz=152,slow=14,SNR=8.5 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| AKASG | Malin Array Be | 14.28 341 | *i* P | | Pn | | 15 25 38.7 | +1.9 |
| AKASG | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| AKBB | Malin Array Si | 14.28 341 | ⇑*e*P | | Pn | | 15 25 38.8 | +2.0 |
| KWP | Kalwaria Pacla | 15.73 326 | *e*P | | P | | 15 26 02.9 | +2.5 |
| CRVS | Cervenica-Dubn | 15.82 321 | *e*P | | P | | 15 26 02.0 | +0.6 |
| CRVS | Cervenica-Dubn | 15.82 321 | *e*P | | P | | 15 26 02.0 | +0.6 |
| CRVS | | | *e* | | | | 15 46 11.2 | |
| RAYN | Ar Rayn | 15.87 148 | Pn | | Pn | | 15 25 56.9 | -1.4 |
| RAYN | Ar Rayn | 15.87 148 | P | | Pn | | 15 25 56.9 | -1.4 |
| RAYN | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.8s | | | | | | | |
| MORH | Mrgy, Hungar | 15.88 309 | ⇓P | | P | | 15 26 07.0 | +5.0 |
| PSZ | Piszkesteto | 16.03 316 | ⇓P | | P | | 15 26 07.7 | +3.9 |
| PSZ | Piszkesteto | 16.03 316 | ⇓P | | P | | 15 26 07.7 | +3.9 |
| NIE | Niedzica | 16.74 321 | *e*P | | Pn | | 15 26 09.9 | +0.6 |
| VYHS | Vyhne | 16.94 317 | *e*P | | P | | 15 26 16.5 | +2.7 |
| VYHS | Vyhne | 16.94 317 | *e*P | | P | | 15 26 16.5 | +2.7 |
| VYHS | | | *e* | | | | 15 44 24.4 | |
| VYHS | | | *e* | | | | 15 46 14.8 | |
| BELG | Belogornoye | 16.98 24 | Pn | | Pn | | 15 26 12.1 | -0.2 |
| | comp=Z,0.5nm,0.3s,baz=324,slow=14,SNR=2.6 | | | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| BELG | Belogornoye | 16.98 24 | ⇑*e*P | | P | | 15 26 13.8 | -0.3 |
| VAE | Valguarnera | 17.44 277 | P | | Pn | | 15 26 16.7 | -1.5 |
| | comp=Z,4.2nm,0.5s,baz=247,slow=15,SNR=1.5 | | | | | | | |
| OJC | Ojcow | 17.50 322 | *e*P | | P | | 15 26 23.6 | +3.6 |
| OBN | Obninsk | 17.76 0 | *i* P | | Pn | | 15 26 21.3 | -0.5 |
| OBN | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| INTR | Introdacqua | 17.89 292 | | | Pn | | 15 26 22.6 | -1.0 |
| OKC | Ostrava-Krasne | 18.09 319 | AMS | | AMS | | 15 37 50.0 | |
| | comp=Z,9μm,21.0s | | | | | | | |
| MNK | Minsk | 18.11 344 | *i* P | | Pn | | 15 26 25.3 | -0.8 |
| | comp=E,16nm,0.8s | | | | | | | |
| MNK | | | *i* P | | Pn | | 15 26 25.3 | -0.8 |
| | comp=N,16nm,1.0s | | | | | | | |
| MNK | | | *i* P | | Pn | | 15 26 25.3 | -0.8 |
| | comp=Z,11nm,0.9s,baz=157 | | | | | | | |
| MNK | | | *i* PP | | PnPn | | 15 26 36.8 | -0.4 |
| MNK | | | *i* PPP | | PPP | | 15 26 44.4 | |
| MNK | | | *i* S | | Sn | | 15 29 49.5 | +1.2 |
| MNK | | | *i* SS | | SnSn | | 15 30 04.3 | +2.5 |
| MNK | | | *i* SSS | | SSS | | 15 30 17.4 | |
| MNK | | | *i* LQ | | LQ | | 15 31 53.2 | |
| MNK | | | *i* LR | | LR | | 15 33 13.3 | |
| MNK | | | *i* LRM | | MLR | | 15 35 58.6 | |
| | comp=E,7μm,20.4s | | | | | | | |
| MNK | | | *i* LRM | | MLR | | 15 36 25.5 | |
| | comp=N,15μm,23.0s | | | | | | | |
| MNK | | | *i* LRM | | MLR | | 15 36 25.5 | |
| | comp=Z,8μm,20.0s | | | | | | | |
| MNK | Minsk | 18.11 344 | *i* P | | Pn | | 15 26 25.3 | -0.8 |
| MNK | | | *i* S | | Sn | | 15 29 49.4 | +1.2 |
| MNK | | | pmax | | pmax | | | |
| | comp=E,16nm,0.8s | | | | | | | |
| MNK | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| MNK | | | pmax | | pmax | | | |
| | comp=N,16nm,1.0s | | | | | | | |
| MNK | | | MLR | | MLR | | | |
| | comp=E,7μm,20.0s | | | | | | | |
| MNK | | | MLR | | MLR | | | |
| | comp=Z,8μm,20.0s | | | | | | | |
| MNK | | | MLR | | MLR | | | |
| | comp=N,15μm,23.0s | | | | | | | |
| BEL | Belsk | 18.17 328 | *e*P | | P | | 15 26 27.7 | +0.3 |
| MOS | Moscow | 18.40 2 | *e*P | | Pn | | 15 26 29.2 | -0.6 |
| MOS | | | pmax | | pmax | | | |
| | comp=Z,108nm,1.5s | | | | | | | |
| VRAC | Vranov | 18.63 316 | P | | P | | 15 26 31.2 | -1.2 |
| | comp=Z,0.1nm,0.3s,baz=13,slow=2.8,SNR=3.3 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| VRAC | Vranov | 18.63 316 | ⇑P | | Pn | | 15 26 37.4 | +4.8 |
| NACGM | Naroch | 18.73 343 | *e*P | | P | | 15 26 29.1 | -4.3 |
| KRLC | Kraliky | 18.95 318 | AMS | | AMS | | 15 38 20.0 | |
| | comp=Z,11μm,24.3s | | | | | | | |
| SUW | Suwalki | 18.97 336 | *e*P | | Pn | | 15 26 36.5 | -0.2 |
| SUW | Suwalki | 18.97 336 | IAmb | | IAmb | | 15 26 44.8 | |
| | comp=Z,107nm,1.3s | | | | | | | |
| DPC | Dobruska-Polom | 19.35 318 | AMS | | AMS | | 15 38 10.0 | |
| | comp=Z,11μm,24.9s | | | | | | | |
| OSTC | Ostas | 19.52 319 | AMS | | AMS | | 15 38 10.0 | |
| | comp=Z,14μm,25.3s | | | | | | | |
| UPC | Upice | 19.60 319 | AMS | | AMS | | 15 38 30.0 | |
| | comp=Z,16μm,27.3s | | | | | | | |
| CHVC | Chvalec | 19.62 319 | AMS | | AMS | | 15 38 10.0 | |
| | comp=Z,15μm,24.5s | | | | | | | |
| KSP | Ksiaz | 19.65 320 | *e*P | | P | | 15 26 41.5 | -2.0 |
| CKRC | Cesky Krumlov | 19.69 313 | AMS | | AMS | | 15 29 40.0 | |
| | comp=Z,10μm,26.9s | | | | | | | |
| CKRC | Cesky Krumlov | 19.69 313 | *e*P | | Pn | | 15 26 51.9 | +6.5 |
| CKRC | | | MLR | | MLR | | | |
| | comp=Z,10μm,25.8s | | | | | | | |
| GOPC | GO Pecny, Ondr | 19.95 316 | AMS | | AMS | | 15 39 10.0 | |
| | comp=Z,15μm,25.9s | | | | | | | |
| ZVC | Zvikov | 20.05 314 | *e*P | | Pn | | 15 26 51.9 | +2.3 |
| ZVC | | | *e*P | | sP | | 15 26 52.0 | +0.9 |
| ZVC | | | AMS | | AMS | | 15 39 20.0 | |
| | comp=Z,10μm,25.8s | | | | | | | |
| GERES | GERESS Array B | 20.06 312 | P | | P | | 15 26 47.2 | -0.9 |
| GERES | GERESS Array B | 20.06 312 | P | | P | | 15 26 47.9 | -0.2 |
| | comp=Z,2.8nm,0.8s,baz=149,slow=13,SNR=3.3 | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| PRU | Pruhonice | 20.12 316 | *e*P | | Pn | | 15 26 50.8 | +0.3 |
| PRU | | | AMS | | AMS | | 15 39 20.0 | |
| PRU | Pruhonice | 20.12 316 | *e*P | | Pn | | 15 26 50.8 | +0.3 |
| TEOL | Teolo | 20.13 301 | P | | P | | 15 26 48.4 | -0.5 |
| TEOL | | | IAmb | | IAmb | | 15 26 55.2 | |
| | comp=Z,116nm,1.0s | | | | | | | |
| SHME | Shamm | 20.21 118 | Pn | | Pn | | 15 26 50.8 | -1.0 |
| SHME | Shamm | 20.21 118 | P | | Pn | | 15 26 50.8 | -1.0 |
| AKTO | Aktyubinsk | 20.26 43 | P | | P | | 15 26 49.0 | -1.2 |
| | comp=Z,3.8nm,0.8s,baz=252,slow=8.7,SNR=7.9 | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| AKTO | Aktyubinsk | 20.26 43 | P | | P | | 15 26 49.0 | -1.2 |
| KHC | Kasperske Hory | 20.26 313 | AMS | | AMS | | 15 29 40.0 | |
| | comp=Z,11μm,21.2s | | | | | | | |
| PVCC | Panska Ves | 20.39 317 | AMS | | AMS | | 15 39 20.0 | |
| | comp=Z,19μm,27.9s | | | | | | | |
| MZR | Muzera | 20.54 129 | P | | P | | 15 26 53.8 | +0.4 |
| ASUD | Al Ashush, Dub | 20.58 123 | P | | P | | 15 26 54.1 | +0.2 |
| MSFE | Esma-Masafi | 20.66 120 | P | | P | | 15 26 55.6 | +0.8 |
| FAQ | Al Faqa, Dubai | 20.68 122 | P | | P | | 15 26 56.0 | +1.1 |
| ABKAR | Akbulak array | 20.78 48 | P | | P | | 15 26 54.8 | -1.0 |
| ABKAR | Akbulak array | 20.78 48 | P | | P | | 15 26 56.0 | +0.2 |
| BRG | Berggiesshubel | 20.91 317 | P | | P | | 15 26 53.6 | -3.6 |
| BRG | | | Amp | | | | 15 26 54.6 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| BRG | Berggiesshubel | 20.91 317 | P | | Pn | | 15 27 02.3 | +2.6 |
| BRG | | | Amp | | | | 15 27 06.6 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| UOSS | Minazif | 20.96 121 | P | | P | | 15 26 59.0 | +1.1 |
| HATD | Hatta, Dubai | 20.99 121 | P | | P | | 15 26 58.4 | +0.1 |
| ASHO | Ashiyiah | 21.03 121 | P | | P | | 15 26 58.5 | -0.3 |
| HSKC | Hora Svate Kat | 21.05 316 | AMS | | AMS | | 15 39 40.0 | |
| | comp=Z,17μm,25.0s | | | | | | | |
| HRA | Herat | 21.16 90 | P | | P | | 15 26 58.3 | -2.0 |
| CLL | Collm | 21.64 318 | *e*P | | P | | 15 27 06.0 | +0.9 |
| | comp=Z,13nm,1.2s | | | | | | | |
| CLL | | | *i* sP | | sP | | 15 27 09.1 | +0.8 |
| | comp=Z,37nm,1.5s | | | | | | | |
| CLL | | | *e*PPP | | PPP | | 15 27 34.0 | |
| CLL | Collm | 21.64 318 | *e*P | | P | | 15 27 06.0 | +0.9 |
| CLL | | | *i* | | | | 15 27 09.1 | |
| CLL | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| TATN | Tataouine | 21.68 265 | P | | P | | 15 27 03.8 | -1.9 |
| TATN | | | IAmb | | IAmb | | 15 27 11.6 | |
| | comp=Z,25nm,0.7s | | | | | | | |
| DAVOX | Davos/Dischmat | 21.71 304 | P | | P | | 15 27 04.8 | -1.3 |
| | comp=Z,2.2nm,0.6s,baz=11,slow=11,SNR=1.0 | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| SOHO | SOHO | 21.72 122 | P | | P | | 15 27 05.8 | -0.3 |
| KEST | Kesra | 21.75 274 | P | | P | | 15 27 07.6 | +1.2 |
| | comp=Z,4.9nm,0.8s,baz=106,slow=7.4,SNR=1.7 | | | | | | | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| VSU | Vasula | 22.03 346 | *ce*P | | P | | 15 27 11.7 | +2.5 |
| VSU | | | pmax | | pmax | | | |
| | comp=Z,41nm,0.9s | | | | | | | |
| KIRV | Kirov | 22.88 18 | *ce*P | | P | | 15 27 19.1 | +0.9 |
| BFO | Black Forest | 23.17 307 | P | | P | | 15 27 20.7 | -0.7 |
| BFO | | | IAmb | | IAmb | | 15 27 26.6 | |
| | comp=Z,116nm,1.3s | | | | | | | |
| BFO | Black Forest | 23.17 307 | P | | P | | 15 27 20.7 | -0.7 |
| BFO | | | pmax | | pmax | | | |
| | comp=Z,116nm,1.3s | | | | | | | |
| SENIN | Lac Senin/Sane | 23.33 302 | P | | P | | 15 27 21.5 | -1.8 |
| SENIN | | | IAmb | | IAmb | | 15 27 40.5 | |
| | comp=Z,97nm,1.2s | | | | | | | |
| BNI | Bardonecchia | 23.52 298 | P | | P | | 15 27 24.7 | -0.4 |
| BNI | | | IAmb | | IAmb | | 15 27 32.7 | |
| | comp=Z,47nm,1.1s | | | | | | | |
| BNI | Bardonecchia | 23.52 298 | P | | P | | 15 27 24.7 | -0.4 |
| BNI | | | pmax | | pmax | | | |
| | comp=Z,47nm,1.2s | | | | | | | |
| ECH | Echery | 23.88 306 | P | | P | | 15 27 27.4 | -1.1 |
| ECH | Echery | 23.88 306 | P | | P | | 15 27 27.4 | -1.1 |
| ECH | | | pmax | | pmax | | | |
| | comp=Z,133nm,1.2s | | | | | | | |
| ARU | Arti | 24.18 31 | *c i*P | | P | | 15 27 29.7 | -1.4 |
| ARU | | | S | | S | | 15 31 50.5 | +1.3 |
| ARU | | | SS | | SnSn | | 15 32 33.3 | +2.7 |
| ARU | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| FINES | FINESS Array B | 24.95 348 | P | | P | | 15 27 38.1 | 0.0 |
| FINES | FINESS Array B | 24.95 348 | P | | P | | 15 27 37.9 | -0.2 |
| | comp=Z,3.4nm,0.6s,baz=149,slow=10.0,SNR=9.3 | | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| FINES | FINESS Array B | 24.95 348 | P | | P | | 15 27 38.1 | 0.0 |
| SVE | Sverdlovsk | 25.30 32 | *e*P | | P | | 15 27 42.3 | +1.1 |
| HFS | Hagfors | 26.99 335 | P | | P | | 15 27 55.9 | -0.6 |
| | comp=Z,2.8nm,0.6s,baz=141,slow=9.6,SNR=6.2 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| NB2 | NORSAR Subarra | 28.49 334 | P | | P | | 15 28 09.7 | -0.3 |
| | comp=Z,14nm,1.4s,baz=133,slow=9.3 | | | | | | | |
| NOA | NORSAR Array B | 28.49 334 | P | | P | | 15 28 09.8 | -0.3 |
| | comp=Z,3.0nm,1.0s,baz=133,slow=8.8,SNR=4.7 | | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| APA | Apatity | 30.30 358 | ⇓*i*P | | P | | 15 28 24.8 | -1.1 |
| APA | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| ESDC | Sonseca Array | 31.46 287 | P | | P | | 15 28 35.1 | -1.3 |
| | comp=Z,5.7nm,1.4s,baz=83,slow=9.3,SNR=7.5 | | | | | | | |
| | comp=Z,5.7nm,1.4s | | | | | | | |
| EKA | Eskdalemuir Ar | 32.10 317 | P | | P | | 15 28 41.4 | -0.5 |
| | comp=Z,2.5nm,0.7s,baz=112,slow=9.5,SNR=2.8 | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| KURBB | Kurchatov Arra | 32.65 52 | P | | P | | 15 28 47.7 | +1.0 |
| | comp=Z,5.3nm,0.8s,baz=266,slow=8.8,SNR=4.2 | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| KURK | Kurchatov | 32.72 52 | P | | P | | 15 28 47.7 | +0.4 |
| ARCES | ARCESS Array B | 32.77 353 | P | | P | | 15 28 47.4 | -0.2 |
| ARCES | | | IAmb | | IAmb | | 15 29 43.6 | |
| | comp=Z,57nm,2.0s | | | | | | | |
| ARCES | ARCESS Array B | 32.77 353 | P | | P | | 15 28 47.5 | 0.0 |
| | comp=Z,4.0nm,0.7s,baz=164,slow=9.4,SNR=8.7 | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| ARCES | ARCESS Array B | 32.77 353 | P | | P | | 15 28 47.4 | -0.2 |
| ARCES | | | pmax | | pmax | | | |
| | comp=Z,57nm,2.0s | | | | | | | |
| MTE | Manteigas | 34.06 289 | *e*P | | P | | 15 28 59.3 | 0.0 |
| | comp=Z,30nm,2.9s | | | | | | | |
| POLO | Lamas de Olo | 34.10 291 | *e*P | | P | | 15 28 59.1 | -0.5 |
| | comp=Z,21nm,1.7s | | | | | | | |
| PCBR | Castelo Branco | 34.10 288 | *e*P | | P | | 15 28 59.0 | -0.5 |
| PESTR | Estremoz | 34.37 286 | P | | P | | 15 29 00.4 | -1.5 |
| PESTR | | | IAmb | | IAmb | | 15 29 13.2 | |
| | comp=Z,31nm,1.3s | | | | | | | |
| PESTR | Estremoz | 34.37 286 | *e*P | | P | | 15 29 00.7 | -1.2 |
| | comp=Z,35nm,1.8s | | | | | | | |
| PBEJ | Beja | 34.76 285 | *e*P | | P | | 15 29 04.2 | -1.1 |
| MK31 | Makanchi Array | 34.93 60 | *ce*P | | P | | 15 29 07.0 | +0.3 |
| MKAR | Makanchi Array | 34.93 60 | P | | P | | 15 29 07.5 | +0.8 |
| | comp=Z,4.4nm,0.8s,baz=282,slow=7.2,SNR=3.5 | | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| PCVE | Castro Verde | 34.98 284 | *e*P | | P | | 15 29 06.5 | -0.7 |
| PNCL | Nicolau / Gran | 35.25 285 | *e*P | | P | | 15 29 09.2 | -0.3 |
| ZALV | Zalesovo Geam | 36.89 47 | P | | P | | 15 29 22.8 | -0.6 |
| | comp=Z,1nm,0.6s,baz=264,slow=9.6,SNR=2.3 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| WMQ | Urumqi | 38.98 64 | *e*P | | P | | 15 29 42.3 | +1.0 |
| TORD | Torodi Ar. Bea | 39.20 241 | P | | P | | 15 29 43.0 | -0.3 |
| | comp=Z,16nm,1.0s,baz=34,slow=10,SNR=22 | | | | | | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| SPITS | Spitsbergen Ar | 41.78 354 | P | | P | | 15 30 03.6 | -0.3 |
| | comp=Z,18nm,0.9s,baz=131,slow=21,SNR=4.8 | | | | | | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| DBIC | Dimbokro | 48.32 241 | P | | P | | 15 30 55.9 | -0.7 |
| | comp=Z,8.7nm,0.6s,baz=35,slow=8.2,SNR=14 | | | | | | | |
| | comp=Z,8.7nm,0.6s | | | | | | | |
| TIC | Toumodi | 48.45 241 | ⇑*i*PKP2 | | P | | 15 30 56.4 | -1.3 |
| | comp=Z,2.7nm,0.2s | | | | | | | |
| KIC | Kosan Boka | 48.45 241 | ⇓*i*PKP2 | | P | | 15 30 57.1 | -0.6 |
| | comp=Z,25nm,0.6s | | | | | | | |
| LIC | Lamto | 48.75 241 | ⇑*e*PKP2 | | P | | 15 30 58.0 | -2.0 |
| | comp=Z,46nm,0.8s | | | | | | | |
| GTA | Gaotai | 48.85 67 | P | | P | | 15 31 01.6 | +0.9 |
| GTA | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| SONM | Songino Array | 50.96 55 | P | | P | | 15 31 16.6 | 0.0 |
| | comp=Z,1.4nm,0.7s,baz=306,slow=5.6,SNR=3.5 | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| PZH | PanZhiHua | 55.55 81 | P | | P | | 15 31 50.6 | 0.0 |
| PZH | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| HHC | Hu-ho-hao-te | 56.76 61 | *e*P | | P | | 15 31 59.9 | +0.8 |
| HHC | | | pmax | | pmax | | | |
| | comp=Z,31nm,0.6s | | | | | | | |
| CMAR | Chiang Mai Arr | 57.42 91 | P | | P | | 15 32 03.5 | -0.4 |
| | comp=Z,1.4nm,0.7s,baz=292,slow=8.1,SNR=5.9 | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| CMAR | Chiang Mai Arr | 57.42 91 | *i* P | | P | | 15 32 03.4 | -0.5 |
| CMAR | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| XAN | Xi'an | 57.65 70 | ⇓P | | P | | 15 32 05.6 | +0.2 |
| XAN | | | pmax | | pmax | | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| HEH | HeiHe | 63.00 46 | *e*P | | P | | 15 32 42.1 | +0.4 |
| HEH | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| NJ2 | Nanjing | 65.95 67 | *e*P | | P | | 15 32 59.3 | -1.9 |
| NJ2 | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| KLR | Kul'dur | 65.96 46 | *e*P | | P | | 15 33 00.3 | -0.8 |
| KLR | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| BOSA | Boshof | 66.45 191 | P | | P | | 15 33 04.3 | -0.1 |
| | comp=Z,6.7nm,1.1s,baz=358,slow=6.9,SNR=2.6 | | | | | | | |
| | comp=Z,6.7nm,1.1s | | | | | | | |
| SEY | Seymchan | 67.82 26 | P | | P | | 15 33 13.9 | +1.2 |
| | comp=Z,4.2nm,0.8s,baz=302,slow=7.5,SNR=4.9 | | | | | | | |
| SEY | | | PP | | PP | | 15 35 41.6 | -0.1 |
| | comp=Z,10nm,1.0s,baz=163,slow=1.2,SNR=4.9 | | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| SEY | Seymchan | 67.82 26 | ⇑*e*P | | P | | 15 33 14.6 | +1.9 |
| SEY | | | pmax | | pmax | | | |
| | comp=Z,32nm,3.2s | | | | | | | |
| KSRS | Korea Array | 69.59 58 | P | | P | | 15 33 23.4 | -0.7 |
| | comp=Z,2.7nm,0.9s,baz=296,slow=4.6,SNR=8.6 | | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | | |
| MJAR | Matsushiro Arr | 76.91 54 | P | | P | | 15 34 07.6 | +0.2 |
| | comp=Z,2.0nm,0.9s,baz=334,slow=5.0,SNR=4.3 | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| YKA | Yellowknife Ar | 77.78 347 | P | | P | | 15 34 12.2 | +0.5 |
| | comp=Z,3.5nm,0.9s,baz=26,slow=5.6,SNR=6.6 | | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| J30M | Hart River | 78.23 357 | P | | P | | 15 34 14.3 | -0.2 |
| J30M | | | IAmb | | IAmb | | 15 34 19.2 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| DAWY | Dawson | 78.85 358 | P | | P | | 15 34 17.2 | -0.6 |
| DAWY | | | IAmb | | IAmb | | 15 34 21.7 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| BCAR | Beaver Creek A | 79.90 359 | P | | P | | 15 34 25.3 | +1.8 |
| M29M | Somme Creek | 80.45 358 | P | | P | | 15 34 27.2 | +0.7 |
| ULM | Lac du Bonnet | 83.14 331 | P | | P | | 15 34 41.3 | +0.5 |
| | comp=Z,2.9nm,0.8s,baz=172,slow=5.4,SNR=2.2 | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| C09A | Chrisman Ranch | 92.24 343 | IAmb | | IAmb | | 15 35 24.4 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| SMCO | Snowmass | 96.70 332 | | | P | | 15 35 45.8 | -0.2 |
| SDCO | Great Sand Dun | 97.38 330 | IAmb | | IAmb | | 15 35 51.2 | |
| | comp=Z,10.0nm,1.0s | | | | | | | |

*IDC* ***19*** *15:23:40.6±7.5, 17.93S×178.30W, h547km±86km, mb3.3/7, mbtmp4.2/8, Error ellipse: s-maj=51.8km s-min=35.9km az=140.0*
*NEIC* ***19*** *15:23:41.8±1.1, 18.0S±0.3×178.2W±0.2, h565km±8km, mb4.9/11, Error ellipse: s-maj=48.9km s-min=16.4km az=149.0*

**ISC 19 15:23:43.2**±1.3, **18.0S**±0.2×**178.4W**±0.2, **h579**km, **n27,** σ**0°60/26, mb4.5/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.37 | 274 | P | P | P | 15 25 03.8 | +0.8 |
| AFI | Afiamalu | 7.59 | 58 | P | P | P | 15 25 32.6 | -5.5 |
| LIFNC | LIFOU | 13.80 | 256 | P | P | P | 15 26 38.9 | -1.4 |
| DZM | Mont Dzumac | 14.77 | 252 | P | P | P | 15 26 49.3 | -0.7 |
| | 6.9nm,0.7s,baz=239,slow=23,SNR=0.9 | | | | | | | |
| ARMA | Armidale | 29.86 | 240 | P | P | P | 15 29 05.7 | +0.6 |
| CTAO | Charters Tower | 33.41 | 261 | P | P | P | 15 29 35.2 | -0.1 |
| CTAO | | | | IAmb | IAmb | IAmb | 15 31 07.5 | |
| | comp=Z,115nm,1.9s | | | | | | | |
| TOO | Toolangi | 37.08 | 231 | P | P | P | 15 30 05.7 | +0.3 |
| TOO | | | | IAmb | IAmb | IAmb | 15 30 36.9 | |
| | comp=Z,123nm,1.9s | | | | | | | |
| WRA | Warramunga Arr | 44.59 | 260 | P | P | P | 15 31 05.1 | -0.1 |
| | comp=Z,1.5nm,0.5s,baz=90,slow=8.3,SNR=2.7 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| ASAR | Alice Springs | 44.74 | 254 | P | P | P | 15 31 06.5 | +0.2 |
| ASAR | Alice Springs | 44.74 | 254 | P | P | P | 15 31 07.0 | +0.7 |
| | comp=Z,1.1nm,0.6s,baz=87,slow=8.7,SNR=13 | | | | | | | |
| | comp=Z,8.1nm,0.6s | | | | | | | |
| MJAR | Matsushiro Arr | 67.99 | 323 | P | P | P | 15 33 45.8 | +0.3 |
| | comp=Z,1.1nm,0.6s,baz=158,slow=5.7,SNR=6.3 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| PEA0B | Petropavlovsk- | 73.79 | 345 | P | P | P | 15 34 19.2 | +0.1 |
| PETK | Petropavlovsk- | 73.79 | 345 | P | P | P | 15 34 19.4 | +0.3 |
| PETK | Petropavlovsk- | 73.79 | 345 | P | P | P | 15 34 18.5 | -0.6 |
| | comp=Z,1.3nm,0.6s,baz=107,slow=9.1,SNR=4.3 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| K15K | Wolf Creek Mou | 81.17 | 8 | P | P | P | 15 34 58.9 | +0.3 |
| K15K | | | | IAmb | IAmb | IAmb | 15 36 00.8 | |
| | comp=Z,75nm,1.8s | | | | | | | |
| L18K | Granite Mounta | 81.82 | 10 | P | P | P | 15 35 02.4 | +0.4 |
| L18K | | | | IAmb | IAmb | IAmb | 15 35 04.3 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| J16K | Anvik River | 82.24 | 8 | P | P | P | 15 35 04.6 | +0.5 |
| J16K | | | | IAmb | IAmb | IAmb | 15 36 07.2 | |
| | comp=Z,47nm,1.9s | | | | | | | |
| N25K | Chitina, Valde | 83.82 | 16 | P | P | P | 15 35 11.9 | -0.2 |
| SEY | Seymchan | 83.89 | 347 | P | P | P | 15 35 12.3 | 0.0 |
| | comp=Z,0.7nm,0.3s,baz=21,slow=20,SNR=1.4 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| IL31 | | 86.01 | 13 | P | P | P | 15 35 21.7 | -0.8 |
| ILAR | Eielson Array | 86.01 | 13 | P | P | P | 15 35 22.2 | -0.4 |
| ILAR | Eielson Array | 86.01 | 13 | P | P | P | 15 35 21.6 | -1.0 |
| | comp=Z,0.5nm,0.4s,baz=220,slow=4.8,SNR=5.2 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| TXAR | Lajitas Array | 86.08 | 58 | P | P | P | 15 35 23.8 | -0.1 |
| | comp=Z,0.7nm,0.8s,baz=224,slow=5.2,SNR=4.5 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| F20K | Avaraart Lake | 86.49 | 9 | P | P | P | 15 35 23.6 | -1.1 |
| F20K | | | | IAmb | IAmb | IAmb | 15 38 37.3 | |
| | comp=Z,26nm,1.9s | | | | | | | |
| D22K | Ayikyak River | 88.63 | 9 | P | P | P | 15 35 34.5 | -0.3 |
| D22K | | | | IAmb | IAmb | IAmb | 15 35 54.3 | |
| | comp=Z,26nm,1.6s | | | | | | | |
| CLL | Collm | 145.58 | 347 | *i* PKPbc | PKPbc | PKPbc | 15 42 17.7 | +0.2 |
| GERES | GERESS Array B | 147.72 | 345 | PKPbc | PKPbc | PKPbc | 15 42 23.3 | -0.2 |
| | comp=Z,0.4nm,0.4s,baz=161,slow=8.5,SNR=4.0 | | | | | | | |

*IDC* ***19*** *15:25:42.2±3.2, 18.09S×178.13W, h534km±37km, mb3.7/10, mbtmp4.6/11, Error ellipse: s-maj=20.7km s-min=18.4km az=164.0*
*NEIC* ***19*** *15:25:43.0±1.0, 18.1S±0.1×178.1W±0.1, h545km±8km, mb4.8/37, Error ellipse: s-maj=22.0km s-min=17.4km az=155.0*
*NOU* ***19*** *15:26:28.6, 19.80S×177.02E, h0km, ML3.0/6, South of Fiji Islands*

**ISC 19 15:25:43.0**±0.5, **18.1S**±0.1×**178.03W**±0.08, **h550**km, **n96,** σ**19°05/93, mb4.7/25, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.75 | 275 | P | P | P | 15 27 07.0 | +3.8 |
| MSVF | Nonsavu | 3.75 | 275 | P | P | P | 15 27 07.0 | +3.8 |
| AFI | Afiamalu | 7.33 | 56 | P | P | P | 15 27 31.5 | -2.8 |
| NIUE | Niue | 7.74 | 98 | P | S | | 15 29 25.9 | +13 |
| NIUE | Niue | 7.74 | 98 | P | P | P | 15 27 38.5 | +0.3 |
| DVP | Devils Point | 13.13 | 270 | P | P | P | 15 28 35.6 | +2.4 |
| MARNC | Mare, Loyalty | 13.54 | 253 | P | P | P | 15 28 34.5 | -2.9 |
| LIFNC | LIFOU | 14.14 | 257 | P | P | P | 15 28 42.1 | -1.6 |
| LIFNC | LIFOU | 14.14 | 257 | P | P | P | 15 28 42.1 | -1.6 |
| PINNC | Pines Island, | 14.33 | 249 | P | P | P | 15 28 44.4 | -1.2 |
| DZM | Mont Dzumac | 15.10 | 252 | P | P | P | 15 28 52.3 | -1.3 |
| DZM | Mont Dzumac | 15.10 | 252 | P | P | P | 15 28 52.5 | -1.2 |
| | 5.5nm,0.4s,baz=101,slow=21,SNR=8.8 | | | | | | | |
| KOUNC |

comp=Z,35nm,0.9s
**L18K Granite Mounta 81.84 10 P P 15 37 06.0 +1.5**
**BELA Belgrano 2 81.91 173 P P 15 37 04.9 +0.2**
**M19K Big River Lodg 81.95 11 P P 15 37 05.2 +0.2**
M19K IAmb IAmb 15 39 52.2
comp=Z,40nm,1.7s
**K17K Iditarod 82.06 9 P P 15 37 07.0 +1.5**
K17K IAmb IAmb 15 38 58.4
comp=Z,73nm,1.8s
**L19K White Mountain 82.12 11 P P 15 37 07.2 +1.3**
L19K IAmb IAmb 15 39 01.1
comp=Z,39nm,1.7s
**J16K Anvik River 82.28 8 P P 15 37 07.6 +0.9**
**J17K VABM Dome 82.59 8 P P 15 37 08.9 +0.7**
J17K IAmb IAmb 15 39 17.0
comp=Z,77nm,2.0s
**GHO Glory Hole Cre 82.93 13 P P 15 37 10.3 +0.3**
**J18K Innoko River 83.01 9 P P 15 37 11.2 +0.9**
**SCM Sheep Creek Mo 83.35 14 P P 15 37 12.8 +0.7**
**J19K Poorman 83.68 10 P P 15 37 14.6 +1.0**
J19K IAmb IAmb 15 38 19.9
comp=Z,45nm,2.0s
**SEY Seymchan 84.07 347 P P 15 37 15.2 -0.3**
comp=Z,3.1nm,0.6s,baz=153,slow=7.5,SNR=5.3
comp=Z,3.1nm,0.6s
**J20K Nowinta River 84.09 10 P P 15 37 16.5 +0.8**
**RND Reindeer 84.40 13 P P 15 37 17.9 +0.7**
**CCB Clear Creek Bu 85.71 13 P P 15 37 23.6 +0.1**
**IMAR Indian Mountai 85.83 10 P P 15 37 24.5 +0.5**
**I23K Minto, Yukon-K 85.85 12 P P 15 37 24.2 +0.1**
I23K IAmb IAmb 15 39 33.8
comp=Z,37nm,2.0s
**ILAR Eielson Array 86.02 13 P P 15 37 25.1 +0.1**
comp=Z,0.7nm,0.4s,baz=222,slow=5.1,SNR=12
comp=Z,0.7nm,0.4s
**J25K Salcha River, 86.21 13 P P 15 37 26.3 +0.4**
**J26L Joseph Creek 86.52 14 P P 15 37 28.0 +0.5**
J26L IAmb IAmb 15 39 19.6
comp=Z,24nm,1.6s
**I26K Coal Creek Min 87.30 14 P P 15 37 31.8 +0.8**
I26K IAmb IAmb 15 40 16.0
comp=Z,29nm,1.9s
**F24K Squaw Lake 88.23 11 P P 15 37 36.3 +0.9**
**I30M Mount Dempster 88.91 16 P P 15 37 39.2 +0.5**
**MKAR Makanchi Array 109.55 314 PKiKP PKiKP 15 43 10.1 -1.2**
comp=Z,0.4nm,0.5s,baz=142,slow=1.7,SNR=1.0
**BVAR Borovoye Array 117.24 321 PKP PKPdf 15 43 25.2 -0.6**
comp=Z,1.5nm,0.5s,baz=111,slow=3.2,SNR=1.8
**HFS Hagfors 137.20 351 PKhKP PKPpre** 15 43 56.4
comp=Z,1.0nm,0.7s,baz=73,slow=5.0,SNR=1.3
**BRTR Keskin Array B 145.19 315 PKPbc PKPbc 15 44 19.5 -0.1**
comp=Z,1.2nm,0.4s,baz=69,slow=2.6,SNR=8.3
**CLL Collm 145.75 348** *i* PKPbc **PKPbc 15 44 21.1 +0.5**
**UPC Upice 145.80 344** *e*PKP **PKPab 15 44 21.7 -0.8**
**DPC Dobruska-Polom 145.86 344** *e*PKP **PKPab 15 44 22.1 -0.7**
**BRG Berggiesshubel 145.96 346** Amp 15 44 22.8
comp=Z,4.7nm,0.7s
**BRG Berggiesshubel 145.96 346** *i* P **PKPbc 15 44 22.1 +0.9**
**KRLC Kraliky 145.98 343** *e*PKP **PKPbc 15 44 22.2 +0.8**
**MMAI Mount Meron Ar 146.56 303** PKPbc **PKPbc 15 44 24.4 +0.8**
comp=Z,3.5nm,0.5s,baz=67,slow=6.4,SNR=4.3
**ZVC Zvikov 147.24 345** *e*PKP **PKiKP 15 44 25.6 -0.9**
**KHC Kasperske Hory 147.67 346** PKPbc **PKPbc 15 44 26.1 +0.2**
**KHC Kasperske Hory 147.67 346** *e*PKP **PKPbc 15 44 26.5 +0.6**
**CKRC Cesky Krumlov 147.79 345** *e*PKP **PKiKP 15 44 27.0 -0.6**
**GERES GERESS Array B 147.91 345** PKPbc **PKPbc 15 44 27.2 +0.6**
comp=Z,2.3nm,0.7s,baz=167,slow=6.4,SNR=12
**CONA Conrad Observa 148.18 342** *e*PKP **PKPbc 15 44 27.7 +0.4**
comp=Z,1.2nm,0.6s
**RONA Rosalia, Austr 148.26 341** *e*PKP **PKPbc 15 44 27.9 +0.5**
comp=Z,2.0nm,0.7s
**LESA Schwarzleotal 149.49 346** *e*PKP **PKPbc 15 44 30.7 +0.2**
comp=Z,2.0nm,0.5s
**SOKA Soboth 149.55 342** *e*PKP **PKPbc 15 44 30.5 -0.1**
comp=Z,0.1nm,0.1s
**KBA Koelnbreinsper 149.64 345** *i* PKP **PKPbc 15 44 30.7 -0.3**
comp=Z,0.7nm,0.3s
**WATA Walderalm 149.82 347** *i* PKP **PKiKP 15 44 31.8 -0.3**
comp=Z,1.3nm,0.4s
**WTTA Wattenberg 149.87 347** *e*PKP **PKiKP 15 44 31.9 -0.3**
comp=Z,3.5nm,0.4s
**MOTA Moosalm 149.91 348** *e*PKP **PKiKP 15 44 32.1 -0.1**
comp=Z,0.8nm,0.2s
**MYKA Terra Mystica 149.98 344** *i* PKP **PKPbc 15 44 31.5 -0.2**
comp=Z,2.1nm,0.4s
**SQTA Sankt Quirin 150.00 347** *i* PKP **PKiKP 15 44 32.1 -0.3**
comp=Z,2.0nm,0.4s
**ABTA Abfaltersbach 150.16 345** *i* PKP **PKPbc 15 44 31.8 -0.3**
comp=Z,4.8nm,0.7s
**DAVA Damuels 150.20 349** *e*PKP **PKiKP 15 44 33.2 +0.4**
comp=Z,0.7nm,0.3s
**FETA Feichten 150.29 348** *e*PKP **PKiKP 15 44 32.9 -0.2**
comp=Z,3.0nm,0.8s
**FNA Florina 151.92 328 PKPbc 15 44 35.7 -0.6**

*NOU **19** 15:27:32.9, 18°.30S×177°.95W, h485km, mb4.8/15, Fiji Islands Region*
*IDC **19** 15:27:35.0±2.3, 18°.18S×178°.12W, h563km±27km, mb3.8/17, mbtmp4.7/19, Error ellipse: s-maj=15.1km s-min=13.7km az=102.0*
*NEIC **19** 15:27:34.6±2.2, 18°.2S±0°.1×178°.1W±0°.1, h556km±4km, mb4.6/68, Error ellipse: s-maj=15.2km s-min=13.7km az=148.0*
**ISC 19 15:27:34.0±0.3, 18°.15S±0°.07×178°.07W±0°.07, h550km, n196, σ1§15/190, mb4.5/48, 30C-8D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.72** | **276** | P | P | 15 28 59.7 | +5.8 |
| **AFI** | **Afiamalu** | **7.37** | **56** | P | P | **15 29 26.1** | **+0.4** |
| **NIUE** | **Niue** | **7.77** | **98** | P | P | 15 29 24.0 | -5.5 |
| **NIUE** | **Niue** | **7.77** | **98** | P | P | **15 29 25.3** | **-4.2** |
| **RAO** | **Raoul Island** | **11.05** | **179** | P | P | **15 30 02.6** | **0.0** |
| **RTV** | **Rentapao** | **12.86** | **269** | P | P | **15 30 23.3** | **+1.9** |
| **DVP** | **Devils Point** | **13.09** | **270** | P | P | **15 30 25.0** | **+1.2** |
| **MARNC** | **Mare, Loyalty** | **13.50** | **254** | P | P | **15 30 28.7** | **+0.7** |
| **LIFNC** | **LIFOU** | **14.10** | **257** | P | P | **15 30 34.8** | **+0.6** |
| **LIFNC** | **LIFOU** | **14.10** | **257** | P | P | **15 30 34.1** | **-0.1** |
| **DZM** | **Mont Dzumac** | **15.06** | **252** | P | P | **15 30 44.0** | **-0.2** |
| DZM | | | | IAmb | IAmb | 15 30 51.7 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.06** | **252** | P | P | **15 30 44.1** | **-0.2** |
| | comp=Z,11nm,0.5s,baz=89,slow=13,SNR=15 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.82** | **259** | P | P | **15 31 02.9** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **16.82** | **259** | P | P | **15 31 01.5** | **+0.3** |
| KOUNC | | | | IAmb | IAmb | 15 31 03.4 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **RAR** | **Rarotonga** | **17.49** | **103** | P | P | **15 31 09.7** | **+2.4** |
| **RAR** | **Rarotonga** | **17.49** | **103** | P | P | **15 31 08.5** | **+1.3** |
| | comp=Z,22nm,0.8s,baz=274,slow=11,SNR=3.7 | | | | | | |
| **OUZ** | **Omahuta** | **18.55** | **202** | P | P | **15 31 20.1** | **+3.4** |
| **KUZ** | **Kuaotunu** | **19.32** | **195** | P | P | **15 31 25.2** | **+1.5** |
| **MXZ** | **Matakaoa Point** | **19.60** | **189** | P | P | **15 31 27.9** | **+1.6** |
| MXZ | | | | IAmb | IAmb | 15 31 38.6 | |
| | comp=Z,42nm,1.2s | | | | | | |
| **URZ** | **Urewera** | **20.47** | **191** | P | P | **15 31 34.4** | **+0.2** |
| **URZ** | **Urewera** | **20.47** | **191** | P | P | **15 31 32.3** | **-1.8** |
| | comp=Z,7.8nm,0.4s,baz=1.6,slow=1.4,SNR=10 | | | | | | |
| | comp=Z,7.8nm,0.4s | | | | | | |
| **NNZ** | **Nelson** | **24.13** | **196** | P | P | **15 32 07.2** | **+0.4** |
| **THZ** | **Tophouse** | **24.77** | **196** | P | P | **15 32 12.2** | **-0.3** |
| **DSZ** | **Denniston Nort** | **25.06** | **198** | P | P | **15 32 15.7** | **+0.6** |
| **PPT** | **Papeete** | **27.11** | **93** | P | P | **15 32 35.1** | **+1.6** |
| | comp=Z,21nm,0.6s,baz=64,slow=7.8,SNR=10 | | | | | | |
| | comp=Z,21nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.12** | **93** | P | P | **15 32 36.7** | **+3.0** |
| **PPTF** | **Pamatai, Papee** | **27.12** | **93** | P | P | **15 32 35.2** | **+1.5** |
| **FOZ** | **Fox Glacier** | **27.30** | **199** | P | P | **15 32 34.0** | **-0.7** |
| **EIDS** | **Eidsvold** | **29.49** | **250** | P | P | **15 32 55.0** | **+0.9** |
| **EIDS** | **Eidsvold** | **29.49** | **250** | P | P | **15 32 54.3** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 15 32 55.4 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **30.10** | **240** | P | P | **15 33 01.5** | **+2.0** |
| **ARMA** | **Armidale** | **30.10** | **240** | P | P | **15 33 00.5** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 15 33 35.2 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.73** | **261** | P | P | **15 33 30.6** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 15 34 06.5 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **33.82** | **233** | P | P | **15 33 31.8** | **+0.8** |
| **TOO** | **Toolangi** | **37.27** | **231** | P | P | **15 34 00.4** | **+0.9** |
| TOO | | | | IAmb | IAmb | 15 34 18.8 | |
| | comp=Z,17nm,1.1s | | | | | | |
**MANU Manus Island 37.49 291 P P 15 34 02.0 +0.5**
**TAOE Nuku Hiva Isla 37.94 81 P P 15 34 06.1 +0.8**
**STKA Stephens Creek 38.80 242 P P 15 34 12.6 +0.6**
**STKA Stephens Creek 38.80 242 P P 15 34 12.6 +0.6**
comp=Z,11nm,0.8s,baz=109,slow=2.4,SNR=4.8
comp=Z,11nm,0.8s
**WAKE Wake Island 40.11 337 P P 15 34 22.4 -0.2**
**JOKA Jonika Flow 43.68 32 P P 15 34 50.9 +0.1**
**KEKH Kekaha 43.75 25 P P 15 34 52.0 +0.9**
**DHH Diamond Head 43.91 28 P P 15 34 53.8 +1.4**
**MJAR Matsushiro Arr 66.30 323 P P 15 37 40.2 -0.3**
comp=Z,8.3nm,0.6s,baz=163,slow=5.8,SNR=32
comp=Z,8.3nm,0.6s
**KKM Kota Kinabalu 69.12 284 P P 15 37 45.4 -0.6**
**SHEM Shemya Is, Ala 70.91 355 P P 15 37 55.1 -0.5**
comp=Z,97nm,0.9s,baz=23,slow=5.0,SNR=5.0
**ASAJ Asahikawa 71.64 331 P P 15 38 00.9 +0.7**
comp=Z,17nm,1.0s,baz=225,slow=7.0,SNR=9.1
comp=Z,17nm,1.0s
**QSPA South Pole Qui 71.91 180 P P 15 38 02.2 +0.6**
**QSPA South Pole Qui 71.91 180 P P 15 38 02.0 +0.4**
comp=Z,1.4nm,0.4s,baz=219,slow=1.0,SNR=14
comp=Z,1.4nm,0.4s
**YULB Yu-li 72.17 303 P P 15 38 02.1 -1.6**
**SSLB Suanglung 72.64 303 P P 15 38 05.2 -1.2**
SSLB IAmb IAmb 15 38 06.0
comp=Z,16nm,0.5s
**PET Petropavlovsk 73.69 346 P P 15 38 10.8 -0.8**
PET IAmb IAmb 15 38 50.4
comp=Z,34nm,1.3s
**PEA0B Petropavlovsk- 74.00 345 P P 15 38 12.7 -0.7**
PEA0B IAmb IAmb 15 38 13.9
comp=Z,62nm,1.4s
**PETK Petropavlovsk- 74.00 345 P P 15 38 12.8 -0.6**
**PETK Petropavlovsk- 74.00 345 P P 15 38 13.0 -0.4**
comp=Z,13nm,0.6s,baz=111,slow=7.4,SNR=38
comp=Z,13nm,0.6s
**SDPT Sand Point 74.72 10 P P 15 38 16.8 -0.7**
**S12K Black Hills 74.80 9 P P 15 38 17.0 -0.9**
**SII Sitkinak Islan 77.08 13 P P 15 38 30.1 -0.4**
**PLK4 Peulik 4 77.63 12 P P 15 38 33.8 +0.2**
**OHAK Old Harbor 77.89 13 P P 15 38 35.1 +0.3**
**KDAK Kodiak Island 78.56 14 P P 15 38 37.9 -0.5**
comp=Z,13nm,0.6s,baz=60,slow=5.8,SNR=2.2
comp=Z,13nm,0.6s
**O16K Kokwok River B 79.17 10 P P 15 38 41.0 -0.5**
O16K IAmb IAmb 15 39 12.1
comp=Z,36nm,1.4s
**NVAR Mina Array Bea 79.37 44 P P 15 38 43.8 +0.3**
comp=Z,0.8nm,0.7s,baz=225,slow=8.9,SNR=3.4
comp=Z,0.8nm,0.7s
**N15K Kwethluk River 79.39 9 P P 15 38 43.3 +0.5**
N15K IAmb IAmb 15 38 49.2
comp=Z,40nm,1.4s
**M14K Bethel 79.69 8 P P 15 38 45.2 +0.9**
M14K IAmb IAmb 15 38 46.6
comp=Z,23nm,1.1s
**O18K Koktuh Hills 79.92 11 P P 15 38 45.4 -0.2**
O18K IAmb IAmb 15 38 46.9
comp=Z,27nm,0.8s
**N17K Nushagak Hills 80.20 10 P P 15 38 46.9 -0.1**
**KLR Kul'dur 80.48 329 P P 15 38 49.5 +0.8**
comp=Z,1.8nm,0.7s,baz=238,slow=19,SNR=1.9
comp=Z,1.8nm,0.7s
**H04A Detroit Lake 80.59 37 P P 15 38 50.1 +0.7**
**SMAI San Martin Ant 80.81 159 P P 15 38 51.2 +1.0**
**J14K Nanvaranak Lak 81.44 7 P P 15 38 53.5 +0.2**
J14K IAmb IAmb 15 39 08.2
comp=Z,21nm,1.3s
**MA2 Magadan 81.52 345 P P 15 38 52.2 -1.6**
comp=Z,6.7nm,0.7s,baz=71,slow=14,SNR=2.6
comp=Z,6.7nm,0.7s
**L18K Granite Mounta 81.88 10 P P 15 38 56.4 +0.8**
L18K IAmb IAmb 15 38 57.4
comp=Z,13nm,0.8s
**BELA Belgrano 2 81.88 173 P P 15 38 55.4 -0.2**
**GLI Glacier Island 82.60 15 P P 15 38 58.9 -0.4**
GLI IAmb IAmb 15 38 59.8
comp=Z,16nm,0.8s
**PMR Palmer 82.76 13 P P 15 38 59.6 -0.4**
PMR IAmb IAmb 15 39 01.9
comp=Z,22nm,1.4s
**G08A Pilot Rock 82.80 38 P P 15 39 01.5 +0.6**
**GHO Glory Hole Cre 82.97 13 P P 15 39 01.0 -0.2**
GHO IAmb IAmb 15 39 01.9
comp=Z,18nm,0.7s
**J18K Innoko River 83.04 9 P P 15 39 01.8 +0.3**
J18K IAmb IAmb 15 39 02.7
comp=Z,12nm,0.8s
**SNH Sunshine Point 83.11 17 P P 15 39 02.3 +0.4**
SNH IAmb IAmb 15 39 03.6
comp=Z,27nm,0.9s
**SML Sawmill 83.13 14 P P 15 39 01.6 -0.4**
SML IAmb IAmb 15 39 25.5
comp=Z,22nm,1.4s
**K20K Telida 83.38 11 P P 15 39 03.3 +0.1**
K20K IAmb IAmb 15 39 04.1
comp=Z,11nm,0.7s
**SCM Sheep Creek Mo 83.38 14 P P 15 39 03.2 -0.1**
SCM IAmb IAmb 15 39 04.0
comp=Z,20nm,0.7s
**TABL Table Mountain 83.80 17 P P 15 39 06.1 +0.5**
TABL IAmb IAmb 15 39 06.6
comp=Z,13nm,0.6s
**VRDI Verde Repeater 83.82 16 P P 15 39 05.7 0.0**
**N25K Chitina, Valde 83.85 15 P P 15 39 05.7 +0.1**
N25K IAmb IAmb 15 39 06.6
comp=Z,12nm,0.7s
**SEY Seymchan 84.08 347 P P 15 39 06.3 -0.3**
comp=Z,9.2nm,0.5s,baz=140,slow=7.0,SNR=18
comp=Z,9.2nm,0.5s
**J20K Nowinta River 84.13 10 P P 15 39 06.8 -0.1**
**RND Reindeer 84.43 13 P P 15 39 07.9 -0.5**
RND IAmb IAmb 15 39 09.1
comp=Z,19nm,0.8s
**DHY Denali Highway 84.46 14 P P 15 39 08.3 -0.4**
**M26K Nabesna, AK 84.93 16 P P 15 39 11.0 +0.1**
M26K IAmb IAmb 15 39 12.5
comp=Z,9.9nm,0.9s
**MLY Manley 85.51 11 P P 15 39 12.6 -1.1**
**HDA Harding Lake 85.72 13 P P 15 39 14.1 -0.5**
HDA IAmb IAmb 15 39 14.5
comp=Z,5.9nm,0.6s
**CCB Clear Creek Bu 85.75 13 P P 15 39 13.8 -0.8**
CCB IAmb IAmb 15 39 14.3
comp=Z,8.0nm,0.5s
**TXAR Lajitas Array 85.85 57 P P 15 39 16.7 +0.6**
comp=Z,1.0nm,0.7s,baz=220,slow=5.7,SNR=4.1
comp=Z,1.0nm,0.7s
**IMAR Indian Mountai 85.86 10 P P 15 39 14.2 -1.0**
**IL31 86.05 13 P P 15 39 15.6 -0.5**
IL31 IAmb IAmb 15 39 16.4
comp=Z,6.4nm,0.6s
**ILAR Eielson Array 86.05 13 P P 15 39 15.4 -0.7**
comp=Z,3.0nm,0.4s,baz=220,slow=5.0,SNR=61
comp=Z,3.0nm,0.4s
**F19K Shaleruckik Mo 86.07 8 P P 15 39 15.9 -0.3**
**G21K Allakaket 86.39 10 P P 15 39 17.4 -0.3**
**PDAR Pinedale Array 87.30 43 P P 15 39 23.2 +0.4**
comp=Z,0.8nm,0.8s,baz=277,slow=3.5,SNR=3.4
comp=Z,0.8nm,0.8s
**EGAK Eagle 87.36 15 P P 15 39 22.4 +0.1**
**K29M Barlow Dome 87.55 17 P P 15 39 23.6 +0.2**
**E22K Anaktuvuk Pass 88.15 10 P P 15 39 25.7 -0.3**
E22K IAmb IAmb 15 39 26.8
comp=Z,7.8nm,1.1s
**MMPY Sheldon Lake, 88.49 20 P P 15 39 28.3 +0.6**
MMPY IAmb IAmb 15 39 29.4
comp=Z,5.5nm,0.8s
**H29M Whitestone 89.22 15 P P 15 39 31.4 +0.5**
H29M IAmb IAmb 15 39 32.0
comp=Z,7.3nm,0.8s
**CMAR Chiang Mai Arr 89.27 290 P P 15 39 33.2 +0.9**
comp=Z,2.6nm,0.9s,baz=122,slow=3.3,SNR=2.7
comp=Z,2.6nm,0.9s
**SNAA Sanae 90.35 178 P P 15 39 35.0 -1.3**
comp=Z,0.7nm,0.5s,baz=325,slow=15,SNR=1.8
comp=Z,0.7nm,0.5s
**ZALV Zalesovo Beam 108.62 322 PKiKP PKiKP 15 44 58.4 -1.8**
comp=Z,0.5nm,0.4s,baz=123,slow=2.4,SNR=1.4
**MKAR Makanchi Array 109.54 314 PKiKP PKiKP 15 45 00.5 -1.8**
comp=Z,0.5nm,0.5s,baz=133,slow=0.9,SNR=4.5
**KURBB Kurchatov Arra 112.28 318 PKiKP PKiKP 15 45 04.8 -2.5**
comp=Z,1.0nm,0.8s,baz=91,slow=2.2,SNR=2.8
**BVAR Borovoye Array 117.24 321 PKP PKPdf 15 45 15.7 -1.1**
comp=Z,0.9nm,0.4s,baz=104,slow=3.6,SNR=5.9
**SPITS Spitsbergen Ar 119.53 357 PKP PKPdf 15 45 19.4 -1.1**
comp=Z,7.2nm,0.9s,baz=17,slow=1.5,SNR=1.7
**ARCES ARCESS Array B 126.61 350 PKP PKPdf 15 45 33.5 -0.8**
comp=Z,1.4nm,0.6s,baz=21,slow=1.5,SNR=7.2
**FINES FINESS Array B 133.51 344 PKP PKPdf 15 45 45.9 -1.7**
comp=Z,1.8nm,0.7s,baz=84,slow=4.3,SNR=2.0
**HFS Hagfors 137.22 351 PKhKP PKPpre** 15 45 43.3
comp=Z,0.0nm,0.9s,baz=12,slow=7.8,SNR=1.6
**AKASG Malin Array Be 140.93 332 PKhKP PKPpre** 15 45 54.6
comp=Z,0.7nm,0.3s,baz=41,slow=3.8,SNR=5.2
**KIEV Kiev 140.94 332 ⇑P PKPpre** 15 45 55.4
**SORM Soroca 143.16 330 ⇓P PKPab** 15 46 03.3 -0.1
**TLCR 144.95 326 ⇑P PKPdf 15 46 07.9 -0.9**
**BURAR Bucovina Array 144.98 332 ⇑P PKPab 15 46 10.6 +0.1**
**GHRR 145.08 328 ⇑P PKPab 15 46 10.9 0.0**
**TESR Tescani 145.13 330 ⇓P PKPbc 15 46 09.8 -0.2**
**BR131 Keskin Array S 145.18 315** PKPdf **PKPdf 15 46 08.5 -1.0**
**BRTR Keskin Array B 145.18 315** PKPbc **PKPdf 15 46 09.8 +0.3**
**BRTR Keskin Array B 145.18 315** PKPbc **PKPdf 15 46 09.9 +0.4**
comp=Z,4.0nm,0.7s,baz=127,slow=4.4,SNR=15
**CFR Carcaliu 145.32 327 ⇑P PKPbc 15 46 10.6 +0.1**
**PANC Panciu 145.34 328 ⇑P PKPbc 15 46 11.1 +0.5**
**ONER Baraj Valea Uz 145.38 330 ⇓P PKPbc 15 46 10.8 0.0**
**TPGR Topolog 145.38 326 ⇑P PKPbc 15 46 11.3 +0.5**
**VRI Vrincioaia 145.55 329 ⇑P PKPbc 15 46 11.3 0.0**
**PLOR Plostina 145.60 329 ⇓P PKPbc 15 46 11.3 -0.1**
**BMR Baia Mare 145.68 334 ⇓P PKPbc 15 46 11.8 +0.3**
**CHVC Chvalec 145.73 344** *e*PKP **PKPbc 15 46 11.8 +0.2**
**HARR Harsova 145.75 326 ⇑P PKPbc 15 46 11.4 -0.4**
**ARCR ARCALIA 145.76 332 ⇑P PKPbc 15 46 12.4 +0.6**
**TURR Turia 145.76 330 ⇑P PKPbc 15 46 12.6 +0.8**
**CLL Collm 145.77 348** ⇓ *i* PKPbc **PKPbc 15 46 11.4 -0.2**
comp=Z,21nm,0.8s
CLL *ex* x 15 46 25.0
**UPC Upice 145.81 344** *e*PKP **PKPbc 15 46 12.2 +0.4**
**COVR Voineasa-Covas 145.82 329 ⇑P PKPdf 15 46 10.6 +0.3**
**OZUR 145.84 330 ⇑P PKPbc 15 46 12.8 +0.6**
**DPC Dobruska-Polom 145.87 344** *e*PKP **PKPbc 15 46 12.1 0.0**
**BRG Berggiesshubel 145.98 346** *i* PKP **PKPbc 15 46 12.5 +0.3**
BRG Amp 15 46 13.2
comp=Z,7.5nm,0.8s
**LANS Liptovska Anna 145.98 339** *e* **PKPbc 15 46 13.3 +0.9**
**KRLC Kraliky 146.00 343** *e*PKP **PKPbc 15 46 12.7 +0.3**
**MORC Moravsky Berou 146.04 342** PKPdf **PKPdf 15 46 09.7 -0.9**
**MORC Moravsky Berou 146.04 342** *e*PKP **PKPbc 15 46 12.1 -0.5**
**MORC Moravsky Berou 146.04 342 ⇑P PKPbc 15 46 13.0 +0.4**
**DOPR Dopca 146.13 330 ⇑P PKPbc 15 46 13.0 +0.2**
**PVCC Panska Ves 146.16 345** *e*PKP **PKPbc 15 46 13.3 +0.5**
**MLR Muntele Rosu 146.21 329 ⇑P PKPbc 15 46 13.5 +0.2**
**CJR Cluj-Napoca 146.38 333 ⇑P PKPbc 15 46 14.2 +0.6**
**MMAI Mount Meron Ar 146.55 303** PKPbc **PKPbc 15 46 14.3 -0.2**
comp=Z,4.5nm,0.5s,baz=65,slow=5.9,SNR=10
**LTVH Ltavrtes, Hu 146.56 335 ⇑P PKPab** 15 46 35.4 +19
**PRU Pruhonice 146.66 345** *e*PKP **PKPbc 15 46 14.3 +0.1**
**DRGR 146.70 334 ⇑P PKPbc 15 46 13.9 -0.6**
**VRAC Vranov 146.74 342** *e*PKP **PKPbc 15 46 14.3 -0.1**
**VRAC Vranov 146.74 342 ⇓P PKPbc 15 46 14.0 -0.4**
**PSZ Piszkesteto 146.88 338 ⇓P PKPbc 15 46 13.8 -1.1**
**ARR Arges 146.93 330 ⇑P PKPbc 15 46 16.0 +0.8**
**KRUC Moravsky 147.02 342** *e*PKP **PKPbc 15 46 14.8 -0.4**
**SIRR Siria 147.56 334 ⇑P PKPbc 15 46 16.2 -0.5**
**KHC Kasperske Hory 147.69 346 PKPbc 15 46 16.4 -0.6**
**KHC Kasperske Hory 147.69 346** *e*PKP **PKPbc 15 46 17.0 0.0**
**GZR Gura Zlata 147.76 332 ⇑P PKPbc 15 46 17.0 -0.3**
**SURR Surduc 147.77 333 ⇑P PKPbc 15 46 17.2 0.0**
**CKRC Cesky Krumlov 147.80 345** *e*PKP **PKPbc 15 46 17.3 +0.1**
**GEC2 GERESS Array S 147.93 345 PKPbc 15 46 17.4 -0.2**
**GERES GERESS Array S 147.93 345 PKPbc 15 46 16.8 -0.9**
**GERES GERESS Array B 147.93 345** PKPbc **PKPbc 15 46 17.4 -0.2**
comp=Z,4.7nm,0.7s,baz=168,slow=6.8,SNR=21
**BZS Buzias 148.09 333 ⇑P PKPbc 15 46 17.7 -0.3**
**CONA Conrad Observa 148.19 342** *e*PKP **PKPbc 15 46 18.4 +0.1**
comp=Z,5.1nm,1.0s,SNR=5.6
**RONA Rosalia, Austr 148.27 341** *i* PKKP **PKPbc 15 46 18.3 -0.2**
comp=Z,2.8nm,0.6s,SNR=6.3
**HERR Herculane 148.32 332 ⇑P PKPdf 15 46 10.9 -3.5**
**BAIL Bailesti 148.54 330 ⇑P PKPdf 15 46 07.9 -6.9**
**MOA Molln 148.71 344** *i* PKKP **PKPbc 15 46 18.9 -0.6**
comp=Z,0.7nm,0.5s
**MDVR Moldovita 148.71 332 ⇑P PKPbc 15 46 18.9 -0.8**
**LESA Schwarzleotal 149.50 346** *i* PKKP **PKPbc 15 46 21.3 -0.2**
comp=Z,2.4nm,0.4s
**SOKA Soboth 149.56 342** *i* PKKP **PKPbc 15 46 20.9 -0.8**
comp=Z,0.7nm,0.4s
**BOVS Bovan 149.61 331 ⇑P PKPbc 15 46 21.0 -0.8**
**KBA Koelnbreinsper 149.66 344** *i* PKKP **PKPbc 15 46 21.2 -0.9**
comp=Z,3.1nm,0.4s
**WATA Walderalm 149.83 347** *i* PKKP **PKPbc 15 46 21.8 -0.6**
comp=Z,4.1nm,0.5s
**RETA Reutte 149.86 348** *i* PKKP **PKPbc 15 46 21.8 -0.6**
comp=Z,1.2nm,0.4s
**OBKA Obir 149.86 343** *e*PKKP **PKPbc 15 46 21.5 -0.9**
comp=Z,0.3nm,0.3s
**WTTA Wattenberg 149.89 347** *i* PKKP **PKPbc 15 46 22.2 -0.4**
comp=Z,7.1nm,0.5s,SNR=7.1
**MOTA Moosalm 149.93 348** *i* PKKP **PKPbc 15 46 22.3 -0.3**
comp=Z,3.7nm,0.6s
**MYKA Terra Mystica 150.00 344** *i* PKKP **PKPbc 15 46 21.7 -1.0**
comp=Z,6.0nm,0.7s
**SQTA Sankt Quirin 150.02 347** *e*PKKP **PKPbc 15 46 22.6 -0.2**
comp=Z,7.0nm,0.7s,SNR=6.0
**ABTA Abfaltersbach 150.18 345** *e*PKKP **PKPbc 15 46 22.4 -0.7**
comp=Z,8.6nm,0.6s,SNR=7.2
**DAVA Damuels 150.22 349** *e*PKKP **PKPbc 15 46 23.4 +0.1**
comp=Z,3.4nm,0.5s
**FUORN Ofenpass-Fuorn 150.79 348** PKPdf **PKPdf 15 46 17.9 -0.7**
FUORN PKPbc **PKPbc 15 46 24.1 -0.7**
**CTI Castel Tesino 151.04 346 PKPab 15 46 34.1 -1.1**
**FNA Florina 151.92 328 PKPbc 15 46 26.2 -1.1**
**MATE Matera 154.22 334 ⇑P PKPbc 15 46 30.0 -2.1**
**TIP Timpagrande 155.41 331 ⇑P PKPdf 15 46 31.2 +6.1**
**ESDC Sonseca Array 157.95 12** PKPab **PKPab 15 47 04.4 -0.6**
comp=Z,1.4nm,1.0s,baz=339,slow=4.4,SNR=6.1

*IDC **19** 15:28:24.2±8.5, 52°.28N×177°.39E, h0km, mb3.9/5, mbtmp3.9/6, ML3.2/1, Error ellipse: s-maj=192.0km s-min=42.2km az=165.0*
*NEIC **19** 15:28:30.0±0.6, 51°.7N±0°.2×177°.81E±0°.05, h45km±67km, Error ellipse: s-maj=36.0km s-min=1.3km az=172.0*
*AEIC **19** 15:28:30.2±0.9, 51°.6N±0°.2×178°.0E±0°.2, h63km±10km, ML3.5, Error ellipse: s-maj=28.8km s-min=14.4km az=190.0*
**ISC 19 15:28:26.4±1.1, 51°.8N±0°.2×177°.51E±0°.06, h35km, n27, σ1§32/26, mb4.0/5, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AMKA** | **Amchitka** | **1.19** | **110** | Pn | Pn | **15 28 47.3** | **+0.8** |
| AMKA | | | | Sn | Sn | 15 29 00.1 | -1.3 |
| **GASW** | **Gareloi Southw** | **2.26** | **89** | | Pn | **15 29 02.8** | **+1.6** |
| GASW | | | | | Sn | **15 29 27.0** | **-0.7** |
| **GANO** | **Gareloi North** | **2.29** | **88** | | Pn | **15 29 02.8** | **+1.2** |
| **GAEA** | **Gareloi East** | **2.32** | **89** | | Pn | **15 29 03.5** | **+1.4** |
| **TANO** | **Tanaga North** | **2.71** | **86** | | Pn | **15 29 09.0** | **+1.6** |
| **TASE** | **Tanaga Southea** | **2.76** | **87** | | Pn | **15 29 09.4** | **+1.2** |
| **TAFP** | **Tanaga Falls P** | **2.79** | **86** | | Pn | **15 29 09.6** | **+1.0** |
| TAFP | | | | | Sn | **15 29 39.9** | **-1.2** |
| **TAPA** | **Tanaga Point A** | **2.90** | **88** | | Pn | **15 29 11.3** | **+1.3** |
| **KICM** | **Kanaga Island** | **3.28** | **86** | | Pn | **15 29 16.7** | **+1.5** |
| KICM | | | | | Sn | **15 29 52.0** | **-1.0** |
| **KIWB** | **Kanaga Island** | **3.31** | **87** | | Pn | **15 29 16.4** | **+0.7** |
| **KIRH** | **Kanaga Island** | **3.35** | **86** | | Pn | **15 29 17.4** | **+1.2** |
| **ADAG** | **Mount Adagdak** | **3.65** | **85** | | Pn | **15 29 21.2** | **+0.8** |
| **GSCK** | **Great Sitkin C** | **3.92** | **84** | | Pn | **15 29 25.0** | **+0.9** |
| **GSMY** | **Great Sitkin M** | **3.99** | **84** | | Pn | **15 29 25.7** | **+0.8** |
| **LVA** | **Lava Point** | **10.20** | **70** | Pn | Pn | **15 30 50.1** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **12.16** | **284** |

baz=10,slow=76,SNR=8.5

KURBB **Kurchatov Arra** 57.15 312 P P 15 38 09.6 +0.4
0.6nm,0.4s,baz=42,slow=6.8,SNR=5.2
0.6nm,0.4s

ARCES **ARCESS Array B** 57.27 349 P P 15 38 08.9 -0.8
1.1nm,0.7s,baz=16,slow=10,SNR=4.9
1.1nm,0.7s

MKAR **Makanchi Array** 57.95 306 P P 15 38 15.8 +0.9
0.3nm,0.4s,baz=56,slow=6.6,SNR=4.5
0.3nm,0.4s

BVAR **Borovoye Array** 59.06 318 P P 15 38 23.6 +1.1
1.1nm,0.6s,baz=48,slow=8.4,SNR=3.8
1.1nm,0.6s

FINES **FINESS Array B** 64.84 345 P P 15 39 00.9 -0.2
2.3nm,0.9s,baz=28,slow=6.3,SNR=4.0
2.3nm,0.9s

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*AUST **19** 15:28:53.9±0.3,32˚S±2˚×13˚8E±˚, h10km, mb4.2/1, Mjma4.8/11, ML3.2/8, MLv3.8/12, Error ellipse: s-maj=6.3km s-min=3.7km az=81.7*

*IDC **19** 15:28:54.2±4.6, 31.40S×138.47E, h0km, mbtmp3.3/3, ML3.0/3, Error ellipse: s-maj=79.1km s-min=17.0km az=31.0*

**ISC 19 15:28:52.4±1.0, 31.75S±0.04×138.39E±0.04, h10km±7km, n20, σ1§76/25, South Australia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| YAPP | **Yappala Statio** | **0.13** | **209** | P | | **Pg** | | **15 28 55.8** | **+0.3** |
| YAPP | | | | S | | **Sg** | | **15 29 57.5** | **0.0** |
| LCRK | **Leigh Creek** | **1.31** | **354** | P | | **Pg** | | **15 29 18.1** | **+0.6** |
| LCRK | **Leigh Creek** | **1.31** | **354** | S | | **Sn** | | **15 29 36.6** | **+2.2** |
| NAPP | **Napperby** | **1.44** | **188** | P | | **Pg** | | **15 29 19.8** | **-0.2** |
| HTT | **Hallett** | **1.73** | **165** | P | | **Pb** | | **15 29 24.2** | **-0.2** |
| BBOO | **Buckleboo** | **2.23** | **241** | P | | **Pn** | | **15 29 30.5** | **+1.0** |
| BBOO | **Buckleboo** | **2.23** | **241** | S | | **Sn** | | **15 29 59.0** | **+1.8** |
| STKA | **Stephens Creek** | **2.73** | **93** | P | | **Pn** | | **15 29 38.9** | **+2.5** |
| STKA | **Stephens Creek** | **2.73** | **93** | Pn | | **Pn** | | **15 29 39.0** | **+2.6** |
| | 0.7nm,0.3s,baz=278,slow=12,SNR=10 | | | | | | | | |
| STKA | | | | Pg | | **Pg** | | **15 29 43.8** | **-1.0** |
| | 1.8nm,0.3s,baz=281,slow=15,SNR=10 | | | | | | | | |
| STKA | | | | Sn | | **Sb** | | **15 30 13.1** | **-2.0** |
| | 3.2nm,0.3s,baz=267,slow=15,SNR=5.8 | | | | | | | | |
| STKA | | | | Lg | | Lg | | 15 30 20.2 | |
| | 5.2nm,0.3s,baz=312,slow=13,SNR=6.0 | | | | | | | | |
| | 5.8nm,0.7s | | | | | | | | |
| SDAN | **Sedan** | **2.86** | **164** | P | | **Pn** | | **15 29 39.6** | **+1.5** |
| SDAN | | | | S | | **Sn** | | **15 30 15.5** | **+2.9** |
| MULG | **Mulgathing** | **3.99** | **290** | P | | **Pn** | | **15 29 54.4** | **+0.6** |
| KELC | **Kelly Hill Cav** | **4.39** | **196** | P | | **Pn** | | **15 30 01.0** | **+1.8** |
| OOD | **Oodnadatta** | **4.59** | **329** | P | | **Pn** | | **15 30 02.8** | **+0.9** |
| OOD | **Oodnadatta** | **4.59** | **329** | S | | **Sn** | | **15 30 57.1** | **+1.8** |
| ARPS | **Mount Arapiles** | **5.76** | **151** | P | | **Pn** | | **15 30 18.7** | **+0.7** |
| | comp=Z,874nmcomp=Z,127µmcomp=Z,25nm,1.2s,comp=Z,0.1nm | | | | | | | | |
| CMSA | **Cobar Meteorol** | **6.23** | **90** | P | | **Pn** | | **15 30 25.9** | **+1.4** |
| FORT | **Forrest** | **8.89** | **274** | P | | **Pn** | | **15 30 59.6** | **-1.4** |
| ASAR | **Alice Springs** | **8.98** | **333** | Pn | | **Pn** | | **15 31 01.9** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=154,slow=11,SNR=1.2 | | | | | | | | |
| ASAR | | | | Sn | | **Sn** | | **15 32 40.4** | **-3.2** |
| | comp=Z,0.4nm,0.3s,baz=154,slow=22,SNR=4.6 | | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | | |
| WRKA | **Warakurna** | **11.12** | **304** | P | | **Pn** | | **15 31 29.7** | **-1.9** |
| WRA | **Warramunga Arr** | **12.31** | **342** | Pn | | **Pn** | | **15 31 46.6** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=167,slow=12,SNR=1.6 | | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | | |

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*IDC **19** 15:28:56.2±0.3, 8.32S×116.40E, h0km, mb5.1/33, mbtmp5.1/35, ML5.2/2, Error ellipse: s-maj=14.6km s-min=9.8km az=86.0*

*MOS **19** 15:28:56.8±1.4, 8.32S×116.50E, h13km, mb5.5/32, Error ellipse: s-maj=9.7km s-min=6.0km az=99.5*

*BJI **19** 15:28:57.0±0.0, 8.40S×116.60E, h10km, mb5.3/74, Ms5.9/6, Ms7 5.7/7*

*NEIC **19** 15:28:58.9±2.4, 8.39S±0.06×116.557E±0.008, h10km±1km, mb5.5/76, Error ellipse: s-maj=10.6km s-min=2.6km az=355.0*

*DJA **19** 15:28:59.9±0.3, 8˚S±2˚×11˚7E±˚, h11km±2km, M5.9/72, mB6.4/7, mb5.5/72, MLv5.8/24, Mw(mB)6.2/7*

**ISC 19 15:28:58.3±0.2, 8.40S±0.04×116.54E±0.03, h10km, n398, σ1§58/389, mb5.4/130, 20C-19D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PLAI | **Plampang** | **1.29** | **109** | P | | **Pn** | | **15 29 22.8** | **+0.4** |
| PLAI | **Plampang** | **1.29** | **109** | P | | **Pn** | | **15 29 22.8** | **+0.4** |
| PLAI | | | | S | | **Sg** | | **15 29 40.7** | **+0.7** |
| DNP | **Denpasar** | **1.34** | **258** | P | | **Pg** | | **15 29 24.8** | **+0.7** |
| DNP | | | | S | | **Sg** | | **15 29 44.2** | **+2.6** |
| SRBI | **Singaraja** | **1.35** | **283** | P | | **Pn** | | **15 29 23.4** | **+0.2** |
| JAGI | **Jajag, Banyuwa** | **2.36** | **268** | P | | **Pn** | | **15 29 37.1** | **-0.1** |
| JAGI | **Jajag, Banyuwa** | **2.36** | **268** | | | **Pn** | | **15 29 37.3** | **+0.1** |
| JAG | **Jajag, Banyuwa** | **2.36** | **268** | P | | **Pn** | | **15 29 37.6** | **+0.4** |
| JAGI | | | | S | | **Sn** | | **15 30 06.7** | **+0.4** |
| WBSI | **Waikabubak, Su** | **3.07** | **114** | P | | **Pn** | | **15 29 47.8** | **+0.8** |
| GRJI | **Gresik** | **4.29** | **290** | P | | **Pn** | | **15 30 04.3** | **+0.6** |
| BASI | **Baing, Sumba** | **4.38** | **115** | P | | **Pn** | | **15 30 06.8** | **+1.9** |
| BSSI | **Bau Bau, Buton** | **4.52** | **60** | P | | **Pn** | | **15 30 06.4** | **-0.4** |
| KAPI | **Kappang** | **4.64** | **44** | | | **Pn** | | **15 30 07.4** | **-1.0** |
| KAPI | **Kappang** | **4.64** | **44** | Pn | | **Pn** | | **15 30 08.0** | **-0.4** |
| | 32nm,0.3s,baz=178,slow=5.6,SNR=36 | | | | | | | | |
| KAPI | | | | Sn | | **Sn** | | **15 31 00.1** | **-2.3** |
| | 76nm,0.3s,baz=248,slow=18,SNR=4.9 | | | | | | | | |
| KAPI | | | | Lg | | Lg | | 15 31 21.6 | |
| | 74nm,0.3s,baz=194,slow=22,SNR=1.4 | | | | | | | | |
| | 123nm,0.3s | | | | | | | | |
| PWJI | **Pagerwojo** | **4.70** | **274** | P | | **Pn** | | **15 30 09.8** | **+0.4** |
| EDFI | **Ende, Flores** | **5.11** | **94** | P | | **Pn** | | **15 30 15.4** | **+0.4** |
| | 865nm,0.8s | | | | | | | | |
| NGJI | **Ngawi** | **5.13** | **281** | P | | **Pn** | | **15 30 18.2** | **+2.9** |
| | 726nm,1.3s | | | | | | | | |
| BNSI | **Bone** | **5.33** | **42** | P | | **Pn** | | **15 30 19.0** | **+1.1** |
| | 772nm,1.2s,6.1nm | | | | | | | | |
| MMRI | **Maumere** | **5.64** | **93** | P | | **Pn** | | **15 30 22.2** | **0.0** |
| MMRI | **Maumere** | **5.64** | **93** | | | **Pn** | | **15 30 20.9** | **-1.3** |
| MMRI | **Maumere** | **5.64** | **93** | P | | **Pn** | | **15 30 22.3** | **0.0** |
| UGM | **Wanagama** | **5.98** | **274** | P | | **Pn** | | **15 30 28.6** | **+1.7** |
| UGM | **Wanagama** | **5.98** | **274** | | | **Pn** | | **15 30 27.8** | **+0.8** |
| UGM | **Wanagama** | **5.98** | **274** | P | | **Pn** | | **15 30 29.2** | **+2.3** |
| SMRI | **Semarang** | **6.19** | **282** | | | **Pn** | | **15 30 31.1** | **+1.2** |
| SMRI | **Semarang** | **6.19** | **282** | P | | **Pn** | | **15 30 31.5** | **+1.6** |
| | 699nm,1.0s,6.6nm | | | | | | | | |
| BBSI | **Bau Bau** | **6.65** | **65** | P | | **Pn** | | **15 30 37.7** | **+1.6** |
| | 381nm,1.2s,2.4nm | | | | | | | | |
| BATI | **Baumata** | **7.25** | **105** | P | | **Pn** | | **15 30 47.0** | **+2.5** |
| MTKI | **Muara Teweh, K** | **7.59** | **347** | P | | **Pn** | | **15 30 49.8** | **+0.7** |
| KPJI | **Karang Pucung** | **7.61** | **277** | P | | **Pn** | | **15 30 51.7** | **+2.3** |
| | 294nm,0.6s,2.6nm | | | | | | | | |
| SOEI | **Soe** | **7.75** | **101** | P | | **Pn** | | **15 30 52.9** | **+1.5** |
| SOEI | **Soe** | **7.75** | **101** | | | **Pn** | | **15 30 52.6** | **+1.3** |
| SOEI | **Soe** | **7.75** | **101** | P | | **Pn** | | **15 30 52.7** | **+1.3** |
| CMJI | **Cimerak** | **8.04** | **274** | P | | **Pn** | | **15 30 57.5** | **+2.3** |
| | 220nm,0.7s | | | | | | | | |
| BBJI | **Bungbulang** | **8.86** | **275** | P | | **Pn** | | **15 31 07.6** | **+1.1** |
| MPSI | **Mapaga** | **9.30** | **21** | P | | **Pn** | | **15 31 13.7** | **+1.1** |
| CNJI | **Cibinong** | **9.39** | **276** | P | | **Pn** | | **15 31 16.4** | **+2.7** |
| | 146nm,1.0s | | | | | | | | |
| LUWI | **Luwuk** | **9.59** | **41** | P | | **Pn** | | **15 31 19.9** | **+3.4** |
| LUWI | **Luwuk** | **9.59** | **41** | P | | **Pn** | | **15 31 18.7** | **+2.2** |
| | 126nm,1.2s | | | | | | | | |
| STKI | **Sintang** | **9.81** | **329** | P | | **Pn** | | **15 31 21.4** | **+1.9** |
| | 103nm,0.8s | | | | | | | | |
| DBJI | **Dramaga** | **9.88** | **280** | P | | Pn | | 15 31 25.6 | +5.1 |
| | 349nm,0.9s | | | | | | | | |
| SKJI | **Sukabumi** | **9.99** | **277** | P | | **Pn** | | **15 31 25.2** | **+3.2** |
| TOLI2 | **Tolitoli** | **10.35** | **24** | Pn | | **Pn** | | **15 31 28.1** | **+1.1** |
| SBJI | **Serang** | **10.57** | **282** | P | | Pn | | 15 31 36.5 | +6.5 |
| GTOI | **Gorontalo** | **11.05** | **36** | P | | **Pn** | | **15 31 39.6** | **+3.0** |
| KMSI | **Cibinong** | **11.60** | **40** | P | | **Pn** | | **15 31 47.0** | **+3.0** |
| | 184nm,0.6s | | | | | | | | |
| SBUM | **Sibu** | **11.61** | **338** | Pn | | **Pn** | | **15 31 44.5** | **+0.3** |
| KSM | **Kuching** | **11.61** | **327** | P | | **Pn** | | **15 31 48.2** | **+4.0** |
| KSM | **Kuching** | **11.61** | **327** | Pn | | **Pn** | | **15 31 45.6** | **+1.3** |
| PPBI | **Pangkal Pinang** | **12.07** | **300** | P | | **Pn** | | **15 31 52.6** | **+2.1** |
| | 252nm,1.5s | | | | | | | | |
| KASI | **Kota Agung** | **12.29** | **283** | P | | **Pn** | | **15 31 57.0** | **+3.5** |
| | 161nm,1.2s | | | | | | | | |
| LWLI | **Liwa** | **12.84** | **284** | P | | **Pn** | | **15 32 05.3** | **+4.1** |
| | 335nm,1.2s | | | | | | | | |
| MBWA | **Marble Bar** | **13.05** | **167** | P | | **Pn** | | **15 32 03.5** | **-0.4** |
| MBWA | **Marble Bar** | **13.05** | **167** | Pn | | **Pn** | | **15 32 01.8** | **-2.1** |
| MBWA | **Marble Bar** | **13.05** | **167** | P | | **Pn** | | **15 32 01.8** | **-2.1** |
| | comp=Z,16µmcomp=Z,189nm,0.7s | | | | | | | | |
| PSA00 | **Pilbara Seismi** | **13.48** | **167** | P | | **Pn** | | **15 32 09.9** | **+0.2** |
| PSA00 | **Pilbara Seismi** | **13.48** | **167** | Pn | | **Pn** | | **15 32 07.9** | **-1.8** |
| PSA00 | **Pilbara Seismi** | **13.48** | **167** | P | | **Pn** | | **15 32 09.7** | **0.0** |
| | comp=Z,15µmcomp=Z,118nm,0.7s | | | | | | | | |
| KNRA | **Kununurra** | **13.96** | **122** | Pn | | **Pn** | | **15 32 15.1** | **-1.3** |
| KNRA | **Kununurra** | **13.96** | **122** | P | | **Pn** | | **15 32 15.5** | **-0.9** |
| | comp=Z,12µmcomp=Z,265nm,0.9s | | | | | | | | |
| GIRL | **Giralia** | **14.33** | **189** | P | | **Pn** | | **15 32 20.5** | **-0.9** |
| GIRL | **Giralia** | **14.33** | **189** | Pn | | **Pn** | | **15 32 19.6** | **-1.8** |
| KKM | **Kota Kinabalu** | **14.36** | **359** | P | | **Pn** | | **15 32 24.6** | **+2.7** |
| KKM | **Kota Kinabalu** | **14.36** | **359** | Pn | | **Pn** | | **15 32 23.3** | **+1.5** |
| TPRI | **Tanjung Pinang** | **15.14** | **307** | P | | **P** | | **15 32 36.0** | **-1.6** |
| | comp=Z,179nm,1.4s | | | | | | | | |
| BTDF | **Bukit Timah Da** | **16.00** | **307** | P | | **P** | | **15 32 47.9** | **+0.7** |
| MYKOM | **Kota Tinggi** | **16.20** | **308** | Pn | | **Pn** | | **15 32 47.7** | **+1.4** |
| MYKOM | | | | IAmb | | IAmb | | 15 32 53.9 | |
| | comp=Z,859nm,2.0s | | | | | | | | |
| PDSI | **Padang** | **17.66** | **294** | P | | **P** | | **15 33 07.2** | **+1.6** |
| | comp=Z,147nm,1.2s | | | | | | | | |
| BKNI | **Bangkinang** | **17.71** | **299** | P | | **P** | | **15 33 09.2** | **+3.0** |
| BKNI | **Bangkinang** | **17.71** | **299** | | | **P** | | **15 33 06.9** | **+0.8** |
| BKNI | **Bangkinang** | **17.71** | **299** | P | | **P** | | **15 33 07.9** | **+1.7** |
| | comp=Z,361nm,1.2s | | | | | | | | |
| DAV | **Davao City (W)** | **17.82** | **31** | P | | **P** | | **15 33 07.4** | **+0.1** |
| | comp=Z,27nm,0.3s,baz=209,slow=11,SNR=1.4 | | | | | | | | |
| | comp=Z,86nm,0.4s | | | | | | | | |
| MEEK | **Meekatharra** | **18.24** | **174** | P | | **P** | | **15 33 14.6** | **+2.6** |
| MEEK | **Meekatharra** | **18.24** | **174** | P | | **Pn** | | **15 33 11.2** | **-0.5** |
| | comp=Z,21µmcomp=Z,233nm,0.8s | | | | | | | | |
| SISI | **Saibi** | **18.75** | **291** | P | | **Pn** | | **15 33 19.1** | **+1.2** |
| | comp=Z,140nm,1.1s | | | | | | | | |
| WRKA | **Warakurna** | **19.98** | **147** | P | | **Pn** | | **15 33 33.6** | **+0.8** |
| WRKA | **Warakurna** | **19.98** | **147** | P | | **P** | | **15 33 31.6** | **+0.5** |
| | comp=Z,15µmcomp=Z,234nm,1.4s | | | | | | | | |
| IPM | **Ipoh** | **20.08** | **309** | P | | Pn | | 15 33 34.8 | +0.8 |
| IPM | **Ipoh** | **20.08** | **309** | Pn | | Pn | | 15 33 34.2 | +0.2 |
| MORW | **Morawa** | **20.56** | **181** | P | | Pn | | 15 33 39.3 | -0.2 |
| MORW | **Morawa** | **20.56** | **181** | Pn | | Pn | | 15 33 39.2 | -0.3 |
| MORW | | | | IAmb | | IAmb | | 15 33 54.6 | |
| | comp=Z,295nm,1.6s | | | | | | | | |
| MORW | **Morawa** | **20.56** | **181** | P | | Pn | | 15 33 40.0 | +0.5 |
| | comp=Z,119nm,0.8s | | | | | | | | |
| WB0 | **Warramunga Arr** | **20.65** | **125** | IAmb | | IAmb | | 15 33 40.5 | |
| | comp=Z,326nm,1.1s | | | | | | | | |
| WRA | **Warramunga Arr** | **20.70** | **126** | P | | **P** | | **15 33 37.5** | **-1.4** |
| WRA | **Warramunga Arr** | **20.70** | **126** | P | | **P** | | **15 33 38.7** | **-0.1** |
| | comp=Z,144nm,0.8s,baz=300,slow=12,SNR=133 | | | | | | | | |
| WRA | | | | S | | **S** | | **15 37 30.9** | **+0.6** |
| | comp=Z,18nm,0.9s,baz=296,slow=23,SNR=4.0 | | | | | | | | |
| WRA | | | | PKiKP | | **PKiKP** | | **15 45 38.3** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=295,slow=1.6,SNR=1.2 | | | | | | | | |
| | comp=Z,144nm,0.8s | | | | | | | | |
| WRA | **Warramunga Arr** | **20.70** | **126** | P | | **P** | | **15 33 37.5** | **-1.4** |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| WRAB | **Tennant Creek** | **20.70** | **126** | P | | **P** | | **15 33 38.1** | **-0.8** |
| WRAB | | | | IAmb | | IAmb | | 15 33 41.2 | |
| | comp=Z,249nm,1.0s | | | | | | | | |
| WRAB | **Tennant Creek** | **20.70** | **126** | P | | **P** | | **15 33 38.1** | **-0.8** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,249nm,1.0s | | | | | | | | |
| WB2 | **Warramunga Arr** | **20.71** | **126** | IAmb | | IAmb | | 15 33 41.2 | |
| | comp=Z,244nm,1.0s | | | | | | | | |
| RPSI | **Rantau Prapat** | **20.74** | **301** | P | | **P** | | **15 33 40.6** | **+1.2** |
| PSI | **Prapat** | **20.80** | **302** | P | | **P** | | **15 33 41.4** | **+1.3** |
| PSI | **Prapat** | **20.80** | **302** | P | | **P** | | **15 33 40.6** | **+0.5** |
| PSI | | | | pmax | | pmax | | | |
| | comp=Z,733nm,1.7s | | | | | | | | |
| KULM | **Kulim** | **20.88** | **310** | P | | **P** | | **15 33 42.1** | **+1.2** |
| GSI | **Gunungsitoli** | **21.22** | **296** | P | | **P** | | **15 33 48.1** | **+3.5** |
| GSI | **Gunungsitoli** | **21.22** | **296** | IAmb | | IAmb | | 15 34 02.2 | |
| | comp=Z,118nm,0.8s | | | | | | | | |
| GSI | **Gunungsitoli** | **21.22** | **296** | P | | **P** | | **15 33 48.2** | **+3.6** |
| | comp=Z,154nm,1.4s | | | | | | | | |
| BLDU | **Ballidu** | **22.10** | **180** | P | | **P** | | **15 33 55.8** | **+2.0** |
| BLDU | **Ballidu** | **22.10** | **180** | P | | **P** | | **15 33 55.2** | **+1.3** |
| | comp=Z,146nm,1.2s | | | | | | | | |
| KCSI | **Kotacane, Aceh** | **22.15** | **302** | P | | **P** | | **15 33 55.4** | **+0.8** |
| | comp=Z,185nm,1.1s | | | | | | | | |
| AS31 | **Alice Springs** | **22.52** | **134** | P | | **P** | | **15 33 58.5** | **+0.1** |
| | comp=Z,39nm,0.7s | | | | | | | | |
| ASAR | **Alice Springs** | **22.52** | **134** | P | | **P** | | **15 33 57.8** | **-0.6** |
| ASAR | **Alice Springs** | **22.52** | **134** | P | | **P** | | **15 33 58.2** | **-0.2** |
| | comp=Z,135nm,1.0s,baz=309,slow=9.1,SNR=64 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **15 37 52.5** | **0.0** |
| | comp=Z,11nm,0.8s,baz=338,slow=2.0,SNR=4.5 | | | | | | | | |
| ASAR | | | | S | | **S** | | **15 38 02.8** | **-2.9** |
| | comp=Z,5.2nm,0.9s,baz=299,slow=22,SNR=1.8 | | | | | | | | |
| ASAR | | | | ScP | | **ScP** | | **15 41 28.5** | **-1.9** |
| | comp=Z,4.0nm,0.7s,baz=290,slow=2.0,SNR=3.0 | | | | | | | | |
| | comp=Z,135nm,1.0s | | | | | | | | |
| AS01 | **Alice Springs** | **22.55** | **134** | P | | **P** | | **15 33 59.5** | **+0.7** |
| SNSI | **Sinabang, Aceh** | **22.84** | **297** | P | | **P** | | **15 34 04.1** | **+2.2** |
| | comp=Z,231nm,1.1s | | | | | | | | |
| KLBR | **Kellerberrin** | **23.10** | **177** | P | | **P** | | **15 34 05.3** | **+0.9** |
| KLBR | **Kellerberrin** | **23.10** | **177** | P | | **P** | | **15 34 04.3** | **-0.2** |
| | comp=Z,186nm,0.9s | | | | | | | | |
| KMBL | **Kambalda** | **23.39** | **168** | P | | **P** | | **15 34 07.5** | **+0.2** |
| KMBL | **Kambalda** | **23.39** | **168** | P | | **P** | | **15 34 06.8** | **-0.5** |
| | comp=Z,132nm,1.5s | | | | | | | | |
| MTKN | **Mount Kenneth** | **23.43** | **182** | P | | **P** | | **15 34 12.1** | **+4.4** |
| MUN | **Mundaring** | **23.46** | **181** | P | | **P** | | **15 34 09.7** | **+1.6** |
| MUN | **Mundaring** | **23.46** | **181** | P | | **P** | | **15 34 09.2** | **+1.1** |
| | comp=Z,118nm,1.2s | | | | | | | | |
| MLSI | **Meulaboh, Aceh** | **23.70** | **301** | P | | **P** | | **15 34 10.5** | **-0.1** |
| | comp=Z,169nm,0.8s | | | | | | | | |
| LHMI | **Lhok Sumawe** | **23.77** | **304** | P | | **P** | | **15 34 13.7** | **+2.4** |
| LHMI | **Lhok Sumawe** | **23.77** | **304** | P | | **P** | | **15 34 12.6** | **+1.3** |
| | comp=Z,371nm,1.0s | | | | | | | | |
| SRIT | **Nakonsritamara** | **23.87** | **315** | P | | **P** | | **15 34 13.8** | **+1.6** |
| SRIT | **Nakonsritamara** | **23.87** | **315** | IAmb | | IAmb | | 15 34 22.1 | |
| | comp=Z,215nm,1.4s | | | | | | | | |
| SURA | **Surathani** | **24.26** | **316** | P | | **P** | | **15 34 17.5** | **+1.7** |
| NWAO | **Narrogin (SRO)** | **24.41** | **179** | P | | **P** | | **15 34 18.7** | **+1.6** |
| NWAO | **Narrogin (SRO)** | **24.41** | **179** | P | | **P** | | **15 34 19.6** | **+2.5** |
| NWAO | **Narrogin (SRO)** | **24.41** | **179** | P | | **P** | | **15 34 17.2** | **+0.1** |
| NWAO | | | | IAmb | | IAmb | | 15 34 44.9 | |
| | comp=Z,107nm,1.0s | | | | | | | | |
| NWAO | **Narrogin (SRO)** | **24.41** | **179** | P | | **P** | | **15 34 18.2** | **+1.1** |
| | comp=Z,32nm,0.6s,baz=353,slow=8.4,SNR=22 | | | | | | | | |
| NWAO | | | | S | | **S** | | **15 38 37.2** | **+0.3** |
| | comp=Z,19nm,0.8s,baz=289,slow=22,SNR=0.9 | | | | | | | | |
| | comp=Z,32nm,0.6s | | | | | | | | |
| NWAO | **Narrogin (SRO)** | **24.41** | **179** | P | | **P** | | **15 34 17.2** | **+0.1** |
| NWAO | | | | pmax | | pmax | | | |
| | comp=Z,107nm,1.0s | | | | | | | | |
| FORT | **Forrest** | **24.73** | **156** | P | | **P** | | **15 34 20.7** | **+0.7** |
| FORT | **Forrest** | **24.73** | **156** | P | | **P** | | **15 34 20.4** | **+0.4** |
| | comp=Z,282nm,1.2s | | | | | | | | |
| QIS | **Mount Isa** | **25.35** | **121** | P | | **P** | | **15 34 26.2** | **+0.5** |
| QIS | **Mount Isa** | **25.35** | **121** | P | | **P** | | **15 34 25.8** | **+0.1** |
| | comp=Z,187nm,1.3s | | | | | | | | |
| RKGY | **Rocky Gully** | **26.09** | **179** | P | | **P** | | **15 34 35.4** | **+3.2** |
| | comp=Z,74nm,1.0s | | | | | | | | |
| OOD | **Oodnadatta** | **26.44** | **139** | P | | **P** | | **15 34 35.2** | **-0.3** |
| COEN | **Coen** | **26.69** | **104** | P | | **P** | | **15 34 39.6** | **+1.6** |
| COEN | **Coen** | **26.69** | **104** | P | | **P** | | **15 34 38.4** | **+0.5** |
| | comp=Z,154nm,0.7s | | | | | | | | |
| MULG | **Mulgathing** | **27.25** | **145** | P | | **P** | | **15 34 43.6** | **+0.8** |
| QIZ | **Qiongzhong** | **28.05** | **346** | P | | **P** | | **15 34 51.4** | **+1.4** |
| QIZ | | | | pmax | | pmax | | | |
| | comp=Z,33nm,2.4s | | | | | | | | |
| SRDT | **SRDT** | **28.45** | **322** | P | | **P** | | **15 34 56.5** | **+2.8** |
| LCRK | **Leigh Creek** | **29.86** | **140** | P | | **P** | | **15 35 08.3** | **+2.2** |
| BBOO | **Buckleboo** | **30.28** | **146** | P | | **P** | | **15 35 10.5** | **+0.8** |
| BBOO | **Buckleboo** | **30.28** | **146** | IAmb | | IAmb | | 15 35 14.4 | |
| | comp=Z,80nm,0.9s | | | | | | | | |
| BBOO | **Buckleboo** | **30.28** | **146** | P | | **P** | | **15 35 10.3** | **+0.5** |
| | comp=Z,124nm,0.9s | | | | | | | | |
| CTA | **Charters Tower** | **30.99** | **115** | P | | **P** | | **15 35 19.3** | **+3.1** |
| CTAO | **Charters Tower** | **30.99** | **115** | P | | **P** | | **15 35 19.9** | **+3.7** |
| PHRA | **Phrae** | **31.20** | **329** | P | | **P** | | **15 35 19.9** | **+1.9** |
| WHYH | **Whyalla** | **31.30** | **145** | P | | **P** | | **15 35 20.8** | **+2.1** |
| CM31 | **Chiang Mai Arr** | **31.84** | **327** | IAmb | | IAmb | | 15 35 28.1 | |
| | comp=Z,47nm,0.9s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **31.84** | **327** | P | | **P** | | **15 35 24.7** | **+1.1** |
| CMAR | **Chiang Mai Arr** | **31.84** | **327** | P | | **P** | | **15 35 25.7** | **+2.0** |
| | comp=Z,34nm,0.8s,baz=151,slow=6.4,SNR=112 | | | | | | | | |
| CMAR | | | | ScP | | **ScP** | | **15 41 54.9** | **-3.5** |
| | comp=Z,4.4nm,0.8s,baz=175,slow=3.0,SNR=12 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **31.84** | **327** | P | | **P** | | **15 35 24.7** | **+1.1** |
| QLP | **Quilpie** | **31.88** | **128** | P | | **P** | | **15 35 26.1** | **+2.1** |
| QLP | **Quilpie** | **31.88** | **128** | P | | **P** | | **15 35 23.4** | **-0.6** |
| | comp=Z,140nm,1.5s | | | | | | | | |
| AUAYR | **Ayr State High** | **31.89** | **114** | P | | **P** | | **15 35 25.8** | **+1.7** |
| YULB | **Yu-li** | **31.94** | **8** | P | | **P** | | **15 35 26.9** | **+2.5** |
| YULB | **Yu-li** | **31.94** | **8** | P | | **P** | | **15 35 22.8** | **-1.6** |
| SSLB | **Suanglung** | **32.28** | **8** | P | | **P** | | **15 35 29.5** | **+2.0** |
| SSLB | **Suanglung** | **32.28** | **8** | P | | **P** | | **15 35 28.7** | **+1.2** |
| SSLB | | | | IAmb | | IAmb | | 15 35 32.9 | |
| | comp=Z,28nm,0.7s | | | | | | | | |
| HTT | **Hallett** | **32.36** | **143** | P | | **P** | | **15 35 30.2** | **+2.0** |
| HTT | **Hallett** | **32.36** | **143** | P | | **P** | | **15 35 29.0** | **+0.8** |
| | comp=Z,106nm,2.6s | | | | | | | | |
| CRAI | **Chiangrai** | **32.60** | **331** | IAmb | | IAmb | | 15 35 34.9 | |
| | comp=Z,56nm,1.0s | | | | | | | | |
| NACB | **Ninganchiao** | **32.75** | **9** | P | | **P** | | **15 35 32.2** | **+0.7** |
| STKA | **Stephens Creek** | **32.98** | **139** | P | | **P** | | **15 35 35.1** | **+1.5** |
| STKA | **Stephens Creek** | **32.98** | **139** | P | | **P** | | **15 35 33.1** | **-0.5** |
| | comp=Z,9.8nm,1.0s | | | | | | | | |
| STKA | **Stephens Creek** | **32.98** | **139** | P | | **P** | | **15 35 34.1** | **+0.5** |
| | comp=Z,28nm,0.7s,baz=309,slow=9.8,SNR=14 | | | | | | | | |
| STKA | | | | PcP | | **PcP** | | **15 38 16.8** | **-0.8** |
| | comp=Z,16nm,0.7s,baz=320,slow=9.9,SNR=2.9 | | | | | | | | |
| | comp=Z,28nm,0.7s | | | | | | | | |
| STKA | **Stephens Creek** | **32.98** | **139** | ↑eP | | **P** | | **15 35 33.0** | **-0.5** |
| YHNB | **Yeheng** | **33.21** | **8** | P | | **P** | | **15 35 37.1** | **+1.5** |
| YHNB | **Yeheng** | **33.21** | **8** | IAmb | | IAmb | | 15 35 39.4 | |
| | comp=Z,44nm,0.6s | | | | | | | | |
| TATO | **Taipei** | **33.52** | **8** | P | | **P** | | **15 35 39.0** | **+0.7** |
| TATO | **Taipei** | **33.52** | **8** | P | | **P** | | **15 35 37.9** | **-0.4** |
| TATO | | | | IAmb | | IAmb | | 15 35 50.3 | |
| | comp=Z,97nm,1.1s | | | | | | | | |
| CMSA | **Cobar Meteorol** | **35.57** | **134** | P | | **P** | | **15 35 58.0** | **+1.9** |
| CMSA | **Cobar Meteorol** | **35.57** | **134** | P | | **P** | | **15 35 57.9** | **+1.9** |
| | comp=Z,73nm,1.8s | | | | | | | | |
| KMI | **Kunming** | **35.93** | **338** | ↑P | | **P** | | **15 36 02.3** | **+2.9** |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,54nm,0.7s | | | | | | | | |
| GYA | **Guiyang** | **35.96** | **345** | P | | **P** | | **15 36 01.0** | **+1.6** |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,40nm,0.7s | | | | | | | | |
| AULRC | **Lightning Ridg** | **36.16** | **130** | P | | **P** | | **15 36 03.2** | **+2.1** |
| ARPS | **Mount Arapiles** | **36.41** | **145** | P | | **P** | | **15 36 05.3** | **+2.2** |
| ARPS | **Mount Arapiles** | **36.41** | **145** | P | | **P** | | **15 36 02.4** | **-0.7** |
| | comp=Z,56nm,0.6s | | | | | | | | |
| CNSH | **ChangSha** | **36.54** | **355** | P | | **P** | | **15 36 05.8** | **+1.6** |
| CNSH | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| TNCH | **TengChong** | **37.58** | **333** | P | | **P** | | **15 36 15.8** | **+2.4** |
| TNCH | | | | pmax | | pmax | | | |
| | comp=Z,100nm,1.7s | | | | | | | | |
| AUMAG | **Moama Anglican** | **37.70** | **141** | P | | **P** | | **15 36 16.4** | **+2.3** |
| WHN | **Wuhan** | **38.78** | **357** | P | | **P** | | **15 36 23.5** | **+0.3** |
| YNG | **Young** | **39.00** | **136** | P | | **P** | | **15 36 26.7** | **+1.6** |
| YNG | **Young** | **39.00** | **136** | P | | **P** | | **15 36 26.0** | **+0.9** |
| | comp=Z,388nm,1.2s | | | | | | | | |
| ENH | **Enshi** | **39.05** | **350** | P | | **P** | | **15 36 27.2** | **+1.7** |
| TOO | **Toolangi** | **39.10** | **142** | IAmb | | IAmb | | 15 36 48.9 | |
| | comp=Z,113nm,1.4s | | | | | | | | |
| TOO | **Toolangi** | **39.10** | **142** | P | | **P** | | **15 36 26.5** | **+0.5** |
| | comp=Z,59nm,1.5s | | | | | | | | |
| AUPHS | **Peel High Scho** | **39.17** | **130** | P | | **P** | | **15 36 28.7** | **+2.1** |
| ARMA | **Armidale** | **39.42** | **129** | P | | **P** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MSHR | | | | | pmax | pmax | | | | |
| | comp=Z,32nm,0.9s | | | | | | | | | |
| **CN2** | **Changchun** | **52.58** | **8** | | P | **P** | **15 38 12.8** | **+0.7** | | |
| CN2 | | | | | pmax | pmax | | | | |
| | comp=Z,30nm,0.6s | | | | | | | | | |
| **JTM** | **Tenmabayashi** | **53.91** | **23** | | P | **P** | **15 38 22.7** | **+0.7** | | |
| **MDJ** | **Mudanjiang** | **54.07** | **11** | | P | **P** | **15 38 24.1** | **+1.0** | | |
| **MDJ** | **Mudanjiang** | **54.07** | **11** | | P | **P** | **15 38 23.8** | **+0.7** | | |
| MDJ | | | | | pmax | pmax | | | | |
| | comp=Z,200nm,0.7s | | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.19** | **14** | *ce* | P | **P** | **15 38 23.5** | **-0.5** | | |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **14** | | P | **P** | **15 38 24.2** | **+0.2** | | |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **14** | | P | **P** | **15 38 23.8** | **-0.1** | | |
| | comp=Z,74nm,0.7s,baz=191,slow=7.3,SNR=93 | | | | | | | | | |
| | comp=Z,74nm,0.7s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.19** | **14** | | P | **P** | **15 38 24.2** | **+0.2** | | |
| **BNX** | **BinXian** | **54.77** | **9** | ⇑ | P | **P** | **15 38 28.1** | **0.0** | | |
| BNX | | | | | pmax | pmax | | | | |
| | comp=Z,44nm,0.6s | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.65** | **352** | | P | **P** | **15 38 41.8** | **0.0** | | |
| **ULN** | **Ulaanbaatar** | **56.65** | **352** | ⇓ | *eP* | **P** | **15 38 41.5** | **-0.3** | | |
| ULN | | | | | pmax | pmax | | | | |
| | comp=Z,42nm,1.6s | | | | | | | | | |
| **SONM** | **Songino Array** | **56.71** | **352** | | P | **P** | **15 38 42.1** | **-0.1** | | |
| SONM | | | | | IAmb | IAmb | 15 38 44.4 | | | |
| | comp=Z,32nm,0.8s | | | | | | | | | |
| **SONM** | **Songino Array** | **56.71** | **352** | | P | **P** | **15 38 42.7** | **+0.5** | | |
| | comp=Z,30nm,0.7s,baz=170,slow=8.2,SNR=47 | | | | | | | | | |
| | comp=Z,30nm,0.7s | | | | | | | | | |
| **SONM** | **Songino Array** | **56.71** | **352** | | P | **P** | **15 38 42.1** | **-0.1** | | |
| SONM | | | | | pmax | pmax | | | | |
| | comp=Z,32nm,0.8s | | | | | | | | | |
| **ASAJ** | **Asahikawa** | **57.35** | **22** | | P | **P** | **15 38 47.1** | **+0.4** | | |
| | comp=Z,58nm,0.8s,baz=231,slow=10,SNR=24 | | | | | | | | | |
| | comp=Z,58nm,0.8s | | | | | | | | | |
| **HIA** | **Hailar** | **57.49** | **2** | | P | **P** | **15 38 49.1** | **+1.5** | | |
| **HIA** | **Hailar** | **57.49** | **2** | ⇑ *i* | P | **P** | **15 38 47.8** | **+0.2** | | |
| HIA | | | | | pmax | pmax | | | | |
| | comp=Z,27nm,0.9s | | | | | | | | | |
| **JCZ** | **Jackson Bay** | **57.50** | **137** | | P | **P** | **15 38 49.9** | **+1.9** | | |
| **CASY** | **Casey** | **57.94** | **183** | | P | **P** | **15 38 51.0** | **+0.5** | | |
| **WMQ** | **Urumqi** | **58.19** | **336** | *e* | P | **P** | **15 38 52.4** | **-0.3** | | |
| WMQ | | | | | pmax | pmax | | | | |
| | comp=Z,45nm,0.9s | | | | | | | | | |
| **RPZ** | **Rata Peaks** | **58.91** | **136** | | P | **P** | **15 38 57.9** | **+0.2** | | |
| **KLR** | **Kul'dur** | **58.92** | **12** | | P | **P** | **15 38 57.5** | **0.0** | | |
| | comp=Z,13nm,0.8s,baz=210,slow=4.3,SNR=14 | | | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | | | |
| **KLR** | **Kul'dur** | **58.92** | **12** | ⇑ *e* | P | **P** | **15 38 56.4** | **-1.1** | | |
| KLR | | | | | pmax | pmax | | | | |
| | comp=Z,37nm,1.7s | | | | | | | | | |
| **HEH** | **HeiHe** | **59.17** | **8** | *e* | P | **P** | **15 38 59.1** | **-0.2** | | |
| HEH | | | | | pmax | pmax | | | | |
| | comp=Z,85nm,1.2s | | | | | | | | | |
| **OXZ** | **Oxford** | **59.45** | **136** | | P | **P** | **15 39 01.0** | **-0.5** | | |
| OXZ | | | | | IAmb | IAmb | 15 39 14.5 | | | |
| | comp=Z,27nm,0.8s | | | | | | | | | |
| **THZ** | **Tophouse** | **59.58** | **134** | | P | **P** | **15 39 03.0** | **+0.6** | | |
| THZ | | | | | IAmb | IAmb | 15 39 17.2 | | | |
| | comp=Z,56nm,0.9s | | | | | | | | | |
| **ZAK** | **Zakamensk** | **59.67** | **350** | *e* | P | **P** | **15 39 02.0** | **-0.8** | | |
| ZAK | | | | | pmax | pmax | | | | |
| | comp=Z,19nm,1.3s | | | | | | | | | |
| **RER** | **Riviere de l'E** | **59.82** | **250** | | P | **P** | **15 39 04.1** | **-0.4** | | |
| **YSS** | **Yuzh-Sakhalins** | **59.85** | **20** | | P | **P** | **15 39 03.3** | **-0.7** | | |
| **YSS** | **Yuzh-Sakhalins** | **59.85** | **20** | | pmax | pmax | | | | |
| | comp=Z,105nm,1.2s | | | | | | | | | |
| **CIT** | **Chita** | **60.24** | **358** | *e* | P | **P** | **15 39 07.0** | **+0.3** | | |
| CIT | | | | *e* | | | 15 39 54.4 | | | |
| CIT | | | | *e* | | | 15 47 22.0 | | | |
| CIT | | | | | pmax | pmax | | | | |
| | comp=Z,185nm,2.6s | | | | | | | | | |
| **TCW** | **Tory Channel** | **60.41** | **133** | | P | **P** | **15 39 05.9** | **-2.2** | | |
| **MSVF** | **Nonsavu** | **60.41** | **106** | | P | **P** | **15 39 10.4** | **+1.8** | | |
| **MSVF** | **Nonsavu** | **60.41** | **106** | | P | **P** | **15 39 07.0** | **-1.6** | | |
| MSVF | | | | | IAmb | IAmb | 15 39 11.1 | | | |
| | comp=Z,53nm,1.0s | | | | | | | | | |
| **MSVF** | **Nonsavu** | **60.41** | **106** | ⇑ *e* | P | **P** | **15 39 10.0** | **+1.4** | | |
| **KSH** | **Kashi** | **60.70** | **325** | | P | **P** | **15 39 10.4** | **+0.2** | | |
| KSH | | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.4s | | | | | | | | | |
| **MRZ** | **Mangatainoka R** | **61.22** | **132** | | P | **P** | **15 39 12.9** | **-0.8** | | |
| MRZ | | | | | IAmb | IAmb | 15 39 21.9 | | | |
| | comp=Z,76nm,1.3s | | | | | | | | | |
| **MOY** | **Mondy** | **61.31** | **349** | *e* | P | **P** | **15 39 14.9** | **+0.8** | | |
| MOY | | | | | pmax | pmax | | | | |
| | comp=Z,107nm,2.8s | | | | | | | | | |
| **IRK** | **Irkutsk** | **61.31** | **351** | *e* | P | **P** | **15 39 12.7** | **-1.2** | | |
| IRK | | | | | pmax | pmax | | | | |
| | comp=Z,134nm,2.9s | | | | | | | | | |
| **UGL** | **Uglegorsk** | **61.47** | **19** | *e* | P | **P** | **15 39 16.7** | **+1.7** | | |
| UGL | | | | | pmax | pmax | | | | |
| | comp=Z,130nm,1.1s | | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **61.55** | **130** | | P | **P** | **15 39 18.2** | **+2.3** | | |
| **BKZ** | **Black Stump Fm** | **61.55** | **130** | | P | **P** | **15 39 14.8** | **-1.1** | | |
| BKZ | | | | | IAmb | IAmb | 15 39 30.9 | | | |
| | comp=Z,41nm,0.9s | | | | | | | | | |
| **URZ** | **Urewera** | **61.82** | **129** | | P | **P** | **15 39 17.8** | **+0.1** | | |
| | comp=Z,14nm,0.7s,baz=51,slow=15,SNR=3.7 | | | | | | | | | |
| | comp=Z,14nm,0.7s | | | | | | | | | |
| **ZEA** | **Zeya** | **62.56** | **7** | *e* | P | **P** | **15 39 23.0** | **+0.7** | | |
| ZEA | | | | | pmax | pmax | | | | |
| | comp=N,20nm,1.3s | | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.7s | | | | | | | | | |
| **MK31** | **Makanchi Array** | **62.84** | **334** | | IAmb | IAmb | 15 39 27.3 | | | |
| | comp=Z,21nm,0.8s | | | | | | | | | |
| **MK31** | **Makanchi Array** | **62.84** | **334** | *de* | P | **P** | **15 39 22.8** | **-1.6** | | |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | | P | **P** | **15 39 23.1** | **-1.3** | | |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | | P | **P** | **15 39 23.3** | **-1.1** | | |
| | comp=Z,24nm,0.7s,baz=156,slow=6.1,SNR=45 | | | | | | | | | |
| MKAR | | | | | PKP2bc | | 16 08 33.1 | | | |
| | comp=Z,1.0nm,0.9s,baz=323,slow=0.6,SNR=5.4 | | | | | | | | | |
| | comp=Z,24nm,0.7s | | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **63.20** | **339** | ⇓ *e* | P | **P** | **15 39 26.3** | **-0.5** | | |
| DGZ | | | | | pmax | pmax | | | | |
| | comp=Z,51nm,0.9s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **63.21** | **18** | *e* | P | **P** | **15 39 28.4** | **+1.8** | | |
| TYV | | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.63** | **327** | ⇑ *e* | P | **P** | **15 39 30.3** | **+0.5** | | |
| AAK | | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.0s | | | | | | | | | |
| **GAR** | **Garm** | **63.74** | **321** | | P | **P** | **15 39 30.5** | **-0.1** | | |
| **KK31** | **Karatay Array** | **66.15** | **325** | | P | **P** | **15 39 45.3** | **-0.8** | | |
| **KK31** | **Karatay Array** | **66.15** | **325** | | P | **P** | **15 39 45.3** | **-0.8** | | |
| KK31 | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.2s | | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.56** | **223** | | T | T | 16 51 48.7 | | | |
| | baz=76,slow=74 | | | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.57** | **223** | | T | T | 16 51 48.6 | | | |
| | baz=76 | | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.57** | **223** | | T | T | 16 51 47.7 | | | |
| | baz=76,slow=74 | | | | | | | | | |
| **KRAR** | **Krasnoyarsk** | **67.12** | **346** | ⇓ *e* | P | **P** | **15 39 52.9** | **+1.0** | | |
| **KURBB** | **Kurchatov Arra** | **67.38** | **335** | | P | **P** | **15 39 51.8** | **-1.8** | | |
| | comp=Z,7.4nm,0.7s,baz=148,slow=5.6,SNR=23 | | | | | | | | | |
| KURBB | | | | | PKP2bc | | 16 08 19.9 | | | |
| | comp=Z,0.7nm,0.6s,baz=311,slow=3.8,SNR=6.7 | | | | | | | | | |
| | comp=Z,7.4nm,0.7s | | | | | | | | | |
| **KURK** | **Kurchatov** | **67.41** | **335** | | P | **P** | **15 39 52.5** | **-1.4** | | |
| KURK | | | | | IAmb | IAmb | 15 41 18.6 | | | |
| | comp=Z,31nm,1.0s | | | | | | | | | |
| **KURK** | **Kurchatov** | **67.41** | **335** | ⇑ *i* | P | **P** | **15 39 52.7** | **-1.2** | | |
| KURK | | | | | pmax | pmax | | | | |
| | comp=Z,23nm,1.1s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.64** | **340** | | P | **P** | **15 39 53.1** | **-2.2** | | |
| | comp=Z,11nm,0.7s,baz=147,slow=5.1,SNR=15 | | | | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.64** | **340** | *i* | P | **P** | **15 39 53.4** | **-1.9** | | |
| ZALV | | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| **MAW** | **Mawson** | **68.98** | **199** | | P | **P** | **15 40 04.6** | **+1.1** | | |
| | comp=Z,35nm,1.0s,baz=69,slow=6.4,SNR=21 | | | | | | | | | |
| | comp=Z,35nm,1.0s | | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.53** | **25** | | P | **P** | **15 40 12.0** | **-1.3** | | |
| **PETK** | **Petropavlovsk-** | **70.53** | **25** | | P | **P** | **15 40 12.2** | **-1.1** | | |
| | comp=Z,20nm,1.0s,baz=172,slow=2.7,SNR=8.3 | | | | | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| **YAK** | **Yakutsk** | **70.96** | **7** | | P | **P** | **15 40 14.7** | **-1.0** | | |
| | comp=Z,14nm,0.4s,baz=47,slow=2.0,SNR=1.3 | | | | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | | | | |
| **YAK** | **Yakutsk** | **70.96** | **7** | ⇓ *e* | P | **P** | **15 40 15.2** | **-0.5** | | |
| YAK | | | | | pmax | pmax | | | | |
| | comp=Z,25nm,0.9s | | | | | | | | | |
| **BVA0** | **Borovoye Array** | **72.64** | **333** | *i* | P | **P** | **15 40 23.6** | **-2.4** | | |
| **BVAR** | **Borovoye Array** | **72.64** | **333** | | P | **P** | **15 40 24.0** | **-2.0** | | |
| | comp=Z,11nm,0.7s,baz=139,slow=8.0,SNR=40 | | | | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| **BRVK** | **Borovoye** | **72.71** | **333** | ⇓ *e* | P | **P** | **15 40 24.0** | **-2.4** | | |
| BRVK | | | | | pmax | pmax | | | | |
| | comp=Z,21nm,1.3s | | | | | | | | | |
| **MA2** | **Magadan** | **73.06** | **17** | | P | **P** | **15 40 27.1** | **-1.3** | | |
| | comp=Z,17nm,1.1s,baz=87,slow=3.9,SNR=2.7 | | | | | | | | | |
| | comp=Z,17nm,1.1s | | | | | | | | | |
| **MA2** | **Magadan** | **73.06** | **17** | ⇓ *e* | P | **P** | **15 40 27.7** | **-0.6** | | |
| MA2 | | | | | pmax | pmax | | | | |
| | comp=Z,46nm,1.6s | | | | | | | | | |
| **AB31** | **Akbulak array** | **75.69** | **326** | *i* | P | **P** | **15 40 40.9** | **-3.0** | | |
| **ABKAR** | **Akbulak array** | **75.69** | **326** | | P | **P** | **15 40 41.0** | **-2.8** | | |
| **SEY** | **Seymchan** | **76.24** | **16** | | P | **P** | **15 40 45.1** | **-1.6** | | |
| | comp=Z,12nm,0.9s,baz=190,slow=4.7,SNR=7.5 | | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | | |
| **SEY** | **Seymchan** | **76.24** | **16** | ⇓ *i* | P | **P** | **15 40 46.7** | **0.0** | | |
| SEY | | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.4s | | | | | | | | | |
| **RAYN** | **Ar Rayn** | **76.26** | **297** | | P | **P** | **15 40 45.3** | **-2.5** | | |
| **RAYN** | **Ar Rayn** | **76.26** | **297** | | P | **P** | **15 40 45.3** | **-2.5** | | |
| RAYN | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **79.24** | **270** | | P | **P** | **15 41 04.0** | **-0.9** | | |
| | comp=Z,6.6nm,0.9s,baz=43,slow=6.9,SNR=13 | | | | | | | | | |
| | comp=Z,6.6nm,0.9s | | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **79.24** | **270** | | P | **P** | **15 41 04.0** | **-0.9** | | |
| **SVE** | **Sverdlovsk** | **79.42** | **332** | *e* | P | **P** | **15 41 02.6** | **-1.9** | | |
| SVE | | | | | pmax | pmax | | | | |
| | comp=Z,43nm,1.5s | | | | | | | | | |
| **ARU** | **Arti** | **80.17** | **331** | *c i* | P | **P** | **15 41 06.2** | **-2.4** | | |
| ARU | | | | | S | **S** | **15 51 13.6** | **+0.2** | | |
| ARU | | | | | SS | **SS** | **15 56 20.3** | **-4.1** | | |
| ARU | | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.5s | | | | | | | | | |
| **TIXI** | **Tiksi** | **80.30** | **4** | | P | **P** | **15 41 06.4** | **-2.6** | | |
| | comp=Z,12nm,0.8s,baz=149,slow=7.0,SNR=2.3 | | | | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| **RAR** | **Rarotonga** | **81.16** | **110** | | P | **P** | **15 41 15.1** | **+0.4** | | |
| | comp=Z,26nm,1.1s,baz=261,slow=12,SNR=2.8 | | | | | | | | | |
| | comp=Z,26nm,1.1s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.59** | **180** | | P | **P** | **15 41 15.7** | **-0.6** | | |
| QSPA | | | | | IAmb | IAmb | 15 41 20.8 | | | |
| | comp=Z,46nm,1.1s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.59** | **180** | | P | **P** | **15 41 16.4** | **+0.1** | | |
| | comp=Z,28nm,0.9s,baz=121,slow=0.2,SNR=20 | | | | | | | | | |
| | comp=Z,28nm,0.9s | | | | | | | | | |
| **POGA** | **Pongola** | **81.63** | **244** | | P | **P** | **15 41 16.4** | **-0.8** | | |
| **ELIB** | **Princess Elisa** | **83.06** | **198** | *d* | P | **P** | **15 41 24.6** | **+0.6** | | |
| | comp=Z,27nm,1.0s | | | | | | | | | |
| **BELG** | **Belogornoye** | **84.06** | **325** | ⇓ *e* | P | **P** | **15 41 26.4** | **-2.7** | | |
| BELG | | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| **KBZ** | **Khabaz** | **84.14** | **316** | | P | **P** | **15 41 27.9** | **-1.9** | | |
| | comp=Z,1.2nm,0.4s,baz=91,slow=18,SNR=2.5 | | | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | | | |
| **KBZ** | **Khabaz** | **84.14** | **316** | ⇓ *i* | P | **P** | **15 41 27.7** | **-2.1** | | |
| KBZ | | | | | pmax | pmax | | | | |
| | comp=Z,12nm,2.3s | | | | | | | | | |
| **KIV** | **Kislovodsk** | **84.36** | **316** | *e* | P | **P** | **15 41 27.0** | **-4.0** | | |
| KIV | | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | | |
| **GRHM** | **Grahamstown, E** | **85.59** | **237** | | P | **P** | **15 41 37.4** | **-0.1** | | |
| **MBAR** | **Mbarara** | **85.76** | **270** | | P | **P** | **15 41 37.6** | **-1.2** | | |
| **MBAR** | **Mbarara** | **85.76** | **270** | | P | **P** | **15 41 37.6** | **-1.2** | | |
| MBAR | | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.1s | | | | | | | | | |
| **LSZ** | **Lusaka** | **86.25** | **255** | | P | **P** | **15 41 40.0** | **-1.1** | | |
| LSZ | | | | | IAmb | IAmb | 15 42 02.0 | | | |
| | comp=Z,31nm,1.1s | | | | | | | | | |
| **LSZ** | **Lusaka** | **86.25** | **255** | | P | **P** | **15 41 40.0** | **-1.1** | | |
| LSZ | | | | | pmax | pmax | | | | |
| | comp=Z,31nm,1.1s | | | | | | | | | |
| **NVL** | **N'lazarevskaya** | **86.92** | **199** | *e* | P | **P** | **15 41 43.7** | **+0.6** | | |
| NVL | | | | | pmax | pmax | | | | |
| | comp=Z,31nm,1.0s | | | | | | | | | |
| **BOSA** | **Boshof** | **87.15** | **242** | | IAmb | IAmb | 15 41 46.9 | | | |
| | comp=Z,32nm,0.8s | | | | | | | | | |
| **BOSA** | **Boshof** | **87.15** | **242** | | P | **P** | **15 41 44.9** | **-0.5** | | |
| | comp=Z,34nm,0.8s,baz=109,slow=4.0,SNR=46 | | | | | | | | | |
| | comp=Z,34nm,0.8s | | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **87.17** | **304** | | P | **P** | **15 41 44.0** | **-1.2** | | |
| | comp=Z,1.3nm,0.4s,baz=101,slow=7.5,SNR=2.0 | | | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | | | |
| **LBTB** | **Lobatse** | **87.35** | **245** | | IAmb | IAmb | 15 41 48.5 | | | |
| | comp=Z,34nm,0.9s | | | | | | | | | |
| **LBTB** | **Lobatse** | **87.35** | **245** | | P | **P** | **15 41 45.9** | **-0.5** | | |
| | comp=Z,24nm,0.8s,baz=122,slow=5.7,SNR=26 | | | | | | | | | |
| | comp=Z,24nm,0.8s | | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.26** | **196** | ⇑ | P | **P** | **15 41 56.1** | **+1.6** | | |
| | comp=Z,1μm,0.7s | | | | | | | | | |
| **BR131** | **Keskin Array S** | **89.89** | **310** | ⇓ *e* | P | **P** | **15 41 56.0** | **-2.0** | | |
| **BRTR** | **Keskin Array B** | **89.89** | **310** | | P | **P** | **15 41 55.1** | **-2.9** | | |
| | comp=Z,2.0nm,1.0s,baz=113,slow=4.2,SNR=5.6 | | | | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | | |
| **SUR** | **Sutherland** | **90.36** | **237** | | P | **P** | **15 42 00.8** | **+0.3** | | |
| | comp=Z,11nm,0.9s,baz=109,slow=8.3,SNR=7.2 | | | | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **196** | | P | **P** | **15 42 02.4** | **+0.3** | | |
| SNAA | | | | | IAmb | IAmb | 15 42 04.7 | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **196** | ⇑ | P | **P** | **15 42 03.4** | **+1.3** | | |
| | comp=Z,410nm,0.8s | | | | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **196** | | P | **P** | **15 42 02.5** | **+0.4** | | |
| | comp=Z,16nm,0.8s,baz=130,slow=4.1,SNR=42 | | | | | | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **196** | ⇓ *i* | P | **P** | **15 42 03.1** | **+1.0** | | |
| SNAA | | | | | pmax | pmax | | | | |
| | comp=Z,31nm,1.0s | | | | | | | | | |
| **BELA** | **Belgrano 2** | **92.37** | **186** | | P | **P** | **15 42 08.3** | **-0.4** | | |
| **VNA1** | **Neumayer--Stat** | **92.94** | **196** | ⇑ | P | **P** | **15 42 09.2** | **-2.2** | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.96** | **195** | ⇑ | P | **P** | **15 42 12.6** | **+1.1** | | |
| | comp=Z,10nm,0.8s | | | | | | | | | |
| **APA** | **Apatity** | **95.09** | **338** | ⇓ *i* | P | **P** | **15 42 22.5** | **+1.3** | | |
| APA | | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | | |
| **VALR** | **Valaam** | **95.23** | **331** | ⇑ *e* | P | **P** | **15 42 21.4** | **-0.5** | | |
| VALR | | | | | pmax | pmax | | | | |
| | comp=Z,74nm,0.8s | | | | | | | | | |
| **TSUM** | **Tsumeb** | **95.63** | **250** | | P | **P** | **15 42 23.8** | **-1.2** | | |
| | comp=Z,1.4nm,0.5s,baz=114,slow=4.7,SNR=5.2 | | | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | | | |
| **E19K** | **Redstone River** | **96.25** | **23** | | P | **P** | **15 42 25.8** | **-0.7** | | |
| E19K | | | | | IAmb | IAmb | 15 42 42.6 | | | |
| | comp=Z,35nm,1.9s | | | | | | | | | |
| **H19K** | **Roundabout Mou** | **96.34** | **25** | | P | **P** | **15 42 25.7** | **-1.3** | | |
| H19K | | | | | IAmb | IAmb | 15 42 52.7 | | | |
| | comp=Z,27nm,1.6s | | | | | | | | | |
| **FINES** | **FINESS Array B** | **97.54** | **331** | | PKiKP | **PKiKP** | **15 47 05.5** | **-1.5** | | |
| | comp=Z,2.4nm,0.9s,baz=113,slow=3.6,SNR=3.4 | | | | | | | | | |
| **COLA** | **College** | **99.94** | **26** | ⇑ *e* | P | **Pdif** | **15 42 44.0** | **+0.9** | | |
| COLA | | | | | pmax | pmax | | | | |
| | comp=Z,18nm,2.7s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **100.35** | **26** | | P | **Pdif** | **15 42 45.6** | **+0.6** | | |
| | comp=Z,0.6nm,0.9s,baz=231,slow=4.8,SNR=2.7 | | | | | | | | | |
| ILAR | | | | | PP | **PP** | **15 46 51.5** | **+0.2** | | |
| | comp=Z,1.4nm,1.0s,baz=272,slow=4.8,SNR=5.4 | | | | | | | | | |
| ILAR | | | | | PKKPbc | **PKKPbc** | **15 59 01.8** | **-2.2** | | |
| | comp=Z,0.9nm,0.6s,baz=116,slow=1.6,SNR=7.6 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **114.63** | **23** | | PKP | PKPdf | 15 47 39.4 | +0.8 | | |
| | comp=Z,1.1nm,0.8s,baz=302,slow=1.6,SNR=3.4 | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.96** | **281** | | PKP | **PKPdf** | **15 47 40.4** | **-2.1** | | |
| | comp=Z,5.0nm,0.8s,baz=42,slow=2.4,SNR=16 | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **118.68** | **311** | | PKP | **PKPdf** | **15 47 45.4** | **-1.8** | | |
| | comp=Z,2.0nm,1.1s,baz=19,slow=2.7,SNR=6.0 | | | | | | | | | |
| **POLO** | **Lamas de Olo** | **121.04** | **314** | *e* | PKP | **PKiKP** | **15 47 52.4** | **+0.6** | | |
| **PCBR** | **Castelo Branco** | **121.25** | **312** | *e* | PKP | **PKPdf** | **15 47 52.0** | **0.0** | | |
| **PESTR** | **Estremoz** | **121.61** | **311** | *e* | PKP | **PKPdf** | **15 47 53.1** | **+0.3** | | |
| **DBIC** | **Dimbokro** | **121.92** | **273** | | PKP | **PKPdf** | **15 47 53.0** | **-1.0** | | |
| | comp=Z,10nm,0.9s,baz=86,slow=2.7,SNR=4.9 | | | | | | | | | |
| **PMTG** | **Montargil** | **122.03** | **311** | *e* | PKP | **PKiKP** | **15 47 54.6** | **+0.9** | | |
| **MESJ** | **Messejana** | **122.36** | **310** | *e* | PKP | **PKPdf** | **15 47 53.2** | **-1.0** | | |
| **KVN** | **Kaiserville** | **122.47** | **49** | | PKPdf | **PKPdf** | **15 47 52.6** | **-2.1** | | |
| **KVN** | **Kaiserville** | **122.47** | **49** | | PKiKP | **PKPdf** | **15 47 52.6** | **-2.1** | | |
| **NVAR** | **Mina Array Bea** | **122.50** | **50** | | | **PKPdf** | **15 47 53.6** | **-1.2** | | |
| **NVAR** | **Mina Array Bea** | **122.50** | **50** | | PKP | **PKPdf** | **15 47 53.4** | **-1.4** | | |
| | comp=Z,1.6nm,0.7s,baz=263,slow=2.4,SNR=11 | | | | | | | | | |
| NVAR | | | | | PKKPbc | **PKKPab** | **15 57 49.6** | **+0.4** | | |
| | comp=Z,0.9nm,0.7s,baz=118,slow=3.1,SNR=8.5 | | | | | | | | | |
| **MSO** | **Missoula** | **122.54** | **39** | | PKPdf | **PKPdf** | **15 47 52.8** | **-1.7** | | |
| **MORF** | **Marmelete** | **122.84** | **309** | *e* | PKP | **PKPdf** | **15 47 54.6** | **-0.6** | | |
| **PFO** | **Pinyon Flats O** | **125.23** | **55** | | | **PKPdf** | **15 47 58.9** | **-1.1** | | |
| **PFO** | **Pinyon Flats O** | **125.23** | **55** | | PKIKP | **PKPdf** | **15 47 58.9** | **-1.1** | | |
| **PDAR** | **Pinedale Array** | **127.12** | **42** | | PKPdf | **PKPdf** | **15 48 02.9** | **-0.6** | | |
| **PDAR** | **Pinedale Array** | **127.12** | **42** | | PKP | **PKPdf** | **15 48 03.4** | **-0.1** | | |
| | comp=Z,1.6nm,0.9s,baz=245,slow=3.1,SNR=7.1 | | | | | | | | | |
| PDAR | | | | | SKKPbc | SKKPbc | 16 01 23.6 | -1.4 | | |
| | comp=Z,0.9nm,0.8s,baz=141,slow=5.8,SNR=4.7 | | | | | | | | | |
| **LL02** | **Futaleuf** | **128.09** | **172** | | PKPdf | **PKPdf** | **15 48 04.8** | **-0.3** | | |
| **ULM** | **Lac du Bonnet** | **130.35** | **27** | | PKP | **PKPdf** | **15 48 07.5** | **-1.6** | | |
| | comp=Z,2.8nm,0.8s,baz=322,slow=5.2,SNR=3.0 | | | | | | | | | |
| **PLCA** | **Paso Flores** | **130.67** | **173** | | PKP | **PKPdf** | **15 48 10.6** | **+0.4** | | |
| | comp=Z,2.5nm,0.7s,baz=161,slow=6.3 | | | | | | | | | |
| PLCA | | | | | SKPbc | **SKPbc** | **15 51 33.7** | **-0.5** | | |
| | comp=Z,1.9nm,0.9s,baz=54,slow=8.4,SNR=3.2 | | | | | | | | | |
| **SCHQ** | **Schefferville** | **133.62** | **3** | | PKP | **PKPdf** | **15 48 14.5** | **-0.7** | | |
| | comp=Z,2.6nm,0.8s,baz=57,slow=8.3,SNR=2.3 | | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **134.46** | **34** | | PKPdf | **PKPdf** | **15 48 15.6** | **-1.6** | | |
| **TXAR** | **Lajitas Array** | **136.93** | **56** | | PKhKP | PKPpre | 15 48 11.3 | | | |
| | comp=Z,0.9nm,0.8s,baz=230,slow=3.3,SNR=4.9 | | | | | | | | | |
| TXAR | | | | | PKP | **PKPdf** | **15 48 22.8** | **+0.5** | | |
| | comp=Z,1.5nm,0.7s,baz=321,slow=1.6,SNR=6.1 | | | | | | | | | |
| TXAR | | | | | SKPbc | **SKPbc** | **15 51 52.1** | **-3.3** | | |
| | comp=Z,2.1nm,1.0s,baz=263,slow=2.0,SNR=5.7 | | | | | | | | | |
| **E46A** | **Sault Ste Mari** | **138.16** | **22** | | | **PKPdf** | **15 48 22.8** | **-1.1** | | |
| **T42A** | **Van Buren** | **142.05** | **37** | | | PKPpre | 15 48 24.4 | | | |
| **WCI** | **Wyandotte Cave** | **143.86** | **31** | | | PKPpre | 15 48 29.0 | | | |
| **WCI** | **Wyandotte Cave** | **143.86** | **31** | | PKHKP | PKPpre | 15 48 29.0 | | | |
| **SPB** | **Sao Paulo** | **144.55** | **206** | | | **PKPab** | **15 48 35.0** | **+0.7** | | |
| **WVT** | **Waverly** | **144.57** | **35** | | | **PKPab** | **15 48 31.7** | **-2.4** | | |
| **WVT** | **Waverly** | **144.57** | **35** | | PKIKP | **PKPab** | **15 48 31.7** | **-2.4** | | |
| **TLIG** | **Tlapa** | **144.66** | **72** | | PKPdf | **PKPab** | **15 48 34.1** | **-0.9** | | |
| **VAO** | **Valinhos** | **144.86** | **207** | | PKPdf | **PKPab** | **15 48 35.3** | **-0.3** | | |
| **CPUP** | **Villa Florida** | **144.97** | **190** | | PKPdf | **PKPab** | **15 48 35.2** | **-0.6** | | |
| **CPUP** | **Villa Florida** | **144.97** | **190** | | PKPbc | **PKPab** | **15 48 36.1** | **+0.4** | | |
| | comp=Z,136nm,1.0s,baz=163,slow=2.7,SNR=108 | | | | | | | | | |
| **CPUP** | **Villa Florida** | **144.97** | **190** | | PKIKP | **PKPab** | **15 48 35.2** | **-0.6** | | |
| **SSPA** | **Standing Stone** | **145.43** | **20** | | | **PKPbc** | **15 48 34.8** | **-2.1** | | |
| **VBMS** | **Vicksburg** | **145.48** | **43** | | | **PKPbc** | **15 48 35.5** | **-1.8** | | |
| **146A** | **Union** | **146.18** | **41** | | PKPdf | **PKPdf** | **15 48 37.4** | **-1.1** | | |
| **TZTN** | **Tazewell** | **146.55** | **30** | | | **PKPdf** | **15 48 38.6** | **-0.4** | | |
| **U54A** | **Nelsons Funny** | **147.40** | **28** | | PKPdf | **PKPdf** | **15 48 39.8** | **-0.8** | | |
| **

comp=Z,18nm,0.8s
**BVAR Borovoye Array 75.11 327 P P 15 41 44.2 -0.2**
comp=Z,1.9nm,0.4s,baz=113,slow=7.5,SNR=7.7
comp=Z,1.9nm,0.4s
**BRVK Borovoye 75.18 327 P P 15 41 44.9 +0.2**
BRVK IAmb IAmb 15 42 04.6
comp=Z,42nm,1.6s
**ABKAR Akbulak array 79.85 321 P P 15 42 10.9 -0.1**
**L14K Kuka Creek 81.74 27 P P 15 42 22.0 +1.3**
L14K IAmb IAmb 15 44 21.6
comp=Z,74nm,1.9s
**M14K Bethel 81.84 27 P P 15 42 22.4 +1.1**
**OPO Ambohidratompo 82.81 252 P P 15 42 28.1 +0.6**
comp=Z,6.1nm,0.6s,baz=100,slow=8.4,SNR=4.0
comp=Z,6.1nm,0.6s
**L16K Owhat River 83.31 27 P P 15 42 29.8 +0.9**
L16K IAmb IAmb 15 42 37.8
comp=Z,15nm,1.1s
**D19K Kuna River 86.06 20 P P 15 42 43.4 +0.6**
**RAYN Ar Rayn 86.74 294 P P 15 42 47.4 +0.3**
RAYN IAmb IAmb 15 42 58.2
comp=Z,13nm,0.8s
**QSPA South Pole Qui 86.87 180 P P 15 42 46.9 0.0**
QSPA IAmb IAmb 15 46 01.5
comp=Z,12nm,0.9s
**QSPA South Pole Qui 86.87 180 P P 15 42 47.0 0.0**
comp=Z,5.4nm,0.7s,baz=344,slow=7.9,SNR=1.3
comp=Z,5.4nm,0.7s
**B21K Ikpikpuk River 87.60 20 P P 15 42 50.4 +0.3**
**C23K Itkillik River 89.00 20 P P 15 42 57.0 +0.2**
C23K IAmb IAmb 15 42 57.7
comp=Z,11nm,1.0s
**ILAR Eielson Array 89.56 25 P P 15 42 58.1 -1.5**
comp=Z,0.9nm,0.6s,baz=255,slow=4.9,SNR=9.0
comp=Z,0.9nm,0.6s
**BMAR Burnt Mountain 90.82 23 P P 15 43 05.8 +0.4**
**BCAR Beaver Creek A 91.63 27 P P 15 43 08.6 -0.7**
**M29M Somme Creek 93.13 28 P P 15 43 16.4 +0.1**
M29M IAmb IAmb 15 43 24.7
comp=Z,7.5nm,1.1s
**ARCES ARCESS Array B 98.14 340 P P 15 43 38.5 -0.3**
comp=Z,2.1nm,0.7s,baz=74,slow=6.7,SNR=1.9
comp=Z,2.1nm,0.7s

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**IDC 19 15:36:41.9±2.2, 8.27S×116.68E, h0km, mb3.6/3, mbtmp3.7/4, ML3.4/1, Error ellipse: s-maj=59.7km s-min=29.4km az=56.0, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **4.44** | **44** | Pn | | Pn | Pn | 15 37 50.4 | -0.1 |
| | 1.8nm,0.3s,baz=63,slow=19,SNR=1.5 | | | | | | | | |
| | 7.0nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.66** | **126** | P | | P | P | 15 41 23.4 | 0.0 |
| | 2.9nm,0.8s,baz=300,slow=12,SNR=2.4 | | | | | | | | |
| | 2.9nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | | P | P | 15 41 43.4 | 0.0 |
| | 1.4nm,0.5s,baz=309,slow=9.6,SNR=1.6 | | | | | | | | |
| | 1.4nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.78** | **334** | P | | P | P | 15 47 09.2 | 0.0 |
| | 0.5nm,0.7s,baz=134,slow=5.7,SNR=2.4 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |

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*IDC **19** 15:39:48.3±2.2, 8.40S×116.84E, h0km, mb3.4/3, mbtmp3.6/4, ML4.0/1, Error ellipse: s-maj=58.7km s-min=28.1km az=57.0*
*NEIC **19** 15:39:50.9±0.4, 8.37S±0.07×116.90E±0.06, h10km±2km, mb4.1/4, Error ellipse: s-maj=15.1km s-min=5.8km az=36.0*
**ISC 19 15:39:52.8±1.0, 8.39S±0.09×116.93E±0.07, h35km, n13, σ1§05/14, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **268** | Pn | | Pn | Pn | **15 40 34.5** | **+0.1** |
| **KAPI** | **Kappang** | **4.37** | **40** | Pn | | Pn | Pn | **15 40 57.2** | **+0.4** |
| **KAPI** | **Kappang** | **4.37** | **40** | Pn | | Pn | Pn | **15 40 56.9** | **+0.2** |
| | 7.7nm,0.3s,baz=251,slow=6.0,SNR=5.1 | | | | | | | | |
| KAPI | | | | Sn | | Sn | Sn | **15 41 45.0** | **-1.4** |
| | 2.7nm,0.3s,baz=48,slow=23,SNR=1.3 | | | | | | | | |
| | 19nm,0.2s | | | | | | | | |
| **MMRI** | **Maumere** | **5.26** | **93** | Pn | | Pn | Pn | **15 41 09.9** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **12.84** | **140** | Pn | | Pn | Pn | **15 42 51.1** | **-1.9** |
| **WB0** | **Warramunga Arr** | **20.35** | **126** | P | | P | P | **15 44 27.0** | **+0.6** |
| WB0 | | | | IAmb | | IAmb | IAmb | 15 44 41.4 | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.39** | **126** | P | | P | P | **15 44 27.7** | **+0.8** |
| | comp=Z,1.2nm,0.4s,baz=301,slow=12,SNR=11 | | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.40** | **126** | P | | P | P | **15 44 27.9** | **+0.9** |
| **WR0** | **Warramunga Arr** | **20.56** | **126** | P | | P | P | **15 44 29.9** | **+1.2** |
| WR0 | | | | IAmb | | IAmb | IAmb | 15 44 35.0 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **AS31** | **Alice Springs** | **22.25** | **135** | P | | P | P | **15 44 47.4** | **+0.5** |
| **ASAR** | **Alice Springs** | **22.25** | **135** | P | | P | P | **15 44 47.7** | **+0.8** |
| **ASAR** | **Alice Springs** | **22.25** | **135** | P | | P | P | **15 44 47.5** | **+0.7** |
| | comp=Z,0.5nm,0.5s,baz=310,slow=9.1,SNR=4.3 | | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.00** | **334** | P | | P | P | **15 50 16.9** | **+0.7** |
| | comp=Z,0.2nm,0.6s,baz=145,slow=8.5,SNR=1.7 | | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | | |

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**IDC 19 15:43:20.0±10.0, 8.32S×116.63E, h0km, mb3.6/3, mbtmp3.7/4, ML3.6/1, Error ellipse: s-maj=185.3km s-min=42.0km az=98.0, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **4.52** | **44** | Pn | | Pn | Pn | 15 44 29.8 | 0.0 |
| | 3.0nm,0.3s,baz=165,slow=7.2,SNR=2.3 | | | | | | | | |
| KAPI | | | | Sn | | Sn | Sn | 15 45 18.9 | -4.2 |
| | 3.6nm,0.3s,baz=58,slow=24,SNR=2.2 | | | | | | | | |
| | 5.8nm,0.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.67** | **126** | P | | P | P | 15 48 01.6 | -0.1 |
| | 0.9nm,0.6s,baz=300,slow=12,SNR=10 | | | | | | | | |
| | 0.9nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | | P | P | 15 48 21.4 | -0.1 |
| | 1.9nm,0.9s,baz=309,slow=9.5,SNR=8.5 | | | | | | | | |
| | 1.9nm,0.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | **32.98** | **139** | P | | P | P | 15 49 57.0 | +0.1 |
| | 0.6nm,0.4s,baz=318,slow=14,SNR=1.0 | | | | | | | | |
| | 0.6nm,0.4s | | | | | | | | |

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*IDC **19** 15:43:40.5±8.9, 18.24S×178.02W, h524km±80km, mb3.3/4, mbtmp4.1/5, Error ellipse: s-maj=90.9km s-min=35.5km az=120.0*
**ISC 19 15:43:41.4±2.5, 18.4S±0.4×178.0W±0.4, h550km, n9, σ1§01/9, mb3.6/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.05** | **253** | P | | P | P | **15 46 51.3** | **-0.3** |
| | 4.2nm,0.9s,baz=312,slow=12,SNR=2.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.04** | **255** | P | | P | P | **15 51 09.6** | **+0.9** |
| | 6.1nm,0.8s,baz=91,slow=7.9,SNR=11 | | | | | | | | |
| | 6.1nm,0.8s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.55** | **323** | P | | P | P | **15 53 49.4** | **-0.1** |
| | 0.8nm,0.5s,baz=157,slow=5.5,SNR=4.8 | | | | | | | | |
| | 0.8nm,0.5s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.28** | **345** | P | | P | P | **15 54 22.9** | **+0.5** |
| | 1.6nm,0.6s,baz=98,slow=8.1,SNR=6.0 | | | | | | | | |
| | 1.6nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.30** | **13** | P | | P | P | **15 55 25.5** | **+0.8** |
| | 0.3nm,0.5s,baz=242,slow=3.8,SNR=2.5 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.89** | **350** | PKP | | | **PKiKP** | **16 01 42.0** | **-0.8** |
| | 3.5nm,1.0s,baz=14,slow=1.1,SNR=2.6 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.42** | **315** | PKPbc | | | **PKPab** | **16 02 18.6** | **-1.4** |
| | 0.7nm,0.6s,baz=118,slow=3.5,SNR=3.7 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.75** | **302** | PKPbc | | | **PKPab** | **16 02 24.1** | **-1.3** |
| | 0.8nm,0.4s,baz=122,slow=5.2,SNR=1.2 | | | | | | | | |
| **GERES** | **GERESS Array B** | **148.21** | **345** | PKPbc | | | **PKiKP** | **16 02 27.1** | **+0.1** |
| | 0.2nm,0.4s,baz=82,slow=1.5,SNR=3.5 | | | | | | | | |

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*IDC **19** 15:45:53.3±8.6, 8.34S×116.88E, h0km, mb4.2/3, mbtmp4.2/4, ML3.7/1, Error ellipse: s-maj=146.7km s-min=31.8km az=102.0*
*NEIC **19** 15:45:54.2±1.3, 8.34S±0.07×116.83E±0.06, h10km±2km, mb4.2/8, Error ellipse: s-maj=15.0km s-min=6.5km az=321.0*
**ISC 19 15:45:56.9±0.9, 8.38S±0.08×116.84E±0.09, h35km, n24, σ0§83/25, mb4.1/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **268** | Pn | | Pn | Pn | **15 46 36.4** | **-0.8** |
| **KAPI** | **Kappang** | **4.42** | **41** | | | | Pn | **15 47 00.2** | **-1.2** |
| **KAPI** | **Kappang** | **4.42** | **41** | Pn | | | Pn | **15 47 01.7** | **+0.2** |
| | 4.0nm,0.3s,baz=184,slow=16,SNR=1.6 | | | | | | | | |
| KAPI | | | | Sn | | | Sn | **15 47 51.5** | **-0.2** |
| | 10nm,0.3s,baz=252,slow=20,SNR=6.6 | | | | | | | | |
| | 9.3nm,0.4s | | | | | | | | |
| **MMRI** | **Maumere** | **5.35** | **93** | Pn | | | Pn | **15 47 13.1** | **-1.1** |
| **SOEI** | **Soe** | **7.46** | **101** | Pn | | | Pn | **15 47 42.4** | **-1.0** |
| **MBWA** | **Marble Bar** | **13.01** | **168** | | | | Pn | **15 48 58.9** | **-0.5** |
| **KNRA** | **Kununurra** | **13.73** | **123** | Pn | | | Pn | **15 49 08.7** | **-0.5** |
| **GIRL** | **Giralia** | **14.40** | **190** | Pn | | | Pn | **15 49 17.7** | **-0.6** |
| **MTN** | **Manton Dam** | **14.73** | **109** | Pn | | | Pn | **15 49 22.0** | **-0.8** |
| **WB0** | **Warramunga Arr** | **20.43** | **126** | P | | | P | **15 50 31.5** | **+0.3** |
| **WRA** | **Warramunga Arr** | **20.47** | **126** | P | | | P | **15 50 32.7** | **+0.9** |
| | 4.8nm,0.4s,baz=300,slow=12,SNR=82 | | | | | | | | |
| | 4.8nm,0.4s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.48** | **126** | P | | | P | **15 50 31.7** | **-0.1** |
| WRAB | | | | IAmb | | | IAmb | 15 50 33.5 | |
| | comp=Z,7.7nm,0.8s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.48** | **126** | P | | | P | **15 50 32.3** | **+0.4** |
| WB2 | | | | IAmb | | | IAmb | 15 50 33.4 | |
| | comp=Z,7.5nm,0.5s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.64** | **126** | P | | | P | **15 50 34.1** | **+0.5** |
| **AS31** | **Alice Springs** | **22.33** | **135** | P | | | P | **15 50 52.2** | **+0.5** |
| **ASAR** | **Alice Springs** | **22.33** | **135** | P | | | P | **15 50 52.6** | **+0.9** |
| **ASAR** | **Alice Springs** | **22.33** | **135** | P | | | P | **15 50 52.9** | **+1.2** |
| | comp=Z,4.7nm,0.5s,baz=309,slow=9.4,SNR=70 | | | | | | | | |
| | comp=Z,4.7nm,0.5s | | | | | | | | |
| **FORT** | **Forrest** | **24.63** | **156** | P | | | P | **15 51 15.6** | **+1.4** |
| FORT | | | | IAmb | | | IAmb | 15 51 18.0 | |
| | comp=Z,4.1nm,0.7s | | | | | | | | |
| **COEN** | **Coen** | **26.41** | **104** | P | | | P | **15 51 31.1** | **+0.5** |
| COEN | | | | IAmb | | | IAmb | 15 51 33.1 | |
| | comp=Z,4.6nm,1.0s | | | | | | | | |
| **BBOO** | **Buckleboo** | **30.14** | **146** | P | | | P | **15 52 04.4** | **+0.9** |
| **STKA** | **Stephens Creek** | **32.81** | **139** | P | | | P | **15 52 27.6** | **+0.5** |
| **STKA** | **Stephens Creek** | **32.81** | **139** | P | | | P | **15 52 28.3** | **+1.2** |
| | comp=Z,2.6nm,0.5s,baz=304,slow=10,SNR=8.8 | | | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **49.55** | **112** | P | | | P | **15 54 44.7** | **-0.1** |
| **JMM** | **Marumori** | **51.16** | **24** | P | | | P | **15 54 56.8** | **+0.3** |

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*IDC **19** 15:45:59.0±0.5, 8.26S×116.63E, h0km, mb4.4/20, mbtmp4.4/21, ML3.8/1, Error ellipse: s-maj=20.3km s-min=11.7km az=76.0*
*DJA **19** 15:45:58.3±0.2, 8.3°S±3.1×11.7°E±1.4°, h10km, M5.1/15, mb5.2/4, MLv5.0/15*
*NEIC **19** 15:46:00.2±1.5, 8.26S±0.07×116.66E±0.06, h10km±1km, mb4.9/20, Error ellipse: s-maj=12.6km s-min=9.8km az=342.0*
**ISC 19 15:45:59.8±0.4, 8.32S±0.05×116.89E±0.03, h10km, n89, σ1§91/87, mb4.6/28, 3C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **1.01** | **120** | P | | | **Pg** | **15 46 15.5** | **-3.8** |
| PLAI | | | | S | | | **Sb** | **15 46 30.7** | **-2.1** |
| **SRBI** | **Singaraja** | **1.68** | **278** | P | | | **Pb** | **15 46 30.3** | **-0.5** |
| SRBI | | | | S | | | **Sn** | **15 46 51.2** | **+0.4** |
| **DNP** | **Denpasar** | **1.70** | **258** | P | | | **Pn** | **15 46 30.1** | **+0.5** |
| DNP | | | | S | | | **Sb** | **15 46 53.5** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.71** | **267** | Pn | | | Pn | **15 46 41.2** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.71** | **267** | P | | | Pn | **15 46 42.6** | **-0.9** |
| **WBSI** | **Waikabubak, Su** | **2.80** | **118** | P | | | Pn | **15 46 41.4** | **-3.3** |
| **BASI** | **Baing, Sumba** | **4.10** | **118** | P | | | Pn | **15 47 00.7** | **-1.9** |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **59** | P | | | Pn | **15 47 00.1** | **-3.5** |
| **KAPI** | **Kappang** | **4.34** | **41** | Pn | | | Pn | **15 47 07.4** | **+1.5** |
| **KAPI** | **Kappang** | **4.34** | **41** | Pn | | | Pb | 15 47 08.7 | -7.6 |
| | 5.2nm,0.3s,baz=188,slow=7.1,SNR=7.2 | | | | | | | | |
| KAPI | | | | Sn | | | **Sn** | **15 47 58.3** | **+1.7** |
| | 17nm,0.3s,baz=216,slow=24,SNR=6.1 | | | | | | | | |
| KAPI | | | | Lg | | | Lg | 15 48 16.3 | |
| | 11nm,0.3s,baz=225,slow=20,SNR=2.0 | | | | | | | | |
| | 19nm,0.3s | | | | | | | | |
| **GRJI** | **Gresik** | **4.59** | **287** | P | | | Pn | **15 47 09.3** | **0.0** |
| **EDFI** | **Ende, Flores** | **4.77** | **96** | P | | | Pn | **15 47 09.6** | **-2.2** |
| **BWJI** | **Bawean** | **4.86** | **300** | P | | | Pn | **15 47 12.0** | **-1.1** |
| **BNSI** | **Bone** | **5.03** | **40** | P | | | Pn | **15 47 12.3** | **-3.1** |
| **PWJI** | **Pagerwojo** | **5.04** | **273** | P | | | Pn | **15 47 15.7** | **+0.1** |
| | 168nm,0.6s,1.3nm | | | | | | | | |
| **MMRI** | **Maumere** | **5.30** | **94** | P | | | Pb | 15 47 24.3 | -8.3 |
| **MMRI** | **Maumere** | **5.30** | **94** | Pn | | | Pn | 15 47 22.3 | +3.3 |
| **MMRI** | **Maumere** | **5.30** | **94** | P | | | Pn | **15 47 16.0** | **-3.1** |
| | 511nm,1.1s,1.9nm | | | | | | | | |
| **UGM** | **Wanagama** | **6.32** | **273** | P | | | Pn | **15 47 34.9** | **+1.8** |
| **UGM** | **Wanagama** | **6.32** | **273** | Pn | | | Pn | **15 47 29.2** | **-4.0** |
| **SOEI** | **Soe** | **7.42** | **102** | Pn | | | Pn | **15 47 50.6** | **+2.2** |
| **BBJI** | **Bungbulang** | **9.19** | **275** | P | | | Pn | **15 48 15.2** | **+2.5** |
| **SBUM** | **Sibu** | **11.67** | **336** | Pn | | | Pn | **15 48 43.8** | **-2.6** |
| **MBWA** | **Marble Bar** | **13.06** | **168** | P | | | Pn | **15 49 08.4** | **+2.9** |
| **MBWA** | **Marble Bar** | **13.06** | **168** | Pn | | | Pn | **15 49 06.4** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **13.48** | **168** | P | | | Pn | **15 49 13.2** | **+1.9** |
| **PSA00** | **Pilbara Seismi** | **13.48** | **168** | Pn | | | Pn | **15 49 11.9** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **13.48** | **168** | Pn | | | Pn | **15 49 11.8** | **+0.5** |
| **KNRA** | **Kununurra** | **13.72** | **123** | Pn | | | P | 15 49 16.9 | -6.3 |
| **GIRL** | **Giralia** | **14.47** | **190** | P | | | Pn | **15 49 24.8** | **0.0** |
| **GIRL** | **Giralia** | **14.47** | **190** | Pn | | | Pn | **15 49 25.0** | **+0.2** |
| **MTN** | **Manton Dam** | **14.70** | **109** | Pn | | | P | **15 49 30.1** | **-4.2** |
| **FAKI** | **Fak Fak** | **16.19** | **72** | P | | | P | **15 49 51.4** | **+0.6** |
| **FAKI** | **Fak Fak** | **16.19** | **72** | Pn | | | P | **15 49 49.6** | **-1.2** |
| **COCO** | **West Island** | **20.11** | **257** | P | | | P | **15 50 30.5** | **-3.4** |
| COCO | | | | IAmb | | | IAmb | 15 50 31.4 | |
| | comp=Z,118nm,1.1s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.42** | **126** | P | | | Pn | 15 50 39.4 | 0.0 |
| WB0 | | | | IAmb | | | IAmb | 15 50 41.2 | |
| | comp=Z,34nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.46** | **126** | P | | | Pn | 15 50 40.9 | +0.9 |
| | comp=Z,20nm,0.8s,baz=300,slow=12,SNR=40 | | | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.47** | **126** | P | | | Pn | 15 50 39.5 | -0.5 |
| WRAB | | | | IAmb | | | IAmb | 15 50 41.9 | |
| | comp=Z,26nm,0.9s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.47** | **126** | P | | | Pn | 15 50 39.8 | -0.3 |
| WB2 | | | | IAmb | | | IAmb | 15 50 53.6 | |
| | comp=Z,90nm,1.5s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.64** | **126** | P | | | Pn | 15 50 41.9 | -0.1 |
| WR0 | | | | IAmb | | | IAmb | 15 50 43.8 | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.33** | **135** | P | | | P | **15 51 01.2** | **+3.3** |
| | comp=Z,15nm,0.8s,baz=308,slow=9.0,SNR=27 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **15 54 53.2** | **-0.4** |
| | comp=Z,1.5nm,0.7s,baz=310,slow=2.4,SNR=3.1 | | | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.49** | **179** | P | | | P | **15 51 20.9** | **+1.6** |
| | comp=Z,4.9nm,0.7s,baz=106,slow=16,SNR=2.5 | | | | | | | | |
| NWAO | | | | S | | | **S** | **15 55 40.0** | **+0.3** |
| | comp=Z,6.9nm,0.7s,baz=309,slow=10,SNR=1.9 | | | | | | | | |
| | comp=Z,4.9nm,0.7s | | | | | | | | |
| **BBOO** | **Buckleboo** | **30.15** | **147** | P | | | P | **15 52 11.8** | **+1.7** |
| BBOO | | | | IAmb | | | IAmb | 15 52 13.7 | |
| | comp=Z,100nm,1.9s | | | | | | | | |
| **CTAO** | **Charters Tower** | **30.71** | **116** | P | | | P | **15 52 17.9** | **+2.6** |
| CTAO | | | | IAmb | | | IAmb | 15 52 31.8 | |
| | comp=Z,24nm,1.5s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.96** | **326** | P | | | P | **15 52 26.9** | **+0.7** |
| | comp=Z,1.0nm,0.5s,baz=156,slow=7.1,SNR=6.9 | | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **32.82** | **139** | P | | | P | **15 52 35.1** | **+1.5** |
| STKA | | | | IAmb | | | IAmb | 15 52 44.6 | |
| | comp=Z,1.5nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **32.82** | **139** | P | | | P | **15 52 36.1** | **+2.5** |
| | comp=Z,6.1nm,0.7s,baz=316,slow=9.4,SNR=10.0 | | | | | | | | |
| | comp=Z,6.1nm,0.7s | | | | | | | | |
| **PZH** | **PanZhiHua** | **37.61** | **337** | P | | | P | **15 53 12.5** | **-2.5** |
| PZH | | | | pmax | | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **NJ2** | **Nanjing** | **40.18** | **3** | *e*P | | | P | **15 53 34.5** | **-1.9** |
| NJ2 | | | | pmax | | | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| **HNS** | **HongShan** | **45.52** | **358** | *e*P | | | P | **15 54 21.8** | **+2.2** |
| **KSRS** | **Korea Array** | **46.69** | **12** | P | | | P | **15 54 29.8** | **+1.0** |
| | comp=Z,2.9nm,0.9s,baz=194,slow=8.1,SNR=16 | | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **47.32** | **110** | P | | | P | **15 54 36.5** | **+2.5** |
| **MJAR** | **Matsushiro Arr** | **48.91** | **23** | P | | | P | **15 54 46.6** | **+0.5** |
| | comp=Z,2.8nm,1.0s,baz=191,slow=8.9,SNR=6.6 | | | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **48.91** | **23** | P | | | P | **15 54 45.5** | **-0.6** |
| MJB9 | | | | IAmb | | | IAmb | 15 54 52.2 | |
| | comp=Z,29nm,1.6s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **49.52** | **112** | P | | | P | **15 54 53.5** | **+2.4** |
| | comp=Z,12nm,0.9s,baz=308,slow=6.0,SNR=6.7 | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **GTA** | **Gaotai** | **50.06** | **343** | *e*P | | | P | **15 54 57.3** | **+2.3** |
| GTA | | | | pmax | | | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.03** | **13** | P | | | P | **15 55 24.8** | **+0.5** |
| | comp=Z,2.7nm,0.7s,baz=186,slow=8.5,SNR=6.3 | | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **56.67** | **352** | P | | | P | **15 55 44.3** | **+0.8** |
| | comp=Z,4.6nm,0.7s,baz=170,slow=8.6,SNR=17 | | | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **57.14** | **22** | P | | | P | **15 55 48.1** | **+1.4** |
| | comp=Z,6.0nm,0.7s,baz=222,slow=9.4,SNR=7.0 | | | | | | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.14** | **22** | P | | | P | **15 55 47.6** | **+0.9** |
| **WHZ** | **Wether Hill Ro** | **57.50** | **140** | P | | | P | **15 55 51.5** | **+2.1** |
| **WKZ** | **Wanaka** | **57.77** | **138** | P | | | P | **15 55 52.9** | **+1.7** |
| **WMQ** | **Urumqi** | **58.25** | **335** | *e*P | | | P | **15 55 55.4** | **+0.8** |
| WMQ | | | | pmax | | | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| **DSZ** | **Denniston Nort** | **58.60** | **134** | P | | | P | **15 55 58.6** | **+1.5** |
| **RPZ** | **Rata Peaks** | **58.73** | **137** | P | | | P | **15 55 59.2** | **+1.3** |
| **HEH** | **HeiHe** | **59.04** | **8** | *e*P | | | P | **15 55 57.5** | **-2.4** |
| **KSH** | **Kashi** | **60.83** | **325** | P | | | P | **15 56 08.8** | **-3.8** |
| KSH | | | | pP | | | pP | 15 56 13.5 | -2.2 |
| KSH | | | | pmax | | | pmax | | |
| | comp=Z,9.0nm,1.7s | | | | | | | | |
| **RTZ** | **Ruatahuna** | **61.58** | **129** | P | | | P | **15 56 19.0** | **+1.2** |
| **MKAR** | **Makanchi Array** | **62.92** | **334** | P | | | P | **15 56 26.1** | **-0.2** |
| | comp=Z,2.0nm,0.6s,baz=143,slow=7.6,SNR=12 | | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **63.06** | **334** | P | | | P | **15 56 25.9** | **-1.4** |
| MAKZ | | | | IAmb | | | IAmb | 15 57 59.6 | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.45** | **335** | P | | | P | **15 56 54.8** | **-0.8** |
| | comp=Z,1.0nm,0.8s,baz=144,slow=5.1,SNR=9.2 | | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.68** | **340** | P | | | P | **15 56 56.9** | **-0.1** |
| | comp=Z,2.2nm,0.3s,baz=145,slow=5.3,SNR=1.1 | | | | | | | | |
| | comp=Z,2.2nm,0.3s | | | | | | | | |
| **MAW** | **Mawson** | **69.17** | **199** | P | | | P | **15 57 07.2** | **+0.9** |
| | comp=Z,5.7nm,0.9s,baz=53,slow=9.3,SNR=8.5 | | | | | | | | |
| | comp=Z,5.7nm,0.9s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **72.73** | **333** | P | | | P | **15 57 27.3** | **-0.7** |
| | comp=Z,1.2nm,0.7s,baz=142,slow=7.4,SNR=6.9 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **75.81** | **325** | P | | | P | **15 57 44.8** | **-1.3** |
| **AKTO** | **Aktyubinsk** | **77.49** | **326** | P | | | P | **15 57 54.2** | **-1.3** |
| | comp=Z,1.4nm,0.6s,baz=95,slow=5.8,SNR=4.6 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.67** | **180** | P | | | P | **15 58 19.6** | **+1.4** |
| QSPA | | | | IAmb | | | IAmb | 15 58 27.9 | |
| | comp=Z,9.2nm,1.1s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.67** | **180** | P | | | P | **15 58 19.7** | **+1.4** |
| | comp=Z,2.3nm,0.8s,baz=283,slow=1.1,SNR=7.0 | | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| **BOSA** | **Boshof** | **87.50** | **242** | P | | | P | **15 58 47.9** | **-0.6** |
| | comp=Z,2.0nm,0.7s,baz=151,slow=2.0,SNR=5.9 | | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.44** | **196** | ⇑P | | | P | 15 58 51.6 | -5.2 |
| | comp=Z,198nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **91.09** | **196** | P | | | P | **15 59 05.0** | **+0.6** |
| SNAA | | | | IAmb | | | IAmb | 16 01 23.6 | |
| | comp=Z,16nm,1.6s | | | | | | | | |
| **SNAA** | **Sanae** | **91.09** | **196** | ⇑P | | | P | **15 59 05.9** | **+1.5** |
| | comp=Z,69nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **91.09** | **196** | P | | | P | **15 59 04.9** | **+0.5** |
| | comp=Z,3.7nm,0.7s,baz=177,slow=5.4,SNR=14 | | | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.14** | **195** | ⇑P | | | P | **15 59 15.6** | **+1.8** |
| | comp=Z,2.4nm,0.6s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.29** | **281** | PKP | | | **PKiKP** | **16 04 43.8** | **-0.9** |
| | comp=Z,1.1nm,0.5s,baz=45,slow=2.4,SNR=11 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.18** | **50** | PKP | | | **PKiKP** | **16 04 55.4** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=217,slow=2.8,SNR=4.3 | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.11** | **189** | PKPbc | | | **PKiKP** | **16 05 39.0** | **-3.3** |
| | comp=Z,12nm,0.8s,baz=164,slow=3.4,SNR=23 | | | | | | | | |
| **BDFB** | **Brasilia** | **151.89** | **212** | PKP | | | **PKPdf** | **16 05 49.4** | **-0.4** |
| | comp=Z,1.3nm,0.6s,baz=85,slow=11,SNR=1.9 | | | | | | | | |
| BDFB | | | | PKPbc | | | **pPKPbc** | **16 05 57.0** | **-2.6** |
| | comp=Z,3.1nm,0.6s,baz=71,slow=3.0,SNR=6.8 | | | | | | | | |
| **LPAZ** | **La Paz** | **155.05** | **169** | PKP | | | **PKP

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,1.0nm,0.7s | | | | | | |
| STKA | Stephens Creek | 32.82 | 139 | P | P | 15 53 58.8 | +0.1 |
| STKA | Stephens Creek | 32.82 | 139 | P | P | 15 53 58.8 | +0.1 |
| | comp=Z,6.9nm,0.7s,baz=306,slow=9.8,SNR=4.9 | | | | | | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| KSRS | Korea Array | 46.68 | 12 | P | P | 15 55 55.7 | +1.9 |
| | comp=Z,0.5nm,0.6s,baz=191,slow=8.3,SNR=1.3 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| MJAR | Matsushiro Arr | 48.90 | 23 | P | P | 15 56 10.9 | -0.3 |
| | comp=Z,1.8nm,0.9s,baz=198,slow=8.5,SNR=2.0 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 54.02 | 13 | P | P | 15 56 50.0 | +0.7 |
| USRK | Ussuriysk Ar. | 54.02 | 13 | P | P | 15 56 51.7 | +2.4 |
| | comp=Z,2.3nm,0.6s,baz=192,slow=6.4,SNR=2.8 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| SONM | Songino Array | 56.67 | 352 | P | P | 15 57 09.6 | +1.1 |
| | comp=Z,1.7nm,0.7s,baz=168,slow=7.8,SNR=3.0 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| ASAJ | Asahikawa | 57.14 | 22 | P | P | 15 57 12.4 | +0.6 |
| | comp=Z,4.8nm,0.8s,baz=242,slow=24,SNR=1.9 | | | | | | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| MK31 | Makanchi Array | 62.91 | 334 | P | P | 15 57 50.9 | -0.6 |
| MK31 | | | | IAmb | IAmb | 15 58 02.5 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| MKAR | Makanchi Array | 62.91 | 334 | P | P | 15 57 51.9 | +0.5 |
| | comp=Z,1.9nm,0.7s,baz=158,slow=6.7,SNR=4.0 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| MAKZ | Makanchi | 63.06 | 334 | P | P | 15 57 51.6 | -0.8 |
| KURBB | Kurchatov Arra | 67.44 | 335 | P | P | 15 58 21.2 | +0.5 |
| | comp=Z,0.7nm,0.7s,baz=146,slow=6.0,SNR=2.9 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 67.67 | 340 | P | P | 15 58 21.2 | -0.9 |
| | comp=Z,1.2nm,0.5s,baz=143,slow=4.9,SNR=1.8 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| MAW | Mawson | 69.18 | 199 | P | P | 15 58 32.2 | +0.9 |
| | comp=Z,4.8nm,0.9s,baz=59,slow=8.0,SNR=4.5 | | | | | | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| PETK | Petropavlovsk- | 70.30 | 25 | P | P | 15 58 39.0 | +0.6 |
| | comp=Z,2.9nm,0.9s,baz=193,slow=5.9,SNR=1.7 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| BVAR | Borovoye Array | 72.72 | 333 | P | P | 15 58 52.8 | -0.3 |
| | comp=Z,1.6nm,0.9s,baz=117,slow=8.6,SNR=2.3 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| ABKAR | Akbulak array | 75.81 | 325 | P | P | 15 59 09.2 | -2.0 |
| AKTO | Aktyubinsk | 77.48 | 326 | P | P | 15 59 22.6 | +2.0 |
| | comp=Z,1.9nm,0.8s,baz=112,slow=5.4,SNR=2.6 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| KMBO | Kilima Mbogo | 79.59 | 270 | P | P | 15 59 32.4 | -0.9 |
| | comp=Z,0.9nm,0.6s,baz=49,slow=5.2,SNR=3.7 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 81.68 | 180 | P | P | 15 59 42.6 | -0.8 |
| QSPA | | | | IAmb | IAmb | 15 59 53.2 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 81.68 | 180 | P | P | 15 59 43.7 | +0.4 |
| | comp=Z,3.7nm,1.1s,baz=90,slow=1.0,SNR=2.8 | | | | | | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| BOSA | Boshof | 87.50 | 242 | P | P | 16 00 13.7 | +0.1 |
| | comp=Z,3.1nm,0.9s,baz=70,slow=3.2,SNR=2.5 | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| TROLL | Troll, Antarti | 89.45 | 196 | ⇑Pdiff | P | 16 00 21.8 | -0.2 |
| | comp=Z,114nm,0.7s | | | | | | |
| SNAA | Sanae | 91.09 | 196 | ⇑Pdiff | P | 16 00 30.5 | +1.0 |
| | comp=Z,62nm,0.8s | | | | | | |
| SNAA | Sanae | 91.09 | 196 | P | P | 16 00 30.6 | +1.1 |
| | comp=Z,3.0nm,1.0s,baz=47,slow=4.6,SNR=3.8 | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| TORD | Torodi Ar. Bea | 116.29 | 281 | PKP | PKPdf | 16 06 08.0 | -1.7 |
| | comp=Z,0.8nm,0.7s,baz=58,slow=2.0,SNR=4.0 | | | | | | |
| NVAR | Mina Array Bea | 122.18 | 50 | PKP | PKPdf | 16 06 21.0 | +0.3 |
| | comp=Z,0.3nm,0.7s,baz=246,slow=3.8,SNR=2.4 | | | | | | |
| CPUP | Villa Florida | 145.11 | 189 | PKPbc | PKPdf | 16 07 03.5 | 0.0 |
| | comp=Z,13nm,0.9s,baz=152,slow=3.4,SNR=10.0 | | | | | | |
| BDFB | Brasilia | 151.90 | 212 | PKPbc | PKPbc | 16 07 21.3 | -0.1 |
| | comp=Z,2.8nm,0.7s,baz=104,slow=3.8,SNR=3.3 | | | | | | |
| LPAZ | La Paz | 155.06 | 168 | PKPab | PKPab | 16 07 44.0 | -0.2 |
| | comp=Z,1.8nm,0.7s,baz=193,slow=8.9,SNR=3.9 | | | | | | |

*IDC **19** 15:51:38.7±1.2,8°.36S×116°.87E, h0km, mb3.7/6, mbtmp3.8/7, ML3.9/1, Error ellipse: s-maj=34.6km s-min=20.8km az=62.0*
*NEIC **19** 15:51:40.0±0.8,8°.45S±0°.07×116°.87E±0°.06, h10km±2km, mb4.4/5, Error ellipse: s-maj=12.9km s-min=10.0km az=201.0*
*DJA **19** 15:51:40.7±0.4,9°.S±5°×11°.7E±°, h21km±5km, M4.5/12, mb4.7/3, MLv4.4/12*

**ISC 19 15:51:42.6±0.6, 8°.49S±0°.06×116°.91E±0°.04, h35km, n33, σ0°.94/35, mb3.8/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.24 | 186 | P | Pn | 15 51 48.4 | -1.5 |
| PLAI | Plampang | 0.92 | 111 | P | Pn | 15 51 59.2 | +0.2 |
| PLAI | | | | S | Sn | 15 52 10.5 | -0.6 |
| DNP | Denpasar | 1.69 | 264 | P | Pn | 15 52 09.3 | -0.3 |
| DNP | | | | S | Sn | 15 52 30.2 | +0.1 |
| SRBI | Singaraja | 1.73 | 283 | P | Pn | 15 52 08.8 | -1.3 |
| SRBI | | | | S | Sn | 15 52 31.3 | +0.3 |
| WBSI | Waikabubak, Su | 2.70 | 115 | P | Pn | 15 52 21.7 | -1.9 |
| JAGI | Jajag, Banyuwa | 2.73 | 270 | | Pn | 15 52 22.9 | -1.0 |
| JAGI | Jajag, Banyuwa | 2.73 | 270 | P | Pn | 15 52 22.7 | -1.2 |
| BSSI | Bau Bau, Buton | 4.25 | 57 | P | Pn | 15 52 43.9 | -1.0 |
| KAPI | Kappang | 4.46 | 39 | Pn | Pn | 15 52 48.0 | +0.2 |
| KAPI | Kappang | 4.46 | 39 | Pn | Pn | 15 52 48.0 | +0.2 |
| | 6.4nm,0.3s,baz=213,slow=5.3,SNR=2.0 | | | | | | |
| KAPI | | | | Sn | Sn | 15 53 38.2 | -0.4 |
| | 23nm,0.3s,baz=48,slow=22,SNR=12 | | | | | | |
| | 16nm,0.3s | | | | | | |
| GRJI | Gresik | 4.66 | 289 | P | Pn | 15 52 48.8 | -1.7 |
| EDFI | Ende, Flores | 4.74 | 93 | P | Pn | 15 52 52.2 | +0.6 |
| BWJI | Bawean | 4.97 | 302 | P | Pn | 15 52 55.1 | +0.3 |
| PWJI | Pagerwojo | 5.07 | 275 | P | Pn | 15 52 55.6 | -0.6 |
| | 57nm,0.5s,0.5nm | | | | | | |
| BNSI | Bone | 5.16 | 38 | P | Pn | 15 52 57.2 | -0.2 |
| MMRI | Maumere | 5.27 | 92 | Pn | Pn | 15 52 59.0 | 0.0 |
| UGM | Wanagama | 6.35 | 275 | Pn | Pn | 15 53 12.7 | -1.1 |
| LUWI | Luwuk | 9.43 | 39 | Pn | Pn | 15 53 55.6 | -0.4 |
| MBWA | Marble Bar | 12.88 | 168 | Pn | Pn | 15 54 43.7 | +0.4 |
| GIRL | Giralia | 14.30 | 190 | Pn | Pn | 15 55 02.5 | -0.2 |
| MTN | Manton Dam | 14.63 | 108 | Pn | Pn | 15 55 06.2 | -1.0 |
| FAKI | Fak Fak | 16.23 | 71 | Pn | Pn | 15 55 26.7 | -1.4 |
| FAKI | | | | IAmb | IAmb | 15 55 30.6 | |
| | comp=Z,69nm,1.3s | | | | | | |
| WB0 | Warramunga Arr | 20.30 | 125 | P | P | 15 56 16.7 | +1.0 |
| WB0 | | | | IAmb | IAmb | 15 56 24.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 20.35 | 126 | P | Pn | 15 56 17.9 | -0.4 |
| | comp=Z,2.1nm,0.6s,baz=300,slow=12,SNR=6.7 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| WR0 | Warramunga Arr | 20.52 | 126 | Pn | Pn | 15 56 20.1 | -0.2 |
| WR0 | | | | IAmb | IAmb | 15 56 25.5 | |
| | comp=Z,14nm,1.1s | | | | | | |
| AS31 | Alice Springs | 22.19 | 135 | P | P | 15 56 36.6 | +0.5 |
| ASAR | Alice Springs | 22.19 | 135 | P | P | 15 56 37.9 | +1.9 |
| | comp=Z,3.7nm,0.9s,baz=310,slow=8.8,SNR=6.3 | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 32.12 | 327 | P | P | 15 58 06.5 | -0.4 |
| | comp=Z,1.0nm,0.7s,baz=147,slow=7.2,SNR=5.0 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| TOO | Toolangi | 38.81 | 143 | P | P | 15 59 05.4 | +1.2 |
| KSRS | Korea Array | 46.86 | 12 | P | P | 16 00 09.0 | -0.2 |
| | comp=Z,0.8nm,0.8s,baz=201,slow=8.6,SNR=4.4 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| SONM | Songino Array | 56.85 | 352 | P | P | 16 01 24.5 | +0.7 |
| | comp=Z,0.5nm,0.6s,baz=171,slow=10,SNR=2.6 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 63.08 | 334 | P | P | 16 02 07.0 | +0.5 |
| | comp=Z,0.3nm,0.5s,baz=140,slow=7.5,SNR=2.8 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| CPUP | Villa Florida | 144.94 | 189 | PKPbc | PKPdf | 16 11 17.6 | +0.7 |
| | comp=Z,4.5nm,0.9s,baz=162,slow=3.2,SNR=6.9 | | | | | | |

*IDC **19** 15:52:40.6±5.1, 17°.99S×178°.17W, h567km±59km, mb3.2/8, mbtmp4.1/9, Error ellipse: s-maj=28.0km s-min=24.9km az=137.0*
*NEIC **19** 15:52:40.0±1.7, 18°.0S±0°.1×178°.1W±0°.1, h561km±9km, mb4.4/23, Error ellipse: s-maj=21.5km s-min=14.2km az=175.0*

**ISC 19 15:52:42.2±0.6, 18°.0S±0°.1×178°.22W±0°.10, h590km, n39, σ0°.77/37, mb4.3/20, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.56 | 273 | P | P | 15 54 01.6 | -2.5 |
| AFI | Afiamalu | 7.39 | 58 | P | P | 15 54 27.8 | -7.7 |
| NIUE | Niue | 7.95 | 99 | P | P | 15 54 34.8 | -5.8 |
| DZM | Mont Dzumac | 14.98 | 252 | P | P | 15 55 51.0 | +0.3 |
| DZM | | | | IAmb | IAmb | 15 56 29.9 | |
| | comp=Z,16nm,1.1s | | | | | | |
| DZM | Mont Dzumac | 14.98 | 252 | P | P | 15 55 51.0 | +0.3 |
| | comp=Z,3.7nm,0.6s,baz=113,slow=17,SNR=5.8 | | | | | | |
| KOUNC | Koumac, New Ca | 16.72 | 258 | P | P | 15 56 06.6 | 0.0 |
| PPTF | Pamatai, Papee | 27.28 | 94 | P | P | 15 57 39.2 | -2.0 |
| EIDS | Eidsvold | 29.42 | 250 | P | P | 15 57 59.5 | 0.0 |
| EIDS | | | | IAmb | IAmb | 15 58 12.9 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| ARMA | Armidale | 30.07 | 240 | P | P | 15 58 05.7 | +0.5 |
| CTAO | Charters Tower | 33.62 | 261 | P | P | 15 58 35.3 | 0.0 |
| CTAO | | | | IAmb | IAmb | 15 58 48.3 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| COEN | Coen | 37.28 | 270 | P | P | 15 59 06.4 | +0.8 |
| COEN | | | | IAmb | IAmb | 15 59 07.8 | |
| | comp=Z,18nm,1.1s | | | | | | |
| STKA | Stephens Creek | 38.76 | 241 | P | P | 15 59 17.5 | +0.1 |
| STKA | Stephens Creek | 38.76 | 241 | P | P | 15 59 17.6 | +0.2 |
| | comp=Z,3.2nm,0.6s,baz=32,slow=8.3,SNR=4.7 | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| BBOO | Buckleboo | 43.54 | 241 | P | P | 15 59 55.3 | +0.2 |
| BBOO | | | | IAmb | IAmb | 15 59 55.7 | |
| | comp=Z,20nm,1.4s | | | | | | |
| WB0 | Warramunga Arr | 44.77 | 260 | P | P | 16 00 04.5 | -0.2 |
| WB0 | | | | IAmb | IAmb | 16 00 22.5 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| WB2 | Warramunga Arr | 44.79 | 260 | P | P | 16 00 04.5 | -0.4 |
| WB2 | | | | IAmb | IAmb | 16 00 25.7 | |
| | comp=Z,12nm,1.3s | | | | | | |
| WRA | Warramunga Arr | 44.80 | 260 | P | P | 16 00 04.6 | -0.4 |
| | comp=Z,2.2nm,0.6s,baz=96,slow=7.0,SNR=16 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| AS31 | Alice Springs | 44.95 | 254 | P | P | 16 00 06.4 | +0.3 |
| AS31 | | | | IAmb | IAmb | 16 00 07.4 | |
| | comp=Z,5.0nm,0.4s | | | | | | |
| ASAR | Alice Springs | 44.95 | 254 | P | P | 16 00 06.2 | +0.1 |
| ASAR | Alice Springs | 44.95 | 254 | P | P | 16 00 06.5 | +0.3 |
| | comp=Z,13nm,0.5s,baz=88,slow=9.2,SNR=92 | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| MTN | Manton Dam | 48.98 | 268 | P | P | 16 00 36.6 | +0.2 |
| MTN | | | | IAmb | IAmb | 16 00 42.8 | |
| | comp=Z,17nm,1.2s | | | | | | |
| FORT | Forrest | 50.15 | 245 | P | P | 16 00 44.4 | -0.3 |
| FORT | | | | IAmb | IAmb | 16 01 08.1 | |
| | comp=Z,20nm,1.1s | | | | | | |
| KNRA | Kununurra | 50.66 | 264 | P | P | 16 00 48.8 | +0.1 |
| KNRA | | | | IAmb | IAmb | 16 01 05.1 | |
| | comp=Z,18nm,1.5s | | | | | | |
| KAPI | Kappang | 61.88 | 274 | P | P | 16 02 05.3 | -0.3 |
| KAPI | | | | IAmb | IAmb | 16 02 12.1 | |
| | comp=Z,36nm,1.4s | | | | | | |
| MJAR | Matsushiro Arr | 68.05 | 323 | P | P | 16 02 44.2 | +0.2 |
| | comp=Z,0.9nm,0.7s,baz=126,slow=5.7,SNR=4.2 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 72.10 | 180 | P | P | 16 03 08.0 | +0.5 |
| QSPA | South Pole Qui | 72.10 | 180 | P | P | 16 03 07.6 | +0.1 |
| | comp=Z,1.6nm,0.7s,baz=206,slow=1.3,SNR=6.9 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| HOPS | Hopland Field | 76.59 | 41 | P | P | 16 03 32.2 | -0.8 |
| Q19K | Cape Douglas, | 79.22 | 13 | P | P | 16 03 47.7 | +1.0 |
| NVAR | Mina Array Bea | 79.33 | 44 | P | P | 16 03 48.6 | +0.6 |
| | comp=Z,0.4nm,0.5s,baz=217,slow=7.2,SNR=4.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| J05D | Fort Rock, OR | 80.25 | 38 | P | P | 16 03 53.4 | +0.8 |
| N18K | Kilae Creek | 80.41 | 11 | P | P | 16 03 52.5 | -0.3 |
| N18K | | | | IAmb | IAmb | 16 04 31.5 | |
| | comp=Z,23nm,1.4s | | | | | | |
| SMAI | San Martin Ant | 81.05 | 159 | P | P | 16 03 57.0 | +0.9 |
| BELA | Belgrano 2 | 82.09 | 173 | P | P | 16 04 00.9 | -0.4 |
| TXAR | Lajitas Array | 85.87 | 58 | P | P | 16 04 22.0 | +1.1 |
| | comp=Z,0.7nm,0.7s,baz=219,slow=6.0,SNR=5.9 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| PDAR | Pinedale Array | 87.26 | 43 | P | P | 16 04 26.0 | -1.3 |
| | comp=Z,0.2nm,0.5s,baz=262,slow=1.8,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| BRTR | Keskin Array B | 144.94 | 315 | PKPbc | PKPab | 16 11 15.2 | 0.0 |
| | comp=Z,0.8nm,0.9s,baz=58,slow=4.1,SNR=2.7 | | | | | | |
| MMAI | Mount Meron Ar | 146.32 | 303 | PKPbc | PKPbc | 16 11 19.2 | +1.0 |
| | comp=Z,0.3nm,0.3s,baz=33,slow=8.6,SNR=1.5 | | | | | | |
| GERES | GERESS Array B | 147.70 | 345 | PKPbc | PKPbc | 16 11 21.2 | -0.2 |
| | comp=Z,0.3nm,0.5s,baz=76,slow=4.1,SNR=1.8 | | | | | | |

*IDC **19** 15:57:03.9±17.0, 18°.18S×178°.16W, h496km±126km, mb3.2/5, mbtmp4.0/6, Error ellipse: s-maj=189.0km s-min=29.7km az=40.0*
*NEIC **19** 15:57:04.4±1.3, 18°.2S±0°.1×178°.0W±0°.1, h524km±9km, mb4.3/12, Error ellipse: s-maj=22.6km s-min=19.2km az=144.0*

**ISC 19 15:57:05.0±0.7, 18°.0S±0°.1×177°.9W±0°.1, h550km, n23, σ1°.64/23, mb4.2/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.88 | 273 | P | P | 15 58 27.0 | +0.9 |
| AFI | Afiamalu | 7.15 | 56 | P | P | 15 58 51.9 | -2.7 |
| NIUE | Niue | 7.63 | 99 | P | P | 15 58 57.1 | -1.9 |
| DZM | Mont Dzumac | 15.27 | 252 | P | P | 16 00 15.0 | -2.3 |
| | 2.8nm,0.8s,baz=102,slow=20,SNR=4.5 | | | | | | |
| URZ | Urewera | 20.66 | 191 | P | P | 16 01 05.6 | -1.2 |
| | 6.3nm,0.9s,baz=195,slow=11,SNR=1.5 | | | | | | |
| | 6.3nm,0.9s | | | | | | |
| RTZ | Ruatahuna | 21.03 | 191 | P | P | 16 01 08.2 | -2.0 |
| RTZ | | | | IAmb | IAmb | 16 01 29.0 | |
| | comp=Z,24nm,1.4s | | | | | | |
| BFZ | Birch Farm | 23.16 | 191 | P | P | 16 01 27.7 | -1.5 |
| PLWZ | Palliser | 24.22 | 193 | P | P | 16 01 36.7 | -2.0 |
| KHZ | Kahutara | 25.41 | 195 | P | P | 16 01 48.1 | -1.1 |
| CTAO | Charters Tower | 33.92 | 261 | P | P | 16 03 01.9 | -1.1 |
| CTAO | | | | IAmb | IAmb | 16 03 18.0 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| JOHN | Johnston Islan | 35.48 | 14 | P | P | 16 03 17.7 | +1.9 |
| COEN | Coen | 37.60 | 270 | P | P | 16 03 32.7 | -0.7 |
| COEN | | | | IAmb | IAmb | 16 04 05.6 | |
| | comp=Z,17nm,1.4s | | | | | | |
| STKA | Stephens Creek | 39.02 | 241 | P | P | 16 03 45.7 | +0.9 |
| | comp=Z,0.7nm,0.3s,baz=102,slow=8.6,SNR=3.9 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| BBOO | Buckleboo | 43.80 | 241 | P | P | 16 04 22.1 | -0.4 |
| BBOO | | | | IAmb | IAmb | 16 04 40.5 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| WB2 | Warramunga Arr | 45.09 | 260 | P | P | 16 04 32.4 | -0.2 |
| WB2 | | | | IAmb | IAmb | 16 04 46.1 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 45.10 | 260 | P | P | 16 04 32.5 | -0.3 |
| | comp=Z,0.7nm,0.6s,baz=96,slow=7.9,SNR=9.6 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| AS31 | Alice Springs | 45.24 | 254 | P | P | 16 04 34.2 | +0.3 |
| ASAR | Alice Springs | 45.24 | 254 | P | P | 16 04 33.7 | -0.1 |
| ASAR | Alice Springs | 45.24 | 254 | P | P | 16 04 34.0 | +0.1 |
| | comp=Z,4.9nm,0.5s,baz=89,slow=8.4,SNR=43 | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| PSA00 | Pilbara Seismi | 58.37 | 255 | P | P | 16 06 08.1 | -0.1 |
| QSPA | South Pole Qui | 72.06 | 180 | P | P | 16 07 34.9 | +1.4 |
| QSPA | | | | IAmb | IAmb | 16 08 07.4 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| QSPA | South Pole Qui | 72.06 | 180 | P | P | 16 07 36.5 | +3.0 |
| | comp=Z,0.7nm,0.7s,baz=18,slow=3.9,SNR=2.0 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| BELA | Belgrano 2 | 82.01 | 173 | P | P | 16 08 29.8 | +2.5 |

*IDC **19** 15:57:45.3±5.6, 17°.74S×178°.01W, h469km±59km, mb3.2/8, mbtmp4.0/9, Error ellipse: s-maj=32.9km s-min=24.6km az=56.0*
*NEIC **19** 15:57:50.5±1.1, 17°.8S±0°.3×178°.0W±0°.2, h529km±21km, mb4.1/6, Error ellipse: s-maj=43.9km s-min=23.6km az=169.0*

**ISC 19 15:57:51.1±0.7, 17°.7S±0°.1×178°.1W±0°.1, h550km, n22, σ1°.58/22, mb3.7/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.66 | 268 | P | P | 15 59 10.3 | -0.3 |
| AFI | Afiamalu | 7.15 | 59 | P | P | 15 59 37.2 | -3.4 |
| DZM | Mont Dzumac | 15.17 | 251 | P | P | 16 01 02.2 | -0.3 |
| DZM | | | | IAmb | IAmb | 16 01 30.5 | |
| | comp=Z,19nm,1.4s | | | | | | |
| DZM | Mont Dzumac | 15.17 | 251 | P | P | 16 00 59.5 | -3.0 |
| | comp=Z,4.2nm,1.0s,baz=94,slow=21,SNR=1.7 | | | | | | |
| URZ | Urewera | 20.94 | 191 | P | P | 16 01 52.6 | -2.8 |
| | comp=Z,23nm,1.2s,baz=202,slow=10.0,SNR=2.3 | | | | | | |
| | comp=Z,23nm,1.2s | | | | | | |
| MRZ | Mangatainoka R | 23.55 | 192 | P | P | 16 02 17.1 | -1.7 |
| AMCZ | Amberley | 26.61 | 195 | P | P | 16 02 45.0 | -0.8 |
| STKA | Stephens Creek | 38.99 | 241 | P | P | 16 04 30.6 | -0.1 |
| | comp=Z,3.0nm,1.0s,baz=78,slow=9.3,SNR=2.4 | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| BBOO | Buckleboo | 43.77 | 241 | P | P | 16 05 08.6 | +0.2 |
| BBOO | | | | IAmb | IAmb | 16 05 52.0 | |
| | comp=Z,30nm,1.5s | | | | | | |
| WRA | Warramunga Arr | 44.96 | 259 | P | P | 16 05 17.9 | +0.2 |
| | comp=Z,0.1nm,0.3s,baz=97,slow=7.1,SNR=1.4 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| AS31 | Alice Springs | 45.13 | 254 | P | P | 16 05 19.6 | +0.5 |
| ASAR | Alice Springs | 45.13 | 254 | P | P | 16 05 19.0 | -0.1 |
| ASAR | Alice Springs | 45.13 | 254 | P | P | 16 05 19.6 | +0.6 |
| | comp=Z,2.2nm,0.5s,baz=89,slow=7.9,SNR=16 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| QSPA | South Pole Qui | 72.38 | 180 | P | P | 16 08 23.2 | +1.7 |
| QSPA | | | | IAmb | IAmb | 16 08 25.3 | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 72.38 | 180 | P | P | 16 08 22.7 | +1.3 |
| | comp=Z,1.2nm,0.5s,baz=256,slow=0.4,SNR=11 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| BELA | Belgrano 2 | 82.36 | 173 | P | P | 16 09 16.1 | +1.0 |
| BELA | | | | IAmb | IAmb | 16 09 17.1 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| ILAR | Eielson Array | 85.59 | 13 | P | P | 16 09 32.1 | +1.1 |
| | comp=Z,0.1nm,0.4s,baz=220,slow=6.0,SNR=1.5 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| TXAR | Lajitas Array | 85.63 | 58 | P | P | 16 09 34.7 | +2.5 |
| | comp=Z,0.4nm,0.8s,baz=212,slow=3.2,SNR=3.4 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| SNAA | Sanae | 90.83 | 179 | P | P | 16 09 56.3 | +0.7 |
| | comp=Z,0.6nm,0.5s,baz=301,slow=9.8,SNR=1.8 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| BRTR | Keskin Array B | 144.82 | 315 | PKP | PKPab | 16 16 27.9 | +0.6 |
| | comp=Z,0.2nm,0.5s,baz=192,slow=34,SNR=1.8 | | | | | | |
| MMAI | Mount Meron Ar | 146.25 | 303 | PKPbc | PKPab | 16 16 33.3 | +0.1 |
| | comp=Z,0.7nm,0.5s,baz=46,slow=10,SNR=1.4 | | | | | | |
| GERES | GERESS Array B | 147.46 | 345 | PKPbc | PKiKP | 16 16 34.7 | -0.4 |
| | comp=Z,0.2nm,0.3s,baz=278,slow=39,SNR=2.3 | | | | | | |

*IDC **19** 15:58:24.9±1.6, 8°.39S×116°.99E, h0km, mb3.8/4, mbtmp3.9/5, ML3.5/1, Error ellipse: s-maj=34.5km s-min=21.5km az=94.0*
*DJA **19** 15:58:24.6±0.5, 8°.S±4°×11°.7E±°, h10km, M3.8/7, MLv3.8/7*
*NEIC **19** 15:58:28.2±0.8, 8°.5S±0°.2×116°.87E±0°.08, h19km±10km, mb4.0/6, Error ellipse: s-maj=28.5km s-min=11.0km az=189.0*

**ISC 19 15:58:25.8±0.7, 8°.38S±0°.06×116°.95E±0°.04, h10km, n30, σ1°.16/33, mb3.8/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.37 | 191 | P | Pg | 15 58 34.5 | +1.4 |
| TWSI | | | | S | Sb | 15 58 39.8 | -0.4 |
| PLAI | Plampang | 0.93 | 119 | P | Pg | 15 58 42.0 | -1.8 |
| PLAI | | | | S | Sg | 15 58 53.5 | -2.4 |
| SRBI | Singaraja | 1.75 | 279 | P | Pn | 15 58 56.2 | +0.1 |
| SRBI | | | | S | Sb | 15 59 20.2 | +0.3 |
| DNP | Denpasar | 1.75 | 260 | P | Pn | 15 58 56.4 | +0.2 |
| DNP | | | | S | Sg | 15 59 22.1 | +0.1 |
| WBSI | Waikabubak, Su | 2.72 | 118 | P | Pn | 15 59 06.7 | -2.9 |
| JAGI | Jajag, Banyuwa | 2.77 | 268 | Pn | Pn | 15 59 10.6 | +0.3 |
| JAGI | Jajag, Banyuwa | 2.77 | 268 | P | Pn | 15 59 09.8 | -0.5 |
| KAPI | Kappang | 4.35 | 40 | Pn | Pn | 15 59 33.0 | +1.1 |
| KAPI | Kappang | 4.35 | 40 | Pn | Pn | 15 59 32.7 | +0.7 |
| | 2.8nm,0.3s,baz=164,slow=3.9,SNR=6.8 | | | | | | |
| KAPI | | | | Sn | Sn | 16 00 21.1 | -1.6 |
| | 4.4nm,0.3s,baz=236,slow=22,SNR=6.4 | | | | | | |
| KAPI | | | | Lg | Lg | 16 00 42.0 | |
| | 3.2nm,0.3s,baz=52,slow=23,SNR=2.0 | | | | | | |
| | 6.9nm,0.2s | | | | | | |
| MMRI | Maumere | 5.24 | 93 | Pn | Pn | 15 59 46.8 | +2.6 |
| UGM | Wanagama | 6.38 | 274 | Pn | Pn | 15 59 58.8 | -1.1 |
| SOEI | Soe | 7.36 | 101 | Pn | Pn | 16 00 15.5 | +2.0 |
| FITZ | Fitzroy Crossi | 12.84 | 140 | Pn | Pn | 16 01 29.4 | +0.9 |
| MBWA | Marble Bar | 12.99 | 168 | Pn | Pn | 16 01 30.5 | 0.0 |
| PSA00 | Pilbara Seismi | 13.41 | 168 | Pn | Pn | 16 01 36.7 | +0.3 |
| KNRA | Kununurra | 13.64 | 123 | Pn | Pn | 16 01 39.5 | +0.1 |
| GIRL | Giralia | 14.42 | 190 | Pn | Pn | 16 01 46.6 | -3.6 |
| MTN | Manton Dam | 14.63 | 109 | Pn | Pn | 16 01 52.9 | -0.1 |
| WB0 | Warramunga Arr | 20.33 | 126 | P | P | 16 03 02.5 | +0.1 |
| WB0 | | | | IAmb | IAmb | 16 03 15.3 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 20.38 | 126 | P | P | 16 03 03.4 | +0.4 |
| | comp=Z,2.0nm,0.5s,baz=300,slow=12,SNR=22 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| WB2 | Warramunga Arr | 20.39 | 126 | P | P | 16 03 02.9 | -0.1 |
| WB2 | | | | IAmb | IAmb | 16 03 09.2 | |
| | comp=Z,12nm,1.3s | | | | | | |
| WR0 | Warramunga Arr | 20.55 | 126 | P | P | 16 03 05.3 | +0.5 |
| WR0 | | | | IAmb | IAmb | 16 03 16.2 | |
| | comp=Z,10nm,1.4s | | | | | | |
| AS31 | Alice Springs | 22.25 | 135 | P | P | 16 03 23.5 | +0.4 |
| ASAR | Alice Springs | 22.25 | 135 | P | P | 16 03 23.3 | +0.3 |
| ASAR | Alice Springs | 22.25 | 135 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.69** | **126** | P | | **P** | | **16 14 42.6** | **+0.2** |
| | comp=Z,3.1nm,0.4s,baz=300,slow=12,SNR=42 | | | | | | | | |
| | comp=Z,3.1nm,0.4s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.69** | **126** | P | | **P** | | **16 14 42.1** | **-0.3** |
| WRAB | | | | IAmb | | IAmb | | 16 14 43.4 | |
| | comp=Z,7.4nm,0.9s | | | | | | | | |
| **WB2** | **Warramunga Ar** | **20.70** | **126** | P | | **P** | | **16 14 42.0** | **-0.5** |
| WB2 | | | | IAmb | | IAmb | | 16 14 43.8 | |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.86** | **126** | P | | **P** | | **16 14 43.6** | **-0.6** |
| WR0 | | | | IAmb | | IAmb | | 16 14 45.3 | |
| | comp=Z,6.6nm,0.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **22.54** | **135** | P | | **P** | | **16 15 02.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **22.54** | **135** | P | | **P** | | **16 15 03.1** | **+0.8** |
| **ASAR** | **Alice Springs** | **22.54** | **135** | P | | **P** | | **16 15 02.8** | **+0.5** |
| | comp=Z,1.3nm,0.4s,baz=309,slow=9.1,SNR=16 | | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | | |
| **BBOO** | **Buckleboo** | **30.35** | **146** | P | | **P** | | **16 16 14.5** | **+0.5** |
| **STKA** | **Stephens Creek** | **33.02** | **139** | P | | **P** | | **16 16 38.2** | **+0.7** |
| STKA | | | | IAmb | | IAmb | | 16 17 15.9 | |
| | comp=Z,2.3nm,1.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **33.02** | **139** | P | | **P** | | **16 16 38.1** | **+0.5** |
| | comp=Z,1.9nm,0.5s,baz=317,slow=9.2,SNR=6.9 | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **49.74** | **112** | P | | **P** | | **16 18 53.9** | **-1.1** |
| **SONM** | **Songino Array** | **56.55** | **352** | P | | **P** | | **16 19 43.7** | **-1.0** |
| | comp=Z,0.4nm,0.5s,baz=165,slow=6.0,SNR=1.7 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.74** | **334** | P | | **P** | | **16 20 28.0** | **+0.8** |
| | comp=Z,0.3nm,0.8s,baz=157,slow=7.7,SNR=2.4 | | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.17** | **189** | PKPbc | | **PKPdf** | | **16 29 42.8** | **+2.1** |
| | comp=Z,2.0nm,0.8s,baz=188,slow=7.1,SNR=3.8 | | | | | | | | |

*IDC **19** 16:12:44.3±1.6,25°.61N×141°.92E,h0km,mb3.9/5, mbtmp3.9/6,ML3.2/1,Error ellipse: s-maj=51.3km s-min=19.9km az=94.0*

**ISC 19 16:12:49.4±1.5,25°.6N±0°.1×141°.9E±0°.3,h35km,n13, σ1§23/8,mb3.9/5,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **JCJ** | **Chichijima** | **1.52** | **11** | Pn | **Pn** | **16 13 12.9** | | **-1.2** |
| | 42nm,0.3s,baz=268,slow=22,SNR=9.2 | | | | | | | |
| JCJ | | | | Sn | **Sn** | 16 13 34.6 | | +1.8 |
| | 34nm,0.3s,baz=219,slow=22,SNR=11 | | | | | | | |
| **KSRS** | **Korea Array** | **16.74** | **318** | Pn | **P** | 16 16 42.9 | | -0.2 |
| | 0.1nm,0.3s,baz=137,slow=12,SNR=12 | | | | | | | |
| | 3.0nm,1.0s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.81** | **99** | T | T | 16 43 19.3 | | |
| | baz=288 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.81** | **99** | T | T | 16 43 20.2 | | |
| | baz=288 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.83** | **99** | T | T | 16 43 21.5 | | |
| | baz=288 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **24.05** | **102** | T | T | 16 43 35.7 | | |
| | baz=291,slow=75,SNR=92 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **24.06** | **102** | T | T | 16 43 35.8 | | |
| | baz=291,slow=75,SNR=93 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **24.07** | **102** | T | T | 16 43 38.7 | | |
| | baz=291,slow=75,SNR=76 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.85** | **190** | P | **P** | **16 21 08.9** | | **+0.6** |
| | 2.8nm,0.8s,baz=9.9,slow=8.5,SNR=14 | | | | | | | |
| | 2.8nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.21** | **311** | P | **P** | **16 21 49.6** | | **+0.1** |
| | 0.3nm,0.7s,baz=97,slow=8.4,SNR=2.7 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.89** | **315** | P | **P** | **16 22 09.3** | | **+0.2** |
| | 0.4nm,0.3s,baz=95,slow=7.9,SNR=4.9 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **58.95** | **318** | P | **P** | **16 22 46.1** | | **+0.9** |
| | 0.6nm,0.6s,baz=69,slow=7.9,SNR=2.6 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **79.16** | **334** | P | **P** | **16 24 49.1** | | **-1.2** |
| | 2.7nm,0.9s,baz=93,slow=5.6,SNR=4.2 | | | | | | | |
| | 2.7nm,0.9s | | | | | | | |

*IDC **19** 16:18:49.6±0.9,8°.40S×116°.89E,h0km,mb3.9/11, mbtmp4.0/12,ML3.7/1,Error ellipse: s-maj=34.0km s-min=15.7km az=61.0*

*NEIC **19** 16:18:51.8±1.5,8°.42S±0°.08×116°.90E±0°.06,h8km±5km, mb4.4/15,Error ellipse: s-maj=11.9km s-min=7.5km az=157.0*

*DJA **19** 16:18:51.7±0.5,8°.5S±5°×11°.7E±°,h13km±4km,M4.4/9, MLv4.4/9*

**ISC 19 16:18:50.4±1.4,8°.33S±0°.06×116°.93E±0°.03,h6km±9km, n46,σ1§19/52,mb4.1/14,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **PLAI** | **Plampang** | **0.97** | **121** | P | **Pb** | **16 19 09.8** | | **+0.1** |
| PLAI | | | | S | **Sg** | 16 19 22.7 | | +1.0 |
| **SRBI** | **Singaraja** | **1.72** | **278** | P | **Pg** | 16 19 23.3 | | -0.1 |
| SRBI | | | | S | **Sb** | 16 19 44.0 | | -0.4 |
| **DNP** | **Denpasar** | **1.74** | **258** | P | **Pg** | 16 19 22.8 | | -1.0 |
| DNP | | | | S | **Sg** | 16 19 45.4 | | -1.0 |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **267** | | **Pn** | 16 19 35.6 | | +0.4 |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **267** | P | **Pn** | 16 19 35.6 | | +0.4 |
| JAGI | | | | S | **Sn** | 16 20 08.5 | | -0.4 |
| **WBSI** | **Waikabubak, Su** | **2.76** | **118** | P | **Pn** | 16 19 34.7 | | -0.5 |
| WBSI | | | | S | **Sn** | 16 20 08.9 | | 0.0 |
| **BASI** | **Baing, Sumba** | **4.06** | **118** | P | **Pn** | 16 19 52.9 | | -0.2 |
| **BSSI** | **Bau Bau, Buton** | **4.14** | **59** | P | **Pn** | 16 19 53.9 | | -0.4 |
| **KAPI** | **Kappang** | **4.32** | **41** | Pn | **Pn** | 16 19 58.0 | | +1.2 |
| **KAPI** | **Kappang** | **4.32** | **41** | Pn | **Pn** | **16 19 57.3** | | **+0.6** |
| | 4.0nm,0.3s,baz=198,slow=7.7,SNR=1.6 | | | | | | | |
| KAPI | | | | Sn | **Sn** | 16 20 42.7 | | -4.8 |
| | 3.3nm,0.3s,baz=218,slow=18,SNR=4.3 | | | | | | | |
| | 12nm,0.3s | | | | | | | |
| **EDFI** | **Ende, Flores** | **4.72** | **95** | P | **Pn** | 16 20 03.8 | | +1.4 |
| **MMRI** | **Maumere** | **5.25** | **94** | Pn | **Pn** | 16 20 11.4 | | +1.8 |
| **UGM** | **Wanagama** | **6.36** | **273** | Pn | **Pn** | 16 20 25.8 | | +1.0 |
| **LUWI** | **Luwuk** | **9.28** | **39** | Pn | **Pn** | 16 21 08.1 | | +3.2 |
| **FITZ** | **Fitzroy Crossi** | **12.88** | **140** | Pn | **Pn** | 16 21 54.2 | | 0.0 |
| **MBWA** | **Marble Bar** | **13.04** | **168** | Pn | **Pn** | 16 21 55.8 | | -0.5 |
| **SAUI** | **Saumlaki** | **14.23** | **90** | Pn | **Pn** | 16 22 11.0 | | -1.6 |
| **GIRL** | **Giralia** | **14.47** | **190** | Pn | **Pn** | 16 22 14.6 | | -1.3 |
| **WB0** | **Warramunga Arr** | **20.38** | **126** | P | **P** | 16 23 28.1 | | 0.0 |
| WB0 | | | | IAmb | IAmb | 16 23 29.3 | | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.42** | **126** | P | **P** | 16 23 28.4 | | -0.2 |
| **WRA** | **Warramunga Arr** | **20.42** | **126** | P | **P** | 16 23 28.7 | | +0.1 |
| | comp=Z,7.1nm,0.7s,baz=300,slow=12,SNR=50 | | | | | | | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.43** | **126** | P | **P** | 16 23 29.0 | | +0.4 |
| WRAB | | | | IAmb | IAmb | 16 23 30.0 | | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Ar** | **20.43** | **126** | P | **P** | 16 23 28.5 | | -0.2 |
| WB2 | | | | IAmb | IAmb | 16 23 29.9 | | |
| | comp=Z,6.5nm,0.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.59** | **126** | P | **P** | 16 23 30.5 | | +0.1 |
| WR0 | | | | IAmb | IAmb | 16 23 31.4 | | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **AS31** | **Alice Springs** | **22.29** | **135** | P | **P** | 16 23 48.9 | | +0.1 |
| **ASAR** | **Alice Springs** | **22.29** | **135** | P | **P** | 16 23 48.9 | | +0.2 |
| | comp=Z,3.0nm,0.8s,baz=309,slow=9.5,SNR=25 | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **24.64** | **157** | P | **P** | 16 24 12.9 | | +1.0 |
| FORT | | | | IAmb | IAmb | 16 24 34.2 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **COEN** | **Coen** | **26.33** | **105** | P | **P** | 16 24 27.1 | | -0.3 |
| **BBOO** | **Buckleboo** | **30.12** | **147** | P | **P** | 16 25 00.3 | | -0.8 |
| **CMAR** | **Chiang Mai Arr** | **31.99** | **326** | P | **P** | 16 25 19.5 | | +1.8 |
| | comp=Z,1.1nm,0.8s,baz=155,slow=7.4,SNR=5.8 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **32.78** | **139** | P | **P** | 16 25 24.7 | | +0.1 |
| **STKA** | **Stephens Creek** | **32.78** | **139** | P | **P** | 16 25 24.6 | | +0.1 |
| | comp=Z,3.2nm,0.5s,baz=316,slow=10,SNR=16 | | | | | | | |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **KSRS** | **Korea Array** | **46.69** | **12** | P | **P** | 16 27 21.9 | | +1.8 |
| | comp=Z,0.8nm,0.9s,baz=198,slow=7.5,SNR=4.9 | | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.90** | **23** | P | **P** | 16 27 36.5 | | -0.9 |
| | comp=Z,1.0nm,0.8s,baz=206,slow=8.1,SNR=3.2 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **49.48** | **112** | P | **P** | 16 27 43.1 | | +0.9 |
| **USA0B** | **Ussuriysk Arra** | **54.03** | **13** | P | **P** | 16 28 16.5 | | +0.9 |
| USA0B | | | | IAmb | IAmb | 16 28 16.8 | | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.03** | **13** | P | **P** | 16 28 16.2 | | +0.7 |
| | comp=Z,3.3nm,0.7s,baz=183,slow=6.9,SNR=12 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **56.69** | **352** | P | **P** | 16 28 35.8 | | +0.9 |
| | comp=Z,1.3nm,0.7s,baz=176,slow=8.8,SNR=7.0 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.95** | **334** | P | **P** | 16 29 18.5 | | +0.6 |
| | comp=Z,0.7nm,0.6s,baz=142,slow=7.4,SNR=9.1 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.48** | **335** | P | **P** | 16 29 46.6 | | -0.5 |
| | comp=Z,0.2nm,0.5s,baz=148,slow=5.6,SNR=2.5 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.70** | **340** | P | **P** | 16 29 48.2 | | -0.3 |
| **ZALV** | **Zalesovo Beam** | **67.70** | **340** | P | **P** | 16 29 48.3 | | -0.2 |
| | comp=Z,0.9nm,0.6s,baz=129,slow=4.2,SNR=5.1 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.66** | **180** | P | **P** | 16 31 09.6 | | +0.1 |
| QSPA | | | | IAmb | IAmb | 16 31 54.2 | | |
| | comp=Z,2.5nm,1.1s | | | | | | | |
| **BOSA** | **Boshof** | **87.53** | **242** | P | **P** | 16 31 40.2 | | +0.2 |
| BOSA | | | | IAmb | IAmb | 16 32 14.1 | | |
| | comp=Z,4.4nm,1.1s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.33** | **281** | PKP | **PKPdf** | 16 37 33.9 | | -2.1 |
| | comp=Z,0.5nm,0.7s,baz=143,slow=2.9,SNR=2.4 | | | | | | | |
| **CPUP** | **Villa Florida** | **145.10** | **189** | PKPbc | **PKPab** | 16 38 28.6 | | -0.5 |
| | comp=Z,3.2nm,0.7s,baz=143,slow=2.4,SNR=6.9 | | | | | | | |

*IDC **19** 16:21:05.5±0.4,8°.39S×116°.78E,h0km,mb4.5/19, mbtmp4.5/20,ML4.8/1,Error ellipse: s-maj=18.0km s-min=9.8km az=68.0*

*BJI **19** 16:21:06.0±0.0,8°.40S×116°.90E,h10km,mb4.7/52, mB5.5/3,Ms5.3/7,Ms7 5.2/7*

*NEIC **19** 16:21:07.5±1.1,8°.42S±0°.08×116°.83E±0°.06,h10km±1km, mb5.0/28,Error ellipse: s-maj=13.3km s-min=10.4km az=186.0*

*DJA **19** 16:21:08.9±0.4,8°.S±2°×11°.7E±°,h12km±3km,M5.2/51, mb4.9/51,mB5.7/7,MLv5.3/27,Mw5.1/1,Mw(mB)5.2/7*

**ISC 19 16:21:07.5±0.3,8°.42S±0°.04×116°.84E±0°.04,h10km,n174, σ1§44/172,mb4.8/47,3C-2D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.32** | **173** | P | **Pb** | **16 21 16.0** | | **+0.6** |
| **PLAI** | **Plampang** | **1.01** | **114** | P | **Pb** | 16 21 27.5 | | +0.3 |
| **PLAI** | **Plampang** | **1.01** | **114** | P | **Pg** | 16 21 27.0 | | 0.0 |
| **DNP** | **Denpasar** | **1.63** | **261** | P | **Pg** | 16 21 38.5 | | -0.4 |
| **SRBI** | **Singaraja** | **1.65** | **281** | P | **Pb** | 16 21 37.1 | | -0.9 |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **269** | P | **Pn** | 16 21 51.6 | | +1.0 |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **269** | | **Pn** | 16 21 51.2 | | +0.7 |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **269** | P | **Pn** | 16 21 51.5 | | +1.0 |
| **WBSI** | **Waikabubak, Su** | **2.80** | **116** | P | **Pn** | 16 21 52.8 | | +0.4 |
| **BASI** | **Baing, Sumba** | **4.10** | **116** | P | **Pn** | 16 22 11.8 | | +1.5 |
| **BSSI** | **Bau Bau, Buton** | **4.27** | **58** | P | **Pn** | 16 22 12.3 | | -0.3 |
| **KAPI** | **Kappang** | **4.45** | **41** | Pn | **Pn** | 16 22 14.8 | | -0.3 |
| | 47nm,0.3s,baz=203,slow=6.9,SNR=47 | | | | | | | |
| KAPI | | | | Sn | **Sn** | 16 23 05.7 | | -1.3 |
| | 104nm,0.3s,baz=9.4,slow=19,SNR=5.5 | | | | | | | |
| | 87nm,0.3s | | | | | | | |
| **GRJI** | **Gresik** | **4.57** | **289** | P | **Pn** | 16 22 18.3 | | +1.5 |
| **EDFI** | **Ende, Flores** | **4.81** | **94** | P | **Pn** | 16 22 20.7 | | +0.6 |
| **BWJI** | **Bawean** | **4.87** | **301** | P | **Pn** | 16 22 24.5 | | +3.6 |
| **PWJI** | **Pagerwojo** | **5.00** | **274** | P | **Pn** | 16 22 24.1 | | +1.4 |
| | 306nm,0.7s,9µm3.2nm | | | | | | | |
| **BNSI** | **Bone** | **5.14** | **39** | P | **Pn** | 16 22 24.3 | | -0.3 |
| | 140nm,0.5s,3.0nm | | | | | | | |
| **MMRI** | **Maumere** | **5.34** | **93** | P | **Pn** | 16 22 27.8 | | +0.4 |
| **MMRI** | **Maumere** | **5.34** | **93** | Pn | **Pn** | 16 22 27.2 | | -0.2 |
| **MMRI** | **Maumere** | **5.34** | **93** | P | **Pn** | 16 22 27.6 | | +0.2 |
| **NGJI** | **Ngawi** | **5.43** | **281** | P | **Pn** | 16 22 31.6 | | +3.0 |
| | 167nm,0.6s,2.9nm | | | | | | | |
| **UGM** | **Wanagama** | **6.28** | **274** | P | **Pn** | 16 22 42.4 | | +2.1 |
| **UGM** | **Wanagama** | **6.28** | **274** | Pn | **Pn** | 16 22 41.9 | | +1.6 |
| **UGM** | **Wanagama** | **6.28** | **274** | P | **Pn** | 16 22 42.2 | | +1.9 |
| **BBSI** | **Bau Bau** | **6.39** | **63** | P | **Pn** | 16 22 44.0 | | +2.2 |
| | 56nm,1.1s | | | | | | | |
| **SMRI** | **Semarang** | **6.49** | **282** | P | **Pn** | 16 22 45.4 | | +2.2 |
| | 134nm,0.7s,1.6nm | | | | | | | |
| **BATI** | **Baumata** | **6.96** | **105** | P | **Pn** | 16 22 51.7 | | +2.0 |
| **BKB** | **Balikpapan** | **7.11** | **0** | P | **Pn** | 16 22 55.9 | | +4.2 |
| | 176nm,1.7s | | | | | | | |
| **SOEI** | **Soe** | **7.45** | **101** | P | **Pn** | 16 22 58.5 | | +2.0 |
| **SOEI** | **Soe** | **7.45** | **101** | Pn | **Pn** | 16 22 57.2 | | +0.6 |
| **SOEI** | **Soe** | **7.45** | **101** | P | **Pn** | 16 22 58.3 | | +1.8 |
| | 145nm,0.7s,0.8nm | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.67** | **345** | P | **Pn** | 16 23 01.0 | | +1.5 |
| | 146nm,0.7s,4µm0.6nm | | | | | | | |
| **KPJI** | **Karang Pucung** | **7.91** | **277** | P | **Pn** | 16 23 05.3 | | +2.6 |
| | 117nm,0.7s,7µm0.8nm | | | | | | | |
| **SMKI** | **Samarinda** | **7.92** | **3** | P | **Pn** | 16 23 04.4 | | +1.5 |
| **CMJI** | **Cimerak** | **8.33** | **274** | P | **Pn** | 16 23 08.9 | | +0.4 |
| | 72nm,1.1s | | | | | | | |
| **BBJI** | **Bungbulang** | **9.15** | **275** | P | **Pn** | 16 23 21.3 | | +1.4 |
| **MPSI** | **Mapaga** | **9.21** | **19** | P | **Pn** | 16 23 21.5 | | +0.9 |
| **LUWI** | **Luwuk** | **9.41** | **39** | P | **Pn** | 16 23 24.3 | | +1.0 |
| | 32nm,1.3s | | | | | | | |
| **CNJI** | **Cibinong** | **9.68** | **276** | P | **Pn** | 16 23 29.4 | | +2.3 |
| | 50nm,1.2s | | | | | | | |
| **KSM** | **Kuching** | **11.79** | **326** | Pn | **Pn** | 16 23 55.2 | | -0.7 |
| **FITZ** | **Fitzroy Crossi** | **12.88** | **139** | | **Pn** | 16 24 09.9 | | -0.8 |
| **MBWA** | **Marble Bar** | **12.97** | **168** | P | **Pn** | 16 24 11.5 | | -0.6 |
| **MBWA** | **Marble Bar** | **12.97** | **168** | Pn | **Pn** | 16 24 09.9 | | -2.2 |
| **MBWA** | **Marble Bar** | **12.97** | **168** | P | **Pn** | 16 24 09.9 | | -2.2 |
| | comp=Z,2µmcomp=Z,53nm,0.9s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.40** | **168** | P | **Pn** | 16 24 18.2 | | +0.3 |
| **PSA00** | **Pilbara Seismi** | **13.40** | **168** | | **Pn** | 16 24 16.2 | | -1.7 |
| **PSA00** | **Pilbara Seismi** | **13.40** | **168** | P | **Pn** | 16 24 16.6 | | -1.3 |
| | comp=Z,2µmcomp=Z,32nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **13.71** | **123** | Pn | **Pn** | 16 24 20.8 | | -1.3 |
| **KNRA** | **Kununurra** | **13.71** | **123** | P | **Pn** | 16 24 21.7 | | -0.4 |
| | comp=Z,2µmcomp=Z,46nm,1.1s | | | | | | | |
| **GIRL** | **Giralia** | **14.37** | **190** | P | **Pn** | 16 24 31.1 | | 0.0 |
| **GIRL** | **Giralia** | **14.37** | **190** | | **Pn** | 16 24 29.0 | | -2.2 |
| **KKM** | **Kota Kinabalu** | **14.38** | **357** | Pn | **Pn** | 16 24 32.4 | | +1.0 |
| **MTN** | **Manton Dam** | **14.72** | **109** | | **Pn** | 16 24 33.4 | | -2.6 |
| **MTN** | **Manton Dam** | **14.72** | **109** | P | **Pn** | 16 24 33.9 | | -2.1 |
| **FAKI** | **Fak Fak** | **16.27** | **71** | P | **Pn** | 16 24 56.4 | | 0.0 |
| **FAKI** | **Fak Fak** | **16.27** | **71** | P | **Pn** | 16 24 57.3 | | +0.9 |
| | comp=Z,50nm,1.3s | | | | | | | |
| **PPSI** | **Pulau Pagai** | **17.66** | **288** | P | **P** | 16 25 15.3 | | +0.5 |
| | comp=Z,136nm,1.1s | | | | | | | |
| **MEEK** | **Meekatharra** | **18.20** | **175** | P | **P** | 16 25 20.9 | | +0.2 |
| **MEEK** | **Meekatharra** | **18.20** | **175** | P | **P** | 16 25 22.3 | | +1.5 |
| | comp=Z,3µmcomp=Z,41nm,0.7s | | | | | | | |
| **SISI** | **Saibi** | **19.03** | **291** | P | **Pn** | 16 25 31.8 | | +1.2 |
| | comp=Z,62nm,1.7s | | | | | | | |
| **WRKA** | **Wakurna** | **19.81** | **148** | P | **Pn** | 16 25 39.8 | | -0.2 |
| **WRKA** | **Warakurna** | **19.81** | **148** | P | **Pn** | 16 25 39.3 | | -0.7 |
| | comp=Z,2µmcomp=Z,57nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.40** | **125** | P | **P** | 16 25 44.3 | | -0.5 |
| WB0 | | | | IAmb | IAmb | 16 25 56.6 | | |
| | comp=Z,111nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.45** | **126** | P | **P** | 16 25 44.7 | | -0.7 |
| **WRA** | **Warramunga Arr** | **20.45** | **126** | P | **P** | 16 25 45.3 | | -0.1 |
| | comp=Z,17nm,0.5s,baz=300,slow=12,SNR=114 | | | | | | | |
| WRA | | | | S | **S** | 16 29 28.5 | | -6.0 |
| | comp=Z,3.1nm,0.7s,baz=302,slow=24,SNR=4.2 | | | | | | | |
| | comp=Z,17nm,0.5s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.45** | **126** | P | **P** | 16 25 44.8 | | -0.6 |
| WRAB | | | | IAmb | IAmb | 16 25 58.1 | | |
| | comp=Z,171nm,1.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.46** | **126** | P | **P** | 16 25 44.6 | | -0.9 |
| WB2 | | | | IAmb | IAmb | 16 25 58.0 | | |
| | comp=Z,126nm,1.5s | | | | | | | |
| **MORW** | **Morawa** | **20.56** | **182** | P | Pn | 16 25 49.5 | | +0.8 |
| **MORW** | **Morawa** | **20.56** | **182** | P | **P** | **16 25 45.7** | | **-0.8** |
| **MORW** | **Morawa** | **20.56** | **182** | P | Pn | 16 25 48.7 | | 0.0 |
| **WR0** | **Warramunga Arr** | **20.62** | **126** | IAmb | IAmb | 16 25 48.6 | | |
| | comp=Z,42nm,0.5s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **21.00** | **301** | P | **P** | 16 25 51.1 | | -0.3 |
| RPSI | | | | IAmb | IAmb | 16 26 05.2 | | |
| | comp=Z,185nm,2.0s | | | | | | | |
| **BLDU** | **Ballidu** | **22.09** | **180** | P | **P** | 16 26 05.4 | | +2.5 |
| **AS31** | **Alice Springs** | **22.29** | **135** | P | **P** | 16 26 05.0 | | -0.3 |
| | comp=Z,13nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.29** | **135** | P | **P** | 16 26 05.3 | | 0.0 |
| **ASAR** | **Alice Springs** | **22.29** | **135** | P | **P** | 16 26 05.2 | | -0.1 |
| | comp=Z,11nm,0.6s,baz=309,slow=9.7,SNR=62 | | | | | | | |
| ASAR | | | | PcP | **PcP** | 16 30 00.8 | | -0.5 |
| | comp=Z,2.0nm,0.6s,baz=340,slow=1.9,SNR=4.1 | | | | | | | |
| ASAR | | | | S | **S** | 16 30 13.2 | | +2.4 |
| | comp=Z,3.1nm,0.6s,baz=306,slow=22,SNR=5.2 | | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **AS01** | **Alice Springs** | **22.33** | **135** | P | **P** | 16 26 06.0 | | +0.4 |
| **KLBR** | **Kellerberrin** | **23.08** | **178** | P | **P** | 16 26 14.7 | | +1.3 |
| **KLBR** | **Kellerberrin** | **23.08** | **178** | P | **P** | 16 26 16.1 | | +2.7 |
| **KMBL** | **Kambalda** | **23.31** | **169** | P | **P** | 16 26 17.5 | | +1.6 |
| **KMBL** | **Kambalda** | **23.31** | **169** | P | **P** | 16 26 16.6 | | +0.7 |
| | comp=Z,37nm,0.8s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MUN** | **Mundaring** | **23.45** | **181** | P | | **P** | | **16 26 18.5** | **+1.3** |
| **NWAO** | **Narrogin (SRO)** | **24.39** | **179** | P | | **P** | | **16 26 27.1** | **+1.0** |
| **NWAO** | **Narrogin (SRO)** | **24.39** | **179** | P | | **P** | | **16 26 27.2** | **+1.0** |
| | comp=Z,12nm,0.7s,baz=352,slow=9.4,SNR=5.3 | | | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **FORT** | **Forrest** | **24.59** | **156** | P | | **P** | | **16 26 29.9** | **+1.9** |
| **FORT** | **Forrest** | **24.59** | **156** | P | | **P** | | **16 26 30.1** | **+2.1** |
| | comp=Z,71nm,0.7s | | | | | | | | |
| **QIS** | **Mount Isa** | **25.09** | **121** | P | | **P** | | **16 26 32.5** | **-0.1** |
| **QIS** | **Mount Isa** | **25.09** | **121** | P | | **P** | | **16 26 32.2** | **-0.4** |
| | comp=Z,40nm,0.9s | | | | | | | | |
| **OOD** | **Oodnadatta** | **26.24** | **140** | P | | **P** | | **16 26 42.5** | **-0.4** |
| **COEN** | **Coen** | **26.40** | **104** | P | | **P** | | **16 26 43.6** | **-1.0** |
| **MTSU** | **Mount Surprise** | **28.39** | **113** | P | | **P** | | **16 27 03.4** | **+0.9** |
| **INKA** | **Innaminka** | **29.65** | **133** | P | | **P** | | **16 27 14.0** | **+0.5** |
| **LCRK** | **Leigh Creek** | **29.66** | **141** | P | | **P** | | **16 27 13.2** | **-0.4** |
| **BBOO** | **Buckleboo** | **30.10** | **146** | P | | **P** | | **16 27 17.7** | **+0.3** |
| **QLP** | **Quilpie** | **31.64** | **128** | P | | **P** | | **16 27 32.3** | **+1.2** |
| **QLP** | **Quilpie** | **31.64** | **128** | P | | **P** | | **16 27 31.5** | **+0.5** |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **32.02** | **327** | IAmb | | IAmb | | 16 27 46.1 | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.02** | **327** | P | | **P** | | **16 27 33.8** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **32.02** | **327** | P | | **P** | | **16 27 35.2** | **+0.8** |
| | comp=Z,10nm,1.1s,baz=152,slow=6.7,SNR=31 | | | | | | | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **HTT** | **Hallett** | **32.18** | **144** | P | | **P** | | **16 27 36.3** | **+0.5** |
| **SLVN** | **Son La** | **32.18** | **337** | P | | **P** | | **16 27 35.6** | **-0.3** |
| **STKA** | **Stephens Creek** | **32.77** | **139** | P | | **P** | | **16 27 41.1** | **+0.1** |
| **STKA** | **Stephens Creek** | **32.77** | **139** | P | | **P** | | **16 27 40.7** | **-0.3** |
| | comp=Z,5.3nm,1.6s | | | | | | | | |
| **STKA** | **Stephens Creek** | **32.77** | **139** | P | | **P** | | **16 27 41.0** | **+0.1** |
| | comp=Z,9.0nm,0.5s,baz=313,slow=9.7,SNR=34 | | | | | | | | |
| STKA | | | | PcP | | **PcP** | | 16 30 26.0 | -0.3 |
| | comp=Z,2.7nm,0.5s,baz=58,slow=3.5,SNR=3.6 | | | | | | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.35** | **135** | P | | **P** | | **16 28 04.2** | **+0.8** |
| **GUYA** | **Guiyang** | **36.05** | **344** | P | | **P** | | **16 28 11.4** | **+1.9** |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **36.23** | **145** | P | | **P** | | **16 28 11.5** | **+0.7** |
| **PZH** | **PanZhiHua** | **37.68** | **338** | P | | **P** | | **16 28 26.0** | **+2.6** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **TNCH** | **TengChong** | **37.73** | **332** | P | | **P** | | **16 28 26.4** | **+2.5** |
| TNCH | | | | pmax | | pmax | | | |
| | comp=Z,26nm,1.4s | | | | | | | | |
| **YNG** | **Young** | **38.78** | **136** | P | | **P** | | **16 28 33.1** | **+0.5** |
| | comp=Z,70nm,1.2s | | | | | | | | |
| **ENH** | **Enshi** | **39.11** | **350** | IAmb | | IAmb | | 16 28 44.8 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **ARMA** | **Armidale** | **39.18** | **129** | P | | **P** | | **16 28 36.5** | **+0.4** |
| **NJ2** | **Nanj

comp=Z,3.5nm,0.8s,baz=280,slow=1.3,SNR=17
comp=Z,3.5nm,0.8s
**BOSA Boshof 87.41 242** P **P 16 33 55.1 -0.7**
comp=Z,5.8nm,0.7s,baz=91,slow=3.8,SNR=11
comp=Z,5.8nm,0.7s
**TROLL Troll, Antarti 89.33 196** ⇑P **P 16 34 04.8 +0.7**
comp=Z,198nm,0.6s
**BRTR Keskin Array B 90.13 310** P **P 16 34 07.0 -1.4**
comp=Z,0.8nm,0.8s,baz=101,slow=6.4,SNR=4.3
comp=Z,0.8nm,0.8s
**SNAA Sanae 90.98 196** ⇑P **P 16 34 12.4 +0.7**
comp=Z,71nm,0.6s
**SNAA Sanae 90.98 196** P **P 16 34 12.0 +0.3**
comp=Z,3.1nm,0.7s,baz=162,slow=7.3,SNR=14
comp=Z,3.1nm,0.7s
**TORD Torodi Ar. Bea 116.26 280** PKP **PKPdf 16 39 50.0 -2.3**
comp=Z,1.5nm,0.6s,baz=37,slow=2.2,SNR=11
**NVAR Mina Array Bea 122.28 50** PKP **PKPdf 16 40 03.1 -0.5**
comp=Z,0.8nm,0.7s,baz=250,slow=2.1,SNR=7.9
**PDAR Pinedale Array 126.93 42** PKP **PKPdf 16 40 11.7 -0.7**
comp=Z,0.1nm,0.3s,baz=197,slow=0.9,SNR=2.6
**PLCA Paso Flores 130.62 173** PKP **PKPdf 16 40 18.4 -0.9**
comp=Z,1.1nm,0.6s,baz=323,slow=3.0,SNR=6.3
**TXAR Lajitas Array 136.89 56** PKP **PKPdf 16 40 30.1 -1.0**
comp=Z,0.2nm,0.7s,baz=258,slow=1.2,SNR=4.6
**WVT Waverly 144.41 35 PKPab 16 40 41.5 -1.2**
**CPUP Villa Florida 145.00 189** PKPbc PKPbc 16 40 45.4 +0.2
comp=Z,25nm,0.7s,baz=157,slow=2.6,SNR=51
**U49A Red Boiling Sp 145.27 33 PKPbc 16 40 43.1 -2.7**
**T50A Nancy 145.39 31 PKPbc 16 40 43.3 -2.9**
**BDFB Brasilia 151.78 212** PKP **PKPdf 16 40 57.0 -0.4**
comp=Z,1.4nm,0.7s,baz=180,slow=4.0,SNR=2.0
BDFB PKPbc **PKPbc 16 41 03.1 -0.7**
comp=Z,5.3nm,0.4s,baz=101,slow=2.9,SNR=12
**LPAZ La Paz 154.97 169** PKP **PKPdf 16 41 02.3 -0.3**
comp=Z,0.7nm,0.7s,baz=252,slow=3.2,SNR=2.6
LPAZ PKPbc **PKiKP 16 41 12.2 +0.9**
comp=Z,1.4nm,0.7s,baz=158,slow=5.8,SNR=4.5
LPAZ PKPab **PKPab 16 41 25.8 -0.7**
comp=Z,3.4nm,0.7s,baz=181,slow=6.1,SNR=6.9

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*AEIC **19** 16:21:12.2±1.3, 69.49°N±0.03°×144.38°W±0.04, h9km±7km, ML3.8, ML3.8/118(NEIC), Error ellipse: s-maj=3.9km s-min=1.8km az=169.0*
*NEIC **19** 16:21:12.6±1.2, 69.46°N±0.03°×144.43°W±0.09, h14km±8km, Error ellipse: s-maj=5.5km s-min=2.9km az=135.0*
*IDC **19** 16:21:13.6±1.1, 69.60°N×144.27°W, h0km, mb3.5/5, mbtmp3.6/7, ML3.7/2, Error ellipse: s-maj=27.1km s-min=18.6km az=72.0*
**ISC 19 16:21:13.5±0.7, 69.51°N±0.05°×144.22°W±0.04, h10km, n117, σ1§19/99, mb3.7/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.21** | **57** | Pg | **Pg** | **16 21 17.3** | **-0.6** |
| C27K | | | | IAML | | 16 21 21.6 | |
| | comp=E,12µm,0.7s | | | | | | |
| **C26K** | **Camden Bay** | **0.47** | **329** | | **Pg** | **16 21 22.7** | **0.0** |
| **C26K** | **Camden Bay** | **0.47** | **329** | | **Sg** | **16 21 29.2** | **+0.3** |
| **D25K** | **Kavik River** | **0.79** | **257** | | **Pg** | **16 21 26.3** | **-2.3** |
| **D27M** | **Malcolm River** | **1.18** | **102** | Pn | **Pb** | **16 21 33.8** | **-2.2** |
| D27M | | | | IAML | | 16 21 58.3 | |
| | comp=N,1µm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **280** | | **Pn** | **16 21 39.2** | **-2.3** |
| C24K | | | | IAML | | 16 22 05.4 | |
| | comp=E,1µm,0.7s | | | | | | |
| C24K | | | | IAML | | 16 22 05.5 | |
| | comp=N,1µm,0.4s | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **143** | | **Pn** | **16 21 41.2** | **-1.1** |
| E27K | | | | IAML | | 16 22 08.0 | |
| | comp=N,1µm,0.7s | | | | | | |
| E27K | | | | IAML | | 16 22 10.0 | |
| | comp=E,1µm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **260** | Pn | **Pn** | **16 21 39.8** | **-3.0** |
| D24K | | | | IAML | | 16 22 09.8 | |
| | comp=E,2µm,0.7s | | | | | | |
| D24K | | | | IAML | | 16 22 13.5 | |
| | comp=N,1µm,1.2s | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **179** | | **Pn** | **16 21 43.3** | **-1.7** |
| **E28M** | **Babbage River** | **1.91** | **116** | | **Pn** | **16 21 44.8** | **-1.3** |
| E28M | | | | IAML | | 16 22 15.1 | |
| | comp=N,752nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.94** | **93** | | **Pn** | **16 21 47.0** | **+0.5** |
| **F25K** | **Christian Rive** | **2.00** | **196** | | **Pn** | **16 21 45.0** | **-2.3** |
| **BMAR** | **Burnt Mountain** | **2.10** | **184** | | **Pn** | **16 21 49.4** | **+0.7** |
| **TOLK** | **Toolik Lake Re** | **2.11** | **248** | Pn | **Pn** | **16 21 49.0** | **+0.1** |
| TOLK | | | | IAML | | 16 22 28.0 | |
| | comp=N,552nm,0.7s | | | | | | |
| TOLK | | | | IAML | | 16 22 31.0 | |
| | comp=E,623nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **229** | | **Pn** | **16 21 49.7** | **+0.7** |
| E24K | | | | IAML | | 16 22 23.1 | |
| | comp=N,581nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.26** | **281** | Pn | **Pn** | **16 21 50.9** | **+0.2** |
| C23K | | | | IAML | | 16 22 31.7 | |
| | comp=N,826nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **2.37** | **260** | | **Pn** | **16 21 52.5** | **+0.1** |
| **F24K** | **Squaw Lake** | **2.42** | **216** | Pn | **Pn** | **16 21 53.3** | **+0.2** |
| F24K | | | | IAML | | 16 22 34.2 | |
| | comp=N,414nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.45** | **236** | Pn | **Pn** | **16 21 53.6** | **+0.1** |
| E23K | | | | IAML | | 16 22 35.5 | |
| | comp=E,401nm,0.6s | | | | | | |
| **F28M** | **Old Crow** | **2.49** | **138** | | **Pn** | **16 21 54.2** | **+0.2** |
| F28M | | | | IAML | | 16 22 38.2 | |
| | comp=E,417nm,1.0s | | | | | | |
| F28M | | | | IAML | | 16 22 39.3 | |
| | comp=N,484nm,0.6s | | | | | | |
| **E29M** | **Blow River** | **2.54** | **113** | | **Pn** | **16 21 55.6** | **+0.9** |
| E29M | | | | IAML | | 16 22 39.3 | |
| | comp=N,512nm,1.1s | | | | | | |
| E29M | | | | IAML | | 16 22 45.7 | |
| | comp=E,347nm,0.5s | | | | | | |
| **G25K** | **Bearman Lake** | **2.85** | **195** | | **Sn** | **16 22 34.4** | **+1.2** |
| **G27K** | **Doyon Strip** | **2.88** | **159** | Pn | **Pn** | **16 21 59.4** | **0.0** |
| **FYU** | **Fort Yukon** | **2.99** | **188** | Pn | **Pn** | **16 22 01.2** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **205** | | **Pn** | **16 22 02.5** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **205** | IAML | | 16 22 53.8 | |
| | comp=N,348nm,1.1s | | | | | | |
| **D22K** | **Ayikyak River** | **3.09** | **262** | | **Pn** | **16 22 02.5** | **+0.2** |
| D22K | | | | IAML | | 16 22 59.9 | |
| | comp=N,290nm,1.0s | | | | | | |
| D22K | | | | IAML | | 16 23 12.5 | |
| | comp=E,263nm,0.7s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.28** | **289** | Pn | **Pn** | **16 22 05.2** | **+0.4** |
| **H25L** | **Birch Creek** | **3.32** | **191** | | **Pn** | **16 22 06.2** | **+0.9** |
| **F22K** | **John River** | **3.56** | **239** | | **Pn** | **16 22 09.3** | **+0.7** |
| **G23K** | **Bananza Creek** | **3.56** | **220** | IAML | | 16 23 09.6 | |
| | comp=E,245nm,1.1s | | | | | | |
| G23K | | | | IAML | | 16 23 10.2 | |
| | comp=N,191nm,1.1s | | | | | | |
| **F30M** | **Barrier River** | **3.64** | **118** | | **Pn** | **16 22 12.2** | **+2.4** |
| **B21K** | **Ikpikpuk River** | **3.65** | **277** | IAML | | 16 23 25.3 | |
| | comp=N,175nm,1.1s | | | | | | |
| B21K | | | | IAML | | 16 23 35.2 | |
| | comp=E,209nm,1.2s | | | | | | |
| **E21K** | **Killik River** | **3.68** | **258** | | **Pn** | **16 22 10.7** | **+0.4** |
| **E21K** | **Killik River** | **3.68** | **258** | IAML | | 16 23 20.2 | |
| | comp=E,175nm,0.9s | | | | | | |
| E21K | | | | IAML | | 16 23 22.2 | |
| | comp=N,152nm,0.6s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.76** | **270** | | **Pn** | **16 22 11.9** | **+0.4** |
| **A22K** | **Sinclair Lake** | **3.94** | **297** | | **Pn** | **16 22 14.5** | **+0.6** |
| **H24K** | **Noodor Dome** | **3.95** | **202** | Pn | **Pn** | **16 22 13.9** | **-0.1** |
| H24K | | | | IAML | | 16 23 02.5 | |
| | comp=N,159nm,0.8s | | | | | | |
| H24K | | | | IAML | | 16 23 22.5 | |
| | comp=E,189nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **3.98** | **143** | Pn | **Pn** | **16 22 14.9** | **+0.5** |
| H29M | | | | IAML | | 16 23 26.9 | |
| | comp=N,157nm,0.9s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05** | **188** | IAML | | 16 23 24.1 | |
| | comp=E,112nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **4.05** | **102** | Pn | **Pn** | **16 22 15.7** | **+0.3** |
| **F21K** | **Alatna River** | **4.13** | **241** | IAML | | 16 23 29.6 | |
| | comp=E,136nm,0.8s | | | | | | |
| F21K | | | | IAML | | 16 23 34.9 | |
| | comp=N,104nm,1.0s | | | | | | |
| **H23K** | **Yukon River** | **4.22** | **211** | | **Pn** | **16 22 17.9** | **+0.1** |
| H23K | | | | IAML | | 16 23 32.9 | |
| | comp=N,140nm,1.1s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.24** | **135** | | **Pn** | **16 22 19.2** | **+1.2** |
| **I26K** | **Coal Creek Min** | **4.25** | **174** | | **Pn** | **16 22 18.8** | **+0.7** |
| **I26K** | **Coal Creek Min** | **4.25** | **174** | IAML | | 16 23 29.4 | |
| | comp=E,143nm,0.7s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.38** | **113** | Pn | **Pn** | **16 22 20.1** | **+0.2** |
| F31M | | | | IAML | | 16 23 35.8 | |
| | comp=N,85nm,0.6s | | | | | | |
| F31M | | | | IAML | | 16 23 37.8 | |
| | comp=E,127nm,1.2s | | | | | | |
| **I28M** | **Miner Creek** | **4.40** | **156** | IAML | | 16 23 37.9 | |
| | comp=E,92nm,1.3s | | | | | | |
| I28M | | | | IAML | | 16 23 41.9 | |
| | comp=N,104nm,0.8s | | | | | | |
| **E20K** | **Nigu River** | **4.51** | **259** | | **Pn** | **16 22 22.8** | **+1.0** |
| **B20K** | **Meade River** | **4.52** | **282** | Pn | **Pn** | **16 22 22.5** | **+0.6** |
| **G31M** | **Satah River** | **4.53** | **120** | Pn | **Pn** | **16 22 22.4** | **+0.5** |
| G31M | | | | IAML | | 16 23 42.3 | |
| | comp=E,86nm,1.4s | | | | | | |
| G31M | | | | IAML | | 16 23 50.9 | |
| | comp=N,98nm,1.3s | | | | | | |
| **A21K** | **Barrow** | **4.55** | **299** | | **Pn** | **16 22 23.0** | **+0.8** |
| **POKR** | **Poker Plat Res** | **4.59** | **197** | | **Pn** | **16 22 23.9** | **+1.1** |
| **POKR** | **Poker Plat Res** | **4.59** | **197** | IAML | | 16 23 19.5 | |
| | comp=N,111nm,0.4s | | | | | | |
| **G21K** | **Allakaket** | **4.61** | **234** | IAML | | 16 23 53.8 | |
| | comp=N,90nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **207** | IAML | | 16 23 50.7 | |
| | comp=E,98nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **201** | | **Pn** | **16 22 26.4** | **+0.3** |
| MDM | | | | IAML | | 16 23 47.0 | |
| | comp=E,93nm,1.0s | | | | | | |
| MDM | | | | IAML | | 16 23 47.6 | |
| | comp=N,82nm,0.8s | | | | | | |
| **COLA** | **College** | **4.87** | **199** | | **Pn** | **16 22 27.3** | **+0.6** |
| **IL31** | | **4.88** | **194** | | **Pn** | **16 22 27.7** | **+1.0** |
| **ILAR** | **Eielson Array** | **4.88** | **194** | | **Pn** | **16 22 27.2** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.88** | **194** | Pn | **Pn** | **16 22 27.5** | **+0.7** |
| | comp=N,3.2nm,0.3s,baz=6.0,slow=13,SNR=91 | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 23 23.7** | **+0.5** |
| | comp=N,6.5nm,0.3s,baz=8.4,slow=24,SNR=6.3 | | | | | | |
| ILAR | | | | Lg | Lg | 16 23 42.7 | |
| | comp=N,6.5nm,0.3s,baz=7.7,slow=29,SNR=7.7 | | | | | | |
| | comp=N,4.6nm,0.4s | | | | | | |
| **EGAK** | **Eagle** | **4.90** | **164** | IAML | | 16 24 00.7 | |
| | comp=N,74nm,1.2s | | | | | | |
| EGAK | | | | IAML | | 16 24 02.9 | |
| | comp=N,68nm,1.2s | | | | | | |
| **J25K** | **Salcha River,** | **4.94** | **186** | IAML | | 16 23 32.3 | |
| | comp=N,55nm,0.8s | | | | | | |
| J25K | | | | IAML | | 16 23 51.9 | |
| | comp=E,91nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.04** | **177** | IAML | | 16 23 35.5 | |
| | comp=N,58nm,0.6s | | | | | | |
| J26L | | | | IAML | | 16 23 48.6 | |
| | comp=E,71nm,0.8s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.07** | **230** | | **Pn** | **16 22 29.0** | **-0.4** |
| **H21K** | **Melozitna Rive** | **5.08** | **224** | | **Pn** | **16 22 30.2** | **+0.7** |
| **H21K** | **Melozitna Rive** | **5.08** | **224** | IAML | | 16 24 04.3 | |
| | comp=E,85nm,1.1s | | | | | | |
| H21K | | | | IAML | | 16 24 05.0 | |
| | comp=N,67nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **198** | Pn | **Pn** | **16 22 29.9** | **+0.3** |
| **D19K** | **Kuna River** | **5.10** | **265** | | **Pn** | **16 22 30.6** | **+0.8** |
| **MLY** | **Manley** | **5.16** | **212** | | **Pn** | **16 22 31.3** | **+0.5** |
| **E19K** | **Redstone River** | **5.21** | **253** | | **Pn** | **16 22 31.6** | **+0.2** |
| **E19K** | **Redstone River** | **5.21** | **253** | IAML | | 16 23 36.7 | |
| | comp=N,58nm,0.7s | | | | | | |
| E19K | | | | IAML | | 16 24 04.5 | |
| | comp=E,59nm,0.8s | | | | | | |
| **HDA** | **Harding Lake** | **5.24** | **193** | | **Pn** | **16 22 33.1** | **+1.3** |
| **HDA** | **Harding Lake** | **5.24** | **193** | IAML | | 16 23 60.0 | |
| | comp=N,69nm,0.7s | | | | | | |
| **I30M** | **Mount Dempster** | **5.26** | **141** | | **Pn** | **16 22 32.8** | **+0.7** |
| **I30M** | **Mount Dempster** | **5.26** | **141** | IAML | | 16 23 34.0 | |
| | comp=N,61nm,0.6s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **199** | IAML | | 16 24 05.3 | |
| | comp=N,68nm,0.7s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **203** | | **Pn** | **16 22 33.0** | **+0.5** |
| **K27K** | **Chicken** | **5.57** | **170** | | **Pn** | **16 22 37.4** | **+1.1** |
| **F19K** | **Shaleruckik Mo** | **5.72** | **248** | | **Pn** | **16 22 38.1** | **-0.2** |
| **K24K** | **Donnelly Dome** | **5.77** | **187** | | **Pn** | **16 22 40.6** | **+1.6** |
| **DAWY** | **Dawson** | **5.79** | **159** | | **Pn** | **16 22 40.7** | **+1.3** |
| **RIDG** | **Independent Ri** | **5.80** | **183** | | **Pn** | **16 22 41.4** | **+1.8** |
| **A19K** | **Wainwright** | **5.86** | **285** | | **Pn** | **16 22 40.9** | **+0.7** |
| **DOT** | **Dot Lake** | **5.89** | **179** | | **Pn** | **16 22 42.2** | **+1.4** |
| **B18K** | **Kokolik River** | **6.19** | **277** | | **Pn** | **16 22 44.3** | **-0.5** |
| **C17K** | **Delong Mountai** | **6.89** | **270** | | **Pn** | **16 22 53.4** | **-1.0** |
| **WAT1** | **Susitna Watana** | **6.94** | **197** | | **Pn** | **16 22 56.7** | **+1.6** |
| **E17K** | **Hotham Inlet** | **6.96** | **258** | | **Pn** | **16 22 54.9** | **-0.5** |
| **WAT7** | **Susitna Watana** | **6.96** | **198** | | **Pn** | **16 22 57.3** | **+1.8** |
| **D17K** | **Noatak River** | **7.13** | **264** | | **Pn** | **16 22 56.6** | **-1.0** |
| **J19K** | **Poorman** | **7.13** | **225** | | **Pn** | **16 22 58.0** | **+0.3** |
| **K20K** | **Telida** | **7.33** | **217** | | **Pn** | **16 23 00.6** | **+0.3** |
| **WAZA** | **Wrangell Mount** | **7.47** | **180** | | **Pn** | **16 23 04.6** | **+2.0** |
| **WACK** | **Wrangell Chich** | **7.56** | **180** | | **Pn** | **16 23 05.5** | **+1.7** |
| **WASW** | **Wrangell South** | **7.62** | **180** | | **Pn** | **16 23 06.2** | **+1.7** |
| **C16K** | **Lisburne Hills** | **7.71** | **271** | | **Pn** | **16 23 04.6** | **-1.0** |
| **J18K** | **Innoko River** | **7.85** | **225** | | **Pn** | **16 23 07.4** | **-0.1** |
| **YUK2** | **White River** | **7.88** | **168** | | **Pn** | **16 23 09.9** | **+1.8** |
| **YUK3** | **Moose Creek** | **7.92** | **167** | | **Pn** | **16 23 10.1** | **+1.3** |
| **G16K** | **Koyuk River** | **8.08** | **248** | | **Pn** | **16 23 10.6** | **-0.1** |
| **SKT** | **Skwentna** | **8.13** | **205** | | **Pn** | **16 23 11.7** | **+0.3** |
| **PTPK** | **Patty Peak** | **8.39** | **174** | | **Pn** | **16 23 17.6** | **+2.5** |
| **L19K** | **White Mountain** | **8.54** | **216** | | **Pn** | **16 23 16.9** | **-0.2** |
| **F15K** | **North Star Dit** | **8.66** | **254** | | **Pn** | **16 23 18.0** | **-0.6** |
| **KIAG** | **Kiagna River** | **8.86** | **174** | | **Pn** | **16 23 22.0** | **+3.2** |
| **M19K** | **Big River Lodg** | **8.70** | **214** | | **Pn** | **16 23 20.4** | **+1.2** |
| **SPNN** | **North Nagishla** | **8.90** | **207** | | **Pn** | **16 23 23.9** | **+1.8** |
| **L18K** | **Granite Mounta** | **8.91** | **221** | | **Pn** | **16 23 22.0** | **0.0** |
| **YUK6** | **Outpost Mounta** | **8.94** | **161** | | **Pn** | **16 23 24.4** | **+1.6** |
| **L17K** | **Donlin** | **9.36** | **225** | | **Pn** | **16 23 28.2** | **-0.1** |
| **YKA** | **Yellowknife Ar** | **13.81** | **106** | Pn | **Pn** | **16 24 26.3** | **-2.7** |
| | comp=N,0.4nm,0.3s,baz=330,slow=11,SNR=6.6 | | | | | | |
| YKA | | | | Sn | Sn | 16 26 53.2 | -8.9 |
| | comp=N,0.6nm,0.3s,baz=321,slow=21,SNR=5.9 | | | | | | |
| | comp=N,1.1nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.39** | **128** | P | **P** | **16 29 41.4** | **+1.6** |
| | comp=N,0.1nm,0.5s,baz=353,slow=6.7,SNR=4.0 | | | | | | |
| | comp=N,0.1nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **49.15** | **6** | P | **P** | **16 30 01.6** | **+0.9** |
| | comp=N,1.5nm,0.8s,baz=3.8,slow=8.4,SNR=4.1 | | | | | | |
| | comp=N,1.5nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **49.68** | **14** | P | **P** | **16 30 05.2** | **+0.5** |
| | comp=N,1.0nm,0.7s,baz=356,slow=5.8,SNR=1.4 | | | | | | |
| | comp=N,1.0nm,0.7s | | | | | | |
| **KURBB** | **Kurbatov Arra** | **56.16** | **329** | P | **P** | **16 30 53.8** | **+1.1** |
| | comp=N,0.7nm,0.9s,baz=15,slow=7.2,SNR=5.2 | | | | | | |
| | comp=N,0.7nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.10** | **324** | P | **P** | **16 31 15.2** | **+1.7** |
| | comp=N,0.1nm,0.4s,baz=27,slow=8.9,SNR=2.6 | | | | | | |
| | comp=N,0.1nm,0.4s | | | | | | |

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*IDC **19** 16:23:56.8±1.3, 8.26°S×116.87°E, h0km, mb3.9/5, mbtmp4.0/6, ML3.9/1, Error ellipse: s-maj=35.5km s-min=22.7km az=64.0*
*NEIC **19** 16:23:57.1±1.3, 8.3°S±0.1°×116.70°E±0.05, h10km±1km, mb4.5/9, Error ellipse: s-maj=21.1km s-min=8.9km az=174.0*
*DJA **19** 16:23:58.4±0.5, 8°S±5'×11°7E±°, h10km, M4.4/7, MLv4.4/7*
**ISC 19 16:23:57.4±0.6, 8.26°S±0.05°×116.69°E±0.04, h10km, n27, σ1§14/32, mb4.1/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.51** | **158** | P | **Pb** | **16 24 08.5** | **0.0** |
| TWSI | | | | S | **Sb** | **16 24 15.8** | **-0.2** |
| **PLAI** | **Plampang** | **1.21** | **118** | P | **Pg** | **16 24 21.1** | **+0.4** |
| PLAI | | | | S | **Sn** | **16 24 38.5** | **+1.6** |
| **SRBI** | **Singaraja** | **1.48** | **277** | P | **Pn** | **16 24 24.3** | **+0.3** |
| SRBI | | | | S | **Sb** | **16 24 44.2** | **+0.5** |
| **DNP** | **Denpasar** | **1.52** | **254** | P | **Pb** | **16 24 25.4** | **-0.3** |
| DNP | | | | S | **Sg** | **16 24 46.5** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.52** | **265** | Pn | **Pn** | **16 24 37.8** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.52** | **265** | P | **Pn** | **16 24 37.4** | **-1.0** |
| **WBSI** | **Waikabubak, Su** | **3.00** | **117** | P | **Pn** | **16 24 46.1** | **+1.1** |
| **KAPI** | **Kappang** | **4.43** | **44** | Pn | **Pn** | **16 25 04.4** | **-0.2** |
| **KAPI** | **Kappang** | **4.43** | **44** | Pn | **Pn** | **16 25 04.3** | **-0.4** |
| | 5.8nm,0.3s,baz=196,slow=7.2,SNR=0.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **16 25 54.8** | **-1.6** |
| | 7.0nm,0.3s,baz=53,slow=20,SNR=1.5 | | | | | | |
| | 47nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **14.91** | **109** | P | **P** | **16 27 31.4** | **-2.7** |
| **WB0** | **Warramunga Arr** | **20.61** | **126** | P | **P** | **16 28 35.3** | **-1.7** |
| WB0 | | | | IAmb | IAmb | 16 28 45.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.66** | **126** | P | **P** | **16 28 36.1** | **-1.4** |
| **WRA** | **Warramunga Arr** | **20.66** | **126** | P | **P** | **16 28 37.3** | **-0.2** |
| | comp=Z,5.2nm,0.7s,baz=300,slow=12,SNR=5.2 | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.66** | **126** | P | **P** | **16 28 36.3** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 16 28 45.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.83** | **126** | P | **P** | **16 28 37.7** | **-1.6** |
| WR0 | | | | IAmb | IAmb | 16 28 44.9 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **22.51** | **135** | P | **P** | **16 28 56.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **16 28 56.9** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **16 28 57.1** | **-0.3** |
| | comp=Z,5.2nm,0.7s,baz=313,slow=9.3,SNR=5.0 | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **24.80** | **156** | P | **P** | **16 29 20.3** | **+0.7** |
| **BBOO** | **Buckleboo** | **30.31** | **146** | P | **P** | **16 30 07.8** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **31.80** | **327** | P | **P** | **16 30 24.9** | **+2.5** |
| | comp=Z,0.4nm,0.6s,baz=134,slow=6.5,SNR=1.9 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **39.12** | **143** | P | **P** | **16 31 24.2** | **-1.0** |
| TOO | | | | IAmb | IAmb | 16 32 07.5 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **49.72** | **112** | P | **P** | **16 32 49.8** | **-0.5** |
| DZM | | | | IAmb | IAmb | 16 33 15.7 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.02** | **14** | P | **P** | **16 33 21.7** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **54.02** | **14** | P | **P** | **16 33 21.9** | **+0.1** |
| | comp=Z,1.0nm,0.7s,baz=190,slow=7.3,SNR=3.1 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.56** | **340** | P | **P** | **16 34 55.3** | **+1.4** |
| | comp=Z,0.8nm,0.6s,baz=134,slow=6.2,SNR=2.7 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **CPUP** | **Villa Florida** | **145.13** | **189** | PKPbc | **PKPab** | **16 43 35.4** | **-0.1** |
| | comp=Z,5.0nm,0.8s,baz=197,slow=5.4,SNR=6.9 | | | | | | |

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*IDC **19** 16:28:53.5±16.0, 8.08S×116.71E, h0km, mb3.9/3, mbtmp4.0/3, Error ellipse: s-maj=296.3km s-min=173.6km az=1.0*
**DJA 19 16:28:44.3±0.9, 9°S±15'×11°7E±°, h17km±9km, M3.7/7, MLv3.7/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.19** | **170** | P | **Pb** | **16 28 50.5** | **+1.1** |
| **PLAI** | **Plampang** | **0.96** | **107** | P | **Pb** | **16 29 01.0** | **-1.4** |
| PLAI | | | | S | **Sb** | **16 29 13.3** | **-1.5** |
| **SRBI** | **Singaraja** | **1.69** | **286** | P | **Pn** | **16 29 13.2** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.67** | **272** | P | **Pn** | **16 29 26.1** | **-0.5** |
| **WBSI** | **Waikabubak, Su** | **2.73** | **114** | P | **Pn** | **16 29 28.0** | **+0.5** |
| **EDFI** | **Ende, Flores** | **4.79** | **93** | P | **Pn** | **16 29 56.8** | **+1.0** |
| **WRA** | **Warramunga Arr** | **20.36** | **126** | P | **Pn** | **16 33 35.9** | **+14** |
| | 2.1nm,0.5s,baz=299,slow=12,SNR=8.2 | | | | | | |
| | 2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.19** | **135** | P | **P** | **16 33 56.1** | **+16** |
| | 1.5nm,0.5s,baz=309,slow=9.3,SNR=11 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.67** | **139** | P | **P** | **16 35 31.7** | **+16** |
| | 2.2nm,0.7s,baz=321,slow=11,SNR=5.9 | | | | | | |
| | 2.2nm,0.7s | | | | | | |

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*AFAD **19** 16:30:42.6±0.0, 37.21°N×42.39°E, h7km±4km, ML2.3*
*ISK **19** 16:30:43.9, 37.27°N×42.47°E, h10km, ML2.7/11*
**ISC 19 16:30:43.9±1.6, 37.26°N±0.06°×42.45°E±0.04, h6km±11km, n17, σ1§04/26, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIRN** | **Sırnak** | **0.23** | **354** | P | **Pg** | **16 30 48.0** | **-0.6** |
| SIRN | | | | S | **Sg** | **16 30 52.1** | **+0.5** |
| **PERV** | **Siirt/Pervari-** | **0.69** | **6** | P | **Pg** | **16 30 57.1** | **0.0** |
| PERV | | | | S | **Sb** | **16 31 08.1** | **-0.1** |
| **SRTM** | **Siirt_Merkez** | **0.84** | **330** | P | **Pg** | **16 30 59.3** | **-0.7** |
| SRTM | | | | S | **Sb** | **16 31 12.2** | **-0.3** |
| SRTM | | | | *i* AML | AML | 16 31 21.0 | |
| | comp=N,105nm,0.6s | | | | | | |
| **CUKT** | **Cukurca** | **0.93** | **91** | Pg | **Pb** | **16 31 01.7** | **-0.8** |
| CUKT | | | | Sg | **Sb** | **16 31 14.7** | **-0.5** |
| **AKDM** | **Akdamar-Van** | **1.15** | **22** | Pn | **Pn** | **16 31 06.0** | **-0.7** |
| **GEVA** | **Gevas** | **1.16** | **25** | P | **Pb** | **16 31 06.1** | **-0.3** |
| GEVA | | | | S | **Sn** | **16 31 23.8** | **+0.7** |
| GEVA | | | | *i* AML | AML | 16 31 28.0 | |
| | comp=E,54nm,0.4s | | | | | | |
| **BLIS** | **Bitlis-Merkez** | **1.18** | **347** | P | **Pn** | **16 31 06.5** | **-0.7** |
| BLIS | | | | S | **Sb** | **16 31 22.5** | **0.0** |
| BLIS | | | | *i* AML | AML | 16 31 25.0 | |
| | comp=E,66nm,0.4s | | | | | | |
| BLIS | | | | *i* AML | AML | 16 31 28.0 | |
| | comp=N,59nm,0.4s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **1.33** | **346** | Pn | **Pn** | **16 31 08.6** | **-0.6** |
| GURO | | | | Sn | **Sg** | **16 31 27.8** | **+1.2** |
| **SVAN** | **Silvan-Diyarba** | **1.33** | **312** | Pn | **Pb** | **16 31 08.7** | **-0.6** |
| SVAN | | | | Sn | **Sg** | **16 31 27.5** | **+0.9** |
| **ADCV** | **BITLIS_Adilcev** | **1.56** | **8** | P | **Pg** | **16 31 13.9** | **+0.1** |
| ADCV | | | | S | **Sg** | **16 31 36.5** | **+2.4** |
| ADCV | | | | *i* AML | AML | 16 31 38.0 | |
| | comp=N,34nm,0.4s | | | | | | |
| ADCV | | | | *i* AML | AML | 16 31 38.0 | |
| | comp=E,40nm,0.5s | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WR0 | | | | | IAmb | IAmb | 16 39 18.1 | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.81** | **260** | | P | **P** | **16 38 39.5** | **-0.4** |
| WB0 | | | | | IAmb | IAmb | 16 39 18.3 | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.83** | **260** | | P | **P** | **16 38 39.2** | **-0.9** |
| WB2 | | | | | IAmb | IAmb | 16 38 41.0 | | |
| | comp=Z,9.4nm,1.2s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.84** | **260** | | P | **P** | **16 38 39.6** | **-0.5** |
| WRAB | | | | | IAmb | IAmb | 16 38 58.6 | | |
| | comp=Z,5.7nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | | P | **P** | **16 38 39.6** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | | P | **P** | **16 38 40.1** | **0.0** |
| | comp=Z,1.0nm,0.5s,baz=97,slow=7.1,SNR=18 | | | | | | | | |
| WRA | | | | | PcP | **PcP** | **16 40 09.9** | **-0.2** | |
| | comp=Z,0.4nm,0.4s,baz=92,slow=3.5,SNR=3.0 | | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **AS01** | **Alice Springs** | **44.93** | **254** | | P | **P** | **16 38 39.1** | **-1.7** |
| **MULG** | **Mulgathing** | **44.94** | **245** | | P | **P** | **16 38 40.5** | **-0.2** |
| **AS31** | **Alice Springs** | **44.97** | **254** | | P | **P** | **16 38 40.6** | **-0.5** |
| AS31 | | | | | IAmb | IAmb | 16 38 42.3 | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.97** | **254** | | P | **P** | **16 38 40.7** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.97** | **254** | | P | **P** | **16 38 41.4** | **+0.2** |
| | comp=Z,6.5nm,0.6s,baz=89,slow=9.0,SNR=71 | | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **16 40 10.2** | **-0.4** | |
| | comp=Z,0.8nm,0.5s,baz=102,slow=3.8,SNR=6.1 | | | | | | | | |
| | comp=Z,6.5nm,0.6s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.73** | **264** | | P | **P** | **16 39 24.1** | **0.0** |
| KNRA | | | | | IAmb | IAmb | 16 39 39.7 | | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.28** | **323** | | P | **P** | **16 41 20.6** | **-0.1** |
| | comp=Z,2.2nm,0.5s,baz=160,slow=5.7,SNR=14 | | | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | | | |
| **MAJO** | **Matsushiro** | **68.28** | **323** | | P | **P** | **16 41 20.3** | **-0.4** |
| MAJO | | | | | IAmb | IAmb | 16 41 27.3 | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.28** | **323** | | P | **P** | **16 41 20.9** | **+0.1** |
| MJB9 | | | | | IAmb | IAmb | 16 41 22.0 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | | P | **P** | **16 41 42.4** | **+0.6** |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | | P | **P** | **16 41 41.5** | **-0.3** |
| | comp=Z,1.2nm,0.6s,baz=112,slow=1.3,SNR=9.5 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| **YULB** | **Yu-li** | **72.13** | **303** | | P | **P** | **16 41 42.6** | **-1.2** |
| **SSLB** | **Suanglung** | **72.60** | **303** | | P | **P** | **16 41 44.7** | **-1.8** |
| SSLB | | | | | IAmb | IAmb | 16 41 46.2 | | |
| | comp=Z,8.9nm,0.5s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **74.00** | **345** | | P | **P** | **16 41 53.8** | **0.0** |
| **PETK** | **Petropavlovsk-** | **74.00** | **345** | | P | **P** | **16 41 53.9** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **74.00** | **345** | | P | **P** | **16 41 53.6** | **-0.2** |
| | comp=Z,5.4nm,0.9s,baz=100,slow=7.7,SNR=12 | | | | | | | | |
| | comp=Z,5.4nm,0.9s | | | | | | | | |
| **KSRS** | **Korea Array** | **75.07** | **318** | | P | **P** | **16 41 59.9** | **-0.2** |
| | comp=Z,0.7nm,0.6s,baz=131,slow=6.8,SNR=4.6 | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | |
| **PMPB** | **Monarch Peak** | **76.55** | **44** | | P | **P** | **16 42 08.8** | **+0.4** |
| PMPB | | | | | IAmb | IAmb | 16 42 19.2 | | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **O16K** | **Kokwok River B** | **79.20** | **10** | | P | **P** | **16 42 21.4** | **-0.6** |
| O16K | | | | | IAmb | IAmb | 16 42 49.9 | | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| **GRAC** | **Grapevine Rang** | **79.28** | **45** | | P | **P** | **16 42 24.9** | **+1.8** |
| **RYN** | **Ryan** | **79.40** | **43** | | P | **P** | **16 42 25.1** | **+1.2** |
| **NVAR** | **Mina Array Bea** | **79.43** | **44** | | P | **P** | **16 42 25.5** | **+1.3** |
| **NVAR** | **Mina Array Bea** | **79.43** | **44** | | P | **P** | **16 42 24.9** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=214,slow=8.1,SNR=5.3 | | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | | |
| **KVN** | **Kaiserville** | **79.91** | **43** | | P | **P** | **16 42 27.6** | **+1.0** |
| **J05D** | **Fort Rock, OR** | **80.36** | **38** | | P | **P** | **16 42 30.1** | **+1.3** |
| **M16K** | **Timber Creek** | **80.41** | **9** | | P | **P** | **16 42 29.4** | **+1.0** |
| **H04A** | **Detroit Lake** | **80.64** | **37** | | P | **P** | **16 42 30.4** | **+0.3** |
| H04A | | | | | IAmb | IAmb | 16 42 36.4 | | |
| | comp=Z,8.5nm,1.3s | | | | | | | | |
| **L16K** | **Owhat River** | **80.99** | **9** | | P | **P** | **16 42 31.7** | **+0.3** |
| L16K | | | | | IAmb | IAmb | 16 43 14.2 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **M17K** | **Holitna River** | **81.02** | **10** | | P | **P** | **16 42 32.3** | **+0.7** |
| **K15K** | **Wolf Creek Mou** | **81.27** | **8** | | P | **P** | **16 42 33.9** | **+1.1** |
| K15K | | | | | IAmb | IAmb | 16 42 34.4 | | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **I07A** | **Izee** | **81.85** | **38** | | P | **P** | **16 42 37.1** | **+0.7** |
| **L18K** | **Granite Mounta** | **81.91** | **10** | | P | **P** | **16 42 36.9** | **+0.8** |
| L18K | | | | | IAmb | IAmb | 16 42 55.8 | | |
| | comp=Z,19nm,1.5s | | | | | | | | |
| **K17K** | **Iditarod** | **82.12** | **9** | | P | **P** | **16 42 37.6** | **+0.4** |
| K17K | | | | | IAmb | IAmb | 16 43 13.2 | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **J16K** | **Anvik River** | **82.34** | **8** | | P | **P** | **16 42 39.1** | **+0.8** |
| J16K | | | | | IAmb | IAmb | 16 42 43.1 | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **U15A** | **North Rim** | **82.50** | **48** | | P | **P** | **16 42 41.8** | **+1.7** |
| **J17K** | **VABM Dome** | **82.66** | **9** | | P | **P** | **16 42 40.6** | **+0.7** |
| J17K | | | | | IAmb | IAmb | 16 43 20.0 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **J18K** | **Innoko River** | **83.08** | **10** | | P | **P** | **16 42 42.1** | **+0.1** |
| **SCM** | **Sheep Creek Mo** | **83.42** | **14** | | P | **P** | **16 42 43.7** | **-0.1** |
| **J19K** | **Poorman** | **83.75** | **10** | | P | **P** | **16 42 45.7** | **+0.4** |
| J19K | | | | | IAmb | IAmb | 16 42 47.6 | | |
| | comp=Z,9.3nm,1.5s | | | | | | | | |
| **TABL** | **Table Mountain** | **83.84** | **17** | | P | **P** | **16 42 46.2** | **+0.1** |
| TABL | | | | | IAmb | IAmb | 16 42 46.6 | | |
| | comp=Z,6.4nm,0.8s | | | | | | | | |
| **N25K** | **Chitina, Valde** | **83.89** | **15** | | P | **P** | **16 42 46.2** | **0.0** |
| N25K | | | | | IAmb | IAmb | 16 42 46.9 | | |
| | comp=Z,3.7nm,0.7s | | | | | | | | |
| **GLB** | **Gilahina Butte** | **83.95** | **16** | | P | **P** | **16 42 46.2** | **-0.2** |
| GLB | | | | | IAmb | IAmb | 16 42 50.4 | | |
| | comp=Z,9.6nm,1.4s | | | | | | | | |
| **DHY** | **Denali Highway** | **84.50** | **14** | | P | **P** | **16 42 48.8** | **-0.4** |
| DHY | | | | | IAmb | IAmb | 16 42 58.5 | | |
| | comp=Z,7.8nm,1.4s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **85.22** | **16** | | P | **P** | **16 42 53.1** | **+0.3** |
| M27K | | | | | IAmb | IAmb | 16 42 54.1 | | |
| | comp=Z,3.7nm,1.0s | | | | | | | | |
| **Q32M** | **Nakina River** | **85.53** | **22** | | P | **P** | **16 42 54.9** | **+0.6** |
| Q32M | | | | | IAmb | IAmb | 16 42 55.8 | | |
| | comp=Z,1.9nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.91** | **58** | | P | **P** | **16 42 58.4** | **+1.6** |
| **TXAR** | **Lajitas Array** | **85.91** | **58** | | P | **P** | **16 42 58.2** | **+1.4** |
| | comp=Z,0.4nm,0.6s,baz=216,slow=6.2,SNR=5.9 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **IL31** | | **86.08** | **13** | | P | **P** | **16 42 56.0** | **-0.6** |
| **ILAR** | **Eielson Array** | **86.08** | **13** | | P | **P** | **16 42 56.1** | **-0.5** |
| **ILAR** | **Eielson Array** | **86.08** | **13** | | P | **P** | **16 42 56.0** | **-0.7** |
| | comp=Z,0.8nm,0.4s,baz=220,slow=4.9,SNR=12 | | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| **M29M** | **Somme Creek** | **86.22** | **17** | | P | **P** | **16 42 57.2** | **-0.2** |
| **J26L** | **Joseph Creek** | **86.59** | **14** | | P | **P** | **16 42 60.0** | **+0.8** |
| **OVMT** | **Ovando** | **87.30** | **38** | | P | **P** | **16 43 04.3** | **+1.3** |
| **PDAR** | **Pinedale Array** | **87.36** | **43** | | P | **P** | **16 43 03.5** | **0.0** |
| | comp=Z,0.4nm,0.6s,baz=193,slow=4.6,SNR=4.3 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **MMPY** | **Sheldon Lake,** | **88.53** | **20** | | P | **P** | **16 43 08.9** | **+0.7** |
| MMPY | | | | | IAmb | IAmb | 16 43 09.7 | | |
| | comp=Z,2.7nm,0.9s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.22** | **321** | | PKP | **PKPdf** | **16 48 55.6** | **-1.4** | |
| | comp=Z,0.5nm,0.4s,baz=98,slow=3.4,SNR=4.2 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.62** | **350** | | PKP | **PKPdf** | **16 49 14.1** | **-0.6** | |
| | comp=Z,2.1nm,1.0s,baz=90,slow=1.7,SNR=7.3 | | | | | | | | |
| **BNN** | **Bunyan** | **144.03** | **312** | | | PKPbc | 16 49 46.9 | -0.5 | |
| **BUR08** | **Bucovina Ar. S** | **144.96** | **332** | | | **PKPdf** | **16 49 49.9** | **+0.7** | |
| **BRTR** | **Keskin Array B** | **145.16** | **315** | | PKPbc | **PKPdf** | **16 49 50.5** | **+0.6** | |
| | comp=Z,1.2nm,0.7s,baz=130,slow=3.4,SNR=7.7 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.51** | **303** | | PKPbc | **PKPbc** | **16 49 55.1** | **+0.4** | |
| | comp=Z,1.6nm,0.4s,baz=81,slow=6.8,SNR=5.6 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.94** | **345** | | PKPbc | **PKPbc** | **16 49 58.0** | **0.0** | |
| | comp=Z,1.9nm,0.7s,baz=168,slow=6.8,SNR=11 | | | | | | | | |
| **CONA** | **Conrad Observa** | **148.20** | **342** | *i* | PKP | **PKPbc** | **16 49 58.8** | **+0.1** | |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.27** | **341** | *i* | PKP | **PKPbc** | **16 49 59.0** | **+0.1** | |
| | comp=Z,0.5nm,0.3s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.51** | **345** | *i* | PKP | **PKPbc** | **16 50 01.6** | **-0.3** | |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.66** | **344** | *i* | PKP | **PKPbc** | **16 50 01.9** | **-0.5** | |
| | comp=Z,1.2nm,0.5s | | | | | | | | |
| **WATA** | **Walderalm** | **149.84** | **347** | *i* | PKP | **PKPbc** | **16 50 02.0** | **-0.8** | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **RETA** | **Reutte** | **149.87** | **348** | *i* | PKP | **PKPbc** | **16 50 02.0** | **-0.7** | |
| | comp=Z,0.5nm,0.2s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.90** | **347** | *e* | PKP | **PKPbc** | **16 50 02.2** | **-0.7** | |
| | comp=Z,4.3nm,0.5s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.03** | **347** | *i* | PKP | **PKPbc** | **16 50 02.9** | **-0.3** | |
| | comp=Z,0.5nm,0.2s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.18** | **345** | *e* | PKP | **PKPbc** | **16 50 02.8** | **-0.7** | |
| | comp=Z,3.9nm,0.6s | | | | | | | | |
| **DAVA** | **Damuels** | **150.23** | **349** | *e* | PKP | **PKPbc** | **16 50 03.1** | **-0.5** | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **FETA** | **Feichten** | **150.32** | **348** | *i* | PKP | **PKPbc** | **16 50 03.3** | **-0.7** | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |

*IDC **19** 16:31:36.4±1.5, 8°.55S×116°.39E, h0km, mb3.5/5, mbtmp3.7/6, ML3.8/1, Error ellipse: s-maj=41.8km s-min=22.5km az=55.0*
*DJA **19** 16:31:40.6±0.6, 8°.5±11°×11°.7E±°, h10km, M3.9/5, MLv3.9/5*
**ISC 19 16:31:37.8±1.3, 8°.6S±0°.1×116°.5E±0°.1, h10km, n9, σ2§14/10, mb3.7/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **1.32** | **99** | P | **Pn** | **16 32 01.1** | **-1.2** |
| PLAI | | | | S | **Sn** | **16 32 17.3** | **-2.7** |
| **SRBI** | **Singaraja** | **1.35** | **294** | P | Pg | 16 32 07.5 | +3.8 |
| SRBI | | | | S | Sn | 16 32 28.8 | +8.1 |
| **WBSI** | **Waikabubak, Su** | **3.06** | **109** | P | **Pn** | **16 32 27.9** | **+1.5** |
| **KAPI** | **Kappang** | **4.86** | **43** | Pn | **Pn** | **16 32 49.3** | **-1.8** |
| | 3.6nm,0.3s,baz=199,slow=8.2,SNR=2.0 | | | | | | |
| KAPI | | | | Sn | **Sn** | **16 33 51.1** | **+3.7** |
| | 5.2nm,0.3s,baz=56,slow=22,SNR=4.4 | | | | | | |
| | 8.8nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.63** | **125** | P | **P** | **16 36 18.2** | **+0.5** |
| | 1.4nm,0.5s,baz=300,slow=12,SNR=11 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.41** | **134** | P | **P** | **16 36 38.6** | **+1.7** |
| | 1.2nm,0.9s,baz=311,slow=9.5,SNR=9.1 | | | | | | |
| | 1.2nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.92** | **352** | P | **P** | **16 41 23.6** | **+0.3** |
| | 0.6nm,0.5s,baz=170,slow=8.8,SNR=2.1 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.01** | **334** | P | **P** | **16 42 04.4** | **-0.6** |
| | 0.3nm,0.7s,baz=134,slow=6.2,SNR=3.2 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.83** | **340** | P | **P** | **16 42 35.1** | **-0.9** |
| | 0.3nm,0.4s,baz=134,slow=6.2,SNR=1.8 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*MOS **19** 16:37:33.4±1.0, 8°.31S×116°.86E, h0km, mb4.9/28, Error ellipse: s-maj=10.4km s-min=6.4km az=102.4*
*IDC **19** 16:37:35.6±0.4, 8°.28S×116°.75E, h0km, mb4.6/24, mbtmp4.6/25, ML5.1/1, Error ellipse: s-maj=16.1km s-min=9.3km az=64.0*
*NEIC **19** 16:37:37.7±1.7, 8°.38S±0°.07×116°.85E±0°.06, h10km±1km, mb5.3/54, Error ellipse: s-maj=11.7km s-min=9.9km az=180.0*
*DJA **19** 16:37:38.4±0.4, 8°.5±11°×11°.7E±°, h11km±3km, M5.4/78, mb5.2/78, mB5.8/22, MLv5.7/28, Mw5.6/30, Mw(mB)5.3/22*
**ISC 19 16:37:37.5±0.3, 8°.40S±0°.04×116°.84E±0°.04, h10km, n291, σ1§49/285, mb5.0/98, 19C-4D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.34** | **172** | P | **Pb** | **16 37 46.4** | **+0.8** |
| **PLAI** | **Plampang** | **1.02** | **115** | P | **Pg** | **16 37 57.2** | **0.0** |
| **PLAI** | **Plampang** | **1.02** | **115** | P | **Pg** | **16 37 56.9** | **-0.3** |
| **DNP** | **Denpasar** | **1.63** | **260** | P | **Pb** | **16 38 07.6** | **0.0** |
| **SRBI** | **Singaraja** | **1.64** | **281** | P | **Pn** | **16 38 06.1** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **268** | P | **Pn** | **16 38 21.2** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **268** | Pn | **Pn** | **16 38 20.6** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **268** | P | **Pn** | **16 38 20.7** | **+0.3** |
| **WBSI** | **Waikabuk, Su** | **2.81** | **116** | P | **Pn** | **16 38 23.1** | **+0.6** |
| **BASI** | **Baing, Sumba** | **4.11** | **116** | P | **Pn** | **16 38 42.6** | **+2.2** |
| **BSSI** | **Bau Bau, Buton** | **4.26** | **58** | P | **Pn** | **16 38 41.3** | **-1.2** |
| **KAPI** | **Kappang** | **4.44** | **41** | P | **Pn** | **16 38 43.3** | **-1.6** |
| **KAPI** | **Kappang** | **4.44** | **41** | Pn | **Pn** | **16 38 43.3** | **-1.6** |
| | 101nm,0.3s,baz=214,slow=12,SNR=235 | | | | | | |
| KAPI | | | | Sn | **Sn** | **16 39 34.6** | **-2.0** |
| | 97nm,0.3s,baz=222,slow=20,SNR=7.5 | | | | | | |
| | 204nm,0.3s | | | | | | |
| **GRJI** | **Gresik** | **4.56** | **289** | P | **Pn** | **16 38 47.3** | **+0.7** |
| **EDFI** | **Ende, Flores** | **4.81** | **94** | P | **Pn** | **16 38 51.2** | **+1.0** |
| **BWJI** | **Bawean** | **4.86** | **301** | P | **Pn** | **16 38 51.2** | **+0.5** |
| **PWJI** | **Pagerwojo** | **4.99** | **274** | P | **Pn** | **16 38 53.5** | **+1.0** |
| **BNSI** | **Bone** | **5.13** | **39** | P | **Pn** | **16 38 55.7** | **+1.2** |
| | 816nm,1.0s,17µm12nm | | | | | | |
| **MMRI** | **Maumere** | **5.35** | **93** | P | **Pn** | **16 38 58.4** | **+1.0** |
| **MMRI** | **Maumere** | **5.35** | **93** | Pn | **Pn** | **16 38 57.4** | **0.0** |
| **MMRI** | **Maumere** | **5.35** | **93** | P | **Pn** | **16 38 57.4** | **0.0** |
| **NGJI** | **Ngawi** | **5.42** | **281** | P | **Pn** | **16 38 58.9** | **+0.5** |
| | 212nm,0.6s,5.6nm | | | | | | |
| **UGM** | **Wanagama** | **6.27** | **274** | P | **Pn** | **16 39 12.4** | **+2.3** |
| **UGM** | **Wanagama** | **6.27** | **274** | Pn | **Pn** | **16 39 10.8** | **+0.7** |
| **UGM** | **Wanagama** | **6.27** | **274** | P | **Pn** | **16 39 11.5** | **+1.4** |
| **BBSI** | **Bau Bau** | **6.39** | **63** | P | **Pn** | **16 39 12.7** | **+1.0** |
| | 244nm,0.7s,4µm1.7nm | | | | | | |
| **SMRI** | **Semarang** | **6.48** | **282** | P | **Pn** | **16 39 14.9** | **+1.9** |
| | 193nm,1.1s,3.2nm | | | | | | |
| **BATI** | **Baumata** | **6.97** | **105** | P | **Pn** | **16 39 21.6** | **+1.8** |
| **BKB** | **Balikpapan** | **7.09** | **0** | Pn | **Pn** | **16 39 24.4** | **+3.0** |
| **SOEI** | **Soe** | **7.46** | **101** | P | **Pn** | **16 39 27.4** | **+0.9** |
| **SOEI** | **Soe** | **7.46** | **101** | Pn | **Pn** | **16 39 27.5** | **+0.9** |
| **SOEI** | **Soe** | **7.46** | **101** | P | **Pn** | **16 39 28.7** | **+2.1** |
| **MTKI** | **Muara Teweh, K** | **7.66** | **345** | P | **Pn** | **16 39 27.5** | **-1.7** |
| **KPJI** | **Karang Pucung** | **7.90** | **277** | P | **Pn** | **16 39 35.0** | **+2.5** |
| | 190nm,0.9s,1.2nm | | | | | | |
| **SMKI** | **Samarinda** | **7.91** | **3** | P | **Pn** | **16 39 33.3** | **+0.7** |
| | 89nm,0.4s,1.6nm | | | | | | |
| **CMJI** | **Cimerak** | **8.33** | **274** | P | **Pn** | **16 39 39.5** | **+1.2** |
| | 110nm,0.8s | | | | | | |
| **BBJI** | **Bungbulang** | **9.15** | **275** | P | **Pn** | **16 39 52.3** | **+2.6** |
| **MPSI** | **Mapaga** | **9.20** | **20** | P | **Pn** | **16 39 49.9** | **-0.4** |
| **LUWI** | **Luwuk** | **9.40** | **39** | P | **Pn** | **16 39 54.0** | **+0.9** |
| **LUWI** | **Luwuk** | **9.40** | **39** | | **Pn** | **16 39 53.2** | **+0.1** |
| **LUWI** | **Luwuk** | **9.40** | **39** | P | **Pn** | **16 39 53.7** | **+0.6** |
| | 118nm,0.9s | | | | | | |
| **CNJI** | **Cibinong** | **9.68** | **276** | P | **Pn** | **16 39 58.1** | **+1.2** |
| | 68nm,0.6s | | | | | | |
| **DBJI** | **Dramaga** | **10.17** | **280** | P | **Pn** | **16 40 04.9** | **+1.3** |
| | 140nm,0.9s | | | | | | |
| **MRSI** | **Marisa** | **10.18** | **30** | P | **Pn** | **16 40 04.4** | **+0.6** |
| | 47nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **10.24** | **23** | P | **Pn** | **16 40 05.5** | **+0.9** |
| **TOLI2** | **Tolitoli** | **10.24** | **23** | Pn | **Pn** | **16 40 05.4** | **+0.9** |
| **GTOI** | **Gorontalo** | **10.88** | **35** | P | **Pn** | **16 40 14.6** | **+1.2** |
| **SANI** | **Sanana** | **11.08** | **56** | P | **Pn** | **16 40 17.1** | **+1.0** |
| | 56nm,1.0s | | | | | | |
| **XMIS** | **Christmas Isla** | **11.22** | **259** | P | **Pn** | **16 40 19.5** | **+1.4** |
| **KMSI** | **Cibinong** | **11.41** | **39** | P | **Pn** | **16 40 21.9** | **+1.3** |
| | 125nm,1.0s | | | | | | |
| **SBUM** | **Sibu** | **11.72** | **337** | | **Pn** | **16 40 24.5** | **-0.4** |
| **KSM** | **Kuching** | **11.77** | **326** | Pn | **Pn** | **16 40 26.8** | **+1.2** |
| **KASI** | **Kota Agung** | **12.58** | **282** | P | **Pn** | **16 40 39.1** | **+2.5** |
| | 99nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.89** | **139** | | **Pn** | **16 40 39.7** | **-1.2** |
| **MBWA** | **Marble Bar** | **12.99** | **168** | P | **Pn** | **16 40 41.1** | **-1.1** |
| **MBWA** | **Marble Bar** | **12.99** | **168** | | **Pn** | **16 40 40.6** | **-1.6** |
| **MBWA** | **Marble Bar** | **12.99** | **168** | P | **Pn** | **16 40 40.7** | **-1.5** |
| | comp=Z,2µmcomp=Z,128nm,0.7s | | | | | | |
| **LWLI** | **Liwa** | **13.12** | **284** | P | **Pn** | **16 40 43.1** | **-1.1** |
| | comp=Z,158nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.41** | **168** | P | **Pn** | **16 40 47.3** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **13.41** | **168** | Pn | **Pn** | **16 40 46.5** | **-1.5** |
| **PSA00** | **Pilbara Seismi** | **13.41** | **168** | P | **Pn** | **16 40 47.0** | **-1.0** |
| | comp=Z,3µmcomp=Z,112nm,0.9s | | | | | | |
| **BNDI** | **Bandanaira** | **13.54** | **74** | P | **Pn** | **16 40 50.1** | **+0.3** |
| **BNDI** | **Bandanaira** | **13.54** | **74** | P | **Pn** | **16 40 51.4** | **+1.6** |
| **MYLDM** | **Lahad Datu** | **13.59** | **7** | | **Pn** | **16 40 53.2** | **+2.7** |
| **KNRA** | **Kununurra** | **13.72** | **123** | Pn | **Pn** | **16 40 51.0** | **-1.2** |
| **KNRA** | **Kununurra** | **13.72** | **123** | P | **Pn** | **16 40 51.9** | **-0.3** |
| | comp=Z,2µmcomp=Z,165nm,0.6s | | | | | | |
| **KKM** | **Kota Kinabalu** | **14.36** | **358** | Pn | **Pn** | **16 41 00.9** | **-0.2** |
| **MNAI** | **Manna** | **14.36** | **285** | P | **Pn** | **16 41 03.9** | **+2.8** |
| **GIRL** | **Giralia** | **14.38** | **190** | P | **Pn** | **16 41 01.6** | **+0.4** |
| **GIRL** | **Giralia** | **14.38** | **190** | Pn | **Pn** | **16 41 00.1** | **-1.1** |
| **DRS** | **Darwin Rock St** | **14.40** | **107** | P | **Pn** | **16 41 00.8** | **-0.7** |
| **MTN** | **Manton Dam** | **14.73** | **109** | P | **Pn** | **16 41 05.1** | **-0.9** |
| **MTN** | **Manton Dam** | **14.73** | **109** | | **Pn** | **16 41 03.7** | **-2.3** |
| **MTN** | **Manton Dam** | **14.73** | **109** | P | **Pn** | **16 41 03.6** | **-2.5** |
| **KDU** | **Kakadu** | **15.95** | **107** | P | **Pn** | **16 41 21.9** | **-0.3** |
| **KDU** | **Kakadu** | **15.95** | **107** | P | **Pn** | **16 41 19.8** | **-2.4** |
| **SWI** | **Sorong** | **16.20** | **63** | P | **Pn** | **16 41 26.8** | **+1.4** |
| | comp=Z,157nm,1.4s | | | | | | |
| **FAKI** | **Fak Fak** | **16.27** | **71** | P | **Pn** | **16 41 27.2** | **+0.9** |
| **FAKI** | **Fak Fak** | **16.27** | **71** | | **Pn** | **16 41 26.3** | **0.0** |
| **FAKI** | **Fak Fak** | **16.27** | **71** | P | **Pn** | **16 41 27.1** | **+0.8** |
| | comp=Z,222nm,1.0s | | | | | | |
| **MEEK** | **Meekatharra** | **18.22** | **175** | P | **P** | **16 41 52.6** | **+1.8** |
| **MEEK** | **Meekatharra** | **18.22** | **175** | P | **P** | **16 41 51.7** | **+0.9** |
| | comp=Z,2µmcomp=Z,152nm,0.8s | | | | | | |
| **SISI** | **Saibi** | **19.02** | **291** | P | **Pn** | **16 42 01.6** | **+1.2** |
| | comp=Z,81nm,1.1s | | | | | | |
| **WRKA** | **Warakurna** | **19.83** | **148** | P | **Pn** | **16 42 10.5** | **+0.4** |
| **WRKA** | **Warakurna** | **19.83** | **148** | P | **Pn** | **16 42 10.0** | **-0.2** |
| | comp=Z,2µmcomp=Z,139nm,0.8s | | | | | | |
| **IPM** | **Ipoh** | **20.31** | **308** | P | **P** | **16 42 13.4** | **-0.4** |
| **WB0** | **Warramunga Arr** | **20.41** | **125** | IAmb | IAmb | 16 42 31.1 | |
| | comp=Z,109nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.46** | **126** | P | **P** | **16 42 14.8** | **-0.6** |
| **WRA** | **Warramunga Arr** | **20.46** | **126** | P | **P** | **16 42 15.7** | **+0.2** |
| | comp=Z,60nm,0.8s,baz=301,slow=12,SNR=333 | | | | | | |
| WRA | | | | S | **S** | **16 46 00.0** | **-4.6** |
| | comp=Z,12nm,0.8s,baz=299,slow=23,SNR=5.4 | | | | | | |
| | comp=Z,60nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.46** | **126** | *e*P | **P** | **16 42 15.3** | **-0.2** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,55nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.46** | **126** | P | **P** | **16 42 15.0** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 16 42 31.8 | |
| | comp=Z,101nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.46** | **126** | P | **P** | **16 42 15.0** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,101nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.47** | **126** | IAmb | IAmb | 16 42 31.8 | |
| | comp=Z,99nm,0.7s | | | | | | |
| **MORW** | **Morawa** | **20.57** | **182** | P | **P** | **16 42 17.8** | **+1.2** |
| **MORW** | **Morawa** | **20.57** | **182** | P | Pn | 16 42 18.4 | -0.3 |
| | comp=Z,82nm,1.1s | | | | | | |
| **RPSI** | **Rantau Prapat** | **20.99** | **301** | P | **P** | **16 42 21.4** | **+0.2** |
| **PSI** | **Prapat** | **21.04** | **301** | P | **P** | **16 42 21.4** | **-0.5** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,64nm,1.2s | | | | | | |
| **GSI** | **Gunungsitoli** | **21.48** | **296** | P | **P** | **16 42 27.8** | **+1.3** |
| | comp=Z,39nm,0.8s | | | | | | |
| **BLDU** | **Ballidu** | **22.10** | **180** | P | **P** | **16 42 33.9** | **+0.9** |
| **BLDU** | **Ballidu** | **22.10** | **180** | P | **P** | **16 42 33.7** | **+0.7** |
| | comp=Z,72nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **22.31** | **135** | P | **P** | **16 42 35.2** | **-0.1** |
| | comp=Z,34nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.31** | **135** | P | **P** | **16 42 35.1** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.31** | **135** | P | **P** | **16 42 35.8** | **+0.4** |
| | comp=Z,40nm,0.8s,baz=310,slow=9.7,SNR=226 | | | | | | |
| ASAR | | | | S | **S** | **16 46 45.5** | **+4.5** |
| | comp=Z,19nm,0.9s,baz=303,slow=19,SNR=4.1 | | | | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **22.34** | **135** | P | **P** | **16 42 36.5** | **+0.8** |
| **KLBR** | **Kellerberrin** | **23.09** | **178** | P | **P** | **16 42 44.4** | **+0.9** |
| **KLBR** | **Kellerberrin** | **23.09** | **178** | P | **P** | **16 42 44.6** | **+1.2** |
| | comp=Z,86nm,0.7s | | | | | | |
| **MMPI** | **Merau

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LZH | | | | | pmax | pmax | | |
| | comp=Z,27nm,1.2s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.76** | **12** | P | **P** | **16 46 07.5 +0.5** | | |
| **KSAR** | **Wonju Array Be** | **46.76** | **12** | P | **P** | **16 46 07.5 +0.5** | | |
| **KSRS** | **Korea Array** | **46.78** | **12** | P | **P** | **16 46 07.5 +0.3** | | |
| | comp=Z,5.4nm,1.0s,baz=192,slow=8.5,SNR=18 | | | | | | | |
| | comp=Z,5.4nm,1.0s | | | | | | | |
| **BJT** | **Baijiatuau** | **48.18** | **359** | IAmb | IAmb | 16 46 40.4 | | |
| | comp=Z,41nm,1.1s | | | | | | | |
| **BJI** | **Beijing** | **48.20** | **359** | P | **P** | **16 46 18.3 +0.1** | | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **GOMU** | **GeErMu** | **48.96** | **336** | P | **P** | **16 46 28.8 +4.2** | | |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| **MAJO** | **Matsushiro** | **49.01** | **23** | P | **P** | **16 46 23.1 -1.4** | | |
| MAJO | | | | IAmb | IAmb | 16 46 49.5 | | |
| | comp=Z,24nm,0.8s | | | | | | | |
| **MAJO** | **Matsushiro** | **49.01** | **23** | *c i* P | **P** | **16 46 23.4 -1.1** | | |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.01** | **23** | P | **P** | **16 46 23.1 -1.5** | | |
| | comp=Z,6.0nm,1.0s,baz=198,slow=7.7,SNR=9.2 | | | | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **49.01** | **23** | P | **P** | **16 46 24.1 -0.4** | | |
| MJB9 | | | | IAmb | IAmb | 16 46 50.5 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **49.02** | **23** | *e*P | **P** | **16 46 23.0 -1.7** | | |
| MJA0 | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **BTO** | **Baotou** | **49.16** | **353** | *e*P | **P** | **16 46 27.4 +1.7** | | |
| BTO | | | | pP | **sP** | **16 46 35.3 +5.2** | | |
| BTO | | | | sP | pP | 16 46 40.6 +12 | | |
| BTO | | | | S | **S** | **16 53 33.3 +2.0** | | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.5s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,2µm,21.8s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,2µm,17.7s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,3µm,13.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.24** | **355** | *e*P | **P** | **16 46 29.1 +2.7** | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.6s | | | | | | | |
| **NOUC** | **Port Laguerre** | **49.41** | **112** | P | **P** | **16 46 26.7 -1.2** | | |
| **DZM** | **Mont Dzumac** | **49.54** | **112** | P | **P** | **16 46 29.7 +0.7** | | |
| **DZM** | **Mont Dzumac** | **49.54** | **112** | P | **P** | **16 46 28.4 -0.6** | | |
| **DZM** | **Mont Dzumac** | **49.54** | **112** | P | **P** | **16 46 30.1 +1.1** | | |
| | comp=Z,14nm,0.7s,baz=246,slow=11,SNR=20 | | | | | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **YATNC** | **Mamie plateau,** | **49.95** | **112** | P | **P** | **16 46 32.9 +0.9** | | |
| **LIFNC** | **LIFOU** | **50.11** | **110** | P | **P** | **16 46 34.0 +0.8** | | |
| **LIFNC** | **LIFOU** | **50.11** | **110** | P | **P** | **16 46 33.1 -0.2** | | |
| **GTA** | **Gaotai** | **50.12** | **343** | *e*P | **P** | **16 46 34.8 +1.7** | | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **52.06** | **359** | *e*P | P | 16 46 54.0 +6.5 | | |
| XLT | | | | PcP | **PcP** | **16 48 02.8 +3.2** | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.4s | | | | | | | |
| **CN2** | **Changchun** | **52.54** | **8** | P | P | 16 46 57.1 +6.1 | | |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **MDJ** | **Mudanjiang** | **54.01** | **11** | P | **P** | **16 47 01.9 +0.1** | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.6s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.12** | **13** | IAmb | IAmb | 16 47 18.8 | | |
| | comp=Z,59nm,1.4s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.12** | **13** | *c i* P | **P** | **16 47 01.8 -0.8** | | |
| **USRK** | **Ussuriysk Ar.** | **54.12** | **13** | P | **P** | **16 47 02.2 -0.4** | | |
| | comp=Z,8.0nm,0.8s,baz=191,slow=4.0,SNR=18 | | | | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **BNX** | **BinXian** | **54.72** | **9** | ⇑P | **P** | **16 47 08.0 +1.0** | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **ERM** | **Erimo** | **55.66** | **24** | *e*P | **P** | **16 47 13.7 -0.1** | | |
| **TEY** | **Ternei** | **56.09** | **17** | *e*P | **P** | **16 47 15.2 -1.6** | | |
| **ULN** | **Ulaanbaatar** | **56.69** | **352** | P | **P** | **16 47 20.6 -0.6** | | |
| ULN | | | | IAmb | IAmb | 16 47 45.1 | | |
| | comp=Z,27nm,1.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.69** | **352** | *d i* P | **P** | **16 47 21.1 -0.1** | | |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **56.75** | **352** | P | **P** | **16 47 19.9 -1.8** | | |
| SONM | | | | IAmb | IAmb | 16 47 45.5 | | |
| | comp=Z,34nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **56.75** | **352** | P | **P** | **16 47 21.7 0.0** | | |
| | comp=Z,7.9nm,0.9s,baz=171,slow=7.5,SNR=26 | | | | | | | |
| | comp=Z,7.9nm,0.9s | | | | | | | |
| **WMQ** | **Urumqi** | **58.31** | **336** | *e*P | **P** | **16 47 33.8 +1.2** | | |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| **RPZ** | **Rata Peaks** | **58.71** | **136** | P | **P** | **16 47 37.5 +2.0** | | |
| **KLR** | **Kul'dur** | **58.86** | **11** | *c i* P | **P** | **16 47 34.8 -1.5** | | |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **HEH** | **HeiHe** | **59.13** | **8** | *e*P | **P** | **16 47 37.3 -0.8** | | |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **ZAK** | **Zakamensk** | **59.72** | **350** | *e*P | **P** | **16 47 41.4 -0.9** | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **59.74** | **20** | P | **P** | **16 47 42.0 -0.4** | | |
| **YSS** | **Yuzh-Sakhalins** | **59.74** | **20** | *c i* P | **P** | **16 47 42.3 -0.1** | | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.5s | | | | | | | |
| **MSVF** | **Nonsavu** | **60.13** | **106** | P | **P** | **16 47 44.8 -1.0** | | |
| **MSVF** | **Nonsavu** | **60.13** | **106** | *c i* P | **P** | **16 47 43.9 -1.9** | | |
| MSVF | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **CIT** | **Chita** | **60.25** | **358** | *e*P | **P** | **16 47 46.0 +0.1** | | |
| CIT | | | | *e* | | 16 57 27.6 | | |
| CIT | | | | pmax | pmax | | | |
| | comp=Z,71nm,1.9s | | | | | | | |
| **KSH** | **Kashi** | **60.87** | **325** | P | **P** | **16 47 48.3 -2.2** | | |
| KSH | | | | pP | sP | 16 47 54.5 -0.4 | | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **61.11** | **346** | *e*P | **P** | **16 47 52.1 +0.2** | | |
| **BKZ** | **Black Stump Fm** | **61.32** | **130** | P | **P** | **16 47 54.3 +0.7** | | |
| **GRNR** | **Gornyy** | **61.33** | **14** | ⇑*i* P | **P** | **16 47 52.7 -0.5** | | |
| GRNR | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **IRK** | **Irkutsk** | **61.36** | **351** | *e*P | **P** | **16 47 53.0 -0.4** | | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,37nm,2.2s | | | | | | | |
| **MOY** | **Mondy** | **61.36** | **349** | *e*P | **P** | **16 47 53.3 -0.3** | | |
| **BFZ** | **Birch Farm** | **61.50** | **132** | P | **P** | **16 47 55.2 +0.5** | | |
| **URZ** | **Urewera** | **61.59** | **129** | P | **P** | **16 47 56.0 +0.6** | | |
| | comp=Z,7.2nm,0.8s,baz=328,slow=9.5,SNR=5.1 | | | | | | | |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **ZEA** | **Zeya** | **62.53** | **7** | *e*P | **P** | **16 48 01.1 -0.1** | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,20nm,1.2s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **62.97** | **334** | IAmb | IAmb | 16 48 27.4 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **62.97** | **334** | *d i* P | **P** | **16 48 04.2 -0.2** | | |
| **MKAR** | **Makanchi Array** | **62.97** | **334** | P | **P** | **16 48 02.6 -1.8** | | |
| **MKAR** | **Makanchi Array** | **62.97** | **334** | P | **P** | **16 48 02.7 -1.6** | | |
| | comp=Z,5.8nm,0.9s,baz=145,slow=6.0,SNR=33 | | | | | | | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| **MAKZ** | **Makanchi** | **63.12** | **334** | P | **P** | **16 48 04.0 -1.3** | | |
| **MAKZ** | **Makanchi** | **63.12** | **334** | P | **P** | **16 48 04.0 -1.3** | | |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **63.30** | **339** | *c i* P | **P** | **16 48 06.7 0.0** | | |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **63.79** | **326** | *e*P | **P** | **16 48 09.1 -0.9** | | |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.8s | | | | | | | |
| **BOD** | **Bodaibo** | **66.03** | **358** | *e*P | **P** | **16 48 22.7 -1.4** | | |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,43nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **66.32** | **325** | *i* P | **P** | **16 48 30.5 +4.2** | | |
| **KURBB** | **Kurchatov Arra** | **67.50** | **335** | P | **P** | **16 48 32.0 -1.6** | | |
| | comp=Z,2.7nm,0.9s,baz=146,slow=5.0,SNR=14 | | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | | |
| **KURK** | **Kurchatov** | **67.53** | **335** | P | **P** | **16 48 33.5 -0.3** | | |
| KURK | | | | IAmb | IAmb | 16 48 56.7 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **67.53** | **335** | *e*P | **P** | **16 48 32.2 -1.6** | | |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.74** | **340** | IAmb | IAmb | 16 48 56.5 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.74** | **340** | P | **P** | **16 48 32.6 -2.4** | | |
| **ZALV** | **Zalesovo Beam** | **67.74** | **340** | P | **P** | **16 48 33.0 -2.1** | | |
| | comp=Z,2.8nm,0.5s,baz=149,slow=5.0,SNR=12 | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.74** | **340** | *e*P | **P** | **16 48 33.8 -1.3** | | |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **VOI** | **Vohitsoka** | **68.44** | **250** | P | **P** | **16 48 39.6 -0.7** | | |
| VOI | | | | IAmb | IAmb | 16 48 56.6 | | |
| | comp=Z,32nm,1.2s | | | | | | | |
| **MAW** | **Mawson** | **69.08** | **199** | P | **P** | **16 48 44.3 +1.0** | | |
| | comp=Z,13nm,0.8s,baz=53,slow=6.6,SNR=24 | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.41** | **25** | P | **P** | **16 48 50.3 -1.4** | | |
| | comp=Z,6.0nm,0.9s,baz=241,slow=2.1,SNR=5.6 | | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **YAK** | **Yakutsk** | **70.93** | **6** | *e*P | **P** | **16 48 52.9 -1.7** | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **BVA0** | **Borovoye Array** | **72.78** | **333** | *i* P | **P** | **16 49 03.7 -2.3** | | |
| **BVAR** | **Borovoye Array** | **72.78** | **333** | P | **P** | **16 49 03.7 -2.3** | | |
| | comp=Z,2.0nm,0.7s,baz=142,slow=7.5,SNR=9.0 | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **72.84** | **333** | ⇑*i* P | **P** | **16 49 06.0 -0.4** | | |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **AB31** | **Akbulak array** | **75.85** | **326** | *i* P | **P** | **16 49 21.3 -2.7** | | |
| **ABKAR** | **Akbulak array** | **75.85** | **326** | P | **P** | **16 49 20.7 -3.3** | | |
| **SEY** | **Seymchan** | **76.16** | **16** | ⇑*i* P | **P** | **16 49 23.9 -1.5** | | |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **79.53** | **270** | P | **P** | **16 49 44.4 -1.2** | | |
| | comp=Z,2.4nm,0.8s,baz=26,slow=6.5,SNR=5.4 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **80.31** | **331** | *c i* P | **P** | **16 49 49.6 +1.1** | | |
| ARU | | | | | | 16 52 50.3 | | |
| ARU | | | | S | **S** | **16 59 56.7 +2.6** | | |
| ARU | | | | SS | **SS** | **17 05 03.8 -1.8** | | |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,2.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.59** | **180** | P | **P** | **16 49 55.6 +0.1** | | |
| QSPA | | | | IAmb | IAmb | 16 50 20.3 | | |
| | comp=Z,33nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.59** | **180** | P | **P** | **16 49 55.8 +0.4** | | |
| | comp=Z,11nm,1.0s,baz=253,slow=0.5,SNR=24 | | | | | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **POGA** | **Pongola** | **81.89** | **244** | IAmb | IAmb | 16 50 21.2 | | |
| | comp=Z,34nm,1.0s | | | | | | | |
| **ELIB** | **Princess Elisa** | **83.16** | **198** | *d*P | **P** | **16 50 04.3 +0.7** | | |
| | comp=Z,9.5nm,1.1s | | | | | | | |
| **KBZ** | **Khabaz** | **84.35** | **316** | *e*P | **P** | **16 50 07.4 -2.6** | | |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **GOF** | **Gofitskoye** | **84.64** | **317** | *ce*P | **P** | **16 50 11.0 -0.5** | | |
| **MBAR** | **Mbarara** | **86.05** | **270** | P | **P** | **16 50 18.0 -1.4** | | |
| MBAR | | | | IAmb | IAmb | 16 50 35.5 | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **MBAR** | **Mbarara** | **86.05** | **270** | ⇑*i* P | **P** | **16 50 18.7 -0.7** | | |
| MBAR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **LSZ** | **Lusaka** | **86.53** | **255** | P | **P** | **16 50 20.2 -1.5** | | |
| LSZ | | | | IAmb | IAmb | 16 50 50.2 | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **LSZ** | **Lusaka** | **86.53** | **255** | P | **P** | **16 50 20.2 -1.5** | | |
| LSZ | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **BOSA** | **Boshof** | **87.41** | **242** | IAmb | IAmb | 16 50 49.6 | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **BOSA** | **Boshof** | **87.41** | **242** | P | **P** | **16 50 24.8 -0.9** | | |
| | comp=Z,9.7nm,0.9s,baz=91,slow=5.2,SNR=13 | | | | | | | |
| | comp=Z,9.7nm,0.9s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **87.41** | **304** | P | **P** | **16 50 25.4 -0.2** | | |
| | comp=Z,0.5nm,0.4s,baz=88,slow=3.3,SNR=1.7 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **LBTB** | **Lobatse** | **87.61** | **245** | IAmb | IAmb | 16 50 50.3 | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **VORD** | **Divnogorie** | **88.71** | **322** | *e*P | **P** | **16 50 28.5 -2.7** | | |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **VSR** | **Storozhevoye** | **88.85** | **322** | *e*P | **P** | **16 50 27.6 -4.2** | | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.35** | **196** | ⇑P | **P** | **16 50 35.2 +1.2** | | |
| | comp=Z,9nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **90.11** | **310** | P | **P** | **16 50 36.6 -1.6** | | |
| | comp=Z,1.0nm,1.0s,baz=128,slow=2.4,SNR=2.2 | | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **SNAA** | **Sanae** | **90.99** | **196** | P | **P** | **16 50 41.1 -0.5** | | |
| SNAA | | | | IAmb | IAmb | 16 50 59.3 | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **90.99** | **196** | ⇑P | **P** | **16 50 42.1 +0.4** | | |
| | comp=Z,92nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.99** | **196** | P | **P** | **16 50 42.2 +0.6** | | |
| | comp=Z,5.0nm,0.8s,baz=115,slow=4.7,SNR=18 | | | | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **90.99** | **196** | P | **P** | **16 50 41.1 -0.5** | | |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **BELA** | **Belgrano 2** | **92.40** | **186** | P | **P** | **16 50 47.3 -0.7** | | |
| BELA | | | | IAmb | IAmb | 16 51 07.4 | | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.04** | **195** | ⇑P | **P** | **16 50 50.8 -0.3** | | |
| | comp=Z,6.5nm,1.0s | | | | | | | |
| **CLL** | **Collm** | **105.16** | **321** | *e*PP | **PKiKP** | **16 56 05.0 +4.8** | | |
| **TORD** | **Torodi Ar. Bea** | **116.25** | **281** | PKPdf | **PKPdf** | **16 56 19.7 -2.5** | | |
| **TORD** | **Torodi Ar. Bea** | **116.25** | **281** | PKP | **PKPdf** | **16 56 20.1 -2.2** | | |
| | comp=Z,1.9nm,0.5s,baz=49,slow=1.8,SNR=15 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.28** | **50** | PKP | **PKPdf** | **16 56 32.3 -1.2** | | |
| | comp=Z,0.6nm,0.7s,baz=244,slow=1.7,SNR=5.2 | | | | | | | |
| **MZP** | **Montezuma Peak** | **123.18** | **50** | | **PKPdf** | **16 56 34.1 -1.2** | | |
| **HLID** | **Hailey** | **123.36** | **43** | | **PKPdf** | **16 56 34.0 -1.4** | | |
| **PRN** | **Pahroc Range** | **125.04** | **50** | | **PKPdf** | **16 56 37.9 -0.8** | | |
| **PDAR** | **Pinedale Array** | **126.92** | **42** | PKP | **PKPdf** | **16 56 41.7 -0.6** | | |
| | comp=Z,0.2nm,0.3s,baz=236,slow=1.0,SNR=2.9 | | | | | | | |
| **PLCA** | **Pasa Flores** | **130.64** | **173** | PKP | **PKiKP** | **16 56 50.7 +0.5** | | |
| | comp=Z,1.5nm,0.9s,baz=206,slow=9.4,SNR=3.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **136.69** | **56** | PKP | **PKPdf** | **16 57 00.8 -0.1** | | |
| | comp=Z,0.5nm,0.7s,baz=24,slow=3.4,SNR=5.4 | | | | | | | |
| **OXF** | **Oxford** | **144.56** | **39** | PKPdf | **PKPab** | **16 57 11.1 -2.1** | | |
| **OXF** | **Oxford** | **144.56** | **39** | PKiKP | **PKPab** | **16 57 11.1 -2.1** | | |
| **CPUP** | **Villa Florida** | **145.01** | **189** | PKPbc | **PKPab** | **16 57 15.5 +0.4** | | |
| | comp=Z,41nm,0.9s,baz=178,slow=3.1,SNR=66 | | | | | | | |
| **SSPA** | **Standing Stone** | **145.33** | **20** | | **PKPbc** | **16 57 13.9 -1.9** | | |
| **Y49A** | **Blount Mountai** | **146.82** | **37** | PKPdf | **PKPdf** | **16 57 17.6 -1.2** | | |
| **LVC** | **Limon Verde** | **148.67** | **170** | PKPdf | **PKPdf** | **16 57 19.9 -2.7** | | |
| **LVC** | **Limon Verde** | **148.67** | **170** | PKPbc | **PKPbc** | **16 57 27.3 +1.0** | | |
| | comp=Z,14nm,0.8s,baz=245,slow=4.5,SNR=11 | | | | | | | |
| **LVC** | **Limon Verde** | **148.67** | **170** | PKiKP | **PKPdf** | **16 57 19.9 -2.7** | | |
| **BDFB** | **Brasilia** | **151.79** | **212** | PKPbc | **PKPbc** | **16 57 33.2 -0.4** | | |
| | comp=Z,8.5nm,0.8s,baz=143,slow=3.1,SNR=11 | | | | | | | |
| **LPAZ** | **La Paz** | **154.98** | **169** | PKPdf | **PKPdf** | **16 57 29.3 -3.2** | | |
| **LPAZ** | **La Paz** | **154.98** | **169** | PKP | **PKPdf** | **16 57 29.6 -2.9** | | |
| | comp=Z,3.4nm,0.4s,baz=251,slow=5.3,SNR=17 | | | | | | | |
| LPAZ | | | | PKPab | **pPKPab** | **16 57 58.5 -1.3** | | |
| | comp=Z,5.6nm,0.8s,baz=169,slow=3.8,SNR=7.9 | | | | | | | |
| **SIV** | **San Ignacio** | **155.68** | **185** | PKP | **PKPdf** | **16 57 31.6 -1.2** | | |
| | comp=Z,0.8nm,0.5s,baz=180,slow=1.0,SNR=3.9 | | | | | | | |
| SIV | | | | PKPab | **PKPab** | **16 57 59.3 +0.6** | | |
| | comp=Z,5.9nm,1.0s,baz=168,slow=3.3,SNR=7.0 | | | | | | | |

*IDC* ***19*** *16:46:53.0±1.9, 8.°24S×116.°78E, h0km, mb3.5/3, mbtmp3.6/4, ML3.1/1, Error ellipse: s-maj=41.9km s-min=26.9km az=63.0*

*DJA* ***19*** *16:46:54.9±0.4, 8.°3S×11.°7E±.°, h10km, M3.9/7, MLv3.9/7*

**ISC 19 16:46:54.5±0.9, 8.°21S±0.°06×116.°73E±0.°04, h10km, n12, σ0s59/17, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.54** | **164** | P | **Pg** | **16 47 05.1** | **0.0** |
| TWSI | | | | S | **Sg** | **16 47 12.1** | **-0.2** |
| **PLAI** | **Plampang** | **1.20** | **121** | P | **Pb** | **16 47 17.2** | **-0.2** |
| PLAI | | | | S | **Sb** | **16 47 34.1** | **+1.1** |
| **SRBI** | **Singaraja** | **1.51** | **275** | P | **Pn** | **16 47 21.3** | **-0.4** |
| SRBI | | | | S | **Sn** | **16 47 42.2** | **+0.8** |
| **DNP** | **Denpasar** | **1.58** | **253** | P | **Pn** | **16 47 22.2** | **-0.4** |
| DNP | | | | S | **Sn** | **16 47 43.8** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.57** | **264** | P | **Pn** | **16 47 35.9** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **2.99** | **119** | P | **Pn** | **16 47 41.8** | **-0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.26** | **61** | P | **Pn** | **16 47 59.4** | **-0.1** |
| **KAPI** | **Kappang** | **4.37** | **44** | Pn | **Pn** | **16 48 01.2** | **+0.3** |
| | 1.1nm,0.3s,baz=222,slow=15,SNR=12 | | | | | | |
| KAPI | | | | Sn | **Sn** | **16 48 51.3** | **-0.7** |
| | 8.6nm,0.3s,baz=67,slow=20,SNR=10 | | | | | | |
| | 3.7nm,0.2s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.93** | **97** | P | **Pn** | **16 48 09.2** | **+0.3** |
| **WRA** | **Warramunga Arr** | **20.65** | **126** | P | **P** | **16 51 33.9** | **-0.7** |
| | 1.5nm,0.6s,baz=302,slow=12,SNR=14 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **16 51 53.9** | **-0.8** |
| | 1.9nm,0.7s,baz=308,slow=9.2,SNR=4.5 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.76** | **334** | P | **P** | **16 57 20.4** | **+0.4** |
| | 0.4nm,0.7s,baz=145,slow=8.6,SNR=3.7 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*NEIC* ***19*** *16:47:35.6±1.2, 17.°8S±0.°2×178.°3W±0.°2, h539km±13km, mb4.4/19, Error ellipse: s-maj=29.4km s-min=18.7km az=143.0*

*IDC* ***19*** *16:47:40.8±9.8, 17.°82S×178.°69W, h578km±94km, mb3.3/4, mbtmp4.2/5, Error ellipse: s-maj=94.1km s-min=34.8km az=113.0*

**ISC 19 16:47:40.4±1.3, 17.°8S±0.°2×178.°7W±0.°2, h579km, n32, σ0s60/30, mb4.3/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.08** | **270** | P | **P** | **16 48 56.9** | **-1.4** |
| **AFI** | **Afiamalu** | **7.71** | **61** | P | P | 16 49 25.7 | -11 |
| **NIUE** | **Niue** | **8.45** | **100** | P | P | 16 49 31.6 | -12 |
| **DZM** | **Mont Dzumac** | **14.59** | **251** | P | **P** | **16 50 45.8** | **+0.5** |
| | 2.4nm,0.7s,baz=78,slow=20,SNR=1.4 | | | | | | |
| **EIDS** | **Eidsvold** | **29.03** | **250** | P | **P** | **16 52 55.2** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 16 53 29.3 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **29.75** | **239** | P | **P** | **16 53 00.7** | **-0.5** |
| **CTA** | **Charters Tower** | **33.17** | **260** | P | **P** | **16 53 30.9** | **+0.6** |
| | comp=Z,0.4nm,0.9s,baz=85,slow=11,SNR=1.7 | | | | | | |
| **CTAO** | **Charters Tower** | **33.17** | **260** | P | **P** | **16 53 30.4** | **0.0** |
| CTAO | | | | IAmb | IAmb | 16 54 08.0 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **33.54** | **232** | P | **P** | **16 53 32.9** | **-0.5** |
| CAN | | | | IAmb | IAmb | 16 53 59.0 | |
| | comp=Z,40nm,1.3s | | | | | | |
| **TOO** | **Toolangi** | **37.02** | **231** | P | **P** | **16 54 02.0** | **0.0** |
| **STKA** | **Stephens Creek** | **38.43** | **241** | P | **P** | **16 54 14.1** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.43** | **241** | P | **P** | **16 54 13.9** | **+0.4** |
| | comp=Z,4.7nm,0.9s,baz=100,slow=7.4,SNR=6.3 | | | | | | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **MCQ** | **Macquarie Isla** | **40.47** | **200** | P | **P** | **16 54 30.5** | **+1.0** |
| **BBOO** | **Buckleboo** | **43.21** | **241** | P | **P** | **16 54 50.9** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 16 55 05.8 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.33** | **260** | P | **P** | **16 55 00.4** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 16 55 01.8 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.35** | **259** | P | **P** | **16 55 00.6** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 16 55 01.5 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.36** | **259** | P | **P** | **16 55 00.6** | **+0.1** |
| **WRA** | **Warramunga Arr** | **44.36** | **259** | P | **P** | **16 55 00.8** | **+0.2** |
| | comp=Z,1.9nm,0.4s,baz=91,slow=7.7,SNR=41 | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.54** | **254** | P | **P** | **16 55 02.2** | **+0.3** |
| AS31 | | | | IAmb | IAmb | 16 55 03.4 | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.54** | **254** | P | **P** | **16 55 01.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.54** | **254** | P | **P** | **16 55 02.5** | **+0.7** |
| | comp=Z,17nm,0.5s,baz=88,slow=9.1,SNR=187 | | | | | | |
| **FORT** | **Forrest** | **49.79** | **245** | P | **P** | **16 55 40.4** | **-0.7** |
| FORT | | | | IAmb | IAmb | 16 55 55.9 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **50.20** | **264** | P | **P** | **16 55 44.4** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 16 56 14.6 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.76** | **261** | P | **P** | **16 56 01.4** | **-1.2** |
| **MBWA** | **Marble Bar** | **57.82** | **256** | P | **P** | **16 56 37.1** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **67.63** | **324** | P | **P** | **16 57 41.2** | **+0.8** |
| | comp=Z,0.8nm,0.5s,baz=142,slow=6.1,SNR=4.7 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.48** | **345** | P | **P** | **16 58 15.3** | **+0.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SRBI | Singaraja | 1.58 274 | P | | Pn | 17 01 32.9 | +0.6 |
| SRBI | | | S | | Sn | 17 01 53.8 | +1.0 |
| DNP | Denpasar | 1.64 253 | P | | Pn | 17 01 33.9 | +0.7 |
| DNP | | | S | | Sn | 17 01 55.2 | +0.8 |
| JAGI | Jajag, Banyuwa | 2.64 264 | P | | Pn | 17 01 45.9 | -0.9 |
| WBSI | Waikabubak, Su | 2.93 119 | P | | Pn | 17 01 51.6 | +0.7 |
| BSSI | Bau Bau, Buton | 4.19 61 | P | | Pn | 17 02 08.8 | +0.5 |
| BASI | Baing, Sumba | 4.23 119 | P | | Pn | 17 02 08.9 | +0.1 |
| KAPI | Kappang | 4.32 43 | Pn | | Pn | 17 02 10.9 | +0.9 |
| | 5.3nm,0.3s,baz=204,slow=8.1,SNR=12 | | | | | | |
| KAPI | | | Sn | | Sn | 17 03 00.5 | +0.1 |
| | 17nm,0.3s,baz=326,slow=21,SNR=9.8 13nm,0.3s | | | | | | |
| EDFI | Ende, Flores | 4.87 97 | P | | Pn | 17 02 18.4 | +0.8 |
| PWJI | Pagerwojo | 4.95 272 | P | | Pn | 17 02 19.2 | +0.5 |
| MMRI | Maumere | 5.39 95 | P | | Pn | 17 02 24.7 | -0.1 |
| BATI | Baumata | 7.06 107 | P | | Pn | 17 02 49.1 | +1.4 |
| SOEI | Soe | 7.53 102 | P | | Pn | 17 02 54.4 | +0.1 |
| WRA | Warramunga Arr | 20.60 126 | P | | P | 17 05 43.3 | -0.4 |
| | 6.6nm,0.7s,baz=302,slow=12,SNR=48 6.6nm,0.7s | | | | | | |
| ASAR | Alice Springs | 22.47 135 | P | | P | 17 06 03.2 | -0.6 |
| | 7.8nm,0.8s,baz=309,slow=9.0,SNR=33 | | | | | | |
| ASAR | | | PcP | | PcP | 17 09 57.1 | -1.2 |
| | 0.3nm,0.4s,baz=325,slow=1.5,SNR=2.2 7.8nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 31.82 326 | P | | P | 17 07 29.3 | 0.0 |
| | 0.4nm,0.5s,baz=148,slow=8.6,SNR=1.2 0.4nm,0.5s | | | | | | |
| STKA | Stephens Creek | 32.96 139 | P | | P | 17 07 38.9 | -0.4 |
| | 1.9nm,0.6s,baz=314,slow=13,SNR=6.7 1.9nm,0.6s | | | | | | |
| SONM | Songino Array | 56.55 352 | P | | P | 17 10 46.9 | -0.1 |
| | 1.0nm,0.7s,baz=169,slow=7.6,SNR=5.0 1.0nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 62.78 334 | P | | P | 17 11 29.3 | -0.5 |
| | 0.7nm,0.8s,baz=138,slow=7.4,SNR=5.1 0.7nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 67.55 340 | P | | P | 17 12 00.2 | -0.4 |
| | 0.7nm,0.5s,baz=126,slow=4.0,SNR=4.0 0.7nm,0.5s | | | | | | |
| QSPA | South Pole Qui | 81.79 180 | P | | P | 17 13 23.6 | +0.3 |
| | 1.3nm,1.2s,baz=322,slow=4.2,SNR=1.2 1.3nm,1.2s | | | | | | |
| CPUP | Villa Florida | 145.20 189 | PKPbc | | PKPbc | 17 20 42.5 | 0.0 |
| | 4.7nm,0.9s,baz=140,slow=3.2,SNR=7.4 | | | | | | |

**DJA 19 17:04:29.2**±0.3,**8˚S**±3˚×**11˚7E**±˚,**h10**km,**M4.0**/10,**mb4.0**/1, **MLv3.9**/10,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.37 | 183 | P | Pb | 17 04 37.2 | -0.6 |
| TWSI | | | | S | Sb | 17 04 43.2 | -0.4 |
| PLAI | Plampang | 0.98 | 118 | P | Pg | 17 04 47.9 | -0.2 |
| PLAI | | | | S | Sb | 17 05 02.1 | +0.8 |
| SRBI | Singaraja | 1.69 | 280 | P | Pn | 17 04 59.2 | +0.3 |
| DNP | Denpasar | 1.70 | 260 | P | Pn | 17 04 59.3 | +0.4 |
| DNP | | | | S | Sb | 17 05 22.0 | 0.0 |
| JAGI | Jajag, Banyuwa | 2.72 | 268 | P | Pn | 17 05 11.9 | -1.1 |
| WBSI | Waikabubak, Su | 2.77 | 117 | P | Pn | 17 05 13.7 | 0.0 |
| BASI | Baing, Sumba | 4.07 | 117 | P | Pn | 17 05 31.1 | -0.4 |
| EDFI | Ende, Flores | 4.75 | 95 | P | Pn | 17 05 41.0 | -0.1 |
| PWJI | Pagerwojo | 5.06 | 274 | P | Pn | 17 05 46.4 | +1.3 |

*IDC* ***19*** *17:15:40.7*±*9.0,8˚.28S*×*117˚.02E, h0km, mb3.8/3, mbtmp3.9/4, ML3.1/1, Error ellipse: s-maj=153.6km s-min=31.9km az=101.0*

*DJA* ***19*** *17:15:40.9*±*0.3,8˚S*±*4˚*×*11˚7E*±˚*, h10km, M4.0/7, MLv4.0/7*

**ISC 19 17:15:40.4**±1.0,**8˚22S**±0˚.06×**116˚75E**±0˚.04,**h10**km,**n12,** σ0**$67**/16,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.53 | 166 | P | Pg | 17 15 51.2 | +0.4 |
| TWSI | | | | S | Sg | 17 15 57.5 | -0.3 |
| PLAI | Plampang | 1.18 | 121 | P | Pb | 17 16 02.9 | 0.0 |
| PLAI | | | | S | Sb | 17 16 19.2 | +1.0 |
| SRBI | Singaraja | 1.53 | 275 | P | Pn | 17 16 08.1 | +0.3 |
| SRBI | | | | S | Sn | 17 16 28.9 | +1.1 |
| DNP | Denpasar | 1.59 | 253 | P | Pn | 17 16 08.3 | -0.4 |
| JAGI | Jajag, Banyuwa | 2.59 | 264 | P | Pn | 17 16 22.2 | -0.2 |
| WBSI | Waikabubak, Su | 2.96 | 119 | P | Pn | 17 16 27.1 | -0.5 |
| BSSI | Bau Bau, Buton | 4.24 | 61 | P | Pn | 17 16 45.5 | +0.3 |
| KAPI | Kappang | 4.36 | 43 | Pn | Pn | 17 16 46.7 | 0.0 |
| | 1.1nm,0.3s,baz=103,slow=13,SNR=1.6 | | | | | | |
| KAPI | | | | Sn | Sn | 17 17 37.0 | -0.6 |
| | 3.9nm,0.3s,baz=53,slow=22,SNR=3.5 4.6nm,0.3s | | | | | | |
| EDFI | Ende, Flores | 4.91 | 97 | P | Pn | 17 16 55.5 | +1.0 |
| WRA | Warramunga Arr | 20.63 | 126 | P | P | 17 20 19.4 | -0.9 |
| | 2.8nm,0.7s,baz=302,slow=12,SNR=29 2.8nm,0.7s | | | | | | |
| ASAR | Alice Springs | 22.49 | 135 | P | P | 17 20 39.6 | -0.7 |
| | 3.1nm,0.9s,baz=311,slow=9.5,SNR=28 3.1nm,0.9s | | | | | | |
| STKA | Stephens Creek | 32.98 | 139 | P | P | 17 22 15.4 | -0.2 |
| | 1.3nm,0.6s,baz=328,slow=7.7,SNR=4.1 1.3nm,0.6s | | | | | | |

*IDC* ***19*** *17:16:21.4*±*1.0,21˚.5N*×*143˚.8E*±*0˚.3,* **h33**km**, n16,** σ0**$79**/10,**mb3.8**/10,**Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| H11N1 | WAKE ISLAND Hy 21.70 | 90 | | T | T | 17 43 28.2 | |
| | baz=278,slow=75,SNR=29 | | | | | | |
| H11N2 | WAKE ISLAND Hy 21.70 | 90 | | T | T | 17 43 28.4 | |
| | baz=278,slow=75,SNR=25 | | | | | | |
| H11N3 | WAKE ISLAND Hy 21.72 | 90 | | T | T | 17 43 31.4 | |
| | baz=278,slow=75,SNR=28 | | | | | | |
| H11S3 | WAKE ISLAND Hy 21.73 | 94 | | T | T | 17 43 30.2 | |
| | baz=282,slow=75,SNR=27 | | | | | | |
| H11S1 | WAKE ISLAND Hy 21.73 | 94 | | T | T | 17 43 34.2 | |
| | baz=282,slow=75,SNR=27 | | | | | | |
| H11S2 | WAKE ISLAND Hy 21.74 | 94 | | T | T | 17 43 34.5 | |
| | baz=282,slow=75,SNR=21 | | | | | | |
| WRA | Warramunga Arr | 42.17 | 193 | P | P | 17 24 16.1 | 0.0 |
| | 1.1nm,0.7s,baz=20,slow=9.1,SNR=1.3 1.1nm,0.7s | | | | | | |
| ASAR | Alice Springs | 45.87 | 193 | P | P | 17 24 45.5 | -0.3 |
| | 0.4nm,0.6s,baz=17,slow=9.8,SNR=1.3 0.4nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 54.74 | 322 | P | P | 17 25 53.2 | +0.6 |
| | 0.3nm,0.3s,baz=93,slow=8.8,SNR=2.3 0.3nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 55.27 | 313 | P | P | 17 25 57.4 | +0.8 |
| | 0.3nm,0.5s,baz=91,slow=7.6,SNR=2.4 0.3nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 58.08 | 317 | P | P | 17 26 16.2 | -0.1 |
| | 1.0nm,0.3s,baz=96,slow=6.9,SNR=8.3 1.0nm,0.3s | | | | | | |
| ILAR | Eielson Array | 62.00 | 27 | P | P | 17 26 42.0 | -1.1 |
| | 0.4nm,0.7s,baz=272,slow=6.4,SNR=3.4 0.4nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 63.21 | 320 | P | P | 17 26 51.6 | +0.2 |
| | 1.5nm,0.5s,baz=87,slow=5.9,SNR=3.8 1.5nm,0.5s | | | | | | |
| ARCES | ARCESS Array B | 79.33 | 342 | P | P | 17 28 28.4 | 0.0 |
| | 1.0nm,0.7s,baz=70,slow=5.2,SNR=3.6 1.0nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 82.86 | 52 | P | P | 17 28 49.3 | +1.2 |
| | 0.5nm,0.6s,baz=266,slow=6.5,SNR=6.5 0.5nm,0.6s | | | | | | |
| FINES | FINESS Array B | 83.64 | 335 | P | P | 17 28 50.6 | -0.7 |
| | 0.9nm,0.4s,baz=84,slow=5.7,SNR=10 0.9nm,0.4s | | | | | | |

*NEIC* ***19*** *17:17:45.9*±*1.7,4˚.1S*±*0˚.1*×*152˚.98E*±*0˚.08, h60km*±*9km, mb4.3/18, Error ellipse: s-maj=14.7km s-min=11.8km az=188.0*

*IDC* ***19*** *17:17:47.8*±*2.5,4˚.24S*×*152˚.91E, h78km*±*20km, mb3.7/9, mbtmp4.0/10, Error ellipse: s-maj=35.6km s-min=12.1km az=120.0*

**ISC 19 17:17:44.3**±0.6,**4˚21S**±0˚.07×**153˚06E**±0˚.09,**h50**km,**n39,** σ1**$22**/42,**mb4.2**/17,**New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RABL | Rabaul | 0.89 | 271 | Pn | Pn | 17 17 59.2 | -1.3 |
| MANU | Manus Island | 6.08 | 291 | Pn | Pn | 17 19 14.2 | +2.6 |
| PMG | Port Moresby | 7.80 | 228 | Pn | Pn | 17 19 37.2 | +1.9 |
| PMG | Port Moresby | 7.80 | 228 | P | Pn | 17 19 37.7 | +2.5 |
| | 6.0nm,0.5s,baz=201,slow=16,SNR=1.6 | | | | | | |
| PMG | | | | S | Sn | 17 21 02.8 | +0.5 |
| | 31nm,0.5s,baz=134,slow=20,SNR=7.4 | | | | | | |
| HNR | Honiara | 8.59 | 128 | Pn | Pn | 17 19 50.6 | +4.6 |
| PATS | Pohnpei | 12.16 | 26 | | Pn | 17 20 34.5 | -0.5 |
| KOUNC | Koumac, New Ca | 19.58 | 147 | P | P | 17 22 06.8 | -1.4 |
| KOUNC | | | | IAmb | IAmb | 17 22 39.4 | |
| | comp=Z,28nm,1.2s | | | | | | |
| EIDS | Eidsvold | 21.12 | 185 | P | P | 17 22 22.8 | -2.2 |
| DZM | Mont Dzumac | 21.99 | 145 | P | P | 17 22 35.2 | +0.8 |
| DZM | | | | IAmb | IAmb | 17 23 05.7 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| MTN | Manton Dam | 23.30 | 247 | P | P | 17 22 47.8 | -0.1 |
| MTN | | | | IAmb | IAmb | 17 23 30.1 | |
| | comp=Z,21nm,1.3s | | | | | | |
| WB0 | Warramunga Arr | 23.88 | 228 | P | P | 17 22 52.8 | -0.6 |
| WB0 | | | | IAmb | IAmb | 17 22 55.2 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| WR0 | Warramunga Arr | 23.89 | 228 | P | P | 17 22 53.6 | +0.2 |
| WR0 | | | | IAmb | IAmb | 17 22 55.2 | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| WB2 | Warramunga Arr | 24.01 | 228 | P | P | 17 22 55.0 | +0.3 |
| WB2 | | | | IAmb | IAmb | 17 22 55.6 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 24.02 | 228 | P | P | 17 22 54.0 | -0.7 |
| WRA | Warramunga Arr | 24.02 | 228 | P | P | 17 22 54.6 | -0.1 |
| | comp=Z,9.3nm,0.7s,baz=52,slow=9.7,SNR=42 | | | | | | |
| WRA | | | | PcP | PcP | 17 26 37.1 | +1.3 |
| | comp=Z,0.2nm,0.3s,baz=50,slow=2.4,SNR=1.3 | | | | | | |
| WRA | | | | S | S | 17 27 06.6 | -2.0 |
| | comp=Z,0.4nm,0.6s,baz=68,slow=15,SNR=1.9 comp=Z,9.3nm,0.7s | | | | | | |
| KNRA | Kununurra | 26.46 | 243 | P | P | 17 23 18.4 | +1.5 |
| KNRA | | | | IAmb | IAmb | 17 23 22.6 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| AS31 | Alice Springs | 26.75 | 222 | P | P | 17 23 19.4 | -0.1 |
| ASAR | Alice Springs | 26.75 | 222 | P | P | 17 23 19.7 | +0.1 |
| ASAR | Alice Springs | 26.75 | 222 | P | P | 17 23 19.0 | -0.5 |
| | comp=Z,0.7nm,0.4s,baz=54,slow=9.2,SNR=21 | | | | | | |
| ASAR | | | | S | S | 17 27 48.7 | -3.4 |
| | comp=Z,0.4nm,0.9s,baz=48,slow=14,SNR=2.2 comp=Z,0.7nm,0.4s | | | | | | |
| STKA | Stephens Creek | 29.55 | 200 | P | P | 17 23 44.1 | -0.2 |
| STKA | Stephens Creek | 29.55 | 200 | P | P | 17 23 43.9 | -0.4 |
| | comp=Z,1.2nm,0.5s,baz=31,slow=13,SNR=5.2 comp=Z,1.2nm,0.5s | | | | | | |
| FITZ | Fitzroy Crossi | 30.16 | 241 | P | P | 17 23 49.4 | -0.5 |
| BBOO | Buckleboo | 32.59 | 207 | P | P | 17 24 11.6 | +0.5 |
| FORT | Forrest | 35.40 | 219 | P | P | 17 24 35.3 | -0.2 |
| TUWZ | Tuamarina | 41.52 | 156 | P | P | 17 25 27.4 | +0.7 |
| LTZ | Lake Taylor | 42.04 | 159 | P | P | 17 25 33.2 | +2.3 |
| USRK | Ussuriysk Ar. | 51.78 | 341 | P | P | 17 26 47.2 | +0.3 |
| | comp=Z,0.7nm,0.7s,baz=146,slow=8.0,SNR=2.7 comp=Z,0.7nm,0.7s | | | | | | |
| PETK | Petropavlovsk- | 57.24 | 3 | P | P | 17 27 26.6 | +0.2 |
| | comp=Z,8.3nm,1.1s,baz=135,slow=5.1,SNR=5.4 comp=Z,8.3nm,1.1s | | | | | | |
| IMAR | Indian Mountai | 79.75 | 19 | P | P | 17 29 47.4 | +0.8 |
| MKAR | Makanchi Array | 80.05 | 319 | P | P | 17 29 49.1 | +0.4 |
| | comp=Z,0.1nm,0.5s,baz=94,slow=8.7,SNR=1.7 comp=Z,0.1nm,0.5s | | | | | | |
| MLY | Manley | 80.25 | 21 | P | P | 17 29 49.5 | 0.0 |
| MLY | | | | IAmb | IAmb | 17 29 55.2 | |
| | comp=Z,4.7nm,1.5s | | | | | | |
| ILAR | Eielson Array | 81.52 | 22 | P | P | 17 29 55.3 | -0.8 |
| ILAR | Eielson Array | 81.52 | 22 | P | P | 17 29 55.6 | -0.5 |
| | comp=Z,0.7nm,0.7s,baz=244,slow=5.3,SNR=5.3 comp=Z,0.7nm,0.7s | | | | | | |
| F26K | Sheenjek River | 83.88 | 20 | P | P | 17 30 06.8 | -1.6 |
| F26K | | | | IAmb | IAmb | 17 30 09.6 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 85.74 | 180 | P | P | 17 30 17.8 | -0.2 |
| QSPA | | | | IAmb | IAmb | 17 30 26.4 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| QSPA | South Pole Qui | 85.74 | 180 | P | P | 17 30 18.4 | +0.5 |
| | comp=Z,1.1nm,0.7s,baz=314,slow=2.4,SNR=15 comp=Z,1.1nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 88.92 | 323 | P | P | 17 30 33.2 | -0.2 |
| | comp=Z,0.4nm,0.5s,baz=120,slow=7.8,SNR=2.8 comp=Z,0.4nm,0.5s | | | | | | |
| EKA | Eskdalemuir Ar | 125.54 | 344 | PKP | PKiKP | 17 36 40.3 | 0.0 |
| | comp=Z,0.9nm,0.7s,baz=46,slow=3.1,SNR=1.8 | | | | | | |
| TORD | Torodi Ar. Bea | 150.36 | 289 | PKPbc | PKiKP | 17 37 31.0 | -1.0 |
| | comp=Z,1.9nm,0.8s,baz=80,slow=2.7,SNR=8.7 | | | | | | |

*IDC* ***19*** *17:20:17.9*±*2.1,8˚.43S*×*117˚.09E, h0km, mb3.4/3, mbtmp3.5/4, ML3.2/1, Error ellipse: s-maj=45.1km s-min=27.9km az=67.0*

*DJA* ***19*** *17:20:18.0*±*0.3,8˚S*±*3˚*×*11˚7E*±˚*, h10km, M4.2/12, mb4.5/1, MLv4.1/12*

**ISC 19 17:20:18.3**±0.9,**8˚39S**±0˚.06×**116˚90E**±0˚.04,**h10**km,**n15,** σ0**$88**/20,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.35 | 182 | P | Pg | 17 20 25.5 | +0.2 |
| TWSI | | | | S | Sg | 17 20 30.1 | +0.2 |
| PLAI | Plampang | 0.97 | 117 | P | Pg | 17 20 36.8 | -0.3 |
| PLAI | | | | S | Sg | 17 20 49.9 | +0.1 |
| DNP | Denpasar | 1.69 | 260 | P | Pn | 17 20 48.9 | +0.9 |
| DNP | | | | S | Sn | 17 21 09.8 | +0.1 |
| SRBI | Singaraja | 1.69 | 280 | P | Pn | 17 20 46.6 | -1.4 |
| SRBI | | | | S | Sn | 17 21 09.6 | -0.1 |
| JAGI | Jajag, Banyuwa | 2.72 | 268 | P | Pn | 17 21 00.5 | -1.6 |
| WBSI | Waikabubak, Su | 2.76 | 117 | P | Pn | 17 21 02.7 | 0.0 |
| BASI | Baing, Sumba | 4.06 | 117 | P | Pn | 17 21 20.1 | -0.5 |
| BSSI | Bau Bau, Buton | 4.21 | 58 | P | Pn | 17 21 21.9 | -0.6 |
| KAPI | Kappang | 4.39 | 40 | Pn | Pn | 17 21 25.2 | +0.1 |
| | 1.4nm,0.3s,baz=76,slow=19,SNR=1.4 | | | | | | |
| KAPI | | | | Sn | Sn | 17 22 15.4 | -0.9 |
| | 4.0nm,0.3s,baz=49,slow=22,SNR=7.2 5.5nm,0.3s | | | | | | |
| GRJI | Gresik | 4.62 | 288 | P | Pn | 17 21 27.8 | -0.4 |
| EDFI | Ende, Flores | 4.75 | 95 | P | Pn | 17 21 30.6 | +0.4 |
| PWJI | Pagerwojo | 5.05 | 274 | P | Pn | 17 21 33.5 | -0.7 |
| WRA | Warramunga Arr | 20.42 | 126 | P | P | 17 24 54.8 | -1.0 |
| | 1.0nm,0.6s,baz=301,slow=12,SNR=2.1 1.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 22.27 | 135 | P | P | 17 25 15.1 | -0.8 |
| | 1.3nm,0.9s,baz=311,slow=8.2,SNR=4.5 1.3nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 62.98 | 334 | P | P | 17 30 47.2 | +1.9 |
| | 0.6nm,0.9s,baz=141,slow=5.5,SNR=2.7 0.6nm,0.9s | | | | | | |

*IDC* ***19*** *17:28:38.1*±*0.6,8˚.31S*×*116˚.69E, h0km, mb4.2/15, mbtmp4.2/16, ML4.5/1, Error ellipse: s-maj=22.9km s-min=13.7km az=73.0*

*NEIC* ***19*** *17:28:39.9*±*2.0,8˚.33S*±*0˚.05*×*116˚.69E*±*0˚.07, h10km*±*1km, mb4.6/16, Error ellipse: s-maj=13.0km s-min=7.2km az=63.0*

*DJA* ***19*** *17:28:40.0*±*0.2,8˚S*±*2˚*×*11˚7E*±˚*, h10km, M4.8/18, mb5.1/7, mB5.2/3, MLv4.7/18, Mw(mB)4.5/3*

**ISC 19 17:28:39.8**±0.4,**8˚30S**±0˚.04×**116˚74E**±0˚.04,**h10**km,**n94,** σ1**$11**/98,**mb4.3**/17,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.45 | 162 | P | Pb | 17 28 50.4 | +0.5 |
| TWSI | | | | S | Sb | 17 28 57.2 | +0.4 |
| PLAI | Plampang | 1.15 | 117 | P | Pg | 17 29 02.9 | +0.9 |
| PLAI | Plampang | 1.15 | 117 | P | Pb | 17 29 02.4 | +0.6 |
| PLAI | | | | S | Sn | 17 29 19.1 | +1.3 |
| SRBI | Singaraja | 1.53 | 278 | P | Pn | 17 29 06.7 | -0.5 |
| DNP | Denpasar | 1.56 | 256 | P | Pb | 17 29 08.2 | -0.6 |
| JAGI | Jajag, Banyuwa | 2.56 | 266 | P | Pn | 17 29 21.4 | -0.1 |
| JAGI | Jajag, Banyuwa | 2.56 | 266 | | Pn | 17 29 21.3 | -0.1 |
| JAGI | Jajag, Banyuwa | 2.56 | 266 | P | Pn | 17 29 20.6 | -0.9 |
| WBSI | Waikabubak, Su | 2.94 | 117 | P | Pn | 17 29 26.2 | -0.5 |
| BASI | Baing, Sumba | 4.24 | 117 | P | Pn | 17 29 45.9 | +1.4 |
| BSSI | Bau Bau, Buton | 4.30 | 60 | P | Pn | 17 29 45.5 | +0.2 |
| KAPI | Kappang | 4.43 | 43 | | Pn | 17 29 47.0 | -0.2 |
| KAPI | Kappang | 4.43 | 43 | Pn | Pn | 17 29 47.0 | -0.2 |
| | 21nm,0.3s,baz=194,slow=5.9,SNR=20 | | | | | | |
| KAPI | | | | Sn | Sn | 17 30 37.0 | -1.9 |
| | 62nm,0.3s,baz=328,slow=23,SNR=17 40nm,0.2s | | | | | | |
| GRJI | Gresik | 4.44 | 288 | P | Pn | 17 29 47.3 | 0.0 |
| PWJI | Pagerwojo | 4.89 | 273 | P | Pn | 17 29 53.1 | -0.4 |
| EDFI | Ende, Flores | 4.92 | 96 | P | Pn | 17 29 53.9 | -0.1 |
| BNSI | Bone | 5.12 | 41 | P | Pn | 17 29 57.3 | +0.6 |
| | 104nm,0.4s,2µm1.0nm | | | | | | |
| MMRI | Maumere | 5.45 | 94 | P | Pn | 17 30 02.7 | +1.5 |
| MMRI | Maumere | 5.45 | 94 | Pn | Pn | 17 30 01.9 | +0.7 |
| MMRI | Maumere | 5.45 | 94 | P | Pn | 17 30 01.3 | +0.1 |
| | 215nm,0.8s,2µm0.7nm | | | | | | |
| UGM | Wanagama | 6.17 | 273 | P | Pn | 17 30 12.3 | +1.2 |
| UGM | Wanagama | 6.17 | 273 | P | Pn | 17 30 11.2 | +0.1 |
| BATI | Baumata | 7.09 | 106 | P | Pn | 17 30 25.2 | +1.4 |
| | 84nm,0.8s,0.3nm | | | | | | |
| MTKI | Muara Teweh, K | 7.54 | 346 | P | Pn | 17 30 30.1 | +0.2 |
| BBJI | Bungbulang | 9.04 | 275 | P | Pn | 17 30 53.7 | +3.1 |
| KSM | Kuching | 11.64 | 326 | P | Pn | 17 31 28.7 | +2.6 |
| MBWA | Marble Bar | 13.10 | 168 | P | Pn | 17 31 44.4 | -1.7 |
| MBWA | Marble Bar | 13.10 | 168 | Pn | Pn | 17 31 43.0 | -3.1 |
| PSA00 | Pilbara Seismi | 13.53 | 168 | P | Pn | 17 31 50.6 | -1.3 |
| PSA00 | Pilbara Seismi | 13.53 | 168 | Pn | Pn | 17 31 50.8 | -1.2 |
| KNRA | Kununurra | 13.85 | 123 | Pn | Pn | 17 31 56.2 | -0.2 |
| GIRL | Giralia | 14.46 | 189 | P | Pn | 17 32 03.1 | -1.6 |
| GIRL | Giralia | 14.46 | 189 | Pn | Pn | 17 32 02.7 | -2.0 |
| MTN | Manton Dam | 14.85 | 109 | P | Pn | 17 32 10.4 | +0.4 |
| MTN | Manton Dam | 14.85 | 109 | | Pn | 17 32 08.5 | -1.6 |
| FAKI | Fak Fak | 16.33 | 72 | P | Pn | 17 32 29.7 | +0.2 |
| FAKI | Fak Fak | 16.33 | 72 | Pn | Pn | 17 32 27.4 | -2.0 |
| FAKI | | | | IAmb | IAmb | 17 32 50.4 | |
| | comp=Z,72nm,1.3s | | | | | | |
| MEEK | Meekatharra | 18.32 | 175 | P | P | 17 32 54.9 | +0.6 |
| WRKA | Warakurna | 19.96 | 148 | P | Pn | 17 33 13.9 | -0.2 |
| WB0 | Warramunga Arr | 20.55 | 126 | P | P | 17 33 18.9 | +0.2 |
| WB0 | | | | IAmb | IAmb | 17 33 19.6 | |
| | comp=Z,14nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 20.59 | 126 | P | P | 17 33 19.0 | -0.3 |
| WRA | Warramunga Arr | 20.59 | 126 | P | P | 17 33 19.4 | +0.1 |
| | comp=Z,10nm,0.7s,baz=303,slow=12,SNR=118 comp=Z,10nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 20.60 | 126 | P | P | 17 33 17.7 | -1.6 |
| WRAB | | | | IAmb | IAmb | 17 33 32.4 | |
| | comp=Z,39nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 20.60 | 126 | P | P | 17 33 19.7 | +0.3 |
| WB2 | | | | IAmb | IAmb | 17 33 32.4 | |
| | comp=Z,32nm,1.4s | | | | | | |
| MORW | Morawa | 20.67 | 182 | P | P | 17 33 20.7 | +0.8 |
| MORW | Morawa | 20.67 | 182 | P | P | 17 33 17.0 | -2.9 |
| WR0 | Warramunga Arr | 20.76 | 126 | P | P | 17 33 21.1 | -0.1 |
| WR0 | | | | IAmb | IAmb | 17 33 22.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| BLDU | Ballidu | 22.20 | 180 | P | P | 17 33 37.4 | +1.0 |
| AS31 | Alice Springs | 22.44 | 135 | P | P | 17 33 38.8 | -0.4 |
| ASAR | Alice Springs | 22.44 | 135 | P | P | 17 33 39.4 | +0.1 |
| | comp=Z,13nm,0.8s,baz=310,slow=9.5,SNR=208 | | | | | | |
| ASAR | | | | PcP | PcP | 17 37 32.5 | -1.3 |
| | comp=Z,0.4nm,0.4s,baz=319,slow=1.7,SNR=2.7 comp=Z,13nm,0.8s | | | | | | |
| AS01 | Alice Springs | 22.48 | 135 | P | P | 17 33 40.1 | +0.6 |
| KLBR | Kellerberrin | 23.19 | 178 | P | P | 17 33 48.7 | +1.8 |
| KMBL | Kambalda | 23.44 | 169 | P | P | 17 33 49.8 | +0.4 |
| MUN | Mundaring | 23.56 | 181 | P | P | 17 33 50.2 | -0.4 |
| NWAO | Narrogin (SRO) | 24.51 | 179 | P | P | 17 34 00.4 | +0.9 |
| FORT | Forrest | 24.74 | 156 | P | P | 17 34 02.9 | +1.3 |
| FORT | Forrest | 24.74 | 156 | P | P | 17 34 02.3 | +0.7 |
| QIS | Mount Isa | 25.23 | 121 | P | P | 17 34 07.6 | +1.4 |
| OOD | Oodnadatta | 26.39 | 140 | P | P | 17 34 16.8 | +0.2 |
| COEN | Coen | 26.53 | 105 | P | P | 17 34 18.4 | +0.4 |
| MTSU | Mount Surprise | 28.53 | 113 | P | P | 17 34 36.9 | +0.9 |
| LCRK | Leigh Creek | 29.81 | 141 | P | P | 17 34 47.6 | +0.4 |
| BBOO | Buckleboo | 30.25 | 146 | P | P | 17 34 51.2 | +0.2 |
| BBOO | Buckleboo | 30.25 | 146 | P | P | 17 34 50.2 | -0.8 |
| BBOO | | | | IAmb | IAmb | 17 34 56.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| CMAR | Chiang Mai Arr | 31.87 | 327 | P | P | 17 35 06.8 | +1.4 |
| | comp=Z,0.6nm,0.4s,baz=156,slow=6.6,SNR=5.3 comp=Z,0.6nm,0.4s | | | | | | |
| HTT | Hallett | 32.33 | 144 | P | P | 17 35 10.4 | +1.0 |
| STKA | Stephens Creek | 32.93 | 139 | P | P | 17 35 14.8 | +0.2 |
| STKA | Stephens Creek | 32.93 | 139 | P | P | 17 35 12.8 | -1.8 |
| STKA | Stephens Creek | 32.93 | 139 | P | P | 17 35 15.0 | +0.4 |
| | comp=Z,7.0nm,0.8s,baz=310,slow=9.5,SNR=16 comp=Z,7.0nm,0.8s | | | | | | |
| ARPS | Mount Arapiles | 36.38 | 145 | P | P | 17 35 45.4 | +1.0 |
| TOO | Toolangi | 39.06 | 143 | P | P | 17 36 07.5 | +0.4 |
| TOO | Toolangi | 39.06 | 143 | P | P | 17 36 06.9 | -0.2 |
| KSRS | Korea Array | 46.71 | 12 | P | P | 17 37 10.1 | +1.2 |
| | comp=Z,0.9nm,0.8s,baz=194,slow=8.4,SNR=5.6 comp=Z,0.9nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 48.96 | 23 | P | P | 17 37 26.6 | +0.1 |
| | comp=Z,0.8nm,0.8s,baz=208,slow=8.3,SNR=3.0 comp=Z,0.8nm,0.8s | | | | | | |
| DZM | Mont Dzumac | 49.66 | 112 | P | P | 17 37 31.6 | -0.7 |
| | comp=Z,2.8nm,0.7s,baz=300,slow=20,SNR=1.8 comp=Z,2.8nm,0.7s | | | | | | |
| GTA | Gaotai | 50.00 | 343 | *eP* | P | 17 37 36.1 | +1.5 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,3µm,21.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,4µm,21.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,6µm,21.8s | | | | | | |
| YATNC | Mamie plateau, | 50.07 | 112 | P | P | 17 37 36.7 | +1.4 |
| USRK | Ussuriysk Ar. | 54.05 | 14 | P | P | 17 38 04.5 | +1.0 |
| USRK | Ussuriysk Ar. | 54.05 | 14 | P | P | 17 38 04.8 | +0.3 |
| | comp=Z,1.3nm,0.5s,baz=192,slow=6.2,SNR=7.7 comp=Z,1.3nm,0.5s | | | | | | |
| SONM | Songino Array | 56.64 | 352 | P | P | 17 38 23.5 | +0.3 |
| | comp=Z,1.7nm,0.7s,baz=171,slow=9.8,SNR=8.9 comp=Z,1.7nm,0.7s | | | | | | |
| JKA | Kamikawa-asahi | 57.19 | 22 | P | P | 17 38 25.7 | -1.3 |
| HEH | HeiHe | 59.05 | 8 | *eP* | P | 17 38 39.3 | -0.7 |
| BKZ | Black Stump Fm | 61.46 | 130 | P | P | 17 38 55.2 | -1.6 |
| MK31 | Makanchi Array | 62.84 | 334 | P | P | 17 39 05.6

1.0nm,0.6s,baz=161,slow=6.1,SNR=6.6
1.0nm,0.6s
**QSPA South Pole Qui 71.87 180** P **P** **17 42 38.5 +1.2**
2.6nm,0.6s,baz=222,slow=1.1,SNR=18
2.6nm,0.6s
**PETK Petropavlovsk- 74.00 345** P **P** **17 42 49.1 -0.3**
2.8nm,1.0s,baz=104,slow=7.3,SNR=6.8
2.8nm,1.0s
**NVAR Mina Array Bea 79.47 44** P **P** **17 43 20.9 +1.1**
0.6nm,0.7s,baz=224,slow=8.1,SNR=6.0
0.6nm,0.7s
**TXAR Lajitas Array 85.96 58** P **P** **17 43 53.7 +1.4**
0.5nm,0.7s,baz=204,slow=2.0,SNR=3.8
0.5nm,0.7s
**ILAR Eielson Array 86.11 13** P **P** **17 43 51.6 -0.5**
0.5nm,0.4s,baz=224,slow=4.5,SNR=12
0.5nm,0.4s
**PDAR Pinedale Array 87.40 43** P **P** **17 43 59.4 +0.4**
0.2nm,0.3s,baz=155,slow=3.0,SNR=2.6
0.2nm,0.3s
**TROLL Troll, Antarti 90.03 180** ⇓P **P** **17 44 09.2 -1.4**
**SNAA Sanae 90.32 179** ⇓P **P** **17 44 09.6 -2.2**
**VNA3 Neumayer Olymp 90.45 176** ⇓P **P** **17 44 10.5 -1.9**
**GERES GERESS Array B 147.93 345** PKPbc **PKPbc** **17 50 50.3 -2.6**
0.2nm,0.3s,baz=32,slow=3.8,SNR=2.1

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**IDC 19 17:49:49.5±46.0, 16.77S×176.07W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=856.3km s-min=157.6km az=79.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **41.13** | **241** | P | P | 17 57 35.8 | +0.3 |
| | 1.7nm,0.5s,baz=85,slow=8.1,SNR=7.4 | | | | | | |
| | 1.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.04** | **258** | P | P | 17 58 22.8 | -0.4 |
| | 0.5nm,0.3s,baz=95,slow=7.6,SNR=15 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **47.25** | **253** | P | P | 17 58 24.6 | -0.2 |
| | 4.9nm,0.5s,baz=89,slow=8.0,SNR=93 | | | | | | |
| | 4.9nm,0.5s | | | | | | |

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*IDC **19** 17:50:15.2±1.9, 8.24S×117.01E, h0km, mb3.3/3, mbtmp3.5/4, ML3.8/1, Error ellipse: s-maj=43.0km s-min=26.0km az=64.0*
*DJA **19** 17:50:17.7±0.4, 9.3S×117.7E±, h37km±9km, M3.9/8, MLv3.9/8*
**ISC 19 17:50:18.6±1.0, 8.42S±0.06×116.95E±0.04, h35km, n12, σ1§45/15, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.33** | **191** | P | **Pn** | **17 50 25.6** | **-1.3** |
| TWSI | | | | S | **Sn** | **17 50 31.7** | **-0.8** |
| **PLAI** | **Plampang** | **0.92** | **116** | P | **Pn** | **17 50 35.4** | **+0.4** |
| PLAI | | | | S | **Sn** | **17 50 46.5** | **-0.5** |
| **DNP** | **Denpasar** | **1.73** | **261** | P | **Pn** | **17 50 44.8** | **-1.5** |
| **SRBI** | **Singaraja** | **1.75** | **281** | P | **Pn** | **17 50 47.7** | **+1.3** |
| SRBI | | | | S | **Sn** | **17 51 07.2** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **2.71** | **117** | P | **Pn** | **17 50 58.1** | **-1.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **269** | P | **Pn** | **17 50 58.6** | **-1.8** |
| **BSSI** | **Bau Bau, Buton** | **4.18** | **58** | P | **Pn** | **17 51 20.5** | **+0.6** |
| **KAPI** | **Kappang** | **4.38** | **40** | Pn | **Pn** | **17 51 20.7** | **-2.0** |
| | 5.7nm,0.3s,baz=147,slow=19,SNR=5.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **17 52 11.0** | **-1.5** |
| | 4.2nm,0.3s,baz=221,slow=20,SNR=1.9 | | | | | | |
| | 12nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.71** | **94** | P | **Pn** | **17 51 26.2** | **-1.0** |
| **WRA** | **Warramunga Arr** | **20.36** | **126** | P | Pn | 17 54 54.3 | -0.3 |
| | 1.0nm,0.4s,baz=301,slow=12,SNR=33 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.22** | **135** | P | **P** | **17 55 14.3** | **+2.0** |
| | 0.4nm,0.4s,baz=310,slow=9.2,SNR=10 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.03** | **334** | P | **P** | **18 00 43.2** | **+1.0** |
| | 0.3nm,0.7s,baz=132,slow=7.2,SNR=3.9 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

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**IDC 19 17:55:53.2±50.0, 16.68S×177.47W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=935.2km s-min=157.4km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **40.02** | **240** | P | P | 18 03 30.2 | +0.1 |
| | 1.1nm,0.6s,baz=80,slow=12,SNR=4.6 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.75** | **258** | P | P | 18 04 16.8 | -0.1 |
| | 0.8nm,0.5s,baz=94,slow=7.2,SNR=26 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.00** | **253** | P | P | 18 04 18.4 | -0.3 |
| | 3.2nm,0.6s,baz=87,slow=8.7,SNR=35 | | | | | | |
| | 3.2nm,0.6s | | | | | | |

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*IDC **19** 18:01:26.4±6.9, 8.19S×115.65E, h0km, mb3.5/3, mbtmp3.6/4, ML3.5/1, Error ellipse: s-maj=113.5km s-min=45.1km az=101.0*
*DJA **19** 18:01:39.2±1.0, 9.3S±12°×11°7E±°, h29km±8km, M4.1/5, MLv4.1/5*
**ISC 19 18:01:39.2±1.0, 9.03S±0.08×116.77E±0.06, h10km, n9, σ2§49/10, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.32** | **21** | P | **Pg** | **18 01 45.7** | **+0.2** |
| TWSI | | | | S | **Sg** | **18 01 52.2** | **+2.4** |
| **PLAI** | **Plampang** | **1.02** | **78** | P | **Pg** | **18 01 56.9** | **-1.9** |
| PLAI | | | | S | **Sg** | **18 02 09.4** | **-2.7** |
| **DNP** | **Denpasar** | **1.58** | **283** | P | **Pn** | **18 02 06.1** | **-1.2** |
| DNP | | | | S | **Sn** | **18 02 26.9** | **-0.9** |
| **SRBI** | **Singaraja** | **1.80** | **301** | P | **Pn** | **18 02 09.0** | **-1.4** |
| SRBI | | | | S | **Sn** | **18 02 30.5** | **-2.9** |
| **KAPI** | **Kappang** | **4.97** | **37** | Pn | Pn | 18 02 45.2 | -8.8 |
| | 1.7nm,0.3s,baz=228,slow=21,SNR=2.0 | | | | | | |
| | 5.0nm,0.3s | | | | | | |
| **SOEI** | **Soe** | **7.43** | **96** | P | Pg | 18 04 13.1 | +11 |
| **WRA** | **Warramunga Arr** | **20.15** | **124** | P | Pn | 18 06 15.6 | -0.1 |
| | 1.1nm,0.6s,baz=301,slow=12,SNR=13 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **21.92** | **134** | P | **P** | **18 06 35.7** | **+2.8** |
| | 0.5nm,0.5s,baz=307,slow=9.3,SNR=7.6 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.36** | **138** | P | **P** | **18 08 11.6** | **+2.5** |
| | 1.0nm,0.5s,baz=318,slow=12,SNR=3.7 | | | | | | |
| | 1.0nm,0.5s | | | | | | |

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*IDC **19** 18:02:10.9±1.1, 8.24S×116.84E, h0km, mb3.9/5, mbtmp3.9/6, ML3.8/1, Error ellipse: s-maj=25.7km s-min=19.4km az=83.0*
**ISC 19 18:02:16.2±1.1, 8.29S±0.09×117.0E±0.1, h35km, n11, σ0§98/13, mb3.9/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.28** | **41** | Pn | **Pn** | **18 03 19.1** | **+0.2** |
| | 4.9nm,0.3s,baz=203,slow=8.9,SNR=7.0 | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 04 07.8** | **+0.1** |
| | 10nm,0.3s,baz=204,slow=20,SNR=9.6 | | | | | | |
| KAPI | | | | Lg | Lg | 18 04 27.9 | |
| | 7.7nm,0.3s,baz=139,slow=20,SNR=2.2 | | | | | | |
| | 12nm,0.4s | | | | | | |
| **MBWA** | **Marble Bar** | **13.08** | **168** | P | **Pn** | **18 05 18.8** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **13.50** | **168** | P | **Pn** | **18 05 24.6** | **-0.8** |
| **MTN** | **Manton Dam** | **14.66** | **109** | P | **Pn** | **18 05 40.3** | **-0.9** |
| **MEEK** | **Meekatharra** | **18.32** | **175** | P | **Pn** | **18 06 29.9** | **+2.2** |
| **WRA** | **Warramunga Arr** | **20.44** | **126** | P | **P** | **18 06 51.5** | **+0.8** |
| | 4.9nm,0.7s,baz=302,slow=12,SNR=38 | | | | | | |
| | 4.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.31** | **135** | P | **P** | **18 07 11.7** | **+0.8** |
| | 3.8nm,0.7s,baz=308,slow=9.2,SNR=31 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 11 05.4** | **-0.5** |
| | 0.2nm,0.8s,baz=316,slow=1.5,SNR=1.3 | | | | | | |
| | 3.8nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **32.80** | **139** | P | **P** | **18 08 47.0** | **+0.7** |
| | 2.9nm,0.7s,baz=324,slow=6.6,SNR=6.9 | | | | | | |
| | 2.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.92** | **334** | P | **P** | **18 12 38.2** | **-0.8** |
| | 0.4nm,0.6s,baz=128,slow=7.9,SNR=4.1 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.67** | **340** | P | **P** | **18 13 09.8** | **+0.2** |
| | 0.3nm,0.3s,baz=144,slow=3.7,SNR=2.1 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

**CPUP Villa Florida 145.15 189** PKPbc **PKPbc** **18 21 50.1 -0.3**
0.8nm,0.4s,baz=265,slow=1.3,SNR=3.0

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*IDC **19** 18:04:58.1±13.0, 18.18S×178.27W, h488km±156km, mb2.9/5, mbtmp3.8/5, Error ellipse: s-maj=89.6km s-min=31.6km az=11.0*
**ISC 19 18:04:58.8±1.2, 18.2S±0.3×178.3W±0.2, h500km, n8, σ0§63/8, mb3.4/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.41** | **190** | P | **P** | **18 09 01.0** | **0.0** |
| | 3.5nm,0.8s,baz=44,slow=20,SNR=1.1 | | | | | | |
| | 3.5nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.56** | **241** | P | **P** | **18 11 37.5** | **-0.6** |
| | 1.6nm,0.7s,baz=89,slow=10,SNR=3.7 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **18 12 26.8** | **+0.1** |
| | 0.2nm,0.3s,baz=96,slow=8.0,SNR=5.6 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | **P** | **18 12 28.7** | **+1.0** |
| | 1.3nm,0.6s,baz=89,slow=8.6,SNR=20 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.08** | **58** | P | **P** | **18 16 46.9** | **+0.2** |
| | 0.3nm,0.7s,baz=215,slow=6.1,SNR=3.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.01** | **315** | PKPbc | **PKPbc** | **18 23 39.5** | **-0.3** |
| | 0.4nm,0.6s,baz=81,slow=5.4,SNR=1.8 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.34** | **303** | PKPbc | **PKPbc** | **18 23 44.1** | **+0.3** |
| | 0.6nm,0.5s,baz=64,slow=7.8,SNR=1.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.88** | **345** | PKPbc | **PKPbc** | **18 23 46.8** | **-0.5** |
| | 0.4nm,0.6s,baz=357,slow=15,SNR=2.5 | | | | | | |

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*IDC **19** 18:07:02.4±12.0, 17.51S×178.27W, h602km±124km, mb3.2/4, mbtmp4.2/5, Error ellipse: s-maj=109.0km s-min=36.1km az=47.0*
**ISC 19 18:07:01.7±2.6, 17.4S±0.4×178.3W±0.3, h600km, n6, σ0§38/6, mb3.6/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.14** | **250** | P | **P** | **18 10 11.5** | **+0.3** |
| | 4.3nm,0.7s,baz=112,slow=19,SNR=8.8 | | | | | | |
| **STKA** | **Stephens Creek** | **39.00** | **241** | P | **P** | **18 13 37.8** | **-0.4** |
| | 0.7nm,0.5s,baz=93,slow=19,SNR=1.3 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.88** | **259** | P | **P** | **18 14 24.4** | **0.0** |
| | 1.5nm,0.5s,baz=92,slow=6.8,SNR=27 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | **P** | **18 14 26.4** | **+0.4** |
| | 13nm,0.5s,baz=89,slow=8.0,SNR=126 | | | | | | |
| | 13nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.64** | **180** | P | **P** | **18 17 29.4** | **+0.1** |
| | 1.4nm,0.8s,baz=78,slow=2.2,SNR=6.7 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.00** | **304** | PKPbc | **PKPbc** | **18 25 35.9** | **-0.1** |
| | 0.3nm,0.4s,baz=54,slow=1.7,SNR=1.2 | | | | | | |

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**JMA 19 18:09:22.3±0.1, 35.1N±0.2×134.9E±0.2, h10km±1km, MV0.7/18, SW HYOGO PREF, Western Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKS** | **Kasai** | **0.11** | **192** | *i* P | Pg | 18 09 25.0 | 0.0 |
| JKS | | | | *eS* | Sg | 18 09 26.6 | -0.2 |
| **JWT** | **Wachi** | **0.47** | **66** | *eS* | Sg | 18 09 37.8 | -0.1 |
| **JAD** | **Aida** | **0.60** | **256** | *eS* | Sg | 18 09 41.8 | +0.1 |

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**IDC 19 18:09:31.3±8.2, 17.04S×176.72W, h0km, mb4.1/4, mbtmp4.1/4, Error ellipse: s-maj=214.8km s-min=42.5km az=27.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **40.46** | **241** | P | P | 18 17 12.2 | +0.4 |
| | 2.0nm,0.8s,baz=67,slow=7.7,SNR=2.7 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.38** | **258** | P | P | 18 17 59.5 | -0.4 |
| | 0.8nm,0.4s,baz=96,slow=6.9,SNR=15 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **46.58** | **253** | P | P | 18 18 01.2 | -0.2 |
| | 5.3nm,0.5s,baz=88,slow=9.1,SNR=81 | | | | | | |
| | 5.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.01** | **180** | P | P | 18 21 03.0 | +0.1 |
| | 0.7nm,0.8s,baz=61,slow=6.8,SNR=7.1 | | | | | | |
| | 0.7nm,0.8s | | | | | | |

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*BJI **19** 18:09:54.8±0.0, 38.48N×140.98E, h110km, mb4.6/43, mB4.9/1*
*MOS **19** 18:09:54.5±0.9, 38.56N×141.22E, h109km, mb4.5/17, Error ellipse: s-maj=7.8km s-min=5.4km az=99.3*
*IDC **19** 18:09:57.0±1.5, 38.55N×140.93E, h108km±14km, mb4.1/27, mbtmp4.5/33, Error ellipse: s-maj=11.9km s-min=10.3km az=130.0*
*NEIC **19** 18:09:56.9±2.9, 38.53N±0.06×141.13E±0.09, h105km±6km, mb4.5/158, Error ellipse: s-maj=11.2km s-min=8.0km az=121.0*
*JMA **19** 18:09:57.1±0.1, 38.6N±0.3×141.0E±0.4, h105km, MD4.2/40, MV4.6/40, NORTHERN MIYAGI PREF*
*JMA Felt III J1 at NORTHERN MIYAGI PREF .*
**ISC 19 18:09:56.4±0.5, 38.58N±0.04×141.02E±0.04, h104km±4km, n553, σ1§57/500, mb4.5/134, 12C-36D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOFO** | **Osakifurukawao** | **0.09** | **282** | ⇓*i* P | **Pn** | **18 10 11.8** | **+1.0** |
| JOFO | | | | ⇓S | **Sn** | **18 10 23.5** | **+1.9** |
| **JOFO** | **Osakifurukawao** | **0.09** | **282** | A | A | 18 10 11.8 | |
| | comp=E,53nm,1.7s,comp=N,37nm,1.1s | | | | | | |
| **JIO** | **Ouri** | **0.29** | **117** | ⇓*i* P | **Pn** | **18 10 12.2** | **+0.8** |
| JIO | | | | ⇓*i* S | **Sn** | **18 10 23.3** | **+0.7** |
| **JIO** | **Ouri** | **0.29** | **117** | A | A | 18 10 12.2 | |
| | comp=E,72nm,0.5s,comp=N,15nm,0.5s | | | | | | |
| **JOU** | **Okura** | **0.36** | **232** | ⇓*i* P | **Pn** | **18 10 12.7** | **+0.9** |
| **JOU** | **Okura** | **0.36** | **232** | A | A | 18 10 12.7 | |
| | comp=E,10.0nm,0.4s,comp=N,19nm,0.7s | | | | | | |
| **JMK** | **Ichinoseki** | **0.40** | **23** | ⇓*i* P | **Pn** | **18 10 12.9** | **+0.9** |
| JMK | | | | ⇓S | **Sn** | **18 10 25.1** | **+1.4** |
| **JMK** | **Ichinoseki** | **0.40** | **23** | A | A | 18 10 12.9 | |
| | comp=E,21nm,1.6s,comp=N,26nm,0.5s | | | | | | |
| **JKMT** | **Kesennumamotoy** | **0.42** | **57** | A | A | 18 10 13.1 | |
| | comp=E,38nm,2.5s,comp=N,19nm,0.8s | | | | | | |
| **JIKH** | **Ishinomakikobu** | **0.44** | **128** | ⇓*i* P | **Pn** | **18 10 13.1** | **+0.8** |
| JIKH | | | | ⇓S | **Sn** | **18 10 24.7** | **+0.6** |
| **JIKH** | **Ishinomakikobu** | **0.44** | **128** | A | A | 18 10 13.1 | |
| | comp=E,100nm,0.5s,comp=N,22nm,0.3s | | | | | | |
| **JYK** | **Kaneyama** | **0.62** | **303** | ⇓*i* P | **Pn** | **18 10 14.6** | **+1.1** |
| JYK | | | | ⇓*e*S | **Sn** | **18 10 27.5** | **+1.2** |
| **JYK** | **Kaneyama** | **0.62** | **303** | A | A | 18 10 14.6 | |
| | comp=E,9.0nm,2.3s,comp=N,15nm,2.0s | | | | | | |
| **OFUJ** | **Ofunato** | **0.71** | **45** | A | A | 18 10 15.4 | |
| | comp=E,26nm,1.1s,comp=N,30nm,0.6s | | | | | | |
| **JMM** | **Marumori** | **0.74** | **194** | P | **Pn** | **18 10 14.8** | **+0.3** |
| **JMM** | **Marumori** | **0.74** | **194** | | **Pn** | **18 10 14.8** | **+0.3** |
| **JMM** | **Marumori** | **0.74** | **194** | ⇓*i* P | **Pn** | **18 10 15.0** | **+0.4** |
| JMM | | | | ⇓S | **Sn** | **18 10 28.5** | **+0.4** |
| **JMM** | **Marumori** | **0.74** | **194** | A | A | 18 10 15.0 | |
| | comp=E,11nm,0.3s,comp=N,23nm,1.2s | | | | | | |
| **JYS** | **Shirataka** | **0.83** | **245** | ⇓*i* P | **Pn** | **18 10 16.3** | **+0.8** |
| JYS | | | | ⇓S | **Sn** | **18 10 30.7** | **+0.9** |
| **JYS** | **Shirataka** | **0.83** | **245** | A | A | 18 10 16.3 | |
| | comp=E,20nm,1.6s,comp=N,20nm,1.9s | | | | | | |
| **JMST** | **Minamisoumatoc** | **0.86** | **187** | A | A | 18 10 16.3 | |
| | comp=E,8.0nm,1.3s,comp=N,14nm,1.1s | | | | | | |
| **JRG** | **Rokugo** | **0.87** | **340** | ⇓*i* P | **Pn** | **18 10 17.2** | **+1.4** |
| JRG | | | | ⇓S | **Sn** | **18 10 32.4** | **+2.0** |
| **JRG** | **Rokugo** | **0.87** | **340** | A | A | 18 10 17.2 | |
| | comp=E,20nm,0.6s,comp=N,21nm,0.6s | | | | | | |
| **JOM** | **Ohasama** | **0.91** | **13** | *i* P | **Pn** | **18 10 17.6** | **+1.3** |
| JOM | | | | S | **Sn** | **18 10 32.5** | **+1.3** |
| **JOM** | **Ohasama** | **0.91** | **13** | A | A | 18 10 17.6 | |
| | comp=E,51nm,0.4s,comp=N,45nm,0.3s | | | | | | |
| **JYYZ** | **Yamagatayuza** | **0.96** | **297** | A | A | 18 10 17.8 | |
| | comp=E,23nm,2.1s,comp=N,15nm,1.1s | | | | | | |
| **JYAR** | **Yonezawaarcadi** | **0.96** | **226** | A | A | 18 10 17.4 | |
| | comp=E,25nm,1.0s,comp=N,51nm,1.3s | | | | | | |
| **JYA** | **Atsumi** | **1.02** | **271** | ⇓*i* P | **Pn** | **18 10 18.3** | **+0.9** |
| JYA | | | | ⇓S | **Sn** | **18 10 34.5** | **+1.2** |
| **JYA** | **Atsumi** | **1.02** | **271** | A | A | 18 10 18.3 | |
| | comp=E,36nm,0.7s,comp=N,23nm,0.6s | | | | | | |
| **JYW** | **Yuwa** | **1.15** | **327** | A | A | 18 10 20.1 | |
| | comp=E,22nm,0.9s,comp=N,22nm,1.0s | | | | | | |
| **JSZI** | **Iwateshizukuis** | **1.16** | **357** | A | A | 18 10 20.2 | |
| | comp=E,22nm,1.3s,comp=N,19nm,2.3s | | | | | | |
| **JOTO** | **OTAMA OYAMA** | **1.16** | **208** | *i* P | **Pn** | **18 10 19.6** | **+0.7** |
| JOTO | | | | S | **Sn** | **18 10 36.7** | **+0.8** |
| **JOTO** | **OTAMA OYAMA** | **1.16** | **208** | A | A | 18 10 19.6 | |
| | comp=E,17nm,0.6s,comp=N,25nm,0.6s | | | | | | |
| **MIYJ** | **Miyakonagasawa** | **1.17** | **32** | A | A | 18 10 20.3 | |
| | comp=E,13nm,0.3s,comp=N,15nm,1.5s | | | | | | |
| **JFK** | **Kawauchi** | **1.22** | **186** | ⇓*i* P | **Pn** | **18 10 19.9** | **+0.3** |
| JFK | | | | ⇓S | **Sn** | **18 10 36.7** | **-0.5** |
| **JFK** | **Kawauchi** | **1.22** | **186** | A | A | 18 10 19.9 | |
| | comp=E,7.0nm,0.5s,comp=N,9.0nm,2.1s | | | | | | |
| **JAW** | **Awa shima** | **1.40** | **265** | *i* P | **Pn** | **18 10 22.5** | **+0.9** |
| JAW | | | | S | **Sn** | **18 10 41.7** | **+1.0** |
| **JAW** | **Awa shima** | **1.40** | **265** | A | A | 18 10 22.5 | |
| | comp=E,9.0nm,4.1s,comp=N,7.0nm,3.5s | | | | | | |
| **JKZ** | **Kuzumaki** | **1.42** | **10** | A | A | 18 10 23.4 | |
| | comp=E,7.0nm,0.2s,comp=N,6.0nm,1.1s | | | | | | |
| **ONAJ** | **Iwakimizuishiy** | **1.49** | **187** | A | A | 18 10 23.3 | |
| | comp=E,15nm,0.3s,comp=N,13nm,2.1s | | | | | | |
| **JTH** | **Tanohata** | **1.50** | **26** | A | A | 18 10 24.4 | |
| | comp=E,7.0nm,0.9s,comp=N,15nm,0.7s | | | | | | |
| **JFFD** | **Fukushimafurud** | **1.54** | **194** | A | A | 18 10 23.9 | |
| | comp=E,6.0nm,0.6s,comp=N,8.0nm,1.5s | | | | | | |
| **JNS** | **Sasagawa** | **1.54** | **241** | *i* P | **Pn** | **18 10 24.1** | **+0.7** |
| JNS | | | | S | **Sn** | **18 10 44.2** | **+0.3** |
| **JNS** | **Sasagawa** | **1.54** | **241** | A | A | 18 10 24.1 | |
| | comp=E,7.0nm,2.7s,comp=N,7.0nm,2.7s | | | | | | |
| **JFY** | **Yanaizu** | **1.57** | **222** | A | A | 18 10 24.4 | |
| | comp=E,5.0nm,3.0s,comp=N,4.0nm,2.3s | | | | | | |
| **JKEN** | **Kujiedanarisaw** | **1.71** | **18** | A | A | 18 10 26.9 | |
| | comp=E,13nm,1.3s,comp=N,15nm,0.4s | | | | | | |
| **JANG** | **Nango** | **1.83** | **12** | *i* P | **Pn** | **18 10 27.9** | **+1.0** |
| JANG | | | | S | **Sn** | **18 10 50.8** | **+0.6** |
| **JANG** | **Nango** | **1.83** | **12** | A | A | 18 10 27.9 | |
| | comp=E,4.0nm,0.2s,comp=N,3.0nm,0.3s | | | | | | |
| **JOG3** | **Oga3** | **2.01** | **312** | A | A | 18 10 26.0 | |
| | comp=E,4.0nm,3.0s,comp=N,6.0nm,2.8s | | | | | | |
| **JIZZ** | **Izumozaki** | **2.11** | **241** | A | A | 18 10 31.5 | |
| | comp=E,2.0nm,0.6s,comp=N,8.0nm,1.7s | | | | | | |
| **JTM** | **Tenmabayashi** | **2.20** | **1** | P | **Pn** | **18 10 33.6** | **+1.9** |
| **JTM** | **Tenmabayashi** | **2.20** | **1** | Pn | **Pn** | **18 10 33.1** | **+1.5** |
| **JSD** | **Sado** | **2.24** | **257** | P | **Pn** | **18 10 32.8** | **+0.6** |
| **JSD** | **Sado** | **2.24** | **257** | Pn | **Pn** | **18 10 32.5** | **+0.2** |
| **JYT** | **Yasato** | **2.44** | **196** | A | A | 18 10 35.7 | |
| | comp=E,6.0nm,0.3s,comp=N,5.0nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **3.02** | **229** | P | **Pn** | **18 10 44.1** | **+1.5** |
| **MAJO** | **Matsushiro** | **3.02** | **229** | | **Pn** | **18 10 43.8** | **+1.1** |
| **MAJO** | **Matsushiro** | **3.02** | **229** | *e*P | *i*P **Pn** | **18 10 43.7** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **3.02** | **228** | P | **Pn** | **18 10 43.6** | **+1.0** |
| | comp=N,206nm,0.5s,baz=31,slow=14,SNR=2078 | | | | | | |
| MJAR | | | | S | **Sn** | **18 11 13.4** | **-4.8** |
| | comp=N,29nm,0.8s,baz=71,slow=13,SNR=4.9 | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **3.02** | **229** | Pn | **Pn** | **18 10 44.7** | **+2.1** |
| **ERM** | **Erimo** | **3.80** | **25** | P | **Pn** | **18 10 52.8** | **0.0** |
| **ERM** | **Erimo** | **3.80** | **25** | Pn | **Pn** | **18 10 52.3** | **-0.5** |
| **ERM** | **Erimo** | **3.80** | **25** | *e* *i*P | **Pn** | **18 10 52.2** | **-0.6** |
| ERM | | | | | pmax pmax | | |
| | comp=Z,205nm,0.8s | | | | | | |
| **JEM** | **Erimo** | **3.80** | **25** | P | **Pn** | **18 10 52.6** | **-0.2** |
| **JGF** | **Kuroka** | **4.18** | **226** | P | **Pn** | **18 10 59.4** | **+1.3** |
| **JGF** | **Kuroka** | **4.18** | **226** | Pn | **Pn** | **18 10 58.8** | **+0.7** |
| **INU** | **Inuyama** | **4.55** | **226** | P | **Pn** | **18 11 03.9** | **+0.8** |
| **INU** | **Inuyama** | **4.55** | **226** | Pn | **Pn** | **18 11 03.9** | **+0.8** |
| **JHJ** | **Hachijo jima 2** | **5.54** | **191** | P | **Pn** | **18 11 14.7** | **-1.9** |
| | comp=Z,8.6nm,0.3s,baz=8.4,slow=12,SNR=9.1 | | | | | | |
| JHJ | | | | S | **Sn** | **18 12 13.4** | **-5.6** |
| | comp=Z,298nm,0.4s,baz=335,slow=23,SNR=12 | | | | | | |
| **JHJ2** | **Mitsune** | **5.55** | **191** | P | **Pn** | **18 11 15.4** | **-1.2** |
| **ASAJ** | **Asahikawa** | **5.65** | **12** | P | **Pn** | **18 11 17.3** | **-0.6** |
| | comp=Z,34nm,0.5s,baz=214,slow=14,SNR=158 | | | | | | |
| ASAJ | | | | S | **Sn** | **18 12 19.9** | **-1.6** |
| | comp=Z,58nm,0.5s,baz=271,slow=32,SNR=6.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.65** | **12** | P | **Pn** | **18 11 17.5** | **-0.4** |
| **JKA** | **Kamikawa-asahi** | **5.65** | **12** | Pn | **Pn** | **18 11 17.5** | **-0.4** |
| **YUK** | **Yuzh-Kuril'sk** | **6.55** | **32** | *e*P | **Pn** | **18 11 28.3** | **-1.8** |
| YUK | | | | *e*S | **Sn** | **18 12 37.7** | **-5.6** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,636nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,802nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,312nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **6.86** | **38** | *e*P | **Pn** | **18 11 31.4** | **-2.9** |
| SHO | | | | *e*S | **Sn** | **18 12 43.3** | **-7.4** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,91nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,47nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,50nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,772nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | |
| **JMN** | **Monobe** | **7.54** | **232** | P | **Pn** | **18 11 43.6** | **0.0** |
| **JMN** | **Monobe** | **7.54** | **232** | Pn | **Pn** | **18 11 43.6** | **0.0** |
| **KUR** | **Kuril'sk** | **8.38** | **35** | *e*P | **Pn** | **18 11 53.8** | **-1.0** |
| KUR | | | | *e*S | **Sn** | **18 13 22.0** | **-5.6** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,147nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,27nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,47nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,303nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp

comp=E,1.3nm,0.5s,baz=136,slow=9.6,SNR=5.8
**KLR** **Kul'dur** **12.56** **331**⇑ *i*P **Pn** **18 12 52.1 +0.9**
KLR pmax pmax
comp=Z,4.0nm,1.4s
**ZEA** **Zeya** **17.86** **333** *e*P **P** **18 13 55.7 -1.5**
ZEA pmax pmax
comp=N,10.0nm,0.5s
ZEA pmax pmax
comp=Z,10.0nm,0.5s
**PET** **Petropavlovsk** **18.89** **34**⇓ *e*P **P** **18 14 06.0 -2.4**
**NJ2** **Nanjing** **19.21** **257** *e*P **Pn** **18 14 14.3 +0.2**
NJ2 pmax pmax
comp=Z,16nm,0.9s
**BJT** **Baijiatuau** **19.27** **282** P **P** **18 14 10.8 -2.0**
**BJT** **Baijiatuau** **19.27** **282** P **P** **18 14 10.8 -2.0**
BJT pmax pmax
comp=Z,7.0nm,0.6s
**XLT** **XiLinHaoTe** **19.46** **294** *e*P **P** **18 14 13.5 -1.4**
XLT pmax pmax
comp=Z,26nm,0.8s
**HNS** **HongShan** **20.75** **275**⇑ P **P** **18 14 26.8 -1.9**
HNS pmax pmax
comp=Z,11nm,0.8s
**YHNB** **Yeheng** **21.67** **236** P **P** **18 14 35.9 -2.9**
YHNB IAmb IAmb 18 14 48.6
comp=Z,27nm,1.1s
**NACB** **Ninganchiao** **21.88** **235** P **P** **18 14 37.4 -3.5**
NACB IAmb IAmb 18 14 39.3
comp=Z,45nm,1.4s
**MA2** **Magadan** **21.91** **13** P **P** **18 14 41.3 +0.4**
MA2 IAmb IAmb 18 14 43.2
comp=Z,30nm,0.8s
**MA2** **Magadan** **21.91** **13** P **P** **18 14 41.7 +0.8**
comp=Z,24nm,0.8s,baz=198,slow=11,SNR=12
comp=Z,24nm,0.8s
**MA2** **Magadan** **21.91** **13**⇑ *e*P **P** **18 14 42.4 +1.5**
MA2 pmax pmax
comp=Z,26nm,0.7s
**SSLB** **Suanglung** **22.56** **235** P **P** **18 14 43.8 -4.3**
SSLB IAmb IAmb 18 14 54.2
comp=Z,17nm,0.7s
**YULB** **Yu-li** **22.63** **234** P **P** **18 14 46.3 -2.4**
YULB IAmb IAmb 18 14 51.5
comp=Z,13nm,0.5s
**HHC** **Hu-ho-hao-te** **22.73** **285** *e*P **P** **18 14 47.0 -2.6**
HHC pP pP 18 15 10.6 +0.6
HHC pmax pmax
comp=Z,27nm,0.5s
**TPUB** **Ta-pu** **23.12** **235** P **P** **18 14 49.8 -3.7**
TPUB IAmb IAmb 18 15 00.2
comp=Z,31nm,0.8s
**TWG** **Pinlang** **23.18** **233** P **P** **18 14 50.7 -3.4**
TWG IAmb IAmb 18 15 01.5
comp=Z,36nm,0.9s
**LYN** **LuoYang** **23.24** **269** P **P** **18 14 54.3 -0.2**
LYN pmax pmax
comp=Z,28nm,0.6s
**YAK** **Yakutsk** **24.49** **347** P **P** **18 15 05.3 -0.2**
YAK IAmb IAmb 18 15 05.9
comp=Z,20nm,0.6s
**YAK** **Yakutsk** **24.49** **347** *e*P **P** **18 15 05.1 -0.4**
YAK *e**PP **pP** **18 15 28.6 +0.4**
YAK *e*S **S** **18 19 18.2 +0.1**
YAK pmax pmax
comp=Z,15nm,0.8s
YAK pmax pmax
comp=N,5.0nm,0.9s
YAK pmax pmax
comp=E,2.0nm,0.9s
YAK smax smax
comp=N,62nm,3.2s
YAK smax smax
comp=E,56nm,3.5s
**SEY** **Seymchan** **25.34** **12**⇑ *e*P **P** **18 15 14.7 +1.5**
SEY pmax pmax
comp=Z,7.0nm,0.8s
**CNSH** **ChangSha** **25.56** **254** P **P** **18 15 14.9 -0.6**
CNSH pmax pmax
comp=Z,23nm,0.7s
**XAN** **Xi'an** **26.18** **270**⇓ P **P** **18 15 20.9 -0.3**
XAN pmax pmax
comp=Z,17nm,1.0s
XAN LR LR
comp=Z,860nm,15.1s
XAN LR LR
comp=Z,840nm,19.2s
XAN LR LR
comp=Z,550nm,15.8s
**ULN** **Ulaanbaatar** **26.25** **302** *d i*P **P** **18 15 21.3 -0.5**
ULN pmax pmax
comp=Z,3.0nm,0.8s
**SONM** **Songino Array** **26.69** **302** P **P** **18 15 26.9 +1.2**
**SONM** **Songino Array** **26.69** **302** P **P** **18 15 25.4 -0.3**
comp=Z,2.7nm,0.6s,baz=98,slow=8.4,SNR=12
comp=Z,2.7nm,0.6s
**SONM** **Songino Array** **26.69** **302** P **P** **18 15 26.9 +1.2**
SONM pmax pmax
comp=Z,2.0nm,0.7s
**ENH** **Enshi** **27.20** **262** P **P** **18 15 29.8 -0.6**
**H11N2** **WAKE ISLAND Hy** **29.23** **123** T T 18 46 18.2
baz=317,slow=76,SNR=731
**H11N1** **WAKE ISLAND Hy** **29.23** **123** T T 18 46 21.4
baz=317,slow=76,SNR=721
**H11N3** **WAKE ISLAND Hy** **29.24** **123** T T 18 46 18.2
baz=317,slow=76,SNR=637
**LZH** **Lanzhou** **29.54** **277** *e*P **P** **18 15 54.3 +3.1**
LZH pP pP 18 16 20.1 +5.5
LZH sP sP 18 16 31.8 +5.0
LZH pmax pmax
comp=Z,22nm,1.1s
**H11S1** **WAKE ISLAND Hy** **29.98** **125** T T 18 47 15.7
baz=318,slow=76,SNR=453
**H11S3** **WAKE ISLAND Hy** **29.98** **125** T T 18 47 15.8
baz=318,slow=76,SNR=634
**H11S2** **WAKE ISLAND Hy** **29.99** **125** T T 18 47 17.8
baz=318,slow=76,SNR=504
**GYA** **Guiyang** **31.21** **257**⇓ P **P** **18 16 05.1 -1.0**
GYA pmax pmax
comp=Z,23nm,1.1s
**PZH** **PanZhiHua** **34.98** **262** P **P** **18 16 40.0 +1.1**
PZH pmax pmax
comp=Z,10.0nm,0.5s
**NIKH** **Nikolski High** **37.01** **50** P **P** **18 16 56.3 +0.7**
baz=268
**GAMB** **Gambell** **37.56** **32** P **P** **18 17 01.3 +1.2**
baz=251
**M11K** **Mekoryuk** **39.24** **39** P **P** **18 17 14.9 +0.7**
baz=260
**DGZ** **Jazzator, Alta** **39.25** **304** *d i*P **P** **18 17 15.6 +0.9**
DGZ pmax pmax
comp=Z,8.0nm,0.8s
**CRAI** **Chiangrai** **39.48** **254** P **P** **18 17 18.2 +1.5**
**TNA** **Tin City** **39.67** **30** P **P** **18 17 18.9 +1.2**
baz=253
**WMQ** **Urumqi** **39.88** **295** *e*P **P** **18 17 22.0 +2.1**
WMQ pmax pmax
comp=Z,20nm,0.7s
**ANM** **Nome** **40.45** **32** P **P** **18 17 24.9 +0.7**
baz=256
**PHRA** **Phrae** **40.63** **252** P **P** **18 17 27.0 +0.8**
**M13K** **Dall Lake** **40.64** **39** P **P** **18 17 26.5 +0.7**
baz=263
**ZAA0** **Zalesovo Array** **40.65** **311** P **P** **18 17 26.0 0.0**
**ZALV** **Zalesovo Beam** **40.65** **311** P **P** **18 17 26.3 +0.3**
comp=Z,2.5nm,0.4s,baz=88,slow=8.5,SNR=12
ZALV PcP **PcP** **18 19 25.4 -0.4**
comp=Z,1.7nm,0.4s,baz=106,slow=2.6,SNR=6.4
comp=Z,2.5nm,0.4s
**J14K** **Nanvaranak Lak** **40.88** **35** P **P** **18 17 26.3 -1.4**
J14K IAmb IAmb 18 17 30.3
comp=Z,6.1nm,0.7s
**J14K** **Nanvaranak Lak** **40.88** **35** P **P** **18 17 28.8 +1.1**
baz=260
**F15K** **North Star Dit** **41.02** **31** P **P** **18 17 28.4 -0.5**
F15K IAmb IAmb 18 17 45.8
comp=Z,15nm,1.3s
**F15K** **North Star Dit** **41.02** **31** P **P** **18 17 29.2 +0.3**
baz=256
**S12K** **Black Hills** **41.05** **46** P **P** **18 17 28.8 -0.4**
baz=270
**L14K** **Kuka Creek** **41.08** **38** P **P** **18 17 29.3 -0.1**
baz=263
**G15K** **Niukluk** **41.10** **32** P **P** **18 17 30.6 +1.0**
baz=257
**M14K** **Bethel** **41.36** **39** P **P** **18 17 33.3 +1.6**
**M14K** **Bethel** **41.36** **39** P **P** **18 17 33.1 +1.4**
baz=264
**C16K** **Lisburne Hills** **41.46** **27** P **P** **18 17 31.3 -1.1**
**C16K** **Lisburne Hills** **41.46** **27** P **P** **18 17 33.2 +0.8**
baz=252
**CMAR** **Chiang Mai Arr** **41.62** **253** P **P** **18 17 34.4 0.0**
comp=Z,0.6nm,0.4s,baz=44,slow=8.2,SNR=6.5
comp=Z,0.6nm,0.4s
**K15K** **Wolf Creek Mou** **41.74** **36** P **P** **18 17 36.3 +1.5**
**K15K** **Wolf Creek Mou** **41.74** **36** P **P** **18 17 36.0 +1.2**
baz=263
**M15K** **Kasigluk River** **41.98** **39** P **P** **18 17 37.5 +0.7**
baz=265
**D17K** **Noatak River** **42.12** **28** P **P** **18 17 39.3 +1.5**
baz=255
**N15K** **Kwethluk River** **42.24** **40** P **P** **18 17 39.9 +1.0**
**N15K** **Kwethluk River** **42.24** **40** P **P** **18 17 39.9 +1.0**
baz=266
**C17K** **DeLong Mountai** **42.28** **27** P **P** **18 17 40.3 +1.1**
baz=254
**J16K** **Anvik River** **42.29** **35** P **P** **18 17 39.2 0.0**
J16K IAmb IAmb 18 17 57.2
comp=Z,7.6nm,1.2s
**J16K** **Anvik River** **42.29** **35** P **P** **18 17 40.7 +1.5**
baz=263
**O15K** **Ungalikthiuk R** **42.32** **41** P **P** **18 17 41.0 +1.4**
baz=268
**I17K** **Unalakleet** **42.33** **34** P **P** **18 17 41.1 +1.6**
**E17K** **Hotham Inlet** **42.44** **29** P **P** **18 17 41.6 +1.1**
baz=257
**CHNA** **Chernabura Isl** **42.48** **48** P **P** **18 17 41.4 +0.5**
baz=273
**CNBA** **Chernabura Isl** **42.48** **48** P **P** **18 17 41.0 +0.1**
**F17K** **Baldwin Pennin** **42.53** **30** P **P** **18 17 41.2 +0.1**
**F17K** **Baldwin Pennin** **42.53** **30** P **P** **18 17 42.2 +1.0**
baz=258
**G17K** **Kiwalik Mounta** **42.60** **32** P **P** **18 17 42.8 +1.1**
baz=260
**L16K** **Owhat River** **42.65** **37** P **P** **18 17 42.4 +0.3**
L16K IAmb IAmb 18 17 44.2
comp=Z,6.9nm,0.8s
**L16K** **Owhat River** **42.65** **37** P **P** **18 17 43.5 +1.3**
baz=265
**H17K** **Granite Mounta** **42.82** **33** P **P** **18 17 45.3 +1.8**
baz=261
**M16K** **Timber Creek** **42.84** **38** P **P** **18 17 45.3 +1.5**
baz=267
**N16K** **Nishlik Lake** **42.91** **39** P **P** **18 17 45.9 +1.6**
baz=267
**E18K** **Tukpahlearik C** **42.98** **29** P **P** **18 17 46.7 +1.9**
baz=258
**J17K** **VABM Dome** **42.98** **35** P **P** **18 17 46.6 +1.7**
baz=264
**B18K** **Kokolik River** **43.00** **26** P **P** **18 17 46.2 +1.3**
baz=255
**C18K** **Utukok River** **43.03** **27** P **P** **18 17 46.2 +0.9**
baz=256
**MK31** **Makanchi Array** **43.05** **301** P **P** **18 17 45.5 -0.1**
MK31 IAmb IAmb 18 17 46.5
comp=Z,4.3nm,0.7s
**MK31** **Makanchi Array** **43.05** **301** *d i*P **P** **18 17 45.9 +0.2**
**MKAR** **Makanchi Array** **43.05** **301** P **P** **18 17 45.9 +0.2**
**MKAR** **Makanchi Array** **43.05** **301** P **P** **18 17 46.0 +0.3**
comp=Z,4.8nm,0.6s,baz=86,slow=9.9,SNR=57
comp=Z,4.8nm,0.6s
**MKAR** **Makanchi Array** **43.05** **301** P **P** **18 17 46.0 +0.3**
**F18K** **Selawik** **43.19** **30** P **P** **18 17 48.4 +1.9**
baz=260
**O16K** **Kokwok River B** **43.22** **40** P **P** **18 17 48.6 +1.8**
baz=269
**L17K** **Donlin** **43.23** **37** P **P** **18 17 48.9 +2.0**
baz=266
**MAKZ** **Makanchi** **43.26** **301** P **P** **18 17 47.6 +0.3**
MAKZ IAmb IAmb 18 17 48.2
comp=Z,5.5nm,0.8s
**MAKZ** **Makanchi** **43.26** **301** P **P** **18 17 47.6 +0.3**
MAKZ pmax pmax
comp=Z,6.0nm,0.8s
**P16K** **Nunagak River** **43.27** **41** P **P** **18 17 49.1 +1.9**
baz=270
**K17K** **Iditarod** **43.27** **36** P **P** **18 17 48.5 +1.3**
K17K IAmb IAmb 18 17 50.1
comp=Z,7.5nm,0.8s
**K17K** **Iditarod** **43.27** **36** P **P** **18 17 48.6 +1.4**
baz=265
**G18K** **Tagagawik** **43.48** **31** P **P** **18 17 49.5 +0.7**
G18K IAmb IAmb 18 18 28.6
comp=Z,8.7nm,1.2s
**G18K** **Tagagawik** **43.48** **31** P **P** **18 17 50.5 +1.7**
baz=262
**H18K** **Honhosa River** **43.50** **32** P **P** **18 17 50.6 +1.6**
baz=263
**R16K** **Pilot Point** **43.50** **43** P **P** **18 17 50.9 +1.8**
baz=272
**M17K** **Holitna River** **43.60** **38** P **P** **18 17 51.9 +2.0**
baz=268
**N17K** **Nushagak Hills** **43.69** **39** P **P** **18 17 51.9 +1.2**
**N17K** **Nushagak Hills** **43.69** **39** P **P** **18 17 52.5 +1.9**
baz=269
**C19K** **Lookout Ridge** **43.70** **27** P **P** **18 17 52.4 +1.7**
baz=257
**F19K** **Shaleruckik Mo** **43.96** **30** P **P** **18 17 54.3 +1.6**
baz=262
**L18K** **Granite Mounta** **43.99** **37** P **P** **18 17 54.6 +1.6**
baz=267
**D19K** **Kuna River** **44.11** **28** P **P** **18 17 55.2 +1.3**
D19K IAmb IAmb 18 17 55.7
comp=Z,8.6nm,0.7s
**D19K** **Kuna River** **44.11** **28** P **P** **18 17 55.1 +1.3**
baz=260
**G19K** **Purcell Mounta** **44.14** **31** P **P** **18 17 55.4 +1.2**
baz=263
**E19K** **Redstone River** **44.27** **29** P **P** **18 17 56.5 +1.4**
E19K IAmb IAmb 18 17 57.7
comp=Z,8.4nm,0.9s
**E19K** **Redstone River** **44.27** **29** P **P** **18 17 56.9 +1.8**
baz=261,SNR=5.2
**H19K** **Roundabout Mou** **44.34** **32** P **P** **18 17 57.1 +1.4**
**H19K** **Roundabout Mou** **44.34** **32** P **P** **18 17 57.4 +1.7**
baz=264
**N18K** **Kilae Creek** **44.34** **39** P **P** **18 17 57.5 +1.8**
baz=270
**J19K** **Poorman** **44.57** **34** P **P** **18 17 58.8 +1.2**
J19K IAmb IAmb 18 18 00.7
comp=Z,13nm,1.1s
**J19K** **Poorman** **44.57** **34** P **P** **18 17 59.3 +1.7**
baz=266
**D20K** **Eklutna River** **44.69** **27** P **P** **18 18 00.2 +1.8**
baz=261,SNR=5.4
**B20K** **Meade River** **44.72** **26** P **P** **18 17 59.9 +1.2**
**B20K** **Meade River** **44.72** **26** P **P** **18 17 59.9 +1.2**
baz=259
**KURK** **Kurchatov** **44.74** **307** P **P** **18 17 59.0 -0.1**
**KURK** **Kurchatov** **44.74** **307** *d i*P **P** **18 17 58.8 -0.3**
KURK pmax pmax
comp=Z,10.0nm,1.0s
**E20K** **Nigu River** **44.77** **28** P **P** **18 18 00.6 +1.4**
baz=262
**F20K** **Avaraart Lake** **44.79** **30** P **P** **18 18 01.0 +1.7**
baz=263
**KURBB** **Kurchatov Arra** **44.82** **307** P **P** **18 17 59.7 0.0**
comp=Z,8.5nm,0.4s,baz=81,slow=8.0,SNR=92
comp=Z,8.5nm,0.4s
**Q18K** **Katmai Hardscr** **44.83** **42** P **P** **18 18 01.0 +1.2**
baz=272
**H20K** **Anotleneega Mo** **44.98** **32** P **P** **18 18 02.3 +1.4**
baz=266
**N19K** **Bonanza Creek** **45.03** **39** P **P** **18 18 02.5 +1.2**
baz=271
**M19K** **Big River Lodg** **45.06** **37** P **P** **18 18 03.4 +1.9**
baz=270
**J20K** **Nowinta River** **45.22** **34** P **P** **18 18 04.7 +2.0**
baz=268
**K20K** **Telida** **45.23** **35** P **P** **18 18 04.9 +2.0**
baz=269
**C21K** **Knifeblade Rid** **45.41** **27** P **P** **18 18 05.9 +1.7**
baz=262
**Q19K** **Cape Douglas,** **45.52** **41** P **P** **18 18 06.4 +1.2**
baz=273
**B21K** **Ikpikpuk River** **45.53** **26** P **P** **18 18 06.9 +1.8**
baz=262
**E21K** **Killik River** **45.61** **28** P **P** **18 18 07.7 +1.9**
baz=264
**G21K** **Allakaket** **45.62** **31** P **P** **18 18 07.5 +1.7**
baz=266
**A22K** **Sinclair Lake** **45.63** **24** P **P** **18 18 08.1 +2.3**
baz=260
**M20K** **Styx River** **45.66** **37** P **P** **18 18 07.8 +1.4**
baz=271
**F21K** **Alatna River** **45.68** **30** P **P** **18 18 07.1 +0.7**
F21K IAmb IAmb 18 18 32.8
comp=Z,13nm,1.5s
**F21K** **Alatna River** **45.68** **30** P **P** **18 18 07.7 +1.3**
baz=265
**H21K** **Melozitna Rive** **45.86** **32** P **P** **18 18 09.3 +1.6**
baz=268
**B22K** **Teshekpuk Lake** **46.04** **25** P **P** **18 18 10.1 +1.1**
baz=262
**N20K** **Mount Spurr** **46.12** **38** P **P** **18 18 11.5 +1.5**
baz=272
**SPCR** **Spurr Chakacha** **46.12** **38** P **P** **18 18 11.5 +1.5**
baz=272
**D22K** **Ayikyak River** **46.13** **27** P **P** **18 18 11.7 +1.9**
baz=264,SNR=8.1
**KDAK** **Kodiak Island** **46.16** **43** P **P** **18 18 09.6 -0.6**
**KDAK** **Kodiak Island** **46.16** **43** P **P** **18 18 10.4 +0.2**
comp=Z,16nm,0.7s,baz=280,slow=6.8,SNR=6.3
comp=Z,16nm,0.7s
**KDAK** **Kodiak Island** **46.16** **43** P **P** **18 18 11.7 +1.5**
baz=275
**KDAK** **Kodiak Island** **46.16** **43** P **P** **18 18 09.6 -0.6**
KDAK pmax pmax
comp=Z,71nm,1.4s
**F22K** **John River** **46.20** **29** P **P** **18 18 12.1 +1.6**
baz=266
**E22K** **Anaktuvuk Pass** **46.38** **28** IAmb IAmb 18 18 14.4
comp=Z,12nm,0.9s
**E22K** **Anaktuvuk Pass** **46.38** **28** P **P** **18 18 13.7 +1.8**
baz=266,SNR=7.3
**SKT** **Skwentna** **46.41** **37** P **P** **18 18 14.0 +1.8**
baz=272
**G22K** **Bettles** **46.44** **30** P **P** **18 18 13.7 +1.5**
baz=267
**H22K** **Ishtalitna Cre** **46.45** **32** P **P** **18 18 14.1 +1.7**
baz=269
**HOM** **Homer** **46.49** **40** P **P** **18 18 14.7 +1.9**
baz=274
**BPAW** **Bear Paw Mtn.** **46.61** **34** P **P** **18 18 15.0 +1.3**
baz=271
**CAPN** **Captain Cook N** **46.66** **39** P **P** **18 18 15.8 +1.8**
baz=274
**MLY** **Manley** **46.71** **33** P **P** **18 18 16.3 +1.9**
baz=270
**SUA** **Susitna One** **46.81** **38** P **P** **18 18 17.3 +1.9**
baz=273
**D23K** **Nanushuk River** **46.86** **27** P **P** **18 18 17.7 +2.3**
baz=266
**C23K** **Itkillik River** **46.94** **26** IAmb IAmb 18 18 18.7
comp=Z,12nm,0.9s
**C23K** **Itkillik River** **46.94** **26** P **P** **18 18 17.7 +1.6**
baz=266
**BRSE** **Bradley Lake S** **46.94** **40** P **P** **18 18 18.3 +2.0**
baz=275
**COLD** **Coldfoot** **46.96** **30** P **P** **18 18 17.9 +1.6**
baz=268
**CUT** **Chulitna** **46.99** **36** P **P** **18 18 17.9 +1.4**
baz=273
**G23K** **Bananza Creek** **47.02** **30** P **P** **18 18 17.2 +0.4**
**G23K** **Bananza Creek** **47.02** **30** P **P** **18 18 18.0 +1.2**
baz=269
**E23K** **Chandalar** **47.20** **29** IAmb IAmb 18 18 21.1
comp=Z,13nm,1.0s
**E23K** **Chandalar** **47.20** **29** P **P** **18 18 20.3 +2.0**
baz=268,SNR=7.3
**H23K** **Yukon River** **47.21** **32** IAmb IAmb 18 18 20.9
comp=Z,5.5nm,0.7s
**H23K** **Yukon River** **47.21** **32** P **P** **18 18 20.6 +2.3**
baz=270,SNR=6.2
**TOLK** **Toolik Lake Re** **47.24** **28** P **P** **18 18 20.6 +2.1**
baz=268
**I23K** **Minto, Yukon-K** **47.29** **33** P **P** **18 18 20.6 +1.7**
baz=271
**RC01** **Rabbit Creek A** **47.33** **38** P **P** **18 18 20.5 +1.3**
baz=274
**O22K** **Cooper Landing** **47.38** **39** P **P** **18 18 20.9 +1.3**
baz=275
**NEA2** **Nenana** **47.43** **33** P **P** **18 18 21.7 +1.7**
baz=272
**MCK** **McKinley** **47.53** **35** P **P** **18 18 22.6 +1.8**
baz=273
**D24K** **Happy Valley** **47.53** **27** P **P** **18 18 22.6 +1.9**
baz=268,SNR=6.8
**SEW** **Seward** **47.55** **39** P **P** **18 18 22.3 +1.3**
baz=276
**PMR** **Palmer** **47.58** **37** P **P** **18 18 22.3 +1.2**
baz=275
**C24K** **Franklin Bluff** **47.60** **26** P **P** **18 18 22.2 +1.0**
**C24K** **Franklin Bluff** **47.60** **26** P **P** **18 18 22.3 +1.2**
baz=268
**E24K** **Your Creek** **47.63** **29** IAmb IAmb 18 18 24.2
comp=Z,5.5nm,0.7s
**E24K** **Your Creek** **47.63** **29** P **P** **18 18 23.5 +1.9**
baz=269,SNR=6.2
**WAT1** **Susitna Watana** **47.75** **36** P **P** **18 18 23.8 +1.2**
baz=274
**MDM** **Murphy Dome** **47.78** **33** P **P** **18 18 23.9 +1.2**
MDM IAmb IAmb 18 18 25.2
comp=Z,9.4nm,1.2s
**F24K** **Squaw Lake** **47.85** **29** P **P** **18 18 24.8 +1.5**
baz=270
**H24K** **Noodor Dome** **47.89** **32** P **P** **18 18 25.4 +1.7**
baz=272
**KNK** **Knik Glacier** **47.91** **38** P **P** **18 18 25.4 +1.6**
baz=275
**SML** **Sawmill** **47.94** **37** P **P** **18 18 24.3 +0.3**
SML IAmb IAmb 18 18 27.0
comp=Z,11nm,0.8s
**SML** **Sawmill** **47.94** **37** P **P** **18 18 25.4 +1.4**
baz=275
**G24K** **Hadweenzic Riv** **48.03** **30** IAmb IAmb 18 18 27.2
comp=Z,5.1nm,0.7s
**G24K** **Hadweenzic Riv** **48.03** **30** P **P** **18 18 27.0 +2.4**
baz=271,SNR=5.2
**PWL** **Port Wells** **48.03** **38** P **P** **18 18 25.9 +1.2**
baz=276
**POKR** **Poker Plat Res** **48.11** **33** IAmb IAmb 18 18 28.0
comp=Z,14nm,0.9s
**POKR** **Poker Plat Res** **48.11** **33** P **P** **18 18 27.1 +1.9**
baz=273
**M23K** **Glacier View** **48.23** **37** P **P** **18 18 27.1 +0.9**
baz=276
**DHY** **Denali Highway** **48.27** **35** P **P** **18 18 27.4 +0.8**
baz=275
**HDA** **Harding Lake** **48.36** **34** P **P** **18 18 28.1 +1.0**
baz=274
**IL31** **48.36** **33** IAmb IAmb 18 18 28.6
comp=Z,5.0nm,0.8s
**ILAR** **Eielson Array** **48.36** **33** P **P** **18 18 27.7 +0.5**
comp=Z,3.7nm,0.8s,baz=273,slow=6.5,SNR=35
comp=Z,3.7nm,0.8s
**D25K** **Kavik River** **48.41** **27** IAmb IAmb 18 18 29.7
comp=Z,7.9nm,0.8s
**D25K** **Kavik River** **48.41** **27** P **P** **18 18 28.9 +1.4**
baz=270,SNR=5.9
**SCM** **Sheep Creek Mo** **48.41** **37** P **P** **18 18 28.9 +1.3**
baz=276
**G25K** **Bearman Lake** **48.57** **30** P **P** **18 18 30.6 +1.9**
baz=273
**GLI** **Glacier Island** **48.63** **38** P **P** **18 18 31.0 +1.7**
baz=277
**H25L** **Birch Creek** **48.71** **31** P **P** **18 18 31.9 +2.1**
baz=273
**F25K** **Christian Rive** **48.72** **29** IAmb IAmb 18 18 32.5
comp=Z,3.2nm,0.6s
**F25K** **Christian Rive** **48.72** **29** P **P** **18 18 31.2 +1.3**
baz=272,SNR=5.1
**PRP** **Porcupine Dome** **48.88** **32** P **P** **18 18 32.8 +1.5**
baz=274
**C26K** **Camden Bay** **48.91** **26** P **P** **18 18 33.3 +2.0**
baz=271
**J25K** **Salcha River,** **49.02** **33** P **P** **18 18 33.5 +1.2**
baz=275
**KLU** **Klutina** **49.12** **37** P **P** **18 18 34.4 +1.4**
baz=277
**PAX** **Paxson** **49.15** **35** P **P** **18 18 34.9 +1.6**
baz=276
**F26K** **Sheenjek River** **49.28** **29** P **P** **18 18 36.8 +2.6**
baz=274,SNR=9.9
**BVAR** **Borovoye Array** **49.31** **311** P **P** **18 18 34.5 -0.1**
comp=Z,3.4nm,0.7s,baz=68,slow=7.9,SNR=16
comp=Z,3.4nm,0.7s
**EYAK** **Cordova Ski Ar** **49.33** **39** P **P** **18 18 36.1 +1.5**
baz=278
**HARP** **HAARP** **49.36** **36** P **P** **18 18 36.7 +1.9**
baz=277
**BRVK** **Borovoye** **49.36** **311**⇑ *i*P **P** **18 18 35.2 +0.2**

BRVK pmax pmax
comp=Z,4.0nm,1.0s
**G26K Porcupine Rive 49.47 30 P P 18 18 37.4 +1.8**
baz=274
**AAK Ala-Archa 49.49 297|| eP P 18 18 37.8 +1.4**
AAK pmax pmax
comp=Z,5.0nm,1.7s
**SCRK Sand Creek 49.69 34 IAmb IAmb** 18 18 39.0
comp=Z,11nm,1.2s
**SCRK Sand Creek 49.69 34 P P 18 18 38.1 +0.7**
baz=277,SNR=5.9
**N25K Chitina, Valde 49.73 37 P P 18 18 39.1 +1.3**
baz=278
**BMRM Bremner River 49.82 38 P P 18 18 39.9 +1.5**
baz=279
**L26K Log Cabin Wild 50.10 35 P P 18 18 42.4 +1.9**
baz=278
**E27K Coleen River 50.20 28 IAmb IAmb** 18 18 43.6
comp=Z,3.6nm,0.7s
**E27K Coleen River 50.20 28 P P 18 18 43.0 +1.9**
baz=275,SNR=6.0
**G27K Doyon Strip 50.33 30 P P 18 18 44.0 +1.8**
baz=276
**D27M Malcolm River 50.33 27 P P 18 18 43.9 +1.8**
baz=275
**M26K Nabesna, AK 50.35 36 P P 18 18 44.3 +1.8**
baz=279
**H27K Steamboat Moun 50.45 31 P P 18 18 45.3 +2.3**
baz=277
**MCARA McCarthy VSAT 50.51 37 P P 18 18 45.3 +1.8**
baz=280
**K27K Chicken 50.52 34 P P 18 18 44.9 +1.4**
baz=278
**CRQE Cirque 50.59 38 P P 18 18 46.2 +1.9**
baz=280
**L27K Beaver Creek, 50.78 35 IAmb IAmb** 18 18 48.5
comp=Z,4.5nm,0.8s
**L27K Beaver Creek, 50.78 35 P P 18 18 48.0 +2.4**
baz=279
**BCAR Beaver Creek A 50.80 35 P P 18 18 46.5 +0.8**
**M27K Edge Creek, AK 50.88 36 P P 18 18 48.1 +1.6**
baz=280,SNR=7.3
**E28M Babbage River 50.92 28 IAmb IAmb** 18 18 48.8
comp=Z,3.7nm,0.7s
**E28M Babbage River 50.92 28 P P 18 18 48.5 +2.0**
baz=277
**F28M Old Crow 50.92 29 IAmb IAmb** 18 18 56.0
comp=Z,5.5nm,0.9s
**F28M Old Crow 50.92 29 P P 18 18 48.5 +2.0**
baz=277
**D28M Stokes Point 51.11 27 P P 18 18 50.1 +2.2**
baz=277
**I28M Miner Creek 51.21 32 IAmb IAmb** 18 19 25.4
comp=Z,7.1nm,1.4s
**I28M Miner Creek 51.21 32 P P 18 18 50.8 +2.0**
baz=279
**MESA MESA 51.25 39 P P 18 18 51.0 +1.6**
baz=282
**CTG Chitna Glacier 51.39 38 P P 18 18 51.9 +1.6**
baz=282
**E29M Blow River 51.54 28 P P 18 18 53.5 +2.4**
baz=278,SNR=6.9
**YUK3 Moose Creek 51.64 36 P P 18 18 54.0 +1.8**
baz=282,SNR=5.7
**H29M Whitestone 51.71 31 P P 18 18 54.8 +2.3**
baz=280
**G29M Pine Creek 51.73 30 P P 18 18 54.9 +2.3**
baz=280
**I29M Ogilvie Camp, 51.89 32 IAmb IAmb** 18 18 56.4
comp=Z,7.1nm,1.1s
**I29M Ogilvie Camp, 51.89 32 P P 18 18 55.5 +1.7**
baz=281
**O28M Mount Upton 51.98 38 P P 18 18 56.5 +1.6**
baz=283
**KKAR Karatay Array 52.09 299 P P 18 18 55.3 -0.4**
**KKAR Karatay Array 52.09 299 P P 18 18 55.3 -0.4**
**EPYK Eagle Plains 52.34 30 P P 18 18 59.0 +1.9**
baz=281,SNR=6.2
**G30M tAoh Zraii Nji 52.42 29 P P 18 18 59.7 +2.0**
baz=281
**M29M Somme Creek 52.42 35 P P 18 19 00.6 +2.7**
baz=283,SNR=7.4
**F30M Barrier River 52.46 29 P P 18 19 00.4 +2.4**
baz=281
**K29M Barlow Dome 52.53 34 IAmb IAmb** 18 19 01.6
comp=Z,4.9nm,0.9s
**K29M Barlow Dome 52.53 34 P P 18 19 00.8 +2.1**
baz=282
**YUK4 Talbot Arm 52.58 37 P P 18 19 01.5 +2.2**
baz=283
**I30M Mount Dempster 52.72 32 P P 18 19 01.9 +1.9**
baz=282,SNR=16
**YUK6 Outpost Mounta 52.81 37 P P 18 19 03.2 +2.2**
baz=284
**O29M Mount Kennedy 52.87 38 P P 18 19 04.0 +2.8**
baz=284,SNR=6.6
**J30M Hart River 52.88 32 P P 18 19 03.1 +1.9**
baz=283
**INK Inuvik 53.15 28 P P 18 19 04.2 +1.2**
comp=Z,6.9nm,0.5s,baz=302,slow=7.4,SNR=21
comp=Z,6.9nm,0.5s
**INK Inuvik 53.15 28 P P 18 19 04.3 +1.3**
baz=282,SNR=6.6
**G31M Satah River 53.18 29 P P 18 19 04.5 +1.3**
baz=283
**F31M Tsiigehtchic 53.27 29 P P 18 19 05.1 +1.2**
baz=283
**N30M Aishikik Lake 53.28 36 P P 18 19 06.2 +2.0**
baz=284
**P29M Windy Craggy 53.45 39 P P 18 19 08.1 +2.7**
baz=285,SNR=8.0
**P30M Million Dollar 53.69 38 P P 18 19 08.9 +1.7**
baz=286
**SVE Sverdlovsk 53.79 318 eP P 18 19 08.5 +0.7**
**NIL Nilore 53.85 287 P P 18 19 10.2 +1.5**
**NIL Nilore 53.85 287 P P 18 19 10.2 +1.5**
NIL pmax pmax
comp=Z,10.0nm,0.6s
**N31M Braeburn, Yuko 53.88 36 P P 18 19 11.2 +2.7**
baz=286,SNR=6.9
**O30N Mendenhall 53.93 37 P P 18 19 10.9 +2.0**
baz=286
**PLBC Pleasant Camp 54.16 39 P P 18 19 12.8 +2.3**
baz=286,SNR=6.0
**M31M Drury Creek, Y 54.32 35 IAmb IAmb** 18 19 14.4
comp=Z,5.5nm,1.0s
**M31M Drury Creek, Y 54.32 35 P P 18 19 13.7 +2.0**
baz=286
**WHY Whitehorse 54.53 37 IAmb IAmb** 18 19 16.3
comp=Z,5.7nm,0.8s
**WHY Whitehorse 54.53 37 P P 18 19 15.5 +2.1**
baz=287
**SKAG Skagway 54.67 38 IAmb IAmb** 18 19 17.4
comp=Z,7.3nm,1.1s
**SKAG Skagway 54.67 38 P P 18 19 16.6 +2.4**
baz=287
**S31K Pelican 54.67 40 P P 18 19 16.2 +2.1**
baz=288
**FARO Faro, Yukon 54.78 35 IAmb IAmb** 18 19 17.6
comp=Z,7.0nm,1.1s
**FARO Faro, Yukon 54.78 35 P P 18 19 16.9 +1.9**
baz=287,SNR=6.7
**SIMJ Simiganj 54.84 294 P P 18 19 15.5 -0.4**
SIMJ IAmb IAmb 18 19 19.0
comp=Z,5.4nm,0.7s
**ARU Arti 55.00 318 P P 18 19 15.3 -1.3**
**ARU Arti 55.00 318** *c iP* **P 18 19 16.3 -0.3**
ARU *PP **pP 18 19 42.0 0.0**
ARU S **S 18 26 49.9 -0.6**
ARU SS **SS 18 30 32.0 -2.9**
ARU pmax pmax
comp=Z,13nm,1.3s
**P32M Atlin 55.41 38 P P 18 19 22.1 +2.5**
baz=288
**SIT Sitka 55.42 41 P P 18 19 22.0 +2.4**
baz=289
**R32K Eaglecrest 55.44 40 P P 18 19 22.0 +2.2**
baz=289
**MMPY Sheldon Lake, 55.59 34 IAmb IAmb** 18 19 23.4
comp=Z,3.0nm,0.7s
**MMPY Sheldon Lake, 55.59 34 P P 18 19 23.0 +2.2**
baz=288
**P33M Teslin, Yukon 55.64 37 IAmb IAmb** 18 19 24.3
comp=Z,8.7nm,1.1s
**S32K Killisnoo 55.67 41 P P 18 19 23.9 +2.5**
baz=289
**Q32M Nakina River 56.32 38 P P 18 19 28.7 +2.4**
baz=290

**ABKAR Akbulak array 56.71 309 P P 18 19 28.0 -1.0**
**ABKAR Akbulak array 56.71 309 IAmb IAmb** 18 19 56.4
comp=Z,3.5nm,0.9s
**R33M Jennings River 56.80 38 P P 18 19 32.1 +2.5**
baz=291
**U33K Whale Pass 56.89 42 P P 18 19 32.7 +2.7**
baz=291
**WRAK Wrangell Islan 57.18 41 P P 18 19 34.7 +2.6**
baz=291
**S34M Telegraph Cree 57.25 39 IAmb IAmb** 18 19 36.1
comp=Z,6.8nm,1.1s
**S34M Telegraph Cree 57.25 39 P P 18 19 35.1 +2.4**
baz=291
**TGTN Hyland Airport 57.28 35 P P 18 19 35.4 +2.5**
baz=291
**DLBC Dease Lake 57.60 39 IAmb IAmb** 18 19 38.6
comp=Z,6.7nm,1.1s
**DLBC Dease Lake 57.60 39 P P 18 19 36.8 +1.6**
comp=Z,3.8nm,0.9s,baz=287,slow=8.6,SNR=8.9
comp=Z,3.8nm,0.9s
**DLBC Dease Lake 57.60 39 P P 18 19 37.7 +2.5**
baz=292,SNR=5.6
**V35K Ketchikan 57.98 42 P P 18 19 39.8 +2.1**
baz=292
**T35M Bob Quinn 58.04 40 P P 18 19 41.2 +2.9**
baz=292,SNR=5.3
**WRA Warramunga Arr 58.55 187 P P 18 19 40.1 -2.0**
**WRA Warramunga Arr 58.55 187 P P 18 19 41.2 -0.9**
comp=Z,6.0nm,0.5s,baz=3.3,slow=7.4,SNR=28
comp=Z,6.0nm,0.5s
**WRA Warramunga Arr 58.55 187 P P 18 19 40.1 -2.0**
WRA pmax pmax
comp=Z,1.0nm,0.7s
**WRGLY Wrigley 58.69 32 P P 18 19 44.8 +2.2**
baz=294
**KIRV Kirov 58.83 322** *d iP* **P 18 19 43.1 -0.5**
**LIRD Lard River Hi 59.10 37 P P 18 19 48.1 +2.6**
baz=294,SNR=5.8
**TOAD Toad River Com 59.74 37 P P 18 19 52.0 +2.1**
baz=295,SNR=5.5
**RES Resolute Bay 61.18 15 P P 18 19 59.7 +0.3**
comp=Z,5.6nm,0.4s,baz=333,slow=2.9,SNR=12
comp=Z,5.6nm,0.4s
**ASAR Alice Springs 62.28 187 P P 18 20 07.1 -0.3**
comp=Z,3.5nm,0.7s,baz=4.2,slow=5.5,SNR=11
comp=Z,3.5nm,0.7s
**ARCES ARCESS Array B 62.44 339 P P 18 20 07.5 -0.4**
comp=Z,3.3nm,0.7s,baz=54,slow=7.2,SNR=20
comp=Z,3.3nm,0.7s
**YKA Yellowknife Ar 62.63 30 P P 18 20 08.6 -0.7**
comp=Z,2.7nm,0.9s,baz=301,slow=7.2,SNR=4.5
comp=Z,2.7nm,0.9s
**FINES FINESS Array B 67.30 332 P P 18 20 39.3 -0.2**
comp=Z,5.6nm,0.7s,baz=47,slow=8.3,SNR=14
comp=Z,5.6nm,0.7s
**FINES FINESS Array B 67.30 332** *i P P 18 20 39.2 -0.3*
FINES pmax pmax
comp=Z,6.0nm,0.7s
**C09A Chrisman Ranch 68.86 45 IAmb IAmb** 18 20 51.7
comp=Z,8.6nm,0.8s
**SUMG Summit 69.14 360 P P 18 20 51.3 0.0**
SUMG IAmb IAmb 18 20 53.1
comp=Z,10.0nm,1.0s
**SUMG Summit 69.14 360 P P 18 20 51.3 0.0**
SUMG pmax pmax
comp=Z,10.0nm,1.0s
**NEW Newport 69.24 44 IAmb IAmb** 18 20 54.0
comp=Z,6.6nm,0.7s
**NEW Newport 69.24 44 P P 18 20 53.5 +1.6**
baz=305
**KBZ Khabaz 69.66 310|| eP P 18 20 54.7 +0.2**
KBZ pmax pmax
comp=Z,4.0nm,1.0s
**KIV Kislovodsk 69.66 310** *eP* **P 18 20 55.7 +1.0**
KIV pmax pmax
comp=Z,7.0nm,1.0s
**MNK Minsk 71.04 325** *i P* **P 18 21 00.9 -1.9**
MNK *i *PP **pP 18 21 27.8 -1.4**
MNK *i* 18 23 37.9
MNK *i* PPP PPP 18 25 21.0
MNK *i* S **S 18 30 09.2 -1.2**
MNK *i* SS **SS 18 34 41.2 -3.3**
MNK pmax pmax
comp=E,28nm,0.8s
MNK pmax pmax
comp=N,24nm,0.8s
MNK pmax pmax
comp=Z,32nm,0.7s
MNK MLR MLR
comp=E,177nm,17.0s
**J08A Circle Bar Ran 71.30 49 IAmb IAmb** 18 21 07.5
comp=Z,12nm,1.2s
**MSO Missoula 71.82 44 P P 18 21 08.9 +1.1**
baz=307
**HFS Hagfors 72.55 335 P P 18 21 11.4 -0.3**
comp=Z,4.7nm,0.5s,baz=52,slow=5.8,SNR=27
comp=Z,4.7nm,0.5s
**NC204 NORSAR Array S 72.59 337 IAmb IAmb** 18 21 12.6
comp=Z,9.0nm,0.7s
**NB2 NORSAR Subarra 72.64 337 P P 18 21 12.1 -0.1**
comp=Z,5.3nm,0.7s,baz=39,slow=6.2
**NOA NORSAR Array B 72.64 337 P P 18 21 12.2 -0.1**
comp=Z,4.1nm,0.6s,baz=39,slow=5.9,SNR=17
comp=Z,4.1nm,0.6s
**PAHR Pah Rah Range 72.88 53 IAmb IAmb** 18 21 16.5
comp=Z,6.3nm,1.0s
**AKASG Malin Array Be 72.89 322 P P 18 21 13.3 -0.5**
comp=Z,2.4nm,0.5s,baz=47,slow=5.8,SNR=9.9
comp=Z,2.4nm,0.5s
**AKASG Malin Array Be 72.89 322** *i P* **P 18 21 13.3 -0.5**
AKASG pmax pmax
comp=Z,3.0nm,0.5s
**AKBB Malin Array Si 72.89 322 P P 18 21 12.7 -1.2**
AKBB IAmb IAmb 18 21 14.1
comp=Z,7.5nm,0.9s
**AKBB Malin Array Si 72.89 322|| iP P 18 21 12.1 -1.7**
AKBB pmax pmax
comp=Z,8.0nm,0.9s
**KIEV Kiev 72.90 322 P P 18 21 12.7 -1.2**
KIEV IAmb IAmb 18 21 14.1
comp=Z,6.7nm,0.9s
**KIEV Kiev 72.90 322 P P 18 21 12.7 -1.2**
KIEV pmax pmax
comp=Z,7.0nm,1.0s
**EGMT Eagleton 73.31 41 IAmb IAmb** 18 21 18.4
comp=Z,9.4nm,0.8s
**EGMT Eagleton 73.31 41 P P 18 21 17.8 +1.3**
baz=309
**DLMT Dillon 73.46 45 IAmb IAmb** 18 21 19.8
comp=Z,8.2nm,0.8s
**HLID Hailey 73.55 47 P P 18 21 19.4 +1.2**
baz=308
**BMN Battle Mountai 73.78 51 IAmb IAmb** 18 21 22.2
comp=Z,6.4nm,1.0s
**BOZ Bozeman (W) 73.85 44 IAmb IAmb** 18 21 21.9
comp=Z,7.2nm,0.8s
**BOZ Bozeman (W) 73.85 44 P P 18 21 21.1 +1.3**
baz=309
**LHV Little Huntoon 74.29 54 IAmb IAmb** 18 21 25.4
comp=Z,7.8nm,1.0s
**NVAR Mina Array Bea 74.31 53 P P 18 21 23.4 +0.7**
**NVAR Mina Array Bea 74.31 53 P P 18 21 24.3 +1.6**
comp=Z,2.5nm,0.6s,baz=294,slow=5.9,SNR=27
comp=Z,2.5nm,0.6s
**YHL Hebgen Lake 74.56 45 IAmb IAmb** 18 21 26.6
comp=Z,5.0nm,0.8s
**DSP Deep Springs 75.16 54 P P 18 21 29.1 +1.8**
**H17A Grant Village 75.19 45 P P 18 21 30.2 +2.5**
baz=310
**RLMT Red Lodge 75.43 44 IAmb IAmb** 18 21 31.0
comp=Z,4.4nm,0.6s
**RLMT Red Lodge 75.43 44 P P 18 21 30.7 +1.7**
baz=310
**LAO LASA Array 76.01 41 IAmb IAmb** 18 21 34.3
comp=Z,7.7nm,0.8s
**LAO LASA Array 76.01 41 P P 18 21 33.8 +1.7**
baz=312
**R11B Troy Canyon, C 76.05 52 P P 18 21 34.5 +1.8**
baz=308
**S11A Rachel 76.39 53 IAmb IAmb** 18 21 37.1
comp=Z,7.7nm,0.7s
**HWUT Hardware Ranch 76.41 47 IAmb IAmb** 18 21 37.2
comp=Z,7.8nm,1.1s
**TPNV Topopah Spring 76.50 53 P P 18 21 36.6 +1.4**
baz=308
**DUG Dugway, Tooele 76.58 49 IAmb IAmb** 18 21 38.1
comp=Z,6.1nm,0.8s
**DUG Dugway, Tooele 76.58 49 P P 18 21 37.1 +1.5**
baz=309
**GWY Greenwater Val 76.71 54 P P 18 21 38.0 +1.6**
GWY IAmb IAmb 18 21 38.0
comp=Z,4.1nm,0.6s
**BW06 Boulder Array 76.80 46 P P 18 21 37.9 +1.1**
baz=311
**PDAR Pinedale Array 76.80 46 P P 18 21 37.7 +0.8**
comp=Z,2.7nm,0.6s,baz=284,slow=2.0,SNR=19
comp=Z,2.7nm,0.6s
**TCUT Toone Canyon 76.81 48 IAmb IAmb** 18 21 38.9
comp=Z,6.7nm,0.5s
**NLU North Lily Min 77.17 49 IAmb IAmb** 18 21 41.3
comp=Z,5.4nm,0.9s
**KOLS Kolonicke sedl 77.39 324** *eP* **P 18 21 40.1 +0.3**
**KOLS Kolonicke sedl 77.39 324** *eP* **P 18 21 40.1 +0.3**
**BRTR Keskin Array B 77.60 311 P P 18 21 41.3 0.0**
comp=Z,0.6nm,0.4s,baz=122,slow=3.2,SNR=9.5
comp=Z,0.6nm,0.4s
**P17A Butcher Ranch, 78.26 49 IAmb IAmb** 18 21 47.0
comp=Z,5.9nm,0.6s
**ULM Lac du Bonnet 78.38 33 P P 18 21 46.7 +1.5**
comp=Z,4.2nm,1.0s,baz=318,slow=8.9,SNR=5.3
comp=Z,4.2nm,1.0s
**PFO Pinyon Flats O 78.44 56 P P 18 21 47.0 +1.0**
baz=309
**TPFO Pinon Flats 78.44 56 P P 18 21 47.0 +1.0**
baz=309
**RSSD Black Hills 78.88 42 P P 18 21 49.1 +0.7**
baz=314
**MORC Moravsky Berou 78.89 327** *eP* **P 18 21 47.9 -0.2**
**DPC Dobruska-Polom 78.98 328** *eP* **P 18 21 49.1 +0.5**
**DPC Dobruska-Polom 78.98 328** *eP* **P 18 21 49.1 +0.5**
**KRLC Kraliky 79.00 327** *eP* **P 18 21 48.8 +0.1**
**KRLC Kraliky 79.00 327** *eP* **P 18 21 48.8 +0.1**
**HMU Henry Mountain 79.26 50 IAmb IAmb** 18 21 52.9
comp=Z,8.1nm,0.9s
**JAVC Velka Javorina 79.52 326** *eP* **P 18 21 52.9 +1.3**
**CLL Collm 79.60 330 IAmb IAmb** 18 21 52.4
comp=Z,4.8nm,0.7s
**CLL Collm 79.60 330** *i P* **P 18 21 51.3 -0.5**
comp=Z,5.0nm,0.7s
CLL *es P **sP 18 22 31.0 +1.0**
**CLL Collm 79.60 330** *i P* **P 18 21 51.3 -0.5**
CLL *e* 18 22 31.0
CLL pmax pmax
comp=Z,5.0nm,0.7s
**VRAC Vranov 79.66 327** *eP* **P 18 21 52.7 +0.5**
**KRUC Moravsky 79.93 327** *eP* **P 18 21 53.8 +0.2**
**SRO Srobarova 80.02 325** *eP* **P 18 21 54.0 -0.1**
**SRO Srobarova 80.02 325** *eP* **P 18 21 54.0 -0.1**
**N23A Red Feather La 80.06 45 P P 18 21 56.2 +1.3**
baz=313
**WUAZ Wupatki 80.45 52 P P 18 21 58.9 +2.0**
baz=311
**ISCO Idaho Springs 80.99 46 P P 18 22 01.3 +1.4**
baz=313
**CKRC Cesky Krumlov 81.00 328** *eP* **P 18 21 59.8 +0.4**
**CKRC Cesky Krumlov 81.00 328** *eP* **P 18 21 59.8 +0.4**
**RONA Rosalia, Austr 81.00 326** *i P* **P 18 22 00.2 +0.7**
comp=Z,1.8nm,0.5s
**CONA Conrad Observa 81.02 326** *eP* **P 18 22 00.2 +0.6**
comp=Z,1.7nm,0.7s
**KHC Kasperske Hory 81.06 328** *eP* **P 18 21 59.8 0.0**
**KHC Kasperske Hory 81.06 328** *eP* **P 18 21 59.8 0.0**
**MVCO Mesa Verde 81.08 49 P P 18 22 01.5 +1.1**
baz=312
**GERES GERESS Array B 81.23 328 P P 18 22 00.7 -0.1**
comp=Z,1.1nm,0.6s,baz=0.0,slow=9.3,SNR=8.6
comp=Z,1.1nm,0.6s
**EKA Eskdalemuir Ar 81.57 340 P P 18 22 02.5 +0.2**
comp=Z,0.4nm,0.3s,baz=29,slow=5.3,SNR=12
comp=Z,0.4nm,0.3s
**S22A 4UR Ranch, Cre 81.70 48 P P 18 22 05.2 +1.5**
baz=313
**Q24A Divide 81.83 46 P P 18 22 05.5 +1.2**
baz=314
**214A Organ Pipe Nat 81.86 56 P P 18 22 05.6 +1.4**
baz=311
**BIOA Bad Ischl, Aus 82.16 327** *eP* **P 18 22 05.6 +0.1**
comp=Z,1.9nm,0.4s
**SOKA Soboth 82.34 326** *eP* **P 18 22 06.6 +0.1**
comp=Z,0.6nm,0.4s
**SDCO Great Sand Dun 82.47 47 P P 18 22 08.8 +1.1**
baz=314
**OBKA Obir 82.68 326** *i P* **P 18 22 08.5 +0.1**
comp=Z,1.4nm,0.6s
**KBA Koelnbreinsper 82.76 327** *i P* **P 18 22 08.7 -0.2**
comp=Z,2.3nm,0.8s
**LESA Schwarzleotal 82.77 328** *i P* **P 18 22 08.9 +0.1**
comp=Z,0.9nm,0.3s
**ECSD EROS Data Cent 82.89 38 P P 18 22 09.7 +0.3**
ECSD IAmb IAmb 18 22 10.5
comp=Z,3.9nm,0.7s
**ECSD EROS Data Cent 82.89 38 P P 18 22 10.1 +0.6**
baz=318
**MYKA Terra Mystica 82.98 327** *i P* **P 18 22 08.5 -1.4**
comp=Z,1.8nm,0.3s
**BCLA Clavier 83.20 333** *dP* **P 18 22 10.0 -0.8**
**WATA Walderalm 83.30 328** *i P* **P 18 22 11.4 -0.2**
comp=Z,0.4nm,0.2s
**BMRD Maredsous 83.48 333** *dP* **P 18 22 11.9 -0.4**
**MOTA Moosalm 83.49 328** *i P* **P 18 22 12.3 -0.4**
comp=Z,0.9nm,0.5s
**T25A Trinidad 83.51 47 P P 18 22 14.3 +1.3**
baz=314
**RETA Reutte 83.52 329** *eP* **P 18 22 12.6 0.0**
comp=Z,2.6nm,0.4s
**SQTA Sanki Quirin 83.55 328** *eP* **P 18 22 12.4 -0.5**
comp=Z,0.9nm,0.3s
**ANMO Albuquerque 83.83 50 P P 18 22 16.5 +1.9**
baz=313
**ANMO Albuquerque 83.83 50|| eP P 18 22 16.2 +1.6**
ANMO pmax pmax
comp=Z,2.0nm,1.0s
**FETA Feichten 83.90 328** *i P* **P 18 22 14.4 -0.3**
comp=Z,1.6nm,0.4s
**DAVA Damuels 84.04 329** *i P* **P 18 22 15.4 0.0**
comp=Z,2.3nm,0.6s
**KSU1 Kansas State U 86.35 41 P P 18 22 27.4 +0.5**
baz=318
**JFWS Jewell Farm 86.49 35 P P 18 22 27.1 -0.4**
baz=322
**AMTX Amarillo 86.67 47 P P 18 22 29.4 +0.8**
baz=316
**MNTX Cornudas Mount 86.71 51 P P 18 22 30.1 +1.3**
baz=314
**L44A Lake County Fo 88.12 34 P P 18 22 36.0 +0.6**
baz=324
**WMOK Wichita Mounta 88.42 45 P P 18 22 37.5 +0.6**
baz=317
**TXAR Lajitas Array 89.42 52 P P 18 22 42.9 +1.1**
comp=Z,1.9nm,0.6s,baz=292,slow=3.2,SNR=26
comp=Z,1.9nm,0.6s
**CCM Cathedral Cave 89.85 39 P P 18 22 43.8 +0.3**
baz=322
**JCT Junction City 90.94 49 P P 18 22 49.0 +0.2**
baz=317
**MIAR Mount Ida 91.39 42 P P 18 22 51.1 +0.4**
baz=320
**P49A Miami Univ. Ec 91.68 34 P P 18 22 52.3 +0.3**
baz=326
**P52A Corning 92.69 32 P P 18 22 55.8 -0.8**
baz=328
**WVT Waverly 93.03 38 P P 18 22 58.2 -0.1**
baz=324
**QSPA South Pole Qui 128.32 180 PKPdf PKPdf 18 28 49.0 -0.6**
**QSPA South Pole Qui 128.32 180 PKP PKPdf 18 28 48.9 -0.7**
comp=Z,1.1nm,0.5s,baz=285,slow=1.4,SNR=15
**LPAZ La Paz 146.15 57 PKPbc PKPbc 18 29 25.9 +0.3**
comp=Z,3.7nm,0.4s,baz=357,slow=3.4,SNR=24

**IDC 19 18:11:36.1±3.8, 17°28S×177°13W, h0km, mb4.5/4, mbtmp4.5/5, ML3.0/1, Error ellipse: s-maj=116.0km s-min=32.2km az=13.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAR** | **Rarotonga** | **16.85** | **106** | Pn | Pn | 18 15 33.8 | +0.2 |
| | 0.5nm,0.3s,baz=304,slow=11,SNR=3.3 | | | | | | |
| | 34nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **40.00** | **241** | P | P | 18 19 13.6 | +0.7 |
| | 2.9nm,0.6s,baz=75,slow=7.5,SNR=4.5 | | | | | | |
| | 2.9nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.94** | **259** | P | P | 18 20 00.7 | -0.6 |
| | 1.9nm,0.5s,baz=97,slow=7.5,SNR=7.9 | | | | | | |
| | 1.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.13** | **254** | P | P | 18 20 02.4 | -0.4 |

18nm,0.6s,baz=89,slow=8.2,SNR=16
18nm,0.6s
**QSPA South Pole Qui 72.77 180** P P 18 23 06.3 0.0
1.1nm,0.5s,baz=62,slow=3.2,SNR=5.6
1.1nm,0.5s

*IDC* ***19*** *18:11:53.4±3.0, 17°.76S×178°.10W, h479km±.32km, mb3.7/11, mbtmp4.5/12, Error ellipse: s-maj=18.9km s-min=17.5km az=0.0*

*NEIC* ***19*** *18:11:55.8±1.9, 17°.9S±0°.1×178°.0W±0°.1, h507km±.8km, mb4.5/36, Error ellipse: s-maj=20.4km s-min=17.2km az=146.0*

*NOU* ***19*** *18:11:59.6, 17°.78S×177°.68W, h597km, mb4.4/30, Fiji Islands Region*

**ISC 19 18:11:55.3±0.5, 17°.75S±0°.08×178°.08W±0°.08, h500km, n148, σ1§46/150, mb4.5/33, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.69** | **270** | P | P | 18 13 17.9 | +6.6 |
| **AFI** | **Afiamalu** | **7.17** | **59** | P | **P** | **18 13 44.7** | **+1.3** |
| **NIUE** | **Niue** | **7.85** | **101** | P | **P** | **18 13 53.7** | **+3.5** |
| **NIUE** | **Niue** | **7.85** | **101** | | **P** | **18 13 50.2** | **0.0** |
| **RAO** | **Raoul Island** | **11.45** | **179** | P | **P** | **18 14 24.0** | **-3.9** |
| **RAO** | **Raoul Island** | **11.45** | **179** | P | **P** | **18 14 24.9** | **-3.0** |
| | 168nm,0.3s,baz=270,slow=20,SNR=6.0 | | | | | | |
| **GLKZ** | **Green Lake** | **11.46** | **179** | S | **S** | **18 16 37.3** | **+3.6** |
| **DZM** | **Mont Dzumac** | **15.17** | **251** | P | **P** | **18 15 12.8** | **+5.4** |
| **DZM** | **Mont Dzumac** | **15.17** | **251** | P | **P** | **18 15 05.9** | **-1.5** |
| | 4.6nm,0.9s,baz=41,slow=19,SNR=1.7 | | | | | | |
| **OUZ** | **Omahuta** | **18.91** | **201** | P | **P** | **18 15 44.6** | **+0.8** |
| **OUZ** | **Omahuta** | **18.91** | **201** | P | **P** | **18 15 46.7** | **+2.9** |
| **GRZ** | **Great Barrier** | **19.29** | **196** | P | **P** | **18 15 49.2** | **+1.9** |
| **WCZ** | **Waipu Caves** | **19.32** | **199** | P | **P** | **18 15 50.6** | **+3.1** |
| **KUZ** | **Kuaotunu** | **19.70** | **195** | P | **P** | **18 15 52.8** | **+1.8** |
| **KUZ** | **Kuaotunu** | **19.70** | **195** | P | **P** | **18 15 53.3** | **+2.3** |
| **WIAZ** | **Waiheke Island** | **19.89** | **196** | P | **P** | **18 15 55.2** | **+2.4** |
| **MXZ** | **Matakaoa Point** | **19.99** | **188** | P | **P** | **18 15 54.6** | **+0.9** |
| **MXZ** | **Matakaoa Point** | **19.99** | **188** | P | **P** | **18 15 50.7** | **-3.0** |
| **ETAZ** | **East Tamaki Re** | **20.10** | **196** | P | **P** | **18 15 57.0** | **+2.3** |
| **MKAZ** | **Moumakai** | **20.18** | **196** | P | **P** | **18 15 57.2** | **+1.9** |
| **WMGZ** | **Waiomatatini S** | **20.23** | **188** | P | **P** | **18 15 55.9** | **0.0** |
| **HAZ** | **Te Kaha** | **20.26** | **190** | P | **P** | **18 15 55.6** | **-0.5** |
| **AWAZ** | **Awhitu Peninsu** | **20.28** | **197** | P | **P** | **18 15 58.3** | **+2.0** |
| **PKGZ** | **Pakihiroa** | **20.32** | **189** | P | **P** | **18 15 55.1** | **-1.6** |
| **RUGZ** | **Raukumara Rang** | **20.48** | **190** | P | **P** | **18 15 55.3** | **-2.9** |
| **PUZ** | **Puketiti** | **20.50** | **188** | P | **P** | **18 15 56.3** | **-2.0** |
| **TWGZ** | **Tauwhareparae** | **20.64** | **189** | P | **P** | **18 16 00.2** | **+0.6** |
| **TOZ** | **Tahuroa Road** | **20.69** | **195** | P | **P** | **18 16 02.5** | **+2.5** |
| **URZ** | **Urewera** | **20.86** | **191** | P | **P** | **18 16 01.1** | **-0.5** |
| **URZ** | **Urewera** | **20.86** | **191** | P | **P** | **18 15 59.7** | **-1.9** |
| | 14nm,0.3s,baz=356,slow=2.9,SNR=41 | | | | | | |
| | 14nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **20.86** | **191** | P | **P** | **18 15 59.7** | **-1.9** |
| URZ | | | | S | **S** | **18 19 18.5** | **-2.8** |
| **MWZ** | **Matawai** | **20.86** | **190** | P | **P** | **18 15 59.7** | **-1.9** |
| **CNGZ** | **Carnagh Statio** | **20.91** | **188** | P | **P** | **18 16 02.5** | **+0.5** |
| **TKGZ** | **Te Karaka** | **20.92** | **189** | P | **P** | **18 16 00.4** | **-1.6** |
| **SNGZ** | **Shannon Statio** | **21.33** | **190** | P | **P** | **18 16 04.8** | **-1.1** |
| **HIZ** | **Hauiti** | **21.59** | **195** | P | **P** | **18 16 07.9** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **21.85** | **191** | P | **P** | **18 16 10.9** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **21.85** | **191** | P | **P** | **18 16 08.6** | **-2.0** |
| BKZ | | | | IAmb | IAmb | 18 16 18.4 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **BFZ** | **Birch Farm** | **23.37** | **191** | P | **P** | **18 16 23.6** | **-0.5** |
| **BFZ** | **Birch Farm** | **23.37** | **191** | P | **P** | **18 16 24.0** | **-0.2** |
| **MRZ** | **Mangatainoka R** | **23.48** | **192** | P | **P** | **18 16 22.6** | **-2.4** |
| MRZ | | | | IAmb | IAmb | 18 16 41.6 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **DUWZ** | **D'Urville Isla** | **23.98** | **195** | P | **P** | **18 16 28.5** | **-1.1** |
| **CAW** | **Cannon Point** | **24.01** | **193** | P | **P** | **18 16 27.4** | **-2.4** |
| **TRWZ** | **Traveller** | **24.17** | **192** | P | **P** | **18 16 30.2** | **-1.0** |
| **MSWZ** | **Moikau Station** | **24.27** | **192** | P | **P** | **18 16 30.5** | **-1.6** |
| **SNZO** | **South Karori** | **24.28** | **193** | P | **P** | **18 16 31.4** | **-0.8** |
| | comp=Z,45nm,1.4s | | | | | | |
| **TCW** | **Tory Channel** | **24.28** | **194** | P | **P** | **18 16 31.0** | **-1.2** |
| **BHW** | **Baring Head** | **24.34** | **193** | P | **P** | **18 16 31.7** | **-1.0** |
| BHW | | | | IAmb | IAmb | 18 16 32.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **BHW** | **Baring Head** | **24.34** | **193** | P | **P** | **18 16 31.6** | **-1.2** |
| **PLWZ** | **Palliser** | **24.42** | **192** | P | **P** | **18 16 32.2** | **-1.3** |
| **PLWZ** | **Palliser** | **24.42** | **192** | P | **P** | **18 16 32.0** | **-1.4** |
| **TKNZ** | **Takaka Hill** | **24.45** | **197** | P | **P** | **18 16 31.9** | **-1.8** |
| **NNZ** | **Nelson** | **24.51** | **196** | P | **P** | **18 16 33.2** | **-1.0** |
| **TUWZ** | **Tuamarina** | **24.57** | **195** | P | **P** | **18 16 32.9** | **-1.9** |
| **MRNZ** | **Matariki Terra** | **24.84** | **197** | P | **P** | **18 16 35.3** | **-1.9** |
| **THZ** | **Tophouse** | **25.14** | **196** | P | **P** | **18 16 39.3** | **-0.7** |
| THZ | | | | IAmb | IAmb | 18 16 44.9 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **THZ** | **Tophouse** | **25.14** | **196** | P | **P** | **18 16 39.0** | **-1.0** |
| **DSZ** | **Denniston Nort** | **25.43** | **198** | P | **P** | **18 16 41.5** | **-1.0** |
| **KHZ** | **Kahutara** | **25.60** | **194** | P | **P** | **18 16 42.9** | **-1.0** |
| **KHZ** | **Kahutara** | **25.60** | **194** | P | **P** | **18 16 42.7** | **-1.2** |
| KHZ | | | | IAmb | IAmb | 18 16 42.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KHZ** | **Kahutara** | **25.60** | **194** | P | **P** | **18 16 42.1** | **-1.8** |
| **LTZ** | **Lake Taylor** | **26.26** | **196** | P | **P** | **18 16 48.1** | **-1.7** |
| **INZ** | **Inchbonnie** | **26.44** | **198** | P | **P** | **18 16 50.1** | **-1.2** |
| INZ | | | | IAmb | IAmb | 18 16 55.5 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.46** | **197** | P | **P** | **18 16 59.7** | **-0.6** |
| **FOZ** | **Fox Glacier** | **27.66** | **199** | P | **P** | **18 17 01.1** | **-1.0** |
| **ODZ** | **Otahua Downs** | **28.80** | **197** | P | **P** | **18 17 11.9** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.61** | **250** | P | **P** | **18 17 18.4** | **-1.0** |
| EIDS | | | | IAmb | IAmb | 18 17 35.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.85** | **200** | P | **P** | **18 17 20.8** | **-0.3** |
| **ARMA** | **Armidale** | **30.29** | **240** | P | **P** | **18 17 24.2** | **-1.1** |
| ARMA | | | | IAmb | IAmb | 18 17 27.6 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.37** | **199** | P | **P** | **18 17 25.8** | **+0.2** |
| **ALOT** | **Alotau** | **31.37** | **279** | P | **P** | **18 17 36.7** | **+2.0** |
| **CNB** | **Canberra Magne** | **33.77** | **232** | P | **P** | **18 17 55.6** | **+0.7** |
| **CTAO** | **Charters Tower** | **33.78** | **260** | P | **P** | **18 17 54.5** | **-0.6** |
| **CAN** | **Canberra** | **34.05** | **233** | P | **P** | **18 17 57.1** | **-0.1** |
| **CAN** | **Canberra** | **34.05** | **233** | P | **P** | **18 17 57.3** | **+0.1** |
| CAN | | | | IAmb | IAmb | 18 18 15.2 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.50** | **240** | P | **P** | **18 18 09.9** | **+0.5** |
| **MTSU** | **Mount Surprise** | **35.73** | **263** | P | **P** | **18 18 14.0** | **+2.4** |
| **QLP** | **Quilpie** | **35.88** | **249** | P | **P** | **18 18 13.5** | **+0.9** |
| **GLAD** | **Gladstone** | **37.18** | **224** | P | **P** | **18 18 23.6** | **+0.5** |
| | comp=Z,28nm,1.2s | | | | | | |
| **COEN** | **Coen** | **37.41** | **270** | P | **P** | **18 18 27.1** | **+1.6** |
| **COEN** | **Coen** | **37.41** | **270** | P | **P** | **18 18 25.7** | **+0.3** |
| COEN | | | | IAmb | IAmb | 18 18 28.0 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.51** | **231** | P | **P** | **18 18 26.6** | **+0.6** |
| | comp=Z,29nm,2.4s | | | | | | |
| **TOO** | **Toolangi** | **37.51** | **231** | P | **P** | **18 18 26.7** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **18 18 38.8** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **18 18 38.2** | **+0.1** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **18 18 38.1** | **+0.1** |
| | comp=Z,12nm,0.8s,baz=95,slow=10,SNR=22 | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **INKA** | **Innaminka** | **39.09** | **248** | P | **P** | **18 18 38.6** | **-0.4** |
| **HTT** | **Hallett** | **41.49** | **239** | P | **P** | **18 18 58.9** | **+0.7** |
| **LCRK** | **Leigh Creek** | **41.60** | **244** | P | **P** | **18 18 58.8** | **-0.3** |
| | comp=Z,40nm,0.7s | | | | | | |
| **OOD** | **Oodnadatta** | **43.56** | **248** | P | **P** | **18 19 15.0** | **+0.5** |
| **BBOO** | **Buckleboo** | **43.75** | **241** | P | **P** | **18 19 16.1** | **+0.2** |
| **BBOO** | **Buckleboo** | **43.75** | **241** | P | **P** | **18 19 16.1** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 18 19 16.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.78** | **259** | P | **P** | **18 19 23.2** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 18 19 42.0 | |
| | comp=Z,8.4nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.93** | **260** | P | **P** | **18 19 23.4** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 18 19 40.8 | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.95** | **259** | P | **P** | **18 19 23.6** | **-1.9** |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **18 19 23.6** | **-1.9** |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **18 19 24.3** | **-1.2** |
| | comp=Z,3.8nm,0.7s,baz=93,slow=7.1,SNR=35 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 20 55.2** | **-1.2** |
| | comp=Z,1.4nm,0.7s,baz=90,slow=3.9,SNR=4.3 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **45.13** | **254** | P | **P** | **18 19 26.8** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 18 19 27.3 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **18 19 26.5** | **-0.3** |
| | comp=Z,44nm,0.5s,baz=89,slow=8.2,SNR=391 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 20 56.4** | **-0.6** |
| | comp=Z,3.0nm,0.7s,baz=102,slow=4.0,SNR=6.0 | | | | | | |
| | comp=Z,44nm,0.5s | | | | | | |
| **MULG** | **Mulgathing** | **45.16** | **245** | P | **P** | **18 19 27.0** | **+0.1** |
| **FORT** | **Forrest** | **50.35** | **245** | P | **P** | **18 20 05.4** | **-0.4** |
| **KNRA** | **Kununurra** | **50.81** | **264** | P | **P** | **18 20 09.1** | **-0.3** |
| **FAKI** | **Fak Fak** | **50.85** | **281** | P | **P** | **18 20 09.8** | **0.0** |
| | comp=Z,48nm,1.9s | | | | | | |
| **FAKI** | **Fak Fak** | **50.85** | **281** | P | **P** | **18 20 09.2** | **-0.5** |
| FAKI | | | | IAmb | IAmb | 18 20 16.9 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.36** | **260** | P | **P** | **18 20 27.6** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **58.25** | **255** | P | **P** | **18 21 00.4** | **-1.3** |
| **MBWA** | **Marble Bar** | **58.41** | **256** | P | **P** | **18 21 02.0** | **-0.8** |
| **NWAO** | **Narrogin (SRO)** | **59.56** | **242** | P | **P** | **18 21 09.7** | **-0.7** |
| NWAO | | | | IAmb | IAmb | 18 21 10.3 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **60.83** | **246** | P | **P** | **18 21 17.7** | **-1.2** |
| **TOLI2** | **Tolitoli** | **62.99** | **281** | P | **P** | **18 21 33.0** | **-0.2** |
| TOLI2 | | | | IAmb | IAmb | 18 21 41.4 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.30** | **180** | P | **P** | **18 22 30.2** | **+0.7** |
| QSPA | | | | IAmb | IAmb | 18 22 31.0 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.30** | **180** | P | **P** | **18 22 30.2** | **+0.7** |
| | comp=Z,8.1nm,0.8s,baz=71,slow=12,SNR=70 | | | | | | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.10** | **44** | P | **P** | **18 23 08.6** | **+0.8** |
| | comp=Z,1.1nm,0.6s,baz=224,slow=9.2,SNR=8.5 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **84.11** | **200** | P | **P** | **18 23 32.8** | **+0.1** |
| | comp=Z,2.8nm,0.6s,baz=161,slow=3.1,SNR=7.9 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **M27K** | **Edge Creek, AK** | **84.80** | **16** | P | **P** | **18 23 34.8** | **-1.5** |
| **IMAR** | **Indian Mountai** | **85.48** | **10** | P | **P** | **18 23 38.7** | **-0.5** |
| **TXAR** | **Lajitas Array** | **85.65** | **58** | P | **P** | **18 23 40.1** | **-0.9** |
| **TXAR** | **Lajitas Array** | **85.65** | **58** | P | **P** | **18 23 42.6** | **+1.5** |
| | comp=Z,1.6nm,0.9s,baz=219,slow=5.7,SNR=8.6 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **85.67** | **13** | P | **P** | **18 23 38.6** | **-1.6** |
| **ILAR** | **Eielson Array** | **85.67** | **13** | P | **P** | **18 23 39.1** | **-1.1** |
| | comp=Z,0.4nm,0.4s,baz=225,slow=5.2,SNR=8.4 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.13** | **290** | P | **P** | **18 23 57.3** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=123,slow=3.3,SNR=2.5 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.46** | **180** | ⇑P | **P** | **18 24 02.5** | **-0.4** |
| | comp=Z,214nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.74** | **178** | ⇑P | **P** | **18 24 03.4** | **-0.7** |
| | comp=Z,43nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.74** | **178** | P | **P** | **18 24 03.4** | **-0.7** |
| | comp=Z,1.9nm,0.6s,baz=219,slow=8.2,SNR=13 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.87** | **176** | ⇑P | **P** | **18 24 04.3** | **-0.3** |
| | comp=Z,9.1nm,0.5s | | | | | | |
| **VNA1** | **Neumayer~Stat** | **91.54** | **177** | ⇑P | **P** | **18 24 07.2** | **-0.5** |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.22** | **350** | PKP | **PKPdf** | **18 29 59.0** | **-1.0** |
| | comp=Z,1.2nm,0.5s,baz=20,slow=3.9,SNR=8.7 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **144.61** | **333** | PKPdf | **PKPdf** | **18 30 35.1** | **+0.5** |
| **BURAR** | **Bucovina Array** | **144.62** | **332** | PKPdf | **PKPdf** | **18 30 35.1** | **+0.5** |
| **BRTR** | **Keskin Array B** | **144.89** | **315** | PKPdf | **PKPdf** | **18 30 35.4** | **-0.1** |
| **BRTR** | **Keskin Array B** | **144.89** | **315** | PKP | **PKPdf** | **18 30 35.1** | **-0.4** |
| | comp=Z,1.3nm,0.6s,baz=138,slow=4.4,SNR=7.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.32** | **303** | PKPbc | **PKPdf** | **18 30 39.5** | **+1.5** |
| | comp=Z,1.8nm,0.5s,baz=62,slow=5.8,SNR=6.1 | | | | | | |
| **GERES** | **GERESS Array B** | **147.54** | **345** | PKPbc | **PKPdf** | **18 30 41.9** | **+2.4** |
| | comp=Z,1.7nm,0.6s,baz=337,slow=6.3,SNR=11 | | | | | | |
| **CONA** | **Conrad Observa** | **147.81** | **342** | *i* PKiKP | **PKPbc** | **18 30 43.2** | **-0.5** |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.89** | **342** | *i* PKP | **PKPbc** | **18 30 43.2** | **-0.7** |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.63** | **345** | *i* PKP | **PKPbc** | **18 30 44.8** | **-0.9** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.11** | **346** | *i* PKiKP | **PKPbc** | **18 30 46.2** | **-0.8** |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.27** | **345** | *i* PKP | **PKPbc** | **18 30 45.9** | **-1.5** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **WATA** | **Walderalm** | **149.44** | **347** | *i* PKP | **PKPbc** | **18 30 46.8** | **-1.0** |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **RETA** | **Reutte** | **149.47** | **348** | *i* PKP | **PKPbc** | **18 30 46.8** | **-1.0** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **149.50** | **347** | *i* PKiKP | **PKPbc** | **18 30 47.2** | **-0.8** |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **MOTA** | **Moosalm** | **149.53** | **348** | *i* PKP | **PKPbc** | **18 30 47.0** | **-1.1** |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **MYKA** | **Terra Mystica** | **149.61** | **344** | *i* PKP | **PKPbc** | **18 30 46.6** | **-1.5** |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.63** | **347** | *i* PKiKP | **PKPbc** | **18 30 47.3** | **-0.9** |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.79** | **345** | *i* PKP | **PKPbc** | **18 30 47.1** | **-1.4** |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **DAVA** | **Damuels** | **149.82** | **349** | *i* PKiKP | **PKPbc** | **18 30 48.3** | **-0.4** |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **FETA** | **Feichten** | **149.92** | **348** | *i* PKiKP | **PKPbc** | **18 30 48.3** | **-0.6** |
| | comp=Z,0.5nm,0.4s | | | | | | |

**IDC 19 18:12:30.0±5.5, 16°.77S×176°.54W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=208.2km s-min=68.4km az=137.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **40.74** | **240** | P | P | 18 20 13.3 | +0.5 |
| | 1.8nm,0.5s,baz=89,slow=9.9,SNR=3.0 | | | | | | |
| | 1.8nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.61** | **258** | P | P | 18 21 00.2 | -0.1 |
| | 1.1nm,0.5s,baz=96,slow=7.3,SNR=5.7 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.83** | **253** | P | P | 18 21 01.4 | -0.6 |
| | 4.3nm,0.6s,baz=87,slow=8.7,SNR=5.9 | | | | | | |
| | 4.3nm,0.6s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.99** | **305** | PKPbc | PKPbc | 18 32 14.4 | -0.8 |
| | 0.3nm,0.3s,baz=57,slow=5.5,SNR=1.7 | | | | | | |

*IDC* ***19*** *18:18:33.5±0.5, 8°.16S×116°.58E, h0km, mb4.5/15, mbtmp4.5/16, ML3.9/1, Error ellipse: s-maj=17.4km s-min=12.6km az=87.0*

*NEIC* ***19*** *18:18:35.8±1.9, 8°.27S±0°.07×116°.66E±0°.06, h10km±1km, mb4.7/27, Error ellipse: s-maj=12.5km s-min=10.3km az=170.0*

*DJA* ***19*** *18:18:36.0±0.2, 8°.3S×11°.7E±°, h10km, M5.0/19, mb5.1/7, mbB5.2/3, MLv4.9/19, Mw(mB)4.6/3*

**ISC 19 18:18:35.3±0.4, 8°.22S±0°.04×116°.63E±0°.04, h10km, n103, σ1§17/103, mb4.7/26, 2C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.57** | **154** | P | **Pb** | **18 18 47.2** | **-0.3** |
| TWSI | | | | S | **Sb** | **18 18 56.3** | **+0.6** |
| **PLAI** | **Plampang** | **1.28** | **118** | P | **Pb** | **18 18 59.4** | **-0.2** |
| PLAI | | | | S | **Sn** | **18 19 19.3** | **+2.7** |
| **SRBI** | **Singaraja** | **1.41** | **275** | P | **Pn** | **18 19 01.0** | **-0.1** |
| SRBI | | | | S | **Sn** | **18 19 20.6** | **+0.9** |
| **DNP** | **Denpasar** | **1.48** | **252** | P | **Pb** | **18 19 03.5** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.47** | **264** | | **Pn** | **18 19 15.4** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.47** | **264** | P | **Pn** | **18 19 14.8** | **-0.8** |
| **WBSI** | **Waikabubak, Su** | **3.07** | **118** | P | **Pn** | **18 19 23.1** | **-0.9** |
| **GRJI** | **Gresik** | **4.32** | **287** | P | **Pn** | **18 19 40.6** | **-0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.35** | **62** | P | **Pn** | **18 19 42.3** | **+0.8** |
| **BASI** | **Baing, Sumba** | **4.37** | **117** | P | **Pn** | **18 19 44.9** | **+3.0** |
| **KAPI** | **Kappang** | **4.44** | **44** | | **Pn** | **18 19 43.2** | **+0.4** |
| **KAPI** | **Kappang** | **4.44** | **44** | Pn | **Pn** | **18 19 42.3** | **-0.5** |
| | 6.3nm,0.3s,baz=204,slow=5.9,SNR=16 | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 20 33.9** | **-0.7** |
| | 21nm,0.3s,baz=224,slow=22,SNR=4.5 | | | | | | |
| KAPI | | | | Lg | Lg | 18 20 55.5 | |
| | 16nm,0.3s,baz=280,slow=22,SNR=6.0 | | | | | | |
| | 20nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.78** | **272** | P | **Pn** | **18 19 47.3** | **-0.2** |
| **EDFI** | **Ende, Flores** | **5.03** | **96** | P | **Pn** | **18 19 51.9** | **+0.9** |
| | 267nm,1.0s,2μm0.8nm | | | | | | |
| **BNSI** | **Bone** | **5.13** | **43** | P | **Pn** | **18 19 53.8** | **+1.6** |
| | 185nm,0.7s,3μm1.9nm | | | | | | |
| **MMRI** | **Maumere** | **5.56** | **95** | P | **Pn** | **18 19 59.0** | **+0.8** |
| **MMRI** | **Maumere** | **5.56** | **95** | | **Pn** | **18 19 59.0** | **+0.8** |
| **MMRI** | **Maumere** | **5.56** | **95** | P | **Pn** | **18 19 58.4** | **+0.2** |
| | 265nm,1.0s,3μm1.0nm | | | | | | |
| **UGM** | **Wanagama** | **6.06** | **272** | | Pn | 18 20 10.2 | +5.1 |
| **UGM** | **Wanagama** | **6.06** | **272** | P | **Pn** | **18 20 05.8** | **+0.8** |
| | 219nm,1.5s | | | | | | |
| **BATI** | **Baumata** | **7.22** | **106** | P | **Pn** | **18 20 21.8** | **+0.8** |
| **SOEI** | **Soe** | **7.70** | **102** | P | **Pn** | **18 20 29.8** | **+2.2** |
| **SOEI** | **Soe** | **7.70** | **102** | Pn | **Pn** | **18 20 29.9** | **+2.2** |
| **SOEI** | **Soe** | **7.70** | **102** | P | **Pn** | **18 20 29.5** | **+1.8** |
| **CNJI** | **Cibinong** | **9.46** | **275** | P | **Pn** | **18 20 52.6** | **+0.9** |
| **KSM** | **Kuching** | **11.51** | **327** | | **Pn** | **18 21 22.4** | **+2.6** |
| **FITZ** | **Fitzroy Crossi** | **13.16** | **139** | Pn | **Pn** | **18 21 41.5** | **-1.0** |
| **MBWA** | **Marble Bar** | **13.21** | **167** | P | **Pn** | **18 21 41.0** | **-2.1** |
| **MBWA** | **Marble Bar** | **13.21** | **167** | Pn | **Pn** | **18 21 41.4** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **13.63** | **167** | P | **Pn** | **18 21 47.1** | **-1.8** |
| **PSA00** | **Pilbara Seismi** | **13.63** | **167** | Pn | **Pn** | **18 21 46.5** | **-2.4** |
| **KNRA** | **Kununurra** | **13.99** | **123** | Pn | **Pn** | **18 21 52.9** | **-0.8** |
| **GIRL** | **Giralia** | **14.53** | **189** | Pn | **Pn** | **18 21 59.0** | **-2.1** |
| **MTN** | **Manton Dam** | **14.98** | **109** | P | **Pn** | **18 22 05.9** | **-1.4** |
| **MTN** | **Manton Dam** | **14.98** | **109** | Pn | **Pn** | **18 22 05.4** | **-1.8** |
| **KDU** | **Kakadu** | **16.20** | **107** | P | **Pn** | **18 22 24.1** | **+0.9** |
| **FAKI** | **Fak Fak** | **16.41** | **72** | P | **P** | **18 22 28.0** | **-0.7** |
| **MEEK** | **Meekatharra** | **18.42** | **174** | P | **Pn** | **18 22 50.6** | **-0.3** |
| **WRKA** | **Warakurna** | **20.09** | **148** | P | Pn | 18 23 10.6 | -0.5 |
| **WB0** | **Warramunga Arr** | **20.68** | **126** | P | **P** | **18 23 15.9** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 18 23 18.8 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.73** | **126** | P | **P** | **18 23 15.8** | **-0.4** |
| **WRA** | **Warramunga Arr** | **20.73** | **126** | P | **P** | **18 23 16.1** | **-0.1** |
| | comp=Z,26nm,0.8s,baz=300,slow=12,SNR=62 | | | | | | |
| | comp=Z,26nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.73** | **126** | P | **P** | **18 23 15.9** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 18 23 21.3 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.74** | **126** | P | **P** | **18 23 15.0** | **-1.4** |
| WB2 | | | | IAmb | IAmb | 18 23 31.4 | |
| | comp=Z,47nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **20.75** | **181** | P | Pn | 18 23 17.9 | -0.8 |
| **MORW** | **Morawa** | **20.75** | **181** | P | **P** | **18 23 16.0** | **-0.3** |
| **WR0** | **Warramunga Arr** | **20.90** | **126** | P | **P** | **18 23 17.8** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 18 23 23.2 | |
| | comp=Z,47nm,0.9s | | | | | | |
| **BLDU** | **Ballidu** | **22.28** | **180** | P | **P** | **18 23 33.3** | **+0.5** |
| **AS31** | **Alice Springs** | **22.58** | **135** | P | **P** | **18 23 36.5** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.58** | **135** | P | **P** | **18 23 36.2** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.58** | **135** | P | **P** | **18 23 36.1** | **-0.1** |
| | comp=Z,26nm,0.8s,baz=312,slow=8.6,SNR=72 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 27 29.4** | **-0.3** |
| | comp=Z,1.2nm,0.7s,baz=264,slow=1.3,SNR=4.3 | | | | | | |
| ASAR | | | | Lg | Lg | 18 30 18.4 | |
| | baz=316,slow=12 | | | | | | |
| | comp=Z,26nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **22.61** | **135** | P | **P** | **18 23 36.9** | **+0.4** |
| **KLBR** | **Kellerberrin** | **23.28** | **178** | P | **P** | **18 23 43.7** | **+0.4** |
| **KMBL** | **Kambalda** | **23.55** | **169** | P | **P** | **18 23 45.7** | **-0.3** |
| **NWAO** | **Narrogin (SRO)** | **24.59** | **179** | P | **P** | **18 23 56.5** | **+0.7** |
| **NWAO** | **Narrogin (SRO)** | **24.59** | **179** | P | **P** | **18 23 55.9** | **+0.1** |
| NWAO | | | | IAmb | IAmb | 18 24 32.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **24.86** | **156** | P | **P

*s-maj=14.4km s-min=10.2km az=79.0*
*MOS **19** 18:23:21.2±1.0,8˚34S×116˚82E,h10ᵏᵐ,mb5.1/44,Error ellipse: s-maj=9.5km s-min=5.5km az=107.7*
*BJI **19** 18:23:23.0±0.0,8˚40S×116˚90E,h10ᵏᵐ,mb5.0/73, mB5.3/15,Ms4.6/12,Ms7 4.5/12*
*NEIC **19** 18:23:23.9±2.3,8˚38S±0˚07×116˚89E±0˚06,h10ᵏᵐ±1ᵏᵐ, mb5.2/76,Error ellipse: s-maj=11.6km s-min=9.6km az=186.0*
*DJA **19** 18:23:25.4±0.3,8˚S±1˚×11˚7E±˚,h13ᵏᵐ±2ᵏᵐ,M5.1/71, mB5.5/20,mb5.1/71,MLv5.4/27,Mw(mB)5.0/20*
**ISC 19 18:23:23.4**±0.2,**8˚39S**±0˚03×**116˚90E**±0˚03,**h10ᵏᵐ,n377,** σ1ᵍ**68**/363,**mb5.1**/116,**MS4.6**/4,**24C-8D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.34** | **182** | P | **Pb** | | **18 23 32.6** | **+1.0** |
| TWSI | | | | S | **Sb** | | **18 23 37.6** | **+0.5** |
| **PLAI** | **Plampang** | **0.97** | **116** | P | **Pb** | | **18 23 43.4** | **+1.1** |
| PLAI | | | | S | **Sb** | | **18 23 56.0** | **+0.8** |
| **DNP** | **Denpasar** | **1.69** | **260** | P | **Pg** | | **18 23 56.9** | **+1.1** |
| DNP | | | | S | **Sg** | | **18 24 19.1** | **+1.3** |
| **SRBI** | **Singaraja** | **1.69** | **280** | P | **Pb** | | **18 23 54.4** | **-0.2** |
| SRBI | | | | S | **Sg** | | **18 24 19.6** | **+1.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.71** | **268** | P | **Pb** | | **18 24 10.2** | **-1.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.71** | **268** | Pn | **Pn** | | **18 24 08.0** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.71** | **268** | P | **Pn** | | **18 24 08.2** | **+1.1** |
| **WBSI** | **Waikabubak, Su** | **2.76** | **117** | P | **Pn** | | **18 24 09.3** | **+1.6** |
| **BASI** | **Baing, Sumba** | **4.06** | **117** | P | **Pn** | | **18 24 26.8** | **+1.2** |
| **BSSI** | **Bau Bau, Buton** | **4.21** | **58** | P | **Pn** | | **18 24 28.2** | **+0.5** |
| **KAPI** | **Kappang** | **4.40** | **40** | Pn | **Pn** | | **18 24 30.6** | **+0.4** |
| | 55nm,0.3s,baz=197,slow=4.3,SNR=23 | | | | | | | |
| KAPI | | | | Sn | **Sn** | | **18 25 20.9** | **-0.6** |
| | 102nm,0.3s,baz=217,slow=20,SNR=24 | | | | | | | |
| KAPI | | | | Lg | Lg | | 18 25 40.5 | |
| | 40nm,0.3s,baz=168,slow=20,SNR=5.0 | | | | | | | |
| KAPI | | | | LR | LR | | 18 26 32.6 | |
| | comp=Z,4μm,19.1s,baz=210,slow=44 | | | | | | | |
| | 223nm,0.5s | | | | | | | |
| **GRJI** | **Gresik** | **4.62** | **288** | P | **Pn** | | **18 24 35.4** | **+2.1** |
| **EDFI** | **Ende, Flores** | **4.75** | **95** | P | **Pn** | | **18 24 37.2** | **+1.9** |
| **BWJI** | **Bawean** | **4.91** | **301** | P | **Pn** | | **18 24 38.8** | **+1.6** |
| **PWJI** | **Pagerwojo** | **5.05** | **274** | P | **Pn** | | **18 24 40.8** | **+1.5** |
| | 310nm,0.7s,3μm2.4nm | | | | | | | |
| **BNSI** | **Bone** | **5.09** | **39** | P | **Pn** | | **18 24 41.3** | **+1.5** |
| | 290nm,0.6s,8μm | | | | | | | |
| **MMRI** | **Maumere** | **5.29** | **93** | P | **Pn** | | **18 24 44.1** | **+1.6** |
| **MMRI** | **Maumere** | **5.29** | **93** | Pn | **Pn** | | **18 24 42.9** | **+0.3** |
| **MMRI** | **Maumere** | **5.29** | **93** | P | **Pn** | | **18 24 43.4** | **+0.9** |
| **NGJI** | **Ngawi** | **5.48** | **280** | P | **Pn** | | **18 24 48.1** | **+3.0** |
| | 151nm,0.8s,2.5nm | | | | | | | |
| **UGM** | **Wanagama** | **6.33** | **274** | P | Pn | | 18 25 02.6 | +5.8 |
| **UGM** | **Wanagama** | **6.33** | **274** | Pn | **Pn** | | **18 24 58.8** | **+2.0** |
| **UGM** | **Wanagama** | **6.33** | **274** | P | **Pn** | | **18 24 58.1** | **+1.3** |
| **BBSI** | **Bau Bau** | **6.33** | **63** | P | **Pn** | | **18 25 00.6** | **+3.8** |
| | 125nm,0.6s,2μm0.9nm | | | | | | | |
| **SMRI** | **Semarang** | **6.54** | **281** | P | **Pn** | | **18 25 02.8** | **+3.1** |
| | 150nm,1.1s,1.4nm | | | | | | | |
| **BATI** | **Baumata** | **6.92** | **106** | P | **Pn** | | **18 25 07.2** | **+2.3** |
| | 294nm,0.8s,3μm2.0nm | | | | | | | |
| **BKB** | **Balikpapan** | **7.09** | **0** | P | **Pn** | | **18 25 11.6** | **+4.4** |
| | 145nm,1.0s | | | | | | | |
| **SOEI** | **Soe** | **7.41** | **101** | P | **Pn** | | **18 25 14.8** | **+3.1** |
| **SOEI** | **Soe** | **7.41** | **101** | Pn | **Pn** | | **18 25 12.7** | **+1.0** |
| **SOEI** | **Soe** | **7.41** | **101** | P | **Pn** | | **18 25 14.3** | **+2.6** |
| **MTKI** | **Muara Teweh, K** | **7.67** | **345** | P | Pn | | 18 25 20.5 | +5.3 |
| **SMKI** | **Samarinda** | **7.90** | **2** | P | **Pn** | | **18 25 21.1** | **+2.7** |
| | 95nm,0.5s,1.0nm | | | | | | | |
| **KPJI** | **Karang Pucung** | **7.96** | **277** | P | **Pn** | | **18 25 21.6** | **+2.4** |
| | 107nm,0.6s | | | | | | | |
| **MPSI** | **Mapaga** | **9.18** | **19** | P | **Pn** | | **18 25 37.5** | **+1.6** |
| **BBJI** | **Bungbulang** | **9.20** | **275** | P | **Pn** | | **18 25 40.4** | **+4.0** |
| **LUWI** | **Luwuk** | **9.36** | **39** | P | **Pn** | | **18 25 42.2** | **+3.8** |
| **LUWI** | **Luwuk** | **9.36** | **39** | P | **Pn** | | **18 25 39.8** | **+1.4** |
| | 60nm,0.8s | | | | | | | |
| **CNJI** | **Cibinong** | **9.73** | **276** | P | **Pn** | | **18 25 46.2** | **+2.6** |
| | 50nm,0.8s | | | | | | | |
| **STKI** | **Sintang** | **9.99** | **327** | P | **Pn** | | **18 25 50.3** | **+3.2** |
| | 62nm,0.6s | | | | | | | |
| **TOLI2** | **Tolitoli** | **10.21** | **22** | P | Pn | | 18 25 55.4 | +5.3 |
| **TOLI2** | **Tolitoli** | **10.21** | **22** | Pn | **Pn** | | **18 25 49.5** | **-0.6** |
| **DBJI** | **Dramaga** | **10.22** | **280** | P | **Pn** | | **18 25 53.1** | **+2.8** |
| | 82nm,1.1s | | | | | | | |
| **GTOI** | **Gorontalo** | **10.85** | **34** | P | **Pn** | | **18 26 00.4** | **+1.6** |
| **SANI** | **Sanana** | **11.03** | **56** | P | **Pn** | | **18 26 04.7** | **+3.4** |
| **SANI** | **Sanana** | **11.03** | **56** | P | **Pn** | | **18 26 05.3** | **+4.0** |
| | 113nm,1.1s,1μm | | | | | | | |
| **KSM** | **Kuching** | **11.80** | **326** | P | Pn | | 18 26 16.8 | +4.9 |
| **KSM** | **Kuching** | **11.80** | **326** | | **Pn** | | **18 26 11.7** | **-0.1** |
| **KASI** | **Kota Agung** | **12.63** | **282** | P | **Pn** | | **18 26 26.6** | **+3.3** |
| | 44nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | **12.98** | **168** | P | **Pn** | | **18 26 27.5** | **-0.5** |
| **MBWA** | **Marble Bar** | **12.98** | **168** | Pn | **Pn** | | **18 26 26.1** | **-1.9** |
| **MBWA** | **Marble Bar** | **12.98** | **168** | P | **Pn** | | **18 26 26.6** | **-1.4** |
| | comp=Z,979nmcomp=Z,117nm,0.7s | | | | | | | |
| **LWLI** | **Liwa** | **13.18** | **284** | P | P | | 18 26 46.2 | +5.2 |
| **PSA00** | **Pilbara Seismi** | **13.41** | **168** | P | **Pn** | | **18 26 32.9** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **13.41** | **168** | Pn | **Pn** | | **18 26 31.1** | **-2.8** |
| **PSA00** | **Pilbara Seismi** | **13.41** | **168** | P | **Pn** | | **18 26 32.2** | **-1.7** |
| | comp=Z,1μmcomp=Z,105nm,0.9s | | | | | | | |
| **BNDI** | **Bandanaira** | **13.48** | **74** | P | **Pn** | | **18 26 38.1** | **+3.2** |
| **BNDI** | **Bandanaira** | **13.48** | **74** | P | **P** | | **18 26 46.3** | **+2.0** |
| **KNRA** | **Kununurra** | **13.67** | **123** | Pn | **Pn** | | **18 26 34.7** | **-2.8** |
| **KNRA** | **Kununurra** | **13.67** | **123** | P | **Pn** | | **18 26 37.1** | **-0.4** |
| | comp=Z,698nmcomp=Z,133nm,0.8s | | | | | | | |
| **DRS** | **Darwin Rock St** | **14.35** | **107** | P | **Pn** | | **18 26 47.1** | **+0.4** |
| **KKM** | **Kota Kinabalu** | **14.36** | **357** | P | **P** | | **18 26 51.9** | **-2.2** |
| **KKM** | **Kota Kinabalu** | **14.36** | **357** | Pn | **Pn** | | **18 26 48.4** | **+1.4** |
| **GIRL** | **Giralia** | **14.40** | **190** | P | **Pn** | | **18 26 47.5** | **+0.1** |
| **GIRL** | **Giralia** | **14.40** | **190** | Pn | **Pn** | | **18 26 45.5** | **-1.9** |
| **MTN** | **Manton Dam** | **14.67** | **109** | P | **Pn** | | **18 26 50.0** | **-1.2** |
| **MTN** | **Manton Dam** | **14.67** | **109** | Pn | **Pn** | | **18 26 49.0** | **-2.2** |
| **MTN** | **Manton Dam** | **14.67** | **109** | P | **Pn** | | **18 26 48.6** | **-2.6** |
| **TPRI** | **Tanjung Pinang** | **15.41** | **306** | P | **P** | | **18 27 10.3** | **+4.6** |
| **KDU** | **Kakadu** | **15.90** | **107** | P | **Pn** | | **18 27 06.0** | **-1.4** |
| **KDU** | **Kakadu** | **15.90** | **107** | P | **Pn** | | **18 27 04.5** | **-2.9** |
| **SWI** | **Sorong** | **16.15** | **63** | P | **P** | | **18 27 14.1** | **+0.3** |
| | comp=Z,103nm,1.4s,comp=Z,1μm | | | | | | | |
| **FAKI** | **Fak Fak** | **16.21** | **71** | P | **Pn** | | **18 27 12.3** | **+0.8** |
| **FAKI** | **Fak Fak** | **16.21** | **71** | | **Pn** | | **18 27 11.4** | **-0.1** |
| FAKI | | | | IAmb | IAmb | | 18 27 14.4 | |
| | comp=Z,91nm,0.8s | | | | | | | |
| **FAKI** | **Fak Fak** | **16.21** | **71** | P | **Pn** | | **18 27 11.8** | **+0.3** |
| | comp=Z,125nm,0.9s | | | | | | | |
| **BTDF** | **Bukit Timah Da** | **16.28** | **306** | P | **P** | | **18 27 19.6** | **+4.3** |
| **MYKOM** | **Kota Tinggi** | **16.48** | **307** | | **P** | | **18 27 17.3** | **-0.2** |
| **MEEK** | **Meekatharra** | **18.22** | **175** | P | **P** | | **18 27 39.0** | **+2.2** |
| **MEEK** | **Meekatharra** | **18.22** | **175** | P | **P** | | **18 27 38.6** | **+1.8** |
| **WRKA** | **Warakurna** | **19.80** | **148** | P | **Pn** | | **18 27 55.7** | **0.0** |
| **WRKA** | **Warakurna** | **19.80** | **148** | P | **Pn** | | **18 27 55.7** | **0.0** |
| | comp=Z,1μmcomp=Z,126nm,0.8s | | | | | | | |
| **IPM** | **Ipoh** | **20.35** | **308** | P | Pn | | 18 28 03.5 | +1.3 |
| **IPM** | **Ipoh** | **20.35** | **308** | Pn | Pn | | 18 28 02.3 | +0.1 |
| **WB0** | **Warramunga Arr** | **20.37** | **126** | P | **P** | | **18 27 59.4** | **-0.9** |
| WB0 | | | | IAmb | IAmb | | 18 28 01.8 | |
| | comp=Z,91nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.42** | **126** | P | **P** | | **18 28 00.1** | **-0.8** |
| **WRA** | **Warramunga Arr** | **20.42** | **126** | P | **P** | | **18 28 00.6** | **-0.3** |
| | comp=Z,93nm,0.8s,baz=302,slow=12,SNR=131 | | | | | | | |
| WRA | | | | S | **S** | | **18 31 41.1** | **-8.6** |
| | comp=Z,6.6nm,0.6s,baz=300,slow=22,SNR=5.8 | | | | | | | |
| | comp=Z,93nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.42** | **126** | P | **P** | | **18 28 00.1** | **-0.8** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.42** | **126** | P | **P** | | **18 28 00.8** | **-0.1** |
| WRAB | | | | IAmb | IAmb | | 18 28 02.5 | |
| | comp=Z,92nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.42** | **126** | P | **P** | | **18 28 00.8** | **-0.1** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,91nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.43** | **126** | IAmb | IAmb | | 18 28 02.4 | |
| | comp=Z,83nm,0.8s | | | | | | | |
| **MORW** | **Morawa** | **20.58** | **182** | P | Pn | | 18 28 05.6 | +0.8 |
| **MORW** | **Morawa** | **20.58** | **182** | P | **P** | | **18 28 02.1** | **-0.5** |
| **MORW** | **Morawa** | **20.58** | **182** | P | Pn | | 18 28 05.0 | +0.2 |
| **RPSI** | **Rantau Prapat** | **21.04** | **301** | P | **P** | | **18 28 09.2** | **+1.6** |
| **PSI** | **Prapat** | **21.09** | **301** | P | **P** | | **18 28 10.2** | **+1.9** |
| **PSI** | **Prapat** | **21.09** | **301** | P | **P** | | **18 28 09.2** | **+0.9** |
| PSI | | | | pmax | pmax | | | |
| | comp=Z,59nm,1.2s | | | | | | | |
| **BLDU** | **Ballidu** | **22.11** | **180** | P | **P** | | **18 28 20.9** | **+1.9** |
| **BLDU** | **Ballidu** | **22.11** | **180** | P | **P** | | **18 28 20.1** | **+1.1** |
| | comp=Z,52nm,1.0s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.27** | **135** | P | **P** | | **18 28 21.3** | **+0.4** |
| **ASAR** | **Alice Springs** | **22.27** | **135** | P | **P** | | **18 28 21.5** | **+0.6** |
| | comp=Z,60nm,0.9s,baz=310,slow=8.6,SNR=65 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **18 32 16.6** | **-0.5** |
| | comp=Z,8.5nm,0.8s,baz=340,slow=1.8,SNR=9.3 | | | | | | | |
| ASAR | | | | S | **S** | | **18 32 24.4** | **-1.7** |
| | comp=Z,2.5nm,0.8s,baz=310,slow=22,SNR=5.0 | | | | | | | |
| | comp=Z,60nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **22.27** | **135** | P | **P** | | **18 28 21.3** | **+0.4** |
| | comp=Z,16nm,0.8s | | | | | | | |
| **AS01** | **Alice Springs** | **22.30** | **135** | P | **P** | | **18 28 21.9** | **+0.7** |
| **KLBR** | **Kellerberrin** | **23.09** | **178** | P | **P** | | **18 28 32.8** | **+3.4** |
| **KLBR** | **Kellerberrin** | **23.09** | **178** | P | **P** | | **18 28 30.1** | **+0.7** |
| | comp=Z,126nm,1.0s | | | | | | | |
| **KMBL** | **Kambalda** | **23.32** | **169** | P | **P** | | **18 28 32.9** | **+1.1** |
| **KMBL** | **Kambalda** | **23.32** | **169** | P | **P** | | **18 28 32.1** | **+0.3** |
| | comp=Z,118nm,0.8s | | | | | | | |
| **MUN** | **Mundaring** | **23.48** | **181** | P | **P** | | **18 28 35.2** | **+1.9** |
| **GENI** | **Genyem** | **23.86** | **77** | P | **P** | | **18 28 38.7** | **+1.5** |
| **GENI** | **Genyem** | **23.86** | **77** | P | **P** | | **18 28 37.0** | **-0.2** |
| | comp=Z,73nm,1.4s | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **24.06** | **304** | P | **P** | | **18 28 41.3** | **+2.2** |
| **TABU** | **Tabubil** | **24.35** | **84** | P | **P** | | **18 28 42.1** | **+0.2** |
| **JAY** | **Jayapura** | **24.40** | **77** | P | **P** | | **18 28 42.5** | **+0.2** |
| | comp=Z,22nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.41** | **179** | P | **P** | | **18 28 44.9** | **+2.7** |
| **NWAO** | **Narrogin (SRO)** | **24.41** | **179** | P | **P** | | **18 28 42.1** | **-0.1** |
| NWAO | | | | IAmb | IAmb | | 18 29 05.5 | |
| | comp=Z,48nm,0.7s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.41** | **179** | P | **P** | | **18 28 43.1** | **+0.9** |
| | comp=Z,14nm,0.8s,baz=26,slow=5.2,SNR=6.1 | | | | | | | |
| NWAO | | | | S | **S** | | **18 33 06.7** | **+4.7** |
| | comp=Z,15nm,0.6s,baz=64,slow=14,SNR=2.4 | | | | | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.41** | **179** | P | **P** | | **18 28 42.1** | **-0.1** |
| NWAO | | | | pmax | pmax | | | |
| | comp=Z,48nm,0.7s | | | | | | | |
| **SURA** | **Surathani** | **24.50** | **315** | P | **P** | | **18 28 45.8** | **+2.7** |
| **FORT** | **Forrest** | **24.59** | **156** | P | **P** | | **18 28 46.2** | **+2.4** |
| **FORT** | **Forrest** | **24.59** | **156** | P | **P** | | **18 28 45.2** | **+1.4** |
| | comp=Z,148nm,1.1s | | | | | | | |
| **QIS** | **Mount Isa** | **25.05** | **121** | P | **P** | | **18 28 48.3** | **+0.2** |
| **QIS** | **Mount Isa** | **25.05** | **121** | P | **P** | | **18 28 48.1** | **0.0** |
| | comp=Z,179nm,1.1s | | | | | | | |
| **RKGY** | **Rocky Gully** | **26.09** | **180** | P | **P** | | **18 28 51.8** | **-5.5** |
| **OOD** | **Oodnadatta** | **26.22** | **140** | P | **P** | | **18 28 59.1** | **+0.5** |
| **COEN** | **Coen** | **26.35** | **104** | P | **P** | | **18 29 00.4** | **+0.4** |
| **COEN** | **Coen** | **26.35** | **104** | P | **P** | | **18 28 59.6** | **-0.4** |
| COEN | | | | IAmb | IAmb | | 18 29 00.7 | |
| | comp=Z,36nm,0.6s | | | | | | | |
| **COEN** | **Coen** | **26.35** | **104** | P | **P** | | **18 28 59.2** | **-0.7** |
| | comp=Z,52nm,0.8s | | | | | | | |
| **MULG** | **Mulgathing** | **27.06** | **146** | P | **P** | | **18 29 06.8** | **+0.6** |
| **NAYO** | **Nakonayok** | **27.35** | **325** | P | **P** | | **18 29 12.8** | **+4.0** |
| **MTSU** | **Mount Surprise** | **28.35** | **113** | P | **P** | | **18 29 19.1** | **+1.2** |
| **SRDT** | **SRDT** | **28.66** | **322** | P | **P** | | **18 29 23.9** | **+3.3** |
| **INKA** | **Innaminka** | **29.63** | **134** | P | **P** | | **18 29 30.2** | **+1.1** |
| **LCRK** | **Leigh Creek** | **29.65** | **141** | P | **P** | | **18 29 29.9** | **+0.7** |
| **BBOO** | **Buckleboo** | **30.09** | **147** | P | **P** | | **18 29 33.3** | **+0.2** |
| **BBOO** | **Buckleboo** | **30.09** | **147** | IAmb | IAmb | | 18 29 34.4 | |
| | comp=Z,40nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.09** | **147** | P | **P** | | **18 29 32.9** | **-0.2** |
| | comp=Z,51nm,0.8s | | | | | | | |
| **CTA** | **Charters Tower** | **30.68** | **115** | P | **P** | | **18 29 39.5** | **+1.0** |
| | comp=Z,2.0nm,0.9s,baz=282,slow=10,SNR=13 | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **30.68** | **115** | P | **P** | | **18 29 39.3** | **+0.8** |
| **CTAO** | **Charters Tower** | **30.68** | **115** | P | **P** | | **18 29 39.0** | **+0.5** |
| CTAO | | | | IAmb | IAmb | | 18 29 41.1 | |
| | comp=Z,49nm,1.1s | | | | | | | |
| **CTAO** | **Charters Tower** | **30.68** | **115** | P | **P** | | **18 29 39.0** | **+0.5** |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.2s | | | | | | | |
| **WHYH** | **Whyalla** | **31.10** | **145** | P | **P** | | **18 29 43.0** | **+1.0** |
| **QLP** | **Quilpie** | **31.61** | **128** | P | **P** | | **18 29 47.5** | **+0.8** |
| **QLP** | **Quilpie** | **31.61** | **128** | P | **P** | | **18 29 47.0** | **+0.3** |
| | comp=Z,56nm,1.0s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **32.03** | **327** | IAmb | IAmb | | 18 29 54.4 | |
| | comp=Z,50nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.03** | **327** | P | **P** | | **18 29 51.8** | **+1.4** |
| **CMAR** | **Chiang Mai Arr** | **32.03** | **327** | P | **P** | | **18 29 52.1** | **+1.8** |
| | comp=Z,21nm,0.9s,baz=152,slow=6.9,SNR=76 | | | | | | | |
| CMAR | | | | ScP | **ScP** | | **18 36 22.0** | **-2.1** |
| | comp=Z,0.4nm,0.5s,baz=199,slow=3.1,SNR=5.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.03** | **327** | *e*P | **P** | | **18 29 52.9** | **+2.5** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| **HTT** | **Hallett** | **32.16** | **144** | P | **P** | | **18 29 52.5** | **+1.0** |
| **HTT** | **Hallett** | **32.16** | **144** | P | **P** | | **18 29 52.3** | **+0.8** |
| | comp=Z,44nm,1.2s | | | | | | | |
| **SLVN** | **Son La** | **32.18** | **337** | P | **P** | | **18 29 53.6** | **+1.9** |
| **STKA** | **Stephens Creek** | **32.76** | **139** | P | **P** | | **18 29 57.4** | **+0.7** |
| **STKA** | **Stephens Creek** | **32.76** | **139** | P | **P** | | **18 29 57.4** | **+0.7** |
| | comp=Z,43nm,0.6s,baz=312,slow=9.7,SNR=71 | | | | | | | |
| | comp=Z,43nm,0.6s | | | | | | | |
| **CRAI** | **Chiangrai** | **32.76** | **330** | P | **P** | | **18 29 56.5** | **-0.3** |
| CRAI | | | | IAmb | IAmb | | 18 30 01.6 | |
| | comp=Z,37nm,1.1s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.33** | **135** | P | **P** | | **18 30 19.1** | **+0.1** |
| **AULRC** | **Lightning Ridg** | **35.90** | **130** | P | **P** | | **18 30 24.9** | **+1.0** |
| **GYA** | **Guiyang** | **36.04** | **344** | P | **P** | | **18 30 27.8** | **+2.5** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **KMI** | **Kunming** | **36.06** | **338** | ⇑P | **P** | | **18 30 29.0** | **+3.5** |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **36.21** | **145** | P | **P** | | **18 30 27.9** | **+1.4** |
| **CNSH** | **ChangSha** | **36.56** | **354** | P | **P** | | **18 30 32.8** | **+3.3** |
| CNSH | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **AUMAG** | **Moama Anglican** | **37.48** | **142** | P | **P** | | **18 30 38.2** | **+0.9** |
| **PZH** | **PanZhiHua** | **37.68** | **337** | P | **P** | | **18 30 42.6** | **+3.4** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **TNCH** | **TengChong** | **37.74** | **332** | ⇑*i*P | **P** | | **18 30 39.8** | **0.0** |
| TNCH | | | | S | **S** | | **18 36 29.4** | **-1.2** |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.4s | | | | | | | |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,220nm,3.9s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,340nm,12.6s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,280nm,11.3s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,470nm,12.1s | | | | | | | |
| **YNG** | **Young** | **38.76** | **136** | P | **P** | | **18 30 49.2** | **+1.0** |
| **WHN** | **Wuhan** | **38.79** | **356** | P | **P** | | **18 30 51.1** | **+2.8** |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **AUPHS** | **Peel High Scho** | **38.90** | **130** | P | **P** | | **18 30 50.4** | **+1.0** |
| **ENH** | **Enshi** | **39.10** | **350** | IAmb | IAmb | | 18 30 54.5 | |
| | comp=Z,50nm,0.8s | | | | | | | |
| **ARMA** | **Armidale** | **39.15** | **129** | IAmb | IAmb | | 18 30 55.7 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **NJ2** | **Nanjing** | **40.26** | **3** | ⇑P | **P** | | **18 31 02.8** | **+2.2** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **CD2** | **Chengdu** | **41.06** | **343** | P | **P** | | **18 31 08.9** | **+1.6** |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,90nm,0.7s | | | | | | | |
| **SHL** | **Shillong** | **41.62** | **325** | P | **P** | | **18 31 11.9** | **-0.2** |
| **SHL** | **Shillong** | **41.62** | **325** | P | **P** | | **18 31 11.9** | **-0.2** |
| SHL | | | | pmax | pmax | | | |
| | comp=Z,72nm,0.9s | | | | | | | |
| **HNR** | **Honiara** | **42.53** | **95** | P | **P** | | **18 31 19.0** | **-0.5** |
| **HNR** | **Honiara** | **42.53** | **95** | P | **P** | | **18 31 18.2** | **-1.3** |
| **HNR** | **Honiara** | **42.53** | **95** | P | **P** | | **18 31 18.3** | **-1.3** |
| HNR | | | | pmax | pmax | | | |
| | comp=Z,67nm,0.8s | | | | | | | |
| **XAN** | **Xi'an** | **42.87** | **350** | ⇑P | **P** | | **18 31 23.1** | **+1.0** |
| XAN | | | | sP | sP | | 18 31 30.1 | +3.7 |
| XAN | | | | S | **S** | | **18 37 46.9** | **+0.1** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,910nm,16.5s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,360nm,16.5s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,680nm,17.9s | | | | | | | |
| **LYN** | **LuoYang** | **42.92** | **355** | P | **P** | | **18 31 23.8** | **+1.5** |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,42nm,0.8s | | | | | | | |
| **JNU** | **Nakatsue** | **43.38** | **17** | P | **P** | | **18 31 27.6** | **+1.4** |
| **JNU** | **Nakatsue** | **43.38** | **17** | IAmb | IAmb | | 18 31 28.2 | |
| | comp=Z,34nm,1.0s | | | | | | | |
| **JMN** | **Monobe** | **44.89** | **20** | P | **P** | | **18 31 40.6** | **+2.3** |
| **LSA** | **Lhasa** | **45.26** | **328** | P | **P** | | **18 31 43.6** | **+1.8** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **45.26** | **328** | IAmb | IAmb | | 18 31 45.6 | |
| | comp=Z,31nm,1.0s | | | | | | | |
| **HNS** | **HongShan** | **45.60** | **358** | ⇑P | **P** | | **18 31 44.8** | **+1.0** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **LZH** | **Lanzhou** | **45.92** | **345** | *e*P | **P** | | **18 31 48.9** | **+2.3** |
| LZH | | | | pP | sP | | 18 31 54.3 | +3.4 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.2s | | | | | | | |
| **TIY** | **Taiyuan** | **46.06** | **355** | P | **P** | | **18 31 48.6** | **+1.1** |
| TIY | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.7s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **46.68** | **27** | LR | LR | | 18 51 57.1 | |
| | comp=Z,164nm,20.0s,baz=272,slow=37 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.74** | **12** | P | **P** | | **18 31 53.8** | **+1.0** |
| **KSAR** | **Wonju Array Be** | **46.74** | **12** | P | **P** | | **18 31 53.8** | **+1.0** |
| **KSRS** | **Korea Array** | **46.76** | **12** | P | **P** | | **18 31 54.4** | **+1.4** |
| | comp=Z,16nm,0.9s,baz=191,slow=8.2,SNR=60 | | | | | | | |
| **KS19** | **Wonju Array Si** | **46.80** | **12** | IAmb | IAmb | | 18 31 55.7 | |
| | comp=Z,31nm,1.2s | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **47.29** | **110** | P | **P** | | **18 31 58.6** | **+1.2** |
| **KOUNC** | **Koumac, New Ca** | **47.29** | **110** | P | **P** | | **18 31 56.9** | **-0.5** |
| **JGF** | **Kuroka** | **47.82** | **23** | P | Pg | | 18 32 05.0 | +0.5 |
| | comp=Z,32nm,1.1s | | | | | | | |
| **JGF** | **Kuroka** | **47.83** | **23** | IAmb | IAmb | | 18 32 05.3 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **BJI** | **Beijing** | **48.20** | **359** | P | **P** | | **18 32 05.0** | **+1.0** |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **GOMU** | **GeErMu** | **48.98** | **336** | P | **P** | | **18 32 13.3** | **+2.7** |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **48.98** | **23** | P | **P** | | **18 32 10.5** | **+0.3** |
| **MAJO** | **Matsushiro** | **48.98** | **23** | P | **P** | | **18 32 09.1** | **-1.1** |
| MAJO | | | | IAmb | IAmb | | 18 32 11.0 | |
| | comp=Z,38nm,1.2s | | | | | | | |
| **MAJO** | **Matsushiro** | **48.98** | **23** | ⇓*i*P | **P** | | **18 32 09.6** | **-0.6** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,38nm,1.3s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.98** | **23** | P | **P** | | **18 32 09.7** | **-0.6** |
| | comp=Z,21nm,1.0s,baz=195,slow=7.1,SNR=41 | | | | | | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **48.98** | **23** | IAmb | IAmb | | 18 32 12.0 | |
| | comp=Z,36nm,1.2s | | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **48.99** | **23** | *e*P | **P** | | **18 32 10.1** | **-0.3** |
| MJA0 | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| **BTO** | **Baotou** | **49.17** | **353** | *e*P | **P** | | **18 32 14.3** | **+2.6** |
| BTO | | | | PP | **PP** | | **18 34 05.8** | **+0.2** |
| BTO | | | | S | **S** | | **18 39 20.0** | **+2.8** |
| BTO | | | | SS | **SS** | | **18 42 46.8** | **-2.0** |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,100nm,1.2s | | | | | | | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,170nm,4.1s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,670nm,14.9s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,300nm,9.6s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,300nm,14.4s | | | | | | | |
| **HHC**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,77nm,1.5s | | | | | | | | |
| KSH | **Kashi** | **60.90** | **325** | P | **P** | **18 33 35.3** | **-1.3** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **61.12** | **346** | ⇓*iP* | **P** | **18 33 38.3** | **+0.4** |
| **GRNR** | **Gornyy** | **61.31** | **14** | ⇑*iP* | **P** | **18 33 39.8** | **+0.8** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **IRK** | **Irkutsk** | **61.36** | **351** | *eP* | **P** | **18 33 37.8** | **-1.5** |
| IRK | | | | pmax | pmax | | |
| | comp=Z,29nm,2.2s | | | | | | | | |
| **MOY** | **Mondy** | **61.37** | **349** | *eP* | **P** | **18 33 40.2** | **+0.7** |
| MOY | | | | pmax | pmax | | |
| | comp=Z,24nm,2.0s | | | | | | | | |
| **URZ** | **Urewera** | **61.55** | **129** | P | **P** | **18 33 42.0** | **+1.0** |
| | comp=Z,6.4nm,0.7s,baz=341,slow=4.7,SNR=1.9 | | | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | | | |
| **UZB** | **Uzynbulak** | **61.78** | **329** | *eP* | **P** | **18 33 41.7** | **-0.9** |
| | baz=329 | | | | | | | | |
| **UZB** | **Uzynbulak** | **61.78** | **329** | *eP* | **P** | **18 33 41.7** | **-0.9** |
| **SATY** | **Saty** | **62.03** | **329** | *eP* | **P** | **18 33 43.5** | **-0.8** |
| | comp=Z,4.5nm,0.7s,baz=329 | | | | | | | | |
| **SATY** | **Saty** | **62.03** | **329** | *eP* | **P** | **18 33 43.4** | **-0.8** |
| SATY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **ZHN** | **Zhinishke** | **62.10** | **329** | *eP* | **P** | **18 33 43.7** | **-0.9** |
| | comp=Z,4.6nm,0.9s,baz=329 | | | | | | | | |
| **ZHN** | **Zhinishke** | **62.10** | **329** | *eP* | **P** | **18 33 43.7** | **-0.9** |
| ZHN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **KPKS** | **Kokpek** | **62.19** | **329** | *eP* | **P** | **18 33 44.2** | **-1.0** |
| | comp=Z,7.1nm,0.9s,baz=329 | | | | | | | | |
| **KPKS** | **Kokpek** | **62.19** | **329** | *eP* | **P** | **18 33 44.2** | **-1.0** |
| KPKS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **ZSN** | **Zaisan** | **62.43** | **336** | *eP* | **P** | **18 33 46.3** | **-0.4** |
| | comp=Z,7.1nm,0.7s,baz=336 | | | | | | | | |
| **ZSN** | **Zaisan** | **62.43** | **336** | *eP* | **P** | **18 33 46.3** | **-0.4** |
| ZSN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **ZEA** | **Zeya** | **62.51** | **7** | *eP* | **P** | **18 33 47.7** | **+0.7** |
| ZEA | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.4s | | | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **62.77** | **328** | *eP* | **P** | **18 33 48.3** | **-1.3** |
| | baz=328 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **62.77** | **328** | *eP* | **P** | **18 33 48.2** | **-1.3** |
| **MDOK** | **Medeo** | **62.81** | **328** | *eP* | **P** | **18 33 48.5** | **-1.0** |
| | baz=328 | | | | | | | | |
| **MDOK** | **Medeo** | **62.81** | **328** | *eP* | **P** | **18 33 48.4** | **-1.0** |
| **AAA** | **Alma-Ata** | **62.91** | **328** | *eP* | **P** | **18 33 49.3** | **-0.7** |
| | comp=Z,4.2nm,0.5s,baz=328 | | | | | | | | |
| **AAA** | **Alma-Ata** | **62.91** | **328** | *eP* | **P** | **18 33 49.3** | **-0.7** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |
| **MK31** | **Makanchi Array** | **62.99** | **334** | IAmb | IAmb | 18 33 52.5 | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **62.99** | **334** | *c iP* | **P** | **18 33 49.5** | **-0.9** |
| **MKAR** | **Makanchi Array** | **62.99** | **334** | P | **P** | **18 33 48.9** | **-1.5** |
| **MKAR** | **Makanchi Array** | **62.99** | **334** | P | **P** | **18 33 49.5** | **-0.9** |
| | comp=Z,7.4nm,0.9s,baz=145,slow=7.1,SNR=21 | | | | | | | | |
| | comp=Z,7.4nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.99** | **334** | *eP* | **P** | **18 33 49.5** | **-0.9** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **MAKZ** | **Makanchi** | **63.14** | **334** | P | **P** | **18 33 49.5** | **-1.9** |
| **MAKZ** | **Makanchi** | **63.14** | **334** | P | **P** | **18 33 49.5** | **-1.9** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **63.32** | **339** | *ceP* | **P** | **18 33 52.8** | **+0.1** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,36nm,1.2s | | | | | | | | |
| **CHKK** | **Chushkaly** | **63.33** | **329** | *eP* | **P** | **18 33 51.8** | **-0.9** |
| | baz=329 | | | | | | | | |
| **CHKK** | **Chushkaly** | **63.33** | **329** | *eP* | **P** | **18 33 51.8** | **-0.9** |
| **TDK** | **Taldyqorghan** | **63.43** | **330** | *eP* | **P** | **18 33 52.5** | **-1.0** |
| | comp=Z,7.2nm,0.7s,baz=330 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **63.43** | **330** | *eP* | **P** | **18 33 52.4** | **-1.0** |
| TDK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **KUU** | **Kurty** | **63.69** | **328** | *eP* | **P** | **18 33 54.2** | **-0.9** |
| | comp=Z,6.6nm,0.6s,baz=328 | | | | | | | | |
| **KUU** | **Kurty** | **63.69** | **328** | *eP* | **P** | **18 33 54.2** | **-0.9** |
| KUU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.81** | **326** | P | **P** | **18 33 55.0** | **-1.1** |
| AAK | | | | IAmb | IAmb | 18 33 59.1 | |
| | comp=Z,7.9nm,0.9s | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.81** | **326** | *deP* | **P** | **18 33 55.8** | **-0.3** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **GAR** | **Garm** | **63.96** | **321** | IAmb | IAmb | 18 34 10.9 | |
| | comp=Z,27nm,1.1s | | | | | | | | |
| **BTLS** | **Baital** | **65.67** | **328** | *eP* | **P** | **18 34 07.0** | **-1.0** |
| | baz=328 | | | | | | | | |
| **BTLS** | **Baital** | **65.67** | **328** | *eP* | **P** | **18 34 07.0** | **-1.0** |
| **KKAR** | **Karatay Array** | **66.35** | **325** | P | **P** | **18 34 10.2** | **-2.2** |
| **KKAR** | **Karatay Array** | **66.35** | **325** | P | **P** | **18 34 10.2** | **-2.2** |
| **SEM** | **Semipalatinsk** | **66.64** | **335** | *eP* | **P** | **18 34 13.6** | **-0.8** |
| | baz=336 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **66.64** | **335** | *eP* | **P** | **18 34 13.6** | **-0.8** |
| **BRLS** | **Borolday** | **66.69** | **324** | *eP* | **P** | **18 34 13.9** | **-0.7** |
| | baz=324 | | | | | | | | |
| **BRLS** | **Borolday** | **66.69** | **324** | *eP* | **P** | **18 34 13.9** | **-0.7** |
| **KRAR** | **Krasnoyarsk** | **67.20** | **346** | *ceP* | **P** | **18 34 17.5** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **67.52** | **335** | P | **P** | **18 34 18.4** | **-1.3** |
| | comp=Z,1.8nm,0.3s,baz=148,slow=5.4,SNR=12 | | | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | | | |
| **KURK** | **Kurchatov** | **67.55** | **335** | P | **P** | **18 34 17.9** | **-1.9** |
| KURK | | | | IAmb | IAmb | 18 34 43.1 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **KURK** | **Kurchatov** | **67.55** | **335** | *c iP* | **P** | **18 34 18.2** | **-1.7** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.75** | **340** | IAmb | IAmb | 18 34 38.5 | |
| | comp=Z,10nm,1.0s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.75** | **340** | P | **P** | **18 34 18.9** | **-2.1** |
| **ZALV** | **Zalesovo Beam** | **67.75** | **340** | P | **P** | **18 34 19.7** | **-1.4** |
| | comp=Z,3.9nm,0.6s,baz=146,slow=4.8,SNR=19 | | | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | | | |
| **MAW** | **Mawson** | **69.10** | **199** | P | **P** | **18 34 30.2** | **+0.9** |
| | comp=Z,16nm,0.7s,baz=65,slow=7.0,SNR=37 | | | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.38** | **25** | P | **P** | **18 34 37.0** | **-0.4** |
| | comp=Z,8.6nm,0.9s,baz=227,slow=3.3,SNR=5.1 | | | | | | | | |
| | comp=Z,8.6nm,0.9s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.38** | **25** | P | **P** | **18 34 37.0** | **-0.4** |
| **YAK** | **Yakutsk** | **70.91** | **6** | P | **P** | **18 34 39.1** | **-1.3** |
| YAK | | | | IAmb | IAmb | 18 34 42.2 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | **70.91** | **6** | *c iP* | **P** | **18 34 39.6** | **-0.8** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **72.80** | **333** | P | **P** | **18 34 49.6** | **-2.4** |
| | comp=Z,6.3nm,0.8s,baz=136,slow=8.1,SNR=30 | | | | | | | | |
| | comp=Z,6.3nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **72.87** | **333** | P | **P** | **18 34 50.8** | **-1.6** |
| **BRVK** | **Borovoye** | **72.87** | **333** | P | **P** | **18 34 50.8** | **-1.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **MA2** | **Magadan** | **72.95** | **17** | ⇓*iP* | **P** | **18 34 52.3** | **-0.5** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **75.88** | **326** | P | **P** | **18 35 07.8** | **-2.2** |
| **ABKAR** | **Akbulak array** | **75.88** | **326** | IAmb | IAmb | 18 35 09.2 | |
| | comp=Z,9.6nm,0.8s | | | | | | | | |
| **SEY** | **Seymchan** | **76.14** | **16** | *ceP* | **P** | **18 35 11.0** | **-0.2** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **76.57** | **297** | P | **P** | **18 35 12.1** | **-2.5** |
| **RAYN** | **Ar Rayn** | **76.57** | **297** | P | **P** | **18 35 12.1** | **-2.5** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **KIBK** | **Kibwezi** | **78.63** | **269** | IAmb | IAmb | 18 35 27.4 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **SVE** | **Sverdlovsk** | **79.57** | **332** | *eP* | **P** | **18 35 28.9** | **-1.6** |
| **KMBO** | **Kilima Mbogo** | **79.59** | **270** | P | **P** | **18 35 31.4** | **-0.5** |
| | comp=Z,6.2nm,0.9s,baz=51,slow=7.3,SNR=16 | | | | | | | | |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| **ARU** | **Arti** | **80.33** | **331** | *c iP* | **P** | **18 35 31.1** | **-3.5** |
| ARU | | | | S | **S** | **18 45 36.2** | **-4.0** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.60** | **180** | P | **P** | **18 35 41.9** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 18 35 44.9 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.60** | **180** | P | **P** | **18 35 41.9** | **+0.5** |
| | comp=Z,12nm,0.9s,baz=309,slow=1.5,SNR=37 | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **BELG** | **Belogornoye** | **84.26** | **325** | *deP* | **P** | **18 35 53.3** | **-1.9** |
| BELG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **KBZ** | **Khabaz** | **84.39** | **316** | P | **P** | **18 35 54.1** | **-1.9** |
| | comp=Z,3.9nm,0.9s,baz=158,slow=0.5,SNR=5.8 | | | | | | | | |
| | comp=Z,3.9nm,0.9s | | | | | | | | |
| **KBZ** | **Khabaz** | **84.39** | **316** | *deP* | **P** | **18 35 54.9** | **-1.2** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **KIRV** | **Kirov** | **85.70** | **331** | ⇑*eP* | **P** | **18 36 03.5** | **+1.2** |
| **MBAR** | **Mbarara** | **86.11** | **270** | P | **P** | **18 36 04.6** | **-1.0** |
| MBAR | | | | IAmb | IAmb | 18 36 06.7 | |
| | comp=Z,34nm,1.3s | | | | | | | | |
| **MBAR** | **Mbarara** | **86.11** | **270** | P | **P** | **18 36 04.6** | **-1.0** |
| MBAR | | | | pmax | pmax | | |
| | comp=Z,34nm,1.3s | | | | | | | | |
| **LSZ** | **Lusaka** | **86.59** | **255** | P | **P** | **18 36 06.3** | **-1.6** |
| **LSZ** | **Lusaka** | **86.59** | **255** | P | **P** | **18 36 06.3** | **-1.6** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,39nm,1.4s | | | | | | | | |
| **GAZ** | **Gaziantep** | **86.89** | **308** | P | **P** | **18 36 06.7** | **-2.1** |
| GAZ | | | | IAmb | IAmb | 18 36 08.8 | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **87.46** | **304** | P | **P** | **18 36 11.1** | **-0.6** |
| | comp=Z,7.3nm,0.8s,baz=110,slow=7.2,SNR=9.5 | | | | | | | | |
| | comp=Z,7.3nm,0.8s | | | | | | | | |
| **BOSA** | **Boshof** | **87.47** | **242** | P | **P** | **18 36 11.9** | **-0.1** |
| **BOSA** | **Boshof** | **87.47** | **242** | P | **P** | **18 36 11.9** | **-0.1** |
| | comp=Z,20nm,0.8s,baz=98,slow=4.1,SNR=27 | | | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **BOSA** | **Boshof** | **87.47** | **242** | P | **P** | **18 36 11.9** | **-0.1** |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.37** | **196** | ⇑P | **P** | **18 36 21.6** | **+1.5** |
| | comp=Z,582nm,0.7s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **90.16** | **310** | P | **P** | **18 36 21.6** | **-2.7** |
| | comp=Z,2.1nm,0.8s,baz=200,slow=7.1,SNR=4.3 | | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | | |
| **BR131** | **Keskin Array S** | **90.16** | **310** | P | **P** | **18 36 22.0** | **-2.4** |
| **BR131** | **Keskin Array S** | **90.16** | **310** | P | **P** | **18 36 22.0** | **-2.4** |
| BR131 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **SNAA** | **Sanae** | **91.01** | **196** | P | **P** | **18 36 28.3** | **+0.7** |
| SNAA | | | | IAmb | IAmb | 18 36 29.5 | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **SNAA** | **Sanae** | **91.01** | **196** | ⇑P | **P** | **18 36 28.9** | **+1.3** |
| | comp=Z,226nm,0.7s | | | | | | | | |
| **SNAA** | **Sanae** | **91.01** | **196** | P | **P** | **18 36 28.4** | **+0.7** |
| | comp=Z,7.8nm,0.6s,baz=168,slow=3.3,SNR=36 | | | | | | | | |
| | comp=Z,7.8nm,0.6s | | | | | | | | |
| **SNAA** | **Sanae** | **91.01** | **196** | ⇑*iP* | **P** | **18 36 27.8** | **+0.1** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **BELA** | **Belgrano 2** | **92.41** | **186** | P | **P** | **18 36 34.2** | **+0.2** |
| **VNA1** | **Neumayer--Stat** | **93.05** | **196** | ⇑P | **P** | **18 36 37.9** | **+1.0** |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.06** | **195** | ⇑P | **P** | **18 36 37.5** | **+0.4** |
| | comp=Z,6.3nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **100.19** | **26** | PKKP | | 18 53 27.0 | |
| | comp=Z,0.8nm,0.7s,baz=115,slow=1.8,SNR=6.6 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **114.48** | **24** | PKP | **PKiKP** | **18 42 01.5** | **-1.8** |
| | comp=Z,0.5nm,0.6s,baz=328,slow=2.2,SNR=3.9 | | | | | | | | |
| **TORD** | **Toroidl Ar. Bea** | **116.31** | **281** | PKP | **PKPdf** | **18 42 06.8** | **-1.4** |
| | comp=Z,4.1nm,0.6s,baz=48,slow=2.1,SNR=21 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **118.94** | **311** | PKP | **PKPdf** | **18 42 11.2** | **-1.5** |
| | comp=Z,1.1nm,1.0s,baz=80,slow=0.9,SNR=6.7 | | | | | | | | |
| **MTE** | **Manteigas** | **121.40** | **312** | *e*PKP | **PKPdf** | **18 42 16.8** | **-0.7** |
| **PCBR** | **Castelo Branco** | **121.51** | **312** | *e*PKP | **PKPdf** | **18 42 17.2** | **-0.4** |
| **PBAR** | **Barrancos** | **121.64** | **310** | *e*PKP | **PKPdf** | **18 42 17.2** | **-0.7** |
| **PESTR** | **Estremoz** | **121.87** | **311** | *e*PKP | **PKPdf** | **18 42 17.6** | **-0.7** |
| **NVAR** | **Mina Array Bea** | **122.23** | **50** | | **PKPdf** | **18 42 18.2** | **-1.1** |
| **NVAR** | **Mina Array Bea** | **122.23** | **50** | PKP | **PKPdf** | **18 42 18.4** | **-0.9** |
| | comp=Z,2.0nm,0.7s,baz=248,slow=1.7,SNR=21 | | | | | | | | |
| **DBIC** | **Dimbokro** | **122.27** | **273** | PKP | **PKPdf** | **18 42 18.4** | **-1.4** |
| | comp=Z,4.6nm,0.8s,baz=45,slow=2.5,SNR=3.9 | | | | | | | | |
| **SHPR** | **Sheep Range** | **125.18** | **51** | | **PKPdf** | **18 42 24.4** | **-0.5** |
| **PDAR** | **Pinedale Array** | **126.88** | **42** | PKP | **PKPdf** | **18 42 26.6** | **-1.6** |
| | comp=Z,0.2nm,0.3s,baz=180,slow=1.0,SNR=5.8 | | | | | | | | |
| **LAO** | **LASA Array** | **127.04** | **36** | | **PKPdf** | **18 42 27.3** | **-0.8** |
| **LL02** | **Futaleuf** | **128.05** | **172** | | **PKPdf** | **18 42 29.6** | **-0.5** |
| **RSSD** | **Black Hills** | **129.72** | **38** | | **PKPdf** | **18 42 32.4** | **-1.1** |
| **RSSD** | **Black Hills** | **129.72** | **38** | PKIKP | **PKPdf** | **18 42 32.4** | **-1.1** |
| **PLCA** | **Paso Flores** | **130.64** | **173** | PKP | **PKPdf** | **18 42 35.4** | **+0.2** |
| | comp=Z,2.9nm,0.7s,baz=197,slow=6.4,SNR=12 | | | | | | | | |
| PLCA | | | | SKPbc | **SKPbc** | **18 45 58.0** | **-1.2** |
| | comp=Z,5.9nm,1.2s,baz=193,slow=7.6,SNR=4.0 | | | | | | | | |
| **ANMO** | **Albuquerque** | **132.35** | **50** | | **PKPdf** | **18 42 37.9** | **-0.8** |
| **ANMO** | **Albuquerque** | **132.35** | **50** | PKIKP | **PKPdf** | **18 42 37.9** | **-0.8** |
| **ECSD** | **EROS Data Cent** | **134.26** | **34** | | **PKPdf** | **18 42 40.8** | **-1.0** |
| **BI02** | **San Fabin de** | **134.53** | **171** | | **PKPdf** | **18 42 42.4** | **-0.3** |
| **TXAR** | **Lajitas Array** | **136.64** | **56** | SKPbc | **SKPbc** | **18 46 16.0** | **-3.6** |
| | comp=Z,0.5nm,0.9s,baz=176,slow=2.7,SNR=3.7 | | | | | | | | |
| **MIAR** | **Mount Ida** | **141.79** | **43** | | **PKPdf** | **18 42 54.8** | **-1.1** |
| **MIAR** | **Mount Ida** | **141.79** | **43** | PKIKP | **PKPdf** | **18 42 54.8** | **-1.1** |
| **WVT** | **Waverly** | **144.36** | **36** | | **PKPab** | **18 42 56.5** | **-1.9** |
| **WVT** | **Waverly** | **144.36** | **36** | PKIKP | **PKPab** | **18 42 56.5** | **-1.9** |
| **OXF** | **Oxford** | **144.51** | **39** | | **PKPab** | **18 42 57.3** | **-1.7** |
| **OXF** | **Oxford** | **144.51** | **39** | PKIKP | **PKPab** | **18 42 57.3** | **-1.7** |
| **O54A** | **Avella** | **144.79** | **23** | PKPdf | **PKPab** | **18 42 58.9** | **-0.9** |
| **CPUP** | **Villa Florida** | **145.03** | **189** | PKPbc | **PKPbc** | **18 43 01.1** | **0.0** |
| | comp=Z,78nm,0.8s,baz=175,slow=2.1,SNR=125 | | | | | | | | |
| **SSPA** | **Standing Stone** | **145.30** | **20** | | **PKPbc** | **18 43 00.1** | **-1.5** |
| **LRAL** | **Lakeview Retre** | **146.99** | **39** | | **PKPdf** | **18 43 04.0** | **-0.9** |
| **BDFB** | **Brasilia** | **151.83** | **212** | PKP | **PKPdf** | **18 43 12.7** | **-0.6** |
| | comp=Z,2.7nm,0.7s,baz=126,slow=2.7,SNR=5.7 | | | | | | | | |
| **LPAZ** | **La Paz** | **154.98** | **169** | PKP | **PKPdf** | **18 43 18.9** | **+0.5** |
| | comp=Z,1.9nm,0.8s,baz=128,slow=2.0,SNR=6.1 | | | | | | | | |

**JMA 19 18:31:19.2±0.3, 35°.1N±0°.8×140°.2E±0°.8, h15km±2km, MV1.6/10, SOUTHERN BOSO PENINSULA, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKUC** | **kamogawauchiur** | **0.02** | **11** | P | Pg | 18 31 21.5 | -0.4 |
| JKUC | | | | S | Sg | 18 31 24.2 | +0.5 |
| **KTR** | **Katsuura** | **0.10** | **84** | P | Pg | 18 31 22.3 | -0.2 |
| KTR | | | | S | Sb | 18 31 25.5 | +0.3 |
| **BSO4** | **Boso 4** | **0.19** | **141** | P | Pg | 18 31 23.9 | +0.3 |

*NOU **19** 18:34:16.0, 40°.53S×173°.91E, h121km, MLv3.3/7, Cook Strait, New Zealand*
*WEL **19** 18:34:18.6±0.8, 41°.3±3°.1×17°.4E±1°, h89km±8km, M3.2/16, ML3.6/15, MLv3.2/16, Error ellipse: s-maj=0.0km s-min=0.0km az=113.2, confirmed*

**ISC 19 18:34:15.3±1.5, 40°.55S±0°.03×173°.92E±0°.04, h123km±9km, n84, σ0s97/99, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUWZ** | **D'Urville Isla** | **0.25** | **179** | P | **Pn** | **18 34 32.8** | **+0.2** |
| DUWZ | | | | S | **Sn** | **18 34 44.3** | **-1.3** |
| **TCW** | **Tory Channel** | **0.71** | **158** | P | **Pn** | **18 34 36.1** | **+1.0** |
| TCW | | | | S | **Sn** | **18 34 49.3** | **-0.8** |
| **NNZ** | **Nelson** | **0.78** | **211** | P | **Pn** | **18 34 36.4** | **+0.7** |
| NNZ | | | | S | **Sn** | **18 34 50.3** | **-0.8** |
| **KIW** | **Kapiti Island** | **0.82** | **113** | P | **Pn** | **18 34 36.6** | **+0.6** |
| KIW | | | | S | **Sn** | **18 34 49.9** | **-1.7** |
| **TKNZ** | **Takaka Hill** | **0.87** | **236** | P | **Pn** | **18 34 37.0** | **+0.5** |
| TKNZ | | | | S | **Sn** | **18 34 51.7** | **-0.8** |
| **TUWZ** | **Tuamarina** | **0.88** | **179** | P | **Pn** | **18 34 37.3** | **+0.9** |
| TUWZ | | | | S | **Sn** | **18 34 51.9** | **-0.7** |
| **SNZO** | **South Karori** | **0.97** | **142** | P | **Pn** | **18 34 38.2** | **+0.9** |
| **WEL** | **Wellington** | **0.98** | **139** | P | **Pn** | **18 34 38.5** | **+1.1** |
| WEL | | | | S | **Sn** | **18 34 53.3** | **-0.8** |
| **OGWZ** | **Otaki Gorge** | **0.99** | **106** | P | **Pn** | **18 34 38.4** | **+0.9** |
| OGWZ | | | | S | **Sn** | **18 34 52.4** | **-1.9** |
| **CAW** | **Cannon Point** | **1.03** | **123** | P | **Pn** | **18 34 39.0** | **+1.0** |
| CAW | | | | S | **Sn** | **18 34 55.4** | **+0.3** |
| **QRZ** | **Quartz Range** | **1.09** | **255** | P | **Pn** | **18 34 38.6** | **+0.1** |
| **QRZ** | **Quartz Range** | **1.09** | **255** | P | **Pn** | **18 34 38.7** | **+0.2** |
| QRZ | | | | S | **Sn** | **18 34 54.5** | **-1.6** |
| **BHW** | **Baring Head** | **1.12** | **140** | P | **Pn** | **18 34 39.7** | **+0.9** |
| BHW | | | | S | **Sn** | **18 34 55.7** | **-0.9** |
| **OHWZ** | **Ohakea** | **1.12** | **73** | P | **Pn** | **18 34 39.9** | **+1.1** |
| OHWZ | | | | S | **Sn** | **18 34 57.0** | **+0.4** |
| **NMEZ** | **Namu Road** | **1.14** | **359** | P | **Pn** | **18 34 39.9** | **+0.8** |
| NMEZ | | | | S | **Sn** | **18 34 56.2** | **-0.8** |
| **WAZ** | **Wanganui** | **1.14** | **46** | P | **Pn** | **18 34 40.4** | **+1.3** |
| WAZ | | | | S | **Sn** | **18 34 57.3** | **+0.2** |
| **LREZ** | **Lake Rotokare** | **1.15** | **19** | P | **Pn** | **18 34 40.4** | **+1.2** |
| **BSWZ** | **Blackbirch Sta** | **1.16** | **181** | P | **Pn** | **18 34 40.7** | **+1.4** |
| BSWZ | | | | S | **Sn** | **18 34 57.4** | **-0.1** |
| **CMWZ** | **Cape Campbell** | **1.22** | **169** | P | **Pn** | **18 34 41.8** | **+2.0** |
| **MRNZ** | **Matariki Terra** | **1.22** | **226** | P | **Pn** | **18 34 40.9** | **+1.1** |
| **PREZ** | **Palmer Road** | **1.22** | **9** | P | **Pn** | **18 34 40.9** | **+0.9** |
| **KHEZ** | **Kahui Hut** | **1.26** | **4** | P | **Pn** | **18 34 41.1** | **+0.7** |
| **KHEZ** | **Kahui Hut** | **1.26** | **4** | P | **Pn** | **18 34 41.2** | **+0.7** |
| **HOWZ** | **Holdsworth Sta** | **1.26** | **106** | P | **Pn** | **18 34 41.1** | **+0.8** |
| **MRZ** | **Mangatainoka R** | **1.27** | **95** | P | **Pn** | **18 34 41.1** | **+0.7** |
| **NBEZ** | **Newall Road No** | **1.28** | **358** | P | **Pn** | **18 34 41.4** | **+0.8** |
| **NEZ** | **North Egmont** | **1.29** | **6** | P | **Pn** | **18 34 41.3** | **+0.6** |
| **MSWZ** | **Moikau Station** | **1.33** | **131** | P | **Pn** | **18 34 42.1** | **+1.0** |
| **MTW** | **Mount Morrison** | **1.35** | **117** | P | **Pn** | **18 34 42.2** | **+1.0** |
| **PKE** | **Pukeiti** | **1.36** | **2** | P | **Pn** | **18 34 42.3** | **+0.8** |
| **PAWZ** | **Paruwai Farm** | **1.41** | **126** | P | **Pn** | **18 34 43.1** | **+1.1** |
| **POWZ** | **Post Office Ro** | **1.42** | **84** | P | **Pn** | **18 34 42.7** | **+0.6** |
| **THZ** | **Tophouse** | **1.43** | **212** | P | **Pn** | **18 34 43.3** | **+1.1** |
| **PLWZ** | **Palliser** | **1.44** | **136** | P | **Pn** | **18 34 43.3** | **+1.1** |
| **TIWZ** | **Tintock** | **1.52** | **99** | P | **Pn** | **18 34 44.0** | **+0.8** |
| **PRWZ** | **Pori Road** | **1.57** | **91** | P | **Pn** | **18 34 44.7** | **+1.0** |
| **VRZ** | **Vera Road** | **1.57** | **25** | P | **Pn** | **18 34 44.8** | **+1.0** |
| **TRWZ** | **Traveller** | **1.59** | **123** | P | **Pn** | **18 34 45.0** | **+1.0** |
| **TMWZ** | **Te Maipa** | **1.60** | **111** | P | **Pn** | **18 34 45.2** | **+1.1** |
| **DVHZ** | **Dannevirke** | **1.74** | **82** | P | **Pn** | **18 34 46.1** | **+0.3** |
| **CPWZ** | **Castlepoint** | **1.77** | **102** | P | **Pn** | **18 34 47.5** | **+1.4** |
| **BFZ** | **Birch Farm** | **1.78** | **95** | P | **Pn** | **18 34 46.8** | **+0.6** |
| **BFZ** | **Birch Farm** | **1.78** | **95** | P | **Pn** | **18 34 46.8** | **+0.6** |
| **WNVZ** | **Wahianoa** | **1.78** | **47** | P | **Pn** | **18 34 47.2** | **+0.8** |
| **WHVZ** | **Whangaehu Hut** | **1.81** | **46** | P | **Pn** | **18 34 48.0** | **+1.2** |
| **MOVZ** | **Moawhango** | **1.82** | **52** | P | **Pn** | **18 34 47.3** | **+0.5** |
| **COVZ** | **Chateau Observ** | **1.84** | **43** | P | **Pn** | **18 34 47.9** | **+0.8** |
| **PNHZ** | **Pukenui** | **1.86** | **71** | P | **Pn** | **18 34 47.5** | **+0.2** |
| **KHZ** | **Kahutara** | **1.88** | **189** | P | **Pn** | **18 34 48.8** | **+1.3** |
| **KHZ** | **Kahutara** | **1.88** | **189** | P | **Pn** | **18 34 49.0** | **+1.5** |
| **SNVZ** | **South Ngauruho** | **1.90** | **45** | P | **Pn** | **18 34 49.4** | **+1.5** |
| **WTVZ** | **West Tongariro** | **1.93** | **42** | P | **Pn** | **18 34 49.7** | **+1.5** |
| **NNVZ** | **North Ngauruho** | **1.93** | **43** | P | **Pn** | **18 34 49.9** | **+1.7** |
| **OTVZ** | **Oturere** | **1.93** | **45** | P | **Pn** | **18 34 49.0** | **+0.7** |
| **ANWZ** | **Angora Road** | **1.95** | **88** | P | **Pn** | **18 34 49.0** | **+0.7** |
| **KRVZ** | **Karewarewa** | **1.97** | **43** | P | **Pn** | **18 34 49.4** | **+0.6** |
| **ETVZ** | **East Tongariro** | **1.98** | **45** | P | **Pn** | **18 34 49.8** | **+1.0** |
| **NTVZ** | **North Tongarir** | **1.99** | **44** | P | **Pn** | **18 34 50.5** | **+1.6** |
| **TMVZ** | **Te Maari** | **1.99** | **44** | P | **Pn** | **18 34 50.2** | **+1.2** |
| **DSZ** | **Denniston Nort** | **1.99** | **233** | P | **Pn** | **18 34 49.9** | **+1.1** |
| **WPHZ** | **Waipukurau** | **1.99** | **77** | P | **Pn** | **18 34 49.4** | **+0.5** |
| **KRHZ** | **Kereru** | **2.09** | **65** | P | **Pn** | **18 34 50.2** | **+0.1** |
| **PRHZ** | **Porangahau** | **2.10** | **83** | P | **Pn** | **

0.7nm,0.5s
**TORD Torodi Ar. Bea 116.29 281** PKP **PKPdf** 18 58 00.6 -1.8
0.3nm,0.5s,baz=33,slow=2.0,SNR=2.6
**CPUP Villa Florida 145.08 189** PKPbc **PKPab** 18 58 55.8 +0.3
4.9nm,0.7s,baz=148,slow=2.9,SNR=8.7

**IDC 19 18:40:34.0±52.0, 16.37S×173.14W, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=995.4km s-min=183.0km az=79.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **43.78** | **241** | P | P | 18 48 41.6 | -0.1 |
| | 1.8nm,0.8s,baz=82,slow=7.1,SNR=3.6 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.87** | **258** | P | P | 18 49 29.2 | -0.3 |
| | 1.4nm,0.6s,baz=95,slow=7.0,SNR=16 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **50.06** | **253** | P | P | 18 49 31.0 | +0.1 |
| | 3.0nm,0.7s,baz=86,slow=8.3,SNR=22 | | | | | | |
| | 3.0nm,0.7s | | | | | | |

*NEIC* ***19*** *18:43:54.7±2.4, 17.94S±0.10×177.98W±0.10, h548km±6km, mb4.8/183, Error ellipse: s-maj=14.5km s-min=13.4km az=148.0*
*NOU* ***19*** *18:43:54.7, 17.96S×178.03W, h549km, ML5.1/85, Fiji Islands Region*
*BJI* ***19*** *18:43:54.2±0.0, 17.73S×177.31W, h584km, mb4.7/39, mB4.9/11*
*MOS* ***19*** *18:43:54.3±1.3, 17.83S×178.08W, h549km, mb4.7/12, Error ellipse: s-maj=11.3km s-min=9.6km az=15.0*
*IDC* ***19*** *18:43:56.0±0.4, 17.94S×178.09W, h570km±3km, mb4.3/24, mbtmp5.2/27, Error ellipse: s-maj=9.2km s-min=7.8km az=159.0*

**ISC 19 18:43:55.4±0.3, 18.00S±0.04×177.99W±0.04, h569km±3km, h570km: pP-P, n975, c0 s95/956, mb4.8/179, 94C-73D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.78** | **273** | | **P** | **18 45 19.5** | **+2.4** |
| **MSVF** | **Nonsavu** | **3.78** | **273** | *c iP* | **P** | **18 45 19.7** | **+2.5** |
| **AFI** | **Afiamalu** | **7.23** | **57** | | **P** | **18 45 44.6** | **-1.8** |
| **AFI** | **Afiamalu** | **7.23** | **57** | P | **P** | **18 45 44.6** | **-1.8** |
| **NIUE** | **Niue** | **7.72** | **99** | P | **P** | **18 45 51.5** | **+0.5** |
| **NIUE** | **Niue** | **7.72** | **99** | P | **P** | **18 45 51.7** | **+0.7** |
| **FUNA** | **Funafuti** | **9.81** | **343** | P | **P** | **18 46 10.3** | **-1.5** |
| **FUNA** | **Funafuti** | **9.81** | **343** | P | **P** | **18 46 10.2** | **-1.6** |
| **RAO** | **Raoul Island** | **11.20** | **180** | P | **P** | **18 46 25.3** | **-0.3** |
| | 173nm,0.3s,baz=267,slow=22,SNR=3.2 | | | | | | |
| RAO | | | | S | **S** | **18 48 27.3** | **-1.9** |
| | 250nm,0.5s,baz=278,slow=22,SNR=3.8 | | | | | | |
| **GLKZ** | **Green Lake** | **11.21** | **180** | P | **P** | **18 46 24.2** | **-1.5** |
| GLKZ | | | | S | **S** | **18 48 24.7** | **-4.7** |
| **RTV** | **Rentapao** | **12.94** | **269** | P | **P** | **18 46 43.5** | **-0.2** |
| **DVP** | **Devils Point** | **13.17** | **269** | P | **P** | **18 46 45.8** | **-0.2** |
| **MARNC** | **Mare, Loyalty** | **13.61** | **253** | P | **P** | **18 46 49.2** | **-1.4** |
| **LIFNC** | **LIFOU** | **14.21** | **256** | P | **P** | **18 46 54.8** | **-1.9** |
| **LIFNC** | **LIFOU** | **14.21** | **256** | | **P** | **18 46 54.9** | **-1.8** |
| **PINNC** | **Pines Island,** | **14.41** | **249** | P | **P** | **18 46 58.1** | **-0.6** |
| **PINNC** | **Pines Island,** | **14.41** | **249** | P | **P** | **18 46 58.0** | **-0.6** |
| **YATNC** | **Mamie plateau,** | **14.77** | **252** | P | **P** | **18 47 00.7** | **-1.5** |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | **18 47 05.6** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | **18 47 05.7** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | **18 47 05.8** | **-0.5** |
| | 128nm,0.6s,baz=114,slow=22,SNR=74 | | | | | | |
| DZM | | | | S | **S** | **18 49 44.4** | **+1.4** |
| | 34nm,1.0s,baz=131,slow=19,SNR=3.0 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.31** | **252** | P | **P** | **18 47 06.8** | **-0.8** |
| **KOUNC** | **Koumac, New Ca** | **16.93** | **259** | P | **P** | **18 47 23.4** | **+0.7** |
| **KOUNC** | **Koumac, New Ca** | **16.93** | **259** | P | **P** | **18 47 23.9** | **+1.3** |
| **RAR** | **Rarotonga** | **17.46** | **104** | P | **P** | **18 47 28.6** | **+1.1** |
| **RAR** | **Rarotonga** | **17.46** | **104** | P | **P** | **18 47 27.9** | **+0.5** |
| | 40nm,0.6s,baz=257,slow=6.4,SNR=19 | | | | | | |
| **KUZ** | **Kuaotunu** | **19.48** | **195** | P | **P** | **18 47 47.6** | **+1.9** |
| **MXZ** | **Matakaoa Point** | **19.76** | **189** | P | **P** | **18 47 48.4** | **+0.2** |
| **MXZ** | **Matakaoa Point** | **19.76** | **189** | | **P** | **18 47 46.9** | **-1.3** |
| **MXZ** | **Matakaoa Point** | **19.76** | **189** | P | **P** | **18 47 47.3** | **-0.8** |
| MXZ | | | | S | **S** | **18 51 00.5** | **+3.7** |
| **WIZ** | **White Island** | **19.91** | **191** | P | **P** | **18 47 50.4** | **+0.9** |
| **WMGZ** | **Waiomatatini S** | **19.99** | **188** | P | **P** | **18 47 50.2** | **-0.2** |
| WMGZ | | | | S | **S** | **18 50 59.6** | **-1.0** |
| **HAZ** | **Te Kaha** | **20.03** | **190** | P | **P** | **18 47 49.5** | **-1.1** |
| **PKGZ** | **Pakihiroa** | **20.09** | **189** | P | **P** | **18 47 50.8** | **-0.4** |
| **RUGZ** | **Raukumara Rang** | **20.25** | **190** | P | **P** | **18 47 51.3** | **-1.5** |
| **PUZ** | **Puketiti** | **20.26** | **189** | P | **P** | **18 47 52.4** | **-0.4** |
| PUZ | | | | S | **S** | **18 51 03.9** | **-1.0** |
| **WHRZ** | **Whale Island** | **20.27** | **192** | P | **P** | **18 47 53.7** | **+0.9** |
| **TGRZ** | **Tauranga** | **20.29** | **193** | P | **P** | **18 47 55.7** | **+2.6** |
| **OPRZ** | **Ohinepanea** | **20.34** | **193** | P | **P** | **18 47 54.1** | **+0.7** |
| **TWGZ** | **Tauwhareparae** | **20.41** | **189** | P | **P** | **18 47 54.3** | **+0.1** |
| TWGZ | | | | S | **S** | **18 51 07.4** | **+0.1** |
| **MARZ** | **Manawahe** | **20.45** | **192** | P | **P** | **18 47 55.6** | **+1.1** |
| **TOZ** | **Tahuroa Road** | **20.47** | **195** | | **P** | **18 47 56.3** | **+1.7** |
| **EDRZ** | **Edgecumbe** | **20.55** | **192** | P | **P** | **18 47 56.6** | **+1.1** |
| **MWZ** | **Matawai** | **20.63** | **190** | P | **P** | **18 47 54.8** | **-1.4** |
| MWZ | | | | S | **S** | **18 51 06.8** | **-4.0** |
| **URZ** | **Urewera** | **20.63** | **191** | P | **P** | **18 47 53.9** | **-2.2** |
| **URZ** | **Urewera** | **20.63** | **191** | P | **P** | **18 47 54.1** | **-2.0** |
| | 236nm,0.4s,baz=64,slow=1.6,SNR=159 | | | | | | |
| **CNGZ** | **Carnagh Statio** | **20.68** | **188** | P | **P** | **18 47 56.8** | **+0.3** |
| **TKGZ** | **Te Karaka** | **20.68** | **189** | P | **P** | **18 47 56.8** | **+0.2** |
| **TARZ** | **Mount Tarawera** | **20.73** | **192** | P | **P** | **18 47 57.6** | **+0.6** |
| **RIGZ** | **Rimuhau** | **20.96** | **189** | P | **P** | **18 47 58.2** | **-0.9** |
| RIGZ | | | | S | **S** | **18 51 16.6** | **+0.6** |
| **RTZ** | **Ruatahuna** | **21.00** | **191** | P | **P** | **18 47 57.6** | **-1.9** |
| **HIZ** | **Hauiti** | **21.37** | **196** | P | **P** | **18 48 04.1** | **+1.3** |
| **HIZ** | **Hauiti** | **21.37** | **196** | P | **P** | **18 48 03.3** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **21.63** | **192** | P | **P** | **18 48 03.4** | **-1.7** |
| **BKZ** | **Black Stump Fm** | **21.63** | **192** | P | **P** | **18 48 03.3** | **-1.8** |
| **FWVZ** | **Far West T-bar** | **21.91** | **194** | P | **P** | **18 48 07.7** | **-0.2** |
| **OHWZ** | **Ohakea** | **22.87** | **193** | P | **P** | **18 48 16.1** | **0.0** |
| **ANWZ** | **Angora Road** | **22.89** | **191** | P | **P** | **18 48 15.3** | **-0.9** |
| **POWZ** | **Post Office Ro** | **22.95** | **192** | P | **P** | **18 48 14.6** | **-2.3** |
| **HNR** | **Honiara** | **23.05** | **289** | P | **P** | **18 48 17.3** | **-0.7** |
| **HNR** | **Honiara** | **23.05** | **289** | P | **P** | **18 48 17.9** | **-0.1** |
| **HNR** | **Honiara** | **23.05** | **289** | P | **P** | **18 48 17.9** | **-0.1** |
| **PRWZ** | **Pori Road** | **23.07** | **192** | P | **P** | **18 48 17.6** | **-0.3** |
| **BFZ** | **Birch Farm** | **23.14** | **191** | P | **P** | **18 48 17.5** | **-1.0** |
| **BFZ** | **Birch Farm** | **23.14** | **191** | P | **P** | **18 48 17.1** | **-1.4** |
| **MRZ** | **Mangatainoka R** | **23.25** | **192** | P | **P** | **18 48 17.6** | **-1.9** |
| **TIWZ** | **Tintock** | **23.30** | **192** | P | **P** | **18 48 18.4** | **-1.6** |
| **CPWZ** | **Castlepoint** | **23.37** | **191** | P | **P** | **18 48 19.9** | **-0.6** |
| **OGWZ** | **Otaki Gorge** | **23.49** | **193** | P | **P** | **18 48 19.9** | **-1.7** |
| **HOWZ** | **Holdsworth Sta** | **23.49** | **192** | P | **P** | **18 48 20.7** | **-1.0** |
| **TMWZ** | **Te Maipa** | **23.62** | **192** | P | **P** | **18 48 22.2** | **-0.6** |
| **DUWZ** | **D'Urville Isla** | **23.77** | **195** | P | **P** | **18 48 23.7** | **-0.4** |
| **CAW** | **Cannon Point** | **23.79** | **193** | P | **P** | **18 48 22.2** | **-2.1** |
| **TRWZ** | **Traveller** | **23.94** | **192** | P | **P** | **18 48 24.5** | **-1.1** |
| **PAWZ** | **Paruwai Farm** | **23.98** | **192** | P | **P** | **18 48 24.5** | **-1.5** |
| **MSWZ** | **Moikau Station** | **24.05** | **193** | P | **P** | **18 48 26.0** | **-0.5** |
| **SNZO** | **South Karori** | **24.06** | **194** | P | **P** | **18 48 26.0** | **-0.7** |
| **SNZO** | **South Karori** | **24.06** | **194** | P | **P** | **18 48 25.9** | **-0.8** |
| **BHW** | **Baring Head** | **24.12** | **193** | P | **P** | **18 48 27.6** | **+0.4** |
| **QRZ** | **Quartz Range** | **24.17** | **198** | P | **P** | **18 48 28.4** | **+0.8** |
| **PLWZ** | **Palliser** | **24.19** | **192** | P | **P** | **18 48 27.6** | **-0.3** |
| **TUWZ** | **Tuamarina** | **24.35** | **195** | P | **P** | **18 48 27.6** | **-1.7** |
| **BWRS** | **Waikakaho Road** | **24.37** | **195** | P | **P** | **18 48 28.3** | **-1.1** |
| **CMWZ** | **Cape Campbell** | **24.59** | **194** | P | **P** | **18 48 31.4** | **0.0** |
| **BSWZ** | **Blackbirch Sta** | **24.64** | **195** | P | **P** | **18 48 30.6** | **-1.2** |
| **CTZ** | **Chatham Island** | **25.68** | **178** | P | **P** | **18 48 41.8** | **+0.9** |
| **AMCZ** | **Amberley** | **26.32** | **196** | P | **P** | **18 48 46.0** | **-0.6** |
| **PPT** | **Papeete** | **27.05** | **94** | P | **P** | **18 48 53.6** | **+0.2** |
| | 69nm,0.6s,baz=352,slow=1.2,SNR=27 | | | | | | |
| | 69nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.06** | **94** | P | **P** | **18 48 54.3** | **+0.8** |
| **PPTF** | **Pamatai, Papee** | **27.06** | **94** | P | **P** | **18 48 53.8** | **+0.3** |
| **RPZ** | **Rata Peaks** | **27.25** | **198** | P | **P** | **18 48 55.3** | **+0.5** |
| **GC1S** | **Gold Coast 1 S** | **28.04** | **244** | P | **P** | **18 49 03.4** | **+1.6** |
| **AUWSH** | **Wavell State H** | **28.26** | **245** | P | **P** | **18 49 05.0** | **+1.2** |
| **JCZ** | **Jackson Bay** | **28.28** | **200** | P | **P** | **18 49 04.3** | **+0.5** |
| **ODZ** | **Otahua Downs** | **28.59** | **197** | P | **P** | **18 49 06.0** | **-0.4** |
| **GD1S** | **Gladstone Soft** | **29.35** | **253** | P | **P** | **18 49 14.2** | **+0.9** |
| **EIDS** | **Eidsvold** | **29.61** | **250** | P | **P** | **18 49 15.5** | **-0.1** |
| **EIDS** | **Eidsvold** | **29.61** | **250** | P | **P** | **18 49 15.8** | **+0.2** |
| **EIDS** | **Eidsvold** | **29.61** | **250** | P | **P** | **18 49 15.4** | **-0.2** |
| | comp=Z,142nm,0.9s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.64** | **200** | P | **P** | **18 49 16.2** | **+0.7** |
| **RK1H** | **Rockhampton Ha** | **29.93** | **254** | P | **P** | **18 49 18.4** | **+0.1** |
| **DCZ** | **Deep Cove** | **30.05** | **201** | P | **P** | **18 49 19.6** | **+0.6** |
| **ARMA** | **Armidale** | **30.24** | **240** | P | **P** | **18 49 22.4** | **+1.4** |
| **ARMA** | **Armidale** | **30.24** | **240** | P | **P** | **18 49 22.5** | **+1.4** |
| ARMA | | | | IAmb | IAmb | 18 49 23.4 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **ARMA** | **Armidale** | **30.24** | **240** | P | **P** | **18 49 21.8** | **+0.8** |
| | comp=Z,79nm,0.8s | | | | | | |
| **SYZ** | **Scrubby Hill** | **30.38** | **198** | P | **P** | **18 49 22.6** | **+0.8** |
| **PYZ** | **Puysegur Point** | **30.83** | **201** | P | **P** | **18 49 26.1** | **+0.4** |
| **TH1H** | **Townsville Har** | **33.36** | **262** | P | **P** | **18 49 47.3** | **-0.3** |
| **CNB** | **Canberra Magne** | **33.69** | **233** | P | **P** | **18 49 51.9** | **+1.7** |
| **CNB** | **Canberra Magne** | **33.69** | **233** | P | **P** | **18 49 51.6** | **+1.4** |
| | comp=Z,102nm,1.7s | | | | | | |
| **CTA** | **Charters Tower** | **33.83** | **261** | P | **P** | **18 49 51.4** | **-0.1** |
| **CTAO** | **Charters Tower** | **33.83** | **261** | P | **P** | **18 49 51.2** | **-0.3** |
| **CTAO** | **Charters Tower** | **33.83** | **261** | P | **P** | **18 49 51.5** | **+0.1** |
| **CTAO** | **Charters Tower** | **33.83** | **261** | P | **P** | **18 49 51.6** | **+0.1** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,148nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **33.83** | **261** | ⇓P | **P** | **18 49 51.8** | **+0.3** |
| CTAO | | | | pP | **pP** | **18 51 26.2** | **+0.7** |
| CTAO | | | | PcP | **PcP** | **18 52 15.0** | **+1.2** |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **18 49 54.1** | **+1.6** |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **18 49 53.9** | **+1.4** |
| CAN | | | | IAmb | IAmb | 18 49 56.4 | |
| | comp=Z,54nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **18 49 53.3** | **+0.8** |
| | comp=Z,71nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **18 49 53.9** | **+1.4** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,54nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **33.97** | **233** | P | **P** | **18 49 53.8** | **+1.4** |
| **PATS** | **Pohnpei** | **34.01** | **314** | P | **P** | **18 49 52.9** | **-0.1** |
| **PATS** | **Pohnpei** | **34.01** | **314** | P | **P** | **18 49 53.0** | **0.0** |
| **PATS** | **Pohnpei** | **34.01** | **314** | P | **P** | **18 49 52.5** | **-0.5** |
| | comp=Z,122nm,2.4s | | | | | | |
| **KAVG** | **Kavieng** | **34.22** | **293** | P | **P** | **18 49 54.2** | **-0.6** |
| **PMG** | **Port Moresby** | **34.87** | **279** | P | **P** | **18 50 01.3** | **+1.0** |
| **PMG** | **Port Moresby** | **34.87** | **279** | P | **P** | **18 50 01.2** | **+1.0** |
| **PMG** | **Port Moresby** | **34.87** | **279** | P | **P** | **18 50 01.2** | **+1.0** |
| **PMG** | **Port Moresby** | **34.87** | **279** | P | **P** | **18 50 01.2** | **+1.0** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,661nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **34.87** | **279** | ⇓P | **P** | **18 50 01.4** | **+1.0** |
| PMG | | | | pP | **pwP** | **18 51 37.5** | **-0.9** |
| **CMSA** | **Cobar Meteorol** | **35.45** | **241** | P | **P** | **18 50 05.5** | **+0.6** |
| **CMSA** | **Cobar Meteorol** | **35.45** | **241** | P | **P** | **18 50 05.5** | **+0.6** |
| | comp=Z,134nm,0.8s | | | | | | |
| **MTSU** | **Mount Surprise** | **35.80** | **264** | P | **P** | **18 50 07.8** | **-0.1** |
| **QLP** | **Quilpie** | **35.88** | **249** | P | **P** | **18 50 08.9** | **+0.5** |
| **QLP** | **Quilpie** | **35.88** | **249** | P | **P** | **18 50 08.5** | **0.0** |
| | comp=Z,508nm,0.7s | | | | | | |
| **GLAD** | **Gladstone** | **37.06** | **225** | P | **P** | **18 50 18.9** | **+0.9** |
| **TOO** | **Toolangi** | **37.42** | **231** | P | **P** | **18 50 22.5** | **+1.5** |
| **TOO** | **Toolangi** | **37.42** | **231** | P | **P** | **18 50 22.5** | **+1.5** |
| **TOO** | **Toolangi** | **37.42** | **231** | P | **P** | **18 50 22.4** | **+1.4** |
| **TOO** | **Toolangi** | **37.42** | **231** | P | **P** | **18 50 22.5** | **+1.5** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,63nm,0.6s | | | | | | |
| **COEN** | **Coen** | **37.51** | **270** | P | **P** | **18 50 22.4** | **+0.4** |
| **COEN** | **Coen** | **37.51** | **270** | P | **P** | **18 50 23.0** | **+1.1** |
| **COEN** | **Coen** | **37.51** | **270** | P | **P** | **18 50 22.7** | **+0.7** |
| | comp=Z,659nm,0.8s | | | | | | |
| **MANU** | **Manus Island** | **37.51** | **291** | P | **P** | **18 50 22.9** | **+0.9** |
| **CORO** | **Coronation Par** | **37.86** | **224** | P | **P** | **18 50 26.3** | **+1.9** |
| **TAU** | **Tasmania Unive** | **38.44** | **222** | P | **P** | **18 50 30.1** | **+1.0** |
| TAU | | | | PcP | **PcP** | **18 52 29.1** | **+1.7** |
| **BRAT** | **Ballarat** | **38.58** | **232** | P | **P** | **18 50 32.3** | **+2.0** |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | **P** | **18 50 34.4** | **+1.1** |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | **P** | **18 50 34.4** | **+1.1** |
| | comp=Z,18nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **38.94** | **241** | P | **P** | **18 50 33.8** | **+0.4** |
| | comp=Z,40nm,0.6s,baz=88,slow=10.0,SNR=128 | | | | | | |
| STKA | | | | PcP | **PcP** | **18 52 29.7** | **+0.4** |
| | comp=Z,4.9nm,0.5s,baz=38,slow=6.8,SNR=3.2 | | | | | | |
| STKA | | | | S | **S** | **18 55 51.4** | **-0.4** |
| | comp=Z,21nm,1.2s,baz=0.0,slow=20,SNR=6.8 | | | | | | |
| | comp=Z,40nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **38.94** | **241** | *d iP* | **P** | **18 50 34.8** | **+1.5** |
| **INKA** | **Innaminka** | **39.08** | **248** | P | **P** | **18 50 35.6** | **+1.1** |
| **ARPS** | **Mount Arapiles** | **39.92** | **234** | P | **P** | **18 50 42.3** | **+1.2** |
| **ARPS** | **Mount Arapiles** | **39.92** | **234** | P | **P** | **18 50 41.8** | **+0.6** |
| | comp=Z,38nm,0.7s | | | | | | |
| **WAKE** | **Wake Island** | **40.01** | **337** | P | **P** | **18 50 41.1** | **-0.8** |
| **WAKE** | **Wake Island** | **40.01** | **337** | P | **P** | **18 50 41.1** | **-0.8** |
| **QIS** | **Mount Isa** | **40.03** | **259** | P | **P** | **18 50 41.6** | **-0.7** |
| **QIS** | **Mount Isa** | **40.03** | **259** | P | **P** | **18 50 41.7** | **-0.7** |
| | comp=Z,33nm,0.5s | | | | | | |
| **HTT** | **Hallett** | **41.44** | **240** | P | **P** | **18 50 53.9** | **+0.5** |
| **HTT** | **Hallett** | **41.44** | **240** | P | **P** | **18 50 53.9** | **+0.5** |
| | comp=Z,53nm,1.1s | | | | | | |
| **MMPI** | **Merauke** | **41.53** | **278** | P | **P** | **18 50 54.3** | **+0.1** |
| **LCRK** | **Leigh Creek** | **41.58** | **244** | P | **P** | **18 50 54.8** | **+0.4** |
| **TABU** | **Tabubil** | **41.80** | **283** | P | **P** | **18 50 57.5** | **+1.1** |
| **WHYH** | **Whyalla** | **42.48** | **241** | P | **P** | **18 51 02.4** | **+0.9** |
| **JAY** | **Jayapura** | **43.32** | **286** | P | **P** | **18 51 08.3** | **0.0** |
| | comp=Z,349nm,0.9s,comp=Z,3μm | | | | | | |
| **OOD** | **Oodnadatta** | **43.56** | **248** | P | **P** | **18 51 10.9** | **+1.0** |
| **KEKH** | **Kekaha** | **43.58** | **25** | P | **P** | **18 51 09.8** | **-0.2** |
| **BBOO** | **Buckleboo** | **43.71** | **241** | P | **P** | **18 51 11.8** | **+0.8** |
| **BBOO** | **Buckleboo** | **43.71** | **241** | P | **P** | **18 51 11.8** | **+0.8** |
| **BBOO** | **Buckleboo** | **43.71** | **241** | P | **P** | **18 51 11.5** | **+0.5** |
| | comp=Z,74nm,0.7s | | | | | | |
| **DHH** | **Diamond Head** | **43.75** | **28** | P | **P** | **18 51 12.0** | **+0.6** |
| **DHH** | **Diamond Head** | **43.75** | **28** | P | **P** | **18 51 12.0** | **+0.6** |
| **GENI** | **Genyem** | **43.78** | **286** | P | **P** | **18 51 12.7** | **+0.9** |
| **GENI** | **Genyem** | **43.78** | **286** | P | **P** | **18 51 12.0** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.82** | **260** | P | **P** | **18 51 19.3** | **-0.4** |
| **WB0** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **18 51 20.6** | **-0.3** |
| **WB2** | **Warramunga Arr** | **45.00** | **260** | P | **P** | **18 51 20.7** | **-0.4** |
| **WRAB** | **Tennant Creek** | **45.00** | **260** | P | **P** | **18 51 20.7** | **-0.4** |
| **WRAB** | **Tennant Creek** | **45.00** | **260** | P | **P** | **18 51 20.7** | **-0.4** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,263nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.01** | **260** | P | **P** | **18 51 21.0** | **-0.2** |
| WRA | | | | IAmb | IAmb | 18 51 21.8 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.01** | **260** | P | **P** | **18 51 20.7** | **-0.5** |
| | comp=Z,114nm,0.7s,baz=95,slow=7.1,SNR=501 | | | | | | |
| WRA | | | | ScP | **ScP** | **18 55 51.0** | **+2.3** |
| | comp=Z,4.2nm,1.0s,baz=96,slow=3.7,SNR=4.6 | | | | | | |
| WRA | | | | S | **S** | **18 57 17.0** | **-2.2** |
| | comp=Z,11nm,0.8s,baz=96,slow=13,SNR=7.3 | | | | | | |
| | comp=Z,114nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.01** | **260** | P | **P** | **18 51 21.0** | **-0.2** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | |
| **AS01** | **Alice Springs** | **45.11** | **254** | P | **P** | **18 51 22.0** | **0.0** |
| **MULG** | **Mulgathing** | **45.13** | **245** | P | **P** | **18 51 22.2** | **+0.2** |
| **AS31** | **Alice Springs** | **45.15** | **254** | P | **P** | **18 51 22.5** | **+0.2** |
| **AS31** | **Alice Springs** | **45.15** | **254** | P | **P** | **18 51 22.3** | **0.0** |
| | comp=Z,178nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **45.15** | **254** | P | **P** | **18 51 22.6** | **+0.3** |
| ASAR | | | | PcP | **PcP** | **18 52 51.1** | **+0.6** |
| **ASAR** | **Alice Springs** | **45.15** | **254** | P | **P** | **18 51 21.9** | **-0.4** |
| | comp=Z,373nm,0.7s,baz=86,slow=8.8,SNR=1804 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 52 50.9** | **+0.4** |
| | comp=Z,12nm,0.4s,baz=105,slow=3.7,SNR=5.8 | | | | | | |
| ASAR | | | | ScP | **ScP** | **18 55 50.5** | **+1.2** |
| | comp=Z,2.6nm,0.6s,baz=107,slow=5.2,SNR=2.6 | | | | | | |
| ASAR | | | | S | **S** | **18 57 19.4** | **-1.8** |
| | comp=Z,54nm,0.9s,baz=90,slow=15,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **45.15** | **254** | P | **P** | **18 51 22.6** | **+0.3** |
| ASAR | | | | | | 18 52 51.1 | |
| **KDU** | **Kakadu** | **47.95** | **269** | P | **P** | **18 51 43.2** | **-0.3** |
| **KDU** | **Kakadu** | **47.95** | **269** | P | **P** | **18 51 43.0** | **-0.4** |
| | comp=Z,231nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **48.25** | **308** | P | **P** | **18 51 45.7** | **+0.2** |
| **GUMO** | **Guam** | **48.25** | **308** | P | **P** | **18 51 45.7** | **+0.2** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,197nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **48.25** | **308** | P | **P** | **18 51 45.8** | **+0.2** |
| **MTN** | **Manton Dam** | **49.20** | **268** | P | **P** | **18 51 52.0** | **-0.7** |
| **MTN** | **Manton Dam** | **49.20** | **268** | P | **P** | **18 51 52.3** | **-0.4** |
| **MTN** | **Manton Dam** | **49.20** | **268** | P | **P** | **18 51 51.6** | **-1.1** |
| | comp=Z,204nm,0.8s | | | | | | |
| **DRS** | **Darwin Rock St** | **49.51** | **269** | P | **P** | **18 51 54.6** | **-0.4** |
| **WRKA** | **Warakurna** | **50.20** | **252** | P | **P** | **18 51 59.9** | **-0.1** |
| **WRKA** | **Warakurna** | **50.20** | **252** | P | **P** | **18 51 59.9** | **-0.1** |
| | comp=Z,268nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **50.33** | **245** | P | **P** | **18 52 00.9** | **+0.2** |
| **FORT** | **Forrest** | **50.33** | **245** | P | **P** | **18 52 00.9** | **+0.2** |
| FORT | | | | IAmb | IAmb | 18 52 01.4 | |
| | comp=Z,44nm,0.6s | | | | | | |
| FORT | | | | PcP | **PcP** | **18 53 09.8** | **+0.6** |
| **FORT** | **Forrest** | **50.33** | **245** | P | **P** | **18 52 00.4** | **-0.4** |
| | comp=Z,87nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.88** | **264** | P | **P** | **18 52 04.8** | **-0.2** |
| **KNRA** | **Kununurra** | **50.88** | **264** | P | **P** | **18 52 04.8** | **-0.2** |
| | comp=Z,161nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **50.99** | **281** | P | **P** | **18 52 05.7** | **-0.1** |
| **FAKI** | **Fak Fak** | **50.99** | **281** | P | **P** | **18 52 05.5** | **-0.3** |
| | comp=Z,81nm,1.4s | | | | | | |
| **BNDI** | **Bandamaira** | **52.65** | **278** | P | **P** | **18 52 17.6** | **-0.1** |
| | comp=Z,336nm,1.4s | | | | | | |
| **SWI** | **Sorong** | **52.65** | **283** | P | **P** | **18 52 18.1** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **53.41** | **261** | P | **P** | **18 52 23.4** | **+0.3** |
| **MSAI** | **Masohi** | **53.95** | **279** | P | **P** | **18 52 27.8** | **+0.8** |
| | comp=Z,91nm,1.0s,comp=Z,892nm | | | | | | |
| **KMBL** | **Kambalda** | **55.63** | **244** | P | **P** | **18 52 38.1** | **-0.3** |
| | comp=Z,20nm,1.7s | | | | | | |
| **DRV** | **Dumont d'Urvil** | **55.70** | **199** | ⇑P | **P** | **18 52 39.4** | **+1.2** |
| **NLAI** | **Namlea** | **55.71** | **279** | P | **P** | **18 52 40.1** | **+0.9** |
| | comp=Z,149nm,0.8s,comp=Z,2μm | | | | | | |
| **SOEI** | **Soe** | **56.47** | **270** | P | **P** | **18 52 46.1** | **+1.5** |
| **SOEI** | **Soe** | **56.47** | **270** | P | **P** | **18 52 46.3** | **+1.6** |
| **SOEI** | **Soe** | **56.47** | **270** | P | **P** | **18 52 45.9** | **+1.3** |
| | comp=Z,318nm,0.9s,comp=Z,2μm | | | | | | |
| **TNTI** | **Ternate** | **56.87** | **283** | P | **P** | **18 52 47.9** | **+0.7** |
| **TNTI** | **Ternate** | **56.87** | **283** | P | **P** | **18 52 47.6** | **+0.4** |
| **TNTI** | **Ternate** | **56.87** | **283** | P | **P** | **18 52 47.7** | **+0.5** |
| **BATI** | **Baumata** | **56.93** | **269** | P | **P** | **18 52 48.2** | **+0.6** |
| | comp=Z,121nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **57.15** | **279** | P | **P** | **18 52 48.7** | **-0.4** |
| **SANI** | **Sanana** | **57.15** | **279** | P | **P** | **18 52 48.8** | **-0.4** |
| | comp=Z,171nm,0.9s,comp=Z,1μm | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.27** | **255** | P | **P** | **18 52 56.4** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **58.27** | **255** | P | **P** | **18 52 56.5** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | 18 52 57.4 | |
| | comp=Z,57nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.27** | **255** | P | **P** | **18 52 56.4** | **-0.2** |
| PSA00 | | | | IAmb | IAmb | 18 52 57.5 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.27** | **255** | P | **P** | **18 52 56.6** | **-0.1** |
| | comp=Z,77nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **58.44** | **256** | P | **P** | **18 52 57.6** | **-0.2** |
| **MBWA** | **Marble Bar** | **58.44** | **256** | P | **P** | **18 52 57.6** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 18 52 58.1 | |
| | comp=Z,28nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **58.44** | **256** | P | **P** | **18 52 57.0** | **-0.8** |
| | comp=Z,41nm,2.1s | | | | | | |
| **MBWA** | **Marble Bar** | **58.44** | **256** | P | **P** | **18 52 57.6** | **-0.2** |
| **MMRI** | **Maumere** | **58.70** | **271** | P | **P** | **18 52 59.4** | **-0.2** |
| **MMRI** | **Maumere** | **58.70** | **271**

comp=Z,0.3nm,0.7s,baz=76,slow=7.8,SNR=1.5
comp=Z,4.0nm,0.7s
**SAO** **San Andreas Ge** **76.22** **44** P **P** **18 54 47.1 +1.1**
SAO IAmb IAmb 18 54 48.3
comp=Z,17nm,0.8s
**SAO** **San Andreas Ge** **76.22** **44** P **P** **18 54 47.1 +1.1**
SAO pmax pmax
comp=Z,17nm,0.8s
**MSHR** **Mys Shultsa** **76.31** **324** *de*P **P** **18 54 47.4 +1.0**
MSHR pmax pmax
comp=Z,26nm,1.7s
**KASI** **Kota Agung** **76.46** **269** P **P** **18 54 48.4 +0.5**
**PSTR** **Posyet** **76.56** **324** ⇑*e*P **P** **18 54 49.1 +1.4**
**USRK** **Ussuriysk Ar.** **76.92** **326** P **P** **18 54 50.9 +1.2**
**USRK** **Ussuriysk Ar.** **76.92** **326** P **P** **18 54 49.3 -0.4**
comp=Z,2.3nm,0.6s,baz=120,slow=4.5,SNR=14
USRK pP **pwP** **18 56 50.5 -1.4**
comp=Z,1.4nm,0.7s,baz=121,slow=7.4,SNR=1.5
comp=Z,2.3nm,0.6s
**USRK** **Ussuriysk Ar.** **76.92** **326** P **P** **18 54 50.9 +1.2**
**109C** **Camp Elliot, M** **77.08** **49** P **P** **18 54 51.5 +0.6**
baz=238
**R17L** **Mt. Peulik Vol** **77.47** **12** P **P** **18 54 53.4 +1.0**
baz=201
**MONP2** **Monument Peak** **77.57** **49** P **P** **18 54 55.6 +1.8**
baz=239,SNR=19
**OHAK** **Old Harbor** **77.73** **13** P **P** **18 54 53.3 -0.4**
**OHAK** **Old Harbor** **77.73** **13** P **P** **18 54 54.7 +0.9**
baz=204
**R18K** **Karluk** **77.80** **13** P **P** **18 54 54.3 +0.2**
baz=203
**PFO** **Pinyon Flats O** **77.92** **49** P **P** **18 54 56.0 +0.4**
baz=239
**TPFO** **Pinon Flats** **77.92** **49** P **P** **18 54 56.0 +0.4**
baz=239
**Q17K** **Contact Creek** **78.15** **12** P **P** **18 54 55.8 -0.4**
baz=201
**NJ2** **Nanjing** **78.31** **309** *e*P **P** **18 54 58.1 +0.6**
NJ2 pmax pmax
comp=Z,10.0nm,1.0s
**MDJ** **Mudanjiang** **78.49** **325** P **P** **18 54 59.3 +1.1**
MDJ pmax pmax
comp=Z,29nm,1.0s
**Q18K** **Katmai Hardscr** **78.68** **12** P **P** **18 54 58.8 -0.2**
baz=202
**M11K** **Mekoryuk** **78.69** **6** P **P** **18 54 59.9 +1.1**
baz=191
**N14K** **Kuskokwak Cree** **78.77** **8** P **P** **18 54 59.8 +0.6**
baz=196
**O16K** **Kokwok River B** **79.01** **10** P **P** **18 54 60.0 -0.5**
baz=199
**M13K** **Dall Lake** **79.03** **7** P **P** **18 55 01.6 +1.0**
baz=194
**Q20K** **Shuyak Island** **79.19** **13** P **P** **18 55 02.7 +1.2**
baz=205
**NVAR** **Mina Array Bea** **79.22** **44** P **P** **18 55 03.5 +1.0**
comp=Z,10nm,0.7s,baz=225,slow=9.0,SNR=80
NVAR PKKPbc **PKKPbc** **19 13 49.2 -0.2**
comp=Z,0.3nm,0.5s,baz=63,slow=4.2,SNR=4.7
comp=Z,10nm,0.7s
**Q19K** **Cape Douglas,** **79.22** **13** P **P** **18 55 03.9 +2.2**
baz=204
**N15K** **Kwethluk River** **79.24** **9** P **P** **18 55 02.4 +0.6**
baz=197
**GRNR** **Gornyy** **79.31** **333** ⇓*i*P **P** **18 55 03.0 +0.6**
GRNR pmax pmax
comp=Z,9.0nm,0.7s
**O17K** **Koliganek Bris** **79.35** **11** P **P** **18 55 02.5 +0.2**
baz=200
**M14K** **Bethel** **79.54** **8** P **P** **18 55 02.7 -0.6**
baz=196
**M15K** **Kasigluk River** **79.66** **9** P **P** **18 55 04.5 +0.6**
baz=197
**214A** **Organ Pipe Nat** **79.76** **52** P **P** **18 55 05.4 +0.2**
baz=241
**O18K** **Koktuh Hills** **79.77** **11** P **P** **18 55 04.5 -0.1**
baz=202
**TPNV** **Topopah Spring** **79.80** **46** P **P** **18 55 06.7 +1.2**
baz=238,SNR=13
**L14K** **Kuka Creek** **80.02** **7** P **P** **18 55 06.5 +0.8**
baz=195
**N17K** **Nushagak Hills** **80.04** **10** P **P** **18 55 06.5 +0.6**
baz=200
**J05D** **Fort Rock, OR** **80.15** **38** IAmb IAmb 18 55 09.3
comp=Z,32nm,0.7s
**M16K** **Timber Creek** **80.22** **9** P **P** **18 55 08.1 +1.2**
baz=198
**O19K** **Port Alsworth** **80.25** **12** P **P** **18 55 07.2 +0.2**
baz=203
**CN2** **Changchun** **80.34** **322** P **P** **18 55 08.8 +0.9**
CN2 pmax pmax
comp=Z,20nm,1.1s
**K13K** **Kusilvak Mount** **80.37** **6** P **P** **18 55 08.9 +1.3**
baz=193
**KLR** **Kul'dur** **80.40** **329** P **P** **18 55 08.5 +0.4**
comp=Z,1.7nm,0.7s,baz=111,slow=6.2,SNR=6.0
**KLR** **Kul'dur** **80.40** **329** *de*P **P** **18 55 08.3 +0.2**
KLR pmax pmax
comp=Z,5.0nm,1.3s
**BNX** **BinXian** **80.40** **325** ⇓P **P** **18 55 08.3 +0.1**
BNX pmax pmax
comp=Z,23nm,0.7s
**N18K** **Kilae Creek** **80.41** **11** P **P** **18 55 07.9 -0.1**
baz=201
**L15K** **Ungalak Mounta** **80.49** **8** P **P** **18 55 08.9 +0.6**
baz=196
**PINE** **Pine Mountain** **80.62** **38** IAmb IAmb 18 55 12.0
comp=Z,27nm,0.9s
**N19K** **Bonanza Creek** **80.79** **11** P **P** **18 55 09.7 -0.3**
baz=203
**L16K** **Owhat River** **80.80** **9** P **P** **18 55 10.8 +1.0**
baz=198
**M17K** **Holitna River** **80.82** **10** P **P** **18 55 10.9 +0.9**
baz=200
**R11B** **Troy Canyon, C** **80.98** **45** P **P** **18 55 12.3 +0.7**
baz=239,SNR=12
**WHN** **Wuhan** **80.98** **306** P **P** **18 55 12.9 +1.4**
WHN pmax pmax
comp=Z,20nm,1.5s
**BMN** **Battle Mountai** **81.01** **42** IAmb IAmb 18 55 13.7
comp=Z,16nm,0.9s
**K15K** **Wolf Creek Mou** **81.08** **8** IAmb IAmb 18 55 13.2
comp=Z,19nm,0.8s
**K15K** **Wolf Creek Mou** **81.08** **8** P **P** **18 55 12.6 +1.2**
baz=196,SNR=6.3
**G05A** **Wamic** **81.26** **37** IAmb IAmb 18 55 14.5
comp=Z,25nm,1.1s
**J14K** **Nanvaranak Lak** **81.28** **7** P **P** **18 55 13.3 +1.0**
baz=194
**L17K** **Donlin** **81.38** **9** P **P** **18 55 14.0 +1.1**
baz=199
**MA2** **Magadan** **81.39** **345** ⇓*e*P **P** **18 55 14.1 +1.1**
MA2 pmax pmax
comp=Z,49nm,1.8s
**CAPN** **Captain Cook N** **81.42** **13** P **P** **18 55 15.2 +2.2**
baz=206
**TUC** **Tucson** **81.44** **52** P **P** **18 55 13.8 -0.2**
TUC IAmb IAmb 18 55 17.0
comp=Z,19nm,1.0s
**TUC** **Tucson** **81.44** **52** P **P** **18 55 15.6 +1.6**
baz=242
**TUC** **Tucson** **81.44** **52** P **P** **18 55 13.8 -0.2**
TUC pmax pmax
comp=Z,19nm,1.0s
**N20K** **Mount Spurr** **81.59** **12** P **P** **18 55 13.5 -0.5**
baz=205
**SPCR** **Spurr Chakacha** **81.59** **12** P **P** **18 55 13.3 -0.8**
baz=205
**I07A** **Izee** **81.63** **38** IAmb IAmb 18 55 16.8
comp=Z,20nm,0.8s
**L18K** **Granite Mounta** **81.72** **10** P **P** **18 55 15.5 +0.9**
baz=200
**M19K** **Big River Lodg** **81.82** **11** P **P** **18 55 15.0 -0.1**
baz=203
**J08A** **Circle Bar Ran** **81.84** **39** IAmb IAmb 18 55 17.8
comp=Z,34nm,1.2s
**K17K** **Iditarod** **81.94** **9** P **P** **18 55 16.8 +1.2**
baz=199
**X16A** **Lo Mia Camp, P** **81.94** **50** IAmb IAmb 18 55 19.3
comp=Z,17nm,1.0s
**L19K** **White Mountain** **82.00** **11** P **P** **18 55 16.9 +0.8**
baz=202
**RC01** **Rabbit Creek A** **82.02** **13** P **P** **18 55 16.2 +0.1**
baz=207
**BELA** **Belgrano 2** **82.02** **173** P **P** **18 55 16.3 +0.3**
**CCUT** **Cedar City** **82.08** **46** IAmb IAmb 18 55 19.9
comp=Z,14nm,0.8s
**PWL** **Port Wells** **82.13** **14** P **P** **18 55 16.2 -0.5**
baz=208
**SUA** **Susitna One** **82.13** **13** P **P** **18 55 16.0 -0.9**
baz=206
**J16K** **Anvik River** **82.16** **8** P **P** **18 55 17.4 +0.7**
baz=197
**319A** **Douglas** **82.16** **54** IAmb IAmb 18 55 20.8
comp=Z,30nm,0.9s
**KNB** **Kanab** **82.20** **47** IAmb IAmb 18 55 20.3
comp=Z,15nm,0.8s
**PSUT** **Pine Spring** **82.24** **45** IAmb IAmb 18 55 19.9
comp=Z,12nm,0.7s
**U15A** **North Rim** **82.28** **48** IAmb IAmb 18 55 21.0
comp=Z,30nm,0.8s
**GLI** **Glacier Island** **82.44** **15** P **P** **18 55 17.7 -0.6**
baz=210
**J17K** **VABM Dome** **82.47** **8** P **P** **18 55 17.8 -0.6**
J17K IAmb IAmb 18 55 20.4
comp=Z,32nm,1.6s
**J17K** **VABM Dome** **82.47** **8** P **P** **18 55 19.0 +0.6**
baz=198
**WUAZ** **Wupatki** **82.50** **49** P **P** **18 55 20.7 +1.3**
baz=242
**M22K** **Willow** **82.53** **13** P **P** **18 55 18.4 -0.2**
baz=207
**KNK** **Knik Glacier** **82.59** **14** P **P** **18 55 18.3 -0.8**
baz=208
**PMR** **Palmer** **82.60** **13** P **P** **18 55 18.6 -0.4**
baz=208
**G08A** **Pilot Rock** **82.64** **38** IAmb IAmb 18 55 21.6
comp=Z,28nm,1.3s
**PKCU** **Pink Cliffs** **82.76** **47** IAmb IAmb 18 55 24.0
comp=Z,27nm,0.9s
**E07A** **Sunnyside** **82.86** **36** IAmb IAmb 18 55 22.6
comp=Z,30nm,1.2s
**J18K** **Innoko River** **82.89** **9** IAmb IAmb 18 55 21.6
comp=Z,13nm,0.8s
**J18K** **Innoko River** **82.89** **9** P **P** **18 55 20.9 +0.4**
baz=200,SNR=9.1
**U33K** **Whale Pass** **82.92** **23** P **P** **18 55 21.3 +0.6**
baz=222
**V35K** **Ketchikan** **82.93** **25** P **P** **18 55 21.6 +0.9**
baz=224
**HAWA** **Hanford** **82.94** **36** IAmb IAmb 18 55 23.0
comp=Z,24nm,1.1s
**SML** **Sawmill** **82.97** **14** P **P** **18 55 20.3 -0.7**
baz=208
**CUT** **Chulitna** **83.08** **13** P **P** **18 55 21.1 -0.3**
baz=206
**M23K** **Glacier View** **83.09** **14** P **P** **18 55 21.2 -0.3**
baz=209
**BMRM** **Bremner River** **83.14** **16** P **P** **18 55 22.0 +0.2**
baz=212
**MESA** **MESA** **83.19** **17** P **P** **18 55 22.8 +0.5**
baz=214
**S31K** **Pelican** **83.19** **21** P **P** **18 55 23.0 +1.0**
baz=220,SNR=5.7
**HEH** **HeiHe** **83.20** **328** *e*P **P** **18 55 22.1 -0.2**
HEH pmax pmax
comp=Z,8.0nm,1.3s
**SCM** **Sheep Creek Mo** **83.22** **14** P **P** **18 55 22.1 -0.2**
baz=209,SNR=5.2
**K20K** **Telida** **83.22** **11** IAmb IAmb 18 55 23.0
comp=Z,13nm,0.7s
**K20K** **Telida** **83.22** **11** P **P** **18 55 21.9 -0.2**
baz=203
**KLU** **Klutina** **83.26** **15** P **P** **18 55 22.5 0.0**
baz=210
**CRQE** **Cirque** **83.35** **16** P **P** **18 55 23.4 +0.4**
baz=213
**S32K** **Killisnoo** **83.39** **22** P **P** **18 55 23.1 +0.1**
baz=221
**WRAK** **Wrangell Islan** **83.43** **24** P **P** **18 55 23.4 +0.1**
baz=223
**MFID** **Camas Ranch** **83.48** **40** IAmb IAmb 18 55 26.0
comp=Z,16nm,1.1s
**PNL** **Peninsula** **83.52** **19** P **P** **18 55 23.9 +0.1**
baz=217
**J19K** **Poorman** **83.56** **10** P **P** **18 55 24.1 +0.3**
baz=201
**VRDI** **Verde Repeater** **83.66** **16** IAmb IAmb 18 55 25.3
comp=Z,14nm,1.1s
**D08A** **Wollman Farm,** **83.67** **36** IAmb IAmb 18 55 26.1
comp=Z,12nm,0.7s
**N25K** **Chitina, Valde** **83.69** **15** P **P** **18 55 24.7 +0.1**
baz=212,SNR=8.6
**F14K** **Arctic Creek** **83.69** **5** P **P** **18 55 25.6 +1.2**
baz=191
**M24K** **Tolsona, Glenn** **83.73** **14** P **P** **18 55 25.2 +0.4**
baz=210
**GLB** **Gilahina Butte** **83.75** **16** IAmb IAmb 18 55 25.5
comp=Z,12nm,0.7s
**DUG** **Duway, Tooele** **83.77** **44** P **P** **18 55 25.9 +0.3**
baz=240
**WAT6** **Susitna Watana** **83.78** **14** P **P** **18 55 25.0 -0.2**
baz=209,SNR=8.6
**121A** **Cookes Peak, D** **83.81** **53** P **P** **18 55 27.7 +1.6**
baz=244
**WAT1** **Susitna Watana** **83.82** **13** P **P** **18 55 24.9 -0.3**
baz=208
**HNS** **HongShan** **83.88** **312** ⇑P **P** **18 55 27.3 +1.3**
HNS pmax pmax
comp=Z,12nm,1.4s
**MCARA** **McCarthy VSAT** **83.90** **16** P **P** **18 55 26.3 +0.7**
baz=213
**MAW** **Mawson** **83.91** **200** P **P** **18 55 26.7 +1.1**
comp=Z,25nm,0.5s,baz=139,slow=4.8,SNR=153
comp=Z,25nm,0.5s
**SEY** **Seymchan** **83.96** **347** P **P** **18 55 25.4 -0.3**
comp=Z,6.4nm,0.4s,baz=137,slow=6.3,SNR=30
SEY pP **pP** **18 57 27.9 +0.9**
comp=Z,5.1nm,0.9s,baz=125,slow=4.4,SNR=4.1
comp=Z,6.4nm,0.4s
**SEY** **Seymchan** **83.96** **347** *de*P **P** **18 55 25.2 -0.6**
SEY pmax pmax
comp=Z,6.0nm,0.6s
**J20K** **Nowinta River** **83.97** **10** IAmb IAmb 18 55 26.7
comp=Z,7.7nm,0.7s
**J20K** **Nowinta River** **83.97** **10** P **P** **18 55 26.2 +0.4**
baz=203,SNR=6.4
**G16K** **Koyuk River** **83.99** **7** P **P** **18 55 26.5 +0.6**
baz=195
**P29M** **Windy Craggy** **84.00** **19** IAmb IAmb 18 55 27.7
comp=Z,13nm,0.8s
**P29M** **Windy Craggy** **84.00** **19** P **P** **18 55 26.7 +0.6**
baz=218,SNR=8.3
**CTG** **Chitna Glacier** **84.01** **17** P **P** **18 55 26.5 +0.3**
baz=215,SNR=6.0
**R32K** **Englecrest** **84.02** **21** P **P** **18 55 27.1 +0.9**
baz=221
**F10A** **Beach Ranch, E** **84.03** **38** IAmb IAmb 18 55 28.1
comp=Z,24nm,1.0s
**O28M** **Mount Upton** **84.18** **18** P **P** **18 55 27.2 0.0**
baz=216,SNR=9.8
**LYN** **LuoYang** **84.20** **309** P **P** **18 55 29.6 +2.0**
LYN pmax pmax
comp=Z,38nm,0.6s
**RPSI** **Rantau Prapat** **84.26** **275** IAmb IAmb 18 55 29.4
comp=Z,14nm,0.8s
**RND** **Reindeer** **84.27** **13** IAmb IAmb 18 55 28.0
comp=Z,20nm,0.6s
**DHY** **Denali Highway** **84.30** **13** P **P** **18 55 27.2 -0.5**
baz=209
**PLBC** **Pleasant Camp** **84.31** **20** P **P** **18 55 28.4 +0.8**
baz=219,SNR=8.7
**HLID** **Hailey** **84.44** **41** P **P** **18 55 30.1 +1.3**
baz=239,SNR=19
**C09A** **Chrisman Ranch** **84.45** **36** IAmb IAmb 18 55 29.6
comp=Z,8.8nm,0.7s
**BPAW** **Bear Paw Mtn.** **84.47** **12** P **P** **18 55 27.9 -0.4**
baz=206
**MCK** **McKinley** **84.55** **13** P **P** **18 55 28.1 -0.6**
baz=208
**P30M** **Million Dollar** **84.63** **19** P **P** **18 55 29.9 +0.6**
baz=219
**PAX** **Paxson** **84.64** **14** P **P** **18 55 28.8 -0.5**
baz=211
**T35M** **Bob Quinn** **84.64** **24** P **P** **18 55 30.3 +1.0**
baz=225
**SKAG** **Skagway** **84.65** **20** P **P** **18 55 30.4 +1.2**
baz=220
**YUK8** **Steele Glacier** **84.72** **17** P **P** **18 55 30.5 +0.6**
baz=216
**M26K** **Nabesna, AK** **84.76** **16** P **P** **18 55 30.5 +0.7**
baz=213,SNR=10
**SRU** **San Rafael Swe** **84.79** **46** IAmb IAmb 18 55 32.4
comp=Z,9.4nm,0.7s
**YUK6** **Outpost Mounta** **84.85** **18** P **P** **18 55 30.6 +0.1**
baz=218
**H19K** **Roundabout Mou** **84.87** **9** P **P** **18 55 29.9 -0.2**
baz=200
**G18K** **Tagagawik** **84.91** **8** P **P** **18 55 30.1 -0.3**
baz=198
**YUK3** **Moose Creek** **84.92** **17** P **P** **18 55 31.1 +0.3**
baz=216,SNR=15
**S34M** **Telegraph Cree** **84.97** **23** P **P** **18 55 32.0 +1.1**
baz=224,SNR=11
**M27K** **Edge Creek, AK** **85.02** **16** P **P** **18 55 31.7 +0.6**
baz=214,SNR=11
**H20K** **Anotleneega Mo** **85.07** **9** P **P** **18 55 31.4 +0.3**
baz=202
**YUK4** **Talbot Arm** **85.09** **18** P **P** **18 55 32.7 +1.1**
baz=217
**L26K** **Log Cabin Wild** **85.20** **15** P **P** **18 55 32.3 +0.4**
baz=213
**NEA2** **Nenana** **85.28** **12** P **P** **18 55 31.9 -0.3**
baz=208
**P32M** **Atlin** **85.29** **21** P **P** **18 55 32.8 +0.4**
baz=222
**K24K** **Donnelly Dome** **85.29** **14** P **P** **18 55 32.5 +0.1**
baz=211
**MNTX** **Cornudas Mount** **85.30** **55** P **P** **18 55 34.9 +1.8**
baz=246
**Q32M** **Nakina River** **85.32** **22** P **P** **18 55 33.6 +0.8**
baz=223,SNR=10
**MVCO** **Mesa Verde** **85.34** **49** P **P** **18 55 33.9 +0.5**
baz=243
**NEW** **Newport** **85.35** **36** P **P** **18 55 33.6 +0.6**
baz=236
**MLY** **Manley** **85.36** **11** P **P** **18 55 31.6 -1.0**
baz=206,SNR=5.1
**G19K** **Purcell Mounta** **85.36** **8** P **P** **18 55 32.6 0.0**
baz=200
**O30N** **Mendenhall** **85.41** **19** IAmb IAmb 18 55 34.4
comp=Z,8.4nm,0.7s
**O30N** **Mendenhall** **85.41** **19** P **P** **18 55 33.6 +0.6**
baz=220,SNR=10
**GYA** **Guiyang** **85.43** **300** ⇑P **P** **18 55 35.0 +1.0**
GYA pmax pmax
comp=Z,15nm,1.0s
**RIDG** **Independent Ri** **85.45** **14** P **P** **18 55 33.5 +0.4**
baz=211
**ZEA** **Zeya** **85.46** **331** *e*P **P** **18 55 33.9 +0.6**
ZEA *e* 18 57 38.1
ZEA pmax pmax
comp=Z,10.0nm,0.7s
**HDA** **Harding Lake** **85.56** **13** P **P** **18 55 33.3 -0.3**
baz=209,SNR=8.2
**H21K** **Melozitna Rive** **85.56** **10** P **P** **18 55 33.6 +0.1**
baz=204
**CCB** **Clear Creek Bu** **85.59** **13** IAmb IAmb 18 57 42.1
comp=Z,14nm,1.1s
**L27K** **Beaver Creek,** **85.61** **16** P **P** **18 55 34.3 +0.4**
baz=214,SNR=5.2
**N30M** **Aishikik Lake** **85.64** **18** P **P** **18 55 34.3 +0.3**
baz=219
**TX31** **Lajitas Ar. Si** **85.71** **57** IAmb IAmb 18 55 38.4
comp=Z,29nm,1.0s
**TXAR** **Lajitas Array** **85.71** **57** P **P** **18 55 37.4 +2.2**
**TXAR** **Lajitas Array** **85.71** **57** P **P** **18 55 36.9 +1.7**
comp=Z,19nm,0.8s,baz=218,slow=6.1,SNR=161
comp=Z,19nm,0.8s
**TXAR** **Lajitas Array** **85.71** **57** P **P** **18 55 37.4 +2.2**
**WHY** **Whitehorse** **85.71** **20** P **P** **18 55 34.7 +0.3**
baz=221
**I23K** **Minto, Yukon-K** **85.72** **12** P **P** **18 55 34.0 -0.3**
baz=207
**DLBC** **Dease Lake** **85.76** **23** P **P** **18 55 35.1 +0.4**
baz=225
**ANMO** **Albuquerque** **85.84** **51** P **P** **18 55 35.5 -0.4**
**ANMO** **Albuquerque** **85.84** **51** P **P** **18 55 36.7 +0.9**
baz=245
**ANMO** **Albuquerque** **85.84** **51** P **P** **18 55 35.5 -0.4**
ANMO pmax pmax
comp=Z,7.0nm,1.0s
**SCRK** **Sand Creek** **85.85** **14** P **P** **18 55 35.2 +0.1**
baz=212,SNR=5.1
**ILAR** **Eielson Array** **85.89** **13** P **P** **18 55 34.2 -0.9**
comp=Z,3.2nm,0.4s,baz=219,slow=5.2,SNR=84
ILAR pP **pwP** **18 57 38.7 -1.8**
comp=Z,2.8nm,1.0s,baz=223,slow=1.9,SNR=6.9
ILAR PKKPbc **PKKPbc** **19 13 31.6 -3.4**
comp=Z,0.6nm,0.4s,baz=337,slow=2.7,SNR=8.9
comp=Z,3.2nm,0.4s
**F19K** **Shaleruckik Mo** **85.92** **8** P **P** **18 55 34.9 -0.3**
baz=199
**M29M** **Somme Creek** **86.02** **17** P **P** **18 55 36.2 +0.3**
baz=217,SNR=9.6
**H22K** **Ishtalitna Cre** **86.02** **11** P **P** **18 55 35.7 -0.1**
baz=205
**P33M** **Teslin, Yukon** **86.05** **21** P **P** **18 55 36.8 +0.7**
baz=223,SNR=6.5
**N31M** **Braeburn, Yuko** **86.06** **19** P **P** **18 55 36.8 +0.8**
baz=220
**POKR** **Poker Plat Res** **86.08** **12** P **P** **18 55 35.7 -0.4**
baz=209
**J25K** **Salcha River,** **86.08** **13** P **P** **18 55 35.9 -0.2**
baz=211,SNR=6.3
**R33M** **Jennings River** **86.10** **22** IAmb IAmb 18 55 38.3
comp=Z,15nm,1.4s
**R33M** **Jennings River** **86.10** **22** P **P** **18 55 37.2 +0.8**
baz=224,SNR=7.0
**ALPN** **Alpine** **86.14** **57** IAmb IAmb 18 55 39.9
comp=Z,56nm,1.6s
**USHA** **Ushuaia** **86.20** **147** P **P** **18 55 37.9 +1.0**
comp=Z,34nm,0.9s,baz=260,slow=5.0,SNR=4.3
comp=Z,34nm,0.9s
**G21K** **Allakaket** **86.23** **10** P **P** **18 55 36.6 -0.1**
baz=203,SNR=6.3
**K27K** **Chicken** **86.36** **15** P **P** **18 55 37.9 +0.6**
baz=214
**J26L** **Joseph Creek** **86.39** **14** IAmb IAmb 18 55 39.0
comp=Z,34nm,1.6s
**J26L** **Joseph Creek** **86.39** **14** P **P** **18 55 38.1 +0.5**
baz=213,SNR=11
**F20K** **Avaraart Lake** **86.40** **9** P **P** **18 55 37.2 -0.2**
baz=201
**MSO** **Missoula** **86.41** **38** P **P** **18 55 38.2 0.0**
baz=239
**DLMT** **Dillon** **86.47** **40** IAmb IAmb 18 55 40.1
comp=Z,12nm,0.7s
**GO08** **Villa O'Higgin** **86.52** **140** IAmb IAmb 18 55 42.1
comp=Z,41nm,1.1s
**BILL** **Bilibino** **86.56** **354** *i*P **P** **18 55 38.0 -0.2**
BILL pmax pmax
comp=Z,22nm,2.0s
**E19K** **Redstone River** **86.58** **8** P **P** **18 55 38.0 -0.3**
baz=200
**TPAW** **Teton Pass** **86.59** **42** IAmb IAmb 18 55 40.4
comp=Z,11nm,1.1s
**XAN** **Xi'an** **86.64** **307** ⇓P **P** **18 55 40.4 +1.0**
XAN SKS **SKSac** **19 05 12.5 +0.1**
XAN S **ScS** **19 05 34.8 0.0**
XAN pmax pmax
comp=Z,28nm,1.2s
XAN pmax pmax
comp=Z,670nm,11.6s
**S22A** **4UR Ranch, Cre** **86.77** **49** IAmb IAmb 18 55 42.4
comp=Z,12nm,1.1s
**S22A** **4UR Ranch, Cre** **86.77** **49** P **P** **18 55 41.4 +1.1**
baz=244
**IMW** **Indian Meadow** **86.79** **42** IAmb IAmb 18 55 42.4
comp=Z,17nm,0.9s
**PRP** **Porcupine Dome** **86.83** **13** P **P** **18 55 41.2 +1.5**
baz=211
**F21K** **Alatna River** **86.89** **9** P **P** **18 55 39.1 -0.7**
baz=203
**G22K** **Bettles** **86.93** **10** P **P** **18 55 40.2 +0.2**
baz=205
**AY03** **Cochrane** **86.98** **139** IAmb IAmb 18 55 44.4
comp=Z,41nm,1.2s
**G23K** **Bananza Creek** **87.00** **11** P **P** **18 55 39.8 -0.6**
baz=206
**M31M** **Drury Creek, Y** **87.03** **19** P **P** **18 55 40.1 -0.4**
baz=221
**DAWY** **Dawson** **87.07** **16** P **P** **18 55 41.3 +0.5**
baz=216
**YHL** **Hebgen Lake** **87.09** **41** IAmb IAmb 18 55 44.3
comp=Z,22nm,0.9s
**BW06** **Boulder Array** **87.14** **43** P **P** **18 55 42.3 +0.4**
baz=242,SNR=13
**PDAR** **Pinedale Array** **87.14** **43** P **P** **18 55 41.9 +0.1**
**PDAR** **Pinedale Array** **87.14** **43** P **P** **18 55 42.1 +0.3**
comp=Z,6.0nm,0.7s,baz=220,slow=2.9,SNR=43
PDAR PKKPbc **PKKPbc** **19 13 29.0 -2.3**
comp=Z,0.2nm,0.3s,baz=112,slow=4.0,SNR=5.5
comp=Z,6.0nm,0.7s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| I26K | Coal Creek Min | 87.17 | 14 | P | P | 18 55 40.7 | -0.4 | | |
| | baz=213 | | | | | | | | |
| BOZ | Bozeman (W) | 87.18 | 40 | P | P | 18 55 42.9 | +1.1 | | |
| | baz=241,SNR=11 | | | | | | | | |
| SAND | Sanderson | 87.19 | 57 | IAmb | IAmb | 18 55 44.3 | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| EGAK | Eagle | 87.20 | 15 | P | P | 18 55 41.4 | +0.1 | | |
| | baz=215 | | | | | | | | |
| H17A | Grant Village | 87.26 | 42 | P | P | 18 55 44.2 | +1.9 | | |
| | baz=242 | | | | | | | | |
| F22K | John River | 87.36 | 10 | P | P | 18 55 42.2 | +0.2 | | |
| | baz=204 | | | | | | | | |
| FARO | Faro, Yukon | 87.38 | 19 | P | P | 18 55 42.3 | +0.1 | | |
| | baz=222 | | | | | | | | |
| K29M | Barlow Dome | 87.39 | 17 | IAmb | IAmb | 18 55 43.9 | | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| K29M | Barlow Dome | 87.39 | 17 | P | P | 18 55 42.9 | +0.5 | | |
| | baz=218,SNR=5.9 | | | | | | | | |
| H25L | Birch Creek | 87.41 | 12 | P | P | 18 55 40.9 | -1.3 | | |
| | baz=210 | | | | | | | | |
| COLD | Coldfoot | 87.43 | 10 | P | P | 18 55 42.8 | +0.4 | | |
| | baz=206 | | | | | | | | |
| D19K | Kuna River | 87.45 | 7 | P | P | 18 55 42.9 | +0.4 | | |
| | baz=199 | | | | | | | | |
| G24K | Hadweenzic Riv | 87.46 | 12 | P | P | 18 55 42.6 | +0.1 | | |
| | baz=209 | | | | | | | | |
| E20K | Nigu River | 87.47 | 8 | P | P | 18 55 42.9 | +0.4 | | |
| | baz=201 | | | | | | | | |
| HHC | Hu-ho-hao-te | 87.62 | 314 | eP | P | 18 55 40.6 | -3.4 | | |
| HHC | | | | S | S | 19 05 44.0 | +5.4 | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,23nm,0.7s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,140nm,4.7s | | | | | | | | |
| SDCO | Great Sand Dun | 87.72 | 49 | P | P | 18 55 45.5 | +0.8 | | |
| | baz=245 | | | | | | | | |
| I27K | Kandik River | 87.77 | 14 | P | P | 18 55 44.1 | 0.0 | | |
| | baz=214 | | | | | | | | |
| G25K | Bearman Lake | 87.79 | 12 | P | P | 18 55 44.1 | +0.2 | | |
| | baz=210 | | | | | | | | |
| D20K | Etivluk River | 87.84 | 8 | P | P | 18 55 44.3 | +0.1 | | |
| | baz=200 | | | | | | | | |
| TOAD | Toad River Com | 87.88 | 24 | P | P | 18 55 45.1 | +0.4 | | |
| | baz=229 | | | | | | | | |
| COYC | Coyhaique | 87.97 | 137 | P | P | 18 55 47.6 | +2.1 | | |
| E22K | Anaktuvuk Pass | 87.99 | 10 | IAmb | IAmb | 18 57 54.1 | | | |
| | comp=Z,28nm,1.6s | | | | | | | | |
| E22K | Anaktuvuk Pass | 87.99 | 10 | P | P | 18 55 45.1 | +0.1 | | |
| | baz=205 | | | | | | | | |
| I28M | Miner Creek | 88.05 | 15 | P | P | 18 55 45.7 | +0.3 | | |
| | baz=216 | | | | | | | | |
| F24K | Squaw Lake | 88.11 | 11 | IAmb | IAmb | 18 55 46.3 | | | |
| | comp=Z,6.3nm,0.6s | | | | | | | | |
| F24K | Squaw Lake | 88.11 | 11 | P | P | 18 55 45.9 | +0.4 | | |
| | baz=208,SNR=9.2 | | | | | | | | |
| DRIO | Del Rio | 88.20 | 58 | IAmb | IAmb | 18 55 49.2 | | | |
| | comp=Z,38nm,0.9s | | | | | | | | |
| RWWY | Rawlins | 88.22 | 45 | IAmb | IAmb | 18 55 48.6 | | | |
| | comp=Z,36nm,1.6s | | | | | | | | |
| MSTX | Muleshoe | 88.22 | 54 | IAmb | IAmb | 18 55 48.1 | | | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| T25A | Trinidad | 88.26 | 50 | P | P | 18 55 47.8 | +0.6 | | |
| | baz=246 | | | | | | | | |
| E23K | Chandalar | 88.28 | 10 | P | P | 18 55 47.5 | +1.1 | | |
| | baz=207 | | | | | | | | |
| J30M | Hart River | 88.29 | 17 | IAmb | IAmb | 18 55 47.6 | | | |
| | comp=Z,14nm,1.6s | | | | | | | | |
| J30M | Hart River | 88.29 | 17 | P | P | 18 55 47.0 | +0.4 | | |
| | baz=219 | | | | | | | | |
| H27K | Steamboat Moun | 88.31 | 14 | P | P | 18 55 47.1 | +0.6 | | |
| | baz=214 | | | | | | | | |
| MMPY | Sheldon Lake, | 88.33 | 20 | IAmb | IAmb | 18 55 48.2 | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| MMPY | Sheldon Lake, | 88.33 | 20 | P | P | 18 55 47.4 | +0.7 | | |
| | baz=224,SNR=14 | | | | | | | | |
| OZNA | Ozona | 88.35 | 57 | IAmb | IAmb | 18 55 49.5 | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| I29M | Ogilvie Camp, | 88.39 | 16 | P | P | 18 55 46.4 | -0.5 | | |
| | baz=217 | | | | | | | | |
| RLMT | Red Lodge | 88.42 | 41 | IAmb | IAmb | 18 55 50.0 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| RLMT | Red Lodge | 88.42 | 41 | P | P | 18 55 48.9 | +1.2 | | |
| | baz=242,SNR=8.7 | | | | | | | | |
| G26K | Porcupine River | 88.42 | 13 | P | P | 18 55 47.7 | +0.8 | | |
| | baz=212,SNR=6.0 | | | | | | | | |
| E24K | Your Creek | 88.49 | 11 | P | P | 18 55 47.1 | -0.2 | | |
| | baz=208 | | | | | | | | |
| C21K | Kniefblade Rid | 88.50 | 8 | P | P | 18 55 48.0 | +0.7 | | |
| | baz=202 | | | | | | | | |
| D22K | Ayikyak River | 88.54 | 9 | P | P | 18 55 48.0 | +0.5 | | |
| | baz=204,SNR=5.7 | | | | | | | | |
| TGTN | Hyland Airport | 88.55 | 21 | P | P | 18 55 48.4 | +0.6 | | |
| | baz=226 | | | | | | | | |
| F25K | Christian Rive | 88.59 | 12 | P | P | 18 55 48.4 | +0.6 | | |
| | baz=211 | | | | | | | | |
| SGCY | Sterling City | 88.72 | 56 | IAmb | IAmb | 18 55 51.1 | | | |
| | comp=Z,45nm,1.6s | | | | | | | | |
| N23A | Red Feather La | 88.73 | 46 | IAmb | IAmb | 18 55 51.5 | | | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| N23A | Red Feather La | 88.73 | 46 | P | P | 18 55 50.8 | +1.4 | | |
| | baz=245 | | | | | | | | |
| G27K | Doyon Strip | 88.77 | 14 | P | P | 18 55 48.6 | +0.1 | | |
| | baz=214 | | | | | | | | |
| A19K | Wainwright | 88.78 | 6 | P | P | 18 55 48.0 | -0.5 | | |
| | baz=196 | | | | | | | | |
| I30M | Mount Dempster | 88.78 | 16 | P | P | 18 55 48.8 | 0.0 | | |
| | baz=219,SNR=6.0 | | | | | | | | |
| 833A | Chaparral WMA, | 88.80 | 60 | P | P | 18 55 50.4 | +0.8 | | |
| | baz=249 | | | | | | | | |
| TOLK | Toolik Lake Re | 88.81 | 10 | P | P | 18 55 48.6 | -0.2 | | |
| | baz=207 | | | | | | | | |
| D23K | Nanushuk River | 88.92 | 10 | P | P | 18 55 49.4 | +0.2 | | |
| | baz=206 | | | | | | | | |
| B21K | Ikpikpuk River | 88.95 | 8 | P | P | 18 55 49.0 | -0.3 | | |
| | baz=202 | | | | | | | | |
| HBVL | Hebbronville | 88.95 | 61 | IAmb | IAmb | 18 55 54.5 | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| F26K | Sheenjek River | 88.98 | 12 | P | P | 18 55 50.2 | +0.6 | | |
| | baz=212 | | | | | | | | |
| LL01 | San Ignacio de | 89.03 | 134 | IAmb | IAmb | 18 55 53.2 | | | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| H29M | Whitestone | 89.06 | 15 | IAmb | IAmb | 18 55 51.0 | | | |
| | comp=Z,9.7nm,0.9s | | | | | | | | |
| H29M | Whitestone | 89.06 | 15 | P | P | 18 55 50.5 | +0.6 | | |
| | baz=217 | | | | | | | | |
| LL02 | Futaleuf | 89.08 | 135 | P | P | 18 55 52.9 | +2.1 | | |
| K22A | Casper | 89.09 | 44 | IAmb | IAmb | 18 55 52.5 | | | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| ELIB | Princess Elisa | 89.11 | 187 | dP | P | 18 55 50.8 | +0.4 | | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| KOTAN | Kotaneelee Air | 89.17 | 24 | P | P | 18 55 51.4 | +0.8 | | |
| | baz=230 | | | | | | | | |
| JCT | Junction City | 89.25 | 58 | IAmb | IAmb | 18 55 53.3 | | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| JCT | Junction City | 89.25 | 58 | P | P | 18 55 52.4 | +0.7 | | |
| | baz=249 | | | | | | | | |
| CMAR | Chiang Mai Arr | 89.29 | 290 | P | P | 18 55 51.9 | -0.3 | | |
| | comp=Z,4.6nm,0.9s,baz=109,slow=3.0,SNR=19 | | | | | | | | |
| CMAR | | | | pP | pP | 18 57 56.0 | +0.7 | | |
| | comp=Z,0.3nm,0.3s,baz=157,slow=8.1,SNR=0.9 | | | | | | | | |
| CMAR | | | | PP | PP | 18 59 35.2 | +1.6 | | |
| | comp=Z,1.2nm,0.7s,baz=124,slow=6.1,SNR=4.1 | | | | | | | | |
| CMAR | | | | PKKPbc | PKKPbc | 19 13 26.0 | +1.2 | | |
| | comp=Z,2.2nm,0.7s,baz=284,slow=4.5,SNR=8.1 | | | | | | | | |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| CMAR | Chiang Mai Arr | 89.29 | 290 | i P | P | 18 55 53.9 | +1.8 | | |
| CMAR | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| HNDO | Hondo | 89.33 | 59 | IAmb | IAmb | 18 55 54.8 | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| D24K | Happy Valley | 89.39 | 10 | P | P | 18 55 51.7 | +0.3 | | |
| | baz=208 | | | | | | | | |
| AMTX | Amarillo | 89.41 | 53 | IAmb | IAmb | 18 55 53.4 | | | |
| | comp=Z,9.9nm,0.8s | | | | | | | | |
| AMTX | Amarillo | 89.41 | 53 | P | P | 18 55 53.0 | +0.6 | | |
| | baz=248 | | | | | | | | |
| EGMT | Eagleton | 89.47 | 39 | P | P | 18 55 53.0 | +0.6 | | |
| | baz=242 | | | | | | | | |
| DKNS | Dickens | 89.53 | 54 | IAmb | IAmb | 18 55 54.3 | | | |
| | comp=Z,6.3nm,0.8s | | | | | | | | |
| EPYK | Eagle Plains | 89.59 | 15 | P | P | 18 55 52.7 | +0.3 | | |
| | baz=219,SNR=5.3 | | | | | | | | |
| G29M | Pine Creek | 89.69 | 15 | P | P | 18 55 53.2 | +0.3 | | |
| | baz=218 | | | | | | | | |
| C23K | Itkillik River | 89.72 | 9 | P | P | 18 55 53.3 | +0.4 | | |
| | baz=206 | | | | | | | | |
| YAK | Yakutsk | 89.81 | 338 | ceP | P | 18 55 52.4 | -1.0 | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| F28M | Old Crow | 89.83 | 14 | P | P | 18 55 53.8 | +0.3 | | |
| | baz=216 | | | | | | | | |
| C24K | Franklin Bluff | 89.92 | 10 | P | P | 18 55 54.5 | +0.7 | | |
| | baz=208 | | | | | | | | |
| E27K | Coleen River | 89.92 | 13 | P | P | 18 55 54.2 | +0.3 | | |
| | baz=214 | | | | | | | | |
| BRDY | Brady | 90.18 | 57 | IAmb | IAmb | 18 55 57.6 | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| G30M | tAoh Zraii Nji | 90.19 | 15 | IAmb | IAmb | 18 55 56.0 | | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| G30M | tAoh Zraii Nji | 90.19 | 15 | P | P | 18 55 55.3 | +0.1 | | |
| | baz=219,SNR=8.7 | | | | | | | | |
| TROLL | Troll, Antarti | 90.22 | 180 | ⇑P | P | 18 55 56.2 | +0.6 | | |
| | comp=Z,3µm,0.5s | | | | | | | | |
| SNAA | Sanae | 90.49 | 178 | P | P | 18 55 56.9 | +0.2 | | |
| SNAA | Sanae | 90.49 | 178 | ⇑P | P | 18 55 57.0 | +0.2 | | |
| | comp=Z,685nm,0.6s | | | | | | | | |
| SNAA | Sanae | 90.49 | 178 | P | P | 18 55 57.0 | +0.2 | | |
| | comp=Z,24nm,0.6s,baz=208,slow=6.0,SNR=123 | | | | | | | | |
| | comp=Z,24nm,0.6s | | | | | | | | |
| SNAA | Sanae | 90.49 | 178 | P | P | 18 55 56.9 | +0.2 | | |
| SNAA | | | | pmax | pmax | | | | |
| | comp=Z,103nm,1.4s | | | | | | | | |
| VNA3 | Neumayer Olymp | 90.62 | 176 | ⇑P | P | 18 55 57.7 | +0.4 | | |
| | comp=Z,147nm,0.7s | | | | | | | | |
| G31M | Satah River | 90.64 | 16 | IAmb | IAmb | 18 55 58.0 | | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| G31M | Satah River | 90.64 | 16 | P | P | 18 55 57.1 | -0.1 | | |
| | baz=221,SNR=9.0 | | | | | | | | |
| E28M | Babbage River | 90.70 | 13 | IAmb | IAmb | 18 55 58.6 | | | |
| | comp=Z,6.3nm,1.0s | | | | | | | | |
| E28M | Babbage River | 90.70 | 13 | P | P | 18 55 58.0 | +0.4 | | |
| | baz=216,SNR=6.0 | | | | | | | | |
| F30M | Barrier River | 90.78 | 15 | P | P | 18 55 58.9 | +1.1 | | |
| | baz=220 | | | | | | | | |
| GO06 | Curarrehue | 90.81 | 132 | IAmb | IAmb | 18 56 02.2 | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| E29M | Blow River | 90.89 | 14 | P | P | 18 55 58.9 | +0.6 | | |
| | baz=218 | | | | | | | | |
| PLCA | Paso Flores | 90.98 | 134 | P | P | 18 56 00.8 | +1.1 | | |
| PLCA | | | | IAmb | IAmb | 18 56 02.4 | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| PLCA | Paso Flores | 90.98 | 134 | P | P | 18 56 00.8 | +1.1 | | |
| | comp=Z,9.1nm,0.6s,baz=232,slow=4.7,SNR=40 | | | | | | | | |
| | comp=Z,9.1nm,0.6s | | | | | | | | |
| PLCA | Paso Flores | 90.98 | 134 | P | P | 18 56 00.8 | +1.1 | | |
| PLCA | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| LAO | LASA Array | 91.02 | 41 | IAmb | IAmb | 18 56 02.0 | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| LAO | LASA Array | 91.02 | 41 | P | P | 18 56 01.6 | +2.1 | | |
| | baz=245 | | | | | | | | |
| F31M | Tsiigehtchic | 91.17 | 16 | P | P | 18 55 59.6 | 0.0 | | |
| | baz=222,SNR=15 | | | | | | | | |
| VNA1 | Neumayer--Stat | 91.29 | 177 | ⇑P | P | 18 56 01.4 | +1.1 | | |
| | comp=Z,112nm,0.9s | | | | | | | | |
| RSSD | Black Hills | 91.36 | 44 | P | P | 18 56 01.6 | +0.2 | | |
| | baz=246 | | | | | | | | |
| D28M | Stokes Point | 91.46 | 13 | P | P | 18 56 01.8 | +0.9 | | |
| | baz=217 | | | | | | | | |
| OGNE | Ogallala | 91.47 | 47 | P | P | 18 56 02.6 | +0.8 | | |
| | baz=247 | | | | | | | | |
| WMOK | Wichita Mounta | 91.58 | 54 | P | P | 18 56 02.5 | +0.2 | | |
| | baz=249 | | | | | | | | |
| INK | Inuvik | 91.87 | 15 | IAmb | IAmb | 18 56 03.2 | | | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| INK | Inuvik | 91.87 | 15 | P | P | 18 56 02.3 | -0.5 | | |
| | baz=222 | | | | | | | | |
| DGMT | Dagmar | 93.01 | 40 | P | P | 18 56 08.9 | +0.3 | | |
| | baz=246 | | | | | | | | |
| ULN | Ulaanbaatar | 93.49 | 319 | deP | P | 18 56 11.6 | +0.6 | | |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.8s | | | | | | | | |
| SONM | Songino Array | 93.88 | 319 | P | P | 18 56 12.5 | -0.3 | | |
| | comp=Z,0.5nm,0.4s,baz=134,slow=6.2,SNR=2.5 | | | | | | | | |
| SONM | | | | pP | pP | 18 58 16.2 | -0.9 | | |
| | comp=Z,0.6nm,0.3s,baz=135,slow=5.2,SNR=2.3 | | | | | | | | |
| SONM | | | | PKKPbc | PKKPdf | 19 13 12.9 | -0.3 | | |
| | comp=Z,0.7nm,0.4s,baz=288,slow=1.7,SNR=5.4 | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| YKA | Yellowknife Ar | 94.25 | 25 | P | P | 18 56 12.8 | -1.1 | | |
| | comp=Z,2.8nm,0.8s,baz=256,slow=4.2,SNR=6.4 | | | | | | | | |
| YKA | | | | PKKPbc | PKKPdf | 19 13 11.7 | -1.1 | | |
| | comp=Z,0.5nm,0.4s,baz=325,slow=6.0,SNR=4.5 | | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| KSU1 | Kansas State U | 94.70 | 51 | P | P | 18 56 17.2 | +0.7 | | |
| | baz=251 | | | | | | | | |
| ECSD | EROS Data Cent | 96.21 | 46 | IAmb | IAmb | 18 56 23.9 | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| ECSD | EROS Data Cent | 96.21 | 46 | P | P | 18 56 23.7 | +0.5 | | |
| | baz=251 | | | | | | | | |
| LPAZ | La Paz | 102.99 | 112 | Pdiff | Pdif | 18 56 56.1 | +1.3 | | |
| | comp=Z,1.5nm,0.7s,baz=234,slow=1.9,SNR=5.6 | | | | | | | | |
| WMQ | Urumqi | 105.30 | 312 | Pdif | Pdif | 18 57 04.3 | +0.6 | | |
| ZALV | Zalesovo Beam | 108.55 | 322 | PKiKP | PKiKP | 19 01 18.4 | -1.3 | | |
| | comp=Z,2.0nm,0.6s,baz=122,slow=1.6,SNR=9.3 | | | | | | | | |
| ZALV | | | | PKKPbc | PKKPbc | 19 12 31.1 | -1.3 | | |
| | comp=Z,1.2nm,0.6s,baz=274,slow=5.0,SNR=5.8 | | | | | | | | |
| MKAR | Makanchi Array | 109.49 | 314 | Pdiff | Pdif | 18 57 21.6 | -0.6 | | |
| | comp=Z,0.1nm,0.4s,baz=90,slow=5.3,SNR=2.0 | | | | | | | | |
| MKAR | | | | PKiKP | PKiKP | 19 01 20.8 | -1.0 | | |
| | comp=Z,2.1nm,0.4s,baz=189,slow=0.7,SNR=46 | | | | | | | | |
| MKAR | | | | PKKPbc | PKKPbc | 19 12 28.4 | -0.9 | | |
| | comp=Z,2.1nm,0.5s,baz=268,slow=3.4,SNR=17 | | | | | | | | |
| SEM | Semipalatinsk | 111.11 | 318 | eP KiKP | PKiKP | 19 01 24.2 | -0.8 | | |
| | baz=318 | | | | | | | | |
| SEM | Semipalatinsk | 111.11 | 318 | i PKiKP | PKiKP | 19 01 24.1 | -0.8 | | |
| UZB | Uzynbulak | 111.46 | 310 | eP KiKP | PKiKP | 19 01 24.9 | -0.9 | | |
| | baz=310 | | | | | | | | |
| UZB | Uzynbulak | 111.46 | 310 | i PKiKP | PKiKP | 19 01 24.9 | -0.9 | | |
| KPKS | Kokpek | 111.73 | 310 | eP KiKP | PKiKP | 19 01 25.4 | -0.8 | | |
| | baz=310 | | | | | | | | |
| KPKS | Kokpek | 111.73 | 310 | i PKiKP | PKiKP | 19 01 25.4 | -0.8 | | |
| ZHN | Zhinishke | 111.89 | 310 | eP KiKP | PKiKP | 19 01 25.8 | -0.8 | | |
| | baz=310 | | | | | | | | |
| ZHN | Zhinishke | 111.89 | 310 | i PKiKP | PKiKP | 19 01 25.7 | -0.8 | | |
| SATY | Saty | 111.90 | 310 | eP KiKP | PKiKP | 19 01 25.7 | -0.9 | | |
| | baz=310 | | | | | | | | |
| SATY | Saty | 111.90 | 310 | i PKiKP | PKiKP | 19 01 25.7 | -0.9 | | |
| TDK | Taldyqorghan | 112.04 | 312 | eP KiKP | PKiKP | 19 01 25.9 | -0.8 | | |
| | baz=312 | | | | | | | | |
| TDK | Taldyqorghan | 112.04 | 312 | i PKiKP | PKiKP | 19 01 25.9 | -0.8 | | |
| KURK | Kurchatov | 112.16 | 318 | ⇓i PKiKP | PKiKP | 19 01 25.9 | -0.7 | | |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | | |
| KURBB | Kurchatov Arra | 112.22 | 318 | PKiKP | PKiKP | 19 01 26.0 | -0.8 | | |
| | comp=Z,3.0nm,0.7s,baz=97,slow=1.9,SNR=32 | | | | | | | | |
| KURBB | | | | SKP | | 19 04 09.6 | | | |
| | comp=Z,0.7nm,0.7s,baz=105,slow=2.1,SNR=4.7 | | | | | | | | |
| KURBB | | | | PKKPbc | PKKPbc | 19 12 20.6 | 0.0 | | |
| | comp=Z,2.1nm,0.5s,baz=274,slow=4.0,SNR=13 | | | | | | | | |
| MDOK | Medeo | 112.90 | 310 | eP KiKP | PKiKP | 19 01 27.6 | -0.9 | | |
| | baz=310 | | | | | | | | |
| MDOK | | | | eP P | PP | 19 02 27.1 | -1.2 | | |
| | baz=310 | | | | | | | | |
| MDOK | Medeo | 112.90 | 310 | i PKiKP | PKiKP | 19 01 27.6 | -0.9 | | |
| MDOK | | | | e | | 19 02 27.0 | | | |
| TNSS | Tian-Shan | 112.97 | 310 | eP KiKP | PKiKP | 19 01 27.8 | -1.3 | | |
| | baz=310 | | | | | | | | |
| TNSS | Tian-Shan | 112.97 | 310 | i PKiKP | PKiKP | 19 01 27.7 | -1.3 | | |
| AAA | Alma-Ata | 113.00 | 310 | eP KiKP | PKiKP | 19 01 27.8 | -0.8 | | |
| | baz=310 | | | | | | | | |
| AAA | Alma-Ata | 113.00 | 310 | i PKiKP | PKiKP | 19 01 27.8 | -0.8 | | |
| KUU | Kurty | 113.46 | 311 | eP KiKP | PKiKP | 19 01 28.8 | -0.7 | | |
| | baz=311 | | | | | | | | |
| KUU | Kurty | 113.46 | 311 | i PKiKP | PKiKP | 19 01 28.7 | -0.7 | | |
| SGDS | Sogindy | 114.68 | 310 | eP KiKP | PKPdf | 19 01 31.1 | -0.7 | | |
| | baz=310 | | | | | | | | |
| SGDS | Sogindy | 114.68 | 310 | i PKiKP | PKPdf | 19 01 31.1 | -0.7 | | |
| AAK | Ala-Archa | 114.75 | 309 | ⇓i PKiKP | PKPdf | 19 01 31.8 | -0.3 | | |
| BTLS | Baital | 115.13 | 312 | eP KiKP | PKPdf | 19 01 31.9 | -0.7 | | |
| | baz=312 | | | | | | | | |
| BTLS | | | | eP P | PP | 19 02 42.6 | -0.9 | | |
| | baz=312 | | | | | | | | |
| BTLS | Baital | 115.13 | 312 | eP KiKP | PKPdf | 19 01 31.9 | -0.7 | | |
| BTLS | | | | e | | 19 02 42.6 | | | |
| BVAR | Borovoye Array | 117.17 | 321 | PKP | PKPdf | 19 01 35.5 | -0.7 | | |
| | comp=Z,5.4nm,0.4s,baz=85,slow=2.2,SNR=24 | | | | | | | | |
| BVAR | | | | PKKPbc | PKKPbc | 19 12 02.8 | -1.1 | | |
| | comp=Z,0.9nm,0.5s,baz=297,slow=4.6,SNR=4.8 | | | | | | | | |
| KKAR | Karatay Array | 117.68 | 310 | PKPdf | PKPdf | 19 01 37.4 | -0.1 | | |
| KKAR | Karatay Array | 117.68 | 310 | PKiKP | PKPdf | 19 01 37.4 | -0.1 | | |
| BRLS | Borolday | 118.18 | 310 | eP KP | PKPdf | 19 01 38.0 | -0.6 | | |
| | baz=309 | | | | | | | | |
| BRLS | | | | eP P | PP | 19 03 04.3 | -0.2 | | |
| | baz=309 | | | | | | | | |
| BRLS | Borolday | 118.18 | 310 | eP KiKP | PKPdf | 19 01 37.9 | -0.6 | | |
| BRLS | | | | e | | 19 03 04.3 | | | |
| CHM | Chimkent | 118.37 | 309 | eP KP | PKPdf | 19 01 38.1 | -0.8 | | |
| | baz=309 | | | | | | | | |
| CHM | Chimkent | 118.37 | 309 | eP KiKP | PKPdf | 19 01 38.1 | -0.8 | | |
| CHGR | Chuyangaron | 118.72 | 305 | PKPdf | PKiKP | 19 01 39.9 | +0.1 | | |
| CHGR | Chuyangaron | 118.72 | 305 | PKiKP | PKiKP | 19 01 39.9 | +0.1 | | |
| SPITS | Spitsbergen Ar | 119.39 | 357 | PKP | PKPdf | 19 01 39.8 | -0.1 | | |
| | comp=Z,9.2nm,0.8s,baz=58,slow=6.2,SNR=9.7 | | | | | | | | |
| BDFB | Brasilia | 120.45 | 121 | PKP | PKPdf | 19 01 43.1 | -0.7 | | |
| | comp=Z,3.4nm,0.7s,baz=320,slow=4.7,SNR=5.5 | | | | | | | | |
| ARU | Arti | 123.15 | 326 | PKPdf | PKPdf | 19 01 47.7 | +0.1 | | |
| ARU | Arti | 123.15 | 326 | i PKiKP | PKPdf | 19 01 47.0 | -0.6 | | |
| ARU | | | | | | 19 03 38.5 | | | |
| ARU | | | | | | 19 08 03.6 | | | |
| ARU | | | | SS | SS | 19 19 42.1 | +3.3 | | |
| ARU | Arti | 123.15 | 326 | PKP | PKPdf | 19 01 47.3 | -0.3 | | |
| ABKAR | Akbulak array | 124.27 | 318 | PKPdf | PKPdf | 19 01 50.0 | 0.0 | | |
| ARCES | ARCESS Array B | 126.48 | 350 | PKP | PKPdf | 19 01 52.8 | -0.8 | | |
| | comp=Z,3.3nm,0.4s,baz=33,slow=2.9,SNR=48 | | | | | | | | |
| ARCES | | | | PKKPbc | PKKPab | 19 11 27.8 | +1.1 | | |
| | comp=Z,2.1nm,0.5s,baz=226,slow=1.6,SNR=14 | | | | | | | | |
| KIRV | Kirov | 126.80 | 331 | d i PKiKP | PKPdf | 19 01 54.6 | +0.1 | | |
| BOSA | Boshof | 126.50 | 206 | PKP | PKPdf | 19 01 58.5 | -0.4 | | |
| | comp=Z,6.5nm,0.7s,baz=88,slow=1.2,SNR=12 | | | | | | | | |
| SOHO | SOHO | 129.01 | 287 | i PKPdf | PKPdf | 19 01 58.9 | -0.9 | | |
| | SNR=6.1 | | | | | | | | |
| UOSS | Minazif | 129.37 | 288 | PKPdf | PKPdf | 19 01 59.6 | -0.9 | | |
| HATD | Hatta, Dubai | 129.42 | 288 | i PKiKP | PKPdf | 19 02 00.6 | 0.0 | | |
| | SNR=6.4 | | | | | | | | |
| MSFE | Esma-Masafi | 129.43 | 288 | i PKPdf | PKPdf | 19 02 00.2 | -0.4 | | |
| | SNR=7.1 | | | | | | | | |
| SHME | Shamm | 129.48 | 289 | i PKPdf | PKPdf | 19 01 60.0 | -0.7 | | |
| | SNR=6.8 | | | | | | | | |
| ASHO | Ashiyiah | 129.48 | 287 | PKPdf | PKPdf | 19 02 00.3 | -0.4 | | |
| ALNE | Al Ain | 129.72 | 287 | i PKPdf | PKPdf | 19 02 00.8 | -0.4 | | |
| | SNR=6.6 | | | | | | | | |
| NAZ | Nazwa, Dubai | 129.86 | 288 | PKiKP | PKPdf | 19 02 01.6 | +0.2 | | |
| FAQ | Al Faqa, Dubai | 129.91 | 287 | PKiKP | PKiKP | 19 02 02.0 | -0.3 | | |
| ASUD | Al Ashush, Dub | 130.14 | 287 | i PKiKP | PKPdf | 19 02 02.3 | +0.4 | | |
| | SNR=10 | | | | | | | | |
| AJN | Ajban | 130.45 | 287 | PKiKP | PKPdf | 19 02 02.7 | +0.2 | | |
| BELG | Belogornoye | 130.59 | 325 | ⇓eP KiKP | PKPdf | 19 02 00.6 | -1.3 | | |
| MZR | Muzera | 131.73 | 285 | i PKiKP | PKiKP | 19 02 05.8 | -0.3 | | |
| | SNR=13 | | | | | | | | |
| FINES | FINESS Array B | 133.39 | 344 | PKhKP | PKPpre | 19 01 53.4 | | | |
| | comp=Z,1.6nm,0.7s,baz=20,slow=2.2,SNR=4.2 | | | | | | | | |
| FINES | | | | PKP | PKPdf | 19 02 06.8 | -0.1 | | |
| | comp=Z,4.2nm,0.7s,baz=46,slow=2.8,SNR=10.0 | | | | | | | | |
| FINES | | | | SKPbc | SKPbc | 19 04 43.7 | +1.2 | | |
| | comp=Z,6.1nm,0.7s,baz=72,slow=6.2,SNR=10.0 | | | | | | | | |
| FINES | | | | PKKP | PKKPdf | 19 11 55.0 | -3.5 | | |
| | comp=Z,2.4nm,0.8s,baz=160,slow=6.1,SNR=3.5 | | | | | | | | |
| MAK | Makhachkala | 134.29 | 313 | eP | Pdif | 18 59 14.5 | +2.0 | | |
| MAK | | | | i | | 19 02 11.8 | | | |
| MAK | | | | e | | 19 04 18.7 | | | |
| MAK | | | | e | | 19 04 49.6 | | | |
| MAK | | | | ePPP | PPP | 19 07 53.5 | | | |
| MAK | | | | e | | 19 08 30.6 | | | |
| MAK | | | | eSS | SS | 19 21 57.0 | +1.9 | | |
| MAK | | | | eSSS | SSS | 19 27 07.3 | | | |
| MAK | | | | pmax | pmax | | | | |
| | comp=Z,152nm,0.9s | | | | | | | | |
| VRH | Novokhopyorsk | 134.38 | 326 | eP KiKP | PKPdf | 19 02 09.6 | +0.6 | | |
| VRH | | | | e | | 19 04 46.2 | | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| OBN | Obninsk | 134.56 | 333 | eP KiKP | PKiKP | 19 02 10.2 | -0.6 | | |
| OBN | | | | i | | 19 04 47.4 | | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| VORR | Voronezh | 135.43 | 328 | eP KiKP | PKPdf | 19 02 09.8 | -1.2 | | |
| VORR | | | | pmax | pmax | | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| VSU | Vasula | 135.70 | 342 | ⇓i PKiKP | PKiKP | 19 02 12.7 | -0.3 | | |
| NB2 | NORSAR Subarra | 136.51 | 354 | PKPdf | PKPpre | 19 02 03.0 | | | |
| | comp=Z,1.3nm,0.5s,baz=14,slow=1.8 | | | | | | | | |
| NB2 | | | | SKPa | | 19 04 54.1 | | | |
| | comp=Z,1.4nm,0.7s,baz=11,slow=2.9 | | | | | | | | |
| NOA | NORSAR Array B | 136.51 | 354 | PKP | PKiKP | 19 02 13.9 | -0.8 | | |
| | comp=Z,0.9nm,0.4s,baz=45,slow=2.0,SNR=9.2 | | | | | | | | |
| NOA | | | | SKPbc | SKPbc | 19 04 54.1 | +1.8 | | |
| | comp=Z,3.8nm,0.9s,baz=14,slow=4.5,SNR=6.1 | | | | | | | | |
| HFS | Hagfors | 137.09 | 351 | PKhKP | PKPpre | 19 02 02.2 | | | |
| | comp=Z,2.0nm,0.5s,baz=64,slow=6.8,SNR=11 | | | | | | | | |
| HFS | | | | PKP | PKiKP | 19 02 15.1 | -0.8 | | |
| | comp=Z,3.6nm,0.5s,baz=98,slow=4.5,SNR=10.0 | | | | | | | | |
| HFS | | | | SKPbc | SKPbc | 19 04 52.7 | -1.2 | | |
| | comp=Z,6.2nm,0.8s,baz=5.7,slow=3.0,SNR=7.1 | | | | | | | | |
| KBZ | Khabaz | 137.15 | 316 | PKhKP | PKPpre | 19 02 09.4 | | | |
| | comp=Z,0.9nm,0.6s,baz=124,slow=7.3,SNR=1.9 | | | | | | | | |
| KBZ | | | | SKPbc | SKPbc | 19 04 55.0 | +0.3 | | |
| | comp=Z,3.2nm,0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LBWR | Ladybower, Pea | 144.55 | 4 | *e*P | | **PKPdf** | 19 02 26.5 | -0.9 |
| YLL | Llanberis | 144.60 | 6 | *e*P | | **PKPdf** | 19 02 27.3 | -0.2 |
| PRAR | RASCA | 144.62 | 331 | ⇑P | | **PKPdf** | 19 02 26.8 | -0.9 |
| VLDR | Vladesti | 144.81 | 328 | ⇑P | | **PKPab** | 19 02 30.1 | +0.6 |
| OJC | Ojcow | 144.84 | 340 | *e*PKP | | PKPbc | 19 02 28.3 | -0.3 |
| TLCR | | 144.87 | 326 | ⇑P | | **PKPab** | 19 02 29.7 | 0.0 |
| TLCR | | 144.87 | 326 | ⇑PKIKP | | **PKPab** | 19 02 29.7 | 0.0 |
| BURAR | Bucovina Array | 144.88 | 332 | PKPdf | | **PKPab** | 19 02 30.3 | +0.5 |
| BURAR | Bucovina Array | 144.88 | 332 | ⇑P | | **PKPab** | 19 02 30.1 | +0.3 |
| VARL | Varlezi | 144.88 | 328 | ⇓P | | **PKPab** | 19 02 30.1 | +0.4 |
| SCTR | Scanteiesti | 144.97 | 328 | ⇑P | | **PKPab** | 19 02 30.2 | +0.2 |
| BIZ | Bicaz | 144.99 | 331 | ⇓P | | PKPpre | 19 02 21.7 | |
| BIZ | Bicaz | 144.99 | 331 | ⇑P | | **SKPdf** | 19 05 06.1 | -3.1 |
| GHRR | | 144.99 | 329 | ⇑P | | **PKPab** | 19 02 30.6 | +0.4 |
| TESR | Tescani | 145.04 | 330 | ⇑P | | **PKPbc** | 19 02 29.6 | +0.2 |
| KOLS | Kolonicke sedl | 145.05 | 337 | *e*PKIKP | | **PKPab** | 19 02 29.9 | -0.4 |
| KOLS | Kolonicke sedl | 145.05 | 337 | *e*PKP | | **PKPab** | 19 02 29.9 | -0.4 |
| JURR | Jurilovca | 145.12 | 326 | ⇑P | | **PKPbc** | 19 02 29.7 | +0.1 |
| NEGRR | Negrea | 145.12 | 328 | ⇑P | | **PKPab** | 19 02 30.6 | -0.1 |
| BR131 | Keskin Array S | 145.13 | 315 | PKPdf | | **PKPbc** | 19 02 30.4 | +0.4 |
| BR131 | Keskin Array S | 145.13 | 315 | PKIKP | | **PKPbc** | 19 02 30.4 | +0.4 |
| BRTR | Keskin Array B | 145.13 | 315 | PKPdf | | **PKPbc** | 19 02 30.4 | +0.4 |
| BRTR | Keskin Array B | 145.13 | 315 | PKPbc | | **PKPdf** | 19 02 28.0 | -1.0 |
| | comp=Z,10nm,0.6s,baz=128,slow=4.6,SNR=65 | | | | | | | |
| BRTR | | | | pPKPbc | | pPKPbc | 19 04 39.8 | -0.2 |
| | comp=Z,9.4nm,1.3s,baz=139,slow=2.8,SNR=4.5 | | | | | | | |
| BRTR | | | | SKPbc | | **SKiKP** | **19 05 15.7** | **-0.1** |
| | comp=Z,3.0nm,0.8s,baz=106,slow=3.2,SNR=6.7 | | | | | | | |
| BRTR | Keskin Array B | 145.13 | 315 | PKIKP | | **PKPbc** | 19 02 30.5 | +0.4 |
| SCHL | Schela | 145.17 | 328 | ⇓P | | **PKPab** | 19 02 30.9 | +0.1 |
| IZVR | Izvoarele | 145.17 | 328 | ⇑P | | **PKPab** | 19 02 30.6 | -0.3 |
| COSR | Cosmesti PH | 145.19 | 328 | ⇑P | | **PKPab** | 19 02 30.5 | -0.4 |
| SCHLR | Schela | 145.19 | 328 | ⇑P | | **PKPdf** | 19 02 27.1 | -1.6 |
| KIRS | Kirsehir-Merke | 145.23 | 314 | ⇓P | | **PKPbc** | 19 02 30.1 | -0.2 |
| CFR | Carcaliu | 145.23 | 327 | ⇑P | | **PKPbc** | 19 02 30.2 | +0.4 |
| CWF | Charnwood Fore | 145.24 | 4 | *e*P | | **PKPbc** | 19 02 29.2 | -0.4 |
| PANC | Panciu | 145.25 | 329 | ⇑P | | **PKPab** | 19 02 31.4 | +0.3 |
| ONER | Baraj Valea Uz | 145.29 | 330 | ⇓P | | **PKPab** | 19 02 30.4 | +0.3 |
| TPGR | Topolog | 145.30 | 326 | ⇓P | | **PKPab** | 19 02 31.1 | -0.3 |
| TPGR | Topolog | 145.30 | 326 | ⇓P | | pPKiKP | 19 04 43.8 | -1.4 |
| KSP | Ksiaz | 145.31 | 344 | *e*PKP | | **PKPbc** | 19 02 29.6 | -0.4 |
| WACR | West Acre | 145.33 | 1 | *e*P | | **PKPbc** | 19 02 29.6 | -0.4 |
| HLM1 | Long Mynd | 145.34 | 5 | *e*P | | **PKPbc** | 19 02 29.7 | -0.3 |
| NIE | Niedzica | 145.36 | 335 | *e*PKP | | **PKPab** | 19 02 30.9 | -0.6 |
| CRVS | Cervenica-Dubn | 145.38 | 337 | *e*PKIKP | | **PKPbc** | 19 02 30.6 | +0.3 |
| CRVS | Cervenica-Dubn | 145.38 | 337 | *e*PKP | | **PKPbc** | 19 02 30.6 | +0.3 |
| CRVS | | | | *e* | | | 19 04 44.3 | |
| VRI | Vrincioaia | 145.47 | 329 | ⇑P | | **PKPab** | 19 02 31.4 | -0.6 |
| VRI | Vrincioaia | 145.47 | 329 | ⇑PKP2 | | **PKPab** | 19 02 31.4 | -0.6 |
| PLOR | Plostina | 145.51 | 329 | ⇓P | | **PKPab** | 19 02 31.8 | -0.5 |
| BMR | Baia Mare | 145.57 | 334 | ⇑P | | **PKPab** | 19 02 32.0 | -0.4 |
| BMR | Baia Mare | 145.57 | 334 | ⇑PKP2 | | **PKPab** | 19 02 32.0 | -0.4 |
| OSTC | Ostas | 145.59 | 344 | ⇑*e*PKP | | **PKPbc** | 19 02 30.6 | -0.2 |
| OSTC | Ostas | 145.59 | 344 | *e*PKIKP | | **PKPbc** | 19 02 30.6 | -0.2 |
| CHVC | Chvalec | 145.60 | 344 | ⇑*e*PKP | | **PKPbc** | 19 02 31.4 | +0.5 |
| CHVC | Chvalec | 145.60 | 344 | *e*PKIKP | | **PKPbc** | 19 02 31.4 | +0.5 |
| ANTO | Ankara | 145.62 | 316 | ⇑P | | **PKPdf** | 19 02 29.9 | +0.1 |
| ANTO | Ankara | 145.62 | 316 | ⇑PKIKP | | **PKPdf** | 19 02 29.9 | +0.1 |
| CLL | Collm | 145.64 | 348 | *i* PKPbc | | **PKPbc** | 19 02 31.0 | +0.1 |
| | comp=Z,44nm,0.8s | | | | | | | |
| CLL | | | | *ex* | | x | 19 04 43.0 | |
| CLL | | | | *e*SKPdf | | **SKPdf** | **19 05 11.0** | **+1.0** |
| CLL | | | | *e*SKPbc | | **SKiKP** | **19 05 17.0** | **+0.8** |
| **CLL** | **Collm** | **145.64** | **348** | *i* PKIKP | | **PKPbc** | **19 02 31.0** | **+0.1** |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,44nm,0.8s | | | | | | | |
| ARCR | ARCALIA | 145.67 | 333 | ⇑P | | **PKPab** | 19 02 32.6 | -0.2 |
| HARR | Harsova | 145.67 | 326 | ⇑P | | **PKPab** | 19 02 32.3 | -0.5 |
| HARR | Harsova | 145.67 | 326 | ⇓P | | pPKiKP | 19 04 45.0 | -0.9 |
| HARR | Harsova | 145.67 | 326 | ⇑PKP2 | | **PKPab** | 19 02 32.3 | -0.5 |
| TURR | Turia | 145.68 | 330 | ⇓P | | **PKPab** | 19 02 32.6 | -0.3 |
| OKC | Ostrava-Krasne | 145.69 | 341 | ⇑*e*PKP | | **PKPbc** | 19 02 31.5 | +0.4 |
| OKC | Ostrava-Krasne | 145.69 | 341 | *e*PKIKP | | **PKPbc** | 19 02 31.5 | +0.4 |
| UPC | Upice | 145.69 | 344 | ⇑*e*PKP | | **PKPbc** | 19 02 31.6 | +0.5 |
| UPC | Upice | 145.69 | 344 | *e*PKIKP | | **PKPbc** | 19 02 31.6 | +0.5 |
| RSBS | Rosebush, Pemb | 145.71 | 7 | *e*P | | **PKPdf** | 19 02 30.2 | +0.8 |
| TLBR | Topalu | 145.71 | 326 | ⇓P | | **PKPbc** | 19 02 31.8 | +0.5 |
| TLBR | Topalu | 145.71 | 326 | ⇑P | | pPKiKP | 19 04 45.3 | -0.6 |
| COVR | Voineasa-Covas | 145.74 | 329 | ⇑P | | **PKPbc** | 19 02 31.9 | +0.5 |
| DPC | Dobruska-Polom | 145.75 | 344 | ⇑*e*PKP | | **PKPbc** | 19 02 32.0 | +0.7 |
| DPC | Dobruska-Polom | 145.75 | 344 | *e*PKP2 | | **PKPbc** | 19 02 32.0 | +0.7 |
| OZUR | | 145.75 | 330 | ⇓P | | PKPdf | 19 02 19.1 | -11 |
| BOSR | Bodos | 145.83 | 330 | ⇑P | | **PKPab** | 19 02 33.3 | -0.2 |
| BRG | Berggiesshubel | 145.85 | 347 | *e*PKP | | **PKPdf** | 19 02 30.3 | +0.6 |
| BRG | | | | Amp | | | 19 02 31.1 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.85** | **347** | P | | **PKPbc** | **19 02 32.2** | **+0.7** |
| BRG | | | | Amp | | | 19 02 32.9 | |
| | comp=Z,18nm,0.7s | | | | | | | |
| BRG | | | | pPKP | | **pPKPdf** | **19 04 44.0** | **+2.3** |
| BRG | | | | Amp | | | 19 04 46.0 | |
| | comp=Z,6.7nm,1.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.85** | **347** | Amp | | | 19 05 19.4 | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| BRG | | | | P | | **SKPbc** | **19 05 18.7** | **+2.3** |
| LANS | Liptovska Anna | 145.87 | 339 | *e*PKP2 | | **PKPab** | 19 02 32.7 | -0.9 |
| LANS | Liptovska Anna | 145.87 | 339 | *e*PKP | | **PKPab** | 19 02 32.7 | -0.9 |
| KRLC | Kraliky | 145.88 | 343 | ⇑*e*PKP | | **PKPbc** | 19 02 31.2 | -0.5 |
| KRLC | Kraliky | 145.88 | 343 | *e*PKP2 | | **PKPab** | 19 02 32.7 | -0.9 |
| MORC | Moravsky Berou | 145.93 | 342 | *e*PKP | | **PKPdf** | 19 02 29.9 | 0.0 |
| MORC | Moravsky Berou | 145.93 | 342 | ⇑P | | **PKPbc** | 19 02 30.9 | -0.9 |
| NEHR | Nehoiu | 145.99 | 329 | ⇑P | | **PKPbc** | 19 02 32.8 | +0.6 |
| MONM | Monmouth | 146.02 | 5 | *e*P | | **PKPbc** | 19 02 31.6 | -0.3 |
| PVCC | Panska Ves | 146.03 | 346 | ⇑*e*PKP | | **PKPbc** | 19 02 32.8 | +0.8 |
| PVCC | Panska Ves | 146.03 | 346 | *e*PKP2 | | **PKPbc** | 19 02 32.8 | +0.8 |
| DOPR | Dopca | 146.04 | 330 | ⇓P | | **PKPab** | 19 02 33.6 | -0.7 |
| DOPR | Dopca | 146.04 | 330 | ⇓P | | pPKiKP | 19 04 46.0 | -0.4 |
| ISR | Istrita | 146.09 | 328 | ⇑P | | **PKPab** | 19 02 33.5 | -1.1 |
| ISR | Istrita | 146.09 | 328 | ⇑PKP2 | | **PKPab** | 19 02 33.5 | -1.1 |
| MLR | Muntele Rosu | 146.12 | 329 | ⇓P | | **PKPbc** | 19 02 32.3 | -0.3 |
| MLR | Muntele Rosu | 146.12 | 329 | ⇓P | | pPKiKP | 19 04 45.5 | -1.2 |
| MLR | Muntele Rosu | 146.12 | 329 | ⇓PKIKP | | **PKPbc** | 19 02 32.3 | -0.3 |
| STRD | Stroud | 146.14 | 5 | *e*P | | **PKPbc** | 19 02 31.9 | -0.4 |
| HSKC | Hora Svate Kat | 146.21 | 347 | ⇑*e*PKP | | **PKPbc** | 19 02 32.7 | +0.1 |
| MESR | Meseseni | 146.22 | 334 | ⇓P | | **PKPbc** | 19 02 33.1 | +0.5 |
| MBAR | Mbarara | 146.23 | 240 | *c* PKIKP | | **PKPbc** | 19 02 33.0 | -0.9 |
| MBAR | | | | pmax | | pmax | | |
| | comp=Z,66nm,1.3s | | | | | | | |
| CBBR | Cluj-Babes-Bol | 146.26 | 333 | ⇑P | | **PKPdf** | 19 02 30.3 | -0.3 |
| CJR | Cluj-Napoca | 146.28 | 333 | ⇓P | | **PKPbc** | 19 02 33.6 | +0.7 |
| LEHL | Lehliu | 146.40 | 327 | ⇓P | | **PKPab** | 19 02 38.4 | +2.6 |
| LTVH | Ltavrtes, Hu | 146.46 | 335 | ⇑P | | **PKPbc** | 19 02 32.1 | -1.1 |
| PRA | Prague | 146.49 | 345 | ⇑*e*PKP | | **PKPbc** | 19 02 33.8 | +0.5 |
| PRA | Prague | 146.49 | 345 | *e*PKP2 | | **PKPbc** | 19 02 33.8 | +0.5 |
| MMAI | Mount Meron Ar | 146.53 | 303 | PKPbc | | **pPKPdf** | **19 04 45.1** | **+0.9** |
| | comp=Z,21nm,0.5s,baz=64,slow=5.7,SNR=73 | | | | | | | |
| MMAI | | | | pPKPbc | | **pPKPdf** | **19 04 45.1** | **+0.9** |
| | comp=Z,28nm,1.1s,baz=69,slow=4.6,SNR=12 | | | | | | | |
| MMAI | | | | SKPbc | | **SKiKP** | **19 05 19.8** | **+1.0** |
| | comp=Z,7.6nm,0.8s,baz=105,slow=1.9,SNR=4.7 | | | | | | | |
| PRU | Pruhonice | 146.54 | 345 | ⇑*e*PKP | | **PKPbc** | 19 02 33.9 | +0.5 |
| PRU | Pruhonice | 146.54 | 345 | *e*PKP2 | | **PKPbc** | 19 02 33.9 | +0.5 |
| VOIR | | 146.59 | 330 | ⇓P | | **PKPbc** | 19 02 34.8 | +1.0 |
| VOIR | | 146.59 | 330 | ⇓P | | pPKiKP | 19 04 48.9 | +1.3 |
| VOIR | | 146.59 | 330 | ⇓PKP2 | | **PKPbc** | 19 02 34.8 | +1.0 |
| DRGR | | 146.60 | 334 | ⇑P | | **PKPbc** | 19 02 34.3 | +0.5 |
| DRGR | | 146.60 | 334 | ⇓P | | pPKiKP | 19 04 47.3 | -0.1 |
| DRGR | | 146.60 | 334 | ⇑PKP2 | | **PKPbc** | 19 02 34.3 | +0.5 |
| VRAC | Vranov | 146.62 | 343 | *e*PKP | | **PKPdf** | 19 02 31.1 | 0.0 |
| VRAC | Vranov | 146.62 | 343 | ⇓P | | **PKPbc** | 19 02 34.5 | +0.8 |
| VRAC | Vranov | 146.62 | 343 | ⇑P | | pPKiKP | 19 04 48.9 | +1.6 |
| VRAC | Vranov | 146.62 | 343 | ⇓PKP2 | | **PKPbc** | 19 02 34.5 | +0.8 |
| VYHS | Vyhne | 146.65 | 340 | *e*PKP2 | | **PKPbc** | 19 02 34.4 | +0.6 |
| VYHS | Vyhne | 146.65 | 340 | *e*PKP | | **PKPbc** | 19 02 34.4 | +0.6 |
| VYHS | | | | *e* | | | 19 04 45.6 | |
| JAVC | Velka Javorina | 146.70 | 341 | *e*PKP | | **PKPdf** | 19 02 31.9 | +0.6 |
| JAVC | | | | *e* | | | 19 04 46.6 | |
| BORR | Bors | 146.74 | 335 | ⇑P | | **PKiKP** | 19 02 35.3 | -0.7 |
| PSZ | Piszkesteto | 146.77 | 338 | ⇑P | | **PKPbc** | 19 02 35.1 | +0.9 |
| PSZ | Piszkesteto | 146.77 | 338 | ⇑P | | pPKiKP | 19 04 46.2 | -1.6 |
| PSZ | Piszkesteto | 146.77 | 338 | ⇑PKP2 | | **PKPbc** | 19 02 35.1 | +0.9 |
| ARR | Arges | 146.84 | 330 | ⇑P | | **PKiKP** | 19 02 36.2 | -0.2 |
| ARR | Arges | 146.84 | 330 | ⇑P | | pPKiKP | 19 04 47.3 | -0.8 |
| KRUC | Moravsky | 146.90 | 343 | *e*PKP | | **PKPdf** | 19 02 31.2 | -0.3 |
| KRUC | | | | *e* | | | 19 04 45.8 | |
| ZVC | Zvikov | 147.13 | 345 | ⇑*e*PKP | | **PKPbc** | 19 02 35.4 | +0.4 |
| LOT | Lotru | 147.18 | 331 | ⇑P | | **PKPbc** | 19 02 35.1 | -0.3 |
| LOT | Lotru | 147.18 | 331 | ⇑P | | pPKiKP | 19 04 47.5 | -1.4 |
| MEM | Membach | 147.31 | 355 | *d*PKP | | **PKPbc** | 19 02 35.6 | +0.1 |
| BTNL | Ternell | 147.32 | 355 | *d*PKP | | **PKPbc** | 19 02 35.5 | 0.0 |
| BSTI | Sart Tilman | 147.37 | 356 | *d*PKP | | **PKPbc** | 19 02 35.7 | +0.1 |
| SRO | Srobarova | 147.41 | 339 | *e*PKP2 | | **PKiKP** | 19 02 36.7 | -0.7 |
| SRO | Srobarova | 147.41 | 339 | *e*PKP | | **PKiKP** | 19 02 36.7 | -0.7 |
| COPA | Copaceanca | 147.45 | 328 | ⇑P | | **PKPdf** | 19 02 31.2 | -1.4 |
| CSS | Mathiatis | 147.45 | 307 | | | **PKPbc** | 19 02 36.3 | -0.1 |
| SIRR | Siria | 147.46 | 334 | ⇓P | | **PKPdf** | 19 02 33.6 | +1.1 |
| SIRR | Siria | 147.46 | 334 | ⇓P | | pPKiKP | 19 04 48.7 | -0.4 |
| GRF | Grafenberg Arr | 147.53 | 349 | *e*PKP | | **PKPbc** | 19 02 36.5 | +0.4 |
| | baz=16,slow=2.0 | | | | | | | |
| BCLA | Clavier | 147.55 | 356 | *d*PKP | | **PKPbc** | 19 02 34.9 | -1.1 |
| BCLA | | | | *d*PKiKP | | **PKiKP** | 19 02 36.7 | -0.9 |
| BCLA | | | | *d*PKPab | | **PKPab** | 19 02 38.8 | -1.4 |
| BHOU | Houvegnez | 147.57 | 355 | *d*PKIKP | | **PKPbc** | 19 02 36.6 | +0.5 |
| KHC | Kasperske Hory | 147.57 | 346 | *e*PKPDF | | **PKPdf** | 19 02 33.1 | +0.4 |
| KHC | | | | ⇑*e*PKP | | **PKPbc** | 19 02 36.7 | +0.5 |
| KHC | Kasperske Hory | 147.57 | 346 | *ce*PKHKP | | PKPpre | 19 02 32.2 | |
| BGES | Gesves | 147.60 | 356 | *d*PKPdf | | **PKPdf** | 19 02 32.3 | -0.3 |
| BGES | | | | *d*PKPbc | | **PKPbc** | 19 02 35.4 | -0.8 |
| GZR | Gura Zlata | 147.67 | 332 | ⇑P | | **PKPbc** | 19 02 36.5 | -0.2 |
| GZR | Gura Zlata | 147.67 | 332 | ⇑PKHKP | | PKPpre | 19 02 36.5 | |
| SURR | Surduc | 147.67 | 333 | ⇓P | | **PKPbc** | 19 02 37.0 | +0.5 |
| SURR | Surduc | 147.67 | 333 | ⇑P | | pPKiKP | 19 04 48.7 | -1.2 |
| CKRC | Cesky Krumlov | 147.68 | 345 | ⇑*e*PKP | | **PKPbc** | 19 02 37.1 | +0.6 |
| CKRC | Cesky Krumlov | 147.68 | 345 | *e*PKIKP | | **PKPbc** | 19 02 35.4 | -1.1 |
| BMRD | Maredsous | 147.70 | 357 | *d*PKP | | **PKPbc** | 19 02 36.4 | 0.0 |
| GERES | GERESS Array B | 147.80 | 345 | PKPbc | | **PKPbc** | 19 02 36.5 | -0.4 |
| | comp=Z,15nm,0.6s,baz=352,slow=5.7,SNR=66 | | | | | | | |
| GERES | | | | pPKPbc | | **pPKPbc** | **19 04 46.6** | **-0.5** |
| | comp=Z,1.4nm,0.8s,baz=343,slow=11,SNR=4.1 | | | | | | | |
| RCHB | Rochefort | 147.82 | 356 | *d*PKP | | **PKPbc** | 19 02 36.9 | +0.2 |
| DOU | Dourbes | 147.91 | 357 | *d*PKiKP | | **PKPbc** | 19 02 37.3 | +0.3 |
| ELND | Elena | 147.96 | 326 | ⇓P | | **PKPbc** | 19 02 37.3 | 0.0 |
| ELND | Elena | 147.96 | 326 | ⇓P | | pPKiKP | 19 04 52.4 | +1.7 |
| BZS | Buzias | 148.00 | 334 | ⇑P | | **PKPdf** | 19 02 34.1 | +0.7 |
| BZS | Buzias | 148.00 | 334 | ⇑P | | pPKiKP | 19 04 49.4 | -0.8 |
| BZS | Buzias | 148.00 | 334 | ⇑PKHKP | | PKPpre | 19 02 34.1 | |
| CONA | Conrad Observa | 148.07 | 342 | *i* PKiKP | | **PKPbc** | 19 02 38.1 | +0.5 |
| | comp=Z,12nm,0.5s,SNR=17 | | | | | | | |
| CONA | | | | *ep*PKP | | **pPKPab** | **19 04 49.9** | **+1.2** |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| RONA | Rosalia, Austr | 148.15 | 342 | *i* PKiKP | | **PKPbc** | 19 02 38.3 | +0.5 |
| | comp=Z,12nm,0.5s,SNR=14 | | | | | | | |
| RONA | | | | *ep*PKP | | **pPKPab** | **19 04 50.2** | **+1.3** |
| | comp=Z,7.6nm,1.4s | | | | | | | |
| EDRB | Edirne | 148.21 | 324 | P | | **PKPbc** | 19 02 37.9 | -0.1 |
| HERR | Herculane | 148.23 | 332 | ⇑P | | **PKPbc** | 19 02 38.1 | +0.1 |
| HERR | Herculane | 148.23 | 332 | ⇑P | | pPKiKP | 19 04 50.4 | -0.6 |
| WLF | Walferdange | 148.24 | 355 | *d*PKP | | **PKPbc** | 19 02 38.4 | +0.5 |
| BAND | Balkesir-Ban | 148.35 | 320 | ⇑P | | **PKPbc** | 19 02 39.0 | +0.6 |
| BANR | Banloc | 148.39 | 334 | ⇑P | | **PKPbc** | 19 02 38.3 | 0.0 |
| MOA | Molln | 148.59 | 344 | *i* PKP | | **PKPbc** | 19 02 38.8 | 0.0 |
| | comp=Z,4.1nm,0.6s | | | | | | | |
| MOA | | | | *ep*PKP | | **pPKPab** | **19 04 50.8** | **+0.1** |
| | comp=Z,6.8nm,1.0s | | | | | | | |
| MDVR | Moldovita | 148.62 | 333 | ⇓P | | **PKPdf** | 19 02 35.1 | +0.6 |
| VALD | Valchedram | 148.66 | 329 | P | | **PKPbc** | 19 02 39.0 | 0.0 |
| MORH | Mrgy, Hungar | 148.67 | 338 | ⇑P | | **PKPdf** | 19 02 35.0 | +0.5 |
| MORH | Mrgy, Hungar | 148.67 | 338 | ⇓P | | pPKiKP | 19 04 50.9 | -0.7 |
| JQE | Queens East | 148.71 | 5 | *e*P | | **PKPbc** | 19 02 38.7 | -0.3 |
| JSA | Saint Aubin | 148.71 | 5 | *e*P | | **PKPbc** | 19 02 38.8 | -0.1 |
| MPEP | Malo Peshtene | 148.75 | 329 | P | | **PKPbc** | 19 02 39.0 | -0.3 |
| ARSA | Arzberg | 148.79 | 342 | *e*PKP | | **PKPbc** | 19 02 39.2 | -0.1 |
| | comp=Z,1.4nm,0.5s,SNR=6.0 | | | | | | | |
| ARSA | | | | *ep*PKP | | **pPKPab** | **19 04 51.0** | **-0.4** |
| | comp=Z,5.1nm,1.4s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.89** | **345** | *e*PKP | | **PKPbc** | 19 02 39.3 | -0.3 |
| | comp=Z,2.3nm,0.4s,SNR=6.3 | | | | | | | |
| BIOA | | | | *ep*PKP | | **pPKPab** | **19 04 51.9** | **+0.2** |
| | comp=Z,4.9nm,1.0s | | | | | | | |
| KULA | Kula-Manisa | 149.06 | 317 | P | | **PKPbc** | 19 02 40.7 | +0.3 |
| PGB | Panagyurishte | 149.14 | 327 | P | | **PKPbc** | 19 02 40.0 | -0.4 |
| ALN | Alexandroupoli | 149.23 | 323 | P | | **PKPbc** | 19 02 39.6 | -0.9 |
| BFO | Black Forest | 149.31 | 352 | | | **PKiKP** | 19 02 41.0 | -0.4 |
| LESA | Schwarzleotal | 149.38 | 346 | *i* PKP | | **PKPbc** | 19 02 40.5 | -0.4 |
| | comp=Z,9.1nm,0.4s | | | | | | | |
| SOKA | Soboth | 149.45 | 342 | *e*PKP | | **PKPbc** | 19 02 40.5 | -0.5 |
| | comp=Z,11nm,0.8s,SNR=8.5 | | | | | | | |
| SOKA | | | | *ep*PKP | | **pPKPbc** | **19 04 52.1** | **+0.4** |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| BOVS | Bovan | 149.51 | 331 | ⇑P | | **PKPbc** | 19 02 41.2 | +0.1 |
| KBA | Koelnbreinsper | 149.54 | 345 | *i* PKP | | **PKPbc** | 19 02 40.6 | -0.7 |
| | comp=Z,12nm,0.5s,SNR=12 | | | | | | | |
| VTS | Vitosha | 149.55 | 328 | P | | **PKPbc** | 19 02 41.0 | -0.5 |
| PLNA | Plana | 149.56 | 328 | P | | **PKiKP** | 19 02 42.0 | -0.2 |
| WATA | Walderalm | 149.71 | 347 | *i* PKP | | **PKPbc** | 19 02 41.5 | -0.2 |
| | comp=Z,13nm,0.5s,SNR=12 | | | | | | | |
| WATA | | | | *ep*PKP | | **pPKPbc** | **19 04 53.7** | **+1.3** |
| | comp=Z,6.3nm,1.2s | | | | | | | |
| RETA | Reutte | 149.73 | 348 | *i* PKP | | **PKPbc** | 19 02 41.6 | -0.1 |
| | comp=Z,6.6nm,0.5s | | | | | | | |
| RETA | | | | *ep*PKP | | **pPKPbc** | **19 04 52.8** | **+0.4** |
| | comp=Z,10nm,1.3s | | | | | | | |
| EZN | Ezine | 149.75 | 321 | P | | **PKPbc** | 19 02 41.4 | -0.4 |
| WTTA | Wattenberg | 149.76 | 347 | *i* PKiKP | | **PKPbc** | 19 02 41.9 | +0.1 |
| | comp=Z,24nm,0.5s,SNR=17 | | | | | | | |
| WTTA | | | | *ep*PKP | | **pPKPbc** | **19 04 53.7** | **+1.0** |
| | comp=Z,8.3nm,1.2s | | | | | | | |
| MOTA | Moosalm | 149.80 | 348 | *i* PKP | | **PKPbc** | 19 02 41.7 | -0.2 |
| | comp=Z,20nm,0.8s | | | | | | | |
| MYKA | Terra Mystica | 149.88 | 344 | *i* PKP | | **PKPbc** | 19 02 41.2 | -0.8 |
| | comp=Z,18nm,0.5s,SNR=11 | | | | | | | |
| SQTA | Sankt Quirin | 149.89 | 347 | *i* PKiKP | | **PKPbc** | 19 02 42.0 | -0.1 |
| | comp=Z,28nm,0.6s,SNR=11 | | | | | | | |
| SQTA | | | | *ep*PKP | | **pPKPbc** | **19 04 53.5** | **+0.5** |
| | comp=Z,6.3nm,1.3s | | | | | | | |
| ABTA | Abfaltersbach | 150.05 | 345 | *i* PKP | | **PKPbc** | 19 02 41.9 | -0.5 |
| | comp=Z,38nm,0.6s,SNR=26 | | | | | | | |
| ABTA | | | | *ep*PKiKP | | **pPKPab** | **19 04 56.2** | **-0.1** |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| MMB | Musomishta | 150.05 | 326 | P | | **PKPbc** | 19 02 41.0 | -1.6 |
| DAVA | Damuels | 150.09 | 349 | *e*PKP | | **PKPbc** | 19 02 42.3 | -0.3 |
| | comp=Z,35nm,1.2s,SNR=9.9 | | | | | | | |
| NVR | Nevrokopi | 150.13 | 326 | P | | **PKiKP** | 19 02 43.1 | -0.2 |
| LJU | Ljubljana | 150.17 | 342 | *i* PKPbc | | **PKPbc** | 19 02 42.5 | -0.1 |
| FETA | Feichten | 150.18 | 348 | *i* PKP | | **PKPdf** | 19 02 36.7 | -0.4 |
| | comp=Z,6.2nm,0.8s,SNR=16 | | | | | | | |
| FETA | | | | *i* PKiKP | | **PKPbc** | **19 02 42.8** | **0.0** |
| | comp=Z,17nm,0.7s | | | | | | | |
| LIA | Limnos Island | 150.38 | 322 | P | | **PKPbc** | 19 02 42.9 | -0.4 |
| KOKK | Kokkinochori, | 150.43 | 325 | P | | **PKPbc** | 19 02 43.0 | -0.4 |
| BOJS | Bojanci | 150.44 | 341 | *i* PKPbc | | **PKiKP** | 19 02 43.6 | -0.1 |
| SRS | Serrai | 150.44 | 326 | P | | **PKPbc** | 19 02 42.3 | -1.1 |
| FUORN | Ofenpass-Fuorn | 150.66 | 348 | PKPbc | | **PKiKP** | 19 02 44.7 | +0.2 |
| BODT | Bodrum | 150.76 | 316 | P | | **PKPbc** | 19 02 43.7 | -0.6 |
| DAT | Datca | 150.76 | 315 | P | | **PKPbc** | 19 02 42.9 | -1.5 |
| CHOS | Chios island | 150.80 | 319 | P | | **PKPbc** | 19 02 43.8 | -0.6 |
| VAY | Valandovo | 150.83 | 327 | *i* P | | **PKPbc** | 19 02 43.6 | -0.7 |
| SENIN | Lac Senin/Sane | 151.38 | 352 | PKPbc | | **PKiKP** | 19 02 46.2 | +0.3 |
| PDG | Podgorica | 151.57 | 333 | ⇓P | | **PKiKP** | 19 02 46.1 | 0.0 |
| PDG | Podgorica | 151.57 | 333 | ⇑P | | pPKiKP | 19 04 59.8 | +1.9 |
| FNA | Florina | 151.84 | 328 | P | | **PKPbc** | 19 02 46.2 | -0.5 |
| OHR | Ohrid | 151.88 | 329 | *i* P | | **PKiKP** | 19 02 47.0 | +0.1 |
| NEST | Nestorio | 152.28 | 328 | P | | **PKPbc** | 19 02 47.5 | -0.2 |
| ANX | Ano Chora | 153.13 | 324 | P | | **PKiKP** | 19 02 50.3 | +0.7 |
| PBRG | Braganca | 155.12 | 16 | *e*PKPab | | **PKPab** | 19 03 12.4 | 0.0 |
| POLO | Lamas de Olo | 155.23 | 18 | *e*PKPdf | | **PKPdf** | 19 02 45.1 | +0.7 |
| POLO | Lamas de Olo | 155.23 | 18 | *e*PKPab | | **PKPab** | 19 03 13.1 | +0.1 |
| MVO | Moncorvo | 155.64 | 17 | *e*PKPdf | | **PKPdf** | 19 02 45.5 | +0.5 |
| MVO | Moncorvo | 155.64 | 17 | *e*PKPab | | **PKPab** | 19 03 15.2 | +0.5 |
| PVIS | Viseu | 155.81 | 19 | *e*PKPdf | | **PKPdf** | 19 02 45.8 | +0.6 |
| PVIS | Viseu | 155.81 | 19 | *e*PKPab | | **PKPab** | 19 03 15.5 | +0.1 |
| MTE | Manteigas | 156.20 | 18 | *e*PKPdf | | **PKPdf** | 19 02 46.5 | +0.8 |
| PCAS | Casmilo, Conde | 156.22 | 20 | *e*PKPab | | **PKPab** | 19 03 17.2 | +0.1 |
| PSBE | So Bento | 156.60 | 21 | *e*PKPab | | **PKPab** | 19 03 19.1 | +0.3 |
| PCBR | Castelo Branco | 156.74 | 19 | *e*PKPdf | | **PKPdf** | 19 02 46.9 | +0.6 |
| PMRV | Marv??o | 157.14 | 19 | *e*PKPdf | | **PKPdf** | 19 02 47.5 | +0.6 |
| PMRV | Marv??o | 157.14 | 19 | *e*PKPab | | **PKPab** | 19 03 20.8 | -0.4 |
| PMTG | Montargil | 157.20 | 21 | *e*PKPab | | **PKPab** | 19 03 20.9 | -0.5 |
| PESTR | Estremoz | 157.59 | 20 | *e*PKPab | | **PKPab** | 19 03 22.4 | -0.7 |
| ESDC | Sonseca Array | 157.79 | 12 | PKP | | **PKPdf** | 19 02 47.9 | +0.2 |
| | comp=Z,0.5nm,0.6s,baz=343,slow=2.2,SNR=11 | | | | | | | |
| ESDC | | | | PKPab | | **PKPab** | **19 03 23.8** | **-0.3** |
| | comp=Z,2.1nm,0.9s,baz=338,slow=4.9,SNR=8.3 | | | | | | | |
| PAB | San Pablo | 157.83 | 13 | ⇓PKIKP | | **PKPdf** | 19 02 48.8 | +1.0 |
| PNCL | Nicolau / Gran | 157.94 | 23 | *e*PKPdf | | **PKPdf** | 19 02 48.9 | +1.1 |
| PBEJ | Beja | 158.26 | 21 | *e*PKPdf | | **PKPdf** | 19 02 47.5 | -0.7 |
| PBAR | Barrancos | 158.40 | 20 | *e*PKPdf | | **PKPdf** | 19 02 49.5 | +1.1 |
| KEST | Kesra | 161.18 | 341 | PKP | | **PKPdf** | 19 02 51.0 | -0.7 |
| | comp=Z,5.0nm,1.0s,baz=324,slow=9.6,SNR=3.7 | | | | | | | |
| KEST | | | | PKPab | | **PKPab** | **19 03 39.7** | **+0.8** |
| | comp=Z,2.3nm,0.6s,baz=324,slow=5.8,SNR=5.4 | | | | | | | |
| **MDT** | **Midelt** | **164.09** | **21** | PKP | | **PKPdf** | **19 02 55.8** | **+1.2** |
| | comp=Z,8.1nm,0.9s,baz=331,slow=1.3,SNR=16 | | | |

**BSWZ Blackbirch Sta 24.94 194** P **P** 18 54 09.1 -0.1
**THZ Tophouse 25.22 196** P **P** 18 54 11.8 0.0
**KHZ Kahutara 25.68 194** P **P** 18 54 15.0 -0.7
**PPT Papeete 27.27 94** P **P** 18 54 30.5 +0.4
comp=Z,118nm,0.6s,baz=250,slow=3.2,SNR=35
comp=Z,118nm,0.6s
**PPTF Pamatai, Papee 27.28 94** P **P** 18 54 30.1 -0.1
**EIDS Eidsvold 29.55 250** P **P** 18 54 49.8 -0.1
EIDS IAmb IAmb 18 54 50.8
comp=Z,33nm,0.9s
**EIDS Eidsvold 29.55 250** P **P** 18 54 48.8 -1.0
comp=Z,47nm,0.9s
**ARMA Armidale 30.25 240** P **P** 18 54 56.6 +0.6
comp=Z,115nm,0.9s
**DCZ Deep Cove 30.32 201** P **P** 18 54 56.6 +0.4
**RIV Riverview 31.81 234** P **P** 18 55 10.3 +1.2
comp=Z,275nm,1.8s
**PATS Pohnpei 33.62 314** P **P** 18 55 24.4 -0.2
**CTA Charters Tower 33.69 260** P **P** 18 55 25.1 -0.3
comp=Z,0.8nm,0.6s,baz=97,slow=10.0,SNR=8.7
CTA PcP **PcP** 18 57 49.7 +0.6
comp=Z,0.6nm,0.6s,baz=107,slow=2.1,SNR=2.6
**CNB Canberra Magne 33.75 232** P **P** 18 55 26.8 +1.2
comp=Z,366nm,1.2s
**CAN Canberra 34.03 232** P **P** 18 55 28.1 +0.1
**CAN Canberra 34.03 232** P **P** 18 55 28.6 +0.7
comp=Z,186nm,1.1s
**YNG Young 34.11 234** P **P** 18 55 29.3 +0.7
comp=Z,285nm,1.1s
**MILA Mila 34.61 229** P **P** 18 55 33.5 +0.7
comp=Z,133nm,1.4s
**PMG Port Moresby 34.62 279** P **P** 18 55 33.4 +0.4
comp=Z,25nm,0.8s,baz=88,slow=5.3,SNR=7.5
comp=Z,25nm,0.8s
**CMSA Cobar Meteorol 35.46 240** P **P** 18 55 40.3 +0.4
comp=Z,152nm,1.2s
**QLP Quilpie 35.82 249** P **P** 18 55 42.5 -0.5
comp=Z,206nm,1.4s
**COEN Coen 37.31 270** P **P** 18 55 55.1 -0.2
**COEN Coen 37.31 270** P **P** 18 55 56.0 +0.6
comp=Z,38nm,1.1s
**TOO Toolangi 37.50 231** P **P** 18 55 58.0 +1.4
**TOO Toolangi 37.50 231** P **P** 18 55 57.5 +0.9
comp=Z,407nm,1.0s
**MOO Moorlands 38.43 223** P **P** 18 56 05.1 +1.0
comp=Z,148nm,1.4s
**STKA Stephens Creek 38.94 241** P **P** 18 56 09.1 +0.7
STKA IAmb IAmb 18 56 10.7
comp=Z,48nm,1.2s
**STKA Stephens Creek 38.94 241** P **P** 18 56 08.9 +0.5
comp=Z,32nm,1.4s
**STKA Stephens Creek 38.94 241** P **P** 18 56 09.4 +1.1
comp=Z,86nm,0.7s,baz=90,slow=10,SNR=77
STKA PcP **PcP** 18 58 05.8 +0.7
comp=Z,8.4nm,0.6s,baz=66,slow=5.9,SNR=3.1
STKA PKiKP **PKiKP** 19 05 14.8 -1.7
comp=Z,0.8nm,0.5s,baz=348,slow=3.8,SNR=3.7
comp=Z,86nm,0.7s
**ARPS Mount Arapiles 39.97 233** P **P** 18 56 17.2 +0.6
comp=Z,121nm,1.0s
**HTT Hallett 41.46 239** P **P** 18 56 29.4 +0.9
comp=Z,165nm,1.2s
**JAY Jayapura 43.03 286** P **P** 18 56 41.1 0.0
**GENI Genyem 43.49 285** P **P** 18 56 46.4 +1.7
comp=Z,53nm,0.6s
**WR0 Warramunga Arr 44.69 259** IAmb IAmb 18 57 18.3
comp=Z,24nm,0.8s
**WB2 Warramunga Arr 44.87 259** PcP **PcP** 18 58 25.6 +0.4
**WRAB Tennant Creek 44.87 259** P **P** 18 56 54.4 -0.9
**WRA Warramunga Arr 44.88 259** P **P** 18 56 54.1 -1.2
**WRA Warramunga Arr 44.88 259** P **P** 18 56 54.5 -0.9
comp=Z,17nm,0.4s,baz=93,slow=7.0,SNR=60
WRA PcP **PcP** 18 58 25.6 +0.4
comp=Z,12nm,0.7s,baz=91,slow=3.5,SNR=7.8
WRA S **S** 19 02 49.4 -4.3
comp=Z,0.9nm,0.6s,baz=99,slow=12,SNR=3.0
WRA PKiKP **PKiKP** 19 05 20.9 -1.3
comp=Z,0.6nm,0.6s,baz=74,slow=0.4,SNR=4.7
comp=Z,17nm,0.4s
**AS31 Alice Springs 45.06 254** P **P** 18 56 56.7 0.0
**ASAR Alice Springs 45.06 254** P **P** 18 56 56.5 -0.2
**ASAR Alice Springs 45.06 254** P **P** 18 56 56.8 0.0
comp=Z,203nm,0.5s,baz=89,slow=7.9,SNR=315
ASAR PcP **PcP** 18 58 26.1 +0.2
comp=Z,16nm,0.8s,baz=93,slow=5.5,SNR=7.5
ASAR S **S** 19 02 54.4 -1.9
comp=Z,6.7nm,0.8s,baz=93,slow=15,SNR=13
ASAR PKiKP **PKiKP** 19 05 21.1 -1.2
comp=Z,0.6nm,0.6s,baz=92,slow=1.5,SNR=5.1
**MTN Manton Dam 49.01 268** IAmb IAmb 18 57 26.2
comp=Z,25nm,0.7s
**FORT Forrest 50.31 244** PcP **PcP** 18 58 45.0 +0.2
**KNRA Kununurra 50.72 264** IAmb IAmb 18 57 39.1
comp=Z,31nm,0.7s
**SWI Sorong 52.38 283** P **P** 18 57 50.5 -0.5
comp=Z,119nm,0.8s,comp=Z,1μm
**NLAI Namlea 55.46 278** P **P** 18 58 12.3 -0.5
comp=Z,32nm,0.9s
**SOEI Soe 56.28 270** P **P** 18 58 19.4 +0.9
comp=Z,118nm,1.0s,comp=Z,2μm
**TNTI Ternate 56.60 283** P **P** 18 58 20.5 -0.1
comp=Z,31nm,0.7s
**MBWA Marble Bar 58.34 256** P **P** 18 58 31.8 -0.5
MBWA IAmb IAmb 18 58 32.5
comp=Z,38nm,0.8s
**MMRI Maumere 58.50 271** P **P** 18 58 31.9 -1.7
comp=Z,74nm,1.3s,comp=Z,2μm
**EDFI Ende, Flores 58.99 270** P **P** 18 58 36.5 -0.5
comp=Z,59nm,0.9s,comp=Z,793nm
**NWAO Narrogin (SRO) 59.52 242** P **P** 18 58 39.6 -0.5
NWAO IAmb IAmb 18 58 40.6
comp=Z,32nm,0.8s
**NWAO Narrogin (SRO) 59.52 242** P **P** 18 58 40.0 -0.2
comp=Z,19nm,0.7s,baz=105,slow=4.8,SNR=19
comp=Z,19nm,0.7s
**KMSI Cibinong 59.69 281** P **P** 18 58 41.4 -0.1
comp=Z,84nm,0.8s
**LUWI Luwuk 60.27 279** IAmb IAmb 18 58 46.9
comp=Z,72nm,1.3s
**LUWI Luwuk 60.27 279** P **P** 18 58 45.0 -0.3
comp=Z,52nm,1.5s,comp=Z,823nm
**GTOI Gorontalo 60.62 281** P **P** 18 58 48.9 +1.3
**MORW Morawa 60.78 246** P **P** 18 58 47.6 -0.9
MORW IAmb IAmb 18 58 48.7
comp=Z,31nm,0.7s
**BSSI Bau Bau, Buton 60.85 273** P **P** 18 58 50.0 +0.8
comp=Z,48nm,1.4s
**WBSI Waikabubak, Su 60.95 269** P **P** 18 58 49.3 -0.6
comp=Z,26nm,0.8s
**TOLI2 Tolitoli 62.87 281** IAmb IAmb 18 59 05.6
comp=Z,19nm,0.7s
**GIRL Giralia 63.17 253** P **P** 18 59 04.4 +0.3
**MPSI Mapaga 63.43 279** P **P** 18 59 05.5 -0.5
comp=Z,53nm,0.8s,comp=Z,624nm
**MYLDM Lahad Datu 66.45 284** P **P** 18 59 26.8 +1.9
MYLDM IAmb IAmb 18 59 28.0
comp=Z,54nm,1.4s
**MJAR Matsushiro Arr 67.82 323** P **P** 18 59 31.6 -1.3
comp=Z,3.8nm,0.6s,baz=160,slow=6.1,SNR=20
comp=Z,3.8nm,0.6s
**KKM Kota Kinabalu 68.88 284** P **P** 18 59 39.8 -0.1
**JNU Nakatsue 70.09 316** P **P** 18 59 45.9 -0.7
comp=Z,13nm,1.1s,baz=47,slow=7.5,SNR=5.9
comp=Z,13nm,1.1s
**ASAJ Asahikawa 71.14 331** P **P** 18 59 53.2 +0.7
comp=Z,7.0nm,0.5s,baz=206,slow=5.5,SNR=14
comp=Z,7.0nm,0.5s
**YULB Yu-li 71.80 303** IAmb IAmb 18 59 59.0
comp=Z,10nm,0.8s
**SSLB Suanglung 72.26 303** IAmb IAmb 18 59 59.2
comp=Z,18nm,0.5s
**QSPA South Pole Qui 72.41 180** P **P** 19 00 01.4 +1.5
**QSPA South Pole Qui 72.41 180** P **P** 19 00 00.2 +0.4
comp=Z,67nm,0.8s,baz=16,slow=1.0,SNR=57
QSPA S **S** 19 08 40.1 +0.4
comp=Z,1.7nm,1.1s,baz=324,slow=8.7,SNR=10
comp=Z,67nm,0.8s
**PETK Petropavlovsk- 73.47 345** P **P** 19 00 04.4 -1.4
comp=Z,12nm,0.8s,baz=108,slow=7.6,SNR=21
PETK pP **pP** 19 01 59.2 -0.1
comp=Z,7.2nm,0.9s,baz=130,slow=6.0,SNR=4.3
comp=Z,12nm,0.8s
**S12K Black Hills 74.32 9** P **P** 19 00 08.9 -1.7
baz=196
**KSRS Korea Array 74.64 318** P **P** 19 00 12.7 -0.1
comp=Z,3.5nm,0.7s,baz=126,slow=6.4,SNR=17
comp=Z,3.5nm,0.7s
**KSAR Wonju Array Be 74.66 318** P **P** 19 00 13.1 +0.2

**CHGN Chignik 75.52 11** P **P** 19 00 16.4 -0.7
baz=199
**SAO San Andreas Ge 76.09 44** IAmb IAmb 19 00 22.8
comp=Z,13nm,0.8s
**USRK Ussuriysk Ar. 76.51 326** P **P** 19 00 23.2 +0.2
**USRK Ussuriysk Ar. 76.51 326** P **P** 19 00 23.0 0.0
comp=Z,2.0nm,0.5s,baz=116,slow=3.1,SNR=8.3
comp=Z,2.0nm,0.5s
**R17L Mt. Peulik Vol 77.16 12** P **P** 19 00 26.1 -0.1
baz=201
**KRMB Red Mountain 77.35 39** IAmb IAmb 19 00 29.7
comp=Z,25nm,1.2s
**OHAK Old Harbor 77.42 14** P **P** 19 00 27.5 -0.1
baz=204
**MONP2 Monument Peak 77.49 49** P **P** 19 00 30.2 +1.3
baz=239
**R18K Karluk 77.49 13** P **P** 19 00 28.6 +0.6
baz=203
**PFO Pinyon Flats O 77.83 49** P **P** 19 00 32.0 +1.4
baz=239
**TPFO Pinon Flats 77.83 49** P **P** 19 00 31.8 +1.2
baz=239
**Q17K Contact Creek 77.84 12** P **P** 19 00 29.3 -0.7
baz=202
**NJ2 Nanjing 77.93 309** *e*P **P** 19 00 31.8 +0.8
NJ2 pmax pmax
comp=Z,9.0nm,1.1s
**Q16K King Salmon 78.08 11** P **P** 19 00 30.6 -0.5
baz=201
**MDJ Mudanjiang 78.09 325** P **P** 19 00 32.4 +0.9
MDJ S **S** 19 09 46.3 +5.1
MDJ pmax pmax
comp=Z,20nm,1.2s
MDJ pmax pmax
comp=Z,170nm,4.6s
**KDAK Kodiak Island 78.09 14** P **P** 19 00 30.7 -0.5
comp=Z,17nm,0.6s,baz=219,slow=4.6,SNR=9.5
comp=Z,17nm,0.6s
**KDAK Kodiak Island 78.09 14** P **P** 19 00 31.8 +0.6
baz=205
**Q18K Katmai Hardscr 78.37 12** P **P** 19 00 32.4 -0.5
baz=202
**WAKR Walker 78.39 43** IAmb IAmb 19 00 35.6
comp=Z,14nm,0.9s
**N14K Kuskokwak Cree 78.45 8** P **P** 19 00 32.8 -0.3
baz=196
**HUMO Hull Mountain 78.56 38** IAmb IAmb 19 00 36.4
comp=Z,22nm,1.3s
**PNTR Pine Nut 78.61 43** IAmb IAmb 19 00 36.7
comp=Z,29nm,0.9s
**P17K Kvichak River 78.61 11** P **P** 19 00 33.4 -0.5
baz=201
**O16K Kokwok River B 78.69 10** IAmb IAmb 19 00 33.8
comp=Z,14nm,0.6s
**O16K Kokwok River B 78.69 10** P **P** 19 00 33.4 -1.0
baz=200
**DSP Deep Springs 78.74 45** IAmb IAmb 19 00 37.4
comp=Z,14nm,0.9s
**YERR Yerington 78.78 43** IAmb IAmb 19 00 37.3
comp=Z,18nm,0.8s
**LHV Little Huntoon 78.86 44** IAmb IAmb 19 00 38.1
comp=Z,18nm,0.9s
**Q20K Shuyak Island 78.89 13** P **P** 19 00 35.1 -0.4
baz=205
**N15K Kwethluk River 78.91 9** IAmb IAmb 19 00 36.2
comp=Z,32nm,1.2s
**N15K Kwethluk River 78.91 9** P **P** 19 00 36.2 +0.6
baz=198
**P18K Big Mountain, 79.02 12** P **P** 19 00 35.6 -0.6
baz=202
**O17K Koliganek Bris 79.03 11** P **P** 19 00 35.4 -0.8
baz=200
**MYKOM Kota Tinggi 79.08 275** IAmb IAmb 19 00 38.5
comp=Z,20nm,0.8s
**NVAR Mina Array Bea 79.09 44** P **P** 19 00 37.8 +0.5
**NVAR Mina Array Bea 79.09 44** P **P** 19 00 38.2 +0.9
comp=Z,8.4nm,0.7s,baz=224,slow=8.8,SNR=64
NVAR pP **pP** 19 02 34.0 +1.0
comp=Z,3.4nm,1.0s,baz=227,slow=8.5,SNR=5.7
comp=Z,8.4nm,0.7s
**M14K Bethel 79.21 8** P **P** 19 00 36.3 -0.7
baz=196
**M15K Kasigluk River 79.33 9** P **P** 19 00 37.2 -0.5
baz=197
**N16K Nishlik Lake 79.41 10** P **P** 19 00 38.4 +0.1
baz=199
**O18K Koktuh Hills 79.45 12** P **P** 19 00 37.6 -0.9
baz=202
**BUCK Buck Mountain 79.51 37** IAmb IAmb 19 00 41.3
comp=Z,40nm,1.3s
**TPH Tonopah 79.62 45** IAmb IAmb 19 00 42.7
comp=Z,34nm,0.8s
**P19K Oil Pt 79.66 13** P **P** 19 00 39.4 -0.2
baz=204
**L14K Kuka Creek 79.69 8** P **P** 19 00 40.5 +0.9
baz=195
**214A Organ Pipe Nat 79.69 52** P **P** 19 00 41.6 +1.2
baz=242
**TPNV Topopah Spring 79.69 46** P **P** 19 00 41.5 +1.0
baz=239,SNR=11
**N17K Nushagak Hills 79.72 10** P **P** 19 00 39.0 -0.8
baz=200
**M16K Timber Creek 79.90 9** P **P** 19 00 41.8 +1.1
baz=199
**CN2 Changchun 79.94 322** P **P** 19 00 41.9 +0.5
CN2 pmax pmax
comp=Z,20nm,1.1s
**O19K Port Alsworth 79.94 12** P **P** 19 00 40.6 -0.3
baz=203
**J05D Fort Rock, OR 79.98 38** IAmb IAmb 19 00 43.8
comp=Z,34nm,0.6s
**BNX BinXian 80.00 325** ⇓P **P** 19 00 41.5 -0.1
BNX pmax pmax
comp=Z,22nm,0.8s
**N18K Kilae Creek 80.09 11** P **P** 19 00 41.4 -0.4
baz=202
**L15K Ungalak Mounta 80.17 8** P **P** 19 00 42.4 +0.2
baz=196,SNR=5.9
**BRSE Bradley Lake S 80.28 14** P **P** 19 00 42.8 0.0
baz=206
**S11A Rachel 80.39 46** IAmb IAmb 19 00 45.9
comp=Z,19nm,1.0s
**PINE Pine Mountain 80.45 38** IAmb IAmb 19 00 46.4
comp=Z,18nm,0.8s
**L16K Owhat River 80.48 9** IAmb IAmb 19 00 44.6
comp=Z,10nm,0.7s
**L16K Owhat River 80.48 9** P **P** 19 00 44.4 +0.6
baz=198
**N19K Bonanza Creek 80.48 12** P **P** 19 00 43.7 -0.2
baz=203
**M17K Holitna River 80.50 10** IAmb IAmb 19 00 45.6
comp=Z,33nm,0.8s
**M17K Holitna River 80.50 10** P **P** 19 00 44.8 +0.9
baz=200,SNR=6.9
**I05D Terrebonne, OR 80.54 38** IAmb IAmb 19 00 46.4
comp=Z,15nm,1.0s
**PRN Pahroc Range 80.74 46** IAmb IAmb 19 00 48.2
comp=Z,16nm,0.9s
**K15K Wolf Creek Mou 80.75 8** P **P** 19 00 46.0 +0.9
baz=196,SNR=9.7
**R11B Troy Canyon, C 80.86 45** P **P** 19 00 47.2 +0.6
baz=239,SNR=8.5
**M18K Stony River 80.86 11** P **P** 19 00 45.7 -0.1
baz=202
**BMN Battle Mountai 80.87 43** IAmb IAmb 19 00 49.1
comp=Z,14nm,1.0s
**HOOD Mount Hood Mea 80.94 37** IAmb IAmb 19 00 48.1
comp=Z,24nm,1.2s
**MA2 Magadan 80.99 345** P **P** 19 00 45.0 -1.5
comp=Z,7.9nm,0.6s,baz=118,slow=10.0,SNR=6.9
comp=Z,7.9nm,0.6s
**L17K Donlin 81.06 9** P **P** 19 00 47.8 +1.0
baz=199,SNR=8.5
**WVOR Wild Horse Val 81.07 40** IAmb IAmb 19 00 49.3
comp=Z,23nm,1.1s
**N20K Mount Spurr 81.28 12** P **P** 19 00 46.8 -1.2
baz=205
**SPCR Spurr Chakacha 81.28 12** P **P** 19 00 46.4 -1.6
baz=205
**SPU Mount Spurr 81.30 12** IAmb IAmb 19 00 48.9
comp=Z,9.8nm,0.6s
**SMAI San Martin Ant 81.33 159** P **P** 19 00 50.5 +2.3
**TUC Tucson 81.37 52** P **P** 19 00 51.1 +1.9
TUC IAmb IAmb 19 00 52.0
comp=Z,12nm,0.8s
**TUC Tucson 81.37 52** P **P** 19 00 51.3 +2.1
baz=243
**L18K Granite Mounta 81.40 10** IAmb IAmb 19 00 49.9
comp=Z,29nm,1.1s
**L18K Granite Mounta 81.40 10** P **P** 19 00 49.1 +0.7
baz=201,SNR=8.4
**I07A Izee 81.47 39** IAmb IAmb 19 00 51.3
comp=Z,16nm,0.9s
**M19K Big River Lodg 81.50 11** IAmb IAmb 19 00 48.8
comp=Z,12nm,0.7s
**M19K Big River Lodg 81.50 11** P **P** 19 00 48.4 -0.7
baz=203
**K17K Iditarod 81.61 9** IAmb IAmb 19 00 50.4
comp=Z,11nm,0.7s
**K17K Iditarod 81.61 9** P **P** 19 00 49.9 +0.3
baz=199
**L19K White Mountain 81.68 11** P **P** 19 00 50.5 +0.5
baz=202
**J08A Circle Bar Ran 81.68 40** IAmb IAmb 19 00 52.3
comp=Z,19nm,1.0s
**RC01 Rabbit Creek A 81.71 14** P **P** 19 00 49.2 -0.9
baz=207
**Q12A Willow Creek R 81.72 45** IAmb IAmb 19 00 53.5
comp=Z,31nm,1.3s
**M20K Styx River 81.72 12** P **P** 19 00 49.3 -1.0
baz=204
**J16K Anvik River 81.83 8** IAmb IAmb 19 00 52.0
comp=Z,26nm,0.7s
**J16K Anvik River 81.83 8** P **P** 19 00 51.3 +0.7
baz=197,SNR=12
**SUA Susitna One 81.83 13** IAmb IAmb 19 00 50.4
comp=Z,31nm,0.9s
**SUA Susitna One 81.83 13** P **P** 19 00 50.3 -0.6
baz=206,SNR=5.5
**PWL Port Wells 81.83 14** P **P** 19 00 49.8 -1.0
baz=209,SNR=5.9
**X16A Lo Mia Camp, P 81.85 50** IAmb IAmb 19 00 54.3
comp=Z,13nm,0.9s
**D05A Enumclaw 81.87 35** IAmb IAmb 19 00 54.1
comp=Z,29nm,1.1s
**BBB Bella Bella 81.99 28** P **P** 19 00 51.8 +0.1
comp=Z,8.5nm,0.7s,baz=273,slow=3.4,SNR=8.0
comp=Z,8.5nm,0.7s
**KAIM Kayak Island 82.01 16** P **P** 19 00 52.1 +0.5
baz=212
**SPR3 Spring Creek 3 82.03 45** IAmb IAmb 19 00 54.9
comp=Z,20nm,1.4s
**KNB Kanab 82.10 47** IAmb IAmb 19 00 55.1
comp=Z,12nm,0.8s
**319A Douglas 82.10 54** IAmb IAmb 19 00 55.9
comp=Z,23nm,1.0s
**PSUT Pine Spring 82.13 46** IAmb IAmb 19 00 54.8
comp=Z,10nm,0.7s
**SKT Skwentna 82.13 12** P **P** 19 00 51.3 -0.9
baz=206
**GLI Glacier Island 82.14 15** P **P** 19 00 51.7 -0.6
baz=210,SNR=7.3
**J17K VABM Dome 82.14 9** P **P** 19 00 52.0 -0.3
J17K IAmb IAmb 19 00 53.1
comp=Z,14nm,0.6s
**J17K VABM Dome 82.14 9** P **P** 19 00 52.7 +0.4
baz=198,SNR=8.0
**U15A North Rim 82.19 48** IAmb IAmb 19 00 56.0
comp=Z,21nm,0.8s
**EYAK Cordova Ski Ar 82.19 16** P **P** 19 00 51.9 -0.7
baz=211
**M22K Willow 82.22 13** P **P** 19 00 52.0 -0.6
baz=207
**F07A Phinny Hill Vi 82.26 37** IAmb IAmb 19 00 54.7
comp=Z,14nm,0.8s
**KNK Knik Glacier 82.29 14** P **P** 19 00 52.8 -0.3
baz=208
**PMR Palmer 82.30 14** IAmb IAmb 19 00 52.7
comp=Z,18nm,0.5s
**PMR Palmer 82.30 14** P **P** 19 00 52.6 -0.4
baz=208
**I17K Unalakleet 82.39 8** P **P** 19 00 54.1 +0.6
baz=197
**BELA Belgrano 2 82.40 173** P **P** 19 00 53.8 +0.2
**WUAZ Wupatki 82.41 49** IAmb IAmb 19 00 56.9
comp=Z,15nm,1.0s
**WUAZ Wupatki 82.41 49** P **P** 19 00 55.8 +1.3
baz=242
**G08A Pilot Rock 82.47 38** IAmb IAmb 19 00 56.1
comp=Z,19nm,1.1s
**SIT Sitka 82.55 22** P **P** 19 00 54.8 +0.4
baz=221
**J18K Innoko River 82.56 10** IAmb IAmb 19 00 55.3
comp=Z,23nm,0.8s
**J18K Innoko River 82.56 10** P **P** 19 00 54.5 +0.1
baz=201,SNR=15
**IPM Ipoh 82.59 277** P **P** 19 00 55.9 +0.2
IPM IAmb IAmb 19 00 57.3
comp=Z,32nm,0.7s
**PKCU Pink Cliffs 82.66 47** IAmb IAmb 19 00 58.9
comp=Z,35nm,1.2s
**SML Sawmill 82.67 14** P **P** 19 00 54.0 -1.0
baz=209
**U33K Whale Pass 82.67 24** P **P** 19 00 55.6 +0.6
baz=223
**E07A Sunnyside 82.68 36** IAmb IAmb 19 00 57.0
comp=Z,15nm,0.8s
**HAWA Hanford 82.77 37** IAmb IAmb 19 00 57.5
comp=Z,16nm,0.8s
**CUT Chulitna 82.77 13** P **P** 19 00 55.0 -0.4
baz=207,SNR=5.8
**M23K Glacier View 82.79 14** P **P** 19 00 54.9 -0.7
baz=209
**HEH HeiHe 82.79 328** *e*P **P** 19 00 55.6 -0.2
HEH pmax pmax
comp=Z,13nm,1.6s
**BMRM Bremner River 82.84 16** P **P** 19 00 55.7 -0.3
baz=212,SNR=5.4
**K20K Telida 82.91 11** IAmb IAmb 19 00 56.8
comp=Z,26nm,0.8s
**K20K Telida 82.91 11** P **P** 19 00 56.0 -0.2
baz=203,SNR=15
**MESA MESA 82.91 17** P **P** 19 00 56.7 +0.3
baz=215,SNR=9.6
**SCM Sheep Creek Mo 82.92 14** P **P** 19 00 56.0 -0.3
baz=210,SNR=12
**S31K Pelican 82.93 21** IAmb IAmb 19 00 57.6
comp=Z,12nm,0.9s
**S31K Pelican 82.93 21** P **P** 19 00 57.0 +0.7
baz=220,SNR=5.7
**H16K Elim 82.93 7** P **P** 19 00 56.1 -0.1
baz=195
**KLU Klutina 82.96 15** P **P** 19 00 56.2 -0.4
baz=211
**MTPU Mount Pierson 83.03 47** IAmb IAmb 19 01 00.6
comp=Z,13nm,0.9s
**CRQE Cirque 83.06 17** P **P** 19 00 56.9 -0.2
baz=214
**G15K Niukluk 83.09 6** P **P** 19 00 57.6 +0.6
baz=194
**E08A Dider Farm, El 83.09 37** IAmb IAmb 19 00 59.9
comp=Z,12nm,0.7s
**S32K Killisnoo 83.13 22** P **P** 19 00 58.2 +0.8
baz=221
**WRAK Wrangell Islan 83.18 24** P **P** 19 00 57.9 +0.3
baz=224
**J19K Poorman 83.23 10** IAmb IAmb 19 00 58.3
comp=Z,11nm,0.6s
**J19K Poorman 83.23 10** P **P** 19 00 57.9 +0.1
baz=202,SNR=8.5
**PNL Peninsula 83.24 19** P **P** 19 00 58.0 +0.1
baz=217
**TNA Tin City 83.31 4** P **P** 19 00 57.8 -0.3
baz=190
**MFID Camas Ranch 83.34 41** IAmb IAmb 19 01 00.6
comp=Z,11nm,0.9s
**VRDI Verde Repeater 83.37 16** IAmb IAmb 19 00 58.7
comp=Z,11nm,0.6s
**N25K Chitina, Valde 83.39 15** P **P** 19 00 58.6 -0.1
baz=212,SNR=21
**GRNC Granite Creek 83.42 17** IAmb IAmb 19 00 59.2
comp=Z,13nm,0.6s
**M24K Tolsona, Glenn 83.43 15** P **P** 19 00 59.1 +0.2
baz=211,SNR=8.5
**GLB Gilahina Butte 83.45 16** IAmb IAmb 19 00 59.3
comp=Z,20nm,0.6s
**WAT6 Susitna Watana 83.48 14** P **P** 19 00 58.7 -0.5
baz=209,SNR=15
**HNS HongShan 83.49 312** ⇑P **P** 19 01 00.8 +1.2
HNS pmax pmax
comp=Z,17nm,1.3s
**D08A Wollman Farm, 83.49 36** IAmb IAmb 19 01 01.0
comp=Z,12nm,0.8s
**WAT1 Susitna Watana 83.52 13** P **P** 19 00 58.5 -0.8
baz=208
**SEY Seymchan 83.56 347** P **P** 19 00 58.9 -0.5

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,26nm,0.6s,baz=146,slow=6.0,SNR=82 | | | | | | | | | |
| SEY | | | | pP | | pP | | 19 02 56.8 | +0.1 | |
| | comp=Z,16nm,1.1s,baz=152,slow=6.8,SNR=9.0 | | | | | | | | | |
| | comp=Z,26nm,0.6s | | | | | | | | | |
| MCARA | McCarthy VSAT | 83.61 | 16 | P | | P | | 19 00 59.8 | +0.1 | |
| | baz=214 | | | | | | | | | |
| DUG | Dugway, Tooele | 83.65 | 44 | P | | P | | 19 01 00.8 | +0.2 | |
| | baz=241,SNR=5.9 | | | | | | | | | |
| J20K | Nowinta River | 83.65 | 10 | IAmb | | IAmb | 19 01 00.5 | | | |
| | comp=Z,18nm,0.7s | | | | | | | | | |
| J20K | Nowinta River | 83.65 | 10 | P | | P | | 19 00 59.7 | -0.1 | |
| | baz=203,SNR=15 | | | | | | | | | |
| G16K | Koyuk River | 83.65 | 7 | P | | P | | 19 01 00.3 | +0.6 | |
| | baz=195 | | | | | | | | | |
| CTG | Chitna Glacier | 83.72 | 17 | P | | P | | 19 01 00.5 | 0.0 | |
| | baz=215,SNR=11 | | | | | | | | | |
| F15K | North Star Dit | 83.72 | 6 | P | | P | | 19 01 00.2 | 0.0 | |
| | baz=193 | | | | | | | | | |
| CTGM | Chitina Glacie | 83.73 | 17 | IAmb | | IAmb | 19 01 01.1 | | | |
| | comp=Z,19nm,0.8s | | | | | | | | | |
| P29M | Windy Craggy | 83.73 | 19 | IAmb | | IAmb | 19 01 01.7 | | | |
| | comp=Z,16nm,0.8s | | | | | | | | | |
| P29M | Windy Craggy | 83.73 | 19 | P | | P | | 19 01 00.8 | +0.4 | |
| | baz=218,SNR=13 | | | | | | | | | |
| GCSA | Galena City Sc | 83.74 | 9 | P | | P | | 19 01 00.7 | +0.5 | |
| | baz=200 | | | | | | | | | |
| 121A | Cookes Peak, D | 83.75 | 53 | P | | P | | 19 01 02.9 | +1.6 | |
| | baz=245 | | | | | | | | | |
| R32K | Eaglecrest | 83.76 | 22 | P | | P | | 19 01 01.3 | +0.8 | |
| | baz=221 | | | | | | | | | |
| LYN | LuoYang | 83.82 | 309 | P | | P | | 19 01 02.5 | +1.2 | |
| LYN | | | | pmax | | pmax | | | | |
| | comp=Z,32nm,0.8s | | | | | | | | | |
| F10A | Beach Ranch, E | 83.86 | 38 | IAmb | | IAmb | 19 01 02.5 | | | |
| | comp=Z,19nm,0.9s | | | | | | | | | |
| O28M | Mount Upton | 83.89 | 18 | P | | P | | 19 01 01.4 | -0.1 | |
| | baz=216,SNR=15 | | | | | | | | | |
| H18K | Honhosa River | 83.91 | 8 | P | | P | | 19 01 01.9 | +0.7 | |
| | baz=199 | | | | | | | | | |
| HARP | HAARP | 83.93 | 15 | P | | P | | 19 01 01.1 | -0.2 | |
| | baz=212 | | | | | | | | | |
| G17K | Kiwalik Mounta | 83.95 | 7 | P | | P | | 19 01 01.1 | -0.1 | |
| | baz=197 | | | | | | | | | |
| HMU | Henry Mountain | 83.99 | 47 | IAmb | | IAmb | 19 01 04.8 | | | |
| | comp=Z,17nm,1.4s | | | | | | | | | |
| DHY | Denali Highway | 83.99 | 14 | IAmb | | IAmb | 19 01 01.4 | | | |
| | comp=Z,13nm,0.5s | | | | | | | | | |
| DHY | Denali Highway | 83.99 | 14 | P | | P | | 19 01 01.1 | -0.7 | |
| | baz=209,SNR=10.0 | | | | | | | | | |
| O29M | Mount Kennedy | 84.00 | 19 | P | | P | | 19 01 02.0 | +0.2 | |
| | baz=218,SNR=5.4 | | | | | | | | | |
| B08A | Colville Reser | 84.00 | 35 | IAmb | | IAmb | 19 01 02.7 | | | |
| | comp=Z,10nm,0.7s | | | | | | | | | |
| PLBC | Pleasant Camp | 84.03 | 20 | P | | P | | 19 01 02.3 | +0.5 | |
| | baz=220,SNR=15 | | | | | | | | | |
| BPAW | Bear Paw Mtn. | 84.15 | 12 | IAmb | | IAmb | 19 01 03.4 | | | |
| | comp=Z,7.3nm,0.7s | | | | | | | | | |
| BPAW | Bear Paw Mtn. | 84.15 | 12 | P | | P | | 19 01 01.0 | -1.4 | |
| | baz=206,SNR=6.7 | | | | | | | | | |
| I20K | Naaghedeneel | 84.17 | 10 | IAmb | | IAmb | 19 01 03.8 | | | |
| | comp=Z,25nm,1.1s | | | | | | | | | |
| I20K | Naaghedeneel | 84.17 | 10 | P | | P | | 19 01 02.6 | +0.3 | |
| | baz=203 | | | | | | | | | |
| MAW | Mawson | 84.18 | 200 | P | | P | | 19 01 03.2 | +0.7 | |
| | comp=Z,32nm,0.7s,baz=138,slow=5.0,SNR=54 | | | | | | | | | |
| | comp=Z,32nm,0.7s | | | | | | | | | |
| MCK | McKinley | 84.24 | 13 | P | | P | | 19 01 01.9 | -0.8 | |
| | baz=208,SNR=10 | | | | | | | | | |
| C09A | Chrisman Ranch | 84.27 | 36 | IAmb | | IAmb | 19 01 04.0 | | | |
| | comp=Z,7.6nm,0.6s | | | | | | | | | |
| HLID | Hailey | 84.29 | 41 | IAmb | | IAmb | 19 01 05.7 | | | |
| | comp=Z,9.7nm,0.8s | | | | | | | | | |
| HLID | Hailey | 84.29 | 41 | P | | P | | 19 01 05.3 | +1.6 | |
| | baz=239 | | | | | | | | | |
| PAX | Paxson | 84.34 | 14 | P | | P | | 19 01 02.7 | -0.7 | |
| | baz=211,SNR=7.5 | | | | | | | | | |
| P30M | Million Dollar | 84.36 | 19 | P | | P | | 19 01 04.4 | +1.0 | |
| | baz=219 | | | | | | | | | |
| SKAG | Skagway | 84.38 | 20 | P | | P | | 19 01 04.4 | +0.9 | |
| | baz=221,SNR=5.2 | | | | | | | | | |
| T35M | Bob Quinn | 84.39 | 24 | P | | P | | 19 01 04.6 | +0.9 | |
| | baz=225 | | | | | | | | | |
| YUK8 | Steele Glacier | 84.43 | 18 | P | | P | | 19 01 04.3 | +0.2 | |
| | baz=216,SNR=8.5 | | | | | | | | | |
| M26K | Nabesna, AK | 84.47 | 16 | IAmb | | IAmb | 19 01 04.8 | | | |
| | comp=Z,19nm,0.8s | | | | | | | | | |
| M26K | Nabesna, AK | 84.47 | 16 | P | | P | | 19 01 03.8 | -0.2 | |
| | baz=214,SNR=16 | | | | | | | | | |
| H19K | Roundabout Mou | 84.54 | 9 | P | | P | | 19 01 04.1 | 0.0 | |
| | baz=201 | | | | | | | | | |
| YUK6 | Outpost Mounta | 84.57 | 18 | P | | P | | 19 01 04.5 | -0.2 | |
| | baz=218 | | | | | | | | | |
| G18K | Tagagawik | 84.58 | 8 | P | | P | | 19 01 03.4 | -1.0 | |
| | baz=199 | | | | | | | | | |
| YUK3 | Moose Creek | 84.63 | 17 | P | | P | | 19 01 04.8 | -0.2 | |
| | baz=216,SNR=22 | | | | | | | | | |
| S34M | Telegraph Cree | 84.72 | 23 | IAmb | | IAmb | 19 01 06.9 | | | |
| | comp=Z,22nm,0.8s | | | | | | | | | |
| S34M | Telegraph Cree | 84.72 | 23 | P | | P | | 19 01 06.0 | +0.8 | |
| | baz=224,SNR=20 | | | | | | | | | |
| M27K | Edge Creek, AK | 84.73 | 16 | IAmb | | IAmb | 19 01 06.4 | | | |
| | comp=Z,26nm,1.1s | | | | | | | | | |
| M27K | Edge Creek, AK | 84.73 | 16 | P | | P | | 19 01 05.5 | +0.2 | |
| | baz=214,SNR=15 | | | | | | | | | |
| H20K | Anotleneega Mo | 84.75 | 10 | P | | P | | 19 01 05.3 | +0.1 | |
| | baz=202,SNR=5.7 | | | | | | | | | |
| YUK4 | Talbot Arm | 84.81 | 18 | P | | P | | 19 01 06.2 | +0.4 | |
| | baz=218,SNR=5.4 | | | | | | | | | |
| L26K | Log Cabin Wild | 84.90 | 15 | P | | P | | 19 01 05.9 | -0.1 | |
| | baz=213 | | | | | | | | | |
| NEA2 | Nenana | 84.97 | 12 | P | | P | | 19 01 04.9 | -1.4 | |
| | baz=208 | | | | | | | | | |
| K24K | Donnelly Dome | 84.99 | 14 | P | | P | | 19 01 06.5 | +0.1 | |
| | baz=211,SNR=7.5 | | | | | | | | | |
| P32M | Atlin | 85.02 | 21 | IAmb | | IAmb | 19 01 08.0 | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | | |
| P32M | Atlin | 85.02 | 21 | P | | P | | 19 01 07.2 | +0.5 | |
| | baz=222,SNR=5.1 | | | | | | | | | |
| TCUT | Toone Canyon | 85.03 | 44 | IAmb | | IAmb | 19 01 11.8 | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| G19K | Purcell Mounta | 85.03 | 8 | P | | P | | 19 01 06.5 | -0.1 | |
| | baz=200,SNR=5.6 | | | | | | | | | |
| MLY | Manley | 85.04 | 11 | IAmb | | IAmb | 19 01 06.4 | | | |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| MLY | Manley | 85.04 | 11 | P | | P | | 19 01 05.6 | -1.1 | |
| | baz=206,SNR=7.7 | | | | | | | | | |
| Q32M | Nakina River | 85.06 | 22 | IAmb | | IAmb | 19 01 08.5 | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| Q32M | Nakina River | 85.06 | 22 | P | | P | | 19 01 07.7 | +0.6 | |
| | baz=223,SNR=14 | | | | | | | | | |
| GYA | Guiyang | 85.08 | 300 | ⇓P | | P | | 19 01 08.6 | +0.7 | |
| GYA | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,0.6s | | | | | | | | | |
| O30N | Mendenhall | 85.13 | 19 | IAmb | | IAmb | 19 01 08.3 | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| O30N | Mendenhall | 85.13 | 19 | P | | P | | 19 01 07.4 | +0.1 | |
| | baz=220,SNR=15 | | | | | | | | | |
| RIDG | Independent Ri | 85.15 | 14 | IAmb | | IAmb | 19 01 07.2 | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| RIDG | Independent Ri | 85.15 | 14 | P | | P | | 19 01 06.8 | -0.4 | |
| | baz=212,SNR=7.3 | | | | | | | | | |
| NEW | Newport | 85.17 | 36 | P | | P | | 19 01 08.0 | +0.3 | |
| | baz=237 | | | | | | | | | |
| VHRN | Van Horn | 85.20 | 56 | IAmb | | IAmb | 19 01 11.8 | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | | |
| H21K | Melozitna Rive | 85.24 | 10 | P | | P | | 19 01 06.8 | -0.8 | |
| H21K | Melozitna Rive | 85.24 | 10 | P | | P | | 19 01 07.9 | +0.3 | |
| | baz=204 | | | | | | | | | |
| HDA | Harding Lake | 85.25 | 13 | IAmb | | IAmb | 19 01 07.7 | | | |
| | comp=Z,24nm,0.7s | | | | | | | | | |
| HDA | Harding Lake | 85.25 | 13 | P | | P | | 19 01 07.2 | -0.5 | |
| | baz=210,SNR=20 | | | | | | | | | |
| MNTX | Cornudas Mount | 85.26 | 55 | P | | P | | 19 01 09.8 | +1.3 | |
| | baz=246 | | | | | | | | | |
| CCB | Clear Creek Bu | 85.28 | 13 | IAmb | | IAmb | 19 01 07.6 | | | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| L27K | Beaver Creek, | 85.32 | 16 | P | | P | | 19 01 07.9 | -0.2 | |
| | baz=214,SNR=5.2 | | | | | | | | | |
| E17K | Hotham Inlet | 85.34 | 6 | P | | P | | 19 01 07.8 | -0.2 | |
| | baz=196 | | | | | | | | | |
| N30M | Aishikik Lake | 85.36 | 18 | P | | P | | 19 01 07.9 | -0.5 | |
| | baz=219 | | | | | | | | | |
| IMAR | Indian Mountai | 85.38 | 10 | P | | P | | 19 01 07.5 | -0.7 | |
| I23K | Minto, Yukon-K | 85.41 | 12 | P | | P | | 19 01 07.4 | -1.0 | |
| | baz=207,SNR=5.7 | | | | | | | | | |
| WHY | Whitehorse | 85.44 | 20 | IAmb | | IAmb | 19 01 09.4 | | | |
| | comp=Z,7.4nm,0.7s | | | | | | | | | |
| WHY | Whitehorse | 85.44 | 20 | P | | P | | 19 01 09.2 | +0.5 | |
| | baz=221,SNR=7.8 | | | | | | | | | |
| MDM | Murphy Dome | 85.47 | 12 | IAmb | | IAmb | 19 01 08.4 | | | |
| | comp=Z,13nm,0.8s | | | | | | | | | |
| COLA | College | 85.47 | 12 | P | | P | | 19 01 08.2 | -0.5 | |
| | baz=209 | | | | | | | | | |
| DLBC | Dease Lake | 85.51 | 23 | P | | P | | 19 01 09.0 | -0.1 | |
| | comp=Z,4.4nm,0.6s,baz=204,slow=4.6,SNR=17 | | | | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | | | | |
| DLBC | Dease Lake | 85.51 | 23 | P | | P | | 19 01 09.6 | +0.5 | |
| | baz=225,SNR=7.9 | | | | | | | | | |
| SCRK | Sand Creek | 85.55 | 14 | IAmb | | IAmb | 19 01 09.8 | | | |
| | comp=Z,8.7nm,0.6s | | | | | | | | | |
| SCRK | Sand Creek | 85.55 | 14 | P | | P | | 19 01 08.9 | -0.4 | |
| | baz=212,SNR=8.4 | | | | | | | | | |
| IL31 | | 85.58 | 13 | IAmb | | IAmb | 19 01 09.1 | | | |
| | comp=Z,25nm,1.3s | | | | | | | | | |
| ILAR | Eielson Array | 85.58 | 13 | P | | P | | 19 01 08.1 | -1.2 | |
| | comp=Z,6.2nm,0.4s,baz=225,slow=5.3,SNR=96 | | | | | | | | | |
| ILAR | | | | pP | | pP | | 19 03 07.3 | -0.3 | |
| | comp=Z,13nm,1.1s,baz=225,slow=5.2,SNR=9.8 | | | | | | | | | |
| | comp=Z,6.2nm,0.4s | | | | | | | | | |
| F19K | Shaleruckik Mo | 85.59 | 8 | P | | P | | 19 01 08.8 | -0.4 | |
| | baz=200 | | | | | | | | | |
| TX31 | Lajitas Ar. Si | 85.68 | 58 | IAmb | | IAmb | 19 01 14.5 | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| TXAR | Lajitas Array | 85.68 | 58 | P | | P | | 19 01 11.9 | +1.2 | |
| | comp=Z,8.8nm,0.8s,baz=216,slow=5.9,SNR=70 | | | | | | | | | |
| TXAR | | | | pP | | pP | | 19 03 08.6 | +0.1 | |
| | comp=Z,1.7nm,1.1s,baz=224,slow=7.0,SNR=3.5 | | | | | | | | | |
| | comp=Z,8.8nm,0.8s | | | | | | | | | |
| XLT | XiLinHaoTe | 85.68 | 319 | eP | | P | | 19 01 10.3 | 0.0 | |
| XLT | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| XLT | | | | pmax | | pmax | | | | |
| | comp=Z,110nm,4.1s | | | | | | | | | |
| H22K | Ishtalitna Cre | 85.70 | 11 | P | | P | | 19 01 09.2 | -0.6 | |
| | baz=206,SNR=6.7 | | | | | | | | | |
| M29M | Somme Creek | 85.73 | 17 | IAmb | | IAmb | 19 01 12.1 | | | |
| | comp=Z,9.7nm,0.7s | | | | | | | | | |
| M29M | Somme Creek | 85.73 | 17 | P | | P | | 19 01 10.2 | 0.0 | |
| | baz=218,SNR=14 | | | | | | | | | |
| POKR | Poker Plat Res | 85.77 | 13 | P | | P | | 19 01 09.0 | -1.1 | |
| | baz=209,SNR=5.7 | | | | | | | | | |
| ANMO | Albuquerque | 85.77 | 51 | P | | P | | 19 01 12.0 | +0.9 | |
| ANMO | Albuquerque | 85.77 | 51 | P | | P | | 19 01 12.0 | +0.9 | |
| | baz=245 | | | | | | | | | |
| J25K | Salcha River, | 85.78 | 14 | IAmb | | IAmb | 19 01 10.7 | | | |
| | comp=Z,22nm,1.3s | | | | | | | | | |
| J25K | Salcha River, | 85.78 | 14 | P | | P | | 19 01 09.7 | -0.6 | |
| | baz=211,SNR=12 | | | | | | | | | |
| N31M | Braeburn, Yuko | 85.78 | 19 | P | | P | | 19 01 10.5 | +0.2 | |
| | baz=220,SNR=6.1 | | | | | | | | | |
| P33M | Teslin, Yukon | 85.78 | 21 | P | | P | | 19 01 10.8 | +0.4 | |
| | baz=223,SNR=5.8 | | | | | | | | | |
| E18K | Tukpahlearik C | 85.80 | 7 | P | | P | | 19 01 09.8 | -0.4 | |
| | baz=197 | | | | | | | | | |
| R33M | Jennings River | 85.84 | 22 | IAmb | | IAmb | 19 01 11.7 | | | |
| | comp=Z,6.8nm,0.8s | | | | | | | | | |
| R33M | Jennings River | 85.84 | 22 | P | | P | | 19 01 11.4 | +0.6 | |
| | baz=224,SNR=9.5 | | | | | | | | | |
| G21K | Allakaket | 85.91 | 10 | IAmb | | IAmb | 19 01 11.2 | | | |
| | comp=Z,7.4nm,0.8s | | | | | | | | | |
| G21K | Allakaket | 85.91 | 10 | P | | P | | 19 01 10.4 | -0.4 | |
| | baz=204,SNR=7.0 | | | | | | | | | |
| AHID | Auburn Hatcher | 86.01 | 43 | IAmb | | IAmb | 19 01 13.9 | | | |
| | comp=Z,8.4nm,1.0s | | | | | | | | | |
| K27K | Chicken | 86.06 | 15 | P | | P | | 19 01 12.1 | +0.6 | |
| | baz=214 | | | | | | | | | |
| F20K | Avaraart Lake | 86.07 | 9 | P | | P | | 19 01 11.3 | -0.2 | |
| | baz=201 | | | | | | | | | |
| J26L | Joseph Creek | 86.09 | 14 | IAmb | | IAmb | 19 01 12.4 | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| J26L | Joseph Creek | 86.09 | 14 | P | | P | | 19 01 11.9 | +0.1 | |
| | baz=213,SNR=19 | | | | | | | | | |
| E19K | Redstone River | 86.25 | 8 | IAmb | | IAmb | 19 01 12.4 | | | |
| | comp=Z,12nm,0.6s | | | | | | | | | |
| E19K | Redstone River | 86.25 | 8 | P | | P | | 19 01 12.0 | -0.4 | |
| | baz=200,SNR=9.2 | | | | | | | | | |
| MSO | Missoula | 86.25 | 38 | P | | P | | 19 01 12.8 | -0.2 | |
| | baz=239 | | | | | | | | | |
| XAN | Xi'an | 86.26 | 307 | ⇓P | | P | | 19 01 14.1 | +0.8 | |
| XAN | | | | S | | S | | 19 11 06.6 | +3.4 | |
| XAN | | | | pmax | | pmax | | | | |
| | comp=Z,42nm,1.0s | | | | | | | | | |
| H24K | Noodor Dome | 86.31 | 12 | P | | P | | 19 01 11.2 | -1.5 | |
| | baz=209 | | | | | | | | | |
| DLMT | Dillon | 86.32 | 40 | IAmb | | IAmb | 19 01 15.2 | | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| TPAW | Teton Pass | 86.45 | 42 | IAmb | | IAmb | 19 01 15.1 | | | |
| | comp=Z,6.9nm,0.8s | | | | | | | | | |
| FXWY | Fox Creek | 86.47 | 42 | IAmb | | IAmb | 19 01 17.1 | | | |
| | comp=Z,8.5nm,0.9s | | | | | | | | | |
| PRP | Porcupine Dome | 86.52 | 13 | IAmb | | IAmb | 19 01 19.8 | | | |
| | comp=Z,6.1nm,0.7s | | | | | | | | | |
| PRP | Porcupine Dome | 86.52 | 13 | P | | P | | 19 01 13.1 | -0.7 | |
| | baz=211 | | | | | | | | | |
| SNOW | Snow King Moun | 86.56 | 42 | IAmb | | IAmb | 19 01 16.7 | | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| F21K | Alatna River | 86.57 | 9 | P | | P | | 19 01 13.6 | -0.3 | |
| | baz=204 | | | | | | | | | |
| G22K | Bettles | 86.61 | 10 | P | | P | | 19 01 14.3 | +0.2 | |
| | baz=205 | | | | | | | | | |
| IMW | Indian Meadow | 86.65 | 42 | IAmb | | IAmb | 19 01 17.1 | | | |
| | comp=Z,14nm,0.8s | | | | | | | | | |
| S22A | 4UR Ranch, Cre | 86.68 | 49 | P | | P | | 19 01 16.4 | +0.9 | |
| | baz=245 | | | | | | | | | |
| G23K | Bananza Creek | 86.68 | 11 | P | | P | | 19 01 14.3 | -0.2 | |
| | baz=207 | | | | | | | | | |
| M31M | Drury Creek, Y | 86.76 | 19 | IAmb | | IAmb | 19 01 15.4 | | | |
| | comp=Z,9.7nm,1.1s | | | | | | | | | |
| M31M | Drury Creek, Y | 86.76 | 19 | P | | P | | 19 01 14.9 | 0.0 | |
| | baz=221 | | | | | | | | | |
| DAWY | Dawson | 86.78 | 16 | IAmb | | IAmb | 19 01 15.3 | | | |
| | comp=Z,11nm,1.3s | | | | | | | | | |
| DAWY | Dawson | 86.78 | 16 | P | | P | | 19 01 15.0 | 0.0 | |
| | baz=217 | | | | | | | | | |
| I26K | Coal Creek Min | 86.87 | 14 | IAmb | | IAmb | 19 01 16.4 | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | | |
| I26K | Coal Creek Min | 86.87 | 14 | P | | P | | 19 01 15.1 | -0.2 | |
| | baz=213,SNR=7.1 | | | | | | | | | |
| FLWY | Flagg Ranch | 86.89 | 42 | IAmb | | IAmb | 19 01 18.4 | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| EGAK | Eagle | 86.90 | 15 | IAmb | | IAmb | 19 01 15.6 | | | |
| | comp=Z,10nm,1.0s | | | | | | | | | |
| EGAK | Eagle | 86.90 | 15 | P | | P | | 19 01 15.1 | -0.3 | |
| | baz=215 | | | | | | | | | |
| YHL | Hebgen Lake | 86.95 | 41 | IAmb | | IAmb | 19 01 19.1 | | | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| BW06 | Boulder Array | 87.02 | 43 | P | | P | | 19 01 17.2 | +0.3 | |
| | baz=243,SNR=12 | | | | | | | | | |
| PD31 | Pinedale Array | 87.02 | 43 | IAmb | | IAmb | 19 01 18.0 | | | |
| | comp=Z,22nm,1.5s | | | | | | | | | |
| PDAR | Pinedale Array | 87.02 | 43 | P | | P | | 19 01 17.1 | +0.3 | |
| | comp=Z,6.6nm,0.8s,baz=226,slow=3.2,SNR=32 | | | | | | | | | |
| PDAR | | | | pP | | pP | | 19 03 16.2 | +0.8 | |
| | comp=Z,3.9nm,1.0s,baz=163,slow=1.5,SNR=2.8 | | | | | | | | | |
| | comp=Z,6.6nm,0.8s | | | | | | | | | |
| BOZ | Bozeman (W) | 87.03 | 40 | IAmb | | IAmb | 19 01 18.6 | | | |
| | comp=Z,11nm,1.2s | | | | | | | | | |
| BOZ | Bozeman (W) | 87.03 | 40 | P | | P | | 19 01 17.9 | +1.1 | |
| | baz=241 | | | | | | | | | |
| F22K | John River | 87.04 | 10 | P | | P | | 19 01 15.8 | -0.3 | |
| | baz=205,SNR=7.4 | | | | | | | | | |
| H25L | Birch Creek | 87.10 | 13 | P | | P | | 19 01 14.7 | -1.7 | |
| | baz=211 | | | | | | | | | |
| K29M | Barlow Dome | 87.10 | 17 | IAmb | | IAmb | 19 01 17.8 | | | |
| | comp=Z,14nm,1.4s | | | | | | | | | |
| K29M | Barlow Dome | 87.10 | 17 | P | | P | | 19 01 16.8 | +0.2 | |
| | baz=218,SNR=6.5 | | | | | | | | | |
| COLD | Coldfoot | 87.11 | 11 | P | | P | | 19 01 16.6 | +0.1 | |
| | baz=207,SNR=11 | | | | | | | | | |
| H17A | Grant Village | 87.12 | 42 | P | | P | | 19 01 19.7 | +2.3 | |
| | baz=242 | | | | | | | | | |
| D19K | Kuna River | 87.12 | 7 | P | | P | | 19 01 16.2 | -0.3 | |
| | baz=199 | | | | | | | | | |
| E20K | Nigu River | 87.14 | 8 | P | | P | | 19 01 16.0 | -0.6 | |
| | baz=201 | | | | | | | | | |
| G24K | Hadweenzic Riv | 87.15 | 12 | IAmb | | IAmb | 19 01 16.7 | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | | |
| G24K | Hadweenzic Riv | 87.15 | 12 | P | | P | | 19 01 16.3 | -0.3 | |
| | baz=209,SNR=6.7 | | | | | | | | | |
| SAND | Sanderson | 87.16 | 57 | IAmb | | IAmb | 19 01 20.4 | | | |
| | comp=Z,14nm,1.3s | | | | | | | | | |
| HHC | Hu-ho-hao-te | 87.23 | 314 | eP | | P | | 19 01 18.6 | +0.8 | |
| HHC | | | | pmax | | pmax | | | | |
| | comp=Z,15nm,0.5s | | | | | | | | | |
| HHC | | | | pmax | | pmax | | | | |
| | comp=Z,160nm,4.0s | | | | | | | | | |
| I27K | Kandik River | 87.47 | 14 | P | | P | | 19 01 18.0 | -0.2 | |
| | baz=215 | | | | | | | | | |
| G25K | Bearman Lake | 87.48 | 12 | P | | P | | 19 01 17.5 | -0.6 | |
| | baz=210 | | | | | | | | | |
| FYU | Fort Yukon | 87.48 | 13 | IAmb | | IAmb | 19 01 18.1 | | | |
| | comp=Z,8.8nm,0.6s | | | | | | | | | |
| D20K | Etivluk River | 87.51 | 8 | P | | P | | 19 01 18.0 | -0.3 | |
| | baz=200 | | | | | | | | | |
| E21K | Killik River | 87.62 | 9 | P | | P | | 19 01 18.5 | -0.3 | |
| | baz=203 | | | | | | | | | |
| SDCO | Great Sand Dun | 87.63 | 49 | P | | P | | 19 01 20.1 | +0.2 | |
| | baz=246 | | | | | | | | | |
| TOAD | Toad River Com | 87.63 | 25 | P | | P | | 19 01 19.4 | +0.3 | |
| | baz=230 | | | | | | | | | |
| E22K | Anaktuvuk Pass | 87.67 | 10 | IAmb | | IAmb | 19 01 19.1 | | | |
| | comp=Z,9.6nm,0.7s | | | | | | | | | |
| E22K | Anaktuvuk Pass | 87.67 | 10 | P | | P | | 19 01 18.8 | -0.3 | |
| | baz=205,SNR=8.9 | | | | | | | | | |
| I28M | Miner Creek | 87.75 | 15 | IAmb | | IAmb | 19 01 20.4 | | | |
| | comp=Z,5.6nm,0.6s | | | | | | | | | |
| I28M | Miner Creek | 87.75 | 15 | P | | P | | 19 01 19.1 | -0.5 | |
| | baz=216,SNR=6.5 | | | | | | | | | |
| F24K | Squaw Lake | 87.79 | 11 | IAmb | | IAmb | 19 01 20.4 | | | |
| | comp=Z,12nm,0.7s | | | | | | | | | |
| F24K | Squaw Lake | 87.79 | 11 | P | | P | | 19 01 19.8 | +0.1 | |
| | baz=209,SNR=16 | | | | | | | | | |
| KMI | Kunming | 87.89 | 297 | ⇑P | | P | | 19 01 22.4 | +1.0 | |
| KMI | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| E23K | Chandalar | 87.96 | 10 | IAmb | | IAmb | 19 01 21.1 | | | |
| | comp=Z,8.7nm,0.8s | | | | | | | | | |
| E23K | Chandalar | 87.96 | 10 | P | | P | | 19 01 20.6 | +0.1 | |
| | baz=207,SNR=6.2 | | | | | | | | | |
| J30M | Hart River | 88.00 | 17 | P | | P | | 19 01 20.7 | -0.1 | |
| | baz=220,SNR=6.1 | | | | | | | | | |
| H27K | Steamboat Moun | 88.01 | 14 | P | | P | | 19 01 20.6 | -0.1 | |
| | baz=215,SNR=6.6 | | | | | | | | | |
| MMPY | Sheldon Lake, | 88.05 | 20 | IAmb | | IAmb | 19 01 21.9 | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| MMPY | Sheldon Lake, | 88.05 | 20 | P | | P | | 19 01 21.4 | +0.4 | |
| | baz=224,SNR=16 | | | | | | | | | |
| I29M | Ogilvie Camp, | 88.09 | 16 | P | | P | | 19 01 20.8 | -0.3 | |
| | baz=218,SNR=7.0 | | | | | | | | | |
| G26K | Porcupine Rive | 88.11 | 13 | P | | P | | 19 01 21.2 | +0.2 | |
| | baz=213,SNR=11 | | | | | | | | | |
| MSTX | Muleshoe | 88.17 | 54 | IAmb | | IAmb | 19 01 23.7 | | | |
| | comp=Z,8.9nm,0.8s | | | | | | | | | |
| C21K | Knifeblade Rid | 88.17 | 8 | P | | P | | 19 01 21.7 | +0.3 | |
| | baz=202,SNR=6.0 | | | | | | | | | |
| E24K | Your Creek | 88.17 | 11 | IAmb | | IAmb | 19 01 21.9 | | | |
| | comp=Z,6.4nm,0.6s | | | | | | | | | |
| E24K | Your Creek | 88.17 | 11 | P | | P | | 19 01 21.3 | -0.1 | |
| | baz=208,SNR=8.0 | | | | | | | | | |
| T25A | Trinidad | 88.18 | 50 | P | | P | | 19 01 22.7 | +0.2 | |
| | baz=246 | | | | | | | | | |
| D22K | Ayikyak River | 88.21 | 9 | P | | P | | 19 01 21.7 | +0.1 | |
| | baz=204,SNR=14 | | | | | | | | | |
| RLMT | Red Lodge | 88.28 | 41 | P | | P | | 19 01 23.8 | +1.1 | |
| | baz=243,SNR=6.7 | | | | | | | | | |
| F25K | Christian Rive | 88.28 | 12 | IAmb | | IAmb | 19 01 22.5 | | | |
| | comp=Z,4.8nm,0.7s | | | | | | | | | |
| F25K | Christian Rive | 88.28 | 12 | P | | P | | 19 01 22.2 | +0.2 | |
| | baz=211,SNR=5.8 | | | | | | | | | |
| TGTN | Hyland Airport | 88.29 | 22 | P | | P | | 19 01 22.9 | +0.8 | |
| | baz=227,SNR=5.1 | | | | | | | | | |
| OZNA | Ozona | 88.31 | 57 | IAmb | | IAmb | 19 01 24.8 | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | | |
| BMAR | Burnt Mountain | 88.36 | 12 | P | | P | | 19 01 21.4 | -0.9 | |
| A19K | Wainwright | 88.44 | 6 | P | | P | | 19 01 23.5 | +1.0 | |
| | baz=196 | | | | | | | | | |
| G27K | Doyon Strip | 88.46 | 14 | P | | P | | 19 01 22.9 | +0.1 | |
| | baz=215 | | | | | | | | | |
| TOLK | Toolik Lake Re | 88.49 | 10 | P | | P | | 19 01 22.8 | -0.1 | |
| | baz=207 | | | | | | | | | |
| I30M | Mount Dempster | 88.49 | 16 | P | | P | | 19 01 22.7 | -0.4 | |
| | baz=220,SNR=6.2 | | | | | | | | | |
| D23K | Nanushuk River | 88.60 | 10 | P | | P | | 19 01 23.5 | +0.2 | |
| | baz=206 | | | | | | | | | |
| B21K | Ikpikpuk River | 88.62 | 8 | P | | P | | 19 01 23.6 | +0.2 | |
| | baz=202 | | | | | | | | | |
| N23A | Red Feather La | 88.63 | 46 | IAmb | | IAmb | 19 01 26.5 | | | |
| | comp=Z,21nm,1.4s | | | | | | | | | |
| N23A | Red Feather La | 88.63 | 46 | P | | P | | 19 01 25.2 | +0.8 | |
| | baz=245 | | | | | | | | | |
| F26K | Sheenjek River | 88.67 | 12 | P | | P | | 19 01 24.3 | +0.5 | |
| | baz=212 | | | | | | | | | |
| H29M | Whitestone | 88.76 | 15 | P | | P | | 19 01 24.5 | +0.3 | |
| | baz=218 | | | | | | | | | |
| 833A | Chaparral WMA, | 88.79 | 60 | IAmb | | IAmb | 19 01 27.5 | | | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| 833A | Chaparral WMA, | 88.79 | 60 | P | | P | | 19 01 26.1 | +0.9 | |
| | baz=249 | | | | | | | | | |
| POST | Post | 88.81 | 55 | IAmb | | IAmb | 19 01 26.4 | | | |
| | comp=Z,8.7nm,0.7s | | | | | | | | | |
| KOTAN | Kotaneelee Air | 88.92 | 24 | P | | P | | 19 01 26.5 | +1.5 | |
| | baz=231 | | | | | | | | | |
| CMAR | Chiang Mai Arr | 88.99 | 290 | P | | P | | 19 01 26.0 | -0.3 | |
| | comp=Z,6.9nm,0.9s,baz=107,slow=3.0,SNR=19 | | | | | | | | | |
| | comp=Z,6.9nm,0.9s | | | | | | | | | |
| D24K | Happy Valley | 89.07 | 10 | P | | P | | 19 01 25.2 | -0.3 | |
| | baz=208 | | | | | | | | | |
| PZH | PanZhiHua | 89.21 | 298 | P | | P | | 19 01 28.4 | +1.1 | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | | |
| JCT | Junction City | 89.22 | 58 | P | | P | | 19 01 27.8 | +0.7 | |
| | baz=249 | | | | | | | | | |
| EPYK | Eagle Plains | 89.29 | 15 | P | | P | | 19 01 26.3 | -0.3 | |
| | baz=219,SNR=5.0 | | | | | | | | | |
| EGMT | Eagleton | 89.31 | 39 | P | | P | | 19 01 28.0

comp=Z,18nm,0.8s,baz=210,slow=7.2,SNR=44
SNAA PKKPbc **PKKPdf** **19 18 54.7 +2.3**

comp=Z,1.2nm,0.8s,baz=112,slow=4.1,SNR=4.1
comp=Z,18nm,0.8s
**F31M** **Tsiigehtchic** **90.87 16** P **P** **19 01 34.3 +0.4**
baz=222
**LAO** **LASA Array** **90.88 41** P **P** **19 01 36.0 +1.5**
baz=245,SNR=6.5
**LZH** **Lanzhou** **90.89 308** *e*P **P** **19 01 34.9 0.0**
LZH S **S** **19 11 50.4 +4.7**
LZH pmax pmax
comp=Z,28nm,1.1s
**VNA3** **Neumayer Olymp** **90.99 176** ⇑P **P** **19 01 35.3 +0.7**
comp=Z,79nm,0.6s
**PLCA** **Paso Flores** **91.37 134** P **P** **19 01 37.4 +0.3**
comp=Z,1.5nm,0.7s,baz=209,slow=6.0,SNR=4.4
comp=Z,1.5nm,0.7s
**WMOK** **Wichita Mounta** **91.52 54** P **P** **19 01 37.5 -0.2**
baz=250
**INK** **Inuvik** **91.57 15** IAmb IAmb 19 01 37.2
comp=Z,18nm,1.3s
**INK** **Inuvik** **91.57 15** P **P** **19 01 35.7 -1.4**
comp=Z,5.2nm,0.6s,baz=214,slow=4.6,SNR=9.8
comp=Z,5.2nm,0.6s
**INK** **Inuvik** **91.57 15** P **P** **19 01 36.7 -0.4**
baz=222
**VNA1** **Neumayer--Stat** **91.66 177** ⇑P **P** **19 01 39.0 +1.3**
comp=Z,74nm,1.0s
**DGMT** **Dagmar** **92.86 40** P **P** **19 01 44.5 +0.9**
baz=247
**SONM** **Songino Array** **93.48 319** P **P** **19 01 45.6 -0.9**
comp=Z,1.8nm,0.5s,baz=142,slow=5.3,SNR=6.9
comp=Z,1.8nm,0.5s
**YKA** **Yellowknife Ar** **94.00 25** P **P** **19 01 47.9 -0.4**
comp=Z,3.8nm,0.8s,baz=251,slow=4.4,SNR=8.6
YKA pP **pP** **19 03 47.8 -0.3**
comp=Z,1.9nm,1.0s,baz=246,slow=4.6,SNR=2.4
comp=Z,3.8nm,0.8s
**KSU1** **Kansas State U** **94.62 51** P **P** **19 01 52.8 +1.0**
baz=251
**GTA** **Gaotai** **95.02 310** P **P** **19 01 54.0 +0.3**
GTA pmax pmax
comp=Z,3.0nm,0.9s
**ECSD** **EROS Data Cent** **96.10 46** P **P** **19 01 58.0 -0.3**
baz=252
**ZALV** **Zalesovo Beam** **108.15 322** PKiKP **PKiKP** **19 06 53.5 -1.2**
comp=Z,2.4nm,0.7s,baz=157,slow=2.2,SNR=8.9
**MKAR** **Makanchi Array** **109.10 314** PKiKP **PKiKP** **19 06 55.7 -1.1**
comp=Z,2.6nm,0.6s,baz=91,slow=0.4,SNR=28
MKAR PKKPbc **PKKPbc** **19 18 05.0 -1.3**
comp=Z,0.8nm,0.7s,baz=286,slow=3.8,SNR=7.8
**KURBB** **Kurchatov Arra** **111.82 318** PKiKP **PKiKP** **19 07 00.6 -1.2**
comp=Z,2.9nm,0.7s,baz=94,slow=1.7,SNR=24
KURBB PKKPbc **PKKPbc** **19 17 56.5 -1.2**
comp=Z,0.6nm,0.6s,baz=264,slow=4.1,SNR=6.6
**BVAR** **Borovoye Array** **116.77 321** PKP **PKPdf** **19 07 10.4 -0.8**
comp=Z,7.3nm,0.4s,baz=115,slow=2.1,SNR=26
**SPITS** **Spitsbergen Ar** **119.01 357** PKP **PKPdf** **19 07 14.5 -0.5**
comp=Z,6.8nm,0.5s,baz=85,slow=3.6,SNR=12
**BDFB** **Brasilia** **120.80 121** PKKPbc PKKPbc 19 17 25.1 -1.3
comp=Z,2.3nm,0.6s,baz=181,slow=8.3,SNR=4.6
**ARU** **Arti** **122.74 326** PKP **PKPdf** **19 07 22.0 -0.6**
**ARCES** **ARCESS Array B** **126.09 350** PKP **PKPdf** **19 07 28.0 -0.7**
comp=Z,14nm,0.7s,baz=10,slow=1.4,SNR=42
ARCES PKKPbc **PKKPab** **19 17 04.3 +0.3**
comp=Z,1.2nm,0.6s,baz=318,slow=1.6,SNR=6.8
**BOSA** **Boshof** **128.73 207** PKP **PKPdf** **19 07 34.6 -0.6**
comp=Z,4.4nm,0.8s,baz=147,slow=3.0,SNR=5.1
BOSA PP **PP** **19 09 53.2 +4.6**
comp=Z,5.6nm,0.9s,baz=125,slow=7.2,SNR=4.4
**FINES** **FINESS Array B** **132.99 344** PKhKP PKPpre 19 07 27.0
comp=Z,4.1nm,1.0s,baz=101,slow=1.9,SNR=3.8
FINES PKP **PKPdf** **19 07 41.2 -0.8**
comp=Z,5.1nm,0.6s,baz=46,slow=0.6,SNR=12
**NB2** **NORSAR Subarra** **136.13 353** PKPdf PKPpre 19 07 36.5
comp=Z,1.7nm,0.5s,baz=14,slow=1.8
**NOA** **NORSAR Array B** **136.13 353** PKhKP PKPpre 19 07 39.0
comp=Z,0.6nm,0.5s,baz=6.5,slow=3.1,SNR=6.1
NOA PKP **PKPdf** **19 07 45.8 -2.1**
comp=Z,1.6nm,0.6s,baz=59,slow=1.5,SNR=5.8
NOA SKPbc **SKPbc** **19 10 28.0 -0.8**
comp=Z,0.5nm,0.9s,baz=85,slow=8.2,SNR=1.1
**HFS** **Hagfors** **136.70 351** PKhKP PKPpre 19 07 37.0
comp=Z,1.4nm,0.4s,baz=97,slow=6.1,SNR=12
HFS PKP **PKPdf** **19 07 49.1 +0.1**
comp=Z,6.6nm,0.7s,baz=34,slow=0.5,SNR=7.7
**BCA** **Borcka** **138.53 313** ⇓P **Pdif** **19 05 01.7 -5.4**
**AKASG** **Malin Array Be** **140.42 333** PKhKP PKPpre 19 07 48.6
comp=Z,2.7nm,0.3s,baz=45,slow=4.0,SNR=14
AKASG PKP **PKPdf** **19 07 56.5 +0.5**
comp=Z,5.8nm,0.5s,baz=42,slow=2.9,SNR=9.2
AKASG pPKP pPKPdf 19 10 04.0 +0.3
comp=Z,1.7nm,0.8s,baz=30,slow=1.1,SNR=2.1
AKASG SKPbc **SKPbc** **19 10 39.7 -1.3**
comp=Z,0.2nm,0.2s,baz=40,slow=2.7,SNR=4.5
**KMBO** **Kilima Mbogo** **140.43 246** PKhKP PKPpre 19 07 52.4
comp=Z,1.7nm,0.5s,baz=64,slow=11,SNR=6.8
**KIEV** **Kiev** **140.43 333** ⇓P PKPpre 19 07 48.2
**EKA** **Eskdalemuir Ar** **142.19 5** PKhKP PKPpre 19 07 53.4
comp=Z,1.3nm,0.5s,baz=329,slow=3.0,SNR=12
**NEWG** **New Galloway** **142.31 6** *e*P PKPpre 19 07 55.0
**SORM** **Soroca** **142.66 330** ⇓P PKPpre 19 07 56.7
**EDMD** **Edmundbyers** **142.77 4** *e*P PKPpre 19 07 56.5
**IOMK** **Kirk Michael** **143.12 6** *e*P PKPab 19 07 57.9 -0.6
**WIM** **Isle of Man** **143.22 6** *e*P PKPab 19 07 57.9 -1.0
**MILM** **Milestii Mici** **143.29 329** ⇓P PKPab 19 07 59.0 -0.3
**GAZ** **Gaziantep** **143.32 309** PKPdf PKPbc 19 08 00.2 0.0
**BNN** **Bunyan** **143.63 313** PKPdf PKPbc 19 08 01.5 +0.3
**IAS** **Iasi** **143.71 330** ⇓P PKPab 19 08 00.7 -0.2
**WME** **Myndd Eilian** **144.00 6** *e*P PKPbc 19 08 00.9 -0.7
**WLF1** **Llynfaes** **144.10 6** *e*P PKPbc 19 08 00.9 -1.0
**LODK** **Lodwar** **144.21 251** PKPdf **PKPdf** **19 08 04.2 +0.2**
**PRAR** **RASCA** **144.21 331** ⇓P PKPbc 19 08 02.4 -0.1
**YLL** **Llanberis** **144.27 6** *e*P PKPbc 19 08 02.1 -0.3
**BIR** **Birlad** **144.33 329** ⇓P **PKPab** **19 08 03.7 +0.4**
**VLDR** **Vladesti** **144.40 328** ⇑P **PKPab** **19 08 04.0 +0.5**
**OJC** **Ojcow** **144.43 340** PKP PKPbc 19 08 02.8 -0.3
**TLCR** **144.46 326** ⇑P **PKPab** **19 08 03.7 -0.1**
**BURAR** **Bucovina Array** **144.47 332** PKPdf **PKPab** **19 08 04.2 +0.3**
**BURAR** **Bucovina Array** **144.47 332** ⇑P **PKPab** **19 08 04.4 +0.5**
**VARL** **Varlezi** **144.48 328** ⇑P **PKPab** **19 08 04.1 +0.3**
**SCTR** **Scanteiesti** **144.56 328** ⇑P **PKPab** **19 08 04.7 +0.5**
**TATR** **Tataca** **144.58 328** ⇓P **PKPdf** **19 07 59.8 -3.7**
**GHRR** **144.58 329** ⇓P **PKPab** **19 08 05.1 +0.8**
**FOEL** **Foel Wylfa** **144.61 5** *e*P **PKPdf** **19 08 02.8 -0.6**
**TESR** **Tescani** **144.63 330** ⇓P **PKPab** **19 08 04.3 -0.2**
**KOLS** **Kolonicke sedl** **144.64 337** *e*PKP **PKPab** **19 08 04.3 -0.1**
**JURR** **Jurilovca** **144.71 326** ⇓P PKPbc 19 08 04.4 +0.3
**NEGRR** **Negrea** **144.71 328** ⇓P PKPbc 19 08 04.4 +0.3
**BR131** **Keskin Array S** **144.74 315** PKPdf PKPbc 19 08 04.5 -0.1
**BRTR** **Keskin Array B** **144.74 315** PKPdf PKPbc 19 08 04.6 0.0
**BRTR** **Keskin Array B** **144.74 315** PKP **PKPdf** **19 08 04.0 -0.2**
comp=Z,22nm,0.7s,baz=120,slow=3.4,SNR=93
BRTR pPKP **pPKPdf** **19 10 12.6 +0.1**
comp=Z,2.0nm,0.9s,baz=83,slow=3.9,SNR=3.9
**IZVR** **Izvoarele** **144.76 328** ⇑P **PKPab** **19 08 04.7 -0.3**
**CFR** **Carcaliu** **144.82 327** ⇑P PKPbc 19 08 04.8 +0.4
**KIRS** **Kirsehir-Merke** **144.84 314** ⇓P **PKPdf** **19 08 01.9 -2.4**
**PANC** **Panciu** **144.85 329** ⇑P PKPbc 19 08 04.5 0.0
**ONER** **Baraj Valea Uz** **144.88 330** ⇓P **PKPab** **19 08 05.3 -0.1**
**CWF** **Charnwood Fore** **144.89 3** *e*P **PKPdf** **19 08 03.3 -0.5**
**TPGR** **Topolog** **144.89 326** ⇓P **PKPab** **19 08 05.6 +0.1**
**CRVS** **Cervenica-Dubn** **144.97 337** *e*PKP PKPbc 19 08 04.9 +0.1
**WACR** **West Acre** **144.98 1** *e*P **PKPdf** **19 08 03.4 -0.5**
**HLM1** **Long Mynd** **145.00 5** *e*P **PKPdf** **19 08 03.4 -0.6**
**VRI** **Vrincioaia** **145.06 329** ⇑P **PKPbc** **19 08 05.6 +0.4**
**PLOR** **Plostina** **145.11 329** ⇓P **PKPbc** **19 08 05.2 -0.2**
**BMR** **Baia Mare** **145.17 334** ⇑P **PKPbc** **19 08 05.7 +0.3**
**OSTC** **Ostas** **145.19 344** ⇑*e*PKP **PKPbc** **19 08 05.8 +0.4**
**CHVC** **Chvalec** **145.21 344** ⇑*e*PKP **PKPbc** **19 08 06.0 +0.5**
**CLZ** **Clausthal** **145.21 351** *e*PKPbc **PKPbc** **19 08 05.6 +0.1**
baz=16,slow=2.7
**ANTO** **Ankara** **145.23 316** **PKPab** **19 08 06.6 -0.5**
**ANTO** **Ankara** **145.23 316** ⇑P **PKPbc** **19 08 05.9 -0.1**
**CLL** **Collm** **145.25 348** *i* PKPdf **PKPdf** **19 08 04.7 +0.2**
CLL ⇓*i* PKPbc **PKPbc** **19 08 05.4 -0.1**
comp=Z,74nm,0.7s
CLL *i* (PKPab) **PKPab** **19 08 06.6 0.0**
comp=Z,37nm,0.8s
CLL *e*pPKPdf pPKPbc 19 10 11.0 +0.4
CLL *i* pPKiKP **pPKiKP** **19 10 15.8 0.0**
**CLL** **Collm** **145.25 348** *e*PKPdf **PKPdf** **19 08 04.7 +0.2**
baz=19,slow=1.6
CLL *e*PKPbc **PKPbc** **19 08 05.5 -0.1**
baz=16,slow=2.7

**ARCR** **ARCALIA** **145.26 333** ⇓P **PKPab** **19 08 06.4 -0.5**
**HARR** **Harsova** **145.26 327** ⇓P **PKPbc** **19 08 06.2 +0.5**
**TURR** **Turia** **145.27 330** ⇑P **PKPab** **19 08 06.8 -0.2**
**OKC** **Ostrava-Krasne** **145.29 341** ⇑*e*PKP **PKPbc** **19 08 06.0 +0.3**
**UPC** **Upice** **145.29 344** ⇑*e*PKP **PKPbc** **19 08 06.1 +0.4**
**BISRR** **Bisoca** **145.29 329** ⇓P **PKPbc** **19 08 06.2 +0.3**
**TLBR** **Topalu** **145.30 326** ⇑P **PKPab** **19 08 06.6 -0.4**
**COVR** **Voineasa-Covas** **145.33 330** ⇑P **PKPbc** **19 08 05.6 -0.4**
**OZUR** **145.34 330** ⇓P **PKPab** **19 08 06.8 -0.5**
**DPC** **Dobruska-Polom** **145.35 344** ⇑*e*PKP **PKPab** **19 08 06.6 -0.6**
**BOSR** **Bodos** **145.42 330** ⇓P **PKPab** **19 08 07.3 -0.3**
**CVDA** **Cernavoda** **145.45 326** ⇑P **PKPab** **19 08 07.4 -0.2**
**BRG** **Berggiesshubel** **145.46 346** *e*PKP **PKPdf** **19 08 05.2 +0.4**
BRG Amp 19 08 05.6
comp=Z,5.8nm,1.0s
**BRG** **Berggiesshubel** **145.46 346** P **PKPbc** **19 08 06.6 +0.5**
BRG Amp 19 08 07.0
comp=Z,31nm,0.7s
BRG pPKP **pPKPdf** **19 10 14.2 +1.7**
BRG Amp 19 10 20.5
comp=Z,12nm,1.2s
**BRG** **Berggiesshubel** **145.46 346** *e*PKPdf **PKPdf** **19 08 05.0 +0.2**
baz=19,slow=1.6
BRG *e*PKPbc **PKPbc** **19 08 06.3 +0.2**
baz=16,slow=2.7
**LANS** **Liptovska Anna** **145.46 339** *e*PKP **PKPab** **19 08 07.4 -0.2**
LANS *e* 19 10 13.9
**KRLC** **Kraliky** **145.47 343** ⇑*e*PKP **PKPbc** **19 08 06.5 +0.2**
**MORC** **Moravsky Berou** **145.52 342** *e*PKP **PKPdf** **19 08 05.1 0.0**
MORC *e* 19 10 13.3
**MORC** **Moravsky Berou** **145.52 342** ⇑P **PKPbc** **19 08 06.4 -0.1**
**GTTG** **Gottingen** **145.56 351** *e*PKPdf **PKPdf** **19 08 05.1 +0.1**
baz=19,slow=1.6
GTTG *e*PKPbc **PKPbc** **19 08 06.6 +0.2**
baz=16,slow=2.7
**NEUB** **Neuenburg** **145.58 349** *e*PKPbc **PKPbc** **19 08 06.6 +0.1**
baz=16,slow=2.7
**NEHR** **Nehoiu** **145.58 329** ⇓P **PKPab** **19 08 07.6 -0.7**
**DOPR** **Dopca** **145.63 330** ⇓P **PKPab** **19 08 08.2 -0.1**
**AMRR** **Amara** **145.63 327** ⇓P **PKPbc** **19 08 07.0 +0.2**
**PVCC** **Panska Ves** **145.63 346** ⇑*e*PKP **PKPbc** **19 08 07.1 +0.4**
**ISR** **Istrita** **145.68 328** ⇓P **PKPbc** **19 08 07.6 +0.5**
**MONM** **Monmouth** **145.68 5** *e*P **PKPbc** **19 08 06.0 -0.8**
**MLR** **Muntele Rosu** **145.71 329** PKPdf **PKPbc** **19 08 07.3 0.0**
**MLR** **Muntele Rosu** **145.71 329** ⇓P **PKPbc** **19 08 07.7 +0.5**
**ICOR** **Ion Corvin** **145.72 326** ⇓P **PKPbc** **19 08 07.0 -0.1**
**RICC** **Richard** **145.73 346** ⇑*e*PKP **PKPbc** **19 08 07.5 +0.6**
**STRD** **Stroud** **145.79 4** *e*P **PKPbc** **19 08 06.5 -0.6**
**MESR** **Meseseni** **145.81 334** ⇑P **PKPbc** **19 08 07.7 +0.4**
**HSKC** **Hora Svate Kat** **145.82 347** ⇑*e*PKP **PKPbc** **19 08 07.4 +0.2**
**CBBR** **Cluj-Babes-Bol** **145.85 333** ⇑P **PKPdf** **19 08 04.5 -1.1**
**PSN** **Preselentsi** **145.85 325** P **PKPbc** **19 08 07.0 -0.5**
**CJR** **Cluj-Napoca** **145.87 335** ⇓P **PKPbc** **19 08 08.1 +0.5**
**MDB** **Medias** **145.96 332** ⇑P **PKPbc** **19 08 08.4 +0.6**
**LEHL** **Lehliu** **145.99 327** ⇓P **PKPbc** **19 08 08.2 +0.4**
**LTVH** **Ltavrtes, Hu** **146.05 335** ⇓P **PKPbc** **19 08 08.4 +0.4**
**PRA** **Prague** **146.09 345** ⇑*e*PKP **PKPbc** **19 08 08.3 +0.3**
**KASTN** **Kahler Asten** **146.10 353** *e*PKPdf **PKPdf** **19 08 06.4 +0.4**
baz=19,slow=1.6
KASTN *e*PKPbc **PKPbc** **19 08 08.1 0.0**
baz=16,slow=2.7
**SULR** **146.13 328** ⇓P **PKPbc** **19 08 08.1 -0.1**
**PRU** **Pruhonice** **146.14 345** ⇑*e*PKP **PKPbc** **19 08 08.4 +0.3**
**MOX** **Moxa** **146.15 349** *e*PKPdf **PKPdf** **19 08 06.2 +0.1**
baz=19,slow=1.6
MOX *e*PKPbc **PKPbc** **19 08 08.2 +0.1**
baz=16,slow=2.7
MOX *e*pPKPbc **pPKPdf** **19 10 13.9 +0.1**
**MMAI** **Mount Meron Ar** **146.17 303** PKPbc **PKPbc** **19 08 08.7 -0.2**
comp=Z,33nm,0.5s,baz=67,slow=6.4,SNR=106
MMAI pPKPbc **pPKPdf** **19 10 15.3 +0.2**
comp=Z,27nm,1.1s,baz=57,slow=3.1,SNR=9.4
**PCED** **Cedros** **146.17 46** *e*PKP **PKPbc** **19 08 09.3 +0.7**
**VOIR** **146.18 330** ⇑P **PKPbc** **19 08 09.0 +0.5**
**DRGR** **146.19 334** ⇓P **PKPbc** **19 08 08.8 +0.3**
**CALA** **Caldeira** **146.20 46** *e*PKP **PKPbc** **19 08 09.2 +0.4**
**PLN** **Plauen** **146.20 348** *e*PKPdf **PKPdf** **19 08 06.2 +0.1**
baz=19,slow=1.6
PLN *e*PKPbc **PKPbc** **19 08 08.4 +0.1**
baz=16,slow=2.7
PLN *e*pPKPbc **pPKPdf** **19 10 13.8 -0.1**
**TANN** **Tannenbergstha** **146.20 348** *e*PKPdf **PKPdf** **19 08 06.3 +0.1**
baz=19,slow=1.6
TANN *e*PKPbc **PKPbc** **19 08 08.5 +0.1**
baz=16,slow=2.7
TANN *e*PKPab **PKPab** **19 08 10.1 -0.5**
baz=16,slow=3.9
TANN *e*pPKPbc **pPKPdf** **19 10 13.6 -0.3**
**VRAC** **Vranov** **146.22 343** *e*PKP **PKPdf** **19 08 06.6 +0.4**
VRAC *e* 19 10 14.5
**VRAC** **Vranov** **146.22 343** ⇑P **PKPbc** **19 08 09.0 +0.6**
**VYHS** **Vyhne** **146.24 339** *e*PKP **PKPbc** **19 08 08.7 +0.2**
VYHS *e* 19 10 15.1
**UBBA** **Unterbreizbach** **146.26 351** *e*PKPdf **PKPdf** **19 08 06.2 +0.1**
baz=19,slow=1.6
UBBA *e*PKPbc **PKPbc** **19 08 08.4 +0.1**
baz=16,slow=2.7
UBBA *e*PKPab **PKPab** **19 08 10.5 0.0**
baz=16,slow=3.9
**JAVC** **Velka Javorina** **146.30 341** *e*PKP **PKPbc** **19 08 07.7 -1.0**
JAVC *e* 19 10 16.2
**WOL** **Wolverton** **146.32 3** *e*P **PKPbc** **19 08 07.9 -0.7**
**BORR** **Bors** **146.33 335** ⇓P **PKPbc** **19 08 09.7 +1.0**
**PSZ** **Piszkesteto** **146.37 338** ⇓P **PKPbc** **19 08 09.0 +0.1**
**PCAN** **Candelaria** **146.40 46** *e*PKP **PKPbc** **19 08 09.2 0.0**
**SRBC** **Serra Branca** **146.41 44** *e*PKP **PKPbc** **19 08 09.0 -0.2**
**PICO** **Pico** **146.43 46** *e*PKP **PKPbc** **19 08 10.3 +0.9**
**ARR** **Arges** **146.43 330** ⇑P **PKiKP** **19 08 10.6 -0.8**
**ROSA** **Rosais** **146.44 45** *e*PKP **PKPbc** **19 08 09.8 +0.5**
**PGRA** **Graciosa** **146.46 44** *e*PKP PKPab 19 08 19.9 +8.0
**KRUC** **Moravsky** **146.50 343** *e*PKP **PKPdf** **19 08 06.8 +0.1**
KRUC *e* 19 10 15.5
**PPNO** **Prainha do Nor** **146.55 46** *e*PKP **PKPbc** **19 08 10.0 +0.3**
**PRD** **Provadia** **146.57 325** P **PKPbc** **19 08 09.0 -0.5**
**PMAN** **Manadas** **146.59 45** *e*PKP **PKPbc** **19 08 09.7 0.0**
**SGRR** **Singureni** **146.60 328** ⇓P **PKPbc** **19 08 08.9 -0.7**
**MANZ** **Manzenberg** **146.68 348** *e*PKPdf **PKPdf** **19 08 07.3 +0.3**
baz=19,slow=1.6
MANZ *e*PKPbc **PKPbc** **19 08 09.9 +0.2**
baz=16,slow=2.7
MANZ *e*PKPab **PKiKP** **19 08 11.8 +0.1**
baz=16,slow=3.9
MANZ *e*pPKPbc pPKPbc 19 10 15.6 +0.7
**ZVC** **Zvikov** **146.74 345** ⇑*e*PKP **PKPbc** **19 08 10.1 +0.3**
**SBD** **Saint Breward** **146.74 8** *e*P **PKPbc** **19 08 08.8 -0.9**
**BSZH** **Besenyszg** **146.75 337** ⇓P **PKPbc** **19 08 10.7 +0.9**
**LOT** **Lotru** **146.77 331** ⇓P **PKPbc** **19 08 09.3 -0.9**
**DEV** **Deva** **146.82 333** ⇓P **PKPbc** **19 08 10.2 +0.1**
**ROTZ** **Rotzenmuhle** **146.87 348** *e*PKPbc **PKPbc** **19 08 10.4 +0.2**
baz=16,slow=2.7
ROTZ *e*pPKPbc pPKPab 19 10 16.1 +0.6
**HUMR** **Humele** **146.88 329** ⇑P **PKPbc** **19 08 10.1 -0.2**
**AHRW** **Bad Neuenahr-A** **146.91 354** *e*PKPdf **PKPdf** **19 08 07.9 +0.6**
baz=19,slow=1.6
AHRW *e*pPKPbc **pPKPdf** **19 10 14.9 -0.1**
**MEM** **Membach** **146.94 355** *d*PKP **PKPbc** **19 08 09.9 -0.4**
MEM *dp*PKiKP pPKPab 19 10 15.7 -0.2
**BTNL** **Ternell** **146.95 355** *d*PKPdf **PKPdf** **19 08 08.1 +0.7**
BTNL *dp*PKP **pPKPdf** **19 10 15.0 -0.1**
**BSTI** **Sart Tilman** **147.00 356** *d*PKP **PKPbc** **19 08 10.6 +0.2**
BSTI *dp*PKiKP pPKPab 19 10 16.4 +0.5
**SRO** **Srobarova** **147.01 339** *e*PKP **PKPbc** **19 08 10.9 +0.4**
**PSBA** **Serra de Santa** **147.03 44** *e*PKP **PKPbc** **19 08 10.1 -0.8**
**COPA** **Copaceanca** **147.04 328** ⇑P **PKPbc** **19 08 10.3 -0.4**
**SIRR** **Siria** **147.05 334** ⇓P **PKPbc** **19 08 11.1 +0.4**
**TNS** **Taunus Mts** **147.06 352** *e*PKPdf **PKPdf** **19 08 07.7 0.0**
baz=19,slow=1.6
TNS *e*PKPbc **PKPbc** **19 08 10.9 +0.2**
baz=16,slow=2.7
TNS *e*PKPab **PKPab** **19 08 13.8 -0.2**
baz=16,slow=3.9
TNS *e*pPKPbc **pPKPbc** **19 10 15.8 -0.2**
**ZST** **Bratislava** **147.06 341** *e*PKP **PKPbc** **19 08 11.2 +0.5**
**PAGU** **Agualva, Azore** **147.12 44** *e*PKP **PKiKP** **19 08 12.1 -0.8**
**GRF** **Grafenberg Arr** **147.14 349** *e*PKPdf **PKPdf** **19 08 07.7 0.0**
baz=19,slow=1.6
GRF *e*PKPbc **PKPbc** **19 08 11.2 +0.4**
baz=16,slow=2.7
GRF *e*PKPab **PKPab** **19 08 14.3 +0.1**
baz=16,slow=3.9
GRF *e*pPKPbc **pPKPbc** **19 10 15.8 -0.4**
**KHC** **Kasperske Hory** **147.17 346** **PKPbc** **19 08 11.4 +0.4**
**KHC** **Kasperske Hory** **147.17 346** *e*PKPDF **PKPdf** **19 08 08.0 +0.2**

KHC ⇑*e*PKP **PKPbc** **19 08 11.3 +0.3**
KHC *e*PKPAB **PKPab** **19 08 15.2 +0.8**
**BCLA** **Clavier** **147.18 356** *d*PKP **PKPbc** **19 08 10.1 -0.8**
BCLA *d*PKPab **PKiKP** **19 08 13.3 +0.6**
**BGES** **Gesves** **147.23 356** *d*PKP **PKPbc** **19 08 10.7 -0.3**
**GZR** **Gura Zlata** **147.26 332** ⇑P **PKPbc** **19 08 10.7 -0.6**
**SURR** **Surduc** **147.26 333** ⇑P **PKPbc** **19 08 11.7 +0.4**
**CKRC** **Cesky Krumlov** **147.28 345** *e*PKPDF **PKPdf** **19 08 08.3 +0.3**
CKRC ⇑*e*PKP **PKPbc** **19 08 11.7 +0.4**
**WET** **Wettzell** **147.32 346** *e*PKPdf **PKPdf** **19 08 08.1 0.0**
baz=19,slow=1.6
WET *e*PKPbc **PKPbc** **19 08 11.5 +0.1**
baz=16,slow=2.7
WET *e*PKPab **PKPab** **19 08 15.1 +0.1**
baz=16,slow=3.9
**BMRD** **Maredsous** **147.33 356** *d*PKPdf **PKPdf** **19 08 09.0 +1.0**
BMRD *d*PKP **PKPbc** **19 08 10.9 -0.4**
BMRD *dp*PKiKP **pPKPdf** **19 10 15.5 -0.1**
**GEC2** **GERESS Array S** **147.41 345** *e*PKPdf **PKPdf** **19 08 08.1 -0.3**
baz=19,slow=1.6
GEC2 *e*PKPbc **PKPbc** **19 08 11.7 +0.1**
baz=16,slow=2.7
GEC2 *e*pPKPbc **pPKPab** **19 10 18.0 +0.3**
**GERES** **GERESS Array B** **147.41 345** PKPbc **PKPbc** **19 08 11.8 +0.1**
comp=Z,22nm,0.7s,baz=350,slow=6.7,SNR=65
GERES pPKPbc **pPKPdf** **19 10 15.7 -0.4**
comp=Z,3.4nm,1.0s,baz=150,slow=10.0,SNR=5.1
**RCHB** **Rochefort** **147.45 356** *d*PKPdf **PKPdf** **19 08 07.9 -0.3**
RCHB *d*PKP **PKPbc** **19 08 11.0 -0.6**
**DOU** **Dourbes** **147.54 357** *d*PKP **PKPbc** **19 08 11.9 0.0**
DOU *dp*PKP **pPKPdf** **19 10 16.0 -0.1**
**VLAD** **Vladila** **147.55 329** ⇑P **PKiKP** **19 08 12.8 -0.8**
**ELND** **Elena** **147.55 326** ⇓P **PKPbc** **19 08 12.4 +0.3**
**BZS** **Buzias** **147.59 334** ⇑P **PKPbc** **19 08 12.4 +0.3**
**SRE** **Strehaia** **147.63 331** ⇑P **PKPbc** **19 08 11.9 -0.3**
**CONA** **Conrad Observa** **147.67 342** *i* PKP **PKPbc** **19 08 12.8 +0.4**
comp=Z,33nm,0.5s,SNR=33
CONA *ep*PKP **pPKPdf** **19 10 17.2 +0.7**
comp=Z,16nm,1.7s
**RONA** **Rosalia, Austr** **147.75 342** *i* PKP **PKPbc** **19 08 12.9 +0.4**
comp=Z,29nm,0.6s,SNR=29
RONA *ep*PKiKP **pPKPbc** **19 10 17.7 -0.9**
comp=Z,8.8nm,1.2s
**EDRB** **Edirne** **147.80 324** P **PKPbc** **19 08 12.1 -0.7**
**HERR** **Herculane** **147.82 332** ⇑P **PKPbc** **19 08 13.1 +0.4**
**WLF** **Walferdange** **147.86 355** *d*PKP **PKPbc** **19 08 13.1 +0.5**
**WLF** **Walferdange** **147.86 355** *e*PKPdf **PKPdf** **19 08 09.4 +0.5**
baz=19,slow=1.6
**BANR** **Banloc** **147.98 334** ⇓P **PKiKP** **19 08 13.8 -0.7**
**MOA** **Molln** **148.19 344** *i* PKP **PKPbc** **19 08 13.5 -0.1**
comp=Z,5.1nm,0.5s,SNR=11
MOA *ep*PKP **pPKPbc** **19 10 18.7 -1.0**
comp=Z,5.5nm,0.9s
**MDVR** **Moldovita** **148.21 333** ⇑P **PKPbc** **19 08 13.6 -0.2**
**VALD** **Valchedram** **148.25 329** P **PKPbc** **19 08 13.0 -0.8**
**MORH** **Mrgy, Hungar** **148.26 338** ⇑P **PKPbc** **19 08 14.0 +0.2**
**JLP** **Les Platons** **148.32 5** *e*P **PKPbc** **19 08 13.6 -0.2**
**MPEP** **Malo Peshtene** **148.35 329** P **PKPbc** **19 08 14.0 -0.1**
**JSA** **Saint Aubin** **148.37 5** *e*P **PKPbc** **19 08 13.6 -0.3**
**STU** **Stuttgart** **148.37 351** *e*PKPdf **PKPdf** **19 08 09.9 +0.1**
baz=19,slow=1.6
STU *e*PKPab **PKPab** **19 08 18.7 -0.6**
baz=16,slow=3.9
STU *ep*PKPbc **pPKPdf** **19 10 17.9 +0.4**
**ARSA** **Arzberg** **148.38 342** *i* PKP **PKPbc** **19 08 13.8 -0.3**
comp=Z,3.1nm,0.4s,SNR=9.2
**BIOA** **Bad Ischl, Aus** **148.50 345** *i* PKP **PKPbc** **19 08 14.0 -0.4**
comp=Z,5.7nm,0.4s,SNR=13
**FUR** **Furstenfeldbru** **148.59 348** *e*PKPdf **PKPdf** **19 08 09.8 -0.3**
baz=19,slow=1.6
FUR *e*PKPbc **PKPbc** **19 08 14.8 +0.2**
baz=16,slow=2.7
FUR *ep*PKPbc **pPKPbc** **19 10 19.2 -1.5**
**PSET** **Sete Cidades** **148.60 45** *e*PKP **PKPbc** **19 08 13.3 -1.7**
**RJOB** **Jochberg** **148.66 346** *e*PKPbc **PKPbc** **19 08 14.5 -0.3**
baz=16,slow=2.7
RJOB *e*PKPab **PKPab** **19 08 19.9 -0.7**
baz=16,slow=3.9
RJOB *ep*PKPbc **pPKPbc** **19 10 20.3 -0.7**
**KULA** **Kula-Manisa** **148.67 317** P **PKPbc** **19 08 14.6 -0.6**
**FRGS** **Fruska Gora** **148.70 335** ⇓P **PKPbc** **19 08 15.0 0.0**
**ALN** **Alexandroupoli** **148.82 323** P **PKPbc** **19 08 14.4 -0.9**
**KOGS** **Kog** **148.88 341** *i* PKPbc **PKPbc** **19 08 14.8 -0.5**
**BFO** **Black Forest** **148.93 352** *e*PKPbc **PKPbc** **19 08 15.5 +0.1**
baz=16,slow=2.7
BFO *ep*PKPbc **pPKPbc** **19 10 21.2 -0.4**
**LESA** **Schwarzleotal** **148.98 346** *i* PKP **PKPbc** **19 08 15.1 -0.5**
comp=Z,23nm,0.4s
**SOKA** **Soboth** **149.04 342** *i* PKP **PKPbc** **19 08 15.2 -0.6**
comp=Z,13nm,0.5s,SNR=15
**BOVS** **Bovan** **149.11 331** ⇑P **PKPbc** **19 08 15.2 -0.7**
**KBA** **Koelbreinsper** **149.14 345** *i* PKP **PKPbc** **19 08 15.4 -0.8**
comp=Z,28nm,0.4s,SNR=30
**VTS** **Vitosha** **149.14 328** P **PKPbc** **19 08 16.0 -0.3**
**PLNA** **Plana** **149.15 328** P **PKPbc** **19 08 16.0 -0.3**
**UBR** **Ueberruh** **149.28 349** *e*PKPbc **PKPbc** **19 08 16.5 +0.1**
baz=16,slow=2.7
**WATA** **Walderalm** **149.31 347** *i* PKP **PKPbc** **19 08 16.2 -0.3**
comp=Z,24nm,0.5s,SNR=20
WATA *ep*PKP **pPKPbc** **19 10 22.6 -0.3**
comp=Z,13nm,1.3s
**TEKS** **Tekeris** **149.32 335** ⇓P **PKPbc** **19 08 16.2 -0.3**
**RETA** **Reutte** **149.34 348** *i* PKP **PKPbc** **19 08 16.3 -0.2**
comp=Z,16nm,0.5s,SNR=14
RETA *ep*PKP **pPKPbc** **19 10 22.5 -0.4**
comp=Z,12nm,1.3s
**OBKA** **Obir** **149.34 343** *i* PKP **PKPbc** **19 08 15.8 -0.8**
comp=Z,7.4nm,0.6s
**OBKA** **Obir** **149.34 343** ⇑*i*P **PKPbc** **19 08 15.0 -1.6**
**EZN** **Ezine** **149.35 321** P **PKPbc** **19 08 16.2 -0.4**
**WTTA** **Wattenberg** **149.37 347** *i* PKP **PKPbc** **19 08 16.7 0.0**
comp=Z,46nm,0.4s,SNR=28
WTTA *ep*PKP **pPKPbc** **19 10 22.5 -0.6**
comp=Z,8.5nm,1.0s
**MOTA** **Moosalm** **149.40 348** *i* PKP **PKPbc** **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TREB | Trebinje | 151.31 | 334 | ⇑ | *i*P | | PKPbc | 19 08 19.6 | -1.5 |
| DRME | Dracevica, Mon | 151.39 | 332 | ⇓ | *i*P | | PKPbc | 19 08 20.4 | -0.9 |
| FNA | Florina | 151.43 | 328 | | P | | PKPbc | 19 08 20.6 | -0.9 |
| STON | Ston | 151.45 | 335 | ⇓ | *i*P | | PKPbc | 19 08 20.2 | -1.2 |
| OHR | Ohrid | 151.47 | 329 | | *i* P | | PKPbc | 19 08 21.6 | 0.0 |
| TIR | Tirane | 151.74 | 330 | ⇑ | P | | PKiKP | 19 08 22.3 | 0.0 |
| NEST | Nestorio | 151.87 | 328 | | P | | PKPbc | 19 08 22.1 | -0.5 |
| DION | Dionisos Attik | 151.90 | 321 | | P | | PKPbc | 19 08 22.2 | -0.4 |
| ATHU | Athens Univers | 152.06 | 321 | | P | | PKPbc | 19 08 21.9 | -1.1 |
| AXAR | Agios Charalam | 152.18 | 323 | | P | | PKPbc | 19 08 22.4 | -0.8 |
| VILL | Villia | 152.21 | 322 | | P | | PKPbc | 19 08 21.6 | -1.7 |
| MAKR | Makrakomi, Fth | 152.31 | 324 | | P | | PKPbc | 19 08 22.9 | -0.6 |
| ANX | Ano Chora | 152.72 | 324 | | P | | PKiKP | 19 08 24.6 | 0.0 |
| KRND | KRANIDI | 152.83 | 321 | | P | | PKPbc | 19 08 23.4 | -1.2 |
| EFP | Efpalio | 152.84 | 324 | | P | | PKPbc | 19 08 24.5 | -0.1 |
| IGT | Igoumenitsa | 152.90 | 327 | | P | | PKPbc | 19 08 23.9 | -0.8 |
| PVO | Paravola | 152.92 | 325 | | P | | PKiKP | 19 08 25.1 | +0.2 |
| GUR | Goura | 152.93 | 322 | | P | | PKPbc | 19 08 24.2 | -0.8 |
| KLV | Kalavryta, Ach | 152.97 | 323 | | P | | PKPbc | 19 08 23.7 | -1.3 |
| IDI | Anoyia | 152.98 | 315 | | P | | PKiKP | 19 08 26.4 | +1.2 |
| KEK | Kerkira | 153.03 | 328 | | P | | PKPbc | 19 08 23.3 | -1.7 |
| LKD2 | Lefkada island | 153.27 | 326 | | P | | PKPbc | 19 08 24.2 | -1.4 |
| IMMV | Iera Moni Meta | 153.49 | 316 | | P | | PKPbc | 19 08 25.4 | -0.7 |
| PGAV | Gavieira, Arco | 154.27 | 17 | *e* | PKPbc | | PKPbc | 19 08 27.8 | +0.1 |
| PCAB | Cabril | 154.57 | 17 | *e* | PKPbc | | PKPbc | 19 08 28.7 | +0.4 |
| PCAB | Cabril | 154.57 | 17 | *e* | PKPab | | PKPab | 19 08 45.7 | 0.0 |
| PBRG | Braganca | 154.83 | 15 | *e* | PKPab | | PKPab | 19 08 47.3 | +0.5 |
| TIP | Timpagrande | 154.90 | 332 | ⇑ | P | | PKiKP | 19 08 28.9 | -0.1 |
| POLO | Lamas de Olo | 154.95 | 17 | *e* | LQ | | LQ | 19 08 29.3 | |
| POLO | Lamas de Olo | 154.95 | 17 | *e* | PKPab | | PKPab | 19 08 47.4 | 0.0 |
| PVRL | Vila Real | 155.06 | 17 | *e* | PKPab | | PKPab | 19 08 48.1 | +0.3 |
| MVO | Moncorvo | 155.35 | 16 | *e* | PKPdf | | PKPdf | 19 08 30.9 | +0.5 |
| MVO | | | | | eLQ | | LQ | 19 08 30.4 | |
| MVO | Moncorvo | 155.35 | 16 | *e* | PKPab | | PKPab | 19 08 49.2 | +0.1 |
| PVIS | Viseu | 155.53 | 18 | *e* | LQ | | LQ | 19 08 30.2 | |
| PVIS | Viseu | 155.53 | 18 | *e* | PKPab | | PKPab | 19 08 51.2 | +1.4 |
| MTE | Manteigas | 155.92 | 18 | *e* | PKPdf | | PKPdf | 19 08 21.5 | +0.3 |
| PCAS | Casmilo, Conde | 155.95 | 20 | *e* | PKPab | | PKPab | 19 08 51.4 | -0.2 |
| PSBE | So Bento | 156.34 | 21 | *e* | PKPab | | PKPab | 19 08 53.0 | -0.3 |
| PCBR | Castelo Branco | 156.46 | 18 | *e* | PKPdf | | PKPdf | 19 08 21.9 | +0.1 |
| PCBR | Castelo Branco | 156.46 | 18 | *e* | PKPab | | PKPab | 19 08 53.8 | 0.0 |
| PMRV | Marv??o | 156.86 | 18 | *e* | PKPdf | | PKPdf | 19 08 22.6 | +0.3 |
| PMRV | Marv??o | 156.86 | 18 | *e* | PKPab | | PKPab | 19 08 55.5 | -0.1 |
| PMTG | Montargil | 156.93 | 20 | *e* | PKPab | | PKPab | 19 08 55.0 | -0.9 |
| PESTR | Estremoz | 157.32 | 19 | *e* | PKPab | | PKPab | 19 08 57.2 | -0.4 |
| ESDC | Sonseca Array | 157.48 | 12 | | PKP | | PKPdf | 19 08 22.1 | -1.1 |
| | comp=Z,1.0nm,0.7s,baz=341,slow=1.8,SNR=7.4 | | | | | | | | |
| ESDC | | | | | PKPab | | PKPab | 19 08 58.0 | -0.3 |
| | comp=Z,2.6nm,0.9s,baz=347,slow=4.4,SNR=8.6 | | | | | | | | |
| ESDC | | | | | SKP | | | 19 11 01.7 | |
| | comp=Z,1.5nm,1.0s,baz=334,slow=5.1,SNR=4.9 | | | | | | | | |
| EVO | Evora | 157.48 | 20 | *e* | PKPdf | | PKPdf | 19 08 23.5 | +0.4 |
| EVO | Evora | 157.48 | 20 | *e* | PKPab | | PKPab | 19 08 57.5 | -0.8 |
| PNCL | Nicolau / Gran | 157.68 | 22 | *e* | PKPab | | PKPab | 19 08 58.5 | -0.7 |
| MESJ | Messejana | 158.04 | 22 | *e* | PKPdf | | PKPdf | 19 08 24.7 | +0.9 |
| PTEO | Sao Teotonio | 158.12 | 23 | *e* | PKPdf | | PKPdf | 19 08 23.5 | -0.4 |
| PTEO | Sao Teotonio | 158.12 | 23 | *e* | PKPab | | PKPab | 19 09 00.2 | -0.9 |
| PBAR | Barrancos | 158.12 | 19 | *e* | PKPab | | PKPab | 19 09 01.2 | +0.1 |
| PVAQ | Vaqueiros | 158.60 | 21 | *e* | PKPab | | PKPab | 19 09 03.4 | +0.2 |
| KEST | Kesra | 160.78 | 341 | | PKPab | | PKPab | 19 09 12.3 | -0.5 |
| | comp=Z,5.0nm,0.7s,baz=350,slow=3.2,SNR=8.0 | | | | | | | | |
| MDT | Midelt | 163.82 | 20 | | PKP | | PKPdf | 19 08 27.8 | -2.4 |
| | comp=Z,5.5nm,0.9s,baz=242,slow=0.7,SNR=13 | | | | | | | | |
| MDT | | | | | PKPab | | PKPab | 19 09 25.9 | -0.4 |
| | comp=Z,5.0nm,0.9s,baz=318,slow=6.1,SNR=7.5 | | | | | | | | |
| DBIC | Dimbokro | 167.30 | 148 | | PKP | | PKPdf | 19 08 31.2 | -2.2 |
| | comp=Z,5.4nm,0.7s,baz=154,slow=1.6,SNR=6.2 | | | | | | | | |
| TORD | Torodi Ar. Bea | 175.53 | 179 | | PKPab | | PKPab | 19 10 18.4 | +0.1 |
| | comp=Z,1.7nm,0.5s,baz=193,slow=3.2,SNR=18 | | | | | | | | |
| TORD | | | | | PP | | PP | 19 14 09.8 | -0.1 |
| | comp=Z,2.1nm,0.9s,baz=156,slow=3.2,SNR=7.2 | | | | | | | | |

**DJA 19 18:52:56.5±0.4, 8˚S±3˚×11˚7E±˚, h10km, M3.2/6, MLv3.2/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.37 | 189 | P | Pb | 18 53 04.8 | -0.4 |
| TWSI | | | | S | Sb | 18 53 10.1 | -0.9 |
| PLAI | Plampang | 0.94 | 119 | P | Sb | 18 53 27.2 | -0.4 |
| PLAI | Plampang | 0.94 | 119 | P | Pb | 18 53 15.2 | +0.2 |
| PLAI | | | | S | Sb | 18 53 27.5 | -0.1 |
| PLAI | Plampang | 0.94 | 119 | P | Sb | 18 53 27.8 | +0.2 |
| SRBI | Singaraja | 1.73 | 279 | P | Pn | 18 53 26.4 | -0.3 |
| SRBI | | | | S | Sb | 18 53 49.8 | -0.5 |
| WBSI | Waikabubak, Su | 2.73 | 118 | P | Pn | 18 53 41.4 | +0.9 |
| JAGI | Jajag, Banyuwa | 2.76 | 268 | P | Pg | 18 53 48.7 | -0.7 |
| JAGI | Jajag, Banyuwa | 2.76 | 268 | P | Pg | 18 53 48.5 | -0.9 |
| JAGI | Jajag, Banyuwa | 2.76 | 268 | P | Pg | 18 53 48.5 | -1.0 |
| BSSI | Bau Bau, Buton | 4.16 | 58 | P | Pn | 18 53 59.0 | -1.1 |

**IDC 19 19:04:42.7±3.9, 16˚88S×176˚29W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=175.9km s-min=48.2km az=141.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| STKA | Stephens Creek | 40.90 | 241 | P | P | 19 12 27.2 | +0.3 |
| | 0.7nm,0.5s,baz=86,slow=5.5,SNR=3.8<br>0.7nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 46.82 | 258 | P | P | 19 13 14.8 | +0.1 |
| | 0.4nm,0.4s,baz=95,slow=7.0,SNR=12<br>0.4nm,0.4s | | | | | | |
| ASAR | Alice Springs | 47.02 | 253 | P | P | 19 13 15.6 | -0.7 |
| | 1.6nm,0.4s,baz=87,slow=8.7,SNR=31<br>1.6nm,0.4s | | | | | | |
| BVAR | Borovoye Array | 117.33 | 321 | PKP | PKPdf | 19 23 29.6 | -0.5 |
| | 0.6nm,0.6s,baz=82,slow=1.4,SNR=2.1 | | | | | | |
| BRTR | Keskin Array B | 145.46 | 317 | PKPbc | PKPbc | 19 24 22.7 | -0.5 |
| | 0.4nm,0.8s,baz=77,slow=3.1,SNR=1.8 | | | | | | |

**IDC 19 19:08:14.9±3.9, 5˚54S×148˚55E, h0km, mb3.5/1, mbtmp3.6/3, ML2.9/2, MS3.7/3, Error ellipse: s-maj=126.6km s-min=34.7km az=99.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PMG | Port Moresby | 4.08 | 200 | Pn | Pn | 19 09 17.5 | -1.1 |
| | 5.7nm,0.3s,baz=29,slow=5.3,SNR=21 | | | | | | |
| PMG | | | | | Sn | 19 09 58.1 | -9.0 |
| | 14nm,0.3s,baz=72,slow=20,SNR=9.6<br>15nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 19.90 | 223 | P | P | 19 12 48.4 | +0.2 |
| | 0.2nm,0.3s,baz=49,slow=11,SNR=9.7<br>0.5nm,0.5s | | | | | | |
| DZM | Mont Dzumac | 23.86 | 135 | LR | LR | 19 20 24.0 | |
| | comp=Z,285nm,19.5s,baz=28,slow=31 | | | | | | |
| KSRS | Korea Array | 46.90 | 337 | LR | LR | 19 34 48.5 | |
| | comp=Z,41nm,18.8s,baz=180,slow=34 | | | | | | |
| MKAR | Makanchi Array | 78.14 | 320 | P | P | 19 20 14.5 | -1.6 |
| | 0.4nm,0.9s,baz=102,slow=6.6,SNR=2.9<br>0.4nm,0.9s | | | | | | |
| AAK | Ala-Archa | 82.13 | 314 | LR | LR | 19 59 45.1 | |
| | comp=Z,62nm,18.2s,baz=19,slow=38 | | | | | | |
| TORD | Torodi Ar. Bea | 146.47 | 285 | PKPbc | PKPab | 19 28 00.8 | +0.7 |
| | 0.5nm,1.0s,baz=79,slow=1.8,SNR=2.0 | | | | | | |

*IDC* ***19*** *19:09:29.5±0.9, 12˚71S×167˚06E, h192km±7km, mb4.3/22, mbtmp4.8/24, Error ellipse: s-maj=12.9km s-min=9.4km az=101.0*

*NEIC* ***19*** *19:09:32.0±1.4, 12˚67S±0˚08×167˚06E±0˚05, h208km±6km, mb4.8/243, Error ellipse: s-maj=12.6km s-min=5.5km az=156.0*

*NOU* ***19*** *19:09:33.6, 12˚69S×166˚96E, h220km, mb4.7/48, Santa Cruz Islands*

**ISC 19 19:09:30.9±0.6, 12˚71S±0˚05×167˚06E±0˚05, h204km±5km, h204km:pP-P, n553, σ0s89/471, mb4.8/159, 6C-3D, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HNR | Honiara | 7.70 | 294 | P | Pn | 19 11 21.1 | +0.7 |
| HNR | Honiara | 7.70 | 294 | Pn | Pn | 19 11 20.8 | +0.3 |
| LIFNC | LIFOU | 8.02 | 179 | P | Pn | 19 11 26.1 | +1.6 |
| LIFNC | LIFOU | 8.02 | 179 | Pn | Pn | 19 11 25.1 | +0.7 |
| KOUNC | Koumac, New Ca | 8.23 | 198 | P | Pn | 19 11 29.8 | +2.6 |
| MARNC | Mare, Loyalty | 8.77 | 174 | P | Pn | 19 11 35.8 | +1.6 |
| YATNC | Mamie plateau, | 9.30 | 181 | P | Pn | 19 11 45.4 | +4.4 |
| DZM | Mont Dzumac | 9.32 | 184 | P | Pn | 19 11 45.7 | +4.2 |
| DZM | Mont Dzumac | 9.32 | 184 | | Pn | 19 11 44.4 | +2.9 |
| DZM | Mont Dzumac | 9.32 | 184 | P | Pn | 19 11 40.6 | -0.9 |
| | 5.2nm,0.6s,baz=37,slow=15,SNR=3.3 | | | | | | |
| DZM | | | | S | S | 19 13 23.8 | -2.4 |
| | 3.9nm,0.5s,baz=351,slow=22,SNR=1.0 | | | | | | |
| PINNC | Pines Island, | 9.85 | 178 | P | Pn | 19 11 50.6 | +2.4 |
| PINNC | Pines Island, | 9.85 | 178 | Pn | Pn | 19 11 50.0 | +1.8 |
| MSVF | Nonsavu | 11.72 | 117 | P | P | 19 12 16.3 | -1.0 |
| MSVF | Nonsavu | 11.72 | 117 | Pn | Pn | 19 12 12.6 | +0.3 |
| FUNA | Funafuti | 12.63 | 72 | P | P | 19 12 29.1 | +1.7 |
| FUNA | Funafuti | 12.63 | 72 | Pn | Pn | 19 12 24.2 | +0.4 |
| RABL | Rabaul | 16.98 | 299 | P | P | 19 13 15.3 | -0.3 |
| BULU | Kimbe | 17.99 | 292 | P | Pn | 19 13 28.0 | -0.8 |
| KAVG | Kavieng | 18.98 | 301 | P | P | 19 13 38.2 | +1.0 |
| EIDS | Eidsvold | 19.63 | 228 | P | P | 19 13 45.4 | +1.2 |
| PMG | Port Moresby | 19.80 | 278 | P | P | 19 13 46.7 | +0.6 |
| PMG | Port Moresby | 19.80 | 278 | P | P | 19 13 46.5 | +0.4 |
| PMG | Port Moresby | 19.80 | 278 | P | P | 19 13 45.2 | -0.9 |
| PMG | Port Moresby | 19.80 | 278 | P | P | 19 13 45.5 | -0.6 |
| | 50nm,0.9s,baz=91,slow=5.0,SNR=10.0 | | | | | | |
| TV1H | Townsville Har | 20.53 | 249 | P | P | 19 13 55.0 | +1.2 |
| CTA | Charters Tower | 21.25 | 247 | P | P | 19 14 01.8 | +0.4 |
| CTA | Charters Tower | 21.25 | 247 | P | P | 19 14 01.7 | +0.3 |
| | 2.3nm,0.7s,baz=76,slow=11,SNR=44 | | | | | | |
| CTA | | | | pP | pP | 19 14 33.8 | -1.7 |
| | 1.1nm,1.0s,baz=78,slow=11,SNR=2.3 | | | | | | |
| CTAO | Charters Tower | 21.25 | 247 | P | P | 19 14 01.9 | +0.5 |
| CTAO | Charters Tower | 21.25 | 247 | P | P | 19 14 01.8 | +0.4 |
| PATS | Pohnpei | 21.28 | 335 | P | P | 19 14 01.4 | -0.3 |
| MANU | Manus Island | 22.20 | 297 | P | P | 19 14 09.6 | -1.3 |
| MTSU | Mount Surprise | 22.57 | 253 | P | P | 19 14 15.3 | +1.1 |
| ARMA | Armidale | 22.68 | 217 | P | P | 19 14 17.4 | +2.2 |
| COEN | Coen | 23.27 | 264 | P | P | 19 14 21.8 | +1.1 |
| AUPHS | Peel High Scho | 23.61 | 217 | P | P | 19 14 25.2 | +1.7 |
| AULRC | Lightning Ridg | 24.30 | 224 | P | P | 19 14 30.4 | +0.6 |
| URZ | Urewera | 26.97 | 162 | P | P | 19 14 54.4 | +0.7 |
| | 7.4nm,0.8s,baz=334,slow=16,SNR=1.9<br>7.4nm,0.8s | | | | | | |
| BKZ | Black Stump Fm | 27.64 | 164 | P | P | 19 15 00.6 | +0.9 |
| BKZ | | | | IAmb | IAmb | 19 15 10.7 | |
| | comp=Z,20nm,1.0s | | | | | | |
| CAN | Canberra | 27.81 | 213 | P | P | 19 15 01.9 | +0.6 |
| INKA | Innaminka | 28.77 | 235 | P | P | 19 15 11.4 | +1.6 |
| MRZ | Mangatainoka R | 28.83 | 166 | P | P | 19 15 10.8 | +0.6 |
| MRZ | | | | IAmb | IAmb | 19 16 06.2 | |
| | comp=Z,38nm,1.3s | | | | | | |
| BFZ | Birch Farm | 29.01 | 165 | P | P | 19 15 11.5 | -0.3 |
| MRNZ | Matariki Terra | 29.01 | 171 | P | P | 19 15 13.6 | +1.9 |
| TCW | Tory Channel | 29.08 | 169 | P | P | 19 15 13.1 | +0.7 |
| TUWZ | Tuamarina | 29.23 | 169 | P | P | 19 15 15.1 | +1.4 |
| THZ | Tophouse | 29.39 | 171 | P | P | 19 15 16.8 | +1.6 |
| BHW | Baring Head | 29.39 | 168 | P | P | 19 15 14.9 | -0.2 |
| MSWZ | Moikau Station | 29.48 | 167 | P | P | 19 15 16.3 | +0.4 |
| PLWZ | Palliser | 29.63 | 168 | P | P | 19 15 17.0 | -0.3 |
| KHZ | Kahutara | 30.12 | 170 | P | P | 19 15 22.2 | +0.7 |
| KHZ | Kahutara | 30.12 | 170 | P | P | 19 15 21.3 | -0.2 |
| STKA | Stephens Creek | 30.18 | 227 | P | P | 19 15 23.6 | +1.4 |
| STKA | Stephens Creek | 30.18 | 227 | P | P | 19 15 22.8 | +0.5 |
| STKA | Stephens Creek | 30.18 | 227 | P | P | 19 15 22.2 | 0.0 |
| | comp=Z,7.8nm,0.6s,baz=60,slow=11,SNR=25 | | | | | | |
| STKA | | | | PcP | PcP | 19 18 18.2 | 0.0 |
| | comp=Z,5.8nm,0.7s,baz=72,slow=3.4,SNR=7.4<br>comp=Z,7.8nm,0.6s | | | | | | |
| LTZ | Lake Taylor | 30.30 | 172 | P | P | 19 15 23.6 | +0.4 |
| GVZ | Greta Valley S | 30.59 | 171 | P | P | 19 15 26.1 | +0.4 |
| RPZ | Rata Peaks | 31.08 | 174 | P | P | 19 15 31.8 | +1.8 |
| MQZ | McQueen's Vall | 31.26 | 172 | P | P | 19 15 32.2 | +0.8 |
| TOO | Toolangi | 31.37 | 214 | P | P | 19 15 33.9 | +1.3 |
| TOO | | | | IAmb | IAmb | 19 16 23.7 | |
| | comp=Z,52nm,1.6s | | | | | | |
| LBZ | Lake Benmore | 31.68 | 176 | P | P | 19 15 36.0 | +0.8 |
| LCRK | Leigh Creek | 31.96 | 232 | P | P | 19 15 38.5 | +0.6 |
| WB0 | Warramunga Arr | 32.09 | 253 | P | P | 19 15 38.3 | -0.9 |
| WB2 | Warramunga Arr | 32.16 | 253 | P | P | 19 15 38.5 | -1.3 |
| WRA | Warramunga Arr | 32.17 | 253 | P | P | 19 15 37.6 | -2.2 |
| WRA | Warramunga Arr | 32.17 | 253 | P | P | 19 15 38.6 | -1.2 |
| | comp=Z,2.0nm,0.5s,baz=85,slow=9.2,SNR=18 | | | | | | |
| WRA | | | | pP | pP | 19 16 18.3 | -2.4 |
| | comp=Z,2.7nm,0.8s,baz=82,slow=8.0,SNR=4.4<br>comp=Z,2.0nm,0.5s | | | | | | |
| MLZ | Mavora Lakes | 32.56 | 179 | P | P | 19 15 43.4 | +0.6 |
| OOD | Oodnadatta | 32.91 | 238 | P | P | 19 15 47.0 | +0.9 |
| HTT | Hallett | 32.91 | 227 | P | P | 19 15 47.0 | +0.8 |
| WHZ | Wether Hill Ro | 33.08 | 179 | P | P | 19 15 47.9 | +0.5 |
| AS01 | Alice Springs | 33.20 | 246 | P | P | 19 15 48.9 | +0.1 |
| AS31 | Alice Springs | 33.24 | 246 | P | P | 19 15 48.3 | -0.9 |
| ASAR | Alice Springs | 33.25 | 246 | P | P | 19 15 48.2 | -0.9 |
| ASAR | | | | PcP | PcP | 19 18 26.5 | -0.3 |
| ASAR | Alice Springs | 33.25 | 246 | P | P | 19 15 48.5 | -0.7 |
| | comp=Z,5.1nm,0.6s,baz=72,slow=9.5,SNR=51 | | | | | | |
| ASAR | | | | pP | pP | 19 16 28.1 | -2.3 |
| | comp=Z,7.6nm,0.7s,baz=75,slow=9.8,SNR=6.1 | | | | | | |
| ASAR | | | | PcP | PcP | 19 18 26.2 | -0.6 |
| | comp=Z,1.7nm,0.7s,baz=73,slow=6.3,SNR=4.1<br>comp=Z,5.1nm,0.6s | | | | | | |
| TAU | Tasmania Unive | 34.60 | 206 | P | P | 19 16 00.8 | +0.4 |
| BBOO | Buckleboo | 34.68 | 230 | P | P | 19 16 02.0 | +0.6 |
| BBOO | | | | IAmb | IAmb | 19 16 02.7 | |
| | comp=Z,27nm,0.9s | | | | | | |
| MTN | Manton Dam | 35.02 | 266 | P | P | 19 16 03.5 | -0.9 |
| KNRA | Kununurra | 37.21 | 261 | P | P | 19 16 22.8 | -0.2 |
| KNRA | | | | IAmb | IAmb | 19 17 08.7 | |
| | comp=Z,20nm,1.1s | | | | | | |
| WRKA | Warakurna | 38.53 | 246 | P | P | 19 16 33.8 | -0.3 |
| FORT | Forrest | 40.18 | 237 | P | P | 19 16 48.1 | +0.5 |
| FORT | Forrest | 40.18 | 237 | P | P | 19 16 48.0 | +0.5 |
| FORT | | | | PcP | PcP | 19 18 47.0 | -0.6 |
| SOEI | Soe | 42.04 | 269 | P | P | 19 17 04.9 | +1.9 |
| KMBL | Kambalda | 45.44 | 238 | P | P | 19 17 30.0 | +0.2 |
| MEEK | Meekatharra | 47.40 | 245 | P | P | 19 17 45.5 | +0.4 |
| NWAO | Narrogin (SRO) | 49.63 | 238 | P | P | 19 18 02.2 | +0.2 |
| NWAO | | | | IAmb | IAmb | 19 18 02.7 | |
| | comp=Z,18nm,0.7s | | | | | | |
| NWAO | Narrogin (SRO) | 49.63 | 238 | P | P | 19 18 01.9 | 0.0 |
| MORW | Morawa | 49.98 | 243 | P | P | 19 18 03.2 | -1.5 |
| JGF | Kuroka | 55.67 | 331 | P | P | 19 18 45.2 | -0.8 |
| JGF | | | | IAmb | IAmb | 19 20 06.6 | |
| | comp=Z,46nm,1.7s | | | | | | |
| UGM | Wanagama | 55.74 | 269 | P | P | 19 18 46.7 | -0.3 |
| JMN | Monobe | 55.96 | 327 | P | P | 19 18 48.1 | -0.1 |
| MJAR | Matsushiro Arr | 56.03 | 332 | P | P | 19 18 47.7 | -1.0 |
| | comp=Z,14nm,0.9s,baz=171,slow=8.5,SNR=39 | | | | | | |
| MJAR | | | | PcP | PcP | 19 19 44.2 | -0.2 |
| | comp=Z,1.8nm,0.6s,baz=140,slow=2.9,SNR=5.0<br>comp=Z,14nm,0.9s | | | | | | |
| MAJO | Matsushiro | 56.04 | 332 | P | P | 19 18 48.2 | -0.5 |
| MAJO | Matsushiro | 56.04 | 332 | P | P | 19 18 47.7 | -0.9 |
| MAJO | | | | IAmb | IAmb | 19 18 48.4 | |
| | comp=Z,14nm,0.6s | | | | | | |
| MAJO | Matsushiro | 56.04 | 332 | P | P | 19 18 48.0 | -0.6 |
| MJB9 | Matsu-Tunnel | 56.04 | 332 | P | P | 19 18 49.2 | +0.5 |
| MJB9 | | | | IAmb | IAmb | 19 18 49.4 | |
| | comp=Z,14nm,0.6s | | | | | | |
| DRV | Dumont d'Urvil | 56.85 | 192 | P | P | 19 18 54.6 | +0.6 |
| DRV | | | | pP | pwP | 19 19 41.9 | -0.4 |
| DRV | | | | PcP | PcP | 19 19 46.9 | -0.2 |
| JNU | Nakatsue | 57.18 | 324 | P | P | 19 18 56.7 | -0.1 |
| JNU | Nakatsue | 57.18 | 324 | P | P | 19 18 56.4 | -0.4 |
| JNU | | | | IAmb | IAmb | 19 18 57.4 | |
| | comp=Z,22nm,0.9s | | | | | | |
| ERM | Erimo | 58.73 | 339 | P | P | 19 19 07.5 | +0.2 |
| ERM | | | | IAmb | IAmb | 19 20 32.8 | |
| | comp=Z,20nm,1.1s | | | | | | |
| ERM | Erimo | 58.73 | 339 | P | P | 19 19 07.5 | +0.2 |
| KSRS | Korea Array | 61.97 | 325 | P | P | 19 19 29.4 | +0.1 |
| | comp=Z,4.4nm,0.7s,baz=137,slow=6.8,SNR=21 | | | | | | |
| KSRS | | | | PcP | PcP | 19 20 08.8 | +0.9 |
| | comp=Z,1.3nm,0.5s,baz=136,slow=4.3,SNR=5.4<br>comp=Z,4.4nm,0.7s | | | | | | |
| YSS | Yuzh-Sakhalins | 63.26 | 342 | P | P | 19 19 38.4 | +0.7 |
| YSS | Yuzh-Sakhalins | 63.26 | 342 | P | P | 19 19 38.4 | +0.7 |
| NJ2 | Nanjing | 64.10 | 315 | *e* | P | 19 19 45.5 | +2.0 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 65.01 | 333 | P | P | 19 19 49.8 | +0.7 |
| USRK | Ussuriysk Ar. | 65.01 | 333 | P | P | 19 19 49.5 | +0.3 |
| | comp=Z,13nm,1.0s,baz=142,slow=5.2,SNR=21<br>comp=Z,13nm,1.0s | | | | | | |
| CASY | Casey | 65.31 | 202 | P | P | 19 19 50.8 | +0.1 |
| CASY | | | | IAmb | IAmb | 19 19 51.5 | |
| | comp=Z,15nm,0.6s | | | | | | |
| CASY | Casey | 65.31 | 202 | P | P | 19 19 51.2 | +0.5 |
| PEA0B | Petropavlovsk- | 66.05 | 354 | P | P | 19 19 55.7 | +0.1 |
| PETK | Petropavlovsk- | 66.05 | 354 | P | P | 19 19 55.6 | 0.0 |
| PETK | Petropavlovsk- | 66.05 | 354 | P | P | 19 19 55.2 | -0.4 |
| | comp=Z,11nm,0.7s,baz=152,slow=5.1,SNR=19<br>comp=Z,11nm,0.7s | | | | | | |
| MDJ | Mudanjiang | 66.42 | 332 | P | P | 19 19 59.0 | +0.9 |
| MDJ | Mudanjiang | 66.42 | 332 | P | P | 19 19 58.5 | +0.4 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | |
| MDJ | Mudanjiang | 66.42 | 332 | P | P | 19 19 58.8 | +0.6 |
| CCD | Concordia, Ant | 66.83 | 191 | P | P | 19 20 01.6 | +0.8 |
| CCD | | | | PcP | PcP | 19 20 27.5 | -0.5 |
| IPM | Ipoh | 67.78 | 280 | P | P | 19 20 07.3 | -0.1 |
| CN2 | Changchun | 67.83 | 329 | P | P | 19 20 07.3 | +0.3 |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| BNX | BinXian | 68.28 | 331 | ⇑ | P | 19 20 09.6 | -0.2 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| KULM | Kulim | 68.35 | 281 | P | P | 19 20 10.0 | -0.9 |
| NIKH | Nikolski High | 68.62 | 15 | P | P | 19 20 11.8 | +0.2 |
| | baz=205 | | | | | | |
| PSI | Prapat | 69.37 | 278 | P | P | 19 20 16.5 | -0.8 |
| LYN | LuoYang | 69.93 | 314 | P | P | 19 20 20.8 | +0.6 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| ENH | Enshi | 69.94 | 309 | P | P | 19 20 19.8 | -0.6 |
| ENH | Enshi | 69.94 | 309 | P | P | 19 20 19.9 | -0.5 |
| ENH | | | | pP | pP | 19 21 09.7 | +2.4 |
| HNS | HongShan | 69.97 | 318 | ⇑ | P | 19 20 20.9 | +0.5 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| GSI | Gunungsitoli | 70.31 | 276 | P | P | 19 20 22.7 | -0.3 |
| GSI | | | | IAmb | IAmb | 19 20 23.6 | |
| | comp=Z,21nm,0.7s | | | | | | |
| GYA | Guiyang | 70.41 | 304 | ⇓ | P | 19 20 23.8 | +0.4 |
| GYA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| SURA | Surathani | 70.41 | 285 | P | P | 19 20 24.7 | +1.2 |
| BJT | Baijiatuan | 70.57 | 321 | P | P | 19 20 24.6 | +0.7 |
| HEH | HeiHe | 71.66 | 334 | *e* | P | 19 20 29.9 | -0.3 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| XAN | Xi'an | 72.19 | 312 | ⇑ | P | 19 20 34.0 | +0.2 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,28nm,0.8s | | | | | | |
| S12K | Black Hills | 72.91 | 18 | P | P | 19 20 37.4 | -0.2 |
| | baz=212 | | | | | | |
| XLT | XiLinHaoTe | 72.96 | 324 | *e* | P | 19 20 38.3 | +0.1 |
| XLT | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| XLT | | | | pmax | pmax | | |
| | comp=Z,83nm,4.3s | | | | | | |
| KMI | Kunming | 73.08 | 301 | ⇓ | P | 19 20 40.8 | +1.3 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| CRAI | Chiangrai | 73.29 | 296 | P | P | 19 20 39.8 | -0.7 |
| HHC | Hu-ho-hao-te | 73.93 | 319 | *e* | P | 19 20 43.1 | -0.9 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,160nm,6.6s | | | | | | |
| CMAR | Chiang Mai Arr | 73.95 | 294 | P | P | 19 20 45.2 | +0.8 |
| | comp=Z,6.2nm,0.9s,baz=123,slow=4.4,SNR=28<br>comp=Z,6.2nm,0.9s | | | | | | |
| PZH | PanZhiHua | 74.45 | 302 | P | P | 19 20 46.8 | -0.5 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,5.1s | | | | | | |
| PLK4 | Peulik 4 | 76.28 | 19 | P | P | 19 20 56.3 | -0.7 |
| N14K | Kuskokwak Cree | 76.63 | 16 | P | P | 19 20 58.7 | -0.1 |
| | baz=211 | | | | | | |
| LZH | Lanzhou | 76.82 | 312 | *e* | P | 19 21 01.9 | +1.3 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,29nm,1.1s | | | | | | |
| Q17K | Contact Creek | 76.94 | 19 | P | P | 19 21 00.3 | -0.3 |
| | baz=217 | | | | | | |
| Q16K | King Salmon | 77.03 | 18 | P | P | 19 21 01.0 | 0.0 |
| | baz=216 | | | | | | |
| N15K | Kwethluk River | 77.26 | 16 | P | P | 19 21 02.3 | 0.0 |
| | baz=213 | | | | | | |
| M14K | Bethel | 77.27 | 15 | IAmb | IAmb | 19 21 03.2 | |
| | comp=Z,19nm,0.8s | | | | | | |
| M14K | Bethel | 77.27 | 15 | P | P | 19 21 02.1 | -0.2 |
| | baz=211 | | | | | | |
| QSPA | South Pole Qui | 77.30 | 180 | P | P | 19 21 03.2 | +0.4 |
| QSPA | | | | IAmb | IAmb | 19 21 04.9 | |
| | comp=Z,62nm,1.8s | | | | | | |
| QSPA | South Pole Qui | 77.30 | 180 | P | P | 19 21 03.2 | +0.4 |
| | comp=Z,9.8nm,0.7s,baz=318,slow=0.5,SNR=95<br>comp=Z,9.8nm,

baz=210
M20K **Styx River** 80.65 18 P P 19 21 21.4 +0.6
baz=219
SONM **Songino Array** 80.76 323 P P 19 21 21.4 -0.4
SONM **Songino Array** 80.76 323 P P 19 21 21.3 -0.4
comp=Z,1.6nm,0.4s,baz=136,slow=5.8,SNR=14
comp=Z,1.6nm,0.4s
L20K **Farewell, AK** 80.89 17 P P 19 21 22.6 +0.6
baz=218
J18K **Innoko River** 80.90 16 IAmb IAmb 19 21 23.2
comp=Z,9.1nm,0.7s
J18K **Innoko River** 80.90 16 P P 19 21 22.4 +0.5
baz=216,SNR=8.7
F15K **North Star Dit** 81.00 11 P P 19 21 23.2 +0.7
baz=208
SUA **Susitna One** 81.06 19 P P 19 21 23.0 0.0
baz=222
Q23K **Middleton Isla** 81.09 22 P P 19 21 23.6 +0.6
baz=226
RC01 **Rabbit Creek A** 81.11 20 P P 19 21 23.6 +0.5
baz=222
GTA **Gaotai** 81.13 314 *e*P P 19 21 24.5 +0.6
GTA pP pP 19 22 13.8 +1.1
GTA pmax pmax
comp=Z,9.0nm,1.1s
G16K **Koyuk River** 81.19 12 IAmb IAmb 19 21 25.3
comp=Z,13nm,0.8s
G16K **Koyuk River** 81.19 12 P P 19 21 24.3 +0.8
baz=210
SKT **Skwentna** 81.21 18 P P 19 21 24.0 +0.3
baz=221
H17K **Granite Mounta** 81.34 14 P P 19 21 24.2 0.0
baz=212
PWL **Port Wells** 81.41 20 P P 19 21 24.7 0.0
baz=224,SNR=6.6
M22K **Willow** 81.48 19 P P 19 21 25.1 +0.1
baz=222
K20K **Telida** 81.53 17 IAmb IAmb 19 21 28.2
comp=Z,16nm,1.1s
K20K **Telida** 81.53 17 P P 19 21 25.5 +0.3
baz=218
J19K **Poorman** 81.61 16 IAmb IAmb 19 21 27.8
comp=Z,44nm,1.9s
J19K **Poorman** 81.61 16 P P 19 21 25.7 -0.1
baz=217,SNR=5.9
G17K **Kiwalik Mounta** 81.65 13 P P 19 21 26.0 +0.1
baz=212
PMR **Palmer** 81.68 20 P P 19 21 26.1 0.0
PMR **Palmer** 81.68 20 IAmb IAmb 19 21 28.6
comp=Z,12nm,0.7s
PMR **Palmer** 81.68 20 P P 19 21 26.3 +0.3
baz=223
KNK **Knik Glacier** 81.77 20 IAmb IAmb 19 21 27.3
comp=Z,18nm,0.6s
KNK **Knik Glacier** 81.77 20 P P 19 21 26.9 +0.3
baz=224
GLI **Glacier Island** 81.85 21 IAmb IAmb 19 21 28.8
comp=Z,27nm,1.0s
GLI **Glacier Island** 81.85 21 P P 19 21 27.3 +0.3
baz=225
H18K **Honhosa River** 81.88 14 P P 19 21 26.9 -0.2
baz=214
GCSA **Galena City Sc** 81.90 15 P P 19 21 27.0 -0.1
baz=216
EYAK **Cordova Ski Ar** 82.09 21 P P 19 21 28.0 -0.2
baz=226
SML **Sawmill** 82.10 20 P P 19 21 28.0 -0.3
baz=224,SNR=5.1
KAIM **Kayak Island** 82.15 22 P P 19 21 27.8 -0.8
baz=228
J20K **Nowinta River** 82.15 16 IAmb IAmb 19 21 30.8
comp=Z,10nm,0.7s
J20K **Nowinta River** 82.15 16 P P 19 21 28.2 -0.3
baz=218,SNR=7.6
M23K **Glacier View** 82.29 20 P P 19 21 29.0 -0.3
baz=224
F17K **Baldwin Pennin** 82.33 12 IAmb IAmb 19 21 30.8
comp=Z,18nm,0.8s
F17K **Baldwin Pennin** 82.33 12 P P 19 21 29.0 -0.3
baz=211
G18K **Tagagawik** 82.43 13 P P 19 21 29.6 -0.3
baz=214,SNR=6.5
SHL **Shillong** 82.44 298 IAmb IAmb 19 21 31.9
comp=Z,14nm,0.8s
SCM **Sheep Creek Mo** 82.45 20 P P 19 21 29.7 -0.5
baz=225,SNR=6.0
I20K **Naaghedeneel** 82.56 16 IAmb IAmb 19 21 33.1
comp=Z,15nm,0.7s
I20K **Naaghedeneel** 82.56 16 P P 19 21 30.7 +0.2
baz=218
H19K **Roundabout Mou** 82.65 14 P P 19 21 30.9 -0.1
baz=216,SNR=7.4
KLU **Klutina** 82.69 21 IAmb IAmb 19 21 32.7
comp=Z,48nm,1.5s
KLU **Klutina** 82.69 21 P P 19 21 31.3 -0.2
baz=226,SNR=6.9
E17K **Hotham Inlet** 82.76 12 P P 19 21 31.1 -0.5
baz=211,SNR=5.1
WAT1 **Susitna Watana** 82.77 19 P P 19 21 31.5 -0.3
baz=224
BMRM **Bremner River** 82.79 22 P P 19 21 31.4 -0.5
baz=227
F18K **Selawik** 82.80 13 P P 19 21 31.5 -0.2
baz=213,SNR=5.6
WAT6 **Susitna Watana** 82.85 19 P P 19 21 31.9 -0.5
baz=224,SNR=11
BPAW **Bear Paw Mtn.** 82.98 17 IAmb IAmb 19 21 39.9
comp=Z,30nm,1.8s
BPAW **Bear Paw Mtn.** 82.98 17 P P 19 21 32.2 -0.6
baz=221
G19K **Purcell Mounta** 83.00 14 IAmb IAmb 19 21 34.5
comp=Z,12nm,0.8s
G19K **Purcell Mounta** 83.00 14 P P 19 21 32.8 -0.1
baz=215,SNR=9.1
H20K **Anotleneega Mo** 83.01 15 P P 19 21 33.1 +0.2
baz=217,SNR=7.2
M24K **Tolsona, Glenn** 83.03 20 P P 19 21 32.9 -0.3
baz=226,SNR=8.7
D17K **Noatak River** 83.06 11 P P 19 21 33.1 0.0
baz=209
CRQE **Cirque** 83.19 22 P P 19 21 34.1 -0.1
baz=229,SNR=7.7
N25K **Chitina, Valde** 83.23 21 IAmb IAmb 19 21 35.5
comp=Z,39nm,1.2s
N25K **Chitina, Valde** 83.23 21 P P 19 21 33.8 -0.4
baz=227,SNR=13
MESA **MESA** 83.25 23 IAmb IAmb 19 21 36.0
comp=Z,32nm,0.9s
MESA **MESA** 83.25 23 P P 19 21 35.0 +0.5
baz=230
TGL **Tana Glacier** 83.29 22 IAmb IAmb 19 21 35.8
comp=Z,19nm,1.0s
E18K **Tukpahlearik C** 83.30 12 IAmb IAmb 19 21 36.1
comp=Z,12nm,0.8s
E18K **Tukpahlearik C** 83.30 12 P P 19 21 34.9 +0.5
baz=212
MCK **McKinley** 83.31 18 P P 19 21 34.5 0.0
baz=223,SNR=6.7
DHY **Denali Highway** 83.32 19 P P 19 21 34.4 -0.4
baz=224,SNR=12
ISLE **Juniper Island** 83.38 23 IAmb IAmb 19 21 36.1
comp=Z,25nm,0.9s
VRDI **Verde Repeater** 83.38 22 IAmb IAmb 19 21 36.5
comp=Z,52nm,1.7s
RDOG **Red Dog Mine** 83.40 11 IAmb IAmb 19 21 36.6
comp=Z,20nm,0.8s
RDOG **Red Dog Mine** 83.40 11 P P 19 21 35.0 +0.2
baz=209
F19K **Shaleruckik Mo** 83.41 13 IAmb IAmb 19 21 36.3
comp=Z,12nm,0.8s
F19K **Shaleruckik Mo** 83.41 13 P P 19 21 34.8 0.0
baz=214
O02D **Mt. Diablo Mer** 83.49 46 IAmb IAmb 19 21 38.3
comp=Z,17nm,1.1s
HARP **HAARP** 83.58 20 P P 19 21 35.8 -0.1
baz=227
MCARA **McCarthy VSAT** 83.64 22 IAmb IAmb 19 21 38.1
comp=Z,49nm,1.4s
MCARA **McCarthy VSAT** 83.64 22 P P 19 21 36.2 0.0
baz=229,SNR=5.6
MAW **Mawson** 83.67 202 P P 19 21 36.2 -0.1
comp=Z,4.8nm,0.7s,baz=112,slow=5.6,SNR=12
comp=Z,4.8nm,0.7s
H21K **Melozitna Rive** 83.67 16 P P 19 21 36.3 0.0
baz=219,SNR=6.7
GRNC **Granite Creek** 83.68 23 IAmb IAmb 19 21 37.8
comp=Z,15nm,0.8s
IMAR **Indian Mountai** 83.68 15 P P 19 21 36.7 +0.4
C17K **DeLong Mountai** 83.72 11 P P 19 21 36.5 0.0
baz=209
MLY **Manley** 83.75 17 IAmb IAmb 19 21 37.7
comp=Z,18nm,1.3s
MLY **Manley** 83.75 17 P P 19 21 36.4 -0.3
baz=221,SNR=5.8
PAX **Paxson** 83.87 20 P P 19 21 36.9 -0.6
baz=226
NEA2 **Nenana** 83.90 17 P P 19 21 37.0 -0.5
baz=223,SNR=10
PNL **Peninsula** 83.92 24 P P 19 21 37.5 -0.2
baz=232
CTG **Chitna Glacier** 83.98 23 P P 19 21 38.0 -0.1
baz=230,SNR=13
CTGM **Chitina Glacie** 83.99 23 IAmb IAmb 19 21 39.4
comp=Z,24nm,0.8s
BCPM **Bancas Point** 84.00 24 IAmb IAmb 19 21 39.0
comp=Z,12nm,0.8s
LOGN **Logan Glacier** 84.02 23 IAmb IAmb 19 21 39.5
comp=Z,16nm,0.7s
E19K **Redstone River** 84.05 13 P P 19 21 38.5 +0.3
baz=215,SNR=26
F20K **Avaraart Lake** 84.05 14 P P 19 21 39.2 +1.1
baz=216,SNR=7.1
SIT **Sitka** 84.12 28 P P 19 21 39.3 +0.6
baz=236
YBH **Yreka Blue Hor** 84.14 45 P P 19 21 40.6 +1.2
G21K **Allakaket** 84.16 15 IAmb IAmb 19 21 40.7
comp=Z,46nm,1.8s
G21K **Allakaket** 84.16 15 P P 19 21 39.2 +0.4
baz=218,SNR=7.7
I23K **Minto, Yukon-K** 84.23 17 P P 19 21 38.8 -0.3
baz=222,SNR=7.7
H22K **Ishtalitna Cre** 84.23 16 P P 19 21 39.0 -0.2
baz=221,SNR=15
S31K **Pelican** 84.23 27 IAmb IAmb 19 21 40.6
comp=Z,20nm,1.1s
S31K **Pelican** 84.23 27 P P 19 21 39.4 +0.1
baz=235,SNR=7.8
C18K **Utukok River** 84.24 11 IAmb IAmb 19 21 40.5
comp=Z,14nm,0.7s
C18K **Utukok River** 84.24 11 P P 19 21 39.1 -0.1
baz=211
O28M **Mount Upton** 84.30 23 P P 19 21 39.2 -0.7
baz=231,SNR=18
M26K **Nabesna, AK** 84.32 21 IAmb IAmb 19 21 40.9
comp=Z,14nm,0.8s
M26K **Nabesna, AK** 84.32 21 P P 19 21 39.5 -0.2
baz=229,SNR=11
LSA **Lhasa** 84.32 302 P P 19 21 42.3 +1.3
LSA pmax pmax
comp=Z,12nm,0.8s
K24K **Donnelly Dome** 84.35 19 P P 19 21 39.6 -0.2
baz=226,SNR=6.3
HDA **Harding Lake** 84.41 18 P P 19 21 39.4 -0.7
baz=225,SNR=45
COLA **College** 84.47 18 P P 19 21 39.8 -0.5
COLA **College** 84.47 18 P P 19 21 40.1 -0.2
baz=224
P29M **Windy Craggy** 84.57 25 IAmb IAmb 19 21 42.1
comp=Z,14nm,0.7s
P29M **Windy Craggy** 84.57 25 P P 19 21 40.4 -0.6
baz=234,SNR=9.4
RIDG **Independent Ri** 84.60 19 IAmb IAmb 19 21 42.3
comp=Z,20nm,0.9s
RIDG **Independent Ri** 84.60 19 P P 19 21 41.0 -0.1
baz=227,SNR=13
L26K **Log Cabin Wild** 84.62 20 P P 19 21 41.0 -0.2
baz=228
U33K **Whale Pass** 84.63 29 IAmb IAmb 19 21 42.6
comp=Z,18nm,1.1s
U33K **Whale Pass** 84.63 29 P P 19 21 40.9 -0.4
baz=238
O29M **Mount Kennedy** 84.64 24 P P 19 21 40.9 -0.5
baz=233
H23K **Yukon River** 84.68 17 IAmb IAmb 19 21 42.7
comp=Z,22nm,1.0s
H23K **Yukon River** 84.68 17 P P 19 21 41.2 -0.2
baz=222,SNR=14
ILAR **Eielson Array** 84.68 18 P P 19 21 40.9 -0.5
ILAR **Eielson Array** 84.68 18 P P 19 21 40.7 -0.7
comp=Z,20nm,0.7s,baz=249,slow=5.0,SNR=191
ILAR pP pP 19 22 29.4 -1.4
comp=Z,5.6nm,0.9s,baz=246,slow=4.0,SNR=4.5
comp=Z,20nm,0.7s
M27K **Edge Creek, AK** 84.69 21 P P 19 21 41.3 -0.3
baz=230,SNR=8.5
S32K **Killisnoo** 84.69 28 P P 19 21 41.3 -0.2
baz=236
D19K **Kuna River** 84.72 12 P P 19 21 41.5 -0.1
baz=214
F21K **Alatna River** 84.72 14 IAmb IAmb 19 21 44.2
comp=Z,48nm,1.8s
F21K **Alatna River** 84.72 14 P P 19 21 41.6 0.0
baz=218,SNR=6.2
POKR **Poker Plat Res** 84.77 18 IAmb IAmb 19 21 42.1
comp=Z,24nm,0.7s
POKR **Poker Plat Res** 84.77 18 P P 19 21 41.0 -0.8
baz=224,SNR=5.6
YUK8 **Steele Glacier** 84.78 23 P P 19 21 42.0 -0.3
baz=232,SNR=8.7
YUK3 **Moose Creek** 84.83 22 P P 19 21 41.7 -0.8
baz=231,SNR=5.6
E20K **Nigu River** 84.93 13 P P 19 21 42.4 -0.2
baz=216
C19K **Lookout Ridge** 84.93 11 P P 19 21 42.6 -0.1
baz=213
V35K **Ketchikan** 84.94 30 P P 19 21 42.4 -0.4
baz=239
G22K **Bettles** 84.98 15 P P 19 21 43.0 +0.2
baz=220
PLBC **Pleasant Camp** 85.04 25 P P 19 21 43.1 -0.1
baz=235,SNR=9.9
J25K **Salcha River,** 85.04 19 P P 19 21 43.1 -0.1
baz=226,SNR=34
SCRK **Sand Creek** 85.04 20 IAmb IAmb 19 21 44.7
comp=Z,15nm,0.7s
SCRK **Sand Creek** 85.04 20 P P 19 21 42.8 -0.5
baz=228,SNR=20
YUK6 **Outpost Mounta** 85.11 24 P P 19 21 43.5 -0.4
baz=233
I04A **Tendick Farm,** 85.14 43 IAmb IAmb 19 21 46.4
comp=Z,50nm,1.9s
H24K **Noodor Dome** 85.16 17 IAmb IAmb 19 21 48.9
comp=Z,27nm,1.9s
H24K **Noodor Dome** 85.16 17 P P 19 21 43.9 +0.1
baz=224
WRAK **Wrangell Islan** 85.16 29 IAmb IAmb 19 21 45.1
comp=Z,87nm,0.6s
WRAK **Wrangell Islan** 85.16 29 P P 19 21 43.7 -0.2
baz=238
R32K **Eaglecrest** 85.16 27 P P 19 21 43.7 -0.2
baz=236
L27K **Beaver Creek,** 85.16 21 P P 19 21 44.0 +0.1
baz=230,SNR=9.1
P30M **Million Dollar** 85.18 25 P P 19 21 43.8 -0.2
baz=234
D20K **Etivluk River** 85.21 13 P P 19 21 44.7 +0.7
baz=216,SNR=6.1
G23K **Bananza Creek** 85.21 16 IAmb IAmb 19 21 45.9
comp=Z,20nm,0.8s
G23K **Bananza Creek** 85.21 16 P P 19 21 44.2 +0.2
baz=222,SNR=20
YUK4 **Talbot Arm** 85.24 23 P P 19 21 45.0 +0.4
baz=233,SNR=8.7
F22K **John River** 85.27 15 P P 19 21 44.9 +0.6
baz=220,SNR=6.0
WAKR **Walker** 85.31 49 IAmb IAmb 19 22 40.6
comp=Z,15nm,1.3s
E03A **Lebam** 85.47 40 IAmb IAmb 19 21 47.9
comp=Z,27nm,1.0s
SKAG **Skagway** 85.47 26 P P 19 21 46.2 +0.8
SKAG **Skagway** 85.47 26 P P 19 21 46.0 +0.6
baz=236
J26L **Joseph Creek** 85.53 19 P P 19 21 46.4 +0.6
baz=228,SNR=10
COLD **Coldfoot** 85.55 15 P P 19 21 45.9 +0.3
baz=222,SNR=7.8
E21K **Killik River** 85.57 13 IAmb IAmb 19 21 47.6
comp=Z,20nm,0.8s
E21K **Killik River** 85.57 13 P P 19 21 46.0 +0.2
baz=218
PRP **Porcupine Dome** 85.62 18 P P 19 21 46.0 -0.2
baz=226
K27K **Chicken** 85.71 20 P P 19 21 46.8 +0.3
baz=229
J05D **Fort Rock, OR** 85.74 44 P P 19 21 48.5 +1.1
J05D IAmb IAmb 19 21 49.2
comp=Z,20nm,1.1s
PAHR **Pah Rah Range** 85.76 48 IAmb IAmb 19 21 49.1
comp=Z,11nm,1.0s
MONP2 **Monument Peak** 85.80 55 P P 19 21 46.6 -1.3
baz=252,SNR=6.8
E22K **Anaktuvuk Pass** 85.84 14 P P 19 21 47.4 +0.3
baz=220,SNR=11
G24K **Hadweenzic Riv** 85.89 17 IAmb IAmb 19 21 48.9
comp=Z,24nm,0.9s
G24K **Hadweenzic Riv** 85.89 17 P P 19 21 47.7 +0.3
baz=224,SNR=16
O30N **Mendenhall** 85.91 24 IAmb IAmb 19 25 07.4
comp=Z,19nm,1.5s
O30N **Mendenhall** 85.91 24 P P 19 21 48.0 +0.4
baz=235,SNR=5.9
N30M **Aishikik Lake** 85.91 23 P P 19 21 47.5 -0.1
baz=234
C21K **Knifeblade Rid** 85.96 13 P P 19 21 48.8 +1.2
baz=217,SNR=9.6
M29M **Somme Creek** 85.98 22 P P 19 21 48.4 +0.4
baz=233
PFO **Pinyon Flats O** 85.99 54 P P 19 21 48.0 -0.7
baz=252
TPFO **Pinon Flats** 86.00 54 P P 19 21 47.8 -1.0
baz=252
DSP **Deep Springs** 86.02 50 IAmb IAmb 19 21 50.5
comp=Z,13nm,1.0s
H25L **Birch Creek** 86.06 17 P P 19 21 48.7 +0.6
baz=226
NVAR **Mina Array Bea** 86.12 49 P P 19 21 49.8 +0.4
NVAR **Mina Array Bea** 86.12 49 P P 19 21 49.6 +0.3
comp=Z,4.0nm,0.7s,baz=231,slow=7.8,SNR=26
comp=Z,4.0nm,0.7s
PINE **Pine Mountain** 86.13 44 IAmb IAmb 19 21 51.1
comp=Z,13nm,1.0s
B20K **Meade River** 86.16 12 P P 19 21 49.6 +1.0
baz=215
I26K **Coal Creek Min** 86.20 19 IAmb IAmb 19 21 51.3
comp=Z,9.4nm,0.8s
I26K **Coal Creek Min** 86.20 19 P P 19 21 49.2 +0.3
baz=228
D22K **Ayikyak River** 86.21 14 P P 19 21 49.6 +0.7
baz=219,SNR=11
P32M **Atlin** 86.23 26 P P 19 21 49.3 +0.1
baz=237
E23K **Chandalar** 86.32 15 IAmb IAmb 19 21 51.6
comp=Z,18nm,1.0s
E23K **Chandalar** 86.32 15 P P 19 21 50.3 +0.8
baz=222
G25K **Bearman Lake** 86.33 17 P P 19 21 50.1 +0.7
baz=226
GNW **Green Mountain** 86.34 40 IAmb IAmb 19 21 51.6
comp=Z,16nm,1.2s
GRAC **Grapevine Rang** 86.35 51 IAmb IAmb 19 21 52.1
comp=Z,9.3nm,0.8s
B21K **Ikpikpuk River** 86.37 13 P P 19 21 50.4 +0.9
B21K **Ikpikpuk River** 86.37 13 P P 19 21 50.2 +0.7
baz=217,SNR=11
F24K **Squaw Lake** 86.37 16 P P 19 21 49.7 -0.1
baz=224,SNR=7.8
N31M **Braeburn, Yuko** 86.44 24 P P 19 21 50.4 +0.2
baz=235
S34M **Telegraph Cree** 86.50 28 P P 19 21 50.1 -0.4
baz=240
EGAK **Eagle** 86.50 20 IAmb IAmb 19 21 53.0
comp=Z,14nm,0.8s
EGAK **Eagle** 86.50 20 P P 19 21 50.4 +0.1
baz=230,SNR=15
Q32M **Nakina River** 86.52 27 P P 19 21 50.7 -0.1
baz=238
DAWY **Dawson** 86.64 21 P P 19 21 51.7 +0.6
baz=232
D23K **Nanushuk River** 86.74 14 P P 19 21 51.7 +0.2
baz=221
TOLK **Toolik Lake Re** 86.77 15 P P 19 21 51.7 0.0
baz=222
TPH **Tonopah** 86.81 50 IAmb IAmb 19 21 55.5
comp=Z,16nm,0.7s
I27K **Kandik River** 86.88 19 P P 19 21 51.9 -0.4
baz=230
P33M **Teslin, Yukon** 86.95 26 P P 19 21 52.9 +0.2
baz=238
F25K **Christian Rive** 87.03 16 P P 19 21 53.3 +0.3
baz=226
G26K **Porcupine Rive** 87.12 17 P P 19 21 53.7 +0.4
baz=228,SNR=8.9
GLA **Glamis** 87.13 55 IAmb IAmb 19 21 56.4
comp=Z,22nm,0.8s
K29M **Barlow Dome** 87.17 21 P P 19 21 53.8 0.0
baz=234
TPNV **Topopah Spring** 87.19 51 P P 19 21 54.0 -0.5
baz=252,SNR=7.1
B22K **Teshekpuk Lake** 87.19 12 P P 19 21 54.0 +0.5
baz=218
I07A **Izee** 87.20 44 IAmb IAmb 19 21 56.0
comp=Z,11nm,0.9s
DLBC **Dease Lake** 87.27 28 P P 19 21 54.4 +0.2
baz=240
J29N **Klondike Camp** 87.29 21 P P 19 21 55.0 +0.8
baz=233
H27K **Steamboat Moun** 87.32 18 P P 19 21 54.6 +0.3
baz=230
R33M **Jennings River** 87.32 27 P P 19 21 54.4 -0.2
baz=240
I28M **Miner Creek** 87.33 20 P P 19 21 54.9 +0.4
baz=231
D24K **Happy Valley** 87.33 14 P P 19 21 54.9 +0.7
baz=223
A22K **Sinclair Lake** 87.40 12 P P 19 21 55.1 +0.6
baz=217
C23K **Itkillik River** 87.42 14 P P 19 21 55.1 +0.5
baz=221
BMN **Battle Mountai** 87.57 48 IAmb IAmb 19 21 58.0
comp=Z,27nm,1.7s
BLYC **Blythe** 87.58 55 IAmb IAmb 19 21 58.2
comp=Z,11nm,0.8s
J08A **Circle Bar Ran** 87.65 45 IAmb IAmb 19 21 58.1
comp=Z,8.9nm,0.7s
G27K **Doyon Strip** 87.66 18 P P 19 21 56.0 +0.1
baz=230
I29M **Ogilvie Camp,** 87.81 20 IAmb IAmb 19 21 57.5
comp=Z,24nm,1.4s
I29M **Ogilvie Camp,** 87.81 20 P P 19 21 56.4 -0.2
baz=233,SNR=10
FARO **Faro, Yukon** 87.81 24 P P 19 21 56.9 +0.2
baz=237
E07A **Sunnyside** 87.84 41 IAmb IAmb 19 21 58.9
comp=Z,11nm,0.9s
HAWA **Hanford** 87.99 42 IAmb IAmb 19 21 59.6
comp=Z,9.4nm,0.8s
J30M **Hart River** 88.02 21 P P 19 21 57.7 -0.1
baz=235
D25K **Kavik River** 88.06 15 P P 19 21 58.2 +0.4
baz=225,SNR=32
R11B **Troy Canyon, C** 88.12 50 P P 19 21 58.1 -0.9
baz=252,SNR=11
PRN **Pahroc Range** 88.24 51 IAmb IAmb 19 22 01.5
comp=Z,12nm,0.9s
H29M **Whitestone** 88.31 19 P P 19 21 58.9 0.0
baz=233
I30M **Mount Dempster** 88.38 21 P P 19 21 59.8 +0.3
baz=235
214A **Organ Pipe Nat** 88.45 57 IAmb IAmb 19 22 02.6
comp=Z,17nm,1.0s
214A **Organ Pipe Nat** 88.45 57 P P 19 22 00.1 -0.3
baz=254,SNR=9.7
W13A **Hualapai Mount** 88.47 54 IAmb IAmb 19 22 02.6
comp=Z,12nm,1.0s
E27K **Coleen River** 88.57 17 P P 19 22 00.9 +0.8
baz=230
F28M **Old Crow** 88.71 18 P P 19 22 00.4 -0.4
baz=231
BELA **Belgrano 2** 88.74 176 P P 19 22 00.3 -0.6
B08A **Colville Reser** 88.81 40 IAmb IAmb 19 22 03.0
comp=Z,18nm,1.4s
G29M **Pine Creek** 88.84 19 P P 19 22 01.9 +0.5
baz=233
C26K **Camden Bay** 88.84 15 P P 19 22 02.5 +1.2
baz=226
MMPY **Sheldon Lake,** 88.85 24 P P 19 22 02.1 +0.5
baz=239
Q12A **Willow Creek R** 88.89 50 IAmb IAmb 19 22 04.4
comp=Z,18nm,0.9s
E09A **Wood Farm, Sta** 88.94 42 IAmb IAmb 19 22 03.9
comp=Z,13nm,1.2s
EPYK **Eagle Plains** 88.94 20 P P 19 22 02.7 +0.8
baz=234
C27K **Jago River** 88.95 15 P P 19 22 03.5 +1.6

baz=228,SNR=5.8
**ELK Elko 89.10 48** IAmb IAmb 19 22 05.2
comp=Z,10nm,0.8s
**SPR3 Spring Creek 3 89.25 50** IAmb IAmb 19 22 05.9
comp=Z,12nm,0.8s
**E28M Babbage River 89.42 17** P **P** **19 22 05.8 +1.7**
baz=232
**D27M Malcolm River 89.43 16** P **P** **19 22 06.3 +2.1**
baz=230
**G30M tAoh Zraii Nji 89.45 19** P **P** **19 22 05.7 +1.4**
baz=235
**PSUT Pine Spring 89.47 50** IAmb IAmb 19 22 06.9
comp=Z,8.3nm,0.8s
**MFID Camas Ranch 89.50 45** IAmb IAmb 19 22 06.8
comp=Z,12nm,0.8s
**LCMT Little Creek M 89.51 52** IAmb IAmb 19 22 07.3
comp=Z,14nm,0.9s
**CCUT Cedar City 89.57 51** IAmb IAmb 19 22 07.9
comp=Z,11nm,0.9s
**SZCU Shurtz Canyon 89.79 51** IAmb IAmb 19 22 08.8
comp=Z,9.4nm,1.0s
**KNB Kanab 89.83 52** IAmb IAmb 19 22 09.1
comp=Z,16nm,1.1s
**G31M Satah River 90.06 20** P **P** **19 22 07.8 +0.8**
baz=236
**D28M Stokes Point 90.10 17** P **P** **19 22 08.8 +1.6**
baz=232
**NEW Newport 90.17 40** IAmb IAmb 19 22 09.3
comp=Z,9.3nm,0.9s
**NEW Newport 90.17 40** P **P** **19 22 08.7 +0.6**
baz=251,SNR=6.7
**TUC Tucson 90.20 57** P **P** **19 22 09.3 +0.6**
baz=255
**HLID Hailey 90.52 45** IAmb IAmb 19 22 11.9
comp=Z,7.6nm,0.9s
**HLID Hailey 90.52 45** P **P** **19 22 10.9 +0.9**
baz=253,SNR=12
**TCRU Three Creeks R 90.55 51** IAmb IAmb 19 22 12.6
comp=Z,12nm,0.9s
**WUAZ Wupatki 90.56 54** IAmb IAmb 19 22 12.4
comp=Z,12nm,0.8s
**WUAZ Wupatki 90.56 54** P **P** **19 22 11.8 +1.4**
baz=255,SNR=7.3
**MTPU Mount Pierson 90.60 51** IAmb IAmb 19 22 13.2
comp=Z,13nm,0.9s
**DUG Dugway, Tooele 90.71 49** IAmb IAmb 19 22 12.5
comp=Z,13nm,1.6s
**DUG Dugway, Tooele 90.71 49** P **P** **19 22 11.8 +0.9**
baz=254,SNR=5.2
**BGU Big Grassy Mou 90.75 48** IAmb IAmb 19 22 12.7
comp=Z,7.3nm,1.0s
**HVU Hansel Valley 91.17 47** IAmb IAmb 19 22 14.8
comp=Z,13nm,1.1s
**WMQ Urumqi 91.17 315** *e*P **P** **19 22 14.8 +1.9**
WMQ pmax pmax
comp=Z,27nm,0.7s
**X18A Snowflake 91.44 55** IAmb IAmb 19 22 16.4
comp=Z,12nm,1.0s
**W18A Petrified Fore 91.75 55** P **P** **19 22 16.7 +0.8**
baz=256
**MSO Missoula 91.78 42** P **P** **19 22 16.2 +0.5**
baz=253
**TCUT Toone Canyon 91.99 48** IAmb IAmb 19 22 19.4
comp=Z,6.2nm,0.6s
**HWUT Hardware Ranch 92.00 48** IAmb IAmb 19 22 33.5
comp=Z,20nm,2.0s
**ELIB Princess Elisa 92.15 191** *d*P **P** **19 22 16.0 -1.0**
comp=Z,8.1nm,1.0s
**DLMT Dillon 92.28 44** IAmb IAmb 19 22 19.7
comp=Z,10.0nm,1.1s
**121A Cookes Peak, D 92.72 57** IAmb IAmb 19 22 22.2
comp=Z,5.6nm,0.7s
**121A Cookes Peak, D 92.72 57** P **P** **19 22 20.9 +0.4**
baz=257
**BOZ Bozeman (W) 92.99 44** IAmb IAmb 19 22 23.0
comp=Z,10nm,1.4s
**BOZ Bozeman (W) 92.99 44** P **P** **19 22 22.3 +1.0**
baz=255
**MVCO Mesa Verde 93.22 53** P **P** **19 22 22.9 +0.1**
baz=257
**BW06 Boulder Array 93.73 47** P **P** **19 22 25.6 +0.6**
baz=256
**PDAR Pinedale Array 93.73 47** P **P** **19 22 24.1 -0.9**
comp=Z,0.5nm,0.5s,baz=186,slow=3.3,SNR=4.7
comp=Z,0.5nm,0.5s
**ANMO Albuquerque 94.33 55** P **P** **19 22 28.3 +0.4**
baz=258
**MNTX Cornudas Mount 94.53 59** P **P** **19 22 29.2 +0.7**
baz=258
**S22A 4UR Ranch, Cre 94.64 53** P **P** **19 22 29.5 +0.2**
baz=258
**TROLL Troll, Antarti 94.84 185** ⇑P **P** **19 22 29.4 0.0**
comp=Z,584nm,0.7s
**TXAR Lajitas Array 95.50 61** P **P** **19 22 33.0 -0.2**
comp=Z,1.4nm,0.8s,baz=226,slow=4.9,SNR=12
comp=Z,1.4nm,0.8s
**SNAA Sanae 95.54 183** P **P** **19 22 32.0 -0.5**
**SNAA Sanae 95.54 183** ⇑P **P** **19 22 31.9 -0.5**
comp=Z,54nm,0.5s
**SNAA Sanae 95.54 183** P **P** **19 22 31.9 -0.6**
comp=Z,4.1nm,0.8s,baz=198,slow=8.4,SNR=17
comp=Z,4.1nm,0.8s
**MK31 Makanchi Array 95.61 317** P **P** **19 22 33.2 +0.1**
MK31 IAmb IAmb 19 22 33.9
comp=Z,8.1nm,1.0s
**MKAR Makanchi Array 95.61 317** P **P** **19 22 33.0 -0.2**
comp=Z,5.2nm,0.6s,baz=90,slow=6.5,SNR=53
MKAR PKKPbc **PKKPbc** **19 39 20.4 -4.6**
comp=Z,0.8nm,0.6s,baz=238,slow=0.9,SNR=11
comp=Z,5.2nm,0.6s
**ZALV Zalesovo Beam 95.65 324** P **P** **19 22 32.1 -1.0**
comp=Z,4.7nm,0.8s,baz=126,slow=5.3,SNR=18
ZALV PKKPbc PKKPbc 19 39 14.3 -11
comp=Z,1.0nm,0.6s,baz=30,slow=5.8,SNR=4.7
comp=Z,4.7nm,0.8s
**SDCO Great Sand Dun 95.67 53** P **P** **19 22 34.4 +0.4**
baz=258
**YKA Yellowknife Ar 95.86 27** P **P** **19 22 33.0 -0.9**
comp=Z,1.5nm,0.7s,baz=266,slow=5.0,SNR=5.9
comp=Z,1.5nm,0.7s
**N23A Red Feather La 95.96 50** P **P** **19 22 35.6 +0.4**
baz=258
**VNA3 Neumayer Olymp 96.21 181** ⇑P **P** **19 22 34.9 -0.6**
comp=Z,9.6nm,0.6s
**T25A Trinidad 96.40 54** P **P** **19 22 37.6 +0.4**
baz=259
**AMTX Amarillo 98.17 56** P Pdif 19 22 45.7 +0.6
baz=260
**KURBB Kurchatov Arra 98.78 320** P **P** **19 22 46.2 -1.0**
comp=Z,0.8nm,0.5s,baz=97,slow=4.4,SNR=16
KURBB PKKPbc **PKKPbc** **19 39 14.8 -1.6**
comp=Z,0.3nm,0.6s,baz=277,slow=3.3,SNR=5.0
comp=Z,0.8nm,0.5s
**WMOK Wichita Mounta 100.51 57** P **Pdif** **19 22 55.9 +0.5**
baz=262
**BVAR Borovoye Array 104.05 322** Pdiff **Pdif** **19 23 09.9 -0.8**
comp=Z,0.9nm,0.7s,baz=97,slow=6.1,SNR=5.3
**MIAR Mount Ida 104.74 57** P **Pdif** **19 23 14.6 +0.3**
baz=265
**ARCES ARCESS Array B 118.26 346** PKP **PKPdf** **19 27 53.0 -0.3**
comp=Z,5.3nm,0.5s,baz=88,slow=2.3,SNR=62
**LPAZ La Paz 118.30 116** PKP **PKPdf** **19 27 55.4 -0.3**
comp=Z,1.4nm,0.6s,baz=199,slow=1.8,SNR=5.3
**CPUP Villa Florida 121.96 132** PKP **PKPdf** **19 28 00.4 -1.3**
comp=Z,1.5nm,0.7s,baz=294,slow=5.8,SNR=3.9
**FINES FINESS Array B 123.78 339** PKP **PKPdf** **19 28 02.4 -1.6**
comp=Z,1.7nm,0.8s,baz=104,slow=5.9,SNR=12
**BOSA Boshof 124.75 221** PKP **PKPdf** **19 28 06.2 -1.0**
comp=Z,5.1nm,0.8s,baz=134,slow=4.0,SNR=7.5
**NB2 NORSAR Subarra128.63 345** PKPdf **PKPdf** **19 28 13.0 -0.5**
comp=Z,8.7nm,1.1s,baz=27,slow=1.8
**NB2 NORSAR Subarra128.63 345** PKPdf **PKPdf** **19 28 13.0 -0.5**
baz=27,slow=1.8
**NOA NORSAR Array B 128.63 345** PKP **PKPdf** **19 28 13.6 +0.1**
comp=Z,1.6nm,0.7s,baz=30,slow=2.0,SNR=8.0
**HFS Hagfors 128.75 343** PKP **PKPdf** **19 28 13.1 -0.5**
comp=Z,2.8nm,0.7s,baz=75,slow=8.0,SNR=3.3
**AKASG Malin Array Be 128.95 327** PKP **PKPdf** **19 28 13.3 -0.9**
comp=Z,0.4nm,0.4s,baz=38,slow=0.6,SNR=4.6
**BRTR Keskin Array B 131.03 312** PKP **PKPdf** **19 28 17.8 -1.1**
comp=Z,0.6nm,0.4s,baz=131,slow=5.0,SNR=6.0
**BDFB Brasilia 135.30 128** PKP **PKPdf** **19 28 26.5 -0.9**
comp=Z,2.4nm,0.5s,baz=212,slow=6.8,SNR=7.1
**BRG Berggiesshubel 136.10 336** *e*P **PKPdf** **19 28 28.0 +0.3**
BRG Amp 19 28 29.8
comp=Z,3.0nm,0.9s
**CLL Collm 136.14 337** *e*PKPdf **PKPdf** **19 28 28.0 +0.2**
**RONA Rosalia, Austr 137.43 331** *e*PKiKP **PKiKP** **19 28 32.3 -0.1**
comp=Z,7.1nm,1.3s
**CONA Conrad Observa 137.47 331** *e*PKiKP **PKiKP** **19 28 32.0 -0.5**
comp=Z,2.2nm,0.7s
**GERES GERESS Array B 137.76 334** PKP **PKPdf** **19 28 29.8 -1.2**
comp=Z,1.5nm,0.9s,baz=339,slow=5.4,SNR=5.4
**BIOA Bad Ischl, Aus 138.66 333** *e*PKiKP **PKiKP** **19 28 33.9 -0.9**
comp=Z,0.8nm,0.4s
**SOKA Soboth 138.76 331** *e*PKiKP **PKiKP** **19 28 34.5 -0.6**
comp=Z,5.1nm,1.4s
**OBKA Obir 139.11 331** *e*PKP **PKPdf** **19 28 32.8 -0.8**
comp=Z,4.2nm,1.1s
**WATA Walderalm 139.83 334** *e*PKP **PKPdf** **19 28 31.7 -3.3**
comp=Z,2.3nm,0.9s
**ABTA Abfaltersbach 139.88 333** *e*PKP **PKPdf** **19 28 31.8 -3.2**
comp=Z,1.9nm,0.7s
**MOTA Moosalm 140.03 334** *e*PKP **PKPdf** **19 28 32.8 -2.5**
comp=Z,0.7nm,0.5s
**SQTA Sankt Quirin 140.08 334** *e*PKP **PKPdf** **19 28 33.0 -2.4**
comp=Z,0.8nm,0.5s
**FETA Feichten 140.44 334** *e*PKP **PKPdf** **19 28 32.9 -3.1**
comp=Z,5.0nm,1.4s
**KEST Kesra 149.51 323** PKPbc **PKPbc** **19 28 56.7 +0.1**
comp=Z,15nm,0.9s,baz=339,slow=3.4,SNR=17
**PBRG Braganca 150.52 351** *e*PKPbc **PKPbc** **19 28 59.0 +0.2**
**PBRG Braganca 150.52 351** *e*PKPab **PKPab** **19 29 06.7 +0.7**
**PGAV Gavieira, Arco 150.57 353** *e*PKPbc **PKPbc** **19 28 58.8 -0.2**
**POLO Lamas de Olo 151.09 352** *e*PKPbc **PKiKP** **19 29 00.6 -0.1**
**POLO Lamas de Olo 151.09 352** *e*PKPab **PKPab** **19 29 09.6 +1.1**
**PVRL Vila Real 151.18 352** *e*PKPbc **PKiKP** **19 29 00.9 +0.1**
**MVO Moncorvo 151.19 351** *e*PKPbc **PKiKP** **19 29 00.9 0.0**
**PVIS Viseu 151.75 352** *e*PKPbc **PKiKP** **19 29 01.9 -0.1**
**PVIS Viseu 151.75 352** *e*PKPab **PKPab** **19 29 12.1 +0.9**
**ESDC Sonseca Array 152.00 345** PKP **PKPdf** **19 28 55.4 -0.2**
comp=Z,0.9nm,1.1s,baz=281,slow=2.1,SNR=4.2
ESDC PKPbc **PKiKP** **19 29 02.5 -0.1**
comp=Z,4.9nm,0.8s,baz=12,slow=2.6,SNR=36
ESDC PKPab **PKPab** **19 29 12.8 +0.6**
comp=Z,7.5nm,0.7s,baz=4.1,slow=3.6,SNR=20
**MTE Manteigas 152.01 351** *e*PKPbc **PKiKP** **19 29 02.7 +0.1**
**PCAS Casmilo, Conde 152.49 353** *e*PKPbc **PKiKP** **19 29 03.4 -0.1**
**PCAS Casmilo, Conde 152.49 353** *e*PKPab **PKPab** **19 29 15.7 +1.5**
**PCBR Castelo Branco 152.55 351** *e*PKPbc **PKiKP** **19 29 03.6 0.0**
**PMRV Marv??o 152.94 351** *e*PKPbc **PKiKP** **19 29 04.5 0.0**
**PMRV Marv??o 152.94 351** *e*PKPab **PKPab** **19 29 17.3 +1.1**
**PSBE So Bento 153.06 353** *e*PKPbc **PKiKP** **19 29 04.8 +0.1**
**PMTG Montargil 153.42 352** *e*PKPbc **PKPbc** **19 29 05.3 0.0**
**PMTG Montargil 153.42 352** *e*PKPab **PKPab** **19 29 20.1 +1.9**
**PESTR Estremoz 153.52 351** *e*PKPab **PKPab** **19 29 19.5 +0.9**
**EVO Evora 153.91 351** *e*PKPab **PKPab** **19 29 21.5 +1.2**
**PBAR Barrancos 154.10 349** *e*PKPab **PKPab** **19 29 22.0 +0.9**
**PBEJ Beja 154.39 351** *e*PKPab **PKPab** **19 29 23.5 +1.2**
**PNCL Nicolau / Gran 154.40 352** *e*PKPab **PKPab** **19 29 24.1 +1.7**
**MESJ Messejana 154.62 351** *e*PKPab **PKPab** **19 29 24.7 +1.4**
**PCVE Castro Verde 154.80 351** *e*PKPab **PKPab** **19 29 25.4 +1.3**
**PVAQ Vaqueiros 154.97 350** *e*PKPab **PKPab** **19 29 26.1 +1.3**
**TORD Torodi Ar. Bea 165.72 273** PKP **PKPdf** **19 29 10.8 -1.3**
comp=Z,2.6nm,0.9s,baz=13,slow=2.7,SNR=11
TORD PKPab **PKPab** **19 30 12.2 -0.3**
comp=Z,3.6nm,0.9s,baz=66,slow=5.2,SNR=13

*IDC **19** 19:13:14.7±1.1,8°.25S×176°.80E,h0km,mb3.7/8, mbtmp3.8/9,ML3.5/1,Error ellipse: s-maj=24.5km s-min=17.6km az=61.0*
*DJA **19** 19:13:17.2±0.2,8°.54S×177°.7E±°,h10km,M4.3/15,mb4.6/5, MLv4.2/15*
**ISC 19 19:13:16.5**±0.7,**8°.24S**±0°.06×**176°.78E**±0°.06,**h10km**,**n31,** σ1°**03**/31,**mb3.8/7,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.50** | **168** | P | | **Pg** | | **19 13 27.3** | **+1.0** |
| **PLAI** | **Plampang** | **1.15** | **120** | P | | **Pb** | | **19 13 39.6** | **+1.1** |
| **PLAI** | **Plampang** | **1.15** | **120** | P | | **Pb** | | **19 13 39.6** | **+1.1** |
| **SRBI** | **Singaraja** | **1.56** | **276** | P | | **Pn** | | **19 13 44.7** | **+0.4** |
| **DNP** | **Denpasar** | **1.61** | **254** | P | | **Pn** | | **19 13 47.7** | **+2.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.61** | **265** | P | | **Pn** | | **19 13 58.4** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.61** | **265** | P | | **Pn** | | **19 13 58.3** | **-0.5** |
| **WBSI** | **Waikabubak, Su** | **2.93** | **118** | P | | **Pn** | | **19 14 03.2** | **-0.1** |
| **BASI** | **Baing, Sumba** | **4.23** | **118** | P | | **Pn** | | **19 14 21.2** | **0.0** |
| **BSSI** | **Bau Bau, Buton** | **4.24** | **61** | P | | **Pn** | | **19 14 21.8** | **+0.6** |
| **KAPI** | **Kappang** | **4.36** | **43** | P | | **Pn** | | **19 14 23.4** | **+0.5** |
| **KAPI** | **Kappang** | **4.36** | **43** | Pn | | **Pn** | | **19 14 23.2** | **+0.3** |
| | 2.7nm,0.3s,baz=206,slow=8.3,SNR=33 | | | | | | | | |
| KAPI | | | | Sn | | **Sn** | | **19 15 12.1** | **-1.7** |
| | 9.7nm,0.3s,baz=198,slow=20,SNR=4.5 | | | | | | | | |
| KAPI | | | | Lg | | Lg | | 19 15 32.1 | |
| | 11nm,0.3s,baz=270,slow=20,SNR=6.6 11nm,0.2s | | | | | | | | |
| **EDFI** | **Ende, Flores** | **4.89** | **96** | P | | **Pn** | | **19 14 31.2** | **+1.0** |
| **PWJI** | **Pagerwojo** | **4.93** | **272** | P | | **Pn** | | **19 14 31.3** | **+0.6** |
| **BNSI** | **Bone** | **5.05** | **41** | P | | **Pn** | | **19 14 34.5** | **+2.1** |
| **MMRI** | **Maumere** | **5.42** | **95** | P | | **Pn** | | **19 14 38.4** | **+1.0** |
| **MMRI** | **Maumere** | **5.42** | **95** | P | | **Pn** | | **19 14 37.0** | **-0.4** |
| **UGM** | **Wanagama** | **6.20** | **273** | P | | **Pn** | | **19 14 48.6** | **+0.4** |
| **CMJI** | **Cimerak** | **8.26** | **273** | P | | **Pn** | | **19 15 16.5** | **0.0** |
| **MBWA** | **Marble Bar** | **13.15** | **168** | P | | **Pn** | | **19 16 23.2** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **13.58** | **168** | P | | **Pn** | | **19 16 29.0** | **-0.3** |
| **GIRL** | **Giralia** | **14.52** | **189** | P | | **Pn** | | **19 16 40.6** | **-1.7** |
| **MEEK** | **Meekatharra** | **18.38** | **175** | P | | **Pn** | | **19 17 31.6** | **0.0** |
| **WRA** | **Warramunga Arr** | **20.60** | **126** | P | | **P** | | **19 17 56.0** | **0.0** |
| | 1.7nm,0.4s,baz=301,slow=12,SNR=18 1.7nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.46** | **135** | P | | **P** | | **19 18 16.2** | **+0.1** |
| | 3.4nm,0.7s,baz=315,slow=9.1,SNR=16 3.4nm,0.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.84** | **327** | P | | P | | 19 19 40.4 | -1.5 |
| | 0.4nm,0.3s,baz=139,slow=9.0,SNR=1.7 0.4nm,0.3s | | | | | | | | |
| **STKA** | **Stephens Creek** | **32.95** | **139** | P | | **P** | | **19 19 49.4** | **-2.1** |
| | 2.5nm,0.8s,baz=308,slow=6.3,SNR=3.9 2.5nm,0.8s | | | | | | | | |
| **SONM** | **Songino Array** | **56.59** | **352** | P | | **P** | | **19 22 59.9** | **+0.3** |
| | 0.7nm,0.7s,baz=168,slow=7.4,SNR=2.5 0.7nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.80** | **334** | P | | **P** | | **19 23 42.8** | **+0.5** |
| | 0.6nm,0.8s,baz=128,slow=6.1,SNR=0.9 0.6nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.34** | **335** | P | | **P** | | **19 24 11.9** | **+0.2** |
| | 0.3nm,0.7s,baz=147,slow=4.9,SNR=1.5 0.3nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.57** | **340** | P | | **P** | | **19 24 12.6** | **-0.5** |
| | 0.6nm,0.6s,baz=157,slow=4.1,SNR=2.1 0.6nm,0.6s | | | | | | | | |

*IDC **19** 19:13:13.9±2.2, 17°.03S×177°.99W,h367km±20km, mb4.2/19,mbtmp4.8/19,Error ellipse: s-maj=13.1km s-min=11.3km az=106.0*
*NEIC **19** 19:13:19.1±2.2, 17°.05S±0°.1×177°.9W±0°.1,h412km±6km, mb4.7/121,Error ellipse: s-maj=16.1km s-min=13.8km az=134.0*
*NOU **19** 19:13:20.8, 17°.05S×177°.86W,h441km,mb5.0/73,Fiji Islands Region*
**ISC 19 19:13:20.9**±0.3,**17°.01S**±0°.06×**177°.90W**±0°.06,**h450km**, **n615,** σ1°**73**/492,**mb4.7**/114,**52C-37D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.93** | **259** | P | | **P** | | **19 14 35.2** | **-0.4** |
| **MSVF** | **Nonsavu** | **3.93** | **259** | | | **P** | | **19 14 35.1** | **-0.5** |
| **AFI** | **Afiamalu** | **6.66** | **63** | | | **P** | | **19 14 58.6** | **-3.6** |
| **NIUE** | **Niue** | **7.86** | **106** | P | | **P** | | **19 15 14.2** | **-0.6** |
| **NIUE** | **Niue** | **7.86** | **106** | P | | **P** | | **19 15 14.1** | **-0.8** |
| **FUNA** | **Funafuti** | **8.89** | **341** | | | **P** | | **19 15 23.1** | **-2.9** |
| **RAO** | **Raoul Island** | **12.19** | **180** | S | | **S** | | **19 18 09.2** | **-5.2** |
| | 172nm,0.3s,baz=90,slow=20,SNR=5.5 | | | | | | | | |
| **MARNC** | **Mare, Loyalty** | **14.01** | **249** | P | | **P** | | **19 16 22.2** | **+0.7** |
| **LIFNC** | **LIFOU** | **14.55** | **253** | P | | **P** | | **19 16 25.2** | **-2.1** |
| **PINNC** | **Pines Island,** | **14.87** | **246** | P | | **P** | | **19 16 31.2** | **+0.5** |
| **PINNC** | **Pines Island,** | **14.87** | **246** | P | | **P** | | **19 16 29.9** | **-0.8** |
| **YATNC** | **Mamie plateau,** | **15.19** | **248** | P | | **P** | | **19 16 35.5** | **+1.4** |
| **DZM** | **Mont Dzumac** | **15.59** | **249** | P | | **P** | | **19 16 39.3** | **+0.8** |
| **DZM** | **Mont Dzumac** | **15.59** | **249** | P | | **P** | | **19 16 38.1** | **-0.3** |
| DZM | | | | | IAmb | IAmb | | 19 16 44.0 | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.59** | **249** | P | | **P** | | **19 16 37.2** | **-1.3** |
| | comp=Z,16nm,0.6s,baz=68,slow=20,SNR=12 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.72** | **249** | P | | **P** | | **19 16 39.5** | **-0.3** |
| **KOUNC** | **Koumac, New Ca** | **17.23** | **255** | P | | **P** | | **19 16 55.1** | **-0.6** |
| KOUNC | | | | | IAmb | IAmb | | 19 17 00.5 | |
| | comp=Z,88nm,1.4s | | | | | | | | |
| **OUZ** | **Omahuta** | **19.66** | **201** | P | | **P** | | **19 17 19.4** | **+0.3** |
| **KUZ** | **Kuaotunu** | **20.46** | **195** | P | | **P** | | **19 17 26.6** | **+0.3** |
| **MXZ** | **Matakaoa Point** | **20.75** | **189** | P | | **P** | | **19 17 28.8** | **-0.2** |
| **MXZ** | **Matakaoa Point** | **20.75** | **189** | P | | **P** | | **19 17 29.4** | **+0.5** |
| **MXZ** | **Matakaoa Point** | **20.75** | **189** | P | | **P** | | **19 17 28.8** | **-0.2** |
| **WMGZ** | **Waiomatatini S** | **20.99** | **188** | P | | **P** | | **19 17 32.1** | **+0.9** |
| WMGZ | | | | S | | **S** | | **19 20 55.4** | **+0.8** |
| **HAZ** | **Te Kaha** | **21.02** | **190** | P | | **P** | | **19 17 30.6** | **-0.8** |
| HAZ | | | | S | | **S** | | **19 20 52.8** | **-2.3** |
| **PKGZ** | **Pakihiroa** | **21.08** | **189** | P | | **P** | | **19 17 32.2** | **+0.2** |
| **RUGZ** | **Raukumara Rang** | **21.24** | **190** | P | | **P** | | **19 17 33.6** | **0.0** |
| **PUZ** | **Puketiti** | **21.26** | **188** | P | | **P** | | **19 17 34.7** | **+1.1** |
| **TGRZ** | **Tauranga** | **21.27** | **193** | P | | **P** | | **19 17 35.7** | **+2.0** |
| **TWGZ** | **Tauwhareparae** | **21.40** | **189** | P | | **P** | | **19 17 35.9** | **+0.9** |
| **TOZ** | **Tahuroa Road** | **21.45** | **194** | P | | **P** | | **19 17 38.2** | **+2.9** |
| TOZ | | | | IAmb | | IAmb | | 19 17 39.0 | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| **TOZ** | **Tahuroa Road** | **21.45** | **194** | P | | **P** | | **19 17 38.3** | **+3.0** |
| **KMRZ** | **Kaimai** | **21.46** | **193** | P | | **P** | | **19 17 37.6** | **+2.2** |
| **URZ** | **Urewera** | **21.62** | **191** | P | | **P** | | **19 17 37.0** | **+0.1** |
| **URZ** | **Urewera** | **21.62** | **191** | P | | **P** | | **19 17 34.5** | **-2.3** |
| | comp=Z,24nm,0.3s,baz=344,slow=2.4,SNR=45 | | | | | | | | |
| URZ | | | | S | | **S** | | **19 21 01.9** | **-2.9** |
| | comp=Z,11nm,0.9s,baz=294,slow=19,SNR=2.1 comp=Z,24nm,0.3s | | | | | | | | |
| **URZ** | **Urewera** | **21.62** | **191** | P | | **P** | | **19 17 35.3** | **-1.5** |
| URZ | | | | S | | **S** | | **19 21 01.9** | **-2.9** |
| **MWZ** | **Matawai** | **21.62** | **190** | P | | **P** | | **19 17 35.9** | **-1.1** |
| **CNGZ** | **Carnagh Statio** | **21.67** | **188** | P | | **P** | | **19 17 37.9** | **+0.6** |
| **RIGZ** | **Rimuhau** | **21.95** | **189** | P | | **P** | | **19 17 40.5** | **+0.6** |
| **RTZ** | **Ruatahuna** | **21.99** | **191** | P | | **P** | | **19 17 39.5** | **-0.8** |
| RTZ | | | | IAmb | | IAmb | | 19 17 43.1 | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| **TLZ** | **Tolley Road** | **22.01** | **194** | P | | P | | 19 17 44.3 | +3.9 |
| **PRGZ** | **Paritu Road** | **22.15** | **189** | P | | **P** | | **19 17 43.3** | **+1.6** |
| **MTHZ** | **Maungataniwha** | **22.25** | **191** | P | | **P** | | **19 17 42.5** | **-0.1** |
| MTHZ | | | | S | | **S** | | **19 21 15.4** | **+0.6** |
| **MRHZ** | **Matea Rd** | **22.31** | **192** | P | | **P** | | **19 17 42.8** | **-0.4** |
| **HIZ** | **Hauiti** | **22.35** | **195** | P | | **P** | | **19 17 43.4** | **-0.1** |
| **MHGZ** | **Mahia Peninsul** | **22.37** | **189** | P | | **P** | | **19 17 44.4** | **+0.7** |
| **NMHZ** | **Naumai** | **22.49** | **191** | P | | **P** | | **19 17 45.4** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **22.61** | **191** | P | | **P** | | **19 17 46.1** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **22.61** | **191** | P | | **P** | | **19 17 44.9** | **-1.0** |
| **TMVZ** | **Te Maari** | **22.73** | **193** | P | | **P** | | **19 17 47.2** | **+0.2** |
| **OTVZ** | **Oturere** | **22.78** | **193** | P | | **P** | | **19 17 47.7** | **+0.2** |
| **KWHZ** | **Kaweka Forest** | **22.88** | **191** | P | | **P** | | **19 17 48.0** | **-0.3** |
| KWHZ | | | | S | | S | | 19 21 36.3 | +12 |
| **BFZ** | **Birch Farm** | **24.13** | **191** | P | | **P** | | **19 17 59.8** | **+0.4** |
| **MRZ** | **Mangatainoka R** | **24.24** | **192** | P | | **P** | | **19 17 59.3** | **-1.1** |
| MRZ | | | | IAmb | | IAmb | | 19 18 35.2 | |
| | comp=Z,54nm,1.4s | | | | | | | | |
| **PLWZ** | **Palliser** | **25.18** | **192** | P | | **P** | | **19 18 06.5** | **-2.3** |
| **KHZ** | **Kahutara** | **26.36** | **194** | P | | **P** | | **19 18 19.0** | **-0.2** |
| **RPZ** | **Rata Peaks** | **28.22** | **197** | P | | **P** | | **19 18 36.0** | **+0.4** |
| **RPZ** | **Rata Peaks** | **28.22** | **197** | P | | P | | 19 18 38.3 | +2.6 |
| **ARCZ** | **Arundel** | **28.40** | **197** | P | | **P** | | **19 18 37.2** | **0.0** |
| **FOZ** | **Fox Glacier** | **28.42** | **199** | P | | **P** | | **19 18 36.9** | **-0.4** |
| **FOZ** | **Fox Glacier** | **28.42** | **199** | P | | **P** | | **19 18 37.7** | **+0.3** |
| **TMZ** | **Timaru** | **28.85** | **197** | P | | **P** | | **19 18 40.7** | **-0.5** |
| **LBZ** | **Lake Benmore** | **29.09** | **198** | P | | **P** | | **19 18 42.9** | **-0.3** |
| **JCZ** | **Jackson Bay** | **29.24** | **200** | P | | P | | 19 18 45.9 | +1.3 |
| **JCZ** | **Jackson Bay** | **29.24** | **200** | P | | P | | 19 18 45.9 | +1.3 |
| **WKZ** | **Wanaka** | **29.84** | **199** | P | | **P** | | **19 18 49.9** | **+0.1** |
| **EIDS** | **Eidsvold** | **30.04** | **249** | P | | **P** | | **19 18 51.2** | **-0.5** |
| EIDS | | | | IAmb | | IAmb | | 19 18 52.0 | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| **MSZ** | **Milford Sound** | **30.05** | **200** | P | | P | | 19 18 54.1 | +2.6 |
| **EAZ** | **Earnscleugh** | **30.11** | **198** | P | | **P** | | **19 18 52.9** | **+0.7** |
| **MLZ** | **Mavora Lakes** | **30.61** | **200** | P | | P | | 19 18 57.8 | +1.4 |
| MLZ | | | | IAmb | | IAmb | | 19 18 59.7 | |
| | comp=Z,56nm,1.1s | | | | | | | | |
| **MLZ** | **Mavora Lakes** | **30.61** | **200** | P | | P | | 19 18 57.7 | +1.3 |
| **TUZ** | **Tuapeka** | **30.68** | **197** | P | | **P** | | **19 18 57.9** | **+0.9** |
| **ARMA** | **Armidale** | **30.82** | **239** | P | | **P** | | **19 18 59.2** | **+0.6** |
| ARMA | | | | IAmb | | IAmb | | 19 19 01.4 | |
| | comp=Z,29nm,0.7s | | | | | | | | |
| **DCZ** | **Deep Cove** | **31.01** | **201** | P | | P | | 19 19 01.5 | +1.6 |
| DCZ | | | | IAmb | | IAmb | | 19 19 02.7 | |
| | comp=Z,32nm,0.9s | | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **31.13** | **199** | P | | P | | 19 19 02.2 | +1.3 |
| **WHZ** | **Wether Hill Ro** | **31.13** | **199** | P | | P | | 19 19 02.0 | +1.1 |
| **CTA** | **Charters Tower** | **34.08** | **259** | P | | **P** | | **19 19 24.1** | **-2.4** |
| | comp=Z,1.6nm,0.9s,baz=95,slow=8.7,SNR=14 | | | | | | | | |
| CTA | | | | PcP | | **PcP** | | **19 21 52.9** | **+1.1** |
| | comp=Z,0.9nm,1.1s,baz=231,slow=15,SNR=3.7 | | | | | | | | |
| **CTAO** | **Charters Tower** | **34.08** | **259** | P | | P | | 19 19 27.7 | +1.2 |
| **CTAO** | **Charters Tower** | **34.08** | **259** | P | | **P** | | **19 19 27.3** | **+0.8** |
| CTAO | | | | IAmb | | IAmb | | 19 19 28.0 | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **CAN** | **Canberra** | **34.64** | **232** | P | | **P** | | **19 19 31.4** | **+0.3** |
| CAN | | | | IAmb | | IAmb | | 19 19 51.0 | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| **PMG** | **Port Moresby** | **34.80** | **278** | P | | P | | 19 19 34.4 | +1.8 |
| **PMG** | **Port Moresby** | **34.80** | **278** | P | | P | | 19 19 34.2 | +1.6 |
| **PMG** | **Port Moresby** | **34.80** | **278** | P | | **P** | | **19 19 33.6** | **+1.0** |
| **PMG** | **Port Moresby** | **34.80** | **278** | P | | **P** | | **19 19 31.5** | **-1.1** |
| | comp=Z,97nm,0.8s,baz=80,slow=5.6,SNR=29 comp=Z,97nm,0.8s | | | | | | | | |
| **MTSU** | **Mount Surprise** | **36.00** | **262** | P | | P | | 19 19 43.7 | +1.0 |
| **QLP** | **Quilpie** | **36.31** | **248** | P | | **P** | | **19 19 45.6** | **+0.5** |
| **MANU** | **Manus Island** | **37.24** | **290** | P | | **P** | | **19 19 53.0** | **0.0** |
| **COEN** | **Coen** | **37.59** | **269** | P | | P | | 19 19 57.3 | +1.4 |
| **COEN** | **Coen** | **37.59** | **269** | P | | **P** | | **19 19 56.9** | **+1.0** |
| COEN | | | | IAmb | | IAmb | | 19 19 58.7 | |
| | comp=Z,33nm,0.9s | | | | | | | | |
| **GLAD** | **Gladstone** | **37.83** | **224** | P | | **P** | | **19 19 58.1** | **+0.6

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MTN | Manton Dam | 49.31 | 268 | P | | P | | 19 21 27.9 | +0.1 |
| MTN | Manton Dam | 49.31 | 268 | P | | P | | 19 21 27.8 | 0.0 |
| DRS | Darwin Rock St | 49.62 | 268 | P | | P | | 19 21 31.2 | +1.2 |
| SAUI | Saumlaki | 50.28 | 274 | P | | P | | 19 21 35.3 | +0.4 |
| WRKA | Warakurna | 50.59 | 251 | P | | P | | 19 21 37.3 | +0.2 |
| FORT | Forrest | 50.83 | 244 | P | | P | | 19 21 39.0 | +0.2 |
| FORT | Forrest | 50.83 | 244 | P | | P | | 19 21 38.6 | -0.1 |
| FAKI | Fak Fak | 50.88 | 280 | P | | P | | 19 21 39.5 | +0.1 |
| | comp=Z,47nm,1.3s | | | | | | | | |
| SWI | Sorong | 52.52 | 282 | P | | P | | 19 21 51.5 | +0.2 |
| | comp=Z,146nm,0.8s,comp=Z,1um | | | | | | | | |
| BNDI | Bandanaira | 52.59 | 277 | P | | P | | 19 21 51.9 | +0.1 |
| KMBL | Kambalda | 56.14 | 243 | P | | P | | 19 22 16.7 | 0.0 |
| SOEI | Soe | 56.56 | 269 | P | | P | | 19 22 21.0 | +1.0 |
| SOEI | Soe | 56.56 | 269 | P | | P | | 19 22 20.5 | +0.5 |
| TNTI | Ternate | 56.73 | 282 | P | | P | | 19 22 21.4 | +0.4 |
| | comp=Z,50nm,1.0s | | | | | | | | |
| BATI | Baumata | 57.03 | 269 | P | | P | | 19 22 23.7 | +0.6 |
| | comp=Z,65nm,0.7s | | | | | | | | |
| SANI | Sanana | 57.08 | 279 | P | | P | | 19 22 23.5 | +0.1 |
| | comp=Z,58nm,0.9s | | | | | | | | |
| PSA00 | Pilbara Seismi | 58.61 | 255 | P | | P | | 19 22 34.5 | +0.7 |
| MBWA | Marble Bar | 58.77 | 255 | P | | P | | 19 22 35.5 | +0.6 |
| MBWA | Marble Bar | 58.77 | 255 | P | | P | | 19 22 35.1 | +0.3 |
| MMRI | Maumere | 58.77 | 270 | P | | P | | 19 22 36.2 | +1.2 |
| MMRI | Maumere | 58.77 | 270 | P | | P | | 19 22 35.3 | +0.3 |
| MEEK | Meekatharra | 59.21 | 249 | P | | P | | 19 22 38.2 | +0.4 |
| KLBR | Kellerberrin | 59.66 | 243 | P | | P | | 19 22 41.0 | +0.2 |
| NWAO | Narrogin (SRO) | 60.06 | 241 | P | | P | | 19 22 44.4 | +1.0 |
| NWAO | Narrogin (SRO) | 60.06 | 241 | P | | P | | 19 22 44.3 | +0.9 |
| NWAO | Narrogin (SRO) | 60.06 | 241 | P | | P | | 19 22 42.7 | -0.7 |
| NWAO | | | | IAmb | | IAmb | | 19 22 44.9 | |
| | comp=Z,64nm,1.4s | | | | | | | | |
| BLDU | Ballidu | 60.61 | 244 | P | | P | | 19 22 47.5 | +0.4 |
| GTOI | Gorontalo | 60.77 | 281 | P | | P | | 19 22 49.3 | +0.9 |
| | comp=Z,17nm,0.8s | | | | | | | | |
| MUN | Mundaring | 60.96 | 243 | P | | P | | 19 22 50.7 | +1.3 |
| BSSI | Bau Bau, Buton | 61.10 | 272 | P | | P | | 19 22 51.4 | +0.8 |
| | comp=Z,65nm,1.4s | | | | | | | | |
| WBSI | Waikabubak, Su | 61.25 | 268 | P | | P | | 19 22 51.7 | +0.1 |
| | comp=Z,58nm,0.9s | | | | | | | | |
| MORW | Morawa | 61.29 | 246 | P | | P | | 19 22 52.3 | +0.7 |
| MORW | Morawa | 61.29 | 246 | P | | P | | 19 22 52.0 | +0.4 |
| MORW | | | | IAmb | | IAmb | | 19 22 52.8 | |
| | comp=Z,34nm,0.9s | | | | | | | | |
| MRSI | Marisa | 61.72 | 280 | P | | P | | 19 22 55.1 | +0.4 |
| | comp=Z,27nm,0.7s | | | | | | | | |
| BNSI | Bone | 61.95 | 274 | P | | P | | 19 22 57.1 | +0.9 |
| | comp=Z,60nm,1.2s | | | | | | | | |
| KAPI | Kappang | 62.12 | 273 | P | | P | | 19 22 57.3 | 0.0 |
| | comp=Z,10nm,0.5s,baz=174,slow=3.6,SNR=4.7 | | | | | | | | |
| | comp=Z,10nm,0.5s | | | | | | | | |
| TOLI2 | Tolitoli | 63.03 | 280 | P | | P | | 19 23 03.3 | +0.1 |
| TOLI2 | Tolitoli | 63.03 | 280 | P | | P | | 19 23 04.0 | +0.8 |
| TOLI2 | | | | IAmb | | IAmb | | 19 23 07.6 | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| MPSI | Mapaga | 63.61 | 279 | P | | P | | 19 23 07.1 | +0.2 |
| | comp=Z,58nm,0.9s,comp=Z,477nm | | | | | | | | |
| GIRL | Giralia | 63.62 | 253 | P | | P | | 19 23 08.1 | +1.2 |
| | comp=Z,108nm,1.0s | | | | | | | | |
| GIRL | Giralia | 63.62 | 253 | P | | P | | 19 23 07.6 | +0.7 |
| JAGI | Jajag, Banyuwa | 66.55 | 268 | P | | P | | 19 23 25.7 | +0.1 |
| | comp=Z,89nm,1.0s | | | | | | | | |
| CASY | Casey | 67.15 | 205 | P | | P | | 19 23 29.4 | +1.0 |
| MJAR | Matsushiro Arr | 67.48 | 323 | P | | P | | 19 23 31.1 | +0.2 |
| | comp=Z,9.3nm,0.8s,baz=157,slow=6.0,SNR=31 | | | | | | | | |
| | comp=Z,9.3nm,0.8s | | | | | | | | |
| MAJO | Matsushiro | 67.48 | 323 | P | | P | | 19 23 32.0 | +1.1 |
| MAJO | Matsushiro | 67.48 | 323 | P | | P | | 19 23 31.5 | +0.6 |
| MAJO | | | | IAmb | | IAmb | | 19 23 32.1 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| MJB9 | Matsu-Tunnel | 67.48 | 323 | P | | P | | 19 23 32.3 | +1.4 |
| MJB9 | | | | IAmb | | IAmb | | 19 23 33.1 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| MTKI | Muara Teweh, K | 67.95 | 276 | P | | P | | 19 23 35.3 | +1.1 |
| | comp=Z,46nm,0.5s | | | | | | | | |
| PWJI | Pagerwojo | 68.91 | 268 | P | | P | | 19 23 40.5 | +0.4 |
| | comp=Z,63nm,1.1s | | | | | | | | |
| KKM | Kota Kinabalu | 69.00 | 284 | P | | P | | 19 23 42.8 | +2.1 |
| KKM | Kota Kinabalu | 69.00 | 284 | P | | P | | 19 23 41.6 | +0.8 |
| JNU | Nakatsue | 69.83 | 316 | P | | P | | 19 23 46.4 | +1.1 |
| | comp=Z,28nm,2.2s | | | | | | | | |
| JNU | Nakatsue | 69.83 | 316 | P | | P | | 19 23 45.7 | +0.4 |
| JNU | | | | IAmb | | IAmb | | 19 23 47.1 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| UGM | Wanagama | 70.16 | 268 | P | | P | | 19 23 48.8 | +1.1 |
| UGM | Wanagama | 70.16 | 268 | P | | P | | 19 23 48.6 | +0.9 |
| UGM | Wanagama | 70.16 | 268 | P | | P | | 19 23 48.4 | +0.7 |
| | comp=Z,140nm,1.1s | | | | | | | | |
| SMRI | Semarang | 70.47 | 268 | P | | P | | 19 23 50.6 | +1.1 |
| | comp=Z,71nm,0.8s | | | | | | | | |
| JKA | Kamikawa-asahi | 70.72 | 331 | P | | P | | 19 23 52.3 | +2.1 |
| JKA | | | | IAmb | | IAmb | | 19 23 56.5 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| SBUM | Sibu | 71.55 | 279 | P | | P | | 19 23 56.5 | +0.6 |
| YULB | Yu-li | 71.69 | 302 | P | | P | | 19 23 58.2 | +1.7 |
| YULB | Yu-li | 71.69 | 302 | IAmb | | IAmb | | 19 23 57.3 | |
| | comp=Z,9.8nm,0.6s | | | | | | | | |
| NACB | Ninganchiao | 71.83 | 303 | IAmb | | IAmb | | 19 23 59.2 | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| KPJI | Karang Pucung | 71.84 | 268 | P | | P | | 19 23 58.6 | +1.1 |
| | comp=Z,55nm,0.8s | | | | | | | | |
| SSLB | Suanglung | 72.16 | 303 | P | | P | | 19 24 00.0 | +0.8 |
| SSLB | Suanglung | 72.16 | 303 | IAmb | | IAmb | | 19 23 60.0 | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| PETK | Petropavlovsk- | 72.94 | 345 | P | | P | | 19 24 03.4 | +0.4 |
| PETK | Petropavlovsk- | 72.94 | 345 | P | | P | | 19 24 03.9 | +0.9 |
| | comp=Z,5.9nm,0.6s,baz=98,slow=9.3,SNR=21 | | | | | | | | |
| | comp=Z,5.9nm,0.6s | | | | | | | | |
| BBJI | Bungbulang | 73.03 | 267 | P | | P | | 19 24 06.6 | +2.0 |
| QSPA | South Pole Qui | 73.04 | 180 | P | | P | | 19 24 05.9 | +2.1 |
| QSPA | | | | IAmb | | IAmb | | 19 24 07.9 | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| QSPA | South Pole Qui | 73.04 | 180 | P | | P | | 19 24 05.2 | +1.4 |
| | comp=Z,28nm,0.9s,baz=356,slow=0.8,SNR=38 | | | | | | | | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| DBJI | Dramaga | 74.13 | 268 | P | | P | | 19 24 11.7 | +0.9 |
| KSRS | Korea Array | 74.36 | 318 | P | | P | | 19 24 12.7 | +1.2 |
| | comp=Z,5.2nm,0.6s,baz=124,slow=6.4,SNR=28 | | | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| PPBI | Pangkal Pinang | 75.95 | 272 | P | | P | | 19 24 22.4 | +1.4 |
| | comp=Z,45nm,0.9s | | | | | | | | |
| USRK | Ussuriysk Ar. | 76.15 | 325 | P | | P | | 19 24 23.1 | +1.6 |
| | comp=Z,1.3nm,0.5s,baz=116,slow=6.3,SNR=6.2 | | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| R17L | Mt. Peulik Vol | 76.48 | 12 | P | | P | | 19 24 28.0 | +4.9 |
| | baz=201 | | | | | | | | |
| KASI | Kota Agung | 76.57 | 268 | P | | P | | 19 24 24.4 | -0.1 |
| MONP2 | Monument Peak | 76.86 | 49 | P | | P | | 19 24 29.6 | +3.6 |
| | baz=240 | | | | | | | | |
| LWLI | Liwa | 77.13 | 269 | P | | P | | 19 24 27.2 | -0.5 |
| MDJ | Mudanjiang | 77.73 | 325 | P | | P | | 19 24 32.6 | +2.5 |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| NJ2 | Nanjing | 77.74 | 309 | eP | | P | | 19 24 34.0 | +3.5 |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.5s | | | | | | | | |
| MNAI | Manna | 78.36 | 269 | P | | P | | 19 24 35.3 | +1.0 |
| NVAR | Mina Array Bea | 78.44 | 44 | P | | P | | 19 24 36.5 | +2.1 |
| | comp=Z,2.0nm,0.8s,baz=228,slow=8.1,SNR=9.1 | | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| KVN | Kaiserville | 78.91 | 43 | P | | P | | 19 24 39.3 | +2.4 |
| TPNV | Topopah Spring | 79.05 | 46 | P | | P | | 19 24 40.2 | +2.6 |
| | baz=239 | | | | | | | | |
| MYKOM | Kota Tinggi | 79.29 | 275 | IAmb | | IAmb | | 19 24 41.6 | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| J05D | Fort Rock, OR | 79.32 | 38 | IAmb | | IAmb | | 19 24 43.6 | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| L15K | Ungalak Mounta | 79.50 | 8 | P | | P | | 19 24 41.5 | +2.3 |
| | baz=196 | | | | | | | | |
| CN2 | Changchun | 79.61 | 322 | P | | P | | 19 24 41.9 | +1.7 |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| BNX | BinXian | 79.64 | 324 | ⇓P | | P | | 19 24 41.8 | +1.5 |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| L16K | Owhat River | 79.81 | 9 | P | | P | | 19 24 43.8 | +3.0 |
| | baz=198 | | | | | | | | |
| K15K | Wolf Creek Mou | 80.09 | 8 | P | | P | | 19 24 45.3 | +2.9 |
| | baz=196 | | | | | | | | |
| R11B | Troy Canyon, C | 80.22 | 45 | P | | P | | 19 24 45.6 | +1.8 |
| | baz=239 | | | | | | | | |
| L17K | Donlin | 80.39 | 9 | P | | P | | 19 24 46.5 | +2.6 |
| | baz=199 | | | | | | | | |
| GAMB | Gambell | 80.67 | 3 | P | | P | | 19 24 49.1 | +3.8 |
| | baz=186 | | | | | | | | |
| L18K | Granite Mounta | 80.73 | 10 | P | | P | | 19 24 47.8 | +2.1 |
| | baz=201 | | | | | | | | |
| TUC | Tucson | 80.77 | 52 | P | | P | | 19 24 49.7 | +3.0 |
| | baz=243 | | | | | | | | |
| M19K | Big River Lodg | 80.83 | 11 | P | | P | | 19 24 46.9 | +0.6 |
| | baz=203 | | | | | | | | |
| K17K | Iditarod | 80.94 | 9 | P | | P | | 19 24 49.0 | +2.2 |
| | baz=199 | | | | | | | | |
| L19K | White Mountain | 81.00 | 11 | P | | P | | 19 24 49.1 | +1.9 |
| | baz=202 | | | | | | | | |
| PWL | Port Wells | 81.15 | 14 | P | | P | | 19 24 48.4 | +0.4 |
| | baz=209 | | | | | | | | |
| SUA | Susitna One | 81.15 | 13 | P | | P | | 19 24 49.3 | +1.2 |
| | baz=206 | | | | | | | | |
| J16K | Anvik River | 81.16 | 8 | P | | P | | 19 24 49.5 | +1.6 |
| | baz=197 | | | | | | | | |
| GLI | Glacier Island | 81.46 | 15 | P | | P | | 19 24 51.2 | +1.7 |
| | baz=210 | | | | | | | | |
| J17K | VABM Dome | 81.48 | 8 | P | | P | | 19 24 51.1 | +1.6 |
| | baz=198 | | | | | | | | |
| 319A | Douglas | 81.50 | 54 | IAmb | | IAmb | | 19 24 55.1 | |
| | comp=Z,7.3nm,0.8s | | | | | | | | |
| PDSI | Padang | 81.73 | 272 | P | | P | | 19 24 54.0 | +1.9 |
| SMAI | San Martin Ant | 81.82 | 159 | P | | P | | 19 24 53.7 | +2.3 |
| SMAI | | | | IAmb | | IAmb | | 19 24 55.1 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| J18K | Innoko River | 81.89 | 9 | P | | P | | 19 24 53.2 | +1.5 |
| | baz=200 | | | | | | | | |
| SML | Sawmill | 81.98 | 14 | P | | P | | 19 24 53.1 | +0.8 |
| | baz=208 | | | | | | | | |
| UBPT | Khong Chiam | 82.10 | 289 | P | | P | | 19 24 54.9 | +1.1 |
| | comp=Z,14nm,1.1s | | | | | | | | |
| BMRM | Bremner River | 82.16 | 16 | P | | P | | 19 24 55.3 | +2.1 |
| | baz=212 | | | | | | | | |
| MESA | MESA | 82.22 | 17 | P | | P | | 19 24 55.3 | +1.6 |
| | baz=214 | | | | | | | | |
| K20K | Telida | 82.23 | 11 | IAmb | | IAmb | | 19 24 56.3 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| K20K | Telida | 82.23 | 11 | P | | P | | 19 24 54.9 | +1.5 |
| | baz=203 | | | | | | | | |
| S31K | Pelican | 82.24 | 21 | P | | P | | 19 24 55.5 | +2.0 |
| | baz=220 | | | | | | | | |
| SCM | Sheep Creek Mo | 82.24 | 14 | P | | P | | 19 24 55.0 | +1.4 |
| | baz=209 | | | | | | | | |
| CRQE | Cirque | 82.38 | 16 | P | | P | | 19 24 56.0 | +1.6 |
| | baz=213 | | | | | | | | |
| HEH | HeiHe | 82.40 | 328 | eP | | P | | 19 24 55.6 | +1.0 |
| HEH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| G15K | Niukluk | 82.43 | 6 | P | | P | | 19 24 55.7 | +1.3 |
| | baz=193 | | | | | | | | |
| PNL | Peninsula | 82.56 | 19 | P | | P | | 19 24 56.6 | +1.5 |
| | baz=217 | | | | | | | | |
| J19K | Poorman | 82.56 | 10 | P | | P | | 19 24 56.8 | +1.8 |
| | baz=202 | | | | | | | | |
| TNA | Tin City | 82.66 | 4 | P | | P | | 19 24 57.1 | +1.6 |
| | baz=190 | | | | | | | | |
| F14K | Arctic Creek | 82.70 | 5 | P | | P | | 19 24 56.9 | +1.2 |
| | baz=191 | | | | | | | | |
| N25K | Chitina, Valde | 82.71 | 15 | P | | P | | 19 24 57.0 | +1.0 |
| | baz=212 | | | | | | | | |
| M24K | Tolsona, Glenn | 82.75 | 14 | P | | P | | 19 24 57.9 | +1.8 |
| | baz=210 | | | | | | | | |
| IPM | Ipoh | 82.79 | 277 | P | | P | | 19 24 58.5 | +1.1 |
| IPM | Ipoh | 82.79 | 277 | P | | P | | 19 24 58.9 | +1.5 |
| WAT6 | Susitna Watana | 82.80 | 14 | P | | P | | 19 24 57.3 | +0.8 |
| | baz=209 | | | | | | | | |
| H17K | Granite Mounta | 82.84 | 8 | P | | P | | 19 24 57.5 | +1.1 |
| | baz=197 | | | | | | | | |
| WAT1 | Susitna Watana | 82.84 | 13 | P | | P | | 19 24 57.2 | +0.6 |
| | baz=208 | | | | | | | | |
| MCARA | McCarthy VSAT | 82.93 | 16 | P | | P | | 19 24 58.8 | +1.8 |
| | baz=214 | | | | | | | | |
| J20K | Nowinta River | 82.98 | 10 | P | | P | | 19 24 58.5 | +1.3 |
| J20K | | | | IAmb | | IAmb | | 19 24 59.5 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| J20K | Nowinta River | 82.98 | 10 | P | | P | | 19 24 58.7 | +1.5 |
| | baz=203,SNR=6.5 | | | | | | | | |
| BELA | Belgrano 2 | 82.99 | 173 | P | | P | | 19 24 58.5 | +1.3 |
| BELA | | | | IAmb | | IAmb | | 19 24 59.5 | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| CTG | Chitna Glacier | 83.04 | 17 | P | | P | | 19 24 59.2 | +1.5 |
| | baz=215 | | | | | | | | |
| P29M | Windy Craggy | 83.04 | 19 | P | | P | | 19 24 59.5 | +1.9 |
| | baz=218 | | | | | | | | |
| 121A | Cookes Peak, D | 83.15 | 53 | P | | P | | 19 25 01.8 | +2.8 |
| | baz=245 | | | | | | | | |
| O28M | Mount Upton | 83.21 | 18 | P | | P | | 19 25 00.2 | +1.4 |
| | baz=216 | | | | | | | | |
| HNS | HongShan | 83.27 | 312 | ⇓P | | P | | 19 25 01.4 | +2.1 |
| HNS | | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| RND | Reindeer | 83.29 | 13 | IAmb | | IAmb | | 19 25 00.8 | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| G17K | Kinlik Mounta | 83.29 | 7 | P | | P | | 19 25 00.8 | +2.1 |
| | baz=197 | | | | | | | | |
| O29M | Mount Kennedy | 83.31 | 19 | P | | P | | 19 25 00.6 | +1.5 |
| | baz=218 | | | | | | | | |
| DHY | Denali Highway | 83.31 | 13 | P | | P | | 19 25 00.4 | +1.3 |
| | baz=209 | | | | | | | | |
| PLBC | Pleasant Camp | 83.34 | 20 | P | | P | | 19 25 01.2 | +2.1 |
| | baz=220 | | | | | | | | |
| KULM | Kulim | 83.39 | 278 | IAmb | | IAmb | | 19 25 04.2 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| BPAW | Bear Paw Mtn. | 83.48 | 12 | P | | P | | 19 25 00.1 | +0.3 |
| | baz=206 | | | | | | | | |
| I20K | Naaghedeneel | 83.50 | 10 | P | | P | | 19 25 01.2 | +1.5 |
| | baz=202 | | | | | | | | |
| MCK | McKinley | 83.56 | 13 | P | | P | | 19 25 01.4 | +1.2 |
| | baz=208 | | | | | | | | |
| HLID | Hailey | 83.63 | 41 | P | | P | | 19 25 03.9 | +2.7 |
| | baz=239 | | | | | | | | |
| PAX | Paxson | 83.66 | 14 | P | | P | | 19 25 01.8 | +1.0 |
| | baz=211 | | | | | | | | |
| TMUT | Trail Mountain | 83.66 | 46 | IAmb | | IAmb | | 19 25 05.5 | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| P30M | Million Dollar | 83.67 | 19 | P | | P | | 19 25 02.8 | +2.0 |
| | baz=219 | | | | | | | | |
| SKAG | Skagway | 83.69 | 20 | P | | P | | 19 25 03.3 | +2.5 |
| | baz=221 | | | | | | | | |
| T35M | Bob Quinn | 83.70 | 24 | P | | P | | 19 25 03.3 | +2.3 |
| | baz=225 | | | | | | | | |
| YUK8 | Steele Glacier | 83.75 | 17 | P | | P | | 19 25 03.0 | +1.5 |
| | baz=216 | | | | | | | | |
| M26K | Nabesna, AK | 83.79 | 16 | P | | P | | 19 25 02.9 | +1.5 |
| | baz=213,SNR=7.1 | | | | | | | | |
| H19K | Roundabout Mou | 83.87 | 9 | P | | P | | 19 25 03.7 | +2.1 |
| | baz=201 | | | | | | | | |
| YUK6 | Outpost Mounta | 83.88 | 18 | P | | P | | 19 25 03.5 | +1.4 |
| | baz=218 | | | | | | | | |
| G18K | Tagagawik | 83.92 | 8 | P | | P | | 19 25 03.7 | +1.8 |
| | baz=198 | | | | | | | | |
| YUK3 | Moose Creek | 83.95 | 17 | P | | P | | 19 25 04.1 | +1.7 |
| | baz=216,SNR=6.4 | | | | | | | | |
| S34M | Telegraph Cree | 84.03 | 23 | IAmb | | IAmb | | 19 25 05.4 | |
| | comp=Z,5.4nm,0.8s | | | | | | | | |
| S34M | Telegraph Cree | 84.03 | 23 | P | | P | | 19 25 04.9 | +2.3 |
| | baz=224 | | | | | | | | |
| M27K | Edge Creek, AK | 84.04 | 16 | IAmb | | IAmb | | 19 25 05.4 | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| M27K | Edge Creek, AK | 84.04 | 16 | P | | P | | 19 25 04.7 | +1.9 |
| | baz=214,SNR=5.4 | | | | | | | | |
| H20K | Anotleneega Mo | 84.08 | 9 | P | | P | | 19 25 04.8 | +2.1 |
| | baz=202,SNR=6.5 | | | | | | | | |
| YUK4 | Talbot Arm | 84.12 | 18 | P | | P | | 19 25 05.0 | +1.7 |
| | baz=218 | | | | | | | | |
| F17K | Baldwin Pennin | 84.13 | 7 | P | | P | | 19 25 04.5 | +1.7 |
| | baz=196 | | | | | | | | |
| L26K | Log Cabin Wild | 84.22 | 15 | P | | P | | 19 25 04.9 | +1.4 |
| | baz=213 | | | | | | | | |
| NEA2 | Nenana | 84.30 | 12 | P | | P | | 19 25 04.2 | +0.4 |
| | baz=208 | | | | | | | | |
| K24K | Donnelly Dome | 84.31 | 14 | P | | P | | 19 25 05.6 | +1.7 |
| | baz=211 | | | | | | | | |
| P32M | Atlin | 84.33 | 21 | P | | P | | 19 25 05.7 | +1.6 |
| | baz=222 | | | | | | | | |
| G19K | Purcell Mounta | 84.36 | 8 | P | | P | | 19 25 05.8 | +1.7 |
| | baz=200 | | | | | | | | |
| MLY | Manley | 84.37 | 11 | P | | P | | 19 25 04.7 | +0.5 |
| MLY | | | | IAmb | | IAmb | | 19 25 05.5 | |
| | comp=Z,7.4nm,1.1s | | | | | | | | |
| MLY | Manley | 84.37 | 11 | P | | P | | 19 25 04.8 | +0.7 |
| | baz=206,SNR=5.7 | | | | | | | | |
| Q32M | Nakina River | 84.37 | 22 | P | | P | | 19 25 06.2 | +1.7 |
| | baz=223 | | | | | | | | |
| WRH | Wood River Hil | 84.39 | 13 | IAmb | | IAmb | | 19 25 06.6 | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| O30N | Mendenhall | 84.45 | 19 | P | | P | | 19 25 06.4 | +1.7 |
| | baz=220,SNR=6.2 | | | | | | | | |
| RIDG | Independent Ri | 84.47 | 14 | IAmb | | IAmb | | 19 25 06.7 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| RIDG | Independent Ri | 84.47 | 14 | P | | P | | 19 25 05.6 | +0.9 |
| | baz=212,SNR=5.2 | | | | | | | | |
| NEW | Newport | 84.50 | 36 | P | | P | | 19 25 06.2 | +1.0 |
| | baz=237 | | | | | | | | |
| H21K | Melozitna Rive | 84.57 | 10 | P | | P | | 19 25 06.6 | +1.5 |
| | baz=204 | | | | | | | | |
| HDA | Harding Lake | 84.58 | 13 | IAmb | | IAmb | | 19 25 06.8 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| HDA | Harding Lake | 84.58 | 13 | P | | P | | 19 25 05.7 | +0.6 |
| | baz=210,SNR=10 | | | | | | | | |
| CCB | Clear Creek Bu | 84.60 | 13 | IAmb | | IAmb | | 19 25 06.3 | |
| | comp=Z,9.1nm,0.7s | | | | | | | | |
| VHRN | Van Horn | 84.61 | 56 | IAmb | | IAmb | | 19 25 10.6 | |
| | comp=Z,5.8nm,0.8s | | | | | | | | |
| L27K | Beaver Creek, | 84.64 | 16 | P | | P | | 19 25 07.4 | +1.8 |
| | baz=214 | | | | | | | | |
| MNTX | Cornudas Mount | 84.66 | 55 | P | | P | | 19 25 09.3 | +2.9 |
| | baz=246,SNR=6.7 | | | | | | | | |
| N30M | Aishikik Lake | 84.67 | 18 | P | | P | | 19 25 08.8 | +3.0 |
| | baz=219 | | | | | | | | |
| I23K | Minto, Yukon-K | 84.73 | 12 | P | | P | | 19 25 08.0 | +2.1 |
| | baz=207 | | | | | | | | |
| WHY | Whitehorse | 84.75 | 20 | P | | P | | 19 25 08.1 | +1.9 |
| | baz=221 | | | | | | | | |
| MDM | Murphy Dome | 84.79 | 12 | IAmb | | IAmb | | 19 25 07.6 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| COLA | College | 84.79 | 12 | P | | P | | 19 25 07.1 | +0.9 |
| | baz=209 | | | | | | | | |
| DLBC | Dease Lake | 84.81 | 23 | P | | P | | 19 25 08.5 | +2.0 |
| | baz=225 | | | | | | | | |
| MAW | Mawson | 84.87 | 200 | P | | P | | 19 25 08.6 | +1.9 |
| | comp=Z,11nm,0.7s,baz=127,slow=6.6,SNR=29 | | | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| SCRK | Sand Creek | 84.87 | 14 | P | | P | | 19 25 08.1 | +1.4 |
| SCRK | | | | IAmb | | IAmb | | 19 25 10.6 | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| SCRK | Sand Creek | 84.87 | 14 | P | | P | | 19 25 08.4 | +1.6 |
| | baz=212 | | | | | | | | |
| IL31 | | 84.90 | 13 | IAmb | | IAmb | | 19 25 08.9 | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| ILAR | Eielson Array | 84.90 | 13 | P | | P | | 19 25 06.8 | 0.0 |
| ILAR | Eielson Array | 84.90 | 13 | P | | P | | 19 25 07.5 | +0.8 |
| | comp=Z,5.0nm,0.7s,baz=233,slow=5.7,SNR=26 | | | | | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| F19K | Shaleruckik Mo | 84.92 | 8 | P | | P | | 19 25 08.2 | +1.4 |
| | baz=199 | | | | | | | | |
| GYA | Guiyang | 85.01 | 299 | ⇓P | | P | | 19 25 10.4 | +2.1 |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| H22K | Ishtalitna Cre | 85.03 | 11 | P | | P | | 19 25 09.2 | +1.8 |
| | baz=205,SNR=6.2 | | | | | | | | |
| M29M | Somme Creek | 85.05 | 17 | P | | P | | 19 25 09.0 | +1.4 |
| | baz=218 | | | | | | | | |
| POKR | Poker Plat Res | 85.09 | 12 | P | | P | | 19 25 08.6 | +0.9 |
| | baz=209 | | | | | | | | |
| N31M | Braeburn, Yuko | 85.09 | 19 | IAmb | | IAmb | | 19 25 10.5 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| N31M | Braeburn, Yuko | 85.09 | 19 | P | | P | | 19 25 10.1 | +2.3 |
| | baz=220 | | | | | | | | |
| J25K | Salcha River, | 85.10 | 13 | IAmb | | IAmb | | 19 25 09.7 | |
| | comp=Z,8.2nm,0.7s | | | | | | | | |
| J25K | Salcha River, | 85.10 | 13 | P | | P | | 19 25 09.2 | +1.4 |
| | baz=211,SNR=9.1 | | | | | | | | |
| P33M | Teslin, Yukon | 85.10 | 21 | P | | P | | 19 25 09.9 | +2.0 |
| | baz=223 | | | | | | | | |
| TX31 | Lajitas Ar. Si | 85.11 | 58 | IAmb | | IAmb | | 19 25 13.4 | |
| | comp=Z,6.8nm,1.0s | | | | | | | | |
| TXAR | Lajitas Array | 85.11 | 58 | P | | P | | 19 25 12.2 | +3.5 |
| TXAR | Lajitas Array | 85.11 | 58 | P | | P | | 19 25 11.9 | +3.2 |
| | comp=Z,4.1nm,0.8s,baz=217,slow=6.3,SNR=37 | | | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| GSI | Gunungsitoli | 85.14 | 273 | P | | P | | 19 25 09.7 | +0.6 |
| GSI | Gunungsitoli | 85.14 | 273 | P | | P | | 19 25 11.2 | +2.1 |
| R33M | Jennings River | 85.15 | 22 | P | | P | | 19 25 10.3 | +2.0 |
| | baz=224 | | | | | | | | |
| ANMO | Albuquerque | 85.16 | 51 | P | | P | | 19 25 11.2 | +2.2 |
| | baz=246 | | | | | | | | |
| G21K | Allakaket | 85.24 | 10 | P | | P | | 19 25 09.5 | +1.1 |
| | baz=203 | | | | | | | | |
| H23K | Yukon River | 85.30 | 11 | P | | P | | 19 25 10.3 | +1.6 |
| | baz=207 | | | | | | | | |
| K27K | Chicken | 85.38 | 15 | IAmb | | IAmb | | 19 25 12.5 | |
| | comp=Z,6.8nm,1.1s | | | | | | | | |
| K27K | Chicken | 85.38 | 15 | P | | P | | 19 25 11.8 | +2.7 |
| | baz=214 | | | | | | | | |
| F20K | Avaraart Lake | 85.41 | 9 | P | | P | | 19 25 11.1 | +2.0 |
| | baz=201 | | | | | | | | |
| J26L | Joseph Creek | 85.41 | 14 | IAmb | | IAmb | | 19 25 12.0 | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| J26L | Joseph Creek | 85.41 | 14 | P | | P | | 19 25 11.4 | +2.1 |
| | baz=213,SNR=9.2 | | | | | | | | |
| E19K | Redstone River | 85.58 | 8 | P | | P | | 19 25 12.1 | +2.1 |
| | baz=200 | | | | | | | | |
| H24K | Noodor Dome | 85.64 | 12 | P | | P | | 19 25 12.3 | +2.0 |
| | baz=209 | | | | | | | | |
| PRP | Porcupine Dome | 85.84 | 13 | P | | P | | 19 25 13.3 | +1.8 |
| | baz=211 | | | | | | | | |
| F21K | Alatna River | 85.90 | 9 | P | | P | | 19 25 12.9 | +1.3 |
| | baz=203 | | | | | | | | |
| G22K | Bettles | 85.94 | 10 | P | | P | | 19 25 13.4 | +1.7 |
| | baz=205 | | | | | | | | |
| G23K | Bananza Creek | 86.01 | 11 | P | | P | | 19 25 14.1 | +2.0 |
| | baz=207 | | | | | | | | |
| S22A | 4UR Ranch, Cre | 86.05 | 49 | P | | P | | 19 25 15.6 | +2.3 |
| | baz=245 | | | | | | | | |
| DAWY | Dawson | 86.09 | 16 | P | | P | | 19 25 14.6 | +2.0 |
| | baz=217 | | | | | | | | |
| XAN | Xi'an | 86.10 | 307 | ⇓P | | P | | 19 25 15.8 | +2.5 |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,39nm,1.3s | | | | | | | | |
| I26K | Coal Creek Min | 86.19 | 14 | P | | P | | 19 25 14.9 | +2.0 |
| | baz=213 | | | | | | | | |
| YHL | Hebgen Lake | 86.29 | 41 | IAmb | | IAmb | | 19 25 18.4 | |
| | comp=Z,6.7nm,0.8s | | | | | | | | |
| BW06 | Boulder Array | 86.37 | 43 | P | | P | | 19 25 15.9 | +1.3 |
| | baz=243 | | | | | | | | |
| F22K | John River | 86.37 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| C21K | Knifeblade Rid | 87.50 | 8 | P | | P | | 19 25 20.6 +1.4 |
| | baz=202 | | | | | | | |
| D22K | Ayikyak River | 87.55 | 9 | P | | P | | 19 25 20.5 +1.2 |
| | baz=204 | | | | | | | |
| MSTX | Muleshoe | 87.57 | 54 | IAmb | | IAmb | | 19 25 23.9 |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| SRDT | SRDT | 87.60 | 286 | P | | P | | 19 25 21.8 +1.0 |
| F25K | Christian Rive | 87.61 | 12 | P | | P | | 19 25 21.4 +1.7 |
| | baz=211 | | | | | | | |
| DRIO | Del Rio | 87.61 | 58 | IAmb | | IAmb | | 19 25 24.5 |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| RLMT | Red Lodge | 87.62 | 41 | P | | P | | 19 25 22.3 +1.8 |
| | baz=243 | | | | | | | |
| BMAR | Burnt Mountain | 87.68 | 12 | P | | P | | 19 25 21.6 +1.6 |
| ISCO | Idaho Springs | 87.77 | 47 | P | | P | | 19 25 21.7 +0.3 |
| | baz=246 | | | | | | | |
| G27K | Doyon Strip | 87.78 | 14 | P | | P | | 19 25 21.5 +1.0 |
| | baz=214 | | | | | | | |
| I30M | Mount Dempster | 87.81 | 16 | P | | P | | 19 25 21.4 +0.6 |
| | baz=219 | | | | | | | |
| TOLK | Toolik Lake Re | 87.82 | 10 | P | | P | | 19 25 22.4 +1.7 |
| | baz=207 | | | | | | | |
| KMI | Kunming | 87.85 | 297 | ⇑P | | P | | 19 25 24.6 +2.6 |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| D23K | Nanushuk River | 87.93 | 10 | IAmb | | IAmb | | 19 25 24.1 |
| | comp=Z,12nm,1.1s | | | | | | | |
| D23K | Nanushuk River | 87.93 | 10 | P | | P | | 19 25 23.0 +1.9 |
| | baz=206 | | | | | | | |
| F26K | Sheenjek River | 87.99 | 12 | P | | P | | 19 25 23.4 +1.9 |
| | baz=212 | | | | | | | |
| H29M | Whitestone | 88.08 | 15 | P | | P | | 19 25 23.4 +1.6 |
| | baz=218 | | | | | | | |
| G29M | Pine Creek | 88.71 | 15 | P | | P | | 19 25 26.4 +1.6 |
| | baz=218 | | | | | | | |
| C23K | Itkillik River | 88.73 | 9 | P | | P | | 19 25 26.1 +1.3 |
| | baz=206 | | | | | | | |
| HNDO | Hondo | 88.74 | 59 | IAmb | | IAmb | | 19 25 30.3 |
| | comp=Z,13nm,1.1s | | | | | | | |
| C24K | Franklin Bluff | 88.92 | 10 | P | | P | | 19 25 27.3 +1.6 |
| | baz=208 | | | | | | | |
| E27K | Coleen River | 88.94 | 13 | P | | P | | 19 25 27.2 +1.3 |
| | baz=214 | | | | | | | |
| D25K | Kavik River | 88.97 | 11 | P | | P | | 19 25 27.2 +1.2 |
| | baz=210 | | | | | | | |
| CMAR | Chiang Mai Arr | 89.04 | 290 | P | | P | | 19 25 29.2 +1.8 |
| | comp=Z,5.7nm,1.0s,baz=108,slow=3.0,SNR=19 | | | | | | | |
| CMAR | | | | PKKPbc | | PKKPbc | | 19 43 04.7 +1.8 |
| | comp=Z,1.2nm,0.8s,baz=297,slow=3.7,SNR=5.0 | | | | | | | |
| | comp=Z,5.7nm,1.0s | | | | | | | |
| PZH | PanZhiHua | 89.16 | 298 | P | | P | | 19 25 30.8 +2.8 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.8s | | | | | | | |
| G31M | Satah River | 89.66 | 16 | P | | P | | 19 25 30.4 +1.3 |
| | baz=221 | | | | | | | |
| C27K | Jago River | 89.72 | 11 | P | | P | | 19 25 30.7 +1.3 |
| | baz=212 | | | | | | | |
| E28M | Babbage River | 89.72 | 13 | P | | P | | 19 25 30.7 +1.2 |
| | baz=216 | | | | | | | |
| D27M | Malcolm River | 89.94 | 12 | P | | P | | 19 25 31.5 +0.9 |
| | baz=215 | | | | | | | |
| ELIB | Princess Elisa | 90.11 | 186 | *d*P | | P | | 19 25 32.7 +1.1 |
| | comp=Z,23nm,0.7s | | | | | | | |
| F31M | Tsiigehtchic | 90.19 | 16 | IAmb | | IAmb | | 19 25 34.5 |
| | comp=Z,6.7nm,1.0s | | | | | | | |
| F31M | Tsiigehtchic | 90.19 | 16 | P | | P | | 19 25 32.5 +0.9 |
| | baz=222 | | | | | | | |
| LAO | LASA Array | 90.22 | 41 | P | | P | | 19 25 35.6 +3.2 |
| | baz=245 | | | | | | | |
| WRGLY | Wrigley | 90.41 | 22 | P | | P | | 19 25 35.7 +3.0 |
| | baz=231 | | | | | | | |
| RSSD | Black Hills | 90.58 | 44 | P | | P | | 19 25 36.3 +2.0 |
| | baz=247 | | | | | | | |
| TROLL | Troll, Antarti | 91.21 | 180 | ⇑P | | P | | 19 25 37.9 +1.3 |
| | comp=Z,891nm,0.8s | | | | | | | |
| SNAA | Sanae | 91.48 | 178 | P | | P | | 19 25 38.7 +0.9 |
| SNAA | | | | IAmb | | IAmb | | 19 25 39.8 |
| | comp=Z,24nm,1.4s | | | | | | | |
| SNAA | Sanae | 91.48 | 178 | ⇑P | | P | | 19 25 38.7 +0.9 |
| | comp=Z,165nm,0.7s | | | | | | | |
| SNAA | Sanae | 91.48 | 178 | P | | P | | 19 25 38.2 +0.3 |
| | comp=Z,5.5nm,0.7s,baz=211,slow=6.4,SNR=23 | | | | | | | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| PLCA | Paso Flores | 91.60 | 133 | P | | P | | 19 25 41.4 +2.3 |
| | comp=Z,4.0nm,0.9s,baz=232,slow=6.9,SNR=8.8 | | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| VNA3 | Neumayer Olymp | 91.60 | 176 | ⇑P | | P | | 19 25 39.8 +1.5 |
| | comp=Z,28nm,0.7s | | | | | | | |
| VNA1 | Neumayer--Stat | 92.27 | 177 | ⇑P | | P | | 19 25 43.6 +2.2 |
| | comp=Z,11nm,0.9s | | | | | | | |
| KAN08 | Anthony NE Sta | 92.38 | 52 | P | | P | | 19 25 44.4 +1.9 |
| SONM | Songino Array | 93.19 | 319 | P | | P | | 19 25 45.6 -0.5 |
| | comp=Z,1.4nm,0.7s,baz=128,slow=4.0,SNR=7.0 | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| KSU1 | Kansas State U | 94.01 | 50 | P | | P | | 19 25 52.7 +2.8 |
| | baz=251 | | | | | | | |
| GTA | Gaotai | 94.83 | 310 | *e*P | | P | | 19 25 55.3 +1.5 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| ZALV | Zalesovo Beam | 107.83 | 322 | PKiKP | | PKiKP | | 19 30 56.4 +0.5 |
| | comp=Z,2.4nm,0.5s,baz=159,slow=0.6,SNR=16 | | | | | | | |
| MKAR | Makanchi Array | 108.86 | 314 | PKiKP | | PKiKP | | 19 30 58.5 +0.3 |
| | comp=Z,1.0nm,0.4s,baz=162,slow=0.8,SNR=27 | | | | | | | |
| MKAR | | | | PKKPbc | | PKKPbc | | 19 42 09.6 +0.8 |
| | comp=Z,1.2nm,0.8s,baz=276,slow=2.6,SNR=7.4 | | | | | | | |
| KURBB | Kurchatov Arra | 111.53 | 318 | PKiKP | | PKiKP | | 19 31 03.4 +0.3 |
| | comp=Z,3.4nm,0.8s,baz=94,slow=1.9,SNR=37 | | | | | | | |
| KURBB | | | | PKKPbc | | PKKPbc | | 19 42 00.6 +0.4 |
| | comp=Z,0.2nm,0.6s,baz=265,slow=4.3,SNR=4.7 | | | | | | | |
| BVAR | Borovoye Array | 116.45 | 321 | PKP | | PKiKP | | 19 31 13.1 +0.7 |
| | comp=Z,8.4nm,0.4s,baz=108,slow=1.6,SNR=72 | | | | | | | |
| BRVK | Borovoye | 116.51 | 321 | | | PKiKP | | 19 31 13.3 +0.8 |
| KKAR | Karatay Array | 117.11 | 310 | | | PKiKP | | 19 31 14.8 +0.8 |
| ARU | Arti | 122.37 | 327 | PKPdf | | PKiKP | | 19 31 24.8 +0.9 |
| ARU | Arti | 122.37 | 327 | PKP | | PKiKP | | 19 31 24.8 +0.9 |
| ABKAR | Akbulak array | 123.59 | 318 | PKPdf | | PKiKP | | 19 31 27.2 +0.7 |
| ARCES | ARCESS Array B | 125.52 | 350 | | | PKiKP | | 19 31 31.1 +1.3 |
| ARCES | ARCESS Array B | 125.52 | 350 | PKP | | PKiKP | | 19 31 30.2 +0.4 |
| | comp=Z,6.1nm,0.5s,baz=29,slow=1.3,SNR=45 | | | | | | | |
| BOSA | Boshof | 129.42 | 207 | PKP | | PKiKP | | 19 31 39.8 +0.8 |
| | comp=Z,3.4nm,0.7s,baz=131,slow=2.2,SNR=5.2 | | | | | | | |
| FINES | FINESS Array B | 132.45 | 345 | PKhKP | | PKPpre | | 19 31 35.2 |
| | comp=Z,0.7nm,0.5s,baz=48,slow=2.8,SNR=6.8 | | | | | | | |
| FINES | | | | PKP | | PKiKP | | 19 31 44.1 +0.2 |
| | comp=Z,3.2nm,0.6s,baz=42,slow=1.3,SNR=9.8 | | | | | | | |
| NB2 | NORSAR Subarra | 135.54 | 354 | PKP | | PKPpre | | 19 31 42.1 |
| | comp=Z,3.1nm,0.7s,baz=42,slow=2.7 | | | | | | | |
| NOA | NORSAR Array B | 135.54 | 354 | PKP | | PKiKP | | 19 31 49.8 -0.5 |
| | comp=Z,1.8nm,0.7s,baz=18,slow=4.2,SNR=9.2 | | | | | | | |
| HFS | Hagfors | 136.12 | 352 | PKhKP | | PKPpre | | 19 31 37.9 |
| | comp=Z,1.3nm,0.6s,baz=40,slow=7.7,SNR=6.7 | | | | | | | |
| KBZ | Khabaz | 136.49 | 317 | PKP | | PKiKP | | 19 31 53.0 +0.4 |
| | comp=Z,2.6nm,0.9s,baz=6.5,slow=3.4,SNR=4.7 | | | | | | | |
| BCA | Borcka | 138.29 | 314 | ⇑P | | PKPdf | | 19 31 51.9 -2.3 |
| AKASG | Malin Array Be | 139.98 | 333 | PKhKP | | PKPpre | | 19 31 49.4 |
| | comp=Z,0.7nm,0.4s,baz=45,slow=4.1,SNR=1.6 | | | | | | | |
| KIEV | Kiev | 140.00 | 333 | ⇑P | | PKPdf | | 19 31 54.6 -2.4 |
| KMBO | Kilima Mbogo | 140.94 | 246 | PKhKP | | PKPpre | | 19 31 53.5 |
| | comp=Z,1.0nm,0.6s,baz=90,slow=6.1,SNR=2.7 | | | | | | | |
| EKA | Eskdalemuir Ar | 141.53 | 5 | PKhKP | | PKPpre | | 19 31 54.4 |
| | comp=Z,0.6nm,0.5s,baz=331,slow=2.6,SNR=6.6 | | | | | | | |
| DIKM | Dikmen | 142.44 | 318 | ⇓P | | PKiKP | | 19 32 08.8 +3.9 |
| VLDR | Vladesti | 144.01 | 329 | ⇓P | | PKiKP | | 19 32 05.0 -2.9 |
| BURAR | Bucovina Array | 144.04 | 333 | PKPdf | | PKiKP | | 19 32 05.6 -2.5 |
| BURAR | Bucovina Array | 144.04 | 333 | ⇑P | | PKiKP | | 19 32 05.6 -2.5 |
| TLCR | | 144.09 | 327 | ⇑P | | PKiKP | | 19 32 04.7 -3.5 |
| SCTR | Scanteiesti | 144.17 | 328 | ⇑P | | PKiKP | | 19 32 05.7 -2.7 |
| KOLS | Kolonicke sedl | 144.17 | 337 | *e*PKP | | PKiKP | | 19 32 05.3 -3.0 |
| KOLS | | | | *e* | | | | 19 40 30.7 |
| GHRR | | 144.19 | 329 | ⇓P | | PKiKP | | 19 32 06.4 -1.9 |
| TESR | Tescani | 144.22 | 331 | ⇑P | | PKiKP | | 19 32 05.3 -3.1 |
| NEGRR | Negrea | 144.32 | 328 | ⇑P | | PKiKP | | 19 32 04.9 -3.7 |
| JURR | Jurilovca | 144.34 | 327 | ⇑P | | PKiKP | | 19 32 06.1 -2.6 |
| SLCR | Slobozia Conac | 144.34 | 329 | ⇑P | | PKiKP | | 19 32 07.0 -1.7 |
| IZVR | Izvoarele | 144.38 | 328 | ⇑P | | PKiKP | | 19 32 06.6 -2.1 |
| COSR | Cosmesti PH | 144.38 | 329 | ⇑P | | PKiKP | | 19 32 06.9 -1.8 |
| TUDR | | 144.39 | 329 | ⇓P | | PKiKP | | 19 32 05.7 -3.1 |
| CFR | Carcaliu | 144.44 | 328 | ⇓P | | PKiKP | | 19 32 07.3 -1.6 |
| PANC | Panciu | 144.45 | 329 | ⇑P | | PKiKP | | 19 32 06.9 -1.9 |
| ONER | Baraj Valea Uz | 144.47 | 331 | ⇑P | | PKiKP | | 19 32 07.4 -1.5 |
| BR131 | Keskin Array S | 144.48 | 316 | PKPdf | | PKiKP | | 19 32 06.8 -2.6 |
| BRTR | Keskin Array B | 144.48 | 316 | PKPdf | | PKiKP | | 19 32 06.8 -2.6 |
| BRTR | Keskin Array B | 144.48 | 316 | PKP | | PKiKP | | 19 32 06.2 -3.2 |
| | comp=Z,16nm,0.7s,baz=137,slow=5.2,SNR=81 | | | | | | | |
| CRVS | Cervenica-Dubn | 144.49 | 338 | *e*PKP | | PKiKP | | 19 32 06.6 -2.3 |
| TPGR | Topolog | 144.52 | 327 | ⇓P | | PKiKP | | 19 32 06.7 -2.4 |
| KIRS | Kirsehir-Merke | 144.59 | 315 | ⇑P | | PKPbc | | 19 32 02.2 -3.4 |
| VRI | Vrincioaia | 144.66 | 330 | ⇑P | | PKiKP | | 19 32 06.8 -2.5 |
| OSTC | Ostas | 144.66 | 344 | *e*PKP | | PKiKP | | 19 32 07.3 -1.9 |
| CHVC | Chvalec | 144.67 | 345 | *e*PKP | | PKiKP | | 19 32 07.3 -2.0 |
| LODK | Lodwar | 144.67 | 251 | PKPdf | | PKiKP | | 19 32 10.6 +0.2 |
| CLL | Collm | 144.69 | 348 | *i* PKPbc | | PKiKP | | 19 32 06.4 -2.8 |
| | comp=Z,49nm,1.0s | | | | | | | |
| PLOR | Plostina | 144.70 | 330 | ⇓P | | PKiKP | | 19 32 07.4 -2.0 |
| BMR | Baia Mare | 144.72 | 335 | ⇑P | | PKiKP | | 19 32 07.1 -2.3 |
| UPC | Upice | 144.76 | 345 | *e*PKP | | PKiKP | | 19 32 07.4 -2.0 |
| ARCR | ARCALIA | 144.82 | 335 | ⇑P | | PKiKP | | 19 32 08.0 -1.7 |
| DPC | Dobruska-Polom | 144.82 | 344 | *e*PKP | | PKiKP | | 19 32 08.0 -1.6 |
| TURR | Turia | 144.85 | 331 | ⇑P | | PKiKP | | 19 32 07.5 -2.3 |
| HARR | Harsova | 144.88 | 327 | ⇓P | | PKiKP | | 19 32 08.5 -1.4 |
| BRG | Berggiesshubel | 144.91 | 347 | *i* PKP | | PKiKP | | 19 32 07.5 -2.2 |
| BRG | | | | | | Amp | | 19 32 08.5 |
| | comp=Z,34nm,0.9s | | | | | | | |
| BRG | Berggiesshubel | 144.91 | 347 | P | | PKiKP | | 19 32 10.9 +1.2 |
| BRG | | | | | | Amp | | 19 32 11.2 |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| COVR | Voineasa-Covas | 144.92 | 330 | ⇓P | | PKiKP | | 19 32 08.0 -2.0 |
| TLBR | Topalu | 144.93 | 327 | ⇓P | | PKiKP | | 19 32 08.3 -1.6 |
| OZUR | | 144.93 | 331 | ⇓P | | PKiKP | | 19 32 06.4 -3.5 |
| KRLC | Kraliky | 144.95 | 343 | *e*PKP | | PKiKP | | 19 32 08.1 -1.8 |
| ANTO | Ankara | 144.97 | 317 | | | PKiKP | | 19 32 09.4 -0.9 |
| ANTO | Ankara | 144.97 | 317 | ⇑P | | PKiKP | | 19 32 08.5 -1.8 |
| LANS | Liptovska Anna | 144.97 | 340 | *e*PKP | | PKiKP | | 19 32 08.7 -1.2 |
| BOSR | Bodos | 145.01 | 331 | ⇑P | | PKiKP | | 19 32 09.0 -1.1 |
| MORC | Moravsky Berou | 145.01 | 342 | *e*PKP | | PKiKP | | 19 32 07.2 -2.8 |
| MORC | Moravsky Berou | 145.01 | 342 | ⇓P | | PKiKP | | 19 32 08.5 -1.5 |
| PVCC | Panska Ves | 145.09 | 346 | *e*PKP | | PKiKP | | 19 32 08.3 -1.8 |
| NEHR | Nehoiu | 145.18 | 330 | ⇑P | | PKiKP | | 19 32 09.1 -1.3 |
| DOPR | Dopca | 145.21 | 331 | ⇓P | | PKiKP | | 19 32 09.8 -0.7 |
| AMRR | Amara | 145.25 | 328 | ⇓P | | PKiKP | | 19 32 09.6 -0.9 |
| HSKC | Hora Svate Kat | 145.26 | 347 | *e*PKP | | PKiKP | | 19 32 08.9 -1.6 |
| ISR | Istrita | 145.28 | 329 | ⇓P | | PKiKP | | 19 32 09.6 -1.1 |
| MLR | Muntele Rosu | 145.30 | 330 | ⇑P | | PKiKP | | 19 32 09.3 -1.6 |
| ICOR | Ion Corvin | 145.35 | 327 | ⇑P | | PKiKP | | 19 32 10.2 -0.6 |
| CJR | Cluj-Napoca | 145.44 | 334 | ⇑P | | PKiKP | | 19 32 09.6 -1.3 |
| MDB | Medias | 145.54 | 332 | ⇑P | | PKiKP | | 19 32 10.2 -1.0 |
| PRA | Prague | 145.55 | 346 | *e*PKP | | PKiKP | | 19 32 09.9 -1.1 |
| LTVH | Ltavrtes, Hu | 145.59 | 336 | ⇑P | | PKiKP | | 19 32 10.8 -0.3 |
| PRU | Pruhonice | 145.60 | 346 | *e*PKP | | PKiKP | | 19 32 09.8 -1.3 |
| LEHL | Lehliu | 145.60 | 328 | ⇑P | | PKiKP | | 19 32 10.5 -0.8 |
| GOPC | GO Pecny, Ondr | 145.61 | 345 | *e*PKP | | PKiKP | | 19 32 09.9 -1.3 |
| VRAC | Vranov | 145.70 | 343 | *e*PKP | | PKiKP | | 19 32 09.2 -2.2 |
| VRAC | Vranov | 145.70 | 343 | ⇑P | | PKiKP | | 19 32 09.9 -1.5 |
| SULR | | 145.74 | 329 | ⇑P | | PKiKP | | 19 32 08.9 -2.7 |
| DRGR | | 145.74 | 335 | ⇑P | | PKiKP | | 19 32 10.3 -1.3 |
| VYHS | Vyhne | 145.75 | 340 | *e*PKP | | PKiKP | | 19 32 10.3 -1.2 |
| VYHS | | | | *e* | | | | 19 40 35.2 |
| VOIR | | 145.77 | 331 | ⇑P | | PKiKP | | 19 32 10.0 -1.7 |
| JAVC | Velka Javorina | 145.79 | 342 | *e*PKP | | PKiKP | | 19 32 10.5 -1.2 |
| BORR | Bors | 145.87 | 336 | ⇑P | | PKiKP | | 19 32 11.8 +0.1 |
| PSZ | Piszkesteto | 145.88 | 338 | ⇑P | | PKiKP | | 19 32 11.2 -0.7 |
| KRUC | Moravsky | 145.98 | 343 | *e*PKP | | PKiKP | | 19 32 09.7 -2.2 |
| TREC | Trest | 146.01 | 344 | *e*PKP | | PKiKP | | 19 32 10.9 -1.1 |
| ARR | Arges | 146.01 | 331 | ⇑P | | PKiKP | | 19 32 10.7 -1.6 |
| MMAI | Mount Meron Ar | 146.05 | 304 | PKPbc | | PKiKP | | 19 32 11.9 -0.8 |
| | comp=Z,32nm,0.6s,baz=64,slow=5.7,SNR=80 | | | | | | | |
| ZVC | Zvikov | 146.19 | 346 | *e*PKP | | PKiKP | | 19 32 11.6 -0.8 |
| MEM | Membach | 146.33 | 356 | *d*PKP | | PKiKP | | 19 32 10.7 -1.9 |
| BTNL | Ternell | 146.34 | 355 | *d*PKP | | PKiKP | | 19 32 11.6 -1.1 |
| DEV | Deva | 146.39 | 333 | ⇓P | | PKiKP | | 19 32 12.3 -0.5 |
| BSTI | Sart Tilman | 146.39 | 356 | *d*PKP | | PKiKP | | 19 32 11.8 -0.9 |
| HUMR | Humele | 146.48 | 330 | ⇑P | | PKiKP | | 19 32 12.3 -0.8 |
| BCLA | Clavier | 146.57 | 356 | *d*PKP | | PKPab | | 19 32 11.1 -1.9 |
| GRF | Grafenberg Arr | 146.57 | 349 | *e*PKP | | PKPab | | 19 32 12.6 -0.6 |
| | baz=16,slow=2.0 | | | | | | | |
| BHOU | Houvegnez | 146.59 | 355 | *d*PKP | | PKPab | | 19 32 12.2 -1.0 |
| SIRR | Siria | 146.59 | 335 | ⇓P | | PKPab | | 19 32 12.6 -0.8 |
| BGES | Gesves | 146.62 | 357 | *d*PKP | | PKPab | | 19 32 11.9 -1.4 |
| BGES | | | | *d*PKiKP | | PKiKP | | 19 32 13.6 +0.3 |
| KHC | Kasperske Hory | 146.62 | 346 | *e*PKP | | PKPab | | 19 32 11.2 -2.2 |
| BMRD | Maredsous | 146.72 | 357 | *d*PKP | | PKPab | | 19 32 12.6 -1.1 |
| CKRC | Cesky Krumlov | 146.74 | 345 | *e*PKP | | PKPab | | 19 32 11.3 -2.6 |
| SURR | Surdic | 146.82 | 334 | ⇓P | | PKPab | | 19 32 13.0 -1.3 |
| GZR | Gura Zlata | 146.83 | 333 | ⇑P | | PKPab | | 19 32 13.0 -1.3 |
| GERES | GERESS Array B | 146.86 | 346 | | | PKPab | | 19 32 13.3 -1.1 |
| GERES | GERESS Array B | 146.86 | 346 | PKP | | PKPbc | | 19 32 08.4 -3.4 |
| | comp=Z,0.2nm,0.3s,baz=37,slow=1.9,SNR=3.5 | | | | | | | |
| GERES | | | | PKPbc | | PKPab | | 19 32 13.0 -1.5 |
| | comp=Z,6.1nm,0.8s,baz=346,slow=4.0,SNR=28 | | | | | | | |
| DOU | Dourbes | 146.93 | 357 | *d*PKP | | PKPab | | 19 32 11.7 -2.8 |
| BZS | Buzias | 147.14 | 334 | ⇑P | | PKiKP | | 19 32 11.7 -2.8 |
| VLAD | Vladila | 147.15 | 330 | ⇓P | | PKPab | | 19 32 14.6 -1.0 |
| CONA | Conrad Observa | 147.15 | 343 | *i* PKP | | PKPab | | 19 32 14.4 -1.2 |
| | comp=Z,11nm,0.6s,SNR=14 | | | | | | | |
| ELND | Elena | 147.18 | 327 | ⇓P | | PKPab | | 19 32 14.7 -1.1 |
| SRE | Strehaia | 147.21 | 332 | ⇓P | | PKPab | | 19 32 15.0 -0.8 |
| RONA | Rosalia, Austr | 147.24 | 342 | *e*PKP | | PKPab | | 19 32 14.5 -1.4 |
| | comp=Z,8.9nm,0.7s,SNR=12 | | | | | | | |
| WLF | Walferdange | 147.26 | 355 | *d*PKP | | PKPab | | 19 32 14.8 -1.1 |
| HERR | Herculane | 147.39 | 333 | ⇑P | | PKPab | | 19 32 15.2 -1.3 |
| MOA | Molln | 147.66 | 345 | *e*PKP | | PKPab | | 19 32 15.3 -2.3 |
| | comp=Z,7.0nm,0.7s,SNR=7.5 | | | | | | | |
| MDVR | Moldovita | 147.77 | 333 | ⇑P | | PKPab | | 19 32 15.2 -3.0 |
| MORH | Mrgy, Hungar | 147.78 | 338 | ⇑P | | PKPab | | 19 32 15.6 -2.5 |
| ARSA | Arzberg | 147.87 | 343 | *e*PKP | | PKPab | | 19 32 15.6 -2.8 |
| | comp=Z,1.7nm,0.5s,SNR=6.1 | | | | | | | |
| BIOA | Bad Ischl, Aus | 147.96 | 345 | *e*PKP | | PKPab | | 19 32 15.7 -3.1 |
| | comp=Z,5.9nm,0.8s,SNR=7.7 | | | | | | | |
| BFO | Black Forest | 148.34 | 352 | | | PKPab | | 19 32 17.4 -3.0 |
| KOGS | Kog | 148.37 | 341 | *i* PKPbc | | PKPab | | 19 32 16.6 -3.8 |
| KULA | Kula-Manisa | 148.39 | 318 | P | | PKPab | | 19 32 17.6 -3.4 |
| LESA | Schwarzleotal | 148.44 | 346 | *i* PKP | | PKPab | | 19 32 16.9 -3.9 |
| | comp=Z,6.8nm,0.6s | | | | | | | |
| ALN | Alexandroupoli | 148.48 | 324 | P | | PKPab | | 19 32 16.3 -4.8 |
| SOKA | Soboth | 148.53 | 343 | *i* PKP | | PKPab | | 19 32 17.0 -4.2 |
| | comp=Z,6.0nm,0.7s,SNR=7.7 | | | | | | | |
| KBA | Koelnbreinsper | 148.60 | 345 | *i* PKP | | PKPab | | 19 32 17.2 -4.5 |
| | comp=Z,8.8nm,0.6s,SNR=7.2 | | | | | | | |
| BOVS | Bovan | 148.68 | 332 | ⇑P | | PKPab | | 19 32 17.4 -4.4 |
| WATA | Walderalm | 148.76 | 348 | *i* PKP | | PKPab | | 19 32 18.0 -4.3 |
| | comp=Z,7.4nm,0.6s,SNR=9.5 | | | | | | | |
| RETA | Reutte | 148.77 | 349 | *e*PKP | | PKPab | | 19 32 18.1 -4.1 |
| | comp=Z,5.4nm,0.5s,SNR=6.7 | | | | | | | |
| WTTA | Wattenberg | 148.81 | 347 | *i* PKP | | PKPab | | 19 32 18.4 -4.1 |
| | comp=Z,31nm,0.7s,SNR=12 | | | | | | | |
| OBKA | Obir | 148.82 | 343 | *i* PKP | | PKPab | | 19 32 17.1 -5.3 |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| MOTA | Moosalm | 148.84 | 348 | *i* PKP | | PKPab | | 19 32 18.2 -4.4 |
| | comp=Z,26nm,1.4s | | | | | | | |
| SQTA | Sankt Quirin | 148.94 | 348 | *e*PKP | | PKPab | | 19 32 18.6 -4.4 |
| | comp=Z,10.0nm,0.6s,SNR=8.4 | | | | | | | |
| MYKA | Terra Mystica | 148.94 | 344 | *i* PKP | | PKiKP | | 19 32 17.4 -0.8 |
| | comp=Z,7.9nm,0.6s,SNR=6.7 | | | | | | | |
| EZN | Ezine | 149.02 | 322 | P | | PKPab | | 19 32 18.4 -5.0 |
| ABTA | Abfaltersbach | 149.11 | 346 | *i* PKP | | PKPab | | 19 32 18.4 -5.2 |
| | comp=Z,21nm,0.7s,SNR=7.4 | | | | | | | |
| DAVA | Damuels | 149.13 | 350 | *i* PKP | | PKPab | | 19 32 19.1 -4.6 |
| | comp=Z,21nm,0.8s,SNR=8.7 | | | | | | | |
| FETA | Feichten | 149.23 | 348 | *e*PKP | | PKPab | | 19 32 19.5 -4.7 |
| | comp=Z,20nm,0.9s,SNR=6.8 | | | | | | | |
| LJU | Ljubljana | 149.25 | 343 | *i* PKPbc | | PKPab | | 19 32 19.1 -5.0 |
| NVR | Nevrokopi | 149.35 | 327 | P | | PKPab | | 19 32 19.9 -4.9 |
| YER | Yerkesik | 149.42 | 316 | P | | PKPab | | 19 32 19.8 -5.4 |
| BOJS | Bojanci | 149.53 | 342 | *i* PKPbc | | PKPab | | 19 32 20.2 -5.1 |
| KOKK | Kokkinochori, | 149.66 | 326 | P | | PKiKP | | 19 32 19.2 -0.6 |
| SRS | Serrai | 149.66 | 327 | P | | PKiKP | | 19 32 19.3 -0.5 |
| VAY | Valandovo | 150.04 | 328 | *i* P | | PKPab | | 19 32 20.9 -6.6 |
| BODT | Bodrum | 150.10 | 317 | P | | PKPab | | 19 32 21.4 -6.6 |
| CHOS | Chios island | 150.10 | 320 | P | | PKiKP | | 19 32 20.1 -0.8 |
| DAT | Datca | 150.11 | 316 | P | | PKiKP | | 19 32 20.4 -0.6 |
| HORT | Hortatis | 150.29 | 327 | P | | PKiKP | | 19 32 20.5 -0.7 |
| PDG | Podgorica | 150.72 | 333 | ⇑P | | PKiKP | | 19 32 22.8 +0.9 |
| PUK | Puka | 150.76 | 332 | | | PKiKP | | 19 32 23.1 +1.0 |
| FNA | Florina | 151.04 | 329 | | | PKiKP | | 19 32 23.5 +0.7 |
| FNA | Florina | 151.04 | 329 | P | | PKiKP | | 19 32 23.2 +0.5 |
| OHR | Ohrid | 151.07 | 330 | *i* P | | PKiKP | | 19 32 24.2 +1.4 |
| APE | Apeiranthos | 151.24 | 319 | ⇑P | | PKiKP | | 19 32 23.0 -0.3 |
| TIR | Tirane | 151.32 | 331 | ⇑P | | PKiKP | | 19 32 24.6 +1.4 |
| NEST | Nestorio | 151.48 | 329 | P | | PKiKP | | 19 32 24.3 +0.6 |
| ATHU | Athens Univers | 151.74 | 322 | P | | PKiKP | | 19 32 23.5 -0.7 |
| AXAR | Agios Charalam | 151.84 | 324 | P | | PKiKP | | 19 32 25.0 +0.6 |
| MAKR | Makrakomi, Fth | 151.95 | 325 | P | | PKiKP | | 19 32 25.2 +0.6 |
| EVR | Evrytania | 152.20 | 326 | P | | PKiKP | | 19 32 27.1 +1.9 |
| ANX | Ano Chora | 152.37 | 325 | P | | PKiKP | | 19 32 27.7 +2.1 |
| EFP | Efpalio | 152.49 | 325 | P | | PKiKP | | 19 32 25.7 0.0 |
| IGT | Igoumenitsa | 152.51 | 328 | P | | PKiKP | | 19 32 26.3 +0.6 |
| PVO | Paravola | 152.56 | 326 | P | | PKiKP | | 19 32 27.1 +1.2 |
| GUR | Goura | 152.59 | 324 | P | | PKiKP | | 19 32 26.9 +0.8 |
| KLV | Kalavryta, Ach | 152.63 | 324 | P | | PKiKP | | 19 32 26.5 +0.4 |
| KEK | Kerkira | 152.63 | 329 | P | | PKiKP | | 19 32 26.4 +0.4 |
| IDI | Anoyia | 152.72 | 316 | P | | PKiKP | | 19 32 26.3 -0.1 |
| LKD2 | Lefkada island | 152.90 | 327 | P | | PKiKP | | 19 32 27.6 +1.0 |
| IMMV | Iera Moni Meta | 153.21 | 318 | P | | PKiKP | | 19 32 28.7 +1.4 |
| ANKY | Antikythira Is | 153.40 | 319 | P | | PKiKP | | 19 32 26.2 -1.5 |
| ESDC | Sonseca Array | 156.80 | 12 | PKP | | PKPdf | | 19 32 23.6 -0.5 |
| | comp=Z,1.3nm,1.0s,baz=354,slow=1.5,SNR=5.2 | | | | | | | |
| KEST | Kesra | 160.26 | 342 | PKPab | | PKPab | | 19 33 12.9 +1.4 |
| | comp=Z,4.2nm,0.6s,baz=285,slow=4.2,SNR=9.0 | | | | | | | |
| LIC | Lamto | 167.22 | 146 | ⇑*i*PKIKP | | PKPdf | | 19 32 36.0 +0.8 |
| | comp=Z,48nm,1.1s | | | | | | | |
| KIC | Kosan Boka | 167.48 | 147 | ⇑*i*PKIKP | | PKPdf | | 19 32 36.2 +0.8 |
| | comp=Z,11nm,0.8s | | | | | | | |
| TIC | Toumodi | 167.57 | 145 | ⇓*i*PKIKP | | PKPdf | | 19 32 36.0 +0.5 |
| | comp=Z,5.0nm,0.2s | | | | | | | |
| DBIC | Dimbokro | 167.68 | 146 | PKP | | PKPdf | | 19 32 34.9 -0.6 |
| | comp=Z,4.2nm,0.7s,baz=188,slow=7.1,SNR=5.2 | | | | | | | |
| TORD | Torodi Ar. Bea | 176.15 | 174 | | | PKPdf | | 19 32 39.6 +0.2 |
| TORD | Torodi Ar. Bea | 176.15 | 174 | PKP | | PKPdf | | 19 32 39.3 -0.1 |
| | comp=Z,4.4nm,0.8s,baz=180,slow=0.4,SNR=19 | | | | | | | |
| TORD | | | | PKPab | | pPKPdf | | 19 34 23.2 -4.8 |
| | comp=Z,1.8nm,0.7s,baz=194,slow=2.4,SNR=7.6 | | | | | | | |
| TORD | | | | PP | | PP | | 19 38 14.3 +0.7 |
| | comp=Z,0.6nm,0.7s,baz=174,slow=2.9,SNR=3.1 | | | | | | | |

*IDC* ***19*** *19:21:50.4±4.6, 17.94S×178.12W, h505km±49km, mb3.2/8, mbtmp4.0/9, Error ellipse: s-maj=23.6km s-min=22.5km az=105.0*

*NEIC* ***19*** *19:21:54.1±1.2, 18.2S±0.1×178.11W±0.08, h539km±9km, mb4.2/20, Error ellipse: s-maj=21.9km s-min=9.6km az=165.0*

**ISC 19 19:21:53.9±0.5, 18.1S±0.1×178.12W±0.09, h550km, n62, σ1 9 02/62, mb3.9/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nons

**ISC 19 19:25:00.0±0.9, 8°29S±0.06×116°80E±0.05, h10km, n14, σ1§16/16, mb3.7/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.46** | **169** | **P** | **Pg** | **19 25 09.9** | **+0.9** |
| TWSI | | | | S | **Sb** | **19 25 15.7** | **-1.3** |
| **PLAI** | **Plampang** | **1.11** | **119** | P | **Pg** | **19 25 22.2** | **+0.8** |
| **SRBI** | **Singaraja** | **1.58** | **277** | P | **Pn** | **19 25 29.4** | **+1.3** |
| **DNP** | **Denpasar** | **1.61** | **256** | P | **Pn** | **19 25 29.4** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.62** | **266** | P | **Pn** | **19 25 42.7** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **2.90** | **118** | P | **Pn** | **19 25 48.0** | **+1.7** |
| **BSSI** | **Bau Bau, Buton** | **4.24** | **60** | P | **Pn** | **19 26 05.6** | **+0.8** |
| **KAPI** | **Kappang** 1.2nm,0.3s,baz=225,slow=4.0,SNR=7.0 | **4.38** | **42** | Pn | **Pn** | **19 26 07.5** | **+0.8** |
| KAPI | 8.2nm,0.3s,baz=221,slow=20,SNR=8.4 | | | Sn | **Sn** | **19 26 57.2** | **-0.6** |
| KAPI | 4.1nm,0.3s,baz=253,slow=19,SNR=1.6 3.4nm,0.2s | | | Lg | Lg | 19 27 15.8 | |
| **EDFI** | **Ende, Flores** | **4.86** | **96** | P | **Pn** | **19 26 14.3** | **+0.9** |
| **PWJI** | **Pagerwojo** | **4.95** | **273** | P | **Pn** | **19 26 16.5** | **+2.0** |
| **WRA** | **Warramunga Arr** 2.4nm,0.8s,baz=300,slow=12,SNR=18 2.4nm,0.8s | **20.56** | **126** | P | **P** | **19 29 38.7** | **-0.4** |
| **ASAR** | **Alice Springs** 1.6nm,0.6s,baz=308,slow=9.2,SNR=15 1.6nm,0.6s | **22.42** | **135** | P | **P** | **19 29 58.6** | **-0.5** |
| **STKA** | **Stephens Creek** 1.7nm,0.5s,baz=317,slow=13,SNR=4.2 1.7nm,0.5s | **32.90** | **139** | P | **P** | **19 31 33.3** | **-1.3** |
| **MKAR** | **Makanchi Array** 0.2nm,0.5s,baz=147,slow=7.3,SNR=4.3 0.2nm,0.5s | **62.85** | **334** | P | **P** | **19 35 25.8** | **-0.3** |

*IDC **19** 19:30:07.2±0.7, 69°68N×145°54W, h0km, mb3.8/14, mbtmp3.8/17, ML3.9/3, Error ellipse: s-maj=19.2km s-min=13.9km az=61.0*
*AEIC **19** 19:30:07.5±1.3, 69°64N±0°04×145°45W±0°08, h21km±7km, ML4.2, ML4.3/118(NEIC), Mwr4.1/33(NEIC), Error ellipse: s-maj=6.2km s-min=3.7km az=162.0*
*NEIC **19** 19:30:07.8±1.3, 69°70N±0°05×145°30W±0°10, h10km±2km, Error ellipse: s-maj=8.3km s-min=5.1km az=21.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$=0.70; $M_{\theta\theta}$=1.40; $M_{\phi\phi}$2.10; $M_{r\theta}$=-0.36; $M_{\theta\phi}$=0.84; $M_{\phi r}$=0.18; Fault plane solution: $M_0$2.07000×$10^{15}$ NP1: $\phi_s$30.10000°, δ76.87000°, λ-16.19000°. NP2:$\phi_s$123.88000°, δ74.25000°, λ-166.34000°. Principal axes: T 2.2938, Plg2.0000°, Azm77.0000°; N -0.5548, Plg69.0000°, Azm172.0000°; P -1.7390, Plg21.0000°, Azm347.0000°;*
*NEIC **19** 19:30:07.8, 69°71N×145°32W, h10km*

**ISC 19 19:30:08.0±1.2, 69°63N±0°04×145°36W±0°03, h7km±8km, n139, σ1§00/145, mb3.9/17, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.33** | **28** | | **Pg** | **19 30 14.7** | **+0.2** |
| C26K | comp=E,28µm,0.6s | | | IAML | | 19 30 24.9 | |
| **D25K** | **Kavik River** | **0.47** | **230** | | **Pg** | **19 30 16.0** | **-1.1** |
| D25K | | | | | **Sg** | **19 30 22.8** | **-0.5** |
| **C27K** | **Jago River** | **0.58** | **89** | Pg | **Pg** | **19 30 18.4** | **-0.8** |
| C27K | | | | | **Sg** | **19 30 27.4** | **+0.7** |
| **C24K** | **Franklin Bluff** | **1.17** | **276** | | **Pn** | **19 30 29.7** | **-1.1** |
| **C24K** | **Franklin Bluff** | **1.17** | **276** | | **Sn** | **19 30 47.5** | **+0.5** |
| C24K | comp=E,6µm,0.6s | | | IAML | | 19 30 51.4 | |
| **D24K** | **Happy Valley** | **1.31** | **250** | Pn | **Pn** | **19 30 32.3** | **-0.5** |
| D24K | | | | | **Sg** | **19 30 52.1** | **+1.9** |
| D24K | comp=N,5µm,0.8s | | | IAML | | 19 31 05.4 | |
| **D27M** | **Malcolm River** | **1.60** | **102** | Pn | **Pn** | **19 30 35.9** | **-0.8** |
| D27M | comp=N,2µm,1.0s | | | IAML | | 19 31 03.5 | |
| **TOLK** | **Toolik Lake Re** | **1.81** | **239** | Pn | **Pn** | **19 30 39.2** | **-0.3** |
| TOLK | comp=N,2µm,0.8s | | | IAML | | 19 31 14.8 | |
| TOLK | comp=E,2µm,0.8s | | | IAML | | 19 31 18.4 | |
| **C23K** | **Itkillik River** | **1.84** | **279** | | **Pn** | **19 30 39.5** | **-0.4** |
| **E24K** | **Your Creek** | **1.93** | **217** | | **Pn** | **19 30 41.7** | **+0.5** |
| E24K | | | | | **Sb** | **19 31 08.3** | **+0.6** |
| E24K | comp=N,2µm,0.8s | | | IAML | | 19 31 14.3 | |
| E24K | comp=E,2µm,0.8s | | | IAML | | 19 31 15.8 | |
| **E27K** | **Coleen River** | **1.99** | **135** | Pn | **Pn** | **19 30 42.1** | **+0.1** |
| E27K | | | | | **Sb** | **19 31 08.6** | **-0.9** |
| E27K | comp=E,2µm,1.4s | | | IAML | | 19 31 16.1 | |
| **F26K** | **Sheenjek River** | **1.99** | **167** | | **Pn** | **19 30 42.5** | **+0.4** |
| **D23K** | **Nanushuk River** | **2.00** | **253** | | **Pn** | **19 30 42.2** | **0.0** |
| **D23K** | **Nanushuk River** comp=E,2µm,1.0s | **2.00** | **253** | IAML | | 19 31 19.4 | |
| D23K | comp=N,2µm,1.0s | | | IAML | | 19 31 25.9 | |
| **F25K** | **Christian River** | **2.05** | **183** | | **Pn** | **19 30 43.3** | **+0.4** |
| F25K | | | | | **Sb** | **19 31 11.9** | **+0.7** |
| **E23K** | **Chandalar** | **2.21** | **226** | Pn | **Pn** | **19 30 45.2** | **+0.1** |
| E23K | comp=N,1µm,1.1s | | | IAML | | 19 31 22.1 | |
| E23K | comp=E,2µm,1.3s | | | IAML | | 19 31 22.3 | |
| **BMAR** | **Burnt Mountain** | **2.23** | **172** | | **Pn** | **19 30 45.6** | **+0.3** |
| **F24K** | **Squaw Lake** | **2.31** | **205** | Pn | **Pn** | **19 30 46.9** | **+0.4** |
| F24K | comp=E,1µm,0.7s | | | IAML | | 19 31 23.8 | |
| **E28M** | **Babbage River** | **2.33** | **113** | Pn | **Pn** | **19 30 46.8** | **+0.1** |
| E28M | | | | | **Sb** | **19 31 19.4** | **+0.2** |
| **D28M** | **Stokes Point** | **2.35** | **94** | | **Pn** | **19 30 47.2** | **+0.2** |
| **D22K** | **Ayikyak River** | **2.71** | **257** | | **Pn** | **19 30 51.4** | **-0.6** |
| **E22K** | **Anaktuvuk Pass** | **2.78** | **240** | | **Pn** | **19 30 52.2** | **-0.7** |
| **F28M** | **Old Crow** | **2.85** | **133** | | **Pn** | **19 30 53.9** | **0.0** |
| F28M | comp=N,926nm,1.0s | | | IAML | | 19 31 40.3 | |
| F28M | comp=E,980nm,1.2s | | | IAML | | 19 31 43.3 | |
| **B22K** | **Teshekpuk Lake** | **2.86** | **288** | Pn | **Pn** | **19 30 53.6** | **-0.4** |
| **E29M** | **Blow River** | **2.96** | **111** | Pn | **Pn** | **19 30 55.2** | **-0.1** |
| E29M | comp=E,856nm,1.1s | | | IAML | | 19 31 48.7 | |
| E29M | comp=N,936nm,1.1s | | | IAML | | 19 31 50.8 | |
| **COLD** | **Coldfoot** | **3.00** | **219** | | **Pn** | **19 30 56.4** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **3.05** | **196** | | **Pn** | **19 30 56.8** | **+0.2** |
| G24K | comp=N,919nm,1.1s | | | IAML | | 19 31 45.9 | |
| G24K | comp=E,996nm,0.8s | | | IAML | | 19 31 53.0 | |
| **FYU** | **Fort Yukon** | **3.08** | **179** | Pn | **Pn** | **19 30 57.5** | **+0.6** |
| FYU | comp=E,791nm,1.3s | | | IAML | | 19 31 56.7 | |
| FYU | comp=N,892nm,1.4s | | | IAML | | 19 31 57.5 | |
| **G27K** | **Doyon Strip** | **3.15** | **152** | Pn | **Pn** | **19 30 58.5** | **+0.4** |
| **B21K** | **Ikpikpuk River** | **3.24** | **274** | Pn | **Pn** | **19 30 59.0** | **-0.2** |
| **E21K** | **Killik River** | **3.32** | **253** | Pn | **Pn** | **19 30 59.4** | **-0.9** |
| E21K | comp=E,659nm,1.3s | | | IAML | | 19 32 04.2 | |
| E21K | comp=N,857nm,1.4s | | | IAML | | 19 32 05.8 | |
| **H25L** | **Birch Creek** | **3.38** | **183** | | **Pn** | **19 31 01.2** | **0.0** |
| **G23K** | **Bananza Creek** | **3.41** | **213** | Pn | **Pn** | **19 31 01.6** | **+0.1** |
| G23K | comp=N,552nm,1.8s | | | IAML | | 19 32 00.8 | |
| G23K | comp=E,788nm,1.3s | | | IAML | | 19 32 01.1 | |
| **A22K** | **Sinclair Lake** | **3.53** | **297** | | **Pn** | **19 31 02.4** | **-0.8** |
| **H27K** | **Steamboat Moun** | **3.71** | **155** | | **Pn** | **19 31 06.0** | **+0.4** |
| **F21K** | **Alatna River** | **3.85** | **235** | Pn | **Pn** | **19 31 07.2** | **-0.4** |
| F21K | comp=E,482nm,0.9s | | | IAML | | 19 32 14.5 | |
| F21K | comp=N,416nm,0.9s | | | IAML | | 19 32 18.0 | |
| **G29M** | **Pine Creek** | **3.86** | **132** | Pn | **Pn** | **19 31 07.7** | **0.0** |
| **H24K** | **Noodor Dome** | **3.93** | **195** | Pn | **Pn** | **19 31 08.7** | **0.0** |
| H24K | comp=E,392nm,1.6s | | | IAML | | 19 32 16.0 | |
| H24K | comp=N,321nm,0.8s | | | IAML | | 19 32 20.1 | |
| **B20K** | **Meade River** | **4.11** | **281** | Pn | **Pn** | **19 31 11.1** | **0.0** |
| **PRP** | **Porcupine Dome** | **4.13** | **181** | | **Pn** | **19 31 11.6** | **0.0** |
| **H23K** | **Yukon River** | **4.14** | **205** | | **Pn** | **19 31 11.8** | **+0.2** |
| H23K | comp=N,384nm,0.8s | | | IAML | | 19 32 28.2 | |
| **A21K** | **Barrow** | **4.14** | **299** | | **Pn** | **19 31 11.6** | **+0.1** |
| **G30M** | **tAoh Zraii Nji** | **4.31** | **124** | Pn | **Pn** | **19 31 14.0** | **0.0** |
| G30M | comp=E,269nm,1.6s | | | IAML | | 19 32 32.4 | |
| G30M | comp=N,239nm,1.2s | | | IAML | | 19 32 35.5 | |
| **H29M** | **Whitestone** | **4.32** | **139** | Pn | **Pn** | **19 31 14.6** | **+0.6** |
| **G21K** | **Allakaket** | **4.37** | **228** | Pn | **Pn** | **19 31 14.3** | **-0.4** |
| **H22K** | **Ishtalitna Cre** | **4.39** | **214** | | **Pn** | **19 31 15.1** | **0.0** |
| **I26K** | **Coal Creek Min** | **4.42** | **168** | Pn | **Pn** | **19 31 15.8** | **+0.3** |
| I26K | comp=E,276nm,1.1s | | | IAML | | 19 32 48.6 | |
| **INK** | **Inuvik** | **4.47** | **102** | Pn | **Pn** | **19 31 15.7** | **-0.3** |
| **INK** | **Inuvik** | **4.47** | **102** | Pn | **Pn** | **19 31 15.9** | **-0.1** |
| INK | comp=E,2.5nm,0.3s,baz=290,slow=9.0,SNR=19 | | | Sn | **Sn** | **19 32 06.1** | **-2.0** |
| INK | comp=E,9.9nm,0.3s,baz=55,slow=16,SNR=5.4 | | | Lg | Lg | 19 32 24.8 | |
| **POKR** | **Poker Plat Res** comp=E,8.0nm,0.3s,baz=246,slow=20,SNR=3.1 comp=E,16nm,0.6s | **4.60** | **191** | | **Pn** | **19 31 18.8** | **+0.9** |
| POKR | comp=E,191nm,1.1s | | | IAML | | 19 32 39.9 | |
| POKR | comp=N,223nm,0.9s | | | IAML | | 19 32 41.5 | |
| **EPYK** | **Eagle Plains** | **4.61** | **131** | | **Pn** | **19 31 17.8** | **-0.2** |
| **F20K** | **Avaraart Lake** | **4.63** | **241** | Pn | **Pn** | **19 31 18.3** | **+0.1** |
| F20K | comp=E,233nm,0.8s | | | IAML | | 19 32 43.7 | |
| F20K | comp=N,233nm,1.2s | | | IAML | | 19 32 45.1 | |
| **I28M** | **Miner Creek** | **4.69** | **151** | Pn | **Pn** | **19 31 20.0** | **+0.8** |
| I28M | comp=N,211nm,1.2s | | | IAML | | 19 32 54.5 | |
| **D19K** | **Kuna River** | **4.71** | **262** | Pn | **Pn** | **19 31 19.4** | **-0.1** |
| D19K | comp=E,199nm,1.3s | | | IAML | | 19 32 56.8 | |
| **I23K** | **Minto, Yukon-K** | **4.76** | **201** | | **Pn** | **19 31 19.9** | **-0.1** |
| **I23K** | **Minto, Yukon-K** comp=E,265nm,1.4s | **4.76** | **201** | IAML | | 19 32 41.8 | |
| **F31M** | **Tsiigehtchic** | **4.80** | **112** | Pn | **Pn** | **19 31 20.4** | **-0.1** |
| F31M | comp=N,167nm,1.7s | | | IAML | | 19 32 53.0 | |
| **MDM** | **Murphy Dome** | **4.82** | **195** | | **Pn** | **19 31 21.0** | **0.0** |
| MDM | comp=E,246nm,1.0s | | | IAML | | 19 32 41.0 | |
| MDM | comp=N,156nm,0.9s | | | IAML | | 19 32 50.1 | |
| **IMAR** | **Indian Mountai** | **4.85** | **225** | | **Pn** | **19 31 20.2** | **-1.1** |
| **E19K** | **Redstone River** | **4.87** | **249** | | **Pn** | **19 31 21.5** | **-0.1** |
| E19K | comp=E,239nm,1.4s | | | IAML | | 19 32 57.3 | |
| E19K | comp=N,266nm,0.8s | | | IAML | | 19 32 57.7 | |
| **H21K** | **Melozitna River** | **4.89** | **219** | Pn | **Pn** | **19 31 22.1** | **+0.2** |
| H21K | comp=E,184nm,1.2s | | | IAML | | 19 32 41.8 | |
| H21K | comp=N,235nm,1.6s | | | IAML | | 19 32 52.8 | |
| **IL31** | | **4.92** | **188** | | **Pn** | **19 31 22.7** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.92** | **188** | | **Pn** | **19 31 22.5** | **+0.3** |
| **ILAR** | **Eielson Array** comp=N,4.4nm,0.3s,baz=3.1,slow=14,SNR=208 | **4.92** | **188** | Pn | **Pn** | **19 31 21.5** | **-0.7** |
| ILAR | comp=N,3.6nm,0.3s,baz=356,slow=17,SNR=4.7 | | | Sn | **Sn** | **19 32 17.8** | **-1.4** |
| ILAR | comp=N,3.6nm,0.3s,baz=8.6,slow=29,SNR=2.9 comp=N,31nm,0.7s | | | Lg | Lg | 19 32 38.2 | |
| **G31M** | **Satah River** | **4.93** | **118** | Pn | **Pn** | **19 31 22.1** | **-0.3** |
| G31M | comp=E,194nm,1.2s | | | IAML | | 19 32 50.4 | |
| **J25K** | **Salcha River,** | **5.04** | **180** | | **Pn** | **19 31 24.4** | **+0.4** |
| J25K | comp=E,192nm,1.0s | | | IAML | | 19 32 51.2 | |
| J25K | comp=N,132nm,1.3s | | | IAML | | 19 33 06.6 | |
| **C19K** | **Lookout Ridge** | **5.06** | **271** | | **Pn** | **19 31 24.1** | **-0.1** |
| C19K | comp=N,188nm,1.5s | | | IAML | | 19 33 12.4 | |
| C19K | comp=E,219nm,1.4s | | | IAML | | 19 33 12.6 | |
| **MLY** | **Manley** | **5.06** | **207** | Pn | **Pn** | **19 31 24.6** | **+0.3** |
| MLY | comp=E,168nm,1.7s | | | IAML | | 19 32 53.3 | |
| **I29M** | **Ogilvie Camp,** | **5.07** | **144** | | **Pn** | **19 31 24.6** | **+0.3** |
| I29M | comp=N,148nm,0.7s | | | IAML | | 19 32 29.0 | |
| I29M | comp=E,214nm,1.1s | | | IAML | | 19 32 54.1 | |
| **CCB** | **Clear Creek Bu** | **5.09** | **192** | Pn | **Pn** | **19 31 24.8** | **+0.2** |
| **J26L** | **Joseph Creek** | **5.20** | **171** | Pn | **Pn** | **19 31 27.0** | **+0.9** |
| **NEA2** | **Nenana** | **5.26** | **198** | | **Pn** | **19 31 27.2** | **+0.3** |
| NEA2 | comp=E,132nm,1.3s | | | IAML | | 19 33 04.6 | |
| **WRH** | **Wood River Hil** | **5.29** | **193** | | **Pn** | **19 31 27.9** | **+0.6** |
| WRH | comp=E,184nm,1.6s | | | IAML | | 19 32 58.6 | |
| WRH | comp=N,106nm,1.1s | | | IAML | | 19 33 12.0 | |
| **F19K** | **Shaleruckik Mo** | **5.40** | **245** | Pn | **Pn** | **19 31 28.1** | **-0.7** |
| F19K | comp=E,181nm,1.9s | | | IAML | | 19 33 12.1 | |
| **A19K** | **Wainwright** | **5.44** | **283** | | **Pn** | **19 31 29.3** | **0.0** |
| **I30M** | **Mount Dempster** | **5.61** | **138** | Pn | **Pn** | **19 31 32.1** | **+0.2** |
| **G19K** | **Purcell Mounta** | **5.64** | **237** | Pn | **Pn** | **19 31 31.2** | **-0.9** |
| **SCRK** | **Sand Creek** | **5.70** | **174** | Pn | **Pn** | **19 31 34.1** | **+1.0** |
| **C18K** | **Utukok River** | **5.74** | **268** | | **Pn** | **19 31 33.0** | **-0.6** |
| **K27K** | **Chicken** | **5.77** | **165** | | **Pn** | **19 31 35.6** | **+1.7** |
| **B18K** | **Kokolik River** | **5.78** | **275** | | **Pn** | **19 31 33.0** | **-1.1** |
| **K24K** | **Donnelly Dome** | **5.85** | **182** | | **Pn** | **19 31 36.0** | **+0.9** |
| **RIDG** | **Independent Ri** | **5.92** | **178** | | **Pn** | **19 31 36.7** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **5.98** | **204** | | **Pn** | **19 31 37.0** | **+0.2** |
| **E18K** | **Tukpahlearik C** | **6.01** | **256** | Pn | **Pn** | **19 31 37.3** | **0.0** |
| **DAWY** | **Dawson** | **6.06** | **154** | | **Pn** | **19 31 39.0** | **+1.0** |
| **MCK** | **McKinley** | **6.09** | **195** | | **Pn** | **19 31 38.7** | **+0.4** |
| **J30M** | **Hart River** | **6.17** | **141** | Pn | **Pn** | **19 31 39.8** | **+0.2** |
| **RND** | **Reindeer** | **6.40** | **194** | Pn | **Pn** | **19 31 43.4** | **+0.8** |
| **J20K** | **Nowinta River** | **6.47** | **216** | Pn | **Pn** | **19 31 43.2** | **-0.2** |
| **C17K** | **DeLong Mountai** | **6.49** | **268** | | **Pn** | **19 31 42.2** | **-1.5** |
| **RDOG** | **Red Dog Mine** | **6.54** | **264** | Pn | **Pn** | **19 31 43.4** | **-1.1** |
| **GCSA** | **Galena City Sc** | **6.63** | **228** | | **Pn** | **19 31 45.3** | **-0.3** |
| **DHY** | **Denali Highway** | **6.63** | **188** | Pn | **Pn** | **19 31 47.8** | **+1.9** |
| **PAX** | **Paxson** | **6.69** | **180** | | **Pn** | **19 31 47.5** | **+0.9** |
| **H18K** | **Honhosa River** | **6.72** | **234** | | **Pn** | **19 31 47.0** | **0.0** |
| **D17K** | **Noatak River** | **6.74** | **262** | | **Pn** | **19 31 45.4** | **-1.8** |
| **BCAR** | **Beaver Creek A** | **6.75** | **166** | Pn | **Pn** | **19 31 48.7** | **+1.3** |
| **F17K** | **Baldwin Pennin** | **6.75** | **249** | | **Pn** | **19 31 46.2** | **-1.2** |
| **J19K** | **Poorman** | **6.95** | **220** | Pn | **Pn** | **19 31 49.7** | **-0.4** |
| **A36M** | **Sachs Harbour** | **7.02** | **61** | Pn | **Pn** | **19 31 49.5** | **-1.6** |
| **G17K** | **Kiwalik Mounta** | **7.15** | **242** | | **Pn** | **19 31 51.2** | **-1.7** |
| **C16K** | **Lisburne Hills** | **7.31** | **269** | Pn | **Pn** | **19 31 53.5** | **-1.5** |
| **M27K** | **Edge Creek, AK** | **7.44** | **167** | | **Pn** | **19 31 58.8** | **+1.8** |
| **C36M** | **Paulatuk** | **7.47** | **82** | Pn | **Pn** | **19 31 55.1** | **-2.1** |
| **M29M** | **Somme Creek** | **7.74** | **155** | Pn | **Pn** | **19 32 01.6** | **+0.6** |
| **YUK3** | **Moose Creek** | **8.14** | **163** | | **Pn** | **19 32 08.3** | **+1.7** |
| **J17K** | **VABM Dome** | **8.29** | **228** | Pn | **Pn** | **19 32 07.7** | **-0.8** |
| **F15K** | **North Star Dit** | **8.31** | **251** | | **Pn** | **19 32 07.2** | **-1.5** |
| **M20K** | **Styx River** | **8.40** | **206** | | **Pn** | **19 32 10.9** | **+0.9** |
| **L19K** | **White Mountain** | **8.41** | **212** | | **Pn** | **19 32 10.1** | **-0.1** |
| **G15K** | **Niukluk** | **8.56** | **246** | | **Pn** | **19 32 11.4** | **-0.8** |
| **K17K** | **Iditarod** | **8.67** | **223** | | **Pn** | **19 32 13.3** | **-0.4** |
| **N31M** | **Braeburn, Yuko** | **9.07** | **150** | | **Pn** | **19 32 21.3** | **+2.1** |
| **ISLE** | **Juniper Island** | **9.15** | **171** | | **Pn** | **19 32 24.4** | **+4.0** |
| **TABL** | **Table Mountain** | **9.39** | **167** | | **Pn** | **19 32 27.5** | **+3.7** |
| **O29M** | **Mount Kennedy** | **9.79** | **160** | | **Pn** | **19 32 32.4** | **+3.3** |
| **WHY** | **Whitehorse** | **10.01** | **149** | Pn | **Pn** | **19 32 33.1** | **+1.0** |
| **J14K** | **Nanvaranak Lak** | **10.04** | **236** | Pn | **Pn** | **19 32 32.2** | **-0.2** |
| **WRGLY** | **Wrigley** | **10.81** | **116** | Pn | **Pn** | **19 32 41.7** | **-1.2** |
| **DLBC** | **Dease Lake** comp=E,0.5nm,0.3s,baz=305,slow=15,SNR=6.6 | **13.03** | **142** | Pn | **Pn** | **19 33 16.1** | **+2.8** |
| **YKA** | **Yellowknife Ar** comp=E,1.0nm,0.3s,baz=315,slow=13,SNR=12 | **14.23** | **105** | Pn | Pn | 19 33 24.5 | -5.1 |
| YKA | comp=E,0.5nm,0.3s,baz=316,slow=23,SNR=3.5 comp=E,7.2nm,0.7s | | | Sn | Sn | 19 35 54.8 | -13 |
| **PETK** | **Petropavlovsk-** comp=E,4.4nm,1.1s,baz=3.6,slow=12,SNR=2.1 comp=E,4.4nm,1.1s | **30.40** | **267** | P | **P** | **19 36 19.6** | **-0.7** |
| **PDAR** | **Pinedale Array** comp=E,1.3nm,0.7s,baz=18,slow=5.1,SNR=11 comp=E,1.3nm,0.7s | **32.56** | **127** | P | **P** | **19 36 40.9** | **+1.2** |
| **NVAR** | **Mina Array Bea** comp=E,1.2nm,0.8s,baz=308,slow=4.4,SNR=5.0 comp=E,1.2nm,0.8s | **34.44** | **141** | P | **P** | **19 36 56.9** | **+0.9** |
| **TXAR** | **Lajitas Array** comp=E,0.2nm,0.5s,baz=352,slow=8.1,SNR=4.8 comp=E,0.2nm,0.5s | **46.78** | **127** | P | **P** | **19 38 39.0** | **+1.2** |
| **NOA** | **NORSAR Array B** comp=E,0.9nm,0.9s,baz=340,slow=5.7,SNR=2.3 comp=E,0.9nm,0.9s | **48.56** | **15** | P | **P** | **19 38 50.7** | **-0.6** |
| **FINES** | **FINESS Array B** comp=E,3.5nm,1.0s,baz=308,slow=9.4,SNR=2.2 comp=E,3.5nm,1.0s | **49.07** | **5** | P | **P** | **19 38 54.3** | **-0.9** |
| **HFS** | **Hagfors** comp=E,1.6nm,0.5s,baz=359,slow=5.9,SNR=15 comp=E,1.6nm,0.5s | **49.67** | **14** | P | **P** | **19 38 59.8** | **+0.2** |
| **SONM** | **Songino Array** comp=E,0.5nm,0.5s,baz=22,slow=5.3,SNR=2.9 comp=E,0.5nm,0.5s | **51.81** | **305** | P | **P** | **19 39 16.8** | **+0.7** |
| **EKA** | **Eskdalemuir Ar** comp=E,0.8nm,0.6s,baz=339,slow=6.1,SNR=6.0 comp=E,0.8nm,0.6s | **52.37** | **26** | P | **P** | **19 39 19.8** | **-0.2** |
| **KSRS** | **Korea Array** comp=E,0.3nm,0.3s,baz=14,slow=8.4,SNR=1.8 comp=E,0.3nm,0.3s | **54.33** | **282** | P | **P** | **19 39 33.0** | **-1.6** |
| **KURBB** | **Kurchatov Arra** comp=E,0.7nm,0.7s,baz=15,slow=7.2,SNR=6.7 comp=E,0.7nm,0.7s | **55.85** | **328** | P | **P** | **19 39 45.3** | **-0.2** |
| **HHC** | **Hu-ho-hao-te** | **56.62** | **298** | *eP* | **P** | **19 39 50.3** | **-1.0** |
| HHC | | | | sP | pP | 19 39 57.4 | +3.7 |
| HHC | comp=Z,17nm,0.6s | | | pmax | pmax | | |
| HHC | comp=Z,90nm,3.6s | | | pmax | pmax | | |
| **MKAR** | **Makanchi Array** comp=Z,0.2nm,0.4s,baz=40,slow=9.5,SNR=5.3 comp=Z,0.2nm,0.4s | **58.77** | **324** | P | **P** | **19 40 06.1** | **-0.1** |
| **AKASG** | **Malin Array Be** comp=Z,0.3nm,0.3s,baz=1.3,slow=6.9,SNR=2.0 comp=Z,0.3nm,0.3s | **59.92** | **4** | P | **P** | **19 40 13.7** | **-0.3** |
| **GTA** | **Gaotai** | **61.42** | **307** | P | **P** | **19 40 25.9** | **+1.3** |
| GTA | comp=Z,2.0nm,0.8s | | | pmax | pmax | | |
| **ESDC** | **Sonseca Array** comp=Z,0.2nm,0.5s,baz=70,slow=11,SNR=2.4 comp=Z,0.2nm,0.5s | **67.39** | **31** | P | **P** | **19 41 04.6** | **+1.0** |
| **PZH** | **PanZhiHua** | **72.92** | **300** | P | **P** | **19 41 38.0** | **+0.3** |
| PZH | comp=Z,10.0nm,0.8s | | | pmax | pmax | | |
| PZH | comp=Z,100nm,4.9s | | | pmax | pmax | | |

*IDC **19** 19:38:03.8±1.2, 8°27S×117°08E, h0km, mb3.8/7, mbtmp3.9/8, ML3.4/1, MS3.1/1, Error ellipse: s-maj=37.9km s-min=17.7km az=58.0*
*DJA **19** 19:38:06.1±0.2, 8°S±3°×117°E±°, h10km, M4.5/17, mb4.5/8, MLv4.5/17*

**ISC 19 19:38:05.3±0.7, 8°32S±0.05×116°90E±0.06, h10km, n25, σ1§16/26, mb3.9/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.41** | **183** | P | **Pg** | **19 38 13.4** | **-0.1** |
| TWSI | | | | S | **Sg** | **19 38 18.5** | **-0.4** |
| **PLAI** | **Plampang** | **1.00** | **120** | P | **Pg** | **19 38 24.6** | **0.0** |
| **SRBI** | **Singaraja** | **1.69** | **278** | P | **Pn** | **19 38 34.7** | **-0.2** |
| **DNP** | **Denpasar** | **1.71** | **258** | P | **Pn** | **19 38 36.7** | **+1.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.72** | **267** | P | **Pn** | **19 38 49.1** | **-0.1** |
| **WBSI** | **Waikabubak, Su** | **2.79** | **118** | P | **Pn** | **19 38 50.9** | **+0.8** |
| **BASI** | **Baing, Sumba** | **4.09** | **118** | P | **Pn** | **19 39 08.9** | **+0.9** |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **59** | P | **Pn** | **19 39 09.5** | **+0.4** |
| **KAPI** | **Kappang** 2.0nm,0.3s,baz=262,slow=20,SNR=1.6 | **4.34** | **41** | Pn | Pn | 19 39 07.9 | -3.5 |
| KAPI | 7.4nm,0.3s,baz=141,slow=15,SNR=12 29nm,0.2s | | | Sn | **Sn** | **19 40 00.3** | **-1.8** |
| **GRJI** | **Gresik** | **4.60** | **287** | P | **Pn** | **19 39 15.7** | **+0.7** |
| **EDFI** | **Ende, Flores** | **4.75** | **95** | P | **Pn** | **19 39 18.4** | **+1.2** |
| **BNSI** | **Bone** 33nm,0.5s,0.4nm | **5.03** | **39** | P | **Pn** | **19 39 23.7** | **+2.7** |
| **PWJI** | **Pagerwojo** 42nm,0.6s,0.5nm | **5.06** | **273** | P | **Pn** | **19 39 21.7** | **+0.4** |
| **MMRI** | **Maumere** 55nm,1.0s,0.3nm | **5.29** | **94** | P | **Pn** | **19 39 25.2** | **+0.7** |
| **UGM** | **Wanagama** 87nm,1.3s | **6.33** | **273** | P | **Pn** | **19 39 39.6** | **+0.8** |
| **BATI** | **Baumata** 37nm,1.4s,0.2nm | **6.93** | **106** | P | **Pn** | **19 39 48.8** | **+1.7** |
| **SOEI** | **Soe** 33nm,0.9s,0.2nm | **7.41** | **102** | P | **Pn** | **19 39 56.1** | **+2.3** |
| **KPJI** | **Karang Pucung** | **7.96** | **277** | P | **Pn** | **19 40 01.4** | **+0.2** |
| **WRA** | **Warramunga Arr** 1.9nm,0.5s,baz=300,slow=12,SNR=51 1.9nm,0.5s | **20.45** | **126** | P | **P** | **19 42 42.2** | **-1.1** |
| **ASAR** | **Alice Springs** 1.6nm,0.8s,baz=309,slow=9.6,SNR=31 1.6nm,0.8s | **22.32** | **135** | P | **P** | **19 43 02.6** | **-0.8** |
| **CMAR** | **Chiang Mai Arr** 1.8nm,0.9s,baz=155,slow=6.7,SNR=8.9 | **31.97** | **326** | P | **P** | **19 44 32.6** | **+0.8** |
| CMAR | comp=Z,34nm,22.0s,baz=180,slow=34 1.8nm,0.9s | | | LR | LR | 19 56 25.7 | |
| **STKA** | **Stephens Creek** 1.3nm,0.5s,baz=301,slow=9.7,SNR=5.0 1.3nm,0.5s | **32.80** | **139** | P | **P** | **19 44 38.1** | **-0.9** |
| **KSRS** | **Korea Array** 0.8nm,0.8s,baz=198,slow=9.9,SNR=4.2 0.8nm,0.8s | **46.69** | **12** | P | **P** | **19 46 33.6** | **-0.7** |
| **SONM** | **Songino Array** 1.2nm,0.8s,baz=164,slow=7.7,SNR=4.4 1.2nm,0.8s | **56.68** | **352** | P | **P** | **19 47 49.6** | **+0.5** |
| **MKAR** | **Makanchi Array** 0.7nm,0.9s,baz=182,slow=8.3,SNR=4.8 0.7nm,0.9s | **62.93** | **334** | P | **P** | **19 48 31.3** | **-0.6** |

*IDC **19** 19:41:00.4±2.0, 8°30S×116°63E, h0km, mb3.2/3, mbtmp3.4/4, ML3.8/1, Error ellipse: s-maj=43.1km s-min=27.2km az=63.0*
*DJA **19** 19:41:04.8±0.2, 8°S±3°×117°E±°, h10km, M4.1/14, mb4.3/7, MLv4.1/14*

**ISC 19 19:41:00.8±0.8, 8°35S±0.07×116°52E±0.05, h10km, n18, σ1§45/17, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.52** | **137** | P | **Pg** | **19 41 12.4** | **+0.4** |
| TWSI | | | | S | **Sg** | **19 41 17.2** | **-0.7** |
| **SRBI** | **Singaraja** | **1.32** | **281** | P | Pg | 19 41 32.3 | +6.1 |
| **PLAI** | **Plampang** | **1.33** | **111** | P | **Pb** | **19 41 24.0** | **-1.8** |
| **DNP** | **Denpasar** | **1.34** | **256** | P | Pg | 19 41 33.7 | +7.2 |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **267** | P | **Pg** | **19 41 47

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.13** | **259** | P | P | 20 00 52.0 | +0.2 |
| | 0.5nm,1.0s,baz=92,slow=8.0,SNR=5.7 | | | | | | |
| | 0.5nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **43.34** | **254** | P | P | 20 00 53.2 | -0.4 |
| | 1.1nm,0.5s,baz=86,slow=9.0,SNR=18 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **92.32** | **320** | P | P | 20 06 01.6 | -0.1 |
| | 0.2nm,0.3s,baz=131,slow=4.1,SNR=3.8 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**IDC 19 19:55:44.1±48.0, 17°25S×177°31W, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=893.9km s-min=155.7km az=79.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **39.86** | **241** | P | P | 20 03 20.5 | +0.9 |
| | 1.2nm,0.5s,baz=96,slow=16,SNR=5.7 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.78** | **259** | P | P | 20 04 07.5 | -0.4 |
| | 0.5nm,0.4s,baz=97,slow=7.2,SNR=24 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.98** | **254** | P | P | 20 04 08.8 | -0.7 |
| | 4.4nm,0.5s,baz=88,slow=8.8,SNR=71 | | | | | | |
| | 4.4nm,0.5s | | | | | | |

**IDC 19 19:58:43.2±50.0, 16°20S×174°82W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=955.2km s-min=181.3km az=78.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **42.46** | **240** | P | P | 20 06 40.2 | 0.0 |
| | 1.2nm,0.7s,baz=84,slow=10,SNR=1.6 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.34** | **258** | P | P | 20 07 26.9 | -0.1 |
| | 0.9nm,0.5s,baz=94,slow=7.1,SNR=21 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **48.57** | **253** | P | P | 20 07 28.5 | -0.3 |
| | 1.7nm,0.4s,baz=87,slow=8.4,SNR=19 | | | | | | |
| | 1.7nm,0.4s | | | | | | |

*ISK **19** 20:03:10.5, 36°64N×26°71E, h134km±2km, ML2.2/16*
*ATH **19** 20:03:12.2, 36°58N×26°58E, h123km±12km, ML2.6/2, Error ellipse: s-maj=13.4km s-min=2.0km az=192.0*
*THE **19** 20:03:13.8, 36°62N×26°62E, h115km±11km, ML2.5/3, Error ellipse: s-maj=11.7km s-min=1.2km az=122.0*
*AFAD **19** 20:03:14.6±0.0, 36°44N×27°05E, h13km±3km, ML2.1*

**ISC 19 20:03:09.5±1.5, 36°60N±0°05×26°73E±0°03, h139km±12km, n40, σ1s47/60, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BODT** | **Bodrum** | **0.66** | **45** | Pg | **Pn** | **20 03 31.1** | **+0.6** |
| **BODT** | **Bodrum** | **0.66** | **45** | P | **Pn** | **20 03 31.4** | **+0.9** |
| **DAT** | **Datca** | **0.69** | **79** | Pg | **Pn** | **20 03 31.7** | **+0.8** |
| **DAT** | **Datca** | **0.69** | **79** | P | **Pn** | **20 03 31.4** | **+0.5** |
| **MLSB** | **Milas** | **1.09** | **50** | Pn | **Pn** | **20 03 35.2** | **+1.1** |
| **KARP** | **Karpathos** | **1.11** | **162** | Pn | **Pn** | **20 03 35.7** | **+1.4** |
| **KARP** | **Karpathos** | **1.11** | **162** | P | **Pn** | **20 03 36.1** | **+1.8** |
| KARP | | | | S | **Sn** | **20 03 51.7** | **-1.4** |
| **KARP** | **Karpathos** | **1.11** | **162** | P | **Pn** | **20 03 35.7** | **+1.4** |
| KARP | | | | AML | AML | 20 03 55.3 | |
| | comp=N,528μm,0.1s | | | | | | |
| KARP | | | | AML | AML | 20 03 55.9 | |
| | comp=E,304μm,0.2s | | | | | | |
| **TURN** | **Turunc** | **1.23** | **81** | Pn | **Pn** | **20 03 36.7** | **+1.3** |
| **TURN** | **Turunc** | **1.23** | **81** | P | **Pn** | **20 03 36.3** | **+0.9** |
| TURN | | | | S | **Sn** | **20 03 53.9** | **-1.1** |
| **YER** | **Yerkesik** | **1.35** | **66** | Pn | **Pn** | **20 03 38.3** | **+1.6** |
| YER | | | | Sn | **Sn** | **20 03 57.9** | **+0.4** |
| **YER** | **Yerkesik** | **1.35** | **66** | P | **Pn** | **20 03 38.3** | **+1.6** |
| YER | | | | S | **Sn** | **20 03 58.1** | **+0.6** |
| **ZKR** | **Zakros** | **1.54** | **196** | Pn | **Pn** | **20 03 40.2** | **+1.5** |
| **ZKR** | **Zakros** | **1.54** | **196** | P | **Pn** | **20 03 40.4** | **+1.7** |
| ZKR | | | | S | **Sn** | **20 04 01.3** | **+0.3** |
| | comp=E,80nm,0.2s | | | | | | |
| **ZKR** | **Zakros** | **1.54** | **196** | P | **Pn** | **20 03 40.1** | **+1.4** |
| ZKR | | | | S | **Sn** | **20 04 00.4** | **-0.6** |
| **DALY** | **Dalyan (Mula)** | **1.56** | **81** | Pn | **Pn** | **20 03 40.3** | **+1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.63** | **34** | Pn | **Pn** | **20 03 40.9** | **+1.1** |
| **SABU** | **Mula-Dalaman** | **1.81** | **82** | P | **Pn** | **20 03 43.1** | **+1.3** |
| SABU | | | | S | **Sn** | **20 04 05.5** | **-1.0** |
| SABU | | | | *i* AML | AML | 20 04 09.0 | |
| | comp=E,35nm,0.5s | | | | | | |
| SABU | | | | *i* AML | AML | 20 04 10.0 | |
| | comp=E,21nm,0.2s | | | | | | |
| **NAZL** | **Nazilli-Aydin** | **1.84** | **42** | Pn | **Pn** | **20 03 43.1** | **+0.9** |
| **FETY** | **Fethiye** | **1.89** | **88** | Pn | **Pn** | **20 03 44.1** | **+1.4** |
| **FETY** | **Fethiye** | **1.89** | **88** | P | **Pn** | **20 03 43.8** | **+1.1** |
| FETY | | | | S | **Sn** | **20 04 08.1** | **-0.1** |
| **DNZT** | **Denizli-Tavas-** | **1.96** | **69** | P | **Pn** | **20 03 44.5** | **+1.0** |
| DNZT | | | | S | **Sn** | **20 04 09.1** | **-0.5** |
| **IDI** | **Anoyia** | **1.99** | **229** | P | **Pn** | **20 03 44.5** | **+0.6** |
| IDI | | | | S | **Sn** | **20 04 08.6** | **-1.6** |
| | comp=E,48nm,0.2s | | | | | | |
| **IDI** | **Anoyia** | **1.99** | **229** | P | **Pn** | **20 03 44.4** | **+0.5** |
| IDI | | | | S | **Sn** | **20 04 08.6** | **-1.6** |
| IDI | | | | AML | AML | 20 04 09.4 | |
| | comp=N,114μm,0.2s | | | | | | |
| IDI | | | | AML | AML | 20 04 09.7 | |
| | comp=E,88μm,0.1s | | | | | | |
| **IZZE** | **Mula-Seydike** | **2.02** | **94** | P | **Pn** | **20 03 45.2** | **+1.0** |
| IZZE | | | | S | **Sn** | **20 04 08.3** | **-2.4** |
| IZZE | | | | *i* AML | AML | 20 04 10.0 | |
| | comp=E,36nm,0.3s | | | | | | |
| IZZE | | | | *i* AML | AML | 20 04 22.0 | |
| | comp=E,17nm,0.4s | | | | | | |
| **CAME** | **Cameli-Denizli** | **2.09** | **80** | Pn | **Pn** | **20 03 46.2** | **+1.0** |
| **APMY** | **Acipayam-Deniz** | **2.23** | **66** | Pn | **Pn** | **20 03 48.4** | **+1.5** |
| **KNIK** | **Mula-Seydike** | **2.30** | **83** | P | **Pn** | **20 03 49.0** | **+1.3** |
| KNIK | | | | S | **Sn** | **20 04 13.5** | **-3.5** |
| KNIK | | | | *i* AML | AML | 20 04 18.0 | |
| | comp=E,13nm,0.7s | | | | | | |
| KNIK | | | | *i* AML | AML | 20 04 19.0 | |
| | comp=E,12nm,0.4s | | | | | | |
| **AKAS** | **Kas** | **2.35** | **98** | Pn | **Pn** | **20 03 49.9** | **+1.6** |
| **AKAS** | **Kas** | **2.35** | **98** | P | **Pn** | **20 03 49.3** | **+0.9** |
| AKAS | | | | S | **Sn** | **20 04 14.6** | **-3.6** |
| AKAS | | | | *i* AML | AML | 20 04 19.0 | |
| | comp=E,32nm,0.8s | | | | | | |
| AKAS | | | | *i* AML | AML | 20 04 22.0 | |
| | comp=E,15nm,0.2s | | | | | | |
| **GOLH** | **Golhisar** | **2.36** | **74** | P | **Pn** | **20 03 49.8** | **+1.4** |
| GOLH | | | | S | **Sn** | **20 04 16.8** | **-1.5** |
| GOLH | | | | *i* AML | AML | 20 04 58.0 | |
| | comp=E,14nm,2.5s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **2.50** | **244** | P | **Pn** | **20 03 51.2** | **+1.1** |
| IMMV | | | | S | **Sn** | **20 04 20.3** | **-1.1** |
| | comp=E,45nm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **2.50** | **244** | P | **Pn** | **20 03 51.3** | **+1.2** |
| IMMV | | | | S | **Sn** | **20 04 19.1** | **-2.2** |
| **ELL** | **Elmali** | **2.56** | **86** | Pn | **Pn** | **20 03 52.9** | **+1.9** |
| **ANKY** | **Antikythira Is** | **2.87** | **256** | P | **Pn** | **20 03 56.3** | **+1.6** |
| **ANKY** | **Antikythira Is** | **2.87** | **256** | P | **Pn** | **20 03 56.1** | **+1.3** |
| **AKUM** | **Antalya-Kumluc** | **2.92** | **94** | P | **Pn** | **20 03 55.9** | **+0.5** |
| AKUM | | | | S | **Sn** | **20 04 29.4** | **-1.6** |
| AKUM | | | | *i* AML | AML | 20 04 48.0 | |
| | comp=E,8.3nm,1.1s | | | | | | |
| AKUM | | | | *i* AML | AML | 20 05 03.0 | |
| | comp=E,10nm,1.1s | | | | | | |
| **KORT** | **Korkueli** | **2.93** | **81** | Pn | **Pn** | **20 03 57.2** | **+1.5** |
| **KTHA** | **Kythira Island** | **2.98** | **264** | P | **Pn** | **20 03 57.6** | **+1.4** |
| KTHA | | | | S | **Sn** | **20 04 30.8** | **-1.3** |
| **VLI** | **Veliai** | **3.05** | **273** | P | **Pn** | **20 03 58.4** | **+1.3** |
| VLI | | | | S | **Sn** | **20 04 31.9** | **-1.9** |

*IDC **19** 20:06:40.2±2.5, 8°61S×116°43E, h0km, mb3.6/4, mbtmp3.7/4, Error ellipse: s-maj=191.7km s-min=26.3km az=51.0*
*DJA **19** 20:06:43.4±0.2, 8°S±3°×11°7E±°, h10km, M4.2/12, mb4.5/4, MLv4.0/12*

**ISC 19 20:06:42.9±1.0, 8°28S±0°07×116°79E±0°05, h10km, n16, σ0s91/17, mb3.7/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.47** | **169** | P | **Pg** | **20 06 52.5** | **+0.5** |
| TWSI | | | | S | **Sg** | **20 06 58.2** | **0.0** |
| **PLAI** | **Plampang** | **1.12** | **119** | P | **Pn** | **20 07 04.8** | **+0.2** |
| **SRBI** | **Singaraja** | **1.57** | **277** | P | **Pn** | **20 07 11.9** | **+1.1** |
| **DNP** | **Denpasar** | **1.61** | **256** | P | **Pn** | **20 07 11.7** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.62** | **266** | P | **Pn** | **20 07 24.9** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **2.91** | **118** | P | **Pn** | **20 07 30.6** | **+1.3** |
| **BSSI** | **Bau Bau, Buton** | **4.24** | **60** | P | **Pn** | **20 07 47.6** | **0.0** |
| **EDFI** | **Ende, Flores** | **4.87** | **96** | P | **Pn** | **20 07 57.8** | **+1.4** |
| **PWJI** | **Pagerwojo** | **4.94** | **273** | P | **Pn** | **20 07 58.8** | **+1.6** |
| **BNSI** | **Bone** | **5.07** | **41** | P | **Pn** | **20 08 00.0** | **+1.0** |
| | 18nm,0.8s,0.1nm | | | | | | |
| **UGM** | **Wanagama** | **6.21** | **273** | P | **Pn** | **20 08 15.0** | **+0.2** |
| | 156nm,1.6s | | | | | | |
| **BATI** | **Baumata** | **7.05** | **106** | P | **Pn** | **20 08 26.8** | **+0.5** |
| **WRA** | **Warramunga Arr** | **20.57** | **126** | P | **P** | **20 11 21.5** | **-0.5** |
| | 2.4nm,0.9s,baz=300,slow=12,SNR=29 | | | | | | |
| | 2.4nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.43** | **135** | P | **P** | **20 11 41.6** | **-0.5** |
| | 1.5nm,0.6s,baz=308,slow=9.3,SNR=25 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **32.91** | **139** | P | **P** | **20 13 16.1** | **-1.4** |
| | 1.8nm,0.8s,baz=312,slow=8.4,SNR=5.9 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | P | **P** | **20 17 08.9** | **0.0** |
| | 0.2nm,0.5s,baz=147,slow=8.3,SNR=3.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

**IDC 19 20:09:11.1±4.3, 15°74S×175°90W, h0km, mb4.0/4, mbtmp4.0/4, Error ellipse: s-maj=116.6km s-min=45.2km az=24.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **41.78** | **240** | P | P | 20 17 01.8 | -0.8 |
| | 1.1nm,0.5s,baz=98,slow=7.1,SNR=4.5 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.42** | **257** | P | P | 20 17 48.3 | +0.5 |
| | 0.9nm,0.6s,baz=92,slow=7.2,SNR=8.6 | | | | | | |
| WRA | | | | PcP | PcP | 20 19 17.6 | -0.9 |
| | 0.4nm,0.8s,baz=97,slow=3.4,SNR=1.5 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **47.71** | **252** | P | P | 20 17 50.0 | -0.1 |
| | 2.6nm,0.6s,baz=89,slow=8.5,SNR=26 | | | | | | |
| | 2.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.30** | **180** | P | P | 20 20 50.5 | +0.3 |
| | 0.5nm,0.5s,baz=217,slow=2.0,SNR=5.8 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

*NEIC **19** 20:10:27.1±1.1, 69°60N±0°05×144°4W±0°1, h10km±2km, Error ellipse: s-maj=8.9km s-min=6.0km az=359.0*

**AEIC 19 20:10:27.1±1.1, 69°54N±0°05×144°3W±0°1, h5km±6km, ML3.4, ML3.6/110(NEIC), Error ellipse: s-maj=7.8km s-min=5.3km az=182.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **67** | Pg | Pg | 20 10 31.6 | +0.1 |
| C27K | | | | | Sg | 20 10 35.0 | +0.6 |
| **C26K** | **Camden Bay** | **0.43** | **331** | | Pg | 20 10 36.0 | +0.6 |
| **D25K** | **Kavik River** | **0.76** | **254** | | Pg | 20 10 40.0 | -1.7 |
| D25K | | | | | Sg | 20 10 51.1 | -0.5 |
| **D27M** | **Malcolm River** | **1.22** | **103** | | Pg | 20 10 48.4 | -2.1 |
| D27M | | | | IAML | | 20 11 09.4 | |
| | comp=E,988nm,0.5s | | | | | | |
| D27M | | | | IAML | | 20 11 09.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.55** | **279** | Pn | Pn | 20 10 54.9 | -0.4 |
| C24K | | | | IAML | | 20 11 21.7 | |
| | comp=E,857nm,0.9s | | | | | | |
| **D24K** | **Happy Valley** | **1.65** | **258** | | Pn | 20 10 56.2 | -0.4 |
| D24K | | | | | Sg | 20 11 19.8 | -0.2 |
| **E27K** | **Coleen River** | **1.68** | **143** | | Pn | 20 10 56.7 | -0.4 |
| E27K | | | | | Sn | 20 11 19.1 | +0.1 |
| E27K | | | | IAML | | 20 11 23.6 | |
| | comp=E,706nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.86** | **178** | | Pn | 20 10 59.6 | 0.0 |
| F26K | | | | IAML | | 20 11 26.8 | |
| | comp=N,563nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.95** | **117** | | Pn | 20 11 00.8 | 0.0 |
| E28M | | | | | Sb | 20 11 27.3 | -0.4 |
| E28M | | | | IAML | | 20 11 34.2 | |
| | comp=N,441nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **94** | | Pn | 20 11 01.0 | -0.1 |
| D28M | | | | IAML | | 20 11 37.8 | |
| | comp=E,616nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **195** | | Pn | 20 11 02.1 | +0.3 |
| F25K | | | | Sn | Sn | 20 11 27.6 | +0.2 |
| F25K | | | | IAML | | 20 11 31.8 | |
| | comp=E,576nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.10** | **247** | Pn | Pn | 20 11 02.4 | -0.5 |
| TOLK | | | | IAML | | 20 11 40.0 | |
| | comp=E,428nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 20 11 41.0 | |
| | comp=N,316nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **228** | | Pn | 20 11 03.2 | +0.1 |
| **BMAR** | **Burnt Mountain** | **2.12** | **183** | | Pn | 20 11 03.3 | +0.1 |
| **C23K** | **Itkillik River** | **2.22** | **281** | | Pn | 20 11 04.3 | -0.2 |
| **D23K** | **Nanushuk River** | **2.34** | **259** | Pn | Pn | 20 11 06.5 | +0.3 |
| D23K | | | | IAML | | 20 11 55.3 | |
| | comp=E,269nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **215** | Pn | Pn | 20 11 07.1 | -0.2 |
| F24K | | | | IAML | | 20 11 45.3 | |
| | comp=E,305nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **235** | Pn | Pn | 20 11 07.4 | -0.2 |
| **F28M** | **Old Crow** | **2.53** | **138** | | Pn | 20 11 08.7 | -0.1 |
| F28M | | | | IAML | | 20 11 51.3 | |
| | comp=N,267nm,0.5s | | | | | | |
| F28M | | | | IAML | | 20 11 53.0 | |
| | comp=E,357nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.58** | **114** | | Pn | 20 11 09.6 | +0.1 |
| **G27K** | **Doyon Strip** | **2.92** | **159** | | Pn | 20 11 13.9 | -0.3 |
| **FYU** | **Fort Yukon** | **3.01** | **187** | Pn | Pn | 20 11 15.7 | +0.4 |
| **D22K** | **Ayikyak River** | **3.06** | **261** | | Pn | 20 11 16.0 | -0.1 |
| D22K | | | | IAML | | 20 12 15.5 | |
| | comp=E,191nm,0.9s | | | | | | |
| D22K | | | | IAML | | 20 12 17.2 | |
| | comp=N,217nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **246** | Pn | Pn | 20 11 15.6 | -0.7 |
| **G24K** | **Hadweenzic Riv** | **3.09** | **204** | | Pn | 20 11 15.8 | -0.7 |
| G24K | | | | IAML | | 20 12 06.5 | |
| | comp=E,223nm,0.7s | | | | | | |
| G24K | | | | IAML | | 20 12 11.4 | |
| | comp=N,219nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.19** | **226** | | Pn | 20 11 17.7 | -0.1 |
| **B22K** | **Teshekpuk Lake** | **3.24** | **289** | Pn | Pn | 20 11 18.6 | +0.1 |
| **G29M** | **Pine Creek** | **3.53** | **135** | Pn | Pn | 20 11 22.6 | 0.0 |
| G29M | | | | IAML | | 20 12 24.7 | |
| | comp=N,155nm,0.8s | | | | | | |
| **G23K** | **Bananza Creek** | **3.56** | **220** | Pn | Pn | 20 11 22.1 | -0.8 |
| G23K | | | | IAML | | 20 12 27.1 | |
| | comp=E,122nm,0.9s | | | | | | |
| G23K | | | | IAML | | 20 12 27.2 | |
| | comp=N,111nm,1.1s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.61** | **276** | Pn | Pn | 20 11 23.9 | +0.3 |
| B21K | | | | IAML | | 20 12 42.3 | |
| | comp=E,129nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.96** | **202** | Pn | Pn | 20 11 27.8 | -0.7 |
| H24K | | | | IAML | | 20 12 36.6 | |
| | comp=E,69nm,1.1s | | | | | | |
| H24K | | | | IAML | | 20 12 37.8 | |
| | comp=N,66nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **4.02** | **143** | Pn | Pn | 20 11 29.5 | +0.3 |
| H29M | | | | IAML | | 20 12 42.6 | |
| | comp=N,100nm,1.4s | | | | | | |
| H29M | | | | IAML | | 20 12 45.9 | |
| | comp=E,100nm,1.0s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.07** | **187** | | Pn | 20 11 30.1 | 0.0 |
| PRP | | | | IAML | | 20 12 21.5 | |
| | comp=N,70nm,0.6s | | | | | | |
| PRP | | | | IAML | | 20 12 37.7 | |
| | comp=E,66nm,1.3s | | | | | | |
| **F21K** | **Alatna River** | **4.12** | **240** | Pn | Pn | 20 11 30.2 | -0.4 |
| F21K | | | | IAML | | 20 12 50.4 | |
| | comp=N,53nm,0.7s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.28** | **174** | Pn | Pn | 20 11 32.9 | +0.1 |
| **EPYK** | **Eagle Plains** | **4.28** | **134** | | Pn | 20 11 33.1 | +0.3 |
| **F31M** | **Tsiigehtchic** | **4.42** | **113** | | Pn | 20 11 35.1 | +0.4 |
| F31M | | | | IAML | | 20 12 56.6 | |
| | comp=N,53nm,0.7s | | | | | | |
| F31M | | | | IAML | | 20 12 58.2 | |
| | comp=E,45nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **4.44** | **156** | Pn | Pn | 20 11 35.3 | +0.2 |
| I28M | | | | IAML | | 20 12 58.0 | |
| | comp=E,61nm,1.3s | | | | | | |
| I28M | | | | IAML | | 20 13 01.1 | |
| | comp=N,45nm,0.6s | | | | | | |
| **B20K** | **Meade River** | **4.49** | **282** | | Pn | 20 11 35.9 | +0.3 |
| **G31M** | **Satah River** | **4.57** | **120** | Pn | Pn | 20 11 36.7 | 0.0 |
| **G21K** | **Allakaket** | **4.60** | **233** | Pn | Pn | 20 11 35.5 | -1.7 |
| G21K | | | | IAML | | 20 12 59.8 | |
| | comp=N,65nm,0.8s | | | | | | |
| G21K | | | | IAML | | 20 13 03.7 | |
| | comp=E,69nm,0.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.61** | **197** | | Pn | 20 11 37.4 | +0.1 |
| POKR | | | | IAML | | 20 13 02.7 | |
| | comp=N,48nm,0.9s | | | | | | |
| POKR | | | | IAML | | 20 13 05.6 | |
| | comp=E,67nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.79** | **148** | Pn | Pn | 20 11 40.0 | +0.2 |
| I29M | | | | IAML | | 20 13 07.0 | |
| | comp=E,43nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.83** | **206** | Pn | Pn | 20 11 39.6 | -0.6 |
| I23K | | | | IAML | | 20 13 02.0 | |
| | comp=E,43nm,0.8s | | | | | | |
| I23K | | | | IAML | | 20 13 08.8 | |
| | comp=N,41nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.85** | **200** | | Pn | 20 11 40.0 | -0.7 |
| MDM | | | | IAML | | 20 13 00.2 | |
| | comp=E,36nm,0.9s | | | | | | |
| MDM | | | | IAML | | 20 13 02.5 | |
| | comp=N,40nm,0.9s | | | | | | |
| **IL31** | | **4.89** | **193** | | Pn | 20 11 41.0 | -0.2 |
| **ILAR** | **Eielson Array** | **4.89** | **193** | | Pn | 20 11 42.2 | +0.9 |
| **F20K** | **Avaraart Lake** | **4.92** | **245** | Pn | Pn | 20 11 41.4 | -0.2 |
| F20K | | | | IAML | | 20 13 18.9 | |
| | comp=N,37nm,0.8s | | | | | | |
| **J25K** | **Salcha River,** | **4.97** | **185** | | Pn | 20 11 42.5 | +0.2 |
| J25K | | | | IAML | | 20 13 02.2 | |
| | comp=E,40nm,0.9s | | | | | | |
| J25K | | | | IAML | | 20 13 06.0 | |
| | comp=N,30nm,0.7s | | | | | | |
| **IMAR** | **Indian Mountai** | **5.06** | **230** | | Pn | 20 11 42.8 | -0.7 |
| **J26L** | **Joseph Creek** | **5.07** | **176** | Pn | Pn | 20 11 44.0 | +0.2 |
| J26L | | | | IAML | | 20 12 45.9 | |
| | comp=E,46nm,0.5s | | | | | | |
| J26L | | | | IAML | | 20 12 47.6 | |
| | comp=N,40nm,0.5s | | | | | | |
| **D19K** | **Kuna River** | **5.07** | **265** | Pn | Pn | 20 11 43.7 | 0.0 |
| **H21K** | **Melozitna Rive** | **5.07** | **224** | Pn | Pn | 20 11 43.9 | +0.1 |
| H21K | | | | IAML | | 20 13 13.4 | |
| | comp=E,38nm,1.2s | | | | | | |
| H21K | | | | IAML | | 20 13 19.8 | |
| | comp=N,35nm,1.0s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10** | **197** | Pn | Pn | 20 11 43.9 | -0.2 |
| CCB | | | | IAML | | 20 12 42.9 | |
| | comp=E,26nm,0.5s | | | | | | |
| **MLY** | **Manley** | **5.17** | **212** | Pn | Pn | 20 11 44.8 | -0.3 |
| **E19K** | **Redstone River** | **5.19** | **252** | Pn | Pn | 20 11 44.5 | -0.8 |
| E19K | | | | IAML | | 20 12 46.9 | |
| | comp=N,41nm,0.5s | | | | | | |
| E19K | | | | IAML | | 20 13 23.9 | |
| | comp=E,34nm,1.2s | | | | | | |
| **HDA** | **Harding Lake** | **5.26** | **193** | Pn | Pn | 20 11 46.5 | +0.2 |
| HDA | | | | IAML | | 20 13 20.4 | |
| | comp=N,43nm,0.7s | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **198** | Pn | Pn | 20 11 46.5 | -0.3 |
| WRH | | | | IAML | | 20 13 22.7 | |
| | comp=E,32nm,1.0s | | | | | | |
| WRH | | | | IAML | | 20 13 23.6 | |
| | comp=N,31nm,1.3s | | | | | | |
| **I30M** | **Mount Dempster** | **5.30** | **141** | Pn | Pn | 20 11 47.1 | +0.1 |
| I30M | | | | IAML | | 20 12 48.9 | |
| | comp=N,36nm,0.5s | | | | | | |
| **NEA2** | **Nenana** | **5.31** | **203** | Pn | Pn | 20 11 46.0 | -0.9 |
| **C19K** | **Lookout Ridge** | **5.43** | **273** | Pn | Pn | 20 11 48.8 | +0.2 |
| **SCRK** | **Sand Creek** | **5.59** | **179** | Pn | Pn | 20 11 51.4 | +0.4 |
| **K27K** | **Chicken** | **5.61** | **170** | Pn | Pn | 20 11 51.7 | +0.7 |
| **F19K** | **Shalerockik Mo** | **5.71** | **248** | Pn | Pn | 20 11 52.2 | -0.1 |
| **DAWY** | **Dawson** | **5.83** | **158** | Pn | Pn | 20 11 54.2 | +0.1 |
| **RIDG** | **Independent Ri** | **5.83** | **182** | Pn | Pn | 20 11 54.9 | +0.7 |
| **J30M** | **Hart River** | **5.88** | **144** | Pn | Pn | 20 11 54.9 | 0.0 |
| **G19K** | **Purcell Mounta** | **5.91** | **241** | Pn | Pn | 20 11 53.7 | -1.5 |
| **BPAW** | **Bear Paw Mtn.** | **6.06** | **209** | Pn | Pn | 20 11 57.0 | -0.4 |
| **C18K** | **Utukok River** | **6.11** | **270** | Pn | Pn | 20 11 57.6 | -0.3 |
| **H19K** | **Roundabout Mou** | **6.15** | **235** | Pn | Pn | 20 11 58.0 | -0.4 |
| **K29M** | **Barlow Dome** | **6.32** | **152** | Pn | Pn | 20 12 01.6 | +0.7 |
| **E18K** | **Tukpahlearik C** | **6.36** | **258** | Pn | Pn | 20 12 01.0 | -0.2 |
| **L26K** | **Log Cabin Wild** | **6.56** | **176** | Pn | Pn | 20 12 04.7 | +0.7 |
| **G18K** | **Tagagawik** | **6.56** | **243** | Pn | Pn | 20 12 03.4 | -0.7 |
| **BCAR** | **Beaver Creek A** | **6.58** | **170** | Pn | Pn | 20 12 05.2 | +0.7 |
| **L27K** | **Beaver Creek,** | **6.58** | **170** | Pn | Pn | 20 12 04.6 | +0.1 |
| **DHY** | **Denali Highway** | **6.61** | **192** | Pn | Pn | 20 12 06.6 | +1.6 |
| **J20K** | **Nowinta River** | **6.63** | **220** | Pn | Pn | 20 12 04.4 | -0.6 |
| **A36M** | **Sachs Harbour** | **6.74** | **60** | Pn | Pn | 20 12 04.4 | -2.1 |
| **RDOG** | **Red Dog Mine** | **6.90** | **266** | Pn | Pn | 20 12 07.7 | -1.1 |
| **H18K** | **Henhouse River** | **6.98** | **238** | Pn | Pn | 20 12 08.9 | -1.0 |
| **F17K** | **Baldwin Pennin** | **7.07** | **252** | Pn | Pn | 20 12 10.2 | -0.9 |
| **M27K** | **Edge Creek, AK** | **7.28** | **171** | Pn | Pn | 20 12 15.1 | +1.0 |
| **K20K** | **Telida** | **7.33** | **217** | Pn | Pn | 20 12 14.1 | -0.6 |
| **M29M** | **Somme Creek** | **7.51** | **159** | Pn | Pn | 20 12 17.8 | +0.6 |
| **H17K** | **Granite Mounta** | **7.60** | **240** | Pn | Pn | 20 12 18.2 | -0.1 |
| **C16K** | **Lisburne Hills** | **7.68** | **270** | Pn | Pn | 20 12 18.5 | -0.9 |
| **G16K** | **Koyuk River** | **8.06** | **248** | Pn | Pn | 20 12 23.1 | -1.6 |
| **M20K** | **Styx River** | **8.49** | **209** | Pn | Pn | 20 12 31.0 | +0.3 |
| **J17K** | **VABM Dome** | **8.52** | **231** | Pn | Pn | 20 12 29.8 | -1.2 |
| **L19K** | **White Mountain** | **8.54** | **215** | Pn | Pn | 20 12 30.5 | -0.8 |
| **F15K** | **North Star Dit** | **8.63** | **253** | Pn | Pn | 20 12 31.4 | -1.1 |
| **N30M** | **Aishikik Lake** | **8.64** | **156** | Pn | Pn | 20 12 33.7 | +1.0 |
| **CTGM** | **Chitina Glacie** | **8.70** | **170** | Pn | Pn | 20 12 35.6 | +2.0 |
| **L18K** | **Granite Mounta** | **8.91** | **220** | Pn | Pn | 20 12 35.5 | -0.8 |

*IDC **19** 20:12:25.2±3.5, 8°44S×116°63E, h0km, mb3.4/3, mbtmp3.5/3, Error ellipse: s-maj=258.8km s-min=28.2km az=50.0*
*DJA **19** 20:12:27.7±0.3, 8°S±4°×11°7E±°, h10km, M4.1/8, mb4.8/1, MLv3.8/8*

**ISC 19 20:12:26.6±0.8, 8°5S±0°1×116°66E±0°05, h10km, n12, σ1s97/15, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.33** | **138** | P | **Pn** | **20 12 36.7** | **-0.8** |
| TWSI | | | | S | **Sb** | **20 12 42.5** | **+2.6** |
| **PLAI** | **Plampang** | **1.15** | **107** | P | **Pg** | **20 12 49.4** | **+0.6** |
| PLAI | | | | S | **Sn** |

1.8nm,0.5s,baz=312,slow=0.3,SNR=22
1.8nm,0.5s
**ILAR Eielson Array 85.11 13** P P 20 31 05.5 -0.9
0.2nm,0.4s,baz=227,slow=5.3,SNR=6.1
0.2nm,0.4s

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*IDC* ***19*** *20:19:33.4±1.9,8˚.39S×116˚.63E, h0km, mb3.4/4, mbtmp3.5/5, ML3.3/1, Error ellipse: s-maj=57.1km s-min=25.7km az=59.0*
*DJA* ***19*** *20:19:36.0±0.3,8˚S±4˚×11˚7E±˚, h10km, M4.0/9, mb4.7/1, MLv3.7/9*
**ISC 19 20:19:34.5±0.8, 8˚.33S±0˚.07×116˚.69E±0˚.04, h10km, n15, σ1°41/16, mb3.4/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.45** | **155** | P | **Pn** | **20 19 45.2** | **-1.8** |
| TWSI | | | | S | **Sb** | **20 19 51.3** | **0.0** |
| **PLAI** | **Plampang** | **1.19** | **115** | P | **Pg** | **20 19 57.6** | **+0.3** |
| **SRBI** | **Singaraja** | **1.48** | **279** | P | **Pg** | **20 20 03.8** | **+0.9** |
| **DNP** | **Denpasar** | **1.50** | **257** | P | **Pg** | **20 20 03.5** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.51** | **267** | P | **Pb** | **20 20 17.3** | **-2.4** |
| **WBSI** | **Waikabubak, Su** | **2.97** | **116** | P | **Pn** | **20 20 22.9** | **+1.1** |
| **BSSI** | **Bau Bau, Buton** | **4.35** | **60** | P | **Pn** | **20 20 40.5** | **-0.2** |
| **KAPI** | **Kappang** | **4.48** | **43** | Pn | **Pn** | **20 20 43.0** | **+0.4** |
| | 1.5nm,0.3s,baz=210,slow=18,SNR=1.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 21 32.6** | **-2.2** |
| | 4.5nm,0.3s,baz=196,slow=22,SNR=6.4 | | | | | | |
| | 4.2nm,0.4s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.84** | **273** | P | Pn | 20 20 50.5 | +3.0 |
| **EDFI** | **Ende, Flores** | **4.97** | **95** | P | **Pn** | **20 20 49.4** | **+0.1** |
| **UGM** | **Wanagama** | **6.12** | **273** | P | **Pn** | **20 21 07.8** | **+2.8** |
| **WRA** | **Warramunga Arr** | **20.62** | **126** | P | **P** | **20 24 14.4** | **+0.2** |
| | 0.6nm,0.5s,baz=299,slow=12,SNR=20 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.46** | **135** | P | **P** | **20 24 34.5** | **+0.4** |
| | 0.6nm,0.4s,baz=307,slow=9.3,SNR=18 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **32.94** | **139** | P | **P** | **20 26 09.9** | **+0.6** |
| | 1.3nm,0.6s,baz=328,slow=15,SNR=4.3 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | P | **P** | **20 30 01.6** | **+1.1** |
| | 0.2nm,0.8s,baz=140,slow=8.0,SNR=1.7 | | | | | | |
| | 0.2nm,0.8s | | | | | | |

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*NEIC* ***19*** *20:25:44.0±1.7,24˚.8S±0˚.1×180˚.0E±0˚.1, h501km±8km, mb4.5/32, Error ellipse: s-maj=19.2km s-min=15.9km az=148.0*
*IDC* ***19*** *20:25:48.0±3.5,24˚.56S×179˚.75E, h553km±38km, mb3.5/11, mbtmp4.4/12, Error ellipse: s-maj=22.4km s-min=16.7km az=73.0*
**ISC 19 20:25:44.4±0.5, 24˚.67S±0˚.08×179˚.95E±0˚.08, h517km, n85, σ1°17/84, mb4.5/25, 3C, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **7.12** | **345** | P | **P** | **20 29 27.1** | **-0.8** |
| **NIUE** | **Niue** | **10.92** | **61** | P | **P** | **20 28 10.9** | **-0.8** |
| **PINNC** | **Pines Island,** | **11.64** | **278** | P | **P** | **20 28 21.3** | **+2.2** |
| **DZM** | **Mont Dzumac** | **12.67** | **279** | P | **P** | **20 28 31.7** | **+1.7** |
| **DZM** | **Mont Dzumac** | **12.67** | **279** | P | **P** | **20 28 31.8** | **+1.8** |
| | 28nm,0.9s,baz=84,slow=17,SNR=19 | | | | | | |
| **URZ** | **Urewera** | **13.76** | **189** | S | **S** | **20 31 06.4** | **-0.6** |
| | 12nm,0.5s,baz=149,slow=21,SNR=18 | | | | | | |
| **BFZ** | **Birch Farm** | **16.27** | **190** | P | P | 20 29 26.9 | +20 |
| **MRZ** | **Mangatainoka R** | **16.36** | **192** | P | **P** | **20 29 06.1** | **-2.1** |
| **MSWZ** | **Moikau Station** | **17.16** | **192** | P | **P** | **20 29 14.8** | **-1.1** |
| **QRZ** | **Quartz Range** | **17.27** | **199** | P | **P** | **20 29 17.7** | **+0.8** |
| **TKNZ** | **Takaka Hill** | **17.33** | **198** | P | **P** | **20 29 16.7** | **-0.9** |
| **TKNZ** | **Takaka Hill** | **17.33** | **198** | P | **P** | **20 29 16.7** | **-0.9** |
| **NNZ** | **Nelson** | **17.39** | **197** | P | **P** | **20 29 16.6** | **+0.5** |
| **MRNZ** | **Matariki Terra** | **17.73** | **198** | P | **P** | **20 29 20.8** | **-0.5** |
| **THZ** | **Tophouse** | **18.03** | **197** | P | **P** | **20 29 23.8** | **-0.2** |
| **THZ** | **Tophouse** | **18.03** | **197** | P | **P** | **20 29 23.5** | **-0.5** |
| **DSZ** | **Denniston Nort** | **18.33** | **200** | P | **P** | **20 29 27.0** | **+0.3** |
| **DSZ** | **Denniston Nort** | **18.33** | **200** | P | **P** | **20 29 26.8** | **+0.1** |
| **KHZ** | **Kahutara** | **18.48** | **195** | P | **P** | **20 29 27.4** | **-0.6** |
| **GVZ** | **Greta Valley S** | **19.12** | **196** | P | **P** | **20 29 33.3** | **-0.6** |
| **LTZ** | **Lake Taylor** | **19.15** | **197** | P | **P** | **20 29 34.5** | **+0.3** |
| **INZ** | **Inchbonnie** | **19.33** | **199** | P | **P** | **20 29 30.3** | **-5.4** |
| **OXZ** | **Oxford** | **19.71** | **197** | P | **P** | **20 29 39.2** | **-0.1** |
| **RPZ** | **Rata Peaks** | **20.35** | **199** | P | **P** | **20 29 46.6** | **+1.5** |
| | 8.4nm,0.6s,baz=27,slow=2.3,SNR=1.5 | | | | | | |
| | 8.4nm,0.6s | | | | | | |
| **RPZ** | **Rata Peaks** | **20.35** | **199** | P | **P** | **20 29 46.8** | **+1.7** |
| **ARMA** | **Armidale** | **25.71** | **251** | P | **P** | **20 30 32.4** | **-1.0** |
| ARMA | | | | IAmb | IAmb | 20 31 06.6 | |
| | comp=Z,50nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **26.15** | **262** | P | **P** | **20 30 37.1** | **0.0** |
| EIDS | | | | IAmb | IAmb | 20 30 38.1 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **31.44** | **272** | P | **P** | **20 31 23.9** | **+0.7** |
| **TOO** | **Toolangi** | **32.00** | **238** | P | **P** | **20 31 28.2** | **+0.3** |
| TOO | | | | IAmb | IAmb | 20 32 00.4 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **TAU** | **Tasmania Unive** | **32.38** | **228** | P | **P** | **20 31 31.1** | **+0.2** |
| **STKA** | **Stephens Creek** | **34.40** | **249** | P | **P** | **20 31 48.5** | **+0.3** |
| **STKA** | **Stephens Creek** | **34.40** | **249** | P | **P** | **20 31 48.9** | **+0.7** |
| | comp=Z,6.0nm,0.5s,baz=93,slow=10,SNR=52 | | | | | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **COEN** | **Coen** | **36.19** | **280** | P | **P** | **20 32 04.0** | **+0.7** |
| COEN | | | | IAmb | IAmb | 20 32 47.6 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **39.10** | **248** | P | **P** | **20 32 26.7** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 20 32 51.7 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **AS31** | **Alice Springs** | **41.87** | **261** | P | **P** | **20 32 49.1** | **-0.1** |
| **ASAR** | **Alice Springs** | **41.87** | **261** | P | **P** | **20 32 48.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **41.87** | **261** | P | **P** | **20 32 49.1** | **-0.1** |
| | comp=Z,3.0nm,0.4s,baz=88,slow=7.6,SNR=83 | | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.12** | **267** | P | **P** | **20 32 50.6** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 20 32 51.3 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.30** | **267** | P | **P** | **20 32 52.3** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 20 32 52.8 | |
| | comp=Z,13nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.31** | **267** | P | **P** | **20 32 52.3** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 20 32 52.9 | |
| | comp=Z,16nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.31** | **267** | P | **P** | **20 32 52.2** | **-0.5** |
| | comp=Z,11nm,0.5s,baz=99,slow=7.6,SNR=159 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **46.00** | **250** | P | **P** | **20 33 20.5** | **-0.6** |
| **FORT** | **Forrest** | **46.00** | **250** | P | **P** | **20 33 20.6** | **-0.6** |
| **WRKA** | **Warakurna** | **46.63** | **258** | P | **P** | **20 33 25.9** | **-0.1** |
| **KNRA** | **Kununurra** | **48.64** | **270** | P | **P** | **20 33 41.1** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 20 33 41.6 | |
| | comp=Z,41nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.72** | **266** | P | **P** | **20 33 56.5** | **0.0** |
| **KLBR** | **Kellerberrin** | **54.65** | **248** | P | **P** | **20 34 24.1** | **-0.3** |
| **NWAO** | **Narrogin (SRO)** | **54.88** | **246** | P | **P** | **20 34 24.1** | **-1.9** |
| NWAO | | | | IAmb | IAmb | 20 34 41.9 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **54.98** | **260** | P | **P** | **20 34 26.3** | **-0.5** |
| **BLDU** | **Ballidu** | **55.70** | **249** | P | **P** | **20 34 31.2** | **-0.6** |
| **MORW** | **Morawa** | **56.57** | **250** | P | **P** | **20 34 37.6** | **-0.2** |
| **MORW** | **Morawa** | **56.57** | **250** | P | **P** | **20 34 37.6** | **-0.2** |
| **GIRL** | **Giralia** | **59.70** | **257** | P | **P** | **20 34 58.3** | **-0.7** |
| **QSPA** | **South Pole Qui** | **65.42** | **180** | P | **P** | **20 35 37.0** | **+1.5** |
| QSPA | | | | IAmb | IAmb | 20 35 38.0 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.42** | **180** | P | **P** | **20 35 37.1** | **+1.5** |
| | comp=Z,3.5nm,0.6s,baz=46,slow=3.8,SNR=35 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.50** | **326** | P | **P** | **20 36 18.0** | **-0.4** |
| | comp=Z,0.8nm,0.7s,baz=151,slow=7.5,SNR=2.0 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **75.68** | **173** | P | **P** | **20 36 36.2** | **+0.3** |
| **PEA0B** | **Petropavlovsk-** | **79.83** | **347** | P | **P** | **20 36 59.3** | **+0.9** |
| PEA0B | | | | IAmb | IAmb | 20 37 42.8 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.83** | **347** | P | **P** | **20 36 56.2** | **-2.2** |
| | comp=Z,9.0nm,1.1s,baz=108,slow=6.6,SNR=5.7 | | | | | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **SLBS** | **Sierra La Lagu** | **83.22** | **60** | P | **P** | **20 37 18.7** | **+2.0** |
| SLBS | | | | IAmb | IAmb | 20 37 49.5 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **TROLL** | **Troll, Antarti** | **83.57** | **181** | ⇑P | **P** | **20 37 17.8** | **+0.2** |
| | comp=Z,280nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **83.90** | **179** | P | **P** | **20 37 19.2** | **0.0** |
| **SNAA** | **Sanae** | **83.90** | **179** | ⇑P | **P** | **20 37 18.8** | **-0.4** |
| | comp=Z,33nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **83.90** | **179** | P | **P** | **20 37 19.1** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=205,slow=12,SNR=7.3 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **84.12** | **177** | ⇑P | **P** | **20 37 20.1** | **-0.1** |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.34** | **44** | P | **P** | **20 37 27.9** | **+1.0** |
| | comp=Z,0.9nm,0.7s,baz=227,slow=6.1,SNR=7.5 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **KVN** | **Kaiserville** | **85.83** | **44** | P | **P** | **20 37 30.6** | **+1.4** |
| **I07A** | **Izee** | **88.02** | **39** | P | **P** | **20 37 41.1** | **+1.8** |
| I07A | | | | IAmb | IAmb | 20 37 41.8 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **TMUT** | **Trail Mountain** | **90.40** | **46** | P | **P** | **20 37 51.4** | **+0.6** |
| TMUT | | | | IAmb | IAmb | 20 37 53.4 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.88** | **58** | P | **P** | **20 37 54.4** | **+1.4** |
| | comp=Z,1.6nm,0.8s,baz=214,slow=6.7,SNR=11 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **93.27** | **44** | P | **P** | **20 38 04.5** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=195,slow=2.9,SNR=4.2 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **112.63** | **312** | PKiKP | **PKiKP** | **20 43 20.9** | **-0.9** |
| | comp=Z,0.2nm,0.5s,baz=69,slow=0.8,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **115.76** | **316** | PKP | **PKPdf** | **20 43 26.9** | **-0.7** |
| | comp=Z,0.3nm,0.2s,baz=95,slow=1.6,SNR=5.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **120.98** | **318** | PKP | **PKPdf** | **20 43 37.1** | **-0.5** |
| | comp=Z,1.0nm,0.4s,baz=110,slow=2.3,SNR=7.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **132.62** | **348** | PKP | **PKiKP** | **20 44 00.2** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=44,slow=1.3,SNR=7.5 | | | | | | |
| **FINES** | **FINESS Array B** | **139.15** | **341** | PKP | **PKiKP** | **20 44 14.1** | **+0.1** |
| | comp=Z,2.7nm,0.9s,baz=117,slow=6.8,SNR=4.9 | | | | | | |
| **NB2** | **NORSAR Subarra** | **142.83** | **351** | PKP | **PKPdf** | **20 44 15.3** | **-3.0** |
| | comp=Z,1.4nm,1.0s,baz=16,slow=4.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **142.83** | **351** | PKP | **PKPdf** | **20 44 15.5** | **-2.7** |
| | comp=Z,1.0nm,0.6s,baz=8.1,slow=2.4,SNR=4.5 | | | | | | |
| **HFS** | **Hagfors** | **143.28** | **349** | PKP | PKPab | 20 44 16.8 | -0.2 |
| | comp=Z,6.8nm,0.4s,baz=64,slow=3.4,SNR=62 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.58** | **327** | PKPbc | **PKPbc** | **20 44 24.0** | **-0.6** |
| | comp=Z,1.6nm,0.4s,baz=46,slow=3.7,SNR=6.0 | | | | | | |
| **AKBB** | **Malin Array Si** | **145.58** | **327** | PKPdf | **PKPbc** | **20 44 24.5** | **-0.1** |
| **BRTR** | **Keskin Array B** | **147.99** | **306** | PKPbc | **PKPbc** | **20 44 31.4** | **-0.3** |
| | comp=Z,0.9nm,0.6s,baz=133,slow=3.1,SNR=5.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **149.28** | **3** | PKPbc | **PKPbc** | **20 44 34.0** | **-0.1** |
| | comp=Z,0.5nm,0.4s,baz=350,slow=2.9,SNR=13 | | | | | | |
| **BURAR** | **Bucovina Array** | **149.57** | **325** | PKPbc | **PKiKP** | **20 44 37.4** | **+1.4** |
| **TORD** | **Torodi Ar. Bea** | **168.42** | **189** | PKP | **PKPdf** | **20 44 52.2** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=298,slow=1.0,SNR=3.2 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **20 46 05.3** | **+0.5** |
| | comp=Z,0.8nm,0.7s,baz=198,slow=2.9,SNR=6.7 | | | | | | |

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**IDC 19 20:27:42.5±5.8, 15˚.91S×172˚.14W, h0km, mb3.8/2, mbtmp3.8/2, Error ellipse: s-maj=396.0km s-min=66.6km az=150.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **50.91** | **257** | P | P | 20 36 45.6 | -0.4 |
| | 0.6nm,1.0s,baz=93,slow=7.0,SNR=1.5 | | | | | | |
| | 0.6nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **51.11** | **252** | P | P | 20 36 47.5 | 0.0 |
| | 1.4nm,0.5s,baz=89,slow=8.1,SNR=13 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **132.70** | **348** | PKP | PKPdf | 20 46 58.6 | -0.4 |
| | 2.6nm,0.8s,baz=95,slow=3.1,SNR=4.6 | | | | | | |

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*IDC* ***19*** *20:29:55.2±5.6, 18˚.08S×178˚.26W, h508km±64km, mb3.4/12, mbtmp4.2/12, Error ellipse: s-maj=22.6km s-min=18.5km az=45.0*
**ISC 19 20:30:00.9±0.8, 18˚.2S±0˚.1×178˚.4W±0˚.2, h579km, n14, σ1°02/14, mb3.6/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.39** | **190** | P | **P** | **20 33 56.8** | **-2.1** |
| | 4.6nm,0.3s,baz=356,slow=4.8,SNR=8.8 | | | | | | |
| | 4.6nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **38.52** | **241** | P | **P** | **20 36 36.0** | **+1.1** |
| | 3.7nm,0.5s,baz=92,slow=6.8,SNR=15 | | | | | | |
| | 3.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.60** | **260** | P | **P** | **20 37 22.7** | **-0.3** |
| | 1.2nm,0.5s,baz=97,slow=6.8,SNR=13 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.74** | **254** | P | **P** | **20 37 24.4** | **+0.5** |
| | 11nm,0.5s,baz=88,slow=8.5,SNR=88 | | | | | | |
| | 11nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.13** | **323** | P | **P** | **20 40 03.2** | **-0.9** |
| | 1.3nm,0.6s,baz=155,slow=5.4,SNR=5.8 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **20 40 26.5** | **+0.6** |
| | 1.9nm,0.6s,baz=199,slow=2.0,SNR=15 | | | | | | |
| | 1.9nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.94** | **345** | P | **P** | **20 40 37.5** | **-0.1** |
| | 5.5nm,1.0s,baz=123,slow=4.3,SNR=1.9 | | | | | | |
| | 5.5nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **74.91** | **318** | P | **P** | **20 40 43.8** | **+0.4** |
| | 0.5nm,0.4s,baz=97,slow=7.4,SNR=2.2 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.60** | **44** | P | **P** | **20 41 09.5** | **+0.4** |
| | 1.3nm,0.7s,baz=226,slow=7.9,SNR=9.7 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.12** | **58** | P | **P** | **20 41 43.1** | **+1.4** |
| | 1.1nm,0.8s,baz=232,slow=5.9,SNR=14 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.14** | **13** | P | **P** | **20 41 39.7** | **-1.2** |
| | 0.8nm,0.8s,baz=215,slow=5.2,SNR=6.8 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.53** | **43** | P | **P** | **20 41 48.2** | **0.0** |
| | 0.6nm,0.7s,baz=221,slow=1.9,SNR=5.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.99** | **315** | PKPbc | **PKPbc** | **20 48 34.3** | **+0.2** |
| | 0.4nm,0.4s,baz=82,slow=2.6,SNR=6.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.88** | **345** | PKPbc | **PKiKP** | **20 48 42.2** | **-0.8** |
| | 0.6nm,0.5s,baz=163,slow=10,SNR=4.2 | | | | | | |

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**IDC 19 20:30:40.2±57.0, 16˚.88S×177˚.84W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=1053.0km s-min=166.0km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **39.60** | **240** | P | P | 20 38 14.4 | +0.8 |
| | 0.7nm,0.5s,baz=83,slow=8.1,SNR=4.5 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.36** | **258** | P | P | 20 39 00.1 | -0.6 |
| | 0.3nm,0.6s,baz=97,slow=7.4,SNR=4.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.60** | **253** | P | P | 20 39 02.2 | -0.4 |
| | 4.1nm,0.5s,baz=90,slow=7.8,SNR=19 | | | | | | |
| | 4.1nm,0.5s | | | | | | |

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**IDC 19 20:32:20.6±3.6, 23˚.64N×143˚.81E, h0km, mb3.8/5, mbtmp3.8/5, Error ellipse: s-maj=150.2km s-min=31.3km az=78.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.30** | **193** | P | P | 20 40 32.2 | -0.1 |
| | 0.6nm,0.6s,baz=15,slow=9.0,SNR=4.6 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.83** | **312** | P | P | 20 41 46.3 | +1.0 |
| | 0.2nm,0.5s,baz=89,slow=8.3,SNR=2.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.52** | **316** | P | P | 20 42 04.7 | +0.1 |
| | 0.3nm,0.3s,baz=88,slow=7.9,SNR=5.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.59** | **319** | P | P | 20 42 38.4 | -1.4 |
| | 2.0nm,0.8s,baz=84,slow=7.4,SNR=6.1 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **81.68** | **335** | P | P | 20 44 41.3 | +0.7 |
| | 4.0nm,1.0s,baz=75,slow=7.5,SNR=2.5 | | | | | | |
| | 4.0nm,1.0s | | | | | | |

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*DJA* ***19*** *20:35:33.3±0.3,8˚S±7˚×11˚7E±˚, h10km, M3.8/8, MLv3.8/8*
*IDC* ***19*** *20:35:36.7±19.0, 8.93S×116.94E, h0km, mb3.8/3, mbtmp3.9/3, Error ellipse: s-maj=339.7km s-min=176.4km az=170.0*
**ISC 19 20:35:36.0±1.2, 8˚.3S±0˚.1×116˚.78E±0˚.05, h35km, n11, σ0°66/12, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLAI** | **Plampang** | **1.11** | **117** | P | **Pn** | **20 35 54.2** | **-0.9** |
| PLAI | | | | S | **Sn** | **20 36 10.0** | **+0.7** |
| **SRBI** | **Singaraja** | **1.56** | **278** | P | **Pn** | **20 36 00.9** | **-0.4** |
| **DNP** | **Denpasar** | **1.59** | **257** | P | **Pn** | **20 36 00.8** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.60** | **266** | P | **Pn** | **20 36 15.3** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **2.90** | **117** | P | **Pn** | **20 36 19.2** | **-0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.27** | **60** | P | **Pn** | **20 36 38.0** | **-0.6** |
| **EDFI** | **Ende, Flores** | **4.88** | **95** | P | **Pn** | **20 36 47.1** | **0.0** |
| **PWJI** | **Pagerwojo** | **4.93** | **273** | P | **Pn** | **20 36 47.9** | **+0.2** |
| **WRA** | **Warramunga Arr** | **20.56** | **126** | P | **P** | **20 40 11.5** | **-0.4** |
| | 1.3nm,0.3s,baz=300,slow=12,SNR=25 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **22.41** | **135** | P | **P** | **20 40 31.8** | **-0.1** |
| | 0.9nm,0.4s,baz=308,slow=9.3,SNR=21 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **32.89** | **139** | P | **P** | **20 42 07.7** | **+0.7** |
| | 3.8nm,1.2s,baz=316,slow=9.7,SNR=5.5 | | | | | | |
| | 3.8nm,1.2s | | | | | | |

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*IDC* ***19*** *20:39:38.4±1.3,8˚.32S×116˚.95E, h0km, mb3.7/5, mbtmp3.8/6, ML3.9/1, Error ellipse: s-maj=36.9km s-min=20.6km az=65.0*
*NEIC* ***19*** *20:39:39.8±1.6,8˚.4S±0˚.1×116˚.89E±0˚.04, h10km±2km, mb4.1/7, Error ellipse: s-maj=21.3km s-min=4.8km az=347.0*
*DJA* ***19*** *20:39:40.4±0.2,8˚S±4˚×11˚7E±˚, h10km, M4.5/13, mb4.8/6, mB5.0/1, MLv4.4/13, Mw(mB)4.4/1*
**ISC 19 20:39:39.7±0.7, 8˚.34S±0˚.07×116˚.90E±0˚.05, h10km, n33, σ0°93/33, mb3.8/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLAI** | **Plampang** | **0.99** | **119** | P | **Pg** | **20 39 59.3** | **+0.6** |
| PLAI | | | | S | **Sg** | **20 40 12.2** | **+0.6** |
| **SRBI** | **Singaraja** | **1.69** | **278** | P | **Pn** | **20 40 09.5** | **+0.2** |
| **DNP** | **Denpasar** | **1.71** | **259** | P | **Pn** | **20 40 11.9** | **+2.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **267** | | **Pn** | **20 40 23.4** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **267** | P | **Pn** | **20 40 23.3** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **2.78** | **118** | P | **Pn** | **20 40 24.9** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **59** | P | **Pn** | **20 40 43.8** | **+0.3** |
| **KAPI** | **Kappang** | **4.35** | **41** | Pn | **Pn** | **20 40 46.1** | **+0.2** |
| | 6.5nm,0.3s,baz=213,slow=4.7,SNR=17 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 41 36.0** | **-0.6** |
| | 4.6nm,0.3s,baz=59,slow=23,SNR=6.1 | | | | | | |
| | 15nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.75** | **95** | P | **Pn** | **20 40 53.0** | **+1.5** |
| **BNSI** | **Bone** | **5.04** | **39** | P | **Pn** | **20 40 57.7** | **+2.3** |
| **PWJI** | **Pagerwojo** | **5.06** | **273** | P | **Pn** | **20 40 56.8** | **+1.2** |
| | 60nm,0.7s,0.4nm | | | | | | |
| **UGM** | **Wanagama** | **6.33** | **273** | P | **Pn** | **20 41 14.1** | **+0.9** |
| | 139nm,1.8s | | | | | | |
| **BATI** | **Baumata** | **6.92** | **106** | P | **Pn** | **20 41 23.2** | **+1.9** |
| **FITZ** | **Fitzroy Crossi** | **12.89** | **140** | P | **Pn** | **20 42 42.2** | **-1.0** |
| **MBWA** | **Marble Bar** | **13.04** | **168** | Pn | **Pn** | **20 42 45.0** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **13.46** | **168** | Pn | **Pn** | **20 42 49.9** | **-0.9** |
| **KNRA** | **Kununurra** | **13.70** | **123** | Pn | **Pn** | **20 42 54.3** | **+0.3** |
| **GIRL** | **Giralia** | **14.45** | **190** | Pn | Pn | 20 43 02.3 | -2.1 |
| **MTN** | **Manton Dam** | **14.68** | **109** | Pn | Pn | 20 43 05.1 | -2.5 |
| **WB0** | **Warramunga Arr** | **20.39** | **126** | P | **P** | **20 44 16.9** | **0.0** |
| WB0 | | | | IAmb | IAmb | 20 44 48.1 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.44** | **126** | P | **P** | **20 44 17.2** | **-0.3** |
| | comp=Z,3.1nm,0.5s,baz=300,slow=12,SNR=58 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.45** | **126** | P | **P** | **20 44 17.4** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 20 44 24.9 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.30** | **135** | P | **P** | **20 44 37.4** | **-0.1** |
| **ASAR** | **Alice Springs** | **22.30** | **135** | P | **P** | **20 44 37.8** | **+0.2** |
| | comp=Z,1.6nm,0.6s,baz=309,slow=9.3,SNR=24 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **22.30** | **135** | P | **P** | **20 44 37.6** | **+0.1** |
| **FORT** | **Forrest** | **24.64** | **156** | P | **P** | **20 45 01.5** | **+1.0** |
| FORT | | | | IAmb | IAmb | 20 45 04.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **32.79** | **139** | P | **P** | **20 46 12.5** | **-0.8** |
| STKA | | | | IAmb | IAmb | 20 46 13.6 | |
| | comp=Z,1.3nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **32.79** | **139** | P | **P** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TUMR** | **Tumrok** | **1.82** | **343** | *e*P | | **Pn** | **20 45 12.4** | **+0.1** |
| **GNL** | **Ganaly** | **1.87** | **276** | *e*P | | **Pn** | **20 45 13.6** | **+0.7** |
| **MTVR** | **Mutnovka** | **2.04** | **240** | *e*P | | **Pn** | **20 45 15.4** | **+0.1** |
| **GRL** | **Gorelyy** | **2.06** | **242** | *e*P | | **Pn** | **20 45 16.2** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **2.07** | **259** | P | | **Pn** | **20 45 15.8** | **+0.2** |
| | 30nm,0.5s,baz=75,slow=19,SNR=117 | | | | | | | |
| PETK | | | | S | | **Sn** | **20 45 42.8** | **+2.7** |
| | 25nm,0.5s,baz=111,slow=11,SNR=4.0 | | | | | | | |
| **ASAK** | **Asacha** | **2.24** | **240** | *e*P | | **Pn** | **20 45 19.1** | **+1.1** |
| **KMNR** | **Kamenistaya** | **2.27** | **348** | *e*P | | **Pn** | **20 45 19.4** | **+1.0** |
| **APC** | **Apacha** | **2.43** | **257** | *e*P | | **Pn** | **20 45 21.9** | **+1.4** |
| **KPT** | **Kopyto** | **2.48** | **349** | *e*P | | **Pn** | **20 45 22.4** | **+1.1** |
| **KDTR** | **Khodutka, Kamc** | **2.52** | **228** | *e*P | | **Pn** | **20 45 23.2** | **+1.5** |
| KDTR | | | | eS | | **Sn** | **20 45 53.2** | **+2.1** |
| **LGNR** | **Loginova** | **2.55** | **355** | *e*P | | **Pn** | **20 45 24.5** | **+2.0** |
| **KOZ** | **Kozyrevsk** | **2.61** | **345** | *e*P | | **Pn** | **20 45 23.7** | **+0.7** |
| **ESO** | **Esso** | **2.75** | **331** | *e*P | | **Pn** | **20 45 25.3** | **+0.3** |
| **KBTR** | **Krutoberegovo** | **2.85** | **20** | *e*P | | **Pn** | **20 45 26.8** | **+0.5** |
| **SRDR** | **Sredinnyy** | **2.89** | **345** | *e*P | | **Pn** | **20 45 27.6** | **+0.8** |
| **SRKR** | **Sorokina** | **3.12** | **1** | *e*P | | Pn | 20 45 32.7 | +2.7 |
| **BKI** | **Bering** | **3.31** | **58** | *e*P | | **Pn** | **20 45 31.5** | **-1.0** |
| **H11N2** | **WAKE ISLAND Hy** | **34.05** | **170** | T | | T | 21 27 45.4 | |
| | baz=352,slow=74,SNR=29 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.06** | **170** | T | | T | 21 27 45.1 | |
| | baz=352,slow=74,SNR=24 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.07** | **170** | T | | T | 21 27 46.8 | |
| | baz=352,SNR=27 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.24** | **171** | T | | T | 21 29 09.8 | |
| | baz=352,slow=76,SNR=3.7 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.25** | **171** | T | | T | 21 29 10.2 | |
| | baz=352,slow=76,SNR=5.1 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.26** | **171** | T | | T | 21 29 10.4 | |
| | baz=352,slow=76,SNR=4.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.09** | **302** | P | | **P** | **20 53 15.5** | **-2.7** |
| | 0.4nm,0.4s,baz=58,slow=7.6,SNR=5.0 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.49** | **296** | P | | **P** | **20 53 20.8** | **-0.6** |
| | 0.1nm,0.4s,baz=53,slow=5.5,SNR=2.5 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **55.04** | **71** | P | | **P** | **20 54 12.7** | **+2.1** |
| | 0.3nm,0.5s,baz=309,slow=5.7,SNR=1.7 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **59.94** | **337** | P | | **P** | **20 54 43.6** | **-0.8** |
| | 3.2nm,0.9s,baz=39,slow=7.3,SNR=7.0 | | | | | | | |
| | 3.2nm,0.9s | | | | | | | |
| **BRTR** | **Keskin Array B** | **76.64** | **321** | P | | **P** | **20 56 28.9** | **-0.5** |
| | 0.4nm,0.7s,baz=25,slow=7.2,SNR=3.9 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |

*IDC* ***19*** *20:52:44.9±16.0,* **17°68S×178°07W, h634km±154km, mb3.3/4, mbtmp4.4/5, Error ellipse: s-maj=180.4km s-min=44.4km az=38.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.21** | **251** | P | P | 20 55 54.1 | +0.4 |
| | 4.5nm,0.7s,baz=99,slow=20,SNR=5.4 | | | | | | |
| **STKA** | **Stephens Creek** | **39.02** | **241** | P | P | 20 59 19.5 | 0.0 |
| | 2.7nm,0.6s,baz=98,slow=11,SNR=9.9 | | | | | | |
| | 2.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.99** | **259** | P | P | 21 00 06.1 | -0.1 |
| | 2.1nm,0.5s,baz=94,slow=7.3,SNR=40 | | | | | | |
| | 2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | P | 21 00 07.8 | +0.2 |
| | 6.7nm,0.5s,baz=86,slow=8.8,SNR=62 | | | | | | |
| | 6.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.37** | **180** | P | P | 21 03 08.3 | +0.2 |
| | 1.7nm,0.6s,baz=36,slow=9.5,SNR=19 | | | | | | |
| | 1.7nm,0.6s | | | | | | |

*IDC* ***19*** *20:56:10.8±1.0,8°48S×116°48E, h0km, mb3.9/8, mbtmp3.9/9, ML3.7/1, Error ellipse: s-maj=42.3km s-min=17.4km az=56.0*
*NEIC* ***19*** *20:56:11.1±2.8,8°2S±0°1×116°48E±0°03, h10km±2km, mb4.4/8, Error ellipse: s-maj=18.3km s-min=3.9km az=352.0*
*DJA* ***19*** *20:56:14.2±0.3,8°S±4°×11°7E±°, h10km, M4.4/12, mb4.7/2, MLv4.3/12*

**ISC 19 20:56:13.4±0.6, 8°29S±0°07×116°74E±0°05, h10km, n37, σ1§38/36, mb4.0/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **1.16** | **117** | P | **Pb** | **20 56 36.1** | **+0.6** |
| PLAI | | | | S | **Sb** | **20 56 52.1** | **+1.5** |
| **SRBI** | **Singaraja** | **1.52** | **278** | P | **Pn** | **20 56 41.7** | **+1.0** |
| **DNP** | **Denpasar** | **1.56** | **256** | P | **Pn** | **20 56 43.6** | **+2.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.56** | **266** | | **Pn** | **20 56 55.5** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.56** | **266** | P | **Pn** | **20 56 55.4** | **+0.4** |
| **WBSI** | **Waikabubak, Su** | **2.94** | **117** | P | **Pn** | **20 57 00.8** | **+0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.29** | **60** | P | **Pn** | **20 57 18.6** | **-0.2** |
| **KAPI** | **Kappang** | **4.42** | **43** | Pn | **Pn** | **20 57 21.6** | **+1.0** |
| **KAPI** | **Kappang** | **4.42** | **43** | Pn | **Pn** | **20 57 22.9** | **+2.3** |
| | 3.0nm,0.3s,baz=238,slow=22,SNR=4.3 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 58 10.9** | **-1.3** |
| | 7.1nm,0.3s,baz=225,slow=19,SNR=6.9 | | | | | | |
| KAPI | | | | Lg | Lg | 20 58 28.3 | |
| | 11nm,0.3s,baz=32,slow=19,SNR=3.4 | | | | | | |
| | 12nm,0.4s | | | | | | |
| **GRJI** | **Gresik** | **4.44** | **288** | P | **Pn** | **20 57 21.6** | **+0.8** |
| **PWJI** | **Pagerwojo** | **4.89** | **273** | P | **Pn** | **20 57 29.3** | **+2.3** |
| **EDFI** | **Ende, Flores** | **4.92** | **96** | P | **Pn** | **20 57 28.3** | **+0.8** |
| **MMRI** | **Maumere** | **5.45** | **94** | Pn | **Pn** | **20 57 34.4** | **-0.4** |
| **UGM** | **Wanagama** | **6.16** | **273** | P | **Pn** | **20 57 46.2** | **+1.6** |
| **MBWA** | **Marble Bar** | **13.12** | **168** | Pn | **Pn** | **20 59 19.4** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **13.54** | **168** | Pn | **Pn** | **20 59 23.7** | **-1.9** |
| **KKM** | **Kota Kinabalu** | **14.25** | **358** | Pn | Pn | 20 59 31.1 | -4.4 |
| **GIRL** | **Giralia** | **14.47** | **189** | Pn | Pn | 20 59 34.3 | -4.1 |
| **MTN** | **Manton Dam** | **14.86** | **109** | | **Pn** | **20 59 47.4** | **+3.8** |
| MTN | | | | IAmb | IAmb | 20 59 48.5 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.55** | **126** | P | **P** | **21 00 51.9** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 21 00 53.0 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.60** | **126** | P | **P** | **21 00 52.8** | **-0.2** |
| | comp=Z,4.9nm,0.9s,baz=300,slow=12,SNR=20 | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.61** | **126** | P | **P** | **21 00 52.6** | **-0.4** |
| **WR0** | **Warramunga Arr** | **20.77** | **126** | P | **P** | **21 00 54.8** | **0.0** |
| WR0 | | | | IAmb | IAmb | 21 01 01.7 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.45** | **135** | P | **P** | **21 01 13.1** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.45** | **135** | P | **P** | **21 01 13.2** | **+0.4** |
| **ASAR** | **Alice Springs** | **22.45** | **135** | P | **P** | **21 01 13.1** | **+0.3** |
| | comp=Z,5.7nm,0.9s,baz=312,slow=9.0,SNR=22 | | | | | | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **24.75** | **156** | P | **P** | **21 01 34.3** | **-0.9** |
| FORT | | | | IAmb | IAmb | 21 01 54.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **COEN** | **Coen** | **26.53** | **105** | P | **P** | **21 01 49.8** | **-1.8** |
| **BBOO** | **Buckleboo** | **30.26** | **146** | P | P | 21 02 22.0 | -2.7 |
| **CMAR** | **Chiang Mai Arr** | **31.86** | **327** | P | **P** | **21 02 39.2** | **+0.4** |
| | comp=Z,1.2nm,0.3s,baz=155,slow=8.0,SNR=4.1 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **32.94** | **139** | P | **P** | **21 02 47.6** | **-0.6** |
| | comp=Z,1.4nm,0.6s,baz=312,slow=14,SNR=5.1 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.04** | **14** | P | **P** | **21 05 38.6** | **+0.7** |
| | comp=Z,0.6nm,0.5s,baz=200,slow=7.3,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **56.63** | **352** | P | **P** | **21 05 56.7** | **0.0** |
| | comp=Z,0.9nm,0.7s,baz=170,slow=7.8,SNR=5.1 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.83** | **334** | P | **P** | **21 06 38.8** | **-0.5** |
| | comp=Z,1.0nm,0.9s,baz=150,slow=9.2,SNR=6.3 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.60** | **340** | P | **P** | **21 07 09.7** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=109,slow=6.6,SNR=2.0 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.13** | **281** | PKP | **PKPdf** | **21 14 55.5** | **-2.3** |
| | comp=Z,0.5nm,0.8s,baz=64,slow=1.7,SNR=4.3 | | | | | | |
| **CPUP** | **Villa Florida** | **145.11** | **189** | PKP | **PKPbc** | **21 15 49.1** | **-2.2** |
| | comp=Z,2.8nm,0.7s,baz=186,slow=4.7,SNR=5.6 | | | | | | |

*IDC* ***19*** *21:05:40.1±37.0, 17°53S×178°23W, h441km±366km, mb3.3/4, mbtmp4.2/4, Error ellipse: s-maj=192.9km s-min=29.1km az=55.0*

**ISC 19 21:05:40.7±1.8, 17°5S±0°3×178°3W±0°3, h450km, n7, σ0§49/6, mb3.6/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **21 12 27.2** | **+0.4** |
| | 0.8nm,0.4s,baz=98,slow=8.6,SNR=7.2 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.86** | **259** | P | **P** | **21 13 13.1** | **-0.7** |
| | 0.8nm,0.6s,baz=96,slow=7.0,SNR=15 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **21 13 15.3** | **0.0** |
| | 6.7nm,0.5s,baz=89,slow=8.1,SNR=105 | | | | | | |
| | 6.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.58** | **180** | P | **P** | **21 16 20.7** | **-0.2** |
| | 1.0nm,0.5s,baz=211,slow=1.0,SNR=18 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.58** | **315** | PKP | PKPbc | 21 24 24.2 | -1.2 |
| | 0.6nm,0.5s,baz=83,slow=2.1,SNR=4.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.03** | **304** | PKPbc | **PKPbc** | **21 24 30.1** | **+0.3** |
| | 0.8nm,0.5s,baz=64,slow=6.6,SNR=2.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.23** | **345** | PKPbc | **PKPbc** | **21 24 32.6** | **0.0** |
| | 0.4nm,0.5s,baz=358,slow=8.5,SNR=2.7 | | | | | | |

**IDC 19 21:18:39.8±5.5, 16°99S×176°29W, h0km, mb4.3/3, mbtmp4.3/3, Error ellipse: s-maj=162.0km s-min=42.4km az=119.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **40.84** | **241** | P | P | 21 26 24.1 | +0.6 |
| | 0.7nm,0.4s,baz=96,slow=10,SNR=5.0 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **46.99** | **253** | P | P | 21 27 12.3 | -0.8 |
| | 10nm,0.6s,baz=85,slow=8.9,SNR=11 | | | | | | |
| | 10nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.41** | **322** | P | P | 21 29 43.8 | +0.2 |
| | 1.4nm,0.8s,baz=136,slow=5.1,SNR=4.7 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.53** | **317** | PKPbc | PKPdf | 21 38 19.3 | -1.2 |
| | 0.7nm,0.6s,baz=64,slow=3.4,SNR=5.5 | | | | | | |

*IDC* ***19*** *21:21:48.2±0.4,8°32S×116°83E, h0km, mb4.6/20, mbtmp4.6/21, ML4.7/1, MS3.9/12, Error ellipse: s-maj=16.7km s-min=9.7km az=73.0*
*NEIC* ***19*** *21:21:50.4±1.8,8°45S±0°07×116°95E±0°02, h10km±1km, mb4.8/29, Error ellipse: s-maj=12.2km s-min=2.9km az=192.0*
*DJA* ***19*** *21:21:51.1±0.2,8°S±3°×11°7E±°, h10km, M5.1/24, mb5.1/18, mB5.5/9, MLv5.2/24, Mw(mB)5.0/9*

**ISC 19 21:21:50.8±0.3, 8°37S±0°04×116°97E±0°04, h10km, n177, σ1§64/161, mb4.7/43, MS3.9/14, 5C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **0.92** | **120** | P | **Pg** | **21 22 08.8** | **+0.3** |
| **PLAI** | **Plampang** | **0.92** | **120** | P | **Pg** | **21 22 08.7** | **+0.3** |
| PLAI | | | | S | **Sg** | **21 22 21.4** | **+0.9** |
| **SRBI** | **Singaraja** | **1.76** | **279** | P | **Pn** | **21 22 20.3** | **-1.1** |
| SRBI | | | | S | **Sn** | **21 22 43.8** | **-0.1** |
| **DNP** | **Denpasar** | **1.77** | **260** | P | **Pn** | **21 22 21.9** | **+0.4** |
| **WBSI** | **Waikabubak, Su** | **2.71** | **118** | P | **Pn** | **21 22 35.2** | **+0.8** |
| WBSI | | | | S | **Sn** | **21 23 09.2** | **+1.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.79** | **268** | P | **Pn** | **21 22 35.2** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.79** | **268** | Pn | **Pn** | **21 22 35.0** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.79** | **268** | P | **Pn** | **21 22 34.7** | **-0.8** |
| JAGI | | | | S | **Sn** | **21 23 08.2** | **-1.1** |
| **BASI** | **Baing, Sumba** | **4.01** | **118** | P | **Pn** | **21 22 53.3** | **+1.0** |
| **BSSI** | **Bau Bau, Buton** | **4.13** | **58** | P | **Pn** | **21 22 54.7** | **+0.7** |
| **KAPI** | **Kappang** | **4.33** | **40** | P | **Pn** | **21 22 57.3** | **+0.7** |
| **KAPI** | **Kappang** | **4.33** | **40** | Pn | **Pn** | **21 22 56.8** | **+0.1** |
| | 36nm,0.3s,baz=214,slow=3.8,SNR=74 | | | | | | |
| KAPI | | | | Sn | **Sn** | **21 23 46.7** | **-0.5** |
| | 78nm,0.3s,baz=234,slow=24,SNR=8.0 | | | | | | |
| KAPI | | | | Lg | Lg | 21 24 03.7 | |
| | 59nm,0.3s,baz=287,slow=18,SNR=4.3 | | | | | | |
| KAPI | | | | LR | LR | 21 24 55.9 | |
| | comp=Z,1μm,20.1s,baz=143,slow=43 | | | | | | |
| | 96nm,0.3s | | | | | | |
| **GRJI** | **Gresik** | **4.68** | **288** | P | **Pn** | **21 23 01.7** | **+0.2** |
| **EDFI** | **Ende, Flores** | **4.68** | **95** | P | **Pn** | **21 23 02.3** | **+0.6** |
| **BWJI** | **Bawean** | **4.96** | **300** | P | **Pn** | **21 23 05.3** | **0.0** |
| **BNSI** | **Bone** | **5.02** | **39** | P | **Pn** | **21 23 07.5** | **+1.3** |
| | 253nm,0.7s,6μm5.0nm | | | | | | |
| **PWJI** | **Pagerwojo** | **5.13** | **273** | P | **Pn** | **21 23 06.7** | **-1.0** |
| | 248nm,0.7s,3μm1.6nm | | | | | | |
| **MMRI** | **Maumere** | **5.22** | **93** | P | **Pn** | **21 23 08.7** | **-0.2** |
| **MMRI** | **Maumere** | **5.22** | **93** | Pn | **Pn** | **21 23 09.6** | **+0.6** |
| **MMRI** | **Maumere** | **5.22** | **93** | P | **Pn** | **21 23 09.9** | **+1.0** |
| **NGJI** | **Ngawi** | **5.55** | **280** | P | **Pn** | **21 23 13.0** | **-0.5** |
| | 123nm,0.8s,1.4nm | | | | | | |
| **BBSI** | **Bau Bau** | **6.25** | **63** | P | **Pn** | **21 23 24.1** | **+1.0** |
| | 124nm,1.0s | | | | | | |
| **UGM** | **Wanagama** | **6.40** | **274** | P | **Pn** | **21 23 25.6** | **+0.4** |
| **UGM** | **Wanagama** | **6.40** | **274** | Pn | **Pn** | **21 23 25.1** | **-0.1** |
| **UGM** | **Wanagama** | **6.40** | **274** | P | **Pn** | **21 23 25.0** | **-0.2** |
| | 191nm,0.7s,2.0nm | | | | | | |
| **SMRI** | **Semarang** | **6.60** | **281** | P | **Pn** | **21 23 27.3** | **-0.7** |
| | 113nm,1.1s,0.7nm | | | | | | |
| **BATI** | **Baumata** | **6.85** | **106** | P | **Pn** | **21 23 33.6** | **+2.1** |
| **SOEI** | **Soe** | **7.34** | **101** | P | **Pn** | **21 23 39.3** | **+1.1** |
| **SOEI** | **Soe** | **7.34** | **101** | Pn | **Pn** | **21 23 37.9** | **-0.3** |
| **SOEI** | **Soe** | **7.34** | **101** | P | **Pn** | **21 23 40.1** | **+1.9** |
| | 257nm,0.8s,3μm1.1nm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.66** | **344** | P | **Pn** | **21 23 42.8** | **+0.3** |
| | 148nm,0.5s,7μm | | | | | | |
| **KPJI** | **Karang Pucung** | **8.03** | **277** | P | **Pn** | **21 23 48.7** | **+1.1** |
| | 73nm,0.5s,0.3nm | | | | | | |
| **CMJI** | **Cimerak** | **8.46** | **273** | P | **Pn** | **21 23 52.7** | **-0.8** |
| | 116nm,1.1s | | | | | | |
| **MPSI** | **Mapaga** | **9.12** | **19** | P | **Pn** | **21 24 03.0** | **+0.4** |
| **BBJI** | **Bungbulang** | **9.28** | **275** | P | **Pn** | **21 24 06.7** | **+1.9** |
| **LUWI** | **Luwuk** | **9.29** | **3** | P | **Pn** | **21 24 05.7** | **+0.8** |
| **CNJI** | **Cibinong** | **9.81** | **275** | P | **Pn** | **21 24 11.9** | **-0.1** |
| **TOLI2** | **Tolitoli** | **10.15** | **22** | P | **Pn** | **21 24 19.2** | **+2.5** |
| **TOLI2** | **Tolitoli** | **10.15** | **22** | Pn | **Pn** | **21 24 18.4** | **+1.7** |
| **KSM** | **Kuching** | **11.82** | **326** | Pn | **Pn** | **21 24 40.2** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **12.83** | **140** | P | **Pn** | **21 24 52.6** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **12.83** | **140** | Pn | **Pn** | **21 24 51.8** | **-1.6** |
| **MBWA** | **Marble Bar** | **12.99** | **168** | P | **Pn** | **21 24 54.1** | **-1.5** |
| **MBWA** | **Marble Bar** | **12.99** | **168** | Pn | Pn | 21 24 52.9 | -2.7 |
| **MBWA** | **Marble Bar** | **12.99** | **168** | P | Pn | 21 24 52.3 | -3.3 |
| | comp=Z,695nmcomp=Z,64nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.42** | **168** | P | **Pn** | **21 25 00.1** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.42** | **168** | Pn | Pn | 21 24 58.9 | -2.6 |
| **PSA00** | **Pilbara Seismi** | **13.42** | **168** | | **Pn** | **21 24 59.8** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **13.42** | **168** | P | Pn | 21 24 58.3 | -3.1 |
| | comp=Z,682nmcomp=Z,53nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **13.63** | **123** | Pn | **Pn** | **21 25 03.8** | **-0.4** |
| **KNRA** | **Kununurra** | **13.63** | **123** | P | **Pn** | **21 25 02.5** | **-1.8** |
| | comp=Z,547nmcomp=Z,54nm,0.6s | | | | | | |
| **KKM** | **Kota Kinabalu** | **14.33** | **357** | Pn | **Pn** | **21 25 15.5** | **+1.4** |
| **GIRL** | **Giralia** | **14.44** | **190** | P | Pn | 21 25 12.5 | -2.8 |
| **GIRL** | **Giralia** | **14.44** | **190** | Pn | Pn | 21 25 12.6 | -2.8 |
| **MNAI** | **Manna** | **14.48** | **285** | P | **Pn** | **21 25 17.0** | **+1.0** |
| **MTN** | **Manton Dam** | **14.61** | **109** | P | **Pn** | **21 25 16.1** | **-1.7** |
| **MTN** | **Manton Dam** | **14.61** | **109** | Pn | **Pn** | **21 25 16.0** | **-1.8** |
| **MTN** | **Manton Dam** | **14.61** | **109** | P | Pn | 21 25 14.9 | -2.9 |
| **KDU** | **Kakadu** | **15.83** | **107** | P | **Pn** | **21 25 31.8** | **-2.1** |
| **KDU** | **Kakadu** | **15.83** | **107** | P | **Pn** | **21 25 31.0** | **-3.0** |
| **FAKI** | **Fak Fak** | **16.13** | **71** | P | **Pn** | **21 25 37.5** | **-0.3** |
| **FAKI** | **Fak Fak** | **16.13** | **71** | Pn | **Pn** | **21 25 37.7** | **-0.1** |
| FAKI | | | | IAmb | IAmb | 21 25 41.5 | |
| | comp=Z,73nm,1.0s | | | | | | |
| **MEEK** | **Meekatharra** | **18.24** | **175** | P | **Pn** | **21 26 04.1** | **-0.1** |
| **MEEK** | **Meekatharra** | **18.24** | **175** | P | **Pn** | **21 26 04.1** | **-0.1** |
| **WRKA** | **Warakurna** | **19.79** | **148** | P | **P** | **21 26 21.8** | **+0.4** |
| **WRKA** | **Warakurna** | **19.79** | **148** | P | **P** | **21 26 21.6** | **+0.1** |
| | comp=Z,874nmcomp=Z,58nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.37** | **126** | P | **P** | **21 26 27.5** | **-0.3** |
| | comp=Z,50nm,0.8s,baz=300,slow=12,SNR=381 | | | | | | |
| WRA | | | | S | **S** | **21 30 09.5** | **-6.7** |
| | comp=Z,4.4nm,0.8s,baz=295,slow=24,SNR=6.5 | | | | | | |
| WRA | | | | LR | LR | 21 34 33.0 | |
| | comp=Z,385nm,20.3s,baz=234,slow=37 | | | | | | |
| | comp=Z,50nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.38** | **126** | P | **P** | **21 26 27.0** | **-0.8** |
| WRAB | | | | IAmb | IAmb | 21 26 28.5 | |
| | comp=Z,62nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **20.61** | **182** | P | **P** | **21 26 30.2** | **-0.1** |
| **MORW** | **Morawa** | **20.61** | **182** | P | **P** | **21 26 29.8** | **-0.5** |
| **RPSI** | **Rantau Prapat** | **21.09** | **301** | P | **P** | **21 26 35.5** | **0.0** |
| RPSI | | | | IAmb | IAmb | 21 26 46.8 | |
| | comp=Z,40nm,1.2s | | | | | | |
| **GSI** | **Gunungsitoli** | **21.59** | **296** | P | **P** | **21 26 41.9** | **+0.9** |
| **BLDU** | **Ballidu** | **22.14** | **181** | P | **P** | **21 26 46.5** | **-0.2** |
| **AS31** | **Alice Springs** | **22.24** | **135** | P | **P** | **21 26 46.4** | **-1.6** |
| **ASAR** | **Alice Springs** | **22.24** | **135** | P | **P** | **21 26 47.3** | **-0.7** |
| **ASAR** | **Alice Springs** | **22.24** | **135** | P | **P** | **21 26 47.5** | **-0.4** |
| | comp=Z,30nm,0.9s,baz=306,slow=9.5,SNR=74 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 30 42.0** | **-2.4** |
| | comp=Z,2.9nm,0.9s,baz=324,slow=1.7,SNR=5.3 | | | | | | |
| ASAR | | | | S | **S** | **21 30 56.7** | **+3.8** |
| | comp=Z,8.7nm,1.0s,baz=312,slow=23,SNR=7.7 | | | | | | |
| ASAR | | | | LR | LR | 21 35 38.6 | |
| | comp=Z,376nm,20.2s,baz=313,slow=37 | | | | | | |
| | comp=Z,30nm,0.9s | | | | | | |
| **AS01** | **Alice Springs** | **22.27** | **135** | P | **P** | **21 26 48.0** | **-0.3** |
| **KLBR** | **Kellerberrin** | **23.12** | **178** | P | **P** | **21 26 58.2** | **+1.1** |
| **KMBL** | **Kambalda** | **23.34** | **169** | P | **P** | **21 26 58.2** | **-1.1** |
| **MUN** | **Mundaring** | **23.51** | **182** | P | **P** | **21 27 01.8** | **+0.8** |
| **LHMI** | **Lhok Sumawe** | **24.11** | **303** | P | **P** | **21 27 09.6** | **+2.7** |
| **NWAO** | **Narrogin (SRO)** | **24.44** | **179** | P | **P** | **21 27 11.2** | **+1.4** |
| **NWAO** | **Narrogin (SRO)** | **24.44** | **179** | P | **P** | **21 27 11.1** | **+1.3** |
| **NWAO** | **Narrogin (SRO)** | **24.44** | **179** | P | **P** | **21 27 09.7** | **-0.2** |
| | comp=Z,9.6nm,0.7s,baz=358,slow=7.6,SNR=14 | | | | | | |
| NWAO | | | | S | **S** | **21 31 38.5** | **+8.7** |
| | comp=Z,14nm,0.5s,baz=263,slow=8.8,SNR=6.7 | | | | | | |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **24.59** | **157** | P | **P** | **21 27 10.7** | **-0.5** |
| **FORT** | **Forrest** | **24.59** | **157** | P | **P** | **21 27 09.1** | **-2.1** |
| **QIS** | **Mount Isa** | **25.00** | **121** | P | **P** | **21 27 14.5** | **-0.6** |
| **OOD** | **Oodnadatta** | **26.20** | **140** | P | **P** | **21 27 25.5** | **-0.3** |
| **COEN** | **Coen** | **26.29** | **105** | P | **P** | **21 27 25.9** | **-0.9** |
| **QIZ** | **Qiongzhong** | **28.11** | **346** | P | **P** | **21 27 44.4** | **+1.3** |
| QIZ | | | | S | **S** | **21 32 33.5** | **+5.2** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,13nm,1.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=N,160nm,9.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,99nm,14.4s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,220nm,16.1s | | | | | | |
| **MTSU** | **Mount Surprise** | **28.29** | **113** | P | **P** | **21 27 45.1** | **+0.3** |
| **SRDT** | **SRDT** | **28.69** | **322** | P | **P** | **21 27 50.0** | **+1.8** |
| **INKA** | **Innaminka** | **29.59** | **134** | P | **P** | **21 27 56.0** | **-0.2** |
| **LCRK** | **Leigh Creek** | **29.62** | **141** | P | **P** | **21 27 55.9** | **-0.5** |
| **PMG** | **Port Moresby** | **29.84** | **94** | LR | LR | 21 42 34.8 | |
| | comp=Z,250nm,18.2s,baz=296,slow=42 | | | | | | |
| **BBOO** | **Buckleboo** | **30.07** | **147** | P | **P** | **21 27 59.6** | **-0.8** |
| **BBOO** | **Buckleboo** | **30.07** | **147** | P | **P** | **21 27 59.1** | **-1.2** |
| **CTA** | **Charters Tower** | **30.62** | **116** | LR | LR | 21 41 31.6 | |
| | comp=Z,28nm,20.1s,baz=282,slow=38 | | | | | | |
| **CTAO** | **Charters Tower** | **30.62** | **116** | P | **P** | **21 28 04.5** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **32.05** | **326** | P | **P** | **21 28 17.9** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **32.05** | **326** | P | **P** | **21 28 19.4** | **+1.4** |
| | comp=Z,4.0nm,0.8s,baz=151,slow=6.8,SNR=20 | | | | | | |
| CMAR | | | | LR | LR | 21 42 24.2 | |
| | comp=Z,235nm,19.4s,baz=155,slow=39 | | | | | | |
| **HTT** | **Hallett** | **32.14** | **144** | P | **P** | **21 28 18.4** | **-0.3** |
| **STKA** | **Stephens Creek** | **32.73** | **139** | P | **P** | **21 28 23.5** | **-0.3** |
| **STKA** | **Stephens Creek** | **32.73** | **139** | P | **P** | **21 28 22.9** | **-0.9** |
| **STKA** | **Stephens Creek** | **32.73** | **139** | P | **P** | **21 28 23.5** | **-0.3** |
| | comp=Z,19nm,0.5s,baz=314,slow=9.5,SNR=99 | | | | | | |
| STKA | | | | LR | LR | 21 42 25.1 | |
| | comp=Z,248nm,19.6s,baz=334,slow=38 | | | | | | |
| | comp=Z,19nm,0.5s | | | | | | |
| **CRAI** | **Chiangrai** | **32.77** | **330** | P | **P** | **21 28 24.4** | **+0.1** |
| CRAI | | | | IAmb | IAmb | 

comp=Z,4.2nm,0.6s,baz=246,slow=10.0,SNR=1.8
comp=Z,4.2nm,0.6s
**WMQ Urumqi 58.33 335** *e*P **P 21 31 46.5 +0.4**
WMQ pmax pmax
comp=Z,14nm,0.7s
**KLR Kul'dur 58.80 11** P **P 21 31 48.1 -1.1**
comp=Z,1.1nm,0.3s,baz=169,slow=4.0,SNR=6.4
KLR LR LR 21 59 03.8
comp=Z,61nm,20.0s,baz=190,slow=38
comp=Z,1.1nm,0.3s
**HEH HeiHe 59.08 8** *e*P **P 21 31 50.4 -0.7**
HEH pmax pmax
comp=Z,20nm,1.3s
**MSVF Nonsavu 60.01 106** P **P 21 31 59.2 +0.9**
**URZ Urewera 61.51 129** LR LR 22 00 16.8
comp=Z,167nm,18.8s,baz=0.0,slow=37
**MK31 Makanchi Array 63.00 334** P P 21 32 15.6 -2.3
MK31 IAmb IAmb 21 32 28.8
comp=Z,4.5nm,0.8s
**MKAR Makanchi Array 63.00 334** P P 21 32 15.8 -2.0
**MKAR Makanchi Array 63.00 334** P P 21 32 16.2 -1.7
comp=Z,2.4nm,0.6s,baz=147,slow=7.1,SNR=21
MKAR LR LR 22 03 13.6
comp=Z,52nm,18.3s,baz=110,slow=40
comp=Z,2.4nm,0.6s
**ARSB Arslanbob 63.82 324** P P 21 32 21.7 -1.9
**RAO Raoul Island 64.27 118** LR LR 22 00 20.5
comp=Z,125nm,19.1s,baz=352,slow=36
**KURBB Kurchatov Arra 67.53 335** P P 21 32 45.0 -2.1
comp=Z,2.5nm,0.2s,baz=149,slow=6.1,SNR=1.1
comp=Z,2.5nm,0.2s
**KURK Kurchatov 67.56 335** P P 21 32 45.5 -1.8
KURK IAmb IAmb 21 32 58.2
comp=Z,4.5nm,0.8s
**ZAA0 Zalesovo Array 67.75 340** P **P 21 32 47.2 -1.2**
ZAA0 IAmb IAmb 21 32 55.2
comp=Z,7.7nm,1.3s
**ZALV Zalesovo Beam 67.75 340** P P 21 32 46.8 -1.6
**ZALV Zalesovo Beam 67.75 340** P P 21 32 45.9 -2.5
comp=Z,2.5nm,0.5s,baz=139,slow=5.2,SNR=13
comp=Z,2.5nm,0.5s
**MAW Mawson 69.16 199** P **P 21 32 57.0 0.0**
comp=Z,4.0nm,0.6s,baz=64,slow=6.3,SNR=18
comp=Z,4.0nm,0.6s
**BVAR Borovoye Array 72.81 333** P P 21 33 17.0 -2.5
comp=Z,1.4nm,0.7s,baz=134,slow=4.3,SNR=7.1
comp=Z,1.4nm,0.7s
**ABKAR Akbulak array 75.90 325** P P 21 33 34.6 -3.0
**QSPA South Pole Qui 81.63 180** P **P 21 34 07.7 -1.3**
QSPA IAmb IAmb 21 34 38.1
comp=Z,9.1nm,1.2s
**QSPA South Pole Qui 81.63 180** P **P 21 34 07.6 -1.3**
comp=Z,4.3nm,1.0s,baz=269,slow=1.6,SNR=11
comp=Z,4.3nm,1.0s
**BOSA Boshof 87.55 242** P **P 21 34 38.4 -1.4**
comp=Z,6.0nm,0.9s,baz=90,slow=5.2,SNR=8.2
comp=Z,6.0nm,0.9s
**TROLL Troll, Antarti 89.42 196** ⇑P **P 21 34 47.6 -0.1**
comp=Z,158nm,0.5s
**SNAA Sanae 91.06 196** P **P 21 34 54.5 -0.8**
SNAA IAmb IAmb 21 34 55.7
comp=Z,3.2nm,0.7s
**SNAA Sanae 91.06 196** ⇑P **P 21 34 55.1 -0.1**
comp=Z,62nm,0.6s
**SNAA Sanae 91.06 196** P **P 21 34 55.0 -0.3**
comp=Z,3.4nm,0.8s,baz=190,slow=8.9,SNR=14
comp=Z,3.4nm,0.8s
**BELA Belgrano 2 92.45 186** P **P 21 35 00.7 -0.9**
BELA IAmb IAmb 21 35 01.6
comp=Z,4.4nm,0.7s
**TORD Torodi Ar. Bea 116.38 281** PKP **PKPdf 21 40 32.7 -3.1**
comp=Z,0.9nm,0.5s,baz=34,slow=2.2,SNR=11
**NVAR Mina Array Bea 122.15 50** PKP **PKPdf 21 40 43.6 -3.0**
comp=Z,0.6nm,0.7s,baz=218,slow=2.3,SNR=4.5
**TXAR Lajitas Array 136.56 56** PKP **PKPdf 21 41 13.8 -0.2**
comp=Z,0.5nm,0.8s,baz=151,slow=2.9,SNR=4.1
**CPUP Villa Florida 145.07 189** PKPbc **PKPab 21 41 27.9 -0.7**
comp=Z,23nm,1.0s,baz=160,slow=2.8,SNR=34
**BDFB Brasilia 151.89 212** PKPbc **PKPdf 21 41 46.0 +5.2**
comp=Z,4.9nm,0.8s,baz=154,slow=8.9,SNR=5.8
BDFB PKPab **sPKPbc 21 41 55.8 +4.0**
comp=Z,6.1nm,0.8s,baz=66,slow=6.8,SNR=3.7
**LPAZ La Paz 154.99 168** PKPbc **PKPbc 21 41 54.0 -0.6**
comp=Z,0.8nm,0.5s,baz=98,slow=6.8,SNR=3.9
LPAZ PKPab **PKPab 21 42 09.8 0.0**
comp=Z,3.8nm,1.1s,baz=207,slow=4.5,SNR=5.9

*IDC **19**21:28:00.3±5.2, 17°.89S×178°.30W, h539km±60km, mb3.3/10, mbtmp4.2/11, Error ellipse: s-maj=39.1km s-min=23.1km az=145.0*
*NEIC **19**21:28:07.5±1.6, 18°.0S±0°.1×178°.7W±0°.1, h599km±10km, mb4.5/20, Error ellipse: s-maj=21.3km s-min=19.9km az=190.0*
**ISC 19 21:28:04.7±0.6, 17°.9S±0°.1×178°.6W±0°.1, h579km, n39, σ1ᵖ39/39, mb4.2/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.20** | **273** | P | **P** | **21 29 24.7** | **+1.3** |
| **DZM** | **Mont Dzumac** | **14.66** | **251** | P | **P** | **21 31 10.1** | **-0.2** |
| **DZM** | **Mont Dzumac** | **14.66** | **251** | P | **P** | **21 31 10.3** | **0.0** |
| | 3.4nm,0.4s,baz=119,slow=19,SNR=1.7 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.38** | **258** | P | **P** | **21 31 26.7** | **+0.2** |
| KOUNC | | | | IAmb | IAmb | 21 31 29.1 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **RAR** | **Rarotonga** | **18.04** | **104** | P | **P** | **21 31 46.9** | **+5.3** |
| **TOZ** | **Tahuroa Road** | **20.42** | **194** | P | **P** | **21 32 01.4** | **-1.6** |
| **EIDS** | **Eidsvold** | **29.10** | **250** | P | **P** | **21 33 19.7** | **-0.1** |
| EIDS | | | | IAmb | IAmb | 21 33 22.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.54** | **199** | P | **P** | **21 33 23.1** | **-0.2** |
| **ARMA** | **Armidale** | **29.79** | **240** | P | **P** | **21 33 26.2** | **+0.3** |
| **COEN** | **Coen** | **36.93** | **270** | P | **P** | **21 34 27.7** | **+1.8** |
| COEN | | | | IAmb | IAmb | 21 34 36.3 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **TOO** | **Toolangi** | **37.03** | **231** | P | **P** | **21 34 26.2** | **-0.2** |
| TOO | | | | IAmb | IAmb | 21 34 37.2 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **38.48** | **241** | P | **P** | **21 34 38.4** | **+0.1** |
| **STKA** | **Stephens Creek** | **38.48** | **241** | P | **P** | **21 34 38.4** | **+0.1** |
| | comp=Z,2.5nm,0.5s,baz=83,slow=6.2,SNR=10.0 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.25** | **241** | P | **P** | **21 35 15.9** | **-0.2** |
| **WR0** | **Warramunga Arr** | **44.27** | **260** | P | **P** | **21 35 24.7** | **+0.6** |
| WR0 | | | | IAmb | IAmb | 21 35 31.7 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.43** | **260** | P | **P** | **21 35 25.4** | **+0.1** |
| **WB2** | **Warramunga Arr** | **44.45** | **260** | P | **P** | **21 35 25.3** | **-0.2** |
| **WRA** | **Warramunga Arr** | **44.46** | **260** | P | **P** | **21 35 25.3** | **-0.3** |
| | comp=Z,1.0nm,0.4s,baz=97,slow=7.4,SNR=14 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.62** | **254** | P | **P** | **21 35 27.5** | **+0.7** |
| AS31 | | | | IAmb | IAmb | 21 35 27.9 | |
| | comp=Z,3.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.62** | **254** | P | **P** | **21 35 26.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.62** | **254** | P | **P** | **21 35 27.2** | **+0.4** |
| | comp=Z,7.6nm,0.6s,baz=88,slow=9.0,SNR=32 | | | | | | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **49.85** | **245** | P | **P** | **21 36 04.9** | **-0.9** |
| FORT | | | | IAmb | IAmb | 21 36 10.2 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **55.90** | **270** | P | **P** | **21 36 48.4** | **-0.8** |
| SOEI | | | | IAmb | IAmb | 21 37 01.1 | |
| | comp=Z,48nm,1.5s | | | | | | |
| **MBWA** | **Marble Bar** | **57.90** | **256** | P | **P** | **21 37 02.2** | **-0.4** |
| **MJAR** | **Matsushiro Arr** | **67.80** | **323** | P | **P** | **21 38 06.0** | **+0.2** |
| | comp=Z,1.6nm,0.5s,baz=155,slow=6.6,SNR=5.8 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **67.80** | **323** | P | **P** | **21 38 06.5** | **+0.8** |
| MAJO | | | | IAmb | IAmb | 21 38 19.3 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **67.81** | **323** | P | **P** | **21 38 07.4** | **+1.6** |
| MJB9 | | | | IAmb | IAmb | 21 38 20.3 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.15** | **180** | P | **P** | **21 38 30.3** | **-0.9** |
| **PEA0B** | **Petropavlovsk-** | **73.63** | **345** | P | **P** | **21 38 39.5** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **73.63** | **345** | P | **P** | **21 38 39.5** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **73.63** | **345** | P | **P** | **21 38 38.8** | **-0.8** |
| | comp=Z,3.1nm,0.6s,baz=110,slow=6.6,SNR=8.6 | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.55** | **44** | P | **P** | **21 39 10.9** | **-1.6** |
| | comp=Z,0.5nm,0.6s,baz=214,slow=7.2,SNR=5.4 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.93** | **13** | P | **P** | **21 39 41.5** | **-2.2** |
| | comp=Z,0.8nm,0.4s,baz=220,slow=4.9,SNR=5.0 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.14** | **58** | P | **P** | **21 39 44.4** | **-1.2** |
| | comp=Z,0.3nm,0.7s,baz=213,slow=7.6,SNR=4.8 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.47** | **43** | P | **P** | **21 39 49.0** | **-2.7** |
| | comp=Z,0.6nm,0.4s,baz=305,slow=3.2,SNR=3.9 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **93.44** | **319** | P | **P** | **21 40 20.1** | **+1.1** |
| | comp=Z,0.1nm,0.3s,baz=100,slow=7.5,SNR=1.3 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.66** | **315** | PKP | **PKPdf** | **21 46 36.0** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=97,slow=2.6,SNR=8.4 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.99** | **303** | PKPbc | **PKPdf** | **21 46 40.9** | **+2.0** |
| | comp=Z,0.8nm,0.4s,baz=57,slow=9.1,SNR=4.9 | | | | | | |
| **GERES** | **GERESS Array B** | **147.56** | **345** | PKPbc | **PKPdf** | **21 46 43.0** | **+2.0** |
| | comp=Z,1.1nm,0.6s,baz=181,slow=7.8,SNR=1.9 | | | | | | |

*IDC **19**21:30:52.7±5.9, 17°.70S×178°.57W, h504km±64km, mb3.4/12, mbtmp4.2/12, Error ellipse: s-maj=23.6km s-min=19.5km az=103.0*
*NEIC **19**21:30:54.9±1.6, 17°.8S±0°.2×178°.56W±0°.08, h530km±9km, mb4.1/19, Error ellipse: s-maj=24.5km s-min=1.5km az=153.0*
**ISC 19 21:30:55.6±0.5, 17°.8S±0°.1×178°.63W±0°.09, h550km, n55, σ0ᵖ96/53, mb4.0/22, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.17** | **271** | P | **P** | **21 32 11.9** | **+0.1** |
| **AFI** | **Afiamalu** | **7.64** | **61** | P | **P** | 21 32 43.5 | -6.5 |
| **NIUE** | **Niue** | **8.35** | **100** | P | **P** | **21 32 54.8** | **-2.1** |
| **DZM** | **Mont Dzumac** | **14.67** | **251** | P | **P** | **21 34 00.2** | **-1.5** |
| **MXZ** | **Minkkaoa Point** | **19.87** | **187** | P | **P** | **21 34 50.1** | **-0.3** |
| **PLWZ** | **Palliser** | **24.26** | **191** | P | **P** | **21 35 29.3** | **-0.4** |
| **TOO** | **Toolangi** | **37.08** | **231** | P | **P** | **21 37 19.7** | **+0.1** |
| TOO | | | | IAmb | IAmb | 21 37 24.7 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.50** | **241** | P | **P** | **21 37 32.8** | **+1.6** |
| **STKA** | **Stephens Creek** | **38.50** | **241** | P | **P** | **21 37 32.8** | **+1.6** |
| | comp=Z,2.1nm,0.6s,baz=96,slow=14,SNR=4.6 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **43.28** | **241** | P | **P** | **21 38 10.4** | **+1.3** |
| BBOO | | | | IAmb | IAmb | 21 38 10.6 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.41** | **260** | P | **P** | **21 38 18.5** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 21 38 29.4 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.44** | **259** | P | **P** | **21 38 18.6** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 21 38 26.5 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.45** | **259** | P | **P** | **21 38 18.4** | **0.0** |
| | comp=Z,0.4nm,0.4s,baz=92,slow=7.3,SNR=7.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.62** | **254** | P | **P** | **21 38 20.6** | **+0.9** |
| **ASAR** | **Alice Springs** | **44.62** | **254** | P | **P** | **21 38 19.8** | **0.0** |
| **ASAR** | **Alice Springs** | **44.62** | **254** | P | **P** | **21 38 20.7** | **+1.0** |
| | comp=Z,4.2nm,0.5s,baz=89,slow=8.3,SNR=36 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **49.87** | **245** | P | **P** | **21 39 00.2** | **+1.3** |
| **TOLI2** | **Tolitoli** | **62.49** | **281** | P | **P** | **21 40 23.4** | **-2.9** |
| TOLI2 | | | | IAmb | IAmb | 21 40 28.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **VA02** | **Isla de Pascua** | **63.93** | **112** | P | **P** | **21 40 34.6** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **67.70** | **323** | P | **P** | **21 40 59.0** | **+0.6** |
| | comp=Z,1.2nm,0.5s,baz=153,slow=6.0,SNR=5.5 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **UGM** | **Wanagama** | **69.44** | **268** | P | **P** | **21 41 09.1** | **-0.4** |
| **QSPA** | **South Pole Qui** | **72.25** | **180** | P | **P** | **21 41 26.6** | **+1.4** |
| | comp=Z,1.8nm,0.7s,baz=322,slow=0.6,SNR=11 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.52** | **345** | P | **P** | **21 41 31.9** | **-0.5** |
| | comp=Z,2.8nm,0.8s,baz=178,slow=7.2,SNR=2.3 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.49** | **44** | P | **P** | **21 42 06.2** | **+0.5** |
| | comp=Z,1.3nm,0.7s,baz=225,slow=9.0,SNR=9.4 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **PRN** | **Pahroc Range** | **81.15** | **46** | P | **P** | **21 42 14.8** | **+0.4** |
| **U15A** | **North Rim** | **82.60** | **48** | P | **P** | **21 42 23.8** | **+1.9** |
| U15A | | | | IAmb | IAmb | 21 42 24.5 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **ELK** | **Elko** | **82.72** | **43** | P | **P** | **21 42 22.9** | **+0.6** |
| **WUAZ** | **Wupatki** | **82.83** | **49** | P | **P** | **21 42 23.5** | **+0.5** |
| WUAZ | | | | IAmb | IAmb | 21 42 26.1 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **85.83** | **13** | P | **P** | **21 42 36.4** | **-0.3** |
| | comp=Z,0.7nm,0.4s,baz=226,slow=5.3,SNR=13 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **86.11** | **58** | P | **P** | **21 42 40.7** | **+1.6** |
| TX31 | | | | IAmb | IAmb | 21 42 42.1 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.11** | **58** | P | **P** | **21 42 41.2** | **+2.2** |
| | comp=Z,1.9nm,0.8s,baz=207,slow=6.1,SNR=14 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **87.17** | **15** | P | **P** | **21 42 43.9** | **+0.9** |
| EGAK | | | | IAmb | IAmb | 21 42 51.3 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.42** | **44** | P | **P** | **21 42 45.6** | **+0.6** |
| | comp=Z,1.5nm,0.3s,baz=237,slow=6.3,SNR=7.5 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **HNDO** | **Hondo** | **89.74** | **59** | P | **P** | **21 42 55.7** | **-0.2** |
| HNDO | | | | IAmb | IAmb | 21 42 58.7 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.71** | **179** | P | **P** | **21 43 00.3** | **+0.6** |
| | comp=Z,1.2nm,1.0s,baz=44,slow=6.6,SNR=3.1 | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **93.33** | **319** | P | **P** | **21 43 12.9** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=125,slow=6.7,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **116.63** | **321** | PKP | **PKiKP** | **21 48 37.6** | **+0.3** |
| | comp=Z,0.5nm,0.4s,baz=117,slow=3.6,SNR=3.6 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.38** | **4** | PKhKP | PKPpre | 21 49 22.5 | |
| | comp=Z,0.2nm,0.3s,baz=328,slow=2.5,SNR=3.7 | | | | | | |
| **BNN** | **Bunyan** | **143.43** | **312** | | **PKPdf** | **21 49 28.9** | **+0.7** |
| **BRTR** | **Keskin Array B** | **144.56** | **315** | PKP | **PKPab** | **21 49 30.7** | **-0.2** |
| | comp=Z,1.8nm,0.9s,baz=125,slow=3.7,SNR=8.8 | | | | | | |
| **MLR** | **Muntele Rosu** | **145.63** | **329** | PKPbc | **PKiKP** | **21 49 35.4** | **-0.7** |
| | comp=Z,0.6nm,0.4s,baz=0.0,slow=13,SNR=4.5 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.91** | **303** | PKPbc | **PKPab** | **21 49 35.6** | **-0.7** |
| | comp=Z,0.9nm,0.4s,baz=98,slow=4.6,SNR=4.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.46** | **345** | PKPbc | **PKiKP** | **21 49 39.2** | **-0.4** |
| | comp=Z,1.8nm,0.6s,baz=168,slow=6.8,SNR=8.0 | | | | | | |
| **CONA** | **Conrad Observa** | **147.70** | **342** | *i* PKP | **PKiKP** | **21 49 40.1** | **-0.1** |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.77** | **341** | *e*PKP | **PKiKP** | **21 49 40.1** | **-0.2** |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.03** | **345** | *e*PKP | **PKiKP** | **21 49 42.9** | **-0.1** |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.18** | **344** | *i* PKP | **PKiKP** | **21 49 42.7** | **-0.7** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **WATA** | **Walderalm** | **149.37** | **346** | *e*PKP | **PKiKP** | **21 49 43.7** | **-0.1** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **RETA** | **Reutte** | **149.41** | **347** | *i* PKP | **PKiKP** | **21 49 43.7** | **0.0** |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **149.43** | **346** | *i* PKP | **PKiKP** | **21 49 44.1** | **+0.2** |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **MOTA** | **Moosalm** | **149.47** | **347** | *i* PKP | **PKiKP** | **21 49 43.8** | **-0.1** |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.56** | **347** | *i* PKP | **PKiKP** | **21 49 44.4** | **+0.3** |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.70** | **345** | *i* PKP | **PKiKP** | **21 49 44.0** | **-0.4** |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **DAVA** | **Damuels** | **149.77** | **348** | *e*PKP | **PKiKP** | **21 49 45.3** | **+0.7** |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **FETA** | **Feichten** | **149.85** | **347** | *i* PKP | **PKiKP** | **21 49 45.0** | **+0.2** |
| | comp=Z,0.5nm,0.4s | | | | | | |

*IDC **19**21:32:42.4±4.0, 1°.86N×98°.10E, h0km, mb3.9/4, mbtmp3.9/4, MS3.5/3, Error ellipse: s-maj=164.7km s-min=25.7km az=56.0*
*NEIC **19**21:32:52.5±1.9, 1°.94N±0°.05×98°.12E±0°.06, h67km±4km, mb4.6/20, Error ellipse: s-maj=11.0km s-min=4.4km az=126.0*
**ISC 19 21:32:50.7±0.5, 1°.97N±0°.06×98°.12E±0°.07, h50km, n38, σ1ᵖ53/37, mb4.3/13, MS3.5/3, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **0.85** | **219** | Pn | **Pn** | **21 33 08.4** | **+1.9** |
| GSI | | | | Sn | **Sn** | **21 33 21.4** | **+3.3** |
| **RPSI** | **Rantau Prapat** | **1.08** | **48** | Pn | **Pn** | **21 33 11.8** | **+2.1** |
| **LHMI** | **Lhok Sumawe** | **3.44** | **340** | Pn | **Pn** | **21 33 44.1** | **+2.1** |
| **IPM** | **Ipoh** | **3.83** | **49** | | **Pn** | **21 33 50.2** | **+2.9** |
| **KULM** | **Kulim** | **4.16** | **37** | | **Pn** | **21 33 53.9** | **+2.2** |
| **SRIT** | **Nakonsritamara** | **6.75** | **13** | Pn | **Pn** | **21 34 28.6** | **+1.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **7.93** | **142** | Pn | **Pn** | **21 34 43.7** | **+0.2** |
| **SMRI** | **Semarang** | **15.21** | **126** | | **Pn** | **21 36 25.1** | **+2.5** |
| SMRI | | | | IAmb | IAmb | 21 36 34.0 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.50** | **77** | P | **P** | **21 37 03.0** | **-0.1** |
| **MYLDM** | **Lahad Datu** | **20.59** | **81** | P | **P** | **21 37 25.6** | **-0.3** |
| **KNRA** | **Kununurra** | **35.01** | **121** | P | **P** | **21 39 38.2** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 21 39 43.7 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **MORW** | **Morawa** | **35.32** | **152** | P | **P** | **21 39 41.1** | **-0.2** |
| MORW | | | | IAmb | IAmb | 21 39 59.2 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **39.13** | **154** | P | **P** | **21 40 14.5** | **+0.9** |
| NWAO | | | | IAmb | IAmb | 21 40 25.8 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **41.64** | **123** | P | **P** | **21 40 32.5** | **-2.0** |
| WB0 | | | | IAmb | IAmb | 21 40 48.7 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.67** | **123** | P | **P** | **21 40 32.7** | **-2.2** |
| | comp=Z,1.6nm,0.5s,baz=302,slow=9.1,SNR=18 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.68** | **123** | P | **P** | **21 40 33.1** | **-1.8** |
| WB2 | | | | IAmb | IAmb | 21 40 47.2 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **41.85** | **123** | P | **P** | **21 40 34.4** | **-1.8** |
| WR0 | | | | IAmb | IAmb | 21 40 34.7 | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **43.28** | **141** | P | **P** | **21 40 47.4** | **-0.3** |
| FORT | | | | IAmb | IAmb | 21 40 53.6 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **46.25** | **8** | P | **P** | **21 41 10.9** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=190,slow=7.3,SNR=2.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **46.73** | **345** | P | **P** | **21 41 14.7** | **-0.2** |
| **MKAR** | **Makanchi Array** | **46.73** | **345** | P | **P** | **21 41 14.1** | **-0.8** |
| **MKAR** | **Makanchi Array** | **46.73** | **345** | P | **P** | **21 41 14.5** | **-0.4** |
| | comp=Z,1.6nm,0.7s,baz=154,slow=8.2,SNR=16 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **46.83** | **345** | P | **P** | **21 41 15.3** | **-0.3** |
| **KKAR** | **Karatay Array** | **47.79** | **333** | P | **P** | **21 41 24.5** | **+1.3** |
| **KURBB** | **Kurchatov Arra** | **51.24** | **344** | LR | LR | 22 06 52.2 | |
| | comp=Z,40nm,18.4s,baz=169,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.96** | **350** | P | **P** | **21 42 00.9** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **52.96** | **350** | P | **P** | **21 42 00.1** | **-1.8** |
| | comp=Z,0.9nm,0.3s,baz=164,slow=7.1,SNR=6.0 | | | | | | |
| ZALV | | | | LR | LR | 22 06 46.0 | |
| | comp=Z,32nm,20.6s,baz=109,slow=38 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **57.28** | **331** | P | **P** | **21 42 32.0** | **-1.3** |
| **ARMA** | **Armidale** | **60.25** | **127** | P | **P** | **21 42 54.2** | **-0.2** |
| **ARU** | **Arti** | **62.84** | **337** | LR | LR | 22 14 54.4 | |
| | comp=Z,56nm,18.7s,baz=122,slow=40 | | | | | | |
| **DSZ** | **Denniston Nort** | **79.20** | **133** | P | **P** | **21 44 50.1** | **-0.6** |
| **ARCES** | **ARCESS Array B** | **82.13** | **340** | P | **P** | **21 45 06.3** | **+0.6** |
| ARCES | | | | IAmb | IAmb | 21 45 11.1 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **CEL** | **Celeste** | **82.67** | **308** | P | **P** | **21 45 08.2** | **-1.2** |
| **GRA1** | **Grafenberg Arr** | **86.50** | **319** | P | **P** | **21 45 28.9** | **+0.5** |
| **KONO** | **Kongsberg** | **87.56** | **329** | P | **P** | **21 45 32.7** | **-0.6** |
| **KEST** | **Kesra** | **87.86** | **306** | P | **P** | **21 45 33.2** | **-2.2** |
| KEST | | | | IAmb | IAmb | 21 45 43.3 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **C16K** | **Lisburne Hills** | **90.62** | **22** | P | **P** | **21 45 48.2** | **+0.8** |
| **QSPA** | **South Pole Qui** | **91.90** | **180** | P | **P** | **21 45 53.2** | **-0.4** |

*NOU **19**21:35:15.0, 38°.66S×175°.72E, h187km, MLv4.0/11, North Island, New Zealand*
*WEL **19**21:35:17.7±0.5, 39°.3±3°.3×17°.6E±°, h156km±4km, M3.2/43, ML2.4/7, MLv3.2/43, Error ellipse: s-maj=0.0km s-min=0.0km az=148.1, confirmed*
**ISC 19 21:35:13.2±1.6, 38°.61S±0°.04×175°.73E±0°.04, h192km±8km, n106, σ1ᵖ63/128, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATZ** | **Wairara** | **0.10** | **179** | P | **Pn** | **21 35 39.6** | **+1.1** |
| **RATZ** | **Rangitukua** | **0.26** | **173** | P | **Pn** | **21 35 39.6** | **+0.9** |
| **KATZ** | **Kakaramea** | **0.37** | **184** | P | **Pn** | **21 35 40.2** | **+1.1** |
| KATZ | | | | S | **Sn** | **21 35 59.4** | **+0.1** |
| **TMVZ** | **Te Maari** | **0.51** | **182** | P | **Pn** | **21 35 40.9** | **+1.3** |
| TMVZ | | | | S | **Sn** | **21 35 58.1** | **-2.0** |
| **WTVZ** | **West Tongariro** | **0.52** | **192** | P | **Pn** | **21 35 40.8** | **+1.3** |
| WTVZ | | | | S | **Sn** | **21 35 58.4** | **-1.8** |
| **ETVZ** | **East Tongariro** | **0.53** | **182** | P | **Pn** | **21 35 41.0** | **+1.4** |
| ETVZ | | | | S | **Sn** | **21 35 58.5** | **-1.7** |
| **NNVZ** | **North Ngauruho** | **0.53** | **190** | P | **Pn** | **21 35 41.0** | **+1.3** |
| NNVZ | | | | S | **Sn** | **21 35 58.9** | **-1.5** |
| **MRHZ** | **Matea Rd** | **0.58** | **113** | P | **Pn** | **21 35 40.6** | **+0.8** |
| MRHZ | | | | S | **Sn** | **21 35 57.4** | **-3.0** |
| **HIZ** | **Hauiti** | **0.69** | **277** | P | **Pn** | **21 35 41.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DUWZ | D'Urville Isla | 2.60 | 212 | P | Pn | 21 35 59.0 | +1.3 |
| WEL | Wellington | 2.77 | 195 | P | Pn | 21 36 01.1 | +1.5 |
| PAWZ | Paruwai Farm | 2.78 | 185 | P | Pn | 21 36 01.0 | +1.2 |
| TRWZ | Traveller | 2.79 | 181 | P | Pn | 21 36 01.3 | +1.4 |
| SNZO | South Karori | 2.81 | 196 | P | Pn | 21 36 01.1 | +1.0 |
| MSWZ | Moikau Station | 2.83 | 187 | P | Pn | 21 36 01.5 | +1.1 |
| TCW | Tory Channel | 2.83 | 203 | P | Pn | 21 36 01.7 | +1.4 |
| BHW | Baring Head | 2.88 | 193 | P | Pn | 21 36 02.0 | +1.1 |
| PLWZ | Palliser | 2.98 | 187 | P | Pn | 21 36 03.2 | +1.0 |
| NNZ | Nelson | 3.17 | 214 | P | Pn | 21 36 05.4 | +1.0 |
| TKNZ | Takaka Hill | 3.23 | 220 | P | Pn | 21 36 05.7 | +0.5 |
| QRZ | Quartz Range | 3.32 | 227 | P | Pn | 21 36 06.8 | +0.6 |
| QRZ | Quartz Range | 3.32 | 227 | P | Pn | 21 36 06.6 | +0.5 |
| CMWZ | Cape Campbell | 3.35 | 200 | P | Pn | 21 36 08.7 | +2.2 |
| BSWZ | Blackbirch Sta | 3.41 | 204 | P | Pn | 21 36 08.7 | +1.4 |
| MRNZ | Matariki Terra | 3.60 | 218 | P | Pn | 21 36 10.2 | +0.5 |
| OUZ | Omahuta | 3.79 | 333 | P | Pn | 21 36 15.4 | +3.3 |
| OUZ | Omahuta | 3.79 | 333 | P | Pn | 21 36 15.0 | +3.0 |
| THZ | Tophouse | 3.82 | 214 | P | Pn | 21 36 13.3 | +0.8 |
| KHZ | Kahutara | 4.16 | 203 | P | Pn | 21 36 17.8 | +1.3 |
| KHZ | Kahutara | 4.16 | 203 | P | Pn | 21 36 17.8 | +1.3 |
| DSZ | Denniston Nort | 4.34 | 223 | P | Pn | 21 36 19.3 | +0.3 |
| GVZ | Greta Valley S | 4.81 | 204 | P | Pn | 21 36 25.7 | +0.8 |
| LTZ | Lake Taylor | 4.93 | 211 | P | Pn | 21 36 26.3 | -0.1 |
| AMCZ | Amberley | 5.13 | 206 | P | Pn | 21 36 29.5 | +0.6 |
| INZ | Inchbonnie | 5.25 | 217 | P | Pn | 21 36 30.1 | -0.4 |
| OXZ | Oxford | 5.48 | 209 | P | Pn | 21 36 33.5 | 0.0 |
| OKCZ | Okains Bay | 5.50 | 201 | P | Pn | 21 36 34.1 | +0.4 |
| MQZ | McQueen's Vall | 5.60 | 204 | P | Pn | 21 36 34.6 | -0.4 |
| AKCZ | Akaroa Harbour | 5.67 | 201 | P | Pn | 21 36 36.3 | +0.3 |
| RACZ | Rakaia | 5.79 | 207 | P | Pn | 21 36 37.5 | 0.0 |
| MHCZ | Mount Hutt | 5.84 | 211 | P | Pn | 21 36 38.7 | +0.5 |
| WACZ | Wakanui South | 6.08 | 208 | P | Pn | 21 36 41.4 | +0.1 |
| RPZ | Rata Peaks | 6.20 | 213 | P | Pn | 21 36 43.7 | +0.8 |
| RPZ | Rata Peaks | 6.20 | 213 | P | Pn | 21 36 43.7 | +0.8 |
| ARCZ | Arundel | 6.34 | 211 | P | Pn | 21 36 44.9 | +0.2 |
| FOZ | Fox Glacier | 6.65 | 220 | P | Pn | 21 36 49.5 | +0.9 |
| TMZ | Timaru | 6.77 | 210 | P | Pn | 21 36 50.6 | +0.3 |
| LBZ | Lake Benmore | 7.12 | 214 | P | Pn | 21 36 55.2 | +0.4 |
| ODZ | Otahua Downs | 7.47 | 209 | P | Pn | 21 37 00.2 | +0.8 |
| ODZ | Otahua Downs | 7.47 | 209 | P | Pn | 21 37 00.0 | +0.7 |
| JCZ | Jackson Bay | 7.56 | 222 | P | Pn | 21 37 01.2 | +0.6 |
| JCZ | Jackson Bay | 7.56 | 222 | P | Pn | 21 37 01.5 | +0.9 |

*IDC* ***19*** *21:36:02.3±1.6, 18°.02S×177°.30W, h0km, mb3.9/4, mbtmp3.9/4, Error ellipse: s-maj=52.3km s-min=32.9km az=176.0*

*NEIC* ***19*** *21:37:00.3±1.7, 18°.2S±0°.1×178°.2W±0°.2, h549km±13km, mb4.5/16, Error ellipse: s-maj=31.1km s-min=12.8km az=55.0*

**ISC 19 21:36:59.4**±1.1, **18°.1S**±0°.2×**178°.2W**±0°.1, **h550**km, **n24,** σ0§**83**/24, **mb4.2**/11, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.60** | **275** | P | **P** | **21 38 19.5** | **+1.0** |
| **DZM** | **Mont Dzumac** | **14.98** | **252** | P | **P** | **21 40 07.8** | **-1.1** |
| KOUNC | **Koumac, New Ca** | **16.73** | **259** | P | **P** | **21 40 27.1** | **+1.3** |
| KOUNC | | | | IAmb | IAmb | 21 40 42.0 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.34** | **199** | P | **P** | **21 42 00.1** | **-0.4** |
| **EIDS** | **Eidsvold** | **29.42** | **250** | P | **P** | **21 42 17.9** | **-1.1** |
| EIDS | | | | IAmb | IAmb | 21 42 19.4 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.52** | **200** | P | **P** | **21 42 20.7** | **+1.1** |
| **ARMA** | **Armidale** | **30.05** | **240** | P | **P** | **21 42 23.0** | **-1.5** |
| ARMA | | | | IAmb | IAmb | 21 42 27.8 | |
| | comp=Z,54nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **33.78** | **233** | P | **P** | **21 42 55.5** | **-0.6** |
| **COEN** | **Coen** | **37.32** | **271** | P | **P** | **21 43 24.9** | **-0.7** |
| COEN | | | | IAmb | IAmb | 21 43 35.8 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.62** | **260** | P | **P** | **21 44 23.1** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 21 44 29.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **21 44 25.1** | **+0.3** |
| **WB2** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **21 44 24.8** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 21 44 36.0 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.81** | **260** | P | **P** | **21 44 24.0** | **-1.0** |
| | comp=Z,0.7nm,0.5s,baz=95,slow=7.5,SNR=16 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.95** | **254** | P | **P** | **21 44 26.9** | **+0.8** |
| **ASAR** | **Alice Springs** | **44.96** | **254** | P | **P** | **21 44 26.7** | **+0.6** |
| **ASAR** | **Alice Springs** | **44.96** | **254** | P | **P** | **21 44 26.9** | **+0.8** |
| | comp=Z,2.5nm,0.6s,baz=86,slow=8.5,SNR=27 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **50.69** | **264** | P | **P** | **21 45 09.3** | **+0.4** |
| KNRA | | | | IAmb | IAmb | 21 45 22.7 | |
| | comp=Z,9.8nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **50.82** | **281** | P | **P** | **21 45 10.1** | **+0.2** |
| **SOEI** | **Soe** | **56.29** | **270** | P | **P** | **21 45 49.0** | **+0.2** |
| SOEI | | | | IAmb | IAmb | 21 45 53.3 | |
| | comp=Z,34nm,1.3s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.08** | **255** | P | **P** | **21 46 01.7** | **+0.9** |
| **QSPA** | **South Pole Qui** | **71.99** | **180** | P | **P** | **21 47 27.8** | **+0.3** |
| **QSPA** | **South Pole Qui** | **71.99** | **180** | P | **P** | **21 47 27.9** | **+0.4** |
| | comp=Z,1.1nm,0.6s,baz=20,slow=0.5,SNR=13 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **58** | P | **P** | **21 48 41.1** | **-0.8** |
| | comp=Z,0.2nm,0.7s,baz=228,slow=4.7,SNR=2.5 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.43** | **179** | P | **P** | **21 49 01.9** | **-0.3** |

*IPEC* ***19*** *21:43:39.3±0.3, 51°.56N×16°.21E, h1km, ML2.3/4, Error ellipse: s-maj=3.3km s-min=1.7km az=66.0*

*DNK* ***19*** *21:43:39.5±2.7, 51°.62N×16°.02E, h0km±114km, ML2.1*

*VIE* ***19*** *21:43:40.9±0.6, 51°.45N×16°.14E, h0km, mb2.3/6, ml2.7/5, Error ellipse: s-maj=6.6km s-min=3.5km az=52.0, Suspected Mining induced.*

*PRU* ***19*** *21:43:42.3, 51°.45N×16°.08E, h0km*

**ISC 19 21:43:38.5**±0.8, **51°.61N**±0°.03×**16°.11E**±0°.03, **h0**km, **n38,** σ1§**11**/67, **Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.78** | **172** | *e*Pg | **Pg** | **21 43 53.3** | **-0.1** |
| KSP | | | | *e*Sg | **Sg** | **21 44 02.7** | **-0.6** |
| **CHVC** | **Chvalec** | **1.02** | **182** | *e*PG | **Pg** | **21 43 58.2** | **+0.1** |
| CHVC | | | | *e*SG | **Sg** | **21 44 10.7** | **-0.6** |
| **OSTC** | **Ostas** | **1.05** | **176** | *e*PG | **Pg** | **21 43 58.9** | **+0.2** |
| OSTC | | | | *e*SG | **Sg** | **21 44 11.3** | **-1.1** |
| | comp=Z,43nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.10** | **183** | *e*PG | **Pg** | **21 43 59.6** | **-0.1** |
| UPC | | | | *e*SG | **Sg** | **21 44 12.9** | **-1.1** |
| **DPC** | **Dobruska-Polom** | **1.27** | **174** | *e*PG | **Pg** | **21 44 02.3** | **-0.5** |
| DPC | | | | *e*SG | **Sg** | **21 44 17.5** | **-1.7** |
| | comp=Z,25nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **1.46** | **223** | *e*PG | **Pb** | **21 44 06.7** | **+0.2** |
| PVCC | | | | *e*SG | **Sg** | **21 44 25.1** | **-0.1** |
| | comp=Z,77nm,0.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.55** | **242** | Pg | **Pg** | **21 44 08.6** | **+0.3** |
| BRG | | | | Sg | **Sn** | **21 44 28.5** | **+0.4** |
| BRG | | | | Amp | | 21 44 31.1 | |
| | comp=Z,41nm,0.5s | | | | | | |
| **KRLC** | **Kraliky** | **1.59** | **164** | *e*PG | **Pn** | **21 44 08.2** | **+0.2** |
| KRLC | | | | *e*SG | **Sn** | **21 44 28.3** | **-1.0** |
| | comp=Z,29nm,0.5s | | | | | | |
| **PRA** | **Prague** | **1.87** | **215** | *e*PN | **Pn** | **21 44 11.9** | **+0.1** |
| **GOPC** | **GO Pecny, Ondr** | **1.89** | **207** | *e*PG | **Pb** | **21 44 13.2** | **-0.8** |
| **PRU** | **Pruhonice** | **1.90** | **212** | *e*PG | **Pb** | **21 44 13.6** | **-0.5** |
| PRU | | | | *e*SG | **Sb** | **21 44 38.1** | **-0.3** |
| | comp=Z,22nm,0.5s | | | | | | |
| **HSKC** | **Hora Svate Kat** | **1.96** | **240** | *e*PG | **Pb** | **21 44 15.4** | **+0.2** |
| HSKC | | | | *e*SG | **Sb** | **21 44 40.4** | **+0.2** |
| | comp=Z,42nm,0.4s | | | | | | |
| **CLL** | **Collm** | **1.97** | **262** | *e*Pn | **Pn** | **21 44 14.0** | **+0.9** |
| CLL | | | | *e*Pg | **Pg** | **21 44 17.0** | **+0.8** |
| CLL | | | | *ex* | x | 21 44 21.0 | |
| CLL | | | | *e*Sg | **Sg** | **21 44 43.0** | **+1.3** |
| | comp=Z,27nm,0.7s | | | | | | |
| **MORC** | **Moravsky Berou** | **2.05** | **153** | *e*Pn | **Pn** | **21 44 13.9** | **-0.3** |
| | baz=335 | | | | | | |
| MORC | | | | *e*Sg | **Sn** | **21 44 41.2** | **+0.7** |
| | comp=Z,31nm,0.7s,baz=335 | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.19** | **143** | *e*SG | **Sb** | **21 44 46.8** | **0.0** |
| **VRAC** | **Vranov** | **2.32** | **172** | *e*Pn | **Pn** | **21 44 17.7** | **-0.3** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **21 44 50.3** | **-0.2** |
| | comp=Z,13nm,0.4s,baz=354 | | | | | | |
| **VRAC** | **Vranov** | **2.32** | **172** | *e*PN | **Pn** | **21 44 17.8** | **-0.3** |
| VRAC | | | | *e*SG | **Sb** | **21 44 50.4** | **-0.1** |
| **TREC** | **Trest** | **2.35** | **190** | *e*SG | **Sb** | **21 44 51.6** | **+0.3** |
| | comp=Z,14nm,0.3s | | | | | | |
| **ZVC** | **Zvikov** | **2.49** | **210** | *e*PN | **Pn** | **21 44 20.3** | **0.0** |
| **KRUC** | **Moravsky** | **2.56** | **176** | *e*Pn | **Pn** | **21 44 21.2** | **0.0** |
| | baz=357 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **21 44 57.8** | **+0.6** |
| | comp=Z,14nm,0.5s,baz=357 | | | | | | |
| **OJC** | **Ojcow** | **2.72** | **119** | *e*Pg | **Pg** | **21 44 30.7** | **+0.2** |
| OJC | | | | *e*Sg | **Sg** | **21 45 06.4** | **+0.6** |
| **JAVC** | **Velka Javorina** | **2.93** | **159** | *e*PN | **Pn** | **21 44 26.3** | **-0.1** |
| **KHC** | **Kasperske Hory** | **2.96** | **214** | *e*PN | **Pn** | **21 44 26.9** | **+0.1** |
| KHC | | | | *e*PG | **Pb** | **21 44 33.1** | **+0.9** |
| KHC | | | | *e*SN | **Sn** | **21 45 00.6** | **-2.5** |
| KHC | | | | *e*SG | **Sb** | **21 45 10.2** | **+1.2** |
| | comp=Z,12nm,0.6s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.02** | **203** | *e*PN | **Pn** | **21 44 28.5** | **+0.9** |
| CKRC | | | | *e*PG | **Pb** | **21 44 34.3** | **+1.1** |
| **LANS** | **Liptovska Anna** | **3.27** | **138** | *e*PN | **Pn** | **21 44 31.9** | **+0.9** |
| LANS | | | | *e*PG | **Pg** | **21 44 40.8** | **-0.3** |
| LANS | | | | *e*SG | **Sg** | **21 45 24.5** | **+1.1** |
| **NIE** | **Niedzica** | **3.46** | **128** | *e*Pg | **Pg** | **21 44 44.9** | **+0.2** |
| NIE | | | | *e*Sg | **Sg** | **21 45 29.0** | **-0.5** |
| **VYHS** | **Vyhne** | **3.58** | **150** | *e*PN | **Pg** | **21 44 47.6** | **+0.5** |
| VYHS | | | | *e*PG | Pb | 21 44 54.5 | +12 |
| VYHS | | | | *e*SG | **Sg** | **21 45 37.8** | **+4.4** |
| **BSD** | **Bornholm Skovb** | **3.58** | **349** | *i* P | **Pn** | **21 44 36.0** | **+0.7** |
| BSD | | | | *i* S | **Sn** | **21 45 16.4** | **-1.9** |
| BSD | | | | IAML | | 21 45 22.9 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| **CONA** | **Conrad Observa** | **3.69** | **183** | *e*Pn | **Pn** | **21 44 37.4** | **+0.5** |
| | comp=Z,0.2nm,0.1s | | | | | | |
| **RONA** | **Rosalia, Austr** | **3.92** | **178** | *e*Pn | **Pn** | **21 44 39.7** | **-0.2** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **MOA** | **Molln** | **3.95** | **198** | *i* Pn | **Pn** | **21 44 40.3** | **-0.1** |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **4.24** | **203** | *e*Pn | **Pn** | **21 44 44.2** | **-0.2** |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **LUNU** | **Lund** | **4.33** | **340** | *i* P | **Pn** | **21 44 46.0** | **+0.4** |
| LUNU | | | | *i* S | **Sn** | **21 45 36.0** | **-0.8** |
| **BJUU** | **Bjuv** | **4.83** | **339** | *i* P | **Pn** | **21 44 52.9** | **+0.5** |
| BJUU | | | | *i* S | **Sn** | **21 45 45.0** | **-4.1** |
| **KBA** | **Koelnbreinsper** | **4.88** | **203** | *e*Pn | **Pn** | **21 44 53.1** | **-0.2** |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **DEL** | **Delary** | **5.05** | **346** | *i* P | **Pn** | **21 44 57.0** | **+1.6** |
| DEL | | | | *i* S | **Sn** | **21 45 52.4** | **-1.9** |
| **FABU** | **Falkenberg** | **5.76** | **341** | *i* S | **Sn** | **21 46 09.9** | **-1.8** |
| **BORU** | **Boraas** | **6.34** | **344** | *i* S | **Sn** | **21 46 25.1** | **-1.1** |

*IDC* ***19*** *21:44:50.2±0.6, 8°.29S×116°.52E, h0km, mb4.4/12, mbtmp4.4/13, ML3.9/1, Error ellipse: s-maj=20.4km s-min=14.0km az=90.0*

*DJA* ***19*** *21:44:52.4±0.2, 8°.5±3°×11°.7E±°, h10km, M4.7/19, mb4.9/7, mB5.0/2, MLv4.7/19, Mw(mB)4.3/2*

*NEIC* ***19*** *21:44:52.2±1.8, 8°.34S±0°.08×116°.55E±0°.06, h10km±1km, mb4.7/15, Error ellipse: s-maj=13.2km s-min=9.2km az=161.0*

**ISC 19 21:44:51.9**±0.4, **8°.35S**±0°.05×**116°.58E**±0°.04, **h10**km, **n73,** σ1§**12**/77, **mb4.6**/25, **3C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLAI** | **Plampang** | **1.28** | **112** | P | **Pn** | **21 45 15.8** | **0.0** |
| PLAI | | | | S | **Sb** | **21 45 33.4** | **+0.8** |
| **SRBI** | **Singaraja** | **1.38** | **281** | P | **Pn** | **21 45 17.2** | **0.0** |
| SRBI | | | | S | **Sg** | **21 45 36.0** | **-0.3** |
| **DNP** | **Denpasar** | **1.39** | **256** | P | **Pg** | **21 45 18.3** | **-0.4** |
| DNP | | | | S | **Sg** | **21 45 37.9** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.40** | **267** | Pn | **Pn** | **21 45 31.3** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.40** | **267** | P | **Pn** | **21 45 31.2** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **3.06** | **115** | P | **Pn** | **21 45 41.2** | **+0.8** |
| **GRJI** | **Gresik** | **4.30** | **289** | P | **Pn** | **21 45 57.8** | **+0.3** |
| **BASI** | **Baing, Sumba** | **4.36** | **116** | P | **Pn** | **21 45 59.6** | **+1.3** |
| **BSSI** | **Bau Bau, Buton** | **4.46** | **61** | P | **Pn** | **21 45 59.3** | **-0.3** |
| **KAPI** | **Kappang** | **4.57** | **44** | Pn | **Pn** | **21 46 00.9** | **-0.2** |
| | 5.8nm,0.3s,baz=193,slow=5.7,SNR=34 | | | | | | |
| KAPI | | | | Sn | **Sn** | **21 46 51.7** | **-2.6** |
| | 14nm,0.3s,baz=236,slow=24,SNR=4.9 | | | | | | |
| KAPI | | | | Lg | Lg | 21 47 14.2 | |
| | 20nm,0.3s,baz=9.9,slow=20,SNR=7.8 | | | | | | |
| | 20nm,0.2s | | | | | | |
| **BWJI** | **Bawean** | **4.61** | **302** | P | **Pn** | **21 46 01.1** | **-0.7** |
| **BKSI** | **Bulukumba** | **4.63** | **50** | P | **Pn** | **21 46 01.4** | **-0.5** |
| **PWJI** | **Pagerwojo** | **4.74** | **274** | P | **Pn** | **21 46 03.9** | **+0.4** |
| **EDFI** | **Ende, Flores** | **5.07** | **95** | P | **Pn** | **21 46 08.9** | **+0.7** |
| | 103nm,0.8s,948nm0.3nm | | | | | | |
| **NGJI** | **Ngawi** | **5.16** | **280** | P | **Pn** | **21 46 09.6** | **+0.3** |
| | 90nm,0.8s,0.6nm | | | | | | |
| **BNSI** | **Bone** | **5.26** | **42** | P | **Pn** | **21 46 11.3** | **+0.7** |
| | 86nm,0.6s,2μm0.9nm | | | | | | |
| **MMRI** | **Maumere** | **5.61** | **93** | Pn | **Pn** | **21 46 16.9** | **+1.5** |
| **MMRI** | **Maumere** | **5.61** | **93** | P | **Pn** | **21 46 17.4** | **+1.3** |
| **UGM** | **Wanagama** | **6.01** | **274** | Pn | **Pn** | **21 46 20.5** | **-0.5** |
| **UGM** | **Wanagama** | **6.01** | **274** | P | **Pn** | **21 46 20.2** | **-0.8** |
| | 158nm,1.1s | | | | | | |
| **BBSI** | **Bau Bau** | **6.59** | **65** | P | **Pn** | **21 46 29.6** | **+0.6** |
| | 55nm,0.7s,0.2nm | | | | | | |
| **BATI** | **Baumata** | **7.23** | **105** | P | **Pn** | **21 46 38.7** | **+0.9** |
| | 76nm,0.7s,0.2nm | | | | | | |
| **KPJI** | **Karang Pucung** | **7.64** | **277** | P | **Pn** | **21 46 43.3** | **-0.1** |
| **SOEI** | **Soe** | **7.72** | **101** | Pn | **Pn** | **21 46 44.9** | **+0.3** |
| **LUWI** | **Luwuk** | **9.52** | **41** | Pn | **Pn** | **21 47 08.4** | **-0.8** |
| **MBWA** | **Marble Bar** | **13.10** | **167** | | **Pn** | **21 47 56.1** | **-2.1** |
| **FITZ** | **Fitzroy Crossi** | **13.10** | **139** | Pn | **Pn** | **21 47 57.7** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **13.52** | **167** | Pn | **Pn** | **21 48 03.1** | **-0.9** |
| **KNRA** | **Kununurra** | **13.96** | **123** | Pn | **Pn** | **21 48 09.8** | **-0.1** |
| **GIRL** | **Giralia** | **14.39** | **189** | Pn | **Pn** | **21 48 13.8** | **-2.0** |
| **FAKI** | **Fak Fak** | **16.50** | **72** | Pn | **Pn** | **21 48 44.0** | **+0.4** |
| FAKI | | | | IAmb | IAmb | 21 48 45.0 | |
| | comp=Z,117nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.70** | **126** | P | **P** | **21 49 32.5** | **0.0** |
| | comp=Z,10nm,0.6s,baz=298,slow=12,SNR=99 | | | | | | |
| | comp=Z,10nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **20.88** | **310** | P | **P** | **21 49 34.1** | **-0.3** |
| KULM | | | | IAmb | IAmb | 21 49 49.3 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **22.53** | **135** | P | **P** | **21 49 51.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.53** | **135** | P | **P** | **21 49 52.3** | **+0.1** |
| | comp=Z,14nm,0.9s,baz=312,slow=8.7,SNR=50 | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **24.76** | **156** | P | **P** | **21 50 15.3** | **+1.4** |
| FORT | | | | IAmb | IAmb | 21 50 18.2 | |
| | comp=Z,41nm,1.3s | | | | | | |
| **COEN** | **Coen** | **26.67** | **104** | P | **P** | **21 50 31.9** | **+0.5** |
| COEN | | | | IAmb | IAmb | 21 50 46.8 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **30.30** | **146** | P | **P** | **21 51 03.3** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **31.82** | **327** | P | **P** | **21 51 19.2** | **+2.2** |
| | comp=Z,2.6nm,0.9s,baz=152,slow=6.7,SNR=13 | | | | | | |
| **STKA** | **Stephens Creek** | **33.00** | **139** | P | **P** | **21 51 27.2** | **-0.1** |
| **STKA** | **Stephens Creek** | **33.00** | **139** | P | **P** | **21 51 27.8** | **+0.4** |
| | comp=Z,4.3nm,0.6s,baz=315,slow=10,SNR=19 | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **PZH** | **PanZhiHua** | **37.52** | **338** | P | **P** | **21 52 09.0** | **+2.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.8s | | | | | | |
| **NJ2** | **Nanjing** | **40.23** | **3** | *e*P | **P** | **21 52 31.3** | **+2.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SHL** | **Shillong** | **41.40** | **325** | P | **P** | **21 52 39.7** | **+0.8** |
| SHL | | | | IAmb | IAmb | 21 52 40.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **XAN** | **Xi'an** | **42.77** | **351** | ⇑P | **P** | **21 52 52.6** | **+2.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **HNS** | **HongShan** | **45.54** | **358** | *e*P | **P** | **21 53 09.8** | **-2.0** |
| **LZH** | **Lanzhou** | **45.79** | **346** | *e*P | **P** | **21 53 16.8** | **+2.7** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,25nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **46.78** | **12** | P | **P** | **21 53 22.2** | **+0.6** |
| | comp=Z,1.4nm,0.7s,baz=189,slow=7.9,SNR=6.7 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.06** | **23** | P | **P** | **21 53 38.7** | **-0.7** |
| | comp=Z,5.9nm,0.9s,baz=197,slow=7.4,SNR=11 | | | | | | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.17** | **355** | *e*P | **P** | **21 53 40.0** | **-0.2** |
| HHC | | | | pP | pP | 21 53 44.3 | +0.8 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,5.4s | | | | | | |
| **GTA** | **Gaotai** | **50.00** | **343** | P | **P** | **21 53 48.3** | **+1.7** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **JMM** | **Marumori** | **51.23** | **25** | P | **P** | **21 53 55.9** | **+0.1** |
| **MDJ** | **Mudanjiang** | **54.01** | **11** | P | **P** | **21 54 16.8** | **+0.5** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.13** | **14** | P | **P** | **21 54 16.7** | **-0.5** |
| USA0B | | | | IAmb | IAmb | 21 54 18.2 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.13** | **14** | P | **P** | **21 54 17.1** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **54.13** | **14** | P | **P** | **21 54 17.4** | **+0.2** |
| | comp=Z,6.4nm,0.8s,baz=184,slow=7.3,SNR=11 | | | | | | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.66** | **352** | P | **P** | **21 54 35.9** | **+0.5** |
| SONM | | | | IAmb | IAmb | 21 54 37.2 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.66** | **352** | P | **P** | **21 54 35.6** | **+0.2** |
| | comp=Z,2.7nm,0.7s,baz=169,slow=8.9,SNR=20 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.28** | **22** | P | **P** | **21 54 39.7** | **-0.1** |
| **HEH** | **HeiHe** | **59.11** | **8** | *e*P | **P** | **21 54 52.8** | **+0.3** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **62.81** | **334** | P | **P** | **21 55 16.6** | **-1.1** |
| MK31 | | | | IAmb | IAmb | 21 55 19.5 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.81** | **334** | P | **P** | **21 55 16.6** | **-1.1** |
| | comp=Z,3.5nm,0.8s,baz=158,slow=6.8,SNR=19 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.60** | **340** | P | **P** | **21 55 47.2** | **-1.5** |
| | comp=Z,2.1nm,0.6s,baz=134,slow=4.5,SNR=10 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **69.05** | **199** | P | **P** | **21 55 58.2** | **+0.7** |
| | comp=Z,3.7nm,1.0s,baz=30,slow=7.9,SNR=4.7 | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.66** | **326** | P | **P** | **21 56 35.4** | **-1.9** |
| **ABKAR** | **Akbulak array** | **75.66** | **326** | P | **P** | **21 56 35.4** | **-1.9** |
| **BOSA** | **Boshof** | **87.21** | **242** | P | **P** | **21 57 39.0** | **-0.2** |
| | comp=Z,3.2nm,0.8s,baz=13,slow=2.7,SNR=5.4 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.33** | **196** | ⇑P | **P** | **21 57 47.9** | **-0.5** |
| | comp=Z,56nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.97** | **196** | ⇑P | **P** | **21 57 56.4** | **+0.3** |
| | comp=Z,15nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.97** | **196** | P | **P** | **21 57 56.1** | **+0.1** |
| | comp=Z,0.6nm,0.4s,baz=186,slow=9.9,SNR=6.1 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.99** | **281** | PKP | **PKPdf** | **22 03 34.0** | **-2.2** |
| | comp=Z,0.3nm,0.5s,baz=47,slow=2.6,SNR=5.1 | | | | | | |
| **CPUP** | **Villa Florida** | **145.03** | **190** | PKPbc | **PKPdf** | **22 04 30.4** | **0.0** |
| | comp=Z,5.3nm,0.6s,baz=159,slow=2.3,SNR=12 | | | | | | |
| **BDFB** | **Brasilia** | **151.70** | **213** | PKPbc | **PKPbc** | **22 04 47.5** | **-0.4** |
| | comp=Z,2.1nm,0.8s,baz=96,slow=9.2,SNR=4.2 | | | | | | |

*NEIC* ***19*** *21:47:02.7±1.9, 17°.7S±0°.1×178°.25W±0°.10, h540km±10km, mb4.4/15, Error ellipse: s-maj=20.9km s-min=12.6km az=197.0*

*IDC* ***19*** *21:47:09.0±8.8, 17°.76S×178°.43W, h619km±114km, mb3.3/7, mbtmp4.2/8, Error ellipse: s-maj=47.3km s-min=27.9km az=114.0*

**ISC 19 21:47:03.0**±0.7, **17°.8S**±0°.1×**178°.2W**±0°.1, **h550**km, **n26,** σ0§**86**/26, **mb4.1**/13, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.54** | **270** | P | **P** | **21 48 21.0** | **-0.7** |
| **NIUE** | **Niue** | **7.99** | **101** | P | **P** | **21 48 59.9** | **-0.8** |
| **DZM** | **Mont Dzumac** | **15.03** | **251** | P | **P** | **21 50 13.0** | **0.0** |
| DZM | | | | IAmb | IAmb | 21 50 19.6 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.03** | **251** | P | **P** | **21 50 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **6.09 272** | Pn | **Pn** | **21 51 26.8 +1.5** | | | |
| **UGM** | **Wanagama** | **6.09 272** | P | **Pn** | **21 51 28.8 +3.4** | | | |
| **SMRI** | **Semarang** | **6.28 280** | Pn | **Pn** | **21 51 26.9 -1.0** | | | |
| **BBSI** | **Bau Bau** | **6.45 66** | P | Pb | 21 51 42.8 -4.8 | | | |
| | 165nm,0.9s,1µm0.6nm | | | | | | | |
| **BATI** | **Baumata** | **7.19 107** | P | Pn | 21 51 47.7 +7.2 | | | |
| | 169nm,0.6s,2µm0.6nm | | | | | | | |
| **SOEI** | **Soe** | **7.67 102** | Pn | **Pn** | **21 51 46.9 -0.2** | | | |
| **KPJI** | **Karang Pucung** | **7.71 276** | P | **Pn** | **21 51 51.4 +3.8** | | | |
| | 96nm,0.6s,2µm0.4nm | | | | | | | |
| **CMJI** | **Cimerak** | **8.15 272** | P | **Pn** | **21 51 56.2 +2.6** | | | |
| | 92nm,0.6s,0.5nm | | | | | | | |
| **LUWI** | **Luwuk** | **9.36 41** | Pn | **Pn** | **21 52 10.0 -0.3** | | | |
| **CNJI** | **Cibinong** | **9.49 275** | P | **Pn** | **21 52 15.4 +3.4** | | | |
| **FITZ** | **Fitzroy Crossi** | **13.15 139** | P | **P** | **21 53 08.7 -3.6** | | | |
| **FITZ** | **Fitzroy Crossi** | **13.15 139** | Pn | **Pn** | **21 53 02.3 +0.2** | | | |
| **MBWA** | **Marble Bar** | **13.21 167** | | **Pn** | **21 53 01.0 -2.0** | | | |
| **PSA00** | **Pilbara Seismi** | **13.64 167** | Pn | **Pn** | **21 53 08.6 -0.2** | | | |
| **KNRA** | **Kununurra** | **13.97 123** | Pn | **Pn** | **21 53 13.5 +0.2** | | | |
| **MNAI** | **Manna** | **14.15 285** | Pn | **Pn** | **21 53 14.3 -1.6** | | | |
| **GIRL** | **Giralia** | **14.54 189** | Pn | **Pn** | **21 53 19.0 -2.2** | | | |
| **FAKI** | **Fak Fak** | **16.37 72** | Pn | **Pn** | **21 53 45.0 -0.3** | | | |
| FAKI | | | IAmb | IAmb | 21 53 49.4 | | | |
| | comp=Z,46nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.66 126** | P | **P** | **21 54 35.1 -0.2** | | | |
| WB0 | | | IAmb | IAmb | 21 54 40.3 | | | |
| | comp=Z,8.7nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.71 126** | P | **P** | **21 54 36.5 +0.6** | | | |
| | comp=Z,6.0nm,0.5s,baz=299,slow=12,SNR=5.1 | | | | | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| **KULM** | **Kulim** | **20.85 309** | P | **P** | **21 54 36.5 -1.0** | | | |
| **WR0** | **Warramunga Arr** | **20.88 126** | P | **P** | **21 54 38.3 +0.6** | | | |
| WR0 | | | IAmb | IAmb | 21 54 42.8 | | | |
| | comp=Z,9.6nm,0.6s | | | | | | | |
| **GSI** | **Gunungsitoli** | **21.25 296** | P | **P** | **21 54 42.4 +0.7** | | | |
| GSI | | | IAmb | IAmb | 21 54 45.7 | | | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **AS31** | **Alice Springs** | **22.57 135** | P | **P** | **21 54 55.7 -0.2** | | | |
| **ASAR** | **Alice Springs** | **22.57 135** | P | **P** | **21 54 57.8 +1.9** | | | |
| | comp=Z,8.4nm,0.8s,baz=310,slow=8.9,SNR=17 | | | | | | | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **26.62 105** | P | **P** | **21 55 33.6 -0.6** | | | |
| COEN | | | IAmb | IAmb | 21 55 39.2 | | | |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.37 146** | P | **P** | **21 56 08.4 +0.9** | | | |
| BBOO | | | IAmb | IAmb | 21 56 14.9 | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **33.05 139** | P | **P** | **21 56 31.5 +0.5** | | | |
| **STKA** | **Stephens Creek** | **33.05 139** | P | **P** | **21 56 31.9 +0.9** | | | |
| | comp=Z,1.0nm,0.5s,baz=318,slow=5.6,SNR=3.6 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **TOO** | **Toolangi** | **39.18 143** | P | **P** | **21 57 22.4 -1.1** | | | |
| TOO | | | IAmb | IAmb | 21 57 29.2 | | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **ARMA** | **Armidale** | **39.45 129** | P | **P** | **21 57 25.6 -0.3** | | | |
| ARMA | | | IAmb | IAmb | 21 57 34.3 | | | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **CAN** | **Canberra** | **40.04 137** | P | **P** | **21 57 31.1 +0.3** | | | |
| **SHL** | **Shillong** | **41.33 325** | P | **P** | **21 57 42.6 +1.0** | | | |
| SHL | | | IAmb | IAmb | 21 57 44.2 | | | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **44.98 328** | P | **P** | **21 58 10.7 -0.7** | | | |
| LSA | | | IAmb | IAmb | 21 58 14.6 | | | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.61 12** | P | **P** | **21 58 23.8 +0.3** | | | |
| **BJT** | **Baijiatuan** | **47.98 359** | P | **P** | **21 58 33.2 -1.0** | | | |
| BJT | | | IAmb | IAmb | 21 58 36.5 | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **DZM** | **Mont Dzumac** | **49.77 112** | P | **P** | **21 58 48.3 -0.1** | | | |
| **LIFNC** | **LIFOU** | **50.34 110** | P | **P** | **21 58 52.4 -0.3** | | | |
| **USRK** | **Ussuriysk Ar.** | **53.97 14** | P | **P** | **21 59 19.0 -0.2** | | | |
| **SONM** | **Songino Array** | **56.53 352** | P | **P** | **21 59 39.2 +1.4** | | | |
| **SONM** | **Songino Array** | **56.53 352** | P | **P** | **21 59 38.7 +0.9** | | | |
| | comp=Z,1.1nm,0.7s,baz=172,slow=8.6,SNR=8.0 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **WKZ** | **Wanaka** | **58.00 138** | P | **P** | **21 59 49.5 +1.2** | | | |
| **LBZ** | **Lake Benmore** | **58.61 138** | P | **P** | **21 59 52.9 +0.4** | | | |
| **HEH** | **HeiHe** | **58.96 8** | *e*P | **P** | **21 59 55.3 +0.6** | | | |
| HEH | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **62.72 334** | P | **P** | **22 00 21.1 +0.7** | | | |
| **MKAR** | **Makanchi Array** | **62.72 334** | P | **P** | **22 00 20.7 +0.3** | | | |
| **MKAR** | **Makanchi Array** | **62.72 334** | P | **P** | **22 00 21.3 +0.9** | | | |
| | comp=Z,1.2nm,0.7s,baz=150,slow=8.2,SNR=9.8 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.50 340** | P | **P** | **22 00 51.2 -0.1** | | | |
| | comp=Z,1.0nm,0.6s,baz=143,slow=5.2,SNR=5.1 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **CPUP** | **Villa Florida** | **145.18 189** | PKPbc | **PKPdf** | **22 09 34.8 +0.8** | | | |
| | comp=Z,1.6nm,0.7s,baz=114,slow=3.7,SNR=3.3 | | | | | | | |

*IDC **19**21:50:07.0±0.4,8.2°7S×116.4°43E,h0km,mb4.7/20, mbtmp4.7/21,ML4.5/1,MS4.0/4,Error ellipse: s-maj=18.0km s-min=11.6km az=67.0*
*MOS **19**21:50:08.4±1.3,8.2°31S×116.4°58E,h15km,mb5.0/35,Error ellipse: s-maj=10.4km s-min=6.3km az=102.5*
*NEIC **19**21:50:10.1±1.7,8.2°32S±0.2°07×116.4°644E±0.2°006,h10km±1km, mb5.1/51,Error ellipse: s-maj=11.2km s-min=2.7km az=179.0*

**ISC 19 21:50:09.5±0.3,8.2°37S±0.2°04×116.4°67E±0.2°05,h10km,n252, σ1§68/261,mb4.9/82,MS4.3/14,4C-3D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAGI** | **Jajag, Banyuwa** | **2.49 268** | | Pn | **Pn** | **21 50 49.9** | **-0.3** |
| **KAPI** | **Kappang** | **4.53 43** | | Pn | **Pn** | **21 51 16.3** | **-1.9** |
| | 22nm,0.3s,baz=210,slow=5.4,SNR=12 | | | | | | |
| KAPI | | | | Sn | **Sn** | **21 52 06.4** | **-4.6** |
| | 51nm,0.3s,baz=212,slow=23,SNR=8.5 | | | | | | |
| KAPI | | | | Lg | Lg | 21 52 28.5 | |
| | 45nm,0.3s,baz=120,slow=23,SNR=4.7 | | | | | | |
| KAPI | | | | LR | LR | 21 53 21.6 | |
| | comp=Z,3µm,21.9s,baz=218,slow=42 | | | | | | |
| | 48nm,0.3s | | | | | | |
| **KAPI** | **Kappang** | **4.53 43** | *i* | P | **Pn** | **21 51 17.7** | **-0.5** |
| **MMRI** | **Maumere** | **5.52 93** | | Pn | **Pn** | **21 51 31.4** | **-0.4** |
| **UGM** | **Wanagama** | **6.10 274** | | Pn | **Pn** | **21 51 40.0** | **+0.2** |
| **SMRI** | **Semarang** | **6.31 282** | | Pn | **Pn** | **21 51 43.6** | **+0.9** |
| **BKB** | **Balikpapan** | **7.07 2** | | Pn | **Pn** | **21 51 54.4** | **+1.2** |
| **XMIS** | **Christmas Isla** | **11.07 258** | | Pn | **Pn** | **21 52 45.7** | **-2.3** |
| **SBUM** | **Sibu** | **11.63 337** | | Pn | **Pn** | **21 52 56.4** | **+0.7** |
| **KSM** | **Kuching** | **11.65 327** | | Pn | **Pn** | **21 52 56.2** | **+0.1** |
| **FITZ** | **Fitzroy Crossi** | **13.02 139** | | Pn | **Pn** | **21 53 15.1** | **+0.3** |
| **MBWA** | **Marble Bar** | **13.05 167** | | P | **Pn** | **21 53 15.6** | **+0.4** |
| **MBWA** | **Marble Bar** | **13.05 167** | | Pn | **Pn** | **21 53 14.5** | **-0.7** |
| **MBWA** | **Marble Bar** | **13.05 167** | | P | **Pn** | **21 53 15.2** | **0.0** |
| | comp=Z,967nmcomp=Z,142nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.48 167** | | P | **Pn** | **21 53 21.3** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **13.48 167** | | | **Pn** | **21 53 20.7** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **13.48 167** | | Pn | **Pn** | **21 53 21.3** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **13.48 167** | | P | **Pn** | **21 53 21.3** | **+0.3** |
| **MYLDM** | **Lahad Datu** | **13.59 8** | | Pn | **Pn** | **21 53 20.2** | **-2.2** |
| **KNRA** | **Kununurra** | **13.88 123** | | Pn | **Pn** | **21 53 27.2** | **+0.8** |
| **KNRA** | **Kununurra** | **13.88 123** | | P | **Pn** | **21 53 29.4** | **+3.0** |
| **KKM** | **Kota Kinabalu** | **14.33 358** | | Pn | **Pn** | **21 53 32.7** | **0.0** |
| **GIRL** | **Giralia** | **14.38 189** | | Pn | **Pn** | **21 53 33.2** | **-0.1** |
| **MTN** | **Manton Dam** | **14.89 109** | | P | **P** | **21 53 44.3** | **-1.8** |
| **MTN** | **Manton Dam** | **14.89 109** | | Pn | **Pn** | **21 53 39.8** | **-0.6** |
| **KDU** | **Kakadu** | **16.12 107** | | P | **P** | **21 54 01.3** | **+1.6** |
| **KDU** | **Kakadu** | **16.12 107** | | P | **Pn** | **21 53 53.1** | **-3.3** |
| **FAKI** | **Fak Fak** | **16.42 72** | | Pn | **Pn** | **21 54 00.4** | **+0.1** |
| FAKI | | | | IAmb | IAmb | 21 54 07.1 | |
| | comp=Z,122nm,1.3s | | | | | | |
| **DAV** | **Davao City (W)** | **17.73 30** | | | **Pn** | **21 54 16.6** | **-0.1** |
| **MEEK** | **Meekatharra** | **18.26 174** | | P | **P** | **21 54 25.9** | **+2.5** |
| **MEEK** | **Meekatharra** | **18.26 174** | | P | **P** | **21 54 26.7** | **+3.3** |
| | comp=Z,893nmcomp=Z,78nm,0.7s | | | | | | |
| **WRKA** | **Warakurna** | **19.94 148** | | P | **Pn** | **21 54 43.0** | **-0.6** |
| | comp=Z,957nmcomp=Z,124nm,0.7s | | | | | | |
| **MORW** | **Morawa** | **20.60 182** | | P | **P** | **21 54 49.3** | **+0.4** |
| **WRA** | **Warramunga Arr** | **20.61 126** | | P | **P** | **21 54 49.9** | **+0.7** |
| | comp=Z,51nm,0.6s,baz=299,slow=12,SNR=28 | | | | | | |
| WRA | | | | LR | LR | 22 04 02.7 | |
| | comp=Z,309nm,19.9s,baz=280,slow=40 | | | | | | |
| | comp=Z,51nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.62 126** | | P | **P** | **21 54 49.2** | **0.0** |
| WRAB | | | | IAmb | IAmb | 21 54 55.3 | |
| | comp=Z,69nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.62 126** | *i* | P | **P** | **21 54 50.1** | **+0.9** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,67nm,0.7s | | | | | | |
| **RPSI** | **Rantau Prapat** | **20.83 301** | | P | **P** | **21 54 51.5** | **0.0** |
| RPSI | | | | IAmb | IAmb | 21 55 06.7 | |
| | comp=Z,101nm,1.7s | | | | | | |
| **PSI** | **Prapat** | **20.89 301** | | P | **P** | **21 54 51.5** | **-0.8** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,101nm,1.7s | | | | | | |
| **KULM** | **Kulim** | **20.96 310** | | P | **P** | **21 54 52.4** | **-0.6** |
| **GSI** | **Gunungsitoli** | **21.32 296** | | P | **P** | **21 54 58.2** | **+1.4** |
| **BLDU** | **Ballidu** | **22.13 180** | | P | **P** | **21 55 12.6** | **+7.2** |
| **BLDU** | **Ballidu** | **22.13 180** | | P | **P** | **21 55 06.5** | **+1.1** |
| | comp=Z,34nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **22.45 135** | | P | **P** | **21 55 08.6** | **-0.4** |
| **AS31** | **Alice Springs** | **22.45 135** | | P | **P** | **21 55 09.8** | **+0.8** |
| | comp=Z,36nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.45 135** | | P | **P** | **21 55 09.1** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.45 135** | | P | **P** | **21 55 09.7** | **+0.7** |
| | comp=Z,41nm,0.8s,baz=312,slow=8.8,SNR=26 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 59 02.0** | **-1.6** |
| | comp=Z,2.0nm,0.6s,baz=321,slow=1.2,SNR=4.2 | | | | | | |
| | comp=Z,41nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **22.48 135** | | P | **P** | **21 55 06.9** | **-2.4** |
| **KLBR** | **Kellerberrin** | **23.13 178** | | P | **P** | 21 55 24.7 | +8.8 |
| **KMBL** | **Kambalda** | **23.39 169** | | P | **P** | **21 55 19.2** | **+0.6** |
| **NWAO** | **Narrogin (SRO)** | **24.44 179** | | P | **P** | **21 55 29.1** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **24.44 179** | | P | **P** | **21 55 28.7** | **+0.1** |
| | comp=Z,9.9nm,0.8s,baz=336,slow=9.4,SNR=4.4 | | | | | | |
| PSI | comp=Z,9.9nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.44 179** | | P | **P** | **21 55 29.1** | **+0.5** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **24.70 156** | | P | **P** | **21 55 32.3** | **+1.3** |
| **FORT** | **Forrest** | **24.70 156** | | P | **P** | **21 55 31.0** | **0.0** |
| **QIS** | **Mount Isa** | **25.26 121** | | P | **P** | **21 55 38.9** | **+2.8** |
| **QIS** | **Mount Isa** | **25.26 121** | | P | **P** | **21 55 37.1** | **+0.9** |
| | comp=Z,46nm,0.8s | | | | | | |
| **UBPT** | **Khong Chiam** | **25.99 335** | | P | **P** | **21 55 43.4** | **+0.6** |
| **OOD** | **Oodnadatta** | **26.39 139** | | P | **P** | **21 55 47.7** | **+1.4** |
| **COEN** | **Coen** | **26.58 104** | | P | **P** | **21 55 48.7** | **+0.5** |
| COEN | | | | IAmb | IAmb | 21 55 55.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **COEN** | **Coen** | **26.58 104** | | P | **P** | **21 55 46.2** | **-1.9** |
| **MULG** | **Mulgathing** | **27.21 146** | | P | **P** | **21 55 55.7** | **+2.1** |
| **LCRK** | **Leigh Creek** | **29.81 140** | | P | **P** | **21 56 19.1** | **+2.3** |
| **INKA** | **Innaminka** | **29.81 133** | | P | **P** | **21 56 21.0** | **+4.1** |
| **BBOO** | **Buckleboo** | **30.23 146** | | P | **P** | **21 56 22.0** | **+1.4** |
| **BBOO** | **Buckleboo** | **30.23 146** | | P | **P** | **21 56 21.3** | **+0.7** |
| BBOO | | | | IAmb | IAmb | 21 56 32.0 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **30.23 146** | | P | **P** | **21 56 19.8** | **-0.7** |
| | comp=Z,32nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **30.89 115** | | P | **P** | **21 56 27.5** | **+0.9** |
| | comp=Z,0.8nm,1.0s,baz=293,slow=11,SNR=5.2 | | | | | | |
| **QLP** | **Quilpie** | **31.80 128** | | P | **P** | **21 56 38.6** | **+4.1** |
| **CMAR** | **Chiang Mai Arr** | **31.88 327** | | P | **P** | **21 56 35.2** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **31.88 327** | | P | **P** | **21 56 37.0** | **+1.8** |
| | comp=Z,1.0nm,0.3s,baz=157,slow=6.8,SNR=9.3 | | | | | | |
| CMAR | | | | ScP | **ScP** | **22 03 09.5** | **-0.2** |
| | comp=Z,1.2nm,0.9s,baz=191,slow=2.8,SNR=4.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.88 327** | *e*P | | **P** | **21 56 35.8** | **+0.5** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **SLVN** | **Son La** | **32.07 337** | | P | **P** | **21 56 38.1** | **+1.2** |
| SLVN | | | | IAmb | IAmb | 21 56 47.1 | |
| | comp=Z,28nm,1.8s | | | | | | |
| **HTT** | **Hallett** | **32.31 144** | | P | **P** | **21 56 41.0** | **+2.0** |
| **CRAI** | **Chiangrai** | **32.63 331** | | P | **P** | **21 56 41.0** | **-0.8** |
| **STKA** | **Stephens Creek** | **32.92 139** | | P | **P** | **21 56 47.3** | **+3.0** |
| **STKA** | **Stephens Creek** | **32.92 139** | | P | **P** | **21 56 44.8** | **+0.5** |
| **STKA** | **Stephens Creek** | **32.92 139** | | P | **P** | **21 56 45.1** | **+0.9** |
| | comp=Z,12nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **32.92 139** | | P | **P** | **21 56 45.2** | **+0.9** |
| | comp=Z,13nm,0.6s,baz=313,slow=10.0,SNR=12 | | | | | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **32.92 139** | | P | **P** | **21 56 44.8** | **+0.5** |
| STKA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.6s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.51 134** | | P | **P** | **21 57 10.3** | **+3.6** |
| **CMSA** | **Cobar Meteorol** | **35.51 134** | | P | P | 21 57 11.8 | +5.1 |
| **KMI** | **Kunming** | **35.95 338** | | ⇓P | **P** | **21 57 13.3** | **+2.5** |
| KMI | | | | S | **S** | **22 02 54.3** | **+4.8** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,300nm,12.6s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,430nm,12.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,370nm,12.9s | | | | | | |
| **ARPS** | **Mount Arapiles** | **36.36 145** | | P | **P** | **21 57 16.9** | **+2.9** |
| **PZH** | **PanZhiHua** | **37.57 338** | | P | **P** | **21 57 27.5** | **+3.0** |
| PZH | | | | S | **S** | **22 03 14.8** | **+0.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,4.5s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,250nm,13.3s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,250nm,14.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,330nm,14.7s | | | | | | |
| **YNG** | **Young** | **38.94 136** | | P | **P** | **21 57 39.9** | **+4.1** |
| **YNG** | **Young** | **38.94 136** | | P | **P** | **21 57 36.0** | **+0.2** |
| | comp=Z,132nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **39.34 129** | | P | **P** | **21 57 42.4** | **+3.0** |
| **NJ2** | **Nanjing** | **40.25 3** | *e*P | | **P** | **21 57 49.4** | **+2.7** |
| NJ2 | | | | sP | **sP** | **21 57 54.5** | **+3.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **CD2** | **Chengdu** | **40.97 343** | | P | **P** | **21 57 54.0** | **+1.3** |
| **HNR** | **Honiara** | **42.75 95** | | LR | LR | 22 17 50.6 | |
| | comp=Z,2µm,18.7s,baz=246,slow=39 | | | | | | |
| **XAN** | **Xi'an** | **42.81 351** | | ⇓P | **P** | **21 58 07.9** | **+0.1** |
| XAN | | | | sP | sP | 21 58 15.3 | +3.2 |
| XAN | | | | S | **S** | **22 04 33.5** | **+1.4** |
| XAN | | | | sS | sS | 22 04 40.8 | +3.3 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,14nm,1.6s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,790nm,16.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,180nm,11.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,900nm,15.1s | | | | | | |
| **LYN** | **LuoYang** | **42.87 355** | | P | P | 21 58 15.0 | +6.8 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,22nm,1.5s | | | | | | |
| **LSA** | **Lhasa** | **45.12 328** | | P | **P** | **21 58 27.9** | **+1.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| **LSA** | **Lhasa** | **45.12 328** | | P | **P** | **21 58 26.4** | **-0.4** |
| LSA | | | | IAmb | IAmb | 21 58 35.2 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **45.12 328** | | P | **P** | **21 58 26.4** | **-0.4** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **HNS** | **HongShan** | **45.57 358** | *e*P | | **P** | **21 58 28.5** | **-1.2** |
| HNS | | | | LR | LR | | |
| | comp=Z,430nm,15.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,440nm,15.1s | | | | | | |
| **LZH** | **Lanzhou** | **45.84 345** | *e*P | | **P** | **21 58 31.3** | **-0.8** |
| LZH | | | | sP | sP | 21 58 39.0 | +2.5 |
| LZH | | | | S | **S** | **22 05 13.8** | **-2.5** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,210nm,15.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,370nm,13.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,350nm,16.6s | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.77 12** | | P | **P** | **21 58 38.7** | **-0.4** |
| **KSAR** | **Wonju Array Be** | **46.77 12** | | P | **P** | **21 58 38.7** | **-0.4** |
| **KSRS** | **Korea Array** | **46.79 12** | | P | **P** | **21 58 38.1** | **-1.1** |
| | comp=Z,4.2nm,1.0s,baz=190,slow=7.0,SNR=8.5 | | | | | | |
| | comp=Z,4.2nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **46.79 12** | *e*P | | **P** | **21 58 39.5** | **+0.2** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **47.51 110** | | P | **P** | **21 58 44.9** | **-0.4** |
| KOUNC | | | | IAmb | IAmb | 21 58 52.8 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **BJT** | **Baijiatuan** | **48.15 359** | | P | **P** | **21 58 50.1** | **+0.2** |
| BJT | | | | IAmb | IAmb | 21 58 56.4 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **BJT** | **Baijiatuan** | **48.15 359** | | P | **P** | **21 58 50.1** | **+0.2** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | |
| **MAJO** | **Matsushiro** | **49.05 23** | | P | **P** | **21 58 56.4** | **-0.5** |
| **MAJO** | **Matsushiro** | **49.05 23** | | P | **P** | **21 58 56.4** | **-0.5** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,54nm,1.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.05 23** | | P | **P** | **21 58 55.7** | **-1.2** |
| | comp=Z,5.6nm,0.9s,baz=198,slow=6.7,SNR=11 | | | | | | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **49.06 23** | *e*P | | **P** | **21 58 57.9** | **+0.9** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **BTO** | **Baotou** | **49.12 353** | *e*P | | **P** | **21 58 57.3** | **-0.2** |
| BTO | | | | pP | **sP** | **21 59 01.9** | **+0.1** |
| BTO | | | | sP | **pP** | **21 59 04.4** | **+3.8** |
| BTO | | | | PP | **PP** | **22 00 53.0** | **+1.7** |
| BTO | | | | S | **S** | **22 06 02.6** | **-0.1** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,190nm,4.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,190nm,5.5s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,300nm,7.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,290nm,11.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.20 355** | *e*P | | **P** | **21 59 02.3** | **+4.2** |
| HHC | | | | pP | sP | 21 59 07.8 | +5.3 |
| HHC | | | | sP | pP | 21 59 09.8 | +8.5 |
| HHC | | | | S | **S** | **22 06 06.3** | **+2.4** |
| HHC | | | | sS | sS | 22 06 14.3 | +4.9 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,160nm,5.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,180nm,14.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,170nm,13.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,220nm,13.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **49.70 112** | P | | **P** | **21 59 02.2** | **-0.1** |
| DZM | | | IAmb | | IAmb | 21 59 14.5 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **49.70 112** | P | | **P** | **21 59 03.9** | **+1.6** |
| | comp=Z,11nm,1.0s,baz=264,slow=13,SNR=4.5 | | | | | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **GTA** | **Gaotai** | **50.05 343** | *e*P | | **P** | **21 59 04.8** | **+0.2** |
| GTA | | | S | | **S** | **22 06 18.8** | **+3.0** |
| GTA | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| GTA | | | LR | | LR | | |
| | comp=Z,170nm,16.4s | | | | | | |
| GTA | | | LR | | LR | | |
| | comp=Z,180nm,16.4s | | | | | | |
| GTA | | | LR | | LR | | |
| | comp=Z,250nm,15.6s | | | | | | |
| **LIFNC** | **LIFOU** | **50.28 110** | P | | **P** | **21 59 06.8** | **+0.2** |
| **JMM** | **Marumori** | **51.22 25** | P | | **P** | **21 59 12.3** | **-1.1** |
| **XLT** | **XiLinHaoTe** | **52.03 359** | *e*P | | P | 21 59 24.8 | +5.4 |
| XLT | | | pmax | | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | |
| XLT | | | pmax | | pmax | | |
| | comp=Z,190nm,6.1s | | | | | | |
| XLT | | | LR | | LR | | |
| | comp=Z,28nm,15.5s | | | | | | |
| XLT | | | LR | | LR | | |
| | comp=Z,390nm,16.7s | | | | | | |
| **PSTR** | **Posyet** | **52.39 13** | *i* P | | **P** | **21 59 25.1** | **+3.1** |
| **MSHR** | **Mys Shultsa** | **52.41 13** | *i* P | | **P** | **21 59 21.3** | **-0.8** |
| MSHR | | | pmax | | pmax | | |
| | comp=Z,30nm,1.7s | | | | | | |
| **CN2** | **Changchun** | **52.53 8** | P | | **P** | **21 59 24.6** | **+1.6** |
| CN2 | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **JTM** | **Tenmabayashi** | **53.84 23** | P | | **P** | **21 59 32.5** | **-0.1** |
| **MDJ** | **Mudanjiang** | **54.02 11** | P | | **P** | **21 59 33.9** | **-0.1** |
| MDJ | | | pmax | | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| **MDJ** | **Mudanjiang** | **54.02 11** | P | | **P** | **21 59 33.8** | **-0.1** |
| MDJ | | | IAmb | | IAmb | 21 59 39.7 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.13 14** | P | | **P** | **21 59 34.6** | **-0.2** |
| USA0B | | | IAmb | | IAmb | 21 59 38.7 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.13 14** | P | | **P** | **21 59 34.6** | **-0.2** |
| USA0B | | | pmax | | pmax | | |
| | comp=Z,27nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.13 14** | P | | **P** | **21 59 34.8** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **54.13 14** | P | | **P** | **21 59 34.0** | **-0.7** |
| | comp=Z,8.6nm,0.7s,baz=199,slow=7.3,SNR=10 | | | | | | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.13 14** | P | | **P** | **21 59 34.8** | **0.0** |
| **BNX** | **BinXian** | **54.72 9** | ⇓P | | **P** | **21 59 38.4** | **-0.6** |
| BNX | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.63 352** | P | | **P** | **21 59 52.6** | **-0.3** |
| **ULN** | **Ulaanbaatar** | **56.63 352** | P | | **P** | **21 59 52.6** | **-0.3** |
| ULN | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.69 352** | P | | **P** | **21 59 52.9** | **-0.5** |
| SONM | | | IAmb | | IAmb | 21 59 59.7 

**MK31 Makanchi Array 62.87 334** *i* P **P** **22 00 36.7 +0.9**
**MKAR Makanchi Array 62.87 334** P **P** **22 00 34.2 -1.6**
comp=Z,4.4nm,0.7s,baz=146,slow=7.3,SNR=16
comp=Z,4.4nm,0.7s
**MAKZ Makanchi 63.02 334** P **P** **22 00 35.3 -1.4**
MAKZ IAmb IAmb 22 00 42.8
comp=Z,22nm,1.6s
**MAKZ Makanchi 63.02 334** P **P** **22 00 35.3 -1.4**
MAKZ pmax pmax
comp=Z,22nm,1.7s
**TYV Tymovskoe 63.14 18** *e*P **P** **22 00 42.2 +4.8**
TYV pmax pmax
comp=Z,200nm,2.9s
TYV pmax pmax
comp=Z,13nm,1.2s
**DGZ Jazzator, Alta 63.22 339** *i* P **P** **22 00 39.3 +1.1**
DGZ pmax pmax
comp=Z,29nm,1.2s
**ARSB Arslanbob 63.65 325** P **P** **22 00 39.4 -1.8**
**ARSB Arslanbob 63.65 325** P **P** **22 00 39.4 -1.8**
ARSB pmax pmax
comp=Z,9.0nm,1.8s
**AAK Ala-Archa 63.67 326** *i* P **P** **22 00 41.0 -0.4**
AAK pmax pmax
comp=Z,5.0nm,1.0s
**GAR Garm 63.80 321** P **P** **22 00 41.8 -0.5**
GAR IAmb IAmb 22 00 58.8
comp=Z,19nm,1.0s
**BTK Batken 64.13 322** P **P** **22 00 43.2 -1.1**
BTK IAmb IAmb 22 01 24.2
comp=Z,26nm,1.8s
**BTK Batken 64.13 322** P **P** **22 00 43.2 -1.1**
BTK pmax pmax
comp=Z,26nm,1.8s
**KURBB Kurchatov Arra 67.40 335** P **P** **22 01 03.1 -1.9**
comp=Z,2.6nm,0.5s,baz=149,slow=5.4,SNR=8.4
comp=Z,2.6nm,0.5s
**KURK Kurchatov 67.44 335** P **P** **22 01 04.5 -0.7**
KURK IAmb IAmb 22 01 14.8
comp=Z,40nm,1.9s
**KURK Kurchatov 67.44 335** *i* P **P** **22 01 05.6 +0.3**
KURK pmax pmax
comp=Z,10.0nm,1.1s
**ZAA0 Zalesovo Array 67.66 340** P **P** **22 01 04.8 -1.8**
ZAA0 IAmb IAmb 22 01 09.8
comp=Z,6.9nm,0.8s
**ZALV Zalesovo Beam 67.66 340** P **P** **22 01 04.7 -1.9**
**ZALV Zalesovo Beam 67.66 340** P **P** **22 01 04.3 -2.3**
comp=Z,4.1nm,0.6s,baz=145,slow=5.6,SNR=16
comp=Z,4.1nm,0.6s
**ZALV Zalesovo Beam 67.66 340** P **P** **22 01 04.7 -1.9**
**MAW Mawson 69.05 199** P **P** **22 01 14.8 -0.3**
comp=Z,8.4nm,0.8s,baz=51,slow=8.1,SNR=14
comp=Z,8.4nm,0.8s
**PET Petropavlovsk 70.79 25** *i* P **P** **22 01 27.2 +1.1**
PET pmax pmax
comp=Z,58nm,1.7s
**YAK Yakutsk 70.92 6** *e*P **P** **22 01 28.0 +1.4**
YAK pmax pmax
comp=Z,18nm,0.9s
YAK pmax pmax
comp=N,9.0nm,1.0s
**BVAR Borovoye Array 72.67 333** P **P** **22 01 34.8 -2.6**
comp=N,3.6nm,0.7s,baz=131,slow=8.0,SNR=15
comp=N,3.6nm,0.7s
**BRVK Borovoye 72.74 333** P **P** **22 01 37.6 -0.3**
BRVK IAmb IAmb 22 01 43.7
comp=Z,18nm,1.6s
**BRVK Borovoye 72.74 333** P **P** **22 01 37.6 -0.3**
BRVK pmax pmax
comp=Z,18nm,1.6s
**ABKAR Akbulak array 75.73 326** P **P** **22 01 53.1 -2.3**
**ABKAR Akbulak array 75.73 326** P **P** **22 01 52.5 -2.8**
**SEY Seymchan 76.18 16** *i* P **P** **22 01 59.2 +1.6**
SEY pmax pmax
comp=Z,25nm,1.5s
**KMBO Kilima Mbogo 79.36 270** P **P** **22 02 15.2 -1.6**
comp=Z,1.5nm,0.7s,baz=49,slow=20,SNR=3.8
comp=Z,1.5nm,0.7s
**ARU Arti 80.20 331** *c*P **P** **22 02 21.5 +1.4**
ARU 22 05 20.4
ARU S **S** **22 12 29.5 +4.5**
ARU SS **SS** **22 17 39.0 +2.9**
ARU pmax pmax
comp=Z,5.0nm,1.2s
**TIXI Tiksi 80.26 4** *i* P **P** **22 02 21.3 +1.2**
TIXI pmax pmax
comp=Z,40nm,1.5s
**QSPA South Pole Qui 81.62 180** P **P** **22 02 27.8 0.0**
**BILL Bilibino 83.85 17** *i* P **P** **22 02 41.6 +2.6**
BILL pmax pmax
comp=Z,10.0nm,1.5s
**BELG Belogornoye 84.11 325** LR LR 22 47 32.4
comp=Z,49nm,19.1s,baz=133,slow=41
**BELG Belogornoye 84.11 325** *i* P **P** **22 02 41.6 +1.0**
BELG pmax pmax
comp=Z,1.0nm,0.9s
**KBZ Khabaz 84.21 316** *i* P **P** **22 02 42.5 +1.2**
KBZ pmax pmax
comp=Z,10.0nm,3.1s
**KIV Kislovodsk 84.42 316** *e*P **P** **22 02 42.9 +0.3**
KIV pmax pmax
comp=Z,6.0nm,1.1s
**MBAR Mbarara 85.89 270** P **P** **22 02 47.7 -3.0**
**MBAR Mbarara 85.89 270** P **P** **22 02 47.7 -3.0**
MBAR pmax pmax
comp=Z,9.0nm,0.3s
**LSZ Lusaka 86.38 255** P **P** **22 02 50.9 -2.1**
LSZ IAmb IAmb 22 02 53.3
comp=Z,5.8nm,0.7s
**LSZ Lusaka 86.38 255** P **P** **22 02 50.9 -2.1**
LSZ pmax pmax
comp=Z,6.0nm,0.7s
**MMAI Mount Meron Ar 87.26 304** P **P** **22 02 54.0 -2.9**
comp=Z,2.7nm,0.8s,baz=84,slow=8.5,SNR=3.8
comp=Z,2.7nm,0.8s
**BOSA Boshof 87.28 242** P **P** **22 02 54.7 -2.5**
comp=Z,6.3nm,0.7s,baz=94,slow=4.6,SNR=15
comp=Z,6.3nm,0.7s
**ANN Anapa 88.28 316** *e*P **P** **22 02 59.8 -1.6**
ANN *e**PP **PcP** **22 03 02.9 -0.2**
ANN *e*S **SKSac** **22 13 27.9 -2.5**
ANN pmax pmax
comp=Z,64nm,1.3s
**TROLL Troll, Antarti 89.33 196** ⇑P **P** **22 03 07.0 +1.0**
comp=Z,329nm,0.6s
**BRTR Keskin Array B 89.97 310** P **P** **22 03 06.5 -3.1**
comp=Z,0.9nm,0.9s,baz=108,slow=5.7,SNR=5.0
comp=Z,0.9nm,0.9s
**BRTR Keskin Array B 89.97 310** *e*P **P** **22 03 07.9 -1.7**
BRTR pmax pmax
comp=Z,1.0nm,0.8s
**SNAA Sanae 90.97 196** P **P** **22 03 12.9 -0.7**
SNAA IAmb IAmb 22 03 16.1
comp=Z,6.6nm,0.8s
**SNAA Sanae 90.97 196** ⇑P **P** **22 03 14.5 +0.8**
comp=Z,118nm,0.6s
**SNAA Sanae 90.97 196** P **P** **22 03 14.4 +0.8**
comp=Z,5.7nm,0.7s,baz=156,slow=6.9,SNR=18
comp=Z,5.7nm,0.7s
**SNAA Sanae 90.97 196** *i* P **P** **22 03 15.2 +1.6**
SNAA pmax pmax
comp=Z,6.0nm,1.0s
**OBN Obninsk 91.18 326** *i* P **P** **22 03 15.2 +0.5**
OBN pmax pmax
comp=Z,3.0nm,0.8s
**BELA Belgrano 2 92.41 186** P **P** **22 03 21.1 +1.0**
BELA IAmb IAmb 22 03 21.8
comp=Z,8.5nm,0.7s
**VNA3 Neumayer Olymp 93.03 195** ⇑P **P** **22 03 23.9 +0.8**
comp=Z,3.7nm,0.6s
**MLR Muntele Rosu 96.41 315** LR LR 22 54 28.8
comp=Z,85nm,19.4s,baz=81,slow=40
**TORD Torodi Ar. Bea 116.08 281** **PKPdf** **22 08 51.6 -2.4**
**TORD Torodi Ar. Bea 116.08 281** PKP **PKPdf** **22 08 51.7 -2.3**
comp=Z,2.4nm,0.5s,baz=53,slow=1.9,SNR=32
**ESDC Sonseca Array 118.75 311** PKP **PKPdf** **22 08 55.6 -3.0**
comp=Z,0.3nm,0.7s,baz=74,slow=1.5,SNR=2.2
**DBIC Dimbokro 122.04 273** PKP **PKPdf** **22 09 03.1 -2.4**
comp=Z,1.9nm,0.7s,baz=133,slow=5.0,SNR=3.8
**NVAR Mina Array Bea 122.39 50** PKP **PKPdf** **22 09 04.8 -1.0**
comp=Z,0.8nm,0.7s,baz=336,slow=3.3,SNR=3.8
**TXAR Lajitas Array 136.81 56** PKhKP PKPpre 22 09 26.4
comp=Z,0.3nm,0.6s,baz=289,slow=3.8,SNR=3.6
**T42A Van Buren 141.95 37** **PKPdf** **22 09 42.3 +0.1**
**R49A Shelbyville 144.29 30** **PKPab** **22 09 43.0 -1.3**

**OXF Oxford 144.64 39** PKPdf **PKPab** **22 09 44.5 -1.1**
**OXF Oxford 144.64 39** PKIKP **PKPab** **22 09 44.5 -1.1**
**M57A Sunshine Farm, 144.96 18** **PKPab** **22 09 44.9 -1.7**
**CPUP Villa Florida 145.02 189** PKPbc **PKPab** **22 09 47.0 -0.2**
comp=Z,15nm,0.7s,baz=160,slow=3.2,SNR=23
**CPUP Villa Florida 145.02 189** PKIKP **PKPab** **22 09 47.0 -0.2**
**P53A Whipple 145.05 25** **PKPbc** **22 09 45.5 -1.5**
**Q52A Bidwell 145.11 26** **PKPbc** **22 09 45.1 -2.1**
**V48A Smith Brothers 145.32 35** **PKPbc** **22 09 46.8 -1.2**
**CLTN Cedars of Leba 145.34 34** **PKPbc** **22 09 46.2 -1.8**
**SSPA Standing Stone 145.35 20** **PKPbc** **22 09 45.9 -2.0**
**T50A Nancy 145.44 31** **PKPbc** **22 09 45.8 -2.5**
**MCWV Mont-Chateau 145.52 23** **PKPdf** **22 09 46.8 -1.0**
**S51A Beattyville 145.57 29** **PKPdf** **22 09 46.6 -2.0**
**KSCT Kent School, K 145.59 13** **PKPdf** **22 09 46.5 -1.9**
**Q54A Coxs Mills 145.70 25** **PKPdf** **22 09 47.3 -1.5**
**X48A Hartselle 146.11 37** PKPdf **PKPdf** **22 09 47.7 -1.9**
**Q56A Snyder Ridge, 146.30 23** **PKPdf** **22 09 49.1 -0.7**
**Z47A Carrollton 146.34 39** **PKPdf** **22 09 49.8 -0.2**
**S54A Dingess, Beckl 146.49 26** **PKPdf** **22 09 49.7 -0.5**
**Y49A Blount Mountai 146.90 37** PKPdf **PKPdf** **22 09 50.2 -0.7**
**V52A Sevierville 146.98 31** **PKPdf** **22 09 51.3 +0.2**
**LRAL Lakeview Retre 147.11 38** PKPdf **PKPdf** **22 09 51.0 -0.3**
**V53A Saluda 147.51 30** **PKPdf** **22 09 52.1 +0.1**
**Y52A Lilburn 148.24 34** **PKPdf** **22 09 53.4 +0.2**
**250A Grady 148.28 39** PKPbc **PKPbc** **22 09 56.3 -0.4**
**LVC Limon Verde 148.73 170** PKPdf **PKPdf** **22 09 54.5 -0.3**
**LVC Limon Verde 148.73 170** PKIKP **PKPdf** **22 09 54.5 -0.3**
**152A Waverly Hall 148.74 36** **PKPab** **22 10 01.3 -0.2**
**GOGA Godfrey 148.91 34** **PKPab** **22 10 02.1 0.0**
**GOGA Godfrey 148.91 34** PKP2 **PKPab** **22 10 02.1 0.0**
**AQDB Aquidauana 150.37 195** PKPbc **PKPbc** **22 10 01.9 -0.3**
**BDFB Brasilia 151.72 213** **PKPbc** **22 10 04.7 -0.9**
**BDFB Brasilia 151.72 213** PKPbc **PKPbc** **22 10 03.7 -1.9**
comp=Z,4.0nm,0.6s,baz=72,slow=1.5,SNR=13
**LPAZ La Paz 155.04 169** PKPdf **PKPdf** **22 10 04.0 -0.7**
**LPAZ La Paz 155.04 169** PKPbc PKPbc 22 10 15.0
comp=Z,1.7nm,0.8s,baz=168,slow=2.5,SNR=5.4
**LPAZ La Paz 155.04 169** PKIKP **PKPdf** **22 10 04.0 -0.7**
**ETMB Extrema 161.71 171** PKPdf **PKPdf** **22 10 11.3 -0.7**

*IDC* ***19*** *22:00:27.5±2.6, 17.82S×178.03W, h570km±33km, mb3.5/13, mbtmp4.4/14, Error ellipse: s-maj=23.6km s-min=13.4km az=167.0*
*NEIC* ***19*** *22:00:28.0±1.8, 18.2S±0.1×178.0W±0.1, h572km±8km, mb4.7/41, Error ellipse: s-maj=20.0km s-min=15.7km az=160.0*
**ISC 19 22:00:28.6±0.5, 18.1S±0.1×177.98W±0.08, h590km, n83, σ1°22/83, mb4.6/33, 1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.80** | **275** | P | **P** | **P** | **22 01 53.0** | **+1.0** |
| **AFI** | **Afiamalu** | **7.28** | **56** | P | **P** | **P** | **22 02 17.8** | **-3.1** |
| **LIFNC** | **LIFOU** | **14.19** | **257** | P | **P** | **P** | **22 03 26.4** | **-3.1** |
| **DZM** | **Mont Dzumac** | **15.15** | **252** | P | **P** | **P** | **22 03 38.5** | **-0.1** |
| | 5.6nm,0.8s,baz=90,slow=19,SNR=2.7 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.91** | **259** | P | **P** | **P** | **22 03 55.9** | **+1.2** |
| KOUNC | | | | | IAmb | IAmb | 22 04 27.2 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **QRZ** | **Quartz Range** | **24.06** | **198** | P | **P** | **P** | **22 04 58.3** | **-0.5** |
| **THZ** | **Tophouse** | **24.83** | **196** | P | **P** | **P** | **22 05 06.1** | **+0.5** |
| **KHZ** | **Kahutara** | **25.28** | **195** | P | **P** | **P** | **22 05 08.8** | **-0.7** |
| KHZ | | | | | IAmb | IAmb | 22 05 08.8 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **LTZ** | **Lake Taylor** | **25.95** | **197** | P | **P** | **P** | **22 05 13.1** | **-2.4** |
| LTZ | | | | | IAmb | IAmb | 22 05 26.8 | |
| | comp=Z,42nm,1.3s | | | | | | | |
| **PPT** | **Papeete** | **27.04** | **93** | P | **P** | **P** | **22 05 25.5** | **+0.1** |
| | comp=Z,20nm,0.8s,baz=97,slow=2.9,SNR=5.1 | | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.04** | **93** | P | **P** | **P** | **22 05 25.4** | **-0.1** |
| **FOZ** | **Fox Glacier** | **27.36** | **200** | P | **P** | **P** | **22 05 28.1** | **+0.4** |
| **LBZ** | **Lake Benmore** | **28.02** | **198** | P | **P** | **P** | **22 05 31.8** | **-1.8** |
| LBZ | | | | | IAmb | IAmb | 22 05 39.4 | |
| | comp=Z,41nm,1.3s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.54** | **200** | P | **P** | **P** | **22 05 47.3** | **+0.6** |
| MLZ | | | | | IAmb | IAmb | 22 05 57.7 | |
| | comp=Z,30nm,1.3s | | | | | | | |
| **ARMA** | **Armidale** | **30.19** | **240** | P | **P** | **P** | **22 05 51.5** | **-1.1** |
| ARMA | | | | | IAmb | IAmb | 22 06 03.4 | |
| | comp=Z,45nm,1.5s | | | | | | | |
| **CTA** | **Charters Tower** | **33.81** | **261** | P | **P** | **P** | **22 06 23.2** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=102,slow=10,SNR=12 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.81** | **261** | P | **P** | **P** | **22 06 22.9** | **-0.5** |
| CTAO | | | | | IAmb | IAmb | 22 06 24.1 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **33.90** | **233** | P | **P** | **P** | **22 06 25.2** | **+1.2** |
| **PMG** | **Port Moresby** | **34.89** | **280** | P | **P** | **P** | **22 06 29.9** | **-2.5** |
| **PMG** | **Port Moresby** | **34.89** | **280** | P | **P** | **P** | **22 06 32.6** | **+0.2** |
| | comp=Z,34nm,0.8s,baz=77,slow=8.2,SNR=7.8 | | | | | | | |
| | comp=Z,34nm,0.8s | | | | | | | |
| **TOO** | **Toolangi** | **37.36** | **231** | P | **P** | **P** | **22 06 51.7** | **-0.7** |
| TOO | | | | | IAmb | IAmb | 22 07 31.7 | |
| | comp=Z,50nm,1.5s | | | | | | | |
| **COEN** | **Coen** | **37.51** | **271** | P | **P** | **P** | **22 06 54.4** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.89** | **241** | P | **P** | **P** | **22 07 05.8** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.89** | **241** | P | **P** | **P** | **22 07 06.2** | **+1.4** |
| | comp=Z,10nm,0.8s,baz=84,slow=11,SNR=12 | | | | | | | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.66** | **241** | P | **P** | **P** | **22 07 42.7** | **+0.2** |
| BBOO | | | | | IAmb | IAmb | 22 07 43.7 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **P** | **22 07 51.1** | **-0.3** |
| **WB0** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **P** | **22 07 51.8** | **-0.8** |
| WB0 | | | | | IAmb | IAmb | 22 07 52.7 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **P** | **22 07 52.0** | **-0.8** |
| WB2 | | | | | IAmb | IAmb | 22 07 52.9 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.99** | **260** | P | **P** | **P** | **22 07 52.2** | **-0.7** |
| | comp=Z,8.3nm,0.7s,baz=94,slow=7.3,SNR=106 | | | | | | | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **45.13** | **254** | P | **P** | **P** | **22 07 53.7** | **-0.2** |
| AS31 | | | | | IAmb | IAmb | 22 07 54.9 | |
| | comp=Z,8.4nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **P** | **22 07 53.3** | **-0.6** |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **P** | **22 07 53.8** | **-0.1** |
| | comp=Z,30nm,0.6s,baz=87,slow=8.7,SNR=213 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **22 09 21.4** | **-0.2** |
| | comp=Z,1.4nm,0.6s,baz=94,slow=3.5,SNR=5.2 | | | | | | | |
| ASAR | | | | | S | **S** | **22 13 48.2** | **-3.2** |
| | comp=Z,0.4nm,0.7s,baz=100,slow=10,SNR=2.2 | | | | | | | |
| | comp=Z,30nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **49.20** | **268** | P | **P** | **P** | **22 08 23.4** | **-1.0** |
| MTN | | | | | IAmb | IAmb | 22 08 24.5 | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **FORT** | **Forrest** | **50.29** | **245** | P | **P** | **P** | **22 08 32.0** | **-0.2** |
| FORT | | | | | IAmb | IAmb | 22 08 32.5 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **50.87** | **264** | P | **P** | **P** | **22 08 36.0** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **53.40** | **261** | P | **P** | **P** | **22 08 54.0** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **58.25** | **255** | P | **P** | **P** | **22 09 27.4** | **-0.7** |
| **MBWA** | **Marble Bar** | **58.42** | **256** | P | **P** | **P** | **22 09 28.9** | **-0.3** |
| **TOLI2** | **Tolitoli** | **63.15** | **281** | P | **P** | **P** | **22 10 01.0** | **+0.7** |
| **GIRL** | **Giralia** | **63.23** | **253** | P | **P** | **P** | **22 10 01.1** | **+0.4** |
| GIRL | | | | | IAmb | IAmb | 22 10 10.3 | |
| | comp=Z,66nm,1.1s | | | | | | | |
| **JMZ** | **Minamidaito 2** | **65.92** | **310** | P | **P** | **P** | **22 10 18.8** | **+1.3** |
| **MJAR** | **Matsushiro Arr** | **68.31** | **323** | P | **P** | **P** | **22 10 30.3** | **-1.7** |
| | comp=Z,2.3nm,0.7s,baz=166,slow=6.1,SNR=6.5 | | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.32** | **323** | P | **P** | **P** | **22 10 33.3** | **+1.3** |
| **UGM** | **Wanagama** | **70.05** | **268** | P | **P** | **P** | **22 10 42.7** | **-0.2** |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **P** | **22 10 54.6** | **+1.6** |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **P** | **22 10 55.1** | **+2.1** |
| | comp=Z,0.6nm,0.6s,baz=97,slow=1.6,SNR=1.7 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **TATO** | **Taipei** | **72.85** | **304** | P | **P** | **P** | **22 10 59.6** | **+0.8** |
| TATO | | | | | IAmb | IAmb | 22 11 21.7 | |
| | comp=Z,60nm,1.4s | | | | | | | |
| **KSM** | **Kuching** | **73.11** | **277** | P | **P** | **P** | **22 11 01.0** | **+0.4** |
| KSM | | | | | IAmb | IAmb | 22 11 01.7 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.98** | **345** | P | **P** | **P** | **22 11 03.1** | **-1.6** |
| | comp=Z,1.5nm,0.6s,baz=102,slow=7.6,SNR=4.0 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **KS19** | **Wonju Array Si** | **75.19** | **318** | P | **P** | **P** | **22 11 13.6** | **+1.8** |
| KS19 | | | | | IAmb | IAmb | 22 11 55.6 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.01** | **326** | P | **P** | **P** | **22 11 24.1** | **+2.5** |
| **HKPS** | **Hong Kong Po S** | **77.57** | **299** | P | **P** | **P** | **22 11 28.1** | **+3.0** |
| HKPS | | | | | IAmb | IAmb | 22 12 11.7 | |
| | comp=Z,33nm,1.0s | | | | | | | |
| **J01E** | **Myrtle Point** | **78.58** | **37** | P | **P** | **P** | **22 11 30.9** | **+0.9** |
| **NVAR** | **Mina Array Bea** | **79.29** | **44** | P | **P** | **P** | **22 11 34.7** | **+0.5** |
| | comp=Z,1.0nm,0.7s,baz=221,slow=8.6,SNR=5.6 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **84.27** | **275** | P | **P** | **P** | **22 11 59.5** | **-0.2** |
| **GSI** | **Gunungsitoli** | **85.12** | **273** | P | **P** | **P** | **22 12 04.6** | **+0.7** |
| GSI | | | | | IAmb | IAmb | 22 12 05.5 | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.76** | **57** | P | **P** | **P** | **22 12 07.8** | **+1.1** |
| | comp=Z,0.9nm,0.7s,baz=201,slow=7.7,SNR=7.2 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.00** | **13** | P | **P** | **P** | **22 12 04.8** | **-2.1** |
| | comp=Z,0.3nm,0.4s,baz=220,slow=5.3,SNR=7.8 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.22** | **43** | P | **P** | **P** | **22 12 13.1** | **-0.4** |
| | comp=Z,0.3nm,0.5s,baz=190,slow=4.4,SNR=2.1 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.34** | **290** | P | **P** | **P** | **22 12 24.5** | **+0.9** |
| | comp=Z,1.1nm,0.3s,baz=97,slow=2.9,SNR=7.0 | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| **EGMT** | **Eagleton** | **89.55** | **39** | P | **P** | **P** | **22 12 24.9** | **+0.9** |
| EGMT | | | | | IAmb | IAmb | 22 12 36.4 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **GAZ** | **Gaziantep** | **143.78** | **309** | | | PKPbc | 22 18 56.5 | -0.5 |
| **BNN** | **Bunyan** | **144.09** | **312** | | | PKPbc | 22 18 56.3 | -1.7 |
| **OJC** | **Ojcow** | **144.94** | **340** | | | **PKPdf** | **22 18 58.8** | **-0.5** |
| **BRTR** | **Keskin Array B** | **145.22** | **315** | PKP | | **PKPdf** | **22 19 00.4** | **+0.1** |
| | comp=Z,1.9nm,0.7s,baz=99,slow=3.9,SNR=4.9 | | | | | | | |
| **CLL** | **Collm** | **145.75** | **348** | ‖ *i* PKPbc | | **PKPbc** | **22 19 01.4** | **+0.8** |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.59** | **303** | PKPbc | | **PKPbc** | **22 19 05.2** | **-0.1** |
| | comp=Z,3.6nm,0.6s,baz=58,slow=7.0,SNR=11 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.91** | **345** | PKPbc | | **PKPbc** | **22 19 07.8** | **-0.5** |
| | comp=Z,1.3nm,0.6s,baz=165,slow=5.5,SNR=7.3 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.18** | **342** | *e*PKP | | **PKPbc** | **22 19 08.5** | **-0.5** |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.26** | **342** | *i* PKP | | **PKPbc** | **22 19 08.7** | **-0.5** |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.00** | **345** | *e*PKP | | **PKPbc** | **22 19 11.2** | **+0.3** |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.49** | **346** | *i* PKP | | **PKPbc** | **22 19 11.6** | **-0.6** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **SOKA** | **Soboth** | **149.56** | **342** | *e*PKP | | **PKPbc** | **22 19 11.2** | **-1.2** |
| | comp=Z,0.1nm,0.2s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.65** | **345** | *e*PKP | | **PKPbc** | **22 19 11.8** | **-0.9** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **WATA** | **Walderalm** | **149.82** | **347** | *i* PKP | | **PKPbc** | **22 19 11.8** | **-1.2** |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **RETA** | **Reutte** | **149.84** | **348** | *i* PKP | | **PKPbc** | **22 19 11.6** | **-1.4** |
| | comp=Z,0.1nm,0.2s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.87** | **347** | *i* PKP | | **PKPbc** | **22 19 12.4** | **-0.9** |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **MOTA** | **Moosalm** | **149.91** | **348** | *e*PKP | | **PKPbc** | **22 19 12.3** | **-1.0** |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.00** | **347** | *e*PKP | | **PKPbc** | **22 19 12.4** | **-1.1** |
| | comp=Z,0.6nm,0.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.16** | **345** | *i* PKP | | **PKPbc** | **22 19 12.4** | **-1.4** |
| | comp=Z,3.2nm,0.6s | | | | | | | |
| **DAVA** | **Damuels** | **150.20** | **349** | *e*PKP | | **PKPbc** | **22 19 13.2** | **-0.7** |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **150.29** | **348** | *i* PKP | | **PKPbc** | **22 19 13.5** | **-0.6** |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.77** | **348** | | | **PKPbc** | **22 19 14.7** | **-0.7** |

**IDC 19 22:02:05.1±4.9, 15.28S×176.48W, h0km, mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=215.3km s-min=37.4km az=137.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **41.53** | **239** | P | **P** | P | 22 09 54.6 | +0.1 |
| | 1.3nm,0.7s,baz=98,slow=12,SNR=1.4 | | | | | | | |
| | 1.3nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.98** | **257** | P | **P** | P | 22 10 37.8 | -0.5 |
| | 1.1nm,0.7s,baz=93,slow=6.7,SNR=8.4 | | | | | | | |
| | 1.1nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.32** | **252** | P | **P** | P | 22 10 41.0 | 0.0 |
| | 13nm,0.4s,baz=86,slow=7.8,SNR=78 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.93** | **12** | P | **P** | P | 22 14 31.5 | +0.1 |
| | 0.2nm,0.6s,baz=203,slow=6.7,SNR=1.8 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |

*IDC* ***19*** *22:15:45.9±6.4, 18.12S×178.68W, h497km±75km, mb3.3/10, mbtmp4.2/10, Error ellipse: s-maj=25.1km s-min=22.7km az=77.0*
**ISC 19 22:15:45.8±0.8, 18.1S±0.2×178.7W±0.2, h500km, n11, σ1°07/11, mb3.7/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **20.41** | **189** | P | **P** | **P** | **22 19 47.2** | **-0.8** |
| | 7.1nm,0.6s,baz=122,slow=5.2,SNR=3.7 | | | | | | | |
| | 7.1nm,0.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.29** | **241** | P | **P** | **P** | **22 22 23.2** | **+0.2** |
| | 3.8nm,0.7s,baz=72,slow=9.6,SNR=6.3 | | | | | | | |
| | 3.8nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.33** | **260** | P | **P** | **P** | **22 23 11.3** | **+0.2** |
| | 1.1nm,0.5s,baz=94,slow=6.8,SNR=18 | | | | | | | |
| | 1.1nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.47** | **254** | P | **P** | **P** | **22 23 13.2** | **+1.0** |
| | 10nm,0.6s,baz=89,slow=8.2,SNR=122 | | | | | | | |
| | 10nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.95** | **180** | P | **P** | **P** | **22 26 18.8** | **+0.8** |
| | 2.8nm,0.7s,baz=22,slow=0.6,SNR=18 | | | | | | | |
| | 2.8nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.76** | **44** | P | **P** | **P** | **22 27 02.5** | **+0.8** |
| | 1.0nm,0.8s,baz=224,slow=8.8,SNR=7.8 | | | | | | | |
| | 1.0nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.14** | **13** | P | **P** | **P** | **22 27 31.5** | **-1.5** |
| | 0.2nm,0.4s,baz=218,slow=4.2,SNR=4.5 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.33** | **58** | P | **P** | **P** | **22 27 36.3** | **+1.4** |
| | 1.5nm,0.8s,baz=221,slow=6.4,SNR=17 | | | | | | | |
| | 1.5nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.68** | **44** | P | **P** | **P** | **22 27 40.9** | **-0.2** |
| | 0.4nm,0.5s,baz=169,slow=1.5,SNR=4.4 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **90.41** | **179** | P | **P** | **P** | **22 27 52.0** | **-1.0** |
| | 0.6nm,0.6s,baz=225,slow=13,SNR=1.7 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.72** | **314** | PK

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WB0** | **Warramunga Arr** | **44.86** | **260** | P | **P** | **22 25 39.1** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 22 25 45.5 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **22 25 38.8** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 22 25 42.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **22 25 39.1** | **-0.4** |
| | comp=Z,2.3nm,0.5s,baz=95,slow=7.4,SNR=33 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.02** | **254** | P | **P** | **22 25 39.9** | **-0.6** |
| AS31 | | | | IAmb | IAmb | 22 25 41.6 | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.03** | **254** | P | **P** | **22 25 40.0** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.03** | **254** | P | **P** | **22 25 40.7** | **+0.2** |
| | comp=Z,9.0nm,0.7s,baz=86,slow=8.9,SNR=43 | | | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **50.19** | **245** | P | **P** | **22 26 18.4** | **-0.5** |
| FORT | | | | IAmb | IAmb | 22 26 37.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.77** | **264** | P | **P** | **22 26 22.1** | **-1.3** |
| KNRA | | | | IAmb | IAmb | 22 26 27.7 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **LUWI** | **Luwuk** | **60.44** | **279** | P | **P** | **22 27 29.6** | **-0.9** |
| LUWI | | | | IAmb | IAmb | 22 27 35.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **UGM** | **Wanagama** | **69.94** | **268** | P | **P** | **22 28 29.3** | **-0.9** |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **22 28 41.5** | **+0.4** |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **22 28 41.4** | **+0.4** |
| | comp=Z,2.5nm,0.6s,baz=281,slow=0.2,SNR=15 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **M13K** | **Dall Lake** | **79.16** | **7** | P | **P** | **22 29 20.0** | **-0.8** |
| **BRLK** | **Bradley Lake** | **80.71** | **14** | P | **P** | **22 29 29.6** | **+0.6** |
| **BELA** | **Belgrano 2** | **81.92** | **173** | P | **P** | **22 29 34.4** | **-0.7** |
| **MXC** | **Moxie City** | **82.77** | **36** | P | **P** | **22 29 40.1** | **+0.3** |
| **EGAK** | **Eagle** | **87.34** | **15** | P | **P** | **22 30 00.4** | **-1.1** |
| **SNAA** | **Sanae** | **90.38** | **178** | P | **P** | **22 30 14.9** | **-0.9** |
| SNAA | | | | IAmb | IAmb | 22 30 22.2 | |
| | comp=Z,4.8nm,1.3s | | | | | | |

*IDC* ***19*** *22:21:29.3±0.7, 8°.20S×116°.59E, h0km, mb4.0/10, mbtmp4.0/11, ML3.8/1, MS2.8/1, Error ellipse: s-maj=20.7km s-min=16.2km az=84.0*
*DJA* ***19*** *22:21:31.9±0.2, 8°.5±3'×11°.7E±°, h10km, M4.6/19, mb4.7/7, mB4.8/1, MLv4.5/19, Mw(mB)4.0/1*
**ISC 19 22:21:31.5±0.6, 8°.17S±0°.07×116°.63E±0°.05, h10km, n30, σ1§09/33, mb4.0/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLAI** | **Plampang** | **1.31** | **120** | P | **Pn** | **22 21 55.8** | **-0.2** |
| PLAI | | | | S | **Sb** | **22 22 14.1** | **+0.8** |
| **SRBI** | **Singaraja** | **1.40** | **273** | P | **Pn** | **22 21 56.8** | **-0.3** |
| SRBI | | | | S | **Sn** | **22 22 16.3** | **+0.6** |
| **DNP** | **Denpasar** | **1.49** | **250** | P | **Pn** | **22 21 59.1** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.47** | **263** | P | **Pn** | **22 22 11.0** | **-0.8** |
| **WBSI** | **Waikabubak, Su** | **3.10** | **118** | P | **Pn** | **22 22 20.2** | **-0.4** |
| **GRJI** | **Gresik** | **4.29** | **287** | P | **Pn** | **22 22 36.1** | **-0.9** |
| **BSSI** | **Bau Bau, Buton** | **4.33** | **63** | P | **Pn** | **22 22 37.4** | **-0.1** |
| **BASI** | **Baing, Sumba** | **4.40** | **118** | P | **Pn** | **22 22 38.2** | **-0.3** |
| **KAPI** | **Kappang** | **4.41** | **45** | Pn | **Pn** | **22 22 38.5** | **-0.1** |
| | 4.8nm,0.3s,baz=148,slow=4.7,SNR=6.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **22 23 29.7** | **-0.3** |
| | 8.4nm,0.3s,baz=47,slow=20,SNR=8.4 | | | | | | |
| KAPI | | | | Lg | Lg | 22 23 49.7 | |
| | 3.9nm,0.3s,baz=61,slow=21,SNR=4.2 | | | | | | |
| KAPI | | | | LR | LR | 22 24 30.0 | |
| | comp=Z,120nm,19.5s,baz=256,slow=40 | | | | | | |
| | 17nm,0.4s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.78** | **271** | P | **Pn** | **22 22 43.2** | **-0.4** |
| **EDFI** | **Ende, Flores** | **5.04** | **97** | P | **Pn** | **22 22 47.6** | **+0.2** |
| | 89nm,0.8s,860nm | | | | | | |
| **BNSI** | **Bone** | **5.10** | **43** | P | **Pn** | **22 22 49.0** | **+1.0** |
| | 74nm,0.6s,0.3nm | | | | | | |
| **NGJI** | **Ngawi** | **5.18** | **278** | P | **Pn** | **22 22 50.4** | **+1.3** |
| | 48nm,1.0s,0.4nm | | | | | | |
| **UGM** | **Wanagama** | **6.05** | **272** | P | **Pn** | **22 23 01.4** | **+0.3** |
| | 142nm,1.6s | | | | | | |
| **BATI** | **Baumata** | **7.24** | **107** | P | **Pn** | **22 23 18.8** | **+1.3** |
| | 41nm,0.8s,0.2nm | | | | | | |
| **KPJI** | **Karang Pucung** | **7.67** | **276** | P | **Pn** | **22 23 23.2** | **-0.2** |
| **SOEI** | **Soe** | **7.71** | **102** | P | **Pn** | **22 23 25.4** | **+1.3** |
| **WRA** | **Warramunga Arr** | **20.77** | **126** | P | **P** | **22 26 12.3** | **-0.5** |
| | 6.8nm,0.6s,baz=300,slow=12,SNR=28 | | | | | | |
| | 6.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.62** | **135** | P | **P** | **22 26 32.0** | **-0.8** |
| | 2.6nm,0.4s,baz=310,slow=8.8,SNR=22 | | | | | | |
| | 2.6nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **33.10** | **139** | P | **P** | **22 28 07.3** | **-0.6** |
| | 1.9nm,0.4s,baz=309,slow=9.9,SNR=7.3 | | | | | | |
| | 1.9nm,0.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.95** | **14** | P | **P** | **22 30 55.8** | **+0.4** |
| | 1.1nm,0.6s,baz=193,slow=7.5,SNR=5.3 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.49** | **352** | P | **P** | **22 31 14.0** | **+0.1** |
| | 0.6nm,0.6s,baz=169,slow=7.7,SNR=4.8 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.67** | **334** | P | **P** | **22 31 57.0** | **+0.6** |
| | 0.6nm,0.6s,baz=149,slow=6.7,SNR=5.1 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.20** | **335** | P | **P** | **22 32 25.1** | **-0.7** |
| | 0.2nm,0.5s,baz=148,slow=5.7,SNR=3.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.45** | **340** | P | **P** | **22 32 25.9** | **-1.4** |
| | 0.4nm,0.4s,baz=132,slow=6.1,SNR=3.1 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **BOSA** | **Boshof** | **87.34** | **242** | P | **P** | **22 34 18.4** | **-1.1** |
| | 4.0nm,0.9s,baz=41,slow=3.8,SNR=3.8 | | | | | | |
| | 4.0nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **91.16** | **196** | P | **P** | **22 34 36.7** | **+0.3** |
| | 0.6nm,0.4s,baz=88,slow=13,SNR=7.0 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.00** | **281** | PKP | | **PKPdf** | **22 40 13.7** | **-2.1** |
| | 0.3nm,0.5s,baz=30,slow=1.7,SNR=5.2 | | | | | | |
| **CPUP** | **Villa Florida** | **145.21** | **190** | PKPbc | | **PKPbc** | **22 41 08.7** | **-1.1** |
| | 1.7nm,0.4s,baz=74,slow=1.6,SNR=6.4 | | | | | | |
| **BDFB** | **Brasilia** | **151.87** | **213** | PKPbc | | **PKPdf** | **22 41 25.3** | **+3.8** |
| | 1.0nm,0.4s,baz=65,slow=3.9,SNR=4.3 | | | | | | |

*IDC* ***19*** *22:28:16.1±2.7, 8°.50S×116°.25E, h0km, mb3.5/5, mbtmp3.5/5, Error ellipse: s-maj=159.5km s-min=22.1km az=52.0*
*DJA* ***19*** *22:28:19.4±0.3, 8°.5±5'×11°.7E±°, h10km, M4.0/10, mb4.2/2, MLv4.0/10*
**ISC 19 22:28:19.0±0.8, 8°.18S±0°.09×116°.64E±0°.05, h10km, n16, σ0§93/17, mb3.6/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLAI** | **Plampang** | **1.30** | **120** | P | **Pn** | **22 28 43.3** | **+0.1** |
| PLAI | | | | S | **Sn** | **22 29 01.0** | **+0.3** |
| **SRBI** | **Singaraja** | **1.41** | **274** | P | **Pn** | **22 28 45.0** | **+0.2** |
| **DNP** | **Denpasar** | **1.49** | **251** | P | **Pb** | **22 28 46.5** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **263** | P | **Pn** | **22 28 58.7** | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **3.08** | **118** | P | **Pn** | **22 29 07.8** | **-0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.33** | **62** | P | **Pn** | **22 29 24.3** | **-0.6** |
| **BASI** | **Baing, Sumba** | **4.39** | **118** | P | **Pn** | **22 29 26.5** | **+0.8** |
| **PWJI** | **Pagerwojo** | **4.79** | **272** | P | **Pn** | **22 29 32.4** | **+1.2** |
| **EDFI** | **Ende, Flores** | **5.03** | **97** | P | **Pn** | **22 29 35.2** | **+0.5** |
| | 22nm,0.7s,0.1nm | | | | | | |
| **BNSI** | **Bone** | **5.10** | **43** | P | **Pn** | **22 29 37.3** | **+1.8** |
| **UGM** | **Wanagama** | **6.06** | **272** | P | **Pn** | **22 29 50.7** | **+1.9** |
| **WRA** | **Warramunga Arr** | **20.75** | **126** | P | **P** | **22 32 59.7** | **-0.4** |
| | 1.4nm,0.7s,baz=300,slow=12,SNR=9.5 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.60** | **135** | P | **P** | **22 33 19.4** | **-0.7** |
| | 1.5nm,0.7s,baz=309,slow=9.0,SNR=10.0 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.50** | **352** | P | **P** | **22 38 02.0** | **+0.5** |
| | 0.7nm,0.7s,baz=169,slow=8.8,SNR=5.3 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.69** | **334** | P | **P** | **22 38 43.5** | **-0.5** |
| | 0.4nm,0.8s,baz=156,slow=7.3,SNR=2.0 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.22** | **335** | P | **P** | **22 39 12.8** | **-0.6** |
| | 0.2nm,0.6s,baz=151,slow=5.0,SNR=2.5 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*UCR* ***19*** *22:39:39.5±0.8, 10°.48N×84°.76W, h94km±4km, MW3.6*
*CATAC* ***19*** *22:39:40.5±0.6, 10°.45N×84°.79W, h76km±7km, ML3.3*
**ISC 19 22:39:40.0±1.6, 10°.43N±0°.04×84°.76W±0°.04, h95km±10km, n60, σ0§53/71, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARE1** | **Arenal 1** | **0.05** | **49** | *e*P | **Pn** | **22 39 53.4** | **+0.1** |
| **CEDE** | **Laguna Cedeo** | **0.08** | **42** | *e*P | **Pn** | **22 39 53.4** | **0.0** |
| **VACR** | **Volcan Arenal** | **0.09** | **61** | *e*P | **Pn** | **22 39 53.3** | **-0.1** |
| **MTEVE** | **Monteverde** | **0.13** | **213** | *e*P | **Pn** | **22 39 54.3** | **+0.7** |
| **SOCE** | **Pocosol** | **0.14** | **109** | *i* P | **Pn** | **22 39 53.3** | **-0.1** |
| SOCE | | | | IAML | | 22 39 53.7 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **0.14** | **109** | *e*P | **Pn** | **22 39 53.4** | **-0.1** |
| **JTS** | **Las Juntas de** | **0.24** | **235** | *e*P | **Pn** | **22 39 52.9** | **-0.9** |
| **JUNT** | **Juntas** | **0.25** | **234** | *e*P | **Pn** | **22 39 53.2** | **-0.6** |
| **CNAS** | **Canas** | **0.33** | **270** | *e*P | **Pn** | **22 39 54.0** | **-0.1** |
| CNAS | | | | *e*S | **Sn** | **22 40 05.2** | **+0.5** |
| **ZARE** | **Zarcero** | **0.43** | **124** | *e*P | **Pn** | **22 39 55.0** | **-0.1** |
| **VERA** | **Finca Concepci** | **0.44** | **345** | *e*P | **Pn** | **22 39 54.6** | **-0.2** |
| **SRA1** | **San Ramn** | **0.44** | **142** | *e*P | **Pn** | **22 39 54.5** | **-0.4** |
| **RAMO** | **San Ramon** | **0.44** | **140** | *e*P | **Pn** | **22 39 55.6** | **+0.6** |
| **COVE** | **Coope Vega, Sa** | **0.45** | **50** | *i* P | **Pn** | **22 39 54.3** | **-0.6** |
| COVE | | | | *i* S | **Sn** | **22 40 05.8** | **-0.2** |
| COVE | | | | IAML | | 22 40 10.8 | |
| | comp=Z,860nm,1.0s | | | | | | |
| **CUI** | **Cuipilapa** | **0.46** | **299** | *e*P | **Pn** | **22 39 54.8** | **-0.2** |
| CUI | | | | *e*S | **Sn** | **22 40 06.3** | **+0.1** |
| **ITAL** | **Pital** | **0.48** | **87** | *e*P | **Pn** | **22 39 54.8** | **-0.3** |
| **BAGA** | **Bagaces** | **0.51** | **281** | *e*P | **Pn** | **22 39 55.1** | **-0.2** |
| **SARCI** | **Sarchi** | **0.53** | **130** | *e*P | **Pn** | **22 39 55.6** | **0.0** |
| **VPS6** | **Volcano Poas** | **0.57** | **115** | *e*P | **Pn** | **22 39 55.9** | **-0.2** |
| **TCS1** | **Tacares** | **0.59** | **131** | *i* P | **Pn** | **22 39 56.0** | **-0.1** |
| TCS1 | | | | IAML | | 22 39 56.0 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **TCS1** | **Tacares** | **0.59** | **131** | *e*P | **Pn** | **22 39 56.0** | **-0.1** |
| **TRB2** | **Turrubares** | **0.59** | **149** | *e*P | **Pn** | **22 39 55.7** | **-0.3** |
| **LCHIL** | **Los Chiles** | **0.60** | **4** | *e*P | **Pn** | **22 39 55.8** | **-0.3** |
| LCHIL | | | | *e*S | **Sn** | **22 40 08.0** | **-0.1** |
| **GPS2** | **Hotel Rincn d** | **0.67** | **299** | *e*P | **Pn** | **22 39 56.4** | **-0.3** |
| **GPS3** | **Bodega del ICE** | **0.68** | **298** | *e*P | **Pn** | **22 39 57.7** | **+0.8** |
| **VRLE** | **La Escondida,** | **0.70** | **301** | *e*P | **Pn** | **22 39 56.9** | **-0.1** |
| **BELE** | **Belen** | **0.72** | **129** | *e*P | **Pn** | **22 39 56.9** | **-0.3** |
| **SANTA** | **Santa Ana** | **0.75** | **131** | *e*P | **Pn** | **22 39 57.2** | **-0.3** |
| **HDC** | **Heredia** | **0.76** | **124** | *e*P | **Pn** | **22 39 57.6** | **-0.1** |
| **HDC3** | **Heredia 3** | **0.76** | **124** | *i* P | **Pn** | **22 39 57.6** | **-0.1** |
| HDC3 | | | | IAML | | 22 39 57.8 | |
| | comp=Z,940nm,1.0s | | | | | | |
| **DELF** | **Filadelfia** | **0.79** | **271** | *e*P | **Pn** | **22 39 59.0** | **+1.2** |
| DELF | | | | *e*S | **Sn** | **22 40 12.9** | **+1.8** |
| **ALIBA** | **Liberia Airpor** | **0.79** | **282** | *e*P | **Pn** | **22 39 58.9** | **+1.1** |
| **LUJA** | **Lujan** | **0.84** | **127** | *e*P | **Pn** | **22 39 59.4** | **+0.9** |
| **ACOS** | **Acosta** | **0.86** | **137** | *e*P | **Pn** | **22 39 58.5** | **-0.2** |
| **CORON** | **Coronado** | **0.87** | **121** | *e*P | **Pn** | **22 39 59.2** | **+0.4** |
| **CBL1** | **Cabuya** | **0.90** | **202** | *e*P | **Pn** | **22 39 57.5** | **-1.4** |
| CBL1 | | | | *e*S | **Sn** | **22 40 12.8** | **-0.3** |
| **TRIO** | **Tres Rios** | **0.91** | **125** | *e*P | **Pn** | **22 39 59.1** | **-0.2** |
| **INDI** | **Punta indio, G** | **0.92** | **233** | *i* P | **Pn** | **22 39 58.2** | **-1.0** |
| INDI | | | | IAML | | 22 39 58.3 | |
| | comp=Z,650nm,1.0s | | | | | | |
| INDI | | | | *i* S | **Sn** | **22 40 12.6** | **-1.0** |
| **ABE2** | **San Pablo** | **1.00** | **136** | *e*P | **Pn** | **22 40 00.2** | **-0.1** |
| **VICA** | **Volcano Irazu** | **1.00** | **116** | *e*P | **Pn** | **22 40 00.4** | **-0.1** |
| **LCR2** | **La Lucha 2** | **1.01** | **133** | *i* P | **Pn** | **22 40 00.1** | **-0.2** |
| LCR2 | | | | IAML | | 22 40 01.1 | |
| | comp=Z,670nm,1.0s | | | | | | |
| LCR2 | | | | *i* S | **Sn** | **22 40 15.9** | **+0.3** |
| **LCR2** | **La Lucha 2** | **1.01** | **133** | *e*P | **Pn** | **22 40 00.1** | **-0.2** |
| **RAFA** | **San Farael, Vo** | **1.04** | **117** | *i* P | **Pn** | **22 40 00.9** | **+0.1** |
| RAFA | | | | IAML | | 22 40 22.8 | |
| | comp=Z,980nm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.04** | **117** | *e*P | **Pn** | **22 40 00.9** | **+0.1** |
| **RAZU** | **San Marcos de** | **1.05** | **137** | *e*P | **Pn** | **22 40 00.8** | **0.0** |
| **REPA** | **Paraso** | **1.06** | **124** | *e*P | **Pn** | **22 40 01.9** | **+1.1** |
| **CVTQ** | **Turrialba Volc** | **1.06** | **113** | *e*P | **Pn** | **22 40 01.0** | **0.0** |
| **CVTT** | **Volcan Turrial** | **1.06** | **112** | *e*P | **Pn** | **22 40 00.9** | **-0.2** |
| **CVTV** | **Tajo** | **1.08** | **113** | *e*P | **Pn** | **22 40 01.1** | **-0.1** |
| **VTCV** | **VTCV, Calle Va** | **1.11** | **114** | *e*P | **Pn** | **22 40 01.4** | **0.0** |
| **LLNJ** | **Naranjito** | **1.15** | **146** | *e*P | **Pn** | **22 40 02.2** | **+0.4** |
| **VERB** | **Verbena** | **1.15** | **115** | *e*P | **Pn** | **22 40 01.9** | **0.0** |
| **RVLA** | **Villa Bonita** | **1.19** | **105** | *e*P | **Pn** | **22 40 02.4** | **+0.2** |
| **BUS1** | **Rivas** | **1.32** | **131** | *e*P | **Pn** | **22 40 04.0** | **-0.2** |
| **ACON** | **Acoyapa** | **1.58** | **345** | *i* P | **Pn** | **22 40 06.5** | **-0.5** |
| ACON | | | | IAML | | 22 40 06.9 | |
| | comp=Z,86nm,1.0s | | | | | | |
| ACON | | | | *i* S | **Sn** | **22 40 27.4** | **-0.1** |
| **ACON** | **Acoyapa** | **1.58** | **345** | *e*P | **Pn** | **22 40 06.5** | **-0.5** |
| **OCHAL** | **Ojochal** | **1.72** | **140** | *i* P | **Pn** | **22 40 09.0** | **+0.3** |
| OCHAL | | | | IAML | | 22 40 09.4 | |
| | comp=Z,290nm,1.0s | | | | | | |
| OCHAL | | | | *i* S | **Sn** | **22 40 31.5** | **+0.9** |
| **DRK0** | **Durika** | **1.89** | **128** | *i* P | **Pn** | **22 40 11.1** | **0.0** |
| DRK0 | | | | *i* S | **Sn** | **22 40 34.4** | **-0.3** |
| DRK0 | | | | IAML | | 22 40 36.5 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **1.89** | **128** | *e*P | **Pn** | **22 40 11.0** | **0.0** |
| **EDBA** | **Buenos Aires** | **1.93** | **131** | *e*P | **Pn** | **22 40 11.4** | **0.0** |

**IDC 19 22:42:53.6±9.3, 17°.22S×177°.15W, h0km, mb3.8/4, mbtmp3.8/4, Error ellipse: s-maj=238.7km s-min=50.5km az=26.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **40.01** | **241** | P | P | 22 50 30.4 | 0.0 |
| | 0.6nm,0.4s,baz=105,slow=12,SNR=2.9 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.94** | **259** | P | P | 22 51 17.6 | -1.1 |
| | 0.4nm,0.7s,baz=96,slow=7.4,SNR=2.0 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **46.13** | **254** | P | P | 22 51 20.5 | +0.3 |
| | 2.7nm,0.7s,baz=89,slow=8.3,SNR=31 | | | | | | |
| | 2.7nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.83** | **180** | P | P | 22 54 24.2 | +0.1 |
| | 0.9nm,0.8s,baz=221,slow=2.2,SNR=2.1 | | | | | | |
| | 0.9nm,0.8s | | | | | | |

*IDC* ***19*** *22:45:13.8±2.0, 17°.84S×179°.62W, h617km±24km, mb3.6/15, mbtmp4.5/16, Error ellipse: s-maj=14.6km s-min=11.2km az=151.0*
*NEIC* ***19*** *22:45:13.2±1.6, 17°.9S±0°.2×179°.5W±0°.1, h602km±7km, mb4.2/40, Error ellipse: s-maj=22.4km s-min=15.6km az=160.0*
*NOU* ***19*** *22:45:14.2, 18°.18S×179°.59W, h610km, MLv4.1/8, Fiji Islands Region*
**ISC 19 22:45:13.8±0.4, 17°.93S±0°.09×179°.57W±0°.07, h622km, n186, σ0§89/181, mb4.2/35, 33C-25D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.28** | **275** | P | **P** | **22 46 30.6** | **-0.8** |
| **MSVF** | **Nonsavu** | **2.28** | **275** | | **P** | **22 46 30.8** | **-0.6** |
| MSVF | | | | S | **S** | **22 47 34.1** | **-0.4** |
| **NIUE** | **Niue** | **9.22** | **99** | P | **P** | **22 47 22.4** | **-3.1** |
| **RTV** | **Rentapao** | **11.43** | **269** | P | **P** | **22 47 47.4** | **+0.3** |
| **DVP** | **Devils Point** | **11.66** | **269** | P | **P** | **22 47 49.9** | **+0.6** |
| **MARNC** | **Mare, Loyalty** | **12.20** | **251** | P | **P** | **22 47 53.3** | **-1.2** |
| **LIFNC** | **LIFOU** | **12.77** | **255** | | **P** | **22 47 58.6** | **-1.4** |
| **PINNC** | **Pines Island,** | **13.04** | **247** | P | **P** | **22 48 02.7** | **0.0** |
| **PINNC** | **Pines Island,** | **13.04** | **247** | P | **P** | **22 48 02.7** | **0.0** |
| **DZM** | **Mont Dzumac** | **13.78** | **250** | | **P** | **22 48 09.3** | **-0.6** |
| **DZM** | **Mont Dzumac** | **13.78** | **250** | P | **P** | **22 48 09.1** | **-0.8** |
| | 11nm,0.5s,baz=327,slow=19,SNR=16 | | | | | | |
| **NOUC** | **Port Laguerre** | **13.91** | **250** | P | **P** | **22 48 11.3** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **15.47** | **258** | P | **P** | **22 48 26.2** | **+0.8** |
| **MRNZ** | **Matariki Terra** | **24.30** | **194** | P | **P** | **22 49 44.5** | **-0.1** |
| **FOZ** | **Fox Glacier** | **27.05** | **197** | P | **P** | **22 50 09.6** | **+0.9** |
| **EIDS** | **Eidsvold** | **28.22** | **250** | P | **P** | **22 50 18.9** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 22 50 44.8 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **ODZ** | **Otahua Downs** | **28.25** | **195** | P | **P** | **22 50 19.3** | **+0.3** |
| **PPT** | **Papeete** | **28.55** | **94** | P | **P** | **22 50 21.9** | **-0.2** |
| | comp=Z,18nm,0.6s,baz=83,slow=5.6,SNR=5.0 | | | | | | |
| | comp=Z,18nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **28.56** | **94** | P | **P** | **22 50 22.1** | **-0.2** |
| **ARMA** | **Armidale** | **28.98** | **239** | P | **P** | **22 50 26.5** | **+0.8** |
| **MLZ** | **Mavora Lakes** | **29.22** | **198** | P | **P** | **22 50 28.0** | **+0.5** |
| **WHZ** | **Wether Hill Ro** | **29.75** | **198** | P | **P** | **22 50 32.5** | **+0.5** |
| **CTAO** | **Charters Tower** | **32.35** | **261** | P | **P** | **22 50 54.3** | **-0.2** |
| **COEN** | **Coen** | **36.00** | **271** | P | **P** | **22 51 25.5** | **+0.6** |
| **STKA** | **Stephens Creek** | **37.65** | **241** | P | **P** | **22 51 39.2** | **+1.1** |
| **STKA** | **Stephens Creek** | **37.65** | **241** | P | **P** | **22 51 39.2** | **+1.1** |
| | comp=Z,3.6nm,0.5s,baz=78,slow=9.9,SNR=15 | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.54** | **260** | P | **P** | **22 52 24.1** | **-0.8** |
| | comp=Z,2.6nm,0.7s,baz=96,slow=6.9,SNR=23 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 53 58.6** | **+0.4** |
| | comp=Z,1.7nm,0.8s,baz=80,slow=3.3,SNR=6.6 | | | | | | |
| WRA | | | | S | **S** | **22 58 08.9** | **-1.7** |
| | comp=Z,0.6nm,0.7s,baz=96,slow=12,SNR=2.2 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **43.72** | **254** | P | **P** | **22 52 26.4** | **+0.2** |
| AS31 | | | | IAmb | IAmb | 22 52 27.4 | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **43.72** | **254** | P | **P** | **22 52 26.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **43.72** | **254** | P | **P** | **22 52 26.5** | **+0.3** |
| | comp=Z,16nm,0.6s,baz=88,slow=8.2,SNR=139 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 53 59.5** | **+0.6** |
| | comp=Z,2.5nm,0.6s,baz=101,slow=3.8,SNR=9.6 | | | | | | |
| ASAR | | | | S | **S** | **22 58 08.8** | **-4.3** |
| | comp=Z,1.6nm,0.9s,baz=89,slow=15,SNR=7.4 | | | | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.27** | **324** | P | **P** | **22 55 07.9** | **-0.3** |
| | comp=Z,4.1nm,0.7s,baz=157,slow=5.7,SNR=9.9 | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.12** | **180** | P | **P** | **22 55 37.9** | **+1.2** |
| QSPA | | | | IAmb | IAmb | 22 55 38.3 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.12** | **180** | P | **P** | **22 55 37.9** | **+1.2** |
| | comp=Z,8.4nm,0.6s,baz=313,slow=0.6,SNR=75 | | | | | | |
| | comp=Z,8.4nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.43** | **346** | P | **P** | **22 55 43.4** | **-0.6** |
| | comp=Z,3.9nm,0.6s,baz=107,slow=8.1,SNR=11 | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **73.99** | **319** | P | **P** | **22 55 48.5** | **+1.0** |
| | comp=Z,0.8nm,0.6s,baz=141,slow=4.2,SNR=2.3 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **CMB** | **Columbia Colle** | **78.62** | **44** | P | **P** | **22 56 13.1** | **+0.2** |
| **WAKR** | **Walker** | **79.50** | **44** | P | **P** | **22 56 18.9** | **+1.1** |
| **DSP** | **Deep Springs** | **79.88** | **45** | P | **P** | **22 56 20.4** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **80.21** | **44** | P | **P** | **22 56 22.4** | **+1.0** |
| | comp=Z,2.0nm,0.8s,baz=225,slow=8.9,SNR=15 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **GMN** | **Gold Mountain** | **80.32** | **46** | P | **P** | **22 56 23.0** | **+0.9** |
| **KVN** | **Kaiserville** | **80.67** | **44** | P | **P** | **22 56 24.5** | **+0.7** |
| **J05D** | **Fort Rock, OR** | **81.03** | **39** | P | **P** | **22 56 26.7** | **+1.2** |
| J05D | | | | IAmb | IAmb | 22 56 27.3 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.22** | **8** | P | **P** | **22 56 26.8** | **+0.9** |
| **PINE** | **Pine Mountain** | **81.50** | **39** | P | **P** | **22 56 28.9** | **+1.0** |
| PINE | | | | IAmb | IAmb | 22 56 29.8 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **BMN** | **Battle Mountai** | **81.98** | **43** | P | **P** | **22 56 30.3** | **-0.1** |
| BMN | | | | IAmb | IAmb | 22 56 32.0 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **82.14** | **41** | P | **P** | **22 56 31.0** | **-0.2** |
| WVOR | | | | IAmb | IAmb | 22 56 32.9 | |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **I07A** | **Izee** | **82.52** | **39** | P | **P** | **22 56 33.8** | **+0.8** |
| I07A | | | | IAmb | IAmb | 22 56 34.6 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **J08A** | **Circle Bar Ran** | **82.75** | **40** | P | **P** | **22 56 34.8** | **+0.7** |
| J08A | | | | IAmb | IAmb | 22 56 36.2 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **83.05** | **51** | P | **P** | **22 56 37.2** | **+1.2** |
| **J18K** | **Innoko River** | **83.07** | **10** | P | **P** | **22 56 35.4** | **+0.2** |
| J18K | | | | IAmb | IAmb | 22 56 35.6 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **ELK** | **Elko** | **83.43** | **44** | P | **P** | **22 56 36.6** | **-1.2** |
| **K20K** | **Telida** | **83.44** | **11

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ONER | Baraj Valea Uz | 144.46 | 329 | ⇑P | | PKPab | 23 03 42.3 +0.7 |
| ANTO | Ankara | 144.52 | 315 | | | PKPbc | 23 03 41.8 +0.4 |
| ANTO | Ankara | 144.52 | 315 | ⇓P | | PKPab | 23 03 42.0 -0.1 |
| VRI | Vrincioaia | 144.62 | 328 | ⇓P | | PKPbc | 23 03 41.8 +0.4 |
| PLOR | Plostina | 144.67 | 328 | ⇑P | | PKPdf | 23 03 39.6 -1.4 |
| HARR | Harsova | 144.77 | 325 | ⇓P | | PKPbc | 23 03 42.3 +0.5 |
| TLBR | Topalu | 144.80 | 325 | ⇑P | | PKPbc | 23 03 42.1 +0.2 |
| BMR | Baia Mare | 144.84 | 333 | ⇑P | | PKPab | 23 03 42.8 -0.1 |
| TURR | Turia | 144.84 | 329 | ⇓P | | PKPab | 23 03 43.2 +0.1 |
| ARCR | ARCALIA | 144.90 | 331 | ⇓P | | PKPab | 23 03 42.8 -0.4 |
| COVR | Voineasa-Covas | 144.90 | 328 | ⇑P | | PKPbc | 23 03 42.5 +0.2 |
| OZUR | | 144.93 | 329 | ⇓P | | PKPab | 23 03 43.2 -0.3 |
| BOSR | Bodos | 145.01 | 329 | ⇑P | | PKPab | 23 03 43.8 +0.1 |
| CHVC | Chvalec | 145.11 | 343 | ⇑ePKP | | PKPbc | 23 03 43.4 +0.7 |
| UPC | Upice | 145.19 | 343 | ⇑ePKP | | PKPbc | 23 03 43.6 +0.7 |
| ICOR | Ion Corvin | 145.21 | 325 | ⇓P | | PKPab | 23 03 44.0 -0.5 |
| DOPR | Dopca | 145.22 | 329 | ⇓P | | PKPab | 23 03 44.3 -0.2 |
| MMAI | Mount Meron Ar | 145.22 | 302 | PKPbc | | PKPab | 23 03 44.6 -0.4 |
| | comp=Z,8.0nm,0.5s,baz=73,slow=6.2,SNR=41 | | | | | | |
| CLL | Collm | 145.23 | 346 | ⇓*i*PKPbc | | PKPbc | 23 03 43.4 +0.4 |
| | comp=Z,26nm,0.6s | | | | | | |
| DPC | Dobruska-Polom | 145.24 | 342 | ⇑*e*PKP | | PKPbc | 23 03 43.9 +0.8 |
| MLR | Muntele Rosu | 145.27 | 328 | | | PKPbc | 23 03 43.5 0.0 |
| MLR | Muntele Rosu | 145.27 | 328 | ⇑P | | PKPbc | 23 03 44.2 +0.7 |
| KRLC | Kraliky | 145.35 | 341 | ⇑*e*PKP | | PKPbc | 23 03 44.1 +0.6 |
| MORC | Moravsky Berou | 145.37 | 340 | *e*PKP | | PKPbc | 23 03 43.7 +0.2 |
| MORC | Moravsky Berou | 145.37 | 340 | ⇑P | | PKPbc | 23 03 44.0 +0.5 |
| BRG | Berggiesshubel | 145.41 | 345 | *e*PKP | | PKPbc | 23 03 44.1 +0.5 |
| BRG | | | | Amp | | | 23 03 44.9 |
| | comp=Z,12nm,1.0s | | | | | | |
| BRG | Berggiesshubel | 145.41 | 345 | P | | PKiKP | 23 03 51.7 +5.4 |
| BRG | | | | Amp | | | 23 03 52.1 |
| | comp=Z,2.7nm,0.8s | | | | | | |
| MESR | Meseseni | 145.48 | 333 | ⇑P | | PKPab | 23 03 44.9 -0.6 |
| CJR | Cluj-Napoca | 145.52 | 331 | ⇓P | | PKPbc | 23 03 44.5 +0.5 |
| PVCC | Panska Ves | 145.57 | 344 | ⇑*e*PKP | | PKPbc | 23 03 44.9 +0.9 |
| VOIR | | 145.76 | 329 | ⇓P | | PKPbc | 23 03 44.9 0.0 |
| HSKC | Hora Svate Kat | 145.78 | 345 | ⇑*e*PKP | | PKPbc | 23 03 45.0 +0.4 |
| DRGR | | 145.86 | 332 | ⇑P | | PKPbc | 23 03 45.5 +0.5 |
| ARR | Arges | 146.01 | 329 | ⇑P | | PKPbc | 23 03 46.5 +1.0 |
| PRU | Pruhonice | 146.07 | 344 | ⇑*e*PKP | | PKPbc | 23 03 46.0 +0.6 |
| VRAC | Vranov | 146.08 | 341 | *e*PKP | | PKPbc | 23 03 45.8 +0.3 |
| PSZ | Piszkesteto | 146.12 | 336 | | | PKPbc | 23 03 44.8 -1.0 |
| PSZ | Piszkesteto | 146.12 | 336 | ⇓P | | PKPbc | 23 03 45.4 -0.4 |
| JAVC | Velka Javorina | 146.13 | 339 | *e*PKP | | PKiKP | 23 03 47.1 -0.9 |
| KRUC | Moravsky | 146.36 | 341 | *e*PKP | | PKPbc | 23 03 46.4 +0.2 |
| HUMR | Humele | 146.43 | 327 | ⇑P | | PKPdf | 23 03 41.1 -2.9 |
| SIRR | Siria | 146.72 | 333 | ⇑P | | PKPbc | 23 03 48.1 +0.7 |
| GZR | Gura Zlata | 146.89 | 331 | ⇑P | | PKPbc | 23 03 47.7 -0.1 |
| SURR | Surduc | 146.91 | 332 | ⇑P | | PKPbc | 23 03 47.9 +0.1 |
| ELND | Elena | 147.04 | 325 | ⇑P | | PKPbc | 23 03 48.6 +0.3 |
| VLAD | Vladila | 147.10 | 327 | ⇑P | | PKPbc | 23 03 48.1 -0.3 |
| KHC | Kasperske Hory | 147.11 | 344 | | | PKPbc | 23 03 47.8 -0.4 |
| KHC | Kasperske Hory | 147.11 | 344 | *e*PKPDF | | PKPdf | 23 03 46.0 +1.0 |
| KHC | | | | ⇑*e*PKP | | PKPbc | 23 03 48.7 +0.4 |
| CKRC | Cesky Krumlov | 147.19 | 343 | *e*PKPDF | | PKPdf | 23 03 46.2 +1.0 |
| CKRC | | | | ⇑*e*PKP | | PKPbc | 23 03 49.1 +0.6 |
| BZS | Buzias | 147.25 | 332 | ⇑P | | PKPbc | 23 03 48.6 -0.1 |
| GEC2 | GERESS Array S | 147.34 | 344 | | | PKPbc | 23 03 49.2 +0.3 |
| GERES | GERESS Array B | 147.34 | 344 | | | PKPbc | 23 03 49.4 +0.4 |
| GERES | GERESS Array B | 147.34 | 344 | PKPbc | | PKPbc | 23 03 49.5 +0.5 |
| | comp=Z,4.8nm,0.6s,baz=168,slow=6.8,SNR=28 | | | | | | |
| HERR | Herculane | 147.44 | 330 | ⇓P | | PKPbc | 23 03 49.4 +0.2 |
| CONA | Conrad Observa | 147.53 | 341 | *e*PKiKP | | PKPbc | 23 03 50.2 +0.7 |
| | comp=Z,4.3nm,0.5s,SNR=7.6 | | | | | | |
| RONA | Rosalia, Austr | 147.59 | 340 | *i* PKiKP | | PKPbc | 23 03 50.0 +0.5 |
| | comp=Z,5.2nm,0.6s,SNR=6.6 | | | | | | |
| MDVR | Moldovita | 147.84 | 331 | ⇓P | | PKPbc | 23 03 49.8 -0.6 |
| ELL | Elmali | 147.99 | 312 | | | PKPbc | 23 03 50.9 -0.1 |
| WLF | Walferdange | 148.01 | 353 | | | PKiKP | 23 03 51.8 0.0 |
| MORH | Mrgy, Hungar | 148.01 | 336 | ⇓P | | PKPdf | 23 03 47.0 +0.5 |
| MOA | Molln | 148.09 | 342 | *e*PKP | | PKPbc | 23 03 50.9 +0.1 |
| | comp=Z,1.6nm,0.5s | | | | | | |
| ARSA | Arzberg | 148.24 | 340 | *e*PKiKP | | PKPbc | 23 03 51.6 +0.4 |
| | comp=Z,1.4nm,0.4s | | | | | | |
| BIOA | Bad Ischl, Aus | 148.41 | 343 | *i* PKP | | PKPbc | 23 03 51.0 -0.6 |
| | comp=Z,1.6nm,0.5s | | | | | | |
| BOVS | Bovan | 148.71 | 330 | ⇓P | | PKPbc | 23 03 52.1 -0.3 |
| SOKA | Soboth | 148.90 | 340 | *e*PKP | | PKPbc | 23 03 52.4 -0.5 |
| | comp=Z,0.9nm,0.3s,SNR=5.6 | | | | | | |
| LESA | Schwarzleotal | 148.91 | 344 | *i* PKP | | PKPbc | 23 03 52.8 -0.2 |
| | comp=Z,3.6nm,0.3s | | | | | | |
| KBA | Koelnbreinsper | 149.05 | 343 | *e*PKP | | PKPbc | 23 03 52.7 -0.7 |
| | comp=Z,3.0nm,0.4s,SNR=5.9 | | | | | | |
| WATA | Walderalm | 149.28 | 345 | *i* PKP | | PKPbc | 23 03 53.8 -0.1 |
| | comp=Z,6.0nm,0.6s,SNR=6.6 | | | | | | |
| RETA | Reutte | 149.33 | 346 | *i* PKP | | PKPbc | 23 03 53.9 0.0 |
| | comp=Z,3.1nm,0.4s | | | | | | |
| WTTA | Wattenberg | 149.33 | 345 | *i* PKiKP | | PKPbc | 23 03 54.1 +0.1 |
| | comp=Z,5.5nm,0.3s,SNR=9.4 | | | | | | |
| MYKA | Terra Mystica | 149.37 | 342 | *i* PKP | | PKPbc | 23 03 53.2 -0.8 |
| | comp=Z,6.1nm,0.5s,SNR=5.5 | | | | | | |
| MOTA | Moosalm | 149.38 | 346 | *e*PKP | | PKPbc | 23 03 54.0 -0.2 |
| | comp=Z,1.6nm,0.4s | | | | | | |
| SQTA | Sankt Quirin | 149.47 | 345 | *i* PKiKP | | PKPbc | 23 03 54.5 +0.2 |
| | comp=Z,3.3nm,0.4s,SNR=7.6 | | | | | | |
| PRED | Cave del Predi | 149.56 | 342 | | | PKPbc | 23 03 53.7 -0.7 |
| ABTA | Abfaltersbach | 149.58 | 343 | *i* PKP | | PKPbc | 23 03 54.1 -0.4 |
| | comp=Z,6.7nm,0.6s,SNR=7.8 | | | | | | |
| DAVA | Damuels | 149.71 | 347 | *i* PKiKP | | PKPbc | 23 03 55.1 +0.2 |
| | comp=Z,2.8nm,0.4s | | | | | | |
| FETA | Feichten | 149.77 | 346 | *i* PKiKP | | PKPbc | 23 03 55.1 0.0 |
| | comp=Z,1.9nm,0.4s | | | | | | |
| FUORN | Ofenpass-Fuorn | 150.26 | 346 | | | PKPbc | 23 03 56.8 +0.4 |
| CTI | Castel Tesino | 150.46 | 344 | | | PKPbc | 23 03 56.4 -0.2 |
| PDG | Podgorica | 150.79 | 331 | ⇓P | | PKPbc | 23 03 57.2 -0.1 |
| OHR | Ohrid | 151.03 | 327 | *i* P | | PKiKP | 23 03 58.5 +0.1 |
| TEOL | Teolo | 151.09 | 343 | | | PKPbc | 23 03 57.2 -0.7 |
| ESDC | Sonseca Array | 158.00 | 9 | PKPab | | PKPab | 23 04 37.7 -0.8 |
| | comp=Z,0.4nm,0.5s,baz=336,slow=2.8,SNR=3.6 | | | | | | |
| KEST | Kesra | 160.59 | 338 | PKPab | | PKPab | 23 04 49.7 -0.2 |
| | comp=Z,2.1nm,0.6s,baz=125,slow=3.8,SNR=6.3 | | | | | | |
| TORD | Torodi Ar. Bea | 175.09 | 195 | PKP | | PKPdf | 23 04 13.8 -0.6 |
| | comp=Z,0.7nm,0.8s,baz=324,slow=1.2,SNR=4.8 | | | | | | |
| TORD | | | | PKPab | | PKPab | 23 05 54.4 +0.1 |
| | comp=Z,0.5nm,0.8s,baz=159,slow=2.9,SNR=2.3 | | | | | | |

*IDC* ***19*** *22:55:03.5±0.9,8.˚44S×116.˚80E,h0km,mb3.7/7, mbtmp3.8/8,ML4.0/1,MS3.0/2,Error ellipse: s-maj=25.2km s-min=18.4km az=71.0*

*NEIC* ***19*** *22:55:05.5±1.5,8.˚41S±0.˚07×116.˚87E±0.˚07,h10km±1km, mb4.5/16,Error ellipse: s-maj=12.5km s-min=10.5km az=28.0*

*DJA* ***19*** *22:55:06.5±0.2,8˚S±4˚×11˚7E±˚,h10km,M4.5/19, mb4.5/10,MLv4.4/19*

**ISC 19 22:55:08.4±0.5,8.43S±0.06×116.88E±0.06,h35km,n64, σ1s24/64,mb4.2/14,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PLAI | Plampang | 0.97 | 114 | P | | | Pn | 22 55 24.9 | -0.6 |
| PLAI | Plampang | 0.97 | 114 | P | | | Pn | 22 55 25.0 | -0.6 |
| DNP | Denpasar | 1.67 | 261 | P | | | Pn | 22 55 35.7 | +0.6 |
| SRBI | Singaraja | 1.69 | 281 | P | | | Pn | 22 55 34.5 | -0.8 |
| JAGI | Jajag, Banyuwa | 2.70 | 269 | P | | | Pn | 22 55 49.1 | -0.3 |
| JAGI | Jajag, Banyuwa | 2.70 | 269 | | | | Pn | 22 55 49.0 | -0.3 |
| JAGI | Jajag, Banyuwa | 2.70 | 269 | P | | | Pn | 22 55 49.0 | -0.3 |
| WBSI | Waikabubak, Su | 2.76 | 116 | P | | | Pn | 22 55 50.7 | +0.6 |
| BASI | Baing, Sumba | 4.06 | 116 | P | | | Pn | 22 56 09.7 | +1.7 |
| BSSI | Bau Bau, Buton | 4.24 | 58 | P | | | Pn | 22 56 09.5 | -1.0 |
| KAPI | Kappang | 4.43 | 40 | Pn | | | Pn | 22 56 13.0 | -0.1 |
| KAPI | Kappang | 4.43 | 40 | Pn | | | Pn | 22 56 12.8 | -0.3 |
| | 8.0nm,0.3s,baz=183,slow=4.5,SNR=15 | | | | | | | | |
| KAPI | | | | Sn | | | Sn | 22 57 02.0 | -1.5 |
| | 6.0nm,0.3s,baz=310,slow=5.8,SNR=4.1 | | | | | | | | |
| KAPI | | | | Lg | | | Lg | 22 57 26.4 | |
| | 7.0nm,0.3s,baz=50,slow=22,SNR=4.0 | | | | | | | | |
| KAPI | | | | LR | | | LR | 22 58 13.3 | |
| | comp=Z,62nm,20.9s,baz=334,slow=42 25nm,0.2s | | | | | | | | |
| GRJI | Gresik | 4.62 | 289 | P | | | Pn | 22 56 15.3 | -0.3 |
| EDFI | Ende, Flores | 4.77 | 94 | P | | | Pn | 22 56 18.5 | +0.7 |
| PWJI | Pagerwojo | 5.04 | 274 | P | | | Pn | 22 56 21.2 | -0.3 |
| | 44nm,0.7s,0.3nm | | | | | | | | |
| BNSI | Bone | 5.12 | 39 | P | | | Pn | 22 56 24.6 | +1.9 |
| | 27nm,0.8s,0.3nm | | | | | | | | |
| MMRI | Maumere | 5.30 | 93 | P | | | Pn | 22 56 26.9 | +1.8 |
| | 43nm,0.5s,0.4nm | | | | | | | | |
| UGM | Wanagama | 6.32 | 274 | P | | | Pn | 22 56 40.0 | +0.9 |
| UGM | Wanagama | 6.32 | 274 | Pn | | | Pn | 22 56 39.6 | +0.5 |
| UGM | Wanagama | 6.32 | 274 | P | | | Pn | 22 56 39.0 | -0.1 |
| | 108nm,1.2s | | | | | | | | |
| SMRI | Semarang | 6.53 | 282 | P | | | Pn | 22 56 44.5 | +2.5 |
| | 48nm,0.4s | | | | | | | | |
| SMRI | Semarang | 6.53 | 282 | P | | | Pn | 22 56 41.5 | -0.5 |
| BATI | Baumata | 6.92 | 105 | P | | | Pn | 22 56 49.0 | +1.6 |
| | 27nm,1.0s,0.2nm | | | | | | | | |
| SOEI | Soe | 7.41 | 101 | P | | | Pn | 22 56 56.1 | +1.9 |
| | 20nm,0.8s,0.1nm | | | | | | | | |
| KPJI | Karang Pucung | 7.95 | 277 | P | | | Pn | 22 57 03.4 | +1.9 |
| BBJI | Bungbulang | 9.19 | 275 | P | | | Pn | 22 57 20.3 | +1.7 |
| FITZ | Fitzroy Crossi | 12.84 | 139 | Pn | | | Pn | 22 58 08.4 | -0.1 |
| MBWA | Marble Bar | 12.95 | 168 | P | | | Pn | 22 58 08.9 | -1.1 |
| MBWA | Marble Bar | 12.95 | 168 | Pn | | | Pn | 22 58 07.9 | -2.2 |
| PSA00 | Pilbara Seismi | 13.38 | 168 | P | | | Pn | 22 58 15.8 | -0.1 |
| PSA00 | Pilbara Seismi | 13.38 | 168 | Pn | | | Pn | 22 58 15.6 | -0.3 |
| KNRA | Kununurra | 13.67 | 123 | Pn | | | Pn | 22 58 18.6 | -1.2 |
| GIRL | Giralia | 14.36 | 190 | P | | | Pn | 22 58 26.5 | -2.8 |
| GIRL | Giralia | 14.36 | 190 | Pn | | | Pn | 22 58 25.9 | -3.4 |
| WB0 | Warramunga Arr | 20.36 | 125 | P | | | P | 22 59 42.3 | +0.3 |
| WRA | Warramunga Arr | 20.41 | 126 | P | | | P | 22 59 43.1 | +0.5 |
| | 2.5nm,0.5s,baz=300,slow=12,SNR=34 2.5nm,0.5s | | | | | | | | |
| WB2 | Warramunga Arr | 20.42 | 126 | P | | | P | 22 59 42.8 | +0.1 |
| WR0 | Warramunga Arr | 20.58 | 126 | P | | | P | 22 59 44.9 | +0.4 |
| ASAR | Alice Springs | 22.26 | 135 | P | | | P | 23 00 02.4 | -0.2 |
| ASAR | Alice Springs | 22.26 | 135 | P | | | P | 23 00 03.2 | +0.7 |
| | 0.8nm,0.5s,baz=310,slow=9.9,SNR=13 0.8nm,0.5s | | | | | | | | |
| FORT | Forrest | 24.57 | 156 | P | | | P | 23 00 26.6 | +1.5 |
| FORT | | | | IAmb | | | IAmb | 23 00 39.9 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| COEN | Coen | 26.36 | 104 | P | | | P | 23 00 39.5 | -2.0 |
| COEN | | | | IAmb | | | IAmb | 23 00 44.2 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| BBOO | Buckleboo | 30.07 | 146 | P | | | P | 23 01 14.0 | -0.5 |
| BBOO | | | | IAmb | | | IAmb | 23 01 33.9 | |
| | comp=Z,6.4nm,1.1s | | | | | | | | |
| CTAO | Charters Tower | 30.68 | 115 | P | | | P | 23 01 18.2 | -1.7 |
| CMAR | Chiang Mai Arr | 32.05 | 327 | P | | | P | 23 01 33.3 | +1.4 |
| | comp=Z,0.6nm,0.5s,baz=144,slow=7.8,SNR=1.3 comp=Z,0.6nm,0.5s | | | | | | | | |
| STKA | Stephens Creek | 32.74 | 139 | P | | | P | 23 01 38.9 | +1.0 |
| STKA | Stephens Creek | 32.74 | 139 | P | | | P | 23 01 38.2 | +0.3 |
| | comp=Z,1.9nm,0.6s,baz=321,slow=10,SNR=4.6 comp=Z,1.9nm,0.6s | | | | | | | | |
| ARMA | Armidale | 39.14 | 129 | P | | | P | 23 02 32.9 | -0.1 |
| ARMA | | | | IAmb | | | IAmb | 23 02 50.1 | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| KAAM | Kaadhehdhoo | 44.62 | 279 | P | | | P | 23 03 17.7 | -0.1 |
| USA0B | Ussuriysk Arra | 54.14 | 13 | P | | | P | 23 04 29.9 | 0.0 |
| USA0B | | | | IAmb | | | IAmb | 23 04 30.6 | |
| | comp=Z,3.4nm,0.8s | | | | | | | | |
| USRK | Ussuriysk Ar. | 54.14 | 13 | P | | | P | 23 04 29.5 | -0.5 |
| SONM | Songino Array | 56.78 | 352 | P | | | P | 23 04 49.9 | +0.8 |
| | comp=Z,0.8nm,0.8s,baz=166,slow=7.6,SNR=3.7 comp=Z,0.8nm,0.8s | | | | | | | | |
| INZ | Inchbonnie | 58.59 | 135 | P | | | P | 23 05 01.8 | -0.1 |
| MKAR | Makanchi Array | 63.01 | 334 | P | | | P | 23 05 31.2 | -0.5 |
| | comp=Z,0.3nm,0.7s,baz=159,slow=5.6,SNR=2.0 comp=Z,0.3nm,0.7s | | | | | | | | |
| ARSB | Arslanbob | 63.82 | 324 | P | | | P | 23 05 35.4 | -2.0 |
| ARSB | | | | IAmb | | | IAmb | 23 05 53.3 | |
| | comp=Z,1.4nm,0.7s | | | | | | | | |
| AAK | Ala-Archa | 63.83 | 326 | P | | | P | 23 05 38.0 | +0.5 |
| AAK | | | | IAmb | | | IAmb | 23 05 45.0 | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| WSAR | Wadi Sarin | 65.06 | 300 | LR | | | LR | 23 32 35.0 | |
| | comp=Z,32nm,21.2s,baz=129,slow=35 | | | | | | | | |
| PETK | Petropavlovsk- | 70.41 | 25 | P | | | P | 23 06 21.2 | +2.4 |
| MA2 | Magadan | 72.98 | 17 | P | | | P | 23 06 34.4 | +0.3 |
| ABKAR | Akbulak array | 75.90 | 326 | P | | | P | 23 06 50.0 | -1.3 |
| QSPA | South Pole Qui | 81.56 | 180 | P | | | P | 23 07 23.3 | +0.9 |
| QSPA | | | | IAmb | | | IAmb | 23 07 25.7 | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| SNAA | Sanae | 90.98 | 196 | P | | | P | 23 08 09.9 | +1.3 |
| | comp=Z,0.4nm,0.4s,baz=349,slow=5.2,SNR=1.8 comp=Z,0.4nm,0.4s | | | | | | | | |
| TORD | Torodi Ar. Bea | 116.30 | 280 | PKP | | | PKPdf | 23 13 48.0 | -1.2 |
| | comp=Z,0.2nm,0.5s,baz=43,slow=3.2,SNR=4.7 | | | | | | | | |
| CPUP | Villa Florida | 145.00 | 189 | PKP | | | PKPdf | 23 14 43.2 | +0.4 |
| | comp=Z,4.7nm,0.9s,baz=153,slow=3.3,SNR=5.7 | | | | | | | | |

*SOME* ***19*** *23:04:30.2,40.˚03N×77.˚93E,h10km*

*KRNET* ***19*** *23:04:31.4±0.1,39.˚96N×77.˚81E,mb3.0*

*NNC* ***19*** *23:04:31.2±1.4,40.˚07N×78.˚03E,h0km,mb3.8,mpv3.4, Error ellipse: s-maj=9.1km s-min=7.5km az=166.0*

**ISC 19 23:04:33.6±1.7,40.09N±0.07×77.91E±0.04,h10km,n62, σ1s65/97,23C-20D,Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| NRN | Naryn | 1.98 | 313 | ⇑*e*P | | | Pn | 23 05 08.2 | +0.8 |
| | baz=17 | | | | | | | | |
| NRN | | | | ⇑*i*S | | | Sb | 23 05 35.1 | +0.4 |
| | baz=17 | | | | | | | | |
| KDJ | Kajisay | 2.11 | 345 | ⇑*e*P | | | Pb | 23 05 10.9 | -1.2 |
| | baz=48 | | | | | | | | |
| KDJ | | | | ⇑*e*S | | | Sg | 23 05 39.6 | -1.9 |
| | baz=48 | | | | | | | | |
| PRZ | Przheval'sk | 2.42 | 9 | ⇓*e*P | | | Pb | 23 05 15.8 | -1.6 |
| | baz=10.0 | | | | | | | | |
| PRZ | | | | ⇓*e*S | | | Sg | 23 05 48.4 | -3.0 |
| | baz=10.0 | | | | | | | | |
| ULHL | Ulahol | 2.50 | 330 | ⇑*e*P | | | Pn | 23 05 15.8 | +1.3 |
| | baz=33 | | | | | | | | |
| ULHL | | | | ⇑*e*S | | | Sb | 23 05 48.4 | -1.1 |
| | baz=33 | | | | | | | | |
| BOOM | Boomskoye usch | 2.82 | 329 | ⇓*e*P | | | Pn | 23 05 20.2 | +1.3 |
| | baz=32 | | | | | | | | |
| BOOM | | | | ⇓*e*S | | | Sb | 23 05 56.0 | -2.8 |
| | baz=32 | | | | | | | | |
| SATY | Saty | 2.99 | 7 | *e*P | | | Pb | 23 05 27.4 | +0.4 |
| | 7.0nm,0.5s | | | | | | | | |
| SATY | | | | *e*S | | | Sg | 23 06 08.6 | -1.1 |
| | 31nm,0.6s | | | | | | | | |
| SATY | Saty | 2.99 | 7 | Pg | | | Pb | 23 05 27.4 | +0.4 |
| | 6.9nm,0.4s | | | | | | | | |
| SATY | | | | Lg | | | Lg | 23 06 08.6 | |
| | 22nm,0.5s | | | | | | | | |
| TNSS | Tian-Shan | 3.03 | 347 | *e*P | | | Pb | 23 05 28.0 | +0.1 |
| | 28nm,0.4s | | | | | | | | |
| TNSS | | | | *e*S | | | Sg | 23 06 09.6 | -1.5 |
| | 35nm,0.9s | | | | | | | | |
| TNSS | Tian-Shan | 3.03 | 347 | Pg | | | Pb | 23 05 28.0 | +0.1 |
| | 14nm,0.4s | | | | | | | | |
| TNSS | | | | Lg | | | Lg | 23 06 09.6 | |
| | 22nm,0.5s | | | | | | | | |
| ZHN | Zhinishke | 3.10 | 7 | *e*P | | | Pb | 23 05 29.1 | +0.2 |
| | 5.7nm,0.3s | | | | | | | | |
| ZHN | | | | *e*S | | | Sg | 23 06 11.6 | -1.7 |
| | 40nm,0.3s | | | | | | | | |
| MDOK | Medeo | 3.14 | 348 | *e*P | | | Pb | 23 05 30.0 | +0.5 |
| | 23nm,0.5s | | | | | | | | |
| MDOK | | | | *e*S | | | Sg | 23 06 12.9 | -1.6 |
| | 36nm,0.4s | | | | | | | | |
| MDOK | Medeo | 3.14 | 348 | ⇓Pg | | | Pb | 23 05 29.5 | -0.1 |
| | 18nm,0.6s | | | | | | | | |
| MDOK | | | | Pg | | | Pb | 23 05 30.0 | +0.5 |
| | 23nm,0.6s | | | | | | | | |
| MDOK | | | | Lg | | | Lg | 23 06 12.9 | |
| | 39nm,0.8s | | | | | | | | |
| MDOK | | | | Lg | | | Lg | 23 06 13.1 | |
| | 44nm,0.8s | | | | | | | | |
| UZB | Uzunbulak | 3.17 | 15 | *e*P | | | Pb | 23 05 29.4 | -0.6 |
| | 9.1nm,0.6s | | | | | | | | |
| UZB | | | | *e*S | | | Sg | 23 06 11.9 | -3.4 |
| | 22nm,0.4s | | | | | | | | |
| UZB | Uzunbulak | 3.17 | 15 | Pg | | | Pb | 23 05 29.4 | -0.6 |
| | 8.8nm,0.7s | | | | | | | | |
| UZB | | | | Lg | | | Lg | 23 06 11.9 | |
| | 18nm,0.3s | | | | | | | | |
| KOTS | Kotyrbulak | 3.20 | 349 | *e*P | | | Pb | 23 05 31.0 | +0.4 |
| | 7.5nm,0.3s | | | | | | | | |
| KOTS | | | | *e*S | | | Sg | 23 06 14.8 | -1.5 |
| | 41nm,0.3s | | | | | | | | |
| KOTS | Kotyrbulak | 3.20 | 349 | Pg | | | Pb | 23 05 31.0 | +0.4 |
| | 7.0nm,0.3s | | | | | | | | |
| KOTS | | | | Lg | | | Lg | 23 06 14.8 | |
| | 41nm,0.3s | | | | | | | | |
| KNDC | Almaty | 3.21 | 348 | ⇑Pg | | | Pb | 23 05 31.4 | +0.8 |
| | 18nm,0.6s | | | | | | | | |
| KNDC | | | | ⇓Lg | | | Lg | 23 06 15.3 | |
| | 34nm,0.7s | | | | | | | | |
| AAA | Alma-Ata | 3.21 | 347 | *e*P | | | Pb | 23 05 31.6 | +1.0 |
| | 33nm,0.3s | | | | | | | | |
| AAA | | | | *e*S | | | Sg | 23 06 15.8 | -0.7 |
| | 69nm,0.3s | | | | | | | | |
| MTBS | Maitube | 3.23 | 340 | *e*P | | | Pb | 23 05 31.6 | +0.4 |
| | 5.3nm,0.2s | | | | | | | | |
| MTBS | | | | *e*S | | | Sg | 23 06 15.8 | -1.7 |
| | 43nm,0.5s | | | | | | | | |
| MTBS | Maitube | 3.23 | 340 | Pg | | | Pb | 23 05 31.6 | +0.4 |
| | 5.4nm,0.2s | | | | | | | | |
| MTBS | | | | Lg | | | Lg | 23 06 15.8 | |
| | 43nm,0.4s | | | | | | | | |
| ARLS | Aral | 3.24 | 304 | ⇓*e*P | | | Pn | 23 05 25.1 | +0.4 |
| | baz=7.0 | | | | | | | | |
| ARLS | | | | ⇓*e*S | | | Sn | 23 06 04.3 | +0.9 |
| | baz=7.0 | | | | | | | | |
| KST | Kastek | 3.29 | 334 | *e*P | | | Pb | 23 05 32.2 | 0.0 |
| | 2.8nm,0.6s | | | | | | | | |
| KST | | | | *e*S | | | Sg | 23 06 17.1 | -2.3 |
| | 22nm,0.6s | | | | | | | | |
| KST | Kastek | 3.29 | 334 | Pg | | | Pb | 23 05 32.2 | 0.0 |
| | 2.8nm,0.6s | | | | | | | | |
| KST | | | | Lg | | | Lg | 23 06 17.1 | |
| | 22nm,0.6s | | | | | | | | |
| TKM2 | Tokmak 2 | 3.32 | 329 | ⇓Pg | | | Pb | 23 05 32.1 | -0.6 |
| | 3.8nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | | Lg | 23 06 18.3 | |
| | 7.6nm,0.4s | | | | | | | | |
| TKM2 | Tokmak 2 | 3.32 | 329 | ⇑*e*P | | | Pn | 23 05 27.2 | +1.4 |
| | baz=31 | | | | | | | | |
| TKM2 | | | | ⇑*i*S | | | Sn | 23 06 08.0 | +2.6 |
| | baz=31 | | | | | | | | |
| SFK | Sufi-Kurgan | 3.38 | 270 | ⇑*e*P | | | Pn | 23 05 26.0 | -0.7 |
| | baz=72 | | | | | | | | |
| SFK | | | | ⇑*e*S | | | Sn | 23 06 05.9 | -1.1 |
| | baz=72 | | | | | | | | |
| KBK | Karagaybulak | 3.40 | 320 | ⇓*e*P | | | Pn | 23 05 28.0 | +1.2 |
| | baz=22 | | | | | | | | |
| KBK | | | | ⇓*e*S | | | Sn | 23 06 09.3 | +2.0 |
| | baz=22 | | | | | | | | |
| KURS | Kuram | 3.40 | 3 | *e*P | | | Pb | 23 05 34.6 | +0.7 |
| | 14nm,0.6s | | | | | | | | |
| KURS | | | | *e*S | | | Sg | 23 06 20.9 | -1.9 |
| | 14nm,0.7s | | | | | | | | |
| KURS | Kuram | 3.40 | 3 | Pg | | | Pb | 23 05 34.6 | +0.7 |
| | 10nm,0.6s | | | | | | | | |
| KURS | | | | Lg | | | Lg | 23 06 20.9 | |
| | 14nm,0.7s | | | | | | | | |
| KPKS | Kokpek | 3.42 | 9 | *e*P | | | Pb | 23 05 34.6 | +0.2 |
| | 9.4nm,0.4s | | | | | | | | |
| KPKS | | | | *e*S | | | Sg | 23 06 20.6 | -2.9 |
| | 26nm,0.6s | | | | | | | | |
| KPKS | Kokpek | 3.42 | 9 | Pg | | | Pb | 23 05 34.6 | +0.2 |
| | 9.4nm,0.4s | | | | | | | | |
| KPKS | | | | Lg | | | Lg | 23 06 20.6 | |
| | 23nm,0.4s | | | | | | | | |
| PDGK | Podgornoye | 3.45 | 20 | ⇓Pg | | | Pn | 23 05 28.8 | +1.3 |
| | 1.4nm,0.3s | | | | | | | | |
| PDGK | | | | ⇓Lg | | | Lg | 23 06 16.1 | |
| | 12nm,0.6s | | | | | | | | |
| DGS | Degeres | 3.54 | 334 | *e*P | | | Pb | 23 05 36.6 | +0.3 |
| | 1.9nm,0.3s | | | | | | | | |
| DGS | | | | *e*S | | | Sg | 23 06 24.2 | -2.9 |
| | 23nm,0.6s | | | | | | | | |
| DGS | Degeres | 3.54 | 334 | Pg | | | Pb | 23 05 36.6 | +0.3 |
| | 1.9nm,0.3s | | | | | | | | |
| DGS | | | | Lg | | | Lg | 23 06 24.2 | |
| | 23nm,0.6s | | | | | | | | |
| AAK | Ala-Archa | 3.62 | 316 | ⇑Pg | | | Pb | 23 05 37.2 | -0.5 |
| | 4.2nm,0.7s | | | | | | | | |
| AAK | | | | ⇑Lg | | | Lg | 23 06 28.5 | |
| | 11nm,0.5s | | | | | | | | |
| AAK | Ala-Archa | 3.62 | 316 | ⇓*e*P | | | Pn | 23 05 30.9 | +1.1 |
| | baz=18 | | | | | | | | |
| AAK | | | | ⇓*e*S | | | Sn | 23 06 14.4 | +1.7 |
| | baz=18 | | | | | | | | |
| FRU1 | Bishkek | 3.67 | 319 | ⇓*e*P | | | Pn | 23 05 31.9 | +1.4 |
| | baz=21 | | | | | | | | |
| FRU1 | | | | ⇓*e*S | | | Sn | 23 06 16.2 | +2.4 |
| | baz=21 | | | | | | | | |
| KTBS | Karatobe | 3.73 | 346 | *e*P | | | Pb | 23 05 39.9 | +0.3 |
| | 3.5nm,0.3s | | | | | | | | |
| KTBS | | | | *e*S | | | Sg | 23 06 30.3 | -3.2 |
| | 26nm,0.5s | | | | | | | | |
| KTBS | Karatobe | 3.73 | 346 | Pg | | | Pb | 23 05 39.9 | +0.3 |
| | 3.5nm,0.3s | | | | | | | | |
| KTBS | | | | Lg | | | Lg | 23 06 30.3 | |
| | 22nm,0.4s | | | | | | | | |
| CHMS | Chumysh | 3.75 | 322 | ⇑Pg | | | Pb | 23 05 40.3 | +0.4 |
| | 4.8nm,0.7s | | | | | | | | |
| CHMS | | | | ⇓Lg | | | Lg | 23 06 30.8 | |
| | 6.0nm,0.6s | | | | | | | | |
| CHMS |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BTLS | | | | | Lg | Lg | 23 07 32.2 | | | |
| | 3.3nm,0.7s | | | | | | | | | |
| **KK31** | **Karatay Array** | **6.31** | **301** | ⇓Pg | | Pg | 23 06 29.6 | -4.8 | | |
| | 0.2nm,0.3s,baz=119,slow=15,SNR=4.8 | | | | | | | | | |
| KK31 | | | | | ⇓Lg | Lg | 23 07 53.1 | | | |
| | 1.4nm,0.6s | | | | | | | | | |

**DJA 19 23:12:58.7±0.6, 8°S±7°×11°7E±°, h12km±6km, M3.8/7, mb4.3/2, mB5.0/1, MLv3.6/7, Mw(mB)4.3/1, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.34** | **190** | P | Pb | 23 13 06.6 | -0.1 |
| TWSI | | | | S | Sb | 23 13 11.8 | -0.3 |
| **PLAI** | **Plampang** | **0.93** | **117** | P | Pg | 23 13 16.3 | -0.4 |
| PLAI | | | | S | Sb | 23 13 29.6 | +0.5 |
| **WBSI** | **Waikabubak, Su** | **2.72** | **117** | P | Pn | 23 13 43.0 | +0.7 |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **268** | P | Pn | 23 13 42.1 | -0.7 |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **58** | P | Pn | 23 14 01.9 | -0.4 |
| **EDFI** | **Ende, Flores** | **4.71** | **95** | P | Pn | 23 14 10.6 | +0.9 |
| **PWJI** | **Pagerwojo** | **5.10** | **274** | P | Pn | 23 14 14.8 | -0.2 |
| | 16nm,1.0s,0.2nm | | | | | | |
| **SOEI** | **Soe** | **7.36** | **101** | P | Pn | 23 14 45.7 | -0.5 |

**IDC 19 23:19:15.4±1.5, 18°21S×177°43W, h0km, mb3.9/4, mbtmp3.9/4, MS3.8/1, Error ellipse: s-maj=55.4km s-min=33.7km az=170.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **35.43** | **279** | LR | LR | 23 38 33.9 | |
| | comp=Z,147nm,19.6s,baz=274,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.49** | **260** | P | P | 23 27 36.4 | -0.5 |
| | 0.6nm,0.4s,baz=99,slow=7.5,SNR=4.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.61** | **254** | P | P | 23 27 37.8 | 0.0 |
| | 1.8nm,0.4s,baz=93,slow=7.9,SNR=32 | | | | | | |
| | 1.8nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.84** | **180** | P | P | 23 30 40.2 | +0.3 |
| | 0.9nm,0.6s,baz=336,slow=0.8,SNR=6.7 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.37** | **57** | P | P | 23 31 54.9 | -0.2 |
| | 0.3nm,0.7s,baz=217,slow=6.1,SNR=3.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC **19** 23:20:27.2±4.4, 16°06S×176°24W, h0km, mb4.2/5, mbtmp4.2/5, MS3.5/2, Error ellipse: s-maj=96.5km s-min=38.0km az=36.0*
*NEIC **19** 23:21:35.9±1.1, 17°7S±0°3×178°5W±0°2, h529km±22km, mb4.2/15, Error ellipse: s-maj=43.7km s-min=28.3km az=203.0*
**ISC 19 23:21:33.5±3.6, 17°8S±0°4×178°1W±0°4, h550km, n25, σ1s77/21, mb4.2/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.70** | **270** | P | **P** | **23 22 51.1** | **-2.1** |
| **DZM** | **Mont Dzumac** | **15.17** | **251** | LR | LR | 23 29 58.8 | |
| | comp=Z,236nm,21.9s,baz=58,slow=33 | | | | | | |
| **URZ** | **Urewera** | **20.83** | **191** | P | **P** | **23 25 32.8** | **-4.1** |
| | 2.7nm,0.3s,baz=331,slow=3.9,SNR=5.6 | | | | | | |
| | 2.7nm,0.3s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.24** | **196** | P | P | 23 26 33.2 | +8.2 |
| **LBZ** | **Lake Benmore** | **28.30** | **198** | P | **P** | **23 26 46.2** | **+3.2** |
| LBZ | | | | IAmb | IAmb | 23 27 03.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **29.61** | **250** | P | **P** | **23 26 55.3** | **+0.6** |
| EIDS | | | | IAmb | IAmb | 23 27 04.9 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.28** | **240** | P | **P** | **23 26 58.7** | **-1.8** |
| ARMA | | | | IAmb | IAmb | 23 26 59.6 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.35** | **200** | P | **P** | **23 26 59.8** | **-0.9** |
| **CTAO** | **Charters Tower** | **33.78** | **260** | P | **P** | **23 27 30.1** | **-0.2** |
| CTAO | | | | IAmb | IAmb | 23 27 40.5 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **COEN** | **Coen** | **37.43** | **270** | P | **P** | **23 27 60.0** | **-0.6** |
| **TOO** | **Toolangi** | **37.50** | **231** | P | **P** | **23 28 01.9** | **+1.1** |
| TOO | | | | IAmb | IAmb | 23 28 02.5 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **23 28 14.1** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **23 28 14.6** | **+1.7** |
| | comp=Z,1.9nm,0.5s,baz=97,slow=11,SNR=6.6 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.75** | **241** | P | **P** | **23 28 51.7** | **+1.1** |
| BBOO | | | | IAmb | IAmb | 23 29 03.7 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **23 29 01.2** | **+1.2** |
| WB0 | | | | IAmb | IAmb | 23 29 13.7 | |
| | comp=Z,4.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.96** | **259** | P | **P** | **23 29 00.5** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 23 29 06.9 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **23 29 01.1** | **+0.8** |
| | comp=Z,0.8nm,0.5s,baz=93,slow=7.1,SNR=4.9 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.13** | **254** | P | **P** | **23 29 03.0** | **+1.5** |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **23 29 02.4** | **+0.9** |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **23 29 02.9** | **+1.4** |
| | comp=Z,7.2nm,0.6s,baz=88,slow=8.3,SNR=53 | | | | | | |
| | comp=Z,7.2nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.35** | **245** | P | **P** | **23 29 41.5** | **+1.2** |
| **CASY** | **Casey** | **66.39** | **205** | P | P | 23 31 34.0 | +6.3 |
| CASY | | | | IAmb | IAmb | 23 31 34.9 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.00** | **323** | LR | LR | 23 57 47.5 | |
| | comp=Z,26nm,19.3s,baz=172,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **72.27** | **180** | P | **P** | **23 32 04.8** | **+1.7** |
| **QSPA** | **South Pole Qui** | **72.27** | **180** | P | **P** | **23 32 04.6** | **+1.4** |
| | comp=Z,0.7nm,0.5s,baz=255,slow=0.7,SNR=9.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |

*SJA **19** 23:22:08.8±0.7, 19°21S×70°22W, h41km±116km, ML3.8, MW3.6*
*GUC **19** 23:22:10.9±0.8, 19°23S×70°20W, h40km±4km, ML3.8*
**ISC 19 23:22:10.1±1.2, 19°26S±0°03×70°30W±0°07, h28km±12km, n18, σ1s25/30, 3D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PX02** | **IPOC Station P** | **0.31** | **18** | *e*P | **Pb** | **23 22 18.0** | **+0.3** |
| PX02 | | | | *i* S | **Sn** | **23 22 24.6** | **+0.2** |
| **AP01** | **Chacalluta** | **0.88** | **357** | *e*P | **Pn** | **23 22 25.6** | **-1.1** |
| AP01 | | | | *e*S | **Sb** | **23 22 37.3** | **-1.1** |
| AP01 | | | | IAML | | 23 22 39.6 | |
| | comp=Z,5μm,0.1s | | | | | | |
| **AP01** | **Chacalluta** | **0.88** | **357** | ⇓*i*P | **Pn** | **23 22 26.2** | **-0.4** |
| AP01 | | | | *i* S | **Sb** | **23 22 38.2** | **-0.1** |
| AP01 | | | | IAML | | 23 22 38.8 | |
| | comp=E,11μm,0.5s | | | | | | |
| **TA02** | **Huaiquique** | **1.02** | **171** | *e*P | **Pn** | **23 22 28.3** | **-0.2** |
| TA02 | | | | IAML | | 23 22 44.4 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **TA02** | **Huaiquique** | **1.02** | **171** | *e*P | **Pn** | **23 22 28.4** | **-0.2** |
| TA02 | | | | *e*S | **Sn** | **23 22 42.2** | **+0.3** |
| **GO01** | **Chusmiza** | **1.12** | **112** | *e*P | **Pn** | **23 22 29.3** | **-1.1** |
| GO01 | | | | *e*S | **Sn** | **23 22 44.2** | **-0.8** |
| GO01 | | | | IAML | | 23 22 44.4 | |
| | comp=Z,4μm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **1.12** | **112** | ⇓*i*P | **Pn** | **23 22 29.4** | **-0.9** |
| GO01 | | | | *i* S | **Sn** | **23 22 43.9** | **-1.1** |
| GO01 | | | | IAML | | 23 22 44.8 | |
| | comp=N,7μm,0.1s | | | | | | |
| **PX03** | **IPOC Station P** | **1.30** | **151** | *e*P | **Pn** | **23 22 31.6** | **-1.0** |
| PX03 | | | | IAML | | 23 22 52.2 | |
| | comp=N,1μm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **1.31** | **175** | *e*P | **Pn** | **23 22 32.6** | **+0.1** |
| TA01 | | | | *e*S | **Sn** | **23 22 50.1** | **+1.1** |
| **TA01** | **Diego Aracena** | **1.31** | **175** | *e*P | **Pn** | **23 22 32.5** | **0.0** |
| TA01 | | | | *e*S | **Sn** | **23 22 49.1** | **+0.1** |
| TA01 | | | | IAML | | 23 22 54.0 | |
| | comp=N,1μm,0.2s | | | | | | |
| **PB18** | **Visviri** | **1.83** | **25** | ⇓*i*P | **Pn** | **23 22 40.9** | **+0.7** |
| **PB09** | **IPOC Station P** | **2.71** | **159** | *e*P | **Pn** | **23 22 52.9** | **+0.9** |
| PB09 | | | | *e*S | **Sn** | **23 23 25.0** | **+1.0** |
| PB09 | | | | IAML | | 23 23 37.2 | |
| | comp=Z,245nm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **2.71** | **159** | *e*P | **Pn** | **23 22 53.6** | **+1.6** |
| PB09 | | | | IAML | | 23 23 38.3 | |
| | comp=E,236nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **3.06** | **177** | *e*P | **Pn** | **23 22 57.5** | **+0.6** |
| PB04 | | | | *e*S | **Sn** | **23 23 35.0** | **+2.3** |
| PB04 | | | | IAML | | 23 23 52.4 | |
| | comp=Z,149nm,0.8s | | | | | | |
| **PB04** | **IPOC Station P** | **3.06** | **177** | *e*P | **Pn** | **23 22 56.8** | **-0.1** |
| **LVC** | **Limon Verde** | **3.58** | **159** | *e*P | **Pn** | **23 23 05.2** | **+1.1** |
| LVC | | | | *e*S | **Sn** | **23 23 46.9** | **+1.3** |
| LVC | | | | IAML | | 23 24 00.6 | |
| | comp=Z,262nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **3.60** | **35** | *e*P | **Pn** | **23 23 06.5** | **+1.8** |
| LPAZ | | | | *e*S | Sn | 23 23 26.5 | -20 |
| **PB14** | **IPOC Station P** | **5.34** | **181** | *e*P | **Pn** | **23 23 26.7** | **-1.6** |
| PB14 | | | | *e*S | **Sn** | **23 24 25.5** | **-3.6** |
| PB14 | | | | IAML | | 23 24 55.3 | |
| | comp=Z,34nm,1.5s | | | | | | |

*IDC **19** 23:23:41.9±2.4, 18°01S×177°97W, h562km±27km, mb3.7/14, mbtmp4.6/15, Error ellipse: s-maj=15.9km s-min=12.8km az=156.0*
*NEIC **19** 23:23:43.2±1.3, 18°1S±0°1×177°9W±0°1, h577km±6km, mb4.4/136, Error ellipse: s-maj=17.7km s-min=14.2km az=164.0*
*NOU **19** 23:23:43.3, 18°10S×177°85W, h590km, mb4.8/38, Fiji Islands Region*
**ISC 19 23:23:43.6±0.3, 18°00S±0°08×177°96W±0°06, h590km, n279, σ0s78/274, mb4.3/80, 12C-13D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.81** | **273** | P | **P** | **23 25 07.2** | **+0.1** |
| **MSVF** | **Nonsavu** | **3.81** | **273** | P | **P** | **23 25 07.3** | **+0.1** |
| **AFI** | **Afiamalu** | **7.20** | **57** | P | **P** | **23 25 32.1** | **-3.1** |
| **NIUE** | **Niue** | **7.69** | **99** | P | **P** | **23 25 38.5** | **-1.2** |
| **NIUE** | **Niue** | **7.69** | **99** | P | **P** | **23 25 38.7** | **-1.0** |
| **RTV** | **Rentapao** | **12.96** | **269** | P | **P** | **23 26 32.8** | **+0.6** |
| **DVP** | **Devils Point** | **13.20** | **269** | P | **P** | **23 26 36.2** | **+1.7** |
| **DVP** | **Devils Point** | **13.20** | **269** | P | **P** | **23 26 32.5** | **-2.0** |
| **LIFNC** | **LIFOU** | **14.24** | **256** | P | **P** | **23 26 44.7** | **-0.3** |
| **LIFNC** | **LIFOU** | **14.24** | **256** | P | **P** | **23 26 42.7** | **-2.3** |
| **LIFNC** | **LIFOU** | **14.24** | **256** | P | **P** | **23 26 43.6** | **-1.4** |
| **PINNC** | **Pines Island,** | **14.44** | **249** | P | **P** | **23 26 46.1** | **-0.8** |
| **YATNC** | **Mamie plateau,** | **14.80** | **252** | P | **P** | **23 26 49.6** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.21** | **252** | P | **P** | **23 26 53.7** | **-0.5** |
| **DZM** | **Mont Dzumac** | **15.21** | **252** | P | **P** | **23 26 53.5** | **-0.7** |
| DZM | | | | IAmb | IAmb | 23 27 00.2 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.21** | **252** | P | **P** | **23 26 53.4** | **-0.7** |
| | comp=Z,8.6nm,0.4s,baz=123,slow=20,SNR=13 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.34** | **252** | P | **P** | **23 26 54.9** | **-0.4** |
| **KOUNC** | **Koumac, New Ca** | **16.95** | **259** | P | **P** | **23 27 11.3** | **+1.1** |
| **KOUNC** | **Koumac, New Ca** | **16.95** | **259** | P | **P** | **23 27 10.9** | **+0.7** |
| **KOUNC** | **Koumac, New Ca** | **16.95** | **259** | P | **P** | **23 27 11.1** | **+0.9** |
| **URZ** | **Urewera** | **20.64** | **191** | P | **P** | **23 27 41.1** | **-2.2** |
| | comp=Z,8.4nm,0.4s,baz=91,slow=3.3,SNR=15 | | | | | | |
| | comp=Z,8.4nm,0.4s | | | | | | |
| **RTZ** | **Ruatahuna** | **21.01** | **191** | P | **P** | **23 27 46.2** | **-0.7** |
| RTZ | | | | IAmb | IAmb | 23 28 18.6 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **BFZ** | **Birch Farm** | **23.15** | **191** | P | **P** | **23 28 06.6** | **+0.8** |
| **MRZ** | **Mangatainoka R** | **23.26** | **193** | P | **P** | **23 28 04.9** | **-1.9** |
| MRZ | | | | IAmb | IAmb | 23 28 12.7 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **MSWZ** | **Moikau Station** | **24.05** | **193** | P | **P** | **23 28 12.7** | **-1.1** |
| **BHW** | **Baring Head** | **24.13** | **193** | P | **P** | **23 28 13.2** | **-1.2** |
| **PLWZ** | **Palliser** | **24.20** | **192** | P | **P** | **23 28 14.2** | **-0.9** |
| **TKNZ** | **Takaka Hill** | **24.25** | **197** | P | **P** | **23 28 14.8** | **-0.7** |
| **BSWZ** | **Blackbirch Sta** | **24.65** | **195** | P | **P** | **23 28 19.2** | **+0.2** |
| **THZ** | **Tophouse** | **24.94** | **196** | P | **P** | **23 28 21.0** | **-0.6** |
| **DSZ** | **Denniston Nort** | **25.24** | **198** | P | **P** | **23 28 24.3** | **0.0** |
| **KHZ** | **Kahutara** | **25.39** | **195** | P | **P** | **23 28 23.6** | **-1.9** |
| **KHZ** | **Kahutara** | **25.39** | **195** | P | **P** | **23 28 24.0** | **-1.6** |
| **LTZ** | **Lake Taylor** | **26.06** | **197** | P | **P** | **23 28 29.7** | **-1.8** |
| **INZ** | **Inchbonnie** | **26.24** | **198** | P | **P** | **23 28 32.5** | **-0.6** |
| **PPT** | **Papeete** | **27.02** | **93** | P | **P** | **23 28 40.4** | **+0.2** |
| | comp=Z,21nm,0.6s,baz=67,slow=1.5,SNR=9.0 | | | | | | |
| | comp=Z,21nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.03** | **94** | P | **P** | **23 28 40.5** | **+0.1** |
| **RPZ** | **Rata Peaks** | **27.26** | **198** | P | **P** | **23 28 41.9** | **-0.1** |
| **FOZ** | **Fox Glacier** | **27.47** | **200** | P | **P** | **23 28 43.2** | **-0.5** |
| **LBZ** | **Lake Benmore** | **28.13** | **198** | P | **P** | **23 28 47.6** | **-2.0** |
| **WKZ** | **Wanaka** | **28.89** | **199** | P | **P** | **23 28 55.3** | **-0.8** |
| **EIDS** | **Eidsvold** | **29.64** | **250** | P | **P** | **23 29 02.3** | **-0.6** |
| **EIDS** | **Eidsvold** | **29.64** | **250** | P | **P** | **23 29 02.3** | **-0.6** |
| **MLZ** | **Mavora Lakes** | **29.66** | **200** | P | **P** | **23 29 02.8** | **+0.1** |
| **DCZ** | **Deep Cove** | **30.07** | **201** | P | **P** | **23 29 05.7** | **-0.5** |
| **WHZ** | **Wether Hill Ro** | **30.18** | **200** | P | **P** | **23 29 07.4** | **+0.2** |
| WHZ | | | | IAmb | IAmb | 23 29 16.8 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **30.27** | **240** | P | **P** | **23 29 09.3** | **+0.9** |
| **CNB** | **Canberra Magne** | **33.71** | **233** | P | **P** | **23 29 38.2** | **+0.8** |
| **CTAO** | **Charters Tower** | **33.85** | **261** | P | **P** | **23 29 38.4** | **-0.3** |
| **CTAO** | **Charters Tower** | **33.85** | **261** | P | **P** | **23 29 38.4** | **-0.3** |
| **CAN** | **Canberra** | **33.99** | **233** | P | **P** | **23 29 40.4** | **+0.7** |
| **CAN** | **Canberra** | **33.99** | **233** | P | **P** | **23 29 40.1** | **+0.4** |
| **MILA** | **Mila** | **34.55** | **230** | P | **P** | **23 29 44.2** | **-0.2** |
| **PMG** | **Port Moresby** | **34.90** | **279** | P | **P** | **23 29 48.2** | **+0.7** |
| **PMG** | **Port Moresby** | **34.90** | **279** | P | **P** | **23 29 48.7** | **+1.2** |
| **PMG** | **Port Moresby** | **34.90** | **279** | P | **P** | **23 29 47.8** | **+0.3** |
| **CMSA** | **Cobar Meteorol** | **35.48** | **241** | P | **P** | **23 29 52.5** | **+0.4** |
| **CMSA** | **Cobar Meteorol** | **35.48** | **241** | P | **P** | **23 29 51.9** | **-0.2** |
| **MTSU** | **Mount Surprise** | **35.82** | **264** | P | **P** | **23 29 54.9** | **-0.2** |
| **QLP** | **Quilpie** | **35.90** | **249** | P | **P** | **23 29 55.5** | **-0.1** |
| **GLAD** | **Gladstone** | **37.09** | **225** | P | **P** | **23 30 05.0** | **-0.1** |
| **TOO** | **Toolangi** | **37.45** | **231** | P | **P** | **23 30 09.1** | **+1.0** |
| **TOO** | **Toolangi** | **37.45** | **231** | P | **P** | **23 30 08.8** | **+0.7** |
| **TOO** | **Toolangi** | **37.45** | **231** | P | **P** | **23 30 08.4** | **+0.3** |
| **MANU** | **Manus Island** | **37.53** | **291** | P | **P** | **23 30 09.2** | **+0.1** |
| **COEN** | **Coen** | **37.53** | **270** | P | **P** | **23 30 09.4** | **+0.2** |
| **COEN** | **Coen** | **37.53** | **270** | P | **P** | **23 30 09.2** | **+0.1** |
| **COEN** | **Coen** | **37.53** | **270** | P | **P** | **23 30 09.3** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.96** | **241** | P | **P** | **23 30 20.7** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.96** | **241** | P | **P** | **23 30 20.9** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.96** | **241** | P | **P** | **23 30 20.3** | **-0.2** |
| STKA | | | | IAmb | IAmb | 23 30 22.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.96** | **241** | P | **P** | **23 30 21.2** | **+0.7** |
| | comp=Z,23nm,0.6s,baz=92,slow=10.0,SNR=45 | | | | | | |
| | comp=Z,23nm,0.6s | | | | | | |
| **INKA** | **Innaminka** | **39.11** | **248** | P | **P** | **23 30 22.3** | **+0.6** |
| **INKA** | **Innaminka** | **39.11** | **248** | P | **P** | **23 30 22.5** | **+0.8** |
| **ARPS** | **Mount Arapiles** | **39.94** | **234** | P | **P** | **23 30 28.3** | **+0.1** |
| **QIS** | **Mount Isa** | **40.06** | **259** | P | **P** | **23 30 28.6** | **-0.8** |
| **HTT** | **Hallett** | **41.47** | **240** | P | **P** | **23 30 40.7** | **+0.3** |
| **HTT** | **Hallett** | **41.47** | **240** | P | **P** | **23 30 41.0** | **+0.6** |
| **LCRK** | **Leigh Creek** | **41.60** | **244** | P | **P** | **23 30 41.4** | **0.0** |
| **JAY** | **Jayapura** | **43.34** | **286** | P | **P** | **23 30 54.8** | **-0.5** |
| | comp=Z,56nm,1.2s,comp=Z,615nm | | | | | | |
| **OOD** | **Oodnadatta** | **43.58** | **248** | P | **P** | **23 30 57.4** | **+0.5** |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | **P** | **23 30 58.0** | **-0.1** |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | **P** | **23 30 57.9** | **-0.1** |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | **P** | **23 30 58.2** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **23 31 06.4** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 23 31 07.8 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.00** | **260** | P | **P** | **23 31 07.6** | **-0.3** |
| **WB2** | **Warramunga Arr** | **45.03** | **260** | P | **P** | **23 31 07.6** | **-0.6** |
| **AS01** | **Alice Springs** | **45.14** | **254** | P | **P** | **23 31 08.7** | **-0.3** |
| **MULG** | **Mulgathing** | **45.16** | **245** | P | **P** | **23 31 08.7** | **-0.3** |
| **MULG** | **Mulgathing** | **45.16** | **245** | P | **P** | **23 31 08.6** | **-0.4** |
| **AS31** | **Alice Springs** | **45.18** | **254** | P | **P** | **23 31 09.3** | **0.0** |
| AS31 | | | | IAmb | IAmb | 23 31 09.9 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **45.18** | **254** | P | **P** | **23 31 09.3** | **0.0** |
| | comp=Z,49nm,0.5s,baz=86,slow=8.9,SNR=381 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 32 37.0** | **+0.2** |
| | comp=Z,3.2nm,0.4s,baz=106,slow=3.9,SNR=7.0 | | | | | | |
| | comp=Z,49nm,0.5s | | | | | | |
| **KDU** | **Kakadu** | **47.98** | **269** | P | **P** | **23 31 29.8** | **-0.6** |
| **MTN** | **Manton Dam** | **49.23** | **268** | P | **P** | **23 31 39.1** | **-0.5** |
| **MTN** | **Manton Dam** | **49.23** | **268** | P | **P** | **23 31 39.1** | **-0.5** |
| **WRKA** | **Warakurna** | **50.22** | **252** | P | **P** | **23 31 46.4** | **-0.5** |
| **FORT** | **Forrest** | **50.36** | **245** | P | **P** | **23 31 47.1** | **-0.6** |
| **FORT** | **Forrest** | **50.36** | **245** | P | **P** | **23 31 46.8** | **-0.9** |
| **FORT** | **Forrest** | **50.36** | **245** | P | **P** | **23 31 47.1** | **-0.6** |
| **KNRA** | **Kununurra** | **50.91** | **264** | P | **P** | **23 31 51.4** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 23 31 52.3 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **SWI** | **Sorong** | **52.68** | **283** | P | **P** | **23 32 04.2** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **53.44** | **261** | P | **P** | **23 32 09.8** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **53.44** | **261** | P | **P** | **23 32 09.9** | **0.0** |
| **NLAI** | **Namlea** | **55.73** | **279** | P | **P** | **23 32 27.5** | **+1.5** |
| **SOEI** | **Soe** | **56.50** | **270** | P | **P** | **23 32 31.0** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **58.30** | **255** | P | **P** | **23 32 42.7** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **58.30** | **255** | P | **P** | **23 32 43.2** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 23 33 10.4 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **58.47** | **256** | P | **P** | **23 32 44.0** | **-0.5** |
| **MBWA** | **Marble Bar** | **58.47** | **256** | P | **P** | **23 32 44.3** | **-0.3** |
| MBWA | | | | IAmb | IAmb | 23 33 21.1 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **MEEK** | **Meekatharra** | **58.80** | **249** | P | **P** | **23 32 46.0** | **-0.8** |
| **KLBR** | **Kellerberrin** | **59.17** | **244** | P | **P** | **23 32 48.5** | **-0.6** |
| **LUWI** | **Luwuk** | **60.54** | **279** | P | **P** | **23 32 59.1** | **+0.6** |
| **LUWI** | **Luwuk** | **60.54** | **279** | P | **P** | **23 32 59.9** | **+1.5** |
| **TOLI2** | **Tolitoli** | **63.15** | **281** | P | **P** | **23 33 15.8** | **+0.5** |
| TOLI2 | | | | IAmb | IAmb | 23 33 16.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.24** | **323** | P | **P** | **23 33 46.2** | **-0.3** |
| | comp=Z,2.0nm,0.5s,baz=160,slow=6.0,SNR=5.3 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **23 34 10.1** | **+1.4** |
| QSPA | | | | IAmb | IAmb | 23 34 10.6 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **23 34 10.1** | **+1.4** |
| | comp=Z,5.2nm,0.6s,baz=340,slow=0.7,SNR=60 | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **72.65** | **303** | P | **P** | **23 34 12.2** | **-0.5** |
| SSLB | | | | IAmb | IAmb | 23 34 18.9 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **TPUB** | **Ta-pu** | **72.67** | **302** | P | **P** | **23 34 11.3** | **-1.6** |
| TPUB | | | | IAmb | IAmb | 23 34 12.7 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **KSM** | **Kuching** | **73.12** | **277** | P | **P** | **23 34 15.6** | **-0.1** |
| **KSRS** | **Korea Array** | **75.06** | **318** | P | **P** | **23 34 26.8** | **+0.8** |
| | comp=Z,0.7nm,0.5s,baz=142,slow=6.7,SNR=4.9 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **ISA** | **Isabella, Lake** | **77.57** | **46** | P | **P** | **23 34 39.9** | **0.0** |
| ISA | | | | IAmb | IAmb | 23 34 42.0 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **CMB** | **Columbia Colle** | **77.61** | **43** | P | **P** | **23 34 40.4** | **+0.3** |
| **RMX** | **La Rumorosa** | **77.65** | **50** | P | **P** | **23 34 40.7** | **+0.2** |
| RMX | | | | IAmb | IAmb | 23 34 42.8 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **AFDM** | **Forest Hills D** | **77.76** | **42** | P | **P** | **23 34 41.2** | **+0.3** |
| **MDPB** | **Devils Postpil** | **78.24** | **44** | P | **P** | **23 34 43.9** | **+0.1** |
| MDPB | | | | IAmb | IAmb | 23 34 45.6 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **78.28** | **44** | P | **P** | **23 34 44.2** | **+0.2** |
| **WAKR** | **Walker** | **78.49** | **43** | P | **P** | **23 34 45.9** | **+0.9** |
| WAKR | | | | IAmb | IAmb | 23 34 47.2 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **PNTR** | **Pine Nut** | **78.72** | **43** | P | **P** | **23 34 46.6** | **+0.4** |
| PNTR | | | | IAmb | IAmb | 23 34 48.3 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **DSP** | **Deep Springs** | **78.84** | **45** | P | **P** | **23 34 47.6** | **+1.0** |
| **YERR** | **Yerington** | **78.89** | **43** | P | **P** | **23 34 47.7** | **+0.6** |
| YERR | | | | IAmb | IAmb | 23 34 48.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **LHV** | **Little Huntoon** | **78.96** | **44** | P | **P** | **23 34 48.2** | **+1.0** |
| LHV | | | | IAmb | IAmb | 23 34 49.6 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **GWY** | **Greenwater Val** | **79.09** | **46** | P | **P** | **23 34 48.3** | **+0.2** |
| **RYN** | **Ryan** | **79.16** | **43** | P | **P** | **23 34 49.3** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **79.19** | **44** | P | **P** | **23 34 49.6** | **+0.9** |
| **NVAR** | **Mina Array Bea** | **79.19** | **44** | P | **P** | **23 34 49.7** | **+1.0** |
| | comp=Z,3.4nm,0.8s,baz=222,slow=9.0,SNR=28 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **GMN** | **Gold Mountain** | **79.28** | **45** | P | **P** | **23 34 48.7** | **-0.6** |
| **BLYC** | **Blythe** | **79.35** | **49** | P | **P** | **23 34 50.0** | **+0.6** |
| **113A** | **Mohawk Valley,** | **79.42** | **50** | P | **P** | **23 34 49.1** | **-0.6** |
| **WCT** | **Wildcat Mounta** | **79.44** | **46** | P | **P** | **23 34 50.1** | **+0.2** |
| **KVN** | **Kaiserville** | **79.67** | **43** | P | **P** | **23 34 51.7** | **+0.5** |
| **TPH** | **Tonopah** | **79.72** | **44** | P | **P** | **23 34 52.2** | **+0.8** |
| TPH | | | | IAmb | IAmb | 23 34 53.4 | |
| | com

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TMUT | | | | | IAmb | IAmb | 23 35 17.5 | | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **HLID** | **Hailey** | **84.42** | **41** | P | **P** | | **23 35 15.7** | **+0.7** | |
| **M26K** | **Nabesna, AK** | **84.75** | **16** | IAmb | IAmb | | 23 35 17.7 | | |
| | comp=Z,5.1nm,0.9s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **85.01** | **16** | IAmb | IAmb | | 23 35 19.2 | | |
| | comp=Z,5.8nm,1.1s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.68** | **57** | P | **P** | | **23 35 22.3** | **+0.9** | |
| TX31 | | | | IAmb | IAmb | | 23 35 24.5 | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.68** | **57** | P | **P** | | **23 35 22.6** | **+1.1** | |
| **TXAR** | **Lajitas Array** | **85.68** | **57** | P | **P** | | **23 35 23.2** | **+1.8** | |
| | comp=Z,5.9nm,0.8s,baz=220,slow=6.1,SNR=51 | | | | | | | | |
| | comp=Z,5.9nm,0.8s | | | | | | | | |
| **ANMO** | **Albuquerque** | **85.82** | **51** | P | **P** | | **23 35 22.2** | **+0.2** | |
| **ILAR** | **Eielson Array** | **85.88** | **13** | P | **P** | | **23 35 21.0** | **-0.4** | |
| **ILAR** | **Eielson Array** | **85.88** | **13** | P | **P** | | **23 35 20.9** | **-0.5** | |
| | comp=Z,0.5nm,0.3s,baz=220,slow=5.4,SNR=15 | | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | | |
| **ALPN** | **Alpine** | **86.11** | **57** | P | **P** | | **23 35 23.9** | **+0.4** | |
| ALPN | | | | IAmb | IAmb | | 23 35 26.1 | | |
| | comp=Z,8.8nm,1.2s | | | | | | | | |
| **XAN** | **Xi'an** | **86.66** | **307** | ⇓P | **P** | | **23 35 27.0** | **+1.2** | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **IMW** | **Indian Meadow** | **86.77** | **42** | IAmb | IAmb | | 23 35 28.5 | | |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **87.01** | **42** | P | **P** | | **23 35 28.1** | **+0.6** | |
| FLWY | | | | IAmb | IAmb | | 23 35 29.7 | | |
| | comp=Z,7.6nm,1.1s | | | | | | | | |
| **OVMT** | **Ovando** | **87.07** | **38** | P | **P** | | **23 35 27.2** | **-0.4** | |
| **YHL** | **Hebgen Lake** | **87.07** | **41** | P | **P** | | **23 35 29.4** | **+1.6** | |
| YHL | | | | IAmb | IAmb | | 23 35 31.1 | | |
| | comp=Z,22nm,1.5s | | | | | | | | |
| **PD31** | **Pinedale Array** | **87.12** | **43** | P | **P** | | **23 35 27.8** | **-0.2** | |
| **PDAR** | **Pinedale Array** | **87.12** | **43** | P | **P** | | **23 35 28.0** | **-0.1** | |
| **PDAR** | **Pinedale Array** | **87.12** | **43** | P | **P** | | **23 35 28.6** | **+0.6** | |
| | comp=Z,1.9nm,0.7s,baz=204,slow=3.5,SNR=10 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.16** | **40** | P | **P** | | **23 35 28.5** | **+0.5** | |
| BOZ | | | | IAmb | IAmb | | 23 35 30.1 | | |
| | comp=Z,6.5nm,1.4s | | | | | | | | |
| **SAND** | **Sanderson** | **87.16** | **57** | P | **P** | | **23 35 29.2** | **+0.9** | |
| SAND | | | | IAmb | IAmb | | 23 35 30.4 | | |
| | comp=Z,6.8nm,1.1s | | | | | | | | |
| **MNHN** | **Monahans** | **87.19** | **56** | P | **P** | | **23 35 28.9** | **+0.5** | |
| **H17A** | **Grant Village** | **87.23** | **41** | P | **P** | | **23 35 28.9** | **+0.4** | |
| H17A | | | | IAmb | IAmb | | 23 35 31.7 | | |
| | comp=Z,5.2nm,1.1s | | | | | | | | |
| **DRIO** | **Del Rio** | **88.17** | **58** | P | **P** | | **23 35 33.9** | **+0.9** | |
| **MSTX** | **Muleshoe** | **88.20** | **53** | P | **P** | | **23 35 33.1** | **-0.1** | |
| MSTX | | | | IAmb | IAmb | | 23 35 34.7 | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **OZNA** | **Ozona** | **88.32** | **57** | P | **P** | | **23 35 34.4** | **+0.7** | |
| OZNA | | | | IAmb | IAmb | | 23 35 35.1 | | |
| | comp=Z,7.2nm,1.0s | | | | | | | | |
| **RLMT** | **Red Lodge** | **88.40** | **41** | P | **P** | | **23 35 34.4** | **+0.4** | |
| RLMT | | | | IAmb | IAmb | | 23 35 36.6 | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| **ELIB** | **Princess Elisa** | **89.12** | **187** | *d*P | **P** | | **23 35 37.3** | **+0.5** | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **HNDO** | **Hondo** | **89.30** | **59** | IAmb | IAmb | | 23 35 40.9 | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.32** | **290** | P | **P** | | **23 35 39.3** | **+0.8** | |
| | comp=Z,1.4nm,0.4s,baz=108,slow=3.1,SNR=14 | | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| **APMT** | **Aspermont** | **90.00** | **55** | P | **P** | | **23 35 42.0** | **+0.5** | |
| APMT | | | | IAmb | IAmb | | 23 35 42.8 | | |
| | comp=Z,6.3nm,1.0s | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **90.12** | **56** | P | **P** | | **23 35 42.0** | **-0.1** | |
| **BRDY** | **Brady** | **90.15** | **57** | P | **P** | | **23 35 42.5** | **+0.4** | |
| BRDY | | | | IAmb | IAmb | | 23 35 43.8 | | |
| | comp=Z,2.6nm,0.9s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.22** | **180** | ⇑P | **P** | | **23 35 42.3** | **+0.5** | |
| | comp=Z,117nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **90.50** | **178** | ⇑P | **P** | | **23 35 43.2** | **+0.1** | |
| | comp=Z,28nm,0.6s | | | | | | | | |
| **SNAA** | **Sanae** | **90.50** | **178** | P | **P** | | **23 35 42.7** | **-0.3** | |
| | comp=Z,1.1nm,0.6s,baz=182,slow=15,SNR=8.7 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.62** | **176** | ⇑P | **P** | | **23 35 43.9** | **+0.3** | |
| | comp=Z,5.4nm,0.6s | | | | | | | | |
| **LAO** | **LASA Array** | **91.00** | **41** | P | **P** | | **23 35 47.0** | **+1.2** | |
| LAO | | | | IAmb | IAmb | | 23 35 48.1 | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **PLPT** | **Palo Pinto** | **91.24** | **56** | P | **P** | | **23 35 47.8** | **+0.7** | |
| PLPT | | | | IAmb | IAmb | | 23 35 48.8 | | |
| | comp=Z,7.8nm,1.0s | | | | | | | | |
| **R32A** | **Long Quarter,** | **92.90** | **51** | P | **P** | | **23 35 55.4** | **+0.8** | |
| **MKAR** | **Makanchi Array** | **109.51** | **314** | PKiKP | **PKiKP** | | **23 41 06.5** | **-1.4** | |
| | comp=Z,0.6nm,0.6s,baz=139,slow=4.3,SNR=4.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.48** | **350** | PKP | **PKPdf** | | **23 41 39.8** | **0.0** | |
| | comp=Z,0.5nm,0.4s,baz=52,slow=1.4,SNR=8.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **133.39** | **344** | PKhKP | PKPpre | | 23 41 47.9 | | |
| | comp=Z,1.7nm,0.9s,baz=70,slow=1.6,SNR=1.8 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.52** | **5** | PKP | **PKiKP** | | **23 42 11.7** | **-1.5** | |
| | comp=Z,1.0nm,0.8s,baz=346,slow=2.6,SNR=3.7 | | | | | | | | |
| **SORM** | **Soroca** | **143.08** | **330** | ⇓P | PKPab | | 23 42 08.9 | -0.1 | |
| **GAZ** | **Gaziantep** | **143.72** | **309** | | **PKPdf** | | **23 42 12.6** | **-0.1** | |
| **BURAR** | **Bucovina Array** | **144.89** | **332** | ⇓P | **PKPab** | | **23 42 16.6** | **+0.5** | |
| **GHRR** | | **145.01** | **329** | ⇑P | **PKPbc** | | **23 42 15.8** | **+0.4** | |
| **TESR** | **Tescani** | **145.05** | **330** | ⇑P | **PKPdf** | | **23 42 13.4** | **-1.2** | |
| **KOLS** | **Kolonicke sedl** | **145.06** | **337** | *e*PKP | **PKPab** | | **23 42 17.2** | **+0.6** | |
| **BR131** | **Keskin Array S** | **145.15** | **315** | PKPdf | **PKPbc** | | **23 42 15.9** | **-0.3** | |
| **BRTR** | **Keskin Array B** | **145.15** | **315** | PKPbc | **PKPbc** | | **23 42 16.2** | **0.0** | |
| | comp=Z,2.1nm,0.5s,baz=130,slow=4.7,SNR=25 | | | | | | | | |
| **SLCR** | **Slobozia Conac** | **145.15** | **328** | ⇓P | **PKPbc** | | **23 42 15.8** | **0.0** | |
| **IZVR** | **Izvoarele** | **145.19** | **328** | ⇓P | **PKPbc** | | **23 42 16.1** | **+0.2** | |
| **KIRS** | **Kirsehir-Merke** | **145.25** | **314** | ⇓P | **PKPbc** | | **23 42 16.1** | **-0.3** | |
| **CFR** | **Carcaliu** | **145.25** | **327** | ⇑P | **PKPdf** | | **23 42 15.1** | **+0.2** | |
| **TPGR** | **Topolog** | **145.31** | **326** | ⇓P | **PKPbc** | | **23 42 17.0** | **+0.6** | |
| **CRVS** | **Cervenica-Dubn** | **145.39** | **337** | *e*PKP | **PKPbc** | | **23 42 17.1** | **+0.7** | |
| **VRI** | **Vrincioaia** | **145.48** | **329** | ⇑P | **PKPdf** | | **23 42 16.0** | **+0.6** | |
| **BMR** | **Baia Mare** | **145.59** | **334** | ⇑P | **PKPbc** | | **23 42 16.8** | **-0.2** | |
| **OSTC** | **Ostas** | **145.60** | **344** | *e*PKP | **PKPab** | | **23 42 18.4** | **-0.2** | |
| **CLL** | **Collm** | **145.65** | **348** | *i* PKPbc | **PKPbc** | | **23 42 17.3** | **+0.2** | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.76** | **344** | *e*PKP | **PKPbc** | | **23 42 18.4** | **+0.9** | |
| **BRG** | **Berggiesshubel** | **145.86** | **347** | *e*PKP | **PKPab** | | **23 42 18.9** | **-0.7** | |
| BRG | | | | Amp | | | 23 42 19.5 | | |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **145.88** | **339** | *e*PKP | **PKPab** | | **23 42 19.2** | **-0.6** | |
| **KRLC** | **Kraliky** | **145.88** | **343** | *e*PKP | **PKPbc** | | **23 42 18.3** | **+0.4** | |
| **MORC** | **Moravsky Berou** | **145.93** | **342** | *e*PKP | **PKPbc** | | **23 42 17.8** | **-0.2** | |
| **PVCC** | **Panska Ves** | **146.03** | **346** | *e*PKP | **PKPab** | | **23 42 20.4** | **+0.1** | |
| **DOPR** | **Dopca** | **146.05** | **330** | ⇑P | **PKPbc** | | **23 42 18.8** | **+0.4** | |
| **MLR** | **Muntele Rosu** | **146.13** | **329** | | **PKPbc** | | **23 42 19.3** | **+0.5** | |
| **MLR** | **Muntele Rosu** | **146.13** | **329** | ⇑P | **PKPbc** | | **23 42 18.5** | **-0.3** | |
| **MBAR** | **Mbarara** | **146.26** | **240** | | **PKiKP** | | **23 42 21.3** | **-1.1** | |
| **MMAI** | **Mount Meron Ar** | **146.55** | **303** | PKPbc | **PKPbc** | | **23 42 21.2** | **+0.9** | |
| | comp=Z,6.8nm,0.5s,baz=66,slow=6.5,SNR=41 | | | | | | | | |
| **VOIR** | | **146.60** | **330** | ⇓P | **PKPdf** | | **23 42 18.3** | **+1.0** | |
| **DRGR** | | **146.61** | **334** | ⇑P | **PKPbc** | | **23 42 20.7** | **+0.7** | |
| **VYHS** | **Vyhne** | **146.66** | **340** | *e*PKP | **PKPbc** | | **23 42 21.0** | **+1.0** | |
| **ARR** | **Arges** | **146.85** | **330** | ⇓P | **PKiKP** | | **23 42 21.9** | **-0.7** | |
| **KRUC** | **Moravsky** | **146.91** | **343** | *e*PKP | **PKPbc** | | **23 42 21.0** | **+0.4** | |
| **SIRR** | **Siria** | **147.47** | **334** | ⇓P | **PKiKP** | | **23 42 23.2** | **-0.5** | |
| **GRF** | **Grafenberg Arr** | **147.53** | **349** | *e*PKP | **PKiKP** | | **23 42 23.2** | **-0.5** | |
| | baz=16,slow=1.8 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.57** | **346** | *e*PKP | **PKiKP** | | **23 42 23.3** | **-0.6** | |
| **SURR** | **Surduc** | **147.68** | **333** | ⇑P | **PKPbc** | | **23 42 22.9** | **+0.2** | |
| **CKRC** | **Cesky Krumlov** | **147.68** | **345** | *e*PKP | **PKiKP** | | **23 42 23.6** | **-0.5** | |
| **GERES** | **GERESS Array B** | **147.81** | **345** | PKPbc | **PKPbc** | | **23 42 23.6** | **+0.5** | |
| | comp=Z,1.3nm,0.4s,baz=7.8,slow=11,SNR=16 | | | | | | | | |
| **CONA** | **Conrad Observa** | **148.08** | **342** | *i* PKP | **PKiKP** | | **23 42 24.7** | **-0.4** | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.16** | **342** | *e*PKP | **PKiKP** | | **23 42 24.9** | **-0.2** | |
| | comp=Z,1.8nm,0.5s,SNR=4.1 | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **148.68** | **338** | ⇓P | **PKPdf** | | **23 42 22.2** | **+1.6** | |
| **LESA** | **Schwarzleotal** | **149.38** | **346** | *i* PKP | **PKiKP** | | **23 42 27.5** | **-0.2** | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.54** | **345** | *i* PKP | **PKPbc** | | **23 42 27.5** | **0.0** | |
| | comp=Z,2.1nm,0.5s | | | | | | | | |
| **WATA** | **Walderalm** | **149.71** | **347** | *i* PKP | **PKPbc** | | **23 42 27.9** | **+0.1** | |
| | comp=Z,2.7nm,0.5s,SNR=4.5 | | | | | | | | |
| **RETA** | **Reutte** | **149.73** | **348** | *i* PKP | **PKPbc** | | **23 42 27.9** | **+0.1** | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.77** | **347** | *i* PKP | **PKiKP** | | **23 42 28.4** | **-0.3** | |
| | comp=Z,3.8nm,0.5s,SNR=11 | | | | | | | | |
| **MOTA** | **Moosalm** | **149.80** | **348** | *i* PKP | **PKPbc** | | **23 42 28.0** | **0.0** | |
| | comp=Z,0.8nm,0.4s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.88** | **344** | *i* PKP | **PKPbc** | | **23 42 28.0** | **-0.1** | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.90** | **347** | *i* PKP | **PKPbc** | | **23 42 28.6** | **+0.3** | |
| | comp=Z,1.7nm,0.5s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.06** | **346** | *e*PKP | **PKPbc** | | **23 42 28.8** | **+0.2** | |
| | comp=Z,4.4nm,0.6s,SNR=9.4 | | | | | | | | |
| **DAVA** | **Damuels** | **150.09** | **349** | *i* PKiKP | **PKiKP** | | **23 42 29.7** | **+0.4** | |
| | comp=Z,1.6nm,0.4s | | | | | | | | |
| **FETA** | **Feichten** | **150.19** | **348** | *e*PKP | **PKiKP** | | **23 42 29.6** | **+0.1** | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **FNA** | **Florina** | **151.85** | **328** | | **PKPbc** | | **23 42 32.6** | **-0.2** | |
| FNA | | | | PKPab | **PKPab** | | **23 42 46.1** | **+1.3** | |
| **TORD** | **Torodi Ar. Bea** | **175.16** | **176** | PKPbc | **PKPab** | | **23 44 28.0** | **+0.7** | |
| | comp=Z,0.6nm,1.0s,baz=192,slow=3.7,SNR=2.0 | | | | | | | | |

*IDC **19** 23:29:28.6±7.7, 10.87N×140.96E, h92km±49km, mb3.5/6, mbtmp3.9/7, Error ellipse: s-maj=94.2km s-min=34.6km az=173.0*

**ISC 19 23:29:29.4±3.9, 10.9N±0.6×141.0E±0.2, h100km, n7, σ0.8 29/8, mb3.8/6, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | | ISC |
| **GUMO** | **Guam** | **4.65** | **54** | P | | **Pn** | **23 30 37.5** | | **0.0** |
| | 50nm,0.7s,baz=198,slow=19,SNR=1.2 | | | | | | | | |
| GUMO | | | | S | | **Sn** | **23 31 30.2** | | **-0.2** |
| | 33nm,0.3s,baz=29,slow=19,SNR=2.0 | | | | | | | | |
| **KLR** | **Kul'dur** | **39.00** | **350** | P | | **P** | **23 36 46.4** | | **+0.4** |
| | 1.2nm,0.5s,baz=162,slow=9.6,SNR=5.2 | | | | | | | | |
| | 1.2nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **46.89** | **328** | P | | **P** | **23 37 49.7** | | **-0.1** |
| | 0.4nm,0.5s,baz=141,slow=9.3,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.86** | **318** | P | | **P** | **23 39 31.4** | | **-0.1** |
| | 0.3nm,0.5s,baz=95,slow=10,SNR=6.4 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.28** | **321** | P | | **P** | **23 39 53.8** | | **-0.4** |
| | 0.8nm,0.6s,baz=109,slow=6.2,SNR=5.2 | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **69.72** | **323** | P | | **P** | **23 40 28.5** | | **0.0** |
| | 1.1nm,0.6s,baz=116,slow=6.6,SNR=7.9 | | | | | | | | |
| | 1.1nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **72.62** | **25** | P | | **P** | **23 40 46.1** | | **+0.3** |
| | 0.8nm,0.5s,baz=250,slow=6.1,SNR=14 | | | | | | | | |
| | 0.8nm,0.5s | | | | | | | | |

*IDC **19** 23:29:53.4±0.5, 8.22S×116.60E, h0km, mb4.3/17, mbtmp4.3/18, ML3.9/1, MS3.2/5, Error ellipse: s-maj=15.6km s-min=9.3km az=61.0*
*DJA **19** 23:29:55.9±0.5, 8.3°S±3.3°×111.7°E±1.1°, h14km±4km, M4.9/21, mb5.0/14, mB5.4/6, MLv4.9/21, Mw(mB)4.8/6*
*NEIC **19** 23:29:55.6±1.8, 8.20S±0.08×116.54E±0.02, h10km±1km, mb4.6/18, Error ellipse: s-maj=14.4km s-min=2.9km az=170.0*

**ISC 19 23:29:55.3±0.4, 8.21S±0.05×116.55E±0.05, h10km, n87, σ1.9 05/90, mb4.6/28, MS3.3/3, 2C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.62** | **148** | P | | **Pg** | **23 30 08.1** | | **+0.7** |
| **SRBI** | **Singaraja** | **1.33** | **275** | P | | **Pn** | **23 30 18.8** | | **-1.2** |
| SRBI | | | | S | | **Sn** | **23 30 37.5** | | **-0.3** |
| **PLAI** | **Plampang** | **1.36** | **117** | P | | **Pn** | **23 30 21.0** | | **+0.6** |
| PLAI | | | | S | | **Sg** | **23 30 39.6** | | **+0.5** |
| **DNP** | **Denpasar** | **1.41** | **250** | P | | **Pn** | **23 30 20.8** | | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **264** | | | **Pn** | **23 30 33.9** | | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **264** | P | | **Pn** | **23 30 33.9** | | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **3.15** | **117** | P | | **Pn** | **23 30 45.4** | | **+0.4** |
| **GRJI** | **Gresik** | **4.24** | **287** | P | | **Pn** | **23 30 59.3** | | **-0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.41** | **63** | P | | **Pn** | **23 31 02.2** | | **-0.2** |
| **BASI** | **Baing, Sumba** | **4.45** | **117** | P | | **Pn** | **23 31 05.1** | | **+2.2** |
| **KAPI** | **Kappang** | **4.49** | **45** | Pn | | **Pn** | **23 31 03.2** | | **-0.2** |
| | 6.4nm,0.3s,baz=197,slow=6.7,SNR=17 | | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **23 31 54.2** | | **-1.6** |
| | 14nm,0.3s,baz=48,slow=20,SNR=5.6 | | | | | | | | |
| KAPI | | | | Lg | | Lg | 23 32 17.4 | | |
| | 17nm,0.3s,baz=32,slow=20,SNR=5.2 | | | | | | | | |
| KAPI | | | | LR | | LR | 23 32 38.8 | | |
| | comp=Z,103nm,19.9s,baz=222,slow=37 | | | | | | | | |
| | 15nm,0.3s | | | | | | | | |
| **PWJI** | **Pagerwojo** | **4.71** | **272** | P | | **Pn** | **23 31 06.1** | | **-0.3** |
| **EDFI** | **Ende, Flores** | **5.11** | **96** | P | | **Pn** | **23 31 12.7** | | **+0.6** |
| | 182nm,0.8s,0.6nm | | | | | | | | |
| **BNSI** | **Bone** | **5.17** | **43** | P | | **Pn** | **23 31 13.3** | | **+0.5** |
| | 112nm,0.4s,3μm1.0nm | | | | | | | | |
| **MMRI** | **Maumere** | **5.64** | **95** | Pn | | **Pn** | **23 31 19.4** | | **+0.1** |
| **MMRI** | **Maumere** | **5.64** | **95** | P | | **Pn** | **23 31 19.2** | | **-0.1** |
| **UGM** | **Wanagama** | **5.98** | **272** | | | **Pn** | **23 31 24.6** | | **+0.6** |
| **UGM** | **Wanagama** | **5.98** | **272** | P | | **Pn** | **23 31 24.6** | | **+0.6** |
| | 228nm,1.5s | | | | | | | | |
| **SMRI** | **Semarang** | **6.17** | **280** | Pn | | **Pn** | **23 31 24.5** | | **-2.0** |
| **BBSI** | **Bau Bau** | **6.56** | **66** | P | | **Pn** | **23 31 32.8** | | **+0.9** |
| | 61nm,0.7s,2μm0.3nm | | | | | | | | |
| **BATI** | **Baumata** | **7.30** | **106** | P | | **Pn** | **23 31 42.8** | | **+0.7** |
| **KPJI** | **Karang Pucung** | **7.60** | **276** | P | | **Pn** | **23 31 47.5** | | **+1.3** |
| | 60nm,0.8s,0.3nm | | | | | | | | |
| **SOEI** | **Soe** | **7.78** | **102** | | | **Pn** | **23 31 49.4** | | **+0.7** |
| **SOEI** | **Soe** | **7.78** | **102** | P | | **Pn** | **23 31 49.8** | | **+1.1** |
| | 95nm,0.8s,0.4nm | | | | | | | | |
| **CMJI** | **Cimerak** | **8.04** | **272** | P | | **Pn** | **23 31 52.1** | | **-0.1** |
| | 62nm,1.0s | | | | | | | | |
| **CNJI** | **Cibinong** | **9.38** | **275** | P | | **Pn** | **23 32 12.0** | | **+1.3** |
| **FITZ** | **Fitzroy Crossi** | **13.22** | **139** | Pn | | **Pn** | **23 33 02.9** | | **-0.4** |
| **MBWA** | **Marble Bar** | **13.24** | **167** | | | **Pn** | **23 33 01.9** | | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **167** | Pn | | **Pn** | **23 33 08.0** | | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **167** | Pn | | **Pn** | **23 33 07.5** | | **-1.8** |
| **KNRA** | **Kununurra** | **14.06** | **123** | Pn | | **Pn** | **23 33 15.3** | | **+0.6** |
| **GIRL** | **Giralia** | **14.53** | **189** | | | **Pn** | **23 33 17.5** | | **-3.6** |
| **MTN** | **Manton Dam** | **15.05** | **109** | Pn | | **Pn** | **23 33 26.9** | | **-1.4** |
| MTN | | | | IAmb | | IAmb | 23 33 35.5 | | |
| | comp=Z,15nm,0.6s | | | | | | | | |
| **DAV** | **Davao City (W)** | **17.64** | **31** | LR | | LR | 23 42 25.5 | | |
| | comp=Z,132nm,18.2s,baz=150,slow=43 | | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.75** | **125** | P | | **P** | **23 34 36.6** | | **+0.1** |
| WB0 | | | | IAmb | | IAmb | 23 34 42.5 | | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| **MORW** | **Morawa** | **20.76** | **181** | P | | **P** | **23 34 37.9** | | **+1.5** |
| **WRA** | **Warramunga Arr** | **20.80** | **126** | P | | **P** | **23 34 36.9** | | **-0.1** |
| | comp=Z,7.1nm,0.5s,baz=301,slow=12,SNR=38 | | | | | | | | |
| WRA | | | | S | | **S** | **23 38 28.0** | | **-1.3** |
| | comp=Z,1.9nm,0.7s,baz=290,slow=23,SNR=4.7 | | | | | | | | |
| | comp=Z,7.1nm,0.5s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.81** | **126** | P | | **P** | **23 34 37.0** | | **-0.1** |
| WB2 | | | | IAmb | | IAmb | 23 34 43.2 | | |
| | comp=Z,31nm,1.1s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.97** | **126** | P | | **P** | **23 34 38.9** | | **+0.1** |
| WR0 | | | | IAmb | | IAmb | 23 34 45.0 | | |
| | comp=Z,44nm,1.1s | | | | | | | | |
| **GSI** | **Gunungsitoli** | **21.15** | **296** | P | | **P** | **23 34 41.6** | | **+0.8** |
| GSI | | | | IAmb | | IAmb | 23 34 58.0 | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.64** | **135** | P | | **P** | **23 34 56.5** | | **-0.3** |
| **ASAR** | **Alice Springs** | **22.64** | **135** | P | | **P** | **23 34 56.7** | | **-0.1** |
| | comp=Z,9.2nm,0.7s,baz=311,slow=8.8,SNR=39 | | | | | | | | |
| ASAR | | | | S | | **S** | **23 39 05.5** | | **+0.5** |
| | comp=Z,2.2nm,1.1s,baz=319,slow=22,SNR=4.6 | | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **23 42 25.6** | | **-2.1** |
| | comp=Z,1.1nm,0.8s,baz=336,slow=2.7,SNR=4.1 | | | | | | | | |
| | comp=Z,9.2nm,0.7s | | | | | | | | |
| **AS31** | **Alice Springs** | **22.64** | **135** | P | | **P** | **23 34 56.3** | | **-0.6** |
| **NWAO** | **Narrogin (SRO)** | **24.61** | **179** | P | | **P** | **23 35 16.1** | | **+0.2** |
| NWAO | | | | IAmb | | IAmb | 23 35 34.8 | | |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **FORT** | **Forrest** | **24.90** | **156** | P | | **P** | **23 35 19.0** | | **+0.5** |
| **PMG** | **Port Moresby** | **30.27** | **95** | LR | | LR | 23 50 57.2 | | |
| | comp=Z,87nm,20.1s,baz=316,slow=42 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.68** | **327** | P | | **P** | **23 36 20.6** | | **+1.3** |
| | comp=Z,1.1nm,0.4s,baz=146,slow=6.8,SNR=7.6 | | | | | | | | |
| CMAR | | | | LR | | LR | 23 50 02.2 | | |
| | comp=Z,66nm,18.8s,baz=145,slow=38 | | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | | |
| **STKA** | **Stephens Creek** | **33.12** | **139** | P | | **P** | **23 36 32.3** | | **+0.5** |
| **STKA** | **Stephens Creek** | **33.12** | **139** | P | | **P** | **23 36 31.9** | | **+0.1** |
| | comp=Z,4.3nm,0.6s,baz=313,slow=9.4,SNR=9.6 | | | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | | | |
| **PZH** | **PanZhiHua** | **37.38** | **338** | P | | **P** | **23 37 10.9** | | **+2.3** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,100nm,4.8s | | | | | | | | |
| **NJ2** | **Nanjing** | **40.09** | **3** | *e*P | | **P** | **23 37 32.3** | | **+1.2** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **SHL** | **Shillong** | **41.27** | **325** | P | | **P** | **23 37 40.9** | | **-0.3** |
| **JNU** | **Nakatsue** | **43.30** | **18** | LR | | LR | 23 58 27.2 | | |
| | comp=Z,21nm,18.2s,baz=339,slow=40 | | | | | | | | |
| **LSA** | **Lhasa** | **44.92** | **328** | P | | **P** | **23 38 13.3** | | **+2.2** |
| LSA | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **LZH** | **Lanzhou** | **45.65** | **346** | *e*P | | **P** | **23 38 17.6** | | **+1.2** |
| LZH | | | | sP | | sP | 23 38 26.9 | | +6.7 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,26nm,1.2s | | | | | | | | |
| **KSRS** | **Korea Array** | **46.65** | **12** | P | | **P** | **23 38 24.5** | | **+0.5** |
| | comp=Z,0.8nm,0.3s,baz=188,slow=7.9,SNR=7.5 | | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.94** | **23** | P | | **P** | **23 38 41.3** | | **-0.6** |
| | comp=Z,1.4nm,0.6s,baz=194,slow=8.7,SNR=4.3 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.03** | **355** | *e*P | | **P** | **23 38 44.5** | | **+2.0** |
| HHC | | | | pP | | sP | 23 38 49.0 | | +2.1 |
| HHC | | | | sP | | pP | 23 38 51.1 | | +5.4 |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,73nm,4.5s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **53.88** | **12** | P | | **P** | **23 39 18.8** | | **+0.1** |
| MDJ | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.00** | **14** | P | | **P** | **23 39 19.7** | | **+0.1** |
| | comp=Z,3.9nm,0.7s,baz=194,slow=8.4,SNR=8.0 | | | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | | **P** | **23 39 37.6** | | **-0.2** |
| SONM | | | | IAmb | | IAmb | 23 39 46.6 | | |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | | **P** | **23 39 37.9** | | **0.0** |
| | comp=Z,3.3nm,0.7s,baz=171,slow=8.2,SNR=19 | | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| **WMQ** | **Urumqi** | **58.01** | **336** | *e*P | | **P** | **23 39 48.8** | | **+0.3** |
| WMQ | | | | sP | | sP | 23 39 58.5 | | +5.6 |
| WMQ | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.1s | | | | | | | | |
| **KLR** | **Kul'dur** | **58.72** | **12** | P | | **P** | **23 39 52.8** | | **-0.5** |
| | comp=Z,0.8nm,0.6s,baz=188,slow=6.8,SNR=3.6 | | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | | |
| **HEH** | **HeiHe** | **58.98** | **8** | *e*P | | **P** | **23 39 55.0** | | **+0.1** |
| HEH | | | | pmax | | pmax | |

*az=209.0*

**ISC 19 23:47:54.4±1.2, 18°0S±0.1×178°0W±0.2, h590km, n33, σ1°49/33, mb4.6/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.82** | **273** | P | **P** | **23 49 20.7** | **+2.7** |
| **FUNA** | **Funafuti** | **9.81** | **343** | P | **P** | **23 50 10.2** | **-1.0** |
| **RAO** | **Raoul Island** | **11.21** | **180** | P | **P** | **23 50 26.9** | **+1.9** |
| **DZM** | **Mont Dzumac** | **15.22** | **252** | P | **P** | **23 51 03.2** | **-1.9** |
| | 6.3nm,0.9s,baz=80,slow=18,SNR=2.5 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.97** | **259** | P | **P** | **23 51 21.6** | **+0.5** |
| KOUNC | | | | IAmb | IAmb | 23 51 38.1 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **HNR** | **Honiara** | **23.08** | **289** | P | **P** | **23 52 21.1** | **+4.8** |
| **MSWZ** | **Moikau Station** | **24.07** | **193** | P | **P** | **23 52 24.5** | **-0.2** |
| **THZ** | **Tophouse** | **24.95** | **196** | P | **P** | **23 52 32.1** | **-0.5** |
| **LTZ** | **Lake Taylor** | **26.07** | **197** | P | **P** | **23 52 42.7** | **+0.3** |
| LTZ | | | | IAmb | IAmb | 23 52 48.9 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **29.65** | **250** | P | **P** | **23 53 12.9** | **-0.9** |
| EIDS | | | | IAmb | IAmb | 23 53 35.7 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.67** | **200** | P | **P** | **23 53 13.0** | **-0.6** |
| MLZ | | | | IAmb | IAmb | 23 53 46.6 | |
| | comp=Z,49nm,1.5s | | | | | | |
| **ARMA** | **Armidale** | **30.28** | **240** | P | **P** | **23 53 19.0** | **-0.3** |
| ARMA | | | | IAmb | IAmb | 23 53 44.1 | |
| | comp=Z,35nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.87** | **261** | P | **P** | **23 53 48.6** | **-1.0** |
| CTAO | | | | IAmb | IAmb | 23 53 57.5 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **34.00** | **233** | P | **P** | **23 53 50.6** | **0.0** |
| **TOO** | **Toolangi** | **37.46** | **231** | P | **P** | **23 54 19.5** | **+0.5** |
| TOO | | | | IAmb | IAmb | 23 54 57.0 | |
| | comp=Z,38nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.55** | **270** | P | **P** | **23 54 19.8** | **-0.3** |
| COEN | | | | IAmb | IAmb | 23 54 36.6 | |
| | comp=Z,52nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **23 54 31.6** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **23 54 31.6** | **+0.3** |
| | comp=Z,2.3nm,0.5s,baz=80,slow=11,SNR=6.9 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.75** | **241** | P | **P** | **23 55 08.1** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 23 55 35.4 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.86** | **260** | P | **P** | **23 55 16.6** | **-1.1** |
| **WB0** | **Warramunga Arr** | **45.02** | **260** | P | **P** | **23 55 17.4** | **-1.4** |
| **WB2** | **Warramunga Arr** | **45.04** | **260** | P | **P** | **23 55 17.7** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 23 55 18.7 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.04** | **260** | P | **P** | **23 55 16.5** | **-2.6** |
| WRAB | | | | IAmb | IAmb | 23 55 58.2 | |
| | comp=Z,16nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.05** | **260** | P | **P** | **23 55 17.8** | **-1.3** |
| | comp=Z,1.3nm,0.3s,baz=100,slow=7.6,SNR=8.7 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **45.19** | **254** | P | **P** | **23 55 19.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **45.19** | **254** | P | **P** | **23 55 18.8** | **-1.4** |
| **ASAR** | **Alice Springs** | **45.19** | **254** | P | **P** | **23 55 19.4** | **-0.8** |
| | comp=Z,5.7nm,0.6s,baz=85,slow=8.7,SNR=29 | | | | | | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.37** | **245** | P | **P** | **23 55 57.2** | **-1.4** |
| FORT | | | | IAmb | IAmb | 23 56 01.5 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.92** | **264** | P | **P** | **23 56 01.1** | **-1.7** |
| KNRA | | | | IAmb | IAmb | 23 56 37.7 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.45** | **261** | P | **P** | **23 56 19.2** | **-1.5** |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **23 58 19.8** | **+0.2** |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **23 58 19.9** | **+0.2** |
| | comp=Z,1.8nm,1.2s,baz=50,slow=6.1,SNR=1.7 | | | | | | |
| | comp=Z,1.8nm,1.2s | | | | | | |
| **PMSA** | **Palmer Station** | **83.56** | **157** | P | **P** | **23 59 20.1** | **-0.9** |

**IDC 19 23:52:42.1±50.0, 16°33S×174°14W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=957.3km s-min=182.7km az=79.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **42.96** | **241** | P | P | 00 00 43.6 | +0.5 |
| | 1.6nm,0.5s,baz=90,slow=13,SNR=3.8 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.95** | **258** | P | P | 00 01 30.1 | -0.5 |
| | 1.2nm,0.5s,baz=96,slow=7.1,SNR=7.6 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **49.15** | **253** | P | P | 00 01 31.9 | -0.3 |
| | 2.3nm,0.4s,baz=89,slow=8.4,SNR=26 | | | | | | |
| | 2.3nm,0.4s | | | | | | |

*IDC **19** 23:54:27.6±1.0, 55°99S×143°52W, h0km, mb4.3/8, mbtmp4.3/8, MS4.3/39, Error ellipse: s-maj=31.4km s-min=22.3km az=175.0*

*NEIC **19** 23:54:29.4±2.2, 56°1S±0°1×143°5W±0°2, h10km±1km, mb5.1/11, Error ellipse: s-maj=28.0km s-min=7.6km az=42.0*

*GCMT **19** 23:54:33.4±0.2, 56°45S±0°02×143°44W±0°03, h20km±1km, MW5.3/93, Moment Tensor Solution. s45,c54; s93,c127; Duration: 1§1 Moment tensor: Scale 10^17 Nm; Mrr-0.07±.04; Mθθ 0.87±.04; Mϕϕ -0.80±.04; Mrθ 0.03±.07; Mθϕ 0.66±.03; Mϕr-0.07±.07; Best double couple: M0 1.07000×10^17 NP1 ϕs 296.00000°, δ87.00000°, λ-3.00000°. NP2 ϕs 26.00000°, δ87.00000°, λ-177.00000°. Principal axes: T 1.0990, Plg0.0000°, Azm341.0000°; N -0.0590, Plg86.0000°, Azm71.0000°; P -1.0410, Plg4.0000°, Azm251.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 19 23:54:28.9±0.6, 56°0S±0°1×143°6W±0°1, h10km, n82, σ0§98/31, mb5.0/14, MS4.4/42, 4C, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTZ** | **Chatham Island** | **24.33** | **286** | P | **P** | **23 59 47.2** | **+0.8** |
| CTZ | | | | IAmb | IAmb | 00 00 09.2 | |
| | comp=Z,96nm,1.3s | | | | | | |
| **MQZ** | **McQueen's Vall** | **30.26** | **275** | P | **P** | **00 00 38.7** | **-0.9** |
| **OXZ** | **Oxford** | **30.85** | **275** | P | **P** | **00 00 46.3** | **+1.5** |
| **RPZ** | **Rata Peaks** | **31.15** | **274** | LR | LR | 00 10 23.9 | |
| | comp=Z,975nm,20.7s,baz=125,slow=31 | | | | | | |
| **URZ** | **Urewera** | **31.54** | **287** | LR | LR | 00 10 37.5 | |
| | comp=Z,753nm,20.9s,baz=282,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.16** | **180** | P | **P** | **00 01 13.9** | **0.0** |
| QSPA | | | | IAmb | IAmb | 00 01 17.6 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.16** | **180** | P | **P** | **00 01 15.0** | **+1.1** |
| | comp=Z,13nm,1.1s,baz=58,slow=2.9,SNR=22 | | | | | | |
| QSPA | | | | LR | LR | 00 13 13.6 | |
| | comp=Z,663nm,18.2s,baz=65,slow=33 | | | | | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SMAI** | **San Martin Ant** | **35.29** | **141** | P | **P** | **00 01 23.5** | **+0.2** |
| **RAO** | **Raoul Island** | **36.15** | **303** | LR | LR | 00 12 30.0 | |
| | comp=Z,222nm,21.9s,baz=160,slow=30 | | | | | | |
| **RAR** | **Rarotonga** | **36.78** | **334** | LR | LR | 00 12 37.6 | |
| | comp=Z,529nm,20.5s,baz=155,slow=30 | | | | | | |
| **PMSA** | **Palmer Station** | **37.70** | **136** | LR | LR | 00 12 28.2 | |
| | comp=Z,883nm,20.1s,baz=233,slow=29 | | | | | | |
| **RPN** | **Rapa Nui** | **37.89** | **55** | LR | LR | 00 13 44.8 | |
| | comp=Z,229nm,18.4s,baz=2.5,slow=31 | | | | | | |
| **PPT** | **Papeete** | **38.63** | **351** | LR | LR | 00 13 19.5 | |
| | comp=Z,439nm,19.3s,baz=171,slow=29 | | | | | | |
| **BELA** | **Belgrano 2** | **39.65** | **162** | P | **P** | **00 02 00.1** | **0.0** |
| **PLCA** | **Paso Flores** | **48.51** | **104** | P | **P** | **00 03 09.9** | **-1.8** |
| PLCA | | | | IAmb | IAmb | 00 03 26.4 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **PLCA** | **Paso Flores** | **48.51** | **104** | P | **P** | **00 03 11.9** | **+0.2** |
| | comp=Z,3.7nm,1.0s,baz=219,slow=13,SNR=5.3 | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **H03S2** | **Juan Fernandez** | **48.79** | **91** | T | T | 00 55 29.2 | |
| | baz=220,slow=74,SNR=1652 | | | | | | |
| **H03S1** | **Juan Fernandez** | **48.79** | **91** | T | T | 00 55 30.6 | |
| | baz=220,slow=74,SNR=1850 | | | | | | |
| **H03S3** | **Juan Fernandez** | **48.80** | **91** | T | T | 00 55 24.3 | |
| | baz=220,slow=74,SNR=1433 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.95** | **162** | ⇑P | **P** | **00 03 14.6** | **0.0** |
| | comp=Z,22nm,0.8s | | | | | | |
| **H03N3** | **Juan Fernandez** | **49.07** | **91** | T | T | 00 55 45.4 | |
| | baz=223,slow=72,SNR=1106 | | | | | | |
| **H03N2** | **Juan Fernandez** | **49.08** | **91** | T | T | 00 55 43.7 | |
| | baz=223,slow=72,SNR=1241 | | | | | | |
| **H03N1** | **Juan Fernandez** | **49.09** | **91** | T | T | 00 55 44.3 | |
| | baz=223,slow=72,SNR=2284 | | | | | | |
| **TOO** | **Toolangi** | **49.61** | **260** | P | **P** | **00 03 17.9** | **-2.3** |
| TOO | | | | IAmb | IAmb | 00 03 23.7 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **SNAA** | **Sanae** | **49.67** | **165** | P | **P** | **00 03 19.5** | **-0.7** |
| SNAA | | | | IAmb | IAmb | 00 03 21.8 | |
| | comp=Z,30nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **49.67** | **165** | ⇑P | **P** | **00 03 19.9** | **-0.4** |
| | comp=Z,255nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **49.67** | **165** | P | **P** | **00 03 19.8** | **-0.4** |
| | comp=Z,21nm,1.1s,baz=208,slow=5.7,SNR=37 | | | | | | |
| SNAA | | | | LR | LR | 00 23 17.3 | |
| | comp=Z,306nm,19.4s,baz=246,slow=35 | | | | | | |
| | comp=Z,21nm,1.1s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **49.70** | **162** | ⇑P | **P** | **00 03 19.3** | **-0.9** |
| | comp=Z,32nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **49.90** | **292** | LR | LR | 00 21 39.1 | |
| | comp=Z,383nm,18.1s,baz=142,slow=33 | | | | | | |
| **TROLL** | **Troll, Antarti** | **50.11** | **167** | ⇑P | **P** | **00 03 24.6** | **+1.0** |
| | comp=Z,656nm,0.8s | | | | | | |
| **BO04** | **La Punta** | **53.33** | **98** | P | **P** | **00 03 48.0** | **0.0** |
| BO04 | | | | IAmb | IAmb | 00 03 57.1 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **55.16** | **192** | P | **P** | **00 04 01.2** | **+0.4** |
| | comp=Z,4.2nm,1.0s,baz=166,slow=4.4,SNR=6.7 | | | | | | |
| MAW | | | | LR | LR | 00 24 15.6 | |
| | comp=Z,594nm,21.7s,baz=156,slow=32 | | | | | | |
| | comp=Z,4.2nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **55.97** | **262** | LR | LR | 00 24 04.3 | |
| | comp=Z,352nm,20.5s,baz=144,slow=32 | | | | | | |
| **CTA** | **Charters Tower** | **62.52** | **275** | LR | LR | 00 28 57.0 | |
| | comp=Z,15nm,18.4s,baz=123,slow=33 | | | | | | |
| **LVC** | **Limon Verde** | **63.02** | **91** | LR | LR | 00 26 03.6 | |
| | comp=Z,128nm,21.0s,baz=213,slow=30 | | | | | | |
| **HNR** | **Honiara** | **63.85** | **294** | LR | LR | 00 28 48.3 | |
| | comp=Z,3µm,18.0s,baz=146,slow=32 | | | | | | |
| **CPUP** | **Villa Florida** | **66.54** | **103** | P | **P** | **00 05 17.2** | **-1.6** |
| | comp=Z,1.4nm,0.7s,baz=247,slow=7.7,SNR=1.9 | | | | | | |
| CPUP | | | | LR | LR | 00 29 07.5 | |
| | comp=Z,140nm,20.8s,baz=220,slow=31 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **66.60** | **262** | P | **P** | **00 05 19.4** | **0.0** |
| | comp=Z,1.2nm,0.8s,baz=135,slow=6.5,SNR=6.6 | | | | | | |
| ASAR | | | | LR | LR | 00 30 17.1 | |
| | comp=Z,382nm,21.5s,baz=146,slow=32 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **NNA** | **Nana** | **67.17** | **77** | LR | LR | 00 27 27.7 | |
| | comp=Z,424nm,18.7s,baz=216,slow=30 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **68.11** | **240** | T | T | 01 20 37.6 | |
| | baz=142,slow=76,SNR=310 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **68.12** | **240** | T | T | 01 20 38.0 | |
| | baz=142,slow=76,SNR=362 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **68.13** | **240** | T | T | 01 20 34.1 | |
| | baz=142,slow=76,SNR=270 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **68.17** | **243** | LR | LR | 00 28 01.7 | |
| | comp=Z,188nm,20.6s,baz=116,slow=30 | | | | | | |
| **LPAZ** | **La Paz** | **68.51** | **87** | P | **P** | **00 05 32.4** | **+0.3** |
| | comp=Z,1.7nm,0.8s,baz=252,slow=3.2,SNR=2.4 | | | | | | |
| LPAZ | | | | LR | LR | 00 26 19.1 | |
| | comp=Z,104nm,21.6s,baz=202,slow=28 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **69.32** | **265** | P | **P** | **00 05 36.8** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=143,slow=5.6,SNR=2.8 | | | | | | |
| WRA | | | | LR | LR | 00 31 59.2 | |
| | comp=Z,193nm,21.6s,baz=82,slow=32 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **ATAH** | **Atahualpa** | **70.35** | **73** | LR | LR | 00 29 47.5 | |
| | comp=Z,152nm,18.6s,baz=188,slow=30 | | | | | | |
| **PMG** | **Port Moresby** | **70.70** | **282** | LR | LR | 00 32 39.4 | |
| | comp=Z,247nm,20.1s,baz=324,slow=32 | | | | | | |
| **SIV** | **San Ignacio** | **72.71** | **93** | LR | LR | 00 32 18.1 | |
| | comp=Z,114nm,20.9s,baz=206,slow=31 | | | | | | |
| **H06S1** | **SOCORRO T** | **79.37** | **31** | T | T | 01 33 48.3 | |
| | SNR=11 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **79.42** | **31** | T | T | 01 33 47.3 | |
| | SNR=20 | | | | | | |
| **BDFB** | **Brasilia** | **80.25** | **103** | LR | LR | 00 38 37.1 | |
| | comp=Z,168nm,18.5s,baz=241,slow=33 | | | | | | |
| **ROSC** | **El Rosal** | **82.58** | **70** | LR | LR | 00 36 21.2 | |
| | comp=Z,257nm,21.2s,baz=212,slow=30 | | | | | | |
| **APG** | **El Apazote** | **83.50** | **51** | LR | LR | 00 36 01.5 | |
| | comp=Z,6.5nm,20.1s,baz=65,slow=30 | | | | | | |
| **LPIG** | **La Paz** | **84.64** | **30** | LR | LR | 00 34 25.7 | |
| | comp=Z,125nm,20.9s,baz=200,slow=28 | | | | | | |
| **SDV** | **Santo Domingo** | **87.93** | **71** | LR | LR | 00 41 30.2 | |
| | comp=Z,102nm,18.9s,baz=231,slow=32 | | | | | | |
| **KAPI** | **Kappang** | **89.62** | **262** | LR | LR | 00 45 42.1 | |
| | comp=Z,259nm,19.7s,baz=121,slow=34 | | | | | | |
| **VTX** | **Valle De La Tr** | **90.21** | **23** | P | **P** | **00 07 29.3** | **+0.2** |
| VTX | | | | IAmb | IAmb | 00 07 58.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SUR** | **Sutherland** | **90.97** | **167** | LR | LR | 00 42 28.4 | |
| | comp=Z,135nm,22.0s,baz=180,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.53** | **34** | LR | LR | 00 39 18.3 | |
| | comp=Z,35nm,20.8s,baz=213,slow=29 | | | | | | |
| **PFO** | **Pinyon Flats O** | **92.20** | **22** | LR | LR | 00 38 35.4 | |
| | comp=Z,198nm,22.0s,baz=214,slow=29 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **92.23** | **75** | LR | LR | 00 44 23.7 | |
| | comp=Z,251nm,18.0s,slow=32 | | | | | | |
| **MDP** | **Montagnes des** | **94.70** | **88** | LR | LR | 00 44 26.1 | |
| | comp=Z,176nm,19.0s,baz=185,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **95.19** | **170** | LR | LR | 00 46 57.5 | |
| | comp=Z,151nm,20.1s,baz=192,slow=33 | | | | | | |
| **ANMO** | **Albuquerque** | **95.94** | **30** | LR | LR | 00 42 07.6 | |
| | comp=Z,111nm,21.8s,baz=299,slow=30 | | | | | | |
| **DAV** | **Davao City (W)** | **96.29** | **273** | LR | LR | 00 49 28.6 | |
| | comp=Z,92nm,19.6s,baz=162,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **96.48** | **20** | LR | LR | 00 41 41.1 | |
| | comp=Z,132nm,21.4s,baz=202,slow=29 | | | | | | |
| **LBTB** | **Lobatse** | **98.79** | **170** | LR | LR | 00 48 47.5 | |
| | comp=Z,169nm,20.8s,baz=177,slow=33 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **98.95** | **16** | LR | LR | 00 42 28.1 | |
| | comp=Z,263nm,21.9s,baz=176,slow=29 | | | | | | |
| **ELK** | **Elko** | **99.32** | **21** | LR | LR | 00 43 13.6 | |
| | comp=Z,179nm,21.9s,baz=201,slow=30 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **102.75** | **128** | T | T | 02 03 28.8 | |
| | baz=208,slow=74,SNR=36 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **102.75** | **128** | T | T | 02 03 29.0 | |
| | baz=12,slow=74,SNR=43 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **103.81** | **128** | T | T | 02 04 50.4 | |
| | baz=206,slow=75,SNR=37 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **103.81** | **128** | T | T | 02 04 48.8 | |
| | baz=206,slow=75,SNR=59 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **103.83** | **128** | T | T | 02 04 50.4 | |
| | baz=206,slow=75,SNR=56 | | | | | | |
| **H02S1** | **DAWSON INLET T** | **109.21** | **7** | T | T | 02 11 17.4 | |
| | SNR=4.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **148.90** | **104** | | **PKPab** | **00 14 21.3** | **+1.1** |
| **ESDC** | **Sonseca Array** | **148.90** | **104** | PKPbc | **PKiKP** | **00 14 17.9** | **+0.5** |
| | comp=Z,2.0nm,0.9s,baz=248,slow=2.4,SNR=15 | | | | | | |
| **MK31** | **Makanchi Array** | **150.45** | **271** | PKPdf | **PKPdf** | **00 14 16.6** | **+2.3** |
| MK31 | | | | PKPab | **PKPab** | **00 14 25.8** | **-0.5** |
| **MKAR** | **Makanchi Array** | **150.45** | **271** | | **PKiKP** | **00 14 20.5** | **+0.2** |
| MKAR | | | | PKPab | **PKPab** | **00 14 25.8** | **-0.5** |
| **MKAR** | **Makanchi Array** | **150.45** | **271** | PKPbc | **PKPbc** | **00 14 19.9** | **+0.3** |
| | comp=Z,0.7nm,0.8s,baz=117,slow=5.5,SNR=4.4 | | | | | | |
| **MAKZ** | **Makanchi** | **150.64** | **271** | | **PKPab** | **00 14 26.3** | **-0.7** |
| **CLL** | **Collm** | **165.36** | **99** | *i* PKPbc | PKPbc | 00 15 16.3 | |

*IDC **20** 00:01:37.2±2.4, 17°41S×178°62W, h487km±27km, mb3.6/12, mbtmp4.5/13, Error ellipse: s-maj=19.0km s-min=10.7km az=159.0*

*NEIC **20** 00:01:37.6±1.8, 17°45S±0°1×178°5W±0°1, h492km±9km, mb4.5/50, Error ellipse: s-maj=17.5km s-min=14.0km az=155.0*

**ISC 20 00:01:37.8±0.4, 17°32S±0°08×178°53W±0°06, h500km, n122, σ1§15/123, mb4.5/36, 3C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.29** | **262** | P | **P** | **00 02 51.4** | **+0.5** |
| **AFI** | **Afiamalu** | **7.34** | **63** | | **P** | **00 03 24.6** | **-3.0** |
| AFI | | | | S | **S** | **00 04 53.7** | **-3.7** |
| **NIUE** | **Niue** | **8.36** | **103** | P | **P** | **00 03 37.3** | **-0.7** |
| **FUNA** | **Funafuti** | **9.02** | **345** | P | **P** | **00 03 43.8** | **-1.1** |
| **RAO** | **Raoul Island** | **11.89** | **177** | P | **P** | **00 04 13.2** | **-1.9** |
| **LIFNC** | **LIFOU** | **13.89** | **253** | P | **P** | **00 04 33.8** | **-2.5** |
| **PINNC** | **Pines Island,** | **14.19** | **246** | P | **P** | **00 04 39.2** | **-0.4** |
| **KOUNC** | **Koumac, New Ca** | **16.57** | **256** | P | **P** | **00 05 05.2** | **+0.7** |
| KOUNC | | | | IAmb | IAmb | 00 05 14.8 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **RAR** | **Rarotonga** | **18.12** | **105** | P | **P** | **00 05 20.5** | **+1.1** |
| RAR | | | | IAmb | IAmb | 00 05 30.2 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **RAR** | **Rarotonga** | **18.12** | **105** | P | **P** | **00 05 19.4** | **+0.1** |
| | comp=Z,18nm,0.6s,baz=259,slow=3.4,SNR=6.2 | | | | | | |
| **MXZ** | **Matakaoa Point** | **20.36** | **187** | P | **P** | **00 05 39.5** | **0.0** |
| **TOZ** | **Tahuroa Road** | **21.00** | **193** | P | **P** | **00 05 46.9** | **+1.6** |
| TOZ | | | | IAmb | IAmb | 00 05 49.5 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **URZ** | **Urewera** | **21.21** | **190** | P | **P** | **00 05 44.8** | **-2.4** |
| | comp=Z,21nm,0.4s,baz=344,slow=2.8,SNR=31 | | | | | | |
| | comp=Z,21nm,0.4s | | | | | | |
| **RTZ** | **Ruatahuna** | **21.58** | **190** | P | **P** | **00 05 50.1** | **-0.6** |
| **HIZ** | **Hauiti** | **21.89** | **194** | P | **P** | **00 05 55.7** | **+2.2** |
| **HIZ** | **Hauiti** | **21.89** | **194** | P | **P** | **00 05 57.1** | **+3.6** |
| **BKZ** | **Black Stump Fm** | **22.19** | **190** | P | **P** | **00 05 55.1** | **-1.2** |
| BKZ | | | | IAmb | IAmb | 00 06 00.9 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **ETVZ** | **East Tongariro** | **22.31** | **192** | P | **P** | **00 05 59.1** | **+1.8** |
| **OTVZ** | **Oturere** | **22.34** | **192** | P | **P** | **00 05 58.5** | **+0.7** |
| **KRHZ** | **Kereru** | **22.68** | **190** | P | **P** | **00 06 00.5** | **-0.1** |
| **BFZ** | **Birch Farm** | **23.71** | **190** | P | **P** | **00 06 09.6** | **-0.1** |
| BFZ | | | | IAmb | IAmb | 00 06 19.7 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **BFZ** | **Birch Farm** | **23.71** | **190** | P | **P** | **00 06 12.1** | **+2.4** |
| **MRZ** | **Mangatainoka R** | **23.81** | **191** | P | **P** | **00 06 10.9** | **+0.3** |
| **MRZ** | **Mangatainoka R** | **23.81** | **191** | P | **P** | **00 06 09.4** | **-1.2** |
| **OGWZ** | **Otaki Gorge** | **24.04** | **192** | P | **P** | **00 06 11.5** | **-1.1** |
| **TCW** | **Tory Channel** | **24.60** | **193** | P | **P** | **00 06 17.6** | **-0.1** |
| **TCW** | **Tory Channel** | **24.60** | **193** | P | **P** | **00 06 17.8** | **+0.2** |
| **MSWZ** | **Moikau Station** | **24.60** | **191** | P | **P** | **00 06 17.8** | **+0.1** |
| **MSWZ** | **Moikau Station** | **24.60** | **191** | P | **P** | **00 06 17.3** | **-0.4** |
| **BHW** | **Baring Head** | **24.67** | **192** | P | **P** | **00 06 17.9** | **-0.3** |
| BHW | | | | IAmb | IAmb | 00 06 31.1 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **TKNZ** | **Takaka Hill** | **24.74** | **196** | P | **P** | **00 06 18.1** | **-0.8** |
| **PLWZ** | **Palliser** | **24.75** | **191** | P | **P** | **00 06 17.9** | **-1.1** |
| **NNZ** | **Nelson** | **24.81** | **195** | P | **P** | **00 06 19.6** | **+0.1** |
| **TUWZ** | **Tuamarina** | **24.88** | **194** | P | **P** | **00 06 20.3** | **+0.2** |
| **TUWZ** | **Tuamarina** | **24.88** | **194** | P | **P** | **00 06 20.5** | **+0.4** |
| **MRNZ** | **Matariki Terra** | **25.14** | **196** | P | **P** | **00 06 22.2** | **-0.2** |
| **MRNZ** | **Matariki Terra** | **25.14** | **196** | P | **P** | **00 06 21.5** | **-0.9** |
| **BSWZ** | **Blackbirch Sta** | **25.17** | **193** | P | **P** | **00 06 23.2** | **+0.5** |
| **THZ** | **Tophouse** | **25.44** | **195** | P | **P** | **00 06 25.6** | **+0.4** |
| THZ | | | | IAmb | IAmb | 00 06 37.3 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **THZ** | **Tophouse** | **25.44** | **195** | P | **P** | **00 06 24.5** | **-0.7** |
| **DSZ** | **Denniston Nort** | **25.72** | **197** | P | **P** | **00 06 26.9** | **-0.7** |
| **KHZ** | **Kahutara** | **25.91** | **194** | P | **P** | **00 06 28.1** | **-1.0** |
| KHZ | | | | IAmb | IAmb | 00 06 29.9 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **KHZ** | **Kahutara** | **25.91** | **194** | P | **P** | **00 06 27.4** | **-1.8** |
| **GVZ** | **Greta Valley S** | **26.55** | **194** | P | **P** | **00 06 33.9** | **-1.0** |
| GVZ | | | | IAmb | IAmb | 00 06 42.9 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.56** | **195** | P | **P** | **00 06 34.1** | **-0.9** |
| LTZ | | | | IAmb | IAmb | 00 06 41.8 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **INZ** | **Inchbonnie** | **26.73** | **197** | P | **P** | **00 06 35.4** | **-1.0** |
| **OXZ** | **Oxford** | **27.13** | **195** | P | **P** | **00 06 39.2** | **-0.7** |
| OXZ | | | | IAmb | IAmb | 00 06 48.2 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **PPT** | **Papeete** | **27.61** | **95** | P | **P** | **00 06 45.2** | **+0.7** |
| | comp=Z,21nm,0.6s,baz=82,slow=2.3,SNR=6.9 | | | | | | |
| | comp=Z,21nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.62** | **95** | P | **P** | **00 06 44.8** | **+0.1** |
| **RPZ** | **Rata Peaks** | **27.75** | **196** | P | **P** | **00 06 44.2** | **-1.2** |
| RPZ | | | | IAmb | IAmb | 00 06 53.1 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.93** | **198** | P | **P** | **00 06 45.9** | **-1.1** |
| **LBZ** | **Lake Benmore** | **28.61** | **197** | P | **P** | **00 06 51.2** | **-1.7** |
| LBZ | | | | IAmb | IAmb | 00 07 02.8 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **ODZ** | **Otahua Downs** | **29.09** | **196** | P | **P** | **00 06 55.7** | **-1.4** |
| ODZ | | | | IAmb | IAmb | 00 07 02.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **WKZ** | **Wanaka** | **29.35** | **198** | P | **P** | **00 06 58.0** | **-1.4** |
| **EIDS** | **Eidsvold** | **29.36** | **249** | P | **P** | **00 06 59.4** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 00 07 02.1 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **MLZ** | **Mavora Lakes** | **30.11** | **199** | P | **P** | **00 07 06.1** | **+0.2** |
| MLZ | | | | IAmb | IAmb | 00 07 07.5 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **30.14** | **239** | P | **P** | **00 07 06.8** | **+0.3** |
| ARMA | | | | IAmb | IAmb | 00 07 25.2 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **DCZ** | **Deep Cove** | **30.51** | **200** | P | **P** | **00 07 08.5** | **-0.8** |
| DCZ | | | | IAmb | IAmb | 00 07 21.6 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.64** | **199** | P | **P** | **00 07 10.0** | **-0.5** |
| WHZ | | | | IAmb | IAmb | 00 07 18.1 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **33.43** | **260** | P | **P** | **00 07

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BVAR | Borovoye Array | 116.32 | 321 | PKP | | PKPdf | 00 19 23.4 | -0.6 |
| | comp=Z,0.3nm,0.3s,baz=99,slow=1.4,SNR=5.2 | | | | | | | |
| SPITS | Spitsbergen Ar | 118.68 | 357 | PKP | | PKPdf | 00 19 26.5 | -1.4 |
| | comp=Z,0.8nm,0.3s,baz=65,slow=14,SNR=8.6 | | | | | | | |
| ARCES | ARCESS Array B | 125.72 | 350 | PKP | | PKiKP | 00 19 42.0 | 0.0 |
| | comp=Z,2.5nm,0.9s,baz=76,slow=3.8,SNR=3.8 | | | | | | | |
| BRTR | Keskin Array B | 144.29 | 315 | PKP | PKPbc | | 00 20 16.7 | +0.1 |
| | comp=Z,0.7nm,0.6s,baz=65,slow=1.5,SNR=7.0 | | | | | | | |
| DPC | Dobruska-Polom | 144.96 | 343 | *e*PKP | | PKPab | 00 20 19.6 | +0.7 |
| KRLC | Kraliky | 145.08 | 343 | *e*PKP | | PKPab | 00 20 19.9 | +0.5 |
| MMAI | Mount Meron Ar | 145.73 | 304 | PKPbc | | PKPab | 00 20 22.4 | -0.2 |
| | comp=Z,1.5nm,0.5s,baz=64,slow=4.7,SNR=6.0 | | | | | | | |
| ZVC | Zvikov | 146.35 | 345 | *e*PKP | | PKiKP | 00 20 25.4 | +0.9 |
| KHC | Kasperske Hory | 146.78 | 345 | *e*PKP | | PKPdf | 00 20 21.5 | +0.7 |
| GERES | GERESS Array B | 147.02 | 345 | PKPbc | | PKPbc | 00 20 24.8 | +0.7 |
| | comp=Z,0.6nm,0.8s,baz=168,slow=10.0,SNR=3.7 | | | | | | | |
| CONA | Conrad Observa | 147.27 | 342 | *i* PKP | | PKiKP | 00 20 25.9 | -0.7 |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| RONA | Rosalia, Austr | 147.35 | 341 | *i* PKP | | PKiKP | 00 20 26.3 | -0.4 |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| MOA | Molln | 147.79 | 344 | *e*PKP | | PKiKP | 00 20 28.7 | +1.1 |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| LESA | Schwarzleotal | 148.59 | 345 | *i* PKP | | PKiKP | 00 20 28.8 | -0.5 |
| | comp=Z,2.1nm,0.4s | | | | | | | |
| SOKA | Soboth | 148.65 | 342 | *i* PKP | | PKPbc | 00 20 28.8 | +0.4 |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| KBA | Koelnbreinsper | 148.75 | 344 | *e*PKP | | PKPbc | 00 20 29.0 | +0.3 |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| WATA | Walderalm | 148.93 | 347 | *i* PKP | | PKPbc | 00 20 29.6 | +0.4 |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| RETA | Reutte | 148.96 | 348 | *i* PKP | | PKiKP | 00 20 29.8 | -0.3 |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| WTTA | Wattenberg | 148.99 | 347 | *i* PKP | | PKiKP | 00 20 29.8 | -0.4 |
| | comp=Z,3.8nm,0.6s | | | | | | | |
| MOTA | Moosalm | 149.02 | 347 | *i* PKP | | PKPbc | 00 20 29.8 | +0.4 |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| MYKA | Terra Mystica | 149.08 | 344 | *e*PKP | | PKPbc | 00 20 29.4 | 0.0 |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| SQTA | Sankt Quirin | 149.12 | 347 | *i* PKiKP | | PKiKP | 00 20 30.4 | -0.1 |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| ABTA | Abfaltersbach | 149.26 | 345 | *i* PKP | | PKPbc | 00 20 30.2 | +0.3 |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| DAVA | Damuels | 149.32 | 349 | *i* PKiKP | | PKiKP | 00 20 31.2 | +0.3 |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| FETA | Feichten | 149.41 | 348 | *e*PKiKP | | PKiKP | 00 20 31.1 | 0.0 |
| | comp=Z,4.7nm,1.3s | | | | | | | |
| TORD | Torodi Ar. Bea | 175.84 | 183 | PKPab | | PKPab | 00 22 32.9 | 0.0 |
| | comp=Z,0.8nm,1.0s,baz=151,slow=3.3,SNR=3.4 | | | | | | | |

*IDC* ***20*** *00:04:07.7≈1.6, 17.°32S×178.°58W, h468km±16km, mb4.1/22, mbtmp4.9/23, Error ellipse: s-maj=12.0km s-min=10.3km az=138.0*

*NEIC* ***20*** *00:04:08.2≈1.4, 17.°33S±0.°09×178.°51W±0.°10, h474km±5km, mb4.5/349, Error ellipse: s-maj=14.0km s-min=12.5km az=139.0*

*NOU* ***20*** *00:04:09.9, 17.°47S×178.°55W, h490km, mb5.0/53, Fiji Islands Region*

**ISC 20 00:04:09.8±0.3, 17.°33S±0.°06×178.°54W±0.°05, h500km, n807, σ1$20/792, mb4.5/192, 61C-62D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.28 | 262 | P | P | 00 05 23.1 | +0.3 |
| MSVF | Nonsavu | 3.28 | 262 | P | P | 00 05 23.2 | +0.3 |
| AFI | Afiamalu | 7.35 | 63 | P | P | 00 05 55.9 | -3.8 |
| NIUE | Niue | 8.37 | 103 | P | P | 00 06 09.5 | -0.6 |
| NIUE | Niue | 8.37 | 103 | P | P | 00 06 08.3 | -1.7 |
| FUNA | Funafuti | 9.03 | 346 | P | P | 00 06 14.8 | -2.2 |
| RAO | Raoul Island | 11.88 | 177 | P | P | 00 06 44.6 | -2.4 |
| LIFNC | LIFOU | 13.87 | 253 | P | P | 00 07 06.9 | -1.3 |
| LIFNC | LIFOU | 13.87 | 253 | P | P | 00 07 06.4 | -1.8 |
| PINNC | Pines Island, | 14.18 | 246 | P | P | 00 07 11.0 | -0.5 |
| DZM | Mont Dzumac | 14.90 | 249 | P | P | 00 07 18.6 | -0.6 |
| DZM | Mont Dzumac | 14.90 | 249 | P | P | 00 07 17.8 | -1.3 |
| DZM | Mont Dzumac | 14.90 | 249 | P | P | 00 07 18.3 | -0.9 |
| | 10nm,0.6s,baz=65,slow=19,SNR=10 | | | | | | |
| NOUC | Port Laguerre | 15.04 | 249 | P | P | 00 07 20.6 | +0.1 |
| KOUNC | Koumac, New Ca | 16.56 | 256 | P | P | 00 07 35.9 | -0.5 |
| KOUNC | Koumac, New Ca | 16.56 | 256 | P | P | 00 07 35.3 | -1.1 |
| RAR | Rarotonga | 18.13 | 105 | P | P | 00 07 49.2 | -2.3 |
| GRZ | Great Barrier | 19.58 | 195 | P | P | 00 08 06.2 | +1.7 |
| KUZ | Kuaotunu | 19.99 | 194 | P | P | 00 08 08.4 | +0.1 |
| KUZ | Kuaotunu | 19.99 | 194 | P | P | 00 08 09.6 | +1.3 |
| WIAZ | Waiheke Island | 20.18 | 195 | P | P | 00 08 11.7 | +1.7 |
| MBAZ | Motutapu North | 20.21 | 195 | P | P | 00 08 11.7 | +1.4 |
| MXZ | Matakaoa Point | 20.34 | 187 | P | P | 00 08 11.6 | +0.2 |
| TARA | Tarawa | 20.39 | 335 | P | P | 00 08 11.2 | -1.0 |
| MKAZ | Moumakai | 20.47 | 195 | P | P | 00 08 14.0 | +1.5 |
| AWAZ | Awhitu Peninsu | 20.56 | 196 | P | P | 00 08 15.3 | +1.9 |
| HAZ | Te Kaha | 20.60 | 188 | P | P | 00 08 12.8 | -1.0 |
| RUGZ | Raukumara Rang | 20.82 | 188 | P | P | 00 08 15.0 | -1.0 |
| PUZ | Puketiti | 20.85 | 187 | P | P | 00 08 15.6 | -0.5 |
| TOZ | Tahuroa Road | 20.99 | 193 | P | P | 00 08 18.7 | +1.5 |
| TOZ | Tahuroa Road | 20.99 | 193 | P | P | 00 08 19.4 | +2.1 |
| TWGZ | Tauwhareparae | 20.99 | 188 | P | P | 00 08 16.2 | -1.1 |
| KMRZ | Kaimai | 21.00 | 192 | P | P | 00 08 19.0 | +1.5 |
| URZ | Urewera | 21.20 | 190 | P | P | 00 08 17.2 | -1.9 |
| | 64nm,1.0s,baz=1.1,slow=2.7,SNR=17 | | | | | | |
| | 64nm,1.0s | | | | | | |
| MWZ | Matawai | 21.21 | 189 | P | P | 00 08 18.8 | -0.5 |
| RTZ | Ruatahuna | 21.57 | 190 | P | P | 00 08 21.5 | -1.1 |
| HIZ | Hauiti | 21.88 | 194 | P | P | 00 08 26.6 | +1.2 |
| BFZ | Birch Farm | 23.70 | 190 | P | P | 00 08 41.0 | -0.6 |
| MRZ | Mangatainoka R | 23.80 | 191 | P | P | 00 08 41.6 | -0.9 |
| MRZ | | | | IAmb | IAmb | 00 08 51.5 | |
| | comp=Z,17nm,1.0s | | | | | | |
| TCW | Tory Channel | 24.59 | 193 | P | P | 00 08 49.0 | -0.6 |
| MSWZ | Moikau Station | 24.59 | 191 | P | P | 00 08 49.1 | -0.4 |
| QRZ | Quartz Range | 24.65 | 196 | P | P | 00 08 50.6 | +0.6 |
| BHW | Baring Head | 24.66 | 192 | P | P | 00 08 49.6 | -0.5 |
| BHW | | | | IAmb | IAmb | 00 08 50.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| TKNZ | Takaka Hill | 24.73 | 196 | P | P | 00 08 49.4 | -1.4 |
| PLWZ | Palliser | 24.74 | 191 | P | P | 00 08 49.2 | -1.7 |
| NNZ | Nelson | 24.80 | 195 | P | P | 00 08 50.6 | -0.8 |
| TUWZ | Tuamarina | 24.87 | 194 | P | P | 00 08 51.5 | -0.5 |
| MRNZ | Matariki Terra | 25.13 | 196 | P | P | 00 08 53.1 | -1.2 |
| BSWZ | Blackbirch Sta | 25.16 | 193 | P | P | 00 08 54.6 | 0.0 |
| THZ | Tophouse | 25.43 | 195 | P | P | 00 08 56.3 | -0.7 |
| DSZ | Denniston Nort | 25.70 | 197 | P | P | 00 08 59.0 | -0.4 |
| KHZ | Kahutara | 25.90 | 194 | P | P | 00 08 59.5 | -1.6 |
| KHZ | | | | IAmb | IAmb | 00 09 06.5 | |
| | comp=Z,29nm,1.0s | | | | | | |
| CTZ | Chatham Island | 26.37 | 177 | P | P | 00 09 05.8 | +0.5 |
| GVZ | Greta Valley S | 26.54 | 194 | P | P | 00 09 05.4 | -1.4 |
| LTZ | Lake Taylor | 26.55 | 195 | P | P | 00 09 05.9 | -1.0 |
| INZ | Inchbonnie | 26.71 | 197 | P | P | 00 09 07.2 | -1.0 |
| INZ | | | | IAmb | IAmb | 00 09 19.6 | |
| | comp=Z,38nm,1.2s | | | | | | |
| OXZ | Oxford | 27.12 | 195 | P | P | 00 09 10.5 | -1.4 |
| MQZ | McQueen's Vall | 27.33 | 194 | P | P | 00 09 12.9 | -0.8 |
| MQZ | | | | IAmb | IAmb | 00 09 30.8 | |
| | comp=Z,26nm,1.2s | | | | | | |
| PPT | Papeete | 27.62 | 95 | P | P | 00 09 17.2 | +0.6 |
| | comp=Z,36nm,0.7s,baz=119,slow=2.0,SNR=6.7 | | | | | | |
| | comp=Z,36nm,0.7s | | | | | | |
| PPTF | Pamatai, Papee | 27.63 | 95 | P | P | 00 09 17.0 | +0.2 |
| RPZ | Rata Peaks | 27.74 | 196 | P | P | 00 09 16.2 | -1.1 |
| RPZ | | | | IAmb | IAmb | 00 09 28.8 | |
| | comp=Z,24nm,1.1s | | | | | | |
| FOZ | Fox Glacier | 27.92 | 198 | P | P | 00 09 18.0 | -0.9 |
| XMAS | Kiritimati | 28.34 | 49 | P | P | 00 09 23.2 | +0.2 |
| LBZ | Lake Benmore | 28.60 | 197 | P | P | 00 09 23.4 | -1.5 |
| ODZ | Otahua Downs | 29.08 | 196 | P | P | 00 09 27.7 | -1.3 |
| WKZ | Wanaka | 29.34 | 198 | P | P | 00 09 29.9 | -1.4 |
| EIDS | Eidsvold | 29.35 | 249 | P | P | 00 09 31.4 | -0.3 |
| EIDS | | | | IAmb | IAmb | 00 09 32.0 | |
| | comp=Z,31nm,1.0s | | | | | | |
| MLZ | Mavora Lakes | 30.10 | 199 | P | P | 00 09 38.4 | +0.5 |
| MLZ | | | | IAmb | IAmb | 00 09 39.5 | |
| | comp=Z,19nm,0.7s | | | | | | |
| ARMA | Armidale | 30.12 | 239 | P | P | 00 09 38.5 | +0.1 |
| ARMA | | | | IAmb | IAmb | 00 09 39.8 | |
| | comp=Z,23nm,0.8s | | | | | | |
| CTA | Charters Tower | 33.42 | 260 | P | P | 00 10 05.7 | -1.0 |
| | comp=Z,0.8nm,0.5s,baz=88,slow=9.3,SNR=16 | | | | | | |
| CTA | | | | PcP | PcP | 00 12 35.1 | +1.3 |
| | comp=Z,0.3nm,0.6s,baz=73,slow=4.7,SNR=3.6 | | | | | | |
| CTAO | Charters Tower | 33.42 | 260 | P | P | 00 10 06.0 | -0.7 |
| CTAO | | | | IAmb | IAmb | 00 10 06.5 | |
| | comp=Z,14nm,0.7s | | | | | | |
| CAN | Canberra | 33.96 | 232 | P | P | 00 10 11.1 | 0.0 |
| PMG | Port Moresby | 34.24 | 279 | P | P | 00 10 15.0 | +1.3 |
| PMG | Port Moresby | 34.24 | 279 | P | P | 00 10 14.8 | +1.1 |
| PMG | Port Moresby | 34.24 | 279 | P | P | 00 10 14.7 | +1.1 |
| PMG | Port Moresby | 34.24 | 279 | P | P | 00 10 14.4 | +0.8 |
| | comp=Z,34nm,0.7s,baz=89,slow=8.3,SNR=6.6 | | | | | | |
| | comp=Z,34nm,0.7s | | | | | | |
| CMSA | Cobar Meteorol | 35.33 | 240 | P | P | 00 10 21.5 | -1.0 |
| MTSU | Mount Surprise | 35.35 | 263 | P | P | 00 10 22.0 | -0.9 |
| QLP | Quilpie | 35.62 | 248 | P | P | 00 10 25.1 | 0.0 |
| MANU | Manus Island | 36.78 | 291 | P | P | 00 10 35.2 | +0.5 |
| TOO | Toolangi | 37.44 | 230 | P | P | 00 10 40.0 | +0.1 |
| TOO | | | | IAmb | IAmb | 00 10 41.4 | |
| | comp=Z,32nm,1.1s | | | | | | |
| BRAT | Ballarat | 38.58 | 231 | P | P | 00 10 49.8 | +0.6 |
| STKA | Stephens Creek | 38.80 | 240 | P | P | 00 10 51.4 | +0.3 |
| | comp=Z,7.7nm,1.3s | | | | | | |
| STKA | Stephens Creek | 38.80 | 240 | P | P | 00 10 51.6 | +0.4 |
| STKA | Stephens Creek | 38.80 | 240 | P | P | 00 10 51.5 | +0.4 |
| | comp=Z,16nm,0.5s,baz=92,slow=11,SNR=36 | | | | | | |
| STKA | | | | PcP | PcP | 00 12 51.0 | +1.1 |
| | comp=Z,6.6nm,0.7s,baz=349,slow=1.7,SNR=5.2 | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | |
| INKA | Innaminka | 38.85 | 247 | P | P | 00 10 52.6 | +1.0 |
| TABU | Tabubil | 41.14 | 282 | P | P | 00 11 11.2 | +1.0 |
| HTT | Hallett | 41.33 | 239 | P | P | 00 11 12.3 | +0.8 |
| LCRK | Leigh Creek | 41.40 | 243 | P | P | 00 11 12.1 | +0.1 |
| GENI | Genyem | 43.09 | 285 | P | P | 00 11 27.1 | +1.5 |
| OOD | Oodnadatta | 43.32 | 248 | P | P | 00 11 27.6 | +0.4 |
| BBOO | Buckleboo | 43.58 | 240 | P | P | 00 11 29.1 | 0.0 |
| BBOO | Buckleboo | 43.58 | 240 | P | P | 00 11 29.0 | -0.1 |
| HLK | Haleakala | 43.72 | 31 | P | P | 00 11 30.8 | +0.2 |
| WR0 | Warramunga Arr | 44.43 | 259 | P | P | 00 11 34.8 | -1.1 |
| WB0 | Warramunga Arr | 44.58 | 259 | P | P | 00 11 35.9 | -1.2 |
| WB0 | | | | IAmb | IAmb | 00 11 36.8 | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 44.60 | 259 | P | P | 00 11 36.1 | -1.2 |
| WB2 | | | | IAmb | IAmb | 00 11 36.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| WRAB | Tennant Creek | 44.61 | 259 | P | P | 00 11 39.7 | +2.4 |
| WRAB | | | | IAmb | IAmb | 00 11 41.7 | |
| | comp=Z,29nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 44.62 | 259 | P | P | 00 11 35.7 | -1.7 |
| | comp=Z,8.3nm,0.7s,baz=88,slow=7.6,SNR=28 | | | | | | |
| WRA | | | | PcP | pwP | 00 13 10.6 | -1.9 |
| | comp=Z,9.0nm,0.8s,baz=79,slow=3.8,SNR=13 | | | | | | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| ASAR | Alice Springs | 44.83 | 254 | P | P | 00 11 38.7 | -0.3 |
| | comp=Z,81nm,0.7s,baz=89,slow=8.0,SNR=135 | | | | | | |
| ASAR | | | | PcP | pP | 00 13 11.1 | -0.2 |
| | comp=Z,14nm,0.7s,baz=100,slow=3.9,SNR=17 | | | | | | |
| ASAR | | | | ScP | ScP | 00 16 17.5 | +2.5 |
| | comp=Z,1.7nm,0.8s,baz=108,slow=3.8,SNR=5.5 | | | | | | |
| ASAR | | | | S | S | 00 17 35.2 | -4.6 |
| | comp=Z,3.0nm,0.9s,baz=90,slow=16,SNR=15 | | | | | | |
| | comp=Z,81nm,0.7s | | | | | | |
| MULG | Mulgathing | 44.94 | 244 | P | P | 00 11 39.4 | -0.4 |
| GUMO | Guam | 47.42 | 308 | P | P | 00 11 59.4 | +0.6 |
| KDU | Kakadu | 47.44 | 269 | P | P | 00 11 58.7 | -0.3 |
| MTN | Manton Dam | 48.69 | 268 | P | P | 00 12 07.7 | -0.6 |
| WRKA | Warakurna | 49.90 | 252 | P | P | 00 12 16.9 | -0.4 |
| FORT | Forrest | 50.14 | 244 | P | P | 00 12 18.7 | -0.2 |
| FORT | Forrest | 50.14 | 244 | P | P | 00 12 18.5 | -0.4 |
| FITZ | Fitzroy Crossi | 53.00 | 260 | P | P | 00 12 40.0 | +0.3 |
| SOEI | Soe | 55.95 | 270 | P | P | 00 13 01.3 | +0.6 |
| SOEI | Soe | 55.95 | 270 | P | P | 00 13 01.7 | +1.0 |
| TNTI | Ternate | 56.21 | 283 | P | P | 00 13 04.0 | +1.6 |
| TNTI | Ternate | 56.21 | 283 | P | P | 00 13 02.9 | +0.5 |
| SANI | Sanana | 56.52 | 279 | P | P | 00 13 05.2 | +0.6 |
| | comp=Z,124nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 57.93 | 255 | P | P | 00 13 13.8 | -0.3 |
| PSA00 | Pilbara Seismi | 57.93 | 255 | P | P | 00 13 13.4 | -0.7 |
| PSA00 | | | | IAmb | IAmb | 00 13 14.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| MBWA | Marble Bar | 58.09 | 256 | P | P | 00 13 15.5 | +0.3 |
| MBWA | Marble Bar | 58.09 | 256 | P | P | 00 13 14.9 | -0.3 |
| MMRI | Maumere | 58.17 | 270 | P | P | 00 13 16.1 | +0.3 |
| KLBR | Kellerberrin | 58.97 | 243 | P | P | 00 13 20.7 | -0.3 |
| LUWI | Luwuk | 59.89 | 279 | P | P | 00 13 29.0 | +1.6 |
| LUWI | Luwuk | 59.89 | 279 | P | P | 00 13 27.2 | -0.2 |
| MORW | Morawa | 60.60 | 246 | P | P | 00 13 31.6 | -0.3 |
| KAPI | Kappang | 61.53 | 274 | P | P | 00 13 38.5 | +0.3 |
| KAPI | | | | IAmb | IAmb | 00 13 39.6 | |
| | comp=Z,30nm,1.1s | | | | | | |
| TOLI2 | Tolitoli | 62.49 | 281 | P | P | 00 13 44.9 | +0.4 |
| TOLI2 | Tolitoli | 62.49 | 281 | P | P | 00 13 45.1 | +0.7 |
| GIRL | Giralia | 62.94 | 253 | P | P | 00 13 48.3 | +1.0 |
| JAGI | Jajag, Banyuwa | 65.93 | 268 | P | P | 00 14 07.8 | +1.4 |
| JAGI | Jajag, Banyuwa | 65.93 | 268 | P | P | 00 14 05.6 | -0.9 |
| MYLDM | Lahad Datu | 66.05 | 284 | P | P | 00 14 09.4 | +2.2 |
| CASY | Casey | 66.61 | 205 | P | P | 00 14 11.1 | +1.4 |
| CASY | | | | IAmb | IAmb | 00 14 11.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| MJAR | Matsushiro Arr | 67.37 | 323 | P | P | 00 14 14.7 | -0.1 |
| | comp=Z,8.5nm,0.7s,baz=158,slow=6.2,SNR=18 | | | | | | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| KKM | Kota Kinabalu | 68.48 | 284 | P | P | 00 14 23.2 | +1.0 |
| KKM | Kota Kinabalu | 68.48 | 284 | P | P | 00 14 22.7 | +0.4 |
| UGM | Wanagama | 69.54 | 268 | P | P | 00 14 28.9 | +0.3 |
| JNU | Nakatsue | 69.64 | 316 | P | P | 00 14 29.1 | +0.3 |
| JNU | | | | IAmb | IAmb | 00 14 42.4 | |
| | comp=Z,9.2nm,1.0s | | | | | | |
| YOJ | Yonaguni jima | 70.52 | 305 | P | P | 00 14 33.3 | -0.8 |
| JKA | Kamikawa-asahi | 70.71 | 331 | P | P | 00 14 36.5 | +1.7 |
| JKA | | | | IAmb | IAmb | 00 14 36.6 | |
| | comp=Z,13nm,0.7s | | | | | | |
| SBUM | Sibu | 70.99 | 279 | P | P | 00 14 37.9 | +0.8 |
| SBUM | | | | IAmb | IAmb | 00 14 39.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| YULB | Yu-li | 71.35 | 303 | P | P | 00 14 38.8 | -0.3 |
| YULB | | | | IAmb | IAmb | 00 14 48.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| NACB | Ninganchiao | 71.49 | 304 | P | P | 00 14 40.7 | +0.8 |
| NACB | | | | IAmb | IAmb | 00 14 42.5 | |
| | comp=Z,25nm,1.1s | | | | | | |
| UNV | Unalaska Valle | 71.64 | 7 | P | P | 00 14 38.6 | -1.4 |
| UNV | | | | IAmb | IAmb | 00 14 57.1 | |
| | comp=Z,24nm,1.1s | | | | | | |
| TPUB | Ta-pu | 71.85 | 302 | P | P | 00 14 41.5 | -0.5 |
| YHNB | Yeheng | 71.91 | 304 | P | P | 00 14 42.5 | +0.1 |
| BBJI | Bungbulang | 72.40 | 268 | P | P | 00 14 46.7 | +1.2 |
| KSM | Kuching | 72.49 | 277 | P | P | 00 14 47.3 | +1.4 |
| KSM | Kuching | 72.49 | 277 | P | P | 00 14 46.4 | +0.5 |
| QSPA | South Pole Qui | 72.72 | 180 | P | P | 00 14 47.8 | +1.4 |
| QSPA | | | | IAmb | IAmb | 00 14 49.2 | |
| | comp=Z,17nm,0.9s | | | | | | |
| QSPA | South Pole Qui | 72.72 | 180 | P | P | 00 14 48.4 | +1.9 |
| | comp=Z,16nm,0.9s,baz=30,slow=0.6,SNR=26 | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| PEA0B | Petropavlovsk- | 73.09 | 345 | P | P | 00 14 48.7 | +0.2 |
| PETK | Petropavlovsk- | 73.09 | 345 | P | P | 00 14 48.8 | +0.3 |
| | comp=Z,5.9nm,0.6s,baz=107,slow=7.6,SNR=8.0 | | | | | | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| KSRS | Korea Array | 74.19 | 318 | P | P | 00 14 56.2 | +1.2 |
| | comp=Z,3.0nm,0.6s,baz=127,slow=6.6,SNR=9.4 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| USRK | Ussuriysk Ar. | 76.07 | 326 | P | P | 00 15 07.6 | +2.1 |
| | comp=Z,1.4nm,0.6s,baz=111,slow=3.5,SNR=5.3 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| R17L | Mt. Peulik Vol | 76.93 | 12 | P | P | 00 15 10.0 | +0.1 |
| | baz=202 | | | | | | |
| O02D | Mt. Diablo Mer | 77.20 | 41 | P | P | 00 15 12.7 | +0.8 |
| O02D | | | | IAmb | IAmb | 00 15 14.5 | |
| | comp=Z,14nm,1.0s | | | | | | |
| OHAK | Old Harbor | 77.20 | 14 | P | P | 00 15 11.4 | 0.0 |
| R18K | Karluk | 77.26 | 13 | P | P | 00 15 11.8 | +0.1 |
| | baz=204 | | | | | | |
| ESJX | Sierra Juarez | 77.44 | 51 | P | P | 00 15 14.6 | +1.0 |
| NJ2 | Nanjing | 77.48 | 309 | *e*P | P | 00 15 15.9 | +2.4 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| ISA | Isabella, Lake | 77.51 | 46 | P | P | 00 15 14.1 | +0.4 |
| ISA | | | | IAmb | IAmb | 00 15 15.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| MONP2 | Monument Peak | 77.54 | 50 | P | P | 00 15 15.0 | +1.0 |
| | baz=240 | | | | | | |
| CCAC | Calif City Air | 77.56 | 47 | P | P | 00 15 14.3 | +0.3 |
| Q17K | Contact Creek | 77.61 | 12 | P | P | 00 15 13.0 | -0.7 |
| | baz=202 | | | | | | |
| AFDM | Forest Hills D | 77.64 | 42 | P | P | 00 15 15.1 | +0.9 |
| MDJ | Mudanjiang | 77.64 | 325 | P | P | 00 15 15.3 | +1.2 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| MDJ | Mudanjiang | 77.64 | 325 | P | P | 00 15 14.7 | +0.6 |
| MDJ | | | | IAmb | IAmb | 00 15 16.3 | |
| | comp=Z,13nm,1.0s | | | | | | |
| RMX | La Rumorosa | 77.64 | 50 | P | P | 00 15 14.8 | +0.2 |
| RMX | | | | IAmb | IAmb | 00 15 17.0 | |
| | comp=Z,24nm,1.0s | | | | | | |
| ORV | Oroville | 77.64 | 42 | P | P | 00 15 14.9 | +0.7 |
| MNAI | Manna | 77.75 | 269 | P | P | 00 15 15.9 | +0.5 |
| YUH | Yuha Desert | 77.78 | 50 | P | P | 00 15 16.5 | +1.4 |
| Q18K | Katmai Hardscr | 78.14 | 12 | P | P | 00 15 16.1 | -0.5 |
| | baz=203 | | | | | | |
| YBH | Yreka Blue Hor | 78.16 | 39 | P | P | 00 15 18.4 | +1.3 |
| N14K | Kuskokwak Cree | 78.19 | 9 | P | P | 00 15 17.2 | +0.5 |
| | baz=196 | | | | | | |
| P17K | Kvichak River | 78.37 | 11 | P | P | 00 15 17.3 | -0.3 |
| | baz=202 | | | | | | |
| SLBS | Sierra La Lagu | 78.39 | 61 | P | P | 00 15 20.7 | +2.0 |
| SLBS | | | | IAmb | IAmb | 00 15 21.2 | |
| | comp=Z,11nm,0.8s | | | | | | |
| WAKR | Walker | 78.39 | 43 | P | P | 00 15 19.4 | +0.9 |
| O16K | Kokwok River B | 78.44 | 10 | P | P | 00 15 17.2 | -0.8 |
| O16K | | | | IAmb | IAmb | 00 15 19.4 | |
| | comp=Z,3nm,1.1s | | | | | | |
| O16K | Kokwok River B | 78.44 | 10 | P | P | 00 15 17.4 | -0.7 |
| | baz=200 | | | | | | |
| HUMO | Hull Mountain | 78.53 | 38 | P | P | 00 15 20.2 | +1.3 |
| PNTR | Pine Nut | 78.60 | 43 | P | P | 00 15 20.2 | +0.5 |
| PNTR | | | | IAmb | IAmb | 00 15 21.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| DSP | Deep Springs | 78.76 | 45 | P | P | 00 15 21.3 | +1.1 |
| DSP | | | | IAmb | IAmb | 00 15 22.7 | |
| | comp=Z,15nm,1.0s | | | | | | |
| GLA | Glamis | 78.78 | 50 | P | P | 00 15 21.7 | +1.1 |
| GLA | | | | IAmb | IAmb | 00 15 23.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| YERR | Yerington | 78.78 | 43 | P | P | 00 15 21.0 | +0.4 |
| YERR | | | | IAmb | IAmb | 00 15 22.5 | |
| | comp=Z,12nm,0.7s | | | | | | |
| LHV | Little Huntoon | 78.87 | 44 | P | P | 00 15 21.8 | +1.0 |
| LHV | | | | IAmb | IAmb | 00 15 23.4 | |
| | comp=Z,19nm,1.0s | | | | | | |
| GRAC | Grapevine Rang | 78.97 | 46 | P | P | 00 15 22.3 | +0.8 |
| GRAC | | | | IAmb | IAmb | 00 15 23.8 | |
| | comp=Z,22nm,1.1s | | | | | | |
| GWY | Greenwater Val | 79.03 | 47 | P | P | 00 15 22.1 | +0.1 |
| RYN | Ryan | 79.06 | 44 | P | P | 00 15 22.8 | +0.7 |
| M15K | Kasigluk River | 79.08 | 9 | P | P | 00 15 21.3 | -0.1 |
| | baz=197 | | | | | | |
| PAHR | Pah Rah Range | 79.08 | 42 | P | P | 00 15 22.0 | -0.2 |
| PIX | Pinacate | 79.08 | 52 | P | P | 00 15 21.8 | -0.3 |
| NVAR | Mina Array Bea | 79.10 | 44 | P | P | 00 15 22.3 | 0.0 |
| NVAR | Mina Array Bea | 79.10 | 44 | P | P | 00 15 23.6 | +1.3 |
| | comp=Z,6.5nm,0.7s,baz=227,slow=9.3,SNR=49 | | | | | | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| NV11 | Mina Array Sit | 79.20 | 44 | P | P | 00 15 23.5 | +0.7 |
| NV11 | | | | IAmb | IAmb | 00 15 24.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| GMN | Gold Mountain | 79.20 | 45 | P | P | 00 15 22.7 | -0.2 |
| O18K | Koktuh Hills | 79.22 | 12 | P | P | 00 15 22.5 | +0.3 |
| | baz=203 | | | | | | |
| MZP | Montezuma Peak | 79.33 | 45 | P | P | 00 15 23.8 | +0.1 |
| BLYC | Blythe | 79.34 | 50 | P | P | 00 15 24.1 | +0.7 |
| WCT | Wildcat Mounta | 79.37 | 46 | P | P | 00 15 23.9 | +0.2 |
| L14K | Kuka Creek | 79.42 | 8 | P | P | 00 15 24.0 | +0.8 |
| | baz=195 | | | | | | |
| 113A | Mohawk Valley, | 79.43 | 51 | P | P | 00 15 24.2 | +0.2 |
| BNX | BinXian | 79.55 | 325 | ⇑P | P | 00 15 25.0 | +0.7 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| KVN | Kaiserville | 79.56 | 44 | P | P | 00 15 24.6 | -0.2 |
| KVN | | | | IAmb | IAmb | 00 15 26.6 | |
| | comp=Z,10nm,1.0s | | | | | | |
| TPH | Tonopah | 79.63 | 45 | P | P | 00 15 25.4 | +0.2 |
| M16K | Timber Creek | 79.65 | 10 | P | P | 00 15 25.3 | +0.9 |
| | baz=199 | | | | | | |
| O19K | Port Alsworth | 79.71 | 12 | P | P | 00 15 24.5 | -0.3 |
| | baz=203 | | | | | | |
| TPNV | Topopah Spring | 79.71 | 46 | P | P | 00 15 27.1 | +1.5 |
| | baz=239 | | | | | | |
| 214A | Organ Pipe Nat | 79.76 | 52 | P | P | 00 15 26.4 | +0.7 |
| 214A | | | | IAmb | IAmb | 00 15 29.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| 214A | Organ Pipe Nat | 79.76 | 52 | P | P | 00 15 27.8 | +2.1 |
| | baz=242 | | | | | | |
| N18K | Kilae Creek | 79.86 | 11 | P | P | 00 15 25.5 | -0.1 |
| | baz=202 | | | | | | |
| L15K | Ungalak Mounta | 79.91 | 8 | P | P | 00 15 25.9 | +0.1 |
| | baz=196 | | | | | | |
| J05D | Fort Rock, OR | 79.95 | 39 | P | P | 00 15 27.4 | +0.8 |
| J05D | | | | IAmb | IAmb | 00 15 28.8 | |
| | comp=Z,22nm,1.0s | | | | | | |
| V12A | Nelson | 80.07 | 48 | P | P | 00 15 27.3 | -0.1 |
| L16K | Owhat River | 80.23 | 9 | P | P | 00 15 27.8 | +0.3 |
| | baz=198 | | | | | | |
| N19K |

CBB **Campbell River** 81.78 31 P P 00 15 36.4 +0.6
CBB IAmb IAmb 00 15 39.4
comp=Z,18nm,1.2s
D05A **Enumclaw** 81.80 35 P P 00 15 37.0 +1.1
D05A IAmb IAmb 00 15 48.2
comp=Z,19nm,1.1s
LCMT **Little Creek M** 81.83 47 P P 00 15 37.2 +0.7
LCMT IAmb IAmb 00 15 38.9
comp=Z,10nm,1.0s
BBB **Bella Bella** 81.87 29 P P 00 15 36.7 +0.6
comp=Z,22nm,1.1s,baz=337,slow=2.7,SNR=4.3
comp=Z,22nm,1.1s
J17K **VABM Dome** 81.89 9 IAmb IAmb 00 15 37.2
comp=Z,8.7nm,0.8s
J17K **VABM Dome** 81.89 9 P P 00 15 36.6 +0.6
baz=199
L20K **Farewell, AK** 81.89 11 P P 00 15 35.9 -0.2
baz=204
SKT **Skwentna** 81.90 13 P P 00 15 36.6 +0.5
baz=206
X16A **Lo Mia Camp, P** 81.91 50 P P 00 15 38.1 +1.0
X16A IAmb IAmb 00 15 39.9
comp=Z,14nm,1.0s
GLI **Glacier Island** 81.93 15 P P 00 15 36.2 -0.1
baz=210
M22K **Willow** 82.00 13 P P 00 15 36.7 +0.1
M22K **Willow** 82.00 13 P P 00 15 36.9 +0.4
baz=207
CCUT **Cedar City** 82.01 47 IAmb IAmb 00 15 40.2
comp=Z,11nm,1.0s
SPR3 **Spring Creek 3** 82.05 45 P P 00 15 37.4 -0.4
PMR **Palmer** 82.07 14 P P 00 15 36.5 -0.5
baz=208
I17K **Unalakleet** 82.13 8 P P 00 15 37.9 +0.6
baz=197
319A **Douglas** 82.19 54 P P 00 15 39.3 +0.9
F07A **Phinny Hill Vi** 82.21 37 P P 00 15 38.4 +0.4
IPM **Ipoh** 82.22 277 P P 00 15 40.2 +1.3
IPM **Ipoh** 82.22 277 P P 00 15 39.5 +0.6
U15A **North Rim** 82.23 48 P P 00 15 39.8 +1.1
U15A IAmb IAmb 00 15 41.5
comp=Z,22nm,0.9s
GHO **Glory Hole Cre** 82.28 14 IAmb IAmb 00 15 39.9
comp=Z,21nm,0.9s
J18K **Innoko River** 82.31 10 IAmb IAmb 00 15 39.0
comp=Z,9.5nm,0.8s
J18K **Innoko River** 82.31 10 P P 00 15 38.9 +0.7
baz=201,SNR=7.6
ELK **Elko** 82.32 43 P P 00 15 39.8 +0.7
ELK IAmb IAmb 00 15 41.0
comp=Z,12nm,1.1s
MXC **Moxie City** 82.39 36 P P 00 15 39.6 +0.6
RUBB **Prince Rupert** 82.40 26 P P 00 15 39.1 +0.4
RUBB IAmb IAmb 00 15 49.7
comp=Z,19nm,1.1s
G08A **Pilot Rock** 82.43 38 P P 00 15 40.1 +0.7
G08A IAmb IAmb 00 15 41.3
comp=Z,13nm,1.1s
WUAZ **Wupatki** 82.46 49 P P 00 15 40.5 +0.7
WUAZ IAmb IAmb 00 15 42.5
comp=Z,21nm,1.1s
WUAZ **Wupatki** 82.46 49 P P 00 15 41.5 +1.7
baz=242
U33K **Whale Pass** 82.52 24 P P 00 15 39.6 +0.3
baz=223
CUT **Chulitna** 82.55 13 P P 00 15 38.7 -0.7
baz=207
LTY **Liberty** 82.57 36 P P 00 15 39.9 -0.1
M23K **Glacier View** 82.57 14 P P 00 15 39.7 +0.1
baz=210
E07A **Sunnyside** 82.63 36 P P 00 15 40.5 +0.3
E07A IAmb IAmb 00 15 42.1
comp=Z,14nm,1.1s
BMRM **Bremner River** 82.64 16 P P 00 15 40.7 +0.7
BMRM **Bremner River** 82.64 16 P P 00 15 39.8 -0.2
baz=212
H16K **Elim** 82.67 7 P P 00 15 40.4 +0.5
baz=196
SCM **Sheep Creek Mo** 82.70 14 P P 00 15 40.3 0.0
baz=210
MESA **MESA** 82.71 17 P P 00 15 40.4 -0.1
baz=215
HAWA **Hanford** 82.72 37 P P 00 15 41.1 +0.5
HAWA IAmb IAmb 00 15 42.6
comp=Z,16nm,1.1s
BELA **Belgrano 2** 82.75 173 P P 00 15 40.8 +0.4
KLU **Klutina** 82.75 15 P P 00 15 40.5 0.0
baz=211
S31K **Pelican** 82.76 21 P P 00 15 41.0 +0.5
S31K IAmb IAmb 00 15 42.8
comp=Z,15nm,1.1s
S31K **Pelican** 82.76 21 P P 00 15 41.6 +1.1
baz=220
G15K **Niukluk** 82.82 6 P P 00 15 41.3 +0.6
baz=194
DUN6 **Lazy B Ranch** 82.84 53 P P 00 15 42.1 +0.3
CRQM **Cirque** 82.86 17 P P 00 15 41.3 +0.1
CRQM IAmb IAmb 00 15 42.1
comp=Z,15nm,1.0s
CRQE **Cirque** 82.86 17 P P 00 15 41.8 +0.6
baz=214
ISLE **Juniper Island** 82.95 17 P P 00 15 41.8 +0.2
ISLE IAmb IAmb 00 15 42.5
comp=Z,15nm,0.9s
S32K **Killisnoo** 82.97 22 P P 00 15 42.1 +0.6
baz=222
J19K **Poorman** 82.99 10 P P 00 15 42.0 +0.4
baz=202
WRAK **Wrangell Islan** 83.03 24 P P 00 15 42.7 +0.7
baz=224
E08A **Dider Farm, El** 83.05 37 P P 00 15 42.2 0.0
E08A IAmb IAmb 00 15 44.1
comp=Z,8.1nm,0.9s
PNL **Peninsula** 83.06 19 P P 00 15 42.1 +0.1
baz=217
X18A **Snowflake** 83.06 51 P P 00 15 42.8 -0.1
X18A IAmb IAmb 00 15 45.5
comp=Z,12nm,1.0s
MTPU **Mount Pierson** 83.06 47 P P 00 15 43.5 +0.5
MTPU IAmb IAmb 00 15 46.1
comp=Z,20nm,1.1s
F14K **Arctic Creek** 83.07 5 P P 00 15 42.7 +0.7
baz=192
PCA **Pinnacle** 83.14 18 P P 00 15 41.5 -1.0
PCA IAmb IAmb 00 15 43.4
comp=Z,16nm,1.1s
PINM **Pinnacle** 83.14 18 P P 00 15 42.8 +0.3
baz=216
TCRU **Three Creeks R** 83.15 46 P P 00 15 44.1 +0.8
TCRU IAmb IAmb 00 15 46.1
comp=Z,11nm,0.7s
VRDI **Verde Repeater** 83.16 16 IAmb IAmb 00 15 43.1
comp=Z,8.3nm,0.9s
N25K **Chitina, Valde** 83.18 16 IAmb IAmb 00 15 43.6
comp=Z,12nm,0.8s
N25K **Chitina, Valde** 83.18 16 P P 00 15 42.7 0.0
baz=212,SNR=6.4
GRNC **Granite Creek** 83.22 17 IAmb IAmb 00 15 44.0
comp=Z,16nm,1.0s
HPIG 83.24 59 P P 00 15 44.2 +0.3
GLB **Gilahina Butte** 83.25 16 IAmb IAmb 00 15 43.7
comp=Z,9.9nm,0.9s
WAT6 **Susitna Watana** 83.26 14 P P 00 15 43.2 0.0
baz=209
MVU **Marysvale** 83.26 46 P P 00 15 44.0 +0.1
MSU **Marysvale** 83.29 46 P P 00 15 44.7 +0.7
WAT1 **Susitna Watana** 83.30 13 P P 00 15 43.2 0.0
baz=209
MFID **Camas Ranch** 83.32 41 IAmb IAmb 00 15 45.8
comp=Z,12nm,1.0s
G16K **Koyuk River** 83.38 7 P P 00 15 44.2 +0.7
baz=196
J20K **Nowinta River** 83.41 10 P 00 15 43.6 0.0
J20K IAmb IAmb 00 15 44.7
comp=Z,9.4nm,0.8s
J20K **Nowinta River** 83.41 10 P P 00 15 43.7 +0.1
baz=203,SNR=6.7
MCARA **McCarthy VSAT** 83.41 16 P P 00 15 44.2 +0.4
baz=214
D08A **Wollman Farm,** 83.44 36 P P 00 15 44.5 +0.2
D08A IAmb IAmb 00 15 46.1
comp=Z,11nm,1.1s
W18A **Petrified Fore** 83.48 50 IAmb IAmb 00 15 47.4
comp=Z,15nm,1.1s
W18A **Petrified Fore** 83.48 50 P P 00 15 46.5 +1.6
baz=244

GCSA **Galena City Sc** 83.49 9 P P 00 15 44.7 +0.7
baz=201
LOGN **Logan Glacier** 83.51 17 IAmb IAmb 00 15 45.4
comp=Z,17nm,1.2s
CTG **Chitna Glacier** 83.53 17 P P 00 15 44.7 +0.2
baz=216
CTGM **Chitina Glacie** 83.53 17 IAmb IAmb 00 15 45.5
comp=Z,9.7nm,0.9s
P29M **Windy Craggy** 83.55 20 IAmb IAmb 00 15 46.2
comp=Z,15nm,1.0s
P29M **Windy Craggy** 83.55 20 P P 00 15 45.5 +0.9
baz=219,SNR=6.1
DUG **Dugway, Tooele** 83.66 45 P P 00 15 46.1 +0.4
DUG **Dugway, Tooele** 83.66 45 P P 00 15 47.1 +1.4
baz=241
G17K **Kiwalik Mounta** 83.69 7 P P 00 15 44.7 -0.3
baz=197
O28M **Mount Upton** 83.70 18 P P 00 15 45.9 +0.3
baz=216,SNR=7.2
BESE **Bessie Mountai** 83.70 21 P P
BESE IAmb IAmb 00 15 47.2
comp=Z,7.8nm,1.0s
PSI **Prapat** 83.71 275 P P 00 15 46.5 0.0
HARP **HAARP** 83.71 15 P P 00 15 45.5 +0.2
baz=212
RND **Reindeer** 83.74 13 P P 00 15 45.8 +0.4
DHY **Denali Highway** 83.77 14 P P 00 15 45.8 0.0
baz=210
F10A **Beach Ranch, E** 83.82 38 IAmb IAmb 00 15 47.7
comp=Z,13nm,0.9s
121A **Cookes Peak, D** 83.83 53 P P 00 15 47.3 +0.6
121A **Cookes Peak, D** 83.83 53 P P 00 15 48.1 +1.3
baz=245
ENH **Enshi** 83.84 304 P P 00 15 48.8 +2.1
ENH **Enshi** 83.84 304 P P 00 15 47.7 +1.0
PLBC **Pleasant Camp** 83.86 20 P P 00 15 46.4 +0.4
baz=220
BPAW **Bear Paw Mtn.** 83.92 12 P P 00 15 45.6 -0.7
baz=206
I20K **Naaghedeneel** 83.92 10 P P 00 15 46.9 +0.7
I20K IAmb IAmb 00 15 48.7
comp=Z,16nm,1.1s
I20K **Naaghedeneel** 83.92 10 P P 00 15 46.4 +0.2
baz=203
B08A **Colville Reser** 83.94 35 IAmb IAmb 00 15 47.8
comp=Z,7.1nm,0.9s
MCK **McKinley** 84.01 13 P P 00 15 46.7 0.0
MCK IAmb IAmb 00 15 47.1
comp=Z,16nm,1.0s
MCK **McKinley** 84.01 13 P P 00 15 46.7 0.0
baz=208
HMU **Henry Mountain** 84.02 47 P P 00 15 47.6 -0.1
NLU **North Lily Min** 84.04 45 P P 00 15 47.9 +0.2
PAX **Paxson** 84.13 15 P P 00 15 47.0 -0.3
PAX **Paxson** 84.13 15 P P 00 15 46.8 -0.6
baz=212
Q16A **Castle Valley** 84.17 46 P P 00 15 48.8 +0.4
P30M **Million Dollar** 84.18 20 P P 00 15 49.0 +1.4
baz=220
SKAG **Skagway** 84.21 21 P P 00 15 49.6 +1.9
baz=221
YUK8 **Steele Glacier** 84.24 18 P P 00 15 48.9 +0.7
baz=217,SNR=5.3
M26K **Nabesna, AK** 84.26 16 P P 00 15 48.4 +0.4
M26K **Nabesna, AK** 84.26 16 P P 00 15 48.2 +0.2
baz=214,SNR=12
ZAIG **Zacatecas** 84.28 64 P P 00 15 50.0 +0.7
ZAIG IAmb IAmb 00 15 52.8
comp=Z,9.4nm,1.0s
HLID **Hailey** 84.28 41 P P 00 15 49.6 +0.9
HLID IAmb IAmb 00 15 51.0
comp=Z,9.1nm,0.9s
HLID **Hailey** 84.28 41 P P 00 15 50.3 +1.6
baz=240
BWN **Browne** 84.29 12 P P 00 15 48.6 +0.5
H19K **Roundabout Mou** 84.29 9 P P 00 15 47.9 -0.1
baz=201
G18K **Tagagawik** 84.32 8 P P 00 15 48.4 +0.2
baz=199
TMUT **Trail Mountain** 84.33 46 P P 00 15 49.1 -0.1
TMUT IAmb IAmb 00 15 51.7
comp=Z,11nm,1.0s
MAW **Mawson** 84.36 200 P P 00 15 50.0 +1.6
comp=Z,9.7nm,0.7s,baz=130,slow=5.8,SNR=25
comp=Z,9.7nm,0.7s
YUK6 **Outpost Mounta** 84.38 18 P P 00 15 49.2 +0.3
baz=218
YUK3 **Moose Creek** 84.44 17 P P 00 15 49.7 +0.6
baz=216,SNR=12
HVU **Hansel Valley** 84.45 43 P P 00 15 50.0 +0.4
HVU IAmb IAmb 00 15 51.6
comp=Z,8.2nm,1.1s
H20K **Anotleneega Mo** 84.50 10 P P 00 15 49.9 +0.8
baz=203
EPT **El Paso** 84.50 54 P P 00 15 50.4 +0.4
EPT IAmb IAmb 00 15 53.1
comp=Z,6.4nm,0.8s
M27K **Edge Creek, AK** 84.52 16 P P 00 15 49.5 +0.1
M27K IAmb IAmb 00 15 50.9
comp=Z,19nm,1.0s
M27K **Edge Creek, AK** 84.52 16 P P 00 15 49.9 +0.5
baz=215,SNR=10
GSI **Gunungsitoli** 84.55 273 P P 00 15 52.6 +2.1
S34M **Telegraph Cree** 84.57 23 P P 00 15 50.0 +0.5
S34M IAmb IAmb 00 15 51.5
comp=Z,18nm,1.1s
S34M **Telegraph Cree** 84.57 23 P P 00 15 50.6 +1.0
baz=225,SNR=9.5
CTU **Camp Tracy** 84.61 45 P P 00 15 50.4 0.0
CTU IAmb IAmb 00 15 52.2
comp=Z,8.2nm,1.1s
YUK4 **Talbot Arm** 84.62 18 P P 00 15 50.0 0.0
baz=218
L26K **Log Cabin Wild** 84.69 15 P P 00 15 49.7 -0.4
L26K IAmb IAmb 00 15 51.0
comp=Z,11nm,1.0s
L26K **Log Cabin Wild** 84.69 15 P P 00 15 50.5 +0.4
baz=214
SRU **San Rafael Swe** 84.71 46 P P 00 15 51.3 +0.3
SRU IAmb IAmb 00 15 52.9
comp=Z,8.2nm,1.0s
P17A **Butcher Ranch,** 84.73 46 P P 00 15 50.5 -0.5
NEA2 **Nenana** 84.74 12 P P 00 15 50.0 -0.2
baz=208
K24K **Donnelly Dome** 84.77 14 P P 00 15 51.1 +0.6
baz=211
G19K **Purcell Mounta** 84.77 9 P P 00 15 50.9 +0.6
G19K **Purcell Mounta** 84.77 9 P P 00 15 51.2 +0.9
baz=200
MLY **Manley** 84.80 11 IAmb IAmb 00 15 50.6
comp=Z,12nm,1.0s
MLY **Manley** 84.80 11 P P 00 15 50.1 -0.5
baz=206
SRIT **Nakonsritamara** 84.85 281 P P 00 15 52.0 +0.1
P32M **Atlin** 84.85 21 P P 00 15 51.1 +0.2
P32M **Atlin** 84.85 21 P P 00 15 51.6 +0.7
baz=222
Q32M **Nakina River** 84.90 22 IAmb IAmb 00 15 53.2
comp=Z,8.8nm,1.1s
Q32M **Nakina River** 84.90 22 P P 00 15 52.4 +1.0
baz=224,SNR=6.2
RIDG **Independent Ri** 84.93 14 IAmb IAmb 00 15 52.0
comp=Z,21nm,1.0s
RIDG **Independent Ri** 84.93 14 P P 00 15 51.4 +0.1
baz=212
O30N **Mendenhall** 84.95 19 IAmb IAmb 00 15 52.8
comp=Z,7.8nm,0.8s
O30N **Mendenhall** 84.95 19 P P 00 15 52.0 +0.6
baz=220,SNR=8.1
SURA **Surathani** 85.00 281 P P 00 15 53.5 +0.9
HDA **Harding Lake** 85.03 13 P P 00 15 51.6 -0.1
baz=210,SNR=5.8
TCUT **Toone Canyon** 85.04 44 P P 00 15 52.9 +0.3
TCUT IAmb IAmb 00 15 54.2
comp=Z,7.5nm,0.9s
CCB **Clear Creek Bu** 85.05 13 P P 00 15 50.5 -1.3
CCB IAmb IAmb 00 15 51.9
comp=Z,12nm,0.8s
NAYO **Nakonayok** 85.08 287 P P 00 15 54.8 +1.8
L27K **Beaver Creek,** 85.11 16 P P 00 15 52.0 -0.2
L27K **Beaver Creek,** 85.11 16 P P 00 15 52.7 +0.6
baz=215
NEW **Newport** 85.12 36 P P 00 15 52.6 0.0
baz=237
LENM **Lemitar** 85.13 52 P P 00 15 52.8 -0.4
SLVN **Son La** 85.13 294 P P 00 15 53.6 +0.3

SLVN IAmb IAmb 00 15 56.0
comp=Z,14nm,1.1s
P18A **Preston Nutter** 85.14 46 P P 00 15 53.2 0.0
HWUT **Hardware Ranch** 85.16 44 P P 00 15 52.5 -0.6
N30M **Aishikik Lake** 85.17 19 P P 00 15 53.1 +0.6
baz=219
I23K **Minto, Yukon-K** 85.18 12 P P 00 15 52.3 0.0
I23K **Minto, Yukon-K** 85.18 12 P P 00 15 52.8 +0.5
baz=208
MDM **Murphy Dome** 85.24 12 P P 00 15 51.8 -0.9
MDM IAmb IAmb 00 15 52.8
comp=Z,21nm,1.1s
COLA **College** 85.24 13 P P 00 15 52.3 -0.3
COLA **College** 85.24 13 P P 00 15 52.3 -0.3
COLA **College** 85.24 13 P P 00 15 52.4 -0.2
baz=209
PV05 **Paradox Valley** 85.25 48 P P 00 15 54.8 +1.1
WHY **Whitehorse** 85.26 20 P P 00 15 53.5 +0.5
WHY **Whitehorse** 85.26 20 P P 00 15 53.3 +0.2
baz=221
VHRN **Van Horn** 85.30 56 P P 00 15 55.2 +1.3
VHRN IAmb IAmb 00 15 56.8
comp=Z,9.4nm,1.0s
SCRK **Sand Creek** 85.34 15 IAmb IAmb 00 15 54.2
comp=Z,5.7nm,0.8s
SCRK **Sand Creek** 85.34 15 P P 00 15 53.6 +0.3
baz=213,SNR=5.2
MNTX **Cornudas Mount** 85.35 55 P P 00 15 54.5 +0.5
MNTX IAmb IAmb 00 15 57.1
comp=Z,8.5nm,1.1s
MNTX **Cornudas Mount** 85.35 55 P P 00 15 55.6 +1.6
baz=246
DLBC **Dease Lake** 85.35 23 IAmb IAmb 00 15 55.2
comp=Z,10nm,1.1s
DLBC **Dease Lake** 85.35 23 P P 00 15 54.2 +0.7
comp=Z,8.5nm,1.1s,baz=221,slow=6.3,SNR=9.7
comp=Z,8.5nm,1.1s
DLBC **Dease Lake** 85.35 23 P P 00 15 54.5 +1.0
baz=226,SNR=7.5
IL31 85.36 13 P P 00 15 52.7 -0.5
IL31 IAmb IAmb 00 15 53.5
comp=Z,8.1nm,0.9s
ILAR **Eielson Array** 85.36 13 P P 00 15 52.4 -0.8
comp=Z,6.2nm,0.9s,baz=221,slow=5.3,SNR=4.5
comp=Z,6.2nm,0.9s
IL03 **Eielson Array** 85.36 13 P P 00 15 52.7 -0.6
BNM **Barren Site** 85.38 52 P P 00 15 55.2 +0.8
JRQG **Juriquilla Cam** 85.39 67 P P 00 15 55.1 +0.4
PV18 **Skein Mesa, Pa** 85.45 48 P P 00 15 54.1 -0.6
PV18 IAmb IAmb 00 15 57.1
comp=Z,9.7nm,1.2s
PV20 **West Nyswonger** 85.45 48 P P 00 15 54.1 -0.5
PV20 IAmb IAmb 00 15 57.6
comp=Z,13nm,1.1s
H22K **Ishtalitna Cre** 85.46 11 P P 00 15 53.5 -0.2
baz=206
PV23 **Carpenter Ridg** 85.47 48 P P 00 15 54.2 -0.6
PV23 IAmb IAmb 00 15 56.7
comp=Z,8.3nm,0.8s
PV16 **Nyswonger Mesa** 85.48 48 P P 00 15 54.3 -0.4
PV03 **Paradox Valley** 85.50 48 P P 00 15 55.3 +0.4
PV11 **David Mesa, Pa** 85.50 48 P P 00 15 54.7 -0.1
M29M **Somme Creek** 85.54 17 P P 00 15 53.9 -0.4
M29M IAmb IAmb 00 15 55.5
comp=Z,6.2nm,0.8s
M29M **Somme Creek** 85.54 17 P P 00 15 54.6 +0.3
baz=218
POKR **Poker Plat Res** 85.54 13 P P 00 15 54.6 +0.4
baz=210
PV21 **Cone Mtn., Par** 85.55 47 P P 00 15 55.2 +0.1
J25K **Salcha River,** 85.55 14 P P 00 15 53.9 -0.4
J25K IAmb IAmb 00 15 54.9
comp=Z,8.0nm,0.8s
J25K **Salcha River,** 85.55 14 P P 00 15 54.5 +0.2
baz=212
PV02 **Paradox Valley** 85.56 48 P P 00 15 55.1 0.0
PV02 IAmb IAmb 00 16 10.6
comp=Z,9.3nm,1.2s
PV12 **Saucer Basin,** 85.56 48 P P 00 15 54.9 -0.3
PV12 IAmb IAmb 00 15 56.5
comp=Z,7.7nm,0.9s
N31M **Braeburn, Yuko** 85.60 19 P P 00 15 54.6 +0.1
N31M IAmb IAmb 00 15 55.9
comp=Z,9.5nm,0.9s
N31M **Braeburn, Yuko** 85.60 19 P P 00 15 55.0 +0.4
baz=220,SNR=5.9
P33M **Teslin, Yukon** 85.62 21 P P 00 15 55.3 +0.6
baz=223
PV01 **Paradox Valley** 85.65 48 P P 00 15 55.6 0.0
G21K **Allakaket** 85.67 10 P P 00 15 54.8 +0.1
baz=204
PV22 **Blue Mesa, Par** 85.67 48 P P 00 15 55.5 -0.1
R33M **Jennings River** 85.68 22 P P 00 15 55.7 +0.6
R33M IAmb IAmb 00 15 57.6
comp=Z,7.9nm,1.1s
R33M **Jennings River** 85.68 22 P P 00 15 56.3 +1.2
baz=225,SNR=9.6
TX31 **Lajitas Ar. Si** 85.79 58 P P 00 15 57.8 +1.4
TX31 IAmb IAmb 00 15 59.1
comp=Z,11nm,0.9s
TXAR **Lajitas Array** 85.79 58 P P 00 15 57.8 +1.4
TXAR **Lajitas Array** 85.79 58 P P 00 15 58.8 +2.5
comp=Z,7.4nm,0.8s,baz=205,slow=5.5,SNR=8.4
comp=Z,7.4nm,0.8s
PV15 **Paradox Valley** 85.80 48 P P 00 15 56.2 -0.2
PV15 IAmb IAmb 00 15 58.0
comp=Z,8.7nm,1.2s
XAN **Xi'an** 85.81 307 ⇓P P 00 15 57.6 +1.4
XAN pmax pmax
comp=Z,37nm,1.0s
ANMO **Albuquerque** 85.84 52 P P 00 15 56.5 -0.1
ANMO IAmb IAmb 00 15 58.5
comp=Z,7.2nm,1.0s
ANMO **Albuquerque** 85.84 52 P P 00 15 57.9 +1.3
baz=246
K27K **Chicken** 85.85 15 P P 00 15 56.3 +0.6
K27K IAmb IAmb 00 15 57.2
comp=Z,7.7nm,1.1s
K27K **Chicken** 85.85 15 P P 00 15 56.8 +1.2
baz=215
J26L **Joseph Creek** 85.88 14 P P 00 15 56.0 +0.1
J26L IAmb IAmb 00 15 57.2
comp=Z,10nm,0.9s
J26L **Joseph Creek** 85.88 14 P P 00 15 56.7 +0.8
baz=213,SNR=5.1
MCMT **McKenzie Canyo** 85.88 41 P P 00 15 57.4 +0.8
AHID **Auburn Hatcher** 86.01 43 P P 00 15 57.3 +0.2
RDMU **Red Mountain** 86.03 45 P P 00 15 57.7 +0.3
ALPN **Alpine** 86.21 57 P P 00 15 58.9 +0.6
ALPN IAmb IAmb 00 16 01.9
comp=Z,6.5nm,0.9s
MSO **Missoula** 86.21 38 P P 00 15 57.4 -0.6
MSO **Missoula** 86.21 38 P P 00 15 57.9 -0.1
baz=240
N32M **Quiet Lake** 86.22 20 P P 00 15 57.6 +0.1
N32M IAmb IAmb 00 15 58.6
comp=Z,11nm,0.9s
DLMT **Dillon** 86.30 40 P P 00 15 59.0 +0.6
DLMT IAmb IAmb 00 15 59.9
comp=Z,6.8nm,0.8s
TPAW **Teton Pass** 86.45 42 IAmb IAmb 00 16 00.5
comp=Z,8.9nm,1.1s
REDW **Red Top Meadow** 86.45 43 P P 00 15 59.7 +0.4
FXWY **Fox Creek** 86.47 42 P P 00 15 59.8 +0.4
SNOW **Snow King Moun** 86.56 42 P P 00 16 00.7 +0.8
SNOW IAmb IAmb 00 16 02.0
comp=Z,15nm,0.9s
DAWY **Dawson** 86.57 16 IAmb IAmb 00 16 00.2
comp=Z,6.0nm,0.9s
DAWY **Dawson** 86.57 16 P P 00 15 59.5 +0.4
baz=217
M31M **Drury Creek, Y** 86.57 19 P P 00 15 58.8 -0.4
baz=222
LRM **Limekiln Ridge** 86.61 40 P P 00 16 00.2 +0.2
IMW **Indian Meadow** 86.64 42 P P 00 16 01.0 +0.8
IMW IAmb IAmb 00 16 02.5
comp=Z,12nm,0.8s
I26K **Coal Creek Min** 86.65 14 P P 00 16 01.2 +1.8
EGAK **Eagle** 86.69 15 P P 00 16 00.2 +0.6
baz=215
S22A **4UR Ranch, Cre** 86.72 49 P P 00 16 01.0 +0.2
S22A IAmb IAmb 00 16 03.1
comp=Z,11nm,1.1s
S22A **4UR Ranch, Cre** 86.72 49 P P 00 16 02.0 +1.2
baz=245
LOHW **Long Hollow** 86.73 42 IAmb IAmb 00 16 02.5

comp=Z,5.4nm,0.8s
O20A White River Ci 86.75 46 P P 00 16 01.2 +0.5
QLMT Earthquake Lak 86.77 41 P P 00 16 01.9 +1.2
HHC Hu-ho-hao-te 86.78 314 eP P 00 16 02.4 +1.6
HHC pmax pmax
comp=Z,17nm,0.6s
HHC pmax pmax
comp=Z,86nm,4.0s
D19K Kuna River 86.86 7 P P 00 15 60.0 -0.4
baz=200
CLN7 Carlsbad 7 86.86 55 P P 00 16 01.2 -0.1
E20K Nigu River 86.88 8 P P 00 16 00.3 -0.2
baz=201
FLWY Flagg Ranch 86.88 42 P P 00 16 02.2 +0.9
FLWY IAmb IAmb 00 16 03.8
comp=Z,16nm,1.1s
OVMT Ovando 86.89 39 P P 00 16 01.2 +0.1
K29M Barlow Dome 86.90 17 P P 00 16 01.2 +0.4
baz=219
YHL Hebgen Lake 86.94 41 P P 00 16 03.1 +1.5
YHL IAmb IAmb 00 16 04.4
comp=Z,13nm,0.9s
BOZ Bozeman (W) 87.01 40 P P 00 16 01.8 0.0
BOZ Bozeman (W) 87.01 40 P P 00 16 02.7 +0.9
baz=242
HTMS Hat Mesa 87.02 55 P P 00 16 02.2 +0.1
BW06 Boulder Array 87.02 43 P P 00 16 02.2 +0.2
BW06 IAmb IAmb 00 16 03.0
comp=Z,4.7nm,0.7s
BW06 Boulder Array 87.02 43 P P 00 16 02.6 +0.6
baz=243
PD31 Pinedale Array 87.02 43 P P 00 16 02.0 0.0
PD31 IAmb IAmb 00 16 03.0
comp=Z,4.6nm,0.7s
PDAR Pinedale Array 87.02 43 P P 00 16 01.6 -0.4
PDAR Pinedale Array 87.02 43 P P 00 16 02.5 +0.5
comp=Z,4.4nm,0.7s,baz=226,slow=3.0,SNR=32
comp=Z,4.4nm,0.7s
H17A Grant Village 87.11 42 P P 00 16 03.2 +0.8
H17A IAmb IAmb 00 16 06.1
comp=Z,9.2nm,0.8s
H17A Grant Village 87.11 42 P P 00 16 05.1 +2.7
baz=242
SMCO Snowmass 87.22 48 P P 00 16 04.0 +0.8
SAND Sanderson 87.27 58 P P 00 16 04.0 +0.7
MNHN Monahans 87.28 56 P P 00 16 03.1 -0.1
B18K Kokolik River 87.28 6 P P 00 16 04.5 +2.2
baz=196
HRY Holter Researc 87.42 39 P P 00 16 04.0 +0.4
PHRA Phrae 87.43 290 P P 00 16 04.5 +0.4
KMI Kunming 87.46 297 ⇓P P 00 16 06.4 +2.0
KMI pmax pmax
comp=Z,15nm,1.1s
TOAD Toad River Com 87.49 25 P P 00 16 04.3 +0.7
baz=230
YMP Mirror Lake Pl 87.53 42 P P 00 16 05.3 +0.9
I28M Miner Creek 87.54 15 P P 00 16 03.7 -0.1
I28M IAmb IAmb 00 16 04.1
comp=Z,6.3nm,1.0s
SDCO Great Sand Dun 87.68 49 P P 00 16 04.4 -0.9
baz=246
ODSA Odessa 87.73 55 P P 00 16 06.0 +0.6
ODSA IAmb IAmb 00 16 07.4
comp=Z,11nm,0.9s
J30M Hart River 87.80 17 P P 00 16 05.0 0.0
CRAI Chiangrai 87.87 292 P P 00 16 06.6 +0.4
MMPY Sheldon Lake, 87.87 20 P P 00 16 05.8 +0.5
MMPY IAmb IAmb 00 16 06.4
comp=Z,4.8nm,0.8s
MMPY Sheldon Lake, 87.87 20 P P 00 16 05.8 +0.5
baz=224,SNR=7.3
F25K Christian Rive 88.05 12 P P 00 16 07.0 +1.0
baz=211
RWWY Rawlins 88.12 45 P P 00 16 06.8 -0.4
RWWY IAmb IAmb 00 16 08.4
comp=Z,5.4nm,0.9s
TGTN Hyland Airport 88.12 22 P P 00 16 07.6 +1.1
baz=227
MSTX Muleshoe 88.25 54 P P 00 16 07.7 -0.1
MSTX IAmb IAmb 00 16 09.5
comp=Z,9.2nm,0.8s
RLMT Red Lodge 88.27 41 P P 00 16 08.3 +0.6
RLMT IAmb IAmb 00 16 10.1
comp=Z,7.7nm,1.1s
RLMT Red Lodge 88.27 41 P P 00 16 09.5 +1.7
baz=243
I30M Mount Dempster 88.29 16 P P 00 16 07.0 -0.3
I30M IAmb IAmb 00 16 14.6
comp=Z,5.6nm,0.8s
DRIO Del Rio 88.30 59 P P 00 16 08.8 +0.7
OZNA Ozona 88.42 57 P P 00 16 08.1 -0.5
OZNA IAmb IAmb 00 16 10.8
comp=Z,11nm,0.9s
Q24A Divide 88.43 48 P P 00 16 09.1 +0.3
Q24A Divide 88.43 48 P P 00 16 09.7 +0.9
baz=246
CMAR Chiang Mai Arr 88.57 290 P P 00 16 11.0 +1.5
CMAR Chiang Mai Arr 88.57 290 P P 00 16 11.3 +1.8
comp=Z,6.1nm,0.7s,baz=105,slow=3.2,SNR=29
comp=Z,6.1nm,0.7s
N23A Red Feather La 88.65 46 P P 00 16 10.4 +0.7
N23A IAmb IAmb 00 16 12.7
comp=Z,7.8nm,1.1s
N23A Red Feather La 88.65 46 P P 00 16 11.3 +1.5
baz=246
PZH PanZhiHua 88.78 298 P P 00 16 12.0 +1.6
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,120nm,4.6s
SGCY Sterling City 88.78 56 P P 00 16 10.4 +0.2
SGCY IAmb IAmb 00 16 13.9
comp=Z,8.7nm,1.2s
POST Post 88.91 55 P P 00 16 10.9 +0.1
POST IAmb IAmb 00 16 12.2
comp=Z,7.6nm,0.8s
PHWY Pilot Hill 89.16 46 P P 00 16 11.8 -0.3
RTBA Rita Blanca 89.21 51 P P 00 16 12.7 +0.5
SN05 Snyder 5 89.32 55 P P 00 16 13.2 +0.5
SN05 IAmb IAmb 00 16 14.1
comp=Z,7.8nm,0.9s
JCT Junction City 89.33 58 P P 00 16 13.3 +0.4
JCT IAmb IAmb 00 16 14.7
comp=Z,6.8nm,0.8s
JCT Junction City 89.33 58 P P 00 16 13.6 +0.8
baz=249
AMTX Amarillo 89.43 53 P P 00 16 11.5 -1.7
AMTX IAmb IAmb 00 16 14.9
comp=Z,5.3nm,1.1s
AMTX Amarillo 89.43 53 P P 00 16 13.7 +0.5
baz=248
HNDO Hondo 89.43 59 P P 00 16 14.9 +1.6
ELIB Princess Elisa 89.72 187 dP P 00 16 14.7 +0.7
comp=Z,17nm,0.8s
APMT Aspermont 90.08 55 IAmb IAmb 00 16 17.8
comp=Z,12nm,1.1s
ABTX Abilene, Hawle 90.21 56 P P 00 16 17.6 +0.8
BRDY Brady 90.26 57 P P 00 16 18.0 +0.9
BRDY IAmb IAmb 00 16 18.9
comp=Z,7.2nm,1.0s
F31M Tsiigehtchic 90.67 16 P P 00 16 19.8 +1.8
baz=222
LAO LASA Array 90.86 41 P P 00 16 21.7 +2.1
baz=245
TROLL Troll, Antarti 90.88 180 ⇑P P 00 16 20.0 +0.6
comp=Z,787nm,0.8s
SNAA Sanae 91.17 179 P P 00 16 21.1 +0.4
SNAA IAmb IAmb 00 16 22.0
comp=Z,5.2nm,0.8s
SNAA Sanae 91.17 179 ⇑P P 00 16 20.8 +0.2
comp=Z,96nm,0.5s
SNAA Sanae 91.17 179 P P 00 16 21.1 +0.4
comp=Z,4.3nm,0.6s,baz=197,slow=8.0,SNR=20
comp=Z,4.3nm,0.6s
435B Jarrell 91.23 58 P P 00 16 21.4 -0.2
435B IAmb IAmb 00 16 23.9
comp=Z,9.8nm,0.9s
RSSD Black Hills 91.24 44 P P 00 16 21.5 -0.1
RSSD IAmb IAmb 00 16 23.0
comp=Z,9.6nm,1.1s
RSSD Black Hills 91.24 44 P P 00 16 22.9 +1.3
baz=247
VNA3 Neumayer Olymp 91.32 176 ⇑P P 00 16 22.4 +1.1
comp=Z,33nm,0.8s
PLPT Palo Pinto 91.32 56 P P 00 16 22.6 +0.7
ELIS Ellis County 91.58 53 P P 00 16 24.1 +1.0

FW03 Perrin-Whitt E 91.60 56 P P 00 16 23.8 +0.5
WMOK Wichita Mounta 91.61 54 P P 00 16 24.1 +0.8
baz=250
VNA1 Neumayer--Stat 91.99 177 ⇑P P 00 16 25.7 +1.4
comp=Z,20nm,0.9s
ULN Ulaanbaatar 92.64 320 P P 00 16 28.4 +0.6
ULN IAmb IAmb 00 16 29.1
comp=Z,5.1nm,0.8s
DGMT Dagmar 92.83 40 P P 00 16 30.5 +1.9
baz=247
R32A Long Quarter, 92.91 51 P P 00 16 29.6 +0.5
SONM Songino Array 93.03 319 P P 00 16 29.8 +0.2
comp=Z,1.0nm,0.5s,baz=134,slow=4.9,SNR=8.4
comp=Z,1.0nm,0.5s
KAN13 South Haven SW 93.36 52 P P 00 16 31.5 +0.3
BLOK Blackwell 93.48 53 P P 00 16 31.9 +0.2
OK052 Battle Ridge R 93.55 54 P P 00 16 31.4 -0.7
OK052 IAmb IAmb 00 16 33.1
comp=Z,5.2nm,0.8s
QUOK Quay 93.68 53 P P 00 16 33.0 +0.3
K30B Basset 93.71 46 P P 00 16 33.4 +0.7
YKA Yellowknife Ar 93.86 25 P P 00 16 33.0 +0.2
comp=Z,2.4nm,0.7s,baz=248,slow=4.5,SNR=5.1
comp=Z,2.4nm,0.7s
KSU1 Kansas State U 94.68 51 P P 00 16 38.5 +1.3
KSU1 Kansas State U 94.68 51 P P 00 16 38.9 +1.7
baz=252
ECSD EROS Data Cent 96.13 46 P P 00 16 43.9 +0.3
baz=252
ZALV Calesovo Beam 107.70 322 PKiKP PKiKP 00 21 38.9 -0.6
comp=Z,1.6nm,0.6s,baz=177,slow=0.5,SNR=9.0
MKAR Makanchi Array 108.64 314 PKiKP PKiKP 00 21 41.1 -0.4
comp=Z,0.9nm,0.5s,baz=218,slow=1.0,SNR=16
MKAR PKKPbc PKKPbc 00 32 52.6 -0.6
comp=Z,0.7nm,0.7s,baz=270,slow=5.6,SNR=4.4
KURBB Kurchatov Arra 111.37 318 PKiKP PKiKP 00 21 46.0 -0.5
comp=Z,1.8nm,0.7s,baz=103,slow=1.8,SNR=18
BVAR Borovoye Array 116.32 321 PKP PKiKP 00 21 55.7 -0.2
comp=Z,5.4nm,0.6s,baz=104,slow=1.0,SNR=40
BRVK Borovoye 116.38 321 PKiKP 00 21 56.1 0.0
KKAR Karatay Array 116.85 310 PKiKP 00 21 57.1 -0.3
GAR Garm 117.00 305 PKPdf PKiKP 00 21 58.4 +0.5
KBL Kabul 117.89 300 PKPdf PKiKP 00 22 00.5 +0.7
SPITS Spitsbergen Ar 118.69 357 PKP PKiKP 00 21 59.9 -0.1
comp=Z,11nm,0.8s,baz=72,slow=5.4,SNR=9.9
ARU Arti 122.30 327 PKPdf PKiKP 00 22 07.2 -0.3
ARU Arti 122.30 327 PKP PKiKP 00 22 07.1 -0.5
ABKAR Akbulak array 123.42 318 PKPdf PKiKP 00 22 09.1 -0.9
ARCES ARCESS Array B 125.73 350 PKP PKiKP 00 22 13.7 -0.3
comp=Z,8.8nm,0.8s,baz=14,slow=5.5,SNR=32
BOSA Boshof 128.85 207 PKP PKiKP 00 22 22.2 +0.5
comp=Z,2.5nm,0.8s,baz=180,slow=4.0,SNR=1.1
FINES FINESS Array B 132.60 344 PKhKP PKPpre 00 22 15.4
comp=Z,3.6nm,1.0s,baz=104,slow=4.4,SNR=3.4
FINES PKP PKiKP 00 22 26.8 -1.2
comp=Z,3.5nm,0.6s,baz=60,slow=2.0,SNR=15
FINES SKPbc SKPab 00 25 10.1 +1.1
comp=Z,1.4nm,0.8s,baz=20,slow=4.4,SNR=4.5
NB2 NORSAR Subarra135.79 353 PKP PKiKP 00 22 33.2 -1.3
comp=Z,2.1nm,0.5s,baz=35,slow=2.6
NOA NORSAR Array B 135.79 353 PKP PKiKP 00 22 33.3 -1.3
comp=Z,0.9nm,0.5s,baz=59,slow=1.5,SNR=9.2
NOA SKPab SKPab 00 25 26.2 +3.1
comp=Z,0.9nm,0.8s,baz=350,slow=4.9,SNR=4.4
HFS Hagfors 136.35 351 PKhKP PKPpre 00 22 21.7
comp=Z,1.0nm,0.4s,baz=64,slow=6.8,SNR=14
HFS PKP PKiKP 00 22 34.0 -1.7
comp=Z,2.7nm,0.6s,baz=225,slow=0.4,SNR=5.2
RAYN Ar Rayn 138.39 286 PKPpre 00 22 31.2
AKASG Malin Array Be 139.99 333 PKhKP PKPpre 00 22 31.8
comp=Z,1.3nm,0.4s,baz=46,slow=4.2,SNR=6.0
AKASG PKP PKiKP 00 22 42.6 -0.7
comp=Z,2.3nm,0.5s,baz=39,slow=2.7,SNR=7.0
KIEV Kiev 140.00 333 PKPpre 00 22 34.0
KIEV Kiev 140.00 333 ⇑P PKPpre 00 22 35.7
KMBO Kilima Mbogo 140.25 246 PKhKP PKPpre 00 22 36.4
comp=Z,1.6nm,0.5s,baz=41,slow=8.3,SNR=6.9
EKA Eskdalemuir Ar 141.90 4 PKhKP PKPpre 00 22 38.9
comp=Z,3.0nm,0.8s,baz=327,slow=2.7,SNR=10
SORM Soroca 142.23 330 ⇑P PKPpre 00 22 41.6
KWP Karkaria Pacla 143.49 337 ePKP PKPdf 00 22 45.7 -1.4
VLDR Vladesti 143.96 328 ⇑P PKiKP 00 22 48.7 -3.0
LODK Lodwar 143.99 251 PKiKP 00 22 49.7 -3.1
TLCR 144.03 326 ⇑P PKiKP 00 22 48.5 -3.3
OJC Ojcow 144.03 340 ePKP PKPdf 00 22 47.3 -0.7
VARL Varlezi 144.04 328 ⇓P PKiKP 00 22 48.7 -3.2
BURAR Bucovina Array 144.05 332 PKPdf 00 22 48.0 -0.2
BURAR Bucovina Array 144.05 332 ⇓P PKiKP 00 22 48.7 -3.3
SCTR Scanteiesti 144.12 328 ⇓P PKiKP 00 22 49.2 -2.9
TATR Tatarca 144.15 328 ⇓P PKPbc 00 22 44.3 -3.4
GHRR 144.15 329 ⇓P PKiKP 00 22 50.0 -2.1
TESR Tescani 144.20 330 ⇓P PKPdf 00 22 48.5 +0.1
KOLS Kolonicke sedl 144.23 336 ePKP PKiKP 00 22 48.9 -3.3
KOLS e 00 40 01.4
JURR Jurilovca 144.27 326 ⇑P PKiKP 00 22 48.8 -3.5
NEGRR Negrea 144.28 328 ⇓P PKiKP 00 22 49.5 -2.8
BR131 Keskin Array S 144.29 315 PKPdf 00 22 49.0 0.0
BRTR Keskin Array B 144.29 315 PKPdf 00 22 48.8 -0.2
BRTR Keskin Array B 144.29 315 PKP PKPdf 00 22 49.0 0.0
comp=Z,12nm,0.8s,baz=140,slow=5.6,SNR=61
SLCR Slobozia Conac 144.29 328 ⇑P PKiKP 00 22 49.7 -2.7
SCHL Schela 144.32 328 ⇓P PKiKP 00 22 49.5 -2.9
IZVR Izvoarele 144.33 328 ⇑P PKiKP 00 22 49.7 -2.8
COSR Cosmesti PH 144.34 328 ⇑P PKiKP 00 22 50.4 -2.1
TUDR 144.34 328 ⇑P PKiKP 00 22 50.7 -1.8
SCHLR Schela 144.34 328 ⇑P PKiKP 00 22 49.7 -2.8
KIRS Kirsehir-Merke 144.38 314 ⇓P PKiKP 00 22 49.5 -3.4
CFR Carcaliu 144.39 327 ⇓P PKiKP 00 22 49.2 -3.4
PANC Panciu 144.41 329 ⇓P PKiKP 00 22 50.0 -2.6
ONER Baraj Valea Uz 144.45 330 ⇓P PKiKP 00 22 50.0 -2.7
TPGR Topolog 144.45 326 ⇑P PKiKP 00 22 50.2 -2.6
KSP Ksiaz 144.52 344 ePKP PKiKP 00 22 49.5 -3.2
NIE Niedzica 144.54 339 ePKP PKiKP 00 22 49.8 -3.1
CRVS Cervenica-Dubn 144.56 337 ePKP PKiKP 00 22 49.9 -3.0
VRI Vrancioaia 144.62 329 ⇑P PKiKP 00 22 50.2 -2.9
PLOR Plostina 144.67 329 ⇑P PKiKP 00 22 50.2 -3.1
BMR Baia Mare 144.75 334 ⇑P PKPab 00 22 49.7 -0.4
ANTO Ankara 144.78 316 PKiKP 00 22 50.8 -2.9
ANTO Ankara 144.78 316 ⇓P PKiKP 00 22 51.0 -2.7
OSTC Ostas 144.80 344⇑ePKP PKiKP 00 22 50.9 -2.4
CHVC Chvalec 144.82 344⇑ePKP PKiKP 00 22 50.6 -2.8
HARR Harsova 144.82 327 ⇓P PKiKP 00 22 50.9 -2.6
ARCR ARCALIA 144.83 333 ⇑P PKPab 00 22 50.0 -0.5
TURR Turia 144.83 330 ⇓P PKiKP 00 22 51.4 -2.2
TLBR Topalu 144.86 326 ⇑P PKiKP 00 22 51.0 -2.5
CLL Collm 144.88 347 ⇓iPKPbc PKPab 00 22 50.1 -0.4
comp=Z,90nm,1.2s
OKC Ostrava-Krasne 144.89 341⇑ePKP PKiKP 00 22 50.5 -3.0
COVR Voineasa-Covas 144.89 329 ⇓P PKPab 00 22 50.5 -0.3
UPC Upice 144.90 344⇑ePKP PKiKP 00 22 50.8 -2.7
OZUR 144.91 330 ⇑P PKiKP 00 22 51.2 -2.5
DPC Dobruska-Polom 144.96 343⇑ePKP PKiKP 00 22 51.3 -2.4
BOSR Bodos 144.99 330 ⇓P PKiKP 00 22 51.2 -2.7
TSMN Mangalia Port- 145.05 325 ⇓P PKiKP 00 22 55.9 +1.9
LANS Liptovska Anna 145.06 339 ePKP PKiKP 00 22 52.1 -1.8
LANS e 00 40 04.5
BRG Berggiesshubel 145.08 346 ePKP PKiKP 00 22 51.2 -2.7
BRG Amp 00 22 52.3
comp=Z,38nm,1.1s
KRLC Kraliky 145.08 343⇑ePKP PKiKP 00 22 51.3 -2.7
MORC Moravsky Berou 145.13 342 ePKP PKPab 00 22 50.9 -0.7
MORC Moravsky Berou 145.13 342 ⇓P PKiKP 00 22 51.5 -2.5
NEHR Nehoiu 145.15 329 ⇓P PKiKP 00 22 52.2 -2.0
DOPR Dopca 145.20 330 ⇓P PKiKP 00 22 52.4 -1.9
ISR Istrita 145.24 328 ⇑P PKiKP 00 22 52.4 -2.1
PVCC Pansea Ves 145.25 345⇓ePKP PKiKP 00 22 51.9 -2.7
MLR Muntele Rosu 145.28 329 ⇓P PKPab 00 22 51.7 -0.7
RICC Richard 145.35 346⇑ePKP PKiKP 00 22 52.2 -2.2
MESR Meseseni 145.39 334 ⇓P PKiKP 00 22 53.1 -1.5
CBBR Cluj-Babes-Bol 145.43 333 ⇑P PKPdf 00 22 49.4 -1.2
HSKC Hora Svate Kat 145.44 347⇑ePKP PKiKP 00 22 52.1 -2.6
CJR Cluj-Napoca 145.45 333 ⇑P PKiKP 00 22 53.1 -1.8
MDB Medias 145.54 331 ⇑P PKiKP 00 22 53.7 -1.2
LEHL Lehliu 145.55 327 ⇑P PKiKP 00 22 53.1 -1.9
LTVH Ltavrtes, Hu 145.63 335 ⇑P PKiKP 00 22 53.4 -1.7
PRA Prague 145.71 345⇑ePKP PKiKP 00 22 53.1 -2.1
MMAI Mount Meron Ar 145.72 304 PKPbc PKiKP 00 22 54.0 -1.8
comp=Z,34nm,0.7s,baz=60,slow=4.9,SNR=71
VOIR 145.75 330 ⇑P PKPab 00 22 52.7 -1.5
PRU Pruhonice 145.76 345⇓ePKP PKiKP 00 22 53.1 -2.2
GOPC GO Pecny, Ondr 145.76 345⇓ePKP PKiKP 00 22 53.3 -2.0
DRGR 145.77 334 ⇓P PKiKP 00 22 53.6 -1.9
VRAC Vranov 145.82 342 ePKP PKiKP 00 22 53.4 -2.1

VRAC Vranov 145.82 342 ⇑P PKiKP 00 22 53.4 -2.1
VYHS Vyhne 145.84 339 ePKP PKiKP 00 22 53.4 -2.1
JAVC Velka Javorina 145.90 341 ePKP PKiKP 00 22 54.7 -1.0
BORR Bors 145.91 335 ⇓P PKiKP 00 22 53.7 -1.9
PSZ Piszkesteto 145.96 338 ⇓P PKiKP 00 22 54.1 -1.8
ARR Arges 146.00 330 ⇑P PKiKP 00 22 55.2 -0.9
KRUC Moravsky 146.10 342 ePKP PKPab 00 22 54.0 -1.4
TREC Trest 146.15 343⇑ePKP PKPab 00 22 54.1 -1.5
BSZH Besenyszg 146.34 337 ⇓P PKiKP 00 22 54.9 -1.6
LOT Lotru 146.34 331 ⇑P PKPab 00 22 54.8 -1.8
ZVC Zvikov 146.35 345⇑ePKP PKiKP 00 22 54.9 -1.6
ZVC ePKPAB PKPab 00 22 57.2 +0.8
HUMR Humele 146.44 329 ⇓P PKiKP 00 22 54.3 -2.6
MEM Membach 146.60 355 dPKP PKiKP 00 22 54.8 -2.2
SRO Srobarova 146.60 339 ePKP PKPab 00 22 56.2 -1.2
BTNL Ternell 146.61 355 dPKP PKiKP 00 22 54.9 -2.2
SIRR Siria 146.63 334 ⇑P PKPab 00 22 56.2 -1.4
BSTI Sart Tilman 146.66 355 dPKP PKiKP 00 22 55.4 -1.7
GRF Grafenberg Arr 146.77 348 ePKP PKiKP 00 22 55.9 -1.5
baz=17,slow=2.0
KHC Kasperske Hory 146.79 345 ePKPDF PKPbc 00 22 53.3 -2.1
KHC ⇑ePKP PKPab 00 22 56.2 -2.0
KHC ePKPAB PKiKP 00 22 59.5 +2.0
GZR Gura Zlata 146.83 332 ⇓P PKiKP 00 22 55.9 -1.8
SURR Surduc 146.84 333 ⇓P PKiKP 00 22 56.3 -1.4
BCLA Clavier 146.85 356 dPKP PKiKP 00 22 55.1 -2.4
BHOU Houvegnez 146.85 355 dPKPdf PKPbc 00 22 53.8 -1.7
BHOU dPKP PKPab 00 22 56.3 -2.0
CKRC Cesky Krumlov 146.90 344 ePKPDF PKPbc 00 22 53.9 -1.8
CKRC ⇑ePKP PKPab 00 22 56.7 -1.9
BGES Gesves 146.90 356 dPKP PKiKP 00 22 55.4 -2.2
BGES dPKiKP PKPab 00 22 57.6 -0.9
BMRD Maredsous 147.00 356 dPKP PKiKP 00 22 55.9 -2.0
GERES GERESS Array B 147.03 345 PKPbc PKPbc 00 22 54.3 -1.9
GERES GERESS Array B 147.03 345 PKPbc PKiKP 00 22 56.7 -1.4
comp=Z,12nm,0.9s,baz=166,slow=6.9,SNR=39
ELND Elena 147.11 326 ⇑P PKiKP 00 22 56.8 -1.5
VLAD Vladila 147.11 329 ⇓P PKPab 00 22 57.3 -2.3
RCHB Rochefort 147.12 356 dPKP PKiKP 00 22 56.7 -1.4
BZS Buzias 147.16 334 ⇓P PKiKP 00 22 56.5 -1.9
SRE Strehaia 147.20 331 ⇑P PKPab 00 22 57.9 -2.0
DOU Dourbes 147.22 356 dPKPdf PKPbc 00 22 54.2 -2.3
DOU dPKP PKiKP 00 22 56.8 -1.5
CONA Conrad Observa 147.28 342 iPKP PKPab 00 22 57.8 -2.4
comp=Z,23nm,0.6s,SNR=24
RONA Rosalia, Austr 147.35 341 iPKP PKiKP 00 22 57.9 -0.9
comp=Z,30nm,0.9s,SNR=20
HERR Herculane 147.39 332 ⇓P PKiKP 00 22 57.6 -1.2
BAND Balkesir-Ban 147.50 320 ⇑P PKiKP 00 22 57.6 -1.6
WLF Walferdange 147.52 354 dPKP PKiKP 00 22 58.2 -0.7
BANR Banloc 147.56 334 ⇓P PKPab 00 22 59.0 -2.3
BAIL Bailesti 147.61 330 ⇑P PKiKP 00 22 58.5 -0.8
PUNG Punghina 147.61 331 ⇑P PKPbc 00 22 56.8 -0.9
MDVR Moldovita 147.78 332 ⇑P PKiKP 00 22 58.5 -1.2
MOA Molln 147.80 344 iPKP PKiKP 00 22 58.6 -1.0
comp=Z,24nm,1.2s,SNR=10
VALD Valchedram 147.81 329 P PKiKP 00 22 58.0 -1.7
MORH Mrgy, Hungar 147.85 337 ⇓P PKiKP 00 22 58.8 -0.9
DIM Dimitrovgrad 147.88 325 P PKiKP 00 22 59.0 -0.9
MPEP Malo Peshtene 147.91 329 P PKiKP 00 22 59.0 -1.0
ARSA Arzberg 147.99 342 iPKP PKiKP 00 22 59.0 -1.0
comp=Z,16nm,1.2s
BIOA Bad Ischl, Aus 148.11 344 iPKP PKiKP 00 22 59.2 -1.1
comp=Z,14nm,1.1s,SNR=12
FRGS Fruska Gora 148.28 335⇓iP PKiKP 00 22 59.7 -1.0
KDZ Kurdzhali 148.29 325 P PKiKP 00 22 59.0 -1.8
BFO Black Forest 148.58 351 PKPdf PKPbc 00 22 56.3 -3.8
LESA Schwarzleotal 148.60 345 iPKP PKiKP 00 23 00.7 -0.7
comp=Z,13nm,0.4s
SOKA Soboth 148.65 342 iPKP PKiKP 00 23 00.4 -1.1
comp=Z,8.5nm,0.6s,SNR=14
BOVS Bovan 148.68 331 ⇓P PKiKP 00 23 00.0 -1.5
VTS Vitosha 148.70 328 P PKiKP 00 23 01.0 -0.8
GROS Grobnik 148.70 341 ePKPbc PKiKP 00 23 00.3 -1.3
PLNA Plana 148.71 328 P PKiKP 00 23 01.0 -0.8
KBA Koelnbreinsper 148.75 344 iPKP PKiKP 00 23 00.6 -1.2
comp=Z,19nm,0.5s,SNR=19
TEKS Tekeris 148.90 335⇓iP PKiKP 00 23 01.0 -1.0
WATA Walderalm 148.94 347 iPKP PKiKP 00 23 01.4 -0.8
comp=Z,18nm,0.6s,SNR=16
OBKA Obir 148.94 342 iPKP PKiKP 00 23 00.7 -1.4
comp=Z,6.5nm,0.9s
OBKA Obir 148.94 342⇑iP PKiKP 00 23 00.1 -2.0
RETA Reutte 148.97 348 iPKP PKiKP 00 23 01.6 -0.5
comp=Z,9.0nm,0.5s,SNR=13
WTTA Wattenberg 148.99 346 iPKP PKiKP 00 23 01.8 -0.5
comp=Z,41nm,0.6s,SNR=25
MOTA Moosalm 149.03 347 iPKP PKiKP 00 23 01.8 -0.6
comp=Z,31nm,1.0s
MYKA Terra Mystica 149.09 344 iPKP PKiKP 00 23 01.2 -1.1
comp=Z,23nm,0.5s,SNR=17
SQTA Sankt Quirin 149.13 347 iPKP PKiKP 00 23 02.1 -0.4
comp=Z,29nm,0.6s,SNR=18
GCIS Gornji Cirnik 149.19 340 iPKPbc PKiKP 00 23 02.0 -0.5
MMB Musomishta 149.21 326 P PKiKP 00 23 01.0 -1.7
ABTA Abfaltersbach 149.27 345 iPKP PKiKP 00 23 01.8 -1.0
comp=Z,34nm,0.6s,SNR=20
KKB Krupnik 149.32 327 P PKiKP 00 23 02.0 -0.9
DAVA Damuels 149.33 349 iPKP PKiKP 00 23 02.6 -0.4
comp=Z,39nm,0.9s,SNR=17
CRNS Crni Vrh 149.42 342 iPKPbc PKiKP 00 23 02.2 -0.9
FETA Feichten 149.42 347 iPKP PKiKP 00 23 02.8 -0.3
comp=Z,31nm,1.1s,SNR=14
BBLS Lazi&#263i 149.51 334⇓iP PKiKP 00 23 03.1 -0.2
A051A Mrakovica 149.51 338⇓iP PKiKP 00 23 02.8 -0.5
PRIJ Prijedor 149.61 338 ePKP PKiKP 00 23 03.6 +0.2
BOJS Bojanci 149.64 341⇑iP PKiKP 00 23 02.9 -0.5
BLY Banja Luka 149.64 338⇓iP PKiKP 00 23 03.3 -0.2
CEY Cerknica 149.68 342⇓iP PKiKP 00 23 02.8 -0.8
RUDO Rudo 149.72 334 eP PKiKP 00 23 02.7 -1.0
SJES Sjenica 149.75 333⇑iP PKiKP 00 23 03.1 -0.8
SKDS Skadanscina 149.98 342⇑iP PKiKP 00 23 03.0 -1.2
VAY Valandovo 149.99 327 iP PKiKP 00 23 03.5 -0.8
A050A Klekovaca 150.11 338⇓iP PKiKP 00 23 03.9 -0.6
UPM Unac-Piva 150.26 334 eP PKiKP 00 23 04.0 -1.0
BRY Bratogost 150.66 334 eP PKiKP 00 23 05.0 -0.8
PDG Podgorica 150.73 332⇓iP PKiKP 00 23 05.2 -0.6
PDG Podgorica 150.73 332 ⇑P PKiKP 00 23 05.7 -0.6
TREB Trebinje 150.89 334 eP PKiKP 00 23 05.4 -0.7
DRME Dracevica, Mon 150.96 332 eP PKiKP 00 23 05.9 -0.4
STON Ston 151.03 335 eP PKPbc 00 23 04.4 -1.6
OHR Ohrid 151.04 329 iP PKiKP 00 23 06.9 +0.3
TIR Tirane 151.31 330 ⇓P PKiKP 00 23 07.9 +0.9
FDMO Fiordimonte 152.53 341 PKPab PKPab 00 23 23.1 +0.9
INTR Introdacqua 153.19 339 PKPdf PKPdf 00 23 01.0 -2.0
PGAV Gavieira, Arco 154.07 17 ePKPab PKPab 00 23 29.0 +0.2
TIP Timpagrande 154.47 332 ⇑P PKPbc 00 23 14.5 +0.8
PBRG Braganca 154.61 14 ePKPab PKPab 00 23 32.1 +1.0
POLO Lamas de Olo 154.75 16 ePKPab PKPab 00 23 32.3 +0.6
PVRL Vila Real 154.86 16 ePKPab PKPab 00 23 32.8 +0.6
MVO Moncorvo 155.15 15 ePKPdf PKPdf 00 23 06.0 +0.3
MVO Moncorvo 155.15 15 ePKPab PKPab 00 23 34.0 +0.6
PVIS Viseu 155.34 17 ePKPab PKPab 00 23 34.6 +0.4
PCAS Casmilo, Conde 155.77 19 ePKPab PKPab 00 23 36.5 +0.5
PSBE So Bento 156.16 20 ePKPab PKPab 00 23 38.3 +0.5
PMRV Marv??o 156.67 18 ePKPab PKPab 00 23 40.4 +0.4
PMTG Montargil 156.75 19 ePKPab PKPab 00 23 39.9 +0.4
ESDC Sonseca Array 157.24 11 PKPdf PKPdf 00 23 07.7 -0.8
ESDC PKPab 00 23 42.8 +0.3
ESDC Sonseca Array 157.24 11 PKP PKPdf 00 23 08.2 -0.3
comp=Z,0.6nm,0.7s,baz=325,slow=2.7,SNR=5.8
ESDC PKPab PKPab 00 23 42.4 -0.1
comp=Z,1.5nm,0.9s,baz=348,slow=4.6,SNR=7.9
EVO Evora 157.31 20 ePKPab PKPab 00 23 42.6 -0.1
PMAR Madeira 157.43 44 ePKPab PKPab 00 23 44.2 +0.4
PBAR Barrancos 157.94 18 ePKPab PKPab 00 23 46.1 +0.6
PVAQ Vaqueiros 158.43 20 ePKPab PKPab 00 23 47.9 +0.3
KEST Kesra 160.38 341 PKPab PKPab 00 23 56.8 +0.5
comp=Z,4.5nm,0.9s,baz=326,slow=4.8,SNR=6.8
TORD Torodi Ar. Bea 175.84 183 PKPdf PKPdf 00 23 22.7 -0.3
TORD Torodi Ar. Bea 175.84 183 PKP PKPdf 00 23 22.6 -0.4
comp=Z,2.4nm,0.8s,baz=349,slow=2.4,SNR=11
TORD PKPab PKPab 00 25 05.5 +0.6
comp=Z,0.8nm,0.7s,baz=161,slow=2.4,SNR=7.0

**ROM 20 00:06:48.5±0.1, 41°863N±0.006×14°862E±0.006, h21km±1km, ML1.7/34, 1C-6D, Error ellipse: s-maj=0.7km s-min=0.2km az=21.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FRES** | **Fresagrandinar** | **0.18** | **308** | ⇓P | Pb | 00 06 53.7 | -0.7 |
| FRES | | | | S | Sb | 00 06 56.7 | -2.0 |
| FRES | | | | AML | AML | | |
| | comp=E,532µm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,332µm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,266µm,0.1s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,431µm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **171** | P | Pb | 00 06 55.0 | +0.5 |
| CIGN | | | | S | Sb | 00 06 58.4 | -0.3 |
| **MELA** | **Melanico ??? S** | **0.25** | **128** | ⇓P | Pb | 00 06 54.4 | -0.3 |
| MELA | | | | S | Sb | 00 06 58.9 | -0.1 |
| MELA | | | | AML | AML | | |
| | comp=E,726µm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,553µm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,806µm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,706µm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,954µm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,1054µm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,707µm,0.5s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,532µm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,416µm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,626µm,0.1s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,488µm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,481µm,0.5s | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **174** | ⇓P | Pb | 00 06 57.0 | +1.0 |
| GATE | | | | AML | AML | | |
| | comp=N,392µm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,394µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,402µm,0.3s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,398µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,392µm,0.5s | | | | | | |
| **BSSO** | **Busso** | **0.38** | **213** | ⇑P | Pb | 00 06 56.7 | +0.3 |
| BSSO | | | | S | Sb | 00 07 03.0 | +1.2 |
| BSSO | | | | AML | AML | | |
| | comp=E,540µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,730µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,224µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,541µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,730µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,319µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,21µm,0.8s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,15µm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,71µm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,58µm,0.3s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.48** | **194** | ⇓P | Pb | 00 06 58.2 | -0.1 |
| SACR | | | | S | Sb | 00 07 05.7 | +0.8 |
| SACR | | | | AML | AML | | |
| | comp=N,936µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,1870µm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,990µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,1795µm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,388µm,1.2s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,413µm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,103µm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,94µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,52µm,0.7s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,40µm,0.4s | | | | | | |
| **APRC** | **Apricena** | **0.52** | **101** | P | Pb | 00 06 59.1 | +0.1 |
| APRC | | | | S | Sb | 00 07 06.2 | 0.0 |
| APRC | | | | AML | AML | | |
| | comp=E,2040µm,0.4s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,3845µm,0.9s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,71µm,0.5s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,48µm,0.1s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,104µm,0.8s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.54** | **290** | P | Pb | 00 06 59.6 | +0.2 |
| LPEL | | | | S | Sb | 00 07 07.4 | +0.6 |
| LPEL | | | | AML | AML | | |
| | comp=E,2710µm,0.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,2795µm,1.0s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,2100µm,0.8s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,2385µm,0.4s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,140µm,0.1s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.54** | **156** | P | Pb | 00 06 59.7 | +0.2 |
| MOCO | | | | AML | AML | | |
| | comp=E,243µm,0.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,165µm,0.3s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,248µm,0.6s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,174µm,0.3s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.55** | **253** | P | Pb | 00 06 59.5 | -0.2 |
| RNI2 | | | | S | Sb | 00 07 08.2 | +0.9 |
| RNI2 | | | | AML | AML | | |
| | comp=E,3375µm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,3470µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,3670µm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,3725µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1290µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1430µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,3720µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,128µm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,31µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,86µm,0.3s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,87µm,0.4s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.60** | **217** | P | Pb | 00 06 60.0 | -0.5 |
| SGG | | | | S | Sb | 00 07 08.7 | +0.2 |
| **PSB1** | **Pescosannita** | **0.64** | **183** | P | Pb | 00 07 00.9 | -0.2 |
| **VAGA** | **Valle Agricola** | **0.65** | **227** | P | Pb | 00 07 00.7 | -0.6 |
| **SGRT** | **San Giovanni R** | **0.67** | **99** | P | Pb | 00 07 01.6 | 0.0 |
| SGRT | | | | S | Sb | 00 07 11.6 | +1.1 |
| SGRT | | | | AML | AML | | |
| | comp=E,2365µm,0.3s | | | | | | |
| SGRT | | | | AML | AML | | |
| | comp=N,2295µm,0.5s | | | | | | |
| **CERA** | **Filignano** | **0.69** | **248** | ⇓P | Pb | 00 07 01.1 | -0.8 |
| **VITU** | **Vitulano (BN)** | **0.70** | **194** | P | Pb | 00 07 01.8 | -0.3 |
| **INTR** | **Introdacqua** | **0.73** | **282** | ⇓P | Pb | 00 07 02.1 | -0.5 |
| INTR | | | | S | Sb | 00 07 13.0 | +0.8 |
| INTR | | | | AML | AML | | |
| | comp=E,1605µm,0.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,2040µm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,1175µm,0.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,2185µm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,40µm,0.1s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,50µm,0.1s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,47µm,0.1s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,33µm,0.1s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.80** | **101** | P | Pb | 00 07 03.9 | +0.2 |
| MSAG | | | | AML | AML | | |
| | comp=E,1595µm,0.6s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,4045µm,0.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,638µm,0.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,1715µm,0.5s | | | | | | |
| **SGTA** | **Sant Agata di** | **0.82** | **152** | P | Pb | 00 07 03.7 | -0.4 |
| **PIGN** | **Pignataro Magg** | **0.84** | **218** | P | Pn | 00 07 05.1 | 0.0 |
| **POFI** | **Posta Fibreno** | **0.87** | **261** | P | Pb | 00 07 04.4 | -0.6 |
| **CAFE** | **Carife** | **0.88** | **161** | P | Pb | 00 07 04.8 | -0.4 |
| **T0110** | **Collepietro** | **0.89** | **295** | P | Pb | 00 07 05.4 | +0.2 |
| T0110 | | | | S | Sn | 00 07 18.0 | -0.1 |
| T0110 | | | | AML | AML | | |
| | comp=E,2030µm,0.6s | | | | | | |
| T0110 | | | | AML | AML | | |
| | comp=N,1815µm,0.7s | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.93** | **271** | P | Pb | 00 07 05.4 | -0.6 |
| VVLD | | | | S | Sn | 00 07 18.6 | -0.5 |
| VVLD | | | | AML | AML | | |
| | comp=E,824µm,0.5s | | | | | | |
| VVLD | | | | AML | AML | | |
| | comp=N,911µm,0.9s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.93** | **305** | P | Pn | 00 07 06.4 | -0.1 |
| VCEL | | | | AML | AML | | |
| | comp=E,1705µm,0.5s | | | | | | |
| VCEL | | | | AML | AML | | |
| | comp=N,1585µm,0.5s | | | | | | |
| **SNAL** | **S. Angelo Dei** | **0.97** | **164** | P | Pb | 00 07 06.8 | +0.1 |
| **LRP** | **Arpino** | **0.98** | **258** | P | Pn | 00 07 07.6 | +0.6 |
| LRP | | | | AML | AML | | |
| | comp=E,515µm,0.5s | | | | | | |
| LRP | | | | AML | AML | | |
| | comp=N,508µm,1.4s | | | | | | |

*ROM **20** 00:07:04.9±0.1, 41°.863N±0°.004×14°.832E±0°.005, h20km, ML2.9/172, Error ellipse: s-maj=0.4km s-min=0.2km az=219.0*

*LDG **20** 00:07:08.8±0.4, 42°.03N×14°.78E, h10km, Ml2.9/12, Error ellipse: s-maj=12.1km s-min=6.9km az=35.0*

**ISC 20 00:07:04.3**±0.8, **41°.88N**±0°.02×**14°.82E**±0°.02, **h28**km±5km, **n132**, σ1§**89**/178, **4C-4D, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T1411** | **Guglionesi (CB** | **0.10** | **48** | ⇑P | **Pb** | **00 07 09.2** | **-0.1** |
| T1411 | | | | S | **Sb** | **00 07 12.5** | **-0.3** |
| T1411 | | | | AML | AML | | |
| | comp=N,42650µm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,74200µm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,42500µm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,73200µm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,74150µm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,73150µm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,42550µm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,42700µm,0.1s | | | | | | |
| **FRES** | **Fresagrandinar** | **0.15** | **311** | P | **Pb** | **00 07 10.0** | **+0.2** |
| FRES | | | | AML | AML | | |
| | comp=E,9980µm,0.1s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,5875µm,1.5s | | | | | | |
| **T1413** | **San Martino in** | **0.15** | **99** | P | **Pb** | **00 07 09.4** | **-0.3** |
| T1413 | | | | S | **Sb** | **00 07 13.0** | **-0.4** |
| T1413 | | | | AML | AML | | |
| | comp=E,17100µm,0.5s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=N,35800µm,0.4s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,13950µm,0.4s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=N,37350µm,0.4s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,16434µm,0.5s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,16434µm,1.5s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,17331µm,0.7s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.23** | **164** | ⇓P | **Pb** | **00 07 10.5** | **-0.2** |
| CIGN | | | | S | **Sb** | **00 07 14.8** | **-0.1** |
| CIGN | | | | AML | AML | | |
| | comp=N,4565µm,1.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,3395µm,0.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,3005µm,0.7s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,3398µm,0.6s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,4253µm,0.5s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.29** | **126** | ⇓P | **Pb** | **00 07 11.2** | **-0.1** |
| MELA | | | | S | **Sb** | **00 07 16.0** | **-0.1** |
| MELA | | | | AML | AML | | |
| | comp=E,6645µm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,7105µm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,6645µm,0.6s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,9255µm,0.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,6363µm,0.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,9825µm,0.4s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,6750µm,0.4s | | | | | | |
| **GATE** | **Gambatesa** | **0.37** | **169** | ⇓P | **Pb** | **00 07 13.4** | **+0.8** |
| GATE | | | | S | **Sn** | **00 07 19.9** | **-0.3** |
| GATE | | | | AML | AML | | |
| | comp=E,4350µm,1.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,2220µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,4365µm,1.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,4350µm,1.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,2385µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,4365µm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,4350µm,0.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,2220µm,0.4s | | | | | | |
| **BSSO** | **Busso** | **0.37** | **207** | ⇑P | **Pb** | **00 07 13.1** | **+0.4** |
| BSSO | | | | S | **Sb** | **00 07 19.0** | **+0.7** |
| BSSO | | | | AML | AML | | |
| | comp=N,2175µm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,735µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,1840µm,0.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,13500µm,1.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,14000µm,1.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,1840µm,1.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,886µm,0.4s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.49** | **190** | ⇑P | **Pb** | **00 07 14.5** | **+0.1** |
| SACR | | | | S | **Sb** | **00 07 22.0** | **+0.7** |
| SACR | | | | AML | AML | | |
| | comp=E,1790µm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,990µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,1870µm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,1795µm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,936µm,0.3s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.51** | **290** | P | **Pb** | **00 07 15.4** | **+0.6** |
| LPEL | | | | S | **Sb** | **00 07 23.5** | **+1.6** |
| LPEL | | | | AML | AML | | |
| | comp=N,2955µm,1.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,2710µm,0.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,2955µm,0.9s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.53** | **251** | P | **Pb** | **00 07 15.6** | **+0.4** |
| RNI2 | | | | S | **Sb** | **00 07 23.8** | **+1.3** |
| RNI2 | | | | AML | AML | | |
| | comp=E,3670µm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,3720µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,3470µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,3380µm,0.4s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,3357µm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,3357µm,1.8s | | | | | | |
| **APRC** | **Apricena** | **0.55** | **102** | P | **Pb** | **00 07 15.4** | **-0.1** |
| APRC | | | | S | **Sb** | **00 07 23.1** | **-0.1** |
| APRC | | | | AML | AML | | |
| | comp=N,3845µm,0.9s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,2040µm,0.4s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,3572µm,0.3s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,1891µm,0.2s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=E,2036µm,0.2s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.57** | **153** | ⇓P | **Pb** | **00 07 16.2** | **+0.4** |
| MOCO | | | | AML | AML | | |
| | comp=E,408µm,0.3s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=E,418µm,0.3s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,311µm,0.4s | | | | | | |
| MOCO | | | | AML | AML | | |
| | comp=N,284µm,0.4s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.59** | **214** | P | **Pb** | **00 07 16.2** | **0.0** |
| SGG | | | | AML | AML | | |
| | comp=E,3.0nm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,824µm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,782µm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,824µm,1.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,2.7nm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,2.0nm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,2.7nm,1.5s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.64** | **224** | ⇑P | **Pb** | **00 07 16.8** | **-0.1** |
| VAGA | | | | AML | AML | | |
| | comp=E,698µm,0.6s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,873µm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,872µm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,742µm,0.6s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,899µm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,899µm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,683µm,0.6s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,899µm,1.7s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,872µm,1.7s | | | | | | |
| **PSB1** | **Pescosannita** | **0.65** | **181** | P | **Pb** | **00 07 16.8** | **-0.4** |
| PSB1 | | | | S | **Sb** | **00 07 26.2** | **+0.3** |
| **CERA** | **Filignano** | **0.66** | **245** | P | **Pb** | **00 07 17.2** | **-0.2** |
| CERA | | | | AML | AML | | |
| | comp=E,867µm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,788µm,0.6s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,902µm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=E,866µm,0.4s | | | | | | |
| CERA | | | | AML | AML | | |
| | comp=N,820µm,0.4s | | | | | | |
| **INTR** | **Introdacqua** | **0.70** | **281** | P | **Pb** | **00 07 18.1** | **+0.2** |
| **SGRT** | **San Giovanni R** | **0.70** | **100** | P | **Pb** | **00 07 18.4** | **+0.4** |
| SGRT | | | | S | **Sb** | **00 07 27.7** | **+0.3** |
| SGRT | | | | AML | AML | | |
| | comp=N,2295µm,0.5s | | | | | | |
| SGRT | | | | AML | AML | | |
| | comp=E,2365µm,0.3s | | | | | | |
| **VITU** | **Vitulano (BN)** | **0.71** | **192** | P | **Pb** | **00 07 18.1** | **-0.1** |
| VITU | | | | S | **Sb** | **00 07 28.4** | **+0.9** |
| VITU | | | | AML | AML | | |
| | comp=E,1185µm,1.4s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,3175µm,0.4s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,1185µm,0.6s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=N,3095µm,0.4s | | | | | | |
| VITU | | | | AML | AML | | |
| | comp=E,3160µm,0.4s | | | | | | |
| **BIOG** | **Biogem** | **0.71** | **161** | P | **Pb** | **00 07 17.5** | **-0.8** |
| **MRB1** | **Monte Rocchett** | **0.76** | **171** | P | **Pb** | **00 07 19.6** | **+0.6** |
| MRB1 | | | | AML | AML | | |
| | comp=N,1500µm,0.7s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=N,1500µm,0.7s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=N,1620µm,0.7s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=E,1155µm,0.4s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=E,1225µm,0.4s | | | | | | |
| MRB1 | | | | AML | AML | | |
| | comp=N,1619µm,0.7s | | | | | | |
| **PIGN** | **Pignataro Magg** | **0.83** | **216** | P | **Pb** | **00 07 20.1** | **-0.1** |
| PIGN | | | | AML | AML | | |
| | comp=E,340µm,0.9s | | | | | | |
| PIGN | | | | AML | AML | | |
| | comp=N,309µm,0.5s | | | | | | |
| PIGN | | | | AML | AML | | |
| | comp=N,339µm,0.5s | | | | | | |
| PIGN | | | | AML | AML | | |
| | comp=E,312µm,0.9s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.83** | **101** | P | **Pb** | **00 07 19.9** | **-0.4** |
| MSAG | | | | S | **Sb** | **00 07 31.5** | **+0.4** |
| MSAG | | | | AML | AML | | |
| | comp=N,1715µm,0.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,1595µm,0.6s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=E,638µm,0.5s | | | | | | |
| MSAG | | | | AML | AML | | |
| | comp=N,4045µm,0.5s | | | | | | |
| **POFI** | **Posta Fibreno** | **0.84** | **260** | P | **Pb** | **00 07 20.5** | **0.0** |
| POFI | | | | AML | AML | | |
| | comp=E,553µm,0.8s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=N,684µm,0.5s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=N,625µm,0.5s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,536µm,1.4s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,536µm,0.6s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=E,552µm,0.8s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=N,684µm,1.5s | | | | | | |
| POFI | | | | AML | AML | | |
| | comp=N,625µm,1.5s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **SGTA** | **Sant Agata di** | **0.85 151** | P | **Pb** | **00 07 20.2** | **-0.3** |
| SGTA | | | S | **Sn** | **00 07 32.3** | **+0.3** |
| SGTA | | | AML | AML | | |
| | comp=N,1088μm,0.5s | | | | | |
| SGTA | | | AML | AML | | |
| | comp=E,1570μm,0.6s | | | | | |
| SGTA | | | AML | AML | | |
| | comp=E,1495μm,0.6s | | | | | |
| SGTA | | | AML | AML | | |
| | comp=N,1088μm,0.5s | | | | | |
| SGTA | | | AML | AML | | |
| | comp=E,1495μm,1.4s | | | | | |
| SGTA | | | AML | AML | | |
| | comp=E,1570μm,1.4s | | | | | |
| SGTA | | | AML | AML | | |
| | comp=N,1155μm,0.5s | | | | | |
| **MCI** | **Monte Cassino** | **0.85 243** | P | **Pb** | **00 07 20.5** | **0.0** |
| MCI | | | AML | AML | | |
| | comp=E,1011μm,1.6s | | | | | |
| MCI | | | AML | AML | | |
| | comp=N,630μm,0.9s | | | | | |
| MCI | | | AML | AML | | |
| | comp=E,1011μm,0.4s | | | | | |
| **T0110** | **Collepietro** | **0.85 295** | P | **Pb** | **00 07 20.9** | **+0.3** |
| T0110 | | | AML | AML | | |
| | comp=N,1815μm,0.7s | | | | | |
| T0110 | | | AML | AML | | |
| | comp=E,2030μm,0.6s | | | | | |
| T0110 | | | AML | AML | | |
| | comp=N,1815μm,1.3s | | | | | |
| **PAOL** | **Paolisi** | **0.87 193** | P | **Pb** | **00 07 20.5** | **-0.3** |
| **VCEL** | **Villa Celiera** | **0.89 306** | P | **Pb** | **00 07 21.9** | **+0.5** |
| VCEL | | | S | **Sn** | **00 07 34.5** | **+1.2** |
| VCEL | | | AML | AML | | |
| | comp=N,1585μm,0.5s | | | | | |
| VCEL | | | AML | AML | | |
| | comp=E,1705μm,0.5s | | | | | |
| **VVLD** | **Villa Vallelon** | **0.90 270** | P | **Pb** | **00 07 21.2** | **-0.1** |
| VVLD | | | AML | AML | | |
| | comp=N,911μm,0.9s | | | | | |
| VVLD | | | AML | AML | | |
| | comp=E,939μm,0.6s | | | | | |
| VVLD | | | AML | AML | | |
| | comp=N,911μm,1.1s | | | | | |
| **CAFE** | **Carife** | **0.90 160** | P | **Pb** | **00 07 21.3** | **-0.2** |
| CAFE | | | AML | AML | | |
| | comp=E,923μm,0.5s | | | | | |
| CAFE | | | AML | AML | | |
| | comp=E,971μm,0.5s | | | | | |
| CAFE | | | AML | AML | | |
| | comp=N,695μm,0.4s | | | | | |
| CAFE | | | AML | AML | | |
| | comp=N,739μm,0.4s | | | | | |
| CAFE | | | AML | AML | | |
| | comp=E,923μm,0.5s | | | | | |
| **RSF3** | **Rocca San Feli** | **0.95 164** | P | **Pn** | **00 07 22.0** | **0.0** |
| **LRP** | **Arpino** | **0.95 256** | P | **Pn** | **00 07 22.2** | **+0.4** |
| LRP | | | S | **Sn** | **00 07 36.0** | **+1.5** |
| LRP | | | AML | AML | | |
| | comp=N,509μm,1.4s | | | | | |
| LRP | | | AML | AML | | |
| | comp=E,515μm,0.5s | | | | | |
| LRP | | | AML | AML | | |
| | comp=N,508μm,1.4s | | | | | |
| **MTMR** | **Montemarano** | **0.97 172** | P | **Pn** | **00 07 22.2** | **+0.1** |
| MTMR | | | S | **Sn** | **00 07 35.8** | **+0.8** |
| MTMR | | | AML | AML | | |
| | comp=N,880μm,0.4s | | | | | |
| MTMR | | | AML | AML | | |
| | comp=E,784μm,0.5s | | | | | |
| MTMR | | | AML | AML | | |
| | comp=E,1660μm,0.5s | | | | | |
| MTMR | | | AML | AML | | |
| | comp=N,1790μm,0.3s | | | | | |
| **SNAL** | **S. Angelo Dei** | **0.99 163** | P | **Pn** | **00 07 22.6** | **0.0** |
| SNAL | | | S | **Sn** | **00 07 36.2** | **+0.5** |
| SNAL | | | AML | AML | | |
| | comp=E,820μm,0.4s | | | | | |
| SNAL | | | AML | AML | | |
| | comp=N,949μm,0.5s | | | | | |
| SNAL | | | AML | AML | | |
| | comp=E,835μm,1.1s | | | | | |
| SNAL | | | AML | AML | | |
| | comp=N,901μm,0.5s | | | | | |
| SNAL | | | AML | AML | | |
| | comp=E,835μm,0.9s | | | | | |
| SNAL | | | AML | AML | | |
| | comp=E,820μm,1.6s | | | | | |
| **LIO3** | **Lioni** | **1.01 164** | P | **Pn** | **00 07 23.0** | **+0.2** |
| **LIK** | **San Giovanni I** | **1.02 249** | P | **Pb** | **00 07 24.7** | **+1.5** |
| **AND3** | **Andretta** | **1.02 158** | P | **Pb** | **00 07 24.1** | **+0.7** |
| **CAPA** | **Cerignola FG** | **1.04 133** | P | **Pn** | **00 07 23.6** | **+0.5** |
| CAPA | | | AML | AML | | |
| | comp=E,602μm,0.8s | | | | | |
| CAPA | | | AML | AML | | |
| | comp=N,676μm,1.1s | | | | | |
| **NSC3** | **Nusco** | **1.05 167** | P | **Pn** | **00 07 23.9** | **+0.6** |
| **PTQR** | **Pietraquaria** | **1.07 278** | P | **Pn** | **00 07 24.1** | **+0.5** |
| **VVDG** | **Vesuvio Valle** | **1.08 196** | P | **Pb** | **00 07 25.2** | **+0.7** |
| **GIGS** | **Gran Sasso** | **1.09 302** | P | **Pn** | **00 07 24.6** | **+0.7** |
| GIGS | | | AML | AML | | |
| | comp=E,154μm,1.0s | | | | | |
| GIGS | | | AML | AML | | |
| | comp=N,135μm,0.5s | | | | | |
| **CRTO** | **Cratere Ovest,** | **1.10 196** | P | **Pb** | **00 07 25.7** | **+1.0** |
| **OVO** | **Vesuviano** | **1.10 197** | P | **Pb** | **00 07 25.6** | **+1.0** |
| **VCRE** | **Vesuvio Crater** | **1.10 196** | P | **Pb** | **00 07 25.8** | **+1.1** |
| **VTIR** | **Vesuvio Tirone** | **1.11 196** | P | **Pb** | **00 07 25.5** | **+0.5** |
| VTIR | | | AML | AML | | |
| | comp=E,456μm,0.5s | | | | | |
| VTIR | | | AML | AML | | |
| | comp=N,308μm,0.6s | | | | | |
| VTIR | | | AML | AML | | |
| | comp=E,456μm,1.5s | | | | | |
| VTIR | | | AML | AML | | |
| | comp=N,308μm,0.6s | | | | | |
| **MCRV** | **Calabrutti - M** | **1.12 166** | P | **Pb** | **00 07 25.8** | **+0.6** |
| MCRV | | | S | **Sb** | **00 07 40.3** | **+0.9** |
| MCRV | | | AML | AML | | |
| | comp=E,746μm,1.1s | | | | | |
| MCRV | | | AML | AML | | |
| | comp=N,700μm,0.5s | | | | | |
| **RDM3** | **Ruvo Del Monte** | **1.14 151** | P | **Pb** | **00 07 25.8** | **+0.4** |
| **TERO** | **Teramo** | **1.17 310** | P | **Pn** | **00 07 26.1** | **+1.2** |
| **SNR3** | **Senerchia** | **1.17 166** | P | **Pb** | **00 07 26.7** | **+0.7** |
| **GIUL** | **Giuliano Di Ro** | **1.21 255** | P | **Pn** | **00 07 26.6** | **+1.1** |
| GIUL | | | AML | AML | | |
| | comp=E,214μm,0.6s | | | | | |
| GIUL | | | AML | AML | | |
| | comp=N,238μm,0.9s | | | | | |
| **CAMP** | **Campotosto** | **1.24 303** | P | **Pn** | **00 07 27.3** | **+1.4** |
| CAMP | | | S | **Sb** | **00 07 44.0** | **+1.2** |
| CAMP | | | AML | AML | | |
| | comp=N,364μm,0.7s | | | | | |
| CAMP | | | AML | AML | | |
| | comp=E,324μm,0.6s | | | | | |
| **COL3** | **Colliano** | **1.25 162** | P | **Pn** | **00 07 26.9** | **+0.9** |
| **PALZ** | **Palazzo San Ge** | **1.27 137** | P | **Pb** | **00 07 28.2** | **+0.6** |
| PALZ | | | AML | AML | | |
| | comp=N,626μm,1.2s | | | | | |
| PALZ | | | AML | AML | | |
| | comp=N,607μm,0.7s | | | | | |
| PALZ | | | AML | AML | | |
| | comp=E,693μm,1.1s | | | | | |
| PALZ | | | AML | AML | | |
| | comp=N,607μm,1.3s | | | | | |
| **SCL3** | **Muro Lucano (S** | **1.29 156** | P | **Pn** | **00 07 27.8** | **+1.2** |
| **FIAM** | **Fiamignano** | **1.33 288** | P | **Pb** | **00 07 28.7** | **+0.1** |
| FIAM | | | AML | AML | | |
| | comp=N,389μm,0.5s | | | | | |
| FIAM | | | AML | AML | | |
| | comp=E,266μm,0.9s | | | | | |
| FIAM | | | AML | AML | | |
| | comp=N,389μm,0.5s | | | | | |
| FIAM | | | AML | AML | | |
| | comp=N,389μm,1.5s | | | | | |
| **SMA1** | **SAN MARTINO** | **1.33 305** | P | **Pn** | **00 07 28.7** | **+1.5** |
| SMA1 | | | AML | AML | | |
| | comp=N,446μm,0.7s | | | | | |
| SMA1 | | | AML | AML | | |
| | comp=E,554μm,0.8s | | | | | |
| **PST3** | **Postiglione** | **1.35 166** | P | **Pb** | **00 07 29.7** | **+0.7** |
| **CERT** | **Cerreto** | **1.37 274** | P | **Pn** | **00 07 29.3** | **+1.5** |
| CERT | | | AML | AML | | |
| | comp=E,288μm,0.6s | | | | | |
| CERT | | | AML | AML | | |
| | comp=N,196μm,1.0s | | | | | |
| **MTRA** | **Matera** | **1.37 310** | P | **Pn** | **00 07 29.3** | **+1.6** |
| MTRA | | | AML | AML | | |
| | comp=E,507μm,0.4s | | | | | |
| MTRA | | | AML | AML | | |
| | comp=N,365μm,1.6s | | | | | |
| MTRA | | | AML | AML | | |
| | comp=E,507μm,1.6s | | | | | |
| MTRA | | | AML | AML | | |
| | comp=N,406μm,0.7s | | | | | |
| MTRA | | | AML | AML | | |
| | comp=E,565μm,1.1s | | | | | |
| MTRA | | | AML | AML | | |
| | comp=N,365μm,0.4s | | | | | |
| **ACER** | **Acerenza** | **1.38 142** | P | **Pn** | **00 07 29.1** | **+1.3** |
| ACER | | | AML | AML | | |
| | comp=E,547μm,0.4s | | | | | |
| ACER | | | AML | AML | | |
| | comp=E,545μm,0.4s | | | | | |
| ACER | | | AML | AML | | |
| | comp=N,380μm,0.5s | | | | | |
| ACER | | | AML | AML | | |
| | comp=N,380μm,1.5s | | | | | |
| ACER | | | AML | AML | | |
| | comp=N,332μm,0.5s | | | | | |
| ACER | | | AML | AML | | |
| | comp=E,545μm,1.6s | | | | | |
| ACER | | | AML | AML | | |
| | comp=E,547μm,1.6s | | | | | |
| **MF5** | **Montefalcone A** | **1.50 318** | P | **Pb** | **00 07 32.4** | **+0.8** |
| MF5 | | | AML | AML | | |
| | comp=E,704μm,0.4s | | | | | |
| MF5 | | | AML | AML | | |
| | comp=N,472μm,0.4s | | | | | |
| **MMO1** | **Montemonaco** | **1.51 313** | P | **Pb** | **00 07 31.8** | **+0.2** |
| MMO1 | | | S | **Sb** | **00 07 51.2** | **+0.8** |
| **NRCA** | **Norcia** | **1.58 308** | P | **Pb** | **00 07 33.5** | **+0.4** |
| NRCA | | | AML | AML | | |
| | comp=E,342μm,0.2s | | | | | |
| NRCA | | | AML | AML | | |
| | comp=N,382μm,0.5s | | | | | |
| **MC2** | **Monte Cornacci** | **1.59 311** | P | **Pb** | **00 07 33.0** | **-0.1** |
| **CMPR** | **Campora** | **1.60 167** | P | **Pb** | **00 07 32.9** | **-0.4** |
| CMPR | | | AML | AML | | |
| | comp=E,409μm,0.7s | | | | | |
| CMPR | | | AML | AML | | |
| | comp=N,187μm,0.5s | | | | | |
| CMPR | | | AML | AML | | |
| | comp=N,187μm,0.5s | | | | | |
| CMPR | | | AML | AML | | |
| | comp=E,409μm,0.7s | | | | | |
| CMPR | | | AML | AML | | |
| | comp=E,409μm,1.3s | | | | | |
| **GUMA** | **Gualdo di Mace** | **1.62 318** | P | **Pb** | **00 07 33.3** | **-0.3** |
| GUMA | | | AML | AML | | |
| | comp=N,2981μm,1.6s | | | | | |
| GUMA | | | AML | AML | | |
| | comp=E,972μm,0.5s | | | | | |
| GUMA | | | AML | AML | | |
| | comp=N,770μm,0.5s | | | | | |
| GUMA | | | AML | AML | | |
| | comp=N,2981μm,0.4s | | | | | |
| GUMA | | | AML | AML | | |
| | comp=E,972μm,1.5s | | | | | |
| GUMA | | | AML | AML | | |
| | comp=N,770μm,1.5s | | | | | |
| GUMA | | | AML | AML | | |
| | comp=E,884μm,0.4s | | | | | |
| **AMUR** | **Altamura** | **1.66 125** | P | **Pn** | **00 07 33.4** | **+1.8** |
| AMUR | | | AML | AML | | |
| | comp=E,326μm,0.4s | | | | | |
| AMUR | | | AML | AML | | |
| | comp=N,361μm,0.6s | | | | | |
| AMUR | | | AML | AML | | |
| | comp=E,326μm,1.6s | | | | | |
| **CSP1** | **Cessapalombo** | **1.70 316** | P | **Pb** | **00 07 35.3** | **+0.3** |
| **MCEL** | **Monticello** | **1.72 154** | P | **Pb** | **00 07 35.0** | **-0.3** |
| MCEL | | | AML | AML | | |
| | comp=N,126μm,0.6s | | | | | |
| MCEL | | | AML | AML | | |
| | comp=E,142μm,0.8s | | | | | |
| MCEL | | | AML | AML | | |
| | comp=N,136μm,0.6s | | | | | |
| MCEL | | | AML | AML | | |
| | comp=N,126μm,1.4s | | | | | |
| MCEL | | | AML | AML | | |
| | comp=E,142μm,0.8s | | | | | |
| MCEL | | | AML | AML | | |
| | comp=E,155μm,0.8s | | | | | |
| MCEL | | | AML | AML | | |
| | comp=E,142μm,1.2s | | | | | |
| **FDMO** | **Fiordimonte** | **1.73 313** | P | **Pb** | **00 07 35.6** | **+0.2** |
| FDMO | | | AML | AML | | |
| | comp=N,198μm,0.5s | | | | | |
| FDMO | | | AML | AML | | |
| | comp=E,168μm,1.2s | | | | | |
| **MIGL** | **Miglionico** | **1.76 136** | P | **Pn** | **00 07 34.5** | **+1.5** |
| MIGL | | | AML | AML | | |
| | comp=E,672μm,1.4s | | | | | |
| MIGL | | | AML | AML | | |
| | comp=N,640μm,0.4s | | | | | |
| MIGL | | | AML | AML | | |
| | comp=N,640μm,1.6s | | | | | |
| MIGL | | | AML | AML | | |
| | comp=E,672μm,0.6s | | | | | |
| **CESI** | **CESI - Serrava** | **1.81 309** | P | **Pb** | **00 07 36.8** | **-0.1** |
| CESI | | | AML | AML | | |
| | comp=E,204μm,1.0s | | | | | |
| CESI | | | AML | AML | | |
| | comp=N,252μm,0.4s | | | | | |
| **MOMA** | **Monte Martano** | **1.91 300** | P | **Pb** | **00 07 37.9** | **-0.6** |
| MOMA | | | AML | AML | | |
| | comp=N,651μm,1.6s | | | | | |
| MOMA | | | AML | AML | | |
| | comp=N,142μm,0.3s | | | | | |
| MOMA | | | AML | AML | | |
| | comp=E,133μm,0.3s | | | | | |
| MOMA | | | AML | AML | | |
| | comp=N,651μm,0.4s | | | | | |
| MOMA | | | AML | AML | | |
| | comp=E,254μm,0.8s | | | | | |
| **CING** | **Cingoli** | **1.92 322** | P | **Pb** | **00 07 38.1** | **-0.5** |
| CING | | | AML | AML | | |
| | comp=N,167μm,0.5s | | | | | |
| CING | | | AML | AML | | |
| | comp=E,188μm,1.0s | | | | | |
| **LTRZ** | **Laterza** | **1.97 129** | P | **Pn** | **00 07 37.5** | **+1.6** |
| **NOCI** | **Noci** | **2.01 122** | P | **Pn** | **00 07 38.2** | **+1.7** |
| NOCI | | | AML | AML | | |
| | comp=E,252μm,1.4s | | | | | |
| NOCI | | | AML | AML | | |
| | comp=N,354μm,1.0s | | | | | |
| NOCI | | | AML | AML | | |
| | comp=E,252μm,0.6s | | | | | |
| **ATCC** | **AVT- Casa Cast** | **2.08 310** | P | **Pn** | **00 07 40.0** | **+2.6** |
| ATCC | | | AML | AML | | |
| | comp=E,166μm,0.9s | | | | | |
| ATCC | | | AML | AML | | |
| | comp=N,183μm,1.4s | | | | | |
| ATCC | | | AML | AML | | |
| | comp=N,183μm,0.6s | | | | | |
| ATCC | | | AML | AML | | |
| | comp=E,166μm,1.1s | | | | | |
| **FOSV** | **Fossato di Vic** | **2.08 314** | P | **Pn** | **00 07 40.2** | **+2.8** |
| FOSV | | | AML | AML | | |
| | comp=E,109μm,1.0s | | | | | |
| FOSV | | | AML | AML | | |
| | comp=E,109μm,1.0s | | | | | |
| FOSV | | | AML | AML | | |
| | comp=N,140μm,0.6s | | | | | |
| **ARVD** | **Arcevia** | **2.13 320** | P | **Pn** | **00 07 40.8** | **+2.7** |
| ARVD | | | AML | AML | | |
| | comp=E,73μm,1.4s | | | | | |
| ARVD | | | AML | AML | | |
| | comp=N,71μm,0.6s | | | | | |
| ARVD | | | AML | AML | | |
| | comp=E,73μm,0.6s | | | | | |
| **STON** | **Ston** | **2.35 64** | *e*Pn | **Pb** | **00 07 45.4** | **-0.6** |
| **PIEI** | **Pieia** | **2.36 315** | P | **Pn** | **00 07 44.0** | **+2.7** |
| PIEI | | | AML | AML | | |
| | comp=E,86μm,1.1s | | | | | |
| PIEI | | | AML | AML | | |
| | comp=N,46μm,1.3s | | | | | |
| PIEI | | | AML | AML | | |
| | comp=E,86μm,0.9s | | | | | |
| PIEI | | | AML | AML | | |
| | comp=N,46μm,0.7s | | | | | |
| **NARO** | **Abbazia di Nar** | **2.39 317** | P | **Pn** | **00 07 44.9** | **+3.2** |
| NARO | | | AML | AML | | |
| | comp=E,55μm,0.2s | | | | | |
| NARO | | | AML | AML | | |
| | comp=N,51μm,1.1s | | | | | |
| **APEC** | **Apecchio** | **2.44 314** | P | **Pn** | **00 07 45.0** | **+2.6** |
| **PE3** | **Peglio** | **2.50 318** | P | **Pn** | **00 07 46.3** | **+3.2** |
| PE3 | | | AML | AML | | |
| | comp=E,270μm,1.2s | | | | | |
| PE3 | | | AML | AML | | |
| | comp=E,270μm,0.8s | | | | | |
| PE3 | | | AML | AML | | |
| | comp=N,390μm,0.4s | | | | | |
| **TREB** | **Trebinje** | **2.75 71** | *e*Pn | **Pb** | **00 07 50.8** | **-2.0** |
| **A050A** | **Klekovaca** | **2.89 25** | *e*Pn | **Pb** | **00 07 53.1** | **-2.1** |
| **DRME** | **Dracevica, Mon** | **3.27 83** | *e*Pn | **Pn** | **00 07 57.8** | **+4.1** |
| **PDG** | **Podgorica** | **3.34 79** | *e*Pn | **Pn** | **00 07 58.4** | **+3.7** |
| **BLY** | **Banja Luka** | **3.35 30** | *e*Pn | **Pb** | **00 08 01.7** | **-1.3** |
| **A051A** | **Mrakovica** | **3.48 25** | *e*Pn | **Pn** | **00 08 01.2** | **+4.4** |
| **BOJS** | **Bojanci** | **3.64 5** | *e*Pn | **Pb** | **00 08 06.1** | **-1.8** |
| **SKDS** | **Skadanscina** | **3.71 351** | *e*Pn | **Pn** | **00 08 02.6** | **+2.7** |
| **RUDO** | **Rudo** | **3.78 61** | *e*Pn | **Pn** | **00 08 05.4** | **+4.7** |
| **CEY** | **Cerknica** | **3.87 356** | *e*Pn | **Pn** | **00 08 05.9** | **+3.9** |
| **BBLS** | **Lazi&#263i** | **3.91 58** | *e*Pn | **Pn** | **00 08 05.3** | **+2.7** |
| **SJES** | **Sjenica** | **4.05 68** | *e*Pn | Pn | 00 08 10.3 | +5.7 |
| **OBKA** | **Obir** | **4.64 358** | *i* Pn | **Pn** | **00 08 14.1** | **+1.5** |
| | comp=N,0.2nm,0.2s | | | | | |
| OBKA | | | *i* Sn | **Sn** | **00 09 08.2** | **+2.7** |
| | comp=N,3.1nm,0.3s | | | | | |
| **OBKA** | **Obir** | **4.64 358** | *e*Pn | **Pn** | **00 08 13.7** | **+1.1** |
| **SOKA** | **Soboth** | **4.80 2** | *i* Pn | **Pn** | **00 08 16.1** | **+1.2** |
| | comp=N,0.1nm,0.2s | | | | | |
| SOKA | | | *i* Sn | **Sn** | **00 09 10.8** | **+1.2** |
| | comp=N,0.4nm,0.4s | | | | | |
| **MYKA** | **Terra Mystica** | **4.83 350** | *i* Pn | **Pn** | **00 08 16.0** | **+0.7** |
| | comp=N,1.2nm,0.3s | | | | | |
| MYKA | | | *i* Sn | **Sn** | **00 09 13.0** | **+2.8** |
| | comp=N,1.9nm,0.3s | | | | | |
| **ABTA** | **Abfaltersbach** | **5.14 342** | *i* Pn | **Pn** | **00 08 20.6** | **+1.1** |
| | comp=N,0.1nm,0.1s | | | | | |
| ABTA | | | *e*Sn | **Sn** | **00 09 18.3** | **+0.3** |
| | comp=N,0.6nm,0.4s | | | | | |
| **KBA** | **Koelnbreinsper** | **5.31 349** | *i* Pn | **Pn** | **00 08 23.0** | **+1.1** |
| | comp=N,0.7nm,0.4s | | | | | |
| KBA | | | *i* Sn | **Sn** | **00 09 23.2** | **+1.0** |
| | comp=N,1.0nm,0.4s | | | | | |
| **ARSA** | **Arzberg** | **5.40 5** | *i* Pn | **Pn** | **00 08 23.2** | **+0.2** |
| | comp=N,0.4nm,0.2s | | | | | |
| **LESA** | **Schwarzleotal** | **5.75 345** | *i* Pn | **Pn** | **00 08 28.5** | **+0.6** |
| | comp=N,0.3nm,0.2s | | | | | |
| LESA | | | *i* Sn | **Sn** | **00 09 36.1** | **+3.1** |
| | comp=N,0.5nm,0.3s | | | | | |
| **SBF** | **Sospel** | **5.78 293** | *e*Sn | **Sn** | **00 09 32.4** | **-1.3** |
| | comp=N,0.7nm,0.2s | | | | | |
| **WTTA** | **Wattenberg** | **5.85 338** | *i* Pn | **Pn** | **00 08 29.9** | **+0.6** |
| | comp=N,0.4nm,0.3s | | | | | |
| WTTA | | | *i* Sn | **Sn** | **00 09 37.5** | **+2.0** |
| | comp=N,1.1nm,0.4s | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **5.88 352** | *i* Pn | **Pn** | **00 08 30.2** | **+0.7** |
| | comp=N,0.7nm,0.3s | | | | | |
| BIOA | | | *i* Sn | **Sn** | **00 09 38.3** | **+2.4** |
| | comp=N,1.6nm,0.3s | | | | | |
| **RONA** | **Rosalia, Austr** | **5.92 10** | *e*Pn | **Pn** | **00 08 30.7** | **+0.6** |
| | comp=N,0.4nm,0.4s | | | | | |
| **FETA** | **Feichten** | **5.92 332** | *i* Pn | **Pn** | **00 08 31.5** | **+1.2** |
| | comp=N,0.3nm,0.3s | | | | | |
| FETA | | | *i* Sn | **Sn** | **00 09 40.4** | **+3.1** |
| | comp=N,0.9nm,0.6s | | | | | |
| **WATA** | **Walderalm** | **5.93 338** | *i* Pn | **Pn** | **00 08 31.1** | **+0.7** |
| | comp=N,0.2nm,0.2s | | | | | |
| WATA | | | *i* Sn | **Sn** | **00 09 41.4** | **+4.0** |
| | comp=N,1.1nm,0.2s | | | | | |
| **SQTA** | **Sankt Quirin** | **5.93 335** | *i* Pn | **Pn** | **00 08 31.1** | **+0.7** |
| | comp=N,0.2nm,0.1s | | | | | |
| SQTA | | | *i* Sn | **Sn** | **00 09 42.1** | **+4.6** |
| | comp=N,2.9nm,0.4s | | | | | |
| **MOA** | **Molln** | **5.99 356** | *i* Pn | **Pn** | **00 08 31.4** | **+0.4** |
| | comp=N,0.2nm,0.2s | | | | | |
| MOA | | | *e*Sn | **Sn** | **00 09 41.6** | **+2.9** |
| | comp=N,0.9nm,0.3s | | | | | |
| **MOTA** | **Moosalm** | **6.08 335** | *i* Pn | **Pn** | **00 08 32.9** | **+0.4** |
| | comp=N,0.2nm,0.3s | | | | | |
| MOTA | | | *i* Sn | **Sn** | **00 09 43.2** | **+2.1** |
| | comp=N,1.2nm,0.6s | | | | | |
| **CONA** | **Conrad Observa** | **6.10 7** | *e*Pn | **Pn** | **00 08 32.6** | **0.0** |
| | comp=N,0.3nm,0.3s | | | | | |
| CONA | | | *i* Sn | **Sn** | **00 09 43.8** | **+2.3** |
| | comp=N,1.9nm,0.5s | | | | | |
| **RETA** | **Reutte** | **6.31 334** | *i* Pn | **Pn** | **00 08 36.3** | **+0.7** |
| RETA | | | *i* Sn | **Sn** | **00 09 49.3** | **+2.5** |
| | comp=N,0.3nm,0.2s | | | | | |
| **DAVA** | **Damuels** | **6.46 329** | *e*Pn | **Pn** | **00 08 38.1** | **+0.5** |
| | comp=N,0.3nm,0.3s | | | | | |
| DAVA | | | *i* Sn | **Sn** | **00 09 52.5** | **+2.1** |
| | comp=N,0.8nm,0.5s | | | | | |
| **MBDF** | **Montbardon** | **6.53 299** | *e*Pn | **Pn** | **00 08 42.2** | **+3.6** |
| **LPG** | **La Plagne** | **6.88 304** | *e*Pn | **Pn** | **00 08 45.7** | **+2.1** |
| LPG | | | *e*Sn | **Sn** | **00 09 58.8** | **-2.2** |
| | comp=N,0.7nm,0.2s | | | | | |
| **LPL** | **La Plagne** | **6.90 305** | *e*Pn | **Pn** | **00 08 45.6** | **+1.8** |
| LPL | | | *e*Sn | **Sn** | **00 09 58.7** | **-2.7** |
| | comp=N,1.8nm,0.4s | | | | | |
| **ORIF** | **Oris-en-Rattie** | **7.19 298** | *e*Pn | **Pn** | **00 08 52.2** | **+4.6** |
| ORIF | | | *e*Sn | **Sn** | **00 10 05.4** | **-2.9** |
| | comp=N,0.3nm,0.2s | | | | | |
| **VYHS** | **Vyhne** | **7.20 22** | *e*PN | **Pn** | **00 08 52.5** | **+4.8** |
| VYHS | | | *e*SN | **Sn** | **00 10 12.4** | **+3.9** |
| VYHS | | | *e* | | 00 40 06.0 | |
| **CABF** | **La Chapelle** | **7.85 310** | *e*Pn | **Pn** | **00 08 59.8** | **+3.0** |
| **HINF** | **Hinteralfeld** | **8.20 319** | *e*Pn | **Pn** | **00 09 03.4** | **+1.9** |
| HINF | | | *e*Sn | **Sn** | **00 10 29.6** | **-3.6** |
| | comp=N,3.5nm,0.4s | | | | | |
| **CDF** | **Champ du Feu** | **8.43 323** | *e*Pn | **Pn** | **00 09 06.4** | **+1.7** |
| CDF | | | *e*Sn | **Sn** | **00 10 35.2** | **-3.7** |
| | comp=N,2.3nm,0.4s | | | | | |
| **HAU** | **Haudompre** | **8.58 318** | *e*Pn | **Pn** | **00 09 08.7** | **+2.1** |
| HAU | | | *e*Sn | **Sn** | **00 10 38.6** | **-3.9** |
| | comp=N,1.4nm,0.3s | | | | | |
| **SMF** | **Signal de Mont** | **9.21 305** | *e*Sn | **Sn** | **00 10 53.6** | **-4.2** |
| | comp=N,0.9nm,0.4s | | | | | |
| **PAGF** | **Fort de Pagny** | **9.26 319** | *e*Sn | **Sn** | **00 10 55.0** | **-4.1** |
| | comp=N,1.0nm,0.2s | | | | | |
| **SFTF** | **Sexfontaines** | **9.38 316** | *e*Sn | **Sn** | **00 10 57.9** | **-4.1** |
| | comp=N,0.4nm,0.2s | | | | | |
| **LOR** | **Lormes** | **9.50 308** | *e*Pn | **Pn** | **00 09 21.6** | **+2.4** |
| LOR | | | *e*Sn | **Sn** | **00 11 01.6** | **-3.4** |
| | comp=N,0.3nm,0.2s | | | | | |
| **GRR** | **Gorron** | **12.83 306** | *e*P | **P** | **00 10 12.2** | **-3.2** |
| GRR | | | *e*Sn | **Sn** | **00 12 21.2** | **-5.4** |
| | comp=N,0.2nm,0.2s | | | | | |

*IDC* ***20*** *00:12:28.7±1.5, 18°.02S×178°.01W, h565km±18km, mb3.6/19, mbtmp4.5/21, Error ellipse: s-maj=13.7km s-min=10.0km az=154.0*

*NEIC* ***20*** *00:12:29.7±1.6, 18°.1S±0°.1×177°.95W±0°.03, h575km±7km, mb4.2/79, Error ellipse: s-maj=16.4km s-min=3.2km az=174.0*

*NOU* ***20*** *00:12:30.6, 19°.22S×177°.93W, h549km, mb5.0/7, Fiji Islands Region*

**ISC 20 00:12:30.2±0.3, 18°.09S±0°.07×177°.95W±0°.07, h590km, n184, σ0°88/186, mb4.2/62, 15C-11D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **MSVF** | **Nonsavu** | **3.83** | **275** | P | **P** | **00** | **13** | **53.6** | **-0.3** |
| **MSVF** | **Nonsavu** | **3.83** | **275** | P | **P** | **00** | **13** | **53.9** | **0.0** |
| **AFI** | **Afiamalu** | **7.24** | **56** | P | **P** | **00** | **14** | **19.4** | **-2.8** |
| **NIUE** | **Niue** | **7.67** | **99** | P | **P** | **00** | **14** | **24.2** | **-1.8** |
| **FUNA** | **Funafuti** | **9.90** | **343** | P | **P** | **00** | **14** | **45.7** | **-2.3** |
| **RAO** | **Raoul Island** | **11.11** | **180** | P | **P** | **00** | **14** | **57.9** | **-1.9** |
| **RAO** | **Raoul Island** | **11.11** | **180** | P | **P** | **00** | **14** | **57.6** | **-2.3** |
| | 119nm,0.3s,baz=45,slow=20,SNR=2.3 | | | | | | | | |
| **DVP** | **Devils Point** | **13.21** | **269** | P | **P** | **00** | **15** | **21.9** | **+0.6** |
| **LIFNC** | **LIFOU** | **14.23** | **257** | P | **P** | **00** | **15** | **29.7** | **-1.8** |
| **LIFNC** | **LIFOU** | **14.23** | **257** | P | **P** | **00** | **15** | **29.2** | **-2.3** |
| **PINNC** | **Pines Island,** | **14.42** | **249** | P | **P** | **00** | **15** | **31.8** | **-1.4** |
| **DZM** | **Mont Dzumac** | **15.19** | **252** | P | **P** | **00** | **15** | **39.7** | **-0.9** |
| DZM | | | | IAmb | IAmb | 00 | 15 | 44.7 | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.19** | **252** | P | **P** | **00** | **15** | **39.4** | **-1.3** |
| | comp=Z,7.6nm,0.5s,baz=99,slow=22,SNR=15 | | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.95** | **259** | P | **P** | **00** | **15** | **58.5** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **16.95** | **259** | P | **P** | **00** | **15** | **56.6** | **-0.2** |
| **RAR** | **Rarotonga** | **17.40** | **103** | P | **P** | **00** | **16** | **00.5** | **-0.3** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RAR | Rarotonga | 17.40 | 103 | P | P | 00 16 00.8 | 0.0 | | |
| | comp=Z,36nm,0.9s,baz=242,slow=3.2,SNR=5.3 | | | | | | | | |
| URZ | Urewera | 20.56 | 191 | P | P | 00 16 28.4 | -0.9 | | |
| | comp=Z,8.7nm,0.3s,baz=10,slow=3.8,SNR=17 | | | | | | | | |
| | comp=Z,8.7nm,0.3s | | | | | | | | |
| MRZ | Mangatainoka R | 23.18 | 193 | P | P | 00 16 51.3 | -1.3 | | |
| MSWZ | Moikau Station | 23.97 | 193 | P | P | 00 16 58.7 | -1.0 | | |
| TKNZ | Takaka Hill | 24.17 | 197 | P | P | 00 17 00.6 | -0.8 | | |
| THZ | Tophouse | 24.86 | 196 | P | P | 00 17 07.5 | -0.1 | | |
| KHZ | Kahutara | 25.31 | 195 | P | P | 00 17 10.0 | -1.4 | | |
| PPT | Papeete | 27.00 | 93 | P | P | 00 17 26.6 | -0.1 | | |
| | comp=Z,39nm,0.7s,baz=71,slow=1.4,SNR=12 | | | | | | | | |
| | comp=Z,39nm,0.7s | | | | | | | | |
| PPTF | Pamatai, Papee | 27.01 | 93 | P | P | 00 17 28.6 | +1.8 | | |
| PPTF | Pamatai, Papee | 27.01 | 93 | P | P | 00 17 26.8 | 0.0 | | |
| FOZ | Fox Glacier | 27.39 | 200 | P | P | 00 17 29.7 | 0.0 | | |
| LBZ | Lake Benmore | 28.05 | 198 | P | P | 00 17 34.0 | -1.5 | | |
| MLZ | Mavora Lakes | 29.58 | 200 | P | P | 00 17 49.0 | +0.3 | | |
| MLZ | | | | IAmb | IAmb | 00 17 51.2 | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| PMG | Port Moresby | 34.92 | 280 | P | P | 00 18 33.7 | -0.6 | | |
| COEN | Coen | 37.55 | 270 | P | P | 00 18 56.2 | +0.4 | | |
| STKA | Stephens Creek | 38.93 | 241 | P | P | 00 19 08.1 | +1.2 | | |
| | comp=Z,1.5nm,0.5s,baz=87,slow=11,SNR=3.5 | | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| AS31 | Alice Springs | 45.16 | 254 | P | P | 00 19 56.0 | +0.1 | | |
| AS31 | | | | IAmb | IAmb | 00 19 57.0 | | | |
| | comp=Z,6.4nm,1.1s | | | | | | | | |
| ASAR | Alice Springs | 45.17 | 254 | P | P | 00 19 55.4 | -0.5 | | |
| ASAR | Alice Springs | 45.17 | 254 | P | P | 00 19 56.0 | +0.2 | | |
| | comp=Z,11nm,0.6s,baz=87,slow=8.4,SNR=72 | | | | | | | | |
| ASAR | | | | PcP | PcP | 00 21 23.9 | +0.5 | | |
| | comp=Z,1.2nm,0.5s,baz=101,slow=3.6,SNR=4.7 | | | | | | | | |
| ASAR | | | | S | S | 00 25 52.3 | -1.3 | | |
| | comp=Z,2.1nm,1.0s,baz=92,slow=16,SNR=7.5 | | | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | | | |
| MJAR | Matsushiro Arr | 68.31 | 323 | P | P | 00 22 32.7 | -0.8 | | |
| | comp=Z,6.5nm,0.6s,baz=155,slow=5.9,SNR=16 | | | | | | | | |
| | comp=Z,6.5nm,0.6s | | | | | | | | |
| MAJO | Matsushiro | 68.32 | 323 | P | P | 00 22 33.4 | -0.2 | | |
| MAJO | | | | IAmb | IAmb | 00 22 33.5 | | | |
| | comp=Z,11nm,0.5s | | | | | | | | |
| MJB9 | Matsu-Tunnel | 68.32 | 323 | P | P | 00 22 34.3 | +0.7 | | |
| MJB9 | | | | IAmb | IAmb | 00 22 34.5 | | | |
| | comp=Z,10nm,0.5s | | | | | | | | |
| QSPA | South Pole Qui | 71.97 | 180 | P | P | 00 22 56.3 | +1.4 | | |
| | comp=Z,2.9nm,0.6s,baz=329,slow=0.9,SNR=19 | | | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | | | |
| SSLB | Suanglung | 72.70 | 303 | P | P | 00 22 58.8 | -0.9 | | |
| TPUB | Ta-pu | 72.73 | 302 | P | P | 00 22 59.0 | -0.9 | | |
| PETK | Petropavlovsk- | 73.97 | 345 | P | P | 00 23 05.5 | -0.7 | | |
| | comp=Z,8.5nm,0.7s,baz=126,slow=7.6,SNR=8.4 | | | | | | | | |
| | comp=Z,8.5nm,0.7s | | | | | | | | |
| KSRS | Korea Array | 75.13 | 318 | P | P | 00 23 13.2 | +0.1 | | |
| | comp=Z,1.7nm,0.8s,baz=135,slow=6.2,SNR=5.6 | | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | | |
| PMPB | Monarch Peak | 76.36 | 44 | P | P | 00 23 20.8 | +0.8 | | |
| PMPB | | | | IAmb | IAmb | 00 23 49.8 | | | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| USRK | Ussuriysk Ar. | 77.01 | 326 | P | P | 00 23 24.2 | +1.0 | | |
| USRK | Ussuriysk Ar. | 77.01 | 326 | P | P | 00 23 24.3 | +1.1 | | |
| | comp=Z,1.8nm,0.7s,baz=104,slow=6.1,SNR=5.2 | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| SLBS | Sierra La Lagu | 78.27 | 60 | P | P | 00 23 31.5 | +1.0 | | |
| SLBS | | | | IAmb | IAmb | 00 23 50.7 | | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| YBH | Yreka Blue Hor | 78.39 | 39 | P | P | 00 23 31.9 | +1.0 | | |
| YBH | Yreka Blue Hor | 78.39 | 39 | P | P | 00 23 32.0 | +1.2 | | |
| | comp=Z,1.4nm,0.6s,baz=142,slow=5.8,SNR=5.2 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| WAKR | Walker | 78.55 | 43 | P | P | 00 23 33.0 | +1.0 | | |
| MDJ | Mudanjiang | 78.59 | 325 | P | P | 00 23 32.9 | +1.2 | | |
| MDJ | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| MPK | Martis Peak | 78.62 | 42 | P | P | 00 23 31.4 | -1.0 | | |
| HUMO | Hull Mountain | 78.77 | 38 | P | P | 00 23 33.6 | +0.8 | | |
| HUMO | | | | IAmb | IAmb | 00 23 58.1 | | | |
| | comp=Z,10nm,1.5s | | | | | | | | |
| PNTR | Pine Nut | 78.77 | 42 | P | P | 00 23 33.9 | +0.8 | | |
| PNTR | | | | IAmb | IAmb | 00 23 34.9 | | | |
| | comp=Z,5.6nm,0.8s | | | | | | | | |
| DSP | Deep Springs | 78.89 | 45 | P | P | 00 23 34.5 | +1.0 | | |
| LHV | Little Huntoon | 79.02 | 44 | P | P | 00 23 34.3 | +0.2 | | |
| O16K | Kokwok River B | 79.08 | 10 | P | P | 00 23 32.8 | -1.1 | | |
| O16K | | | | IAmb | IAmb | 00 24 11.0 | | | |
| | comp=Z,20nm,1.4s | | | | | | | | |
| PIX | Pinacate | 79.11 | 52 | P | P | 00 23 34.8 | +0.1 | | |
| RYN | Ryan | 79.22 | 43 | P | P | 00 23 35.5 | +0.1 | | |
| NVAR | Mina Array Bea | 79.25 | 44 | P | P | 00 23 36.4 | +0.8 | | |
| NVAR | Mina Array Bea | 79.25 | 44 | P | P | 00 23 36.3 | +0.6 | | |
| | comp=Z,3.0nm,0.8s,baz=225,slow=9.0,SNR=22 | | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| N15K | Kwethluk River | 79.32 | 9 | P | P | 00 23 35.0 | -0.2 | | |
| N15K | | | | IAmb | IAmb | 00 24 16.7 | | | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| GMN | Gold Mountain | 79.33 | 45 | P | P | 00 23 36.9 | +0.8 | | |
| KVN | Kaiserville | 79.72 | 43 | P | P | 00 23 38.8 | +0.7 | | |
| J05D | Fort Rock, OR | 80.19 | 38 | P | P | 00 23 41.4 | +1.1 | | |
| J05D | | | | IAmb | IAmb | 00 23 41.8 | | | |
| | comp=Z,8.2nm,0.6s | | | | | | | | |
| M16K | Timber Creek | 80.30 | 9 | P | P | 00 23 41.2 | +0.9 | | |
| M16K | | | | IAmb | IAmb | 00 23 42.6 | | | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| BNX | BinXian | 80.50 | 325 | ⇓P | P | 00 23 41.6 | -0.1 | | |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| PINE | Pine Mountain | 80.66 | 38 | P | P | 00 23 43.7 | +0.8 | | |
| PINE | | | | IAmb | IAmb | 00 23 44.4 | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| SMAI | San Martin Ant | 80.83 | 159 | P | P | 00 23 44.4 | +1.4 | | |
| SMAI | | | | IAmb | IAmb | 00 23 45.9 | | | |
| | comp=Z,9.6nm,0.8s | | | | | | | | |
| PRN | Pahroc Range | 80.88 | 46 | P | P | 00 23 45.4 | +1.3 | | |
| PRN | | | | IAmb | IAmb | 00 23 46.1 | | | |
| | comp=Z,5.5nm,1.0s | | | | | | | | |
| K15K | Wolf Creek Mou | 81.16 | 8 | P | P | 00 23 45.6 | +0.9 | | |
| K15K | | | | IAmb | IAmb | 00 23 46.3 | | | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| NLWA | Neilton Lookou | 81.21 | 34 | P | P | 00 23 46.4 | +1.0 | | |
| NLWA | | | | IAmb | IAmb | 00 24 13.8 | | | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| I07A | Izee | 81.67 | 38 | P | P | 00 23 48.9 | +0.9 | | |
| I07A | | | | IAmb | IAmb | 00 23 49.6 | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | |
| L18K | Granite Mounta | 81.80 | 10 | P | P | 00 23 48.6 | +0.6 | | |
| L18K | | | | IAmb | IAmb | 00 24 10.1 | | | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| J08A | Circle Bar Ran | 81.88 | 39 | P | P | 00 23 49.6 | +0.7 | | |
| LCMT | Little Creek M | 81.93 | 47 | P | P | 00 23 49.9 | +0.4 | | |
| BELA | Belgrano 2 | 81.93 | 173 | P | P | 00 23 49.0 | +0.4 | | |
| BELA | | | | IAmb | IAmb | 00 23 50.2 | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| X16A | Lo Mia Camp, P | 81.96 | 50 | P | P | 00 23 50.3 | +0.6 | | |
| X16A | | | | IAmb | IAmb | 00 23 52.0 | | | |
| | comp=Z,5.5nm,1.1s | | | | | | | | |
| K17K | Iditarod | 82.01 | 9 | P | P | 00 23 48.5 | -0.5 | | |
| K17K | | | | IAmb | IAmb | 00 24 04.6 | | | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| CCUT | Cedar City | 82.11 | 46 | P | P | 00 23 51.0 | +0.5 | | |
| 319A | Douglas | 82.18 | 54 | P | P | 00 23 51.1 | +0.3 | | |
| 319A | | | | IAmb | IAmb | 00 23 53.4 | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| KNB | Kanab | 82.23 | 47 | P | P | 00 23 52.0 | +1.0 | | |
| KNB | | | | IAmb | IAmb | 00 23 52.6 | | | |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| J16K | Anvik River | 82.24 | 8 | P | P | 00 23 50.3 | +0.1 | | |
| J16K | | | | IAmb | IAmb | 00 23 53.0 | | | |
| | comp=Z,8.6nm,1.2s | | | | | | | | |
| PSUT | Pine Spring | 82.27 | 45 | P | P | 00 23 51.8 | +0.6 | | |
| U15A | North Rim | 82.31 | 48 | P | P | 00 23 52.0 | +0.5 | | |
| U15A | | | | IAmb | IAmb | 00 23 53.7 | | | |
| | comp=Z,8.9nm,0.9s | | | | | | | | |
| SZCU | Shurtz Canyon | 82.33 | 47 | P | P | 00 23 51.0 | -0.5 | | |
| SZCU | | | | IAmb | IAmb | 00 23 53.5 | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| ELK | Elko | 82.49 | 43 | P | P | 00 23 51.8 | -0.5 | | |
| ELK | Elko | 82.49 | 43 | P | P | 00 23 52.8 | +0.5 | | |
| | comp=Z,1.8nm,0.7s,baz=251,slow=4.5,SNR=8.6 | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| J17K | VABM Dome | 82.55 | 8 | P | P | 00 23 52.1 | +0.3 | | |
| J17K | | | | IAmb | IAmb | 00 23 55.7 | | | |
| | comp=Z,6.4nm,1.1s | | | | | | | | |
| G08A | Pilot Rock | 82.68 | 38 | P | P | 00 23 53.7 | +0.7 | | |
| MTPU | Mount Pierson | 83.17 | 46 | P | P | 00 23 56.0 | +0.1 | | |
| MFID | Camas Ranch | 83.52 | 40 | P | P | 00 23 56.8 | -0.4 | | |
| LYN | LuoYang | 84.28 | 309 | P | P | 00 24 02.3 | +1.3 | | |
| LYN | | | | pmax | pmax | | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| TMUT | Trail Mountain | 84.44 | 46 | P | P | 00 24 02.7 | +0.6 | | |
| TMUT | | | | IAmb | IAmb | 00 24 04.0 | | | |
| | comp=Z,7.4nm,1.4s | | | | | | | | |
| TX31 | Lajitas Ar. Si | 85.72 | 57 | P | P | 00 24 07.9 | -0.3 | | |
| TX31 | | | | IAmb | IAmb | 00 24 10.9 | | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| TXAR | Lajitas Array | 85.72 | 57 | P | P | 00 24 09.1 | +0.9 | | |
| TXAR | Lajitas Array | 85.72 | 57 | P | P | 00 24 09.8 | +1.6 | | |
| | comp=Z,4.8nm,0.8s,baz=220,slow=6.3,SNR=49 | | | | | | | | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| ANMO | Albuquerque | 85.86 | 51 | P | P | 00 24 08.4 | -0.5 | | |
| ANMO | | | | IAmb | IAmb | 00 24 10.5 | | | |
| | comp=Z,2.9nm,1.1s | | | | | | | | |
| ANMO | Albuquerque | 85.86 | 51 | P | P | 00 24 09.5 | +0.6 | | |
| | comp=Z,1.2nm,0.6s,baz=291,slow=5.3,SNR=5.7 | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | |
| ILAR | Eielson Array | 85.96 | 13 | P | P | 00 24 07.0 | -1.4 | | |
| | comp=Z,1.3nm,0.9s,baz=220,slow=6.9,SNR=5.4 | | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | | |
| ALPN | Alpine | 86.15 | 56 | P | P | 00 24 10.7 | +0.4 | | |
| ALPN | | | | IAmb | IAmb | 00 24 12.5 | | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| REDW | Red Top Meadow | 86.62 | 42 | P | P | 00 24 12.8 | +0.5 | | |
| XAN | Xi'an | 86.72 | 307 | ⇑P | P | 00 24 14.3 | +1.6 | | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| IMW | Indian Meadow | 86.83 | 42 | P | P | 00 24 12.8 | -0.5 | | |
| IMW | | | | IAmb | IAmb | 00 24 15.1 | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| YHL | Hebgen Lake | 87.13 | 41 | P | P | 00 24 15.5 | +0.7 | | |
| YHL | | | | IAmb | IAmb | 00 24 17.1 | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| PD31 | Pinedale Array | 87.18 | 43 | P | P | 00 24 14.0 | -0.9 | | |
| PDAR | Pinedale Array | 87.18 | 43 | P | P | 00 24 14.6 | -0.3 | | |
| PDAR | Pinedale Array | 87.18 | 43 | P | P | 00 24 15.1 | +0.1 | | |
| | comp=Z,1.3nm,0.6s,baz=224,slow=2.8,SNR=8.7 | | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | | |
| SAND | Sanderson | 87.20 | 57 | P | P | 00 24 15.3 | +0.2 | | |
| SAND | | | | IAmb | IAmb | 00 24 16.9 | | | |
| | comp=Z,5.7nm,1.0s | | | | | | | | |
| HHC | Hu-ho-hao-te | 87.71 | 314 | eP | P | 00 24 18.5 | +1.2 | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,140nm,6.1s | | | | | | | | |
| DRIO | Del Rio | 88.21 | 58 | P | P | 00 24 19.9 | +0.1 | | |
| MSTX | Muleshoe | 88.24 | 53 | P | P | 00 24 18.9 | -1.1 | | |
| MSTX | | | | IAmb | IAmb | 00 24 21.3 | | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| ELIB | Princess Elisa | 89.03 | 187 | dP | P | 00 24 23.5 | +0.5 | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| HNDO | Hondo | 89.33 | 59 | P | P | 00 24 25.2 | +0.2 | | |
| CMAR | Chiang Mai Arr | 89.36 | 290 | P | P | 00 24 27.1 | +1.7 | | |
| | comp=Z,1.0nm,0.3s,baz=119,slow=3.4,SNR=9.8 | | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| PZH | PanZhiHua | 89.63 | 298 | P | P | 00 24 28.0 | +1.4 | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| PZH | | | | pmax | pmax | | | | |
| | comp=Z,100nm,4.9s | | | | | | | | |
| TROLL | Troll, Antarti | 90.13 | 180 | ⇑P | P | 00 24 28.0 | 0.0 | | |
| | comp=Z,175nm,1.1s | | | | | | | | |
| ABTX | Abilene, Hawle | 90.16 | 56 | P | P | 00 24 28.9 | +0.1 | | |
| ABTX | | | | IAmb | IAmb | 00 24 30.1 | | | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| VNA3 | Neumayer Olymp | 90.53 | 176 | ⇑P | P | 00 24 30.4 | +0.6 | | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| PLCA | Paso Flores | 90.89 | 134 | P | P | 00 24 33.3 | +1.2 | | |
| | comp=Z,2.3nm,0.9s,baz=206,slow=3.8,SNR=5.6 | | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | | |
| PLPT | Palo Pinto | 91.28 | 56 | P | P | 00 24 33.4 | -0.5 | | |
| R32A | Long Quarter, | 92.95 | 51 | P | P | 00 24 41.4 | -0.1 | | |
| SONM | Songino Array | 93.97 | 319 | P | P | 00 24 46.4 | +0.4 | | |
| | comp=Z,0.5nm,0.7s,baz=156,slow=7.4,SNR=3.9 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| BVAR | Borovoye Array | 117.26 | 321 | PKP | PKPdf | 00 30 07.8 | -1.3 | | |
| | comp=Z,0.5nm,0.4s,baz=90,slow=5.8,SNR=3.0 | | | | | | | | |
| FINES | FINESS Array B | 133.48 | 344 | PKP | PKPdf | 00 30 39.1 | -0.7 | | |
| | comp=Z,2.8nm,1.0s,baz=87,slow=6.1,SNR=1.9 | | | | | | | | |
| EKA | Eskdalemuir Ar | 142.61 | 5 | PKhKP | PKPpre | 00 30 54.3 | | | |
| | comp=Z,1.5nm,1.1s,baz=308,slow=2.3,SNR=1.5 | | | | | | | | |
| GAZ | Gaziantep | 143.79 | 309 | | PKPdf | 00 30 59.2 | -0.2 | | |
| BNN | Bunyan | 144.10 | 312 | | PKPab | 00 31 00.2 | +0.2 | | |
| KWP | Kalwaria Pacla | 144.41 | 337 | | PKPbc | 00 31 00.3 | +0.2 | | |
| BUR08 | Bucovina Ar. S | 144.96 | 332 | PKPdf | PKPbc | 00 31 02.3 | +0.3 | | |
| TLCR | | 144.97 | 326 | ⇓P | PKPab | 00 31 02.6 | -0.3 | | |
| TESR | Tescani | 145.14 | 330 | ⇑P | PKPbc | 00 31 02.3 | 0.0 | | |
| KOLS | Kolonicke sedl | 145.15 | 336 | e | PKPab | 00 31 03.0 | -0.5 | | |
| BR131 | Keskin Array S | 145.22 | 315 | PKPdf | PKPbc | 00 31 02.7 | -0.4 | | |
| BRTR | Keskin Array B | 145.22 | 315 | | PKPbc | 00 31 02.9 | -0.1 | | |
| BRTR | Keskin Array B | 145.22 | 315 | PKPbc | PKPbc | 00 31 03.1 | 0.0 | | |
| | comp=Z,2.2nm,0.4s,baz=115,slow=3.0,SNR=18 | | | | | | | | |
| BRTR | | | | SKPbc | SKiKP | 00 33 48.7 | +1.8 | | |
| | comp=Z,1.0nm,1.0s,baz=35,slow=2.4,SNR=3.9 | | | | | | | | |
| KIRS | Kirsehir-Merke | 145.32 | 314 | ⇓P | PKPbc | 00 31 03.3 | 0.0 | | |
| TPGR | Topolog | 145.40 | 326 | ⇑P | PKPbc | 00 31 03.4 | +0.2 | | |
| CRVS | Cervenica-Dubn | 145.47 | 337 | e | PKPab | 00 31 05.2 | +0.4 | | |
| OSTC | Ostas | 145.69 | 344 | ⇓ePKP | PKiKP | 00 31 06.8 | +0.3 | | |
| CHVC | Chvalec | 145.70 | 344 | ⇓ePKP | PKiKP | 00 31 06.2 | -0.4 | | |
| CLL | Collm | 145.73 | 348 | PKPdf | PKPdf | 00 31 03.1 | +0.9 | | |
| CLL | Collm | 145.73 | 346 | ⇓iPKPbc | PKPbc | 00 31 04.1 | +0.2 | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| TURR | Turia | 145.77 | 330 | ⇓P | PKPab | 00 31 05.4 | -0.7 | | |
| DPC | Dobruska-Polom | 145.85 | 344 | ⇑ePKP | PKPbc | 00 31 05.2 | +0.8 | | |
| DPC | | | | ePKPAB | PKiKP | 00 31 07.1 | +0.2 | | |
| BRG | Berggiesshubel | 145.94 | 347 | ePKP | PKPbc | 00 31 05.1 | +0.6 | | |
| BRG | | | | Amp | | 00 31 05.5 | | | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| LANS | Liptovska Anna | 145.96 | 339 | e | PKPab | 00 31 06.0 | -0.8 | | |
| KRLC | Kraliky | 145.97 | 343 | ⇑ePKP | PKPbc | 00 31 05.3 | +0.6 | | |
| MORC | Moravsky Berou | 146.02 | 342 | ePKP | PKPbc | 00 31 05.4 | +0.5 | | |
| MORC | Moravsky Berou | 146.02 | 342 | ⇓P | PKPab | 00 31 06.3 | -0.7 | | |
| MLR | Muntele Rosu | 146.21 | 329 | ⇑P | PKPbc | 00 31 05.7 | +0.1 | | |
| MMAI | Mount Meron Ar | 146.61 | 303 | PKPbc | PKPbc | 00 31 07.9 | +0.9 | | |
| | comp=Z,4.1nm,0.5s,baz=70,slow=7.2,SNR=20 | | | | | | | | |
| DRGR | | 146.69 | 334 | ⇓P | PKPbc | 00 31 06.8 | 0.0 | | |
| VYHS | Vyhne | 146.74 | 340 | e | PKPbc | 00 31 07.7 | +0.9 | | |
| ARR | Arges | 146.93 | 330 | ⇓P | PKiKP | 00 31 09.0 | -0.3 | | |
| KRUC | Moravsky | 146.99 | 343 | ePKP | PKPbc | 00 31 07.9 | +0.5 | | |
| ZVC | Zvikov | 147.23 | 345 | ⇑ePKP | PKPab | 00 31 12.0 | +0.2 | | |
| SIRR | Siria | 147.55 | 334 | ⇓P | PKPbc | 00 31 09.5 | +0.5 | | |
| KHC | Kasperske Hory | 147.66 | 346 | ⇑ePKP | PKPbc | 00 31 09.7 | +0.5 | | |
| KHC | | | | ePKPAB | PKPab | 00 31 14.5 | +0.9 | | |
| SURR | Surduc | 147.76 | 333 | ⇓P | PKPbc | 00 31 09.0 | -0.5 | | |
| CKRC | Cesky Krumlov | 147.77 | 345 | ⇑ePKP | PKPbc | 00 31 10.2 | +0.7 | | |
| GERES | GERESS Array B | 147.90 | 345 | PKPbc | PKPbc | 00 31 10.4 | +0.5 | | |
| | comp=Z,1.2nm,0.5s,baz=163,slow=9.4,SNR=8.1 | | | | | | | | |
| ELND | Elena | 148.05 | 326 | ⇑P | PKPab | 00 31 15.4 | -0.1 | | |
| CONA | Conrad Observa | 148.17 | 342 | iPKP | PKiKP | 00 31 11.4 | -0.4 | | |
| | comp=Z,4.6nm,1.2s | | | | | | | | |
| RONA | Rosalia, Austr | 148.25 | 342 | iPKP | PKiKP | 00 31 11.4 | -0.5 | | |
| | comp=Z,2.5nm,0.8s | | | | | | | | |
| HERR | Herculane | 148.32 | 332 | ⇑P | PKPbc | 00 31 10.7 | -0.3 | | |
| MOA | Molln | 148.68 | 344 | iPKP | PKPab | 00 31 18.8 | +0.9 | | |
| | comp=Z,6.4nm,1.3s | | | | | | | | |
| ARSA | Arzberg | 148.88 | 342 | ePKP | PKPab | 00 31 18.7 | 0.0 | | |
| | comp=Z,3.6nm,0.7s | | | | | | | | |
| BIOA | Bad Ischl, Aus | 148.99 | 345 | ePKP | PKPab | 00 31 19.4 | +0.3 | | |
| | comp=Z,5.3nm,0.9s | | | | | | | | |
| LESA | Schwarzleotal | 149.47 | 346 | iPKiKP | PKiKP | 00 31 15.8 | +1.2 | | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| SOKA | Soboth | 149.54 | 342 | ePKP | PKPab | 00 31 21.7 | +0.2 | | |
| | comp=Z,2.2nm,1.0s | | | | | | | | |
| KBA | Koelnbreinsper | 149.63 | 345 | iPKP | PKPbc | 00 31 14.0 | -0.3 | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| WATA | Walderalm | 149.80 | 347 | iPKP | PKPbc | 00 31 14.5 | -0.2 | | |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| RETA | Reutte | 149.82 | 348 | ePKP | PKPab | 00 31 22.1 | -0.6 | | |
| | comp=Z,2.6nm,1.0s | | | | | | | | |
| OBKA | Obir | 149.83 | 343 | iPKiKP | PKiKP | 00 31 17.5 | +2.2 | | |
| | comp=Z,3.1nm,1.2s | | | | | | | | |
| WTTA | Wattenberg | 149.86 | 347 | iPKP | PKPbc | 00 31 14.9 | +0.1 | | |
| | comp=Z,3.5nm,0.6s | | | | | | | | |
| MOTA | Moosalm | 149.89 | 348 | ePKP | PKPbc | 00 31 13.9 | -1.0 | | |
| | comp=Z,3.2nm,1.3s | | | | | | | | |
| MYKA | Terra Mystica | 149.97 | 344 | iPKP | PKPbc | 00 31 14.5 | -0.4 | | |
| | comp=Z,1.3nm,0.6s | | | | | | | | |
| SQTA | Sankt Quirin | 149.99 | 347 | iPKP | PKPbc | 00 31 14.8 | -0.2 | | |
| | comp=Z,2.4nm,0.6s | | | | | | | | |
| ABTA | Abfaltersbach | 150.15 | 345 | ePKP | PKPbc | 00 31 14.9 | -0.5 | | |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| DAVA | Damuels | 150.18 | 349 | ePKP | PKPbc | 00 31 15.8 | +0.3 | | |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| FETA | Feichten | 150.27 | 348 | iPKP | PKiKP | 00 31 16.2 | -0.1 | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | |
| CTI | Castel Tesino | 151.00 | 346 | PKPab | PKPab | 00 31 27.0 | -0.7 | | |
| KEST | Kesra | 161.28 | 341 | PKPab | PKPab | 00 32 11.5 | -0.8 | | |
| | comp=Z,2.6nm,0.9s,baz=15,slow=6.0,SNR=4.1 | | | | | | | | |

*NEIC* ***20*** *00:13:52±1.5, 69°.62N±0°.05×144°.42W±0°.03, h10km±2km, Error ellipse: s-maj=8.8km s-min=3.0km az=6.0*

**AEIC 20 00:13:50.8±1.9, 69°.56N±0°.05×144°.59W±0°.08, h10km±6km, ML2.7, ML2.8/1**16(NEIC), **Error ellipse: s-maj=7.6km s-min=3.9km az=193.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.32 | 77 | Pg | Pg | 00 13 56.7 | -0.4 |
| C27K | | | | Sg | Sg | 00 14 00.5 | -0.8 |
| C27K | | | | IAML | | 00 14 02.7 | |
| | comp=N,1μm,0.5s | | | | | | |
| C27K | | | | IAML | | 00 14 02.8 | |
| | comp=E,1μm,0.3s | | | | | | |
| C26K | Camden Bay | 0.38 | 343 | | Pb | 00 13 59.3 | -0.2 |
| C26K | | | | | Sb | 00 14 05.2 | -0.2 |
| C26K | Camden Bay | 0.38 | 343 | IAML | | 00 14 07.0 | |
| | comp=N,758nm,0.4s | | | | | | |
| D25K | Kavik River | 0.67 | 250 | Pg | Pg | 00 14 03.2 | -0.6 |
| D25K | | | | Sg | Sg | 00 14 13.3 | +0.7 |
| D27M | Malcolm River | 1.32 | 102 | Pn | Pn | 00 14 14.5 | -0.8 |
| D27M | | | | Sn | Sg | 00 14 33.4 | +0.1 |
| D27M | | | | IAML | | 00 14 36.2 | |
| | comp=N,158nm,0.4s | | | | | | |
| C24K | Franklin Bluff | 1.45 | 278 | | Pg | 00 14 19.0 | +0.5 |
| C24K | Franklin Bluff | 1.45 | 278 | Sn | Sg | 00 14 39.4 | +2.2 |
| D24K | Happy Valley | 1.56 | 257 | Pn | Pg | 00 14 21.0 | +0.4 |
| D24K | | | | Sn | Sg | 00 14 42.2 | +1.5 |
| D24K | | | | | Sb | 00 14 42.9 | +3.6 |
| E27K | Coleen River | 1.76 | 140 | Pn | Pn | 00 14 21.7 | +0.4 |
| E27K | | | | Sn | Sb | 00 14 45.2 | +0.1 |
| F26K | Sheenjek River | 1.88 | 175 | | Pb | 00 14 25.6 | +0.4 |
| F26K | | | | | Sb | 00 14 48.8 | 0.0 |
| F26K | | | | IAML | | 00 14 53.2 | |
| | comp=N,104nm,0.6s | | | | | | |
| TOLK | Toolik Lake Re | 2.01 | 245 | | Pg | 00 14 28.4 | -0.9 |
| TOLK | | | | IAML | | 00 14 58.6 | |
| | comp=E,86nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 00 15 07.3 | |
| | comp=N,74nm,0.7s | | | | | | |
| F25K | Christian Rive | 2.01 | 192 | | Pb | 00 14 27.4 | 0.0 |
| F25K | | | | Sn | Sg | 00 14 54.1 | -1.3 |
| F25K | | | | IAML | | 00 14 57.5 | |
| | comp=N,79nm,0.8s | | | | | | |
| F25K | | | | IAML | | 00 14 58.3 | |
| | comp=E,58nm,0.6s | | | | | | |
| E28M | Babbage River | 2.05 | 115 | Pn | Pb | 00 14 27.2 | -0.9 |
| E28M | | | | Sn | Sb | 00 14 53.2 | -0.4 |
| E24K | Your Creek | 2.06 | 225 | Pn | Pb | 00 14 28.1 | -0.1 |
| D28M | Stokes Point | 2.08 | 94 | | Pb | 00 14 29.0 | +0.4 |
| C23K | Itkillik River | 2.12 | 280 | | Pb | 00 14 29.2 | 0.0 |
| BMAR | Burnt Mountain | 2.14 | 180 | | Pn | 00 14 28.1 | +1.5 |
| D23K | Nanushuk River | 2.25 | 257 | | Pb | 00 14 30.0 | -1.4 |
| D23K | | | | IAML | | 00 15 17.4 | |
| | comp=E,45nm,0.7s | | | | | | |
| D23K | | | | IAML | | 00 15 17.5 | |
| | comp=N,46nm,0.9s | | | | | | |
| E23K | Chandalar | 2.37 | 233 | | Pb | 00 14 32.4 | -1.1 |
| E23K | | | | | Pg | 00 14 33.0 | -3.1 |
| E23K | | | | IAML | | 00 15 10.7 | |
| | comp=E,38nm,0.5s | | | | | | |
| F24K | Squaw Lake | 2.38 | 212 | Pn | Pn | 00 14 30.8 | +0.9 |
| F28M | Old Crow | 2.61 | 136 | Pn | Pn | 00 14 33.7 | +0.7 |
| F28M | | | | | Pb | 00 14 33.9 | -3.8 |
| F28M | | | | IAML | | 00 15 19.1 | |
| | comp=N,48nm,0.6s | | | | | | |
| F28M | | | | IAML | | 00 15 21.0 | |
| | comp=E,32nm,0.8s | | | | | | |
| G26K | Porcupine Rive | 2.64 | 173 | | Pn | 00 14 35.4 | +2.0 |
| E29M | Blow River | 2.69 | 113 | Pn | Pn | 00 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,8.8nm,0.7s | | | | | | | | |
| G31M | | | | IAML | | | 00 16 29.4 | | |
| | comp=N,11nm,1.2s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.80** | **205** | IAML | | | 00 16 35.1 | | |
| | comp=N,8.7nm,1.1s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **199** | | | Pn | 00 15 05.2 | +1.8 | |
| MDM | | | | IAML | | | 00 16 25.7 | | |
| | comp=N,7.6nm,0.9s | | | | | | | | |
| MDM | | | | IAML | | | 00 16 28.8 | | |
| | comp=E,7.1nm,1.1s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.84** | **244** | Pn | | Pn | 00 15 05.7 | +2.2 | |
| F20K | | | | IAML | | | 00 16 05.8 | | |
| | comp=E,5.7nm,1.4s | | | | | | | | |
| F20K | | | | IAML | | | 00 16 38.4 | | |
| | comp=N,7.1nm,1.4s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.86** | **147** | IAML | | | 00 16 09.9 | | |
| | comp=E,10nm,0.5s | | | | | | | | |
| **IL31** | | **4.89** | **192** | Pn | | Pn | 00 15 07.7 | +3.4 | |
| **ILAR** | **Eielson Array** | **4.89** | **192** | Pn | | Pn | 00 15 06.2 | +2.0 | |
| **D19K** | **Kuna River** | **4.97** | **264** | Pn | | Pn | 00 15 07.5 | +2.1 | |
| D19K | | | | IAML | | | 00 16 05.3 | | |
| | comp=E,5.7nm,0.7s | | | | | | | | |
| **J25K** | **Salcha River,** | **4.98** | **184** | Pn | | Pn | 00 15 07.7 | +2.2 | |
| J25K | | | | IAML | | | 00 16 36.4 | | |
| | comp=E,6.2nm,1.2s | | | | | | | | |
| **EGAK** | **Eagle** | **4.99** | **163** | Pn | | Pn | 00 15 07.8 | +2.2 | |
| EGAK | | | | IAML | | | 00 16 32.6 | | |
| | comp=E,8.0nm,1.4s | | | | | | | | |
| EGAK | | | | IAML | | | 00 16 42.8 | | |
| | comp=E,8.6nm,1.1s | | | | | | | | |
| **IMAR** | **Indian Mountai** | **5.00** | **228** | Pn | | Pn | 00 15 07.6 | +1.9 | |
| **H21K** | **Melozitna Rive** | **5.02** | **223** | | | Pn | 00 15 08.0 | +1.9 | |
| **CCB** | **Clear Creek Bu** | **5.09** | **196** | Pn | | Pn | 00 15 08.8 | +1.8 | |
| **J26L** | **Joseph Creek** | **5.10** | **175** | | | Pn | 00 15 09.6 | +2.4 | |
| J26L | | | | IAML | | | 00 16 09.9 | | |
| | comp=N,5.8nm,0.8s | | | | | | | | |
| **E19K** | **Redstone River** | **5.10** | **252** | Pn | | Pn | 00 15 10.0 | +2.8 | |
| E19K | | | | IAML | | | 00 16 09.2 | | |
| | comp=E,8.7nm,0.7s | | | | | | | | |
| **MLY** | **Manley** | **5.13** | **211** | Pn | | Pn | 00 15 09.2 | +1.5 | |
| **HDA** | **Harding Lake** | **5.26** | **191** | Pn | | Pn | 00 15 11.9 | +2.7 | |
| HDA | | | | IAML | | | 00 15 55.6 | | |
| | comp=N,5.9nm,1.4s | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **197** | Pn | | Pn | 00 15 11.7 | +2.0 | |
| WRH | | | | IAML | | | 00 16 43.4 | | |
| | comp=E,4.5nm,0.9s | | | | | | | | |
| WRH | | | | IAML | | | 00 16 44.2 | | |
| | comp=N,4.2nm,1.3s | | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.33** | **272** | Pn | | Pn | 00 15 12.0 | +1.6 | |
| C19K | | | | IAML | | | 00 17 22.0 | | |
| | comp=E,5.1nm,1.4s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.38** | **140** | Pn | | Pn | 00 15 12.4 | +1.3 | |
| **SCRK** | **Sand Creek** | **5.61** | **177** | Pn | | Pn | 00 15 16.7 | +2.4 | |
| **K27K** | **Chicken** | **5.64** | **169** | Pn | | Pn | 00 15 16.3 | +1.7 | |
| **G19K** | **Purcell Mounta** | **5.83** | **240** | Pn | | Pn | 00 15 20.2 | +3.0 | |
| **RIDG** | **Independent Ri** | **5.85** | **181** | Pn | | Pn | 00 15 20.0 | +2.6 | |
| **C18K** | **Utukok River** | **6.01** | **269** | Pn | | Pn | 00 15 21.2 | +1.5 | |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **208** | Pn | | Pn | 00 15 21.1 | +1.2 | |
| **H19K** | **Roundabout Mou** | **6.08** | **234** | | | Pn | 00 15 22.5 | +2.0 | |
| **E18K** | **Tukpahlearik C** | **6.26** | **258** | Pn | | Pn | 00 15 24.9 | +1.9 | |
| **K29M** | **Barlow Dome** | **6.38** | **151** | | | Pn | 00 15 26.8 | +1.9 | |
| **RND** | **Reindeer** | **6.41** | **197** | Pn | | Pn | 00 15 27.9 | +2.7 | |
| **G18K** | **Tagagawik** | **6.48** | **242** | Pn | | Pn | 00 15 27.8 | +1.8 | |
| **J20K** | **Nowinta River** | **6.58** | **219** | Pn | | Pn | 00 15 29.4 | +2.0 | |
| **L26K** | **Log Cabin Wild** | **6.58** | **175** | Pn | | Pn | 00 15 30.4 | +2.9 | |
| **DHY** | **Denali Highway** | **6.61** | **191** | Pn | | Pn | 00 15 29.9 | +2.0 | |
| **BCAR** | **Beaver Creek A** | **6.62** | **169** | P | | Pg | 00 15 52.0 | -5.4 | |
| **BCAR** | **Beaver Creek A** | **6.62** | **169** | Pn | | Pn | 00 15 30.7 | +2.7 | |
| BCAR | | | | | | Pg | 00 15 52.0 | -5.4 | |
| **L27K** | **Beaver Creek,** | **6.62** | **169** | Pn | | Pn | 00 15 30.0 | +2.0 | |
| **RDOG** | **Red Dog Mine** | **6.80** | **266** | Pn | | Pn | 00 15 30.7 | +0.3 | |
| **H18K** | **Honhosa River** | **6.90** | **237** | Pn | | Pn | 00 15 34.9 | +3.0 | |
| **F17K** | **Baldwin Pennin** | **6.98** | **251** | Pn | | Pn | 00 15 33.1 | +0.2 | |
| **K20K** | **Telida** | **7.28** | **216** | | | Pn | 00 15 39.7 | +2.6 | |
| **K20K** | **Telida** | **7.28** | **216** | P | | Pn | 00 15 39.7 | +2.6 | |
| **K20K** | **Telida** | **7.28** | **216** | P | | Pn | 00 15 40.2 | +3.1 | |
| | baz=203,SNR=8.6 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **7.51** | **186** | Pn | | Pn | 00 15 43.2 | +2.9 | |
| **M24K** | **Tolsona, Glenn** | **7.51** | **186** | P | | Pn | 00 15 43.2 | +2.9 | |
| | baz=211 | | | | | | | | |
| **H17K** | **Granite Mounta** | **7.52** | **239** | Pn | | Pn | 00 15 41.7 | +1.4 | |
| **M29M** | **Somme Creek** | **7.57** | **158** | Pn | | Pn | 00 15 43.6 | +2.5 | |
| **C16K** | **Lisburne Hills** | **7.58** | **270** | Pn | | Pn | 00 15 42.1 | +1.0 | |

*IDC **20** 00:21:26.6±3.1, 18°.19S×177°.95W, h562km±36km, mb3.5/14, mbtmp4.4/15, Error ellipse: s-maj=20.3km s-min=16.1km az=156.0*

*NEIC **20** 00:21:28.5±0.8, 18°.1S±0°.2×177°.9W±0°.2, h576km±15km, mb4.6/13, Error ellipse: s-maj=25.8km s-min=21.9km az=46.0*

*NOU **20** 00:21:33.2, 18°.91S×178°.52W, h548km, mb4.6/7, Fiji Islands Region*

**ISC 20 00:21:28.5±0.5, 18°.2S±0°.1×178°.00W±0°.09, h590km, n103, σ0$77/102, mb3.9/18, 23C-13D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.78** | **276** | P | **P** | **00 22 51.4** | **-0.4** |
| **MSVF** | **Nonsavu** | **3.78** | **276** | P | **P** | **00 22 51.1** | **-0.7** |
| **NIUE** | **Niue** | **7.71** | **98** | P | **P** | **00 23 23.5** | **-1.2** |
| **FUNA** | **Funafuti** | **9.94** | **344** | P | **P** | **00 23 45.7** | **-0.9** |
| **LIFNC** | **LIFOU** | **14.16** | **257** | P | **P** | **00 24 27.0** | **-2.1** |
| **DZM** | **Mont Dzumac** | **15.12** | **252** | P | **P** | **00 24 39.5** | **+1.3** |
| DZM | | | | IAmb | IAmb | 00 24 41.0 | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.12** | **252** | P | **P** | **00 24 38.4** | **+0.1** |
| | comp=Z,5.8nm,0.5s,baz=132,slow=9.7,SNR=14 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.26** | **252** | P | **P** | **00 24 39.0** | **-0.4** |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **00 24 56.1** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **00 24 55.4** | **+0.9** |
| KOUNC | | | | IAmb | IAmb | 00 25 14.2 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **20.49** | **191** | P | **P** | **00 25 24.6** | **-2.3** |
| | comp=Z,4.5nm,0.3s,baz=335,slow=3.6,SNR=9.5 | | | | | | |
| | comp=Z,4.5nm,0.3s | | | | | | |
| **KHZ** | **Kahutara** | **25.24** | **195** | P | **P** | **00 26 08.0** | **-1.0** |
| **LBZ** | **Lake Benmore** | **27.98** | **198** | P | **P** | **00 26 31.9** | **-1.2** |
| **EIDS** | **Eidsvold** | **29.55** | **250** | P | **P** | **00 26 47.0** | **0.0** |
| EIDS | | | | IAmb | IAmb | 00 27 05.6 | |
| | comp=Z,9.8nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **30.16** | **240** | P | **P** | **00 26 53.2** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 00 27 11.7 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **00 27 23.1** | **0.0** |
| CTAO | | | | IAmb | IAmb | 00 27 41.9 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **CAN** | **Canberra** | **33.87** | **233** | P | **P** | **00 27 24.5** | **+1.0** |
| **TOO** | **Toolangi** | **37.32** | **231** | P | **P** | **00 27 52.6** | **+0.7** |
| **COEN** | **Coen** | **37.50** | **271** | P | **P** | **00 27 54.2** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.86** | **242** | P | **P** | **00 28 05.6** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.86** | **242** | P | **P** | **00 28 05.8** | **+1.4** |
| | comp=Z,9.2nm,0.5s,baz=94,slow=11,SNR=18 | | | | | | |
| | comp=Z,9.2nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.63** | **241** | P | **P** | **00 28 42.6** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 00 29 01.3 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **00 28 52.0** | **-0.6** |
| | comp=Z,6.7nm,0.5s,baz=96,slow=7.3,SNR=39 | | | | | | |
| | comp=Z,6.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **00 28 53.9** | **+0.3** |
| | comp=Z,36nm,0.8s,baz=86,slow=9.0,SNR=273 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 30 22.0** | **+0.6** |
| | comp=Z,2.0nm,0.5s,baz=106,slow=4.4,SNR=4.3 | | | | | | |
| | comp=Z,36nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.33** | **323** | P | **P** | **00 31 31.5** | **-0.4** |
| | comp=Z,2.3nm,0.6s,baz=157,slow=6.7,SNR=5.8 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.91** | **180** | P | **P** | **00 31 54.2** | **+1.5** |
| **QSPA** | **South Pole Qui** | **71.91** | **180** | P | **P** | **00 31 52.6** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=329,slow=0.4,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **NACB** | **Ninganchiao** | **72.37** | **304** | P | **P** | **00 31 56.1** | **+0.2** |
| NACB | | | | IAmb | IAmb | 00 32 15.2 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.01** | **345** | P | **P** | **00 32 04.7** | **+0.1** |
| | comp=Z,2.6nm,0.7s,baz=141,slow=7.4,SNR=2.1 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.46** | **39** | P | **P** | **00 32 30.5** | **+1.1** |
| | comp=Z,2.3nm,1.0s,baz=149,slow=5.9,SNR=3.5 | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.33** | **44** | P | **P** | **00 32 35.3** | **+1.0** |
| | comp=Z,1.0nm,0.7s,baz=224,slow=8.7,SNR=9.5 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ELK** | **Elko** | | **82.56** | **43** | P | **P** | **00 32 50.9** | **0.0** | |
| | comp=Z,0.5nm,0.4s,baz=235,slow=12,SNR=3.5 | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | | **85.80** | **57** | P | **P** | **00 33 08.8** | **+2.0** | |
| | comp=Z,1.3nm,0.8s,baz=221,slow=6.3,SNR=14 | | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | | **86.03** | **13** | P | **P** | **00 33 06.2** | **-0.7** | |
| | comp=Z,0.7nm,0.4s,baz=225,slow=5.2,SNR=13 | | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| **PDAR** | **Pinedale Array** | | **87.26** | **43** | P | **P** | **00 33 14.3** | **+0.8** | |
| | comp=Z,0.4nm,0.3s,baz=194,slow=3.8,SNR=5.0 | | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | **89.33** | **290** | P | **P** | **00 33 24.0** | **+0.6** | |
| | comp=Z,0.7nm,0.5s,baz=108,slow=3.9,SNR=7.1 | | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | | |
| **BVAR** | **Borovoye Array** | | **117.28** | **321** | PKP | **PKPdf** | **00 39 06.5** | **-0.9** | |
| | comp=Z,0.7nm,0.4s,baz=100,slow=2.8,SNR=1.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | | **126.62** | **350** | PKP | **PKPdf** | **00 39 24.8** | **-0.1** | |
| | comp=Z,0.8nm,0.5s,baz=76,slow=0.5,SNR=6.5 | | | | | | | | |
| **FINES** | **FINESS Array B** | | **133.52** | **344** | PKP | **PKiKP** | **00 39 40.1** | **+0.7** | |
| | comp=Z,1.7nm,0.9s,baz=281,slow=1.0,SNR=4.2 | | | | | | | | |
| **HFS** | **Hagfors** | | **137.23** | **351** | PKP | **PKiKP** | **00 39 46.6** | **-0.5** | |
| | comp=Z,1.6nm,0.9s,baz=76,slow=6.1,SNR=1.0 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | | **142.67** | **5** | PKiKP | PKPpre | 00 39 51.0 | | |
| | comp=Z,0.2nm,0.4s,baz=340,slow=3.1,SNR=5.7 | | | | | | | | |
| **SORM** | **Soroca** | | **143.19** | **330** | ⇑P | PKPab | 00 39 53.9 | -0.3 | |
| **BURAR** | **Bucovina Array** | | **145.00** | **332** | ⇓P | **PKPab** | **00 40 01.4** | **0.0** | |
| **GHRR** | | | **145.11** | **329** | ⇓P | **PKPab** | **00 40 01.2** | **-0.5** | |
| **TESR** | **Tescani** | | **145.16** | **330** | ⇑P | **PKPdf** | **00 39 60.0** | **+0.4** | |
| **BRTR** | **Keskin Array B** | | **145.23** | **315** | PKPbc | **PKPbc** | **00 40 01.4** | **+0.2** | |
| | comp=Z,3.3nm,0.7s,baz=133,slow=4.4,SNR=20 | | | | | | | | |
| **KIRS** | **Kirsehir-Merke** | | **145.32** | **314** | ⇓P | **PKPbc** | **00 40 01.6** | **+0.1** | |
| **CFR** | **Carcaliu** | | **145.35** | **327** | ⇓P | **PKPab** | **00 40 02.0** | **-0.6** | |
| **TPGR** | **Topolog** | | **145.41** | **326** | ⇑P | **PKPbc** | **00 40 01.4** | **-0.1** | |
| **OSTC** | **Ostas** | | **145.73** | **344** | *e*PKP | **PKPab** | **00 40 03.6** | **-0.4** | |
| **CHVC** | **Chvalec** | | **145.74** | **344** | *e*PKP | **PKPbc** | **00 40 02.5** | **+0.2** | |
| **CLL** | **Collm** | | **145.78** | **348** | *i* PKPbc | **PKPbc** | **00 40 02.5** | **+0.2** | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **UPC** | **Upice** | | **145.83** | **344** | *e*PKP | **PKPbc** | **00 40 03.1** | **+0.6** | |
| **COVR** | **Voineasa-Covas** | | **145.85** | **329** | ⇑P | **PKPbc** | **00 40 03.1** | **+0.3** | |
| **DPC** | **Dobruska-Polom** | | **145.89** | **344** | *e*PKP | **PKPab** | **00 40 03.7** | **-1.0** | |
| **BRG** | **Berggiesshubel** | | **145.99** | **346** | *e*PKP | **PKPbc** | **00 40 03.6** | **+0.7** | |
| BRG | | | | | Amp | | 00 40 03.9 | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **KRLC** | **Kraliky** | | **146.01** | **343** | ⇑*e*PKP | **PKPbc** | **00 40 03.8** | **+0.8** | |
| **MORC** | **Moravsky Berou** | | **146.06** | **342** | *e*PKP | **PKPbc** | **00 40 03.5** | **+0.3** | |
| **MORC** | **Moravsky Berou** | | **146.06** | **342** | ⇓P | **PKPdf** | **00 40 01.9** | **+0.8** | |
| **DOPR** | **Dopca** | | **146.16** | **330** | ⇓P | **PKPbc** | **00 40 04.7** | **+1.1** | |
| **PVCC** | **Panska Ves** | | **146.17** | **346** | ⇑*e*PKP | **PKPbc** | **00 40 04.2** | **+0.8** | |
| **MLR** | **Muntele Rosu** | | **146.24** | **329** | ⇑P | **PKPbc** | **00 40 04.2** | **+0.2** | |
| **CBBR** | **Cluj-Babes-Bol** | | **146.38** | **333** | ⇑P | **PKPdf** | **00 40 01.2** | **-0.4** | |
| **CJR** | **Cluj-Napoca** | | **146.41** | **333** | ⇑P | **PKPbc** | **00 40 04.5** | **+0.2** | |
| **MMAI** | **Mount Meron Ar** | | **146.60** | **303** | PKPbc | **PKPbc** | **00 40 06.0** | **+0.8** | |
| | comp=Z,5.1nm,0.5s,baz=67,slow=6.4,SNR=18 | | | | | | | | |
| **PRA** | **Prague** | | **146.62** | **345** | ⇑*e*PKP | **PKPbc** | **00 40 05.1** | **+0.5** | |
| **PRU** | **Pruhonice** | | **146.68** | **345** | ⇑*e*PKP | **PKPbc** | **00 40 05.4** | **+0.6** | |
| **VOIR** | | | **146.71** | **330** | ⇑P | **PKPbc** | **00 40 05.2** | **+0.1** | |
| **DRGR** | | | **146.72** | **334** | ⇓P | **PKPbc** | **00 40 05.1** | **-0.1** | |
| **VRAC** | **Vranov** | | **146.75** | **342** | *e*PKP | **PKPbc** | **00 40 06.0** | **+0.9** | |
| **JAVC** | **Velka Javorina** | | **146.83** | **341** | *e*PKP | **PKiKP** | **00 40 06.9** | **-0.3** | |
| **PSZ** | **Piszkesteto** | | **146.90** | **338** | ⇑P | **PKPbc** | **00 40 05.8** | **+0.2** | |
| **ARR** | **Arges** | | **146.96** | **330** | ⇑P | **PKiKP** | **00 40 06.9** | **-0.7** | |
| **KRUC** | **Moravsky** | | **147.03** | **343** | *e*PKP | **PKPbc** | **00 40 06.3** | **+0.5** | |
| **TREC** | **Trest** | | **147.07** | **344** | ⇑*e*PKP | **PKPbc** | **00 40 06.3** | **+0.4** | |
| **ZVC** | **Zvikov** | | **147.27** | **345** | ⇑*e*PKP | **PKiKP** | **00 40 07.5** | **-0.5** | |
| **SIRR** | **Siria** | | **147.58** | **334** | ⇓P | **PKPbc** | **00 40 07.7** | **+0.4** | |
| **KHC** | **Kasperske Hory** | | **147.70** | **346** | ⇑*e*PKP | **PKiKP** | **00 40 08.4** | **-0.6** | |
| **GZR** | **Guza Zlata** | | **147.79** | **332** | ⇓P | **PKPbc** | **00 40 07.7** | **-0.2** | |
| **SURR** | **Surduc** | | **147.79** | **333** | ⇑P | **PKPbc** | **00 40 08.2** | **+0.4** | |
| **CKRC** | **Cesky Krumlov** | | **147.81** | **345** | ⇑*e*PKP | **PKPbc** | **00 40 08.4** | **+0.6** | |
| **GERES** | **GERESS Array B** | | **147.94** | **345** | PKPbc | **PKPbc** | **00 40 08.8** | **+0.5** | |
| | comp=Z,2.8nm,0.6s,baz=165,slow=11,SNR=16 | | | | | | | | |
| **BZS** | **Buzias** | | **148.12** | **334** | ⇓P | **PKPbc** | **00 40 08.5** | **-0.2** | |
| **CONA** | **Conrad Observa** | | **148.21** | **342** | *e*PKiKP | **PKiKP** | **00 40 09.6** | **-0.6** | |
| | comp=Z,3.0nm,0.7s,SNR=5.4 | | | | | | | | |
| **RONA** | **Rosalia, Austr** | | **148.29** | **342** | *i* PKiKP | **PKiKP** | **00 40 09.9** | **-0.3** | |
| | comp=Z,3.8nm,0.6s,SNR=4.7 | | | | | | | | |
| **HERR** | **Herculane** | | **148.35** | **332** | ⇓P | **PKPbc** | **00 40 09.5** | **+0.2** | |
| **MOA** | **Molln** | | **148.72** | **344** | *e*PKiKP | **PKiKP** | **00 40 11.2** | **+0.1** | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | | **148.80** | **337** | ⇓P | **PKPbc** | **00 40 10.5** | **+0.2** | |
| **ARSA** | **Arzberg** | | **148.92** | **342** | *e*PKP | **PKPab** | **00 40 14.6** | **-2.5** | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | | **149.03** | **345** | *i* PKP | **PKPbc** | **00 40 11.0** | **+0.1** | |
| | comp=Z,2.6nm,0.7s | | | | | | | | |
| **LESA** | **Schwarzleotal** | | **149.51** | **346** | *e*PKiKP | **PKiKP** | **00 40 12.6** | **-0.3** | |
| | comp=Z,2.6nm,0.7s | | | | | | | | |
| **SOKA** | **Soboth** | | **149.58** | **342** | *i* PKP | **PKPbc** | **00 40 11.9** | **-0.4** | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | | **149.67** | **345** | *e*PKP | **PKPbc** | **00 40 12.6** | **0.0** | |
| | comp=Z,3.3nm,0.5s,SNR=5.9 | | | | | | | | |
| **WATA** | **Walderalm** | | **149.84** | **347** | *e*PKiKP | **PKPbc** | **00 40 13.0** | **+0.1** | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **RETA** | **Reutte** | | **149.87** | **348** | *e*PKiKP | **PKPbc** | **00 40 13.2** | **+0.2** | |
| | comp=Z,0.9nm,0.5s | | | | | | | | |
| **OBKA** | **Obir** | | **149.87** | **343** | *e*PKP | **PKPbc** | **00 40 12.2** | **-0.8** | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **WTTA** | **Wattenberg** | | **149.90** | **347** | *e*PKiKP | **PKiKP** | **00 40 13.5** | **-0.3** | |
| | comp=Z,8.9nm,0.6s | | | | | | | | |
| **MOTA** | **Moosalm** | | **149.94** | **348** | *i* PKiKP | **PKPbc** | **00 40 13.5** | **+0.3** | |
| | comp=Z,4.1nm,0.9s | | | | | | | | |
| **MYKA** | **Terra Mystica** | | **150.01** | **344** | *e*PKP | **PKPbc** | **00 40 12.7** | **-0.6** | |
| | comp=Z,3.5nm,0.5s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | | **150.03** | **347** | *i* PKiKP | **PKPbc** | **00 40 13.6** | **+0.2** | |
| | comp=Z,4.6nm,0.6s,SNR=5.4 | | | | | | | | |
| **ABTA** | **Abfaltersbach** | | **150.19** | **345** | *i* PKP | **PKPbc** | **00 40 13.5** | **-0.2** | |
| | comp=Z,6.6nm,0.6s,SNR=11 | | | | | | | | |
| **DAVA** | **Damuels** | | **150.22** | **349** | *i* PKiKP | **PKiKP** | **00 40 14.2** | **-0.2** | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **FETA** | **Feichten** | | **150.32** | **348** | *e*PKiKP | **PKiKP** | **00 40 14.5** | **-0.1** | |
| | comp=Z,4.6nm,0.8s | | | | | | | | |

*IDC **20** 00:21:45.7±2.9, 18°.20S×178°.12W, h562km±33km, mb3.7/16, mbtmp4.6/17, Error ellipse: s-maj=16.0km s-min=14.0km az=123.0*

*NEIC **20** 00:21:47.2±1.2, 18°.2S±0°.1×178°.1W±0°.1, h577km±8km, mb4.3/112, Error ellipse: s-maj=21.9km s-min=16.0km az=135.0*

**ISC 20 00:21:48.1±0.4, 18°.17S±0°.09×178°.17W±0°.09, h600km, n384, σ1$30/362, mb4.3/76, 5C-5D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.62** | **276** | P | **P** | **00 23 10.0** | **-1.2** |
| **AFI** | **Afiamalu** | **7.46** | **56** | P | **P** | **00 23 39.4** | **-3.1** |
| **LIFNC** | **LIFOU** | **14.00** | **257** | P | **P** | **00 24 44.5** | **-2.6** |
| **PINNC** | **Pines Island,** | **14.19** | **249** | P | **P** | **00 24 47.4** | **-1.4** |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | **P** | **00 24 55.7** | **-0.3** |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | **P** | **00 24 55.9** | **-0.2** |
| | 8.4nm,0.5s,baz=94,slow=18,SNR=9.6 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.72** | **259** | P | **P** | **00 25 13.2** | **+1.1** |
| **URZ** | **Urewera** | **20.44** | **191** | P | **P** | **00 25 42.8** | **-2.8** |
| | 7.8nm,0.3s,baz=2.7,slow=3.1,SNR=11 | | | | | | |
| | 7.8nm,0.3s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.05** | **192** | P | **P** | **00 26 06.8** | **-2.1** |
| **MSWZ** | **Moikau Station** | **23.85** | **192** | P | **P** | **00 26 14.3** | **-1.6** |
| **PLWZ** | **Palliser** | **23.99** | **192** | P | **P** | **00 26 16.2** | **-1.1** |
| **CTA** | **Charters Tower** | **33.63** | **261** | P | **P** | **00 27 41.0** | **+0.3** |
| | 0.7nm,0.6s,baz=95,slow=12,SNR=5.7 | | | | | | |
| **TOO** | **Toolangi** | **37.18** | **231** | P | **P** | **00 28 11.2** | **+1.3** |
| **COEN** | **Coen** | **37.33** | **271** | P | **P** | **00 28 12.3** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.70** | **242** | P | **P** | **00 28 23.3** | **+1.1** |
| STKA | | | | IAmb | IAmb | 00 28 24.3 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.70** | **242** | P | **P** | **00 28 23.4** | **+1.1** |
| | comp=Z,19nm,0.7s,baz=97,slow=8.7,SNR=16 | | | | | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.81** | **260** | P | **P** | **00 29 10.2** | **-0.1** |
| | comp=Z,6.8nm,0.5s,baz=96,slow=7.1,SNR=10 | | | | | | |
| | comp=Z,6.8nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.94** | **254** | P | **P** | **00 29 11.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **44.94** | **254** | P | **P** | **00 29 11.8** | **+0.5** |
| | comp=Z,38nm,0.8s,baz=87,slow=9.1,SNR=35 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 30 40.1** | **+0.6** |
| | comp=Z,1.3nm,0.6s,baz=110,slow=3.6,SNR=3.0 | | | | | | |
| ASAR | | | | S | **S** | **00 35 07.1** | **0.0** |
| | comp=Z,4.4nm,1.0s,baz=89,slow=16,SNR=14 | | | | | | |
| | comp=Z,38nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.25** | **323** | P | **P** | **00 31 50.6** | **+0.3** |
| | comp=Z,3.2nm,0.5s,baz=152,slow=6.0,SNR=7.0 | | | | | | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.89** | **180** | P | **P** | **00 32 12.7** | **+1.3** |
| QSPA | | | | IAmb | IAmb | 00 32 13.1 | |
| | comp=Z,5.0nm,0.6s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | | **71.89** | **180** | P | **P** | **00 32 12.7** | **+1.3** | |
| | comp=Z,2.9nm,0.4s,baz=229,slow=1.1,SNR=46 | | | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | | **73.99** | **345** | P | **P** | **00 32 24.3** | **+0.9** | |
| **PETK** | **Petropavlovsk-** | | **73.99** | **345** | P | **P** | **00 32 24.2** | **+0.9** | |
| **PETK** | **Petropavlovsk-** | | **73.99** | **345** | P | **P** | **00 32 23.4** | **+0.1** | |
| | comp=Z,7.5nm,0.8s,baz=112,slow=7.2,SNR=7.4 | | | | | | | | |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| **S12K** | **Black Hills** | **74.84** | **9** | P | **P** | **00 32 27.6** | **-0.4** | | |
| **S14K** | **Fog Glacier** | **75.81** | **11** | P | **P** | **00 32 34.6** | **+1.1** | | |
| | baz=198 | | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **77.67** | **12** | P | **P** | **00 32 43.9** | **+0.3** | | |
| | baz=201 | | | | | | | | |
| **MONP2** | **Monument Peak** | **77.81** | **49** | P | **P** | **00 32 46.0** | **+0.8** | | |
| | baz=239 | | | | | | | | |
| **CMB** | **Columbia Colle** | **77.87** | **43** | P | **P** | **00 32 46.2** | **+1.0** | | |
| **OHAK** | **Old Harbor** | **77.93** | **14** | P | **P** | **00 32 45.4** | **+0.6** | | |
| | baz=204 | | | | | | | | |
| **R18K** | **Karluk** | **78.00** | **13** | P | **P** | **00 32 45.9** | **+0.7** | | |
| | baz=203 | | | | | | | | |
| **YUH** | **Yuha Desert** | **78.05** | **50** | P | P | 00 32 47.8 | +1.7 | | |
| **Q17K** | **Contact Creek** | **78.35** | **12** | P | **P** | **00 32 48.1** | **+0.8** | | |
| | baz=202 | | | | | | | | |
| **MDPB** | **Devils Postpil** | **78.50** | **44** | P | **P** | **00 32 49.3** | **+0.5** | | |
| **O15K** | **Ungalikthiuk R** | **78.52** | **10** | P | **P** | **00 32 49.2** | **+1.1** | | |
| | baz=198 | | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.53** | **325** | P | **P** | **00 32 50.3** | **+1.9** | | |
| MDJ | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.53** | **325** | P | **P** | **00 32 49.1** | **+0.7** | | |
| **OMMB** | **Old Mammoth Mi** | **78.55** | **44** | P | P | 00 32 50.9 | +1.8 | | |
| **YBH** | **Yreka Blue Hor** | **78.58** | **39** | P | **P** | **00 32 50.1** | **+1.3** | | |
| **YBH** | **Yreka Blue Hor** | **78.58** | **39** | P | P | 00 32 50.6 | +1.8 | | |
| | comp=Z,2.4nm,0.5s,baz=247

L19K **White Mountain** 82.19 11 P P 00 33 07.9 +0.9
baz=202
RC01 **Rabbit Creek A** 82.22 14 P P 00 33 07.3 +0.2
baz=207
M20K **Styx River** 82.23 12 P P 00 33 08.0 +0.7
baz=204
CCUT **Cedar City** 82.33 47 P P 00 33 10.1 +1.6
SUA **Susitna One** 82.33 13 P P 00 33 08.0 +0.1
baz=206
J16K **Anvik River** 82.35 8 P P 00 33 08.0 +0.3
baz=197
U15A **North Rim** 82.52 48 P P 00 33 11.1 +1.5
U15A IAmb IAmb 00 33 12.8
comp=Z,5.9nm,0.8s
SZCU **Shurtz Canyon** 82.54 47 P P 00 33 09.7 +0.1
SZCU IAmb IAmb 00 33 10.3
comp=Z,9.2nm,1.4s
SKT **Skwentna** 82.64 12 P P 00 33 09.7 +0.5
baz=205
L20K **Farewell, AK** 82.64 11 P P 00 33 10.3 +1.0
baz=203
J17K **VABM Dome** 82.66 9 P P 00 33 09.9 +0.6
baz=198
ELK **Elko** 82.69 43 P P 00 33 11.4 +1.1
ELK **Elko** 82.69 43 P P 00 33 11.8 +1.5
comp=Z,3.0nm,1.0s,baz=290,slow=4.8,SNR=6.7
comp=Z,3.0nm,1.0s
M22K **Willow** 82.73 13 P P 00 33 10.5 +0.9
baz=207
WUAZ **Wupatki** 82.74 49 P P 00 33 11.4 +0.8
WUAZ **Wupatki** 82.74 49 P P 00 33 11.1 +0.5
baz=242
PMR **Palmer** 82.80 14 P P 00 33 10.2 +0.2
baz=208
G08A **Pilot Rock** 82.88 38 P P 00 33 12.1 +1.1
G08A IAmb IAmb 00 33 13.4
comp=Z,4.3nm,0.8s
PKCU **Pink Cliffs** 83.00 47 P P 00 33 13.1 +1.1
PKCU IAmb IAmb 00 33 15.8
comp=Z,6.8nm,1.0s
J18K **Innoko River** 83.08 10 IAmb IAmb 00 33 13.3
comp=Z,9.7nm,0.9s
J18K **Innoko River** 83.08 10 P P 00 33 11.8 +0.5
baz=200,SNR=6.1
E07A **Sunnyside** 83.09 36 P P 00 33 13.6 +1.7
E07A IAmb IAmb 00 33 14.4
comp=Z,5.7nm,0.7s
U33K **Whale Pass** 83.14 24 P P 00 33 12.7 +0.9
baz=223
HAWA **Hanford** 83.18 37 P P 00 33 13.7 +1.4
HAWA IAmb IAmb 00 33 14.8
comp=Z,9.1nm,1.2s
CUT **Chulitna** 83.28 13 P P 00 33 13.5 +1.1
baz=206
M23K **Glacier View** 83.30 14 P P 00 33 13.1 +0.6
baz=209
BMRM **Bremner River** 83.35 16 P P 00 33 13.5 +0.7
baz=212
MTPU **Mount Pierson** 83.38 47 P P 00 33 14.7 +0.8
MESA **MESA** 83.40 17 P P 00 33 14.1 +0.8
baz=214
S31K **Pelican** 83.41 21 P P 00 33 13.9 +0.8
baz=220
K20K **Telida** 83.42 11 IAmb IAmb 00 33 14.6
comp=Z,7.6nm,0.8s
K20K **Telida** 83.42 11 P P 00 33 13.9 +0.8
baz=203,SNR=5.7
SCM **Sheep Creek Mo** 83.42 14 P P 00 33 13.7 +0.5
baz=209
H16K **Elim** 83.45 7 P P 00 33 14.0 +0.8
baz=195
KLU **Klutina** 83.46 15 P P 00 33 14.2 +0.8
baz=211
CRQE **Cirque** 83.56 16 P P 00 33 14.4 +0.4
baz=213
BMO **Blue Mountains** 83.60 39 P P 00 33 15.3 +0.7
G15K **Niukluk** 83.61 6 P P 00 33 14.5 +0.6
baz=193
MSU **Marysvale** 83.61 46 P P 00 33 16.3 +1.3
WRAK **Wrangell Islan** 83.66 24 P P 00 33 15.3 +0.9
baz=223
MAW **Mawson** 83.69 200 P P 00 33 15.5 +1.0
comp=Z,1.1nm,0.4s,baz=160,slow=1.7,SNR=7.6
comp=Z,1.1nm,0.4s
MFID **Camas Ranch** 83.72 40 P P 00 33 15.3 +0.1
MFID IAmb IAmb 00 33 17.7
comp=Z,8.4nm,1.3s
PNL **Peninsula** 83.73 19 P P 00 33 15.6 +0.9
baz=217
J19K **Poorman** 83.75 10 P P 00 33 15.8 +1.1
baz=201
PINM **Pinnacle** 83.82 18 P P 00 33 15.5 +0.3
baz=216
F14K **Arctic Creek** 83.87 5 P P 00 33 16.0 +0.8
baz=191
N25K **Chitina, Valde** 83.89 15 P P 00 33 16.0 +0.4
baz=212
D08A **Wollman Farm,** 83.90 36 P P 00 33 17.0 +1.2
D08A IAmb IAmb 00 33 18.3
comp=Z,6.4nm,1.1s
M24K **Tolsona, Glenn** 83.93 15 P P 00 33 16.5 +0.8
baz=210
GLB **Gilahina Butte** 83.95 16 P P 00 33 16.5 +0.7
GLB IAmb IAmb 00 33 17.2
comp=Z,5.8nm,0.6s
WAT6 **Susitna Watana** 83.99 14 P P 00 33 16.3 +0.2
baz=209
DUG **Dugway, Tooele** 84.01 44 P P 00 33 17.8 +1.1
baz=240
H17K **Granite Mounta** 84.02 8 P P 00 33 16.4 +0.4
baz=197
WAT1 **Susitna Watana** 84.03 13 P P 00 33 17.1 +0.9
baz=208
121A **Cookes Peak, D** 84.05 53 P P 00 33 18.4 +1.3
baz=244
MCARA **McCarthy VSAT** 84.11 16 P P 00 33 17.7 +1.1
baz=213
J20K **Nowinta River** 84.16 10 IAmb IAmb 00 33 18.4
comp=Z,12nm,1.2s
J20K **Nowinta River** 84.16 10 P P 00 33 17.5 +0.8
baz=203
LYN **LuoYang** 84.17 309 P P 00 33 19.4 +2.0
LYN pmax pmax
comp=Z,18nm,0.8s
P29M **Windy Craggy** 84.22 19 P P 00 33 18.1 +1.0
baz=218
CTG **Chitna Glacier** 84.22 17 P P 00 33 18.2 +1.0
baz=215
F10A **Beach Ranch, E** 84.27 38 P P 00 33 18.0 +0.2
F10A IAmb IAmb 00 33 19.8
comp=Z,9.9nm,1.1s
O28M **Mount Upton** 84.39 18 P P 00 33 18.8 +0.6
baz=216
DHY **Denali Highway** 84.50 14 P P 00 33 18.8 +0.2
baz=209
PLBC **Pleasant Camp** 84.52 20 P P 00 33 19.2 +0.6
baz=219
BPAW **Bear Paw Mtn.** 84.67 12 P P 00 33 20.1 +0.9
baz=206
HLID **Hailey** 84.68 41 P P 00 33 20.8 +0.8
HLID **Hailey** 84.68 41 P P 00 33 20.7 +0.7
baz=239
I20K **Naaghedeneel** 84.68 10 P P 00 33 19.7 +0.5
baz=202
MCK **McKinley** 84.75 13 P P 00 33 19.7 +0.1
baz=208
PAX **Paxson** 84.85 14 P P 00 33 20.6 +0.4
baz=211
P30M **Million Dollar** 84.85 19 P P 00 33 21.0 +0.7
baz=219
T35M **Bob Quinn** 84.87 24 P P 00 33 21.3 +0.9
baz=225
YUK8 **Steele Glacier** 84.93 18 P P 00 33 21.3 +0.5
baz=216
M26K **Nabesna, AK** 84.97 16 P P 00 33 21.6 +0.8
M26K IAmb IAmb 00 33 23.1
comp=Z,10nm,1.0s
M26K **Nabesna, AK** 84.97 16 P P 00 33 21.4 +0.6
baz=213,SNR=6.3
H19K **Roundabout Mou** 85.06 9 P P 00 33 21.6 +0.6
baz=201
YUK3 **Moose Creek** 85.13 17 P P 00 33 21.8 +0.1
baz=216
S34M **Telegraph Cree** 85.20 23 P P 00 33 23.2 +1.4
S34M IAmb IAmb 00 33 24.5
comp=Z,7.0nm,0.9s
S34M **Telegraph Cree** 85.20 23 P P 00 33 22.8 +1.0
baz=224,SNR=5.4
M27K **Edge Creek, AK** 85.22 16 P P 00 33 22.6 +0.5
baz=214
H20K **Anotleneega Mo** 85.26 10 P P 00 33 22.4 +0.3
baz=202
YUK4 **Talbot Arm** 85.30 18 P P 00 33 23.7 +1.2
baz=217
L26K **Log Cabin Wild** 85.41 15 P P 00 33 23.6 +0.8
baz=213
NEA2 **Nenana** 85.48 12 P P 00 33 23.7 +0.6
baz=208
K24K **Donnelly Dome** 85.49 14 P P 00 33 24.0 +0.8
baz=211
Q32M **Nakina River** 85.54 22 IAmb IAmb 00 33 26.1
comp=Z,3.8nm,0.7s
Q32M **Nakina River** 85.54 22 P P 00 33 24.7 +1.0
baz=223
MNTX **Cornudas Mount** 85.54 55 P P 00 33 25.3 +1.1
baz=246
G19K **Purcell Mounta** 85.55 8 P P 00 33 23.8 +0.5
baz=200
MLY **Manley** 85.55 11 IAmb IAmb 00 33 25.2
comp=Z,13nm,1.4s
MLY **Manley** 85.55 11 P P 00 33 23.7 +0.3
baz=206
NEW **Newport** 85.59 36 P P 00 33 24.7 +0.6
baz=236
O30N **Mendenhall** 85.62 19 IAmb IAmb 00 33 26.1
comp=Z,10.0nm,1.1s
O30N **Mendenhall** 85.62 19 P P 00 33 24.6 +0.6
baz=220,SNR=5.3
RIDG **Independent Ri** 85.65 14 P P 00 33 24.5 +0.5
baz=212
H21K **Melozitna Rive** 85.75 10 P P 00 33 25.8 +1.4
H21K IAmb IAmb 00 33 28.0
comp=Z,10nm,1.5s
H21K **Melozitna Rive** 85.75 10 P P 00 33 25.4 +1.0
baz=204
HDA **Harding Lake** 85.76 13 IAmb IAmb 00 33 25.1
comp=Z,9.3nm,1.2s
HDA **Harding Lake** 85.76 13 P P 00 33 25.5 +1.1
baz=210
L27K **Beaver Creek,** 85.82 16 P P 00 33 25.8 +1.0
baz=214
BCAR **Beaver Creek A** 85.84 16 P P 00 33 26.0 +1.2
N30M **Aishikik Lake** 85.85 18 P P 00 33 26.3 +1.3
baz=219
IMAR **Indian Mountai** 85.90 10 P P 00 33 25.9 +0.9
I23K **Minto, Yukon-K** 85.92 12 P P 00 33 26.0 +0.9
baz=207
WHY **Whitehorse** 85.92 20 P P 00 33 26.0 +0.6
WHY IAmb IAmb 00 33 27.5
comp=Z,6.2nm,1.2s
WHY **Whitehorse** 85.92 20 P P 00 33 26.0 +0.6
baz=221
TX31 **Lajitas Ar. Si** 85.94 58 P P 00 33 28.3 +2.0
TX31 IAmb IAmb 00 33 29.9
comp=Z,7.2nm,1.0s
TXAR **Lajitas Array** 85.94 58 P P 00 33 28.1 +1.9
TXAR **Lajitas Array** 85.94 58 P P 00 33 28.8 +2.5
comp=Z,2.6nm,0.7s,baz=219,slow=6.1,SNR=25
comp=Z,2.6nm,0.7s
MDM **Murphy Dome** 85.98 12 P P 00 33 25.8 +0.3
DLBC **Dease Lake** 85.98 23 P P 00 33 26.3 +0.6
baz=225
SCRK **Sand Creek** 86.06 14 P P 00 33 26.5 +0.5
baz=212
ANMO **Albuquerque** 86.08 51 P P 00 33 27.5 +0.6
ANMO **Albuquerque** 86.08 51 P P 00 33 26.8 -0.1
baz=245
IL31 86.09 13 IAmb IAmb 00 33 27.0
comp=Z,9.9nm,1.1s
ILAR **Eielson Array** 86.09 13 P P 00 33 26.2 +0.2
ILAR **Eielson Array** 86.09 13 P P 00 33 25.6 -0.4
comp=Z,2.2nm,0.4s,baz=221,slow=4.9,SNR=43
comp=Z,2.2nm,0.4s
H22K **Ishtalitna Cre** 86.22 11 P P 00 33 27.1 +0.6
baz=205
M29M **Somme Creek** 86.23 17 P P 00 33 27.3 +0.5
M29M IAmb IAmb 00 33 29.7
comp=Z,5.2nm,1.0s
M29M **Somme Creek** 86.23 17 P P 00 33 27.1 +0.3
baz=217
P33M **Teslin, Yukon** 86.27 21 P P 00 33 28.4 +1.4
baz=223
N31M **Braeburn, Yuko** 86.27 19 P P 00 33 28.6 +1.7
baz=220
POKR **Poker Plat Res** 86.28 13 P P 00 33 27.0 +0.2
baz=209
J25K **Salcha River,** 86.28 14 IAmb IAmb 00 33 28.2
comp=Z,4.2nm,0.5s
J25K **Salcha River,** 86.28 14 P P 00 33 27.5 +0.5
baz=211,SNR=5.5
R33M **Jennings River** 86.32 22 P P 00 33 28.9 +1.5
R33M IAmb IAmb 00 33 29.8
comp=Z,10nm,1.4s
R33M **Jennings River** 86.32 22 P P 00 33 28.5 +1.1
baz=224,SNR=5.3
D17K **Noatak River** 86.34 6 P P 00 33 27.7 +0.7
baz=194
ALPN **Alpine** 86.38 57 P P 00 33 28.9 +0.6
ALPN IAmb IAmb 00 33 31.4
comp=Z,4.6nm,1.0s
G21K **Allakaket** 86.43 10 P P 00 33 28.3 +0.8
baz=203
H23K **Yukon River** 86.49 11 P P 00 33 28.5 +0.6
baz=207
K27K **Chicken** 86.56 15 P P 00 33 29.2 +1.0
baz=214
F20K **Avaraart Lake** 86.59 9 P P 00 33 29.1 +0.8
baz=201
XAN **Xi'an** 86.60 307 ⇑P P 00 33 31.3 +2.1
XAN pmax pmax
comp=Z,19nm,1.1s
J26L **Joseph Creek** 86.60 14 IAmb IAmb 00 33 30.6
comp=Z,5.4nm,0.8s
J26L **Joseph Creek** 86.60 14 P P 00 33 29.1 +0.6
baz=213,SNR=5.1
MSO **Missoula** 86.65 38 P P 00 33 29.7 +0.5
baz=239
DLMT **Dillon** 86.71 40 P P 00 33 30.7 +1.1
DLMT IAmb IAmb 00 33 32.2
comp=Z,5.7nm,0.8s
BPMT **Black Pine Rid** 86.74 39 P P 00 33 30.0 +0.2
E19K **Redstone River** 86.77 8 P P 00 33 29.7 +0.6
baz=200
H24K **Noodor Dome** 86.82 12 P P 00 33 29.8 +0.3
baz=209
L29M **L29M** 86.85 17 P P 00 33 30.5 +0.9
baz=218
S22A **4UR Ranch, Cre** 87.01 49 P P 00 33 32.1 +0.7
baz=244
G22K **Bettles** 87.13 10 P P 00 33 31.5 +0.7
baz=205
G23K **Bananza Creek** 87.19 11 P P 00 33 31.6 +0.4
baz=207
M31M **Drury Creek, Y** 87.25 19 P P 00 33 32.5 +1.0
baz=221
DAWY **Dawson** 87.28 16 P P 00 33 32.4 +0.8
baz=216
OVMT **Ovando** 87.32 38 P P 00 33 33.2 +0.9
YHL **Hebgen Lake** 87.33 41 P P 00 33 34.2 +1.6
I26K **Coal Creek Min** 87.37 14 P P 00 33 33.1 +1.2
baz=213
PDAR **Pinedale Array** 87.39 43 P P 00 33 34.0 +1.1
comp=Z,1.5nm,0.7s,baz=222,slow=3.8,SNR=12
comp=Z,1.5nm,0.7s
EGAK **Eagle** 87.41 15 P P 00 33 33.1 +0.9
baz=215
BOZ **Bozeman (W)** 87.42 40 P P 00 33 33.8 +0.9
BOZ **Bozeman (W)** 87.42 40 P P 00 33 33.9 +1.0
baz=204
C18K **Utukok River** 87.44 6 P P 00 33 33.1 +0.8
baz=196
MNHN **Monahans** 87.45 56 P P 00 33 33.8 +0.6
MNHN IAmb IAmb 00 33 35.8
comp=Z,5.6nm,1.3s
H17A **Grant Village** 87.50 42 P P 00 33 34.6 +1.2
H17A IAmb IAmb 00 33 37.2
comp=Z,4.3nm,0.8s
YHH **Holmes Hill** 87.51 41 P P 00 33 34.4 +0.9
F22K **John River** 87.55 10 P P 00 33 33.5 +0.7
baz=205
FARO **Faro, Yukon** 87.59 19 P P 00 33 34.3 +1.1
baz=222
K29M **Barlow Dome** 87.60 17 P P 00 33 34.0 +0.7
K29M **Barlow Dome** 87.60 17 P P 00 33 33.9 +0.6
baz=218
H25L **Birch Creek** 87.61 13 P P 00 33 34.0 +1.0
baz=210
HHC **Hu-ho-hao-te** 87.62 314 eP P 00 33 31.4 -2.5
HHC PP PP 00 37 16.8 +5.9
HHC pmax pmax
comp=Z,16nm,0.5s
HHC pmax pmax
comp=Z,87nm,3.9s
COLD **Coldfoot** 87.63 11 P P 00 33 33.8 +0.7
baz=206
D19K **Kuna River** 87.64 7 P P 00 33 33.8 +0.6
baz=199
E20K **Nigu River** 87.66 8 P P 00 33 33.7 +0.4
baz=201
G24K **Hadweenzic Riv** 87.66 12 P P 00 33 33.9 +0.6
baz=209
I27K **Kandik River** 87.98 14 P P 00 33 35.8 +0.9
baz=214
G25K **Bearman Lake** 87.99 12 P P 00 33 35.8 +1.0
baz=210
D20K **Etivluk River** 88.03 8 P P 00 33 36.0 +1.0
baz=200
C19K **Lookout Ridge** 88.05 7 P P 00 33 36.1 +1.0
baz=198
TOAD **Toad River Com** 88.10 25 P P 00 33 36.9 +1.3
baz=229
E21K **Killik River** 88.14 9 P P 00 33 36.6 +1.1
baz=203
E22K **Anaktuvuk Pass** 88.18 10 P P 00 33 36.2 +0.4
E22K **Anaktuvuk Pass** 88.18 10 P P 00 33 37.0 +1.3
baz=205
I28M **Miner Creek** 88.26 15 P P 00 33 37.5 +1.2
I28M IAmb IAmb 00 33 37.6
comp=Z,5.1nm,1.1s
I28M **Miner Creek** 88.26 15 P P 00 33 37.2 +1.0
baz=216
F24K **Squaw Lake** 88.30 11 P P 00 33 37.3 +1.0
F24K IAmb IAmb 00 33 38.1
comp=Z,3.2nm,0.7s
F24K **Squaw Lake** 88.30 11 P P 00 33 37.0 +0.6
baz=209
DRIO **Del Rio** 88.44 58 P P 00 33 38.3 +0.4
DRIO IAmb IAmb 00 33 40.7
comp=Z,6.1nm,1.0s
E23K **Chandalar** 88.47 10 P P 00 33 38.6 +1.4
baz=207
J30M **Hart River** 88.50 17 P P 00 33 38.5 +1.1
baz=219
T25A **Trinidad** 88.50 50 P P 00 33 39.1 +0.8
baz=246
H27K **Steamboat Moun** 88.52 14 P P 00 33 38.7 +1.4
baz=214
MMPY **Sheldon Lake,** 88.54 20 P P 00 33 38.9 +1.3
MMPY **Sheldon Lake,** 88.54 20 P P 00 33 38.9 +1.3
baz=224
I29M **Ogilvie Camp,** 88.59 16 P P 00 33 36.5 -1.2
I29M **Ogilvie Camp,** 88.59 16 P P 00 33 38.5 +0.8
baz=218
G26K **Porcupine Rive** 88.62 13 P P 00 33 39.0 +1.3
baz=212
RLMT **Red Lodge** 88.66 41 P P 00 33 39.9 +1.2
baz=242
C21K **Knifeblade Rid** 88.69 8 P P 00 33 39.3 +1.2
baz=202
D22K **Ayikyak River** 88.73 9 P P 00 33 39.3 +1.0
D22K **Ayikyak River** 88.73 9 P P 00 33 39.1 +0.9
baz=204
BMAR **Burnt Mountain** 88.86 12 P P 00 33 40.2 +1.2
ELIB **Princess Elisa** 88.93 187 dP P 00 33 39.9 +0.4
comp=Z,2.8nm,0.5s
I30M **Mount Dempster** 88.99 16 P P 00 33 40.0 +0.4
baz=219
TOLK **Toolik Lake Re** 89.00 10 P P 00 33 40.0 +0.4
TOLK **Toolik Lake Re** 89.00 10 P P 00 33 40.7 +1.1
baz=207
833A **Chaparral WMA,** 89.03 60 P P 00 33 41.8 +1.2
baz=249
D23K **Nanushuk River** 89.11 10 P P 00 33 41.6 +1.5
baz=206
B21K **Ikpikpuk River** 89.14 8 P P 00 33 41.1 +1.0
baz=202
B20K **Meade River** 89.19 7 P P 00 33 40.9 +0.6
baz=200
CMAR **Chiang Mai Arr** 89.19 290 P P 00 33 43.6 +2.1
comp=Z,1.5nm,0.6s,baz=113,slow=2.5,SNR=11
comp=Z,1.5nm,0.6s
H29M **Whitestone** 89.26 15 P P 00 33 41.5 +0.7
baz=217
PZH **PanZhiHua** 89.48 298 P P 00 33 44.3 +1.4
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,4.5s
D24K **Happy Valley** 89.58 10 P P 00 33 43.3 +1.1
baz=208
EGMT **Eagleton** 89.71 39 P P 00 33 44.1 +0.8
baz=242
EPYK **Eagle Plains** 89.79 15 P P 00 33 44.0 +0.7
baz=219
G29M **Pine Creek** 89.90 15 P P 00 33 44.3 +0.6
baz=218
C23K **Itkillik River** 89.91 9 P P 00 33 44.7 +1.0
baz=206
B22K **Teshekpuk Lake** 89.97 8 P P 00 33 45.4 +1.5
baz=203
TROLL **Troll, Antarti** 90.05 180 ⇑PKKPbc P 00 33 44.5 -0.2
comp=Z,127nm,0.4s
C24K **Franklin Bluff** 90.11 10 P P 00 33 45.5 +0.9
baz=208
E27K **Coleen River** 90.12 13 P P 00 33 46.2 +1.4
baz=214
SNAA **Sanae** 90.33 179 P P 00 33 46.6 +0.7
SNAA IAmb IAmb 00 33 53.2
comp=Z,7.4nm,1.5s
SNAA **Sanae** 90.33 179 ⇑PKKPbc P 00 33 45.5 -0.4
comp=Z,28nm,0.5s
SNAA **Sanae** 90.33 179 P P 00 33 45.7 -0.2
comp=Z,1.0nm,0.4s,baz=227,slow=9.8,SNR=6.4
comp=Z,1.0nm,0.4s
G30M **tAoh Zraii Nji** 90.39 15 P P 00 33 47.2 +1.1
baz=219
VNA3 **Neumayer Olymp** 90.47 176 ⇑PKKPbc P 00 33 46.8 +0.3
comp=Z,3.8nm,0.4s
A21K **Barrow** 90.49 7 P P 00 33 47.2 +0.9
baz=200
G31M **Satah River** 90.85 16 P P 00 33 48.9 +0.9
baz=221
E28M **Babbage River** 90.91 13 P P 00 33 48.9 +0.6
baz=216
F30M **Barrier River** 90.99 15 P P 00 33 49.9 +1.2
baz=220
E29M **Blow River** 91.10 14 P P 00 33 50.0 +0.8
baz=218
LAO **LASA Array** 91.26 41 P P 00 33 51.4 +0.9
baz=245
F31M **Tsiigehtchic** 91.37 16 P P 00 33 51.2 +0.8
F31M **Tsiigehtchic** 91.37 16 P P 00 33 51.5 +1.1
baz=222
RSSD **Black Hills** 91.59 44 P P 00 33 53.4 +1.0
baz=246
INK **Inuvik** 92.08 15 P P 00 33 54.5 +0.8
baz=222
BVAR **Borovoye Array** 117.19 321 PKP PKiKP 00 39 25.0 -0.9
comp=Z,0.8nm,0.5s,baz=90,slow=2.1,SNR=4.2
ARCES **ARCESS Array B** 126.61 350 PKP PKiKP 00 39 42.9 -1.1
comp=Z,0.6nm,0.4s,baz=13,slow=2.7,SNR=7.2
FINES **FINESS Array B** 133.50 344 PKP PKiKP 00 39 56.7 -1.4
comp=Z,1.3nm,0.7s,baz=33,slow=4.5,SNR=3.5
HFS **Hagfors** 137.22 351 PKP PKiKP 00 40 05.2 -0.5
comp=Z,1.8nm,0.7s,baz=57,slow=5.3,SNR=2.7
EKA **Eskdalemuir Ar** 142.71 5 PKhKP PKPpre 00 40 10.9
comp=Z,0.6nm,0.5s,baz=322,slow=2.2,SNR=5.8
BRTR **Keskin Array B** 145.13 315 PKPbc PKiKP 00 40 20.4 -2.3
comp=Z,2.6nm,0.8s,baz=104,slow=2.8,SNR=12
KOLS **Kolonicke sedl** 145.13 336 ePKP PKiKP 00 40 20.4 -1.9
CRVS **Cervenica-Dubn** 145.47 337 ePKP PKiKP 00 40 21.6 -1.4
OSTC **Ostas** 145.70 344 ex PKPbc 00 40 22.6 +1.8
CHVC **Chvalec** 145.72 344 ex PKPbc 00 40 22.3 +1.4
CLL **Collm** 145.77 348 ⇓iPKPbc PKiKP 00 40 21.8 -1.7
comp=Z,17nm,0.9s
UPC **Upice** 145.80 344 ex PKPbc 00 40 22.4 +1.3
DPC **Dobruska-Polom** 145.86 343 ex PKPbc 00 40 22.8 +1.5
LANS **Liptovska Anna** 145.96 339 ePKP PKiKP 00 40 23.1 -1.0
BRG **Berggiesshubel** 145.97 346 P PKiKP 00 40 22.8 -1.2
BRG Amp 00 40 23.1
comp=Z,5.7nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KRLC | Kraliky | 145.98 | 343 | *ex* | | PKPbc | 00 40 22.9 | +1.2 |
| MORC | Moravsky Berou | 146.03 | 342 | *e*PKP | | PKiKP | 00 40 22.6 | -1.6 |
| PVCC | Panska Ves | 146.15 | 345 | *ex* | | PKPbc | 00 40 23.4 | +1.4 |
| MMAI | Mount Meron Ar | 146.47 | 303 | PKPbc | | PKPab | 00 40 25.0 | -1.4 |
| | comp=Z,3.2nm,0.5s,baz=77,slow=7.2,SNR=8.0 | | | | | | | |
| PRA | Prague | 146.61 | 345 | *ex* | | PKPbc | 00 40 24.6 | +1.3 |
| PRU | Pruhonice | 146.66 | 345 | *ex* | | PKPbc | 00 40 24.6 | +1.2 |
| VRAC | Vranov | 146.73 | 342 | *e*PKP | | PKPab | 00 40 24.8 | -1.9 |
| VYHS | Vyhne | 146.74 | 339 | *e*PKP | | PKPab | 00 40 25.1 | -1.7 |
| JAVC | Velka Javorina | 146.80 | 341 | *e*PKP | | PKPab | 00 40 25.9 | -1.2 |
| MEM | Membach | 147.46 | 355 | *d*PKP | | PKPab | 00 40 26.7 | -2.9 |
| BTNL | Ternell | 147.48 | 355 | *d*PKP | | PKPab | 00 40 27.0 | -2.7 |
| GRF | Grafenberg Arr | 147.66 | 349 | *e*PKP | | PKPab | 00 40 27.2 | -3.3 |
| | baz=17,slow=1.9 | | | | | | | |
| KHC | Kasperske Hory | 147.69 | 346 | *ex* | | PKPbc | 00 40 27.5 | +1.3 |
| CKRC | Cesky Krumlov | 147.79 | 344 | *ex* | | PKPbc | 00 40 27.7 | +1.2 |
| GERES | GERESS Array B | 147.92 | 345 | PKPbc | | PKPab | 00 40 27.7 | -4.0 |
| | comp=Z,1.9nm,0.6s,baz=168,slow=8.2,SNR=12 | | | | | | | |
| CONA | Conrad Observa | 148.18 | 342 | *i* PKP | | PKPab | 00 40 28.8 | -4.0 |
| | comp=Z,16nm,1.3s | | | | | | | |
| RONA | Rosalia, Austr | 148.26 | 341 | *i* PKP | | PKPab | 00 40 28.8 | -4.3 |
| | comp=Z,13nm,1.1s | | | | | | | |
| WLF | Walferdange | 148.39 | 355 | *d*PKP | | PKPab | 00 40 28.9 | -4.6 |
| MOA | Molln | 148.70 | 344 | *i* PKP | | PKPab | 00 40 30.0 | -4.8 |
| | comp=Z,6.9nm,1.3s | | | | | | | |
| ARSA | Arzberg | 148.89 | 342 | *e*PKP | | PKPab | 00 40 30.7 | -5.0 |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| BIOA | Bad Ischl, Aus | 149.01 | 344 | *i* PKP | | PKPab | 00 40 30.6 | -5.6 |
| | comp=Z,15nm,1.5s | | | | | | | |
| LESA | Schwarzleotal | 149.50 | 345 | *i* PKP | | PKiKP | 00 40 31.3 | -0.2 |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| SOKA | Soboth | 149.55 | 342 | *i* PKP | | PKiKP | 00 40 30.9 | -0.7 |
| | comp=Z,6.3nm,1.1s,SNR=5.5 | | | | | | | |
| KBA | Koelnbreinsper | 149.65 | 344 | *e*PKP | | PKiKP | 00 40 32.0 | +0.1 |
| | comp=Z,9.1nm,1.2s | | | | | | | |
| WATA | Walderalm | 149.83 | 347 | *i* PKiKP | | PKPab | 00 40 33.1 | -6.7 |
| | comp=Z,9.1nm,1.0s | | | | | | | |
| OBKA | Obir | 149.85 | 342 | *e*PKiKP | | PKPab | 00 40 34.0 | -5.8 |
| | comp=Z,4.3nm,1.2s | | | | | | | |
| RETA | Reutte | 149.86 | 348 | *i* PKP | | PKiKP | 00 40 32.3 | +0.1 |
| | comp=Z,6.2nm,1.2s | | | | | | | |
| WTTA | Wattenberg | 149.88 | 347 | *i* PKP | | PKiKP | 00 40 32.5 | +0.1 |
| | comp=Z,4.6nm,0.5s | | | | | | | |
| MOTA | Moosalm | 149.92 | 347 | *i* PKP | | PKiKP | 00 40 32.6 | +0.2 |
| | comp=Z,9.2nm,1.0s | | | | | | | |
| MYKA | Terra Mystica | 149.99 | 344 | *i* PKP | | PKiKP | 00 40 32.7 | +0.2 |
| | comp=Z,7.5nm,1.0s | | | | | | | |
| SQTA | Sankt Quirin | 150.02 | 347 | *i* PKP | | PKiKP | 00 40 32.4 | -0.2 |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| ABTA | Abfaltersbach | 150.17 | 345 | *i* PKP | | PKiKP | 00 40 32.6 | -0.3 |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| DAVA | Damuels | 150.22 | 349 | *i* PKP | | PKiKP | 00 40 33.3 | +0.2 |
| | comp=Z,13nm,1.2s | | | | | | | |
| FETA | Feichten | 150.31 | 348 | *i* PKP | | PKiKP | 00 40 33.8 | +0.6 |
| | comp=Z,11nm,1.1s | | | | | | | |
| ESDC | Sonseca Array | 157.99 | 12 | PKPab | | PKPab | 00 41 15.1 | +0.4 |
| | comp=Z,1.1nm,1.0s,baz=335,slow=4.2,SNR=5.9 | | | | | | | |

*IDC **20** 00:28:03.0±0.9, 23.°52N×143.°53E, h0km, mb4.0/10, mbtmp4.0/11, ML3.7/1, MS3.5/2, Error ellipse: s-maj=30.5km s-min=20.4km az=73.0*

**ISC 20 00:28:07.7±0.9, 23.°6N±0.°1×143.°5E±0.°2, h31km, n14, σ1s22/13, mb3.9/10, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JCJ | Chichijima | 3.63 | 342 | Sn | Sn | 00 29 41.7 | -2.0 |
| | 30nm,0.3s,baz=267,slow=22,SNR=8.4 | | | | | | |
| KSRS | Korea Array | 19.16 | 320 | P | Pn | 00 32 30.2 | +0.6 |
| | 0.3nm,0.3s,baz=135,slow=12,SNR=6.0 | | | | | | |
| KSRS | | | | LR | LR | 00 39 57.0 | |
| | comp=Z,66nm,18.4s,baz=120,slow=37 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 44.21 | 192 | P | P | 00 36 13.2 | -1.0 |
| | 1.0nm,0.6s,baz=15,slow=8.5,SNR=5.9 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 47.92 | 192 | P | P | 00 36 41.8 | -1.6 |
| | 0.7nm,0.8s,baz=13,slow=9.4,SNR=5.6 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 52.86 | 321 | P | P | 00 37 20.6 | +0.2 |
| | 0.5nm,0.5s,baz=108,slow=6.8,SNR=2.3 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 53.59 | 312 | P | P | 00 37 27.2 | +1.2 |
| | 1.3nm,0.8s,baz=95,slow=9.9,SNR=9.9 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 56.30 | 316 | P | P | 00 37 46.2 | +0.8 |
| | 4.0nm,0.8s,baz=94,slow=7.7,SNR=36 | | | | | | |
| | 4.0nm,0.8s | | | | | | |
| ILAR | Eielson Array | 60.22 | 28 | P | P | 00 38 11.9 | -0.7 |
| | 0.7nm,0.8s,baz=255,slow=4.6,SNR=6.0 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| BVAR | Borovoye Array | 61.38 | 319 | P | P | 00 38 21.9 | +1.3 |
| | 7.7nm,0.7s,baz=93,slow=7.8,SNR=42 | | | | | | |
| | 7.7nm,0.7s | | | | | | |
| KBZ | Khabaz | 81.21 | 314 | P | P | 00 40 21.6 | +1.0 |
| | 2.9nm,0.8s,baz=77,slow=0.8,SNR=5.7 | | | | | | |
| | 2.9nm,0.8s | | | | | | |
| FINES | FINESS Array B | 81.55 | 334 | P | P | 00 40 21.7 | -0.4 |
| | 1.0nm,0.6s,baz=73,slow=6.1,SNR=1.6 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 81.76 | 52 | P | P | 00 40 25.1 | +1.1 |
| | 0.6nm,0.8s,baz=252,slow=6.5,SNR=3.8 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| JMIC | Jan Mayen | 83.61 | 351 | LR | LR | 01 19 30.6 | |
| | comp=Z,44nm,19.8s,baz=306,slow=37 | | | | | | |
| LPAZ | La Paz | 149.48 | 82 | PKPbc | PKiKP | 00 47 56.5 | -0.1 |
| | 1.1nm,0.7s,baz=155,slow=1.8,SNR=4.1 | | | | | | |

**IDC 20 00:32:31.1±8.7, 16.°64S×176.°16W, h0km, mb4.0/4, mbtmp4.0/4, Error ellipse: s-maj=227.6km s-min=41.7km az=25.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| STKA | Stephens Creek | 41.12 | 240 | P | P | 00 40 17.2 | +0.1 |
| | 2.8nm,0.8s,baz=85,slow=11,SNR=4.2 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 46.99 | 258 | P | P | 00 41 04.5 | +0.1 |
| | 0.2nm,0.4s,baz=96,slow=7.0,SNR=1.6 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| ASAR | Alice Springs | 47.21 | 253 | P | P | 00 41 05.8 | -0.4 |
| | 2.1nm,0.8s,baz=85,slow=8.4,SNR=17 | | | | | | |
| | 2.1nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 73.41 | 180 | P | P | 00 44 05.2 | +0.1 |
| | 1.4nm,0.6s,baz=316,slow=0.6,SNR=13 | | | | | | |
| | 1.4nm,0.6s | | | | | | |

*IDC **20** 00:41:59.6±2.8, 18.°31S×177.°97W, h625km±34km, mb3.7/8, mbtmp4.7/9, Error ellipse: s-maj=25.6km s-min=16.3km az=3.0*

*NEIC **20** 00:42:00.9±1.4, 18.°5S±0.°1×178.°0W±0.°1, h623km±8km, mb4.7/33, Error ellipse: s-maj=19.3km s-min=12.8km az=148.0*

**ISC 20 00:41:58.9±0.5, 18.°4S±0.°1×178.°00W±0.°08, h600km, n59, σ1s30/59, mb4.7/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.82 | 280 | P | P | 00 43 27.4 | +4.1 |
| MSVF | Nonsavu | 3.82 | 280 | P | P | 00 43 28.4 | +5.0 |
| AFI | Afiamalu | 7.48 | 54 | P | P | 00 43 54.3 | +0.7 |
| NIUE | Niue | 7.67 | 96 | P | P | 00 43 57.2 | +2.1 |
| RAO | Raoul Island | 10.77 | 180 | P | P | 00 44 25.8 | +0.6 |
| RTV | Rentapao | 12.93 | 271 | P | P | 00 44 48.8 | +1.8 |
| DVP | Devils Point | 13.16 | 271 | P | P | 00 44 50.7 | +1.3 |
| LIFNC | LIFOU | 14.10 | 258 | P | P | 00 44 58.3 | -0.5 |
| PINNC | Pines Island, | 14.25 | 251 | P | P | 00 45 00.7 | +0.5 |
| DZM | Mont Dzumac | 15.04 | 253 | P | P | 00 45 08.6 | +1.0 |
| DZM | Mont Dzumac | 15.04 | 253 | | P | 00 45 08.5 | +1.0 |
| DZM | Mont Dzumac | 15.04 | 253 | P | P | 00 45 08.7 | +1.0 |
| | 21nm,0.9s,baz=274,slow=17,SNR=16 | | | | | | |
| NOUC | Port Laguerre | 15.17 | 253 | P | P | 00 45 11.2 | +2.5 |
| KOUNC | Koumac, New Ca | 16.84 | 260 | P | P | 00 45 25.3 | +1.3 |
| KOUNC | | | | IAmb | IAmb | 00 45 42.4 | |
| | comp=Z,32nm,1.0s | | | | | | |
| URZ | Urewera | 20.21 | 191 | P | P | 00 45 53.6 | -0.8 |
| | comp=Z,9.8nm,0.8s,baz=338,slow=3.3,SNR=7.9 | | | | | | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| MRZ | Mangatainoka R | 22.83 | 193 | P | P | 00 46 17.5 | -0.3 |
| MRZ | | | | IAmb | IAmb | 00 46 34.3 | |
| | comp=Z,24nm,1.2s | | | | | | |
| HNR | Honiara | 23.18 | 290 | P | P | 00 46 22.1 | +0.9 |
| TCW | Tory Channel | 23.65 | 195 | P | P | 00 46 26.9 | +1.9 |
| BHW | Baring Head | 23.70 | 193 | P | P | 00 46 25.0 | -0.4 |
| BHW | | | | IAmb | IAmb | 00 46 27.1 | |
| | comp=Z,26nm,1.1s | | | | | | |
| MRNZ | Matariki Terra | 24.22 | 197 | P | P | 00 46 30.2 | +0.1 |
| THZ | Tophouse | 24.52 | 197 | P | P | 00 46 33.6 | +0.9 |
| LTZ | Lake Taylor | 25.64 | 197 | P | P | 00 46 42.3 | -0.3 |
| LTZ | | | | IAmb | IAmb | 00 46 46.1 | |
| | comp=Z,18nm,0.7s | | | | | | |
| INZ | Inchbonnie | 25.82 | 198 | P | P | 00 46 43.8 | -0.4 |
| PPT | Papeete | 27.03 | 93 | P | P | 00 46 55.2 | 0.0 |
| | comp=Z,12nm,0.6s,baz=142,slow=12,SNR=2.2 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| PPTF | Pamatai, Papee | 27.04 | 93 | P | P | 00 46 55.1 | -0.2 |
| PPTF | | | | IAmb | IAmb | 00 47 14.4 | |
| | comp=Z,12nm,0.9s | | | | | | |
| FOZ | Fox Glacier | 27.05 | 200 | P | P | 00 46 55.1 | +0.2 |
| MLZ | Mavora Lakes | 29.24 | 200 | P | P | 00 47 14.5 | +0.6 |
| MLZ | | | | IAmb | IAmb | 00 47 18.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| EIDS | Eidsvold | 29.46 | 251 | P | P | 00 47 16.7 | +0.6 |
| EIDS | | | | IAmb | IAmb | 00 47 16.8 | |
| | comp=Z,14nm,0.7s | | | | | | |
| ARMA | Armidale | 30.02 | 241 | P | P | 00 47 21.8 | +0.8 |
| ARMA | | | | IAmb | IAmb | 00 47 23.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| CAN | Canberra | 33.70 | 233 | P | P | 00 47 53.0 | +1.0 |
| CAN | | | | IAmb | IAmb | 00 47 53.8 | |
| | comp=Z,20nm,0.9s | | | | | | |
| CTAO | Charters Tower | 33.75 | 261 | P | P | 00 47 52.6 | 0.0 |
| PMG | Port Moresby | 34.93 | 280 | | P | 00 48 02.6 | +0.1 |
| TOO | Toolangi | 37.15 | 232 | P | P | 00 48 21.2 | +0.8 |
| COEN | Coen | 37.50 | 271 | P | P | 00 48 23.6 | 0.0 |
| STKA | Stephens Creek | 38.72 | 242 | P | P | 00 48 34.0 | +0.7 |
| STKA | Stephens Creek | 38.72 | 242 | P | P | 00 48 34.2 | +1.0 |
| | comp=Z,8.7nm,0.8s,baz=99,slow=10,SNR=15 | | | | | | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| BBOO | Buckleboo | 43.50 | 242 | P | P | 00 49 10.7 | -0.2 |
| BBOO | | | | IAmb | IAmb | 00 49 11.4 | |
| | comp=Z,17nm,0.8s | | | | | | |
| WR0 | Warramunga Arr | 44.73 | 260 | P | P | 00 49 19.8 | -0.8 |
| WB0 | Warramunga Arr | 44.89 | 260 | P | P | 00 49 20.8 | -1.0 |
| WB0 | | | | IAmb | IAmb | 00 49 21.2 | |
| | comp=Z,22nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 44.91 | 260 | P | P | 00 49 21.0 | -0.9 |
| WB2 | | | | IAmb | IAmb | 00 49 21.4 | |
| | comp=Z,20nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 44.92 | 260 | P | P | 00 49 20.9 | -1.1 |
| | comp=Z,13nm,0.4s,baz=96,slow=7.5,SNR=18 | | | | | | |
| | comp=Z,13nm,0.4s | | | | | | |
| AS31 | Alice Springs | 45.03 | 255 | P | P | 00 49 22.1 | -0.7 |
| ASAR | Alice Springs | 45.03 | 255 | P | P | 00 49 22.3 | -0.5 |
| | comp=Z,29nm,0.7s,baz=90,slow=7.8,SNR=215 | | | | | | |
| ASAR | | | | PcP | PcP | 00 50 48.3 | -2.3 |
| | comp=Z,1.6nm,0.6s,baz=92,slow=4.7,SNR=2.9 | | | | | | |
| | comp=Z,29nm,0.7s | | | | | | |
| FORT | Forrest | 50.14 | 245 | P | P | 00 49 59.5 | -1.2 |
| FORT | | | | IAmb | IAmb | 00 50 00.1 | |
| | comp=Z,14nm,0.7s | | | | | | |
| KNRA | Kununurra | 50.83 | 265 | P | P | 00 50 04.6 | -1.3 |
| KNRA | | | | IAmb | IAmb | 00 50 05.2 | |
| | comp=Z,19nm,0.8s | | | | | | |
| FITZ | Fitzroy Crossi | 53.33 | 261 | P | P | 00 50 22.8 | -0.9 |
| SOEI | Soe | 56.46 | 270 | P | P | 00 50 45.6 | -0.2 |
| SOEI | | | | IAmb | IAmb | 00 50 46.5 | |
| | comp=Z,42nm,0.8s | | | | | | |
| PSA00 | Pilbara Seismi | 58.16 | 256 | P | P | 00 50 55.1 | -1.9 |
| UGM | Wanagama | 70.02 | 268 | P | P | 00 52 10.4 | -1.8 |
| UGM | | | | IAmb | IAmb | 00 52 14.4 | |
| | comp=Z,28nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 71.62 | 180 | P | P | 00 52 20.9 | +0.1 |
| QSPA | South Pole Qui | 71.62 | 180 | P | P | 00 52 20.9 | +0.1 |
| | comp=Z,4.6nm,0.6s,baz=340,slow=0.4,SNR=48 | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| BELA | Belgrano 2 | 81.59 | 173 | P | P | 00 53 13.7 | -1.0 |
| TCRU | Three Creeks R | 83.54 | 46 | P | P | 00 53 26.9 | +1.5 |
| TCRU | | | | IAmb | IAmb | 00 53 37.9 | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| TXAR | Lajitas Array | 85.95 | 57 | P | P | 00 53 35.5 | -1.6 |
| | comp=Z,0.4nm,0.8s,baz=205,slow=5.5,SNR=4.4 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 89.43 | 290 | P | P | 00 53 52.5 | -1.0 |
| | comp=Z,1.3nm,0.3s,baz=105,slow=4.5,SNR=5.8 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| BVAR | Borovoye Array | 117.50 | 321 | PKP | PKPdf | 00 59 33.5 | -3.8 |
| | comp=Z,0.3nm,0.4s,baz=50,slow=2.3,SNR=1.5 | | | | | | |
| BRTR | Keskin Array B | 145.43 | 315 | PKPbc | PKPdf | 01 00 28.4 | -1.6 |
| | comp=Z,1.9nm,0.9s,baz=148,slow=3.9,SNR=7.3 | | | | | | |
| MMAI | Mount Meron Ar | 146.75 | 302 | PKPbc | PKPdf | 01 00 33.1 | +0.9 |
| | comp=Z,3.2nm,0.6s,baz=60,slow=4.9,SNR=6.7 | | | | | | |
| GERES | GERESS Array B | 148.22 | 345 | PKPbc | PKPdf | 01 00 35.2 | +1.0 |
| | comp=Z,0.4nm,0.5s,baz=222,slow=1.8,SNR=3.5 | | | | | | |

**IDC 20 00:42:51.3±35.0, 17.°83S×178.°78W, h575km±436km, mb3.2/4, mbtmp4.2/4, MS3.8/2, Error ellipse: s-maj=139.7km s-min=51.5km az=96.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RAO | Raoul Island | 11.40 | 176 | LR | LR | 00 49 22.6 | |
| | comp=Z,381nm,18.3s,baz=267,slow=34 | | | | | | |
| DZM | Mont Dzumac | 14.52 | 251 | LR | | 00 50 42.4 | |
| | comp=Z,381nm,21.5s,baz=356,slow=32 | | | | | | |
| STKA | Stephens Creek | 38.36 | 241 | P | P | 00 49 24.1 | -0.1 |
| | 2.6nm,0.5s,baz=100,slow=12,SNR=4.0 | | | | | | |
| | 2.6nm,0.5s | | | | | | |
| ASAR | Alice Springs | 44.48 | 254 | P | P | 00 50 12.4 | -0.2 |
| | 4.8nm,0.5s,baz=88,slow=8.2,SNR=8.1 | | | | | | |
| | 4.8nm,0.5s | | | | | | |
| QSPA | South Pole Qui | 72.22 | 180 | P | P | 00 53 18.8 | +0.1 |
| | 1.3nm,0.8s,baz=190,slow=2.7,SNR=2.5 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 86.25 | 58 | P | P | 00 54 33.1 | -0.1 |
| | 0.4nm,0.8s,baz=205,slow=7.1,SNR=4.9 | | | | | | |
| | 0.4nm,0.8s | | | | | | |

*IDC **20** 00:44:27.8±0.7, 18.°14S×178.°02W, h578km±7km, mb4.1/20, mbtmp5.0/23, Error ellipse: s-maj=11.2km s-min=8.7km az=133.0*

*BGR **20** 00:44:27.6, 18.°41S×177.°61W, h580km±1km*

*NEIC **20** 00:44:27.7±1.4, 18.°11S±0.°09×178.°02W±0.°10, h574km±6km, mb4.6/343, Error ellipse: s-maj=14.6km s-min=11.6km az=125.0*

*NOU **20** 00:44:28.6, 18.°12S×178.°03W, h581km, ML4.9/112, Fiji Islands Region*

**ISC 20 00:44:27.6±0.3, 18.°11S±0.°06×177.°99W±0.°05, h579km±3km, h579km:pP-P, n1053, σ0s77/1022, mb4.7/243, 87C-52D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.79 | 275 | P | P | 00 45 51.7 | +1.6 |
| MSVF | Nonsavu | 3.79 | 275 | P | P | 00 45 51.1 | +1.0 |
| AFI | Afiamalu | 7.29 | 56 | P | P | 00 46 17.9 | -1.7 |
| NIUE | Niue | 7.71 | 98 | P | P | 00 46 24.6 | +1.2 |
| NIUE | Niue | 7.71 | 98 | P | P | 00 46 23.3 | -0.1 |
| NIUE | Niue | 7.71 | 98 | P | P | 00 46 24.5 | +1.1 |
| | comp=Z,1825µcomp=Z,276nm,1.1s | | | | | | |
| FUNA | Funafuti | 9.91 | 344 | P | P | 00 46 45.8 | +0.7 |
| FUNA | Funafuti | 9.91 | 344 | P | P | 00 46 43.6 | -1.5 |
| RAO | Raoul Island | 11.09 | 180 | P | P | 00 46 55.3 | -1.5 |
| RAO | Raoul Island | 11.09 | 180 | P | P | 00 46 55.6 | -1.3 |
| | comp=Z,140nm,0.2s,baz=136,slow=22,SNR=5.3 | | | | | | |
| RTV | Rentapao | 12.93 | 269 | P | P | 00 47 17.3 | +1.5 |
| DVP | Devils Point | 13.16 | 270 | P | P | 00 47 19.7 | +1.5 |
| LIFNC | LIFOU | 14.18 | 257 | P | P | 00 47 27.4 | -1.1 |
| LIFNC | LIFOU | 14.18 | 257 | P | P | 00 47 26.8 | -1.7 |
| PINNC | Pines Island, | 14.37 | 249 | P | P | 00 47 29.6 | -0.8 |
| DZM | Mont Dzumac | 15.14 | 252 | P | P | 00 47 38.2 | +0.3 |
| DZM | Mont Dzumac | 15.14 | 252 | P | P | 00 47 37.4 | -0.5 |
| DZM | Mont Dzumac | 15.14 | 252 | P | P | 00 47 37.6 | -0.3 |
| | comp=Z,37nm,0.6s,baz=122,slow=3.9,SNR=43 | | | | | | |
| NOUC | Port Laguerre | 15.28 | 252 | P | P | 00 47 39.3 | +0.2 |
| KOUNC | Koumac, New Ca | 16.90 | 259 | P | P | 00 47 55.4 | +1.2 |
| KOUNC | Koumac, New Ca | 16.90 | 259 | P | P | 00 47 55.0 | +0.8 |
| RAR | Rarotonga | 17.43 | 103 | P | P | 00 48 00.1 | +1.1 |
| RAR | Rarotonga | 17.43 | 103 | P | P | 00 48 00.1 | +1.1 |
| RAR | Rarotonga | 17.43 | 103 | P | P | 00 47 59.4 | +0.4 |
| | comp=Z,47nm,0.8s,baz=223,slow=5.8,SNR=6.9 | | | | | | |
| MXZ | Matakaoa Point | 19.65 | 189 | P | P | 00 48 18.0 | -1.0 |
| TOZ | Tahuroa Road | 20.37 | 195 | P | P | 00 48 26.4 | +1.0 |
| TOZ | | | | IAmb | IAmb | 00 48 27.7 | |
| | comp=Z,20nm,1.2s | | | | | | |
| URZ | Urewera | 20.53 | 191 | P | P | 00 48 24.8 | -2.1 |
| | comp=Z,18nm,0.4s,baz=9.2,slow=1.6,SNR=25 | | | | | | |
| | comp=Z,18nm,0.4s | | | | | | |
| RTZ | Ruatahuna | 20.90 | 191 | P | P | 00 48 29.6 | -0.7 |
| RTZ | | | | IAmb | IAmb | 00 48 34.0 | |
| | comp=Z,20nm,1.1s | | | | | | |
| MSWZ | Moikau Station | 23.94 | 193 | P | P | 00 48 56.6 | -0.7 |
| BHW | Baring Head | 24.02 | 193 | P | P | 00 48 56.5 | -1.4 |
| PLWZ | Palliser | 24.09 | 192 | P | P | 00 48 58.0 | -0.7 |
| TKNZ | Takaka Hill | 24.14 | 197 | P | P | 00 48 58.5 | -0.6 |
| THZ | Tophouse | 24.83 | 196 | P | P | 00 49 04.8 | -0.4 |
| DSZ | Denniston Nort | 25.12 | 198 | P | P | 00 49 07.2 | -0.6 |
| KHZ | Kahutara | 25.28 | 195 | P | P | 00 49 07.5 | -1.5 |
| LTZ | Lake Taylor | 25.95 | 197 | P | P | 00 49 13.1 | -1.9 |
| LTZ | | | | IAmb | IAmb | 00 49 21.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| OXZ | Oxford | 26.52 | 196 | P | P | 00 49 19.6 | -0.4 |
| PPT | Papeete | 27.04 | 93 | P | P | 00 49 25.8 | +0.8 |
| | comp=Z,35nm,0.8s,baz=252,slow=6.4,SNR=5.1 | | | | | | |
| | comp=Z,35nm,0.8s | | | | | | |
| PPTF | Pamatai, Papee | 27.05 | 93 | P | P | 00 49 26.4 | +1.3 |
| PPTF | Pamatai, Papee | 27.05 | 93 | P | P | 00 49 25.5 | +0.4 |
| FOZ | Fox Glacier | 27.36 | 200 | P | P | 00 49 27.9 | +0.6 |
| GC1S | Gold Coast 1 S | 27.99 | 244 | P | P | 00 49 33.9 | +0.8 |
| LBZ | Lake Benmore | 28.02 | 198 | P | P | 00 49 31.3 | -1.8 |
| WKZ | Wanaka | 28.78 | 199 | P | P | 00 49 38.8 | -0.9 |
| MLZ | Mavora Lakes | 29.55 | 200 | P | P | 00 49 47.1 | +0.7 |
| MLZ | | | | IAmb | IAmb | 00 49 48.0 | |
| | comp=Z,18nm,0.7s | | | | | | |
| EIDS | Eidsvold | 29.57 | 250 | P | P | 00 49 47.3 | +0.4 |
| EIDS | Eidsvold | 29.57 | 250 | P | P | 00 49 47.1 | +0.3 |
| EIDS | Eidsvold | 29.57 | 250 | P | P | 00 49 46.8 | -0.1 |
| | comp=Z,124nm,0.7s | | | | | | |
| RK1H | Rockhampton Ha | 29.90 | 254 | P | P | 00 49 49.8 | +0.1 |
| DCZ | Deep Cove | 29.96 | 201 | P | P | 00 49 50.0 | +0.3 |
| WHZ | Wether Hill Ro | 30.07 | 200 | P | P | 00 49 51.2 | +0.5 |
| ARMA | Armidale | 30.19 | 240 | P | P | 00 49 52.7 | +0.5 |
| ARMA | Armidale | 30.19 | 240 | P | P | 00 49 53.4 | +1.2 |
| ARMA | Armidale | 30.19 | 240 | P | P | 00 49 53.1 | +0.9 |
| | comp=Z,92nm,0.7s | | | | | | |
| SYDH | Sydney Hard Ro | 31.99 | 235 | P | P | 00 50 08.1 | +0.7 |
| AULRC | Lightning Ridg | 33.01 | 244 | P | P | 00 50 17.0 | +1.0 |
| AUDCS | Dubbo College | 33.17 | 238 | P | P | 00 50 18.3 | +0.9 |
| TV1H | Townsville Har | 33.35 | 262 | P | P | 00 50 19.4 | +0.4 |
| CNB | Canberra Magne | 33.62 | 233 | P | P | 00 50 22.4 | +1.2 |
| CNB | Canberra Magne | 33.62 | 233 | P | P | 00 50 22.5 | +1.2 |
| | comp=Z,258nm,0.9s | | | | | | |
| CTAO | Charters Tower | 33.81 | 261 | P | P | 00 50 23.3 | +0.3 |
| CTAO | Charters Tower | 33.81 | 261 | P | P | 00 50 23.2 | +0.3 |
| CAN | Canberra | 33.90 | 233 | P | P | 00 50 24.4 | +0.9 |
| CAN | Canberra | 33.90 | 233 | P | P | 00 50 23.7 | +0.1 |
| CAN | Canberra | 33.90 | 233 | P | P | 00 50 24.4 | +0.9 |
| | comp=Z,156nm,0.8s | | | | | | |
| YNG | Young | 34.00 | 235 | P | P | 00 50 25.3 | +0.9 |
| YNG | Young | 34.00 | 235 | P | P | 00 50 25.3 | +0.9 |
| | comp=Z,198nm,1.2s | | | | | | |
| PMG | Port Moresby | 34.88 | 280 | P | P | 00 50 33.2 | +1.3 |
| PMG | Port Moresby | 34.88 | 280 | P | P | 00 50 33.2 | +1.3 |
| CMSA | Cobar Meteorol | 35.40 | 241 | P | P | 00 50 36.6 | +0.6 |
| CMSA | Cobar Meteorol | 35.40 | 241 | P | P | 00 50 36.6 | +0.6 |
| | comp=Z,193nm,0.8s | | | | | | |
| MTSU | Mount Surprise | 35.78 | 264 | P | P | 00 50 39.6 | +0.2 |
| QLP | Quilpie | 35.84 | 250 | P | P | 00 50 40.5 | +0.8 |
| QLP | Quilpie | 35.84 | 250 | P | P | 00 50 39.9 | +0.2 |
| | comp=Z,340nm,0.9s | | | | | | |
| GLAD | Gladstone | 36.99 | 225 | P | P | 00 50 49.5 | +0.6 |
| TOO | Toolangi | 37.35 | 231 | P | P | 00 50 52.9 | +0.9 |
| TOO | Toolangi | 37.35 | 231 | P | P | 00 50 52.9 | +0.9 |
| TOO | Toolangi | 37.35 | 231 | P | P | 00 50 53.0 | +0.9 |
| | comp=Z,172nm,1.3s | | | | | | |
| COEN | Coen | 37.51 | 271 | P | P | 00 50 54.4 | +0.9 |
| COEN | Coen | 37.51 | 271 | P | P | 00 50 54.2 | +0.7 |
| COEN | Coen | 37.51 | 271 | P | P | 00 50 54.2 | +0.7 |
| | comp=Z,226nm,0.9s | | | | | | |
| CORO | Coronation Par | 37.78 | 225 | P | P | 00 50 56.1 | +0.8 |
| TAU | Tasmania Unive | 38.36 | 222 | P | P | 00 50 59.1 | -0.9 |
| GEXS | Deakin Univers | 38.47 | 231 | P | P | 00 51 02.1 | +1.1 |
| BRAT | Ballarat | 38.51 | 232 | P | P | 00 51 02.0 | +0.7 |
| STKA | Stephens Creek | 38.88 | 241 | P | P | 00 51 05.6 | +1.1 |
| STKA | Stephens Creek | 38.88 | 241 | P | P | 00 51 05.6 | +1.1 |
| STKA | Stephens Creek | 38.88 | 241 | P | P | 00 51 05.2 | +0.7 |
| | comp=Z,41nm,0.9s | | | | | | |
| STKA | Stephens Creek | 38.88 | 241 | P | P | 00 51 05.6 | +1.1 |
| | comp=Z,92nm,0.5s,baz=90,slow=9.9,SNR=143 | | | | | | |
| | comp=Z,92nm,0.5s | | | | | | |
| INKA | Innaminka | 39.04 | 248 | P | P | 00 51 06.9 | +1.1 |
| ARPS | Mount Arapiles | 39.85 | 234 | P | P | 00 51 12.6 | +0.4 |
| ARPS | Mount Arapiles | 39.85 | 234 | P | P | 00 51 12.6 | +0.4 |
| | comp=Z,102nm,0.9s | | | | | | |
| QIS | Mount Isa | 40.01 | 259 | P | P | 00 51 13.5 | -0.2 |
| QIS | Mount Isa | 40.01 | 259 | P | P | 00 51 13.2 | -0.5 |
| | comp=Z,27nm,0.8s | | | | | | |
| HTT | Hallett | 41.39 | 240 | P | P | 00 51 25.0 | +0.5 |
| HTT | Hallett | 41.39 | 240 | P | P | 00 51 24.9 | +0.4 |
| | comp=Z,154nm,1.2s | | | | | | |
| LCRK | Leigh Creek | 41.53 | 244 | P | P | 00 51 26.1 | +0.

comp=Z,104nm,0.7s,comp=Z,1µm
**SANI Sanana 57.17 280** P **P** **00 53 20.8 +0.2**
**SANI Sanana 57.17 280** P **P** **00 53 19.8 -0.8**
comp=Z,151nm,0.9s,comp=Z,1µm
**PSA00 Pilbara Seismi 58.24 255** P **P** **00 53 27.2 -0.6**
**PSA00 Pilbara Seismi 58.24 255** P **P** **00 53 27.7 -0.2**
**PSA00 Pilbara Seismi 58.24 255** P **P** **00 53 27.3 -0.6**
PSA00 IAmb IAmb 00 53 28.4
comp=Z,40nm,1.1s
**PSA00 Pilbara Seismi 58.24 255** P **P** **00 53 27.3 -0.5**
comp=Z,114nm,0.9s
**MBWA Marble Bar 58.41 256** P **P** **00 53 28.1 -0.8**
**MBWA Marble Bar 58.41 256** P **P** **00 53 28.2 -0.8**
MBWA IAmb IAmb 00 53 29.4
comp=Z,46nm,0.8s
**MBWA Marble Bar 58.41 256** P **P** **00 53 28.4 -0.5**
comp=Z,71nm,1.1s
**MMRI Maumere 58.70 271** P **P** **00 53 31.1 +0.1**
**MMRI Maumere 58.70 271** P **P** **00 53 30.7 -0.3**
**MMRI Maumere 58.70 271** P **P** **00 53 31.5 +0.5**
comp=Z,103nm,0.5s
**MEEK Meekatharra 58.74 249** P **P** **00 53 30.6 -0.5**
**MEEK Meekatharra 58.74 249** P **P** **00 53 30.4 -0.7**
comp=Z,84nm,0.9s
**KLBR Kellerberrin 59.10 244** P **P** **00 53 33.2 -0.2**
**KLBR Kellerberrin 59.10 244** P **P** **00 53 33.0 -0.5**
comp=Z,344nm,0.7s
**EDFI Ende, Flores 59.19 270** P **P** **00 53 32.5 -1.9**
comp=Z,118nm,1.1s,comp=Z,1µm
**NWAO Narrogin (SRO) 59.47 242** P **P** **00 53 35.9 0.0**
**NWAO Narrogin (SRO) 59.47 242** P **P** **00 53 36.1 +0.2**
**NWAO Narrogin (SRO) 59.47 242** P **P** **00 53 34.6 -1.3**
NWAO IAmb IAmb 00 53 36.6
comp=Z,45nm,0.9s
**RKGY Rocky Gully 59.62 240** P **P** **00 53 37.4 +0.6**
**RKGY Rocky Gully 59.62 240** P **P** **00 53 37.1 +0.3**
comp=Z,119nm,1.0s
**BLDU Ballidu 60.06 245** P **P** **00 53 39.4 -0.5**
**BLDU Ballidu 60.06 245** P **P** **00 53 39.3 -0.5**
comp=Z,83nm,0.8s
**MUN Mundaring 60.39 243** P **P** **00 53 42.0 0.0**
**MUN Mundaring 60.39 243** P **P** **00 53 41.9 0.0**
comp=Z,90nm,1.6s
**LUWI Luwuk 60.53 279** P **P** **00 53 44.0 +0.8**
**LUWI Luwuk 60.53 279** P **P** **00 53 42.4 -0.8**
**LUWI Luwuk 60.53 279** P **P** **00 53 42.8 -0.4**
comp=Z,159nm,1.0s,comp=Z,2µm
**MTKN Mount Kenneth 60.76 243** P **P** **00 53 45.6 +1.2**
**MTKN Mount Kenneth 60.76 243** P **P** **00 53 46.1 +1.8**
comp=Z,265nm,0.7s
**MORW Morawa 60.77 246** P **P** **00 53 44.1 -0.4**
**MORW Morawa 60.77 246** P **P** **00 53 43.9 -0.6**
MORW IAmb IAmb 00 53 45.0
comp=Z,28nm,0.8s
**MORW Morawa 60.77 246** P **P** **00 53 44.0 -0.6**
comp=Z,45nm,1.0s
**GTOI Gorontalo 60.90 281** P **P** **00 53 45.3 -0.2**
**WBSI Waikabubak, Su 61.14 269** P **P** **00 53 45.2 -2.0**
comp=Z,62nm,0.9s
**BNSI Bone 61.95 275** P **P** **00 53 52.1 -0.4**
comp=Z,95nm,1.2s,comp=Z,1µm
**KAPI Kappang 62.10 274** P **P** **00 53 52.8 -0.7**
KAPI IAmb IAmb 00 53 54.2
comp=Z,36nm,1.1s
**TOLI2 Tolitoli 63.15 281** P **P** **00 54 00.2 +0.1**
**TOLI2 Tolitoli 63.15 281** P **P** **00 53 59.0 -1.1**
TOLI2 IAmb IAmb 00 54 00.8
comp=Z,36nm,0.8s
**GIRL Giralia 63.22 253** P **P** **00 54 01.3 +0.8**
**GIRL Giralia 63.22 253** P **P** **00 54 00.3 -0.2**
**MPSI Mapaga 63.70 280** P **P** **00 54 02.0 -1.7**
comp=Z,87nm,1.0s
**CASY Casey 66.12 205** P **P** **00 54 18.3 +0.4**
CASY IAmb IAmb 00 54 19.3
comp=Z,28nm,1.1s
**JAGI Jajag, Banyuwa 66.43 268** P **P** **00 54 19.8 -1.0**
**JAGI Jajag, Banyuwa 66.43 268** P **P** **00 54 19.5 -1.3**
**JAGI Jajag, Banyuwa 66.43 268** P **P** **00 54 18.9 -1.9**
comp=Z,181nm,0.7s,comp=Z,2µm
**MYLDM Lahad Datu 66.75 284** P **P** **00 54 22.7 0.0**
**INU Inuyama 68.17 321** P **P** **00 54 30.2 -0.7**
INU IAmb IAmb 00 54 31.7
comp=Z,27nm,1.2s
**MJAR Matsushiro Arr 68.30 323** P **P** **00 54 31.4 -0.4**
comp=Z,14nm,0.5s,baz=157,slow=5.7,SNR=38
comp=Z,14nm,0.5s
**MAJO Matsushiro 68.31 323** P **P** **00 54 32.1 +0.3**
**MAJO Matsushiro 68.31 323** P **P** **00 54 31.4 -0.4**
MAJO IAmb IAmb 00 54 32.4
comp=Z,23nm,0.7s
**MJB9 Matsu-Tunnel 68.31 323** P **P** **00 54 31.8 0.0**
MJB9 IAmb IAmb 00 54 33.4
comp=Z,22nm,0.7s
**JMN Monobe 69.00 318** P **P** **00 54 37.5 +1.4**
**JMN Monobe 69.00 318** P **P** **00 54 36.3 +0.2**
**KKM Kota Kinabalu 69.18 284** P **P** **00 54 38.0 +0.4**
**KKM Kota Kinabalu 69.18 284** P **P** **00 54 37.3 -0.3**
**KIWB Kanaga Island 69.66 1** P **P** **00 54 38.6 -0.9**
**JTM Tenmabayashi 69.85 328** P **P** **00 54 42.3 +1.4**
**JTM Tenmabayashi 69.85 328** IAmb IAmb 00 54 41.9
comp=Z,24nm,0.9s
**UGM Wanagama 70.04 268** P **P** **00 54 43.1 +0.4**
**UGM Wanagama 70.04 268** P **P** **00 54 42.3 -0.3**
**SMRI Semarang 70.36 269** P **P** **00 54 45.4 +0.8**
**SMRI Semarang 70.36 269** P **P** **00 54 44.6 +0.1**
**SMRI Semarang 70.36 269** P **P** **00 54 43.3 -1.3**
**JNU Nakatsue 70.56 316** P **P** **00 54 45.8 +0.5**
**JNU Nakatsue 70.56 316** IAmb IAmb 00 54 46.7
comp=Z,37nm,1.2s
**NIKH Nikolski High 71.22 6** P **P** **00 54 48.2 -0.5**
baz=189
**SBUM Sibu 71.63 279** P **P** **00 54 51.7 -0.3**
SBUM IAmb IAmb 00 54 53.7
comp=Z,13nm,0.8s
**QSPA South Pole Qui 71.95 180** P **P** **00 54 54.0 +1.0**
QSPA IAmb IAmb 00 54 54.7
comp=Z,6.9nm,0.6s
**QSPA South Pole Qui 71.95 180** P **P** **00 54 53.9 +0.9**
comp=Z,5.7nm,0.5s,baz=252,slow=0.8,SNR=58
comp=Z,5.7nm,0.5s
**TWGBT Beinan 72.11 302** P **P** **00 54 53.5 -1.0**
**YULB Yu-li 72.21 303** P **P** **00 54 56.2 +1.1**
**YULB Yu-li 72.21 303** P **P** **00 54 53.4 -1.7**
**UNV Unalaska Valle 72.33 7** P **P** **00 54 55.2 +0.1**
baz=192
**NACB Ninganchiao 72.36 304** P **P** **00 54 56.4 +0.5**
**NACB Ninganchiao 72.36 304** P **P** **00 54 55.3 -0.6**
**SSLB Suanglung 72.68 303** P **P** **00 54 57.2 -0.6**
**SSLB Suanglung 72.68 303** P **P** **00 54 56.8 -1.1**
**TPUB Ta-pu 72.70 302** P **P** **00 54 57.8 -0.2**
**YHNB Yeheng 72.78 304** P **P** **00 54 59.3 +0.9**
**TATO Taipei 72.84 304** P **P** **00 54 58.2 -0.4**
**BBJI Bungbulang 72.89 268** P **P** **00 54 58.9 -0.5**
**KSM Kuching 73.11 277** P **P** **00 55 01.6 +1.1**
**YSS Yuzh-Sakhalins 73.77 333** P **P** **00 55 04.6 +1.1**
**YSS Yuzh-Sakhalins 73.77 333** P **P** **00 55 03.5 +0.1**
YSS IAmb IAmb 00 55 05.3
comp=Z,23nm,0.9s
**PETK Petropavlovsk- 73.97 345** P **P** **00 55 04.1 -0.4**
comp=Z,21nm,0.7s,baz=124,slow=8.0,SNR=16
comp=Z,21nm,0.7s
**KSRS Korea Array 75.11 318** P **P** **00 55 12.2 +1.0**
comp=Z,4.2nm,0.6s,baz=134,slow=6.2,SNR=14
comp=Z,4.2nm,0.6s
**KSAR Wonju Array Be 75.13 318** P **P** **00 55 11.3 -0.1**
**S14K Fog Glacier 75.72 10** P **P** **00 55 13.9 -0.3**
baz=198
**CHGN Chignik 75.94 11** P **P** **00 55 14.4 -0.9**
baz=199
**CHIR Chirikof Islan 76.03 13** P **P** **00 55 15.7 -0.2**
baz=202
**USA0B Ussuriysk Arra 77.00 326** P **P** **00 55 21.7 +0.2**
USA0B IAmb IAmb 00 55 23.6
comp=Z,13nm,1.0s
**USRK Ussuriysk Ar. 77.00 326** P **P** **00 55 22.1 +0.7**
**USRK Ussuriysk Ar. 77.00 326** P **P** **00 55 22.4 +1.0**
comp=Z,3.6nm,0.5s,baz=119,slow=4.3,SNR=13
comp=Z,3.6nm,0.5s
**SII Sitkinak Islan 77.03 13** P **P** **00 55 21.5 +0.2**
baz=203
**R16K Pilot Point 77.28 11** P **P** **00 55 22.3 -0.3**
baz=200
**O02D Mt. Diablo Mer 77.45 40** P **P** **00 55 24.1 0.0**
O02D IAmb IAmb 00 55 26.8
comp=Z,17nm,1.2s
**R17L Mt. Peulik Vol 77.57 12** P **P** **00 55 24.4 +0.2**
baz=201
**MONP2 Monument Peak 77.64 49** P **P** **00 55 24.7 -0.8**
baz=239
**ISA Isabella, Lake 77.67 46** P **P** **00 55 25.7 +0.3**
**CMB Columbia Colle 77.71 43** P **P** **00 55 25.6 +0.1**
**OHAK Old Harbor 77.83 13** P **P** **00 55 25.1 -0.5**
baz=204
**AFDM Forest Hills D 77.86 42** P **P** **00 55 26.2 -0.1**
**ORV Oroville 77.88 41** P **P** **00 55 26.2 -0.1**
**R18K Karluk 77.90 13** P **P** **00 55 26.2 +0.2**
baz=203
**PFO Pinyon Flats O 77.99 49** P **P** **00 55 25.5 -1.7**
baz=239
**TPFO Pinon Flats 77.99 49** P **P** **00 55 25.2 -2.0**
baz=239
**Q17K Contact Creek 78.26 12** P **P** **00 55 27.7 -0.3**
baz=201
**O14K Tigyukauivet M 78.29 9** P **P** **00 55 28.0 0.0**
baz=196
**MDPB Devils Postpil 78.34 44** P **P** **00 55 30.0 +0.8**
**NJ2 Nanjing 78.37 309** *e*P **P** **00 55 31.5 +2.4**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**OMMB Old Mammoth Mi 78.38 44** P **P** **00 55 29.9 +0.4**
**YBH Yreka Blue Hor 78.43 39** P **P** **00 55 29.3 0.0**
**O15K Ungalikthiuk R 78.43 9** P **P** **00 55 28.7 -0.1**
baz=198
**LRDM Redding Peak 78.43 41** P **P** **00 55 29.5 +0.1**
**Q16K King Salmon 78.50 11** P **P** **00 55 28.8 -0.3**
baz=201
**MDJ Mudanjiang 78.58 325** P **P** **00 55 31.1 +1.2**
**MDJ Mudanjiang 78.58 325** P **P** **00 55 31.3 +1.4**
MDJ pmax pmax
comp=Z,54nm,1.0s
**MDJ Mudanjiang 78.58 325** P **P** **00 55 30.2 +0.2**
MDJ IAmb IAmb 00 55 32.1
comp=Z,36nm,0.8s
**WAKR Walker 78.59 43** P **P** **00 55 31.1 +0.6**
**P16K Nushagak River 78.59 10** P **P** **00 55 29.5 -0.1**
baz=199
**GSC Goldstone, Bar 78.62 47** P **P** **00 55 30.0 -0.6**
**HATC Hat Creek Radi 78.64 40** P **P** **00 55 31.1 +0.7**
HATC IAmb IAmb 00 55 34.7
comp=Z,11nm,0.7s
**Q18K Katmai Hardscr 78.79 12** P **P** **00 55 30.0 -0.9**
baz=202
**M11K Mekoryuk 78.80 6** P **P** **00 55 30.2 -0.4**
baz=191
**HUMO Hull Mountain 78.81 38** P **P** **00 55 32.5 +1.2**
HUMO IAmb IAmb 00 55 33.7
comp=Z,18nm,1.2s
**PNTR Pine Nut 78.82 43** P **P** **00 55 30.9 -0.7**
PNTR IAmb IAmb 00 55 33.8
comp=Z,17nm,0.9s
**GLA Glamis 78.88 50** P **P** **00 55 32.6 +0.8**
**N14K Kuskokwak Cree 78.88 8** P **P** **00 55 30.7 -0.4**
baz=196,SNR=5.8
**DSP Deep Springs 78.93 45** P **P** **00 55 32.4 +0.4**
**P17K Kvichak River 79.02 11** P **P** **00 55 30.9 -1.0**
baz=201
**LHV Little Huntoon 79.06 44** P **P** **00 55 33.0 +0.4**
LHV IAmb IAmb 00 55 35.1
comp=Z,13nm,1.1s
**O16K Kokwok River B 79.11 10** P **P** **00 55 31.9 -0.5**
baz=199
**M13K Dall Lake 79.14 7** P **P** **00 55 31.9 -0.6**
baz=194
**GWY Greenwater Val 79.18 46** P **P** **00 55 34.0 +0.4**
**BTDF Bukit Timah Da 79.25 275** P **P** **00 55 34.6 +0.4**
**RYN Ryan 79.26 43** P **P** **00 55 34.4 +0.5**
**NVAR Mina Array Bea 79.29 44** P **P** **00 55 34.8 +0.6**
**NVAR Mina Array Bea 79.29 44** P **P** **00 55 35.0 +0.8**
comp=Z,4.3nm,0.8s,baz=226,slow=8.6,SNR=38
NVAR pP **pP** **00 57 36.8 +1.4**
comp=Z,0.7nm,0.8s,baz=263,slow=7.2,SNR=3.2
comp=Z,4.3nm,0.8s
**Q20K Shuyak Island 79.30 13** P **P** **00 55 32.6 -0.8**
baz=205
**PAHR Pah Rah Range 79.30 42** P **P** **00 55 34.3 +0.2**
**N15K Kwethluk River 79.34 9** P **P** **00 55 33.3 -0.3**
baz=197
**GMN Gold Mountain 79.37 45** P **P** **00 55 35.4 +0.7**
**NV11 Mina Array Sit 79.39 44** P **P** **00 55 35.1 +0.5**
**P18K Big Mountain, 79.43 12** P **P** **00 55 33.9 -0.3**
baz=202
**O17K Koliganek Bris 79.45 11** P **P** **00 55 33.4 -0.7**
baz=200
**M14K Bethel 79.64 8** IAmb IAmb 00 55 36.5
comp=Z,34nm,1.3s
**M14K Bethel 79.64 8** P **P** **00 55 35.0 -0.1**
baz=196
**M15K Kasigluk River 79.76 9** P **P** **00 55 36.2 +0.4**
baz=197
**TPH Tonopah 79.81 44** IAmb IAmb 00 55 38.9
comp=Z,42nm,1.2s
**214A Organ Pipe Nat 79.82 52** P **P** **00 55 36.6 -0.2**
baz=241
**N16K Nishlik Lake 79.83 10** P **P** **00 55 36.0 -0.2**
baz=199
**O18K Koktuh Hills 79.87 11** P **P** **00 55 36.6 +0.2**
baz=202
**TPNV Topopah Spring 79.87 46** P **P** **00 55 37.0 -0.2**
baz=238,SNR=5.8
**L14K Kuka Creek 80.12 7** P **P** **00 55 38.4 +0.8**
baz=195
**V12A Nelson 80.21 47** P **P** **00 55 38.9 0.0**
**G03D McMinnville, O 80.23 36** P **P** **00 55 39.3 +0.7**
**J05D Fort Rock, OR 80.23 38** P **P** **00 55 38.9 0.0**
J05D IAmb IAmb 00 55 41.1
comp=Z,17nm,0.8s
**Q09A Carvers 80.25 44** P **P** **00 55 38.9 -0.2**
Q09A IAmb IAmb 00 55 41.0
comp=Z,11nm,0.8s
**M16K Timber Creek 80.33 9** P **P** **00 55 39.1 +0.3**
M16K IAmb IAmb 00 55 40.8
comp=Z,34nm,1.0s
**M16K Timber Creek 80.33 9** P **P** **00 55 39.5 +0.7**
baz=198,SNR=6.7
**O19K Port Alsworth 80.35 12** P **P** **00 55 39.2 +0.4**
baz=203
**SHPR Sheep Range 80.39 47** P **P** **00 55 39.9 0.0**
**BNX BinXian 80.49 325** ⇑P **P** **00 55 40.5 +0.6**
BNX pmax pmax
comp=Z,42nm,0.9s
**F03A Seaside 80.51 35** P **P** **00 55 40.2 +0.2**
**H04A Detroit Lake 80.51 37** P **P** **00 55 40.4 +0.2**
**N18K Kilae Creek 80.51 11** P **P** **00 55 39.8 +0.1**
baz=201
**W13A Hualapai Mount 80.57 48** P **P** **00 55 40.7 -0.3**
**S11A Rachel 80.58 45** P **P** **00 55 41.5 +0.7**
**L15K Ungalak Mounta 80.60 8** P **P** **00 55 40.8 +0.7**
baz=196,SNR=6.0
**Y14A Wickenburg 80.64 50** P **P** **00 55 40.7 -0.4**
**BRSE Bradley Lake S 80.69 14** P **P** **00 55 40.6 -0.1**
baz=206
**PINE Pine Mountain 80.70 38** IAmb IAmb 00 55 43.7
comp=Z,17nm,0.9s
**I05D Terrebonne, OR 80.79 37** P **P** **00 55 42.9 +1.3**
I05D IAmb IAmb 00 55 43.6
comp=Z,13nm,1.0s
**SMAI San Martin Ant 80.83 159** P **P** **00 55 42.6 +1.2**
**E03A Lebam 80.89 35** IAmb IAmb 00 55 43.9
comp=Z,15nm,0.8s
**N19K Bonanza Creek 80.89 11** P **P** **00 55 41.3 -0.5**
baz=203
**L16K Owhat River 80.91 9** IAmb IAmb 00 55 44.0
comp=Z,31nm,1.2s
**L16K Owhat River 80.91 9** P **P** **00 55 42.8 +1.1**
baz=198,SNR=7.2
**M17K Holitna River 80.93 10** P **P** **00 55 42.6 +0.8**
**M17K Holitna River 80.93 10** P **P** **00 55 43.3 +1.5**
baz=200,SNR=5.6
**PRN Pahroc Range 80.93 46** P **P** **00 55 43.1 +0.5**
PRN IAmb IAmb 00 55 45.1
comp=Z,10.0nm,1.0s
**WHN Wuhan 81.04 306** P **P** **00 55 44.4 +1.3**
WHN sP **sP** **00 58 40.8 -3.7**
WHN pmax pmax
comp=Z,40nm,1.6s
**R11B Troy Canyon, C 81.05 45** P **P** **00 55 43.6 +0.3**
**R11B Troy Canyon, C 81.05 45** P **P** **00 55 43.4 +0.2**
baz=238
**BMN Battle Mountai 81.08 42** P **P** **00 55 44.1 +0.8**
BMN IAmb IAmb 00 55 45.4
comp=Z,9.5nm,0.9s
**CNSH ChangSha 81.10 303** P **P** **00 55 44.4 +0.9**
CNSH pmax pmax
comp=Z,27nm,1.3s
**K15K Wolf Creek Mou 81.19 8** P **P** **00 55 44.5 +1.4**
baz=196,SNR=13
**HOOD Mount Hood Mea 81.20 36** P **P** **00 55 44.2 +0.4**
HOOD IAmb IAmb 00 55 45.4
comp=Z,10nm,0.8s
**M18K Stony River 81.28 11** P **P** **00 55 44.0 +0.3**
baz=201
**WVOR Wild Horse Val 81.30 40** P **P** **00 55 45.3 +0.9**
WVOR IAmb IAmb 00 55 46.4
comp=Z,16nm,1.1s
**SEW Seward 81.30 14** P **P** **00 55 45.1 +1.4**
baz=207
**G05A Wamic 81.34 37** IAmb IAmb 00 55 52.0
comp=Z,34nm,1.3s
**J14K Nanvaranak Lak 81.39 7** P **P** **00 55 45.2 +1.1**
baz=194
**L17K Donlin 81.49 9** P **P** **00 55 46.2 +1.5**
baz=199,SNR=9.4
**TUC Tucson 81.51 52** P **P** **00 55 46.7 +1.1**
TUC **pwP** **00 57 49.9 -0.3**
**TUC Tucson 81.51 52** P **P** **00 55 47.2 +1.6**
baz=242
**I07A Izee 81.71 38** P **P** **00 55 47.4 +0.9**
I07A IAmb IAmb 00 55 48.5
comp=Z,12nm,0.8s
**G06A Carlson Farm, 81.73 37** P **P** **00 55 47.1 +0.8**
G06A IAmb IAmb 00 55 48.0
comp=Z,11nm,1.1s
**L18K Granite Mounta 81.82 10** P **P** **00 55 46.8 +0.4**
L18K IAmb IAmb 00 55 48.1
comp=Z,16nm,0.7s
**L18K Granite Mounta 81.82 10** P **P** **00 55 47.6 +1.2**
baz=200,SNR=8.2
**GNW Green Mountain 81.92 34** P **P** **00 55 47.7 +0.5**
GNW IAmb IAmb 00 55 49.0
comp=Z,10nm,0.9s
**Q12A Willow Creek R 81.92 45** P **P** **00 55 48.4 +0.7**
**BELA Belgrano 2 81.92 173** P **P** **00 55 47.1 +0.3**
BELA IAmb IAmb 00 55 48.0
comp=Z,9.6nm,0.8s
**J08A Circle Bar Ran 81.92 39** P **P** **00 55 47.7 +0.2**
J08A IAmb IAmb 00 55 49.5
comp=Z,19nm,1.2s
**M19K Big River Lodg 81.92 11** P **P** **00 55 46.8 -0.2**
baz=203
**GULI GuiLin 81.96 300** P **P** **00 55 49.6 +1.6**
**LON Longmire 81.97 35** P **P** **00 55 47.8 +0.2**
**LCMT Little Creek M 81.97 47** P **P** **00 55 48.7 +0.7**
**X16A Lo Mia Camp, P 82.00 50** P **P** **00 55 49.1 +0.9**
X16A **pwP** **00 57 52.6 -0.7**
**K17K Iditarod 82.04 9** IAmb IAmb 00 55 48.9
comp=Z,16nm,1.1s
**K17K Iditarod 82.04 9** P **P** **00 55 47.8 +0.3**
baz=199
**L19K White Mountain 82.10 11** IAmb IAmb 00 55 51.1
comp=Z,14nm,1.2s
**L19K White Mountain 82.10 11** P **P** **00 55 48.4 +0.6**
baz=202
**RC01 Rabbit Creek A 82.12 13** P **P** **00 55 48.3 +0.4**
baz=207
**D05A Enumclaw 82.14 35** P **P** **00 55 49.5 +1.2**
D05A IAmb IAmb 00 55 51.4
comp=Z,32nm,1.2s
**M20K Styx River 82.14 12** P **P** **00 55 47.6 -0.5**
baz=204
**CCUT Cedar City 82.16 46** P **P** **00 55 50.2 +1.2**
**319A Douglas 82.22 54** P **P** **00 55 50.5 +1.2**
319A IAmb IAmb 00 55 52.3
comp=Z,11nm,0.9s
**SPR3 Spring Creek 3 82.23 45** P **P** **00 55 50.1 +0.7**
**PWL Port Wells 82.23 14** P **P** **00 55 47.9 -0.7**
baz=208
**SUA Susitna One 82.24 13** P **P** **00 55 48.0 -0.7**
baz=206
**J16K Anvik River 82.26 8** IAmb IAmb 00 55 50.2
comp=Z,20nm,0.9s
**J16K Anvik River 82.26 8** P **P** **00 55 49.7 +1.1**
baz=197,SNR=5.9
**KNB Kanab 82.27 47** P **P** **00 55 50.3 +0.8**
**PSUT Pine Spring 82.31 45** P **P** **00 55 50.0 +0.2**
**U15A North Rim 82.36 48** P **P** **00 55 50.6 +0.5**
U15A IAmb IAmb 00 55 52.6
comp=Z,12nm,0.8s
U15A **pwP** **00 57 54.8 -0.6**
**SZCU Shurtz Canyon 82.37 47** P **P** **00 55 50.3 +0.2**
**UBPT Khong Chiam 82.37 289** P **P** **00 55 51.7 +1.5**
**UBPT Khong Chiam 82.37 289** P **P** **00 55 50.0 -0.2**
**F07A Phinny Hill Vi 82.51 37** P **P** **00 55 51.0 +0.7**
**ELK Elko 82.53 43** P **P** **00 55 50.8 0.0**
**CRAG Craig 82.53 24** P **P** **00 55 50.0 -0.1**
baz=223
**SKT Skwentna 82.54 12** P **P** **00 55 49.4 -0.7**
baz=205
**GLI Glacier Island 82.54 15** P **P** **00 55 49.9 -0.2**
GLI IAmb IAmb 00 55 50.4
comp=Z,30nm,0.8s
**GLI Glacier Island 82.54 15** P **P** **00 55 49.6 -0.4**
baz=210
**L20K Farewell, AK 82.55 11** P **P** **00 55 50.1 0.0**
baz=203
**WUAZ Wupatki 82.57 49** P **P** **00 55 51.3 +0.2**
**WUAZ Wupatki 82.57 49** P **P** **00 55 52.0 +0.9**
baz=242
**J17K VABM Dome 82.57 8** IAmb IAmb 00 55 51.6
comp=Z,11nm,0.8s
**J17K VABM Dome 82.57 8** P **P** **00 55 51.0 +0.9**
baz=198
**M22K Willow 82.63 13** P **P** **00 55 49.6 -0.8**
baz=207
**KNK Knik Glacier 82.69 14** P **P** **00 55 50.8 0.0**
baz=208
**PMR Palmer 82.70 13** P **P** **00 55 50.0 -0.8**
baz=208
**MXC Moxie City 82.71 36** P **P** **00 55 51.7 +0.4**
**G08A Pilot Rock 82.72 38** P **P** **00 55 51.8 +0.3**
G08A IAmb IAmb 00 55 53.4
comp=Z,9.3nm,0.9s
**PKCU Pink Cliffs 82.83 47** P **P** **00 55 53.1 +0.6**
PKCU IAmb IAmb 00 55 55.6
comp=Z,14nm,1.0s
**IPM Ipoh 82.84 277** P **P** **00 55 53.7 +1.0**
**IPM Ipoh 82.84 277** P **P** **00 55 53.2 +0.5**
**GHO Glory Hole Cre 82.91 13** IAmb IAmb 00 55 52.5
comp=Z,23nm,0.7s
**E07A Sunnyside 82.94 36** P **P** **00 55 53.3 +0.8**
E07A IAmb IAmb 00 55 54.4
comp=Z,11nm,0.9s
**ANM Nome 82.98 5** P **P** **00 55 51.8 -0.4**
baz=192
**J18K Innoko River 82.99 9** IAmb IAmb 00 55 53.4
comp=Z,21nm,0.8s
**J18K Innoko River 82.99 9** P **P** **00 55 52.4 +0.1**
baz=200,SNR=12
**U33K Whale Pass 83.01 23** P **P** **00 55 53.4 +0.9**
baz=222
**V35K Ketchikan 83.02 25** P **P** **00 55 51.5 -1.0**
baz=224
**HAWA Hanford 83.03 36** IAmb IAmb 00 55 54.8
comp=Z,12nm,0.9s
**SML Sawmill 83.07 14** P **P** **00 55 52.7 -0.1**
baz=208
**X18A Snowflake 83.15 50** P **P** **00 55 54.6 +0.6**
**CUT Chulitna 83.18 13** P **P** **00 55 52.6 -0.6**
baz=206
**M23K Glacier View 83.19 14** P **P** **00 55 53.1 -0.3**
baz=209
**MTPU Mount Pierson 83.21 46** P **P** **00 55 55.0 +0.6**
**BMRM Bremner River 83.24 16** P **P** **00 55 53.2 -0.4**
baz=212
**MESA MESA 83.29 17** P **P** **00 55 53.3 -0.7**
**MESA MESA 83.29 17** P **P** **00 55 54.1 0.0**
baz=214
**S31K Pelican 83.29 21** IAmb IAmb 00 55 55.4
comp=Z,19nm,1.0s
**S31K Pelican 83.29 21** P **P** **00 55 54.5 +0.6**
baz=220,SNR=5.2
**TCRU Three Creeks R 83.31 46** P **P** **00 55 55.5 +0.7**
**SCM Sheep Creek Mo 83.32 14** P **P** **00 55 54.1 0.0**
baz=209
**K20K Telida 83.33 11** IAmb IAmb 00 55 54.8
comp=Z,22nm,0.8s
**K20K Telida 83.33 11** P **P** **00 55 54.3 +0.3**
baz=203,SNR=10

E08A Dider Farm, El 83.35 37 P P 00 55 55.2 +0.8
E08A IAmb IAmb 00 55 56.2
comp=Z,8.2nm,0.8s
KLU Klutina 83.36 15 P P 00 55 54.4 +0.1
baz=210
H16K Elim 83.37 7 P P 00 55 54.1 0.0
baz=195
CRQM Cirque 83.45 16 IAmb IAmb 00 55 55.7
comp=Z,35nm,1.1s
MSU Marysvale 83.45 46 P P 00 55 56.7 +1.3
CRQE Cirque 83.45 16 P P 00 55 54.8 0.0
baz=213,SNR=5.0
KULM Kulim 83.45 278 P P 00 55 55.6 -0.1
S32K Killisnoo 83.49 22 P P 00 55 54.9 0.0
baz=221
G15K Niukluk 83.53 6 P P 00 55 55.1 +0.2
baz=193
TGL Tana Glacier 83.53 17 IAmb IAmb 00 55 56.0
comp=Z,21nm,1.0s
WRAK Wrangell Islan 83.53 24 P P 00 55 55.5 +0.5
WRAK IAmb IAmb 00 55 56.7
comp=Z,9.5nm,0.8s
WRAK Wrangell Islan 83.53 24 P P 00 55 55.7 +0.7
baz=223
ISLE Juniper Island 83.53 17 P P 00 55 55.1 -0.1
ISLE IAmb IAmb 00 55 56.1
comp=Z,20nm,0.9s
MFID Camas Ranch 83.56 40 P P 00 55 56.4 +0.7
PNL Peninsula 83.62 19 P P 00 55 56.2 +0.7
baz=217
J19K Poorman 83.66 10 P P 00 55 55.9 +0.3
J19K IAmb IAmb 00 55 56.8
comp=Z,9.0nm,0.9s
J19K Poorman 83.66 10 P P 00 55 56.2 +0.6
baz=201
PINM Pinnacle 83.71 18 P P 00 55 56.2 +0.2
baz=216
TABL Table Mountain 83.74 17 P P 00 55 56.7 +0.4
D08A Wollman Farm, 83.75 36 P P 00 55 57.1 +0.6
D08A IAmb IAmb 00 55 58.2
comp=Z,10nm,1.0s
TNA Tin City 83.76 4 P P 00 55 56.1 +0.1
baz=190
VRDI Verde Repeater 83.76 16 IAmb IAmb 00 55 57.2
comp=Z,17nm,0.9s
N25K Chitina, Valde 83.79 15 IAmb IAmb 00 55 57.2
comp=Z,21nm,0.8s
N25K Chitina, Valde 83.79 15 P P 00 55 56.5 +0.1
baz=212,SNR=10
F14K Arctic Creek 83.80 5 P P 00 55 56.4 +0.2
baz=191
GRNC Granite Creek 83.80 17 P P 00 55 56.2 -0.4
GRNC IAmb IAmb 00 55 57.6
comp=Z,19nm,1.0s
MAW Mawson 83.81 200 P P 00 55 57.2 +0.8
comp=Z,5.1nm,0.5s,baz=136,slow=5.9,SNR=21
comp=Z,5.1nm,0.5s
M24K Tolsona, Glenn 83.83 14 P P 00 55 57.1 +0.5
M24K Tolsona, Glenn 83.83 14 P P 00 55 56.8 +0.2
baz=210
GLB Gilahina Butte 83.85 16 IAmb IAmb 00 55 57.3
comp=Z,17nm,0.7s
121A Cookes Peak, D 83.87 53 P P 00 55 58.5 +0.9
121A Cookes Peak, D 83.87 53 P P 00 55 59.0 +1.4
baz=244
E09A Wood Farm, Sta 83.88 37 P P 00 55 57.7 +0.6
E09A IAmb IAmb 00 55 58.6
comp=Z,12nm,1.3s
WAT6 Susitna Watana 83.89 14 P P 00 55 56.9 0.0
baz=209,SNR=5.9
WAT1 Susitna Watana 83.93 13 P P 00 55 56.7 -0.3
baz=208
H17K Granite Mounta 83.94 8 P P 00 55 56.8 -0.1
baz=197
HNS HongShan 83.95 312 ⇓P P 00 55 58.4 +0.8
HNS pmax pmax
comp=Z,24nm,1.2s
MCARA McCarthy VSAT 84.00 16 P P 00 55 57.8 +0.5
MCARA McCarthy VSAT 84.00 16 P P 00 55 57.4 +0.1
baz=213
J20K Nowinta River 84.07 10 IAmb IAmb 00 55 58.5
comp=Z,11nm,0.7s
J20K Nowinta River 84.07 10 P P 00 55 57.8 +0.2
baz=203,SNR=12
G16K Koyuk River 84.09 7 P P 00 55 57.8 +0.2
baz=195
LOGN Logan Glacier 84.09 17 IAmb IAmb 00 55 58.9
comp=Z,16nm,0.8s
P29M Windy Craggy 84.10 19 IAmb IAmb 00 55 59.5
comp=Z,16nm,0.8s
P29M Windy Craggy 84.10 19 P P 00 55 58.8 +0.9
baz=218,SNR=6.6
CTG Chitna Glacier 84.11 17 P P 00 55 58.1 +0.1
baz=215,SNR=5.6
F10A Beach Ranch, E 84.11 38 IAmb IAmb 00 55 59.7
comp=Z,15nm,1.0s
CTGM Chitina Glacie 84.11 17 IAmb IAmb 00 55 59.0
comp=Z,16nm,0.8s
GCSA Galena City Sc 84.17 9 P P 00 55 58.8 +0.8
baz=200
BJT Baijiatuau 84.20 315 P P 00 55 59.8 +1.0
BJT Baijiatuau 84.20 315 P P 00 55 59.2 +0.4
BJT IAmb IAmb 00 56 00.4
comp=Z,35nm,1.3s
BJI Beijing 84.21 315 P P 00 55 59.8 +1.0
BJI pmax pmax
comp=Z,10.0nm,1.0s
LYN LuoYang 84.26 309 ⇑iP P 00 56 00.6 +1.4
LYN pmax pmax
comp=Z,94nm,0.8s
RPSI Rantau Prapat 84.27 275 P P 00 55 58.6 -1.1
B08A Colville Reser 84.27 35 IAmb IAmb 00 55 60.0
comp=Z,8.4nm,0.8s
O28M Mount Upton 84.28 18 P P 00 55 59.1 0.0
baz=216,SNR=8.4
PSI Prapat 84.30 275 P P 00 56 00.4 +0.4
HARP HAARP 84.33 15 P P 00 55 59.1 +0.2
baz=211
Q16A Castle Valley 84.33 46 P P 00 56 00.2 +0.5
O29M Mount Kennedy 84.38 19 P P 00 55 59.4 0.0
O29M Mount Kennedy 84.38 19 P P 00 55 59.7 +0.3
baz=217
G17K Kiwalik Mounta 84.39 7 P P 00 55 58.8 -0.3
baz=197
DHY Denali Highway 84.40 13 IAmb IAmb 00 55 59.4
comp=Z,7.3nm,0.7s
DHY Denali Highway 84.40 13 P P 00 55 58.6 -0.8
baz=209
PLBC Pleasant Camp 84.40 20 P P 00 55 60.0 +0.7
baz=219,SNR=8.2
TMUT Trail Mountain 84.49 46 P P 00 56 01.1 +0.4
HLID Hailey 84.52 41 P P 00 56 01.0 +0.5
HLID Hailey 84.52 41 P P 00 56 01.5 +1.0
baz=239
EPT El Paso 84.53 54 P P 00 56 01.2 +0.4
EPT IAmb IAmb 00 56 03.6
comp=Z,8.3nm,0.7s
C09A Chrisman Ranch 84.54 36 P P 00 56 00.5 +0.2
C09A IAmb IAmb 00 56 01.7
comp=Z,8.7nm,0.9s
BPAW Bear Paw Mtn. 84.57 12 P P 00 55 59.3 -0.8
BPAW Bear Paw Mtn. 84.57 12 P P 00 55 58.9 -1.2
baz=206
I20K Naaghedeneel 84.59 10 P P 00 56 00.4 +0.3
baz=202
MCK McKinley 84.65 13 P P 00 56 00.1 -0.4
baz=208,SNR=7.2
ENH Enshi 84.71 304 P P 00 56 03.1 +1.5
P30M Million Dollar 84.73 19 P P 00 56 01.6 +0.6
baz=219
T35M Bob Quinn 84.74 24 P P 00 56 01.5 +0.4
baz=225
PAX Paxson 84.74 14 P P 00 56 00.5 -0.5
baz=211
SKAG Skagway 84.75 20 P P 00 56 01.4 +0.5
baz=220
YUK8 Steele Glacier 84.82 17 P P 00 56 02.0 +0.4
baz=216
M26K Nabesna, AK 84.86 16 IAmb IAmb 00 56 03.2
comp=Z,20nm,1.1s
M26K Nabesna, AK 84.86 16 P P 00 56 02.0 +0.4
baz=213,SNR=12
YUK6 Outpost Mounta 84.95 18 P P 00 56 02.0 -0.3
baz=218
H19K Roundabout Mou 84.97 9 P P 00 56 02.1 +0.1
baz=200
G18K Tagagawik 85.01 8 P P 00 56 01.9 -0.3
baz=198
YUK3 Moose Creek 85.02 17 P P 00 56 03.0 +0.5
baz=216,SNR=12
S34M Telegraph Cree 85.07 23 IAmb IAmb 00 56 04.5
comp=Z,16nm,0.9s
S34M Telegraph Cree 85.07 23 P P 00 56 03.9 +1.3
baz=224,SNR=15
GSI Gununoitoli 85.11 273 P P 00 56 05.4 +1.5
M27K Edge Creek, AK 85.12 16 IAmb IAmb 00 56 04.3
comp=Z,23nm,1.0s
M27K Edge Creek, AK 85.12 16 P P 00 56 03.7 +0.8
baz=214,SNR=14
H20K Anotleneega Mo 85.17 9 P P 00 56 03.4 +0.4
baz=202
YUK4 Talbot Arm 85.19 18 P P 00 56 04.1 +0.8
baz=217
L26K Log Cabin Wild 85.30 15 IAmb IAmb 00 56 04.7
comp=Z,8.8nm,0.9s
L26K Log Cabin Wild 85.30 15 P P 00 56 03.7 +0.1
baz=213
MNTX Cornudas Mount 85.36 55 P P 00 56 05.9 +1.2
baz=246
P32M Atlin 85.38 21 P P 00 56 04.9 +0.8
baz=222
NEA2 Nenana 85.39 12 P P 00 56 03.0 -1.0
baz=208
K24K Donnelly Dome 85.39 14 P P 00 56 04.5 +0.4
baz=211
Q32M Nakina River 85.42 22 IAmb IAmb 00 56 06.2
comp=Z,8.7nm,0.7s
Q32M Nakina River 85.42 22 P P 00 56 05.4 +0.9
baz=223,SNR=7.2
NEW Newport 85.44 36 P P 00 56 04.5 -0.2
baz=236
NONG Nongkai 85.44 291 P P 00 56 06.0 +0.7
MLY Manley 85.46 11 IAmb IAmb 00 56 04.9
comp=Z,14nm,1.2s
MLY Manley 85.46 11 P P 00 56 03.4 -0.9
baz=206,SNR=7.4
G19K Purcell Mounta 85.46 8 IAmb IAmb 00 56 04.6
comp=Z,9.5nm,1.2s
G19K Purcell Mounta 85.46 8 P P 00 56 04.4 +0.1
baz=200
GYA Guiyang 85.48 300 P P 00 56 06.0 +0.5
GYA pmax pmax
comp=Z,27nm,1.0s
SRIT Nakonsritamara 85.50 280 P P 00 56 06.9 +1.2
O30N Mendenhall 85.51 19 IAmb IAmb 00 56 06.2
comp=Z,9.7nm,0.8s
O30N Mendenhall 85.51 19 P P 00 56 05.4 +0.7
baz=220,SNR=7.2
RIDG Independent Ri 85.55 14 IAmb IAmb 00 56 05.6
comp=Z,15nm,1.0s
RIDG Independent Ri 85.55 14 P P 00 56 05.0 +0.1
baz=211,SNR=5.8
F18K Selawik 85.56 7 P P 00 56 03.6 -1.1
baz=198
HDA Harding Lake 85.66 13 IAmb IAmb 00 56 05.6
comp=Z,11nm,0.7s
HDA Harding Lake 85.66 13 P P 00 56 05.2 -0.1
baz=210,SNR=8.1
H21K Melozitna Rive 85.66 10 IAmb IAmb 00 56 08.0
comp=Z,7.7nm,1.2s
H21K Melozitna Rive 85.66 10 P P 00 56 05.5 +0.2
baz=204
SURA Surathani 85.66 281 P P 00 56 07.6 +1.2
CCB Clear Creek Bu 85.69 13 IAmb IAmb 00 56 05.5
comp=Z,24nm,1.2s
L27K Beaver Creek, 85.72 16 P P 00 56 05.9 +0.3
baz=214
BCAR Beaver Creek A 85.73 16 P P 00 56 05.3 -0.4
N30M Aishikik Lake 85.74 18 P P 00 56 06.4 +0.5
baz=219
TX31 Lajitas Ar. Si 85.77 57 IAmb IAmb 00 56 09.8
comp=Z,9.6nm,1.0s
TXAR Lajitas Array 85.77 57 P P 00 56 08.2 +1.5
TXAR Lajitas Array 85.77 57 P P 00 56 08.5 +1.7
comp=Z,3.8nm,0.7s,baz=218,slow=6.2,SNR=45
TXAR pP pP 00 58 12.0 +1.5
comp=Z,0.3nm,0.7s,baz=264,slow=3.6,SNR=3.0
comp=Z,3.8nm,0.7s
E17K Hotham Inlet 85.78 6 P P 00 56 06.0 +0.2
baz=195
NAYO Nainoyok 85.80 286 P P 00 56 08.3 +1.3
WHY Whitehorse 85.81 20 IAmb IAmb 00 56 07.7
comp=Z,11nm,1.1s
WHY Whitehorse 85.81 20 P P 00 56 06.8 +0.6
baz=221,SNR=5.6
IMAR Indian Mountai 85.81 10 P P 00 56 05.7 -0.2
I23K Minto, Yukon-K 85.82 12 IAmb IAmb 00 56 07.1
comp=Z,16nm,1.3s
I23K Minto, Yukon-K 85.82 12 P P 00 56 05.8 -0.3
baz=207
DLBC Dease Lake 85.86 23 P P 00 56 06.8 +0.4
comp=Z,2.2nm,0.7s,baz=219,slow=6.2,SNR=7.3
comp=Z,2.2nm,0.7s
DLBC Dease Lake 85.86 23 P P 00 56 07.4 +0.9
baz=225
MDM Murphy Dome 85.88 12 IAmb IAmb 00 56 06.3
comp=Z,22nm,1.1s
COLA College 85.88 12 P P 00 56 07.1 +0.8
COLA College 85.88 12 P P 00 56 05.6 -0.7
baz=209
ANMO Albuquerque 85.91 51 P P 00 56 08.5 +1.1
ANMO Albuquerque 85.91 51 P P 00 56 08.0 +0.6
baz=245
SLVN Son La 85.93 294 IAmb IAmb 00 56 09.9
comp=Z,16nm,1.3s
SCRK Sand Creek 85.95 14 P P 00 56 06.8 -0.1
baz=212
IL31 85.99 13 IAmb IAmb 00 56 07.0
comp=Z,8.2nm,0.8s
ILAR Eielson Array 85.99 13 P P 00 56 05.5 -1.4
ILAR pwP 00 58 13.2 -0.8
ILAR Eielson Array 85.99 13 P P 00 56 06.0 -0.9
comp=Z,3.8nm,0.5s,baz=231,slow=5.5,SNR=25
ILAR pP pP 00 58 11.8 +1.1
comp=Z,2.2nm,1.2s,baz=228,slow=6.5,SNR=4.4
comp=Z,3.8nm,0.5s
M29M Somme Creek 86.12 17 IAmb IAmb 00 56 09.8
comp=Z,6.0nm,0.8s
M29M Somme Creek 86.12 17 P P 00 56 07.7 0.0
baz=209,SNR=7.4
H22K Ishtalitna Cre 86.12 11 P P 00 56 07.6 +0.1
baz=205
P33M Teslin, Yukon 86.15 21 P P 00 56 08.1 +0.2
baz=222
N31M Braeburn, Yuko 86.16 19 IAmb IAmb 00 56 09.2
comp=Z,17nm,1.1s
N31M Braeburn, Yuko 86.16 19 P P 00 56 08.0 +0.2
baz=220,SNR=5.6
XLT XiLinHaoTe 86.16 319 eP P 00 56 08.8 +0.5
XLT pmax pmax
comp=Z,35nm,1.2s
POKR Poker Plat Res 86.18 12 P P 00 56 06.9 -0.9
baz=209
J25K Salcha River, 86.18 13 IAmb IAmb 00 56 10.7
comp=Z,4.4nm,0.7s
J25K Salcha River, 86.18 13 P P 00 56 07.3 -0.5
baz=211,SNR=9.5
R33M Jennings River 86.20 22 IAmb IAmb 00 56 10.0
comp=Z,19nm,1.4s
R33M Jennings River 86.20 22 P P 00 56 09.5 +1.4
baz=224,SNR=8.4
ALPN Alpine 86.20 57 IAmb IAmb 00 56 11.3
comp=Z,10.0nm,1.4s
E18K Tukpahlearik C 86.24 7 P P 00 56 07.8 -0.2
baz=197
D17K Noatak River 86.26 6 P P 00 56 08.6 +0.6
baz=194
G21K Allakaket 86.34 10 P P 00 56 08.7 +0.3
baz=203,SNR=8.3
H23K Yukon River 86.39 11 P P 00 56 08.3 -0.5
baz=207
K27K Chicken 86.46 15 IAmb IAmb 00 56 10.6
comp=Z,13nm,1.2s
K27K Chicken 86.46 15 P P 00 56 09.9 +0.8
baz=214,SNR=6.6
MSO Missoula 86.49 38 P P 00 56 09.8 0.0
baz=239
J26L Joseph Creek 86.50 14 IAmb IAmb 00 56 11.5
comp=Z,9.0nm,0.7s
J26L Joseph Creek 86.50 14 P P 00 56 10.0 +0.6
baz=213,SNR=13
F20K Avaraart Lake 86.50 9 P P 00 56 09.1 -0.1
F20K IAmb IAmb 00 56 09.9
comp=Z,5.5nm,0.8s
F20K Avaraart Lake 86.50 9 P P 00 56 09.4 +0.2
baz=201
DLMT Dillon 86.55 40 P P 00 56 10.4 +0.2
DLMT IAmb IAmb 00 56 12.1
comp=Z,8.7nm,0.9s
TPAW Teton Pass 86.66 42 IAmb IAmb 00 56 12.0
comp=Z,7.5nm,1.1s
REDW Red Top Meadow 86.67 42 pwP 00 58 19.2 +1.1
BILL Bilibino 86.67 354 P P 00 56 10.2 +0.2
E19K Redstone River 86.68 8 IAmb IAmb 00 56 10.8
comp=Z,9.1nm,0.7s
E19K Redstone River 86.68 8 P P 00 56 10.4 +0.3
baz=200,SNR=6.9
XAN Xi'an 86.70 307 ⇓P P 00 56 11.9 +0.9
XAN pmax pmax
comp=Z,82nm,1.2s
H24K Noodor Dome 86.72 12 P P 00 56 09.3 -1.1
baz=209
N32M Quiet Lake 86.76 20 P P 00 56 12.4 +1.8
baz=222
HIA Hailar 86.76 324 P P 00 56 11.3 +0.5
HIA IAmb IAmb 00 56 36.2
comp=Z,8.5nm,0.5s
SNOW Snow King Moun 86.78 42 P P 00 56 12.3 +0.9
SNOW IAmb IAmb 00 56 13.5
comp=Z,9.6nm,0.9s
S22A 4UR Ranch, Cre 86.84 49 P P 00 56 12.7 +0.9
S22A 4UR Ranch, Cre 86.84 49 P P 00 56 12.8 +0.9
baz=244
IMW Indian Meadow 86.87 42 IAmb IAmb 00 56 14.0
comp=Z,11nm,1.0s
IMW pwP 00 58 20.2 +0.9
LRM Limekiln Ridge 86.87 40 P P 00 56 12.0 +0.2
PRP Porcupine Dome 86.93 13 P P 00 56 11.1 -0.3
baz=211
F21K Alatna River 86.99 9 P P 00 56 11.7 +0.1
baz=203
C17K DeLong Mountai 87.01 5 P P 00 56 11.8 +0.3
baz=194
QLMT Earthquake Lak 87.01 41 P P 00 56 13.8 +1.4
G22K Bettles 87.04 10 P P 00 56 12.1 +0.4
baz=205
G23K Bananza Creek 87.10 11 P P 00 56 12.6 +0.5
baz=206
FLWY Flagg Ranch 87.11 42 P P 00 56 13.2 +0.3
FLWY IAmb IAmb 00 56 15.2
comp=Z,14nm,1.1s
M31M Drury Creek, Y 87.13 19 IAmb IAmb 00 56 13.0
comp=Z,7.3nm,1.1s
M31M Drury Creek, Y 87.13 19 P P 00 56 12.4 +0.1
baz=221
YPP Pitchstone Pla 87.13 42 P P 00 56 13.1 0.0
DAWY Dawson 87.17 16 IAmb IAmb 00 56 13.5
comp=Z,15nm,1.2s
DAWY Dawson 87.17 16 P P 00 56 12.9 +0.5
baz=216,SNR=5.4
YHL Hebgen Lake 87.17 41 P P 00 56 14.6 +1.3
YHL IAmb IAmb 00 56 15.9
comp=Z,15nm,1.0s
YFT Old Faithful 87.20 41 P P 00 56 14.3 +0.9
YFT IAmb IAmb 00 56 16.6
comp=Z,10nm,1.0s
BW06 Boulder Array 87.22 43 P P 00 56 13.1 -0.4
BW06 IAmb IAmb 00 56 14.8
comp=Z,5.0nm,0.9s
BW06 Boulder Array 87.22 43 P P 00 56 14.2 +0.8
baz=242,SNR=5.1
PDAR Pinedale Array 87.22 43 P P 00 56 13.4 -0.1
PDAR Pinedale Array 87.22 43 P P 00 56 13.8 +0.3
comp=Z,2.7nm,0.7s,baz=205,slow=3.1,SNR=23
PDAR pP pwP 00 58 20.0 -1.6
comp=Z,0.8nm,0.7s,baz=213,slow=4.6,SNR=5.5
comp=Z,2.7nm,0.7s
SAND Sanderson 87.24 57 P P 00 56 14.4 +0.7
BOZ Bozeman (W) 87.26 40 P P 00 56 13.9 +0.4
BOZ IAmb IAmb 00 56 15.6
comp=Z,11nm,1.3s
BOZ Bozeman (W) 87.26 40 P P 00 56 14.6 +1.1
baz=241
I26K Coal Creek Min 87.27 14 IAmb IAmb 00 56 14.0
comp=Z,28nm,1.5s
I26K Coal Creek Min 87.27 14 P P 00 56 13.3 +0.5
baz=213,SNR=6.7
MNHN Monahans 87.27 56 P P 00 56 13.0 -0.8
EGAK Eagle 87.30 15 IAmb IAmb 00 56 14.0
comp=Z,8.7nm,0.9s
EGAK Eagle 87.30 15 P P 00 56 13.3 +0.3
baz=215,SNR=6.9
H17A Grant Village 87.33 41 P P 00 56 15.0 +1.0
H17A IAmb IAmb 00 56 17.1
comp=Z,8.2nm,0.9s
H17A Grant Village 87.33 41 P P 00 56 16.3 +2.3
baz=242
YHH Holmes Hill 87.35 41 P P 00 56 15.1 +1.0
C18K Utukok River 87.36 6 P P 00 56 15.0 +1.7
baz=196
YNR Norris Junctio 87.42 41 P P 00 56 15.3 +0.9
YNR IAmb IAmb 00 56 18.2
comp=Z,6.0nm,1.0s
F22K John River 87.46 10 P P 00 56 14.1 +0.3
baz=204
FARO Faro, Yukon 87.48 19 P P 00 56 13.1 -0.8
FARO Faro, Yukon 87.48 19 P P 00 56 13.8 -0.1
baz=222
K29M Barlow Dome 87.49 17 P P 00 56 14.3 +0.2
K29M IAmb IAmb 00 56 15.5
comp=Z,22nm,1.3s
K29M Barlow Dome 87.49 17 P P 00 56 14.9 +0.8
baz=218,SNR=11
H25L Birch Creek 87.52 12 P P 00 56 13.1 -0.9
baz=210
COLD Coldfoot 87.53 10 P P 00 56 13.8 -0.3
COLD IAmb IAmb 00 56 15.3
comp=Z,10.0nm,0.8s
COLD Coldfoot 87.53 10 P P 00 56 14.4 +0.4
baz=206,SNR=12
LYMT Lyon Mountain 87.54 39 P P 00 56 15.6 +0.7
D19K Kuna River 87.56 7 P P 00 56 14.2 0.0
baz=199
G24K Hadweenzic Riv 87.56 12 P P 00 56 14.1 -0.1
baz=209
E20K Nigu River 87.57 8 P P 00 56 14.3 0.0
baz=201,SNR=9.6
HRY Holter Researc 87.69 39 P P 00 56 15.7 +0.3
HHC Hu-ho-hao-te 87.70 314 eP P 00 56 15.6 0.0
HHC pP pP 00 58 27.4 +6.7
HHC PP PP 00 59 53.0 +0.7
HHC pmax pmax
comp=Z,33nm,1.0s
HHC pmax pmax
comp=Z,110nm,5.6s
ODSA Odessa 87.74 55 P P 00 56 16.0 0.0
ODSA IAmb IAmb 00 56 39.7
comp=Z,8.5nm,0.9s
J29N Klondike Camp 87.79 16 P P 00 56 15.7 +0.3
J29N IAmb IAmb 00 56 17.0
comp=Z,12nm,0.7s
I27K Kandik River 87.88 14 P P 00 56 15.8 0.0
baz=214
G25K Bearman Lake 87.89 12 P P 00 56 16.2 +0.5
baz=210
D20K Etivluk River 87.95 8 P P 00 56 16.4 +0.4
baz=200
C19K Lookout Ridge 87.97 7 P P 00 56 16.7 +0.5
baz=198
TOAD Toad River Com 87.98 24 P P 00 56 17.2 +0.8
baz=229,SNR=13
B18K Kokolik River 88.00 6 P P 00 56 16.6 +0.4
baz=195
E21K Killik River 88.05 9 IAmb IAmb 00 56 17.0
comp=Z,8.7nm,0.9s
E21K Killik River 88.05 9 P P 00 56 16.8 +0.3
baz=203
E22K Anaktuvuk Pass 88.09 10 IAmb IAmb 00 56 17.6
comp=Z,15nm,1.1s
E22K Anaktuvuk Pass 88.09 10 P P 00 56 17.0 +0.3
baz=205,SNR=9.8
I28M Miner Creek 88.15 15 IAmb IAmb 00 56 17.8
comp=Z,7.2nm,0.8s
I28M Miner Creek 88.15 15 P P 00 56 17.5 +0.4
baz=216,SNR=5.6
PHRA Phrae 88.19 290 P P 00 56 17.5 -0.7
F24K Squaw Lake 88.21 11 IAmb IAmb 00 56 18.4
comp=Z,8.6nm,0.7s
F24K Squaw Lake 88.21 11 P P 00 56 17.6 +0.4
baz=208,SNR=10
DRIO Del Rio 88.26 58 P P 00 56 19.1 +0.8
DRIO IAmb IAmb 00 56 20.6

KMI **Kunming** 88.28 297 ⇓P P 00 56 20.3 +1.5
KMI pmax pmax
comp=Z,23nm,1.1s
RWWY **Rawlins** 88.29 45 P P 00 56 18.0 -0.6
RWWY IAmb IAmb 00 56 20.0
comp=Z,11nm,1.2s
T25A **Trinidad** 88.33 50 P P 00 56 19.2 +0.4
baz=246
E23K **Chandalar** 88.38 10 IAmb IAmb 00 56 19.1
comp=Z,9.7nm,0.9s
E23K **Chandalar** 88.38 10 P P 00 56 18.6 +0.5
baz=207,SNR=6.0
J30M **Hart River** 88.39 17 P P 00 56 18.2 -0.1
J30M IAmb IAmb 00 56 18.9
comp=Z,6.9nm,1.1s
J30M **Hart River** 88.39 17 P P 00 56 18.4 +0.1
baz=219
OZNA **Ozona** 88.41 57 P P 00 56 19.1 0.0
OZNA IAmb IAmb 00 56 20.9
comp=Z,5.4nm,0.8s
H27K **Steamboat Moun** 88.42 14 P P 00 56 18.8 +0.5
baz=214,SNR=6.9
MMPY **Sheldon Lake,** 88.42 20 IAmb IAmb 00 56 20.0
comp=Z,14nm,0.9s
MMPY **Sheldon Lake,** 88.42 20 P P 00 56 19.4 +1.0
baz=224,SNR=16
I29M **Ogilvie Camp,** 88.49 16 IAmb IAmb 00 56 19.1
comp=Z,11nm,1.1s
I29M **Ogilvie Camp,** 88.49 16 P P 00 56 18.7 +0.1
baz=217,SNR=5.6
RLMT **Red Lodge** 88.50 41 P P 00 56 20.1 +0.7
RLMT IAmb IAmb 00 56 21.5
comp=Z,7.3nm,1.1s
RLMT **Red Lodge** 88.50 41 P P 00 56 20.3 +1.0
baz=242
G26K **Porcupine Rive** 88.52 13 P P 00 56 19.4 +0.8
baz=212,SNR=9.8
Q24A **Divide** 88.55 48 P P 00 56 19.5 -0.4
GCMT **Greycliff** 88.56 41 P P 00 56 20.2 +0.7
E24K **Your Creek** 88.59 11 IAmb IAmb 00 56 21.1
comp=Z,9.1nm,1.4s
E24K **Your Creek** 88.59 11 P P 00 56 19.3 +0.3
baz=208
C21K **Knifeblade Rid** 88.60 8 P P 00 56 19.7 +0.7
baz=202,SNR=5.8
CRAI **Chiangrai** 88.64 292 P P 00 56 20.6 +0.2
CRAI IAmb IAmb 00 56 22.4
comp=Z,11nm,1.0s
D22K **Ayikyak River** 88.64 9 P P 00 56 19.9 +0.7
baz=204,SNR=6.4
TGTN **Hyland Airport** 88.65 21 P P 00 56 20.4 +0.9
baz=226
F25K **Christian Rive** 88.70 12 IAmb IAmb 00 56 21.0
comp=Z,7.1nm,1.0s
F25K **Christian Rive** 88.70 12 P P 00 56 20.3 +0.7
baz=211,SNR=6.5
BMAR **Burnt Mountain** 88.77 12 P P 00 56 20.7 +0.8
SGCY **Sterling City** 88.78 56 P P 00 56 20.8 +0.1
SGCY IAmb IAmb 00 56 21.8
comp=Z,6.6nm,1.2s
N23A **Red Feather La** 88.81 46 P P 00 56 21.7 +0.7
baz=245
G27K **Doyon Strip** 88.87 14 IAmb IAmb 00 56 20.7
comp=Z,6.2nm,1.3s
G27K **Doyon Strip** 88.87 14 P P 00 56 19.6 -0.8
baz=214
A19K **Wainwright** 88.88 6 P P 00 56 20.4 +0.2
baz=196
I30M **Mount Dempster** 88.88 16 IAmb IAmb 00 56 21.4
comp=Z,14nm,1.1s
I30M **Mount Dempster** 88.88 16 P P 00 56 20.7 +0.1
baz=219,SNR=9.7
TOLK **Toolik Lake Re** 88.91 10 P P 00 56 20.8 +0.3
baz=207
ELIB **Princess Elisa** 89.01 187 *d*P P 00 56 21.0 -0.2
comp=Z,19nm,0.7s
D23K **Nanushuk River** 89.02 10 P P 00 56 21.3 +0.3
D23K **Nanushuk River** 89.02 10 P P 00 56 21.8 +0.8
baz=206
B21K **Ikpikpuk River** 89.06 8 P P 00 56 21.2 +0.2
baz=202
F26K **Sheenjek River** 89.08 12 IAmb IAmb 00 56 22.8
comp=Z,4.3nm,0.9s
F26K **Sheenjek River** 89.08 12 P P 00 56 22.2 +0.9
baz=212,SNR=5.7
B20K **Meade River** 89.10 7 P P 00 56 21.7 +0.4
baz=200
H29M **Whitestone** 89.16 15 P P 00 56 21.9 +0.3
baz=217,SNR=8.6
K22A **Casper** 89.17 44 P P 00 56 22.9 +0.4
K22A IAmb IAmb 00 56 24.0
comp=Z,13nm,1.3s
JCT **Junction City** 89.30 58 P P 00 56 23.6 +0.3
JCT IAmb IAmb 00 56 25.8
comp=Z,3.9nm,0.9s
JCT **Junction City** 89.30 58 P P 00 56 23.5 +0.3
baz=248
CM31 **Chiang Mai Arr** 89.33 290 P P 00 56 24.1 +0.6
CMAR **Chiang Mai Arr** 89.33 290 P P 00 56 24.0 +0.5
CMAR **Chiang Mai Arr** 89.33 290 P P 00 56 25.1 +1.6
comp=Z,11nm,0.8s,baz=110,slow=2.9,SNR=59
comp=Z,11nm,0.8s
SN05 **Snyder 5** 89.33 55 P P 00 56 21.9 -1.4
SN05 IAmb IAmb 00 56 24.6
comp=Z,5.2nm,0.8s
HNDO **Hondo** 89.38 59 P P 00 56 24.6 +1.0
HNDO IAmb IAmb 00 56 26.2
comp=Z,13nm,1.2s
AMTX **Amarillo** 89.47 53 P P 00 56 23.6 -0.3
AMTX IAmb IAmb 00 56 25.4
comp=Z,4.5nm,0.7s
D24K **Happy Valley** 89.49 10 P P 00 56 23.8 +0.7
baz=208
PZH **PanZhiHua** 89.60 298 P P 00 56 27.0 +2.2
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,90nm,4.0s
EPYK **Eagle Plains** 89.69 15 P P 00 56 24.4 +0.2
baz=219,SNR=6.2
G29M **Pine Creek** 89.79 15 P P 00 56 24.6 0.0
G29M IAmb IAmb 00 56 25.4
comp=Z,14nm,1.1s
G29M **Pine Creek** 89.79 15 P P 00 56 24.7 +0.1
baz=218,SNR=5.1
C23K **Itkillik River** 89.82 9 IAmb IAmb 00 56 34.3
comp=Z,4.0nm,0.9s
C23K **Itkillik River** 89.82 9 P P 00 56 25.4 +0.7
baz=206,SNR=6.7
B22K **Teshekpuk Lake** 89.88 8 P P 00 56 25.3 +0.5
baz=203
F28M **Old Crow** 89.93 14 IAmb IAmb 00 57 08.0
comp=Z,5.4nm,0.9s
F28M **Old Crow** 89.93 14 P P 00 56 25.4 +0.2
baz=216
C24K **Franklin Bluff** 90.02 10 P P 00 56 25.5 -0.1
C24K **Franklin Bluff** 90.02 10 P P 00 56 26.3 +0.8
baz=208
E27K **Coleen River** 90.02 13 P P 00 56 26.0 +0.3
baz=214
D25K **Kavik River** 90.06 11 P P 00 56 24.8 -1.0
D25K IAmb IAmb 00 56 26.1
comp=Z,6.4nm,1.2s
D25K **Kavik River** 90.06 11 P P 00 56 25.5 -0.3
baz=210
APMT **Aspermont** 90.09 55 P P 00 56 26.2 -0.6
APMT IAmb IAmb 00 56 28.2
comp=Z,7.9nm,1.0s
TROLL **Troll, Antarti** 90.11 180 ⇓P P 00 56 26.3 0.0
comp=Z,368nm,0.5s
ABTX **Abilene, Hawle** 90.21 56 P P 00 56 27.6 +0.2
ABTX IAmb IAmb 00 56 29.0
comp=Z,8.7nm,0.9s
BRDY **Brady** 90.24 57 P P 00 56 26.9 -0.6
BRDY IAmb IAmb 00 56 29.0
comp=Z,3.5nm,1.0s
G30M **tAoh Zraii Nji** 90.29 15 P P 00 56 26.9 0.0
baz=219
A22K **Sinclair Lake** 90.30 7 P P 00 56 27.5 +0.7
baz=202
SNAA **Sanae** 90.39 178 ⇑P P 00 56 26.9 -0.7
comp=Z,91nm,0.6s
SNAA **Sanae** 90.39 178 P P 00 56 27.4 -0.2
comp=Z,3.1nm,0.6s,baz=219,slow=6.8,SNR=17
comp=Z,3.1nm,0.6s
VNA3 **Neumayer Olymp** 90.52 176 ⇑P P 00 56 28.4 +0.4
comp=Z,15nm,0.6s
G31M **Satah River** 90.74 16 P P 00 56 29.1 +0.2
baz=221,SNR=14
E28M **Babbage River** 90.81 13 IAmb IAmb 00 56 30.3
comp=Z,9.3nm,1.0s
E28M **Babbage River** 90.81 13 P P 00 56 29.6 +0.4
baz=216,SNR=9.3
C27K **Jago River** 90.81 11 P P 00 56 29.8 +0.6
baz=212
C26K **Camden Bay** 90.84 11 P P 00 56 30.2 +0.9
baz=211
F30M **Barrier River** 90.89 15 P P 00 56 30.5 +0.9
baz=220
E29M **Blow River** 91.00 14 IAmb IAmb 00 56 30.6
comp=Z,7.4nm,1.2s
E29M **Blow River** 91.00 14 P P 00 56 30.1 0.0
baz=218
D27M **Malcolm River** 91.03 12 IAmb IAmb 00 56 31.6
comp=Z,9.4nm,1.4s
D27M **Malcolm River** 91.03 12 P P 00 56 30.6 +0.3
baz=215
LAO **LASA Array** 91.10 41 P 00 56 30.9 -0.3
LAO IAmb IAmb 00 56 33.6
comp=Z,9.1nm,0.8s
LAO **LASA Array** 91.10 41 P P 00 56 32.6 +1.5
baz=245
VNA1 **Neumayer--Stat** 91.19 177 ⇑P P 00 56 31.0 0.0
comp=Z,13nm,0.9s
F31M **Tsiigehtchic** 91.27 16 P P 00 56 31.6 +0.3
baz=222,SNR=8.0
PLPT **Palo Pinto** 91.32 56 P 00 56 32.5 +0.1
PLPT IAmb IAmb 00 56 34.2
comp=Z,6.8nm,0.7s
LZH **Lanzhou** 91.33 308 *e*P P 00 56 34.3 +1.7
LZH pP pP 00 58 40.9 +2.2
LZH pmax pmax
comp=Z,31nm,1.3s
RSSD **Black Hills** 91.43 44 P P 00 56 32.0 -0.9
RSSD IAmb IAmb 00 56 34.1
comp=Z,5.3nm,0.8s
RSSD **Black Hills** 91.43 44 P P 00 56 33.3 +0.4
baz=246
INK **Inuvik** 91.97 15 P P 00 56 34.4 -0.2
comp=Z,10nm,0.9s,baz=229,slow=4.8,SNR=11
comp=Z,10nm,0.9s
INK **Inuvik** 91.97 15 P P 00 56 34.4 -0.2
baz=222,SNR=7.8
OK032 **Salt Plains WL** 92.80 52 P P 00 56 38.7 -0.5
DGMT **Dagmar** 93.09 40 P P 00 56 41.1 +0.9
baz=246
SONM **Songino Array** 93.96 319 P P 00 56 44.2 -0.1
SONM IAmb IAmb 00 56 45.1
comp=Z,5.6nm,1.2s
SONM **Songino Array** 93.96 319 P P 00 56 43.9 -0.5
comp=Z,2.1nm,1.0s,baz=112,slow=2.9,SNR=11
comp=Z,2.1nm,1.0s
YKA **Yellowknife Ar** 94.34 25 P P 00 56 45.5 -0.1
comp=Z,2.0nm,0.8s,baz=247,slow=3.7,SNR=3.9
comp=Z,2.0nm,0.8s
KSU1 **Kansas State U** 94.77 51 P P 00 56 49.0 +1.0
baz=251
GTA **Gaotai** 95.47 310 P P 00 56 51.9 +0.5
GTA pmax pmax
comp=Z,6.0nm,0.9s
ZALV **Zalesovo Beam** 108.64 322 PKiKP PKiKP 01 01 49.9 -1.1
comp=Z,2.5nm,0.6s,baz=154,slow=0.8,SNR=10
MKAR **Makanchi Array** 109.56 314 Pdiff Pdif 00 57 55.8 +2.0
comp=Z,0.4nm,0.6s,baz=82,slow=6.5,SNR=4.8
MKAR PKiKP PKiKP 01 01 52.2 -0.8
comp=Z,2.3nm,0.5s,baz=192,slow=0.8,SNR=29
KURBB **Kurchatov Arra** 112.29 318 PKiKP PKiKP 01 01 57.1 -0.9
comp=Z,3.6nm,0.7s,baz=94,slow=1.9,SNR=29
NEEM **North Greenlan** 115.24 11 *i*P PKPdf 01 02 02.1 -1.4
BVAR **Borovoye Array** 117.25 321 PKP PKPdf 01 02 06.7 -0.8
comp=Z,7.4nm,0.6s,baz=102,slow=1.4,SNR=26
KKAR **Karatay Array** 117.75 310 PKPdf 01 02 08.2 -0.7
KBL **Kabul** 118.73 300 PKiKP 01 02 11.6 +0.2
SPITS **Spitsbergen Ar** 119.49 357 PKP PKPdf 01 02 10.7 -0.5
comp=Z,3.4nm,0.8s,baz=82,slow=7.0,SNR=4.6
DBG **Daneborg** 122.47 7 *i*P PKPdf 01 02 15.6 -1.4
DY2G **Dye2** 122.48 21 *i*P PKPdf 01 02 16.3 -1.2
ICESG **Greenland Ices** 122.92 17 *i*P PKPdf 01 02 16.6 -1.9
ARU **Arti** 123.24 326 PKPdf 01 02 18.5 -0.5
ARU **Arti** 123.24 326 PKP PKPdf 01 02 18.5 -0.5
ABKAR **Akbulak array** 124.35 318 PKPdf 01 02 20.8 -0.5
ABKAR **Akbulak array** 124.35 318 PKPdf 01 02 20.7 -0.5
ARCES **ARCESS Array B** 126.58 350 PKP PKPdf 01 02 24.5 -0.5
comp=Z,7.2nm,0.7s,baz=32,slow=1.4,SNR=24
BOSA **Boshof** 128.40 206 PKP PKPdf 01 02 29.5 -0.4
comp=Z,4.1nm,0.9s,baz=184,slow=3.1,SNR=4.5
FINES **FINESS Array B** 133.49 344 PKhKP PKPpre 01 02 24.2
comp=Z,3.6nm,1.0s,baz=90,slow=2.3,SNR=5.3
FINES PKP PKPdf 01 02 37.1 -1.1
comp=Z,4.7nm,0.7s,baz=92,slow=3.1,SNR=5.3
FINES SKPbc SKPab 01 05 14.8 -1.5
comp=Z,1.6nm,0.7s,baz=46,slow=4.0,SNR=1.9
NB2 **NORSAR Array B** 136.42 353 PKP PKPpre 01 02 34.4
comp=Z,4.8nm,0.9s,baz=20,slow=3.7
NOA **NORSAR Array B** 136.62 353 PKhKP PKPpre 01 02 34.4
comp=Z,1.4nm,0.7s,baz=22,slow=3.8,SNR=8.8
NOA PKP PKPdf 01 02 44.1 -0.1
comp=Z,1.6nm,0.6s,baz=15,slow=3.9,SNR=7.3
HFS **Hagfors** 137.19 351 PKhKP PKPpre 01 02 34.3
comp=Z,3.2nm,0.6s,baz=48,slow=2.2,SNR=15
KBZ **Khabaz** 137.22 316 PKP PKPdf 01 02 45.2 -0.5
comp=Z,2.5nm,0.9s,baz=90,slow=1.0,SNR=4.3
STRU **Storemstad** 138.58 353 *i*P PKPpre 01 02 39.2
RAYN **Ar Rayn** 139.10 285 PKPpre 01 02 43.5
HOMB **Homborsund** 139.61 355 *i*P PKPpre 01 02 43.4
KMBO **Kilima Mbogo** 140.41 245 PKhKP PKPpre 01 02 47.6
comp=Z,2.8nm,0.8s,baz=75,slow=5.0,SNR=7.1
KMBO PKP PKiKP 01 02 54.5 -1.0
comp=Z,5.1nm,0.9s,baz=69,slow=2.9,SNR=7.6
DEL **Delary** 140.67 350 *i*P PKPpre 01 02 44.8
AKASG **Malin Array Be** 140.92 333 PKPpre 01 02 47.3
AKASG **Malin Array Be** 140.92 333 PKhKP PKPpre 01 02 46.5
comp=Z,1.6nm,0.4s,baz=42,slow=4.0,SNR=11
AKASG PKP PKiKP 01 02 53.8 -1.3
comp=Z,4.7nm,0.5s,baz=40,slow=2.8,SNR=4.3
KIEV **Kiev** 140.93 333 PKPpre 01 02 46.4
KIEV **Kiev** 140.93 333 ⇑P PKPpre 01 02 46.7
INVG **Invergeldie, C** 141.47 5 *e*P PKPpre 01 02 47.9
LAWE **Loch Awe, Argy** 141.50 7 *e*P PKPpre 01 02 48.0
BSD **Bornholm Skovb** 141.76 348 *i*P PKPpre 01 02 48.6
EKA **Eskdalemuir Ar** 142.63 5 PKhKP PKPpre 01 02 51.6
comp=Z,1.1nm,0.4s,baz=318,slow=2.5,SNR=22
NEWG **New Galloway** 142.75 6 *e*P PKPpre 01 02 51.9
GAL1 **Galloway** 142.95 6 *e*P PKPdf 01 02 52.9 -2.8
SORM **Soroca** 143.16 330 ⇓P PKPab 01 02 54.1 -0.1
SORM **Soroca** 143.16 330 PKP PKPab 01 02 53.7 -0.6
DIKM **Dikmen** 143.19 317 ⇑P PKPdf 01 02 56.0 -0.6
EDMD **Edmundbyers** 143.22 4 *e*P PKPab 01 02 53.8 -0.5
BEL **Belsk** 143.22 341 *e*PKP PKPbc 01 02 55.1 +0.4
PURM **Purcari** 143.51 327 ⇑P PKPbc 01 02 56.2 +0.4
IOMK **Kirk Michael** 143.56 6 *e*P PKPab 01 02 54.9 -0.7
ILTH **Belurgan, Co L** 143.57 8 *e*P PKPab 01 02 54.9 -0.7
WIM **Isle of Man** 143.66 7 *e*P PKPab 01 02 55.2 -0.8
IGLA **Glengowla, Co** 143.66 12 *e*P PKPab 01 02 55.7 -0.3
KIS **Kishinev** 143.73 329 ⇑P PKPbc 01 02 56.3 -0.2
MILM **Milestii Mici** 143.79 328 ⇓P PKPbc 01 02 56.4 -0.2
DRBR **Darabani** 143.91 332 ⇑P PKPbc 01 02 56.6 -0.4
IAS **Iasi** 144.21 330 ⇓P PKPab 01 02 58.4 +0.1
KWP **Kalwaria Pacla** 144.41 337 *e*PKP PKPdf 01 02 58.3 -0.1
KWP **Kalwaria Pacla** 144.41 337 PKP PKPbc 01 02 58.6 +0.1
WPS **Cemaes, Angles** 144.41 7 *e*P PKPdf 01 02 57.1 -1.2
WME **Myndd Eilian** 144.44 7 *e*P PKPdf 01 02 57.9 -0.5
WLF1 **Llynfaes** 144.53 7 *e*P PKPdf 01 02 57.7 -0.8
LBWR **Ladybower, Pea** 144.66 4 *e*P PKPdf 01 02 58.7 0.0
LMK **Market Rasen** 144.67 2 *e*P PKPdf 01 02 58.7 0.0
YLL **Llanberis** 144.71 6 *e*P PKPbc 01 02 59.0 -0.2
PRAR **RASCA** 144.71 331 ⇑P PKPbc 01 02 59.8 +0.2
BIR **Birlad** 144.83 329 ⇓P PKPab 01 03 01.6 +0.8
VLDR **Vladesti** 144.89 328 ⇑P PKPab 01 03 01.2 +0.2
STNC **Stoke** 144.93 4 *e*P PKPbc 01 03 00.1 +0.1
OJC **Ojcow** 144.94 340 *e*PKP PKPbc 01 02 59.9 -0.2
OJC **Ojcow** 144.94 340 PKP PKPdf 01 02 59.6 +0.3
TLCR 144.96 326 ⇑P PKPab 01 03 01.0 -0.3
VARL **Varlezi** 144.97 328 ⇓P PKPab 01 03 01.7 +0.4
BURAR **Bucovina Array** 144.97 332 PKPbc 01 03 00.6 +0.2
BURAR **Bucovina Array** 144.97 332 ⇓P PKPab 01 03 01.4 0.0
LLW **Llanuwchllyn** 145.05 6 *e*P PKPdf 01 02 59.8 +0.4
FOEL **Foel Wylfa** 145.05 6 *e*P PKPbc 01 03 00.1 -0.3
SCTR **Scanteiesti** 145.05 328 ⇓P PKPab 01 03 01.5 -0.1
GIUM **Giurgiulesti** 145.07 327 ⇑P PKiKP 01 03 02.8 -1.0
TATR **Tatarca** 145.08 327 ⇑P PKPdf 01 02 53.4 -6.3
GHRR 145.08 329 ⇑P PKPab 01 03 02.3 +0.6
IWEX **Carrickbyrne,** 145.11 9 *e*P PKPbc 01 03 00.4 -0.1
TESR **Tescani** 145.13 330 ⇑P PKPbc 01 03 01.3 +0.5
TESR **Tescani** 145.13 330 PKP PKPbc 01 03 00.4 -0.4
KOLS **Kolonicke sedl** 145.15 336 *e*PKP PKPab 01 03 01.5 -0.4
JURR **Jurilovca** 145.20 326 ⇓P PKPab 01 03 01.8 -0.4
BR131 **Keskin Array S** 145.20 315 PKPdf PKPdf 01 02 59.7 -0.6
BRTR **Keskin Array B** 145.21 315 PKPdf PKPdf 01 02 59.7 -0.7
BRTR **Keskin Array B** 145.21 315 PKPbc PKPbc 01 03 01.1 -0.3
comp=Z,18nm,0.6s,baz=123,slow=4.0,SNR=104
BRTR pKPbc **pPKPdf** 01 05 15.2 +0.5
comp=Z,2.0nm,0.9s,baz=64,slow=3.4,SNR=4.9
NEGRR **Negrea** 145.21 327 ⇑P PKPab 01 03 02.0 -0.2
SLCR **Slobozia Conac** 145.23 328 ⇑P PKPab 01 03 02.0 -0.3
SCHL **Schela** 145.26 327 ⇑P PKPbc 01 03 01.7 +0.5
IZVR **Izvoarele** 145.26 328 ⇑P PKPab 01 03 02.1 -0.3
COSR **Cosmesti PH** 145.27 328 ⇑P PKPab 01 03 02.3 -0.2
KIRS **Kirsehir-Merke** 145.30 314 ⇓P PKPdf 01 03 00.8 +0.3
CFR **Carcaliu** 145.32 327 ⇑P PKPab 01 03 02.0 -0.7
CWF **Charnwood Fore** 145.34 4 *e*P PKPbc 01 03 01.0 -0.1
PANC **Panciu** 145.34 329 ⇑P PKPab 01 03 02.3 -0.4
ONER **Baraj Valea Uz** 145.38 330 ⇑P PKPab 01 03 02.9 0.0
TPGR **Topolog** 145.39 326 ⇑P PKPab 01 03 02.6 -0.4
KSP **Ksiaz** 145.41 344 *e*PKP PKPbc 01 03 01.6 +0.2
WACR **West Acre** 145.44 1 *e*P PKPbc 01 03 01.2 -0.2
HLM1 **Long Mynd** 145.45 5 *e*P PKPbc 01 03 01.1 -0.4
NIE **Niedzica** 145.46 339 *e*PKP PKPbc 01 03 01.8 +0.1
CRVS **Cervenica-Dubn** 145.47 337 *e*PKP PKPbc 01 03 02.1 +0.4
VRI **Vrincioaia** 145.56 329 ⇓P PKPbc 01 03 02.6 +0.5
PLOR **Plostina** 145.60 329 ⇓P PKPdf 01 03 01.3 +0.6
BMR **Baia Mare** 145.67 334 ⇑P PKPbc 01 03 03.1 +0.8
OSTC **Ostas** 145.69 344⇑*e*PKP PKPbc 01 03 02.2 -0.1
CLZ **Clausthal** 145.70 351 *e*PKPdf PKPdf 01 03 01.1 +0.5
baz=28,slow=1.5
CLZ *e*PKPbc PKPbc 01 03 02.8 +0.5
baz=17,slow=2.5
ANTO **Ankara** 145.70 316 PKPdf 01 03 01.1 +0.1
ANTO **Ankara** 145.70 316 ⇓P PKPab 01 03 03.7 -0.8
CHVC **Chvalec** 145.71 344⇑*e*PKP PKPbc 01 03 02.9 +0.5
CLL **Collm** 145.74 348 ⇓*i*PKPbc PKPbc 01 03 02.6 +0.2
comp=Z,82nm,0.9s
CLL **Collm** 145.74 348 *e*PKPdf PKPdf 01 03 00.8 +0.2
baz=28,slow=1.5
CLL *e*PKPbc PKPbc 01 03 02.8 +0.4
baz=17,slow=2.5
HARR **Harsova** 145.76 326 ⇑P PKPbc 01 03 03.4 +0.8
ARCR **ARCALIA** 145.76 333 ⇑P PKPab 01 03 03.6 -0.8
TURR **Turia** 145.76 330 ⇑P PKPab 01 03 03.7 -0.7
OKC **Ostrava-Krasne** 145.79 341⇑*e*PKP PKPbc 01 03 03.0 +0.4
UPC **Upice** 145.79 344⇑*e*PKP PKPbc 01 03 03.0 +0.4
TLBR **Topalu** 145.79 326 ⇓P PKPbc 01 03 03.2 +0.5
RSBS **Rosebush, Pemb** 145.81 7 *e*P PKPbc 01 03 01.8 -0.7
COVR **Voineasa-Covas** 145.82 329 ⇑P PKPbc 01 03 03.1 +0.3
OZUR 145.84 330 ⇑P PKPab 01 03 03.8 -1.0
DPC **Dobruska-Polom** 145.85 344⇑*e*PKP PKPbc 01 03 03.4 +0.6
BOSR **Bodos** 145.92 330 ⇓P PKPab 01 03 04.5 -0.6
CVDA **Cernavoda** 145.94 326 ⇑P PKPbc 01 03 03.7 +0.6
BRG **Berggiesshubel** 145.95 346 *e*PKP PKPdf 01 03 01.3 +0.3
BRG Amp 01 03 02.3
comp=Z,9.7nm,1.1s
BRG **Berggiesshubel** 145.95 346 P PKPbc 01 03 03.6 +0.6
BRG Amp 01 03 04.3
comp=Z,32nm,0.8s
BRG **Berggiesshubel** 145.95 346 *e*PKPdf PKPdf 01 03 01.5 +0.4
baz=28,slow=1.5
BRG *e*PKPbc PKPbc 01 03 03.5 +0.5
baz=17,slow=2.5
BRG *e*PKPab PKiKP 01 03 05.2 -0.3
baz=12,slow=4.3
LANS **Liptovska Anna** 145.97 339 *e*PKP PKPab 01 03 04.3 -0.9
KRLC **Kraliky** 145.97 343⇑*e*PKP PKPbc 01 03 03.8 +0.6
MORC **Moravsky Berou** 146.02 342 *e*PKP PKPdf 01 03 01.5 +0.2
MORC *e* 01 03 03.7
MORC **Moravsky Berou** 146.02 342 ⇑P PKPdf 01 03 01.8 +0.5
GTTG **Gottingen** 146.04 351 *e*PKPbc PKPbc 01 03 03.6 +0.4
baz=17,slow=2.5
NEUB **Neuenburg** 146.07 349 *e*PKPdf PKPdf 01 03 01.7 +0.5
baz=28,slow=1.5
NEUB *e*PKPbc PKPbc 01 03 03.7 +0.4
baz=17,slow=2.5
NEUB *e*PKPab PKPab 01 03 05.1 -0.4
baz=12,slow=4.3
ELMS **Elmsett, Ipswi** 146.08 1 *e*P PKPbc 01 03 03.0 -0.2
NEHR **Nehoiu** 146.08 329 ⇑P PKPbc 01 03 03.7 +0.2
AMRR **Amara** 146.12 327 ⇓P PKPab 01 03 05.2 -0.6
MONM **Monmouth** 146.13 5 *e*P PKPbc 01 03 02.6 -0.8
DOPR **Dopca** 146.13 330 ⇑P PKPab 01 03 04.9 -1.0
PVCC **Panska Ves** 146.13 346⇑*e*PKP PKPbc 01 03 04.4 +0.9
ISR **Istrita** 146.18 328 ⇓P PKPbc 01 03 04.4 +0.6
MBAR **Mbarara** 146.18 240 PKPbc 01 03 05.3 +0.4
MLR **Muntele Rosu** 146.21 329 ⇓P PKPbc 01 03 04.0 +1.0
RICC **Richard** 146.23 346⇑*e*PKP PKPbc 01 03 04.5 +0.8
MESR **Meseseni** 146.31 334 ⇓P PKPbc 01 03 04.0 -0.1
HSKC **Hora Svate Kat** 146.31 347⇑*e*PKP PKPbc 01 03 04.4 +0.4
CBBR **Cluj-Babes-Bol** 146.35 333 ⇑P PKPdf 01 03 01.9 0.0
CJR **Cluj-Napoca** 146.38 333 ⇑P PKPbc 01 03 05.3 +0.9
BUG **Bochum--Univer** 146.48 354 *e*PKPdf PKPbc 01 03 03.1 -1.3
baz=28,slow=1.5
SWN1 **Swindon** 146.53 4 *e*P PKPbc 01 03 04.3 -0.2
LTVH **Ltavrtes, Hu** 146.55 335 ⇓P PKiKP 01 03 05.8 -1.0
MMAI **Mount Meron Ar** 146.59 303 PKPbc PKPbc 01 03 06.2 +0.8
comp=Z,24nm,0.5s,baz=64,slow=5.7,SNR=102
KASTN **Kahler Asten** 146.59 353 *e*PKPdf PKPdf 01 03 03.2 +1.0
baz=28,slow=1.5
KASTN *e*PKPbc PKPbc 01 03 05.1 +0.3
baz=17,slow=2.5
PRA **Prague** 146.59 345⇑*e*PKP PKPbc 01 03 05.4 +0.7
SULR 146.63 328 ⇓P PKPbc 01 03 05.5 +0.5
PRU **Pruhonice** 146.64 345⇑*e*PKP PKPbc 01 03 05.3 +0.4
PRU *e*PKPAB PKPab 01 03 08.8 +1.0
MOX **Moxa** 146.64 349 *e*PKPdf PKPdf 01 03 02.6 +0.4
baz=28,slow=1.5
MOX *e*PKPbc PKPbc 01 03 05.2 +0.3
baz=17,slow=2.5
MOX *e*PKPab PKPab 01 03 07.4 -0.4
baz=12,slow=4.3
MOX *e*pPKPbc pPKPbc 01 05 18.5 +2.0
VOIR 146.68 330 ⇑P PKPbc 01 03 06.2 +0.9
DRGR 146.69 334 ⇑P PKPbc 01 03 05.6 +0.3
PLN **Plauen** 146.69 348 *e*PKPdf PKPdf 01 03 02.7 +0.4
baz=28,slow=1.5
PLN *e*PKPbc PKPbc 01 03 05.5 +0.5
baz=17,slow=2.5
PLN *e*PKPab PKPab 01 03 07.6 -0.3
baz=12,slow=4.3
PLN *e*pPKPbc pPKPbc 01 05 18.9 +2.2
TANN **Tannenbergstha** 146.70 348 *e*PKPdf PKPdf 01 03 02.7 +0.3
baz=28,slow=1.5
TANN *e*PKPbc PKPbc 01 03 05.5 +0.4
baz=17,slow=2.5
TANN *e*PKPab PKPab 01 03 07.9 -0.1
baz=12,slow=4.3
TANN *e*pPKPbc pPKPbc 01 05 18.4 +1.7
VRAC **Vranov** 146.72 343 *e*PKP PKPdf 01 03 02.3 -0.1
VRAC *e* 01 03 05.5
VRAC **Vranov** 146.72 343 ⇓P PKPbc 01 03 05.8 +0.6
VYHS **Vyhne** 146.74 339 *e*PKP PKPbc 01 03 05.8 +0.5
VYHS *e* 01 03 09.1
UBBA **Unterbreizbach** 146.75 351 *e*PKPbc PKPbc 01 03 05.2 +0.2
baz=17,slow=2.5
UBBA *e*pPKPbc pPKPbc 01 05 18.8 +2.2
WOL **Wolverton** 146.77 4 *e*P PKPbc 01 03 04.8 -0.4
JAVC **Velka Javorina** 146.80 341 *e*PKP PKiKP 01 03 06.9 -0.5
BORR **Bors** 146.84 335 ⇑P PKiKP 01 03 06.7 -0.7
PSZ **Piszkesteto** 146.87 338 ⇑P PKPbc 01 03 06.3 +0.6
ARR **Arges** 146.93 330 ⇑P PKiKP 01 03 08.0 +0.2
KRUC **Moravsky** 147.00 343 *e*PKP PKPdf 01 03 02.8 0.0
KRUC *e* 01 03 06.3
KRUC *e* 01 03 09.6
TREC **Trest** 147.04 344⇑*e*PKP PKPbc 01 03 06.3 +0.3
PRD **Provadia** 147.06 325 P PKPbc 01 03 07.0 +0.8
NEF **NEVSHA** 147.06 325 P PKPbc 01 03 07.0 +0.7
MANZ **Manzenberg** 147.18 348 *e*PKPdf PKPdf 01 03 03.3 +0.2
baz=28,slow=1.5
MANZ *e*PKPbc PKPbc 01 03 06.7 +0.3
baz=17,slow=2.5
ZVC **Zvikov** 147.23 345⇑*e*PKP PKPbc 01 03 07.0 +0.5
ZVC *e*PKPAB PKPab 01 03 10.9 +0.7
BSZH **Besenyszg** 147.25 337 ⇓P PKiKP 01 03 07.9 -0.3
LOT **Lotru** 147.27 331 ⇑P PKPbc 01 03 06.7 -0.2
DEV **Deva** 147.32 333 ⇓P PKPbc 01 03 07.2 +0.4
ROTZ **Rotzenmuhle** 147.37 348 *e*PKPdf PKPdf 01 03 03.5 0.0
baz=28,slow=1.5

ROTZ *e*PKPbc **PKPbc 01 03 07.2 +0.3**
baz=17,slow=2.5
ROTZ *e*PKPab **PKPab 01 03 10.9 +0.2**
baz=12,slow=4.3
**HUMR Humele 147.38 329** ⇓P **PKPbc 01 03 07.0 0.0**
**AHRW Bad Neuenahr-A 147.39 354** *e*PKPdf **PKPbc 01 03 05.2 -1.6**
baz=28,slow=1.5
AHRW *e*PKPbc **PKPab 01 05 20.3 +1.3**
**MEM Membach 147.42 355** *d*PKPdf **PKPdf 01 03 03.5 0.0**
MEM *d*PKPbc **PKPbc 01 03 06.9 0.0**
**BTNL Ternell 147.43 355** *d*PKPdf **PKPdf 01 03 03.5 0.0**
BTNL *d*PKPbc **PKPbc 01 03 07.1 +0.1**
**BSTI Sart Tilman 147.47 356** *d*PKPbc **PKPbc 01 03 07.6 +0.5**
**SRO Srobarova 147.51 339** *e*PKP **PKiKP 01 03 08.2 -0.6**
SRO *e* 01 03 12.5
**TNS Taunus Mts 147.55 352** *e*PKPbc **PKPbc 01 03 07.8 +0.4**
baz=17,slow=2.5
TNS *e*PKPab **PKPab 01 03 11.1 -0.4**
baz=12,slow=4.3
**SIRR Siria 147.55 334** ⇑P **PKPbc 01 03 07.9 +0.5**
**GRF Grafenberg Arr 147.63 349** *e*PKPdf **PKPdf 01 03 03.9 0.0**
baz=28,slow=1.5
GRF *e*PKPbc **PKPbc 01 03 07.9 +0.4**
baz=17,slow=2.5
GRF *e*PKPab **PKPab 01 03 12.0 +0.2**
baz=12,slow=4.3
GRF *e*PKPbc **PKPab 01 05 21.2 +1.2**
**BCLA Clavier 147.66 356** *d*PKP **PKPab 01 03 11.4 -0.5**
**KHC Kasperske Hory 147.67 346** *e*PKPDF **PKPdf 01 03 04.2 +0.2**
KHC ⇑*e*PKP **PKPbc 01 03 08.0 +0.3**
KHC *e*PKPAB **PKPab 01 03 13.2 +1.2**
**BHOU Houvegnez 147.67 355** *d*PKPbc **PKPbc 01 03 08.0 +0.4**
BHOU *d*PKP **PKPab 01 03 11.8 -0.2**
**BGES Gesves 147.70 356** *d*PKPdf **PKPbc 01 03 07.3 -0.4**
BGES *d*PKP **PKPab 01 03 11.9 -0.2**
**GZH Gura Zlata 147.76 332** ⇓P **PKPbc 01 03 08.1 +0.1**
**SZH Strazhitsa 147.76 326** P **PKPbc 01 03 08.0 -0.1**
**SURR Surduc 147.76 333** ⇑P **PKPbc 01 03 08.0 +0.1**
**CKRC Cesky Krumlov 147.78 345** *e*PKPDF **PKPdf 01 03 04.6 +0.4**
CKRC ⇑*e*PKP **PKPbc 01 03 08.3 +0.3**
CKRC *e*PKPAB **PKPab 01 03 13.0 +0.5**
**BMRD Maredsous 147.80 357** *d*PKPbc **PKPbc 01 03 07.7 -0.2**
BMRD *d*PKPab **PKPab 01 03 11.9 -0.6**
**WET Wettzell 147.81 347** *e*PKPdf **PKPdf 01 03 03.6 -0.6**
baz=28,slow=1.5
WET *e*PKPbc **PKPbc 01 03 08.1 +0.1**
baz=17,slow=2.5
WET *e*PKPab **PKPab 01 03 13.3 +0.7**
baz=12,slow=4.3
**GEC2 GERESS Array S 147.91 345** *e*PKPdf **PKPdf 01 03 03.7 -0.8**
baz=28,slow=1.5
GEC2 *e*PKPbc **PKPbc 01 03 08.5 +0.1**
baz=17,slow=2.5
GEC2 *e*PKPab **PKPab 01 03 14.1 +1.0**
baz=12,slow=4.3
**GERES GERESS Array B 147.91 345** **PKPdf 01 03 04.4 -0.1**
**GERES GERESS Array B 147.91 345** PKP **PKPdf 01 03 05.1 +0.6**
comp=Z,16nm,0.7s,baz=161,slow=13,SNR=65
GERES PKPbc **PKPbc 01 03 08.4 +0.1**
comp=Z,17nm,0.7s,baz=159,slow=8.4,SNR=72
**RCHB Rochefort 147.92 356** *d*PKPbc **PKPbc 01 03 07.4 -0.8**
RCHB *d*PKPab **PKPab 01 03 12.2 -0.8**
**DOU Dourbes 148.02 357** *d*PKPbc **PKPbc 01 03 08.2 -0.3**
DOU *d*PKP **PKPab 01 03 13.0 -0.3**
**ELND Elena 148.04 326** ⇓P **PKPbc 01 03 09.1 +0.4**
**VLAD Vladila 148.04 329** ⇑P **PKiKP 01 03 09.3 -0.7**
**BZS Buzias 148.09 334** ⇑P **PKPbc 01 03 09.3 +0.5**
**SRE Strehaia 148.13 331** ⇓P **PKiKP 01 03 10.0 -0.2**
**CONA Conrad Observa 148.17 342** *i* PKP **PKPbc 01 03 09.3 +0.3**
comp=Z,29nm,0.8s,SNR=22
CONA *ep*PKiKP **pPKiKP 01 05 23.7 0.0**
comp=Z,7.6nm,1.3s
**RONA Rosalia, Austr 148.25 342** *i* PKP **PKiKP 01 03 09.9 -0.5**
comp=Z,27nm,0.8s,SNR=21
RONA *ep*PKP **pPKPab 01 05 22.9 +0.1**
comp=Z,4.1nm,1.2s
**HERR Herculane 148.32 332** ⇑P **PKPbc 01 03 09.8 +0.4**
**WLF Walferdange 148.34 355** *d*PKP **PKiKP 01 03 10.0 -0.5**
**WLF Walferdange 148.34 355** *e*PKPdf **PKPdf 01 03 06.3 +1.3**
baz=28,slow=1.5
WLF *e*PKPbc **PKiKP 01 03 10.0 -0.5**
baz=17,slow=2.5
**BAND Balkesir-Ban 148.43 320** ⇑P **PKPbc 01 03 10.0 +0.2**
**BANR Banloc 148.48 334** ⇑P **PKiKP 01 03 11.0 +0.1**
**BAIL Bailesti 148.54 330** ⇑P **PKiKP 01 03 11.3 +0.3**
**MOA Molln 148.69 344** *i* PKP **PKPbc 01 03 10.6 +0.3**
comp=Z,19nm,1.2s,SNR=9.5
**MDVR Moldovita 148.71 332** ⇑P **PKPbc 01 03 10.7 +0.2**
**VALD Valchedram 148.75 329** P **PKiKP 01 03 11.0 -0.4**
**MORH Mrgy, Hungar 148.77 337** ⇓P **PKPdf 01 03 05.8 0.0**
**DIM Dimitrovgrad 148.81 325** P **PKPbc 01 03 11.0 +0.3**
**JSA Saint Aubin 148.81 5** *e*P **PKPbc 01 03 10.2 -0.2**
**MPEP Malo Peshtene 148.84 329** P **PKPbc 01 03 11.0 +0.3**
**STU Stuttgart 148.86 351** *e*PKPbc **PKPbc 01 03 11.0 +0.4**
baz=17,slow=2.5
STU *e*PKPab **PKPab 01 03 17.0 +0.1**
baz=12,slow=4.3
**ARSA Arzberg 148.88 342** *i* PKP **PKiKP 01 03 11.4 -0.3**
comp=Z,12nm,0.9s
ARSA *ep*PKiKP **pPKiKP 01 05 25.6 +0.4**
comp=Z,4.3nm,1.0s
**BIOA Bad Ischl, Aus 148.99 345** *i* PKP **PKPbc 01 03 11.0 0.0**
comp=Z,18nm,0.9s,SNR=11
BIOA *i* PKP **PKPab 01 03 18.1 +0.6**
comp=Z,26nm,1.1s
BIOA *ep*PKP **pPKPbc 01 05 24.5 +0.8**
comp=Z,1.4nm,0.7s
**FUR Furstenfeldbru 149.08 348** *e*PKPbc **PKPbc 01 03 11.4 +0.2**
baz=17,slow=2.5
FUR *e*PKPab **PKPab 01 03 18.2 +0.4**
baz=12,slow=4.3
**RJOB Jochberg 149.16 346** *e*PKPbc **PKPbc 01 03 11.4 -0.1**
baz=17,slow=2.5
RJOB *e*PKPab **PKPab 01 03 18.8 +0.6**
baz=12,slow=4.3
**FRGS Fruska Gora 149.21 335** ⇑*i*P **PKPbc 01 03 11.8 +0.2**
**KDZ Kurdzhali 149.22 325** P **PKPbc 01 03 12.0 +0.3**
**KOGS Kog 149.38 340** *e*PKPbc **PKPbc 01 03 11.4 -0.5**
**BFO Black Forest 149.42 352** **PKiKP 01 03 12.4 -0.4**
**BFO Black Forest 149.42 352** *e*PKPbc **PKPbc 01 03 12.0 0.0**
baz=17,slow=2.5
BFO *e*PKPab **PKPab 01 03 18.8 -0.4**
baz=12,slow=4.3
**LESA Schwarzleotal 149.48 346** *i* PKP **PKPbc 01 03 11.9 -0.4**
comp=Z,25nm,1.0s
LESA *ep*PKP **pPKPbc 01 05 24.4 -0.4**
comp=Z,4.4nm,1.3s
**SOKA Soboth 149.55 342** *i* PKP **PKPbc 01 03 12.3 -0.1**
comp=Z,20nm,0.9s,SNR=16
**BOVS Bovan 149.61 331** ⇑P **PKPbc 01 03 12.3 -0.2**
**VTS Vitosha 149.63 328** P **PKPbc 01 03 13.0 +0.1**
**KBA Koelnbreinsper 149.64 345** *i* PKP **PKPbc 01 03 12.4 -0.3**
comp=Z,20nm,0.6s,SNR=11
KBA *ep*PKiKP **pPKiKP 01 05 27.2 +0.4**
comp=Z,3.2nm,0.7s
**PLNA Plana 149.64 328** P **PKPbc 01 03 13.0 +0.2**
**UBR Ueberruh 149.77 349** *e*PKPbc **PKPbc 01 03 12.9 0.0**
baz=17,slow=2.5
**WATA Walderalm 149.81 347** *i* PKP **PKPbc 01 03 13.1 0.0**
comp=Z,22nm,0.6s,SNR=15
WATA *ep*PKP **pPKPab 01 05 28.3 -0.2**
comp=Z,2.7nm,0.9s
**TEKS Tekeris 149.82 335** ⇑*i*P **PKPbc 01 03 13.0 -0.1**
**RETA Reutte 149.83 348** *i* PKP **PKPbc 01 03 13.3 +0.2**
comp=Z,12nm,0.6s,SNR=12
RETA *ep*PKP **pPKPbc 01 05 25.8 +0.1**
**OBKA Obir 149.84 343** *i* PKP **PKPbc 01 03 12.7 -0.5**
comp=Z,10nm,0.8s
OBKA *ep*PKiKP **pPKPbc 01 05 26.5 +0.7**
comp=Z,2.8nm,1.0s
**OBKA Obir 149.84 343** ⇑*i*P **PKPbc 01 03 12.6 -0.5**
**WTTA Wattenberg 149.86 347** *i* PKP **PKiKP 01 03 13.6 -0.3**
comp=Z,43nm,0.6s
WTTA *ep*PKP **pPKPbc 01 05 24.6 -1.4**
comp=Z,9.1nm,1.9s
**MOTA Moosalm 149.90 348** *i* PKP **PKPbc 01 03 13.0 -0.3**
comp=Z,30nm,0.9s
MOTA *ep*PKP **pPKPdf 01 05 22.5 +0.7**
comp=Z,4.8nm,1.1s
**MYKA Terra Mystica 149.98 344** *i* PKP **PKPbc 01 03 13.0 -0.5**
comp=Z,18nm,0.5s,SNR=14
**SQTA Sankt Quirin 150.00 347** *i* PKP **PKiKP 01 03 13.8 -0.3**
comp=Z,29nm,0.6s,SNR=16
SQTA *ep*PKP **pPKPab 01 05 29.3 0.0**
comp=Z,3.2nm,1.1s

**MMB Musomishta 150.14 326** P **PKPbc 01 03 13.0 -0.9**
**ABTA Abfaltersbach 150.15 345** *i* PKP **PKPbc 01 03 13.3 -0.5**
comp=Z,52nm,0.7s
ABTA *ep*PKP **pPKPdf 01 05 23.2 +0.9**
comp=Z,3.6nm,1.1s
**DAVA Damuels 150.19 349** *i* PKP **PKiKP 01 03 14.4 -0.2**
comp=Z,35nm,1.2s,SNR=14
DAVA *ep*PKiKP **pPKiKP 01 05 27.6 -0.3**
comp=Z,5.8nm,1.4s
**KKB Krupnik 150.25 327** P **PKPbc 01 03 14.0 -0.2**
**LJU Ljubljana 150.27 342** *e*PKPbc **PKPbc 01 03 13.7 -0.4**
**FETA Feichten 150.28 348** *i* PKP **PKiKP 01 03 14.6 -0.1**
comp=Z,43nm,1.0s
FETA *i* pPKiKP **pPKiKP 01 05 29.1 +1.0**
comp=Z,6.3nm,1.8s
**A051A Mrakovica 150.42 338** ⇑*i*P **PKiKP 01 03 14.7 -0.3**
**BBLS Lazi&#263i 150.43 334** ⇑*i*P **PKiKP 01 03 15.0 -0.1**
**PRIJ Prijedor 150.52 339** ⇑*i*P **PKiKP 01 03 15.2 +0.1**
**BOJS Bojanci 150.54 341** ⇑*i*P **PKPbc 01 03 14.8 +0.1**
**BLY Banja Luka 150.55 338** ⇑*i*P **PKiKP 01 03 15.0 -0.2**
**CEY Cerknica 150.58 342** ⇑*i*P **PKiKP 01 03 14.7 -0.1**
**RUDO Rudo 150.65 334** ⇑*i*P **PKPbc 01 03 13.9 -1.1**
**GBRS Gornja Briga 150.65 341** *i* PKPbc **PKPbc 01 03 14.7 -0.3**
**SJES Sjenica 150.68 333** ⇑*i*P **PKiKP 01 03 15.6 0.0**
**SKDS Skadanscina 150.87 343** ⇑*i*P **PKPbc 01 03 15.0 -0.5**
**VAY Valandovo 150.92 327** *i* P **PKPbc 01 03 15.1 -0.6**
**A050A Klekovaca 151.02 338** ⇑*i*P **PKPbc 01 03 15.7 -0.2**
**BRY Bratogost 151.58 334** ⇑*i*P **PKPbc 01 03 15.7 -1.6**
**PDG Podgorica 151.66 332** ⇑*i*P **PKPbc 01 03 16.5 -0.8**
**PDG Podgorica 151.66 332** ⇓P **PKPbc 01 03 17.1 -0.2**
**TREB Trebinje 151.81 334** ⇑*i*P **PKPbc 01 03 16.2 -1.4**
**DRME Dracevica, Mon 151.89 332** ⇑*i*P **PKPbc 01 03 17.2 -0.6**
**STON Ston 151.95 335** ⇑*i*P **PKPbc 01 03 16.7 -1.2**
**OHR Ohrid 151.97 329** *i* P **PKiKP 01 03 18.3 0.0**
**BNI Bardonecchia 152.85 353** PKPab **PKPab 01 03 34.5 +0.6**
**MSSA Maissana 153.12 348** PKPab **PKPab 01 03 33.9 -1.1**
**NRCA Norcia 153.61 341** PKPdf **PKPdf 01 03 11.8 -1.6**
NRCA **PKPbc 01 03 21.2 -0.4**
**INTR Introdacqua 154.10 339** **PKPdf 01 03 13.7 -0.3**
**PBRG Braganca 155.22 16** *e*PKPab **PKPab 01 03 44.4 +0.3**
**POLO Lamas de Olo 155.33 18** *e*PKPdf **PKPdf 01 03 15.5 -0.2**
**MVO Moncorvo 155.75 17** *e*PKPdf **PKPdf 01 03 17.1 +0.8**
**MVO Moncorvo 155.75 17** *e*PKPab **PKPab 01 03 46.8 +0.4**
**PVIS Viseu 155.91 19** *e*PKPab **PKPab 01 03 47.2 +0.1**
**PSBE So Bento 156.70 22** *e*PKPab **PKPab 01 03 50.8 +0.3**
**PCBR Castelo Branco 156.84 19** *e*PKPdf **PKPdf 01 03 17.9 +0.3**
**PMTG Montargil 157.29 21** *e*PKPab **PKPab 01 03 47.6 -5.5**
**PMAR Madeira 157.60 46** *e*PKPab **PKPab 01 03 53.5 -1.4**
**PMPST Porto Santo, M 157.78 44** *e*PKPdf **PKPdf 01 03 17.9 -1.1**
**ESDC Sonseca Array 157.89 12** **PKPab 01 03 55.7 0.0**
**ESDC Sonseca Array 157.89 12** PKP **PKPdf 01 03 19.4 +0.5**
comp=Z,0.7nm,0.9s,baz=23,slow=1.5,SNR=6.4
ESDC PKPab **PKPab 01 03 55.6 -0.1**
comp=Z,2.9nm,0.9s,baz=347,slow=3.7,SNR=13
**PNCL Nicolau / Gran 158.04 23** *e*PKPab **PKPab 01 03 56.4 +0.1**
**PBEJ Beja 158.35 22** *e*PKPab **PKPab 01 03 56.8 -0.9**
**KEST Kesra 161.28 341** PKPab **PKPab 01 04 11.0 +0.3**
comp=Z,7.4nm,0.8s,baz=299,slow=1.5,SNR=12
**DBIC Dimbokro 166.81 149** PKP **PKPdf 01 03 27.2 -1.1**
comp=Z,7.2nm,1.1s,baz=146,slow=3.9,SNR=3.5
**TORD Torodi Ar. Bea 175.06 176** PKP **PKPdf 01 03 31.6 -0.9**
comp=Z,4.0nm,1.1s,baz=346,slow=3.5,SNR=13
TORD PKPab **PKPab 01 05 11.5 -0.4**
comp=Z,0.8nm,0.6s,baz=164,slow=2.8,SNR=5.5

*NEIC **20** 01:05:43.9±2.6, 25.7°S±0.1°×179.5°E±0.2, h526km±9km, mb4.7/7, Error ellipse: s-maj=31.5km s-min=13.7km az=103.0*
*IDC **20** 01:05:45.0±8.8, 25.34°S×179.63°E, h545km±95km, mb3.2/5, mbtmp4.1/5, Error ellipse: s-maj=37.4km s-min=30.3km az=73.0*

**ISC 20 01:05:41.2±0.6, 25°46S±0.07°×179°5E±0.1, h507km, n44, σ2s31/47, mb3.5/7, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **4.44** | **149** | P | **P** | P | **P** | **01 07 05.6** | **+1.9** |
| **GLKZ** | **Green Lake** | **4.45** | **149** | P | **P** | P | **P** | **01 07 00.6** | **-3.1** |
| GLKZ | | | | S | **S** | S | **S** | **01 08 13.8** | **+2.7** |
| **MSVF** | **Nonsavu** | **7.80** | **350** | P | **P** | P | **P** | **01 07 33.9** | **-2.1** |
| **MXZ** | **Matakaoa Point** | **12.11** | **184** | P | **P** | P | **P** | **01 08 22.7** | **+2.0** |
| **HAZ** | **Te Kaha** | **12.34** | **186** | P | **P** | P | **P** | **01 08 25.6** | **+2.4** |
| **WMGZ** | **Waiomatatini S** | **12.36** | **184** | P | **P** | P | **P** | **01 08 23.7** | **+0.3** |
| **PKGZ** | **Pakihiroa** | **12.43** | **185** | P | **P** | P | **P** | **01 08 27.2** | **+3.0** |
| **RUGZ** | **Raukumara Rang** | **12.56** | **186** | P | **P** | P | **P** | **01 08 24.9** | **-0.8** |
| **PUZ** | **Puketiti** | **12.62** | **184** | P | **P** | P | **P** | **01 08 22.9** | **-3.2** |
| **RTZ** | **Ruatahuna** | **13.29** | **188** | P | **P** | P | **P** | **01 08 34.9** | **+1.7** |
| **HIZ** | **Hauiti** | **13.59** | **196** | P | P | P | 01 08 43.0 | **+6.7** |
| **ETVZ** | **East Tongariro** | **14.00** | **192** | P | **P** | P | **P** | **01 08 42.1** | **+1.3** |
| **OTVZ** | **Oturere** | **14.03** | **192** | P | **P** | P | **P** | **01 08 42.2** | **+1.0** |
| **SNVZ** | **South Ngauruho** | **14.06** | **192** | P | **P** | P | **P** | **01 08 42.5** | **+1.0** |
| **MRZ** | **Mangatainoka R** | **15.50** | **191** | P | **P** | P | **P** | **01 08 54.8** | **-1.6** |
| MRZ | | | | | IAmb | | IAmb | 01 09 01.4 | |
| comp=Z,48nm,1.5s | | | | | | | | | |
| **MRZ** | **Mangatainoka R** | **15.50** | **191** | P | | P | **P** | **01 08 52.5** | **-3.9** |
| **TCW** | **Tory Channel** | **16.29** | **194** | P | | P | **P** | **01 09 03.7** | **-0.9** |
| **TCW** | **Tory Channel** | **16.29** | **194** | P | | P | **P** | **01 09 04.6** | **0.0** |
| **MSWZ** | **Moikau Station** | **16.29** | **191** | P | | P | **P** | **01 09 03.0** | **-1.6** |
| MSWZ | | | | S | | S | **S** | **01 11 53.2** | **+1.3** |
| **BHW** | **Baring Head** | **16.36** | **192** | P | | P | **P** | **01 09 04.1** | **-1.1** |
| BHW | | | | | IAmb | | IAmb | 01 09 39.4 | |
| comp=Z,53nm,1.2s | | | | | | | | | |
| **TKNZ** | **Takaka Hill** | **16.45** | **198** | P | | P | **P** | **01 09 06.1** | **-0.1** |
| **TKNZ** | **Takaka Hill** | **16.45** | **198** | P | | P | **P** | **01 09 07.4** | **+1.2** |
| TKNZ | | | | S | | S | **S** | **01 11 46.2** | **-8.4** |
| **TUWZ** | **Tuamarina** | **16.57** | **195** | P | | P | **P** | **01 09 07.2** | **-0.3** |
| **TUWZ** | **Tuamarina** | **16.57** | **195** | P | | P | **P** | **01 09 07.4** | **-0.1** |
| **THZ** | **Tophouse** | **17.14** | **197** | P | | P | **P** | **01 09 13.1** | **-0.1** |
| THZ | | | | | IAmb | | IAmb | 01 09 15.2 | |
| comp=Z,43nm,1.2s | | | | | | | | | |
| **THZ** | **Tophouse** | **17.14** | **197** | P | | P | **P** | **01 09 14.0** | **+0.8** |
| THZ | | | | S | | S | **S** | **01 12 00.8** | **-5.7** |
| **INZ** | **Inchbonnie** | **18.44** | **199** | P | | P | **P** | **01 09 24.8** | **-0.2** |
| **CTAO** | **Charters Tower** | **31.02** | **273** | P | | P | **P** | **01 11 18.9** | **+1.7** |
| CTAO | | | | | IAmb | | IAmb | 01 11 20.4 | |
| comp=Z,12nm,0.9s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **41.32** | **262** | P | | P | **P** | **01 12 44.8** | **+2.3** |
| comp=Z,10nm,0.3s,baz=95,slow=7.5,SNR=3.7 | | | | | | | | | |
| comp=Z,10nm,0.3s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **64.63** | **180** | P | | P | **P** | **01 15 29.8** | **+1.6** |
| **QSPA** | **South Pole Qui** | **64.63** | **180** | P | | P | **P** | **01 15 29.8** | **+1.6** |
| comp=Z,0.8nm,0.6s,baz=23,slow=1.6,SNR=11 | | | | | | | | | |
| comp=Z,0.8nm,0.6s | | | | | | | | | |
| **BELA** | **Belgrano 2** | **74.96** | **173** | P | | P | **P** | **01 16 29.9** | **+0.4** |
| BELA | | | | | IAmb | | IAmb | 01 16 31.6 | |
| comp=Z,3.9nm,1.5s | | | | | | | | | |
| **MAW** | **Mawson** | **76.12** | **201** | P | | P | **P** | **01 16 37.2** | **+1.0** |
| comp=Z,0.9nm,0.8s,baz=162,slow=3.2,SNR=1.5 | | | | | | | | | |
| comp=Z,0.9nm,0.8s | | | | | | | | | |
| **KIWB** | **Kanaga Island** | **77.03** | **2** | P | | P | **P** | **01 16 43.6** | **+2.4** |
| **NVAR** | **Mina Array Bea** | **86.21** | **44** | P | | P | **P** | **01 17 28.2** | **-0.6** |
| comp=Z,0.5nm,0.7s,baz=233,slow=7.5,SNR=4.7 | | | | | | | | | |
| comp=Z,0.5nm,0.7s | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.67** | **58** | P | | P | **P** | **01 17 54.5** | **+0.2** |
| comp=Z,0.4nm,0.8s,baz=216,slow=7.5,SNR=3.9 | | | | | | | | | |
| comp=Z,0.4nm,0.8s | | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **134.90** | **240** | PKPdf | | **PKPdf** | | **01 24 00.3** | **-3.1** |
| **NB2** | **NORSAR Subarra** | **143.53** | **350** | PKP | | **PKPdf** | | **01 24 15.4** | **-2.0** |
| comp=Z,0.6nm,0.6s,baz=17,slow=3.4 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **143.53** | **350** | PKP | | **PKPdf** | | **01 24 15.7** | **-1.7** |
| comp=Z,1.7nm,0.9s,baz=22,slow=3.9,SNR=5.4 | | | | | | | | | |
| **HFS** | **Hagfors** | **143.97** | **348** | PKP | | **PKPdf** | | **01 24 16.5** | **-1.5** |
| comp=Z,1.7nm,0.6s,baz=31,slow=3.5,SNR=10 | | | | | | | | | |
| **KONO** | **Kongsberg** | **145.10** | **351** | PKPdf | | **PKPab** | | **01 24 20.6** | **-1.1** |
| **MMAI** | **Mount Meron Ar** | **147.86** | **292** | PKPbc | | **PKiKP** | | **01 24 30.9** | **+0.2** |
| comp=Z,1.1nm,0.5s,baz=96,slow=4.3,SNR=3.6 | | | | | | | | | |
| **BURAR** | **Bucovina Array** | **149.96** | **324** | PKPbc | | **PKiKP** | | **01 24 35.5** | **+0.8** |
| **EKA** | **Eskdalemuir Ar** | **150.09** | **3** | PKPbc | | **PKPbc** | | **01 24 32.6** | **-1.3** |
| comp=Z,0.2nm,0.4s,baz=357,slow=3.3,SNR=5.6 | | | | | | | | | |

*MOS **20** 01:30:29.5±1.4, 8.23S×116.64E, h9km, mb5.2/37, Error ellipse: s-maj=10.3km s-min=5.6km az=111.0*
*IDC **20** 01:30:29.7±0.4, 8.20S×116.59E, h0km, mb4.7/22, mbtmp4.7/23, ML5.0/1, MS3.8/39, Error ellipse: s-maj=15.8km s-min=11.3km az=81.0*
*NEIC **20** 01:30:31.5±1.9, 8.30S±0.06×116.70E±0.06, h6km±3km, mb5.2/64, Error ellipse: s-maj=9.4km s-min=8.2km az=181.0*
*DJA **20** 01:30:32.2±0.3, 8°S±2°×117°E±°, h10km±2km, M5.2/42, mB5.5/15, mb5.3/42, MLv5.3/23, Mw(mB)5.0/15*

**ISC 20 01:30:31.6±0.2, 8.36S±0.04×116.68E±0.04, h10km, n374, σ1s45/347, mb5.1/108, MS4.0/48, 11C-5D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.43** | **152** | P | | P | **Pb** | **01 30 41.9** | **+0.7** |
| **PLAI** | **Plampang** | **1.18** | **113** | P | | P | **Pg** | **01 30 54.3** | **0.0** |
| PLAI | | | | S | | S | **Sn** | **01 31 10.1** | **-0.2** |
| **SRBI** | **Singaraja** | **1.48** | **280** | P | | P | **Pn** | **01 30 58.3** | **+0.1** |
| **DNP** | **Denpasar** | **1.49** | **258** | P | | P | **Pg** | **01 31 00.3** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.50** | **267** | Pn | | Pn | **Pn** | **01 31 13.1** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.50** | **267** | P | | Pn | **Pn** | **01 31 13.2** | **+0.8** |
| **WBSI** | **Waikabubak, Su** | **2.97** | **116** | P | | Pn | **Pn** | **01 31 18.9** | **+0.1** |
| **BASI** | **Baing, Sumba** | **4.27** | **116** | P | | Pn | **Pn** | **01 31 37.9** | **+1.2** |
| **BSSI** | **Bau Bau, Buton** | **4.37** | **60** | P | | Pn | **Pn** | **01 31 36.9** | **-1.2** |
| **GRJI** | **Gresik** | **4.40** | **289** | P | | Pn | **Pn** | **01 31 39.6** | **+1.1** |
| **KAPI** | **Kappang** | **4.51** | **43** | Pn | | Pn | **Pn** | **01 31 38.7** | **-1.3** |
| **KAPI** | **Kappang** | **4.51** | **43** | Pn | | Pn | **Pn** | **01 31 38.5** | **-1.4** |
| 82nm,0.3s,baz=201,slow=7.2,SNR=1.0 | | | | | | | | | |
| KAPI | | | | | | Sn | **Sn** | **01 32 28.8** | **-3.7** |
| 88nm,0.3s,baz=228,slow=23,SNR=7.8 | | | | | | | | | |
| KAPI | | | | | | Lg | Lg | 01 32 49.2 | |
| 49nm,0.3s,baz=75,slow=20,SNR=2.0 | | | | | | | | | |
| 146nm,0.3s | | | | | | | | | |
| **PWJI** | **Pagerwojo** | **4.84** | **274** | P | | P | **Pn** | **01 31 45.5** | **+1.0** |
| **EDFI** | **Ende, Flores** | **4.97** | **95** | P | | P | **Pn** | **01 31 46.4** | **0.0** |
| **BNSI** | **Bone** | **5.20** | **41** | P | | P | **Pn** | **01 31 49.5** | **0.0** |
| **NGJI** | **Ngawi** | **5.26** | **280** | P | | P | **Pn** | **01 31 52.7** | **+2.4** |
| 213nm,0.8s,2.2nm | | | | | | | | | |
| **MMRI** | **Maumere** | **5.50** | **93** | P | | P | **Pn** | **01 31 56.8** | **+3.1** |
| **MMRI** | **Maumere** | **5.50** | **93** | Pn | | Pn | **Pn** | **01 31 52.4** | **-1.2** |
| **MMRI** | **Maumere** | **5.50** | **93** | P | | Pn | **Pn** | **01 31 53.5** | **-0.2** |
| **UGM** | **Wanagama** | **6.11** | **274** | Pn | | Pn | **Pn** | **01 32 03.2** | **+1.2** |
| **UGM** | **Wanagama** | **6.11** | **274** | P | | Pn | **Pn** | **01 32 03.4** | **+1.3** |
| 316nm,0.6s | | | | | | | | | |
| **SMRI** | **Semarang** | **6.32** | **281** | P | | P | Pn | 01 32 12.2 | +7.3 |
| **SMRI** | **Semarang** | **6.32** | **281** | Pn | | Pn | **Pn** | **01 32 04.7** | **-0.2** |
| **BBSI** | **Bau Bau** | **6.51** | **64** | P | | P | **Pn** | **01 32 07.6** | **+0.2** |
| 185nm,0.7s | | | | | | | | | |
| **BKB** | **Balikpapan** | **7.05** | **2** | Pn | | Pn | Pn | 01 32 19.0 | +4.0 |
| **BATI** | **Baumata** | **7.13** | **105** | P | | P | **Pn** | **01 32 16.4** | **+0.3** |
| 253nm,0.6s,3µm1.2nm | | | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.58** | **346** | P | | P | **Pn** | **01 32 22.1** | **-0.1** |
| **SOEI** | **Soe** | **7.62** | **101** | P | | P | **Pn** | **01 32 25.1** | **+2.2** |
| **SOEI** | **Soe** | **7.62** | **101** | Pn | | Pn | **Pn** | **01 32 24.4** | **+1.5** |
| **SOEI** | **Soe** | **7.62** | **101** | P | | Pn | **Pn** | **01 32 23.6** | **+0.7** |
| 399nm,0.7s,3µm1.3nm | | | | | | | | | |
| **KPJI** | **Karang Pucung** | **7.74** | **277** | P | | P | **Pn** | **01 32 26.0** | **+1.5** |
| 114nm,0.7s,0.5nm | | | | | | | | | |
| **CMJI** | **Cimerak** | **8.17** | **273** | P | | P | **Pn** | **01 32 31.7** | **+1.4** |
| 94nm,0.7s | | | | | | | | | |
| **MPSI** | **Mapaga** | **9.21** | **21** | P | | P | **Pn** | **01 32 43.7** | **-0.9** |
| **CNJI** | **Cibinong** | **9.52** | **276** | P | | P | **Pn** | **01 32 51.0** | **+2.2** |
| 54nm,1.0s | | | | | | | | | |
| **TOLI2** | **Tolitoli** | **10.26** | **24** | Pn | | Pn | **Pn** | **01 32 58.3** | **-0.6** |
| **SBUM** | **Sibu** | **11.62** | **337** | Pn | | Pn | **Pn** | **01 33 19.5** | **+1.9** |
| **KSM** | **Kuching** | **11.65** | **327** | Pn | | Pn | **Pn** | **01 33 18.8** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **13.03** | **139** | Pn | | Pn | **Pn** | **01 33 35.3** | **-1.5** |
| **MBWA** | **Marble Bar** | **13.06** | **167** | Pn | | Pn | **Pn** | **01 33 35.3** | **-2.1** |
| **MBWA** | **Marble Bar** | **13.06** | **167** | P | | Pn | **Pn** | **01 33 35.8** | **-1.5** |
| **PSA00** | **Pilbara Seismi** | **13.49** | **167** | P | | Pn | **Pn** | **01 33 42.7** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **13.49** | **167** | Pn | | Pn | **Pn** | **01 33 41.6** | **-1.5** |
| **PSA00** | **Pilbara Seismi** | **13.49** | **167** | P | | Pn | **Pn** | **01 33 41.1** | **-2.1** |
| **KNRA** | **Kununurra** | **13.87** | **123** | Pn | | Pn | **Pn** | **01 33 47.9** | **-0.5** |
| **KNRA** | **Kununurra** | **13.87** | **123** | P | | Pn | **Pn** | **01 33 47.9** | **-0.5** |
| comp=Z,618nmcomp=Z,125nm,0.9s | | | | | | | | | |
| **MNAI** | **Manna** | **14.20** | **285** | P | | P | **Pn** | **01 33 54.6** | **+1.6** |
| comp=Z,286nm,1.3s | | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **14.31** | **358** | P | | P | **P** | **01 34 03.3** | **+1.5** |
| **KKM** | **Kota Kinabalu** | **14.31** | **358** | Pn | | Pn | **Pn** | **01 33 55.2** | **+0.7** |
| **GIRL** | **Giralia** | **14.40** | **189** | P | | Pn | **Pn** | **01 33 55.0** | **-0.6** |
| **GIRL** | **Giralia** | **14.40** | **189** | Pn | | Pn | **Pn** | **01 33 53.6** | **-1.9** |
| **DRS** | **Darwin Rock St** | **14.56** | **107** | P | | Pn | **Pn** | **01 33 58.4** | **+0.6** |
| **MTN** | **Manton Dam** | **14.89** | **109** | P | | Pn | **Pn** | **01 34 01.3** | **-1.0** |
| **MTN** | **Manton Dam** | **14.89** | **109** | Pn | | Pn | **Pn** | **01 33 59.5** | **-2.8** |
| **MTN** | **Manton Dam** | **14.89** | **109** | P | | Pn | **Pn** | **01 33 59.5** | **-2.8** |
| **BTDF** | **Bukit Timah Da** | **16.09** | **306** | P | | P | P | 01 34 28.6 | +7.2 |
| **KDU** | **Kakadu** | **16.11** | **107** | P | | P | **P** | **01 34 20.5** | **-1.1** |
| **SWI** | **Sorong** | **16.32** | **64** | P | | P | P | 01 34 31.7 | +7.7 |
| **FAKI** | **Fak Fak** | **16.40** | **72** | P | | P | **P** | **01 34 25.7** | **+0.8** |
| **FAKI** | **Fak Fak** | **16.40** | **72** | Pn | | Pn | **Pn** | **01 34

**COEN Coen 26.57 104** P **P** **01 36 08.9 -1.3**
comp=Z,45nm,0.8s
**MULG Mulgathing 27.21 146** P **P** **01 36 15.6 -0.1**
**QIZ Qiongzhong 28.04 346** P **P** **01 36 27.8 +4.6**
QIZ S **S** **01 41 13.4 +5.6**
QIZ pmax pmax
comp=Z,240nm,5.3s
QIZ LR LR
comp=Z,200nm,18.4s
QIZ LR LR
comp=Z,290nm,16.3s
QIZ LR LR
comp=Z,380nm,14.7s
**SRDT SRDT 28.50 322** P P 01 36 35.8 +8.4
**MTSU Mount Surprise 28.56 113** P **P** **01 36 30.1 +2.1**
**NONG Nongkai 29.46 333** P P 01 36 44.8 +9.0
**INKA Innaminka 29.81 133** P **P** **01 36 40.4 +1.5**
**LCRK Leigh Creek 29.81 140** P **P** **01 36 39.2 +0.3**
**PMG Port Moresby 30.13 94** LR LR 01 51 23.1
comp=Z,148nm,19.5s,baz=228,slow=42
**BBOO Buckleboo 30.24 146** P **P** **01 36 43.0 +0.4**
**BBOO Buckleboo 30.24 146** P **P** **01 36 42.1 -0.6**
BBOO IAmb IAmb 01 36 43.5
comp=Z,38nm,0.8s
**BBOO Buckleboo 30.24 146** P **P** **01 36 42.5 -0.1**
comp=Z,59nm,0.7s
**CTA Charters Tower 30.89 115** P **P** **01 36 48.9 +0.3**
**CTA Charters Tower 30.89 115** LR LR 01 51 07.3
comp=Z,28nm,18.4s,baz=286,slow=40
**WHYH Whyalla 31.25 145** P **P** **01 36 52.1 +0.5**
comp=Z,44nm,0.8s
**QLP Quilpie 31.80 128** P **P** **01 36 57.7 +1.2**
**QLP Quilpie 31.80 128** P **P** **01 36 57.3 +0.7**
comp=Z,55nm,0.8s
**CM31 Chiang Mai Arr 31.88 327** P **P** **01 36 58.4 +1.1**
CM31 IAmb IAmb 01 37 08.4
comp=Z,64nm,1.4s
**CMAR Chiang Mai Arr 31.88 327** P **P** **01 36 58.5 +1.3**
comp=Z,7.3nm,0.7s,baz=151,slow=6.6,SNR=24
**HTT Hallett 32.32 144** P **P** **01 37 01.6 +0.6**
**HTT Hallett 32.32 144** P **P** **01 37 01.6 +0.6**
comp=Z,45nm,1.6s
**CRAI Chiangrai 32.63 331** P **P** **01 37 05.1 +1.3**
CRAI IAmb IAmb 01 37 15.3
comp=Z,34nm,1.2s
**STKA Stephens Creek 32.92 139** P **P** **01 37 06.7 +0.4**
**STKA Stephens Creek 32.92 139** P **P** **01 37 05.7 -0.7**
**STKA Stephens Creek 32.92 139** P **P** **01 37 06.7 +0.4**
comp=Z,11nm,1.0s
**STKA Stephens Creek 32.92 139** P **P** **01 37 06.7 +0.4**
comp=Z,32nm,0.6s,baz=311,slow=9.6,SNR=93
STKA LR LR 01 51 15.1
comp=Z,330nm,18.1s,baz=299,slow=38
comp=Z,32nm,0.6s
**BULU Kimbe 33.50 87** P **P** **01 37 13.8 +2.3**
comp=Z,109µm,0.4s
**CMSA Cobar Meteorol 35.51 135** P **P** **01 37 30.6 +1.9**
**CMSA Cobar Meteorol 35.51 135** P **P** **01 37 28.9 +0.2**
comp=Z,20nm,1.0s
**KMI Kunming 35.94 338** ⇓P **P** **01 37 36.8 +4.0**
KMI pmax pmax
comp=Z,32nm,0.9s
KMI LR LR
comp=Z,200nm,16.1s
KMI LR LR
comp=Z,230nm,13.9s
KMI LR LR
comp=Z,320nm,17.7s
**GYA Guiyang 35.95 345** P **P** **01 37 34.8 +2.1**
GYA S **S** **01 43 14.4 +3.1**
GYA pmax pmax
comp=Z,12nm,0.6s
GYA LR LR
comp=Z,330nm,15.6s
GYA LR LR
comp=Z,250nm,16.6s
GYA LR LR
comp=Z,270nm,15.5s
**AULRC Lightning Ridg 36.08 130** P **P** **01 37 34.7 +1.0**
**ARPS Mount Arapiles 36.37 145** P **P** **01 37 37.0 +1.0**
**ARPS Mount Arapiles 36.37 145** P **P** **01 37 36.8 +0.8**
comp=Z,49nm,1.6s
**JOW Kunigami 36.74 17** P **P** **01 37 36.2 -3.1**
JOW IAmb IAmb 01 38 50.4
comp=Z,37nm,1.1s
**JOW Kunigami 36.74 17** LR LR 01 54 25.1
comp=Z,141nm,20.2s,baz=288,slow=39
**EIDS Eidsvold 36.85 122** P **P** **01 37 41.6 +1.2**
EIDS IAmb IAmb 01 38 26.2
comp=Z,60nm,1.8s
**PZH PanZhiHua 37.57 338** P **P** **01 37 49.9 +3.4**
PZH S **S** **01 43 34.3 -1.7**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,130nm,3.5s
PZH LR LR
comp=Z,160nm,14.3s
PZH LR LR
comp=Z,230nm,15.3s
PZH LR LR
comp=Z,200nm,14.2s
**WHN Wuhan 38.74 357** P **P** **01 37 57.8 +1.7**
**YNG Young 38.94 136** P **P** **01 37 58.9 +1.1**
**YNG Young 38.94 136** P **P** **01 37 58.9 +1.1**
comp=Z,190nm,1.7s
**ENH Enshi 39.02 350** P P 01 38 06.5 +7.9
**TOO Toolangi 39.05 143** P **P** **01 38 00.2 +1.4**
**TOO Toolangi 39.05 143** P **P** **01 38 00.3 +1.4**
TOO IAmb IAmb 01 38 01.4
comp=Z,84nm,1.4s
**TOO Toolangi 39.05 143** P **P** **01 38 00.2 +1.4**
comp=Z,55nm,2.2s
**TOO Toolangi 39.05 143** P **P** **01 38 00.3 +1.4**
TOO pmax pmax
comp=Z,84nm,1.4s
**PALK Pallekele 39.08 292** LR LR 01 55 49.6
comp=Z,141nm,18.4s,baz=227,slow=39
**ARMA Armidale 39.34 129** P **P** **01 38 02.6 +1.2**
ARMA IAmb IAmb 01 38 04.5
comp=Z,118nm,2.0s
**CAN Canberra 39.92 137** P **P** **01 38 07.4 +1.3**
CAN IAmb IAmb 01 38 26.3
comp=Z,101nm,1.7s
**CAN Canberra 39.92 137** P **P** **01 38 07.4 +1.3**
CAN pmax pmax
comp=Z,101nm,1.7s
**NJ2 Nanjing 40.23 3** *e*P **P** **01 38 11.6 +3.0**
NJ2 pmax pmax
comp=Z,13nm,0.5s
NJ2 pmax pmax
comp=Z,180nm,3.6s
**CD2 Chengdu 40.96 343** P **P** **01 38 16.4 +1.7**
CD2 pP sP 01 38 24.1 +5.1
CD2 sP pP 01 38 30.1 +12
CD2 S **S** **01 44 27.3 +0.5**
CD2 sS sS 01 44 44.4 +13
CD2 pmax pmax
comp=Z,50nm,0.6s
CD2 pmax pmax
comp=Z,120nm,7.7s
CD2 LR LR
comp=Z,200nm,13.0s
CD2 LR LR
comp=Z,350nm,12.9s
CD2 LR LR
comp=Z,250nm,12.0s
**SHL Shillong 41.47 325** P **P** **01 38 18.6 -0.5**
SHL IAmb IAmb 01 38 26.0
comp=Z,42nm,0.8s
**SHL Shillong 41.47 325** P **P** **01 38 18.6 -0.5**
SHL pmax pmax
comp=Z,42nm,0.8s
**XAN Xi'an 42.80 351** ⇑P **P** **01 38 31.3 +1.6**
XAN sP sP 01 38 44.6 +11
XAN pmax pmax
comp=Z,14nm,0.6s
XAN LR LR
comp=Z,400nm,13.1s
XAN LR LR
comp=Z,190nm,15.1s
XAN LR LR
comp=Z,460nm,15.1s
**LYN LuoYang 42.86 355** P **P** **01 38 28.0 -2.1**
LYN pmax pmax
comp=Z,12nm,0.6s
LYN LR LR
comp=Z,310nm,12.6s
LYN LR LR
comp=Z,370nm,14.3s
**JNU Nakatsue 43.41 17** LR LR 01 58 23.5
comp=Z,85nm,21.4s,baz=206,slow=39
**TIA Tai'an 44.33 1** P **P** **01 38 43.1 +1.1**
TIA pmax pmax
comp=Z,13nm,0.8s
**LSA Lhasa 45.11 328** P **P** **01 38 49.1 +0.2**
**LSA Lhasa 45.11 328** P **P** **01 38 48.2 -0.7**
LSA IAmb IAmb 01 39 00.5
comp=Z,37nm,1.1s
**LSA Lhasa 45.11 328** P **P** **01 38 48.2 -0.7**
LSA pmax pmax
comp=Z,37nm,1.1s
**HNS HongShan 45.55 358** ⇓P P 01 38 57.3 +5.7
HNS pmax pmax
comp=Z,14nm,1.5s
**LZH Lanzhou 45.83 345** *e*P **P** **01 38 55.0 +0.9**
LZH pP sP 01 39 04.4 +6.1
LZH S **S** **01 45 36.9 -1.3**
LZH pmax pmax
comp=Z,40nm,1.1s
LZH LR LR
comp=Z,330nm,17.5s
LZH LR LR
comp=Z,300nm,14.8s
LZH LR LR
comp=Z,300nm,15.5s
**KSAR Wonju Array Be 46.75 12** P **P** **01 39 00.9 -0.2**
**KSAR Wonju Array Be 46.75 12** P **P** **01 39 00.9 -0.2**
**KSRS Korea Array 46.77 12** P **P** **01 39 01.4 +0.2**
comp=Z,4.3nm,0.9s,baz=194,slow=7.2,SNR=9.9
comp=Z,4.3nm,0.9s
**KOUNC Koumac, New Ca 47.50 110** P **P** **01 39 07.3 0.0**
KOUNC IAmb IAmb 01 39 09.0
comp=Z,17nm,0.7s
**BJT Baijiatuan 48.13 359** P P 01 39 18.3 +6.5
**BJI Beijing 48.16 359** P **P** **01 39 12.8 +0.9**
BJI pmax pmax
comp=Z,7.0nm,1.1s
**MAJO Matsushiro 49.03 23** P P 01 39 23.8 +5.0
**MAJO Matsushiro 49.03 23** P **P** **01 39 19.0 +0.2**
MAJO IAmb IAmb 01 40 06.1
comp=Z,21nm,0.5s
**MAJO Matsushiro 49.03 23** P **P** **01 39 19.0 +0.2**
MAJO pmax pmax
comp=Z,21nm,0.5s
**MJAR Matsushiro Arr 49.03 23** P **P** **01 39 18.8 0.0**
comp=Z,1.3nm,0.3s,baz=182,slow=8.5,SNR=3.6
MJAR LR LR 01 58 25.5
comp=Z,71nm,21.8s,baz=196,slow=34
comp=Z,1.3nm,0.3s
**MJB9 Matsu-Tunnel 49.03 23** P **P** **01 39 18.1 -0.7**
**BTO Baotou 49.10 353** *e*P **P** **01 39 21.1 +1.7**
BTO pP **sP** **01 39 26.3 +2.6**
BTO sP pP 01 39 34.8 +12
BTO S **S** **01 46 26.5 +1.9**
BTO pmax pmax
comp=Z,19nm,0.7s
BTO pmax pmax
comp=Z,190nm,5.2s
BTO LR LR
comp=Z,200nm,5.2s
BTO LR LR
comp=Z,350nm,6.7s
BTO LR LR
comp=Z,240nm,7.6s
**HHC Hu-ho-hao-te 49.19 355** *e*P **P** **01 39 23.0 +2.9**
HHC pP sP 01 39 33.4 +9.1
HHC pmax pmax
comp=Z,17nm,0.7s
HHC pmax pmax
comp=Z,130nm,5.9s
HHC LR LR
comp=Z,220nm,17.1s
HHC LR LR
comp=Z,190nm,13.7s
HHC LR LR
comp=Z,190nm,14.7s
**DZM Mont Dzumac 49.70 112** P **P** **01 39 25.7 +1.4**
**DZM Mont Dzumac 49.70 112** P **P** **01 39 22.9 -1.4**
DZM IAmb IAmb 01 39 34.6
comp=Z,22nm,0.8s
**DZM Mont Dzumac 49.70 112** P **P** **01 39 25.2 +0.8**
comp=Z,8.1nm,0.7s,baz=121,slow=19,SNR=4.4
DZM LR LR 02 00 27.6
comp=Z,84nm,19.9s,baz=302,slow=36
comp=Z,8.1nm,0.7s
**GTA Gaotai 50.04 343** *e*P **P** **01 39 28.4 +1.8**
GTA pmax pmax
comp=Z,16nm,1.0s
**LIFNC LIFOU 50.27 110** P **P** **01 39 30.2 +1.6**
**LIFNC LIFOU 50.27 110** P **P** **01 39 28.3 -0.3**
**JMM Marumori 51.20 25** P P 01 39 41.2 +6.0
**JMM Marumori 51.20 25** P **P** **01 39 34.9 -0.4**
JMM IAmb IAmb 01 39 42.4
comp=Z,74nm,1.4s
**XLT XiLinHaoTe 52.01 359** *e*P P 01 39 47.9 +6.6
XLT pmax pmax
comp=Z,18nm,1.1s
**MSHR Mys Shultsa 52.39 13** *i* P **P** **01 39 45.0 +1.0**
MSHR pmax pmax
comp=Z,32nm,1.2s
**CN2 Changchun 52.52 8** *e*P **P** **01 39 48.8 +3.9**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**JTM Tenmabayashi 53.82 23** P P 01 40 00.7 +6.1
**JTM Tenmabayashi 53.82 23** P **P** **01 39 54.0 -0.6**
JTM IAmb IAmb 01 40 01.0
comp=Z,24nm,0.8s
**MDJ Mudanjiang 54.00 11** P **P** **01 39 56.0 +0.1**
MDJ pmax pmax
comp=Z,16nm,0.8s
**MDJ Mudanjiang 54.00 11** P **P** **01 39 55.3 -0.5**
MDJ IAmb IAmb 01 40 04.7
comp=Z,17nm,0.9s
**USA0B Ussuriysk Arra 54.12 14** P **P** **01 39 57.0 +0.3**
USA0B IAmb IAmb 01 40 02.8
comp=Z,35nm,1.4s
**USA0B Ussuriysk Arra 54.12 14** P **P** **01 39 57.0 +0.3**
USA0B pmax pmax
comp=Z,35nm,1.5s
**USRK Ussuriysk Ar. 54.12 14** P **P** **01 39 55.3 -1.4**
**USRK Ussuriysk Ar. 54.12 14** P **P** **01 39 56.6 -0.1**
comp=Z,3.0nm,0.5s,baz=195,slow=6.7,SNR=16
comp=Z,3.0nm,0.5s
**BNX BinXian 54.70 9** ⇓P P 01 40 06.0 +5.1
BNX pmax pmax
comp=Z,12nm,1.5s
**ULN Ulaanbaatar 56.62 352** P **P** **01 40 15.0 +0.1**
ULN IAmb IAmb 01 40 24.9
comp=Z,33nm,1.9s
**ULN Ulaanbaatar 56.62 352** *ce*P **P** **01 40 15.3 +0.4**
ULN pmax pmax
comp=Z,9.0nm,1.3s
**SONM Songino Array 56.68 352** P **P** **01 40 14.9 -0.4**
**SONM Songino Array 56.68 352** P **P** **01 40 15.2 -0.1**
comp=Z,7.8nm,0.7s,baz=171,slow=9.0,SNR=51
SONM LR LR 02 06 25.3
comp=Z,115nm,20.8s,baz=190,slow=38
comp=Z,7.8nm,0.7s
**SONM Songino Array 56.68 352** P **P** **01 40 14.9 -0.4**
SONM pmax pmax
comp=Z,10.0nm,0.9s
**ASAJ Asahikawa 57.26 22** LR LR 02 04 56.5
comp=Z,75nm,21.9s,baz=122,slow=36
**ASAJ Asahikawa 57.26 22** P **P** **01 40 20.8 +1.5**
ASAJ pmax pmax
comp=Z,116nm,1.6s
**JKA Kamikawa-asahi 57.26 22** P **P** **01 40 20.8 +1.5**
**CASY Casey 57.99 183** P **P** **01 40 24.0 -0.1**
**WMQ Urumqi 58.20 336** *e*P **P** **01 40 26.9 +0.8**
**LBZ Lake Benmore 58.49 137** P **P** **01 40 28.2 +0.1**
**INZ Inchbonnie 58.78 135** P **P** **01 40 30.4 +0.3**
**RPZ Rata Peaks 58.84 136** P **P** **01 40 31.1 +0.5**
**KLR Kul'dur 58.85 11** LR LR 02 10 07.8
comp=Z,67nm,18.1s,baz=218,slow=40
**KLR Kul'dur 58.85 11** *ce*P **P** **01 40 30.1 -0.2**
KLR pmax pmax
comp=Z,19nm,1.7s
**HEH HeiHe 59.11 8** *e*P **P** **01 40 32.3 +0.2**
HEH pmax pmax
comp=Z,11nm,0.8s
**MRNZ Matariki Terra 59.30 133** P **P** **01 40 33.4 -0.3**
**YSS Yuzh-Sakhalins 59.76 20** P **P** **01 40 36.3 -0.4**
**YSS Yuzh-Sakhalins 59.76 20** *i* P **P** **01 40 37.4 +0.8**
YSS pmax pmax
comp=Z,14nm,0.9s
**KHZ Kahutara 60.16 134** P **P** **01 40 40.2 +0.6**
**MSVF Nonsavu 60.29 106** P **P** **01 40 44.4 +3.4**
**MSVF Nonsavu 60.29 106** P **P** **01 40 41.1 +0.1**
MSVF IAmb IAmb 01 40 48.7
comp=Z,22nm,0.9s
**MSVF Nonsavu 60.29 106** P **P** **01 40 41.1 +0.1**
MSVF pmax pmax
comp=Z,22nm,1.0s
**KSH Kashi 60.74 325** P P 01 40 49.5 +5.7
KSH pP sP 01 40 58.4 +10
KSH pmax pmax
comp=Z,6.0nm,0.9s
**BHW Baring Head 60.83 133** P **P** **01 40 43.6 -0.6**
**KNGR Kungurtug, Tuv 61.03 346** *i* P **P** **01 40 46.1 +0.6**
KNGR pmax pmax
comp=Z,8.0nm,1.1s
**MOY Mondy 61.29 349** *e*P **P** **01 40 47.2 0.0**
MOY pmax pmax
comp=Z,19nm,2.0s
**BKZ Black Stump Fm 61.47 130** P **P** **01 40 51.5 +2.8**
**BKZ Black Stump Fm 61.47 130** P **P** **01 40 48.9 +0.2**
**UZB Uzynbulak 61.64 329** *e*P **P** **01 40 48.4 -1.4**
baz=329
**UZB Uzynbulak 61.64 329** *e*P **P** **01 40 48.4 -1.4**
**RTZ Ruatahuna 61.72 129** P **P** **01 40 50.2 -0.2**
**URZ Urewera 61.74 129** LR LR 02 08 11.3
comp=Z,198nm,18.7s,baz=22,slow=36
**SATY Saty 61.89 329** *e*P **P** **01 40 50.1 -1.4**
baz=329
**SATY Saty 61.89 329** *e*P **P** **01 40 50.1 -1.4**
**KPKS Kokpek 62.05 330** *e*P **P** **01 40 50.9 -1.6**
comp=Z,6.3nm,1.0s,baz=329
**KPKS Kokpek 62.05 330** *e*P **P** **01 40 50.8 -1.6**
KPKS pmax pmax
comp=Z,6.0nm,1.0s
**ZSN Zaisan 62.31 336** *e*P **P** **01 40 53.1 -0.9**
comp=Z,7.8nm,1.0s,baz=336
**ZSN Zaisan 62.31 336** *e*P **P** **01 40 53.1 -0.9**
ZSN pmax pmax
comp=Z,8.0nm,1.0s
**ZEA Zeya 62.50 7** *e*P **P** **01 40 55.9 +0.7**
ZEA pmax pmax
comp=Z,30nm,1.3s
**TNSS Tian-Shan 62.63 328** *e*P **P** **01 40 55.4 -1.4**
baz=328
**TNSS Tian-Shan 62.63 328** *e*P **P** **01 40 55.4 -1.4**
**MDOK Medeo 62.66 328** *e*P **P** **01 40 55.3 -1.4**
baz=328
**MDOK Medeo 62.66 328** *e*P **P** **01 40 55.3 -1.4**
**AAA Alma-Ata 62.77 328** *e*P **P** **01 40 56.2 -1.1**
comp=Z,10nm,0.7s,baz=328
**AAA Alma-Ata 62.77 328** *e*P **P** **01 40 56.1 -1.1**
AAA pmax pmax
comp=Z,11nm,0.7s
**MK31 Makanchi Array 62.86 334** P **P** **01 40 55.9 -1.9**
MK31 IAmb IAmb 01 41 08.6
comp=Z,11nm,0.9s
**MK31 Makanchi Array 62.86 334** *ce*P **P** **01 40 56.0 -1.8**
**MKAR Makanchi Array 62.86 334** P **P** **01 40 56.5 -1.2**
**MKAR Makanchi Array 62.86 334** P **P** **01 40 56.4 -1.3**
comp=Z,5.4nm,0.7s,baz=146,slow=6.5,SNR=36
MKAR LR LR 02 12 02.8
comp=Z,56nm,18.1s,baz=142,slow=40
comp=Z,5.4nm,0.7s
**MAKZ Makanchi 63.01 334** P **P** **01 40 58.6 -0.1**
**MAKZ Makanchi 63.01 334** P **P** **01 40 58.6 -0.1**
MAKZ pmax pmax
comp=Z,5.0nm,0.9s
**CHKK Chushkaly 63.18 329** *e*P **P** **01 40 59.0 -1.0**
baz=329
**CHKK Chushkaly 63.18 329** *e*P **P** **01 40 58.9 -1.0**
**DGZ Jazzator, Alta 63.21 339** *i* P **P** **01 41 00.7 +0.5**
DGZ pmax pmax
comp=Z,12nm,0.9s
**TDK Taldyqorghan 63.30 331** *e*P **P** **01 40 59.4 -1.3**
comp=Z,9.4nm,0.7s,baz=330
**TDK Taldyqorghan 63.30 331** *e*P **P** **01 40 59.4 -1.3**
TDK pmax pmax
comp=Z,9.0nm,0.7s
**ARSB Arslanbob 63.65 325** P **P** **01 41 01.2 -2.1**
**ARSB Arslanbob 63.65 325** P **P** **01 41 01.2 -2.1**
ARSB pmax pmax
comp=Z,6.0nm,1.3s
**AAK Ala-Archa 63.67 326** P **P** **01 41 01.7 -1.6**
comp=Z,1.6nm,0.3s,baz=49,slow=20,SNR=1.5
AAK LR LR 02 13 27.0
comp=Z,138nm,19.7s,baz=138,slow=41
comp=Z,1.6nm,0.3s
**AAK Ala-Archa 63.67 326** *ce*P **P** **01 41 02.9 -0.5**
AAK pmax pmax
comp=Z,11nm,2.5s
**BTK Batken 64.13 322** P **P** **01 41 04.5 -1.9**
**BTK Batken 64.13 322** P **P** **01 41 04.5 -1.9**
BTK pmax pmax
comp=Z,4.0nm,0.7s
**RAO Raoul Island 64.52 118** LR LR 02 10 31.2
comp=Z,60nm,18.7s,baz=352,slow=37
**WSAR Wadi Sarin 64.85 300** P **P** **01 41 09.5 -1.8**
comp=Z,8.5nm,0.9s,baz=53,slow=5.1,SNR=3.8
comp=Z,8.5nm,0.9s
**BTLS Baital 65.53 328** *e*P **P** **01 41 14.4 -0.9**
baz=328
**BTLS Baital 65.53 328** *e*P **P** **01 41 14.3 -0.9**
**BOD Bodaibo 65.98 358** *e*P **P** **01 41 17.5 -0.4**
BOD pmax pmax
comp=Z,28nm,1.2s
**KK31 Karatay Array 66.20 325** P **P** **01 41 17.3 -2.3**
**KK31 Karatay Array 66.20 325** P **P** **01 41 17.3 -2.3**
KK31 pmax pmax
comp=Z,3.0nm,1.0s
**KKAR Karatay Array 66.20 325** P **P** **01 41 17.3 -2.3**
**KKAR Karatay Array 66.20 325** P **P** **01 41 17.3 -2.3**
**BRLS Borolday 66.54 324** *e*P **P** **01 41 20.2 -1.7**
baz=324
**BRLS Borolday 66.54 324** *e*P **P** **01 41 20.1 -1.7**
**KURBB Kurchatov Arra 67.40 335** P **P** **01 41 25.3 -1.8**
comp=Z,1.8nm,0.7s,baz=146,slow=5.0,SNR=15
KURBB LR LR 02 13 40.8
comp=Z,95nm,20.2s,baz=176,slow=38
comp=Z,1.8nm,0.7s
**KURK Kurchatov 67.43 335** P **P** **01 41 26.6 -0.7**
**KURK Kurchatov 67.43 335** *ce*P **P** **01 41 26.5 -0.7**
KURK pmax pmax
comp=Z,4.0nm,1.0s
**ZAA0 Zalesovo Array 67.65 340** P **P** **01 41 26.5 -2.1**
**ZALV Zalesovo Beam 67.65 340** P **P** **01 41 26.3 -2.3**
comp=Z,4.8nm,0.6s,baz=142,slow=5.2,SNR=21
ZALV LR LR 02 14 39.3
comp=Z,69nm,19.3s,baz=141,slow=39
comp=Z,4.8nm,0.6s
**MAW Mawson 69.07 199** P **P** **01 41 38.4 +1.0**
**MAW Mawson 69.07 199** P **P** **01 41 38.7 +1.3**
comp=Z,15nm,0.9s,baz=57,slow=6.3,SNR=28
comp=Z,15nm,0.9s
**PETK Petropavlovsk- 70.43 25** P **P** **01 41 45.2 -0.8**
comp=Z,5.0nm,0.9s,baz=112,slow=1.6,SNR=3.2
PETK LR LR 02 14 37.8
comp=Z,26nm,20.1s,baz=246,slow=38
comp=Z,5.0nm,0.9s
**YAK Yakutsk 70.90 6** LR LR 02 16 09.2
comp=Z,58nm,18.2s,baz=224,slow=39
**YAK Yakutsk 70.90 6** *i* P **P** **01 41 49.6 +1.0**
YAK pmax pmax
comp=Z,10.0nm,0.8s
**BVA0 Borovoye Array 72.67 333** *i* P **P** **01 41 56.5 -2.9**
**BVAR Borovoye Array 72.67 333** P **P** **01 41 57.2 -2.3**
comp=Z,2.5nm,0.6s,baz=134,slow=11,SNR=11
BVAR LR LR 02 18 19.2
comp=Z,86nm,18.8s,baz=134,slow=40
comp=Z,2.5nm,0.6s
**AB31 Akbulak array 75.73 326** *i* P **P** **01 42 14.7 -2.7**
**ABKAR Akbulak array 75.73 326** P **P** **01 42 14.9 -2.5**
**SEY Seymchan 76.16 16** *i* P **P** **01 42 19.0 -0.5**
SEY pmax pmax
comp=Z,18nm,1.3s
**AKTO Aktyubinsk 77.40 326** P **P** **01 42 24.7 -2.2**
comp=Z,3.4nm,0.6s,baz=112,slow=4.3,SNR=14
AKTO LR LR 02 18 58.4
comp=Z,63nm,20.2s,baz=176,slow=38
comp=Z,3.4nm,0.6s
**SHEM Shemya Is, Ala 77.91 32** LR LR 02 13 39.0
comp=Z,34nm,21.4s,baz=269,slow=33

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|---|---|---|---|---|---|---|---|---|---|
| KIBK | **Kibwezi** | **78.42** | **269** | P | | **P** | | **01 42 32.4** | **-1.1** |
| KMBO | **Kilima Mbogo** | **79.38** | **270** | P | | **P** | | **01 42 38.7** | **-0.2** |
| | comp=Z,4.6nm,0.8s,baz=58,slow=9.9,SNR=10.0 | | | | | | | | |
| KMBO | | | | LR | | LR | | 02 11 42.8 | |
| | comp=Z,93nm,21.6s,baz=98,slow=31 | | | | | | | | |
| | comp=Z,4.6nm,0.8s | | | | | | | | |
| SVE | **Sverdlovsk** | **79.44** | **332** | *e*P | | **P** | | **01 42 36.2** | **-1.8** |
| ARU | **Arti** | **80.20** | **331** | LR | | LR | | 02 22 21.4 | |
| | comp=Z,103nm,20.8s,baz=120,slow=39 | | | | | | | | |
| ARU | **Arti** | **80.20** | **331** | *d i*P | | **P** | | **01 42 43.1** | **+1.0** |
| ARU | | | | | | | | 01 45 39.6 | |
| ARU | | | | S | | **S** | | **01 52 49.7** | **+2.7** |
| ARU | | | | SS | | **SS** | | **01 57 54.8** | **-3.3** |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | | |
| TIXI | **Tiksi** | **80.25** | **4** | *i* P | | **P** | | **01 42 42.4** | **+0.4** |
| TIXI | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| QSPA | **South Pole Qui** | **81.63** | **180** | P | | **P** | | **01 42 49.9** | **+0.1** |
| QSPA | **South Pole Qui** | **81.63** | **180** | P | | **P** | | **01 42 49.8** | **-0.1** |
| | comp=Z,7.6nm,0.9s,baz=155,slow=0.2,SNR=32 | | | | | | | | |
| | comp=Z,7.6nm,0.9s | | | | | | | | |
| POGA | **Pongola** | **81.77** | **244** | P | | **P** | | **01 42 51.0** | **-0.3** |
| BILL | **Bilibino** | **83.83** | **17** | *e*P | | **P** | | **01 43 01.9** | **+1.0** |
| BILL | | | | *e* | | | | 01 46 14.3 | |
| BILL | | | | *e*PPP | | PPP | | 01 48 10.2 | |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| BELG | **Belogornoye** | **84.11** | **325** | LR | | LR | | 02 25 33.3 | |
| | comp=Z,84nm,20.0s,slow=39 | | | | | | | | |
| BELG | **Belogornoye** | **84.11** | **325** | *i* P | | **P** | | **01 43 04.2** | **+1.6** |
| BELG | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| KBZ | **Khabaz** | **84.21** | **316** | *i* P | | **P** | | **01 43 04.0** | **+0.6** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.5s | | | | | | | | |
| KIV | **Kislovodsk** | **84.42** | **316** | *e*P | | **P** | | **01 43 04.0** | **-0.6** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| KIRV | **Kirov** | **85.57** | **331** | LR | | LR | | 02 27 11.4 | |
| | comp=Z,82nm,20.5s,baz=137,slow=40 | | | | | | | | |
| MBAR | **Mbarara** | **85.90** | **270** | P | | **P** | | **01 43 11.7** | **-1.1** |
| MBAR | | | | IAmb | | IAmb | | 01 43 14.1 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| MBAR | **Mbarara** | **85.90** | **270** | LR | | LR | | 02 17 47.3 | |
| | comp=Z,77nm,19.1s,baz=103,slow=33 | | | | | | | | |
| MBAR | **Mbarara** | **85.90** | **270** | *ce*P | | **P** | | **01 43 12.7** | **-0.1** |
| MBAR | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| LSZ | **Lusaka** | **86.39** | **255** | P | | **P** | | **01 43 14.1** | **-1.0** |
| LSZ | | | | IAmb | | IAmb | | 01 43 21.9 | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| LSZ | **Lusaka** | **86.39** | **255** | P | | **P** | | **01 43 14.1** | **-1.0** |
| LSZ | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| EIL | **Elat** | **86.97** | **300** | LR | | LR | | 02 25 34.2 | |
| | comp=Z,73nm,18.3s,baz=74,slow=38 | | | | | | | | |
| BOSA | **Boshof** | **87.30** | **242** | P | | **P** | | **01 43 19.6** | **+0.3** |
| BOSA | | | | IAmb | | IAmb | | 01 43 20.4 | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| BOSA | **Boshof** | **87.30** | **242** | P | | **P** | | **01 43 19.6** | **+0.3** |
| | comp=Z,16nm,0.8s,baz=99,slow=4.2,SNR=27 | | | | | | | | |
| BOSA | | | | LR | | LR | | 02 14 13.7 | |
| | comp=Z,65nm,19.7s,baz=162,slow=30 | | | | | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| BOSA | **Boshof** | **87.30** | **242** | P | | **P** | | **01 43 19.6** | **+0.3** |
| BOSA | | | | pmax | | pmax | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| LBTB | **Lobatse** | **87.49** | **245** | P | | **P** | | **01 43 20.2** | **0.0** |
| LBTB | | | | IAmb | | IAmb | | 01 43 22.0 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| LBTB | **Lobatse** | **87.49** | **245** | LR | | LR | | 02 15 29.2 | |
| | comp=Z,43nm,21.1s,baz=155,slow=31 | | | | | | | | |
| LBTB | **Lobatse** | **87.49** | **245** | P | | **P** | | **01 43 20.3** | **0.0** |
| LBTB | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| TROLL | **Troll, Antarti** | **89.34** | **196** | ⇑P | | **P** | | **01 43 29.4** | **+1.3** |
| | comp=Z,449nm,0.5s | | | | | | | | |
| BRTR | **Keskin Array B** | **89.97** | **310** | P | | **P** | | **01 43 29.2** | **-2.5** |
| | comp=Z,1.1nm,0.9s,baz=122,slow=6.0,SNR=5.4 | | | | | | | | |
| BRTR | | | | PKKPbc | | **PKKPbc** | | **02 01 05.0** | **+0.5** |
| | comp=Z,0.5nm,0.7s,baz=41,slow=3.9,SNR=3.8 | | | | | | | | |
| BRTR | | | | LR | | LR | | 02 29 10.2 | |
| | comp=Z,43nm,18.1s,baz=110,slow=39 | | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | | |
| SNAA | **Sanae** | **90.99** | **196** | P | | **P** | | **01 43 35.8** | **+0.1** |
| SNAA | | | | IAmb | | IAmb | | 01 43 37.8 | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| SNAA | **Sanae** | **90.99** | **196** | ⇑P | | **P** | | **01 43 36.9** | **+1.2** |
| | comp=Z,149nm,0.5s | | | | | | | | |
| SNAA | **Sanae** | **90.99** | **196** | P | | **P** | | **01 43 36.9** | **+1.2** |
| | comp=Z,7.0nm,0.6s,baz=172,slow=6.2,SNR=34 | | | | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| SNAA | **Sanae** | **90.99** | **196** | *ce*P | | **P** | | **01 43 37.2** | **+1.5** |
| SNAA | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| PPT | **Papeete** | **91.05** | **108** | LR | | LR | | 02 24 33.8 | |
| | comp=Z,25nm,18.6s,baz=179,slow=36 | | | | | | | | |
| OBN | **Obninsk** | **91.18** | **326** | ⇓*e*P | | **P** | | **01 43 38.5** | **+1.8** |
| OBN | | | | *e* | | | | 01 43 43.2 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,33nm,2.0s | | | | | | | | |
| BELA | **Belgrano 2** | **92.43** | **186** | P | | **P** | | **01 43 41.9** | **-0.4** |
| BELA | | | | IAmb | | IAmb | | 01 43 43.5 | |
| | comp=Z,8.6nm,0.7s | | | | | | | | |
| VNA3 | **Neumayer Olymp** | **93.04** | **195** | ⇑P | | **P** | | **01 43 45.7** | **+0.5** |
| | comp=Z,5.4nm,0.7s | | | | | | | | |
| AKASG | **Malin Array Be** | **94.79** | **320** | LR | | LR | | 02 32 17.4 | |
| | comp=Z,50nm,21.7s,baz=86,slow=39 | | | | | | | | |
| TSUM | **Tsumeb** | **95.78** | **250** | LR | | LR | | 02 23 25.9 | |
| | comp=Z,27nm,19.8s,baz=136,slow=33 | | | | | | | | |
| MNK | **Minsk** | **96.04** | **324** | *i* P | | **P** | | **01 43 57.4** | **-1.7** |
| MNK | | | | *i* | | | | 01 47 49.9 | |
| MNK | | | | *i* PPP | | PPP | | 01 49 52.6 | |
| MNK | | | | *i* S | | **SKSac** | | **01 54 33.7** | **-1.9** |
| MNK | | | | *i* PS | | **PS** | | **01 56 37.3** | **-0.9** |
| MNK | | | | *i* SS | | **SS** | | **02 01 49.0** | **0.0** |
| MNK | | | | *i* SSS | | SSS | | 02 05 32.9 | |
| MNK | | | | pmax | | pmax | | | |
| | comp=N,13nm,0.9s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=E,13nm,1.0s | | | | | | | | |
| MNK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=Z,35nm,16.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=E,65nm,22.0s | | | | | | | | |
| MNK | | | | MLR | | MLR | | | |
| | comp=N,37nm,14.0s | | | | | | | | |
| KDAK | **Kodiak Island** | **97.40** | **33** | LR | | LR | | 02 34 32.5 | |
| | comp=N,46nm,18.8s,baz=301,slow=40 | | | | | | | | |
| FINES | **FINESS Array B** | **97.56** | **331** | LR | | LR | | 02 31 53.9 | |
| | comp=N,36nm,21.9s,baz=88,slow=38 | | | | | | | | |
| ARCES | **ARCESS Array B** | **98.18** | **339** | LR | | LR | | 02 36 19.1 | |
| | comp=N,58nm,19.4s,baz=88,slow=40 | | | | | | | | |
| ILAR | **Eielson Array** | **100.25** | **26** | PKKPbc | | PKKPbc | | 02 00 33.7 | -3.9 |
| | comp=N,0.5nm,0.7s,baz=92,slow=1.7,SNR=4.7 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | **116.09** | **281** | | | **PKPdf** | | **01 49 13.8** | **-2.2** |
| TORD | **Torodi Ar. Bea** | **116.09** | **281** | PKP | | **PKPdf** | | **01 49 14.2** | **-1.9** |
| | comp=N,3.8nm,0.5s,baz=46,slow=2.1,SNR=74 | | | | | | | | |
| ESDC | **Sonseca Array** | **118.75** | **311** | PKP | | **PKPdf** | | **01 49 18.7** | **-1.9** |
| | comp=N,0.4nm,0.5s,baz=52,slow=1.8,SNR=6.2 | | | | | | | | |
| MDT | **Midelt** | **120.70** | **303** | PKP | | **PKPdf** | | **01 49 23.1** | **-1.4** |
| | comp=N,0.9nm,0.6s,baz=131,slow=4.4,SNR=2.1 | | | | | | | | |
| DBIC | **Dimbokro** | **122.06** | **273** | PKP | | **PKPdf** | | **01 49 25.1** | **-2.5** |
| | comp=N,2.2nm,0.5s,baz=62,slow=2.9,SNR=6.1 | | | | | | | | |
| NVAR | **Mina Array Bea** | **122.37** | **50** | PKP | | **PKPdf** | | **01 49 27.1** | **-0.6** |
| | comp=N,0.7nm,0.6s,baz=284,slow=1.2,SNR=7.1 | | | | | | | | |
| HLID | **Hailey** | **123.43** | **43** | PKPdf | | **PKPdf** | | **01 49 29.5** | **-0.2** |
| PRN | **Pahroc Range** | **125.13** | **50** | PKPdf | | **PKPdf** | | **01 49 31.8** | **-1.3** |
| V12A | **Nelson** | **125.79** | **52** | PKPdf | | **PKPdf** | | **01 49 32.6** | **-1.7** |
| PLCA | **Paso Flores** | **130.70** | **173** | PKP | | **PKiKP** | | **01 49 44.5** | **+0.1** |
| | comp=N,1.9nm,0.9s,baz=303,slow=2.7,SNR=3.8 | | | | | | | | |
| TXAR | **Lajitas Array** | **136.79** | **56** | PKP | | **PKPdf** | | **01 49 55.6** | **+0.3** |
| | comp=N,0.4nm,0.6s,baz=257,slow=1.0,SNR=5.7 | | | | | | | | |
| T42A | **Van Buren** | **141.93** | **37** | | | PKPpre | | 01 49 57.4 | |
| R49A | **Shelbyville** | **144.27** | **30** | | | **PKPab** | | **01 50 04.7** | **-1.5** |
| WVT | **Waverly** | **144.46** | **35** | PKPdf | | **PKPab** | | **01 50 04.6** | **-2.3** |
| WVT | **Waverly** | **144.46** | **35** | PKIKP | | **PKPab** | | **01 50 04.6** | **-2.3** |
| Q51A | **Peebles** | **144.56** | **27** | PKPdf | | **PKPab** | | **01 50 04.9** | **-2.3** |
| M57A | **Sunshine Farm,** | **144.95** | **18** | PKPdf | | **PKPab** | | **01 50 06.4** | **-2.2** |
| Y45A | **Yeager Farm, C** | **144.96** | **40** | PKPdf | | **PKPab** | | **01 50 06.6** | **-2.3** |
| P53A | **Whipple** | **145.03** | **25** | | | **PKPab** | | **01 50 06.7** | **-2.3** |
| CPUP | **Villa Florida** | **145.03** | **189** | PKPbc | | **PKPdf** | | **01 50 10.2** | **+0.1** |
| | comp=N,44nm,0.7s,baz=162,slow=2.2,SNR=99 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Q52A | **Bidwell** | **145.09** | **26** | | | **PKPbc** | | **01 50 06.3** | **-2.8** |
| U49A | **Red Boiling Sp** | **145.31** | **33** | | | **PKPbc** | | **01 50 07.3** | **-2.6** |
| CLTN | **Cedars of Leba** | **145.32** | **34** | | | **PKPbc** | | **01 50 06.8** | **-3.2** |
| SSPA | **Standing Stone** | **145.34** | **20** | | | **PKPbc** | | **01 50 07.5** | **-2.4** |
| T50A | **Nancy** | **145.42** | **31** | | | **PKPbc** | | **01 50 07.5** | **-2.7** |
| MCWV | **Mont Chateau** | **145.50** | **23** | | | **PKPbc** | | **01 50 08.1** | **-2.4** |
| S51A | **Beattyville** | **145.56** | **29** | PKPdf | | **PKPbc** | | **01 50 08.0** | **-2.7** |
| V52A | **Sevierville** | **146.97** | **31** | PKPdf | | **PKPdf** | | **01 50 11.9** | **-1.1** |
| LVC | **Limon Verde** | **148.74** | **170** | | | **PKPbc** | | **01 50 20.9** | **+0.3** |
| LVC | **Limon Verde** | **148.74** | **170** | PKP2 | | **PKPbc** | | **01 50 20.9** | **+0.3** |
| AQDB | **Aquidauana** | **150.38** | **195** | PKPbc | | **PKPbc** | | **01 50 23.0** | **-1.2** |
| BDFB | **Brasilia** | **151.74** | **212** | PKPbc | | **PKPbc** | | **01 50 26.6** | **-1.1** |
| BDFB | **Brasilia** | **151.74** | **212** | PKP | | **PKPdf** | | **01 50 21.4** | **0.0** |
| | comp=N,1.7nm,0.7s,baz=102,slow=2.8,SNR=4.6 | | | | | | | | |
| BDFB | | | | PKPbc | | **PKPbc** | | **01 50 27.4** | **-0.3** |
| | comp=N,12nm,0.5s,baz=114,slow=2.0,SNR=32 | | | | | | | | |
| BDFB | | | | PKPab | | **PKPab** | | **01 50 37.1** | **+0.8** |
| | comp=N,10nm,0.5s,baz=150,slow=5.7,SNR=11 | | | | | | | | |
| LPAZ | **La Paz** | **155.05** | **169** | PKPbc | PKPdf | | | 01 50 35.0 | +8.2 |
| LPAZ | **La Paz** | **155.05** | **169** | PKP | | **PKPdf** | | **01 50 27.4** | **+0.6** |
| | comp=N,2.1nm,1.1s,baz=164,slow=3.0,SNR=3.5 | | | | | | | | |
| LPAZ | | | | PKPbc | pPKPbc | | | 01 50 37.4 | -1.6 |
| | comp=N,2.9nm,0.9s,baz=161,slow=4.4,SNR=5.5 | | | | | | | | |
| LPAZ | | | | PKPab | | **PKPab** | | **01 50 52.6** | **+1.8** |
| | comp=N,9.5nm,0.8s,baz=173,slow=3.6,SNR=12 | | | | | | | | |
| ETMB | **Extrema** | **161.72** | **171** | PKPdf | | **PKPdf** | | **01 50 32.7** | **-1.3** |
| ETMB | | | | PKPab | | **PKPab** | | **01 51 19.1** | **+0.1** |
| SAML | **Samuel** | **162.81** | **180** | PKPdf | | **PKPdf** | | **01 50 32.0** | **-3.1** |
| SAML | | | | | | **PKPab** | | **01 51 23.6** | **-0.1** |

*IDC **20** 01:47:25.5±7.4, 8°.38S×117°.22E, h0km, mb3.6/3, mbtmp3.7/4, ML3.3/1, Error ellipse: s-maj=123.1km s-min=21.7km az=106.0*
*DJA **20** 01:47:26.6±0.5, 8°.5S±4°×117°.7E±°, h10km, M3.5/6, MLv3.5/6*
**ISC 20 01:47:28.0**±1.1, **8°.45S**±0°.07×**116°.96E**±0°.07, **h35**km, **n8, σ1s87/10, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | **0.29** | **195** | P | **Pn** | **01 47 33.8** | **-2.1** |
| TWSI | | | | S | **Sn** | **01 47 39.0** | **-2.2** |
| PLAI | **Plampang** | **0.89** | **115** | P | **Pn** | **01 47 43.7** | **-0.3** |
| SRBI | **Singaraja** | **1.77** | **282** | P | **Pn** | **01 47 57.3** | **+1.3** |
| WBSI | **Waikabubak, Su** | **2.68** | **116** | P | **Pn** | **01 48 10.5** | **+1.8** |
| KAPI | **Kappang** | **4.40** | **39** | Pn | **Pn** | **01 48 31.2** | **-1.1** |
| | 1.6nm,0.3s,baz=163,slow=5.8,SNR=5.1 | | | | | | |
| KAPI | | | | Sn | **Sn** | **01 49 19.9** | **-2.5** |
| | 1.5nm,0.3s,baz=37,slow=20,SNR=1.6 | | | | | | |
| KAPI | | | | Lg | Lg | 01 49 38.3 | |
| | 2.2nm,0.3s,baz=180,slow=20,SNR=2.2 | | | | | | |
| | 4.3nm,0.2s | | | | | | |
| WRA | **Warramunga Arr** | **20.33** | **126** | P | **P** | **01 52 02.0** | **+0.6** |
| | 2.0nm,0.5s,baz=299,slow=12,SNR=20 | | | | | | |
| | 2.0nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | **22.19** | **135** | P | **P** | **01 52 21.8** | **+0.5** |
| | 0.5nm,0.6s,baz=304,slow=8.8,SNR=4.6 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| STKA | **Stephens Creek** | **32.67** | **139** | P | **P** | **01 53 58.5** | **+1.5** |
| | 1.1nm,0.5s,baz=329,slow=12,SNR=3.6 | | | | | | |
| | 1.1nm,0.5s | | | | | | |

**IDC 20 01:54:44.8**±1.5, **17°.64S×67°.26W, h350**km±62km, **mb3.1**/2, **mbtmp3.7**/2, **Error ellipse: s-maj=189.4km s-min=24.7km az=114.0, Central Bolivia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LPAZ | **La Paz** | **1.59** | **328** | P | Pn | 01 55 34.2 | 0.0 |
| | 1.5nm,0.4s,baz=155,slow=5.2,SNR=18 | | | | | | |
| PLCA | **Paso Flores** | **23.18** | **186** | P | P | 01 59 21.7 | 0.0 |
| | 1.3nm,0.4s,baz=314,slow=11,SNR=20 | | | | | | |
| | 1.3nm,0.4s | | | | | | |
| TORD | **Torodi Ar. Bea** | **74.60** | **71** | P | P | 02 05 46.8 | 0.0 |
| | 0.6nm,1.1s,baz=251,slow=5.1,SNR=6.0 | | | | | | |
| | 0.6nm,1.1s | | | | | | |
| MKAR | **Makanchi Array** | **141.60** | **34** | PKP | PKPdf | 02 13 34.4 | -0.4 |
| | 0.2nm,0.5s,baz=300,slow=3.5,SNR=2.2 | | | | | | |

*WEL **20** 01:56:08.4, 42°.S±3°×17°.4E±°, h19km±6km, M3.5/40, ML3.8/19, MLv3.5/40, Error ellipse: s-maj=0.0km s-min=0.0km az=126.0, confirmed*
*NOU **20** 01:56:08.0, 41°.74S×174°.67E, h1km, MLv3.9/10, Cook Strait, New Zealand*
**ISC 20 01:56:08.9**±1.0, **41°.66S**±0°.03×**174°.43E**±0°.02, **h16**km±8km, **n98, σ1s47/106, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMWZ | **Cape Campbell** | **0.19** | **240** | P | **Pb** | **01 56 12.8** | **-1.2** |
| CMWZ | | | | S | **Sg** | **01 56 17.9** | **+1.5** |
| SNZO | **South Karori** | **0.40** | **31** | P | **Pb** | **01 56 17.0** | **-0.6** |
| BHW | **Baring Head** | **0.41** | **53** | P | **Pb** | **01 56 17.2** | **-0.6** |
| BHW | | | | S | **Sb** | **01 56 24.7** | **+0.8** |
| BSWZ | **Blackbirch Sta** | **0.42** | **262** | P | **Pb** | **01 56 17.2** | **-0.7** |
| BSWZ | | | | S | **Sb** | **01 56 24.2** | **+0.1** |
| TUWZ | **Tuamarina** | **0.43** | **302** | P | **Pb** | **01 56 17.6** | **-0.5** |
| TUWZ | | | | S | **Sb** | **01 56 24.6** | **+0.3** |
| WEL | **Wellington** | **0.45** | **35** | P | **Pb** | **01 56 18.0** | **-0.5** |
| TCW | **Tory Channel** | **0.46** | **346** | P | **Pb** | **01 56 18.2** | **-0.4** |
| TCW | | | | S | **Sb** | **01 56 25.6** | **+0.4** |
| PLWZ | **Palliser** | **0.63** | **82** | P | **Pg** | **01 56 21.6** | **+0.4** |
| PLWZ | | | | S | **Sn** | **01 56 34.0** | **+1.1** |
| MSWZ | **Moikau Station** | **0.66** | **69** | P | **Pg** | **01 56 22.0** | **+0.1** |
| MSWZ | | | | S | **Sn** | **01 56 34.7** | **+1.1** |
| CAW | **Cannon Point** | **0.73** | **41** | P | **Pg** | **01 56 22.7** | **-0.4** |
| PAWZ | **Paruwai Farm** | **0.80** | **70** | P | **Pg** | **01 56 24.4** | **0.0** |
| PAWZ | | | | S | **Sn** | **01 56 38.6** | **+1.5** |
| KIW | **Kapiti Island** | **0.87** | **25** | P | **Pg** | **01 56 25.3** | **-0.5** |
| NNZ | **Nelson** | **0.90** | **299** | P | **Pn** | **01 56 25.9** | **-1.0** |
| DUWZ | **D'Urville Isla** | **0.94** | **336** | P | **Pg** | **01 56 26.6** | **-0.4** |
| MTW | **Mount Morrison** | **0.95** | **59** | P | **Pg** | **01 56 27.0** | **-0.3** |
| MTW | | | | S | **Sn** | **01 56 41.8** | **+1.1** |
| TRWZ | **Traveller** | **0.98** | **75** | P | **Pn** | **01 56 27.0** | **-1.0** |
| KHZ | **Kahutara** | **1.01** | **221** | P | **Pn** | **01 56 27.6** | **-0.8** |
| KHZ | **Kahutara** | **1.01** | **221** | P | **Pn** | **01 56 27.5** | **-0.8** |
| OGWZ | **Otaki Gorge** | **1.01** | **34** | P | **Pn** | **01 56 27.6** | **-0.8** |
| HOWZ | **Holdsworth Sta** | **1.12** | **48** | P | **Pg** | **01 56 29.6** | **-0.8** |
| THZ | **Tophouse** | **1.15** | **264** | P | **Pg** | **01 56 30.2** | **-0.8** |
| TMWZ | **Te Maipa** | **1.23** | **64** | P | **Pn** | **01 56 30.7** | **-0.7** |
| TKNZ | **Takaka Hill** | **1.27** | **299** | P | **Pg** | **01 56 32.5** | **-0.9** |
| MRNZ | **Matariki Terra** | **1.28** | **281** | P | **Pg** | **01 56 32.9** | **-0.7** |
| MRZ | **Mangatainoka R** | **1.32** | **42** | P | **Pb** | **01 56 32.6** | **-0.6** |
| TIWZ | **Tintock** | **1.41** | **52** | P | **Pn** | **01 56 33.4** | **-0.5** |
| CPWZ | **Castlepoint** | **1.53** | **61** | P | **Pn** | **01 56 35.4** | **-0.1** |
| OHWZ | **Ohakea** | **1.60** | **25** | P | **Pg** | **01 56 38.9** | **-0.7** |
| PRWZ | **Pori Road** | **1.60** | **47** | P | **Pn** | **01 56 36.2** | **-0.4** |
| POWZ | **Post Office Ro** | **1.62** | **39** | P | **Pb** | **01 56 36.8** | **-1.5** |
| QRZ | **Quartz Range** | **1.66** | **299** | P | **Pg** | **01 56 39.4** | **-1.3** |
| QRZ | **Quartz Range** | **1.66** | **299** | P | **Pb** | **01 56 38.9** | **-0.1** |
| GVZ | **Greta Valley S** | **1.67** | **218** | P | **Pn** | **01 56 36.6** | **-0.9** |
| BFZ | **Birch Farm** | **1.68** | **55** | P | **Pn** | **01 56 36.1** | **-1.5** |
| DVHZ | **Dannevirke** | **1.89** | **45** | P | **Pn** | **01 56 39.6** | **-0.9** |
| WAZ | **Wanganui** | **1.95** | **13** | P | **Pb** | **01 56 44.4** | **+0.4** |
| ANWZ | **Angora Road** | **1.96** | **53** | P | **Pn** | **01 56 40.4** | **-1.0** |
| LTZ | **Lake Taylor** | **1.96** | **234** | P | **Pn** | **01 56 40.9** | **-0.6** |
| DSZ | **Denniston Nort** | **1.97** | **267** | P | **Pb** | **01 56 43.8** | **-0.6** |
| AMCZ | **Amberley** | **2.01** | **220** | P | **Pg** | **01 56 48.3** | **+0.8** |
| PRHZ | **Porangahau** | **2.17** | **51** | P | **Pn** | **01 56 43.4** | **-1.0** |
| LREZ | **Lake Rotokare** | **2.19** | **359** | P | **Pg** | **01 56 49.2** | **-1.7** |
| PNHZ | **Pukenui** | **2.20** | **38** | P | **Pn** | **01 56 44.2** | **-0.6** |
| WPHZ | **Waipukurau** | **2.20** | **44** | P | **Pb** | **01 56 47.6** | **-0.8** |
| NMEZ | **Namu Road** | **2.28** | **349** | P | **Pg** | **01 56 50.5** | **-2.1** |
| OKCZ | **Okains Bay** | **2.30** | **206** | P | **Pn** | **01 56 44.2** | **-2.0** |
| PREZ | **Palmer Road** | **2.32** | **355** | P | **Pg** | **01 56 52.4** | **-1.0** |
| KHEZ | **Kahui Hut** | **2.38** | **352** | P | **Pb** | **01 56 49.8** | **-1.6** |
| KHEZ | **Kahui Hut** | **2.38** | **352** | P | **Pb** | **01 56 52.0** | **+0.6** |
| NEZ | **North Egmont** | **2.40** | **354** | P | **Pg** | **01 56 54.0** | **-0.8** |
| NBEZ | **Newall Road No** | **2.42** | **350** | P | **Pb** | **01 56 51.4** | **-0.7** |
| MQZ | **McQueen's Vall** | **2.43** | **212** | P | **Pn** | **01 56 45.4** | **-2.5** |
| OXZ | **Oxford** | **2.43** | **226** | P | **Pb** | **01 56 49.8** | **-2.4** |
| PXZ | **Pawanui** | **2.46** | **49** | P | **Pn** | **01 56 47.3** | **-1.0** |
| INZ | **Inchbonnie** | **2.46** | **243** | P | **Pn** | **01 56 48.7** | **+0.3** |
| MOVZ | **Moawhango** | **2.46** | **25** | P | **Pb** | **01 56 52.9** | **+0.1** |
| DREZ | **Durham Road** | **2.47** | **356** | P | **Pg** | **01 56 54.0** | **-2.3** |
| PKE | **Pukeiti** | **2.48** | **352** | P | **Pb** | **01 56 51.9** | **-1.2** |
| WNVZ | **Wahianoa** | **2.49** | **21** | P | **Pn** | **01 56 50.3** | **+1.3** |
| KRHZ | **Kereru** | **2.50** | **37** | P | **Pn** | **01 56 48.0** | **-0.9** |
| TRVZ | **Turoa** | **2.50** | **20** | P | **Pb** | **01 56 53.9** | **+0.3** |
| WHVZ | **Whangaehu Hut** | **2.53** | **21** | P | **Pb** | **01 56 50.9** | **-3.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MAVZ | **Matarangi** | **2.54** | **20** | P | | **Pb** | | **01 56 53.7** | **-0.5** |
| VRZ | **Vera Road** | **2.54** | **6** | P | | **Pb** | | **01 56 52.0** | **-2.1** |
| FWVZ | **Far West T-bar** | **2.55** | **20** | P | | **Pb** | | **01 56 51.3** | **-3.1** |
| TUVZ | **Tukino** | **2.56** | **22** | P | | **Pb** | | **01 56 55.3** | **+0.7** |
| COVZ | **Chateau Observ** | **2.60** | **19** | P | | **Pb** | | **01 56 55.2** | **+0.1** |
| KAHZ | **Kahuranaki** | **2.63** | **46** | P | | **Pn** | | **01 56 49.3** | **-1.4** |
| NGZ | **Ngauruhoe** | **2.63** | **20** | P | | **Pn** | | **01 56 51.6** | **+0.7** |
| SNVZ | **South Ngauruho** | **2.63** | **21** | P | | **Pn** | | **01 56 52.2** | **+1.3** |
| OTVZ | **Oturere** | **2.66** | **21** | P | | **Pn** | | **01 56 52.6** | **+1.3** |
| NNVZ | **North Ngauruho** | **2.68** | **20** | P | | **Pb** | | **01 56 53.3** | **-3.3** |
| WTVZ | **West Tongariro** | **2.69** | **20** | P | | **Pb** | | **01 56 53.5** | **-3.2** |
| TWVZ | **Taurewa** | **2.69** | **17** | P | | **Pb** | | **01 56 57.6** | **+0.8** |
| KWHZ | **Kaweka Forest** | **2.70** | **35** | P | | **Pb** | | **01 56 57.9** | **+1.1** |
| ETVZ | **East Tongariro** | **2.70** | **22** | P | | **Pn** | | **01 56 52.8** | **+1.0** |
| TMVZ | **Te Maari** | **2.72** | **21** | P | | **Pn** | | **01 56 53.1** | **+1.1** |
| KRVZ | **Karewarewa** | **2.72** | **20** | P | | **Pn** | | **01 56 53.5** | **+1.4** |
| NTVZ | **North Tongarir** | **2.73** | **21** | P | | **Pn** | | **01 56 53.2** | **+1.1** |
| KATZ | **Kakaramea** | **2.85** | **20** | P | | **Pb** | | **01 57 00.2** | **+0.8** |
| BKZ | **Black Stump Fm** | **2.94** | **33** | P | | **Pn** | | **01 56 54.1** | **-1.0** |
| WVZ | **Waitaha Valley** | **3.08** | **241** | P | | **Pb** | | **01 57 02.0** | **-1.2** |
| WATZ | **Wairara** | **3.11** | **19** | P | | **Pb** | | **01 57 04.9** | **+1.1** |
| HIZ | **Hauiti** | **3.16** | **6** | P | | **Pb** | | **01 57 00.5** | **-4.1** |
| HIZ | **Hauiti** | **3.16** | **6** | P | | **Pn** | | **01 57 00.3** | **+2.4** |
| MRHZ | **Matea Rd** | **3.20** | **29** | P | | **Pb** | | **01 57 06.3** | **+0.9** |
| RPZ | **Rata Peaks** | **3.23** | **229** | P | | **Pn** | | **01 57 01.1** | **+2.2** |
| WHHZ | **Waihua** | **3.35** | **41** | P | | **Pb** | | **01 57 05.8** | **-2.1** |
| TLZ | **Tolley Road** | **3.43** | **15** | P | | **Pb** | | **01 57 07.9** | **-1.4** |
| TMZ | **Timaru** | **3.71** | **221** | P | | **Pn** | | **01 57 04.1** | **-1.4** |
| OMRZ | **Omania** | **3.85** | **23** | P | | **Pn** | | **01 57 08.9** | **+1.5** |
| URZ | **Urewera** | **3.97** | **32** | P | | **Pn** | | **01 57 09.3** | **+0.2** |
| TOZ | **Tahuroa Road** | **4.01** | **12** | P | | **Pb** | | **01 57 15.1** | **-4.0** |
| ODZ | **Otahua Downs** | **4.37** | **218** | P | | **Pn** | | **01 57 16.3** | **+1.7** |
| MKAZ | **Moumakai** | **4.58** | **7** | P | | **Pn** | | **01 57 19.0** | **+1.5** |
| AWAZ | **Awhitu Peninsu** | **4.59** | **2** | P | | Pn | | 01 57 21.4 | +3.8 |
| JCZ | **Jackson Bay** | **4.80** | **238** | P | | **Pn** | | **01 57 24.0** | **+3.4** |
| JCZ | **Jackson Bay** | **4.80** | **238** | P | | **Pn** | | **01 57 24.4** | **+3.8** |

*IDC **20** 01:58:15.0±5.8, 17°.96S×177°.98W, h614km±69km, mb3.2/9, mbtmp4.1/9, Error ellipse: s-maj=29.8km s-min=21.0km az=92.0*
*NEIC **20** 01:58:14.6±1.1, 18°.1S±0°.1×177°.9W±0°.1, h609km±8km, mb4.2/19, Error ellipse: s-maj=25.9km s-min=9.6km az=137.0*
**ISC 20 01:58:13.3**±0.6, **18°.0S**±0°.1×**177°.9W**±0°.1, **h590**km, **n46, σ1s12/47, mb4.1/20, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.87** | **274** | P | **P** | **01 59 40.2** | **+3.0** |
| AFI | **Afiamalu** | **7.17** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.57** | **278** | P | **P** | **02 02 32.0** | **+1.2** |
| **AFI** | **Afiamalu** | **7.56** | **56** | P | **P** | **02 03 01.9** | **-3.6** |
| **NIUE** | **Niue** | **7.92** | **97** | P | **P** | **02 03 08.3** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.88** | **253** | P | **P** | **02 04 22.9** | **+2.6** |
| **DZM** | **Mont Dzumac** | **14.88** | **253** | P | **P** | **02 04 17.2** | **-3.1** |
| | 5.3nm,1.0s,baz=109,slow=18,SNR=1.7 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.65** | **259** | P | **P** | **02 04 37.5** | **-0.1** |
| **URZ** | **Urewera** | **20.36** | **191** | P | **P** | **02 05 08.9** | **-2.2** |
| | 5.1nm,0.3s,baz=348,slow=2.9,SNR=12 | | | | | | |
| | 5.1nm,0.3s | | | | | | |
| **EIDS** | **Eidsvold** | **29.31** | **251** | P | **P** | **02 06 30.1** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 02 06 48.9 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **29.92** | **240** | P | **P** | **02 06 37.0** | **+1.2** |
| **CTAO** | **Charters Tower** | **33.55** | **261** | P | **P** | **02 07 06.6** | **-0.2** |
| CTAO | | | | IAmb | IAmb | 02 07 08.9 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.09** | **231** | P | **P** | **02 07 37.0** | **+1.0** |
| TOO | | | | IAmb | IAmb | 02 08 05.8 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **COEN** | **Coen** | **37.27** | **271** | P | **P** | **02 07 37.7** | **-0.1** |
| **STKA** | **Stephens Creek** | **38.61** | **242** | P | **P** | **02 07 48.2** | **-0.2** |
| **STKA** | **Stephens Creek** | **38.61** | **242** | P | **P** | **02 07 49.3** | **+0.9** |
| | comp=Z,6.0nm,0.5s,baz=100,slow=11,SNR=13 | | | | | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.39** | **241** | P | **P** | **02 08 26.3** | **0.0** |
| **WR0** | **Warramunga Arr** | **44.54** | **260** | P | **P** | **02 08 34.8** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 02 08 50.3 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **02 08 35.7** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 02 08 36.9 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **02 08 36.1** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 02 08 37.7 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **02 08 35.5** | **-1.4** |
| **WRA** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **02 08 36.4** | **-0.6** |
| | comp=Z,6.2nm,0.5s,baz=97,slow=6.8,SNR=79 | | | | | | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.86** | **255** | P | **P** | **02 08 37.7** | **-0.2** |
| AS31 | | | | IAmb | IAmb | 02 08 38.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **44.86** | **255** | P | **P** | **02 08 37.7** | **-0.2** |
| **ASAR** | **Alice Springs** | **44.86** | **255** | P | **P** | **02 08 38.2** | **+0.4** |
| | comp=Z,43nm,0.5s,baz=89,slow=8.4,SNR=295 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 10 07.4** | **-0.4** |
| | comp=Z,1.2nm,0.5s,baz=101,slow=3.8,SNR=4.3 | | | | | | |
| ASAR | | | | S | **S** | **02 14 34.5** | **-1.3** |
| | comp=Z,1.8nm,1.0s,baz=92,slow=14,SNR=5.1 | | | | | | |
| **FORT** | **Forrest** | **50.01** | **245** | P | **P** | **02 09 16.1** | **-0.2** |
| FORT | | | | IAmb | IAmb | 02 09 46.7 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **50.62** | **264** | P | **P** | **02 09 20.4** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 02 09 21.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.13** | **261** | P | **P** | **02 09 39.2** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **57.98** | **256** | P | **P** | **02 10 12.0** | **-0.6** |
| PSA00 | | | | IAmb | IAmb | 02 10 13.2 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **58.15** | **256** | P | **P** | **02 10 13.4** | **-0.4** |
| **MORW** | **Morawa** | **60.50** | **246** | P | **P** | **02 10 28.9** | **-0.5** |
| **GIRL** | **Giralia** | **62.95** | **253** | P | **P** | **02 10 46.3** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **66.27** | **323** | P | **P** | **02 11 17.4** | **-0.9** |
| | comp=Z,4.4nm,0.7s,baz=151,slow=5.9,SNR=8.8 | | | | | | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **69.80** | **268** | P | **P** | **02 11 28.0** | **0.0** |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | **P** | **02 11 39.8** | **+0.7** |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | **P** | **02 11 40.3** | **+1.2** |
| | comp=Z,3.4nm,0.9s,baz=356,slow=1.1,SNR=13 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **SSLB** | **Suanglung** | **72.55** | **303** | P | **P** | **02 11 43.2** | **-0.7** |
| **TPUB** | **Ta-pu** | **72.57** | **302** | P | **P** | **02 11 43.2** | **-0.8** |
| TPUB | | | | IAmb | IAmb | 02 11 44.4 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.04** | **345** | P | **P** | **02 11 51.9** | **+0.2** |
| | comp=Z,4.7nm,0.7s,baz=105,slow=8.2,SNR=5.2 | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.98** | **326** | P | **P** | **02 12 10.2** | **+2.0** |
| | comp=Z,0.7nm,0.5s,baz=104,slow=6.1,SNR=1.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.55** | **44** | P | **P** | **02 12 23.8** | **+1.3** |
| | comp=Z,0.7nm,0.6s,baz=220,slow=6.9,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **M16K** | **Timber Creek** | **80.49** | **9** | P | **P** | **02 12 27.6** | **+1.1** |
| M16K | | | | IAmb | IAmb | 02 12 47.9 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **M17K** | **Holitna River** | **81.10** | **10** | P | **P** | **02 12 30.7** | **+1.1** |
| M17K | | | | IAmb | IAmb | 02 12 45.4 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.35** | **8** | P | **P** | **02 12 31.9** | **+1.0** |
| K15K | | | | IAmb | IAmb | 02 12 32.5 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **81.82** | **173** | P | **P** | **02 12 33.4** | **+0.2** |
| **L18K** | **Granite Mounta** | **81.99** | **10** | P | **P** | **02 12 34.9** | **+0.7** |
| **J16K** | **Anvik River** | **82.42** | **8** | P | **P** | **02 12 36.8** | **+0.5** |
| **J17K** | **VABM Dome** | **82.74** | **9** | P | **P** | **02 12 38.3** | **+0.4** |
| J17K | | | | IAmb | IAmb | 02 12 59.9 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| **ELK** | **Elko** | **82.79** | **43** | P | **P** | **02 12 40.2** | **+1.2** |
| | comp=Z,1.5nm,0.9s,baz=261,slow=7.8,SNR=3.9 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **K20K** | **Telida** | **83.50** | **11** | P | **P** | **02 12 41.8** | **+0.1** |
| K20K | | | | IAmb | IAmb | 02 12 43.1 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.97** | **15** | P | **P** | **02 12 44.3** | **0.0** |
| N25K | | | | IAmb | IAmb | 02 12 48.3 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **J20K** | **Nowinta River** | **84.24** | **10** | P | **P** | **02 12 45.3** | **0.0** |
| J20K | | | | IAmb | IAmb | 02 13 21.9 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.03** | **58** | P | **P** | **02 12 57.2** | **+2.2** |
| | comp=Z,0.5nm,0.8s,baz=210,slow=6.4,SNR=7.5 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.17** | **13** | P | **P** | **02 12 54.0** | **-0.7** |
| | comp=Z,0.9nm,0.7s,baz=232,slow=4.8,SNR=6.3 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.48** | **43** | P | **P** | **02 13 02.3** | **+0.6** |
| | comp=Z,0.6nm,0.7s,baz=224,slow=4.1,SNR=4.6 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.15** | **290** | P | **P** | **02 13 11.4** | **+1.8** |
| | comp=Z,1.4nm,0.4s,baz=105,slow=3.0,SNR=6.4 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **109.48** | **314** | PKiKP | **PKiKP** | **02 18 39.3** | **-0.9** |
| | comp=Z,0.3nm,0.5s,baz=33,slow=2.1,SNR=4.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.20** | **321** | PKP | **PKPdf** | **02 18 54.2** | **-0.5** |
| | comp=Z,0.9nm,0.5s,baz=178,slow=1.2,SNR=4.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.67** | **350** | PKP | **PKPdf** | **02 19 11.1** | **-1.3** |
| | comp=Z,0.9nm,0.6s,baz=64,slow=2.8,SNR=6.9 | | | | | | |
| **FINES** | **FINESS Array B** | **133.55** | **344** | PKP | **PKPdf** | **02 19 24.9** | **-0.8** |
| | comp=Z,1.4nm,0.8s,baz=100,slow=3.4,SNR=5.8 | | | | | | |
| **HFS** | **Hagfors** | **137.28** | **351** | PKhKP | PKPpre | 02 19 26.2 | |
| | comp=Z,0.6nm,0.4s,baz=69,slow=4.8,SNR=6.1 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.78** | **5** | PKhKP | PKPpre | 02 19 38.2 | |
| | comp=Z,0.2nm,0.4s,baz=332,slow=3.1,SNR=4.7 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **144.96** | **332** | | **PKPab** | **02 19 48.2** | **-0.2** |
| **BR131** | **Keskin Array S** | **145.13** | **315** | | **PKPdf** | **02 19 47.3** | **-0.2** |
| **BRTR** | **Keskin Array B** | **145.13** | **315** | PKPbc | **PKPbc** | **02 19 48.5** | **+0.1** |
| | comp=Z,2.0nm,0.7s,baz=126,slow=4.9,SNR=12 | | | | | | |
| **OSTC** | **Ostas** | **145.75** | **344** | *e*PKP | **PKPab** | **02 19 50.6** | **-0.7** |
| **CHVC** | **Chvalec** | **145.76** | **344** | *e*PKP | **PKPab** | **02 19 50.6** | **-0.8** |
| **CLL** | **Collm** | **145.82** | **347** | | **PKPbc** | **02 19 50.1** | **+0.3** |
| **UPC** | **Upice** | **145.85** | **344** | *e*PKP | **PKPbc** | **02 19 50.7** | **+0.8** |
| **DPC** | **Dobruska-Polom** | **145.91** | **343** | *e*PKP | **PKPab** | **02 19 51.2** | **-0.8** |
| **KRLC** | **Kraliky** | **146.03** | **343** | *e*PKP | **PKPbc** | **02 19 51.2** | **+0.7** |
| **PVCC** | **Panska Ves** | **146.20** | **345** | *e*PKP | **PKPbc** | **02 19 51.9** | **+1.0** |
| **MMAI** | **Mount Meron Ar** | **146.46** | **303** | PKPbc | **PKPbc** | **02 19 52.9** | **+0.6** |
| | comp=Z,2.0nm,0.4s,baz=70,slow=5.8,SNR=8.5 | | | | | | |
| **PRU** | **Pruhonice** | **146.70** | **345** | *e*PKP | **PKPbc** | **02 19 53.0** | **+0.7** |
| **KHC** | **Kasperske Hory** | **147.73** | **345** | *e*PKP | **PKiKP** | **02 19 55.9** | **-0.6** |
| **CKRC** | **Cesky Krumlov** | **147.84** | **344** | *e*PKP | **PKiKP** | **02 19 56.2** | **-0.5** |
| **GEC2** | **GERESS Array S** | **147.97** | **345** | | **PKPbc** | **02 19 55.6** | **-0.2** |
| **GERES** | **GERESS Array B** | **147.97** | **345** | PKPbc | **PKiKP** | **02 19 56.4** | **-0.7** |
| | comp=Z,2.2nm,0.6s,baz=161,slow=8.5,SNR=13 | | | | | | |
| **CONA** | **Conrad Observa** | **148.22** | **342** | *i* PKP | **PKiKP** | **02 19 57.0** | **-0.6** |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.30** | **341** | *e*PKP | **PKPbc** | **02 19 57.0** | **+0.5** |
| | comp=Z,2.8nm,0.9s,SNR=4.4 | | | | | | |
| **MOA** | **Molln** | **148.75** | **344** | *e*PKiKP | **PKiKP** | **02 20 00.8** | **+2.2** |
| | comp=Z,4.9nm,1.5s | | | | | | |
| **ARSA** | **Arzberg** | **148.94** | **342** | *i* PKiKP | **PKiKP** | **02 19 58.9** | **-0.1** |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.06** | **344** | *i* PKP | **PKPbc** | **02 19 58.6** | **+0.2** |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.54** | **345** | *i* PKP | **PKiKP** | **02 20 00.1** | **-0.3** |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **SOKA** | **Soboth** | **149.60** | **342** | *e*PKP | **PKPbc** | **02 19 58.9** | **-0.8** |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.70** | **344** | *i* PKP | **PKPbc** | **02 19 59.6** | **-0.5** |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **WATA** | **Walderalm** | **149.88** | **347** | *i* PKP | **PKPbc** | **02 19 58.0** | **-2.5** |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **OBKA** | **Obir** | **149.89** | **342** | *e*PKP | **PKPbc** | **02 19 58.7** | **-1.7** |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **RETA** | **Reutte** | **149.91** | **348** | *i* PKP | **PKPbc** | **02 20 00.4** | **0.0** |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **WTTA** | **Wattenberg** | **149.94** | **347** | *i* PKP | **PKiKP** | **02 20 01.0** | **-0.3** |
| | comp=Z,5.2nm,0.5s,SNR=8.7 | | | | | | |
| **MOTA** | **Moosalm** | **149.97** | **347** | *i* PKP | **PKPbc** | **02 19 59.5** | **-1.3** |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **MYKA** | **Terra Mystica** | **150.03** | **343** | *i* PKP | **PKPbc** | **02 20 00.6** | **-0.2** |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.07** | **347** | *i* PKP | **PKiKP** | **02 20 01.3** | **-0.2** |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.22** | **345** | *i* PKP | **PKPbc** | **02 20 00.6** | **-0.6** |
| | comp=Z,4.5nm,0.6s,SNR=7.0 | | | | | | |
| **PRED** | **Cave del Predi** | **150.23** | **343** | PKPab | **PKPab** | **02 20 09.0** | **-0.8** |
| **DAVA** | **Damuels** | **150.27** | **349** | *i* PKP | **PKPbc** | **02 20 01.4** | **0.0** |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **FETA** | **Feichten** | **150.36** | **348** | *i* PKiKP | **PKiKP** | **02 20 02.1** | **0.0** |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **STAL** | **STALIGIAL** | **150.62** | **344** | | **PKPbc** | **02 20 01.6** | **-0.5** |
| **FUORN** | **Ofenpass-Fuorn** | **150.84** | **348** | PKPbc | **PKiKP** | **02 20 03.2** | **-0.1** |

*CATAC* ***20*** *02:02:15.7±1.1,8.34N×83.20W,h1km±4km,ML3.6*
*UPA* ***20*** *02:02:16.5±1.5,8.46N×83.16W,h8km±13km,ML3.7*
*UCR* ***20*** *02:02:16.8±0.5,8.43N×83.15W,h9km±2km,MW3.7*

**ISC 20 02:02:15.8±1.2,8.42N±0.05×83.18W±0.03,h15km±7km,**
**n45,σ0.80/61,4D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIME** | **Puerto Jimenez** | **0.19** | **309** | *e*P | **Pb** | **02 02 21.5** | **+0.5** |
| **FITO** | **Golfito** | **0.21** | **6** | *e*P | **Pg** | **02 02 20.7** | **0.0** |
| FITO | | | | *e*S | **Sg** | **02 02 23.7** | **0.1** |
| **EDAD** | **Golfito** | **0.23** | **3** | *e*P | **Pg** | **02 02 21.1** | **0.0** |
| **NELY** | **Ciudad Neily** | **0.32** | **45** | *e*P | **Pb** | **02 02 23.3** | **0.0** |
| NELY | | | | *e*S | **Sb** | **02 02 28.4** | **0.0** |
| **CDITO** | **Canoas** | **0.34** | **63** | *i* P | **Pb** | **02 02 23.5** | **-0.1** |
| CDITO | | | | *i* S | **Sb** | **02 02 29.0** | **+0.2** |
| CDITO | | | | IAML | | 02 02 33.0 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **PTPM** | **Petroterminale** | **0.36** | **126** | *e*P | **Pn** | **02 02 25.4** | **-1.2** |
| PTPM | | | | *e*S | **Sn** | **02 02 34.1** | **+0.7** |
| **VITO** | **San Vito** | **0.45** | **27** | *e*P | **Pb** | **02 02 25.7** | **+0.2** |
| **MLIR3** | **Monte Lirio, C** | **0.51** | **43** | ⇓*e*P | **Pb** | **02 02 26.9** | **+0.3** |
| MLIR3 | | | | *e*S | **Sn** | **02 02 36.1** | **-1.1** |
| **EDP2** | **Potrero Grande** | **0.59** | **0** | *e*P | **Pb** | **02 02 28.1** | **+0.2** |
| **EDPN** | **Palmar Norte** | **0.61** | **333** | *e*P | **Pg** | **02 02 27.2** | **-0.6** |
| **BRU2** | **Volcan** | **0.61** | **52** | *i* P | **Pb** | **02 02 28.3** | **+0.1** |
| BRU2 | | | | IAML | | 02 02 28.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| BRU2 | | | | *i* S | **Sb** | **02 02 37.3** | **+0.6** |
| **BRU2** | **Volcan** | **0.61** | **52** | ⇓*e*P | **Pb** | **02 02 28.4** | **+0.1** |
| BRU2 | | | | AMP | | 02 02 28.6 | |
| | comp=Z,5μm,0.3s | | | | | | |
| BRU2 | | | | *e*S | **Sb** | **02 02 37.3** | **+0.6** |
| **BRU2** | **Volcan** | **0.61** | **52** | *e*P | **Pb** | **02 02 28.4** | **+0.1** |
| **BCO2** | **Palmira** | **0.71** | **65** | ⇓*e*P | **Pb** | **02 02 30.1** | **+0.1** |
| BCO2 | | | | *e*S | **Sb** | **02 02 39.9** | **+0.4** |
| **DVD** | **David** | **0.72** | **89** | *e*P | **Pb** | **02 02 30.2** | **+0.1** |
| DVD | | | | *e*S | **Sb** | **02 02 41.0** | **+1.3** |
| **EDBA** | **Buenos Aires** | **0.74** | **353** | *e*P | **Pb** | **02 02 30.6** | **0.0** |
| **PEDE3** | **Pedregal, Chir** | **0.75** | **93** | *e*P | **Pb** | **02 02 30.9** | **+0.4** |
| PEDE3 | | | | *e*S | **Sb** | **02 02 41.5** | **+0.9** |
| **LOCO3** | **Loma Colorada,** | **0.75** | **91** | *e*P | **Pb** | **02 02 30.9** | **+0.3** |
| LOCO3 | | | | *e*S | **Sn** | **02 02 42.3** | **-0.6** |
| **BURE** | **Buenos Aires** | **0.77** | **348** | *e*P | **Pb** | **02 02 30.9** | **0.0** |
| **LNBQ3** | **Los Naranjos,** | **0.82** | **63** | *e*P | **Pg** | **02 02 31.3** | **-0.5** |
| LNBQ3 | | | | *e*S | **Sn** | **02 02 44.5** | **-0.3** |
| **OCHAL** | **Ojochal** | **0.82** | **326** | *i* S | **Sn** | **02 02 44.8** | **+0.2** |
| **DRK0** | **Durika** | **0.84** | **355** | ⇓*e*P | **Pg** | **02 02 31.8** | **-0.4** |
| DRK0 | | | | *e*S | **Sn** | **02 02 45.3** | **-0.2** |
| **DRK0** | **Durika** | **0.84** | **355** | *e*P | **Pg** | **02 02 31.8** | **-0.4** |
| **BUS1** | **Rivas** | **1.26** | **334** | *e*P | **Pn** | **02 02 39.0** | **-0.3** |
| **ABE2** | **San Pablo** | **1.54** | **326** | *e*P | **Pb** | **02 02 44.5** | **+0.3** |
| **LCR2** | **La Lucha 2** | **1.55** | **328** | *i* P | **Pb** | **02 02 43.8** | **-0.5** |
| LCR2 | | | | *i* S | **Sg** | **02 03 05.8** | **-0.1** |
| LCR2 | | | | IAML | | 02 03 07.7 | |
| | comp=Z,400nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.55** | **328** | *e*P | **Pn** | **02 02 43.5** | **+0.4** |
| **VTCV** | **VTCV, Calle Va** | **1.65** | **341** | *e*P | **Pb** | **02 02 45.7** | **-0.3** |
| **RAFA** | **San Farael, Vo** | **1.65** | **338** | *i* P | **Pb** | **02 02 45.8** | **-0.4** |
| RAFA | | | | IAML | | 02 03 14.0 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.65** | **338** | *e*P | **Pb** | **02 02 46.0** | **-0.2** |
| **CVTV** | **Tajo** | **1.67** | **340** | *e*P | **Pb** | **02 02 46.5** | **-0.1** |
| **CVTQ** | **Turrialba Volc** | **1.68** | **340** | *e*P | **Pb** | **02 02 46.5** | **-0.2** |
| **VTLA** | **Turrialba Volc** | **1.68** | **339** | *e*P | **Pb** | **02 02 46.4** | **-0.3** |
| **VICA** | **Volcano Irazu** | **1.69** | **337** | *e*P | **Pb** | **02 02 46.5** | **-0.4** |
| **VTR0** | **Volcan Turrial** | **1.69** | **340** | *e*P | **Pb** | **02 02 46.8** | **-0.1** |
| **CVTR** | **Volcan Turrial** | **1.69** | **340** | *e*P | **Pb** | **02 02 46.8** | **-0.1** |
| **LCOCO** | **El Coco** | **1.70** | **347** | *e*P | **Pb** | **02 02 46.9** | **+0.1** |
| **IRES** | **Siquirres** | **1.70** | **349** | *e*P | **Pb** | **02 02 47.2** | **+0.5** |
| **RVLA** | **Villa Bonita** | **1.73** | **346** | *e*P | **Pb** | **02 02 46.7** | **-0.5** |
| **HDC3** | **Heredia 3** | **1.82** | **330** | *i* P | **Pb** | **02 02 49.2** | **+0.2** |
| HDC3 | | | | *i* S | **Sg** | **02 03 14.9** | **+0.3** |
| HDC3 | | | | IAML | | 02 03 22.0 | |
| | comp=Z,740nm,1.0s | | | | | | |
| **HDC** | **Heredia** | **1.82** | **330** | *e*P | **Pb** | **02 02 49.5** | **+0.4** |
| **ARE1** | **Arenal 1** | **2.54** | **323** | *e*P | **Pb** | **02 03 00.8** | **-0.3** |
| **INDI** | **Punta indio, G** | **2.71** | **302** | *i* P | **Pn** | **02 03 00.6** | **+1.8** |
| INDI | | | | IAML | | 02 03 55.5 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **ALIBA** | **Liberia Airpor** | **3.18** | **313** | *e*P | **Pb** | **02 03 10.6** | **-1.4** |
| **BCIP** | **Isla Barro Col** | **3.38** | **77** | *i* P | **Pn** | **02 03 10.4** | **+2.3** |
| BCIP | | | | *i* S | **Sb** | **02 03 52.6** | **-3.9** |
| BCIP | | | | IAML | | 02 04 24.2 | |
| | comp=Z,70nm,1.0s | | | | | | |

**ROM 20 02:05:28.6±0.1,43.323N×0.002×12.683E±0.003,**
**h9km,ML0.8/12,5C-2D,Error ellipse: s-maj=0.2km**
**s-min=0.1km az=289.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FOSV** | **Fossato di Vic** | **0.06** | **116** | P | **Pg** | **02 05 30.9** | **+0.3** |
| FOSV | | | | S | **Sg** | **02 05 32.4** | **+0.2** |
| FOSV | | | | AML | AML | | |
| | comp=E,115μm,0.3s | | | | | | |
| FOSV | | | | AML | AML | | |
| | comp=N,77μm,0.6s | | | | | | |
| **ATFO** | **Monte Foce - G** | **0.09** | **298** | P | **Pg** | **02 05 31.5** | **+0.4** |
| ATFO | | | | S | **Sg** | **02 05 33.4** | **+0.5** |
| **MURB** | **Monte Urbino** | **0.13** | **243** | ⇑P | **Pg** | **02 05 32.1** | **+0.5** |
| MURB | | | | S | **Sg** | **02 05 34.6** | **+0.9** |
| MURB | | | | AML | AML | | |
| | comp=E,124μm,0.3s | | | | | | |
| MURB | | | | AML | AML | | |
| | comp=N,91μm,0.4s | | | | | | |
| **ATCC** | **AVT- Casa Cast** | **0.14** | **193** | P | **Pg** | **02 05 32.3** | **+0.5** |
| ATCC | | | | S | **Sg** | **02 05 34.9** | **+1.0** |
| ATCC | | | | AML | AML | | |
| | comp=E,80μm,0.2s | | | | | | |
| ATCC | | | | AML | AML | | |
| | comp=N,71μm,0.3s | | | | | | |
| **FRON** | **Frontone** | **0.20** | **9** | ⇑P | **Pg** | **02 05 33.2** | **+0.5** |
| FRON | | | | S | **Sg** | **02 05 36.9** | **+1.4** |
| FRON | | | | AML | AML | | |
| | comp=E,46μm,0.1s | | | | | | |
| FRON | | | | AML | AML | | |
| | comp=E,46μm,0.1s | | | | | | |
| FRON | | | | AML | AML | | |
| | comp=N,58μm,0.8s | | | | | | |
| **ATVO** | **AVT- Monte Val** | **0.21** | **286** | ⇑P | **Pg** | **02 05 33.5** | **+0.6** |
| ATVO | | | | S | **Sg** | **02 05 37.1** | **+1.2** |
| ATVO | | | | AML | AML | | |
| | comp=E,25μm,0.3s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=N,18μm,1.2s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=E,25μm,0.3s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=N,18μm,0.8s | | | | | | |
| **PIEI** | **Pieia** | **0.24** | **333** | ⇓P | **Pg** | **02 05 34.2** | **+0.7** |
| PIEI | | | | S | **Sg** | **02 05 38.1** | **+1.4** |
| **ARVD** | **Arcevia** | **0.26** | **47** | ⇑P | **Pg** | **02 05 34.4** | **+0.6** |
| ARVD | | | | S | **Sb** | **02 05 39.1** | **-0.8** |
| **NARO** | **Abbazia di Nar** | **0.30** | **346** | ⇑P | **Pg** | **02 05 35.1** | **+0.6** |
| NARO | | | | S | **Sb** | **02 05 40.2** | **-0.8** |
| NARO | | | | AML | AML | | |
| | comp=N,14μm,0.9s | | | | | | |
| NARO | | | | AML | AML | | |
| | comp=E,16μm,1.6s | | | | | | |
| NARO | | | | AML | AML | | |
| | comp=N,14μm,1.1s | | | | | | |
| **EL6** | **Elcito** | **0.31** | **89** | ⇓P | **Pg** | **02 05 35.3** | **+0.6** |

**ROM 20 02:06:10.2±0.1,42.797N×0.002×13.132E±0.004,**
**h10km,ML2.3/108,15C-10D,Error ellipse: s-maj=0.3km**
**s-min=0.2km az=63.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NRCA** | **Norcia** | **0.04** | **340** | P | **Pg** | **02 06 12.8** | **+0.4** |
| NRCA | | | | S | **Sg** | **02 06 14.3** | **+0.5** |
| NRCA | | | | AML | AML | | |
| | comp=E,16200μm,0.4s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,10705μm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,16200μm,0.3s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,17200μm,0.3s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,11700μm,1.6s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,10710μm,0.1s | | | | | | |
| **MC2** | **Monte Cornacci** | **0.12** | **20** | ⇑P | **Pg** | **02 06 13.8** | **+0.4** |
| MC2 | | | | S | **Sg** | **02 06 16.4** | **+0.7** |
| **FEMA** | **Monte Fema** | **0.18** | **340** | ⇓P | **Pg** | **02 06 14.6** | **+0.4** |
| FEMA | | | | S | **Sg** | **02 06 17.6** | **+0.7** |
| FEMA | | | | AML | AML | | |
| | comp=E,10140μm,0.2s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,6815μm,0.1s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=E,10140μm,0.2s | | | | | | |
| **MMO1** | **Montemonaco** | **0.18** | **54** | ⇑P | **Pg** | **02 06 14.6** | **+0.5** |
| MMO1 | | | | S | **Sg** | **02 06 17.7** | **+0.9** |
| **MTRA** | **Matera** | **0.20** | **102** | ⇓P | **Pg** | **02 06 15.0** | **+0.6** |
| MTRA | | | | S | **Sg** | **02 06 19.0** | **+1.6** |
| MTRA | | | | AML | AML | | |
| | comp=E,1665μm,0.1s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,1490μm,0.2s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,1490μm,0.2s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,1745μm,0.1s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,1665μm,0.1s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,1435μm,0.2s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,1309μm,0.3s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=E,755μm,0.2s | | | | | | |
| MTRA | | | | AML | AML | | |
| | comp=N,1203μm,0.0s | | | | | | |
| **LNSS** | **Leonessa** | **0.21** | **199** | ⇑P | **Pg** | **02 06 15.3** | **+0.7** |
| LNSS | | | | S | **Sg** | **02 06 19.2** | **+1.6** |
| LNSS | | | | AML | AML | | |
| | comp=N,2695μm,1.4s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=E,3070μm,0.2s | | | | | | |
| LNSS | | | | AML | AML | | |
| | comp=N,1502μm,0.1s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.22** | **138** | ⇓P | **Pg** | **02 06 15.6** | **+0.6** |
| SMA1 | | | | S | **Sg** | **02 06 19.2** | **+1.1** |
| SMA1 | | | | AML | AML | | |
| | comp=E,1700μm,0.7s | | | | | | |
| SMA1 | | | | AML | AML | | |
| | comp=N,1600μm,0.9s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.24** | **352** | ⇑P | **Pg** | **02 06 15.6** | **+0.3** |
| FDMO | | | | S | **Sg** | **02 06 19.4** | **+0.8** |
| **CESI** | **CESI - Serrava** | **0.27** | **321** | ⇓P | **Pg** | **02 06 16.0** | **+0.3** |
| CESI | | | | S | **Sg** | **02 06 20.2** | **+0.8** |
| CESI | | | | AML | AML | | |
| | comp=N,2315μm,0.4s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=E,1530

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TERO** | **Teramo** | **0.39** | **116** | ⇑P | Pg | 02 06 18.1 | +0.2 | |
| TERO | | | | S | Sb | 02 06 24.3 | -0.9 | |
| TERO | | | | AML | AML | | | |
| | comp=N,283μm,0.5s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=E,482μm,1.1s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=N,652μm,1.5s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=N,283μm,1.5s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=E,482μm,0.9s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=E,280μm,0.7s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=E,352μm,0.1s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=N,224μm,0.2s | | | | | | | |
| TERO | | | | AML | AML | | | |
| | comp=E,223μm,0.3s | | | | | | | |
| **MOMA** | **Monte Martano** | **0.41** | **271** | ⇓P | Pg | 02 06 18.7 | +0.3 | |
| MOMA | | | | S | Sb | 02 06 25.2 | -0.8 | |
| MOMA | | | | AML | AML | | | |
| | comp=E,2520μm,0.2s | | | | | | | |
| MOMA | | | | AML | AML | | | |
| | comp=N,1312μm,0.5s | | | | | | | |
| MOMA | | | | AML | AML | | | |
| | comp=N,1310μm,0.5s | | | | | | | |
| MOMA | | | | AML | AML | | | |
| | comp=N,1275μm,0.5s | | | | | | | |
| MOMA | | | | AML | AML | | | |
| | comp=N,1275μm,1.5s | | | | | | | |
| MOMA | | | | AML | AML | | | |
| | comp=E,2790μm,0.2s | | | | | | | |
| MOMA | | | | AML | AML | | | |
| | comp=N,1310μm,1.5s | | | | | | | |
| **MNTP** | **Montappone** | **0.42** | **36** | P | Pb | 02 06 19.3 | -0.4 | |
| **GAG1** | **Gagliole** | **0.44** | **354** | P | Pg | 02 06 19.2 | +0.3 | |
| GAG1 | | | | S | Sb | 02 06 26.2 | -0.6 | |
| **GIGS** | **Gran Sasso** | **0.47** | **137** | P | Pg | 02 06 19.4 | -0.1 | |
| GIGS | | | | S | Sg | 02 06 26.7 | +0.9 | |
| GIGS | | | | AML | AML | | | |
| | comp=E,192μm,0.4s | | | | | | | |
| GIGS | | | | AML | AML | | | |
| | comp=N,209μm,0.2s | | | | | | | |
| **SNTG** | **Esanatoglia** | **0.48** | **343** | P | Pg | 02 06 19.6 | 0.0 | |
| SNTG | | | | S | Sg | 02 06 26.8 | +0.9 | |
| SNTG | | | | AML | AML | | | |
| | comp=N,538μm,0.6s | | | | | | | |
| SNTG | | | | AML | AML | | | |
| | comp=N,574μm,0.6s | | | | | | | |
| SNTG | | | | AML | AML | | | |
| | comp=E,505μm,0.1s | | | | | | | |
| SNTG | | | | AML | AML | | | |
| | comp=N,538μm,0.6s | | | | | | | |
| SNTG | | | | AML | AML | | | |
| | comp=E,245μm,0.5s | | | | | | | |
| SNTG | | | | AML | AML | | | |
| | comp=N,574μm,1.4s | | | | | | | |
| SNTG | | | | AML | AML | | | |
| | comp=N,538μm,1.4s | | | | | | | |
| **FIAM** | **Fiamignano** | **0.53** | **181** | ⇑P | Pg | 02 06 20.6 | +0.1 | |
| FIAM | | | | S | Sb | 02 06 28.8 | -0.5 | |
| FIAM | | | | AML | AML | | | |
| | comp=N,322μm,0.4s | | | | | | | |
| FIAM | | | | AML | AML | | | |
| | comp=E,508μm,0.4s | | | | | | | |
| **ATCC** | **AVT- Casa Cast** | **0.53** | **317** | ⇓P | Pg | 02 06 20.6 | 0.0 | |
| ATCC | | | | S | Sb | 02 06 28.7 | -0.6 | |
| ATCC | | | | AML | AML | | | |
| | comp=E,626μm,0.1s | | | | | | | |
| ATCC | | | | AML | AML | | | |
| | comp=N,597μm,0.3s | | | | | | | |
| ATCC | | | | AML | AML | | | |
| | comp=N,597μm,1.7s | | | | | | | |
| ATCC | | | | AML | AML | | | |
| | comp=E,626μm,1.9s | | | | | | | |
| **EL6** | **Elcito** | **0.53** | **358** | ⇑P | Pg | 02 06 20.5 | -0.1 | |
| EL6 | | | | S | Sb | 02 06 28.9 | -0.6 | |
| EL6 | | | | AML | AML | | | |
| | comp=E,884μm,0.3s | | | | | | | |
| EL6 | | | | AML | AML | | | |
| | comp=N,614μm,1.0s | | | | | | | |
| EL6 | | | | AML | AML | | | |
| | comp=N,614μm,1.0s | | | | | | | |
| EL6 | | | | AML | AML | | | |
| | comp=E,884μm,0.3s | | | | | | | |
| **FOSV** | **Fossato di Vic** | **0.57** | **331** | P | Pg | 02 06 21.1 | -0.2 | |
| FOSV | | | | S | Sb | 02 06 29.6 | -0.8 | |
| FOSV | | | | AML | AML | | | |
| | comp=E,256μm,1.2s | | | | | | | |
| FOSV | | | | AML | AML | | | |
| | comp=N,390μm,0.5s | | | | | | | |
| FOSV | | | | AML | AML | | | |
| | comp=N,390μm,1.5s | | | | | | | |
| **TRTR** | **Tortoreto Alto** | **0.57** | **89** | P | Pg | 02 06 21.9 | +0.5 | |
| TRTR | | | | AML | AML | | | |
| | comp=E,1037μm,0.7s | | | | | | | |
| TRTR | | | | AML | AML | | | |
| | comp=N,1076μm,0.4s | | | | | | | |
| TRTR | | | | AML | AML | | | |
| | comp=E,1037μm,1.3s | | | | | | | |
| **CING** | **Cingoli** | **0.58** | **5** | ⇑P | Pg | 02 06 21.4 | -0.2 | |
| CING | | | | S | Sb | 02 06 30.4 | -0.4 | |
| CING | | | | AML | AML | | | |
| | comp=N,258μm,0.2s | | | | | | | |
| CING | | | | AML | AML | | | |
| | comp=E,305μm,0.2s | | | | | | | |
| **MURB** | **Monte Urbino** | **0.64** | **316** | P | Pg | 02 06 22.9 | +0.2 | |
| MURB | | | | AML | AML | | | |
| | comp=E,710μm,1.0s | | | | | | | |
| MURB | | | | AML | AML | | | |
| | comp=N,625μm,1.0s | | | | | | | |
| MURB | | | | AML | AML | | | |
| | comp=N,744μm,0.2s | | | | | | | |
| MURB | | | | AML | AML | | | |
| | comp=E,735μm,0.6s | | | | | | | |
| MURB | | | | AML | AML | | | |
| | comp=N,625μm,1.0s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.66** | **127** | P | Pg | 02 06 23.2 | +0.1 | |
| VCEL | | | | AML | AML | | | |
| | comp=E,338μm,0.3s | | | | | | | |
| VCEL | | | | AML | AML | | | |
| | comp=N,404μm,0.2s | | | | | | | |
| **PP3** | **Marolino** | **0.68** | **31** | P | Pb | 02 06 23.8 | -0.3 | |
| **SSFR** | **Montelago di S** | **0.69** | **338** | P | Pg | 02 06 23.5 | 0.0 | |
| SSFR | | | | S | Sb | 02 06 33.6 | -0.3 | |
| SSFR | | | | AML | AML | | | |
| | comp=E,780μm,0.8s | | | | | | | |
| SSFR | | | | AML | AML | | | |
| | comp=E,676μm,0.8s | | | | | | | |
| SSFR | | | | AML | AML | | | |
| | comp=E,676μm,1.2s | | | | | | | |
| SSFR | | | | AML | AML | | | |
| | comp=N,691μm,0.2s | | | | | | | |
| SSFR | | | | AML | AML | | | |
| | comp=E,780μm,1.2s | | | | | | | |
| SSFR | | | | AML | AML | | | |
| | comp=N,594μm,0.7s | | | | | | | |
| **ATTE** | **AVT- Monte Tez** | **0.70** | **305** | ⇑P | Pg | 02 06 23.7 | 0.0 | |
| **ATFO** | **Monte Foce - G** | **0.70** | **324** | P | Pg | 02 06 23.7 | -0.1 | |
| ATFO | | | | S | Sb | 02 06 33.9 | -0.4 | |
| **ATSC** | **Scheggia e Pas** | **0.71** | **333** | P | Pg | 02 06 23.3 | -0.6 | |
| **ARVD** | **Arcevia** | **0.71** | **349** | ⇓P | Pg | 02 06 23.8 | -0.3 | |
| ARVD | | | | S | Sb | 02 06 34.6 | 0.0 | |
| ARVD | | | | AML | AML | | | |
| | comp=E,222μm,0.3s | | | | | | | |
| ARVD | | | | AML | AML | | | |
| | comp=N,184μm,1.4s | | | | | | | |
| ARVD | | | | AML | AML | | | |
| | comp=E,222μm,1.7s | | | | | | | |
| **ATLO** | **AVT- Montelove** | **0.74** | **315** | P | Pg | 02 06 24.2 | -0.4 | |
| ATLO | | | | S | Sb | 02 06 35.2 | -0.2 | |
| **T0110** | **Collepietro** | **0.74** | **140** | ⇓P | Pg | 02 06 24.2 | -0.4 | |
| T0110 | | | | S | Sg | 02 06 34.8 | +0.5 | |
| T0110 | | | | AML | AML | | | |
| | comp=N,467μm,0.5s | | | | | | | |
| T0110 | | | | AML | AML | | | |
| | comp=E,361μm,0.3s | | | | | | | |
| T0110 | | | | AML | AML | | | |
| | comp=N,467μm,1.5s | | | | | | | |
| **FRON** | **Frontone** | **0.78** | **338** | P | Pg | 02 06 24.8 | -0.4 | |
| FRON | | | | S | Sb | 02 06 36.2 | -0.3 | |
| FRON | | | | AML | AML | | | |
| | comp=E,280μm,0.2s | | | | | | | |
| FRON | | | | AML | AML | | | |
| | comp=N,328μm,0.2s | | | | | | | |
| **ATVA** | **AVT- Monte Val** | **0.79** | **308** | P | Pg | 02 06 25.5 | +0.1 | |
| **ATVO** | **AVT- Monte Val** | **0.79** | **318** | P | Pg | 02 06 25.0 | -0.5 | |
| ATVO | | | | S | Sb | 02 06 36.7 | -0.1 | |
| ATVO | | | | AML | AML | | | |
| | comp=E,112μm,0.8s | | | | | | | |
| ATVO | | | | AML | AML | | | |
| | comp=N,112μm,0.7s | | | | | | | |
| ATVO | | | | AML | AML | | | |
| | comp=N,112μm,1.3s | | | | | | | |
| **PTQR** | **Pietraquaria** | **0.80** | **166** | P | Pg | 02 06 25.1 | -0.5 | |
| **ATBU** | **Serra di Buran** | **0.80** | **328** | P | Pg | 02 06 25.5 | -0.2 | |
| ATBU | | | | S | Sb | 02 06 37.1 | -0.1 | |
| **MTCE** | **Montecelio** | **0.83** | **201** | P | Pg | 02 06 25.6 | -0.6 | |
| MTCE | | | | AML | AML | | | |
| | comp=E,65μm,0.9s | | | | | | | |
| MTCE | | | | AML | AML | | | |
| | comp=N,63μm,0.5s | | | | | | | |
| MTCE | | | | AML | AML | | | |
| | comp=N,63μm,1.5s | | | | | | | |
| **AOI** | **Ancona** | **0.83** | **24** | P | Pg | 02 06 26.3 | +0.1 | |
| AOI | | | | S | Sb | 02 06 38.8 | +0.9 | |
| **ATMI** | **Monte Miggiano** | **0.83** | **311** | P | Pg | 02 06 26.2 | -0.1 | |
| ATMI | | | | AML | AML | | | |
| | comp=N,253μm,0.3s | | | | | | | |
| ATMI | | | | AML | AML | | | |
| | comp=E,244μm,0.5s | | | | | | | |
| **COR1** | **Corinaldo** | **0.84** | **353** | P | Pb | 02 06 26.9 | +0.1 | |
| **ATPC** | **Poggio Castell** | **0.84** | **324** | P | Pg | 02 06 26.3 | -0.2 | |
| **ATPI** | **Pietralunga -** | **0.84** | **321** | P | Pg | 02 06 26.1 | -0.4 | |
| ATPI | | | | S | Sg | 02 06 37.5 | 0.0 | |
| ATPI | | | | AML | AML | | | |
| | comp=E,140μm,1.0s | | | | | | | |
| ATPI | | | | AML | AML | | | |
| | comp=E,140μm,1.0s | | | | | | | |
| ATPI | | | | AML | AML | | | |
| | comp=N,101μm,0.4s | | | | | | | |
| ATPI | | | | AML | AML | | | |
| | comp=E,105μm,0.3s | | | | | | | |
| **CERT** | **Cerreto** | **0.85** | **188** | P | Pg | 02 06 26.0 | -0.7 | |
| CERT | | | | AML | AML | | | |
| | comp=E,170μm,1.4s | | | | | | | |
| CERT | | | | AML | AML | | | |
| | comp=N,138μm,0.3s | | | | | | | |
| **PIEI** | **Pieia** | **0.86** | **330** | P | Pg | 02 06 26.3 | -0.4 | |
| PIEI | | | | AML | AML | | | |
| | comp=E,176μm,1.2s | | | | | | | |
| PIEI | | | | AML | AML | | | |
| | comp=N,127μm,0.2s | | | | | | | |
| PIEI | | | | AML | AML | | | |
| | comp=E,176μm,0.8s | | | | | | | |
| **MPAG** | **Monte Paganucc** | **0.88** | **342** | P | Pg | 02 06 27.0 | -0.1 | |
| MPAG | | | | S | Sg | 02 06 38.8 | +0.3 | |
| MPAG | | | | AML | AML | | | |
| | comp=E,339μm,1.6s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=N,388μm,1.6s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=E,170μm,0.3s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=N,142μm,0.3s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=N,388μm,0.4s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=E,339μm,0.4s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=N,142μm,1.7s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=E,184μm,1.5s | | | | | | | |
| MPAG | | | | AML | AML | | | |
| | comp=N,90μm,0.3s | | | | | | | |
| **SACS** | **San Casciano d** | **0.90** | **274** | P | Pg | 02 06 27.5 | -0.1 | |
| SACS | | | | AML | AML | | | |
| | comp=N,95μm,0.4s | | | | | | | |
| SACS | | | | AML | AML | | | |
| | comp=E,73μm,0.7s | | | | | | | |
| **NARO** | **Abbazia di Nar** | **0.91** | **334** | P | Pg | 02 06 27.1 | -0.6 | |
| NARO | | | | AML | AML | | | |
| | comp=E,65μm,0.3s | | | | | | | |
| NARO | | | | AML | AML | | | |
| | comp=E,79μm,0.8s | | | | | | | |
| **APEC** | **Apecchio** | **0.92** | **326** | P | Pg | 02 06 27.6 | -0.4 | |
| APEC | | | | S | Sb | 02 06 40.7 | +0.1 | |
| APEC | | | | AML | AML | | | |
| | comp=N,158μm,0.3s | | | | | | | |
| APEC | | | | AML | AML | | | |
| | comp=E,150μm,0.4s | | | | | | | |
| **ATMC** | **Monte Cedrone** | **0.95** | **314** | P | Pg | 02 06 28.0 | -0.5 | |
| **RCAV** | **Rocca di Cave** | **0.96** | **188** | P | Pg | 02 06 28.4 | -0.3 | |
| **BADI** | **Badiali** | **0.96** | **318** | P | Pb | 02 06 28.9 | -0.1 | |
| **INTR** | **Introdacqua** | **0.97** | **144** | P | Pg | 02 06 27.7 | -1.2 | |
| INTR | | | | AML | AML | | | |
| | comp=N,216μm,0.5s | | | | | | | |
| INTR | | | | AML | AML | | | |
| | comp=E,87μm,0.6s | | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.99** | **158** | P | Pg | 02 06 29.2 | -0.1 | |
| **CAFI** | **Castiglion Fio** | **1.01** | **302** | P | Pg | 02 06 29.2 | -0.4 | |
| CAFI | | | | AML | AML | | | |
| | comp=E,39μm,1.2s | | | | | | | |
| CAFI | | | | AML | AML | | | |
| | comp=N,38μm,1.5s | | | | | | | |
| CAFI | | | | AML | AML | | | |
| | comp=N,38μm,0.5s | | | | | | | |
| **PE3** | **Peglio** | **1.01** | **333** | P | Pg | 02 06 29.5 | -0.2 | |
| PE3 | | | | AML | AML | | | |
| | comp=N,620μm,0.4s | | | | | | | |
| PE3 | | | | AML | AML | | | |
| | comp=E,496μm,0.5s | | | | | | | |
| PE3 | | | | AML | AML | | | |
| | comp=N,620μm,1.6s | | | | | | | |
| **SF11** | **Podere del Sol** | **1.07** | **274** | P | Pb | 02 06 30.9 | 0.0 | |
| **MCIV** | **Monte Civitell** | **1.07** | **269** | P | Pg | 02 06 30.2 | -0.7 | |
| **PARC** | **Parchiule** | **1.07** | **323** | P | Pg | 02 06 30.3 | -0.6 | |
| PARC | | | | AML | AML | | | |
| | comp=E,64μm,0.9s | | | | | | | |
| PARC | | | | AML | AML | | | |
| | comp=N,57μm,0.6s | | | | | | | |
| PARC | | | | AML | AML | | | |
| | comp=E,64μm,1.1s | | | | | | | |
| **LPEL** | **Lama dei Pelig** | **1.08** | **134** | P | Pg | 02 06 29.7 | -1.3 | |
| LPEL | | | | AML | AML | | | |
| | comp=E,122μm,0.9s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=N,106μm,1.4s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=E,122μm,1.1s | | | | | | | |
| LPEL | | | | AML | AML | | | |
| | comp=N,106μm,0.6s | | | | | | | |
| **SF13** | **Bagnolo** | **1.11** | **272** | P | Pg | 02 06 31.7 | +0.1 | |
| **SF14** | **Selvena** | **1.12** | **268** | P | Pb | 02 06 30.3 | -1.3 | |
| **SF01** | **Poggio Pratacc** | **1.16** | **271** | P | Pb | 02 06 31.9 | -0.4 | |
| **POFI** | **Posta Fibreno** | **1.16** | **158** | P | Pb | 02 06 31.8 | -0.6 | |
| **LAV9** | **Lanuvio** | **1.16** | **196** | P | Pb | 02 06 31.8 | -0.6 | |
| **LRP** | **Arpino** | **1.20** | **163** | P | Pg | 02 06 33.7 | +0.5 | |
| **ARCI** | **Arcidosso** | **1.22** | **273** | P | Pn | 02 06 32.0 | -1.3 | |
| **LATB** | **Latina** | **1.31** | **186** | P | Pn | 02 06 34.1 | -0.4 | |
| **OBKA** | **Obir** | **3.85** | **15** | *i* Pn | Pg | 02 07 21.6 | -2.3 | |
| | comp=N,0.7nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **3.97** | **354** | *e*Pn | Pn | 02 07 13.2 | +2.0 | |
| | comp=N,0.1nm,0.1s | | | | | | | |
| **FETA** | **Feichten** | **4.55** | **339** | *e*Pn | Pn | 02 07 17.8 | -1.5 | |
| **WATA** | **Walderalm** | **4.67** | **347** | *e*Pn | Pn | 02 07 23.9 | +3.1 | |
| | comp=N,0.4nm,0.2s | | | | | | | |
| **MOA** | **Molln** | **5.12** | **9** | *i* Pn | Pn | 02 07 27.8 | +1.0 | |
| | comp=N,0.3nm,0.3s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **5.39** | **23** | *i* Pn | Pn | 02 07 30.7 | +0.1 | |
| | comp=N,0.4nm,0.2s | | | | | | | |
| **CONA** | **Conrad Observa** | **5.48** | **20** | *e*Pn | Pn | 02 07 31.3 | -0.6 | |
| | comp=N,0.1nm,0.2s | | | | | | | |

*TEH* ***20*** *02:12:56.8,34.°59N×43.°69E,h10km,ML3.2*
*ISN* ***20*** *02:12:59.7±1.0,34.°61N×43.°81E,h18km±44km,ML3.0*
**ISC 20 02:12:59.2**±1.8,**34.°64N**±0.°05×**43.°9E**±0.°1,**h10**km,**n10,**
**σ1s61/14,Iraq**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKRK** | **Kirkuk** | **0.85** | **27** | *e*Pg | **Pn** | **02 13 17.0** | **-0.2** |
| IKRK | | | | *e*Sg | **Sn** | **02 13 29.5** | **-0.2** |
| **BHD** | **Baghdad** | **1.43** | **163** | *e*Pn | **Pg** | **02 13 26.0** | **-0.7** |
| BHD | | | | *e*Sn | **Sg** | **02 13 46.0** | **+0.7** |
| BHD | | | | AML | AML | 02 14 01.1 | |
| | comp=E,289nm,0.4s | | | | | | |
| **GLG1** | **Gilan-e-Gharb** | **1.76** | **107** | Pn | **Pg** | **02 13 32.4** | **-0.6** |
| **IDHR** | **Dehrash** | **2.07** | **88** | Pn | **Pb** | **02 13 36.7** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **2.18** | **117** | Pn | **Pb** | **02 13 37.3** | **-1.5** |
| **IGHG** | **Ghaleghazi** | **2.25** | **97** | Pn | **Pb** | **02 13 39.4** | **-0.7** |
| **IBDR** | **Badra** | **2.29** | **131** | *e*Pn | **Pb** | **02 13 39.0** | **-1.7** |
| IBDR | | | | *e*Sn | **Sb** | **02 14 07.0** | **-2.1** |
| **SNQR** | **Sonqor, Kerman** | **3.10** | **85** | Pn | **Pn** | **02 13 51.0** | **+2.5** |
| **RAFI** | **Al-Rafai** | **3.46** | **147** | *e*Pn | **Pn** | **02 13 55.0** | **+1.8** |
| RAFI | | | | *e*Sn | **Sn** | **02 14 35.8** | **+1.5** |
| **IAZR** | **Azarshahr** | **3.48** | **29** | Pn | **Pn** | **02 13 55.9** | **+2.2** |

*SDD* ***20*** *02:25:54.2±1.8,19.°14N×64.°82W,h17km±464km,MD3.6, ML3.1,MW3.4*
*NEIC* ***20*** *02:25:54.7±1.3,18.°75N±0.°09×64.°44W±0.°02,h35km±2km, ML3.5/40,Md3.2/17(RSPR),Error ellipse: s-maj=14.9km s-min=3.1km az=348.0*
*RSPR* ***20*** *02:25:56.2,18.°73N×64.°44W,h27km±29km,MD3.2/17*
*OSPL* ***20*** *02:25:58.0±1.6,18.°78N×64.°58W,h22km±218km,ML3.4*
**ISC 20 02:25:53.5**±2.0,**18.°7N**±0.°1×**64.°41W**±0.°03,**h28**km±20km, **n75,σ0s93/103,21C-4D,Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMRT** | **St. Maarten** | **1.44** | **118** | ⇓*e*P | **Pb** | **02 26 19.5** | **-0.2** |
| **SMRT** | **St. Maarten** | **1.44** | **118** | *e*S | **Sn** | **02 26 36.8** | **+1.1** |
| **SMRT** | **St. Maarten** | **1.44** | **118** | Pn | **Pn** | **02 26 17.4** | **-0.3** |
| SMRT | | | | Sn | **Sn** | **02 26 36.6** | **+0.8** |
| SMRT | | | | IAML | | 02 26 38.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **HUMP** | **Col San Antoni** | **1.49** | **247** | ⇑*e*P | **Pn** | **02 26 18.9** | **+0.5** |
| **HUMP** | **Col San Antoni** | **1.49** | **247** | *e*S | **Sn** | **02 26 36.4** | **-0.6** |
| **HUMP** | **Col San Antoni** | **1.49** | **247** | Pn | **Pn** | **02 26 18.6** | **+0.2** |
| HUMP | | | | | **Sn** | **02 26 36.1** | **-0.8** |
| HUMP | | | | IAML | | 02 26 37.5 | |
| | comp=N,682nm,0.2s | | | | | | |
| HUMP | | | | IAML | | 02 26 38.2 | |
| | comp=E,590nm,0.2s | | | | | | |
| **SABA** | **Saba** | **1.57** | **135** | Pn | **Pn** | **02 26 20.1** | **+0.5** |
| SABA | | | | IAML | | 02 26 45.0 | |
| | comp=N,289nm,0.5s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.64** | **255** | ⇓*e*P | **Pn** | **02 26 20.7** | **+0.1** |
| **GCPR** | **Guaynabo City** | **1.64** | **255** | *e*S | **Sn** | **02 26 39.9** | **-0.8** |
| **GCPR** | **Guaynabo City** | **1.64** | **255** | Pn | **Pn** | **02 26 20.4** | **-0.2** |
| GCPR | | | | Sn | **Sn** | **02 26 39.1** | **-1.6** |
| GCPR | | | | IAML | | 02 26 40.2 | |
| | comp=E,442nm,0.7s | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.69** | **245** | Pn | **Pn** | **02 26 21.3** | **+0.1** |
| **IGPR** | **InterUniversit** | **1.79** | **245** | ⇓*e*P | **Pn** | **02 26 23.3** | **+0.8** |
| **IGPR** | **InterUniversit** | **1.79** | **245** | *e*S | **Sn** | **02 26 44.5** | **+0.3** |
| **IGPR** | **InterUniversit** | **1.79** | **245** | Pn | **Pn** | **02 26 23.1** | **+0.7** |
| IGPR | | | | Sn | **Sn** | **02 26 44.1** | **-0.1** |
| IGPR | | | | IAML | | 02 26 46.5 | |
| | comp=E,757nm,0.3s | | | | | | |
| IGPR | | | | IAML | | 02 26 48.1 | |
| | comp=N,537nm,0.2s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **2.03** | **263** | ⇑*e*P | **Pn** | **02 26 26.8** | **+0.9** |
| **EMPR** | **Esperanza - Ma** | **2.03** | **263** | *e*S | **Sn** | **02 26 50.7** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **2.03** | **263** | Pn | **Pn** | **02 26 26.5** | **+0.7** |
| EMPR | | | | Sn | **Sn** | **02 26 50.1** | **-0.1** |
| EMPR | | | | IAML | | 02 26 52.1 | |
| | comp=E,428nm,0.5s | | | | | | |
| EMPR | | | | IAML | | 02 26 53.0 | |
| | comp=N,259nm,0.6s | | | | | | |
| **SKOC** | **St. Kitts, UWI** | **2.15** | **132** | *e*P | **Pn** | **02 26 28.1** | **+0.7** |
| SKOC | | | | *e*S | **Sn** | **02 26 53.6** | **+0.4** |
| **CELP** | **Cerrillos** | **2.16** | **253** | ⇑*e*P | **Pn** | **02 26 28.1** | **+0.4** |
| **CELP** | **Cerrillos** | **2.16** | **253** | *e*S | **Sn** | **02 26 53.3** | **-0.3** |
| **CELP** | **Cerrillos** | **2.16** | **253** | Pn | **Pn** | **02 26 28.1** | **+0.4** |
| CELP | | | | Sn | **Sn** | **02 26 52.7** | **-0.9** |
| **CELP** | **Cerrillos** | **2.16** | **253** | ⇑*e*Pg | **Pn** | **02 26 28.1** | **+0.4** |
| CELP | | | | *e*Sg | **Sn** | **02 26 53.3** | **-0.3** |
| CELP | | | | IAML | | 02 26 53.7 | |
| | comp=N,142nm,0.3s | | | | | | |
| CELP | | | | IAML | | 02 26 55.0 | |
| | comp=E,139nm,0.5s | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.20** | **252** | ⇑*e*P | **Pn** | **02 26 28.5** | **+0.4** |
| **OBIP** | **Obispado Ponce** | **2.20** | **252** | *e*S | **Sn** | **02 26 54.3** | **-0.1** |
| **OBIP** | **Obispado Ponce** | **2.20** | **252** | Pn | **Pn** | **02 26 28.8** | **+0.7** |
| OBIP | | | | Sn | **Sn** | **02 26 53.7** | **-0.7** |
| OBIP | | | | IAML | | 02 26 54.9 | |
| | comp=N,187nm,0.7s | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **2.25** | **258** | ⇑*e*P | **Pn** | **02 26 29.1** | **+0.3** |
| **UUPR** | **Utuado, UPR, P** | **2.25** | **258** | *e*S | **Sn** | **02 26 55.4** | **-0.2** |
| **UUPR** | **Utuado, UPR, P** | **2.25** | **258** | Pn | **Pn** | **02 26 28.8** | **0.0** |
| UUPR | | | | Sn | **Sn** | **02 26 54.6** | **-1.0** |
| **AOPR** | **Arecibo Observ** | **2.26** | **260** | ⇑*e*P | **Pn** | **02 26 29.6** | **+0.5** |
| **AOPR** | **Arecibo Observ** | **2.26** | **260** | *e*S | **Sn** | **02 26 55.5** | **-0.5** |
| **AOPR** | **Arecibo Observ** | **2.26** | **260** | Pn | **Pn** | **02 26 29.4** | **+0.4** |
| AOPR | | | | Sn | **Sn** | **02 26 54.9** | **-1.1** |
| AOPR | | | | IAML | | 02 26 57.7 | |
| | comp=N,387nm,0.3s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.26** | **260** | *e*Pg | **Pn** | **02 26 29.4** | **+0.4** |
| AOPR | | | | ⇑*e*Sg | **Sn** | **02 26 53.9** | **-2.0** |
| AOPR | | | | IAML | | 02 26 57.7 | |
| | comp=N,369nm,0.2s | | | | | | |
| AOPR | | | | IAML | | 02 27 00.5 | |
| | comp=E,255nm,0.1s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.26** | **260** | *e*P | **Pn** | **02 26 29.4** | **+0.4** |
| AOPR | | | | *e*S | **Sn** | **02 26 54.7** | **-1.3** |
| **GBPR** | **Guanica, Bosqu** | **2.46** | **253** | ⇑*e*P | **Pn** | **02 26 33.5** | **+1.7** |
| **GBPR** | **Guanica, Bosqu** | **2.46** | **253** | *e*S | **Sn** | **02 27 01.9** | **+0.9** |
| **GBPR** | **Guanica, Bosqu** | **2.46** | **253** | | **Pn** | **02 26 33.5** | **+1.7** |
| GBPR | | | | | **Sn** | **02 27 01.9** | **+0.9** |
| **AGPR** | **Aguadilla, PR** | **2.58** | **264** | ⇑*e*P | **Pn** | **02 26 33.9** | **+0.5** |
| **AGPR** | **Aguadilla, PR** | **2.58** | **264** | Pn | **Pn** | **02 26 33.4** | **0.0** |
| AGPR | | | | Sn | **Sn** | **02 27 02.4** | **-1.4** |
| AGPR | | | | IAML | | 02 27 05.3 | |
| | comp=E,187nm,0.4s | | | | | | |
| AGPR | | | | IAML | | 02 27 07.9 | |
| | comp=N,135nm,0.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.58** | **264** | *e*Pg | **Pn** | **02 26 33.9** | **+0.5** |
| AGPR | | | | ⇑*e*Sg | **Sn** | **02 27 02.8** | **-1.0** |
| AGPR | | | | IAML | | 02 27 03.1 | |
| | comp=E,151nm,0.3s | | | | | | |
| AGPR | | | | IAML | | 02 27 10.1 | |
| | comp=N,114nm,0.4s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.58** | **264** | *i* P | **Pn** | **02 26 33.9** | **+0.5** |
| AGPR | | | | *e*S | **Sn** | **02 27 02.2** | **-1.6** |
| AGPR | | | | IAML | | 02 27 07.5 | |
| | comp=Z,75nm,0.2s | | | | | | |
| **LSP** | **Las Mesas** | **2.60** | **258** | ⇑*e*P | **Pn** | **02 26 34.7** | **+1.0** |
| **LSP** | **Las Mesas** | **2.60** | **258** | *e*S | **Sn** | **02 27 04.1** | **-0.4** |
| **LSP** | **Las Mesas** | **2.60** | **258** | | **Pn** | **02 26 34.7** | **+1.0** |
| LSP | | | | | **Sn** | **02 27 04.1** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **2.62** | **253** | ⇑*e*P | **Pn** | **02 26 33.9** | **0.0** |
| **MLPR** | **Magueyes Islan** | **2.62** | **253** | *e*S | **Sn** | **02 27 05.2** | **+0.4** |
| **MLPR** | **Magueyes Islan** | **2.62** | **253** | Pn | **Pn** | **02 26 33.8** | **-0.1** |
| MLPR | | | | Sn | **Sn** | **02 27 03.9** | **-0.8** |
| **MLPR** | **Magueyes Islan** | **2.62** | **253** | ⇑*e*Pg | **Pn** | **02 26 33.9** | **0.0** |
| MLPR | | | | IAML | | 02 27 06.6 | |
| | comp=E,87nm,0.3s | | | | | | |
| MLPR | | | | IAML | | 02 27 10.9 | |
| | comp=N,42nm,0.5s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **2.65** | **259** | ⇑*e*P | **Pn** | **02 26 35.7** | **+1.3** |
| **PRSN** | **Puerto Rico Se** | **2.65** | **259** | *e*S | **Sn** | **02 27 04.9** | **-0.6** |
| **PRSN** | **Puerto Rico Se** | **2.65** | **259** | Pn | **Pn** | **02 26 35.2** | **+0.9** |
| PRSN | | | | Sn | **Sn** | **02 27 04.7** | **-0.9** |
| **PRSN** | **Puerto Rico Se** | **2.65** | **259** | ⇓*e*Pg | **Pn** | **02 26 35.6** | **+1.3** |
| PRSN | | | | ⇑*e*Sg | **Sn** | **02 27 04.9** | **-0.6** |
| PRSN | | | | IAML | | 02 27 08.0 | |
| | comp=N,558nm,0.2s | | | | | | |
| PRSN | | | | IAML | | 02 27 08.1 | |
| | comp=E,81nm,0.1s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **255** | ⇑*e*P | **Pn** | **02 26 35.6** | **+1.0** |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **255** | *e*S | **Sn** | **02 27 06.8** | **+0.8** |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **255** | Pn | **Pn** | **02 26 35.4** | **+0.8** |
| CRPR | | | | Sn | **Sn** | **02 27 06.2** | **+0.2** |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **255** | ⇑*e*Pg | **Pn** | **02 26 36.0** | **+1.4** |
| CRPR | | | | ⇑*e*Sg | **Sn** | **02 27 06.8** | **+0.8** |
| CRPR | | | | IAML | | 02 27 09.8 | |
| | comp=E,72nm,0.8s | | | | | | |
| CRPR | | | | IAML | | 02 27 09.8 | |
| | comp=N,80nm,0.5s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **255** | *i* P | **Pn** | **02 26 35.5** | **+1.0** |
| CRPR | | | | IAML | | 02 27 14.2 | |
| | comp=Z,101nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ANBD | | | | *e*S | | **Sn** | **02 27 13.3 -1.6** |
| **GDHS** | **Morne Mazeau,** | **3.52** | **134** | Pn | | **Pn** | **02 26 47.2 +0.8** |
| GDHS | | | | IAML | | | 02 27 30.7 |
| | comp=N,122nm,0.6s | | | | | | |
| GDHS | | | | IAML | | | 02 27 45.4 |
| | comp=E,94nm,0.6s | | | | | | |
| **ABD** | **La Joyeuse, An** | **3.58** | **128** | Pn | | **Pn** | **02 26 48.0 +0.9** |
| ABD | | | | IAML | | | 02 28 11.3 |
| | comp=N,117nm,2.7s | | | | | | |
| ABD | | | | IAML | | | 02 28 48.9 |
| | comp=E,142nm,2.1s | | | | | | |
| **CBE** | **Ff, Capester** | **3.77** | **134** | Pn | | **Pn** | **02 26 51.2 +1.4** |
| CBE | | | | Sn | | **Sn** | **02 27 34.6 +1.4** |
| CBE | | | | IAML | | | 02 27 53.5 |
| | comp=E,118nm,0.5s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.77** | **267** | Pn | | **Pn** | **02 26 51.2 +1.4** |
| PCDR | | | | IAML | | | 02 27 52.3 |
| | comp=N,140nm,2.0s | | | | | | |
| PCDR | | | | IAML | | | 02 27 58.8 |
| | comp=E,69nm,2.3s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.77** | **267**⇑ | *e*Pg | | **Pn** | **02 26 52.7 +2.9** |
| PCDR | | | ⇑ | *e*Sg | | **Sn** | **02 27 35.1 +1.8** |
| PCDR | | | | IAML | | | 02 27 38.7 |
| | comp=E,22nm,0.6s | | | | | | |
| PCDR | | | | IAML | | | 02 27 52.1 |
| | comp=N,131nm,1.2s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.77** | **267** | *i* P | | **Pn** | **02 26 52.2 +2.3** |
| PCDR | | | | IAML | | | 02 27 47.8 |
| | comp=Z,93nm,1.4s | | | | | | |
| **TBG** | **Guadaloupe-3** | **3.90** | **137** | *e*P | | **Pn** | **02 26 53.0 +1.4** |
| TBG | | | | *e*S | | **Sn** | **02 27 35.6 -0.8** |
| **MAGL** | **Barre de l'ile** | **4.07** | **132** | Pn | | **Pn** | **02 26 54.5 +0.5** |
| **BIM** | **Bigot** | **5.28** | **142** | *e*P | | **Pn** | **02 27 10.6 0.0** |
| **SLBI** | **Saint Lucia, B** | **5.73** | **144** | *e*P | | **Pn** | **02 27 16.9 +0.1** |
| **SDDR** | **Presa de Saban** | **6.52** | **273** | Pn | | **Pn** | **02 27 28.2 +0.6** |
| **SDDR** | **Presa de Saban** | **6.52** | **273** | *i* P | | **Pn** | **02 27 28.7 +1.1** |
| SDDR | | | | IAML | | | 02 28 45.3 |
| | comp=Z,9.9nm,1.5s | | | | | | |
| **GRTK** | **Grand Turk** | **6.89** | **295** | Pn | | **Pn** | **02 27 32.2 -0.5** |
| **GRTK** | **Grand Turk** | **6.89** | **295** | *e*S | | Sn | 02 28 43.1 -7.2 |
| GRTK | | | | IAML | | | 02 28 49.1 |
| | comp=Z,37nm,1.1s | | | | | | |
| **BAUV** | **El Baul** | **10.35** | **200** | Pn | | **Pn** | **02 28 19.2 -1.0** |

*IDC **20** 02:25:49.6±0.9,56˚.43S×24˚.79W,h0km,mb4.2/5, mbtmp4.2/6,ML3.7/1,MS3.4/6,Error ellipse: s-maj=37.1km s-min=20.0km az=63.0*

*NEIC **20** 02:25:50.6±2.2,56˚.48S±0˚.09×24˚.8W±0˚.2,h10km±1km, mb4.4/12,Error ellipse: s-maj=23.5km s-min=4.3km az=52.0*

**ISC 20 02:25:54.2±0.7,56˚.53S±0˚.10×25˚.0W±0˚.1,h40km,n45, σ1s28/40,mb4.4/10,MS3.5/5,4C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **6.93** | **284** | Pn | | **Pn** | **02 27 31.8** | **-1.3** |
| **ORCD** | **Orcadas** | **11.11** | **240** | | | **Pn** | **02 28 31.7** | **+1.5** |
| **VNA1** | **Neumayer--Stat** | **15.90** | **160** | ⇑P | | **Pn** | **02 29 29.2** | **-5.4** |
| | comp=Z,4.2nm,1.0s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.14** | **162** | ⇑P | | **Pn** | **02 29 35.1** | **-2.6** |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **17.81** | **157** | | | **Pn** | **02 29 57.9** | **-0.7** |
| **SNAA** | **Sanae** | **17.81** | **157** | ⇑P | | **P** | **02 29 59.3** | **+0.3** |
| | comp=Z,13nm,0.2s | | | | | | | |
| **SNAA** | **Sanae** | **17.81** | **157** | P | | **P** | **02 29 58.9** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=182,slow=21,SNR=9.5 | | | | | | | |
| SNAA | | | | LR | | LR | 02 35 43.2 | |
| | comp=Z,74nm,21.4s,baz=256,slow=33 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **19.27** | **154** | ⇑P | | **P** | **02 30 14.9** | **-0.2** |
| | comp=Z,69nm,0.5s | | | | | | | |
| **BELA** | **Belgrano 2** | **21.70** | **186** | P | | **P** | **02 30 40.1** | **-1.1** |
| BELA | | | | IAmb | | IAmb | 02 30 58.8 | |
| | comp=Z,7.7nm,0.7s | | | | | | | |
| **TRQA** | **Tornquist** | **30.65** | **291** | P | | **P** | **02 32 03.5** | **-1.0** |
| **QSPA** | **South Pole Qui** | **33.72** | **180** | P | | **P** | **02 32 32.8** | **+1.5** |
| QSPA | | | | IAmb | | IAmb | 02 32 58.3 | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **33.72** | **180** | P | | **P** | **02 32 33.0** | **+1.7** |
| | comp=Z,4.7nm,0.6s,baz=205,slow=2.0,SNR=59 | | | | | | | |
| | comp=Z,4.7nm,0.6s | | | | | | | |
| **CPUP** | **Villa Florida** | **38.07** | **309** | P | | **P** | **02 33 08.6** | **-0.1** |
| **CPUP** | **Villa Florida** | **38.07** | **309** | P | | **P** | **02 33 09.2** | **+0.4** |
| | comp=Z,1.3nm,0.5s,baz=143,slow=7.8,SNR=5.5 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **MAW** | **Mawson** | **39.02** | **143** | P | | **P** | **02 33 17.4** | **+1.1** |
| | comp=Z,1.5nm,0.6s,baz=236,slow=9.0,SNR=3.5 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **SUR** | **Sutherland** | **39.59** | **72** | LR | | LR | 02 45 11.0 | |
| | comp=Z,55nm,19.9s,baz=185,slow=29 | | | | | | | |
| **CO01** | **Juntas del Tor** | **41.14** | **291** | P | | **P** | **02 33 34.7** | **+0.1** |
| CO01 | | | | IAmb | | IAmb | 02 33 47.4 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **AC05** | **El Transito** | **42.15** | **292** | P | | **P** | **02 33 42.1** | **-0.6** |
| **PTLB** | **Pontes e Lacer** | **48.51** | **314** | P | | **P** | **02 34 32.3** | **-0.7** |
| PTLB | | | | IAmb | | IAmb | 02 34 35.6 | |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| **SIV** | **San Ignacio** | **48.81** | **311** | LR | | LR | 02 54 58.2 | |
| | comp=Z,37nm,21.5s,baz=115,slow=36 | | | | | | | |
| **TSUM** | **Tsumeb** | **48.86** | **59** | LR | | LR | 02 49 33.1 | |
| | comp=Z,32nm,20.7s,baz=42,slow=29 | | | | | | | |
| **LPAZ** | **La Paz** | **51.67** | **303** | P | | **P** | **02 34 58.0** | **+0.3** |
| **LPAZ** | **La Paz** | **51.67** | **303** | P | | **P** | **02 34 59.2** | **+1.6** |
| | comp=Z,2.3nm,0.4s,baz=138,slow=5.0,SNR=17 | | | | | | | |
| | comp=Z,2.3nm,0.4s | | | | | | | |
| **SAML** | **Samuel** | **56.03** | **313** | P | | **P** | **02 35 29.0** | **+0.2** |
| SAML | | | | IAmb | | IAmb | 02 35 42.7 | |
| | comp=Z,5.1nm,1.2s | | | | | | | |
| **ETMB** | **Extrema** | **56.52** | **309** | P | | **P** | **02 35 31.9** | **-0.4** |
| ETMB | | | | IAmb | | IAmb | 02 35 37.5 | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **RPN** | **Rapa Nui** | **64.78** | **259** | LR | | LR | 02 59 50.1 | |
| | comp=Z,47nm,21.6s,baz=129,slow=31 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.89** | **27** | P | | **P** | **02 37 19.0** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** | **72.89** | **27** | P | | **P** | **02 37 19.4** | **+0.6** |
| | comp=Z,0.8nm,0.5s,baz=203,slow=5.8,SNR=19 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **CMIG** | **Matias Romero** | **93.51** | **296** | LR | | LR | 03 18 01.4 | |
| | comp=Z,31nm,20.6s,baz=181,slow=34 | | | | | | | |
| **G31M** | **Satah River** | **146.85** | **317** | PKPbc | | **PKiKP** | **02 45 32.7** | **-0.2** |
| **INK** | **Inuvik** | **146.97** | **320** | PKPbc | | **PKPab** | **02 45 32.9** | **+0.6** |
| **INK** | **Inuvik** | **146.97** | **320** | PKPbc | | **PKPbc** | **02 45 31.4** | **+0.7** |
| | comp=Z,2.0nm,0.9s,baz=117,slow=2.3,SNR=3.4 | | | | | | | |
| **M29M** | **Somme Creek** | **147.11** | **308** | PKPbc | | **PKPab** | **02 45 32.8** | **-0.4** |
| **I30M** | **Mount Dempster** | **147.16** | **314** | PKPbc | | **PKPbc** | **02 45 31.9** | **+0.3** |
| **K29M** | **Barlow Dome** | **147.18** | **311** | PKPbc | | **PKPab** | **02 45 33.0** | **-0.4** |
| **DAWY** | **Dawson** | **148.04** | **311** | PKPbc | | **PKPbc** | **02 45 34.5** | **+0.6** |
| **H29M** | **Whitestone** | **148.23** | **315** | PKPbc | | **PKiKP** | **02 45 35.9** | **0.0** |
| **G29M** | **Pine Creek** | **148.27** | **316** | PKPbc | | **PKPbc** | **02 45 35.4** | **+1.0** |
| **E29M** | **Blow River** | **148.56** | **319** | PKPbc | | **PKPbc** | **02 45 34.9** | **-0.1** |
| **BCAR** | **Beaver Creek A** | **148.76** | **308** | PKPbc | | **PKPbc** | **02 45 36.2** | **+0.5** |
| **L27K** | **Beaver Creek,** | **148.77** | **308** | PKPbc | | **PKPbc** | **02 45 36.6** | **+0.9** |
| **I26K** | **Coal Creek Min** | **149.93** | **312** | PKPbc | | **PKPbc** | **02 45 39.0** | **+0.5** |
| **BMAR** | **Burnt Mountain** | **150.88** | **316** | PKPbc | | **PKiKP** | **02 45 41.9** | **+0.5** |
| **ILAR** | **Eielson Array** | **151.36** | **311** | PKPbc | | **PKiKP** | **02 45 43.6** | **+1.3** |
| | comp=Z,2.2nm,0.9s,baz=120,slow=1.1,SNR=13 | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **151.91** | **315** | PKPbc | | **PKiKP** | **02 45 44.5** | **+1.1** |

*UPA **20** 02:25:32.6±19.0,9˚.37N×80˚.75W,h45km±220km,MD3.7*

*UCR **20** 02:26:00.3±0.7,8˚.45N×83˚.15W,h10km±2km,MW3.5*

**ISC 20 02:26:00.8±1.3,8˚.49N±0˚.07×83˚.15W±0˚.04,h13km±7km, n25,σ0s89/31,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.13** | **358** | *e*P | | **Pg** | **02 26 03.9** | **-0.3** |
| FITO | | | | *e*S | | **Sg** | **02 26 06.9** | **+0.3** |
| **EDAD** | **Golfito** | **0.16** | **354** | *e*P | | **Pg** | **02 26 04.3** | **-0.3** |
| **JIME** | **Puerto Jimenez** | **0.18** | **285** | *e*P | | **Pg** | **02 26 04.6** | **-0.3** |
| **NELY** | **Ciudad Neily** | **0.26** | **52** | *e*P | | **Pg** | **02 26 06.5** | **+0.3** |
| NELY | | | | *e*S | | **Sb** | **02 26 11.4** | **-0.2** |
| **VITO** | **San Vito** | **0.37** | **29** | *e*P | | **Pb** | **02 26 08.9** | **-0.5** |
| **EDP2** | **Potrero Grande** | **0.52** | **357** | *e*P | | **Pg** | **02 26 11.2** | **+0.2** |
| **BRU2** | **Volcan** | **0.55** | **56** | *i* P | | **Pg** | **02 26 11.5** | **-0.1** |
| BRU2 | | | | *e*S | | **Sb** | **02 26 19.9** | **-0.3** |
| **BRU2** | **Volcan** | **0.55** | **56** | *e*P | | **Pg** | **02 26 11.5** | **-0.1** |
| **EDPN** | **Palmar Norte** | **0.56** | **327** | *e*P | | **Pg** | **02 26 11.1** | **-0.7** |
| **BCO2** | **Palmira** | **0.66** | **70** | *i* P | | **Pg** | **02 26 13.2** | **-0.4** |
| BCO2 | | | | *e*S | | **Sb** | **02 26 23.1** | **-0.2** |
| **EDBA** | **Buenos Aires** | **0.68** | **350** | *e*P | | **Pg** | **02 26 12.3** | **-1.7** |
| **DVD** | **David** | **0.69** | **95** | *e*P | | **Pg** | **02 26 13.6** | **-0.8** |
| DVD | | | | *e*S | | **Sg** | **02 26 23.6** | **+0.1** |
| **BURE** | **Buenos Aires** | **0.70** | **345** | *e*P | | **Pg** | **02 26 14.2** | **-0.3** |
| **DRK0** | **Durika** | **0.77** | **353** | *i* P | | **Pg** | **02 26 15.0** | **-0.8** |
| DRK0 | | | | *e*S | | **Sb** | **02 26 28.3** | **+1.6** |
| **DRK0** | **Durika** | **0.77** | **353** | *e*P | | **Pg** | **02 26 15.0** | **-0.8** |
| **BUS1** | **Rivas** | **1.21** | **331** | *e*P | | **Pb** | **02 26 22.3** | **-1.5** |
| **LCR2** | **La Lucha 2** | **1.50** | **326** | *e*P | | **Pn** | **02 26 27.1** | **-0.6** |
| **VTCV** | **VTCV, Calle Va** | **1.59** | **339** | *e*P | | **Pn** | **02 26 29.0** | **+0.1** |
| **CVTV** | **Tajo** | **1.61** | **339** | *e*P | | **Pn** | **02 26 29.7** | **+0.3** |
| **CVTQ** | **Turrialba Volc** | **1.62** | **338** | *e*P | | **Pn** | **02 26 30.1** | **+0.7** |
| **VTLA** | **Turrialba Volc** | **1.62** | **338** | *e*P | | **Pn** | **02 26 30.0** | **+0.5** |
| **VTR0** | **Volcan Turrial** | **1.63** | **338** | *e*P | | **Pb** | **02 26 30.8** | **-0.2** |
| **LCOCO** | **El Coco** | **1.63** | **346** | *e*P | | **Pb** | **02 26 30.3** | **-0.6** |
| **CVTR** | **Volcan Turrial** | **1.63** | **338** | *e*P | | **Pb** | **02 26 30.8** | **-0.3** |
| **CUI** | **Cuipilapa** | **2.93** | **317** | *e*P | | **Pn** | **02 26 50.1** | **+2.9** |

*NEIC **20** 02:28:07.7±2.3,18˚.3S±0˚.1×178˚.0W±0˚.1,h579km±7km, mb4.4/128,Error ellipse: s-maj=20.5km s-min=14.5km az=141.0*

*NOU **20** 02:28:10.5,18˚.72S×178˚.17W,h577km,mb4.5/22,Fiji Islands Region*

*IDC **20** 02:28:11.0±2.5,18˚.33S×178˚.10W,h615km±28km, mb3.7/16,mbtmp4.6/17,Error ellipse: s-maj=16.1km s-min=11.4km az=136.0*

**ISC 20 02:28:08.6±0.4,18˚.39S±0˚.08×177˚.98W±0˚.07,h600km, n474,σ0s97/458,mb4.4/86,23C-17D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.84** | **279** | P | | **P** | **02 29 33.1** | **0.0** |
| **MSVF** | **Nonsavu** | **3.84** | **279** | P | | **P** | **02 29 32.6** | **-0.6** |
| **AFI** | **Afiamalu** | **7.44** | **54** | P | | **P** | **02 29 59.1** | **-3.8** |
| **NIUE** | **Niue** | **7.66** | **96** | P | | **P** | **02 30 03.4** | **-1.4** |
| **RTV** | **Rentapao** | **12.95** | **271** | P | | **P** | **02 30 57.3** | **+0.3** |
| **DVP** | **Devils Point** | **13.18** | **271** | P | | **P** | **02 31 00.1** | **+0.8** |
| **LIFNC** | **LIFOU** | **14.13** | **258** | P | | **P** | **02 31 07.0** | **-1.8** |
| **LIFNC** | **LIFOU** | **14.13** | **258** | P | | **P** | **02 31 05.8** | **-3.0** |
| **PINNC** | **Pines Island,** | **14.29** | **250** | P | | **P** | **02 31 09.4** | **-0.8** |
| **DZM** | **Mont Dzumac** | **15.07** | **253** | P | | **P** | **02 31 17.3** | **-0.3** |
| **DZM** | **Mont Dzumac** | **15.07** | **253** | P | | **P** | **02 31 16.5** | **-1.1** |
| DZM | | | | IAmb | | IAmb | 02 31 17.7 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.07** | **253** | P | | **P** | **02 31 17.0** | **-0.7** |
| | comp=Z,7.4nm,0.5s,baz=248,slow=22,SNR=12 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.86** | **260** | P | | **P** | **02 31 35.7** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **16.86** | **260** | P | | **P** | **02 31 34.0** | **0.0** |
| **URZ** | **Urewera** | **20.25** | **191** | P | | **P** | **02 32 03.7** | **-0.8** |
| **URZ** | **Urewera** | **20.25** | **191** | P | | **P** | **02 32 02.3** | **-2.2** |
| | comp=Z,6.0nm,0.4s,baz=11,slow=4.1,SNR=8.4 | | | | | | | |
| **TKNZ** | **Takaka Hill** | **23.87** | **197** | P | | **P** | **02 32 36.0** | **-0.7** |
| **KHZ** | **Kahutara** | **25.01** | **195** | P | | **P** | **02 32 45.6** | **-1.1** |
| **KHZ** | **Kahutara** | **25.01** | **195** | P | | **P** | **02 32 45.0** | **-1.7** |
| **LTZ** | **Lake Taylor** | **25.68** | **197** | P | | **P** | **02 32 50.7** | **-2.0** |
| **FOZ** | **Fox Glacier** | **27.10** | **200** | P | | **P** | **02 33 05.2** | **+0.2** |
| **JCZ** | **Jackson Bay** | **27.92** | **201** | P | | **P** | **02 33 12.3** | **0.0** |
| **GD1S** | **Gladstone Soft** | **29.25** | **254** | P | | **P** | **02 33 23.7** | **-0.3** |
| **MLZ** | **Mavora Lakes** | **29.28** | **200** | P | | **P** | **02 33 23.6** | **-0.4** |
| **EIDS** | **Eidsvold** | **29.49** | **251** | P | | **P** | **02 33 25.9** | **-0.2** |
| **WHZ** | **Wether Hill Ro** | **29.80** | **200** | P | | **P** | **02 33 29.6** | **+1.1** |
| **ARMA** | **Armidale** | **30.06** | **241** | P | | **P** | **02 33 32.2** | **+1.2** |
| **ARMA** | **Armidale** | **30.06** | **241** | P | | **P** | **02 33 31.3** | **+0.3** |
| **CNB** | **Canberra Magne** | **33.46** | **233** | P | | **P** | **02 33 59.8** | **0.0** |
| **CAN** | **Canberra** | **33.74** | **233** | P | | **P** | **02 34 03.4** | **+1.3** |
| **CAN** | **Canberra** | **33.74** | **233** | P | | **P** | **02 34 03.0** | **+0.9** |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | | **P** | **02 34 02.8** | **+0.3** |
| **CTAO** | **Charters Tower** | **33.78** | **261** | P | | **P** | **02 34 02.5** | **0.0** |
| CTAO | | | | IAmb | | IAmb | 02 34 03.2 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.27** | **241** | P | | **P** | **02 34 15.7** | **+0.9** |
| **QLP** | **Quilpie** | **35.75** | **250** | P | | **P** | **02 34 19.2** | **+0.4** |
| **TOO** | **Toolangi** | **37.19** | **231** | P | | **P** | **02 34 31.9** | **+1.4** |
| **TOO** | **Toolangi** | **37.19** | **231** | P | | **P** | **02 34 30.9** | **+0.5** |
| TOO | | | | IAmb | | IAmb | 02 34 32.0 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **37.52** | **271** | P | | **P** | **02 34 34.5** | **+1.0** |
| **COEN** | **Coen** | **37.52** | **271** | P | | **P** | **02 34 33.9** | **+0.4** |
| **TAOE** | **Nuku Hiva Isla** | **37.89** | **81** | P | | P | 02 34 41.3 | +4.7 |
| | comp=Z,88nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.76** | **242** | P | | **P** | **02 34 44.1** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.76** | **242** | P | | **P** | **02 34 44.5** | **+1.2** |
| | comp=Z,7.0nm,0.5s,baz=88,slow=11,SNR=16 | | | | | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **QIS** | **Mount Isa** | **39.97** | **260** | P | | **P** | **02 34 54.2** | **+1.1** |
| **LCRK** | **Leigh Creek** | **41.42** | **245** | P | | **P** | **02 35 05.2** | **+0.8** |
| **BBOO** | **Buckleboo** | **43.53** | **242** | P | | **P** | **02 35 21.3** | **+0.5** |
| **POHA** | **Pohakuloa** | **43.85** | **31** | P | | **P** | **02 35 21.7** | **-1.9** |
| **WR0** | **Warramunga Arr** | **44.76** | **260** | P | | **P** | **02 35 30.1** | **-0.3** |
| WR0 | | | | IAmb | | IAmb | 02 35 39.0 | |
| | comp=Z,9.7nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.92** | **260** | P | | **P** | **02 35 29.6** | **-2.2** |
| WB0 | | | | IAmb | | IAmb | 02 35 31.7 | |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.94** | **260** | P | | **P** | **02 35 31.4** | **-0.5** |
| WB2 | | | | IAmb | | IAmb | 02 35 55.7 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **AS31** | **Alice Springs** | **45.06** | **255** | P | | **P** | **02 35 32.8** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.06** | **255** | P | | **P** | **02 35 32.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.06** | **255** | P | | **P** | **02 35 33.1** | **+0.4** |
| | comp=Z,7.1nm,0.4s,baz=90,slow=8.3,SNR=89 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **02 37 01.1** | **+0.7** |
| | comp=Z,2.5nm,0.5s,baz=106,slow=3.7,SNR=9.2 | | | S | | **S** | **02 41 28.2** | **-1.1** |
| ASAR | | | | | | | | |
| | comp=Z,3.3nm,0.8s,baz=89,slow=14,SNR=20 | | | | | | | |
| | comp=Z,7.1nm,0.4s | | | | | | | |
| **FORT** | **Forrest** | **50.17** | **245** | P | | **P** | **02 36 10.6** | **-0.1** |
| FORT | | | | IAmb | | IAmb | 02 36 47.8 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.54** | **323** | P | | **P** | **02 38 12.4** | **-0.1** |
| | comp=Z,4.2nm,0.6s,baz=158,slow=6.4,SNR=11 | | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | | |
| **KIWB** | **Kanaga Island** | **69.95** | **1** | P | | **P** | **02 38 20.2** | **-0.3** |
| **UGM** | **Wanagama** | **70.04** | **268** | P | | **P** | **02 38 21.1** | **-1.0** |
| **QSPA** | **South Pole Qui** | **71.66** | **180** | P | | **P** | **02 38 32.1** | **+1.4** |
| **QSPA** | **South Pole Qui** | **71.66** | **180** | P | | **P** | **02 38 32.5** | **+1.8** |
| | comp=Z,2.3nm,0.5s,baz=214,slow=0.9,SNR=29 | | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **SSLB** | **Suanglung** | **72.84** | **303** | P | | **P** | **02 38 37.1** | **-1.0** |
| **TPUB** | **Ta-pu** | **72.86** | **302** | P | | **P** | **02 38 37.5** | **-0.7** |
| **PEA0B** | **Petropavlovsk-** | **74.25** | **345** | P | | **P** | **02 38 45.7** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **74.25** | **345** | P | | **P** | **02 38 45.3** | **0.0** |
| | comp=Z,6.7nm,0.6s,baz=108,slow=6.5,SNR=11 | | | | | | | |
| | comp=Z,6.7nm,0.6s | | | | | | | |
| **S12K** | **Black Hills** | **75.03** | **9** | P | | **P** | **02 38 48.5** | **-1.1** |
| **KSRS** | **Korea Array** | **75.33** | **318** | P | | **P** | **02 38 53.1** | **+1.4** |
| | comp=Z,0.6nm,0.4s,baz=124,slow=8.8,SNR=2.2 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **SAO** | **San Andreas Ge** | **76.49** | **44** | P | | **P** | **02 38 59.4** | **+1.3** |
| SAO | | | | IAmb | | IAmb | 02 39 00.5 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.25** | **326** | P | | **P** | **02 39 04.2** | **+2.1** |
| | comp=Z,1.7nm,0.8s,baz=172,slow=5.8,SNR=4.5 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **CBX** | **Cerro Bola** | **77.34** | **50** | P | | **P** | **02 39 04.0** | **+0.9** |
| CBX | | | | IAmb | | IAmb | 02 39 05.0 | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **ESJX** | **Sierra Juarez** | **77.70** | **50** | P | | **P** | **02 39 05.7** | **+0.6** |
| **MONP2** | **Monument Peak** | **77.82** | **49** | P | | **P** | **02 39 07.6** | **+1.9** |
| | baz=239,SNR=6.6 | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **77.85** | **12** | P | | **P** | **02 39 05.7** | **+0.7** |
| | baz=201 | | | | | | | |
| **PLK4** | **Peulik 4** | **77.85** | **12** | P | | **P** | **02 39 05.1** | **0.0** |
| **CMB** | **Columbia Colle** | **77.91** | **43** | P | | **P** | **02 39 06.7** | **+0.8** |
| **OHAK** | **Old Harbor** | **78.11** | **13** | P | | **P** | **02 39 06.5** | **+0.2** |
| | baz=204 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **78.17** | **49** | P | | **P** | **02 39 07.2** | **-0.3** |
| | baz=238 | | | | | | | |
| **TPFO** | **Pinon Flats** | **78.17** | **49** | P | | **P** | **02 39 08.0** | **+0.5** |
| | baz=238 | | | | | | | |
| **R18K** | **Karluk** | **78.17** | **13** | P | | **P** | **02 39 06.9** | **+0.2** |
| | baz=203 | | | | | | | |
| **Q17K** | **Contact Creek** | **78.53** | **12** | P | | **P** | **02 39 08.7** | **-0.1** |
| | baz=201 | | | | | | | |
| **MDPB** | **Devils Postpil** | **78.54** | **44** | P | | **P** | **02 39 10.7** | **+1.2** |
| **O14K** | **Tigyukauivet M** | **78.57** | **9** | P | | **P** | **02 39 07.8** | **-0.9** |
| O14K | | | | IAmb | | IAmb | 02 39 14.9 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.64** | **39** | P | | **P** | **02 39 11.1** | **+1.4** |
| **WAKR** | **Walker** | **78.79** | **43** | P | | **P** | **02 39 12.1** | **+1.4** |
| WAKR | | | | IAmb | | IAmb | 02 39 13.3 | |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.82** | **325** | P | | **P** | **02 39 12.1** | **+1.6** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **PNTR** | **Pine Nut** | **79.02** | **42** | P | | **P** | **02 39 13.0** | **+1.1** |
| PNTR | | | | IAmb | | IAmb | 02 39 14.4 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **HUMO** | **Hull Mountain** | **79.03** | **38** | P | | **P** | **02 39 13.3** | **+1.6** |
| **Q18K** | **Katmai Hardscr** | **79.06** | **12** | P | | **P** | **02 39 12.0** | **+0.5** |
| | baz=202 | | | | | | | |
| **DSP** | **Deep Springs** | **79.13** | **45** | P | | **P** | **02 39 13.7** | **+1.5** |
| **N14K** | **Kuskokwak Cree** | **79.16** | **8** | P | | **P** | **02 39 13.0** | **+1.2** |
| | baz=196 | | | | | | | |
| **YERR** | **Yerington** | **79.19** | **43** | P | | **P** | **02 39 12.3** | **-0.5** |
| YERR | | | | IAmb | | IAmb | 02 39 49.3 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **LHV** | **Little Huntoon** | **79.26** | **44** | P | | **P** | **02 39 14.1** | **+1.2** |
| **P17K** | **Kvichak River** | **79.30** | **11** | P | | **P** | **02 39 13.0** | **+0.4** |
| | baz=201 | | | | | | | |
| **O16K** | **Kokwok River B** | **79.39** | **10** | P | | **P** | **02 39 12.1** | **-1.0** |
| O16K | | | | IAmb | | IAmb | 02 39 15.2 | |
| | comp=Z,24nm,1.5s | | | | | | | |
| **O16K** | **Kokwok River B** | **79.39** | **10** | P | | **P** | **02 39 12.6** | **-0.5** |
| | baz=199 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.49** | **44** | P | | **P** | **02 39 15.3** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **79.49** | **44** | P | | **P** | **02 39 16.0** | **+1.6** |
| | comp=Z,3.6nm,0.7s,baz=224,slow=9.1,SNR=27 | | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| **NV11** | **Mina Array Sit** | **79.59** | **44** | P | | **P** | **02 39 15.8** | **+0.9** |
| **N15K** | **Kwethluk River** | **79.62** | **9** | P | | **P** | **02 39 14.8** | **+0.5** |
| N15K | | | | IAmb | | IAmb | 02 39 16.0 | |
| | comp=Z,7.8nm,0.7s | | | | | | | |
| **N15K** | **Kwethluk River** | **79.62** | **9** | P | | **P** | **02 39 14.6** | **+0.3** |
| | baz=197 | | | | | | | |
| **P18K** | **Big Mountain,** | **79.71** | **12** | P | | **P** | **02 39 14.8** | **-0.1** |
| **P18K** | **Big Mountain,** | **79.71** | **12** | P | | **P** | **02 39 15.1** | **+0.2** |
| | baz=202 | | | | | | | |
| **WCT** | **Wildcat Mounta** | **79.72** | **46** | P | | **P** | **02 39 16.8** | **+1.2** |
| **O17K** | **Koliganek Bris** | **79.73** | **11** | P | | **P** | **02 39 14.8** | **0.0** |
| | baz=200 | | | | | | | |
| **M14K** | **Bethel** | **79.92** | **8** | P | | **P** | **02 39 16.1** | **+0.3** |
| M14K | | | | IAmb | | IAmb | 02 39 18.1 | |
| | comp=Z,9.8nm,0.9s | | | | | | | |
| **M14K** | **Bethel** | **79.92** | **8** | P | | **P** | **02 39 16.5** | **+0.7** |
| | baz=195 | | | | | | | |
| **KVN** | **Kaiserville** | **79.96** | **43** | P | | **P** | **02 39 17.9** | **+1.0** |
| **214A** | **Organ Pipe Nat** | **79.99** | **52** | P | | **P** | **02 39 16.0** | **-0.9** |
| | baz=241 | | | | | | | |
| **M15K** | **Kasigluk River** | **80.04** | **9** | P | | **P** | **02 39 16.9** | **+0.4** |
| | baz=197 | | | | | | | |
| **TPNV** | **Topopah Spring** | **80.06** | **46** | P | | **P** | **02 39 18.9** | **+1.5** |
| | baz=238 | | | | | | | |
| **I04A** | **Tendick Farm,** | **80.06** | **37** | P | | **P** | **02 39 18.1** | **+1.0** |
| **N16K** | **Nishlik Lake** | **80.11** | **10** | P | | **P** | **02 39 17.8** | **+0.9** |
| | baz=198 | | | | | | | |
| **O18K** | **Koktuh Hills** | **80.14** | **11** | P | | **P** | **02 39 16.9** | **-0.1** |
| **O18K** | **Koktuh Hills** | **80.14** | **11** | P | | **P** | **02 39 17.4** | **+0.3** |
| | baz=202 | | | | | | | |
| **L14K** | **Kuka Creek** | **80.40** | **7** | P | | **P** | **02 39 19.4** | **+1.1** |
| L14K | | | | IAmb | | IA

baz=220
**GHO Glory Hole Cre 83.18 13 P P 02 39 32.3 -0.2**
**HAWA Hanford 83.25 36 P P 02 39 33.9 +0.7**
HAWA IAmb IAmb 02 39 35.5
comp=Z,10.0nm,1.2s
**J18K Innoko River 83.27 9 P P**
J18K IAmb IAmb 02 39 34.3
comp=Z,8.9nm,0.8s
**J18K Innoko River 83.27 9 P P 02 39 33.3 +0.4**
baz=200,SNR=6.1
**U33K Whale Pass 83.27 23 P P 02 39 33.6 +0.6**
baz=222
**MTPU Mount Pierson 83.40 46 P P 02 39 36.2 +1.6**
**CUT Chulitna 83.46 13 P P 02 39 33.8 0.0**
baz=206
**M23K Glacier View 83.47 14 P P 02 39 33.9 0.0**
baz=209
**BMRM Bremner River 83.51 16 P P 02 39 34.6 +0.4**
baz=212
**WAX Waxell Ridge 83.53 17 P P 02 39 34.2 -0.1**
**MESA MESA 83.56 17 P P 02 39 34.9 +0.3**
**MESA MESA 83.56 17 P P 02 39 35.5 +0.9**
baz=214
**E08A Dider Farm, El 83.57 37 P P 02 39 36.3 +1.6**
E08A IAmb IAmb 02 39 37.4
comp=Z,4.7nm,0.5s
**SCM Sheep Creek Mo 83.59 14 P P 02 39 34.4 -0.2**
**SCM Sheep Creek Mo 83.59 14 P P 02 39 35.1 +0.5**
baz=209
**K20K Telida 83.60 11 P P 02 39 35.2 +0.7**
baz=203,SNR=5.6
**H16K Elim 83.65 7 P P 02 39 34.7 0.0**
baz=195
**CRQE Cirque 83.72 16 P P 02 39 36.3 +1.0**
baz=213
**WRAK Wrangell Islan 83.79 24 P P 02 39 36.6 +1.0**
baz=223
**G15K Niukluk 83.81 6 P P 02 39 36.0 +0.5**
baz=193
**PNL Peninsula 83.89 19 P P 02 39 36.6 +0.6**
baz=216
**J19K Poorman 83.94 10 P P 02 39 36.7 +0.5**
**J19K Poorman 83.94 10 P P 02 39 37.4 +1.2**
baz=201
**TABL Table Mountain 84.00 17 P P 02 39 36.8 0.0**
**VRDI Verde Repeater 84.03 16 P P 02 39 37.3 +0.4**
VRDI IAmb IAmb 02 39 37.6
comp=Z,7.1nm,0.8s
**121A Cookes Peak, D 84.03 53 P P 02 39 39.1 +1.5**
baz=244
**TNA Tin City 84.04 4 P P 02 39 37.2 +0.6**
baz=190
**N25K Chitina, Valde 84.06 15 P P 02 39 36.9 0.0**
**N25K Chitina, Valde 84.06 15 P P 02 39 37.5 +0.6**
baz=212
**M24K Tolsona, Glenn 84.10 14 P P 02 39 38.0 +1.0**
baz=210
**GLB Gilahina Butte 84.12 16 P P 02 39 37.2 0.0**
GLB IAmb IAmb 02 39 38.2
comp=Z,9.0nm,0.6s
**WAT6 Susitna Watana 84.16 14 P P 02 39 37.6 +0.2**
baz=209
**WAT1 Susitna Watana 84.20 13 P P 02 39 37.8 +0.3**
baz=208
**MCARA McCarthy VSAT 84.27 16 P P 02 39 38.1 +0.2**
baz=213
**SEY Seymchan 84.34 347 P P 02 39 38.4 +0.3**
comp=Z,7.2nm,0.5s,baz=118,slow=5.1,SNR=10
comp=Z,7.2nm,0.5s
**J20K Nowinta River 84.35 10 P P 02 39 37.9 -0.2**
J20K IAmb IAmb 02 39 39.4
comp=Z,4.7nm,0.6s
**J20K Nowinta River 84.35 10 P P 02 39 39.1 +1.0**
baz=203
**LOGN Logan Glacier 84.36 17 P P 02 39 38.6 +0.1**
LOGN IAmb IAmb 02 39 39.6
comp=Z,7.7nm,0.8s
**P29M Windy Craggy 84.37 19 P P 02 39 39.4 +1.0**
baz=218
**G16K Koyuk River 84.37 7 P P 02 39 39.4 +1.2**
baz=195
**R32K Eaglecrest 84.38 21 P P 02 39 39.3 +0.9**
baz=221
**CTG Chitna Glacier 84.38 17 P P 02 39 38.9 +0.4**
baz=215
**CTGM Chitina Glacie 84.38 17 P P 02 39 38.8 +0.2**
CTGM IAmb IAmb 02 39 39.8
comp=Z,9.3nm,0.9s
**GCSA Galena City Sc 84.45 9 P P 02 39 38.8 +0.3**
baz=200
**F15K North Star Dit 84.45 5 P P 02 39 37.5 -1.1**
baz=193
**LYN LuoYang 84.45 309 P P 02 39 41.1 +1.7**
LYN pmax pmax
comp=Z,29nm,0.6s
**O28M Mount Upton 84.55 18 P P 02 39 40.2 +0.6**
baz=216
**HARP HAARP 84.60 15 P P 02 39 40.4 +1.0**
baz=211
**PLBC Pleasant Camp 84.67 20 P P 02 39 40.9 +1.1**
baz=219
**DHY Denali Highway 84.67 13 P P 02 39 39.4 -0.5**
baz=209
**HLID Hailey 84.72 41 P P 02 39 41.8 +1.1**
**HLID Hailey 84.72 41 P P 02 39 42.0 +1.2**
baz=239,SNR=6.0
**BPAW Bear Paw Mtn. 84.84 12 P P 02 39 40.0 -0.7**
BPAW IAmb IAmb 02 40 03.5
comp=Z,12nm,1.5s
**BPAW Bear Paw Mtn. 84.84 12 P P 02 39 39.8 -0.8**
baz=206
**I20K Naaghedeneel 84.87 10 P P 02 39 41.5 +0.9**
baz=202
**MCK McKinley 84.92 13 P P 02 39 41.4 +0.4**
baz=208
**T35M Bob Quinn 84.99 24 P P 02 39 42.1 +0.6**
baz=225
**P30M Million Dollar 85.00 19 P P 02 39 43.2 +1.8**
baz=219
**SKAG Skagway 85.01 20 P P 02 39 42.7 +1.3**
baz=220
**PAX Paxson 85.02 14 P P 02 39 41.9 +0.3**
baz=211
**YUK8 Steele Glacier 85.08 17 P P 02 39 42.8 +0.6**
baz=216
**M26K Nabesna, AK 85.14 16 P P 02 39 43.4 +1.3**
baz=213,SNR=5.8
**YUK6 Outpost Mounta 85.22 18 P P 02 39 43.7 +1.0**
baz=217
**H19K Roundabout Mou 85.25 9 P P 02 39 42.0 -0.5**
**H19K Roundabout Mou 85.25 9 P P 02 39 43.5 +1.0**
baz=200
**YUK3 Moose Creek 85.29 17 P P 02 39 44.0 +0.9**
baz=215,SNR=8.3
**G18K Tagagawik 85.29 8 P P 02 39 41.6 -1.1**
**G18K Tagagawik 85.29 8 P P 02 39 43.0 +0.3**
baz=198
**S34M Telegraph Cree 85.33 23 P P 02 39 43.3 +0.2**
S34M IAmb IAmb 02 39 45.3
comp=Z,6.8nm,0.8s
**S34M Telegraph Cree 85.33 23 P P 02 39 44.5 +1.5**
baz=224,SNR=5.3
**M27K Edge Creek, AK 85.39 16 P P 02 39 43.7 +0.3**
M27K IAmb IAmb 02 39 45.1
comp=Z,9.5nm,1.0s
**M27K Edge Creek, AK 85.39 16 P P 02 39 44.1 +0.7**
baz=214,SNR=6.2
**H20K Anotleneega Mo 85.45 9 P P 02 39 44.5 +1.0**
baz=202
**YUK4 Talbot Arm 85.45 18 P P 02 39 45.1 +1.3**
baz=217
**MNTX Cornudas Mount 85.52 55 P P 02 39 45.9 +1.3**
baz=245
**I21K Tanana 85.64 11 P P 02 39 44.9 +0.5**
baz=205
**P32M Atlin 85.64 21 P P 02 39 45.0 +0.5**
baz=222
**NEW Newport 85.66 36 P P 02 39 45.6 +0.6**
baz=236
**NEA2 Nenana 85.66 12 P P 02 39 46.6 +2.2**
baz=207
**Q32M Nakina River 85.68 22 P P 02 39 46.2 +1.3**
baz=223
**MLY Manley 85.73 11 P P 02 39 44.1 -0.7**
baz=206
**G19K Purcell Mounta 85.74 8 P P 02 39 45.0 +0.2**
baz=200

**WRH Wood River Hil 85.75 13 P P 02 39 43.8 -1.1**
WRH IAmb IAmb 02 39 46.2
comp=Z,11nm,1.0s
**O30N Mendenhall 85.77 19 P P 02 39 46.1 +0.9**
baz=219,SNR=5.8
**TXAR Lajitas Array 85.91 57 P P 02 39 48.0 +1.4**
**TXAR Lajitas Array 85.91 57 P P 02 39 49.2 +2.6**
comp=Z,5.0nm,0.7s,baz=215,slow=6.1,SNR=15
comp=Z,5.0nm,0.7s
**HDA Harding Lake 85.94 13 P P 02 39 45.5 -0.2**
baz=209
**H21K Melozitna Rive 85.94 10 P P 02 39 45.5 -0.3**
baz=204
**L27K Beaver Creek, 85.99 16 P P 02 39 46.6 +0.5**
baz=214
**N30M Aishikik Lake 86.00 18 P P 02 39 46.3 0.0**
baz=218
**E17K Hotham Inlet 86.06 6 P P 02 39 46.8 +0.5**
baz=195
**WHY Whitehorse 86.07 20 P P 02 39 47.1 +0.4**
baz=220
**ANMO Albuquerque 86.08 51 P P 02 39 48.5 +1.1**
baz=244
**I23K Minto, Yukon-K 86.10 12 P P 02 39 46.4 -0.1**
baz=207
**DLBC Dease Lake 86.11 23 P P 02 39 48.1 +1.3**
comp=Z,1.6nm,0.7s,baz=219,slow=8.0,SNR=4.3
comp=Z,1.6nm,0.7s
**DLBC Dease Lake 86.11 23 P P 02 39 48.1 +1.3**
baz=225
**MDM Murphy Dome 86.15 12 IAmb IAmb 02 39 47.2**
comp=Z,7.8nm,1.0s
**COLA College 86.16 12 P P 02 39 46.8 0.0**
baz=208
**SCRK Sand Creek 86.23 14 P P 02 39 47.6 +0.3**
baz=212
**IL31 86.27 13 IAmb IAmb 02 39 47.8**
comp=Z,4.5nm,0.6s
**ILAR Eielson Array 86.27 13 P P 02 39 46.2 -1.1**
**ILAR Eielson Array 86.27 13 P P 02 39 47.0 -0.3**
comp=Z,2.5nm,0.4s,baz=220,slow=4.8,SNR=64
comp=Z,2.5nm,0.4s
**ALPN Alpine 86.34 56 IAmb IAmb 02 39 51.6**
comp=Z,4.6nm,0.9s
**M29M Somme Creek 86.39 17 P P 02 39 48.7 +0.6**
**M29M Somme Creek 86.39 17 P P 02 39 48.9 +0.8**
baz=217
**H22K Ishtalitna Cre 86.40 11 P P 02 39 48.3 +0.3**
baz=205
**P33M Teslin, Yukon 86.41 21 P P 02 39 49.2 +1.0**
baz=222
**N31M Braeburn, Yuko 86.42 19 P P 02 39 49.5 +1.3**
baz=220
**J25K Salcha River, 86.45 13 IAmb IAmb 02 39 49.1**
comp=Z,4.3nm,0.6s
**J25K Salcha River, 86.45 13 P P 02 39 48.3 0.0**
baz=211
**POKR Poker Plat Res 86.45 12 P P 02 39 47.5 -0.7**
baz=209
**R33M Jennings River 86.45 22 P P 02 39 49.0 +0.4**
baz=224
**E18K Tukpahlearik C 86.52 7 P P 02 39 48.8 +0.3**
baz=196
**G21K Allakaket 86.62 10 P P 02 39 49.0 +0.1**
G21K IAmb IAmb 02 39 49.7
comp=Z,4.2nm,0.8s
**G21K Allakaket 86.62 10 P P 02 39 49.4 +0.5**
baz=203
**H23K Yukon River 86.67 11 P P 02 39 48.8 -0.5**
baz=207
**K27K Chicken 86.73 15 P P 02 39 50.0 +0.5**
baz=214
**J26L Joseph Creek 86.77 14 P P 02 39 50.1 +0.3**
J26L IAmb IAmb 02 39 52.2
comp=Z,5.2nm,0.7s
**J26L Joseph Creek 86.77 14 P P 02 39 51.0 +1.1**
baz=212,SNR=8.2
**F20K Avaraart Lake 86.78 9 P P 02 39 50.5 +0.9**
baz=201
**XAN Xi'an 86.88 307 ⇓P P 02 39 52.5 +1.5**
XAN pmax pmax
comp=Z,14nm,1.1s
**E19K Redstone River 86.96 8 P P 02 39 51.4 +0.8**
baz=200
**H24K Noodor Dome 87.00 12 P P 02 39 49.8 -1.0**
baz=208
**S22A 4UR Ranch, Cre 87.02 49 P P 02 39 53.6 +1.7**
baz=244
**N32M Quiet Lake 87.02 20 P P 02 39 51.6 +0.6**
baz=222
**IMW Indian Meadow 87.07 42 IAmb IAmb 02 39 54.5**
comp=Z,5.1nm,0.9s
**F21K Alatna River 87.27 9 P P 02 39 52.1 +0.1**
baz=203
**G22K Bettles 87.31 10 P P 02 39 52.9 +0.7**
baz=205
**G23K Bananza Creek 87.38 11 P P 02 39 53.1 +0.5**
baz=206
**YHL Hebgen Lake 87.38 41 IAmb IAmb 02 39 56.5**
comp=Z,7.2nm,0.9s
**M31M Drury Creek, Y 87.40 19 P P 02 39 53.0 +0.3**
baz=221
**BW06 Boulder Array 87.42 43 P P 02 39 54.6 +1.0**
baz=242
**PD31 Pinedale Array 87.42 43 IAmb IAmb 02 39 54.9**
comp=Z,3.4nm,0.9s
**PDAR Pinedale Array 87.42 43 P P 02 39 54.5 +0.9**
comp=Z,2.4nm,0.7s,baz=208,slow=3.0,SNR=10.0
comp=Z,2.4nm,0.7s
**DAWY Dawson 87.44 16 P P 02 39 53.9 +1.0**
baz=216
**BOZ Bozeman (W) 87.47 40 P P 02 39 54.9 +1.3**
baz=240
**H17A Grant Village 87.54 41 P P 02 39 56.1 +2.0**
baz=241
**I26K Coal Creek Min 87.54 14 P P 02 39 53.8 +0.5**
baz=213
**EGAK Eagle 87.57 15 P P 02 39 53.8 +0.4**
EGAK IAmb IAmb 02 39 54.8
comp=Z,5.5nm,0.8s
**EGAK Eagle 87.57 15 P P 02 39 54.2 +0.7**
baz=215,SNR=6.2
**F22K John River 87.74 10 P P 02 39 54.6 +0.4**
baz=204
**FARO Faro, Yukon 87.74 19 P P 02 39 55.0 +0.6**
baz=222
**K29M Barlow Dome 87.76 17 P P 02 39 55.1 +0.6**
K29M IAmb IAmb 02 39 55.8
comp=Z,3.8nm,0.8s
**K29M Barlow Dome 87.76 17 P P 02 39 55.5 +1.0**
baz=218,SNR=6.2
**H25L Birch Creek 87.79 12 P P 02 39 54.4 0.0**
baz=210
**COLD Coldfoot 87.81 10 P P 02 39 55.4 +0.9**
baz=206,SNR=7.0
**D19K Kuna River 87.84 7 P P 02 39 55.1 +0.4**
baz=199
**G24K Hadweenzic Riv 87.84 12 P P 02 39 54.6 0.0**
baz=225
**E20K Nigu River 87.85 8 P P 02 39 55.2 +0.5**
baz=201,SNR=6.5
**HHC Hu-ho-hao-te 87.90 314 eP P 02 39 57.3 +1.6**
HHC pP pP 02 42 18.5 +14
HHC pmax pmax
comp=Z,14nm,0.6s
HHC pmax pmax
comp=Z,130nm,6.8s
**I27K Kandik River 88.15 14 P P 02 39 56.4 +0.2**
baz=214
**G25K Bearman Lake 88.17 12 P P 02 39 56.7 +0.6**
baz=210
**D20K Etivluk River 88.23 8 P P 02 39 56.5 0.0**
baz=200
**TOAD Toad River Com 88.23 24 P P 02 39 58.0 +1.3**
baz=229,SNR=5.7
**E21K Killik River 88.33 9 P P 02 39 56.9 0.0**
baz=203
**E22K Anaktuvuk Pass 88.37 10 P P 02 39 57.9 +0.7**
baz=205,SNR=5.1
**DRIO Del Rio 88.39 58 IAmb IAmb 02 40 00.8**
comp=Z,6.3nm,0.9s
**I28M Miner Creek 88.42 15 IAmb IAmb 02 39 58.6**
comp=Z,3.0nm,0.8s
**I28M Miner Creek 88.42 15 P P 02 39 58.0 +0.5**
baz=216
**F24K Squaw Lake 88.48 11 P P 02 39 57.8 +0.1**
F24K IAmb IAmb 02 39 59.2
comp=Z,4.6nm,0.7s

**F24K Squaw Lake 88.48 11 P P 02 39 58.5 +0.8**
baz=208,SNR=5.8
**E23K Chandalar 88.66 10 IAmb IAmb 02 39 59.5**
comp=Z,4.4nm,0.9s
**E23K Chandalar 88.66 10 P P 02 39 59.2 +0.7**
baz=207
**J30M Hart River 88.66 17 P P 02 39 59.4 +0.7**
baz=219
**MMPY Sheldon Lake, 88.69 20 IAmb IAmb 02 40 00.7**
comp=Z,8.5nm,1.0s
**MMPY Sheldon Lake, 88.69 20 P P 02 40 00.2 +1.5**
baz=224,SNR=5.2
**H27K Steamboat Moun 88.69 14 P P 02 40 00.0 +1.3**
baz=214
**RLMT Red Lodge 88.70 41 P P 02 40 00.6 +1.1**
baz=242
**ELIB Princess Elisa 88.73 187 dP P 02 39 59.8 +0.7**
comp=Z,6.0nm,0.7s
**G26K Porcupine Rive 88.80 13 P P 02 40 00.2 +1.1**
baz=212,SNR=7.0
**E24K Your Creek 88.87 11 P P 02 40 00.2 +0.7**
baz=208
**C21K Knifeblade Rid 88.88 8 P P 02 40 00.6 +1.1**
baz=202
**TGTN Hyland Airport 88.91 21 P P 02 40 00.6 +0.7**
baz=226
**D22K Ayikyak River 88.92 9 IAmb IAmb 02 40 01.2**
comp=Z,6.0nm,0.7s
**D22K Ayikyak River 88.92 9 P P 02 40 00.6 +0.9**
baz=204
**F25K Christian Rive 88.97 12 P P 02 40 00.8 +0.8**
baz=210
**833A Chaparral WMA, 88.99 60 P P 02 40 01.0 +0.1**
baz=248
**BMAR Burnt Mountain 89.04 12 P P 02 40 00.6 +0.3**
**G27K Doyon Strip 89.14 14 P P 02 40 01.4 +0.7**
baz=214
**I30M Mount Dempster 89.15 16 IAmb IAmb 02 40 02.2**
comp=Z,7.0nm,1.1s
**I30M Mount Dempster 89.15 16 P P 02 40 01.3 +0.3**
baz=219
**TOLK Toolik Lake Re 89.19 10 P P 02 40 01.3 +0.4**
baz=207
**D23K Nanushuk River 89.30 10 P P 02 40 02.5 +1.1**
baz=206
**B21K Ikpikpuk River 89.34 8 P P 02 40 02.0 +0.5**
baz=202
**F26K Sheenjek River 89.36 12 P P 02 40 02.9 +1.1**
baz=212
**B20K Meade River 89.38 7 P P 02 40 02.5 +0.7**
baz=200
**H29M Whitestone 89.43 15 P P 02 40 02.5 +0.4**
H29M IAmb IAmb 02 40 03.4
comp=Z,5.8nm,0.8s
**H29M Whitestone 89.43 15 P P 02 40 02.5 +0.4**
baz=217
**CMAR Chiang Mai Arr 89.43 290 P P 02 40 05.3 +2.1**
comp=Z,1.1nm,0.3s,baz=113,slow=2.9,SNR=9.6
comp=Z,1.1nm,0.3s
**PZH PanZhiHua 89.75 298 P P 02 40 05.8 +1.2**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,100nm,4.8s
**EGMT Eagleton 89.77 39 P P 02 40 05.0 +0.8**
baz=242
**D24K Happy Valley 89.77 10 P P 02 40 04.2 +0.7**
baz=208
**TROLL Troll, Antarti 89.83 180 ⇓P P 02 40 04.8 +0.6**
comp=Z,128nm,0.4s
**EPYK Eagle Plains 89.96 15 P P 02 40 05.1 +0.5**
baz=219
**G29M Pine Creek 90.06 15 P P 02 40 05.6 +0.5**
baz=218
**C23K Itkillik River 90.10 9 P P 02 40 05.9 +0.8**
baz=206
**SNAA Sanae 90.11 178 ⇓P P 02 40 04.8 -0.5**
comp=Z,34nm,0.6s
**SNAA Sanae 90.11 178 P P 02 40 05.9 +0.5**
comp=Z,1.2nm,0.6s,baz=210,slow=8.5,SNR=12
comp=Z,1.2nm,0.6s
**B22K Teshekpuk Lake 90.16 8 P P 02 40 06.3 +0.9**
baz=203
**F28M Old Crow 90.20 14 P P 02 40 06.4 +0.8**
baz=216
**VNA3 Neumayer Olymp 90.23 176 ⇓P P 02 40 06.3 +0.4**
comp=Z,9.3nm,0.8s
**C24K Franklin Bluff 90.30 10 P P 02 40 06.9 +0.9**
baz=208
**E27K Coleen River 90.30 13 P P 02 40 07.0 +0.9**
baz=214
**ABTX Abilene, Hawle 90.36 56 P P 02 40 08.4 +1.2**
**G30M tAoh Zraii Nji 90.56 15 P P 02 40 07.7 +0.4**
baz=219
**A22K Sinclair Lake 90.58 7 P P 02 40 09.4 +2.2**
baz=202
**A21K Barrow 90.69 7 P P 02 40 10.7 +3.0**
baz=200
**G31M Satah River 91.01 16 P P 02 40 09.6 +0.2**
baz=221
**E28M Babbage River 91.08 13 P P 02 40 10.2 +0.6**
baz=216
**C26K Camden Bay 91.11 11 P P 02 40 11.3 +1.5**
baz=211
**F30M Barrier River 91.16 15 P P 02 40 11.5 +1.4**
baz=220
**E29M Blow River 91.27 14 P P 02 40 11.7 +1.1**
baz=218
**D27M Malcolm River 91.30 12 P P 02 40 11.9 +1.2**
baz=215
**LAO LASA Array 91.31 41 P P 02 40 13.5 +2.2**
baz=244
**F31M Tsiigehtchic 91.54 16 P P 02 40 12.4 +0.7**
baz=222
**RSSD Black Hills 91.63 44 P P 02 40 13.0 0.0**
baz=246
**INK Inuvik 92.24 15 P P 02 40 14.9 -0.1**
comp=Z,3.8nm,0.9s,baz=228,slow=5.7,SNR=8.5
comp=Z,3.8nm,0.9s
**INK Inuvik 92.24 15 P P 02 40 14.7 -0.2**
baz=222
**ZALV Zalesovo Beam 108.87 322 PKiKP PKiKP 02 45 29.9 -0.6**
comp=Z,0.4nm,0.3s,baz=169,slow=0.7,SNR=3.5
**MKAR Makanchi Array 109.77 314 PKiKP PKiKP 02 45 32.0 -0.4**
comp=Z,0.6nm,0.4s,baz=98,slow=1.2,SNR=11
**KURBB Kurchatov Arra 112.51 318 PKiKP PKiKP 02 45 37.0 -0.4**
comp=Z,0.2nm,0.3s,baz=84,slow=1.7,SNR=7.5
**BVAR Borovoye Array 117.48 321 PKP PKiKP 02 45 46.5 -0.5**
comp=Z,1.6nm,0.4s,baz=106,slow=2.4,SNR=10
**ARCES ARCESS Array B 126.86 350 PKP PKiKP 02 46 04.7 -0.4**
comp=Z,1.4nm,0.4s,baz=37,slow=1.4,SNR=19
**FINES FINESS Array B 133.76 344 PKhKP PKPpre 02 46 12.2**
comp=Z,1.4nm,0.8s,baz=46,slow=4.0,SNR=1.6
FINES PKP PKiKP 02 46 17.8 -1.3
comp=Z,1.8nm,0.6s,baz=114,slow=2.3,SNR=7.2
**NB2 NORSAR Subarra136.90 353 PKP PKiKP 02 46 25.0 -0.7**
comp=Z,9.9nm,0.9s,baz=27,slow=2.3
**NOA NORSAR Array B136.90 353 PKP PKiKP 02 46 25.4 -0.3**
comp=Z,0.7nm,0.6s,baz=14,slow=4.1,SNR=3.9
**HFS Hagfors 137.47 351 PKhKP PKPpre 02 46 14.9**
comp=Z,0.9nm,0.4s,baz=72,slow=4.7,SNR=8.0
**AKASG Malin Array Be 141.18 332 PKhKP PKPpre 02 46 26.4**
comp=Z,1.6nm,0.3s,baz=42,slow=3.9,SNR=12
**AKBB Malin Array Si 141.18 332 PKPpre 02 46 25.9**
**KIEV Kiev 141.19 332 PKPpre PKPpre 02 46 26.2**
**EKA Eskdalemuir Ar 142.91 5 PKhKP PKPpre 02 46 32.3**
comp=Z,1.2nm,0.4s,baz=323,slow=2.7,SNR=24
**GAZ Gaziantep 143.96 309 PKPdf PKiKP 02 46 38.1 -2.8**
**KWP Kalwaria Pacla 144.68 337 ePKP PKPab 02 46 39.0 -0.1**
**OJC Ojcow 145.21 340 ePKP PKPab 02 46 40.5 -0.7**
**BURAR Bucovina Array 145.23 332 PKPbc PKiKP 02 46 41.5 -1.7**
**BURAR Bucovina Array 145.23 332 ⇑P PKiKP 02 46 41.6 -1.7**
**KOLS Kolonicke sedl 145.41 336 ePKP PKiKP 02 46 41.8 -1.6**
**BR131 Keskin Array S 145.41 315 PKPdf PKPbc 02 46 40.5 -0.6**
**BRTR Keskin Array B 145.41 315 PKPbc PKPab 02 46 41.6 -1.0**
comp=Z,3.2nm,0.5s,baz=129,slow=4.1,SNR=25
**KIRS Kirsehir-Merke 145.50 313 ⇑P PKPab 02 46 41.7 -1.1**
**KSP Ksiaz 145.69 344 ePKP PKiKP 02 46 42.4 -1.5**
**CRVS Cervenica-Dubn 145.74 337 ePKP PKiKP 02 46 42.6 -1.5**
**BMR Baia Mare 145.93 334 ⇑P PKPab 02 46 42.3 -1.8**
**OSTC Ostas 145.97 344 ePKP PKiKP 02 46 43.4 -1.1**
**CHVC Chvalec 145.98 344 ePKP PKiKP 02 46 43.4 -1.2**
**CLL Collm 146.02 348 ⇓PKPbc PKPab 02 46 42.9 -1.4**
comp=Z,27nm,0.8s
**UPC Upice 146.07 344 ePKP PKiKP 02 46 43.6 -1.1**
**DPC Dobruska-Polom 146.13 344 ePKP PKiKP 02 46 44.0 -0.9**
**BRG Berggiesshubel 146.23 346 ePKP PKiKP 02 46 43.9 -1.2**

| | | | | | | |
|---|---|---|---|---|---|---|
| BRG | | | Amp | | | 02 46 44.2 |
| | comp=Z,10nm,0.9s | | | | | |
| **BRG** | **Berggiesshubel** | **146.23 346** | P | **PKPab** | **02 46 45.7** | **+0.5** |
| BRG | | | Amp | | | 02 46 46.3 |
| | comp=Z,6.0nm,0.7s | | | | | |
| **LANS** | **Liptovska Anna** | **146.24 339** | *e*PKP | **PKPab** | **02 46 44.8** | **-0.6** |
| **KRLC** | **Kraliky** | **146.25 343** | *e*PKP | **PKiKP** | **02 46 44.1** | **-1.1** |
| **MORC** | **Moravsky Berou** | **146.30 342** | *e*PKP | **PKiKP** | **02 46 43.6** | **-1.7** |
| **MORC** | **Moravsky Berou** | **146.30 342** | PKP | **PKiKP** | **02 46 44.1** | **-1.2** |
| **PVCC** | **Panska Ves** | **146.41 345** | *e*PKP | **PKPab** | **02 46 44.7** | **-1.2** |
| **MLR** | **Muntele Rosu** | **146.46 329** | PKPbc | **PKiKP** | **02 46 44.2** | **-1.6** |
| | comp=Z,5.1nm,0.6s,baz=333,slow=5.4,SNR=9.4 | | | | | |
| **HSKC** | **Hora Svate Kat** | **146.59 347** | *e*PKP | **PKiKP** | **02 46 44.8** | **-1.0** |
| **CBBR** | **Cluj-Babes-Bol** | **146.61 333** | P | **PKPbc** | **02 46 42.0** | **-1.9** |
| **CJR** | **Cluj-Napoca** | **146.63 333** | P | **PKiKP** | **02 46 45.4** | **-0.7** |
| **MMAI** | **Mount Meron Ar** | **146.75 303** | PKPbc | **PKiKP** | **02 46 45.7** | **-1.1** |
| | comp=Z,8.3nm,0.6s,baz=64,slow=5.8,SNR=22 | | | | | |
| **LTVH** | **Ltavrtes, Hu** | **146.81 335** | P | **PKiKP** | **02 46 45.1** | **-1.2** |
| **PRU** | **Pruhonice** | **146.92 345** | *e*PKP | **PKiKP** | **02 46 45.7** | **-0.8** |
| **DRGR** | | **146.95 334** | P | **PKiKP** | **02 46 45.7** | **-1.1** |
| **VRAC** | **Vranov** | **146.99 342** | *e*PKP | **PKiKP** | **02 46 45.7** | **-1.0** |
| **VRAC** | **Vranov** | **146.99 342** | PKPbc | **PKPbc** | **02 46 43.5** | **-1.4** |
| | comp=Z,2.1nm,0.7s,baz=315,slow=4.3,SNR=2.7 | | | | | |
| **VYHS** | **Vyhne** | **147.01 339** | *e*PKP | **PKiKP** | **02 46 46.0** | **-0.8** |
| **JAVC** | **Velka Javorina** | **147.07 341** | *e*PKP | **PKPab** | **02 46 47.0** | **-1.8** |
| **PSZ** | **Piszkesteto** | **147.14 338** | P | **PKiKP** | **02 46 45.6** | **-1.5** |
| **KRUC** | **Moravsky** | **147.27 342** | *e*PKP | **PKiKP** | **02 46 46.3** | **-0.9** |
| **TREC** | **Trest** | **147.31 344** | *e*PKP | **PKiKP** | **02 46 46.7** | **-0.7** |
| **ZVC** | **Zvikov** | **147.51 345** | *e*PKP | **PKiKP** | **02 46 47.3** | **-0.4** |
| **LOT** | **Lotru** | **147.52 331** | P | **PKiKP** | **02 46 46.8** | **-1.2** |
| **BTNL** | **Ternell** | **147.71 355** | *d*PKPbc | **PKiKP** | **02 46 47.1** | **-1.0** |
| **BSTI** | **Sart Tilman** | **147.76 356** | *d*PKP | **PKiKP** | **02 46 47.5** | **-0.7** |
| **SIRR** | **Siria** | **147.81 334** | P | **PKiKP** | **02 46 48.0** | **-0.5** |
| **GRF** | **Grafenberg Arr** | **147.91 349** | *e*PKP | **PKiKP** | **02 46 48.1** | **-0.5** |
| | baz=17,slow=2.1 | | | | | |
| **KHC** | **Kasperske Hory** | **147.95 346** | *e*PKP | **PKiKP** | **02 46 48.6** | **-0.1** |
| **GZR** | **Gura Zlata** | **148.02 332** | P | **PKiKP** | **02 46 47.9** | **-1.1** |
| **SURR** | **Surduc** | **148.02 333** | P | **PKiKP** | **02 46 48.0** | **-0.9** |
| **CKRC** | **Cesky Krumlov** | **148.06 345** | *e*PKP | **PKiKP** | **02 46 48.9** | **0.0** |
| **BMRD** | **Maredsous** | **148.09 357** | *d*PKP | **PKiKP** | **02 46 48.7** | **-0.2** |
| **GERES** | **GERESS Array B** | **148.18 345** | PKPbc | **PKiKP** | **02 46 49.1** | **-0.2** |
| | comp=Z,3.7nm,0.6s,baz=162,slow=9.7,SNR=23 | | | | | |
| **DOU** | **Dourbes** | **148.30 357** | *d*PKPbc | **PKiKP** | **02 46 48.9** | **-0.5** |
| **BZS** | **Buzias** | **148.35 333** | P | **PKiKP** | **02 46 49.1** | **-0.5** |
| **CONA** | **Conrad Observa** | **148.45 342** | *e*PKP | **PKiKP** | **02 46 49.4** | **-0.4** |
| | comp=Z,6.0nm,0.8s,SNR=7.1 | | | | | |
| **RONA** | **Rosalia, Austr** | **148.53 341** | *i* PKP | **PKiKP** | **02 46 49.8** | **-0.1** |
| | comp=Z,8.2nm,0.8s,SNR=8.3 | | | | | |
| **HERR** | **Herculane** | **148.57 332** | P | **PKiKP** | **02 46 49.9** | **-0.2** |
| **WLF** | **Walferdange** | **148.63 355** | *d*PKP | **PKiKP** | **02 46 50.1** | **+0.1** |
| **MOA** | **Molln** | **148.96 344** | *i* PKP | **PKiKP** | **02 46 50.6** | **-0.2** |
| | comp=Z,4.8nm,1.0s | | | | | |
| **MORH** | **Mrgy, Hungar** | **149.04 337** | P | **PKiKP** | **02 46 50.3** | **-0.6** |
| **ARSA** | **Arzberg** | **149.16 342** | *i* PKP | **PKiKP** | **02 46 51.4** | **+0.2** |
| | comp=Z,6.3nm,1.2s | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.27 345** | *i* PKP | **PKiKP** | **02 46 51.3** | **-0.2** |
| | comp=Z,10nm,1.3s | | | | | |
| **BFO** | **Black Forest** | **149.70 352** | PKPbc | **PKiKP** | **02 46 52.4** | **+0.1** |
| **LESA** | **Schwarzleotal** | **149.76 346** | *i* PKP | **PKiKP** | **02 46 52.1** | **-0.4** |
| | comp=Z,5.5nm,0.8s | | | | | |
| **SOKA** | **Soboth** | **149.82 342** | *i* PKP | **PKiKP** | **02 46 52.1** | **-0.6** |
| | comp=Z,9.3nm,1.3s | | | | | |
| **KBA** | **Koelnbreinsper** | **149.91 344** | *i* PKP | **PKiKP** | **02 46 52.3** | **-0.7** |
| | comp=Z,6.7nm,0.7s | | | | | |
| **WATA** | **Walderalm** | **150.09 347** | *i* PKP | **PKiKP** | **02 46 53.2** | **-0.1** |
| | comp=Z,6.5nm,0.6s | | | | | |
| **RETA** | **Reutte** | **150.11 348** | *i* PKP | **PKiKP** | **02 46 53.0** | **-0.3** |
| | comp=Z,3.9nm,0.7s | | | | | |
| **OBKA** | **Obir** | **150.11 343** | *i* PKP | **PKiKP** | **02 46 52.8** | **-0.6** |
| | comp=Z,3.9nm,0.9s | | | | | |
| **WTTA** | **Wattenberg** | **150.14 347** | *i* PKP | **PKiKP** | **02 46 53.5** | **0.0** |
| | comp=Z,13nm,0.6s,SNR=7.7 | | | | | |
| **MOTA** | **Moosalm** | **150.18 348** | *i* PKP | **PKiKP** | **02 46 53.3** | **-0.2** |
| | comp=Z,10.0nm,1.0s | | | | | |
| **MYKA** | **Terra Mystica** | **150.25 344** | *i* PKP | **PKiKP** | **02 46 53.0** | **-0.6** |
| | comp=Z,6.3nm,0.6s | | | | | |
| **SQTA** | **Sankt Quirin** | **150.28 347** | *i* PKP | **PKiKP** | **02 46 53.7** | **+0.1** |
| | comp=Z,10.0nm,0.7s,SNR=5.3 | | | | | |
| **ABTA** | **Abfaltersbach** | **150.43 345** | *e*PKP | **PKiKP** | **02 46 53.4** | **-0.6** |
| | comp=Z,13nm,0.6s,SNR=7.9 | | | | | |
| **DAVA** | **Damuels** | **150.47 349** | *i* PKiKP | **PKiKP** | **02 46 54.6** | **+0.5** |
| | comp=Z,6.0nm,0.6s,SNR=5.3 | | | | | |
| **FETA** | **Feichten** | **150.56 348** | *i* PKP | **PKiKP** | **02 46 54.5** | **+0.2** |
| | comp=Z,6.6nm,0.7s,SNR=5.2 | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.96 349** | PKPbc | **PKiKP** | **02 46 55.6** | **+0.5** |
| | comp=Z,12nm,0.5s,baz=248,slow=3.2,SNR=50 | | | | | |
| **FNA** | **Florina** | **152.17 327** | PKPbc | **PKiKP** | **02 46 57.4** | **-0.3** |
| **ESDC** | **Sonseca Array** | **158.17 13** | PKPab | **PKPab** | **02 47 35.7** | **-0.3** |
| | comp=Z,1.2nm,0.9s,baz=337,slow=5.4,SNR=6.8 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **174.78 176** | PKP | **PKPdf** | **02 47 10.1** | **-1.3** |
| | comp=Z,1.3nm,1.0s,baz=347,slow=4.5,SNR=5.0 | | | | | |
| TORD | | | PKPab | **PKPab** | **02 48 50.1** | **+0.4** |
| | comp=Z,0.4nm,0.8s,baz=136,slow=2.8,SNR=2.1 | | | | | |

*NEIC **20** 03:21:45.3±1.1, 17.9°S±0.2°×178.0°W±0.0°, h610km±12km, mb4.2/16, Error ellipse: s-maj=29.5km s-min=9.8km az=171.0*
*IDC **20** 03:21:47.0±3.2, 17.98°S×178.14°W, h628km±37km, mb3.2/6, mbtmp4.2/7, Error ellipse: s-maj=27.4km s-min=18.9km az=176.0*

**ISC 20 03:21:43.9±0.8, 18.0°S±0.2°×178.0°W±0.1, h590km, n28, σ1§18/30, mb4.0/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.75** | **274** | P | **P** | **03 23 10.2** | **+3.2** |
| **LIFNC** | **LIFOU** | **14.17** | **256** | P | **P** | **03 24 43.3** | **-1.4** |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | **P** | **03 24 53.7** | **-0.2** |
| DZM | | | | IAmb | IAmb | 03 25 00.8 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.14** | **252** | P | **P** | **03 24 53.5** | **-0.3** |
| | comp=Z,4.5nm,0.7s,baz=133,slow=17,SNR=5.9 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **03 25 11.9** | **+2.0** |
| **EIDS** | **Eidsvold** | **29.57** | **250** | P | **P** | **03 27 02.8** | **+0.1** |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **03 27 38.0** | **-0.5** |
| **COEN** | **Coen** | **37.47** | **270** | P | **P** | **03 28 09.3** | **+0.4** |
| COEN | | | | IAmb | IAmb | 03 28 10.4 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.90** | **241** | P | **P** | **03 28 21.5** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.90** | **241** | P | **P** | **03 28 21.6** | **+1.3** |
| | comp=Z,2.5nm,0.5s,baz=98,slow=15,SNR=6.0 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.67** | **241** | P | **P** | **03 28 57.9** | **0.0** |
| **WR0** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **03 29 06.2** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 03 29 47.7 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **03 29 07.0** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 03 29 14.9 | |
| | comp=Z,9.5nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **03 29 07.3** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 03 29 23.6 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **03 29 06.5** | **-1.5** |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **03 29 07.4** | **-0.7** |
| | comp=Z,1.1nm,0.3s,baz=95,slow=7.4,SNR=39 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **45.11** | **254** | P | **P** | **03 29 08.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **03 29 08.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **03 29 09.2** | **0.0** |
| | comp=Z,5.1nm,0.6s,baz=88,slow=8.7,SNR=45 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 30 35.6** | **-1.3** |
| | comp=Z,0.5nm,0.4s,baz=98,slow=4.4,SNR=4.5 | | | | | | |
| ASAR | | | | S | **S** | **03 35 04.5** | **-2.0** |
| | comp=Z,0.4nm,0.5s,baz=88,slow=15,SNR=4.1 | | | | | | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.04** | **180** | P | **P** | **03 32 09.5** | **+0.5** |
| **QSPA** | **South Pole Qui** | **72.04** | **180** | P | **P** | **03 32 09.7** | **+0.8** |
| | comp=Z,1.8nm,0.5s,baz=221,slow=0.8,SNR=30 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **SMAI** | **San Martin Ant** | **80.92** | **159** | P | **P** | **03 32 58.1** | **+0.9** |
| SMAI | | | | IAmb | IAmb | 03 33 29.1 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.10** | **8** | P | **P** | **03 32 57.2** | **-0.9** |
| K15K | | | | IAmb | IAmb | 03 33 12.8 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **BELA** | **Belgrano 2** | **82.01** | **173** | P | **P** | **03 33 02.2** | **-0.5** |
| BELA | | | | IAmb | IAmb | 03 33 03.3 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.74** | **57** | P | **P** | **03 33 22.6** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=207,slow=8.1,SNR=4.8 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **90.48** | **178** | P | **P** | **03 33 41.7** | **-1.6** |
| | comp=Z,0.4nm,0.5s,baz=205,slow=12,SNR=6.8 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **BRTR** | **Keskin Array B** | **145.12 315** | PKPbc | **PKPdf** | **03 40 15.3** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=125,slow=4.2,SNR=4.2 | | | | | |
| **GERES** | **GERESS Array B** | **147.81 345** | PKPbc | **PKPbc** | **03 40 22.1** | **-1.3** |
| | comp=Z,0.5nm,0.4s,baz=34,slow=5.2,SNR=4.8 | | | | | |

*WEL **20** 03:22:52.8±0.5, 40°S±2°×17°3E±°, h5km, M3.3/15, ML3.6/16, MLv3.3/15, Error ellipse: s-maj=0.0km s-min=0.0km az=111.6, confirmed*
*NOU **20** 03:22:53.0, 40.01S×173.01E, h0km, MLv3.5/7, Cook Strait, New Zealand*

**ISC 20 03:22:51.1±1.3, 40.03S±0.02×173.04E±0.03, h4km±10km, n77, σ0§85/105, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **QRZ** | **Quartz Range** | **0.88** | **206** | P | **Pn** | **03 23 09.9** | **-0.4** |
| **QRZ** | **Quartz Range** | **0.88** | **206** | P | **Pn** | **03 23 09.9** | **-0.4** |
| QRZ | | | | S | **Sn** | **03 23 22.7** | **-0.9** |
| **NMEZ** | **Namu Road** | **0.89** | **46** | P | **Pn** | **03 23 09.9** | **-0.5** |
| NMEZ | | | | S | **Sb** | **03 23 22.8** | **+1.4** |
| **NBEZ** | **Newall Road No** | **0.99** | **40** | P | **Pn** | **03 23 11.8** | **-0.1** |
| NBEZ | | | | S | **Sb** | **03 23 24.7** | **+0.4** |
| **TKNZ** | **Takaka Hill** | **1.00** | **184** | P | **Pn** | **03 23 11.6** | **-0.4** |
| TKNZ | | | | S | **Sb** | **03 23 24.5** | **0.0** |
| **DUWZ** | **D'Urville Isla** | **1.02** | **139** | P | **Pb** | **03 23 11.3** | **0.0** |
| DUWZ | | | | S | **Sg** | **03 23 24.0** | **+0.2** |
| **KHEZ** | **Kahui Hut** | **1.05** | **46** | P | **Pn** | **03 23 12.7** | **0.0** |
| **KHEZ** | **Kahui Hut** | **1.05** | **46** | P | **Pn** | **03 23 12.7** | **0.0** |
| KHEZ | | | | S | **Sb** | **03 23 26.7** | **+0.6** |
| **PREZ** | **Palmer Road** | **1.10** | **52** | P | **Pn** | **03 23 13.6** | **+0.2** |
| PREZ | | | | S | **Sb** | **03 23 28.5** | **+1.0** |
| **PKE** | **Pukeiti** | **1.11** | **41** | P | **Pn** | **03 23 13.7** | **+0.3** |
| PKE | | | | S | **Sb** | **03 23 28.6** | **+0.9** |
| **NEZ** | **North Egmont** | **1.11** | **47** | P | **Pn** | **03 23 13.5** | **-0.1** |
| NEZ | | | | S | **Sb** | **03 23 28.4** | **+0.5** |
| **LREZ** | **Lake Rotokare** | **1.19** | **62** | P | **Pg** | **03 23 12.9** | **-1.0** |
| LREZ | | | | S | **Sb** | **03 23 30.9** | **+0.9** |
| **NNZ** | **Nelson** | **1.21** | **168** | P | **Pb** | **03 23 14.4** | **-0.2** |
| NNZ | | | | S | **Sg** | **03 23 29.8** | **-0.1** |
| **MRNZ** | **Matariki Terra** | **1.38** | **189** | P | **Pb** | **03 23 17.4** | **-0.1** |
| MRNZ | | | | S | **Sn** | **03 23 36.0** | **+0.1** |
| **TCW** | **Tory Channel** | **1.50** | **142** | P | **Pn** | **03 23 19.0** | **+0.2** |
| TCW | | | | S | **Sn** | **03 23 38.3** | **-0.6** |
| **TUWZ** | **Tuamarina** | **1.55** | **154** | P | **Pn** | **03 23 19.5** | **0.0** |
| TUWZ | | | | S | **Sn** | **03 23 38.6** | **-1.5** |
| **VRZ** | **Vera Road** | **1.61** | **56** | P | **Pn** | **03 23 19.6** | **-0.7** |
| VRZ | | | | S | **Sn** | **03 23 42.1** | **+0.7** |
| **KIW** | **Kapiti Island** | **1.65** | **121** | P | **Pn** | **03 23 20.6** | **-0.2** |
| **THZ** | **Tophouse** | **1.73** | **183** | P | **Pb** | **03 23 22.4** | **-1.0** |
| THZ | | | | S | **Sg** | **03 23 45.7** | **-0.9** |
| **BSWZ** | **Blackbirch Sta** | **1.79** | **160** | P | **Pb** | **03 23 24.0** | **-0.5** |
| BSWZ | | | | S | **Sn** | **03 23 46.4** | **+0.3** |
| **SNZO** | **South Karori** | **1.79** | **136** | P | **Pg** | **03 23 25.0** | **-0.5** |
| **OGWZ** | **Otaki Gorge** | **1.80** | **116** | P | **Pn** | **03 23 23.7** | **+0.8** |
| OGWZ | | | | S | **Sn** | **03 23 46.4** | **+0.1** |
| **WEL** | **Wellington** | **1.81** | **134** | P | **Pg** | **03 23 25.5** | **-0.3** |
| **CAW** | **Cannon Point** | **1.88** | **125** | P | **Pn** | **03 23 24.3** | **+0.3** |
| CAW | | | | S | **Sb** | **03 23 49.8** | **0.0** |
| **CMWZ** | **Cape Campbell** | **1.93** | **153** | P | **Pg** | **03 23 28.4** | **+0.4** |
| **DSZ** | **Denniston Nort** | **1.95** | **208** | P | **Pn** | **03 23 25.3** | **+0.3** |
| DSZ | | | | S | **Sg** | **03 23 55.9** | **+2.2** |
| **BHW** | **Baring Head** | **1.95** | **135** | P | **Pn** | **03 23 25.7** | **+0.7** |
| BHW | | | | S | **Sb** | **03 23 52.6** | **+0.7** |
| **MRZ** | **Mangatainoka R** | **2.04** | **109** | P | **Pn** | **03 23 26.5** | **+0.4** |
| MRZ | | | | S | **Sn** | **03 23 53.7** | **+1.7** |
| **TRVZ** | **Turoa** | **2.07** | **70** | P | **Pn** | **03 23 26.7** | **-0.1** |
| TRVZ | | | | S | **Sn** | **03 23 51.2** | **-1.9** |
| **HIZ** | **Hauiti** | **2.07** | **43** | P | **Pb** | **03 23 29.5** | **+0.3** |
| **HIZ** | **Hauiti** | **2.07** | **43** | P | **Pn** | **03 23 26.0** | **-0.6** |
| **HOWZ** | **Holdsworth Sta** | **2.07** | **115** | P | **Pn** | **03 23 27.7** | **+1.0** |
| HOWZ | | | | S | **Sb** | **03 23 55.6** | **+0.2** |
| **FWVZ** | **Far West T-bar** | **2.09** | **69** | P | **Pn** | **03 23 27.1** | **0.0** |
| FWVZ | | | | S | **Sn** | **03 23 51.5** | **-2.1** |
| **MAVZ** | **Matarangi** | **2.09** | **69** | P | **Pb** | **03 23 30.2** | **+0.5** |
| MAVZ | | | | S | **Sb** | **03 23 56.1** | **0.0** |
| **WNVZ** | **Wahianoa** | **2.09** | **71** | P | **Pn** | **03 23 28.5** | **+1.4** |
| WNVZ | | | | S | **Sn** | **03 23 50.8** | **-2.9** |
| **COVZ** | **Chateau Observ** | **2.10** | **67** | P | **Pg** | **03 23 31.8** | **+0.5** |
| **WHVZ** | **Whangaehu Hut** | **2.10** | **70** | P | **Pn** | **03 23 27.4** | **+0.1** |
| WHVZ | | | | S | **Sn** | **03 23 55.4** | **+1.4** |
| **POWZ** | **Post Office Ro** | **2.12** | **101** | P | **Pb** | **03 23 29.8** | **-0.2** |
| **NGZ** | **Ngauruhoe** | **2.15** | **67** | P | **Pb** | **03 23 31.5** | **+0.7** |
| **MSWZ** | **Moikau Station** | **2.17** | **130** | P | **Pb** | **03 23 30.6** | **-0.4** |
| **WTVZ** | **West Tongariro** | **2.17** | **66** | P | **Pn** | **03 23 29.2** | **+1.1** |
| **SNVZ** | **South Ngauruho** | **2.18** | **68** | P | **Pn** | **03 23 28.5** | **+0.3** |
| **MOVZ** | **Moawhango** | **2.18** | **74** | P | **Pn** | **03 23 28.7** | **+0.5** |
| **MTW** | **Mount Morrison** | **2.18** | **122** | P | **Pb** | **03 23 29.9** | **-1.2** |
| **NNVZ** | **North Ngauruho** | **2.18** | **66** | P | **Pb** | **03 23 31.6** | **+0.4** |
| **OTVZ** | **Oturere** | **2.20** | **68** | P | **Pg** | **03 23 33.3** | **0.0** |
| **NTVZ** | **North Tongarir** | **2.24** | **66** | P | **Pn** | **03 23 29.4** | **+0.3** |
| **ETVZ** | **East Tongariro** | **2.25** | **67** | P | **Pb** | **03 23 32.7** | **+0.4** |
| **TMVZ** | **Te Maari** | **2.25** | **67** | P | **Pn** | **03 23 30.4** | **+1.2** |
| **PAWZ** | **Paruwai Farm** | **2.26** | **127** | P | **Pb** | **03 23 32.3** | **-0.1** |
| **PLWZ** | **Palliser** | **2.27** | **133** | P | **Pg** | **03 23 34.5** | **-0.2** |
| **PRWZ** | **Pori Road** | **2.30** | **104** | P | **Pg** | **03 23 34.6** | **-0.5** |
| **DVHZ** | **Dannevirke** | **2.41** | **97** | P | **Pb** | **03 23 35.4** | **+0.4** |
| **KHZ** | **Kahutara** | **2.41** | **171** | P | **Pb** | **03 23 34.7** | **-0.2** |
| **KHZ** | **Kahutara** | **2.41** | **171** | P | **Pb** | **03 23 34.8** | **-0.2** |
| **RATZ** | **Rangitukua** | **2.41** | **62** | P | **Pg** | **03 23 37.1** | **-0.2** |
| **TMWZ** | **Te Maipa** | **2.42** | **117** | P | **Pg** | **03 23 37.5** | **+0.1** |
| **PNHZ** | **Pukenui** | **2.43** | **88** | P | **Pb** | **03 23 34.7** | **-0.6** |
| **TRWZ** | **Traveller** | **2.43** | **125** | P | **Pg** | **03 23 37.1** | **-0.4** |
| **BFZ** | **Birch Farm** | **2.53** | **106** | P | **Pg** | **03 23 38.9** | **-0.6** |
| **TLZ** | **Tolley Road** | **2.58** | **49** | P | **Pn** | **03 23 33.9** | **+0.3** |
| **KRHZ** | **Kereru** | **2.59** | **82** | P | **Pb** | **03 23 36.9** | **-1.2** |
| **KWHZ** | **Kaweka Forest** | **2.68** | **78** | P | **Pb** | **03 23 37.6** | **-2.0** |
| **LTZ** | **Lake Taylor** | **2.81** | **192** | P | **Pn** | **03 23 37.6** | **+0.9** |
| **INZ** | **Inchbonnie** | **2.94** | **204** | P | **Pn** | **03 23 39.2** | **+0.5** |
| **AWAZ** | **Awhitu Peninsu** | **3.22** | **23** | P | **Pb** | **03 23 47.5** | **-1.3** |
| **WVZ** | **Waitaha Valley** | **3.50** | **209** | P | **Pn** | **03 23 46.7** | **+0.5** |
| **URZ** | **Urewera** | **3.62** | **62** | P | **Pn** | **03 23 50.1** | **+2.1** |
| **MHCZ** | **Mount Hutt** | **3.67** | **197** | P | **Pn** | **03 23 49.0** | **+0.4** |
| **GCSZ** | **Gaunt Creek Bo** | **3.86** | **211** | P | **Pn** | **03 23 52.2** | **+0.9** |
| **ARCZ** | **Arundel** | **4.15** | **199** | P | **Pn** | **03 23 55.0** | **-0.2** |
| **FOZ** | **Fox Glacier** | **4.25** | **214** | P | **Pn** | **03 23 56.4** | **-0.1** |
| **TMZ** | **Timaru** | **4.60** | **199** | P | **Pn** | **03 24 00.9** | **-0.5** |
| **LBZ** | **Lake Benmore** | **4.84** | **205** | P | **Pn** | **03 24 05.5** | **+0.8** |
| **JCZ** | **Jackson Bay** | **5.13** | **217** | P | **Pn** | **03 24 10.8** | **+2.0** |
| **ODZ** | **Otahua Downs** | **5.31** | **199** | P | **Pn** | **03 24 10.5** | **-0.6** |
| **MSZ** | **Milford Sound** | **5.99** | **218** | P | **Pn** | **03 24 20.4** | **-0.1** |

**IDC 20 03:25:43.8±1.8, 19.40S×177.99W, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=51.2km s-min=41.9km az=154.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.77** | **261** | P | P | 03 33 58.7 | -0.9 |
| | 0.4nm,0.7s,baz=97,slow=7.5,SNR=5.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.79** | **256** | P | P | 03 34 00.2 | +0.5 |
| | 1.0nm,0.6s,baz=86,slow=8.7,SNR=8.9 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.66** | **180** | P | P | 03 37 01.1 | -0.1 |
| | 2.1nm,1.2s,baz=265,slow=5.8,SNR=2.3 | | | | | | |
| | 2.1nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **87.25** | **13** | P | P | 03 38 31.8 | +0.1 |
| | 0.3nm,0.7s,baz=225,slow=3.7,SNR=2.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC **20** 03:40:15.7±7.3, 8.21S×116.58E, h0km, mb3.7/3, mbtmp3.8/4, ML3.4/1, Error ellipse: s-maj=114.8km s-min=22.5km az=112.0*
*DJA **20** 03:40:20.9±0.3, 8.3S±3°×11°7E±°, h10km, M4.0/10, mb4.3/1, MLv3.9/10*
*NEIC **20** 03:40:20.0±1.4, 8.30S±0.10°×116.80E±0.07, h10km±2km, mb4.1/8, Error ellipse: s-maj=18.7km s-min=7.5km az=329.0*

**ISC 20 03:40:22.8±0.9, 8.37S±0.06°×116.80E±0.05, h35km, n30, σ1§25/32, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.37** | **168** | P | **Pn** | **03 40 30.0** | **-1.7** |
| TWSI | | | | S | **Sn** | **03 40 36.6** | **-1.2** |
| **PLAI** | **Plampang** | **1.06** | **115** | P | **Pn** | **03 40 42.0** | **+0.7** |
| **SRBI** | **Singaraja** | **1.60** | **280** | P | **Pn** | **03 40 48.6** | **0.0** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **IGBI** | **Denpasar** | **1.70** | **255** | P | **Pn** | **03 40 52.0** | **+2.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.62** | **268** | | **Pn** | **03 41 01.9** | **-0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.62** | **268** | P | **Pn** | **03 41 02.3** | **-0.4** |
| **WBSI** | **Waikabubak, Su** | **2.85** | **116** | P | **Pn** | **03 41 06.7** | **+0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.28** | **59** | P | **Pn** | **03 41 24.7** | **-0.8** |
| **KAPI** | **Kappang** | **4.44** | **41** | Pn | **Pn** | **03 41 26.3** | **-1.4** |
| **KAPI** | **Kappang** | **4.44** | **41** | Pn | **Pn** | **03 41 26.2** | **-1.5** |
| | 2.1nm,0.3s,baz=192,slow=9.9,SNR=8.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **03 42 16.1** | **-2.1** |
| | 7.4nm,0.3s,baz=55,slow=20,SNR=7.9 | | | | | | |
| KAPI | | | | Lg | Lg | 03 42 37.8 | |
| | 4.8nm,0.3s,baz=282,slow=20,SNR=6.2 | | | | | | |
| | 5.7nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.85** | **95** | P | **Pn** | **03 41 33.9** | **+0.4** |
| **PWJI** | **Pagerwojo** | **4.96** | **274** | P | **Pn** | **03 41 36.0** | **+1.1** |
| **BNSI** | **Bone** | **5.13** | **40** | P | **Pn** | **03 41 38.0** | **+0.7** |
| **UGM** | **Wanagama** | **6.23** | **274** | Pn | **Pn** | **03 41 51.5** | **-0.9** |
| **FITZ** | **Fitzroy Crossi** | **12.94** | **139** | Pn | **Pn** | **03 43 25.9** | **+1.6** |
| **MBWA** | **Marble Bar** | **13.02** | **168** | Pn | **Pn** | **03 43 24.4** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **13.45** | **168** | Pn | **Pn** | **03 43 31.0** | **-0.3** |
| **GIRL** | **Giralia** | **14.40** | **190** | Pn | **Pn** | **03 43 43.1** | **-1.2** |
| **MTN** | **Manton Dam** | **14.77** | **109** | Pn | **Pn** | **03 43 50.2** | **+0.9** |
| **WB0** | **Warramunga Arr** | **20.46** | **125** | P | **P** | **03 44 57.5** | **-0.1** |
| **WRA** | **Warramunga Arr** | **20.50** | **126** | P | **P** | **03 44 58.5** | **+0.4** |
| **WRA** | **Warramunga Arr** | **20.50** | **126** | P | **P** | **03 44 58.6** | **+0.5** |
| | 1.2nm,0.4s,baz=302,slow=12,SNR=36 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.51** | **126** | | **P** | **03 44 55.2** | **-3.0** |
| WRAB | | | | IAmb | IAmb | 03 44 56.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.51** | **126** | P | **P** | **03 44 58.5** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 03 45 35.7 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.67** | **126** | P | **P** | **03 45 00.5** | **+0.6** |
| WR0 | | | | IAmb | IAmb | 03 45 17.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.35** | **135** | P | **P** | **03 45 18.9** | **+0.9** |
| | comp=Z,1.6nm,0.8s,baz=312,slow=8.9,SNR=14 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **24.65** | **156** | P | **P** | **03 45 42.1** | **+1.8** |
| **BBOO** | **Buckleboo** | **30.16** | **146** | P | **P** | **03 46 31.1** | **+1.4** |
| **STKA** | **Stephens Creek** | **32.83** | **139** | P | **P

*mbtmp3.3/3, Error ellipse: s-maj=301.6km s-min=29.9km az=57.0*

**ISC 20 03:54:16.5±1.2, 8°.6S±0°.2×116°.69E±0°.07, h35km, n10, σ1§50/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.23** | **122** | P | **Pn** | **03 54 22.0** | **-1.6** |
| **PLAI** | **Plampang** | **1.10** | **101** | P | **Pn** | **03 54 34.3** | **-1.1** |
| **SRBI** | **Singaraja** | **1.55** | **290** | P | **Pn** | **03 54 40.2** | **-1.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.51** | **273** | P | **Pn** | **03 54 54.1** | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **2.86** | **111** | P | **Pn** | **03 55 00.6** | **+1.0** |
| **BSSI** | **Bau Bau, Buton** | **4.50** | **57** | P | Pn | 03 55 17.1 | -5.1 |
| **EDFI** | **Ende, Flores** | **4.95** | **92** | P | **Pn** | **03 55 26.6** | **-1.9** |
| **WRA** | **Warramunga Arr** | **20.45** | **125** | P | **P** | **03 58 50.8** | **-0.4** |
| | 0.4nm,0.5s,baz=300,slow=12,SNR=7.1 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.26** | **134** | P | **P** | **03 59 11.1** | **+0.4** |
| | 0.6nm,0.6s,baz=313,slow=9.6,SNR=7.1 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.94** | **352** | P | **P** | **04 03 60.0** | **+1.7** |
| | 0.3nm,0.5s,baz=158,slow=4.2,SNR=1.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*IDC **20** 03:56:35.5±1.8, 8°.33S×116°.84E, h0km, mb3.8/4, mbtmp3.8/5, ML3.7/1, Error ellipse: s-maj=31.9km s-min=21.0km az=94.0*

*NEIC **20** 03:56:37.2±1.1, 8°.29S±0°.10×116°.83E±0°.06, h10km±2km, mb4.2/9, Error ellipse: s-maj=16.7km s-min=9.5km az=165.0*

*DJA **20** 03:56:37.7±0.3, 8°.5S±3°×11°.7E±°, h10km, M4.2/11, mb4.6/2, MLv4.0/11*

**ISC 20 03:56:39.7±0.7, 8°.39S±0°.05×116°.82E±0°.04, h35km, n33, σ1§21/34, mb3.9/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.35** | **170** | P | **Pn** | **03 56 46.4** | **-1.9** |
| TWSI | | | | S | **Sn** | **03 56 52.2** | **-2.1** |
| **PLAI** | **Plampang** | **1.04** | **115** | P | **Pn** | **03 56 58.2** | **+0.3** |
| **SRBI** | **Singaraja** | **1.62** | **281** | P | **Pn** | **03 57 05.5** | **-0.2** |
| **IGBI** | **Denpasar** | **1.71** | **255** | P | **Pn** | **03 57 08.4** | **+1.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.64** | **268** | Pn | **Pn** | **03 57 19.6** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.64** | **268** | P | **Pn** | **03 57 19.5** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **2.83** | **116** | P | **Pn** | **03 57 24.2** | **+1.7** |
| **BSSI** | **Bau Bau, Buton** | **4.27** | **59** | P | **Pn** | **03 57 41.9** | **-0.4** |
| **KAPI** | **Kappang** | **4.44** | **41** | Pn | **Pn** | **03 57 42.5** | **-2.1** |
| **KAPI** | **Kappang** | **4.44** | **41** | Pn | **Pn** | **03 57 43.4** | **-1.2** |
| | 4.1nm,0.3s,baz=225,slow=3.7,SNR=5.7 | | | | | | |
| KAPI | | | | Sn | **Sn** | **03 58 34.0** | **-1.1** |
| | 6.8nm,0.3s,baz=50,slow=20,SNR=8.6 | | | | | | |
| KAPI | | | | Lg | Lg | 03 58 55.6 | |
| | 5.6nm,0.3s,baz=59,slow=19,SNR=1.8 | | | | | | |
| | 8.4nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.83** | **95** | P | **Pn** | **03 57 51.1** | **+1.0** |
| **PWJI** | **Pagerwojo** | **4.98** | **274** | P | **Pn** | **03 57 52.6** | **+0.6** |
| **BNSI** | **Bone** | **5.14** | **40** | P | **Pn** | **03 57 55.1** | **+0.9** |
| | 43nm,0.6s,0.2nm | | | | | | |
| **MMRI** | **Maumere** | **5.37** | **93** | Pn | Pn | 03 57 51.2 | -6.2 |
| **FITZ** | **Fitzroy Crossi** | **12.91** | **139** | Pn | **Pn** | **03 59 41.2** | **+0.4** |
| **MBWA** | **Marble Bar** | **13.00** | **168** | Pn | **Pn** | **03 59 42.2** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **13.43** | **168** | | **Pn** | **03 59 44.8** | **-3.1** |
| **KNRA** | **Kununurra** | **13.74** | **123** | Pn | **Pn** | **03 59 52.3** | **+0.1** |
| **GIRL** | **Giralia** | **14.39** | **190** | Pn | **Pn** | **03 59 59.4** | **-1.6** |
| **WB0** | **Warramunga Arr** | **20.43** | **125** | P | **P** | **04 01 14.8** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 04 01 22.6 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.48** | **126** | P | **P** | **04 01 14.8** | **0.0** |
| **WRA** | **Warramunga Arr** | **20.48** | **126** | P | **P** | **04 01 15.2** | **+0.5** |
| | comp=Z,1.9nm,0.5s,baz=300,slow=12,SNR=28 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.49** | **126** | P | **P** | **04 01 15.2** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 04 01 40.0 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **22.33** | **135** | P | **P** | **04 01 34.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.33** | **135** | P | **P** | **04 01 35.7** | **+1.1** |
| **ASAR** | **Alice Springs** | **22.33** | **135** | P | **P** | **04 01 35.5** | **+0.9** |
| | comp=Z,2.8nm,0.6s,baz=312,slow=9.2,SNR=22 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **24.63** | **156** | P | **P** | **04 01 58.5** | **+1.5** |
| FORT | | | | IAmb | IAmb | 04 02 01.2 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **30.14** | **146** | P | **P** | **04 02 47.1** | **+0.8** |
| **CM31** | **Chiang Mai Arr** | **31.98** | **327** | P | **P** | **04 03 02.2** | **-0.6** |
| **STKA** | **Stephens Creek** | **32.81** | **139** | P | **P** | **04 03 11.3** | **+1.3** |
| STKA | | | | IAmb | IAmb | 04 03 29.1 | |
| | comp=Z,1.7nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.81** | **139** | P | **P** | **04 03 11.0** | **+1.1** |
| | comp=Z,1.4nm,0.5s,baz=322,slow=9.4,SNR=6.9 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.95** | **334** | P | **P** | **04 07 03.7** | **+0.9** |
| | comp=Z,0.2nm,0.5s,baz=157,slow=8.9,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **ARSB** | **Arslanbob** | **63.75** | **324** | P | **P** | **04 07 09.1** | **+0.8** |
| ARSB | | | | IAmb | IAmb | 04 07 31.2 | |
| | comp=Z,0.9nm,0.6s | | | | | | |

**IDC 20 04:09:06.9±2.9, 6°.60S×128°.61E, h0km, mb3.8/1, mbtmp3.8/3, ML4.1/2, Error ellipse: s-maj=302.8km s-min=31.3km az=67.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.38** | **158** | Pn | Pn | 04 12 31.1 | -0.9 |
| | 0.9nm,0.3s,baz=334,slow=13,SNR=23 | | | | | | |
| WRA | | | | Sn | Sn | 04 14 57.8 | -15 |
| | 2.1nm,0.3s,baz=330,slow=21,SNR=8.5 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **17.71** | **164** | P | P | 04 13 15.8 | -0.5 |
| | 0.4nm,0.3s,baz=345,slow=12,SNR=9.8 | | | | | | |
| ASAR | | | | S | Sn | 04 16 20.6 | -13 |
| | 0.9nm,0.5s,baz=348,slow=25,SNR=5.8 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.14** | **327** | P | P | 04 20 02.6 | 0.0 |
| | 0.5nm,0.5s,baz=114,slow=8.1,SNR=5.8 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

*IDC **20** 04:08:25.4±1.1, 19°.13S×177°.67W, h0km, mb4.3/5, mbtmp4.3/5, MS3.0/1, Error ellipse: s-maj=43.8km s-min=27.8km az=97.0*

**ISC 20 04:09:28.3±1.2, 19°.4S±0°.2×178°.8W±0°.3, h600km, n8, σ1§83/7, mb3.7/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPT** | **Papeete** | **27.79** | **91** | LR | LR | 04 24 12.0 | |
| | comp=Z,33nm,18.7s,baz=56,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **44.04** | **256** | P | **P** | **04 16 43.8** | **-0.8** |
| | 4.5nm,0.7s,baz=86,slow=8.4,SNR=19 | | | | | | |
| | 4.5nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.84** | **324** | P | **P** | **04 19 35.3** | **+1.3** |
| | 1.3nm,0.5s,baz=150,slow=6.0,SNR=4.2 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.70** | **180** | P | **P** | **04 19 44.9** | **+0.1** |
| | 1.2nm,0.6s,baz=11,slow=0.7,SNR=12 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.98** | **346** | P | **P** | **04 20 09.0** | **-0.1** |
| | 3.1nm,0.7s,baz=112,slow=8.8,SNR=4.9 | | | | | | |
| | 3.1nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **87.39** | **13** | P | **P** | **04 21 11.6** | **-0.7** |
| | 0.5nm,0.4s,baz=220,slow=5.2,SNR=16 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.50** | **313** | PKPbc | **PKiKP** | **04 28 06.2** | **+2.5** |
| | 0.7nm,0.4s,baz=127,slow=4.5,SNR=6.9 | | | | | | |
| **GERES** | **GERESS Array B** | **148.90** | **344** | PKPbc | **PKPab** | **04 28 13.9** | **-2.1** |
| | 0.2nm,0.3s,baz=204,slow=1.6,SNR=3.4 | | | | | | |

*IDC **20** 04:12:52.8±10.0, 17°.46S×177°.59W, h380km±98km, mb3.5/5, mbtmp4.3/5, Error ellipse: s-maj=42.7km s-min=26.9km az=63.0*

*NEIC **20** 04:13:11.1±1.7, 17°.7S±0°.1×178°.0W±0°.1, h566km±7km, mb4.1/12, Error ellipse: s-maj=21.2km s-min=15.3km az=53.0*

**ISC 20 04:13:10.1±0.6, 17°.8S±0°.2×178°.1W±0°.1, h550km, n35, σ1§08/37, mb4.1/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.70** | **270** | P | **P** | **04 14 32.8** | **+2.9** |
| **NIUE** | **Niue** | **7.84** | **101** | P | **P** | **04 15 06.6** | **+0.4** |
| **KOUNC** | **Koumac, New Ca** | **16.90** | **258** | P | **P** | **04 16 38.0** | **0.0** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **04 19 50.0** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **04 19 49.9** | **+0.4** |
| | 2.3nm,0.5s,baz=98,slow=13,SNR=6.5 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.76** | **241** | P | **P** | **04 20 26.6** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 04 20 48.4 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **04 20 35.3** | **-1.3** |
| WB0 | | | | IAmb | IAmb | 04 21 13.7 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **04 20 35.9** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 04 21 13.8 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.98** | **259** | P | **P** | **04 20 35.9** | **-1.0** |
| | comp=Z,1.9nm,0.5s,baz=95,slow=7.1,SNR=20 | | | | | | |
| WRA | | | | PcP | **PcP** | **04 22 05.8** | **-0.6** |
| | comp=Z,2.5nm,1.2s,baz=91,slow=3.8,SNR=6.7 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.14** | **254** | P | **P** | **04 20 37.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **45.14** | **254** | P | **P** | **04 20 37.7** | **-0.5** |
| | comp=Z,12nm,0.6s,baz=88,slow=8.4,SNR=83 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 22 06.2** | **-0.7** |
| | comp=Z,1.6nm,0.7s,baz=102,slow=4.0,SNR=6.6 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.36** | **245** | P | **P** | **04 21 15.8** | **-1.2** |
| **GIRL** | **Giralia** | **63.25** | **253** | P | **P** | **04 22 45.0** | **-0.4** |
| **QSPA** | **South Pole Qui** | **72.29** | **180** | P | **P** | **04 23 39.3** | **-0.6** |
| **QSPA** | **South Pole Qui** | **72.29** | **180** | P | **P** | **04 23 39.7** | **-0.2** |
| | comp=Z,1.7nm,0.6s,baz=293,slow=0.7,SNR=17 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **SMAI** | **San Martin Ant** | **81.18** | **159** | P | **P** | **04 24 28.5** | **+0.3** |
| **L18K** | **Granite Mounta** | **81.50** | **10** | P | **P** | **04 24 29.5** | **-0.2** |
| L18K | | | | IAmb | IAmb | 04 24 56.6 | |
| | comp=Z,5.1nm,1.5s | | | | | | |
| **K20K** | **Telida** | **83.00** | **11** | P | **P** | **04 24 36.4** | **-1.0** |
| K20K | | | | IAmb | IAmb | 04 24 57.0 | |
| | comp=Z,8.8nm,1.5s | | | | | | |
| **J19K** | **Poorman** | **83.33** | **10** | P | **P** | **04 24 38.8** | **-0.2** |
| J19K | | | | IAmb | IAmb | 04 24 59.8 | |
| | comp=Z,6.2nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.67** | **13** | P | **P** | **04 24 48.6** | **-1.8** |
| | comp=Z,0.2nm,0.4s,baz=223,slow=5.6,SNR=5.8 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **BURAR** | **Bucovina Array** | **144.64** | **332** | PKPbc | **PKPdf** | **04 31 44.8** | **+0.3** |
| **BRTR** | **Keskin Array B** | **144.91** | **315** | PKPbc | **PKPdf** | **04 31 44.5** | **-0.7** |
| **BRTR** | **Keskin Array B** | **144.91** | **315** | PKPbc | **PKPdf** | **04 31 44.9** | **-0.4** |
| | comp=Z,0.9nm,0.5s,baz=149,slow=4.2,SNR=6.1 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.33** | **303** | PKPbc | **PKPbc** | **04 31 50.1** | **0.0** |
| | comp=Z,1.5nm,0.5s,baz=86,slow=5.1,SNR=3.9 | | | | | | |
| **GERES** | **GERESS Array B** | **147.55** | **345** | PKPbc | **PKPbc** | **04 31 52.1** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=180,slow=8.8,SNR=4.4 | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.64** | **345** | *i* PKP | **PKiKP** | **04 31 57.8** | **+1.3** |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **WATA** | **Walderalm** | **149.46** | **347** | *i* PKP | **PKPdf** | **04 31 55.2** | **+2.7** |
| | comp=Z,1.9nm,0.3s | | | | | | |
| **RETA** | **Reutte** | **149.48** | **348** | *i* PKP | **PKPbc** | **04 31 56.5** | **-1.1** |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **149.51** | **347** | *i* PKP | **PKPbc** | **04 31 56.8** | **-1.0** |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **149.55** | **348** | *i* PKP | **PKPbc** | **04 31 56.6** | **-1.2** |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.64** | **347** | *i* PKP | **PKPbc** | **04 31 56.7** | **-1.3** |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.80** | **345** | *i* PKP | **PKPbc** | **04 31 57.0** | **-1.4** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **DAVA** | **Damuels** | **149.84** | **349** | *i* PKP | **PKPbc** | **04 31 58.6** | **+0.1** |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **FETA** | **Feichten** | **149.93** | **348** | *i* PKP | **PKPbc** | **04 31 58.2** | **-0.6** |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.41** | **348** | PKPbc | **PKPbc** | **04 31 59.4** | **-0.6** |

*IDC **20** 04:22:17.0±2.0, 4°.00S×124°.48E, h0km, mb3.3/2, mbtmp3.3/3, ML3.5/1, Error ellipse: s-maj=367.5km s-min=28.7km az=61.0*

*DJA **20** 04:22:17.5±0.7, 3°.5S±7°×12°.7E±°, h10km, M2.7/3, MLv2.7/3*

**ISC 20 04:22:16.6±1.3, 2°.9S±0°.1×126°.3E±0°.2, h10km, n5, σ2§03/6, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NLAI** | **Namlea** | **0.87** | **115** | P | **Pg** | **04 22 33.3** | **0.0** |
| **SANI** | **Sanana** | **0.88** | **338** | P | **Pb** | **04 22 33.5** | **-0.4** |
| SANI | | | | S | **Sb** | **04 22 44.6** | **-1.0** |
| **WRA** | **Warramunga Arr** | **18.69** | **156** | P | **P** | **04 26 36.0** | **+0.8** |
| | 0.2nm,0.3s,baz=330,slow=12,SNR=6.4 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **21.94** | **161** | P | **P** | **04 27 07.9** | **-2.7** |
| | 0.3nm,0.4s,baz=332,slow=9.4,SNR=4.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.78** | **328** | P | **P** | **04 32 44.2** | **+1.9** |
| | 0.4nm,0.7s,baz=133,slow=8.1,SNR=3.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*NEIC **20** 04:23:59.0±1.2, 18°.3S±0°.3×178°.49W±0°.08, h525km±11km, mb4.4/17, Error ellipse: s-maj=41.9km s-min=9.9km az=188.0*

*IDC **20** 04:24:06.1±22.0, 17°.72S×178°.60W, h650km±301km, mb2.8/4, mbtmp3.8/4, Error ellipse: s-maj=100.4km s-min=49.4km az=88.0*

**ISC 20 04:23:58.5±0.9, 17°.8S±0°.2×178°.5W±0°.1, h550km, n25, σ0§80/25, mb4.3/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.31** | **270** | P | **P** | **04 25 14.2** | **-1.5** |
| **EIDS** | **Eidsvold** | **29.26** | **250** | P | **P** | **04 29 16.5** | **-0.1** |
| EIDS | | | | IAmb | IAmb | 04 30 00.5 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **ARMA** | **Armidale** | **29.96** | **240** | P | **P** | **04 29 22.2** | **-0.6** |
| **CTAO** | **Charters Tower** | **33.41** | **260** | P | **P** | **04 29 52.3** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 04 30 00.5 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **37.21** | **231** | P | **P** | **04 30 22.8** | **-0.8** |
| **STKA** | **Stephens Creek** | **38.64** | **241** | P | **P** | **04 30 36.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.64** | **241** | P | **P** | **04 30 36.1** | **+0.9** |
| | comp=Z,1.5nm,0.5s,baz=102,slow=12,SNR=6.7 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.42** | **241** | P | **P** | **04 31 13.4** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 04 31 15.7 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.40** | **259** | P | **P** | **04 31 21.1** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 04 31 34.7 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.56** | **260** | P | **P** | **04 31 21.6** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 04 31 30.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.58** | **259** | P | **P** | **04 31 21.8** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 04 32 04.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.59** | **259** | P | **P** | **04 31 22.3** | **-0.1** |
| **WRA** | **Warramunga Arr** | **44.59** | **259** | P | **P** | **04 31 22.4** | **-0.1** |
| | comp=Z,1.5nm,0.5s,baz=96,slow=6.9,SNR=27 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.77** | **254** | P | **P** | **04 31 23.8** | **0.0** |
| AS31 | | | | IAmb | IAmb | 04 31 24.9 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.77** | **254** | P | **P** | **04 31 23.6** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.77** | **254** | P | **P** | **04 31 24.4** | **+0.6** |
| | comp=Z,17nm,0.5s,baz=92,slow=7.2,SNR=106 | | | | | | |
| **PTCN** | **Pitcairn Islan** | **45.43** | **108** | P | **P** | **04 31 29.3** | **+0.5** |
| **FORT** | **Forrest** | **50.01** | **244** | P | **P** | **04 32 02.2** | **-0.8** |
| FORT | | | | IAmb | IAmb | 04 32 32.2 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **KNRA** | **Kununurra** | **50.44** | **264** | P | **P** | **04 32 07.3** | **+1.1** |
| KNRA | | | | IAmb | IAmb | 04 32 50.8 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **57.88** | **255** | P | **P** | **04 32 58.8** | **+0.2** |
| **GIRL** | **Giralia** | **62.87** | **253** | P | **P** | **04 33 33.0** | **+1.5** |
| **QSPA** | **South Pole Qui** | **72.29** | **180** | P | **P** | **04 34 28.0** | **-0.4** |
| **QSPA** | **South Pole Qui** | **72.29** | **180** | P | **P** | **04 34 28.3** | **-0.1** |
| | comp=Z,0.9nm,0.9s,baz=161,slow=8.5,SNR=1.9 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.97** | **58** | P | **P** | **04 35 40.4** | **-0.9** |
| | comp=Z,0.1nm,0.5s,baz=218,slow=5.7,SNR=1.9 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.63** | **315** | PKPbc | **PKPab** | **04 42 35.8** | **+1.7** |

*IDC **20** 04:31:12.3±5.2, 18°.09S×178°.04W, h491km±58km, mb3.4/10, mbtmp4.2/10, Error ellipse: s-maj=24.8km s-min=18.7km az=61.0*

*NEIC **20** 04:31:19.9±1.2, 18°.5S±0°.2×178°.2W±0°.1, h566km±10km, mb4.3/16, Error ellipse: s-maj=30.3km s-min=9.1km az=220.0*

**ISC 20 04:31:17.4±0.6, 18°.2S±0°.1×178°.1W±0°.1, h550km, n59, σ1§07/58, mb4.0/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.72** | **277** | P | **P** | **04 32 40.4** | **+3.0** |
| **URZ** | **Urewera** | **20.39** | **191** | P | **P** | **04 35 15.2** | **-1.6** |
| | 7.0nm,0.5s,baz=314,slow=3.1,SNR=12 | | | | | | |
| | 7.0nm,0.5s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.39** | **192** | P | **P** | **04 35 24.5** | **-1.4** |
| BKZ | | | | IAmb | IAmb | 04 35 47.3 | |
| | comp=Z,42nm,1.5s | | | | | | |
| **TKNZ** | **Takaka Hill** | **24.00** | **197** | P | **P** | **04 35 48.5** | **-0.6** |
| **THZ** | **Tophouse** | **24.69** | **196** | P | **P** | **04 35 55.0** | **-0.3** |
| **DSZ** | **Denniston Nort** | **24.98** | **198** | P | **P** | **04 35 56.2** | **-1.7** |
| **LBZ** | **Lake Benmore** | **27.88** | **198** | P | **P** | **04 36 21.5** | **-1.7** |
| **CTAO** | **Charters Tower** | **33.71** | **261** | P | **P** | **04 37 13.4** | **-0.2** |
| CTAO | | | | IAmb | IAmb | 04 37 46.0 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.86** | **260** | P | **P** | **04 38 42.5** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 04 39 21.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **04 38 43.1** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 04 39 10.4 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **04 38 42.7** | **-0.8** |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **04 38 42.9** | **-0.7** |
| | comp=Z,1.0nm,0.5s,baz=96,slow=7.0,SNR=23 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.01** | **255** | P | **P** | **04 38 44.2** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 04 38 45.6 | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.01** | **255** | P | **P** | **04 38 43.8** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.01** | **255** | P | **P** | **04 38 44.7** | **+0.2** |
| | comp=Z,6.6nm,0.5s,baz=88,slow=8.7,SNR=97 | | | | | | |
| | comp=Z,6.6nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **50.16** | **245** | P | **P** | **04 39 22.5** | **-0.4** |
| FORT | | | | IAmb | IAmb | 04 40 04.9 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.14** | **256** | P | **P** | **04 40 18.6** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **68.36** | **323** | P | **P** | **04 41 23.4** | **-0.8** |
| | comp=Z,1.8nm,0.6s,baz=176,slow=6.6,SNR=4.3 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | **P** | **04 41 45.6** | **+1.1** |
| **QSPA** | **South Pole Qui** | **71.82** | **180** | P | **P** | **04 41 46.0** | **+1.5** |
| | comp=Z,1.1nm,0.5s,baz=17,slow=0.1,SNR=10 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **74.07** | **345** | P | **P** | **04 41 57.0** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **74.07** | **345** | P | **P** | **04 41 56.9** | **-0.4** |
| **PETK** | **Petropavlovsk-** | **74.07** | **345** | P | **P** | **04 41 56.7** | **-0.6** |
| | comp=Z,2.6nm,0.6s,baz=124,slow=7.0,SNR=5.8 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **M16K** | **Timber Creek** | **80.46** | **9** | P | **P** | **04 42 30.9** | **-0.9** |
| M16K | | | | IAmb | IAmb | 04 42 40.9 | |
| | comp=Z,9.5nm,1.2s | | | | | | |
| **BELA** | **Belgrano 2** | **81.80** | **173** | P | **P** | **04 42 38.5** | **-0.1** |
| **J20K** | **Nowinta River** | **84.21** | **10** | P | **P** | **04 42 49.6** | **-1.0** |
| J20K | | | | IAmb | IAmb | 04 42 55.5 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **57** | P | **P** | **04 43 01.5** | **+1.7** |
| | comp=Z,0.9nm,0.8s,baz=214,slow=5.2,SNR=13 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.13** | **13** | P | **P** | **04 42 58.5** | **-1.5** |
| | comp=Z,0.7nm,0.4s,baz=221,slow=5.3,SNR=18 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.37** | **43** | P | **P** | **04 43 05.8** | **-0.8** |
| | comp=Z,0.5nm,0.7s,baz=217,slow=3.7,SNR=4.9 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.27** | **178** | P | **P** | **04 43 19.4** | **0.0** |
| | comp=Z,0.4nm,0.5s,baz=191,slow=17,SNR=2.0 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.30** | **321** | PKP | **PKPdf** | **04 48 59.3** | **-1.0** |
| | comp=Z,0.5nm,0.4s,baz=121,slow=2.1,SNR=3.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.76** | **5** | PKiKP | PKPpre | 04 49 43.2 | |
| | comp=Z,0.2nm,0.5s,baz=338,slow=3.1,SNR=2.3 | | | | | | |
| **KWP** | **Kalwaria Pacla** | **144.49** | **337** | | **PKPdf** | **04 49 50.6** | **-0.7** |
| **BURAR** | **Bucovina Array** | **145.05** | **332** | PKPbc | **PKPbc** | **04 49 53.3** | **+0.1** |
| **BRTR** | **Keskin Array B** | **145.24** | **315** | PKPbc | **PKPdf** | **04 49 53.4** | **+0.3** |
| **BRTR** | **Keskin Array B** | **145.24** | **315** | PKPbc | **PKPdf** | **04 49 53.5** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=140,slow=4.7,SNR=6.9 | | | | | | |
| **KHC** | **Kasperske Hory** | **147.77** | **346** | | **PKPbc** | **04 50 00.7** | **+0.1** |
| **KHC** | **Kasperske Hory** | **147.77** | **346** | *e*PKP | **PKPbc** | **04 50 00.0** | **-0.6** |
| **GEC2** | **GERESS Array S** | **148.01** | **345** | PKPbc | **PKPbc** | **04 50 00.6** | **-0.7** |
| **GERES** | **GERESS Array B** | **148.01** | **345** | PKPbc | **PKPbc** | **04 50 00.5** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| YUK | | | | | A | A | 04 34 32.0 | | |
| | comp=N,5μm,0.6s | | | | | | | | |
| YUK | | | | | A | A | 04 34 32.0 | | |
| | comp=N,15μm,0.6s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.27** | **284** | *d i* PN | **Pn** | **Pn** | **04 34 14.0** | **0.0** | |
| YUK | | | | *i* S | | | 05 34 29.5 | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=Z,2μm,0.1s | | | | | | | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=N,917nm,0.1s | | | | | | | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=E,797nm,0.1s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=N,7μm,0.2s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=E,5μm,0.2s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **1.38** | **255** | P | **Pn** | **Pn** | **04 34 14.8** | **-0.6** | |
| **NMR** | **Nemuro--Hokkai** | **1.39** | **256** | *i* P | **Pn** | **Pn** | **04 34 15.4** | **-0.1** | |
| NMR | | | | *e*S | | **Sn** | **04 34 32.3** | **-1.9** | |
| **NMR** | **Nemuro--Hokkai** | **1.39** | **256** | *i* PN | **Pn** | **Pb** | **04 34 16.8** | **+0.9** | |
| NMR | | | | *e*S | | **Sn** | **04 34 34.3** | **+0.1** | |
| **KUR** | **Kuril'sk** | **1.52** | **8** | *e*P | **Pg** | **Pg** | **04 34 18.4** | **-0.2** | |
| KUR | | | | AMB | AMB | AMB | 04 34 21.7 | | |
| | comp=E,80nm,0.4s | | | | | | | | |
| KUR | | | | *i* S | **Sg** | **Sg** | **04 34 37.2** | **-1.1** | |
| KUR | | | | A | A | A | 04 34 39.1 | | |
| | comp=E,350nm,0.2s | | | | | | | | |
| KUR | | | | A | A | A | 04 34 39.1 | | |
| | comp=E,430nm,0.2s | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.52** | **8** | *e*PN | **Pg** | **Pg** | **04 34 18.2** | **-0.4** | |
| KUR | | | | *i* S | **Sg** | **Sg** | **04 34 37.3** | **-1.1** | |
| KUR | | | | pmax | pmax | | | | |
| | comp=Z,71nm,0.4s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=N,850nm,0.1s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=E,307nm,0.2s | | | | | | | | |
| **RUSJ** | **Misakicho** | **1.72** | **283** | *e*PN | **Pn** | **Pn** | **04 34 20.5** | **+0.4** | |
| RUSJ | | | | *i* S | **Sn** | **Sn** | **04 34 41.5** | **-1.0** | |
| **JRA** | **Rausu** | **1.79** | **278** | P | **Pn** | **Pn** | **04 34 21.7** | **+0.7** | |
| JRA | | | | *e*S | **Sn** | **Sn** | **04 34 42.5** | **-1.5** | |
| **JNSB** | **Nemuroshibetsu** | **1.86** | **272** | P | **Pn** | **Pn** | **04 34 22.9** | **+0.9** | |
| **JKHN** | **Kushirohamanak** | **1.87** | **251** | P | **Pn** | **Pn** | **04 34 22.5** | **+0.3** | |
| **JNK** | **Nakash** | **2.08** | **267** | P | **Pn** | **Pn** | **04 34 25.2** | **+0.2** | |
| JNK | | | | *e*S | **Sn** | **Sn** | **04 34 49.7** | **-1.5** | |
| **JAK** | **Akkeshi** | **2.22** | **252** | P | **Pn** | **Pn** | **04 34 26.9** | **0.0** | |
| **JTKR** | **Abashiri--Toko** | **2.66** | **276** | P | **Pn** | **Pn** | **04 34 34.8** | **+1.8** | |
| JTKR | | | | *e*S | **Sn** | **Sn** | **04 35 06.7** | **+1.0** | |
| **JAR** | **Ashorobuto** | **2.80** | **262** | P | **Pn** | **Pn** | **04 34 36.0** | **+1.1** | |
| **JOB** | **Onbets** | **2.85** | **254** | P | **Pn** | **Pn** | **04 34 36.4** | **+0.7** | |
| **JMP** | **Maruseppu** | **3.06** | **277** | P | **Pn** | **Pn** | **04 34 40.5** | **+2.0** | |
| **JCH** | **Churui** | **3.27** | **252** | *e*P | **Pn** | **Pn** | **04 34 42.3** | **+0.8** | |
| **ERM** | **Erimo** | **3.67** | **244** | *i* PN | **Pn** | **Pn** | **04 34 50.7** | **+3.8** | |
| **YSS** | **Yuzh-Sakhalins** | **4.68** | **315** | *e*P | **Pn** | **Pn** | **04 35 03.4** | **+2.6** | |
| YSS | | | | AMB | AMB | AMB | 04 35 04.8 | | |
| | comp=E,10.0nm,0.3s | | | | | | | | |
| YSS | | | | *e*S | **Sn** | **Sn** | **04 35 56.8** | **+1.3** | |
| YSS | | | | A | A | A | 04 35 58.6 | | |
| | comp=E,60nm,0.6s | | | | | | | | |
| YSS | | | | A | A | A | 04 35 58.6 | | |
| | comp=E,50nm,0.6s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.68** | **315** | *e*PN | **Pn** | **Pn** | **04 35 04.2** | **+3.4** | |
| YSS | | | | *e*S | **Sn** | **Sn** | **04 35 56.9** | **+1.4** | |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| YSS | | | | smax | smax | | | | |
| | comp=N,30nm,0.8s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **9.06** | **37** | *e*PN | Pn | Pn | 04 36 06.5 | +5.6 | |
| SKR | | | | MLR | MLR | | | | |
| | comp=Z,1μm,13.0s | | | | | | | | |
| **MAJO** | **Matsushiro** | **10.14** | **228** | *c i* PN | **Pn** | **Pn** | **04 36 17.4** | **+1.7** | |
| **KLR** | **Kul'dur** | **12.21** | **302** | *e*P | **Pn** | **Pn** | **04 36 43.4** | **-0.6** | |
| **KLR** | **Kul'dur** | **12.21** | **302** | *i* PN | **Pn** | **Pn** | **04 36 42.4** | **-1.6** | |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **SEY** | **Seymchan** | **19.44** | **7** | ⇓ *i* P | **P** | **P** | **04 38 15.0** | **-1.6** | |
| SEY | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **BILL** | **Bilibino** | **26.30** | **16** | *e*P | **P** | **P** | **04 39 27.2** | **+1.6** | |
| **BILL** | **Bilibino** | **26.30** | **16** | *e*P | **P** | **P** | **04 39 27.2** | **+1.6** | |
| BILL | | | | *e*PPP | PPP | PPP | 04 40 12.5 | | |
| BILL | | | | *e* | | | 04 42 50.6 | | |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.6s | | | | | | | | |
| BILL | | | | MLR | MLR | | | | |
| | comp=Z,27nm,18.0s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.32** | **293** | *e*P | **P** | **P** | **04 39 42.3** | **-1.9** | |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.89** | **140** | T | T | T | 05 10 21.6 | | |
| | baz=330,slow=76,SNR=454 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.90** | **140** | T | T | T | 05 10 22.3 | | |
| | baz=330,slow=76,SNR=479 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.90** | **140** | T | T | T | 05 10 22.3 | | |
| | baz=330,slow=76,SNR=377 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.86** | **141** | T | T | T | 05 11 32.5 | | |
| | baz=331,slow=76,SNR=1161 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.86** | **141** | T | T | T | 05 11 33.4 | | |
| | baz=331,slow=76,SNR=842 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.88** | **141** | T | T | T | 05 11 34.3 | | |
| | baz=331,slow=76,SNR=658 | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **40.69** | **300** | ⇓ *i* P | **P** | **P** | **04 41 31.0** | **+0.1** | |
| DGZ | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **COLA** | **College** | **40.91** | **36** | *i* P | **P** | **P** | **04 41 33.9** | **+1.6** | |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | | |
| **ILAR** | **Eielson Array** | **41.33** | **36** | P | **P** | **P** | **04 41 33.1** | **-2.7** | |
| | comp=Z,0.7nm,0.9s,baz=270,slow=5.3,SNR=6.0 | | | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | | | |
| **MK31** | **Makanchi Array** | **44.87** | **298** | *e*P | **P** | **P** | **04 42 04.8** | **+0.1** | |
| **MKAR** | **Makanchi Array** | **44.87** | **298** | P | **P** | **P** | **04 42 06.3** | **+1.7** | |
| | comp=Z,0.2nm,0.5s,baz=72,slow=9.5,SNR=2.2 | | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | | |
| **KURK** | **Kurchatov** | **45.80** | **304** | *e*P | **P** | **P** | **04 42 12.2** | **+0.3** | |
| **KURK** | **Kurchatov** | **45.80** | **304** | *e*P | **P** | **P** | **04 42 12.2** | **+0.3** | |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.64** | **296** | *e*P | **P** | **P** | **04 42 56.3** | **-0.9** | |
| **AAK** | **Ala-Archa** | **51.64** | **296** | *e*P | **P** | **P** | **04 42 56.5** | **-0.7** | |
| AAK | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **ARU** | **Arti** | **54.57** | **317** | *e*P | **P** | **P** | **04 43 17.1** | **-1.3** | |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,1.4s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.03** | **333** | P | **P** | **P** | **04 44 29.2** | **-1.0** | |
| | comp=Z,1.3nm,0.8s,baz=38,slow=10,SNR=4.0 | | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.03** | **333** | *i* P | **P** | **P** | **04 44 30.2** | **0.0** | |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **67.33** | **58** | P | **P** | **P** | **04 44 46.9** | **+1.1** | |
| | comp=Z,0.4nm,0.7s,baz=294,slow=7.7,SNR=2.8 | | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | | |
| **KIV** | **Kislovodsk** | **70.00** | **312** | *e*P | **P** | **P** | **04 45 01.9** | **-0.2** | |
| **KIV** | **Kislovodsk** | **70.00** | **312** | *e*P | **P** | **P** | **04 45 01.9** | **-0.2** | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **78.23** | **343** | P | **P** | **P** | **04 45 49.8** | **0.0** | |
| | comp=Z,0.5nm,0.6s,baz=33,slow=6.3,SNR=4.2 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **82.41** | **57** | P | **P** | **P** | **04 46 13.7** | **+0.7** | |
| | comp=Z,0.3nm,0.5s,baz=324,slow=4.9,SNR=4.4 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |

*NEIC* ***20*** *04:46:58.6±1.6, 18°.1S±0°.2×178°.2W±0°.1, h534km±10km, mb4.3/34, Error ellipse: s-maj=24.1km s-min=17.2km az=148.0*

*IDC* ***20*** *04:47:02.0±9.9, 18°.01S×178°.46W, h564km±118km, mb3.3/9, mbtmp4.2/9, Error ellipse: s-maj=38.9km s-min=32.6km az=115.0*

**ISC 20 04:47:03.1±0.7, 18°.0S±0°.2×178°.5W±0°.1, h579km, n57, σ0s83/55, mb4.2/26, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.26** | **274** | P | **P** | **P** | **04 48 18.5** | **-3.6** |
| **AFI** | **Afiamalu** | **7.68** | **59** | P | P | P | 04 48 49.2 | -10 |
| **NIUE** | **Niue** | **8.24** | **99** | P | P | P | 04 48 53.6 | -10 |
| **EIDS** | **Eidsvold** | **29.11** | **250** | P | **P** | **P** | **04 52 19.0** | **+0.7** |
| EIDS | | | | | IAmb | IAmb | 04 53 03.0 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **ARMA** | **Armidale** | **29.78** | **240** | P | **P** | **P** | **04 52 24.7** | **+0.5** |
| **COEN** | **Coen** | **36.98** | **271** | P | **P** | **P** | **04 53 26.3** | **+1.6** |
| **STKA** | **Stephens Creek** | **38.47** | **241** | P | **P** | **P** | **04 53 37.2** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.47** | **241** | P | **P** | **P** | **04 53 37.4** | **+0.8** |
| | comp=Z,4.8nm,0.6s,baz=95,slow=8.5,SNR=9.0 | | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.25** | **241** | P | **P** | **P** | **04 54 14.5** | **+0.1** |
| **WB0** | **Warramunga Arr** | **44.46** | **260** | P | **P** | **P** | **04 54 23.6** | **-0.4** |
| WB0 | | | | | IAmb | IAmb | 04 54 39.8 | |
| | comp=Z,8.5nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.48** | **260** | P | **P** | **P** | **04 54 23.9** | **-0.2** |
| WB2 | | | | | IAmb | IAmb | 04 54 28.2 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.48** | **260** | P | **P** | **P** | **04 54 25.8** | **+1.6** |
| WRAB | | | | | IAmb | IAmb | 04 54 39.5 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.49** | **260** | P | **P** | **P** | **04 54 24.3** | **+0.1** |
| | comp=Z,3.3nm,0.7s,baz=98,slow=6.9,SNR=31 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **44.64** | **254** | P | **P** | **P** | **04 54 25.6** | **+0.2** |
| AS31 | | | | | IAmb | IAmb | 04 54 26.9 | |
| | comp=Z,6.9nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.64** | **254** | P | **P** | **P** | **04 54 25.7** | **+0.4** |
| **ASAR** | **Alice Springs** | **44.64** | **254** | P | **P** | **P** | **04 54 25.9** | **+0.5** |
| | comp=Z,22nm,0.6s,baz=88,slow=8.3,SNR=175 | | | | | | | |
| | comp=Z,22nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **48.67** | **269** | P | **P** | **P** | **04 54 55.3** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **57.76** | **255** | P | **P** | **P** | **04 56 00.2** | **+0.1** |
| **MBWA** | **Marble Bar** | **57.93** | **256** | P | **P** | **P** | **04 56 00.7** | **-0.4** |
| MBWA | | | | | IAmb | IAmb | 04 56 02.7 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **GIRL** | **Giralia** | **62.74** | **253** | P | **P** | **P** | **04 56 33.2** | **+0.3** |
| **QSPA** | **South Pole Qui** | **72.04** | **180** | P | **P** | **P** | **04 57 28.3** | **-0.7** |
| QSPA | | | | | IAmb | IAmb | 04 57 41.7 | |
| | comp=Z,8.8nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.04** | **180** | P | **P** | **P** | **04 57 28.3** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=359,slow=3.0,SNR=1.3 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.75** | **345** | P | **P** | **P** | **04 57 38.6** | **-0.1** |
| **HUMO** | **Hull Mountain** | **79.06** | **38** | P | **P** | **P** | **04 58 08.0** | **-0.1** |
| **O16K** | **Kokwok River B** | **79.11** | **10** | P | **P** | **P** | **04 58 07.2** | **-0.6** |
| **N15K** | **Kwethluk River** | **79.33** | **9** | P | **P** | **P** | **04 58 09.3** | **+0.3** |
| N15K | | | | | IAmb | IAmb | 04 58 23.5 | |
| | comp=Z,26nm,1.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.58** | **44** | P | **P** | **P** | **04 58 11.3** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=227,slow=9.8,SNR=6.4 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.88** | **12** | P | **P** | **P** | **04 58 11.4** | **-0.6** |
| **M16K** | **Timber Creek** | **80.32** | **10** | P | **P** | **P** | **04 58 14.8** | **+0.6** |
| M16K | | | | | IAmb | IAmb | 04 58 17.9 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.48** | **39** | P | **P** | **P** | **04 58 15.4** | **-0.2** |
| **M17K** | **Holitna River** | **80.92** | **10** | P | **P** | **P** | **04 58 17.7** | **+0.4** |
| M17K | | | | | IAmb | IAmb | 04 58 21.1 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.16** | **8** | P | **P** | **P** | **04 58 19.3** | **+0.8** |
| K15K | | | | | IAmb | IAmb | 04 58 20.5 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **L18K** | **Granite Mounta** | **81.82** | **10** | P | **P** | **P** | **04 58 22.0** | **+0.1** |
| **I07A** | **Izee** | **81.97** | **39** | P | **P** | **P** | **04 58 23.5** | **+0.3** |
| **J16K** | **Anvik River** | **82.24** | **8** | P | **P** | **P** | **04 58 23.3** | **-0.6** |
| J16K | | | | | IAmb | IAmb | 04 58 41.3 | |
| | comp=Z,20nm,1.5s | | | | | | | |
| **J17K** | **VABM Dome** | **82.56** | **9** | P | **P** | **P** | **04 58 26.3** | **+0.8** |
| J17K | | | | | IAmb | IAmb | 04 58 26.5 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **K20K** | **Telida** | **83.33** | **11** | P | **P** | **P** | **04 58 29.0** | **-0.4** |
| K20K | | | | | IAmb | IAmb | 04 58 30.7 | |
| | comp=Z,4.7nm,0.9s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.36** | **14** | P | **P** | **P** | **04 58 29.4** | **-0.3** |
| **TABL** | **Table Mountain** | **83.80** | **18** | P | **P** | **P** | **04 58 31.7** | **-0.4** |
| **N25K** | **Chitina, Valde** | **83.83** | **16** | P | **P** | **P** | **04 58 32.0** | **0.0** |
| N25K | | | | | IAmb | IAmb | 04 59 05.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **SEY** | **Seymchan** | **83.85** | **347** | P | **P** | **P** | **04 58 32.0** | **0.0** |
| | comp=Z,1.5nm,0.3s,baz=194,slow=21,SNR=3.6 | | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | | |
| **GLB** | **Gilahina Butte** | **83.90** | **16** | P | **P** | **P** | **04 58 31.5** | **-0.8** |
| GLB | | | | | IAmb | IAmb | 04 58 41.2 | |
| | comp=Z,8.1nm,1.2s | | | | | | | |
| **J20K** | **Nowinta River** | **84.07** | **10** | P | **P** | **P** | **04 58 32.7** | **-0.3** |
| **RND** | **Reindeer** | **84.40** | **13** | P | **P** | **P** | **04 58 34.5** | **-0.2** |
| RND | | | | | IAmb | IAmb | 04 58 35.3 | |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.71** | **13** | P | **P** | **P** | **04 58 40.4** | **-0.6** |
| CCB | | | | | IAmb | IAmb | 04 58 41.0 | |
| | comp=Z,6.8nm,1.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.02** | **13** | P | **P** | **P** | **04 58 41.5** | **-0.9** |
| | comp=Z,0.7nm,0.5s,baz=222,slow=5.0,SNR=10 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.16** | **58** | P | **P** | **P** | **04 58 45.0** | **+0.9** |
| | comp=Z,0.5nm,0.7s,baz=218,slow=5.8,SNR=9.4 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.51** | **43** | P | **P** | **P** | **04 58 49.9** | **-0.5** |
| | comp=Z,0.5nm,0.7s,baz=190,slow=2.6,SNR=6.0 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.76** | **315** | PKP | **PKPab** | **PKPbc** | **05 05 36.2** | **-0.1** |
| | comp=Z,1.6nm,1.0s,baz=129,slow=4.9,SNR=5.2 | | | | | | | |
| **CONA** | **Conrad Observa** | **147.92** | **342** | *e*PKP | **PKiKP** | **PKiKP** | **05 05 45.3** | **+0.1** |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.99** | **341** | *e*PKP | **PKiKP** | **PKiKP** | **05 05 45.7** | **+0.3** |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **SOKA** | **Soboth** | **149.29** | **342** | *e*PKP | **PKiKP** | **PKiKP** | **05 05 47.8** | **-0.3** |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.65** | **346** | *e*PKP | **PKPdf** | **PKPdf** | **05 05 42.4** | **-0.5** |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **MOTA** | **Moosalm** | **149.69** | **347** | *i* PKP | **PKPdf** | **PKPdf** | **05 05 45.4** | **+2.5** |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.78** | **347** | *e*PKP | **PKiKP** | **PKiKP** | **05 05 49.4** | **+0.3** |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.92** | **345** | *e*PKP | **PKPbc** | **PKPbc** | **05 05 48.7** | **-0.1** |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **FETA** | **Feichten** | **150.08** | **347** | *e*PKP | **PKPbc** | **PKPbc** | **05 05 49.4** | **+0.1** |
| | comp=Z,4.2nm,1.1s | | | | | | | |

**IDC 20 04:48:40.8±8.7, 47°.04N×155°.39E, h0km, mb3.8/3, mbtmp3.7/4, ML2.5/1, MS2.8/2, Error ellipse: s-maj=217.7km s-min=46.2km az=84.0, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PETK** | **Petropavlovsk-** | **6.25** | **13** | Pn | Pn | Pn | 04 50 14.9 | +0.7 |
| | 0.6nm,0.3s,baz=181,slow=12,SNR=2.5 | | | | | | | |
| PETK | | | | Sn | Sn | Sn | 04 51 27.0 | +0.7 |
| | 0.5nm,0.3s,baz=131,slow=15,SNR=2.1 | | | | | | | |
| | 2.4nm,0.6s | | | | | | | |
| **MA2** | **Magadan** | **12.85** | **349** | LR | LR | LR | 04 56 58.8 | |
| | comp=Z,34nm,20.5s,baz=282,slow=39 | | | | | | | |
| **KLR** | **Kul'dur** | **15.92** | **287** | LR | LR | LR | 04 59 35.9 | |
| | comp=Z,35nm,19.6s,baz=63,slow=41 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.33** | **158** | T | T | T | 05 25 43.7 | |
| | baz=345,slow=76,SNR=8.6 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.95** | **158** | T | T | T | 05 25 44.2 | |
| | baz=345,slow=76,SNR=13 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.95** | **158** | T | T | T | 05 25 44.4 | |
| | baz=345,slow=76,SNR=10 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.91** | **64** | P | P | P | 04 58 56.0 | +0.6 |
| | 0.4nm,0.7s,baz=311,slow=6.9,SNR=3.7 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **63.30** | **55** | P | P | P | 04 59 10.6 | -0.9 |
| | 0.6nm,0.8s,baz=290,slow=5.5,SNR=4.4 | | | | | | | |
| | 0.6nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **75.98** | **62** | P | P | P | 05 00 30.0 | +0.2 |
| | 1.7nm,0.5s,baz=301,slow=4.6,SNR=37 | | | | | | | |
| | 1.7nm,0.5s | | | | | | | |

*NEIC* ***20*** *04:54:07.3±1.3, 18°.1S±0°.2×178°.0W±0°.1, h604km±12km, mb4.2/16, Error ellipse: s-maj=29.1km s-min=14.3km az=171.0*

*IDC* ***20*** *04:54:10.1±3.5, 18°.06S×178°.21W, h630km±41km, mb3.3/5, mbtmp4.3/5, Error ellipse: s-maj=33.5km s-min=20.8km az=155.0*

**ISC 20 04:54:06.5±0.8, 18°.1S±0°.2×178°.1W±0°.1, h590km, n26, σ0s97/28, mb4.2/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.68** | **275** | P | **P** | **P** | **04 55 32.0** | **+2.8** |
| **AFI** | **Afiamalu** | **7.36** | **57** | P | **P** | **P** | **04 55 59.4** | **-0.2** |
| **CTAO** | **Charters Tower** | **33.70** | **261** | P | **P** | **P** | **05 00 00.6** | **+0.2** |
| **COEN** | **Coen** | **37.40** | **271** | P | **P** | **P** | **05 00 30.9** | **0.0** |
| **STKA** | **Stephens Creek** | **38.80** | **241** | P | **P** | **P** | **05 00 43.1** | **+1.1** |
| **STKA** | **Stephens Creek** | **38.80** | **241** | P | **P** | **P** | **05 00 43.1** | **+1.1** |
| | 2.2nm,0.5s,baz=94,slow=12,SNR=6.2 | | | | | | | |
| | 2.2nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.58** | **241** | P | **P** | **P** | **05 01 20.0** | **+0.2** |
| BBOO | | | | | IAmb | IAmb | 05 01 20.7 | |
| | comp=Z,7.2nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **P** | **05 01 28.2** | **-0.3** |
| WR0 | | | | | IAmb | IAmb | 05 01 38.5 | |
| | comp=Z,6.9nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **P** | **05 01 29.0** | **-0.7** |
| WB0 | | | | | IAmb | IAmb | 05 01 42.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **P** | **05 01 29.5** | **-0.4** |
| WB2 | | | | | IAmb | IAmb | 05 01 30.2 | |
| | comp=Z,6.1nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **P** | **05 01 29.7** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **P** | **05 01 29.9** | **-0.1** |
| | comp=Z,3.0nm,0.5s,baz=96,slow=7.0,SNR=65 | | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.02** | **254** | P | **P** | **P** | **05 01 30.7** | **-0.3** |
| **ASAR** | **Alice Springs** | **45.02** | **254** | P | **P** | **P** | **05 01 31.2** | **+0.2** |
| | comp=Z,9.7nm,0.7s,baz=88,slow=8.6,SNR=89 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **PcP** | **05 02 58.6** | **-0.5** |
| | comp=Z,0.8nm,0.6s,baz=100,slow=4.0,SNR=5.6 | | | | | | | |
| ASAR | | | | S | **S** | **S** | **05 07 25.4** | **-2.4** |
| | comp=Z,1.0nm,0.8s,baz=81,slow=17,SNR=4.7 | | | | | | | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| **MTN** | **Manton Dam** | **49.08** | **268** | P | **P** | **P** | **05 02 00.3** | **-1.2** |
| **FORT** | **Forrest** | **50.20** | **245** | P | **P** | **P** | **05 02 08.4** | **-1.0** |
| FORT | | | | | IAmb | IAmb | 05 02 12.7 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **50.76** | **264** | P | **P** | **P** | **05 02 13.2** | **-0.5** |
| KNRA | | | | | IAmb | IAmb | 05 02 14.2 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | **P** | **P** | **05 04 31.1** | **0.0** |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | **P** | **P** | **05 04 31.5** | **+0.3** |
| | comp=Z,1.1nm,0.7s,baz=305,slow=0.4,SNR=5.2 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **M17K** | **Holitna River** | **80.92** | **10** | P | **P** | **P** | **05 05 20.4** | **+0.7** |
| **K15K** | **Wolf Creek Mou** | **81.17** | **8** | P | **P** | **P** | **05 05 21.7** | **+0.7** |
| K15K | | | | | IAmb | IAmb | 05 06 03.9 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **L18K** | **Granite Mounta** | **81.81** | **10** | P | **P** | **P** | **05 05 24.4** | **+0.1** |
| L18K | | | | | IAmb | IAmb | 05 05 42.3 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **K20K** | **Telida** | **83.32** | **11** | P | **P** | **P** | **05 05 30.9** | **-1.0** |
| **ILAR** | **Eielson Array** | **85.99** | **13** | P | **P** | **P** | **05 05 43.7** | **-1.1** |
| | comp=Z,1.2nm,1.0s,baz=230,slow=7.0,SNR=5.9 | | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.11** | **315** | PKPbc | **PKPbc** | **PKPbc** | **05 12 38.5** | **-0.5** |
| | comp=Z,1.3nm,0.7s,baz=115,slow=3.8,SNR=7.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.85** | **345** | PKPbc | **PKPbc** | **PKPbc** | **05 12 45.8** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=188,slow=6.6,SNR=3.4 | | | | | | | |

**IDC 20 04:54:56.2±3.2, 54°.40N×86°.94E, h0km, mbtmp3.0/2, ML2.5/2, Error ellipse: s-maj=28.4km s-min=19.0km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.32** | **251** | I | I | I | 05 02 50.0 | |
| | baz=68,slow=316,SNR=6.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.32** | **251** | Pg | Pg | Pg | 04 55 20.2 | -1.3 |
| | 1.3nm,0.3s,baz=66,slow=16,SNR=11 | | | | | | | |
| ZALV | | | | Lg | Lg | Lg | 04 55 38.3 | |
| | 0.9nm,0.3s,baz=73,slow=27,SNR=4.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.37** | **237** | Pn | Pn | Pn | 04 56 32.4 | +1.1 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=10 | | | | | | | |
| KURBB | | | | Lg | Lg | Lg | 04 58 18.7 | |
| | baz=55,slow=33 | | | | | | | |
| | 1.3nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.16** | **203** | Pn | Pn | Pn | 04 56 56.5 | +0.6 |
| | 0.1nm,0.3s,baz=23,slow=14,SNR=3.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,7.0nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.14** | **13** | P | **P** | **05 17 10.3** | **+0.2** |
| **USRK** | **Ussuriysk Ar.** | **54.14** | **13** | P | **P** | **05 17 10.6** | **+0.5** |
| | comp=Z,3.0nm,0.7s,baz=202,slow=4.1,SNR=5.7 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.77** | **352** | P | **P** | **05 17 29.4** | **+0.2** |
| SONM | | | | IAmb | IAmb | 05 17 30.6 | |
| | comp=Z,2.3nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **56.77** | **352** | P | **P** | **05 17 29.6** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=173,slow=8.0,SNR=6.7 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.00** | **334** | P | **P** | **05 18 13.5** | **+1.5** |
| **MKAR** | **Makanchi Array** | **63.00** | **334** | P | **P** | **05 18 10.8** | **-1.1** |
| | comp=Z,0.5nm,0.6s,baz=152,slow=6.5,SNR=3.6 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.53** | **335** | P | **P** | **05 18 39.4** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=141,slow=6.0,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.77** | **340** | P | **P** | **05 18 40.3** | **-2.4** |
| | comp=Z,0.8nm,0.6s,baz=161,slow=5.3,SNR=2.8 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **69.07** | **199** | P | **P** | **05 18 51.1** | **+0.5** |
| | comp=Z,1.3nm,0.4s,baz=77,slow=11,SNR=4.2 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **72.81** | **333** | P | **P** | **05 19 11.9** | **-1.6** |
| | comp=Z,0.6nm,0.7s,baz=148,slow=8.5,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.89** | **326** | P | **P** | **05 19 29.8** | **-1.8** |
| **SNAA** | **Sanae** | **90.98** | **196** | P | **P** | **05 20 49.8** | **+0.9** |
| | comp=Z,0.9nm,0.6s,baz=157,slow=5.6,SNR=8.9 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.28** | **280** | PKP | **PKPdf** | **05 26 27.6** | **-2.0** |
| | comp=Z,0.5nm,0.6s,baz=90,slow=0.7,SNR=3.2 | | | | | | |
| **CPUP** | **Villa Florida** | **145.00** | **189** | PKPbc | **PKPab** | **05 27 22.8** | **+0.3** |
| | comp=Z,7.8nm,0.8s,baz=153,slow=3.4,SNR=15 | | | | | | |
| **BDFB** | **Brasilia** | **151.79** | **212** | PKPbc | **PKPbc** | **05 27 39.6** | **-1.5** |
| | comp=Z,1.6nm,0.5s,baz=169,slow=3.3,SNR=4.2 | | | | | | |

**IDC 20 05:08:30.6±7.7, 18°45S×175°68W, h0km, mb4.0/2, mbtmp4.0/2, MS3.0/1, Error ellipse: s-maj=352.5km s-min=65.2km az=144.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **10.95** | **190** | LR | LR | 05 13 56.7 | |
| | comp=Z,80nm,20.3s,baz=358,slow=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.09** | **260** | P | P | 05 17 04.1 | -0.5 |
| | 0.4nm,0.5s,baz=97,slow=6.8,SNR=6.5 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **47.15** | **255** | P | P | 05 17 05.2 | +0.1 |
| | 3.8nm,0.6s,baz=89,slow=8.2,SNR=28 | | | | | | |
| | 3.8nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **146.99** | **316** | PKPbc | PKPbc | 05 28 15.0 | -0.7 |
| | 0.4nm,0.4s,baz=56,slow=3.3,SNR=4.5 | | | | | | |

*IDC **20** 05:18:27.1±7.9, 17°.93S×177°.83W, h494km±85km, mb3.2/6, mbtmp4.0/6, Error ellipse: s-maj=45.2km s-min=23.4km az=49.0*
*NEIC **20** 05:18:34.7±0.7, 18°.0S±0°.1×177°.8W±0°.2, h588km±20km, mb4.3/9, Error ellipse: s-maj=27.2km s-min=7.1km az=60.0*
**ISC 20 05:18:34.6±0.8, 18°.0S±0°.1×177°.9W±0°.1, h590km, n19, σ0§92/19, mb4.0/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.88** | **273** | P | **P** | **05 19 58.2** | **-0.4** |
| **AFI** | **Afiamalu** | **7.15** | **56** | P | **P** | **05 20 24.8** | **-0.9** |
| **RAO** | **Raoul Island** | **11.20** | **180** | P | **P** | **05 21 04.9** | **-0.1** |
| **URZ** | **Urewera** | **20.65** | **191** | P | **P** | **05 22 32.5** | **-2.0** |
| | 8.9nm,1.0s,baz=310,slow=2.0,SNR=5.9 | | | | | | |
| | 8.9nm,1.0s | | | | | | |
| **EIDS** | **Eidsvold** | **29.70** | **250** | P | **P** | **05 23 54.5** | **+0.1** |
| **BBOO** | **Buckleboo** | **43.79** | **241** | P | **P** | **05 25 49.7** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 05 26 26.3 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **05 25 58.0** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 05 25 59.1 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.07** | **260** | P | **P** | **05 25 59.2** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 05 26 10.5 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.09** | **260** | P | **P** | **05 25 58.7** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 05 26 01.0 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.10** | **260** | P | **P** | **05 25 58.9** | **-0.8** |
| **WRA** | **Warramunga Arr** | **45.10** | **260** | P | **P** | **05 25 59.0** | **-0.7** |
| | comp=Z,1.1nm,0.7s,baz=96,slow=7.3,SNR=18 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **45.24** | **254** | P | **P** | **05 26 01.7** | **+1.0** |
| **ASAR** | **Alice Springs** | **45.24** | **254** | P | **P** | **05 26 00.6** | **-0.2** |
| | comp=Z,2.8nm,0.6s,baz=87,slow=8.7,SNR=30 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **50.97** | **264** | P | **P** | **05 26 43.7** | **+0.4** |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | **P** | **05 29 01.1** | **+1.4** |
| QSPA | | | | IAmb | IAmb | 05 29 02.5 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | **P** | **05 29 01.3** | **+1.6** |
| | comp=Z,1.5nm,0.6s,baz=43,slow=0.8,SNR=9.5 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.87** | **13** | P | **P** | **05 30 13.2** | **+0.9** |
| | comp=Z,0.1nm,0.4s,baz=219,slow=5.7,SNR=4.8 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.49** | **178** | P | **P** | **05 30 34.1** | **+0.2** |
| | comp=Z,0.3nm,0.5s,baz=190,slow=10,SNR=1.3 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.20** | **315** | PKPbc | **PKPab** | **05 37 08.3** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=67,slow=4.3,SNR=2.3 | | | | | | |

*IDC **20** 05:22:28.3±0.6, 28°.42S×62°.77E, h0km, mb4.1/14, mbtmp4.1/15, ML4.0/1, MS3.5/12, Error ellipse: s-maj=21.5km s-min=18.0km az=47.0*
*NEIC **20** 05:22:30.4±1.2, 28°.4S±0°.1×62°.8E±0°.1, h10km±1km, mb4.6/21, Error ellipse: s-maj=24.6km s-min=19.5km az=32.0*
**ISC 20 05:22:30.1±0.6, 28°.4S±0°.1×62°.63E±0°.09, h10km, n57, σ1§36/40, mb4.4/21, MS3.5/12, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FOMA** | **Nahampoana Res** | **14.40** | **280** | Pn | **Pn** | **05 25 54.1** | **0.0** |
| **VOI** | **Vohitsoka** | **15.71** | **291** | | **Pn** | **05 26 12.9** | **+1.1** |
| VOI | | | | IAmb | IAmb | 05 26 19.4 | |
| | comp=Z,46nm,1.5s | | | | | | |
| **OPO** | **Ambohidratompo** | **17.18** | **301** | Pn | **P** | **05 26 33.7** | **+1.5** |
| | comp=Z,0.1nm,0.3s,baz=114,slow=15,SNR=1.8 | | | | | | |
| OPO | | | | Sn | **Sn** | **05 29 35.7** | **-6.2** |
| | baz=130,slow=21,SNR=1.9 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **19.71** | **203** | T | T | 05 47 12.1 | |
| | baz=31,slow=73,SNR=240 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **19.72** | **203** | T | T | 05 47 12.1 | |
| | baz=31,slow=73,SNR=226 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **19.73** | **203** | T | T | 05 47 08.2 | |
| | baz=31,slow=73,SNR=242 | | | | | | |
| **H08S1** | **Diego Carcia H** | **22.61** | **26** | T | T | 05 50 58.2 | |
| | baz=202 | | | | | | |
| **H08S2** | **Diego Garcia H** | **22.62** | **26** | T | T | 05 50 58.0 | |
| | baz=202 | | | | | | |
| **H08S3** | **Diego Garcia H** | **22.63** | **26** | T | T | 05 50 57.1 | |
| | baz=202 | | | | | | |
| **BOSA** | **Boshof** | **32.77** | **260** | P | **P** | **05 29 04.2** | **+0.6** |
| BOSA | | | | IAmb | IAmb | 05 29 20.3 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **BOSA** | **Boshof** | **32.77** | **260** | P | **P** | **05 29 03.8** | **+0.2** |
| | comp=Z,2.9nm,0.7s,baz=104,slow=9.8,SNR=7.6 | | | | | | |
| BOSA | | | | LR | LR | 05 39 43.5 | |
| | comp=Z,57nm,20.3s,baz=164,slow=32 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **LSZ** | **Lusaka** | **34.40** | **285** | P | **P** | **05 29 19.1** | **+1.1** |
| LSZ | | | | IAmb | IAmb | 05 29 19.7 | |
| | comp=Z,8.9nm,0.7s | | | | | | |
| **KIBK** | **Kibwezi** | **34.93** | **313** | P | **P** | **05 29 22.6** | **+0.2** |
| KIBK | | | | IAmb | IAmb | 05 29 32.4 | |
| | comp=Z,8.1nm,1.3s | | | | | | |
| **SUR** | **Sutherland** | **36.14** | **253** | LR | LR | 05 41 43.1 | |
| | comp=Z,76nm,20.4s,baz=134,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **36.36** | **314** | LR | LR | 05 40 51.3 | |
| | comp=Z,68nm,21.6s,baz=96,slow=30 | | | | | | |
| **MAW** | **Mawson** | **39.26** | **180** | P | **P** | **05 29 58.3** | **-0.3** |
| | comp=Z,1.4nm,0.5s,baz=345,slow=12,SNR=3.5 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **PALK** | **Pallekele** | **39.49** | **29** | LR | LR | 05 41 58.0 | |
| | comp=Z,67nm,21.3s,baz=305,slow=30 | | | | | | |
| **TSUM** | **Tsumeb** | **42.02** | **272** | P | **P** | **05 30 23.5** | **+1.4** |
| **TSUM** | **Tsumeb** | **42.02** | **272** | LR | LR | 05 47 31.4 | |
| | comp=Z,48nm,18.1s,baz=140,slow=36 | | | | | | |
| **FURI** | **Furi** | **43.68** | **324** | LR | LR | 05 45 27.2 | |
| | comp=Z,47nm,19.1s,baz=220,slow=32 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **43.94** | **112** | T | T | 06 17 06.4 | |
| | baz=264,slow=74,SNR=7.9 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **43.94** | **112** | T | T | 06 17 05.5 | |
| | baz=264,slow=74,SNR=11 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **43.95** | **112** | T | T | 06 17 06.5 | |
| | baz=264,slow=74,SNR=6.9 | | | | | | |
| **WSAR** | **Wadi Sarin** | **51.45** | **355** | LR | LR | 05 48 26.5 | |
| | comp=Z,55nm,18.9s,baz=222,slow=30 | | | | | | |
| **SNAA** | **Sanae** | **55.66** | **200** | P | **P** | **05 32 05.5** | **-0.6** |
| SNAA | | | | IAmb | IAmb | 05 32 08.3 | |
| | comp=Z,8.6nm,1.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.31** | **41** | P | **P** | **05 32 25.5** | **0.0** |
| | comp=Z,1.5nm,0.3s,baz=226,slow=7.4,SNR=1.7 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.78** | **180** | P | **P** | **05 32 48.8** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 05 32 51.9 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.78** | **180** | P | **P** | **05 32 48.4** | **-0.5** |
| | comp=Z,4.5nm,0.8s,baz=279,slow=3.0,SNR=13 | | | | | | |
| QSPA | | | | LR | LR | 05 56 31.5 | |
| | comp=Z,83nm,18.7s,baz=260,slow=33 | | | | | | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **63.38** | **104** | P | **P** | **05 32 59.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **63.38** | **104** | P | **P** | **05 32 58.9** | **-1.2** |
| | comp=Z,3.9nm,0.7s,baz=246,slow=6.3,SNR=32 | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **63.38** | **104** | P | **P** | **05 32 59.3** | **-0.8** |
| **EIL** | **Elat** | **63.49** | **333** | LR | LR | 05 57 57.4 | |
| | comp=Z,27nm,18.2s,baz=67,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.13** | **100** | P | **P** | **05 33 10.6** | **-1.1** |
| **WRA** | **Warramunga Arr** | **65.13** | **100** | P | **P** | **05 33 10.4** | **-1.3** |
| | comp=Z,4.3nm,0.7s,baz=248,slow=5.8,SNR=21 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **65.14** | **100** | P | **P** | **05 33 09.0** | **-2.8** |
| **WB0** | **Warramunga Arr** | **65.25** | **100** | P | **P** | **05 33 11.0** | **-1.4** |
| WB0 | | | | IAmb | IAmb | 05 33 13.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **65.30** | **100** | P | **P** | **05 33 11.7** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 05 33 13.7 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **66.29** | **335** | P | **P** | **05 33 19.7** | **+0.9** |
| | comp=Z,1.0nm,0.4s,baz=151,slow=3.3,SNR=2.0 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **GNI** | **Garni** | **70.17** | **346** | LR | LR | 06 02 04.7 | |
| | comp=Z,27nm,21.5s,baz=140,slow=34 | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **70.84** | **340** | P | **P** | **05 33 46.9** | **-0.2** |
| **BNN** | **Bunyan** | **71.40** | **338** | P | **P** | **05 33 50.2** | **-0.3** |
| **KK31** | **Karatay Array** | **71.48** | **6** | P | **P** | **05 33 52.0** | **+1.2** |
| KK31 | | | | IAmb | IAmb | 05 34 02.4 | |
| | comp=Z,5.9nm,1.4s | | | | | | |
| **KKAR** | **Karatay Array** | **71.48** | **6** | P | **P** | **05 33 51.7** | **+0.9** |
| **TORD** | **Torodi Ar. Bea** | **71.93** | **296** | P | **P** | **05 33 54.4** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **71.93** | **296** | P | **P** | **05 33 54.0** | **-0.1** |
| | comp=Z,1.1nm,0.9s,baz=115,slow=6.5,SNR=5.3 | | | | | | |
| TORD | | | | LR | LR | 06 04 58.9 | |
| | comp=Z,60nm,18.6s,baz=152,slow=35 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **BR131** | **Keskin Array S** | **72.93** | **337** | P | **P** | **05 33 59.9** | **+0.2** |
| BR131 | | | | IAmb | IAmb | 05 34 00.8 | |
| | comp=Z,5.4nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **72.93** | **337** | P | **P** | **05 34 00.1** | **+0.4** |
| **BRTR** | **Keskin Array B** | **72.93** | **337** | P | **P** | **05 33 59.7** | **0.0** |
| | comp=Z,1.2nm,0.9s,baz=163,slow=7.4,SNR=6.5 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **73.99** | **345** | LR | LR | 06 05 32.8 | |
| | comp=Z,39nm,20.0s,baz=160,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **76.89** | **14** | P | **P** | **05 34 22.5** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=211,slow=2.5,SNR=2.8 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **77.31** | **358** | P | **P** | **05 34 25.1** | **+0.5** |
| **FNA** | **Florina** | **78.72** | **329** | P | **P** | **05 34 31.7** | **-1.0** |
| FNA | | | | IAmb | IAmb | 05 35 05.8 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **81.33** | **5** | P | **P** | **05 34 46.4** | **0.0** |
| | comp=Z,0.4nm,0.5s,baz=168,slow=7.4,SNR=2.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.20** | **13** | P | **P** | **05 35 00.6** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=230,slow=48,SNR=2.5 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **85.44** | **28** | P | **P** | **05 35 07.8** | **-0.1** |
| | comp=Z,0.3nm,0.4s,baz=191,slow=1.5,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **91.74** | **315** | P | **P** | **05 35 38.5** | **+0.5** |
| | comp=Z,0.7nm,0.8s,baz=85,slow=2.5,SNR=4.7 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.82** | **358** | PKPbc | **PKPdf** | **05 42 08.2** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=352,slow=3.9,SNR=6.2 | | | | | | |

*SJA **20** 05:29:56.8±2.0, 20°.67S×69°.13W, h85km, ML3.5, MW3.7*
*GUC **20** 05:29:57.1±0.8, 20°.52S×69°.32W, h113km±7km, ML3.6*
*IDC **20** 05:29:57.6±1.8, 20°.74S×68°.66W, h116km±15km, mb3.4/1, mbtmp3.7/4, Error ellipse: s-maj=56.5km s-min=15.1km az=104.0*
**ISC 20 05:29:55.5±0.9, 20°.63S±0°.03×69°.22W±0°.07, h120km±8km, n21, σ1§62/36, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PX03** | **IPOC Station P** | **0.44** | **301** | *eP* | **Pn** | **05 30 12.3** | **-0.9** |
| PX03 | | | | *i* S | **Sn** | **05 30 25.4** | **-1.1** |
| PX03 | | | | IAML | | 05 30 26.1 | |
| | comp=N,4µm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **0.90** | **274** | *eP* | **Pn** | **05 30 16.7** | **+0.2** |
| TA01 | | | | *eS* | **Sn** | **05 30 33.0** | **+0.6** |
| TA01 | | | | IAML | | 05 30 33.0 | |
| | comp=Z,419nm,0.1s | | | | | | |
| **TA01** | **Diego Aracena** | **0.90** | **274** | *eP* | **Pn** | **05 30 16.7** | **+0.2** |
| TA01 | | | | *i* S | **Sn** | **05 30 32.0** | **-0.4** |
| TA01 | | | | IAML | | 05 30 33.0 | |
| | comp=E,2µm,0.2s | | | | | | |
| **TA02** | **Huaiquique** | **0.92** | **293** | *eP* | **Pn** | **05 30 17.1** | **+0.3** |
| TA02 | | | | *eS* | **Sn** | **05 30 33.2** | **+0.3** |
| TA02 | | | | IAML | | 05 30 34.2 | |
| | comp=Z,2µm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **0.92** | **293** | *eP* | **Pn** | **05 30 17.1** | **+0.3** |
| TA02 | | | | *i* S | **Sn** | **05 30 32.3** | **-0.6** |
| TA02 | | | | IAML | | 05 30 34.2 | |
| | comp=N,2µm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **0.96** | **2** | *eP* | **Pn** | **05 30 18.0** | **+0.3** |
| GO01 | | | | *eS* | **Sn** | **05 30 33.9** | **-0.5** |
| **GO01** | **Chusmiza** | **0.96** | **2** | *eP* | **Pn** | **05 30 17.8** | **+0.1** |
| GO01 | | | | *i* S | **Sn** | **05 30 34.1** | **-0.3** |
| **PX02** | **IPOC Station P** | **1.90** | **331** | *eP* | **Pn** | **05 30 27.2** | **-0.6** |
| PX02 | | | | *i* S | **Sn** | **05 30 51.4** | **-1.1** |
| **PB04** | **IPOC Station P** | **1.90** | **207** | *eP* | **Pn** | **05 30 27.8** | **-0.1** |
| PB04 | | | | *eS* | **Sn** | **05 30 52.0** | **-0.6** |
| PB04 | | | | IAML | | 05 30 53.0 | |
| | comp=Z,375nm,0.1s | | | | | | |
| **LVC** | **Limon Verde** | **1.99** | **172** | *eP* | **Pn** | **05 30 29.6** | **+0.4** |
| LVC | | | | *eS* | **Sn** | **05 30 55.3** | **+0.4** |
| LVC | | | | IAML | | 05 30 57.5 | |
| | comp=Z,212nm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **1.99** | **172** | P | **Pn** | **05 30 29.7** | **+0.4** |
| | comp=Z,44nm,0.3s,baz=30,slow=6.1,SNR=188 | | | | | | |
| LVC | | | | S | **Sn** | **05 30 54.5** | **-0.5** |
| | comp=Z,302nm,0.4s,baz=308,slow=22,SNR=49 | | | | | | |
| **AF01** | **San Pedro de A** | **2.51** | **157** | *eP* | **Pn** | **05 30 36.0** | **+0.4** |
| AF01 | | | | *eS* | **Sn** | **05 31 07.3** | **+0.8** |
| AF01 | | | | IAML | | 05 31 30.0 | |
| | comp=Z,207nm,0.4s | | | | | | |
| **YJA** | **Yavi** | **3.78** | **115** | *eP* | **Pn** | **05 30 54.2** | **+1.6** |
| **PB14** | **IPOC Station P** | **4.12** | **195** | *eP* | **Pn** | **05 30 55.5** | **-1.5** |
| PB14 | | | | *eS* | **Sn** | **05 31 39.6** | **-5.1** |
| PB14 | | | | IAML | | 05 31 44.1 | |
| | comp=Z,37nm,0.3s | | | | | | |
| **LPAZ** | **La Paz** | **4.44** | **14** | *eP* | **Pn** | **05 31 03.7** | **+2.1** |
| **LPAZ** | **La Paz** | **4.44** | **14** | P | **Pn** | **05 31 03.8** | **+2.1** |
| | comp=Z,8.6nm,0.4s,baz=207,slow=5.6,SNR=105 | | | | | | |
| LPAZ | | | | S | **Sn** | **05 31 48.9** | **-3.9** |
| | comp=Z,6.2nm,0.5s,baz=180,slow=3.3,SNR=7.8 | | | | | | |
| **GO02** | **Mina Guanaco** | **4.52** | **184** | *eP* | **Pn** | **05 31 01.4** | **-1.0** |
| GO02 | | | | *eS* | **Sn** | **05 31 52.3** | **-1.9** |
| GO02 | | | | IAML | | 05 32 26.5 | |
| | comp=Z,66nm,0.3s | | | | | | |
| **SIV** | **San Ignacio** | **9.01** | **61** | P | **Pn** | **05 31 59.3** | **-3.5** |
| | comp=Z,0.9nm,0.3s,baz=258,slow=9.1,SNR=5.3 | | | | | | |
| **PLCA** | **Paso Flores** | **20.07** | **183** | P | **P** | **05 34 20.9** | **+1.4** |
| | comp=Z,2.4nm,1.0s,baz=1.2,slow=9.8,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.34** | **71** | P | **P** | **05 41 37.5** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=258,slow=4.6,SNR=8.1 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **145.10** | **35** | PKP | **PKPdf** | **05 49 20.4** | **+1.6** |
| | comp=Z,0.3nm,0.4s,baz=310,slow=2.9,SNR=2.2 | | | | | | |

*IDC **20** 05:30:20.6±1.8, 17°.22S×177°.99W, h0km, mb3.9/6, mbtmp3.9/6, Error ellipse: s-maj=166.9km s-min=21.5km az=153.0*
**ISC 20 05:30:25.8±1.6, 17°.2S±1°.0×178°.0W±0°.5, h35km, n6, σ1§10/6, mb3.9/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **39.29** | **241** | P | **P** | **05 37 51.8** | **+0.3** |
| | 1.5nm,0.6s,baz=86,slow=9.0,SNR=3.6 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.13** | **259** | P | **P** | **05 38 39.3** | **0.0** |
| | 0.3nm,0.4s,baz=98,slow=6.9,SNR=9.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **254** | P | **P** | **05 38 40.7** | **-0.3** |
| | 1.3nm,0.5s,baz=88,slow=8.2,SNR=8.3 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.67** | **44** | P | **P** | **05 42 26.0** | **+1.2** |
| | 0.9nm,0.8s,baz=226,slow=8.9,SNR=6.8 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.31** | **58** | P | **P** | **05 42 59.7** | **0.0** |
| | 0.8nm,0.8s,baz=218,slow=6.3,SNR=9.4 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **86.60** | **43** | P | **P** | **05 43 04.5** | **-1.4** |
| | 0.2nm,0.5s,baz=215,slow=3.0,SNR=2.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **20** 05:36:45.2±4.5, 18°.75S×175°.69W, h0km, mb4.3/2, mbtmp4.3/2, Error ellipse: s-maj=224.4km s-min=63.8km az=149.0*
*NEIC **20** 05:37:48.3±1.1, 17°.1S±0°.6×177°.9W±0°.3, h529km±24km, mb4.3/9, Error ellipse: s-maj=87.1km s-min=26.0km az=159.0*
**ISC 20 05:37:48.6±1.3, 17°.2S±0°.6×177°.8W±0°.3, h550km, n16, σ1§61/17, mb4.3/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.99** | **262** | P | **P** | **05 39 08.1** | **-2.4** |
| **AFI** | **Afiamalu** | **6.67** | **61** | P | **P** | **05 39 32.2** | **-1.5** |
| **PINNC** | **Pines Island,** | **14.87** | **246** | P | **P** | **05 40 56.0** | **-0.7** |
| **EIDS** | **Eidsvold** | **30.05** | **249** | P | **P** | **05 43 14.0** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 05 43 15.2 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **34.14** | **259** | P | **P** | **05 43 48.8** | **+0.3** |
| **BBOO** | **Buckleboo** | **44.25** | **240** | P | **P** | **05 45 09.4** | **-0.2** |
| **WR0** | **Warramunga Arr** | **45.14** | **259** | P | **P** | **05 45 17.2** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 05 45 55.6 | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.30** | **259** | P | **P** | **05 45 17.2** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 05 45 33.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.32** | **259** | P | **P** | **05 45 18.5** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 05 45 44.7 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.33** | **259** | P | **P** | **05 45 17.1** | **-1.0** |
| **WRA** | **Warramunga Arr** | **45.33** | **259** | P | **P** | **05 45 18.1** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=97,slow=7.5,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 46 50.1** | **+3.9** |
| | comp=Z,0.2nm,0.4s,baz=90,slow=3.3,SNR=1.6 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **45.54** | **254** | P | **P** | **05 45 20.0** | **+0.2** |
| **ASAR** | **Alice Springs** | **45.54** | **254** | P | **P** | **05 45 19.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.54** | **254** | P | **P** | **05 45 19.8** | **0.0** |
| | comp=Z,7.1nm,0.6s,baz=89,slow=8.2,SNR=64 | | | | | | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.83** | **244** | P | **P** | **05 45 58.9** | **-0.1** |
| FORT | | | | IAmb | IAmb | 05 46 43.2 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.70** | **316** | PKPbc | **PKiKP** | **05 56 30.6** | **+3.2** |
| | comp=Z,0.4nm,0.6s,baz=76,slow=1.1,SNR=2.2 | | | | | | |

*IDC **20** 05:45:58.0±1.6, 8°.21S×116°.23E, h0km, mb3.7/4, mbtmp3.7/5, ML3.4/1, Error ellipse: s-maj=27.3km s-min=22.9km az=76.0*
*DJA **20** 05:46:00.9±0.4, 8°.S±4°×11°.6E±°, h10km, M3.8/8, MLv3.8/8*
**ISC 20 05:46:02.8±0.9, 8°.24S±0°.08×116°.21E±0°.04, h35km, n12, σ0§91/14, mb3.8/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.83** | **127** | P | **Pn** | **05 46 16.2** | **-1.9** |
| **SRBI** | **Singaraja** | **1.00** | **279** | P | **Pn** | **05 46 19.1** | **-1.2** |
| SRBI | | | | S | **Sn** | **05 46 34.1** | **+0.9** |
| **DNP** | **

| | | | | | | |
|---|---|---|---|---|---|---|
| **TOO** | **Toolangi** | **31.67 213** | P | **P** | **05 55 35.3** | **+0.8** |
| TOO | | | IAmb | IAmb | 05 55 56.5 | |
| | comp=Z,26nm,1.5s | | | | | |
| **WR0** | **Warramunga Arr** | **31.67 251** | P | **P** | **05 55 35.0** | **+0.3** |
| **WB0** | **Warramunga Arr** | **31.78 252** | P | **P** | **05 55 35.5** | **-0.1** |
| WB0 | | | IAmb | IAmb | 05 55 36.4 | |
| | comp=Z,7.3nm,0.8s | | | | | |
| **WB2** | **Warramunga Arr** | **31.85 251** | P | **P** | **05 55 36.2** | **0.0** |
| WB2 | | | IAmb | IAmb | 05 55 40.4 | |
| | comp=Z,20nm,1.4s | | | | | |
| **WRA** | **Warramunga Arr** | **31.86 251** | P | **P** | **05 55 36.1** | **-0.2** |
| | comp=Z,3.3nm,0.7s,baz=84,slow=9.0,SNR=22 | | | | | |
| WRA | | | PcP | **PcP** | **05 58 26.9** | **+1.5** |
| | comp=Z,1.2nm,1.0s,baz=83,slow=3.2,SNR=4.1 | | | | | |
| WRA | | | LR | LR | 06 07 27.7 | |
| | comp=Z,86nm,20.3s,baz=200,slow=34 | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | |
| **AS31** | **Alice Springs** | **33.04 245** | P | **P** | **05 55 46.6** | **0.0** |
| **ASAR** | **Alice Springs** | **33.04 245** | P | **P** | **05 55 47.4** | **+0.8** |
| **ASAR** | **Alice Springs** | **33.04 245** | P | **P** | **05 55 46.5** | **-0.1** |
| | comp=Z,6.3nm,0.7s,baz=72,slow=9.4,SNR=48 | | | | | |
| ASAR | | | PcP | **PcP** | **05 58 29.4** | **+0.7** |
| | comp=Z,1.0nm,0.9s,baz=62,slow=4.3,SNR=4.2 | | | | | |
| ASAR | | | LR | LR | 06 08 30.1 | |
| | comp=Z,175nm,18.2s,baz=310,slow=35 | | | | | |
| | comp=Z,6.3nm,0.7s | | | | | |
| **RAR** | **Rarotonga** | **33.56 110** | LR | LR | 06 07 25.8 | |
| | comp=Z,42nm,19.3s,baz=258,slow=32 | | | | | |
| **FORT** | **Forrest** | **40.12 236** | P | **P** | **05 56 47.8** | **+1.2** |
| **DAV** | **Davao City (W)** | **44.86 293** | P | **P** | **05 57 23.6** | **-1.7** |
| **NWAO** | **Narrogin (SRO)** | **49.55 237** | P | **P** | **05 58 02.5** | **+0.9** |
| **MORW** | **Morawa** | **49.82 242** | P | **P** | **05 58 05.5** | **+1.8** |
| **MAJO** | **Matsushiro** | **55.12 332** | P | **P** | **05 58 42.0** | **-0.7** |
| MAJO | | | IAmb | IAmb | 05 59 08.9 | |
| | comp=Z,9.9nm,1.1s | | | | | |
| **MJB9** | **Matsu-Tunnel** | **55.13 332** | P | **P** | **05 58 42.3** | **-0.4** |
| MJB9 | | | IAmb | IAmb | 05 59 09.8 | |
| | comp=Z,9.6nm,1.1s | | | | | |
| **KSM** | **Kuching** | **57.36 280** | P | **P** | **05 59 00.3** | **+1.2** |
| **KSAR** | **Wonju Array Be** | **61.06 325** | P | **P** | **05 59 25.0** | **+0.9** |
| **KS19** | **Wonju Array Si** | **61.11 325** | P | **P** | **05 59 25.0** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **65.25 354** | P | **P** | **05 59 53.1** | **+1.6** |
| **ENH** | **Enshi** | **69.04 309** | P | **P** | **06 00 17.3** | **+1.3** |
| ENH | | | IAmb | IAmb | 06 00 17.9 | |
| | comp=Z,13nm,1.0s | | | | | |
| **MA2** | **Magadan** | **72.42 352** | LR | LR | 06 27 37.7 | |
| | comp=Z,23nm,20.0s,baz=124,slow=32 | | | | | |
| **CRAI** | **Chiangrai** | **72.46 296** | P | **P** | **06 00 38.8** | **+1.8** |
| CRAI | | | IAmb | IAmb | 06 00 39.7 | |
| | comp=Z,6.7nm,1.0s | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.14 294** | P | **P** | **06 00 42.7** | **+1.7** |
| | comp=Z,0.9nm,0.4s,baz=122,slow=4.5,SNR=8.2 | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | |
| **M16K** | **Timber Creek** | **77.74 16** | P | **P** | **06 01 06.9** | **+0.5** |
| M16K | | | IAmb | IAmb | 06 01 19.6 | |
| | comp=Z,17nm,1.4s | | | | | |
| **QSPA** | **South Pole Qui** | **78.04 180** | P | **P** | **06 01 09.9** | **+1.6** |
| QSPA | | | IAmb | IAmb | 06 01 24.6 | |
| | comp=Z,5.1nm,1.1s | | | | | |
| **QSPA** | **South Pole Qui** | **78.04 180** | P | **P** | **06 01 08.9** | **+0.6** |
| | comp=Z,2.5nm,0.9s,baz=325,slow=1.0,SNR=8.7 | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | |
| **L18K** | **Granite Mounta** | **79.34 17** | P | **P** | **06 01 16.7** | **+1.5** |
| **J17K** | **VABM Dome** | **79.67 15** | P | **P** | **06 01 17.7** | **+0.7** |
| J17K | | | IAmb | IAmb | 06 01 29.2 | |
| | comp=Z,8.7nm,1.3s | | | | | |
| **SONM** | **Songino Array** | **79.83 324** | P | **P** | **06 01 21.3** | **+2.9** |
| | comp=Z,0.4nm,0.6s,baz=120,slow=8.5,SNR=2.0 | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | |
| **BBB** | **Bella Bella** | **84.93 34** | LR | LR | 06 31 13.3 | |
| | comp=Z,25nm,21.2s,baz=276,slow=30 | | | | | |
| **PFO** | **Pinyon Flats O** | **86.03 55** | LR | LR | 06 38 19.8 | |
| | comp=Z,22nm,18.4s,baz=213,slow=34 | | | | | |
| **NVAR** | **Mina Array Bea** | **86.07 50** | LR | LR | 06 32 46.3 | |
| | comp=Z,39nm,19.7s,baz=272,slow=30 | | | | | |
| **NEW** | **Newport** | **89.97 40** | LR | LR | 06 36 48.2 | |
| | comp=Z,30nm,18.4s,baz=290,slow=32 | | | | | |
| **INK** | **Inuvik** | **90.54 19** | LR | LR | 06 40 23.8 | |
| | comp=Z,29nm,18.3s,baz=288,slow=34 | | | | | |
| **MKAR** | **Makanchi Array** | **94.69 317** | P | **P** | **06 02 30.8** | **-0.1** |
| | comp=Z,1.1nm,0.7s,baz=92,slow=6.5,SNR=9.9 | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | |
| **YKA** | **Yellowknife Ar** | **95.46 27** | LR | LR | 06 45 22.1 | |
| | comp=Z,23nm,18.3s,baz=343,slow=35 | | | | | |

**IDC 20 06:04:48.5±2.6, 54°11N×86°46E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=20.6km s-min=12.8km az=60.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.98** | **261** | I | I | 06 11 20.0 | |
| | baz=80,slow=313,SNR=6.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.98** | **261** | Pg | Pg | 06 05 06.0 | -1.2 |
| | 0.7nm,0.3s,baz=78,slow=17,SNR=7.3 | | | | | | |
| ZALV | | | | Lg | Lg | 06 05 21.5 | |
| | 1.4nm,0.3s,baz=82,slow=30,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.98** | **237** | Pn | Pn | 06 06 18.9 | +0.8 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=6.6 | | | | | | |
| KURBB | | | | Lg | Lg | 06 07 58.9 | |
| | baz=58,slow=33 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.79** | **202** | Pn | Pn | 06 06 44.2 | +1.2 |
| | 0.1nm,0.3s,baz=15,slow=13,SNR=6.2 | | | | | | |
| MKAR | | | | Lg | Lg | 06 08 55.1 | |
| | baz=16,slow=33,SNR=3.7 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC **20** 06:04:25.8±2.6, 16°.98S×176°.91W, h0km, mb4.0/4, mbtmp4.0/4, Error ellipse: s-maj=65.8km s-min=48.7km az=20.0*

*NEIC **20** 06:05:25.0±2.3, 16°.6S±0°.1×178°.4W±0°.2, h536km±7km, mb4.3/13, Error ellipse: s-maj=25.0km s-min=16.9km az=117.0*

**ISC 20 06:05:25.0±0.8, 16°.7S±0°.1×178°.4W±0°.1, h550km, n24, σ1§38/24, mb4.2/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.58** | **253** | P | **P** | **06 06 44.6** | **+0.7** |
| **AFI** | **Afiamalu** | **5.94** | **67** | P | **P** | **06 07 11.3** | **-1.3** |
| **RAO** | **Raoul Island** | **12.50** | **178** | P | **P** | **06 08 09.2** | **+0.6** |
| **RAO** | **Raoul Island** | **12.50** | **178** | P | **P** | **06 08 09.5** | **+0.8** |
| **CTAO** | **Charters Tower** | **33.70** | **259** | P | **P** | **06 11 20.3** | **-0.8** |
| **STKA** | **Stephens Creek** | **39.26** | **240** | P | **P** | **06 12 05.3** | **-1.4** |
| | 0.5nm,0.3s,baz=76,slow=4.2,SNR=1.2 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **BBOO** | **Buckleboo** | **44.03** | **240** | P | **P** | **06 12 43.8** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 06 12 46.5 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.71** | **258** | P | **P** | **06 12 50.8** | **+1.0** |
| WR0 | | | | IAmb | IAmb | 06 12 52.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.86** | **259** | P | **P** | **06 12 50.0** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 06 12 57.9 | |
| | comp=Z,9.2nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.89** | **258** | P | **P** | **06 12 51.6** | **+0.4** |
| **WRAB** | **Tennant Creek** | **44.89** | **258** | P | **P** | **06 12 51.1** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 06 13 19.5 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.90** | **258** | P | **P** | **06 12 52.8** | **+1.5** |
| | comp=Z,0.8nm,0.5s,baz=95,slow=6.8,SNR=18 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.17** | **253** | P | **P** | **06 12 54.5** | **+1.2** |
| **ASAR** | **Alice Springs** | **45.17** | **253** | P | **P** | **06 12 54.3** | **+1.0** |
| **ASAR** | **Alice Springs** | **45.17** | **253** | P | **P** | **06 12 54.5** | **+1.1** |
| | comp=Z,6.7nm,0.5s,baz=88,slow=8.2,SNR=83 | | | | | | |
| | comp=Z,6.7nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **50.57** | **244** | P | **P** | **06 13 32.9** | **-0.5** |
| **KNRA** | **Kununurra** | **50.66** | **263** | P | **P** | **06 13 33.5** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **58.26** | **255** | P | **P** | **06 14 26.6** | **-1.0** |
| **MBWA** | **Marble Bar** | **58.41** | **255** | P | **P** | **06 14 29.0** | **+0.4** |
| **PEA0B** | **Petropavlovsk-** | **72.53** | **345** | P | **P** | **06 15 56.9** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **72.53** | **345** | P | **P** | **06 15 57.1** | **+1.0** |
| **QSPA** | **South Pole Qui** | **73.35** | **180** | P | **P** | **06 16 03.8** | **+2.8** |
| **QSPA** | **South Pole Qui** | **73.35** | **180** | P | **P** | **06 15 57.9** | **-3.0** |
| | comp=Z,1.1nm,1.1s,baz=65,slow=1.3,SNR=1.8 | | | | | | |
| | comp=Z,1.1nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **143.95** | **316** | PKPbc | **PKiKP** | **06 24 04.5** | **+2.2** |
| | comp=Z,0.2nm,0.4s,baz=30,slow=4.1,SNR=1.4 | | | | | | |

*IDC **20** 06:05:34.6±32.0, 17°.99S×178°.24W, h507km±299km, mb3.3/4, mbtmp4.2/4, Error ellipse: s-maj=205.2km s-min=45.1km az=49.0*

*NEIC **20** 06:05:37.6±0.7, 17°.8S±0°.1×178°.3W±0°.2, h540km±18km, mb4.2/12, Error ellipse: s-maj=27.7km s-min=12.5km az=223.0*

**ISC 20 06:05:37.4±0.9, 17°.7S±0°.2×178°.3W±0°.1, h550km, n21, σ0§65/22, mb4.2/10, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.44** | **269** | P | **P** | **06 06 54.4** | **-1.0** |
| **AFI** | **Afiamalu** | **7.37** | **60** | P | **P** | **06 07 28.9** | **-0.2** |
| **TCW** | **Tory Channel** | **24.26** | **194** | P | **P** | **06 10 11.1** | **-0.4** |
| **CTAO** | **Charters Tower** | **33.54** | **260** | P | **P** | **06 11 31.8** | **-0.4** |
| **TOO** | **Toolangi** | **37.34** | **231** | P | **P** | **06 12 04.2** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.77** | **241** | P | **P** | **06 12 15.2** | **0.0** |
| **STKA** | **Stephens Creek** | **38.77** | **241** | P | **P** | **06 12 14.8** | **-0.5** |
| | 0.9nm,0.4s,baz=52,slow=12,SNR=2.9 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.55** | **241** | P | **P** | **06 12 53.6** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 06 12 55.4 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.54** | **259** | P | **P** | **06 13 01.8** | **+0.9** |
| WR0 | | | | IAmb | IAmb | 06 13 05.2 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **06 13 02.6** | **+0.5** |
| **WB2** | **Warramunga Arr** | **44.72** | **259** | P | **P** | **06 13 01.5** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 06 13 27.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **259** | P | **P** | **06 13 02.3** | **0.0** |
| | comp=Z,1.7nm,0.5s,baz=95,slow=6.8,SNR=22 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 14 33.8** | **+0.9** |
| | comp=Z,0.7nm,0.9s,baz=91,slow=3.5,SNR=2.2 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.90** | **254** | P | **P** | **06 13 04.4** | **+0.7** |
| AS31 | | | | IAmb | IAmb | 06 13 04.8 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.90** | **254** | P | **P** | **06 13 04.0** | **+0.3** |
| **ASAR** | **Alice Springs** | **44.90** | **254** | P | **P** | **06 13 04.2** | **+0.6** |
| | comp=Z,12nm,0.5s,baz=88,slow=8.2,SNR=57 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **50.14** | **244** | P | **P** | **06 13 42.6** | **-0.2** |
| FORT | | | | IAmb | IAmb | 06 13 43.3 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.57** | **264** | P | **P** | **06 13 46.1** | **+0.1** |
| **MBWA** | **Marble Bar** | **58.18** | **256** | P | **P** | **06 14 39.5** | **+0.1** |
| MBWA | | | | IAmb | IAmb | 06 14 39.7 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.34** | **180** | P | **P** | **06 16 08.5** | **+1.0** |
| QSPA | | | | IAmb | IAmb | 06 16 49.6 | |
| | comp=Z,1.2nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.34** | **180** | P | **P** | **06 16 06.7** | **-0.8** |
| | comp=Z,0.3nm,0.6s,baz=90,slow=20,SNR=1.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.69** | **315** | PKP | **PKPab** | **06 24 14.0** | **+0.8** |
| | comp=Z,0.6nm,0.5s,baz=69,slow=1.7,SNR=5.7 | | | | | | |

**TAP 20 06:08:27.7, 24°.54N×121°.85E, h15km, ML1.7, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ESAO** | **Su ao** | **0.04** | **352** | *e*P | Pg | 06 08 30.1 | -0.3 |
| | baz=350 | | | | | | |
| **TWC** | **Suao** | **0.07** | **359** | P | Pg | 06 08 30.8 | +0.2 |
| | baz=6.0 | | | | | | |
| TWC | | | | *e*S | Sg | 06 08 32.5 | -0.1 |
| | baz=6.0 | | | | | | |
| **EWUT** | **Wuta** | **0.11** | **215** | *i* P | Pg | 06 08 31.1 | +0.1 |
| | baz=216 | | | | | | |
| EWUT | | | | S | Sg | 06 08 33.6 | +0.3 |
| | baz=216 | | | | | | |
| **ENA** | **Nanau** | **0.15** | **222** | P | Pg | 06 08 31.7 | +0.1 |
| | baz=220 | | | | | | |
| ENA | | | | *e*S | Sg | 06 08 34.0 | 0.0 |
| | baz=220 | | | | | | |
| **NDS** | **Dongshan** | **0.15** | **308** | *e*P | Pg | 06 08 31.7 | 0.0 |
| | baz=308 | | | | | | |
| NDS | | | | *e*S | Sg | 06 08 34.1 | -0.2 |
| | baz=308 | | | | | | |
| **TWE** | **Neicheng** | **0.25** | **318** | *e*P | Pb | 06 08 33.7 | -0.3 |
| | baz=319 | | | | | | |
| TWE | | | | *e*S | Sb | 06 08 38.5 | +0.4 |
| | baz=319 | | | | | | |
| **ENTT** | **Nioudou** | **0.28** | **292** | P | Pg | 06 08 33.6 | 0.0 |
| | baz=291 | | | | | | |
| ENTT | | | | *e*S | Sg | 06 08 38.3 | +0.7 |
| | baz=291 | | | | | | |
| **LATG** | **Datong** | **0.29** | **270** | P | Pg | 06 08 33.8 | -0.2 |
| | baz=270 | | | | | | |
| LATG | | | | *e*S | Sb | 06 08 39.1 | -0.5 |
| | baz=270 | | | | | | |
| **NDT** | **Datong Townshi** | **0.31** | **282** | *e*P | Pg | 06 08 34.5 | +0.3 |
| | baz=282 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.33** | **313** | P | Pb | 06 08 35.3 | 0.0 |
| | baz=305 | | | | | | |
| FUSB | | | | *e*S | Sb | 06 08 41.0 | +0.5 |
| | baz=305 | | | | | | |
| **NWLT** | **Wulai** | **0.40** | **307** | P | Pb | 06 08 36.5 | 0.0 |
| | baz=300 | | | | | | |
| NWLT | | | | *e*S | Sb | 06 08 42.8 | +0.4 |
| | baz=300 | | | | | | |
| **NACB** | **Ninganchiao** | **0.43** | **213** | *e*P | Pb | 06 08 38.1 | +1.0 |
| | baz=206 | | | | | | |
| **TIPB** | **Shuangxi** | **0.43** | **357** | *e*P | Pg | 06 08 36.6 | +0.2 |
| | baz=357 | | | | | | |
| TIPB | | | | *e*S | Sb | 06 08 44.0 | +0.5 |
| | baz=357 | | | | | | |
| **YHNB** | **Yeheng** | **0.45** | **287** | *e*P | Pb | 06 08 37.3 | -0.1 |
| | baz=287 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.47** | **226** | *e*P | Pb | 06 08 37.8 | 0.0 |
| | baz=225 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.55** | **2** | *e*P | Pn | 06 08 41.2 | 0.0 |
| | baz=8.0 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.65** | **218** | P | Pb | 06 08 41.5 | +0.6 |
| | baz=217 | | | | | | |
| LXIB | | | | *e*S | Sb | 06 08 50.0 | +0.2 |
| | baz=217 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.66** | **234** | *e*P | Pg | 06 08 41.0 | +0.2 |
| | baz=233 | | | | | | |
| WHF | | | | *e*S | Sb | 06 08 50.6 | +0.2 |
| | baz=233 | | | | | | |
| **WUSB** | **Renai** | **0.86** | **231** | *e*P | Pb | 06 08 44.7 | +0.2 |
| | baz=221 | | | | | | |
| WUSB | | | | *e*S | Sn | 06 08 57.7 | -0.2 |
| | baz=221 | | | | | | |
| **WHP** | **Taichung City** | **0.86** | **253** | *e*P | Pn | 06 08 45.1 | -0.4 |
| | baz=247 | | | | | | |

**JMA 20 06:09:02.7±0.3, 25°N±1°×124°.0E±0°.7, h5km, MV1.5/5, NW OFF ISHIGAKIJIMA IS, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JISG** | **Ishigakijimahi** | **0.47** | **140** | *e*P | Pg | 06 09 11.9 | +0.2 |
| JISG | | | | *e*S | Sg | 06 09 18.0 | +0.3 |
| **JIJ** | **Ishigaki jima** | **0.60** | **166** | *e*P | Pg | 06 09 14.3 | +0.1 |
| JIJ | | | | *e*S | Sg | 06 09 21.9 | -0.1 |
| **IRIF** | **Iriomote-Funau** | **0.65** | **201** | *e*P | Pg | 06 09 15.1 | 0.0 |
| **JKRS** | **Kuro-shima** | **0.71** | **178** | *e*S | Sb | 06 09 26.4 | -1.0 |

*NEIC **20** 06:09:40.6±2.1, 18°.15S±0°.10×178°.2W±0°.1, h523km±6km, mb4.5/223, Error ellipse: s-maj=14.5km s-min=13.5km az=147.0*

*IDC **20** 06:09:41.8±1.8, 18°.25S×178°.23W, h545km±21km, mb3.8/19, mbtmp4.7/21, Error ellipse: s-maj=13.4km s-min=9.1km az=155.0*

**ISC 20 06:09:41.8±0.3, 18°.17S±0°.06×178°.22W±0°.06, h550km, n573, σ1§03/543, mb4.5/143, 26C-11D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.58** | **276** | P | **P** | **06 11 01.2** | **+0.5** |
| **AFI** | **Afiamalu** | **7.50** | **57** | P | **P** | **06 11 31.2** | **-3.6** |
| **NIUE** | **Niue** | **7.91** | **98** | P | **P** | **06 11 37.5** | **-1.2** |
| **FUNA** | **Funafuti** | **9.91** | **345** | P | **P** | **06 11 58.1** | **-0.8** |
| **RAO** | **Raoul Island** | **11.04** | **179** | P | **P** | **06 12 08.9** | **-1.4** |
| **LIFNC** | **LIFOU** | **13.96** | **257** | P | **P** | **06 12 38.5** | **-2.0** |
| **DZM** | **Mont Dzumac** | **14.92** | **252** | P | **P** | **06 12 49.0** | **-1.6** |
| **DZM** | **Mont Dzumac** | **14.92** | **252** | P | **P** | **06 12 49.2** | **-1.4** |
| | 6.6nm,0.6s,baz=312,slow=23,SNR=8.5 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.68** | **259** | | **P** | **06 13 07.6** | **-0.1** |
| **RAR** | **Rarotonga** | **17.63** | **103** | | **P** | **06 13 16.6** | **+0.2** |
| **RAR** | **Rarotonga** | **17.63** | **103** | P | **P** | **06 13 16.1** | **-0.2** |
| | 93nm,0.9s,baz=258,slow=5.3,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **20.43** | **191** | P | **P** | **06 13 39.6** | **-2.0** |
| | 11nm,0.8s,baz=61,slow=3.7,SNR=8.7 | | | | | | |
| | 11nm,0.8s | | | | | | |
| **TARA** | **Tarawa** | **21.27** | **335** | P | **P** | **06 13 49.4** | **-0.1** |
| **PPT** | **Papeete** | **27.26** | **93** | P | **P** | **06 14 42.0** | **-0.6** |
| | 58nm,0.9s,baz=255,slow=18,SNR=8.6 | | | | | | |
| | 58nm,0.9s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.27** | **93** | P | **P** | **06 14 43.0** | **+0.3** |
| **EIDS** | **Eidsvold** | **29.35** | **250** | P | **P** | **06 15 01.1** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 06 15 39.7 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.41** | **200** | P | **P** | **06 15 02.2** | **+1.1** |
| MLZ | | | | IAmb | IAmb | 06 15 34.9 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.94** | **200** | P | **P** | **06 15 06.0** | **+0.5** |
| **ARMA** | **Armidale** | **29.97** | **240** | P | **P** | **06 15 06.6** | **+0.4** |
| ARMA | | | | IAmb | IAmb | 06 15 35.5 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **33.58** | **261** | P | **P** | **06 15 37.4** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 06 15 39.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **37.15** | **231** | P | **P** | **06 16 08.2** | **+1.9** |
| TOO | | | | IAmb | IAmb | 06 16 19.1 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **COEN** | **Coen** | **37.29** | **271** | P | **P** | **06 16 08.6** | **+0.8** |
| COEN | | | | IAmb | IAmb | 06 16 08.9 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **38.09** | **81** | P | **P** | **06 16 15.2** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.66** | **241** | P | **P** | **06 16 20.3** | **+1.5** |
| **STKA** | **Stephens Creek** | **38.66** | **241** | P | **P** | **06 16 19.8** | **+1.0** |
| | comp=Z,4.3nm,0.5s,baz=98,slow=12,SNR=12 | | | | | | |
| | comp=Z,4.3nm,0.5s | | | | | | |
| **WAKE** | **Wake Island** | **40.08** | **337** | P | **P** | **06 16 29.2** | **-0.9** |
| **BBOO** | **Buckleboo** | **43.44** | **241** | P | **P** | **06 16 57.5** | **+0.9** |
| BBOO | | | | IAmb | IAmb | 06 16 58.0 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.57** | **260** | P | **P** | **06 17 05.8** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 06 17 25.8 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **06 17 07.3** | **+0.5** |
| **WB2** | **Warramunga Arr** | **44.75** | **260** | P | **P** | **06 17 07.0** | **+0.1** |
| **WRA** | **Warramunga Arr** | **44.76** | **260** | P | **P** | **06 17 06.7** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.76** | **260** | P | **P** | **06 17 06.8** | **-0.3** |
| | comp=Z,3.8nm,0.3s,baz=97,slow=7.5,SNR=80 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 18 37.6** | **+0.3** |
| | comp=Z,0.5nm,0.3s,baz=105,slow=2.9,SNR=2.5 | | | | | | |
| WRA | | | | S | **S** | **06 23 03.9** | **-0.6** |
| | comp=Z,1.0nm,1.0s,baz=101,slow=13,SNR=2.3 | | | | | | |
| | comp=Z,3.8nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **44.89** | **254** | P | **P** | **06 17 08.5** | **+0.5** |
| **ASAR** | **Alice Springs** | **44.90** | **254** | P | **P** | **06 17 08.6** | **+0.6** |
| **ASAR** | **Alice Springs** | **44.90** | **254** | P | **P** | **06 17 08.3** | **+0.3** |
| | comp=Z,45nm,0.6s,baz=88,slow=8.3,SNR=368 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 18 38.6** | **+0.8** |
| | comp=Z,1.7nm,0.5s,baz=103,slow=3.8,SNR=5.2 | | | | | | |
| ASAR | | | | S | **S** | **06 23 05.5** | **-0.8** |
| | comp=Z,3.4nm,1.1s,baz=88,slow=15,SNR=9.8 | | | | | | |
| | comp=Z,45nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **48.97** | **269** | P | **P** | **06 17 38.9** | **+0.2** |
| MTN | | | | IAmb | IAmb | 06 17 41.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.02** | **256** | P | **P** | **06 18 43.2** | **+0.5** |
| PSA00 | | | | IAmb | IAmb | 06 18 43.6 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.22** | **323** | P | **P** | **06 19 47.9** | **0.0** |
| | comp=Z,3.1nm,0.5s,baz=149,slow=5.9,SNR=7.8 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **KIWB** | **Kanaga Island** | **69.73** | **1** | P | **P** | **06 19 57.2** | **+0.7** |
| **UGM** | **Wanagama** | **69.82** | **268** | P | **P** | **06 19 58.5** | **+0.6** |
| **NIKH** | **Nikolski High** | **71.31** | **6** | P | **P** | **06 20 05.1** | **-0.7** |
| | baz=189 | | | | | | |
| **QSPA** | **South Pole Qui** | **71.89** | **180** | P | **P** | **06 20 10.8** | **+1.5** |
| **QSPA** | **South Pole Qui** | **71.89** | **180** | P | **P** | **06 20 10.1** | **+0.8** |
| | comp=Z,3.4nm,0.7s,baz=333,slow=0.8,SNR=26 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **YULB** | **Yu-li** | **72.06** | **303** | P | **P** | **06 20 10.4** | **-0.5** |
| YULB | | | | IAmb | IAmb | 06 20 10.9 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **NACB** | **Ninganchiao** | **72.21** | **304** | P | **P** | **06 20 11.9** | **+0.2** |
| NACB | | | | IAmb | IAmb | 06 20 44.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **UNV** | **Unalaska Valle** | **72.42** | **7** | P | **P** | **06 20 11.8** | **-0.5** |
| | baz=192 | | | | | | |
| **TPUB** | **Ta-pu** | **72.55** | **302** | P | **P** | **06 20 13.9** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **73.98** | **345** | P | **P** | **06 20 21.7** | **+0.5** |
| | comp=Z,22nm,1.0s,baz=133,slow=8.3,SNR=12 | | | | | | |
| | comp=Z,22nm,1.0s | | | | | | |
| **SDPT** | **Sand Point** | **74.77** | **10** | P | **P** | **06 20 25.5** | **0.0** |
| | baz=197 | | | | | | |
| **S12K** | **Black Hills** | **74.84** | **9** | P | **P** | **06 20 25.6** | **-0.4** |
| **S12K** | **Black Hills** | **74.84** | **9** | P | **P** | **06 20 25.6** | **-0.4** |
| | baz=196 | | | | | | |
| **KSRS** | **Korea Array** | **75.02** | **318** | P | **P** | **06 20 28.4** | **+1.1** |
| | comp=Z,1.0nm,0.5s,baz=130,slow=5.1,SNR=4.6 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **KSAR** | **Wonju Array Be** | **75.03** | **318** | P | **P** | **06 20 29.2** | **+1.8** |
| **SPIA** | **Saint Paul Isl** | **75.35** | **4** | P | **P** | **06 20 29.2** | **+0.4** |
| | baz=188 | | | | | | |
| **S14K** | **Fog Glacier** | **75.82** | **11** | P | **P** | **06 20 31.3** | **-0.3** |
| | baz=198 | | | | | | |
| **CHGN** | **Chignik** | **76.04** | **11** | P | **P** | **06 20 32.1** | **-0.4** |
| | baz=199 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.93** | **326** | P | **P** | **06 20 39.3** | **+1.5** |
| | comp=Z,1.2nm,0.5s,baz=102,slow=6.1,SNR=5.6 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **SII** | **Sitkinak Islan** | **77.14** | **13** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M15K | Kasigluk River<br>baz=197,SNR=6.2 | 79.85 | 9 | P | P | 06 20 54.1 | +1.1 | |
| N16K | Nishlik Lake<br>baz=199,SNR=6.4 | 79.93 | 10 | P | P | 06 20 54.9 | +1.4 | |
| KVN | Kaiserville | 79.96 | 43 | P | P | 06 20 55.5 | +1.1 | |
| O18K | Koktuh Hills | 79.97 | 12 | P | P | 06 20 54.2 | +0.5 | |
| O18K | Koktuh Hills<br>baz=202,SNR=14 | 79.97 | 12 | P | P | 06 20 54.2 | +0.5 | |
| TPNV | Topopah Spring<br>baz=238 | 80.07 | 46 | P | P | 06 20 53.3 | -1.6 | |
| L14K | Kuka Creek | 80.21 | 8 | P | P | 06 20 56.0 | +1.2 | |
| L14K | comp=Z,15nm,0.9s | | | IAmb | IAmb | 06 20 56.9 | | |
| L14K | Kuka Creek<br>baz=195,SNR=6.8 | 80.21 | 8 | P | P | 06 20 56.4 | +1.6 | |
| N17K | Nushagak Hills<br>baz=200 | 80.24 | 10 | P | P | 06 20 55.7 | +0.6 | |
| BNX | BinXian | 80.41 | 325 | ⇑P | P | 06 20 57.5 | +1.2 | |
| BNX | comp=Z,13nm,1.1s | | | pmax | pmax | | | |
| J05D | Fort Rock, OR | 80.41 | 38 | P | P | 06 20 58.4 | +1.8 | |
| J05D | comp=Z,17nm,0.8s | | | IAmb | IAmb | 06 20 59.3 | | |
| M16K | Timber Creek | 80.42 | 9 | P | P | 06 20 57.8 | +1.8 | |
| M16K | Timber Creek<br>baz=198,SNR=16 | 80.42 | 9 | P | P | 06 20 57.8 | +1.8 | |
| O19K | Port Alsworth | 80.46 | 12 | P | P | 06 20 56.5 | +0.4 | |
| O19K | Port Alsworth<br>baz=203,SNR=9.3 | 80.46 | 12 | P | P | 06 20 56.5 | +0.4 | |
| HOM | Homer<br>baz=206 | 80.52 | 13 | P | P | 06 20 57.4 | +0.9 | |
| N18K | Kilae Creek<br>baz=201 | 80.62 | 11 | P | P | 06 20 57.2 | +0.2 | |
| L15K | Ungalak Mounta<br>baz=196,SNR=6.9 | 80.69 | 8 | P | P | 06 20 58.6 | +1.2 | |
| H04A | Detroit Lake<br>comp=Z,13nm,1.3s | 80.69 | 37 | IAmb | IAmb | 06 21 03.4 | | |
| O20K | Slope Mountain<br>baz=205 | 80.70 | 13 | P | P | 06 20 57.9 | +0.3 | |
| BRSE | Bradley Lake S<br>baz=206 | 80.80 | 14 | P | P | 06 20 58.6 | +0.6 | |
| SMAI | San Martin Ant | 80.85 | 159 | P | P | 06 20 59.1 | +0.9 | |
| PINE | Pine Mountain<br>comp=Z,16nm,0.9s | 80.88 | 38 | IAmb | IAmb | 06 21 01.9 | | |
| N19K | Bonanza Creek<br>comp=Z,14nm,0.8s | 81.00 | 12 | IAmb | IAmb | 06 20 59.9 | | |
| N19K | Bonanza Creek<br>baz=203 | 81.00 | 12 | P | P | 06 20 59.1 | 0.0 | |
| L16K | Owhat River | 81.00 | 9 | P | P | 06 21 00.2 | +1.3 | |
| L16K | Owhat River<br>baz=198,SNR=12 | 81.00 | 9 | P | P | 06 21 00.5 | +1.6 | |
| M17K | Holitna River<br>baz=200,SNR=14 | 81.03 | 10 | P | P | 06 21 00.8 | +1.7 | |
| R11B | Troy Canyon, C<br>baz=239 | 81.25 | 45 | P | P | 06 21 01.3 | +0.2 | |
| BMN | Battle Mountai | 81.28 | 42 | P | P | 06 21 02.9 | +1.7 | |
| K15K | Wolf Creek Mou<br>baz=196,SNR=21 | 81.28 | 8 | P | P | 06 21 02.1 | +1.7 | |
| F04A | Amboy | 81.31 | 36 | P | P | 06 21 02.2 | +1.2 | |
| F04A | comp=Z,12nm,1.2s | | | IAmb | IAmb | 06 21 03.0 | | |
| HOOD | Mount Hood Mea | 81.38 | 37 | P | P | 06 21 03.1 | +1.5 | |
| HOOD | comp=Z,14nm,1.1s | | | IAmb | IAmb | 06 21 04.2 | | |
| M18K | Stony River<br>baz=201 | 81.38 | 11 | P | P | 06 21 02.1 | +1.1 | |
| NLWA | Neilton Lookou<br>comp=Z,18nm,1.2s | 81.43 | 34 | IAmb | IAmb | 06 21 04.2 | | |
| J14K | Nanvaranak Lak<br>comp=Z,12nm,1.0s | 81.47 | 7 | IAmb | IAmb | 06 21 03.3 | | |
| J14K | Nanvaranak Lak<br>baz=194 | 81.47 | 7 | P | P | 06 21 02.6 | +1.2 | |
| L17K | Donlin<br>baz=199,SNR=9.6 | 81.58 | 9 | P | P | 06 21 04.2 | +2.2 | |
| TUC | Tucson | 81.72 | 52 | P | P | 06 21 05.1 | +1.6 | |
| TUC | Tucson<br>baz=242 | 81.72 | 52 | P | P | 06 21 05.1 | +1.6 | |
| N20K | Mount Spurr<br>baz=205 | 81.80 | 12 | P | P | 06 21 03.2 | 0.0 | |
| SPCR | Spurr Chakacha<br>baz=205 | 81.80 | 12 | P | P | 06 21 03.1 | -0.2 | |
| P23K | Montague Islan<br>baz=209 | 81.81 | 15 | P | P | 06 21 04.6 | +1.4 | |
| SPU | Mount Spurr | 81.82 | 12 | P | P | 06 21 03.1 | -0.2 | |
| SPU | comp=Z,17nm,1.1s | | | IAmb | IAmb | 06 21 03.7 | | |
| GAMB | Gambell<br>baz=186 | 81.84 | 3 | P | P | 06 21 04.5 | +1.4 | |
| BELA | Belgrano 2 | 81.88 | 173 | P | P | 06 21 04.0 | +0.5 | |
| I07A | Izee<br>comp=Z,8.6nm,0.8s | 81.90 | 38 | IAmb | IAmb | 06 21 06.8 | | |
| L18K | Granite Mounta<br>baz=201,SNR=7.9 | 81.92 | 10 | P | P | 06 21 05.2 | +1.6 | |
| M19K | Big River Lodg<br>baz=203 | 82.03 | 11 | P | P | 06 21 04.9 | +0.6 | |
| GNW | Green Mountain<br>comp=Z,8.9nm,0.9s | 82.09 | 34 | IAmb | IAmb | 06 21 07.2 | | |
| J08A | Circle Bar Ran<br>comp=Z,16nm,1.2s | 82.10 | 39 | IAmb | IAmb | 06 21 07.8 | | |
| K17K | Iditarod<br>comp=Z,16nm,1.1s | 82.13 | 9 | IAmb | IAmb | 06 21 06.5 | | |
| K17K | Iditarod<br>baz=199 | 82.13 | 9 | P | P | 06 21 05.9 | +1.1 | |
| LCMT | Little Creek M | 82.17 | 47 | P | P | 06 21 07.3 | +1.5 | |
| L19K | White Mountain | 82.20 | 11 | P | P | 06 21 06.1 | +1.0 | |
| L19K | comp=Z,19nm,1.1s | | | IAmb | IAmb | 06 21 07.7 | | |
| L19K | White Mountain<br>baz=202,SNR=6.4 | 82.20 | 11 | P | P | 06 21 06.3 | +1.1 | |
| RC01 | Rabbit Creek A | 82.23 | 14 | P | P | 06 21 05.6 | +0.3 | |
| RC01 | comp=Z,17nm,1.0s | | | IAmb | IAmb | 06 21 06.5 | | |
| RC01 | Rabbit Creek A<br>baz=207 | 82.23 | 14 | P | P | 06 21 05.3 | 0.0 | |
| M20K | Styx River<br>baz=204 | 82.24 | 12 | P | P | 06 21 05.4 | -0.1 | |
| PWL | Port Wells<br>baz=208 | 82.35 | 14 | P | P | 06 21 06.0 | +0.1 | |
| SUA | Susitna One<br>comp=Z,23nm,0.9s | 82.35 | 13 | IAmb | IAmb | 06 21 06.9 | | |
| SUA | Susitna One<br>baz=206,SNR=6.0 | 82.35 | 13 | P | P | 06 21 06.4 | +0.4 | |
| J16K | Anvik River<br>comp=Z,26nm,0.9s | 82.35 | 8 | IAmb | IAmb | 06 21 08.2 | | |
| J16K | Anvik River<br>baz=197,SNR=8.0 | 82.35 | 8 | P | P | 06 21 07.2 | +1.4 | |
| PSUT | Pine Spring | 82.51 | 45 | P | P | 06 21 08.8 | +1.3 | |
| KAIM | Kayak Island<br>baz=212 | 82.52 | 16 | P | P | 06 21 06.3 | -0.5 | |
| U15A | North Rim | 82.56 | 48 | P | P | 06 21 09.8 | +1.9 | |
| SKT | Skwentna<br>baz=206 | 82.65 | 12 | P | P | 06 21 06.6 | -0.8 | |
| L20K | Farewell, AK<br>baz=203 | 82.65 | 11 | P | P | 06 21 07.8 | +0.4 | |
| GLI | Glacier Island<br>baz=210 | 82.66 | 15 | P | P | 06 21 07.8 | +0.3 | |
| J17K | VABM Dome<br>comp=Z,25nm,1.2s | 82.67 | 9 | IAmb | IAmb | 06 21 09.6 | | |
| J17K | VABM Dome<br>baz=198 | 82.67 | 9 | P | P | 06 21 08.3 | +0.9 | |
| EYAK | Cordova Ski Ar<br>baz=211 | 82.71 | 16 | P | P | 06 21 08.1 | +0.5 | |
| M22K | Willow<br>baz=207,SNR=5.9 | 82.74 | 13 | P | P | 06 21 08.3 | +0.5 | |
| WUAZ | Wupatki<br>baz=242 | 82.78 | 49 | P | P | 06 21 10.7 | +1.8 | |
| KNK | Knik Glacier<br>baz=208 | 82.81 | 14 | P | P | 06 21 08.3 | +0.1 | |
| PMR | Palmer | 82.81 | 14 | P | P | 06 21 08.3 | +0.2 | |
| PMR | comp=Z,13nm,1.0s | | | IAmb | IAmb | 06 21 08.7 | | |
| PMR | Palmer<br>baz=208 | 82.81 | 14 | P | P | 06 21 08.4 | +0.3 | |
| MXC | Moxie City | 82.89 | 36 | P | P | 06 21 09.6 | +0.6 | |
| G08A | Pilot Rock | 82.91 | 38 | P | P | 06 21 10.8 | +1.5 | |
| G08A | comp=Z,14nm,1.2s | | | IAmb | IAmb | 06 21 11.6 | | |
| I17K | Unalakleet<br>baz=197 | 82.92 | 8 | P | P | 06 21 08.6 | -0.1 | |
| GHO | Glory Hole Cre | 83.02 | 14 | P | P | 06 21 09.8 | +0.5 | |
| J18K | Innoko River<br>baz=200,SNR=11 | 83.09 | 10 | P | P | 06 21 10.6 | +1.0 | |
| E07A | Sunnyside<br>comp=Z,10nm,1.0s | 83.12 | 36 | IAmb | IAmb | 06 21 12.6 | | |
| HAWA | Hanford | 83.21 | 37 | P | P | 06 21 11.9 | +1.4 | |
| HAWA | comp=Z,12nm,1.0s | | | IAmb | IAmb | 06 21 13.0 | | |
| HEH | HeiHe | 83.23 | 328 | eP | P | 06 21 11.6 | +1.1 | |
| HEH | comp=Z,9.0nm,1.1s | | | pmax | pmax | | | |
| CUT | Chulitna | 83.29 | 13 | P | P | 06 21 10.9 | +0.4 | |
| CUT | Chulitna<br>baz=207 | 83.29 | 13 | P | P | 06 21 10.4 | -0.2 | |
| M23K | Glacier View<br>baz=209 | 83.31 | 14 | P | P | 06 21 10.7 | 0.0 | |
| BMRM | Bremner River<br>baz=212,SNR=5.6 | 83.36 | 16 | P | P | 06 21 11.5 | +0.5 | |
| MESA | MESA<br>baz=214 | 83.42 | 17 | P | P | 06 21 12.8 | +1.3 | |
| K20K | Telida<br>baz=203,SNR=14 | 83.43 | 11 | P | P | 06 21 11.9 | +0.7 | |
| S31K | Pelican | 83.43 | 21 | P | P | 06 21 12.3 | +1.0 | |
| S31K | comp=Z,15nm,0.9s | | | IAmb | IAmb | 06 21 13.6 | | |
| S31K | Pelican<br>baz=220 | 83.43 | 21 | P | P | 06 21 12.5 | +1.2 | |
| SCM | Sheep Creek Mo | 83.44 | 14 | P | P | 06 21 12.0 | +0.6 | |
| SCM | Sheep Creek Mo<br>baz=209 | 83.44 | 14 | P | P | 06 21 12.0 | +0.6 | |
| H16K | Elim<br>baz=195 | 83.46 | 7 | P | P | 06 21 12.1 | +0.8 | |
| KLU | Klutina<br>baz=211 | 83.48 | 15 | P | P | 06 21 12.5 | +0.9 | |
| CRQE | Cirque<br>baz=213,SNR=5.3 | 83.58 | 17 | P | P | 06 21 13.5 | +1.3 | |
| G15K | Niukluk<br>baz=194 | 83.61 | 6 | P | P | 06 21 13.1 | +1.0 | |
| WRAK | Wrangell Islan<br>comp=Z,12nm,0.9s | 83.67 | 24 | IAmb | IAmb | 06 21 14.8 | | |
| WRAK | Wrangell Islan<br>baz=223 | 83.67 | 24 | P | P | 06 21 13.8 | +1.2 | |
| PNL | Peninsula<br>baz=217 | 83.75 | 19 | P | P | 06 21 13.6 | +0.7 | |
| MFID | Camas Ranch | 83.75 | 41 | P | P | 06 21 14.8 | +1.3 | |
| J19K | Poorman | 83.76 | 10 | P | P | 06 21 13.8 | +0.9 | |
| J19K | comp=Z,14nm,1.1s | | | IAmb | IAmb | 06 21 14.8 | | |
| J19K | Poorman<br>baz=202,SNR=7.0 | 83.76 | 10 | P | P | 06 21 13.8 | +0.9 | |
| PINM | Pinnacle<br>baz=216 | 83.84 | 18 | P | P | 06 21 13.7 | +0.3 | |
| TNA | Tin City<br>baz=190 | 83.84 | 4 | P | P | 06 21 14.2 | +1.1 | |
| F14K | Arctic Creek<br>baz=191 | 83.88 | 5 | P | P | 06 21 14.5 | +1.1 | |
| VRDI | Verde Repeater<br>comp=Z,22nm,1.0s | 83.88 | 16 | IAmb | IAmb | 06 21 15.2 | | |
| N25K | Chitina, Valde | 83.90 | 15 | P | P | 06 21 14.4 | +0.6 | |
| N25K | Chitina, Valde<br>baz=212,SNR=8.2 | 83.90 | 15 | P | P | 06 21 14.3 | +0.6 | |
| GRNC | Granite Creek | 83.93 | 17 | P | P | 06 21 15.0 | +0.9 | |
| GRNC | comp=Z,18nm,0.9s | | | IAmb | IAmb | 06 21 15.7 | | |
| D08A | Wollman Farm,<br>comp=Z,7.6nm,0.9s | 83.93 | 36 | IAmb | IAmb | 06 21 16.5 | | |
| M24K | Tonona, Glenn<br>baz=210 | 83.95 | 15 | P | P | 06 21 15.1 | +1.1 | |
| GLB | Gilahina Butte | 83.97 | 16 | P | P | 06 21 14.8 | +0.8 | |
| GLB | comp=Z,21nm,1.0s | | | IAmb | IAmb | 06 21 15.4 | | |
| WAT6 | Susitna Watana<br>baz=209,SNR=11 | 84.00 | 14 | P | P | 06 21 14.5 | +0.2 | |
| H17K | Granite Mounta<br>baz=197 | 84.03 | 8 | P | P | 06 21 14.4 | +0.2 | |
| WAT1 | Susitna Watana<br>baz=208 | 84.04 | 13 | P | P | 06 21 15.1 | +0.7 | |
| MCARA | McCarthy VSAT<br>comp=Z,25nm,1.1s | 84.12 | 16 | IAmb | IAmb | 06 21 16.4 | | |
| MCARA | McCarthy VSAT<br>baz=213 | 84.12 | 16 | P | P | 06 21 15.7 | +1.0 | |
| LYN | LuoYang | 84.13 | 309 | P | P | 06 21 17.4 | +2.0 | |
| LYN | comp=Z,20nm,0.7s | | | pmax | pmax | | | |
| J20K | Nowinta River<br>comp=Z,20nm,0.9s | 84.17 | 10 | IAmb | IAmb | 06 21 16.5 | | |
| J20K | Nowinta River<br>baz=203,SNR=8.0 | 84.17 | 10 | P | P | 06 21 15.9 | +1.1 | |
| G16K | Koyuk River<br>baz=195 | 84.18 | 7 | P | P | 06 21 15.9 | +1.0 | |
| LOGN | Logan Glacier | 84.22 | 17 | P | P | 06 21 16.4 | +1.0 | |
| P29M | Windy Craggy<br>comp=Z,15nm,0.8s | 84.23 | 19 | IAmb | IAmb | 06 21 17.6 | | |
| P29M | Windy Craggy<br>baz=218,SNR=6.6 | 84.23 | 19 | P | P | 06 21 16.6 | +1.3 | |
| CTG | Chitna Glacier<br>baz=215,SNR=7.9 | 84.23 | 17 | P | P | 06 21 16.5 | +1.1 | |
| F15K | North Star Dit<br>baz=193 | 84.25 | 6 | P | P | 06 21 16.1 | +0.9 | |
| R32K | Eaglecrest<br>baz=221 | 84.26 | 22 | P | P | 06 21 16.9 | +1.4 | |
| GCSA | Galena City Sc<br>baz=200 | 84.27 | 9 | P | P | 06 21 16.8 | +1.5 | |
| F10A | Beach Ranch, E | 84.29 | 38 | P | P | 06 21 17.3 | +1.2 | |
| F10A | comp=Z,12nm,1.0s | | | IAmb | IAmb | 06 21 18.0 | | |
| O28M | Mount Upton<br>baz=216,SNR=8.1 | 84.40 | 18 | P | P | 06 21 17.4 | +0.9 | |
| H18K | Honhosa River<br>baz=199 | 84.44 | 8 | P | P | 06 21 15.7 | -0.5 | |
| HARP | HAARP<br>baz=211 | 84.44 | 15 | P | P | 06 21 17.1 | +0.8 | |
| B08A | Colville Reser<br>comp=Z,6.5nm,0.8s | 84.45 | 35 | IAmb | IAmb | 06 21 18.3 | | |
| G17K | Kiwalik Mounta<br>baz=197 | 84.48 | 7 | P | P | 06 21 16.7 | +0.3 | |
| O29M | Mount Kennedy<br>comp=Z,12nm,1.1s | 84.50 | 19 | IAmb | IAmb | 06 21 18.8 | | |
| O29M | Mount Kennedy<br>baz=218 | 84.50 | 19 | P | P | 06 21 17.2 | +0.4 | |
| DHY | Denali Highway | 84.51 | 14 | P | P | 06 21 17.0 | +0.2 | |
| DHY | comp=Z,12nm,1.0s | | | IAmb | IAmb | 06 21 24.0 | | |
| DHY | Denali Highway<br>baz=209,SNR=5.6 | 84.51 | 14 | P | P | 06 21 17.0 | +0.2 | |
| PLBC | Pleasant Camp<br>baz=220,SNR=9.2 | 84.54 | 20 | P | P | 06 21 18.2 | +1.4 | |
| BPAW | Bear Paw Mtn. | 84.67 | 12 | P | P | 06 21 17.5 | +0.1 | |
| BPAW | comp=Z,19nm,1.5s | | | IAmb | IAmb | 06 21 18.8 | | |
| BPAW | Bear Paw Mtn.<br>baz=206 | 84.67 | 12 | P | P | 06 21 16.9 | -0.5 | |
| I20K | Naaghedeneel | 84.69 | 10 | P | P | 06 21 18.8 | +1.4 | |
| I20K | comp=Z,24nm,1.1s | | | IAmb | IAmb | 06 21 19.9 | | |
| I20K | Naaghedeneel<br>baz=203 | 84.69 | 10 | P | P | 06 21 18.1 | +0.8 | |
| HLID | Hailey<br>baz=239 | 84.71 | 41 | P | P | 06 21 19.6 | +1.3 | |
| MCK | McKinley<br>baz=208,SNR=10 | 84.75 | 13 | P | P | 06 21 18.2 | +0.4 | |
| PAX | Paxson<br>baz=211,SNR=5.5 | 84.86 | 14 | P | P | 06 21 18.7 | +0.3 | |
| P30M | Million Dollar<br>baz=219 | 84.86 | 19 | P | P | 06 21 20.2 | +1.7 | |
| SKAG | Skagway | 84.88 | 20 | P | P | 06 21 20.1 | +1.7 | |
| SKAG | comp=Z,23nm,1.4s | | | IAmb | IAmb | 06 21 21.1 | | |
| SKAG | Skagway<br>baz=220,SNR=6.0 | 84.88 | 20 | P | P | 06 21 20.0 | +1.5 | |
| YUK8 | Steele Glacier<br>baz=216 | 84.94 | 18 | P | P | 06 21 20.0 | +0.9 | |
| M26K | Nabesna, AK<br>baz=213,SNR=12 | 84.98 | 16 | P | P | 06 21 20.6 | +1.6 | |
| H19K | Roundabout Mou<br>baz=201 | 85.06 | 9 | P | P | 06 21 19.9 | +0.8 | |
| YUK6 | Outpost Mounta<br>baz=218 | 85.08 | 18 | P | P | 06 21 20.3 | +0.6 | |
| G18K | Tagagawik<br>baz=199 | 85.11 | 8 | P | P | 06 21 20.5 | +1.0 | |
| YUK3 | Moose Creek<br>baz=216,SNR=14 | 85.14 | 17 | P | P | 06 21 20.9 | +0.9 | |
| S34M | Telegraph Cree<br>comp=Z,20nm,0.9s | 85.21 | 23 | IAmb | IAmb | 06 21 23.1 | | |
| S34M | Telegraph Cree<br>baz=224,SNR=17 | 85.21 | 23 | P | P | 06 21 21.9 | +1.8 | |
| M27K | Edge Creek, AK<br>baz=214,SNR=16 | 85.24 | 16 | P | P | 06 21 21.7 | +1.4 | |
| H20K | Anotleneega Mo<br>baz=202 | 85.27 | 10 | P | P | 06 21 20.7 | +0.4 | |
| YUK4 | Talbot Arm<br>baz=217 | 85.31 | 18 | P | P | 06 21 22.0 | +1.2 | |
| L26K | Log Cabin Wild | 85.42 | 15 | P | P | 06 21 22.2 | +1.1 | |
| L26K | comp=Z,14nm,1.1s | | | IAmb | IAmb | 06 21 22.8 | | |
| L26K | Log Cabin Wild<br>baz=213,SNR=5.9 | 85.42 | 15 | P | P | 06 21 22.1 | +1.1 | |
| TCUT | Toone Canyon | 85.42 | 44 | P | P | 06 21 21.8 | 0.0 | |
| I21K | Tanana<br>comp=Z,18nm,1.1s | 85.47 | 11 | IAmb | IAmb | 06 21 22.5 | | |
| I21K | Tanana<br>baz=205 | 85.47 | 11 | P | P | 06 21 21.8 | +0.6 | |
| NEA2 | Nenana<br>baz=208 | 85.49 | 12 | P | P | 06 21 20.9 | -0.4 | |
| K24K | Donnelly Dome<br>baz=211 | 85.50 | 14 | P | P | 06 21 22.4 | +0.9 | |
| P32M | Atlin | 85.52 | 21 | P | P | 06 21 22.9 | +1.3 | |
| P32M | comp=Z,9.7nm,1.0s | | | IAmb | IAmb | 06 21 23.8 | | |
| P32M | Atlin<br>baz=222 | 85.52 | 21 | P | P | 06 21 22.8 | +1.2 | |
| G19K | Purcell Mounta | 85.55 | 8 | P | P | 06 21 22.0 | +0.4 | |
| G19K | comp=Z,7.1nm,1.1s | | | IAmb | IAmb | 06 21 23.0 | | |
| G19K | Purcell Mounta<br>baz=200 | 85.55 | 8 | P | P | 06 21 21.8 | +0.2 | |
| Q32M | Nakina River<br>comp=Z,9.6nm,0.8s | 85.56 | 22 | IAmb | IAmb | 06 21 24.2 | | |
| Q32M | Nakina River<br>baz=223,SNR=8.6 | 85.56 | 22 | P | P | 06 21 23.5 | +1.5 | |
| MLY | Manley | 85.56 | 11 | P | P | 06 21 21.3 | -0.4 | |
| MLY | comp=Z,13nm,1.2s | | | IAmb | IAmb | 06 21 22.3 | | |
| MLY | Manley<br>baz=206 | 85.56 | 11 | P | P | 06 21 21.7 | 0.0 | |
| MNTX | Cornudas Mount<br>baz=246 | 85.58 | 55 | P | P | 06 21 24.4 | +1.9 | |
| NEW | Newport<br>baz=236 | 85.61 | 36 | P | P | 06 21 23.3 | +1.0 | |
| O30N | Mendenhall | 85.64 | 19 | P | P | 06 21 23.2 | +1.0 | |
| O30N | comp=Z,13nm,0.9s | | | IAmb | IAmb | 06 21 24.2 | | |
| O30N | Mendenhall<br>baz=220,SNR=11 | 85.64 | 19 | P | P | 06 21 23.4 | +1.3 | |
| F18K | Selawik<br>baz=198 | 85.65 | 7 | P | P | 06 21 22.4 | +0.4 | |
| RIDG | Independent Ri | 85.66 | 14 | P | P | 06 21 22.7 | +0.4 | |
| RIDG | comp=Z,16nm,1.0s | | | IAmb | IAmb | 06 21 23.6 | | |
| RIDG | Independent Ri<br>baz=212,SNR=6.0 | 85.66 | 14 | P | P | 06 21 22.9 | +0.7 | |
| H21K | Melozitna Rive | 85.76 | 10 | P | P | 06 21 23.6 | +0.9 | |
| H21K | Melozitna Rive<br>baz=204 | 85.76 | 10 | P | P | 06 21 23.1 | +0.5 | |
| HDA | Harding Lake | 85.77 | 13 | P | P | 06 21 23.0 | +0.4 | |
| HDA | comp=Z,16nm,1.0s | | | IAmb | IAmb | 06 21 23.6 | | |
| HDA | Harding Lake<br>baz=210,SNR=7.9 | 85.77 | 13 | P | P | 06 21 23.2 | +0.5 | |
| L27K | Beaver Creek,<br>baz=214 | 85.83 | 16 | P | P | 06 21 23.8 | +0.7 | |
| BCAR | Beaver Creek A | 85.85 | 16 | P | P | 06 21 23.4 | +0.3 | |
| N30M | Aishikik Lake | 85.87 | 18 | P | P | 06 21 23.9 | +0.7 | |
| N30M | comp=Z,6.3nm,1.1s | | | IAmb | IAmb | 06 21 26.2 | | |
| N30M | Aishikik Lake<br>baz=219 | 85.87 | 18 | P | P | 06 21 23.9 | +0.7 | |
| E17K | Hotham Inlet<br>baz=196 | 85.87 | 6 | P | P | 06 21 23.7 | +0.6 | |
| IMAR | Indian Mountai | 85.91 | 10 | P | P | 06 21 23.7 | +0.4 | |
| I23K | Minto, Yukon-K | 85.93 | 12 | P | P | 06 21 23.4 | 0.0 | |
| I23K | comp=Z,16nm,1.5s | | | IAmb | IAmb | 06 21 24.3 | | |
| I23K | Minto, Yukon-K<br>baz=207 | 85.93 | 12 | P | P | 06 21 23.7 | +0.3 | |
| WHY | Whitehorse | 85.94 | 20 | IAmb | IAmb | 06 21 25.7 | | |
| WHY | comp=Z,12nm,1.1s | | | | | | | |
| WHY | Whitehorse<br>baz=221,SNR=5.6 | 85.94 | 20 | P | P | 06 21 25.2 | +1.5 | |
| TX31 | Lajitas Ar. Si<br>comp=Z,7.3nm,0.9s | 85.98 | 58 | IAmb | IAmb | 06 21 28.1 | | |
| TXAR | Lajitas Array | 85.98 | 58 | P | P | 06 21 26.3 | +1.7 | |
| TXAR | Lajitas Array<br>comp=Z,5.8nm,0.9s,baz=220,slow=6.1,SNR=55<br>comp=Z,5.8nm,0.9s | 85.98 | 58 | P | P | 06 21 27.0 | +2.4 | |
| MDM | Murphy Dome | 85.99 | 12 | P | P | 06 21 23.5 | -0.2 | |
| COLA | College | 85.99 | 12 | P | P | 06 21 23.4 | -0.2 | |
| COLA | College<br>baz=209 | 85.99 | 12 | P | P | 06 21 23.7 | +0.1 | |
| DLBC | Dease Lake | 86.00 | 23 | P | P | 06 21 25.2 | +1.2 | |
| DLBC | Dease Lake<br>baz=225 | 86.00 | 23 | P | P | 06 21 25.3 | +1.3 | |
| SCRK | Sand Creek | 86.07 | 14 | P | P | 06 21 25.0 | +0.8 | |
| SCRK | comp=Z,11nm,1.1s | | | IAmb | IAmb | 06 21 25.8 | | |
| SCRK | Sand Creek<br>baz=212,SNR=5.8 | 86.07 | 14 | P | P | 06 21 25.1 | +0.9 | |
| IL31 | | 86.10 | 13 | P | P | 06 21 24.1 | 0.0 | |
| IL31 | comp=Z,21nm,1.1s | | | IAmb | IAmb | 06 21 25.0 | | |
| ILAR | Eielson Array | 86.10 | 13 | P | P | 06 21 24.3 | 0.0 | |
| ILAR | Eielson Array<br>comp=Z,3.6nm,0.4s,baz=220,slow=5.4,SNR=24<br>comp=Z,3.6nm,0.4s | 86.10 | 13 | P | P | 06 21 23.9 | -0.4 | |
| ANMO | Albuquerque<br>baz=245 | 86.12 | 51 | P | P | 06 21 25.4 | +0.2 | |
| H22K | Ishtalitna Cre<br>baz=205 | 86.23 | 11 | P | P | 06 21 25.3 | +0.5 | |
| M29M | Somme Creek | 86.24 | 17 | P | P | 06 21 26.1 | +1.0 | |
| M29M | comp=Z,6.6nm,0.8s | | | IAmb | IAmb | 06 21 27.0 | | |
| M29M | Somme Creek<br>baz=218,SNR=8.0 | 86.24 | 17 | P | P | 06 21 26.1 | +1.0 | |
| P33M | Teslin, Yukon | 86.29 | 21 | IAmb | IAmb | 06 21 27.2 | | |
| P33M | comp=Z,5.1nm,0.8s | | | | | | | |
| P33M | Teslin, Yukon<br>baz=223,SNR=7.1 | 86.29 | 21 | P | P | 06 21 26.5 | +1.2 | |
| N31M | Braeburn, Yuko | 86.29 | 19 | IAmb | IAmb | 06 21 27.2 | | |
| N31M | comp=Z,18nm,1.0s | | | | | | | |
| N31M | Braeburn, Yuko<br>baz=220,SNR=8.5 | 86.29 | 19 | P | P | 06 21 26.3 | +1.1 | |
| J25K | Salcha River, | 86.29 | 14 | P | P | 06 21 25.4 | +0.2 | |
| J25K | comp=Z,8.0nm,1.1s | | | IAmb | IAmb | 06 21 27.2 | | |
| J25K | Salcha River,<br>baz=211,SNR=7.8 | 86.29 | 14 | P | P | 06 21 26.0 | +0.7 | |
| E18K | Tukpahlearik C | 86.33 | 7 | P | P | 06 21 26.0 | +0.8 | |
| E18K | comp=Z,8.3nm,1.0s | | | IAmb | IAmb | 06 21 26.7 | | |
| E18K | Tukpahlearik C<br>baz=197 | 86.33 | 7 | P | P | 06 21 26.3 | +1.0 | |
| R33M | Jennings River | 86.34 | 22 | P | P | 06 21 27.1 | +1.5 | |
| R33M | comp=Z,15nm,1.2s | | | IAmb | IAmb | 06 21 28.1 | | |
| R33M | Jennings River<br>baz=224,SNR=8.4 | 86.34 | 22 | P | P | 06 21 27.1 | +1.5 | |
| D17K | Noatak River<br>baz=194 | 86.34 | 6 | P | P | 06 21 26.7 | +1.4 | |
| G21K | Allakaket | 86.44 | 10 | P | P | 06 21 26.6 | +0.8 | |
| G21K | comp=Z,9.0nm,0.8s | | | IAmb | IAmb | 06 21 27.2 | | |
| G21K | Allakaket<br>baz=203,SNR=8.1 | 86.44 | 10 | P | P | 06 21 26.6 | +0.8 | |
| H23K | Yukon River<br>baz=207 | 86.50 | 11 | P | P | 06 21 26.1 | 0.0 | |
| XAN | Xi'an | 86.56 | 307 | ⇑P | P | 06 21 29.3 | +2.1 | |
| XAN | comp=Z,24nm,1.5s | | | pmax | pmax | | | |
| K27K | Chicken<br>baz=214 | 86.57 | 15 | P | P | 06 21 28.2 | +1.7 | |
| F20K | Avaraart Lake<br>baz=201 | 86.60 | 9 | P | P | 06 21 26.8 | +0.4 | |
| J26L | Joseph Creek<br>comp=Z,8.5nm,0.8s | 86.61 | 14 | IAmb | IAmb | 06 21 28.2 | | |
| J26L | Joseph Creek<br>baz=213,SNR=9.3 | 86.61 | 14 | P | P | 06 21 27.8 | +1.0 | |
| MSO | Missoula<br>baz=239 | 86.68 | 38 | P | P | 06 21 28.4 | +0.9 | |
| RDOG | Red Dog Mine<br>baz=194 | 86.70 | 6 | P | P | 06 21 28.4 | +1.4 | |
| C16K | Lisburne Hills<br>baz=192 | 86.71 | 5 | P | P | 06 21 28.4 | +1.4 | |
| DLMT | Dillon<br>comp=Z,8.8nm,1.1s | 86.74 | 40 | IAmb | IAmb | 06 21 30.5 | | |
| BPMT | Black Pine Rid | 86.77 | 39 | P | P | 06 21 29.3 | +1.2 | |
| E19K | Redstone River | 86.77 | 8 | P | P | 06 21 27.9 | +0.6 | |
| E19K | comp=Z,9.2nm,0.9s | | | IAmb | IAmb | 06 21 28.8 | | |
| E19K | Redstone River<br>baz=200,SNR=9.6 | 86.77 | 8 | P | P | 06 21 28.0 | +0.6 | |
| H24K | Noodor Dome<br>baz=209 | 86.83 | 12 | P | P | 06 21 26.8 | -0.9 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| N32M | Quiet Lake | 86.89 | 20 | IAmb | IAmb | 06 21 30.3 |
| | comp=Z,16nm,1.1s | | | | | |
| N32M | Quiet Lake | 86.89 | 20 | P | P | 06 21 29.3 +1.2 |
| | baz=222 | | | | | |
| SNOW | Snow King Moun | 86.97 | 42 | IAmb | IAmb | 06 21 31.9 |
| | comp=Z,10nm,1.4s | | | | | |
| PRP | Porcupine Dome | 87.04 | 13 | P | P | 06 21 29.2 +0.4 |
| | baz=211 | | | | | |
| S22A | 4UR Ranch, Cre | 87.04 | 49 | P | P | 06 21 30.4 +0.7 |
| | baz=244 | | | | | |
| F21K | Alatna River | 87.09 | 9 | P | P | 06 21 29.0 +0.1 |
| F21K | Alatna River | 87.09 | 9 | P | P | 06 21 29.8 +1.0 |
| | baz=203 | | | | | |
| G22K | Bettles | 87.14 | 10 | P | P | 06 21 30.6 +1.6 |
| | baz=205 | | | | | |
| G23K | Bananza Creek | 87.20 | 11 | P | P | 06 21 30.2 +0.8 |
| G23K | | | | IAmb | IAmb | 06 21 31.0 |
| | comp=Z,10nm,1.2s | | | | | |
| G23K | Bananza Creek | 87.20 | 11 | P | P | 06 21 30.6 +1.1 |
| | baz=207 | | | | | |
| M31M | Drury Creek, Y | 87.26 | 19 | P | P | 06 21 30.4 +0.6 |
| M31M | | | | IAmb | IAmb | 06 21 31.2 |
| | comp=Z,7.9nm,1.1s | | | | | |
| M31M | Drury Creek, Y | 87.26 | 19 | P | P | 06 21 30.0 +0.2 |
| | baz=221 | | | | | |
| DAWY | Dawson | 87.29 | 16 | P | P | 06 21 30.6 +0.7 |
| | baz=217,SNR=5.9 | | | | | |
| YHL | Hebgen Lake | 87.36 | 41 | IAmb | IAmb | 06 21 34.3 |
| | comp=Z,6.6nm,0.9s | | | | | |
| I26K | Coal Creek Min | 87.38 | 14 | P | P | 06 21 31.2 +1.0 |
| I26K | Coal Creek Min | 87.38 | 14 | P | P | 06 21 31.0 +0.8 |
| | baz=213 | | | | | |
| BW06 | Boulder Array | 87.42 | 43 | P | P | 06 21 31.4 +0.2 |
| | baz=242 | | | | | |
| PDAR | Pinedale Array | 87.42 | 43 | P | P | 06 21 31.7 +0.5 |
| | comp=Z,1.6nm,0.8s,baz=230,slow=2.7,SNR=11 | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | |
| EGAK | Eagle | 87.42 | 15 | IAmb | IAmb | 06 21 32.0 |
| | comp=Z,13nm,1.1s | | | | | |
| EGAK | Eagle | 87.42 | 15 | P | P | 06 21 31.4 +1.0 |
| | baz=215,SNR=5.3 | | | | | |
| BOZ | Bozeman (W) | 87.45 | 40 | P | P | 06 21 32.2 +1.0 |
| | baz=241 | | | | | |
| C18K | Utukok River | 87.45 | 6 | P | P | 06 21 31.4 +0.8 |
| | baz=196 | | | | | |
| SAND | Sanderson | 87.46 | 57 | P | P | 06 21 33.0 +1.4 |
| H17A | Grant Village | 87.53 | 42 | P | P | 06 21 31.2 -0.5 |
| H17A | Grant Village | 87.53 | 42 | P | P | 06 21 33.9 +2.2 |
| | baz=242 | | | | | |
| F22K | John River | 87.56 | 10 | P | P | 06 21 32.1 +1.1 |
| | baz=205 | | | | | |
| HHC | Hu-ho-hao-te | 87.58 | 314 | *e*P | P | 06 21 28.8 -3.1 |
| HHC | | | | pmax | pmax | |
| | comp=Z,21nm,0.8s | | | | | |
| HHC | | | | pmax | pmax | |
| | comp=Z,98nm,5.6s | | | | | |
| FARO | Faro, Yukon | 87.61 | 19 | P | P | 06 21 32.3 +0.9 |
| | baz=222,SNR=5.2 | | | | | |
| K29M | Barlow Dome | 87.61 | 17 | IAmb | IAmb | 06 21 33.6 |
| | comp=Z,19nm,1.2s | | | | | |
| K29M | Barlow Dome | 87.61 | 17 | P | P | 06 21 32.6 +1.1 |
| | baz=218,SNR=10 | | | | | |
| H25L | Birch Creek | 87.62 | 13 | P | P | 06 21 31.5 +0.2 |
| | baz=211 | | | | | |
| WTLY | Watson Lake, Y | 87.62 | 22 | P | P | 06 21 32.8 +1.3 |
| | baz=226 | | | | | |
| COLD | Coldfoot | 87.64 | 11 | P | P | 06 21 32.4 +1.0 |
| | baz=206,SNR=17 | | | | | |
| D19K | Kuna River | 87.64 | 7 | P | P | 06 21 31.8 +0.3 |
| D19K | | | | IAmb | IAmb | 06 21 32.7 |
| | comp=Z,12nm,1.0s | | | | | |
| D19K | Kuna River | 87.64 | 7 | P | P | 06 21 32.1 +0.6 |
| | baz=199 | | | | | |
| E20K | Nigu River | 87.67 | 8 | P | P | 06 21 32.3 +0.7 |
| | baz=201,SNR=11 | | | | | |
| G24K | Hadweenzic Riv | 87.67 | 12 | P | P | 06 21 31.9 +0.4 |
| | baz=209 | | | | | |
| LYMT | Lyon Mountain | 87.72 | 39 | P | P | 06 21 33.3 +0.8 |
| I27K | Kandik River | 87.99 | 14 | P | P | 06 21 34.1 +0.9 |
| | baz=214 | | | | | |
| G25K | Bearman Lake | 88.00 | 12 | P | P | 06 21 33.6 +0.5 |
| | baz=210 | | | | | |
| D20K | Etivluk River | 88.04 | 8 | P | P | 06 21 33.8 +0.5 |
| | baz=200 | | | | | |
| C19K | Lookout Ridge | 88.06 | 7 | P | P | 06 21 34.3 +0.9 |
| | baz=198 | | | | | |
| TOAD | Toad River Com | 88.12 | 25 | P | P | 06 21 34.8 +1.0 |
| | baz=229 | | | | | |
| E21K | Killik River | 88.14 | 9 | IAmb | IAmb | 06 21 35.0 |
| | comp=Z,9.2nm,1.0s | | | | | |
| E21K | Killik River | 88.14 | 9 | P | P | 06 21 34.3 +0.5 |
| | baz=203 | | | | | |
| LIRD | Liard River Hi | 88.15 | 24 | P | P | 06 21 34.8 +0.8 |
| | baz=229 | | | | | |
| E22K | Anaktuvuk Pass | 88.19 | 10 | P | P | 06 21 35.1 +1.1 |
| | baz=205 | | | | | |
| I28M | Miner Creek | 88.27 | 15 | P | P | 06 21 35.1 +0.7 |
| I28M | | | | IAmb | IAmb | 06 21 35.9 |
| | comp=Z,5.2nm,0.8s | | | | | |
| I28M | Miner Creek | 88.27 | 15 | P | P | 06 21 35.2 +0.7 |
| | baz=216,SNR=5.4 | | | | | |
| F24K | Squaw Lake | 88.31 | 11 | P | P | 06 21 35.4 +0.8 |
| F24K | | | | IAmb | IAmb | 06 21 36.4 |
| | comp=Z,8.3nm,0.9s | | | | | |
| F24K | Squaw Lake | 88.31 | 11 | P | P | 06 21 35.6 +1.0 |
| | baz=209,SNR=7.8 | | | | | |
| DRIO | Del Rio | 88.47 | 58 | IAmb | IAmb | 06 21 39.5 |
| | comp=Z,8.8nm,0.9s | | | | | |
| E23K | Chandalar | 88.48 | 10 | IAmb | IAmb | 06 21 37.1 |
| | comp=Z,14nm,1.0s | | | | | |
| E23K | Chandalar | 88.48 | 10 | P | P | 06 21 36.4 +1.0 |
| | baz=207,SNR=13 | | | | | |
| J30M | Hart River | 88.51 | 17 | P | P | 06 21 36.1 +0.5 |
| J30M | | | | IAmb | IAmb | 06 21 38.2 |
| | comp=Z,4.2nm,0.9s | | | | | |
| J30M | Hart River | 88.51 | 17 | P | P | 06 21 36.8 +1.1 |
| | baz=219,SNR=5.1 | | | | | |
| H27K | Steamboat Moun | 88.53 | 14 | P | P | 06 21 36.7 +1.1 |
| | baz=215,SNR=6.1 | | | | | |
| I29M | Ogilvie Camp, | 88.61 | 16 | P | P | 06 21 36.4 +0.3 |
| I29M | | | | IAmb | IAmb | 06 21 37.3 |
| | comp=Z,8.8nm,1.0s | | | | | |
| I29M | Ogilvie Camp, | 88.61 | 16 | P | P | 06 21 36.3 +0.3 |
| | baz=218,SNR=8.3 | | | | | |
| G26K | Porcupine Rive | 88.63 | 13 | P | P | 06 21 37.1 +1.1 |
| | baz=212,SNR=13 | | | | | |
| RLMT | Red Lodge | 88.69 | 41 | P | P | 06 21 38.3 +1.2 |
| | baz=242 | | | | | |
| E24K | Your Creek | 88.69 | 11 | P | P | 06 21 37.3 +1.0 |
| E24K | | | | IAmb | IAmb | 06 21 37.5 |
| | comp=Z,3.6nm,0.8s | | | | | |
| E24K | Your Creek | 88.69 | 11 | P | P | 06 21 37.4 +1.0 |
| | baz=208 | | | | | |
| C21K | Knifeblade Rid | 88.69 | 8 | P | P | 06 21 37.4 +1.1 |
| | baz=202,SNR=5.6 | | | | | |
| D22K | Ayikyak River | 88.74 | 9 | P | P | 06 21 37.5 +1.0 |
| | baz=204,SNR=6.1 | | | | | |
| TGTN | Hyland Airport | 88.79 | 22 | P | P | 06 21 38.4 +1.5 |
| | baz=227 | | | | | |
| F25K | Christian Rive | 88.80 | 12 | IAmb | IAmb | 06 21 38.9 |
| | comp=Z,7.0nm,1.0s | | | | | |
| F25K | Christian Rive | 88.80 | 12 | P | P | 06 21 38.5 +1.6 |
| | baz=211,SNR=6.0 | | | | | |
| BMAR | Burnt Mountain | 88.88 | 12 | P | P | 06 21 38.3 +1.1 |
| ELIB | Princess Elisa | 88.92 | 187 | *d*P | P | 06 21 38.2 +0.5 |
| | comp=Z,3.6nm,0.8s | | | | | |
| G27K | Doyon Strip | 88.98 | 14 | P | P | 06 21 38.8 +1.1 |
| G27K | Doyon Strip | 88.98 | 14 | P | P | 06 21 38.9 +1.2 |
| | baz=214 | | | | | |
| I30M | Mount Dempster | 89.00 | 16 | P | P | 06 21 38.5 +0.5 |
| I30M | | | | IAmb | IAmb | 06 21 39.5 |
| | comp=Z,9.5nm,0.9s | | | | | |
| I30M | Mount Dempster | 89.00 | 16 | P | P | 06 21 38.6 +0.6 |
| | baz=219,SNR=11 | | | | | |
| TOLK | Toolik Lake Re | 89.01 | 10 | P | P | 06 21 38.5 +0.7 |
| TOLK | | | | IAmb | IAmb | 06 21 39.5 |
| | comp=Z,9.4nm,1.1s | | | | | |
| TOLK | Toolik Lake Re | 89.01 | 10 | P | P | 06 21 38.8 +1.0 |
| | baz=207 | | | | | |
| D23K | Nanushuk River | 89.12 | 10 | P | P | 06 21 39.6 +1.3 |
| | baz=206 | | | | | |
| CMAR | Chiang Mai Arr | 89.14 | 290 | P | P | 06 21 40.3 +0.7 |
| | comp=Z,4.4nm,0.3s,baz=107,slow=2.7,SNR=13 | | | | | |
| | comp=Z,4.4nm,0.3s | | | | | |
| B21K | Ikpikpuk River | 89.15 | 8 | P | P | 06 21 38.8 +0.4 |
| | baz=202 | | | | | |
| F26K | Sheenjek River | 89.19 | 12 | P | P | 06 21 39.2 +0.5 |
| F26K | | | | IAmb | IAmb | 06 21 40.8 |
| | comp=Z,6.6nm,0.9s | | | | | |
| F26K | Sheenjek River | 89.19 | 12 | P | P | 06 21 39.9 +1.2 |
| | baz=212,SNR=6.5 | | | | | |
| B20K | Meade River | 89.19 | 7 | P | P | 06 21 39.8 +1.2 |
| | baz=200 | | | | | |
| H29M | Whitestone | 89.27 | 15 | P | P | 06 21 40.0 +1.0 |
| | baz=218,SNR=10.0 | | | | | |
| KOTAN | Kotaneelee Air | 89.41 | 24 | P | P | 06 21 40.9 +1.1 |
| | baz=230 | | | | | |
| PZH | PanZhiHua | 89.44 | 298 | P | P | 06 21 42.0 +1.1 |
| PZH | | | | pmax | pmax | |
| | comp=Z,10.0nm,0.5s | | | | | |
| PZH | | | | pmax | pmax | |
| | comp=Z,100nm,4.8s | | | | | |
| D24K | Happy Valley | 89.59 | 10 | P | P | 06 21 40.6 +0.1 |
| D24K | | | | IAmb | IAmb | 06 21 42.2 |
| | comp=Z,11nm,1.0s | | | | | |
| D24K | Happy Valley | 89.59 | 10 | P | P | 06 21 41.3 +0.8 |
| | baz=208 | | | | | |
| HNDO | Hondo | 89.60 | 59 | IAmb | IAmb | 06 21 44.5 |
| | comp=Z,9.0nm,1.1s | | | | | |
| EPYK | Eagle Plains | 89.81 | 15 | P | P | 06 21 42.1 +0.6 |
| | baz=219,SNR=10.0 | | | | | |
| G29M | Pine Creek | 89.91 | 15 | P | P | 06 21 42.7 +0.7 |
| G29M | | | | IAmb | IAmb | 06 21 43.5 |
| | comp=Z,11nm,1.1s | | | | | |
| G29M | Pine Creek | 89.91 | 15 | P | P | 06 21 42.9 +0.9 |
| | baz=218,SNR=6.0 | | | | | |
| C23K | Itkillik River | 89.92 | 9 | P | P | 06 21 43.2 +1.3 |
| | baz=206,SNR=6.5 | | | | | |
| B22K | Teshekpuk Lake | 89.97 | 8 | P | P | 06 21 43.1 +1.0 |
| B22K | Teshekpuk Lake | 89.97 | 8 | P | P | 06 21 42.9 +0.8 |
| | baz=204 | | | | | |
| F28M | Old Crow | 90.04 | 14 | IAmb | IAmb | 06 21 44.2 |
| | comp=Z,7.4nm,1.1s | | | | | |
| F28M | Old Crow | 90.04 | 14 | P | P | 06 21 43.2 +0.6 |
| | baz=216 | | | | | |
| TROLL | Troll, Antarti | 90.05 | 180 | ⇑P | P | 06 21 43.2 +0.3 |
| | comp=Z,73nm,0.5s | | | | | |
| C24K | Franklin Bluff | 90.12 | 10 | P | P | 06 21 44.0 +1.2 |
| | baz=208,SNR=8.6 | | | | | |
| E27K | Coleen River | 90.13 | 13 | P | P | 06 21 44.1 +1.1 |
| E27K | | | | IAmb | IAmb | 06 21 45.0 |
| | comp=Z,8.1nm,1.2s | | | | | |
| E27K | Coleen River | 90.13 | 13 | P | P | 06 21 44.4 +1.4 |
| | baz=214 | | | | | |
| D25K | Kavik River | 90.16 | 11 | P | P | 06 21 44.0 +0.8 |
| | baz=210 | | | | | |
| SNAA | Sanae | 90.33 | 179 | ⇑P | P | 06 21 44.2 +0.1 |
| | comp=Z,29nm,0.8s | | | | | |
| SNAA | Sanae | 90.33 | 179 | P | P | 06 21 43.9 -0.2 |
| | comp=Z,1.2nm,0.8s,baz=211,slow=6.4,SNR=8.5 | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | |
| G30M | tAoh Zrail Nji | 90.41 | 15 | P | P | 06 21 45.1 +0.8 |
| | baz=220,SNR=18 | | | | | |
| ABTX | Abilene, Hawle | 90.42 | 56 | P | P | 06 21 45.1 -0.1 |
| ABTX | | | | IAmb | IAmb | 06 21 47.9 |
| | comp=Z,7.9nm,1.2s | | | | | |
| VNA3 | Neumayer Olymp | 90.47 | 176 | ⇑P | P | 06 21 44.9 +0.2 |
| | comp=Z,5.5nm,0.7s | | | | | |
| G31M | Satah River | 90.86 | 16 | P | P | 06 21 46.8 +0.5 |
| G31M | Satah River | 90.86 | 16 | P | P | 06 21 47.1 +0.8 |
| | baz=221,SNR=12 | | | | | |
| C27K | Jago River | 90.91 | 11 | P | P | 06 21 47.7 +1.1 |
| | baz=213 | | | | | |
| E28M | Babbage River | 90.92 | 13 | IAmb | IAmb | 06 21 48.3 |
| | comp=Z,10nm,1.1s | | | | | |
| E28M | Babbage River | 90.92 | 13 | P | P | 06 21 47.7 +1.1 |
| | baz=216,SNR=8.4 | | | | | |
| C26K | Camden Bay | 90.94 | 11 | P | P | 06 21 48.6 +1.9 |
| | baz=211 | | | | | |
| F30M | Barrier River | 91.00 | 15 | P | P | 06 21 48.5 +1.5 |
| | baz=220 | | | | | |
| PLCA | Pass Flores | 91.02 | 134 | P | P | 06 21 47.7 -0.3 |
| | comp=Z,1.7nm,1.0s,baz=275,slow=3.0,SNR=3.5 | | | | | |
| | comp=Z,1.7nm,1.0s | | | | | |
| E29M | Blow River | 91.11 | 14 | IAmb | IAmb | 06 21 48.7 |
| | comp=Z,6.9nm,1.3s | | | | | |
| E29M | Blow River | 91.11 | 14 | P | P | 06 21 48.4 +1.0 |
| | baz=218 | | | | | |
| D27M | Malcolm River | 91.14 | 12 | P | P | 06 21 48.7 +1.0 |
| D27M | | | | IAmb | IAmb | 06 21 51.2 |
| | comp=Z,8.2nm,1.2s | | | | | |
| D27M | Malcolm River | 91.14 | 12 | P | P | 06 21 49.0 +1.3 |
| | baz=215 | | | | | |
| VNA1 | Neumayer--Stat | 91.14 | 177 | ⇑P | P | 06 21 48.8 +1.1 |
| | comp=Z,7.0nm,0.9s | | | | | |
| LZH | Lanzhou | 91.19 | 308 | *e*P | P | 06 21 51.0 +2.2 |
| LZH | | | | pmax | pmax | |
| | comp=Z,18nm,1.0s | | | | | |
| LAO | LASA Array | 91.29 | 41 | P | P | 06 21 49.9 +1.0 |
| LAO | | | | IAmb | IAmb | 06 21 52.5 |
| | comp=Z,6.5nm,0.8s | | | | | |
| LAO | LASA Array | 91.29 | 41 | P | P | 06 21 50.5 +1.6 |
| | baz=245 | | | | | |
| F31M | Tsiigehtchic | 91.39 | 16 | P | P | 06 21 49.7 +1.0 |
| | baz=222 | | | | | |
| PLPT | Palo Pinto | 91.53 | 56 | P | P | 06 21 50.5 +0.2 |
| PLPT | | | | IAmb | IAmb | 06 21 52.6 |
| | comp=Z,3.9nm,0.6s | | | | | |
| RSSD | Black Hills | 91.63 | 44 | P | P | 06 21 50.7 0.0 |
| | baz=246 | | | | | |
| D28M | Stokes Point | 91.67 | 13 | P | P | 06 21 50.8 +0.8 |
| | baz=217 | | | | | |
| INK | Inuvik | 92.09 | 15 | P | P | 06 21 52.2 +0.2 |
| INK | Inuvik | 92.09 | 15 | P | P | 06 21 52.4 +0.5 |
| | baz=222 | | | | | |
| DGMT | Dagmar | 93.28 | 40 | P | P | 06 21 58.8 +0.9 |
| DGMT | Dagmar | 93.28 | 40 | P | P | 06 21 59.2 +1.3 |
| | baz=246 | | | | | |
| ULN | Ulaanbaatar | 93.47 | 319 | P | P | 06 22 00.2 +1.2 |
| ULN | | | | IAmb | IAmb | 06 22 32.5 |
| | comp=Z,7.6nm,1.4s | | | | | |
| SONM | Songino Array | 93.87 | 319 | P | P | 06 22 01.2 +0.4 |
| SONM | Songino Array | 93.87 | 319 | P | P | 06 22 01.3 +0.5 |
| | comp=Z,0.4nm,0.4s,baz=134,slow=6.4,SNR=4.6 | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | |
| YKA | Yellowknife Ar | 94.49 | 25 | P | P | 06 22 02.8 -0.3 |
| | comp=Z,2.1nm,0.9s,baz=254,slow=4.2,SNR=6.2 | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | |
| MKAR | Makanchi Array | 109.45 | 314 | PKiKP | PKiKP | 06 27 09.9 -0.1 |
| | comp=Z,0.4nm,0.5s,baz=160,slow=0.4,SNR=8.5 | | | | | |
| KURBB | Kurchatov Arra | 112.19 | 318 | PKiKP | PKiKP | 06 27 14.3 -0.7 |
| | comp=Z,0.4nm,0.2s,baz=92,slow=2.0,SNR=4.7 | | | | | |
| BVAR | Borovoye Array | 117.16 | 321 | PKP | PKiKP | 06 27 24.1 -0.4 |
| | comp=Z,1.2nm,0.4s,baz=112,slow=3.5,SNR=6.8 | | | | | |
| ARCES | ARCESS Array B | 126.60 | 350 | PKP | PKiKP | 06 27 42.1 -0.6 |
| | comp=Z,1.4nm,0.7s,baz=29,slow=2.8,SNR=6.1 | | | | | |
| FINES | FINESS Array B | 133.49 | 344 | PKhKP | PKPpre | 06 27 47.5 |
| | comp=Z,1.5nm,0.7s,baz=46,slow=4.0,SNR=2.6 | | | | | |
| EKA | Eskdalemuir Ar | 142.71 | 5 | PKhKP | PKPpre | 06 28 09.8 |
| | comp=Z,0.4nm,0.4s,baz=354,slow=4.5,SNR=6.6 | | | | | |
| SORM | Soroca | 143.11 | 330 | ⇑P | PKPdf | 06 28 11.2 -2.1 |
| GAZ | Gaziantep | 143.64 | 309 | | PKPdf | 06 28 14.9 +0.2 |
| KMPD | K-Podol'skiy | 143.67 | 332 | PKP | PKPbc | 06 28 13.3 +0.1 |
| KMPD | | | | PKP | PKPdf | 06 28 12.8 -1.5 |
| BNN | Bunyan | 143.96 | 312 | | PKiKP | 06 28 16.0 -3.1 |
| LODK | Lodwar | 144.00 | 250 | PKPbc | PKPdf | 06 28 15.7 -0.4 |
| OJC | Ojcow | 144.92 | 340 | *e*PKP | PKPab | 06 28 17.7 -0.2 |
| BURAR | Bucovina Array | 144.93 | 332 | | PKPab | 06 28 17.0 -1.2 |
| BURAR | Bucovina Array | 144.93 | 332 | ⇑P | PKiKP | 06 28 19.3 -1.4 |
| TESR | Tescani | 145.07 | 330 | ⇑P | PKPdf | 06 28 15.7 -1.2 |
| BR131 | Keskin Array S | 145.09 | 315 | | PKPbc | 06 28 17.1 -1.0 |
| BRTR | Keskin Array B | 145.09 | 315 | PKPbc | PKPab | 06 28 18.6 -0.5 |
| BRTR | Keskin Array B | 145.09 | 315 | PKPbc | PKPab | 06 28 17.7 -1.5 |
| | comp=Z,2.2nm,0.4s,baz=92,slow=2.3,SNR=16 | | | | | |
| KIRS | Kirnehir-Merke | 145.18 | 314 | ⇑P | PKPbc | 06 28 17.3 -1.0 |
| CFR | Carcaliu | 145.25 | 327 | ⇑P | PKPab | 06 28 18.7 -0.7 |
| TPGR | Topolog | 145.32 | 326 | ⇑P | PKPab | 06 28 18.9 -0.8 |
| KSP | Ksiaz | 145.41 | 344 | *e*PKP | PKiKP | 06 28 19.5 -2.0 |
| NIE | Niedzica | 145.43 | 339 | *e*PKP | PKiKP | 06 28 19.8 -1.8 |
| CRVS | Cervenica-Dubn | 145.45 | 337 | *e*PKP | PKiKP | 06 28 20.0 -1.6 |
| VRI | Vrincioaia | 145.50 | 329 | ⇑P | PKPdf | 06 28 16.0 -1.6 |
| TURR | Turia | 145.71 | 330 | ⇑P | PKPbc | 06 28 18.1 -1.4 |
| CLL | Collm | 145.76 | 347 | PKPbc | PKiKP | 06 28 20.4 -1.7 |
| CLL | Collm | 145.76 | 347 | ∥*i*PKPbc | PKPab | 06 28 20.3 -0.8 |
| | comp=Z,34nm,1.3s | | | | | |
| COVR | Voineasa-Covas | 145.77 | 329 | ⇑P | PKPbc | 06 28 17.9 -1.8 |
| DPC | Dobruska-Dubn | 145.85 | 343 | *e*PKP | PKiKP | 06 28 21.4 -1.1 |
| LANS | Liptovska Anna | 145.95 | 339 | *e*PKP | PKiKP | 06 28 22.2 -0.5 |
| BRG | Berggiesshubel | 145.96 | 346 | *e*PKP | PKiKP | 06 28 21.1 -1.5 |
| BRG | | | | Amp | | 06 28 23.0 |
| | comp=Z,19nm,1.2s | | | | | |
| MORC | Moravsky Berou | 146.01 | 342 | PKPbc | PKPab | 06 28 20.5 -1.8 |
| MORC | Moravsky Berou | 146.01 | 342 | *e*PKP | PKPab | 06 28 20.9 -1.4 |
| MORC | Moravsky Berou | 146.01 | 342 | ⇑P | PKiKP | 06 28 21.9 -0.9 |
| ISR | Istrita | 146.11 | 328 | ⇑P | PKPdf | 06 28 17.1 -1.6 |
| MLR | Muntele Rosu | 146.15 | 329 | PKPbc | PKiKP | 06 28 22.1 -1.3 |
| MLR | Muntele Rosu | 146.15 | 329 | ⇓P | PKiKP | 06 28 22.4 -1.0 |
| MMAI | Mount Meron Ar | 146.44 | 303 | PKPbc | PKiKP | 06 28 22.8 -1.5 |
| | comp=Z,4.8nm,0.5s,baz=64,slow=5.7,SNR=9.2 | | | | | |
| VOIR | | 146.62 | 330 | ⇑P | PKPab | 06 28 23.7 -1.2 |
| VRAC | Vranov | 146.71 | 342 | *e*PKP | PKiKP | 06 28 23.0 -1.2 |
| VRAC | Vranov | 146.71 | 342 | ⇑P | PKPab | 06 28 26.1 +1.0 |
| VYHS | Vyhne | 146.73 | 339 | *e*PKP | PKPab | 06 28 23.7 -1.4 |
| JAVC | Velka Javorina | 146.79 | 341 | *e*PKP | PKPab | 06 28 24.1 -1.3 |
| PSZ | Piszkesteto | 146.84 | 338 | PKPbc | PKiKP | 06 28 23.4 -1.3 |
| PSZ | Piszkesteto | 146.84 | 338 | ⇓P | PKiKP | 06 28 23.7 -0.9 |
| ARR | Arges | 146.87 | 330 | ⇑P | PKiKP | 06 28 23.6 -1.2 |
| KRUC | Moravsky | 146.99 | 342 | *e*PKP | PKiKP | 06 28 23.6 -1.2 |
| BORA | Eskisehir | 147.12 | 317 | PKPbc | PKiKP | 06 28 23.8 -1.6 |
| MEM | Membach | 147.46 | 355 | *d*PKP | PKiKP | 06 28 24.2 -1.5 |
| BTNL | Ternell | 147.47 | 355 | *d*PKP | PKiKP | 06 28 24.6 -1.1 |
| SIRR | Siria | 147.51 | 334 | ⇑P | PKiKP | 06 28 25.7 -0.3 |
| GRA1 | Grafenberg Arr | 147.65 | 349 | PKPbc | PKiKP | 06 28 26.2 0.0 |
| GRF | Grafenberg Arr | 147.65 | 349 | *e*PKP | PKPab | 06 28 29.6 +0.8 |
| | baz=17,slow=3.8 | | | | | |
| GRFO | Grafenberg | 147.65 | 349 | PKPbc | PKPab | 06 28 26.2 -2.6 |
| KHC | Kasperske Hory | 147.67 | 345 | | PKiKP | 06 28 25.6 -0.7 |
| KHC | Kasperske Hory | 147.67 | 345 | *e*PKP | PKiKP | 06 28 26.0 -0.3 |
| KHC | | | | *ex* | x | 06 28 30.5 |
| SURR | Surduc | 147.72 | 333 | ⇓P | PKiKP | 06 28 25.5 -0.9 |
| CKRC | Cesky Krumlov | 147.78 | 344 | *e*PKP | PKiKP | 06 28 26.4 -0.1 |
| BMRD | Maredsous | 147.85 | 356 | *d*PKP | PKiKP | 06 28 25.1 -1.4 |
| GEC2 | GERESS Array S | 147.91 | 345 | PKPbc | PKiKP | 06 28 25.9 -0.9 |
| GERES | GERESS Array B | 147.91 | 345 | PKPbc | PKiKP | 06 28 26.0 -0.9 |
| GERES | GERESS Array B | 147.91 | 345 | PKPbc | PKiKP | 06 28 26.0 -0.9 |
| | comp=Z,1.7nm,0.5s,baz=163,slow=9.8,SNR=8.9 | | | | | |
| RCHB | Rochefort | 147.97 | 356 | *d*P | PKiKP | 06 28 26.0 -0.7 |
| ELND | Elena | 147.97 | 326 | ⇑P | PKPbc | 06 28 24.1 -1.6 |
| BZS | Buzias | 148.05 | 333 | ⇓P | PKiKP | 06 28 26.4 -0.7 |
| CONA | Conrad Observa | 148.17 | 342 | *i* PKP | PKiKP | 06 28 27.4 0.0 |
| | comp=Z,17nm,1.2s,SNR=11 | | | | | |
| RONA | Rosalia, Austr | 148.24 | 341 | *i* PKP | PKiKP | 06 28 27.5 0.0 |
| | comp=Z,11nm,1.0s,SNR=5.5 | | | | | |
| HERR | Herculane | 148.27 | 332 | ⇑P | PKiKP | 06 28 25.9 -1.6 |
| WLF | Walferdange | 148.38 | 355 | *d*PKP | PKiKP | 06 28 27.9 +0.3 |
| MDVR | Moldovita | 148.66 | 332 | ⇑P | PKiKP | 06 28 27.9 -0.6 |
| MOA | Molln | 148.69 | 344 | *e*PKP | PKiKP | 06 28 28.7 +0.3 |
| | comp=Z,7.1nm,1.1s | | | | | |
| MORH | Mrgy, Hungar | 148.74 | 337 | ⇑P | PKiKP | 06 28 28.1 -0.3 |
| ARSA | Arzberg | 148.88 | 342 | *e*PKP | PKiKP | 06 28 28.7 -0.1 |
| | comp=Z,5.9nm,1.3s | | | | | |
| BIOA | Bad Ischl, Aus | 149.00 | 344 | *e*PKP | PKiKP | 06 28 29.2 +0.2 |
| | comp=Z,11nm,1.3s | | | | | |
| BFO | Black Forest | 149.45 | 351 | | PKiKP | 06 28 29.5 -0.4 |
| LESA | Schwarzleotal | 149.48 | 345 | *e*PKP | PKiKP | 06 28 29.7 -0.4 |
| | comp=Z,3.4nm,0.9s | | | | | |
| SOKA | Soboth | 149.54 | 342 | *e*PKP | PKiKP | 06 28 30.1 -0.2 |
| | comp=Z,6.5nm,1.1s | | | | | |
| BOVS | Bovan | 149.56 | 331 | ⇑P | PKiKP | 06 28 29.8 -0.5 |
| AKAS | Kas | 149.57 | 312 | PKPbc | PKiKP | 06 28 29.4 -1.3 |
| KBA | Koelnbreinsper | 149.64 | 344 | *e*PKP | PKiKP | 06 28 30.8 +0.2 |
| | comp=Z,12nm,1.6s | | | | | |
| WATA | Walderalm | 149.82 | 347 | *e*PKP | PKiKP | 06 28 31.0 +0.1 |
| | comp=Z,3.2nm,0.5s | | | | | |
| OBKA | Obir | 149.83 | 342 | *e*PKP | PKiKP | 06 28 30.8 -0.1 |
| | comp=Z,2.5nm,0.6s | | | | | |
| RETA | Reutte | 149.85 | 348 | *e*PKP | PKiKP | 06 28 30.8 -0.1 |
| | comp=Z,2.8nm,0.8s | | | | | |
| WTTA | Wattenberg | 149.88 | 347 | *i* PKP | PKiKP | 06 28 31.5 +0.4 |
| | comp=Z,5.6nm,0.5s,SNR=5.7 | | | | | |
| MOTA | Moosalm | 149.91 | 347 | *e*PKP | PKiKP | 06 28 31.1 0.0 |
| | comp=Z,4.9nm,0.8s | | | | | |
| MYKA | Terra Mystica | 149.98 | 344 | *e*PKP | PKiKP | 06 28 30.8 -0.4 |
| | comp=Z,2.5nm,0.5s | | | | | |
| SQTA | Sankt Quirin | 150.01 | 347 | *e*PKP | PKiKP | 06 28 31.3 0.0 |
| | comp=Z,3.1nm,0.6s | | | | | |
| ABTA | Abfaltersbach | 150.16 | 345 | *i* PKP | PKiKP | 06 28 31.0 -0.5 |
| | comp=Z,4.9nm,0.7s,SNR=5.1 | | | | | |
| PRED | Cave del Predi | 150.17 | 344 | PKPdf | PKPdf | 06 28 24.6 -0.6 |
| PRED | | | | | PKPbc | 06 28 29.8 -1.2 |
| PRED | | | | PKPab | PKPab | 06 28 39.4 0.0 |
| DAVA | Damuels | 150.21 | 349 | *e*PKP | PKiKP | 06 28 32.3 +0.5 |
| | comp=Z,14nm,1.2s | | | | | |
| CLF | Chambon-Foret | 150.22 | 359 | | PKPab | 06 28 39.5 0.0 |
| FETA | Feichten | 150.30 | 348 | *i* PKP | PKiKP | 06 28 32.5 +0.6 |
| | comp=Z,4.5nm,0.8s,SNR=5.0 | | | | | |
| STAL | STALIGIAL | 150.56 | 344 | | PKiKP | 06 28 32.0 -0.3 |
| FUORN | Ofenpass-Fuorn | 150.78 | 348 | | PKiKP | 06 28 33.9 +0.9 |
| FUORN | | | | PKPab | PKPab | 06 28 43.2 +1.0 |
| CTI | Castel Tesino | 151.02 | 346 | PKPdf | PKPdf | 06 28 24.8 -1.8 |
| CTI | | | | | PKiKP | 06 28 33.4 +0.1 |
| CTI | | | | PKPab | PKPab | 06 28 43.1 +0.1 |
| SENIN | Lac Senin/Sane | 151.52 | 352 | PKPdf | PKPdf | 06 28 26.0 -1.5 |
| SENIN | | | | PKPbc | PKiKP | 06 28 34.2 -0.3 |
| SENIN | | | | | PKPab | 06 28 44.8 -0.4 |
| TEOL | Teolo | 151.66 | 345 | PKPbc | PKiKP | 06 28 35.1 +0.5 |
| TEOL | | | | PKPab | PKPab | 06 28 47.1 +1.5 |
| FNA | Florina | 151.86 | 327 | | PKiKP | 06 28 35.0 -0.2 |
| FNA | | | | PKPab | PKPab | 06 28 46.9 +0.1 |
| BNI | Bardonecchia | 152.88 | 352 | PKPdf | PKPdf | 06 28 28.4 -1.0 |
| BNI | | | | PKPbc | PKiKP | 06 28 36.0 -1.2 |
| BNI | | | | | PKPab | 06 28 51.6 +0.7 |
| CEST | Esterri de Car | 155.65 | 1 | PKPab | PKPab | 06 29 03.8 +0.9 |
| CEL | Celeste | 156.49 | 331 | PKPdf | PKPdf | 06 28 32.1 -2.4 |
| CEL | | | | PKPab | PKPab | 06 29 07.5 +0.8 |
| ESBB | Sonseca Array | 158.00 | 12 | PKPdf | PKPdf | 06 28 33.4 -2.9 |
| ESBB | | | | PKPab | PKPab | 06 29 12.9 -0.2 |
| ESDC | Sonseca Array | 158.00 | 12 | PKPdf | PKPdf | 06 28 35.2 -1.1 |
| ESDC | | | | PKPab | PKPab | 06 29 13.6 +0.5 |
| ESDC | Sonseca Array | 158.00 | 12 | PKPab | PKPab | 06 29 13.1 0.0 |
| | comp=Z,2.5nm,0.9s,ba

0.6nm,0.3s,baz=127,slow=9.1,SNR=2.6
NNA LR LR 06 17 42.4
comp=Z,35nm,21.3s,baz=145,slow=43 4.9nm,0.8s
**PB09 IPOC Station P 6.61 159** Pn **Pn 06 14 56.0 +2.1**
**PB04 IPOC Station P 6.86 167** Pn **Pn 06 14 59.2 +1.9**
**LVC Limon Verde 7.48 159** Pn **Pn 06 15 07.0 +1.0**
1.4nm,0.3s,baz=322,slow=8.0,SNR=14
LVC Sn **Sn 06 16 27.9 -3.2**
0.3nm,0.3s,baz=192,slow=21,SNR=0.8
LVC LR LR 06 17 42.7
comp=Z,198nm,21.0s,baz=347,slow=35 17nm,0.7s
**LVC Limon Verde 7.48 159** *eP* **Pn 06 15 06.7 +0.7**
**CZSB Cruzeiro do Su 7.89 354** Pn **Pn 06 15 12.0 +0.6**
**CZSB Cruzeiro do Su 7.89 354** *eP* **Pn 06 15 12.6 +1.1**
**ETMB Extrema 7.97 44** Pn **Pn 06 15 14.9 +2.5**
**ETMB Extrema 7.97 44** *eP* **Pn 06 15 14.4 +2.0**
**AF01 San Pedro de A 8.06 155** Pn **Pn 06 15 15.8 +1.8**
**PB14 IPOC Station P 9.05 172** Pn **Pn 06 15 26.9 -0.7**
**GO02 Mina Guanaco 9.72 168** Pn **Pn 06 15 36.9 +0.2**
**SIV San Ignacio 10.37 93** Pn **Pn 06 15 45.5 +0.1**
0.1nm,0.3s,baz=270,slow=14,SNR=15
SIV LR LR 06 20 08.5
comp=Z,301nm,19.5s,baz=290,slow=39 4.1nm,0.7s
**AC01 Pan de Azucar 10.53 174** Pn **Pn 06 15 47.7 +0.1**
**SAML Samuel 10.75 53** Pn **Pn 06 15 52.5 +1.9**
**BBSD Serra de San D 10.89 100** *eP* **Pn 06 15 52.6 +0.1**
**TBTG Tabatinga, AM 11.53 10** Pn **Pn 06 16 02.1 +0.9**
**VILB Vilhena 11.59 78** Pn **Pn 06 16 00.7 -1.5**
**AC06 Mina Casimiro 11.75 173** Pn **Pn 06 16 03.7 -0.6**
**CO06 Fray Jorge 14.98 179** Pn **Pn 06 16 46.0 -2.4**
**SALV Santo Antonio 15.55 93** *eP* **Pn 06 16 56.2 +0.3**
**AQDB Aquidauana 16.09 110** Pn **Pn 06 17 04.0 +1.2**
**ZON Zonda 16.11 170** Pn **Pn 06 17 03.9 +0.8**
**MACA Manacapuru-AM 16.56 43** **Pn 06 17 09.0 +0.1**
**MACA Manacapuru-AM 16.56 43** *eP* **Pn 06 17 08.6 -0.4**
**VA06 Catapilco 16.87 178** **Pn 06 17 13.8 +1.1**
VA06 IAmb IAmb 06 17 16.4
comp=Z,67nm,1.4s
**CPUP Villa Florida 17.22 131** LR LR 06 23 49.5
comp=Z,95nm,21.4s,baz=294,slow=36
**TULM Tulcn-Chalpat 17.27 340** Pn **Pn 06 17 16.8 -1.5**
**MT03 Universidad Ad 17.83 176** **Pn 06 17 26.2 +1.3**
MT03 IAmb IAmb 06 17 30.9
comp=Z,49nm,1.4s
**VA05 Santo Domingo 17.95 179** **Pn 06 17 26.5 +0.2**
VA05 IAmb IAmb 06 17 27.9
comp=Z,68nm,1.4s
**MT09 Talagante 18.09 178** **Pn 06 17 28.9 +0.8**
**LMEL Las Melosas 18.20 176** P **P 06 17 30.8 +1.0**
LMEL IAmb IAmb 06 17 36.6
comp=Z,36nm,1.2s
**NPGB Novo Progresso 18.26 64** *eP* **Pn 06 17 29.7 -0.5**
**BO01 Tunca 18.70 178** P **P 06 17 34.6 -0.4**
**BO02 Sierra Bellavi 19.11 177** P **P 06 17 39.8 +0.2**
BO02 IAmb IAmb 06 17 44.7
comp=Z,30nm,1.3s
**SNDB Serra Nova Dou 20.28 82** *eP* **P 06 17 51.3 -1.2**
**CRSM Crissiumal (Br 20.30 129** *eP* **P 06 17 52.3 -0.3**
**ROSC El Rosal 20.48 353** LR LR 06 26 16.5
comp=Z,152nm,21.1s,baz=124,slow=38
**BI02 San Fabin de 20.96 179** P **P 06 17 59.8 0.0**
BI02 IAmb IAmb 06 18 06.5
comp=Z,32nm,1.1s
**BOAV Boa Vista 21.12 33** *eP* **P 06 17 59.1 -2.4**
**ITAB Concordia 21.64 126** P **P 06 18 08.2 +1.1**
**FRTB Fartura 22.34 114** *eP* **P 06 18 13.7 -1.0**
**SDV Santo Domingo 24.39 3** LR LR 06 27 49.6
comp=Z,60nm,22.0s,baz=266,slow=36
**BAUV El Baul 24.70 9** P **P 06 18 37.7 -0.2**
**PLCA Paso Flores 25.04 178** P **P 06 18 40.2 -0.8**
PLCA IAmb IAmb 06 18 45.3
comp=Z,13nm,1.1s
**PLCA Paso Flores 25.04 178** P **P 06 18 42.0 +1.1**
comp=Z,7.0nm,1.1s,baz=5.2,slow=13,SNR=7.4
comp=Z,7.0nm,1.1s
**LL04 Puerto Octay 25.20 181** P **P 06 18 41.6 -0.6**
LL04 IAmb IAmb 06 19 17.0
comp=Z,12nm,0.9s
**PCRV Puerto La Cruz 26.61 16** LR LR 06 30 13.9
comp=Z,253nm,19.6s,slow=38
**MDP Montagnes des 28.03 44** LR LR 06 30 51.9
comp=Z,178nm,19.9s,baz=168,slow=38
**JTS Las Juntas de 28.84 332** LR LR 06 30 13.2
comp=Z,22nm,18.7s,baz=120,slow=35
**ESPN Las Esperanzas 30.27 335** P **P 06 19 28.0 +0.1**
**255A Hazlehurst 48.37 348** P **P 06 21 57.0 -1.5**
**HNDO Hondo 52.12 329** P **P 06 22 27.0 -0.1**
HNDO IAmb IAmb 06 22 29.1
comp=Z,5.2nm,0.9s
**TKL Tuckaleechee C 52.24 348** LR LR 06 47 34.9
comp=Z,34nm,18.2s,baz=192,slow=39
**WLAR White Oak Lake 53.07 338** P **P 06 22 33.5 -0.5**
**MIAR Mount Ida 54.01 338** P **P 06 22 41.4 +0.5**
MIAR IAmb IAmb 06 22 42.5
comp=Z,5.0nm,1.1s
**TXAR Lajitas Array 54.24 325** P **P 06 22 43.6 +0.8**
**TXAR Lajitas Array 54.24 325** P **P 06 22 43.3 +0.4**
comp=Z,0.8nm,0.9s,baz=144,slow=7.7,SNR=3.6
comp=Z,0.8nm,0.9s
**FCAR Ozark Folk Cen 54.72 340** P **P 06 22 45.9 -0.1**
**ABTX Abilene, Hawle 54.86 331** P **P 06 22 47.5 +0.3**
**APMT Aspermont 55.67 331** P **P 06 22 53.6 +0.6**
APMT IAmb IAmb 06 22 57.3
comp=Z,4.4nm,0.9s
**HHAR Hobbs 55.70 338** P **P 06 22 52.5 -0.6**
**RLO Rose Lookout 55.98 337** P **P 06 22 54.7 -0.5**
RLO IAmb IAmb 06 22 58.6
comp=Z,4.7nm,0.8s
**TUL3 Leonard 56.05 337** P **P 06 22 55.8 +0.2**
TUL3 IAmb IAmb 06 22 57.4
comp=Z,6.2nm,1.1s
**P49A Miami Univ. Ec 56.18 348** P **P 06 22 56.7 +0.2**
P49A IAmb IAmb 06 23 24.1
comp=Z,4.9nm,0.9s
**DKNS Dickens 56.32 331** P **P 06 22 56.8 -0.9**
DKNS IAmb IAmb 06 23 00.9
comp=Z,4.5nm,1.1s
**SMWD Samnorwood 57.20 332** P **P 06 23 03.5 -0.5**
**N49A Columbus Grove 57.41 349** P **P 06 23 05.7 +0.4**
**KAN13 South Haven SW 57.67 336** P **P 06 23 06.8 -0.4**
**X16A Lo Mia Camp, P 62.41 324** P **P 06 23 38.9 -1.1**
X16A IAmb IAmb 06 23 52.1
comp=Z,3.8nm,1.3s
**SMCO Snowmass 63.64 330** P **P 06 23 47.1 -1.2**
SMCO IAmb IAmb 06 23 53.0
comp=Z,3.6nm,1.1s
**DRLN Deer Lake 65.83 10** P **P 06 24 02.0 +0.1**
**E28A Huff 67.15 339** P **P 06 24 11.4 +1.0**
**PDAR Pinedale Array 67.66 331** P **P 06 24 13.7 -0.3**
**PDAR Pinedale Array 67.66 331** P **P 06 24 14.6 +0.6**
comp=Z,0.1nm,0.3s,baz=166,slow=12,SNR=1.8
PDAR LR LR 06 55 55.9
comp=Z,16nm,18.8s,baz=166,slow=38
comp=Z,0.1nm,0.3s
**GRAC Grapevine Rang 67.67 322** P **P 06 24 12.3 -1.7**
GRAC IAmb IAmb 06 24 42.9
comp=Z,3.3nm,1.3s
**SNAA Sanae 68.70 162** P **P 06 24 22.0 +1.9**
SNAA IAmb IAmb 06 24 32.0
comp=Z,5.3nm,1.4s
**SNAA Sanae 68.70 162** P **P 06 24 21.1 +1.0**
comp=Z,1.7nm,0.8s,baz=293,slow=12,SNR=5.5
comp=Z,1.7nm,0.8s
**NVAR Mina Array Bea 69.17 322** P **P 06 24 24.2 +0.6**
comp=Z,0.5nm,0.9s,baz=138,slow=8.2,SNR=2.4
comp=Z,0.5nm,0.9s
**TORD Torodi Ar. Bea 78.14 73** P P 06 25 13.1 -3.4
comp=Z,1.0nm,0.8s,baz=255,slow=4.4,SNR=3.8
**SUMG Summit 90.74 10** P **P 06 26 19.9 +0.3**
SUMG IAmb IAmb 06 26 22.1
comp=Z,2.8nm,0.8s
**ZALV Zalesovo Beam 137.63 20** PKP **PKPdf 06 32 40.1 -0.6**
comp=Z,0.4nm,0.4s,baz=315,slow=1.7,SNR=1.0
**MKAR Makanchi Array 142.20 29** PKP **PKPdf 06 32 47.7 -1.6**
comp=Z,0.3nm,0.6s,baz=324,slow=1.7,SNR=3.9
**MJAR Matsushiro Arr 146.13 314** PKPbc **PKPbc 06 32 57.6 +0.3**
comp=Z,3.9nm,0.9s,baz=62,slow=1.5,SNR=8.7
**SONM Songino Array 147.85 2** PKPbc **PKPbc 06 33 01.8 -0.3**
comp=Z,2.5nm,0.7s,baz=5.5,slow=1.3,SNR=11
**KSRS Korea Array 152.09 325** PKPbc **PKPbc 06 33 12.8 +0.3**
comp=Z,2.0nm,0.8s,baz=48,slow=2.3,SNR=7.0

*IDC **20** 06:13:18.3±2.7, 53.56°N×87.91°E, h0km, mbtmp3.0/3, ML2.7/3, Error ellipse: s-maj=24.7km s-min=17.2km az=53.0*
*NNC **20** 06:13:21.4±3.0, 53.50°N×87.74°E, h0km, mb3.1, mpv2.7, Error ellipse: s-maj=28.3km s-min=14.8km az=49.0, Suspected Mining explosion.*
**ISC 20 06:13:19.0±3.2, 53.7°N±0.1×87.8°E±0.2, h0km, n10, σ1§27/11, 8C-3D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.79** | **281** | I | I | I | 06 25 23.8 | |
| | baz=98,slow=319,SNR=17 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.79** | **281** | ⇑Pn | | **Pb** | **06 13 52.7** | **0.0** |
| | 0.2nm,0.3s | | | | | | | |
| ZAA0 | | | | ⇑Sn | | **Sg** | **06 14 18.4** | **+1.8** |
| | 0.9nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.79** | **281** | Pn | | **Pn** | **06 13 51.6** | **+0.4** |
| | 2.0nm,0.3s,baz=98,slow=15,SNR=12 | | | | | | | |
| ZALV | | | | Lg | | Lg | 06 14 18.3 | |
| | 5.2nm,0.3s,baz=102,slow=26,SNR=13 | | | | | | | |
| **KURK** | **Kurchatov** | **6.37** | **246** | ⇓Pn | | **Pn** | **06 14 55.0** | **+1.0** |
| | 0.6nm,0.5s | | | | | | | |
| KURK | | | | ⇑Lg | | Lg | 06 16 42.5 | |
| | 2.7nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.47** | **246** | Pn | | **Pn** | **06 14 56.0** | **+0.7** |
| | 0.2nm,0.3s,baz=64,slow=15,SNR=4.4 | | | | | | | |
| KURBB | | | | Sn | | **Sn** | **06 16 08.5** | **-1.3** |
| | 0.1nm,0.3s,baz=62,slow=37,SNR=1.7 | | | | | | | |
| KURBB | | | | Lg | | Lg | 06 16 42.2 | |
| | baz=61,slow=33,SNR=2.0 | | | | | | | |
| | 1.0nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.47** | **246** | ⇑Pn | | **Pn** | **06 14 56.1** | **+0.7** |
| | 1.4nm,0.3s | | | | | | | |
| KURBB | | | | ⇓Sn | | **Sn** | **06 16 08.1** | **-1.7** |
| | 2.0nm,0.5s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 06 16 43.7 | |
| | 4.1nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **7.73** | **209** | ⇓Pn | | **Pn** | **06 15 13.1** | **+0.4** |
| | 0.1nm,0.3s,baz=30,slow=14,SNR=7.3 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 06 17 22.3 | |
| | 1.5nm,0.8s,baz=24,slow=31,SNR=5.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.73** | **209** | Pn | | **Pn** | **06 15 12.4** | **-0.3** |
| | 0.2nm,0.3s,baz=30,slow=14,SNR=6.6 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **MAKZ** | **Makanchi** | **7.81** | **211** | ⇑Pn | | Pn | 06 15 17.6 | +3.8 |
| | 0.4nm,0.4s | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 06 17 24.0 | |
| | 1.1nm,0.9s | | | | | | | |
| **BVAR** | **Borovoye Array** | **10.44** | **274** | Pn | | **Pn** | **06 15 48.1** | **-1.7** |
| | baz=67,slow=11,SNR=1.6 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |

**IDC 20 06:15:30.5±3.3, 53.44N×87.73E, h0km, mbtmp2.7/2, ML2.7/2, Error ellipse: s-maj=27.5km s-min=18.1km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.80** | **288** | I | I | I | 06 26 07.1 | |
| | baz=105,slow=314,SNR=1.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.80** | **288** | Pg | | Pb | 06 16 04.0 | -0.5 |
| | 1.5nm,0.3s,baz=105,slow=15,SNR=5.8 | | | | | | | |
| ZALV | | | | Lg | | Lg | 06 16 27.0 | |
| | 1.7nm,0.3s,baz=105,slow=20,SNR=4.2 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.34** | **247** | Pn | | Pn | 06 17 05.9 | +0.8 |
| | 0.1nm,0.3s,baz=64,slow=15,SNR=2.9 | | | | | | | |
| KURBB | | | | Sn | | Sn | 06 18 17.6 | -0.6 |
| | baz=53,slow=26,SNR=1.9 | | | | | | | |
| KURBB | | | | Lg | | Lg | 06 18 52.3 | |
| | baz=60,slow=31 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.51** | **210** | Pn | | Pn | 06 17 22.1 | +0.8 |
| | 0.2nm,0.3s,baz=30,slow=13,SNR=2.2 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |

**IDC 20 06:19:56.9±3.6, 53.76N×88.18E, h0km, mbtmp2.7/2, ML2.4/2, Error ellipse: s-maj=33.4km s-min=19.9km az=45.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **2.00** | **277** | I | I | I | 06 32 41.1 | |
| | baz=95,slow=316,SNR=6.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.00** | **277** | Pg | | Pb | 06 20 33.1 | -1.0 |
| | 0.6nm,0.3s,baz=98,slow=12,SNR=14 | | | | | | | |
| ZALV | | | | Lg | | Lg | 06 21 00.1 | |
| | 2.0nm,0.3s,baz=94,slow=26,SNR=14 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.71** | **246** | Pn | | Pn | 06 21 37.3 | +0.7 |
| | 0.1nm,0.3s,baz=60,slow=14,SNR=4.2 | | | | | | | |
| KURBB | | | | Lg | | Lg | 06 23 31.0 | |
| | baz=57,slow=31,SNR=2.2 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.92** | **211** | Pn | | Pn | 06 21 54.1 | +0.9 |
| | 0.1nm,0.3s,baz=27,slow=14,SNR=2.8 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |

*IDC **20** 06:26:00.9±0.9, 8.38°S×116.86°E, h0km, mb3.9/8, mbtmp4.0/9, ML4.3/1, Error ellipse: s-maj=30.2km s-min=17.5km az=63.0*
*DJA **20** 06:26:04.1±0.3, 8°S±3'×11°7E±', h10km, M4.3/12, mb4.5/2, MLv4.3/12*
*NEIC **20** 06:26:04.4±1.8, 8.47°S±0.08×116.91°E±0.05, h10km±1km, mb4.3/15, Error ellipse: s-maj=14.2km s-min=8.0km az=176.0*
**ISC 20 06:26:03.2±0.5, 8.41°S±0.05×116.91°E±0.05, h10km, n63, σ1§06/65, mb4.1/12, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.32** | **185** | P | P | **Pb** | **06 26 12.1** | **+1.0** |
| TWSI | | | | S | S | **Sb** | **06 26 17.1** | **+0.7** |
| **PLAI** | **Plampang** | **0.95** | **116** | P | P | **Pb** | **06 26 22.6** | **+0.8** |
| **PLAI** | **Plampang** | **0.95** | **116** | P | P | **Pb** | **06 26 22.6** | **+0.8** |
| **DNP** | **Denpasar** | **1.70** | **261** | P | P | **Pn** | **06 26 34.4** | **+1.4** |
| **SRBI** | **Singaraja** | **1.71** | **281** | P | P | **Pn** | **06 26 32.9** | **-0.2** |
| **IGBI** | **Denpasar** | **1.79** | **257** | P | P | **Pn** | **06 26 36.0** | **+1.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **269** | P | P | **Pn** | **06 26 47.4** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **269** | | | **Pn** | **06 26 47.4** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **269** | P | P | **Pn** | **06 26 46.9** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **2.74** | **117** | P | P | **Pn** | **06 26 48.3** | **+1.0** |
| **BSSI** | **Bau Bau, Buton** | **4.21** | **58** | P | P | **Pn** | **06 27 08.0** | **+0.5** |
| **KAPI** | **Kappang** | **4.40** | **40** | Pn | P | **Pn** | **06 27 10.7** | **+0.5** |
| | 14nm,0.3s,baz=196,slow=5.3,SNR=34 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **06 28 00.6** | **-0.9** |
| | 34nm,0.3s,baz=228,slow=21,SNR=22 | | | | | | | |
| | 52nm,0.2s | | | | | | | |
| **EDFI** | **Ende, Flores** | **4.74** | **94** | P | P | **Pn** | **06 27 16.2** | **+1.3** |
| **PWJI** | **Pagerwojo** | **5.07** | **274** | P | P | **Pn** | **06 27 18.9** | **-0.4** |
| | 31nm,0.5s,0.4nm | | | | | | | |
| **BNSI** | **Bone** | **5.10** | **39** | P | P | **Pn** | **06 27 20.8** | **+1.1** |
| **MMRI** | **Maumere** | **5.27** | **93** | Pn | P | **Pn** | **06 27 21.8** | **-0.4** |
| **UGM** | **Wanagama** | **6.34** | **274** | P | P | **Pn** | **06 27 38.3** | **+1.4** |
| **UGM** | **Wanagama** | **6.34** | **274** | Pn | P | **Pn** | **06 27 38.4** | **+1.5** |
| **SOEI** | **Soe** | **7.39** | **101** | Pn | P | **Pn** | **06 27 52.0** | **+0.7** |
| **LUWI** | **Luwuk** | **9.37** | **39** | Pn | P | **Pn** | **06 28 20.8** | **+2.4** |
| **FITZ** | **Fitzroy Crossi** | **12.83** | **139** | Pn | P | **Pn** | **06 29 04.6** | **-1.3** |
| **MBWA** | **Marble Bar** | **12.96** | **168** | P | P | **Pn** | **06 29 07.1** | **-0.5** |
| **MBWA** | **Marble Bar** | **12.96** | **168** | | | **Pn** | **06 29 06.1** | **-1.5** |
| **PSA00** | **Pilbara Seismi** | **13.38** | **168** | P | P | **Pn** | **06 29 13.8** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **13.38** | **168** | Pn | P | **Pn** | **06 29 13.3** | **-0.1** |
| **GIRL** | **Giralia** | **14.38** | **190** | P | P | **Pn** | **06 29 24.8** | **-2.2** |
| **GIRL** | **Giralia** | **14.38** | **190** | Pn | P | **Pn** | **06 29 25.0** | **-2.0** |
| **MTN** | **Manton Dam** | **14.65** | **109** | Pn | P | **Pn** | **06 29 29.0** | **-1.8** |
| **MEEK** | **Meekatharra** | **18.20** | **175** | P | P | **P** | **06 30 17.7** | **+1.3** |
| **WRKA** | **Warakurna** | **19.78** | **148** | P | P | **Pn** | **06 30 35.4** | **+0.1** |
| **WB0** | **Warramunga Arr** | **20.34** | **126** | P | P | **P** | **06 30 40.6** | **+0.6** |
| WB0 | | | | | IAmb | IAmb | 06 30 51.0 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.39** | **126** | P | P | **P** | **06 30 41.1** | **+0.6** |
| **WRA** | **Warramunga Arr** | **20.39** | **126** | P | P | **P** | **06 30 40.7** | **+0.2** |
| | comp=Z,4.6nm,0.4s,baz=301,slow=12,SNR=89 | | | | | | | |
| | comp=Z,4.6nm,0.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.40** | **126** | P | P | **P** | **06 30 40.9** | **+0.4** |
| WRAB | | | | | IAmb | IAmb | 06 30 42.6 | |
| | comp=Z,7.5nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.40** | **126** | P | P | **P** | **06 30 41.2** | **+0.6** |
| WB2 | | | | | IAmb | IAmb | 06 30 42.0 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **MORW** | **Morawa** | **20.56** | **182** | P | P | **P** | **06 30 42.1** | **-0.1** |
| **WR0** | **Warramunga Arr** | **20.56** | **126** | P | P | **P** | **06 30 42.8** | **+0.5** |
| WR0 | | | | | IAmb | IAmb | 06 30 43.3 | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **BLDU** | **Ballidu** | **22.09** | **180** | P | P | **P** | **06 30 58.5** | **-0.2** |
| **AS31** | **Alice Springs** | **22.25** | **135** | P | P | **P** | **06 30 59.7** | **-0.8** |
| **ASAR** | **Alice Springs** | **22.25** | **135** | P | P | **P** | **06 31 01.0** | **+0.5** |
| **ASAR** | **Alice Springs** | **22.25** | **135** | P | P | **P** | **06 31 00.4** | **-0.1** |
| | comp=Z,1.6nm,0.4s,baz=310,slow=9.5,SNR=30 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **AS01** | **Alice Springs** | **22.28** | **135** | P | P | **P** | **06 31 01.3** | **+0.5** |
| **FORT** | **Forrest** | **24.57** | **156** | P | P | **P** | **06 31 24.1** | **+0.6** |
| **FORT** | **Forrest** | **24.57** | **156** | P | P | **P** | **06 31 24.9** | **+1.5** |
| FORT | | | | | IAmb | IAmb | 06 32 08.6 | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| **QIS** | **Mount Isa** | **25.03** | **121** | P | P | **P** | **06 31 28.8** | **+1.0** |
| **OOD** | **Oodnadatta** | **26.20** | **140** | P | P | **P** | **06 31 38.4** | **+0.1** |
| **COEN** | **Coen** | **26.34** | **104** | P | P | **P** | **06 31 39.8** | **+0.1** |
| COEN | | | | | IAmb | IAmb | 06 32 16.6 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.06** | **147** | P | P | **P** | **06 32 13.0** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **32.05** | **327** | P | P | **P** | **06 32 31.0** | **+0.6** |
| | comp=Z,0.8nm,0.3s,baz=154,slow=6.9,SNR=4.6 | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **NACB** | **Ninganchiao** | **32.71** | **8** | P | P | **P** | **06 32 35.4** | **-0.7** |
| **STKA** | **Stephens Creek** | **32.73** | **139** | P | P | **P** | **06 32 36.4** | **+0.1** |
| **STKA** | **Stephens Creek** | **32.73** | **139** | P | P | **P** | **06 32 35.7** | **-0.6** |
| | comp=Z,3.1nm,0.6s,baz=316,slow=10,SNR=9.5 | | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.76** | **12** | P | P | **P** | **06 34 34.3** | **+1.5** |
| **KS19** | **Wonju Array Si** | **46.81** | **12** | P | P | **P** | **06 34 34.4** | **+1.2** |
| **SONM** | **Songino Array** | **56.77** | **352** | P | P | **P** | **06 35 46.0** | **-1.6** |
| | comp=Z,1.0nm,0.9s,baz=167,slow=8.0,SNR=4.3 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **62.95** | **327** | P | P | **P** | **06 36 30.1** | **-0.3** |
| BOOM | | | | | IAmb | IAmb | 06 36 54.8 | |
| | comp=Z,1.6nm,1.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **63.01** | **334** | P | P | **P** | **06 36 31.1** | **+0.6** |
| MK31 | | | | | IAmb | IAmb | 06 36 55.3 | |
| | comp=Z,3.2nm,1.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.01** | **334** | P | P | **P** | **06 36 30.8** | **+0.3** |
| **MKAR** | **Makanchi Array** | **63.01** | **334** | P | P | **P** | **06 36 28.4** | **-2.0** |
| | comp=Z,0.4nm,0.5s,baz=147,slow=7.3,SNR=4.7 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **63.16** | **334** | P | P | **P** | **06 36 32.0** | **+0.6** |
| MAKZ | | | | | IAmb | IAmb | 06 37 08.1 | |
| | comp=Z,5.2nm,1.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.58** | **180** | P | P | **P** | **06 38 20.2** | **-1.0** |
| | comp=Z,0.4nm,0.7s,baz=321,slow=7.2,SNR=1.2 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **91.00** | **196** | P | P | **P** | **06 39 08.1** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=180,slow=6.1,SNR=7.6 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.32** | **280** | PKP | | **PKPdf** | **06 44 45.5** | **-2.6** |
| | comp=Z,0.3nm,0.5s,baz=81,slow=1.9,SNR=4.1 | | | | | | | |

**IDC 20 06:26:16.6±3.4, 54.62N×86.29E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=27.1km s-min=17.5km az=38.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.09** | **233** | I | I | I | 06 33 30.0 | |
| | baz=52,slow=310,SNR=1.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.09** | **233** | Pg | | Pg | 06 26 37.1 | -0.4 |
| | 1.1nm,0.3s,baz=52,slow=17,SNR=9.8 | | | | | | | |
| ZALV | | | | Lg | | Lg | 06 26 52.8 | |
| | 5.8nm,0.3s,baz=52,slow=31,SNR=29 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.19** | **233** | Pn | | Pn | 06 27 49.1 | 0.0 |
| | 0.1nm,0.3s,baz=49,slow=13,SNR=4.5 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.23** | **200** | Pn | | Pn | 06 28 18.5 | +1.3 |
| | 0.1nm,0.3s,baz=23,slow=13,SNR=5.5 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |

*IDC **20** 06:29:41.5±1.0, 8.30°S×116.69E, h0km, mb4.1/9, mbtmp4.1/10, ML3.8/1, MS2.9/1, Error ellipse: s-maj=39.4km s-min=17.0km az=58.0*
*NEIC **20** 06:29:43.8±1.7, 8.37°S±0.08×116.75°E±0.06, h10km±1km, mb4.3/14, Error ellipse: s-maj=14.2km s-min=9.0km az=344.0*
*DJA **20** 06:29:44.0±0.4, 8°S±4'×11°7E±', h10km, M4.2/7, MLv4.2/7*
**ISC 20 06:29:43.1±0.5, 8.30°S±0.05×116.77°E±0.05, h10km, n48, σ0§95/47, mb4.2/11, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.45** | **165** | P | P | **Pb** | **06 29 53.9** | **+0.7** |
| TWSI | | | | S | S | **Sb** | **06 30 01.0** | **+1.1** |
| **PLAI** | **Plampang** | **1.13** | **118** | P | P | **Pn** | **06 30 06.3** | **+1.3** |
| **SRBI** | **Singaraja** | **1.55** | **278** | P | P | **Pn** | **06 30 11.1** | **+0.3** |
| **IGBI** | **Denpasar** | **1.68** | **252** | P | P | **Pb** | **06 30 13.8** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.59** | **266** | | | **Pn** | **06 30 25.0** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.59** | **266** | P | P | **Pn** | **06 30 24.9** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **2.92** | **117** | P | P | **Pn** | **06 30 31.2** | **+1.5** |
| **BSSI** | **Bau Bau, Buton** | **4.27** | **60** | P | P | **Pn** | **06 30 48.9** | **+0.6** |
| **KAPI** | **Kappang** | **4.41** | **42** | Pn | P | **Pn** | **06 30 51.0** | **+0.8** |
| **KAPI** | **Kappang** | **4.41** | **42** | Pn | P | **Pn** | **06 30 50.8** | **+0.6** |
| | 4.9nm,0.3s,baz=197,slow=6.1,SNR=6.4 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **06 31 40.8** | **-0.9** |
| | 8.4nm,0.3s,baz=185,slow=19,SNR=4.3 | | | | | | | |
| KAPI | | | | Lg | | Lg | 06 31 57.5 | |
| | 5.4nm,0.3s,baz=225,slow=20,SNR=2.4 | | | | | | | |
| KAPI | | | | LR | | LR | 06 32 50.0 | |
| | comp=Z,125nm,19.4s,baz=230,slow=42 12nm,0.3s | | | | | | | |
| **MMRI** | **Maumere** | **5.42** | **94** | Pn | | **Pn** | **06 31 04.3** | **+0.2** |
| **UGM** | **Wanagama** | **6.19** | **273** | Pn | | **Pn** | **06 31 15.8** | **+1.1** |
| **SOEI** | **Soe** | **7.55** | **102** | Pn | | **Pn** | **06 31 32.0** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **13.01** | **139** | Pn | | **Pn** | **06 32 45.6** | **-2.6** |
| **MBWA** | **Marble Bar** | **13.10** | **168** | Pn | | **Pn** | **06 32 47.3** | **-2.1** |
| **MYLDM** | **Lahad Datu** | **13.50** | **7** | Pn | | **Pn** | **06 32 55.8** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **13.52** | **168** | Pn | | **Pn** | **06 32 54.4** | **-0.8** |
| **KNRA** | **Kununurra** | **13.83** | **123** | Pn | | **Pn** | **06 32 59.1** | **-0.3** |
| **SAUI** | **Saumlaki** | **14.39** | **90** | Pn | | **Pn** | **06 33 07.7** | **+0.6** |
| **GIRL** | **Giralia** | **14.46** | **189** | Pn | | **Pn** | **06 33 07.0** | **-1.1** |
| **WB0** | **Warramunga Arr** | **20.53** | **126** | P | P | **P** | **06 34 22.2** | **+0.3** |
| WB0 | | | | | IAmb | IAmb | 

baz=86,slow=75,SNR=9.0
**H04N3 CROZET ISLANDS 66.80 223** T T 07 52 13.2
baz=86,slow=75,SNR=10
**ZALV Zalesovo Beam 67.62 340** P **P** **06 40 38.2 -1.8**
comp=Z,0.6nm,0.6s,baz=131,slow=4.4,SNR=2.0
comp=Z,0.6nm,0.6s
**SNAA Sanae 91.06 196** P **P** **06 42 48.1 +0.5**
SNAA IAmb IAmb 06 43 07.6
comp=Z,5.5nm,1.4s
**SNAA Sanae 91.06 196** P **P** **06 42 47.7 0.0**
comp=Z,3.1nm,1.3s,baz=203,slow=5.0,SNR=2.5
comp=Z,3.1nm,1.3s
**BELA Belgrano 2 92.49 186** P **P** **06 42 54.4 +0.3**
BELA IAmb IAmb 06 43 02.0
comp=Z,1.0nm,1.1s
**J18K Innoko River 95.81 27** P **P** **06 43 09.7 +0.3**

*IDC **20** 06:30:33.5±8.7, 18°.09S×178°.25W, h542km±99km, mb3.1/8, mbtmp4.0/8, Error ellipse: s-maj=31.7km s-min=24.8km az=92.0*
*NEIC **20** 06:30:35.3±0.8, 17°.8S±0°.2×178°.03W±0°.05, h586km±10km, mb4.4/14, Error ellipse: s-maj=24.8km s-min=6.3km az=175.0*
**ISC 20 06:30:36.3±0.6, 18°.0S±0°.1×178°.2W±0°.1, h590km, n29, σ1§45/29, mb4.2/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.60** | **273** | P | | **P** | **06 31 57.5** | **-0.9** |
| **AFI** | **Afiamalu** | **7.36** | **58** | P | | **P** | **06 32 25.9** | **-3.6** |
| **NIUE** | **Niue** | **7.90** | **99** | P | | **P** | **06 32 31.7** | **-2.7** |
| **CTAO** | **Charters Tower** | **33.65** | **261** | P | | **P** | **06 36 29.9** | **+0.2** |
| CTAO | | | | IAmb | | IAmb | 06 36 39.2 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **TOO** | **Toolangi** | **37.30** | **231** | P | | **P** | **06 36 58.9** | **-0.8** |
| **COEN** | **Coen** | **37.33** | **270** | P | | **P** | **06 36 59.5** | **-0.6** |
| COEN | | | | IAmb | | IAmb | 06 37 41.4 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.79** | **241** | P | | **P** | **06 37 12.5** | **+0.7** |
| **BBOO** | **Buckleboo** | **43.57** | **241** | P | | **P** | **06 37 49.0** | **-0.4** |
| BBOO | | | | IAmb | | IAmb | 06 37 58.4 | |
| | comp=Z,25nm,1.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.65** | **260** | P | | **P** | **06 37 57.4** | **-0.6** |
| WR0 | | | | IAmb | | IAmb | 06 38 32.8 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.80** | **260** | P | | **P** | **06 37 59.0** | **-0.2** |
| WB0 | | | | IAmb | | IAmb | 06 38 14.7 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.83** | **260** | P | | **P** | **06 37 59.0** | **-0.3** |
| WB2 | | | | IAmb | | IAmb | 06 38 28.1 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | P | | **P** | **06 37 59.0** | **-0.4** |
| | comp=Z,1.1nm,0.5s,baz=96,slow=6.9,SNR=15 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **44.98** | **254** | P | | **P** | **06 38 00.5** | **0.0** |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | | **P** | **06 38 00.3** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | | **P** | **06 38 00.5** | **-0.1** |
| | comp=Z,6.6nm,0.6s,baz=88,slow=8.5,SNR=44 | | | | | | | |
| | comp=Z,6.6nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | | **P** | **06 41 02.4** | **+0.8** |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | | **P** | **06 41 01.9** | **+0.3** |
| | comp=Z,2.8nm,0.9s,baz=2.4,slow=4.5,SNR=11 | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.80** | **345** | P | | **P** | **06 41 09.8** | **-1.5** |
| **PETK** | **Petropavlovsk-** | **73.80** | **345** | P | | **P** | **06 41 10.8** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **73.80** | **345** | P | | **P** | **06 41 12.3** | **+1.0** |
| | comp=Z,1.5nm,0.6s,baz=122,slow=5.2,SNR=1.4 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.32** | **44** | P | | **P** | **06 41 44.8** | **+2.7** |
| | comp=Z,0.4nm,0.7s,baz=228,slow=13,SNR=4.5 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.84** | **58** | P | | **P** | **06 42 17.9** | **+3.0** |
| | comp=Z,0.5nm,0.8s,baz=209,slow=6.7,SNR=6.1 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.90** | **13** | P | | **P** | **06 42 15.2** | **+1.0** |
| | comp=Z,0.4nm,0.4s,baz=222,slow=4.9,SNR=8.0 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.25** | **43** | P | | **P** | **06 42 23.0** | **+1.6** |
| | comp=Z,0.3nm,0.6s,baz=226,slow=6.1,SNR=3.0 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **C19K** | **Lookout Ridge** | **87.86** | **7** | P | | **P** | **06 42 23.2** | **-0.1** |
| **I30M** | **Mount Dempster** | **88.80** | **16** | P | | **P** | **06 42 25.5** | **-2.4** |
| I30M | | | | IAmb | | IAmb | 06 42 25.7 | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **90.53** | **179** | P | | **P** | **06 42 36.2** | **+0.3** |
| **BRTR** | **Keskin Array B** | **144.98** | **315** | PKPbc | | **PKPab** | **06 49 10.1** | **+0.6** |
| | comp=Z,0.5nm,0.4s,baz=80,slow=3.2,SNR=3.8 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.73** | **345** | PKPbc | | **PKiKP** | **06 49 17.4** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=298,slow=2.1,SNR=4.0 | | | | | | | |

**IDC 20 06:35:33.0±2.8, 19°.17S×177°.52W, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=315.4km s-min=31.7km az=160.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.25** | **261** | P | | P | 06 43 51.7 | -0.9 |
| | 0.5nm,0.7s,baz=98,slow=6.7,SNR=5.8 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.28** | **255** | P | | P | 06 43 53.2 | +0.4 |
| | 2.2nm,0.6s,baz=90,slow=8.2,SNR=26 | | | | | | | |
| | 2.2nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.95** | **57** | P | | P | 06 48 15.6 | +0.1 |
| | 0.5nm,0.8s,baz=217,slow=5.6,SNR=7.2 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |

*TRN **20** 06:36:55.8, 10°.63N×62°.54W, h76km, MD3.7, Paria peninsula.*
*FUNV **20** 06:36:55.6, 10°.47N×62°.50W, h10km, MW3.7*
**ISC 20 06:36:53.5±1.3, 10°.57N±0°.04×62°.47W±0°.05, h114km±17km, n28, σ1§82/51, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TRN** | **Trinidad (W)** | **1.05** | **86** | *eP* | | **Pn** | **06 37 16.5** | **+0.9** |
| TRN | | | | *eS* | | **Sn** | **06 37 30.3** | **-2.0** |
| **TBH** | **Brigand Hill** | **1.38** | **94** | *eP* | | **Pn** | **06 37 20.8** | **+1.6** |
| TBH | | | | *eS* | | **Sn** | **06 37 39.4** | **+0.6** |
| **GRFF** | **Grenada Fort F** | **1.63** | **26** | *eP* | | **Pn** | **06 37 22.3** | **+0.1** |
| GRFF | | | | *eS* | | **Sn** | **06 37 42.4** | **-1.7** |
| **GRGR** | **Grenville** | **1.75** | **27** | *eP* | | **Pn** | **06 37 23.6** | **0.0** |
| GRGR | | | | *eS* | | **Sn** | **06 37 45.1** | **-1.3** |
| **GRW** | **Mount Saint Ca** | **1.77** | **27** | *eP* | | **Pn** | **06 37 24.6** | **+0.7** |
| GRW | | | | *eS* | | **Sn** | **06 37 46.4** | **-0.7** |
| **GRHS** | **Sauteurs** | **1.83** | **26** | *eP* | | **Pn** | **06 37 24.8** | **+0.2** |
| GRHS | | | | *eS* | | **Sn** | **06 37 47.0** | **-1.3** |
| **GRSS** | **Sisters** | **1.91** | **26** | *eP* | | **Pn** | **06 37 26.6** | **+1.0** |
| GRSS | | | | *eS* | | **Sn** | **06 37 49.2** | **-0.8** |
| **GCMP** | **Grenada, Carri** | **2.16** | **28** | *eP* | | **Pn** | **06 37 29.5** | **+0.8** |
| GCMP | | | | *eS* | | **Sn** | **06 37 54.5** | **-1.1** |
| **PCRV** | **Puerto La Cruz** | **2.17** | **260** | *eP* | | **Pn** | **06 37 30.6** | **+1.7** |
| PCRV | | | | *eS* | | **Sn** | **06 37 55.0** | **-0.9** |
| **SVOC** | **Richmond Hill,** | **2.84** | **25** | *eP* | | **Pn** | **06 37 33.1** | **-4.5** |
| SVOC | | | | *eS* | | **Sn** | **06 38 11.1** | **-0.4** |
| **SVT** | **Saint Vincent** | **2.85** | **25** | *eP* | | **Pn** | **06 37 39.2** | **+1.5** |
| SVT | | | | *eS* | | **Sn** | **06 38 10.4** | **-1.3** |
| **SVB** | **Belmont** | **2.94** | **24** | *eP* | | **Pn** | **06 37 39.4** | **+0.5** |
| **MCLT** | **Moule a Chique** | **3.46** | **25** | *eP* | | **Pn** | **06 37 48.0** | **+2.2** |
| MCLT | | | | *eS* | | **Sn** | **06 38 24.2** | **-1.9** |
| **SLAC** | **Saint Lucia, A** | **3.65** | **25** | *eP* | | **Pn** | **06 37 50.1** | **+1.8** |
| SLAC | | | | *eS* | | **Sn** | **06 38 29.8** | **-0.8** |
| **SLBI** | **Saint Lucia, B** | **3.73** | **23** | *eP* | | **Pn** | **06 37 50.4** | **+1.1** |
| SLBI | | | | *eS* | | **Sn** | **06 38 32.2** | **-0.4** |
| **BBGH** | **Gun Hill** | **3.83** | **48** | *eP* | | **Pn** | **06 37 54.0** | **+3.3** |
| BBGH | | | | *eS* | | **Sn** | **06 38 34.5** | **-0.4** |
| **BIM** | **Bigot** | **4.15** | **19** | *eP* | | **Pn** | **06 37 56.2** | **+1.1** |
| BIM | | | | *eS* | | **Sn** | **06 38 41.0** | **-1.8** |
| **TACV** | **Tcata** | **4.50** | **265** | *eP* | | **Pn** | **06 38 01.4** | **+1.6** |
| TACV | | | | *eS* | | **Sn** | **06 38 51.2** | **-0.1** |
| **LUEV** | **Luepa** | **4.80** | **168** | *eP* | | **Pn** | **06 38 05.4** | **+1.4** |
| LUEV | | | | *eS* | | **Sn** | **06 38 56.9** | **-1.9** |
| **CACV** | **CAICARA DEL OR** | **5.01** | **234** | *eP* | | **Pn** | **06 38 03.2** | **-3.4** |
| CACV | | | | *eS* | | Sn | 06 38 52.8 | -11 |
| **BENV** | **Beln** | **5.08** | **264** | *eP* | | **Pn** | **06 38 10.0** | **+2.4** |
| BENV | | | | *eS* | | **Sn** | **06 39 05.0** | **-0.3** |
| **BAUV** | **El Baul** | **5.72** | **254** | *eP* | | **Pn** | **06 38 17.4** | **+1.2** |
| BAUV | | | | *eS* | | **Sn** | **06 39 19.1** | **-1.6** |
| **BAUV** | **El Baul** | **5.72** | **254** | *eP* | | **Pn** | **06 38 17.4** | **+1.2** |
| BAUV | | | | *eS* | | **Sn** | **06 39 19.1** | **-1.6** |
| **ANBD** | **Bethesda, Anti** | **6.47** | **6** | *eP* | | **Pn** | **06 38 28.9** | **+2.6** |
| **TEPV** | **Terepaima** | **6.64** | **265** | *eP* | | **Pn** | **06 38 30.6** | **+1.9** |
| TEPV | | | | *eS* | | **Sn** | **06 39 40.9** | **-2.1** |
| **ANWB** | **Willy Bob** | **7.08** | **5** | *e* | | **Pn** | **06 38 36.6** | **+2.0** |
| **ANWB** | **Willy Bob** | **7.08** | **5** | *e* | | **Pn** | **06 38 37.9** | **+3.2** |
| **SOCV** | **Socops** | **8.58** | **255** | *eP* | | **Pn** | **06 38 55.8** | **+0.8** |
| SOCV | | | | *eS* | | **Sn** | **06 40 26.0** | **-4.1** |

*IDC **20** 06:40:53.0±1.2, 33°.35S×68°.59W, h0km, mb3.6/4, mbtmp3.6/8, ML3.5/4, Error ellipse: s-maj=44.8km s-min=20.5km az=101.0*
*SJA **20** 06:40:52.8±0.7, 33°.50S×68°.19W, h16km±2km, ML4.3, MW4.2*
*NEIC **20** 06:40:56.5±1.0, 33°.49S±0°.05×68°.14W±0°.06, h38km±9km, mb4.6/14, Error ellipse: s-maj=8.3km s-min=5.9km az=212.0*
**ISC 20 06:40:51.6±1.3, 33°.51S±0°.03×68°.14W±0°.03, h3km±9km, n125, σ1§38/157, mb4.3/9, 10D, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AVIZ** | **Vizcacheras** | **0.32** | **277** | *eP* | | **Pb** | **06 40 59.3** | **-0.7** |
| **AAGR** | **Agrelo** | **0.72** | **306** | *eP* | | **Pg** | **06 41 06.3** | **+0.8** |
| **ARCO** | **CERRO ARCO** | **0.95** | **315** | *eP* | | **Pg** | **06 41 10.5** | **+0.8** |
| ARCO | | | | *eS* | | **Sb** | **06 41 23.5** | **-0.2** |
| ARCO | | | | IAML | | | 06 41 25.7 | |
| | comp=Z,6μm,0.4s | | | | | | | |
| **ASAL** | **Salagasta** | **1.09** | **327** | *eP* | | **Pb** | **06 41 13.4** | **+0.2** |
| ASAL | | | | *eS* | | **Sb** | **06 41 28.5** | **+0.6** |
| **RFA** | **San Rafael** | **1.28** | **192** | *eP* | | **Pg** | **06 41 17.3** | **+1.1** |
| RFA | | | | *eS* | | **Sn** | **06 41 35.4** | **+1.2** |
| RFA | | | | IAML | | | 06 41 36.6 | |
| | comp=Z,7μm,0.3s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.57** | **272** | | | **Pn** | **06 41 20.8** | **+0.1** |
| MT08 | | | | | Sn | **Sn** | **06 41 41.1** | **-0.5** |
| **MT08** | **Bocatoma Ro** | **1.57** | **272** | | *i/P* | **Pn** | **06 41 20.7** | **+0.1** |
| MT08 | | | | *eS* | | **Sn** | **06 41 40.5** | **-1.1** |
| MT08 | | | | IAML | | | 06 41 41.8 | |
| | comp=N,2μm,0.4s | | | | | | | |
| **MT04** | **Ro Olivares** | **1.68** | **273** | *eP* | | **Pn** | **06 41 22.9** | **+0.9** |
| MT04 | | | | *eS* | | **Sb** | **06 41 44.9** | **0.0** |
| **MT04** | **Ro Olivares** | **1.68** | **273** | *i/P* | | **Pn** | **06 41 22.6** | **+0.6** |
| MT04 | | | | *eS* | | **Sn** | **06 41 43.1** | **-1.1** |
| MT04 | | | | IAML | | | 06 41 45.5 | |
| | comp=E,1μm,0.3s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **1.68** | **348** | *eP* | | **Pn** | **06 41 23.4** | **+1.4** |
| RTCV | | | | *eS* | | **Sg** | **06 41 47.0** | **+1.3** |
| **LMEL** | **Las Melosas** | **1.76** | **259** | | | **Pn** | **06 41 24.0** | **+1.0** |
| LMEL | | | | | Sn | **Sn** | **06 41 46.2** | **+0.2** |
| **LMEL** | **Las Melosas** | **1.76** | **259** | *eP* | | **Pn** | **06 41 24.2** | **+1.1** |
| **LMEL** | **Las Melosas** | **1.76** | **259** | *i/P* | | **Pn** | **06 41 24.2** | **+1.1** |
| LMEL | | | | *eS* | | **Sn** | **06 41 45.5** | **-0.5** |
| LMEL | | | | IAML | | | 06 41 48.5 | |
| | comp=N,4μm,0.2s | | | | | | | |
| **MT13** | **San Alfonso** | **1.81** | **262** | | | **Pn** | **06 41 24.6** | **+0.8** |
| MT13 | | | | | Sn | **Sn** | **06 41 47.3** | **0.0** |
| **MT13** | **San Alfonso** | **1.81** | **262** | *i/P* | | **Pn** | **06 41 25.0** | **+1.2** |
| MT13 | | | | *eS* | | **Sn** | **06 41 46.8** | **-0.5** |
| MT13 | | | | IAML | | | 06 41 49.3 | |
| | comp=N,3μm,0.4s | | | | | | | |
| **FCH** | **Farellones** | **1.81** | **275** | *i/P* | | **Pn** | **06 41 24.9** | **+1.0** |
| FCH | | | | *eS* | | **Sn** | **06 41 47.6** | **0.0** |
| FCH | | | | IAML | | | 06 41 51.5 | |
| | comp=E,824nm,0.3s | | | | | | | |
| **RTLS** | **Leoncito** | **1.97** | **330** | *eP* | | **Pn** | **06 41 27.5** | **+1.4** |
| RTLS | | | | IAML | | | 06 41 55.5 | |
| | comp=Z,6μm,0.3s | | | | | | | |
| **MT15** | **Las Vizcachas** | **1.98** | **267** | *i/P* | | **Pn** | **06 41 27.7** | **+1.6** |
| MT15 | | | | *eS* | | **Sn** | **06 41 51.5** | **+0.1** |
| MT15 | | | | IAML | | | 06 41 55.7 | |
| | comp=E,3μm,0.3s | | | | | | | |
| **MT03** | **Universidad Ad** | **1.98** | **270** | | | **Pn** | **06 41 27.5** | **+1.3** |
| **MT03** | **Universidad Ad** | **1.98** | **270** | *eP* | | **Pn** | **06 41 27.4** | **+1.3** |
| MT03 | | | | *eS* | | **Sb** | **06 41 53.6** | **+0.1** |
| MT03 | | | | IAML | | | 06 41 55.3 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| **MT03** | **Universidad Ad** | **1.98** | **270** | *eP* | | **Pn** | **06 41 27.4** | **+1.3** |
| MT03 | | | | *eS* | | **Sn** | **06 41 51.7** | **+0.2** |
| MT03 | | | | IAML | | | 06 41 55.6 | |
| | comp=N,4μm,0.5s | | | | | | | |
| **MT16** | **CCHEN** | **2.00** | **272** | | | **Pn** | **06 41 27.6** | **+1.3** |
| **MT16** | **CCHEN** | **2.00** | **272** | *i/P* | | **Pn** | **06 41 27.7** | **+1.4** |
| **MT14** | **Cerro Cal¡n** | **2.01** | **273** | *i/P* | | **Pn** | **06 41 28.0** | **+1.5** |
| **ZON** | **Zonda** | **2.02** | **347** | | | **Pn** | **06 41 27.9** | **+1.3** |
| **ZON** | **Zonda** | **2.02** | **347** | *eP* | | **Pn** | **06 41 28.1** | **+1.6** |
| ZON | | | | *eS* | | **Sb** | **06 41 55.7** | **+1.3** |
| ZON | | | | IAML | | | 06 41 56.9 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **MT10** | **Hacienda Santa** | **2.02** | **276** | *i/P* | | **Pb** | **06 41 28.5** | **-0.6** |
| **MT12** | **Pirque** | **2.03** | **263** | *i/P* | | **Pn** | **06 41 27.9** | **+1.2** |
| **BO04** | **La Punta** | **2.12** | **256** | | | **Pn** | **06 41 29.4** | **+1.5** |
| **BO04** | **La Punta** | **2.12** | **256** | *eP* | | **Pn** | **06 41 29.4** | **+1.5** |
| **VA03** | **San Esteban** | **2.16** | **290** | | | **Pb** | **06 41 30.6** | **-0.8** |
| **VA03** | **San Esteban** | **2.16** | **290** | *eP* | | **Pb** | **06 41 30.6** | **-0.8** |
| VA03 | | | | *eS* | | **Sb** | **06 41 58.9** | **+0.3** |
| VA03 | | | | IAML | | | 06 42 01.0 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **VA03** | **San Esteban** | **2.16** | **290** | *eP* | | **Pb** | **06 41 30.6** | **-0.8** |
| **PEL** | **Peldehue** | **2.17** | **279** | | | **Pn** | **06 41 30.1** | **+1.5** |
| **PEL** | **Peldehue** | **2.17** | **279** | *eP* | | **Pn** | **06 41 30.2** | **+1.6** |
| **PEL** | **Peldehue** | **2.17** | **279** | *eP* | | **Pn** | **06 41 29.9** | **+1.4** |
| **MT05** | **Renca** | **2.18** | **272** | | | **Pn** | **06 41 32.3** | **+0.6** |
| **MT05** | **Renca** | **2.18** | **272** | *eP* | | **Pn** | **06 41 26.9** | **-1.9** |
| MT05 | | | | *eS* | | **Sg** | **06 42 01.6** | **-0.1** |
| MT05 | | | | IAML | | | 06 42 02.4 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **MT05** | **Renca** | **2.18** | **272** | *eP* | | **Pb** | **06 41 32.2** | **+0.6** |
| **MT09** | **Talagante** | **2.40** | **263** | | | **Pn** | **06 41 33.0** | **+1.2** |
| **MT09** | **Talagante** | **2.40** | **263** | *eP* | | **Pn** | **06 41 33.0** | **+1.2** |
| **ROCH** | **El Roble** | **2.47** | **282** | *eP* | | **Pn** | **06 41 34.2** | **+1.3** |
| **ROC1** | **El Roble** | **2.47** | **282** | *eP* | | **Pn** | **06 41 34.2** | **+1.2** |
| ROC1 | | | | *eS* | | **Sb** | **06 42 09.1** | **+1.4** |
| **EDS3** | **Malargue** | **2.48** | **204** | *eP* | | **Pn** | **06 41 35.0** | **+2.0** |
| EDS3 | | | | *eS* | | **Sb** | **06 42 07.2** | **-0.7** |
| **MT02** | **Curacav** | **2.52** | **275** | | | **Pn** | **06 41 34.6** | **+1.1** |
| **MT02** | **Curacav** | **2.52** | **275** | *eP* | | **Pn** | **06 41 34.4** | **+0.9** |
| MT02 | | | | *eS* | | **Sb** | **06 42 09.8** | **+0.8** |
| **MT02** | **Curacav** | **2.52** | **275** | *eP* | | **Pn** | **06 41 34.4** | **+0.9** |
| **BO02** | **Sierra Bellavi** | **2.54** | **239** | | | **Pn** | **06 41 35.4** | **+1.7** |
| **BO02** | **Sierra Bellavi** | **2.54** | **239** | *eP* | | **Pn** | **06 41 35.7** | **+2.0** |
| BO02 | | | | *eS* | | **Sn** | **06 42 05.6** | **+0.4** |
| BO02 | | | | IAML | | | 06 42 12.4 | |
| | comp=Z,2μm,0.2s | | | | | | | |
| **BO01** | **Tunca** | **2.60** | **250** | | | **Pn** | **06 41 36.6** | **+2.1** |
| **BO01** | **Tunca** | **2.60** | **250** | *eP* | | **Pn** | **06 41 36.0** | **+1.4** |
| BO01 | | | | *eS* | | **Sn** | **06 42 06.5** | **-0.2** |
| BO01 | | | | IAML | | | 06 42 12.8 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **MT01** | **Popeta** | **2.62** | **261** | | | **Pn** | **06 41 35.7** | **+0.9** |
| **MT01** | **Popeta** | **2.62** | **261** | *eP* | | **Pn** | **06 41 35.8** | **+1.0** |
| MT01 | | | | *eS* | | **Sn** | **06 42 07.4** | **+0.3** |
| MT01 | | | | IAML | | | 06 42 13.1 | |
| | comp=Z,666nm,0.2s | | | | | | | |
| **MT01** | **Popeta** | **2.62** | **261** | *eP* | | **Pn** | **06 41 35.5** | **+0.7** |
| **ACHE** | **Chepes** | **2.66** | **28** | *eP* | | **Pn** | **06 41 38.1** | **+2.7** |
| **DOCA** | **Reserva Natura** | **2.68** | **342** | *eP* | | **Pn** | **06 41 37.9** | **+2.0** |
| DOCA | | | | *eS* | | **Sn** | **06 42 09.1** | **0.0** |
| DOCA | | | | IAML | | | 06 42 21.5 | |
| | comp=Z,3μm,0.5s | | | | | | | |
| **CO04** | **Los Peladeros** | **2.81** | **301** | *eP* | | **Pn** | **06 41 39.1** | **+1.5** |
| **VA06** | **Catapilco** | **2.82** | **289** | | | **Pn** | **06 41 38.6** | **+1.0** |
| **AVFE** | **Valle Fertil** | **2.90** | **12** | *eP* | | **Pn** | **06 41 41.3** | **+2.5** |
| AVFE | | | | *eS* | | **Sb** | **06 42 19.6** | **-0.5** |
| AVFE | | | | IAML | | | 06 42 32.1 | |
| | comp=Z,854nm,0.3s | | | | | | | |
| **VA05** | **Santo Domingo** | **2.91** | **266** | | | **Pn** | **06 41 39.8** | **+1.1** |
| **VA05** | **Santo Domingo** | **2.91** | **266** | *eP* | | **Pn** | **06 41 39.8** | **+1.1** |
| **VA01** | **Torpederas** | **2.98** | **278** | | | **Pn** | **06 41 41.1** | **+1.3** |
| **VA01** | **Torpederas** | **2.98** | **278** | *eP* | | **Pn** | **06 41 40.2** | **+0.4** |
| VA01 | | | | *eS* | | **Sb** | **06 42 24.4** | **+2.2** |
| **ACCO** | **Cerro Coronel** | **3.02** | **345** | *eP* | | **Pn** | **06 41 43.3** | **+2.6** |
| ACCO | | | | *eS* | | **Sb** | **06 42 22.2** | **-1.5** |
| ACCO | | | | IAML | | | 06 42 29.2 | |
| | comp=Z,832nm,1.6s | | | | | | | |
| **CO02** | **Combarbal** | **3.34** | **313** | | | **Pn** | **06 41 47.1** | **+2.2** |
| **CO02** | **Combarbal** | **3.34** | **313** | *eP* | | **Pn** | **06 41 46.9** | **+2.0** |
| CO02 | | | | *eS* | | **Sg** | **06 42 40.2** | **+1.2** |
| CO02 | | | | IAML | | | 06 42 45.2 | |
| | comp=Z,919nm,0.6s | | | | | | | |
| **CO03** | **El Pedregal** | **3.44** | **320** | | | **Pn** | **06 41 49.1** | **+3.0** |
| **CO03** | **El Pedregal** | **3.44** | **320** | *eP* | | **Pn** | **06 41 48.9** | **+2.8** |
| CO03 | | | | *eS* | | **Sg** | **06 42 39.2** | **-2.7** |
| CO03 | | | | IAML | | | 06 42 41.8 | |
| | comp=Z,677nm,0.5s | | | | | | | |
| **ACDV** | **Cuesta del Vie** | **3.44** | **346** | *eP* | | **Pn** | **06 41 49.0** | **+2.8** |
| ACDV | | | | *eS* | | **Sg** | **06 42 39.9** | **-2.2** |
| ACDV | | | | IAML | | | 06 42 40.4 | |
| | comp=Z,631nm,0.4s | | | | | | | |
| **GO05** | **Huala** | **3.48** | **244** | | | **Pn** | **06 41 48.4** | **+1.8** |
| **GO05** | **Huala** | **3.48** | **244** | *eS* | | **Sb** | **06 42 39.2** | **+2.8** |
| **ML02** | **Panimavida** | **3.52** | **229** | Pn | | **Pn** | **06 41 48.7** | **+1.6** |
| **CO01** | **Juntas del Tor** | **3.90** | **334** | | | **Pn** | **06 41 55.6** | **+3.0** |
| **CO01** | **Juntas del Tor** | **3.90** | **334** | *eP* | | **Pn** | **06 41 51.1** | **-1.5** |
| CO01 | | | | IAML | | | 06 42 57.5 | |
| | comp=Z,235nm,0.7s | | | | | | | |
| **GO04** | **Tololo Observa** | **4.03** | **325** | Pn | | **Pn** | **06 41 55.6** | **+1.2** |
| **BI02** | **San Fabin de** | **4.06** | **218** | | | **Pn** | **06 41 56.4** | **+1.8** |
| **CO06** | **Fray Jorge** | **4.10** | **313** | | | **Pn** | **06 41 55.6** | **+0.4** |
| **CO05** | **La Serena** | **4.45** | **323** | | | **Pn** | **06 42 01.2** | **+1.2** |
| **LCO** | **Las Campanas** | **5.00** | **333** | Pn | | **Pn** | **06 42 08.9** | **+1.2** |
| **LCO** | **Las Campanas** | **5.00** | **333** | *eP* | | **Pn** | **06 42 09.4** | **+1.6** |
| **AC05** | **El Transito** | **5.01** | **338** | | | **Pn** | **06 42 08.4** | **+0.6** |
| **AC05** | **El Transito** | **5.01** | **338** | *eP* | | **Pn** | **06 42 10.6** | **+2.8** |
| **AC04** | **Llanos de Chal** | **5.86** | **334** | Pn | | **Pn** | **06 42 20.5** | **+1.1** |
| **GO03** | **Copiap** | **6.17** | **342** | Pn | | **Pn** | **06 42 24.6** | **+0.9** |
| **AC06** | **Mina Casimiro** | **6.43** | **342** | | | **Pn** | **06 42 28.2** | **+1.1** |
| **GO06** | **Curarrehue** | **6.62** | **203** | Pn | | **Pn** | **06 42 31.3** | **+1.4** |
| **TRQA** | **Tornquist** | **6.75** | **134** | Pn | | **Pn** | **06 42 33.0** | **+2.0** |
| **LR03** | **Panguipulli** | **6.98** | **208** | Pn | | **Pn** | **06 42 35.9** | **+1.2** |
| **LR05** | **Currie** | **7.38** | **204** | Pn | | **Pn** | **06 42 41.7** | **+1.5** |
| **PLCA** | **Paso Flores** | **7.46** | **194** | Pn | | **Pn** | **06 42 42.9** | **+1.6** |
| **PLCA** | **Paso Flores** | **7.46** | **194** | Pn | | **Pn** | **06 42 43.0** | **+1.7** |
| | comp=Z,1.0nm,0.3s,baz=11,slow=12,SNR=1.4 | | | | | | | |
| PLCA | | | | | Pg | **Pg** | **06 43 10.9** | **-3.5** |
| | comp=Z,0.9nm,0.3s,baz=18,slow=12,SNR=7.6 | | | | | | | |
| PLCA | | | | | Lg | Lg | 06 44 45.0 | |
| | comp=Z,2.1nm,0.3s,baz=100,slow=21,SNR=3.3 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **LR04** | **Corral** | **7.64** | **212** | Pn | | **Pn** | **06 42 45.0** | **+1.3** |
| **AC01** | **Pan de Azucar** | **7.65** | **343** | Pn | | **Pn** | **06 42 44.2** | **+0.4** |
| **LL04** | **Puerto Octay** | **8.13** | **204** | Pn | | **Pn** | **06 42 52.4** | **+1.9** |
| **GO02** | **Mina Guanaco** | **8.42** | **351** | Pn | | **Pn** | **06 42 55.2** | **+0.5** |
| **PB14** | **IPOC Station P** | **9.08** | **347** | Pn | | **Pn** | **06 43 05.0** | **+1.2** |
| **ITQB** | **Itaqui** | **10.54** | **72** | Pn | | **Pn** | **06 43 25.0** | **+1.6** |
| **LVC** | **Limon Verde** | **10.88** | **356** | Pn | | **Pn** | **06 43 28.6** | **0.0** |
| **LVC** | **Limon Verde** | **10.88** | **356** | Pn | | **Pn** | **06 43 27.0** | **-1.6** |
| | comp=Z,0.6nm,0.3s,baz=186,slow=13,SNR=1.9 | | | | | | | |
| LVC | | | | | Lg | Lg | 06 46 29.2 | |
| | comp=Z,0.6nm,0.3s,baz=298,slow=18,SNR=1.7 | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| **PB09** | **IPOC Station P** | **11.71** | **355** | Pn | | **Pn** | **06 43 38.8** | **-1.0** |
| **CPUP** | **Villa Florida** | **11.79** | **55** | Pn | | **Pn** | **06 43 41.0** | **+0.4** |
| **CPUP** | **Villa Florida** | **11.79** | **55** | Pn | | **Pn** | **06 43 40.4** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=227,slow=11,SNR=11 | | | | | | | |
| CPUP | | | | | Lg | Lg | 06 47 06.9 | |
| | comp=Z,0.7nm,0.3s,baz=140,slow=20,SNR=1.9 | | | | | | | |
| **PLTB** | **Pedras Altas** | **12.37** | **86** | Pn | | **Pn** | **06 43 48.4** | **-0.2** |
| **TA02** | **Huaiquique** | **13.31** | **352** | Pn | | **Pn** | **06 43 59.9** | **-1.6** |
| **ITAB** | **Concordia** | **15.16** | **70** | Pn | | **Pn** | **06 44 27.6** | **+1.0** |
| ITAB | | | | IAmb | | IAmb | 06 44 39.6 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| **LPAZ** | **La Paz** | **17.15** | **0** | Pn | | **Pn** | **06 44 52.7** | **-0.3** |
| **LPAZ** | **La Paz** | **17.15** | **0** | Pn | | **Pn** | **06 44 52.3** | **-0.6** |
| | comp=Z,0.2

50nm,0.6s,baz=82,slow=3.4,SNR=27
50nm,0.6s
PPTF **Pamatai, Papee** 27.42 94 P P 06 49 01.5 -0.4
PPTF **Pamatai, Papee** 27.42 94 P P 06 49 02.3 +0.4
JCZ **Jackson Bay** 28.15 200 P P 06 49 08.7 +0.7
55nm,2.0s
EIDS **Eidsvold** 29.27 250 P P 06 49 18.4 +0.5
EIDS **Eidsvold** 29.27 250 P P 06 49 18.4 +0.5
RK1H **Rockhampton Ha** 29.58 254 P P 06 49 21.3 +0.7
26nm,0.7s
ARMA **Armidale** 29.92 240 P P 06 49 24.1 +0.4
ARMA **Armidale** 29.92 240 P P 06 49 24.2 +0.5
TV1H **Townsville Har** 33.00 262 P P 06 49 50.4 +0.3
32nm,0.7s
CNB **Canberra Magne** 33.40 232 P P 06 49 55.0 +1.7
CTA **Charters Tower** 33.47 261 P P 06 49 54.3 +0.2
3.3nm,0.6s,baz=96,slow=9.6,SNR=39
3.3nm,0.6s
CTAO **Charters Tower** 33.47 261 P P 06 49 54.6 +0.6
CTAO **Charters Tower** 33.47 261 P P 06 49 54.7 +0.7
CAN **Canberra** 33.67 233 P P 06 49 56.1 +0.5
CAN **Canberra** 33.67 233 P P 06 49 56.3 +0.6
CAN IAmb IAmb 06 49 57.8
comp=Z,22nm,0.9s
MILA **Mila** 34.25 230 P P 06 50 01.8 +1.3
comp=Z,55nm,1.8s
CMSA **Cobar Meteorol** 35.13 241 P P 06 50 09.2 +1.3
MTSU **Mount Surprise** 35.43 264 P P 06 50 10.5 -0.1
comp=Z,27nm,0.8s
QLP **Quilpie** 35.53 249 P P 06 50 12.4 +1.1
TOO **Toolangi** 37.14 231 P P 06 50 26.4 +1.9
TOO **Toolangi** 37.14 231 P P 06 50 25.2 +0.8
COEN **Coen** 37.14 271 P P 06 50 25.8 +1.0
COEN **Coen** 37.14 271 P P 06 50 24.7 -0.1
TAOE **Nuku Hiva Isla** 38.20 81 P P 06 50 34.0 +0.4
BRAT **Ballarat** 38.29 232 P P 06 50 35.8 +2.0
comp=Z,32nm,0.8s
STKA **Stephens Creek** 38.62 241 P P 06 50 38.0 +1.4
STKA **Stephens Creek** 38.62 241 P P 06 50 37.6 +1.0
STKA IAmb IAmb 06 50 38.8
comp=Z,8.4nm,0.9s
STKA **Stephens Creek** 38.62 241 P P 06 50 37.2 +0.6
comp=Z,28nm,0.5s,baz=94,slow=11,SNR=56
comp=Z,28nm,0.5s
INKA **Innaminka** 38.74 248 P P 06 50 39.2 +1.5
ARPS **Mount Arapiles** 39.62 234 P P 06 50 45.3 +0.6
comp=Z,34nm,1.3s
QIS **Mount Isa** 39.67 259 P P 06 50 45.3 0.0
WAKE **Wake Island** 39.87 338 P P 06 50 47.0 +0.2
HTT **Hallett** 41.13 240 P P 06 50 58.8 +1.9
LCRK **Leigh Creek** 41.25 244 P P 06 50 58.8 +1.0
OOD **Oodnadatta** 43.22 248 P P 06 51 15.1 +1.8
BBOO **Buckleboo** 43.39 241 P P 06 51 15.6 +0.9
BBOO **Buckleboo** 43.39 241 P P 06 51 15.5 +0.8
KEKH **Kekaha** 43.74 25 P P 06 51 17.8 +0.4
DHH **Diamond Head** 43.92 28 P P 06 51 19.7 +0.9
WR0 **Warramunga Arr** 44.46 260 P P 06 51 22.8 -0.4
WR0 IAmb IAmb 06 51 24.3
comp=Z,12nm,0.9s
WB0 **Warramunga Arr** 44.62 260 P P 06 51 24.1 -0.3
WB0 IAmb IAmb 06 51 25.3
comp=Z,17nm,0.7s
WB2 **Warramunga Arr** 44.64 260 P P 06 51 24.3 -0.3
WRAB **Tennant Creek** 44.64 260 P P 06 51 24.8 +0.2
WRA **Warramunga Arr** 44.65 260 P P 06 51 24.3 -0.4
WRA **Warramunga Arr** 44.65 260 P P 06 51 24.2 -0.4
comp=Z,15nm,0.5s,baz=96,slow=6.9,SNR=186
WRA S S 06 57 21.6 -2.6
comp=Z,1.4nm,0.7s,baz=94,slow=12,SNR=7.2
comp=Z,15nm,0.5s
AS01 **Alice Springs** 44.76 254 P P 06 51 25.2 -0.3
comp=Z,242nm,0.7s
AS31 **Alice Springs** 44.80 254 P P 06 51 26.4 +0.6
ASAR **Alice Springs** 44.80 254 P P 06 51 26.5 +0.7
ASAR **Alice Springs** 44.80 254 P P 06 51 26.2 +0.5
comp=Z,153nm,0.6s,baz=89,slow=8.3,SNR=916
ASAR PcP PcP 06 52 57.0 -0.3
comp=Z,2.7nm,0.8s,baz=93,slow=5.6,SNR=2.0
ASAR ScP ScP 06 56 01.8 -0.1
comp=Z,0.6nm,0.7s,baz=101,slow=4.8,SNR=2.1
ASAR S S 06 57 22.4 -3.9
comp=Z,5.9nm,0.9s,baz=88,slow=14,SNR=18
MULG **Mulgathing** 44.80 245 P P 06 51 26.1 +0.4
KDU **Kakadu** 47.59 269 P P 06 51 47.3 +0.2
MTN **Manton Dam** 48.83 269 P P 06 51 56.6 +0.3
MTN IAmb IAmb 06 51 57.0
comp=Z,21nm,0.8s
WRKA **Warakurna** 49.85 252 P P 06 52 04.2 +0.4
FORT **Forrest** 50.00 245 P P 06 52 05.3 +0.5
FORT **Forrest** 50.00 245 P P 06 52 04.9 +0.2
KNRA **Kununurra** 50.52 264 P P 06 52 08.9 +0.2
FAKI **Fak Fak** 50.63 281 P P 06 52 09.9 +0.2
FITZ **Fitzroy Crossi** 53.05 261 P P 06 52 27.6 +0.6
PSA00 **Pilbara Seismi** 57.92 255 P P 06 53 01.3 +0.3
MBWA **Marble Bar** 58.09 256 P P 06 53 01.9 -0.2
comp=Z,6.1nm,0.8s
MBWA **Marble Bar** 58.09 256 P P 06 53 02.3 +0.2
MEEK **Meekatharra** 58.43 249 P P 06 53 04.1 -0.4
comp=Z,8.0nm,0.8s
KLBR **Kellerberrin** 58.82 244 P P 06 53 07.7 +0.7
BLDU **Ballidu** 59.77 245 P P 06 53 14.4 +1.0
comp=Z,12nm,2.5s
GIRL **Giralia** 62.90 253 P P 06 53 35.0 +1.0
comp=Z,58nm,2.1s
JAGI **Jajag, Banyuwa** 66.07 269 P P 06 53 54.9 +0.6
JAGI **Jajag, Banyuwa** 66.07 269 P P 06 53 55.5 +1.2
MJAR **Matsushiro Arr** 68.01 323 P P 06 54 05.6 -0.2
comp=Z,11nm,0.8s,baz=156,slow=6.1,SNR=20
comp=Z,11nm,0.8s
JMN **Monobe** 68.69 319 P P 06 54 09.3 -0.7
NIKH **Nikolski High** 71.16 6 P P 06 54 23.2 -1.0
comp=Z,82nm,1.0s
NIKH **Nikolski High** 71.16 6 P P 06 54 23.7 -0.5
baz=190
JKA **Kamikawa-asahi** 71.38 331 P P 06 54 26.2 +0.4
QSPA **South Pole Qui** 72.05 180 P P 06 54 30.4 +0.9
QSPA **South Pole Qui** 72.05 180 P P 06 54 29.5 0.0
comp=Z,4.4nm,0.7s,baz=19,slow=0.3,SNR=16
comp=Z,4.4nm,0.7s
UNV **Unalaska Valle** 72.28 7 P P 06 54 29.2 -1.5
TPUB **Ta-pu** 72.34 302 P P 06 54 31.3 -0.6
TPUB IAmb IAmb 06 54 32.5
comp=Z,15nm,0.7s
PETK **Petropavlovsk-** 73.78 345 P P 06 54 39.2 -0.2
PETK **Petropavlovsk-** 73.78 345 P P 06 54 38.6 -0.8
comp=Z,26nm,0.7s,baz=118,slow=7.6,SNR=19
comp=Z,26nm,0.7s
KSRS **Korea Array** 74.80 318 P P 06 54 45.9 +0.5
comp=Z,1.9nm,0.7s,baz=129,slow=6.4,SNR=5.3
comp=Z,1.9nm,0.7s
SPIA **Saint Paul Isl** 75.20 5 P P 06 54 47.7 +0.4
baz=188
S14K **Fog Glacier** 75.68 11 P P 06 54 50.3 +0.2
baz=198
USRK **Ussuriysk Ar.** 76.72 326 P P 06 54 55.9 -0.1
comp=Z,3.1nm,0.6s,baz=145,slow=4.3,SNR=6.7
comp=Z,3.1nm,0.6s
SII **Sitkinak Islan** 77.01 13 P P 06 54 57.0 -0.4
baz=204
R17L **Mt. Peulik Vol** 77.55 12 P P 06 55 00.3 0.0
baz=201
PLK4 **Peulik 4** 77.55 12 P P 06 55 00.3 -0.1
OHAK **Old Harbor** 77.82 14 P P 06 55 01.1 -0.6
comp=Z,19nm,1.5s
OHAK **Old Harbor** 77.82 14 P P 06 55 01.5 -0.2
baz=204
MONP2 **Monument Peak** 77.85 49 P P 06 55 03.8 +1.1
baz=239
ISA **Isabella, Lake** 77.86 46 P P 06 55 03.7 +1.2
R18K **Karluk** 77.88 13 P P 06 55 01.6 -0.4
baz=203
NJ2 **Nanjing** 78.03 309 eP P 06 55 05.8 +2.4
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
Q17K **Contact Creek** 78.23 12 P P 06 55 03.8 -0.2
baz=202
MDJ **Mudanjiang** 78.29 325 P P 06 55 05.8 +1.3
MDJ pmax pmax
comp=Z,25nm,1.0s
MDJ **Mudanjiang** 78.29 325 P P 06 55 04.2 -0.3
MDJ IAmb IAmb 06 55 06.8
comp=Z,17nm,0.8s
KDAK **Kodiak Island** 78.49 14 P P 06 55 05.2 -0.1
comp=Z,21nm,1.0s,baz=172,slow=19,SNR=6.8
comp=Z,21nm,1.0s
KDAK **Kodiak Island** 78.49 14 P P 06 55 05.7 +0.5
baz=205
Q18K **Katmai Hardscr** 78.76 12 P P 06 55 06.5 -0.4
baz=203
N14K **Kuskokwak Cree** 78.83 8 P P 06 55 07.5 +0.5
baz=196,SNR=5.6
P17K **Kvichak River** 79.00 11 P P 06 55 07.1 -0.9
baz=201
O16K **Kokwok River B** 79.08 10 P P 06 55 07.3 -1.0
O16K IAmb IAmb 06 55 08.0
comp=Z,28nm,1.2s
O16K **Kokwok River B** 79.08 10 P P 06 55 08.0 -0.4
baz=200
M13K **Dall Lake** 79.08 8 P P 06 55 09.2 +0.8
baz=194
N15K **Kwethluk River** 79.30 9 P P 06 55 09.7 +0.1
baz=198
P18K **Big Mountain,** 79.41 12 P P 06 55 09.8 -0.4
baz=202
O17K **Koliganek Bris** 79.42 11 P P 06 55 10.0 -0.2
baz=200
NVAR **Mina Array Bea** 79.47 44 P P 06 55 11.9 +0.6
comp=Z,1.2nm,0.8s,baz=225,slow=8.6,SNR=9.9
comp=Z,1.2nm,0.8s
M14K **Bethel** 79.59 8 P P 06 55 11.3 +0.3
M14K IAmb IAmb 06 55 28.6
comp=Z,20nm,1.3s
M14K **Bethel** 79.59 8 P P 06 55 11.4 +0.3
baz=196
M15K **Kasigluk River** 79.71 9 P P 06 55 11.9 +0.2
baz=197
N16K **Nishlik Lake** 79.80 10 P P 06 55 12.6 +0.3
baz=199
O18K **Koktuh Hills** 79.84 12 P P 06 55 12.4 -0.1
baz=202,SNR=7.0
214A **Organ Pipe Nat** 80.05 52 P P 06 55 15.4 +1.1
baz=241
L14K **Kuka Creek** 80.07 8 P P 06 55 14.1 +0.6
L14K IAmb IAmb 06 55 15.3
comp=Z,9.8nm,0.8s
L14K **Kuka Creek** 80.07 8 P P 06 55 14.3 +0.8
baz=195
N17K **Nushagak Hills** 80.11 10 IAmb IAmb 06 55 14.6
comp=Z,25nm,1.5s
N17K **Nushagak Hills** 80.11 10 P P 06 55 13.3 -0.6
baz=200
BNX **BinXian** 80.19 325 P P 06 55 15.4 +0.8
BNX pmax pmax
comp=Z,25nm,0.8s
M16K **Timber Creek** 80.29 9 IAmb IAmb 06 55 16.6
comp=Z,30nm,1.0s
M16K **Timber Creek** 80.29 9 P P 06 55 16.0 +1.2
baz=199,SNR=7.7
O19K **Port Alsworth** 80.33 12 P P 06 55 14.5 -0.4
O19K **Port Alsworth** 80.33 12 P P 06 55 14.6 -0.4
baz=203,SNR=6.8
J05D **Fort Rock, OR** 80.38 38 P P 06 55 17.2 +1.3
J05D IAmb IAmb 06 55 17.9
comp=Z,4.9nm,0.5s
N18K **Kilae Creek** 80.48 11 P P 06 55 15.4 -0.4
baz=202
L15K **Ungalak Mounta** 80.55 8 P P 06 55 16.7 +0.6
baz=196
BRSE **Bradley Lake S** 80.67 14 P P 06 55 16.7 -0.1
baz=206
L16K **Owhat River** 80.86 9 IAmb IAmb 06 55 19.2
comp=Z,17nm,1.0s
L16K **Owhat River** 80.86 9 P P 06 55 18.2 +0.5
baz=198,SNR=8.7
N19K **Bonanza Creek** 80.87 12 P P 06 55 17.6 -0.3
baz=203
M17K **Holitna River** 80.89 10 P P 06 55 18.9 +1.0
baz=200,SNR=7.8
SMAI **San Martin Ant** 81.05 159 P P 06 55 19.8 +1.1
SMAI IAmb IAmb 06 55 22.2
comp=Z,10nm,0.7s
PRN **Pahroc Range** 81.12 46 P P 06 55 20.8 +1.0
K15K **Wolf Creek Mou** 81.14 8 P P 06 55 19.8 +0.6
K15K **Wolf Creek Mou** 81.14 8 P P 06 55 20.0 +0.9
baz=196,SNR=13
R11B **Troy Canyon, C** 81.24 45 P P 06 55 20.1 -0.4
baz=239
M18K **Stony River** 81.25 11 P P 06 55 19.9 +0.2
baz=202
SEW **Seward** 81.29 14 P P 06 55 20.2 +0.3
J14K **Nanvaranak Lak** 81.33 7 P P 06 55 20.4 +0.3
baz=194
L17K **Donlin** 81.44 9 P P 06 55 21.9 +1.1
baz=199,SNR=12
N20K **Mount Spurr** 81.67 12 P P 06 55 21.2 -0.9
baz=205
SPCR **Spurr Chakacha** 81.67 12 P P 06 55 20.9 -1.1
baz=205
GAMB **Gambell** 81.68 3 P P 06 55 22.4 +0.5
baz=186
SPU **Mount Spurr** 81.69 13 P P 06 55 20.7 -1.4
SPU IAmb IAmb 06 55 23.0
comp=Z,9.2nm,1.0s
P23K **Montague Islan** 81.69 15 P P 06 55 22.3 +0.2
baz=210
TUC **Tucson** 81.73 52 P P 06 55 22.9 -0.1
TUC **Tucson** 81.73 52 P P 06 55 24.2 +1.2
baz=243
L18K **Granite Mounta** 81.78 10 P P 06 55 23.1 +0.7
L18K IAmb IAmb 06 55 24.1
comp=Z,22nm,1.1s
L18K **Granite Mounta** 81.78 10 P P 06 55 23.2 +0.8
baz=201,SNR=9.9
I07A **Izee** 81.86 39 P P 06 55 23.9 +0.4
M19K **Big River Lodg** 81.89 11 P P 06 55 22.9 -0.2
baz=203
K17K **Iditarod** 82.00 9 IAmb IAmb 06 55 24.5
comp=Z,11nm,1.0s
K17K **Iditarod** 82.00 9 P P 06 55 23.7 +0.2
baz=199
BELA **Belgrano 2** 82.06 173 P P 06 55 23.8 -0.1
L19K **White Mountain** 82.07 11 IAmb IAmb 06 55 25.7
comp=Z,8.9nm,0.9s
L19K **White Mountain** 82.07 11 P P 06 55 24.9 +1.0
baz=202,SNR=5.9
RC01 **Rabbit Creek A** 82.11 14 P P 06 55 23.6 -0.6
baz=207
M20K **Styx River** 82.11 12 P P 06 55 23.7 -0.6
baz=204
LCMT **Little Creek M** 82.17 47 P P 06 55 25.2 -0.1
J16K **Anvik River** 82.21 8 P P 06 55 25.3 +0.7
J16K IAmb IAmb 06 55 26.2
comp=Z,19nm,0.8s
J16K **Anvik River** 82.21 8 P P 06 55 25.4 +0.7
baz=197,SNR=6.9
SUA **Susitna One** 82.22 13 P P 06 55 24.7 -0.1
baz=206,SNR=5.5
PWL **Port Wells** 82.22 14 P P 06 55 23.7 -1.1
baz=209
CCUT **Cedar City** 82.35 47 P P 06 55 27.7 +1.4
319A **Douglas** 82.45 54 IAmb IAmb 06 55 29.3
comp=Z,9.6nm,0.9s
PSUT **Pine Spring** 82.50 46 P P 06 55 26.0 -1.0
L20K **Farewell, AK** 82.52 11 P P 06 55 26.4 +0.1
baz=203
SKT **Skwentna** 82.52 12 P P 06 55 25.3 -0.9
baz=206
J17K **VABM Dome** 82.53 9 IAmb IAmb 06 55 27.6
comp=Z,9.9nm,0.8s
J17K **VABM Dome** 82.53 9 P P 06 55 26.8 +0.6
baz=198,SNR=5.4
U15A **North Rim** 82.56 48 P P 06 55 27.0 -0.4
CRAG **Craig** 82.59 24 P P 06 55 27.0 +0.3
baz=223
M22K **Willow** 82.61 13 P P 06 55 26.7 0.0
baz=207
KNK **Knik Glacier** 82.68 14 P P 06 55 26.7 -0.4
baz=208
PMR **Palmer** 82.69 14 P P 06 55 26.1 -0.9
comp=Z,15nm,1.7s
PMR **Palmer** 82.69 14 P P 06 55 26.5 -0.5
baz=208
I17K **Unalakleet** 82.78 8 P P 06 55 27.8 +0.3
baz=197
WUAZ **Wupatki** 82.78 49 P P 06 55 29.3 +0.9
G08A **Pilot Rock** 82.86 38 P P 06 55 28.7 +0.1
GHO **Glory Hole Cre** 82.89 14 P P 06 55 27.6 -0.6
J18K **Innoko River** 82.95 10 P P 06 55 28.8 +0.4
baz=201,SNR=7.0
HEH **HeiHe** 83.02 328 eP P 06 55 29.3 +0.3
HEH pmax pmax
comp=Z,8.0nm,1.0s
SML **Sawmill** 83.06 14 P P 06 55 28.8 -0.2
baz=209
M23K **Glacier View** 83.19 14 P P 06 55 29.1 -0.5
baz=209
BMRM **Bremner River** 83.24 16 P P 06 55 29.9 0.0
baz=212
K20K **Telida** 83.29 11 P P 06 55 30.1 -0.1
K20K IAmb IAmb 06 55 30.8
comp=Z,20nm,0.9s
K20K **Telida** 83.29 11 P P 06 55 30.1 -0.1
baz=203,SNR=14
SCM **Sheep Creek Mo** 83.31 14 P P 06 55 29.9 -0.5
SCM **Sheep Creek Mo** 83.31 14 P P 06 55 30.2 -0.2
baz=210
S31K **Pelican** 83.33 21 P P 06 55 30.6 +0.3
baz=220
KLU **Klutina** 83.36 15 P P 06 55 31.2 +0.6
baz=211
CRQE **Cirque** 83.46 17 P P 06 55 31.4 +0.3
baz=214
G15K **Niukluk** 83.47 6 P P 06 55 31.2 +0.3
baz=194
S32K **Killisnoo** 83.53 22 P P 06 55 32.0 +0.6
baz=221
WRAK **Wrangell Islan** 83.58 24 P P 06 55 31.3 -0.4
baz=224
J19K **Poorman** 83.62 10 P P 06 55 32.0 +0.3
J19K IAmb IAmb 06 55 32.8
comp=Z,9.7nm,1.0s
J19K **Poorman** 83.62 10 P P 06 55 32.1 +0.3
baz=202,SNR=5.6
PNL **Peninsula** 83.64 19 P P 06 55 32.4 +0.5
baz=217
TNA **Tin City** 83.69 4 P P 06 55 32.2 +0.2
baz=190
F14K **Arctic Creek** 83.73 5 P P 06 55 32.5 +0.3
baz=192
N25K **Chitina, Valde** 83.78 16 P P 06 55 32.6 -0.1
baz=212,SNR=6.7
W18A **Petrified Fore** 83.78 50 P P 06 55 32.6 -0.9
baz=243
M24K **Tolsona, Glenn** 83.82 15 P P 06 55 32.9 +0.1
baz=211
GLB **Gilahina Butte** 83.85 16 P P 06 55 32.6 -0.4
GLB IAmb IAmb 06 55 33.4
comp=Z,25nm,1.2s
WAT6 **Susitna Watana** 83.87 14 P P 06 55 32.7 -0.5
baz=209,SNR=11
WAT1 **Susitna Watana** 83.91 13 P P 06 55 33.0 -0.2
baz=208
LYN **LuoYang** 83.92 309 P P 06 55 35.8 +1.9
LYN pmax pmax
comp=Z,15nm,1.1s
MCARA **McCarthy VSAT** 84.01 16 P P 06 55 34.1 +0.4
baz=214
G16K **Koyuk River** 84.03 7 P P 06 55 34.1 +0.4
baz=195
J20K **Nowinta River** 84.04 10 IAmb IAmb 06 55 34.5
comp=Z,14nm,0.8s
J20K **Nowinta River** 84.04 10 P P 06 55 34.0 +0.2
baz=203,SNR=11
F15K **North Star Dit** 84.10 6 P P 06 55 34.2 +0.2
baz=193
CTG **Chitna Glacier** 84.12 17 P P 06 55 34.4 -0.1
baz=215
P29M **Windy Craggy** 84.13 19 IAmb IAmb 06 55 35.6
comp=Z,11nm,1.1s
P29M **Windy Craggy** 84.13 19 P P 06 55 34.6 +0.2
baz=218
GCSA **Galena City Sc** 84.13 9 P P 06 55 34.6 +0.4
baz=200
R32K **Eaglecrest** 84.16 22 P P 06 55 34.5 0.0
baz=221
O28M **Mount Upton** 84.29 18 P P 06 55 35.5 0.0
baz=216,SNR=5.7
HARP **HAARP** 84.32 15 P P 06 55 35.1 -0.1
baz=212
RND **Reindeer** 84.36 13 P P 06 55 35.0 -0.5
DHY **Denali Highway** 84.39 14 P P 06 55 34.9 -0.8
DHY IAmb IAmb 06 55 36.0
comp=Z,13nm,1.2s
DHY **Denali Highway** 84.39 14 P P 06 55 34.7 -1.1
baz=209,SNR=5.9
O29M **Mount Kennedy** 84.40 19 P P 06 55 35.8 0.0
baz=218
B08A **Colville Reser** 84.40 35 P P 06 55 35.9 0.0
PLBC **Pleasant Camp** 84.43 20 P P 06 55 36.2 +0.4
baz=220
BPAW **Bear Paw Mtn.** 84.54 12 P P 06 55 35.1 -1.2
baz=206
I20K **Naaghedeneel** 84.55 10 P P 06 55 36.5 +0.3
baz=203
MCK **McKinley** 84.63 13 P P 06 55 36.2 -0.5
baz=208,SNR=7.3
HLID **Hailey** 84.68 41 P P 06 55 39.5 +1.8
HLID **Hailey** 84.68 41 P P 06 55 38.5 +0.9
baz=239
PAX **Paxson** 84.74 14 P P 06 55 36.9 -0.5
baz=211
P30M **Million Dollar** 84.76 19 P P 06 55 38.2 +0.7
baz=219
SKAG **Skagway** 84.78 20 P P 06 55 38.3 +0.8
SKAG IAmb IAmb 06 55 39.4
comp=Z,13nm,1.2s
SKAG **Skagway** 84.78 20 P P 06 55 38.3 +0.8
baz=221
T35M **Bob Quinn** 84.80 24 P P 06 55 38.6 +0.9
baz=225
YUK8 **Steele Glacier** 84.83 18 P P 06 55 38.4 +0.3
baz=216
M26K **Nabesna, AK** 84.87 16 IAmb IAmb 06 55 39.3
comp=Z,22nm,1.1s
M26K **Nabesna, AK** 84.87 16 P P 06 55 38.1 +0.1
baz=214,SNR=9.7
H19K **Roundabout Mou** 84.93 9 P P 06 55 38.4 +0.4
baz=201
G18K **Tagagawik** 84.96 8 P P 06 55 37.5 -0.8
baz=199
YUK3 **Moose Creek** 85.03 17 P P 06 55 39.3 +0.3
baz=216,SNR=5.7
S34M **Telegraph Cree** 85.12 23 P P 06 55 40.4 +1.2
S34M IAmb IAmb 06 55 40.9
comp=Z,17nm,1.2s
S34M **Telegraph Cree** 85.12 23 P P 06 55 39.7 +0.5
baz=224,SNR=8.1
M27K **Edge Creek, AK** 85.12 16 P P 06 55 39.8 +0.5
M27K **Edge Creek, AK** 85.12 16 P P 06 55 39.6 +0.3
baz=214,SNR=7.8
H20K **Anotleneega Mo** 85.14 10 P P 06 55 39.4 +0.3
baz=202
YUK4 **Talbot Arm** 85.20 18 P P 06 55 39.8 0.0
baz=218
L26K **Log Cabin Wild** 85.30 15 P P 06 55 40.8 +0.7
L26K IAmb IAmb 06 55 40.8
comp=Z,9.0nm,1.1s
L26K **Log Cabin Wild** 85.30 15 P P 06 55 40.3 +0.3
baz=213
I21K **Tanana** 85.34 11 IAmb IAmb 06 55 41.0
comp=Z,8.5nm,0.9s
I21K **Tanana** 85.34 11 P P 06 55 40.1 0.0
baz=205
G19K **Purcell Mounta** 85.41 9 IAmb IAmb 06 55 42.3
comp=Z,4.0nm,0.7s
G19K **Purcell Mounta** 85.41 9 P P 06 55 40.3 -0.1
baz=200
P32M **Atlin** 85.42 21 P P 06 55 40.9 +0.2
P32M IAmb IAmb 06 55 41.6
comp=Z,5.9nm,0.9s
P32M **Atlin** 85.42 21 P P 06 55 40.9 +0.2
baz=222
MLY **Manley** 85.43 11 P P 06 55 39.8 -0.8
MLY IAmb IAmb 06 55 40.9
comp=Z,4.7nm,0.8s
MLY **Manley** 85.43 11 P P 06 55 39.7 -1.0
baz=206,SNR=5.9
WRH **Wood River Hil** 85.46 13 P P 06 55 40.1 -0.6
WRH IAmb IAmb 06 55 41.3
comp=Z,18nm,1.0s
Q32M **Nakina River** 85.46 22 P P 06 55 41.6 +0.4
Q32M IAmb IAmb 06 55 42.4
comp=Z,14nm,1.4s
Q32M **Nakina River** 85.46 22 P P 06 55 41.7 +0.6
baz=223
O30N **Mendenhall** 85.53 19 IAmb IAmb 06 55 42.4
comp=Z,15nm,1.4s
O30N **Mendenhall** 85.53 19 P P 06 55 41.5 +0.3
baz=220,SNR=6.2

RIDG Independent Ri 85.54 14 IAmb IAmb 06 55 41.7
comp=Z,14nm,1.0s
RIDG Independent Ri 85.54 14 P P 06 55 41.1 -0.1
baz=212,SNR=5.3
VHRN Van Horn 85.54 56 P P 06 55 43.6 +1.4
NEW Newport 85.57 36 P P 06 55 41.6 -0.1
comp=Z,0.9nm,0.6s,baz=270,slow=5.1,SNR=2.2
comp=Z,0.9nm,0.6s
MNTX Cornudas Mount 85.60 55 P P 06 55 43.3 +1.1
baz=246
H21K Melozitna Rive 85.63 10 P P 06 55 41.7 +0.2
H21K IAmb IAmb 06 55 44.1
comp=Z,15nm,1.5s
H21K Melozitna Rive 85.63 10 P P 06 55 41.5 0.0
baz=204,SNR=6.4
HDA Harding Lake 85.64 13 P P 06 55 41.3 -0.4
HDA IAmb IAmb 06 55 41.7
comp=Z,12nm,0.8s
HDA Harding Lake 85.64 13 P P 06 55 41.2 -0.4
baz=210,SNR=9.4
CCB Clear Creek Bu 85.67 13 P P 06 55 41.0 -0.8
L27K Beaver Creek, 85.72 16 P P 06 55 42.2 +0.1
baz=215
E17K Hotham Inlet 85.72 6 P P 06 55 41.5 -0.5
baz=196
N30M Aishikik Lake 85.76 19 P P 06 55 42.3 0.0
baz=219
IMAR Indian Mountai 85.77 10 P P 06 55 41.8 -0.4
I23K Minto, Yukon-K 85.80 12 P P 06 55 41.9 -0.4
I23K IAmb IAmb 06 55 43.5
comp=Z,5.4nm,0.9s
I23K Minto, Yukon-K 85.80 12 P P 06 55 42.4 +0.1
baz=208
WHY Whitehorse 85.83 20 P P 06 55 42.6 -0.2
baz=221
MDM Murphy Dome 85.86 12 P P 06 55 41.1 -1.5
MDM IAmb IAmb 06 55 42.4
comp=Z,10nm,0.9s
COLA College 85.86 13 P P 06 55 42.8 +0.2
comp=Z,7.1nm,1.0s
COLA College 85.86 13 P P 06 55 41.9 -0.7
COLA IAmb IAmb 06 55 42.4
comp=Z,12nm,0.8s
COLA College 85.86 13 P P 06 55 42.2 -0.4
baz=209
DLBC Dease Lake 85.91 23 P P 06 55 43.5 +0.4
comp=Z,1.2nm,0.7s,baz=211,slow=5.9,SNR=3.2
comp=Z,1.2nm,0.7s
DLBC Dease Lake 85.91 23 P P 06 55 44.2 +1.1
baz=225
SCRK Sand Creek 85.95 14 P P 06 55 43.3 +0.1
SCRK IAmb IAmb 06 55 43.9
comp=Z,5.9nm,1.0s
SCRK Sand Creek 85.95 14 P P 06 55 43.4 +0.1
baz=212
IL31 85.97 13 P P 06 55 42.3 -0.8
IL31 IAmb IAmb 06 55 43.0
comp=Z,11nm,1.1s
ILAR Eielson Array 85.97 13 P P 06 55 42.4 -0.8
ILAR Eielson Array 85.97 13 P P 06 55 42.0 -1.2
comp=Z,3.4nm,0.4s,baz=222,slow=5.4,SNR=80
comp=Z,3.4nm,0.4s
TX31 Lajitas Ar. Si 86.02 58 P P 06 55 45.8 +1.4
TX31 IAmb IAmb 06 55 46.9
comp=Z,8.2nm,1.0s
TXAR Lajitas Array 86.02 58 P P 06 55 45.6 +1.3
TXAR Lajitas Array 86.02 58 P P 06 55 45.8 +1.5
comp=Z,4.7nm,0.8s,baz=224,slow=5.8,SNR=48
comp=Z,4.7nm,0.8s
H22K Ishtalitna Cre 86.09 11 P P 06 55 43.4 -0.4
baz=206
ANMO Albuquerque 86.13 52 P P 06 55 45.8 +0.9
ANMO Albuquerque 86.13 52 P P 06 55 45.2 +0.3
baz=245
M29M Somme Creek 86.13 17 P P 06 55 43.9 -0.3
M29M Somme Creek 86.13 17 P P 06 55 44.1 0.0
baz=218
POKR Poker Flat Res 86.16 13 P P 06 55 43.2 -0.9
POKR IAmb IAmb 06 55 43.7
comp=Z,14nm,1.1s
POKR Poker Flat Res 86.16 13 P P 06 55 43.1 -0.9
baz=209
J25K Salcha River, 86.17 14 P P 06 55 43.9 -0.3
J25K IAmb IAmb 06 55 45.2
comp=Z,4.7nm,0.6s
J25K Salcha River, 86.17 14 P P 06 55 43.9 -0.3
baz=211,SNR=8.2
N31M Braeburn, Yuko 86.18 19 P P 06 55 44.3 0.0
N31M IAmb IAmb 06 55 45.4
comp=Z,6.1nm,0.9s
N31M Braeburn, Yuko 86.18 19 P P 06 55 44.5 +0.3
baz=220
E18K Tukpahlearik C 86.19 7 P P 06 55 44.0 -0.2
E18K IAmb IAmb 06 55 45.4
comp=Z,5.8nm,0.9s
E18K Tukpahlearik C 86.19 7 P P 06 55 43.9 -0.2
baz=197
P33M Teslin, Yukon 86.19 21 P P 06 55 44.2 -0.2
P33M Teslin, Yukon 86.19 21 P P 06 55 44.0 -0.4
baz=223
D17K Noatak River 86.19 6 P P 06 55 44.7 +0.6
baz=194
R33M Jennings River 86.24 22 IAmb IAmb 06 55 46.3
comp=Z,7.9nm,1.1s
R33M Jennings River 86.24 22 P P 06 55 45.3 +0.5
baz=224,SNR=5.5
G21K Allakaket 86.30 10 P P 06 55 44.2 -0.5
G21K IAmb IAmb 06 55 45.6
comp=Z,7.2nm,0.8s
G21K Allakaket 86.30 10 P P 06 55 44.4 -0.3
baz=204
XAN Xi'an 86.35 307 ⇑P P 06 55 48.3 +2.5
XAN pmax pmax
comp=Z,12nm,1.0s
H23K Yukon River 86.37 11 P P 06 55 44.1 -1.0
baz=207
ALPN Alpine 86.45 57 IAmb IAmb 06 55 49.1
comp=Z,8.8nm,1.5s
K27K Chicken 86.45 15 P P 06 55 45.7 +0.3
K27K Chicken 86.45 15 P P 06 55 45.9 +0.4
baz=214
F20K Avaraart Lake 86.46 9 P P 06 55 44.9 -0.5
F20K Avaraart Lake 86.46 9 P P 06 55 44.9 -0.5
baz=202
J26L Joseph Creek 86.49 14 P P 06 55 45.8 +0.1
J26L IAmb IAmb 06 55 46.8
comp=Z,11nm,1.1s
J26L Joseph Creek 86.49 14 P P 06 55 46.0 +0.2
baz=213,SNR=8.2
E19K Redstone River 86.63 8 IAmb IAmb 06 55 46.8
comp=Z,8.1nm,0.7s
E19K Redstone River 86.63 8 P P 06 55 46.0 -0.3
baz=200,SNR=8.8
H24K Noodor Dome 86.70 12 P P 06 55 45.2 -1.5
baz=209
N32M Quiet Lake 86.79 20 IAmb IAmb 06 55 49.2
comp=Z,15nm,1.4s
N32M Quiet Lake 86.79 20 P P 06 55 47.4 +0.2
baz=223
PRP Porcupine Dome 86.91 13 P P 06 55 47.3 -0.5
baz=211
C17K DeLong Mountai 86.94 6 P P 06 55 47.1 -0.6
baz=194
F21K Alatna River 86.95 9 P P 06 55 47.0 -0.8
F21K Alatna River 86.95 9 P P 06 55 47.6 -0.2
baz=204
G22K Bettles 87.00 10 P P 06 55 48.1 +0.1
baz=205
IMW Indian Meadow 87.03 42 P P 06 55 47.6 -1.5
S22A 4UR Ranch, Cre 87.04 49 P P 06 55 49.5 +0.2
baz=244
G23K Bananza Creek 87.07 11 P P 06 55 48.7 +0.3
baz=207
M31M Drury Creek, Y 87.16 19 P P 06 55 48.3 -0.6
baz=221
DAWY Dawson 87.17 16 P P 06 55 47.9 -1.1
DAWY IAmb IAmb 06 55 49.9
comp=Z,8.0nm,1.3s
DAWY Dawson 87.17 16 P P 06 55 48.5 -0.4
baz=217,SNR=5.1
I26K Coal Creek Min 87.26 14 P P 06 55 49.0 -0.2
I26K IAmb IAmb 06 55 50.0
comp=Z,4.8nm,1.0s
I26K Coal Creek Min 87.26 14 P P 06 55 48.7 -0.5
baz=213
EGAK Eagle 87.30 15 P P 06 55 49.1 -0.3
EGAK Eagle 87.30 15 P P 06 55 48.8 -0.6
baz=215
C18K Utukok River 87.30 6 P P 06 55 49.3 -0.1
baz=196
HHC Hu-ho-hao-te 87.37 314 eP PKiKP 07 01 01.5 +10
HHC Hu-ho-hao-te 87.37 314 eP P 06 55 49.1 -1.4
HHC pmax pmax
comp=Z,12nm,0.7s
HHC pmax pmax
comp=Z,140nm,6.6s
BW06 Boulder Array 87.40 43 P P 06 55 50.9 +0.2
baz=242
PD31 Pinedale Array 87.40 43 P P 06 55 51.6 +0.8
PDAR Pinedale Array 87.40 43 P P 06 55 51.0 +0.2
PDAR Pinedale Array 87.40 43 P P 06 55 51.3 +0.6
comp=Z,1.3nm,0.6s,baz=216,slow=3.4,SNR=18
comp=Z,1.3nm,0.6s
BOZ Bozeman (W) 87.42 40 P P 06 55 51.0 +0.3
baz=241
F22K John River 87.42 10 P P 06 55 50.2 +0.2
baz=205
H25L Birch Creek 87.50 13 P P 06 55 49.2 -1.1
baz=211
SAND Sanderson 87.50 58 P P 06 55 51.8 +0.5
SAND IAmb IAmb 06 55 53.4
comp=Z,5.3nm,1.2s
H17A Grant Village 87.50 42 P P 06 55 51.8 +0.6
baz=242
K29M Barlow Dome 87.50 17 IAmb IAmb 06 55 51.7
comp=Z,9.5nm,1.3s
K29M Barlow Dome 87.50 17 P P 06 55 51.1 +0.5
baz=218
D19K Kuna River 87.50 7 IAmb IAmb 06 55 50.7
comp=Z,8.1nm,0.8s
D19K Kuna River 87.50 7 P P 06 55 49.8 -0.6
baz=199
FARO Faro, Yukon 87.50 19 P P 06 55 49.9 -0.6
baz=222
COLD Coldfoot 87.50 11 P P 06 55 50.6 +0.2
baz=207
E20K Nigu River 87.52 8 P P 06 55 50.4 -0.1
baz=201,SNR=12
WTLY Watson Lake, Y 87.53 22 P P 06 55 50.9 +0.3
baz=226
G24K Hadweenzic Riv 87.54 12 P P 06 55 50.2 -0.4
baz=209
G25K Bearman Lake 87.87 12 P P 06 55 51.9 -0.1
baz=210
I27K Kandik River 87.87 14 P P 06 55 51.3 -0.8
baz=215
D20K Etivluk River 87.90 8 P P 06 55 52.1 -0.1
baz=201
C19K Lookout Ridge 87.91 7 P P 06 55 52.0 -0.3
baz=198
B18K Kokolik River 87.93 6 P P 06 55 52.0 -0.3
baz=196
E21K Killik River 88.00 9 IAmb IAmb 06 55 53.0
comp=Z,5.1nm,0.8s
E21K Killik River 88.00 9 P P 06 55 52.2 -0.5
baz=203
TOAD Toad River Com 88.03 25 P P 06 55 53.1 +0.1
baz=230,SNR=6.9
E22K Anaktuvuk Pass 88.05 10 P P 06 55 52.5 -0.4
E22K IAmb IAmb 06 55 53.5
comp=Z,9.6nm,0.9s
E22K Anaktuvuk Pass 88.05 10 P P 06 55 53.0 0.0
baz=205
LIRD Liard River Hi 88.06 24 P P 06 55 53.4 +0.2
baz=229
I28M Miner Creek 88.15 15 P P 06 55 53.0 -0.6
I28M Miner Creek 88.15 15 P P 06 55 53.4 -0.1
baz=216
F24K Squaw Lake 88.18 11 P P 06 55 53.1 -0.4
F24K IAmb IAmb 06 55 54.4
comp=Z,7.6nm,0.8s
F24K Squaw Lake 88.18 11 P P 06 55 53.6 0.0
baz=209
E23K Chandalar 88.35 10 IAmb IAmb 06 55 55.1
comp=Z,7.3nm,0.8s
E23K Chandalar 88.35 10 P P 06 55 54.4 0.0
baz=207
J30M Hart River 88.40 17 P P 06 55 54.7 -0.1
baz=220
H27K Steamboat Moun 88.41 14 P P 06 55 54.6 0.0
baz=215
I29M Ogilvie Camp, 88.49 16 P P 06 55 54.6 -0.4
I29M IAmb IAmb 06 55 55.4
comp=Z,4.9nm,1.1s
I29M Ogilvie Camp, 88.49 16 P P 06 55 55.0 0.0
baz=218
G26K Porcupine Rive 88.51 13 P P 06 55 55.2 +0.2
baz=213
DRIO Del Rio 88.51 59 IAmb IAmb 06 55 58.2
comp=Z,11nm,0.9s
C21K Knifeblade Rid 88.55 8 P P 06 55 55.4 +0.1
baz=202,SNR=7.3
E24K Your Creek 88.56 11 P P 06 55 55.5 +0.1
E24K IAmb IAmb 06 56 06.5
comp=Z,3.5nm,0.8s
E24K Your Creek 88.56 11 P P 06 55 54.8 -0.6
baz=208
D22K Ayikyak River 88.60 9 P P 06 55 55.6 +0.1
D22K Ayikyak River 88.60 9 P P 06 55 55.5 +0.1
baz=204
OZNA Ozona 88.66 57 IAmb IAmb 06 55 58.1
comp=Z,4.3nm,0.9s
F25K Christian Rive 88.67 12 IAmb IAmb 06 55 56.5
comp=Z,4.2nm,0.9s
F25K Christian Rive 88.67 12 P P 06 55 55.5 -0.4
baz=211
TGTN Hyland Airport 88.69 22 P P 06 55 55.8 -0.3
baz=227
BMAR Burnt Mountain 88.75 12 P P 06 55 56.6 +0.4
G27K Doyon Strip 88.85 14 P P 06 55 56.5 -0.2
G27K Doyon Strip 88.85 14 P P 06 55 56.2 -0.5
baz=215
TOLK Toolik Lake Re 88.88 10 P P 06 55 56.5 -0.3
TOLK IAmb IAmb 06 55 57.4
comp=Z,3.7nm,0.8s
TOLK Toolik Lake Re 88.88 10 P P 06 55 56.7 -0.1
baz=207
I30M Mount Dempster 88.89 16 P P 06 55 57.0 -0.1
I30M IAmb IAmb 06 55 57.6
comp=Z,4.6nm,0.9s
I30M Mount Dempster 88.89 16 P P 06 55 56.6 -0.4
baz=220,SNR=5.3
CMAR Chiang Mai Arr 88.95 290 P P 06 55 58.5 +0.3
comp=Z,1.0nm,0.3s,baz=119,slow=2.5,SNR=6.0
comp=Z,1.0nm,0.3s
D23K Nanushuk River 88.99 10 IAmb IAmb 06 55 58.3
comp=Z,9.9nm,0.8s
D23K Nanushuk River 88.99 10 P P 06 55 57.8 +0.5
baz=206
B21K Ikpikpuk River 89.01 8 P P 06 55 57.1 -0.2
baz=202
B20K Meade River 89.05 7 P P 06 55 57.3 -0.2
baz=200
F26K Sheenjek River 89.06 12 P P 06 55 58.5 +0.8
baz=212
ELIB Princess Elisa 89.07 187 dP P 06 55 57.9 -0.1
comp=Z,4.1nm,0.8s
H29M Whitestone 89.15 15 P P 06 55 57.6 -0.5
H29M IAmb IAmb 06 55 59.3
comp=Z,7.9nm,0.9s
H29M Whitestone 89.15 15 P P 06 55 57.8 -0.3
baz=218
PZH PanZhiHua 89.23 298 P P 06 56 00.8 +1.2
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,4.8s
D24K Happy Valley 89.46 10 P P 06 55 59.2 -0.3
baz=208
JCT Junction City 89.56 58 P P 06 56 00.0 -0.8
baz=249
HNDO Hondo 89.64 59 IAmb IAmb 06 56 03.9
comp=Z,9.4nm,0.9s
EPYK Eagle Plains 89.69 16 P P 06 56 00.4 -0.2
EPYK IAmb IAmb 06 56 01.7
comp=Z,13nm,1.1s
EPYK Eagle Plains 89.69 16 P P 06 56 00.6 -0.1
baz=219,SNR=5.8
C23K Itkillik River 89.78 9 IAmb IAmb 06 56 01.4
comp=Z,9.3nm,0.8s
C23K Itkillik River 89.78 9 P P 06 56 01.2 +0.3
baz=206,SNR=6.0
G29M Pine Creek 89.79 15 IAmb IAmb 06 56 02.0
comp=Z,6.0nm,1.0s
G29M Pine Creek 89.79 15 P P 06 56 01.0 -0.1
baz=218
B22K Teshekpuk Lake 89.83 8 P P 06 56 01.2 +0.1
baz=204
F28M Old Crow 89.92 14 P P 06 56 01.4 -0.2
F28M IAmb IAmb 06 56 02.3
comp=Z,5.4nm,1.1s
F28M Old Crow 89.92 14 P P 06 56 01.6 0.0
baz=216
C24K Franklin Bluff 89.98 10 P P 06 56 02.0 +0.2
baz=208
E27K Coleen River 90.00 13 P P 06 56 01.9 -0.2
E27K Coleen River 90.00 13 P P 06 56 02.1 +0.1
baz=215
D25K Kavik River 90.03 11 IAmb IAmb 06 56 06.3
comp=Z,13nm,1.4s
D25K Kavik River 90.03 11 P P 06 56 01.9 -0.3
baz=210
TROLL Troll, Antarti 90.21 180 ⇑P P 06 56 02.8 -0.4
comp=Z,99nm,0.5s
G30M tAoh Zraii Nji 90.29 15 P P 06 56 03.1 -0.3
G30M tAoh Zraii Nji 90.29 15 P P 06 56 03.1 -0.3
baz=220,SNR=12
APMT Aspermont 90.33 55 P P 06 56 02.8 -1.5
APMT IAmb IAmb 06 56 05.8
comp=Z,2.8nm,0.7s
ABTX Abilene, Hawle 90.45 56 P P 06 56 04.2 -0.7
ABTX IAmb IAmb 06 56 06.2
comp=Z,6.1nm,0.9s
BRDY Brady 90.49 57 IAmb IAmb 06 56 07.2
comp=Z,5.5nm,1.3s
SNAA Sanae 90.50 179 ⇑P P 06 56 03.1 -1.4
comp=Z,20nm,0.5s
SNAA Sanae 90.50 179 P P 06 56 03.8 -0.7
comp=Z,1.2nm,0.8s,baz=202,slow=9.4,SNR=5.9
comp=Z,1.2nm,0.8s
VNA3 Neumayer Olymp 90.64 176 ⇑P P 06 56 04.8 -0.3
comp=Z,5.3nm,0.6s
G31M Satah River 90.74 16 P P 06 56 04.6 -0.8
G31M Satah River 90.74 16 P P 06 56 05.3 -0.1
baz=221,SNR=8.0
C27K Jago River 90.78 11 P P 06 56 05.7 +0.1
baz=213,SNR=6.1
E28M Babbage River 90.79 13 P P 06 56 05.2 -0.4
E28M IAmb IAmb 06 56 06.4
comp=Z,5.5nm,0.9s
E28M Babbage River 90.79 13 P P 06 56 05.8 +0.1
baz=217,SNR=8.4
C26K Camden Bay 90.81 11 P P 06 56 06.2 +0.6
baz=212,SNR=6.1
F30M Barrier River 90.88 15 P P 06 56 06.8 +0.7
baz=220
E29M Blow River 90.99 14 P P 06 56 06.8 +0.3
baz=218
D27M Malcolm River 91.01 13 P P 06 56 07.0 +0.3
D27M IAmb IAmb 06 56 08.6
comp=Z,7.4nm,1.4s
D27M Malcolm River 91.01 13 P P 06 56 07.0 +0.3
baz=215
PLCA Paso Flores 91.24 134 P P 06 56 09.2 +0.6
comp=Z,1.6nm,0.6s,baz=242,slow=5.7,SNR=7.4
comp=Z,1.6nm,0.6s
LAO LASA Array 91.26 41 P P 06 56 08.6 +0.2
baz=245
F31M Tsiigehtchic 91.27 16 P P 06 56 07.5 -0.3
baz=222
D28M Stokes Point 91.55 13 P P 06 56 08.9 -0.1
baz=217
INK Inuvik 91.97 15 P P 06 56 10.8 -0.3
INK IAmb IAmb 06 56 11.2
comp=Z,7.9nm,1.0s
INK Inuvik 91.97 15 P P 06 56 10.4 -0.6
comp=Z,7.3nm,0.9s,baz=191,slow=3.6,SNR=13
comp=Z,7.3nm,0.9s
INK Inuvik 91.97 15 P P 06 56 10.6 -0.4
baz=222
SONM Songino Array 93.65 319 P P 06 56 18.9 -0.6
comp=Z,0.8nm,0.5s,baz=108,slow=9.3,SNR=4.4
comp=Z,0.8nm,0.5s
YKA Yellowknife Ar 94.41 25 P P 06 56 21.4 -0.9
comp=Z,1.4nm,0.8s,baz=255,slow=5.0,SNR=4.7
comp=Z,1.4nm,0.8s
MKAR Makanchi Array 109.23 314 PKiKP PKiKP 07 01 28.4 -1.2
comp=Z,0.3nm,0.4s,baz=148,slow=0.6,SNR=6.9
BVAR Borovoye Array 116.94 321 PKP PKPdf 07 01 42.9 -1.2
comp=Z,1.0nm,0.4s,baz=108,slow=2.5,SNR=7.1
ARCES ARCESS Array B 126.42 350 PKP PKPdf 07 02 01.4 -0.4
comp=Z,3.2nm,0.7s,baz=39,slow=1.4,SNR=11
FINES FINESS Array B 133.29 344 PKhKP PKPpre 07 02 04.3
comp=Z,0.9nm,0.8s,baz=360,slow=26,SNR=1.5
FINES PKP PKPdf 07 02 14.6 -0.5
comp=Z,1.4nm,0.6s,baz=90,slow=1.9,SNR=2.3
FINES SKPbc SKPbc 07 04 56.7 +0.4
comp=Z,3.0nm,0.8s,baz=228,slow=4.9,SNR=4.5
NB2 NORSAR Subarra136.48 353 PKPdf PKPpre 07 02 12.0
comp=Z,0.8nm,0.5s,baz=14,slow=1.8
NOA NORSAR Array B136.48 353 PKhKP PKPpre 07 02 10.9
comp=Z,0.3nm,0.5s,baz=15,slow=3.2,SNR=1.7
NOA PKP PKPdf 07 02 20.5 -0.6
comp=Z,0.6nm,0.7s,baz=6.4,slow=4.0,SNR=3.8
HFS Hagfors 137.03 351 PKP PKPdf 07 02 22.6 +0.5
comp=Z,5.2nm,0.7s,baz=353,slow=11,SNR=4.1
AKASG Malin Array Be 140.66 332 PKhKP PKPpre 07 02 21.5
comp=Z,1.1nm,0.4s,baz=41,slow=3.8,SNR=8.5
INVG Invergeldie, C 141.41 5 eP PKPpre 07 02 24.5
LAWE Loch Awe, Argy 141.44 6 eP PKPpre 07 02 24.5
EKA Eskdalemuir Ar 142.56 5 PKhKP PKPpre 07 02 28.3
comp=Z,3.0nm,0.6s,baz=341,slow=2.8,SNR=18
EKA PKP PKPdf 07 02 32.2 -0.1
comp=Z,1.6nm,0.5s,baz=60,slow=2.8,SNR=4.6
NEWG New Galloway 142.69 6 eP PKPpre 07 02 27.6
GAL1 Galloway 142.89 6 eP PKPpre 07 02 28.8
EMID Edmundbyers 143.14 3 eP PKPab 07 02 30.2 -0.6
GAZ Gazimoy 143.42 309 PKPbc 07 02 32.7 -0.2
IOMK Kirk Michael 143.50 6 eP PKPab 07 02 31.5 -0.7
WIM Isle of Man 143.60 6 eP PKPab 07 02 31.9 -0.7
BNN Bunyan 143.75 312 PKPbc PKPbc 07 02 34.0 +0.1
MORS Morshin 144.11 335 PKP PKPbc 07 02 34.2 -0.3
KWP Kalwaria Pacla 144.17 336 ePKP PKPbc 07 02 34.6 -0.1
KWP Kalwaria Pacla 144.17 336 PKPbc PKPbc 07 02 34.7 0.0
KWP Kalwaria Pacla 144.17 336 PKP PKPab 07 02 34.9 0.0
STNU Starunia 144.19 334 PKP PKPbc 07 02 34.8 0.0
SHIU Shidnytsya 144.25 335 PKP PKPdf 07 02 35.5 +0.1
DSB Dublin 144.28 8 PKPbc PKPbc 07 02 34.4 -0.5
WPS Cemaes, Angles 144.36 6 eP PKPbc 07 02 34.3 -0.8
WME Myndd Eilian 144.38 6 eP PKPbc 07 02 34.4 -0.8
WLF1 Llynfaes 144.48 6 eP PKPbc 07 02 34.9 -0.6
LBWR Ladybower, Pea 144.58 3 eP PKPdf 07 02 35.3 -0.5
YLL Llanberis 144.65 6 eP PKPdf 07 02 35.4 -0.5
BUR08 Bucovina Ar. S 144.70 332 PKPbc 07 02 36.6 0.0
OJC Ojcow 144.72 340 ePKP PKPbc 07 02 36.4 0.0
OJC Ojcow 144.72 340 PKPbc 07 02 36.3 0.1
BURAR Bucovina Array 144.72 332 PKPab 07 02 37.1 0.0
BURAR Bucovina Array 144.72 332 ⇓P PKPab 07 02 37.6 +0.5
GHRR 144.81 328 ⇓P PKPab 07 02 38.6 +1.2
STNC Stoke 144.86 4 eP PKPbc 07 02 36.8 +0.1
TESR Tescani 144.86 330 ⇑P PKPab 07 02 37.7 +0.1
BR131 Keskin Array S 144.88 315 PKPbc 07 02 37.3 -0.1
BRTR Keskin Array B 144.88 315 PKPbc 07 02 37.3 -0.1
BRTR Keskin Array B 144.88 315 PKP PKPbc 07 02 37.1 -0.3
comp=Z,4.9nm,0.7s,baz=80,slow=1.8,SNR=18
KOLS Kolonicke sedl 144.91 336 ePKP PKPab 07 02 38.0 +0.3
KIRS Kirsehir-Merke 144.97 314 ⇑P PKPdf 07 02 35.2 -1.9
LLW Llanuwychllyn 144.98 6 eP PKPdf 07 02 36.3 -0.2
CFR Carcaliu 145.04 327 ⇑P PKPab 07 02 38.4 +0.1
TPGR Topolog 145.10 326 ⇑P PKPab 07 02 38.8 +0.2
ONPR Baraj Valea Uz 145.11 330 ⇑P PKPbc 07 02 38.0 +0.3
KSP Ksiaz 145.21 344 ePKP PKPab 07 02 38.3 -0.5
NIE Niedzica 145.23 338 ePKP PKPab 07 02 38.6 -0.4
CRVS Cervenica-Dubn 145.24 337 ePKP PKPab 07 02 38.7 -0.3
VRI Vrincioaia 145.28 329 ⇑P PKPab 07 02 38.9 -0.4
PLOR Plostina 145.33 329 ⇑P PKPdf 07 02 37.3 -0.1
HLM1 Long Mynd 145.38 5 eP PKPdf 07 02 36.7 -0.5
HARR Harsova 145.47 326 ⇑P PKPab 07 02 39.7 -0.3
OSTC Ostas 145.49 344 ⇑ePKP PKPab 07 02 39.9 0.0
TURR Turia 145.50 329 ⇑P PKPbc 07 02 39.3 +0.3
ARCR ARCALIA 145.50 332 ⇑P PKPab 07 02 40.2 +0.1
CHVC Chvalec 145.51 344 ⇑ePKP PKPbc 07 02 39.3 +0.5
COVR Voineasa-Covas 145.55 329 ⇑P PKPbc 07 02 39.5 +0.5
CLL Collm 145.57 347 PKPbc 07 02 38.8 0.0
CLL Collm 145.57 347 ⇑/PKPbc PKPbc 07 02 38.8 0.0
comp=Z,42nm,0.8s
OZUR 145.58 330 ⇑P PKPab 07 02 40.4 -0.1
UPC Upice 145.59 344 ⇑ePKP PKPbc 07 02 39.4 +0.4
DPC Dobruska-Polom 145.65 343 ⇑ePKP PKPab 07 02 40.0 -0.6
LANS Liptovska Anna 145.74 339 ePKP PKPab 07 02 40.9 -0.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RSBS** | **Rosebush, Pemb** | **145.75** | **7** | *e*P | | **PKPdf** | **07 02 37.3** | **-0.5** |
| **BRG** | **Berggiesshubel** | **145.77 346** | | *e*PKP | | **PKPbc** | **07 02 39.9** | **+0.5** |
| BRG | | | | Amp | | | 07 02 40.7 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.77 346** | | P | | **PKiKP** | **07 02 47.2** | **+4.9** |
| BRG | | | | Amp | | | 07 02 47.8 | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **KRLC** | **Kraliky** | **145.77 343** | ⇑ | *e*PKP | | **PKPbc** | **07 02 40.0** | **+0.4** |
| **MORC** | **Moravsky Berou** | **145.81 342** | | | | **PKPbc** | **07 02 40.1** | **+0.4** |
| **MORC** | **Moravsky Berou** | **145.81 342** | | *e*PKP | | **PKPbc** | **07 02 39.6** | **-0.1** |
| **MORC** | **Moravsky Berou** | **145.81 342** | ⇑ | P | | **PKPbc** | **07 02 39.9** | **+0.1** |
| **DOPR** | **Dopca** | **145.86 330** | ⇑ | P | | **PKPbc** | **07 02 40.7** | **+0.7** |
| **ISR** | **Istrita** | **145.90 328** | ⇑ | P | | **PKPbc** | **07 02 39.7** | **-0.4** |
| **MLR** | **Muntele Rosu** | **145.93 329** | | | | **PKPbc** | **07 02 40.3** | **0.0** |
| **MLR** | **Muntele Rosu** | **145.93 329** | | PKPbc | | **PKPdf** | **07 02 39.1** | **+0.6** |
| | comp=Z,4.1nm,0.4s,baz=27,slow=3,1,SNR=9.0 | | | | | | | |
| **MLR** | **Muntele Rosu** | **145.93 329** | ⇑ | P | | **PKPbc** | **07 02 40.9** | **+0.6** |
| **PVCC** | **Panska Ves** | **145.94 345** | ⇑ | *e*PKP | | **PKPbc** | **07 02 40.7** | **+0.7** |
| **MONM** | **Monmouth** | **146.06 5** | | *e*P | | **PKPbc** | **07 02 39.9** | **-0.4** |
| **MDUB** | **Mudurnu** | **146.11 318** | | PKPbc | | **PKPbc** | **07 02 40.8** | **-0.1** |
| **CJR** | **Cluj-Napoca** | **146.12 332** | ⇑ | P | | **PKPdf** | **07 02 35.5** | **-3.3** |
| **HSKC** | **Hora Svate Kat** | **146.13 346** | ⇑ | *e*PKP | | **PKPbc** | **07 02 40.5** | **-0.1** |
| **MMAI** | **Mount Meron Ar** | **146.23 303** | | PKPbc | | **PKPbc** | **07 02 41.2** | **-0.2** |
| | comp=Z,3.2nm,0.5s,baz=75,slow=4.4,SNR=7.7 | | | | | | | |
| **DRGR** | | **146.44 333** | ⇓ | P | | **PKPbc** | **07 02 41.3** | **-0.3** |
| **PRU** | **Pruhonice** | **146.45 345** | ⇑ | *e*PKP | | **PKPbc** | **07 02 42.2** | **+0.8** |
| **GOPC** | **GO Pecny, Ondr** | **146.46 345** | ⇑ | *e*PKP | | **PKPbc** | **07 02 42.2** | **+0.7** |
| **SWN1** | **Swindon** | **146.46 4** | | *e*P | | **PKPbc** | **07 02 40.8** | **-0.5** |
| **VRAC** | **Vranov** | **146.51 342** | | *e*PKP | | **PKPbc** | **07 02 41.7** | **+0.1** |
| **VRAC** | **Vranov** | **146.51 342** | | PKPbc | | **PKPbc** | **07 02 41.9** | **+0.3** |
| | comp=Z,12nm,0.8s,baz=358,slow=3.2,SNR=9.0 | | | | | | | |
| **VRAC** | **Vranov** | **146.51 342** | ⇑ | P | | **PKPbc** | **07 02 42.6** | **+0.9** |
| **VYHS** | **Vyhne** | **146.52 339** | | *e*PKP | | **PKPbc** | **07 02 42.0** | **+0.3** |
| **JAVC** | **Velka Javorina** | **146.59 341** | | *e*PKP | | **PKiKP** | **07 02 43.1** | **-1.0** |
| **PSZ** | **Piszkesteto** | **146.64 337** | | | | **PKPbc** | **07 02 42.2** | **+0.1** |
| **PSZ** | **Piszkesteto** | **146.64 337** | ⇑ | P | | **PKPbc** | **07 02 42.2** | **+0.1** |
| **ARR** | **Arges** | **146.66 330** | ⇑ | P | | **PKiKP** | **07 02 43.8** | **-0.6** |
| **KRUC** | **Moravsky** | **146.79 342** | | *e*PKP | | **PKPbc** | **07 02 42.3** | **-0.1** |
| **BORA** | **Eskisehir** | **146.91 317** | | PKPbc | | **PKPbc** | **07 02 42.5** | **-0.6** |
| **ZVC** | **Zvikov** | **147.04 345** | | *e*PKP | | **PKPbc** | **07 02 43.8** | **+0.8** |
| **MEM** | **Membach** | **147.28 355** | | *d*PKPbc | | **PKPbc** | **07 02 43.9** | **+0.3** |
| **BTNL** | **Ternell** | **147.30 355** | | *d*PKPbc | | **PKPbc** | **07 02 43.6** | **-0.1** |
| **SIRR** | **Siria** | **147.30 334** | ⇑ | P | | **PKiKP** | **07 02 44.7** | **-0.9** |
| **BSTI** | **Sart Tilman** | **147.35 355** | | *d*PKPbc | | **PKPbc** | **07 02 44.0** | **+0.2** |
| **GRF** | **Grafenberg Arr** | **147.46 348** | | *e*PKP | | **PKPbc** | **07 02 44.5** | **+0.4** |
| | baz=17,slow=1.9 | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.48 345** | | | | **PKPbc** | **07 02 44.6** | **+0.3** |
| **KHC** | **Kasperske Hory** | **147.48 345** | ⇑ | *e*PKP | | **PKPbc** | **07 02 44.6** | **+0.3** |
| KHC | | | | *e*PKPAB | | **PKPab** | **07 02 49.0** | **+1.1** |
| **GZR** | **Gura Zlata** | **147.50 332** | ⇑ | P | | **PKPbc** | **07 02 44.1** | **-0.3** |
| **SURR** | **Surduc** | **147.51 333** | ⇑ | P | | **PKPbc** | **07 02 43.8** | **-0.6** |
| **BCLA** | **Clavier** | **147.53 356** | | *d*PKP | | **PKPbc** | **07 02 44.3** | **+0.1** |
| **BHOU** | **Houvegnez** | **147.54 355** | | *d*PKPbc | | **PKPbc** | **07 02 44.9** | **+0.6** |
| **BGES** | **Gesves** | **147.58 356** | | *d*PKP | | **PKPab** | **07 02 47.6** | **-0.6** |
| **CKRC** | **Cesky Krumlov** | **147.59 344** | ⇑ | *e*PKP | | **PKPbc** | **07 02 45.0** | **+0.5** |
| **BMRD** | **Maredsous** | **147.68 356** | | *d*PKPbc | | **PKPbc** | **07 02 44.4** | **-0.3** |
| **GEC2** | **GERESS Array S** | **147.72 345** | | PKPdf | | **PKPbc** | **07 02 40.6** | **-0.8** |
| GEC2 | | | | | | **PKPbc** | **07 02 45.4** | **+0.4** |
| GEC2 | | | | PKPab | | **PKPab** | **07 02 49.1** | **+0.2** |
| **GERES** | **GERESS Array B** | **147.72 345** | | | | **PKPbc** | **07 02 45.0** | **+0.1** |
| **GERES** | **GERESS Array B** | **147.72 345** | | PKPbc | | **PKPbc** | **07 02 45.0** | **+0.1** |
| | comp=Z,7.4nm,0.6s,baz=163,slow=7.2,SNR=29 | | | | | | | |
| **ELND** | **Elena** | **147.76 326** | ⇑ | P | | **PKPab** | **07 02 50.2** | **+1.0** |
| **BZS** | **Buzias** | **147.84 333** | ⇑ | P | | **PKPbc** | **07 02 44.5** | **-0.7** |
| **DOU** | **Dourbes** | **147.90 356** | | *d*PKPbc | | **PKPbc** | **07 02 45.3** | **+0.1** |
| **CONA** | **Conrad Observa** | **147.97 342** | | *i* PKP | | **PKiKP** | **07 02 46.3** | **-0.7** |
| | comp=Z,5.1nm,0.5s,SNR=10.0 | | | | | | | |
| CONA | | | | *i* PKP | | **PKPab** | **07 02 51.1** | **+1.1** |
| | comp=Z,8.5nm,0.6s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.04 341** | | *i* PKP | | **PKPbc** | **07 02 46.2** | **+0.5** |
| | comp=Z,6.5nm,0.6s,SNR=6.6 | | | | | | | |
| RONA | | | | *i* PKP | | **PKPab** | **07 02 51.0** | **+0.8** |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **HERR** | **Herculane** | **148.06 332** | ⇑ | P | | **PKPbc** | **07 02 45.5** | **-0.3** |
| **WLF** | **Walferdange** | **148.21 354** | | PKPbc | | **PKPbc** | **07 02 46.5** | **+0.5** |
| **WLF** | **Walferdange** | **148.21 354** | | *d*PKP | | **PKiKP** | **07 02 47.0** | **-0.4** |
| **MOA** | **Molln** | **148.49 344** | | *i* PKP | | **PKPbc** | **07 02 47.0** | **+0.2** |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| MOA | | | | *i* PKP | | **PKPab** | **07 02 52.5** | **+0.4** |
| | comp=Z,2.3nm,0.4s | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **148.54 337** | ⇑ | P | | **PKPbc** | **07 02 46.2** | **-0.7** |
| **ARSA** | **Arzberg** | **148.68 342** | | *i* PKP | | **PKPbc** | **07 02 47.3** | **0.0** |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| ARSA | | | | *i* PKP | | **PKPab** | **07 02 53.4** | **+0.6** |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **STU** | **Stuttgart** | **148.70 350** | | PKPdf | | **PKPdf** | **07 02 41.9** | **-1.0** |
| STU | | | | PKPbc | | **PKPbc** | **07 02 47.7** | **+0.4** |
| STU | | | | PKPab | | **PKPab** | **07 02 52.5** | **-0.4** |
| **JSA** | **Saint Aubin** | **148.74 5** | | *e*P | | **PKPbc** | **07 02 46.9** | **-0.5** |
| **BIOA** | **Bad Ischl, Aus** | **148.80 344** | | *i* PKP | | **PKPab** | **07 02 54.2** | **+0.9** |
| | comp=Z,9.7nm,0.4s | | | | | | | |
| **BFO** | **Black Forest** | **149.26 351** | | | | **PKPbc** | **07 02 48.3** | **-0.4** |
| **LESA** | **Schwarzleotal** | **149.29 345** | | *i* PKP | | **PKPbc** | **07 02 48.7** | **-0.2** |
| | comp=Z,4.4nm,0.3s | | | | | | | |
| LESA | | | | *i* PKP | | **PKPab** | **07 02 55.8** | **+0.4** |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| **SOKA** | **Soboth** | **149.34 342** | | *i* PKP | | **PKPbc** | **07 02 48.6** | **-0.4** |
| | comp=Z,2.8nm,0.5s,SNR=5.3 | | | | | | | |
| SOKA | | | | *i* PKP | | **PKPab** | **07 02 55.6** | **-0.1** |
| | comp=Z,3.3nm,0.4s | | | | | | | |
| **BOVS** | **Bovan** | **149.34 331** | ⇓ | P | | **PKPbc** | **07 02 48.2** | **-0.8** |
| **KBA** | **Koelnbreinsper** | **149.44 344** | | *i* PKP | | **PKPbc** | **07 02 48.8** | **-0.5** |
| | comp=Z,6.5nm,0.5s,SNR=5.6 | | | | | | | |
| KBA | | | | *i* PKP | | **PKPab** | **07 02 57.0** | **+0.8** |
| | comp=Z,8.9nm,0.6s | | | | | | | |
| **ECH** | **Echery** | **149.53 353** | | PKPdf | | **PKPdf** | **07 02 42.7** | **-1.5** |
| ECH | | | | | | **PKPbc** | **07 02 48.8** | **-0.6** |
| ECH | | | | PKPab | | **PKPab** | **07 02 55.9** | **-0.5** |
| **WATA** | **Walderalm** | **149.63 347** | | *i* PKP | | **PKPbc** | **07 02 49.6** | **-0.2** |
| | comp=Z,5.7nm,0.5s | | | | | | | |
| WATA | | | | *i* PKP | | **PKPab** | **07 02 56.4** | **-0.5** |
| | comp=Z,3.3nm,0.4s | | | | | | | |
| **OBKA** | **Obir** | **149.63 342** | | *i* PKiKP | | **PKiKP** | **07 02 51.2** | **+0.7** |
| | comp=Z,3.7nm,0.6s | | | | | | | |
| OBKA | | | | *i* PKP | | **PKPab** | **07 02 56.9** | **0.0** |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| **RETA** | **Reutte** | **149.66 348** | | *e*PKP | | **PKPab** | **07 02 57.1** | **+0.1** |
| | comp=Z,9.5nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.68 346** | | *i* PKP | | **PKPbc** | **07 02 50.0** | **0.0** |
| | comp=Z,9.4nm,0.3s,SNR=8.1 | | | | | | | |
| WTTA | | | | *i* PKP | | **PKPab** | **07 02 57.3** | **+0.1** |
| | comp=Z,15nm,0.6s | | | | | | | |
| **MOTA** | **Moosalm** | **149.72 347** | | *i* PKP | | **PKPbc** | **07 02 49.9** | **-0.1** |
| | comp=Z,3.0nm,0.4s | | | | | | | |
| MOTA | | | | *i* PKP | | **PKPab** | **07 02 56.8** | **-0.5** |
| | comp=Z,5.0nm,0.4s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.78 343** | | *i* PKP | | **PKPbc** | **07 02 49.5** | **-0.6** |
| | comp=Z,5.4nm,0.4s | | | | | | | |
| MYKA | | | | *i* PKP | | **PKPab** | **07 02 56.9** | **-0.6** |
| | comp=Z,8.1nm,0.6s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.82 347** | | *i* PKP | | **PKPbc** | **07 02 50.2** | **0.0** |
| | comp=Z,11nm,0.6s,SNR=5.4 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.96 345** | | *i* PKP | | **PKPbc** | **07 02 50.0** | **-0.5** |
| | comp=Z,14nm,0.6s,SNR=9.6 | | | | | | | |
| ABTA | | | | *i* PKP | | **PKPab** | **07 02 57.9** | **-0.4** |
| | comp=Z,13nm,0.6s | | | | | | | |
| **CLF** | **Chambon-Foret** | **150.05 359** | | PKPdf | | **PKPdf** | **07 02 43.8** | **-1.2** |
| CLF | | | | | | **PKiKP** | **07 02 50.9** | **-0.2** |
| CLF | | | | | | **PKPab** | **07 02 58.2** | **-0.3** |
| **FETA** | **Feichten** | **150.11 347** | | *i* PKP | | **PKPbc** | **07 02 50.9** | **-0.1** |
| | comp=Z,4.0nm,0.5s,SNR=6.5 | | | | | | | |
| **STAL** | **STALIGIAL** | **150.37 344** | | PKPdf | | **PKPdf** | **07 02 44.9** | **-0.7** |
| STAL | | | | | | **PKPbc** | **07 02 50.9** | **-0.5** |
| STAL | | | | PKPab | | **PKPab** | **07 02 58.4** | **-1.5** |
| **DAVOX** | **Davos/Dischmat** | **150.51 348** | | PKP | | **PKPdf** | **07 02 45.6** | **-0.4** |
| | comp=Z,24nm,0.6s,baz=26,slow=5.2,SNR=4.2 | | | | | | | |
| DAVOX | | | | PKPbc | | **PKiKP** | **07 02 52.1** | **-0.3** |
| | comp=Z,22nm,0.6s,baz=284,slow=4.2,SNR=42 | | | | | | | |
| DAVOX | | | | PKPab | | **PKPab** | **07 02 59.9** | **-0.8** |
| | comp=Z,8.9nm,0.6s,baz=349,slow=5.2,SNR=7.0 | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.59 348** | | PKPbc | | **PKiKP** | **07 02 52.9** | **+0.2** |
| FUORN | | | | PKPab | | **PKPab** | **07 03 01.3** | **+0.2** |
| **CTI** | **Castel Tesino** | **150.83 346** | | PKPdf | | **PKPdf** | **07 02 44.6** | **-1.8** |
| CTI | | | | | | **PKPbc** | **07 02 52.1** | **-0.4** |
| CTI | | | | PKPab | | **PKPab** | **07 03 01.1** | **-0.8** |
| **SENIN** | **Lac Senin/Sane** | **151.34 352** | | PKPdf | | **PKPdf** | **07 02 46.2** | **-1.1** |
| SENIN | | | | | | **PKiKP** | **07 02 54.0** | **-0.2** |
| SENIN | | | | PKPab | | **PKPab** | **07 03 03.9** | **-0.3** |
| **TEOL** | **Teolo** | **151.47 345** | | PKPdf | | **PKPdf** | **07 02 47.4** | **+0.1** |
| TEOL | | | | PKPbc | | **PKiKP** | **07 02 54.0** | **-0.2** |
| TEOL | | | | PKPab | | **PKPab** | **07 03 04.3** | **-0.2** |
| **FNA** | **Florina** | **151.65 327** | | | | **PKPbc** | **07 02 53.8** | **-0.7** |
| **SSB** | **Saint Sauveur** | **152.70 356** | | PKPdf | | **PKPdf** | **07 02 47.6** | **-1.5** |
| SSB | | | | PKPbc | | **PKiKP** | **07 02 57.2** | **+0.4** |
| SSB | | | | PKPab | | **PKPab** | **07 03 09.9** | **+0.2** |
| **BNI** | **Bardonecchia** | **152.71 352** | | | | **PKiKP** | **07 02 57.4** | **+0.5** |
| BNI | | | | PKPab | | **PKPab** | **07 03 09.6** | **-0.3** |
| **FDMO** | **Fiordimonte** | **153.22 341** | | PKPdf | | **PKPdf** | **07 02 48.6** | **-1.3** |
| FDMO | | | | | | **PKPab** | **07 03 11.7** | **-0.4** |
| **KEK** | **Kerkira** | **153.25 328** | | PKPdf | | **PKPdf** | **07 02 48.8** | **-1.3** |
| **NRCA** | **Norcia** | **153.40 341** | | PKPdf | | **PKPdf** | **07 02 49.3** | **-0.9** |
| NRCA | | | | PKPab | | **PKPab** | **07 03 13.5** | **+0.6** |
| **CAMP** | **Campotosto** | **153.57 340** | | PKPdf | | **PKPdf** | **07 02 48.6** | **-1.9** |
| CAMP | | | | PKPab | | **PKPab** | **07 03 13.5** | **-0.2** |
| **ESDC** | **Sonseca Array** | **157.87 12** | | PKPdf | | **PKPdf** | **07 02 55.4** | **-0.9** |
| ESDC | | | | PKPab | | **PKPab** | **07 03 32.2** | **0.0** |
| **ESDC** | **Sonseca Array** | **157.87 12** | | PKPab | | **PKPab** | **07 03 31.4** | **-0.8** |
| | comp=Z,2.0nm,0.8s,baz=338,slow=4.5,SNR=11 | | | | | | | |
| **KEST** | **Kesra** | **161.06 340** | | PKPdf | | **PKPdf** | **07 02 57.8** | **-2.2** |
| KEST | | | | PKPab | | **PKPab** | **07 03 46.2** | **-0.1** |
| **KEST** | **Kesra** | **161.06 340** | | PKPab | | **PKPab** | **07 03 46.5** | **+0.2** |
| | comp=Z,5.5nm,0.7s,baz=8.6,slow=2.2,SNR=7.2 | | | | | | | |

*IDC* ***20*** *06:49:29.7±0.9, 43°.69N×36°.53E, h0km, mbtmp3.4/5, ML3.5/5, Error ellipse: s-maj=10.8km s-min=9.6km az=14.0*
*MCSM* ***20*** *06:49:31.3±1.3, 44°.N±3°×3°.7E±1°.7, h10km, mb3.7, MLv3.5*
*ISK* ***20*** *06:49:33.8, 43°.47N×36°.54E, h12km, ML3.6/15*
*AFAD* ***20*** *06:49:34.9±0.0, 43°.73N×36°.14E, h4km, 3km, ML2.6*
*CFUSG* ***20*** *06:49:34.2, 43°.65N×36°.47E, h28km, mb2.9/7, Black sea district 5 Magtype MSH 3.1 from 6 stations*

**ISC 20 06:49:31.6±0.9, 43.73N±0°.04×36.48E±0°.05, h10km, n63, σ1°39/86, 1C-1D, Black Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FEO** | **Feodosiya** | **1.51** | **329** | *e*Sn | | | **Sn** | **06 50 20.4** | **+2.1** |
| FEO | | | | Snm | | | | 06 50 25.6 | |
| | comp=N,94nm,0.2s | | | | | | | | |
| FEO | | | | Snm | | | | 06 50 30.4 | |
| | comp=E,59nm,0.2s | | | | | | | | |
| **SUDU** | **Sudak** | **1.57** | **318** | ⇓ *i* Pn | | | **Pn** | **06 50 01.3** | **+1.8** |
| SUDU | | | | Pnm | | | | 06 50 08.9 | |
| | comp=Z,20nm,0.3s | | | | | | | | |
| SUDU | | | | *i* Sn | | | **Sn** | **06 50 21.7** | **+1.8** |
| SUDU | | | | Snm | | | | 06 50 22.5 | |
| | comp=E,72nm,0.2s | | | | | | | | |
| SUDU | | | | Snm | | | | 06 50 22.7 | |
| | comp=N,115nm,0.2s | | | | | | | | |
| **ALU** | **Alushta** | **1.77** | **303** | *e*Pn | | | **Pn** | **06 50 03.0** | **+0.8** |
| ALU | | | | Pnm | | | | 06 50 06.7 | |
| | comp=Z,17nm,0.2s | | | | | | | | |
| ALU | | | | *e*Sn | | | **Sn** | **06 50 24.5** | **-0.3** |
| ALU | | | | Snm | | | | 06 50 25.1 | |
| | comp=N,135nm,0.2s | | | | | | | | |
| ALU | | | | Snm | | | | 06 50 25.4 | |
| | comp=E,51nm,0.2s | | | | | | | | |
| **YAL** | **Yalta** | **1.84** | **295** | *e*Pn | | | **Pn** | **06 50 05.0** | **+1.9** |
| YAL | | | | Pnm | | | | 06 50 05.7 | |
| | comp=Z,42nm,0.2s | | | | | | | | |
| YAL | | | | *e*Sn | | | **Sn** | **06 50 26.8** | **+0.4** |
| YAL | | | | Snm | | | | 06 50 27.3 | |
| | comp=N,225nm,0.3s | | | | | | | | |
| YAL | | | | Snm | | | | 06 50 27.5 | |
| | comp=E,373nm,0.4s | | | | | | | | |
| **SNOP** | **Sinop** | **1.95** | **209** | Pn | | | **Pn** | **06 50 04.9** | **+0.2** |
| SNOP | | | | Sn | | | **Sn** | **06 50 27.4** | **-1.8** |
| **SIM** | **Simferopol'** | **2.09** | **306** | *e*Pn | | | **Pn** | **06 50 08.0** | **+1.4** |
| SIM | | | | Pnm | | | | 06 50 15.2 | |
| | comp=Z,48nm,0.3s | | | | | | | | |
| SIM | | | | *e*Sn | | | **Sn** | **06 50 33.0** | **+0.4** |
| SIM | | | | Snm | | | | 06 50 34.4 | |
| | comp=E,69nm,0.2s | | | | | | | | |
| SIM | | | | Snm | | | | 06 50 36.9 | |
| | comp=N,62nm,0.3s | | | | | | | | |
| **SEV** | **Sevastopol'** | **2.18** | **293** | ⇑ *i* Pn | | | **Pn** | **06 50 08.0** | **+0.1** |
| SEV | | | | Pnm | | | | 06 50 10.5 | |
| | comp=Z,13nm,0.2s | | | | | | | | |
| SEV | | | | *e*Sn | | | **Sn** | **06 50 34.0** | **-0.9** |
| SEV | | | | Snm | | | | 06 50 36.5 | |
| | comp=N,78nm,0.2s | | | | | | | | |
| SEV | | | | Snm | | | | 06 50 36.5 | |
| | comp=E,71nm,0.2s | | | | | | | | |
| **DIKM** | **Dikmen** | **2.27** | **204** | Pn | | | **Pn** | **06 50 09.2** | **+0.1** |
| DIKM | | | | Sn | | | **Sn** | **06 50 34.8** | **-2.3** |
| **DIKM** | **Dikmen** | **2.27** | **204** | P | | | **Pn** | **06 50 10.0** | **+0.9** |
| **BZK** | **Bozkurt** | **2.54** | **227** | Pn | | | **Pn** | **06 50 14.1** | **+1.3** |
| **BZK** | **Bozkurt** | **2.54** | **227** | P | | | **Pn** | **06 50 14.2** | **+1.4** |
| **KVT** | **Kavak** | **2.67** | **187** | Pn | | | **Pn** | **06 50 14.3** | **-0.3** |
| **YARM** | **Yarimca-Ladik(** | **2.85** | **190** | Pn | | | **Pn** | **06 50 16.9** | **-0.3** |
| **KIZO** | **Buyukkizoglu-L** | **2.86** | **188** | Pn | | | **Pn** | **06 50 17.0** | **-0.3** |
| **SEYI** | **Kastamonu-Seyd** | **2.91** | **225** | P | | | **Pn** | **06 50 19.9** | **+1.9** |
| SEYI | | | | S | | | **Sn** | **06 50 53.3** | **+0.3** |
| SEYI | | | | *i* AML | | AML | | 06 50 54.0 | |
| | comp=E,32nm,0.2s | | | | | | | | |
| SEYI | | | | *i* AML | | AML | | 06 50 54.0 | |
| | comp=E,44nm,0.8s | | | | | | | | |
| **CIDE** | **Kastamonu/Cide** | **3.19** | **236** | P | | | **Pn** | **06 50 21.1** | **-0.6** |
| CIDE | | | | S | | | **Sn** | **06 50 58.8** | **-1.0** |
| CIDE | | | | *i* AML | | AML | | 06 51 00.0 | |
| | comp=E,122nm,0.5s | | | | | | | | |
| CIDE | | | | *i* AML | | AML | | 06 51 00.0 | |
| | comp=E,110nm,0.2s | | | | | | | | |
| **TARU** | **Tarkhankut** | **3.27** | **302** | *e*Pn | | | **Pn** | **06 50 24.8** | **+2.0** |
| TARU | | | | Pnm | | | | 06 50 31.5 | |
| | comp=Z,11nm,0.4s | | | | | | | | |
| TARU | | | | *e*Sn | | | **Sn** | **06 51 02.3** | **+0.6** |
| TARU | | | | Snm | | | | 06 51 11.1 | |
| | comp=E,26nm,0.2s | | | | | | | | |
| TARU | | | | Snm | | | | 06 51 12.1 | |
| | comp=N,12nm,0.3s | | | | | | | | |
| **KURC** | **Kurucasile-Bar** | **3.33** | **237** | Pn | | | **Pn** | **06 50 25.9** | **+2.2** |
| **ILGA** | **Ilgaz** | **3.37** | **218** | P | | | **Pn** | **06 50 26.4** | **+2.0** |
| ILGA | | | | *i* AML | | AML | | 06 51 06.0 | |
| | comp=N,13nm,0.3s | | | | | | | | |
| ILGA | | | | *i* AML | | AML | | 06 51 10.0 | |
| | comp=N,23nm,0.8s | | | | | | | | |
| **PELI** | **Kastamonı-Ara** | **3.38** | **225** | P | | | **Pn** | **06 50 26.9** | **+2.5** |
| PELI | | | | S | | | **Sn** | **06 51 05.4** | **+0.9** |
| PELI | | | | *i* AML | | AML | | 06 51 07.0 | |
| | comp=N,20nm,0.4s | | | | | | | | |
| PELI | | | | *i* AML | | AML | | 06 51 07.0 | |
| | comp=N,21nm,0.3s | | | | | | | | |
| **RSDY** | **Resadiye-TOKAT** | **3.39** | **169** | Pn | | | **Pn** | **06 50 24.4** | **-0.2** |
| **TOKT** | **Tokat** | **3.41** | **179** | Pn | | | **Pn** | **06 50 24.8** | **0.0** |
| **YENC** | **ankr-Yen** | **3.62** | **214** | P | | | **Pn** | **06 50 30.0** | **+2.2** |
| YENC | | | | S | | | **Sn** | **06 51 12.0** | **+1.3** |
| YENC | | | | *i* AML | | AML | | 06 51 20.0 | |
| | comp=N,12nm,0.4s | | | | | | | | |
| YENC | | | | *i* AML | | AML | | 06 51 21.0 | |
| | comp=N,15nm,1.1s | | | | | | | | |
| **BTIN** | **Bartın** | **3.76** | **238** | P | | | **Pn** | **06 50 31.0** | **+1.4** |
| BTIN | | | | *i* AML | | AML | | 06 51 14.0 | |
| | comp=N,56nm,0.6s | | | | | | | | |
| BTIN | | | | *i* AML | | AML | | 06 51 18.0 | |
| | comp=N,64nm,1.1s | | | | | | | | |
| **CANT** | **Cankiri** | **3.78** | **215** | Pn | | | **Pn** | **06 50 31.0** | **+1.1** |
| **KBUK** | **KARABUK-Merkez** | **3.79** | **230** | P | | | **Pn** | **06 50 32.0** | **+2.0** |
| KBUK | | | | *i* AML | | AML | | 06 51 17.0 | |
| | comp=N,12nm,0.6s | | | | | | | | |
| KBUK | | | | *i* AML | | AML | | 06 51 19.0 | |
| | comp=N,13nm,1.1s | | | | | | | | |
| **CORM** | **Corum** | **3.81** | **202** | Pn | | | **Pn** | **06 50 30.9** | **+0.5** |
| **SVSK** | **Karacayir** | **3.83** | **174** | Pn | | | **Pn** | **06 50 30.7** | **+0.1** |
| **SUNG** | **orum-Sungurl** | **3.91** | **206** | P | | | **Pn** | **06 50 33.9** | **+2.1** |
| SUNG | | | | S | | | **Sn** | **06 51 17.8** | **0.0** |
| SUNG | | | | *i* AML | | AML | | 06 51 23.0 | |
| | comp=N,9.1nm,0.6s | | | | | | | | |
| SUNG | | | | *i* AML | | AML | | 06 51 43.0 | |
| | comp=N,12nm,1.6s | | | | | | | | |
| **ELDT** | **Eldivan** | **3.96** | **216** | P | | | **Pn** | **06 50 34.2** | **+1.7** |
| ELDT | | | | S | | | **Sn** | **06 51 19.1** | **+0.1** |
| ELDT | | | | *i* AML | | AML | | 06 51 37.0 | |
| | comp=N,8.1nm,0.8s | | | | | | | | |
| ELDT | | | | *i* AML | | AML | | 06 52 47.0 | |
| | comp=N,5.4nm,2.1s | | | | | | | | |
| **DERS** | **Karabk-Eskip** | **4.10** | **227** | P | | | **Pn** | **06 50 36.6** | **+2.3** |
| DERS | | | | *i* AML | | AML | | 06 51 30.0 | |
| | comp=N,11nm,1.2s | | | | | | | | |
| DERS | | | | *i* AML | | AML | | 06 51 42.0 | |
| | comp=N,8.6nm,0.9s | | | | | | | | |
| **YOZ** | **Yozgat** | **4.18** | **192** | Pn | | | **Pn** | **06 50 35.9** | **+0.4** |
| **DEVR** | **Zonguldak/Devr** | **4.22** | **234** | P | | | **Pn** | **06 50 37.9** | **+2.0** |
| DEVR | | | | *i* AML | | AML | | 06 51 31.0 | |
| | comp=N,11nm,1.2s | | | | | | | | |
| DEVR | | | | *i* AML | | AML | | 06 51 45.0 | |
| | comp=N,3.8nm,0.4s | | | | | | | | |
| **BATM** | **Batumi** | **4.39** | **117** | P | | | **Pn** | **06 50 37.2** | **-1.1** |
| **BCHG** | **Becho** | **4.50** | **97** | P | | | **Pn** | **06 50 40.9** | **+1.1** |
| **BR106** | **Keskin Array S** | **4.53** | **209** | P | | | **Pn** | **06 50 41.7** | **+1.3** |
| **BR131** | **Keskin Array S** | **4.53** | **209** | Pn | | | **Pn** | **06 50 41.5** | **+1.1** |
| **BRTR** | **Keskin Array B** | **4.53** | **209** | Pn | | | **Pn** | **06 50 41.2** | **+0.9** |
| | comp=N,2.7nm,0.3s,baz=26,slow=12,SNR=136 | | | | | | | | |
| BRTR | | | | Sn | | | **Sn** | **06 51 31.2** | **-2.0** |
| | comp=N,0.8nm,0.3s,baz=23,slow=17,SNR=6.5 comp=N,4.4nm,0.3s | | | | | | | | |
| **BR105** | **Keskin Array S** | **4.55** | **209** | P | | | **Pn** | **06 50 41.9** | **+1.3** |
| **BR104** | **Keskin Array S** | **4.55** | **209** | P | | | **Pn** | **06 50 41.9** | **+1.3** |
| **KBZ** | **Khabaz** | **4.65** | **88** | Pn | | | **Pn** | **06 50 42.6** | **+0.8** |
| | comp=N,0.4nm,0.3s,baz=270,slow=11,SNR=6.1 | | | | | | | | |
| KBZ | | | | Sn | | | **Sn** | **06 51 35.4** | **-0.4** |
| | comp=N,0.4nm,0.3s,baz=294,slow=18,SNR=1.6 comp=N,1.2nm,0.3s | | | | | | | | |
| **KOZK** | **Kozakli-Nevseh** | **4.68** | **196** | Pn | | | **Pn** | **06 50 42.9** | **+0.6** |
| **KAMT** | **Kaman** | **4.83** | **206** | Pn | | | **Pn** | **06 50 45.6** | **+1.2** |
| **ABS** | **Abastumani** | **5.06** | **111** | P | | | **Pn** | **06 50 47.5** | **-0.2** |
| **ALIG** | **Mtskhetisjvari** | **5.51** | **105** | P | | | **Pn** | **06 50 54.2** | **+0.5** |
| **TRLG** | **Trialeti** | **6.03** | **109** | P | | | **Pn** | **06 51 03.0** | **+2.0** |
| **CHRG** | **Chargali** | **6.35** | **100** | P | | | **Pn** | **06 51 06.8** | **+1.5** |
| **MLR** | **Muntele Rosu** | **7.72** | **287** | Pn | | | **Pn** | **06 51 23.5** | **-0.6** |
| | comp=N,0.6nm,0.3s,baz=98,slow=14,SNR=2.3 | | | | | | | | |
| MLR | | | | Sn | | | **Sn** | **06 52 51.2** | **-0.4** |
| | comp=N,2.9nm,0.3s,baz=181,slow=18,SNR=14 comp=N,1.3nm,0.3s | | | | | | | | |
| **VOIR** | | **8.34** | **286** | P | | | **Pn** | **06 51 33.5** | **+1.0** |
| | comp=N,3.5nm,0.8s | | | | | | | | |
| **AK08** | **Malin Array Si** | **8.47** | **327** | P | | | **Pn** | **06 51 34.6** | **+0.3** |
| **AK05** | **Malin Array Si** | **8.48** | **327** | P | | | **Pn** | **06 51 34.7** | **+0.3** |
| **AK02** | **Malin Array Si** | **8.51** | **327** | P | | | **Pn** | **06 51 34.2** | **-0.6** |
| **AK12** | **Malin Array Si** | **8.52** | **327** | P | | | **Pn** | **06 51 34.7** | **-0.2** |
| **AK13** | **Malin Array Si** | **8.54** | **326** | P | | | **Pn** | **06 51 36.0** | **+0.9** |
| **AKASG** | **Malin Array Be** | **8.54** | **327** | Pn | | | **Pn** | **06 51 35.0** | **-0.1** |
| | comp=N,1.3nm,0.3s,baz=135,slow=14,SNR=2.4 | | | | | | | | |
| AKASG | | | | Sn | | | **Sn** | **06 53 06.6** | **-4.9** |
| | comp=N,2.0nm,0.3s,baz=142,slow=24,SNR=5.6 comp=N,0.3nm,0.3s | | | | | | | | |
| **KIEV** | **Kiev** | **8.54** | **327** | P | | | **Pn** | **06 51 35.0** | **-0.2** |
| **AK11** | **Malin Array Si** | **8.54** | **327** | P | | | **Pn** | **06 51 34.9** | **-0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO02 | | | | | *e*S | **Sn** | **06 56 12.3 +0.3** |
| CO02 | | | | | IAML | | 06 56 12.3 | |
| | comp=Z,1μm,0.1s | | | | | | | |
| **CO02** | **Combarbal** | **0.67** | **124** | ⇓*i*P | | **Pn** | **06 56 01.3 +0.5** |
| CO02 | | | | | *e*S | **Sn** | **06 56 11.6 -0.4** |
| CO02 | | | | | IAML | | 06 56 12.4 | |
| | comp=E,7μm,0.1s | | | | | | | |
| **CO03** | **El Pedregal** | **0.83** | **91** | | | **Pn** | **06 56 02.6 +0.1** |
| CO03 | | | | Sn | | **Sn** | **06 56 14.1 -0.9** |
| **CO03** | **El Pedregal** | **0.83** | **91** | *e*S | | **Sn** | **06 56 14.5 -0.5** |
| CO03 | | | | | IAML | | 06 56 15.5 | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **CO03** | **El Pedregal** | **0.83** | **91** | ⇓*i*P | | **Pn** | **06 56 02.6 +0.1** |
| CO03 | | | | | *e*S | **Sn** | **06 56 13.9 -1.1** |
| CO03 | | | | | IAML | | 06 56 15.6 | |
| | comp=E,7μm,0.1s | | | | | | | |
| **CO05** | **La Serena** | **0.98** | **22** | | | **Pn** | **06 56 05.8 +1.6** |
| CO05 | | | | Sn | | **Sn** | **06 56 19.7 +1.8** |
| **CO05** | **La Serena** | **0.98** | **22** | *e*P | | **Pn** | **06 56 05.7 +1.5** |
| CO05 | | | | | *e*S | **Sn** | **06 56 19.1 +1.1** |
| **GO04** | **Tololo Observa** | **0.99** | **49** | | | **Pn** | **06 56 05.8 +1.2** |
| GO04 | | | | Sn | | **Sn** | **06 56 19.0 +0.4** |
| **GO04** | **Tololo Observa** | **0.99** | **49** | *e*P | | **Pn** | **06 56 04.8 +0.2** |
| GO04 | | | | | *e*S | **Sn** | **06 56 19.3 +0.7** |
| GO04 | | | | | IAML | | 06 56 20.1 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.99** | **49** | *e*P | | **Pn** | **06 56 05.3 +0.7** |
| GO04 | | | | | *e*S | **Sn** | **06 56 18.8 +0.2** |
| GO04 | | | | | IAML | | 06 56 20.4 | |
| | comp=E,5μm,0.3s | | | | | | | |
| **CO04** | **Los Peladeros** | **1.34** | **155** | *i* P | | **Pn** | **06 56 09.6 +0.5** |
| CO04 | | | | | *e*S | **Sn** | **06 56 26.1 -0.4** |
| CO04 | | | | | IAML | | 06 56 27.4 | |
| | comp=N,2μm,0.2s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.59** | **58** | | | **Pn** | **06 56 13.5 +1.1** |
| CO01 | | | | Sn | | **Sn** | **06 56 32.9 +0.5** |
| **CO01** | **Juntas del Tor** | **1.59** | **58** | *e*P | | **Pn** | **06 56 13.4 +1.1** |
| CO01 | | | | | *e*S | **Sn** | **06 56 33.2 +0.8** |
| CO01 | | | | | IAML | | 06 56 34.2 | |
| | comp=Z,411nm,0.7s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.59** | **58** | ⇑*i*P | | **Pn** | **06 56 13.4 +1.1** |
| CO01 | | | | | *e*S | **Sn** | **06 56 32.7 +0.3** |
| **VA06** | **Catapilco** | **1.75** | **170** | | | **Pn** | **06 56 14.7 +0.5** |
| **LCO** | **Las Campanas** | **1.99** | **25** | Pn | | **Pn** | **06 56 18.9 +1.2** |
| **LCO** | **Las Campanas** | **1.99** | **25** | *e*P | | **Pn** | **06 56 18.4 +0.7** |
| LCO | | | | | *e*S | **Sn** | **06 56 43.9 +1.9** |
| LCO | | | | | IAML | | 06 56 45.2 | |
| | comp=Z,442nm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **1.99** | **25** | *e*P | | **Pn** | **06 56 18.9 +1.2** |
| LCO | | | | | IAML | | 06 56 44.9 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| **AROD** | **Rodeo** | **2.00** | **71** | *e*P | | **Sn** | **06 56 20.0 +2.2** |
| AROD | | | | | *e*S | **Sn** | **06 56 38.8 -3.3** |
| AROD | | | | | *e*S | | 06 56 45.9 | |
| **VA03** | **San Esteban** | **2.14** | **154** | Pn | | **Pn** | **06 56 19.9 +0.4** |
| **VA03** | **San Esteban** | **2.14** | **154** | *e*P | | **Pn** | **06 56 20.2 +0.7** |
| VA03 | | | | | *e*S | **Sn** | **06 56 46.5 +1.2** |
| VA03 | | | | | *e*S | | 06 56 46.5 | |
| VA03 | | | | | IAML | | 06 56 47.8 | |
| | comp=Z,368nm,0.1s | | | | | | | |
| **VA03** | **San Esteban** | **2.14** | **154** | *e*P | | **Pn** | **06 56 20.2 +0.7** |
| VA03 | | | | | IAML | | 06 56 47.6 | |
| | comp=E,934nm,0.2s | | | | | | | |
| **VA01** | **Torpederas** | **2.19** | **180** | Pn | | **Pn** | **06 56 20.2 +0.2** |
| **ROCH** | **El Roble** | **2.20** | **166** | ⇓*i*P | | **Pn** | **06 56 20.9 +0.4** |
| **DOCA** | **Reserva Natura** | **2.21** | **94** | *e*P | | **Pn** | **06 56 22.7 +1.9** |
| DOCA | | | | | *e*S | **Sn** | **06 56 50.2 +2.8** |
| DOCA | | | | | IAML | | 06 56 50.7 | |
| | comp=Z,200nm,0.3s | | | | | | | |
| **RTLS** | **Leoncito** | **2.24** | **116** | *e*P | | **Pn** | **06 56 19.4 -1.5** |
| RTLS | | | | | *e*S | **Sn** | **06 56 51.0 +3.1** |
| RTLS | | | | | IAML | | 06 56 51.5 | |
| | comp=Z,674nm,0.2s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.24** | **84** | *e*P | | **Pn** | **06 56 23.2 +2.1** |
| ACCO | | | | | *e*S | **Sn** | **06 56 51.6 +3.6** |
| **ACDV** | **Cuesta del Vie** | **2.28** | **74** | *e*P | | **Pn** | **06 56 23.8 +2.3** |
| ACDV | | | | | *e*S | **Sn** | **06 56 42.3 -6.5** |
| **AC05** | **El Transito** | **2.32** | **31** | | | **Pn** | **06 56 23.3 +1.3** |
| **AC05** | **El Transito** | **2.32** | **31** | *e*P | | **Pn** | **06 56 23.0 +1.0** |
| AC05 | | | | | *e*S | **Sn** | **06 56 51.8 +2.1** |
| **PEL** | **Peldehue** | **2.45** | **161** | | | **Pn** | **06 56 24.3 +0.7** |
| **PEL** | **Peldehue** | **2.45** | **161** | *e*P | | **Pn** | **06 56 24.0 +0.4** |
| PEL | | | | | IAML | | 06 56 53.5 | |
| | comp=E,298nm,0.6s | | | | | | | |
| **MT02** | **Curacav** | **2.46** | **170** | | | **Pn** | **06 56 23.8 0.0** |
| **MT02** | **Curacav** | **2.46** | **170** | *e*P | | **Pn** | **06 56 23.7 0.0** |
| MT02 | | | | | *e*S | **Sn** | **06 56 53.5 +0.7** |
| MT02 | | | | | IAML | | 06 56 54.3 | |
| | comp=Z,117nm,0.3s | | | | | | | |
| **MT10** | **Hacienda Santa** | **2.61** | **159** | *e*P | | **Pn** | **06 56 26.6 +0.7** |
| MT10 | | | | | IAML | | 06 56 57.9 | |
| | comp=E,964nm,0.3s | | | | | | | |
| **ZON** | **Zonda** | **2.65** | **106** | Pn | | **Pn** | **06 56 27.1 +0.8** |
| **ZON** | **Zonda** | **2.65** | **106** | *e*P | | **Pn** | **06 56 27.9 +1.6** |
| ZON | | | | | *e*S | **Sn** | **06 56 59.5 +2.0** |
| ZON | | | | | IAML | | 06 57 05.6 | |
| | comp=Z,84nm,0.3s | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.67** | **11** | Pn | | **Pn** | **06 56 27.6 +1.0** |
| **AC04** | **Llanos de Chal** | **2.67** | **11** | *e*P | | **Pn** | **06 56 27.5 +1.0** |
| AC04 | | | | | *e*S | **Sn** | **06 57 00.5 +2.7** |
| AC04 | | | | | IAML | | 06 57 00.7 | |
| | comp=Z,74nm,0.3s | | | | | | | |
| **MT05** | **Renca** | **2.67** | **163** | Pn | | **Pn** | **06 56 26.4 -0.2** |
| **MT05** | **Renca** | **2.67** | **163** | *e*P | | **Pn** | **06 56 28.5 +1.9** |
| MT05 | | | | | *e*S | **Sn** | **06 56 59.2 +1.2** |
| MT05 | | | | | IAML | | 06 56 60.0 | |
| | comp=Z,204nm,0.3s | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **2.73** | **160** | *e*P | | **Pn** | **06 56 28.2 +0.8** |
| MT14 | | | | | IAML | | 06 57 01.3 | |
| | comp=N,528nm,0.5s | | | | | | | |
| **MT16** | **CCHEN** | **2.76** | **160** | | | **Pn** | **06 56 28.6 +0.7** |
| **MT16** | **CCHEN** | **2.76** | **160** | *e*P | | **Pn** | **06 56 28.8 +0.9** |
| **VA05** | **Santo Domingo** | **2.82** | **179** | | | **Pn** | **06 56 28.5 -0.1** |
| **MT03** | **Universidad Ad** | **2.83** | **160** | | | **Pn** | **06 56 29.6 +0.9** |
| **MT03** | **Universidad Ad** | **2.83** | **160** | *e*P | | **Pn** | **06 56 29.8 +1.0** |
| MT03 | | | | | *e*S | **Sn** | **06 57 03.2 +1.3** |
| MT03 | | | | | IAML | | 06 57 03.6 | |
| | comp=Z,292nm,0.2s | | | | | | | |
| **MT04** | **Ro Olivares** | **2.87** | **154** | *e*P | | **Pn** | **06 56 30.6 +1.1** |
| MT04 | | | | | *e*S | **Sn** | **06 57 05.0 +1.9** |
| MT04 | | | | | IAML | | 06 57 06.9 | |
| | comp=Z,182nm,0.8s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.95** | **152** | Pn | | **Pn** | **06 56 33.5 +2.9** |
| **MT08** | **Bocatoma Ro** | **2.95** | **152** | *e*P | | **Pn** | **06 56 32.9 +2.2** |
| MT08 | | | | | *e*S | **Sn** | **06 57 08.6 +3.5** |
| MT08 | | | | | IAML | | 06 57 12.6 | |
| | comp=Z,102nm,0.5s | | | | | | | |
| **MT09** | **Talagante** | **2.99** | **169** | | | **Pn** | **06 56 31.7 +0.7** |
| **MT01** | **Popeta** | **3.04** | **174** | | | **Pn** | **06 56 32.1 +0.4** |
| **MT01** | **Popeta** | **3.04** | **174** | *e*P | | **Pn** | **06 56 32.0 +0.4** |
| MT01 | | | | | *e*S | **Sn** | **06 57 06.5 -0.4** |
| MT01 | | | | | IAML | | 06 57 11.0 | |
| | comp=Z,79nm,0.1s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.06** | **132** | *e*P | | **Pn** | **06 56 35.7 +3.6** |
| ARCO | | | | | *e*S | **Sn** | **06 57 13.6 +5.9** |
| ARCO | | | | | IAML | | 06 57 14.7 | |
| | comp=Z,99nm,0.3s | | | | | | | |
| **MT13** | **San Alfonso** | **3.13** | **159** | | | **Pn** | **06 56 33.8 +0.9** |
| **MT13** | **San Alfonso** | **3.13** | **159** | *e*P | | **Pn** | **06 56 33.7 +0.9** |
| MT13 | | | | | *e*S | **Sn** | **06 57 10.5 +1.4** |
| MT13 | | | | | IAML | | 06 57 12.2 | |
| | comp=Z,145nm,0.2s | | | | | | | |
| **LMEL** | **Las Melosas** | **3.25** | **158** | | | **Pn** | **06 56 36.2 +1.6** |
| **LMEL** | **Las Melosas** | **3.25** | **158** | *e*P | | **Pn** | **06 56 35.4 +0.9** |
| LMEL | | | | | *e*S | **Sn** | **06 57 13.7 +1.5** |
| LMEL | | | | | IAML | | 06 57 15.1 | |
| | comp=Z,134nm,0.5s | | | | | | | |
| **BO04** | **La Punta** | **3.27** | **165** | | | **Pn** | **06 56 35.2 +0.4** |
| **GO03** | **Copiap** | **3.46** | **21** | Pn | | **Pn** | **06 56 37.2 -0.1** |
| **GO03** | **Copiap** | **3.46** | **21** | *e*P | | **Pn** | **06 56 38.8 +1.5** |
| GO03 | | | | | IAML | | 06 57 23.4 | |
| | comp=Z,51nm,0.3s | | | | | | | |
| **BO01** | **Tunca** | **3.58** | **172** | | | **Pn** | **06 56 38.7 -0.3** |
| **BO01** | **Tunca** | **3.58** | **172** | *e*P | | **Pn** | **06 56 39.2 +0.2** |
| BO01 | | | | | IAML | | 06 57 35.0 | |
| | comp=Z,40nm,1.9s | | | | | | | |
| **AC06** | **Mina Casimiro** | **3.64** | **18** | Pn | | **Pn** | **06 56 40.6 +0.8** |
| **BO02** | **Sierra Bellavi** | **4.02** | **170** | | | **Pn** | **06 56 45.6 +0.6** |
| **BO02** | **Sierra Bellavi** | **4.02** | **170** | *e*P | | **Pn** | **06 56 45.7 +0.7** |
| **GO05** | **Huala** | **4.17** | **183** | Pn | | **Pn** | **06 56 46.4 -0.6** |
| **GO05** | **Huala** | **4.17** | **183** | *e*P | | **Pn** | **06 56 46.5 -0.6** |
| GO05 | | | | | IAML | | 06 57 53.4 | |
| | comp=Z,24nm,2.8s | | | | | | | |
| **BI02** | **San Fabin de** | **5.83** | **177** | | | **Pn** | **06 57 09.7 0.0** |
| **GO02** | **Mina Guanaco** | **5.93** | **18** | Pn | | **Pn** | **06 57 10.7 -0.7** |
| **AF01** | **San Pedro de A** | **8.44** | **22** | Pn | | **Pn** | **06 57 44.2 -1.4** |
| **GO06** | **Curarrehue** | **8.73** | **179** | Pn | | **Pn** | **06 57 47.2 -2.1** |
| **LR03** | **Panguipulli** | **8.80** | **183** | Pn | | **Pn** | **06 57 49.7 -0.5** |
| **PLCA** | **Paso Flores** | **9.92** | **175** | Pn | | **Pn** | **06 58 04.6 -1.0** |
| **TRQA** | **Tornquist** | **10.75** | **135** | Pn | | **Pn** | **06 58 15.1 -1.8** |
| **GO01** | **Chusmiza** | **11.34** | **12** | Pn | | **Pn** | **06 58 24.3 -1.0** |
| **SAML** | **Samuel** | **23.16** | **22** | P | | **P** | **07 00 46.7 +0.7** |
| SAML | | | | IAmb | | IAmb | 07 01 17.3 | |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **54.40** | **159** | P | | **P** | **07 05 03.6 -1.2** |
| SNAA | | | | IAmb | | IAmb | 07 05 33.0 | |
| | comp=Z,3.9nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.40** | **180** | P | | **P** | **07 05 41.1 +0.8** |
| QSPA | | | | IAmb | | IAmb | 07 06 21.8 | |
| | comp=Z,4.2nm,1.4s | | | | | | | |

***IDC 20 07:00:17.8±2.5, 54°.67N×83°.63E, h0km, mbtmp2.5/2, ML2.2/2, Error ellipse: s-maj=20.2km s-min=11.9km az=167.0, Southwestern Siberia***

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.00** | **135** | I | I | 07 06 30.0 | |
| | baz=319,slow=318,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.00** | **136** | Pg | Pb | 07 00 38.3 | +0.3 |
| | 1.2nm,0.3s,baz=319,slow=14,SNR=8.7 | | | | | | |
| ZALV | | | | Lg | Lg | 07 00 50.0 | |
| | 2.9nm,0.3s,baz=317,slow=29,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.10** | **220** | Pn | Pn | 07 01 35.2 | -0.2 |
| | baz=38,slow=12,SNR=2.3 | | | | | | |
| KURBB | | | | Lg | Lg | 07 02 58.5 | |
| | baz=37,slow=27,SNR=1.9 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.93** | **187** | Pn | Pn | 07 02 14.5 | +0.3 |
| | 0.1nm,0.3s,baz=11,slow=24,SNR=1.9 | | | | | | |
| MKAR | | | | Lg | Lg | 07 04 28.4 | |
| | baz=360,slow=33,SNR=1.6 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC 20 07:00:59.4±0.5, 23°.50N×143°.44E, h0km, mb4.4/24, mbtmp4.4/27, ML4.0/3, MS3.4/17, Error ellipse: s-maj=19.5km s-min=12.6km az=75.0*
*BJI 20 07:01:00.5±0.0, 23°.24N×143°.90E, h40km, mb4.8/26, mB5.1/7, Ms4.8/1, Ms7 4.4/1*
*NEIC 20 07:01:02.3±2.7, 23°.26N±0°.06×143°.28E±0°.10, h10km±1km, mb4.7/119, Error ellipse: s-maj=15.7km s-min=10.4km az=78.0*
*JMA 20 07:01:03.9±0.2, 24°.N±2°.×14°.4E±°, h81km, MV5.0/14, IOTO ISLANDS REGION*

**ISC 20 07:01:04.9±0.4, 23°.35N±0°.05×143°.28E±0°.07, h35km, n216, σ1s63/200, mb4.7/92, MS3.5/14, 2C, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **3.42** | **343** | *e*P | **Pn** | **07 01 54.5** | **-1.2** |
| JHH2 | | | | *e*S | **Sn** | **07 02 33.0** | **-2.1** |
| **JCJ** | **Chichijima** | **3.86** | **345** | | **Pn** | **07 02 00.4** | **-1.4** |
| **JCJ** | **Chichijima** | **3.86** | **345** | Pn | **Pn** | **07 02 00.9** | **-0.9** |
| | 37nm,0.3s,baz=296,slow=19,SNR=4.6 | | | | | | |
| JCJ | | | | Sn | Sn | 07 02 36.6 | -9.3 |
| | 76nm,0.3s,baz=297,slow=22,SNR=4.3 | | | | | | |
| | 76nm,0.3s | | | | | | |
| **CBIJ** | **Chichi jima** | **3.86** | **345** | *e*S | **Sn** | **07 02 42.9** | **-3.1** |
| **GUMO** | **Guam** | **9.82** | **171** | Pn | **Pn** | **07 03 20.3** | **-3.4** |
| **JHJ2** | **Mitsune** | **10.20** | **343** | Pn | **Pn** | **07 03 28.1** | **-0.6** |
| **JHJ** | **Hachijo jima 2** | **10.21** | **343** | LR | LR | 07 07 03.5 | |
| | comp=Z,94nm,21.6s,baz=26,slow=36 | | | | | | |
| **JMZ** | **Minamidaito 2** | **11.24** | **285** | Pn | **Pn** | **07 03 40.7** | **-2.4** |
| **BSO1** | **Boso 1** | **11.45** | **350** | *e*P | **Pn** | **07 03 43.6** | **-1.7** |
| **JSGW** | **Sagamiharawaka** | **12.71** | **345** | *e*P | **Pn** | **07 04 00.2** | **-2.9** |
| **INU** | **Inuyama** | **13.14** | **337** | Pn | **Pn** | **07 04 07.5** | **-1.5** |
| **JRY** | **Ryogami san** | **13.19** | **344** | *e*P | **Pn** | **07 04 06.6** | **-3.1** |
| **JGF** | **Kuroka** | **13.25** | **338** | Pn | **Pn** | **07 04 09.7** | **-0.9** |
| **JAG** | **Ashikaga** | **13.45** | **347** | *e*P | Pn | 07 04 08.7 | -4.5 |
| **MJAR** | **Matsushiro Arr** | **13.86** | **343** | Pn | **Pn** | **07 04 14.7** | **-4.1** |
| | 0.2nm,0.3s,baz=164,slow=11,SNR=9.9 | | | | | | |
| | 3.0nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **13.86** | **343** | Pn | **Pn** | **07 04 17.7** | **-1.1** |
| **MJB9** | **Matsu-Tunnel** | **13.87** | **343** | Pn | **Pn** | **07 04 18.6** | **-0.4** |
| **JOW** | **Kunigami** | **14.03** | **287** | Pn | **Pn** | **07 04 20.4** | **-0.8** |
| **JNU** | **Nakatsue** | **14.63** | **314** | Pn | **Pn** | **07 04 27.6** | **-1.7** |
| **JNU** | **Nakatsue** | **14.63** | **314** | LR | LR | 07 09 38.4 | |
| | comp=Z,92nm,19.9s,baz=129,slow=36 | | | | | | |
| **JTM** | **Tenmabayashi** | **17.49** | **354** | | **Pn** | **07 05 06.2** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **18.57** | **278** | P | **P** | **07 05 17.4** | **-1.5** |
| YOJ | | | | IAmb | IAmb | 07 05 33.0 | |
| | comp=Z,123nm,1.3s | | | | | | |
| **ERM** | **Erimo** | **18.62** | **360** | P | **P** | **07 05 18.9** | **-0.3** |
| **KSRS** | **Korea Array** | **19.28** | **320** | P | **P** | **07 05 25.6** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=138,slow=11,SNR=6.5 | | | | | | |
| KSRS | | | | LR | LR | 07 12 52.6 | |
| | comp=Z,115nm,18.5s,baz=125,slow=37 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **KSAR** | **Wonju Array Be** | **19.29** | **320** | P | **P** | **07 05 26.6** | **-0.1** |
| **KS19** | **Wonju Array Si** | **19.34** | **320** | P | **P** | **07 05 27.1** | **-0.2** |
| **NACB** | **Ninganchiao** | **19.87** | **277** | P | **P** | **07 05 31.7** | **-1.4** |
| NACB | | | | IAmb | IAmb | 07 05 53.8 | |
| | comp=Z,62nm,1.5s | | | | | | |
| **SSLB** | **Suanglung** | **20.47** | **276** | P | **P** | **07 05 40.0** | **+0.3** |
| **JKA** | **Kamikawa-asahi** | **20.72** | **359** | P | Pn | 07 05 44.2 | -0.5 |
| **ASAJ** | **Asahikawa** | **20.73** | **359** | LR | LR | 07 16 52.5 | |
| | comp=Z,66nm,18.2s,baz=150,slow=46 | | | | | | |
| **TPUB** | **Ta-pu** | **20.80** | **274** | P | **P** | **07 05 43.7** | **+0.4** |
| TPUB | | | | IAmb | IAmb | 07 06 02.8 | |
| | comp=Z,35nm,1.2s | | | | | | |
| **PATS** | **Pohnpei** | **21.87** | **136** | P | **P** | **07 05 52.8** | **-2.0** |
| **H11N1** | **WAKE ISLAND Hy** | **22.25** | **95** | T | T | 07 29 39.6 | |
| | baz=283 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.25** | **95** | T | T | 07 29 43.0 | |
| | baz=283 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.27** | **95** | T | T | 07 29 40.7 | |
| | baz=283 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.38** | **98** | T | T | 07 29 23.0 | |
| | baz=284 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.39** | **98** | T | T | 07 29 20.8 | |
| | baz=284 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.40** | **98** | T | T | 07 29 21.9 | |
| | baz=284 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **22.78** | **339** | P | **P** | **07 06 05.5** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **22.78** | **339** | P | **P** | **07 06 05.3** | **+1.1** |
| **USRK** | **Ussuriysk Ar.** | **22.78** | **339** | P | **P** | **07 06 01.4** | **-2.8** |
| | comp=Z,4.0nm,0.8s,baz=158,slow=16,SNR=7.5 | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **MDJ** | **Mudanjiang** | **24.00** | **335** | P | **P** | **07 06 15.5** | **-0.6** |
| MDJ | | | | IAmb | IAmb | 07 06 32.7 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **CN2** | **Changchun** | **25.14** | **329** | *e*P | **P** | **07 06 29.4** | **+2.8** |
| CN2 | | | | *es*P | pwP | 07 06 45.0 | +4.0 |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **BNX** | **BinXian** | **25.79** | **334** | ⇑P | **P** | **07 06 32.8** | **+0.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **TIA** | **Tai'an** | **25.98** | **306** | P | **P** | **07 06 33.8** | **-0.5** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **27.39** | **343** | LR | LR | 07 18 00.5 | |
| | comp=Z,88nm,18.7s,baz=153,slow=37 | | | | | | |
| **FAKI** | **Fak Fak** | **28.23** | **204** | P | **P** | **07 06 51.3** | **-3.4** |
| **HEH** | **HeiHe** | **29.58** | **339** | *e*P | **P** | **07 07 06.8** | **+0.5** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **MYLDM** | **Lahad Datu** | **29.95** | **237** | P | **P** | **07 07 08.9** | **-1.1** |
| MYLDM | | | | IAmb | IAmb | 07 07 36.2 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **31.68** | **17** | P | **P** | **07 07 26.3** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **31.68** | **17** | P | **P** | **07 07 21.5** | **-3.3** |
| | comp=Z,2.3nm,0.9s,baz=196,slow=15,SNR=2.1 | | | | | | |
| PETK | | | | LR | LR | 07 18 47.3 | |
| | comp=Z,54nm,19.9s,baz=189,slow=34 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.80** | **311** | *e*P | **P** | **07 07 27.1** | **+0.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,4.3s | | | | | | |
| **XAN** | **Xi'an** | **31.83** | **297** | ⇑P | **P** | **07 07 27.8** | **+1.3** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **BTO** | **Baotou** | **32.80** | **310** | *e*P | P | 07 07 40.8 | +5.9 |
| BTO | | | | pP | pwP | 07 07 53.0 | +4.4 |
| BTO | | | | PP | **PP** | **07 08 49.9** | **+0.5** |
| BTO | | | | S | S | 07 13 00.1 | +10 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,24nm,0.5s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,170nm,4.4s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,260nm,5.4s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,270nm,6.2s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,260nm,7.5s | | | | | | |
| **MA2** | **Magadan** | **36.59** | **6** | P | **P** | **07 08 09.9** | **+2.6** |
| **COEN** | **Coen** | **37.08** | **180** | P | **P** | **07 08 13.9** | **+2.1** |
| COEN | | | | IAmb | IAmb | 07 08 17.8 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **37.55** | **31** | LR | LR | 07 21 24.3 | |
| | comp=Z,43nm,21.9s,baz=246,slow=33 | | | | | | |
| **MTN** | **Manton Dam** | **37.88** | **200** | P | **P** | **07 08 18.4** | **-0.3** |
| MTN | | | | IAmb | IAmb | 07 08 22.0 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **38.14** | **319** | P | **P** | **07 08 19.7** | **-1.1** |
| | comp=Z,1.1nm,0.7s,baz=134,slow=8.2,SNR=4.2 | | | | | | |
| SONM | | | | LR | LR | 07 24 54.8 | |
| | comp=Z,91nm,18.3s,baz=96,slow=38 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **41.30** | **201** | P | **P** | **07 08 48.6** | **+1.4** |
| KNRA | | | | IAmb | IAmb | 07 08 48.8 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.59** | **272** | P | **P** | **07 08 50.7** | **+1.0** |
| **CMAR** | **Chiang Mai Arr** | **41.59** | **272** | P | **P** | **07 08 50.4** | **+0.8** |
| | comp=Z,2.5nm,0.3s,baz=54,slow=10,SNR=7.0 | | | | | | |
| CMAR | | | | LR | LR | 07 25 38.1 | |
| | comp=Z,55nm,19.6s,baz=225,slow=35 | | | | | | |
| | comp=Z,2.5nm,0.3s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **42.56** | **225** | P | **P** | **07 08 57.2** | **-0.4** |
| **WB0** | **Warramunga Arr** | **43.72** | **192** | P | **P** | **07 09 07.0** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 07 09 13.2 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.88** | **192** | P | **P** | **07 09 07.1** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 07 09 09.5 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **43.89** | **192** | P | **P** | **07 09 06.2** | **-2.0** |
| WRAB | | | | IAmb | IAmb | 07 09 08.4 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.90** | **192** | P | **P** | **07 09 08.2** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 07 09 09.7 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.90** | **192** | P | **P** | **07 09 09.0** | **+0.8** |
| **WRA** | **Warramunga Arr** | **43.90** | **192** | P | **P** | **07 09 08.7** | **+0.4** |
| | comp=Z,5.2nm,0.6s,baz=12,slow=8.4,SNR=74 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 10 54.9** | **+0.8** |
| | comp=Z,2.6nm,0.7s,baz=5.4,slow=3.4,SNR=8.0 | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **SRIT** | **Nakonsritamara** | **44.29** | **258** | P | **P** | **07 09 11.1** | **-0.5** |
| SRIT | | | | IAmb | IAmb | 07 09 17.7 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.65** | **204** | P | **P** | **07 09 15.5** | **+1.2** |
| **SHL** | **Shillong** | **46.60** | **284** | P | **P** | **07 09 31.3** | **+1.3** |
| **LSA** | **Lhasa** | **46.75** | **289** | P | **P** | **07 09 34.2** | **+2.7** |
| LSA | | | | IAmb | IAmb | 07 09 36.0 | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **RPSI** | **Rantau Prapat** | **47.56** | **251** | P | **P** | **07 09 38.0** | **+0.7** |
| RPSI | | | | IAmb | IAmb | 07 09 39.5 | |
| | comp=Z,9.4nm,1.0s | | | | | | |
| **AS31** | **Alice Springs** | **47.61** | **192** | P | **P** | **07 09 37.6** | **0.0** |
| **ASAR** | **Alice Springs** | **47.61** | **192** | P | **P** | **07 09 37.8** | **+0.3** |
| **ASAR** | **Alice Springs** | **47.61** | **192** | P | **P** | **07 09 38.0** | **+0.5** |
| | comp=Z,1.4nm,0.5s,baz=17,slow=10,SNR=31 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 11 07.8** | **+0.8** |
| | comp=Z,0.7nm,0.4s,baz=91,slow=8.2,SNR=10 | | | | | | |
| ASAR | | | | LR | LR | 07 28 52.0 | |
| | comp=Z,65nm,19.5s,baz=334,slow=35 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **TIXI** | **Tiksi** | **49.03** | **354** | P | **P** | **07 09 49.9** | **+2.1** |
| TIXI | | | | IAmb | IAmb | 07 10 17.7 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **49.62** | **308** | *e*P | **P** | **07 09 56.3** | **+3.4** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,28nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **49.83** | **209** | P | **P** | **07 09 55.8** | **+1.2** |
| MBWA | | | | IAmb | IAmb | 07 09 56.7 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **50.46** | **152** | P | **P** | **07 10 00.0** | **+0.6** |
| **DZM** | **Mont Dzumac** | **50.46** | **152** | LR | LR | 07 28 53.0 | |
| | comp=Z,50nm,21.0s,baz=37,slow=33 | | | | | | |
| **ZSN** | **Zaisan** | **51.97** | **313** | *e*P | **P** | **07 10 11.2** | **+0.7** |
| | baz=313 | | | | | | |
| **J14K** | **Nanvaranak Lak** | **52.88** | **28** | P | **P** | **07 10 19.4** | **+2.4** |
| J14K | | | | IAmb | IAmb | 07 10 31.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NRN | | | | IAmb | IAmb | 07 10 60.0 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **58.26** | **26** | P | **P** | **07 10 56.5** | **+1.0** |
| **KSH** | **Kashi** | **58.40** | **303** | P | P | 07 11 02.1 | +4.9 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **58.42** | **307** | P | **P** | **07 10 59.1** | **+1.7** |
| | SNR=8.8 | | | | | | |
| **I21K** | **Tanana** | **58.48** | **27** | P | **P** | **07 10 57.9** | **+0.8** |
| I21K | | | | IAmb | IAmb | 07 11 10.3 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **58.55** | **23** | P | **P** | **07 11 00.9** | **+3.3** |
| E21K | | | | IAmb | IAmb | 07 11 24.4 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **58.67** | **28** | P | **P** | **07 10 59.2** | **+0.7** |
| BPAW | | | | IAmb | IAmb | 07 11 04.5 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **KBK** | **Karagaybulak** | **58.91** | **307** | P | **P** | **07 11 02.3** | **+1.5** |
| | SNR=5.6 | | | | | | |
| **MLY** | **Manley** | **58.96** | **27** | P | **P** | **07 11 02.5** | **+2.0** |
| **D22K** | **Ayikyak River** | **59.13** | **22** | P | **P** | **07 11 02.8** | **+1.2** |
| D22K | | | | IAmb | IAmb | 07 11 08.4 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **USP** | **Ospenovka** | **59.20** | **308** | P | **P** | **07 11 03.9** | **+1.3** |
| | SNR=5.7 | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **59.24** | **23** | P | **P** | **07 11 06.0** | **+3.6** |
| E22K | | | | IAmb | IAmb | 07 11 11.2 | |
| | comp=Z,7.6nm,1.4s | | | | | | |
| **AAK** | **Ala-Archa** | **59.25** | **307** | P | **P** | **07 11 04.4** | **+1.4** |
| AAK | | | | IAmb | IAmb | 07 11 05.3 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **59.25** | **307** | P | **P** | **07 11 04.0** | **+0.9** |
| | comp=Z,2.1nm,0.4s,baz=141,slow=7.6,SNR=5.2 | | | | | | |
| | comp=Z,2.1nm,0.4s | | | | | | |
| **BTLS** | **Baital** | **59.41** | **310** | *e*P | **P** | **07 11 04.7** | **+0.8** |
| | comp=Z,4.0nm,0.7s,baz=310 | | | | | | |
| **RND** | **Reindeer** | **59.49** | **29** | P | **P** | **07 11 05.2** | **+1.0** |
| RND | | | | IAmb | IAmb | 07 11 19.4 | |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **SML** | **Sawmill** | **59.50** | **31** | P | **P** | **07 11 06.1** | **+1.8** |
| **I23K** | **Minto, Yukon-K** | **59.56** | **27** | P | **P** | **07 11 07.1** | **+2.6** |
| I23K | | | | IAmb | IAmb | 07 11 11.3 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **NEA2** | **Nenana** | **59.58** | **28** | P | **P** | **07 11 07.1** | **+2.3** |
| NEA2 | | | | IAmb | IAmb | 07 11 18.4 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **G23K** | **Bananza Creek** | **59.59** | **25** | P | **P** | **07 11 06.0** | **+1.1** |
| **EKS2** | **Erkin-Say** | **59.77** | **307** | P | **P** | **07 11 08.4** | **+1.8** |
| | SNR=6.4 | | | | | | |
| **AML** | **Almayashu** | **59.88** | **306** | P | **P** | **07 11 09.9** | **+2.2** |
| | SNR=5.9 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **59.98** | **31** | P | **P** | **07 11 10.9** | **+3.3** |
| **MDM** | **Murphy Dome** | **60.00** | **27** | P | **P** | **07 11 10.7** | **+3.0** |
| **E23K** | **Chandalar** | **60.03** | **24** | P | **P** | **07 11 11.8** | **+3.9** |
| E23K | | | | IAmb | IAmb | 07 11 17.2 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **C23K** | **Itkillik River** | **60.09** | **21** | P | **P** | **07 11 09.2** | **+1.0** |
| C23K | | | | IAmb | IAmb | 07 11 21.9 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **60.28** | **26** | P | **P** | **07 11 12.1** | **+2.4** |
| H24K | | | | IAmb | IAmb | 07 11 23.9 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **60.45** | **24** | P | **P** | **07 11 13.4** | **+2.7** |
| **ARSB** | **Arslanbob** | **60.49** | **305** | P | **P** | **07 11 13.5** | **+1.9** |
| ARSB | | | | IAmb | IAmb | 07 11 14.3 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **IL31** | | **60.54** | **28** | P | **P** | **07 11 12.8** | **+1.5** |
| IL31 | | | | IAmb | IAmb | 07 11 23.1 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **60.54** | **28** | P | **P** | **07 11 15.1** | **+3.8** |
| **ILAR** | **Eielson Array** | **60.54** | **28** | P | **P** | **07 11 09.9** | **-1.4** |
| | comp=Z,1.4nm,0.9s,baz=252,slow=6.0,SNR=11 | | | | | | |
| ILAR | | | | LR | LR | 07 38 44.0 | |
| | comp=Z,37nm,18.3s,baz=186,slow=38 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **60.59** | **25** | P | **P** | **07 11 15.2** | **+3.5** |
| **KLU** | **Klutina** | **60.61** | **31** | P | **P** | **07 11 15.7** | **+3.7** |
| KLU | | | | IAmb | IAmb | 07 11 31.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **61.23** | **205** | P | **P** | **07 11 15.0** | **-1.4** |
| **NIL** | **Nilore** | **61.37** | **297** | P | **P** | **07 11 19.3** | **+1.7** |
| **F25K** | **Christian Rive** | **61.43** | **24** | P | **P** | **07 11 20.0** | **+2.6** |
| **FYU** | **Fort Yukon** | **61.45** | **26** | P | **P** | **07 11 18.9** | **+1.4** |
| FYU | | | | IAmb | IAmb | 07 11 31.2 | |
| | comp=Z,8.9nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.49** | **319** | P | **P** | **07 11 17.9** | **0.0** |
| | comp=Z,30nm,0.7s,baz=92,slow=8.1,SNR=99 | | | | | | |
| | comp=Z,30nm,0.7s | | | | | | |
| **SCRK** | **Sand Creek** | **61.71** | **29** | P | **P** | **07 11 18.9** | **-0.5** |
| SCRK | | | | IAmb | IAmb | 07 11 31.8 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **61.81** | **25** | P | **P** | **07 11 21.6** | **+1.6** |
| **J26L** | **Joseph Creek** | **61.93** | **28** | P | **P** | **07 11 20.7** | **-0.2** |
| J26L | | | | IAmb | IAmb | 07 11 33.6 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **62.12** | **308** | P | **P** | **07 11 23.7** | **+1.3** |
| **KKAR** | **Karatay Array** | **62.12** | **308** | P | **P** | **07 11 23.8** | **+1.4** |
| **KKAR** | **Karatay Array** | **62.12** | **308** | P | **P** | **07 11 23.5** | **+1.1** |
| **BTK** | **Batken** | **62.28** | **304** | P | **P** | **07 11 24.4** | **+0.8** |
| BTK | | | | IAmb | IAmb | 07 11 25.8 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **BRLS** | **Borolday** | **62.62** | **308** | *e*P | **P** | **07 11 27.5** | **+1.7** |
| | baz=308 | | | | | | |
| **GAR** | **Garm** | **62.82** | **303** | | | **07 11 28.9** | **+1.6** |
| **CHM** | **Chimkent** | **62.88** | **307** | *e*P | **P** | **07 11 28.1** | **+0.6** |
| | baz=307 | | | | | | |
| **E27K** | **Coleen River** | **63.02** | **24** | P | **P** | **07 11 30.8** | **+2.8** |
| **D27M** | **Malcolm River** | **63.33** | **23** | P | **P** | **07 11 31.4** | **+1.3** |
| D27M | | | | IAmb | IAmb | 07 11 37.0 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **63.52** | **27** | P | **P** | **07 11 32.0** | **+0.5** |
| I28M | | | | IAmb | IAmb | 07 11 59.6 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **BCPM** | **Bancas Point** | **63.65** | **33** | P | **P** | **07 11 32.6** | **+0.4** |
| **DAWY** | **Dawson** | **63.73** | **29** | P | **P** | **07 11 33.6** | **+0.8** |
| **CHGR** | **Chuyangaron** | **63.77** | **303** | | **P** | **07 11 35.1** | **+1.5** |
| **E28M** | **Babbage River** | **63.81** | **23** | P | **P** | **07 11 34.7** | **+1.5** |
| E28M | | | | IAmb | IAmb | 07 11 47.8 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **SIMJ** | **Simiganj** | **63.88** | **303** | | **P** | **07 11 35.7** | **+1.3** |
| **M29M** | **Somme Creek** | **64.16** | **30** | P | **P** | **07 11 36.4** | **+0.6** |
| M29M | | | | IAmb | IAmb | 07 11 49.8 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **O29M** | **Mount Kennedy** | **64.17** | **33** | P | **P** | **07 11 37.1** | **+1.2** |
| **H29M** | **Whitestone** | **64.19** | **26** | P | **P** | **07 11 35.8** | **+0.1** |
| H29M | | | | IAmb | IAmb | 07 11 46.6 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **64.20** | **27** | P | **P** | **07 11 38.1** | **+2.3** |
| I29M | | | | IAmb | IAmb | 07 11 52.1 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **G29M** | **Pine Creek** | **64.33** | **25** | P | **P** | **07 11 39.2** | **+2.5** |
| G29M | | | | IAmb | IAmb | 07 11 43.3 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **E29M** | **Blow River** | **64.40** | **24** | P | **P** | **07 11 38.3** | **+1.2** |
| **K29M** | **Barlow Dome** | **64.56** | **29** | P | **P** | **07 11 38.8** | **+0.4** |
| **KBL** | **Kabul** | **64.63** | **298** | P | **P** | **07 11 40.9** | **+1.5** |
| **I30M** | **Mount Dempster** | **65.02** | **27** | P | **P** | **07 11 42.7** | **+1.4** |
| **J30M** | **Hart River** | **65.06** | **28** | P | **P** | **07 11 41.6** | **0.0** |
| **G31M** | **Satah River** | **65.81** | **25** | P | **P** | **07 11 46.2** | **0.0** |
| G31M | | | | IAmb | IAmb | 07 11 59.1 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **F31M** | **Tsiigehtchic** | **65.99** | **25** | P | **P** | **07 11 47.8** | **+0.4** |
| F31M | | | | IAmb | IAmb | 07 11 55.3 | |
| | comp=Z,8.7nm,1.5s | | | | | | |
| **INK** | **Inuvik** | **66.03** | **24** | P | **P** | **07 11 48.6** | **+1.1** |
| INK | | | | IAmb | IAmb | 07 12 00.3 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **Q32M** | **Nakina River** | **67.47** | **34** | P | **P** | **07 11 58.2** | **+1.0** |
| **ARU** | **Arti** | **68.00** | **323** | P | **P** | **07 12 00.2** | **-0.1** |
| | comp=Z,11nm,0.4s,baz=98,slow=8.1,SNR=20 | | | | | | |
| | comp=Z,11nm,0.4s | | | | | | |
| **V35K** | **Ketchikan** | **68.40** | **38** | P | **P** | **07 12 03.6** | **+0.8** |
| **ABKAR** | **Akbulak array** | **68.44** | **316** | P | **P** | **07 12 03.6** | **+0.4** |
| **URZ** | **Urewera** | **69.02** | **152** | LR | LR | 07 38 59.5 | |
| | comp=Z,36nm,21.2s,baz=52,slow=33 | | | | | | |
| **RTZ** | **Ruatahuna** | **69.26** | **152** | P | **P** | **07 12 08.5** | **0.0** |
| **AKTO** | **Aktyubinsk** | **69.42** | **317** | P | **P** | **07 12 09.3** | **0.0** |
| | comp=Z,2.1nm,0.6s,baz=92,slow=6.7,SNR=5.6 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **BKZ** | **Black Stump Fm** | **69.52** | **153** | P | **P** | **07 12 10.4** | **+0.4** |
| **PGC** | **Sidney** | **74.92** | **43** | P | **P** | **07 12 42.7** | **+0.5** |
| PGC | | | | IAmb | IAmb | 07 12 58.8 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.96** | **28** | P | **P** | **07 12 40.6** | **-1.5** |
| | comp=Z,0.9nm,0.6s,baz=294,slow=5.3,SNR=3.8 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **NLWA** | **Neilton Lookou** | **75.04** | **45** | P | **P** | **07 12 43.0** | **0.0** |
| NLWA | | | | IAmb | IAmb | 07 13 06.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **BELG** | **Belogornoye** | **75.17** | **321** | P | **P** | **07 12 43.9** | **+0.3** |
| | comp=Z,12nm,0.6s,baz=106,slow=9.6,SNR=4.9 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **H04A** | **Detroit Lake** | **77.04** | **47** | P | **P** | **07 12 55.3** | **+0.9** |
| H04A | | | | IAmb | IAmb | 07 13 00.4 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **LTY** | **Liberty** | **77.14** | **44** | P | **P** | **07 12 55.1** | **+0.1** |
| **ARCES** | **ARCESS Array B** | **77.39** | **341** | P | **P** | **07 12 55.0** | **-1.0** |
| | comp=Z,6.0nm,0.8s,baz=70,slow=8.8,SNR=9.3 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **77.69** | **50** | LR | LR | 07 43 22.6 | |
| | comp=Z,19nm,20.2s,baz=315,slow=33 | | | | | | |
| **KBZ** | **Khabaz** | **81.30** | **314** | P | **P** | **07 13 18.6** | **+1.0** |
| | comp=Z,5.8nm,0.8s,baz=67,slow=3.3,SNR=10 | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **81.74** | **334** | P | **P** | **07 13 19.0** | **-0.6** |
| | comp=Z,1.4nm,0.5s,baz=75,slow=7.4,SNR=9.1 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.05** | **52** | P | **P** | **07 13 21.8** | **-0.3** |
| | comp=Z,1.0nm,0.8s,baz=271,slow=5.2,SNR=11 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **PFO** | **Pinyon Flats O** | **85.38** | **55** | LR | LR | 07 46 26.9 | |
| | comp=Z,26nm,19.4s,baz=236,slow=32 | | | | | | |
| **PDAR** | **Pinedale Array** | **86.16** | **45** | P | **P** | **07 13 41.5** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=284,slow=3.6,SNR=2.6 | | | | | | |
| PDAR | | | | LR | LR | 07 47 08.2 | |
| | comp=Z,20nm,19.4s,baz=318,slow=32 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **87.25** | **337** | P | **P** | **07 13 45.5** | **-2.1** |
| | comp=Z,1.8nm,0.6s,baz=50,slow=12,SNR=2.3 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **89.28** | **313** | P | **P** | **07 13 56.1** | **-1.7** |
| | comp=Z,0.7nm,0.7s,baz=30,slow=3.5,SNR=3.1 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.77** | **310** | PKP | **PKPdf** | **07 20 07.4** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=354,slow=3.8,SNR=4.0 | | | | | | |
| **SNAA** | **Sanae** | **127.97** | **193** | PKP | **PKPdf** | **07 20 06.2** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=76,slow=4.6,SNR=5.1 | | | | | | |
| **PLCA** | **Paso Flores** | **146.75** | **129** | PKPbc | **PKPbc** | **07 20 43.9** | **+0.5** |
| | comp=Z,2.1nm,0.6s,baz=239,slow=3.1,SNR=15 | | | | | | |
| **LPAZ** | **La Paz** | **149.67** | **82** | PKPbc | **PKPbc** | **07 20 53.0** | **+0.6** |
| | comp=Z,2.8nm,0.7s,baz=266,slow=5.7,SNR=3.9 | | | | | | |

**IDC 20 07:03:48.4±2.6, 54°16N×86°31E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=19.4km s-min=11.7km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.90** | **257** | I | I | 07 09 05.0 | |
| | baz=76,slow=315,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.90** | **257** | Pg | Pg | 07 04 04.1 | -1.6 |
| | 1.9nm,0.3s,baz=73,slow=17,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 07 04 19.4 | |
| | 3.4nm,0.3s,baz=77,slow=30,SNR=15 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.93** | **237** | Pn | Pn | 07 05 18.5 | +1.1 |
| | 0.1nm,0.3s,baz=53,slow=13,SNR=5.0 | | | | | | |
| KURBB | | | | Lg | Lg | 07 06 54.1 | |
| | baz=50,slow=31,SNR=1.1 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.80** | **201** | Pn | Pn | 07 05 44.4 | +1.3 |
| | 0.2nm,0.3s,baz=25,slow=14,SNR=5.8 | | | | | | |
| MKAR | | | | Lg | Lg | 07 07 54.4 | |
| | 0.1nm,0.3s,baz=19,slow=32,SNR=3.1 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

**IDC 20 07:05:09.6±2.5, 54°77N×83°53E, h0km, mbtmp2.6/2, ML2.4/2, Error ellipse: s-maj=21.2km s-min=12.3km az=168.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.11** | **137** | I | I | 07 11 20.0 | |
| | baz=319,slow=319,SNR=1.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.11** | **137** | Pg | Pg | 07 05 31.3 | +0.3 |
| | 2.7nm,0.3s,baz=318,slow=20,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 07 05 46.7 | |
| | 3.9nm,0.3s,baz=319,slow=29,SNR=13 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.14** | **218** | Pn | Pn | 07 06 27.9 | +0.1 |
| | 0.1nm,0.3s,baz=38,slow=15,SNR=4.6 | | | | | | |
| KURBB | | | | Lg | Lg | 07 07 52.2 | |
| | 0.1nm,0.3s,baz=38,slow=31,SNR=1.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.02** | **186** | Pn | Pn | 07 07 07.2 | -0.2 |
| | 0.1nm,0.3s,baz=11,slow=13,SNR=1.5 | | | | | | |
| MKAR | | | | Lg | Lg | 07 09 21.1 | |
| | baz=13,slow=27,SNR=1.9 | | | | | | |
| | 0.1nm,0.6s | | | | | | |

*NEIC* ***20*** *07:13:15.2±1.6, 17°.9S±0°.4×177°.8W±0°.2, h576km±24km, mb4.2/8, Error ellipse: s-maj=55.0km s-min=24.1km az=184.0*

*IDC* ***20*** *07:13:21.6±7.2, 18°.32S×178°.31W, h622km±90km, mb3.0/6, mbtmp3.9/6, Error ellipse: s-maj=46.6km s-min=26.8km az=145.0*

**ISC 20 07:13:15.7±0.8, 18°.5S±0°.2×178°.0W±0°.1, h550km, n17, σ1s38/17, mb3.7/10, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.85** | **281** | P | **P** | **07 14 38.6** | **+2.0** |
| **AFI** | **Afiamalu** | **7.52** | **53** | P | **P** | 07 15 03.0 | -5.9 |
| **NIUE** | **Niue** | **7.65** | **95** | P | **P** | **07 15 09.6** | **-0.4** |
| **CTAO** | **Charters Tower** | **33.75** | **261** | P | **P** | **07 19 12.5** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **07 20 38.6** | **-2.0** |
| WR0 | | | | IAmb | IAmb | 07 20 41.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.89** | **260** | P | P | 07 20 39.0 | -2.9 |
| WB0 | | | | IAmb | IAmb | 07 21 11.9 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **07 20 41.0** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 07 21 13.7 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.91** | **260** | P | **P** | **07 20 41.7** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **07 20 41.0** | **-1.1** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **07 20 40.9** | **-1.2** |
| | comp=Z,0.8nm,0.5s,baz=97,slow=7.0,SNR=17 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 22 09.7** | **-2.1** |
| | comp=Z,0.3nm,0.7s,baz=91,slow=3.7,SNR=1.5 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.02** | **255** | P | **P** | **07 20 42.7** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 07 20 43.5 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.02** | **255** | P | **P** | **07 20 42.5** | **-0.3** |
| | comp=Z,4.4nm,0.5s,baz=88,slow=9.0,SNR=73 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 22 09.7** | **-2.4** |
| | comp=Z,0.3nm,0.5s,baz=110,slow=3.3,SNR=1.9 | | | | | | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.53** | **180** | P | **P** | **07 23 41.8** | **+0.6** |
| **QSPA** | **South Pole Qui** | **71.53** | **180** | P | **P** | **07 23 42.2** | **+1.1** |
| | comp=Z,2.0nm,1.2s,baz=348,slow=5.1,SNR=1.7 | | | | | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.59** | **44** | P | **P** | **07 24 25.5** | **-0.9** |
| | comp=Z,0.4nm,0.6s,baz=221,slow=9.5,SNR=4.7 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.98** | **57** | P | **P** | **07 24 59.9** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=225,slow=5.6,SNR=7.3 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.52** | **43** | P | **P** | **07 25 05.3** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=194,slow=3.4,SNR=2.2 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |

*NEIC* ***20*** *07:13:31.1±1.4, 9°.42N±0°.10×126°.20E±0°.06, h10km±1km, mb4.4/21, Error ellipse: s-maj=16.8km s-min=8.8km az=19.0*

*IDC* ***20*** *07:13:32.2±1.5, 9°.46N×126°.27E, h0km, mb3.9/9, mbtmp3.9/9, MS4.1/1, Error ellipse: s-maj=162.9km s-min=19.9km az=69.0*

**ISC 20 07:13:31.7±0.7, 9°.32N±0°.08×126°.1E±0°.1, h10km, n39, σ1s58/35, mb4.3/17, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **2.31** | **194** | Pn | **Pn** | **07 14 10.6** | **+0.7** |
| **TNTI** | **Ternate** | **8.58** | **172** | Pn | **Pn** | **07 15 36.3** | **+0.2** |
| **TOLI2** | **Tolitoli** | **9.75** | **213** | Pn | **Pn** | **07 15 52.2** | **+0.1** |
| **KKM** | **Kota Kinabalu** | **10.36** | **252** | Pn | **Pn** | **07 15 59.1** | **-1.5** |
| **SBUM** | **Sibu** | **15.43** | **245** | Pn | **Pn** | **07 17 09.7** | **0.0** |
| **KAPI** | **Kappang** | **15.60** | **204** | Pn | **Pn** | **07 17 12.3** | **+0.4** |
| KAPI | | | | IAmb | IAmb | 07 17 13.3 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **SAUI** | **Saumlaki** | **17.94** | **163** | | **Pn** | **07 17 41.1** | **-0.4** |
| **GUMO** | **Guam** | **18.83** | **75** | P | **P** | **07 17 49.3** | **-2.6** |
| **SOEI** | **Soe** | **19.05** | **186** | P | **P** | **07 17 54.4** | **+0.1** |
| SOEI | | | | IAmb | IAmb | 07 18 14.7 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **24.98** | **174** | P | **P** | **07 18 54.8** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 07 19 03.1 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **26.82** | **26** | LR | LR | 07 30 59.7 | |
| | comp=Z,38nm,18.3s,baz=61,slow=39 | | | | | | |
| **CRAI** | **Chiangrai** | **27.13** | **296** | P | **P** | **07 19 13.2** | **-2.0** |
| CRAI | | | | IAmb | IAmb | 07 19 32.9 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.25** | **181** | P | **P** | **07 19 15.2** | **-1.1** |
| **WB0** | **Warramunga Arr** | **30.03** | **164** | P | **P** | **07 19 41.0** | **0.0** |
| WB0 | | | | IAmb | IAmb | 07 19 44.7 | |
| | comp=Z,8.5nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **30.18** | **165** | P | **P** | **07 19 41.8** | **-0.6** |
| **WRA** | **Warramunga Arr** | **30.18** | **165** | P | **P** | **07 19 44.0** | **+1.6** |
| | comp=Z,0.5nm,0.8s,baz=349,slow=9.2,SNR=2.6 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **30.18** | **165** | P | **P** | **07 19 40.4** | **-2.0** |
| WB2 | | | | IAmb | IAmb | 07 19 49.8 | |
| | comp=Z,7.6nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **30.25** | **164** | P | **P** | **07 19 42.9** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 07 19 45.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **33.65** | **167** | P | **P** | **07 20 11.8** | **-1.1** |
| **ASAR** | **Alice Springs** | **33.66** | **167** | P | **P** | **07 20 17.2** | **+4.3** |
| | comp=Z,0.3nm,0.5s,baz=349,slow=6.6,SNR=6.2 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.68** | **71** | T | T | 08 04 37.3 | |
| | baz=265 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.69** | **71** | T | T | 08 04 38.4 | |
| | baz=265 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.70** | **71** | T | T | 08 04 37.8 | |
| | baz=265 | | | | | | |
| **SONM** | **Songino Array** | **41.86** | **340** | P | **P** | **07 21 24.6** | **+2.5** |
| | comp=Z,1.2nm,0.7s,baz=157,slow=7.3,SNR=4.5 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **42.95** | **168** | P | **P** | **07 21 30.7** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 07 21 52.4 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **MK31** | **Makanchi Array** | **52.70** | **323** | P | **P** | **07 22 44.5** | **-2.1** |
| **MKAR** | **Makanchi Array** | **52.70** | **323** | P | **P** | **07 22 48.8** | **+2.2** |
| | comp=Z,1.0nm,0.7s,baz=117,slow=8.0,SNR=8.3 | | | | | | |
| MKAR | | | | PcP | **PcP** | **07 23 57.3** | **+1.0** |
| | comp=Z,0.7nm,0.7s,baz=123,slow=5.3,SNR=3.6 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.39** | **332** | P | **P** | **07 23 06.7** | **+0.7** |
| | comp=Z,0.7nm,0.3s,baz=104,slow=10,SNR=0.9 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **56.77** | **326** | P | **P** | **07 23 15.1** | **-0.9** |
| KURK | | | | IAmb | IAmb | 07 23 18.9 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.78** | **326** | P | **P** | **07 23 17.7** | **+1.7** |
| | comp=Z,1.2nm,0.5s,baz=123,slow=7.3,SNR=10 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **GAR** | **Garm** | **57.80** | **310** | P | **P** | **07 23 23.1** | **-0.6** |
| **CHGR** | **Chuyangaron** | **58.59** | **310** | P | **P** | **07 23 28.0** | **-1.1** |
| **KKAR** | **Karatay Array** | **58.82** | **315** | P | **P** | **07 23 30.1** | **-0.5** |
| **BVAR** | **Borovoye Array** | **62.37** | **326** | P | **P** | **07 23 56.5** | **+2.0** |
| | comp=Z,0.9nm,0.6s,baz=99,slow=8.9,SNR=3.2 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **62.44** | **326** | P | **P** | **07 23 54.1** | **-0.9** |
| BRVK | | | | IAmb | IAmb | 07 23 59.8 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **67.51** | **320** | P | **P** | **07 24 25.8** | **-2.3** |
| **ARCES** | **ARCESS Array B** | **85.03** | **340** | P | **P** | **07 26 08.9** | **+1.7** |
| | comp=Z,1.9nm,0.6s,baz=67,slow=5.4,SNR=6.1 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **86.66** | **332** | P | **P** | **07 26 17.1** | **+1.6** |
| | comp=Z,2.2nm,0.8s,baz=72,slow=4.5,SNR=4.4 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **VRAC** | **Vranov** | **95.42** | **322** | LR | LR | 08 11 56.3 | |
| | comp=Z,84nm,21.2s,baz=99,slow=37 | | | | | | |

**IDC 20 07:13:52.1±3.8, 53°76N×88°20E, h0km, mbtmp2.8/3, ML2.2/3, Error ellipse: s-maj=37.5km s-min=20.5km az=46.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **2.01** | **277** | I | I | 07 26 40.0 | |
| | 0.1nm,0.9s,baz=92,slow=315,SNR=5.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.01** | **277** | Pn | Pn | 07 14 28.2 | +1.0 |
| | 1.3nm,0.3s,baz=92,slow=12,SNR=24 | | | | | | |
| ZALV | | | | Lg | Lg | 07 14 55.2 | |
| | 3.9nm,0.3s,ba

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,250nm,0.2s | | | | | | | | |
| **BER** | **Bergen** | | **1.44** | **172** | Pn | | **Pb** | **07 26 20.8** | **+2.2** |
| BER | | | | | Lg | | Lg | 07 26 40.3 | |
| **DOMB** | **Dombas** | | **1.96** | **81** | *e*P | | **Pb** | **07 26 27.7** | **+0.3** |
| DOMB | | | | | *e*Pg | | **Pg** | **07 26 29.3** | **+0.9** |
| DOMB | | | | | *e*S | | **Sb** | **07 26 52.0** | **-0.4** |
| DOMB | | | | | *e*Sg | | **Sg** | **07 26 55.6** | **+1.7** |
| DOMB | | | | | IAML | | | 07 27 02.0 | |
| | comp=Z,101nm,0.3s | | | | | | | | |
| **DOMB** | **Dombas** | | **1.96** | **81** | Pn | | **Pb** | **07 26 27.8** | **+0.3** |
| DOMB | | | | | Pg | | **Pg** | **07 26 29.3** | **+0.9** |
| DOMB | | | | | Sn | | **Sb** | **07 26 52.1** | **-0.4** |
| DOMB | | | | | Lg | | Lg | 07 26 55.8 | |
| **ODD1** | **Odda** | | **2.07** | **156** | *e*P | | **Pb** | **07 26 28.9** | **-0.5** |
| ODD1 | | | | | *e*S | | **Sn** | **07 26 54.1** | **+0.6** |
| ODD1 | | | | | IAML | | | 07 27 06.6 | |
| | comp=Z,70nm,0.6s | | | | | | | | |
| **BLS5** | **Blasjo** | | **2.51** | **162** | *e*P | | **Pn** | **07 26 34.8** | **+1.9** |
| BLS5 | | | | | *e*S | | **Sn** | **07 27 03.7** | **-0.5** |
| BLS5 | | | | | *e*Sg | | **Sg** | **07 27 12.4** | **+1.1** |
| BLS5 | | | | | IAML | | | 07 27 16.4 | |
| | comp=Z,53nm,0.3s | | | | | | | | |
| **KMY** | **Karmoy** | | **2.61** | **177** | *e*P | | **Pn** | **07 26 35.6** | **+1.4** |
| KMY | | | | | *e*S | | **Sn** | **07 27 04.7** | **-1.9** |
| KMY | | | | | *e*Sg | | **Sg** | **07 27 15.1** | **+0.5** |
| KMY | | | | | IAML | | | 07 27 19.3 | |
| | comp=Z,46nm,0.8s | | | | | | | | |
| **KMY** | **Karmoy** | | **2.61** | **177** | Pn | | **Pn** | **07 26 35.6** | **+1.4** |
| KMY | | | | | Sn | | **Sn** | **07 27 04.7** | **-1.9** |
| KMY | | | | | Lg | | Lg | 07 27 15.2 | |
| **NC204** | **NORSAR Array S** | | **2.84** | **98** | IAML | | | 07 27 27.4 | |
| | comp=Z,36nm,0.1s | | | | | | | | |
| **TBLU** | **Trondheim** | | **2.86** | **57** | *e*P | | **Pb** | **07 26 40.9** | **-1.8** |
| TBLU | | | | | *e*S | | **Sn** | **07 27 14.4** | **+1.7** |
| TBLU | | | | | *e*Sg | | **Sg** | **07 27 25.7** | **+3.1** |
| TBLU | | | | | IAML | | | 07 27 27.2 | |
| | comp=Z,33nm,0.7s | | | | | | | | |
| **NC2** | **NORSAR Subarra** | | **2.87** | **98** | Pn | | **Pn** | **07 26 39.0** | **+1.1** |
| NC2 | | | | | Sg | | **Sg** | **07 27 21.8** | **-1.2** |
| **NC2** | **NORSAR Subarra** | | **2.87** | **98** | Pn | | **Pn** | **07 26 39.0** | **+1.1** |
| NC2 | | | | | Lg | | Lg | 07 27 21.8 | |
| **NBO** | **NORSAR Subarra** | | **2.91** | **103** | Pn | | **Pn** | **07 26 39.5** | **+1.1** |
| NBO | | | | | Sg | | **Sg** | **07 27 22.6** | **-1.6** |
| **NBO** | **NORSAR Subarra** | | **2.91** | **103** | Pn | | **Pn** | **07 26 39.5** | **+1.1** |
| NBO | | | | | Lg | | Lg | 07 27 22.6 | |
| **NAO** | **NORSAR Subarra** | | **3.01** | **107** | Pn | | **Pn** | **07 26 40.4** | **+0.7** |
| NAO | | | | | Sg | | **Sg** | **07 27 24.9** | **-2.4** |
| **NAO** | **NORSAR Subarra** | | **3.01** | **107** | Pn | | **Pn** | **07 26 40.4** | **+0.7** |
| NAO | | | | | Lg | | Lg | 07 27 24.9 | |
| **NB2** | **NORSAR Subarra** | | **3.11** | **102** | Pn | | **Pn** | **07 26 42.2** | **+1.0** |
| | baz=287,slow=14 | | | | | | | | |
| NB2 | | | | | Sg | | **Sg** | **07 27 29.5** | **-1.2** |
| | baz=288,slow=37 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | | **3.11** | **102** | Pn | | **Pn** | **07 26 42.2** | **+1.0** |
| | baz=287,slow=14 | | | | | | | | |
| NB2 | | | | | Lg | | Lg | 07 27 29.5 | |
| | baz=288,slow=37 | | | | | | | | |
| **NOA** | **NORSAR Array B** | | **3.11** | **102** | Pn | | **Pn** | **07 26 42.8** | **+1.6** |
| | comp=Z,0.5nm,0.3s,baz=288,slow=16,SNR=31 | | | | | | | | |
| NOA | | | | | Pg | | **Pb** | **07 26 47.2** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=288,slow=17,SNR=38 | | | | | | | | |
| NOA | | | | | Lg | | Lg | 07 27 25.8 | |
| | comp=Z,1.2nm,0.3s,baz=299,slow=15,SNR=8.4 | | | | | | | | |
| | comp=Z,2.1nm,0.4s | | | | | | | | |
| **NC3** | **NORSAR Subarra** | | **3.15** | **97** | Pn | | **Pn** | **07 26 42.5** | **+0.9** |
| NC3 | | | | | Sg | | **Sg** | **07 27 30.6** | **-1.3** |
| **NC3** | **NORSAR Subarra** | | **3.15** | **97** | Pn | | **Pn** | **07 26 42.5** | **+0.9** |
| NC3 | | | | | Lg | | Lg | 07 27 30.6 | |
| **KONO** | **Kongsberg** | | **3.15** | **131** | *e*P | | **Pn** | **07 26 43.1** | **+1.4** |
| KONO | | | | | *e*S | | **Sn** | **07 27 19.4** | **-0.5** |
| KONO | | | | | *e*Sg | | **Sg** | **07 27 33.8** | **+1.9** |
| KONO | | | | | IAML | | | 07 27 35.7 | |
| | comp=Z,21nm,0.2s | | | | | | | | |
| **NC6** | **NORSAR Subarra** | | **3.32** | **106** | Pn | | **Pn** | **07 26 44.4** | **+0.4** |
| NC6 | | | | | Sg | | **Sg** | **07 27 34.7** | **-2.7** |
| **NC6** | **NORSAR Subarra** | | **3.32** | **106** | Pn | | **Pn** | **07 26 44.4** | **+0.4** |
| NC6 | | | | | Lg | | Lg | 07 27 34.7 | |
| **NC4** | **NORSAR Subarra** | | **3.33** | **100** | Pn | | **Pn** | **07 26 44.9** | **+0.7** |
| NC4 | | | | | Sg | | **Sg** | **07 27 35.8** | **-2.1** |
| **NC4** | **NORSAR Subarra** | | **3.33** | **100** | Pn | | **Pn** | **07 26 44.9** | **+0.7** |
| NC4 | | | | | Lg | | Lg | 07 27 35.8 | |
| **NC602** | **NORSAR Array S** | | **3.36** | **106** | IAML | | | 07 27 41.3 | |
| | comp=Z,29nm,0.2s | | | | | | | | |
| **NRA0** | **NORESS Array S** | | **3.36** | **106** | Pn | | **Pn** | **07 26 46.0** | **+1.4** |
| | baz=304,slow=12 | | | | | | | | |
| NRA0 | | | | | Sn | | **Sn** | **07 27 24.8** | **-0.4** |
| | baz=304,slow=22 | | | | | | | | |
| NRA0 | | | | | Sg | | **Sg** | **07 27 38.1** | **-0.6** |
| | baz=305,slow=37 | | | | | | | | |
| **NRA0** | **NORESS Array S** | | **3.36** | **106** | Pn | | **Pn** | **07 26 46.0** | **+1.4** |
| | baz=304,slow=12 | | | | | | | | |
| NRA0 | | | | | Sn | | **Sn** | **07 27 24.8** | **-0.4** |
| | baz=304,slow=22 | | | | | | | | |
| NRA0 | | | | | Lg | | Lg | 07 27 38.1 | |
| | baz=305,slow=37 | | | | | | | | |
| **OSL** | **Oslo** | | **3.39** | **121** | *e*P | | **Pn** | **07 26 46.9** | **+1.9** |
| OSL | | | | | *e*S | | **Sn** | **07 27 26.0** | **+0.2** |
| OSL | | | | | *e*Sg | | **Sg** | **07 27 39.4** | **-0.3** |
| OSL | | | | | IAML | | | 07 27 49.2 | |
| | comp=Z,65nm,0.4s | | | | | | | | |
| **LRW** | **Lerwick** | | **3.42** | **243** | *e*P | | **Pn** | **07 26 45.2** | **-0.2** |
| LRW | | | | | *e*S | | **Sn** | **07 27 21.9** | **-4.8** |
| **LRW** | **Lerwick** | | **3.42** | **243** | Pn | | **Pn** | **07 26 44.9** | **-0.5** |
| LRW | | | | | Sn | | **Sn** | **07 27 22.1** | **-4.6** |
| **SNART** | **Snartemo** | | **3.66** | **161** | *e*P | | **Pn** | **07 26 50.3** | **+1.6** |
| SNART | | | | | *e*S | | **Sn** | **07 27 30.7** | **-1.8** |
| SNART | | | | | *e*Sg | | **Sg** | **07 27 48.5** | **+0.2** |
| SNART | | | | | IAML | | | 07 27 52.2 | |
| | comp=Z,50nm,0.4s | | | | | | | | |
| **SNART** | **Snartemo** | | **3.66** | **161** | *i* P | | **Pn** | **07 26 50.4** | **+1.6** |
| SNART | | | | | *i* S | | **Sn** | **07 27 31.0** | **-1.6** |
| **HOMB** | **Homborsund** | | **3.97** | **152** | *e*P | | **Pn** | **07 26 54.9** | **+2.0** |
| HOMB | | | | | *e*S | | **Sn** | **07 27 38.7** | **-1.5** |
| **HOMB** | **Homborsund** | | **3.97** | **152** | *i* P | | **Pn** | **07 26 55.0** | **+2.0** |
| HOMB | | | | | *i* S | | **Sn** | **07 27 38.7** | **-1.5** |
| **STRU** | **Stroemstad** | | **4.16** | **129** | *i* P | | **Pn** | **07 26 55.9** | **+0.3** |
| STRU | | | | | *i* S | | **Sn** | **07 27 41.5** | **-3.3** |
| **NSS** | **Namsos** | | **4.19** | **46** | *e*P | | **Pn** | **07 26 57.1** | **+1.1** |
| **HFS** | **Hagfors** | | **4.58** | **108** | Pn | | **Pn** | **07 27 02.8** | **+1.4** |
| | baz=281,slow=12 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | **07 27 53.5** | **-1.8** |
| | baz=285,slow=22 | | | | | | | | |
| HFS | | | | | Sg | | **Sg** | **07 28 16.8** | **-1.1** |
| | baz=299,slow=28 | | | | | | | | |
| **HFS** | **Hagfors** | | **4.58** | **108** | Pn | | **Pn** | **07 27 02.8** | **+1.4** |
| | baz=281,slow=12 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | **07 27 53.5** | **-1.8** |
| | baz=285,slow=22 | | | | | | | | |
| HFS | | | | | Lg | | Lg | 07 28 16.8 | |
| | baz=299,slow=28 | | | | | | | | |
| **HFS** | **Hagfors** | | **4.58** | **108** | Pn | | **Pn** | **07 27 03.0** | **+1.7** |
| | comp=Z,0.5nm,0.3s,baz=296,slow=13,SNR=18 | | | | | | | | |
| HFS | | | | | Pg | | **Pb** | **07 27 12.9** | **+0.8** |
| | comp=Z,3.1nm,0.3s,baz=299,slow=17,SNR=14 | | | | | | | | |
| HFS | | | | | Sn | | **Sn** | **07 27 52.5** | **-2.7** |
| | comp=Z,1.6nm,0.3s,baz=286,slow=23,SNR=5.2 | | | | | | | | |
| HFS | | | | | Lg | | Lg | 07 28 14.0 | |
| | comp=Z,2.5nm,0.3s,baz=288,slow=15,SNR=5.1 | | | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | | | |
| **NOD** | **Norderasen** | | **4.86** | **66** | P | | **Pn** | **07 27 06.9** | **+1.7** |
| **NOD** | **Norderasen** | | **4.86** | **66** | P | | **Pn** | **07 27 06.9** | **+1.7** |
| **TJOU** | **Tjoern** | | **5.06** | **135** | P | | **Pn** | **07 27 08.7** | **+0.7** |
| TJOU | | | | | S | | **Sn** | **07 28 03.5** | **-3.5** |
| **TJOU** | **Tjoern** | | **5.06** | **135** | *i* P | | **Pn** | **07 27 08.6** | **+0.7** |
| TJOU | | | | | P | | **Pn** | **07 27 08.7** | **+0.7** |
| TJOU | | | | | *i* S | | **Sn** | **07 28 03.1** | **-3.9** |
| TJOU | | | | | S | | **Sn** | **07 28 03.5** | **-3.5** |
| **ROTU** | **Roteberg** | | **5.20** | **89** | P | | **Pn** | **07 27 11.1** | **+1.3** |
| ROTU | | | | | S | | **Sn** | **07 28 08.5** | **-1.9** |
| **ROTU** | **Roteberg** | | **5.20** | **89** | P | | **Pn** | **07 27 11.1** | **+1.3** |
| ROTU | | | | | S | | **Sn** | **07 28 08.5** | **-1.9** |
| **NRAU** | **Nora** | | **5.44** | **110** | S | | **Sn** | **07 28 14.2** | **-2.1** |
| **NRAU** | **Nora** | | **5.44** | **110** | S | | **Sn** | **07 28 14.2** | **-2.1** |
| **HASU** | **Hassela** | | **5.51** | **81** | P | | **Pn** | **07 27 16.1** | **+2.1** |
| HASU | | | | | S | | **Sn** | **07 28 15.9** | **-2.2** |
| **HASU** | **Hassela** | | **5.51** | **81** | P | | **Pn** | **07 27 16.1** | **+2.1** |
| HASU | | | | | S | | **Sn** | **07 28 15.9** | **-2.2** |
| **BIGH** | **Upper Bighouse** | | **5.53** | **237** | *e*P | | **Pn** | **07 27 13.9** | **-0.5** |
| BIGH | | | | | *e*S | | **Sn** | **07 28 11.2** | **-7.4** |
| BIGH | | | | | *e*S | | **Sn** | **07 28 11.8** | **-6.8** |
| **ONAU** | **Onsala** | | **5.67** | **138** | P | | **Pn** | **07 27 17.0** | **+0.8** |
| **ONAU** | **Onsala** | | **5.67** | **138** | *i* S | | **Sn** | **07 28 16.6** | **-5.3** |
| ONAU | | | | | *i* P | | **Pn** | **07 27 16.8** | **+0.6** |
| ONAU | | | | | P | | **Pn** | **07 27 17.0** | **+0.8** |
| **STOK** | **Stokkvaagen** | | **5.76** | **34** | *e*P | | **Pn** | **07 27 17.3** | **-0.1** |
| STOK | | | | | *e*S | | **Sn** | **07 28 23.2** | **-0.8** |
| **BORU** | **Boraas** | | **5.76** | **133** | *i* P | | **Pn** | **07 27 17.4** | **-0.1** |
| BORU | | | | | *i* S | | **Sn** | **07 28 17.7** | **-6.5** |
| **KONS** | **Konsvik** | | **5.91** | **34** | *e*S | | **Sn** | **07 28 26.2** | **-1.6** |
| **FABU** | **Falkenberg** | | **6.24** | **137** | *i* P | | **Pn** | **07 27 24.3** | **+0.2** |
| FABU | | | | | *e*S | | **Sn** | **07 28 29.5** | **-6.6** |
| **DEL** | **Delary** | | **7.05** | **135** | *i* P | | **Pn** | **07 27 35.6** | **+0.4** |
| DEL | | | | | *e*S | | **Sn** | **07 28 49.7** | **-6.2** |
| **BJUU** | **Bjuv** | | **7.10** | **140** | *i* P | | **Pn** | **07 27 36.5** | **+0.5** |
| BJUU | | | | | *e*S | | **Sn** | **07 28 52.4** | **-4.8** |
| **EKA** | **Eskdalemuir Ar** | | **7.75** | **217** | Pn | | **Pn** | **07 27 45.9** | **+1.1** |
| **EKA** | **Eskdalemuir Ar** | | **7.75** | **217** | Pn | | **Pn** | **07 27 45.9** | **+1.1** |
| **EKA** | **Eskdalemuir Ar** | | **7.75** | **217** | Pn | | **Pn** | **07 27 43.8** | **-1.0** |
| | comp=Z,1.1nm,0.3s,baz=23,slow=12,SNR=18 | | | | | | | | |
| EKA | | | | | Sn | | **Sn** | **07 29 05.5** | **-7.6** |
| | baz=38,slow=24 | | | | | | | | |
| **FINES** | **FINESS Array B** | | **10.06** | **83** | Pn | | **Pn** | **07 28 16.2** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=279,slow=12,SNR=1.5 | | | | | | | | |
| FINES | | | | | Lg | | Lg | 07 31 01.9 | |
| | comp=Z,0.4nm,0.3s,baz=295,slow=26,SNR=2.3 | | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | | **11.42** | **39** | Pn | | **Pn** | **07 28 34.9** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=225,slow=13,SNR=1.8 | | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | | |

**IDC 20 07:27:08.8±2.3, 16°.53S×177°.96W, h0km, mb3.4/4, mbtmp3.4/4, Error ellipse: s-maj=144.5km s-min=36.4km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **45.59** | **253** | P | | P | 07 35 31.1 | 0.0 |
| | 0.1nm,0.4s,baz=82,slow=7.6,SNR=1.9 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.14** | **44** | P | | P | 07 39 12.0 | +1.8 |
| | 0.2nm,0.5s,baz=210,slow=7.1,SNR=2.0 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.46** | **13** | P | | P | 07 39 42.3 | -0.6 |
| | 0.2nm,0.4s,baz=219,slow=5.5,SNR=4.0 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.90** | **58** | P | | P | 07 39 45.0 | -1.1 |
| | 0.3nm,0.8s,baz=234,slow=4.2,SNR=4.4 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |

**NAM 20 07:31:11.6±0.3, 19°.80S×14°.58E, h6km±1km, ML0.5, 4C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.03** | **263** | ↓*i* P | | Pg | 07 31 13.0 | +0.1 |
| ST9N | | | | *i* S | | Sg | 07 31 14.0 | +0.1 |
| ST9N | | | | IAML | | | 07 31 14.3 | |
| | comp=Z,148nm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.03** | **263** | *i* P | | Pg | 07 31 13.0 | +0.1 |
| ST9N | | | | *i* S | | Sg | 07 31 14.0 | +0.1 |
| ST9N | | | | IAML | | | 07 31 14.6 | |
| | comp=Z,376nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.07** | **30** | ↑*i* P | | Pg | 07 31 13.4 | +0.1 |
| ST1N | | | | *i* S | | Sg | 07 31 14.6 | 0.0 |
| ST1N | | | | IAML | | | 07 31 14.8 | |
| | comp=Z,56nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.07** | **30** | *i* P | | Pg | 07 31 13.4 | +0.1 |
| ST1N | | | | *i* S | | Sg | 07 31 14.6 | +0.1 |
| ST1N | | | | IAML | | | 07 31 14.8 | |
| | comp=Z,31nm,0.1s | | | | | | | |
| **ST3N** | **ST3** | **0.09** | **305** | ↑*i* P | | Pg | 07 31 13.8 | +0.1 |
| ST3N | | | | *i* S | | Sg | 07 31 15.3 | +0.1 |
| ST3N | | | | IAML | | | 07 31 15.4 | |
| | comp=Z,14nm,0.0s | | | | | | | |
| **ST3N** | **ST3** | **0.09** | **305** | *i* P | | Pg | 07 31 13.8 | +0.1 |
| ST3N | | | | *i* S | | Sg | 07 31 15.3 | +0.1 |
| ST3N | | | | IAML | | | 07 31 15.5 | |
| | comp=Z,20nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.13** | **172** | *i* S | | Sg | 07 31 16.4 | +0.1 |
| ST2N | | | | *i* S | | | 07 31 16.5 | |
| **ST2N** | **ST2** | **0.13** | **172** | *i* P | | Pg | 07 31 14.5 | +0.1 |
| ST2N | | | | *i* S | | Sg | 07 31 16.5 | +0.2 |
| ST2N | | | | IAML | | | 07 31 16.6 | |
| | comp=Z,11nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.17** | **89** | ↓*i* P | | Pg | 07 31 15.1 | +0.1 |
| ST5N | | | | *i* S | | Sg | 07 31 17.5 | +0.2 |
| ST5N | | | | IAML | | | 07 31 17.8 | |
| | comp=Z,13nm,0.0s | | | | | | | |
| **ST5N** | **ST5** | **0.17** | **89** | *i* P | | Pg | 07 31 15.2 | +0.1 |
| ST5N | | | | *i* S | | Sg | 07 31 17.5 | +0.2 |
| ST5N | | | | IAML | | | 07 31 17.9 | |
| | comp=Z,4.5nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.17** | **268** | ↓*i* P | | Pg | 07 31 15.1 | +0.1 |
| ST6N | | | | *i* S | | Sg | 07 31 17.5 | +0.2 |
| ST6N | | | | IAML | | | 07 31 18.4 | |
| | comp=Z,7.7nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.17** | **268** | *i* P | | Pg | 07 31 15.1 | +0.1 |
| ST6N | | | | *i* S | | Sg | 07 31 17.5 | +0.1 |
| ST6N | | | | IAML | | | 07 31 18.0 | |
| | comp=Z,5.6nm,0.1s | | | | | | | |
| **ST8N** | **ST8** | **0.27** | **293** | ↑*i* P | | Pg | 07 31 16.9 | +0.1 |
| ST8N | | | | *i* S | | Sg | 07 31 20.4 | -0.1 |
| ST8N | | | | IAML | | | 07 31 21.0 | |
| | comp=Z,1.8nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.27** | **222** | *i* S | | Sg | 07 31 20.4 | 0.0 |
| **ST11N** | **ST11** | **0.29** | **61** | ↑*i* P | | Pg | 07 31 17.6 | +0.3 |
| ST11N | | | | IAML | | | 07 31 22.0 | |
| | comp=N,7.1nm,0.0s | | | | | | | |

*BJI **20** 07:38:17.4±0.0, 8°.82N×57°.40E, h10km, mb4.8/61, mB5.2/30, Ms4.8/46, Ms7 4.7/46*

*IDC **20** 07:38:23.7±0.5, 9°.54N×57°.98E, h0km, mb4.5/30, mbtmp4.5/31, ML3.2/2, MS4.3/67, Error ellipse: s-maj=13.5km s-min=12.1km az=120.0*

*MOS **20** 07:38:24.0±0.9, 9°.54N×57°.93E, h10km, mb5.1/61, MS4.2/8, Error ellipse: s-maj=7.2km s-min=4.3km az=99.9*

*GCMT **20** 07:38:25.8±0.2, 9°.56N±0°.01×57°.88E±0°.01, h12km, MW5.2/121, Moment Tension Solution. s49,c57; s121,c201; Duration: 1s0 Moment tensor: Scale $10^{16}$ Nm; $M_{rr}$=7.08±.12; $M_{\theta\theta}$=2.71±.12; $M_{\phi\phi}$=4.38±.14; $M_{r\theta}$=3.19±.45; $M_{\theta\phi}$=-2.78±.10; $M_{\phi r}$=0.90±.44; Best double couple: $M_0$=7.49500×$10^{16}$ NP1:$\phi_s$309.00000°,δ57.00000°, λ=-104.00000°. NP2:$\phi_s$155.00000°,δ36.00000°, λ=-69.00000°. Principal axes: T 6.9610, Plg11.0000°, Azm50.0000°; N 1.0770, Plg12.0000°, Azm317.0000°; P -8.0280, Plg74.0000°, Azm181.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **20** 07:38:26.8±2.0, 9°.56N±0°.09×57°.96E±0°.09, h10km±1km, mb5.0/108 Error ellipse: s-maj=14.7km s-min=14.2km az=203.0*

**ISC 20 07:38:26.9±0.6, 9°.48N±0°.04×57°.92E±0°.04, h16km±3km, h16km:pP-P,n473,σ1s58/501, mb4.8/183, MS4.4/92, 33C-8D, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ABTO** | **Aybut** | **9.03** | **331** | P | | **Pn** | **07 40 40.6** | **+3.9** |
| ABTO | | | | P | | **Pn** | **07 40 40.6** | **+3.9** |
| **WHFO** | **Wadi Hawf** | **9.30** | **335** | P | | **Pn** | **07 40 44.1** | **+3.6** |
| **DOK** | **Doka** | **9.80** | **338** | P | | **Pn** | **07 40 51.6** | **+4.4** |
| **DQM** | **DQM** | **10.39** | **358** | P | | **Pn** | **07 40 54.8** | **-0.6** |
| **MHTO** | **MHTO** | **11.44** | **0** | P | | **Pn** | **07 41 10.4** | **+0.7** |
| MHTO | | | | P | | **Pn** | **07 41 10.4** | **+0.7** |
| **JLN** | **Jalan Bani Buh** | **12.68** | **6** | P | | **Pn** | **07 41 27.2** | **+0.6** |
| JLN | | | | P | | **Pn** | **07 41 27.2** | **+0.6** |
| **JMDO** | **Jabal Madar** | **12.82** | **1** | P | | **Pn** | **07 41 30.7** | **+2.1** |
| | SNR=8.0 | | | | | | | |
| JMDO | | | | P | | **Pn** | **07 41 30.7** | **+2.1** |
| | SNR=8.0 | | | | | | | |
| **WBK** | **Wadi Bani Khal** | **13.10** | **4** | P | | **Pn** | **07 41 34.8** | **+2.4** |
| WBK | | | | P | | **Pn** | **07 41 34.8** | **+2.4** |
| **BSY** | **Bisya** | **13.21** | **357** | P | | **Pn** | **07 41 36.5** | **+2.6** |
| | SNR=6.5 | | | | | | | |
| BSY | | | | S | | **Sn** | **07 44 02.8** | **+2.3** |
| **UMZA** | **Um Al Zommool** | **13.42** | **349** | P | | **Pn** | **07 41 38.4** | **+1.6** |
| UMZA | | | | P | | **Pn** | **07 41 38.4** | **+1.6** |
| UMZA | | | | S | | **Sn** | **07 44 10.5** | **+4.8** |
| UMZA | | | | S | | **Sn** | **07 44 10.5** | **+4.8** |
| **SMDO** | **Samad** | **13.50** | **1** | P | | **Pn** | **07 41 39.8** | **+1.8** |
| SMDO | | | | P | | **Pn** | **07 41 39.8** | **+1.8** |
| SMDO | | | | S | | **Sn** | **07 44 13.7** | **+5.8** |
| SMDO | | | | S | | **Sn** | **07 44 13.7** | **+5.8** |
| **WSAR** | **Wadi Sarin** | **13.70** | **3** | Pn | | **Pn** | **07 41 40.5** | **-0.1** |
| | 0.2nm,0.3s,baz=211,slow=17,SNR=6.5 | | | | | | | |
| WSAR | | | | LR | | LR | 07 46 09.9 | |
| | comp=Z,3μm,18.8s,baz=201,slow=34 | | | | | | | |
| | 7.5nm,0.8s | | | | | | | |
| **ARQ** | **Araqi** | **13.84** | **355** | P | | **Pn** | **07 41 44.7** | **+2.1** |
| | SNR=8.2 | | | | | | | |
| ARQ | | | | P | | **Pn** | **07 41 44.7** | **+2.1** |
| | SNR=8.2 | | | | | | | |
| ARQ | | | | S | | **Sn** | **07 44 22.5** | **+6.4** |
| ARQ | | | | S | | **Sn** | **07 44 22.5** | **+6.4** |
| **BIDO** | **Bidbid** | **13.96** | **1** | P | | **Pn** | **07 41 46.4** | **+2.2** |
| BIDO | | | | P | | **Pn** | **07 41 46.4** | **+2.2** |
| **HOQ** | **Hoqain** | **14.04** | **358** | P | | **Pn** | **07 41 46.9** | **+1.7** |
| | SNR=14 | | | | | | | |
| HOQ | | | | P | | **Pn** | **07 41 46.9** | **+1.7** |
| | SNR=14 | | | | | | | |
| **MZR** | **Muzera** | **14.10** | **343** | P | | **Pn** | **07 41 48.7** | **+2.5** |
| **SOHO** | **SOHO** | **14.63** | **355** | P | | **P** | **07 41 57.0** | **-2.6** |
| SOHO | | | | P | | **P** | **07 41 57.0** | **-2.6** |
| SOHO | | | | S | | **Sn** | **07 44 40.1** | **+4.9** |
| SOHO | | | | S | | **Sn** | **07 44 40.1** | **+4.9** |
| **ALNE** | **Al Ain** | **14.64** | **352** | P | | **Pn** | **07 41 55.0** | **+1.4** |
| **ATD** | **Arta Tunnel** | **14.96** | **279** | Pn | | **Pn** | **07 41 56.3** | **-1.6** |
| **ATD** | **Arta Tunnel** | **14.96** | **279** | Pn | | **Pn** | **07 41 59.5** | **+1.6** |
| | 0.1nm,0.3s,baz=75,slow=12,SNR=5.7 | | | | | | | |
| ATD | | | | LR | | LR | 07 46 55.7 | |
| | comp=Z,40nm,19.8s,baz=88,slow=34 | | | | | | | |
| **ASHO** | **Ashiyiah** | **15.22** | **354** | P | | **Pn** | **07 42 00.8** | **-0.6** |
| **ASHO** | **Ashiyiah** | **15.22** | **354** | P | | **P** | **07 42 04.1** | **-2.1** |
| **AJN** | **Ajban** | **15.26** | **350** | P | | **Pn** | **07 42 00.3** | **-1.4** |
| **AJN** | **Ajban** | **15.26** | **350** | P | | **Pn** | **07 42 02.5** | **+0.8** |
| AJN | | | | P | | **Pn** | **07 42 02.5** | **+0.8** |
| AJN | | | | S | | **Sn** | **07 44 56.1** | **+5.6** |
| AJN | | | | S | | **Sn** | **07 44 56.1** | **+5.6** |
| **ASUD** | **Al Ashush, Dub** | **15.26** | **351** | P | | **Pn** | **07 42 03.1** | **+1.3** |
| **ASUD** | **Al Ashush, Dub** | **15.26** | **351** | P | | **Pn** | **07 42 04.1** | **+2.3** |
| **FAQ** | **Al Faqa, Dubai** | **15.34** | **352** | P | | **Pn** | **07 42 03.7** | **+0.9** |
| **FAQ** | **Al Faqa, Dubai** | **15.34** | **352** | P | | **Pn** | **07 42 04.2** | **+1.3** |
| FAQ | | | | P | | **Pn** | **07 42 04.2** | **+1.3** |
| **HATD** | **Hatta, Dubai** | **15.36** | **354** | P | | **Pn** | **07 42 03.2** | **+0.2** |
| **HATD** | **Hatta, Dubai** | **15.36** | **354** | P | | **Pn** | **07 42 04.0** | **+1.0** |
| **UOSS** | **Minazif** | **15.47** | **354** | | | **Pn** | **07 42 02.5** | **-2.0** |
| UOSS | | | | IAmb | | IAmb | 07 42 10.8 | |
| | comp=Z,164nm,1.9s | | | | | | | |
| **UOSS** | **Minazif** | **15.47** | **354** | P | | **Pn** | **07 42 04.8** | **+0.3** |
| **UOSS** | **Minazif** | **15.47** | **354** | P | | **Pn** | **07 42 05.4** | **+0.9** |
| UOSS | | | | P | | **Pn** | **07 42 05.4** | **+0.9** |
| UOSS | | | | S | | **Sn** | **07 44 58.7** | **+3.1** |
| UOSS | | | | S | | **Sn** | **07 44 58.7** | **+3.1** |
| **NAZ** | **Nazwa, Dubai** | **15.57** | **352** | P | | **P** | **07 42 09.3** | **-0.8** |
| **SLWR** | **Sila** | **15.68** | **338** | P | | **P** | **07 42 10.3** | **-0.9** |
| **MDH** | **Madha** | **15.81** | **355** | P | | **P** | **07 42 11.1** | **-1.5** |
| **MSFE** | **Esma-Masafi** | **15.88** | **354** | P | | **Pn** | **07 42 09.0** | **-0.9** |
| MSFE | | | | P | | **P** | **07 42 09.8** | **-3.7** |
| **MASF** | **Masafi** | **15.89** | **354** | P | | **Pn** | **07 42 10.5** | **+0.5** |
| MASF | | | | P | | **Pn** | **07 42 10.5** | **+0.5** |
| **JRN** | **Qarnain Island** | **16.12** | **343** | P | | **P** | **07 42 15.7** | **-0.4** |
| JRN | | | | P | | **P** | **07 42 15.7** | **-0.4** |
| **JASK** | **Jask - Hormozg** | **16.30** | **360** | P | | **P** | **07 42 16.7** | **-1.4** |
| **TRNA** | **Turayna** | **16.46** | **338** | P | | **P** | **07 42 18.9** | **-1.0** |
| | SNR=6.9 | | | | | | | |
| **SHME** | **Shamm** | **16.57** | **354** | P | | **Pn** | **07 42 17.6** | **-1.0** |
| **SHME** | **Shamm** | **16.57** | **354** | P | | **Pn** | **07 42 18.4** | **-0.2** |
| SHME | | | | P | | **Pn** | **07 42 18.4** | **-0.2** |
| **SMRA** | **Abu-Samra** | **16.62** | **337** | P | | **P** | **07 42 21.2** | **-0.4** |
| | SNR=9.5 | | | | | | | |
| **SHMA** | **Al-Shehemyia** | **17.57** | **339** | P | | **P** | **07 42 33.0** | **+0.8** |
| SHMA | | | | S | | **S** | **07 45 50.9** | **-3.4** |
| **SAKB** | **Bahrain** | **17.84** | **338** | P | | **P** | **07 42 35.1** | **-0.1** |
| **RAYN** | **Ar Rayn** | **18.33** | **321** | Pn | | **Pn** | **07 42 38.4** | **-2.2** |
| **RAYN** | **Ar Rayn** | **18.33** | **321** | P | | **Pn** | **07 42 38.2** | **-2.4** |
| **RAYN** | **Ar Rayn** | **18.33** | **321** | P | | **Pn** | **07 42 38.2** | **-2.4** |
| **RAYN** | **Ar Rayn** | **18.33** | **321** | P | | **Pn** | **07 42 38.4** | **-2.2** |
| RAYN | | | | pmax | | pmax | | |
| | comp=Z,39nm,1.3s | | | | | | | |
| **HYB** | **Hyderabad** | **21.55** | **66** | *e*P | | **P** | **07 43 15.4** | **-0.3** |
| **KBD** | **Kabd** | **21.82** | **335** | P | | **P**

**GNI Garni 32.72 341** P **P** **07 44 58.0 -1.0**
GNI lAmb lAmb 07 45 21.1
comp=Z,29nm,1.2s
**GNI Garni 32.72 341** P **P** **07 45 00.9 +1.9**
**GNI Garni 32.72 341** LR LR 07 59 40.2
comp=Z,880nm,18.6s,baz=146,slow=39
**GNI Garni 32.72 341** *i* P **P** **07 44 58.6 -0.3**
GNI pmax pmax
comp=Z,12nm,1.0s
**VOI Vohitsoka 33.05 199** P **P** **07 45 02.4 +0.4**
VOI lAmb lAmb 07 45 40.2
comp=Z,44nm,1.5s
**VOI Vohitsoka 33.05 199** P **P** **07 45 04.0 +2.1**
**GAZ Gaziantep 33.33 329** P **P** **07 45 02.1 -2.2**
**KSH Kashi 33.98 25** P **P** **07 45 06.3 -3.6**
KSH pP pP 07 45 11.4 -2.5
KSH sP sP 07 45 13.3 -2.3
KSH pmax pmax
comp=Z,8.0nm,1.0s
KSH LR LR
comp=Z,770nm,23.7s
KSH LR LR
comp=Z,610nm,21.0s
KSH LR LR
comp=Z,1μm,24.7s
**ARPR Arapgir-MALATY 34.30 332** P **P** **07 45 14.4 +1.6**
ARPR lAmb lAmb 07 45 25.8
comp=Z,31nm,1.2s
**ARSB Arslanbob 34.40 20** P **P** **07 45 13.5 -0.1**
**ARSB Arslanbob 34.40 20** P **P** **07 45 13.5 -0.1**
ARSB pmax pmax
comp=Z,5.0nm,1.8s
**MAK Makhachkala 34.58 346** *e*P **P** **07 45 11.1 -3.7**
MAK *e* 07 46 24.9
MAK *e*S **S** **07 50 36.7 -6.6**
MAK *e*SS **SnSn** **07 52 52.1 -3.3**
MAK pmax pmax
comp=Z,136nm,1.0s
MAK MLR MLR
comp=Z,422nm,17.0s
**KK31 Karatay Array 35.26 16** P **P** **07 45 21.4 +0.6**
**KK31 Karatay Array 35.26 16** P **P** **07 45 21.4 +0.6**
KK31 pmax pmax
comp=Z,10.0nm,0.8s
**KKAR Karatay Array 35.26 16** P **P** **07 45 21.5 +0.7**
**KKAR Karatay Array 35.26 16** P **P** **07 45 21.5 +0.7**
**BNN Bunyan 35.31 329** P **P** **07 45 22.1 +0.7**
BNN lAmb lAmb 07 45 24.0
comp=Z,30nm,1.0s
**SHL Shillong 35.98 59** P **P** **07 45 27.1 -0.4**
SHL lAmb lAmb 07 45 57.7
comp=Z,18nm,1.2s
**SHL Shillong 35.98 59** P **P** **07 45 27.1 -0.4**
SHL pmax pmax
comp=Z,19nm,1.2s
**AAK Ala-Archa 36.08 21** P **P** **07 45 26.1 -2.0**
**AAK Ala-Archa 36.08 21** P **P** **07 45 27.4 -0.6**
comp=Z,1.4nm,0.2s,baz=218,slow=10,SNR=6.8
AAK LR LR 08 00 56.6
comp=Z,1μm,20.7s,baz=208,slow=38
comp=Z,1.4nm,0.2s
**AAK Ala-Archa 36.08 21***ce*P **P** **07 45 27.8 -0.3**
AAK pmax pmax
comp=Z,14nm,1.7s
**BOOM Boomskoye usch 36.49 23** P **P** **07 45 31.2 -0.4**
**BOOM Boomskoye usch 36.49 23** P **P** **07 45 31.2 -0.4**
BOOM pmax pmax
comp=Z,12nm,1.2s
**KIRS Kirsehir-Merke 36.51 328** ⇑P **P** **07 45 31.8 +0.2**
**KBZ Khabaz 36.54 342** P **P** **07 45 31.1 -0.6**
comp=Z,5.9nm,0.8s,baz=167,slow=6.3,SNR=13
KBZ LR LR 08 03 08.6
comp=Z,468nm,20.6s,baz=140,slow=41
comp=Z,5.9nm,0.8s
**KBZ Khabaz 36.54 342***ce*P **P** **07 45 31.6 -0.1**
KBZ pmax pmax
comp=Z,8.0nm,0.9s
**SHA1 Shidzhatmaz 36.62 341** *i* P **P** **07 45 33.0 +0.2**
**KIV Kislovodsk 36.81 342** P **P** **07 45 33.6 -0.6**
**KIV Kislovodsk 36.81 342** *e*P **P** **07 45 35.3 +1.1**
KIV pmax pmax
comp=Z,11nm,1.0s
KIV MLR MLR
comp=Z,284nm,16.0s
**BR104 Keskin Array S 37.08 328** P **P** **07 45 37.0 +0.5**
comp=Z,7.1nm,0.9s,comp=Z,72nm
**BR131 Keskin Array S 37.09 328** P **P** **07 45 37.1 +0.4**
**BR131 Keskin Array S 37.09 328** P **P** **07 45 37.1 +0.4**
BR131 pmax pmax
comp=Z,7.0nm,0.9s
**BRTR Keskin Array B 37.09 328** P **P** **07 45 37.1 +0.4**
comp=Z,4.1nm,0.8s,baz=150,slow=9.7,SNR=24
comp=Z,4.1nm,0.8s
**BR105 Keskin Array S 37.09 328** P **P** **07 45 37.7 +1.0**
comp=Z,7.5nm,1.2s,comp=Z,69nm
**BR106 Keskin Array S 37.11 328** P **P** **07 45 37.8 +1.0**
comp=Z,5.5nm,0.9s,comp=Z,54nm
**ELL Elmali 37.15 321** P **P** **07 45 38.4 +1.2**
**ELL Elmali 37.15 321** P **P** **07 45 38.4 +1.2**
ELL pmax pmax
comp=Z,58nm,1.1s
**PRZ Przheval'sk 37.46 25** P **P** **07 45 41.7 +1.8**
PRZ lAmb lAmb 07 45 57.7
comp=Z,13nm,0.4s
**PRZ Przheval'sk 37.46 25** P **P** **07 45 41.7 +1.8**
PRZ pmax pmax
comp=Z,13nm,0.4s
**SOC Sochi 37.49 338** *e*P **P** **07 45 35.1 -4.8**
SOC *e* 07 47 02.1
SOC *e*S **S** **07 51 22.8 -5.2**
SOC MLR MLR
comp=Z,352nm,17.0s
**BR231 Keskin MP Arra 37.63 328** P **P** **07 45 42.4 +1.2**
BR231 lAmb lAmb 07 45 43.2
comp=Z,20nm,0.9s
**ANTO Ankara 37.64 328** P **P** **07 45 41.0 -0.2**
ANTO lAmb lAmb 07 45 43.8
comp=Z,64nm,1.6s
**ANTO Ankara 37.64 328** P **P** **07 45 42.4 +1.2**
ANTO P **P** **07 45 42.4 +1.2**
**ANTO Ankara 37.64 328** P **P** **07 45 41.0 -0.2**
ANTO pmax pmax
comp=Z,64nm,1.6s
**ANTO Ankara 37.64 328** P **P** **07 45 42.4 +1.2**
comp=Z,11nm,1.3s
**ANN Anapa 39.39 337** *e*P **P** **07 45 55.4 -0.4**
ANN pmax pmax
comp=Z,97nm,1.5s
**ABKAR Akbulak array 39.68 2** P **P** **07 45 58.1 0.0**
**SANT Santorini 39.79 317** P **P** **07 45 58.7 -0.6**
SANT lAmb lAmb 07 46 42.9
comp=Z,63nm,1.1s
**CM31 Chiang Mai Arr 40.72 73** P **P** **07 46 08.1 +0.9**
CM31 lAmb lAmb 07 46 08.9
comp=Z,27nm,1.4s
**CMAR Chiang Mai Arr 40.72 73** P **P** **07 46 08.3 +1.1**
**CMAR Chiang Mai Arr 40.72 73** P **P** **07 46 07.2 -0.1**
comp=Z,6.5nm,1.0s,baz=264,slow=8.2,SNR=28
CMAR LR LR 08 02 42.3
comp=Z,253nm,18.7s,baz=265,slow=36
comp=Z,6.5nm,1.0s
**AKTO Aktyubinsk 40.83 0** P **P** **07 46 07.5 -0.1**
comp=Z,17nm,0.8s,baz=196,slow=8.9,SNR=36
AKTO LR LR 08 04 52.8
comp=Z,305nm,20.1s,baz=170,slow=39
comp=Z,17nm,0.8s
**SRIT Nakonsritamara 41.16 88** P **P** **07 46 11.9 +1.0**
**MATP Matopo 41.48 224** LR LR 08 01 28.8
comp=Z,360nm,21.4s,baz=62,slow=33
**PHRA Phrae 41.94 73** P **P** **07 46 17.9 +0.7**
**CRAI Chiangrai 42.29 70** P **P** **07 46 20.3 +0.1**
CRAI lAmb lAmb 07 46 30.3
comp=Z,31nm,1.6s
**MAKZ Makanchi 42.47 25** P **P** **07 46 20.2 -1.0**
**MAKZ Makanchi 42.47 25** P **P** **07 46 20.2 -1.0**
MAKZ pmax pmax
comp=Z,25nm,1.6s
**MK31 Makanchi Array 42.58 25** P **P** **07 46 21.5 -0.7**
**MK31 Makanchi Array 42.58 25***ce*P **P** **07 46 22.1 0.0**
**MKAR Makanchi Array 42.58 25** P **P** **07 46 21.1 -1.1**
**MKAR Makanchi Array 42.58 25** P **P** **07 46 20.5 -1.6**
comp=Z,3.4nm,0.9s,baz=220,slow=9.1,SNR=11
MKAR PcP **PcP** **07 48 14.1 -0.3**
comp=Z,1.4nm,0.8s,baz=248,slow=4.6,SNR=4.1
MKAR LR LR 08 05 20.3
comp=Z,376nm,20.2s,baz=222,slow=38
comp=Z,3.4nm,0.9s
**MKAR Makanchi Array 42.58 25** *i* P **P** **07 46 21.8 -0.3**
MKAR pmax pmax
comp=Z,2.0nm,0.8s
**GOMU GeErMu 42.75 46** P **P** **07 46 25.1 +1.1**
GOMU S **S** **07 52 49.6 +2.0**
GOMU pmax pmax
comp=Z,19nm,0.8s
GOMU LR LR
comp=Z,660nm,18.6s
GOMU LR LR
comp=Z,690nm,18.2s
GOMU LR LR
comp=Z,1μm,18.0s
**WMQ Urumqi 42.89 32** *e*P **P** **07 46 26.6 +1.9**
WMQ LR LR
comp=Z,730nm,12.9s
WMQ LR LR
comp=Z,460nm,14.7s
WMQ LR LR
comp=Z,520nm,18.5s
**TPGR Topolog 43.47 329** ⇑P **P** **07 46 28.8 -0.5**
**HARR Harsova 43.60 329** ⇑P **P** **07 46 30.3 -0.1**
**HARR Harsova 43.60 329** P **P** **07 46 30.2 -0.1**
**BELG Belogornoye 43.60 351** LR LR 08 08 05.3
comp=Z,134nm,19.8s,baz=153,slow=41
**BELG Belogornoye 43.60 351** *i* P **P** **07 46 29.5 -0.7**
BELG pmax pmax
comp=Z,11nm,0.9s
**VRH Novokhopyorsk 43.68 345** *e*P **P** **07 46 30.3 -0.6**
VRH pmax pmax
comp=Z,27nm,0.8s
**VORD Divnogorie 44.12 343** *e*P **P** **07 46 32.2 -2.2**
VORD pmax pmax
comp=Z,10.0nm,0.8s
**VSR Storozhevoye 44.38 343** *e*P **P** **07 46 33.5 -3.0**
VSR pmax pmax
comp=Z,10.0nm,0.9s
**KURBB Kurchatov Arra 44.41 19** P **P** **07 46 36.2 -0.6**
comp=Z,3.0nm,0.8s,baz=216,slow=8.1,SNR=19
KURBB LR LR 08 06 01.3
comp=Z,1μm,21.5s,baz=183,slow=37
comp=Z,3.0nm,0.8s
**KURK Kurchatov 44.52 19** P **P** **07 46 37.6 0.0**
**KURK Kurchatov 44.52 19***ce*P **P** **07 46 38.0 +0.4**
KURK pmax pmax
comp=Z,10.0nm,1.3s
**BVAR Borovoye Array 44.58 11** P **P** **07 46 37.5 -0.6**
comp=Z,6.5nm,0.8s,baz=185,slow=6.1,SNR=28
BVAR PcP **PcP** **07 48 19.8 -1.1**
comp=Z,2.8nm,0.8s,baz=172,slow=3.0,SNR=5.5
BVAR LR LR 08 07 07.5
comp=Z,445nm,18.1s,baz=193,slow=39
comp=Z,6.5nm,0.8s
**BRVK Borovoye 44.59 11** P **P** **07 46 38.3 +0.1**
**BRVK Borovoye 44.59 11** P **P** **07 46 38.3 +0.1**
BRVK pmax pmax
comp=Z,5.0nm,1.0s
**PZH PanZhiHua 44.73 62** P **P** **07 46 40.3 +0.4**
PZH S **S** **07 53 17.3 +0.9**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,160nm,4.1s
PZH LR LR
comp=Z,380nm,18.4s
PZH LR LR
comp=Z,610nm,21.0s
PZH LR LR
comp=Z,690nm,20.6s
**VORR Voronezh 44.77 344** *e*P **P** **07 46 38.9 -0.7**
VORR pmax pmax
comp=Z,69nm,0.4s
**FNA Florina 44.90 320** P **P** **07 46 40.2 -0.8**
FNA lAmb lAmb 07 46 42.2
comp=Z,36nm,1.9s
**FNA Florina 44.90 320** P **P** **07 46 40.2 -0.8**
FNA pmax pmax
comp=Z,37nm,1.9s
**SPBR Spulber 44.94 329** ⇓P **P** **07 46 41.6 +0.5**
**VRI Vrincioaia 45.03 329** ⇑P **P** **07 46 42.3 +0.4**
**VRI Vrincioaia 45.03 329** P **P** **07 46 42.2 +0.4**
**VRI Vrincioaia 45.03 329** P **P** **07 46 42.3 +0.4**
comp=Z,12nm,0.9s,comp=Z,172nm
**PLOR5 Plostina Array 45.05 329** P **P** **07 46 43.0 +1.0**
comp=Z,27nm,1.5s
**PLOR Plostina 45.06 329** ⇑P **P** **07 46 42.7 +0.6**
**PLOR Plostina 45.06 329** P **P** **07 46 42.7 +0.6**
**PLOR3 Plostina Array 45.06 329** P **P** **07 46 43.1 +1.0**
comp=Z,47nm,1.2s,comp=Z,722nm
**MLR Muntele Rosu 45.17 328** P **P** **07 46 43.3 +0.2**
**MLR Muntele Rosu 45.17 328** LR LR 08 07 38.2
comp=Z,153nm,18.8s,baz=124,slow=39
**MLR Muntele Rosu 45.17 328** ⇑P **P** **07 46 43.6 +0.5**
**MLR Muntele Rosu 45.17 328** P **P** **07 46 43.3 +0.2**
MLR pmax pmax
comp=Z,70nm,1.8s
**MLR Muntele Rosu 45.17 328** P **P** **07 46 44.1 +1.0**
comp=Z,15nm,1.0s
**COVR Voineasa-Covas 45.28 329** ⇑P **P** **07 46 44.6 +0.8**
**KMI Kunming 45.30 64** ⇓P **P** **07 46 44.9 +0.4**
KMI SS SS 07 56 44.6 -3.4
KMI pmax pmax
comp=Z,27nm,0.6s
KMI LR LR
comp=Z,310nm,18.3s
KMI LR LR
comp=Z,450nm,21.8s
KMI LR LR
comp=Z,700nm,29.1s
**TESR Tescani 45.52 330** ⇑P **P** **07 46 45.4 -0.2**
**TESR Tescani 45.52 330** P **P** **07 46 45.5 -0.2**
comp=Z,36nm,1.1s,comp=Z,958nm
**VOIR 45.60 328** ⇑P **P** **07 46 46.4 -0.1**
**VOIR 45.60 328** P **P** **07 46 46.4 -0.1**
**VOIR 45.60 328** P **P** **07 46 46.4 -0.1**
comp=Z,11nm,1.2s
**OZUR 45.66 329** ⇑P **P** **07 46 46.6 -0.3**
**SLVN Son La 45.71 69** P **P** **07 46 46.7 -1.0**
SLVN lAmb lAmb 07 46 56.8
comp=Z,24nm,1.5s
**ARR Arges 45.78 327** ⇑P **P** **07 46 47.6 -0.2**
**DOPR Dopca 45.78 328** ⇓P **P** **07 46 47.4 -0.4**
**LBTB Lobatse 46.56 222** P **P** **07 46 55.3 +1.0**
LBTB lAmb lAmb 07 47 54.8
comp=Z,32nm,1.7s
**LBTB Lobatse 46.56 222** LR LR 08 05 13.9
comp=Z,463nm,18.5s,baz=46,slow=34
**LBTB Lobatse 46.56 222** P **P** **07 46 55.3 +1.0**
LBTB pmax pmax
comp=Z,31nm,1.7s
**ARU Arti 46.84 0** P **P** **07 46 55.2 -0.7**
ARU lAmb lAmb 07 46 56.8
comp=Z,15nm,0.9s
**ARU Arti 46.84 0** P **P** **07 46 54.6 -1.3**
comp=Z,15nm,0.9s,baz=167,slow=5.9,SNR=15
comp=Z,15nm,0.9s
**ARU Arti 46.84 0***d* iP **P** **07 46 55.6 -0.3**
ARU 07 48 40.4
ARU PPP PPP 07 49 27.6
ARU S **S** **07 53 43.9 -1.7**
ARU SS **SS** **07 57 05.4 -6.9**
ARU pmax pmax
comp=Z,19nm,1.0s
ARU MLR MLR
comp=Z,291nm,18.0s
**BURAR Bucovina Array 46.99 330** P **P** **07 46 57.1 -0.3**
**BURAR Bucovina Array 46.99 330** ⇑P **P** **07 46 58.0 +0.6**
**BURAR Bucovina Array 46.99 330** P **P** **07 46 57.9 +0.6**
**DGZ Jazzator, Alta 47.01 26** *i* P **P** **07 46 57.5 0.0**
DGZ pmax pmax
comp=Z,2.0nm,1.0s
**BUR08 Bucovina Ar. S 47.02 330** P **P** **07 46 57.5 -0.1**
BUR08 lAmb lAmb 07 47 16.2
comp=Z,30nm,1.9s
**KMPD K-Podol'skiy 47.05 332** P **P** **07 46 56.3 -1.4**
KMPD P **P** **07 46 55.9 -1.8**
**AK09 Malin Array Si 47.33 335** P **P** **07 46 58.7 -1.1**
**AK10 Malin Array Si 47.33 335** P **P** **07 46 58.8 -1.0**
**SURR Surduc 47.38 326** ⇑P **P** **07 46 59.9 -0.5**
**AKASG Malin Array Be 47.42 336** P **P** **07 46 58.9 -1.6**
comp=Z,0.6nm,0.3s,baz=137,slow=7.4,SNR=12
AKASG PcP **PcP** **07 48 28.5 -2.4**
comp=Z,0.2nm,0.3s,baz=112,slow=2.5,SNR=4.2
AKASG LR LR 08 09 45.7
comp=Z,141nm,18.7s,baz=140,slow=40
comp=Z,0.6nm,0.3s
**AKBB Malin Array Si 47.42 336** P **P** **07 46 59.5 -1.0**
AKBB lAmb lAmb 07 47 00.5
comp=Z,10nm,1.1s
**AKBB Malin Array Si 47.42 336***ce*P **P** **07 46 59.7 -0.8**
AKBB pmax pmax
comp=Z,8.0nm,1.0s
**AKBB Malin Array Si 47.42 336** P **P** **07 46 59.6 -1.0**
**KIEV Kiev 47.42 335** P **P** **07 46 59.4 -1.1**
KIEV lAmb lAmb 07 47 00.4
comp=Z,9.9nm,1.1s
**KIEV Kiev 47.42 335** P **P** **07 46 59.4 -1.1**
**KIEV Kiev 47.42 335** ⇑P **P** **07 46 59.5 -1.1**
**KIEV Kiev 47.42 335** P **P** **07 46 59.4 -1.1**
KIEV pmax pmax
comp=Z,10.0nm,1.2s
**KIEV Kiev 47.42 335** P **P** **07 46 59.6 -0.9**
comp=Z,33nm,1.1s
**LUBAR Lubar, Ukraine 47.45 334** P **P** **07 46 59.8 -1.0**
**AK04 Malin Array Si 47.46 335** P **P** **07 46 59.6 -1.2**
**CD2 Chengdu 47.60 57** P **P** **07 47 00.0 -2.3**
CD2 pmax pmax
comp=Z,20nm,0.7s
CD2 pmax pmax
comp=Z,120nm,7.5s
**GTA Gaotai 47.75 44** *e*P **P** **07 47 03.6 +0.1**
GTA S **S** **07 54 00.1 +0.6**
GTA SS **SS** **07 57 29.3 +1.4**
GTA pmax pmax
comp=Z,8.0nm,1.1s
GTA LR LR
comp=Z,320nm,21.4s
GTA LR LR
comp=Z,440nm,20.7s
GTA LR LR
comp=Z,340nm,21.6s
**VAE Valguarnera 48.06 313** LR LR 08 06 51.8
comp=Z,176nm,20.0s,baz=140,slow=36
**MI28 Mi28,Pidlybu 48.24 335** P **P** **07 47 05.6 -1.3**
**OBN Obninsk 48.56 344**⇓*e*P **P** **07 47 09.3 +0.1**
OBN *PP **pP** **07 47 12.0 -1.4**
OBN *SP **pwP** **07 47 17.0 -0.3**
OBN 07 48 36.0
OBN 07 49 04.0
OBN PPP PPP 07 49 50.0
OBN *i* S S 07 54 21.7 +12
OBN SSS SSS 07 58 50.0
OBN pmax pmax
comp=Z,6.0nm,0.7s
OBN MLR MLR
comp=Z,151nm,16.0s
**MORS Morshin 48.67 331** P **P** **07 47 09.6 -0.6**
**MOS Moscow 48.83 345** *e*P **P** **07 47 10.0 -1.3**
MOS pmax pmax
comp=Z,43nm,0.7s
**TSUM Tsumeb 48.91 234** P **P** **07 47 14.7 +2.0**
**TSUM Tsumeb 48.91 234** LR LR 08 06 42.6
comp=Z,699nm,21.9s,baz=17,slow=35
**GYA Guiyang 49.03 63** P **P** **07 47 14.1 +0.6**
GYA S **S** **07 54 19.1 +1.2**
GYA pmax pmax
comp=Z,20nm,0.9s
GYA pmax pmax
comp=Z,160nm,3.7s
GYA LR LR
comp=Z,510nm,24.4s
GYA LR LR
comp=Z,410nm,19.3s
GYA LR LR
comp=Z,750nm,24.4s
**RNPP5 Staryi Chortor 49.23 334** P **P** **07 47 14.1 -0.3**
**BOSA Boshof 49.29 219** P **P** **07 47 15.2 -0.2**
comp=Z,4.7nm,0.6s,baz=42,slow=5.8,SNR=12
BOSA LR LR 08 05 23.9
comp=Z,833nm,21.4s,baz=31,slow=33
comp=Z,4.7nm,0.6s
**ZAA0 Zalesovo Array 49.31 21** P **P** **07 47 13.8 -1.2**
ZAA0 lAmb lAmb 07 47 15.3
comp=Z,11nm,1.1s
**ZALV Zalesovo Beam 49.31 21** P **P** **07 47 13.7 -1.3**
**ZALV Zalesovo Beam 49.31 21** P **P** **07 47 13.2 -1.7**
comp=Z,8.7nm,0.9s,baz=224,slow=7.6,SNR=23
ZALV LR LR 08 08 53.8
comp=Z,780nm,21.2s,baz=220,slow=37
comp=Z,8.7nm,0.9s
**ZALV Zalesovo Beam 49.31 21** *i* P **P** **07 47 14.1 -0.9**
ZALV pmax pmax
comp=Z,9.0nm,0.9s
**LZH Lanzhou 49.32 50** *e*P **P** **07 47 15.5 -0.2**
LZH sP sP 07 47 21.8 +0.4
LZH S **S** **07 54 22.6 +0.8**
LZH pmax pmax
comp=Z,16nm,1.0s
LZH LR LR
comp=Z,620nm,18.9s
LZH LR LR
comp=Z,630nm,18.2s
LZH LR LR
comp=Z,1μm,17.9s
**KOLS Kolonicke sedl 49.33 330** *e*P **P** **07 47 15.7 +0.4**
KOLS pmax pmax
comp=Z,12nm,1.1s
**KOLS Kolonicke sedl 49.33 330** *e*P **P** **07 47 15.6 +0.3**
**TATN Tataouine 49.34 305** P **P** **07 47 17.7 +2.0**
TATN lAmb lAmb 07 47 19.4
comp=Z,15nm,0.8s
**KIRV Kirov 49.43 354** P **P** **07 47 15.3 -0.5**
comp=Z,11nm,0.8s,baz=149,slow=5.9,SNR=4.1
KIRV LR LR 08 12 15.1
comp=Z,262nm,18.2s,baz=163,slow=41
comp=Z,11nm,0.8s
**KIRV Kirov 49.43 354***ce*P **P** **07 47 15.5 -0.3**
**KWP Kalwaria Pacla 49.58 330** P **P** **07 47 16.7 -0.5**
KWP lAmb lAmb 07 47 22.7
comp=Z,36nm,1.6s
**KWP Kalwaria Pacla 49.58 330** P **P** **07 47 16.7 -0.5**
KWP pmax pmax
comp=Z,36nm,1.6s
**MORH Mrgy, Hungar 49.61 325** ⇓P **P** **07 47 17.4 0.0**
**CRVS Cervenica-Dubn 49.72 329** *e*P **P** **07 47 18.7 +0.4**
CRVS pmax pmax
comp=Z,38nm,1.7s
**CRVS Cervenica-Dubn 49.72 329** *e*P **P** **07 47 18.7 +0.4**
**PSZ Piszkesteto 49.92 327** P **P** **07 47 19.1 -0.8**
**PSZ Piszkesteto 49.92 327** P **P** **07 47 19.1 -0.8**
PSZ pmax pmax
comp=Z,7.0nm,1.2s
**VYHS Vyhne 50.83 327** *e*P **P** **07 47 25.8 -0.9**
VYHS pmax pmax
comp=Z,8.0nm,1.2s
**VYHS Vyhne 50.83 327** *e*P **P** **07 47 25.8 -0.9**
**MNK Minsk 50.87 338** *i* P **P** **07 47 25.7 -1.2**
comp=E,23nm,0.7s
MNK *i* P **P** **07 47 25.7 -1.2**
comp=N,14nm,1.0s
MNK *i* P **P** **07 47 25.7 -1.2**
comp=Z,25nm,0.7s,baz=140
MNK *i* PP **PP** **07 49 22.0 -1.2**
MNK *i* PPP PPP 07 50 19.0
MNK *i* S **S** **07 54 42.3 -0.2**
MNK *i* SS **SS** **07 58 18.4 +1.1**
MNK *i* SSS SSS 07 59 48.2
MNK *i* LQ LQ 08 05 19.3
MNK *i* LR LR 08 08 05.9
MNK *i* LRM MLR 08 10 53.5
comp=N,289nm,21.2s
MNK *i* LRM MLR 08 11 18.7
comp=Z,333nm,19.4s
MNK *i* LRM MLR 08 11 48.7
comp=E,160nm,16.8s
**MNK Minsk 50.87 338** *i* P **P** **07 47 25.7 -1.2**
MNK *i* 07 48 42.3
MNK *i* 07 49 21.9
MNK *i* PPP PPP 07 50 19.0
MNK *i* S **S** **07 54 42.3 -0.2**
MNK *i* 07 57 16.6
MNK *i* SS **SS** **07 58 18.3 +1.1**
MNK *i* SSS SSS 07 59 48.1
MNK pmax pmax
comp=Z,25nm,0.7s
MNK pmax pmax
comp=N,14nm,1.0s
MNK pmax pmax

comp=E,23nm,0.7s
MNK MLR MLR
comp=N,289nm,21.0s
MNK MLR MLR
comp=Z,333nm,19.0s
MNK MLR MLR
comp=E,160nm,17.0s
**LANS Liptovska Anna 50.90 328** *eP* **P 07 47 27.6 +0.3**
**LANS Liptovska Anna 50.90 328** *eP* **P 07 47 27.6 +0.3**
**QIZ Qiongzhong 51.05 73** P **P 07 47 27.8 -1.1**
QIZ S **S 07 54 45.6 -0.5**
QIZ LR LR
comp=E,140nm,14.0s
QIZ LR LR
comp=E,350nm,16.8s
QIZ LR LR
comp=E,440nm,15.9s
**KEST Kesra 51.23 309** LR LR 08 09 30.3
comp=E,269nm,20.5s,baz=100,slow=36
**NRCA Norcia 51.26 318** P **P 07 47 29.4 -0.7**
**FDMO Fiordimonte 51.37 319** P **P 07 47 30.7 -0.2**
FDMO IAmb IAmb 07 47 32.6
comp=Z,27nm,1.4s
**OJC Ojcow 51.39 330** P **P 07 47 30.2 -0.7**
OJC IAmb IAmb 07 47 31.3
comp=Z,48nm,1.9s
**OJC Ojcow 51.39 330** P **P 07 47 30.2 -0.7**
OJC pmax pmax
comp=Z,48nm,1.9s
**NACGM Naroch 51.59 338** *eP* **P 07 47 31.5 -0.7**
comp=Z,804nm,0.8s,baz=140
**JAVC Velka Javorina 51.67 327** *eP* **P 07 47 32.3 -0.8**
**RONA Rosalia, Austr 51.77 325** *eP* **P 07 47 33.1 -0.7**
comp=Z,15nm,1.7s
**TAM Tamanrasset 51.79 291** P **P 07 47 35.6 +1.1**
**TAM Tamanrasset 51.79 291** P **P 07 47 35.6 +1.1**
TAM pmax pmax
comp=Z,8.0nm,1.1s
**SOKA Soboth 51.95 323** *eP* **P 07 47 36.6 +1.4**
comp=Z,4.1nm,0.9s
**ARSA Arzberg 51.97 324** *eP* **P 07 47 33.8 -1.5**
comp=Z,3.7nm,0.9s
**CONA Conrad Observa 52.14 325** *eP* **P 07 47 35.5 -1.1**
comp=Z,13nm,1.2s
**OBKA Obir 52.15 323** *eP* **P 07 47 37.6 +0.9**
comp=Z,14nm,1.8s
**MORC Moravsky Berou 52.28 328** P **P 07 47 36.8 -0.8**
MORC IAmb IAmb 07 47 38.4
comp=Z,31nm,1.7s
**MORC Moravsky Berou 52.28 328** *eP* **P 07 47 36.3 -1.3**
**MORC Moravsky Berou 52.28 328** ⇑P **P 07 47 36.8 -0.8**
**MORC Moravsky Berou 52.28 328** P **P 07 47 36.8 -0.8**
MORC pmax pmax
comp=Z,31nm,1.7s
**SUW Suwalki 52.37 335** P **P 07 47 37.2 -0.9**
SUW IAmb IAmb 07 47 38.1
comp=Z,26nm,0.9s
**SUW Suwalki 52.37 335** P **P 07 47 37.2 -0.9**
SUW pmax pmax
comp=Z,26nm,0.9s
**KNGR Kungurtug, Tuv 52.38 31** *i* P **P 07 47 38.5 +0.1**
KNGR pmax pmax
comp=Z,14nm,1.3s
**KRUC Moravsky 52.48 327** *eP* **P 07 47 38.4 -0.6**
**VRAC Vranov 52.51 327** *eP* **P 07 47 38.7 -0.6**
**XAN Xi'an 52.65 54** ⇑P **P 07 47 39.4 -1.2**
XAN S **S 07 55 06.4 -1.3**
XAN pmax pmax
comp=Z,39nm,1.1s
XAN LR LR
comp=Z,450nm,16.5s
XAN LR LR
comp=Z,750nm,19.2s
XAN LR LR
comp=Z,1μm,19.5s
**KSM Kuching 52.70 95** P **P 07 47 42.2 +1.0**
KSM IAmb IAmb 07 47 43.1
comp=Z,43nm,1.5s
**MYKA Terra Mystica 52.75 323** *eP* **P 07 47 40.5 -0.7**
comp=Z,13nm,1.8s
**MOA Molln 53.01 324** *eP* **P 07 47 41.7 -1.2**
comp=Z,3.0nm,0.9s
**STAL STALIGIAL 53.13 322** P **P 07 47 43.1 -0.8**
**KBA Koelnbreinsper 53.15 323** *eP* **P 07 47 44.0 -0.2**
comp=Z,7.6nm,1.2s
**DPC Dobruska-Polom 53.25 328** P **P 07 47 43.9 -0.9**
comp=Z,6.8nm,1.4s
**BIOA Bad Ischl, Aus 53.29 324** *i* P **P 07 47 44.4 -0.7**
comp=Z,6.0nm,0.9s
**ABTA Abfaltersbach 53.48 322** *eP* **P 07 47 46.3 -0.3**
comp=Z,4.8nm,0.6s
**CTI Castel Tesino 53.67 321** P **P 07 47 47.3 -0.7**
CTI IAmb IAmb 07 48 02.4
comp=Z,22nm,1.8s
**CTI Castel Tesino 53.67 321** P **P 07 47 47.3 -0.7**
CTI pmax pmax
comp=Z,22nm,1.8s
**LESA Schwarzleotal 53.72 323** *i* P **P 07 47 47.1 -1.2**
comp=Z,5.4nm,0.8s
**GERES GERESS Array B 53.85 325** LR LR 08 14 22.3
comp=Z,78nm,18.5s,baz=49,slow=40
**KHC Kasperske Hory 54.07 325** P **P 07 47 50.0 -0.7**
KHC IAmb IAmb 07 47 50.7
comp=Z,20nm,1.8s
**KHC Kasperske Hory 54.07 325** *ce*P **P 07 47 49.3 -1.5**
KHC pmax pmax
comp=Z,8.0nm,1.0s
**WTTA Wattenberg 54.26 323** *i* P **P 07 47 50.8 -1.6**
comp=Z,7.8nm,0.9s
**WATA Walderalm 54.33 323** *eP* **P 07 47 52.0 -0.8**
comp=Z,7.9nm,1.0s
**SQTA Sankt Quirin 54.49 322** *i* P **P 07 47 51.9 -2.1**
comp=Z,4.5nm,0.7s
**MOTA Moosalm 54.61 323** *i* P **P 07 47 52.5 -2.4**
comp=Z,7.3nm,0.9s
**SUR Sutherland 54.66 219** LR LR 08 09 24.3
comp=Z,560nm,20.2s,baz=44,slow=34
**FETA Feichten 54.69 322** *eP* **P 07 47 53.8 -1.7**
comp=Z,3.7nm,1.0s
**BRG Berggiesshubel 54.80 327** *eP* **P 07 47 55.6 -0.4**
BRG Amp 07 47 56.1
comp=Z,4.2nm,0.9s
**BRG Berggiesshubel 54.80 327** P P 07 48 02.9 +6.9
BRG Amp 07 48 03.2
comp=Z,4.5nm,0.8s
BRG Amp 08 09 34.0
comp=Z,0.1nm,17.4s
**RETA Reutte 54.88 323** *i* P **P 07 47 55.0 -1.7**
comp=Z,2.3nm,0.6s
**DAVOX Davos/Dischmat 55.10 321** LR LR 08 13 32.8
comp=Z,93nm,21.9s,baz=82,slow=38
**FBE Freiberg 55.14 327** *eP* **P 07 47 57.2 -1.2**
comp=Z,30nm,1.5s,baz=120,slow=7.4
**TOA0 Torodi Ar. Sit 55.16 279** P **P 07 47 59.4 +0.2**
**TORD Torodi Ar. Bea 55.16 279** P **P 07 47 59.3 +0.1**
TORD IAmb IAmb 07 48 16.1
comp=Z,50nm,2.0s
**TORD Torodi Ar. Bea 55.16 279** P **P 07 47 59.4 +0.1**
comp=Z,7.8nm,1.0s,baz=67,slow=7.0,SNR=38
TORD PcP **PcP 07 48 59.8 -0.6**
comp=Z,2.4nm,0.9s,baz=76,slow=3.5,SNR=2.2
TORD LR LR 08 11 19.8
comp=Z,173nm,18.2s,baz=92,slow=36
comp=Z,7.8nm,1.0s
**ROTZ Rotzenmuhle 55.16 326** *eP* **P 07 47 57.6 -1.1**
baz=120,slow=7.4
**DAVA Damuels 55.33 322** *eP* **P 07 47 58.3 -1.8**
comp=Z,3.7nm,0.8s
**WERN Wernitzgruen 55.34 326** *eP* **P 07 47 59.3 -0.6**
comp=Z,33nm,1.6s,baz=120,slow=7.4
**TANN Tannenbergstha 55.36 326** *eP* **P 07 47 59.2 -0.9**
comp=Z,21nm,1.9s,baz=120,slow=7.4
**MULD Muldenberg 55.39 326** *eP* **P 07 47 59.4 -0.9**
comp=Z,13nm,1.5s,baz=120,slow=7.4
**BTO Baotou 55.43 47** *eP* **P 07 48 01.0 +0.1**
BTO pP **pP 07 48 05.1 +0.1**
BTO sP **sP 07 48 07.6 +1.0**
BTO PP **PP 07 50 07.3 +2.5**
BTO S **S 07 55 46.3 +1.1**
BTO pmax pmax
comp=Z,22nm,0.5s
BTO pmax pmax
comp=Z,120nm,4.6s
BTO LR LR
comp=Z,810nm,7.9s
BTO LR LR
comp=Z,1μm,16.3s
BTO LR LR
comp=Z,3μm,19.4s
**WERD Werda 55.46 326** *eP* **P 07 47 59.7 -1.1**
comp=Z,26nm,1.8s,baz=120,slow=7.4
**SCHF Schoenfels 55.52 327** *eP* **P 07 48 00.2 -1.1**
comp=Z,2.4nm,0.8s,baz=120,slow=7.4
**CLL Collm 55.54 327** P **P 07 48 02.0 +0.7**
CLL IAmb IAmb 07 48 02.2
comp=Z,11nm,1.1s
**CLL Collm 55.54 327** ⇑*i*P **P 07 48 01.0 -0.3**
comp=Z,26nm,1.6s
**CLL Collm 55.54 327** ⇑*i*P **P 07 48 01.0 -0.3**
CLL pmax pmax
comp=Z,26nm,1.6s
**PLN Plauen 55.56 326** *eP* **P 07 48 00.6 -0.9**
comp=Z,5.8nm,1.1s,baz=120,slow=7.4
**ABG1 Leinawald 55.58 327** *eP* **P 07 48 00.7 -0.9**
comp=Z,16nm,1.0s,baz=120,slow=7.4
**LYN LuoYang 55.62 55** *eP* **P 07 48 04.9 +2.7**
LYN S **S 07 55 49.5 +1.7**
LYN pmax pmax
comp=Z,15nm,0.5s
LYN LR LR
comp=Z,320nm,19.6s
LYN LR LR
comp=Z,570nm,18.7s
LYN LR LR
comp=Z,790nm,22.1s
**HKWD Heukewalde 55.68 327** *eP* **P 07 48 01.4 -1.0**
comp=Z,5.6nm,1.1s,baz=120,slow=7.4
**MLFH Mildenfurth 55.76 327** *eP* **P 07 48 02.2 -0.7**
comp=Z,5.4nm,1.0s,baz=120,slow=7.4
**SONM Songino Array 55.84 38** P **P 07 48 03.7 0.0**
**SONM Songino Array 55.84 38** P **P 07 48 02.6 -1.1**
comp=Z,3.9nm,1.0s,baz=243,slow=7.1,SNR=17
comp=Z,3.9nm,1.0s
**SONM Songino Array 55.84 38** P **P 07 48 03.7 0.0**
SONM pmax pmax
comp=Z,10.0nm,1.3s
**MOX Moxa 55.94 326** *eP* **P 07 48 03.2 -1.0**
comp=Z,3.6nm,0.9s,baz=120,slow=7.4
**HWTS Hohenwarte Tal 55.99 326** *eP* **P 07 48 03.8 -0.8**
comp=Z,22nm,1.5s,baz=120,slow=7.4
**TAUT Tautenburg 56.06 327** *eP* **P 07 48 04.0 -1.1**
comp=Z,42nm,1.2s,baz=120,slow=7.4
**NEUB Neuenburg 56.14 327** *eP* **P 07 48 05.0 -0.6**
comp=Z,9.5nm,0.8s,baz=120,slow=7.4
**ULN Ulaanbaatar 56.25 38** P **P 07 48 05.9 -0.8**
**ULN Ulaanbaatar 56.25 38** *ce*P **P 07 48 06.0 -0.7**
ULN pmax pmax
comp=Z,9.0nm,1.7s
**TIY Taiyuan 56.37 51** P **P 07 48 07.4 -0.2**
TIY S **S 07 55 58.9 +1.1**
TIY LR LR
comp=Z,430nm,18.6s
TIY LR LR
comp=Z,600nm,22.0s
TIY LR LR
comp=Z,720nm,23.4s
**WHN Wuhan 56.40 60** P **P 07 48 06.4 -1.5**
**WIMM Wimmelburg 56.45 327** *eP* **P 07 48 07.3 -0.5**
comp=Z,5.0nm,1.1s,baz=120,slow=7.4
**SENIN Lac Senin/Sane 56.53 320** P **P 07 48 08.3 -0.5**
**BBWF Bergwerk Finst 56.59 326** *eP* **P 07 48 08.3 -0.6**
comp=Z,1.6nm,0.5s,baz=120,slow=7.4
**HHC Hu-ho-hao-te 56.62 47** *eP* **P 07 48 09.8 +0.4**
HHC sP pwP 07 48 17.3 -0.3
HHC S **S 07 56 00.1 -1.0**
HHC sS sS 07 56 19.4 +12
HHC pmax pmax
comp=Z,20nm,0.6s
HHC pmax pmax
comp=Z,130nm,5.0s
HHC LR LR
comp=Z,380nm,17.7s
HHC LR LR
comp=Z,1μm,18.3s
HHC LR LR
comp=Z,2μm,19.5s
**POSS Possen 56.69 327** *eP* **P 07 48 08.5 -1.0**
comp=Z,4.1nm,0.6s,baz=120,slow=7.4
**BFO Black Forest 56.73 323** P **P 07 48 09.7 -0.2**
**BFO Black Forest 56.73 323** P **P 07 48 09.7 -0.2**
BFO pmax pmax
comp=Z,9.0nm,1.1s
**FIA1 FINESS Array S 56.89 342** P **P 07 48 10.2 -0.6**
**FINES FINESS Array B 56.89 342** P **P 07 48 09.5 -1.2**
**FINES FINESS Array B 56.89 342** P **P 07 48 09.0 -1.8**
comp=Z,4.0nm,0.7s,baz=120,slow=10,SNR=14
FINES LR LR 08 14 19.0
comp=Z,232nm,21.7s,baz=152,slow=38
comp=Z,4.0nm,0.7s
**FINES FINESS Array B 56.89 342** *i* P **P 07 48 09.6 -1.2**
FINES pmax pmax
comp=Z,4.0nm,0.6s
**VITZ Vitzeroda 56.90 326** *eP* **P 07 48 10.4 -0.7**
comp=Z,5.9nm,0.9s,baz=120,slow=7.4
**ECH Echery 57.38 322** P **P 07 48 13.6 -1.0**
ECH IAmb IAmb 07 48 15.7
comp=Z,19nm,1.6s
**ECH Echery 57.38 322** P **P 07 48 13.6 -1.0**
ECH pmax pmax
comp=Z,19nm,1.6s
**HNS HongShan 58.04 52** ⇑P **P 07 48 18.8 -0.5**
HNS S **S 07 56 21.8 +2.2**
HNS pmax pmax
comp=Z,24nm,1.0s
HNS LR LR
comp=Z,400nm,18.8s
HNS LR LR
comp=Z,490nm,19.6s
HNS LR LR
comp=Z,790nm,22.2s
**WLF Walferdange 58.59 323** P **P 07 48 23.0 0.0**
**WLF Walferdange 58.59 323** P **P 07 48 23.0 0.0**
WLF pmax pmax
comp=Z,41nm,1.6s
**TIA Tai'an 59.69 54** P **P 07 48 30.0 -0.8**
TIA pmax pmax
comp=Z,14nm,0.9s
**DOU Dourbes 59.69 323** *d*P **P 07 48 30.7 +0.1**
**BJT Baijiatuau 59.77 49** P **P 07 48 30.6 -0.7**
BJT IAmb IAmb 07 48 31.9
comp=Z,14nm,0.9s
**BJT Baijiatuau 59.77 49** P **P 07 48 30.6 -0.7**
BJT pmax pmax
comp=Z,14nm,0.9s
**BJI Beijing 59.78 49** P **P 07 48 31.3 -0.1**
BJI pmax pmax
comp=Z,9.0nm,1.0s
BJI LR LR
comp=Z,340nm,17.1s
BJI LR LR
comp=Z,130nm,19.7s
BJI LR LR
comp=Z,320nm,18.0s
**HFS Hagfors 60.30 336** P **P 07 48 32.4 -2.1**
comp=Z,4.9nm,0.7s,baz=155,slow=8.2,SNR=9.0
HFS LR LR 08 16 59.3
comp=Z,281nm,21.2s,baz=120,slow=38
comp=Z,4.9nm,0.7s
**CLF Chambon-Foret 60.34 320** P **P 07 48 34.7 -0.3**
**NJ2 Nanjing 60.44 59** *eP* **P 07 48 35.4 -0.6**
NJ2 pmax pmax
comp=Z,12nm,0.5s
**NC405 NORSAR Array S 61.67 337** P **P 07 48 44.1 +0.2**
**NOA NORSAR Array B 61.82 336** P **P 07 48 42.5 -2.5**
comp=Z,0.3nm,0.3s,baz=123,slow=7.4,SNR=3.1
NOA LR LR 08 17 55.7
comp=Z,243nm,20.7s,baz=110,slow=38
comp=Z,0.3nm,0.3s
**MDT Midelt 61.87 302** LR LR 08 15 39.7
comp=Z,265nm,20.9s,baz=106,slow=36
**NBO00 NORSAR Array S 61.99 336** P **P 07 48 46.0 -0.1**
**KIC Kosan Boka 62.07 272** ⇑*i*PKP1 **P 07 48 48.8 +1.4**
comp=Z,14nm,0.8s
**DBIC Dimbokro 62.15 273** P **P 07 48 48.5 +0.6**
DBIC IAmb IAmb 07 48 59.0
comp=Z,20nm,1.1s
**DBIC Dimbokro 62.15 273** P **P 07 48 48.5 +0.6**
comp=Z,11nm,0.7s,baz=66,slow=7.2,SNR=12
DBIC LR LR 08 16 51.5
comp=Z,269nm,18.3s,baz=73,slow=37
comp=Z,11nm,0.7s
**DBIC Dimbokro 62.15 273** P **P 07 48 48.5 +0.6**
DBIC pmax pmax
comp=Z,20nm,1.2s
**TIC Toumodi 62.31 273** ⇑*ce*PKP1 **P 07 48 48.0 -1.0**
comp=Z,1.6nm,0.2s
**LIC Lamto 62.37 272** ⇑*ce*PKP1 **P 07 48 48.2 -1.2**
comp=Z,50nm,0.9s
**ESBB Sonseca Array 62.42 310** P **P 07 48 49.5 +0.1**
ESBB IAmb IAmb 07 48 50.6
comp=Z,9.1nm,0.8s
**ESDC Sonseca Array 62.43 310** P **P 07 48 49.4 0.0**
ESDC IAmb IAmb 07 48 50.5
comp=Z,8.0nm,0.9s
**ESDC Sonseca Array 62.43 310** P **P 07 48 49.1 -0.3**
comp=Z,8.2nm,0.8s,baz=88,slow=6.0,SNR=50
ESDC LR LR 08 17 06.6
comp=Z,52nm,18.0s,baz=106,slow=37
comp=Z,8.2nm,0.8s
**PAB San Pablo 62.69 310** P **P 07 48 51.6 +0.3**
**PAB San Pablo 62.69 310** P **P 07 48 51.6 +0.3**
PAB pmax pmax
comp=Z,46nm,1.8s
**KAPI Kappang 63.27 100** LR LR 08 13 14.1
comp=Z,251nm,21.4s,baz=273,slow=33
**KEV Kevo 63.38 348** P **P 07 48 55.2 +0.1**
**KEV Kevo 63.38 348** P **P 07 48 55.3 +0.1**
KEV pmax pmax
comp=Z,88nm,1.7s
**ARCES ARCESS Array B 63.51 348** P **P 07 48 55.6 -0.3**
**ARCES ARCESS Array B 63.51 348** P **P 07 48 54.5 -1.5**
comp=Z,4.3nm,0.8s,baz=146,slow=5.5,SNR=8.7
ARCES LR LR 08 19 47.8
comp=Z,278nm,20.3s,baz=146,slow=39
comp=Z,4.3nm,0.8s
**ARCES ARCESS Array B 63.51 348** P **P 07 48 55.7 -0.3**
ARCES pmax pmax
comp=Z,80nm,1.9s
**HIA Hailar 64.61 40** P **P 07 49 03.1 -0.6**
HIA IAmb IAmb 07 49 08.2
comp=Z,20nm,1.4s
**HIA Hailar 64.61 40** P **P 07 49 03.1 -0.6**
HIA pmax pmax
comp=Z,20nm,1.4s
**EKA Eskdalemuir Ar 65.99 327** P **P 07 49 10.6 -1.9**
comp=Z,2.3nm,0.7s,baz=114,slow=7.1,SNR=15
comp=Z,2.3nm,0.7s
**DAV Davao City (W) 66.91 86** LR LR 08 17 25.1
comp=Z,141nm,21.9s,baz=172,slow=35
**DSB Dublin 67.17 324** P **P 07 49 20.2 +0.2**
**CN2 Changchun 67.30 46** *eP* **P 07 49 22.5 +1.5**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**MORW Morawa 67.85 127** P **P 07 49 24.5 -0.3**
**JOW Kunigami 68.30 65** LR LR 08 22 40.6
comp=Z,192nm,18.0s,baz=272,slow=39
**KSAR Wonju Array Be 68.41 54** P **P 07 49 26.6 -1.5**
**KSAR Wonju Array Be 68.41 54** P **P 07 49 26.6 -1.5**
**KSRS Korea Array 68.44 54** P **P 07 49 26.4 -1.9**
comp=Z,2.6nm,0.7s,baz=264,slow=6.7,SNR=9.3
KSRS LR LR 08 20 43.0
comp=Z,201nm,21.6s,baz=265,slow=37
comp=Z,2.6nm,0.7s
**SOEI Soe 68.74 104** P **P 07 49 30.0 -0.7**
**BNX BinXian 68.97 45** ⇑P **P 07 49 30.8 -0.7**
BNX pmax pmax
comp=Z,6.0nm,0.9s
**H01W3 Cape Leeuwin H 69.03 133** T T 09 04 34.4
baz=300,slow=75,SNR=4.3
**H01W2 Cape Leeuwin H 69.04 133** T T 09 04 36.9
baz=300,slow=75,SNR=4.7
**H01W1 Cape Leeuwin H 69.05 133** T T 09 04 41.6
baz=300,slow=75,SNR=4.8
**TNTI Ternate 69.61 93** P **P 07 49 36.1 +0.1**
**HEH HeiHe 69.68 40** *eP* **P 07 49 34.8 -1.0**
HEH pmax pmax
comp=Z,10.0nm,0.9s
**ZEA Zeya 70.22 36** *eP* **P 07 49 40.2 +1.2**
ZEA MLR MLR
comp=E,100nm,13.0s
**MDJ Mudanjiang 70.36 46** P **P 07 49 40.0 -0.1**
MDJ PP **PP 07 52 18.3 +2.4**
MDJ S **S 07 58 53.3 +1.2**
MDJ ScS **SKSac 07 59 38.6 -2.7**
MDJ SS **SS 08 03 30.4 +7.7**
MDJ pmax pmax
comp=E,17nm,1.8s
MDJ LR LR
comp=E,360nm,20.3s
MDJ LR LR
comp=E,620nm,23.0s
MDJ LR LR
comp=E,920nm,24.0s
**NWAO Narrogin (SRO) 70.44 130** P **P 07 49 40.6 -0.1**
**NWAO Narrogin (SRO) 70.44 130** LR LR 08 13 44.0
comp=E,146nm,21.7s,baz=227,slow=30
**NWAO Narrogin (SRO) 70.44 130** P **P 07 49 40.6 -0.1**
NWAO pmax pmax
comp=Z,44nm,1.6s
**JNU Nakatsue 70.64 58** LR LR 08 22 46.9
comp=Z,130nm,19.0s,baz=272,slow=38
**SPITS Spitsbergen Ar 71.80 352** P **P 07 49 48.6 +0.4**
comp=Z,11nm,0.9s,baz=124,slow=13,SNR=2.6
comp=Z,11nm,0.9s
**USRK Ussuriysk Ar. 72.04 47** P **P 07 49 49.4 -0.9**
**USRK Ussuriysk Ar. 72.04 47** LR LR 08 22 15.5
comp=Z,427nm,20.9s,baz=259,slow=37
**USRK Ussuriysk Ar. 72.04 47** P **P 07 49 49.4 -0.9**
**KLR Kul'dur 72.32 41** LR LR 08 23 29.6
comp=Z,801nm,19.5s,baz=276,slow=38
**KLR Kul'dur 72.32 41** *ce*P **P 07 49 50.3 -1.6**
KLR pmax pmax
comp=Z,16nm,1.7s
**BBTS Babate 72.72 282** LR LR 08 22 15.4
comp=Z,143nm,19.0s,baz=328,slow=36
**YAK Yakutsk 73.15 28** LR LR 08 23 37.7
comp=Z,324nm,20.3s,baz=245,slow=37
**YAK Yakutsk 73.15 28** *ce*P **P 07 49 54.8 -1.7**
YAK pmax pmax
comp=Z,25nm,1.0s
**JMIC Jan Mayen 73.51 342** LR LR 08 23 55.7
comp=Z,68nm,21.7s,baz=96,slow=37
**TIXI Tiksi 75.10 18** P **P 07 50 06.4 -1.3**
**TIXI Tiksi 75.10 18** LR LR 08 25 52.0
comp=Z,339nm,19.5s,baz=276,slow=38
**TIXI Tiksi 75.10 18** *i* P **P 07 50 06.8 -0.9**
TIXI pmax pmax
comp=Z,6.0nm,0.9s
**MJAR Matsushiro Arr 76.64 55** P **P 07 50 17.4 +0.1**
comp=Z,0.8nm,0.5s,baz=281,slow=7.1,SNR=5.7
MJAR LR LR 08 25 03.9
comp=Z,364nm,21.9s,baz=264,slow=37
comp=Z,0.8nm,0.5s
**BORG Borgarnes 76.89 334** LR LR 08 26 54.8
comp=Z,95nm,21.8s,baz=113,slow=38
**MAW Mawson 76.97 178** P **P 07 50 19.0 +0.7**
comp=Z,6.4nm,1.0s,baz=329,slow=4.3,SNR=8.2
MAW LR LR 08 18 54.4
comp=Z,201nm,18.5s,baz=33,slow=32
comp=Z,6.4nm,1.0s
**MAW Mawson 76.97 178** P **P 07 50 19.0 +0.7**
**JHJ Hachijo jima 2 78.10 58** LR LR 08 27 00.5
comp=Z,104nm,18.7s,baz=290,slow=37
**YSS Yuzh-Sakhalins 79.63 44** *eP* **P 07 50 32.8 -0.8**
YSS *eS* **S 08 00 36.5 +1.3**
**ASAJ Asahikawa 79.67 47** LR LR 08 27 27.1
comp=Z,280nm,19.1s,baz=304,slow=37
**WRA Warramunga Arr 80.65 112** P **P 07 50 38.8 -0.9**
**WRA Warramunga Arr 80.65 112** P **P 07 50 38.0 -1.6**
comp=Z,7.0nm,1.0s,baz=296,slow=4.0,SNR=17
WRA LR LR 08 20 45.5
comp=Z,107nm,21.0s,baz=338,slow=32
comp=Z,7.0nm,1.0s
**WRA Warramunga Arr 80.65 112** P **P 07 50 38.8 -0.9**
WRA pmax pmax
comp=Z,2.0nm,1.4s
**WRAB Tennant Creek 80.66 112** P **P 07 50 39.7 0.0**
WRAB IAmb IAmb 07 50 40.6
comp=Z,34nm,1.4s
**WRAB Tennant Creek 80.66 112** P **P 07 50 39.7 0.0**
WRAB pmax pmax
comp=Z,34nm,1.4s
**WB0 Warramunga Arr 80.66 112** P **P 07 50 39.1 -0.6**
WB0 IAmb IAmb 07 50 40.4
comp=Z,24nm,1.5s
**WB2 Warramunga Arr 80.66 112** P **P 07 50 39.6 -0.1**
WB2 IAmb IAmb 07 50 40.6
comp=Z,27nm,1.2s
**JCJ Chichijima 80.68 64** LR LR 08 26 29.2
comp=Z,152nm,21.3s,baz=152,slow=36

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 81.16 | 116 | P | P | 07 50 41.3 | -1.0 | |
| ASAR | Alice Springs | 81.16 | 116 | P | P | 07 50 41.0 | -1.3 | |
| | comp=Z,7.6nm,1.0s,baz=290,slow=5.1,SNR=23 | | | | | | | |
| ASAR | | | | LR | LR | 08 20 41.5 | | |
| | comp=Z,198nm,21.2s,baz=320,slow=31 | | | | | | | |
| | comp=Z,7.6nm,1.0s | | | | | | | |
| ASAR | Alice Springs | 81.16 | 116 | P | P | 07 50 41.3 | -1.0 | |
| AS31 | Alice Springs | 81.16 | 116 | P | P | 07 50 41.1 | -1.2 | |
| SUMG | Summit | 82.93 | 342 | P | P | 07 50 51.3 | +0.2 | |
| SUMG | Summit | 82.93 | 342 | P | P | 07 50 51.3 | +0.2 | |
| SUMG | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.6s | | | | | | | |
| MA2 | Magadan | 83.34 | 31 | LR | LR | 08 29 14.1 | | |
| | comp=Z,189nm,21.8s,baz=284,slow=37 | | | | | | | |
| ELIB | Princess Elisa | 84.39 | 190 | *d*P | P | 07 51 01.3 | +3.1 | |
| | comp=Z,1.9nm,1.4s | | | | | | | |
| GUMO | Guam | 84.88 | 77 | LR | LR | 08 22 53.4 | | |
| | comp=Z,138nm,21.3s,baz=262,slow=32 | | | | | | | |
| BILL | Bilibino | 88.01 | 21 | *e*P | P | 07 51 15.0 | -1.0 | |
| BILL | | | | *e*PP | pP | 07 51 19.5 | -0.8 | |
| BILL | | | | *e* | | 07 54 43.3 | | |
| BILL | | | | *e*PPP | PPP | 07 56 38.3 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,185nm,20.0s | | | | | | | |
| PETK | Petropavlovsk- | 88.31 | 36 | LR | LR | 08 33 46.6 | | |
| | comp=Z,267nm,19.0s,baz=280,slow=38 | | | | | | | |
| SFJD | Kangerlussuaq | 88.44 | 338 | LR | LR | 08 34 48.7 | | |
| | comp=Z,65nm,20.1s,baz=48,slow=38 | | | | | | | |
| EUNU | Eureka | 88.75 | 354 | P | P | 07 51 19.6 | +0.1 | |
| STKA | Stephens Creek | 89.63 | 122 | LR | LR | 08 27 27.3 | | |
| | comp=Z,223nm,18.1s,baz=253,slow=33 | | | | | | | |
| SNAA | Sanae | 90.16 | 196 | P | P | 07 51 25.8 | -0.2 | |
| | comp=Z,1.6nm,1.1s,baz=33,slow=3.1,SNR=2.4 | | | | | | | |
| SNAA | | | | LR | LR | 08 24 59.7 | | |
| | comp=Z,150nm,19.1s,baz=64,slow=31 | | | | | | | |
| | comp=Z,1.6nm,1.1s | | | | | | | |
| CTA | Charters Tower | 91.66 | 110 | LR | LR | 08 28 32.8 | | |
| | comp=Z,8.6nm,19.9s,baz=302,slow=33 | | | | | | | |
| RCBR | Riachuelo | 94.70 | 265 | LR | LR | 08 32 28.1 | | |
| | comp=Z,108nm,19.4s,baz=128,slow=34 | | | | | | | |
| FRB | Frobisher Bay | 96.56 | 339 | LR | LR | 08 37 29.9 | | |
| | comp=Z,113nm,20.7s,baz=23,slow=37 | | | | | | | |
| SHEM | Shemya Is, Ala | 97.75 | 33 | LR | LR | 08 38 21.8 | | |
| | comp=Z,295nm,21.9s,baz=304,slow=37 | | | | | | | |
| QSPA | South Pole Qui | 99.41 | 180 | LR | LR | 08 32 39.1 | | |
| | comp=Z,274nm,18.9s,baz=270,slow=33 | | | | | | | |
| TOLK | Toolik Lake Re | 99.69 | 10 | | Pdif | 07 52 10.3 | +0.6 | |
| MSO | Missoula | 123.47 | 353 | PKPdf | PKPdf | 07 57 23.9 | +0.1 | |
| ETMB | Extrema | 124.98 | 265 | PKPdf | PKPdf | 07 57 27.4 | 0.0 | |
| TPAW | Teton Pass | 126.32 | 350 | PKPdf | PKPdf | 07 57 29.2 | -0.4 | |
| PDAR | Pinedale Array | 126.76 | 349 | PKP | PKPdf | 07 57 29.6 | -0.8 | |
| | comp=Z,2.0nm,0.8s,baz=50,slow=2.8,SNR=18 | | | | | | | |
| MFID | Camas Ranch | 127.05 | 354 | PKPdf | PKiKP | 07 57 31.4 | +0.2 | |
| LPAZ | La Paz | 127.09 | 257 | PKP | PKPdf | 07 57 31.7 | -0.4 | |
| | comp=Z,1.4nm,0.9s,baz=186,slow=3.3,SNR=3.7 | | | | | | | |
| HWUT | Hardware Ranch | 128.25 | 350 | PKPdf | PKPdf | 07 57 33.1 | -0.1 | |
| SMCO | Snowmass | 129.59 | 345 | PKPdf | PKPdf | 07 57 36.4 | +0.2 | |
| T25A | Trinidad | 130.75 | 341 | PKPdf | PKPdf | 07 57 36.8 | -1.3 | |
| NV11 | Mina Array Sit | 132.20 | 356 | PKPdf | PKiKP | 07 57 41.4 | -0.5 | |
| FW13 | Cleburne | 132.20 | 332 | PKPdf | PKPdf | 07 57 40.0 | -0.8 | |
| NVAR | Mina Array Bea | 132.21 | 356 | PKPdf | PKPdf | 07 57 41.2 | +0.3 | |
| NVAR | Mina Array Bea | 132.21 | 356 | PKP | PKPdf | 07 57 41.4 | +0.5 | |
| | comp=Z,1.8nm,0.8s,baz=45,slow=1.4,SNR=13 | | | | | | | |
| ALPN | Alpine | 136.59 | 337 | PKPdf | PKPdf | 07 57 49.5 | +0.3 | |
| TX31 | Lajitas Ar. Si | 137.52 | 336 | PKPdf | PKPdf | 07 57 50.4 | -0.5 | |
| TXAR | Lajitas Array | 137.52 | 336 | PKPdf | PKPdf | 07 57 51.1 | +0.2 | |
| TXAR | Lajitas Array | 137.52 | 336 | PKP | PKPdf | 07 57 50.1 | -0.8 | |
| | comp=Z,0.9nm,0.8s,baz=124,slow=1.3,SNR=9.3 | | | | | | | |
| TGUH | Tegucigalpa,Un | 138.29 | 304 | PKPdf | PKPdf | 07 57 51.1 | -1.5 | |
| PETF | Flores | 138.74 | 309 | PKPdf | PKPdf | 07 57 51.8 | -1.4 | |

**IDC 20 07:40:48.1±7.9, 18°48S×176°62W, h0km, mb3.6/3, mbtmp3.6/3, Error ellipse: s-maj=345.3km s-min=38.1km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 46.20 | 260 | P | P | 07 49 14.7 | -0.6 |
| | 0.3nm,0.4s,baz=96,slow=6.9,SNR=6.8 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| ASAR | Alice Springs | 46.27 | 255 | P | P | 07 49 16.0 | +0.2 |
| | 1.1nm,0.5s,baz=89,slow=8.5,SNR=27 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| ILAR | Eielson Array | 86.07 | 12 | P | P | 07 53 30.4 | +0.1 |
| | 0.3nm,0.7s,baz=211,slow=5.9,SNR=5.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC **20** 07:49:29.0±0.6, 56°45S×25°01W, h0km, mb4.5/8, mbtmp4.5/9, ML3.9/1, Error ellipse: s-maj=22.6km s-min=17.5km az=44.0*

*MOS **20** 07:49:29.7±1.4, 56°61S×25°29W, h10km, mb4.8/8, Error ellipse: s-maj=21.9km s-min=12.8km az=126.3*

*NEIC **20** 07:49:31.3±1.6, 56°6S±0°1×25°0W±0°2, h10km±1km, mb5.0/58, Error ellipse: s-maj=18.1km s-min=14.4km az=174.0*

**ISC 20 07:49:35.1±0.3, 56°62S±0°07×25°20W±0°06, h40km, n161, σ1°18/168, mb5.0/40, 5C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HOPE | Hope Point | 6.83 | 285 | Pn | Pn | 07 51 12.6 | 0.0 |
| HOPE | Hope Point | 6.83 | 285 | P | Pn | 07 51 12.6 | 0.0 |
| VNA1 | Neumayer--Stat | 15.86 | 159 | ⇑P | Pn | 07 53 15.9 | +0.9 |
| | comp=Z,14nm,0.7s | | | | | | |
| VNA3 | Neumayer Olymp | 16.09 | 162 | ⇑P | Pn | 07 53 17.1 | -0.9 |
| | comp=Z,23nm,1.0s | | | | | | |
| SNAA | Sanae | 17.78 | 157 | | Pn | 07 53 38.1 | -1.0 |
| SNAA | Sanae | 17.78 | 157 | ⇑P | P | 07 53 40.1 | +0.5 |
| | comp=Z,119nm,0.7s | | | | | | |
| SNAA | Sanae | 17.78 | 157 | P | Pn | 07 53 38.9 | -0.2 |
| | comp=Z,0.4nm,0.3s,baz=318,slow=12,SNR=26 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| SNAA | Sanae | 17.78 | 157 | *i* P | P | 07 53 39.9 | +0.4 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,20nm,1.4s | | | | | | |
| TROLL | Troll, Antarti | 19.25 | 154 | ⇑P | P | 07 53 56.0 | +0.3 |
| | comp=Z,215nm,0.6s | | | | | | |
| EFI | East Falkland | 19.75 | 271 | P | Pn | 07 54 02.4 | -0.5 |
| EFI | | | | IAmb | IAmb | 07 54 11.0 | |
| | comp=Z,69nm,1.2s | | | | | | |
| EFI | East Falkland | 19.75 | 271 | *i* P | P | 07 54 00.3 | -0.9 |
| EFI | | | | pmax | pmax | | |
| | comp=Z,121nm,2.5s | | | | | | |
| PMSA | Palmer Station | 20.38 | 231 | P | P | 07 54 08.4 | +0.5 |
| PMSA | Palmer Station | 20.38 | 231 | P | P | 07 54 08.0 | +0.2 |
| | comp=Z,4.1nm,0.4s,baz=90,slow=5.1,SNR=2.1 | | | | | | |
| | comp=Z,4.1nm,0.4s | | | | | | |
| NVL | N'lazarevskaya | 21.18 | 146 | *e*P | P | 07 54 15.8 | -0.7 |
| NVL | | | | *e*S | Sn | 07 58 27.8 | +10 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,180nm,16.0s | | | | | | |
| BELA | Belgrano 2 | 21.60 | 185 | P | P | 07 54 21.2 | +0.2 |
| BELA | | | | IAmb | IAmb | 07 54 24.8 | |
| | comp=Z,25nm,0.5s | | | | | | |
| SMAI | San Martin Ant | 22.06 | 222 | P | P | 07 54 28.2 | +2.2 |
| MG04 | Isla Riesco | 26.63 | 258 | P | P | 07 55 09.8 | +0.3 |
| GO09 | Cerro Castillo | 27.80 | 261 | P | P | 07 55 18.8 | -1.2 |
| TRQA | Tornquist | 30.56 | 292 | P | P | 07 55 44.0 | -0.7 |
| TRQA | Tornquist | 30.56 | 292 | P | P | 07 55 44.0 | -0.7 |
| TRQA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| COYC | Coyhaique | 30.85 | 271 | P | P | 07 55 47.1 | 0.0 |
| COYC | | | | IAmb | IAmb | 07 56 30.1 | |
| | comp=Z,46nm,1.8s | | | | | | |
| PLTB | Pedras Altas | 31.71 | 310 | P | P | 07 55 55.1 | +0.3 |
| LL02 | Futaleuf | 32.24 | 274 | P | P | 07 55 58.6 | -0.7 |
| LL02 | | | | IAmb | IAmb | 07 56 28.1 | |
| | comp=Z,24nm,1.6s | | | | | | |
| LL01 | San Ignacio de | 33.09 | 275 | P | P | 07 56 06.1 | -0.7 |
| PLCA | Paso Flores | 33.19 | 279 | P | P | 07 56 06.6 | -1.2 |
| PLCA | | | | IAmb | IAmb | 07 56 48.8 | |
| | comp=Z,45nm,2.0s | | | | | | |
| PLCA | Paso Flores | 33.19 | 279 | P | P | 07 56 06.2 | -1.6 |
| | comp=Z,1.8nm,0.7s,baz=158,slow=8.9,SNR=5.3 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| PLCA | Paso Flores | 33.19 | 279 | P | P | 07 56 06.6 | -1.2 |
| PLCA | | | | pmax | pmax | | |
| | comp=Z,45nm,2.0s | | | | | | |
| GO07 | Milladeo Hill, | 33.29 | 273 | P | P | 07 56 07.4 | -1.1 |
| QSPA | South Pole Qui | 33.63 | 180 | P | P | 07 56 12.5 | +1.0 |
| QSPA | | | | IAmb | IAmb | 07 56 14.1 | |
| | comp=Z,17nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 33.63 | 180 | P | P | 07 56 12.8 | +1.3 |
| | comp=Z,15nm,0.5s,baz=207,slow=2.4,SNR=131 | | | | | | |
| | comp=Z,15nm,0.5s | | | | | | |
| GO06 | Curarrehue | 34.49 | 280 | P | P | 07 56 18.6 | -0.6 |
| ITQB | Itaqui | 34.82 | 307 | P | P | 07 56 22.2 | +0.3 |
| ITQB | | | | IAmb | IAmb | 07 57 00.4 | |
| | comp=Z,50nm,1.4s | | | | | | |
| ML02 | Panimavida | 37.26 | 284 | P | P | 07 56 44.4 | +1.7 |
| ML02 | | | | IAmb | IAmb | 07 58 01.1 | |
| | comp=Z,88nm,1.8s | | | | | | |
| CPUP | Villa Florida | 38.02 | 309 | P | P | 07 56 50.0 | +0.7 |
| CPUP | Villa Florida | 38.02 | 309 | P | P | 07 56 48.5 | -0.8 |
| | comp=Z,4.9nm,0.7s,baz=150,slow=7.9,SNR=13 | | | | | | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| CPUP | Villa Florida | 38.02 | 309 | P | P | 07 56 50.0 | +0.7 |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,21nm,1.4s | | | | | | |
| BO01 | Tunca | 38.12 | 286 | P | P | 07 56 51.0 | +1.0 |
| BO01 | | | | IAmb | IAmb | 07 57 01.7 | |
| | comp=Z,83nm,2.0s | | | | | | |
| MT09 | Talagante | 38.54 | 287 | P | P | 07 56 52.2 | -1.5 |
| MT09 | | | | IAmb | IAmb | 07 57 36.7 | |
| | comp=Z,66nm,1.5s | | | | | | |
| MT16 | CCHEN | 38.56 | 287 | P | P | 07 56 54.3 | +0.5 |
| MT16 | | | | IAmb | IAmb | 07 56 57.2 | |
| | comp=Z,63nm,1.4s | | | | | | |
| MT01 | Popeta | 38.61 | 286 | P | P | 07 56 52.6 | -1.5 |
| MT01 | | | | IAmb | IAmb | 07 57 40.1 | |
| | comp=Z,35nm,1.3s | | | | | | |
| PEL | Peldehue | 38.87 | 288 | P | P | 07 56 55.0 | -1.3 |
| PEL | Peldehue | 38.87 | 288 | P | P | 07 56 55.0 | -1.3 |
| PEL | | | | pmax | pmax | | |
| | comp=Z,139nm,1.9s | | | | | | |
| MT02 | Curacav | 39.01 | 287 | P | P | 07 56 56.6 | -0.9 |
| MT02 | | | | IAmb | IAmb | 07 57 30.8 | |
| | comp=Z,56nm,1.4s | | | | | | |
| MAW | Mawson | 39.03 | 143 | P | P | 07 56 57.5 | +0.3 |
| | comp=Z,6.0nm,0.6s,baz=229,slow=7.5,SNR=25 | | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| ZON | Zonda | 39.07 | 291 | P | P | 07 56 56.9 | -1.2 |
| ZON | Zonda | 39.07 | 291 | P | P | 07 56 56.9 | -1.2 |
| ZON | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| VA03 | San Esteban | 39.09 | 288 | P | P | 07 56 59.0 | +0.7 |
| VA03 | | | | IAmb | IAmb | 07 57 13.4 | |
| | comp=Z,48nm,1.4s | | | | | | |
| VA06 | Catapilco | 39.64 | 288 | P | P | 07 57 04.3 | +1.6 |
| VA06 | | | | IAmb | IAmb | 07 58 29.3 | |
| | comp=Z,53nm,1.3s | | | | | | |
| CO02 | Combarbal | 40.55 | 289 | P | P | 07 57 10.2 | -0.3 |
| CO03 | El Pedregal | 40.68 | 290 | P | P | 07 57 10.5 | -1.0 |
| CO03 | | | | IAmb | IAmb | 07 57 36.3 | |
| | comp=Z,37nm,1.4s | | | | | | |
| CO01 | Juntas del Tor | 41.06 | 291 | P | P | 07 57 15.8 | +1.0 |
| CO01 | | | | IAmb | IAmb | 07 58 40.6 | |
| | comp=Z,52nm,1.9s | | | | | | |
| AC05 | El Transito | 42.07 | 292 | P | P | 07 57 22.8 | -0.1 |
| AC05 | | | | IAmb | IAmb | 07 57 35.3 | |
| | comp=Z,46nm,1.1s | | | | | | |
| AQDB | Aquidauana | 42.58 | 315 | P | P | 07 57 27.0 | +0.1 |
| AC04 | Llanos de Chal | 42.99 | 292 | P | P | 07 57 30.9 | +0.6 |
| AC04 | | | | IAmb | IAmb | 07 57 41.9 | |
| | comp=Z,27nm,0.8s | | | | | | |
| GO02 | Mina Guanaco | 44.74 | 296 | P | P | 07 57 44.3 | -0.3 |
| BOSA | Boshof | 45.05 | 73 | P | P | 07 57 46.0 | -0.9 |
| BOSA | | | | IAmb | IAmb | 07 58 56.1 | |
| | comp=Z,36nm,1.7s | | | | | | |
| BOSA | Boshof | 45.05 | 73 | P | P | 07 57 45.5 | -1.5 |
| | comp=Z,3.2nm,0.8s,baz=212,slow=12,SNR=4.7 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| BOSA | Boshof | 45.05 | 73 | P | P | 07 57 46.0 | -0.9 |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,36nm,1.7s | | | | | | |
| PB14 | IPOC Station P | 45.59 | 295 | P | P | 07 57 51.4 | -0.1 |
| AF01 | San Pedro de A | 45.90 | 299 | P | P | 07 57 55.6 | +1.7 |
| LVC | Limon Verde | 46.55 | 298 | P | P | 07 57 59.4 | +0.4 |
| LVC | Limon Verde | 46.55 | 298 | P | P | 07 57 59.4 | +0.4 |
| LVC | | | | pmax | pmax | | |
| | comp=Z,67nm,0.6s | | | | | | |
| PB09 | IPOC Station P | 47.40 | 299 | P | P | 07 58 05.8 | +0.3 |
| LBTB | Lobatse | 48.13 | 71 | P | P | 07 58 10.0 | -1.1 |
| LBTB | Lobatse | 48.13 | 71 | P | P | 07 58 10.0 | -1.1 |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,54nm,2.0s | | | | | | |
| PTLB | Pontes e Lacer | 48.48 | 314 | P | P | 07 58 14.2 | +0.6 |
| PTLB | | | | IAmb | IAmb | 07 58 14.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| TSUM | Tsumeb | 49.02 | 58 | P | P | 07 58 17.1 | -0.9 |
| GO01 | Chusmiza | 49.19 | 300 | P | P | 07 58 20.8 | +1.1 |
| PB18 | Visviri | 51.11 | 301 | P | P | 07 58 34.1 | -0.2 |
| PB18 | | | | IAmb | IAmb | 07 59 05.4 | |
| | comp=Z,28nm,1.0s | | | | | | |
| VILB | Vilhena | 51.17 | 314 | P | P | 07 58 34.4 | +0.2 |
| VILB | | | | IAmb | IAmb | 07 58 47.5 | |
| | comp=Z,14nm,0.8s | | | | | | |
| LPAZ | La Paz | 51.61 | 303 | P | P | 07 58 39.4 | +1.3 |
| LPAZ | | | | IAmb | IAmb | 07 58 53.8 | |
| | comp=Z,21nm,0.7s | | | | | | |
| LPAZ | La Paz | 51.61 | 303 | P | P | 07 58 39.2 | +1.1 |
| | comp=Z,15nm,0.5s,baz=172,slow=4.8,SNR=49 | | | | | | |
| | comp=Z,15nm,0.5s | | | | | | |
| LPAZ | La Paz | 51.61 | 303 | P | P | 07 58 39.4 | +1.3 |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,21nm,0.7s | | | | | | |
| SAML | Samuel | 56.00 | 313 | P | P | 07 59 09.8 | +0.4 |
| SAML | Samuel | 56.00 | 313 | P | P | 07 59 09.8 | +0.4 |
| SAML | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| ETMB | Extrema | 56.48 | 309 | P | P | 07 59 13.3 | +0.4 |
| ETMB | | | | IAmb | IAmb | 07 59 14.7 | |
| | comp=Z,20nm,1.6s | | | | | | |
| LSZ | Lusaka | 57.56 | 67 | P | P | 07 59 19.5 | -1.2 |
| LSZ | Lusaka | 57.56 | 67 | P | P | 07 59 19.5 | -1.2 |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| NNA | Nana | 59.49 | 297 | *i* P | P | 07 59 33.3 | -0.8 |
| NNA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| MACA | Manacapuru-AM | 60.32 | 318 | P | P | 07 59 39.3 | -0.4 |
| MACA | | | | IAmb | IAmb | 07 59 39.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| CZSB | Cruzeiro do Su | 61.22 | 304 | P | P | 07 59 45.5 | -0.3 |
| CZSB | | | | IAmb | IAmb | 08 00 01.7 | |
| | comp=Z,12nm,1.1s | | | | | | |
| BOAV | Boa Vista | 65.42 | 321 | P | P | 08 00 13.6 | +0.1 |
| BOAV | | | | IAmb | IAmb | 08 00 14.2 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| MBAR | Mbarara | 71.44 | 61 | *i* P | P | 08 00 52.1 | +0.7 |
| MBAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| TORD | Torodi Ar. Bea | 73.03 | 27 | P | P | 08 00 60.0 | -0.6 |
| TORD | Torodi Ar. Bea | 73.03 | 27 | P | P | 08 00 59.0 | -1.6 |
| | comp=Z,2.4nm,0.6s,baz=204,slow=6.0,SNR=24 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| BAUV | El Baul | 74.23 | 316 | P | P | 08 01 06.6 | -1.1 |
| BAUV | | | | IAmb | IAmb | 08 01 21.2 | |
| | comp=Z,16nm,0.9s | | | | | | |
| ESPN | Las Esperanzas | 84.11 | 302 | P | P | 08 02 02.0 | +0.5 |
| DGAR | Diego Garcia | 88.06 | 100 | *i* P | P | 08 02 21.0 | -0.2 |
| DGAR | | | | pmax | pmax | | |
| | comp=Z,215nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 101.82 | 160 | *i* P | Pdif | 08 03 23.5 | -0.6 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| SHA1 | Shidzhatmaz | 115.03 | 48 | *i* PKiKP | PKiKP | 08 08 12.5 | +1.5 |
| KBZ | Khabaz | 115.12 | 48 | *i* PKiKP | PKiKP | 08 08 12.4 | +1.6 |
| KIV | Kislovodsk | 115.22 | 48 | *e*PKiKP | PKiKP | 08 08 12.6 | +1.4 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| SMCO | Snowmass | 117.57 | 300 | PKPdf | PKiKP | 08 08 17.2 | +0.9 |
| FAKI | Fak Fak | 117.89 | 154 | PKPdf | PKPdf | 08 08 15.3 | -2.0 |
| ELS | Elsinore Mount | 118.52 | 288 | PKPdf | PKiKP | 08 08 19.6 | +1.6 |
| MSU | Marysvale | 119.60 | 296 | PKPdf | PKiKP | 08 08 20.8 | +0.7 |
| MSU | Marysvale | 119.60 | 296 | PKiKP | PKiKP | 08 08 20.8 | +0.7 |
| MVU | Marysvale | 119.61 | 296 | PKPdf | PKiKP | 08 08 21.5 | +1.4 |
| VSU | Vasula | 121.99 | 29 | *i* PKiKP | PKiKP | 08 08 25.4 | +1.7 |
| OBN | Obninsk | 122.13 | 37 | *i* PKiKP | PKiKP | 08 08 24.6 | +0.5 |
| OBN | | | | *e*SS | SKSdf | 08 15 29.0 | -3.0 |
| OBN | | | | *e* | | 08 15 32.9 | |
| OBN | | | | SSS | SSS | 08 21 16.0 | |
| OBN | | | | SS | SS | 08 26 45.0 | +8.9 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,11nm,0.4s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,46nm,15.0s | | | | | | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.4s | | | | | | |
| CMAR | Chiang Mai Arr | 123.83 | 109 | PKP | PKiKP | 08 08 28.7 | 0.0 |
| | comp=Z,1.8nm,0.3s,baz=241,slow=3.9,SNR=7.1 | | | | | | |
| BELG | Belogorsnoye | 123.95 | 45 | *i* PKiKP | PKiKP | 08 08 27.7 | -0.1 |
| ARU | Arti | 131.26 | 47 | *i* PKiKP | PKPdf | 08 08 40.3 | -1.1 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| PZH | PanZhiHua | 131.88 | 106 | PKP | PKiKP | 08 08 44.3 | -0.5 |
| BVAR | Borovoye Array | 134.16 | 57 | PKP | PKPdf | 08 08 45.7 | -1.3 |
| | comp=Z,1.8nm,0.8s,baz=270,slow=1.4,SNR=8.4 | | | | | | |
| MKAR | Makanchi Array | 136.03 | 71 | PKP | PKPdf | 08 08 49.0 | -1.7 |
| | comp=Z,0.3nm,0.6s,baz=230,slow=2.2,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 136.03 | 71 | PKiKP | PKPdf | 08 08 49.0 | -1.7 |
| KURK | Kurchatov | 136.65 | 64 | *i* PKiKP | PKiKP | 08 08 53.4 | 0.0 |
| WMQ | Urumqi | 136.94 | 78 | *e*PKP | PKiKP | 08 08 54.3 | -0.1 |
| YKA | Yellowknife Ar | 137.34 | 317 | PKP | PKPdf | 08 08 51.7 | -0.9 |
| | comp=Z,0.9nm,0.9s,baz=76,slow=2.3,SNR=4.0 | | | | | | |
| DGZ | Jazzator, Alta | 140.53 | 71 | *i* PKiKP | PKPdf | 08 08 59.0 | -0.1 |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| P33M | Teslin, Yukon | 143.66 | 307 | PKPdf | PKPbc | 08 09 02.9 | +1.0 |
| N32M | Quiet Lake | 144.20 | 308 | PKPdf | PKPdf | 08 09 04.6 | -0.5 |
| SKAG | Skagway | 144.45 | 304 | PKPdf | PKPdf | 08 09 05.4 | 0.0 |
| FARO | Faro, Yukon | 144.78 | 309 | PKPdf | PKPdf | 08 09 06.6 | +0.6 |
| M31M | Drury Creek, Y | 145.21 | 309 | | PKPdf | 08 09 07.7 | +1.0 |
| A36M | Sachs Harbour | 145.28 | 327 | | PKPab | 08 09 07.2 | +0.6 |
| N30M | Aishikik Lake | 146.09 | 307 | PKPbc | PKPab | 08 09 10.7 | +0.6 |
| KNGR | Kungurtug, Tuv | 146.37 | 75 | *i* PKP2 | PKPbc | 08 09 10.3 | -0.3 |
| YKUJ | Yakutat | 146.47 | 303 | PKPbc | PKPab | 08 09 11.1 | -0.2 |
| F31M | Tsiigehtchic | 146.78 | 318 | PKPbc | PKiKP | 08 09 13.2 | +0.5 |
| G31M | Satah River | 146.83 | 317 | PKPbc | PKiKP | 08 09 13.6 | -0.2 |
| J30M | Hart River | 146.90 | 312 | | PKPbc | 08 09 12.4 | +0.7 |
| M29M | Somme Creek | 147.06 | 308 | | PKPab | 08 09 13.3 | -0.6 |
| I30M | Mount Dempster | 147.13 | 314 | | PKPbc | 08 09 12.8 | +0.5 |
| TIA | Tai'an | 147.56 | 113 | PKPbc | PKPdf | 08 09 00.4 | -11 |
| DAWY | Dawson | 148.00 | 311 | PKPbc | PKPbc | 08 09 15.0 | +0.3 |
| HHC | Hu-ho-hao-te | 148.05 | 101 | *e*P | PKPdf | 08 09 10.0 | -2.4 |
| H29M | Whitestone | 148.20 | 315 | PKPbc | PKPbc | 08 09 15.4 | +0.4 |
| G29M | Pine Creek | 148.25 | 316 | | PKPbc | 08 09 15.6 | +0.5 |
| E29M | Blow River | 148.54 | 319 | | PKPbc | 08 09 16.0 | +0.1 |
| BCAR | Beaver Creek A | 148.71 | 308 | | PKiKP | 08 09 17.2 | -0.7 |
| L27K | Beaver Creek, | 148.73 | 308 | PKPbc | PKiKP | 08 09 17.2 | -0.7 |
| F28M | Old Crow | 149.11 | 317 | PKPbc | PKPbc | 08 09 17.9 | +0.5 |
| K27K | Chicken | 149.12 | 310 | PKPbc | PKiKP | 08 09 18.6 | -0.1 |
| ZAK | Zakamensk | 149.36 | 80 | *e*PKP2 | PKPbc | 08 09 18.1 | -0.5 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| G27K | Doyon Strip | 149.62 | 315 | PKPbc | PKiKP | 08 09 19.4 | -0.3 |
| SONM | Songino Array | 149.66 | 86 | PKPbc | PKPbc | 08 09 18.9 | -0.6 |
| SONM | Songino Array | 149.66 | 86 | PKPbc | PKPbc | 08 09 18.3 | -1.2 |
| | comp=Z,2.6nm,0.7s,baz=214,slow=2.7,SNR=9.9 | | | | | | |
| E27K | Coleen River | 149.86 | 318 | | PKiKP | 08 09 19.7 | -0.4 |
| J26L | Joseph Creek | 149.87 | 311 | PKPbc | PKiKP | 08 09 20.0 | -0.3 |
| I26K | Coal Creek Min | 149.89 | 312 | PKPbc | PKiKP | 08 09 19.9 | -0.3 |
| SCRK | Sand Creek | 149.91 | 310 | PKPbc | PKiKP | 08 09 20.5 | +0.1 |
| RIDG | Independent Ri | 150.22 | 309 | PKPbc | PKiKP | 08 09 21.5 | +0.5 |
| F26K | Sheenjek River | 150.73 | 317 | PKPbc | PKiKP | 08 09 22.1 | +0.1 |
| BMAR | Burnt Mountain | 150.86 | 316 | PKPbc | PKiKP | 08 09 22.2 | 0.0 |
| F25K | Christian Rive | 151.29 | 317 | PKPbc | PKiKP | 08 09 23.6 | +0.5 |
| IL31 | | 151.32 | 311 | PKPbc | PKiKP | 08 09 23.1 | 0.0 |
| ILAR | Eielson Array | 151.32 | 311 | PKPbc | PKiKP | 08 09 23.1 | -0.1 |
| | comp=Z,4.5nm,0.8s,baz=133,slow=1.6,SNR=40 | | | | | | |
| CCB | Clear Creek Bu | 151.69 | 310 | | PKPbc | 08 09 23.5 | 0.0 |
| CCB | | | | PKPab | PKPab | 08 09 33.1 | +0.5 |
| WRH | Wood River Hil | 151.78 | 310 | PKPbc | PKPbc | 08 09 23.8 | +0.1 |
| WRH | | | | PKPab | PKPab | 08 09 33.5 | +0.5 |
| G24K | Hadweenzic Riv | 151.88 | 314 | PKPbc | PKiKP | 08 09 24.9 | +0.6 |
| G24K | | | | PKPab | pPKPbc | 08 09 34.7 | +0.1 |
| RND | Reindeer | 151.89 | 307 | PKPbc | PKiKP | 08 09 25.1 | +0.6 |
| RND | Reindeer | 151.89 | 307 | PKiKP | PKiKP | 08 09 25.1 | +0.6 |
| H24K | Noodor Dome | 151.92 | 313 | PKPbc | PKiKP | 08 09 24.7 | +0.2 |
| H24K | | | | PKPab | PKPab | 08 09 33.3 | -0.3 |
| NEA2 | Nenana | 152.21 | 310 | PKPbc | PKPbc | 08 09 24.6 | -0.2 |
| NEA2 | | | | PKPab | pPKPbc | 08 09 35.4 | -0.1 |
| TOLK | Toolik Lake Re | 152.84 | 319 | PKPab | PKPab | 08 09 37.6 | +0.2 |
| G23K | Bananza Creek | 152.89 | 314 | | PKiKP | 08 09 27.2 | +0.8 |
| G23K | | | | PKPab | PKPab | 08 09 37.6 | -0.1 |
| BPAW | Bear Paw Mtn. | 152.95 | 308 | PKPbc | PKiKP | 08 09 26.9 | +0.3 |
| BPAW | | | | PKPab | sPKPbc | 08 09 40.3 | -0.6 |
| MDJ | Mudanjiang | 160.13 | 116 | P | PKPdf | 08 09 33.6 | +4.6 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| BILL | Bilibino | 167.40 | 340 | *e*PKiKP | PKPdf | 08 09 36.1 | +1.2 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |

**IDC 20 07:52:04.2±34.0, 17°89S×178°99E, h492km±323km, mb3.2/5, mbtmp4.1/5, MS3.4/1, Error ellipse: s-maj=238.2km s-min=67.8km az=50.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| UNAN | | | | *i* S | Sb | 08 00 27.5 | -0.2 | | |
| **USIM** | **UNAN** | **1.59** | **48** | *i* P | Pn | 08 00 06.4 | 0.0 | | |
| USIM | | | | *i* S | Sb | 08 00 27.5 | -0.3 | | |
| USIM | | | | IAML | | 08 01 35.0 | | | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **1.59** | **32** | *i* P | Pn | 08 00 06.5 | +0.1 | | |
| LEVN | | | | *i* S | Sb | 08 00 27.5 | -0.3 | | |
| LEVN | | | | IAML | | 08 00 29.4 | | | |
| | comp=Z,330nm,1.0s | | | | | | | | |
| **ENAN** | **Enatrel Managu** | **1.60** | **48** | IAML | | 08 00 05.2 | | | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| ENAN | | | | *i* P | Pn | 08 00 06.7 | +0.2 | | |
| ENAN | | | | *i* S | Sn | 08 00 27.2 | +0.6 | | |
| **MASN** | **Masaya** | **1.60** | **54** | *i* P | Pn | 08 00 07.0 | +0.4 | | |
| MASN | | | | IAML | | 08 00 14.3 | | | |
| | comp=Z,170nm,1.0s | | | | | | | | |
| MASN | | | | *i* S | Sn | 08 00 26.9 | +0.1 | | |
| **APQ2** | **Apoyeque** | **1.61** | **45** | *i* P | Pn | 08 00 06.9 | +0.2 | | |
| APQ2 | | | | *i* S | Sn | 08 00 27.3 | +0.5 | | |
| APQ2 | | | | IAML | | 08 00 29.3 | | | |
| | comp=Z,460nm,1.0s | | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.61** | **47** | *i* P | Pn | 08 00 05.8 | -0.9 | | |
| TISN | | | | IAML | | 08 00 06.2 | | | |
| | comp=Z,75nm,1.0s | | | | | | | | |
| **ALLN** | **Telcor Managua** | **1.61** | **47** | *i* P | Pn | 08 00 06.2 | -0.6 | | |
| ALLN | | | | *i* S | Sn | 08 00 27.3 | +0.3 | | |
| ALLN | | | | IAML | | 08 01 20.3 | | | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| **R0529** | **La Mascota** | **1.62** | **49** | *i* P | Pn | 08 00 06.6 | -0.2 | | |
| R0529 | | | | IAML | | 08 00 08.0 | | | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **MGA1** | **Managua** | **1.63** | **48** | *i* P | Pn | 08 00 06.8 | -0.2 | | |
| MGA1 | | | | IAML | | 08 00 26.8 | | | |
| | comp=Z,5μm,1.0s | | | | | | | | |
| MGA1 | | | | *i* S | Sb | 08 00 28.2 | -0.7 | | |
| **R4DEC** | **Barrio San Lui** | **1.63** | **48** | *i* P | Pn | 08 00 06.9 | -0.1 | | |
| R4DEC | | | | *i* P | Pb | 08 00 07.1 | -1.7 | | |
| R4DEC | | | | IAML | | 08 00 07.3 | | | |
| | comp=Z,780nm,1.0s | | | | | | | | |
| R4DEC | | | | IAML | | 08 00 07.3 | | | |
| | comp=Z,700nm,1.0s | | | | | | | | |
| R4DEC | | | | *i* S | Sn | 08 00 27.9 | +0.5 | | |
| **APQ3** | **Volcan Apoyequ** | **1.63** | **42** | *i* P | Pn | 08 00 07.1 | +0.1 | | |
| APQ3 | | | | IAML | | 08 00 10.3 | | | |
| | comp=Z,500nm,1.0s | | | | | | | | |
| APQ3 | | | | *i* S | Sb | 08 00 28.4 | -0.6 | | |
| **CNGN** | **Cerro Negro** | **1.63** | **28** | *i* P | Pn | 08 00 06.9 | -0.2 | | |
| CNGN | | | | IAML | | 08 00 36.4 | | | |
| | comp=Z,270nm,1.0s | | | | | | | | |
| **APQN** | **BB Volcan Apoy** | **1.64** | **45** | *i* P | Pn | 08 00 07.0 | -0.2 | | |
| APQN | | | | *i* S | Sn | 08 00 28.5 | +0.8 | | |
| **TELN** | **Telica** | **1.67** | **22** | *i* P | Pn | 08 00 07.6 | -0.1 | | |
| TELN | | | | *i* S | Sn | 08 00 29.0 | +0.4 | | |
| TELN | | | | IAML | | 08 00 32.7 | | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **HERN** | **Volcan Telica** | **1.68** | **22** | *i* P | Pn | 08 00 07.8 | +0.1 | | |
| HERN | | | | IAML | | 08 00 31.5 | | | |
| | comp=Z,280nm,1.0s | | | | | | | | |
| **WILN** | **Americas 2** | **1.68** | **49** | *i* P | Pn | 08 00 07.7 | 0.0 | | |
| WILN | | | | IAML | | 08 00 08.9 | | | |
| | comp=Z,360nm,1.0s | | | | | | | | |
| WILN | | | | *i* S | Sb | 08 00 29.8 | -0.6 | | |
| **AERN** | **Aeropuerto Man** | **1.69** | **50** | *i* P | Pn | 08 00 07.9 | +0.2 | | |
| AERN | | | | *i* S | Sb | 08 00 29.8 | -0.7 | | |
| AERN | | | | IAML | | 08 01 27.3 | | | |
| | comp=Z,5μm,1.0s | | | | | | | | |
| **MOM2** | **El Cardon** | **1.69** | **35** | *i* P | Pn | 08 00 07.3 | -0.5 | | |
| MOM2 | | | | IAML | | 08 00 08.3 | | | |
| | comp=Z,380nm,1.0s | | | | | | | | |
| MOM2 | | | | *i* S | Sb | 08 00 30.0 | -0.7 | | |
| **CRIN** | **San Cristobal** | **1.69** | **14** | *i* P | Pn | 08 00 08.2 | +0.2 | | |
| CRIN | | | | IAML | | 08 00 08.9 | | | |
| | comp=Z,630nm,1.0s | | | | | | | | |
| CRIN | | | | *i* S | Sn | 08 00 29.6 | +0.5 | | |
| **ILCN** | **San Idelfonso** | **1.70** | **27** | *i* P | Pn | 08 00 07.8 | -0.2 | | |
| ILCN | | | | IAML | | 08 00 08.5 | | | |
| | comp=Z,190nm,1.0s | | | | | | | | |
| ILCN | | | | *i* S | Sn | 08 00 29.8 | +0.6 | | |
| **HUEN** | | **1.81** | **45** | *i* P | Pn | 08 00 09.5 | 0.0 | | |
| HUEN | | | | IAML | | 08 00 09.8 | | | |
| | comp=Z,410nm,1.0s | | | | | | | | |
| **JAPN** | **Al SSO del Vol** | **1.83** | **75** | *i* P | Pn | 08 00 09.6 | -0.1 | | |
| JAPN | | | | IAML | | 08 00 14.3 | | | |
| | comp=Z,240nm,1.0s | | | | | | | | |
| **BRAN** | **Las Pilas** | **2.00** | **33** | *i* P | Pn | 08 00 05.1 | -6.9 | | |
| BRAN | | | | IAML | | 08 00 06.3 | | | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| BRAN | | | | *i* S | Sn | 08 00 26.5 | -10 | | |
| **AMPH** | **Amapala** | **2.23** | **355** | *i* P | Pn | 08 00 15.8 | +0.5 | | |
| AMPH | | | | *i* S | Sn | 08 00 42.9 | +0.6 | | |
| **CNCH** | **Conchagua** | **2.24** | **351** | *i* P | Pn | 08 00 15.8 | +0.3 | | |
| CNCH | | | | *i* S | Sn | 08 00 42.9 | +0.2 | | |
| CNCH | | | | IAML | | 08 00 47.4 | | | |
| | comp=Z,380nm,1.0s | | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.26** | **52** | *i* P | Pn | 08 00 15.3 | -0.3 | | |
| BOAB | | | | IAML | | 08 00 16.6 | | | |
| | comp=Z,78nm,1.0s | | | | | | | | |
| BOAB | | | | *i* S | Sn | 08 00 43.5 | +0.6 | | |
| **INDI** | **Punta indio, G** | **2.27** | **121** | *i* P | Pn | 08 00 14.7 | -1.1 | | |
| INDI | | | | IAML | | 08 00 42.5 | | | |
| | comp=Z,69nm,1.0s | | | | | | | | |
| **LIMN** | **Finca el Limon** | **2.28** | **28** | *i* P | Pn | 08 00 15.8 | -0.2 | | |
| LIMN | | | | IAML | | 08 00 50.2 | | | |
| | comp=Z,290nm,1.0s | | | | | | | | |
| **LCND** | **La Caada** | **2.28** | **350** | *i* P | Pn | 08 00 16.3 | +0.3 | | |
| LCND | | | | *i* S | Sn | 08 00 44.5 | +0.9 | | |
| LCND | | | | IAML | | 08 00 47.5 | | | |
| | comp=Z,120nm,1.0s | | | | | | | | |
| **ACON** | **Acoyapa** | **2.44** | **68** | *i* P | Pn | 08 00 16.7 | -1.4 | | |
| ACON | | | | *i* S | Sn | 08 00 48.5 | +1.2 | | |
| ACON | | | | IAML | | 08 01 04.7 | | | |
| | comp=Z,45nm,1.0s | | | | | | | | |
| **SOCE** | **Pocosol** | **2.89** | **103** | *i* S | Sn | 08 00 58.8 | +0.3 | | |
| **YUSH** | **Yuscaran** | **2.96** | **12** | *i* P | Pn | 08 00 25.8 | +0.5 | | |
| YUSH | | | | *i* S | Sn | 08 01 00.8 | +0.5 | | |
| **TGUH** | **Tegucigalpa,Un** | **3.00** | **4** | *i* P | Pn | 08 00 26.7 | +0.7 | | |
| TGUH | | | | IAML | | 08 00 28.0 | | | |
| | comp=Z,85nm,1.0s | | | | | | | | |
| TGUH | | | | *i* S | Sn | 08 01 01.6 | +0.2 | | |
| **ESPN** | **Las Esperanzas** | **3.32** | **70** | *i* S | Sn | 08 01 09.8 | +0.8 | | |
| **HDC3** | **Heredia 3** | **3.47** | **107** | *i* P | Pn | 08 00 34.9 | +2.5 | | |
| HDC3 | | | | *i* S | Sn | 08 01 13.9 | +0.9 | | |
| HDC3 | | | | IAML | | 08 01 18.7 | | | |
| | comp=Z,57nm,1.0s | | | | | | | | |
| **LCR2** | **La Lucha 2** | **3.65** | **110** | *i* P | Pn | 08 00 36.0 | +1.0 | | |
| LCR2 | | | | IAML | | 08 00 37.1 | | | |
| | comp=Z,85nm,1.0s | | | | | | | | |
| LCR2 | | | | *i* S | Sn | 08 01 17.8 | +0.1 | | |

**IDC 20 08:04:52.5±3.1, 54°.26N×86°.81E, h0km, mbtmp3.1/3, ML2.5/3, Error ellipse: s-maj=27.4km s-min=14.7km az=66.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.21** | **256** | I | I | 08 13 15.0 | | |
| | baz=73,slow=314,SNR=7.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.21** | **256** | Pg | Pg | 08 05 13.9 | | -1.8 |
| | 2.0nm,0.3s,baz=74,slow=17,SNR=15 | | | | | | | |
| ZALV | | | | Lg | Lg | 08 05 31.9 | | |
| | 2.1nm,0.3s,baz=73,slow=30,SNR=6.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.24** | **238** | Pn | Pn | 08 06 26.3 | | +0.6 |
| | 0.2nm,0.3s,baz=54,slow=14,SNR=1.9 | | | | | | | |
| | 2.0nm,0.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.01** | **203** | Pn | Pn | 08 06 50.8 | | +0.7 |
| | 0.1nm,0.3s,baz=27,slow=13,SNR=2.5 | | | | | | | |
| MKAR | | | | Sn | Sn | 08 08 20.9 | | -0.5 |
| | 0.1nm,0.3s,baz=24,slow=22,SNR=2.0 | | | | | | | |
| MKAR | | | | Lg | Lg | 08 09 08.5 | | |
| | baz=19,slow=28,SNR=2.2 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **9.83** | **269** | Pn | Pn | 08 07 15.3 | | +0.3 |
| | baz=80,slow=14,SNR=2.1 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |

*IDC **20** 08:07:58.7±1.5, 9°.95N×57°.84E, h0km, mb3.9/8, mbtmp3.9/8, MS3.6/3, Error ellipse: s-maj=42.6km s-min=22.4km az=160.0*

**ISC 20 08:08:00.2±1.4, 9°.9N±0°.2×57°.9E±0°.2, h10km, n11, σ0s96/8, mb4.0/8, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FURI** | **Furi** | | **18.94** | **268** | LR | LR | 08 19 17.4 | | |
| | comp=Z,100nm,19.3s,baz=177,slow=36 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | | **23.26** | **243** | P | **P** | **08 13 08.2** | | **-0.2** |
| | 4.6nm,0.9s,baz=70,slow=12,SNR=5.6 | | | | | | | | |
| | 4.6nm,0.9s | | | | | | | | |
| **BRTR** | **Keskin Array B** | | **36.66** | **328** | P | **P** | **08 15 08.8** | | **+1.6** |
| | 1.4nm,1.1s,baz=170,slow=8.8,SNR=3.6 | | | | | | | | |
| | 1.4nm,1.1s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | **40.65** | **73** | P | **P** | **08 15 41.7** | | **+0.8** |
| | 0.9nm,0.3s,baz=261,slow=8.4,SNR=4.9 | | | | | | | | |
| | 0.9nm,0.3s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | | **48.91** | **21** | P | **P** | **08 16 45.3** | | **-0.9** |
| | 1.1nm,0.7s,baz=235,slow=6.9,SNR=4.0 | | | | | | | | |
| | 1.1nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | **55.02** | **279** | P | **P** | **08 17 32.2** | | **-0.2** |
| | 1.8nm,1.0s,baz=77,slow=8.9,SNR=6.0 | | | | | | | | |
| | 1.8nm,1.0s | | | | | | | | |
| **SONM** | **Songino Array** | | **55.52** | **38** | P | **P** | **08 17 35.4** | | **-0.3** |
| | 0.2nm,0.4s,baz=247,slow=7.5,SNR=1.1 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **FINES** | **FINESS Array B** | | **56.44** | **342** | P | **P** | **08 17 41.0** | | **-0.8** |
| | 1.5nm,0.8s,baz=149,slow=5.7,SNR=2.0 | | | | | | | | |
| | 1.5nm,0.8s | | | | | | | | |
| **ESDC** | **Sonseca Array** | | **62.08** | **310** | P | **P** | **08 18 21.4** | | **0.0** |
| | 1.2nm,0.9s,baz=88,slow=5.6,SNR=6.4 | | | | | | | | |
| | 1.2nm,0.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | | **89.94** | **122** | LR | LR | 08 57 39.8 | | |
| | comp=Z,154nm,20.9s,baz=218,slow=33 | | | | | | | | |
| **CTA** | **Charters Tower** | | **91.88** | **110** | LR | LR | 08 55 33.9 | | |
| | comp=Z,8.5nm,21.1s,baz=347,slow=31 | | | | | | | | |

**NAM 20 08:11:54.1±0.2, 19°.83S×14°.58E, h4km±1km, ML1.1, 6C-2D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **ST9N** | **ST9** | **0.04** | **316** | ⇑*i* P | Pg | 08 11 55.2 | | 0.0 |
| ST9N | | | | *i* S | Sg | 08 11 55.9 | | 0.0 |
| ST9N | | | | IAML | | 08 11 56.4 | | |
| | comp=Z,556nm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.04** | **316** | *i* P | Pg | 08 11 55.2 | | 0.0 |
| ST9N | | | | *i* S | Sg | 08 11 56.0 | | 0.0 |
| ST9N | | | | IAML | | 08 11 56.5 | | |
| | comp=Z,694nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.10** | **21** | ⇑*i* P | Pg | 08 11 56.1 | | 0.0 |
| ST1N | | | | *i* S | Sg | 08 11 57.4 | | 0.0 |
| ST1N | | | | IAML | | 08 11 57.5 | | |
| | comp=Z,57nm,0.0s | | | | | | | |
| **ST1N** | **ST1** | **0.10** | **21** | *i* P | Pg | 08 11 56.1 | | 0.0 |
| ST1N | | | | *i* S | Sg | 08 11 57.6 | | +0.1 |
| ST1N | | | | IAML | | 08 11 57.6 | | |
| | comp=Z,98nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.10** | **168** | ⇑*i* P | Pg | 08 11 56.2 | | 0.0 |
| ST2N | | | | *i* S | Sg | 08 11 58.0 | | +0.4 |
| ST2N | | | | IAML | | 08 11 58.6 | | |
| | comp=Z,67nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.10** | **168** | *i* P | Pg | 08 11 56.2 | | 0.0 |
| ST2N | | | | *i* S | Sg | 08 11 57.7 | | 0.0 |
| ST2N | | | | IAML | | 08 11 59.3 | | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **ST3N** | **ST3** | **0.11** | **320** | ⇑*i* P | Pg | 08 11 56.4 | | 0.0 |
| ST3N | | | | *i* S | Sg | 08 11 58.0 | | 0.0 |
| ST3N | | | | IAML | | 08 11 58.1 | | |
| | comp=Z,17nm,0.1s | | | | | | | |
| **ST3N** | **ST3** | **0.11** | **320** | *i* P | Pg | 08 11 56.4 | | 0.0 |
| ST3N | | | | *i* S | Sg | 08 11 58.0 | | 0.0 |
| ST3N | | | | IAML | | 08 11 58.2 | | |
| | comp=Z,33nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.17** | **279** | ⇑*i* P | Pg | 08 11 57.5 | | 0.0 |
| ST6N | | | | *i* S | Sg | 08 11 59.9 | | +0.2 |
| ST6N | | | | IAML | | 08 12 00.2 | | |
| | comp=Z,27nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.17** | **279** | *i* P | Pg | 08 11 57.5 | | 0.0 |
| ST6N | | | | *i* S | Sg | 08 11 59.8 | | +0.1 |
| ST6N | | | | IAML | | 08 12 00.2 | | |
| | comp=Z,21nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.17** | **78** | *i* P | Pg | 08 11 57.5 | | -0.1 |
| ST5N | | | | *i* S | Sg | 08 11 59.9 | | 0.0 |
| ST5N | | | | IAML | | 08 12 00.1 | | |
| | comp=Z,110nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.24** | **227** | ⇑*i* P | Pg | 08 11 58.8 | | 0.0 |
| ST10N | | | | *i* S | Sg | 08 12 02.3 | | +0.2 |
| ST10N | | | | IAML | | 08 12 02.7 | | |
| | comp=Z,30nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.24** | **227** | *i* P | Pg | 08 11 58.8 | | 0.0 |
| ST10N | | | | *i* S | Sg | 08 12 02.1 | | +0.1 |
| ST10N | | | | IAML | | 08 12 02.5 | | |
| | comp=Z,54nm,0.2s | | | | | | | |
| **ST8N** | **ST8** | **0.28** | **299** | ⇓*i* P | Pg | 08 11 59.6 | | 0.0 |
| ST8N | | | | *i* S | Sg | 08 12 03.7 | | +0.5 |
| ST8N | | | | IAML | | 08 12 04.9 | | |
| | comp=Z,4.3nm,0.1s | | | | | | | |
| **ST11N** | **ST11** | **0.31** | **56** | ⇓*i* P | Pg | 08 12 00.3 | | +0.2 |
| ST11N | | | | *i* S | Sg | 08 12 04.9 | | +0.8 |
| ST11N | | | | IAML | | 08 12 06.0 | | |
| | comp=Z,4.8nm,0.0s | | | | | | | |

*IDC **20** 08:12:03.9±1.7, 8°.22S×116°.65E, h0km, mb3.5/4, mbtmp3.6/5, ML3.3/1, Error ellipse: s-maj=40.4km s-min=17.0km az=52.0*

*DJA **20** 08:12:06.1±0.6, 8°S±10″×11°6E±°, h10km, M4.0/7, MLv4.0/7*

**ISC 20 08:12:08.3±0.9, 8°.22S±0°.08×116°.49E±0°.05, h35km, n12, σ1s28/14, mb3.6/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.64** | **143** | P | **Pn** | **08 12 18.1** | | **-2.9** |
| **SRBI** | **Singaraja** | **1.27** | **276** | P | **Pn** | **08 12 28.3** | | **-1.3** |
| **DNP** | **Denpasar** | **1.34** | **250** | P | **Pn** | **08 12 31.2** | | **+0.6** |
| **PLAI** | **Plampang** | **1.41** | **115** | P | **Pn** | **08 12 31.9** | | **+0.4** |
| **IGBI** | **Denpasar** | **1.46** | **246** | P | **Pn** | **08 12 31.7** | | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.33** | **264** | P | **Pn** | **08 12 42.7** | | **-1.4** |
| **WBSI** | **Waikabubak, Su** | **3.19** | **116** | P | **Pn** | **08 12 56.9** | | **+0.8** |
| **KAPI** | **Kappang** | **4.54** | **46** | Pn | **Pn** | **08 13 13.4** | | **-1.2** |
| | 1.6nm,0.3s,baz=200,slow=9.2,SNR=7.4 | | | | | | | |
| KAPI | | | | Sn | **Sn** | **08 14 05.3** | | **-0.9** |
| | 2.8nm,0.3s,baz=208,slow=20,SNR=5.7 | | | | | | | |
| | 6.0nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.84** | **126** | P | **P** | **08 16 46.8** | | **-0.4** |
| | 1.6nm,0.6s,baz=302,slow=12,SNR=16 | | | | | | | |
| WRA | | | | S | **S** | **08 20 38.9** | | **+0.9** |
| | 0.6nm,0.8s,baz=303,slow=22,SNR=2.3 | | | | | | | |
| | 1.6nm,0.6s | | | | | | | |
| **ASAR** | **Alis Springs** | **22.68** | **135** | P | **P** | **08 17 06.6** | | **-0.3** |
| | 1.4nm,0.7s,baz=314,slow=9.7,SNR=17 | | | | | | | |
| | 1.4nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | **P** | **08 21 48.0** | | **+0.8** |
| | 0.3nm,0.3s,baz=168,slow=7.4,SNR=2.1 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.66** | **334** | P | **P** | **08 22 30.3** | | **+0.9** |
| | 0.3nm,0.6s,baz=150,slow=5.8,SNR=2.9 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |

*IDC **20** 08:15:02.5±2.4, 17°.96S×178°.20W, h524km±27km, mb3.4/14, mbtmp4.2/14, Error ellipse: s-maj=17.0km s-min=11.3km az=154.0*

*NEIC **20** 08:15:02.3±1.8, 17°.8S±0°.1×178°.1W±0°.1, h518km±6km, mb4.2/102, Error ellipse: s-maj=17.2km s-min=14.1km az=175.0*

**ISC 20 08:15:00.6±0.4, 17°.92S±0°.08×178°.19W±0°.07, h500km, n157, σ0s96/156, mb4.2/66, 3C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **MSVF** | **Nonsavu** | **3.58** | **272** | P | P | 08 16 21.8 | | +5.9 |
| **AFI** | **Afiamalu** | **7.34** | **58** | P | **P** | **08 16 50.1** | | **-0.4** |
| **NIUE** | **Niue** | **7.92** | **100** | P | **P** | **08 16 58.2** | | **+1.9** |
| **FUNA** | **Funafuti** | **9.68** | **344** | P | **P** | **08 17 16.7** | | **+2.1** |
| **KOUNC** | **Koumac, New Ca** | **16.75** | **258** | P | **P** | **08 18 32.6** | | **+3.4** |
| **RAR** | **Rarotonga** | **17.66** | **104** | P | **P** | **08 18 37.9** | | **0.0** |
| **URZ** | **Urewera** | **20.68** | **191** | P | **P** | **08 19 04.2** | | **-1.1** |
| | 9.7nm,0.8s,baz=12,slow=2.8,SNR=5.6 | | | | | | | |
| | 9.7nm,0.8s | | | | | | | |
| **PPT** | **Papeete** | **27.25** | **94** | P | **P** | **08 20 03.8** | | **-0.3** |
| | 9.0nm,0.5s,baz=12,slow=7.0,SNR=5.4 | | | | | | | |
| | 9.0nm,0.5s | | | | | | | |
| **EIDS** | **Eidsvold** | **29.46** | **250** | P | **P** | **08 20 24.4** | | **+1.1** |
| **ARMA** | **Armidale** | **30.11** | **240** | P | **P** | **08 20 30.6** | | **+1.5** |
| **CTAO** | **Charters Tower** | **33.65** | **261** | P | **P** | **08 20 59.9** | | **+0.5** |
| CTAO | | | | IAmb | IAmb | 08 21 00.5 | | |
| | comp=Z,8.6nm,0.8s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAN** | **Canberra** | **33.86** | **233** | P | **P** | **08 21 02.2** | | **+1.2** | |
| **COEN** | **Coen** | **37.31** | **270** | P | **P** | **08 21 30.5** | | **+0.6** | |
| **TOO** | **Toolangi** | **37.32** | **231** | P | **P** | **08 21 31.4** | | **+1.7** | |
| **STKA** | **Stephens Creek** | **38.81** | **241** | P | **P** | **08 21 43.1** | | **+1.2** | |
| **STKA** | **Stephens Creek** | **38.81** | **241** | P | **P** | **08 21 42.9** | | **+0.9** | |
| | comp=Z,5.7nm,0.5s,baz=94,slow=11,SNR=18 | | | | | | | | |
| | comp=Z,5.7nm,0.5s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.58** | **241** | P | **P** | **08 22 20.4** | | **+0.4** | |
| **WR0** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **08 22 27.8** | | **-0.6** | |
| WR0 | | | | IAmb | IAmb | 08 23 01.7 | | | |
| | comp=Z,18nm,1.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **08 22 29.0** | | **-0.6** | |
| WB0 | | | | IAmb | IAmb | 08 22 29.7 | | | |
| | comp=Z,7.7nm,0.6s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.82** | **260** | P | **P** | **08 22 29.2** | | **-0.5** | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **08 22 29.3** | | **-0.6** | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **08 22 29.1** | | **-0.7** | |
| | comp=Z,6.7nm,0.5s,baz=94,slow=6.8,SNR=196 | | | | | | | | |
| WRA | | | | PcP | **PcP** | **08 24 00.9** | | **-0.4** | |
| | comp=Z,0.9nm,0.4s,baz=92,slow=3.8,SNR=4.0 | | | | | | | | |
| | comp=Z,6.7nm,0.5s | | | | | | | | |
| **AS31** | **Alice Springs** | **44.99** | **254** | P | **P** | **08 22 31.2** | | **+0.2** | |
| **ASAR** | **Alice Springs** | **44.99** | **254** | P | **P** | **08 22 31.4** | | **+0.3** | |
| **ASAR** | **Alice Springs** | **44.99** | **254** | P | **P** | **08 22 31.1** | | **0.0** | |
| | comp=Z,56nm,0.5s,baz=89,slow=8.1,SNR=808 | | | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 24 01.2** | | **-0.5** | |
| | comp=Z,1.5nm,0.5s,baz=99,slow=4.1,SNR=4.4 | | | | | | | | |
| ASAR | | | | S | **S** | **08 28 29.9** | | **-2.9** | |
| | comp=Z,1.5nm,0.8s,baz=89,slow=16,SNR=9.1 | | | | | | | | |
| **FORT** | **Forrest** | **50.19** | **245** | P | **P** | **08 23 09.5** | | **-0.4** | |
| **KNRA** | **Kununurra** | **50.69** | **264** | P | **P** | **08 23 13.7** | | **-0.2** | |
| KNRA | | | | IAmb | IAmb | 08 23 14.6 | | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.11** | **255** | P | **P** | **08 24 05.4** | | **-0.6** | |
| PSA00 | | | | IAmb | IAmb | 08 24 06.2 | | | |
| | comp=Z,8.4nm,0.7s | | | | | | | | |
| **MBWA** | **Marble Bar** | **58.27** | **256** | P | **P** | **08 24 06.9** | | **-0.3** | |
| MBWA | | | | IAmb | IAmb | 08 24 30.4 | | | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| **JCJ** | **Chichijima** | **58.99** | **318** | P | **P** | **08 24 11.5** | | **-0.3** | |
| **NWAO** | **Narrogin (SRO)** | **59.39** | **242** | P | **P** | **08 24 14.1** | | **-0.5** | |
| NWAO | | | | IAmb | IAmb | 08 24 40.7 | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **MORW** | **Morawa** | **60.67** | **246** | P | **P** | **08 24 22.9** | | **-0.2** | |
| MORW | | | | IAmb | IAmb | 08 24 25.1 | | | |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| **TOLI2** | **Tolitoli** | **62.92** | **281** | P | **P** | **08 24 38.1** | | **+0.1** | |
| TOLI2 | | | | IAmb | IAmb | 08 24 49.9 | | | |
| | comp=Z,7.3nm,0.9s | | | | | | | | |
| **JMZ** | **Minamidaito 2** | **65.64** | **310** | P | **P** | **08 24 55.4** | | **+0.3** | |
| **JAGI** | **Jajag, Banyuwa** | **66.25** | **268** | P | **P** | **08 24 58.1** | | **-1.1** | |
| **MJAR** | **Matsushiro Arr** | **68.04** | **323** | P | **P** | **08 25 09.1** | | **-0.6** | |
| | comp=Z,1.3nm,0.5s,baz=162,slow=6.2,SNR=5.7 | | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| **UGM** | **Wanagama** | **69.85** | **268** | P | **P** | **08 25 21.0** | | **-0.2** | |
| **YOJ** | **Yonaguni jima** | **71.12** | **305** | P | **P** | **08 25 28.9** | | **+0.5** | |
| **QSPA** | **South Pole Qui** | **72.14** | **180** | P | **P** | **08 25 34.3** | | **+0.5** | |
| **QSPA** | **South Pole Qui** | **72.14** | **180** | P | **P** | **08 25 34.0** | | **+0.2** | |
| | comp=Z,1.4nm,0.5s,baz=46,slow=8.6,SNR=15 | | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | | |
| **SSLB** | **Suanglung** | **72.42** | **303** | P | **P** | **08 25 35.5** | | **-0.5** | |
| **TPUB** | **Ta-pu** | **72.44** | **302** | P | **P** | **08 25 36.0** | | **-0.2** | |
| **PETK** | **Petropavlovsk-** | **73.74** | **345** | P | **P** | **08 25 42.8** | | **-0.2** | |
| **S12K** | **Black Hills** | **74.59** | **9** | P | **P** | **08 25 46.4** | | **-1.3** | |
| **KSRS** | **Korea Array** | **74.85** | **318** | P | **P** | **08 25 50.4** | | **+0.8** | |
| | comp=Z,0.9nm,0.6s,baz=134,slow=6.3,SNR=4.4 | | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | | |
| **OHAK** | **Old Harbor** | **77.69** | **14** | P | **P** | **08 26 04.6** | | **-0.1** | |
| OHAK | | | | IAmb | IAmb | 08 26 34.3 | | | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.36** | **14** | P | **P** | **08 26 09.6** | | **+1.3** | |
| **O16K** | **Kokwok River B** | **78.96** | **10** | P | **P** | **08 26 10.4** | | **-1.1** | |
| O16K | | | | IAmb | IAmb | 08 26 14.6 | | | |
| | comp=Z,9.9nm,1.4s | | | | | | | | |
| **N15K** | **Kwethluk River** | **79.19** | **9** | P | **P** | **08 26 12.9** | | **+0.1** | |
| N15K | | | | IAmb | IAmb | 08 26 42.1 | | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.29** | **44** | P | **P** | **08 26 14.8** | | **+0.7** | |
| **NVAR** | **Mina Array Bea** | **79.29** | **44** | P | **P** | **08 26 14.4** | | **+0.3** | |
| | comp=Z,0.7nm,0.7s,baz=227,slow=9.1,SNR=6.8 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.72** | **12** | P | **P** | **08 26 15.3** | | **-0.4** | |
| O18K | | | | IAmb | IAmb | 08 26 16.0 | | | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **M16K** | **Timber Creek** | **80.17** | **9** | P | **P** | **08 26 18.5** | | **+0.5** | |
| M16K | | | | IAmb | IAmb | 08 26 48.4 | | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.20** | **38** | P | **P** | **08 26 19.6** | | **+0.9** | |
| **N18K** | **Kilae Creek** | **80.37** | **11** | P | **P** | **08 26 18.3** | | **-0.7** | |
| N18K | | | | IAmb | IAmb | 08 26 42.0 | | | |
| | comp=Z,22nm,1.4s | | | | | | | | |
| **H04A** | **Detroit Lake** | **80.48** | **37** | P | **P** | **08 26 20.3** | | **+0.3** | |

comp=Z,0.6nm,0.9s
**IL31** 85.85 13 P P 08 26 45.3 -1.1
**ILAR Eielson Array** 85.85 13 P P 08 26 45.3 -1.1
**ILAR Eielson Array** 85.85 13 P P 08 26 44.9 -1.5
comp=Z,0.8nm,0.4s,baz=222,slow=5.4,SNR=25
comp=Z,0.8nm,0.4s
**M29M Somme Creek** 86.00 17 P P 08 26 47.3 0.0
**J25K Salcha River,** 86.04 14 P P 08 26 46.4 -1.0
**E18K Tukpahlearik C** 86.08 7 P P 08 26 47.1 -0.3
**G21K Allakaket** 86.19 10 P P 08 26 47.5 -0.4
G21K IAmb IAmb 08 26 47.7
comp=Z,4.8nm,1.2s
**H23K Yukon River** 86.25 11 P P 08 26 47.6 -0.7
**F20K Avaraart Lake** 86.34 9 P P 08 26 47.9 -0.8
**J26L Joseph Creek** 86.36 14 P P 08 26 49.1 +0.1
**E19K Redstone River** 86.52 8 P P 08 26 48.9 -0.6
E19K IAmb IAmb 08 27 10.6
comp=Z,6.0nm,1.5s
**DLMT Dillon** 86.53 40 P P 08 26 50.4 +0.1
DLMT IAmb IAmb 08 27 20.1
comp=Z,4.8nm,1.4s
**H24K Noodor Dome** 86.58 12 P P 08 26 50.1 +0.2
**F21K Alatna River** 86.84 9 P P 08 26 50.6 -0.4
**G23K Bananza Creek** 86.95 11 P P 08 26 52.0 +0.4
G23K IAmb IAmb 08 27 03.4
comp=Z,5.7nm,1.5s
**DAWY Dawson** 87.04 16 P P 08 26 51.9 -0.2
**I26K Coal Creek Min** 87.14 14 P P 08 26 52.4 0.0
I26K IAmb IAmb 08 27 15.0
comp=Z,8.3nm,1.4s
**EGAK Eagle** 87.17 15 P P 08 26 52.3 -0.3
EGAK IAmb IAmb 08 26 58.2
comp=Z,7.4nm,1.5s
**PDAR Pinedale Array** 87.22 43 P P 08 26 53.2 -0.4
comp=Z,0.4nm,0.7s,baz=244,slow=4.5,SNR=4.6
comp=Z,0.4nm,0.7s
**D19K Kuna River** 87.39 7 P P 08 26 52.9 -0.7
D19K IAmb IAmb 08 26 53.6
comp=Z,3.8nm,1.0s
**G24K Hadweenzic Riv** 87.42 12 P P 08 26 53.1 -0.7
G24K IAmb IAmb 08 27 19.5
comp=Z,6.9nm,1.4s
**FYU Fort Yukon** 87.75 13 P P 08 26 54.9 -0.4
FYU IAmb IAmb 08 27 04.8
comp=Z,6.3nm,1.3s
**E21K Killik River** 87.89 9 P P 08 26 55.2 -0.7
E21K IAmb IAmb 08 27 03.5
comp=Z,7.2nm,1.5s
**E22K Anaktuvuk Pass** 87.94 10 P P 08 26 55.5 -0.7
**F24K Squaw Lake** 88.06 11 P P 08 26 56.6 -0.2
**E24K Your Creek** 88.44 11 P P 08 26 57.3 -1.3
E24K IAmb IAmb 08 27 24.4
comp=Z,5.6nm,1.4s
**D22K Ayikyak River** 88.49 9 P P 08 26 58.6 -0.1
D22K IAmb IAmb 08 26 59.0
comp=Z,3.1nm,0.7s
**BMAR Burnt Mountain** 88.62 12 P P 08 26 59.4 0.0
**I30M Mount Dempster** 88.75 16 P P 08 26 59.7 -0.5
I30M IAmb IAmb 08 27 40.9
comp=Z,5.1nm,1.4s
**D23K Nanushuk River** 88.87 10 P P 08 27 00.4 -0.1
D23K IAmb IAmb 08 27 28.2
comp=Z,6.3nm,1.4s
**H29M Whitestone** 89.03 15 P P 08 27 01.3 0.0
H29M IAmb IAmb 08 27 02.2
comp=Z,3.1nm,1.1s
**CMAR Chiang Mai Arr** 89.08 290 P P 08 27 02.4 -0.2
comp=Z,0.8nm,0.3s,baz=109,slow=3.3,SNR=7.7
comp=Z,0.8nm,0.3s
**C23K Itkillik River** 89.67 9 P P 08 27 04.1 -0.1
**G30M tAoh Zraii Nji** 90.16 15 P P 08 27 05.8 -0.7
G30M IAmb IAmb 08 27 42.5
comp=Z,6.0nm,1.4s
**TROLL Troll, Antarti** 90.30 180 ⇑P P 08 27 06.3 -1.1
comp=Z,42nm,0.4s
**SNAA Sanae** 90.58 179 P P 08 27 07.6 -1.1
SNAA IAmb IAmb 08 27 15.0
comp=Z,6.7nm,1.4s
**SNAA Sanae** 90.58 179 ⇑P P 08 27 07.3 -1.4
comp=Z,16nm,0.8s
**SNAA Sanae** 90.58 179 P P 08 27 07.7 -1.0
comp=Z,0.7nm,0.7s,baz=247,slow=7.7,SNR=2.2
comp=Z,0.7nm,0.7s
**VNA3 Neumayer Olymp** 90.72 176 ⇑P P 08 27 08.4 -0.9
comp=Z,4.8nm,0.7s
**F31M Tsiigehtchic** 91.14 16 P P 08 27 10.8 -0.1
F31M IAmb IAmb 08 27 17.0
comp=Z,5.2nm,1.2s
**INK Inuvik** 91.84 15 P P 08 27 13.2 -1.0
INK IAmb IAmb 08 27 56.3
comp=Z,5.9nm,1.4s
**MKAR Makanchi Array** 109.29 314 PKiKP PKiKP 08 32 31.9 -1.6
comp=Z,0.6nm,0.5s,baz=169,slow=0.5,SNR=9.9
**KURBB Kurchatov Arra** 112.03 318 PKiKP PKiKP 08 32 37.3 -1.2
comp=Z,0.7nm,0.5s,baz=57,slow=3.4,SNR=4.0
**BVAR Borovoye Array** 116.98 321 PKP PKPdf 08 32 46.9 -1.0
comp=Z,1.5nm,0.5s,baz=45,slow=0.6,SNR=8.7
**ARCES ARCESS Array B** 126.36 350 PKP PKPdf 08 33 04.8 -0.8
comp=Z,2.6nm,0.9s,baz=346,slow=0.5,SNR=1.8
**FINES FINESS Array B** 133.25 344 PKP PKPdf 08 33 16.5 -2.3
comp=Z,1.6nm,0.8s,baz=64,slow=3.2,SNR=3.8
**GAZ Gaziantep** 143.50 309 PKPab 08 33 36.9 +0.2
**BNN Bunyan** 143.81 312 PKPbc PKPab 08 33 37.8 -0.1
**LODK Lodwar** 144.12 250 PKPbc PKPbc 08 33 38.7 -0.8
**BUR08 Bucovina Ar. S** 144.71 332 PKPbc PKPdf 08 33 40.7 +0.5
**BR131 Keskin Array S** 144.94 315 PKPbc PKPdf 08 33 40.9 0.0
**BRTR Keskin Array B** 144.94 315 PKPbc PKPdf 08 33 40.9 0.0
**BRTR Keskin Array B** 144.94 315 PKP PKPdf 08 33 40.7 -0.2
comp=Z,4.3nm,0.6s,baz=128,slow=4.6,SNR=26
**ANTO Ankara** 145.43 316 PKPbc PKPdf 08 33 42.7 +1.1
**CLL Collm** 145.52 348 PKPbc PKPdf 08 33 42.4 +1.1
**MDUB Mudurnu** 146.16 318 PKPbc PKPdf 08 33 43.7 +0.9
**MMAI Mount Meron Ar** 146.32 303 PKPbc PKPdf 08 33 45.5 +2.1
comp=Z,8.2nm,0.4s,baz=71,slow=6.3,SNR=20
**PSZ Piszkesteto** 146.62 338 PKPbc PKPdf 08 33 44.5 +1.1
**GHAJ Ghor Haditha** 146.69 300 PKPbc PKPdf 08 33 46.0 +2.2
**CSS Mathiatis** 147.25 307 PKPbc PKPdf 08 33 47.3 +2.6
**GERES GERESS Array B** 147.68 345 PKPbc PKPdf 08 33 48.1 +3.0
**GERES GERESS Array B** 147.68 345 PKPbc PKPdf 08 33 47.4 +2.3
comp=Z,2.0nm,0.6s,baz=29,slow=2.2,SNR=7.4
**WLF Walferdange** 148.14 355 PKPbc PKPbc 08 33 49.4 -0.2
**STAL STALIGIAL** 150.33 345 PKPbc PKPbc 08 33 53.8 -1.3
**FUORN Ofenpass-Fuorn** 150.54 348 PKPbc 08 33 54.7 -1.2
**FNA Florina** 151.67 328 PKPbc PKPbc 08 33 57.1 -1.3
**KBN Korca** 152.08 328 PKPbc PKPbc 08 33 58.5 -0.9

**KRSC 20 08:15:28.5±1.1, 55°.35N×165°.95E, h27km±9km, Ml4.1, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BKI** | **Bering** | **0.14** | **176** | *i* P | Pb | 08 15 34.0 | +0.2 |
| BKI | | | | *e*S | Sb | 08 15 39.5 | +2.1 |
| **KBTR** | **Krutoberegovo** | **1.97** | **297** | *e*S | Sn | 08 16 25.5 | +1.6 |
| **KBG** | **Krutoberegovo** | **2.05** | **298** | *e*S | Sn | 08 16 27.2 | +1.5 |
| **TUMD** | **Tumrok D** | **3.18** | **270** | *e*P | Pn | 08 16 20.4 | +3.7 |
| TUMD | | | | *e*S | Sb | 08 16 58.5 | -4.1 |
| **KMNR** | **Kamenistaya** | **3.27** | **280** | *e*P | Pn | 08 16 21.5 | +3.4 |
| **TUMR** | **Tumrok** | **3.32** | **271** | *e*P | Pb | 08 16 22.7 | -4.0 |
| **KII** | **Karymskiy** | **4.00** | **253** | *e*P | Pn | 08 16 32.1 | +4.2 |
| **SPN** | **Mys Shipunski** | **4.14** | **240** | *e*S | Sn | 08 17 21.3 | +3.9 |
| **SMAR** | **Somma** | **4.68** | **246** | *e*P | Pn | 08 16 41.8 | +4.3 |
| **UGLR** | **Uglovaya** | **4.69** | **246** | *e*P | Pn | 08 16 41.6 | +4.0 |
| **AVH** | **Avacha** | **4.71** | **247** | *e*P | Pn | 08 16 42.5 | +4.7 |
| AVH | | | | *e*S | Sn | 08 17 37.5 | +6.0 |
| **KOK** | **Koryaka** | **4.75** | **247** | *e*P | Pn | 08 16 42.7 | +4.4 |
| **GNL** | **Ganaly** | **4.95** | **254** | *e*P | Pn | 08 16 46.2 | +5.1 |
| **KRMR** | **Karymshinskiy** | **5.25** | **245** | *e*P | Pn | 08 16 49.4 | +4.3 |
| KRMR | | | | *e*S | Sn | 08 17 48.7 | +4.1 |
| **MTVR** | **Mutnovka** | **5.41** | **241** | *e*P | Pn | 08 16 51.6 | +4.1 |
| **GRL** | **Gorelyy** | **5.43** | **242** | *e*P | Pn | 08 16 53.5 | +5.8 |

**IDC 20 08:26:08.3±43.0, 16°.88S×174°.81W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=823.1km s-min=173.5km az=79.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **42.13** | **241** | P | P | 08 34 03.4 | +0.8 |
| | 1.3nm,0.7s,baz=99,slow=12,SNR=3.3 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.20** | **258** | P | P | 08 34 50.5 | -0.5 |
| | 0.4nm,0.5s,baz=96,slow=7.0,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **48.38** | **253** | P | P | 08 34 52.0 | -0.3 |
| | 3.7nm,0.7s,baz=88,slow=8.7,SNR=52 | | | | | | |
| | 3.7nm,0.7s | | | | | | |

**IDC 20 08:29:41.5±3.2, 15°.38S×172°.85W, h0km, mb3.5/4, mbtmp3.5/4, MS3.9/2, Error ellipse: s-maj=296.7km s-min=29.1km az=153.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **39.47** | **274** | LR | LR | 08 50 32.8 | |
| | comp=Z,149nm,18.9s,baz=344,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.37** | **257** | P | P | 08 38 40.4 | -0.5 |
| | 0.2nm,0.6s,baz=84,slow=6.8,SNR=1.2 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **50.62** | **252** | P | P | 08 38 43.0 | +0.2 |
| | 1.0nm,0.6s,baz=88,slow=8.1,SNR=5.0 | | | | | | |
| ASAR | | | | LR | LR | 08 59 34.6 | |
| | comp=Z,122nm,19.2s,baz=122,slow=35 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.96** | **42** | P | P | 08 41 19.2 | 0.0 |
| | 0.3nm,0.7s,baz=233,slow=8.9,SNR=2.6 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.16** | **56** | P | P | 08 41 54.2 | +0.1 |
| | 0.2nm,0.7s,baz=221,slow=6.8,SNR=2.6 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

*JMA **20** 08:37:50.3±0.1, 24°.2N±1°.0×122°.4E±0°.3, h63km±1km, MV2.2/12, NW OFF ISHIGAKIJIMA IS*
*TAP **20** 08:37:50.4, 24°.26N×122°.41E, h68km, ML2.9, C*
**ISC 20 08:37:50.5±1.3, 24°.25N±0°.03×122°.43E±0°.02, h67km±6km, n72, σ0°73/144, 1C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS3** | **EOS3** | **0.10** | **288** | *i* P | Pn | 08 38 00.5 | +0.3 |
| | baz=272 | | | | | | |
| EOS3 | | | | *i* S | Sn | 08 38 08.0 | +0.7 |
| | baz=272 | | | | | | |
| **EOS4** | **EOS4** | **0.16** | **216** | *i* P | Pn | 08 38 00.1 | 0.0 |
| | baz=218 | | | | | | |
| EOS4 | | | | S | Sn | 08 38 07.7 | +0.5 |
| | baz=218 | | | | | | |
| **EOS2** | **EOS2** | **0.24** | **313** | *i* P | Pn | 08 38 01.3 | +0.5 |
| | baz=294 | | | | | | |
| EOS2 | | | | *i* S | Sn | 08 38 09.7 | +1.3 |
| | baz=294 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.51** | **67** | P | Pn | 08 38 03.1 | -0.1 |
| JYNG | | | | *e*S | Sn | 08 38 12.4 | 0.0 |
| **YOJ** | **Yonaguni jima** | **0.57** | **69** | *i* P | Pn | 08 38 03.7 | -0.1 |
| | baz=62 | | | | | | |
| YOJ | | | | S | Sn | 08 38 13.9 | +0.4 |
| | baz=62 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.57** | **69** | P | Pn | 08 38 03.8 | -0.1 |
| YOJ | | | | *e*S | Sn | 08 38 13.4 | -0.2 |
| **ESAO** | **Su ao** | **0.62** | **301** | *e*P | Pn | 08 38 03.7 | -0.6 |
| | baz=301 | | | | | | |
| ESAO | | | | *e*S | Sn | 08 38 13.7 | -0.7 |
| | baz=301 | | | | | | |
| **EWUT** | **Wuta** | **0.62** | **288** | *i* P | Pn | 08 38 03.8 | -0.5 |
| | baz=288 | | | | | | |
| EWUT | | | | S | Sn | 08 38 14.0 | -0.4 |
| | baz=288 | | | | | | |
| **EAHA** | **Aohua** | **0.63** | **277** | P | Pn | 08 38 04.5 | +0.1 |
| | baz=283 | | | | | | |
| EAHA | | | | *e*S | Sn | 08 38 15.3 | +0.7 |
| | baz=283 | | | | | | |
| **TWC** | **Suao** | **0.63** | **304** | *i* P | Pn | 08 38 04.2 | -0.2 |
| | baz=302 | | | | | | |
| TWC | | | | *i* S | Sn | 08 38 13.5 | -1.2 |
| | baz=302 | | | | | | |
| **ENA** | **Nanau** | **0.65** | **286** | *i* P | Pn | 08 38 04.0 | -0.6 |
| | baz=290 | | | | | | |
| ENA | | | | S | Sn | 08 38 14.9 | -0.1 |
| | baz=290 | | | | | | |
| **ETL** | **Fush Village** | **0.74** | **263** | *e*P | Pn | 08 38 05.1 | -0.6 |
| | baz=262 | | | | | | |
| ETL | | | | S | Sn | 08 38 16.0 | -0.8 |
| | baz=262 | | | | | | |
| **NDS** | **Dongshan** | **0.75** | **300** | *i* P | Pn | 08 38 05.9 | +0.2 |
| | baz=300 | | | | | | |
| NDS | | | | S | Sn | 08 38 17.5 | +0.4 |
| | baz=300 | | | | | | |
| **NACB** | **Ninganchiao** | **0.76** | **264** | *i* P | Pn | 08 38 05.3 | -0.6 |
| | baz=263 | | | | | | |
| NACB | | | | *i* S | Sn | 08 38 16.5 | -0.8 |
| | baz=263 | | | | | | |
| **TWD** | **Chiawan** | **0.78** | **257** | *e*P | Pn | 08 38 07.1 | +1.0 |
| | baz=249 | | | | | | |
| TWD | | | | *i* S | Sn | 08 38 16.9 | -0.7 |
| | baz=249 | | | | | | |
| **TWE** | **Neicheng** | **0.83** | **304** | *i* P | Pn | 08 38 07.0 | +0.3 |
| | baz=311 | | | | | | |
| TWE | | | | S | Sn | 08 38 19.0 | +0.2 |
| | baz=311 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.85** | **332** | P | Pn | 08 38 06.2 | -0.7 |
| | baz=323 | | | | | | |
| TWB1 | | | | *i* S | Sn | 08 38 18.1 | -1.1 |
| | baz=323 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.86** | **267** | *i* P | Pn | 08 38 06.8 | -0.4 |
| | baz=266 | | | | | | |
| ETLH | | | | S | Sn | 08 38 19.1 | -0.5 |
| | baz=266 | | | | | | |
| **LATG** | **Datong** | **0.87** | **289** | *i* P | Pn | 08 38 07.2 | 0.0 |
| | baz=288 | | | | | | |
| LATG | | | | S | Sn | 08 38 19.7 | 0.0 |
| | baz=288 | | | | | | |
| **ENTT** | **Nioudou** | **0.87** | **296** | ⇑*i* P | Pn | 08 38 07.5 | +0.2 |
| | baz=289 | | | | | | |
| ENTT | | | | *i* S | Sn | 08 38 19.8 | +0.1 |
| | baz=289 | | | | | | |
| **ETM** | **Tongmen** | **0.90** | **252** | P | Pn | 08 38 07.2 | -0.4 |
| | baz=251 | | | | | | |
| ETM | | | | S | Sn | 08 38 19.4 | -0.8 |
| | baz=251 | | | | | | |
| **TIPB** | **Shuangxi** | **0.90** | **323** | *i* P | Pn | 08 38 07.3 | -0.3 |
| | baz=323 | | | | | | |
| TIPB | | | | *i* S | Sn | 08 38 19.2 | -1.1 |
| | baz=323 | | | | | | |
| **NDT** | **Datong Townshi** | **0.90** | **293** | *i* P | Pn | 08 38 08.0 | +0.4 |
| | baz=287 | | | | | | |
| NDT | | | | *i* S | Sn | 08 38 20.4 | +0.1 |
| | baz=287 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.91** | **304** | *i* P | Pn | 08 38 08.2 | +0.4 |
| | baz=312 | | | | | | |
| FUSB | | | | S | Sn | 08 38 21.3 | +0.6 |
| | baz=312 | | | | | | |
| **SHUL** | **Shoufeng** | **0.92** | **240** | *i* P | Pn | 08 38 07.4 | -0.3 |
| | baz=237 | | | | | | |
| SHUL | | | | S | Sn | 08 38 21.0 | +0.4 |
| | baz=237 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.95** | **256** | *i* P | Pn | 08 38 08.1 | -0.3 |
| | baz=255 | | | | | | |
| LXIB | | | | S | Sn | 08 38 20.8 | -0.9 |
| | baz=255 | | | | | | |
| **NNSB** | **Datong** | **0.97** | **281** | *i* P | Pn | 08 38 08.3 | -0.3 |
| | baz=280 | | | | | | |
| NNSB | | | | S | Sn | 08 38 22.2 | +0.3 |
| | baz=280 | | | | | | |
| **NNSH** | **Datong** | **0.97** | **281** | *i* P | Pn | 08 38 08.1 | -0.5 |
| | baz=280 | | | | | | |
| NNSH | | | | S | Sn | 08 38 21.7 | -0.2 |
| | baz=280 | | | | | | |
| **TEGC** | **Jichi Village** | **0.97** | **236** | *e*P | Pn | 08 38 08.2 | -0.3 |
| | baz=229 | | | | | | |
| TEGC | | | | S | Sn | 08 38 21.9 | 0.0 |
| | baz=229 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.97** | **329** | *i* P | Pn | 08 38 08.1 | -0.5 |
| | baz=329 | | | | | | |
| SXI1 | | | | S | Sn | 08 38 21.1 | -0.9 |
| | baz=329 | | | | | | |
| **NNS** | **Nan Shan** | **0.98** | **281** | *i* P | Pn | 08 38 08.8 | +0.1 |
| | baz=280 | | | | | | |
| NNS | | | | *i* S | Sn | 08 38 21.7 | -0.5 |
| | baz=280 | | | | | | |
| **NWLT** | **Wulai** | **0.99** | **302** | *i* P | Pn | 08 38 09.2 | +0.4 |
| | baz=307 | | | | | | |
| NWLT | | | | *i* S | Sn | 08 38 22.5 | +0.2 |
| | baz=307 | | | | | | |
| **ESL** | **Shilin** | **1.01** | **244** | *i* P | Pn | 08 38 08.3 | -0.6 |
| | baz=250 | | | | | | |
| ESL | | | | S | Sn | 08 38 22.2 | -0.4 |
| | baz=250 | | | | | | |
| **YHNB** | **Yeheng** | **1.04** | **294** | *i* P | Pn | 08 38 09.7 | +0.3 |
| | baz=286 | | | | | | |
| YHNB | | | | S | Sn | 08 38 23.4 | -0.1 |
| | baz=286 | | | | | | |
| **TWA** | **Mucha** | **1.05** | **314** | *i* P | Pn | 08 38 09.3 | -0.2 |
| | baz=323 | | | | | | |
| TWA | | | | S | Sn | 08 38 23.5 | -0.2 |
| | baz=323 | | | | | | |
| **NSK** | **Sanguang** | **1.06** | **294** | *i* P | Pn | 08 38 10.0 | +0.3 |
| | baz=286 | | | | | | |
| NSK | | | | *i* S | Sn | 08 38 23.5 | -0.4 |
| | baz=286 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.06** | **264** | *i* P | Pn | 08 38 09.0 | -1.1 |
| | baz=256 | | | | | | |
| WHF | | | | *i* S | Sn | 08 38 24.0 | -0.6 |
| | baz=256 | | | | | | |
| **FUSS** | **Fushou** | **1.08** | **270** | P | Pn | 08 38 09.9 | -0.2 |
| | baz=269 | | | | | | |
| FUSS | | | | *i* S | Sn | 08 38 24.6 | -0.1 |
| | baz=269 | | | | | | |
| **EGFH** | **Guangfu** | **1.08** | **238** | *e*P | Pn | 08 38 10.6 | +0.7 |
| | baz=232 | | | | | | |
| EGFH | | | | *i* S | Sn | 08 38 24.1 | -0.2 |
| | baz=232 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.09** | **241** | *i* P | Pn | 08 38 09.5 | -0.5 |
| | baz=249 | | | | | | |
| WARBT | | | | S | Sn | 08 38 23.6 | -1.0 |
| | baz=249 | | | | | | |
| **TATO** | **Taipei** | **1.11** | **310** | P | Pn | 08 38 10.0 | -0.3 |
| | baz=321 | | | | | | |
| TATO | | | | S | Sn | 08 38 26.5 | +1.4 |
| | baz=321 | | | | | | |
| **TWT** | **Tachien** | **1.14** | **270** | *e*P | Pn | 08 38 12.4 | +1.6 |
| | baz=269 | | | | | | |
| TWT | | | | S | Sn | 08 38 26.1 | +0.2 |
| | baz=269 | | | | | | |
| **TDCB** | **Techi** | **1.16** | **270** | *i* P | Pn | 08 38 11.5 | +0.5 |
| | baz=270 | | | | | | |
| TDCB | | | | *i* S | Sn | 08 38 26.1 | -0.2 |
| | baz=270 | | | | | | |
| **CHGB** | **Renai** | **1.16** | **261** | *i* P | Pn | 08 38 11.5 | +0.4 |
| | baz=253 | | | | | | |
| CHGB | | | | *i* S | Sn | 08 38 26.5 | 0.0 |
| | baz=253 | | | | | | |
| **OWD** | **Renai** | **1.18** | **256** | *i* P | Pn | 08 38 11.7 | +0.4 |
| | baz=255 | | | | | | |
| OWD | | | | S | Sn | 08 38 26.0 | -0.8 |
| | baz=255 | | | | | | |
| **YM01** | **YM01** | **1.18** | **319** | *i* P | Pn | 08 38 10.2 | -1.0 |
| | baz=319 | | | | | | |
| YM01 | | | | *e*S | Sn | 08 38 25.9 | -0.7 |
| | baz=319 | | | | | | |
| **HGSD** | **Ruisui** | **1.19** | **231** | *i* P | Pn | 08 38 11.1 | -0.2 |
| | baz=225 | | | | | | |
| HGSD | | | | S | Sn | 08 38 27.0 | +0.2 |
| | baz=225 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.19** | **86** | P | Pn | 08 38 11.3 | 0.0 |
| IRIF | | | | S | Sn | 08 38 26.9 | +0.1 |
| **WUSB** | **Renai** | **1.22** | **258** | *i* P | Pn | 08 38 12.3 | +0.5 |
| | baz=252 | | | | | | |
| WUSB | | | | S | Sn | 08 38 27.6 | -0.2 |
| | baz=252 | | | | | | |
| **EHYH** | **Wanrong** | **1.25** | **233** | *e*P | Pn | 08 38 12.6 | +0.6 |
| | baz=241 | | | | | | |
| EHYH | | | | S | Sn | 08 38 27.6 | -0.5 |
| | baz=241 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.25** | **313** | *i* P | Pn | 08 38 10.8 | -1.2 |
| | baz=322 | | | | | | |
| TWS1 | | | | *e*S | Sn | 08 38 27.7 | -0.4 |
| | baz=322 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.25** | **288** | *i* P | Pn | 08 38 12.7 | +0.6 |
| | baz=298 | | | | | | |
| NFF | | | | S | Sn | 08 38 28.6 | +0.3 |
| | baz=298 | | | | | | |
| **VWDT** | **VWDT** | **1.27** | **247** | *i* P | Pn | 08 38 12.7 | +0.4 |
| | baz=246 | | | | | | |
| VWDT | | | | *i* S | Sn | 08 38 29.1 | +0.3 |
| | baz=246 | | | | | | |
| **ECBN** | **Changbin** | **1.29** | **224** | *e*P | Pn | 08 38 12.7 | +0.1 |
| | baz=216 | | | | | | |
| ECBN | | | | S | Sn | 08 38 28.6 | -0.6 |
| | baz=216 | | | | | | |
| **LIOB** | **Emei** | **1.34** | **287** | P | Pn | 08 38 14.1 | +0.8 |
| | baz=286 | | | | | | |
| LIOB | | | | S | Sn | 08 38 31.4 | +1.0 |
| | baz=286 | | | | | | |
| **YULB** | **Yu-li** | **1.34** | **231** | *i* P | Pn | 08 38 12.8 | -0.5 |
| | baz=240 | | | | | | |
| YULB | | | | S | Sn | 08 38 29.3 | -1.1 |
| | baz=240 | | | | | | |
| **WHP** | **Taichung City** | **1.35** | **271** | *e*P | Pn | 08 38 14.4 | +0.9 |
| | baz=266 | | | | | | |
| WHP | | | | *i* S | Sn | 08 38 31.3 | +0.6 |
| | baz=266 | | | | | | |
| **NSTT** | **Nanjuang** | **1.35** | **286** | *i* P | Pn | 08 38 13.7 | +0.3 |
| | baz=286 | | | | | | |
| NSTT | | | | S | Sn | 08 38 31.6 | +1.0 |
| | baz=286 | | | | | | |
| **TWF1** | **Yuli** | **1.37** | **229** | P | Pn | 08 38 13.4 | -0.3 |
| | baz=239 | | | | | | |
| TWF1 | | | | *e*S | Sn | 08 38 29.7 | -1.3 |
| | baz=239 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.40** | **262** | P | Pn | 08 38 13.1 | -0.8 |
| | baz=259 | | | | | | |
| WCS | | | | *e*S | Sn | 08 38 31.4 | -0.2 |
| | baz=259 | | | | | | |
| **CHKH** | **Chenggong** | **1.42** | **222** | *e*P | Pn | 08 38 13.9 | -0.3 |
| | baz=215 | | | | | | |
| CHKH | | | | S | Sn | 08 38 29.9 | -2.2 |
| | baz=215 | | | | | | |
| **SSLB** | **Suanglung** | **1.42** | **251** | P | Pn | 08 38 14.6 | +0.2 |
| | baz=255 | | | | | | |
| SSLB | | | | S | Sn | 08 38 32.6 | +0.3 |
| | baz=255 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.45** | **90** | *e*P | Pn | 08 38 15.4 | +0.8 |
| JKRS | | | | *e*S | Sn | 08 38 33.5 | +0.7 |
| **TYC** | **Yuchr** | **1.48** | **257** | *i* P | Pn | 08 38 16.0 | +1.0 |
| | baz=251 | | | | | | |
| TYC | | | | S | Sn | 08 38 33.8 | +0.3 |
| | baz=251 | | | | | | |
| **FULB** | **Fuli** | **1.48** | **225** | *e*P | Pn | 08 38 15.8 | +0.7 |
| | baz=216 | | | | | | |
| FULB | | | | *e*S | Sn | 08 38 34.4 | +0.9 |
| | baz=216 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.54** | **249** | *i* P | Pn | 08 38 16.9 | +1.0 |
| | baz=245 | | | | | | |
| WHYT | | | | *i* S | Sn | 08 38 36.7 | +1.6 |
| | baz=245 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.57** | **86** | *e*P | Pn | 08 38 16.3 | 0.0 |
| JIJ | | | | S | Sn | 08 38 35.0 | -0.8 |
| **EDH** | **Donghe** | **1.64** | **219** | P | Pn | 08 38 15.7 | -1.5 |
| | baz=213 | | | | | | |
| EDH | | | | *i* S | Sn | 08 38 36.1 | -1.3 |
| | baz=213 | | | | | | |
| **ELDTW** | **Lidau** | **1.67** | **231** | P | Pn | 08 38 17.0 | -0.7 |
| | baz=224 | | | | | | |
| ELDTW | | | | S | Sn | 08 38 37.2 | -1.1 |
| | baz=224 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.75** | **79** | P | Pn | 08 38 18.6 | 0.0 |
| JISG | | | | S | Sn | 08 38 39.4 | -0.7 |
| **WCKO** | **Fanlu** | **1.85** | **244** | P | Pn | 08 38 22.5 | +2.4 |
| | baz=236 | | | | | | |
| WCKO | | | | S | Sn | 08 38 45.4 | +2.8 |
| | baz=236 | | | | | | |
| **JTJ** | **Tarama** | **2.11** | **79** | *e*P | Pn | 08 38 24.2 | +0.7 |
| JTJ | | | | *e*S | Sn | 08 38 48.5 | -0.2 |

*NEIC **20** 08:38:00.2, 18°.16S×178°.19W, h560km, Moment Tensor Solution. Duration: 28s8 Moment tensor: Scale 10^17Nm; Mrr~0.55; Mθθ-1.33; Mϕϕ1.87; Mrθ-1.26; Mϕθ-0.36; Mϕr~0.55; Fault plane solution: Mo2.17000×10^17 NP1: ϕs33.86000°, δ73.47000°, λ-35.73000°. NP2:ϕs135.43000°, δ55.96000°, λ-159.92000°. Principal axes: T 1.9960, Plg11.0000°, Azm88.0000°; N 0.3479, Plg51.0000°, Azm192.0000°; P -2.3439, Plg37.0000°, Azm350.0000°;*
*MOS **20** 08:38:00.5±1.0, 18°.08S×178°.31W, h540km, mb5.1/43 Error ellipse: s-maj=8.0km s-min=7.2km az=62.5*
*NOU **20** 08:38:00.1, 18°.17S×178°.18W, h534km, ML5.3/114, Fiji Islands Region*
*NEIC **20** 08:38:01.0±2.2, 18°.18S±0°.09×178°.18W±0°.09, h535km±4km, mb5.2/561, Mww5.5/14, Error ellipse: s-maj=12.6km s-min=12.1km az=159.0*
*NEIC **20** 08:38:00.2, 18°.16S×178°.19W, h560km*
*IDC **20** 08:38:01.1±0.5, 18°.18S×178°.25W, h542km±5km, mb4.5/24, mbtmp5.4/26, Error ellipse: s-maj=10.3km s-min=7.9km*

*az=152.0*

*GCMT* ***20*** *08:38:03.2±0.4, 18°.18S±0°.05×178°.21W±0°.03, h542km±2km, MW5.6/87, Moment Tensor Solution. s87,c116; Duration: 1±5 Moment tensor: Scale 10¹⁷Nm; Mrr=0.72±.07; Mθθ-2.09±.12; Mϕϕ2.81±.11; Mrθ-1.55±.11; Mθϕ-0.35±.11; Mϕr-0.00±.12; Best double couple: M₀2.97600×10¹⁷ NP1:ϕs136.00000°,δ69.00000°, λ-154.00000°. NP2:ϕs36.00000°, δ66.00000°, λ-23.00000°. Principal axes: T 2.8380, Plg2.0000°, Azm265.0000°; N 0.2760, Plg57.0000°, Azm172.0000°; P -3.1140, Plg33.0000°, Azm357.0000°; nsta1 refers to body waves, cutoff=40s. Triangular moment-rate function*

**ISC 20 08:38:00.2±0.3, 18°.18S±0°.04×178°.17W±0°.04, h538km±2km, h539km:pP-P,n1403,σ1°18/1392,mb5.2/369, 62C-67D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.62** | **276** | P | | **P** | | **08 39 20.6** | **+2.0** |
| **MSVF** | **Nonsavu** | **3.62** | **276** | P | | **P** | | **08 39 20.5** | **+2.0** |
| **MSVF** | **Nonsavu** | **3.62** | **276** | *i* P | | **P** | | **08 39 19.7** | **+1.1** |
| **AFI** | **Afiamalu** | **7.47** | **56** | | | **P** | | **08 39 49.5** | **-3.0** |
| **AFI** | **Afiamalu** | **7.47** | **56** | P | | **P** | | **08 39 49.5** | **-3.0** |
| **NIUE** | **Niue** | **7.87** | **98** | P | | **P** | | **08 39 56.4** | **+0.1** |
| **NIUE** | **Niue** | **7.87** | **98** | | | **P** | | **08 39 56.5** | **+0.1** |
| **NIUE** | **Niue** | **7.87** | **98** | P | | **P** | | **08 39 56.3** | **+0.1** |
| | comp=Z,16093μmcomp=Z,5μm,1.1s | | | | | | | | |
| **FUNA** | **Funafuti** | **9.93** | **345** | P | | **P** | | **08 40 16.3** | **-1.0** |
| **FUNA** | **Funafuti** | **9.93** | **345** | P | | **P** | | **08 40 16.4** | **-1.0** |
| **RAO** | **Raoul Island** | **11.03** | **179** | P | | **P** | | **08 40 27.2** | **-1.3** |
| **RAO** | **Raoul Island** | **11.03** | **179** | P | | **P** | | **08 40 27.5** | **-1.0** |
| | comp=Z,1μm,0.3s,baz=2.6,slow=1.8,SNR=42 | | | | | | | | |
| RAO | | | | S | | **S** | | **08 42 31.1** | **+0.6** |
| | comp=Z,554nm,0.3s,baz=90,slow=22,SNR=5.8 | | | | | | | | |
| **GLKZ** | **Green Lake** | **11.04** | **179** | P | | **P** | | **08 40 26.7** | **-1.9** |
| GLKZ | | | | S | | **S** | | **08 42 29.9** | **-0.8** |
| **RTV** | **Rentapao** | **12.76** | **270** | P | | **P** | | **08 40 36.9** | **+0.2** |
| **DVP** | **Devils Point** | **12.99** | **270** | P | | **P** | | **08 40 49.1** | **0.0** |
| **MARNC** | **Mare, Loyalty** | **13.39** | **254** | P | | **P** | | **08 40 51.8** | **-1.4** |
| **LIFNC** | **LIFOU** | **14.00** | **257** | P | | **P** | | **08 40 57.6** | **-1.9** |
| **LIFNC** | **LIFOU** | **14.00** | **257** | | | **P** | | **08 40 57.7** | **-1.9** |
| **PINNC** | **Pines Island,** | **14.19** | **249** | | | **P** | | **08 41 00.8** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | | **P** | | **08 41 08.4** | **-1.1** |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | | **P** | | **08 41 08.3** | **-1.3** |
| **DZM** | **Mont Dzumac** | **14.96** | **252** | P | | **P** | | **08 41 08.5** | **-1.1** |
| | comp=Z,367nm,0.8s,baz=86,slow=16,SNR=84 | | | | | | | | |
| DZM | | | | S | | **S** | | **08 43 44.1** | **-1.6** |
| | comp=Z,24nm,1.0s,baz=53,slow=17,SNR=1.4 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.09** | **252** | P | | **P** | | **08 41 09.7** | **-1.2** |
| **NFK** | **Norfolk Island** | **16.69** | **227** | P | | **P** | | **08 41 28.8** | **+2.2** |
| **NFK** | **Norfolk Island** | **16.69** | **227** | P | | **P** | | **08 41 28.5** | **+2.0** |
| | comp=Z,607nm,1.2s | | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.72** | **259** | P | | **P** | | **08 41 26.8** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **16.72** | **259** | P | | **P** | | **08 41 26.8** | **-0.2** |
| **RAR** | **Rarotonga** | **17.59** | **103** | P | | **P** | | **08 41 35.3** | **+0.3** |
| **RAR** | **Rarotonga** | **17.59** | **103** | P | | **P** | | **08 41 35.4** | **+0.5** |
| **RAR** | **Rarotonga** | **17.59** | **103** | P | | **P** | | **08 41 35.3** | **+0.3** |
| | comp=Z,420nm,0.9s,baz=248,slow=6.3,SNR=48 | | | | | | | | |
| **OUZ** | **Omahuta** | **18.48** | **202** | P | | **P** | | **08 41 45.6** | **+2.6** |
| **OUZ** | **Omahuta** | **18.48** | **202** | P | | **P** | | **08 41 46.2** | **+3.2** |
| **WCZ** | **Waipu Caves** | **18.89** | **199** | P | | **P** | | **08 41 49.9** | **+3.2** |
| **KUZ** | **Kuaotunu** | **19.26** | **195** | P | | **P** | | **08 41 50.9** | **+0.9** |
| **KUZ** | **Kuaotunu** | **19.26** | **195** | P | | **P** | | **08 41 51.5** | **+1.5** |
| **ABAZ** | **Army Bay** | **19.36** | **197** | P | | **P** | | **08 41 53.5** | **+2.5** |
| **WIAZ** | **Waiheke Island** | **19.48** | **196** | P | | **P** | | **08 41 54.6** | **+2.8** |
| **MBAZ** | **Motutaw North** | **19.50** | **197** | P | | **P** | | **08 41 54.5** | **+2.2** |
| **MXZ** | **Matakaoa Point** | **19.56** | **188** | P | | **P** | | **08 41 52.8** | **+0.1** |
| **MXZ** | **Matakaoa Point** | **19.56** | **188** | P | | **P** | | **08 41 53.1** | **+0.4** |
| **RVAZ** | **Riverhead Bore** | **19.59** | **198** | P | | **P** | | **08 41 55.0** | **+2.0** |
| **EPAZ** | **Eden Park BICE** | **19.64** | **197** | P | | **P** | | **08 41 55.6** | **+2.1** |
| **WMGZ** | **Waiomatatini S** | **19.80** | **188** | P | | **P** | | **08 41 54.9** | **+0.1** |
| WMGZ | | | | S | | **S** | | **08 45 02.3** | **-3.0** |
| **HAZ** | **Te Kaha** | **19.83** | **189** | P | | **P** | | **08 41 53.4** | **-1.7** |
| HAZ | | | | S | | **S** | | **08 45 00.8** | **-5.0** |
| **URZ** | **Urewera** | **20.43** | **191** | P | | **P** | | **08 41 57.7** | **-2.9** |
| **URZ** | **Urewera** | **20.43** | **191** | P | | **P** | | **08 41 57.8** | **-2.9** |
| | comp=Z,65nm,0.3s,baz=348,slow=3.5,SNR=92 | | | | | | | | |
| URZ | | | | S | | **S** | | **08 45 09.8** | **-5.6** |
| | comp=Z,40nm,0.8s,baz=22,slow=19,SNR=4.0 | | | | | | | | |
| **HIZ** | **Hauiti** | **21.16** | **195** | P | | **P** | | **08 42 09.1** | **+1.9** |
| **TARA** | **Tarawa** | **21.30** | **335** | P | | **P** | | **08 42 08.3** | **-0.5** |
| **BKZ** | **Black Stump Fm** | **21.42** | **191** | P | | **P** | | **08 42 07.1** | **-2.6** |
| **BFZ** | **Birch Farm** | **22.94** | **191** | P | | **P** | | **08 42 21.4** | **-1.7** |
| **HNR** | **Honiara** | **22.94** | **289** | P | | **P** | | **08 42 22.8** | **-0.7** |
| **HNR** | **Honiara** | **22.94** | **289** | P | | **P** | | **08 42 22.8** | **-0.7** |
| **SNZO** | **South Karori** | **23.85** | **193** | P | | **P** | | **08 42 29.9** | **-1.3** |
| **QRZ** | **Quartz Range** | **23.95** | **198** | P | | **P** | | **08 42 32.3** | **+0.2** |
| **KHZ** | **Kahutara** | **25.17** | **195** | P | | **P** | | **08 42 41.3** | **-1.6** |
| **CTZ** | **Chatham Island** | **25.51** | **177** | P | | **P** | | **08 42 48.4** | **+2.5** |
| **RPZ** | **Rata Peaks** | **27.03** | **197** | P | | **P** | | **08 42 59.3** | **-0.1** |
| **PPT** | **Papeete** | **27.21** | **93** | P | | **P** | | **08 43 02.0** | **+0.7** |
| | comp=Z,282nm,1.0s,baz=326,slow=4.1,SNR=21 | | | | | | | | |
| | comp=Z,282nm,1.0s | | | | | | | | |
| **PPTF** | **Pamatai, Papee** | **27.22** | **93** | P | | **P** | | **08 43 01.9** | **+0.5** |
| **PPTF** | **Pamatai, Papee** | **27.22** | **93** | P | | **P** | | **08 43 01.7** | **+0.3** |
| **JCZ** | **Jackson Bay** | **28.05** | **200** | P | | **P** | | **08 43 08.2** | **-0.2** |
| **ODZ** | **Otahua Downs** | **28.37** | **197** | P | | **P** | | **08 43 10.5** | **-0.5** |
| **XMAS** | **Kiritimati** | **28.64** | **48** | P | | **P** | | **08 43 14.0** | **+0.2** |
| **EIDS** | **Eidsvold** | **29.39** | **250** | P | | **P** | | **08 43 19.9** | **-0.3** |
| **EIDS** | **Eidsvold** | **29.39** | **250** | P | | **P** | | **08 43 20.1** | **0.0** |
| **EIDS** | **Eidsvold** | **29.39** | **250** | P | | **P** | | **08 43 20.0** | **-0.1** |
| | comp=Z,351nm,0.9s | | | | | | | | |
| **RK1H** | **Rockhampton Ha** | **29.71** | **255** | P | | **P** | | **08 43 22.6** | **-0.4** |
| **ARMA** | **Armidale** | **30.00** | **240** | P | | **P** | | **08 43 26.3** | **+0.8** |
| **ARMA** | **Armidale** | **30.00** | **240** | P | | **P** | | **08 43 26.6** | **+1.1** |
| **ARMA** | **Armidale** | **30.00** | **240** | P | | **P** | | **08 43 26.6** | **+1.1** |
| | comp=Z,415nm,0.8s | | | | | | | | |
| **SYZ** | **Scrubby Hill** | **30.16** | **198** | P | | **P** | | **08 43 26.8** | **+0.3** |
| **PYZ** | **Puysegur Point** | **30.60** | **201** | P | | **P** | | **08 43 30.2** | **-0.1** |
| **KWJN** | **Gagan, Kwajale** | **30.68** | **331** | P | | **P** | | **08 43 32.6** | **+1.3** |
| **NTLH** | **Newcastle Hard** | **30.75** | **236** | P | | **P** | | **08 43 33.2** | **+1.4** |
| **RMQ** | **Roma** | **31.62** | **249** | P | | **P** | | **08 43 40.1** | **+0.7** |
| **RMQ** | **Roma** | **31.62** | **249** | P | | **P** | | **08 43 39.7** | **+0.4** |
| | comp=Z,75nm,0.7s | | | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **31.81** | **235** | P | | **P** | | **08 43 40.5** | **-0.4** |
| **TV1H** | **Townsville Har** | **33.16** | **262** | P | | **P** | | **08 43 52.2** | **-0.3** |
| **CNB** | **Canberra Magne** | **33.44** | **233** | P | | **P** | | **08 43 55.7** | **+1.0** |
| **CNB** | **Canberra Magne** | **33.44** | **233** | P | | **P** | | **08 43 55.8** | **+1.0** |
| | comp=Z,364nm,1.0s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.62** | **261** | P | | **P** | | **08 43 56.5** | **0.0** |
| | comp=Z,14nm,0.5s,baz=90,slow=10.0,SNR=99 | | | | | | | | |
| CTA | | | | S | | **S** | | **08 48 38.8** | **-2.6** |
| | comp=Z,0.4nm,0.8s,baz=45,slow=20,SNR=1.4 | | | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.62** | **261** | P | | **P** | | **08 43 56.1** | **-0.4** |
| **CTAO** | **Charters Tower** | **33.62** | **261** | P | | **P** | | **08 43 56.5** | **0.0** |
| **CTAO** | **Charters Tower** | **33.62** | **261** | P | | **P** | | **08 43 56.5** | **0.0** |
| CTAO | | | | | pmax | pmax | | | |
| | comp=Z,321nm,0.9s | | | | | | | | |
| **CTAO** | **Charters Tower** | **33.62** | **261** | P | | **P** | | **08 43 56.4** | **-0.1** |
| CTAO | | | | | pP | **pwP** | | **08 45 30.6** | **-0.1** |
| **CAN** | **Canberra** | **33.72** | **233** | P | | **P** | | **08 43 57.8** | **+0.7** |
| **CAN** | **Canberra** | **33.72** | **233** | P | | **P** | | **08 43 57.8** | **+0.7** |
| **CAN** | **Canberra** | **33.72** | **233** | P | | **P** | | **08 43 57.8** | **+0.7** |
| | comp=Z,243nm,1.2s | | | | | | | | |
| **CAN** | **Canberra** | **33.72** | **233** | P | | **P** | | **08 43 57.8** | **+0.7** |
| CAN | | | | | pmax | pmax | | | |
| | comp=Z,150nm,0.8s | | | | | | | | |
| **CAN** | **Canberra** | **33.72** | **233** | P | | **P** | | **08 43 57.8** | **+0.7** |
| **YNG** | **Young** | **33.82** | **235** | P | | **P** | | **08 43 58.6** | **+0.7** |
| **YNG** | **Young** | **33.82** | **235** | P | | **P** | | **08 43 58.6** | **+0.7** |
| | comp=Z,372nm,1.6s | | | | | | | | |
| **PATS** | **Pohnpei** | **34.01** | **315** | P | | **P** | | **08 44 00.6** | **+1.0** |
| **MILA** | **Mila** | **34.28** | **230** | P | | **P** | | **08 44 02.4** | **+0.6** |
| **PMG** | **Port Moresby** | **34.73** | **280** | P | | **P** | | **08 44 06.3** | **+0.6** |
| **PMG** | **Port Moresby** | **34.73** | **280** | P | | **P** | | **08 44 06.4** | **+0.7** |
| **PMG** | **Port Moresby** | **34.73** | **280** | P | | **P** | | **08 44 06.2** | **+0.4** |
| **PMG** | **Port Moresby** | **34.73** | **280** | *ce*P | | **P** | | **08 44 06.3** | **+0.6** |
| PMG | | | | | pmax | pmax | | | |
| | comp=Z,361nm,0.8s | | | | | | | | |
| **PMG** | **Port Moresby** | **34.73** | **280** | P | | **P** | | **08 44 06.4** | **+0.7** |
| **CMSA** | **Cobar Meteorol** | **35.22** | **241** | P | | **P** | | **08 44 09.9** | **+0.3** |
| **MTSU** | **Mount Surprise** | **35.60** | **264** | P | | **P** | | **08 44 12.7** | **-0.3** |
| **QLP** | **Quilpie** | **35.65** | **250** | P | | **P** | | **08 44 13.1** | **-0.2** |
| **JOHN** | **Johnston Islan** | **35.72** | **14** | P | | **P** | | **08 44 14.0** | **+0.1** |
| **JOHN** | **Johnston Islan** | **35.72** | **14** | P | | **P** | | **08 44 13.9** | **+0.1** |
| **JOHN** | **Johnston Islan** | **35.72** | **14** | P | | **P** | | **08 44 14.4** | **+0.6** |
| **GLAD** | **Gladstone** | **36.82** | **225** | P | | **P** | | **08 44 23.2** | **+0.5** |
| **TOO** | **Toolangi** | **37.18** | **231** | P | | **P** | | **08 44 26.5** | **+0.8** |
| **TOO** | **Toolangi** | **37.18** | **231** | P | | **P** | | **08 44 26.8** | **+1.0** |
| **TOO** | **Toolangi** | **37.18** | **231** | P | | **P** | | **08 44 26.8** | **+1.0** |
| TOO | | | | | pmax | pmax | | | |
| | comp=Z,229nm,0.7s | | | | | | | | |
| **COEN** | **Coen** | **37.33** | **271** | P | | **P** | | **08 44 27.6** | **+0.3** |
| **COEN** | **Coen** | **37.33** | **271** | P | | **P** | | **08 44 27.7** | **+0.4** |
| **MANU** | **Manus Island** | **37.41** | **291** | P | | **P** | | **08 44 29.0** | **+1.1** |
| **CORO** | **Coronation Par** | **37.61** | **224** | P | | **P** | | **08 44 30.7** | **+1.5** |
| **TAOE** | **Nuku Hiva Isla** | **38.04** | **81** | P | | **P** | | **08 44 33.7** | **+0.5** |
| **TAOE** | **Nuku Hiva Isla** | **38.04** | **81** | P | | **P** | | **08 44 33.9** | **+0.7** |
| **MOO** | **Moorlands** | **38.05** | **223** | P | | **P** | | **08 44 33.4** | **+0.7** |
| **TAU** | **Tasmania Unive** | **38.19** | **222** | P | | **P** | | **08 44 34.1** | **+0.2** |
| **TAU** | **Tasmania Unive** | **38.19** | **222** | P | | **P** | | **08 44 34.0** | **+0.1** |
| TAU | | | | | | IAmb | IAmb | 08 45 06.2 | |
| | comp=Z,118nm,1.4s | | | | | | | | |
| **TAU** | **Tasmania Unive** | **38.19** | **222** | P | | **P** | | **08 44 34.0** | **+0.1** |
| TAU | | | | | pmax | pmax | | | |
| | comp=Z,118nm,1.5s | | | | | | | | |
| **GEXS** | **Deakin Univers** | **38.29** | **231** | P | | **P** | | **08 44 35.9** | **+1.2** |
| **BRAT** | **Ballarat** | **38.33** | **232** | P | | **P** | | **08 44 36.7** | **+1.6** |
| **STKA** | **Stephens Creek** | **38.70** | **242** | P | | **P** | | **08 44 39.0** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.70** | **242** | P | | **P** | | **08 44 39.3** | **+1.1** |
| STKA | | | | | | IAmb | IAmb | 08 44 40.1 | |
| | comp=Z,113nm,1.1s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.70** | **242** | P | | **P** | | **08 44 39.2** | **+1.0** |
| | comp=Z,220nm,0.5s,baz=88,slow=10,SNR=1000 | | | | | | | | |
| STKA | | | | S | | **S** | | **08 49 55.4** | **-1.3** |
| | comp=Z,1.5nm,0.4s,baz=144,slow=17,SNR=3.9 | | | | | | | | |
| | comp=Z,220nm,0.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.70** | **242** | *c i* P | | **P** | | **08 44 38.9** | **+0.8** |
| **INKA** | **Innaminka** | **38.85** | **248** | P | | **P** | | **08 44 40.6** | **+1.1** |
| **ARPS** | **Mount Arapiles** | **39.67** | **234** | P | | **P** | | **08 44 46.3** | **+0.3** |
| **ARPS** | **Mount Arapiles** | **39.67** | **234** | P | | **P** | | **08 44 46.3** | **+0.3** |
| | comp=Z,268nm,0.9s | | | | | | | | |
| **QIS** | **Mount Isa** | **39.83** | **260** | P | | **P** | | **08 44 46.7** | **-0.8** |
| **QIS** | **Mount Isa** | **39.83** | **260** | P | | **P** | | **08 44 46.6** | **-0.8** |
| | comp=Z,58nm,0.7s | | | | | | | | |
| **WAKE** | **Wake Island** | **40.10** | **337** | P | | **P** | | **08 44 49.5** | **0.0** |
| **WAKE** | **Wake Island** | **40.10** | **337** | P | | **P** | | **08 44 49.2** | **-0.3** |
| **HTT** | **Hallett** | **41.20** | **240** | P | | **P** | | **08 44 58.8** | **+0.5** |
| **LCRK** | **Leigh Creek** | **41.34** | **244** | P | | **P** | | **08 44 59.6** | **+0.2** |
| **PTPS** | **Port Pirie** | **41.92** | **240** | P | | **P** | | **08 45 03.7** | **-0.2** |
| **WHYH** | **Whyalla** | **42.25** | **241** | P | | **P** | | **08 45 07.1** | **+0.6** |
| **JAY** | **Jayapura** | **43.20** | **286** | P | | **P** | | **08 45 14.5** | **+0.3** |
| | comp=Z,164nm,0.8s | | | | | | | | |
| **OOD** | **Oodnadatta** | **43.33** | **249** | P | | **P** | | **08 45 15.9** | **+0.9** |
| **BBOO** | **Buckleboo** | **43.47** | **241** | P | | **P** | | **08 45 16.4** | **+0.3** |
| **BBOO** | **Buckleboo** | **43.47** | **241** | P | | **P** | | **08 45 16.6** | **+0.5** |
| **BBOO** | **Buckleboo** | **43.47** | **241** | P | | **P** | | **08 45 16.5** | **+0.5** |
| | comp=Z,523nm,0.8s | | | | | | | | |
| **HMH** | **Humu'ula Sheep** | **43.66** | **32** | P | | **P** | | **08 45 18.6** | **+0.7** |
| **GENI** | **Genyem** | **43.66** | **286** | P | | **P** | | **08 45 19.0** | **+1.3** |
| | comp=Z,214nm,0.7s | | | | | | | | |
| **POHA** | **Pohakuloa** | **43.76** | **32** | P | | **P** | | **08 45 19.2** | **+0.5** |
| **KIP** | **Kipapa** | **44.03** | **28** | P | | **P** | | **08 45 21.4** | **+1.0** |
| **KIP** | **Kipapa** | **44.03** | **28** | P | | **P** | | **08 45 21.1** | **+0.7** |
| **KIP** | **Kipapa** | **44.03** | **28** | *ce*P | | **P** | | **08 45 21.3** | **+0.9** |
| KIP | | | | | pmax | pmax | | | |
| | comp=Z,79nm,1.7s | | | | | | | | |
| **KIP** | **Kipapa** | **44.03** | **28** | P | | **P** | | **08 45 20.9** | **+0.4** |
| **WR0** | **Warramunga Arr** | **44.62** | **260** | P | | **P** | | **08 45 24.2** | **-0.9** |
| WR0 | | | | | | IAmb | IAmb | 08 45 27.2 | |
| | comp=Z,76nm,0.7s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.77** | **260** | P | | **P** | | **08 45 25.5** | **-0.9** |
| **WB2** | **Warramunga Arr** | **44.79** | **260** | P | | **P** | | **08 45 25.9** | **-0.6** |
| **WRAB** | **Tennant Creek** | **44.80** | **260** | P | | **P** | | **08 45 25.8** | **-0.7** |
| **WRAB** | **Tennant Creek** | **44.80** | **260** | *i* P | | **P** | | **08 45 25.4** | **-1.1** |
| WRAB | | | | | pmax | pmax | | | |
| | comp=Z,129nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.80** | **260** | P | | **P** | | **08 45 26.1** | **-0.5** |
| | comp=Z,156nm,0.7s,baz=98,slow=6.6,SNR=1009 | | | | | | | | |
| WRA | | | | | pP | **pP** | | **08 47 04.4** | **+0.5** |
| | comp=Z,18nm,1.0s,baz=95,slow=9.3,SNR=2.8 | | | | | | | | |
| WRA | | | | | ScP | **ScP** | | **08 49 58.2** | **-0.1** |
| | comp=Z,10nm,1.1s,baz=83,slow=5.2,SNR=6.4 | | | | | | | | |
| | comp=Z,156nm,0.7s | | | | | | | | |
| **AS01** | **Alice Springs** | **44.89** | **254** | P | | **P** | | **08 45 27.1** | **-0.1** |
| **MULG** | **Mulgathing** | **44.90** | **245** | P | | **P** | | **08 45 27.2** | **0.0** |
| **AS31** | **Alice Springs** | **44.93** | **254** | P | | **P** | | **08 45 27.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **44.94** | **254** | P | | **P** | | **08 45 27.8** | **+0.2** |
| **ASAR** | **Alice Springs** | **44.94** | **254** | P | | **P** | | **08 45 27.5** | **-0.1** |
| | comp=Z,1μm,0.6s,baz=89,slow=8.3 | | | | | | | | |
| ASAR | | | | | ScP | **ScP** | | **08 49 59.1** | **+0.3** |
| | comp=Z,8.6nm,0.9s,baz=101,slow=3.6,SNR=5.1 | | | | | | | | |
| **MIDW** | **Midway** | **46.13** | **1** | P | | **P** | | **08 45 35.6** | **-0.7** |
| **KDU** | **Kakadu** | **47.78** | **269** | P | | **P** | | **08 45 48.8** | **-0.3** |
| **KDU** | **Kakadu** | **47.78** | **269** | P | | **P** | | **08 45 48.7** | **-0.5** |
| | comp=Z,196nm,0.9s | | | | | | | | |
| **MTN** | **Manton Dam** | **49.02** | **269** | P | | **P** | | **08 45 57.8** | **-0.6** |
| **MTN** | **Manton Dam** | **49.02** | **269** | P | | **P** | | **08 45 57.8** | **-0.6** |
| **MTN** | **Manton Dam** | **49.02** | **269** | P | | **P** | | **08 45 57.7** | **-0.7** |
| | comp=Z,185nm,0.9s | | | | | | | | |
| **DRS** | **Darwin Rock St** | **49.33** | **269** | P | | **P** | | **08 46 00.1** | **-0.6** |
| **WRKA** | **Warakurna** | **49.98** | **252** | P | | **P** | | **08 46 05.3** | **-0.1** |
| **WRKA** | **Warakurna** | **49.98** | **252** | P | | **P** | | **08 46 05.5** | **+0.1** |
| | comp=Z,622nm,0.9s | | | | | | | | |
| **FORT** | **Forrest** | **50.10** | **245** | P | | **P** | | **08 46 05.5** | **-0.6** |
| **FORT** | **Forrest** | **50.10** | **245** | P | | **P** | | **08 46 05.9** | **-0.2** |
| **FORT** | **Forrest** | **50.10** | **245** | P | | **P** | | **08 46 05.6** | **-0.5** |
| | comp=Z,417nm,0.9s | | | | | | | | |
| **KNRA** | **Kununurra** | **50.69** | **264** | P | | **P** | | **08 46 10.5** | **-0.1** |
| **KNRA** | **Kununurra** | **50.69** | **264** | P | | **P** | | **08 46 10.3** | **-0.3** |
| | comp=Z,255nm,0.9s | | | | | | | | |
| **SWI** | **Sorong** | **52.52** | **283** | P | | **P** | | **08 46 24.3** | **+0.4** |
| | comp=Z,357nm,0.8s,comp=Z,3μm | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.21** | **261** | P | | **P** | | **08 46 29.0** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **53.21** | **261** | P | | **P** | | **08 46 28.8** | **+0.1** |
| **MSAI** | **Masohi** | **53.81** | **279** | P | | **P** | | **08 46 38.6** | **+5.5** |
| **KMBL** | **Kambalda** | **55.40** | **244** | P | | **P** | | **08 46 43.4** | **-0.6** |
| **KMBL** | **Kambalda** | **55.40** | **244** | P | | **P** | | **08 46 43.1** | **-0.9** |
| | comp=Z,112nm,1.1s | | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **55.48** | **199** | ⇑P | | **P** | | **08 46 44.5** | **+0.6** |
| DRV | | | | | PcP | **PcP** | | **08 47 36.0** | **+0.1** |
| DRV | | | | | pP | **pwP** | | **08 48 30.1** | **-0.1** |
| **NLAI** | **Namlea** | **55.56** | **279** | P | | **P** | | **08 46 46.4** | **+1.1** |
| **SOEI** | **Soe** | **56.30** | **270** | P | | **P** | | **08 46 52.0** | **+1.4** |
| **SOEI** | **Soe** | **56.30** | **270** | P | | **P** | | **08 46 52.1** | **+1.6** |
| **SOEI** | **Soe** | **56.30** | **270** | P | | **P** | | **08 46 51.8** | **+1.2** |
| **TNTI** | **Ternate** | **56.74** | **283** | P | | **P** | | **08 46 53.8** | **+0.3** |
| TNTI | | | | | | IAmb | IAmb | 08 46 54.6 | |
| | comp=Z,63nm,0.7s | | | | | | | | |
| **SANI** | **Sanana** | **57.01** | **280** | P | | **P** | | **08 46 54.8** | **-0.5** |
| | comp=Z,165nm,0.8s,comp=Z,1μm | | | | | | | | |
| **PSAC2** | **Pilbara Seismi** | **58.01** | **256** | P | | **P** | | **08 47 01.5** | **-0.6** |
| | comp=Z,248nm,0.7s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.06** | **256** | P | | **P** | | **08 47 02.1** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **58.06** | **256** | P | | **P** | | **08 47 02.2** | **-0.2** |
| **MBWA** | **Marble Bar** | **58.23** | **256** | P | | **P** | | **08 47 03.1** | **-0.5** |
| **MBWA** | **Marble Bar** | **58.23** | **256** | P | | **P** | | **08 47 03.3** | **-0.3** |
| MBWA | | | | | | IAmb | IAmb | 08 47 04.0 | |
| | comp=Z,92nm,0.8s | | | | | | | | |
| **MBWA** | **Marble Bar** | **58.23** | **256** | ⇑P | | **P** | | **08 47 03.0** | **-0.5** |
| **MMRI** | **Maumere** | **58.53** | **271** | P | | **P** | | **08 47 05.3** | **-0.4** |
| MMRI | | | | | | IAmb | IAmb | 08 47 06.0 | |
| | comp=Z,95nm,0.7s | | | | | | | | |
| **MEEK** | **Meekatharra** | **58.55** | **249** | P | | **P** | | **08 47 05.1** | **-0.6** |
| **KLBR** | **Kellerberrin** | **58.91** | **244** | P | | **P** | | **08 47 07.7** | **-0.3** |
| **EDFI** | **Ende, Flores** | **59.02** | **271** | P | | **P** | | **08 47 08.2** | **-0.9** |
| | comp=Z,111nm,0.9s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.28** | **242** | P | | **P** | | **08 47 10.5** | **0.0** |
| **NWAO** | **Narrogin (SRO)** | **59.28** | **242** | P | | **P** | | **08 47 10.3** | **-0.1** |
| **NWAO** | **Narrogin (SRO)** | **59.28** | **242** | P | | **P** | | **08 47 10.5** | **0.0** |
| NWAO | | | | | | IAmb | IAmb | 08 47 11.3 | |
| | comp=Z,65nm,0.8s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.28** | **242** | P | | **P** | | **08 47 10.5** | **0.0** |
| NWAO | | | | | pmax | pmax | | | |
| | comp=Z,65nm,0.8s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.28** | **242** | P | | **P** | | **08 47 10.2** | **-0.3** |
| **RKGY** | **Rocky Gully** | **59.43** | **240** | P | | **P** | | **08 47 11.8** | **+0.4** |
| **BLDU** | **Ballidu** | **59.87** | **245** | P | | **P** | | **08 47 14.0** | **-0.4** |
| **SBA** | **Scott Base** | **60.17** | **184** | P | | **P** | | **08 47 18.1** | **+2.6** |
| **SBA** | **Scott Base** | **60.17** | **184** | P | | **P** | | **08 47 18.1** | **+2.6** |
| SBA | | | | | pmax | pmax | | | |
| | comp=Z,64nm,1.2s | | | | | | | | |
| **MUN** | **Mundaring** | **60.20** | **243** | P | | **P** | | **08 47 16.6** | **0.0** |
| **LUWI** | **Luwuk** | **60.37** | **279** | P | | **P** | | **08 47 18.8** | **+0.9** |
| LUWI | | | | | | IAmb | IAmb | 08 47 19.5 | |
| | comp=Z,112nm,0.9s | | | | | | | | |
| **LUWI** | **Luwuk** | **60.37** | **279** | P | | **P** | | **08 47 18.7** | **+0.7** |
| | comp=Z,138nm,1.2s,comp=Z,4μm | | | | | | | | |
| **MORW** | **Morawa** | **60.58** | **246** | P | | **P** | | **08 47 18.7** | **-0.4** |
| **MORW** | **Morawa** | **60.58** | **246** | P | | **P** | | **08 47 18.9** | **-0.2** |
| MORW | | | | | | IAmb | IAmb | 08 47 19.6 | |
| | comp=Z,65nm,0.7s | | | | | | | | |
| **GTOI** | **Gorontalo** | **60.74** | **281** | P | | **P** | | **08 47 22.0** | **+1.6** |
| **WBSI** | **Waikabubak, Su** | **60.96** | **269** | P | | **P** | | **08 47 21.5** | **-0.4** |
| | comp=Z,52nm,0.8s | | | | | | | | |
| **MRSI** | **Marisa** | **61.68** | **281** | P | | **P** | | **08 47 26.2** | **-0.3** |
| | comp=Z,73nm,1.0s,comp=Z,1μm | | | | | | | | |
| **BNSI** | **Bone** | **61.79** | **275** | P | | **P** | | **08 47 27.7** | **+0.4** |
| **KAPI** | **Kappang** | **61.94** | **274** | P | | **P** | | **08 47 28.1** | **-0.1** |
| **KAPI** | **Kappang** | **61.94** | **274** | P | | **P** | | **08 47 28.1** | **-0.1** |
| KAPI | | | | | pmax | pmax | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| **SPSI** | **Sidrap Palu** | **62.24** | **275** | P | | **P** | | **08 47 29.4** | **-0.8** |
| **TOLI2** | **Tolitoli** | **62.99** | **281** | P | | **P** | | **08 47 34.9** | **-0.1** |
| **TOLI2** | **Tolitoli** | **62.99** | **281** | P | | **P** | | **08 47 35.1** | **+0.1** |
| **GIRL** | **Giralia** | **63.03** | **253** | P | | **P** | | **08 47 36.1** | **+0.9** |
| **GIRL** | **Giralia** | **63.03** | **253** | P | | **P** | | **08 47 35.8** | **+0.6** |
| | comp=Z,478nm,0.8s | | | | | | | | |
| **VA02** | **Isla de Pascua** | **63.39** | **112** | P | | **P** | | **08 47 37.0** | **-0.4** |
| **MPSI** | **Mapaga** | **63.54** | **280** | P | | **P** | | **08 47 38.4** | **-0.2** |
| **TWSI** | **Taliwang, Sumb** | **63.59** | **269** | P | | **P** | | **08 47 38.2** | **-0.7** |
| | comp=Z,210nm,1.0s,comp=Z,2μm | | | | | | | | |
| **CCD** | **Concordia, Ant** | **64.66** | **194** | P | | **P** | | **08 47 45.9** | **+0.8** |
| CCD | | | | | pP | **pwP** | | **08 49 37.0** | **+1.7** |
| **JHJ2** | **Mitsune** | **64.89** | **322** | P | | **P** | | **08 47 47.1** | **+0.4** |
| | comp=Z,467nm,1.4s | | | | | | | | |
| **JHJ2** | **Mitsune** | **64.89** | **322** | P | | **P** | | **08 47 47.1** | **+0.4** |
| **SRBI** | **Singaraja** | **65.36** | **269** | P | | **P** | | **08 47 50.5** | **+0.4** |
| **JMZ** | **Minamidaito 2** | **65.83** | **310** | P | | **P** | | **08 47 52.8** | **+0.1** |
| **CASY** | **Casey** | **65.99** | **205** | P | | **P** | | **08 47 53.5** | **+0.5** |
| **CASY** | **Casey** | **65.99** | **205** | P | | **P

CHNA **Chernabura Isl** 74.43 11 P P 08 48 42.4 -0.7
baz=198
SDPT **Sand Point** 74.76 10 P P 08 48 44.5 -0.5
SDPT **Sand Point** 74.76 10 P P 08 48 44.3 -0.7
baz=197,SNR=8.7
P08K **Saint George I** 74.84 5 P P 08 48 45.0 -0.4
baz=188
S12K **Black Hills** 74.85 9 P P 08 48 45.1 -0.3
S12K **Black Hills** 74.85 9 P P 08 48 44.6 -0.9
baz=196,SNR=14
KSRS **Korea Array** 75.05 318 P P 08 48 47.4 +0.4
comp=Z,4.0nm,0.7s,baz=134,slow=5.8,SNR=14
comp=Z,4.0nm,0.7s
KSAR **Wonju Array Be** 75.07 318 P P 08 48 48.7 +1.6
KSAR **Wonju Array Be** 75.07 318 P P 08 48 48.7 +1.6
TEY **Ternei** 75.16 329 *e*P P 08 48 45.8 -1.6
SPIA **Saint Paul Isl** 75.36 4 P P 08 48 48.1 -0.2
baz=188
UGL **Uglegorsk** 75.70 334 *e*P P 08 48 50.8 +0.4
S14K **Fog Glacier** 75.82 11 P P 08 48 50.8 -0.2
baz=198,SNR=12
CHGN **Chignik** 76.04 11 P P 08 48 51.8 -0.3
CHGN **Chignik** 76.04 11 P P 08 48 51.5 -0.5
baz=199,SNR=9.0
CHIR **Chirikof Islan** 76.14 13 P P 08 48 52.9 +0.3
CHIR **Chirikof Islan** 76.14 13 P P 08 48 52.6 -0.1
baz=202
KASI **Kota Agung** 76.28 269 P P 08 48 53.6 -0.8
comp=Z,122nm,0.8s
MSHR **Mys Shultsa** 76.35 324 *ce*P P 08 48 54.7 +0.6
MSHR pmax pmax
comp=Z,67nm,1.3s
SAO **San Andreas Ge** 76.46 44 P P 08 48 56.8 +1.9
SAO IAmb IAmb 08 48 57.4
comp=Z,62nm,0.8s
SAO **San Andreas Ge** 76.46 44 P P 08 48 56.8 +1.9
SAO pmax pmax
comp=Z,62nm,0.9s
PMPB **Monarch Peak** 76.58 44 IAmb IAmb 08 48 58.4
comp=Z,119nm,1.4s
PSTR **Posyet** 76.59 324 *i* P P 08 48 56.3 +0.9
BBGB **Big Mountain B** 76.62 44 P P 08 48 58.4 +2.5
BBGB IAmb IAmb 08 48 59.0
comp=Z,79nm,1.1s
HOPS **Hopland Field** 76.73 41 P P 08 48 57.2 +0.9
HOPS IAmb IAmb 08 48 58.2
comp=Z,139nm,1.5s
BCW **Bitter Crk WRg** 76.80 46 P P 08 48 58.6 +1.6
LWLI **Liwa** 76.84 269 P P 08 49 05.6 +7.9
TYV **Tymovskoe** 76.87 336 *e*P P 08 48 57.2 +0.5
TYV *e*S S 08 57 55.5 -5.1
TYV pmax pmax
comp=Z,200nm,3.5s
TYV pmax pmax
comp=Z,76nm,1.2s
TYV smax smax
comp=N,100nm,3.3s
TYV smax smax
comp=E,200nm,3.3s
KMPM **Mount Pierce** 76.95 39 IAmb IAmb 08 49 00.4
comp=Z,76nm,0.9s
USA0B **Ussuriysk Arra** 76.96 326 P P 08 48 59.1 +1.7
USA0B IAmb IAmb 08 48 60.0
comp=Z,123nm,1.6s
USA0B **Ussuriysk Arra** 76.96 326 *d i*P P 08 48 58.3 +0.9
USRK **Ussuriysk Ar.** 76.96 326 P P 08 48 57.7 +0.2
comp=Z,16nm,1.1s,baz=141,slow=3.9,SNR=29
comp=Z,16nm,1.1s
KMRM **Mail Ridge** 77.08 40 IAmb IAmb 08 49 01.1
comp=Z,162nm,0.9s
SII **Sitkinak Islan** 77.13 13 P P 08 48 58.1 0.0
SII **Sitkinak Islan** 77.13 13 P P 08 48 58.6 +0.5
SII **Sitkinak Islan** 77.13 13 P P 08 48 58.0 0.0
baz=203,SNR=10
JCC **Jacoby Creek,** 77.25 39 IAmb IAmb 08 49 01.7
comp=Z,114nm,1.2s
109C **Camp Elliot, M** 77.33 49 P P 08 49 01.3 +1.7
109C **Camp Elliot, M** 77.33 49 P P 08 49 00.9 +1.3
baz=238
CBX **Cerro Bola** 77.35 50 P P 08 49 01.6 +1.6
R16K **Pilot Point** 77.39 11 P P 08 48 59.8 +0.4
R16K **Pilot Point** 77.39 11 P P 08 48 58.9 -0.5
baz=200
KHMM **Horse Mountain** 77.46 39 IAmb IAmb 08 49 03.3
comp=Z,69nm,1.1s
ELS **Elsinore Mount** 77.49 48 P P 08 49 02.4 +1.7
O02D **Mt. Diablo Mer** 77.61 40 IAmb IAmb 08 49 04.2
comp=Z,91nm,1.2s
R17L **Mt. Peulik Vol** 77.68 12 P P 08 49 00.8 -0.2
baz=201,SNR=48
ESJX **Sierra Juarez** 77.71 50 P P 08 49 03.7 +1.7
MONP2 **Monument Peak** 77.82 49 P P 08 49 03.9 +1.3
baz=239,SNR=43
CMB **Columbia Colle** 77.88 43 P P 08 49 04.1 +1.5
CMB **Columbia Colle** 77.88 43 P P 08 49 04.1 +1.5
CMB pmax pmax
comp=Z,45nm,0.9s
OHAK **Old Harbor** 77.94 14 P P 08 49 02.4 0.0
OHAK **Old Harbor** 77.94 14 P P 08 49 03.0 +0.7
OHAK IAmb IAmb 08 49 03.6
comp=Z,149nm,0.8s
OHAK **Old Harbor** 77.94 14 P P 08 49 02.5 0.0
baz=204,SNR=19
R18K **Karluk** 78.00 13 P P 08 49 02.8 +0.1
baz=203
ORV **Oroville** 78.04 41 P P 08 49 04.6 +1.2
ORV **Oroville** 78.04 41 P P 08 49 04.6 +1.2
ORV pmax pmax
comp=Z,47nm,1.1s
PFO **Pinyon Flats O** 78.16 49 P P 08 49 05.7 +1.3
PFO **Pinyon Flats O** 78.16 49 P P 08 49 05.5 +1.1
baz=239,SNR=11
PFO **Pinyon Flats O** 78.16 49 *d i*P P 08 49 04.7 +0.3
PFO pmax pmax
comp=Z,25nm,1.0s
TPFO **Pinon Flats** 78.16 49 P P 08 49 05.5 +1.2
baz=239,SNR=12
SRIG **Santa Rosalia** 78.26 56 P P 08 49 05.9 +1.1
NJ2 **Nanjing** 78.28 309 *e*P P 08 49 06.3 +1.5
NJ2 pmax pmax
comp=Z,14nm,0.6s
L02F **Cave Junction** 78.32 38 P P 08 49 06.8 +1.9
Q17K **Contact Creek** 78.36 12 P P 08 49 04.5 -0.3
baz=202,SNR=36
O14K **Tigyukauivet M** 78.39 9 P P 08 49 04.7 0.0
O14K **Tigyukauivet M** 78.39 9 P P 08 49 04.3 -0.4
baz=196,SNR=8.3
SLBS **Sierra La Lagu** 78.50 60 P P 08 49 08.6 +2.3
MDPB **Devils Postpil** 78.51 44 P P 08 49 07.4 +1.1
MDPB IAmb IAmb 08 49 08.6
comp=Z,59nm,0.9s
O15K **Ungalikthiuk R** 78.53 10 P P 08 49 05.0 -0.5
baz=198,SNR=8.7
MDJ **Mudanjiang** 78.53 325 P P 08 49 06.9 +1.0
MDJ S S 08 58 24.9 +6.5
MDJ ScS ScS 08 58 42.8 +5.4
MDJ pmax pmax
comp=Z,98nm,1.0s
MDJ pmax pmax
comp=Z,530nm,4.6s
MDJ **Mudanjiang** 78.53 325 IAmb IAmb 08 49 08.4
comp=Z,103nm,1.1s
EMB **Emerald Bay** 78.60 42 P P 08 49 08.2 +1.5
Q16K **King Salmon** 78.60 11 P P 08 49 06.0 +0.1
baz=201
KDAK **Kodiak Island** 78.61 14 P P 08 49 06.6 +0.6
KDAK **Kodiak Island** 78.61 14 P P 08 49 06.3 +0.3
comp=Z,108nm,0.8s,baz=234,slow=4.8,SNR=37
comp=Z,108nm,0.8s
KDAK **Kodiak Island** 78.61 14 P P 08 49 06.2 +0.3
baz=205
KDAK **Kodiak Island** 78.61 14 P P 08 49 06.6 +0.6
KDAK pmax pmax
comp=Z,380nm,1.4s
P16K **Nushagak River** 78.69 10 P P 08 49 06.1 -0.3
baz=200,SNR=15
J01E **Myrtle Point** 78.75 37 P P 08 49 08.6 +1.5
J01E IAmb IAmb 08 49 09.4
comp=Z,61nm,0.9s
WAKR **Walker** 78.76 43 IAmb IAmb 08 49 10.2
comp=Z,69nm,0.9s
HATC **Hat Creek Radi** 78.81 40 IAmb IAmb 08 49 10.1
comp=Z,107nm,1.0s
MPK **Martis Peak** 78.83 42 P P 08 49 10.3 +2.3
MPK IAmb IAmb 08 49 10.8
comp=Z,133nm,1.0s

M11K **Mekoryuk** 78.88 6 P P 08 49 08.2 +0.9
baz=192,SNR=7.5
Q18K **Katmai Hardscr** 78.89 12 P P 08 49 07.4 -0.3
baz=202,SNR=55
N14K **Kuskokwak Cree** 78.97 8 P P 08 49 08.2 +0.3
baz=196,SNR=52
HUMO **Hull Mountain** 78.97 38 IAmb IAmb 08 49 11.1
comp=Z,68nm,1.1s
PNTR **Pine Nut** 78.98 43 P P 08 49 10.4 +1.6
PNTR IAmb IAmb 08 49 11.2
comp=Z,113nm,0.9s
GLA **Glamis** 79.05 50 P P 08 49 11.1 +2.1
GLA **Glamis** 79.05 50 P P 08 49 11.1 +2.1
GLA pmax pmax
comp=Z,38nm,1.0s
DSP **Deep Springs** 79.11 45 P P 08 49 10.6 +1.5
P17K **Kvichak River** 79.13 11 P P 08 49 08.5 -0.2
baz=201,SNR=42
YERR **Yerington** 79.16 43 P P 08 49 10.9 +1.2
YERR IAmb IAmb 08 49 11.9
comp=Z,80nm,0.9s
O16K **Kokwok River B** 79.21 10 IAmb IAmb 08 49 09.3
comp=Z,90nm,0.8s
O16K **Kokwok River B** 79.21 10 P P 08 49 08.3 -0.8
baz=199,SNR=41
M13K **Dall Lake** 79.23 7 IAmb IAmb 08 49 11.1
comp=Z,98nm,0.9s
M13K **Dall Lake** 79.23 7 P P 08 49 10.1 +0.9
baz=194,SNR=13
LHV **Little Huntoon** 79.23 44 P P 08 49 11.4 +1.6
LHV IAmb IAmb 08 49 12.6
comp=Z,79nm,1.0s
GRAC **Grapevine Rang** 79.31 45 IAmb IAmb 08 49 13.0
comp=Z,55nm,0.9s
GRNR **Gornyy** 79.38 333 *i* P P 08 49 11.3 +1.0
GRNR pmax pmax
comp=E,20nm,1.2s
GRNR pmax pmax
comp=N,20nm,0.9s
GRNR pmax pmax
comp=Z,80nm,1.1s
Q20K **Shuyak Island** 79.40 13 P P 08 49 10.6 +0.4
baz=205,SNR=12
SYI **Shuyak Island** 79.41 13 P P 08 49 10.4 +0.2
Q19K **Cape Douglas,** 79.43 13 P P 08 49 10.7 +0.4
Q19K **Cape Douglas,** 79.43 13 P P 08 49 10.2 -0.2
baz=204,SNR=6.7
RYN **Ryan** 79.43 43 P P 08 49 12.4 +1.3
N15K **Kwethluk River** 79.44 9 P P 08 49 10.9 +0.6
N15K IAmb IAmb 08 49 12.0
comp=Z,141nm,1.1s
N15K **Kwethluk River** 79.44 9 P P 08 49 10.8 +0.4
baz=197,SNR=26
NVAR **Mina Array Bea** 79.46 44 P P 08 49 12.3 +1.0
NVAR **Mina Array Bea** 79.46 44 P P 08 49 12.6 +1.3
comp=Z,29nm,0.8s,baz=224,slow=9.0,SNR=245
comp=Z,29nm,0.8s
PAHR **Pah Rah Range** 79.47 42 P P 08 49 12.7 +1.5
PAHR IAmb IAmb 08 49 13.6
comp=Z,63nm,1.1s
P18K **Big Mountain,** 79.54 12 P P 08 49 10.6 -0.4
P18K **Big Mountain,** 79.54 12 P P 08 49 10.5 -0.4
baz=202,SNR=35
GMN **Gold Mountain** 79.55 45 P P 08 49 13.1 +1.3
O17K **Koliganek Bris** 79.55 11 P P 08 49 10.6 -0.3
baz=200,SNR=24
NV11 **Mina Array Sit** 79.56 44 P P 08 49 12.7 +1.0
NV11 IAmb IAmb 08 49 14.1
comp=Z,63nm,1.1s
BLYC **Blythe** 79.62 49 P P 08 49 13.9 +1.9
K04D **Chiloquin, OR** 79.69 39 P P 08 49 13.7 +1.4
K04D IAmb IAmb 08 49 14.6
comp=Z,57nm,1.0s
M14K **Bethel** 79.73 8 P P 08 49 12.4 +0.5
M14K IAmb IAmb 08 49 13.5
comp=Z,143nm,1.0s
M14K **Bethel** 79.73 8 P P 08 49 12.3 +0.5
baz=196,SNR=31
QIZ **Qiongzhong** 79.77 294 P P 08 49 14.3 +1.3
QIZ pP pP 08 51 06.8 -0.9
QIZ sP sP 08 52 01.0 -1.5
QIZ S S 08 58 35.1 +2.9
M15K **Kasigluk River** 79.85 9 P P 08 49 13.0 +0.5
baz=197,SNR=55
BUCK **Buck Mountain** 79.92 37 P P 08 49 15.1 +1.7
BUCK IAmb IAmb 08 49 15.8
comp=Z,94nm,1.0s
N16K **Nishlik Lake** 79.93 10 P P 08 49 13.5 +0.5
baz=199,SNR=51
KVN **Kaiserville** 79.94 43 P P 08 49 14.4 +0.7
KVN **Kaiserville** 79.94 43 P P 08 49 14.4 +0.7
KVN pmax pmax
comp=Z,48nm,1.0s
O18K **Koktuh Hills** 79.97 12 P P 08 49 13.1 -0.1
O18K **Koktuh Hills** 79.97 12 P P 08 49 13.1 -0.1
baz=202,SNR=56
COR **Corvallis** 79.98 36 P P 08 49 14.5 +1.0
COR IAmb IAmb 08 49 16.0
comp=Z,48nm,0.8s
COR **Corvallis** 79.98 36 P P 08 49 14.5 +1.0
COR pmax pmax
comp=Z,48nm,0.9s
214A **Organ Pipe Nat** 80.00 52 P P 08 49 15.7 +1.6
baz=241,SNR=12
I04A **Tendick Farm,** 80.01 37 P P 08 49 14.9 +1.1
I04A IAmb IAmb 08 49 15.6
comp=Z,55nm,0.9s
TPNV **Topopah Spring** 80.05 46 P P 08 49 15.6 +1.2
baz=238,SNR=31
HEBO **Mount Hebo** 80.11 36 IAmb IAmb 08 49 16.8
comp=Z,130nm,0.9s
P19K **Oil Pt** 80.18 13 P P 08 49 14.5 +0.2
P19K **Oil Pt** 80.18 13 P P 08 49 13.9 -0.3
baz=204,SNR=6.4
L14K **Kuka Creek** 80.21 8 IAmb IAmb 08 49 16.2
comp=Z,106nm,1.0s
L14K **Kuka Creek** 80.21 8 P P 08 49 14.6 +0.3
baz=195,SNR=36
N17K **Nushagak Hills** 80.24 10 P P 08 49 14.9 +0.3
N17K IAmb IAmb 08 49 15.7
comp=Z,65nm,1.0s
N17K **Nushagak Hills** 80.24 10 P P 08 49 14.4 -0.2
baz=200,SNR=26
H04D **Lebanon** 80.26 37 IAmb IAmb 08 49 17.4
comp=Z,96nm,1.1s
CN2 **Changchun** 80.37 322 ||P P 08 49 16.1 +0.5
CN2 *ep*P pP 08 51 07.0 -3.8
CN2 *e*S S 08 58 40.3 +2.9
CN2 pmax pmax
comp=Z,60nm,1.2s
CN2 pmax pmax
comp=Z,300nm,4.0s
G03D **McMinnville, O** 80.39 36 P P 08 49 17.4 +1.7
G03D IAmb IAmb 08 49 18.0
comp=Z,97nm,1.0s
J05D **Fort Rock, OR** 80.39 38 P P 08 49 17.3 +1.3
M16K **Timber Creek** 80.42 9 P P 08 49 16.7 +1.2
baz=198,SNR=90
BNX **BinXian** 80.44 325 ||P P 08 49 16.4 +0.5
BNX S S 08 58 40.9 +2.9
BNX pmax pmax
comp=Z,78nm,1.1s
KLR **Kul'dur** 80.46 329 *ce*P P 08 49 16.2 +0.3
KLR pmax pmax
comp=Z,40nm,1.3s
O19K **Port Alsworth** 80.46 12 P P 08 49 15.3 -0.4
baz=203,SNR=55
CNPM **China Poot** 80.49 14 P P 08 49 16.3 +0.4
CNPM IAmb IAmb 08 49 17.1
comp=Z,138nm,0.9s
HOM **Homer** 80.52 13 P P 08 49 16.1 +0.1
baz=205
SHPR **Sheep Range** 80.56 47 P P 08 49 18.9 +1.9
N18K **Kilae Creek** 80.61 11 P P 08 49 16.6 +0.1
N18K IAmb IAmb 08 49 17.4
comp=Z,54nm,0.9s
N18K **Kilae Creek** 80.61 11 P P 08 49 16.2 -0.3
baz=201,SNR=19
F03A **Seaside** 80.67 35 IAmb IAmb 08 49 19.4
comp=Z,89nm,1.0s
H04A **Detroit Lake** 80.67 37 P P 08 49 18.2 +1.0
H04A IAmb IAmb 08 49 18.9
comp=Z,63nm,0.8s
L15K **Ungalak Mounta** 80.69 8 P P 08 49 17.1 +0.3
baz=196,SNR=53
O20K **Slope Mountain** 80.70 13 P P 08 49 16.6 -0.4
baz=204,SNR=9.1
S11A **Rachel** 80.75 45 IAmb IAmb 08 49 20.3
comp=Z,62nm,1.0s
BRLK **Bradley Lake** 80.78 14 P P 08 49 17.7 +0.3
BRSE **Bradley Lake S** 80.80 14 P P 08 49 17.7 +0.2
baz=206,SNR=16
Y14A **Wickenburg** 80.81 50 P P 08 49 19.8 +1.6
SMAI **San Martin Ant** 80.83 159 IAmb IAmb 08 51 20.0
comp=Z,145nm,1.5s
RADR **Rader Ridge** 80.84 35 IAmb IAmb 08 49 20.0
comp=Z,64nm,1.0s
WHN **Wuhan** 80.94 306 P P 08 49 20.3 +1.4
I05D **Terrebonne, OR** 80.95 37 P P 08 49 20.3 +1.6
I05D IAmb IAmb 08 49 21.0
comp=Z,85nm,1.0s
N19K **Bonanza Creek** 81.00 12 IAmb IAmb 08 49 19.1
comp=Z,107nm,0.9s
N19K **Bonanza Creek** 81.00 12 P P 08 49 18.0 -0.6
baz=203,SNR=25
L16K **Owhat River** 81.00 9 P P 08 49 19.3 +0.9
baz=198,SNR=102
M17K **Holitna River** 81.03 10 P P 08 49 19.9 +1.3
baz=200,SNR=111
E03A **Lebam** 81.05 35 P P 08 49 20.7 +1.7
E03A IAmb IAmb 08 49 21.3
comp=Z,140nm,1.0s
F04D **Rainier, OR** 81.06 35 IAmb IAmb 08 49 21.7
comp=Z,88nm,0.7s
PRN **Pahroc Range** 81.10 46 P P 08 49 20.7 +1.0
PRN IAmb IAmb 08 49 22.6
comp=Z,64nm,0.9s
R11B **Troy Canyon, C** 81.22 45 P P 08 49 21.2 +0.8
baz=238,SNR=28
BMN **Battle Mountai** 81.25 42 P P 08 49 21.8 +1.3
BMN IAmb IAmb 08 49 22.9
comp=Z,71nm,1.0s
BMN **Battle Mountai** 81.25 42 P P 08 49 21.8 +1.3
BMN pmax pmax
comp=Z,71nm,1.0s
DIB **Dawson Inlet,** 81.27 26 IAmb IAmb 08 49 22.2
comp=Z,50nm,1.0s
K15K **Wolf Creek Mou** 81.28 8 P P 08 49 21.0 +1.1
baz=196,SNR=160
WISH **Wishkah** 81.29 34 IAmb IAmb 08 49 23.0
comp=Z,70nm,0.9s
F04A **Amboy** 81.30 36 IAmb IAmb 08 49 22.3
comp=Z,145nm,1.3s
HOOD **Mount Hood Mea** 81.36 37 P P 08 49 22.1 +1.2
HOOD IAmb IAmb 08 49 22.8
comp=Z,103nm,1.1s
M18K **Stony River** 81.38 11 P P 08 49 20.9 +0.4
baz=201,SNR=24
C03A **Quillayute Air** 81.39 33 IAmb IAmb 08 49 23.7
comp=Z,142nm,1.1s
NLWA **Neilton Lookou** 81.41 34 IAmb IAmb 08 49 23.3
comp=Z,80nm,1.1s
SEW **Seward** 81.41 14 P P 08 49 20.2 -0.3
baz=208,SNR=5.3
WVOR **Wild Horse Val** 81.47 40 IAmb IAmb 08 49 23.9
comp=Z,93nm,1.0s
J14K **Nanvaranak Lak** 81.48 7 P P 08 49 21.3 +0.5
J14K IAmb IAmb 08 49 22.5
comp=Z,75nm,1.1s
J14K **Nanvaranak Lak** 81.48 7 P P 08 49 21.4 +0.5
baz=194,SNR=25
G05A **Wamic** 81.50 37 P P 08 49 22.9 +1.4
G05A IAmb IAmb 08 49 23.6
comp=Z,80nm,1.0s
MA2 **Magadan** 81.51 345 *ce*P P 08 49 20.4 -0.7
MA2 pmax pmax
comp=Z,86nm,1.7s
L17K **Donlin** 81.58 9 P P 08 49 22.8 +1.3
baz=199,SNR=105
TIA **Tai'an** 81.60 312 P P 08 49 25.3 +3.2
TIA pmax pmax
comp=Z,8.0nm,1.0s
CAPN **Captain Cook N** 81.63 13 P P 08 49 22.6 +0.9
baz=206
TUC **Tucson** 81.69 52 P P 08 49 24.8 +2.0
TUC **Tucson** 81.69 52 P P 08 49 24.9 +2.1
baz=242
TUC **Tucson** 81.69 52 P P 08 49 24.8 +2.0
TUC pmax pmax
comp=Z,40nm,1.1s
O22K **Cooper Landing** 81.69 14 IAmb IAmb 08 49 27.1
comp=Z,106nm,0.8s
O22K **Cooper Landing** 81.69 14 P P 08 49 21.6 -0.4
baz=207
N20K **Mount Spurr** 81.80 12 P P 08 49 21.7 -0.9
baz=205,SNR=16
SPCR **Spurr Chakacha** 81.80 12 P P 08 49 21.7 -1.0
baz=205,SNR=14
P23K **Montague Islan** 81.81 15 P P 08 49 22.6 0.0
baz=209
SPU **Mount Spurr** 81.82 12 P P 08 49 22.0 -0.7
SPU IAmb IAmb 08 49 22.8
comp=Z,72nm,1.0s
GAMB **Gambell** 81.84 3 P P 08 49 23.6 +0.9
GAMB **Gambell** 81.84 3 P P 08 49 23.3 +0.6
baz=186,SNR=11
I07A **Izee** 81.88 38 P P 08 49 24.3 +0.7
I07A IAmb IAmb 08 49 26.0
comp=Z,90nm,0.8s
G06A **Carlson Farm,** 81.89 37 P P 08 49 24.7 +1.3
G06A IAmb IAmb 08 49 25.5
comp=Z,75nm,1.1s
L18K **Granite Mounta** 81.92 10 P P 08 49 24.2 +1.0
baz=201,SNR=67
B04A **Port Angeles** 82.02 34 P P 08 49 25.0 +1.0
B04A IAmb IAmb 08 49 26.4
comp=Z,70nm,1.1s
M19K **Big River Lodg** 82.03 11 IAmb IAmb 08 49 24.5
comp=Z,67nm,0.8s
M19K **Big River Lodg** 82.03 11 P P 08 49 23.3 -0.5
baz=203
GNW **Green Mountain** 82.07 34 IAmb IAmb 08 49 26.4
comp=Z,60nm,0.8s
J08A **Circle Bar Ran** 82.08 39 IAmb IAmb 08 49 26.9
comp=Z,108nm,1.1s
Q12A **Willow Creek R** 82.09 45 P P 08 49 26.5 +1.7
Q12A IAmb IAmb 08 49 27.1
comp=Z,78nm,1.2s
LON **Longmire** 82.13 35 P P 08 49 25.3 +0.6
LON **Longmire** 82.13 35 P P 08 49 25.3 +0.6
LON pmax pmax
comp=Z,25nm,0.9s
K17K **Iditarod** 82.13 9 P P 08 49 24.8 +0.6
K17K IAmb IAmb 08 49 26.2
comp=Z,178nm,1.4s
K17K **Iditarod** 82.13 9 P P 08 49 25.1 +0.9
baz=199,SNR=35
LCMT **Little Creek M** 82.15 47 P P 08 49 26.5 +1.4
CLRS **Cowichan Lake** 82.17 33 P P 08 49 26.0 +1.3
CLRS IAmb IAmb 08 49 26.7
comp=Z,58nm,0.9s
X16A **Lo Mia Camp, P** 82.18 50 P P 08 49 27.1 +1.7
L19K **White Mountain** 82.20 11 P P 08 49 24.8 +0.1
baz=202,SNR=35
RC01 **Rabbit Creek A** 82.23 14 IAmb IAmb 08 49 25.7
comp=Z,157nm,1.1s
RC01 **Rabbit Creek A** 82.23 14 P P 08 49 24.4 -0.3
baz=207,SNR=11
M20K **Styx River** 82.24 12 P P 08 49 24.4 -0.6
M20K IAmb IAmb 08 49 25.4
comp=Z,70nm,1.3s
M20K **Styx River** 82.24 12 P P 08 49 23.9 -1.0
baz=204,SNR=9.6
D05A **Enumclaw** 82.29 35 P P 08 49 27.2 +1.8
CBB **Campbell River** 82.32 31 IAmb IAmb 08 49 27.6
comp=Z,82nm,1.0s
CCUT **Cedar City** 82.33 47 P P 08 49 27.9 +1.8
PWL **Port Wells** 82.34 14 P P 08 49 25.0 -0.4
baz=208,SNR=14
SUA **Susitna One** 82.34 13 P P 08 49 25.0 -0.5
baz=206,SNR=22
J16K **Anvik River** 82.35 8 P P 08 49 26.2 +0.9
J16K **Anvik River** 82.35 8 P P 08 49 26.1 +0.8
baz=197,SNR=67
319A **Douglas** 82.40 54 IAmb IAmb 08 49 29.9
comp=Z,52nm,0.9s
PGC **Sidney** 82.41 33 P P 08 49 27.2 +1.2
PGC IAmb IAmb 08 49 27.9
comp=Z,64nm,0.9s
KNB **Kanab** 82.44 47 P P 08 49 28.4 +1.7
KNB IAmb IAmb 08 49 29.4
comp=Z,43nm,0.9s
KNB **Kanab** 82.44 47 P P 08 49 28.4 +1.7

KNB pmax pmax
comp=Z,43nm,0.9s
**BBB Bella Bella 82.45 28** IAmb IAmb 08 49 27.8
comp=Z,54nm,0.9s
**BBB Bella Bella 82.45 28** P **P 08 49 26.6 +0.6**
comp=Z,59nm,1.0s,baz=226,slow=4.1,SNR=11
comp=Z,59nm,1.0s
**KAIM Kayak Island 82.52 16** P **P 08 49 26.7 +0.5**
baz=212
**U15A North Rim 82.53 48** P **P 08 49 28.7 +1.5**
U15A IAmb IAmb 08 49 30.1
comp=Z,71nm,0.9s
**SKT Skwentna 82.65 12** P **P 08 49 25.9 -0.9**
SKT IAmb IAmb 08 49 26.7
comp=Z,61nm,1.1s
**SKT Skwentna 82.65 12** P **P 08 49 25.5 -1.4**
baz=205,SNR=12
**L20K Farewell, AK 82.65 11** P **P 08 49 26.6 -0.3**
baz=203,SNR=19
**GLI Glacier Island 82.66 15** P **P 08 49 26.5 -0.4**
baz=210,SNR=13
**J17K VABM Dome 82.67 9** IAmb IAmb 08 49 28.8
comp=Z,83nm,0.9s
**J17K VABM Dome 82.67 9** P **P 08 49 27.7 +0.8**
baz=198,SNR=45
**CRAG Craig 82.67 24** IAmb IAmb 08 49 29.3
comp=Z,60nm,1.0s
**CRAG Craig 82.67 24** P **P 08 49 25.7 -1.3**
baz=223
**F07A Phinny Hill Vi 82.67 37** P **P 08 49 28.8 +1.4**
F07A IAmb IAmb 08 49 29.4
comp=Z,60nm,0.8s
**IPM Ipoh 82.68 277** IAmb IAmb 08 49 29.6
comp=Z,39nm,0.6s
**ELK Elko 82.70 43** IAmb IAmb 08 49 30.1
comp=Z,40nm,0.9s
**EYAK Cordova Ski Ar 82.70 15** P **P 08 49 26.9 -0.3**
baz=211
**M22K Willow 82.74 13** P **P 08 49 27.2 0.0**
**M22K Willow 82.74 13** P **P 08 49 26.9 -0.4**
baz=207,SNR=26
**WUAZ Wupatki 82.75 49** P **P 08 49 30.0 +1.8**
**WUAZ Wupatki 82.75 49** P **P 08 49 29.8 +1.5**
baz=242,SNR=32
**GRNB Grenville Isla 82.78 26** IAmb IAmb 08 49 29.8
comp=Z,57nm,1.1s
**KNK Knik Glacier 82.80 14** IAmb IAmb 08 49 28.6
comp=Z,99nm,0.8s
**KNK Knik Glacier 82.80 14** P **P 08 49 27.3 -0.4**
baz=208,SNR=14
**PMR Palmer 82.81 14** P **P 08 49 27.6 0.0**
**PMR Palmer 82.81 14** P **P 08 49 27.6 0.0**
PMR IAmb IAmb 08 49 28.4
comp=Z,115nm,1.2s
**PMR Palmer 82.81 14** P **P 08 49 27.4 -0.3**
baz=208,SNR=20
**PMR Palmer 82.81 14** P **P 08 49 27.6 0.0**
PMR pmax pmax
comp=Z,115nm,1.2s
**MXC Moxie City 82.86 36** P **P 08 49 29.8 +1.5**
MXC IAmb IAmb 08 49 30.4
comp=Z,62nm,1.1s
**G08A Pilot Rock 82.88 38** P **P 08 49 29.6 +1.0**
G08A IAmb IAmb 08 49 30.8
comp=Z,74nm,0.9s
**I17K Unalakleet 82.92 8** IAmb IAmb 08 49 30.1
comp=Z,61nm,1.1s
**I17K Unalakleet 82.92 8** P **P 08 49 29.0 +0.8**
baz=197,SNR=10
**PKCU Pink Cliffs 83.01 47** P **P 08 49 31.5 +1.8**
PKCU IAmb IAmb 08 49 33.1
comp=Z,79nm,1.0s
**SIT Sitka 83.04 22** P **P 08 49 29.6 +0.7**
SIT IAmb IAmb 08 49 30.7
comp=Z,80nm,1.3s
**SIT Sitka 83.04 22** P **P 08 49 29.2 +0.3**
baz=221
**SIT Sitka 83.04 22** P **P 08 49 29.6 +0.7**
SIT pmax pmax
comp=Z,80nm,1.3s
**LTY Liberty 83.06 35** P **P 08 49 29.9 +0.5**
LTY IAmb IAmb 08 49 31.1
comp=Z,58nm,1.0s
**ANM Nome 83.07 6** P **P 08 49 29.4 +0.5**
baz=192
**DUN6 Lazy B Ranch 83.07 53** P **P 08 49 31.4 +1.6**
DUN6 IAmb IAmb 08 49 33.2
comp=Z,98nm,1.1s
**J18K Innoko River 83.09 10** P **P 08 49 29.5 +0.4**
**J18K Innoko River 83.09 10** P **P 08 49 29.4 +0.4**
baz=200,SNR=75
**E07A Sunnyside 83.10 36** IAmb IAmb 08 49 31.8
comp=Z,86nm,0.9s
**U33K Whale Pass 83.15 24** P **P 08 49 30.8 +1.4**
U33K IAmb IAmb 08 49 31.6
comp=Z,85nm,1.0s
**U33K Whale Pass 83.15 24** P **P 08 49 30.4 +1.0**
baz=223,SNR=12
**V35K Ketchikan 83.16 25** P **P 08 49 30.4 +0.9**
V35K IAmb IAmb 08 49 31.6
comp=Z,58nm,1.0s
**V35K Ketchikan 83.16 25** P **P 08 49 30.4 +0.9**
baz=224,SNR=10
**SML Sawmill 83.18 14** P **P 08 49 29.6 0.0**
SML IAmb IAmb 08 49 30.5
comp=Z,196nm,1.6s
**SML Sawmill 83.18 14** P **P 08 49 29.3 -0.3**
baz=208,SNR=7.9
**HAWA Hanford 83.19 37** IAmb IAmb 08 49 32.2
comp=Z,92nm,0.9s
**DIV Divide 83.20 15** P **P 08 49 29.5 -0.2**
**HEH HeiHe 83.26 328** *e*P **P 08 49 30.0 -0.2**
HEH pP **pP 08 51 27.8 +1.5**
HEH S **SKSac 08 59 00.6 -0.2**
HEH pmax pmax
comp=Z,52nm,1.5s
HEH pmax pmax
comp=Z,330nm,4.4s
**CUT Chulitna 83.29 13** P **P 08 49 29.5 -0.5**
baz=207,SNR=22
**M23K Glacier View 83.31 14** P **P 08 49 29.7 -0.5**
baz=209,SNR=11
**BMRM Bremner River 83.35 16** P **P 08 49 30.6 +0.1**
**BMRM Bremner River 83.35 16** P **P 08 49 30.6 +0.1**
baz=212,SNR=22
**WAX Waxell Ridge 83.38 17** P **P 08 49 31.5 +0.8**
**MTPU Mount Pierson 83.39 47** P **P 08 49 33.4 +1.8**
MTPU IAmb IAmb 08 49 34.8
comp=Z,41nm,0.9s
**MESA MESA 83.41 17** P **P 08 49 31.6 +0.6**
**MESA MESA 83.41 17** P **P 08 49 31.4 +0.4**
baz=214,SNR=18
**S31K Pelican 83.42 21** P **P 08 49 31.9 +1.2**
S31K IAmb IAmb 08 49 32.7
comp=Z,103nm,1.0s
**S31K Pelican 83.42 21** P **P 08 49 31.5 +0.7**
baz=220,SNR=22
**K20K Telida 83.43 11** P **P 08 49 30.8 0.0**
baz=203,SNR=74
**SCM Sheep Creek Mo 83.43 14** P **P 08 49 31.1 +0.2**
**SCM Sheep Creek Mo 83.43 14** P **P 08 49 30.8 -0.1**
baz=209,SNR=23
**SCM Sheep Creek Mo 83.43 14** P **P 08 49 31.1 +0.2**
SCM pmax pmax
comp=Z,195nm,0.8s
**H16K Elim 83.46 7** P **P 08 49 31.1 +0.2**
baz=195,SNR=15
**KLU Klutina 83.47 15** IAmb IAmb 08 49 32.2
comp=Z,92nm,1.1s
**KLU Klutina 83.47 15** P **P 08 49 30.8 -0.3**
baz=211,SNR=13
**E08A Dider Farm, El 83.51 37** P **P 08 49 32.5 +1.0**
E08A IAmb IAmb 08 49 33.7
comp=Z,58nm,0.8s
**CRQM Cirque 83.56 16** P **P 08 49 32.2 +0.5**
**CRQE Cirque 83.57 16** P **P 08 49 31.8 +0.1**
baz=213,SNR=23
**MVU Marysvale 83.59 46** P **P 08 49 34.5 +2.0**
**BMO Blue Mountains 83.61 39** P **P 08 49 32.9 +0.7**
**BMO Blue Mountains 83.61 39** P **P 08 49 32.9 +0.7**
BMO pmax pmax
comp=Z,30nm,0.9s
**G15K Niukluk 83.62 6** P **P 08 49 32.0 +0.4**
baz=194,SNR=26
**MSU Marysvale 83.62 46** P **P 08 49 34.7 +2.1**
**MSU Marysvale 83.62 46** P **P 08 49 34.7 +2.1**

**S32K Killisnoo 83.62 22** P **P 08 49 32.4 +0.7**
baz=221,SNR=6.8
**ISLE Juniper Island 83.65 17** P **P 08 49 32.8 +0.7**
**WRAK Wrangell Islan 83.66 24** P **P 08 49 32.9 +0.9**
baz=223
**MAW Mawson 83.68 200** P **P 08 49 32.5 +0.4**
comp=Z,5.9nm,0.7s,baz=149,slow=6.0,SNR=15
MAW pP **pwP 08 51 29.8 -0.5**
comp=Z,5.3nm,1.1s,baz=115,slow=9.8,SNR=2.7
comp=Z,5.9nm,0.7s
**T33K Petersburg 83.72 23** P **P 08 49 33.3 +1.0**
baz=223,SNR=5.3
**MFID Camas Ranch 83.73 40** P **P 08 49 33.7 +0.9**
MFID IAmb IAmb 08 49 35.1
comp=Z,61nm,1.1s
**PNL Peninsula 83.74 19** P **P 08 49 33.1 +0.7**
**PNL Peninsula 83.74 19** P **P 08 49 32.8 +0.4**
baz=217,SNR=16
**W18A Petrified Fore 83.75 50** P **P 08 49 34.5 +1.3**
baz=243,SNR=9.5
**J19K Poorman 83.76 10** IAmb IAmb 08 49 34.0
comp=Z,65nm,0.9s
**J19K Poorman 83.76 10** P **P 08 49 32.6 +0.3**
baz=202,SNR=32
**PCA Pinnacle 83.83 18** P **P 08 49 33.6 +0.7**
PCA IAmb IAmb 08 49 34.1
comp=Z,88nm,1.0s
**PINM Pinnacle 83.83 18** P **P 08 49 33.2 +0.2**
baz=216,SNR=14
**TNA Tin City 83.84 4** P **P 08 49 33.6 +1.0**
TNA IAmb IAmb 08 49 34.3
comp=Z,118nm,1.0s
**TNA Tin City 83.84 4** P **P 08 49 33.0 +0.3**
baz=190,SNR=16
**TABL Table Mountain 83.85 17** P **P 08 49 33.4 +0.2**
**HNS HongShan 83.87 312** ⇓P **P 08 49 34.3 +0.8**
HNS pmax pmax
comp=Z,22nm,1.7s
**VRDI Verde Repeater 83.88 16** IAmb IAmb 08 49 34.4
comp=Z,114nm,1.0s
**F14K Arctic Creek 83.88 5** P **P 08 49 33.5 +0.5**
baz=191,SNR=20
**BCPM Bancas Point 83.90 18** IAmb IAmb 08 49 34.5
comp=Z,77nm,1.0s
**N25K Chitina, Valde 83.90 15** P **P 08 49 33.4 +0.2**
baz=212,SNR=49
**D08A Wollman Farm, 83.91 36** P **P 08 49 34.4 +0.8**
D08A IAmb IAmb 08 49 35.7
comp=Z,70nm,0.9s
**GRNC Granite Creek 83.92 17** P **P 08 49 33.6 0.0**
**R31K City Hall, Gus 83.93 21** P **P 08 49 33.9 +0.6**
baz=220
**M24K Tolsona, Glenn 83.94 15** P **P 08 49 34.3 +0.9**
**M24K Tolsona, Glenn 83.94 15** P **P 08 49 33.8 +0.4**
baz=210,SNR=23
**GLB Gilahina Butte 83.96 16** P **P 08 49 33.9 +0.4**
**WAT6 Susitna Watana 83.99 14** P **P 08 49 33.6 -0.2**
baz=209,SNR=64
**DUG Dugway, Tooele 84.01 44** P **P 08 49 35.3 +0.9**
**DUG Dugway, Tooele 84.01 44** P **P 08 49 35.2 +0.9**
baz=240,SNR=10.0
**DUG Dugway, Tooele 84.01 44** P **P 08 49 35.3 +0.9**
DUG pmax pmax
comp=Z,45nm,1.8s
**H17K Granite Mounta 84.03 8** P **P 08 49 33.9 +0.2**
H17K IAmb IAmb 08 49 34.8
comp=Z,76nm,1.2s
**H17K Granite Mounta 84.03 8** P **P 08 49 33.5 -0.2**
baz=197,SNR=27
**WAT1 Susitna Watana 84.03 13** P **P 08 49 33.4 -0.4**
baz=208
**E09A Wood Farm, Sta 84.04 37** P **P 08 49 35.2 +1.0**
E09A IAmb IAmb 08 49 36.0
comp=Z,66nm,1.3s
**121A Cookes Peak, D 84.05 53** P **P 08 49 36.9 +2.1**
**121A Cookes Peak, D 84.05 53** P **P 08 49 36.5 +1.7**
baz=244,SNR=17
**SEY Seymchan 84.09 347** *ce*P **P 08 49 33.6 -0.4**
SEY pmax pmax
comp=Z,266nm,1.7s
**RPSI Rantau Prapat 84.10 275** P **P 08 49 34.8 -0.4**
RPSI IAmb IAmb 08 49 36.3
comp=Z,35nm,0.9s
**MCARA McCarthy VSAT 84.12 16** P **P 08 49 34.7 +0.5**
**MCARA McCarthy VSAT 84.12 16** P **P 08 49 34.2 0.0**
baz=213,SNR=17
**BJT Baijiatuan 84.13 315** IAmb IAmb 08 49 36.8
comp=Z,127nm,1.9s
**PSI Prapat 84.13 275** P **P 08 49 34.8 -0.7**
**BJI Beijing 84.13 315** P **P 08 49 35.4 +0.7**
BJI S **S 08 59 18.6 +3.6**
BJI pmax pmax
comp=Z,15nm,1.7s
BJI pmax pmax
comp=Z,220nm,4.2s
**J20K Nowinta River 84.17 10** IAmb IAmb 08 49 35.7
comp=Z,109nm,0.9s
**J20K Nowinta River 84.17 10** P **P 08 49 34.5 +0.2**
baz=203,SNR=44
**LYN LuoYang 84.17 309** P **P 08 49 36.8 +1.7**
LYN S **S 08 59 21.3 +5.7**
LYN pmax pmax
comp=Z,49nm,1.0s
LYN pmax pmax
comp=Z,250nm,8.0s
**G16K Koyuk River 84.18 7** P **P 08 49 35.1 +0.7**
G16K IAmb IAmb 08 49 35.9
comp=Z,55nm,1.1s
**G16K Koyuk River 84.18 7** P **P 08 49 34.7 +0.3**
baz=195,SNR=14
**LOGN Logan Glacier 84.21 17** P **P 08 49 35.3 +0.4**
**U35K Hyder 84.21 25** P **P 08 49 35.4 +0.7**
baz=225
**P29M Windy Craggy 84.22 19** P **P 08 49 35.7 +0.9**
**P29M Windy Craggy 84.22 19** P **P 08 49 35.5 +0.6**
baz=218,SNR=45
**CTG Chitna Glacier 84.23 17** P **P 08 49 35.1 +0.2**
baz=215,SNR=26
**R32K Eaglecrest 84.25 22** IAmb IAmb 08 49 36.7
comp=Z,38nm,1.0s
**R32K Eaglecrest 84.25 22** P **P 08 49 35.6 +0.7**
baz=221,SNR=18
**F15K North Star Dit 84.25 6** P **P 08 49 35.6 +0.8**
F15K IAmb IAmb 08 49 36.0
comp=Z,59nm,1.1s
**F15K North Star Dit 84.25 6** P **P 08 49 34.6 -0.2**
baz=193
**GCSA Galena City Sc 84.27 9** P **P 08 49 35.2 +0.4**
baz=200,SNR=15
**F10A Beach Ranch, E 84.27 38** P **P 08 49 35.6 +0.2**
F10A IAmb IAmb 08 49 37.7
comp=Z,92nm,0.9s
**JIS Juneau Island 84.30 22** P **P 08 49 35.5 +0.4**
**HMU Henry Mountain 84.34 47** P **P 08 49 36.3 +0.1**
**BESE Bessie Mountai 84.36 21** P **P 08 49 36.5 +1.0**
BESE IAmb IAmb 08 49 37.5
comp=Z,110nm,1.0s
**NLU North Lily Min 84.39 45** P **P 08 49 37.0 +0.7**
**O28M Mount Upton 84.40 18** P **P 08 49 36.3 +0.3**
baz=216,SNR=56
**B08A Colville Reser 84.43 35** P **P 08 49 36.5 +0.4**
B08A IAmb IAmb 08 49 37.5
comp=Z,65nm,0.9s
**HARP HAARP 84.44 15** P **P 08 49 36.0 +0.2**
baz=211,SNR=21
**H18K Honhosa River 84.44 8** P **P 08 49 35.8 +0.1**
H18K IAmb IAmb 08 49 36.6
comp=Z,66nm,1.4s
**H18K Honhosa River 84.44 8** P **P 08 49 35.3 -0.4**
baz=199,SNR=9.5
**G17K Kiwalik Mounta 84.48 7** P **P 08 49 35.8 0.0**
baz=197,SNR=18
**RND Reindeer 84.48 13** P **P 08 49 36.4 +0.4**
**RND Reindeer 84.48 13** P **P 08 49 36.4 +0.4**
RND pmax pmax
comp=Z,286nm,1.0s
**O29M Mount Kennedy 84.50 19** IAmb IAmb 08 49 38.0
comp=Z,62nm,1.0s
**O29M Mount Kennedy 84.50 19** P **P 08 49 36.8 +0.5**
baz=217,SNR=28
**Q16A Castle Valley 84.50 46** P **P 08 49 38.9 +2.0**
**DHY Denali Highway 84.51 14** IAmb IAmb 08 49 37.1
comp=Z,197nm,1.4s
**DHY Denali Highway 84.51 14** P **P 08 49 35.9 -0.3**
baz=209,SNR=22
**PLBC Pleasant Camp 84.53 20** P **P 08 49 37.1 +0.9**

baz=220,SNR=56
**ENH Enshi 84.61 304** IAmb IAmb 08 49 39.7
comp=Z,220nm,1.9s
**TMUT Trail Mountain 84.66 46** P **P 08 49 39.4 +1.6**
TMUT IAmb IAmb 08 49 40.5
comp=Z,53nm,1.3s
**BPAW Bear Paw Mtn. 84.67 12** P **P 08 49 35.4 -1.5**
baz=206,SNR=13
**HLID Hailey 84.68 41** IAmb IAmb 08 49 40.2
comp=Z,35nm,0.9s
**HLID Hailey 84.68 41** P **P 08 49 39.0 +1.3**
baz=239,SNR=67
**I20K Naaghedeneel 84.69 10** P **P 08 49 37.1 +0.3**
**I20K Naaghedeneel 84.69 10** P **P 08 49 37.1 +0.3**
baz=202,SNR=28
**C09A Chrisman Ranch 84.69 36** IAmb IAmb 08 49 39.1
comp=Z,59nm,0.9s
**MPU Maple Canyon 84.72 45** P **P 08 49 39.0 +1.1**
**MCK McKinley 84.75 13** P **P 08 49 37.3 0.0**
**MCK McKinley 84.75 13** P **P 08 49 36.8 -0.5**
baz=208,SNR=39
**MCK McKinley 84.75 13** P **P 08 49 37.3 0.0**
MCK pmax pmax
comp=Z,172nm,1.0s
**HVU Hansel Valley 84.82 43** P **P 08 49 39.8 +1.5**
HVU IAmb IAmb 08 49 40.6
comp=Z,113nm,2.0s
**HVU Hansel Valley 84.82 43** P **P 08 49 39.8 +1.5**
HVU pmax pmax
comp=Z,113nm,2.0s
**PAX Paxson 84.85 14** P **P 08 49 37.8 -0.1**
PAX IAmb IAmb 08 49 38.5
comp=Z,68nm,1.0s
**PAX Paxson 84.85 14** P **P 08 49 37.4 -0.5**
baz=211,SNR=27
**PAX Paxson 84.85 14** P **P 08 49 37.8 -0.1**
PAX pmax pmax
comp=Z,68nm,1.0s
**P30M Million Dollar 84.86 19** P **P 08 49 38.8 +0.9**
baz=219
**SKAG Skagway 84.87 20** P **P 08 49 39.0 +1.1**
**SKAG Skagway 84.87 20** P **P 08 49 39.2 +1.3**
SKAG IAmb IAmb 08 49 40.3
comp=Z,107nm,1.2s
**SKAG Skagway 84.87 20** P **P 08 49 39.2 +1.3**
baz=220,SNR=42
**T35M Bob Quinn 84.88 24** P **P 08 49 39.3 +1.3**
**T35M Bob Quinn 84.88 24** P **P 08 49 39.1 +1.1**
baz=225,SNR=16
**YUK8 Steele Glacier 84.94 18** P **P 08 49 39.0 +0.4**
baz=216,SNR=47
**GSI Gunungsitoli 84.94 273** IAmb IAmb 08 49 41.4
comp=Z,57nm,0.9s
**CTU Camp Tracy 84.97 44** P **P 08 49 39.5 +0.5**
**M26K Nabesna, AK 84.98 16** P **P 08 49 38.9 +0.4**
**M26K Nabesna, AK 84.98 16** P **P 08 49 38.7 +0.3**
baz=213,SNR=87
**SRU San Rafael Swe 85.04 46** P **P 08 49 40.2 +0.7**
**SRU San Rafael Swe 85.04 46** P **P 08 49 40.2 +0.7**
SRU pmax pmax
comp=Z,22nm,0.8s
**P17A Butcher Ranch, 85.06 46** P **P 08 49 40.5 +1.0**
**H19K Roundabout Mou 85.06 9** P **P 08 49 39.2 +0.6**
H19K IAmb IAmb 08 49 40.2
comp=Z,74nm,1.2s
**H19K Roundabout Mou 85.06 9** P **P 08 49 38.9 +0.2**
baz=201,SNR=23
**YUK6 Outpost Mounta 85.07 18** P **P 08 49 39.6 +0.4**
baz=218,SNR=16
**G18K Tagagawik 85.11 8** P **P 08 49 38.6 -0.4**
baz=199,SNR=16
**JLU Jordanelle 85.12 45** P **P 08 49 40.7 +0.8**
**YUK3 Moose Creek 85.14 17** P **P 08 49 39.8 +0.4**
baz=216,SNR=37
**S34M Telegraph Cree 85.20 23** P **P 08 49 40.7 +1.2**
**S34M Telegraph Cree 85.20 23** P **P 08 49 40.8 +1.2**
baz=224,SNR=86
**M27K Edge Creek, AK 85.23 16** P **P 08 49 40.5 +0.6**
baz=214,SNR=52
**H20K Anotleneega Mo 85.27 10** P **P 08 49 39.9 +0.1**
baz=202,SNR=29
**YUK4 Talbot Arm 85.31 18** P **P 08 49 41.0 +0.8**
baz=217,SNR=27
**F17K Baldwin Pennin 85.32 7** P **P 08 49 40.3 +0.5**
F17K IAmb IAmb 08 49 43.1
comp=Z,36nm,0.8s
**F17K Baldwin Pennin 85.32 7** P **P 08 49 39.8 -0.1**
baz=196,SNR=10
**SRIT Nakonsritamara 85.35 281** IAmb IAmb 08 49 44.3
comp=Z,31nm,0.7s
**GYA Guiyang 85.36 300** P **P 08 49 42.6 +1.3**
GYA pmax pmax
comp=Z,22nm,0.9s
**LENM Lemitar 85.37 52** P **P 08 49 42.3 +1.1**
**Y22D IRIS PASSCAL I 85.37 52** P **P 08 49 42.8 +1.6**
baz=244
**TCUT Toone Canyon 85.40 44** IAmb IAmb 08 49 43.5
comp=Z,31nm,0.8s
**L26K Log Cabin Wild 85.42 15** P **P 08 49 40.6 +0.1**
L26K IAmb IAmb 08 49 41.9
comp=Z,68nm,1.0s
**L26K Log Cabin Wild 85.42 15** P **P 08 49 40.8 +0.3**
baz=213,SNR=33
**I21K Tanana 85.47 11** P **P 08 49 40.8 +0.1**
I21K IAmb IAmb 08 49 41.6
comp=Z,127nm,1.2s
**I21K Tanana 85.47 11** P **P 08 49 40.5 -0.2**
baz=205
**NEA2 Nenana 85.49 12** P **P 08 49 39.5 -1.3**
**NEA2 Nenana 85.49 12** P **P 08 49 39.5 -1.3**
baz=208,SNR=14
**K24K Donnelly Dome 85.50 14** P **P 08 49 41.1 +0.2**
baz=211,SNR=13
**P32M Atlin 85.51 21** P **P 08 49 41.8 +0.7**
P32M IAmb IAmb 08 49 43.0
comp=Z,59nm,0.9s
**P32M Atlin 85.51 21** P **P 08 49 41.6 +0.5**
baz=222,SNR=30
**ZEA Zeya 85.53 331** *e*P **P 08 49 42.1 +0.9**
ZEA pmax pmax
comp=E,20nm,1.0s
ZEA pmax pmax
comp=N,40nm,1.3s
ZEA pmax pmax
comp=Z,60nm,1.1s
**MNTX Cornudas Mount 85.55 55** P **P 08 49 43.1 +1.2**
baz=246,SNR=30
**Q32M Nakina River 85.55 22** IAmb IAmb 08 49 43.5
comp=Z,68nm,0.8s
**Q32M Nakina River 85.55 22** P **P 08 49 42.4 +1.0**
baz=223,SNR=44
**G19K Purcell Mounta 85.55 8** IAmb IAmb 08 49 42.2
comp=Z,28nm,0.9s
**G19K Purcell Mounta 85.55 8** P **P 08 49 40.9 -0.2**
baz=200,SNR=24
**MLY Manley 85.56 11** P **P 08 49 40.8 -0.4**
MLY IAmb IAmb 08 49 42.1
comp=Z,61nm,1.1s
**MLY Manley 85.56 11** P **P 08 49 40.2 -1.0**
baz=206,SNR=48
**MVCO Mesa Verde 85.59 49** P **P 08 49 42.8 +0.6**
**MVCO Mesa Verde 85.59 49** P **P 08 49 43.0 +0.7**
baz=243
**NEW Newport 85.59 36** P **P 08 49 42.5 +0.7**
NEW IAmb IAmb 08 49 43.2
comp=Z,30nm,0.8s
**NEW Newport 85.59 36** P **P 08 49 42.0 +0.3**
baz=236,SNR=27
**NEW Newport 85.59 36** P **P 08 49 42.5 +0.7**
NEW pmax pmax
comp=Z,30nm,0.9s
**TIY Taiyuan 85.61 312** P **P 08 49 42.0 -0.1**
TIY S **S 08 59 37.4 +7.8**
TIY pmax pmax
comp=Z,270nm,3.7s
**O30N Mendenhall 85.63 19** P **P 08 49 42.2 +0.6**
O30N IAmb IAmb 08 49 43.4
comp=Z,85nm,0.8s
**O30N Mendenhall 85.63 19** P **P 08 49 42.3 +0.6**
baz=220,SNR=64
**F18K Selawik 85.65 7** P **P 08 49 41.0 -0.5**
baz=198,SNR=5.3
**RIDG Independent Ri 85.66 14** P **P 08 49 41.7 0.0**
baz=212,SNR=22
**PV14 Lion Creek, Pa 85.74 47** P **P 08 49 44.1 +1.1**
**H21K Melozitna Rive 85.76 10** P **P 08 49 42.1 0.0**

H21K IAmb IAmb 08 49 44.5
comp=Z,124nm,1.5s
**H21K Melozitna Rive 85.76 10** P **P** **08 49 42.1 0.0**
baz=204,SNR=28
**HDA Harding Lake 85.77 13** P **P** **08 49 41.7 -0.5**
baz=210,SNR=26
**PV13 Radium Mtn., P 85.78 48** P **P** **08 49 44.0 +0.9**
**CCB Clear Creek Bu 85.80 13** P **P** **08 49 41.6 -0.7**
**L27K Beaver Creek, 85.83 16** P **P** **08 49 42.6 +0.1**
baz=214,SNR=27
**N30M Aishikik Lake 85.86 18** P **P** **08 49 43.0 +0.2**
N30M IAmb IAmb 08 49 45.5
comp=Z,43nm,1.0s
**N30M Aishikik Lake 85.86 18** P **P** **08 49 42.7 0.0**
baz=219,SNR=30
**E17K Hotham Inlet 85.87 6** P **P** **08 49 42.6 +0.1**
baz=196,SNR=13
**IMAR Indian Mountai 85.91 10** P **P** **08 49 43.1 +0.4**
**I23K Minto, Yukon-K 85.93 12** P **P** **08 49 42.3 -0.5**
I23K IAmb IAmb 08 49 44.1
comp=Z,106nm,1.4s
**I23K Minto, Yukon-K 85.93 12** P **P** **08 49 41.9 -0.9**
baz=207,SNR=30
**WHY Whitehorse 85.93 20** P **P** **08 49 43.7 +0.5**
WHY IAmb IAmb 08 49 44.9
comp=Z,63nm,1.0s
**WHY Whitehorse 85.93 20** P **P** **08 49 43.8 +0.7**
baz=221,SNR=26
**TX31 Lajitas Ar. Si 85.95 58** P **P** **08 49 46.2 +2.2**
TX31 IAmb IAmb 08 49 47.4
comp=Z,34nm,1.0s
**TXAR Lajitas Array 85.95 58** P **P** **08 49 46.1 +2.2**
**TXAR Lajitas Array 85.95 58** P **P** **08 49 46.0 +2.1**
comp=Z,17nm,0.7s,baz=218,slow=6.1,SNR=235
comp=Z,17nm,0.7s
**COLA College 85.99 12** P **P** **08 49 42.4 -0.7**
**COLA College 85.99 12** P **P** **08 49 42.5 -0.7**
**COLA College 85.99 12** P **P** **08 49 42.6 -0.6**
baz=209
**COLA College 85.99 12** *d i* P **P** **08 49 42.3 -0.8**
COLA pmax pmax
comp=Z,136nm,1.1s
**DLBC Dease Lake 85.99 23** IAmb IAmb 08 49 45.4
comp=Z,47nm,0.9s
**DLBC Dease Lake 85.99 23** P **P** **08 49 44.3 +0.8**
comp=Z,26nm,0.8s,baz=222,slow=5.6,SNR=66
comp=Z,26nm,0.8s
**DLBC Dease Lake 85.99 23** P **P** **08 49 44.0 +0.6**
baz=225,SNR=32
**SCRK Sand Creek 86.06 14** P **P** **08 49 43.8 0.0**
baz=212,SNR=26
**ANMO Albuquerque 86.09 51** P **P** **08 49 45.8 +1.2**
**ANMO Albuquerque 86.09 51** P **P** **08 49 45.5 +0.8**
baz=245
**ANMO Albuquerque 86.09 51** *d i* P **P** **08 49 46.0 +1.4**
ANMO pmax pmax
comp=Z,9.0nm,1.0s
**IL31 86.10 13** IAmb IAmb 08 49 44.2
comp=Z,99nm,1.1s
**ILAR Eielson Array 86.10 13** P **P** **08 49 43.0 -0.7**
**ILAR Eielson Array 86.10 13** P **P** **08 49 43.1 -0.6**
comp=Z,55nm,1.0s,baz=223,slow=4.6,SNR=136
ILAR PP **PP** **08 53 13.9 -0.4**
comp=Z,9.0nm,1.1s,baz=227,slow=7.2,SNR=6.0
comp=Z,55nm,1.0s
**XLT XiLinHaoTe 86.10 319** *e* P **P** **08 49 44.8 +0.5**
XLT pmax pmax
comp=Z,33nm,1.3s
**IL03 Eielson Array 86.11 13** P **P** **08 49 43.3 -0.4**
**PV15 Paradox Valley 86.11 48** P **P** **08 49 45.7 +1.0**
**H22K Ishtalitna Cre 86.22 11** P **P** **08 49 44.1 -0.3**
baz=205,SNR=43
**M29M Somme Creek 86.24 17** IAmb IAmb 08 49 46.1
comp=Z,47nm,0.8s
**M29M Somme Creek 86.24 17** P **P** **08 49 45.0 +0.4**
baz=217,SNR=52
**P33M Teslin, Yukon 86.28 21** P **P** **08 49 45.1 +0.4**
P33M IAmb IAmb 08 49 46.4
comp=Z,37nm,0.9s
**P33M Teslin, Yukon 86.28 21** P **P** **08 49 45.2 +0.5**
baz=223,SNR=46
**N31M Braeburn, Yuko 86.28 19** P **P** **08 49 45.3 +0.6**
baz=220,SNR=52
**POKR Poker Plat Res 86.29 13** P **P** **08 49 43.8 -0.8**
POKR IAmb IAmb 08 49 44.9
comp=Z,51nm,0.8s
**POKR Poker Plat Res 86.29 13** P **P** **08 49 43.6 -1.0**
baz=209,SNR=17
**J25K Salcha River, 86.29 14** P **P** **08 49 44.3 -0.4**
baz=211,SNR=34
**MCMT McKenzie Canyo 86.30 40** P **P** **08 49 47.0 +1.6**
**R33M Jennings River 86.33 22** P **P** **08 49 45.8 +0.7**
R33M IAmb IAmb 08 49 47.2
comp=Z,115nm,1.3s
**R33M Jennings River 86.33 22** P **P** **08 49 46.0 +0.9**
baz=224,SNR=49
**E18K Tukpahlearik C 86.33 7** IAmb IAmb 08 49 46.2
comp=Z,38nm,0.8s
**E18K Tukpahlearik C 86.33 7** P **P** **08 49 44.8 +0.1**
baz=197,SNR=33
**D17K Noatak River 86.35 6** P **P** **08 49 44.9 +0.1**
baz=194,SNR=19
**ALPN Alpine 86.38 57** IAmb IAmb 08 49 49.0
comp=Z,38nm,1.3s
**AHID Auburn Hatcher 86.39 43** IAmb IAmb 08 49 48.2
comp=Z,37nm,1.2s
**G21K Allakaket 86.44 10** IAmb IAmb 08 49 46.4
comp=Z,52nm,0.8s
**G21K Allakaket 86.44 10** P **P** **08 49 45.4 +0.1**
baz=203
**H23K Yukon River 86.50 11** P **P** **08 49 44.8 -0.9**
**H23K Yukon River 86.50 11** P **P** **08 49 44.7 -0.9**
baz=207,SNR=13
**K27K Chicken 86.57 15** P **P** **08 49 46.4 +0.5**
K27K IAmb IAmb 08 49 47.9
comp=Z,88nm,1.2s
**K27K Chicken 86.57 15** P **P** **08 49 46.4 +0.5**
baz=214,SNR=67
**F20K Avaraart Lake 86.60 9** IAmb IAmb 08 49 47.1
comp=Z,26nm,0.8s
**F20K Avaraart Lake 86.60 9** P **P** **08 49 46.0 +0.1**
baz=201,SNR=28
**XAN Xi'an 86.60 307** ⇓P **P** **08 49 48.1 +1.2**
XAN S **S** **08 59 44.6 +5.6**
XAN pmax pmax
comp=Z,58nm,1.2s
**J26L Joseph Creek 86.61 14** P **P** **08 49 46.6 +0.3**
**J26L Joseph Creek 86.61 14** P **P** **08 49 46.6 +0.3**
baz=213,SNR=65
**MSO Missoula 86.66 38** P **P** **08 49 47.2 +0.3**
**MSO Missoula 86.66 38** P **P** **08 49 46.8 -0.1**
baz=239,SNR=14
**RDOG Red Dog Mine 86.71 6** P **P** **08 49 46.9 +0.4**
**RDOG Red Dog Mine 86.71 6** P **P** **08 49 46.3 -0.2**
baz=194,SNR=7.4
**C16K Lisburne Hills 86.71 5** P **P** **08 49 46.6 +0.1**
C16K IAmb IAmb 08 49 48.8
comp=Z,41nm,1.1s
**C16K Lisburne Hills 86.71 5** P **P** **08 49 46.3 -0.2**
baz=192
**HIA Hailar 86.72 325** *i* P **P** **08 49 47.8 +0.8**
HIA pmax pmax
comp=Z,39nm,1.5s
**DLMT Dillon 86.72 40** P **P** **08 49 47.9 +0.6**
DLMT IAmb IAmb 08 49 49.6
comp=Z,58nm,0.9s
**BILL Bilibino 86.72 354** P **P** **08 49 46.5 -0.1**
BILL IAmb IAmb 08 49 47.9
comp=Z,84nm,1.2s
**BILL Bilibino 86.72 354** ⇓*e* P **P** **08 49 46.5 -0.1**
BILL *e**PP **pP** **08 51 43.0 -0.4**
BILL *e**SP **sP** **08 52 42.7 +4.9**
BILL *e* 08 53 21.7
BILL *e*PPP PPP 08 55 18.8
BILL pmax pmax
comp=Z,73nm,1.0s
**BPMT Black Pine Rid 86.75 39** P **P** **08 49 48.4 +0.9**
**E19K Redstone River 86.78 8** P **P** **08 49 47.0 +0.1**
E19K IAmb IAmb 08 49 48.0
comp=Z,50nm,0.8s
**E19K Redstone River 86.78 8** P **P** **08 49 46.8 -0.1**
baz=200
**H24K Noodor Dome 86.83 12** P **P** **08 49 45.5 -1.8**
baz=209,SNR=11
**TPAW Teton Pass 86.83 42** P **P** **08 49 48.0 -0.1**
TPAW IAmb IAmb 08 49 49.5
comp=Z,38nm,1.0s
**REDW Red Top Meadow 86.83 42** IAmb IAmb 08 49 50.4
comp=Z,69nm,1.1s
**FXWY Fox Creek 86.86 42** P **P** **08 49 49.3 +1.2**
**N32M Quiet Lake 86.88 20** P **P** **08 49 48.3 +0.7**
baz=222
**SNOW Snow King Moun 86.94 42** IAmb IAmb 08 49 51.0
comp=Z,60nm,1.0s
**MLSI Meulaboh, Aceh 86.98 275** P **P** **08 49 49.9 +0.9**
**S22A 4UR Ranch, Cre 87.02 49** P **P** **08 49 49.8 +0.8**
**S22A 4UR Ranch, Cre 87.02 49** P **P** **08 49 50.4 +1.3**
baz=244,SNR=28
**IMW Indian Meadow 87.03 42** IAmb IAmb 08 49 51.5
comp=Z,57nm,0.9s
**PRP Porcupine Dome 87.03 13** P **P** **08 49 47.7 -0.6**
baz=211,SNR=33
**LRM Limekiln Ridge 87.04 40** P **P** **08 49 50.0 +1.0**
**F21K Alatna River 87.09 9** IAmb IAmb 08 49 49.2
comp=Z,29nm,0.9s
**F21K Alatna River 87.09 9** P **P** **08 49 48.0 -0.4**
baz=203,SNR=28
**C17K DeLong Mountai 87.09 5** P **P** **08 49 48.1 -0.2**
baz=194
**LOHW Long Hollow 87.11 42** IAmb IAmb 08 49 51.5
comp=Z,25nm,0.9s
**G22K Bettles 87.14 10** P **P** **08 49 48.7 +0.2**
baz=205,SNR=57
**G23K Bananza Creek 87.20 11** P **P** **08 49 49.2 +0.2**
G23K IAmb IAmb 08 49 50.2
comp=Z,47nm,1.2s
**G23K Bananza Creek 87.20 11** P **P** **08 49 48.8 -0.1**
baz=207,SNR=24
**M31M Drury Creek, Y 87.25 19** IAmb IAmb 08 49 50.3
comp=Z,52nm,1.1s
**M31M Drury Creek, Y 87.25 19** P **P** **08 49 49.0 -0.2**
baz=221,SNR=42
**FLWY Flagg Ranch 87.28 42** IAmb IAmb 08 49 52.8
comp=Z,67nm,0.9s
**DAWY Dawson 87.28 16** P **P** **08 49 48.7 -0.6**
DAWY IAmb IAmb 08 49 50.9
comp=Z,80nm,1.1s
**DAWY Dawson 87.28 16** P **P** **08 49 49.3 -0.1**
baz=216,SNR=59
**OVMT Ovando 87.33 38** P **P** **08 49 50.7 +0.6**
**YHL Hebgen Lake 87.34 41** P **P** **08 49 52.1 +1.7**
**YFT Old Faithful 87.37 41** IAmb IAmb 08 49 54.1
comp=Z,43nm,0.9s
**I26K Coal Creek Min 87.38 14** IAmb IAmb 08 49 51.2
comp=Z,66nm,1.1s
**I26K Coal Creek Min 87.38 14** P **P** **08 49 49.7 -0.1**
baz=213
**BW06 Boulder Array 87.39 43** P **P** **08 49 51.1 +0.5**
baz=242,SNR=21
**PD31 Pinedale Array 87.39 43** IAmb IAmb 08 49 52.3
comp=Z,27nm,0.8s
**PDAR Pinedale Array 87.39 43** P **P** **08 49 51.4 +0.8**
**PDAR Pinedale Array 87.39 43** P **P** **08 49 51.5 +0.9**
comp=Z,19nm,0.8s,baz=219,slow=2.7,SNR=165
comp=Z,19nm,0.8s
**EGAK Eagle 87.42 15** P **P** **08 49 49.9 0.0**
EGAK IAmb IAmb 08 49 51.2
comp=Z,92nm,1.1s
**EGAK Eagle 87.42 15** P **P** **08 49 49.9 0.0**
baz=215,SNR=51
**BOZ Bozeman (W) 87.43 40** P **P** **08 49 51.6 +0.9**
BOZ IAmb IAmb 08 49 53.0
comp=Z,55nm,1.2s
**BOZ Bozeman (W) 87.43 40** P **P** **08 49 51.5 +0.9**
baz=241,SNR=53
**BOZ Bozeman (W) 87.43 40** P **P** **08 49 51.6 +0.9**
BOZ pmax pmax
comp=Z,55nm,1.2s
**C18K Utukok River 87.45 6** P **P** **08 49 50.0 -0.1**
**C18K Utukok River 87.45 6** P **P** **08 49 49.4 -0.7**
baz=196
**H17A Grant Village 87.50 42** IAmb IAmb 08 49 54.6
comp=Z,43nm,0.8s
**H17A Grant Village 87.50 42** P **P** **08 49 53.4 +2.2**
baz=242,SNR=39
**SMCO Snowmass 87.53 47** P **P** **08 49 52.6 +1.0**
**F22K John River 87.56 10** P **P** **08 49 50.6 0.0**
baz=205
**YNM Yellowstone No 87.58 41** IAmb IAmb 08 49 55.6
comp=Z,83nm,1.2s
**YNR Norris Junctio 87.59 41** IAmb IAmb 08 49 55.7
comp=Z,39nm,1.2s
**FARO Faro, Yukon 87.60 19** P **P** **08 49 51.0 +0.1**
baz=222,SNR=22
**K29M Barlow Dome 87.61 17** P **P** **08 49 51.6 +0.6**
baz=218,SNR=65
**WTLY Watson Lake, Y 87.61 22** P **P** **08 49 51.8 +0.8**
WTLY IAmb IAmb 08 49 52.9
comp=Z,61nm,1.2s
**WTLY Watson Lake, Y 87.61 22** P **P** **08 49 51.5 +0.5**
baz=226,SNR=21
**H25L Birch Creek 87.62 13** P **P** **08 49 49.5 -1.3**
baz=211
**HHC Hu-ho-hao-te 87.62 314** *e* P **P** **08 49 53.0 +1.4**
HHC SKS **SKSac** **08 59 27.1 -1.3**
HHC S **ScS** **08 59 53.4 +0.6**
HHC pmax pmax
comp=Z,29nm,1.0s
HHC pmax pmax
comp=Z,140nm,6.7s
**COLD Coldfoot 87.64 11** P **P** **08 49 51.3 +0.5**
**COLD Coldfoot 87.64 11** P **P** **08 49 51.4 +0.5**
baz=206,SNR=50
**D19K Kuna River 87.65 7** P **P** **08 49 50.9 -0.1**
D19K IAmb IAmb 08 49 51.9
comp=Z,38nm,0.8s
**D19K Kuna River 87.65 7** P **P** **08 49 50.8 -0.1**
baz=199
**E20K Nigu River 87.67 8** P **P** **08 49 51.1 0.0**
baz=201,SNR=65
**G24K Hadweenzic Riv 87.67 12** IAmb IAmb 08 49 51.8
comp=Z,25nm,0.9s
**G24K Hadweenzic Riv 87.67 12** P **P** **08 49 50.1 -1.0**
baz=209,SNR=13
**LKWY Lake 87.69 41** IAmb IAmb 08 49 55.7
comp=Z,44nm,0.9s
**J29N Klondike Camp 87.90 16** P **P** **08 49 53.3 +1.0**
J29N IAmb IAmb 08 49 54.2
comp=Z,63nm,0.9s
**J29N Klondike Camp 87.90 16** P **P** **08 49 53.0 +0.7**
baz=218,SNR=6.8
**ODSA Odessa 87.92 55** P **P** **08 49 55.0 +1.8**
ODSA IAmb IAmb 08 49 56.1
comp=Z,38nm,1.2s
**YMP Mirror Lake Pl 87.93 41** IAmb IAmb 08 50 10.4
comp=Z,30nm,1.2s
**COYC Coyhaique 87.96 138** P **P** **08 49 55.2 +2.1**
COYC IAmb IAmb 08 49 56.8
comp=Z,134nm,1.9s
**SDCO Great Sand Dun 87.97 49** P **P** **08 49 54.8 +1.2**
**SDCO Great Sand Dun 87.97 49** P **P** **08 49 54.9 +1.4**
baz=245,SNR=10
**I27K Kandik River 87.99 14** P **P** **08 49 52.7 +0.1**
baz=214,SNR=18
**G25K Bearman Lake 87.99 12** P **P** **08 49 52.9 +0.3**
baz=210,SNR=9.2
**FYU Fort Yukon 88.00 13** IAmb IAmb 08 49 53.9
comp=Z,29nm,0.8s
**D20K Etivluk River 88.04 8** P **P** **08 49 52.9 +0.1**
baz=200
**C19K Lookout Ridge 88.06 7** P **P** **08 49 53.1 +0.2**
C19K IAmb IAmb 08 49 54.2
comp=Z,39nm,0.9s
**C19K Lookout Ridge 88.06 7** P **P** **08 49 53.0 +0.1**
baz=198,SNR=10
**B18K Kokolik River 88.08 6** P **P** **08 49 52.8 -0.1**
baz=196
**TOAD Toad River Com 88.11 25** P **P** **08 49 54.0 +0.6**
baz=229,SNR=76
**LIRD Liard River Hi 88.14 24** P **P** **08 49 53.9 +0.4**
baz=228,SNR=17
**E21K Killik River 88.14 9** IAmb IAmb 08 49 54.1
comp=Z,57nm,0.9s
**E21K Killik River 88.14 9** P **P** **08 49 52.9 -0.4**
baz=203
**KMI Kunming 88.15 297** ⇓P **P** **08 49 56.6 +2.0**
KMI pmax pmax
comp=Z,14nm,0.7s
**E22K Anaktuvuk Pass 88.19 10** P **P** **08 49 53.6 +0.1**
**E22K Anaktuvuk Pass 88.19 10** P **P** **08 49 53.7 +0.2**
baz=205,SNR=46
**I28M Miner Creek 88.26 15** P **P** **08 49 53.7 -0.3**
I28M IAmb IAmb 08 49 55.0
comp=Z,42nm,0.9s
**I28M Miner Creek 88.26 15** P **P** **08 49 53.9 -0.1**
baz=216,SNR=34
**F24K Squaw Lake 88.31 11** IAmb IAmb 08 49 55.6
comp=Z,53nm,0.8s
**F24K Squaw Lake 88.31 11** P **P** **08 49 54.6 +0.5**
baz=209,SNR=31
**DRIO Del Rio 88.44 58** IAmb IAmb 08 49 58.2
comp=Z,34nm,0.9s
**RWWY Rawlins 88.46 45** P **P** **08 49 56.8 +1.1**
RWWY IAmb IAmb 08 49 57.6
comp=Z,50nm,1.2s
**MSTX Muleshoe 88.47 54** IAmb IAmb 08 49 57.6
comp=Z,36nm,1.1s
**E23K Chandalar 88.48 10** P **P** **08 49 55.2 +0.3**
baz=207,SNR=30
**J30M Hart River 88.51 17** P **P** **08 49 55.3 +0.1**
J30M IAmb IAmb 08 49 56.7
comp=Z,100nm,1.6s
**J30M Hart River 88.51 17** P **P** **08 49 55.2 0.0**
baz=219,SNR=31
**T25A Trinidad 88.51 50** P **P** **08 49 56.5 +0.5**
baz=246,SNR=10
**H27K Steamboat Moun 88.53 14** P **P** **08 49 55.4 +0.2**
baz=214,SNR=37
**BTO Baotou 88.57 314** *e* P **P** **08 49 58.3 +2.3**
BTO sP sP 08 52 36.3 -12
BTO S **S** **08 59 54.0 -3.2**
BTO SS **SS** **09 06 05.6 +0.8**
BTO pmax pmax
comp=Z,20nm,0.5s
BTO pmax pmax
comp=Z,340nm,4.5s
**OZNA Ozona 88.59 57** IAmb IAmb 08 49 58.5
comp=Z,21nm,0.8s
**I29M Ogilvie Camp, 88.60 16** IAmb IAmb 08 49 56.4
comp=Z,60nm,1.0s
**I29M Ogilvie Camp, 88.60 16** P **P** **08 49 55.0 -0.5**
baz=218,SNR=48
**G26K Porcupine Rive 88.63 13** P **P** **08 49 56.0 +0.5**
baz=212,SNR=31
**RLMT Red Lodge 88.67 41** IAmb IAmb 08 49 59.1
comp=Z,42nm,1.0s
**RLMT Red Lodge 88.67 41** P **P** **08 49 57.8 +1.2**
baz=242,SNR=25
**E24K Your Creek 88.69 11** P **P** **08 49 56.2 +0.3**
E24K IAmb IAmb 08 49 57.2
comp=Z,23nm,0.8s
**E24K Your Creek 88.69 11** P **P** **08 49 56.2 +0.3**
baz=208,SNR=7.3
**C21K Knifeblade Rid 88.69 8** P **P** **08 49 56.3 +0.5**
baz=202,SNR=39
**Q24A Divide 88.73 48** P **P** **08 49 58.0 +0.9**
baz=245
**GCMT Greycliff 88.73 41** P **P** **08 49 58.1 +1.4**
**D22K Ayikyak River 88.74 9** P **P** **08 49 56.3 +0.3**
**D22K Ayikyak River 88.74 9** P **P** **08 49 56.6 +0.5**
baz=204,SNR=26
**ISCO Idaho Springs 88.75 47** P **P** **08 49 57.9 +0.8**
baz=245
**TGTN Hyland Airport 88.78 22** P **P** **08 49 57.2 +0.8**
baz=227,SNR=31
**F25K Christian Rive 88.80 12** IAmb IAmb 08 49 58.1
comp=Z,41nm,1.0s
**F25K Christian Rive 88.80 12** P **P** **08 49 57.0 +0.6**
baz=211,SNR=16
**BMAR Burnt Mountain 88.87 12** P **P** **08 49 57.9 +1.1**
**ELIB Princess Elisa 88.92 187** *d* P **P** **08 49 57.3 +0.1**
comp=Z,17nm,0.8s
ELIB *d*pP **pP** **08 51 58.2 +3.2**
**SGCY Sterling City 88.96 56** P **P** **08 49 59.1 +1.1**
SGCY IAmb IAmb 08 49 59.9
comp=Z,41nm,1.5s
**A19K Wainwright 88.97 6** P **P** **08 49 56.4 -0.6**
baz=196
**G27K Doyon Strip 88.98 14** IAmb IAmb 08 49 58.6
comp=Z,25nm,1.1s
**G27K Doyon Strip 88.98 14** P **P** **08 49 57.2 0.0**
baz=214,SNR=16
**N23A Red Feather La 88.98 46** P **P** **08 49 59.9 +1.8**
N23A IAmb IAmb 08 50 00.6
comp=Z,40nm,1.2s
**N23A Red Feather La 88.98 46** P **P** **08 49 59.2 +1.1**
baz=245,SNR=18
**I30M Mount Dempster 89.00 16** P **P** **08 49 57.5 0.0**
baz=219,SNR=49
**TOLK Toolik Lake Re 89.01 10** P **P** **08 49 57.1 -0.2**
TOLK IAmb IAmb 08 49 58.6
comp=Z,56nm,1.1s
**TOLK Toolik Lake Re 89.01 10** P **P** **08 49 57.5 +0.2**
baz=207,SNR=12
**833A Chaparral WMA, 89.04 60** P **P** **08 49 60.0 +1.6**
baz=249
**LL02 Futaleuf 89.08 135** IAmb IAmb 08 50 02.8
comp=Z,24nm,1.2s
**POST Post 89.10 55** P **P** **08 49 59.2 +0.5**
POST IAmb IAmb 08 50 00.2
comp=Z,26nm,0.8s
**D23K Nanushuk River 89.12 10** P **P** **08 49 58.3 +0.5**
**D23K Nanushuk River 89.12 10** P **P** **08 49 58.3 +0.5**
baz=206
**B21K Ikpikpuk River 89.15 8** P **P** **08 49 58.0 +0.2**
B21K IAmb IAmb 08 49 59.1
comp=Z,51nm,1.1s
**B21K Ikpikpuk River 89.15 8** P **P** **08 49 58.1 +0.2**
baz=202,SNR=15
**CMAR Chiang Mai Arr 89.19 290** P **P** **08 50 01.1 +1.9**
**CMAR Chiang Mai Arr 89.19 290** P **P** **08 50 00.6 +1.3**
comp=Z,2.8nm,0.4s,baz=109,slow=2.8,SNR=28
CMAR pP **pwP** **08 52 00.5 +0.4**
comp=Z,1.5nm,0.3s,baz=111,slow=3.3,SNR=3.0
comp=Z,2.8nm,0.4s
**F26K Sheenjek River 89.19 12** P **P** **08 49 59.1 +0.9**
F26K IAmb IAmb 08 50 00.0
comp=Z,42nm,1.0s
**F26K Sheenjek River 89.19 12** P **P** **08 49 58.8 +0.7**
baz=212,SNR=8.0
**B20K Meade River 89.19 7** P **P** **08 49 58.4 +0.4**
**B20K Meade River 89.19 7** P **P** **08 49 58.1 +0.1**
baz=200,SNR=17
**H29M Whitestone 89.27 15** P **P** **08 49 58.6 0.0**
**H29M Whitestone 89.27 15** P **P** **08 49 58.5 0.0**
baz=217,SNR=74
**K22A Casper 89.34 44** IAmb IAmb 08 50 01.6
comp=Z,35nm,1.1s
**KOTAN Kotaneelee Air 89.40 24** P **P** **08 50 00.0 +0.8**
baz=230,SNR=20
**CD2 Chengdu 89.40 303** P **P** **08 50 01.0 +0.9**
CD2 S **S** **09 00 09.3 +4.2**
CD2 pmax pmax
comp=Z,110nm,5.6s
**RTBA Rita Blanca 89.46 51** P **P** **08 50 00.7 +0.4**
**PZH PanZhiHua 89.48 298** P **P** **08 50 00.9 +0.3**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,130nm,5.5s
**JCT Junction City 89.49 58** P **P** **08 50 01.1 +0.7**
baz=248
**PHWY Pilot Hill 89.49 46** P **P** **08 50 01.4 +0.9**
**SN05 Snyder 5 89.51 55** IAmb IAmb 08 50 02.2
comp=Z,24nm,0.9s
**HNDO Hondo 89.56 59** P **P** **08 50 03.1 +2.4**
HNDO IAmb IAmb 08 50 03.8
comp=Z,25nm,0.8s
**D24K Happy Valley 89.59 10** P **P** **08 50 00.2 +0.3**
baz=208,SNR=8.9
**AMTX Amarillo 89.65 53** P **P** **08 50 02.3 +1.1**
AMTX IAmb IAmb 08 50 02.9
comp=Z,27nm,1.1s
**AMTX Amarillo 89.65 53** P **P** **08 50 01.5 +0.3**
baz=247
**EGMT Eagleton 89.72 39** P **P** **08 50 02.2 +1.1**
EGMT IAmb IAmb 08 50 03.0
comp=Z,23nm,1.1s
**EGMT Eagleton 89.72 39** P **P** **08 50 01.7 +0.5**
baz=242,SNR=5.0
**EPYK Eagle Plains 89.80 15** P **P** **08 50 00.9 -0.1**
baz=219,SNR=57
**G29M Pine Creek 89.91 15** P **P** **08 50 01.6 +0.1**
**G29M Pine Creek 89.91 15** P **P** **08 50 01.4 -0.1**
baz=218,SNR=38
**YAK Yakutsk 89.91 338** *d i* P **P** **08 50 00.5 -1.0**
YAK *e**PP **pP** **08 51 56.8 -2.9**
YAK *e*S **SKSac** **08 59 40.5 +0.1**
YAK *e* 09 00 12.7
YAK *e*SS **SS** **09 06 16.7 -6.0**

YAK pmax pmax
comp=Z,31nm,1.0s
YAK pmax pmax
comp=N,5.0nm,1.1s
YAK pmax pmax
comp=E,10.0nm,1.1s
YAK pmax pmax
comp=Z,147nm,2.2s
YAK pmax pmax
comp=N,50nm,2.1s
YAK pmax pmax
comp=E,49nm,2.0s
YAK smax smax
comp=E,56nm,2.6s

**C23K Itkillik River** 89.92 9 P **P** 08 50 01.7 +0.2
baz=206,SNR=30
**B22K Teshekpuk Lake** 89.98 8 P **P** 08 50 02.2 +0.5
**B22K Teshekpuk Lake** 89.98 8 P **P** 08 50 01.9 +0.2
baz=203,SNR=20
**F28M Old Crow** 90.04 14 P **P** 08 50 02.6 +0.5
F28M IAmb IAmb 08 50 03.4
comp=Z,48nm,1.1s
**F28M Old Crow** 90.04 14 P **P** 08 50 02.1 +0.1
baz=216,SNR=15
**TROLL Troll, Antarti** 90.04 180 ⇑P **P** 08 50 02.6 +0.2
comp=Z,390nm,0.5s
**C24K Franklin Bluff** 90.12 10 P **P** 08 50 02.8 +0.4
**C24K Franklin Bluff** 90.12 10 P **P** 08 50 02.8 +0.4
baz=208
**E27K Coleen River** 90.13 13 P **P** 08 50 03.0 +0.5
E27K IAmb IAmb 08 50 04.2
comp=Z,68nm,1.4s
**E27K Coleen River** 90.13 13 P **P** 08 50 02.9 +0.3
baz=214,SNR=11
**D25K Kavik River** 90.16 11 P **P** 08 50 02.5 -0.2
D25K IAmb IAmb 08 50 03.4
comp=Z,27nm,0.9s
**D25K Kavik River** 90.16 11 P **P** 08 50 02.1 -0.6
baz=210,SNR=8.0
**APMT Aspermont** 90.27 55 P **P** 08 50 05.3 +1.3
APMT IAmb IAmb 08 50 05.8
comp=Z,24nm,0.9s
**SNAA Sanae** 90.32 179 P **P** 08 50 03.5 -0.1
**SNAA Sanae** 90.32 179 ⇑P **P** 08 50 03.5 -0.1
comp=Z,66nm,0.5s
**SNAA Sanae** 90.32 179 P **P** 08 50 03.5 -0.1
comp=Z,6.5nm,1.0s,baz=212,slow=7.5,SNR=35
SNAA pP **pwP** 08 52 04.1 +0.4
comp=Z,2.0nm,1.0s,baz=240,slow=7.6,SNR=2.8
comp=Z,6.5nm,1.0s
**SNAA Sanae** 90.32 179 P **P** 08 50 03.6 -0.1
SNAA pmax pmax
comp=Z,9.0nm,1.0s
**A22K Sinclair Lake** 90.39 7 P **P** 08 50 03.7 +0.1
baz=202
**ABTX Abilene, Hawle** 90.39 56 P **P** 08 50 05.8 +1.3
ABTX IAmb IAmb 08 50 06.6
comp=Z,33nm,0.9s
**G30M tAoh Zraii Nji** 90.40 15 P **P** 08 50 03.8 -0.1
**G30M tAoh Zraii Nji** 90.40 15 P **P** 08 50 03.7 -0.1
baz=219,SNR=93
**BRDY Brady** 90.42 57 P **P** 08 50 05.7 +1.0
**VNA3 Neumayer Olymp** 90.46 176 ⇑P **P** 08 50 04.2 0.0
comp=Z,17nm,0.6s
**A21K Barrow** 90.50 7 P **P** 08 50 04.1 +0.1
baz=200
**KSCO Kaye Shedlock'** 90.54 49 IAmb IAmb 08 50 08.4
comp=Z,34nm,1.1s
**G31M Satah River** 90.86 16 P **P** 08 50 05.9 +0.1
**G31M Satah River** 90.86 16 P **P** 08 50 05.7 -0.1
baz=221,SNR=92
**C27K Jago River** 90.91 11 P **P** 08 50 06.5 +0.5
C27K IAmb IAmb 08 50 08.2
comp=Z,39nm,0.9s
**C27K Jago River** 90.91 11 P **P** 08 50 06.0 -0.1
baz=212,SNR=11
**E28M Babbage River** 90.91 13 P **P** 08 50 06.7 +0.6
**E28M Babbage River** 90.91 13 P **P** 08 50 06.2 +0.1
baz=216,SNR=19
**C26K Camden Bay** 90.94 11 P **P** 08 50 06.8 +0.7
baz=211,SNR=12
**PLCA Paso Flores** 90.98 134 P **P** 08 50 08.2 +0.8
comp=Z,5.1nm,1.0s,baz=229,slow=6.0,SNR=7.6
PLCA pP **pwP** 08 52 07.1 -0.9
comp=Z,3.6nm,1.1s,baz=331,slow=5.8,SNR=3.9
comp=Z,5.1nm,1.0s
**F30M Barrier River** 91.00 15 P **P** 08 50 06.5 -0.1
baz=220,SNR=21
**E29M Blow River** 91.11 14 P **P** 08 50 06.6 -0.3
baz=218,SNR=14
**VNA1 Neumayer--Stat** 91.13 177 ⇑P **P** 08 50 08.0 +0.8
comp=Z,12nm,0.8s
**D27M Malcolm River** 91.13 12 P **P** 08 50 07.7 +0.5
**D27M Malcolm River** 91.13 12 P **P** 08 50 07.7 +0.5
baz=215,SNR=19
**LZH Lanzhou** 91.23 308 *e*P **P** 08 50 10.3 +1.8
LZH pmax pmax
comp=Z,26nm,1.2s
LZH pmax pmax
comp=Z,220nm,4.6s
**LAO LASA Array** 91.27 41 P **P** 08 50 10.3 +2.0
**LAO LASA Array** 91.27 41 P **P** 08 50 09.9 +1.6
baz=245,SNR=37
**435B Jarrell** 91.38 58 P **P** 08 50 10.2 +1.1
baz=250
**F31M Tsiigehtchic** 91.38 16 P **P** 08 50 08.1 -0.1
baz=222,SNR=152
**PLPT Palo Pinto** 91.50 56 IAmb IAmb 08 50 11.8
comp=Z,28nm,0.8s
**WRGLY Wrigley** 91.59 22 IAmb IAmb 08 50 10.5
comp=Z,14nm,0.8s
**WRGLY Wrigley** 91.59 22 P **P** 08 50 09.5 +0.3
baz=231
**RSSD Black Hills** 91.60 44 P **P** 08 50 11.1 +1.0
RSSD IAmb IAmb 08 50 11.6
comp=Z,32nm,0.9s
**RSSD Black Hills** 91.60 44 P **P** 08 50 10.4 +0.3
baz=246
**RSSD Black Hills** 91.60 44 P **P** 08 50 11.1 +1.0
RSSD pmax pmax
comp=Z,32nm,0.9s
**D28M Stokes Point** 91.67 13 P **P** 08 50 09.6 0.0
baz=217,SNR=8.3
**OGNE Ogallala** 91.71 47 P **P** 08 50 10.8 +0.3
baz=247
**WTFS Wichita Falls** 91.72 55 **P** 08 50 11.8 +1.1
**FW03 Perrin-Whitt E** 91.78 56 IAmb IAmb 08 50 13.1
comp=Z,22nm,0.9s
**WMOK Wichita Mounta** 91.82 54 P **P** 08 50 11.4 +0.4
**WMOK Wichita Mounta** 91.82 54 P **P** 08 50 11.2 +0.1
baz=249
**WMOK Wichita Mounta** 91.82 54 P **P** 08 50 11.5 +0.4
WMOK pmax pmax
comp=Z,15nm,1.7s
**INK Inuvik** 92.08 15 P **P** 08 50 11.0 -0.4
comp=Z,65nm,0.9s,baz=219,slow=5.1,SNR=100
comp=Z,65nm,0.9s
**INK Inuvik** 92.08 15 P **P** 08 50 11.2 -0.3
baz=222,SNR=57
**FW06 Azle** 92.16 56 P **P** 08 50 14.0 +1.3
**CBKS Cedar Bluff** 92.56 50 P **P** 08 50 15.0 +0.6
baz=249
**OK032 Salt Plains WL** 92.98 52 IAmb IAmb 08 50 18.2
comp=Z,32nm,0.9s
**R32A Long Quarter,** 93.17 51 P **P** 08 50 18.7 +1.4
**DGMT Dagmar** 93.26 40 P **P** 08 50 18.3 +0.9
baz=246,SNR=20
**ULN Ulaanbaatar** 93.50 319 P **P** 08 50 19.2 +0.5
ULN IAmb IAmb 08 50 20.0
comp=Z,21nm,1.3s
**ULN Ulaanbaatar** 93.50 319 *ce*P **P** 08 50 18.6 -0.1
ULN pmax pmax
comp=Z,19nm,1.4s
**KAN13 South Haven SW** 93.60 52 P **P** 08 50 20.7 +1.5
KAN13 IAmb IAmb 08 50 21.9
comp=Z,22nm,0.8s
**BLOK Blackwell** 93.71 53 IAmb IAmb 08 50 22.5
comp=Z,30nm,1.0s
**SONM Songino Array** 93.90 319 P **P** 08 50 20.8 +0.3
**SONM Songino Array** 93.90 319 P **P** 08 50 20.4 -0.1
comp=Z,2.2nm,0.9s,baz=127,slow=3.9,SNR=14
SONM pP **pP** 08 52 20.5 +1.4
comp=Z,1.5nm,1.0s,baz=125,slow=2.3,SNR=3.5
comp=Z,2.2nm,0.9s
**SONM Songino Array** 93.90 319 P **P** 08 50 20.8 +0.3
SONM pmax pmax
comp=Z,14nm,1.4s

**YKA Yellowknife Ar** 94.48 25 P **P** 08 50 22.6 0.0
**YKA Yellowknife Ar** 94.48 25 P **P** 08 50 22.8 +0.2
comp=Z,16nm,0.9s,baz=250,slow=4.3,SNR=44
YKA PP **PP** 08 54 15.7 -4.0
comp=Z,3.7nm,1.1s,baz=240,slow=6.4,SNR=4.6
comp=Z,16nm,0.9s
**BGNE Belgrade** 94.61 48 P **P** 08 50 25.4 +1.6
**E28A Huff** 94.72 43 P **P** 08 50 24.8 +0.7
E28A IAmb IAmb 08 50 25.3
comp=Z,21nm,1.1s
**KSU1 Kansas State U** 94.95 51 P **P** 08 50 26.2 +1.0
baz=251,SNR=7.9
**C36M Paulatuk** 95.29 17 P **P** 08 50 25.7 -0.4
baz=231,SNR=7.2
**ECSD EROS Data Cent** 96.46 46 IAmb IAmb 08 50 33.1
comp=Z,9.0nm,0.8s
**ECSD EROS Data Cent** 96.46 46 P **P** 08 50 32.1 +0.1
baz=251,SNR=8.5
**TIXI Tiksi** 96.47 345 P **P** 08 50 30.7 -0.6
TIXI IAmb IAmb 08 50 31.4
comp=Z,16nm,0.9s
**TIXI Tiksi** 96.47 345 P **P** 08 50 30.7 -0.6
TIXI pmax pmax
comp=Z,15nm,1.0s
**A36M Sachs Harbour** 96.68 14 P **P** 08 50 32.6 +0.4
**A36M Sachs Harbour** 96.68 14 P **P** 08 50 31.9 -0.4
baz=230
**ZAK Zakamensk** 96.74 321 *eP* **P** 08 50 32.6 -0.6
ZAK pmax pmax
comp=Z,4.0nm,1.3s
**WHAR Wooly Hollow** 97.04 55 P Pdif 08 50 35.5 +0.8
WHAR IAmb IAmb 08 52 35.7
comp=Z,37nm,2.0s
**P38A Dawn** 97.38 51 P **P** 08 50 37.3 +1.1
P38A IAmb IAmb 08 50 37.9
comp=Z,7.1nm,0.8s
**MGMO Mountain Grove** 97.60 54 P **P** 08 50 37.8 +0.6
MGMO IAmb IAmb 08 50 39.3
comp=Z,37nm,1.9s
**R40A Maddies Static** 97.93 52 Pdif **P** 08 50 39.1 +0.5
R40A IAmb IAmb 08 53 11.5
comp=Z,14nm,1.6s
**N38A Joes South For** 97.94 50 Pdif **P** 08 50 40.4 +1.7
N38A IAmb IAmb 08 50 41.2
comp=Z,22nm,1.1s
**P40A Paris** 98.44 51 Pdif **P** 08 50 42.5 +1.5
P40A IAmb IAmb 08 50 43.0
comp=Z,6.9nm,0.8s
**I37A Lemond, Waseca** 98.75 47 Pdif **P** 08 50 42.9 +0.7
I37A IAmb IAmb 08 50 43.6
comp=Z,19nm,1.1s
**ULM Lac du Bonnet** 98.97 40 P **P** 08 50 43.1 0.0
comp=Z,3.7nm,0.8s,baz=316,slow=7.0,SNR=3.3
comp=Z,3.7nm,0.8s
**TA01 Diego Aracena** 99.61 115 Pdif **Pdif** 08 50 45.1 -1.5
**LPAZ La Paz** 103.09 112 PP **PP** 08 55 25.2 -0.5
comp=Z,3.4nm,1.1s,baz=278,slow=5.0,SNR=5.5
**WMQ Urumqi** 105.28 312 Pdif **Pdif** 08 51 12.8 +1.5
**ZSN Zaisan** 107.81 315 *e*PKiKP **PKiKP** 08 55 26.0 -0.5
baz=315
**ZALV Zalesovo Beam** 108.58 322 PP **PP** 08 56 00.9 -3.4
comp=Z,0.8nm,0.3s,baz=56,slow=5.8,SNR=3.8
**MKAR Makanchi Array** 109.48 314 PKiKP **PKiKP** 08 55 28.9 -0.7
comp=Z,0.9nm,0.5s,baz=191,slow=1.6,SNR=8.8
MKAR PP **PP** 08 56 08.4 -2.6
comp=Z,1.9nm,1.0s,baz=90,slow=5.5,SNR=4.6
**UZB Uzynbulak** 111.44 310 *e*PKiKP **PKiKP** 08 55 32.9 -0.8
baz=310
UZB *e*PP **PP** 08 56 23.4 -1.7
baz=310
**UZB Uzynbulak** 111.44 310 *i* PKiKP **PKiKP** 08 55 32.9 -0.8
UZB *e* 08 56 23.3
**KPKS Kokpek** 111.71 310 *e*PKiKP **PKiKP** 08 55 33.3 -0.8
baz=310
**KPKS Kokpek** 111.71 310 *i* PKiKP **PKiKP** 08 55 33.3 -0.8
**SATY Saty** 111.88 310 *e*PKiKP **PKiKP** 08 55 33.7 -0.8
baz=310
**SATY Saty** 111.88 310 *i* PKiKP **PKiKP** 08 55 33.6 -0.8
**KURK Kurchatov** 112.17 318 *i* PKiKP **PKiKP** 08 55 33.9 -0.7
**KURBB Kurchatov Arra** 112.23 318 PKiKP **PKiKP** 08 55 33.9 -0.8
comp=Z,1.5nm,0.8s,baz=97,slow=1.9,SNR=10
KURBB PP **PP** 08 56 24.9 -5.3
comp=Z,1.1nm,0.8s,baz=86,slow=5.9,SNR=6.7
**MDOK Medeo** 112.88 310 *e*PKiKP **PKiKP** 08 55 35.6 -0.8
baz=310
**MDOK Medeo** 112.88 310 *i* PKiKP **PKiKP** 08 55 35.6 -0.8
**KSH Kashi** 113.42 306 PKP **PKiKP** 08 55 35.1 -2.4
**BTLS Baital** 115.12 312 *e*PKP **PKPdf** 08 55 40.0 -0.4
baz=312
**BTLS Baital** 115.12 312 *e*PKiKP **PKPdf** 08 55 40.0 -0.4
**BVAR Borovoye Array** 117.19 321 PKP **PKPdf** 08 55 43.6 -0.6
comp=Z,2.9nm,0.5s,baz=118,slow=1.7,SNR=12
BVAR PP **PP** 08 56 57.0 -7.5
comp=Z,2.0nm,0.9s,baz=70,slow=8.7,SNR=4.0
**KKAR Karatay Array** 117.66 310 PKPdf **PKPdf** 08 55 44.9 -0.6
**KKAR Karatay Array** 117.66 310 PKiKP **PKPdf** 08 55 44.9 -0.6
**GAR Garm** 117.77 305 PKPdf **PKiKP** 08 55 46.3 +0.3
**BRLS Borolday** 118.16 310 *e*PKP **PKPdf** 08 55 45.8 -0.6
baz=309
**BRLS Borolday** 118.16 310 *e*PKiKP **PKPdf** 08 55 45.8 -0.6
**SEUS St. Eustatius** 118.61 80 PKPdf **PKPdf** 08 55 47.3 -0.6
**KBL Kabul** 118.62 300 PKPdf **PKiKP** 08 55 48.3 +0.5
**KBL Kabul** 118.62 300 PKiKP **PKiKP** 08 55 48.3 +0.5
**CHGR Chuyangaron** 118.67 305 PKPdf **PKiKP** 08 55 47.7 0.0
**CHGR Chuyangaron** 118.67 305 PKiKP **PKiKP** 08 55 47.7 0.0
**SIMJ Simiganj** 118.79 305 PKPdf **PKiKP** 08 55 48.0 0.0
**SPB5 Spitsbergen Ar** 119.55 357 PKPdf **PKPdf** 08 55 47.9 -0.2
**SPA0 Spitsbergen Ar** 119.55 357 PKPdf **PKPdf** 08 55 47.9 -0.2
**SPITS Spitsbergen Ar** 119.55 357 PP **PP** 08 57 16.2 -3.5
comp=Z,32nm,1.2s,baz=48,slow=15,SNR=3.9
**SPITS Spitsbergen Ar** 119.55 357 PKiKP **PKiKP** 08 55 48.4 +0.2
**SPB3 Spitsbergen Ar** 119.55 357 PKPdf **PKiKP** 08 55 48.4 +0.2
**SUMG Summit** 120.94 13 PKPdf **PKiKP** 08 55 51.6 +0.1
**SUMG Summit** 120.94 13 PKiKP **PKiKP** 08 55 51.6 +0.1
**ARU Arti** 123.20 326 PKPdf **PKPdf** 08 55 55.6 0.0
**ARU Arti** 123.20 326 *i* PKiKP **PKPdf** 08 55 54.5 -1.1
ARU 09 02 14.7
**ABKAR Akbulak array** 124.28 318 PKPdf **PKPdf** 08 55 57.6 -0.3
**ARCES ARCESS Array B** 126.62 350 PKP **PKPdf** 08 56 02.0 +0.2
comp=Z,11nm,0.9s,baz=98,slow=1.6,SNR=12
**ARCES ARCESS Array B** 126.62 350 PKiKP **PKPdf** 08 56 02.0 +0.2
**APA Apatity** 126.67 345 ⇓*i* PKiKP **PKPdf** 08 56 00.6 -1.3
APA *i* 08 57 59.0
APA pmax pmax
comp=Z,10.0nm,1.0s
**KIRV Kirov** 126.87 331 PKP **PKPdf** 08 56 02.4 -0.2
comp=Z,8.0nm,0.6s,baz=90,slow=3.0,SNR=6.6
**KIRV Kirov** 126.87 331 *i* PKiKP **PKiKP** 08 56 03.3 +0.2
**BELG Belogornoye** 130.63 325 *i* PKiKP **PKiKP** 08 56 10.4 -0.4
BELG pmax pmax
comp=Z,4.0nm,1.0s
**FINES FINESS Array B** 133.51 344 PKhKP PKPpre 08 56 03.0
comp=Z,1.4nm,0.9s,baz=9.4,slow=39,SNR=1.9
FINES PKP **PKPdf** 08 56 13.2 -1.8
comp=Z,5.9nm,0.9s,baz=36,slow=3.5,SNR=6.0
FINES PP **PP** 08 58 46.0 -4.7
comp=Z,3.1nm,0.9s,baz=23,slow=7.5,SNR=2.2
**VSU Vasula** 135.81 341 *i* PKiKP **PKPdf** 08 56 20.0 +0.6
**NB2 NORSAR Subarra** 136.67 353 PKP PKPpre 08 56 07.7
comp=Z,7.8nm,1.2s,baz=34,slow=2.3
NB2 SKPa 08 58 57.6
comp=Z,36nm,1.7s,baz=17,slow=2.1
**NOA NORSAR Array B** 136.67 353 PKhKP PKPpre 08 56 08.9
comp=Z,0.2nm,0.3s,baz=233,slow=19,SNR=3.3
NOA PKP **PKPdf** 08 56 20.2 -0.8
comp=Z,2.0nm,0.8s,baz=13,slow=4.1,SNR=4.2
NOA SKPbc **SKPbc** 08 59 02.0 -1.2
comp=Z,5.6nm,1.1s,baz=16,slow=4.5,SNR=4.4
**KBZ Khabaz** 137.15 316 PKP **PKiKP** 08 56 23.8 -0.6
comp=Z,0.5nm,0.4s,baz=18,slow=3.2,SNR=4.2
KBZ SKPbc **SKPbc** 08 59 04.5 -0.6
comp=Z,2.5nm,0.9s,baz=160,slow=9.0,SNR=2.4
**KBZ Khabaz** 137.15 316 *i* PKiKP **PKPdf** 08 56 23.2 +0.8
KBZ pmax pmax
comp=Z,4.0nm,1.1s
**KIV Kislovodsk** 137.20 316 *e*PKiKP **PKPdf** 08 56 22.5 -0.1
KIV pmax pmax
comp=Z,10.0nm,1.0s
**HFS Hagfors** 137.23 351 PKhKP PKPpre 08 56 11.2
comp=Z,1.2nm,0.4s,baz=63,slow=4.0,SNR=7.7
HFS SKPbc **SKPbc** 08 59 04.7 -0.2
comp=Z,3.0nm,0.8s,baz=33,slow=9.2,SNR=4.1
**SHA1 Shidzhatmaz** 137.31 316 *i* PKiKP **PKPdf** 08 56 22.7 -0.3
**KMBO Kilima Mbogo** 140.22 245 SKPbc **SKiKP** 08 59 16.2 -0.9
comp=Z,4.5nm,0.9s,baz=59,slow=2.4,SNR=5.2

**KPL Plockton** 140.50 6 *e*P **PKPdf** 08 56 21.0 -7.0
**AKASG Malin Array Be** 140.90 332 PKhKP PKPpre 08 56 22.4
comp=Z,1.6nm,0.5s,baz=43,slow=2.9,SNR=7.4
**LAWE Loch Awe, Argy** 141.59 6 *e*P **PKPdf** 08 56 24.5 -5.5
**ARPR Arapgir-MALATY** 142.13 311 **PKPdf** 08 56 30.2 -1.6
**IDGL Inch Island, C** 142.49 9 *e*P **PKPdf** 08 56 29.4 -2.2
**EKA Eskdalemuir Ar** 142.72 5 PKhKP PKPpre 08 56 28.8
comp=Z,14nm,0.8s,baz=343,slow=2.9,SNR=56
EKA PP **PP** 08 59 44.9 -1.9
comp=Z,4.3nm,1.0s,baz=350,slow=4.3,SNR=4.5
**ESK Eskdalemuir** 142.73 5 *e*P **PKPdf** 08 56 28.4 -3.7
**NEWG New Galloway** 142.84 6 *e*P **PKPdf** 08 56 28.9 -3.4
**GAL1 Galloway** 143.04 6 *e*P PKPab 08 56 29.8 -0.3
**SORM Soroca** 143.13 330 ⇓P PKPab 08 56 30.8 +0.1
**SORM Soroca** 143.13 330 ⇓PKiKP PKPab 08 56 30.8 +0.1
**BEL Belsk** 143.23 340 *e*PKP PKPbc 08 56 31.4 +0.1
**EDMD Edmundbyers** 143.30 4 *e*P PKPab 08 56 30.4 -0.8
**KESW Keswick, Cumbr** 143.46 5 *e*P PKPab 08 56 31.5 -0.3
**IOMK Kirk Michael** 143.65 6 *e*P PKPab 08 56 31.8 -0.7
**ILTH Belurgan, Co L** 143.67 8 *e*P PKPab 08 56 32.1 -0.4
**GAZ Gaziantep** 143.68 309 PKPbc PKPbc 08 56 33.9 +0.5
**KMPD K-Podol'skiy** 143.69 332 PKP PKPab 08 56 31.9 -0.9
**KIS Kishinev** 143.70 328 ⇓*i*P PKPbc 08 56 33.0 0.0
comp=Z,40nm,1.3s
**KIS Kishinev** 143.70 328 *d i*PKiKP PKPbc 08 56 33.0 0.0
KIS pmax pmax
comp=Z,40nm,1.3s
**LVV L'vov** 143.74 336 *e*PKiKP PKPab 08 56 32.9 -0.1
**LVV L'vov** 143.74 336 PKP PKPab 08 56 32.7 -0.3
**WIM Isle of Man** 143.75 6 *e*P PKPab 08 56 32.3 -0.6
**MILM Milestii Mici** 143.76 328 ⇓*i*PKP PKPbc 08 56 32.0 -1.1
comp=Z,300nm,1.7s
**MILM Milestii Mici** 143.76 328 ⇑P PKPab 08 56 33.3 +0.2
**MILM Milestii Mici** 143.76 328 *d i*PKiKP PKPbc 08 56 32.0 -1.1
MILM pmax pmax
comp=Z,300nm,1.7s
**IGLA Glengowla, Co** 143.76 11 *e*P PKPab 08 56 32.9 -0.1
**GDLE Glaisdale, N Y** 143.77 3 *e*P PKPab 08 56 31.7 -1.2
**DRBR Darabani** 143.89 332 ⇑P PKPbc 08 56 33.1 -0.5
**BNN Bunyan** 144.00 312 **PKPdf** 08 56 34.9 -0.1
**HPK Haverah Park** 144.19 3 *e*P PKPbc 08 56 34.1 -0.2
**KWP Kalwaria Pacla** 144.41 337 *e*PKP PKPbc 08 56 35.1 0.0
**WPS Cemaes, Angles** 144.50 7 *e*P **PKPdf** 08 56 34.5 -0.7
**WME Myndd Eilian** 144.53 6 *e*P **PKPdf** 08 56 34.9 -0.4
**WLF1 Llynfaes** 144.62 6 *e*P **PKPdf** 08 56 34.6 -0.8
**LBWR Ladybower, Pea** 144.74 4 *e*P **PKPdf** 08 56 35.7 +0.1
**LMK Market Rasen** 144.75 2 *e*P **PKPdf** 08 56 35.5 -0.2
**YLL Llanberis** 144.80 6 *e*P PKPbc 08 56 36.2 +0.1
**VLDR Vladesti** 144.86 328 ⇑P **PKPab** 08 56 37.5 +0.1
**TLCR** 144.92 326 ⇓P **PKPab** 08 56 37.5 -0.1
**TLCR** 144.92 326 ⇓PKiKP **PKPab** 08 56 37.5 -0.1
**BUR08 Bucovina Ar. S** 144.94 332 PKPbc **PKPab** 08 56 37.5 -0.3
**OJC Ojcow** 144.94 340 *e*PKP **PKPdf** 08 56 36.4 +0.3
**BURAA Bucovina Array** 144.96 332 ⇓P **PKPab** 08 56 38.1 +0.3
**BURAR Bucovina Array** 144.96 332 ⇓PKiKP **PKPab** 08 56 38.1 +0.3
**STNC Stoke** 145.01 4 *e*P **PKPbc** 08 56 36.6 -0.2
**SCTR Scanteiesti** 145.02 327 ⇑P **PKPab** 08 56 37.7 -0.3
**GHRR** 145.05 328 ⇓P **PKPab** 08 56 38.6 +0.5
**TESR Tescani** 145.10 330 ⇓P **PKPbc** 08 56 37.5 +0.2
**BR131 Keskin Array S** 145.13 315 PKPbc **PKPbc** 08 56 38.0 +0.2
**BR131 Keskin Array S** 145.13 315 *i* PKiKP **PKPdf** 08 56 38.9 -0.1
**BRTR Keskin Array B** 145.13 315 PKPbc **PKPbc** 08 56 37.9 0.0
**BRTR Keskin Array B** 145.13 315 PKPbc **PKPbc** 08 56 37.5 -0.4
comp=Z,14nm,0.9s,baz=127,slow=1.8,SNR=50
**BRTR Keskin Array B** 145.13 315 PKIKP **PKPbc** 08 56 37.9 0.0
**LLW Llanuwychllyn** 145.13 6 *e*P **PKPdf** 08 56 36.5 +0.2
**FOEL Foel Wylfa** 145.14 5 *e*P **PKPdf** 08 56 36.7 +0.4
**KOLS Kolonicke sedl** 145.14 336 *e*PKiKP **PKPab** 08 56 38.2 -0.2
**KOLS Kolonicke sedl** 145.14 336 *e*PKP **PKPab** 08 56 38.2 -0.2
**IWEX Carrickbyrne,** 145.21 9 *e*P **PKPbc** 08 56 37.2 -0.2
**KIRS Kirsehir-Merke** 145.22 314 ⇓P **PKPbc** 08 56 38.1 0.0
**IZVR Izvoarele** 145.23 327 ⇓P **PKPab** 08 56 38.5 -0.3
**CFR Carcaliu** 145.28 327 ⇑P **PKPbc** 08 56 38.2 +0.3
**CFR Carcaliu** 145.28 327 ⇑PKP2 **PKPbc** 08 56 38.2 +0.3
**PANC Panciu** 145.31 328 ⇑P **PKPab** 08 56 39.0 -0.2
**TPGR Topolog** 145.35 326 ⇑P **PKPbc** 08 56 38.7 +0.5
**ONER Baraj Valea Uz** 145.35 330 ⇓P **PKPab** 08 56 39.1 -0.3
**KSP Ksiaz** 145.43 344 *e*PKP **PKPbc** 08 56 38.5 +0.4
**NIE Niedzica** 145.46 339 *e*PKP **PKPbc** 08 56 38.8 +0.5
**CRVS Cervenica-Dubn** 145.47 337 *e*PKP2 **PKPab** 08 56 39.2 -0.5
**CRVS Cervenica-Dubn** 145.47 337 *e*PKP **PKPab** 08 56 39.2 -0.5
**WACR West Acre** 145.51 1 *e*P **PKPbc** 08 56 37.7 -0.6
**VRI Vrincioaia** 145.53 329 ⇑P **PKPbc** 08 56 39.1 +0.5
**VRI Vrincioaia** 145.53 329 ⇑PKP2 **PKPbc** 08 56 39.1 +0.5
**HLM1 Long Mynd** 145.53 5 *e*P **PKPbc** 08 56 37.9 -0.5
**PLOR Plostina** 145.57 329 ⇑P **PKPbc** 08 56 38.9 +0.1
**PLOR Plostina** 145.57 329 ⇑PKP2 **PKPbc** 08 56 38.9 +0.1
**ANTO Ankara** 145.63 315 ⇓P **PKPbc** 08 56 39.1 -0.6
**ANTO Ankara** 145.63 315 ⇓P **PKPbc** 08 56 39.1 -0.6
**ANTO Ankara** 145.63 315 ⇓PKiKP **PKPbc** 08 56 39.1 -0.1
**BR231 Keskin MP Arra** 145.65 315 PKPbc **PKPbc** 08 56 38.8 -0.6
**BMR Baia Mare** 145.66 334 ⇓P **PKPbc** 08 56 39.4 +0.5
**BMR Baia Mare** 145.66 334 ⇓PKP2 **PKPbc** 08 56 39.4 +0.5
**OSTC Ostas** 145.71 344 ⇑*e*PKP **PKPab** 08 56 40.1 -0.5
**OSTC Ostas** 145.71 344 *e*PKP2 **PKPab** 08 56 40.1 -0.5
**HARR Harsova** 145.72 326 ⇑P **PKPab** 08 56 40.5 -0.2
**HARR Harsova** 145.72 326 ⇑PKP2 **PKPab** 08 56 40.5 -0.2
**CHVC Chvalec** 145.72 344 ⇑*e*PKP **PKPab** 08 56 39.9 -0.7
**CHVC Chvalec** 145.72 344 *e*PKP2 **PKPab** 08 56 39.9 -0.7
**TURR Turia** 145.74 330 ⇓P **PKPab** 08 56 40.3 -0.5
**ARCR ARCALIA** 145.74 332 ⇓P **PKPbc** 08 56 39.9 +0.7
**CLL Collm** 145.77 348 **PKPbc** 08 56 39.3 +0.1
**CLL Collm** 145.77 348 ⇓*i*PKPbc **PKPbc** 08 56 39.4 +0.3
comp=Z,178nm,1.0s
CLL *ex* x 08 57 03.0
CLL *e*SKPbc **SKiKP** 08 59 30.0 +2.9
CLL *ex* x 09 00 02.0
CLL *e*PP **PP** 09 00 09.0 +4.1
**CLL Collm** 145.77 348 ⇓*i*PKP2 **PKPbc** 08 56 39.4 +0.3
CLL pmax pmax
comp=Z,178nm,1.0s
**COVR Voineasa-Covas** 145.80 329 ⇑P **PKPbc** 08 56 39.7 +0.2
**OKC Ostrava-Krasne** 145.80 341 ⇑*e*PKP **PKPab** 08 56 40.7 -0.2
**OKC Ostrava-Krasne** 145.80 341 *e*PKP2 **PKPab** 08 56 40.7 -0.2
**UPC Upice** 145.81 344 ⇑*e*PKP **PKPbc** 08 56 40.0 +0.7
**UPC Upice** 145.81 344 *e*PKP2 **PKPbc** 08 56 40.0 +0.7
**OZUR** 145.82 330 ⇑P **PKPab** 08 56 40.7 -0.5
**DPC Dobruska-Polom** 145.87 343 ⇑*e*PKP **PKPab** 08 56 40.6 -0.6
**DPC Dobruska-Polom** 145.87 343 *e*PKP2 **PKPab** 08 56 40.6 -0.6
**LANS Liptovska Anna** 145.97 339 *e*PKP2 **PKPab** 08 56 41.3 -0.4
**LANS Liptovska Anna** 145.97 339 *e*PKP **PKPab** 08 56 41.3 -0.4
**BRG Berggiesshubel** 145.98 346 *e*PKP **PKPdf** 08 56 38.8 +0.9
BRG Amp 08 56 42.1
comp=Z,82nm,1.1s
**BRG Berggiesshubel** 145.98 346 P **PKiKP** 08 56 47.4 +5.1
BRG Amp 08 56 48.6
comp=Z,43nm,1.0s
**KRLC Kraliky** 145.99 343 ⇑*e*PKP **PKPbc** 08 56 40.6 +0.7
**KRLC Kraliky** 145.99 343 *e*PKP2 **PKPbc** 08 56 40.6 +0.7
**MORC Moravsky Berou** 146.04 342 *e*PKP **PKPdf** 08 56 38.5 +0.5
MORC *e* 08 56 40.4
**MORC Moravsky Berou** 146.04 342 ⇓P **PKPbc** 08 56 40.4 +0.4
**MORC Moravsky Berou** 146.04 342 ⇓PKP2 **PKPbc** 08 56 40.4 +0.4
**DOPR Dopca** 146.10 330 ⇑P **PKPbc** 08 56 41.2 +0.9
**ISR Istrita** 146.14 328 ⇑P **PKPbc** 08 56 41.0 +0.5
**ISR Istrita** 146.14 328 ⇑PKP2 **PKPbc** 08 56 41.0 +0.5
**PVCC Panska Ves** 146.16 345 ⇑*e*PKP **PKPab** 08 56 41.3 -1.0
**PVCC Panska Ves** 146.16 345 *e*PKP2 **PKPab** 08 56 41.3 -1.0
**MLR Muntele Rosu** 146.18 329 ⇓P **PKPbc** 08 56 40.6 0.0
**MLR Muntele Rosu** 146.18 329 ⇓PKP2 **PKPbc** 08 56 40.6 0.0
**KECS Kecovo** 146.18 338 *e*PKP2 **PKPab** 08 56 41.7 -0.8
**KECS Kecovo** 146.18 338 *e*PKP **PKPab** 08 56 41.7 -0.8
**MONM Monmouth** 146.21 5 *e*P **PKPbc** 08 56 39.9 -0.4
**CJR Cluj-Napoca** 146.36 333 ⇓P **PKPbc** 08 56 41.7 +0.7
**CJR Cluj-Napoca** 146.36 333 ⇓PKP2 **PKPbc** 08 56 41.7 +0.7
**MDUB Mudurnu** 146.36 318 **PKPbc** 08 56 41.4 +0.1
**MMAI Mount Meron Ar** 146.48 303 PKPbc **PKPbc** 08 56 42.5 +0.7
comp=Z,10nm,0.6s,baz=70,slow=5.4,SNR=21
MMAI pPKPbc **pPKPdf** 08 58 45.8 0.0
comp=Z,5.2nm,0.7s,baz=108,slow=5.5,SNR=4.7
**LTVH Ltavrtes, Hu** 146.54 335 ⇓P **PKPbc** 08 56 42.4 +1.0
**MARR Marisel-Cluj** 146.59 333 ⇑P **PKPbc** 08 56 42.0 +0.3
**PRA Prague** 146.61 345 ⇑*e*PKP **PKPab** 08 56 45.4 +1.3
**PRA Prague** 146.61 345 *e*PKP2 **PKPab** 08 56 45.4 +1.3
**VOIR** 146.65 330 ⇓P **PKPbc** 08 56 42.0 +0.2
**VOIR** 146.65 330 ⇓PKP2 **PKPbc** 08 56 42.0 +0.2
**PRU Pruhonice** 146.66 345 ⇑*e*PKP **PKPbc** 08 56 42.3 +0.7
**PRU Pruhonice** 146.66 345 *e*PKP2 **PKPbc** 08 56 42.3 +0.7
**GOPC GO Pecny, Ondr** 146.67 345 ⇑*e*PKP **PKPbc** 08 56 42.2 +0.5
**GOPC GO Pecny, Ondr** 146.67 345 *e*PKP2 **PKPbc** 08 56 42.2 +0.5
**DRGR** 146.68 334 ⇓P **PKPbc** 08 56 42.1 +0.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DRGR** | | | 146.68 334 | ⇓PKP2 | **PKPbc** | 08 56 42.1 | +0.2 |
| **VRAC** | **Vranov** | | 146.73 342 | *e*PKP | **PKPdf** | 08 56 40.0 | +0.8 |
| VRAC | | | | *e* | | 08 56 42.3 | |
| **VRAC** | **Vranov** | | 146.73 342 | ⇑P | **PKPbc** | 08 56 42.2 | +0.3 |
| **VRAC** | **Vranov** | | 146.73 342 | ⇑PKP2 | **PKPbc** | 08 56 42.2 | +0.3 |
| **VYHS** | **Vyhne** | | 146.75 339 | *e*PKP2 | **PKPbc** | 08 56 42.9 | +1.0 |
| **VYHS** | **Vyhne** | | 146.75 339 | *e*PKP | **PKPbc** | 08 56 42.9 | +1.0 |
| **JAVC** | **Velka Javorina** | | 146.81 341 | *e*PKP | **PKPbc** | 08 56 41.0 | -1.2 |
| JAVC | | | | *e* | | 08 56 43.7 | |
| **WOL** | **Wolverton** | | 146.85 4 | *e*P | **PKPbc** | 08 56 41.9 | -0.2 |
| **TNR** | **Turnu Rosu** | | 146.86 331 | ⇑P | **PKPbc** | 08 56 42.9 | +0.6 |
| **TNR** | **Turnu Rosu** | | 146.86 331 | ⇑PKP2 | **PKPbc** | 08 56 42.9 | +0.6 |
| **PSZ** | **Piszkesteto** | | 146.87 338 | ⇓P | **PKPbc** | 08 56 42.5 | +0.1 |
| **PSZ** | **Piszkesteto** | | 146.87 338 | ⇓PKP2 | **PKPbc** | 08 56 42.5 | +0.1 |
| **ARR** | **Arges** | | 146.90 330 | ⇓P | **PKiKP** | 08 56 43.6 | -0.9 |
| **KRUC** | **Moravsky** | | 147.01 342 | *e*PKP | **PKPdf** | 08 56 40.0 | +0.4 |
| KRUC | | | | *e* | | 08 56 42.6 | |
| **TREC** | **Trest** | | 147.06 343 | ⇑*e*PKP | **PKPbc** | 08 56 43.4 | +0.7 |
| **TREC** | **Trest** | | 147.06 343 | *e*PKP2 | **PKPbc** | 08 56 43.4 | +0.7 |
| **ZVC** | **Zvikov** | | 147.26 345 | ⇑*e*PKP | **PKPbc** | 08 56 43.9 | +0.7 |
| **SBD** | **Saint Breward** | | 147.27 8 | *e*P | **PKPbc** | 08 56 42.7 | -0.5 |
| **MEM** | **Membach** | | 147.47 355 | *d*PKPbc | **PKPbc** | 08 56 43.7 | 0.0 |
| **BTNL** | **Ternell** | | 147.48 355 | *d*PKPbc | **PKPbc** | 08 56 44.0 | +0.2 |
| **DYA** | **Yadsworthy** | | 147.49 7 | *e*P | **PKPbc** | 08 56 43.6 | -0.2 |
| **BSTI** | **Sart Tilman** | | 147.53 356 | *d*PKPbc | **PKPbc** | 08 56 44.3 | +0.4 |
| **SIRR** | **Siria** | | 147.54 334 | ⇓P | **PKPbc** | 08 56 44.7 | +0.6 |
| **ZST** | **Bratislava** | | 147.57 341 | *e*PKP2 | **PKiKP** | 08 56 45.4 | -0.2 |
| **ZST** | **Bratislava** | | 147.57 341 | *e*PKP | **PKiKP** | 08 56 45.4 | -0.2 |
| **GRFO** | **Grafenberg** | | 147.66 349 | | **PKiKP** | 08 56 45.5 | -0.3 |
| **GRFO** | **Grafenberg** | | 147.66 349 | PKP2 | **PKiKP** | 08 56 45.5 | -0.3 |
| **KHC** | **Kasperske Hory** | | 147.69 346 | *e*PKPDF | **PKPdf** | 08 56 40.5 | -0.3 |
| KHC | | | | ⇑*e*PKP | **PKiKP** | 08 56 45.2 | -0.7 |
| KHC | | | | *e*PKPAB | **PKPab** | 08 56 49.0 | +0.4 |
| **KHC** | **Kasperske Hory** | | 147.69 346 | *e*PKIKP | **PKPdf** | 08 56 40.5 | -0.3 |
| KHC | | | | *e* | | 08 56 49.0 | |
| **BCLA** | **Clavier** | | 147.71 356 | *d*PKPbc | **PKPbc** | 08 56 45.0 | +0.6 |
| **BHOU** | **Houvegnez** | | 147.72 355 | *d*PKPbc | **PKPbc** | 08 56 45.0 | +0.5 |
| **GZR** | **Gura Zlata** | | 147.74 332 | ⇓P | **PKPbc** | 08 56 44.9 | +0.1 |
| **GZR** | **Gura Zlata** | | 147.74 332 | ⇓PKHKP | PKPpre | 08 56 44.9 | |
| **SURR** | **Surduc** | | 147.75 333 | ⇑P | **PKPbc** | 08 56 44.6 | 0.0 |
| **BGES** | **Gesves** | | 147.76 356 | *d*PKPbc | **PKPbc** | 08 56 44.8 | +0.3 |
| **CKRC** | **Cesky Krumlov** | | 147.80 344 | ⇑*e*PKP | **PKPbc** | 08 56 45.3 | +0.6 |
| **CKRC** | **Cesky Krumlov** | | 147.80 344 | *e*PKP2 | **PKPbc** | 08 56 45.3 | +0.6 |
| **BMRD** | **Maredsous** | | 147.86 356 | *d*PKPbc | **PKPbc** | 08 56 44.7 | 0.0 |
| **GERES** | **GERESS Array B** | | 147.93 345 | PKPdf | **PKPdf** | 08 56 41.1 | -0.2 |
| GERES | | | | PKPbc | **PKPbc** | 08 56 45.7 | +0.6 |
| GERES | | | | PKPab | **PKPab** | 08 56 50.1 | +0.4 |
| **GERES** | **GERESS Array B** | | 147.93 345 | PKPbc | **PKPbc** | 08 56 45.5 | +0.4 |
| | comp=Z,22nm,0.9s,baz=168,slow=6.8,SNR=54 | | | | | | |
| **GERES** | **GERESS Array B** | | 147.93 345 | PKHKP | PKPpre | 08 56 41.1 | |
| GERES | | | | | | 08 56 50.1 | |
| **RCHB** | **Rochefort** | | 147.98 356 | *d*PKPbc | **PKPbc** | 08 56 45.2 | +0.2 |
| **ELND** | **Elena** | | 148.01 326 | ⇑P | **PKPab** | 08 56 50.7 | +0.7 |
| **BZS** | **Buzias** | | 148.07 333 | ⇑P | **PKPbc** | 08 56 45.3 | -0.1 |
| **BZS** | **Buzias** | | 148.07 333 | ⇑PKP2 | **PKPbc** | 08 56 45.3 | -0.1 |
| **DOU** | **Dourbes** | | 148.08 357 | *d*PKPbc | **PKPbc** | 08 56 45.5 | +0.2 |
| **CONA** | **Conrad Observa** | | 148.19 342 | *i* PKP | **PKiKP** | 08 56 46.5 | -0.6 |
| | comp=Z,97nm,1.2s,SNR=30 | | | | | | |
| CONA | | | | *e*pPKP | **pPKPbc** | 08 58 49.4 | -0.9 |
| | comp=Z,7.6nm,1.0s | | | | | | |
| CONA | | | | *i* PP | **PP** | 09 00 16.3 | -2.8 |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **RONA** | **Rosalia, Austr** | | 148.26 341 | *i* PKP | **PKiKP** | 08 56 46.6 | -0.5 |
| | comp=Z,74nm,1.1s,SNR=26 | | | | | | |
| RONA | | | | *e*pPKP | **pPKPbc** | 08 58 50.9 | +0.5 |
| | comp=Z,3.2nm,0.8s | | | | | | |
| RONA | | | | *i* PP | **PP** | 09 00 17.9 | -1.6 |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **HERR** | **Herculane** | | 148.30 332 | ⇑P | **PKPbc** | 08 56 46.4 | +0.4 |
| **WLF** | **Walferdange** | | 148.40 355 | *d*PKP | **PKPbc** | 08 56 46.7 | +0.6 |
| **MDVR** | **Moldovita** | | 148.69 332 | ⇑P | **PKPbc** | 08 56 47.1 | 0.0 |
| **MOA** | **Molln** | | 148.71 344 | *i* PKP | **PKPbc** | 08 56 47.3 | +0.3 |
| | comp=Z,48nm,1.2s,SNR=15 | | | | | | |
| MOA | | | | *e*PP | **PP** | 09 00 21.8 | -0.2 |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **MORH** | **Mrgy, Hungar** | | 148.77 337 | ⇓P | **PKPbc** | 08 56 47.0 | -0.1 |
| **JSA** | **Saint Aubin** | | 148.90 5 | *e*P | **PKPbc** | 08 56 47.4 | +0.1 |
| **ARSA** | **Arzberg** | | 148.90 342 | *i* PKP | **PKPbc** | 08 56 47.5 | 0.0 |
| | comp=Z,17nm,1.1s,SNR=9.2 | | | | | | |
| ARSA | | | | *e*pPKP | **pPKPbc** | 08 58 52.4 | +0.1 |
| | comp=Z,3.9nm,1.0s | | | | | | |
| ARSA | | | | *e*PP | **PP** | 09 00 22.1 | -1.0 |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | | 149.02 344 | *i* PKP | **PKiKP** | 08 56 48.2 | -0.5 |
| | comp=Z,46nm,1.1s,SNR=10 | | | | | | |
| BIOA | | | | *e*pPKiKP | **pPKiKP** | 08 58 53.3 | -0.7 |
| | comp=Z,1.2nm,0.4s | | | | | | |
| BIOA | | | | *e*PP | **PP** | 09 00 22.3 | -1.4 |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **BFO** | **Black Forest** | | 149.46 351 | PKPdf | **PKPdf** | 08 56 41.6 | -2.1 |
| BFO | | | | | **PKPbc** | 08 56 48.9 | +0.1 |
| BFO | | | | PKPab | **PKPab** | 08 56 55.7 | -0.2 |
| **BFO** | **Black Forest** | | 149.46 351 | PKIKP | **PKPdf** | 08 56 41.6 | -2.1 |
| BFO | | | | | | 08 56 55.7 | |
| **LESA** | **Schwarzleotal** | | 149.50 345 | *i* PKP | **PKPbc** | 08 56 49.3 | +0.3 |
| | comp=Z,42nm,1.1s | | | | | | |
| LESA | | | | *i* pPKP | **pPKPbc** | 08 58 52.5 | -1.2 |
| | comp=Z,5.3nm,1.0s | | | | | | |
| LESA | | | | *i* PP | **PP** | 09 00 24.8 | -1.8 |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **SOKA** | **Soboth** | | 149.56 342 | *e*PKP | **PKPbc** | 08 56 48.9 | -0.2 |
| | comp=Z,36nm,1.1s,SNR=19 | | | | | | |
| SOKA | | | | *i* PP | **PP** | 09 00 23.5 | -3.5 |
| | comp=Z,12nm,1.5s | | | | | | |
| **BOVS** | **Bovan** | | 149.58 331 | ⇓P | **PKPbc** | 08 56 48.6 | -0.6 |
| **GROS** | **Grobnik** | | 149.61 341 | *e*PKPbc | **PKPbc** | 08 56 48.9 | -0.4 |
| GROS | | | | *e*PKPab | **PKPab** | 08 56 56.5 | -0.1 |
| **KBA** | **Koelnbreinsper** | | 149.66 344 | *i* PKP | **PKPbc** | 08 56 49.2 | -0.3 |
| | comp=Z,42nm,1.0s,SNR=14 | | | | | | |
| KBA | | | | *e*pPKP | **pPKPab** | 08 58 57.4 | +0.2 |
| | comp=Z,0.2nm,0.3s | | | | | | |
| KBA | | | | *i* PP | **PP** | 09 00 23.5 | -4.1 |
| | comp=Z,15nm,1.7s | | | | | | |
| **ECH** | **Echery** | | 149.72 353 | PKPdf | **PKPdf** | 08 56 41.5 | -2.6 |
| ECH | | | | | **PKPbc** | 08 56 49.7 | +0.2 |
| ECH | | | | PKPab | **PKPab** | 08 56 56.9 | -0.1 |
| **ECH** | **Echery** | | 149.72 353 | PKIKP | **PKPdf** | 08 56 41.5 | -2.6 |
| ECH | | | | | | 08 56 56.9 | |
| **WATA** | **Walderalm** | | 149.84 347 | *i* PKP | **PKPbc** | 08 56 50.0 | +0.2 |
| | comp=Z,66nm,1.0s,SNR=16 | | | | | | |
| WATA | | | | *e*pPKP | **pPKPab** | 08 58 57.7 | -0.2 |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **OBKA** | **Obir** | | 149.85 342 | *i* PKP | **PKPbc** | 08 56 49.6 | -0.3 |
| | comp=Z,23nm,1.2s,SNR=7.9 | | | | | | |
| OBKA | | | | *i* PP | **PP** | 09 00 23.4 | -5.3 |
| | comp=Z,12nm,1.5s | | | | | | |
| **RETA** | **Reutte** | | 149.86 348 | *i* PKP | **PKPbc** | 08 56 50.0 | +0.2 |
| | comp=Z,39nm,1.3s,SNR=16 | | | | | | |
| RETA | | | | *e*pPKP | **pPKPab** | 08 58 57.8 | 0.0 |
| | comp=Z,4.9nm,1.0s | | | | | | |
| RETA | | | | *e*PP | **PP** | 09 00 29.1 | +0.5 |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **WTTA** | **Wattenberg** | | 149.89 347 | *i* PKP | **PKPbc** | 08 56 50.3 | +0.2 |
| | comp=Z,93nm,1.0s,SNR=18 | | | | | | |
| WTTA | | | | *e*pPKP | **pPKPab** | 08 58 56.7 | -1.5 |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **MOTA** | **Moosalm** | | 149.93 347 | *i* PKP | **PKiKP** | 08 56 50.5 | -0.3 |
| | comp=Z,68nm,1.0s | | | | | | |
| MOTA | | | | *i* pPKP | **pPKPbc** | 08 58 52.9 | -1.8 |
| | comp=Z,1.4nm,0.5s | | | | | | |
| MOTA | | | | *i* PP | **PP** | 09 00 28.7 | -0.4 |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **MYKA** | **Terra Mystica** | | 150.00 344 | *e*PKP | **PKPbc** | 08 56 49.8 | -0.4 |
| | comp=Z,50nm,1.2s,SNR=14 | | | | | | |
| MYKA | | | | *e*pPKP | **pPKPbc** | 08 58 54.1 | -0.8 |
| MYKA | | | | *i* PP | **PP** | 09 00 27.8 | -1.6 |
| | comp=Z,6.4nm,1.0s | | | | | | |
| **SQTA** | **Sankt Quirin** | | 150.03 347 | *i* PKP | **PKPbc** | 08 56 50.4 | +0.1 |
| | comp=Z,63nm,1.0s,SNR=13 | | | | | | |
| SQTA | | | | *i* pPKP | **pPKPdf** | 08 58 52.5 | +1.9 |
| | comp=Z,6.6nm,1.0s | | | | | | |
| SQTA | | | | *i* PP | **PP** | 09 00 31.3 | +1.7 |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **ABTA** | **Abfaltersbach** | | 150.18 345 | *i* PKP | **PKPbc** | 08 56 50.1 | -0.5 |
| | comp=Z,89nm,1.0s,SNR=18 | | | | | | |
| ABTA | | | | *e*pPKiKP | **pPKPbc** | 08 58 55.0 | -0.5 |
| | comp=Z,6.4nm,1.1s | | | | | | |
| ABTA | | | | *i* PP | **PP** | 09 00 27.4 | -3.0 |
| | comp=Z,8.3nm,1.0s | | | | | | |
| **DAVA** | **Damuels** | | 150.22 349 | *i* PKP | **PKiKP** | 08 56 51.2 | -0.2 |
| | comp=Z,88nm,1.1s,SNR=24 | | | | | | |
| DAVA | | | | *e*pPKP | **pPKPbc** | 08 58 54.7 | -0.8 |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **LJU** | **Ljubljana** | | 150.28 342 | *e*PKPbc | **PKPbc** | 08 56 50.7 | -0.1 |
| **FETA** | **Feichten** | | 150.31 348 | *i* PKP | **PKiKP** | 08 56 51.5 | 0.0 |
| | comp=Z,74nm,1.0s,SNR=28 | | | | | | |
| FETA | | | | *i* pPKiKP | **pPKPbc** | 08 58 56.1 | +0.4 |
| | comp=Z,5.3nm,1.0s | | | | | | |
| FETA | | | | *i* PP | **PP** | 09 00 29.3 | -1.9 |
| | comp=Z,8.5nm,1.3s | | | | | | |
| **CRNS** | **Crni Vrh** | | 150.33 342 | *e*PKPdf | **PKPdf** | 08 56 44.6 | -0.5 |
| CRNS | | | | *i* PKPbc | **PKPbc** | 08 56 50.5 | -0.4 |
| **STAL** | **STALIGIAL** | | 150.58 345 | | **PKPdf** | 08 56 45.4 | -0.1 |
| STAL | | | | PKPbc | **PKPbc** | 08 56 51.4 | -0.1 |
| STAL | | | | PKPab | **PKPab** | 08 56 59.9 | -0.8 |
| **PDG** | **Podgorica** | | 151.64 332 | ⇑P | **PKPbc** | 08 56 51.9 | -2.0 |
| **TEOL** | **Teolo** | | 151.68 345 | PKPdf | **PKPdf** | 08 56 45.8 | -1.3 |
| TEOL | | | | | **PKiKP** | 08 56 54.4 | +0.2 |
| TEOL | | | | | **PKPab** | 08 57 05.6 | +0.4 |
| **FNA** | **Florina** | | 151.89 327 | | **PKPbc** | 08 56 54.2 | -0.5 |
| **FNA** | **Florina** | | 151.89 327 | PKIKP | **PKPbc** | 08 56 54.2 | -0.5 |
| **OHR** | **Ohrid** | | 151.94 329 | *i* P | **PKiKP** | 08 56 55.2 | +0.2 |
| **SSB** | **Saint Sauveur** | | 152.88 356 | PKPdf | **PKPdf** | 08 56 46.8 | -2.1 |
| SSB | | | | | **PKiKP** | 08 56 57.5 | +0.8 |
| SSB | | | | PKPab | **PKPab** | 08 57 10.2 | -0.1 |
| **SSB** | **Saint Sauveur** | | 152.88 356 | PKIKP | **PKPdf** | 08 56 46.8 | -2.1 |
| SSB | | | | | | 08 57 10.2 | |
| **FDMO** | **Fiordimonte** | | 153.44 341 | PKPdf | **PKPdf** | 08 56 48.5 | -1.3 |
| FDMO | | | | | **PKiKP** | 08 56 58.3 | +0.4 |
| FDMO | | | | | **PKPab** | 08 57 13.3 | +0.5 |
| **INTR** | **Introdacqua** | | 154.10 339 | | **PKPdf** | 08 56 50.2 | -0.6 |
| INTR | | | | | **PKiKP** | 08 56 59.5 | +0.1 |
| INTR | | | | PKPab | **PKPab** | 08 57 15.4 | -0.4 |
| **PGAV** | **Gavieira, Arco** | | 154.77 18 | *e*PKPab | **PKPab** | 08 57 19.9 | +1.3 |
| **PCAB** | **Cabril** | | 155.08 18 | *e*PKPab | **PKPab** | 08 57 20.9 | +1.0 |
| **PBRG** | **Braganca** | | 155.34 15 | *e*PKPab | **PKPab** | 08 57 21.3 | +0.3 |
| **TIP** | **Timpagrande** | | 155.38 331 | PKPdf | **PKPdf** | 08 56 50.8 | -1.9 |
| TIP | | | | | **PKPab** | 08 57 20.8 | -0.6 |
| **POLO** | **Lamas de Olo** | | 155.45 18 | *e*PKPab | **PKPab** | 08 57 22.1 | +0.5 |
| **PVRL** | **Vila Real** | | 155.57 18 | *e*PKPab | **PKPab** | 08 57 23.1 | +1.1 |
| **CEST** | **Esterri de Car** | | 155.65 1 | PKPdf | **PKPdf** | 08 56 51.1 | -1.8 |
| CEST | | | | PKPab | **PKPab** | 08 57 22.9 | +0.4 |
| **MVO** | **Moncorvo** | | 155.86 17 | *e*PKPab | **PKPab** | 08 57 23.9 | +0.6 |
| **PVIS** | **Viseu** | | 156.03 18 | *e*PKPab | **PKPab** | 08 57 24.5 | +0.5 |
| **MTE** | **Manteigas** | | 156.43 18 | PKPdf | **PKPdf** | 08 56 52.0 | -1.9 |
| MTE | | | | PKPab | **PKPab** | 08 57 25.5 | -0.3 |
| **MTE** | **Manteigas** | | 156.43 18 | *e*PKPab | **PKPab** | 08 57 27.2 | +1.4 |
| **PCAS** | **Casmilo, Conde** | | 156.44 20 | *e*PKPab | **PKPab** | 08 57 26.1 | +0.3 |
| **PSBE** | **So Bento** | | 156.83 21 | *e*PKPab | **PKPab** | 08 57 28.0 | +0.5 |
| **PCBR** | **Castelo Branco** | | 156.96 19 | *e*PKPab | **PKPab** | 08 57 28.4 | +0.4 |
| **PMRV** | **Marv??o** | | 157.36 19 | *e*PKPab | **PKPab** | 08 57 29.9 | +0.1 |
| **PMTG** | **Montargil** | | 157.42 21 | *e*PKPab | **PKPab** | 08 57 30.0 | 0.0 |
| **PESTR** | **Estremoz** | | 157.81 20 | PKPdf | **PKPdf** | 08 56 53.3 | -2.3 |
| PESTR | | | | PKPab | **PKPab** | 08 57 31.1 | -0.7 |
| **EVO** | **Evora** | | 157.98 21 | *e*PKPab | **PKPab** | 08 57 32.5 | 0.0 |
| **ESBB** | **Sonseca Array** | | 158.00 12 | PKPdf | **PKPdf** | 08 56 55.0 | -0.8 |
| ESBB | | | | PKPab | **PKPab** | 08 57 31.9 | -0.7 |
| **ESDC** | **Sonseca Array** | | 158.00 12 | | **PKPdf** | 08 56 53.3 | -2.6 |
| ESDC | | | | | **PKPab** | 08 57 31.2 | -1.4 |
| **ESDC** | **Sonseca Array** | | 158.00 12 | PKP | **PKPdf** | 08 56 56.3 | +0.4 |
| | comp=Z,1.5nm,1.1s,baz=352,slow=3.0,SNR=6.7 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | 08 57 32.7 | +0.1 |
| | comp=Z,18nm,1.0s,baz=341,slow=4.1,SNR=51 | | | | | | |
| ESDC | | | | PP | **PP** | 09 01 11.8 | -1.8 |
| | comp=Z,1.6nm,0.8s,baz=331,slow=5.1,SNR=5.3 | | | | | | |
| **PAB** | **San Pablo** | | 158.04 13 | PKPab | **PKPab** | 08 57 31.3 | -1.5 |
| **PAB** | **San Pablo** | | 158.04 13 | PKP2 | **PKPab** | 08 57 31.3 | -1.5 |
| **PNCL** | **Nicolau / Gran** | | 158.17 22 | *e*PKPab | **PKPab** | 08 57 33.6 | +0.3 |
| **PBEJ** | **Beja** | | 158.48 21 | *e*PKPab | **PKPab** | 08 57 35.1 | +0.4 |
| **MESJ** | **Messejana** | | 158.53 22 | *e*PKPab | **PKPab** | 08 57 35.3 | +0.5 |
| **MESJ** | **Messejana** | | 158.53 22 | *e*PKPab | **PKPab** | 08 57 35.4 | +0.5 |
| **PTEO** | **Sao Teotonio** | | 158.60 24 | *e*PKPab | **PKPab** | 08 57 36.0 | +0.8 |
| **PBAR** | **Barrancos** | | 158.62 19 | *e*PKPab | **PKPab** | 08 57 36.0 | +0.7 |
| **PCVE** | **Castro Verde** | | 158.77 22 | *e*PKPab | **PKPab** | 08 57 36.7 | +0.7 |
| **MORF** | **Marmelete** | | 158.84 24 | *e*PKPab | **PKPab** | 08 57 36.6 | +0.3 |
| **MORF** | **Marmelete** | | 158.84 24 | *e*PKPab | **PKPab** | 08 57 36.9 | +0.6 |
| **PFVI** | **Vila Bisbo** | | 158.92 24 | *e*PKPab | **PKPab** | 08 57 37.3 | +0.7 |
| **PVAQ** | **Vaqueiros** | | 159.09 22 | PKPdf | **PKPdf** | 08 56 54.6 | -2.6 |
| PVAQ | | | | PKPab | **PKPab** | 08 57 37.4 | +0.1 |
| **PVAQ** | **Vaqueiros** | | 159.09 22 | *e*PKPab | **PKPab** | 08 57 38.1 | +0.7 |
| **PBDV** | **Barranco-do-Ve** | | 159.16 22 | *e*PKPab | **PKPab** | 08 57 38.6 | +0.9 |
| **KEST** | **Kesra** | | 161.29 341 | PKPdf | **PKPdf** | 08 56 58.3 | -1.4 |
| KEST | | | | PKPab | **PKPab** | 08 57 47.6 | +0.5 |
| **KEST** | **Kesra** | | 161.29 341 | PKPab | **PKPab** | 08 57 47.4 | +0.2 |
| | comp=Z,22nm,1.0s,baz=342,slow=1.8,SNR=12 | | | | | | |
| **TAM** | **Tamanrasset** | | 174.25 324 | PKPdf | **PKPdf** | 08 57 06.1 | -3.0 |
| TAM | | | | PKPab | **PKPab** | 08 58 43.6 | -1.3 |
| **TAM** | **Tamanrasset** | | 174.25 324 | PKIKP | **PKPdf** | 08 57 06.1 | -3.0 |
| TAM | | | | | | 08 58 43.7 | |
| **TORD** | **Torodi Ar. Bea** | | 175.00 179 | PKPdf | **PKPdf** | 08 57 07.5 | -1.7 |
| TORD | | | | PKPab | **PKPab** | 08 58 47.8 | -0.1 |
| **TORD** | **Torodi Ar. Bea** | | 175.00 179 | PKP | **PKPdf** | 08 57 08.7 | -0.6 |
| | comp=Z,1.0nm,0.8s,baz=165,slow=6.0,SNR=5.6 | | | | | | |
| TORD | | | | PKPab | **PKPab** | 08 58 48.0 | 0.0 |
| | comp=Z,0.7nm,0.8s,baz=192,slow=3.1,SNR=5.2 | | | | | | |
| TORD | | | | pPKPab | **pPKPab** | 09 00 48.6 | +1.9 |
| | comp=Z,4.5nm,1.0s,baz=188,slow=1.6,SNR=4.1 | | | | | | |

**IDC 20 08:38:52.4±2.6, 53.61N×86.96E, h0km, mbtmp2.9/3, ML2.7/1, Error ellipse: s-maj=24.7km s-min=15.7km az=71.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.31** | **286** | I | I | 08 47 20.0 | |
| | baz=104,slow=315,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.31** | **286** | Pg | Pg | 08 39 16.2 | -1.4 |
| | 1.3nm,0.3s,baz=106,slow=13,SNR=22 | | | | | | |
| ZALV | | | | Lg | Lg | 08 39 34.2 | |
| | 2.5nm,0.3s,baz=106,slow=31,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.99** | **243** | Pn | Pn | 08 40 22.4 | +0.2 |
| | 1.0nm,0.7s,baz=57,slow=14,SNR=0.9 | | | | | | |
| KURBB | | | | Lg | Lg | 08 42 04.0 | |
| | 0.1nm,0.3s,baz=56,slow=34,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.45** | **206** | Pn | Pn | 08 40 43.6 | +1.2 |
| | 0.1nm,0.3s,baz=29,slow=14,SNR=4.1 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **9.94** | **273** | Pn | Pn | 08 41 16.3 | 0.0 |
| | 0.3nm,0.5s,baz=79,slow=13,SNR=0.9 | | | | | | |

**JMA 20 08:40:00.3±0.2, 24.9N±0.3°×124.0E±0.6, h2km, MV1.5/5, NW OFF ISHIGAKIJIMA IS, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JISG** | **Ishigakijimahi** | **0.43** | **141** | P | Pg | 08 40 09.0 | +0.4 |
| JISG | | | | S | Sg | 08 40 15.0 | +0.9 |
| **JIJ** | **Ishigaki jima** | **0.57** | **168** | P | Pg | 08 40 11.3 | +0.1 |
| JIJ | | | | S | Sg | 08 40 19.1 | +0.5 |
| **JKRS** | **Kuro-shima** | **0.68** | **180** | eP | Pg | 08 40 13.9 | +0.5 |
| **JTJ** | **Tarama** | **0.69** | **114** | S | Sg | 08 40 23.3 | +0.9 |

**TAP 20 08:40:44.7, 24.81N×121.94E, h13km, ML1.3, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.03** | **353** | *i* P | Pg | 08 40 47.2 | +0.2 |
| | baz=14 | | | | | | |
| EGS | | | | S | Sg | 08 40 49.1 | +0.5 |
| | baz=14 | | | | | | |
| **TIPB** | **Shuangxi** | **0.19** | **328** | P | Pg | 08 40 49.2 | +0.2 |
| | baz=321 | | | | | | |
| TIPB | | | | S | Sg | 08 40 51.8 | -0.1 |
| | baz=321 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.20** | **14** | *e*P | Pg | 08 40 49.6 | +0.5 |
| | baz=17 | | | | | | |
| TWB1 | | | | S | Sg | 08 40 52.6 | +0.4 |
| | baz=17 | | | | | | |
| **TWC** | **Suao** | **0.22** | **201** | P | Pg | 08 40 49.7 | +0.3 |
| | baz=192 | | | | | | |
| TWC | | | | *e*S | Sg | 08 40 52.5 | -0.2 |
| | baz=192 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.28** | **349** | P | Pb | 08 40 51.4 | -0.4 |
| | baz=354 | | | | | | |
| SXI1 | | | | *e*S | Sg | 08 40 55.6 | +0.9 |
| | baz=354 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.32** | **261** | P | Pg | 08 40 51.4 | +0.1 |
| | baz=259 | | | | | | |
| FUSB | | | | *e*S | Sg | 08 40 55.4 | -0.4 |
| | baz=259 | | | | | | |
| **ENTT** | **Nioudou** | **0.38** | **243** | *e*P | Pg | 08 40 52.7 | +0.4 |
| | baz=240 | | | | | | |
| **EWUT** | **Wuta** | **0.39** | **201** | *e*P | Pg | 08 40 52.8 | +0.2 |
| | baz=204 | | | | | | |
| EWUT | | | | *e*S | Sb | 08 40 59.1 | -0.4 |
| | baz=204 | | | | | | |
| **NWLT** | **Wulai** | **0.40** | **265** | *e*P | Pg | 08 40 52.8 | +0.2 |
| | baz=263 | | | | | | |
| NWLT | | | | *e*S | Sg | 08 40 57.2 | -0.7 |
| | baz=263 | | | | | | |
| **NDT** | **Datong Townshi** | **0.44** | **242** | *e*P | Pb | 08 40 54.5 | +0.3 |
| | baz=239 | | | | | | |
| NDT | | | | *e*S | Sb | 08 41 01.7 | +0.9 |
| | baz=239 | | | | | | |
| **LATG** | **Datong** | **0.46** | **234** | *e*P | Pb | 08 40 54.6 | -0.2 |
| | baz=231 | | | | | | |
| LATG | | | | *e*S | Sg | 08 41 00.1 | 0.0 |
| | baz=231 | | | | | | |
| **YM01** | **YM01** | **0.47** | **315** | *e*P | Pb | 08 40 54.7 | -0.1 |
| | baz=315 | | | | | | |
| **YHNB** | **Yeheng** | **0.53** | **254** | *e*P | Pg | 08 40 55.4 | +0.3 |
| | baz=260 | | | | | | |
| **NACB** | **Ninganchiao** | **0.71** | **206** | *e*P | Pb | 08 40 59.1 | +0.3 |
| | baz=205 | | | | | | |
| NACB | | | | *e*S | Sb | 08 41 08.7 | +0.2 |
| | baz=205 | | | | | | |

*ISK 20 08:54:09.9, 37.39N×36.41E, h3km, ML1.6/6*
**AFAD 20 08:54:11.5±0.0, 37.39N×36.41E, h7km±1km, ML1.3, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANDN** | **Andirin** | **0.19** | **345** | P | Pg | 08 54 15.6 | +0.1 |
| ANDN | | | | S | Sg | 08 54 18.7 | +0.6 |
| ANDN | | | | *i* AML | AML | 08 54 19.0 | |
| | comp=N,70nm,0.3s | | | | | | |
| ANDN | | | | *i* AML | AML | 08 54 19.0 | |
| | comp=E,45nm,0.3s | | | | | | |
| **HCB** | **Kahramanmara** | **0.40** | **97** | P | Pg | 08 54 19.7 | +0.4 |
| HCB | | | | S | Sg | 08 54 25.4 | +0.8 |
| HCB | | | | *i* AML | AML | 08 54 35.0 | |
| | comp=N,72nm,0.5s | | | | | | |
| HCB | | | | *i* AML | AML | 08 54 35.0 | |
| | comp=E,47nm,0.7s | | | | | | |
| **KMRS** | **Kahramanmaras** | **0.41** | **74** | Pg | Pg | 08 54 19.6 | +0.2 |
| KMRS | | | | Sg | Sg | 08 54 25.7 | +0.9 |
| **KOZT** | **Kozan** | **0.47** | **281** | Pg | Pg | 08 54 19.0 | -1.7 |
| KOZT | | | | Sg | Sg | 08 54 25.2 | -1.6 |
| **KAHM** | **Kahramanmaras,** | **0.47** | **75** | P | Pg | 08 54 21.0 | +0.2 |
| KAHM | | | | *i* AML | AML | 08 54 28.0 | |
| | comp=N,12nm,0.2s | | | | | | |
| KAHM | | | | *i* AML | AML | 08 54 28.0 | |
| | comp=E,17nm,0.3s | | | | | | |
| KAHM | | | | S | Sg | 08 54 28.2 | +1.2 |
| **SAIM** | **ADANA** | **0.64** | **336** | P | Pg | 08 54 24.0 | +0.2 |
| SAIM | | | | *i* AML | AML | 08 54 35.0 | |
| | comp=N,17nm,0.2s | | | | | | |
| SAIM | | | | *i* AML | AML | 08 54 35.0 | |
| | comp=E,14nm,0.3s | | | | | | |
| **CEYT** | **Ceyhan** | **0.65** | **234** | Pg | Pg | 08 54 22.3 | -1.8 |
| CEYT | | | | Sg | Sg | 08 54 32.1 | -0.4 |
| **GAZ** | **Gaziantep** | **0.68** | **109** | Pg | Pg | 08 54 24.6 | +0.1 |
| GAZ | | | | Sg | Sg | 08 54 35.6 | +0.3 |
| **GZT** | **Gaziantep** | **0.92** | **92** | P | Pn | 08 54 30.6 | -0.4 |
| GZT | | | | *i* AML | AML | 08 54 44.0 | |
| | comp=N,10.0nm,0.3s | | | | | | |
| GZT | | | | S | Sn | 08 54 44.2 | -0.4 |
| GZT | | | | *i* AML | AML | 08 54 46.0 | |
| | comp=E,12nm,0.2s | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **1.01** | **0** | Pg | Pg | 08 54 30.2 | -0.8 |
| SARI | | | | Sg | Sb | 08 54 44.9 | -0.2 |
| **TAHT** | **Tahtakopru-Hat** | **1.03** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **N17K** | **Nushagak Hills** | **54.73** | **31** | P | **P** | **09 04 35.1** | **+0.7** |
| N17K | | | | IAmb | IAmb | 09 04 51.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **K17K** | **Iditarod** | **54.83** | **29** | P | **P** | **09 04 35.5** | **+0.4** |
| K17K | | | | IAmb | IAmb | 09 04 39.5 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **M17K** | **Holitna River** | **54.84** | **30** | P | **P** | **09 04 35.6** | **+0.4** |
| M17K | | | | IAmb | IAmb | 09 04 55.5 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **H17K** | **Granite Mounta** | **54.88** | **26** | P | **P** | **09 04 35.7** | **+0.2** |
| H17K | | | | IAmb | IAmb | 09 04 39.4 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **55.20** | **182** | P | **P** | **09 04 37.2** | **-0.9** |
| **STKA** | **Stephens Creek** | **55.20** | **182** | P | **P** | **09 04 36.9** | **-1.3** |
| | comp=Z,1.4nm,0.5s,baz=356,slow=4.2,SNR=8.7 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **O18K** | **Koktuh Hills** | **55.53** | **32** | P | **P** | **09 04 42.0** | **+1.7** |
| **HLK** | **Haleakala** | **55.54** | **80** | P | **P** | **09 04 40.0** | **-1.2** |
| **E18K** | **Tukpahlearik C** | **55.54** | **23** | P | **P** | **09 04 40.8** | **+0.6** |
| E18K | | | | IAmb | IAmb | 09 04 44.4 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **H18K** | **Honhosa River** | **55.57** | **26** | P | **P** | **09 04 41.6** | **+1.1** |
| H18K | | | | IAmb | IAmb | 09 04 50.4 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| **G18K** | **Tagagawik** | **55.71** | **25** | P | **P** | **09 04 42.7** | **+1.3** |
| G18K | | | | IAmb | IAmb | 09 04 56.6 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **FORT** | **Forrest** | **56.06** | **196** | P | **P** | **09 04 43.9** | **-0.4** |
| **KURK** | **Kurchatov** | **56.27** | **316** | P | **P** | **09 04 46.3** | **+0.6** |
| **KURBB** | **Kurchatov Arra** | **56.33** | **316** | P | **P** | **09 04 46.6** | **+0.6** |
| | comp=Z,1.0nm,0.4s,baz=91,slow=7.7,SNR=15 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **J19K** | **Poorman** | **56.35** | **28** | P | **P** | **09 04 46.8** | **+0.7** |
| J19K | | | | IAmb | IAmb | 09 04 51.4 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **H19K** | **Roundabout Mou** | **56.45** | **26** | P | **P** | **09 04 47.8** | **+1.1** |
| **C19K** | **Lookout Ridge** | **56.55** | **21** | P | **P** | **09 04 49.1** | **+1.6** |
| **BBOO** | **Buckleboo** | **56.55** | **187** | P | **P** | **09 04 46.9** | **-0.8** |
| **SYI** | **Shuyak Island** | **56.72** | **34** | P | **P** | **09 04 49.4** | **+0.7** |
| **E19K** | **Redstone River** | **56.77** | **23** | P | **P** | **09 04 49.7** | **+0.7** |
| E19K | | | | IAmb | IAmb | 09 05 00.3 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **56.81** | **22** | P | **P** | **09 04 49.7** | **+0.4** |
| D19K | | | | IAmb | IAmb | 09 04 53.5 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **J20K** | **Nowinta River** | **57.03** | **28** | P | **P** | **09 04 50.5** | **-0.3** |
| J20K | | | | IAmb | IAmb | 09 04 55.1 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **57.19** | **24** | P | **P** | **09 04 54.0** | **+2.1** |
| **IMAR** | **Indian Mountai** | **57.65** | **26** | P | **P** | **09 04 57.1** | **+1.9** |
| **F21K** | **Alatna River** | **58.08** | **24** | P | **P** | **09 04 59.0** | **+0.8** |
| F21K | | | | IAmb | IAmb | 09 05 27.6 | |
| | comp=Z,8.1nm,1.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **58.17** | **306** | P | **P** | **09 04 59.3** | **-0.2** |
| **D22K** | **Ayikyak River** | **58.82** | **22** | P | **P** | **09 05 04.0** | **+0.6** |
| D22K | | | | IAmb | IAmb | 09 05 08.6 | |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **58.94** | **23** | P | **P** | **09 05 04.6** | **+0.3** |
| **PWL** | **Port Wells** | **59.06** | **32** | P | **P** | **09 05 05.7** | **+0.5** |
| **SML** | **Sawmill** | **59.19** | **31** | P | **P** | **09 05 04.7** | **-1.4** |
| **GLI** | **Glacier Island** | **59.67** | **32** | P | **P** | **09 05 11.0** | **+1.6** |
| **C23K** | **Itkillik River** | **59.78** | **21** | P | **P** | **09 05 11.0** | **+1.1** |
| **COLA** | **College** | **59.83** | **27** | P | **P** | **09 05 11.8** | **+1.4** |
| COLA | | | | IAmb | IAmb | 09 05 14.9 | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **59.86** | **23** | P | **P** | **09 05 11.1** | **+0.4** |
| TOLK | | | | IAmb | IAmb | 09 05 27.7 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **HIN** | **Hinchinbrook I** | **59.92** | **33** | P | **P** | **09 05 10.9** | **-0.2** |
| **H24K** | **Noodor Dome** | **59.97** | **26** | P | **P** | **09 05 12.2** | **+0.7** |
| H24K | | | | IAmb | IAmb | 09 05 15.8 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **E24K** | **Your Creek** | **60.14** | **24** | P | **P** | **09 05 12.0** | **-0.5** |
| **IL31** | | **60.23** | **28** | P | **P** | **09 05 13.0** | **0.0** |
| IL31 | | | | IAmb | IAmb | 09 05 15.2 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **60.23** | **28** | P | **P** | **09 05 13.0** | **-0.1** |
| **ILAR** | **Eielson Array** | **60.23** | **28** | P | **P** | **09 05 14.5** | **+1.4** |
| | comp=Z,2.7nm,0.9s,baz=257,slow=5.7,SNR=19 | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **60.26** | **24** | P | **P** | **09 05 13.9** | **+0.6** |
| **C24K** | **Franklin Bluff** | **60.40** | **22** | P | **P** | **09 05 13.9** | **-0.3** |
| C24K | | | | IAmb | IAmb | 09 05 18.8 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **61.39** | **29** | P | **P** | **09 05 21.2** | **0.0** |
| SCRK | | | | IAmb | IAmb | 09 05 24.5 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.40** | **319** | P | **P** | **09 05 22.5** | **+1.1** |
| | comp=Z,5.7nm,0.7s,baz=91,slow=7.9,SNR=16 | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **61.68** | **32** | P | **P** | **09 05 22.3** | **-0.7** |
| **KK31** | **Karatay Array** | **62.09** | **308** | P | **P** | **09 05 26.1** | **-0.1** |
| KK31 | | | | IAmb | IAmb | 09 05 42.5 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **62.09** | **308** | P | **P** | **09 05 26.3** | **+0.2** |
| KKAR | | | | IAmb | IAmb | 09 05 42.5 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **GAR** | **Garm** | **62.82** | **303** | P | **P** | **09 05 31.6** | **+0.3** |
| **CHGR** | **Chuyangaron** | **63.77** | **303** | P | **P** | **09 05 36.4** | **-1.1** |
| **SIMJ** | **Simiganj** | **63.89** | **303** | P | **P** | **09 05 38.1** | **-0.2** |
| **EPYK** | **Eagle Plains** | **64.54** | **26** | P | **P** | **09 05 41.3** | **-0.7** |
| EPYK | | | | IAmb | IAmb | 09 05 46.1 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **N31M** | **Braeburn, Yuko** | **65.16** | **31** | P | **P** | **09 05 46.5** | **+0.5** |
| N31M | | | | IAmb | IAmb | 09 06 03.8 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **65.50** | **25** | P | **P** | **09 05 49.7** | **+1.6** |
| G31M | | | | IAmb | IAmb | 09 05 51.7 | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **65.72** | **24** | P | **P** | **09 05 49.5** | **0.0** |
| **ABKAR** | **Akbulak array** | **68.37** | **316** | P | **P** | **09 06 06.7** | **0.0** |
| **ARCES** | **ARCESS Array B** | **77.20** | **341** | P | **P** | **09 06 59.4** | **+0.6** |
| | comp=Z,2.2nm,0.6s,baz=74,slow=9.0,SNR=7.3 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **B08A** | **Colville Reser** | **77.28** | **43** | P | **P** | **09 06 59.3** | **-0.3** |
| **G08A** | **Pilot Rock** | **78.65** | **46** | P | **P** | **09 07 06.0** | **-1.5** |
| **KBZ** | **Khabaz** | **81.24** | **314** | P | **P** | **09 07 21.3** | **0.0** |
| | comp=Z,2.1nm,0.8s,baz=121,slow=5.5,SNR=4.6 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **81.58** | **334** | P | **P** | **09 07 23.2** | **+0.5** |
| | comp=Z,1.1nm,0.5s,baz=64,slow=4.5,SNR=8.7 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.75** | **52** | P | **P** | **09 07 24.9** | **+0.4** |
| **NVAR** | **Mina Array Bea** | **81.75** | **52** | P | **P** | **09 07 26.4** | **+2.0** |
| | comp=Z,1.3nm,0.9s,baz=277,slow=5.9,SNR=8.5 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **85.86** | **45** | P | **P** | **09 07 47.4** | **+2.1** |
| | comp=Z,0.4nm,0.7s,baz=318,slow=2.0,SNR=4.3 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **89.23** | **313** | P | **P** | **09 08 02.6** | **+1.1** |
| | comp=Z,0.3nm,0.7s,baz=46,slow=4.2,SNR=1.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **96.72** | **54** | P | **P** | **09 08 37.9** | **+1.7** |
| | comp=Z,0.2nm,0.8s,baz=257,slow=3.4,SNR=2.5 | | | | | | |
| | comp=Z,0.2nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **146.78** | **129** | PKPbc | **PKPab** | **09 14 48.5** | **-0.2** |
| | comp=Z,3.6nm,1.1s,baz=280,slow=4.6,SNR=4.1 | | | | | | |
| **LPAZ** | **La Paz** | **149.46** | **82** | PKPbc | **PKiKP** | **09 14 56.4** | **-0.5** |
| | comp=Z,1.8nm,0.7s,baz=256,slow=2.5,SNR=7.6 | | | | | | |

***IDC 20 09:05:10.8±3.6, 53°.75N×88°.03E, h0km, mbtmp2.8/2, ML2.5/2, Error ellipse: s-maj=31.4km s-min=17.3km az=59.0, Southwestern Siberia***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.91** | **277** | I | I | 09 17 10.0 | |
| | baz=97,slow=317,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.91** | **277** | Pg | Pn | 09 05 45.4 | +0.8 |
| | 1.5nm,0.3s,baz=99,slow=14,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 09 06 11.5 | |
| | 1.5nm,0.3s,baz=97,slow=32,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.63** | **246** | Pn | Pn | 09 06 49.8 | +0.4 |
| | 0.1nm,0.3s,baz=62,slow=14,SNR=5.3 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.88** | **210** | Pn | Pn | 09 07 07.1 | +0.6 |
| | 0.1nm,0.3s,baz=20,slow=12,SNR=2.5 | | | | | | |
| MKAR | | | | Sn | Sn | 09 08 37.6 | +1.2 |
| | 0.1nm,0.3s,baz=24,slow=28,SNR=2.2 | | | | | | |
| MKAR | | | | Lg | Lg | 09 09 14.3 | |
| | baz=25,slow=30,SNR=2.0 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

***IDC 20 09:07:08.4±5.0, 17°.34S×179°.40W, h469km±108km, mb3.1/4, mbtmp4.0/4, Error ellipse: s-maj=122.1km s-min=34.6km az=14.0, Fiji Islands region***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.08** | **240** | P | P | 09 13 46.1 | +0.1 |
| | 3.7nm,1.2s,baz=104,slow=17,SNR=2.3 | | | | | | |
| STKA | | | | S | S | 09 19 04.7 | +0.4 |
| | 1.6nm,1.0s,baz=98,slow=13,SNR=6.3 | | | | | | |
| | 3.7nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.81** | **259** | P | P | 09 14 31.2 | -0.7 |
| | 0.4nm,0.5s,baz=95,slow=8.1,SNR=14 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.04** | **254** | P | P | 09 14 33.9 | +0.2 |
| | 1.6nm,0.5s,baz=87,slow=8.5,SNR=33 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.71** | **180** | P | P | 09 17 47.7 | +0.1 |
| | 1.8nm,1.1s,baz=106,slow=2.0,SNR=2.1 | | | | | | |
| | 1.8nm,1.1s | | | | | | |

*NEIC **20** 09:15:47.8±0.8, 5°.3S±0°.1×151°.5E±0°.1, h80km±17km, mb4.5/15, Error ellipse: s-maj=23.9km s-min=8.2km az=125.0*

*IDC **20** 09:15:48.8±3.3, 5°.32S×151°.32E, h90km±25km, mb3.8/9, mbtmp4.1/10, MS3.7/1, Error ellipse: s-maj=33.2km s-min=16.6km az=98.0*

***ISC 20 09:15:45.1±0.6, 5°.32S±0°.08×151°.6E±0°.1, h57km, n46, σ1°35/49, mb4.3/17, New Britain region***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.28** | **28** | Pn | **Pn** | **09 16 10.1** | **+3.3** |
| **PMG** | **Port Moresby** | **5.96** | **227** | P | **Pn** | **09 17 13.7** | **+2.9** |
| **PMG** | **Port Moresby** | **5.96** | **227** | P | **Pn** | **09 17 14.0** | **+3.2** |
| **PMG** | **Port Moresby** | **5.96** | **227** | | **Pn** | **09 17 13.4** | **+2.6** |
| **PMG** | **Port Moresby** | **5.96** | **227** | P | **Pn** | **09 17 13.2** | **+2.4** |
| | 53nm,0.6s,baz=28,slow=18,SNR=13 | | | | | | |
| PMG | | | | S | **Sn** | **09 18 17.9** | **+0.2** |
| | 84nm,0.5s,baz=152,slow=19,SNR=19 | | | | | | |
| **HNR** | **Honiara** | **9.27** | **117** | LR | LR | 09 21 33.3 | |
| | comp=Z,462nm,18.9s,baz=268,slow=36 | | | | | | |
| **COEN** | **Coen** | **11.91** | **223** | Pn | **Pn** | **09 18 34.6** | **+2.4** |
| **CTA** | **Charters Tower** | **15.56** | **199** | P | **P** | **09 19 24.1** | **-0.1** |
| | 0.2nm,0.8s,baz=35,slow=16,SNR=3.5 | | | | | | |
| **QIS** | **Mount Isa** | **19.08** | **216** | P | **Pn** | **09 20 03.8** | **-0.7** |
| **FAKI** | **Fak Fak** | **19.41** | **276** | P | **P** | **09 20 06.3** | **-0.5** |
| FAKI | | | | IAmb | IAmb | 09 20 36.1 | |
| | comp=Z,41nm,1.1s | | | | | | |
| **GUMO** | **Guam** | **19.93** | **341** | P | **P** | **09 20 13.2** | **+0.8** |
| | comp=Z,102nm,0.7s,baz=288,slow=16,SNR=2.3 | | | | | | |
| **EIDS** | **Eidsvold** | **19.94** | **181** | P | **Pn** | **09 20 13.9** | **-0.7** |
| **KDU** | **Kakadu** | **20.21** | **247** | P | **P** | **09 20 15.3** | **-0.2** |
| **MTN** | **Manton Dam** | **21.50** | **248** | P | **P** | **09 20 29.8** | **+0.4** |
| **MTN** | **Manton Dam** | **21.50** | **248** | P | **P** | **09 20 28.7** | **-0.7** |
| MTN | | | | IAmb | IAmb | 09 21 03.6 | |
| | comp=Z,35nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **22.02** | **141** | P | **P** | **09 20 35.8** | **+0.8** |
| DZM | | | | IAmb | IAmb | 09 20 37.8 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.03** | **228** | P | **P** | **09 20 34.8** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 09 20 49.8 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.04** | **227** | P | **P** | **09 20 35.2** | **0.0** |
| WR0 | | | | IAmb | IAmb | 09 20 50.5 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.16** | **228** | P | **P** | **09 20 36.4** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 09 20 38.5 | |
| | comp=Z,9.8nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.17** | **228** | P | **P** | **09 20 36.1** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 09 20 38.9 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.18** | **228** | P | **P** | **09 20 36.9** | **+0.2** |
| **WRA** | **Warramunga Arr** | **22.18** | **228** | P | **P** | **09 20 35.7** | **-1.0** |
| | comp=Z,7.5nm,0.6s,baz=52,slow=9.8,SNR=55 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 24 31.9** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=47,slow=1.8,SNR=2.9 | | | | | | |
| WRA | | | | ScP | **ScP** | **09 28 01.2** | **-3.5** |
| | comp=Z,0.2nm,0.5s,baz=53,slow=3.1,SNR=1.5 | | | | | | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **24.63** | **244** | P | **P** | **09 21 00.5** | **0.0** |
| KNRA | | | | IAmb | IAmb | 09 21 06.4 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **AS01** | **Alice Springs** | **24.91** | **221** | P | **P** | **09 21 02.8** | **-0.2** |
| **AS31** | **Alice Springs** | **24.94** | **221** | P | **P** | **09 21 03.3** | **0.0** |
| **ASAR** | **Alice Springs** | **24.94** | **221** | P | **P** | **09 21 04.0** | **+0.7** |
| **ASAR** | **Alice Springs** | **24.94** | **221** | P | **P** | **09 21 02.4** | **-0.9** |
| | comp=Z,13nm,0.7s,baz=57,slow=8.7,SNR=144 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 24 37.1** | **-0.6** |
| | comp=Z,0.5nm,0.7s,baz=46,slow=2.7,SNR=3.0 | | | | | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **OOD** | **Oodnadatta** | **26.97** | **212** | P | **P** | **09 21 21.3** | **-0.2** |
| **LCRK** | **Leigh Creek** | **27.97** | **205** | P | **P** | **09 21 30.3** | **-0.2** |
| **STKA** | **Stephens Creek** | **28.02** | **198** | P | **P** | **09 21 30.6** | **-0.2** |
| **STKA** | **Stephens Creek** | **28.02** | **198** | P | **P** | **09 21 30.4** | **-0.5** |
| | comp=Z,3.9nm,1.1s,baz=46,slow=16,SNR=4.8 | | | | | | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.32** | **241** | P | **P** | **09 21 33.2** | **-0.6** |
| **WRKA** | **Warakurna** | **29.70** | **226** | P | **P** | **09 21 45.2** | **-0.8** |
| **MULG** | **Mulgathing** | **29.81** | **212** | P | **P** | **09 21 45.9** | **-0.9** |
| **HTT** | **Hallett** | **30.34** | **201** | P | **P** | **09 21 51.1** | **-0.4** |
| **BBOO** | **Buckleboo** | **30.94** | **206** | P | **P** | **09 21 56.0** | **-0.7** |
| BBOO | | | | IAmb | IAmb | 09 22 39.7 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **33.61** | **218** | P | **P** | **09 22 19.7** | **-0.5** |
| **COCO** | **West Island** | **54.44** | **259** | P | **P** | **09 25 07.2** | **+0.1** |
| **SONM** | **Songino Array** | **66.11** | **328** | P | **P** | **09 26 26.8** | **+0.2** |
| | comp=Z,0.9nm,0.6s,baz=134,slow=4.1,SNR=4.8 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **79.91** | **319** | P | **P** | **09 27 46.8** | **-1.2** |
| | comp=Z,0.2nm,0.5s,baz=96,slow=8.8,SNR=2.8 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.90** | **327** | P | **P** | **09 27 50.4** | **-2.7** |
| | comp=Z,0.6nm,0.3s,baz=75,slow=1.6,SNR=2.1 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.45** | **322** | P | **P** | **09 28 05.3** | **-1.2** |
| | comp=Z,0.8nm,1.0s,baz=112,slow=4.1,SNR=2.5 | | | | | | |
| | comp=Z,0.8nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.64** | **180** | P | **P** | **09 28 12.1** | **-0.4** |
| | comp=Z,1.3nm,0.7s,baz=99,slow=0.2,SNR=12 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.38** | **52** | P | **P** | **09 28 55.5** | **+0.8** |
| | comp=Z,0.6nm,0.8s,baz=246,slow=8.8,SNR=5.1 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.28** | **287** | PKPbc | **PKPbc** | **09 35 26.9** | **-1.7** |
| | comp=Z,2.9nm,0.7s,baz=47,slow=3.2,SNR=19 | | | | | | |
| **BDFB** | **Brasilia** | **151.55** | **137** | PKPbc | **PKPbc** | **09 35 33.6** | **-0.5** |
| | comp=Z,3.2nm,0.7s,baz=185,slow=2.7,SNR=5.1 | | | | | | |

***IDC 20 09:19:49.4±4.4, 22°.78S×170°.74E, h0km, mb3.8/4, mbtmp3.7/4, MS3.5/2, Error ellipse: s-maj=407.7km s-min=35.1km az=161.0, Southeast of Loyalty Islands***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **26.22** | **297** | LR | LR | 09 34 07.1 | |
| | comp=Z,50nm,19.6s,baz=22,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **33.81** | **261** | P | P | 09 26 33.4 | -0.1 |
| | 0.3nm,0.6s,baz=91,slow=8.6,SNR=4.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **79.66** | **335** | LR | LR | 10 02 36.1 | |
| | comp=Z,49nm,21.8s,baz=41,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.10** | **48** | P | P | 09 32 50.7 | -0.9 |
| | 0.2nm,0.6s,baz=240,slow=7.1,SNR=2.8 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **97.22** | **61** | P | P | 09 33 24.4 | -0.1 |
| | 0.3nm,0.7s,baz=224,slow=5.2,SNR=4.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **97.98** | **47** | P | Pdif | 09 33 28.7 | +0.8 |
| | 0.2nm,0.7s,baz=226,slow=9.9,SNR=1.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

*IDC **20** 09:19:58.3±42.0, 15°.76S×171°.85W, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=825.8km s-min=178.9km az=79.0*

*NEIC **20** 09:21:24.6±0.8, 16°.8S±0°.3×176°.8W±0°.1, h524km±13km, mb4.2/9, Error ellipse: s-maj=42.3km s-min=18.2km az=180.0*

***ISC 20 09:21:24.2±1.5, 16°.8S±0°.4×176°.6W±0°.1, h550km, n16, σ1°20/16, mb4.2/8, Fiji Islands region***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.21** | **259** | P | **P** | **09 22 55.4** | **-0.5** |
| **NIUE** | **Niue** | **6.73** | **111** | P | **P** | **09 23 07.5** | **-2.0** |
| **BHW** | **Baring Head** | **25.61** | **195** | P | **P** | **09 26 11.8** | **+1.7** |
| **PPTF** | **Pamatai, Papee** | **25.82** | **96** | P | **P** | **09 26 14.7** | **+2.3** |
| **EIDS** | **Eidsvold** | **31.29** | **249** | P | **P** | **09 26 58.7** | **-1.1** |
| EIDS | | | | IAmb | IAmb | 09 27 09.5 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **35.36** | **259** | P | **P** | **09 27 34.2** | **0.0** |
| CTAO | | | | IAmb | IAmb | 09 27 50.8 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **40.69** | **240** | P | **P** | **09 28 16.3** | **-1.1** |
| **STKA** | **Stephens Creek** | **40.69** | **240** | P | **P** | **09 28 16.9** | **-0.4** |
| | comp=Z,0.9nm,0.4s,baz=56,slow=7.3,SNR=5.4 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **45.47** | **240** | P | **P** | **09 28 54.4** | **-0.2** |
| BBOO | | | | IAmb | IAmb | 09 29 05.3 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.52** | **259** | P | **P** | **09 29 03.5** | **+0.7** |
| WB0 | | | | IAmb | IAmb | 09 29 09.5 | |
| | comp=Z,6.5nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.56** | **258** | P | **P** | **09 29 03.6** | **+0.6** |
| **WRA** | **Warramunga Arr** | **46.56** | **258** | P | **P** | **09 29 03.8** | **+0.8** |
| | comp=Z,1.0nm,0.7s,baz=94,slow=6.8,SNR=19 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **46.77** | **253** | P | **P** | **09 29 05.4** | **+0.7** |
| **ASAR** | **Alice Springs** | **46.78** | **253** | P | **P** | **09 29 04.9** | **+0.2** |
| **ASAR** | **Alice Springs** | **46.78** | **253** | P | **P** | **09 29 05.5** | **+0.8** |
| | comp=Z,4.9nm,0.6s,baz=89,slow=8.3,SNR=79 | | | | | | |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **52.06** | **244** | P | **P** | **09 29 44.3** | **+0.9** |
| FORT | | | | IAmb | IAmb | 09 29 59.2 | |
| | comp=Z,14nm,1.2s | | | | | | |

*IDC **20** 09:26:04.9±1.5, 56°.00S×143°.97W, h0km, mb4.1/5, mbtmp4.1/5, MS3.8/16, Error ellipse: s-maj=44.8km s-min=28.1km az=25.0*

***ISC 20 09:26:06.7±1.5, 56°.05S±0°.3×144°.0W±0°.2, h10km, n34, σ1°23/9, mb4.2/7, MS3.9/16, 4C, Pacific-Antarctic Ridge***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **31.32** | **288** | LR | LR | 09 42 01.4 | |
| | comp=Z,105nm,21.4s,baz=322,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.19** | **180** | P | **P** | **09 32 52.7** | **+0.7** |
| | 3.9nm,1.1s,baz=62,slow=3.7,SNR=5.7 | | | | | | |
| QSPA | | | | LR | LR | 09 44 01.6 | |
| | comp=Z,171nm,19.9s,baz=70,slow=32 | | | | | | |
| | 3.9nm,1.1s | | | | | | |
| **RAO** | **Raoul Island** | **35.94** | **304** | LR | LR | 09 45 11.6 | |
| | comp=Z,74nm,20.1s,baz=345,slow=32 | | | | | | |
| **RAR** | **Rarotonga** | **36.65** | **335** | LR | LR | 09 43 27.9 | |
| | comp=Z,226nm,20.8s,baz=152,slow=28 | | | | | | |
| **H03S2** | **Juan Fernandez** | **49.02** | **92** | T | T | 10 27 33.2 | |
| | baz=220,slow=74,SNR=97 | | | | | | |
| **H03S1** | **Juan Fernandez** | **49.02** | **92** | T | T | 10 27 34.4 | |
| | baz=220,slow=74,SNR=99 | | | | | | |
| **H03S3** | **Juan Fernandez** | **49.03** | **92** | T | T | 10 27 33.0 | |
| | baz=220,slow=74,SNR=94 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **49.05** | **162** | ⇑P | **P** | **09 34 52.8** | **-0.4** |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **H03N3** | **Juan Fernandez** | **49.30** | **91** | T | T | 10 27 40.0 | |
| | baz=223,slow=72,SNR=103 | | | | | | |
| **H03N2** | **Juan Fernandez** | **49.31** | **91** | T | T | 10 27 37.2 | |
| | baz=223,slow=72,SNR=59 | | | | | | |
| **H03N1** | **Juan Fernandez** | **49.32** | **91** | T | T | 10 27 52.0 | |
| | baz=223,slow=72,SNR=106 | | | | | | |
| **DZM** | **Mont Dzumac** | **49.68** | **292** | LR | LR | 09 53 03.7 | |
| | comp=Z,71nm,18.3s,baz=44,slow=33 | | | | | | |
| **SNAA** | **Sanae** | **49.76** | **165** | ⇑P | **P** | **09 34 58.6** | **-0.1** |
| | comp=Z,100nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **49.76** | **165** | P | **P** | **09 34 57.0** | **-1.7** |
| | comp=Z,5.0nm,1.0s,baz=194,slow=9.0,SNR=13 | | | | | | |
| SNAA | | | | LR | LR | 09 53 19.7 | |
| | comp=Z,73nm,18.0s,baz=255,slow=33 | | | | | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **49.80** | **162** | ⇑P | **P** | **09 34 58.3** | **-0.6** |
| | comp=Z,13nm,1.0s | | | | | | |
| **TROLL** | **Troll, Antarti** | **50.19** | **167** | ⇑P | **P** | **09 35 02.6** | **+0.5** |
| | comp=Z,206nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **55.14** | **192** | LR | LR | 09 57 05.6 | |
| | comp=Z,115nm,18.3s,baz=90,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **55.74** | **263** | LR | LR | 09 55 29.4 | |
| | comp=Z,89nm,20.3s,baz=194,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **66.38** | **262** | P | **P** | **09 36 54.1** | **-1.6** |
| | comp=Z,1.4nm,0.9s,baz=134,slow=6.7,SNR=12 | | | | | | |
| ASAR | | | | LR | LR | 10 01 41.6 | |
| | comp=Z,88nm,21.6s,baz=143,slow=32 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **CPUP** | **Villa Florida** | **66.77** | **103** | LR | LR | 10 01 20.1 | |
| | comp=Z

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| D24K | Happy Valley | 1.35 251 | P | Pn | 09 34 13.4 | -0.9 | | |
| | baz=64,SNR=1000 | | | | | | | |
| D27M | Malcolm River | 1.56 102 | Pn | Pn | 09 34 16.8 | -0.5 | | |
| D27M | | | Sn | Sg | 09 34 39.6 | +0.8 | | |
| D27M | Malcolm River | 1.56 102 | P | Pn | 09 34 16.8 | -0.5 | | |
| | baz=289,SNR=1000 | | | | | | | |
| TOLK | Toolik Lake Re | 1.83 240 | Pn | Pn | 09 34 20.5 | -0.5 | | |
| TOLK | | | IAML | | 09 34 53.3 | | | |
| | comp=E,6µm,0.9s | | | | | | | |
| TOLK | | | IAML | | 09 34 56.3 | | | |
| | comp=N,6µm,0.9s | | | | | | | |
| TOLK | Toolik Lake Re | 1.83 240 | Sn | Sb | 09 34 47.4 | +1.3 | | |
| TOLK | Toolik Lake Re | 1.83 240 | P | Pn | 09 34 20.5 | -0.5 | | |
| | baz=52,SNR=922 | | | | | | | |
| C23K | Itkillik River | 1.88 279 | | Pn | 09 34 20.7 | -0.9 | | |
| C23K | Itkillik River | 1.88 279 | P | Pn | 09 34 20.6 | -1.0 | | |
| | baz=92,SNR=1000 | | | | | | | |
| E24K | Your Creek | 1.95 219 | | Pn | 09 34 23.1 | +0.5 | | |
| E24K | | | Sn | Sn | 09 34 49.4 | +2.0 | | |
| E24K | | | IAML | | 09 34 55.5 | | | |
| | comp=E,3µm,0.8s | | | | | | | |
| E24K | | | IAML | | 09 34 57.0 | | | |
| | comp=N,4µm,1.1s | | | | | | | |
| E24K | Your Creek | 1.95 219 | P | Pn | 09 34 22.5 | 0.0 | | |
| | baz=33,SNR=944 | | | | | | | |
| E27K | Coleen River | 1.96 136 | Pn | Pn | 09 34 23.2 | +0.6 | | |
| E27K | | | Sn | Sb | 09 34 49.5 | -0.1 | | |
| E27K | Coleen River | 1.96 136 | P | Pn | 09 34 23.2 | +0.6 | | |
| | baz=320,SNR=764 | | | | | | | |
| F26K | Sheenjek River | 1.98 168 | | Pn | 09 34 23.6 | +0.7 | | |
| F26K | Sheenjek River | 1.98 168 | | Sn | 09 34 49.5 | +1.4 | | |
| F26K | Sheenjek River | 1.98 168 | P | Pn | 09 34 23.6 | +0.7 | | |
| | baz=348,SNR=745 | | | | | | | |
| D23K | Nanushuk River | 2.04 254 | | Pn | 09 34 23.2 | -0.7 | | |
| D23K | | | IAML | | 09 35 03.8 | | | |
| | comp=E,3µm,1.2s | | | | | | | |
| D23K | | | IAML | | 09 35 06.9 | | | |
| | comp=N,4µm,0.9s | | | | | | | |
| D23K | Nanushuk River | 2.04 254 | P | Pn | 09 34 23.1 | -0.7 | | |
| | baz=66 | | | | | | | |
| F25K | Christian Rive | 2.04 184 | | Pn | 09 34 24.3 | +0.5 | | |
| F25K | Christian Rive | 2.04 184 | P | Pn | 09 34 24.1 | +0.3 | | |
| | baz=2.3,SNR=998 | | | | | | | |
| BMAR | Burnt Mountain | 2.21 173 | | Pn | 09 34 27.1 | +0.8 | | |
| E23K | Chandalar | 2.23 227 | Pn | Pn | 09 34 26.5 | 0.0 | | |
| E23K | | | Sn | Sb | 09 34 57.7 | +0.2 | | |
| E23K | | | IAML | | 09 35 03.2 | | | |
| | comp=N,3µm,1.1s | | | | | | | |
| E23K | | | IAML | | 09 35 03.4 | | | |
| | comp=E,3µm,1.2s | | | | | | | |
| E23K | Chandalar | 2.23 227 | P | Pn | 09 34 26.4 | -0.1 | | |
| | baz=41,SNR=392 | | | | | | | |
| E28M | Babbage River | 2.29 114 | Pn | Pn | 09 34 27.7 | +0.5 | | |
| E28M | Babbage River | 2.29 114 | P | Pn | 09 34 27.9 | +0.7 | | |
| | baz=301,SNR=689 | | | | | | | |
| D28M | Stokes Point | 2.31 94 | IAML | | 09 35 15.3 | | | |
| | comp=N,4µm,1.0s | | | | | | | |
| D28M | Stokes Point | 2.31 94 | P | Pn | 09 34 28.2 | +0.6 | | |
| | baz=282,SNR=622 | | | | | | | |
| F24K | Squaw Lake | 2.32 206 | Pn | Pn | 09 34 28.3 | +0.6 | | |
| F24K | | | Sn | Sb | 09 35 01.6 | +1.5 | | |
| F24K | | | IAML | | 09 35 05.8 | | | |
| | comp=N,2µm,0.8s | | | | | | | |
| F24K | | | IAML | | 09 35 08.1 | | | |
| | comp=E,3µm,1.0s | | | | | | | |
| F24K | Squaw Lake | 2.32 206 | P | Pn | 09 34 27.8 | +0.1 | | |
| | baz=21,SNR=338 | | | | | | | |
| G26K | Porcupine Rive | 2.74 168 | P | Pn | 09 34 34.3 | +0.9 | | |
| | baz=349,SNR=207 | | | | | | | |
| D22K | Ayikyak River | 2.75 258 | | Pn | 09 34 32.7 | -0.9 | | |
| D22K | Ayikyak River | 2.75 258 | P | Pn | 09 34 32.7 | -0.9 | | |
| | baz=69,SNR=169 | | | | | | | |
| E22K | Anaktuvuk Pass | 2.81 241 | Pn | Pn | 09 34 33.6 | -0.8 | | |
| E22K | | | IAML | | 09 35 16.9 | | | |
| | comp=E,1µm,0.8s | | | | | | | |
| E22K | | | IAML | | 09 35 28.1 | | | |
| | comp=N,2µm,0.7s | | | | | | | |
| E22K | Anaktuvuk Pass | 2.81 241 | P | Pn | 09 34 33.5 | -0.8 | | |
| | baz=53,SNR=135 | | | | | | | |
| F28M | Old Crow | 2.82 133 | | Pn | 09 34 34.7 | +0.3 | | |
| F28M | | | IAML | | 09 35 24.2 | | | |
| | comp=E,2µm,1.1s | | | | | | | |
| F28M | | | IAML | | 09 35 24.4 | | | |
| | comp=N,2µm,1.2s | | | | | | | |
| F28M | Old Crow | 2.82 133 | P | Pn | 09 34 34.8 | +0.3 | | |
| | baz=319,SNR=121 | | | | | | | |
| G25K | Bearman Lake | 2.89 187 | P | Pn | 09 34 35.9 | +0.5 | | |
| | baz=4.8,SNR=111 | | | | | | | |
| B22K | Teshekpuk Lake | 2.90 288 | Pn | Pn | 09 34 34.6 | -1.0 | | |
| B22K | Teshekpuk Lake | 2.90 288 | P | Pn | 09 34 34.3 | -1.3 | | |
| | baz=99,SNR=124 | | | | | | | |
| E29M | Blow River | 2.92 112 | Pn | Pn | 09 34 36.4 | +0.5 | | |
| E29M | | | IAML | | 09 35 25.8 | | | |
| | comp=E,1µm,0.6s | | | | | | | |
| E29M | | | IAML | | 09 35 26.6 | | | |
| | comp=N,1µm,0.9s | | | | | | | |
| E29M | Blow River | 2.92 112 | P | Pn | 09 34 35.9 | 0.0 | | |
| | baz=300,SNR=267 | | | | | | | |
| COLD | Coldfoot | 3.02 220 | Pn | Pn | 09 34 37.3 | 0.0 | | |
| COLD | Coldfoot | 3.02 220 | P | Pn | 09 34 37.4 | +0.1 | | |
| | baz=33,SNR=99 | | | | | | | |
| G24K | Hadweenzic Riv | 3.05 197 | | Pn | 09 34 37.5 | -0.1 | | |
| G24K | | | IAML | | 09 35 27.6 | | | |
| | comp=N,2µm,1.3s | | | | | | | |
| G24K | | | IAML | | 09 35 34.8 | | | |
| | comp=E,2µm,0.8s | | | | | | | |
| G24K | Hadweenzic Riv | 3.05 197 | P | Pn | 09 34 37.6 | 0.0 | | |
| | baz=13,SNR=172 | | | | | | | |
| FYU | Fort Yukon | 3.07 180 | Pn | Pn | 09 34 38.1 | +0.2 | | |
| FYU | | | IAML | | 09 35 35.7 | | | |
| | comp=E,1µm,1.8s | | | | | | | |
| FYU | | | IAML | | 09 35 38.4 | | | |
| | comp=N,2µm,1.6s | | | | | | | |
| G27K | Doyon Strip | 3.13 153 | Pn | Pn | 09 34 38.8 | 0.0 | | |
| G27K | Doyon Strip | 3.13 153 | P | Pn | 09 34 38.7 | 0.0 | | |
| | baz=336,SNR=83 | | | | | | | |
| B21K | Ikpikpuk River | 3.28 274 | | Pn | 09 34 40.1 | -0.7 | | |
| B21K | | | IAML | | 09 35 49.7 | | | |
| | comp=E,2µm,1.1s | | | | | | | |
| B21K | Ikpikpuk River | 3.28 274 | P | Pn | 09 34 40.1 | -0.7 | | |
| | baz=84 | | | | | | | |
| F22K | John River | 3.31 233 | P | Pn | 09 34 40.0 | -1.3 | | |
| | baz=45 | | | | | | | |
| E21K | Killik River | 3.35 253 | | Pn | 09 34 40.2 | -1.6 | | |
| E21K | | | IAML | | 09 35 47.3 | | | |
| | comp=E,2µm,0.9s | | | | | | | |
| E21K | Killik River | 3.35 253 | P | Pn | 09 34 40.2 | -1.6 | | |
| | baz=64 | | | | | | | |
| H25L | Birch Creek | 3.38 184 | | Pn | 09 34 42.5 | +0.4 | | |
| H25L | Birch Creek | 3.38 184 | P | Pn | 09 34 43.4 | +1.3 | | |
| | baz=2.5 | | | | | | | |
| C21K | Knifeblade Rid | 3.40 267 | P | Pn | 09 34 41.9 | -0.6 | | |
| | baz=76,SNR=104 | | | | | | | |
| G23K | Bananza Creek | 3.42 214 | Pn | Pn | 09 34 42.6 | -0.3 | | |
| G23K | | | IAML | | 09 35 43.8 | | | |
| | comp=N,931nm,1.9s | | | | | | | |
| G23K | Bananza Creek | 3.42 214 | P | Pn | 09 34 43.0 | +0.1 | | |
| | baz=28,SNR=153 | | | | | | | |
| A22K | Sinclair Lake | 3.57 297 | P | Pn | 09 34 43.6 | -1.2 | | |
| | baz=107,SNR=15 | | | | | | | |
| G22K | Bettles | 3.57 224 | P | Pn | 09 34 44.7 | -0.1 | | |
| | baz=36 | | | | | | | |
| H27K | Steamboat Moun | 3.68 156 | P | Pn | 09 34 47.4 | +1.0 | | |
| | baz=339,SNR=73 | | | | | | | |
| G29M | Pine Creek | 3.82 132 | Pn | Pn | 09 34 48.8 | +0.5 | | |
| G29M | | | IAML | | 09 36 06.2 | | | |
| | comp=N,1µm,0.9s | | | | | | | |
| G29M | Pine Creek | 3.82 132 | P | Pn | 09 34 49.0 | +0.6 | | |
| | baz=319,SNR=198 | | | | | | | |
| F21K | Alatna River | 3.88 236 | Pn | Pn | 09 34 48.2 | -0.8 | | |
| F21K | | | IAML | | 09 35 54.8 | | | |
| | comp=E,1µm,0.8s | | | | | | | |
| F21K | Alatna River | 3.88 236 | P | Pn | 09 34 48.5 | -0.6 | | |
| | baz=46,SNR=102 | | | | | | | |
| H24K | Noodor Dome | 3.93 196 | Pn | Pn | 09 34 50.0 | +0.3 | | |
| H24K | | | IAML | | 09 35 57.1 | | | |
| | comp=E,866nm,1.6s | | | | | | | |
| H24K | | | IAML | | 09 36 02.7 | | | |
| | comp=N,515nm,0.9s | | | | | | | |
| H24K | Noodor Dome | 3.93 196 | P | Pn | 09 34 50.2 | +0.4 | | |
| | baz=12,SNR=108 | | | | | | | |
| F30M | Barrier River | 4.01 116 | P | Pn | 09 34 52.0 | +1.2 | | |
| | baz=305,SNR=110 | | | | | | | |
| PRP | Porcupine Dome | 4.12 182 | | Pn | 09 34 52.9 | +0.4 | | |
| PRP | Porcupine Dome | 4.12 182 | P | Pn | 09 34 53.0 | +0.5 | | |
| | baz=0.6,SNR=226 | | | | | | | |
| B20K | Meade River | 4.15 281 | Pn | Pn | 09 34 51.6 | -1.1 | | |
| B20K | Meade River | 4.15 281 | P | Pn | 09 34 51.8 | -0.9 | | |
| | baz=89,SNR=42 | | | | | | | |
| H23K | Yukon River | 4.15 205 | | Pn | 09 34 52.7 | -0.1 | | |
| H23K | | | IAML | | 09 36 02.7 | | | |
| | comp=E,860nm,1.9s | | | | | | | |
| H23K | | | IAML | | 09 36 16.7 | | | |
| | comp=N,607nm,1.1s | | | | | | | |
| H23K | Yukon River | 4.15 205 | P | Pn | 09 34 52.8 | 0.0 | | |
| | baz=20,SNR=57 | | | | | | | |
| D20K | Etivluk River | 4.16 263 | | Pn | 09 34 53.0 | +0.1 | | |
| D20K | Etivluk River | 4.16 263 | P | Pn | 09 34 53.0 | +0.1 | | |
| | baz=71 | | | | | | | |
| E20K | Nigu River | 4.18 256 | | Pn | 09 34 53.4 | +0.2 | | |
| A21K | Barrow | 4.18 299 | P | Pn | 09 34 51.9 | -1.3 | | |
| | baz=108,SNR=28 | | | | | | | |
| I27K | Kandik River | 4.27 159 | P | Pn | 09 34 55.6 | +1.1 | | |
| | baz=342,SNR=89 | | | | | | | |
| G30M | tAoh Zraii Nji | 4.27 124 | Pn | Pn | 09 34 54.4 | -0.1 | | |
| G30M | | | IAML | | 09 36 16.2 | | | |
| | comp=N,516nm,1.1s | | | | | | | |
| G30M | tAoh Zraii Nji | 4.27 124 | P | Pn | 09 34 54.1 | -0.4 | | |
| | baz=313,SNR=60 | | | | | | | |
| H29M | Whitestone | 4.29 139 | Pn | Pn | 09 34 55.1 | +0.4 | | |
| H29M | Whitestone | 4.29 139 | P | Pn | 09 34 55.5 | +0.9 | | |
| | baz=326,SNR=108 | | | | | | | |
| G21K | Allakaket | 4.39 229 | | Pn | 09 34 55.2 | -0.9 | | |
| G21K | | | IAML | | 09 36 10.2 | | | |
| | comp=N,715nm,2.1s | | | | | | | |
| G21K | Allakaket | 4.39 229 | P | Pn | 09 34 55.8 | -0.3 | | |
| | baz=40 | | | | | | | |
| H22K | Ishtalitna Cre | 4.41 215 | P | Pn | 09 34 55.9 | -0.4 | | |
| | baz=28,SNR=30 | | | | | | | |
| I26K | Coal Creek Min | 4.41 168 | | Pn | 09 34 56.9 | +0.6 | | |
| I26K | | | IAML | | 09 36 21.7 | | | |
| | comp=N,643nm,1.1s | | | | | | | |
| I26K | | | IAML | | 09 36 27.0 | | | |
| | comp=E,591nm,1.2s | | | | | | | |
| I26K | Coal Creek Min | 4.41 168 | P | Pn | 09 34 57.2 | +0.9 | | |
| | baz=350 | | | | | | | |
| INK | Inuvik | 4.43 102 | Pn | Pn | 09 34 56.1 | -0.4 | | |
| INK | Inuvik | 4.43 102 | Pn | Pn | 09 34 55.8 | -0.7 | | |
| | comp=E,6.5nm,0.3s,baz=309,slow=14,SNR=154 | | | | | | | |
| INK | | | Sn | Sn | 09 35 46.6 | -1.7 | | |
| | comp=E,20nm,0.3s,baz=68,slow=27,SNR=6.5 | | | | | | | |
| INK | | | LR | LR | 09 37 20.3 | | | |
| | comp=E,441nm,19.2s,baz=284,slow=48 | | | | | | | |
| | comp=E,21nm,0.5s | | | | | | | |
| INK | Inuvik | 4.43 102 | P | Pn | 09 34 56.3 | -0.2 | | |
| | baz=294,SNR=59 | | | | | | | |
| EPYK | Eagle Plains | 4.58 131 | | Pn | 09 34 58.7 | 0.0 | | |
| EPYK | Eagle Plains | 4.58 131 | P | Pn | 09 34 58.8 | +0.2 | | |
| | baz=320,SNR=148 | | | | | | | |
| POKR | Poker Plat Res | 4.60 192 | | Pn | 09 34 59.3 | +0.3 | | |
| POKR | | | IAML | | 09 36 20.9 | | | |
| | comp=E,373nm,1.0s | | | | | | | |
| POKR | Poker Plat Res | 4.60 192 | P | Pn | 09 34 59.4 | +0.4 | | |
| | baz=8.7,SNR=47 | | | | | | | |
| I28M | Miner Creek | 4.66 152 | Pn | Pn | 09 35 00.6 | +0.8 | | |
| I28M | | | IAML | | 09 36 29.3 | | | |
| | comp=N,313nm,1.8s | | | | | | | |
| I28M | | | IAML | | 09 36 30.0 | | | |
| | comp=E,640nm,1.6s | | | | | | | |
| I28M | Miner Creek | 4.66 152 | P | Pn | 09 35 00.3 | +0.4 | | |
| | baz=336,SNR=96 | | | | | | | |
| F20K | Avaraart Lake | 4.66 241 | Pn | Pn | 09 34 59.1 | -0.6 | | |
| F20K | | | IAML | | 09 36 28.4 | | | |
| | comp=N,498nm,1.7s | | | | | | | |
| F20K | | | IAML | | 09 36 31.0 | | | |
| | comp=E,394nm,0.9s | | | | | | | |
| F20K | Avaraart Lake | 4.66 241 | P | Pn | 09 34 59.2 | -0.5 | | |
| | baz=50,SNR=215 | | | | | | | |
| D19K | Kuna River | 4.75 262 | | Pn | 09 35 00.1 | -0.9 | | |
| D19K | | | IAML | | 09 36 32.3 | | | |
| | comp=E,402nm,1.1s | | | | | | | |
| D19K | Kuna River | 4.75 262 | P | Pn | 09 34 59.8 | -1.3 | | |
| | baz=69 | | | | | | | |
| F31M | Tsiigehtchic | 4.76 112 | Pn | Pn | 09 35 00.7 | -0.4 | | |
| F31M | | | IAML | | 09 36 27.1 | | | |
| | comp=N,398nm,1.7s | | | | | | | |
| F31M | | | IAML | | 09 36 38.6 | | | |
| | comp=E,481nm,1.6s | | | | | | | |
| F31M | Tsiigehtchic | 4.76 112 | P | Pn | 09 35 00.3 | -0.7 | | |
| | baz=303,SNR=35 | | | | | | | |
| I23K | Minto, Yukon-K | 4.76 201 | | Pn | 09 35 01.2 | 0.0 | | |
| I23K | | | IAML | | 09 36 28.6 | | | |
| | comp=E,518nm,1.3s | | | | | | | |
| I23K | Minto, Yukon-K | 4.76 201 | P | Pn | 09 35 01.5 | +0.3 | | |
| | baz=17,SNR=55 | | | | | | | |
| MDM | Murphy Dome | 4.82 195 | | Pn | 09 35 02.2 | +0.2 | | |
| MDM | | | IAML | | 09 36 22.1 | | | |
| | comp=E,419nm,1.0s | | | | | | | |
| MDM | | | IAML | | 09 36 31.1 | | | |
| | comp=N,298nm,0.8s | | | | | | | |
| IMAR | Indian Mountai | 4.87 225 | | Pn | 09 35 01.5 | -1.1 | | |
| COLA | College | 4.87 193 | | Pn | 09 35 03.2 | +0.6 | | |
| COLA | | | IAML | | 09 36 08.7 | | | |
| | comp=N,542nm,0.6s | | | | | | | |
| COLA | College | 4.87 193 | P | Pn | 09 35 03.3 | +0.6 | | |
| | baz=10.0 | | | | | | | |
| G31M | Satah River | 4.89 118 | Pn | Pn | 09 35 02.8 | -0.2 | | |
| G31M | | | IAML | | 09 36 30.6 | | | |
| | comp=E,410nm,1.7s | | | | | | | |
| G31M | Satah River | 4.89 118 | P | Pn | 09 35 03.1 | +0.2 | | |
| | baz=309,SNR=97 | | | | | | | |
| E19K | Redstone River | 4.91 249 | P | Pn | 09 35 02.1 | -1.1 | | |
| | baz=57 | | | | | | | |
| IL31 | | 4.91 188 | | Pn | 09 35 03.3 | +0.2 | | |
| ILAR | Eielson Array | 4.91 188 | | Pn | 09 35 03.4 | +0.1 | | |
| ILAR | Eielson Array | 4.91 188 | Pn | Pn | 09 35 03.5 | +0.3 | | |
| | comp=E,7.9nm,0.3s,baz=4.0,slow=14,SNR=142 | | | | | | | |
| ILAR | | | Sn | Sn | 09 36 00.7 | +0.3 | | |
| | comp=E,10.0nm,0.3s,baz=4.0,slow=23,SNR=9.6 | | | | | | | |
| ILAR | | | LR | LR | 09 37 27.1 | | | |
| | comp=E,623nm,18.4s,baz=13,slow=43 | | | | | | | |
| | comp=E,49nm,0.6s | | | | | | | |
| H21K | Melozitna Rive | 4.91 220 | Pn | Pn | 09 35 03.1 | -0.2 | | |
| H21K | | | IAML | | 09 36 22.9 | | | |
| | comp=E,362nm,1.2s | | | | | | | |
| H21K | | | IAML | | 09 36 34.8 | | | |
| | comp=N,402nm,1.5s | | | | | | | |
| H21K | Melozitna Rive | 4.91 220 | P | Pn | 09 35 03.2 | -0.1 | | |
| | baz=31,SNR=45 | | | | | | | |
| J25K | Salcha River, | 5.03 181 | | Pn | 09 35 05.2 | +0.3 | | |
| J25K | | | IAML | | 09 36 32.2 | | | |
| | comp=E,255nm,1.2s | | | | | | | |
| J25K | Salcha River, | 5.03 181 | P | Pn | 09 35 05.5 | +0.5 | | |
| | baz=360,SNR=96 | | | | | | | |
| I29M | Ogilvie Camp, | 5.04 145 | | Pn | 09 35 05.3 | +0.3 | | |
| I29M | | | IAML | | 09 36 36.9 | | | |
| | comp=E,393nm,1.4s | | | | | | | |
| I29M | | | IAML | | 09 36 38.7 | | | |
| | comp=N,300nm,1.0s | | | | | | | |
| I29M | Ogilvie Camp, | 5.04 145 | P | Pn | 09 35 05.3 | +0.3 | | |
| | baz=331,SNR=124 | | | | | | | |
| MLY | Manley | 5.07 207 | Pn | Pn | 09 35 05.5 | 0.0 | | |
| MLY | | | IAML | | 09 36 39.8 | | | |
| | comp=E,319nm,1.2s | | | | | | | |
| MLY | Manley | 5.07 207 | P | Pn | 09 35 05.9 | +0.4 | | |
| | baz=21,SNR=47 | | | | | | | |
| CCB | Clear Creek Bu | 5.09 192 | Pn | Pn | 09 35 05.8 | +0.1 | | |
| CCB | | | IAML | | 09 36 32.5 | | | |
| | comp=E,225nm,2.1s | | | | | | | |
| C19K | Lookout Ridge | 5.10 271 | | Pn | 09 35 04.8 | -1.0 | | |
| C19K | Lookout Ridge | 5.10 271 | P | Pn | 09 35 04.4 | -1.4 | | |
| | baz=76,SNR=26 | | | | | | | |
| EGAK | Eagle | 5.12 160 | | Pn | 09 35 06.7 | +0.7 | | |
| EGAK | | | IAML | | 09 36 15.5 | | | |
| | comp=E,361nm,0.9s | | | | | | | |
| EGAK | | | IAML | | 09 36 36.1 | | | |
| | comp=E,291nm,1.4s | | | | | | | |
| EGAK | Eagle | 5.12 160 | P | Pn | 09 35 06.5 | +0.5 | | |
| | baz=344,SNR=144 | | | | | | | |
| I21K | Tanana | 5.16 213 | | Pn | 09 35 06.7 | +0.2 | | |
| I21K | Tanana | 5.16 213 | P | Pn | 09 35 06.8 | +0.2 | | |
| | baz=26 | | | | | | | |
| J26L | Joseph Creek | 5.18 172 | Pn | Pn | 09 35 07.8 | +0.8 | | |
| J26L | Joseph Creek | 5.18 172 | P | Pn | 09 35 08.3 | +1.2 | | |
| | baz=353,SNR=148 | | | | | | | |
| NEA2 | Nenana | 5.26 198 | | Pn | 09 35 08.1 | 0.0 | | |
| NEA2 | | | IAML | | 09 36 45.7 | | | |
| | comp=E,256nm,1.3s | | | | | | | |
| NEA2 | Nenana | 5.26 198 | P | Pn | 09 35 07.8 | -0.3 | | |
| | baz=14,SNR=69 | | | | | | | |
| HDA | Harding Lake | 5.28 188 | | Pn | 09 35 08.4 | +0.1 | | |
| HDA | | | IAML | | 09 36 47.1 | | | |
| | comp=E,300nm,0.9s | | | | | | | |
| HDA | | | IAML | | 09 36 47.9 | | | |
| | comp=N,328nm,1.0s | | | | | | | |
| HDA | Harding Lake | 5.28 188 | P | Pn | 09 35 08.6 | +0.4 | | |
| | baz=5.8,SNR=59 | | | | | | | |
| WRH | Wood River Hil | 5.29 193 | | Pn | 09 35 08.6 | +0.2 | | |
| WRH | | | IAML | | 09 36 44.3 | | | |
| | comp=E,278nm,1.2s | | | | | | | |
| F19K | Shaleruckik Mo | 5.43 245 | Pn | Pn | 09 35 10.3 | 0.0 | | |
| F19K | Shaleruckik Mo | 5.43 245 | P | Pn | 09 35 09.9 | -0.4 | | |
| | baz=52,SNR=12 | | | | | | | |
| A19K | Wainwright | 5.48 284 | P | Pn | 09 35 10.0 | -1.0 | | |
| | baz=88,SNR=38 | | | | | | | |
| H20K | Anotleneega Mo | 5.54 226 | P | Pn | 09 35 11.4 | -0.5 | | |
| | baz=36,SNR=29 | | | | | | | |
| I30M | Mount Dempster | 5.58 138 | Pn | Pn | 09 35 12.9 | +0.3 | | |
| I30M | Mount Dempster | 5.58 138 | P | Pn | 09 35 12.6 | 0.0 | | |
| | baz=326,SNR=405 | | | | | | | |
| G19K | Purcell Mounta | 5.67 238 | Pn | Pn | 09 35 12.4 | -1.1 | | |
| G19K | Purcell Mounta | 5.67 238 | P | Pn | 09 35 12.5 | -1.1 | | |
| | baz=46,SNR=87 | | | | | | | |
| SCRK | Sand Creek | 5.69 174 | Pn | Pn | 09 35 14.8 | +0.8 | | |
| SCRK | Sand Creek | 5.69 174 | P | Pn | 09 35 15.2 | +1.2 | | |
| | baz=355,SNR=173 | | | | | | | |
| BWN | Browne | 5.72 199 | | Pn | 09 35 14.4 | +0.1 | | |
| K27K | Chicken | 5.75 166 | P | Pn | 09 35 16.6 | +1.8 | | |
| | baz=349 | | | | | | | |
| C18K | Utukok River | 5.78 268 | Pn | Pn | 09 35 13.7 | -1.4 | | |
| C18K | Utukok River | 5.78 268 | P | Pn | 09 35 13.8 | -1.4 | | |
| | baz=72,SNR=66 | | | | | | | |
| B18K | Kokolik River | 5.82 275 | P | Pn | 09 35 14.4 | -1.3 | | |
| | baz=79 | | | | | | | |
| K24K | Donnelly Dome | 5.85 182 | P | Pn | 09 35 16.7 | +0.6 | | |
| | baz=1.3,SNR=22 | | | | | | | |
| J29N | Klondike Camp | 5.87 149 | P | Pn | 09 35 17.6 | +1.2 | | |
| | baz=335,SNR=18 | | | | | | | |
| RIDG | Independent Ri | 5.91 178 | | Pn | 09 35 17.9 | +0.9 | | |
| RIDG | Independent Ri | 5.91 178 | P | Pn | 09 35 18.0 | +1.1 | | |
| | baz=358,SNR=150 | | | | | | | |
| H19K | Roundabout Mou | 5.93 232 | Pn | Pn | 09 35 16.4 | -0.8 | | |
| H19K | Roundabout Mou | 5.93 232 | P | Pn | 09 35 15.9 | -1.3 | | |
| | baz=47,SNR=70 | | | | | | | |
| BPAW | Bear Paw Mtn. | 5.99 205 | | Pn | 09 35 17.7 | -0.3 | | |
| BPAW | Bear Paw Mtn. | 5.99 205 | P | Pn | 09 35 18.1 | +0.1 | | |
| | baz=19,SNR=54 | | | | | | | |
| I20K | Naaghedeneel | 6.02 221 | P | Pn | 09 35 18.5 | +0.1 | | |
| | baz=31,SNR=9.5 | | | | | | | |
| DAWY | Dawson | 6.04 155 | | Pn | 09 35 19.2 | +0.5 | | |
| DAWY | Dawson | 6.04 155 | P | Pn | 09 35 19.7 | +1.0 | | |
| | baz=340,SNR=127 | | | | | | | |
| E18K | Tukpahlearik C | 6.05 256 | Pn | Pn | 09 35 18.3 | -0.5 | | |
| E18K | Tukpahlearik C | 6.05 256 | P | Pn | 09 35 18.5 | -0.3 | | |
| | baz=61,SNR=122 | | | | | | | |
| MCK | McKinley | 6.09 196 | P | Pn | 09 35 19.7 | +0.3 | | |
| | baz=12,SNR=57 | | | | | | | |
| J30M | Hart River | 6.14 141 | Pn | Pn | 09 35 20.5 | +0.3 | | |
| J30M | Hart River | 6.14 141 | P | Pn | 09 35 20.8 | +0.6 | | |
| | baz=330,SNR=109 | | | | | | | |
| F18K | Selawik | 6.17 247 | P | Pn | 09 35 19.7 | -0.8 | | |
| | baz=53,SNR=212 | | | | | | | |
| G18K | Tagagawik | 6.31 240 | P | Pn | 09 35 21.8 | -0.6 | | |
| | baz=47,SNR=37 | | | | | | | |
| J20K | Nowinta River | 6.48 217 | Pn | Pn | 09 35 24.5 | -0.3 | | |
| J20K | Nowinta River | 6.48 217 | P | Pn | 09 35 25.6 | +0.8 | | |
| | baz=28,SNR=12 | | | | | | | |
| C17K | DeLong Mountai | 6.53 268 | P | Pn | 09 35 23.1 | -2.3 | | |
| | baz=71,SNR=16 | | | | | | | |
| K29M | Barlow Dome | 6.55 149 | P | Pn | 09 35 26.8 | +0.9 | | |
| | baz=336,SNR=42 | | | | | | | |
| RDOG | Red Dog Mine | 6.58 265 | Pn | Pn | 09 35 24.4 | -1.7 | | |
| RDOG | Red Dog Mine | 6.58 265 | P | Pn | 09 35 24.5 | -1.5 | | |
| | baz=67,SNR=20 | | | | | | | |
| DHY | Denali Highway | 6.63 188 | P | Pn | 09 35 28.9 | +1.9 | | |
| | baz=5.9,SNR=55 | | | | | | | |
| E17K | Hotham Inlet | 6.63 255 | P | Pn | 09 35 25.4 | -1.4 | | |
| | baz=59,SNR=51 | | | | | | | |
| GCSA | Galena City Sc | 6.65 228 | P | Pn | 09 35 27.4 | +0.4 | | |
| | baz=37,SNR=7.0 | | | | | | | |
| L26K | Log Cabin Wild | 6.67 173 | P | Pn | 09 35 28.6 | +1.2 | | |
| | baz=354,SNR=124 | | | | | | | |
| PAX | Paxson | 6.68 181 | P | Pn | 09 35 29.4 | +1.8 | | |
| | baz=0.2,SNR=72 | | | | | | | |
| BCAR | Beaver Creek A | 6.73 166 | Pn | Pn | 09 35 28.6 | +0.5 | | |
| L27K | Beaver Creek, | 6.73 167 | Pn | Pn | 09 35 29.4 | +1.2 | | |
| L27K | Beaver Creek, | 6.73 167 | P | Pn | 09 35 29.9 | +1.7 | | |
| | baz=350,SNR=68 | | | | | | | |
| H18K | Honhosa River | 6.75 235 | P | Pn | 09 35 27.7 | -0.7 | | |
| | baz=42,SNR=37 | | | | | | | |
| D17K | Noatak River | 6.78 262 | P | Pn | 09 35 26.5 | -2.3 | | |
| | baz=64,SNR=35 | | | | | | | |
| F17K | Baldwin Pennin | 6.79 250 | Pn | Pn | 09 35 27.1 | -1.7 | | |
| F17K | Baldwin Pennin | 6.79 250 | P | Pn | 09 35 27.2 | -1.7 | | |
| | baz=54,SNR=47 | | | | | | | |
| WAT1 | Susitna Watana | 6.95 193 | P | Pn | 09 35 32.3 | +1.1 | | |
| | baz=9.0 | | | | | | | |
| J19K | Poorman | 6.97 221 | Pn | Pn | 09 35 31.6 | +0.2 | | |
| J19K | Poorman | 6.97 221 | P | Pn | 09 35 31.9 | +0.5 | | |
| | baz=30,SNR=14 | | | | | | | |
| A36M | Sachs Harbour | 6.99 61 | Pn | Pn | 09 35 30.4 | -1.4 | | |
| A36M | Sachs Harbour | 6.99 61 | P | Pn | 09 35 30.6 | -1.1 | | |
| | baz=261,SNR=54 | | | | | | | |
| WAT6 | Susitna Watana | 7.14 189 | P | Pn | 09 35 34.7 | +0.7 | | |
| | baz=6.5,SNR=15 | | | | | | | |
| G17K | Kiwalik Mounta | 7.18 242 | P | Pn | 09 35 33.6 | -0.8 | | |
| | baz=47,SNR=41 | | | | | | | |
| K20K | Telida | 7.20 213 | P | Pn | 09 35 36.0 | +1.4 | | |
| | baz=25 | | | | | | | |
| HARP | HAARP | 7.25 180 | P | Pn | 09 35 37.6 | +2.3 | | |
| | baz=359,SNR=25 | | | | | | | |
| M26K | Nabesna, AK | 7.31 172 | P | Pn | 09 35 37.9 | +1.8 | | |
| | baz=354,SNR=35 | | | | | | | |
| C16K | Lisburne Hills | 7.35 269 | P | Pn | 09 35 35.1 | -1.5 | | |
| | baz=70,SNR=14 | | | | | | | |
| H17K | Granite Mounta | 7.36 237 | P | Pn | 09 35 36.2 | -0.5 | | |
| | baz=43,SNR=36 | | | | | | | |
| M27K | Edge Creek, AK | 7.42 168 | P | Pn | 09 35 39.6 | +1.8 | | |
| | baz=351,SNR=17 | | | | | | | |
| C36M | Paulatuk | 7.43 82 | P | Pn | 09 35 35.8 | -1.9 | | |
| | baz=283,SNR=21 | | | | | | | |
| M24K | Tolsona, Glenn | 7.56 183 | P | Pn | 09 35 41.2 | +1.6 | | |
| | baz=2.0,SNR=8.8 | | | | | | | |
| J18K | Innoko River | 7.67 222 | P | Pn | 09 35 41.6 | +0.5 | | |
| | baz=31,SNR=6.0 | | | | | | | |
| M29M | Somme Creek | 7.71 156 | P | Pn | 09 35 43.5 | +1.7 | | |
| | baz=342,SNR=109 | | | | | | | |
| G16K | Koyuk River | 7.79 245 | P | Pn | 09 35 41.9 | -0.8 | | |
| | baz=49 | | | | | | | |
| SCM | Sheep Creek Mo | 7.87 187 | P | Pn | 09 35 45.6 | +1.8 | | |
| | baz=4.9,SNR=8.6 | | | | | | | |
| M23K | Glacier View | 7.93 189 | P | Pn | 09 35 46.3 | +1.8 | | |
| | baz=5.8,SNR=13 | | | | | | | |
| SML | Sawmill | 7.95 191 | P | Pn | 09 35 47.1 | +2.1 | | |
| | baz=7.3 | | | | | | | |
| L20K | Farewell, AK | 7.97 210 | P | Pn | 09 35 47.2 | +2.0 | | |
| | baz=22 | | | | | | | |
| N25K | Chitina, Valde | 8.05 178 | P | Pn | 09 35 48.2 | +1.8 | | |
| | baz=358 | | | | | | | |
| SKT | Skwentna | 8.09 202 | P | Pn | 09 35 48.3 | +1.4 | | |
| | baz=15 | | | | | | | |
| YUK3 | Moose Creek | 8.12 164 | P | P

baz=21
M31M **Drury Creek, Y** 8.65 144 P Pn 09 35 55.2 +0.7
baz=334,SNR=24
YUK8 **Steele Glacier** 8.67 162 P Pn 09 35 56.8 +1.8
baz=347,SNR=22
K17K **Iditarod** 8.69 224 P Pn 09 35 55.5 +0.4
baz=31
BMRM **Bremner River** 8.69 178 P Pn 09 35 57.0 +1.9
baz=358,SNR=12
YUK4 **Talbot Arm** 8.74 159 P Pn 09 35 56.8 +0.9
baz=344,SNR=23
L18K **Granite Mounta** 8.76 218 P Pn 09 35 56.0 +0.1
baz=26
RC01 **Rabbit Creek A** 8.77 194 P Pn 09 35 59.2 +3.1
baz=9.9,SNR=8.0
GLI **Glacier Island** 8.81 186 P Pn 09 35 58.7 +2.0
baz=3.8
J16K **Anvik River** 8.81 231 P Pn 09 35 57.1 +0.4
baz=36,SNR=15
SPNN **North Nagishla** 8.84 204 Pn 09 35 59.4 +2.2
CTG **Chitna Glacier** 8.84 168 P Pn 09 36 00.5 +3.3
baz=351,SNR=32
FARO **Faro, Yukon** 8.85 141 P Pn 09 35 58.3 +1.0
baz=332,SNR=22
N30M **Aishikik Lake** 8.86 154 P Pn 09 35 58.4 +1.1
baz=341,SNR=36
PWL **Port Wells** 8.89 190 P Pn 09 36 00.9 +3.1
baz=6.6
N20K **Mount Spurr** 8.93 202 P Pn 09 36 00.4 +2.0
baz=15
SPCR **Spurr Chakacha** 8.93 202 P Pn 09 36 00.8 +2.4
baz=15
CRQE **Cirque** 8.95 173 P Pn 09 36 01.9 +3.2
baz=355,SNR=27
LOGN **Logan Glacier** 9.01 167 Pn 09 36 00.9 +1.3
F14K **Arctic Creek** 9.04 253 P Pn 09 35 57.8 -2.1
baz=53
N31M **Braeburn, Yuko** 9.05 150 P Pn 09 36 01.8 +1.8
baz=338,SNR=20
O28M **Mount Upton** 9.13 164 P Pn 09 36 04.2 +2.9
baz=349,SNR=13
YUK6 **Outpost Mounta** 9.17 158 P Pn 09 36 04.4 +2.6
baz=345,SNR=16
L17K **Donlin** 9.19 222 P Pn 09 36 02.7 +0.8
baz=29,SNR=7.7
M18K **Stony River** 9.24 213 P Pn 09 36 03.6 +1.0
baz=23
KHIT **Khitrov Hills** 9.25 174 Pn 09 36 04.4 +1.6
ANM **Nome** 9.31 247 P Pn 09 36 03.1 -0.4
baz=48
O22K **Cooper Landing** 9.37 194 P Pn 09 36 06.8 +2.6
baz=9.2
TNA **Tin City** 9.53 256 P Pn 09 36 06.2 -0.2
baz=54
MESA **MESA** 9.58 170 P Pn 09 36 10.5 +3.1
baz=353,SNR=6.6
N19K **Bonanza Creek** 9.64 208 P Pn 09 36 09.9 +1.8
baz=19
M17K **Holitna River** 9.65 217 P Pn 09 36 09.1 +0.9
baz=26,SNR=6.9
O30N **Mendenhall** 9.67 152 P Pn 09 36 09.4 +0.9
baz=341,SNR=18
O29M **Mount Kennedy** 9.77 160 P Pn 09 36 12.8 +2.9
baz=346,SNR=16
PINM **Pinnacle** 9.79 165 P Pn 09 36 12.6 +2.4
baz=350,SNR=16
L16K **Owhat River** 9.84 223 P Pn 09 36 11.2 +0.4
baz=30
K15K **Wolf Creek Mou** 9.87 230 P Pn 09 36 11.4 +0.2
baz=34
N32M **Quiet Lake** 9.88 143 P Pn 09 36 12.2 +0.9
baz=335
WHY **Whitehorse** 9.98 149 P Pn 09 36 13.5 +0.7
baz=339,SNR=8.1
N18K **Kilae Creek** 10.01 212 P Pn 09 36 14.9 +1.8
baz=21
O20K **Slope Mountain** 10.07 202 P Pn 09 36 16.0 +2.0
baz=14
J14K **Nanvaranak Lak** 10.07 236 P Pn 09 36 13.1 -0.7
baz=38,SNR=18
P30M **Million Dollar** 10.15 156 P Pn 09 36 17.5 +2.4
baz=343
BRSE **Bradley Lake S** 10.19 196 P Pn 09 36 17.0 +1.4
baz=10
Q23K **Middleton Isla** 10.24 183 P Pn 09 36 18.7 +2.4
baz=1.8
PNL **Peninsula** 10.29 163 P Pn 09 36 19.1 +2.1
baz=348
M16K **Timber Creek** 10.32 220 P Pn 09 36 17.6 +0.2
baz=27
HOM **Homer** 10.36 198 P Pn 09 36 19.0 +1.1
baz=12
L15K **Ungalak Mounta** 10.37 228 P Pn 09 36 18.3 +0.3
baz=32
N17K **Nushagak Hills** 10.40 215 P Pn 09 36 18.7 +0.3
baz=23
P29M **Windy Craggy** 10.52 159 P Pn 09 36 22.9 +2.8
baz=345,SNR=8.4
O18K **Koktuh Hills** 10.67 208 P Pn 09 36 23.3 +1.2
baz=19
TGTN **Hyland Airport** 10.69 131 P Pn 09 36 23.2 +0.7
baz=327,SNR=9.1
WRGLY **Wrigley** 10.77 116 P Pn 09 36 22.2 -1.2
baz=316,SNR=38
N16K **Nishlik Lake** 10.77 218 P Pn 09 36 24.1 +0.5
baz=25
P33M **Teslin, Yukon** 10.79 145 P Pn 09 36 24.6 +0.8
baz=336
PLBC **Pleasant Camp** 10.88 155 P Pn 09 36 27.3 +2.4
baz=343,SNR=17
L14K **Kuka Creek** 10.97 229 P Pn 09 36 27.1 +0.9
baz=33
M15K **Kasigluk River** 11.02 223 P Pn 09 36 27.3 +0.5
baz=29
SKAG **Skagway** 11.03 153 P Pn 09 36 28.7 +1.7
baz=342,SNR=9.5
O17K **Koliganek Bris** 11.08 213 P Pn 09 36 28.3 +0.6
baz=22
P18K **Big Mountain,** 11.11 207 P Pn 09 36 29.5 +1.4
baz=18
P32M **Atlin** 11.19 148 P Pn 09 36 31.2 +1.9
baz=339
M14K **Bethel** 11.28 226 P Pn 09 36 30.9 +0.5
baz=30
Q19K **Cape Douglas,** 11.32 203 P Pn 09 36 32.2 +1.2
baz=15
N15K **Kwethluk River** 11.34 221 P Pn 09 36 32.0 +0.6
baz=27
O16K **Kokwok River B** 11.44 215 P Pn 09 36 33.9 +1.3
baz=23
WTLY **Watson Lake, Y** 11.77 136 P Pn 09 36 37.8 +0.6
baz=331
Q18K **Katmai Hardscr** 11.79 206 P Pn 09 36 39.5 +2.0
baz=16
R33M **Jennings River** 11.92 142 P Pn 09 36 41.3 +2.0
baz=335,SNR=7.1
R31K **City Hall, Gus** 11.97 155 P Pn 09 36 41.8 +1.9
baz=344
Q32M **Nakina River** 12.05 146 P Pn 09 36 43.5 +2.3
baz=338,SNR=9.9
Q17K **Contact Creek** 12.29 207 P Pn 09 36 47.0 +2.7
baz=17
R32K **Eaglecrest** 12.29 152 P Pn 09 36 46.7 +2.4
baz=342
KDAK **Kodiak Island** 12.30 199 Pn Pn 09 36 47.2 +2.8
comp=E,0.2nm,0.3s,baz=294,slow=10.0,SNR=1.7
KDAK LR LR 09 40 59.1
comp=E,176nm,18.7s,baz=55,slow=35
KDAK **Kodiak Island** 12.30 199 P Pn 09 36 47.2 +2.8
baz=12
S31K **Pelican** 12.34 157 P Pn 09 36 47.8 +2.9
baz=345
M11K **Mekoryuk** 12.73 234 P Pn 09 36 52.0 +1.8
baz=34
R18K **Karluk** 12.75 203 P Pn 09 36 51.9 +1.4
baz=14
DLBC **Dease Lake** 12.99 142 Pn Pn 09 36 54.0 0.0
comp=E,0.7nm,0.3s,baz=13,slow=8.7,SNR=14
DLBC Sn Sn 09 39 13.1 -5.7
comp=E,0.1nm,0.3s,baz=259,slow=23,SNR=2.9
DLBC Lg Lg 09 40 38.8
comp=E,0.2nm,0.3s,baz=88,slow=19,SNR=4.4
DLBC LR LR 09 42 15.2
comp=E,262nm,19.0s,baz=318,slow=39
comp=E,3.3nm,0.5s
DLBC **Dease Lake** 12.99 142 P Pn 09 36 55.9 +2.0
baz=336
KOTAN **Kotaneelee Air** 13.01 126 P Pn 09 36 54.8 +0.8
baz=326
S32K **Killisnoo** 13.06 154 P Pn 09 36 57.8 +3.1
baz=343
LIRD **Liard River Hi** 13.06 132 P Pn 09 36 57.2 +2.3
baz=330
S34M **Telegraph Cree** 13.25 145 P Pn 09 36 59.2 +1.9
baz=338,SNR=9.6
TOAD **Toad River Com** 13.78 132 P Pn 09 37 06.1 +1.6
baz=330
YKA **Yellowknife Ar** 14.19 105 Pn Pn 09 37 04.3 -5.9
comp=E,2.3nm,0.3s,baz=35,slow=12,SNR=29
YKA Sn Sn 09 39 34.3 -13
comp=E,0.8nm,0.3s,baz=316,slow=23,SNR=5.8
YKA LR LR 09 42 52.9
comp=E,200nm,18.4s,baz=294,slow=38
comp=E,14nm,0.6s
T35M **Bob Quinn** 14.29 145 P Pn 09 37 14.0 +2.3
baz=338
WRAK **Wrangell Islan** 14.43 150 P Pn 09 37 15.9 +2.4
baz=342
CHGN **Chignik** 14.59 210 P Pn 09 37 18.3 +2.7
baz=18
U33K **Whale Pass** 14.59 152 P Pn 09 37 18.1 +2.5
baz=343
CHIR **Chirikof Islan** 14.60 204 P Pn 09 37 18.3 +2.5
baz=14
S14K **Fog Glacier** 14.81 213 P Pn 09 37 19.9 +1.2
baz=19
V35K **Ketchikan** 15.60 150 P Pn 09 37 31.1 +2.0
baz=342
RES **Resolute Bay** 15.77 49 Pn Pn 09 37 28.4 -2.8
comp=E,1.6nm,0.3s,baz=258,slow=13,SNR=15
RES Sn Sn 09 40 09.8 -16
comp=E,1.8nm,0.3s,baz=207,slow=18,SNR=3.5
comp=E,9.3nm,0.6s
S12K **Black Hills** 15.86 217 P Pn 09 37 33.0 +0.5
baz=21
SPIA **Saint Paul Isl** 16.57 234 P Pn 09 37 41.6 0.0
baz=31
P08K **Saint George I** 16.88 232 P Pn 09 37 45.9 +0.4
baz=29
UNV **Unalaska Valle** 18.57 222 P Pn 09 38 06.8 +0.5
baz=23
BBB **Bella Bella** 19.24 147 LR LR 09 45 45.1
comp=E,119nm,18.9s,baz=344,slow=37
NIKH **Nikolski High** 19.94 225 P P 09 38 21.7 +0.5
baz=24
SEY **Seymchan** 24.88 286 P P 09 39 11.7 -0.3
comp=E,7.8nm,0.4s,baz=30,slow=8.4,SNR=23
comp=E,7.8nm,0.4s
SHEM **Shemya Is, Ala** 25.16 249 LR LR 09 48 46.9
comp=E,127nm,21.2s,baz=296,slow=36
NEW **Newport** 25.41 133 LR LR 09 49 14.2
comp=E,33nm,21.3s,baz=334,slow=36
NEW **Newport** 25.41 133 P P 09 39 18.2 +1.3
baz=338
TIXI **Tiksi** 26.32 315 LR LR 09 51 51.5
comp=E,94nm,18.7s,baz=56,slow=41
MSO **Missoula** 27.57 130 P P 09 39 37.6 +1.1
baz=337,SNR=6.6
EGMT **Eagleton** 27.66 123 P P 09 39 37.9 +0.6
baz=334
MA2 **Magadan** 27.81 281 P P 09 39 38.0 -0.4
comp=E,4.5nm,0.5s,baz=44,slow=16,SNR=1.6
comp=E,4.5nm,0.5s
DGMT **Dagmar** 28.97 116 P P 09 39 50.0 +1.1
baz=332
FRB **Frobisher Bay** 28.99 63 LR LR 09 52 01.2
comp=E,195nm,20.4s,baz=335,slow=38
BOZ **Bozeman (W)** 29.34 127 P P 09 39 52.8 +0.6
baz=337
LAO **LASA Array** 29.92 120 P P 09 39 58.0 +0.6
baz=334
ULM **Lac du Bonnet** 30.17 104 P P 09 40 00.2 +0.8
comp=E,2.0nm,0.8s,baz=315,slow=13,SNR=2.4
ULM LR LR 09 54 03.3
comp=E,40nm,20.8s,baz=308,slow=40
comp=E,2.0nm,0.8s
RLMT **Red Lodge** 30.44 125 P P 09 40 03.1 +1.0
baz=336
PETK **Petropavlovsk-** 30.44 267 LR LR 09 52 54.7
comp=E,160nm,21.3s,baz=44,slow=38
IMW **Indian Meadow** 31.09 128 IAmb IAmb 09 40 11.3
comp=E,6.2nm,0.9s
SFJD **Kangerlussuaq** 31.77 48 LR LR 09 55 36.9
comp=E,58nm,18.1s,baz=328,slow=41
AGMN **Agassiz Nation** 31.84 106 P P 09 40 14.5 +0.3
baz=330
BW06 **Boulder Array** 32.52 127 P P 09 40 21.6 +1.1
baz=338,SNR=8.3
PDAR **Pinedale Array** 32.52 127 P P 09 40 21.7 +1.2
comp=E,3.8nm,0.7s,baz=3.6,slow=5.8,SNR=46
comp=E,3.8nm,0.7s
HVU **Hansel Valley** 32.57 132 IAmb IAmb 09 40 26.9
comp=E,5.5nm,1.3s
RSSD **Black Hills** 32.90 119 P P 09 40 24.8 +0.9
RSSD IAmb IAmb 09 40 28.4
comp=E,11nm,1.4s
RSSD **Black Hills** 32.90 119 P P 09 40 24.7 +0.9
baz=335
PAHR **Pah Rah Range** 32.95 142 IAmb IAmb 09 40 30.2
comp=E,8.7nm,1.3s
EYMN **Ely** 33.63 102 P P 09 40 30.0 +0.1
EYMN **Ely** 33.63 102 P P 09 40 29.8 -0.1
baz=330
YERR **Yerington** 33.67 142 IAmb IAmb 09 40 35.9
comp=E,5.1nm,1.1s
DUG **Dugway, Tooele** 34.05 133 P P 09 40 35.0 +1.3
baz=340,SNR=5.9
NVAR **Mina Array Bea** 34.41 141 P P 09 40 39.1 +2.2
comp=E,3.8nm,1.0s,baz=333,slow=6.8,SNR=21
NVAR LR LR 09 55 22.6
comp=E,126nm,21.1s,baz=324,slow=38
comp=E,3.8nm,1.0s
MPU **Maple Canyon** 34.52 131 IAmb IAmb 09 40 40.8
comp=E,4.8nm,1.2s
TPH **Tonopah** 34.99 140 P P 09 40 44.2 +2.2
R11B **Troy Canyon, C** 35.11 137 P P 09 40 44.7 +1.8
baz=343
N23A **Red Feather La** 35.28 124 P P 09 40 45.7 +1.1
baz=338
PSUT **Pine Spring** 35.35 135 IAmb IAmb 09 41 12.3
comp=E,3.4nm,1.0s
DSP **Deep Springs** 35.50 141 IAmb IAmb 09 40 51.9
comp=E,4.6nm,1.2s
ECSD **EROS Data Cent** 35.61 111 P P 09 40 47.5 +0.5
baz=333
PRN **Pahroc Range** 36.13 137 IAmb IAmb 09 40 59.6
comp=E,5.7nm,1.2s
MTPU **Mount Pierson** 36.24 133 IAmb IAmb 09 40 58.2
comp=E,5.1nm,1.2s
TPNV **Topopah Spring** 36.29 139 P P 09 40 55.0 +2.0
baz=343,SNR=12
SCHQ **Schefferville** 36.42 73 P P 09 40 54.4 +0.5
comp=E,7.1nm,0.8s,baz=271,slow=7.5,SNR=5.5
SCHQ LR LR 09 56 56.4
comp=E,75nm,19.0s,baz=340,slow=38
comp=E,7.1nm,0.8s
Q24A **Divide** 37.30 124 P P 09 41 03.4 +1.5
baz=338
S22A **4UR Ranch, Cre** 37.95 127 P P 09 41 08.7 +1.4
baz=339
MVCO **Mesa Verde** 37.99 129 P P 09 41 08.4 +0.8
baz=340
SDCO **Great Sand Dun** 38.33 125 P P 09 41 11.5 +1.0
baz=339
JFWS **Jewell Farm** 38.46 105 P P 09 41 11.2 0.0
baz=333
WUAZ **Wupatki** 38.83 134 P P 09 41 16.9 +2.3
WUAZ **Wupatki** 38.83 134 P P 09 41 16.1 +1.5
baz=342
T25A **Trinidad** 39.21 124 P P 09 41 18.9 +1.1
baz=339
L44A **Lake County Fo** 39.91 103 P P 09 41 24.2 +0.9
baz=333
MONP2 **Monument Peak** 40.14 141 P P 09 41 26.0 +0.4
baz=345
SADO **Sadowa** 40.67 92 LR LR 09 59 48.9
comp=E,54nm,18.3s,baz=239,slow=38
ANMO **Albuquerque** 40.68 128 LR LR 09 58 38.3
comp=E,42nm,20.8s,baz=66,slow=37
ANMO **Albuquerque** 40.68 128 P P 09 41 30.5 +0.5
baz=340
HDIL **Hopedale** 40.88 105 P P 09 41 31.4 0.0
baz=334
ARCES **ARCESS Array B** 40.96 5 P P 09 41 30.6 -1.1
comp=E,5.6nm,1.0s,baz=20,slow=8.6,SNR=3.8
comp=E,5.6nm,1.0s
TUC **Tucson** 42.03 134 P P 09 41 42.5 +1.5
baz=343
AMTX **Amarillo** 42.10 122 P P 09 41 42.3 +0.7
baz=339
S39A **Bolivar** 42.13 111 P P 09 41 41.5 -0.2
S39A IAmb IAmb 09 41 43.4
comp=Z,4.2nm,0.8s
LONY **Lake Ozonia** 42.40 88 P P 09 41 43.1 -0.7
baz=331
121A **Cookes Peak, D** 42.59 131 P P 09 41 47.5 +1.8
121A **Cookes Peak, D** 42.59 131 P P 09 41 47.8 +2.1
baz=342
KLR **Kul'dur** 42.67 286 P P 09 41 45.8 -0.1
comp=Z,1.2nm,0.4s,baz=8.1,slow=7.1,SNR=7.3
comp=Z,1.2nm,0.4s
U38A **Gravette** 42.93 113 P P 09 41 47.3 -0.9
U38A IAmb IAmb 09 41 49.0
comp=Z,6.6nm,1.2s
MGMO **Mountain Grove** 42.96 111 P P 09 41 48.5 0.0
MGMO IAmb IAmb 09 41 49.4
comp=Z,7.4nm,1.0s
M53A **WI Miller and** 43.06 96 P P 09 41 49.0 -0.2
baz=333
WMOK **Wichita Mounta** 43.11 119 P P 09 41 50.0 +0.4
WMOK **Wichita Mounta** 43.11 119 P P 09 41 50.1 +0.4
baz=338
ACSO **Alum Creek Sta** 43.33 99 P P 09 41 51.0 -0.4
baz=333
ASAJ **Asahikawa** 43.36 273 LR LR 10 00 29.1
comp=Z,122nm,20.4s,baz=52,slow=37
PKME **Peaks-Kenny Pk** 43.68 83 P P 09 41 54.1 0.0
baz=331
WCI **Wyandotte Cave** 43.99 104 P P 09 41 56.8 +0.1
baz=335
P52A **Corning** 44.16 99 P P 09 41 57.4 -0.6
baz=334
MIAR **Mount Ida** 44.92 114 P P 09 42 03.2 -1.0
MIAR IAmb IAmb 09 42 12.9
comp=Z,4.3nm,0.9s
MIAR **Mount Ida** 44.92 114 P P 09 42 03.8 -0.4
baz=337
HRV **Adam Dziewonsk** 45.31 87 P P 09 42 06.8 -0.3
baz=332
WVT **Waverly** 45.37 107 P P 09 42 07.0 -0.7
WVT **Waverly** 45.37 107 P P 09 42 07.6 -0.1
baz=336
TZTN **Tazewell** 46.45 102 P P 09 42 15.6 -0.7
baz=335
TXAR **Lajitas Array** 46.74 127 P P 09 42 19.6 +0.8
comp=Z,0.5nm,0.6s,baz=356,slow=7.3,SNR=10
TXAR LR LR 10 01 41.4
comp=Z,60nm,18.2s,baz=332,slow=36
comp=Z,0.5nm,0.6s
JCT **Junction City** 46.77 122 P P 09 42 19.3 +0.4
baz=340
USRK **Ussuriysk Ar.** 46.96 283 LR LR 10 03 52.5
comp=Z,55nm,21.6s,baz=74,slow=38
TKL **Tuntakeechee C** 47.17 103 LR LR 10 02 29.0
comp=Z,82nm,19.6s,baz=340,slow=36
VBMS **Vicksburg** 48.05 111 P P 09 42 28.8 +0.1
baz=338
LRAL **Lakeview Retre** 48.47 107 P P 09 42 32.4 +0.5
baz=337
FINES **FINESS Array B** 49.08 6 P P 09 42 35.1 -1.2
comp=Z,0.8nm,0.3s,baz=5.7,slow=7.0,SNR=8.9
comp=Z,0.8nm,0.3s
GOGA **Godfrey** 49.32 104 P P 09 42 38.7 +0.3
baz=336
HFS **Hagfors** 49.66 14 P P 09 42 40.0 -0.8
comp=Z,1.7nm,0.4s,baz=353,slow=4.6,SNR=8.9
comp=Z,1.7nm,0.4s
NHSC **New Hope** 50.72 100 P P 09 42 49.3 +0.2
baz=336
ZALV **Zalesovo Beam** 51.50 325 P P 09 42 54.5 -0.1
comp=Z,1.1nm,0.4s,baz=12,slow=6.4,SNR=5.5
comp=Z,1.1nm,0.4s
MJAR **Matsushiro Arr** 51.62 272 P P 09 42 56.9 +1.0
comp=Z,2.1nm,0.8s,baz=2.5,slow=9.0,SNR=6.4
MJAR LR LR 10 07 00.0
comp=Z,48nm,18.3s,baz=34,slow=39
comp=Z,2.1nm,0.8s
KIRV **Kirov** 51.66 350 LR LR 10 05 10.9
comp=Z,40nm,21.7s,baz=34,slow=36
SONM **Songino Array** 51.84 306 P P 09 42 57.9 +0.3
comp=Z,1.3nm,0.8s,baz=38,slow=5.4,SNR=5.8
SONM LR LR 10 07 22.8
comp=Z,85nm,20.6s,baz=20,slow=39
comp=Z,1.3nm,0.8s
EKA **Eskdalemuir Ar** 52.36 26 P P 09 43 00.7 -0.4
comp=Z,1.6nm,0.4s,baz=334,slow=6.4,SNR=15
comp=Z,1.6nm,0.4s
ARU **Arti** 53.08 344 P P 09 43 06.8 +0.4
comp=Z,7.1nm,0.2s,baz=24,slow=5.5,SNR=8.7
ARU LR LR 10 08 12.0
comp=Z,37nm,18.4s,baz=6.0,slow=39
KSRS **Korea Array** 54.37 282 P P 09 43 17.6 +1.5
comp=Z,1.2nm,0.5s,baz=21,slow=6.5,SNR=3.2
KSRS LR LR 10 09 15.0
comp=Z,40nm,19.1s,baz=55,slow=39
comp=Z,1.2nm,0.5s
BVAR **Borovoye Array** 54.94 335 P P 09 43 20.4 +0.4
comp=Z,1.2nm,0.5s,baz=2.6,slow=6.8,SNR=7.3
comp=Z,1.2nm,0.5s
KURBB **Kurchatov Arra** 55.88 328 P P 09 43 26.7 -0.2
comp=Z,1.7nm,0.6s,baz=18,slow=7.6,SNR=14
comp=Z,1.7nm,0.6s
HHC **Hu-ho-hao-te** 56.66 298 eP P 09 43 32.4 -0.3
HHC pP sP 09 43 37.0 +1.9
HHC pmax pmax
comp=Z,23nm,0.6s
HHC pmax pmax
comp=Z,140nm,4.7s
BELG **Belogornoye** 57.94 351 LR LR 10 11 01.7
comp=Z,25nm,18.6s,baz=64,slow=39
MKAR **Makanchi Array** 58.80 324 P P 09 43 47.3 -0.2
comp=Z,0.9nm,0.6s,baz=36,slow=6.4,SNR=11
MKAR PP PP 09 45 57.3 +0.4
comp=Z,0.9nm,0.9s,baz=104,slow=6.1,SNR=5.0
MKAR LR LR 10 13 11.1
comp=Z,44nm,18.7s,baz=21,slow=40
comp=Z,0.9nm,0.6s
AKTO **Aktyubinsk** 59.05 343 P P 09 43 49.4 +0.2
comp=Z,1.4nm,0.6s,baz=43,slow=5.1,SNR=3.7
comp=Z,1.4nm,0.6s
AKASG **Malin Array Be** 59.92 4 P P 09 43 54.6 -0.6
comp=Z,0.8nm,0.4s,baz=360,slow=7.3,SNR=2.4
AKASG LR LR 10 09 56.6
comp=Z,24nm,19.2s,baz=9.0,slow=36
comp=Z,0.8nm,0.4s
CMIG **Matias Romero** 60.84 122 LR LR 10 11 36.3
comp=Z,45nm,18.0s,baz=16,slow=37
GERES **GERESS Array B** 60.84 16 P P 09 44 02.5 +0.8
comp=Z,1.0nm,0.7s,baz=235,slow=3.5,SNR=3.8
comp=Z,1.0nm,0.7s
LZH **Lanzhou** 63.38 302 eP P 09 44 17.0 -2.0
LZH pmax pmax
comp=Z,28nm,1.0s
JOW **Kunigami** 63.91 277 LR LR 10 13 12.0
comp=Z,48nm,19.7s,baz=96,slow=37
AAK **Ala-Archa** 64.32 328 LR LR 10 15 23.9
comp=Z,39nm,18.5s,baz=38,slow=39
ESDC **Sonseca Array** 67.38 32 P P 09 44 44.6 0.0
comp=Z,0.7nm,0.8s,baz=1.4,slow=4.8,SNR=5.1
comp=Z,0.7nm,0.8s
GNI **Garni** 70.30 352 LR LR 10 20 08.5
comp=Z,17nm,19.9s,baz=7.0,slow=40
BRTR **Keskin Array B** 70.97 1 P P 09 45 08.2 +1.1
comp=Z,1.1nm,0.9s,baz=26,slow=3.4,SNR=4.7
comp=Z,1.1nm,0.9s
PZH **PanZhiHua** 72.96 300 P P 09 45 19.0 -0.1
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.5s
KEST **Kesra** 73.31 21 P P 09 45 21.4 +0.3
comp=Z,5.0nm,0.8s,baz=314,slow=5.0,SNR=4.1
comp=Z,5.0nm,0.8s
MDT **Midelt** 73.91 34 LR LR 10 18 36.1
comp=Z,26nm,20.8s,baz=184,slow=36
CMAR **Chiang Mai Arr** 81.37 300 P P 09 46 06.2 -0.2
comp=Z,1.1nm,0.4s,baz=355,slow=5.9,SNR=6.0
comp=Z,1.1nm,0.4s
MDP **Montagnes des** 86.17 86 LR LR 10 23 35.4
comp=Z,53nm,20.8s,baz=204,slow=35
HNR **Honiara** 87.32 234 LR LR 10 23 33.7
comp=Z,379nm,18.4s,baz=276,slow=34
PLCA **Paso Flores** 122.59 120 PKP PKiKP 09 52 44.1 -0.4
comp=Z,1.8nm,1.0s,baz=0.0,slow=1.0,SNR=3.4

*IDC **20** 09:47:00.0±3.5, 7°.71S×115°.99E, h0km, mb3.2/3, mbtmp3.3/3, Error ellipse: s-maj=266.5km s-min=28.1km az=50.0*
*DJA **20** 09:47:14.1±1.8, 9°S±19'×11°7E±', h26km±10km, M3.4/4, MLv3.4/4*
**ISC 20 09:47:14.0**±3.7, **8°.4S**±0'.2×**117°.0E**±0'.2, **h10**km, **n5**, σ0**s27**/6, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.40** | **195** | P | **Pg** | **09 47 22.0** | **+0.1** |
| TWSI | | | | S | **Sg** | **09 47 27.2** | **0.0** |
| **PLAI** | **Plampang** | **0.92** | **121** | P | **Pn** | **09 47 33.0** | **+0.1** |
| PLAI | | | | S | **Sn** | **09 47 46.2** | **0.0** |
| **WRA** | **Warramunga Arr** | **20.37** | **126** | P | **P** | **09 51 51.2** | **+0.2** |
| | 0.4nm,0.3s,baz=301,slow=12,SNR=24 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **22.24** | **135** | P | **P** | **09 52 10.8** | **-0.4** |
| | 0.2nm,0.3s,baz=310,slow=9.1,SNR=7.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.99** | **334** | P | P | 09 57 21.9 | -19 |
| | 0.2nm,0.6s,baz=134,slow=6.2,SNR=1.8 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**ISC 20 09:48:41.1**±1.0, **60°.78N**±0°.04×**140°.45W**±0°.04, **h10**km, **n10**, σ1**s36**/15, **Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **O28M** | **Mount Upton** | **0.13** | **95** | P | **Pg** | **09 48 46.4** | **+2.1** |
| | baz=268,SNR=371 | | | | | | |
| O28M | | | | S | **Sg** | **09 48 50.3** | **+3.6** |
| | baz=268 | | | | | | |
| **CTG** | **Chitna Glacier** | **0.47** | **293** | P | **Pb** | **09 48 51.5** | **0.0** |
| | baz=114,SNR=14 | | | | | | |
| CTG | | | | S | **Sb** | **09 48 58.5** | **-0.1** |
| | baz=114 | | | | | | |
| **YUK8** | **Steele Glacier** | **0.60** | **33** | P | **Pb** | **09 48 53.4** | **-0.5** |
| | baz=213,SNR=41 | | | | | | |
| **PINM** | **Pinnacle** | **0.70** | **172** | P | **Pb** | **09 48 55.0** | **-0.3** |
| | baz=352,SNR=34 | | | | | | |
| **YUK3** | **Moose Creek** | **1.00** | **360** | P | **Pg** | **09 48 59.8** | **-0.4** |
| | baz=180,SNR=27 | | | | | | |
| YUK3 | | | | S | **Sg** | **09 49 13.3** | **+0.1** |
| | baz=180 | | | | | | |
| **YUK6** | **Outpost Mounta** | **1.04** | **80** | P | **Pg** | **09 49 00.4** | **-0.6** |
| | baz=261 | | | | | | |
| YUK6 | | | | S | **Sg** | **09 49 13.7** | **-0.8** |
| | baz=261 | | | | | | |
| **YUK4** | **Talbot Arm** | **1.04** | **57** | P | **Pn** | **09 49 01.9** | **0.0** |
| | baz=235 | | | | | | |
| **O29M** | **Mount Kennedy** | **1.05** | **117** | P | **Pg** | **09 49 00.0** | **-1.1** |
| | baz=298,SNR=7.8 | | | | | | |
| O29M | | | | S | **Sg** | **09 49 13.5** | **-1.3** |
| | baz=298 | | | | | | |
| **N30M** | **Aishikik Lake** | **1.77** | **66** | Pb | **Pb** | **09 49 13.2** | **-0.4** |
| | baz=248,SNR=8.5 | | | | | | |
| **M29M** | **Somme Creek** | **1.92** | **29** | Pb | **Pb** | **09 49 16.4** | **+0.2** |
| | baz=210,SNR=10.0 | | | | | | |

**ISC 20 10:14:18.4**±46.0, **16°.44S**×**172°.27W**, **h0**km, **mb4.1**/3, **mbtmp4.1**/3, **Error ellipse: s-maj=889.2km s-min=176.9km az=80.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **44.48** | **241** | P | P | 10 22 32.0 | +0.3 |
| | 0.8nm,0.4s,baz=68,slow=16,SNR=4.4 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.67** | **257** | P | P | 10 23 19.6 | -0.5 |
| | 1.1nm,0.4s,baz=96,slow=6.9,SNR=22 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **50.83** | **253** | P | P | 10 23 21.2 | 0.0 |
| | 2.0nm,0.4s,baz=90,slow=8.4,SNR=38 | | | | | | |
| | 2.0nm,0.4s | | | | | | |

*AZER **20** 10:19:53.8, 38°.59N×44°.76E, h3km, ml2.3*
*TEH **20** 10:19:57.7, 38°.67N×44°.71E, h10km±999km, ML2.5*
**ISC 20 10:19:57.4**±1.9, **38°.67N**±0°.06×**44°.77E**±0°.09, **h4**km±12km, **n12**, σ1**s18**/19, **Turkey-Iran border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MAKU** | **Maku** | **0.69** | **354** | Pg | **Pg** | **10 20 10.8** | **+0.2** |
| **IMRD** | **Marand** | **0.73** | **86** | Pg | **Pn** | **10 20 13.0** | **-1.6** |
| **ISHB** | **Shabestar** | **0.77** | **120** | Pg | **Pb** | **10 20 12.9** | **-0.5** |
| **SBZ** | **Shahbuz** | **0.94** | **40** | P | **Pn** | **10 20 16.9** | **-0.6** |
| SBZ | | | | S | **Sn** | **10 20 32.5** | **+1.0** |
| **ORD** | **Ordubad** | **0.99** | **75** | P | **Pb** | **10 20 16.3** | **-0.8** |
| ORD | | | | S | **Sn** | **10 20 32.2** | **-0.3** |
| **HYR** | **Heyderabad** | **1.05** | **3** | P | **Pn** | **10 20 18.4** | **-0.4** |
| HYR | | | | S | **Sn** | **10 20 36.0** | **+2.1** |
| **ITBZ** | **Tabriz** | **1.16** | **112** | Pg | **Pg** | **10 20 19.9** | **+0.3** |
| **IAZR** | **Azarshahr** | **1.37** | **136** | Pg | **Pg** | **10 20 24.6** | **+0.9** |
| **GDB** | **GEDABAY** | **2.18** | **20** | P | **Pb** | **10 20 36.6** | **-0.8** |
| GDB | | | | S | **Sg** | **10 21 08.7** | **+1.2** |
| **GANJ** | **Ganja** | **2.31** | **31** | P | **Pn** | **10 20 36.0** | **-0.1** |
| GANJ | | | | S | **Sg** | **10 21 11.4** | **0.0** |
| **QZX** | **Qazax, Azerbai** | **2.43** | **11** | P | **Pb** | **10 20 38.9** | **-2.6** |
| QZX | | | | S | **Sb** | **10 21 13.2** | **+1.3** |
| **YRD** | **Yardimli** | **2.72** | **84** | P | **Pn** | **10 20 42.2** | **+0.2** |
| YRD | | | | S | **Sb** | **10 21 20.4** | **-0.1** |

*IDC **20** 10:25:44.3±2.6, 0°.66S×100°.79E, h0km, mb3.9/6, mbtmp3.9/6, Error ellipse: s-maj=163.0km s-min=19.7km az=53.0*
*DJA **20** 10:25:46.6±0.4, 1°S±4'×10°0E±', h10km, M4.2/7, MLv4.2/7*
**ISC 20 10:25:45.6**±0.8, **0°.77S**±0°.08×**100°.5E**±0°.1, **h10**km, **n15**, σ1**s46**/12, **mb4.1**/6, **Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PDSI** | **Padang** | **0.15** | **204** | P | **Pg** | **10 25 51.7** | **+2.6** |
| **SISI** | **Saibi** | **1.54** | **249** | P | Pn | 10 26 08.6 | -4.5 |
| SISI | | | | S | Sn | 10 26 25.8 | -7.4 |
| **PPSI** | **Pulau Pagai** | **2.05** | **195** | P | **Pn** | **10 26 17.9** | **-2.2** |
| **PBSI** | **Pulau Batu** | **2.35** | **288** | P | **Pn** | **10 26 23.3** | **-1.1** |
| **GSI** | **Gunungsitoli** | **3.60** | **305** | P | **Pn** | **10 26 42.0** | **+0.5** |
| **MNAI** | **Manna** | **4.32** | **146** | P | **Pn** | **10 26 52.2** | **+0.8** |
| **WRA** | **Warramunga Arr** | **38.18** | **122** | P | **P** | **10 33 04.4** | **-1.3** |
| | 0.3nm,0.6s,baz=303,slow=9.1,SNR=8.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **39.56** | **128** | P | **P** | **10 33 16.3** | **-1.1** |
| | 0.4nm,0.7s,baz=306,slow=7.9,SNR=8.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 35 24.5** | **-0.3** |
| | 0.2nm,0.6s,baz=320,slow=2.4,SNR=1.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.00** | **344** | P | **P** | **10 34 40.3** | **+0.2** |
| | 0.9nm,0.3s,baz=157,slow=8.8,SNR=14 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.07** | **349** | P | **P** | **10 35 26.0** | **+1.3** |
| | 0.5nm,0.3s,baz=165,slow=8.7,SNR=1.9 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **59.22** | **339** | P | **P** | **10 35 46.5** | **-0.5** |
| | 1.4nm,0.4s,baz=154,slow=8.7,SNR=7.5 | | | | | | |
| | 1.4nm,0.4s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **62.09** | **216** | T | T | 11 42 00.3 | |
| | baz=57,slow=75,SNR=7.0 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **62.10** | **216** | T | T | 11 42 01.0 | |
| | baz=57,slow=75,SNR=8.6 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **62.11** | **216** | T | T | 11 42 00.6 | |
| | baz=57,slow=75,SNR=7.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.50** | **340** | P | **P** | **10 38 22.9** | **-0.6** |
| | 1.5nm,0.7s,baz=97,slow=4.6,SNR=5.2 | | | | | | |
| | 1.5nm,0.7s | | | | | | |

*IDC **20** 10:31:30.8±0.5, 8°.19S×116°.57E, h0km, mb4.6/18, mbtmp4.6/19, ML4.3/1, MS4.0/8, Error ellipse: s-maj=17.3km s-min=9.1km az=58.0*
*NEIC **20** 10:31:32.4±1.4, 8°.24S±0°.07×116°.37E±0°.02, h10km±1km, mb4.9/47, Error ellipse: s-maj=11.8km s-min=2.9km az=165.0*
*DJA **20** 10:31:34.2±0.1, 8°S±2'×11°6E±', h10km, M5.1/38, mB5.6/12, mb4.9/38, MLv5.1/22, Mw(mB)5.1/12*
**ISC 20 10:31:32.8**±0.3, **8°.19S**±0°.04×**116°.47E**±0°.04, **h10**km, **n170**, σ1**s66**/163, **mb4.9**/58, **MS4.1**/12, **1C-6D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.68** | **144** | P | **Pg** | **10 31 46.2** | **+0.2** |
| **SRBI** | **Singaraja** | **1.25** | **275** | P | **Pg** | **10 31 56.0** | **-0.9** |
| **DNP** | **Denpasar** | **1.34** | **249** | P | **Pg** | **10 31 59.5** | **+0.9** |
| DNP | | | | S | **Sn** | **10 32 18.2** | **+2.7** |
| **PLAI** | **Plampang** | **1.44** | **116** | P | **Pb** | **10 32 00.3** | **+0.6** |
| **PLAI** | **Plampang** | **1.44** | **116** | P | **Pn** | **10 31 59.9** | **+1.0** |
| PLAI | | | | S | **Sn** | **10 32 18.8** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.31** | **263** | | **Pn** | **10 32 10.8** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.31** | **263** | P | **Pn** | **10 32 10.8** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **3.22** | **117** | P | **Pn** | **10 32 24.8** | **+1.3** |
| **GRJI** | **Gresik** | **4.16** | **287** | P | **Pn** | **10 32 36.9** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.47** | **63** | P | **Pn** | **10 32 41.0** | **+0.3** |
| **BASI** | **Baing, Sumba** | **4.53** | **117** | P | **Pn** | **10 32 42.9** | **+1.5** |
| **KAPI** | **Kappang** | **4.53** | **46** | Pn | **Pn** | **10 32 42.0** | **+0.5** |
| **KAPI** | **Kappang** | **4.53** | **46** | Pn | **Pn** | **10 32 41.0** | **-0.4** |
| | 16nm,0.3s,baz=201,slow=7.1,SNR=48 | | | | | | |
| KAPI | | | | Sn | **Sn** | **10 33 32.1** | **-2.1** |
| | 17nm,0.3s,baz=52,slow=19,SNR=10 | | | | | | |
| KAPI | | | | Lg | Lg | 10 33 59.5 | |
| | 24nm,0.3s,baz=342,slow=19,SNR=2.8 | | | | | | |
| | 36nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.63** | **272** | P | **Pn** | **10 32 44.7** | **+1.9** |
| **NGJI** | **Ngawi** | **5.03** | **279** | P | **Pn** | **10 32 50.3** | **+1.9** |
| | 354nm,1.0s,3.3nm | | | | | | |
| **EDFI** | **Ende, Flores** | **5.19** | **97** | P | **Pn** | **10 32 53.3** | **+2.6** |
| | 185nm,0.7s,2µm0.9nm | | | | | | |
| **BNSI** | **Bone** | **5.21** | **44** | P | **Pn** | **10 32 53.7** | **+2.8** |
| | 287nm,1.0s,5µm1.9nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.32** | **38** | P | **Pn** | **10 32 54.2** | **+1.8** |
| | 61nm,1.1s,3µm1.0nm | | | | | | |
| **MMRI** | **Maumere** | **5.72** | **95** | | **Pn** | **10 32 57.7** | **-0.1** |
| **MMRI** | **Maumere** | **5.72** | **95** | P | **Pn** | **10 32 59.5** | **+1.7** |
| | 450nm,1.2s,6µm2.0nm | | | | | | |
| **UGM** | **Wanagama** | **5.90** | **272** | | **Pn** | **10 32 57.9** | **-2.4** |
| **UGM** | **Wanagama** | **5.90** | **272** | P | **Pn** | **10 33 01.9** | **+1.6** |
| **MTKI** | **Muara Teweh, K** | **7.37** | **348** | P | Pb | 10 33 46.1 | +5.3 |
| **BATI** | **Baumata** | **7.38** | **106** | P | **Pn** | **10 33 20.4** | **-0.2** |
| | 129nm,1.0s,0.5nm | | | | | | |
| **KPJI** | **Karang Pucung** | **7.52** | **276** | P | **Pn** | **10 33 24.9** | **+2.3** |
| | 92nm,0.7s,0.5nm | | | | | | |
| **SOEI** | **Soe** | **7.86** | **102** | Pn | **Pn** | **10 33 27.5** | **+0.2** |
| **SOEI** | **Soe** | **7.86** | **102** | P | **Pn** | **10 33 28.9** | **+1.6** |
| | 174nm,0.9s,2µm0.7nm | | | | | | |
| **CMJI** | **Cimerak** | **7.96** | **272** | P | **Pn** | **10 33 29.9** | **+1.3** |
| | 118nm,1.1s,0.5nm | | | | | | |
| **DBJI** | **Dranaga** | **9.78** | **279** | P | Pn | 10 34 13.1 | +19 |
| **TOLI2** | **Tolitoli** | **10.19** | **25** | Pn | **Pn** | **10 34 00.3** | **+1.2** |
| **XMIS** | **Christmas Isla** | **10.92** | **257** | Pn | **Pn** | **10 34 05.6** | **-3.7** |
| **SBUM** | **Sibu** | **11.39** | **338** | Pn | **Pn** | **10 34 15.2** | **-0.4** |
| **KSM** | **Kuching** | **11.40** | **327** | Pn | **Pn** | **10 34 15.0** | **-0.7** |
| **PPBI** | **Pangkal Pinang** | **11.90** | **300** | P | Pn | 10 34 31.1 | +8.4 |
| **MBWA** | **Marble Bar** | **13.28** | **167** | P | **Pn** | **10 34 39.4** | **-2.0** |
| **MBWA** | **Marble Bar** | **13.28** | **167** | | **Pn** | **10 34 38.5** | **-2.9** |
| **FITZ** | **Fitzroy Crossi** | **13.29** | **139** | | **Pn** | **10 34 41.4** | **-0.2** |
| **MYLDM** | **Lahad Datu** | **13.43** | **9** | Pn | **Pn** | **10 34 43.7** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **13.70** | **167** | P | **Pn** | **10 34 46.7** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **13.70** | **167** | | **Pn** | **10 34 45.0** | **-2.2** |
| **KNRA** | **Kununurra** | **14.13** | **123** | | **Pn** | **10 34 52.6** | **-0.6** |
| **KKM** | **Kota Kinabalu** | **14.14** | **359** | | **Pn** | **10 34 53.1** | **-0.3** |
| **GIRL** | **Giralia** | **14.54** | **188** | | **Pn** | **10 34 56.4** | **-2.2** |
| **MTN** | **Manton Dam** | **15.13** | **109** | Pn | **Pn** | **10 35 05.4** | **-1.4** |
| MTN | | | | IAmb | IAmb | 10 35 33.7 | |
| | comp=Z,53nm,1.3s | | | | | | |
| **FAKI** | **Fak Fak** | **16.55** | **72** | Pn | **Pn** | **10 35 24.9** | **-0.2** |
| **PDSI** | **Padang** | **17.51** | **294** | P | **P** | **10 35 39.5** | **+1.1** |
| | comp=Z,35nm,1.0s,comp=Z,5µm | | | | | | |
| **DAV** | **Davao City (W)** | **17.67** | **31** | LR | LR | 10 44 03.6 | |
| | comp=Z,550nm,18.3s,baz=165,slow=43 | | | | | | |
| **MEEK** | **Meekatharra** | **18.46** | **174** | P | **Pn** | **10 35 49.4** | **+0.5** |
| **WRKA** | **Warakurna** | **20.20** | **147** | P | Pn | 10 36 08.8 | -1.0 |
| **RPSI** | **Rantau Prapat** | **20.57** | **301** | P | **P** | **10 36 10.0** | **-2.0** |
| RPSI | | | | IAmb | IAmb | 10 36 15.4 | |
| | comp=Z,77nm,1.2s | | | | | | |
| **KULM** | **Kulim** | **20.70** | **310** | P | **P** | **10 36 11.6** | **-1.7** |
| **MORW** | **Morawa** | **20.78** | **181** | P | Pn | 10 36 18.2 | +1.7 |
| **MORW** | **Morawa** | **20.78** | **181** | | **P** | **10 36 13.3** | **-0.7** |
| **WB0** | **Warramunga Arr** | **20.83** | **125** | P | **P** | **10 36 14.7** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 10 36 41.3 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.88** | **126** | P | **P** | **10 36 15.2** | **-0.1** |
| **WRA** | **Warramunga Arr** | **20.88** | **126** | P | **P** | **10 36 14.9** | **-0.3** |
| | comp=Z,23nm,1.1s,baz=300,slow=12,SNR=75 | | | | | | |
| WRA | | | | S | **S** | **10 40 06.7** | **-1.5** |
| | comp=Z,2.9nm,0.9s,baz=295,slow=21,SNR=5.0 | | | | | | |
| WRA | | | | LR | LR | 10 45 30.8 | |
| | comp=Z,399nm,18.4s,baz=328,slow=40 | | | | | | |
| | comp=Z,23nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.88** | **126** | P | **P** | **10 36 14.8** | **-0.5** |
| **WB2** | **Warramunga Arr** | **20.89** | **126** | P | **P** | **10 36 15.2** | **-0.2** |
| **WR0** | **Warramunga Arr** | **21.05** | **126** | IAmb | IAmb | 10 36 20.2 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **BLDU** | **Ballidu** | **22.32** | **179** | P | **P** | **10 36 35.1** | **+4.5** |
| **ASAR** | **Alice Springs** | **22.71** | **135** | P | **P** | **10 36 35.2** | **+0.2** |
| **ASAR** | **Alice Springs** | **22.71** | **135** | P | **P** | **10 36 35.0** | **0.0** |
| | comp=Z,18nm,1.0s,baz=312,slow=8.7,SNR=59 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 40 26.6** | **-0.8** |
| | comp=Z,1.4nm,0.7s,baz=302,slow=1.7,SNR=4.5 | | | | | | |
| ASAR | | | | S | **S** | **10 40 42.0** | **-1.7** |
| | comp=Z,7.7nm,1.2s,baz=324,slow=23,SNR=5.5 | | | | | | |
| ASAR | | | | LR | LR | 10 45 38.7 | |
| | comp=Z,297nm,19.4s,baz=318,slow=37 | | | | | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **KLBR** | **Kellerberrin** | **23.32** | **177** | P | **P** | **10 36 44.4** | **+3.3** |
| **MLSI** | **Meulaboh, Aceh** | **23.53** | **301** | P | **P** | **10 36 44.2** | **+0.8** |
| | comp=Z,54nm,0.9s | | | | | | |
| **KMBL** | **Kambalda** | **23.61** | **168** | P | **P** | **10 36 45.2** | **+1.2** |
| **MUN** | **Mundaring** | **23.68** | **181** | P | **P** | **10 36 49.8** | **+5.2** |
| **SRIT** | **Nakonsritamara** | **23.68** | **314** | P | **P** | **10 36 42.8** | **-2.0** |
| SRIT | | | | IAmb | IAmb | 10 36 48.5 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.63** | **178** | P | **P** | **10 36 57.9** | **+4.4** |
| | comp=Z,25nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.63** | **178** | P | **P** | **10 36 53.3** | **-0.2** |
| NWAO | | | | IAmb | IAmb | 10 37 18.1 | |
| | comp=Z,45nm,1.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.63** | **178** | LR | LR | 10 47 08.8 | |
| | comp=Z,229nm,20.2s,baz=202,slow=38 | | | | | | |
| **FORT** | **Forrest** | **24.95** | **156** | P | **P** | **10 36 58.5** | **+2.1** |
| **FORT** | **Forrest** | **24.95** | **156** | P | **P** | **10 36 55.2** | **-1.2** |
| **QIS** | **Mount Isa** | **25.52** | **121** | P | **P** | **10 37 05.1** | **+3.4** |
| **OOD** | **Oodnadatta** | **26.65** | **139** | P | **P** | **10 37 12.8** | **+0.9** |
| **MULG** | **Mulgathing** | **27.47** | **145** | P | **P** | **10 37 21.9** | **+2.7** |
| **QIZ** | **Qiongzhong** | **27.82** | **346** | P | **P** | **10 37 23.8** | **+1.3** |
| QIZ | | | | S | **S** | **10 42 08.6** | **+2.9** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,140nm,4.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=N,270nm,10.4s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,210nm,11.6s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,350nm,14.3s | | | | | | |
| **LCRK** | **Leigh Creek** | **30.07** | **140** | P | **P** | **10 37 45.3** | **+2.9** |
| **INKA** | **Innaminka** | **30.07** | **133** | P | **P** | **10 37 45.8** | **+3.4** |
| **BBOO** | **Buckleboo** | **30.49** | **146** | P | **P** | **10 37 48.9** | **+2.8** |
| **BBOO** | **Buckleboo** | **30.49** | **146** | P | **P** | **10 37 45.6** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 10 37 50.4 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **PHRA** | **Phrae** | **30.98** | **329** | P | **P** | **10 37 49.4** | **-1.1** |
| **CTA** | **Charters Tower** | **31.14** | **115** | LR | LR | 10 52 44.2 | |
| | comp=Z,35nm,18.1s,baz=290,slow=41 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **31.63** | **327** | P | **P** | **10 37 55.6** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **31.63** | **327** | P | **P** | **10 37 55.7** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **31.63** | **327** | P | **P** | **10 37 57.5** | **+1.3** |
| | comp=Z,9.7nm,1.0s,baz=155,slow=7.2,SNR=43 | | | | | | |
| CMAR | | | | PcP | **PcP** | **10 40 48.3** | **-0.3** |
| | comp=Z,0.8nm,0.3s,baz=90,slow=0.9,SNR=1.7 | | | | | | |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **SLVN** | **Son La** | **31.83** | **337** | P | **P** | **10 37 56.7** | **-1.3** |
| **CRAI** | **Chiangrai** | **32.38** | **331** | P | **P** | **10 38 01.7** | **-1.1** |
| CRAI | | | | IAmb | IAmb | 10 38 24.9 | |
| | comp=Z,16nm,0.6s | | | | | | |
| **HTT** | **Hallett** | **32.58** | **144** | P | **P** | **10 38 07.8** | **+3.3** |
| **STKA** | **Stephens Creek** | **33.19** | **139** | P | **P** | **10 38 12.8** | **+3.0** |
| **STKA** | **Stephens Creek** | **33.19** | **139** | P | **P** | **10 38 09.9** | **+0.1** |
| **STKA** | **Stephens Creek** | **33.19** | **139** | P | **P** | **10 38 10.5** | **+0.7** |
| | comp=Z,4.9nm,0.7s,baz=319,slow=9.2,SNR=11 | | | | | | |
| STKA | | | | LR | LR | 10 52 24.3 | |
| | comp=Z,346nm,18.8s,baz=332,slow=38 | | | | | | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **35.71** | **338** | ⇓P | **P** | **10 38 35.3** | **+3.4** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,170nm,13.1s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,240nm,18.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,250nm,16.5s | | | | | | |
| **PZH** | **PanZhiHua** | **37.33** | **338** | P | **P** | **10 38 47.8** | **+2.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,3.5s | | | | | | |
| **NJ2** | **Nanjing** | **40.08** | **3** | *e*P | **P** | **10 39 09.8** | **+1.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **CD2** | **Chengdu** | **40.74** | **343** | P | **P** | **10 39 14.9** | **+0.8** |
| CD2 | | | | pP | sP | 10 39 18.8 | +0.8 |
| CD2 | | | | sP | pP | 10 39 20.0 | +3.1 |
| CD2 | | | | S | **S** | **10 45 27.8** | **+3.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,70nm,0.8s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,200nm,5.4s | | | | | | |
| **XAN** | **Xi'an** | **42.60** | **351** | ⇓P | **P** | **10 39 31.0** | **+1.7** |
| XAN | | | | pP | sP | 10 39 35.8 | +2.6 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,14nm,1.5s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,340nm,15.8s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,340nm,14.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,440nm,15.1s | | | | | | |
| **LYN** | **LuoYang** | **42.67** | **355** | P | **P** | **10 39 30.9** | **+1.1** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,360nm,4.5s | | | | | | |
| **HNR** | **Honiara** | **42.96** | **95** | LR | LR | 10 59 40.7 | |
| | comp=Z,868nm,19.1s,baz=273,slow=39 | | | | | | |
| **TIA** | **Tai'an** | **44.16** | **1** | P | **P** | **10 39 42.3** | **+0.5** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **44.86** | **328** | P | **P** | **10 39 51.3** | **+3.2** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| **LZH** | **Lanzhou** | **45.61** | **346** | *e*P | **P** | **10 39 56.6** | **+3.1** |
| LZH | | | | pP | sP | 10 40 02.1 | +4.6 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,40nm,1.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,930nm,16.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,1µm,16.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1µm,17.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.63** | **13** | P | **P** | **10 40 01.8** | **+0.5** |
| **KSRS** | **Korea Array** | **46.65** | **13** | P | **P** | **10 40 02.1** | **+0.7** |
| | comp=Z,9.3nm,1.1s,baz=195,slow=7.9,SNR=15 | | | | | | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **BJI** | **Beijing** | **47.98** | **360** | P | **P** | **10 40 12.5** | **+0.7** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.95** | **23** | P | **P** | **10 40 18.6** | **-0.8** |
| | comp=Z,5.5nm,0.8s,baz=202,slow=7.4,SNR=10.0 | | | | | | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.00** | **355** | *e*P | **P** | **10 40 21.9** | **+2.1** |
| HHC | | | | pP | sP | 10 40 27.0 | +3.2 |
| HHC | | | | sP | pP | 10 40 32.6 | +10 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,4.8s | | | | | | |
| **GTA** | **Gaotai** | **49.81** | **343** | *e*P | **P** | **10 40 28.1** | **+2.0** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,170nm,18.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,160nm,16.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,140nm,19.6s | | | | | | |
| **MDJ** | **Mudanjiang** | **53.88** | **12** | P | **P** | **10 40 56.3** | **+0.2** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,210nm,5.5s | | | | | | |
| **MDJ** | **Mudanjiang** | **53.88** | **12** | P | **P** | **10 40 55.7** | **-0.4** |
| **USA0B** | **Ussuriysk Arra** | **54.00** | **14** | IAmb | IAmb | 10 40 58.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.00** | **14** | P | **P** | **10 40 56.5** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** | **54.00** | **14** | P | **P** | **10 40 57.3** | **+0.3** |
| | comp=Z,9.9nm,0.7s,baz=189,slow=7.2,SNR=25 | | | | | | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **BNX** | **BinXian** | **54.57** | **9** | ⇑P | **P** | **10 40 59.3** | **-1.9** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.43** | **352** | P | **P** | **10 41 14.2** | **-0.5** |
| ULN | | | | IAmb | IAmb | 10 41 17.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.49** | **352** | P | **P** | **10 41 15.0** | **-0.1** |
| SONM | | | | IAmb | IAmb | 10 41 17.3 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.49** | **352** | P | **P** | **10 41 15.2** | **+0.1** |
| | comp=Z,14nm,0.9s,baz=170,slow=8.2,SNR=52 | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.18** | **22** | P | **P** | **10 41 20.0** | **+0.1** |
| **WMQ** | **Urumqi** | **57.97** | **336** | *e*P | **P** | **10 41 26.8** | **+1.2** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,49nm,3.6s | | | | | | |
| **CASY** | **Casey** | **58.15** | **183** | P | **P** | **10 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,6.9nm,0.7s | | | | | | | |
| **MAW** | **Mawson** | **69.16** | **199** | P | | **P** | **10 42 39.9** | **+0.8** |
| | comp=Z,8.4nm,0.9s,baz=68,slow=8.8,SNR=7.2 | | | | | | | |
| | comp=Z,8.4nm,0.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.36** | **25** | P | | **P** | **10 42 47.7** | **+1.0** |
| | comp=Z,2.8nm,0.5s,baz=206,slow=6.3,SNR=3.7 | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **72.42** | **333** | P | | **P** | **10 42 57.6** | **-1.6** |
| | comp=Z,4.3nm,0.8s,baz=142,slow=7.3,SNR=21 | | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **72.49** | **333** | P | | **P** | **10 42 58.7** | **-0.9** |
| **ABKAR** | **Akbulak array** | **75.47** | **326** | P | | **P** | **10 43 15.0** | **-2.1** |
| **ABKAR** | **Akbulak array** | **75.47** | **326** | IAmb | | IAmb | 10 43 16.4 | |
| | comp=Z,8.5nm,1.1s | | | | | | | |
| **RAYN** | **Ar Rayn** | **76.11** | **297** | P | | **P** | **10 43 18.4** | **-2.9** |
| RAYN | | | | IAmb | | IAmb | 10 43 36.5 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **TIXI** | **Tiksi** | **80.09** | **4** | P | | **P** | **10 43 41.3** | **-1.1** |
| TIXI | | | | IAmb | | IAmb | 10 43 42.7 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.80** | **180** | P | | **P** | **10 43 51.8** | **-0.2** |
| QSPA | | | | IAmb | | IAmb | 10 43 58.7 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.80** | **180** | P | | **P** | **10 43 52.0** | **+0.1** |
| | comp=Z,6.1nm,1.0s,baz=320,slow=2.5,SNR=12 | | | | | | | |
| | comp=Z,6.1nm,1.0s | | | | | | | |
| **BOSA** | **Boshof** | **87.20** | **242** | P | | **P** | **10 44 19.4** | **-0.7** |
| | comp=Z,3.2nm,0.9s,baz=86,slow=10,SNR=3.6 | | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.45** | **197** | ⇓P | | **P** | **10 44 31.1** | **+1.2** |
| | comp=Z,306nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **89.70** | **310** | P | | **P** | **10 44 30.3** | **-1.3** |
| | comp=Z,0.7nm,0.8s,baz=129,slow=2.0,SNR=3.6 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **91.10** | **196** | P | | **P** | **10 44 37.2** | **-0.2** |
| SNAA | | | | IAmb | | IAmb | 10 44 43.8 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **SNAA** | **Sanae** | **91.10** | **196** | ⇓P | | **P** | **10 44 38.1** | **+0.7** |
| | comp=Z,160nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **91.10** | **196** | P | | **P** | **10 44 37.9** | **+0.4** |
| | comp=Z,5.1nm,0.9s,baz=107,slow=5.4,SNR=15 | | | | | | | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| **BELA** | **Belgrano 2** | **92.58** | **186** | P | | **P** | **10 44 42.5** | **-1.6** |
| BELA | | | | IAmb | | IAmb | 10 44 49.6 | |
| | comp=Z,7.2nm,0.9s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.74** | **196** | ⇓P | | **P** | **10 44 45.6** | **+0.6** |
| | comp=Z,13nm,0.8s,baz=249,slow=1.7 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.16** | **195** | ⇓P | | **P** | **10 44 47.4** | **+0.5** |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.86** | **281** | PKP | | **PKPdf** | **10 50 14.8** | **-2.0** |
| | comp=Z,1.4nm,0.6s,baz=140,slow=0.8,SNR=8.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.41** | **49** | PKP | | **PKPdf** | **10 50 28.0** | **-1.1** |
| | comp=Z,0.2nm,0.7s,baz=251,slow=4.7,SNR=2.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **136.87** | **55** | PKP | | **PKPdf** | **10 50 54.2** | **-2.4** |
| | comp=Z,0.4nm,0.9s,baz=264,slow=1.6,SNR=3.7 | | | | | | | |
| **CPUP** | **Villa Florida** | **145.17** | **190** | PKPbc | | **PKPab** | **10 51 10.7** | **-0.3** |
| | comp=Z,22nm,1.1s,baz=170,slow=3.5,SNR=17 | | | | | | | |
| **BDFB** | **Brasilia** | **151.78** | **213** | PKPbc | | **PKiKP** | **10 51 28.7** | **-0.6** |
| | comp=Z,4.2nm,0.6s,baz=94,slow=2.0,SNR=4.2 | | | | | | | |
| **LPAZ** | **La Paz** | **155.26** | **169** | PKPab | | **PKPab** | **10 51 53.4** | **+0.5** |
| | comp=Z,3.5nm,0.8s,baz=178,slow=2.7,SNR=6.7 | | | | | | | |

*JMA **20** 10:45:50.5±0.1, 24°.2N±0°.2×123°.9E±0°.2, h17km, MD4.4/10, MV3.9/10, NEAR ISHIGAKIJIMA ISLAND*
*JMA Felt II J1 at NEAR ISHIGAKIJIMA ISLAND.*
*NEIC **20** 10:45:55.0±1.9, 24°.26N±0°.08×123°.5E±0°.1, h44km, mb4.4/21, Error ellipse: s-maj=14.9km s-min=11.5km az=78.0*
*IDC **20** 10:45:57.7±3.6, 24°.25N×123°.62E, h77km±33km, mb3.6/18, mbtmp3.9/20, Error ellipse: s-maj=28.3km s-min=14.5km az=65.0*

**ISC 20 10:45:50.3±0.7, 24°.28N±0°.04×123°.86E±0°.02, h18km±4km, n90, σ1°27/82, mb4.2/29, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.14** | **296** | P | **Pg** | **10 45 54.5** | **+0.3** |
| IRIF | | | | S | **Sg** | **10 45 57.6** | **+0.6** |
| **IRIF** | **Iriomote-Funau** | **0.14** | **296** | A | A | 10 45 54.5 | |
| | comp=E,30nm,0.8s,comp=N,36nm,1.4s | | | | | | |
| **JKRS** | **Kuro-shima** | **0.14** | **106** | P | **Pg** | **10 45 54.6** | **+0.3** |
| JKRS | | | | S | **Sg** | **10 45 57.8** | **+0.7** |
| **JKRS** | **Kuro-shima** | **0.14** | **106** | A | A | 10 45 54.6 | |
| | comp=E,74nm,0.8s,comp=N,103nm,2.0s | | | | | | |
| **HATJ** | **Hateruma jima** | **0.23** | **194** | P | **Pg** | **10 45 54.9** | **-0.7** |
| HATJ | | | | S | **Sg** | **10 45 58.1** | **-1.0** |
| **HATJ** | **Hateruma jima** | **0.23** | **194** | A | A | 10 45 54.9 | |
| | comp=E,92nm,2.1s,comp=N,122nm,3.9s | | | | | | |
| **JIJ** | **Ishigaki jima** | **0.27** | **71** | P | **Pb** | **10 45 56.7** | **+0.1** |
| JIJ | | | | S | **Sg** | **10 46 01.3** | **+0.9** |
| **JIJ** | **Ishigaki jima** | **0.27** | **71** | A | A | 10 45 56.7 | |
| | comp=E,8.0nm,2.2s,comp=N,13nm,0.9s | | | | | | |
| **JISG** | **Ishigakijimahi** | **0.51** | **53** | P | **Pn** | **10 46 01.3** | **-1.4** |
| JISG | | | | S | **Sb** | **10 46 09.3** | **+1.4** |
| **JISG** | **Ishigakijimahi** | **0.51** | **53** | A | A | 10 46 01.3 | |
| | comp=E,80nm,0.5s,comp=N,79nm,0.4s | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.80** | **284** | P | **Pb** | **10 46 05.8** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.80** | **284** | Pn | **Pb** | **10 46 05.8** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.80** | **284** | P | **Pb** | **10 46 05.8** | **+0.1** |
| YOJ | | | | S | **Sg** | **10 46 16.1** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **0.80** | **284** | A | A | 10 46 05.8 | |
| | comp=E,22nm,0.8s,comp=N,25nm,0.3s | | | | | | |
| **JTJ** | **Tarama** | **0.85** | **64** | P | **Pn** | **10 46 07.1** | **-0.2** |
| JTJ | | | | S | **Sn** | **10 46 19.4** | **+0.1** |
| **JTJ** | **Tarama** | **0.85** | **64** | A | A | 10 46 07.1 | |
| | comp=E,16nm,1.2s,comp=N,14nm,0.9s | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.86** | **282** | P | **Pg** | **10 46 06.6** | **-0.4** |
| JYNG | | | | S | **Sg** | **10 46 18.2** | **-0.1** |
| **JYNG** | **Yonagunijimaku** | **0.86** | **282** | A | A | 10 46 06.6 | |
| | comp=E,30nm,1.0s,comp=N,45nm,0.4s | | | | | | |
| **JIRB** | **Irabujima** | **1.31** | **65** | A | A | 10 46 14.5 | |
| | comp=E,9.0nm,3.4s,comp=N,7.0nm,5.1s | | | | | | |
| **JMJ** | **Miyako jima 2** | **1.41** | **67** | P | **Pg** | **10 46 17.4** | **0.0** |
| **JMJ2** | **Miyako jima3** | **1.41** | **71** | A | A | 10 46 16.0 | |
| | comp=E,10.0nm,1.6s,comp=N,10.0nm,2.9s | | | | | | |
| **JIKM** | **Ikemajima** | **1.42** | **63** | A | A | 10 46 16.1 | |
| | comp=E,13nm,2.3s,comp=N,9.0nm,1.0s | | | | | | |
| **JOGS** | **Gusukube** | **1.48** | **71** | A | A | 10 46 17.1 | |
| | comp=E,15nm,5.6s,comp=N,15nm,0.7s | | | | | | |
| **NACB** | **Ninganchiao** | **2.07** | **268** | P | **Pn** | **10 46 25.1** | **+0.9** |
| **NACB** | **Ninganchiao** | **2.07** | **268** | | **Pn** | **10 46 24.9** | **+0.7** |
| **TATO** | **Taipei** | **2.27** | **288** | P | **Pb** | **10 46 28.9** | **-1.9** |
| **TATO** | **Taipei** | **2.27** | **288** | | **Pn** | **10 46 27.9** | **+0.9** |
| **YHNB** | **Yeheng** | **2.30** | **280** | P | **Pn** | **10 46 29.3** | **+1.9** |
| **YHNB** | **Yeheng** | **2.30** | **280** | | **Pn** | **10 46 28.6** | **+1.2** |
| **YULB** | **Yu-li** | **2.51** | **250** | P | **Pn** | **10 46 29.9** | **-0.4** |
| **YULB** | **Yu-li** | **2.51** | **250** | Pn | **Pn** | **10 46 29.6** | **-0.7** |
| **SSLB** | **Suanglung** | **2.70** | **260** | P | **Pn** | **10 46 33.9** | **+0.9** |
| **SSLB** | **Suanglung** | **2.70** | **260** | Pn | **Pn** | **10 46 33.6** | **+0.6** |
| **TWGBT** | **Beinan** | **2.94** | **241** | P | **Pn** | **10 46 35.3** | **-0.8** |
| **TWG** | **Pinlang** | **2.94** | **241** | Pn | **Pn** | **10 46 35.3** | **-0.9** |
| **TPUB** | **Ta-pu** | **3.12** | **253** | Pn | **Pn** | **10 46 39.7** | **+1.1** |
| **JOW** | **Kunigami** | **4.73** | **56** | P | **Pb** | **10 47 10.0** | **-2.7** |
| | comp=N,16nm,0.5s,baz=235,slow=16,SNR=2.1 | | | | | | |
| **KSRS** | **Korea Array** | **15.59** | **14** | P | **P** | **10 49 09.3** | **-1.8** |
| | comp=N,1.7nm,0.8s,baz=198,slow=12,SNR=4.3 | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.56** | **203** | P | **P** | **10 50 17.6** | **+0.2** |
| **CM31** | **Chiang Mai Arr** | **23.90** | **261** | P | **P** | **10 51 01.9** | **-1.4** |
| CM31 | | | | IAmb | IAmb | 10 51 11.8 | |
| | comp=Z,5.6nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.90** | **261** | P | **P** | **10 51 00.4** | **-2.9** |
| **SONM** | **Songino Array** | **27.30** | **334** | P | **P** | **10 51 33.6** | **-0.3** |
| | comp=Z,0.9nm,0.6s,baz=152,slow=9.6,SNR=3.8 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **39.99** | **315** | P | **P** | **10 53 23.7** | **-0.3** |
| **MKAR** | **Makanchi Array** | **39.99** | **315** | P | **P** | **10 53 22.9** | **-1.0** |
| **MKAR** | **Makanchi Array** | **39.99** | **315** | P | **P** | **10 53 23.2** | **-0.8** |
| | comp=Z,1.0nm,0.3s,baz=97,slow=8.7,SNR=19 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.04** | **88** | T | T | 11 36 11.4 | |
| | baz=284,slow=75,SNR=4.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.04** | **88** | T | T | 11 36 04.8 | |
| | baz=284,slow=75,SNR=3.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.05** | **88** | T | T | 11 36 08.8 | |
| | baz=284,slow=75,SNR=4.2 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.17** | **90** | T | T | 11 36 15.5 | |
| | baz=284 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.18** | **90** | T | T | 11 36 17.6 | |
| | baz=284 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.19** | **90** | T | T | 11 36 22.9 | |
| | baz=284 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.52** | **326** | P | **P** | **10 53 36.7** | **+0.3** |
| | comp=Z,0.7nm,0.5s,baz=119,slow=7.4,SNR=2.9 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **COEN** | **Coen** | **42.42** | **152** | P | | **P** | **10 53 45.7** | **+1.5** |
| **KURK** | **Kurchatov** | **43.61** | **319** | P | | **P** | **10 53 50.8** | **-2.7** |
| **KURBB** | **Kurchatov Arra** | **43.63** | **319** | P | | **P** | **10 53 52.9** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=106,slow=9.7,SNR=5.0 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.96** | **166** | P | | **P** | **10 54 05.2** | **+0.6** |
| WB0 | | | | IAmb | | IAmb | 10 54 21.2 | |
| | comp=Z,8.3nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.11** | **166** | P | | **P** | **10 54 09.4** | **+3.7** |
| **WRA** | **Warramunga Arr** | **45.12** | **166** | P | | **P** | **10 54 07.6** | **+1.8** |
| **WRA** | **Warramunga Arr** | **45.12** | **166** | P | | **P** | **10 54 05.9** | **+0.1** |
| | comp=Z,2.2nm,0.7s,baz=347,slow=8.9,SNR=8.8 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **45.12** | **166** | P | | **P** | **10 54 06.8** | **+0.9** |
| WB2 | | | | IAmb | | IAmb | 10 54 11.5 | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| **WR0** | **Warramunga Arr** | **45.18** | **166** | P | | **P** | **10 54 07.2** | **+0.9** |
| WR0 | | | | IAmb | | IAmb | 10 54 11.9 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **48.64** | **168** | P | | **P** | **10 54 34.5** | **+1.2** |
| **ASAR** | **Alice Springs** | **48.64** | **168** | P | | **P** | **10 54 34.5** | **+1.1** |
| **ASAR** | **Alice Springs** | **48.64** | **168** | P | | **P** | **10 54 34.2** | **+0.8** |
| | comp=Z,0.6nm,0.6s,baz=352,slow=7.2,SNR=18 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **10 55 58.8** | **+0.1** |
| | comp=Z,0.4nm,0.8s,baz=351,slow=4.0,SNR=2.3 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.16** | **320** | P | | **P** | **10 54 36.7** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=88,slow=7.4,SNR=4.4 | | | | | | | |
| BVAR | | | | PcP | | **PcP** | **10 56 00.3** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=124,slow=5.4,SNR=1.9 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **55.13** | **314** | P | | **P** | **10 55 21.5** | **0.0** |
| **J17K** | **VABM Dome** | **62.80** | **30** | P | | **P** | **10 56 17.6** | **+3.0** |
| J17K | | | | IAmb | | IAmb | 10 56 33.9 | |
| | comp=Z,5.0nm,1.2s | | | | | | | |
| **M16K** | **Timber Creek** | **62.89** | **32** | P | | **P** | **10 56 16.7** | **+1.5** |
| **H19K** | **Roundabout Mou** | **63.91** | **27** | P | | **P** | **10 56 22.5** | **+0.7** |
| H19K | | | | IAmb | | IAmb | 10 56 35.7 | |
| | comp=Z,6.6nm,1.3s | | | | | | | |
| **J19K** | **Poorman** | **64.33** | **29** | P | | **P** | **10 56 26.2** | **+1.6** |
| J19K | | | | IAmb | | IAmb | 10 56 30.0 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **H21K** | **Melozitna Rive** | **65.42** | **27** | P | | **P** | **10 56 33.7** | **+2.0** |
| H21K | | | | IAmb | | IAmb | 10 56 34.9 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **SKT** | **Skwentna** | **66.36** | **31** | P | | **P** | **10 56 41.3** | **+3.5** |
| **H23K** | **Yukon River** | **66.74** | **27** | P | | **P** | **10 56 42.4** | **+2.2** |
| H23K | | | | IAmb | | IAmb | 10 56 43.2 | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| **RND** | **Reindeer** | **67.38** | **29** | P | | **P** | **10 56 45.1** | **+0.7** |
| **ILAR** | **Eielson Array** | **68.01** | **28** | P | | **P** | **10 56 48.8** | **+0.6** |
| | comp=Z,3.9nm,0.5s,baz=262,slow=4.4,SNR=5.3 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **69.91** | **348** | P | | **P** | **10 56 59.5** | **-0.4** |
| | comp=Z,4.6nm,0.9s,baz=69,slow=7.9,SNR=1.2 | | | | | | | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **K27K** | **Chicken** | **70.21** | **28** | P | | **P** | **10 57 03.6** | **+1.7** |
| K27K | | | | IAmb | | IAmb | 10 57 04.3 | |
| | comp=Z,3.8nm,1.1s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **70.58** | **29** | P | | **P** | **10 57 06.1** | **+1.8** |
| **DAWY** | **Dawson** | **71.33** | **27** | P | | **P** | **10 57 10.3** | **+1.5** |
| DAWY | | | | IAmb | | IAmb | 10 57 10.7 | |
| | comp=Z,3.9nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **72.59** | **330** | P | | **P** | **10 57 15.6** | **-0.7** |
| **FINES** | **FINESS Array B** | **72.59** | **330** | P | | **P** | **10 57 15.9** | **-0.4** |
| | comp=Z,1.0nm,0.6s,baz=104,slow=5.9,SNR=5.6 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.42** | **319** | P | | **P** | **10 57 26.6** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=58,slow=7.8,SNR=1.3 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.08** | **307** | P | | **P** | **10 57 31.6** | **+0.1** |
| | comp=Z,1.6nm,0.9s,baz=82,slow=5.1,SNR=6.6 | | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **78.67** | **331** | P | | **P** | **10 57 50.8** | **-0.3** |
| | comp=Z,2.9nm,0.8s,baz=106,slow=4.7,SNR=4.8 | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **79.27** | **333** | P | | **P** | **10 57 54.3** | **-0.2** |
| | comp=Z,1.3nm,0.6s,baz=54,slow=6.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **79.27** | **333** | P | | **P** | **10 57 53.8** | **-0.7** |
| | comp=Z,0.9nm,0.5s,baz=54,slow=5.8,SNR=4.2 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.92** | **24** | P | | **P** | **10 58 08.3** | **-0.3** |
| | comp=Z,0.8nm,0.7s,baz=327,slow=6.6,SNR=2.3 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **GERES** | **GERESS Array B** | **84.31** | **321** | P | | **P** | **10 58 21.4** | **0.0** |
| | comp=Z,1.2nm,0.6s,baz=116,slow=3.1,SNR=5.7 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **88.77** | **333** | P | | **P** | **10 58 42.3** | **-0.6** |
| | comp=Z,0.2nm,0.4s,baz=51,slow=4.6,SNR=3.6 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.68** | **44** | P | | **P** | **10 59 12.4** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=317,slow=6.1,SNR=4.0 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |

*IDC **20** 10:45:53.4±1.6, 63°.06N×28°.02E, h0km, mbtmp2.8/2, Error ellipse: s-maj=20.4km s-min=7.7km az=104.0*
*HEL **20** 10:45:53.9±0.1, 63°.12N×27°.71E, h0km, ML1.9, Suspected explosion*
*UPP **20** 10:45:57.5±2.8, 63°.20N×27°.36E, h1km, ML1.6*

**ISC 20 10:45:53.4±0.8, 63°.10N±0°.02×27°.74E±0°.03, h0km, n43, σ1°86/62, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIF** | **Nilsia** | **0.29** | **6** | PG | **Pg** | **10 45 58.8** | **-0.1** |
| | baz=194 | | | | | | |
| NIF | | | | SG | **Sg** | **10 46 02.7** | **+0.1** |
| **SUF** | **Sumiainen** | **0.82** | **243** | PB | **Pg** | **10 46 08.8** | **-0.3** |
| | baz=56 | | | | | | |
| SUF | | | | MSG | | 10 46 19.3 | |
| | comp=Z,6.1nm,0.2s | | | | | | |
| SUF | | | | SB | **Sg** | **10 46 20.8** | **+1.0** |
| **KAF** | **Kangasniemi** | **1.20** | **214** | PG | **Pg** | **10 46 15.6** | **-0.7** |
| KAF | | | | MSG | | 10 46 30.5 | |
| | comp=Z,16nm,0.2s | | | | | | |
| KAF | | | | SB | **Sg** | **10 46 32.2** | **+0.5** |
| **RMF** | **Romuvaara** | **1.48** | **40** | PG | **Pn** | **10 46 20.9** | **-0.4** |
| RMF | | | | MSG | | 10 46 38.5 | |
| | comp=Z,8.4nm,0.2s | | | | | | |
| **KEF** | **Keuruu** | **1.63** | **236** | *e*P | **Pn** | **10 46 23.8** | **+0.6** |
| **KEF** | **Keuruu** | **1.63** | **236** | PN | **Pn** | **10 46 23.4** | **+0.2** |
| | baz=49 | | | | | | |
| KEF | | | | MSG | | 10 46 42.4 | |
| | comp=Z,8.5nm,0.2s | | | | | | |
| **JOF** | **Joensuu** | **1.64** | **95** | *e*P | **Pn** | **10 46 23.6** | **+0.2** |
| **JOF** | **Joensuu** | **1.64** | **95** | PG | **Pn** | **10 46 23.6** | **+0.2** |
| JOF | | | | SG | **Sg** | **10 46 45.8** | **-0.1** |
| **RUF** | **Ruokolahti** | **1.78** | **161** | PG | **Pn** | **10 46 25.9** | **+0.6** |
| | baz=341 | | | | | | |
| RUF | | | | MSG | | 10 46 47.5 | |
| | comp=Z,8.9nm,0.2s | | | | | | |
| RUF | | | | SG | **Sb** | **10 46 49.7** | **+0.1** |
| **FIA0** | **FINESS Array S** | **1.84** | **206** | PG | **Pn** | **10 46 27.0** | **+0.9** |
| FIA0 | | | | MSG | | 10 46 48.9 | |
| | comp=Z,10nm,0.2s | | | | | | |
| FIA0 | | | | SG | **Sb** | **10 46 51.7** | **+0.4** |
| **FINES** | **FINESS Array B** | **1.84** | **206** | Pn | **Pn** | **10 46 27.2** | **+1.0** |
| | comp=Z,0.3nm,0.3s,baz=24,slow=16,SNR=13 | | | | | | |
| FINES | | | | Lg | Lg | 10 46 52.1 | |
| | comp=Z,0.7nm,0.3s,baz=24,slow=29,SNR=12 | | | | | | |
| **OUF** | **Merijarvi** | **1.84** | **315** | PG | **Pn** | **10 46 26.8** | **+0.6** |
| OUF | | | | MSG | | 10 46 48.1 | |
| | comp=Z,9.1nm,0.2s | | | | | | |
| **OBF4** | **Vikkela, Lumij** | **2.07** | **327** | PG | **Pn** | **10 46 30.7** | **+1.3** |
| OBF4 | | | | MSG | | 10 46 54.8 | |
| | comp=Z,5.4nm,0.2s | | | | | | |
| **OBF0** | **Syolatti, Pyha** | **2.09** | **314** | PG | **Pn** | **10 46 30.7** | **+1.1** |
| OBF0 | | | | MSG | | 10 46 55.3 | |
| | comp=Z,6.0nm,0.2s | | | | | | |
| **OUL** | **Oulu** | **2.15** | **339** | PG | **Pn** | **10 46 31.7** | **+1.4** |
| | baz=159 | | | | | | |
| OUL | | | | SG | **Sb** | **10 47 00.7** | **+0.5** |
| **OBF8** | **Ulkokalla** | **2.27** | **305** | PG | **Pn** | **10 46 34.6** | **+2.5** |
| | baz=123 | | | | | | |
| OBF8 | | | | MSG | | 10 47 00.5 | |
| | comp=Z,7.6nm,0.2s | | | | | | |
| **VAF** | **Ylistaro** | **2.31** | **271** | *e*P | **Pn** | **10 46 34.9** | **+2.3** |
| **VAF** | **Ylistaro** | **2.31** | **271** | PG | **Pn** | **10 46 34.2** | **+1.7** |
| VAF | | | | MSG | | 10 47 01.8 | |
| | comp=Z,9.5nm,0.2s | | | | | | |
| VAF | | | | SG | **Sb** | **10 47 05.2** | **+0.4** |
| **VJF** | **Virojoki** | **2.58** | **182** | PB | **Pn** | **10 46 38.6** | **+2.3** |
| VJF | | | | MSG | | 10 47 10.3 | |
| | comp=Z,5.2nm,0.2s | | | | | | |
| VJF | | | | SG | **Sb** | **10 47 13.3** | **+0.8** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PVF** | **Pernaja** | **2.72** | **200** | PG | **Pb** | **10 46 41.7** | **-1.0** |
| PVF | | | | MSG | | 10 47 14.2 | |
| | comp=Z,3.8nm,0.2s | | | | | | |
| PVF | | | | SG | **Sb** | **10 47 17.3** | **+0.7** |
| **MSF** | **Maaselka** | **2.87** | **11** | SB | **Sn** | **10 47 19.1** | **+3.5** |
| **KPF** | **Kankaanpaa** | **2.93** | **247** | PB | **Pn** | **10 46 43.5** | **+2.4** |
| | baz=61 | | | | | | |
| **RANF** | **Ranua** | **2.95** | **352** | PB | **Pn** | **10 46 43.5** | **+2.1** |
| RANF | | | | SB | **Sn** | **10 47 21.2** | **+3.7** |
| **KU6** | **Riekki** | **3.08** | **17** | PB | **Pb** | **10 46 47.1** | **-1.8** |
| KU6 | | | | MSG | | 10 47 24.1 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| KU6 | | | | SB | **Sn** | **10 47 24.2** | **+3.6** |
| **HEL1** | **Helsinki** | **3.24** | **206** | PG | **Pb** | **10 46 49.9** | **-1.8** |
| **UMAU** | **Umeaa** | **3.26** | **287** | P | **Pn** | **10 46 46.1** | **+0.4** |
| UMAU | | | | S | **Sn** | **10 47 27.0** | **+1.9** |
| **UMAU** | **Umeaa** | **3.26** | **287** | PB | **Pn** | **10 46 46.8** | **+1.2** |
| | baz=104 | | | | | | |
| **OLKF** | **Oulanka, Finla** | **3.31** | **12** | PB | **Pn** | **10 46 50.3** | **+4.0** |
| OLKF | | | | SB | **Sb** | **10 47 32.4** | **-1.1** |
| **TOF** | **Tornio** | **3.33** | **335** | PB | **Pn** | **10 46 49.6** | **+3.0** |
| TOF | | | | SG | **Sb** | **10 47 35.5** | **+1.3** |
| **KALU** | **Kalix** | **3.35** | **327** | P | **Pn** | **10 46 48.7** | **+1.8** |
| **ODEU** | **Stanfors** | **3.38** | **296** | P | **Pn** | **10 46 48.0** | **+0.7** |
| **RAF** | **Rauma** | **3.50** | **236** | *e*P | **Pn** | **10 46 51.2** | **+2.3** |
| **RNF** | **Rovaniemi** | **3.60** | **349** | PB | **Pn** | **10 46 52.6** | **+2.4** |
| **SJUU** | **Sjulsmark** | **3.60** | **315** | P | **Pn** | **10 46 51.8** | **+1.5** |
| **HUSU** | **Husum** | **3.87** | **277** | P | **Pn** | **10 46 56.3** | **+2.4** |
| **SVAU** | **Svanoeiden** | **3.88** | **295** | P | **Pn** | **10 46 55.4** | **+1.2** |
| **LILU** | **Lilltraesk** | **4.09** | **306** | P | **Pn** | **10 46 58.0** | **+1.1** |
| **SGF** | **Sodankyl** | **4.39** | **354** | PN | **Pn** | **10 46 59.0** | **-2.1** |
| **PAJU** | **Pajala** | **4.40** | **336** | PG | **Pb** | **10 47 11.0** | **-0.4** |
| | baz=147 | | | | | | |
| PAJU | | | | SB | **Sb** | **10 48 02.2** | **-2.6** |
| **KLF** | **Kolari** | **4.44** | **341** | PN | **Pn** | **10 47 03.4** | **+1.5** |
| KLF | | | | SB | **Sb** | **10 48 02.3** | **-3.9** |
| **HEMU** | **Hemsoen** | **4.46** | **269** | PN | **Pn** | **10 47 03.2** | **+1.1** |
| **ARCES** | **ARCESS Array B** | **6.52** | **353** | Pn | **Pn** | **10 47 31.4** | **+1.0** |
| | comp=Z,1.5nm,0.9s,baz=172,slow=14,SNR=1.3 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 48 41.2** | **-4.2** |
| | comp=Z,0.1nm,0.3s,baz=177,slow=22,SNR=1.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **8.03** | **262** | Pn | **Pn** | **10 47 52.1** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=64,slow=13,SNR=1.3 | | | | | | |
| NOA | | | | Sn | **Sn** | **10 49 19.3** | **-3.2** |
| | baz=85,slow=16,SNR=2.9 | | | | | | |

**NAM 20 10:47:53.0±4.3, 19°.76S×14°.48E, h22km±15km, ML2.0, 4C-5D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.02** | **46** | *i*P | Pb | 10 47 58.7 | +1.7 |
| ST3N | | | | *i*S | Sb | 10 48 00.3 | +0.6 |
| ST3N | | | | IAML | | 10 48 00.3 | |
| | comp=Z,116nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.02** | **46** | ⇑*i*P | Pb | 10 47 58.7 | +1.7 |
| ST3N | | | | *i*S | Sb | 10 48 00.3 | +0.6 |
| ST3N | | | | IAML | | 10 48 00.3 | |
| | comp=Z,120nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **128** | *i*P | Pb | 10 47 57.5 | +0.3 |
| ST9N | | | | *i*S | Sb | 10 47 58.3 | -1.7 |
| ST9N | | | | IAML | | 10 47 58.7 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **128** | ⇓*i*P | Pb | 10 47 57.5 | +0.3 |
| ST9N | | | | *i*S | Sb | 10 47 58.3 | -1.8 |
| ST

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSM** | **Kuching** | **12.92** | **88** | P | **Pn** | **10 54 10.2** | **+3.0** | |
| **KSM** | **Kuching** | **12.92** | **88** | Pn | **Pn** | **10 54 05.9** | **-1.3** | |
| **STKI** | **Sintang** | **14.12** | **94** | P | **Pn** | **10 54 24.0** | **+0.5** | |
| | 44nm,0.5s | | | | | | | |
| **SBUM** | **Sibu** | **14.89** | **84** | Pn | **Pn** | **10 54 35.5** | **+1.5** | |
| **UBPT** | **Khong Chiam** | **16.27** | **29** | P | **Pn** | **10 54 52.4** | **+0.5** | |
| **UBPT** | **Khong Chiam** | **16.27** | **29** | Pn | **Pn** | **10 54 49.7** | **-2.2** | |
| **CM31** | **Chiang Mai Arr** | **17.41** | **5** | P | **Pn** | **10 55 05.9** | **-0.3** | |
| **CMAR** | **Chiang Mai Arr** | **17.41** | **5** | Pn | **Pn** | **10 55 04.8** | **-1.4** | |
| **CMAR** | **Chiang Mai Arr** | **17.41** | **5** | Pn | **Pn** | **10 55 05.5** | **-0.7** | |
| | 1.9nm,0.3s,baz=194,slow=12,SNR=58 | | | | | | | |
| CMAR | | | | LR | LR | 11 02 28.6 | | |
| | comp=Z,1µm,18.8s,baz=190,slow=39 | | | | | | | |
| | 22nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **17.41** | **5** | P | **Pn** | **10 55 04.8** | **-1.4** | |
| **PHRA** | **Phrae** | **17.60** | **9** | | **Pn** | **10 55 08.0** | **-0.6** | |
| **MTKI** | **Muara Teweh, K** | **17.61** | **96** | P | **Pn** | **10 55 08.9** | **+0.1** | |
| **PALK** | **Pallekele** | **17.76** | **291** | P | **P** | **10 55 12.1** | **+0.8** | |
| | 0.8nm,0.3s,baz=228,slow=5.4,SNR=4.4 | | | | | | | |
| PALK | | | | S | Sn | 10 58 14.3 | -14 | |
| | 12nm,0.7s,baz=94,slow=9.3,SNR=7.0 | | | | | | | |
| PALK | | | | LR | LR | 11 01 31.3 | | |
| | comp=Z,1µm,18.6s,baz=214,slow=35 | | | | | | | |
| | 8.8nm,0.6s | | | | | | | |
| **PALK** | **Pallekele** | **17.76** | **291** | ⇑*iP* | **P** | **10 55 11.2** | **-0.1** | |
| **CRAI** | **Chiangrai** | **19.32** | **8** | P | **P** | **10 55 27.5** | **-0.8** | |
| **KKM** | **Kota Kinabalu** | **19.44** | **75** | P | **Pn** | **10 55 32.6** | **+1.5** | |
| **KKM** | **Kota Kinabalu** | **19.44** | **75** | P | **P** | **10 55 29.8** | **0.0** | |
| KKM | | | | IAmb | IAmb | 10 55 33.3 | | |
| | comp=Z,147nm,1.2s | | | | | | | |
| **SLVN** | **Son La** | **21.18** | **17** | P | **P** | **10 55 47.9** | **-0.6** | |
| SLVN | | | | IAmb | IAmb | 10 55 52.7 | | |
| | comp=Z,85nm,0.9s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **21.48** | **78** | P | **P** | **10 55 51.9** | **+0.1** | |
| MYLDM | | | | IAmb | IAmb | 10 56 10.4 | | |
| | comp=Z,68nm,1.0s | | | | | | | |
| **QIZ** | **Qiongzhong** | **21.68** | **34** | P | **P** | **10 55 54.3** | **+0.5** | |
| QIZ | | | | pmax | pmax | | | |
| | comp=Z,42nm,1.2s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,880nm,13.7s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,570nm,15.5s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,820nm,12.5s | | | | | | | |
| **QIZ** | **Qiongzhong** | **21.68** | **34** | P | **P** | **10 55 50.9** | **-3.0** | |
| **MPSI** | **Mapaga** | **22.52** | **92** | P | **P** | **10 56 03.6** | **+0.7** | |
| | comp=Z,43nm,0.9s,comp=Z,2µm | | | | | | | |
| **KAPI** | **Kappang** | **23.12** | **105** | P | **P** | **10 56 09.1** | **-0.2** | |
| **KAPI** | **Kappang** | **23.12** | **105** | LR | LR | 11 05 02.7 | | |
| | comp=Z,764nm,18.7s,baz=274,slow=37 | | | | | | | |
| **KAPI** | **Kappang** | **23.12** | **105** | P | **P** | **10 56 09.1** | **-0.2** | |
| KAPI | | | | pmax | pmax | | | |
| | comp=Z,46nm,1.2s | | | | | | | |
| **BNSI** | **Bone** | **23.32** | **103** | P | **P** | **10 56 10.9** | **-0.4** | |
| | comp=Z,45nm,0.9s | | | | | | | |
| **TOLI2** | **Tolitoli** | **23.39** | **90** | P | **P** | **10 56 10.7** | **-1.2** | |
| TOLI2 | | | | IAmb | IAmb | 10 56 12.1 | | |
| | comp=Z,109nm,1.0s | | | | | | | |
| **BKSI** | **Bulukumba** | **23.56** | **106** | P | **P** | **10 56 14.3** | **+0.7** | |
| | comp=Z,40nm,0.9s | | | | | | | |
| **TNCH** | **TengChong** | **23.91** | **3** | ⇑*iP* | **P** | **10 56 17.3** | **+0.4** | |
| TNCH | | | | sP | sP | 10 56 27.5 | -1.6 | |
| TNCH | | | | S | **S** | **11 00 32.0** | **+0.3** | |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,100nm,1.1s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,510nm,8.6s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,1µm,11.0s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,1µm,13.1s | | | | | | | |
| **IMP** | **Imphal** | **23.92** | **352** | *e*P | **P** | **10 56 16.6** | **-0.3** | |
| **WBSI** | **Waikabubak, Su** | **24.33** | **116** | P | **P** | **10 56 16.6** | **-4.2** | |
| | comp=Z,81nm,1.1s | | | | | | | |
| **KMI** | **Kunming** | **24.52** | **12** | ⇑P | **P** | **10 56 23.8** | **+1.1** | |
| KMI | | | | pP | pP | 10 56 31.8 | +0.5 | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,58nm,1.1s | | | | | | | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,380nm,4.5s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,2µm,13.8s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,2µm,14.1s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,2µm,13.2s | | | | | | | |
| **MRSI** | **Marisa** | **24.55** | **91** | P | **P** | **10 56 22.2** | **-0.7** | |
| | comp=Z,79nm,0.8s,comp=Z,1µm | | | | | | | |
| **KOHI** | **KOHIMA** | **24.77** | **353** | *e*P | **P** | **10 56 26.8** | **+1.9** | |
| **SHL** | **Shillong** | **24.99** | **348** | P | **P** | **10 56 26.8** | **0.0** | |
| **SHL** | **Shillong** | **24.99** | **348** | *e*P | **P** | **10 56 27.0** | **+0.1** | |
| SHL | | | | IAmb | IAmb | 10 56 28.5 | | |
| | comp=Z,78nm,0.7s | | | | | | | |
| **SHL** | **Shillong** | **24.99** | **348** | P | **P** | **10 56 26.8** | **0.0** | |
| SHL | | | | pmax | pmax | | | |
| | comp=Z,98nm,0.7s | | | | | | | |
| **BOK** | **Bokaro** | **25.25** | **335** | *e*P | **P** | **10 56 31.0** | **+2.0** | |
| BOK | | | | IAmb | IAmb | 10 56 32.4 | | |
| | comp=Z,106nm,1.0s | | | | | | | |
| **MOKO** | **MOKOCHONG** | **25.32** | **354** | *e*P | **P** | **10 56 31.2** | **+1.4** | |
| **LUWI** | **Luwuk** | **25.46** | **95** | P | **P** | **10 56 31.5** | **+0.4** | |
| **LUWI** | **Luwuk** | **25.46** | **95** | P | **P** | **10 56 31.0** | **-0.1** | |
| **GTOI** | **Gorontalo** | **25.62** | **91** | P | **P** | **10 56 31.2** | **-1.3** | |
| | comp=Z,35nm,0.9s | | | | | | | |
| **PZH** | **PanZhiHua** | **25.69** | **9** | P | **P** | **10 56 34.3** | **+1.1** | |
| PZH | | | | S | **S** | **11 01 04.8** | **+4.6** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.7s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,210nm,4.6s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,2µm,17.6s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,1µm,16.5s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,2µm,15.7s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.28** | **250** | T | T | 11 23 38.3 | | |
| | baz=71,slow=75,SNR=1354 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.28** | **251** | T | T | 11 23 41.1 | | |
| | baz=71,slow=75 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.30** | **251** | T | T | 11 23 42.2 | | |
| | baz=71,slow=75,SNR=880 | | | | | | | |
| **ZIRO** | **ZIRO** | **26.59** | **353** | *e*P | **P** | **10 56 41.3** | **0.0** | |
| **GYA** | **Guiyang** | **26.83** | **19** | P | **P** | **10 56 43.6** | **+0.1** | |
| GYA | | | | pP | pP | 10 56 51.9 | -0.2 | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.2s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,950nm,15.6s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,1µm,14.5s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,2µm,12.6s | | | | | | | |
| **GULI** | **GuiLin** | **27.20** | **26** | P | **P** | **10 56 47.4** | **+0.8** | |
| GULI | | | | S | **S** | **11 01 18.8** | **-5.0** | |
| GULI | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| GULI | | | | LR | LR | | | |
| | comp=Z,910nm,13.0s | | | | | | | |
| GULI | | | | LR | LR | | | |
| | comp=Z,1µm,15.2s | | | | | | | |
| GULI | | | | LR | LR | | | |
| | comp=Z,1µm,14.7s | | | | | | | |
| **GTK** | **Tadong** | **27.49** | **343** | *e*P | **P** | **10 56 49.8** | **+0.4** | |
| **ALBI** | **Allahabad** | **28.46** | **329** | *e*P | **P** | **10 56 59.4** | **+1.5** | |
| ALBI | | | | IAmb | IAmb | 10 57 01.2 | | |
| | comp=Z,34nm,0.7s | | | | | | | |
| **DAV** | **Davao City (W)** | **28.74** | **77** | LR | LR | 11 09 48.9 | | |
| | comp=Z,586nm,19.8s,baz=174,slow=40 | | | | | | | |
| **SOEI** | **Soe** | **28.82** | **112** | P | **P** | **10 57 00.1** | **-1.2** | |
| SOEI | | | | IAmb | IAmb | 10 57 08.1 | | |
| | comp=Z,66nm,1.1s | | | | | | | |
| **SOEI** | **Soe** | **28.82** | **112** | P | **P** | **10 57 00.2** | **-1.2** | |
| | comp=Z,47nm,1.1s | | | | | | | |
| **LSA** | **Lhasa** | **29.15** | **349** | P | **P** | **10 57 06.8** | **+2.3** | |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,37nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **29.15** | **349** | IAmb | IAmb | 10 57 07.2 | | |
| | comp=Z,33nm,0.9s | | | | | | | |
| **CD2** | **Chengdu** | **30.35** | **11** | P | **P** | **10 57 13.8** | **-0.8** | |
| CD2 | | | | pP | pP | 10 57 22.9 | -0.4 | |
| CD2 | | | | sP | sP | 10 57 26.1 | -0.8 | |
| CD2 | | | | S | **S** | **11 02 16.6** | **+3.3** | |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,130nm,5.9s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,2µm,14.6s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,1µm,13.2s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,3µm,14.8s | | | | | | | |
| **JHNI** | **Jhansi** | **30.37** | **325** | *e*P | **P** | **10 57 15.8** | **+1.0** | |
| JHNI | | | | IAmb | IAmb | 10 57 16.3 | | |
| | comp=Z,53nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | **31.03** | **136** | P | **P** | **10 57 22.4** | **+1.7** | |
| **MBWA** | **Marble Bar** | **31.03** | **136** | P | **P** | **10 57 20.3** | **-0.4** | |
| **PSA00** | **Pilbara Seismi** | **31.38** | **137** | P | **P** | **10 57 25.5** | **+1.6** | |
| **PSA00** | **Pilbara Seismi** | **31.38** | **137** | P | **P** | **10 57 23.8** | **-0.1** | |
| **TPUB** | **Ta-pu** | **31.62** | **44** | P | **P** | **10 57 25.5** | **-0.4** | |
| **SSLB** | **Suanglung** | **32.16** | **43** | P | **P** | **10 57 30.4** | **-0.3** | |
| **LGTI** | **Lohaghat** | **32.66** | **332** | *e*P | **P** | **10 57 36.6** | **+1.6** | |
| **PTH** | **Pithoragarh** | **32.76** | **332** | *e*P | **P** | **10 57 37.4** | **+1.3** | |
| **NACB** | **Ninganchiao** | **32.86** | **44** | IAmb | IAmb | 10 57 40.1 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **WHN** | **Wuhan** | **33.50** | **27** | P | **P** | **10 57 41.8** | **-0.4** | |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **KUDL** | **Kundal** | **33.59** | **325** | *e*P | **P** | **10 57 44.0** | **+0.9** | |
| KUDL | | | | IAmb | IAmb | 10 57 44.6 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **33.66** | **126** | P | **P** | **10 57 42.0** | **-1.9** | |
| **XAN** | **Xi'an** | **34.59** | **17** | ⇑P | **P** | **10 57 51.1** | **-0.7** | |
| XAN | | | | sP | sP | 10 58 03.8 | -0.3 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,95nm,1.0s | | | | | | | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,360nm,9.2s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,910nm,15.1s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,2µm,15.8s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,880nm,21.3s | | | | | | | |
| **GOMU** | **GeErMu** | **35.09** | **356** | P | **P** | **10 57 57.9** | **+1.4** | |
| GOMU | | | | pmax | pmax | | | |
| | comp=Z,41nm,1.0s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,610nm,13.5s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,490nm,13.1s | | | | | | | |
| GOMU | | | | LR | LR | | | |
| | comp=Z,640nm,13.5s | | | | | | | |
| **LZH** | **Lanzhou** | **35.41** | **9** | *e*P | **P** | **10 57 59.0** | **0.0** | |
| LZH | | | | pP | pP | 10 58 05.9 | -1.8 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,32nm,1.1s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,930nm,17.9s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,1µm,16.5s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,1µm,19.2s | | | | | | | |
| **SMLA** | **Simla** | **35.56** | **329** | *e*P | **P** | **10 58 00.8** | **+0.7** | |
| SMLA | | | | IAmb | IAmb | 10 58 03.4 | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **HNLY** | **HANLEY** | **36.04** | **333** | *e*P | **P** | **10 58 06.3** | **+1.4** | |
| **LYN** | **LuoYang** | **36.22** | **21** | P | **P** | **10 58 06.3** | **+0.6** | |
| LYN | | | | pP | pP | 10 58 14.4 | -0.1 | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,76nm,1.2s | | | | | | | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,550nm,4.2s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,2µm,11.7s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,890nm,12.7s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,2µm,12.2s | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **36.90** | **329** | *e*P | **P** | **10 58 12.3** | **+0.5** | |
| DHRM | | | | IAmb | IAmb | 10 58 19.8 | | |
| | comp=Z,33nm,0.6s | | | | | | | |
| **NJ2** | **Nanjing** | **36.93** | **31** | *e*P | **P** | **10 58 13.8** | **+2.0** | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,620nm,14.7s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,510nm,14.2s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,680nm,11.8s | | | | | | | |
| **THN** | **Thein Dam** | **37.34** | **329** | *e*P | **P** | **10 58 16.3** | **+1.0** | |
| THN | | | | IAmb | IAmb | 10 58 17.7 | | |
| | comp=Z,34nm,0.6s | | | | | | | |
| **SSE** | **Sheshan** | **37.46** | **35** | P | **P** | **10 58 18.5** | **+2.2** | |
| SSE | | | | S | **S** | **11 04 06.3** | **+3.1** | |
| SSE | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| SSE | | | | pmax | pmax | | | |
| | comp=Z,130nm,3.5s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=Z,490nm,13.1s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=Z,370nm,13.6s | | | | | | | |
| **GTA** | **Gaotai** | **38.28** | **3** | *e*P | **P** | **10 58 23.5** | **+0.2** | |
| GTA | | | | sP | sP | 10 58 34.9 | -0.8 | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,36nm,1.0s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,360nm,16.4s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,350nm,20.0s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,410nm,16.0s | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **39.00** | **158** | T | T | 11 39 47.2 | | |
| | baz=334,slow=76,SNR=104 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **39.01** | **158** | T | T | 11 39 48.1 | | |
| | baz=334,slow=76,SNR=116 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **39.01** | **158** | T | T | 11 39 48.3 | | |
| | baz=334,slow=76,SNR=93 | | | | | | | |
| **TIA** | **Tai'an** | **39.52** | **25** | P | **P** | **10 58 33.3** | **-0.3** | |
| TIA | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| TIA | | | | pmax | pmax | | | |
| | comp=Z,240nm,3.8s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=Z,1µm,12.9s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=Z,740nm,14.4s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=Z,2µm,13.7s | | | | | | | |
| **WRKA** | **Warakurna** | **39.57** | **133** | P | **P** | **10 58 35.1** | **+0.9** | |
| **HNS** | **HongShan** | **39.58** | **22** | ⇑P | **P** | **10 58 34.8** | **+0.8** | |
| HNS | | | | S | **S** | **11 04 31.1** | **-3.9** | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.3s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,560nm,12.8s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,370nm,12.6s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,680nm,13.8s | | | | | | | |
| **NIL** | **Nilore** | **39.58** | **328** | P | **P** | **10 58 33.0** | **-1.1** | |
| NIL | | | | IAmb | IAmb | 10 58 35.5 | | |
| | comp=Z,34nm,0.6s | | | | | | | |
| **NIL** | **Nilore** | **39.58** | **328** | P | **P** | **10 58 33.1** | **-1.1** | |
| NIL | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.6s | | | | | | | |
| **KMBL** | **Kambalda** | **39.71** | **146** | P | **P** | **10 58 37.6** | **+2.3** | |
| **BTO** | **Baotou** | **41.05** | **15** | *e*P | **P** | **10 58 47.6** | **+1.3** | |
| BTO | | | | pP | **sP** | **10 58 57.4** | **-1.3** | |
| BTO | | | | sP | **pP** | **10 59 01.5** | **+6.4** | |
| BTO | | | | PP | **PnPn** | **11 00 23.8** | **-2.0** | |
| BTO | | | | S | **S** | **11 05 00.5** | **+3.4** | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,440nm,5.3s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,440nm,5.6s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,1µm,16.7s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,440nm,13.5s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.69** | **16** | *e*P | **P** | **10 58 52.8** | **+1.2** | |
| HHC | | | | pP | pP | 10 59 00.5 | +0.1 | |
| HHC | | | | *e*S | **S** | **11 05 07.3** | **+0.7** | |
| HHC | | | | sS | sS | 11 05 24.9 | +3.7 | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,26nm,0.7s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,170nm,6.2s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,1µm,15.0s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,460nm,12.9s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,1µm,14.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **41.74** | **122** | P | **P** | **10 58 50.1** | **-2.2** | |
| **WRA** | **Warramunga Arr** | **41.77** | **122** | P | **P** | **10 58 51.0** | **-1.5** | |
| **WRA** | **Warramunga Arr** | **41.77** | **122** | P | **P** | **10 58 50.9** | **-1.5** | |
| | comp=Z,8.2nm,0.8s,baz=301,slow=9.2,SNR=27 | | | | | | | |
| WRA | | | | S | **S** | **11 05 06.4** | **-1.9** | |
| | comp=Z,1.7nm,1.1s,baz=294,slow=16,SNR=4.4 | | | | | | | |
| WRA | | | | LR | LR | 11 18 38.8 | | |
| | comp=Z,267nm,20.4s,baz=306,slow=40 | | | | | | | |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **41.77** | **122** | P | **P** | **10 58 51.0** | **-1.5** | |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **41.78** | **122** | P | **P** | **10 58 51.1** | **-1.4** | |
| **WRAB** | **Tennant Creek** | **41.78** | **122** | *i*P | **P** | **10 58 51.3** | **-1.2** | |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **WB2** | **Warramunga Arr** | **41.78** | **122** | P | **P** | **10 58 50.8** | **-1.8** | |
| WB2 | | | | | **pP** | **10 59 00.3** | **-1.2** | |
| **BJT** | **Baijiatuau** | **42.42** | **21** | IAmb | IAmb | 10 58 59.7 | | |
| | comp=Z,42nm,0.8s | | | | | | | |
| **BJI** | **Beijing** | **42.45** | **21** | P | **P** | **10 58 58.8** | **+1.2** | |
| BJI | | | | sP | **pP** | **10 59 07.1** | **+0.7** | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,29nm,0.8s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,150nm,16.0s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,270nm,17.4s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,220nm,12.8s | | | | | | | |
| **FORT** | **Forrest** | **43.01** | **140** | P | **P** | **10 59 03.3** | **+1.0** | |
| **FORT** | **Forrest** | **43.01** | **140** | P | **P** | **10 59 00.7** | **-1.6** | |
| FORT | | | | IAmb | IAmb | 10 59 05.1 | | |
| | comp=Z,41nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **43.02** | **336** | P | **P** | **10 59 02.3** | **-0.2** | |
| KSH | | | | sP | sP | 10 59 14.3 | -0.6 | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| KSH | | | | LR | LR | | | |
| | comp=Z,310nm,18.9s | | | | | | | |
| KSH | | | | LR | LR | | | |
| | comp=Z,390nm,20.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **43.13** | **127** | P | **P** | **10 59 02.0** | **-1.5** | |
| **ASAR** | **Alice Springs** | **43.13** | **127** | P | **P** | **10 59 03.0** | **-0.5** | |
| | comp=Z,5.7nm,0.8s,baz=297,slow=7.4,SNR=49 | | | | | | | |
| ASAR | | | | S | **S** | **11 05 24.6** | **-3.6** | |
| | comp=Z,1.2nm,1.0s,baz=296,slow=15,SNR=6.5 | | | | | | | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **43.13** | **127** | P | **P** | **10 59 02.0** | **-1.5** | |
| **AS01** | **Alice Springs** | **43.16** | **127** | P | **P** | **10 59 04.3** | **+0.5** | |
| **WMQ** | **Urumqi** | **43.49** | **350** | ⇑*iP* | **P** | **10 59 07.9** | **+1.7** | |
| WMQ | | | | pP | sP | 10 59 17.6 | -1.0 | |
| WMQ | | | | pmax | pmax | | | |
| | comp=Z,130nm,3.6s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,300nm,22.1s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,300nm,19.3s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,310nm,23.9s | | | | | | | |
| **WSAR** | **Wadi Sarin** | **43.61** | **303** | LR | LR | 11 17 30.8 | | |
| | comp=Z,98nm,18.1s,baz=124,slow=36 | | | | | | | |
| **TJN** | **Taejon** | **44.82** | **35** | ⇑*iP* | **P** | **10 59 16.6** | **-0.2** | |
| **JNU** | **Nakatsue** | **44.82** | **41** | P | **P** | **10 59 16.3** | **-0.7** | |
| **JNU** | **Nakatsue** | **44.82** | **41** | LR | LR | 11 20 09.8 | | |
| | comp=Z,503nm,18.3s,baz=220,slow=39 | | | | | | | |
| **UZB** | **Uzynbulak** | **45.06** | **341** | *e*P | **P** | **10 59 19.5** | **+0.7** | |
| | comp=Z,6.5nm,0.4s,baz=341 | | | | | | | |
| **UZB** | **Uzynbulak** | **45.06** | **341** | *e*P | **P** | **10 59 19.4** | **+0.7** | |
| UZB | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.4s | | | | | | | |
| **PDGK** | **Podgornoye** | **45.07** | **342** | P | **P** | **10 59 19.7** | **+0.8** | |
| **SATY** | **Saty** | **45.18** | **340** | *e*P | **P** | **10 59 20.6** | **+0.8** | |
| | comp=Z,14nm,0.8s,baz=340 | | | | | | | |
| **SATY** | **Saty** | **45.18** | **340** | *e*P | **P** | **10 59 20.5** | **+0.8** | |
| SATY | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **GAR** | **Garm** | **45.20** | **330** | IAmb | IAmb | 10 59 28.5 | | |
| | comp=Z,48nm,1.1s | | | | | | | |
| **ULHL** | **Ulahol** | **45.24** | **338** | P | **P** | **10 59 21.8** | **+1.5** | |
| | SNR=7.2 | | | | | | | |
| **ZHN** | **Zhinishke** | **45.27** | **340** | *e*P | **P** | **10 59 21.3** | **+0.8** | |
| | baz=340 | | | | | | | |
| **ZHN** | **Zhinishke** | **45.27** | **340** | *e*P | **P** | **10 59 21.2** | **+0.8** | |
| **KPKS** | **Kokpek** | **45.45** | **341** | *e*P | **P** | **10 59 22.4** | **+0.6** | |
| | baz=341 | | | | | | | |
| **KPKS** | **Kokpek** | **45.45** | **341** | *e*P | **P** | **10 59 22.4** | **+0.6** | |
| **SIMJ** | **Simiganj** | **45.61** | **329** | P | **P** | **10 59 22.7** | **-0.5** | |
| SIMJ | | | | IAmb | IAmb | 10 59 24.4 | | |
| | comp=Z,26nm,0.7s | | | | | | | |
| **TNSS** | **Tian-Shan** | **45.67** | **339** | *e*P | **P** | **10 59 24.4** | **+0.4** | |
| | baz=339 | | | | | | | |
| **TNSS** | **Tian-Shan** | **45.67** | **339** | *e*P | **P** | **10 59 24.3** | **+0.4** | |
| **MDOK** | **Medeo** | **45.74** | **339** | *e*P | **P** | **10 59 24.8** | **+0.5** | |
| | baz=339 | | | | | | | |
| **MDOK** | **Medeo** | **45.74** | **339** | *e*P | **P** | **10 59 24.7** | **+0.5** | |
| **BTK** | **Batken** | **45.77** | **331** | IAmb | IAmb | 10 59 27.7 | | |
| | comp=Z,68nm,1.4s | | | | | | | |
| **AAA** | **Alma-Ata** | **45.83** | **339** | *e*P | **P** | **10 59 25.8** | **+0.9** | |
| | comp=Z,13nm,0.5s,baz=339 | | | | | | | |
| **AAA** | **Alma-Ata** | **45.83** | **339** | *e*P | **P** | **10 59 25.7** | **+0.9** | |
| AAA | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.5s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **45.84** | **19** | *e*P | **P** | **10 59 25.8** | **+0.9** | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,680nm,16.6s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=Z,520nm,16.3s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.87** | **34** | P | **P** | **10 59 24.8** | **-0.3** | |
| **KSAR** | **Wonju Array Be** | **45.87** | **34** | P | **P** | **10 59 24.8** | **-0.3** | |
| **KSRS** | **Korea Array** | **45.90** | **34** | P | **P** | **10 59 24.9** | **-0.3** | |
| | comp=Z,24nm,1.0s,baz=223,slow=9.0,SNR=41 | | | | | | | |
| KSRS | | | | LR | LR | 11 19 19.7 | | |
| | comp=Z,305nm,20.4s,baz=225,slow=37 | | | | | | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **45.90** | **34** | P | **P** | **10 59 25.0** | **-0.3** | |
| **TKM2** | **Tokmak 2** | **46.07** | **338** | P | **P** | **10 59 28.4** | **+1.5** | |
| | SNR=18 | | | | | | | |
| **TKM2** | **Tokmak 2** | **46.07** | **338** | P | **P** | **10 59 27.2** | **+0.3** | |
| **KBK** | **Karagaybulak** | **46.09** | **337** | P | **P** | **10 59 29.1** | **+2.1** | |
| | SNR=8.1 | | | | | | | |
| **AAK** | **Ala-Archa** | **46.25** | **337** | P | **P** | **10 59 29.3** | **+1.0** | |
| **AAK** | **Ala-Archa** | **46.25** | **337** | LR | LR | 11 21 01.3 | | |
| | comp=Z,335nm,21.1s,baz=158,slow=39 | | | | | | | |
| **AAK** | **Ala-Archa** | **46.25** | **337** | ⇑*iP* | **P** | **10 59 30.1** | **+1.8** | |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **CHKK** | **Chushkaly** | **46.37** | **340** | *e*P | **P** | **10 59 29.5** | **+0.5** | |
| | baz=340 | | | | | | | |
| **CHKK** | **Chushkaly** | **46.37** | **340** | *e*P | **P** | **10 59 29.5** | **+0.5** | |
| **ARXS** | **Arharly** | **46.40** | **341** | *e*P | **P** | **10 59 29.6** | **+0.3** | |
| **EKS2** | **Erkin-Say** | **46.56** | **336** | P | **P** | **10 59 32.6** | **+2.0** | |
| | SNR=16 | | | | | | | |
| **OOD** | **Oodnadatta** | **46.60** | **131** | P | **P** | **10 59 31.8** | **+0.8** | |
| **KUU** | **Kurty** | **46.63** | **339** | *e

SONM pmax pmax
comp=Z,23nm,1.0s
**ULN Ulaanbaatar 47.42 9** P **P 10 59 37.8 +0.5**
ULN lAmb lAmb 10 59 39.2
comp=Z,20nm,1.1s
**ULN Ulaanbaatar 47.42 9***c iP* **P 10 59 38.0 +0.7**
ULN pmax pmax
comp=Z,19nm,1.1s
**MK31 Makanchi Array 47.47 346** lAmb lAmb 10 59 39.4
comp=Z,23nm,0.7s
**MK31 Makanchi Array 47.47 346***c iP* **P 10 59 38.3 +0.7**
**MKAR Makanchi Array 47.47 346** P **P 10 59 38.3 +0.8**
comp=Z,28nm,0.5s,baz=160,slow=8.2,SNR=340
MKAR LR LR 11 23 24.7
comp=Z,311nm,20.5s,baz=157,slow=41
comp=Z,28nm,0.5s
**MKAR Makanchi Array 47.47 346** P **P 10 59 38.2 +0.6**
**ZSN Zaisan 47.52 348** *eP* **P 10 59 38.8 +0.9**
comp=Z,16nm,1.1s,baz=348
**ZSN Zaisan 47.52 348** *eP* **P 10 59 38.8 +0.9**
ZSN pmax pmax
comp=Z,16nm,1.1s
**MAKZ Makanchi 47.56 346** P **P 10 59 38.9 +0.6**
**MAKZ Makanchi 47.56 346** P **P 10 59 38.9 +0.6**
MAKZ pmax pmax
comp=Z,24nm,0.6s
**COEN Coen 47.72 110** P **P 10 59 38.5 -1.4**
COEN lAmb lAmb 10 59 40.6
comp=Z,27nm,1.0s
**CHM Chimkent 48.11 332** *eP* **P 10 59 43.4 +0.9**
comp=Z,5.1nm,0.5s,baz=332
**CHM Chimkent 48.11 332** *eP* **P 10 59 43.4 +0.9**
CHM pmax pmax
comp=Z,5.0nm,0.5s
**KK31 Karatay Array 48.31 334** P **P 10 59 42.6 -1.5**
**KK31 Karatay Array 48.31 334** P **P 10 59 42.6 -1.5**
KK31 pmax pmax
comp=Z,13nm,1.1s
**KKAR Karatay Array 48.31 334** P **P 10 59 44.2 +0.2**
**KKAR Karatay Array 48.31 334** lAmb lAmb 10 59 46.3
comp=Z,13nm,1.1s
**KKAR Karatay Array 48.31 334** P **P 10 59 44.3 +0.2**
**BTLS Baital 48.46 338**⇑ *iP* **P 10 59 45.9 +0.6**
baz=338
**BTLS Baital 48.46 338***c iP* **P 10 59 45.8 +0.6**
**BRLS Boroldaу 48.56 333** *eP* **P 10 59 45.6 -0.4**
baz=333
**BRLS Boroldaу 48.56 333** *eP* **P 10 59 45.6 -0.4**
**DGZ Jazzator, Alta 49.25 351***c iP* **P 10 59 52.8 +1.4**
DGZ pmax pmax
comp=Z,20nm,0.8s
**CN2 Changchun 49.39 27** *eP* **P 10 59 55.0 +2.7**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**KNGR Kungurtug, Tuv 49.41 0**⇑ *iP* **P 10 59 53.3 +0.7**
KNGR pmax pmax
comp=Z,19nm,0.9s
**ZAK Zakamensk 49.45 5** *eP* **P 10 59 52.7 -0.1**
ZAK pmax pmax
comp=Z,7.0nm,1.0s
**BBOO Buckleboo 49.61 136** P **P 10 59 55.4 +1.2**
**BBOO Buckleboo 49.61 136** P **P 10 59 54.7 +0.4**
BBOO lAmb lAmb 11 00 02.9
comp=Z,26nm,1.1s
**LCRK Leigh Creek 49.87 132** P **P 10 59 57.6 +1.4**
**INKA Innaminka 50.48 128** P **P 11 00 02.2 +1.3**
**JGF Kuroka 50.61 43** P **P 11 00 01.1 -0.7**
JGF lAmb lAmb 11 00 02.3
comp=Z,15nm,0.8s
**PMG Port Moresby 50.63 103***c iP* **P 11 00 01.6 -0.6**
PMG pmax pmax
comp=Z,40nm,1.1s
**SEM Semipalatinsk 51.33 346** *eP* **P 11 00 07.6 +0.4**
comp=Z,14nm,0.8s,baz=346
**SEM Semipalatinsk 51.33 346** *eP* **P 11 00 07.6 +0.4**
SEM pmax pmax
comp=Z,14nm,0.8s
**IRK Irkutsk 51.38 5** *eP* **P 11 00 07.0 -0.3**
IRK *e* 11 00 19.8
IRK pmax pmax
comp=Z,39nm,2.1s
**MAJO Matsushiro 51.70 42** *i P* **P 11 00 08.6 -1.4**
MAJO pmax pmax
comp=Z,16nm,1.6s
**MJAR Matsushiro Arr 51.70 42** P **P 11 00 08.9 -1.1**
comp=Z,6.4nm,0.8s,baz=224,slow=6.1,SNR=23
MJAR PcP **PcP 11 01 23.4 +0.1**
comp=Z,2.0nm,0.9s,baz=272,slow=5.0,SNR=4.0
MJAR LR LR 11 24 13.9
comp=Z,229nm,18.3s,baz=229,slow=39
comp=Z,6.4nm,0.8s
**BNX BinXian 51.77 26**⇑ **P P 11 00 10.0 -0.3**
BNX pmax pmax
comp=Z,42nm,0.8s
**OTUK Ortayu 51.80 339** P **P 11 00 10.9 +0.4**
**MDJ Mudanjiang 51.94 29** P **P 11 00 13.8 +2.2**
MDJ sP sP 11 00 25.8 +1.7
MDJ PcS **PcS 11 05 20.8 -1.1**
MDJ pmax pmax
comp=Z,17nm,1.0s
MDJ LR LR
comp=Z,810nm,16.8s
MDJ LR LR
comp=Z,490nm,15.8s
MDJ LR LR
comp=Z,1μm,17.5s
**KURBB Kurchatov Arra 51.96 345** P **P 11 00 12.2 +0.6**
comp=Z,14nm,0.6s,baz=166,slow=7.1,SNR=64
KURBB PcP **PcP 11 01 24.5 +0.6**
comp=Z,3.5nm,0.8s,baz=167,slow=4.4,SNR=1.3
KURBB LR LR 11 26 25.2
comp=Z,310nm,18.8s,baz=172,slow=41
comp=Z,14nm,0.6s
**KURK Kurchatov 52.03 345** P **P 11 00 12.4 +0.4**
KURK lAmb lAmb 11 00 14.1
comp=Z,37nm,1.1s
**KURK Kurchatov 52.03 345***c iP* **P 11 00 12.9 +0.8**
KURK pmax pmax
comp=Z,42nm,1.3s
**CTA Charters Tower 52.25 116** LR LR 11 24 12.9
comp=Z,22nm,21.3s,baz=282,slow=38
**QLP Quilpie 52.80 125** P **P 11 00 20.0 +1.7**
**USA0B Ussuriysk Arra 52.84 31** lAmb lAmb 11 00 20.1
comp=Z,55nm,1.3s
**USA0B Ussuriysk Arra 52.84 31***c iP* **P 11 00 18.6 +0.4**
**USRK Ussuriysk Ar. 52.84 31** P **P 11 00 18.5 +0.3**
**USRK Ussuriysk Ar. 52.84 31** P **P 11 00 18.4 +0.2**
comp=Z,28nm,1.1s,baz=234,slow=4.8,SNR=24
USRK LR LR 11 24 14.5
comp=Z,448nm,19.5s,baz=224,slow=38
comp=Z,28nm,1.1s
**STKA Stephens Creek 53.09 132** P **P 11 00 21.7 +1.4**
**STKA Stephens Creek 53.09 132** P **P 11 00 20.9 +0.7**
**STKA Stephens Creek 53.09 132** P **P 11 00 19.3 -1.0**
comp=Z,17nm,0.9s,baz=308,slow=7.7,SNR=17
STKA LR LR 11 24 55.9
comp=Z,346nm,21.2s,baz=297,slow=38
comp=Z,17nm,0.9s
**STKA Stephens Creek 53.09 132** P **P 11 00 21.0 +0.7**
STKA pmax pmax
comp=Z,6.0nm,1.1s
**ZALV Zalesovo Beam 53.78 351** P **P 11 00 25.6 +0.7**
**ZALV Zalesovo Beam 53.78 351** P **P 11 00 25.4 +0.5**
comp=Z,36nm,0.6s,baz=180,slow=6.2,SNR=145
ZALV LR LR 11 26 41.6
comp=Z,223nm,19.2s,baz=172,slow=40
comp=Z,36nm,0.6s
**ATD Arta Tunnel 55.12 283** LR LR 11 21 34.6
comp=Z,4.9nm,18.4s,baz=3.0,slow=33
**HEH HeiHe 55.31 23** *eP* **P 11 00 36.8 +0.6**
HEH pmax pmax
comp=Z,15nm,1.4s
HEH pmax pmax
comp=Z,220nm,4.9s
HEH LR LR
comp=Z,410nm,13.6s
HEH LR LR
comp=Z,300nm,11.6s
HEH LR LR
comp=Z,630nm,16.1s
**JTM Tenmabayashi 55.91 39** lAmb lAmb 11 00 41.9
comp=Z,48nm,1.2s
**CMSA Cobar Meteorol 56.03 130** P **P 11 00 42.7 +1.0**
**KLR Kul'dur 56.34 26** LR LR 11 26 54.4
comp=Z,231nm,19.2s,baz=218,slow=38
**KLR Kul'dur 56.34 26***c iP* **P 11 00 44.3 +0.7**
KLR pmax pmax
comp=Z,31nm,1.0s
**BVA0 Borovoye Array 56.49 341** *i* P **P 11 00 44.1 -0.5**
**BVAR Borovoye Array 56.49 341** P **P 11 00 44.5 -0.2**
comp=Z,17nm,0.7s,baz=139,slow=7.9,SNR=70
comp=Z,17nm,0.7s
**BRVK Borovoye 56.55 341** P **P 11 00 45.0 0.0**
BRVK lAmb lAmb 11 00 46.1
comp=Z,17nm,0.9s
**BRVK Borovoye 56.55 341** P **P 11 00 45.0 0.0**
BRVK pmax pmax
comp=Z,17nm,1.0s
**AULRC Lightning Ridg 56.96 126** P **P 11 00 49.3 +0.9**
**AB31 Akbulak array 57.77 332** *i* P **P 11 00 53.3 -0.4**
**ABKAR Akbulak array 57.77 332** P **P 11 00 54.0 +0.2**
**ABKAR Akbulak array 57.77 332** lAmb lAmb 11 00 54.9
comp=Z,22nm,0.8s
**ZEA Zeya 58.05 20** *eP* **P 11 00 56.2 +0.6**
ZEA pmax pmax
comp=Z,10.0nm,1.1s
ZEA MLR MLR
comp=E,300nm,11.0s
ZEA MLR MLR
comp=N,200nm,13.0s
ZEA MLR MLR
comp=Z,300nm,12.0s
**BOD Bodaibo 58.16 10** *eP* **P 11 00 56.5 +0.2**
BOD pmax pmax
comp=Z,42nm,1.1s
**AUDCS Dubbo College 58.58 129** P **P 11 01 01.3 +1.6**
**ASAJ Asahikawa 58.70 37** LR LR 11 25 39.0
comp=Z,194nm,21.6s,baz=228,slow=35
**GRNR Gornyy 59.56 28**⇑ *iP* **P 11 01 06.8 +0.7**
GRNR pmax pmax
comp=Z,8.0nm,1.1s
GRNR MLR MLR
comp=E,150nm,14.0s
GRNR MLR MLR
comp=Z,470nm,14.0s
**KMBO Kilima Mbogo 60.17 268** P **P 11 01 13.2 +1.9**
comp=Z,0.7nm,0.3s,baz=39,slow=10,SNR=1.6
KMBO LR LR 11 26 04.4
comp=Z,151nm,18.2s,baz=95,slow=35
comp=Z,0.7nm,0.3s
**ARMA Armidale 60.27 126** P **P 11 01 13.3 +1.7**
**YSS Yuzh-Sakhalins 60.40 34** P **P 11 01 11.7 -0.2**
**YSS Yuzh-Sakhalins 60.40 34**⇑ *eP* **P 11 01 12.6 +0.7**
YSS pmax pmax
comp=Z,41nm,1.1s
**MAK Makhachkala 61.00 320** *eP* **P 11 01 14.4 -1.7**
MAK *e* 11 03 26.9
MAK *eS* **S 11 09 30.7 -2.2**
MAK pmax pmax
comp=Z,97nm,0.9s
**GNI Garni 61.56 316** LR LR 11 30 19.7
comp=Z,78nm,21.0s,baz=110,slow=38
**H04N2 CROZET ISLANDS 61.72 214** T T 12 08 19.4
baz=54,slow=75,SNR=4174
**H04N1 CROZET ISLANDS 61.73 214** T T 12 08 19.9
baz=54,slow=75,SNR=4974
**H04N3 CROZET ISLANDS 61.74 214** T T 12 08 18.6
baz=54,slow=75,SNR=4759
**H04S1 CROZET ISLANDS 62.06 214** T T 12 08 29.0
baz=53,slow=75,SNR=490
**H04S3 CROZET ISLANDS 62.07 214** T T 12 08 28.0
baz=53,slow=75,SNR=701
**H04S2 CROZET ISLANDS 62.08 214** T T 12 08 30.1
baz=53,slow=75,SNR=574
**TYV Tymovskoe 62.65 30** *eP* **P 11 01 28.9 +1.9**
TYV pmax pmax
comp=Z,6.0nm,1.7s
TYV pmax pmax
comp=Z,100nm,5.5s
**SVE Sverdlovsk 62.94 338** *eP* **P 11 01 29.3 +0.4**
SVE pmax pmax
comp=Z,28nm,1.0s
**ARU Arti 63.43 337** P **P 11 01 30.4 -1.7**
ARU lAmb lAmb 11 01 33.1
comp=Z,19nm,1.1s
**ARU Arti 63.43 337** LR LR 11 30 42.1
comp=Z,155nm,21.5s,baz=146,slow=38
**ARU Arti 63.43 337***ceP* **P 11 01 32.0 -0.2**
ARU pmax pmax
comp=Z,13nm,1.1s
**ARU Arti 63.43 337** P **P 11 01 32.2 0.0**
comp=Z,17nm,1.1s
**KBZ Khabaz 64.34 319** P **P 11 01 38.4 0.0**
comp=Z,7.7nm,0.9s,baz=121,slow=4.7,SNR=14
comp=Z,7.7nm,0.9s
**KBZ Khabaz 64.34 319***ceP* **P 11 01 38.7 +0.3**
KBZ pmax pmax
comp=Z,11nm,0.9s
**SHA1 Shidzhatmaz 64.50 319**⇑ *iP* **P 11 01 40.5 +0.7**
**KIV Kislovodsk 64.58 319** *eP* **P 11 01 40.5 +0.4**
KIV pmax pmax
comp=Z,14nm,1.1s
**YAK Yakutsk 65.55 16** P **P 11 01 44.6 -1.3**
**YAK Yakutsk 65.55 16** LR LR 11 34 06.5
comp=Z,314nm,18.1s,baz=214,slow=39
**YAK Yakutsk 65.55 16** *eP* **P 11 01 45.2 -0.7**
YAK *e**PP **pP 11 01 53.2 -1.9**
YAK *e* 11 02 16.7
YAK *e* 11 04 09.5
YAK *eS* **S 11 10 29.3 +0.3**
YAK *e**SS **sS 11 10 45.3 +1.1**
YAK *e* 11 11 41.2
YAK *eSS* **SS 11 14 44.6 +1.5**
YAK pmax pmax
comp=Z,48nm,1.0s
YAK pmax pmax
comp=E,13nm,1.3s
YAK pmax pmax
comp=N,12nm,1.0s
YAK pmax pmax
comp=Z,238nm,5.2s
YAK pmax pmax
comp=E,62nm,3.2s
YAK pmax pmax
comp=N,126nm,6.1s
YAK smax smax
comp=E,52nm,3.0s
YAK smax smax
comp=N,48nm,2.8s
YAK MLR MLR
comp=Z,686nm,13.0s
YAK MLR MLR
comp=E,494nm,16.0s
YAK MLR MLR
comp=N,434nm,15.0s
**EIL Elat 65.72 302** LR LR 11 30 37.8
comp=N,315nm,18.4s,baz=71,slow=36
**BELG Belogornoye 65.82 329***c iP* **P 11 01 47.2 -0.6**
BELG pmax pmax
comp=Z,3.0nm,1.0s
**GAZ Gaziantep 65.94 311** P **P 11 01 48.7 -0.3**
GAZ **pP 11 01 58.4 +0.1**
GAZ lAmb lAmb 11 02 17.2
comp=Z,10nm,0.8s
**RPOR Krasnaya Polya 66.07 318** *eP* **P 11 01 50.4 +0.7**
**MMAI Mount Meron Ar 66.17 306** P **P 11 01 52.0 +1.4**
comp=Z,1.4nm,0.5s,baz=73,slow=5.0,SNR=3.4
MMAI LR LR 11 32 44.9
comp=Z,156nm,18.1s,baz=46,slow=38
comp=Z,1.4nm,0.5s
**SOC Sochi 66.39 318** *eP* **P 11 01 49.4 -2.3**
SOC *e* 11 04 18.4
SOC *e*PPP PPP 11 05 49.2
SOC *eS* **S 11 10 37.3 -2.6**
SOC *eSS* **SS 11 14 51.8 -5.1**
**MBAR Mbarara 66.67 269** LR LR 11 30 45.8
comp=Z,102nm,18.1s,baz=88,slow=36
**MBAR Mbarara 66.67 269** *i* P **P 11 01 55.3 +1.0**
MBAR pmax pmax
comp=Z,12nm,1.7s
**VRH Novokhopyorsk 68.39 326** *eP* **P 11 02 01.6 -2.5**
VRH pmax pmax
comp=Z,10.0nm,0.9s
**KIRV Kirov 68.56 335** LR LR 11 34 51.9
comp=Z,123nm,20.3s,baz=131,slow=38
**KIRV Kirov 68.56 335**⇑ *iP* **P 11 02 05.3 +0.2**
**KIRS Kirsehir-Merke 69.00 312**⇑ P **P 11 02 07.5 -0.9**
**BR131 Keskin Array S 69.38 312** P **P 11 02 10.3 -0.4**
**BR131 Keskin Array S 69.38 312***c iP* **P 11 02 10.4 -0.4**
**BRTR Keskin Array B 69.38 312** P **P 11 02 09.4 -1.4**
**BRTR Keskin Array B 69.38 312** P **P 11 02 10.3 -0.4**
comp=Z,3.7nm,0.9s,baz=135,slow=7.3,SNR=19
BRTR LR LR 11 34 01.2
comp=Z,59nm,21.0s,baz=116,slow=37
comp=Z,3.7nm,0.9s
**BRTR Keskin Array B 69.38 312** P **P 11 02 09.4 -1.4**
**VORD Divnogorie 69.66 325** *eP* **P 11 02 10.0 -2.0**
VORD pmax pmax
comp=Z,10.0nm,0.9s
**VSR Storozhevoye 69.83 325** *eP* **P 11 02 10.5 -2.6**
VSR pmax pmax
comp=Z,9.0nm,1.0s
**VORR Voronezh 70.00 326** *eP* **P 11 02 12.2 -2.0**
VORR pmax pmax
comp=Z,10.0nm,0.8s
**LPSR Galich'ya Gora 70.56 327** *eP* **P 11 02 15.4 -2.1**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**MA2 Magadan 71.42 26** LR LR 11 36 17.7
comp=Z,184nm,18.8s,baz=244,slow=38
**MA2 Magadan 71.42 26***c iP* **P 11 02 22.8 +0.1**
MA2 pmax pmax
comp=Z,36nm,0.9s
**ELL Elmali 71.46 309** P **P 11 02 23.7 +0.1**
ELL **pP 11 02 31.6 -1.2**
**ELL Elmali 71.46 309** P **P 11 02 23.7 +0.1**
ELL *PP **pP 11 02 31.6 -1.2**
**PETK Petropavlovsk- 71.79 33** P **P 11 02 25.2 +0.2**
comp=Z,6.7nm,1.0s,baz=237,slow=5.0,SNR=3.1
PETK LR LR 11 37 27.9
comp=Z,201nm,18.4s,baz=250,slow=39
comp=Z,6.7nm,1.0s
**MAW Mawson 72.57 193** P **P 11 02 30.6 +1.3**
comp=Z,1.0nm,0.5s,baz=263,slow=10,SNR=1.9
MAW LR LR 11 29 49.9
comp=Z,197nm,18.1s,baz=63,slow=32
comp=Z,1.0nm,0.5s
**OBN Obninsk 72.88 328**⇓ *iP* **P 11 02 31.6 +0.2**
OBN *e**PP **pP 11 02 39.4 -1.4**
OBN *SP **sP 11 02 46.0 +1.8**
OBN 11 02 49.0
OBN S **S 11 11 54.0 -1.8**
OBN pmax pmax
comp=Z,10.0nm,0.5s
OBN MLR MLR
comp=Z,127nm,20.0s
**TIXI Tiksi 73.34 10** P **P 11 02 32.4 -1.5**
TIXI lAmb lAmb 11 02 34.4
comp=Z,14nm,0.8s
**TIXI Tiksi 73.34 10** LR LR 11 37 55.0
comp=Z,294nm,18.9s,baz=246,slow=38
**TIXI Tiksi 73.34 10**⇑ *iP* **P 11 02 33.3 -0.6**
TIXI pmax pmax
comp=Z,22nm,1.0s
**SEY Seymchan 73.86 23**⇑ *iP* **P 11 02 37.5 +0.4**
SEY pmax pmax
comp=Z,29nm,1.1s
**LBTB Lobatse 73.97 244** LR LR 11 32 45.3
comp=Z,144nm,18.2s,baz=79,slow=34
**BOSA Boshof 74.85 240** P **P 11 02 44.5 +0.8**
comp=Z,2.9nm,0.9s,baz=118,slow=10,SNR=3.1
BOSA LR LR 11 31 19.6
comp=Z,159nm,18.8s,baz=37,slow=32
comp=Z,2.9nm,0.9s
**SORM Soroca 75.37 320**⇑ P **P 11 02 46.0 -0.1**
**SORM Soroca 75.37 320**⇑ P **P 11 02 46.0 -0.1**
**AKASG Malin Array Be 75.53 322** P **P 11 02 46.4 -0.6**
comp=Z,2.2nm,0.6s,baz=90,slow=4.6,SNR=13
comp=Z,2.2nm,0.6s
**AKBB Malin Array Si 75.53 322** P **P 11 02 45.5 -1.5**
**AKBB Malin Array Si 75.53 322***c iP* **P 11 02 46.6 -0.4**
AKBB pmax pmax
comp=Z,9.0nm,0.7s
**KIEV Kiev 75.53 322** P **P 11 02 45.6 -1.4**
**KIEV Kiev 75.53 322**⇑ P **P 11 02 45.4 -1.6**
**KIEV Kiev 75.53 322** P **P 11 02 45.6 -1.4**
KIEV pmax pmax
comp=Z,8.0nm,0.7s
**VRI Vrincioaia 75.89 317**⇑ P **P 11 02 50.1 +0.9**
**VRI Vrincioaia 75.89 317**⇑ P **P 11 02 50.1 +0.9**
**VRI Vrincioaia 75.89 317** P **P 11 02 50.6 +1.4**
comp=Z,12nm,0.9s,comp=Z,164nm
**PLOR Plostina 75.94 317**⇑ P **P 11 02 50.1 +0.6**
**PLOR Plostina 75.94 317**⇑ P **P 11 02 50.1 +0.6**
**TESR Tescani 76.09 318**⇑ P **P 11 02 50.5 +0.1**
**MLR Muntele Rosu 76.34 317** P **P 11 02 52.0 0.0**
MLR lAmb lAmb 11 02 54.0
comp=Z,20nm,1.1s
MLR **pP 11 03 00.1 -1.1**
**MLR Muntele Rosu 76.34 317** LR LR 11 43 38.1
comp=Z,83nm,18.2s,baz=88,slow=41
**MLR Muntele Rosu 76.34 317**⇑ P **P 11 02 52.9 +1.0**
**MLR Muntele Rosu 76.34 317**⇑ P **P 11 02 52.9 +1.0**
**VOIR 76.94 316**⇑ P **P 11 02 55.8 +0.5**
**VOIR 76.94 316**⇑ P **P 11 02 55.8 +0.5**
**ARR Arges 77.21 316**⇑ P **P 11 02 57.3 +0.5**
**BURAR Bucovina Array 77.29 319** P **P 11 02 57.7 +0.5**
BURAR lAmb lAmb 11 02 59.9
comp=Z,14nm,0.9s
**BURAR Bucovina Array 77.29 319**⇑ P **P 11 02 58.8 +1.5**
**BURAR Bucovina Array 77.29 319**⇑ P **P 11 02 58.8 +1.5**
**BUR08 Bucovina Ar. S 77.31 319** lAmb lAmb 11 02 59.7
comp=Z,17nm,1.0s
**MARR Marisel-Cluj 78.50 317**⇑ P **P 11 03 05.2 +1.2**
**RPZ Rata Peaks 78.94 135** LR LR 11 37 55.6
comp=Z,234nm,21.9s,baz=314,slow=36
**BOVS Bovan 78.96 314**⇓ P **P 11 03 05.1 -1.3**
**SURR Surduc 79.02 316**⇑ P **P 11 03 07.4 +0.7**
**SUR Sutherland 79.22 237** LR LR 11 35 18.6
comp=Z,329nm,19.4s,baz=97,slow=34
**SIRR Siria 79.42 317**⇑ P **P 11 03 09.8 +0.9**
**KOLS Kolonicke sedl 79.48 320** *eP* **P 11 03 11.3 +2.1**
**KOLS Kolonicke sedl 79.48 320** *eP* **P 11 03 11.3 +2.1**
**FINES FINESS Array B 80.25 332** P **P 11 03 13.1 0.0**
comp=Z,4.3nm,0.6s,baz=101,slow=6.1,SNR=18
FINES LR LR 11 42 03.4
comp=Z,175nm,20.8s,baz=82,slow=38
comp=Z,4.3nm,0.6s
**PDG Podgorica 80.56 313**⇓ P **P 11 03 15.1 0.0**
**NIE Niedzica 80.84 320** P **P 11 03 17.9 +1.3**
comp=Z,3.3nm,1.0s
**PSZ Piszkesteto 80.88 318**⇓ P **P 11 03 17.9 +1.1**
**PSZ Piszkesteto 80.88 318**⇓ P **P 11 03 17.9 +1.1**
**SHEM Shemya Is, Ala 81.16 37** LR LR 11 38 22.4
comp=Z,52nm,21.9s,baz=276,slow=35
**BILL Bilibino 81.28 21** *eP* **P 11 03 19.5 +1.1**
BILL pmax pmax
comp=Z,3.0nm,0.9s
**MORH Mrgy, Hungar 81.48 316**⇑ P **P 11 03 20.5 +0.6**
**VYHS Vyhne 81.66 319** *eP* **P 11 03 21.8 +0.9**
**VYHS Vyhne 81.66 319** *eP* **P 11 03 21.8 +0.9**
**BKZ Black Stump Fm 82.19 130** P **P 11 03 23.4 -0.5**
BKZ lAmb lAmb 11 03 25.1
comp=Z,32nm,1.1s
**MPLH Magyarpolny 82.36 317** P **P 11 03 25.7 +1.1**
**JAVC Velka Javorina 82.47 319** *eP* **P 11 03 26.7 +1.5**
**URZ Urewera 82.55 129** LR LR 11 41 46.9
comp=Z,217nm,19.9s,baz=12,slow=37
**MORC Moravsky Berou 82.67 320** *eP* **P 11 03 26.9 +0.7**
**MORC Moravsky Berou 82.67 320**⇑ P **P 11 03 27.9 +1.7**
**MORC Moravsky Berou 82.67 320**⇑ P **P 11 03 27.9 +1.7**
**ARCES ARCESS Array B 82.78 340** P **P 11 03 26.6 +0.3**
comp=Z,6.3nm,0.8s,baz=92,slow=5.4,SNR=13
ARCES LR LR 11 44 29.2
comp=Z,190nm,19.9s,baz=100,slow=39
comp=Z,6.3nm,0.8s
**RONA Rosalia, Austr 83.25 318** *eP* **P 11 03 30.2 +0.9**
comp=Z,5.7nm,1.2s
**KRUC Moravsky 83.33 319** *eP* **P 11 03 30.4 +0.8**
**CONA Conrad Observa 83.57 318** *i* P **P 11 03 31.4 +0.4**
comp=Z,5.7nm,1.1s
**ARSA Arzberg 83.73 317** *i* P **P 11 03 32.9 +1.2**
comp=Z,7.1nm,0.8s
**SOKA Soboth 84.02 317** *i* P **P 11 03 34.6 +1.3**
comp=Z,10.0nm,1.1s
**OBKA Obir 84.34 316** *i* P **P 11 03 36.0 +1.1**
comp=Z,4.5nm,0.7s
**MOA Molln 84.63 318** *i* P **P 11 03 36.4 +0.1**
comp=Z,4.2nm,0.9s
**MYKA Terra Mystica 84.97 317** *ePcP* **PcP 11 03 39.9 -1.4**
comp=Z,4.6nm,0.8s
**PRED Cave del Predi 85.01 316** lAmb lAmb 11 03 39.9
comp=Z,12nm,0.9s
**BRG Berggiesshubel 85.08 321** *eP* **P 11 03 39.6 +1.2**
BRG Amp 11 03 40.0
comp=Z,4.3nm,0.8s
**BRG Berggiesshubel 85.08 321** P P 11 03 46.8 +8.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BRG | | | | Amp | | 11 03 48.5 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **GEC2** | **GERESS Array S** | **85.08 319** | | P | **P** | **11 03 38.5** | **-0.1** |
| GEC2 | | | | IAmb | IAmb | 11 03 40.6 | |
| | comp=Z,16nm,1.2s | | | | | | |
| GEC2 | | | | | **pP** | **11 03 46.2** | **-1.8** |
| **GERES** | **GERESS Array B** | **85.08 319** | | P | **P** | **11 03 38.9** | **+0.3** |
| **GERES** | **GERESS Array B** | **85.08 319** | | P | **P** | **11 03 39.3** | **+0.7** |
| | comp=Z,4.2nm,0.9s,baz=145,slow=12,SNR=13 | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **85.08 319** | | P | **P** | **11 03 38.9** | **+0.3** |
| **NRCA** | **Norcia** | **85.11 313** | | IAmb | IAmb | 11 05 26.2 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **85.18 319** | *ce* | P | **P** | **11 03 39.7** | **+0.7** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **KBA** | **Koelnbreinsper** | **85.20 317** | *i* | P | **P** | **11 03 39.5** | **+0.2** |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **STAL** | **STALIGIAL** | **85.59 316** | | IAmb | IAmb | 11 04 11.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **LESA** | **Schwarzleotal** | **85.68 317** | *e* | P | **P** | **11 03 41.6** | **-0.1** |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **CLL** | **Collm** | **85.70 321** | *e* | P | **P** | **11 03 42.0** | **+0.5** |
| | comp=Z,7.0nm,1.0s | | | | | | |
| CLL | | | | *e*pP | **pP** | **11 03 50.0** | **-1.0** |
| **CLL** | **Collm** | **85.70 321** | *e* | P | **P** | **11 03 42.0** | **+0.5** |
| CLL | | | | *e**PP | **pP** | **11 03 50.0** | **-1.0** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ABTA** | **Abfaltersbach** | **85.75 317** | *e* | P | **P** | **11 03 42.0** | **+0.1** |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **85.98 330** | | P | **P** | **11 03 43.0** | **+0.3** |
| | comp=Z,3.8nm,0.5s,baz=123,slow=5.3,SNR=15 | | | | | | |
| HFS | | | | LR | LR | 11 47 17.8 | |
| | comp=Z,129nm,18.5s,baz=86,slow=39 | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **85.98 330** | | P | **P** | **11 03 43.0** | **+0.3** |
| **ELIB** | **Princess Elisa** | **86.04 197** | *d* | P | **P** | **11 03 41.5** | **-1.5** |
| | comp=Z,4.3nm,1.2s | | | | | | |
| ELIB | | | *d* | PP | **PP** | **11 07 05.5** | **+2.4** |
| **CTI** | **Castel Tesino** | **86.31 316** | | IAmb | IAmb | 11 03 46.2 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **WTTA** | **Wattenberg** | **86.38 317** | *i* | P | **P** | **11 03 45.6** | **+0.4** |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **86.67 317** | *i* | P | **P** | **11 03 46.1** | **-0.4** |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **86.74 317** | *i* | P | **P** | **11 03 46.8** | **-0.2** |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **RETA** | **Reutte** | **86.98 317** | *i* | P | **P** | **11 03 48.1** | **+0.2** |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **FETA** | **Feichten** | **86.98 317** | *e* | P | **P** | **11 03 48.0** | **-0.2** |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **87.17 348** | | LR | LR | 11 49 37.9 | |
| | comp=Z,202nm,20.4s,baz=76,slow=40 | | | | | | |
| **NB2** | **NORSAR Subarra** | **87.26 331** | | P | **P** | **11 03 49.5** | **+0.5** |
| | comp=Z,2.1nm,0.8s,baz=95,slow=4.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **87.26 331** | | P | **P** | **11 03 48.9** | **-0.1** |
| | comp=Z,3.6nm,0.8s,baz=94,slow=5.0,SNR=9.7 | | | | | | |
| NOA | | | | LR | LR | 11 46 14.1 | |
| | comp=Z,85nm,20.8s,baz=105,slow=38 | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **87.29 316** | | IAmb | IAmb | 11 03 59.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **87.56 317** | | LR | LR | 11 49 42.6 | |
| | comp=Z,27nm,19.0s,baz=77,slow=40 | | | | | | |
| **DAVA** | **Damuels** | **87.57 317** | *e* | PcP | **PcP** | **11 03 52.4** | **-0.6** |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **KEST** | **Kesra** | **87.83 306** | | P | **P** | **11 03 54.0** | **+1.7** |
| | comp=Z,6.4nm,0.9s,baz=206,slow=3.4,SNR=5.5 | | | | | | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **90.95 180** | | LR | LR | 11 42 50.8 | |
| | comp=Z,148nm,19.5s,baz=306,slow=34 | | | | | | |
| **C19K** | **Lookout Ridge** | **93.70 21** | | IAmb | IAmb | 11 04 21.3 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **94.17 198** | | LR | LR | 11 43 22.1 | |
| | comp=Z,128nm,18.4s,baz=88,slow=33 | | | | | | |
| **D19K** | **Kuna River** | **94.36 21** | | IAmb | IAmb | 11 04 23.8 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **94.94 22** | | IAmb | IAmb | 11 04 26.4 | |
| | comp=Z,8.1nm,1.0s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **95.18 326** | | P | **P** | **11 04 26.4** | **+0.4** |
| | comp=Z,0.8nm,0.3s,baz=88,slow=5.3,SNR=7.8 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **95.32 283** | | P | **P** | **11 04 28.1** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=68,slow=5.9,SNR=1.9 | | | | | | |
| TORD | | | | LR | LR | 11 46 56.7 | |
| | comp=Z,101nm,18.0s,baz=90,slow=35 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **G19K** | **Purcell Mounta** | **95.33 23** | | IAmb | IAmb | 11 04 28.1 | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **95.61 22** | | IAmb | IAmb | 11 04 29.4 | |
| | comp=Z,9.4nm,1.0s | | | | | | |
| **K17K** | **Iditarod** | **95.64 27** | | IAmb | IAmb | 11 04 30.0 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **H19K** | **Roundabout Mou** | **95.74 24** | | IAmb | IAmb | 11 04 30.5 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **95.85 21** | | IAmb | IAmb | 11 04 30.4 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **F21K** | **Alatna River** | **96.40 22** | | IAmb | IAmb | 11 04 32.8 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **G21K** | **Allakaket** | **96.61 22** | | P | **P** | **11 04 32.4** | **+0.1** |
| G21K | | | | | **pP** | **11 04 40.4** | **-1.3** |
| **J20K** | **Nowinta River** | **97.06 25** | | P | Pdif | 11 04 34.4 | 0.0 |
| J20K | | | | IAmb | IAmb | 11 04 36.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **98.09 310** | | P | **P** | **11 04 39.3** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=95,slow=2.6,SNR=1.7 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **MDT** | **Midelt** | **99.53 303** | | LR | LR | 11 55 06.5 | |
| | comp=Z,72nm,18.1s,baz=101,slow=39 | | | | | | |
| **DLMT** | **Dillon** | **126.74 26** | | PKPdf | **PKPdf** | **11 10 06.7** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **128.82 36** | | PKP | **PKiKP** | **11 10 12.4** | **+0.9** |
| | comp=Z,1.1nm,0.8s,baz=223,slow=3.1,SNR=8.8 | | | | | | |
| **PDAR** | **Pinedale Array** | **130.13 26** | | PKP | **PKPdf** | **11 10 11.2** | **-2.0** |
| | comp=Z,0.4nm,0.7s,baz=239,slow=1.6,SNR=4.0 | | | | | | |
| **R11B** | **Troy Canyon, C** | **130.44 34** | | | **PKPdf** | **11 10 14.2** | **+0.3** |
| **PLCA** | **Paso Flores** | **138.97 194** | | PKP | **PKPdf** | **11 10 30.1** | **+0.6** |
| | comp=Z,1.4nm,0.9s,baz=236,slow=7.3,SNR=2.5 | | | | | | |
| **SGCY** | **Sterling City** | **142.85 27** | | PKPdf | PKPpre | 11 10 32.8 | |
| **MIAR** | **Mount Ida** | **143.17 15** | | PKPdf | PKPab | 11 10 32.2 | -0.5 |
| **MIAR** | **Mount Ida** | **143.17 15** | | PKHKP | PKPpre | 11 10 32.2 | |
| **TXAR** | **Lajitas Array** | **143.73 32** | | PKPdf | PKPbc | 11 10 35.8 | -0.2 |
| **TXAR** | **Lajitas Array** | **143.73 32** | | PKP | PKPbc | 11 10 36.2 | +0.2 |
| | comp=Z,1.4nm,0.9s,baz=302,slow=2.8,SNR=12 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.73 32** | | PKIKP | PKPbc | 11 10 35.8 | -0.2 |
| **BO02** | **Sierra Bellavi** | **144.62 197** | | | **PKPdf** | **11 10 39.6** | **-0.2** |
| **JCT** | **Junction City** | **144.66 26** | | PKPdf | PKPbc | 11 10 38.9 | +0.2 |
| **JCT** | **Junction City** | **144.66 26** | | PKIKP | PKPbc | 11 10 38.9 | +0.1 |
| **CPUP** | **Villa Florida** | **144.99 222** | | PKPbc | **PKPbc** | **11 10 39.7** | **-0.1** |
| | comp=Z,1.9nm,0.8s,baz=135,slow=5.7,SNR=3.2 | | | | | | |

*IDC **20** 10:53:19.7±8.8, 17.°94S×177.°99W, h514km±90km, mb3.2/5, mbtmp4.1/5, Error ellipse: s-maj=43.9km s-min=27.9km az=64.0*

*NEIC **20** 10:53:27.1±1.1, 18.°4S±0.°2×178.°3W±0.°2, h570km±10km, mb4.2/14, Error ellipse: s-maj=28.1km s-min=21.7km az=169.0*

**ISC 20 10:53:25.9±0.8, 18.°4S±0.°2×178.°5W±0.°1, h550km, n25, σ1s12/27, mb4.2/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.38** | **280** | P | | **P** | **10 54 45.1** | **+1.6** |
| **NIUE** | **Niue** | **8.12** | **96** | P | | **P** | **10 55 26.4** | **+1.7** |
| **TOO** | **Toolangi** | **36.85** | **231** | P | | **P** | **10 59 49.2** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.38** | **242** | P | | **P** | **11 00 01.9** | **+1.5** |
| STKA | | | | IAmb | | IAmb | 11 00 22.2 | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.38** | **242** | P | | **P** | **11 00 01.9** | **+1.5** |
| | comp=Z,2.0nm,0.5s,baz=86,slow=10,SNR=5.9 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.15** | **241** | P | | **P** | **11 00 39.4** | **+0.9** |
| BBOO | | | | IAmb | | IAmb | 11 01 17.1 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.32** | **260** | P | | **P** | **11 00 48.2** | **+0.6** |
| WR0 | | | | IAmb | | IAmb | 11 01 29.7 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.48** | **260** | P | | **P** | **11 00 49.1** | **+0.3** |
| **WRAB** | **Tennant Creek** | **44.50** | **260** | P | | **P** | **11 00 47.7** | **-1.3** |
| WRAB | | | | IAmb | | IAmb | 11 01 24.9 | |
| | comp=Z,7.4nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.51** | **260** | P | | **P** | **11 00 48.8** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.51** | **260** | P | | **P** | **11 00 48.8** | **-0.3** |
| | comp=Z,1.1nm,0.5s,baz=97,slow=6.8,SNR=7.5 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **11 02 18.9** | **-1.6** |
| | comp=Z,0.4nm,0.4s,baz=92,slow=3.5,SNR=1.7 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **44.63** | **255** | P | | **P** | **11 00 50.3** | **+0.3** |
| AS31 | | | | IAmb | | IAmb | 11 00 51.6 | |
| | comp=Z,2.7nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.63** | **255** | P | | **P** | **11 00 49.9** | **-0.1** |
| ASAR | | | | PcP | | **PcP** | **11 02 19.6** | **-1.4** |
| **ASAR** | **Alice Springs** | **44.63** | **255** | P | | **P** | **11 00 50.4** | **+0.3** |
| | comp=Z,7.0nm,0.5s,baz=88,slow=8.9,SNR=49 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **11 02 18.9** | **-2.1** |
| | comp=Z,0.8nm,0.5s,baz=110,slow=3.5,SNR=6.2 | | | | | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **49.78** | **245** | P | | **P** | **11 01 28.6** | **0.0** |
| **KNRA** | **Kununurra** | **50.40** | **265** | P | | **P** | **11 01 33.4** | **+0.1** |
| KNRA | | | | IAmb | | IAmb | 11 01 59.3 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **UGM** | **Wanagama** | **69.59** | **268** | P | | **P** | **11 03 40.2** | **-0.5** |
| **QSPA** | **South Pole Qui** | **71.70** | **180** | P | | **P** | **11 03 51.8** | **-0.5** |
| **QSPA** | **South Pole Qui** | **71.70** | **180** | P | | **P** | **11 03 51.7** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=212,slow=0.7,SNR=13 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **N19K** | **Bonanza Creek** | **81.22** | **12** | P | | **P** | **11 04 43.9** | **-0.4** |
| N19K | | | | IAmb | | IAmb | 11 04 49.8 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **BELA** | **Belgrano 2** | **81.73** | **173** | P | | **P** | **11 04 45.5** | **-1.2** |
| **ILAR** | **Eielson Array** | **86.33** | **13** | P | | P | 11 05 03.6 | -5.8 |
| | comp=Z,0.2nm,0.4s,baz=218,slow=5.9,SNR=6.3 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.06** | **314** | PKPbc | | **PKPdf** | **11 11 59.3** | **-2.0** |
| | comp=Z,1.0nm,0.6s,baz=85,slow=1.6,SNR=5.6 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.34** | **302** | PKPbc | | **PKPdf** | **11 12 03.9** | **+0.4** |
| | comp=Z,2.3nm,0.6s,baz=94,slow=4.3,SNR=2.5 | | | | | | | |
| **GERES** | **GERESS Array B** | **148.03** | **345** | PKPbc | | **PKPdf** | **11 12 06.1** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=224,slow=2.7,SNR=3.7 | | | | | | | |

*HEL **20** 11:29:59.4±0.1, 67.°93N×25.°84E, h0km, ML1.6, Suspected explosion*

*IDC **20** 11:30:01.7±1.5, 68.°05N×25.°90E, h0km, mbtmp3.0/1, ML2.2/1, Error ellipse: s-maj=27.2km s-min=9.6km az=87.0*

**ISC 20 11:29:58.0±0.8, 67.°94N±0.°02×25.°85E±0.°03, h0km, n23, σ0s72/37, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGF** | **Sodankyl** | **0.57** | **152** | PG | | **Pg** | **11 30 08.1** | **-0.8** |
| | baz=335 | | | | | | | |
| SGF | | | | SG | | **Sg** | **11 30 15.7** | **-0.5** |
| **HEF** | **Hetta** | **0.94** | **301** | *e*P | | **Pg** | **11 30 16.1** | **+0.1** |
| **HEF** | **Hetta** | **0.94** | **301** | PG | | **Pb** | **11 30 16.3** | **-0.9** |
| | baz=121 | | | | | | | |
| HEF | | | | MSG | | | 11 30 28.4 | |
| | comp=Z,4.1nm,0.2s | | | | | | | |
| HEF | | | | SB | | **Sb** | **11 30 28.9** | **-1.3** |
| **KLF** | **Kolari** | **1.01** | **226** | PG | | **Pg** | **11 30 17.3** | **-0.1** |
| | baz=41 | | | | | | | |
| KLF | | | | MSG | | | 11 30 30.3 | |
| | comp=Z,4.2nm,0.2s | | | | | | | |
| KLF | | | | SG | | **Sg** | **11 30 30.4** | **-0.1** |
| **RAJF** | **Raja-Jooseppi** | **1.06** | **59** | PG | | **Pb** | **11 30 18.8** | **-0.4** |
| RAJF | | | | SG | | **Sg** | **11 30 32.3** | **+0.2** |
| **RNF** | **Rovaniemi** | **1.34** | **177** | PG | | **Pg** | **11 30 23.4** | **-0.3** |
| RNF | | | | SB | | **Sg** | **11 30 41.1** | **0.0** |
| **PAJU** | **Pajala** | **1.40** | **230** | PG | | **Pg** | **11 30 24.5** | **-0.3** |
| PAJU | | | | SB | | **Sb** | **11 30 43.3** | **-0.1** |
| **VRF** | **Varrio** | **1.44** | **96** | PG | | **Pb** | **11 30 25.9** | **+0.2** |
| | baz=280 | | | | | | | |
| VRF | | | | MSG | | | 11 30 42.7 | |
| | comp=Z,5.8nm,0.2s | | | | | | | |
| VRF | | | | SG | | **Sg** | **11 30 43.8** | **-0.4** |
| **KTK1** | **Kautokeino** | **1.44** | **319** | *e*P | | **Pg** | **11 30 25.3** | **-0.3** |
| **KTK1** | **Kautokeino** | **1.44** | **319** | PG | | **Pg** | **11 30 25.3** | **-0.3** |
| KTK1 | | | | SN | | **Sn** | **11 30 47.4** | **+2.5** |
| **LANU** | **Lannavaara** | **1.45** | **276** | PG | | **Pg** | **11 30 25.6** | **-0.3** |
| LANU | | | | SN | | **Sn** | **11 30 45.4** | **+0.1** |
| **ARA0** | **ARCESS Array S** | **1.60** | **356** | PG | | **Pg** | **11 30 28.5** | **-0.2** |
| | baz=177 | | | | | | | |
| ARA0 | | | | SN | | **Sg** | **11 30 49.2** | **-0.2** |
| **ARCES** | **ARCESS Array B** | **1.60** | **356** | Pg | | **Pg** | **11 30 28.4** | **-0.2** |
| | comp=Z,0.8nm,0.3s,baz=173,slow=15,SNR=54 | | | | | | | |
| ARCES | | | | Lg | | Lg | 11 30 48.9 | |
| | comp=Z,0.8nm,0.3s,baz=175,slow=30,SNR=10 | | | | | | | |
| **KEV** | **Kevo** | **1.87** | **12** | PG | | **Pb** | **11 30 32.8** | **-0.1** |
| KEV | | | | MSG | | | 11 30 55.4 | |
| | comp=Z,4.6nm,0.2s | | | | | | | |
| KEV | | | | SG | | **Sb** | **11 30 56.9** | **+0.1** |
| **TOF** | **Tornio** | **1.97** | **198** | PG | | **Pb** | **11 30 34.5** | **-0.1** |
| TOF | | | | MSG | | | 11 30 57.5 | |
| | comp=Z,3.1nm,0.2s | | | | | | | |
| TOF | | | | SG | | **Sb** | **11 30 60.0** | **+0.4** |
| **RANF** | **Ranua** | **1.97** | **169** | PG | | **Pb** | **11 30 34.3** | **-0.4** |
| | baz=352 | | | | | | | |
| RANF | | | | SG | | **Sb** | **11 30 59.8** | **0.0** |
| **OLKF** | **Oulanka, Finla** | **2.14** | **138** | PG | | **Pb** | **11 30 37.5** | **-0.1** |
| OLKF | | | | MSG | | | 11 31 02.6 | |
| | comp=Z,2.3nm,0.2s | | | | | | | |
| OLKF | | | | SG | | **Sb** | **11 31 05.2** | **+0.5** |
| **KALU** | **Kalix** | **2.31** | **206** | SG | | **Sb** | **11 31 10.1** | **+0.5** |
| **MSF** | **Maaselka** | **2.40** | **147** | PG | | **Pb** | **11 30 41.5** | **-0.5** |
| MSF | | | | SG | | **Sb** | **11 31 12.4** | **+0.3** |
| **KUI6** | **Riekki** | **2.50** | **139** | PG | | **Pb** | **11 30 43.4** | **-0.3** |
| KU6 | | | | MSG | | | 11 31 13.0 | |
| | comp=Z,3.7nm,0.2s | | | | | | | |
| KU6 | | | | SB | | **Sb** | **11 31 13.6** | **-1.3** |
| **OUL** | **Oulu** | **2.87** | **180** | SG | | **Sb** | **11 31 27.6** | **+2.0** |
| **I37NO** | **I37NO** | **2.90** | **296** | I | | I | 11 47 50.0 | |
| | comp=Z,0.6nm,0.9s,baz=109,slow=317,SNR=35 | | | | | | | |
| **FINES** | **FINESS Array B** | **6.53** | **179** | Pn | | Pn | 11 31 39.9 | +4.8 |
| | comp=Z,0.1nm,0.3s,baz=6.4,slow=12,SNR=1.5 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |

*IDC **20** 11:38:44.3±0.9, 8.°36S×117.°01E, h0km, mb4.0/8, mbtmp4.0/9, ML4.0/1, MS3.2/1, Error ellipse: s-maj=25.9km s-min=14.9km az=52.0*

*DJA **20** 11:38:46.8±0.3, 8.°5S±5.°1×11.°7E±.°, h10km, M4.3/13, mb4.4/1, MLv4.2/13*

*NEIC **20** 11:38:47.0±1.4, 8.°4S±0.°1×116.°86E±0.°07, h16km±8km, mb4.4/10, Error ellipse: s-maj=16.1km s-min=9.7km az=170.0*

**ISC 20 11:38:45.7±0.6, 8.°34S±0.°06×116.°92E±0.°05, h10km, n53, σ1s12/54, mb4.1/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.39** | **186** | P | | **Pg** | **11 38 54.2** | **+0.7** |
| **PLAI** | **Plampang** | **0.97** | **120** | P | | **Pg** | **11 39 04.7** | **+0.3** |
| **PLAI** | **Plampang** | **0.97** | **120** | P | | **Pg** | **11 39 03.8** | **-0.6** |
| **SRBI** | **Singaraja** | **1.71** | **279** | P | | **Pb** | **11 39 17.8** | **+0.5** |
| **DNP** | **Denpasar** | **1.73** | **259** | P | | **Pb** | **11 39 17.5** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.74** | **267** | P | | **Pn** | **11 39 30.3** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.74** | **267** | | | **Pn** | **11 39 29.9** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.74** | **267** | P | | **Pn** | **11 39 30.3** | **+0.5** |
| **WBSI** | **Waikabubak, Su** | **2.76** | **118** | P | | **Pn** | **11 39 30.6** | **+0.6** |
| **BASI** | **Baing, Sumba** | **4.06** | **118** | P | | **Pn** | **11 39 49.6** | **+1.7** |
| **BSSI** | **Bau Bau, Buton** | **4.16** | **59** | P | | **Pn** | **11 39 50.1** | **+0.8** |
| **KAPI** | **Kappang** | **4.34** | **41** | | | **Pn** | **11 39 52.8** | **+1.0** |
| **KAPI** | **Kappang** | **4.34** | **41** | Pn | | **Pn** | **11 39 52.4** | **+0.6** |
| | 8.5nm,0.3s,baz=203,slow=6.3,SNR=15 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **11 40 42.2** | **-0.2** |
| | 4.2nm,0.3s,baz=241,slow=19,SNR=6.1 | | | | | | | |
| | 20nm,0.2s | | | | | | | |
| **EDFI** | **Ende, Flores** | **4.73** | **95** | P | | **Pn** | **11 39 58.3** | **+1.0** |
| **PWJI** | **Pagerwojo** | **5.08** | **273** | P | | **Pn** | **11 40 03.0** | **+1.1** |
| **UGM** | **Wanagama** | **6.35** | **273** | P | | **Pn** | **11 40 22.4** | **+2.9** |
| **UGM** | **Wanagama** | **6.35** | **273** | Pn | | **Pn** | **11 40 17.8** | **-1.7** |
| **SOEI** | **Soe** | **7.39** | **102** | Pn | | **Pn** | **11 40 35.9** | **+2.1** |
| **FITZ** | **Fitzroy Crossi** | **12.88** | **140** | P | | **Pn** | **11 41 48.2** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **12.88** | **140** | Pn | | **Pn** | **11 41 48.8** | **-0.1** |
| **MBWA** | **Marble Bar** | **13.03** | **168** | P | | **Pn** | **11 41 49.5** | **-1.5** |
| **MBWA** | **Marble Bar** | **13.03** | **168** | | | **Pn** | **11 41 49.3** | **-1.7** |
| **PSA00** | **Pilbara Seismi** | **13.45** | **168** | P | | **Pn** | **11 41 55.5** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.45** | **168** | | | **Pn** | **11 41 56.2** | **-0.6** |
| **KNRA** | **Kununurra** | **13.68** | **123** | Pn | | **Pn** | **11 42 00.1** | **+0.3** |
| **GIRL** | **Giralia** | **14.45** | **190** | P | | **Pn** | **11 42 07.5** | **-2.9** |
| **GIRL** | **Giralia** | **14.45** | **190** | Pn | | **Pn** | **11 42 07.3** | **-3.1** |
| **MTN** | **Manton Dam** | **14.66** | **109** | Pn | | **Pn** | **11 42 10.9** | **-2.5** |
| **MEEK** | **Meekatharra** | **18.27** | **175** | P | | **Pn** | **11 42 59.8** | **+0.4** |
| **WRKA** | **Warakurna** | **19.83** | **148** | P | | **P** | **11 43 17.8** | **+1.0** |
| **WB0** | **Warramunga Arr** | **20.38** | **126** | P | | **P** | **11 43 22.3** | **-0.4** |
| WB0 | | | | IAmb | | IAmb | 11 43 23.4 | |
| | comp=Z,8.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.42** | **126** | P | | **P** | **11 43 22.6** | **-0.7** |
| **WRA** | **Warramunga Arr** | **20.42** | **126** | P | | **P** | **11 43 23.1** | **-0.2** |
| | comp=Z,7.1nm,0.6s,baz=301,slow=12,SNR=192 | | | | | | | |
| WRA | | | | S | | **S** | **11 47 12.0** | **-0.2** |
| | comp=Z,0.8nm,0.8s,baz=300,slow=23,SNR=2.5 | | | | | | | |
| | comp=Z,7.1nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.43** | **126** | P | | **P** | **11 43 23.2** | **-0.2** |
| WB2 | | | | IAmb | | IAmb | 11 43 24.2 | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.59** | **126** | P | | **P** | **11 43 25.1** | **-0.1** |
| WR0 | | | | IAmb | | IAmb | 11 43 25.9 | |
| | comp=Z,11nm,0.5s | | | | | | | |
| **MORW** | **Morawa** | **20.63** | **182** | P | | **P** | **11 43 26.8** | **+1.3** |
| MORW | | | | IAmb | | IAmb | 11 43 27.1 | |
| | comp=Z,24nm,1.5s | | | | | | | |
| **AS31** | **Alice Springs** | **22.29** | **135** | P | | **P** | **11 43 43.5** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.29** | **135** | P | | **P** | **11 43 43.5** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.29** | **135** | P | | **P** | **11 43 42.9** | **-0.5** |
| | comp=Z,2.8nm,0.6s,baz=311,slow=8.9,SNR=82 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.46** | **179** | P | | **P** | **11 44 05.6** | **+0.6** |
| **FORT** | **Forrest** | **24.63** | **156** | P | | **P** | **11 44 06.2** | **-0.2** |
| FORT | | | | IAmb | | IAmb | 11 44 27.1 | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.11** | **147** | P | | **P** | **11 44 55.1** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **32.00** | **326** | LR | | LR | 11 59 28.2 | |
| | comp=Z,43nm,18.7s,baz=280,slow=39 | | | | | | | |
| **STKA** | **Stephens Creek** | **32.78** | **139** | P | | **P** | **11 45 19.0** | **-0.1** |
| **STKA** | **Stephens Creek** | **32.78** | **139** | P | | **P** | **11 45 19.0** | **-0.1** |
| | comp=Z,3.8nm,0.5s,baz=314,slow=12,SNR=11 | | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | | |
| **YNG** | **Young** | **38.78** | **136** | P | | **P** | **11 46 11.5** | **+0.8** |
| **SONM** | **Songino Array** | **56.70** | **352** | P | | **P** | **11 48 29.9** | **+0.3** |
| | comp=Z,0.7nm,0.7s,baz=165,slow=12,SNR=3.1 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.96** | **334** | P | | **P** | **11 49 13.1** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=141,slow=7.4,SNR=2.7 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **MAW** | **Mawson** | **69.16** | **199** | P | | **P** | **11 49 52.3** | **+0.3** |
| | comp=Z,1.5nm,0.6s,baz=58,slow=16,SNR=2.5 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **72.77** | **333** | P | | **P** | **11 50 13.5** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=134,slow=4.2,SNR=2.8 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **91.07** | **196** | P | | **P** | **11 51 50.5** | **+0.3** |
| SNAA | | | | IAmb | | IAmb | 11 52 08.3 | |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **91.07** | **196** | P | | **P** | **11 51 50.6** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=115,slow=14,SNR=7.5 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **CPUP** | **Villa Florida** | **145.08** | **189** | PKPbc | | **PKPab** | **11 58 23.7** | **+0.1** |
| | comp=Z,1.2nm,0.4s,baz=149,slow=1.7,SNR=7.2 | | | | | | | |

*BGR **20** 11:39:58.6, 18.°63S×177.°48W, h500km*

*NEIC **20** 11:40:05.0±2.1, 18.°25S±0.°09×178.°1W±0.°1, h549km±5km, mb5.0/99, Error ellipse: s-maj=14.6km s-min=12.9km az=121.0*

*MOS **20** 11:40:06.3±1.7, 18.°01S×178.°32W, h565km, mb4.9/22, Error ellipse: s-maj=10.4km s-min=9.0km az=116.4*

*NOU **20** 11:40:06.2, 18.°20S×178.°17W, h570km, mb5.0/111, Fiji Islands Region*

*IDC **20** 11:40:07.6±1.4, 18.°25S×178.°23W, h587km±16km, mb4.2/29, mbtmp5.1/31, Error ellipse: s-maj=11.2km s-min=6.9km az=158.0*

**ISC 20 11:40:05.4±0.3, 18.°23S±0.°04×178.°17W±0.°04, h564km±4km, h565km; pP-P, n1062, σ0s87/1120, mb4.9/141, 87C-65D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.63** | **277** | P | | **P** | **11 41 28.2** | **+2.4** |
| **MSVF** | **Nonsavu** | **3.63** | **277** | P | | **P** | **11 41 28.0** | **+2.3** |
| **MSVF** | **Nonsavu** | **3.63** | **277** | *c* | *i*P | **P** | **11 41 28.2** | **+2.4** |
| **AFI** | **Afiamalu** | **7

ETVZ **East Tongariro** 21.50 193 P **P** 11 44 13.9 -0.4
SNVZ **South Ngauruho** 21.56 193 P **P** 11 44 14.2 -0.7
COVZ **Chateau Observ** 21.59 193 P **P** 11 44 14.0 -1.2
MCHZ **McNeill Hill** 21.60 191 P **P** 11 44 14.0 -1.1
KWHZ **Kaweka Forest** 21.63 191 P **P** 11 44 13.8 -1.6
FWVZ **Far West T-bar** 21.64 193 P **P** 11 44 14.6 -1.1
WHVZ **Whangaehu Hut** 21.66 193 P **P** 11 44 14.8 -1.1
TRVZ **Turoa** 21.69 193 P **P** 11 44 14.5 -1.6
WNVZ **Wahianoa** 21.70 193 P **P** 11 44 14.9 -1.3
MOVZ **Moawhango** 21.75 193 P **P** 11 44 14.7 -1.8
KRHZ **Kereru** 21.85 191 P **P** 11 44 15.6 -1.8
MRZ **Mangatainoka R** 22.99 192 P **P** 11 44 25.3 -2.2
SNZO **South Karori** 23.80 193 P **P** 11 44 34.1 -0.5
QRZ **Quartz Range** 23.89 198 P **P** 11 44 34.8 -0.7
KHZ **Kahutara** 25.12 195 P **P** 11 44 45.2 -1.0
CTZ **Chatham Island** 25.46 177 P **P** 11 44 51.1 +1.9
INZ **Inchbonnie** 25.96 198 P **P** 11 44 53.1 -0.6
RPZ **Rata Peaks** 26.98 197 P **P** 11 45 03.4 +0.7
RPZ **Rata Peaks** 26.98 197 P **P** 11 45 02.3 -0.3
comp=Z,22nm,0.6s,baz=29,slow=8.3,SNR=9.4
comp=Z,22nm,0.6s
PPT **Papeete** 27.21 93 P **P** 11 45 05.7 +0.6
comp=Z,24nm,0.6s,baz=219,slow=14,SNR=11
comp=Z,24nm,0.6s
PPTF **Pamatai, Papee** 27.22 93 P **P** 11 45 07.3 +2.1
JCZ **Jackson Bay** 28.00 200 P **P** 11 45 12.7 +1.0
ODZ **Otahua Downs** 28.32 197 P **P** 11 45 14.0 -0.3
EIDS **Eidsvold** 29.37 251 P **P** 11 45 23.4 -0.4
EIDS **Eidsvold** 29.37 251 P **P** 11 45 24.2 +0.5
EIDS IAmb IAmb 11 45 24.9
comp=Z,18nm,0.8s
EIDS **Eidsvold** 29.37 251 P **P** 11 45 23.8 0.0
comp=Z,29nm,0.9s
RK1H **Rockhampton Ha** 29.70 255 P **P** 11 45 26.9 +0.3
ARMA **Armidale** 29.98 240 P **P** 11 45 29.8 +0.7
ARMA **Armidale** 29.98 240 P **P** 11 45 30.5 +1.5
ARMA IAmb IAmb 11 45 58.5
comp=Z,107nm,1.9s
ARMA **Armidale** 29.98 240 P **P** 11 45 30.4 +1.3
comp=Z,21nm,2.5s
SYZ **Scrubby Hill** 30.11 198 P **P** 11 45 29.8 0.0
ALOT **Alotau** 31.37 280 P **P** 11 45 41.4 +0.3
TV1H **Townsville Har** 33.16 263 P **P** 11 45 56.4 +0.2
CNB **Canberra Magne** 33.41 233 P **P** 11 46 00.3 +2.1
CNB **Canberra Magne** 33.41 233 P **P** 11 45 59.6 +1.5
comp=Z,20nm,1.0s
CTA **Charters Tower** 33.62 261 P **P** 11 46 00.4 +0.4
comp=Z,3.8nm,0.6s,baz=92,slow=11,SNR=78
CTA S **S** 11 50 44.5 +0.9
comp=Z,0.7nm,1.1s,baz=176,slow=10,SNR=3.4
comp=Z,3.8nm,0.6s
CTAO **Charters Tower** 33.62 261 P **P** 11 46 00.5 +0.4
CTAO **Charters Tower** 33.62 261 P **P** 11 46 00.2 +0.1
CTAO **Charters Tower** 33.62 261 P **P** 11 46 00.2 +0.1
CTAO pmax pmax
comp=Z,59nm,0.7s
CTAO **Charters Tower** 33.62 261 P **P** 11 46 00.3 +0.2
CAN **Canberra** 33.69 233 P **P** 11 46 01.0 +0.5
CAN **Canberra** 33.69 233 P **P** 11 46 01.4 +0.9
comp=Z,21nm,2.2s
CAN **Canberra** 33.69 233 P **P** 11 46 01.8 +1.3
YNG **Young** 33.79 235 P **P** 11 46 01.7 +0.4
PATS **Pohnpei** 34.05 315 P **P** 11 46 05.4 +1.8
PATS **Pohnpei** 34.05 315 P **P** 11 46 04.2 +0.6
PATS **Pohnpei** 34.05 315 P **P** 11 46 04.1 +0.4
comp=Z,147nm,1.2s
MILA **Mila** 34.25 230 P **P** 11 46 06.1 +0.9
PMG **Port Moresby** 34.74 280 P **P** 11 46 09.5 0.0
PMG **Port Moresby** 34.74 280 P **P** 11 46 10.8 +1.3
PMG **Port Moresby** 34.74 280 P **P** 11 46 10.3 +0.9
PMG **Port Moresby** 34.74 280 P **P** 11 46 10.1 +0.6
comp=Z,129nm,0.8s,baz=102,slow=9.3,SNR=23
comp=Z,129nm,0.8s
PMG **Port Moresby** 34.74 280 P **P** 11 46 10.3 +0.9
PMG pmax pmax
comp=Z,145nm,0.9s
PMG **Port Moresby** 34.74 280 P **P** 11 46 10.4 +1.0
CMSA **Cobar Meteorol** 35.19 241 P **P** 11 46 13.6 +0.6
CMSA **Cobar Meteorol** 35.19 241 P **P** 11 46 13.8 +0.8
comp=Z,17nm,0.7s
MTSU **Mount Surprise** 35.60 264 P **P** 11 46 17.8 +1.2
QLP **Quilpie** 35.63 250 P **P** 11 46 17.6 +0.8
QLP **Quilpie** 35.63 250 P **P** 11 46 17.1 +0.4
comp=Z,84nm,0.6s
GLAD **Gladstone** 36.78 225 P **P** 11 46 26.4 +0.5
TOO **Toolangi** 37.14 231 P **P** 11 46 29.4 +0.3
TOO **Toolangi** 37.14 231 P **P** 11 46 30.3 +1.2
TOO IAmb IAmb 11 46 31.2
comp=Z,41nm,1.3s
TOO **Toolangi** 37.14 231 P **P** 11 46 30.8 +1.7
comp=Z,29nm,1.9s
TOO **Toolangi** 37.14 231 P **P** 11 46 30.3 +1.2
TOO pmax pmax
comp=Z,41nm,1.3s
COEN **Coen** 37.34 271 P **P** 11 46 31.9 +1.0
COEN **Coen** 37.34 271 P **P** 11 46 31.7 +0.8
COEN **Coen** 37.34 271 P **P** 11 46 31.7 +0.8
comp=Z,95nm,0.8s
MANU **Manus Island** 37.43 291 P **P** 11 46 32.4 +0.7
TAOE **Nuku Hiva Isla** 38.05 81 P **P** 11 46 37.7 +0.9
BRAT **Ballarat** 38.30 232 P **P** 11 46 39.8 +1.4
STKA **Stephens Creek** 38.67 242 P **P** 11 46 42.2 +0.7
STKA **Stephens Creek** 38.67 242 P **P** 11 46 42.9 +1.4
STKA **Stephens Creek** 38.67 242 P **P** 11 46 42.6 +1.1
comp=Z,5.4nm,1.0s
STKA **Stephens Creek** 38.67 242 P **P** 11 46 42.6 +1.1
comp=Z,13nm,0.5s,baz=78,slow=11,SNR=22
STKA PcP **PcP** 11 48 39.6 +0.7
comp=Z,6.0nm,0.9s,baz=65,slow=0.6,SNR=4.5
comp=Z,13nm,0.5s
STKA **Stephens Creek** 38.67 242 *i* P **P** 11 46 41.6 +0.1
INKA **Innaminka** 38.84 248 P **P** 11 46 43.6 +0.7
ARPS **Mount Arapiles** 39.64 234 P **P** 11 46 49.3 +0.1
comp=Z,21nm,1.0s
QIS **Mount Isa** 39.82 260 P **P** 11 46 50.9 0.0
QIS **Mount Isa** 39.82 260 P **P** 11 46 50.4 -0.5
comp=Z,12nm,0.6s
WAKE **Wake Island** 40.15 337 P **P** 11 46 53.2 -0.2
WAKE **Wake Island** 40.15 337 P **P** 11 46 53.1 -0.4
HTT **Hallett** 41.18 240 P **P** 11 47 02.9 +1.3
LCRK **Leigh Creek** 41.32 244 P **P** 11 47 03.6 +0.9
JAY **Jayapura** 43.22 286 P **P** 11 47 18.4 +0.6
comp=Z,176nm,1.0s,comp=Z,2μm
OOD **Oodnadatta** 43.31 249 P **P** 11 47 19.9 +1.6
BBOO **Buckleboo** 43.45 241 P **P** 11 47 19.8 +0.5
BBOO **Buckleboo** 43.45 241 P **P** 11 47 19.8 +0.5
BBOO IAmb IAmb 11 47 20.8
comp=Z,28nm,0.8s
BBOO **Buckleboo** 43.45 241 P **P** 11 47 19.9 +0.5
comp=Z,43nm,1.0s
GENI **Genyem** 43.67 286 P **P** 11 47 21.4 +0.1
GENI **Genyem** 43.67 286 P **P** 11 47 22.6 +1.3
POHA **Pohakuloa** 43.81 32 P **P** 11 47 22.4 -0.1
DHH **Diamond Head** 44.03 28 P **P** 11 47 24.3 +0.4
DHH **Diamond Head** 44.03 28 P **P** 11 47 24.3 +0.4
KIP **Kipapa** 44.08 27 P **P** 11 47 24.4 +0.2
KIP **Kipapa** 44.08 27 *i* P **P** 11 47 24.5 +0.2
KIP pmax pmax
comp=Z,19nm,1.0s
KIP **Kipapa** 44.08 27 P **P** 11 47 24.3 +0.1
WR0 **Warramunga Arr** 44.61 260 P **P** 11 47 27.9 -0.6
WR0 IAmb IAmb 11 47 29.1
comp=Z,76nm,1.8s
WB0 **Warramunga Arr** 44.77 260 P **P** 11 47 29.3 -0.4
WB0 IAmb IAmb 11 47 30.2
comp=Z,48nm,0.7s
WB2 **Warramunga Arr** 44.79 260 P **P** 11 47 29.4 -0.4
WB2 IAmb IAmb 11 47 30.4
comp=Z,48nm,0.7s
WRAB **Tennant Creek** 44.79 260 P **P** 11 47 29.4 -0.4
WRAB IAmb IAmb 11 47 30.3
comp=Z,37nm,0.7s
WRAB **Tennant Creek** 44.79 260 *i* P **P** 11 47 29.2 -0.7
WRAB pmax pmax
comp=Z,35nm,0.9s
WRA **Warramunga Arr** 44.80 260 P **P** 11 47 29.2 -0.8
WRA **Warramunga Arr** 44.80 260 P **P** 11 47 29.3 -0.6
comp=Z,39nm,0.7s,baz=96,slow=6.9,SNR=237
WRA PcP **PcP** 11 48 59.5 -0.2
comp=Z,9.8nm,0.8s,baz=91,slow=3.6,SNR=9.5
WRA S **S** 11 53 22.2 -4.6
comp=Z,3.7nm,0.8s,baz=98,slow=13,SNR=7.2
WRA PKiKP **PKiKP** 11 55 55.5 -1.3
comp=Z,1.1nm,0.8s,baz=79,slow=0.5,SNR=7.4
comp=Z,39nm,0.7s
WRA **Warramunga Arr** 44.80 260 P **P** 11 47 29.2 -0.8
WRA pmax pmax
comp=Z,3.0nm,0.7s
AS01 **Alice Springs** 44.88 255 P **P** 11 47 31.1 +0.5
MULG **Mulgathing** 44.88 245 P **P** 11 47 30.7 +0.3
AS31 **Alice Springs** 44.92 255 P **P** 11 47 31.2 +0.3
AS31 **Alice Springs** 44.92 255 P **P** 11 47 31.0 +0.2
comp=Z,88nm,0.7s
ASAR **Alice Springs** 44.92 255 P **P** 11 47 31.5 +0.6
ASAR **Alice Springs** 44.92 255 P **P** 11 47 31.1 +0.3
comp=Z,196nm,0.7s,baz=88,slow=8.5,SNR=1445
ASAR PcP **PcP** 11 48 59.3 -0.8
comp=Z,15nm,0.8s,baz=95,slow=4.6,SNR=9.9
ASAR S **S** 11 53 26.3 -2.2
comp=Z,15nm,1.1s,baz=92,slow=16,SNR=33
ASAR PKiKP **PKiKP** 11 55 55.5 -1.4
comp=Z,0.4nm,0.6s,baz=100,slow=1.7,SNR=2.6
comp=Z,196nm,0.7s
ASAR **Alice Springs** 44.92 255 P **P** 11 47 31.5 +0.6
KDU **Kakadu** 47.78 269 P **P** 11 47 52.6 +0.1
KDU **Kakadu** 47.78 269 P **P** 11 47 52.1 -0.4
comp=Z,75nm,0.7s
GUMO **Guam** 48.26 308 P **P** 11 47 56.0 +0.1
GUMO **Guam** 48.26 308 P **P** 11 47 56.1 +0.1
GUMO pmax pmax
comp=Z,309nm,0.9s
GUMO **Guam** 48.26 308 P **P** 11 47 55.9 -0.1
MTN **Manton Dam** 49.02 269 P **P** 11 48 01.4 -0.3
comp=Z,90nm,0.8s
DRS **Darwin Rock St** 49.33 269 P **P** 11 48 03.9 -0.1
WRKA **Warakurna** 49.96 252 P **P** 11 48 09.1 +0.5
WRKA **Warakurna** 49.96 252 P **P** 11 48 08.9 +0.3
comp=Z,128nm,0.8s
FORT **Forrest** 50.08 245 P **P** 11 48 09.4 +0.1
FORT **Forrest** 50.08 245 P **P** 11 48 09.1 -0.1
FORT **Forrest** 50.08 245 P **P** 11 48 09.0 -0.2
comp=Z,86nm,0.8s
KNRA **Kununurra** 50.68 264 P **P** 11 48 14.0 +0.1
KNRA IAmb IAmb 11 48 14.6
comp=Z,55nm,0.8s
KNRA **Kununurra** 50.68 264 P **P** 11 48 13.7 -0.2
comp=Z,92nm,1.0s
FAKI **Fak Fak** 50.86 281 P **P** 11 48 14.4 -0.9
FAKI **Fak Fak** 50.86 281 P **P** 11 48 15.1 -0.1
FAKI IAmb IAmb 11 49 35.5
comp=Z,128nm,1.5s
SWI **Sorong** 52.54 283 P **P** 11 48 27.4 +0.1
FITZ **Fitzroy Crossi** 53.20 261 P **P** 11 48 32.1 +0.1
FITZ **Fitzroy Crossi** 53.20 261 P **P** 11 48 32.2 +0.2
KMBL **Kambalda** 55.37 244 P **P** 11 48 47.1 +0.1
KMBL **Kambalda** 55.37 244 P **P** 11 48 46.2 -0.9
comp=Z,23nm,0.9s
DRV **Dumont d'Urvil** 55.43 199 P **P** 11 48 47.4 +0.7
DRV pP **pwP** 11 50 37.6 +0.8
NLAI **Namlea** 55.57 279 P **P** 11 48 49.0 +0.4
comp=Z,74nm,0.8s,comp=Z,850nm
SOEI **Soe** 56.30 270 P **P** 11 48 55.4 +1.6
SOEI **Soe** 56.30 270 P **P** 11 48 55.3 +1.4
SOEI **Soe** 56.30 270 P **P** 11 48 55.2 +1.4
TNTI **Ternate** 56.76 283 P **P** 11 48 56.4 -0.4
TNTI IAmb IAmb 11 48 58.0
comp=Z,80nm,0.9s
TNTI **Ternate** 56.76 283 P **P** 11 48 57.7 +0.9
comp=Z,94nm,0.9s,comp=Z,1μm
SANI **Sanana** 57.02 280 P **P** 11 48 58.3 -0.3
comp=Z,121nm,0.8s,comp=Z,908nm
PSAC2 **Pilbara Seismi** 58.00 256 P **P** 11 49 04.7 -0.5
comp=Z,69nm,0.7s
PSA00 **Pilbara Seismi** 58.05 256 P **P** 11 49 05.5 0.0
PSA00 **Pilbara Seismi** 58.05 256 P **P** 11 49 05.1 -0.4
PSA00 IAmb IAmb 11 49 06.2
comp=Z,48nm,0.8s
PSA00 **Pilbara Seismi** 58.05 256 P **P** 11 49 05.4 -0.1
comp=Z,79nm,0.8s
MBWA **Marble Bar** 58.22 256 P **P** 11 49 06.7 +0.1
MBWA **Marble Bar** 58.22 256 P **P** 11 49 06.0 -0.7
MBWA IAmb IAmb 11 49 07.2
comp=Z,27nm,0.7s
MBWA **Marble Bar** 58.22 256 P **P** 11 49 06.3 -0.3
comp=Z,47nm,1.1s
MBWA **Marble Bar** 58.22 256 P **P** 11 49 06.3 -0.3
MEEK **Meekatharra** 58.53 250 P **P** 11 49 08.8 +0.1
MEEK **Meekatharra** 58.53 250 P **P** 11 49 08.3 -0.5
comp=Z,46nm,0.8s
KLBR **Kellerberrin** 58.89 244 P **P** 11 49 10.8 -0.2
KLBR **Kellerberrin** 58.89 244 P **P** 11 49 10.7 -0.2
comp=Z,162nm,0.7s
EDFI **Ende, Flores** 59.02 271 P **P** 11 49 11.5 -0.7
comp=Z,74nm,0.9s
NWAO **Narrogin (SRO)** 59.26 242 P **P** 11 49 13.2 -0.3
NWAO **Narrogin (SRO)** 59.26 242 P **P** 11 49 13.4 -0.1
NWAO **Narrogin (SRO)** 59.26 242 P **P** 11 49 13.1 -0.3
comp=Z,11nm,0.7s,baz=94,slow=7.5,SNR=6.5
comp=Z,11nm,0.7s
NWAO **Narrogin (SRO)** 59.26 242 P **P** 11 49 13.2 -0.3
NWAO pmax pmax
comp=Z,57nm,1.6s
NWAO **Narrogin (SRO)** 59.26 242 P **P** 11 49 13.4 -0.1
RKGY **Rocky Gully** 59.41 240 P **P** 11 49 14.8 +0.4
comp=Z,63nm,0.9s
BLDU **Ballidu** 59.85 245 P **P** 11 49 17.4 0.0
BLDU **Ballidu** 59.85 245 P **P** 11 49 16.9 -0.5
comp=Z,25nm,0.7s
SBA **Scott Base** 60.11 184 P **P** 11 49 20.4 +2.1
SBA **Scott Base** 60.11 184 P **P** 11 49 20.4 +2.1
SBA pmax pmax
comp=Z,17nm,0.9s
MUN **Mundaring** 60.18 243 P **P** 11 49 19.6 0.0
MUN **Mundaring** 60.18 243 P **P** 11 49 19.9 +0.3
comp=Z,38nm,1.2s
LUWI **Luwuk** 60.38 279 P **P** 11 49 21.4 +0.2
LUWI **Luwuk** 60.38 279 P **P** 11 49 22.2 +1.0
MORW **Morawa** 60.56 246 P **P** 11 49 22.1 0.0
MORW **Morawa** 60.56 246 P **P** 11 49 21.9 -0.3
MORW **Morawa** 60.56 246 P **P** 11 49 21.9 -0.3
comp=Z,29nm,1.1s
DAV **Davao City (W)** 60.92 289 P **P** 11 49 25.9 +1.2
comp=Z,185nm,0.4s,baz=73,slow=16,SNR=2.3
TOLI2 **Tolitoli** 63.00 281 P **P** 11 49 38.3 +0.1
TOLI2 **Tolitoli** 63.00 281 P **P** 11 49 38.2 +0.1
TOLI2 IAmb IAmb 11 49 39.0
comp=Z,28nm,0.8s
GIRL **Giralia** 63.02 253 P **P** 11 49 39.2 +1.0
GIRL **Giralia** 63.02 253 P **P** 11 49 39.0 +0.8
CCD **Concordia, Ant** 64.61 194 P **P** 11 49 48.5 +0.6
CCD PcP **PcP** 11 50 15.0 -1.0
CCD pP **pwP** 11 51 42.9 +0.2
JHJ2 **Mitsune** 64.94 322 P **P** 11 49 50.3 +0.2
CASY **Casey** 65.94 205 P **P** 11 49 56.7 +0.9
CASY **Casey** 65.94 205 P **P** 11 49 56.5 +0.6
CASY pP **pwP** 11 51 51.0 -0.3
CASY sP **sP** 11 52 48.3 +0.6
JAGI **Jajag, Banyuwa** 66.26 269 P **P** 11 49 58.6 -0.2
JAGI **Jajag, Banyuwa** 66.26 269 P **P** 11 49 57.4 -1.4
MYLDM **Lahad Datu** 66.61 284 P **P** 11 50 02.1 +1.2
MYLDM IAmb IAmb 11 50 04.9
comp=Z,81nm,1.4s
JMM **Marumori** 67.83 326 P **P** 11 50 07.4 -0.5
JGF **Kuroka** 68.13 322 P **P** 11 50 10.0 +0.1
JGF **Kuroka** 68.13 322 P **P** 11 50 09.9 +0.1
JGF IAmb IAmb 11 50 10.6
comp=Z,102nm,1.6s
MJAR **Matsushiro Arr** 68.30 323 P **P** 11 50 10.4 -0.4
comp=Z,31nm,0.6s,baz=154,slow=5.7,SNR=79
MJAR PcP **PcP** 11 50 32.2 +0.6
comp=Z,8.5nm,0.7s,baz=153,slow=4.4,SNR=5.2
comp=Z,31nm,0.6s
MAJO **Matsushiro** 68.30 323 P **P** 11 50 10.6 -0.2
MAJO **Matsushiro** 68.30 323 P **P** 11 50 10.5 -0.3
MAJO IAmb IAmb 11 50 11.1
comp=Z,42nm,0.6s
MAJO **Matsushiro** 68.30 323 *i* P **P** 11 50 10.3 -0.5
MAJO pmax pmax
comp=Z,28nm,0.8s
MAJO **Matsushiro** 68.30 323 P **P** 11 50 10.6 -0.2
MAJO PcP **PcP** 11 50 32.3 +0.7
MJB9 **Matsu-Tunnel** 68.31 323 P **P** 11 50 11.3 +0.5
MJB9 IAmb IAmb 11 50 12.1
comp=Z,40nm,0.6s
JMN **Monobe** 68.98 318 P **P** 11 50 15.4 +0.4
JMN IAmb IAmb 11 50 17.0
comp=Z,73nm,1.0s
KKM **Kota Kinabalu** 69.04 284 P **P** 11 50 15.9 +0.1
comp=Z,39nm,0.7s
KKM **Kota Kinabalu** 69.04 284 P **P** 11 50 15.5 -0.3
KKM IAmb IAmb 11 50 16.5
comp=Z,30nm,0.7s
JWT **Wachi** 69.08 321 P **P** 11 50 15.6 +0.1
JSD **Sado** 69.33 324 P **P** 11 50 17.1 +0.2
JSD IAmb IAmb 11 50 18.0
comp=Z,35nm,0.7s
AMKA **Amchitka** 69.34 358 P **P** 11 50 15.9 -0.7
ERM **Erimo** 69.78 330 P **P** 11 50 19.9 +0.4
KIWB **Kanaga Island** 69.79 1 P **P** 11 50 19.0 -0.3
UGM **Wanagama** 69.86 268 P **P** 11 50 20.8 +0.1
UGM **Wanagama** 69.86 268 P **P** 11 50 20.4 -0.3
JTM **Tenmabayashi** 69.86 328 P **P** 11 50 20.6 +0.6
JTM **Tenmabayashi** 69.86 328 P **P** 11 50 19.7 -0.3
JTM IAmb IAmb 11 50 21.1
comp=Z,47nm,1.0s
JNU **Nakatsue** 70.53 316 P **P** 11 50 24.4 +0.2
YOJ **Yonaguni jima** 71.32 305 P **P** 11 50 29.1 +0.2
NIKH **Nikolski High** 71.36 6 P **P** 11 50 29.0 +0.4
NIKH **Nikolski High** 71.36 6 P **P** 11 50 27.1 -1.4
baz=189
SBUM **Sibu** 71.48 279 P **P** 11 50 30.5 +0.3
JKA **Kamikawa-asahi** 71.67 331 P **P** 11 50 31.5 +0.9
ASAJ **Asahikawa** 71.67 331 P **P** 11 50 31.5 +0.9
ASAJ pmax pmax
comp=Z,286nm,1.9s
QSPA **South Pole Qui** 71.82 180 P **P** 11 50 31.9 +0.5
QSPA IAmb IAmb 11 50 33.6
comp=Z,40nm,1.2s
QSPA **South Pole Qui** 71.82 180 P **P** 11 50 32.1 +0.8
comp=Z,18nm,0.8s,baz=35,slow=2.1,SNR=157
comp=Z,18nm,0.8s
QSPA **South Pole Qui** 71.82 180 P **P** 11 50 32.5 +1.2
QSPA pP **pwP** 11 52 30.5 +1.4
TWGBT **Beinan** 72.03 302 P **P** 11 50 32.7 -0.4
YULB **Yu-li** 72.14 303 P **P** 11 50 33.2 -0.6
NACB **Ninganchiao** 72.28 304 P **P** 11 50 33.5 -1.1
NACB **Ninganchiao** 72.28 304 P **P** 11 50 33.9 -0.7
JTU **Tsushima** 72.36 317 P **P** 11 50 35.5 +0.7
UNV **Unalaska Valle** 72.48 7 P **P** 11 50 33.8 -1.2
UNV **Unalaska Valle** 72.48 7 P **P** 11 50 33.8 -1.2
baz=192,SNR=5.9
SSLB **Suanglung** 72.60 303 P **P** 11 50 36.0 -0.5
SSLB **Suanglung** 72.60 303 P **P** 11 50 35.5 -1.0
TPUB **Ta-pu** 72.62 302 P **P** 11 50 35.9 -0.7
BBJI **Bungbulang** 72.72 268 P **P** 11 50 37.1 -0.3
PET **Petropavlovsk** 73.74 346 *i* P **P** 11 50 41.8 -0.4
PET pmax pmax
comp=Z,24nm,0.9s
YSS **Yuzh-Sakhalins** 73.81 333 P **P** 11 50 43.1 +0.3
YSS IAmb IAmb 11 50 44.6
comp=Z,41nm,0.8s
YSS **Yuzh-Sakhalins** 73.81 333 ||| *eP* **P** 11 50 43.5 +0.7
YSS *eS* **S** 11 59 29.7 +0.7
YSS pmax pmax
comp=Z,200nm,3.0s
YSS pmax pmax
comp=Z,50nm,0.8s
FALS **False Pass** 73.88 9 P **P** 11 50 41.8 -1.1
baz=195
PEA0B **Petropavlovsk-** 74.05 345 P **P** 11 50 44.2 +0.2
PEA0B **Petropavlovsk-** 74.05 345 *ce* P **P** 11 50 44.1 +0.1
PETK **Petropavlovsk-** 74.05 345 P **P** 11 50 44.0 0.0
PETK **Petropavlovsk-** 74.05 345 P **P** 11 50 43.1 -0.9
comp=Z,38nm,0.6s,baz=120,slow=8.5,SNR=50
comp=Z,38nm,0.6s
PETK **Petropavlovsk-** 74.05 345 P **P** 11 50 44.0 0.0
CHNA **Chernabura Isl** 74.48 11 P **P** 11 50 44.7 -1.6
baz=198
TJN **Taejon** 74.80 317 *ce* P **P** 11 50 50.3 +1.7
SDPT **Sand Point** 74.82 10 P **P** 11 50 48.1 -0.1
SDPT **Sand Point** 74.82 10 P **P** 11 50 46.6 -1.7
baz=197
S12K **Black Hills** 74.90 9 P **P** 11 50 47.7 -1.0
S12K IAmb IAmb 11 50 48.5
comp=Z,55nm,0.7s
S12K **Black Hills** 74.90 9 P **P** 11 50 47.6 -1.1
baz=196,SNR=10.0
QZH **Quanzhou** 75.05 303 ||| *iP* **P** 11 50 50.8 +0.6
KSRS **Korea Array** 75.09 318 P **P** 11 50 51.0 +0.7
comp=Z,7.4nm,0.7s,baz=129,slow=6.3,SNR=30
comp=Z,7.4nm,0.7s
KSAR **Wonju Array Be** 75.11 318 P **P** 11 50 50.9 +0.6
KSAR **Wonju Array Be** 75.11 318 P **P** 11 50 50.9 +0.6
KS19 **Wonju Array Si** 75.16 318 P **P** 11 50 50.0 -0.6
KS19 IAmb IAmb 11 51 31.6
comp=Z,155nm,1.9s
S14K **Fog Glacier** 75.87 11 P **P** 11 50 53.6 -0.7
baz=198,SNR=6.9
CHGN **Chignik** 76.09 11 P **P** 11 50 54.4 -0.9
baz=199
CHIR **Chirikof Islan** 76.19 13 P **P** 11 50 55.7 -0.2
baz=202
MSHR **Mys Shultsa** 76.40 324 *ce* P **P** 11 50 57.3 0.0
MSHR pmax pmax
comp=Z,22nm,1.3s
PMPB **Monarch Peak** 76.61 44 P **P** 11 50 59.7 +0.9
PMPB IAmb IAmb 11 51 01.0
comp=Z,112nm,1.6s
PSTR **Posyet** 76.64 324 *i* P **P** 11 50 59.6 +1.0
BCW **Bitter Crk WRg** 76.84 46 P **P** 11 51 03.1 +1.2
TYV **Tymovskoe** 76.92 336 *eP* **P** 11 51 00.1 +0.2
TYV pmax pmax
comp=Z,100nm,4.0s
TYV pmax pmax
comp=Z,34nm,1.6s
USA0B **Ussuriysk Arra** 77.01 326 P **P** 11 51 01.6 +1.0
USA0B IAmb IAmb 11 51 02.8
comp=Z,85nm,1.6s
USA0B **Ussuriysk Arra** 77.01 326 *i* P **P** 11 51 00.8 +0.2
USRK **Ussuriysk Ar.** 77.01 326 P **P** 11 51 01.1 +0.5
comp=Z,7.6nm,0.7s,baz=120,slow=3.3,SNR=21
comp=Z,7.6nm,0.7s
SII **Sitkinak Islan** 77.19 13 P **P** 11 51 01.5 +0.2
SII **Sitkinak Islan** 77.19 13 P **P** 11 51 01.2 -0.2
baz=203
PASC **Pasadena Art C** 77.27 47 P **P** 11 51 02.4 0.0
ELS **Elsinore Mount** 77.53 48 P **P** 11 51 04.1 +0.3
VTX **Valle De La Tr** 77.55 51 P **P** 11 51 05.7 +1.7
O02D **Mt. Diablo Mer** 77.65 40 P **P** 11 51 05.9 +1.6
R17L **Mt. Peulik Vol** 77.73 12 P **P** 11 51 04.1 -0.2
baz=201,SNR=14
MONP2 **Monument Peak** 77.85 49 P **P** 11 51 06.7 +1.0
baz=239,SNR=30
OHAK **Old Harbor** 77.99 14 P **P** 11 51 06.0 +0.4
OHAK **Old Harbor** 77.99 14 P **P** 11 51 05.2 -0.4
OHAK IAmb IAmb 11 51 06.0
comp=Z,39nm,0.7s
OHAK **Old Harbor** 77.99 14 P **P** 11 51 05.4 -0.2
baz=204
R18K **Karluk** 78.06 13 P **P** 11 51 05.6 -0.3
baz=203
AFDM **Forest Hills D** 78.07 42 P **P** 11 51 07.1 +0.6
PFO **Pinyon Flats O** 78.20 49 P **P** 11 51 08.5 +1.1
baz=239,SNR=6.6
TPFO **Pinon Flats** 78.20 49 P **P** 11 51 08.2 +0.7
baz=239,SNR=5.8
NJ2 **Nanjing** 78.32 309 ||| *iP* **P** 11 51 08.8 +0.8
NJ2 pmax pmax
comp=Z,39nm,0.9s
NJ2 pmax pmax
comp=Z,95nm,3.9s
Q17K **Contact Creek** 78.41 12 P **P** 11 51 07.3 -0.7
baz=202,SNR=14
O14K **Tigyukauivet M** 78.44 9 P **P** 11 51 07.3 -0.6
baz=196
ACHA **Angle Creek He** 78.47 12 P **P** 11 51 07.5 -0.8
MDJ **Mudanjiang** 78.58 325 P **P** 11 51 10.3 +1.2
MDJ pmax pmax
comp=Z,97nm,0.8s
MDJ pmax pmax
comp=Z,300nm,4.8s
MDJ **Mudanjiang** 78.58 325 P **P** 11 51 09.6 +0.5
MDJ IAmb IAmb 11 51 11.3
comp=Z,74nm,0.9s
O15K **Ungalikthiuk R** 78.58 10 P **P** 11 51 07.8 -0.9
baz=198
YBH **Yreka Blue Hor** 78.63 39 P **P** 11 51 09.9 +0.3
comp=Z,13nm,0.6s,baz=205,slow=5.3,SNR=56
comp=Z,13nm,0.6s
KDAK **Kodiak Island** 78.66 14 P **P** 11 51 08.9 -0.2
KDAK IAmb IAmb 11 51 11.0
comp=Z,46nm,0.8s
KDAK **Kodiak Island** 78.66 14 P **P** 11 51 09.1 0.0
baz=205

**KDAK Kodiak Island** 78.66 14 *i* P P 11 51 10.0 +0.8
KDAK pmax pmax
comp=Z,74nm,1.0s
**P16K Nushagak River** 78.75 10 P P 11 51 09.2 -0.4
baz=200
**M11K Mekoryuk** 78.94 6 P P 11 51 10.9 +0.3
baz=192
**Q18K Katmai Hardscr** 78.94 12 P P 11 51 10.2 -0.7
baz=202,SNR=18
**HUMO Hull Mountain** 79.02 38 P P 11 51 12.8 +1.3
**PNTR Pine Nut** 79.02 43 P P 11 51 13.0 +1.2
PNTR IAmb IAmb 11 51 14.0
comp=Z,50nm,0.9s
**N14K Kuskokwak Cree** 79.03 8 P P 11 51 11.1 +0.1
baz=196,SNR=14
**P17K Kvichak River** 79.18 11 P P 11 51 11.2 -0.6
baz=201,SNR=32
**O16K Kokwok River B** 79.26 10 P P 11 51 11.4 -0.9
baz=199,SNR=13
**M13K Dall Lake** 79.28 7 P P 11 51 11.8 -0.6
baz=194
**GRNR Gornyy** 79.43 333⇓ *i* P P 11 51 14.3 +0.9
GRNR pmax pmax
comp=E,10.0nm,1.1s
GRNR pmax pmax
comp=Z,40nm,1.0s
**Q20K Shuyak Island** 79.46 13 P P 11 51 12.6 -0.7
baz=205
**Q19K Cape Douglas,** 79.48 13 P P 11 51 13.0 -0.6
baz=204
**N15K Kwethluk River** 79.49 9 P P 11 51 13.8 +0.2
baz=197,SNR=10
**NVAR Mina Array Bea** 79.50 44 P P 11 51 15.5 +1.1
**NVAR Mina Array Bea** 79.50 44 P P 11 51 15.2 +0.8
comp=Z,15nm,0.7s,baz=224,slow=7.6,SNR=141
comp=Z,15nm,0.7s
**P18K Big Mountain,** 79.59 12 P P 11 51 13.3 -0.9
baz=202,SNR=18
**O17K Koliganek Bris** 79.61 11 P P 11 51 13.6 -0.5
baz=200,SNR=12
**M14K Bethel** 79.79 8 P P 11 51 15.4 +0.4
baz=196,SNR=11
**M15K Kasigluk River** 79.91 9 P P 11 51 15.7 +0.1
baz=197,SNR=16
**N16K Nishlik Lake** 79.99 10 P P 11 51 16.6 +0.5
baz=199,SNR=14
**O18K Koktuh Hills** 80.03 12 P P 11 51 16.0 -0.3
**O18K Koktuh Hills** 80.03 12 P P 11 51 16.1 -0.3
baz=202,SNR=24
**214A Organ Pipe Nat** 80.03 52 P P 11 51 18.1 +1.0
**214A Organ Pipe Nat** 80.03 52 P P 11 51 18.8 +1.6
baz=241,SNR=6.9
**I04A Tendick Farm,** 80.05 37 P P 11 51 17.8 +0.9
**TPNV Topopah Spring** 80.08 46 P P 11 51 18.5 +1.1
baz=238,SNR=22
**P19K Oil Pt** 80.23 13 P P 11 51 17.1 -0.4
baz=204
**L14K Kuka Creek** 80.27 8 P P 11 51 17.9 +0.4
baz=195
**N17K Nushagak Hills** 80.30 10 P P 11 51 17.4 -0.3
baz=200,SNR=7.6
**M16K Timber Creek** 80.48 9 P P 11 51 19.4 +0.8
baz=198,SNR=29
**BNX BinXian** 80.49 325⇓ P P 11 51 19.3 +0.2
BNX pmax pmax
comp=Z,77nm,0.9s
**KLR Kul'dur** 80.50 329 *ce* P P 11 51 18.8 -0.3
KLR pmax pmax
comp=Z,21nm,1.3s
**O19K Port Alsworth** 80.51 12 P P 11 51 18.2 -0.6
baz=203,SNR=20
**N18K Kilae Creek** 80.67 11 P P 11 51 19.0 -0.7
baz=201
**L15K Ungalak Mounta** 80.75 8 P P 11 51 20.2 +0.2
baz=196,SNR=15
**BRSE Bradley Lake S** 80.85 14 P P 11 51 20.7 +0.1
baz=206
**WHN Wuhan** 80.98 306 P P 11 51 22.6 +0.6
WHN pmax pmax
comp=Z,40nm,1.1s
**I05D Terrebonne, OR** 81.00 37 P P 11 51 22.8 +0.9
I05D IAmb IAmb 11 51 23.8
comp=Z,28nm,0.9s
**CNSH ChangSha** 81.03 304 P P 11 51 22.5 +0.2
CNSH pmax pmax
comp=Z,20nm,1.0s
**N19K Bonanza Creek** 81.05 11 P P 11 51 21.0 -0.7
baz=203,SNR=8.6
**L16K Owhat River** 81.06 9 P P 11 51 22.4 +0.7
baz=198,SNR=27
**M17K Holitna River** 81.08 10 P P 11 51 22.9 +1.1
baz=200,SNR=28
**E03A Lebam** 81.09 35 P P 11 51 23.0 +0.9
E03A IAmb IAmb 11 51 24.1
comp=Z,58nm,1.0s
**R11B Troy Canyon, C** 81.26 45 P P 11 51 24.2 +0.7
baz=238,SNR=17
**K15K Wolf Creek Mou** 81.33 8 P P 11 51 24.1 +1.0
baz=196,SNR=45
**M18K Stony River** 81.44 11 P P 11 51 23.7 +0.1
baz=201,SNR=12
**SEW Seward** 81.47 14 P P 11 51 23.0 -0.8
baz=208
**J14K Nanvaranak Lak** 81.53 7 P P 11 51 24.0 0.0
baz=194,SNR=5.5
**MA2 Magadan** 81.57 345 P P 11 51 23.8 -0.5
**MA2 Magadan** 81.57 345 *ce* P P 11 51 23.2 -1.1
MA2 pmax pmax
comp=Z,42nm,1.7s
**TIA Tai'an** 81.64 312 P P 11 51 25.8 +0.6
TIA pmax pmax
comp=Z,20nm,0.8s
**L17K Donlin** 81.64 9 P P 11 51 25.8 +1.2
baz=199,SNR=30
**TUC Tucson** 81.72 52 P P 11 51 27.5 +1.7
baz=242
**O22K Cooper Landing** 81.74 14 P P 11 51 24.6 -0.6
baz=207
**N20K Mount Spurr** 81.86 12 P P 11 51 24.7 -1.1
baz=205,SNR=5.3
**SPCR Spurr Chakacha** 81.86 12 P P 11 51 24.5 -1.4
baz=205
**P23K Montague Islan** 81.86 15 P P 11 51 25.3 -0.5
baz=209
**GAMB Gambell** 81.90 3 P P 11 51 26.4 +0.6
baz=186
**L18K Granite Mounta** 81.97 10 P P 11 51 26.8 +0.5
baz=201,SNR=26
**M19K Big River Lodg** 82.08 11 P P 11 51 26.4 -0.5
baz=203,SNR=15
**J08A Circle Bar Ran** 82.12 39 P P 11 51 28.7 +1.0
J08A IAmb IAmb 11 51 29.7
comp=Z,69nm,1.3s
**K17K Iditarod** 82.19 9 P P 11 51 27.8 +0.4
baz=199
**L19K White Mountain** 82.25 11 P P 11 51 27.9 +0.1
baz=202,SNR=17
**RC01 Rabbit Creek A** 82.28 14 P P 11 51 27.4 -0.5
baz=207
**M20K Styx River** 82.30 12 P P 11 51 27.1 -0.9
baz=204
**PWL Port Wells** 82.40 14 P P 11 51 27.8 -0.8
PWL IAmb IAmb 11 51 28.9
comp=Z,65nm,1.0s
**PWL Port Wells** 82.40 14 P P 11 51 27.7 -0.8
baz=208,SNR=7.0
**SUA Susitna One** 82.40 13 P P 11 51 27.9 -0.8
baz=206,SNR=8.4
**J16K Anvik River** 82.41 8 P P 11 51 29.2 +0.7
baz=197,SNR=15
**BBB Bella Bella** 82.49 28 P P 11 51 29.7 +0.5
comp=Z,13nm,0.6s,baz=233,slow=10,SNR=6.8
comp=Z,13nm,0.6s
**IPM Ipoh** 82.69 277 P P 11 51 31.5 +0.4
**SKT Skwentna** 82.70 12 P P 11 51 28.4 -1.6
baz=205,SNR=6.2
**L20K Farewell, AK** 82.70 11 P P 11 51 29.6 -0.4
baz=203,SNR=16
**GLI Glacier Island** 82.71 15 P P 11 51 29.4 -0.7
baz=210,SNR=6.5
**CRAG Craig** 82.72 24 P P 11 51 30.8 +0.6
baz=223
**J17K VABM Dome** 82.72 9 P P 11 51 30.3 +0.2
baz=198,SNR=20
**ELK Elko** 82.74 43 P P 11 51 31.6 +0.6
comp=Z,14nm,0.9s,baz=241,slow=6.1
comp=Z,14nm,0.9s

**WUAZ Wupatki** 82.78 49 P P 11 51 32.6 +1.3
baz=242,SNR=20
**M22K Willow** 82.79 13 P P 11 51 29.8 -0.6
baz=207,SNR=14
**KNK Knik Glacier** 82.86 14 P P 11 51 30.3 -0.5
baz=208,SNR=6.1
**PMR Palmer** 82.86 14 P P 11 51 30.6 -0.2
**PMR Palmer** 82.86 14 P P 11 51 30.2 -0.6
baz=206,SNR=12
**I17K Unalakleet** 82.97 8 P P 11 51 31.7 +0.4
baz=197
**PKCU Pink Cliffs** 83.04 47 P P 11 51 34.4 +1.7
PKCU IAmb IAmb 11 51 35.8
comp=Z,49nm,1.1s
**GHO Glory Hole Cre** 83.07 14 P P 11 51 31.7 -0.3
**J18K Innoko River** 83.14 10 P P 11 51 32.4 +0.2
baz=200,SNR=46
**U33K Whale Pass** 83.20 24 P P 11 51 33.4 +0.9
U33K IAmb IAmb 11 51 34.4
comp=Z,106nm,1.6s
**U33K Whale Pass** 83.20 24 P P 11 51 33.2 +0.6
baz=223
**V35K Ketchikan** 83.21 25 P P 11 51 32.2 -0.4
**V35K Ketchikan** 83.21 25 P P 11 51 33.2 +0.5
baz=224
**SML Sawmill** 83.23 14 P P 11 51 32.1 -0.6
baz=208
**HEH HeiHe** 83.31 328 *e* P P 11 51 33.4 +0.1
HEH pmax pmax
comp=Z,34nm,1.3s
HEH pmax pmax
comp=Z,230nm,4.6s
**CUT Chulitna** 83.34 13 P P 11 51 32.7 -0.4
baz=207,SNR=8.0
**M23K Glacier View** 83.36 14 P P 11 51 32.5 -0.8
baz=209,SNR=5.1
**BMRM Bremner River** 83.41 16 P P 11 51 33.4 -0.2
baz=212,SNR=8.8
**MESA MESA** 83.46 17 P P 11 51 34.4 +0.3
baz=214,SNR=9.0
**S31K Pelican** 83.47 21 P P 11 51 34.5 +0.7
baz=220,SNR=6.8
**K20K Telida** 83.48 11 P P 11 51 33.8 -0.1
baz=203
**SCM Sheep Creek Mo** 83.49 14 P P 11 51 33.8 -0.3
baz=209,SNR=13
**H16K Elim** 83.52 7 P P 11 51 33.9 -0.1
baz=195
**KLU Klutina** 83.53 15 P P 11 51 33.7 -0.5
baz=211,SNR=7.0
**CRQE Cirque** 83.62 16 P P 11 51 34.7 0.0
baz=213,SNR=8.1
**MAW Mawson** 83.63 200 P P 11 51 35.5 +0.8
comp=Z,1.0nm,0.4s,baz=157,slow=11,SNR=2.5
comp=Z,1.0nm,0.4s
**G15K Niukluk** 83.67 6 P P 11 51 34.9 +0.1
baz=194,SNR=11
**S32K Killisnoo** 83.67 22 P P 11 51 35.2 +0.4
baz=221
**WRAK Wrangell Islan** 83.71 24 P P 11 51 35.9 +0.8
baz=223
**W18A Petrified Fore** 83.78 50 P P 11 51 36.9 +0.7
baz=243
**PNL Peninsula** 83.79 19 P P 11 51 35.7 +0.2
**PNL Peninsula** 83.79 19 P P 11 51 35.5 -0.1
baz=217,SNR=5.6
**J19K Poorman** 83.81 10 P P 11 51 35.8 +0.3
baz=202,SNR=16
**PINM Pinnacle** 83.88 18 P P 11 51 35.8 -0.3
baz=216
**TNA Tin City** 83.90 4 P P 11 51 36.1 +0.3
baz=190
**HNS HongShan** 83.91 312⇓ P P 11 51 37.3 +0.8
HNS pmax pmax
comp=Z,32nm,1.3s
**F14K Arctic Creek** 83.93 5 P P 11 51 36.2 +0.1
baz=191
**N25K Chitina, Valde** 83.95 15 P P 11 51 36.3 0.0
baz=212,SNR=17
**M24K Tolsona, Glenn** 84.00 15 P P 11 51 36.8 +0.2
**M24K Tolsona, Glenn** 84.00 15 P P 11 51 36.9 +0.4
baz=210,SNR=9.8
**WAT6 Susitna Watana** 84.05 14 P P 11 51 36.5 -0.3
baz=209,SNR=23
**DUG Dugway, Tooele** 84.05 44 P P 11 51 38.0 +0.5
baz=240,SNR=6.1
**H17K Granite Mounta** 84.08 8 P P 11 51 36.6 -0.2
baz=197,SNR=5.9
**121A Cookes Peak, D** 84.08 53 P P 11 51 39.3 +1.5
baz=244
**SEY Seymchan** 84.14 347 *ce* P P 11 51 36.9 -0.2
SEY pmax pmax
comp=Z,101nm,1.3s
**MCARA McCarthy VSAT** 84.17 16 P P 11 51 37.0 -0.3
baz=213,SNR=5.7
**BJI Beijing** 84.17 315 P P 11 51 38.3 +0.5
BJI pmax pmax
comp=Z,14nm,1.0s
**LYN LuoYang** 84.21 309⇓ *i* P P 11 51 39.3 +1.2
LYN pmax pmax
comp=Z,140nm,0.8s
**J20K Nowinta River** 84.22 10 P P 11 51 37.4 -0.1
baz=203,SNR=31
**G16K Koyuk River** 84.23 7 P P 11 51 37.8 +0.2
baz=195
**P29M Windy Craggy** 84.28 19 P P 11 51 38.6 +0.7
baz=218,SNR=14
**CTG Chitna Glacier** 84.28 17 P P 11 51 37.9 -0.1
baz=215,SNR=8.4
**R32K Eaglecrest** 84.30 22 P P 11 51 38.3 +0.3
baz=221
**F15K North Star Dit** 84.31 6 P P 11 51 37.7 -0.2
baz=193
**GCSA Galena City Sc** 84.32 9 P P 11 51 37.8 -0.1
baz=200
**O28M Mount Upton** 84.45 18 P P 11 51 39.0 0.0
baz=216,SNR=12
**HARP HAARP** 84.49 15 P P 11 51 38.7 -0.2
baz=211,SNR=9.6
**H18K Honhosa River** 84.49 8 P P 11 51 38.1 -0.7
baz=199
**G17K Kiwalik Mounta** 84.53 7 P P 11 51 38.8 -0.2
baz=197,SNR=5.4
**RND Reindeer** 84.53 13 P P 11 51 38.6 -0.5
**RND Reindeer** 84.53 13 P P 11 51 38.7 -0.5
RND pmax pmax
comp=Z,84nm,0.8s
**O29M Mount Kennedy** 84.55 19 P P 11 51 39.3 -0.1
baz=217,SNR=6.0
**DHY Denali Highway** 84.56 14 P P 11 51 38.6 -0.8
baz=209,SNR=11
**PLBC Pleasant Camp** 84.58 20 P P 11 51 40.1 +0.7
baz=220,SNR=16
**HLID Hailey** 84.72 41 P P 11 51 41.5 +0.8
baz=239,SNR=30
**BPAW Bear Paw Mtn.** 84.73 12 P P 11 51 38.4 -1.6
baz=206,SNR=9.2
**I20K Naaghedeneel** 84.74 10 P P 11 51 39.6 -0.4
baz=202,SNR=9.4
**MCK McKinley** 84.81 13 P P 11 51 39.7 -0.7
baz=208,SNR=20
**P30M Million Dollar** 84.91 19 P P 11 51 41.6 +0.5
baz=219
**PAX Paxson** 84.91 14 P P 11 51 40.2 -0.8
baz=211,SNR=14
**SKAG Skagway** 84.92 20 P P 11 51 42.0 +1.0
baz=220,SNR=15
**T35M Bob Quinn** 84.92 24 P P 11 51 41.4 +0.3
baz=225,SNR=6.2
**YUK8 Steele Glacier** 84.99 18 P P 11 51 41.7 +0.1
baz=216,SNR=8.4
**M26K Nabesna, AK** 85.03 16 P P 11 51 41.5 0.0
M26K IAmb IAmb 11 51 42.7
comp=Z,48nm,0.9s
**M26K Nabesna, AK** 85.03 16 P P 11 51 41.6 0.0
baz=213,SNR=24
**SRU San Rafael Swe** 85.08 46 P P 11 51 43.2 +0.7
**SRU San Rafael Swe** 85.08 46 P P 11 51 43.2 +0.7
SRU pmax pmax
comp=Z,12nm,0.7s
**H19K Roundabout Mou** 85.12 9 P P 11 51 41.8 0.0
H19K IAmb IAmb 11 51 43.0
comp=Z,86nm,1.9s
**H19K Roundabout Mou** 85.12 9 P P 11 51 41.9 +0.1
baz=201,SNR=8.0
**YUK6 Outpost Mounta** 85.12 18 P P 11 51 42.3 0.0
baz=218

**G18K Tagagawik** 85.16 8 P P 11 51 41.2 -0.9
baz=199,SNR=5.8
**YUK3 Moose Creek** 85.19 17 P P 11 51 42.7 +0.1
baz=216,SNR=17
**S34M Telegraph Cree** 85.25 23 P P 11 51 43.3 +0.7
baz=224,SNR=29
**M27K Edge Creek, AK** 85.29 16 P P 11 51 43.3 +0.4
baz=214,SNR=32
**H20K Anotleneega Mo** 85.33 10 P P 11 51 42.9 0.0
baz=202,SNR=13
**F17K Baldwin Pennin** 85.37 7 P P 11 51 42.4 -0.6
baz=196
**GYA Guiyang** 85.39 300 P P 11 51 45.0 +0.8
GYA pmax pmax
comp=Z,26nm,1.0s
**L26K Log Cabin Wild** 85.47 15 P P 11 51 43.7 +0.1
baz=213,SNR=9.5
**I21K Tanana** 85.52 11 P P 11 51 43.5 -0.3
baz=205
**NEA2 Nenana** 85.54 12 P P 11 51 42.4 -1.5
baz=208,SNR=7.7
**K24K Donnelly Dome** 85.55 14 P P 11 51 43.8 -0.2
baz=211
**P32M Atlin** 85.56 21 P P 11 51 44.7 +0.6
baz=222,SNR=9.6
**MNTX Cornudas Mount** 85.58 55 P P 11 51 45.6 +0.7
baz=246
**ZEA Zeya** 85.58 331 *e* P P 11 51 45.0 +0.7
ZEA pmax pmax
comp=E,10.0nm,0.7s
ZEA pmax pmax
comp=N,30nm,0.8s
ZEA pmax pmax
comp=Z,40nm,0.8s
**Q32M Nakina River** 85.60 22 P P 11 51 45.3 +0.7
baz=223,SNR=20
**G19K Purcell Mounta** 85.61 8 P P 11 51 44.0 -0.2
baz=200,SNR=10
**MLY Manley** 85.61 11 P P 11 51 43.2 -1.1
baz=206,SNR=20
**MVCO Mesa Verde** 85.62 49 P P 11 51 45.8 +0.5
baz=243
**NEW Newport** 85.64 36 P P 11 51 44.6 -0.2
comp=Z,9.3nm,0.8s,baz=250,slow=6.8,SNR=13
comp=Z,9.3nm,0.8s
**NEW Newport** 85.64 36 P P 11 51 44.6 -0.2
baz=236,SNR=6.2
**O30N Mendenhall** 85.68 19 P P 11 51 45.0 +0.3
baz=220,SNR=20
**F18K Selawik** 85.71 7 P P 11 51 43.9 -0.7
baz=198
**RIDG Independent Ri** 85.71 14 P P 11 51 44.5 -0.3
baz=212,SNR=14
**H21K Melozitna Rive** 85.82 10 P P 11 51 44.7 -0.5
baz=204,SNR=11
**HDA Harding Lake** 85.82 13 P P 11 51 44.3 -1.0
baz=210,SNR=23
**L27K Beaver Creek,** 85.88 16 P P 11 51 45.6 0.0
baz=214,SNR=13
**BCAR Beaver Creek A** 85.90 16 P P 11 51 44.9 -0.8
**N30M Aishikik Lake** 85.91 18 P P 11 51 46.0 +0.2
baz=219,SNR=7.1
**E17K Hotham Inlet** 85.93 6 P P 11 51 45.3 -0.4
baz=196,SNR=7.2
**TXAR Lajitas Array** 85.98 58 P P 11 51 48.6 +1.7
comp=Z,18nm,0.8s,baz=218,slow=5.7,SNR=238
comp=Z,18nm,0.8s
**I23K Minto, Yukon-K** 85.98 12 P P 11 51 44.7 -1.2
I23K IAmb IAmb 11 51 46.9
comp=Z,35nm,1.4s
**I23K Minto, Yukon-K** 85.98 12 P P 11 51 44.7 -1.2
baz=207,SNR=13
**WHY Whitehorse** 85.98 20 P P 11 51 46.0 -0.2
WHY IAmb IAmb 11 51 47.7
comp=Z,29nm,1.2s
**WHY Whitehorse** 85.98 20 P P 11 51 46.6 +0.4
baz=221,SNR=11
**DLBC Dease Lake** 86.04 23 P P 11 51 46.2 -0.3
DLBC IAmb IAmb 11 51 48.2
comp=Z,88nm,1.9s
**DLBC Dease Lake** 86.04 23 P P 11 51 46.5 0.0
comp=Z,9.9nm,0.9s,baz=220,slow=3.5,SNR=24
comp=Z,9.9nm,0.9s
**DLBC Dease** 86.04 23 P P 11 51 47.2 +0.7
baz=225,SNR=9.5
**COLA College** 86.04 12 P P 11 51 45.8 -0.4
**COLA College** 86.04 12 P P 11 51 45.3 -1.0
baz=209
**COLA College** 86.04 12 *i* P P 11 51 45.2 -1.0
COLA pmax pmax
comp=Z,47nm,1.3s
**SCRK Sand Creek** 86.12 14 P P 11 51 46.1 -0.7
**SCRK Sand Creek** 86.12 14 P P 11 51 46.3 -0.5
baz=212,SNR=9.5
**ANMO Albuquerque** 86.12 51 P P 11 51 48.2 +0.6
comp=Z,9.5nm,0.9s,baz=268,slow=7.1,SNR=24
comp=Z,9.5nm,0.9s
**ANMO Albuquerque** 86.12 51 P P 11 51 48.2 +0.6
baz=245
**ANMO Albuquerque** 86.12 51 *i* P P 11 51 48.0 +0.4
ANMO pmax pmax
comp=Z,7.0nm,1.0s
**XLT XiLinHaoTe** 86.14 319 *e* P P 11 51 47.6 +0.2
XLT pmax pmax
comp=Z,38nm,1.2s
**ILAR Eielson Array** 86.15 13 P P 11 51 46.0 -0.8
comp=Z,9.5nm,0.5s,baz=221,slow=4.8,SNR=152
ILAR PP PP 11 55 19.9 +1.6
comp=Z,3.3nm,1.2s,baz=217,slow=7.7,SNR=4.4
comp=Z,9.5nm,0.5s
**H22K Ishtalitna Cre** 86.28 11 P P 11 51 47.4 -0.1
baz=205,SNR=18
**M29M Somme Creek** 86.29 17 P P 11 51 47.9 +0.3
baz=217,SNR=16
**P33M Teslin, Yukon** 86.33 21 P P 11 51 48.1 +0.3
baz=223,SNR=12
**N31M Braeburn, Yuko** 86.33 19 P P 11 51 48.2 +0.4
baz=220,SNR=11
**POKR Poker Plat Res** 86.34 13 P P 11 51 46.5 -1.2
baz=209,SNR=12
**J25K Salcha River,** 86.34 14 P P 11 51 47.3 -0.5
baz=211,SNR=28
**R33M Jennings River** 86.38 22 P P 11 51 48.9 +0.7
baz=224,SNR=15
**E18K Tukpahlearik C** 86.39 7 P P 11 51 47.4 -0.4
baz=197
**D17K Noatak River** 86.40 6 P P 11 51 47.6 -0.2
baz=194
**G21K Allakaket** 86.49 10 P P 11 51 48.1 -0.3
baz=203
**H23K Yukon River** 86.55 11 P P 11 51 47.4 -1.3
baz=207,SNR=6.6
**K27K Chicken** 86.62 15 P P 11 51 49.2 +0.1
baz=214
**XAN Xi'an** 86.64 307⇓ P P 11 51 50.8 +0.9
XAN pmax pmax
comp=Z,110nm,1.1s
**F20K Avaraart Lake** 86.65 9 P P 11 51 48.8 -0.3
baz=201,SNR=13
**J26L Joseph Creek** 86.66 14 P P 11 51 49.6 +0.3
baz=213,SNR=36
**MSO Missoula** 86.70 38 P P 11 51 49.2 -0.7
baz=239,SNR=8.5
**HIA Hailar** 86.76 325 *i* P P 11 51 51.0 +0.9
HIA pmax pmax
comp=Z,21nm,1.1s
**BILL Bilibino** 86.78 354 *e* P P 11 51 49.8 +0.1
BILL *e* *PP pP 11 53 47.8 -3.3
BILL *e* *SP sP 11 54 45.4 -2.1
BILL *e* 11 55 20.3
BILL pmax pmax
comp=Z,13nm,1.0s
**E19K Redstone River** 86.83 8 P P 11 51 49.8 -0.1
baz=200
**H24K Noodor Dome** 86.88 12 P P 11 51 48.3 -2.0
baz=209,SNR=5.3
**SNOW Snow King Moun** 86.98 42 P P 11 51 52.5 +1.0
SNOW IAmb IAmb 11 51 53.7
comp=Z,33nm,1.1s
**S22A 4UR Ranch, Cre** 87.05 49 P P 11 51 52.7 +0.7
**S22A 4UR Ranch, Cre** 87.05 49 P P 11 51 52.7 +0.7
baz=244,SNR=18
**IMW Indian Meadow** 87.08 42 P P 11 51 53.0 +1.0
IMW IAmb IAmb 11 51 54.1
comp=Z,29nm,0.9s
**PRP Porcupine Dome** 87.09 13 P P 11 51 50.5 -0.9
baz=211,SNR=8.1
**F21K Alatna River** 87.15 9 P P 11 51 50.7 -0.8

baz=203,SNR=10
**G22K Bettles 87.19 10** P **P** **11 51 51.4 -0.2**
baz=205
**G23K Bananza Creek 87.26 11** P **P** **11 51 51.7 -0.3**
baz=207,SNR=8.6
**M31M Drury Creek, Y 87.31 19** P **P** **11 51 51.8 -0.5**
baz=221,SNR=12
**DAWY Dawson 87.34 16** P **P** **11 51 52.5 +0.1**
baz=216,SNR=27
**BW06 Boulder Array 87.43 43** P **P** **11 51 53.9 +0.3**
baz=242,SNR=23
**PDAR Pinedale Array 87.43 43** P **P** **11 51 53.4 -0.3**
**PDAR Pinedale Array 87.43 43** P **P** **11 51 53.7 0.0**
comp=Z,9.4nm,0.7s,baz=215,slow=3.0,SNR=86
comp=Z,9.4nm,0.7s
**I26K Coal Creek Min 87.43 14** P **P** **11 51 52.5 -0.3**
I26K IAmb IAmb 11 51 54.0
comp=Z,75nm,1.6s
**I26K Coal Creek Min 87.43 14** P **P** **11 51 52.6 -0.2**
baz=213
**BOZ Bozeman (W) 87.47 40** P **P** **11 51 54.6 +0.9**
baz=241,SNR=26
**EGAK Eagle 87.47 15** P **P** **11 51 52.9 -0.1**
baz=215,SNR=19
**C18K Utukok River 87.51 6** P **P** **11 51 52.5 -0.7**
baz=196
**H17A Grant Village 87.54 42** P **P** **11 51 56.1 +1.9**
baz=242,SNR=12
**F22K John River 87.61 10** P **P** **11 51 53.6 0.0**
baz=205,SNR=9.7
**FARO Faro, Yukon 87.65 19** P **P** **11 51 53.6 -0.3**
baz=222,SNR=10
**HHC Hu-ho-hao-te 87.66 314** *e*P **P** **11 51 55.6 +1.0**
HHC pmax pmax
comp=Z,23nm,0.8s
HHC pmax pmax
comp=Z,100nm,4.6s
**K29M Barlow Dome 87.66 17** P **P** **11 51 54.4 +0.3**
baz=218,SNR=24
**WTLY Watson Lake, Y 87.67 22** P **P** **11 51 54.6 +0.5**
baz=226,SNR=9.0
**H25L Birch Creek 87.67 13** P **P** **11 51 52.5 -1.4**
baz=211,SNR=5.6
**COLD Coldfoot 87.69 11** P **P** **11 51 53.9 -0.1**
baz=206,SNR=13
**D19K Kuna River 87.70 7** P **P** **11 51 53.5 -0.5**
baz=199
**G24K Hadweenzic Riv 87.72 12** P **P** **11 51 53.5 -0.7**
baz=209,SNR=6.3
**ODSA Odessa 87.95 55** P **P** **11 51 57.4 +1.3**
ODSA IAmb IAmb 11 51 58.0
comp=Z,19nm,0.8s
**J29N Klondike Camp 87.95 16** P **P** **11 51 55.7 +0.3**
baz=218
**SDCO Great Sand Dun 88.00 49** P **P** **11 51 57.0 +0.4**
**SDCO Great Sand Dun 88.00 49** P **P** **11 51 56.6 +0.1**
baz=245,SNR=8.6
**I27K Kandik River 88.04 14** P **P** **11 51 55.4 -0.4**
baz=214,SNR=7.1
**G25K Bearman Lake 88.05 12** P **P** **11 51 55.8 +0.2**
baz=210
**FYU Fort Yukon 88.05 13** P **P** **11 51 54.9 -0.8**
FYU IAmb IAmb 11 51 55.9
comp=Z,15nm,0.6s
**D20K Ettviuk River 88.09 8** P **P** **11 51 55.7 -0.2**
baz=200
**C19K Lookout Ridge 88.11 7** P **P** **11 51 55.9 -0.1**
baz=198
**TOAD Toad River Com 88.16 25** P **P** **11 51 56.7 +0.3**
baz=229,SNR=27
**KMI Kunming 88.18 297** ⇓P **P** **11 51 58.8 +1.3**
KMI pmax pmax
comp=Z,23nm,1.0s
**LIRD Liard River Hi 88.19 24** P **P** **11 51 56.8 +0.3**
baz=228,SNR=6.4
**E21K Killik River 88.20 9** P **P** **11 51 55.6 -0.8**
baz=203
**E22K Anaktuvuk Pass 88.24 10** P **P** **11 51 56.6 0.0**
baz=205,SNR=16
**I28M Miner Creek 88.32 15** P **P** **11 51 56.8 -0.2**
baz=216,SNR=15
**F24K Squaw Lake 88.36 11** P **P** **11 51 57.3 +0.1**
baz=209,SNR=17
**E23K Chandalar 88.54 10** P **P** **11 51 58.1 0.0**
baz=207,SNR=11
**T25A Trinidad 88.54 50** P **P** **11 51 59.2 +0.2**
baz=246
**J30M Hart River 88.56 17** P **P** **11 51 58.3 0.0**
baz=219,SNR=14
**H27K Steamboat Moun 88.58 14** P **P** **11 51 58.1 -0.1**
baz=214,SNR=14
**I29M Ogilvie Camp, 88.66 16** P **P** **11 51 58.2 -0.4**
baz=218,SNR=17
**G26K Porcupine Rive 88.68 13** P **P** **11 51 58.8 +0.2**
baz=212,SNR=13
**RLMT Red Lodge 88.71 41** P **P** **11 52 00.6 +1.1**
baz=242,SNR=17
**E24K Your Creek 88.75 11** P **P** **11 51 58.6 -0.3**
baz=208
**C21K Knifeblade Rid 88.75 8** P **P** **11 51 58.9 +0.1**
baz=202,SNR=10
**Q24A Divide 88.76 48** P **P** **11 52 00.4 +0.4**
baz=245
**D22K Ayikyak River 88.79 9** P **P** **11 51 59.1 0.0**
baz=204,SNR=14
**TGTN Hyland Airport 88.83 22** P **P** **11 52 00.3 +0.8**
baz=227,SNR=9.6
**F25K Christian Rive 88.86 12** P **P** **11 51 59.9 +0.4**
baz=211,SNR=6.5
**ELIB Princess Elisa 88.86 187** *d*P **P** **11 51 59.8 0.0**
comp=Z,6.1nm,0.9s
ELIB *d*pP **pP** **11 54 05.5 +3.1**
**SGCY Sterling City 88.99 56** P **P** **11 52 00.9 0.0**
SGCY IAmb IAmb 11 52 02.0
comp=Z,9.0nm,0.7s
**N23A Red Feather La 89.02 46** P **P** **11 52 02.0 +0.9**
baz=245,SNR=9.1
**G27K Doyon Strip 89.03 14** P **P** **11 52 00.3 0.0**
baz=214,SNR=5.6
**I30M Mount Dempster 89.05 16** P **P** **11 52 00.2 -0.3**
I30M IAmb IAmb 11 52 01.4
comp=Z,26nm,1.0s
**I30M Mount Dempster 89.05 16** P **P** **11 52 00.4 -0.1**
baz=219,SNR=21
**833A Chaparral WMA, 89.06 60** P **P** **11 52 01.5 +0.2**
baz=249
**TOLK Toolik Lake Re 89.06 10** P **P** **11 52 00.3 -0.1**
baz=207,SNR=5.3
**D23K Nanushuk River 89.18 10** P **P** **11 52 01.3 +0.4**
baz=206
**B21K Ikpikpuk River 89.20 8** P **P** **11 52 01.0 +0.1**
baz=202,SNR=5.6
**CMAR Chiang Mai Arr 89.21 290** P **P** **11 52 03.0 +0.8**
comp=Z,15nm,0.9s,baz=110,slow=2.8,SNR=74
comp=Z,15nm,0.9s
**F26K Sheenjek River 89.24 12** P **P** **11 52 02.2 +1.0**
baz=212
**B20K Meade River 89.25 7** P **P** **11 52 01.1 0.0**
baz=200
**H29M Whitestone 89.32 15** P **P** **11 52 01.6 -0.1**
baz=217,SNR=28
**KOTAN Kotaneelee Air 89.45 24** P **P** **11 52 02.5 +0.2**
baz=230,SNR=8.2
**PZH PanZhiHua 89.51 298** P **P** **11 52 04.8 +1.2**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,170nm,3.9s
**JCT Junction City 89.51 58** P **P** **11 52 03.8 +0.4**
baz=248
**AMTX Amarillo 89.69 53** P **P** **11 52 04.4 +0.3**
baz=247
**EGMT Eagleton 89.76 39** P **P** **11 52 04.7 +0.6**
baz=242
**EPYK Eagle Plains 89.86 15** P **P** **11 52 04.0 -0.2**
baz=219,SNR=19
**G29M Pine Creek 89.96 15** P **P** **11 52 04.2 -0.4**
baz=218,SNR=11
**YAK Yakutsk 89.96 338** *e*P **P** **11 52 03.4 -1.2**
YAK *e**PP **pwP** **11 54 08.6 -0.7**
YAK *e* 11 55 47.1
YAK *e*S **SKSac** **12 01 39.8 -1.5**
YAK *e* 12 02 12.7
YAK pmax pmax
comp=Z,18nm,0.9s
YAK pmax pmax
comp=N,2.0nm,1.1s
YAK pmax pmax
comp=E,5.0nm,1.0s
YAK pmax pmax
comp=Z,138nm,4.4s
YAK pmax pmax
comp=E,64nm,4.1s
YAK smax smax
comp=E,32nm,3.1s
YAK smax smax
comp=N,27nm,3.0s
**C23K Itkillik River 89.97 9** P **P** **11 52 04.6 +0.1**
baz=206,SNR=9.7
**TROLL Troll, Antarti 89.98 180** ⇑P **P** **11 52 05.3 +0.3**
comp=Z,163nm,0.4s
**B22K Teshekpuk Lake 90.03 8** P **P** **11 52 04.4 -0.3**
baz=203,SNR=5.8
**F28M Old Crow 90.09 14** P **P** **11 52 05.1 -0.1**
baz=216
**C24K Franklin Bluff 90.17 10** P **P** **11 52 05.4 0.0**
baz=208
**E27K Coleen River 90.18 13** P **P** **11 52 05.6 0.0**
baz=214
**SNAA Sanae 90.27 179** P **P** **11 52 06.3 +0.1**
**SNAA Sanae 90.27 179** ⇑P **P** **11 52 06.1 -0.1**
comp=Z,45nm,0.6s
**SNAA Sanae 90.27 179** P **P** **11 52 05.9 -0.2**
comp=Z,2.0nm,0.6s,baz=195,slow=11,SNR=14
comp=Z,2.0nm,0.6s
**SNAA Sanae 90.27 179** P **P** **11 52 06.3 +0.1**
SNAA pmax pmax
comp=Z,14nm,1.6s
**VNA3 Neumayer Olymp 90.40 176** ⇑P **P** **11 52 06.7 0.0**
comp=Z,5.9nm,0.4s
**A22K Sinclair Lake 90.44 7** P **P** **11 52 06.4 -0.2**
baz=202,SNR=6.5
**G30M tAoh Zrail Nji 90.45 15** P **P** **11 52 06.6 -0.3**
baz=219,SNR=36
**A21K Barrow 90.55 7** P **P** **11 52 06.8 -0.4**
baz=200
**G31M Satah River 90.91 16** P **P** **11 52 08.7 -0.1**
baz=221,SNR=42
**PLCA Paso Flores 90.94 134** P **P** **11 52 10.1 +0.2**
comp=Z,0.9nm,0.6s,baz=239,slow=12,SNR=2.8
comp=Z,0.9nm,0.6s
**C27K Jago River 90.97 11** P **P** **11 52 09.2 +0.1**
baz=212
**E28M Babbage River 90.97 13** P **P** **11 52 09.2 0.0**
baz=216,SNR=12
**C26K Camden Bay 90.99 11** P **P** **11 52 09.6 +0.4**
baz=211,SNR=6.4
**F30M Barrier River 91.05 15** P **P** **11 52 09.6 0.0**
baz=220,SNR=6.0
**VNA1 Neumayer--Stat 91.07 177** ⇑P **P** **11 52 09.8 +0.1**
comp=Z,8.5nm,0.9s
**E29M Blow River 91.16 14** P **P** **11 52 09.5 -0.6**
baz=218
**LZH Lanzhou 91.27 308** *e*P **P** **11 52 13.1 +1.6**
LZH pmax pmax
comp=Z,40nm,1.2s
**LAO LASA Array 91.31 41** P **P** **11 52 12.7 +1.4**
baz=245,SNR=7.4
**F31M Tsiigehtchic 91.44 16** P **P** **11 52 11.1 -0.2**
baz=222,SNR=40
**RSSD Black Hills 91.64 44** P **P** **11 52 13.1 0.0**
baz=246
**D28M Stokes Point 91.72 13** P **P** **11 52 12.4 -0.2**
baz=217,SNR=5.7
**WMOK Wichita Mounta 91.85 54** P **P** **11 52 14.0 -0.1**
baz=249
**INK Inuvik 92.14 15** P **P** **11 52 13.9 -0.6**
baz=222,SNR=19
**CBKS Cedar Bluff 92.59 50** P **P** **11 52 18.0 +0.6**
baz=249
**DGMT Dagar 93.30 40** P **P** **11 52 21.0 +0.7**
baz=246,SNR=5.5
**ULN Ulaanbaatar 93.55 319** *ce*P **P** **11 52 21.7 0.0**
ULN pmax pmax
comp=Z,13nm,0.9s
**SONM Songino Array 93.94 319** P **P** **11 52 24.1 +0.6**
comp=Z,2.4nm,0.6s,baz=124,slow=4.0,SNR=14
comp=Z,2.4nm,0.6s
**YKA Yellowknife Ar 94.53 25** P **P** **11 52 25.2 -0.4**
comp=Z,6.6nm,0.9s,baz=247,slow=4.4,SNR=10
comp=Z,6.6nm,0.9s
**KSU1 Kansas State U 94.98 51** P **P** **11 52 29.0 +0.8**
baz=251
**C36M Paulatuk 95.34 17** P **P** **11 52 29.5 +0.5**
baz=231
**GTA Gaotai 95.42 310** *e*P **P** **11 52 30.8 +0.5**
GTA pmax pmax
comp=Z,9.0nm,1.0s
**ECSD EROS Data Cent 96.49 46** P **P** **11 52 34.7 -0.2**
baz=251
**TIXI Tiksi 96.53 345** *ce*P **P** **11 52 33.7 -0.7**
TIXI pmax pmax
comp=Z,6.0nm,0.9s
**ZALV Zalesovo Beam 108.63 322** PKiKP **PKiKP** **11 57 29.2 -1.1**
comp=Z,2.7nm,0.6s,baz=92,slow=0.9,SNR=11
**MKAR Makanchi Array 109.52 314** PKiKP **PKiKP** **11 57 31.0 -1.3**
comp=Z,2.6nm,0.5s,baz=76,slow=0.4,SNR=30
**KURK Kurchatov 112.22 318** *c i*PKIKP **PKiKP** **11 57 36.6 -0.6**
KURK pmax pmax
comp=Z,6.0nm,1.0s
**KURBB Kurchatov Arra 112.27 318** PKiKP **PKiKP** **11 57 36.4 -1.0**
comp=Z,3.3nm,0.5s,baz=93,slow=1.8,SNR=24
KURBB PP **PP** **11 58 29.0 -4.8**
comp=Z,0.9nm,0.6s,baz=92,slow=7.4,SNR=6.6
**AAK Ala-Archa 114.76 309** *c i*PKIKP PKPdf 11 57 42.6 0.0
AAK pmax pmax
comp=Z,4.0nm,1.3s
**BVAR Borovoye Array 117.24 321** PKP **PKPdf** **11 57 45.9 -1.0**
comp=Z,8.9nm,0.6s,baz=98,slow=2.9,SNR=37
BVAR PP **PP** **11 59 09.3 +1.2**
comp=Z,1.6nm,0.8s,baz=77,slow=6.4,SNR=3.9
**KK31 Karatay Array 117.70 310** **PKPdf** **11 57 47.0 -1.1**
**KK31 Karatay Array 117.70 310** PKiKP **PKPdf** **11 57 47.0 -1.1**
**KKAR Karatay Array 117.70 310** PKPdf **PKPdf** **11 57 47.0 -1.1**
**KKAR Karatay Array 117.70 310** **PKPdf** **11 57 46.5 -1.6**
**KKAR Karatay Array 117.70 310** PKiKP **PKPdf** **11 57 46.5 -1.6**
**GAR Garm 117.81 305** **PKPdf** **11 57 47.8 -0.8**
**KBL Kabul 118.65 300** **PKPdf** **11 57 49.8 -0.6**
**KBL Kabul 118.65 300** PKiKP **PKPdf** **11 57 49.8 -0.6**
**SIMJ Simiganj 118.82 305** **PKPdf** **11 57 49.8 -0.8**
**LMN Caledonia Moun 119.07 47** PKPdf **PKPdf** **11 57 50.0 -0.6**
**SPITS Spitsbergen Ar 119.61 357** PKP **PKPdf** **11 57 50.3 -0.5**
comp=Z,12nm,0.8s,baz=26,slow=3.7,SNR=4.8
**GBN Guysborough 121.41 48** PKPdf **PKPdf** **11 57 54.7 -0.3**
**ARU Arti 123.25 326** **PKPdf** **11 57 58.1 -0.2**
**ARU Arti 123.25 326** *c i*PKIKP **PKPdf** **11 57 56.2 -2.1**
ARU pmax pmax
comp=Z,28nm,1.0s
**LVZ Lovozero 126.17 345** *i* PKIKP **PKPdf** **11 58 01.8 -1.8**
LVZ pmax pmax
comp=Z,85nm,2.0s
**ARCES ARCESS Array B 126.67 350** PKP **PKPdf** **11 58 04.0 -0.5**
comp=Z,11nm,0.7s,baz=18,slow=1.1,SNR=19
**APA Apatity 126.72 345** ⇓*i*PKIKP **PKPdf** **11 58 03.0 -1.6**
APA pmax pmax
comp=Z,11nm,0.7s
**KIRV Kirov 126.92 331** *c i*PKIKP **PKPdf** **11 58 05.3 +0.1**
**BOSA Boshof 128.21 206** PKP **PKPdf** **11 58 09.1 +0.2**
comp=Z,1.3nm,0.7s,baz=162,slow=3.2,SNR=4.0
**BELG Belogornoye 130.68 325** *i* PKIKP **PKiKP** **11 58 13.4 -0.1**
BELG pmax pmax
comp=Z,5.0nm,1.0s
**FINES FINESS Array B 133.56 344** PKhKP PKPpre 11 58 02.0
comp=Z,3.1nm,1.0s,baz=48,slow=2.1,SNR=4.6
FINES PKP **PKPdf** **11 58 17.2 -0.6**
comp=Z,7.7nm,0.7s,baz=48,slow=2.3,SNR=8.6
**VRH Novokhopyorsk 134.47 326** *e*PKIKP **PKPdf** **11 58 17.9 -1.8**
VRH pmax pmax
comp=Z,20nm,1.1s
**OBN Obninsk 134.69 333** ⇓*e*PKIKP **PKPdf** **11 58 19.3 -0.7**
OBN 12 01 03.0
OBN *e* 12 01 24.6
OBN pmax pmax
comp=Z,8.0nm,0.4s
**LPSR Galich'ya Gora 135.14 329** *e*PKIKP **PKPdf** **11 58 18.8 -2.1**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
**VORR Voronezh 135.53 327** *e*PKIKP **PKPdf** **11 58 19.5 -2.2**
VORR pmax pmax
comp=Z,60nm,0.3s
**VSR Storozhevoye 135.81 327** *e*PKIKP **PKPdf** **11 58 20.1 -2.1**
VSR pmax pmax
comp=Z,8.0nm,0.4s
**VSU Vasula 135.86 341** *c i*PKIKP **PKiKP** **11 58 24.2 +0.4**
VSU pmax pmax
comp=Z,24nm,1.7s
**NB2 NORSAR Subarra 136.72 353** PKP PKPpre 11 58 14.0
comp=Z,2.2nm,0.8s,baz=16,slow=3.2
**NOA NORSAR Array B 136.72 353** PKhKP PKPpre 11 58 14.8
comp=Z,2.7nm,0.7s,baz=22,slow=3.9,SNR=9.7
NOA PKP **PKPdf** **11 58 23.3 -0.4**
comp=Z,2.6nm,0.6s,baz=14,slow=4.0,SNR=9.0
**KBZ Khabaz 137.19 316** PKP **PKPdf** **11 58 25.8 +0.8**
comp=Z,3.5nm,0.9s,baz=131,slow=2.6,SNR=7.3
**KBZ Khabaz 137.19 316** *c i*PKIKP **PKiKP** **11 58 27.4 +0.4**
**KIV Kislovodsk 137.25 316** *e*PKIKP **PKPdf** **11 58 26.3 +1.0**
KIV pmax pmax
comp=Z,7.0nm,1.0s
**HFS Hagfors 137.29 351** PKhKP PKPpre 11 58 13.1
comp=Z,3.2nm,0.5s,baz=346,slow=3.0,SNR=8.0
HFS PKP **PKPdf** **11 58 24.3 -0.4**
comp=Z,6.3nm,0.7s,baz=46,slow=4.2,SNR=6.5
**SHA1 Shidzhatmaz 137.35 316** *c i*PKIKP **PKPdf** **11 58 26.7 +1.0**
**KPL Plockton 140.56 6** *e*P PKPpre 11 58 23.6
**AKASG Malin Array Be 140.95 332** PKhKP PKPpre 11 58 25.3
comp=Z,8.0nm,0.6s,baz=44,slow=3.9,SNR=28
**KIEV Kiev 140.96 332** PKPpre 11 58 33.7
**KIEV Kiev 140.96 332** PKIKP **PKiKP** **11 58 33.7 -0.8**
**INVG Invergeldie, C 141.61 5** *e*P **PKPdf** **11 58 27.3 -5.4**
**LAWE Loch Awe, Argy 141.65 6** *e*P PKPpre 11 58 27.7
**CLGH Cloghs, Cushen 142.72 8** *e*P PKPpre 11 58 30.7
**EKA Eskdalemuir Ar 142.77 5** PKhKP PKPpre 11 58 31.1
comp=Z,6.3nm,0.7s,baz=338,slow=3.3,SNR=34
**NEWG New Galloway 142.89 6** *e*P PKPpre 11 58 31.8
**GAL1 Galloway 143.09 6** *e*P PKPab 11 58 32.0 -1.0
**SORM Soroca 143.18 330** ⇑P PKPab 11 58 33.6 -0.1
**SORM Soroca 143.18 330** ⇑PKHKP PKPpre 11 58 33.6
**BEL Belsk 143.28 340** *e*PKP PKPbc 11 58 34.4 +0.2
**EDMD Edmundbyers 143.35 4** *e*P PKPab 11 58 33.0 -1.1
**KESW Keswick, Cumbr 143.51 5** *e*P PKPab 11 58 34.2 -0.5
**IOMK Kirk Michael 143.70 6** *e*P PKPbc 11 58 34.6 -0.8
**GAZ Gaziantep 143.71 309** PKPbc 11 58 35.9 -0.2
**ILTH Belurgan, Co L 143.72 8** *e*P PKPbc 11 58 34.6 -0.8
**LVV L'vov 143.79 336** *e*PKIKP PKPbc 11 58 35.3 -0.6
**MILM Milestii Mici 143.80 328** ⇑P PKPbc 11 58 35.8 -0.1
**MILM Milestii Mici 143.80 328** ⇑PKIKP PKPbc 11 58 35.8 -0.2
**WIM Isle of Man 143.80 6** *e*P PKPbc 11 58 34.4 -1.3
**IGLA Glengowla, Co 143.82 11** *e*P PKPbc 11 58 35.1 -0.7
**BZK Bozkurt 143.82 318** ⇓P PKPab 11 58 36.7 +0.4
**GDLE Glaisdale, N Y 143.82 3** *e*P PKPbc 11 58 35.2 -0.6
**DRBR Darabani 143.94 332** ⇑P PKPbc 11 58 35.7 -0.7
**LODK Lodwar 144.03 250** PKPbc 11 58 37.6 -0.1
**BNN Bunyan 144.04 312** PKPbc 11 58 37.0 -0.2
**HPK Haverah Park 144.24 3** *e*P PKPbc 11 58 36.2 -0.9
**KWP Kalwaria Pacla 144.46 337** *e*PKP PKPbc 11 58 38.1 +0.1
**KWP Kalwaria Pacla 144.46 337** PKPbc 11 58 38.2 +0.3
**KWP Kalwaria Pacla 144.46 337** PKIKP PKPbc 11 58 38.2 +0.3
**DSB Dublin 144.48 8** PKPdf **PKPdf** **11 58 37.6 -0.1**
**WPS Cemaes, Angles 144.56 7** *e*P **PKPdf** **11 58 37.0 -0.8**
**WME Myndd Eilian 144.58 6** *e*P **PKPdf** **11 58 37.1 -0.8**
**WLF1 Llynfaes 144.68 6** *e*P **PKPdf** **11 58 37.7 -0.4**
**LBWR Ladybower, Pea 144.79 4** *e*P **PKPdf** **11 58 38.0 -0.4**
**YLL Llanberis 144.85 6** *e*P **PKPdf** **11 58 37.6 -0.8**
**TLCR 144.97 326** ⇓P PKPbc 11 58 39.9 +0.3
**TLCR 144.97 326** ⇓PKIKP PKPbc 11 58 39.9 +0.3
**BUR08 Bucovina Ar. S 144.99 332** PKPbc 11 58 39.8 0.0
**OJC Ojcow 144.99 340** *e*PKP **PKPdf** **11 58 39.1 +0.4**
**OJC Ojcow 144.99 340** PKPdf **PKPdf** **11 58 39.0 +0.2**
**OJC Ojcow 144.99 340** PKIKP **PKPdf** **11 58 39.0 +0.2**
**BURAR Bucovina Array 145.01 332** PKPdf **PKPbc** **11 58 39.7 -0.1**
**BURAR Bucovina Array 145.01 332** ⇑P **PKPab** **11 58 40.6 -0.2**
**BURAR Bucovina Array 145.01 332** ⇑PKIKP **PKPab** **11 58 40.6 -0.2**
**SCTR Scanteiesti 145.07 327** ⇑P **PKPab** **11 58 40.9 0.0**
**GHRR 145.10 328** ⇑P **PKPab** **11 58 41.5 +0.5**
**TESR Tescani 145.15 330** ⇓P **PKPbc** **11 58 40.0 -0.1**
**BR131 Keskin Array S 145.17 315** **PKPbc** **11 58 40.3 -0.3**
**BR131 Keskin Array S 145.17 315** *i* PKIKP **PKPdf** **11 58 39.5 -0.1**
**BRTR Keskin Array B 145.17 315** PKPbc **PKPdf** **11 58 40.1 +0.5**
comp=Z,24nm,0.8s,baz=116,slow=3.4,SNR=111
**LLW Llanuwychllyn 145.19 6** *e*P **PKPdf** **11 58 39.1 +0.1**
**KOLS Kolonicke sedl 145.19 336** *e*PKIKP **PKPab** **11 58 40.9 -0.4**
**KOLS Kolonicke sedl 145.19 336** *e*PKP **PKPab** **11 58 40.9 -0.4**
**NEGRR Negrea 145.22 327** ⇓P **PKPab** **11 58 41.2 -0.3**
**KIRS Kirsehir-Merke 145.26 314** ⇑P **PKPdf** **11 58 38.5 -1.2**
**IZVR Izvoarele 145.27 327** ⇑P **PKPab** **11 58 42.2 +0.5**
**CFR Carcaliu 145.33 327** ⇑P **PKPbc** **11 58 41.2 +0.6**
**CFR Carcaliu 145.33 327** ⇑PKIKP **PKPbc** **11 58 41.2 +0.6**
**ONER Baraj Valea Uz 145.40 330** ⇑P **PKPab** **11 58 42.1 -0.2**
**KSP Ksiaz 145.48 344** *e*PKP **PKPbc** **11 58 41.4 +0.5**
**NIE Niedzica 145.51 339** *e*PKP **PKPbc** **11 58 41.7 +0.6**
**CRVS Cervenica-Dubn 145.52 337** *e*PKIKP **PKPbc** **11 58 41.4 +0.2**
**CRVS Cervenica-Dubn 145.52 337** *e*PKP **PKPbc** **11 58 41.4 +0.2**
**WACR West Acre 145.57 1** *e*P **PKPdf** **11 58 40.4 +0.8**
**VRI Vrincioaia 145.57 329** ⇑P **PKPbc** **11 58 41.7 +0.3**
**VRI Vrincioaia 145.57 329** ⇑PKIKP **PKPbc** **11 58 41.7 +0.3**
**HLM1 Long Mynd 145.59 5** *e*P **PKPdf** **11 58 40.1 +0.4**
**PLOR Plostina 145.62 329** ⇓P **PKPbc** **11 58 41.6 0.0**
**PLOR Plostina 145.62 329** ⇓PKIKP **PKPbc** **11 58 41.6 0.0**
**ANTO Ankara 145.67 315** **PKPbc** **11 58 42.2 +0.3**
**ANTO Ankara 145.67 315** ⇓P **PKPdf** **11 58 40.7 +0.3**
**ANTO Ankara 145.67 315** ⇓PKIKP **PKPdf** **11 58 40.7 +0.3**
**BR231 Keskin MP Arra 145.69 315** **PKPbc** **11 58 42.0 -0.1**
**BMR Baia Mare 145.71 334** ⇓P **PKPbc** **11 58 42.2 +0.5**
**BMR Baia Mare 145.71 334** ⇓PKP2 **PKPbc** **11 58 42.2 +0.5**
**OSTC Ostas 145.76 344** *e*PKP **PKPab** **11 58 43.1 -0.4**
**OSTC Ostas 145.76 344** *e*PKP2 **PKPab** **11 58 43.1 -0.4**
**CHVC Chvalec 145.78 344** ⇑*e*PKP **PKPbc** **11 58 42.3 +0.5**
**CHVC Chvalec 145.78 344** *e*PKIKP **PKPbc** **11 58 42.3 +0.5**
**TURR Turia 145.79 330** ⇑P **PKPbc** **11 58 42.9 +0.8**
**ARCR ARCALIA 145.79 332** ⇑P **PKPab** **11 58 43.1 -0.6**
**CLZ Clausthal 145.79 351** *e*PKP **PKPdf** **11 58 40.5 +0.4**
baz=19,slow=1.5
CLZ *e*PKPbc **PKPbc** **11 58 42.1 +0.2**
baz=16,slow=2.6
**TLBR Topalu 145.80 326** ⇓P **PKPab** **11 58 43.6 -0.2**
**CLL Collm 145.83 347** **PKPbc** **11 58 42.3 +0.4**
**CLL Collm 145.83 347** ⇓*i*PKPbc **PKPbc** **11 58 42.0 +0.1**
comp=Z,126nm,0.8s
CLL *e*SKPbc **SKiKP** **12 01 29.0 +1.5**
**CLL Collm 145.83 347** ⇓*i*PKIKP **PKPbc** **11 58 42.0 +0.1**
CLL pmax pmax
comp=Z,126nm,0.8s
**CLL Collm 145.83 347** *e*PKPdf **PKPdf** **11 58 40.5 +0.3**
baz=19,slow=1.5
CLL *e*PKPbc **PKPbc** **11 58 42.1 +0.2**
baz=16,slow=2.6
**COVR Voineasa-Covas 145.84 329** ⇑P **PKPbc** **11 58 42.3 +0.1**
**OKC Ostrava-Krasne 145.85 341** ⇑*e*PKP **PKPbc** **11 58 42.5 +0.5**
**OKC Ostrava-Krasne 145.85 341** *e*PKP2 **PKPbc** **11 58 42.5 +0.5**
**UPC Upice 145.86 344** ⇑*e*PKP **PKPbc** **11 58 42.6 +0.5**
**UPC Upice 145.86 344** *e*PKP2 **PKPbc** **11 58 42.6 +0.5**
**OZUR 145.87 330** ⇑P **PKPbc** **11 58 43.1 +0.9**
**DPC Dobruska-Polom 145.92 343** ⇑*e*PKP **PKPbc** **11 58 43.0 +0.7**
**DPC Dobruska-Polom 145.92 343** *e*PKP2 **PKPbc** **11 58 43.0 +0.7**
**BOSR Bodos 145.94 330** ⇑P **PKPab** **11 58 43.7 -0.7**
**RSBS Rosebush, Pemb 145.96 7** *e*P **PKPdf** **11 58 41.3 +1.0**
**MBAR Mbarara 145.97 240** *i* PKIKP **PKPdf** **11 58 42.2 +0.5**
**LANS Liptovska Anna 146.02 339** *e*PKP2 **PKPab** **11 58 43.9 -0.7**
**LANS Liptovska Anna 146.02 339** *e*PKP **PKPab** **11 58 43.9 -0.7**
**BRG Berggiesshubel 146.03 346** *e*PKP **PKPdf** **11 58 40.9 +0.3**
BRG Amp 11 58 41.3
comp=Z,7.0nm,1.0s
**BRG Berggiesshubel 146.03 346** P **PKPbc** **11 58 42.9 +0.4**
BRG Amp 11 58 43.8
comp=Z,47nm,0.7s
**BRG Berggiesshubel 146.03 346** P **PKiKP** **11 58 49.6 +4.6**
BRG Amp 11 58 51.8
comp=Z,15nm,0.8s
**BRG Berggiesshubel 146.03 346** *e*PKPdf **PKPdf** **11 58 40.8 +0.3**
baz=19,slow=1.5
BRG *e*PKPbc **PKPbc** **11 58 43.0 +0.4**
baz=16,slow=2.6
**KRLC Kraliky 146.04 343** ⇑*e*PKP **PKPbc** **11 58 43.3 +0.7**
**KRLC Kraliky 146.04 343** *e*PKP2 **PKPbc** **11 58 43.3 +0.7**
**MORC Moravsky Berou 146.09 342** **PKPdf** **11 58 39.7 -1.0**
MORC PKPbc **PKPbc** **11 58 43.2 +0.4**
**MORC Moravsky Berou 146.09 342** *e*PKP **PKPdf** **11 58 41.0 +0.3**
MORC *e* 11 58 43.0
**MORC Moravsky Berou 146.09 342** ⇓P **PKPbc** **11 58 43.6 +0.8**
**MORC Moravsky Berou 146.09 342** PKHKP PKPpre 11 58 39.7
MORC 11 58 43.2
**NEHR Nehoiu 146.10 328** ⇑P **PKPbc** **11 58 43.0 +0.1**
**GTTG Gottingen 146.14 351** *e*PKPdf **PKPdf** **11 58 41.0 +0.3**
baz=19,slow=1.5
GTTG *e*PKPbc **PKPbc** **11 58 43.0 +0.2**
baz=16,slow=2.6
**DOPR Dopca 146.15 330** ⇑P **PKPbc** **11 58 44.1 +1.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NEUB** | **Neuenburg** | **146.16** | **349** | *e*PKPbc | **PKPbc** | **11 58 43.3** | **+0.5** |
| | baz=16,slow=2.6 | | | | | | | |
| NEUB | | | | *e*PKPab | **PKPab** | **11 58 44.1** | **-0.9** |
| | baz=15,slow=4.4 | | | | | | | |
| **ISR** | **Istrita** | **146.19** | **328** | ⇑P | **PKPbc** | **11 58 43.9** | **+0.7** |
| **ISR** | **Istrita** | **146.19** | **328** | ⇑PKP2 | **PKPbc** | **11 58 43.9** | **+0.7** |
| **PVCC** | **Panska Ves** | **146.21** | **345** | ⇑*e*PKP | **PKPbc** | **11 58 43.7** | **+0.7** |
| **PVCC** | **Panska Ves** | **146.21** | **345** | *e*PKP2 | **PKPbc** | **11 58 43.7** | **+0.7** |
| **MLR** | **Muntele Rosu** | **146.23** | **329** | ⇓P | **PKPdf** | **11 58 41.7** | **+0.5** |
| **MLR** | **Muntele Rosu** | **146.23** | **329** | ⇓PKIKP | **PKPdf** | **11 58 41.7** | **+0.5** |
| **KECS** | **Kecovo** | **146.23** | **337** | *e*PKP2 | **PKPbc** | **11 58 44.0** | **+0.9** |
| **KECS** | **Kecovo** | **146.23** | **337** | *e*PKP | **PKPbc** | **11 58 44.0** | **+0.9** |
| **MONM** | **Monmouth** | **146.27** | **5** | *e*P | **PKPbc** | **11 58 42.1** | **-1.0** |
| **CBBR** | **Cluj-Babes-Bol** | **146.39** | **333** | ⇑P | **PKPdf** | **11 58 40.8** | **-0.4** |
| **HSKC** | **Hora Svate Kat** | **146.40** | **347** | ⇑*e*PKP | **PKPbc** | **11 58 43.9** | **+0.3** |
| **CJR** | **Cluj-Napoca** | **146.41** | **333** | ⇑P | **PKPbc** | **11 58 44.6** | **+0.8** |
| **CJR** | **Cluj-Napoca** | **146.41** | **333** | ⇑PKP2 | **PKPbc** | **11 58 44.6** | **+0.8** |
| **MMAI** | **Mount Meron Ar** | **146.51** | **303** | PKPbc | **PKPbc** | **11 58 44.5** | **0.0** |
| | comp=Z,39nm,0.6s,baz=65,slow=5.1,SNR=58 | | | | | | | |
| **BUG** | **Bochum--Univer** | **146.59** | **354** | *e*PKPbc | **PKPbc** | **11 58 44.0** | **0.0** |
| | baz=16,slow=2.6 | | | | | | | |
| **MARR** | **Marisel-Cluj** | **146.65** | **333** | ⇑P | **PKPbc** | **11 58 45.1** | **+0.7** |
| **PRA** | **Prague** | **146.67** | **345** | ⇑*e*PKP | **PKPbc** | **11 58 45.0** | **+0.8** |
| **PRA** | **Prague** | **146.67** | **345** | *e*PKP2 | **PKPbc** | **11 58 45.0** | **+0.8** |
| **KASTN** | **Kahler Asten** | **146.69** | **352** | *e*PKPdf | **PKPdf** | **11 58 42.0** | **+0.4** |
| | baz=19,slow=1.5 | | | | | | | |
| KASTN | | | | *e*PKPbc | **PKPbc** | **11 58 44.5** | **+0.1** |
| | baz=16,slow=2.6 | | | | | | | |
| **VOIR** | | **146.70** | **330** | ⇑P | **PKPbc** | **11 58 45.0** | **+0.4** |
| **VOIR** | | **146.70** | **330** | ⇑PKP2 | **PKPbc** | **11 58 45.0** | **+0.4** |
| **PRU** | **Pruhonice** | **146.72** | **345** | ⇑*e*PKP | **PKPbc** | **11 58 44.8** | **+0.4** |
| **PRU** | **Pruhonice** | **146.72** | **345** | *e*PKP2 | **PKPbc** | **11 58 44.8** | **+0.4** |
| **GOPC** | **GO Pecny, Ondr** | **146.72** | **345** | ⇑*e*PKP | **PKPbc** | **11 58 45.0** | **+0.5** |
| **GOPC** | **GO Pecny, Ondr** | **146.72** | **345** | *e*PKP2 | **PKPbc** | **11 58 45.0** | **+0.5** |
| **DRGR** | | **146.73** | **333** | ⇑P | **PKPbc** | **11 58 45.3** | **+0.6** |
| **DRGR** | | **146.73** | **333** | ⇑PKP2 | **PKPbc** | **11 58 45.3** | **+0.6** |
| **MOX** | **Moxa** | **146.73** | **349** | *e*PKPdf | **PKPdf** | **11 58 41.8** | **+0.1** |
| | baz=19,slow=1.5 | | | | | | | |
| MOX | | | | *e*PKPbc | **PKPbc** | **11 58 44.7** | **+0.2** |
| | baz=16,slow=2.6 | | | | | | | |
| MOX | | | | *e*PKPab | **PKiKP** | **11 58 46.6** | **+0.2** |
| | baz=15,slow=4.4 | | | | | | | |
| **PLN** | **Plauen** | **146.78** | **348** | *e*PKPdf | **PKPdf** | **11 58 41.9** | **+0.1** |
| | baz=19,slow=1.5 | | | | | | | |
| PLN | | | | *e*PKPbc | **PKPbc** | **11 58 44.9** | **+0.3** |
| | baz=16,slow=2.6 | | | | | | | |
| **TANN** | **Tannenbergstha** | **146.78** | **348** | *e*PKPdf | **PKPdf** | **11 58 41.7** | **-0.2** |
| | baz=19,slow=1.5 | | | | | | | |
| TANN | | | | *e*PKPbc | **PKPbc** | **11 58 45.0** | **+0.3** |
| | baz=16,slow=2.6 | | | | | | | |
| TANN | | | | *e*PKPab | **PKiKP** | **11 58 47.0** | **+0.4** |
| | baz=15,slow=4.4 | | | | | | | |
| **VRAC** | **Vranov** | **146.79** | **342** | *e*PKP | **PKPbc** | **11 58 44.9** | **+0.3** |
| VRAC | | | | *e* | | 11 58 48.1 | | |
| **VRAC** | **Vranov** | **146.79** | **342** | ⇑P | **PKPbc** | **11 58 45.3** | **+0.7** |
| **VRAC** | **Vranov** | **146.79** | **342** | ⇑PKP2 | **PKPbc** | **11 58 45.3** | **+0.7** |
| **VYHS** | **Vyhne** | **146.80** | **339** | *e*PKP2 | **PKPbc** | **11 58 45.1** | **+0.4** |
| **VYHS** | **Vyhne** | **146.80** | **339** | *e*PKP | **PKPbc** | **11 58 45.1** | **+0.4** |
| **UBBA** | **Unterbreizbach** | **146.84** | **351** | *e*PKPdf | **PKPdf** | **11 58 41.8** | **+0.1** |
| | baz=19,slow=1.5 | | | | | | | |
| UBBA | | | | *e*PKPbc | **PKPbc** | **11 58 44.8** | **+0.2** |
| | baz=16,slow=2.6 | | | | | | | |
| UBBA | | | | *e*PKPab | **PKPab** | **11 58 47.4** | **-0.2** |
| | baz=15,slow=4.4 | | | | | | | |
| **JAVC** | **Velka Javorina** | **146.86** | **341** | *e*PKP | **PKPdf** | **11 58 43.1** | **+1.1** |
| JAVC | | | | *e* | | 11 58 46.1 | | |
| **WOL** | **Wolverton** | **146.91** | **4** | *e*P | **PKPbc** | **11 58 44.1** | **-0.7** |
| **TNR** | **Turnu Rosu** | **146.91** | **331** | ⇑P | **PKPbc** | **11 58 45.5** | **+0.4** |
| **TNR** | **Turnu Rosu** | **146.91** | **331** | ⇑PKP2 | **PKPbc** | **11 58 45.5** | **+0.4** |
| **PSZ** | **Piszkesteto** | **146.92** | **338** | ⇑P | **PKPbc** | **11 58 45.7** | **+0.6** |
| **PSZ** | **Piszkesteto** | **146.92** | **338** | ⇑PKP2 | **PKPbc** | **11 58 45.7** | **+0.6** |
| **ARR** | **Arges** | **146.95** | **330** | ⇑P | **PKPbc** | **11 58 46.2** | **+0.9** |
| **KRUC** | **Moravsky** | **147.07** | **342** | *e*PKP | **PKPdf** | **11 58 42.3** | **0.0** |
| KRUC | | | | *e* | | 11 58 45.5 | | |
| KRUC | | | | *e* | | 11 58 48.9 | | |
| **NEF** | **NEVSHA** | **147.07** | **325** | P | **PKPbc** | **11 58 45.0** | **-0.6** |
| **ELSH** | **Elham, Standar** | **147.16** | **1** | *e*P | **PKPbc** | **11 58 45.2** | **-0.2** |
| **SMOL** | **Smolenice** | **147.24** | **341** | *e*PKP2 | **PKiKP** | **11 58 46.9** | **-0.7** |
| **MANZ** | **Manzenberg** | **147.26** | **348** | *e*PKPdf | **PKPdf** | **11 58 42.6** | **0.0** |
| | baz=19,slow=1.5 | | | | | | | |
| MANZ | | | | *e*PKPbc | **PKPbc** | **11 58 46.3** | **+0.4** |
| | baz=16,slow=2.6 | | | | | | | |
| **BSZH** | **Besenyszg** | **147.30** | **337** | ⇑P | **PKiKP** | **11 58 47.0** | **-0.7** |
| **ZVC** | **Zvikov** | **147.31** | **345** | ⇑*e*PKP | **PKPbc** | **11 58 46.6** | **+0.6** |
| **SBD** | **Saint Breward** | **147.32** | **8** | *e*P | **PKPbc** | **11 58 45.2** | **-0.8** |
| **HUMR** | **Humele** | **147.39** | **329** | ⇑P | **PKPbc** | **11 58 45.3** | **-1.0** |
| **ROTZ** | **Rotzenmuhle** | **147.45** | **347** | *e*PKPbc | **PKPbc** | **11 58 46.7** | **+0.4** |
| | baz=16,slow=2.6 | | | | | | | |
| **CSS** | **Mathiatis** | **147.46** | **307** | | **PKPdf** | **11 58 42.2** | **-1.2** |
| CSS | | | | PKPbc | **PKPbc** | **11 58 46.5** | **-0.4** |
| CSS | | | | PKPab | **PKPab** | **11 58 50.8** | **-0.1** |
| **AHRW** | **Bad Neuenahr-A** | **147.50** | **354** | *e*PKPdf | **PKPdf** | **11 58 43.3** | **+0.4** |
| | baz=19,slow=1.5 | | | | | | | |
| AHRW | | | | *e*PKPbc | **PKPbc** | **11 58 46.9** | **+0.5** |
| | baz=16,slow=2.6 | | | | | | | |
| AHRW | | | | *e*PKPab | **PKPab** | **11 58 50.2** | **-0.2** |
| | baz=15,slow=4.4 | | | | | | | |
| **MEM** | **Membach** | **147.53** | **355** | *d*PKPdf | **PKPdf** | **11 58 43.5** | **+0.5** |
| MEM | | | | *d*PKPbc | **PKPbc** | **11 58 46.2** | **-0.3** |
| **BTNL** | **Ternell** | **147.54** | **355** | *d*PKPdf | **PKPdf** | **11 58 43.4** | **+0.4** |
| BTNL | | | | *d*PKPbc | **PKPbc** | **11 58 46.5** | **-0.1** |
| **DYA** | **Yadsworthy** | **147.54** | **7** | *e*P | **PKPbc** | **11 58 45.5** | **-1.0** |
| **SRO** | **Srobarova** | **147.57** | **339** | *e*PKP2 | **PKiKP** | **11 58 47.7** | **-0.5** |
| **SRO** | **Srobarova** | **147.57** | **339** | *e*PKP | **PKiKP** | **11 58 47.7** | **-0.5** |
| **BSTI** | **Sart Tilman** | **147.59** | **356** | *d*PKPbc | **PKPbc** | **11 58 46.8** | **+0.1** |
| **SIRR** | **Siria** | **147.59** | **334** | ⇓P | **PKPbc** | **11 58 47.1** | **+0.2** |
| **ZST** | **Bratislava** | **147.63** | **341** | *e*PKP2 | **PKPbc** | **11 58 47.6** | **+0.8** |
| **ZST** | **Bratislava** | **147.63** | **341** | *e*PKP | **PKPbc** | **11 58 47.6** | **+0.8** |
| **TNS** | **Taunus Mts** | **147.65** | **352** | *e*PKPbc | **PKPbc** | **11 58 47.3** | **+0.4** |
| | baz=16,slow=2.6 | | | | | | | |
| TNS | | | | *e*PKPab | **PKPab** | **11 58 50.8** | **-0.4** |
| | baz=15,slow=4.4 | | | | | | | |
| **GRF** | **Grafenberg Arr** | **147.72** | **349** | *e*PKPdf | **PKPdf** | **11 58 43.0** | **-0.4** |
| | baz=19,slow=1.5 | | | | | | | |
| GRF | | | | *e*PKPbc | **PKPbc** | **11 58 47.4** | **+0.3** |
| | baz=16,slow=2.6 | | | | | | | |
| GRF | | | | *e*PKPab | **PKPab** | **11 58 51.5** | **+0.1** |
| | baz=15,slow=4.4 | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.75** | **345** | | **PKPdf** | **11 58 43.1** | **-0.4** |
| KHC | | | | PKPbc | **PKPbc** | **11 58 47.6** | **+0.4** |
| KHC | | | | PKPab | **PKPab** | **11 58 51.7** | **+0.1** |
| **KHC** | **Kasperske Hory** | **147.75** | **345** | *e*PKPDF | **PKPdf** | **11 58 43.0** | **-0.5** |
| KHC | | | | ⇑*e*PKP | **PKPbc** | **11 58 47.6** | **+0.4** |
| KHC | | | | *e*PKPAB | **PKPab** | **11 58 52.7** | **+1.1** |
| **KHC** | **Kasperske Hory** | **147.75** | **345** | *c* iPKIKP | **PKPdf** | **11 58 43.8** | **+0.3** |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,122nm,1.0s | | | | | | | |
| **BCLA** | **Clavier** | **147.77** | **356** | *d*PKPbc | **PKPbc** | **11 58 47.3** | **+0.1** |
| BCLA | | | | *d*PKP | **PKPab** | **11 58 51.1** | **-0.4** |
| **SZH** | **Strazhitsa** | **147.77** | **326** | P | **PKPbc** | **11 58 47.0** | **-0.4** |
| **BHOU** | **Houvegnez** | **147.78** | **355** | *d*PKPbc | **PKPbc** | **11 58 47.5** | **+0.3** |
| BHOU | | | | *d*PKP | **PKPab** | **11 58 51.3** | **-0.3** |
| **GZR** | **Gura Zlata** | **147.79** | **332** | ⇑P | **PKPbc** | **11 58 47.5** | **0.0** |
| **GZR** | **Gura Zlata** | **147.79** | **332** | ⇑PKHKP | PKPpre | 11 58 47.5 | | |
| **SURR** | **Surduc** | **147.80** | **333** | ⇑P | **PKPbc** | **11 58 47.7** | **+0.3** |
| **BGES** | **Gesves** | **147.82** | **356** | *d*PKPbc | **PKPbc** | **11 58 46.7** | **-0.6** |
| BGES | | | | *d*PKP | **PKPab** | **11 58 51.5** | **-0.2** |
| **CKRC** | **Cesky Krumlov** | **147.85** | **344** | ⇑*e*PKP | **PKPbc** | **11 58 47.9** | **+0.5** |
| **CKRC** | **Cesky Krumlov** | **147.85** | **344** | *e*PKP2 | **PKPbc** | **11 58 47.9** | **+0.5** |
| **WET** | **Wettzell** | **147.90** | **346** | *e*PKPdf | **PKPdf** | **11 58 43.3** | **-0.4** |
| | baz=19,slow=1.5 | | | | | | | |
| WET | | | | *e*PKPbc | **PKPbc** | **11 58 47.6** | **0.0** |
| | baz=16,slow=2.6 | | | | | | | |
| WET | | | | *e*PKPab | **PKPab** | **11 58 52.4** | **+0.2** |
| | baz=15,slow=4.4 | | | | | | | |
| **BMRD** | **Maredsous** | **147.92** | **356** | *d*PKPbc | **PKPbc** | **11 58 47.1** | **-0.3** |
| **GEC2** | **GERESS Array S** | **147.98** | **345** | *e*PKPbc | **PKPbc** | **11 58 48.0** | **+0.1** |
| | baz=16,slow=2.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.98** | **345** | | **PKPdf** | **11 58 43.3** | **-0.6** |
| GERES | | | | | **PKPbc** | **11 58 48.0** | **+0.1** |
| **GERES** | **GERESS Array B** | **147.98** | **345** | PKPbc | **PKPbc** | **11 58 47.9** | **0.0** |
| | comp=Z,24nm,0.7s,baz=155,slow=5.4,SNR=57 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.98** | **345** | PKIKP | **PKPdf** | **11 58 43.3** | **-0.6** |
| **RCHB** | **Rochefort** | **148.04** | **356** | *d*PKPbc | **PKPbc** | **11 58 47.6** | **-0.2** |
| **ELND** | **Elena** | **148.05** | **326** | ⇓P | **PKPbc** | **11 58 48.5** | **+0.4** |
| **BZS** | **Buzias** | **148.12** | **333** | ⇓P | **PKPbc** | **11 58 48.4** | **+0.2** |
| **BZS** | **Buzias** | **148.12** | **333** | ⇓PKHKP | PKPpre | 11 58 48.4 | | |
| **DOU** | **Dourbes** | **148.13** | **357** | *d*PKPbc | **PKPbc** | **11 58 48.3** | **+0.2** |
| **SRE** | **Strehaia** | **148.15** | **330** | ⇑P | **PKiKP** | **11 58 49.0** | **-0.5** |
| **SRE** | **Strehaia** | **148.15** | **330** | ⇑PKP2 | **PKiKP** | **11 58 49.0** | **-0.5** |
| **CONA** | **Conrad Observa** | **148.24** | **342** | *i* PKP | **PKPbc** | **11 58 49.0** | **+0.5** |
| | comp=Z,61nm,1.1s,SNR=31 | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.32** | **341** | *i* PKP | **PKPbc** | **11 58 49.0** | **+0.4** |
| | comp=Z,70nm,1.2s,SNR=28 | | | | | | | |
| **HERR** | **Herculane** | **148.35** | **332** | ⇑P | **PKPbc** | **11 58 49.0** | **+0.2** |
| **BAND** | **Balkesir-Ban** | **148.42** | **320** | ⇑P | **PKPbc** | **11 58 47.7** | **-1.4** |
| **WLF** | **Walferdange** | **148.45** | **355** | *d*PKPbc | **PKiKP** | **11 58 49.5** | **-0.4** |
| **WLF** | **Walferdange** | **148.45** | **355** | *e*PKPbc | **PKiKP** | **11 58 49.6** | **-0.4** |
| | baz=16,slow=2.6 | | | | | | | |
| **MDVR** | **Moldovita** | **148.74** | **332** | ⇑P | **PKPbc** | **11 58 49.5** | **-0.3** |
| **MOA** | **Molln** | **148.76** | **344** | *i* PKP | **PKPbc** | **11 58 49.7** | **0.0** |
| | comp=Z,34nm,1.3s,SNR=10 | | | | | | | |
| **VALD** | **Valchedram** | **148.77** | **329** | P | **PKPbc** | **11 58 49.0** | **-0.8** |
| **MPEP** | **Malo Peshtene** | **148.86** | **328** | P | **PKPbc** | **11 58 49.0** | **-1.1** |
| **JLP** | **Les Platons** | **148.90** | **5** | *e*P | **PKPbc** | **11 58 50.0** | **0.0** |
| **ARSA** | **Arzberg** | **148.95** | **342** | *i* PKP | **PKPbc** | **11 58 50.0** | **-0.2** |
| | comp=Z,25nm,1.2s,SNR=9.0 | | | | | | | |
| **JSA** | **Saint Aubin** | **148.95** | **5** | *e*P | **PKPbc** | **11 58 49.7** | **-0.4** |
| **STU** | **Stuttgart** | **148.96** | **351** | *e*PKPdf | **PKPdf** | **11 58 45.3** | **-0.1** |
| | baz=19,slow=1.5 | | | | | | | |
| STU | | | | *e*PKPbc | **PKPbc** | **11 58 50.5** | **+0.3** |
| | baz=16,slow=2.6 | | | | | | | |
| STU | | | | *e*PKPab | **PKPab** | **11 58 56.4** | **-0.1** |
| | baz=15,slow=4.4 | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.07** | **344** | *i* PKP | **PKPbc** | **11 58 50.5** | **0.0** |
| | comp=Z,33nm,1.0s,SNR=7.7 | | | | | | | |
| **FUR** | **Furstenfeldbru** | **149.17** | **348** | *e*PKPdf | **PKPdf** | **11 58 45.8** | **0.0** |
| | baz=19,slow=1.5 | | | | | | | |
| FUR | | | | *e*PKPbc | **PKPbc** | **11 58 51.1** | **+0.4** |
| | baz=16,slow=2.6 | | | | | | | |
| FUR | | | | *e*PKPab | **PKPab** | **11 58 57.4** | **-0.1** |
| | baz=15,slow=4.4 | | | | | | | |
| **RJOB** | **Jochberg** | **149.24** | **345** | *e*PKPdf | **PKPdf** | **11 58 45.6** | **-0.3** |
| | baz=19,slow=1.5 | | | | | | | |
| RJOB | | | | *e*PKPbc | **PKPbc** | **11 58 50.7** | **-0.3** |
| | baz=16,slow=2.6 | | | | | | | |
| RJOB | | | | *e*PKPab | **PKPab** | **11 58 58.1** | **+0.3** |
| | baz=15,slow=4.4 | | | | | | | |
| **FRGS** | **Fruska Gora** | **149.25** | **335** | ⇓*i* P | **PKPbc** | **11 58 50.9** | **-0.1** |
| **BFO** | **Black Forest** | **149.52** | **351** | PKPdf | **PKPdf** | **11 58 45.7** | **-0.6** |
| BFO | | | | | **PKPbc** | **11 58 51.5** | **0.0** |
| BFO | | | | PKPab | **PKPab** | **11 58 58.6** | **-0.2** |
| **BFO** | **Black Forest** | **149.52** | **351** | PKIKP | **PKPdf** | **11 58 45.7** | **-0.6** |
| BFO | | | | | | 11 58 51.5 | | |
| BFO | | | | | | 11 58 58.6 | | |
| **BFO** | **Black Forest** | **149.52** | **351** | *e*PKPbc | **PKPbc** | **11 58 51.6** | **0.0** |
| | baz=16,slow=2.6 | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.56** | **345** | *i* PKP | **PKPbc** | **11 58 51.3** | **-0.5** |
| | comp=Z,33nm,0.8s | | | | | | | |
| **SOKA** | **Soboth** | **149.61** | **342** | *i* PKP | **PKPbc** | **11 58 51.4** | **-0.5** |
| | comp=Z,33nm,0.9s,SNR=20 | | | | | | | |
| **PERS** | **Pernice** | **149.63** | **342** | *e*PKPbc | **PKPbc** | **11 58 51.2** | **-0.7** |
| **BOVS** | **Bovan** | **149.63** | **331** | ⇑P | **PKPbc** | **11 58 51.6** | **-0.3** |
| **VTS** | **Vitosha** | **149.65** | **328** | P | **PKPbc** | **11 58 51.0** | **-1.2** |
| **KBA** | **Koelnbreinsper** | **149.71** | **344** | *i* PKP | **PKPbc** | **11 58 51.4** | **-0.8** |
| | comp=Z,31nm,0.6s,SNR=20 | | | | | | | |
| **UBR** | **Ueberruh** | **149.86** | **349** | *e*PKPbc | **PKPbc** | **11 58 52.4** | **0.0** |
| | baz=16,slow=2.6 | | | | | | | |
| **TEKS** | **Tekeris** | **149.86** | **334** | ⇓*i* P | **PKPbc** | **11 58 52.1** | **-0.4** |
| **WATA** | **Walderalm** | **149.89** | **347** | *i* PKP | **PKPbc** | **11 58 52.4** | **-0.2** |
| | comp=Z,35nm,0.6s,SNR=13 | | | | | | | |
| **OBKA** | **Obir** | **149.91** | **342** | *i* PKP | **PKPbc** | **11 58 52.3** | **-0.3** |
| | comp=Z,17nm,0.9s,SNR=7.4 | | | | | | | |
| **OBKA** | **Obir** | **149.91** | **342** | ⇓*i* P | **PKPbc** | **11 58 51.4** | **-1.2** |
| **RETA** | **Reutte** | **149.92** | **348** | *i* PKP | **PKPbc** | **11 58 52.5** | **-0.1** |
| | comp=Z,20nm,0.7s,SNR=12 | | | | | | | |
| **WTTA** | **Wattenberg** | **149.95** | **347** | *i* PKP | **PKPbc** | **11 58 52.7** | **-0.1** |
| | comp=Z,76nm,0.6s,SNR=22 | | | | | | | |
| **MOTA** | **Moosalm** | **149.98** | **347** | *i* PKP | **PKPbc** | **11 58 52.4** | **-0.4** |
| | comp=Z,48nm,0.9s | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.05** | **344** | *i* PKP | **PKPbc** | **11 58 52.0** | **-0.9** |
| | comp=Z,33nm,0.6s,SNR=16 | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.08** | **347** | *i* PKP | **PKPbc** | **11 58 53.1** | **+0.1** |
| | comp=Z,53nm,0.7s,SNR=16 | | | | | | | |
| **MMB** | **Musomishta** | **150.15** | **326** | P | **PKPbc** | **11 58 53.0** | **-0.3** |
| **GCIS** | **Gornji Cirnik** | **150.16** | **340** | *i* PKPbc | **PKPbc** | **11 58 53.0** | **0.0** |
| GCIS | | | | *e*PKPab | **PKPab** | **11 59 01.4** | **-0.2** |
| **ABTA** | **Abfaltersbach** | **150.23** | **345** | *i* PKP | **PKPbc** | **11 58 52.7** | **-0.6** |
| | comp=Z,69nm,0.7s | | | | | | | |
| **KKB** | **Krupnik** | **150.27** | **327** | P | **PKPbc** | **11 58 53.0** | **-0.5** |
| **DAVA** | **Damuels** | **150.28** | **349** | *i* PKP | **PKiKP** | **11 58 53.9** | **-0.1** |
| | comp=Z,68nm,1.0s,SNR=16 | | | | | | | |
| **FETA** | **Feichten** | **150.37** | **348** | *i* PKP | **PKPbc** | **11 58 54.1** | **+0.3** |
| | comp=Z,45nm,0.8s | | | | | | | |
| **CADS** | **Cadrg** | **150.39** | **343** | *e*PKPbc | **PKPbc** | **11 58 52.6** | **-1.1** |
| **BBLS** | **Lazi&#263i** | **150.47** | **334** | ⇓*i* P | **PKPbc** | **11 58 53.5** | **-0.5** |
| **A051A** | **Mrakovica** | **150.48** | **338** | ⇓*i* P | **PKPbc** | **11 58 53.6** | **-0.3** |
| **HAPS** | **Han Pijesak,Bl** | **150.48** | **334** | ⇓*i* P | **PKPbc** | **11 58 54.0** | **0.0** |
| **BOJS** | **Bojanci** | **150.60** | **341** | ⇓*i* P | **PKPbc** | **11 58 53.8** | **-0.3** |
| **BLY** | **Banja Luka** | **150.60** | **337** | ⇓*i* P | **PKPbc** | **11 58 54.2** | **+0.1** |
| **STAL** | **STALIGIAL** | **150.63** | **345** | | **PKPdf** | **11 58 47.0** | **-1.1** |
| STAL | | | | PKPbc | **PKPbc** | **11 58 53.7** | **-0.5** |
| **CEY** | **Cerknica** | **150.64** | **342** | ⇓*i* P | **PKPbc** | **11 58 53.8** | **-0.5** |
| **SABO** | **M.te Sabotino** | **150.66** | **343** | PKPdf | **PKPdf** | **11 58 47.5** | **-0.7** |
| SABO | | | | | **PKPbc** | **11 58 53.9** | **-0.4** |
| SABO | | | | PKPab | **PKPab** | **11 59 02.7** | **-1.0** |
| **RUDO** | **Rudo** | **150.69** | **333** | *e*P | **PKPbc** | **11 58 53.7** | **-0.7** |
| **SJES** | **Sjenica** | **150.71** | **332** | ⇓*i* P | **PKPbc** | **11 58 54.6** | **0.0** |
| **FUORN** | **Ofenpass-Fuorn** | **150.85** | **348** | | **PKPdf** | **11 58 48.2** | **-0.5** |
| FUORN | | | | PKPbc | **PKiKP** | **11 58 55.3** | **-0.1** |
| FUORN | | | | PKPab | **PKPab** | **11 59 05.0** | **+0.2** |
| **SKDS** | **Skadanscina** | **150.94** | **342** | ⇓*i* P | **PKPbc** | **11 58 53.8** | **-1.1** |
| **A050A** | **Klekovaca** | **151.07** | **338** | ⇓*i* P | **PKPbc** | **11 58 54.7** | **-0.6** |
| **CTI** | **Castel Tesino** | **151.09** | **346** | | **PKPdf** | **11 58 47.3** | **-1.6** |
| CTI | | | | PKPbc | **PKPbc** | **11 58 54.8** | **-0.5** |
| CTI | | | | PKPab | **PKPab** | **11 59 04.7** | **-0.9** |
| **CTI** | **Castel Tesino** | **151.09** | **346** | PKIKP | **PKPdf** | **11 58 47.3** | **-1.6** |
| CTI | | | | | | 11 58 54.8 | | |
| CTI | | | | | | 11 59 04.7 | | |
| **SENIN** | **Lac Senin/Sane** | **151.59** | **352** | PKPdf | **PKPdf** | **11 58 47.8** | **-2.0** |
| SENIN | | | | | **PKPbc** | **11 58 56.8** | **+0.2** |
| SENIN | | | | PKPab | **PKPab** | **11 59 07.4** | **-0.5** |
| **BRY** | **Bratogost** | **151.62** | **334** | ⇓*i* P | **PKPbc** | **11 58 55.9** | **-0.8** |
| **PDG** | **Podgorica** | **151.69** | **332** | ⇓*i* P | **PKPbc** | **11 58 56.0** | **-0.7** |
| **PDG** | **Podgorica** | **151.69** | **332** | ⇑P | **PKPbc** | **11 58 56.5** | **-0.1** |
| **TEOL** | **Teolo** | **151.74** | **345** | | **PKPdf** | **11 58 48.7** | **-1.1** |
| TEOL | | | | PKPbc | **PKPbc** | **11 58 56.6** | **-0.1** |
| TEOL | | | | PKPab | **PKPab** | **11 59 08.0** | **-0.2** |
| **DRME** | **Dracevica, Mon** | **151.92** | **332** | ⇓*i* P | **PKPbc** | **11 58 56.1** | **-1.1** |
| **OHR** | **Ohrid** | **151.99** | **328** | *i* P | **PKPbc** | **11 58 57.6** | **+0.1** |
| **STON** | **Ston** | **151.99** | **335** | ⇓*i* P | **PKPbc** | **11 58 55.9** | **-1.4** |
| **ZCCA** | **Zocca** | **152.85** | **346** | | **PKPdf** | **11 58 47.8** | **-0.7** |
| ZCCA | | | | | **PKPbc** | **11 58 58.5** | **-0.7** |
| ZCCA | | | | PKPab | **PKPab** | **11 59 13.7** | **+0.7** |
| **SSB** | **Saint Sauveur** | **152.94** | **356** | | **PKPdf** | **11 58 49.6** | **-2.0** |
| SSB | | | | PKPbc | **PKPbc** | **11 58 59.0** | **-0.3** |
| SSB | | | | PKPab | **PKPab** | **11 59 12.6** | **-0.8** |
| **SSB** | **Saint Sauveur** | **152.94** | **356** | PKIKP | **PKPdf** | **11 58 49.6** | **-2.0** |
| SSB | | | | | | 11 58 59.0 | | |
| SSB | | | | | | 11 59 12.6 | | |
| **BNI** | **Bardonecchia** | **152.95** | **352** | | **PKPdf** | **11 58 51.3** | **-0.4** |
| BNI | | | | | **PKiKP** | **11 59 00.3** | **+0.6** |
| BNI | | | | PKPab | **PKPab** | **11 59 13.7** | **+0.1** |
| **BNI** | **Bardonecchia** | **152.95** | **352** | PKIKP | **PKPdf** | **11 58 51.3** | **-0.4** |
| BNI | | | | | | 11 59 00.3 | | |
| BNI | | | | | | 11 59 13.7 | | |
| **FDMO** | **Fiordimonte** | **153.50** | **341** | PKPdf | **PKPdf** | **11 58 51.0** | **-1.4** |
| FDMO | | | | | **PKPab** | **11 59 16.3** | **+0.4** |
| **NRCA** | **Norcia** | **153.67** | **341** | PKPdf | **PKPdf** | **11 58 50.6** | **-2.1** |
| NRCA | | | | | **PKPbc** | **11 58 59.8** | **-1.2** |
| NRCA | | | | | **PKPab** | **11 59 17.0** | **+0.3** |
| **PGAV** | **Gavieira, Arco** | **154.82** | **18** | *e*PKPab | **PKPab** | **11 59 21.5** | **-0.1** |
| **PBRG** | **Braganca** | **155.39** | **16** | *e*PKPab | **PKPab** | **11 59 24.0** | **0.0** |
| **POLO** | **Lamas de Olo** | **155.51** | **18** | *e*PKPdf | **PKPdf** | **11 58 55.5** | **+0.2** |
| **POLO** | **Lamas de Olo** | **155.51** | **18** | *e*PKPab | **PKPab** | **11 59 25.4** | **+0.8** |
| **PVRL** | **Vila Real** | **155.62** | **18** | *e*PKPab | **PKPab** | **11 59 25.3** | **+0.3** |
| **MVO** | **Moncorvo** | **155.91** | **17** | *e*PKPdf | **PKPdf** | **11 58 56.5** | **+0.7** |
| **MVO** | **Moncorvo** | **155.91** | **17** | *e*PKPab | **PKPab** | **11 59 26.5** | **+0.2** |
| **PVIS** | **Viseu** | **156.08** | **18** | *e*PKPab | **PKPab** | **11 59 27.0** | **0.0** |
| **MTE** | **Manteigas** | **156.48** | **18** | *e*PKPab | **PKPab** | **11 59 28.9** | **+0.1** |
| **PCAS** | **Casmilo, Conde** | **156.50** | **20** | *e*PKPdf | **PKPdf** | **11 58 57.7** | **+1.2** |
| **PCAS** | **Casmilo, Conde** | **156.50** | **20** | *e*PKPab | **PKPab** | **11 59 28.5** | **-0.3** |
| **PSBE** | **So Bento** | **156.88** | **21** | *e*PKPab | **PKPab** | **11 59 30.7** | **+0.2** |
| **PCBR** | **Castelo Branco** | **157.01** | **19** | *e*PKPdf | **PKPdf** | **11 58 57.3** | **+0.2** |
| **PCBR** | **Castelo Branco** | **157.01** | **19** | *e*PKPab | **PKPab** | **11 59 31.1** | **+0.1** |
| **PMRV** | **Marv??o** | **157.41** | **19** | *e*PKPab | **PKPab** | **11 59 32.8** | **0.0** |
| **PMTG** | **Montargil** | **157.47** | **21** | *e*PKPab | **PKPab** | **11 59 32.5** | **-0.5** |
| **PESTR** | **Estremoz** | **157.87** | **20** | *e*PKPdf | **PKPdf** | **11 58 58.4** | **+0.1** |
| **PESTR** | **Estremoz** | **157.87** | **20** | *e*PKPab | **PKPab** | **11 59 34.6** | **-0.2** |
| **EVO** | **Evora** | **158.03** | **21** | *e*PKPab | **PKPab** | **11 59 35.5** | **0.0** |
| **ESDC** | **Sonseca Array** | **158.05** | **12** | | **PKPdf** | **11 58 57.6** | **-0.9** |
| ESDC | | | | | **PKPab** | **11 59 35.4** | **-0.2** |
| **ESDC** | **Sonseca Array** | **158.05** | **12** | PKP | **PKPdf** | **11 58 58.0** | **-0.6** |
| | comp=Z,1.6nm,1.1s,baz=336,slow=1.5,SNR=7.3 | | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **11 59 35.3** | **-0.2** |
| | comp=Z,6.5nm,1.0s,baz=336,slow=4.9,SNR=21 | | | | | | | |
| ESDC | | | | PP | **PP** | **12 03 17.5** | **+0.7** |
| | comp=Z,1.7nm,1.2s,baz=11,slow=9.2,SNR=4.4 | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **158.22** | **22** | *e*PKPab | **PKPab** | **11 59 36.1** | **-0.2** |
| **PBEJ** | **Beja** | **158.53** | **21** | *e*PKPdf | **PKPdf** | **11 59 00.9** | **+1.8** |
| **PBEJ** | **Beja** | **158.53** | **21** | *e*PKPab | **PKPab** | **11 59 37.6** | **-0.1** |
| **MESJ** | **Messejana** | **158.57** | **22** | *e*PKPdf | **PKPdf** | **11 58 59.5** | **+0.4** |
| **MESJ** | **Messej

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 12nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **3.16 264** | Pg | **Pb** | **12 08 36.1** | **-1.2** |
| | 4.4nm,0.3s | | | | | | |
| ARXS | | | Lg | Lg | 12 09 15.7 | | |
| | 12nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.12 249** | *e*P | **Pg** | **12 08 56.8** | **-2.3** |
| | 3.2nm,0.5s | | | | | | |
| TNSS | | | *e*S | **Sg** | **12 09 51.1** | **-1.5** |
| | 1.6nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.12 249** | Pg | **Pg** | **12 08 57.6** | **-1.5** |
| | 3.2nm,0.5s | | | | | | |
| TNSS | | | Lg | Lg | 12 09 52.7 | | |
| | 1.7nm,0.8s | | | | | | |

*IDC* ***20*** *12:10:08.3±3.6, 18°.07S×178°.00W, h570km±41km, mb3.3/13, mbtmp4.2/14, Error ellipse: s-maj=20.9km s-min=18.7km az=45.0*
*NEIC* ***20*** *12:10:09.1±0.6, 17°.9S±0°.2×177°.95W±0°.07, h585km±10km, mb4.5/21, Error ellipse: s-maj=26.7km s-min=9.7km az=174.0*

**ISC 20 12:10:09.5±0.6, 18°.0S±0°.1×178°.02W±0°.09, h590km, n44, σ0s89/45, mb4.4/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.76 274** | | P | **P** | **12 11 33.1** | **+0.5** |
| **AFI** | **Afiamalu** | **7.27 57** | | P | **P** | **12 11 59.2** | **-2.5** |
| **NIUE** | **Niue** | **7.74 99** | | P | **P** | **12 12 04.5** | **-1.4** |
| **LIFNC** | **LIFOU** | **14.18 257** | | P | **P** | **12 13 07.8** | **-2.4** |
| **DZM** | **Mont Dzumac** | **15.14 252** | | P | **P** | **12 13 19.7** | **+0.3** |
| | 3.9nm,0.6s,baz=81,slow=19,SNR=6.0 | | | | | | |
| **URZ** | **Urewera** | **20.59 191** | | P | **P** | **12 14 07.3** | **-1.5** |
| | 6.3nm,0.5s,baz=16,slow=7.4,SNR=6.0 | | | | | | |
| | 6.3nm,0.5s | | | | | | |
| **EIDS** | **Eidsvold** | **29.58 250** | | P | **P** | **12 15 28.3** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 12 15 36.8 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **30.20 240** | | P | **P** | **12 15 34.4** | **+0.8** |
| ARMA | | | | IAmb | IAmb | 12 16 11.6 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **CTA** | **Charters Tower** | **33.80 261** | | P | **P** | **12 16 04.3** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=91,slow=11,SNR=6.1 | | | | | | |
| **CTAO** | **Charters Tower** | **33.80 261** | | P | **P** | **12 16 03.7** | **-0.3** |
| CTAO | | | | IAmb | IAmb | 12 16 31.4 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **33.92 233** | | P | **P** | **12 16 05.6** | **+0.6** |
| CAN | | | | IAmb | IAmb | 12 16 16.7 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **PMG** | **Port Moresby** | **34.85 280** | | P | **P** | **12 16 12.8** | **-0.1** |
| **PMG** | **Port Moresby** | **34.85 280** | | P | **P** | **12 16 14.0** | **+1.1** |
| | comp=Z,22nm,0.8s,baz=128,slow=4.8,SNR=3.8 | | | | | | |
| | comp=Z,22nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.38 231** | | P | **P** | **12 16 34.2** | **+0.8** |
| **COEN** | **Coen** | **37.48 270** | | P | **P** | **12 16 34.7** | **+0.2** |
| COEN | | | | IAmb | IAmb | 12 16 35.9 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.90 241** | | P | **P** | **12 16 46.6** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.90 241** | | P | **P** | **12 16 46.1** | **+0.4** |
| | comp=Z,5.2nm,0.5s,baz=80,slow=12,SNR=12 | | | | | | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.67 241** | | P | **P** | **12 17 23.6** | **+0.2** |
| BBOO | | | | IAmb | IAmb | 12 17 24.0 | |
| | comp=Z,9.8nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.79 260** | | P | **P** | **12 17 31.9** | **-0.2** |
| **WB0** | **Warramunga Arr** | **44.95 260** | | P | **P** | **12 17 33.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 12 17 33.6 | |
| | comp=Z,7.4nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.97 260** | | P | **P** | **12 17 33.1** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 12 17 33.8 | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.98 260** | | P | **P** | **12 17 32.9** | **-0.7** |
| | comp=Z,4.2nm,0.5s,baz=95,slow=7.2,SNR=77 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 19 02.5** | **+0.6** |
| | comp=Z,0.4nm,0.3s,baz=94,slow=3.7,SNR=2.5 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.12 254** | | P | **P** | **12 17 34.8** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 12 17 35.8 | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.12 254** | | P | **P** | **12 17 34.6** | **-0.1** |
| | comp=Z,16nm,0.6s,baz=88,slow=8.5,SNR=314 | | | | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.17 268** | | P | **P** | **12 18 04.3** | **-0.8** |
| **FORT** | **Forrest** | **50.29 245** | | P | **P** | **12 18 12.6** | **-0.4** |
| FORT | | | | IAmb | IAmb | 12 18 12.9 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **50.85 264** | | P | **P** | **12 18 16.9** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 12 18 45.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.38 261** | | P | **P** | **12 18 35.3** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **58.24 255** | | P | **P** | **12 19 08.2** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **68.23 323** | | P | **P** | **12 20 12.1** | **-0.3** |
| | comp=Z,1.7nm,0.7s,baz=139,slow=7.6,SNR=4.3 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **70.02 268** | | P | **P** | **12 20 23.1** | **-0.4** |
| **QSPA** | **South Pole Qui** | **72.02 180** | | P | **P** | **12 20 35.4** | **+1.0** |
| **QSPA** | **South Pole Qui** | **72.02 180** | | P | **P** | **12 20 35.0** | **+0.6** |
| | comp=Z,1.0nm,0.7s,baz=79,slow=11,SNR=9.7 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.90 345** | | P | **P** | **12 20 44.8** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **79.26 44** | | P | **P** | **12 21 16.3** | **+1.4** |
| | comp=Z,0.4nm,0.7s,baz=233,slow=8.9,SNR=4.1 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **83.99 347** | | P | **P** | **12 21 38.3** | **+0.2** |
| | comp=Z,1.0nm,0.4s,baz=171,slow=19,SNR=4.7 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.75 57** | | P | **P** | **12 21 49.4** | **+1.8** |
| | comp=Z,0.3nm,0.7s,baz=230,slow=7.0,SNR=5.0 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.93 13** | | P | **P** | **12 21 46.7** | **-0.8** |
| | comp=Z,0.3nm,0.4s,baz=222,slow=5.3,SNR=8.6 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.19 43** | | P | **P** | **12 21 54.7** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=221,slow=3.6,SNR=1.4 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.28 290** | | P | **P** | **12 22 05.1** | **+0.9** |
| | comp=Z,0.4nm,0.3s,baz=108,slow=2.9,SNR=4.4 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.18 321** | | PKP | **PKPdf** | **12 27 47.9** | **-0.3** |
| | comp=Z,0.4nm,0.4s,baz=62,slow=3.4,SNR=2.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.14 315** | | PKPbc | **PKPbc** | **12 28 42.1** | **+0.1** |
| | comp=Z,1.2nm,0.5s,baz=77,slow=2.1,SNR=8.4 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.53 303** | | PKPbc | **PKPbc** | **12 28 46.8** | **+0.7** |
| | comp=Z,1.9nm,0.5s,baz=92,slow=4.8,SNR=5.7 | | | | | | |
| **GERES** | **GERESS Array B** | **147.83 345** | | PKPbc | **PKPbc** | **12 28 49.5** | **+0.5** |
| | comp=Z,1.1nm,0.4s,baz=21,slow=8.4,SNR=4.4 | | | | | | |

*IDC* ***20*** *12:12:45.9±2.8, 13°.79S×167°.09E, h165km±25km, mb3.6/8, mbtmp4.0/9, Error ellipse: s-maj=27.8km s-min=19.7km az=117.0*
*NEIC* ***20*** *12:12:46.6±2.2, 14°.0S±0°.2×167°.21E±0°.07, h171km±9km, mb4.5/14, Error ellipse: s-maj=22.8km s-min=7.7km az=197.0*

**ISC 20 12:12:44.1±0.7, 13°.78S±0°.08×167°.1E±0°.1, h150km, n31, σ1s13/33, mb4.2/14, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LIFNC** | **LIFOU** | **6.96 179** | | Pn | **Pn** | **12 14 23.3** | **-0.3** |
| **KOUNC** | **Koumac, New Ca** | **7.26 202** | | Pn | **Pn** | **12 14 26.0** | **-1.7** |
| **DZM** | **Mont Dzumac** | **8.27 184** | | Pn | **Pn** | **12 14 40.2** | **-1.0** |
| **DZM** | **Mont Dzumac** | **8.27 184** | | P | **Pn** | **12 14 43.7** | **+2.5** |
| | 8.8nm,0.8s,baz=324,slow=19,SNR=7.1 | | | | | | |
| DZM | | | | S | **Sn** | **12 16 15.4** | **+2.0** |
| | 9.0nm,0.9s,baz=350,slow=12,SNR=1.7 | | | | | | |
| **EIDS** | **Eidsvold** | **19.00 230** | | P | **P** | **12 16 55.7** | **+1.4** |
| EIDS | | | | IAmb | IAmb | 12 17 28.5 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **RAO** | **Raoul Island** | **20.71 140** | | P | **P** | **12 17 11.5** | **-1.1** |
| **CTA** | **Charters Tower** | **20.93 250** | | P | **P** | **12 17 15.2** | **+0.1** |
| | comp=Z,0.3nm,0.9s,baz=78,slow=13,SNR=6.3 | | | | | | |
| **CTAO** | **Charters Tower** | **20.93 250** | | P | **P** | **12 17 15.7** | **+0.6** |
| CTAO | | | | IAmb | IAmb | 12 17 51.4 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **21.88 218** | | P | **P** | **12 17 26.5** | **+1.3** |
| ARMA | | | | IAmb | IAmb | 12 17 33.7 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **COEN** | **Coen** | **23.26 267** | | P | **P** | **12 17 39.7** | **+1.3** |
| **STKA** | **Stephens Creek** | **29.52 228** | | P | **P** | **12 18 34.9** | **+0.5** |
| **STKA** | **Stephens Creek** | **29.52 228** | | P | **P** | **12 18 35.5** | **+1.1** |
| | comp=Z,4.4nm,0.5s,baz=57,slow=12,SNR=12 | | | | | | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.87 255** | | P | **P** | **12 18 54.9** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 12 18 56.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.94 254** | | P | **P** | **12 18 54.8** | **-1.1** |
| | comp=Z,0.5nm,0.4s,baz=84,slow=8.6,SNR=3.2 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **32.90 248** | | P | **P** | **12 19 03.0** | **-1.3** |
| **ASAR** | **Alice Springs** | **32.90 248** | | P | **P** | **12 19 03.3** | **-1.0** |
| | comp=Z,1.1nm,0.5s,baz=76,slow=9.3,SNR=6.9 | | | | | | |
| ASAR | | | | ScP | **ScP** | **12 25 14.2** | **-1.4** |
| | comp=Z,0.4nm,0.7s,baz=93,slow=4.5,SNR=4.4 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **34.06 231** | | P | **P** | **12 19 14.2** | **0.0** |
| BBOO | | | | IAmb | IAmb | 12 19 26.1 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **KNRA** | **Kununurra** | **37.13 262** | | P | **P** | **12 19 40.3** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 12 20 20.1 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **39.68 238** | | P | **P** | **12 20 01.6** | **-0.1** |
| FORT | | | | IAmb | IAmb | 12 20 02.3 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **49.13 238** | | P | **P** | **12 21 15.7** | **-1.1** |
| **KLR** | **Kul'dur** | **70.09 336** | | P | **P** | **12 23 41.5** | **+1.7** |
| | comp=Z,0.6nm,0.4s,baz=150,slow=20,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **76.24 180** | | P | **P** | **12 24 14.3** | **-1.7** |
| **QSPA** | **South Pole Qui** | **76.24 180** | | P | **P** | **12 24 15.4** | **-0.5** |
| | comp=Z,0.6nm,0.9s,baz=27,slow=2.3,SNR=1.4 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **77.33 353** | | P | **P** | **12 24 21.7** | **0.0** |
| | comp=Z,1.7nm,0.7s,baz=198,slow=19,SNR=1.6 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **79.71 14** | | P | **P** | **12 24 36.0** | **+1.2** |
| K15K | | | | IAmb | IAmb | 12 24 41.8 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.67 18** | | P | **P** | **12 25 04.9** | **-0.6** |
| | comp=Z,0.3nm,0.6s,baz=237,slow=5.3,SNR=6.7 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **96.43 316** | | P | **P** | **12 25 56.7** | **+0.5** |
| | comp=Z,0.6nm,0.8s,baz=103,slow=7.0,SNR=6.1 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **119.31 346** | | PKP | **PKPdf** | **12 31 14.5** | **-0.5** |
| | comp=Z,3.1nm,0.9s,baz=67,slow=2.3,SNR=6.6 | | | | | | |
| **KEST** | **Kesra** | **150.40 321** | | PKPbc | **PKPbc** | **12 32 18.5** | **+0.2** |
| | comp=Z,2.3nm,0.6s,baz=55,slow=3.9,SNR=2.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **153.04 345** | | PKPbc | **PKPbc** | **12 32 24.1** | **-0.1** |
| | comp=Z,0.2nm,0.4s,baz=14,slow=4.6,SNR=2.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.82 269** | | PKP | **PKPdf** | **12 32 31.3** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=8.4,slow=2.1,SNR=1.9 | | | | | | |

**IDC 20 12:21:21.9±2.3, 16°.66S×177°.06W, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=128.4km s-min=28.7km az=150.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **46.14 258** | | P | P | 12 29 48.3 | -0.2 |
| | 0.1nm,0.3s,baz=96,slow=7.6,SNR=6.7 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **46.38 253** | | P | P | 12 29 50.5 | +0.1 |
| | 2.7nm,0.6s,baz=89,slow=8.1,SNR=47 | | | | | | |
| | 2.7nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.24 57** | | P | P | 12 33 56.6 | +0.7 |
| | 0.3nm,0.9s,baz=236,slow=7.5,SNR=3.4 | | | | | | |
| | 0.3nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **84.39 12** | | P | P | 12 33 55.1 | -0.6 |
| | 0.3nm,0.6s,baz=211,slow=4.8,SNR=6.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*IDC* ***20*** *12:26:29.6±0.9, 17°.30N×46°.46W, h0km, mb3.7/8, mbtmp3.7/8, MS3.5/38, Error ellipse: s-maj=30.0km s-min=24.8km az=135.0*

**ISC 20 12:26:31.6±0.8, 17°.3N±0°.2×46°.5W±0°.2, h12km, n44, σ0s54/8, mb3.7/8, MS3.6/38, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SDV** | **Santo Domingo** | **24.96 254** | | LR | LR | 12 42 09.9 | |
| | comp=Z,84nm,19.7s,baz=71,slow=38 | | | | | | |
| **RCBR** | **Riachuelo** | **25.22 155** | | LR | LR | 12 40 08.4 | |
| | comp=Z,30nm,18.4s,baz=153,slow=32 | | | | | | |
| **BBTS** | **Babate** | **28.88 91** | | LR | LR | 12 40 48.5 | |
| | comp=Z,170nm,19.7s,baz=146,slow=30 | | | | | | |
| **ROSC** | **El Rosal** | **29.95 249** | | LR | LR | 12 45 49.0 | |
| | comp=Z,144nm,18.2s,baz=205,slow=39 | | | | | | |
| **TKL** | **Tuckaleechee C** | **37.80 306** | | LR | LR | 12 46 29.6 | |
| | comp=Z,74nm,22.0s,baz=124,slow=32 | | | | | | |
| **JTS** | **Las Juntas de** | **37.97 265** | | LR | LR | 12 49 13.1 | |
| | comp=Z,28nm,19.2s,baz=48,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **38.73 322** | | LR | LR | 12 47 34.2 | |
| | comp=Z,35nm,20.5s,baz=60,slow=33 | | | | | | |
| **LPAZ** | **La Paz** | **39.61 214** | | P | **P** | **12 34 04.3** | **+0.4** |
| | 1.1nm,0.6s,baz=29,slow=1.6,SNR=4.5 | | | | | | |
| LPAZ | | | | LR | LR | 12 49 38.3 | |
| | comp=Z,52nm,21.8s,baz=36,slow=35 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **ATAH** | **Atahualpa** | **39.81 235** | | LR | LR | 12 51 16.1 | |
| | comp=Z,78nm,18.9s,baz=27,slow=37 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **40.26 126** | | T | T | 13 17 07.6 | |
| | baz=308,slow=75,SNR=77 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **40.26 126** | | T | T | 13 16 58.7 | |
| | baz=308,slow=75,SNR=99 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **40.28 126** | | T | T | 13 16 60.0 | |
| | baz=308,slow=75,SNR=124 | | | | | | |
| **MDT** | **Midelt** | **40.66 60** | | LR | LR | 12 48 56.7 | |
| | comp=Z,36nm,18.1s,baz=356,slow=33 | | | | | | |
| **NNA** | **Nana** | **41.80 228** | | LR | LR | 12 51 27.6 | |
| | comp=Z,61nm,18.0s,baz=18,slow=36 | | | | | | |
| **DBIC** | **Dimbokro** | **41.95 99** | | LR | LR | 12 48 33.1 | |
| | comp=Z,89nm,20.8s,baz=312,slow=32 | | | | | | |
| **ESDC** | **Sonseca Array** | **42.99 50** | | LR | LR | 12 47 49.2 | |
| | comp=Z,60nm,21.6s,baz=268,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **44.62 194** | | LR | LR | 12 53 55.0 | |
| | comp=Z,62nm,18.6s,baz=221,slow=37 | | | | | | |
| **CMIG** | **Matias Romero** | **46.16 277** | | LR | LR | 12 53 21.5 | |
| | comp=Z,31nm,20.4s,baz=66,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.56 88** | | P | **P** | **12 34 59.5** | **-0.1** |
| | 0.5nm,0.7s,baz=280,slow=40,SNR=2.6 | | | | | | |
| TORD | | | | LR | LR | 12 52 53.1 | |
| | comp=Z,108nm,18.2s,baz=291,slow=34 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ULM** | **Lac du Bonnet** | **51.29 321** | | LR | LR | 12 54 29.2 | |
| | comp=Z,40nm,20.8s,baz=22,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.43 294** | | P | **P** | **12 35 51.3** | **-0.6** |
| | 0.2nm,0.7s,baz=88,slow=6.4,SNR=2.5 | | | | | | |
| TXAR | | | | LR | LR | 13 00 12.7 | |
| | comp=Z,18nm,18.4s,baz=31,slow=38 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **54.66 45** | | LR | LR | 12 56 15.5 | |
| | comp=Z,53nm,20.2s,baz=256,slow=33 | | | | | | |
| **ANMO** | **Albuquerque** | **55.89 301** | | LR | LR | 12 57 21.0 | |
| | comp=Z,60nm,21.8s,baz=196,slow=33 | | | | | | |
| **PDAR** | **Pinedale Array** | **58.80 310** | | LR | LR | 13 00 32.8 | |
| | comp=Z,22nm,19.8s,baz=105,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **59.56 28** | | P | **P** | **12 36 35.2** | **+0.3** |
| | 0.4nm,0.7s,baz=247,slow=6.4,SNR=1.6 | | | | | | |
| NOA | | | | LR | LR | 12 58 10.3 | |
| | comp=Z,16nm,18.3s,baz=255,slow=32 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **LPIG** | **La Paz** | **59.69 288** | | LR | LR | 13 01 16.1 | |
| | comp=Z,31nm,21.9s,baz=94,slow=35 | | | | | | |
| **PLCA** | **Paso Flores** | **61.91 201** | | P | **P** | **12 36 50.8** | **-0.3** |
| | 1.1nm,0.8s,baz=34,slow=7.3,SNR=1.9 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **ELK** | **Elko** | **62.95 307** | | LR | LR | 13 01 48.6 | |
| | comp=Z,46nm,21.3s,baz=124,slow=34 | | | | | | |
| **PFO** | **Pinyon Flats O** | **64.19 299** | | LR | LR | 13 03 06.7 | |
| | comp=Z,54nm,21.8s,baz=105,slow=34 | | | | | | |
| **NEW** | **Newport** | **64.46 316** | | LR | LR | 13 03 19.9 | |
| | comp=Z,50nm,20.3s,baz=90,slow=34 | | | | | | |
| **YKA** | **Yellowknife Ar** | **64.75 332** | | LR | LR | 13 03 27.3 | |
| | comp=Z,46nm,18.7s,baz=20,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.38 305** | | P | **P** | **12 37 15.2** | **+0.8** |
| | 0.4nm,0.7s,baz=81,slow=7.4,SNR=3.6 | | | | | | |
| NVAR | | | | LR | LR | 13 06 09.5 | |
| | comp=Z,36nm,18.7s,baz=120,slow=36 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **68.55 309** | | LR | LR | 13 05 11.0 | |
| | comp=Z,32nm,21.4s,baz=71,slow=34 | | | | | | |
| **BBB** | **Bella Bella** | **71.45 320** | | LR | LR | 13 09 07.2 | |
| | comp=Z,26nm,18.2s,baz=95,slow=36 | | | | | | |
| **BRTR** | **Keskin Array B** | **71.66 53** | | P | **P** | **12 37 53.6** | **0.0** |
| | 0.6nm,0.8s,baz=276,slow=5.2,SNR=3.0 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **DLBC** | **Dease Lake** | **72.09 327** | | LR | LR | 13 06 56.3 | |
| | comp=Z,50nm,20.1s,baz=357,slow=34 | | | | | | |
| **EIL** | **Elat** | **74.36 63** | | LR | LR | 13 12 00.0 | |
| | comp=Z,38nm,18.3s,baz=253,slow=37 | | | | | | |
| **MBAR** | **Mbarara** | **77.96 94** | | LR | LR | 13 10 47.0 | |
| | comp=Z,75nm,19.9s,baz=186,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **78.89 335** | | P | **P** | **12 38 34.1** | **-0.5** |
| | 2.1nm,0.8s,baz=74,slow=4.4,SNR=17 | | | | | | |
| | 2.1nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **81.78 119** | | LR | LR | 13 08 33.2 | |
| | comp=Z,55nm,18.6s,baz=300,slow=31 | | | | | | |
| **FURI** | **Furi** | **82.80 83** | | LR | LR | 13 15 49.3 | |
| | comp=Z,47nm,18.2s,baz=290,slow=36 | | | | | | |
| **BOSA** | **Boshof** | **82.94 123** | | LR | LR | 13 06 57.1 | |
| | comp=Z,38nm,19.3s,baz=202,slow=29 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **84.33 93** | | LR | LR | 13 14 58.8 | |
| | comp=Z,36nm,19.1s,baz=95,slow=34 | | | | | | |
| **WSAR** | **Wadi Sarin** | **96.48 63** | | LR | LR | 13 28 03.1 | |
| | comp=Z,31nm,18.1s,baz=8.5,slow=38 | | | | | | |

*DJA* ***20*** *12:39:03.0±1.1, 9°.5S±25°×11°.7E±°, h46km±19km, M2.9/4, MLv2.9/4*
*IDC* ***20*** *12:39:17.4±3.4, 9°.45S×118°.24E, h0km, mb3.1/2, mbtmp3.3/3, ML3.5/1, Error ellipse: s-maj=254.5km s-min=29.5km az=49.0*

**ISC 20 12:39:04.1±1.4, 8°.6S±0°.2×116°.91E±0°.08, h35km, n6, σ0s83/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.18 188** | | P | **Pn** | **12 39 10.2** | **-0.6** |
| **PLAI** | **Plampang** | **0.90 108** | | P | **Pn** | **12 39 19.6** | **-0.7** |
| PLAI | | | | S | **Sn** | **12 39 32.2** | **+0.1** |
| **SRBI** | **Singaraja** | **1.74 285** | | P | **Pn** | **12 39 31.6** | **-0.2** |
| SRBI | | | | S | **Sn** | **12 39 52.6** | **-0.2** |
| **WRA** | **Warramunga Arr** | **20.31 126** | | P | Pn | 12 43 37.9 | -1.6 |
| | 0.2nm,0.3s,baz=300,slow=12,SNR=15 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.15 135** | | P | **P** | **12 43 58.1** | **+1.1** |
| | 0.3nm,0.5s,baz=312,slow=9.3,SNR=7.7 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.14 334** | | P | P | 12 49 56.2 | +28 |
| | 0.3nm,0.7s,baz=140,slow=7.0,SNR=2.4 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC* ***20*** *12:43:41.0±4.1, 18°.01S×178°.49W, h587km±47km, mb3.3/12, mbtmp4.2/13, Error ellipse: s-maj=22.5km s-min=18.1km az=117.0*
*NEIC* ***20*** *12:43:41.2±1.2, 18°.1S±0°.2×178°.4W±0°.2, h595km±16km, mb4.4/13, Error ellipse: s-maj=32.9km s-min=21.8km az=184.0*

**ISC 20 12:43:40.0±0.6, 18°.1S±0°.1×178°.4W±0°.1, h579km, n34, σ1s00/36, mb4.0/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.38 276** | | P | **P** | **12 45 03.1** | **+3.3** |
| **AFI** | **Afiamalu** | **7.62 58** | | P | **P** | **12 45 36.2** | **+1.0** |
| **LIFNC** | **LIFOU** | **13.79 257** | | P | **P** | **12 46 36.3** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.76 252** | | P | **P** | **12 46 48.2** | **+1.6** |
| | 10nm,0.9s,baz=67,slow=18,SNR=2.1 | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.42 200** | | P | **P** | **12 48 58.0** | **+0.3** |
| **CTAO** | **Charters Tower** | **33.40 261** | | P | **P** | **12 49 31.7** | **-0.3** |
| CTAO | | | | IAmb | IAmb | 12 49 40.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.09 271** | | P | **P** | **12 50 02.8** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.53 241** | | P | **P** | **12 50 14.4** | **+0.4** |
| | comp=Z,3.4nm,0.9s,baz=54,slow=14,SNR=3.8 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **43.31 241** | | P | **P** | **12 50 51.3** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 12 51 02.4 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.55 260** | | P | **P** | **12 51 01.6** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 12 51 03.0 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.58 260** | | P | **P** | **12 51 02.0** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 12 51 06.9 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.59 260** | | P | **P** | **12 51 01.8** | **-0.1** |
| **WRA** | **Warramunga Arr** | **44.59 260** | | P | **P** | **12 51 01.6** | **-0.3** |
| | comp=Z,1.9nm,0.7s,baz=96,slow=7.0,SNR=22 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 52 32.1** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=95,slow=3.4,SNR=4.8 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **44.73 254** | | P | **P** | **12 51 02.9** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.73 254** | | P | **P** | **12 51 02.4** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.73 254** | | P | **P** | **12 51 03.0** | **+0.1** |
| | comp=Z,8.1nm,0.7s,baz=91,slow=8.0,SNR=93 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 52 32.2** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=103,slow=3.9,SNR=7.4 | | | | | | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **50.46 264** | | P | **P** | **12 51 45.0** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 12 52 14.4 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **60.23 184** | | P | **P** | **12 52 51.7** | **-0.8** |
| **MJAR** | **Matsushiro

**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.50** | **162** | P | Pg | 13 01 21.2 | 0.0 |
| **PLAI** | **Plampang** | **1.18** | **119** | P | Pb | 13 01 33.5 | -0.5 |
| PLAI | | | | S | Sn | 13 01 50.4 | +0.2 |
| **SRBI** | **Singaraja** | **1.51** | **277** | P | Pn | 13 01 38.6 | -0.1 |
| SRBI | | | | S | Sb | 13 01 59.2 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.56** | **265** | P | Pn | 13 01 52.3 | -0.8 |
| **WBSI** | **Waikabubak, Su** | **2.97** | **118** | P | Pn | 13 01 58.7 | 0.0 |
| **BSSI** | **Bau Bau, Buton** | **4.28** | **61** | P | Pn | 13 02 16.2 | -0.6 |
| **EDFI** | **Ende, Flores** | **4.93** | **96** | P | Pn | 13 02 25.6 | -0.2 |

*IDC **20** 13:02:07.5±2.4, 7.˝14S×130.˝30E, h0km, mb3.6/1, mbtmp3.6/3, ML3.7/2, Error ellipse: s-maj=131.3km s-min=32.8km az=69.0*

**ISC 20 13:02:07.0±0.9, 7.˚32S±0.˚07×130.˚12E±0.˚09, h10km, n16, σ1℘93/16, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.34** | **120** | P | **Sn** | **13 02 48.4** | **-1.3** |
| **FAKI** | **Fak Fak** | **4.86** | **26** | P | **Pn** | **13 03 19.1** | **-1.1** |
| **DRS** | **Darwin Rock St** | **5.14** | **171** | P | **Pb** | **13 03 35.2** | **-1.9** |
| **MTN** | **Manton Dam** | **5.58** | **170** | P | Pb | 13 03 40.5 | -4.1 |
| **KDU** | **Kakadu** | **5.82** | **157** | P | Pb | 13 03 43.8 | -4.8 |
| **SOEI** | **Soe** | **6.28** | **247** | P | **Pn** | **13 03 40.0** | **+0.1** |
| **WRA** | **Warramunga Arr** | **13.20** | **162** | Pn | **Pn** | **13 05 18.4** | **+3.7** |
| | 0.4nm,0.3s,baz=346,slow=13,SNR=15 | | | | | | |
| WRA | | | | Sn | **Sn** | **13 07 43.2** | **+1.5** |
| | 1.0nm,0.3s,baz=330,slow=23,SNR=8.0 0.5nm,0.4s | | | | | | |
| **COEN** | **Coen** | **14.42** | **118** | P | **P** | **13 05 38.7** | **+0.4** |
| **QIS** | **Mount Isa** | **16.05** | **146** | P | **P** | **13 05 58.2** | **+1.8** |
| **ASAR** | **Alice Springs** | **16.66** | **168** | Pn | **P** | **13 06 03.8** | **+0.6** |
| | 0.3nm,0.3s,baz=346,slow=11,SNR=26 | | | | | | |
| ASAR | | | | Sn | **Sn** | **13 09 04.9** | **-1.1** |
| | 0.1nm,0.3s,baz=350,slow=20,SNR=1.7 0.9nm,0.5s | | | | | | |
| **AS01** | **Alice Springs** | **16.66** | **168** | P | **P** | **13 06 03.7** | **+0.4** |
| | 3.4nm,1.2s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.30** | **214** | P | **Pn** | **13 06 05.7** | **-3.2** |
| **OOD** | **Oodnadatta** | **21.04** | **166** | P | **P** | **13 06 52.3** | **+1.1** |
| **QLP** | **Quilpie** | **23.39** | **147** | P | **P** | **13 07 15.4** | **-0.8** |
| **LCRK** | **Leigh Creek** | **24.23** | **163** | P | **P** | **13 07 21.8** | **-2.4** |
| **MKAR** | **Makanchi Array** | **68.56** | **327** | P | **P** | **13 13 11.9** | **+1.9** |
| | 0.3nm,0.4s,baz=128,slow=8.1,SNR=4.1 0.3nm,0.4s | | | | | | |

*NEIC **20** 13:05:47.6±2.4, 15.˚0S±0.˚2×177.˚12W±0.˚06, h366km±11km, mb4.3/9, Error ellipse: s-maj=29.5km s-min=7.5km az=171.0*

*IDC **20** 13:05:51.5±6.6, 14.˚97S×177.˚39W, h402km±67km, mb3.3/7, mbtmp4.0/8, Error ellipse: s-maj=32.0km s-min=24.8km az=119.0*

**ISC 20 13:05:50.5±0.7, 15.˚1S±0.˚1×177.˚3W±0.˚1, h400km, n22, σ1℘37/22, mb3.9/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.22** | **239** | Pn | **Pn** | **13 07 12.7** | **-2.2** |
| **AFI** | **Afiamalu** | **5.43** | **78** | Pn | Pn | 13 07 10.8 | -6.4 |
| **NIUE** | **Niue** | **8.05** | **121** | Pn | **Pn** | **13 07 43.5** | **-2.5** |
| **LIFNC** | **LIFOU** | **15.80** | **247** | P | **P** | **13 09 11.6** | **-0.1** |
| **DZM** | **Mont Dzumac** | **16.93** | **243** | P | **P** | **13 09 25.5** | **+1.6** |
| | 4.3nm,0.8s,baz=131,slow=19,SNR=5.6 | | | | | | |
| **TOZ** | **Tahuroa Road** | **23.45** | **195** | P | **P** | **13 10 25.5** | **-0.7** |
| TOZ | | | | IAmb | IAmb | 13 10 46.9 | |
| | comp=Z,35nm,1.3s | | | | | | |
| **LTZ** | **Lake Taylor** | **29.03** | **196** | P | **P** | **13 11 15.9** | **+0.3** |
| **WKZ** | **Wanaka** | **31.84** | **199** | P | **P** | **13 11 38.7** | **-1.4** |
| WKZ | | | | IAmb | IAmb | 13 12 10.1 | |
| | comp=Z,55nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.29** | **257** | P | **P** | **13 13 38.0** | **-0.5** |
| | comp=Z,0.4nm,0.8s,baz=96,slow=6.8,SNR=1.4 comp=Z,0.4nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **46.67** | **252** | P | **P** | **13 13 40.7** | **-0.7** |
| **ASAR** | **Alice Springs** | **46.67** | **252** | P | **P** | **13 13 40.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **46.67** | **252** | P | **P** | **13 13 41.1** | **-0.3** |
| | comp=Z,3.1nm,0.5s,baz=86,slow=8.4,SNR=37 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 15 07.8** | **+0.1** |
| | comp=Z,0.3nm,0.5s,baz=96,slow=3.5,SNR=1.3 comp=Z,3.1nm,0.5s | | | | | | |
| **SBA** | **Scott Base** | **63.29** | **184** | P | **P** | **13 15 39.8** | **+2.0** |
| **CASY** | **Casey** | **69.15** | **204** | P | **P** | **13 16 15.8** | **+1.1** |
| CASY | | | | IAmb | IAmb | 13 16 46.3 | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.95** | **180** | P | **P** | **13 16 48.5** | **-0.4** |
| QSPA | | | | IAmb | IAmb | 13 16 51.0 | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.95** | **180** | P | **P** | **13 16 50.2** | **+1.3** |
| | comp=Z,1.7nm,0.6s,baz=117,slow=2.3,SNR=21 comp=Z,1.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **82.91** | **13** | P | **P** | **13 17 30.6** | **-0.7** |
| | comp=Z,0.6nm,1.0s,baz=221,slow=5.6,SNR=2.3 comp=Z,0.6nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **83.56** | **57** | P | **P** | **13 17 37.2** | **+1.7** |
| | comp=Z,0.4nm,0.6s,baz=219,slow=7.7,SNR=5.0 comp=Z,0.4nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **84.55** | **43** | P | **P** | **13 17 40.6** | **+0.3** |
| | comp=Z,0.8nm,0.3s,baz=248,slow=6.4,SNR=2.7 comp=Z,0.8nm,0.3s | | | | | | |
| **BELA** | **Belgrano 2** | **84.80** | **173** | P | **P** | **13 17 41.4** | **+0.6** |
| BELA | | | | IAmb | IAmb | 13 17 42.0 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **86.87** | **199** | P | **P** | **13 17 52.2** | **+1.4** |
| | comp=Z,2.2nm,0.7s,baz=103,slow=8.8,SNR=4.4 comp=Z,2.2nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.44** | **307** | PKPbc | **PKiKP** | **13 24 44.1** | **-2.3** |
| | comp=Z,0.9nm,0.5s,baz=51,slow=5.7,SNR=2.1 | | | | | | |

*IDC **20** 13:17:17.3±1.4, 8.˚27S×116.˚95E, h0km, mb3.8/6, mbtmp3.9/7, ML3.8/1, Error ellipse: s-maj=38.1km s-min=12.4km az=52.0*

*NEIC **20** 13:17:19.2±0.9, 8.˚30S±0.˚09×116.˚98E±0.˚06, h10km±2km, mb4.0/5, Error ellipse: s-maj=16.2km s-min=6.4km az=333.0*

*DJA **20** 13:17:20.5±0.4, 8.˚5S˚×11.˚7E±.˚, h10km, M4.0/7, MLv4.0/7*

**ISC 20 13:17:19.0±0.6, 8.˚32S±0.˚05×116.˚91E±0.˚05, h10km, n30, σ1℘22/35, mb4.0/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.42** | **183** | P | **Pb** | **13 17 29.1** | **+0.6** |
| TWSI | | | | S | **Sb** | **13 17 35.4** | **+0.4** |
| **PLAI** | **Plampang** | **1.00** | **121** | P | **Pg** | **13 17 38.5** | **+0.3** |
| PLAI | | | | S | **Sb** | **13 17 52.2** | **+0.5** |
| **SRBI** | **Singaraja** | **1.69** | **278** | P | **Pn** | **13 17 50.8** | **+2.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **267** | | **Pn** | **13 18 03.8** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **267** | P | **Pn** | **13 18 03.8** | **+0.9** |
| **WBSI** | **Waikabubak, Su** | **2.79** | **118** | P | **Pn** | **13 18 05.7** | **+2.0** |
| **BSSI** | **Bau Bau, Buton** | **4.16** | **59** | P | **Pn** | **13 18 23.8** | **+1.2** |
| **KAPI** | **Kappang** | **4.33** | **41** | Pn | **Pn** | **13 18 24.1** | **-0.8** |
| **KAPI** | **Kappang** | **4.33** | **41** | Pn | **Pn** | **13 18 25.5** | **+0.6** |
| | 5.5nm,0.3s,baz=220,slow=7.9,SNR=5.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **13 19 17.4** | **+1.9** |
| | 3.6nm,0.3s,baz=212,slow=23,SNR=1.4 15nm,0.3s | | | | | | |
| **MMRI** | **Maumere** | **5.28** | **94** | Pn | **Pn** | **13 18 37.1** | **-0.9** |
| **UGM** | **Wanagama** | **6.33** | **273** | Pn | **Pn** | **13 18 52.3** | **-0.2** |
| **SOEI** | **Soe** | **7.41** | **102** | Pn | **Pn** | **13 19 05.8** | **-1.6** |
| **FITZ** | **Fitzroy Crossi** | **12.91** | **140** | Pn | **Pn** | **13 20 22.4** | **-0.3** |
| **MBWA** | **Marble Bar** | **13.06** | **168** | Pn | **Pn** | **13 20 24.7** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **13.48** | **168** | Pn | **Pn** | **13 20 30.1** | **-0.3** |
| **KNRA** | **Kununurra** | **13.71** | **123** | Pn | **Pn** | **13 20 31.9** | **-1.7** |
| **GIRL** | **Giralia** | **14.48** | **190** | Pn | **Pn** | **13 20 43.5** | **-0.6** |
| **MTN** | **Manton Dam** | **14.69** | **109** | Pn | **Pn** | **13 20 46.0** | **-1.0** |
| **WB0** | **Warramunga Arr** | **20.41** | **126** | Pn | **P** | **13 21 57.4** | **+1.0** |
| WB0 | | | | IAmb | IAmb | 13 22 09.9 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.45** | **126** | P | **P** | **13 21 57.9** | **+1.0** |
| | comp=Z,3.2nm,0.5s,baz=301,slow=12,SNR=47 | | | | | | |
| WRA | | | | S | **S** | **13 25 46.5** | **+0.4** |
| | comp=Z,0.9nm,0.8s,baz=291,slow=23,SNR=2.7 comp=Z,3.2nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.46** | **126** | Pn | **P** | **13 21 58.0** | **+1.1** |
| WRAB | | | | IAmb | IAmb | 13 22 02.5 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.46** | **126** | Pn | **P** | **13 21 57.9** | **+0.9** |
| **WR0** | **Warramunga Arr** | **20.62** | **126** | Pn | **P** | **13 21 59.9** | **+1.2** |
| WR0 | | | | IAmb | IAmb | 13 22 13.3 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.32** | **135** | P | **P** | **13 22 15.7** | **-1.3** |
| **ASAR** | **Alice Springs** | **22.32** | **135** | P | **P** | **13 22 17.9** | **+0.9** |
| | comp=Z,0.8nm,0.6s,baz=311,slow=9.9,SNR=6.2 | | | | | | |
| ASAR | | | | S | **S** | **13 26 24.7** | **+2.1** |
| | comp=Z,0.2nm,0.7s,baz=318,slow=24,SNR=1.4 comp=Z,0.8nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **30.15** | **147** | P | **P** | **13 23 28.8** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **31.97** | **326** | P | **P** | **13 23 46.7** | **+1.3** |
| | comp=Z,0.7nm,0.3s,baz=158,slow=5.8,SNR=2.2 comp=Z,0.7nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.02** | **13** | P | **P** | **13 26 41.8** | **-1.6** |
| | comp=Z,1.0nm,0.6s,baz=197,slow=8.6,SNR=2.4 comp=Z,1.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **56.67** | **352** | P | **P** | **13 27 00.3** | **-2.3** |
| | comp=Z,0.7nm,0.6s,baz=165,slow=11,SNR=1.5 comp=Z,0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.92** | **334** | P | **P** | **13 27 45.4** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=135,slow=8.4,SNR=6.0 comp=Z,0.7nm,0.7s | | | | | | |

*IDC **20** 13:25:10.3±0.6, 8.˝34S×116.˝78E, h0km, mb4.0/14, mbtmp4.0/15, ML4.4/1, MS3.2/8, Error ellipse: s-maj=20.8km s-min=10.2km az=54.0*

*DJA **20** 13:25:13.3±0.2, 8.˚5S˚×11.˚7E±.˚, h10km, M4.8/22, mb4.8/12, mB5.2/4, MLv4.8/22, Mw(mB)4.6/4*

*NEIC **20** 13:25:14.1±1.9, 8.˚43S±0.˚08×116.˚84E±0.˚06, h10km±5km, mb4.5/21, Error ellipse: s-maj=11.8km s-min=8.6km az=179.0*

**ISC 20 13:25:13.2±0.4, 8.˚39S±0.˚04×116.˚85E±0.˚05, h10km, n111, σ1℘44/109, mb4.5/30, MS3.2/6, 1C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.34** | **174** | P | **Pb** | **13 25 22.0** | **+0.6** |
| **PLAI** | **Plampang** | **1.02** | **115** | P | **Pg** | **13 25 33.3** | **+0.5** |
| **PLAI** | **Plampang** | **1.02** | **115** | P | Pg | 13 25 28.4 | -4.4 |
| **DNP** | **Denpasar** | **1.64** | **260** | P | **Pn** | **13 25 42.6** | **+0.5** |
| **SRBI** | **Singaraja** | **1.65** | **281** | P | **Pn** | **13 25 40.9** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.67** | **268** | P | **Pn** | **13 25 55.6** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.67** | **268** | | **Pn** | **13 25 55.2** | **-1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.67** | **268** | P | **Pn** | **13 25 55.5** | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **2.80** | **116** | P | **Pn** | **13 25 59.0** | **+0.8** |
| **BASI** | **Baing, Sumba** | **4.11** | **117** | P | **Pn** | **13 26 16.1** | **+0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.25** | **59** | P | **Pn** | **13 26 17.6** | **-0.5** |
| **KAPI** | **Kappang** | **4.43** | **41** | P | **Pn** | **13 26 19.6** | **-0.9** |
| **KAPI** | **Kappang** | **4.43** | **41** | | **Pn** | **13 26 19.1** | **-1.4** |
| **KAPI** | **Kappang** | **4.43** | **41** | Pn | **Pn** | **13 26 19.3** | **-1.2** |
| | 20nm,0.3s,baz=211,slow=6.3,SNR=41 | | | | | | |
| KAPI | | | | Sn | **Sn** | **13 27 10.0** | **-2.1** |
| | 24nm,0.3s,baz=234,slow=19,SNR=9.9 | | | | | | |
| KAPI | | | | LR | LR | 13 27 49.1 | |
| | comp=Z,75nm,21.5s,baz=232,slow=36 43nm,0.2s | | | | | | |
| **GRJI** | **Gresik** | **4.57** | **288** | P | **Pn** | **13 26 19.6** | **-2.8** |
| **EDFI** | **Ende, Flores** | **4.80** | **95** | P | **Pn** | **13 26 26.7** | **+0.9** |
| **PWJI** | **Pagerwojo** | **5.00** | **274** | P | **Pn** | **13 26 27.6** | **-0.8** |
| **BNSI** | **Bone** | **5.12** | **39** | P | **Pn** | **13 26 30.4** | **+0.4** |
| | 79nm,0.5s,2µm1.1nm | | | | | | |
| **MMRI** | **Maumere** | **5.34** | **93** | | **Pn** | **13 26 32.6** | **-0.4** |
| **MMRI** | **Maumere** | **5.34** | **93** | P | **Pn** | **13 26 32.7** | **-0.3** |
| **UGM** | **Wanagama** | **6.28** | **274** | P | **Pn** | **13 26 46.0** | **0.0** |
| **UGM** | **Wanagama** | **6.28** | **274** | | **Pn** | **13 26 45.9** | **0.0** |
| **UGM** | **Wanagama** | **6.28** | **274** | P | **Pn** | **13 26 46.0** | **0.0** |
| **BBSI** | **Bau Bau** | **6.37** | **63** | P | **Pn** | **13 26 48.3** | **+1.1** |
| | 85nm,0.9s,0.3nm | | | | | | |
| **BATI** | **Baumata** | **6.96** | **106** | P | **Pn** | **13 26 56.3** | **+0.9** |
| | 70nm,0.7s,0.3nm | | | | | | |
| **SOEI** | **Soe** | **7.45** | **101** | Pn | **Pn** | **13 27 02.0** | **-0.2** |
| **SOEI** | **Soe** | **7.45** | **101** | P | **Pn** | **13 27 02.2** | **0.0** |
| | 112nm,0.8s,0.5nm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.65** | **345** | P | **Pn** | **13 27 04.1** | **-0.7** |
| **KPJI** | **Karang Pucung** | **7.91** | **277** | P | **Pn** | **13 27 09.0** | **+0.6** |
| | 30nm,0.7s,0.2nm | | | | | | |
| **BBJI** | **Bungbulang** | **9.16** | **275** | P | **Pn** | **13 27 26.8** | **+1.3** |
| **CNJI** | **Cibinong** | **9.69** | **276** | P | **Pn** | **13 27 33.4** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **12.89** | **139** | Pn | **Pn** | **13 28 18.0** | **+1.4** |
| **MBWA** | **Marble Bar** | **12.99** | **168** | P | **Pn** | **13 28 16.9** | **-1.1** |
| **MBWA** | **Marble Bar** | **12.99** | **168** | | **Pn** | **13 28 15.8** | **-2.2** |
| **PSA00** | **Pilbara Seismi** | **13.42** | **168** | P | **Pn** | **13 28 24.0** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **13.42** | **168** | Pn | **Pn** | **13 28 22.2** | **-1.6** |
| **KNRA** | **Kununurra** | **13.71** | **123** | Pn | **Pn** | **13 28 28.1** | **+0.2** |
| **GIRL** | **Giralia** | **14.39** | **190** | P | **Pn** | **13 28 36.2** | **-0.9** |
| **GIRL** | **Giralia** | **14.39** | **190** | Pn | **Pn** | **13 28 35.3** | **-1.8** |
| **MTN** | **Manton Dam** | **14.72** | **109** | P | **Pn** | **13 28 41.5** | **-0.2** |
| **MTN** | **Manton Dam** | **14.72** | **109** | Pn | **Pn** | **13 28 39.1** | **-2.6** |
| **FAKI** | **Fak Fak** | **16.26** | **71** | Pn | **Pn** | **13 29 01.8** | **-0.1** |
| FAKI | | | | IAmb | IAmb | 13 29 27.6 | |
| | comp=Z,96nm,1.4s | | | | | | |
| **DAV** | **Davao City (W)** | **17.66** | **30** | LR | LR | 13 37 49.9 | |
| | comp=Z,100nm,18.1s,baz=165,slow=43 | | | | | | |
| **MEEK** | **Meekatharra** | **18.22** | **175** | P | **P** | **13 29 28.4** | **+1.8** |
| **WRKA** | **Warakurna** | **19.83** | **148** | P | **Pn** | **13 29 45.8** | **-0.1** |
| **COCO** | **West Island** | **20.05** | **257** | P | **P** | **13 29 47.5** | **+0.8** |
| **WB0** | **Warramunga Arr** | **20.41** | **125** | P | **P** | **13 29 50.6** | **0.0** |
| WB0 | | | | IAmb | IAmb | 13 30 01.7 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.46** | **126** | P | **P** | **13 29 50.9** | **-0.2** |
| **WRA** | **Warramunga Arr** | **20.46** | **126** | P | **P** | **13 29 51.3** | **+0.1** |
| | comp=Z,11nm,0.8s,baz=301,slow=12,SNR=31 | | | | | | |
| WRA | | | | S | **S** | **13 33 40.2** | **-0.1** |
| | comp=Z,2.5nm,0.8s,baz=291,slow=24,SNR=4.7 comp=Z,11nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.46** | **126** | P | **P** | **13 29 51.1** | **0.0** |
| WRAB | | | | IAmb | IAmb | 13 30 02.4 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.46** | **126** | P | **P** | **13 29 51.2** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 13 30 02.4 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **20.58** | **182** | P | Pn | 13 29 54.7 | +0.1 |
| **MORW** | **Morawa** | **20.58** | **182** | P | **P** | **13 29 53.0** | **+0.6** |
| MORW | | | | IAmb | IAmb | 13 29 58.6 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.63** | **126** | P | **P** | **13 29 53.1** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 13 30 00.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **RPSI** | **Rantau Prapat** | **20.99** | **301** | P | **P** | **13 29 57.8** | **+0.8** |
| **BLDU** | **Ballidu** | **22.11** | **180** | P | **P** | **13 30 08.5** | **-0.3** |
| **ASAR** | **Alice Springs** | **22.31** | **135** | P | **P** | **13 30 11.4** | **+0.3** |
| **ASAR** | **Alice Springs** | **22.31** | **135** | P | **P** | **13 30 11.3** | **+0.2** |
| | comp=Z,12nm,0.8s,baz=311,slow=8.3,SNR=56 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 34 05.6** | **-1.4** |
| | comp=Z,0.5nm,0.7s,baz=338,slow=1.4,SNR=2.6 | | | | | | |
| ASAR | | | | S | **S** | **13 34 19.9** | **+3.3** |
| | comp=Z,0.6nm,0.7s,baz=314,slow=20,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 13 39 25.2 | |
| | comp=Z,74nm,18.5s,baz=308,slow=38 comp=Z,12nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.31** | **135** | P | **P** | **13 30 11.2** | **+0.2** |
| **AS01** | **Alice Springs** | **22.34** | **135** | P | **P** | **13 30 11.3** | **-0.1** |
| | comp=Z,22nm,1.0s | | | | | | |
| **KLBR** | **Kellerberrin** | **23.10** | **178** | P | **P** | **13 30 20.7** | **+1.4** |
| **KMBL** | **Kambalda** | **23.34** | **169** | P | **P** | **13 30 22.2** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **24.42** | **179** | LR | LR | 13 42 03.5 | |
| | comp=Z,65nm,18.2s,baz=126,slow=41 | | | | | | |
| **FORT** | **Forrest** | **24.61** | **156** | P | **P** | **13 30 34.6** | **+0.8** |
| | comp=Z,39nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **24.61** | **156** | P | **P** | **13 30 34.6** | **+0.8** |
| **QIS** | **Mount Isa** | **25.09** | **121** | P | **P** | **13 30 39.8** | **+1.5** |
| **OOD** | **Oodnadatta** | **26.25** | **140** | P | **P** | **13 30 49.5** | **+0.8** |
| **COEN** | **Coen** | **26.40** | **104** | P | **P** | **13 30 50.9** | **+0.7** |
| | comp=Z,24nm,2.2s | | | | | | |
| **COEN** | **Coen** | **26.40** | **104** | P | **P** | **13 30 50.0** | **-0.2** |
| **MULG** | **Mulgathing** | **27.09** | **146** | P | **P** | **13 30 56.5** | **+0.3** |
| **LCRK** | **Leigh Creek** | **29.68** | **141** | P | **P** | **13 31 21.4** | **+2.1** |
| **BBOO** | **Buckleboo** | **30.11** | **146** | P | **P** | **13 31 23.2** | **0.0** |
| | comp=Z,17nm,2.4s | | | | | | |
| **BBOO** | **Buckleboo** | **30.11** | **146** | P | **P** | **13 31 23.1** | **-0.1** |
| BBOO | | | | IAmb | IAmb | 13 32 00.7 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **CTA** | **Charters Tower** | **30.72** | **115** | LR | LR | 13 46 00.1 | |
| | comp=Z,7.6nm,20.5s,baz=281,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.00** | **327** | P | **P** | **13 31 40.2** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **32.00** | **327** | P | **P** | **13 31 39.0** | **-1.0** |
| | comp=Z,0.4nm,0.5s,baz=148,slow=8.3,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 13 44 54.1 | |
| | comp=Z,58nm,18.5s,baz=125,slow=37 comp=Z,0.4nm,0.5s | | | | | | |
| **HTT** | **Hallett** | **32.19** | **144** | P | **P** | **13 31 42.5** | **+0.9** |
| | comp=Z,16nm,2.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.79** | **139** | P | **P** | **13 31 46.7** | **-0.1** |
| **STKA** | **Stephens Creek** | **32.79** | **139** | P | **P** | **13 31 47.0** | **+0.3** |
| | comp=Z,4.5nm,0.5s,baz=311,slow=12,SNR=10 | | | | | | |
| STKA | | | | LR | LR | 13 46 13.5 | |
| | comp=Z,52nm,18.3s,baz=212,slow=38 comp=Z,4.5nm,0.5s | | | | | | |
| **GHSS** | **Government Hou** | **33.09** | **146** | P | **P** | **13 31 49.8** | **+0.5** |
| **JOW** | **Kunigami** | **36.73** | **17** | P | **P** | **13 32 22.3** | **+1.5** |
| **JOW** | **Kunigami** | **36.73** | **17** | P | **P** | **13 32 21.9** | **+1.1** |
| **PZH** | **PanZhiHua** | **37.66** | **338** | P | **P** | **13 32 33.3** | **+4.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,5.5s | | | | | | |
| **NJ2** | **Nanjing** | **40.26** | **3** | *e*P | **P** | **13 32 52.8** | **+2.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,83nm,4.1s | | | | | | |
| **XAN** | **Xi'an** | **42.86** | **350** | ⇑P | **P** | **13 33 16.0** | **+4.2** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **46.77** | **12** | P | **P** | **13 33 42.1** | **-0.7** |
| | comp=Z,0.5nm,0.5s,baz=165,slow=8.3,SNR=3.7 comp=Z,0.5nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.00** | **23** | P | **P** | **13 33 59.2** | **-1.0** |
| | comp=Z,0.7nm,0.6s,baz=214,slow=9.8,SNR=1.5 comp=Z,0.7nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.24** | **355** | *e*P | **P** | **13 34 04.4** | **+2.3** |
| HHC | | | | pP | sP | 13 34 08.8 | +2.4 |
| HHC | | | | sP | pP | 13 34 11.5 | +6.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,160nm,5.3s | | | | | | |
| **GTA** | **Gaotai** | **50.12** | **343** | *e*P | **P** | **13 34 09.8** | **+1.0** |
| GTA | | | | sP | sP | 13 34 22.8 | +10 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **MDJ** | **Mudanjiang** | **54.01** | **11** | P | P | 13 34 43.8 | +6.3 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.11** | **13** | P | **P** | **13 34 37.6** | **-0.7** |
| | comp=Z,1.1nm,0.7s,baz=153,slow=3.9,SNR=4.2 comp=Z,1.1nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.74** | **352** | P | **P** | **13 34 56.2** | **-1.1** |
| | comp=Z,1.7nm,0.8s,baz=168,slow=8.2,SNR=7.5 | | | | | | |
| SONM | | | | LR | LR | 14 00 56.7 | |
| | comp=Z,50nm,18.9s,baz=152,slow=38 comp=Z,1.7nm,0.8s | | | | | | |
| **CASY** | **Casey** | **57.96** | **183** | P | **P** | **13 35 05.7** | **+0.1** |
| CASY | | | | IAmb | IAmb | 13 35 06.3 | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **WMQ** | **Urumqi** | **58.30** | **336** | *e*P | **P** | **13 35 12.8** | **+4.4** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **HEH** | **HeiHe** | **59.12** | **8** | *e*P | **P** | **13 35 13.1** | **-0.7** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **MSVF** | **Nonsavu** | **60.12** | **106** | P | **P** | **13 35 21.6** | **+0.1** |
| **MK31** | **Makanchi Array** | **62.97** | **334** | P | **P** | **13 35 41.5** | **+1.5** |
| MK31 | | | | IAmb | IAmb | 13 35 46.3 | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.97** | **334** | P | **P** | **13 35 41.5** | **+1.5** |
| **MKAR** | **Makanchi Array** | **62.97** | **334** | P | **P** | **13 35 37.0** | **-3.0** |
| | comp=Z,0.3nm,0.5s,baz=126,slow=6.2,SNR=3.6 comp=Z,0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.50** | **335** | P | **P** | **13 36 05.8** | **-3.6** |
| | comp=Z,0.2nm,0.6s,baz=155,slow=5.5,SNR=2.4 comp=Z,0.2nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.74** | **340** | P | **P** | **13 36 08.2** | **-2.6** |
| | comp=Z,0.7nm,0.6s,baz=133,slow=5.9,SNR=3.7 comp=Z,0.7nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **69.09** | **199** | P | **P** | **13 36 17.8** | **-1.3** |
| | comp=Z,3.7nm,0.8s,baz=63,slow=6.4,SNR=5.3 comp=Z,3.7nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **72.77** | **333** | P | **P** | **13 36 38.4** | **-3.2** |
| | comp=Z,0.7nm,0.5s,baz=141,slow=7.3,SNR=2.7 comp=Z,0.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.60** | **180** | P | **P** | **13 37 30.6** | **-0.6** |
| QSPA | | | | IAmb | IAmb | 13 37 44.3 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **POGA** | **Pongola** | **81.90** | **244** | P | **P** | **13 37 34.0** | **+0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WHYT** | **Xinyi Township** | 0.33 | 203 | P | Pb | 13 28 05.9 | -0.4 | | |
| | baz=199 | | | | | | | | |
| WHYT | | | | *e*S | Sb | 13 28 11.2 | -0.1 | | |
| | baz=199 | | | | | | | | |
| **FUSS** | **Fushou** | 0.34 | 43⇑ | *i*P | Pg | 13 28 06.0 | +0.1 | | |
| | baz=42 | | | | | | | | |
| FUSS | | | | *e*S | Sg | 13 28 10.8 | -0.1 | | |
| | baz=42 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | 0.39 | 87⇓ | *i*P | Pb | 13 28 06.9 | -0.5 | | |
| | baz=82 | | | | | | | | |
| LXIB | | | | *e*S | Sb | 13 28 13.0 | -0.1 | | |
| | baz=82 | | | | | | | | |
| **TWQ1** | **Liyutan** | 0.40 | 330⇓ | *i*P | Pb | 13 28 08.2 | +0.6 | | |
| | baz=332 | | | | | | | | |
| TWQ1 | | | | S | Sb | 13 28 14.8 | +1.3 | | |
| | baz=332 | | | | | | | | |
| **WCHH** | **Zhanghua** | 0.41 | 281⇓ | *i*P | Pb | 13 28 08.2 | +0.6 | | |
| | baz=281 | | | | | | | | |
| **ESL** | **Shilin** | 0.44 | 114⇓ | *i*P | Pb | 13 28 07.9 | -0.3 | | |
| | baz=108 | | | | | | | | |
| ESL | | | | *i* S | Sb | 13 28 14.1 | -0.5 | | |
| | baz=108 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | 0.46 | 128⇓ | *i*P | Pb | 13 28 08.0 | -0.5 | | |
| | baz=119 | | | | | | | | |
| WARBT | | | | S | Sg | 13 28 13.6 | -0.6 | | |
| | baz=119 | | | | | | | | |
| **ETM** | **Tongmen** | 0.46 | 94⇓ | *i*P | Pg | 13 28 08.0 | 0.0 | | |
| | baz=93 | | | | | | | | |
| ETM | | | | *e*S | Sb | 13 28 14.4 | -0.7 | | |
| | baz=93 | | | | | | | | |
| **NSY** | **Sanyi** | 0.47 | 333⇓ | *i*P | Pn | 13 28 09.7 | -1.1 | | |
| | baz=335 | | | | | | | | |
| NSY | | | | S | Sn | 13 28 17.2 | -1.6 | | |
| | baz=335 | | | | | | | | |
| **WDJ** | **Dajia District** | 0.47 | 317⇓ | *i*P | Pn | 13 28 09.9 | -1.0 | | |
| | baz=319 | | | | | | | | |
| WDJ | | | | *e*S | Sn | 13 28 17.4 | -1.5 | | |
| | baz=319 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | 0.49 | 65⇓ | *i*P | Pb | 13 28 08.8 | -0.4 | | |
| | baz=61 | | | | | | | | |
| ETLH | | | | *e*S | Sg | 13 28 15.1 | -0.3 | | |
| | baz=61 | | | | | | | | |
| **EGFH** | **Guangfu** | 0.52 | 129 | P | Pg | 13 28 09.0 | -0.1 | | |
| | baz=124 | | | | | | | | |
| EGFH | | | | *e*S | Sb | 13 28 16.1 | -0.6 | | |
| | baz=124 | | | | | | | | |
| **WDLH** | **Douliu** | 0.52 | 234 | ⇓P | Pb | 13 28 10.0 | +0.5 | | |
| | baz=232 | | | | | | | | |
| WDLH | | | | *i* S | Sb | 13 28 17.9 | +1.1 | | |
| | baz=232 | | | | | | | | |
| **NNSB** | **Datong** | 0.56 | 40 | ⇑P | Pg | 13 28 09.5 | -0.4 | | |
| | baz=39 | | | | | | | | |
| NNSB | | | | *e*S | Sg | 13 28 16.5 | -0.8 | | |
| | baz=39 | | | | | | | | |
| **TWD** | **Chiawan** | 0.56 | 82⇓ | *i*P | Pg | 13 28 09.8 | -0.1 | | |
| | baz=89 | | | | | | | | |
| TWD | | | | *e*S | Sg | 13 28 17.0 | -0.3 | | |
| | baz=89 | | | | | | | | |
| **NNS** | **Nan Shan** | 0.56 | 38 | ⇑P | Pg | 13 28 09.8 | -0.2 | | |
| | baz=38 | | | | | | | | |
| NNS | | | | *e*S | Sg | 13 28 17.1 | -0.4 | | |
| | baz=38 | | | | | | | | |
| **HWA** | **Hwalien** | 0.56 | 92⇓ | *i*P | Pb | 13 28 10.4 | +0.1 | | |
| | baz=92 | | | | | | | | |
| HWA | | | | *i* S | Sb | 13 28 18.6 | +0.7 | | |
| | baz=92 | | | | | | | | |
| **SHUL** | **Shoufeng** | 0.56 | 112⇓ | *i*P | Pb | 13 28 10.4 | +0.1 | | |
| | baz=106 | | | | | | | | |
| SHUL | | | | *e*S | Sb | 13 28 18.4 | +0.4 | | |
| | baz=106 | | | | | | | | |
| **NMLH** | **Miaoli** | 0.57 | 341⇓ | *i*P | Pn | 13 28 11.7 | -0.5 | | |
| | baz=342 | | | | | | | | |
| NMLH | | | | *i* S | Sn | 13 28 20.6 | -0.6 | | |
| | baz=342 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | 0.57 | 103⇓ | *i*P | Pb | 13 28 10.4 | 0.0 | | |
| | baz=99 | | | | | | | | |
| TEYL | | | | *e*S | Sb | 13 28 18.8 | +0.5 | | |
| | baz=99 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | 0.57 | 260 | *e*P | Pb | 13 28 11.0 | +0.6 | | |
| | baz=260 | | | | | | | | |
| WRL | | | | *i* S | Sn | 13 28 20.3 | -1.0 | | |
| | baz=260 | | | | | | | | |
| **EHY** | **Hungye** | 0.58 | 148⇓ | *i*P | Pb | 13 28 10.2 | -0.3 | | |
| | baz=143 | | | | | | | | |
| EHY | | | | S | Sb | 13 28 17.9 | -0.6 | | |
| | baz=143 | | | | | | | | |
| **NACB** | **Ninganchiao** | 0.58 | 72 | P | Pg | 13 28 10.0 | -0.2 | | |
| **NACB** | **Ninganchiao** | 0.58 | 72⇓ | *i*P | Pg | 13 28 10.1 | -0.2 | | |
| | baz=69 | | | | | | | | |
| NACB | | | | *e*S | Sb | 13 28 18.1 | -0.4 | | |
| | baz=69 | | | | | | | | |
| **TEGC** | **Jichi Village** | 0.58 | 120 | *e*P | Pb | 13 28 10.7 | +0.1 | | |
| | baz=114 | | | | | | | | |
| TEGC | | | | *e*S | Sb | 13 28 18.9 | +0.4 | | |
| | baz=114 | | | | | | | | |
| **ETL** | **Fush Village** | 0.60 | 74 | ⇓P | Pg | 13 28 10.4 | -0.2 | | |
| | baz=83 | | | | | | | | |
| ETL | | | | S | Sg | 13 28 18.6 | 0.0 | | |
| | baz=83 | | | | | | | | |
| **EHYH** | **Wanrong** | 0.60 | 147⇓ | *i*P | Pb | 13 28 10.5 | -0.3 | | |
| | baz=142 | | | | | | | | |
| EHYH | | | | *e*S | Sb | 13 28 18.7 | -0.4 | | |
| | baz=142 | | | | | | | | |
| **NSTT** | **Nanjuang** | 0.63 | 1⇑ | *i*P | Pb | 13 28 12.0 | +0.5 | | |
| | baz=10.0 | | | | | | | | |
| NSTT | | | | *i* S | Sb | 13 28 20.7 | +0.7 | | |
| | baz=10.0 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | 0.64 | 10⇑ | *e*P | Pb | 13 28 11.6 | 0.0 | | |
| | baz=21 | | | | | | | | |
| NFF | | | | *e*S | Sb | 13 28 20.4 | 0.0 | | |
| | baz=21 | | | | | | | | |
| **HGSD** | **Ruisui** | 0.64 | 142⇓ | *i*P | Pb | 13 28 11.7 | +0.1 | | |
| | baz=142 | | | | | | | | |
| HGSD | | | | *e*S | Sb | 13 28 20.4 | 0.0 | | |
| | baz=142 | | | | | | | | |
| **LIOB** | **Emei** | 0.64 | 2⇑ | *i*P | Pb | 13 28 12.3 | +0.6 | | |
| | baz=10.0 | | | | | | | | |
| LIOB | | | | S | Sn | 13 28 21.9 | -1.4 | | |
| | baz=10.0 | | | | | | | | |
| **WCKO** | **Fanlu** | 0.66 | 213 | ⇑P | Pb | 13 28 12.0 | 0.0 | | |
| | baz=212 | | | | | | | | |
| WCKO | | | | S | Sb | 13 28 21.6 | +0.7 | | |
| | baz=212 | | | | | | | | |
| **CHN2** | **Minshiung** | 0.66 | 226 | ⇓P | Pn | 13 28 12.6 | -0.9 | | |
| | baz=225 | | | | | | | | |
| CHN2 | | | | *i* S | Sn | 13 28 22.7 | -0.9 | | |
| | baz=225 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | 0.67 | 258 | *e*P | Pb | 13 28 12.1 | +0.1 | | |
| | baz=258 | | | | | | | | |
| WTCT | | | | *i* S | Sn | 13 28 22.5 | -1.2 | | |
| | baz=258 | | | | | | | | |
| **YULB** | **Yu-li** | 0.67 | 155 | P | Pg | 13 28 11.6 | -0.2 | | |
| **YULB** | **Yu-li** | 0.67 | 155⇓ | *i*P | Pg | 13 28 11.7 | -0.2 | | |
| | baz=146 | | | | | | | | |
| YULB | | | | *i* S | Sb | 13 28 21.0 | -0.1 | | |
| | baz=146 | | | | | | | | |
| **TWF1** | **Yuli** | 0.70 | 157⇓ | *i*P | Pb | 13 28 12.5 | -0.2 | | |
| | baz=156 | | | | | | | | |
| TWF1 | | | | *i* S | Sb | 13 28 22.0 | 0.0 | | |
| | baz=156 | | | | | | | | |
| **EYUL** | **Yuli** | 0.71 | 155 | ⇓P | Pb | 13 28 12.8 | -0.1 | | |
| | baz=155 | | | | | | | | |
| EYUL | | | | S | Sb | 13 28 22.3 | -0.1 | | |
| | baz=155 | | | | | | | | |
| **CHY** | **Chiayi** | 0.72 | 226 | *e*P | Pn | 13 28 13.4 | -0.9 | | |
| | baz=225 | | | | | | | | |
| CHY | | | | *e*S | Sn | 13 28 24.1 | -1.0 | | |
| | baz=225 | | | | | | | | |
| **LATG** | **Datong** | 0.72 | 42 | ⇓P | Pg | 13 28 12.5 | -0.5 | | |
| | baz=37 | | | | | | | | |
| **NSK** | **Sanguang** | 0.75 | 26 | ⇑P | Pb | 13 28 13.3 | -0.3 | | |
| | baz=34 | | | | | | | | |
| NSK | | | | *i* S | Sb | 13 28 22.4 | -1.2 | | |
| | baz=34 | | | | | | | | |
| **YHNB** | **Yeheng** | 0.75 | 28 | P | Pb | 13 28 13.1 | -0.5 | | |
| **YHNB** | **Yeheng** | 0.75 | 28 | ⇑P | Pb | 13 28 13.2 | -0.4 | | |
| | baz=35 | | | | | | | | |
| YHNB | | | | S | Sb | 13 28 22.4 | -1.3 | | |
| | baz=35 | | | | | | | | |
| **EAHA** | **Aohua** | 0.76 | 64⇓ | *e*P | Pb | 13 28 13.3 | -0.3 | | |
| | baz=63 | | | | | | | | |
| EAHA | | | | S | Sg | 13 28 23.6 | 0.0 | | |
| | baz=63 | | | | | | | | |
| **NDT** | **Datong Townshi** | 0.77 | 38 | P | Pb | 13 28 13.5 | -0.3 | | |
| | baz=30 | | | | | | | | |
| NDT | | | | *e*S | Sb | 13 28 23.8 | -0.1 | | |
| | baz=30 | | | | | | | | |
| **TPUB** | **Ta-pu** | 0.77 | 206 | P | Pg | 13 28 13.9 | 0.0 | | |
| | baz=205 | | | | | | | | |
| **TPUB** | **Ta-pu** | 0.77 | 206⇑ | *i*P | Pg | 13 28 13.7 | -0.2 | | |
| | baz=205 | | | | | | | | |
| TPUB | | | | S | Sg | 13 28 24.3 | +0.3 | | |
| | baz=205 | | | | | | | | |
| **SBCB** | **Hsinchu** | 0.79 | 359 | *e*P | Pn | 13 28 15.1 | -0.2 | | |
| | baz=1.0 | | | | | | | | |
| SBCB | | | | S | Sn | 13 28 27.0 | +0.3 | | |
| | baz=1.0 | | | | | | | | |
| **WSF** | **Szhu** | 0.79 | 243 | *i* P | Pg | 13 28 14.2 | -0.1 | | |
| | baz=242 | | | | | | | | |
| WSF | | | | *i* S | Sn | 13 28 25.9 | -0.8 | | |
| | baz=242 | | | | | | | | |
| **ECBN** | **Changbin** | 0.80 | 148 | *e*P | Pn | 13 28 15.3 | -0.1 | | |
| | baz=148 | | | | | | | | |
| ECBN | | | | *e*S | Sn | 13 28 27.1 | +0.2 | | |
| | baz=148 | | | | | | | | |
| **HSN** | **Hsinchu** | 0.80 | 358 | *e*P | Pn | 13 28 16.2 | +0.8 | | |
| | baz=3.0 | | | | | | | | |
| HSN | | | | *e*S | Sn | 13 28 28.4 | +1.4 | | |
| | baz=3.0 | | | | | | | | |
| **ENA** | **Nanau** | 0.81 | 58 | ⇓P | Pb | 13 28 14.2 | -0.2 | | |
| | baz=58 | | | | | | | | |
| ENA | | | | S | Sn | 13 28 26.1 | -1.1 | | |
| | baz=58 | | | | | | | | |
| **ELDTW** | **Lidau** | 0.81 | 178 | *e*P | Pb | 13 28 13.6 | -0.9 | | |
| | baz=184 | | | | | | | | |
| ELDTW | | | | *e*S | Sb | 13 28 24.7 | -0.5 | | |
| | baz=184 | | | | | | | | |
| **ENTT** | **Nioudou** | 0.82 | 39 | *e*P | Pb | 13 28 14.5 | -0.3 | | |
| | baz=32 | | | | | | | | |
| ENTT | | | | *e*S | Sb | 13 28 24.7 | -1.0 | | |
| | baz=32 | | | | | | | | |
| **WTP** | **Ta-pu** | 0.83 | 205⇑ | *i*P | Pb | 13 28 14.5 | -0.3 | | |
| | baz=203 | | | | | | | | |
| WTP | | | | S | Sn | 13 28 26.8 | -0.9 | | |
| | baz=203 | | | | | | | | |
| **EWUT** | **Wuta** | 0.84 | 58⇓ | *i*P | Pb | 13 28 14.9 | -0.2 | | |
| | baz=57 | | | | | | | | |
| EWUT | | | | *i* S | Sg | 13 28 26.6 | +0.3 | | |
| | baz=57 | | | | | | | | |
| **FULB** | **Fuli** | 0.84 | 161⇓ | *i*P | Pn | 13 28 15.8 | -0.3 | | |
| | baz=161 | | | | | | | | |
| FULB | | | | S | Sn | 13 28 28.1 | 0.0 | | |
| | baz=161 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | 0.85 | 236 | P | Pg | 13 28 15.1 | -0.2 | | |
| | baz=235 | | | | | | | | |
| WSL | | | | *e*S | Sn | 13 28 28.0 | -0.2 | | |
| | baz=235 | | | | | | | | |
| **TWK** | **Hsinying** | 0.86 | 213⇑ | *i*P | Pg | 13 28 15.3 | -0.3 | | |
| | baz=210 | | | | | | | | |
| TWK | | | | S | Sn | 13 28 27.8 | -0.8 | | |
| | baz=210 | | | | | | | | |
| **EHD** | **Haiduan** | 0.87 | 167 | *i* P | Pg | 13 28 15.6 | -0.1 | | |
| | baz=167 | | | | | | | | |
| EHD | | | | *e*S | Sn | 13 28 27.5 | -1.2 | | |
| | baz=167 | | | | | | | | |
| **CHKH** | **Chenggong** | 0.88 | 155 | P | Pn | 13 28 16.6 | 0.0 | | |
| | baz=156 | | | | | | | | |
| CHKH | | | | S | Sn | 13 28 29.5 | +0.5 | | |
| | baz=156 | | | | | | | | |
| **SNST** | **Tainan City** | 0.90 | 210 | P | Pg | 13 28 16.1 | -0.1 | | |
| | baz=209 | | | | | | | | |
| SNST | | | | *e*S | Sn | 13 28 29.1 | -0.3 | | |
| | baz=209 | | | | | | | | |
| **NWLT** | **Wulai** | 0.90 | 31 | *e*P | Pb | 13 28 16.1 | -0.1 | | |
| | baz=30 | | | | | | | | |
| NWLT | | | | *e*S | Sg | 13 28 28.1 | -0.2 | | |
| | baz=30 | | | | | | | | |
| **ICHU** | **Yijhu** | 0.91 | 226 | *e*P | Pg | 13 28 16.4 | -0.1 | | |
| | baz=236 | | | | | | | | |
| ICHU | | | | *i* S | Sn | 13 28 30.0 | +0.3 | | |
| | baz=236 | | | | | | | | |
| **NDS** | **Dongshan** | 0.91 | 46 | *e*P | Pb | 13 28 16.0 | -0.3 | | |
| | baz=45 | | | | | | | | |
| NDS | | | | *e*S | Sg | 13 28 28.3 | -0.2 | | |
| | baz=45 | | | | | | | | |
| **CHN1** | **Nanshi** | 0.92 | 208 | *e*P | Pb | 13 28 16.2 | -0.1 | | |
| | baz=206 | | | | | | | | |
| CHN1 | | | | *i* S | Sn | 13 28 29.0 | -0.9 | | |
| | baz=206 | | | | | | | | |
| **ECS** | **Chishang** | 0.92 | 167 | *e*P | Pn | 13 28 17.0 | -0.1 | | |
| | baz=166 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | 0.93 | 35 | P | Pb | 13 28 16.3 | -0.3 | | |
| | baz=30 | | | | | | | | |
| FUSB | | | | *e*S | Sb | 13 28 28.1 | -0.7 | | |
| | baz=30 | | | | | | | | |
| **TWE** | **Neicheng** | 0.95 | 40 | ⇑P | Pg | 13 28 17.0 | -0.2 | | |
| | baz=37 | | | | | | | | |
| TWE | | | | *e*S | Sg | 13 28 29.7 | +0.1 | | |
| | baz=37 | | | | | | | | |
| **ESAO** | **Su ao** | 0.97 | 53 | *i* P | Pb | 13 28 17.2 | 0.0 | | |
| | baz=53 | | | | | | | | |
| ESAO | | | | *e*S | Sg | 13 28 30.2 | 0.0 | | |
| | baz=53 | | | | | | | | |
| **CHN8** | **Yiju** | 0.97 | 228⇓ | *i*P | Pb | 13 28 17.1 | -0.1 | | |
| | baz=237 | | | | | | | | |
| CHN8 | | | | *i* S | Sn | 13 28 31.3 | +0.2 | | |
| | baz=237 | | | | | | | | |
| **NCUH** | **Zhongli** | 0.98 | 10 | *e*P | Pg | 13 28 18.5 | +0.7 | | |
| | baz=12 | | | | | | | | |
| NCUH | | | | *e*S | Sn | 13 28 32.4 | +1.0 | | |
| | baz=12 | | | | | | | | |
| **SGST** | **Jiashian** | 0.99 | 202 | P | Pb | 13 28 17.1 | -0.4 | | |
| | baz=211 | | | | | | | | |
| SGST | | | | *e*S | Sn | 13 28 31.3 | -0.3 | | |
| | baz=211 | | | | | | | | |
| **TWC** | **Suao** | 0.99 | 52 | *e*P | Pb | 13 28 17.6 | 0.0 | | |
| | baz=52 | | | | | | | | |
| TWC | | | | *e*S | Sg | 13 28 30.9 | -0.1 | | |
| | baz=52 | | | | | | | | |
| **ILA** | **Ilan** | 1.03 | 42 | *e*P | Pg | 13 28 18.9 | +0.2 | | |
| | baz=44 | | | | | | | | |
| **SLGT** | **Liugui** | 1.05 | 198 | *e*P | Pg | 13 28 19.0 | -0.2 | | |
| | baz=198 | | | | | | | | |
| SLGT | | | | *e*S | Sn | 13 28 33.9 | +0.7 | | |
| | baz=198 | | | | | | | | |
| **EDH** | **Donghe** | 1.06 | 164 | ⇓P | Pg | 13 28 19.4 | +0.1 | | |
| | baz=149 | | | | | | | | |
| EDH | | | | *e*S | Sn | 13 28 35.4 | +2.0 | | |
| | baz=149 | | | | | | | | |
| **TATO** | **Taipei** | 1.07 | 25 | P | Pn | 13 28 19.0 | -0.2 | | |
| **NHDH** | **Xindian Distri** | 1.07 | 27 | *e*P | Pg | 13 28 20.4 | +0.8 | | |
| | baz=33 | | | | | | | | |
| **SSHA** | **Shanhua** | 1.07 | 217 | *e*P | Pg | 13 28 19.8 | +0.2 | | |
| | baz=216 | | | | | | | | |
| SSHA | | | | S | Sg | 13 28 36.1 | +2.4 | | |
| | baz=216 | | | | | | | | |
| **CHN3** | **Shinhua** | 1.08 | 212 | P | Pg | 13 28 20.4 | +0.6 | | |
| | baz=222 | | | | | | | | |
| CHN3 | | | | S | Sg | 13 28 36.6 | +2.6 | | |
| | baz=222 | | | | | | | | |
| **LONT** | **Longtian** | 1.09 | 173 | *e*P | Pg | 13 28 19.8 | -0.2 | | |
| | baz=174 | | | | | | | | |
| LONT | | | | *e*S | Sn | 13 28 33.5 | -0.7 | | |
| | baz=174 | | | | | | | | |
| **SCLT** | **Jiali** | 1.10 | 222 | *e*P | Pg | 13 28 20.0 | -0.1 | | |
| | baz=220 | | | | | | | | |
| SCLT | | | | *i* S | Sg | 13 28 35.9 | +1.4 | | |
| | baz=220 | | | | | | | | |
| **TWA** | **Mucha** | 1.11 | 29 | *e*P | Pg | 13 28 20.6 | +0.2 | | |
| | baz=28 | | | | | | | | |
| TWA | | | | S | Sg | 13 28 36.5 | +1.5 | | |
| | baz=28 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | 1.16 | 19 | *e*P | Pn | 13 28 19.7 | -0.7 | | |
| | baz=20 | | | | | | | | |
| TWS1 | | | | *i* S | Sg | 13 28 37.9 | +1.4 | | |
| | baz=20 | | | | | | | | |
| **TWG** | **Pinlang** | 1.18 | 176 | *e*P | Pg | 13 28 21.0 | -0.5 | | |
| | baz=170 | | | | | | | | |
| TWG | | | | *e*S | Sg | 13 28 37.2 | +0.4 | | |
| | baz=170 | | | | | | | | |
| **TWGBT** | **Beinan** | 1.18 | 176 | P | Pg | 13 28 21.2 | -0.3 | | |
| **TWGBT** | **Beinan** | 1.18 | 176 | P | Pg | 13 28 21.3 | -0.3 | | |
| | baz=170 | | | | | | | | |
| TWGBT | | | | S | Sg | 13 28 37.5 | +0.5 | | |
| | baz=170 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | 1.19 | 216 | *e*P | Pg | 13 28 21.1 | -0.6 | | |
| | baz=214 | | | | | | | | |
| TAI1 | | | | *e*S | Sg | 13 28 39.3 | +2.1 | | |
| | baz=214 | | | | | | | | |
| **TSCK** | **Chigu Township** | 1.19 | 225 | *e*P | Pn | 13 28 20.4 | -0.3 | | |
| | baz=234 | | | | | | | | |
| TSCK | | | | *e*S | Sg | 13 28 38.3 | +1.0 | | |
| | baz=234 | | | | | | | | |
| **SCST** | **Cishan** | 1.20 | 203 | *e*P | Pg | 13 28 21.9 | 0.0 | | |
| | baz=201 | | | | | | | | |
| SCST | | | | *e*S | Sg | 13 28 39.1 | +1.5 | | |
| | baz=201 | | | | | | | | |
| **EOS2** | **EOS2** | 1.21 | 69 | *e*P | Pg | 13 28 22.7 | +0.6 | | |
| | baz=69 | | | | | | | | |
| **EOS4** | **EOS4** | 1.22 | 84 | *e*P | Pb | 13 28 21.3 | +0.1 | | |
| | baz=100 | | | | | | | | |
| EOS4 | | | | *e*S | Sg | 13 28 38.0 | -0.1 | | |
| | baz=100 | | | | | | | | |
| **TIPB** | **Shuangxi** | 1.23 | 38 | *e*P | Pb | 13 28 21.6 | -0.1 | | |
| | baz=22 | | | | | | | | |
| TIPB | | | | *e*S | Sn | 13 28 37.4 | -0.3 | | |
| | baz=22 | | | | | | | | |
| **NTST** | **Danshui** | 1.23 | 20 | *e*P | Pb | 13 28 21.7 | 0.0 | | |
| | baz=1.0 | | | | | | | | |
| **EOS3** | **EOS3** | 1.24 | 76 | *e*P | Pg | 13 28 22.7 | -0.1 | | |
| | baz=91 | | | | | | | | |
| **TTN** | **Taitung** | 1.25 | 173 | *e*P | Pb | 13 28 22.1 | +0.1 | | |
| | baz=173 | | | | | | | | |
| **YM01** | **YM01** | 1.26 | 25 | P | Pn | 13 28 21.8 | 0.0 | | |
| | baz=24 | | | | | | | | |
| YM01 | | | | *e*S | Sg | 13 28 39.5 | 0.0 | | |
| | baz=24 | | | | | | | | |
| **ANP** | **Anpu** | 1.28 | 22 | *e*P | Pn | 13 28 22.1 | 0.0 | | |
| | baz=23 | | | | | | | | |
| ANP | | | | *e*S | Sg | 13 28 40.2 | +0.1 | | |
| | baz=23 | | | | | | | | |
| **TWM1** | **Shoushan** | 1.28 | 204 | *e*P | Pg | 13 28 23.4 | -0.1 | | |
| | baz=204 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | 1.29 | 34 | *e*P | Pg | 13 28 23.6 | 0.0 | | |
| | baz=35 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | 1.29 | 34 | *e*P | Pb | 13 28 22.6 | -0.1 | | |
| | baz=36 | | | | | | | | |
| **YM08** | **YM08** | 1.30 | 25 | *e*P | Pn | 13 28 22.4 | 0.0 | | |
| | baz=24 | | | | | | | | |
| YM08 | | | | *e*S | Sb | 13 28 39.5 | +0.1 | | |
| | baz=24 | | | | | | | | |
| **TSMG** | **Majia** | 1.33 | 194 | *e*P | Pb | 13 28 23.4 | 0.0 | | |
| | baz=204 | | | | | | | | |
| TSMG | | | | *e*S | Sb | 13 28 40.1 | +0.1 | | |
| | baz=204 | | | | | | | | |
| **TNOU** | **National Taiwa** | 1.35 | 32 | *e*P | Pg | 13 28 24.6 | -0.2 | | |
| | baz=13 | | | | | | | | |
| **SGLT** | **Jiouru** | 1.35 | 200 | *e*P | Pg | 13 28 24.7 | -0.1 | | |
| | baz=200 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | 1.35 | 42 | *e*P | Pg | 13 28 24.2 | -0.7 | | |
| | baz=44 | | | | | | | | |
| **SXI1** | **Grass Mountain** | 1.35 | 36 | *e*P | Pb | 13 28 23.7 | -0.1 | | |
| | baz=27 | | | | | | | | |
| **PNG** | **Penghu** | 1.39 | 252 | *e*P | Pn | 13 28 22.9 | -0.6 | | |
| | baz=250 | | | | | | | | |
| PNG | | | | *e*S | Sb | 13 28 41.7 | 0.0 | | |
| | baz=250 | | | | | | | | |
| **TWY** | **Chenhua** | 1.39 | 23 | *e*P | Pn | 13 28 23.7 | +0.2 | | |
| | baz=6.0 | | | | | | | | |
| **PHUB** | **P'eng-hu** | 1.39 | 250 | *e*P | Pn | 13 28 22.7 | -0.8 | | |
| | baz=248 | | | | | | | | |
| PHUB | | | | *i* S | Sb | 13 28 41.4 | -0.4 | | |
| | baz=248 | | | | | | | | |
| **LDUT** | **Ludao** | 1.39 | 162 | *e*P | Pn | 13 28 23.4 | -0.2 | | |
| | baz=150 | | | | | | | | |
| LDUT | | | | *e*S | Sg | 13 28 42.6 | -1.1 | | |
| | baz=150 | | | | | | | | |
| **ECL** | **Taimali** | 1.40 | 181 | *e*P | Pb | 13 28 24.6 | +0.1 | | |
| | baz=167 | | | | | | | | |
| ECL | | | | *i* S | Sg | 13 28 43.1 | -0.8 | | |
| | baz=167 | | | | | | | | |
| **MASBT** | **Mashibuluo** | 1.42 | 194 | *e*P | Pb | 13 28 24.6 | -0.3 | | |
| | baz=195 | | | | | | | | |
| MASBT | | | | S | Sg | 13 28 45.0 | +0.3 | | |
| | baz=195 | | | | | | | | |
| **WDGT** | **Dungji** | 1.43 | 239 | *i* P | Pn | 13 28 24.1 | +0.1 | | |
| | baz=230 | | | | | | | | |
| WDGT | | | | *e*S | Sg | 13 28 44.3 | -0.6 | | |
| | baz=230 | | | | | | | | |
| **EAST** | **Anshuo** | 1.61 | 185 | *e*P | Pb | 13 28 27.5 | -0.7 | | |
| | baz=204 | | | | | | | | |
| **TAW** | **Tawu** | 1.64 | 183 | *e*P | Pb | 13 28 27.6 | -1.0 | | |
| | baz=172 | | | | | | | | |
| **VCHM** | **Qimei** | 1.64 | 242 | *e*P | Pn | 13 28 26.6 | -0.3 | | |
| | baz=241 | | | | | | | | |
| VCHM | | | | *i* S | Sn | 13 28 47.7 | +0.1 | | |
| | baz=241 | | | | | | | | |
| **SCZT** | **Fangliau** | 1.66 | 192 | P | Pb | 13 28 28.2 | -0.7 | | |
| | baz=193 | | | | | | | | |
| SCZT | | | | *e*S | Sb | 13 28 49.8 | +0.3 | | |
| | baz=193 | | | | | | | | |
| **VWUC** | **VWUC** | 1.72 | 305 | *e*P | Pn | 13 28 26.5 | -1.6 | | |
| | baz=304 | | | | | | | | |
| **SLIU** | **Shizi** | 1.78 | 186 | *e*P | Pb | 13 28 30.0 | -1.1 | | |
| | baz=203 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | 1.84 | 75 | P | Pn | 13 28 30.6 | +0.9 | | |
| JYNG | | | | *e*S | Sb | 13 28 53.9 | -0.9 | | |
| **YOJ** | **Yonaguni jima** | 1.90 | 76 | P | Pn | 13 28 31.4 | +0.9 | | |
| **YOJ** | **Yonaguni jima** | 1.90 | 76 | *e*P | Pn | 13 28 31.2 | +0.7 | | |
| | baz=87 | | | | | | | | |
| YOJ | | | | *e*S | Sb | 13 28 55.9 | -0.6 | | |
| | baz=87 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | 1.90 | 76 | P | Pn | 13 28 31.4 | +0.9 | | |
| **PTMZ** | **Houxiangcun** | 2.00 | 302 | *e*P | Pn | 13 28 30.4 | -1.5 | | |
| | baz=300 | | | | | | | | |
| **LAY** | **Lan-yu** | 2.02 | 165 | *e*P | Pn | 13 28 32.0 | -0.2 | | |
| | baz=153 | | | | | | | | |
| **LYUB** | **Lan-yu** | 2.06 | 165 | *e*P | Pn | 13 28 31.5 | -1.2 | | |
| | baz=153 | | | | | | | | |
| **MATB** | **Ma-tsu** | 2.34 | 336 | *e*P | Pn | 13 28 35.0 | -1.7 | | |
| | baz=334 | | | | | | | | |
| **KNM** | **Kinmen** | 2.37 | 281 | *e*P | Pn | 13 28 38.2 | +1.1 | | |
| | baz=278 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | 2.42 | 282 | *e*P | Pn | 13 28 36.6 | -1.1 | | |
| | baz=280 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | 2.52 | 82 | P | Pn | 13 28 40.3 | +1.2 | | |
| IRIF | | | | S | Sn | 13 29 10.3 | +0.8 | | |
| **MHZQ** | **Yeshan** | 2.75 | 320 | *e*P | Pn | 13 28 41.9 | -0.3 | | |
| | baz=319 | | | | | | | | |
| **JKRS** | **Kuro-shima** | 2.77 | 84 | P | Pn | 13 28 44.2 | +1.8 | | |
| JKRS | | | | S | Sn | 13 29 17.7 | +2.2 | | |
| **LYJJ** | **Jianjiangzhen** | 2.77 | 337 | *e*P | Pn | 13 28 41.3 | -1.3 | | |
| | baz=334 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | 2.90 | 82 | P | Pn | 13 28 45.0 | +0.7 | | |
| JIJ | | | | *e*S | Sn | 13 29 18.5 | -0.4 | | |
| **ZPLA** | **Ao Xicun** | 2.97 | 269 | *e*P | Pn | 13 28 44.2 | -1.0 | | |
| | baz=267 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | 3.08 | 78 | P | Pn | 13 28 48.0 | +1.2 | | |
| JISG | | | | S | Sn | 13 29 22.9 | -0.5 | | |
| **JTJ** | **Tarama** | 3.44 | 79 | P | Pn | 13 28 53.5 | +1.7 | | |
| JTJ | | | | *e*S | Sn | 13 29 33.8 | +1.5 | | |
| **JIKM** | **Ikemajima** | 3.98 | 76 | *e*P | Pn | 13 29 01.7 | +2.5 | | |
| **JMJ2** | **Miyako jima3** | 4.02 | 79 | *e*P | Pn | 13 29 01.8 | +2.1 | | |

**IDC 20 13:30:34.6±5.0,55.19S×130.01W,h0km,mb3.9/3, mbtmp3.9/3,MS3.5/3,Error ellipse: s-maj=147.9km s-min=46.9km az=58.0,Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMSA** | **Palmer Station** | **32.83** | **134** | LR | | LR | | 13 47 33.3 | |
| | comp=Z,222nm,21.6s,baz=170,slow=31 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.98** | **180** | P | | P | | 13 37 30.0 | +1.7 |
| | 2.6nm,0.9s,baz=111,slow=1.6,SNR=5.3 | | | | | | | | |
| | 2.6nm,0.9s | | | | | | | | |
| **RPZ** | **Rata Peaks** | **38.85** | **262** | LR | | LR | | 13 49 17.2 | |
| | comp=Z,50nm,21.6s,baz=136,slow=29 | | | | | | | | |
| **RAR** | **Rarotonga** | **40.61** | **315** | LR | | LR | | 13 51 46.1 | |
| | comp=Z,40nm,18.6s,baz=243,slow=31 | | | | | | | | |
| **H03S2** | **Juan Fernandez** | **41.07** | **80** | T | | T | | 14 20 48.1 | |
| | baz=220,slow=74,SNR=9.1 | | | | | | | | |
| **H03S1** | **Juan Fernandez** | **41.08** | **80** | T | | T | | 14 20 57.6 | |
| | baz=220,slow=74,SNR=10 | | | | | | | | |
| **H03S3** | **Juan Fernandez** | **41.09** | **80** | T | | T | | 14 20 50.4 | |
| | baz=220,slow=74,SNR=8.3 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **41.35** | **80** | T | | T | | 14 21 09.0 | |
| | baz=223,slow=72,S

baz=148
**H11N1 WAKE ISLAND Hy 91.73 303** T T 15 26 36.6
baz=148
**H11N2 WAKE ISLAND Hy 91.75 303** T T 15 26 32.2
baz=148
**SONM Songino Array 145.00 282** PKPbc PKPab 13 50 12.6 +0.3
0.3nm,0.4s,baz=132,slow=2.1,SNR=2.2

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*NEIC* ***20*** *13:31:31.4±2.2,51°.19N±0°.08×179°.96E±0°.06, h70km±6km, mb4.1/79, ML4.3(AEIC), Error ellipse: s-maj=11.7km s-min=5.2km az=182.0*
*AEIC* ***20*** *13:31:32.2±3.1,51°.35N±0°.09×180°.00E±0°.03, h59km±5km, Error ellipse: s-maj=13.7km s-min=2.5km az=180.0*
*IDC* ***20*** *13:31:36.2±2.1,51°.65N×179°.82E, h95km±16km, mb3.6/21, mbtmp3.9/24, MS2.8/2, Error ellipse: s-maj=20.5km s-min=12.6km az=175.0*
**ISC 20 13:31:32.3±0.8, 51°.36N±0°.09×179°.92E±0°.03, h70km±6km, n174, σ1$23/178, mb4.1/56, Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **AMKA** | **Amchitka** | **0.39** | **273** | Pn | **Pn** | | **13 31 43.9** | **-0.2** |
| AMKA | | | | Sn | **Sn** | | **13 31 52.0** | **-0.7** |
| **CESW** | **Semis' Southwe** | **0.58** | **338** | | **Pn** | | **13 31 45.7** | **-0.2** |
| **CEPE** | **Semis' Perret** | **0.63** | **344** | | **Pn** | | **13 31 46.2** | **-0.2** |
| **CEAP** | **Semis' Anvil P** | **0.68** | **342** | | **Pn** | | **13 31 46.8** | **-0.1** |
| **GAKI** | **Gareloi-Kavalg** | **0.81** | **76** | | **Pn** | | **13 31 47.9** | **-0.6** |
| GAKI | | | | | **Sn** | | **13 31 59.4** | **-1.0** |
| **GANO** | **Gareloi North** | **0.92** | **60** | | **Pn** | | **13 31 49.0** | **-0.7** |
| **GAEA** | **Gareloi East** | **0.93** | **63** | | **Pn** | | **13 31 49.4** | **-0.6** |
| **LSSE** | **Little Sitkin** | **1.02** | **305** | | **Pn** | | **13 31 51.7** | **+0.6** |
| **LSPA** | **Little Sitkin** | **1.03** | **306** | | **Pn** | | **13 31 51.8** | **+0.6** |
| LSPA | | | | | **Sn** | | **13 32 06.0** | **+0.8** |
| **LSNW** | **Little Sitkin** | **1.07** | **305** | | **Pn** | | **13 31 51.9** | **+0.3** |
| **TANO** | **Tanaga North** | **1.34** | **65** | | **Pn** | | **13 31 54.9** | **-0.3** |
| TANO | | | | | **Sn** | | **13 32 11.8** | **-0.4** |
| **TASE** | **Tanaga Southea** | **1.36** | **69** | | **Pn** | | **13 31 55.1** | **-0.3** |
| **KICM** | **Kanaga Island** | **1.88** | **72** | | **Pn** | | **13 32 02.1** | **-0.2** |
| KICM | | | | | **Sn** | | **13 32 26.2** | **+1.1** |
| **KIWB** | **Kanaga Island** | **1.89** | **74** | | **Pn** | | **13 32 02.0** | **-0.5** |
| **KIRH** | **Kanaga Island** | **1.94** | **73** | | **Pn** | | **13 32 02.8** | **-0.2** |
| KIRH | | | | | **Sn** | | **13 32 26.6** | **+0.2** |
| **GSCK** | **Great Sitkin C** | **2.52** | **74** | | **Pn** | | **13 32 10.8** | **-0.2** |
| GSCK | | | | | **Sn** | | **13 32 40.4** | **-0.3** |
| **GSMY** | **Great Sitkin M** | **2.59** | **73** | | **Pn** | | **13 32 11.8** | **-0.1** |
| **GSTR** | **Great Sitkin T** | **2.60** | **72** | | **Pn** | | **13 32 11.3** | **-0.8** |
| **KOKL** | **Mount Kliuchef** | **3.77** | **73** | | **Pn** | | **13 32 27.8** | **-0.2** |
| KOKL | | | | | **Sn** | | **13 33 09.7** | **-1.5** |
| **KOFP** | **Korovin Flat P** | **3.82** | **74** | | **Pn** | | **13 32 29.1** | **+0.5** |
| **SHEM** | **Shemya Is, Ala** | **3.85** | **293** | P | **Pn** | | **13 32 30.8** | **+1.9** |
| | 40nm,0.3s,baz=93,slow=7.8,SNR=15 | | | | | | | |
| SHEM | | | | S | **Sn** | | **13 33 13.6** | **+0.7** |
| | 74nm,0.4s,baz=61,slow=19,SNR=11 | | | | | | | |
| SHEM | | | | LR | LR | | 13 33 18.4 | |
| | comp=Z,64nm,19.7s,baz=152,slow=28 | | | | | | | |
| **CLES** | **Cleveland East** | **6.44** | **73** | Pn | **Pn** | | **13 33 03.0** | **-1.5** |
| **CLCO** | **Concord Point,** | **6.54** | **73** | | **Pn** | | **13 33 07.4** | **+1.6** |
| **NIKH** | **Nikolski High** | **7.09** | **72** | | **Pn** | | **13 33 13.3** | **0.0** |
| **OKWE** | **Okmok W'rng Wal** | **7.54** | **69** | | **Pn** | | **13 33 20.7** | **+1.3** |
| **OKCE** | **Okmok Cone E** | **7.58** | **70** | | **Pn** | | **13 33 22.1** | **+2.1** |
| **OKTU** | **Okmok Mt. Tuli** | **7.64** | **70** | | **Pn** | | **13 33 21.8** | **+1.0** |
| **P08K** | **Saint George I** | **8.12** | **46** | | **Pn** | | **13 33 28.1** | **+0.7** |
| **SPIA** | **Saint Paul Isl** | **8.18** | **41** | Pn | **Pn** | | **13 33 28.9** | **+0.8** |
| **MAPS** | **Pakushin South** | **8.37** | **68** | | **Pn** | | **13 33 31.6** | **+0.9** |
| **MGOD** | **Makushin Gods** | **8.40** | **68** | | **Pn** | | **13 33 31.8** | **+0.5** |
| **MSW** | **Makushin Switc** | **8.48** | **67** | | **Pn** | | **13 33 33.0** | **+0.7** |
| **MTBL** | **Makushin Table** | **8.55** | **67** | | **Pn** | | **13 33 35.3** | **+2.0** |
| **UNV** | **Unalaska Valle** | **8.63** | **68** | | **Pn** | | **13 33 34.8** | **+0.5** |
| **AKGG** | **Akutan Green G** | **9.00** | **66** | | **Pn** | | **13 33 40.5** | **+1.2** |
| **WEBT** | **Westdahl Beart** | **9.79** | **65** | | **Pn** | | **13 33 51.4** | **+1.3** |
| **WESE** | **West Dahl East** | **9.86** | **66** | | **Pn** | | **13 33 52.5** | **+1.3** |
| **S12K** | **Black Hills** | **11.56** | **61** | | **Pn** | | **13 34 14.7** | **+0.4** |
| **SDPT** | **Sand Point** | **12.36** | **64** | Pn | **Pn** | | **13 34 24.2** | **-1.0** |
| **CNBA** | **Chernabura Isl** | **12.78** | **66** | Pn | **Pn** | | **13 34 28.1** | **-2.7** |
| **M13K** | **Dall Lake** | **13.01** | **39** | Pn | **Pn** | | **13 34 36.3** | **+2.3** |
| **O14K** | **Tigyukauivet M** | **13.28** | **46** | Pn | **Pn** | | **13 34 39.3** | **+1.8** |
| **PETK** | **Petropavlovsk-** | **13.72** | **286** | P | **Pn** | | **13 34 45.9** | **+2.4** |
| | 4.2nm,1.0s,baz=104,slow=18,SNR=1.7 | | | | | | | |
| PETK | | | | S | **Sn** | | **13 37 07.8** | **-6.2** |
| | 2.0nm,0.8s,baz=79,slow=22,SNR=1.2 | | | | | | | |
| **M14K** | **Bethel** | **13.77** | **40** | Pn | **Pn** | | **13 34 46.3** | **+2.3** |
| **L14K** | **Kuka Creek** | **13.84** | **37** | Pn | **Pn** | | **13 34 47.0** | **+2.1** |
| **N15K** | **Kwethluk River** | **14.24** | **44** | | **Pn** | | **13 34 51.6** | **+1.4** |
| **R16K** | **Pilot Point** | **14.44** | **56** | P | **P** | | **13 34 57.1** | **-0.6** |
| **K15K** | **Wolf Creek Mou** | **14.86** | **35** | P | **P** | | **13 35 02.2** | **-0.2** |
| **O16K** | **Kokwok River B** | **14.88** | **48** | Pn | **Pn** | | **13 34 59.9** | **+1.3** |
| **PLK4** | **Peulik 4** | **15.09** | **56** | Pn | **Pn** | | **13 34 59.9** | **-1.4** |
| **M16K** | **Timber Creek** | **15.15** | **42** | Pn | **Pn** | | **13 35 03.4** | **+1.4** |
| M16K | | | | IAmb | IAmb | | 13 35 23.1 | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **CHIR** | **Chirikof Islan** | **15.16** | **63** | Pn | **Pn** | | **13 34 58.5** | **-3.5** |
| **ANM** | **Nome** | **15.30** | **25** | Pn | **P** | | **13 35 05.8** | **-1.4** |
| ANM | | | | IAmb | IAmb | | 13 35 26.2 | |
| | comp=Z,33nm,1.4s | | | | | | | |
| **L16K** | **Owhat River** | **15.30** | **39** | Pn | **P** | | **13 35 05.5** | **-1.8** |
| L16K | | | | IAmb | IAmb | | 13 35 10.5 | |
| | comp=Z,6.8nm,0.7s | | | | | | | |
| **ACHA** | **Angle Creek He** | **15.77** | **55** | Pn | **Pn** | | **13 35 09.6** | **-0.4** |
| **J16K** | **Anvik River** | **15.82** | **34** | P | **P** | | **13 35 13.9** | **+0.8** |
| **M17K** | **Holitna River** | **15.98** | **42** | | **P** | | **13 35 14.3** | **-0.5** |
| M17K | | | | IAmb | IAmb | | 13 35 18.9 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| **K17K** | **Iditarod** | **16.32** | **37** | | **P** | | **13 35 19.4** | **+0.9** |
| K17K | | | | IAmb | IAmb | | 13 35 35.2 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **O18K** | **Koktuh Hills** | **16.33** | **49** | | **P** | | **13 35 18.5** | **-0.2** |
| O18K | | | | IAmb | IAmb | | 13 35 35.2 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **Q19K** | **Cape Douglas,** | **16.81** | **53** | | **P** | | **13 35 24.0** | **0.0** |
| **N19K** | **Bonanza Creek** | **17.02** | **46** | | **P** | | **13 35 26.1** | **-0.2** |
| N19K | | | | IAmb | IAmb | | 13 35 50.4 | |
| | comp=Z,8.6nm,0.9s | | | | | | | |
| **KDAK** | **Kodiak Island** | **17.10** | **57** | P | **Pn** | | **13 35 22.9** | **-3.6** |
| | comp=Z,5.3nm,0.4s,baz=208,slow=5.0,SNR=36 | | | | | | | |
| **H17K** | **Granite Mounta** | **17.15** | **30** | | **P** | | **13 35 29.5** | **+1.8** |
| **RSO** | **Redoubt South** | **17.69** | **48** | | **P** | | **13 35 34.7** | **+0.8** |
| **HOM** | **Homer** | **17.99** | **51** | P | **Pn** | | **13 35 37.5** | **+0.2** |
| **CNPM** | **China Poot** | **18.16** | **52** | P | **P** | | **13 35 38.7** | **-0.2** |
| **C16K** | **Lisburne Hills** | **18.41** | **17** | P | **Pn** | | **13 35 43.0** | **+0.7** |
| C16K | | | | IAmb | IAmb | | 13 35 54.9 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **H19K** | **Roundabout Mou** | **18.64** | **31** | Pn | **Pn** | | **13 35 46.4** | **+1.3** |
| **J20K** | **Nowinta River** | **18.68** | **37** | P | **Pn** | | **13 35 45.0** | **-0.6** |
| **RDOG** | **Red Dog Mine** | **18.72** | **20** | P | **Pn** | | **13 35 46.9** | **+0.9** |
| RDOG | | | | IAmb | IAmb | | 13 35 47.6 | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **SEY** | **Seymchan** | **18.73** | **319** | P | **Pn** | | **13 35 46.0** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=159,slow=17,SNR=1.9 | | | | | | | |
| **SKT** | **Skwentna** | **18.77** | **45** | P | **Pn** | | **13 35 46.4** | **-0.4** |
| SKT | | | | IAmb | IAmb | | 13 36 08.7 | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **C18K** | **Utukok River** | **19.58** | **21** | P | **Pn** | | **13 35 55.5** | **-0.7** |
| C18K | | | | IAmb | IAmb | | 13 35 57.2 | |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **F20K** | **Avaraart Lake** | **19.84** | **28** | P | **P** | | **13 35 58.0** | **+0.9** |
| **BPAW** | **Bear Paw Mtn.** | **19.86** | **39** | P | **P** | | **13 35 57.4** | **0.0** |
| BPAW | | | | IAmb | IAmb | | 13 36 14.5 | |
| | comp=Z,7.1nm,1.1s | | | | | | | |
| **H21K** | **Melozitna Rive** | **19.95** | **34** | P | **Pn** | | **13 35 59.5** | **-1.2** |
| **C19K** | **Lookout Ridge** | **20.30** | **21** | P | Pn | | 13 36 03.4 | -1.3 |
| C19K | | | | IAmb | IAmb | | 13 36 04.8 | |
| | comp=Z,25nm,1.4s | | | | | | | |
| **RND** | **Reindeer** | **20.45** | **42** | P | **P** | | **13 36 03.9** | **+0.1** |
| RND | | | | IAmb | IAmb | | 13 36 29.7 | |
| | comp=Z,9.3nm,1.2s | | | | | | | |
| **F21K** | **Alatna River** | **20.63** | **30** | P | **P** | | **13 36 05.3** | **-0.4** |
| **I23K** | **Minto, Yukon-K** | **20.96** | **37** | P | **P** | | **13 36 08.9** | **-0.2** |
| I23K | | | | IAmb | IAmb | | 13 36 19.1 | |
| | comp=Z,9.7nm,1.5s | | | | | | | |
| **DHY** | **Denali Highway** | **20.96** | **43** | P | **P** | | **13 36 08.5** | **-0.9** |
| DHY | | | | IAmb | IAmb | | 13 36 25.1 | |
| | comp=Z,25nm,1.4s | | | | | | | |
| **E21K** | **Killik River** | **21.25** | **27** | P | **P** | | **13 36 11.7** | **-0.6** |
| E21K | | | | IAmb | IAmb | | 13 36 15.0 | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **MDM** | **Murphy Dome** | **21.31** | **38** | P | **P** | | **13 36 12.0** | **-1.0** |
| MDM | | | | IAmb | IAmb | | 13 36 36.2 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **G23K** | **Bananza Creek** | **21.47** | **33** | P | **P** | | **13 36 14.5** | **-0.2** |
| G23K | | | | IAmb | IAmb | | 13 36 18.1 | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| **B20K** | **Meade River** | **21.54** | **21** | P | **P** | | **13 36 15.5** | **+0.1** |
| B20K | | | | IAmb | IAmb | | 13 36 35.2 | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **21.69** | **29** | P | **P** | | **13 36 16.9** | **-0.2** |
| **ILAR** | **Eielson Array** | **21.76** | **39** | P | **P** | | **13 36 17.8** | **0.0** |
| | comp=Z,0.4nm,0.5s,baz=248,slow=8.5,SNR=2.1 | | | | | | | |
| ILAR | | | | PcP | **PcP** | | **13 40 14.4** | **-1.0** |
| | comp=Z,0.6nm,0.6s,baz=252,slow=3.0,SNR=5.4 | | | | | | | |
| ILAR | | | | ScP | **ScP** | | **13 43 44.4** | **-1.7** |
| | comp=Z,0.6nm,0.6s,baz=277,slow=4.0,SNR=4.8 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **H24K** | **Noodor Dome** | **21.82** | **36** | P | **P** | | **13 36 19.1** | **+0.7** |
| H24K | | | | IAmb | IAmb | | 13 36 43.3 | |
| | comp=Z,7.3nm,1.2s | | | | | | | |
| **D22K** | **Ayikyak River** | **21.90** | **27** | P | **P** | | **13 36 19.8** | **+0.6** |
| D22K | | | | IAmb | IAmb | | 13 36 22.3 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **RIDG** | **Independent Ri** | **22.25** | **43** | P | **P** | | **13 36 23.3** | **+0.2** |
| RIDG | | | | IAmb | IAmb | | 13 37 03.1 | |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **22.35** | **34** | P | **P** | | **13 36 24.4** | **+0.3** |
| G24K | | | | IAmb | IAmb | | 13 36 44.1 | |
| | comp=Z,8.6nm,1.1s | | | | | | | |
| **D23K** | **Nanushuk River** | **22.52** | **28** | P | **P** | | **13 36 25.5** | **-0.4** |
| D23K | | | | IAmb | IAmb | | 13 36 28.0 | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **F24K** | **Squaw Lake** | **22.60** | **32** | P | **P** | | **13 36 26.5** | **-0.3** |
| F24K | | | | IAmb | IAmb | | 13 36 46.8 | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **SCRK** | **Sand Creek** | **22.68** | **42** | P | **P** | | **13 36 26.7** | **-1.1** |
| **E24K** | **Your Creek** | **22.69** | **31** | P | **P** | | **13 36 27.3** | **-0.5** |
| **J26L** | **Joseph Creek** | **23.02** | **41** | P | **P** | | **13 36 29.3** | **-1.9** |
| **C23K** | **Itkillik River** | **23.07** | **26** | P | **P** | | **13 36 30.9** | **-0.6** |
| C23K | | | | IAmb | IAmb | | 13 37 11.1 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **L27K** | **Beaver Creek,** | **23.39** | **45** | P | **P** | | **13 36 33.9** | **-0.8** |
| **F25K** | **Christian Rive** | **23.40** | **33** | P | **P** | | **13 36 35.0** | **+0.3** |
| **BCAR** | **Beaver Creek A** | **23.41** | **45** | P | **P** | | **13 36 34.1** | **-0.8** |
| **F26K** | **Sheenjek River** | **23.96** | **33** | P | **P** | | **13 36 39.1** | **-0.6** |
| **D25K** | **Kavik River** | **24.00** | **29** | P | **P** | | **13 36 40.0** | **-0.1** |
| D25K | | | | IAmb | IAmb | | 13 36 41.9 | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **EGAK** | **Eagle** | **24.09** | **41** | P | **P** | | **13 36 40.8** | **-0.1** |
| EGAK | | | | IAmb | IAmb | | 13 36 58.7 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **G27K** | **Doyon Strip** | **24.51** | **36** | P | **P** | | **13 36 45.0** | **+0.2** |
| **I28M** | **Miner Creek** | **24.76** | **40** | P | **P** | | **13 36 46.9** | **-0.2** |
| I28M | | | | IAmb | IAmb | | 13 37 06.4 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **M29M** | **Somme Creek** | **24.82** | **47** | P | **P** | | **13 36 46.9** | **-0.7** |
| M29M | | | | IAmb | IAmb | | 13 37 05.9 | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **E27K** | **Coleen River** | **25.04** | **33** | P | **P** | | **13 36 49.5** | **0.0** |
| E27K | | | | IAmb | IAmb | | 13 37 10.8 | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| **N30M** | **Aishikik Lake** | **25.37** | **50** | P | **P** | | **13 36 53.6** | **+1.0** |
| N30M | | | | IAmb | IAmb | | 13 37 12.2 | |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| **K29M** | **Barlow Dome** | **25.44** | **44** | P | **P** | | **13 36 52.6** | **-0.7** |
| **D27M** | **Malcolm River** | **25.67** | **31** | P | **P** | | **13 36 55.8** | **+0.5** |
| **E29M** | **Blow River** | **26.40** | **34** | P | **P** | | **13 37 02.5** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **32.50** | **276** | P | **P** | | **13 37 57.0** | **+0.9** |
| | comp=Z,1.6nm,0.6s,baz=66,slow=11,SNR=4.2 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.19** | **203** | T | T | | 14 13 38.2 | |
| | baz=16,slow=76,SNR=42 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.20** | **203** | T | T | | 14 13 38.9 | |
| | baz=16,slow=76,SNR=35 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.21** | **203** | T | T | | 14 13 39.6 | |
| | baz=16,slow=76,SNR=46 | | | | | | | |
| **JSG** | **Sagara** | **34.23** | **257** | P | P | | 13 38 06.2 | -4.9 |
| **H11S1** | **WAKE ISLAND Hy** | **34.41** | **203** | T | T | | 14 15 10.1 | |
| | baz=15,slow=76,SNR=54 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.43** | **203** | T | T | | 14 15 09.0 | |
| | baz=15,slow=76,SNR=20 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.43** | **203** | T | T | | 14 15 31.4 | |
| | baz=15,slow=76,SNR=24 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **35.82** | **46** | P | **P** | | **13 38 25.6** | **+1.0** |
| | comp=Z,0.4nm,0.6s,baz=307,slow=10,SNR=1.8 | | | | | | | |
| YKA | | | | LR | LR | | 13 54 31.2 | |
| | comp=Z,32nm,18.1s,baz=320,slow=38 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **44.35** | **82** | P | **P** | | **13 39 36.4** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=303,slow=8.1,SNR=4.4 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **45.94** | **296** | P | **P** | | **13 39 48.8** | **+0.8** |
| SONM | | | | IAmb | IAmb | | 13 39 49.9 | |
| | comp=Z,6.1nm,1.5s | | | | | | | |
| **SONM** | **Songino Array** | **45.94** | **296** | P | **P** | | **13 39 49.0** | **+1.0** |
| | comp=Z,2.8nm,0.7s,baz=66,slow=7.3,SNR=13 | | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **46.92** | **285** | *e*P | **P** | | **13 39 52.8** | **-3.0** |
| HHC | | | | pP | pP | | 13 40 06.4 | -6.7 |
| HHC | | | | sP | sP | | 13 40 15.4 | -5.6 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,160nm,5.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **47.08** | **71** | P | **P** | | **13 39 58.9** | **+1.7** |
| | comp=Z,0.9nm,0.6s,baz=298,slow=3.6,SNR=6.0 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.33** | **356** | P | **P** | | **13 40 20.4** | **-0.9** |
| | comp=Z,2.9nm,0.4s,baz=45,slow=6.0,SNR=16 | | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **50.34** | **356** | P | **P** | | **13 40 20.6** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **57.97** | **350** | P | **P** | | **13 41 15.6** | **-1.3** |
| **ARCES** | **ARCESS Array B** | **57.97** | **350** | P | **P** | | **13 41 15.6** | **-1.3** |
| | comp=Z,3.2nm,0.6s,baz=28,slow=8.4,SNR=14 | | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | | |
| **LVZ** | **Lovozero** | **58.26** | **345** | P | **P** | | **13 41 17.7** | **-1.3** |
| **KURK** | **Kurchatov** | **58.45** | **313** | P | **P** | | **13 41 20.4** | **-0.1** |
| KURK | | | | IAmb | IAmb | | 13 41 55.2 | |
| | comp=Z,1.8nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.55** | **313** | P | **P** | | **13 41 20.9** | **-0.3** |
| | comp=Z,0.8nm,0.4s,baz=43,slow=6.6,SNR=18 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **59.41** | **308** | P | **P** | | **13 41 26.7** | **-0.6** |
| MK31 | | | | IAmb | IAmb | | 13 41 27.7 | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.41** | **308** | P | **P** | | **13 41 26.7** | **-0.6** |
| **MKAR** | **Makanchi Array** | **59.41** | **308** | P | **P** | | **13 41 26.8** | **-0.5** |
| | comp=Z,2.2nm,0.6s,baz=52,slow=6.9,SNR=22 | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **59.45** | **80** | P | **P** | | **13 41 29.9** | **+2.0** |
| | comp=Z,0.3nm,0.6s,baz=319,slow=7.4,SNR=3.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **MAKZ** | **Makanchi** | **59.56** | **308** | P | **P** | | **13 41 28.1** | **-0.2** |
| MAKZ | | | | IAmb | IAmb | | 13 41 28.7 | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **60.38** | **319** | P | **P** | | **13 41 33.0** | **-0.8** |
| | comp=Z,0.7nm,0.2s,baz=46,slow=7.2,SNR=7.9 | | | | | | | |
| | comp=Z,0.7nm,0.2s | | | | | | | |
| **PZH** | **PanZhiHua** | **62.56** | **279** | P | **P** | | **13 41 47.0** | **-2.0** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.8s | | | | | | | |
| **FIA1** | **FINESS Array S** | **65.62** | **347** | P | **P** | | **13 42 06.8** | **-1.4** |
| **FINES** | **FINESS Array B** | **65.62** | **347** | P | **P** | | **13 42 06.8** | **-1.5** |
| | comp=Z,1.9nm,0.4s,baz=11,slow=6.6,SNR=16 | | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **65.65** | **308** | P | **P** | | **13 42 09.7** | **+0.6** |
| BOOM | | | | IAmb | IAmb | | 13 42 11.0 | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **NC204** | **NORSAR Array S** | **67.38** | **354** | P | **P** | | **13 42 18.9** | **-0.8** |
| **NC405** | **NORSAR Array S** | **67.48** | **354** | P | **P** | | **13 42 20.3** | **+0.1** |
| **NB201** | **NORSAR Array S** | **67.57** | **354** | P | **P** | | **13 42 20.2** | **-0.6** |
| **NB2** | **NORSAR Subarra** | **67.58** | **354** | P | **P** | | **13 42 20.0** | **-0.9** |
| | comp=Z,1.0nm,0.5s,baz=6.4,slow=6.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.58** | **354** | P | **P** | | **13 42 19.8** | **-1.2** |
| | comp=Z,0.9nm,0.5s,baz=2.0,slow=5.7,SNR=5.1 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **KKAR** | **Karatay Array** | **67.80** | **312** | P | **P** | | **13 42 22.7** | **+0.1** |
| **KSH** | **Kashi** | **67.86** | **306** | P | **P** | | **13 42 27.9** | **+4.7** |
| KSH | | | | sP | PcP | | 13 42 52.8 | +3.5 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | **68.30** | **353** | P | **P** | | **13 42 24.0** | **-1.4** |
| | comp=Z,0.9nm,0.4s,baz=35,slow=5.4,SNR=10 | | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.22** | **275** | P | **P** | | **13 42 38.7** | **+0.9** |
| | comp=Z,0.3nm,0.3s,baz=17,slow=6.7,SNR=2.2 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **GAR** | **Garm** | **71.07** | **309** | P | **P** | | **13 42 42.9** | **-0.1** |
| **CHGR** | **Chuyangaron** | **71.90** | **310** | P | **P** | | **13 42 47.9** | **0.0** |
| **EKA** | **Eskdalemuir Ar** | **73.64** | **2** | P | **P** | | **13 42 56.9** | **-0.9** |
| | comp=Z,1.0nm,0.6s,baz=356,slow=4.9,SNR=9.1 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.31** | **341** | P | **P** | | **13 43 05.3** | **-2.2** |
| | comp=Z,0.8nm,0.3s,baz=20,slow=5.8,SNR=4.5 | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **79.01** | **343** | P | **P** | | **13 43 28.1** | **-0.4** |
| BUR08 | | | | IAmb | IAmb | | 13 43 31.3 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **BURAR** | **Bucovina Array** | **79.04** | **343** | P | **P** | | **13 43 28.7** | **+0.1** |
| BURAR | | | | IAmb | IAmb | | 13 43 29.5 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **80.32** | **349** | *i* P | **P** | | **13 43 35.8** | **+0.4** |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **RETA** | **Reutte** | **81.09** | **353** | *e*PcP | **P** | | **13 43 42.4** | **+2.8** |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **WTTA** | **Wattenberg** | **81.24** | **352** | *i* P | **P** | | **13 43 40.5** | **-0.1** |
| | comp=Z,4.3nm,0.6s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **81.26** | **351** | *i* PcP | **P** | | **13 43 41.3** | **+0.6** |
| | comp=Z,7.2nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.45** | **223** | P | **P** | | **13 43 42.3** | **+0.6** |
| | comp=Z,0.3nm,0.7s,baz=31,slow=5.9,SNR=1.7 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **SOKA** | **Soboth** | **81.48** | **350** | *i* P | **P** | | **13 43 42.0** | **+0.3** |
| | comp=Z,3.8nm,0.9s | | | | | | | |
| **FETA** | **Feichten** | **81.56** | **353** | *i* P | **P** | | **13 43 42.3** | **+0.1** |
| | comp=Z,4.7nm,1.1s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **81.67** | **351** | *e*PcP | **P** | | **13 43 43.3** | **+0.6** |
| | comp=Z,3.1nm,1.0s | | | | | | | |
| **OBKA** | **Obir** | **81.70** | **350** | *i* PcP | **P** | | **13 43 43.3** | **+0.4** |
| | comp=Z,3.8nm,0.5s | | | | | | | |
| **PRED** | **Cave del Predi** | **81.87** | **351** | P | **P** | | **13 43 43.3** | **-0.4** |
| **BNI** | **Bardonecchia** | **83.79** | **355** | P | **P** | | **13 43 54.5** | **+0.7** |
| BNI | | | | IAmb | IAmb | | 13 43 55.4 | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **MSSA** | **Maissana** | **84.34** | **353** | P | **P** | | **13 43 55.7** | **-0.9** |
| **BRTR** | **Keskin Array B** | **84.62** | **335** | P | **P** | | **13 43 58.1** | **0.0** |
| | comp=Z,0.3nm,0.5s,baz=353,slow=7.9,SNR=1.6 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **84.94** | **221** | P | **P** | | **13 44 00.8** | **+1.2** |
| | comp=Z,0.4nm,0.8s,baz=16,slow=5.3,SNR=5.0 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **FDMO** | **Fiordimonte** | **85.29** | **350** | P | **P** | | **13 44 01.6** | **+0.4** |
| **QSPA** | **South Pole Qui** | **141.12** | **180** | PKP | **PKPdf** | | **13 50 54.1** | **+0.9** |
| | comp=Z,0.9nm,0.8s,baz=320,slow=4.7,SNR=7.3 | | | | | | | |
| **BOSA** | **Boshof** | **150.39** | **310** | PKPbc | **PKiKP** | | **13 51 16.2** | **-0.1** |
| | comp=Z,3.5nm,0.6s,baz=34,slow=3.5,SNR=10 | | | | | | | |

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**NAM 20 13:40:27.9±0.7, 19°.83S×14°.57E, h0km±14km, ML1.7, 7C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **ST9N** | **ST9** | **0.04** | **321** | ⇓*i*P | Pg | | 13 40 28.9 | +0.2 |
| ST9N | | | | *i* S | Sg | | 13 40 29.6 | +0.4 |
| ST9N | | | | IAML | | | 13 40 29.9 | |
| | comp=Z,2μm,0.0s | | | | | | | |
| **ST9N** | **ST9** | **0.04** | **321** | *i* P | Pg | | 13 40 28.9 | +0.2 |
| ST9N | | | | *i* S | Sg | | 13 40 29.6 | +0.4 |
| ST9N | | | | IAML | | | 13 40 29.9 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **ST2N** | **ST2** | **0.10** | **167** | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **L16K** | **Owhat River** | **80.56** | **9** | P | **P** | **13 53 18.6** | **-1.0** |
| L16K | | | | IAmb | IAmb | 13 53 27.0 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **M17K** | **Holitna River** | **80.59** | **10** | P | **P** | **13 53 21.1** | **+1.3** |
| **L18K** | **Granite Mounta** | **81.49** | **10** | P | **P** | **13 53 26.3** | **+1.9** |
| L18K | | | | IAmb | IAmb | 13 53 27.8 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **K17K** | **Iditarod** | **81.69** | **9** | P | **P** | **13 53 27.0** | **+1.6** |
| K17K | | | | IAmb | IAmb | 13 53 46.0 | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **J16K** | **Anvik River** | **81.90** | **8** | P | **P** | **13 53 28.1** | **+1.7** |
| J16K | | | | IAmb | IAmb | 13 53 28.6 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **J18K** | **Innoko River** | **82.65** | **10** | P | **P** | **13 53 31.6** | **+1.3** |
| **K20K** | **Telida** | **83.00** | **11** | P | **P** | **13 53 33.2** | **+1.1** |
| K20K | | | | IAmb | IAmb | 13 53 33.5 | |
| | comp=Z,7.6nm,1.3s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.04** | **14** | P | **P** | **13 53 32.8** | **+0.5** |
| SCM | | | | IAmb | IAmb | 13 53 33.9 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **J19K** | **Poorman** | **83.32** | **10** | P | **P** | **13 53 34.5** | **+0.9** |
| **N25K** | **Chitina, Valde** | **83.52** | **16** | P | **P** | **13 53 35.2** | **+0.5** |
| **GLB** | **Gilahina Butte** | **83.58** | **16** | P | **P** | **13 53 35.5** | **+0.4** |
| **J20K** | **Nowinta River** | **83.74** | **11** | P | **P** | **13 53 36.9** | **+1.2** |
| **RND** | **Reindeer** | **84.07** | **13** | P | **P** | **13 53 38.2** | **+0.8** |
| RND | | | | IAmb | IAmb | 13 53 39.0 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **DHY** | **Denali Highway** | **84.11** | **14** | P | **P** | **13 53 38.2** | **+0.5** |
| DHY | | | | IAmb | IAmb | 13 54 13.2 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **G18K** | **Tagagawik** | **84.66** | **8** | P | **P** | **13 53 40.5** | **+0.3** |
| **SRU** | **San Rafael Swe** | **84.98** | **46** | P | **P** | **13 53 42.7** | **+0.1** |
| **Q32M** | **Nakina River** | **85.23** | **22** | P | **P** | **13 53 44.7** | **+1.4** |
| Q32M | | | | IAmb | IAmb | 13 54 01.4 | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **O30N** | **Mendenhall** | **85.28** | **19** | P | **P** | **13 53 43.9** | **+0.5** |
| O30N | | | | IAmb | IAmb | 13 53 59.9 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **H21K** | **Melozitna Rive** | **85.33** | **10** | P | **P** | **13 53 44.7** | **+1.2** |
| H21K | | | | IAmb | IAmb | 13 53 49.8 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.39** | **13** | P | **P** | **13 53 43.9** | **+0.2** |
| **IMAR** | **Indian Mountai** | **85.47** | **10** | P | **P** | **13 53 44.8** | **+0.7** |
| **ILAR** | **Eielson Airpg** | **85.69** | **13** | P | **P** | **13 53 45.4** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=227,slow=5.3,SNR=4.9 | | | | | | |
| **M29M** | **Somme Creek** | **85.87** | **17** | P | **P** | **13 53 47.1** | **+0.9** |
| M29M | | | | IAmb | IAmb | 13 54 06.4 | |
| | comp=Z,4.2nm,1.2s | | | | | | |
| **R33M** | **Jennings River** | **86.01** | **22** | P | **P** | **13 53 47.8** | **+0.9** |
| R33M | | | | IAmb | IAmb | 13 54 09.8 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.02** | **58** | P | **P** | **13 53 47.4** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=214,slow=7.0,SNR=8.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **J26L** | **Joseph Creek** | **86.21** | **14** | P | **P** | **13 53 49.0** | **+1.2** |
| **PDAR** | **Pinedale Array** | **87.30** | **44** | P | **P** | **13 53 53.7** | **+0.1** |
| | comp=Z,0.7nm,0.7s,baz=231,slow=2.9,SNR=2.6 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **87.75** | **10** | P | **P** | **13 53 55.8** | **+0.9** |
| E22K | | | | IAmb | IAmb | 13 54 32.4 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **D22K** | **Ayikyak River** | **88.30** | **9** | P | **P** | **13 53 58.6** | **+1.3** |
| **G31M** | **Satah River** | **90.47** | **16** | P | **P** | **13 54 08.3** | **+0.9** |

*NEIC **20** 13:46:01.6±1.3,6°.3S±0°.1×128°.1E±0°.1, h391km±11km, mb4.0/6, Error ellipse: s-maj=15.9km s-min=14.6km az=81.0*
*IDC **20** 13:46:04.3±3.3,6°.21S×128°.62E, h432km±37km, mb3.1/6, mbtmp3.9/8, Error ellipse: s-maj=79.0km s-min=10.7km az=68.0*

**ISC 20 13:46:02.2±0.6,6°.35S±0°.08×128°.07E±0°.09, h400km, n35, σ0$89/37, mb3.6/8, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **3.59** | **117** | P | **Pn** | **13 47 10.4** | **-0.1** |
| **SAUI** | **Saumlaki** | **3.59** | **117** | | **Pn** | **13 47 08.1** | **-2.3** |
| **SOEI** | **Soe** | **5.06** | **228** | | **Pn** | **13 47 23.6** | **-1.4** |
| **FAKI** | **Fak Fak** | **5.38** | **51** | P | **Pn** | **13 47 27.2** | **-1.0** |
| **FAKI** | **Fak Fak** | **5.38** | **51** | | **Pn** | **13 47 26.5** | **-1.7** |
| **DRS** | **Darwin Rock St** | **6.65** | **155** | P | **P** | **13 47 42.5** | **-0.1** |
| **MTN** | **Manton Dam** | **7.12** | **155** | P | **Pn** | **13 47 47.6** | **+0.4** |
| **MTN** | **Manton Dam** | **7.12** | **155** | | **Pn** | **13 47 47.3** | **+0.1** |
| **LUWI** | **Luwuk** | **7.47** | **315** | P | **P** | **13 47 52.3** | **+0.6** |
| | 22nm,0.7s | | | | | | |
| **KDU** | **Kakadu** | **7.64** | **146** | P | **Pn** | **13 47 53.4** | **+0.3** |
| **KNRA** | **Kununurra** | **9.29** | **176** | P | **P** | **13 48 12.0** | **0.0** |
| **TOLI2** | **Tolitoli** | **10.39** | **315** | P | **Pn** | **13 48 24.6** | **-0.2** |
| **TOLI2** | **Tolitoli** | **10.39** | **315** | P | **Pn** | **13 48 24.6** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **11.91** | **191** | P | **P** | **13 48 41.3** | **+0.3** |
| **WB0** | **Warramunga Arr** | **14.68** | **156** | P | **P** | **13 49 11.2** | **-0.1** |
| **WRA** | **Warramunga Arr** | **14.82** | **156** | P | **P** | **13 49 13.1** | **+0.3** |
| | 1.4nm,0.4s,baz=329,slow=13,SNR=21 | | | | | | |
| WRA | | | | S | **S** | **13 51 49.4** | **-1.1** |
| | 1.6nm,0.9s,baz=335,slow=21,SNR=5.5 | | | | | | |
| **WB2** | **Warramunga Arr** | **14.82** | **156** | P | **P** | **13 49 13.0** | **+0.2** |
| **WR0** | **Warramunga Arr** | **14.91** | **156** | P | **P** | **13 49 13.9** | **+0.1** |
| **COEN** | **Coen** | **16.67** | **118** | P | **P** | **13 49 33.5** | **+0.8** |
| **COEN** | **Coen** | **16.67** | **118** | P | **P** | **13 49 33.5** | **+0.8** |
| **KKM** | **Kota Kinabalu** | **17.08** | **316** | P | **P** | **13 49 36.9** | **-0.3** |
| KKM | | | | IAmb | IAmb | 13 49 46.4 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **18.11** | **163** | P | **P** | **13 49 48.2** | **+0.3** |
| **ASAR** | **Alice Springs** | **18.11** | **163** | P | **P** | **13 49 48.4** | **+0.5** |
| **ASAR** | **Alice Springs** | **18.11** | **163** | P | **P** | **13 49 48.3** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=346,slow=12,SNR=17 | | | | | | |
| ASAR | | | | S | **S** | **13 52 53.9** | **-0.6** |
| | comp=Z,2.5nm,0.8s,baz=342,slow=19,SNR=15 | | | | | | |
| **BBOO** | **Buckleboo** | **27.36** | **165** | P | **P** | **13 51 13.3** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 13 51 32.5 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.86** | **311** | P | **P** | **13 52 45.3** | **+2.4** |
| | comp=Z,0.7nm,0.3s,baz=144,slow=7.5,SNR=6.0 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **57.24** | **343** | P | **P** | **13 55 09.8** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=165,slow=6.0,SNR=2.9 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **66.65** | **328** | P | **P** | **13 56 10.0** | **-1.4** |
| MK31 | | | | IAmb | IAmb | 13 56 12.5 | |
| | comp=Z,1.3nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.65** | **328** | P | **P** | **13 56 09.9** | **-1.5** |
| **MKAR** | **Makanchi Array** | **66.65** | **328** | P | **P** | **13 56 11.5** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=117,slow=8.4,SNR=15 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.17** | **334** | P | **P** | **13 56 32.2** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=150,slow=4.2,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.97** | **329** | P | **P** | **13 56 37.7** | **+0.2** |
| | comp=Z,0.9nm,0.4s,baz=131,slow=4.9,SNR=12 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **80.82** | **322** | P | **P** | **13 57 32.2** | **-0.4** |
| **QSPA** | **South Pole Qui** | **83.62** | **180** | P | **P** | **13 57 46.4** | **-0.5** |
| QSPA | | | | IAmb | IAmb | 13 58 07.2 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.62** | **180** | P | **P** | **13 57 46.6** | **-0.2** |
| | comp=Z,1.2nm,1.1s,baz=342,slow=4.5,SNR=1.1 | | | | | | |
| | comp=Z,1.2nm,1.1s | | | | | | |

*NEIC **20** 13:47:05.1±0.8,55°.6N±0°.1×149°.3W±0°.1, h7km±8km, ML3.6/32, ML3.5(AEIC), Error ellipse: s-maj=16.9km s-min=10.8km az=170.0*
*AEIC **20** 13:47:11.1±1.2,55°.7N±0°.1×149°.2W±0°.1, h5km±8km, Error ellipse: s-maj=16.2km s-min=10.7km az=167.0*

**ISC 20 13:47:05.5±1.5,55°.59N±0°.09×149°.25W±0°.07, h10km, n72, σ1$95/70, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OHAK** | **Old Harbor** | **2.77** | **308** | P | **Pn** | **13 47 49.9** | **0.0** |
| **OHAK** | **Old Harbor** | **2.77** | **308** | Pn | **Pn** | **13 47 50.0** | **0.0** |
| **OHAK** | **Old Harbor** | **2.77** | **308** | | **Sn** | **13 48 20.7** | **-2.8** |
| **OHAK** | **Old Harbor** | **2.77** | **308** | IAML | | 13 48 22.0 | |
| | comp=E,79nm,0.5s | | | | | | |
| OHAK | | | | IAML | | 13 48 23.2 | |
| | comp=N,84nm,0.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **2.86** | **321** | Pn | **Pn** | **13 47 51.5** | **+0.3** |
| **KDAK** | **Kodiak Island** | **2.86** | **321** | | **Sn** | **13 48 23.4** | **-2.3** |
| **SII** | **Sitkinak Islan** | **2.93** | **291** | P | **Pn** | **13 47 52.3** | **+0.2** |
| **SII** | **Sitkinak Islan** | **2.93** | **291** | | **Pn** | **13 47 52.3** | **+0.2** |
| SII | | | | | **Sn** | **13 48 26.3** | **-1.0** |
| **SII** | **Sitkinak Islan** | **2.93** | **291** | IAML | | 13 48 31.4 | |
| | comp=N,185nm,1.4s | | | | | | |
| SII | | | | IAML | | 13 48 36.2 | |
| | comp=E,147nm,0.9s | | | | | | |
| **SYI** | **Shuyak Island** | **3.48** | **332** | Pn | **Pn** | **13 47 59.8** | **+0.3** |
| SYI | | | | IAML | | 13 48 43.4 | |
| | comp=N,74nm,0.6s | | | | | | |
| **SYI** | **Shuyak Island** | **3.48** | **332** | | **Sn** | **13 48 39.8** | **-0.9** |
| **R18K** | **Karluk** | **3.49** | **307** | | **Pn** | **13 48 00.6** | **+0.9** |
| R18K | | | | | **Sn** | **13 48 39.8** | **-1.3** |
| **R18K** | **Karluk** | **3.49** | **307** | IAML | | 13 48 44.6 | |
| | comp=N,121nm,0.4s | | | | | | |
| R18K | | | | IAML | | 13 48 48.5 | |
| | comp=E,137nm,0.3s | | | | | | |
| **CHIR** | **Chirikof Islan** | **3.61** | **276** | Pn | **Pn** | **13 48 01.3** | **-0.2** |
| CHIR | | | | IAML | | 13 49 06.6 | |
| | comp=E,69nm,1.3s | | | | | | |
| CHIR | | | | IAML | | 13 49 14.7 | |
| | comp=N,84nm,1.4s | | | | | | |
| **CHIR** | **Chirikof Islan** | **3.61** | **276** | | **Sn** | **13 48 42.3** | **-1.8** |
| **CNPM** | **China Poot** | **4.09** | **346** | | **Pn** | **13 48 07.9** | **-0.1** |
| CNPM | | | | IAML | | 13 48 55.7 | |
| | comp=N,102nm,0.4s | | | | | | |
| CNPM | | | | IAML | | 13 48 56.4 | |
| | comp=E,80nm,0.3s | | | | | | |
| **CNPM** | **China Poot** | **4.09** | **346** | | **Sn** | **13 48 54.3** | **-1.6** |
| **KAHG** | **Katmai Hook Gl** | **4.10** | **317** | | **Pn** | **13 48 10.3** | **+2.0** |
| KAHG | | | | | **Sn** | **13 48 56.9** | **+0.6** |
| **Q19K** | **Cape Douglas,** | **4.11** | **326** | | **Pn** | **13 48 09.0** | **+0.7** |
| **Q19K** | **Cape Douglas,** | **4.11** | **326** | | **Sn** | **13 48 58.2** | **+1.9** |
| **MID** | **Middleton Isla** | **4.16** | **21** | P | **Pn** | **13 48 09.1** | **+0.2** |
| **MID** | **Middleton Isla** | **4.16** | **21** | Pn | **Pn** | **13 48 08.2** | **-0.7** |
| **Q23K** | **Middleton Isla** | **4.16** | **21** | Pn | **Pn** | **13 48 08.5** | **-0.4** |
| **BRSE** | **Bradley Lake S** | **4.24** | **350** | | **Pn** | **13 48 09.9** | **-0.1** |
| **ACHA** | **Angle Creek He** | **4.24** | **311** | | **Pn** | **13 48 10.3** | **+0.2** |
| **BRLK** | **Bradley Lake** | **4.28** | **349** | | **Sn** | **13 48 57.6** | **-2.9** |
| **BRLK** | **Bradley Lake** | **4.28** | **349** | | **Pn** | **13 48 10.1** | **-0.5** |
| **PLK4** | **Peulik 4** | **4.43** | **300** | | **Pn** | **13 48 13.6** | **+0.9** |
| PLK4 | | | | IAML | | 13 49 11.2 | |
| | comp=E,62nm,0.6s | | | | | | |
| PLK4 | | | | IAML | | 13 49 11.9 | |
| | comp=N,54nm,0.7s | | | | | | |
| **P23K** | **Montague Islan** | **4.53** | **12** | | **Pn** | **13 48 13.9** | **-0.1** |
| **P19K** | **Oil Pt** | **4.60** | **334** | | **Pn** | **13 48 15.9** | **+0.9** |
| **P19K** | **Oil Pt** | **4.60** | **334** | IAML | | 13 49 13.2 | |
| | comp=N,152nm,0.5s | | | | | | |
| P19K | | | | IAML | | 13 49 13.3 | |
| | comp=E,151nm,0.5s | | | | | | |
| **P18K** | **Big Mountain,** | **4.99** | **322** | IAML | | 13 49 16.7 | |
| | comp=N,23nm,0.3s | | | | | | |
| **ANPB** | **Aniakchak Plen** | **5.19** | **287** | | **Pn** | **13 48 24.3** | **+1.2** |
| **EYAK** | **Cordova Ski Ar** | **5.31** | **19** | P | **Pn** | **13 48 25.2** | **+0.5** |
| **EYAK** | **Cordova Ski Ar** | **5.31** | **19** | | **Pn** | **13 48 24.9** | **+0.2** |
| **O18K** | **Koktuh Hills** | **5.33** | **326** | | **Pn** | **13 48 25.2** | **+0.1** |
| O18K | | | | IAML | | 13 49 27.9 | |
| | comp=N,28nm,0.9s | | | | | | |
| O18K | | | | IAML | | 13 49 29.6 | |
| | comp=E,32nm,0.6s | | | | | | |
| **GOAT** | **Goat Mountain** | **5.55** | **24** | | **Pn** | **13 48 28.7** | **+0.6** |
| **SNH** | **Sunshine Point** | **5.73** | **34** | | **Pn** | **13 48 31.1** | **+0.5** |
| **KHIT** | **Khitrov Hills** | **5.82** | **31** | | **Pn** | **13 48 32.0** | **+0.2** |
| **N19K** | **Bonanza Creek** | **5.92** | **334** | | **Pn** | **13 48 33.0** | **-0.2** |
| **O17K** | **Koliganek Bris** | **5.94** | **318** | | **Pn** | **13 48 34.1** | **+0.8** |
| **MESA** | **MESA** | **6.03** | **37** | | **Pn** | **13 48 35.3** | **+0.6** |
| **KLU** | **Klutina** | **6.17** | **15** | | **Pn** | **13 48 37.3** | **+0.7** |
| **TGL** | **Tana Glacier** | **6.19** | **31** | | **Pn** | **13 48 37.3** | **+0.4** |
| **N18K** | **Kilae Creek** | **6.19** | **328** | | **Pn** | **13 48 37.1** | **+0.2** |
| **O16K** | **Kokwok River B** | **6.22** | **314** | Pn | **Pn** | **13 48 37.8** | **+0.6** |
| **SCM** | **Sheep Creek Mo** | **6.34** | **8** | | **Pn** | **13 48 40.3** | **+1.4** |
| **SDPT** | **Sand Point** | **6.39** | **272** | P | **Pn** | **13 48 39.7** | **+0.2** |
| **SAMH** | **Samovar Hills** | **6.41** | **41** | | **Pn** | **13 48 41.2** | **+1.3** |
| **TABL** | **Table Mountain** | **6.50** | **38** | | **Pn** | **13 48 41.6** | **+0.4** |
| **GRNC** | **Granite Creek** | **6.50** | **34** | | **Pn** | **13 48 41.4** | **+0.1** |
| **N25K** | **Chitina, Valde** | **6.50** | **20** | | **Pn** | **13 48 42.2** | **+1.0** |
| **GLB** | **Gilahina Butte** | **6.52** | **24** | Pn | **Pn** | **13 48 41.7** | **+0.3** |
| **MCARA** | **McCarthy VSAT** | **6.66** | **27** | | **Pn** | **13 48 43.9** | **+0.6** |
| **PNL** | **Peninsula** | **6.69** | **48** | P | **Pn** | **13 48 44.7** | **+1.1** |
| **BCPM** | **Bancas Point** | **6.75** | **46** | | **Pn** | **13 48 45.0** | **+0.5** |
| **CTGM** | **Chitina Glacie** | **6.81** | **35** | | **Pn** | **13 48 46.0** | **+0.4** |
| **L19K** | **White Mountain** | **7.22** | **339** | | **Pn** | **13 48 49.7** | **-1.2** |
| **O29M** | **Mount Kennedy** | **7.38** | **46** | | **Pn** | **13 48 53.9** | **+0.6** |
| **P29M** | **Windy Craggy** | **7.39** | **52** | Pn | **Pn** | **13 48 53.6** | **+0.3** |
| **M16K** | **Timber Creek** | **7.46** | **321** | Pn | **Pn** | **13 48 54.8** | **+0.4** |
| **YUK2** | **White River** | **7.60** | **32** | | **Pn** | **13 48 58.0** | **+1.8** |
| **YUK3** | **Moose Creek** | **7.71** | **33** | | **Pn** | **13 48 59.2** | **+1.4** |
| **SIT** | **Sitka** | **7.88** | **74** | P | **Pn** | **13 48 57.5** | **-2.5** |
| **FALS** | **False Pass** | **8.13** | **271** | P | **Pn** | **13 49 03.9** | **+0.4** |
| **SKAG** | **Skagway** | **8.43** | **57** | P | **Pn** | **13 49 08.2** | **+0.7** |
| **M31M** | **Drury Creek, Y** | **10.13** | **43** | Pn | **Pn** | **13 49 32.5** | **+1.6** |
| **N32M** | **Quiet Lake** | **10.14** | **50** | | **Pn** | **13 49 31.9** | **+0.9** |
| **K29M** | **Barlow Dome** | **10.16** | **31** | Pn | **Pn** | **13 49 32.4** | **+1.0** |
| **H21K** | **Melozitna Rive** | **10.25** | **352** | Pn | **Pn** | **13 49 33.3** | **+0.9** |
| **R33M** | **Jennings River** | **10.54** | **61** | Pn | **Pn** | **13 49 36.6** | **+0.1** |
| **J30M** | **Hart River** | **11.06** | **30** | Pn | **Pn** | **13 49 44.9** | **+1.3** |

*NEIC **20** 13:48:08.7±0.6, 19°.08N±0°.07×65°.24W±0°.08, h35km±2km, ML2.3/18, Md3.4/5(RSPR), Error ellipse: s-maj=13.9km s-min=11.9km az=60.0*

**RSPR 20 13:48:09.9,19°.07N×65°.27W, h57km±6km, MD3.4/5, 10C-1D, Puerto Rico region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUMP** | **Col San Antoni** | **1.07** | **211** | ↑eP | Pn | 13 48 27.9 | -0.9 |
| **HUMP** | **Col San Antoni** | **1.07** | **211** | eS | Sn | 13 48 41.9 | -0.9 |
| **HUMP** | **Col San Antoni** | **1.07** | **211** | | Pn | 13 48 27.5 | -1.3 |
| HUMP | | | | IAML | | 13 48 45.8 | |
| | comp=E,46nm,0.2s | | | | | | |
| HUMP | | | | IAML | | 13 48 48.8 | |
| | comp=N,38nm,0.2s | | | | | | |
| **HUMP** | **Col San Antoni** | **1.07** | **211** | | Sn | 13 48 41.9 | -0.9 |
| **GCPR** | **Guaynabo City** | **1.08** | **226** | Pn | Pn | 13 48 27.4 | -1.5 |
| **PDPR** | **Patillas Dam,** | **1.27** | **215** | ↑eP | Pn | 13 48 30.4 | -0.9 |
| **PDPR** | **Patillas Dam,** | **1.27** | **215** | eS | Sn | 13 48 47.0 | -0.4 |
| **PDPR** | **Patillas Dam,** | **1.27** | **215** | Pn | Pn | 13 48 30.0 | -1.3 |
| **EMPR** | **Esperanza - Ma** | **1.33** | **244** | eS | Sn | 13 48 48.1 | -0.9 |
| **EMPR** | **Esperanza - Ma** | **1.33** | **244** | ↑eP | Pn | 13 48 30.6 | -1.6 |
| **EMPR** | **Esperanza - Ma** | **1.33** | **244** | eS | Sn | 13 48 47.7 | -1.2 |
| **EMPR** | **Esperanza - Ma** | **1.33** | **244** | | Sn | 13 48 48.1 | -0.9 |
| **EMPR** | **Esperanza - Ma** | **1.33** | **244** | Pn | Pn | 13 48 31.1 | -1.1 |
| **IGPR** | **InterUniversit** | **1.35** | **216** | Pn | Pn | 13 48 32.1 | -0.5 |
| IGPR | | | | IAML | | 13 48 52.5 | |
| | comp=N,37nm,0.2s | | | | | | |
| IGPR | | | | IAML | | 13 48 56.9 | |
| | comp=E,58nm,0.3s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.58** | **243** | ↑eP | Pn | 13 48 34.9 | -0.7 |
| **AOPR** | **Arecibo Observ** | **1.58** | **243** | eS | Sn | 13 48 54.5 | -0.6 |
| **AOPR** | **Arecibo Observ** | **1.58** | **243** | ↑eP | Pn | 13 48 33.1 | -2.5 |
| **AOPR** | **Arecibo Observ** | **1.58** | **243** | eS | Sn | 13 48 53.2 | -1.8 |
| **AOPR** | **Arecibo Observ** | **1.58** | **243** | | Pn | 13 48 34.1 | -1.6 |
| **AOPR** | **Arecibo Observ** | **1.58** | **243** | | Sn | 13 48 54.5 | -0.6 |
| **CELP** | **Cerrillos** | **1.59** | **232** | ↑eP | Pn | 13 48 34.7 | -1.0 |
| **CELP** | **Cerrillos** | **1.59** | **232** | eS | Sn | 13 48 54.2 | -1.0 |
| **CELP** | **Cerrillos** | **1.59** | **232** | ↑eP | Pn | 13 48 34.8 | -1.0 |
| **CELP** | **Cerrillos** | **1.59** | **232** | eS | Sn | 13 48 55.1 | -0.1 |
| **CELP** | **Cerrillos** | **1.59** | **232** | | Pn | 13 48 34.7 | -1.0 |
| CELP | | | | | Sn | 13 48 54.2 | -1.0 |
| **CELP** | **Cerrillos** | **1.59** | **232** | IAML | | 13 49 14.6 | |
| | comp=N,22nm,3.5s | | | | | | |
| CELP | | | | IAML | | 13 49 21.4 | |
| | comp=E,16nm,2.5s | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.01** | **237** | ↑eP | Pn | 13 48 40.7 | -0.7 |
| **MLPR** | **Magueyes Islan** | **2.01** | **237** | eS | Sn | 13 49 04.8 | -0.7 |
| **MLPR** | **Magueyes Islan** | **2.01** | **237** | ↑eP | Pn | 13 48 38.5 | -2.9 |
| **MLPR** | **Magueyes Islan** | **2.01** | **237** | eS | Sn | 13 49 03.8 | -1.6 |
| **MLPR** | **Magueyes Islan** | **2.01** | **237** | | Pn | 13 48 40.7 | -0.7 |
| MLPR | | | | IAML | | 13 49 32.0 | |
| | comp=E,29nm,2.5s | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.01** | **237** | | Sn | 13 49 04.8 | -0.7 |
| **MLPR** | **Magueyes Islan** | **2.01** | **237** | IAML | | 13 48 59.5 | |
| | comp=N,25nm,2.5s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.04** | **239** | ↑eP | Pn | 13 48 41.3 | -0.6 |
| **CRPR** | **Cabo Rojo, PR** | **2.04** | **239** | eS | Sn | 13 49 05.2 | -1.0 |
| **CRPR** | **Cabo Rojo, PR** | **2.04** | **239** | ↑eP | Pn | 13 48 38.6 | -3.2 |
| **CRPR** | **Cabo Rojo, PR** | **2.04** | **239** | eS | Sn | 13 49 06.5 | +0.2 |
| **CRPR** | **Cabo Rojo, PR** | **2.04** | **239** | | Pn | 13 48 41.3 | -0.6 |
| CRPR | | | | IAML | | 13 49 42.1 | |
| | comp=N,30nm,2.5s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.04** | **239** | | Sn | 13 49 05.2 | -1.0 |
| **CRPR** | **Cabo Rojo, PR** | **2.04** | **239** | IAML | | 13 48 58.5 | |
| | comp=E,27nm,2.4s | | | | | | |

*IDC **20** 13:51:53.4±1.6, 1°.53S×127°.84E, h0km, mb3.7/5, mbtmp3.7/6, ML3.8/1, Error ellipse: s-maj=146.1km s-min=20.6km az=68.0*
*DJA **20** 13:51:57.9±0.5, 2°.5S±5°×127°.7E±°, h10km, M3.4/7, MLv3.4/7*
*NEIC **20** 13:51:58.5±1.2, 1°.72S±0°.10×127°.2E±0°.1, h33km±6km, mb4.2/5, Error ellipse: s-maj=17.4km s-min=13.9km az=96.0*

**ISC 20 13:51:59.5±0.8,2°.04S±0°.07×126°.73E±0°.07, h35km, n21, σ1$44/20, mb3.9/5, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANI** | **Sanana** | **0.74** | **270** | P | **Pn** | **13 52 12.4** | **-1.1** |
| **NLAI** | **Namlea** | **1.24** | **163** | P | **Pn** | **13 52 21.0** | **+0.6** |
| **LBMI** | **Labuha** | **1.59** | **29** | P | **Pn** | **13 52 25.2** | **-0.1** |
| **MSAI** | **Masohi** | **2.55** | **121** | P | **Pn** | **13 52 40.9** | **+2.5** |
| **TNTI** | **Ternate** | **2.87** | **13** | Pn | Pn | 13 52 34.0 | -8.8 |
| **LUWI** | **Luwuk** | **4.08** | **284** | Pn | **Pn** | **13 53 00.4** | **+1.0** |
| **TOLI2** | **Tolitoli** | **6.72** | **298** | Pn | **Pn** | **13 53 38.5** | **+2.6** |
| **WB0** | **Warramunga Arr** | **19.14** | **157** | | **P** | **13 56 19.7** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 13 57 00.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **19.28** | **158** | | **Pn** | **13 56 21.8** | **-0.8** |
| **WRA** | **Warramunga Arr** | **19.28** | **158** | | **P** | **13 56 21.4** | **0.0** |
| **WRA** | **Warramunga Arr** | **19.28** | **158** | P | **P** | **13 56 21.5** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=340,slow=11,SNR=11 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **19.29** | **158** | | **P** | **13 56 21.6** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 13 56 22.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.59** | **163** | P | **P** | **13 56 55.5** | **-1.6** |
| **ASAR** | **Alice Springs** | **22.59** | **163** | P | **P** | **13 56 57.5** | **+0.4** |
| | comp=Z,0.9nm,0.7s,baz=346,slow=12,SNR=8.3 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **56.60** | **147** | P | **P** | **14 01 36.4** | **-2.6** |
| **MKAR** | **Makanchi Array** | **62.32** | **327** | P | **P** | **14 02 16.9** | **-1.5** |
| **MKAR** | **Makanchi Array** | **62.32** | **327** | P | **P** | **14 02 19.2** | **+0.8** |
| | comp=Z,0.5nm,0.5s,baz=112,slow=8.2,SNR=7.6 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.61** | **329** | P | **P** | **14 02 46.6** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=132,slow=6.0,SNR=7.1 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **72.16** | **328** | P | **P** | **14 03 20.3** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=118,slow=7.3,SNR=2.0 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **87.90** | **180** | P | **P** | **14 04 47.5** | **+2.0** |
| QSPA | | | | IAmb | IAmb | 14 05 11.5 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **87.90** | **180** | P | **P** | **14 04 46.9** | **+1.5** |
| | comp=Z,0.8nm,0.9s,baz=352,slow=4.3,SNR=2.0 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |

**IDC 20 14:09:55.6±2.3,4°.31N×126°.52E, h0km, mb3.3/3, mbtmp3.3/3, Error ellipse: s-maj=167.9km s-min=29.1km az=66.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **25.30** | **163** | P | P | 14 15 24.2 | +0.2 |
| | 0.5nm,0.9s,baz=342,slow=10,SNR=4.9 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **28.72** | **166** | P | P | 14 15 54.7 | -0.2 |
| | 0.3nm,0.5s,baz=353,slow=7.5,SNR=13 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.96** | **325** | P | P | 14 19 42.8 | -0.1 |
| | 0.1nm,0.4s,baz=123,slow=5.3,SNR=2.0 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **20** 14:38:40.5±34.0, 17°.39S×177°.71W, h380km±280km, mb3.6/6, mbtmp4.3/6, Error ellipse: s-maj=243.4km s-min=27.4km az=41.0*
*NEIC **20

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **3.43** | **347** | P | **Pn** | **15 05 52.5** | **+2.0** |
| MSAI | | | | S | **Sn** | **15 06 33.8** | **+1.6** |
| **FAKI** | **Fak Fak** | **4.54** | **34** | | **Pn** | **15 06 02.0** | **-2.7** |
| **FAKI** | **Fak Fak** | **4.54** | **34** | P | **Pn** | **15 06 02.1** | **-2.7** |
| **KMPI** | **Kaimana, Papua** | **5.00** | **53** | P | **Pn** | **15 06 09.4** | **-1.4** |
| **DRS** | **Darwin Rock St** | **5.80** | **168** | P | **Pn** | **15 06 21.0** | **-0.3** |
| **SWI** | **Sorong** | **6.01** | **15** | P | **Pn** | **15 06 21.5** | **-2.7** |
| | 33nm,0.5s,1µm1.0nm | | | | | | |
| **SOEI** | **Soe** | **6.18** | **240** | P | **Pn** | **15 06 26.2** | **-0.2** |
| **SOEI** | **Soe** | **6.18** | **240** | Pn | **Pn** | **15 06 25.9** | **-0.5** |
| **SOEI** | **Soe** | **6.18** | **240** | P | **Pn** | **15 06 25.7** | **-0.7** |
| | 136nm,0.6s,2µm2.3nm | | | | | | |
| **MTN** | **Manton Dam** | **6.25** | **167** | P | **Pn** | **15 06 27.1** | **-0.2** |
| **MTN** | **Manton Dam** | **6.25** | **167** | Pn | **Pn** | **15 06 25.9** | **-1.4** |
| **KDU** | **Kakadu** | **6.53** | **156** | P | **Pn** | **15 06 30.0** | **-1.0** |
| **BATI** | **Baumata** | **6.91** | **239** | P | **Pn** | **15 06 35.1** | **-1.0** |
| **MMRI** | **Maumere** | **7.65** | **255** | Pn | **Pn** | **15 06 45.2** | **-0.6** |
| **EDFI** | **Ende, Flores** | **8.20** | **255** | P | **Pn** | **15 06 53.9** | **+0.7** |
| **KNRA** | **Kununurra** | **8.96** | **186** | Pn | **Pn** | **15 07 00.7** | **-2.5** |
| **TABU** | **Tabubil** | **11.54** | **83** | P | **Pn** | **15 07 37.3** | **+0.1** |
| **FITZ** | **Fitzroy Crossi** | **11.99** | **199** | Pn | **Pn** | **15 07 39.4** | **-3.5** |
| **WB0** | **Warramunga Arr** | **13.75** | **161** | Pn | **Pn** | **15 08 02.0** | **-3.4** |
| **WRAB** | **Tennant Creek** | **13.89** | **162** | P | **P** | **15 08 10.6** | **+0.5** |
| **WRA** | **Warramunga Arr** | **13.90** | **162** | | **Pn** | **15 08 04.8** | **-2.5** |
| **WRA** | **Warramunga Arr** | **13.90** | **162** | P | **Pn** | **15 08 04.0** | **-3.2** |
| | 3.7nm,0.5s,baz=340,slow=13,SNR=23 | | | | | | |
| WRA | | | | S | Sn | 15 10 28.9 | -13 |
| | 7.9nm,0.7s,baz=345,slow=22,SNR=8.7 | | | | | | |
| **WB2** | **Warramunga Arr** | **13.90** | **162** | Pn | **Pn** | **15 08 04.3** | **-3.0** |
| **WR0** | **Warramunga Arr** | **13.98** | **161** | | **Pn** | **15 08 05.0** | **-3.2** |
| **COEN** | **Coen** | **15.07** | **120** | Pn | **Pn** | **15 08 19.9** | **-1.9** |
| COEN | | | | IAmb | IAmb | 15 08 25.6 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.52** | **263** | Pn | **Pn** | **15 08 24.0** | **-3.4** |
| JAGI | | | | IAmb | IAmb | 15 08 39.0 | |
| | comp=Z,42nm,1.3s | | | | | | |
| **MBWA** | **Marble Bar** | **17.31** | **213** | P | **P** | **15 08 48.1** | **+0.3** |
| **MBWA** | **Marble Bar** | **17.31** | **213** | | **P** | **15 08 47.6** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 15 08 49.6 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **17.33** | **167** | | **Pn** | **15 08 48.9** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 15 08 52.4 | |
| | comp=Z,7.6nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **17.33** | **167** | | **Pn** | **15 08 48.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **17.33** | **167** | P | **Pn** | **15 08 49.1** | **-0.1** |
| | comp=Z,12nm,0.5s,baz=347,slow=10,SNR=185 | | | | | | |
| ASAR | | | | S | **S** | **15 11 53.8** | **-6.4** |
| | comp=Z,6.5nm,0.9s,baz=0.0,slow=25,SNR=5.4 | | | | | | |
| **AS01** | **Alice Springs** | **17.34** | **167** | P | **Pn** | **15 08 49.5** | **+0.1** |
| **PMG** | **Port Moresby** | **17.48** | **100** | P | **P** | **15 08 49.0** | **-0.8** |
| PMG | | | | IAmb | IAmb | 15 08 54.4 | |
| | comp=Z,39nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **17.48** | **100** | P | **Pn** | **15 08 51.1** | **0.0** |
| | comp=Z,17nm,0.6s,baz=318,slow=11,SNR=3.1 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **17.58** | **212** | P | **Pn** | **15 08 51.6** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **17.58** | **212** | | **P** | **15 08 51.3** | **+0.5** |
| **WRKA** | **Warakurna** | **18.27** | **184** | P | **Pn** | **15 08 59.7** | **-0.6** |
| **CTA** | **Charters Tower** | **20.85** | **131** | P | **P** | **15 09 27.5** | **+1.4** |
| | comp=Z,0.3nm,1.0s,baz=270,slow=7.8,SNR=1.9 | | | | | | |
| **OOD** | **Oodnadatta** | **21.72** | **166** | P | **P** | **15 09 35.9** | **+0.6** |
| **GIRL** | **Giralia** | **21.76** | **222** | P | **P** | **15 09 36.2** | **+0.4** |
| **INKA** | **Innaminka** | **23.39** | **155** | P | **P** | **15 09 53.5** | **+2.4** |
| **MULG** | **Mulgathing** | **23.80** | **171** | P | **P** | **15 09 56.4** | **+1.6** |
| **FORT** | **Forrest** | **23.99** | **183** | P | **P** | **15 09 58.0** | **+1.5** |
| **FORT** | **Forrest** | **23.99** | **183** | P | **P** | **15 09 57.3** | **+0.8** |
| FORT | | | | IAmb | IAmb | 15 09 59.3 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **LCRK** | **Leigh Creek** | **24.93** | **162** | P | **P** | **15 10 06.5** | **+1.5** |
| **KMBL** | **Kambalda** | **25.60** | **196** | P | **P** | **15 10 11.6** | **+0.5** |
| **MORW** | **Morawa** | **25.71** | **208** | P | **P** | **15 10 11.9** | **-0.3** |
| MORW | | | | IAmb | IAmb | 15 10 13.3 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **26.63** | **168** | P | **P** | **15 10 20.7** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 15 10 21.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **27.39** | **158** | P | **P** | **15 10 27.9** | **+0.7** |
| **STKA** | **Stephens Creek** | **27.39** | **158** | P | **P** | **15 10 28.0** | **+0.9** |
| | comp=Z,4.2nm,0.4s,baz=333,slow=8.9,SNR=13 | | | | | | |
| | comp=Z,4.2nm,0.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.55** | **202** | P | **P** | **15 10 37.9** | **+0.5** |
| **CAN** | **Canberra** | **33.55** | **151** | P | **P** | **15 11 22.9** | **+1.6** |
| **CMAR** | **Chiang Mai Arr** | **39.33** | **310** | P | **P** | **15 12 09.6** | **-0.9** |
| | comp=Z,0.9nm,0.6s,baz=136,slow=7.5,SNR=6.4 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **39.91** | **346** | eP | **P** | **15 12 17.0** | **+1.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,250nm,4.7s | | | | | | |
| **PZH** | **PanZhiHua** | **42.73** | **322** | P | **P** | **15 12 39.5** | **+1.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,180nm,4.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.18** | **342** | eP | **P** | **15 13 37.3** | **+1.2** |
| HHC | | | | sP | sP | 15 14 37.0 | +7.3 |
| HHC | | | | PP | **PP** | **15 15 29.9** | **-3.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,78nm,4.6s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **51.10** | **146** | P | **P** | **15 13 43.8** | **+1.0** |
| **TUWZ** | **Tuamarina** | **52.29** | **138** | P | **P** | **15 13 52.9** | **+1.2** |
| **SONM** | **Songino Array** | **58.08** | **342** | P | **P** | **15 14 33.5** | **+0.4** |
| | comp=Z,0.5nm,0.4s,baz=152,slow=6.4,SNR=2.9 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **CASY** | **Casey** | **60.94** | **189** | P | **P** | **15 14 53.1** | **+0.9** |
| **MK31** | **Makanchi Array** | **67.83** | **327** | P | **P** | **15 15 37.7** | **+0.3** |
| **MKAR** | **Makanchi Array** | **67.83** | **327** | P | **P** | **15 15 37.7** | **+0.3** |
| **MKAR** | **Makanchi Array** | **67.83** | **327** | P | **P** | **15 15 37.5** | **+0.1** |
| | comp=Z,1.5nm,0.3s,baz=117,slow=8.2,SNR=56 | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **68.01** | **327** | P | **P** | **15 15 38.6** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **71.20** | **334** | P | **P** | **15 15 57.2** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **71.20** | **334** | P | **P** | **15 15 57.8** | **0.0** |
| | comp=Z,1.4nm,0.5s,baz=118,slow=6.5,SNR=7.2 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.11** | **329** | P | **P** | **15 16 03.4** | **0.0** |
| | comp=Z,2.0nm,0.5s,baz=130,slow=4.9,SNR=21 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **72.12** | **329** | P | **P** | **15 16 03.4** | **-0.1** |
| **MAW** | **Mawson** | **75.11** | **201** | P | **P** | **15 16 22.1** | **+1.5** |
| | comp=Z,3.0nm,0.5s,baz=90,slow=5.6,SNR=6.6 | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **77.67** | **328** | P | **P** | **15 16 35.4** | **+0.1** |
| | comp=Z,0.8nm,0.4s,baz=123,slow=5.5,SNR=7.1 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **82.11** | **322** | P | **P** | **15 16 58.4** | **-0.8** |
| **QSPA** | **South Pole Qui** | **83.26** | **180** | P | **P** | **15 17 05.2** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 15 17 05.9 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.26** | **180** | P | **P** | **15 17 05.3** | **+0.3** |
| | comp=Z,2.9nm,0.5s,baz=272,slow=0.4,SNR=61 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **M19K** | **Big River Lodg** | **89.30** | **27** | P | **P** | **15 17 32.9** | **-1.5** |
| M19K | | | | IAmb | IAmb | 15 18 13.3 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **95.87** | **194** | P | **P** | **15 18 05.8** | **+1.2** |
| | comp=Z,1.5nm,1.0s,baz=177,slow=21,SNR=5.6 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.47** | **281** | PKP | **PKiKP** | **15 23 45.8** | **-0.1** |
| | comp=Z,0.3nm,0.4s,baz=59,slow=0.8,SNR=3.1 | | | | | | |
| **CPUP** | **Villa Florida** | **146.45** | **169** | PKPbc | **PKPab** | **15 24 20.5** | **-0.2** |
| | comp=Z,5.4nm,0.8s,baz=239,slow=1.8,SNR=9.0 | | | | | | |

*IDC **20** 15:15:57.6±1.1,8.4°S×116.9°E,h0km,mb3.8/7, mbtmp3.9/8,ML3.8/1,MS3.0/1,Error ellipse: s-maj=25.6km s-min=17.2km az=69.0*
*NEIC **20** 15:15:58.9±1.3,8.4°S±0.1°×116.8°E±0.1°,h10km±2km, mb4.1/6,Error ellipse: s-maj=17.1km s-min=11.5km az=176.0*
*DJA **20** 15:15:59.7±0.3,8°S±5°×117°E±°,h10km,M4.1/8,mb4.2/1, MLv4.0/8*

**ISC 20 15:15:58.9±0.6,8°40'S±0'.06×116°94'E±0'.04,h10km,n46, σ1s18/48,mb3.9/8,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.34** | **190** | P | **Pg** | **15 16 07.8** | **+2.1** |
| **PLAI** | **Plampang** | **0.93** | **117** | P | **Pg** | **15 16 17.9** | **+1.1** |
| **PLAI** | **Plampang** | **0.93** | **117** | P | **Pg** | **15 16 17.7** | **+0.9** |
| **SRBI** | **Singaraja** | **1.74** | **280** | P | **Pn** | **15 16 29.4** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **2.72** | **117** | P | **Pn** | **15 16 43.9** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **268** | P | **Pn** | **15 16 43.4** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **268** | | **Pn** | **15 16 41.8** | **-1.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **268** | P | **Pn** | **15 16 43.6** | **+0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.18** | **58** | P | **Pn** | **15 17 03.0** | **+0.3** |
| **KAPI** | **Kappang** | **4.37** | **40** | Pn | **Pn** | **15 17 05.6** | **+0.1** |
| **KAPI** | **Kappang** | **4.37** | **40** | Pn | **Pn** | **15 17 05.7** | **+0.3** |
| | 4.6nm,0.3s,baz=193,slow=6.5,SNR=15 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 17 56.3** | **-0.2** |
| | 8.2nm,0.3s,baz=208,slow=22,SNR=7.1 | | | | | | |
| KAPI | | | | Lg | Lg | 15 18 16.4 | |
| | 8.6nm,0.3s,baz=92,slow=19,SNR=5.5 | | | | | | |
| | 13nm,0.4s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.71** | **95** | P | **Pn** | **15 17 11.5** | **+1.3** |
| **PWJI** | **Pagerwojo** | **5.10** | **274** | P | **Pn** | **15 17 16.6** | **+1.2** |
| **MMRI** | **Maumere** | **5.25** | **93** | Pn | **Pn** | **15 17 16.6** | **-0.9** |
| **UGM** | **Wanagama** | **6.37** | **274** | Pn | **Pn** | **15 17 30.8** | **-2.1** |
| **FITZ** | **Fitzroy Crossi** | **12.83** | **140** | Pn | **Pn** | **15 19 02.1** | **+0.7** |
| **MBWA** | **Marble Bar** | **12.97** | **168** | P | **Pn** | **15 19 04.4** | **+1.0** |
| **MBWA** | **Marble Bar** | **12.97** | **168** | Pn | **Pn** | **15 19 02.8** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **13.39** | **168** | P | **Pn** | **15 19 10.2** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **13.39** | **168** | Pn | **Pn** | **15 19 09.2** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **13.39** | **168** | Pn | **Pn** | **15 19 08.4** | **-0.8** |
| **KNRA** | **Kununurra** | **13.63** | **123** | Pn | **Pn** | **15 19 11.8** | **-0.6** |
| **GIRL** | **Giralia** | **14.40** | **190** | P | **Pn** | **15 19 23.5** | **+0.6** |
| **GIRL** | **Giralia** | **14.40** | **190** | Pn | **Pn** | **15 19 21.6** | **-1.3** |
| **MTN** | **Manton Dam** | **14.63** | **109** | Pn | **Pn** | **15 19 24.8** | **-1.4** |
| **DAV** | **Davao City (W)** | **17.62** | **30** | LR | LR | 15 28 07.7 | |
| | comp=Z,52nm,20.4s,baz=146,slow=42 | | | | | | |
| **MEEK** | **Meekatharra** | **18.21** | **175** | P | **Pn** | **15 20 12.4** | **+0.5** |
| **WRKA** | **Warakurna** | **19.78** | **148** | P | **P** | **15 20 30.5** | **+1.1** |
| **WB0** | **Warramunga Arr** | **20.33** | **126** | P | **P** | **15 20 35.3** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 15 20 36.9 | |
| | comp=Z,9.5nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.38** | **126** | P | **P** | **15 20 35.9** | **-0.1** |
| | comp=Z,3.4nm,0.5s,baz=300,slow=12,SNR=59 | | | | | | |
| WRA | | | | S | **S** | **15 24 18.9** | **-5.5** |
| | comp=Z,0.7nm,0.7s,baz=295,slow=21,SNR=3.6 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.39** | **126** | P | **P** | **15 20 36.1** | **0.0** |
| WB2 | | | | IAmb | IAmb | 15 20 37.6 | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.55** | **126** | P | **P** | **15 20 37.5** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 15 20 39.0 | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **BLDU** | **Ballidu** | **22.10** | **181** | P | **P** | **15 20 54.5** | **0.0** |
| **AS31** | **Alice Springs** | **22.24** | **135** | P | **P** | **15 20 56.0** | **-0.1** |
| **ASAR** | **Alice Springs** | **22.24** | **135** | P | **P** | **15 20 56.0** | **-0.1** |
| | comp=Z,1.3nm,0.7s,baz=308,slow=9.5,SNR=34 | | | | | | |
| ASAR | | | | S | **S** | **15 24 60.0** | **-1.0** |
| | comp=Z,0.4nm,0.7s,baz=320,slow=26,SNR=2.8 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **AS01** | **Alice Springs** | **22.27** | **135** | P | **P** | **15 20 57.1** | **+0.7** |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **QIS** | **Mount Isa** | **25.01** | **121** | P | **P** | **15 21 24.3** | **+1.0** |
| **OOD** | **Oodnadatta** | **26.19** | **140** | P | **P** | **15 21 33.6** | **-0.2** |
| | comp=Z,8.6nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **30.06** | **147** | P | **P** | **15 22 07.8** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **32.06** | **326** | P | **P** | **15 22 26.6** | **+0.4** |
| | comp=Z,0.6nm,0.7s,baz=147,slow=7.5,SNR=5.0 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **32.72** | **139** | P | **P** | **15 22 32.2** | **+0.3** |
| STKA | | | | IAmb | IAmb | 15 22 49.5 | |
| | comp=Z,2.5nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.72** | **139** | P | **P** | **15 22 32.1** | **+0.3** |
| | comp=Z,1.6nm,0.5s,baz=307,slow=9.1,SNR=8.7 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.10** | **13** | P | **P** | **15 25 24.1** | **+0.2** |
| | comp=Z,2.2nm,0.8s,baz=174,slow=5.6,SNR=5.3 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.76** | **352** | P | **P** | **15 25 43.3** | **+0.1** |
| | comp=Z,1.0nm,0.8s,baz=164,slow=7.8,SNR=4.7 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.01** | **334** | P | **P** | **15 26 25.8** | **-0.3** |
| **MKAR** | **Makanchi Array** | **63.01** | **334** | P | **P** | **15 26 26.3** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=128,slow=7.9,SNR=4.6 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |

*IDC **20** 15:16:25.1±1.1,50°.18N×29°.16W,h0km,mb3.5/9, mbtmp3.5/10,ML3.7/1,MS3.4/26,Error ellipse: s-maj=33.0km s-min=21.9km az=12.0*

**ISC 20 15:16:26.6±0.9,50°2'N±0'.2×29°1'W±0'.1,h10km,n33, σ0s90/12,mb3.7/8,MS3.4/25,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BORG** | **Borgarnes** | **15.14** | **13** | LR | LR | 15 24 09.9 | |
| | comp=Z,68nm,19.0s,baz=195,slow=31 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **16.47** | **62** | Pn | **Pn** | **15 20 16.0** | **-1.5** |
| | baz=268,slow=12 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **20.03** | **335** | LR | LR | 15 26 50.7 | |
| | comp=Z,39nm,21.4s,baz=320,slow=31 | | | | | | |
| **ESDC** | **Sonseca Array** | **20.58** | **111** | P | **P** | **15 21 05.6** | **-0.1** |
| | 0.8nm,0.9s,baz=300,slow=9.0,SNR=4.1 | | | | | | |
| ESDC | | | | LR | LR | 15 27 40.5 | |
| | comp=Z,81nm,18.5s,baz=298,slow=33 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **JMIC** | **Jan Mayen** | **22.92** | **17** | LR | LR | 15 28 06.1 | |
| | comp=Z,60nm,19.6s,baz=218,slow=30 | | | | | | |
| **NOA** | **NORSAR Array B** | **24.80** | **49** | LR | LR | 15 30 56.0 | |
| | comp=Z,62nm,18.3s,baz=270,slow=35 | | | | | | |
| **FRB** | **Frobisher Bay** | **24.91** | **318** | LR | LR | 15 29 26.2 | |
| | comp=Z,31nm,19.3s,baz=360,slow=31 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **25.86** | **82** | LR | LR | 15 31 09.5 | |
| | comp=Z,58nm,20.9s,baz=270,slow=34 | | | | | | |
| **HFS** | **Hagfors** | **25.93** | **51** | LR | LR | 15 31 12.8 | |
| | comp=Z,82nm,20.2s,baz=266,slow=34 | | | | | | |
| **VRAC** | **Vranov** | **29.18** | **74** | LR | LR | 15 34 12.1 | |
| | comp=Z,72nm,18.3s,baz=287,slow=36 | | | | | | |
| **FINES** | **FINESS Array B** | **31.97** | **48** | P | **P** | **15 22 52.4** | **0.0** |
| | 2.4nm,0.9s,baz=278,slow=9.7,SNR=1.7 | | | | | | |
| FINES | | | | LR | LR | 15 34 39.6 | |
| | comp=Z,93nm,20.1s,baz=266,slow=34 | | | | | | |
| | 2.4nm,0.9s | | | | | | |
| **SADO** | **Sadowa** | **33.72** | **280** | LR | LR | 15 35 42.1 | |
| | comp=Z,42nm,18.8s,baz=97,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.30** | **66** | LR | LR | 15 38 53.2 | |
| | comp=Z,54nm,18.9s,baz=278,slow=37 | | | | | | |
| **TKL** | **Tuckaleechee C** | **41.64** | **271** | LR | LR | 15 42 14.0 | |
| | comp=Z,22nm,18.8s,baz=60,slow=37 | | | | | | |
| **KIRV** | **Kirov** | **43.97** | **48** | LR | LR | 15 41 53.7 | |
| | comp=Z,58nm,18.3s,baz=347,slow=35 | | | | | | |
| **BRTR** | **Keskin Array B** | **44.38** | **79** | LR | LR | 15 44 41.3 | |
| | comp=Z,24nm,18.3s,baz=122,slow=38 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.70** | **135** | P | **P** | **15 24 40.1** | **+0.2** |
| | 0.7nm,0.7s,baz=336,slow=9.3,SNR=4.4 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **BELG** | **Belogornoye** | **45.90** | **56** | LR | LR | 15 43 10.3 | |
| | comp=Z,67nm,18.6s,baz=279,slow=35 | | | | | | |
| **ARU** | **Arti** | **49.33** | **47** | LR | LR | 15 44 36.5 | |
| | comp=Z,58nm,20.2s,baz=276,slow=34 | | | | | | |
| **AKTO** | **Aktyubinsk** | **52.43** | **54** | LR | LR | 15 46 41.3 | |
| | comp=Z,40nm,20.2s,baz=105,slow=35 | | | | | | |
| **PDAR** | **Pinedale Array** | **53.35** | **295** | P | **P** | **15 25 45.3** | **-0.9** |
| | 0.2nm,0.6s,baz=63,slow=10,SNR=2.5 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **NEW** | **Newport** | **54.20** | **305** | LR | LR | 15 46 47.2 | |
| | comp=Z,37nm,19.1s,baz=346,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **55.67** | **333** | P | **P** | **15 26 02.8** | **+0.4** |
| | 0.3nm,0.8s,baz=39,slow=4.6,SNR=3.8 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **56.86** | **45** | P | **P** | **15 26 12.2** | **+1.1** |
| | 0.4nm,0.5s,baz=316,slow=8.1,SNR=2.7 | | | | | | |
| BVAR | | | | LR | LR | 15 49 25.4 | |
| | comp=Z,59nm,19.6s,baz=300,slow=35 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **58.48** | **279** | P | **P** | **15 26 23.1** | **+0.2** |
| | 0.3nm,0.6s,baz=47,slow=6.6,SNR=2.6 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **CMIG** | **Matias Romero** | **61.58** | **263** | LR | LR | 15 53 51.7 | |
| | comp=Z,25nm,19.3s,baz=0.0,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.18** | **43** | P | **P** | **15 26 49.1** | **+1.4** |
| | 0.2nm,0.3s,baz=326,slow=6.9,SNR=3.0 | | | | | | |
| KURBB | | | | LR | LR | 15 52 56.3 | |
| | comp=Z,46nm,19.4s,baz=175,slow=35 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **LPIG** | **La Paz** | **66.36** | **280** | LR | LR | 15 55 43.6 | |
| | comp=Z,27nm,18.5s,baz=38,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.69** | **44** | P | **P** | **15 27 17.8** | **+0.3** |
| | 0.4nm,0.8s,baz=351,slow=4.5,SNR=4.0 | | | | | | |
| MKAR | | | | LR | LR | 15 55 29.9 | |
| | comp=Z,34nm,19.8s,baz=336,slow=35 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **NNA** | **Nana** | **74.65** | **229** | LR | LR | 15 58 38.6 | |
| | comp=Z,23nm,20.9s,baz=189,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **97.74** | **49** | LR | LR | 16 17 10.8 | |
| | comp=Z,16nm,18.5s,baz=195,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **147.06** | **30** | PKPbc | **PKPbc** | **15 36 09.1** | **-0.6** |
| | 0.8nm,0.8s,baz=325,slow=3.7,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **150.37** | **33** | PKPbc | **PKPbc** | **15 36 17.4** | **-0.8** |
| | 0.4nm,1.0s,baz=341,slow=2.3,SNR=4.5 | | | | | | |

**IDC 20 15:28:39.7±2.1,1°.62N×125°.37E,h0km,mb3.3/3, mbtmp3.4/3,Error ellipse: s-maj=174.3km s-min=27.8km az=64.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.16** | **158** | P | P | 15 33 47.5 | -0.6 |
| | 0.9nm,0.6s,baz=336,slow=11,SNR=8.7 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **26.47** | **162** | P | P | 15 34 19.2 | +0.5 |
| | 0.4nm,0.9s,baz=338,slow=7.1,SNR=8.3 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.53** | **327** | P | P | 15 38 38.0 | -0.1 |
| | 0.1nm,0.3s,baz=112,slow=6.5,SNR=2.2 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*IDC **20** 15:33:23.7±4.2,17°.83S×178°.01W,h479km±48km,mb3.3/9, mbtmp4.2/10,Error ellipse: s-maj=20.8km s-min=20.1km az=62.0*
*NEIC **20** 15:33:27.7±1.1,17°.9S±0°.1×177°.9W±0°.1,h533km±7km, mb4.4/37,Error ellipse: s-maj=22.6km s-min=7.9km az=129.0*

**ISC 20 15:33:28.8±0.5,17°.9S±0°.1×178°.0W±0°.1,h550km,n57, σ1s27/57,mb4.2/28,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.74** | **271** | P | **P** | **15 34 48.1** | **-0.7** |
| **AFI** | **Afiamalu** | **7.17** | **58** | P | **P** | **15 35 14.7** | **-3.9** |
| **DZM** | **Mont Dzumac** | **15.19** | **251** | P | **P** | **15 36 42.3** | **+1.9** |
| DZM | | | | IAmb | IAmb | 15 37 22.0 | |
| | comp=Z,35nm,1.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.19** | **251** | P | **P** | **15 36 38.3** | **-2.0** |
| | comp=Z,7.4nm,0.6s,baz=66,slow=20,SNR=2.2 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.92** | **258** | P | **P** | **15 36 56.2** | **-0.7** |
| **URZ** | **Urewera** | **20.77** | **191** | P | **P** | **15 37 29.6** | **-2.1** |
| | comp=Z,16nm,0.9s,baz=356,slow=2.7,SNR=6.4 | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **PLWZ** | **Palliser** | **24.33** | **192** | P | **P** | **15 38 00.2** | **-3.3** |
| **CMWZ** | **Cape Campbell** | **24.73** | **194** | P | **P** | **15 38 04.3** | **-2.6** |
| **THZ** | **Tophouse** | **25.07** | **196** | P | **P** | **15 38 09.5** | **-0.5** |
| **KHZ** | **Kahutara** | **25.52** | **195** | P | **P** | **15 38 12.5** | **-1.4** |
| **LTZ** | **Lake Taylor** | **26.19** | **196** | P | **P** | **15 38 18.1** | **-1.8** |
| **MLZ** | **Mavora Lakes** | **29.77** | **200** | P | **P** | **15 38 50.2** | **-0.9** |
| MLZ | | | | IAmb | IAmb | 15 39 30.1 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **33.82** | **260** | P | **P** | **15 39 25.5** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=102,slow=12,SNR=2.1 | | | | | | |
| **CAN** | **Canberra** | **34.03** | **233** | P | **P** | **15 39 28.4** | **+0.9** |
| CAN | | | | IAmb | IAmb | 15 39 36.9 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **COEN** | **Coen** | **37.47** | **270** | P | **P** | **15 39 56.1** | **-0.1** |
| COEN | | | | IAmb | IAmb | 15 40 05.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.49** | **231** | P | **P** | **15 39 56.7** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **15 40 08.7** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | **P** | **15 40 08.8** | **+0.5** |
| | comp=Z,4.9nm,0.8s,baz=98,slow=10.0,SNR=9.7 | | | | | | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **51.69** | **256** | P | | P | 15 47 55.9 | -0.3 |
| | 0.6nm,0.5s,baz=93,slow=6.9,SNR=25 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **51.95** | **252** | P | | P | 15 47 58.1 | 0.0 |
| | 5.0nm,0.4s,baz=89,slow=7.7,SNR=187 | | | | | | | |
| | 5.0nm,0.4s | | | | | | | |

**IDC 20 15:44:47.3±1.9, 52°68S×26°74E, h0km, mb3.7/4, mbtmp3.7/4, MS3.2/4, Error ellipse: s-maj=52.8km s-min=42.6km az=165.0, South of Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H04S2** | **CROZET ISLANDS** | **17.22** | **80** | T | T | 16 06 49.5 | |
| | baz=241,slow=74,SNR=80 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **17.22** | **80** | T | T | 16 06 50.7 | |
| | baz=241,slow=74,SNR=75 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **17.23** | **80** | T | T | 16 06 46.3 | |
| | baz=241,slow=74,SNR=133 | | | | | | |
| **SUR** | **Sutherland** | **20.74** | **346** | LR | LR | 15 55 42.8 | |
| | comp=Z,76nm,19.6s,baz=150,slow=32 | | | | | | |
| **MAW** | **Mawson** | **22.91** | **145** | P | P | 15 49 51.5 | -0.7 |
| | 0.9nm,0.6s,baz=284,slow=16,SNR=1.9 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **23.07** | **203** | P | P | 15 49 54.4 | +0.4 |
| | 0.7nm,0.6s,baz=72,slow=13,SNR=2.0 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **24.07** | **357** | LR | LR | 15 57 15.3 | |
| | comp=Z,78nm,21.8s,baz=196,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **27.64** | **358** | LR | LR | 16 00 23.6 | |
| | comp=Z,39nm,21.7s,baz=161,slow=34 | | | | | | |
| **MBAR** | **Mbarara** | **52.00** | **5** | LR | LR | 16 15 38.1 | |
| | comp=Z,25nm,18.3s,baz=124,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **81.27** | **118** | P | P | 15 57 05.8 | +0.5 |
| | 1.0nm,0.6s,baz=214,slow=4.8,SNR=22 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **84.51** | **116** | P | P | 15 57 22.0 | -0.1 |
| | 0.8nm,0.8s,baz=202,slow=3.2,SNR=4.8 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **152.00** | **253** | PKPbc | PKPbc | 16 04 43.5 | -0.6 |
| | 0.6nm,0.7s,baz=158,slow=3.6,SNR=4.1 | | | | | | |

*NEIC **20** 15:44:54.2±1.2, 33°49N±0°.01×116°.792W±0°.009, h5km±1km, Error ellipse: s-maj=2.6km s-min=2.0km az=16.0*

**PAS 20 15:44:54.8±1.4, 33°49N±0°.01×116°.806W±0°.009, h2km±3km, ML3.1/273, ML3.0/47(NEIC), Error ellipse: s-maj=2.0km s-min=1.0km az=194.0, Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRY** | **Cary Ranch** | **0.10** | **37** | | Pg | 15 44 56.8 | 0.0 |
| **BZNA** | **Buzz No.'s Pla** | **0.12** | **88** | | Pg | 15 44 59.1 | +2.0 |
| **PLM** | **Palomar** | **0.14** | **199** | | Pg | 15 44 58.2 | +0.7 |
| **FRD** | **Ford Ranch, An** | **0.17** | **87** | | Pg | 15 44 58.2 | +0.1 |
| FRD | | | | | Sg | 15 45 00.5 | +0.1 |
| **SNDA** | **J Saunders Pla** | **0.17** | **68** | | Pg | 15 44 58.4 | +0.2 |
| SNDA | | | | | Sg | 15 45 00.7 | +0.2 |
| **GVDA** | **Garner Valley** | **0.21** | **31** | | Pg | 15 44 58.9 | 0.0 |
| GVDA | | | | | Sg | 15 45 01.8 | +0.1 |
| **POB** | **Polly Butte** | **0.22** | **334** | | Pg | 15 44 59.2 | +0.1 |
| POB | | | | | Sg | 15 45 02.2 | +0.2 |
| **BACC** | **Bachelor Mtn.** | **0.23** | **302** | | Pg | 15 44 59.5 | +0.2 |
| BACC | | | | | Sg | 15 45 02.8 | +0.5 |
| **DGR** | **Domenigoni Val** | **0.23** | **314** | | Sg | 15 45 02.7 | +0.3 |
| **HMTC** | **Hemet** | **0.28** | **323** | | Pg | 15 45 00.2 | 0.0 |
| HMTC | | | | | Sg | 15 45 03.8 | +0.1 |
| **PFO** | **Pinyon Flats O** | **0.32** | **67** | | Pg | 15 45 00.8 | 0.0 |
| PFO | | | | IAML | | 15 45 05.4 | |
| | 3μm,0.5s | | | | | | |
| PFO | | | | IAML | | 15 45 06.2 | |
| | 1μm,0.3s | | | | | | |
| **PFO** | **Pinyon Flats O** | **0.32** | **67** | | Sg | 15 45 05.0 | 0.0 |
| **MATG** | **Mataguay Scout** | **0.32** | **155** | | Pg | 15 45 01.4 | +0.5 |
| MATG | | | | | Sg | 15 45 05.8 | +0.7 |
| **MURC** | **Murrieta** | **0.34** | **289** | | Sg | 15 45 06.9 | +1.0 |
| **BORC** | **Borrego Spring** | **0.39** | **124** | | Sg | 15 45 08.0 | +0.6 |
| **JUEM** | **Julian Eagle M** | **0.44** | **157** | | Sg | 15 45 09.6 | +0.5 |
| **BBSC** | **Beaumont Base** | **0.46** | **341** | | Sg | 15 45 10.6 | +1.0 |
| **DEVC** | **Devers** | **0.49** | **23** | | Sg | 15 45 11.1 | +0.7 |
| **GORC** | **Green Oak Ranc** | **0.49** | **227** | | Pg | 15 45 04.2 | +0.1 |
| **PEC** | **Perris** | **0.50** | **324** | | Sg | 15 45 10.8 | -0.2 |
| **DPP** | **Dos Picos Cty** | **0.50** | **193** | | Sg | 15 45 11.1 | +0.3 |
| **ELS** | **Elsinore Mount** | **0.54** | **287** | Pg | Pg | 15 45 05.2 | -0.1 |
| **ELS** | **Elsinore Mount** | **0.54** | **287** | | Sg | 15 45 12.7 | +0.5 |
| **SLH** | **Sleepy Hollow** | **0.55** | **122** | | Pg | 15 45 05.7 | +0.4 |
| SLH | | | | | Sg | 15 45 13.7 | +1.3 |
| **CFT** | **Crafton Hills** | **0.60** | **335** | | Sg | 15 45 15.0 | +0.8 |
| **109C** | **Camp Elliot, M** | **0.65** | **203** | | Pg | 15 45 06.6 | -0.6 |
| 109C | | | | IAML | | 15 45 17.4 | |
| | comp=E,814nm,0.2s | | | | | | |
| 109C | | | | IAML | | 15 45 17.8 | |
| | comp=N,665nm,0.3s | | | | | | |
| **RSBC** | **Riverside Bore** | **0.65** | **318** | | Pg | 15 45 07.0 | -0.3 |
| RSBC | | | | | Sg | 15 45 15.5 | -0.2 |
| **RSBC** | **Riverside Bore** | **0.65** | **318** | | Pg | 15 45 06.8 | -0.5 |
| RSBC | | | | | Sg | 15 45 15.7 | 0.0 |
| **SVD** | **Seven Oaks Dam** | **0.66** | **339** | | Sg | 15 45 16.8 | +0.6 |
| **MONP2** | **Monument Peak** | **0.68** | **151** | | Sg | 15 45 16.6 | +0.1 |
| **BLAC** | **Blackrock camp** | **0.68** | **31** | | Sg | 15 45 16.7 | +0.2 |
| **RVR** | **Riverside** | **0.69** | **317** | | Sg | 15 45 16.6 | -0.5 |
| **MTRP** | **Mission Trails** | **0.70** | **198** | | Pg | 15 45 07.8 | -0.4 |
| MTRP | | | | | Sg | 15 45 17.2 | -0.1 |
| **CTCC** | **Cactus City** | **0.70** | **76** | | Pg | 15 45 08.5 | +0.3 |
| **HLNC** | **Highland** | **0.72** | **332** | | Pg | 15 45 08.6 | -0.1 |
| HLNC | | | | | Sg | 15 45 18.5 | +0.6 |
| **CFSC** | **Central Fire S** | **0.73** | **327** | | Pg | 15 45 09.1 | +0.2 |
| CFSC | | | | | Sg | 15 45 19.0 | +0.6 |
| **CLTC** | **Calectric** | **0.74** | **325** | | Pg | 15 45 08.3 | -0.7 |
| **CRNC** | **Corona** | **0.74** | **302** | | Pg | 15 45 08.5 | -0.5 |
| CRNC | | | | | Sg | 15 45 18.3 | -0.2 |
| **SDMC** | **San Diego Miss** | **0.76** | **202** | | Pg | 15 45 08.8 | -0.5 |
| SDMC | | | | | Sg | 15 45 19.6 | +0.5 |
| **SDRC** | **San Diego Road** | **0.76** | **189** | | Sg | 15 45 18.8 | -0.4 |
| **BBRC** | **Big Bear Solar** | **0.78** | **353** | | Pg | 15 45 09.7 | -0.1 |
| **CTW** | **Cottonwood Mou** | **0.80** | **76** | | Pg | 15 45 10.1 | -0.1 |
| CTW | | | | | Sg | 15 45 21.0 | +0.4 |
| **FON** | **Fontana** | **0.81** | **319** | | Pg | 15 45 09.8 | -0.5 |
| FON | | | | | Sg | 15 45 20.3 | -0.4 |
| **BAR** | **Barrett** | **0.81** | **172** | | Sg | 15 45 20.4 | -0.5 |
| **BAR** | **Barrett** | **0.81** | **172** | | Pg | 15 45 09.8 | -0.6 |
| **BAR** | **Barrett** | **0.81** | **172** | IAML | | 15 45 20.2 | |
| | comp=N,3.1nm,0.3s | | | | | | |
| **MLSC** | **Mira Loma** | **0.81** | **310** | | Pg | 15 45 09.6 | -0.8 |
| MLSC | | | | | Sg | 15 45 20.9 | 0.0 |
| **BELC** | **Belle Mtn. Jos** | **0.85** | **53** | | Sg | 15 45 21.9 | -0.1 |
| **DUZA** | **Dulzura** | **0.88** | **178** | | Pg | 15 45 10.8 | -0.8 |
| DUZA | | | | | Sg | 15 45 22.5 | -0.5 |
| **OLP** | **Otay Lakes Par** | **0.88** | **187** | | Pg | 15 45 11.0 | -0.8 |
| OLP | | | | | Sg | 15 45 22.6 | -0.6 |
| **GTM** | **Goat Mountain** | **0.89** | **25** | | Pg | 15 45 11.3 | -0.5 |
| GTM | | | | | Sg | 15 45 23.0 | -0.3 |
| **ERRC** | **Elmore Ranch** | **0.90** | **114** | | Pb | 15 45 12.8 | -0.4 |
| **BOMB** | **Bombay Beach** | **0.91** | **97** | | Pg | 15 45 12.5 | +0.2 |
| **TKX** | **Tecate** | **0.93** | **170** | | Pg | 15 45 11.6 | -1.0 |
| TKX | | | | IAML | | 15 45 24.7 | |
| | comp=N,602nm,0.1s | | | | | | |
| **TJX** | **Tijuana** | **1.00** | **192** | | Pg | 15 45 13.0 | -0.9 |
| TJX | | | | IAML | | 15 45 33.2 | |
| | comp=N,427nm,0.6s | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **1.03** | **317** | | Pg | 15 45 13.7 | -0.9 |
| **RMX** | **La Rumorosa** | **1.07** | **145** | | Pb | 15 45 16.0 | -0.2 |
| RMX | | | | IAML | | 15 45 33.6 | |
| | comp=E,294nm,0.3s | | | | | | |
| RMX | | | | IAML | | 15 45 33.9 | |
| | comp=N,223nm,0.6s | | | | | | |
| **YUH** | **Yuha Desert** | **1.12** | **138** | | Pg | 15 45 15.4 | -0.8 |
| **CBX** | **Cerro Bola** | **1.18** | **174** | | Pg | 15 45 16.1 | -1.3 |
| **PASC** | **Pasadena Art C** | **1.33** | **301** | Pg | Pg | 15 45 18.7 | -1.7 |
| **CCX** | **Cicese** | **1.62** | **176** | | Pn | 15 45 23.5 | -0.8 |
| **ESJX** | **Sierra Juarez** | **1.65** | **154** | | Pn | 15 45 23.9 | -1.0 |
| ESJX | | | | IAML | | 15 45 48.9 | |
| | comp=N,160nm,0.5s | | | | | | |
| **GLA** | **Glamis** | **1.71** | **104** | | Pn | 15 45 23.3 | -2.4 |
| GLA | | | | IAML | | 15 45 54.3 | |
| | comp=N,118nm,0.7s | | | | | | |
| GLA | | | | IAML | | 15 45 55.4 | |
| | comp=E,197nm,0.6s | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.81** | **0** | Pn | Pn | 15 45 26.4 | -0.7 |
| GSC | | | | IAML | | 15 45 54.4 | |
| | comp=N,188nm,0.5s | | | | | | |
| **BLYC** | **Blythe** | **1.92** | **82** | Pn | Pn | 15 45 27.2 | -1.4 |
| BLYC | | | | IAML | | 15 45 57.3 | |
| | comp=N,153nm,0.8s | | | | | | |
| BLYC | | | | IAML | | 15 46 00.8 | |
| | comp=E,115nm,0.5s | | | | | | |
| **CCAC** | **Calif City Air** | **1.94** | **329** | | Pn | 15 45 27.9 | -0.9 |
| CCAC | | | | IAML | | 15 45 57.8 | |
| | comp=E,152nm,0.6s | | | | | | |
| **ISA** | **Isabella, Lake** | **2.57** | **328** | | Pn | 15 45 36.3 | -1.2 |
| **BCW** | **Bitter Crk WRg** | **2.60** | **305** | | Pn | 15 45 37.7 | -0.3 |
| BCW | | | | IAML | | 15 46 20.1 | |
| | comp=E,69nm,0.7s | | | | | | |
| BCW | | | | IAML | | 15 46 21.4 | |
| | comp=N,72nm,0.5s | | | | | | |
| **GWY** | **Greenwater Val** | **2.69** | **2** | | Pn | 15 45 38.6 | -0.7 |
| **V12A** | **Nelson** | **2.75** | **35** | | Pn | 15 45 39.3 | -0.8 |
| **Y14A** | **Wickenburg** | **3.20** | **81** | | Pn | 15 45 45.0 | -1.2 |
| **SHPR** | **Sheep Range** | **3.30** | **24** | Pn | Pn | 15 45 47.3 | -0.4 |
| **GRAC** | **Grapevine Rang** | **3.53** | **353** | IAML | | 15 46 57.2 | |
| | comp=N,38nm,1.1s | | | | | | |
| GRAC | | | | IAML | | 15 47 02.3 | |
| | comp=E,36nm,0.8s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **4.55** | **77** | Pn | Pn | 15 46 03.9 | -1.0 |
| **U15A** | **North Rim** | **4.73** | **50** | Pn | Pn | 15 46 07.3 | -0.1 |
| **WUAZ** | **Wupatki** | **4.92** | **64** | | Pn | 15 46 09.4 | -0.5 |
| WUAZ | | | | IAML | | 15 47 32.1 | |
| | comp=E,10nm,1.2s | | | | | | |
| WUAZ | | | | IAML | | 15 47 38.4 | |
| | comp=E,14nm,0.6s | | | | | | |
| **LHV** | **Little Huntoon** | **4.95** | **344** | Pn | Pn | 15 46 10.5 | +0.4 |
| **NV11** | **Mina Array Sit** | **5.05** | **348** | IAML | | 15 47 25.9 | |
| | comp=E,7.0nm,4.5s | | | | | | |
| NV11 | | | | IAML | | 15 48 12.9 | |
| | comp=N,5.9nm,4.2s | | | | | | |
| **RYN** | **Ryan** | **5.32** | **345** | Pn | Pn | 15 46 14.6 | -0.7 |

*IDC **20** 15:52:50.0±4.6, 36°.36N×70°.71E, h216km±41km, mb3.3/8, mbtmp3.9/13, Error ellipse: s-maj=33.2km s-min=19.1km az=23.0*

*NEIC **20** 15:52:54.2±1.5, 36°.66N±0°.08×70°.69E±0°.07, h250km±5km, mb4.4/4, Error ellipse: s-maj=11.4km s-min=7.2km az=160.0*

**ISC 20 15:52:53.8±0.6, 36°59N±0°.06×70°77E±0°.07, h250km, n50, σ1°17/53, mb3.5/9, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHGR** | **Chuyangaron** | **2.43** | **329** | Pn | **Pn** | **15 53 40.3** | **-0.1** |
| **GAR** | **Garm** | **2.44** | **352** | Pn | **Pn** | **15 53 40.6** | **+0.1** |
| **KBL** | **Kabul** | **2.48** | **215** | Pn | **Pn** | **15 53 42.4** | **+1.2** |
| **SIMJ** | **Simiganj** | **2.50** | **326** | Pn | **Pn** | **15 53 41.1** | **-0.1** |
| **DRK** | **Karamyk** | **3.00** | **15** | | **Pn** | **15 53 46.9** | **+0.3** |
| **BTK** | **Batken** | **3.47** | **1** | Pn | **Pn** | **15 53 52.3** | **+0.8** |
| **NIL** | **Nilore** | **3.57** | **144** | Pn | **Pn** | **15 53 54.9** | **+2.2** |
| **ARSB** | **Arslanbob** | **5.04** | **19** | | **Pn** | **15 54 09.4** | **-0.7** |
| **KSH** | **Kashi** | **5.04** | **53** | Pn | Pn | 15 54 05.6 | -4.6 |
| KSH | | | | Sn | S | 15 54 59.6 | -11 |
| KSH | | | | smax | smax | | |
| | comp=N,48nm,0.4s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,27nm,0.5s | | | | | | |
| **JMU** | **Jammu** | **5.15** | **137** | *e*S | **S** | **15 55 11.3** | **-2.0** |
| JMU | | | | IAML | | 15 55 13.5 | |
| | comp=E,119nm,0.5s | | | | | | |
| JMU | | | | IAML | | 15 55 15.3 | |
| | comp=N,112nm,0.3s | | | | | | |
| **THN** | **Thein Dam** | **5.82** | **134** | *e*P | **Pn** | **15 54 21.4** | **+1.7** |
| THN | | | | *e*S | **S** | **15 55 27.6** | **-0.7** |
| THN | | | | IAML | | 15 55 29.1 | |
| | comp=E,148nm,0.4s | | | | | | |
| THN | | | | IAML | | 15 55 41.9 | |
| | comp=E,85nm,0.6s | | | | | | |
| **AML** | **Almayashu** | **5.98** | **21** | P | **Pn** | **15 54 21.6** | **-0.4** |
| | SNR=39 | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.29** | **132** | *e*P | **Pn** | **15 54 27.3** | **+1.5** |
| DHRM | | | | *e*S | **S** | **15 55 37.8** | **-1.7** |
| DHRM | | | | IAML | | 15 55 39.6 | |
| | comp=E,324nm,0.4s | | | | | | |
| DHRM | | | | IAML | | 15 55 41.6 | |
| | comp=E,155nm,0.3s | | | | | | |
| **EKS2** | **Erkin-Say** | **6.50** | **20** | P | **Pn** | **15 54 28.7** | **+0.5** |
| | SNR=22 | | | | | | |
| **KK31** | **Karatay Array** | **6.51** | **358** | Pn | **Pn** | **15 54 27.5** | **-0.8** |
| **KKAR** | **Karatay Array** | **6.51** | **358** | | **Pn** | **15 54 27.5** | **-0.7** |
| **KKAR** | **Karatay Array** | **6.51** | **358** | Pn | **Pn** | **15 54 27.3** | **-1.0** |
| **AAK** | **Ala-Archa** | **6.69** | **24** | P | **Pn** | **15 54 30.7** | **0.0** |
| | SNR=7.0 | | | | | | |
| **AAK** | **Ala-Archa** | **6.69** | **24** | Pn | **Pn** | **15 54 30.5** | **-0.2** |
| **AAK** | **Ala-Archa** | **6.69** | **24** | P | **Pn** | **15 54 30.6** | **0.0** |
| | comp=E,6.9nm,0.3s,baz=207,slow=7.9,SNR=9.6 | | | | | | |
| AAK | | | | S | **S** | **15 55 46.7** | **-1.7** |
| | comp=E,2.9nm,0.3s,baz=331,slow=23,SNR=10.0 | | | | | | |
| **ULHL** | **Ulahol** | **7.06** | **35** | P | **Pn** | **15 54 35.3** | **-0.1** |
| | SNR=5.7 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.34** | **29** | P | **Pn** | **15 54 38.7** | **-0.1** |
| | SNR=6.9 | | | | | | |
| **SMLA** | **Simla** | **7.61** | **134** | *e*P | **Pn** | **15 54 43.4** | **+1.2** |
| SMLA | | | | *e*S | **S** | **15 56 08.5** | **-0.9** |
| SMLA | | | | IAML | | 15 56 09.0 | |
| | comp=E,65nm,0.7s | | | | | | |
| SMLA | | | | IAML | | 15 56 10.3 | |
| | comp=E,51nm,0.3s | | | | | | |
| **HNLY** | **HANLEY** | **7.75** | **117** | *e*P | **Pn** | **15 54 45.8** | **+1.3** |
| **KLP** | **Kalpa** | **7.99** | **127** | *e*S | **S** | **15 56 14.4** | **-4.3** |
| **KUDL** | **Kundal** | **9.70** | **149** | *e*P | **Pn** | **15 55 08.8** | **+0.1** |
| KUDL | | | | *e*S | S | 15 56 51.5 | -6.6 |
| KUDL | | | | IAML | | 15 56 54.3 | |
| | comp=E,14nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **13.19** | **36** | Pn | **Pn** | **15 55 51.5** | **-0.5** |
| **MK31** | **Makanchi Array** | **13.33** | **37** | Pn | **Pn** | **15 55 53.0** | **-0.7** |
| **MKAR** | **Makanchi Array** | **13.33** | **37** | Pn | **Pn** | **15 55 53.1** | **-0.6** |
| **MKAR** | **Makanchi Array** | **13.33** | **37** | P | **Pn** | **15 55 54.4** | **+0.7** |
| | comp=E,2.4nm,0.5s,baz=211,slow=9.9,SNR=29 | | | | | | |
| **WMQ** | **Urumqi** | **14.80** | **56** | *e*P | **Pn** | **15 56 12.9** | **+1.3** |
| **ABKAR** | **Akbulak array** | **14.92** | **331** | P | **P** | **15 56 11.4** | **-1.1** |
| **KURBB** | **Kurchatov Arra** | **15.10** | **19** | P | **Pn** | **15 56 15.2** | **+0.2** |
| | comp=E,1.3nm,0.5s,baz=210,slow=11,SNR=9.2 | | | | | | |
| **KURK** | **Kurchatov** | **15.21** | **19** | | **Pn** | **15 56 15.9** | **-0.4** |
| **BVAR** | **Borovoye Array** | **16.44** | **359** | P | **Pn** | **15 56 30.4** | **-0.5** |
| | comp=E,1.4nm,0.5s,baz=156,slow=10,SNR=9.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.61** | **330** | P | **Pn** | **15 56 32.0** | **-0.9** |
| | comp=E,6.5nm,0.6s,baz=146,slow=10,SNR=20 | | | | | | |
| **UOSS** | **Minazif** | **17.04** | **231** | Pn | **Pn** | **15 56 38.3** | **+0.1** |
| UOSS | | | | IAmb | IAmb | 15 56 41.8 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **19.91** | **25** | P | **P** | **15 57 06.3** | **-0.3** |
| ZAA0 | | | | IAmb | IAmb | 15 57 09.7 | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.91** | **25** | P | **P** | **15 57 06.4** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **19.91** | **25** | P | **P** | **15 57 07.1** | **+0.5** |
| | comp=Z,3.9nm,0.3s,baz=220,slow=11,SNR=28 | | | | | | |
| | comp=Z,3.9nm,0.3s | | | | | | |
| **ARU** | **Arti** | **21.49** | **341** | P | **P** | **15 57 23.3** | **+0.5** |
| | comp=Z,1.7nm,0.3s,baz=158,slow=11,SNR=4.7 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **PZH** | **PanZhiHua** | **28.14** | **102** | P | **P** | **15 58 25.5** | **+2.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | |
| **SONM** | **Songino Array** | **28.44** | **55** | P | **P** | **15 58 27.6** | **+2.0** |
| | comp=Z,0.6nm,0.4s,baz=271,slow=8.2,SNR=3.2 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.91** | **70** | *e*P | **P** | **15 58 55.8** | **-0.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,98nm,5.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **338** | P | **P** | **16 00 13.2** | **+1.1** |
| | comp=Z,0.7nm,0.4s,baz=94,slow=5.3,SNR=5.2 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **42.88** | **322** | P | **P** | **16 00 27.8** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=95,slow=12,SNR=5.4 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.53** | **268** | P | **P** | **16 03 10.2** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=45,slow=6.4,SNR=3.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **C36M** | **Paulatuk** | **73.81** | **5** | P | **P** | **16 04 00.5** | **+0.1** |
| **WRA** | **Warramunga Arr** | **82.19** | **122** | P | **P** | **16 04 45.8** | **-1.4** |
| | comp=Z,0.6nm,0.9s,baz=318,slow=5.5,SNR=2.5 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **84.46** | **125** | P | **P** | **16 04 58.0** | **-0.6** |
| | comp=Z,0.2nm,0.6s,baz=300,slow=5.0,SNR=5.3 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |

*NEIC **20** 16:02:16.4±1.8, 18°.05S±0°.2×178°.2W±0°.2, h543km±12km, mb4.3/12, Error ellipse: s-maj=24.6km s-min=21.3km az=155.0*

*IDC **20** 16:02:19.5±51.0, 18°.07S×178°.20W, h576km±428km, mb2.8/4, mbtmp3.9/4, Error ellipse: s-maj=417.9km s-min=108.9km az=70.0*

**ISC 20 16:02:16.1±0.8, 18°.05S±0°.2×178°.1W±0°.1, h550km, n19, σ0°79/19, mb4.0/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.69** | **274** | P | P | 16 03 28.9 | -7.0 |
| **AFI** | **Afiamalu** | **7.32** | **57** | P | **P** | **16 04 07.0** | **-0.3** |
| **HNR** | **Honiara** | **22.97** | **289** | P | **P** | **16 06 38.8** | **-0.2** |
| **BFZ** | **Birch Farm** | **23.09** | **191** | P | **P** | **16 06 39.9** | **0.0** |
| **CTA** | **Charters Tower** | **33.73** | **261** | P | **P** | **16 08 13.4** | **+0.9** |
| | 0.2nm,0.6s,baz=94,slow=13,SNR=1.3 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.73** | **261** | P | **P** | **16 08 13.0** | **+0.5** |
| CTAO | | | | IAmb | IAmb | 16 08 45.1 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **38.84** | **241** | P | **P** | **16 08 53.0** | **-1.5** |
| STKA | | | | IAmb | IAmb | 16 08 58.2 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **38.84** | **241** | P | **P** | **16 08 55.5** | **+1.1** |
| | comp=Z,2.8nm,0.7s,baz=99,slow=11,SNR=5.5 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.62** | **241** | P | **P** | **16 09 32.9** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 16 09 35.2 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.90** | **260** | P | **P** | **16 09 42.2** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 16 10 23.4 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **16 09 42.4** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **16 09 42.9** | **+0.4** |
| | comp=Z,0.6nm,0.5s,baz=97,slow=7.0,SNR=12 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.05** | **254** | P | **P** | **16 09 43.9** | **+0.4** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **16 09 43.4** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **16 09 44.1** | **+0.6** |
| | comp=Z,3.6nm,0.6s,baz=88,slow=8.7,SNR=59 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 11 12.9** | **+0.3** |
| | comp=Z,0.2nm,0.4s,baz=105,slow=4.0,SNR=5.2 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **CASY** | **Casey** | **66.15** | **205** | P | **P** | **16 12 08.2** | **-0.8** |
| **UGM** | **Wanagama** | **69.95** | **268** | P | **P** | **16 12 31.5** | **-1.6** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **16 12 45.0** | **+0.6** |
| QSPA | | | | IAmb | IAmb | 16 13 08.1 | |
| | comp=Z,7.3nm,1.5s | | | | | | |
| **I17K** | **Unalakleet** | **82.77** | **8** | P | **P** | **16 13 43.0** | **+0.8** |
| I17K | | | | IAmb | IAmb | 16 13 47.0 | |
| | comp=Z,24nm,1.4s | | | | | | |

**TAP 20 16:04:02.3, 23°25N×120°98E, h4km±1km, ML0.6, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ELDTW** | **Lidau** | **0.07** | **148** | *i* P | Pg | 16 04 04.8 | +0.8 |
| | baz=143 | | | | | | |
| ELDTW | | | | *i* S | Sg | 16 04 06.3 | +1.2 |
| | baz=143 | | | | | | |
| **FULB** | **Fuli** | **0.30** | **100** | *e*P | Pb | 16 04 09.5 | -0.7 |
| | baz=99 | | | | | | |
| FULB | | | | *e*S | Sb | 16 04 14.5 | -1.0 |
| | baz=99 | | | | | | |
| **TPUB** | **Ta-pu** | **0.32** | **279** | *e*P | Pb | 16 04 09.8 | -0.8 |
| | baz=279 | | | | | | |
| TPUB | | | | *e*S | Sb | 16 04 15.5 | -0.7 |
| | baz=279 | | | | | | |
| **YULB** | **Yu-li** | **0.33** | **64** | *e*P | Pb | 16 04 10.5 | -0.2 |
| | baz=64 | | | | | | |
| YULB | | | | *i* S | Sb | 16 04 15.4 | -0.9 |
| | baz=64 | | | | | | |
| **WTP** | **Ta-pu** | **0.33** | **269** | *e*P | Pb | 16 04 10.0 | -0.8 |
| | baz=268 | | | | | | |
| WTP | | | | *e*S | Sg | 16 04 14.5 | +1.4 |
| | baz=268 | | | | | | |
| **TWG** | **Pinlang** | **0.44** | **168** | *e*P | Pb | 16 04 12.4 | -0.2 |
| | baz=167 | | | | | | |
| TWG | | | | *e*S | Sb | 16 04 19.4 | 0.0 |
| | baz=167 | | | | | | |
| **TWGBT** | **Beinan** | **0.44** | **167** | *e*P | Pb | 16 04 12.2 | -0.4 |
| | baz=167 | | | | | | |
| **VWDT** | **VWDT** | **0.52** | **17** | *e*P | Pb | 16 04 13.5 | -0.6 |
| | baz=16 | | | | | | |

*IDC **20** 16:18:39.8±1.2, 6°.38S×129°.79E, h0km, mb4.0/7, mbtmp4.0/9, ML4.0/2, Error ellipse: s-maj=96.4km s-min=20.1km az=66.0*

*DJA **20** 16:18:54.5±0.5, 7°.5S±3°×13°.0E±°, h202km±9km, M4.3/12, mb4.3/6, mB4.8/6, MLv4.6/12, Mw(mB)4.1/6*

*NEIC **20** 16:18:55.9±1.2, 6°.92S±0°.09×129°.52E±0°.06, h146km±9km, mb4.2/9, Error ellipse: s-maj=12.9km s-min=8.0km az=186.0*

**ISC 20 16:18:55.7±0.6, 6°.99S±0°.06×129°.53E±0°.07, h150km, n51, σ1°98/52, mb3.8/9, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.02** | **119** | P | **Pn** | **16 19 32.0** | **+0.9** |
| **SAUI** | **Saumlaki** | **2.02** | **119** | Pn | **Pn** | **16 19 32.0** | **+0.9** |
| **SAUI** | **Saumlaki** | **2.02** | **119** | P | **Pn** | **16 19 31.9** | **+0.9** |
| SAUI | | | | S | **Sn** | **16 19 59.7** | **+1.5** |
| **BNDI** | **Bandanaira** | **2.48** | **9** | P | Pn | 16 19 43.6 | +7.0 |
| **BNDI** | **Bandanaira** | **2.48** | **9** | P | **Pn** | **16 19 39.9** | **+3.3** |
| **MSAI** | **Masohi** | **3.67** | **351** | P | **Pn** | **16 19 54.2** | **+2.5** |
| **FAKI** | **Fak Fak** | **4.87** | **34** | | **Pn** | **16 20 05.8** | **-1.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,1.8nm,0.6s,baz=136,slow=7.4,SNR=13 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.00** | **2** | P | **P** | **16 27 42.1** | **0.0** | |
| **SONM** | **Songino Array** | **58.28** | **342** | P | **P** | **16 28 33.3** | **-1.4** | |
| | comp=Z,0.3nm,0.4s,baz=163,slow=6.0,SNR=2.2 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **67.96** | **327** | P | **P** | **16 29 39.0** | **+0.5** | |
| MK31 | | | | IAmb | IAmb | 16 29 40.0 | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.96** | **327** | P | **P** | **16 29 38.7** | **+0.3** | |
| **MKAR** | **Makanchi Array** | **67.96** | **327** | P | **P** | **16 29 39.0** | **+0.5** | |
| | comp=Z,2.2nm,0.4s,baz=119,slow=8.1,SNR=30 | | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.37** | **334** | P | **P** | **16 29 58.4** | **-0.7** | |
| | comp=Z,1.2nm,0.8s,baz=142,slow=6.0,SNR=5.6 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.26** | **329** | P | **P** | **16 30 04.0** | **-0.5** | |
| | comp=Z,1.3nm,0.6s,baz=130,slow=4.9,SNR=18 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **72.27** | **329** | P | **P** | **16 30 04.5** | **-0.1** | |
| **BVAR** | **Borovoye Array** | **77.81** | **328** | P | **P** | **16 30 36.2** | **-0.1** | |
| | comp=Z,0.9nm,0.7s,baz=111,slow=7.9,SNR=4.6 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **82.21** | **322** | P | **P** | **16 30 60.0** | **0.0** | |
| **ABKAR** | **Akbulak array** | **82.21** | **322** | P | **P** | **16 30 59.7** | **-0.3** | |
| ABKAR | | | | IAmb | IAmb | 16 31 02.3 | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |

*ISK **20** 16:31:43.3,38°.89N×43°.74E,h5km,ML3.4/11*
*AFAD **20** 16:31:46.0±0.0,38°.92N×43°.55E,h7km±3km,ML2.9*
*TEH **20** 16:31:50.2,38°.90N×43°.86E,h10km±152km,ML2.9*
*NSSP **20** 16:32:45.2,38°.72N×43°.52E,h7km,Ms3.2*

**ISC 20 16:31:44.7±0.8, 38°.84N±0°.02×43°.59E±0°.02, h10km, n35, σ2s48/52, 1C, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ERCV** | **ERCIS-VAN** | **0.27** | **313** | Pg | | **Pg** | **16 31 50.6** | **+0.4** |
| ERCV | | | | Sg | | **Sg** | **16 31 55.5** | **+1.6** |
| **VANB** | **Van** | **0.29** | **213** | Pg | | **Pb** | **16 31 53.6** | **+1.6** |
| **OZAP** | **Van, Ozalp-Mer** | **0.36** | **119** | P | | **Pn** | **16 31 55.9** | **-0.3** |
| OZAP | | | | S | | **Sb** | **16 32 00.8** | **+1.7** |
| **CLDR** | **Caldiran** | **0.40** | **40** | Pg | | **Pg** | **16 31 49.2** | **-3.4** |
| **CLDR** | **Caldiran** | **0.40** | **40** | S | | **Sb** | **16 31 58.8** | **-1.4** |
| **ADCV** | **BITLIS_Adilcev** | **0.68** | **268** | P | | **Pb** | **16 31 59.2** | **+0.5** |
| ADCV | | | | S | | **Sg** | **16 32 08.6** | **+1.9** |
| ADCV | | | | *i* AML | | AML | 16 32 09.0 | |
| | comp=Z,752nm,0.5s | | | | | | | |
| **AKDM** | **Akdamar-Van** | **0.70** | **223** | Pg | | **Pg** | **16 31 59.1** | **+0.9** |
| AKDM | | | | Sg | | **Sb** | **16 32 11.2** | **+2.4** |
| **DORK** | **Agr/Tutak/Do** | **0.84** | **311** | P | | **Pg** | **16 32 00.6** | **-0.2** |
| DORK | | | | S | | **Sg** | **16 32 09.8** | **-2.0** |
| DORK | | | | *i* AML | | AML | 16 32 14.0 | |
| | comp=Z,524nm,0.4s | | | | | | | |
| **MLAZ** | **Malazgirt-MUS** | **0.87** | **291** | Pg | | **Pb** | **16 32 02.1** | **+0.2** |
| **AGRB** | **Hanur-Agry** | **0.87** | **328** | Pg | | **Pb** | **16 32 01.2** | **-0.8** |
| AGRB | | | | Sg | | **Sb** | **16 32 13.8** | **0.0** |
| **MAKU** | **Maku** | **0.99** | **58** | Pg | | **Pn** | **16 32 05.0** | **+0.1** |
| **KOTA** | **Agri, Merkez-K** | **1.01** | **343** | P | | **Pn** | **16 32 07.9** | **+2.8** |
| KOTA | | | | S | | **Sn** | **16 32 17.2** | **-2.3** |
| **PERV** | **Siirt/Pervari-** | **1.21** | **223** | P | | **Pg** | **16 32 10.0** | **+2.0** |
| PERV | | | | S | | **Sb** | **16 32 17.4** | **-6.1** |
| PERV | | | | *i* AML | | AML | 16 32 41.0 | |
| | comp=Z,202nm,0.6s | | | | | | | |
| **BLIS** | **Bitlis-Merkez** | **1.23** | **250** | P | | **Pb** | **16 32 08.9** | **+0.8** |
| BLIS | | | | S | | **Sb** | **16 32 18.8** | **-5.3** |
| BLIS | | | | *i* AML | | AML | 16 32 32.0 | |
| | comp=Z,372nm,0.6s | | | | | | | |
| **TASB** | **TASBURUN-IGDIR** | **1.25** | **23** | Pn | | **Pn** | **16 32 06.2** | **-2.1** |
| **GURO** | **Guroymak-BITLI** | **1.25** | **257** | Pn | | **Pb** | **16 32 09.3** | **+0.8** |
| **VNNZ** | **Vanand** | **1.28** | **8** | *e*P | | **Pg** | **16 32 10.3** | **+1.1** |
| VNNZ | | | | *e*S | | **Sn** | **16 32 29.8** | **+3.9** |
| **METS** | **Metsamor** | **1.36** | **16** | *e*P | | **Pg** | **16 32 11.7** | **+0.8** |
| METS | | | | *e*S | | **Sn** | **16 32 32.1** | **+4.1** |
| **NRKZ** | **NAREK** | **1.43** | **35** | *e*P | | **Pg** | **16 32 12.9** | **+0.8** |
| NRKZ | | | | *e*S | | **Sg** | **16 32 33.0** | **+2.4** |
| **ARUZ** | **Aruch** | **1.50** | **15** | *e*P | | **Pg** | **16 32 14.8** | **+1.4** |
| ARUZ | | | | *e*S | | **Sg** | **16 32 36.1** | **+3.3** |
| **SRTM** | **Siirt_Merkez** | **1.56** | **238** | P | | **Pg** | **16 32 16.0** | **+1.4** |
| SRTM | | | | S | | Sn | 16 32 24.2 | -8.6 |
| **GNI** | **Garni** | **1.58** | **34** | *e*P | | **Pg** | **16 32 16.0** | **+0.9** |
| GNI | | | | ↑↑S | | **Sg** | **16 32 39.7** | **+4.0** |
| **MUSM** | **Mu-Merkez** | **1.63** | **267** | P | | **Pb** | **16 32 15.8** | **+0.9** |
| MUSM | | | | S | | **Sn** | **16 32 27.5** | **-7.2** |
| **AMBZ** | **Amberd** | **1.63** | **18** | *e*P | | **Pg** | **16 32 17.2** | **+1.2** |
| AMBZ | | | | *e*S | | **Sg** | **16 32 40.7** | **+3.5** |
| **IMRD** | **Marand** | **1.66** | **94** | Pg | | Pg | 16 32 17.9 | +1.5 |
| **ISHB** | **Shabestar** | **1.68** | **109** | Pg | | **Pg** | **16 32 17.9** | **+0.9** |
| **VRTB** | **Varto-Mus** | **1.69** | **282** | Pn | | **Pb** | **16 32 15.8** | **-0.2** |
| **VRTB** | **Varto-Mus** | **1.69** | **282** | P | | **Pg** | **16 32 17.5** | **+0.3** |
| VRTB | | | | S | | Sn | 16 32 27.9 | -8.3 |
| VRTB | | | | *i* AML | | AML | 16 32 52.0 | |
| | comp=Z,279nm,0.6s | | | | | | | |
| **KAPZ** | **Kaputan** | **1.71** | **30** | *e*P | | **Pg** | **16 32 18.3** | **+0.8** |
| KAPZ | | | | *e*S | | **Sg** | **16 32 42.6** | **+2.8** |
| **KARS** | **Kars** | **1.83** | **348** | Pn | | **Pb** | **16 32 16.0** | **-2.4** |
| **SENK** | **Senkaya-Erzuru** | **1.97** | **331** | Pn | | **Pb** | **16 32 18.4** | **-2.4** |
| **SLHN** | **Bingol, Solhan** | **2.01** | **274** | P | | **Pg** | **16 32 23.0** | **-0.2** |
| SLHN | | | | S | | Sn | 16 32 31.2 | -13 |
| SLHN | | | | *i* AML | | AML | 16 33 11.0 | |
| | comp=Z,82nm,0.9s | | | | | | | |
| **IAZR** | **Azarshahr** | **2.21** | **121** | Pn | | **Pg** | **16 32 27.3** | **+0.3** |
| **GRS** | **Goris** | **2.23** | **72** | *e*P | | **Pg** | **16 32 25.0** | **-2.5** |
| GRS | | | | *e*S | | **Sg** | **16 32 56.0** | **-0.4** |
| **IHRS** | **Heris** | **2.75** | **100** | Pn | | **Pg** | **16 32 34.0** | **-3.5** |

**TAP 20 16:32:34.2, 24°.83N×122°.53E, h10km±1km, ML1.7, D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **EOS2** | **EOS2** | **0.49** | **214** | *e*P | | Pg | 16 32 43.5 | -0.3 |
| | baz=213 | | | | | | | |
| EOS2 | | | | S | | Sg | 16 32 50.6 | +0.4 |
| | baz=213 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.52** | **290** | *e*S | | Sg | 16 32 51.6 | +0.3 |
| | baz=290 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.57** | **130** | *i* P | | Pg | 16 32 45.2 | -0.1 |
| | baz=129 | | | | | | | |
| YOJ | | | | S | | Sg | 16 32 52.5 | -0.2 |
| | baz=129 | | | | | | | |
| **EOS3** | **EOS3** | **0.57** | **200** | *e*P | | Pg | 16 32 44.9 | -0.4 |
| | baz=199 | | | | | | | |
| EOS3 | | | | *e*S | | Sb | 16 32 54.2 | -0.3 |
| | baz=199 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.66** | **283** | *e*P | | Pg | 16 32 47.0 | 0.0 |
| | baz=282 | | | | | | | |
| TIPB | | | | *e*S | | Sg | 16 32 55.8 | +0.2 |
| | baz=282 | | | | | | | |
| **EOS4** | **EOS4** | **0.73** | **195** | *e*P | | Pg | 16 32 47.7 | -0.5 |
| | baz=195 | | | | | | | |
| EOS4 | | | | *e*S | | Sb | 16 32 58.3 | -0.5 |
| | baz=195 | | | | | | | |
| **EWUT** | **Wuta** | **0.78** | **241** | *e*S | | Sg | 16 32 59.4 | -0.2 |
| | baz=240 | | | | | | | |
| **ENA** | **Nanau** | **0.82** | **241** | *e*P | | Pg | 16 32 49.1 | -0.9 |
| | baz=240 | | | | | | | |
| ENA | | | | *e*S | | Sg | 16 33 00.8 | 0.0 |
| | baz=240 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.86** | **266** | *e*P | | Pg | 16 32 50.2 | -0.6 |
| | baz=265 | | | | | | | |
| **LATG** | **Datong** | **0.96** | **253** | P | | Pg | 16 32 51.9 | -0.8 |
| | baz=252 | | | | | | | |
| LATG | | | | *e*S | | Sb | 16 33 05.6 | -0.3 |
| | baz=252 | | | | | | | |
| **YHNB** | **Yeheng** | **1.06** | **262** | *e*P | | Pg | 16 32 53.6 | -1.1 |
| | baz=261 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.07** | **233** | *e*P | | Pg | 16 32 53.5 | -1.4 |
| | baz=232 | | | | | | | |
| NACB | | | | *e*S | | Sg | 16 33 06.9 | -1.9 |
| | baz=232 | | | | | | | |

**JMA 20 16:33:07.5±0.1, 24°.2N±0°.3×123°.8E±0°.3, h16km±1km, MV0.4/7, NEAR ISHIGAKIJIMA ISLAND, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **IRIF** | **Iriomote-Funau** | **0.13** | **315** | P | | Pg | 16 33 11.3 | 0.0 |
| **JKRS** | **Kuro-shima** | **0.16** | **91** | P | | Pg | 16 33 11.7 | 0.0 |
| JKRS | | | | *e*S | | Sg | 16 33 14.6 | +0.1 |
| **HATJ** | **Hateruma jima** | **0.18** | **188** | P | | Pg | 16 33 11.8 | -0.2 |
| HATJ | | | | *e*S | | Sg | 16 33 15.1 | +0.1 |
| **JIJ** | **Ishigaki jima** | **0.31** | **67** | P | | Pg | 16 33 13.8 | -0.2 |
| JIJ | | | | *e*S | | Sg | 16 33 18.3 | -0.2 |
| **JISG** | **Ishigakijimahi** | **0.56** | **52** | *e*P | | Pg | 16 33 18.4 | -0.1 |
| JISG | | | | *e*S | | Sb | 16 33 26.5 | 0.0 |

*IDC **20** 16:36:35.3±2.1, 7°.06S×155°.30E, h0km, mb3.7/5, mbtmp3.8/6, ML2.4/1, MS2.9/3, Error ellipse: s-maj=66.4km s-min=27.6km az=128.0*
*NEIC **20** 16:36:36.4±1.1, 7°.04S±0°.06×155°.25E±0°.08, h6km±6km, mb4.5/15, Error ellipse: s-maj=12.0km s-min=8.2km az=91.0*

**ISC 20 16:36:36.6±0.7, 7°.00S±0°.09×155°.30E±0°.10, h10km, n35, σ0s97/27, mb4.2/13, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **RABL** | **Rabaul** | **4.18** | **312** | Pn | | **Pn** | **16 37 40.0** | **-0.5** |
| **HNR** | **Honiara** | **5.20** | **118** | Pn | | **Pn** | **16 37 53.8** | **-0.8** |
| **HNR** | **Honiara** | **5.20** | **118** | LR | | LR | 16 39 53.4 | |
| | comp=Z,870nm,21.0s,baz=208,slow=38 | | | | | | | |
| **PMG** | **Port Moresby** | **8.40** | **253** | Pn | | **Pn** | **16 38 36.7** | **-1.8** |
| **PMG** | **Port Moresby** | **8.40** | **253** | Pn | | **Pn** | **16 38 40.3** | **+1.8** |
| | 2.5nm,0.3s,baz=65,slow=7.2,SNR=8.2 | | | | | | | |
| PMG | | | | LR | | LR | 16 41 41.4 | |
| | comp=Z,89nm,19.5s,baz=278,slow=36 | | | | | | | |
| | 9.8nm,0.5s | | | | | | | |
| **MANU** | **Manus Island** | **9.31** | **302** | Pn | | **Pn** | **16 38 49.0** | **-2.0** |
| **PATS** | **Pohnpei** | **14.07** | **12** | Pn | | **Pn** | **16 39 56.3** | **+0.2** |
| **CTA** | **Charters Tower** | **15.70** | **213** | LR | | LR | 16 45 10.2 | |
| | comp=Z,4.1nm,18.8s,baz=98,slow=33 | | | | | | | |
| **WR0** | **Warramunga Arr** | **23.91** | **235** | P | | **P** | **16 41 50.1** | **-0.8** |
| WR0 | | | | IAmb | | IAmb | 16 42 04.8 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **23.93** | **236** | P | | **P** | **16 41 50.1** | **-1.0** |
| WB0 | | | | IAmb | | IAmb | 16 42 13.8 | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **24.05** | **236** | P | | **P** | **16 41 51.5** | **-0.7** |
| WB2 | | | | IAmb | | IAmb | 16 41 53.8 | |
| | comp=Z,6.1nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.06** | **236** | P | | **P** | **16 41 51.4** | **-1.0** |
| **WRA** | **Warramunga Arr** | **24.06** | **236** | P | | **P** | **16 41 51.9** | **-0.4** |
| | comp=Z,2.2nm,0.7s,baz=59,slow=10,SNR=8.0 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **26.39** | **229** | P | | **P** | **16 42 12.8** | **-0.7** |
| **ASAR** | **Alice Springs** | **26.40** | **229** | P | | **P** | **16 42 13.2** | **-0.4** |
| | comp=Z,1.2nm,0.4s,baz=57,slow=10,SNR=40 | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.71** | **24** | T | | T | 17 10 51.8 | |
| | baz=203,slow=75,SNR=38 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.71** | **24** | T | | T | 17 10 54.1 | |
| | baz=203,slow=75,SNR=36 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.73** | **24** | T | | T | 17 10 54.2 | |
| | baz=203,slow=75,SNR=22 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.89** | **23** | T | | T | 17 12 25.3 | |
| | baz=204 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.90** | **23** | T | | T | 17 12 21.0 | |
| | baz=204 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.91** | **23** | T | | T | 17 12 27.3 | |
| | baz=204 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.93** | **246** | P | | **P** | **16 42 53.8** | **-0.1** |
| **JCJ** | **Chichijima** | **36.19** | **340** | P | | **P** | **16 43 39.5** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **61.05** | **295** | P | | **P** | **16 46 52.9** | **+1.7** |
| | comp=Z,0.5nm,0.4s,baz=126,slow=5.7,SNR=2.1 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **M16K** | **Timber Creek** | **76.61** | **21** | P | | **P** | **16 48 28.6** | **+1.4** |
| M16K | | | | IAmb | | IAmb | 16 48 33.9 | |
| | comp=Z,3.8nm,1.0s | | | | | | | |
| **RDOG** | **Red Dog Mine** | **80.44** | **15** | P | | **P** | **16 48 48.2** | **0.0** |
| **H19K** | **Roundabout Mou** | **80.48** | **18** | P | | **P** | **16 48 48.7** | **+0.2** |
| H19K | | | | IAmb | | IAmb | 16 48 52.4 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **IMAR** | **Indian Mountai** | **81.63** | **19** | P | | **P** | **16 48 55.2** | **+0.6** |
| **D19K** | **Kuna River** | **82.01** | **16** | P | | **P** | **16 48 57.1** | **+0.5** |
| **MLY** | **Manley** | **82.05** | **20** | P | | **P** | **16 48 57.5** | **+0.6** |
| **QSPA** | **South Pole Qui** | **82.98** | **180** | P | | **P** | **16 49 01.7** | **-0.2** |
| QSPA | | | | IAmb | | IAmb | 16 49 35.3 | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.27** | **21** | P | | **P** | **16 49 03.1** | **0.0** |
| | comp=Z,0.2nm,0.5s,baz=245,slow=3.7,SNR=2.5 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **83.60** | **319** | P | | **P** | **16 49 05.6** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=104,slow=3.8,SNR=2.0 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **J25K** | **Salcha River,** | **83.74** | **22** | P | | **P** | **16 49 06.0** | **+0.4** |
| J25K | | | | IAmb | | IAmb | 16 49 36.9 | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **G29M** | **Pine Creek** | **87.49** | **21** | P | | **P** | **16 49 25.0** | **+0.7** |
| G29M | | | | IAmb | | IAmb | 16 50 04.3 | |
| | comp=Z,4.1nm,1.4s | | | | | | | |

**IDC 20 16:39:31.3±48.0, 17°.90S×179°.29E, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=868.9km s-min=149.6km az=78.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **STKA** | **Stephens Creek** | **36.72** | **240** | P | | P | 16 46 41.4 | +1.0 |
| | 1.3nm,0.5s,baz=92,slow=9.8,SNR=3.4 | | | | | | | |
| | 1.3nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.48** | **260** | P | | P | 16 47 28.1 | -0.5 |
| | 0.7nm,0.5s,baz=97,slow=7.3,SNR=12 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **42.68** | **254** | P | | P | 16 47 29.8 | -0.5 |
| | 4.8nm,0.6s,baz=88,slow=9.0,SNR=105 | | | | | | | |
| | 4.8nm,0.6s | | | | | | | |

**ISC 20 16:40:19.2±1.0, 69°.17N±0°.02×146°.56W±0°.02, h6km±10km, n23, σ0s96/40, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **D25K** | **Kavik River** | **0.17** | **23** | P | | **Pg** | **16 40 22.6** | **-0.1** |
| | baz=204 | | | | | | | |
| D25K | | | | S | | **Sg** | **16 40 25.1** | **+0.2** |
| | baz=204 | | | | | | | |
| **D24K** | **Happy Valley** | **0.81** | **270** | S | | **Sb** | **16 40 46.8** | **0.0** |
| | baz=88 | | | | | | | |
| **C24K** | **Franklin Bluff** | **0.94** | **307** | P | | **Pg** | **16 40 37.4** | **+0.2** |
| | baz=125 | | | | | | | |
| C24K | | | | S | | **Sb** | **16 40 51.1** | **+0.6** |
| | baz=125 | | | | | | | |
| **C26K** | **Camden Bay** | **0.95** | **37** | Pb | | **Pn** | **16 40 38.8** | **-0.2** |
| | baz=218,SNR=7.7 | | | | | | | |
| C26K | | | | S | | **Sb** | **16 40 51.2** | **+0.3** |
| | baz=218 | | | | | | | |
| **C27K** | **Jago River** | **1.11** | **64** | P | | **Pg** | **16 40 40.3** | **-0.2** |
| | baz=247 | | | | | | | |
| C27K | | | | S | | **Sg** | **16 40 55.1** | **+0.3** |
| | baz=247 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.21** | **245** | P | | **Pg** | **16 40 42.5** | **+0.1** |
| | baz=63,SNR=9.7 | | | | | | | |
| TOLK | | | | S | | **Sn** | **16 40 59.2** | **-0.2** |
| | baz=63 | | | | | | | |
| **E24K** | **Your Creek** | **1.31** | **214** | P | | **Pn** | **16 40 43.5** | **-0.5** |
| | baz=32,SNR=13 | | | | | | | |
| E24K | | | | S | | **Sn** | **16 41 02.6** | **+0.8** |
| | baz=32 | | | | | | | |
| **D23K** | **Nanushuk River** | **1.49** | **264** | P | | **Pg** | **16 40 48.0** | **+0.2** |
| | baz=80,SNR=5.5 | | | | | | | |
| D23K | | | | S | | **Sg** | **16 41 09.0** | **+1.8** |
| | baz=80 | | | | | | | |
| **C23K** | **Itkillik River** | **1.58** | **297** | P | | **Pb** | **16 40 48.3** | **-0.4** |
| | baz=113 | | | | | | | |
| C23K | | | | S | | **Sg** | **16 41 11.2** | **+1.4** |
| | baz=113 | | | | | | | |
| **E23K** | **Chandalar** | **1.58** | **227** | Pb | | **Pg** | **16 40 49.7** | **+0.2** |
| | baz=44,SNR=8.6 | | | | | | | |
| E23K | | | | S | | **Sg** | **16 41 11.5** | **+1.5** |
| | baz=44 | | | | | | | |
| **F25K** | **Christian Rive** | **1.62** | **167** | Pb | | **Pg** | **16 40 50.6** | **+0.4** |
| | baz=348 | | | | | | | |
| F25K | | | | S | | **Sg** | **16 41 11.9** | **+0.7** |
| | baz=348 | | | | | | | |
| **F24K** | **Squaw Lake** | **1.73** | **197** | Pb | | **Pg** | **16 40 52.0** | **-0.3** |
| | baz=16 | | | | | | | |
| F24K | | | | S | | **Sg** | **16 41 14.8** | **+0.1** |
| | baz=16 | | | | | | | |
| **F26K** | **Sheenjek River** | **1.73** | **148** | Pg | | **Pg** | **16 40 52.6** | **+0.3** |
| | baz=330 | | | | | | | |
| F26K | | | | S | | **Sg** | **16 41 14.6** | **-0.1** |
| | baz=330 | | | | | | | |
| **D27M** | **Malcolm River** | **2.00** | **85** | Pb | | **Pb** | **16 40 56.6** | **+0.6** |
| | baz=270 | | | | | | | |
| D27M | | | | Sb | | **Sg** | **16 41 23.2** | **-0.1** |
| | baz=270 | | | | | | | |
| **E27K** | **Coleen River** | **2.07** | **116** | P | | **Pb** | **16 40 56.5** | **-0.6** |
| | baz=301 | | | | | | | |
| E27K | | | | Sb | | **Sg** | **16 41 25.6** | **+0.1** |
| | baz=301 | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.19** | **244** | Pb | | **Pb** | **16 40 59.9** | **+0.8** |
| | baz=59 | | | | | | | |
| E22K | | | | Sb | | **Sg** | **16 41 29.5** | **+0.2** |
| | baz=59 | | | | | | | |
| **D22K** | **Ayikyak River** | **2.22** | **265** | P | | **Pb** | **16 40 58.7** | **-1.1** |
| | baz=80 | | | | | | | |
| D22K | | | | S | | **Sb** | **16 41 26.9** | **-0.5** |
| | baz=80 | | | | | | | |
| **COLD** | **Coldfoot** | **2.38** | **217** | Sb | | **Sg** | **16 41 34.1** | **-1.3** |
| | baz=33 | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.46** | **154** | P | | **Pn** | **16 41 01.4** | **+1.6** |
| | baz=336 | | | | | | | |
| G26K | | | | Sb | | **Sg** | **16 41 36.6** | **-1.6** |
| | baz=336 | | | | | | | |
| **E28M** | **Babbage River** | **2.61** | **99** | S | | **Sb** | **16 41 36.6** | **-1.9** |
| | baz=286 | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.66** | **299** | Sb | | **Sg** | **16 41 43.2** | **-1.4** |
| | baz=113 | | | | | | | |
| **F22K** | **John River** | **2.67** | **234** | Sb | | **Sg** | **16 41 43.4** | **-1.5** |
| | baz=49 | | | | | | | |
| **E21K** | **Killik River** | **2.79** | **258** | Sb | | **Sg** | **16 41 46.4** | **-2.4** |
| | baz=71 | | | | | | | |

**DJA 20 16:43:39.6±0.3, 8°.3S±6°×117°.7E±°, h10km, M4.2/10, mb4.5/3, MLv4.0/10, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.54** | **144** | P | | Pg | 16 43 49.7 | -0.4 |
| **PLAI** | **Plampang** | **1.31** | **114** | P | | Pn | 16 44 03.5 | -0.5 |
| PLAI | | | | S | | Sg | 16 44 21.8 | -0.1 |
| **SRBI** | **Singaraja** | **1.35** | **279** | P | | Pn | 16 44 04.1 | -0.4 |
| **DNP** | **Denpasar** | **1.39** | **254** | P | | Pg | 16 44 06.1 | -0.2 |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **266** | P | | Pn | 16 44 18.2 | -0.6 |
| **WBSI** | **Waikabubak, Su** | **3.10** | **116** | P | | Pn | 16 44 28.1 | -0.5 |
| **BSSI** | **Bau Bau, Buton** | **4.45** | **61** | P | | Pn | 16 44 46.6 | -0.6 |
| **PWJI** | **Pagerwojo** | **4.72** | **273** | P | | Pn | 16 44 50.6 | -0.3 |
| **EDFI** | **Ende, Flores** | **5.09** | **95** | P | | Pn | 16 44 56.3 | +0.1 |
| | 21nm,0.6s,0.1nm | | | | | | | |
| **UGM** | **Wanagama** | **5.99** | **273** | P | | Pn | 16 45 08.8 | +0.4 |
| | 177nm,1.7s | | | | | | | |
| **BATI** | **Baumata** | **7.26** | **106** | P | | Pn | 16 45 26.4 | +0.5 |

*NEIC **20** 16:44:29.3±1.4, 18°.3S±0°.2×178°.2W±0°.1, h534km±13km, mb4.5/19, Error ellipse: s-maj=27.9km s-min=17.8km az=207.0*
*IDC **20** 16:44:40.2±31.0, 18°.51S×178°.88W, h640km±279km, mb3.1/4, mbtmp4.1/4, Error ellipse: s-maj=304.6km s-min=30.6km az=44.0*

**ISC 20 16:44:30.8±1.5, 18°.2S±0°.2×178°.4W±0°.2, h550km, n26, σ0s85/27, mb4.4/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.41** | **278** | P | | **P** | **16 45 47.0** | **-1.6** |
| **NIUE** | **Niue** | **8.08** | **97** | P | | **P** | **16 46 23.6** | **-5.7** |
| **HNR** | **Honiara** | **22.75** | **290** | P | | **P** | **16 48 52.5** | **+0.8** |
| HNR | | | | IAmb | | IAmb | 16 49 11.9 | |
| | comp=Z,63nm,1.1s | | | | | | | |
| **BHW** | **Baring Head** | **23.81** | **193** | P | | **P** | **16 49 00.3** | **-0.5** |
| **KHZ** | **Kahutara** | **25.07** | **194** | P | | **P** | **16 49 11.2** | **-0.7** |
| KHZ | | | | IAmb | | IAmb | 16 49 45.2 | |
| | comp=Z,56nm,1.3s | | | | | | | |
| **GVZ** | **Greta Valley S** | **25.71** | **195** | P | | **P** | **16 49 16.8** | **-0.8** |
| **LBZ** | **Lake Benmore** | **27.78** | **198** | P | | **P** | **16 49 34.6** | **-1.2** |
| LBZ | | | | IAmb | | IAmb | 16 49 49.2 | |
| | comp=Z,77nm,1.5s | | | | | | | |
| **WKZ** | **Wanaka** | **28.53** | **199** | P | | **P** | **16 49 42.0** | **-0.3** |
| **TOO** | **Toolangi** | **36.97** | **231** | P | | **P** | **16 50 55.7** | **+1.8** |
| TOO | | | | IAmb | | IAmb | 16 50 58.2 | |
| | comp=Z,26nm,1.2s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.48** | **242** | P | | **P** | **16 51 07.6** | **+1.4** |
| **STKA** | **Stephens Creek** | **38.48** | **242** | P | | **P** | **16 51 06.5** | **+0.2** |
| | comp=Z,2.1nm,0.8s,baz=90,slow=8.1,SNR=3.4 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.26** | **241** | P | | **P** | **16 51 45.0** | **+0.9** |
| BBOO | | | | IAmb | | IAmb | 16 52 09.7 | |
| | comp=Z,26nm,1.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.39** | **260** | P | | **P** | **16 51 53.1** | **0.0** |
| WR0 | | | | IAmb | | IAmb | 16 51 55.7 | |
| | comp=Z,7.4nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.55** | **260** | P | | **P** | **16 51 53.8** | **-0.5** |
| WB0 | | | | IAmb | | IAmb | 16 52 11.8 | |
| | comp=Z,6.9nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.58** | **260** | P | | **P** | **16 51 53.9** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.58** | **260** | P | | **P** | **16 51 53.7** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=98,slow=6.9,SNR=13 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **16 53 24.6** | **-1.0** |
| | comp=Z,0.3nm,0.4s,baz=90,slow=3.6,SNR=8.6 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **44.71** | **255** | P | | **P** | **16 51 55.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **44.71** | **255** | P | | **P** | **16 51 55.2** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.71** | **255** | P | | **P** | **16 51 55.5** | **0.0** |
| | comp=Z,4.6nm,0.4s,baz=90,slow=7.6,SNR=132 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **16 53 25.4** | **-0.8** |
| | comp=Z,0.6nm,0.5s,baz=104,slow=4.1,SNR=8.7 | | | | | | | |
| | comp=Z,4.6nm,0.4s | | | | | | | |
| **FORT** | **Forrest** | **49.88** | **245

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SNZO | South Karori | 24.33 | 193 | P | P | 16 57 31.5 | -2.7 | |
| THZ | Tophouse | 25.20 | 196 | P | P | 16 57 40.2 | -1.8 | |
| KHZ | Kahutara | 25.65 | 194 | P | P | 16 57 43.8 | -2.1 | |
| PPT | Papeete | 27.14 | 94 | P | P | 16 57 58.2 | -1.2 | |
| | comp=Z,13nm,0.5s,baz=118,slow=6.2,SNR=4.4 | | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | | |
| RPZ | Rata Peaks | 27.51 | 197 | P | P | 16 58 00.3 | -1.9 | |
| LBZ | Lake Benmore | 28.38 | 198 | P | P | 16 58 07.4 | -2.4 | |
| LBZ | | | | IAmb | IAmb | 16 58 11.6 | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| JCZ | Jackson Bay | 28.53 | 200 | P | P | 16 58 10.7 | -0.6 | |
| ODZ | Otahua Downs | 28.85 | 197 | P | P | 16 58 13.3 | -0.6 | |
| ARMA | Armidale | 30.32 | 240 | P | P | 16 58 27.1 | +0.1 | |
| ARMA | | | | IAmb | IAmb | 16 59 08.2 | | |
| | comp=Z,29nm,1.4s | | | | | | | |
| WHZ | Wether Hill Ro | 30.42 | 199 | P | P | 16 58 26.4 | -1.1 | |
| CTAO | Charters Tower | 33.80 | 260 | P | P | 16 58 56.6 | 0.0 | |
| CTAO | | | | IAmb | IAmb | 16 58 58.7 | | |
| | comp=Z,29nm,1.4s | | | | | | | |
| CNB | Canberra Magne | 33.81 | 232 | P | P | 16 58 57.8 | +1.3 | |
| CAN | Canberra | 34.09 | 232 | P | P | 16 58 57.2 | -1.6 | |
| CAN | Canberra | 34.09 | 232 | P | P | 16 58 58.8 | 0.0 | |
| CAN | | | | IAmb | IAmb | 16 58 59.5 | | |
| | comp=Z,18nm,1.1s | | | | | | | |
| COEN | Coen | 37.43 | 270 | P | P | 16 59 27.5 | +0.8 | |
| TOO | Toolangi | 37.55 | 231 | P | P | 16 59 28.6 | +1.2 | |
| TOO | Toolangi | 37.55 | 231 | P | P | 16 59 27.7 | +0.2 | |
| TOO | | | | IAmb | IAmb | 16 59 29.7 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| STKA | Stephens Creek | 39.01 | 241 | P | P | 16 59 42.4 | +3.1 | |
| STKA | Stephens Creek | 39.01 | 241 | | P | 16 59 39.7 | +0.3 | |
| STKA | Stephens Creek | 39.01 | 241 | P | P | 16 59 38.5 | -0.9 | |
| | comp=Z,8.0nm,0.9s,baz=69,slow=6.9,SNR=11 | | | | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| HTT | Hallett | 41.53 | 239 | P | P | 17 00 00.4 | +0.9 | |
| LCRK | Leigh Creek | 41.64 | 244 | P | P | 17 00 01.0 | +0.7 | |
| OOD | Oodnadatta | 43.59 | 248 | P | P | 17 00 17.1 | +1.5 | |
| BBOO | Buckleboo | 43.79 | 241 | P | P | 17 00 17.9 | +0.8 | |
| BBOO | Buckleboo | 43.79 | 241 | P | P | 17 00 17.2 | +0.1 | |
| BBOO | | | | IAmb | IAmb | 17 00 18.2 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| WB0 | Warramunga Arr | 44.95 | 260 | P | P | 17 00 25.8 | -0.4 | |
| WB2 | Warramunga Arr | 44.98 | 259 | P | P | 17 00 26.1 | -0.4 | |
| WB2 | | | | IAmb | IAmb | 17 00 48.2 | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| WRA | Warramunga Arr | 44.99 | 259 | P | P | 17 00 26.1 | -0.5 | |
| WRA | Warramunga Arr | 44.99 | 259 | P | P | 17 00 26.0 | -0.5 | |
| | comp=Z,1.6nm,0.7s,baz=95,slow=6.9,SNR=24 | | | | | | | |
| WRA | | | | PcP | PcP | 17 01 56.9 | +1.0 | |
| | comp=Z,1.1nm,0.4s,baz=91,slow=3.7,SNR=11 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| AS31 | Alice Springs | 45.16 | 254 | P | P | 17 00 27.9 | 0.0 | |
| ASAR | Alice Springs | 45.16 | 254 | P | P | 17 00 27.9 | +0.1 | |
| ASAR | Alice Springs | 45.16 | 254 | P | P | 17 00 27.4 | -0.5 | |
| | comp=Z,18nm,0.7s,baz=91,slow=8.0,SNR=500 | | | | | | | |
| ASAR | | | | PcP | PcP | 17 01 57.6 | +1.1 | |
| | comp=Z,3.2nm,0.5s,baz=102,slow=3.8,SNR=15 | | | | | | | |
| ASAR | | | | ScP | ScP | 17 05 02.8 | +5.8 | |
| | comp=Z,0.4nm,0.9s,baz=104,slow=5.2,SNR=1.7 | | | | | | | |
| ASAR | | | | S | S | 17 06 26.4 | -1.3 | |
| | comp=Z,1.9nm,0.8s,baz=90,slow=15,SNR=11 | | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| MULG | Mulgathing | 45.19 | 245 | P | P | 17 00 28.2 | +0.3 | |
| FORT | Forrest | 50.39 | 244 | P | P | 17 01 06.4 | -0.3 | |
| FORT | | | | IAmb | IAmb | 17 01 21.8 | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| KNRA | Kununurra | 50.83 | 264 | P | P | 17 01 10.2 | +0.1 | |
| KNRA | | | | IAmb | IAmb | 17 01 33.6 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| FITZ | Fitzroy Crossi | 53.38 | 260 | P | P | 17 01 28.9 | +0.4 | |
| PSA00 | Pilbara Seismi | 58.27 | 255 | P | P | 17 02 01.9 | -0.4 | |
| PSA00 | | | | IAmb | IAmb | 17 02 03.0 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| MBWA | Marble Bar | 58.44 | 256 | P | P | 17 02 03.1 | -0.3 | |
| SBA | Scott Base | 60.64 | 184 | P | P | 17 02 18.5 | +1.5 | |
| MORW | Morawa | 60.86 | 246 | P | P | 17 02 19.0 | -0.4 | |
| MORW | | | | IAmb | IAmb | 17 02 49.3 | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| TOLI2 | Tolitoli | 63.00 | 281 | P | P | 17 02 35.8 | +2.3 | |
| TOLI2 | | | | IAmb | IAmb | 17 03 09.4 | | |
| | comp=Z,7.8nm,1.0s | | | | | | | |
| GIRL | Giralia | 63.26 | 253 | P | P | 17 02 35.4 | +0.3 | |
| CASY | Casey | 66.46 | 205 | P | P | 17 02 54.5 | +0.1 | |
| CASY | | | | IAmb | IAmb | 17 02 56.2 | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| KKM | Kota Kinabalu | 69.01 | 284 | P | P | 17 03 11.6 | +0.6 | |
| KKM | | | | IAmb | IAmb | 17 03 12.1 | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| UGM | Wanagama | 69.98 | 268 | P | P | 17 03 16.8 | 0.0 | |
| QSPA | South Pole Qui | 72.35 | 180 | P | P | 17 03 30.9 | +1.1 | |
| QSPA | | | | IAmb | IAmb | 17 03 31.6 | | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| QSPA | South Pole Qui | 72.35 | 180 | P | P | 17 03 30.8 | +1.0 | |
| | comp=Z,9.7nm,0.8s,baz=354,slow=0.8,SNR=62 | | | | | | | |
| | comp=Z,9.7nm,0.8s | | | | | | | |
| KSM | Kuching | 72.98 | 277 | P | P | 17 03 35.9 | +1.7 | |
| KSM | | | | IAmb | IAmb | 17 03 36.8 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| NVAR | Mina Array Bea | 79.05 | 44 | P | P | 17 04 09.9 | +2.5 | |
| | comp=Z,1.0nm,0.7s,baz=218,slow=9.4,SNR=7.2 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| KVN | Kaiserville | 79.52 | 43 | P | P | 17 04 12.1 | +2.2 | |
| J05D | Fort Rock, OR | 79.96 | 38 | P | P | 17 04 14.6 | +2.6 | |
| K15K | Wolf Creek Mou | 80.80 | 8 | P | P | 17 04 18.4 | +2.7 | |
| K15K | | | | IAmb | IAmb | 17 04 30.2 | | |
| | comp=Z,15nm,1.5s | | | | | | | |
| SMAI | San Martin Ant | 81.23 | 159 | P | P | 17 04 19.8 | +1.8 | |
| SMAI | | | | IAmb | IAmb | 17 04 20.6 | | |
| | comp=Z,6.5nm,0.6s | | | | | | | |
| L18K | Granite Mounta | 81.44 | 10 | P | P | 17 04 21.5 | +2.5 | |
| L18K | | | | IAmb | IAmb | 17 04 49.2 | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| U15A | North Rim | 82.14 | 48 | P | P | 17 04 26.2 | +2.7 | |
| BELA | Belgrano 2 | 82.33 | 173 | P | P | 17 04 24.2 | +0.7 | |
| BELA | | | | IAmb | IAmb | 17 04 25.1 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| IPM | Ipoh | 82.72 | 277 | P | P | 17 04 28.2 | +1.5 | |
| IPM | | | | IAmb | IAmb | 17 04 29.2 | | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| MAW | Mawson | 84.16 | 200 | P | P | 17 04 33.1 | +0.3 | |
| | comp=Z,1.6nm,0.4s,baz=122,slow=4.3,SNR=5.9 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| Q32M | Nakina River | 85.07 | 22 | P | P | 17 04 40.1 | +2.7 | |
| Q32M | | | | IAmb | IAmb | 17 04 57.2 | | |
| | comp=Z,12nm,1.5s | | | | | | | |
| TXAR | Lajitas Array | 85.61 | 58 | P | P | 17 04 43.7 | +3.1 | |
| TXAR | Lajitas Array | 85.61 | 58 | P | P | 17 04 42.9 | +2.3 | |
| | comp=Z,1.0nm,0.7s,baz=218,slow=5.4,SNR=13 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| ILAR | Eielson Array | 85.61 | 13 | P | P | 17 04 40.6 | +0.9 | |
| | comp=Z,0.3nm,0.7s,baz=181,slow=8.1,SNR=1.5 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| PDAR | Pinedale Array | 86.98 | 43 | P | P | 17 04 47.0 | 0.0 | |
| | comp=Z,0.2nm,0.4s,baz=230,slow=5.6,SNR=2.2 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| CMAR | Chiang Mai Arr | 89.12 | 290 | P | P | 17 04 59.9 | +2.6 | |
| | comp=Z,0.8nm,0.4s,baz=119,slow=2.6,SNR=5.2 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| TROLL | Troll, Antarti | 90.51 | 180 | ⇑P | P | 17 05 03.6 | +0.7 | |
| | comp=Z,265nm,0.5s | | | | | | | |
| SNAA | Sanae | 90.79 | 178 | ⇑P | P | 17 05 04.2 | +0.2 | |
| | comp=Z,64nm,0.6s | | | | | | | |
| SNAA | Sanae | 90.79 | 178 | P | P | 17 05 04.2 | +0.2 | |
| | comp=Z,2.1nm,0.6s,baz=213,slow=6.8,SNR=17 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| VNA3 | Neumayer Olymp | 90.92 | 176 | ⇑P | P | 17 05 05.5 | +0.9 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| VNA1 | Neumayer–Stat | 91.59 | 177 | ⇑P | P | 17 05 08.9 | +1.3 | |
| | comp=Z,8.3nm,0.8s | | | | | | | |
| ARCES | ARCESS Array B | 126.17 | 350 | PKP | PKiKP | 17 11 00.5 | +0.8 | |
| | comp=Z,2.6nm,1.1s,baz=20,slow=2.9,SNR=3.7 | | | | | | | |
| BRTR | Keskin Array B | 144.87 | 315 | PKP | PKiKP | 17 11 36.1 | -2.6 | |
| | comp=Z,0.5nm,0.5s,baz=146,slow=5.6,SNR=4.4 | | | | | | | |
| MMAI | Mount Meron Ar | 146.30 | 303 | PKPbc | PKPab | 17 11 41.1 | -0.8 | |
| | comp=Z,1.2nm,0.5s,baz=47,slow=4.4,SNR=3.9 | | | | | | | |
| GERES | GERESS Array B | 147.50 | 345 | PKPbc | PKPab | 17 11 43.5 | -2.6 | |
| | comp=Z,0.2nm,0.3s,baz=48,slow=4.7,SNR=3.7 | | | | | | | |
| TORD | Torodi Ar. Bea | 175.47 | 177 | PKPab | PKPab | 17 13 49.0 | +0.6 | |
| | comp=Z,0.4nm,0.5s,baz=215,slow=1.9,SNR=2.4 | | | | | | | |

**BER 20 17:19:36.2±2.2, 71°.86N×1°.19W, h3km±81km, mb(Pn)4.0, Confirmed Earthquake, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| DBG | Daneborg | 6.05 | 303 | *eP* | Pn | | 17 21 03.8 | -2.6 |
| DBG | | | | *eS* | Sn | | 17 22 08.9 | -7.2 |
| LOF | Lofoten | 6.28 | 119 | *eP* | Pn | | 17 21 07.2 | -2.4 |
| HSPB | Hornsund (broa | 6.81 | 33 | *eP* | Pn | | 17 21 12.6 | -4.3 |
| HSPB | | | | *eS* | Sn | | 17 22 26.6 | -8.2 |
| STEI | Steigen | 6.89 | 117 | *eP* | Pn | | 17 21 15.3 | -2.6 |
| STEI | | | | IAML | | | 17 22 29.1 | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| TRO | Tromso | 7.00 | 99 | *eP* | Pn | | 17 21 15.4 | -4.0 |
| FAUS | Fauske | 7.28 | 120 | *eP* | Pn | | 17 21 20.4 | -2.9 |
| BRBB | Barentsburg B | 7.39 | 25 | *eP* | Pn | | 17 21 23.3 | -1.5 |
| SPA0 | Spitsbergen Ar | 7.75 | 27 | *eP* | Pn | | 17 21 27.5 | -2.3 |
| SPA0 | | | | IAML | | | 17 22 57.4 | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| KBS | Kingsbay | 7.80 | 19 | *eP* | Pn | | 17 21 26.4 | -4.0 |
| SALU | Saltoluokta | 8.18 | 114 | *eP* | Pn | | 17 21 33.4 | -2.3 |
| KTK1 | Kautokeino | 8.64 | 97 | *eP* | Pn | | 17 21 37.8 | -4.2 |
| HEF | Hetta | 9.10 | 100 | *eP* | Pn | | 17 21 43.3 | -4.8 |

*IDC* ***20*** *17:36:05.5±1.5, 39°.46N×141°.46E, h107km±13km, mb3.5/7, mbtmp3.9/9, MS3.6/1, Error ellipse: s-maj=22.8km s-min=9.3km az=98.0*
*JMA* ***20*** *17:36:08.5±0.1, 39°.5N±0°.4×141°.2E±0°.6, h125km, MV3.5/40, SOUTHERN IWATE PREF*
*JMA Felt I J1 at SOUTHERN IWATE PREF .*
**ISC 20 17:36:07.9±0.8, 39°.46N±0°.04×141°.28E±0°.08, h128km±6km, n31, σ1s26/38, mb3.7/7, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JOM | Ohasama | 0.02 | 32 | P | Pn | | 17 36 25.5 | +0.2 |
| JOM | | | | S | Sn | | 17 36 38.3 | -0.2 |
| JSZI | Iwateshizukuis | 0.38 | 318 | *i* P | Pn | | 17 36 26.7 | +0.5 |
| JSZI | | | | S | Sn | | 17 36 40.2 | +0.2 |
| MIYJ | Miyakonagasawa | 0.43 | 74 | *i* P | Pn | | 17 36 27.1 | +0.7 |
| MIYJ | | | | S | Sn | | 17 36 40.6 | +0.2 |
| JRG | Rokugo | 0.50 | 263 | *i* P | Pn | | 17 36 27.2 | +0.4 |
| JRG | | | | S | Sn | | 17 36 40.9 | -0.1 |
| JMK | Ichinoseki | 0.51 | 185 | *i* P | Pn | | 17 36 26.9 | 0.0 |
| JMK | | | | S | Sn | | 17 36 40.9 | -0.2 |
| JAH | Hinai | 0.88 | 326 | *i* P | Pn | | 17 36 29.9 | +0.3 |
| JYK | Kaneyama | 0.90 | 233 | *i* P | Pn | | 17 36 30.1 | +0.4 |
| JYK | | | | S | Sn | | 17 36 46.6 | +0.4 |
| JANG | Nango | 0.93 | 11 | *i* P | Pn | | 17 36 30.1 | +0.1 |
| JANG | | | | S | Sn | | 17 36 46.2 | -0.7 |
| JIO | Ouri | 1.00 | 177 | *i* P | Pn | | 17 36 31.0 | +0.3 |
| JIO | | | | S | Sn | | 17 36 47.7 | -0.3 |
| JOU | Okura | 1.19 | 204 | *i* P | Pn | | 17 36 33.1 | +0.5 |
| JTM | Tenmabayashi | 1.34 | 353 | *i* P | Pn | | 17 36 34.2 | +0.1 |
| JTM | | | | S | Sn | | 17 36 53.6 | -0.5 |
| JIW | Iwasaki | 1.50 | 320 | *i* P | Pn | | 17 36 36.1 | +0.3 |
| JIW | | | | S | Sn | | 17 36 57.2 | 0.0 |
| JAW | Awa shima | 1.87 | 238 | P | Pn | | 17 36 40.7 | +0.5 |
| JOT | Ohata | 1.93 | 355 | *i* P | Pn | | 17 36 40.9 | 0.0 |
| MJAR | Matsushiro Arr | 3.79 | 221 | P | Pn | | 17 37 04.8 | -0.1 |
| | 0.9nm,0.5s,baz=28,slow=14,SNR=3.2 | | | | | | | |
| MJAR | | | | S | Sn | | 17 37 48.1 | -0.9 |
| | 0.9nm,0.4s,baz=24,slow=18,SNR=1.3 | | | | | | | |
| ASAJ | Asahikawa | 4.76 | 12 | P | Pn | | 17 37 16.6 | -1.1 |
| | 1.8nm,0.4s,baz=201,slow=17,SNR=8.9 | | | | | | | |
| ASAJ | | | | S | Sn | | 17 38 07.5 | -4.5 |
| | 6.9nm,0.6s,baz=210,slow=28,SNR=6.1 | | | | | | | |
| JHJ | Hachijo jima 2 | 6.44 | 191 | P | Pn | | 17 37 39.8 | -0.5 |
| | 78nm,0.7s,baz=24,slow=13,SNR=1.5 | | | | | | | |
| JHJ | | | | S | Sn | | 17 38 47.3 | -5.2 |
| | 113nm,0.7s,baz=286,slow=23,SNR=6.6 | | | | | | | |
| USRK | Ussuriysk Ar. | 8.40 | 307 | P | Pn | | 17 38 07.5 | +0.9 |
| | 0.8nm,0.5s,baz=113,slow=14,SNR=5.1 | | | | | | | |
| H11N2 | WAKE ISLAND Hy 29.54 | 124 | | T | T | | 18 12 49.7 | |
| | baz=318,slow=76,SNR=30 | | | | | | | |
| H11N1 | WAKE ISLAND Hy 29.55 | 124 | | T | T | | 18 12 53.4 | |
| | baz=318,slow=76,SNR=31 | | | | | | | |
| H11N3 | WAKE ISLAND Hy 29.56 | 124 | | T | T | | 18 12 50.6 | |
| | baz=318,slow=76,SNR=25 | | | | | | | |
| H11S1 | WAKE ISLAND Hy 30.32 | 126 | | T | T | | 18 13 50.5 | |
| | baz=319,slow=76,SNR=6.8 | | | | | | | |
| H11S3 | WAKE ISLAND Hy 30.32 | 126 | | T | T | | 18 13 47.7 | |
| | baz=319,slow=76,SNR=11 | | | | | | | |
| H11S2 | WAKE ISLAND Hy 30.34 | 126 | | T | T | | 18 13 45.9 | |
| | baz=319,slow=76,SNR=11 | | | | | | | |
| ZALV | Zalesovo Beam | 40.24 | 310 | P | P | | 17 43 32.0 | +0.3 |
| | 0.8nm,0.4s,baz=87,slow=10,SNR=4.8 | | | | | | | |
| | 0.8nm,0.4s | | | | | | | |
| MKAR | Makanchi Array | 42.78 | 300 | P | P | | 17 43 52.9 | +0.3 |
| | 0.8nm,0.7s,baz=88,slow=9.1,SNR=9.2 | | | | | | | |
| | 0.8nm,0.7s | | | | | | | |
| KURBB | Kurchatov Arra | 44.46 | 306 | P | P | | 17 44 06.1 | +0.2 |
| | 1.3nm,0.6s,baz=80,slow=8.5,SNR=11 | | | | | | | |
| | 1.3nm,0.6s | | | | | | | |
| BVAR | Borovoye Array | 48.89 | 311 | P | P | | 17 44 40.7 | +0.3 |
| | 0.7nm,0.5s,baz=66,slow=7.7,SNR=5.2 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| WRA | Warramunga Arr | 59.44 | 188 | P | P | | 17 45 57.0 | -0.1 |
| | 0.4nm,0.5s,baz=4.1,slow=7.2,SNR=12 | | | | | | | |
| WRA | | | | LR | LR | | 18 11 40.7 | |
| | comp=Z,45nm,18.3s,baz=24,slow=36 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| ASAR | Alice Springs | 63.17 | 188 | P | P | | 17 46 22.8 | +0.6 |
| | 0.3nm,0.4s,baz=1.3,slow=6.9,SNR=14 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| FINES | FINESS Array B | 66.63 | 332 | P | P | | 17 46 44.3 | +0.1 |
| | 1.4nm,0.7s,baz=27,slow=12,SNR=2.1 | | | | | | | |
| | 1.4nm,0.7s | | | | | | | |

*TIR* ***20*** *17:45:14.1, 41°.58N×20°.13E, h26km, Ml2.7*
*PDG* ***20*** *17:45:14.6±0.0, 41°.60N×20°.24E, h10km, ML2.9/11, Error ellipse: s-maj=0.0km s-min=0.2km az=0.0*
*RHSSO* ***20*** *17:45:15.4±0.8, 41°.51N×20°.17E, h5km±3km, ML2.8/9*
*SKO* ***20*** *17:45:16.8, 41°.52N×20°.15E, h15km, ML2.7*
*BEO* ***20*** *17:45:16.1±0.2, 41°.55N×20°.20E, h5km±3km, ML2.4/10*
*THE* ***20*** *17:45:17.0, 41°.60N×20°.25E, h16km±3km, ML2.5/4, Error ellipse: s-maj=5.2km s-min=0.5km az=312.0*
**ISC 20 17:45:15.5±1.0, 41°.59N±0°.02×20°.21E±0°.02, h8km±9km, n65, σ0s96/110, 10C-2D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| TIR | Tirane | 0.35 | 227 | P | Pg | | 17 45 21.7 | -0.8 |
| | baz=222 | | | | | | | |
| TIR | | | | S | Sg | | 17 45 27.0 | -0.1 |
| | baz=222 | | | | | | | |
| TIR | | | | AMP | | | | |
| | comp=E,2.6nm,0.2s,baz=222 | | | | | | | |
| TIR | Tirane | 0.35 | 227 | P | Pb | | 17 45 25.1 | +1.0 |
| TIR | | | | S | Sb | | 17 45 30.4 | +0.6 |
| TIR | Tirane | 0.35 | 227 | *e*Pg | Pg | | 17 45 22.2 | -0.2 |
| TIR | | | | *e*Sg | Sg | | 17 45 27.0 | -0.1 |
| PUK | Puka | 0.51 | 332 | P | Pg | | 17 45 25.4 | 0.0 |
| | baz=340 | | | | | | | |
| PUK | | | | S | Sg | | 17 45 32.2 | +0.1 |
| | baz=340 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=E,6.3nm,0.3s,baz=340 | | | | | | | |
| OHR | Ohrid | 0.65 | 137 | *e*Pg | Pg | | 17 45 28.2 | +0.1 |
| OHR | | | | *e*Sg | Sg | | 17 45 37.5 | +0.9 |
| OHR | Ohrid | 0.65 | 137 | *i* Pg | Pg | | 17 45 28.2 | +0.1 |
| OHR | | | | *i* Sg | Sb | | 17 45 38.9 | +0.4 |
| OHR | | | | *e*Lg | Lg | | 17 45 39.3 | |
| | comp=N,250nm,0.4s | | | | | | | |
| BCI | Bajram Curri | 0.78 | 352 | P | Pg | | 17 45 30.0 | -0.6 |
| | baz=357 | | | | | | | |
| BCI | | | | S | Sg | | 17 45 41.4 | +0.6 |
| | baz=357 | | | | | | | |
| BCI | | | | AMP | | | | |
| | comp=E,0.6nm,0.3s,baz=357 | | | | | | | |
| DRME | Dracevica, Mon | 0.97 | 308 | ⇑*i* Pg | Pb | | 17 45 32.8 | -1.8 |
| DRME | | | | *e*Sg | Sg | | 17 45 47.6 | +0.9 |
| DRME | Dracevica, Mon | 0.97 | 308 | *e*Pg | Pb | | 17 45 32.6 | -2.0 |
| DRME | | | | *i* Sg | Sg | | 17 45 48.0 | +1.3 |
| PVY | Plav | 1.02 | 350 | *e*Pg | Pb | | 17 45 33.4 | -2.1 |
| PVY | | | | *i* Sg | Sb | | 17 45 49.4 | +0.2 |
| KBN | Korca | 1.06 | 155 | P | Pb | | 17 45 34.6 | -1.5 |
| | baz=152 | | | | | | | |
| KBN | | | | S | Sg | | 17 45 50.1 | +0.5 |
| | baz=152 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=E,1.0nm,0.5s,baz=152 | | | | | | | |
| KBN | Korca | 1.06 | 155 | P | Pb | | 17 45 36.1 | -0.1 |
| KBN | | | | S | Sn | | 17 45 51.4 | -0.4 |
| | comp=E,280nm,0.5s | | | | | | | |
| PDG | Podgorica | 1.10 | 320 | *e*Pg | Pb | | 17 45 35.4 | -1.4 |
| PDG | | | | *e*Sg | Sn | | 17 45 53.4 | +0.8 |
| PDG | Podgorica | 1.10 | 320 | ⇑*i* Pg | Pb | | 17 45 35.6 | -1.2 |
| PDG | | | | *e*Sg | Sg | | 17 45 51.6 | +0.7 |
| PDG | Podgorica | 1.10 | 320 | *i* Pg | Pb | | 17 45 35.6 | -1.2 |
| PDG | | | | *i* Sg | Sn | | 17 45 53.9 | +1.3 |
| PDG | Podgorica | 1.10 | 320 | *e*Pg | Pb | | 17 45 35.1 | -1.7 |
| PDG | | | | *i* Sg | Sn | | 17 45 52.2 | -0.4 |
| FNA | Florina | 1.19 | 132 | P | Pn | | 17 45 37.5 | -1.1 |
| | baz=129 | | | | | | | |
| FNA | | | | S | Sg | | 17 45 55.2 | +1.3 |
| | baz=129 | | | | | | | |
| FNA | Florina | 1.19 | 132 | P | Pn | | 17 45 37.8 | -0.8 |
| FNA | | | | S | Sg | | 17 45 54.5 | +0.6 |
| | comp=E,392nm,0.4s | | | | | | | |
| FNA | Florina | 1.19 | 132 | *e*Pg | Pn | | 17 45 37.8 | -0.8 |
| FNA | Florina | 1.19 | 132 | *i* Pg | Pn | | 17 45 37.8 | -0.8 |
| FNA | | | | *i* Sg | Sg | | 17 45 55.2 | +1.3 |
| BUM | Brajici-Budva | 1.21 | 306 | ⇑*i* Pg | Pn | | 17 45 37.1 | -1.8 |
| BUM | | | | *i* Sg | Sg | | 17 45 56.1 | +1.6 |
| IVA | Berane | 1.30 | 350 | *e*Pg | Pn | | 17 45 38.5 | -1.6 |
| IVA | | | | *i* Sg | Sg | | 17 45 58.8 | +1.4 |
| NEST | Nestorio | 1.34 | 151 | P | Pn | | 17 45 40.1 | -0.5 |
| NEST | | | | S | Sn | | 17 45 58.1 | -0.5 |
| | comp=E,140nm,0.6s | | | | | | | |
| CEME | Cevo | 1.36 | 315 | *e*Pg | Pn | | 17 45 39.7 | -1.1 |
| CEME | | | | *i* Sg | Sg | | 17 46 01.1 | +2.0 |
| KOME | Kolasin | 1.36 | 338 | ⇓*i* Pg | Pn | | 17 45 39.6 | -1.3 |
| KOME | | | | *i* Sg | Sg | | 17 46 01.0 | +1.7 |
| NKME | Niksic | 1.50 | 322 | *e*Pg | Pn | | 17 45 42.4 | -0.4 |
| NKME | | | | *i* Sg | Sg | | 17 46 05.3 | +1.5 |
| SJES | Sjenica | 1.68 | 354 | *e*Pn | Pb | | 17 45 46.9 | +0.1 |
| SJES | | | | *e*Sn | Sg | | 17 46 09.5 | 0.0 |
| SJES | Sjenica | 1.68 | 354 | ⇑*i* Pn | Pb | | 17 45 46.7 | -0.1 |
| SJES | | | | *e*Sn | Sb | | 17 46 09.3 | +1.2 |
| BARS | Barje | 1.71 | 44 | *e*Pn | Pg | | 17 45 48.5 | +0.2 |
| BARS | | | | *e*Sn | Sg | | 17 46 11.0 | +0.5 |
| BARS | Barje | 1.71 | 44 | *i* Pg | Pg | | 17 45 48.8 | +0.5 |
| SRN | Sarande | 1.72 | 185 | P | Pb | | 17 45 47.4 | +0.1 |
| | baz=184 | | | | | | | |
| SRN | | | | S | Sb | | 17 46 08.5 | -0.6 |
| | baz=184 | | | | | | | |
| SELS | Selova | 1.76 | 22 | *e*Pn | Pn | | 17 45 46.2 | -0.2 |
| SELS | | | | *e*Sn | Sg | | 17 46 12.8 | +0.7 |
| TREB | Trebinje | 1.78 | 310 | *e*Pn | Pn | | 17 45 47.2 | +0.6 |
| TREB | | | | *e*Sn | Sg | | 17 46 13.2 | +0.4 |
| TREB | Trebinje | 1.78 | 310 | *e*Pn | Pn | | 17 45 46.7 | +0.1 |
| TREB | | | | *e*Sn | Sb | | 17 46 10.3 | -0.7 |
| BRY | Bratogost | 1.80 | 317 | ⇑*i* Pn | Pn | | 17 45 47.7 | +0.6 |
| BRY | | | | *e*Sn | Sb | | 17 46 11.2 | -0.5 |
| BRY | Bratogost | 1.80 | 317 | *e*Pn | Pn | | 17 45 46.9 | -0.2 |
| BRY | | | | *i* Sn | Sb | | 17 46 12.4 | +0.7 |
| PLE | Pljevlja | 1.84 | 341 | ⇓*i* Pn | Pn | | 17 45 47.3 | -0.3 |
| PLE | | | | *i* Sn | Sb | | 17 46 13.1 | +0.3 |
| UPM | Unac-Piva | 1.88 | 329 | ⇑*i* Pn | Pn | | 17 45 49.2 | +1.1 |
| UPM | | | | *e*Sn | Sb | | 17 46 14.0 | +0.1 |
| UPM | Unac-Piva | 1.88 | 329 | *e*Pn | Pn | | 17 45 47.9 | -0.2 |
| UPM | | | | *i* Sn | Sb | | 17 46 14.1 | +0.1 |
| KLINJ | Klinje | 1.98 | 323 | *e*Pn | Pn | | 17 45 50.4 | +0.9 |
| KLINJ | | | | *e*Sn | Sb | | 17 46 15.6 | -1.3 |
| IGT | Igoumenitsa | 2.06 | 177 | P | Pn | | 17 45 51.2 | +0.7 |
| | baz=175 | | | | | | | |
| IGT | | | | S | Sb | | 17 46 17.9 | -1.0 |
| | baz=175 | | | | | | | |
| IGT | Igoumenitsa | 2.06 | 177 | P | Pn | | 17 45 50.4 | 0.0 |
| IGT | | | | S | Sn | | 17 46 16.4 | +0.1 |
| | comp=E,40nm,0.5s | | | | | | | |
| IGT | Igoumenitsa | 2.06 | 177 | *i* Pn | Pn | | 17 45 51.1 | +0.7 |
| KNT | Kendrikon | 2.07 | 101 | *i* Pn | Pn | | 17 45 50.3 | -0.3 |
| RUDO | Rudo | 2.12 | 343 | *e*Pn | Pn | | 17 45 51.7 | +0.4 |
| RUDO | | | | *e*Sn | Sb | | 17 46 19.5 | -1.2 |
| GRUS | Gruza | 2.33 | 9 | *e*Pn | Pn | | 17 45 54.2 | +0.1 |
| BBLS | Lazi&#263i | 2.35 | 346 | *e*Pn | Pn | | 17 45 55.8 | +1.3 |
| BBLS | Lazi&#263i | 2.35 | 346 | ⇑*i* Pn | Pn | | 17 45 55.8 | +1.3 |
| BBLS | | | | *e*Sn | Sb | | 17 46 25.5 | -1.9 |
| ZAPS | Zavoj | 2.46 | 46 | *e*Pn | Pb | | 17 45 59.1 | -0.9 |
| VTS | Vitosha | 2.47 | 64 | *e*Pn | Pb | | 17 45 58.6 | -1.7 |
| DIVS | Divibare | 2.51 | 356 | *e*Pn | Pn | | 17 45 58.3 | +1.6 |
| SRS | Serrai | 2.59 | 99 | *e*Pn | Pn | | 17 45 58.8 | +1.0 |
| TRUS | Trudelj | 2.64 | 3 | *e*Pn | Pn | | 17 45 59.1 | +0.7 |
| HAPS | Han Pijesak,Bl | 2.66 | 340 | *e*Pn | Pn | | 17 45 59.9 | +1.1 |
| HAPS | Han Pijesak,Bl | 2.66 | 340 | ⇑*i* Pn | Pn | | 17 45 59.8 | +1.0 |
| HAPS | | | | *e*Sn | Sn | | 17 46 32.6 | +1.3 |
| ZAGS | Zajecar | 2.67 | 33 | *e*Pn | Pn | | 17 45 58.5 | -0.4 |
| TEKS | Tekeris | 3.00 | 351 | *e*Pn | Pn | | 17 46 04.4 | +1.0 |
| KUBS | Kucevo | 3.02 | 20 | *e*Pn | Pn | | 17 46 03.9 | +0.3 |
| AVAS | Avala Beograd | 3.11 | 4 | *e*Pn | Pn | | 17 46 06.2 | +1.3 |
| MDVR | Moldovita | 3.37 | 19 | *e*Pn | Pn | | 17 46 08.4 | -0.2 |
| FRGS | Fruska Gora | 3.

**JSD Sado 2.39 327** Pn **Pn** 17 47 44.5 +0.7
**INU Inuyama 2.46 255** Pn **Pn** 17 47 45.9 +1.3
**JHJ Hachijo jima 2 2.91 182** P **Pn** 17 47 50.5 -0.4
comp=N,346nm,0.3s,baz=332,slow=12,SNR=63
JHJ S **Sn** 17 48 22.4 -2.3
comp=N,233nm,0.3s,baz=119,slow=22,SNR=10
**JHJ2 Mitsune 2.92 182** Pn **Pn** 17 47 50.2 -0.8
**JTM Tenmabayashi 4.83 10** Pn **Pn** 17 48 19.5 +2.4
**JMN Monobe 5.47 247** Pn **Pn** 17 48 30.8 +4.8
**ERM Erimo 6.48 22** Pn **Pn** 17 48 41.8 +2.0
**JKA Kamikawa-asahi 8.33 13** Pn **Pn** 17 49 07.0 +1.9
**KSRS Korea Array 9.73 282** LR LR 17 52 53.2
comp=N,85nm,20.6s,baz=100,slow=39
**USA0B Ussuriysk Arra 10.16 326** Pn **Pn** 17 49 29.3 -0.8
**USRK Ussuriysk Ar. 10.16 326** P Pn 17 49 35.3 +5.1
comp=N,3.3nm,1.0s,baz=144,slow=12,SNR=5.5
**KLR Kul'dur 14.47 338** LR LR 17 55 54.5
comp=N,37nm,18.2s,baz=180,slow=36
**HHC Hu-ho-hao-te 22.67 291** *eP* **P** 17 52 04.5 +0.4
HHC pmax pmax
comp=Z,11nm,0.5s
HHC pmax pmax
comp=Z,100nm,4.9s
**SONM Songino Array 27.36 306** LR LR 18 04 11.8
comp=Z,42nm,18.5s,baz=109,slow=38
**LZH Lanzhou 29.06 281** *eP* **P** 17 53 03.0 +0.4
LZH pmax pmax
comp=Z,13nm,1.0s
**PZH PanZhiHua 33.80 265** P **P** 17 53 45.4 +1.0
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.8s
**ZALV Zalesovo Beam 41.70 313** P **P** 17 54 50.0 -0.6
comp=Z,2.1nm,0.8s,baz=102,slow=5.0,SNR=7.5
comp=Z,2.1nm,0.8s
**MKAR Makanchi Array 43.63 303** P **P** 17 55 04.9 -1.5
**MKAR Makanchi Array 43.63 303** P **P** 17 55 05.2 -1.2
comp=Z,0.2nm,0.5s,baz=91,slow=8.2,SNR=3.2
MKAR LR LR 18 13 56.4
comp=Z,29nm,21.2s,baz=131,slow=37
comp=Z,0.2nm,0.5s
**MAKZ Makanchi 43.84 303** P **P** 17 55 09.5 +1.4
MAKZ IAmb IAmb 17 55 49.2
comp=Z,4.8nm,1.4s
**KURBB Kurchatov Arra 45.67 309** P **P** 17 55 21.4 -1.1
comp=Z,2.0nm,0.8s,baz=85,slow=8.1,SNR=14
comp=Z,2.0nm,0.8s
**KSH Kashi 49.71 294** P **P** 17 55 57.3 +3.2
KSH pmax pmax
comp=Z,2.0nm,1.5s
**BVAR Borovoye Array 50.35 313** P **P** 17 55 59.2 +0.5
comp=Z,0.8nm,0.8s,baz=99,slow=9.2,SNR=3.7
comp=Z,0.8nm,0.8s
**ILAR Eielson Array 50.98 32** P P 17 56 15.4 +12
comp=Z,0.7nm,0.7s,baz=273,slow=6.2,SNR=6.7
comp=Z,0.7nm,0.7s
**ARSB Arslanbob 51.35 297** P **P** 17 56 07.0 +0.4
**KKAR Karatay Array 52.58 300** P **P** 17 56 15.7 +0.2
**E29M Blow River 54.21 27** P **P** 17 56 26.6 -0.3
E29M IAmb IAmb 17 56 28.5
comp=Z,5.5nm,1.5s
**CHGR Chuyangaron 55.00 296** P **P** 17 56 32.2 -1.1
**WB0 Warramunga Arr 55.74 186** P **P** 17 56 37.7 -0.9
WB0 IAmb IAmb 17 56 52.7
comp=Z,6.9nm,1.1s
**WB2 Warramunga Arr 55.92 186** P **P** 17 56 39.6 -0.3
WB2 IAmb IAmb 17 57 11.7
comp=Z,6.2nm,1.0s
**WRA Warramunga Arr 55.92 186** P **P** 17 56 40.0 +0.1
**WRA Warramunga Ar 55.92 186** P **P** 17 56 38.4 -1.4
comp=Z,0.8nm,0.5s,baz=1.5,slow=7.6,SNR=14
comp=Z,0.8nm,0.5s
**ABKAR Akbulak array 57.66 310** P **P** 17 56 51.0 -0.9
**ASAR Alice Springs 59.65 186** P **P** 17 57 05.1 -0.9
**ASAR Alice Springs 59.65 186** P **P** 17 57 05.8 -0.2
comp=Z,0.3nm,0.6s,baz=19,slow=11,SNR=7.2
comp=Z,0.3nm,0.6s
**SPB2 Spitsbergen Ar 61.26 349** P **P** 17 57 17.6 +1.3
SPB2 IAmb IAmb 17 57 57.7
comp=Z,38nm,1.2s

*IDC **20** 17:55:38.5±2.2,23°.40N×144°.27E,h0km,mb3.9/10, mbtmp3.9/13,ML3.3/3,MS3.2/5,Error ellipse: s-maj=92.7km s-min=17.3km az=78.0*
*NEIC **20** 17:55:39.8±1.4,23°.3N±0°.2×144°.3E±0°.2,h10km±2km, mb4.3/7,Error ellipse: s-maj=37.1km s-min=9.1km az=42.0*
**ISC 20 17:55:43.7**±1.4,**23°.4N**±0°.1×**144°.1E**±0°.4,**h35**km,**n26,**
σ1**9**/**06**/**23,mb4.2**/15,**MS3.3**/4,**Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **4.05** | **336** | Pn | | **Pn** | | **17 56 41.4** | **-1.9** |
| | 5.4nm,0.3s,baz=281,slow=22,SNR=1.5 | | | | | | | | |
| JCJ | | | | Sn | | Sn | | 17 57 20.6 | -9.0 |
| | 12nm,0.3s,baz=291,slow=20,SNR=1.4 | | | | | | | | |
| | 54nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **14.04** | **340** | Pn | | **Pn** | | **17 58 58.3** | **-1.9** |
| | 0.1nm,0.3s,baz=162,slow=12,SNR=2.4 | | | | | | | | |
| | 0.7nm,0.6s | | | | | | | | |
| **JMM** | **Marumori** | **14.69** | **350** | Pn | | **Pn** | | **17 59 09.6** | **+0.6** |
| **JNU** | **Nakatsue** | **15.11** | **313** | LR | | LR | | 18 03 56.5 | |
| | comp=Z,54nm,18.5s,baz=130,slow=33 | | | | | | | | |
| **KSRS** | **Korea Array** | **19.70** | **319** | P | | | | **18 00 11.7** | **0.0** |
| | 0.1nm,0.3s,baz=139,slow=12,SNR=4.2 | | | | | | | | |
| | 2.1nm,0.9s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **23.00** | **337** | P | | **P** | | **18 00 46.5** | **+1.1** |
| | 1.3nm,0.7s,baz=144,slow=8.3,SNR=4.0 | | | | | | | | |
| | 1.3nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **38.58** | **319** | P | | **P** | | **18 03 03.4** | **+0.1** |
| | 0.5nm,0.7s,baz=106,slow=5.1,SNR=3.0 | | | | | | | | |
| SONM | | | | LR | | LR | | 18 18 47.4 | |
| | comp=Z,31nm,18.4s,baz=136,slow=36 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.30** | **272** | LR | | LR | | 18 20 05.4 | |
| | comp=Z,8.5nm,20.3s,baz=145,slow=34 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.11** | **193** | P | | **P** | | **18 03 46.7** | **-2.1** |
| WB2 | | | | IAmb | | IAmb | | 18 04 16.0 | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.11** | **193** | P | | **P** | | **18 03 47.7** | **-1.2** |
| **WRA** | **Warramunga Ar** | **44.11** | **193** | P | | **P** | | **18 03 48.8** | **0.0** |
| | comp=Z,0.3nm,0.4s,baz=7.4,slow=7.8,SNR=17 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **47.81** | **193** | P | | **P** | | **18 04 18.4** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=9.4,slow=7.4,SNR=9.5 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.40** | **321** | P | | **P** | | **18 04 59.2** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **53.40** | **321** | P | | **P** | | **18 05 00.8** | **+0.9** |
| | comp=Z,2.2nm,0.6s,baz=116,slow=7.6,SNR=8.0 | | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **MK31** | **Makanchi Array** | **54.16** | **312** | P | | **P** | | **18 05 06.3** | **+0.7** |
| MK31 | | | | IAmb | | IAmb | | 18 05 07.6 | |
| | comp=Z,1.5nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.16** | **312** | P | | **P** | | **18 05 06.3** | **+0.7** |
| | comp=Z,1.4nm,0.6s,baz=93,slow=8.6,SNR=14 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **54.38** | **312** | P | | **P** | | **18 05 08.2** | **+1.1** |
| MAKZ | | | | IAmb | | IAmb | | 18 05 08.9 | |
| | comp=Z,2.6nm,0.9s | | | | | | | | |
| **KURK** | **Kurchatov** | **56.80** | **316** | P | | **P** | | **18 05 24.5** | **+0.1** |
| KURK | | | | IAmb | | IAmb | | 18 05 26.4 | |
| | comp=Z,2.1nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.85** | **316** | P | | **P** | | **18 05 25.9** | **+1.1** |
| | comp=Z,1.5nm,0.5s,baz=91,slow=8.0,SNR=24 | | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **58.74** | **307** | P | | **P** | | **18 05 38.5** | **+0.1** |
| BOOM | | | | IAmb | | IAmb | | 18 05 41.3 | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.92** | **319** | P | | **P** | | **18 06 01.1** | **+1.3** |
| | comp=Z,2.4nm,0.6s,baz=89,slow=7.3,SNR=17 | | | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | | | |
| **KBL** | **Kabul** | **65.23** | **299** | P | | **P** | | **18 06 22.7** | **+0.4** |
| **KBZ** | **Khabaz** | **81.78** | **314** | LR | | LR | | 18 49 09.9 | |
| | comp=Z,31nm,18.9s,baz=205,slow=39 | | | | | | | | |
| **FINES** | **FINESS Array B** | **82.00** | **335** | P | | **P** | | **18 08 00.7** | **+0.9** |
| | comp=Z,2.1nm,0.9s,baz=56,slow=7.5,SNR=3.8 | | | | | | | | |
| FINES | | | | LR | | LR | | 18 46 13.2 | |
| | comp=Z,17nm,18.6s,baz=221,slow=37 | | | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | | |
| **HFS** | **Hagfors** | **87.47** | **338** | P | | **P** | | **18 08 27.6** | **+0.1** |
| | comp=Z,1.3nm,0.8s,baz=54,slow=7.3,SNR=0.9 | | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | | |
| **EFI** | **East Falkland** | **147.03** | **154** | PKPdf | | **PKPdf** | | **18 15 19.7** | **-0.8** |

*IDC **20** 18:01:31.2±0.5,1°.01S±24°.46W,h0km,mb4.3/20, mbtmp4.3/20,MS3.8/56,Error ellipse: s-maj=22.2km s-min=13.5km az=129.0*
*NEIC **20** 18:01:33.3±1.6,0°.94S±0°.08×24°.6W±0°.1,h10km±1km, mb4.9/53,Error ellipse: s-maj=20.5km s-min=10.1km az=122.0*
*GCMT **20** 18:01:35.3±0.3,0°.87S±0°.04×24°.52W±0°.02,h15km±1km, MW4.8/95,Moment Tensor Solution. s13,c13; s95,c123; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=2.11±.19; Mθθ=0.31±.10; Mϕϕ=1.80±.12; Mrθ=0.52±.32; Mrϕ=-0.32±.06; Mθϕ=0.13±.18; Best double couple: M=2.04800×10¹⁶ NP1:ϕs=337.00000°,δ=49.00000°,λ=-104.00000°. NP2: ϕs=179.00000°,δ=43.00000°,λ=-74.00000°. Principal axes: T 1.8790, Plg3.0000°, Azm77.0000°; N 0.3410, Plg11.0000°, Azm347.0000°; P -2.2170, Plg79.0000°, Azm185.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*BGR **20** 18:01:40.4,0°.52S×23°.78W,h33km,mb4.4*
**ISC 20 18:01:34.0**±0.4,**1°.01S**±0°.08×**24°.58W**±0°.07,**h22**km,**n170,**
σ1**8**/**16**/121,**mb4.6**/68,**MS3.9**/54,**1D,Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **12.12** | **124** | T | | T | | 18 16 49.0 | |
| | baz=304,slow=74,SNR=212 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **12.12** | **124** | T | | T | | 18 16 47.8 | |
| | baz=304,slow=74,SNR=206 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **12.14** | **124** | T | | T | | 18 16 47.1 | |
| | baz=304,slow=74,SNR=271 | | | | | | | | |
| **RCBR** | **Riachuelo** | **12.27** | **247** | Pn | | **Pn** | | **18 04 24.0** | **-3.6** |
| **RCBR** | **Riachuelo** | **12.27** | **247** | Pn | | **Pn** | | **18 04 25.1** | **-2.5** |
| | 1.2nm,0.3s,baz=63,slow=19,SNR=14 | | | | | | | | |
| RCBR | | | | Sn | | Sn | | 18 06 31.7 | -12 |
| | 0.2nm,0.3s,baz=243,slow=21,SNR=2.1 | | | | | | | | |
| RCBR | | | | LR | | LR | | 18 08 03.6 | |
| | comp=Z,262nm,19.6s,baz=76,slow=32 | | | | | | | | |
| **ASCN** | **Ascension** | **12.29** | **124** | Pn | | **Pn** | | **18 04 25.2** | **-2.6** |
| **BBTS** | **Babate** | **17.49** | **27** | LR | | LR | | 18 10 56.7 | |
| | comp=Z,368nm,19.3s,baz=100,slow=32 | | | | | | | | |
| **DBIC** | **Dimbokro** | **21.11** | **69** | P | | **P** | | **18 06 17.6** | **+0.1** |
| DBIC | | | | IAmb | | IAmb | | 18 06 20.4 | |
| | comp=Z,43nm,1.1s | | | | | | | | |
| **DBIC** | **Dimbokro** | **21.11** | **69** | P | | **P** | | **18 06 16.9** | **-0.5** |
| | comp=Z,28nm,1.0s,baz=237,slow=12,SNR=14 | | | | | | | | |
| DBIC | | | | LR | | LR | | 18 12 37.6 | |
| | comp=Z,643nm,21.1s,baz=250,slow=32 | | | | | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **BDFB** | **Brasilia** | **27.31** | **237** | P | | **P** | | **18 07 18.6** | **+1.0** |
| BDFB | | | | IAmb | | IAmb | | 18 07 29.4 | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **BDFB** | **Brasilia** | **27.31** | **237** | P | | **P** | | **18 07 19.4** | **+1.8** |
| | comp=Z,1.8nm,0.5s,baz=54,slow=12,SNR=2.1 | | | | | | | | |
| BDFB | | | | LR | | LR | | 18 17 24.5 | |
| | comp=Z,724nm,19.3s,baz=101,slow=35 | | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **29.61** | **61** | P | | **P** | | **18 07 38.2** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **29.61** | **61** | P | | **P** | | **18 07 37.7** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **29.61** | **61** | P | | **P** | | **18 07 37.6** | **-0.3** |
| | comp=Z,4.2nm,0.9s,baz=267,slow=9.5,SNR=12 | | | | | | | | |
| TORD | | | | LR | | LR | | 18 17 57.8 | |
| | comp=Z,434nm,19.8s,baz=236,slow=33 | | | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | | | |
| **BOAV** | **Boa Vista** | **36.09** | **275** | P | | **P** | | **18 08 33.8** | **-0.8** |
| **PTLB** | **Pontes e Lacer** | **36.99** | **245** | P | | **P** | | **18 08 43.3** | **+1.1** |
| **TAM** | **Tamanrasset** | **37.68** | **49** | P | | **P** | | **18 08 46.5** | **-1.6** |
| TAM | | | | IAmb | | IAmb | | 18 08 57.9 | |
| | comp=Z,23nm,1.5s | | | | | | | | |
| **MDT** | **Midelt** | **38.57** | **27** | LR | | LR | | 18 24 21.8 | |
| | comp=Z,234nm,18.3s,baz=228,slow=36 | | | | | | | | |
| **SIV** | **San Ignacio** | **38.93** | **246** | LR | | LR | | 18 24 52.5 | |
| | comp=Z,281nm,18.3s,baz=114,slow=36 | | | | | | | | |
| **SAML** | **Samuel** | **39.22** | **257** | P | | **P** | | **18 09 00.5** | **-0.7** |
| **CPUP** | **Villa Florida** | **40.32** | **229** | LR | | LR | | 18 24 50.1 | |
| | comp=Z,225nm,19.9s,baz=47,slow=35 | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **41.38** | **287** | LR | | LR | | 18 23 37.2 | |
| | comp=Z,77nm,21.7s,slow=32 | | | | | | | | |
| **ETMB** | **Extrema** | **42.31** | **257** | P | | **P** | | **18 09 25.3** | **-1.4** |
| **BAUV** | **El Baul** | **44.41** | **284** | P | | **P** | | **18 09 43.1** | **-0.5** |
| BAUV | | | | IAmb | | IAmb | | 18 09 59.2 | |
| | comp=Z,45nm,1.5s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **44.68** | **23** | P | | **P** | | **18 09 47.1** | **+1.7** |
| **ESDC** | **Sonseca Array** | **44.68** | **23** | P | | **P** | | **18 09 46.6** | **+1.2** |
| | comp=Z,3.7nm,1.1s,baz=214,slow=8.7,SNR=18 | | | | | | | | |
| | comp=Z,3.7nm,1.1s | | | | | | | | |
| **ESBB** | **Sonseca Array** | **44.68** | **23** | P | | **P** | | **18 09 46.0** | **+0.6** |
| **TSUM** | **Tsumeb** | **45.08** | **116** | LR | | LR | | 18 24 51.5 | |
| | comp=Z,148nm,19.1s,baz=293,slow=31 | | | | | | | | |
| **LPAZ** | **La Paz** | **45.51** | **248** | P | | **P** | | **18 09 54.4** | **+1.4** |
| LPAZ | | | | IAmb | | IAmb | | 18 10 02.2 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **LPAZ** | **La Paz** | **45.51** | **248** | P | | **P** | | **18 09 55.5** | **+2.4** |
| | comp=Z,5.4nm,0.8s,baz=87,slow=3.7,SNR=15 | | | | | | | | |
| LPAZ | | | | LR | | LR | | 18 28 39.5 | |
| | comp=Z,158nm,18.8s,baz=67,slow=36 | | | | | | | | |
| | comp=Z,5.4nm,0.8s | | | | | | | | |
| **SDV** | **Santo Domingo** | **46.92** | **283** | P | | **P** | | **18 10 02.8** | **-0.9** |
| SDV | | | | IAmb | | IAmb | | 18 10 23.5 | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **SDV** | **Santo Domingo** | **46.92** | **283** | LR | | LR | | 18 29 26.6 | |
| | comp=Z,50nm,18.1s,baz=86,slow=36 | | | | | | | | |
| **TATN** | **Tataouine** | **47.07** | **42** | | | **P** | | **18 10 02.7** | **-1.7** |
| TATN | | | | IAmb | | IAmb | | 18 10 15.6 | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **LVC** | **Limon Verde** | **48.12** | **240** | LR | | LR | | 18 30 24.0 | |
| | comp=Z,123nm,19.4s,baz=43,slow=36 | | | | | | | | |
| **KEST** | **Kesra** | **48.33** | **37** | P | | **P** | | **18 10 12.6** | **-1.7** |
| | comp=Z,3.6nm,0.9s,baz=256,slow=4.2,SNR=1.8 | | | | | | | | |
| KEST | | | | LR | | LR | | 18 31 44.8 | |
| | comp=Z,497nm,18.2s,baz=263,slow=38 | | | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | | | |
| **ROSC** | **El Rosal** | **50.03** | **277** | LR | | LR | | 18 31 07.5 | |
| | comp=Z,276nm,18.8s,baz=82,slow=35 | | | | | | | | |
| **VAE** | **Valguarnera** | **52.58** | **39** | LR | | LR | | 18 34 33.7 | |
| | comp=Z,266nm,18.7s,baz=249,slow=38 | | | | | | | | |
| **SUR** | **Sutherland** | **52.88** | **131** | LR | | LR | | 18 27 44.4 | |
| | comp=Z,74nm,21.7s,baz=304,slow=30 | | | | | | | | |
| **NNA** | **Nana** | **52.96** | **256** | LR | | LR | | 18 32 30.0 | |
| | comp=Z,381nm,21.4s,baz=28,slow=35 | | | | | | | | |
| **LSZ** | **Lusaka** | **53.95** | **108** | P | | **P** | | **18 10 57.6** | **+0.8** |
| LSZ | | | | IAmb | | IAmb | | 18 10 59.1 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **LBTB** | **Lobatse** | **53.96** | **120** | LR | | LR | | 18 29 31.3 | |
| | comp=Z,100nm,21.4s,baz=300,slow=31 | | | | | | | | |
| **ATAH** | **Atahualpa** | **53.99** | **262** | LR | | LR | | 18 33 18.8 | |
| | comp=Z,261nm,22.0s,baz=97,slow=35 | | | | | | | | |
| **CLF** | **Chambon-Foret** | **54.14** | **22** | P | | **P** | | **18 10 56.5** | **-0.9** |
| **BOSA** | **Boshof** | **54.88** | **125** | P | | **P** | | **18 11 01.7** | **-1.6** |
| | comp=Z,1.1nm,0.7s,baz=309,slow=9.4,SNR=1.7 | | | | | | | | |
| BOSA | | | | LR | | LR | | 18 30 09.7 | |
| | comp=Z,94nm,20.9s,baz=292,slow=31 | | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **54.88** | **27** | P | | **P** | | **18 11 04.4** | **+1.2** |
| **ZCCA** | **Zocca** | **55.16** | **31** | P | | **P** | | **18 11 06.9** | **+1.9** |
| ZCCA | | | | IAmb | | IAmb | | 18 11 16.4 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **MBAR** | **Mbarara** | **55.31** | **90** | LR | | LR | | 18 32 14.3 | |
| | comp=Z,320nm,18.7s,baz=256,slow=33 | | | | | | | | |
| **ECH** | **Echery** | **56.24** | **25** | P | | **P** | | **18 11 13.4** | **+0.7** |
| ECH | | | | IAmb | | IAmb | | 18 11 26.0 | |
| | comp=Z,12nm,1.7s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **56.37** | **28** | LR | | LR | | 18 35 35.5 | |
| | comp=Z,72nm,18.0s,baz=262,slow=36 | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **56.44** | **28** | P | | **P** | | **18 11 14.0** | **-0.4** |
| **DAVA** | **Damuels** | **56.74** | **27** | *i* P | | **P** | | **18 11 16.3** | **-0.2** |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| **FETA** | **Feichten** | **56.95** | **28** | *i* P | | **P** | | **18 11 16.6** | **-1.3** |
| | comp=Z,9.2nm,1.1s | | | | | | | | |
| **RETA** | **Reutte** | **57.30** | **28** | *i* P | | **P** | | **18 11 20.9** | **+0.6** |
| | comp=Z,4.5nm,0.9s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **57.32** | **28** | *i* P | | **P** | | **18 11 19.6** | **-0.9** |
| | comp=Z,7.9nm,1.0s | | | | | | | | |
| **PLCA** | **Paso Flores** | **57.35** | **220** | P | | **P** | | **18 11 20.7** | **-0.1** |
| | comp=Z,1.1nm,0.8s,baz=357,slow=2.4,SNR=2.8 | | | | | | | | |
| PLCA | | | | LR | | LR | | 18 35 47.1 | |
| | comp=Z,66nm,18.1s,baz=82,slow=36 | | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | | |
| **MOTA** | **Moosalm** | **57.36** | **28** | *i* P | | **P** | | **18 11 20.2** | **-0.6** |
| | comp=Z,2.6nm,1.1s | | | | | | | | |
| **WTTA** | **Wattenberg** | **57.55** | **28** | *i* P | | **P** | | **18 11 23.2** | **+1.0** |
| | comp=Z,6.3nm,1.5s | | | | | | | | |
| **WATA** | **Walderalm** | **57.57** | **28** | *i* P | | **P** | | **18 11 20.5** | **-1.8** |
| | comp=Z,4.7nm,1.1s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **57.61** | **29** | *i* P | | **P** | | **18 11 23.6** | **+1.1** |
| | comp=Z,7.7nm,1.2s | | | | | | | | |
| **PRED** | **Cave del Predi** | **57.92** | **30** | P | | **P** | | **18 11 24.7** | **0.0** |
| **MYKA** | **Terra Mystica** | **58.09** | **30** | *eP* | | **P** | | **18 11 26.4** | **+0.6** |
| | comp=Z,2.6nm,1.0s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **58.16** | **29** | *i* P | | **P** | | **18 11 26.4** | **+0.1** |
| | comp=Z,5.6nm,1.1s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **58.25** | **30** | *e*pP | | pP | | 18 11 31.6 | -1.4 |
| | comp=Z,1.7nm,1.0s | | | | | | | | |
| **OBKA** | **Obir** | **58.47** | **31** | *i* P | | **P** | | **18 11 28.8** | **+0.3** |
| | comp=Z,5.4nm,1.3s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **58.82** | **29** | *i* P | | **P** | | **18 11 30.3** | **-0.6** |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **SOKA** | **Soboth** | **58.83** | **31** | *i* P | | **P** | | **18 11 32.1** | **+1.1** |
| | comp=Z,6.3nm,1.2s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **58.84** | **14** | P | | **P** | | **18 11 31.3** | **+0.5** |
| | comp=Z,2.4nm,1.0s,baz=216,slow=7.0,SNR=7.0 | | | | | | | | |
| | comp=Z,2.4nm,1.0s | | | | | | | | |
| **FNA** | **Florina** | **58.91** | **40** | P | | **P** | | **18 11 32.9** | **+1.3** |
| FNA | | | | IAmb | | IAmb | | 18 11 36.4 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **59.12** | **26** | *eP* | | **P** | | **18 11 33.5** | **+0.6** |
| | comp=Z,2.7nm,0.8s,baz=216,slow=6.9 | | | | | | | | |
| **MOA** | **Molln** | **59.23** | **29** | *eP* | | **P** | | **18 11 33.7** | **-0.1** |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| **ARSA** | **Arzberg** | **59.46** | **31** | *eP* | | **P** | | **18 11 35.5** | **+0.1** |
| | comp=Z,2.6nm,0.7s | | | | | | | | |
| **GEC2** | **GERESS Array S** | **59.65** | **28** | P | | **P** | | **18 11 36.1** | **-0.5** |
| **GERES** | **GERESS Array B** | **59.65** | **28** | P | | **P** | | **18 11 36.7** | **0.0** |
| **GERES** | **GERESS Array B** | **59.65** | **28** | P | | **P** | | **18 11 36.9** | **+0.2** |
| | comp=Z,1.5nm,0.7s,baz=253,slow=10,SNR=9.0 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **59.79** | **28** | P | | **P** | | **18 11 37.1** | **-0.4** |
| **KHC** | **Kasperske Hory** | **59.79** | **28** | P | | **P** | | **18 11 38.6** | **+1.0** |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **LODK** | **Lodwar** | **60.07** | **85** | P | | **P** | | **18 11 41.6** | **+1.4** |
| LODK | | | | IAmb | | IAmb | | 18 11 43.2 | |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **CONA** | **Conrad Observa** | **60.08** | **30** | *i* P | | **P** | | **18 11 40.5** | **+0.8** |
| | comp=Z,3.7nm,1.4s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **60.15** | **31** | *i* P | | **P** | | **18 11 41.0** | **+0.9** |
| | comp=Z,4.6nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **61.07** | **26** | *i* P | | **P** | | **18 11 47.0** | **+0.8** |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| CLL | | | | *i* PcP | | **PcP** | | **18 12 30.6** | **+1.5** |
| CLL | | | | *e*S | | S | | 18 20 15.0 | +11 |
| **JTS** | **Las Juntas de** | **61.10** | **282** | LR | | LR | | 18 37 49.2 | |
| | comp=Z,36nm,20.1s,baz=108,slow=36 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **61.82** | **91** | LR | | LR | | 18 35 48.2 | |
| | comp=Z,333nm,19.2s,baz=271,slow=33 | | | | | | | | |
| **VYHS** | **Vyhne** | **61.97** | **31** | *eP* | | **P** | | **18 11 53.3** | **+1.0** |
| **NIE** | **Niedzica** | **63.30** | **31** | P | | **P** | | **18 12 03.3** | **+2.1** |
| | comp=Z,2.3nm,1.7s | | | | | | | | |
| **VOIR** | | **63.67** | **37** | P | | **P** | | **18 12 05.1** | **+1.2** |
| | comp=Z,7.5nm,1.5s | | | | | | | | |
| **FURI** | **Furi** | **63.78** | **80** | LR | | LR | | 18 36 47.1 | |
| | comp=Z,96nm,20.7s,baz=246,slow=33 | | | | | | | | |
| **BERU** | **Beregovo** | **63.84** | **33** | P | | **P** | | **18 12 05.2** | **+0.4** |
| **HOLU** | **Holmets** | **63.87** | **33** | P | | **P** | | **18 12 06.6** | **+1.7** |
| **MLR** | **Muntele Rosu** | **64.24** | **37** | P | | **P** | | **18 12 08.2** | **+0.6** |
| MLR | | | | IAmb | | IAmb | | 18 12 10.0 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **64.24** | **37** | LR | | LR | | 18 40 34.0 | |
| | comp=Z,158nm,20.8s,baz=249,slow=36 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **64.24** | **37** | P | | **P** | | **18 12 08.0** | **+0.4** |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **SCHQ** | **Schefferville** | **65.55** | **335** | LR | | LR | | 18 37 18.5 | |
| | comp=Z,61nm,19.3s,baz=266,slow=33 | | | | | | | | |
| **BORG** | **Borgarnes** | **65.65** | **2** | LR | | LR | | 18 33 36.8 | |
| | comp=Z,46nm,20.8s,baz=179,slow=29 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **65.75** | **53** | LR | | LR | | 18 42 33.1 | |
| | comp=Z,48nm,20.6s,baz=256,slow=38 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **66.00** | **310** | LR | | LR | | 18 34 36.8 | |
| | comp=Z,118nm,21.6s,baz=116,slow=30 | | | | | | | | |
| **KMPD** | **K-Podol'skiy** | **66.14** | **34** | P | | **pP** | | **18 12 20.0** | **-5.7** |
| KMPD | | | | P | | P | | **18 12 19.4** | **-0.3** |
| **SADO** | **Sadowa** | **66.38** | **321** | LR | | LR | | 18 37 12.3 | |
| | comp=Z,34nm,18.3s,baz=110,slow=32 | | | | | | | | |
| **BR105** | **Keskin Array S** | **66.72** | **46** | P | | **P** | | **18 12 25.0** | **+1.2** |
| | comp=Z,4.0nm,1.1s,comp=Z,39nm | | | | | | | | |
| **BR106** | **Keskin Array S** | **66.73** | **46** | P | | **P** | | **18 12 24.7** | **+0.8** |
| | comp=Z,3.8nm,0.9s | | | | | | | | |
| **BR104** | **Keskin Array S** | **66.73** | **46** | P | | **P** | | **18 12 24.6** | **+0.7** |
| | comp=Z,3.5nm,1.0s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **66.74** | **46** | P | | **P** | | **18 12 23.9** | **-0.1** |
| **BRTR** | **Keskin Array B** | **66.74** | **46** | P | | **P** | | **18 12 24.5** | **+0.5** |
| | comp=Z,3.1nm,1.0s,baz=238,slow=5.1,SNR=12 | | | | | | | | |
| BRTR | | | | LR | | LR | | 18 43 28.5 | |
| | comp=Z,46nm,18.7s,baz=204,slow=38 | | | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | | | |
| **FPAL** | **Fort Paine** | **67.06** | **308** | IAmb | | IAmb | | 18 12 28.5 | |
| | comp=Z

comp=E,9,8nm,0.9s
**VHRN Van Horn 82.27 301** P **P** **18 13 54.7 +0.3**
**KIRV Kirov 82.56 31** LR LR 18 50 45.9
comp=E,50nm,20.6s,baz=257,slow=36
**SDCO Great Sand Dun 83.43 308** IAmb IAmb 18 14 04.9
comp=E,5.6nm,1.1s
**WSAR Wadi Sarin 84.16 67** LR LR 18 52 34.9
comp=E,86nm,18.4s,baz=258,slow=36
**RPN Rapa Nui 84.87 243** LR LR 18 49 23.0
comp=E,40nm,20.2s,baz=306,slow=34
**AKTO Aktyubinsk 86.05 39** LR LR 18 55 38.5
comp=E,21nm,19.1s,baz=260,slow=38
**LPIG La Paz 86.51 294** LR LR 18 52 21.3
comp=E,28nm,18.3s,baz=197,slow=35
**PDAR Pinedale Array 86.99 313** P **P** **18 14 18.6 +0.4**
comp=Z,1.5nm,0.9s,baz=116,slow=3.4,SNR=3.8
PDAR LR LR 18 47 45.2
comp=Z,55nm,21.5s,baz=117,slow=32
comp=Z,1.5nm,0.9s
**ARU Arti 87.03 34** P **P** **18 14 18.7 +1.0**
ARU IAmb IAmb 18 14 20.3
comp=Z,8.2nm,1.2s
**ARU Arti 87.03 34** LR LR 18 53 23.7
comp=Z,51nm,20.3s,baz=262,slow=36
**ABKAR Akbulak array 87.18 41** P **P** **18 14 18.0 -0.6**
**ABKAR Akbulak array 87.18 41** IAmb IAmb 18 14 21.0
comp=Z,5.8nm,1.2s
**QSPA South Pole Qui 89.07 180** P **P** **18 14 28.8 +1.4**
QSPA IAmb IAmb 18 14 29.9
comp=Z,12nm,0.9s
**QSPA South Pole Qui 89.07 180** P **P** **18 14 28.4 +1.0**
comp=Z,9.0nm,0.9s,baz=206,slow=2.1,SNR=30
comp=Z,9.0nm,0.9s
**YKA Yellowknife Ar 90.90 332** P **P** **18 14 35.8 0.0**
**YKA Yellowknife Ar 90.90 332** P **P** **18 14 36.4 +0.6**
comp=Z,2.1nm,0.7s,baz=94,slow=4.9,SNR=12
YKA LR LR 18 50 10.9
comp=Z,86nm,21.3s,baz=43,slow=32
comp=Z,2.1nm,0.7s
**PFO Pinyon Flats O 92.12 303** LR LR 18 49 58.6
comp=Z,31nm,20.1s,baz=127,slow=32
**NEW Newport 92.45 318** LR LR 18 51 03.6
comp=Z,48nm,21.6s,baz=128,slow=32
**NVAR Mina Array Bea 93.55 308** LR LR 18 52 02.6
comp=Z,40nm,21.3s,baz=92,slow=32
**BVAR Borovoye Array 93.80 37** LR LR 18 59 52.3
comp=Z,34nm,18.5s,baz=223,slow=37
**YBH Yreka Blue Hor 96.75 312** LR LR 18 54 31.6
comp=Z,51nm,18.5s,baz=101,slow=33
**INK Inuvik 97.87 339** LR LR 18 57 16.6
comp=Z,28nm,18.3s,baz=324,slow=34
**DLBC Dease Lake 98.92 329** LR LR 18 55 53.0
comp=Z,44nm,19.5s,baz=288,slow=33
**BBB Bella Bella 99.08 323** LR LR 18 59 48.8
comp=Z,32nm,18.7s,baz=102,slow=35
**SONM Songino Array 117.05 35** PKP **PKiKP** **18 20 18.1 +0.4**
comp=Z,0.8nm,0.9s,baz=270,slow=2.5,SNR=4.1
**STKA Stephens Creek 144.76 159** PKP **PKPdf** **18 21 09.8 -0.1**
comp=Z,15nm,0.9s,baz=196,slow=3.1,SNR=17
**ASAR Alice Springs 147.76 141** PKPbc **PKPbc** **18 21 18.4 +0.3**
comp=Z,6.0nm,0.8s,baz=208,slow=2.1,SNR=72
**WRA Warramunga Arr 150.66 136** PKPbc **PKPbc** **18 21 25.3 -0.2**
comp=Z,4.2nm,0.9s,baz=239,slow=2.0,SNR=15

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*MDD **20** 18:13:00.1±0.7,36°.23N×10°.62W,h0km,mb_Lg3.6/22,*
*Error ellipse: s-maj=5.2km s-min=3.9km az=67.0*
*IGIL **20** 18:13:02.1,36°.08N×10°.70W,h26km,ML3.0*
*INMG **20** 18:13:02.3±1.4,36°.08N×10°.72W,h31km±11km,ML3.1,*
*Error ellipse: s-maj=7.0km s-min=3.8km az=76.0*
*CNRM **20** 18:13:03.7,35°.89N×10°.34W,h30km,ML3.6*
**ISC 20 18:12:58.8±1.6,36°.08N±0°.04×10°.74W±0°.07,h35km,n98,**
**σ2ˢ12/160,6C,Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **PFVI** | **Vila Bisbo** | **1.86** | **55⇑** | *iP* | | **Pn** | **18 13 30.6** | **+2.4** | |
| PFVI | | | | *eS* | | **Sn** | **18 13 51.2** | **+0.6** | |
| PFVI | | | | A | | A | 18 13 52.1 | | |
| | 89nm,0.1s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.86** | **55** | P | | **Pn** | **18 13 30.3** | **+2.0** | |
| **PFVI** | **Vila Bisbo** | **1.86** | **55** | S | | **Sn** | **18 13 53.6** | **+3.1** | |
| **MORF** | **Marmelete** | **2.08** | **53⇑** | *eP* | | **Pn** | **18 13 33.6** | **+2.4** | |
| MORF | | | | *eS* | | **Sn** | **18 13 56.6** | **+0.7** | |
| MORF | | | | A | | A | 18 13 57.7 | | |
| | 123nm,0.2s | | | | | | | | |
| **MORF** | **Marmelete** | **2.08** | **53** | *eP* | | **Pn** | **18 13 33.6** | **+2.4** | |
| MORF | | | | *eS* | | **Sn** | **18 13 56.6** | **+0.7** | |
| MORF | | | | IAML | | | 18 13 57.8 | | |
| | comp=E,192nm,0.1s | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.18** | **47⇑** | *eP* | | **Pn** | **18 13 34.9** | **+2.3** | |
| PTEO | | | | *eS* | | **Sn** | **18 13 59.1** | **+0.7** | |
| PTEO | | | | A | | A | 18 14 01.6 | | |
| | comp=E,70nm,0.2s | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.54** | **62⇑** | *iP* | | **Pn** | **18 13 40.1** | **+2.6** | |
| PBDV | | | | *eS* | | **Sn** | **18 14 07.6** | **+0.3** | |
| PBDV | | | | A | | A | 18 14 17.4 | | |
| | comp=E,18nm,0.2s | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.54** | **62** | Pn | | **Pn** | **18 13 40.1** | **+2.6** | |
| PBDV | | | | Sn | | **Sn** | **18 14 06.6** | **-0.7** | |
| **PCVE** | **Castro Verde** | **2.66** | **54** | *eP* | | **Pn** | **18 13 40.9** | **+1.7** | |
| PCVE | | | | *eS* | | **Sn** | **18 14 10.8** | **+0.5** | |
| PCVE | | | | A | | A | 18 14 13.7 | | |
| | comp=E,68nm,0.3s | | | | | | | | |
| **PCVE** | **Castro Verde** | **2.66** | **54** | Pn | | **Pn** | **18 13 41.8** | **+2.6** | |
| PCVE | | | | Sn | | **Sn** | **18 14 10.1** | **-0.2** | |
| **MESJ** | **Messejana** | **2.68** | **48⇑** | *eP* | | **Pn** | **18 13 41.6** | **+2.2** | |
| MESJ | | | | *eS* | | **Sn** | **18 14 10.6** | **0.0** | |
| MESJ | | | | A | | A | 18 14 13.5 | | |
| | comp=E,49nm,0.4s | | | | | | | | |
| **MESJ** | **Messejana** | **2.68** | **48** | *eP* | | **Pn** | **18 13 41.6** | **+2.2** | |
| MESJ | | | | *eS* | | **Sn** | **18 14 10.8** | **+0.2** | |
| MESJ | | | | IAML | | | 18 14 13.1 | | |
| | comp=N,38nm,0.1s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.69** | **40** | *eP* | | **Pn** | **18 13 41.8** | **+2.2** | |
| PNCL | | | | *eS* | | **Sn** | **18 14 11.2** | **+0.2** | |
| PNCL | | | | A | | A | 18 14 13.0 | | |
| | comp=N,76nm,0.2s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.69** | **40** | Pn | | **Pn** | **18 13 41.7** | **+2.2** | |
| PNCL | | | | Sn | | **Sn** | **18 14 11.0** | **+0.1** | |
| **PVAQ** | **Vaqueiros** | **2.77** | **61⇑** | *iP* | | **Pn** | **18 13 43.1** | **+2.5** | |
| PVAQ | | | | *eS* | | **Sn** | **18 14 13.1** | **+0.3** | |
| PVAQ | | | | A | | A | 18 14 13.8 | | |
| | comp=N,43nm,0.1s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.77** | **61** | Pn | | **Pn** | **18 13 43.1** | **+2.5** | |
| PVAQ | | | | Sn | | **Sn** | **18 14 13.0** | **+0.3** | |
| **PVAQ** | **Vaqueiros** | **2.77** | **61** | P | | **Pn** | **18 13 42.8** | **+2.2** | |
| **PVAQ** | **Vaqueiros** | **2.77** | **61** | S | | **Sn** | **18 14 14.9** | **+2.1** | |
| **LIS** | **Lisbon** | **2.92** | **25** | *eS* | | **Sn** | **18 14 17.9** | **+1.2** | |
| LIS | | | | A | | A | 18 14 18.7 | | |
| | comp=N,92nm,0.3s | | | | | | | | |
| **EGRO** | **El Granado** | **2.99** | **60** | Pn | | **Pn** | **18 13 46.0** | **+2.3** | |
| EGRO | | | | Sn | | **Sn** | **18 14 18.2** | **-0.1** | |
| **EGRO** | **El Granado** | **2.99** | **60** | P | | **Pn** | **18 13 46.1** | **+2.3** | |
| EGRO | | | | S | | **Sn** | **18 14 18.3** | **-0.1** | |
| EGRO | | | | *i* Vmb_Lg | | | 18 14 19.8 | | |
| **PBEJ** | **Beja** | **3.01** | **49** | *eP* | | **Pn** | **18 13 46.0** | **+2.0** | |
| PBEJ | | | | *eS* | | **Sn** | **18 14 18.5** | **-0.4** | |
| PBEJ | | | | A | | A | 18 14 22.0 | | |
| | comp=N,25nm,0.1s | | | | | | | | |
| **EVO** | **Evora** | **3.27** | **41** | *eP* | | **Pn** | **18 13 49.6** | **+2.0** | |
| EVO | | | | *eS* | | **Sn** | **18 14 24.7** | **-0.7** | |
| EVO | | | | A | | A | 18 14 29.1 | | |
| | comp=N,59nm,0.1s | | | | | | | | |
| **EVO** | **Evora** | **3.27** | **41** | Pn | | **Pn** | **18 13 49.7** | **+2.0** | |
| EVO | | | | Sn | | **Sn** | **18 14 24.7** | **-0.7** | |
| **PMTG** | **Montargil** | **3.59** | **33** | *eP* | | **Pn** | **18 13 53.7** | **+1.7** | |
| PMTG | | | | *eS* | | **Sn** | **18 14 31.9** | **-1.3** | |
| PMTG | | | | A | | A | 18 14 33.5 | | |
| | comp=N,36nm,0.1s | | | | | | | | |
| **PBAR** | **Barrancos** | **3.62** | **54** | *eP* | | **Pn** | **18 13 54.8** | **+2.4** | |
| PBAR | | | | *eS* | | **Sn** | **18 14 33.5** | **-0.4** | |
| PBAR | | | | A | | A | 18 14 35.5 | | |
| | comp=N,31nm,0.5s | | | | | | | | |
| **PBAR** | **Barrancos** | **3.62** | **54** | Pn | | **Pn** | **18 13 54.6** | **+2.2** | |
| PBAR | | | | Sn | | **Sn** | **18 14 33.1** | **-0.8** | |
| **EMIN** | **Mina Concepcio** | **3.67** | **61** | Pn | | **Pn** | **18 13 55.1** | **+2.0** | |
| EMIN | | | | Sn | | **Sn** | **18 14 34.5** | **-0.6** | |
| **EMIN** | **Mina Concepcio** | **3.67** | **61** | P | | **Pn** | **18 13 55.1** | **+2.0** | |
| EMIN | | | | S | | **Sn** | **18 14 33.9** | **-1.2** | |
| EMIN | | | | *i* Vmb_Lg | | | 18 14 36.5 | | |
| **PESTR** | **Estremoz** | **3.75** | **41** | *eP* | | **Pn** | **18 13 56.4** | **+2.3** | |
| PESTR | | | | *eS* | | **Sn** | **18 14 36.2** | **-0.8** | |
| PESTR | | | | A | | A | 18 14 36.7 | | |
| | comp=N,6.2nm,0.2s | | | | | | | | |
| **PESTR** | **Estremoz** | **3.75** | **41** | Pn | | **Pn** | **18 13 56.5** | **+2.3** | |
| PESTR | | | | Sn | | **Sn** | **18 14 35.9** | **-1.0** | |
| **PESTR** | **Estremoz** | **3.75** | **41** | P | | **Pn** | **18 13 57.5** | **+3.4** | |
| **PSBE** | **So Bento** | **3.76** | **24** | *eP* | | **Pn** | **18 13 56.3** | **+2.0** | |
| PSBE | | | | *eS* | | **Sn** | **18 14 37.0** | **-0.4** | |
| PSBE | | | | A | | A | 18 14 42.8 | | |
| | comp=N,17nm,0.4s | | | | | | | | |
| **RTC** | **Rabat Centre** | **3.81** | **122** | Sn | | **Sn** | **18 14 36.9** | **-1.6** | |
| **AVE** | **Averroes** | **3.90** | **134** | Pn | | **Pn** | **18 13 58.2** | **+1.9** | |
| AVE | | | | Sn | | **Sn** | **18 14 39.5** | **-1.3** | |
| **AVE** | **Averroes** | **3.90** | **134** | P | | **Pn** | **18 13 57.3** | **+1.0** | |
| **AVE** | **Averroes** | **3.90** | **134** | S | | **Sn** | **18 14 38.1** | **-2.7** | |
| **EBAD** | **Badajoz** | **3.99** | **47** | Pn | | **Pn** | **18 13 59.1** | **+1.6** | |
| EBAD | | | | Sn | | **Sn** | **18 14 41.9** | **-1.2** | |
| **EBAD** | **Badajoz** | **3.99** | **47** | P | | **Pn** | **18 13 59.1** | **+1.6** | |
| EBAD | | | | S | | **Sn** | **18 14 42.1** | **-1.0** | |
| EBAD | | | | *i* Vmb_Lg | | | 18 14 44.1 | | |
| **ESPR** | **Espera** | **4.01** | **77** | Pn | | **Pn** | **18 14 00.4** | **+2.6** | |
| ESPR | | | | Sn | | **Sn** | **18 14 42.9** | **-0.7** | |
| **ESPR** | **Espera** | **4.01** | **77** | P | | **Pn** | **18 14 00.2** | **+2.4** | |
| ESPR | | | | S | | **Sn** | **18 14 43.5** | **-0.1** | |
| ESPR | | | | *i* Vmb_Lg | | | 18 14 44.2 | | |
| **PMRV** | **Marv??o** | **4.27** | **37** | *eP* | | **Pn** | **18 14 03.3** | **+2.0** | |
| PMRV | | | | *eS* | | **Sn** | **18 14 48.3** | **-1.6** | |
| PMRV | | | | A | | A | 18 14 51.9 | | |
| | comp=N,23nm,0.3s | | | | | | | | |
| **ZHG** | **ZHG** | **4.28** | **127** | P | | **Pn** | **18 14 02.6** | **+1.2** | |
| **ZHG** | **ZHG** | **4.28** | **127** | S | | **Sn** | **18 14 47.6** | **-2.5** | |
| **EJIF** | **Jimena Fronter** | **4.28** | **83** | P | | **Pn** | **18 14 04.9** | **+3.5** | |
| EJIF | | | | S | | **Sn** | **18 14 50.7** | **+0.6** | |
| **SRHM** | **Skhour des Reh** | **4.30** | **146** | P | | **Pn** | **18 14 03.0** | **+1.2** | |
| **PCAS** | **Casmilo, Conde** | **4.34** | **23** | *eP* | | **Pn** | **18 14 04.1** | **+1.8** | |
| PCAS | | | | *eS* | | **Sn** | **18 14 50.5** | **-1.2** | |
| PCAS | | | | A | | A | 18 14 53.1 | | |
| | comp=N,22nm,0.3s | | | | | | | | |
| **LIJA** | **Lijar** | **4.38** | **78** | Pn | | **Pn** | **18 14 05.8** | **+2.9** | |
| LIJA | | | | Sn | | **Sn** | **18 14 50.4** | **-2.4** | |
| **COI** | **Coimbra** | **4.51** | **23** | *eS* | | **Sn** | **18 14 55.9** | **0.0** | |
| COI | | | | A | | A | 18 14 56.4 | | |
| | comp=N,35nm,0.2s | | | | | | | | |
| **EAH** | **EAH** | **4.52** | **167** | P | | **Pn** | **18 14 06.1** | **+1.3** | |
| **PCBR** | **Castelo Branco** | **4.55** | **33** | *eP* | | **Pn** | **18 14 07.6** | **+2.4** | |
| PCBR | | | | *eS* | | **Sn** | **18 14 55.8** | **-1.1** | |
| PCBR | | | | A | | A | 18 14 58.1 | | |
| | comp=N,9.9nm,0.2s | | | | | | | | |
| **ECAB** | **El Cabril** | **4.70** | **63** | Pn | | **Pn** | **18 14 09.2** | **+2.0** | |
| ECAB | | | | Sn | | **Sn** | **18 14 58.0** | **-2.6** | |
| **ECAB** | **El Cabril** | **4.70** | **63** | P | | **Pn** | **18 14 09.1** | **+1.8** | |
| ECAB | | | | S | | **Sn** | **18 14 57.9** | **-2.6** | |
| ECAB | | | | *i* Vmb_Lg | | | 18 15 02.9 | | |
| **MTE** | **Manteigas** | **4.99** | **29** | *eP* | | **Pn** | **18 14 13.1** | **+1.8** | |
| MTE | | | | *eS* | | **Sn** | **18 15 05.6** | **-2.2** | |
| MTE | | | | A | | A | 18 15 10.0 | | |
| | comp=N,16nm,0.4s | | | | | | | | |
| **PVIS** | **Viseu** | **5.14** | **25** | *eP* | | **Pn** | **18 14 15.0** | **+1.7** | |
| PVIS | | | | *eS* | | **Sn** | **18 15 09.5** | **-1.9** | |
| PVIS | | | | A | | A | 18 15 13.4 | | |
| | comp=N,27nm,0.1s | | | | | | | | |
| **IFR** | **Ifrane** | **5.28** | **117** | Pn | | **Pn** | **18 14 16.1** | **+0.7** | |
| IFR | | | | Sn | | **Sn** | **18 15 10.4** | **-4.6** | |
| **EADA** | **Adamuz** | **5.35** | **65** | Pn | | **Pn** | **18 14 18.0** | **+1.8** | |
| EADA | | | | Sn | | **Sn** | **18 15 14.9** | **-1.6** | |
| **EADA** | **Adamuz** | **5.35** | **65** | P | | **Pn** | **18 14 18.1** | **+1.8** | |
| EADA | | | | S | | **Sn** | **18 15 13.3** | **-3.2** | |
| EADA | | | | *i* Vmb_Lg | | | 18 15 22.1 | | |
| **EPLA** | **Plasencia** | **5.42** | **41** | P | | **Pn** | **18 14 19.2** | **+2.1** | |
| EPLA | | | | S | | **Sn** | **18 15 15.7** | **-2.5** | |
| EPLA | | | | *i* Vmb_Lg | | | 18 15 18.2 | | |
| **OUK** | **Oukaimeden** | **5.42** | **153** | P | | **Pn** | **18 14 19.8** | **+0.4** | |
| **EGOR** | **Sierra Gorda,** | **5.43** | **77** | Pn | | **Pn** | **18 14 20.1** | **+2.6** | |
| EGOR | | | | Sn | | **Sn** | **18 15 18.1** | **-0.7** | |
| **EGOR** | **Sierra Gorda,** | **5.43** | **77** | P | | **Pn** | **18 14 19.8** | **+2.4** | |
| EGOR | | | | S | | **Sn** | **18 15 17.9** | **-1.0** | |
| EGOR | | | | *i* Vmb_Lg | | | 18 15 23.9 | | |
| **PMPST** | **Porto Santo, M** | **5.50** | **239** | *eP* | | **Pn** | **18 14 17.3** | **-0.9** | |
| PMPST | | | | *eS* | | Sn | 18 15 10.0 | -10 | |
| PMPST | | | | A | | A | 18 15 15.2 | | |
| | comp=N,12nm,0.2s | | | | | | | | |
| **PMPS** | **Porto Santo** | **5.51** | **238** | *eS* | | Sn | 18 15 05.1 | -15 | |
| PMPS | | | | A | | A | 18 15 05.5 | | |
| | comp=N,16nm,0.9s | | | | | | | | |
| **CZD** | **Col de Zad** | **5.60** | **121** | P | | **Pn** | **18 14 21.1** | **+1.2** | |
| **PALE** | **Palemas** | **5.61** | **97** | P | | **Pn** | **18 14 20.3** | **+0.6** | |
| **TISM** | **Timmit** | **5.63** | **139** | P | | **Pn** | **18 14 18.8** | **-1.1** | |
| **PVRL** | **Vila Real** | **5.70** | **24** | *eS* | | **Sn** | **18 15 21.8** | **-3.5** | |
| PVRL | | | | A | | A | 18 15 26.0 | | |
| | comp=N,21nm,0.2s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **5.77** | **23** | *eP* | | **Pn** | **18 14 23.9** | **+1.9** | |
| POLO | | | | *eS* | | **Sn** | **18 15 23.4** | **-3.5** | |
| POLO | | | | A | | A | 18 15 27.7 | | |
| | comp=N,5.6nm,0.4s | | | | | | | | |
| **ELGU** | **Los Guajares,** | **5.79** | **80** | P | | **Pn** | **18 14 25.7** | **+3.5** | |
| ELGU | | | | S | | **Sn** | **18 15 25.2** | **-2.2** | |
| ELGU | | | | *i* Vmb_Lg | | | 18 15 25.9 | | |
| **AKLM** | **AKL** | **5.84** | **104** | P | | **Pn** | **18 14 23.7** | **+0.8** | |
| **MVO** | **Moncorvo** | **5.85** | **29** | *eP* | | **Pn** | **18 14 24.9** | **+1.8** | |
| MVO | | | | *eS* | | **Sn** | **18 15 26.1** | **-2.8** | |
| MVO | | | | A | | A | 18 15 30.1 | | |
| | comp=N,14nm,0.3s | | | | | | | | |
| **MD31** | **MD31** | **5.89** | **121** | P | | **Pn** | **18 14 24.5** | **+0.9** | |
| **TIO** | **Tiouine** | **5.90** | **150** | Pn | | **Pn** | **18 14 24.8** | **+0.9** | |
| TIO | | | | Sn | | **Sn** | **18 15 25.5** | **-4.9** | |
| **TIO** | **Tiouine** | **5.90** | **150** | P | | **Pn** | **18 14 25.1** | **+1.2** | |
| **PCAB** | **Cabril** | **6.01** | **20** | *eP* | | **Pn** | **18 14 26.8** | **+1.6** | |
| PCAB | | | | *eS* | | **Sn** | **18 15 29.9** | **-2.9** | |
| PCAB | | | | A | | A | 18 15 44.9 | | |
| | comp=N,9.3nm,0.4s | | | | | | | | |
| **MDT** | **Midelt** | **6.02** | **121** | P | | **Pn** | **18 14 26.7** | **+1.2** | |
| **PMAR** | **Madeira** | **6.10** | **239** | P | | Pn | 18 14 36.1 | +9.4 | |
| **PAB** | **San Pablo** | **6.13** | **54** | P | | **Pn** | **18 14 28.3** | **+1.3** | |
| PAB | | | | S | | **Sn** | **18 15 31.3** | **-4.6** | |
| PAB | | | | *i* Vmb_Lg | | | 18 15 35.4 | | |
| **OUZM** | **OUZ** | **6.13** | **146** | P | | **Pn** | **18 14 28.1** | **+1.0** | |
| OUZM | | | | P | | | 18 14 28.3 | | |
| **ELOB** | **Lobios** | **6.14** | **19** | P | | **Pn** | **18 14 28.1** | **+1.0** | |
| ELOB | | | | S | | **Sn** | **18 15 32.1** | **-4.1** | |
| ELOB | | | | *i* Vmb_Lg | | | 18 15 36.9 | | |
| **PGAV** | **Gavieira, Arco** | **6.18** | **17** | *eP* | | **Pn** | **18 14 29.2** | **+1.5** | |
| PGAV | | | | *eS* | | **Sn** | **18 15 33.9** | **-3.3** | |
| PGAV | | | | A | | A | 18 15 38.3 | | |
| | comp=N,8.4nm,0.2s | | | | | | | | |
| **EZAM** | **Zamans** | **6.27** | **14** | P | | **Pn** | **18 14 29.7** | **+1.0** | |
| EZAM | | | | S | | **Sn** | **18 15 35.4** | **-3.7** | |
| EZAM | | | | *i* Vmb_Lg | | | 18 15 39.9 | | |
| **ESDC** | **Sonseca Array** | **6.45** | **54** | S | | **Sn** | **18 15 40.0** | **-3.8** | |
| ESDC | | | | *i* Vmb_Lg | | | 18 15 44.5 | | |
| **PBRG** | **Braganca** | **6.51** | **27** | *eP* | | **Pn** | **18 14 33.6** | **+1.5** | |
| PBRG | | | | *eS* | | **Sn** | **18 15 41.5** | **-3.7** | |
| PBRG | | | | A | | A | 18 15 46.2 | | |
| | comp=N,7.8nm,0.2s | | | | | | | | |
| **ECAL** | **Calabor** | **6.63** | **27** | Pn | | **Pn** | **18 14 34.6** | **+0.9** | |
| ECAL | | | | Sn | | **Sn** | **18 15 43.9** | **-4.3** | |
| **ECAL** | **Calabor** | **6.63** | **27** | P | | **Pn** | **18 14 34.7** | **+0.9** | |
| ECAL | | | | S | | **Sn** | **18 15 44.8** | **-3.4** | |
| ECAL | | | | *i* Vmb_Lg | | | 18 15 49.9 | | |
| **GUD** | **Guadarrama** | **6.89** | **47** | P | | **Pn** | **18 14 39.4** | **+1.9** | |
| GUD | | | | S | | **Sn** | **18 15 51.4** | **-3.3** | |
| GUD | | | | *i* Vmb_Lg | | | 18 15 53.9 | | |
| **TAF** | **Taforalt** | **6.91** | **98** | P | | **Pn** | **18 14 37.9** | **+0.2** | |
| **EMAZ** | **Mazaricos** | **7.00** | **11** | P | | **Pn** | **18 14 39.4** | **+0.6** | |
| EMAZ | | | | S | | Sn | 18 15 50.4 | -6.6 | |
| EMAZ | | | | *i* Vmb_Lg | | | 18 15 54.7 | | |
| **EAGO** | **Agolada(Pontev** | **7.02** | **16** | P | | **Pn** | **18 14 40.1** | **+1.0** | |
| EAGO | | | | S | | **Sn** | **18 15 52.9** | **-4.8** | |
| EAGO | | | | *i* Vmb_Lg | | | 18 15 57.5 | | |
| **UCM** | **Universidad Co** | **7.26** | **52** | Pn | | **Pn** | **18 14 44.7** | **+2.3** | |
| UCM | | | | Sn | | **Sn** | **18 16 00.6** | **-2.9** | |
| **ZGR** | **Zagora** | **7.33** | **143** | P | | **Pn** | **18 14 44.9** | **+1.4** | |
| **EZAR** | **Zarzadilla de** | **7.46** | **73** | P | | **Pn** | **18 14 47.0** | **+1.8** | |
| EZAR | | | | S | | **Sn** | **18 16 06.9** | **-1.7** | |
| **EPON** | **Pontenova** | **7.75** | **20** | P | | **Pn** | **18 14 50.0** | **+0.9** | |
| EPON | | | | S | | Sn | 18 16 09.9 | -5.7 | |
| EPON | | | | *i* Vmb_Lg | | | 18 16 10.5 | | |
| **ETOB** | **Tobarra** | **7.75** | **68** | Pn | | **Pn** | **18 14 50.5** | **+1.3** | |
| **ETOB** | **Tobarra** | **7.75** | **68** | P | | **Pn** | **18 14 50.3** | **+1.0** | |
| ETOB | | | | S | | **Sn** | **18 16 11.2** | **-4.6** | |
| **EARI** | **Arriondas** | **8.38** | **29** | S | | **Sn** | **18 16 27.3** | **-3.7** | |

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*NEIC **20** 18:14:28.3±1.9,69°.51N±0°.02×144°.22W±0°.09,h8km±5km,*
*Error ellipse: s-maj=5.3km s-min=2.5km az=121.0*
**AEIC 20 18:14:27.5±1.3,69°.47N±0°.03×144°.12W±0°.05,h3km±5km,**
**ML2.9,ML2.6/28(NEIC),Error ellipse: s-maj=4.2km**
**s-min=2.4km az=178.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **C27K** | **Jago River** | **0.21** | **43** | | | Pg | 18 14 31.3 | | -0.3 |
| **C26K** | **Camden Bay** | **0.53** | **329** | | | Pg | 18 14 37.9 | | +0.3 |
| C26K | | | | | | Sg | 18 14 43.6 | | -0.8 |
| **D25K** | **Kavik River** | **0.81** | **260** | | | Pg | 18 14 42.5 | | -0.5 |
| **D25K** | **Kavik River** | **0.81** | **260** | | | Sg | 18 14 53.4 | | -0.2 |
| **D25K** | **Kavik River** | **0.81** | **260** | IAML | | | 18 14 58.4 | | |
| | comp=N,18nm,0.4s | | | | | | | | |
| D25K | | | | IAML | | | 18 15 00.5 | | |
| | comp=E,10nm,0.5s | | | | | | | | |
| **D27M** | **Malcolm River** | **1.14** | **100** | | | Pg | 18 14 49.4 | | 0.0 |
| **D27M** | **Malcolm River** | **1.14** | **100** | IAML | | | 18 15 11.1 | | |
| | comp=N,19nm,0.2s | | | | | | | | |
| **E27K** | **Coleen River** | **1.58** | **143** | | | Pg | 18 14 57.7 | | -0.1 |
| E27K | | | | IAML | | | 18 15 41.4 | | |
| | comp=E,42nm,0.7s | | | | | | | | |
| E27K | | | | IAML | | | 18 15 42.1 | | |
| | comp=N,57nm,1.0s | | | | | | | | |
| **E27K** | **Coleen River** | **1.58** | **143** | | | Sg | 18 15 19.1 | | +0.7 |
| **C24K** | **Franklin Bluff** | **1.62** | **281** | | | Pn | 18 14 56.7 | | -0.2 |
| C24K | | | | IAML | | | 18 15 56.9 | | |
| | comp=N,49nm,0.7s | | | | | | | | |
| C24K | | | | IAML | | | 18 15 57.5 | | |
| | comp=E,78nm,0.5s | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.79** | **180** | | | Pb | 18 15 01.2 | | +0.4 |
| F26K | | | | IAML | | | 18 15 45.0 | | |
| | comp=N,63nm,1.0s | | | | | | | | |
| F26K | | | | IAML | | | 18 15 49.8 | | |
| | comp=E,33nm,0.4s | | | | | | | | |
| **E28M** | **Babbage River** | **1.87** | **116** | | | Pb | 18 15 02.2 | | 0.0 |
| E28M | | | | IAML | | | 18 16 09.7 | | |
| | comp=E,40nm,0.9s | | | | | | | | |
| E28M | | | | IAML | | | 18 16 10.6 | | |
| | comp=N,37nm,1.1s | | | | | | | | |
| **D28M** | **Stokes Point** | **1.91** | **92** | | | Pb | 18 15 03.2 | | +0.3 |
| **D28M** | **Stokes Point** | **1.91** | **92** | IAML | | | 18 15 47.8 | | |
| | comp=E,62nm,0.6s | | | | | | | | |
| D28M | | | | IAML | | | 18 16 12.1 | | |
| | comp=N,54nm,0.9s | | | | | | | | |
| **F25K** | **Christian Rive** | **1.97** | **197** | | | Pb | 18 15 04.4 | | +0.4 |
| F25K | | | | | | Sb | 18 15 29.6 | | +0.8 |
| **F25K** | **Christian Rive** | **1.97** | **197** | IAML | | | 18 16 16.5 | | |
| | comp=N,89nm,0.4s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.06** | **185** | Pg | | Pb | 18 15 05.3 | | -0.2 |
| **E24K** | **Your Creek** | **2.12** | **231** | Pg | | Pb | 18 15 06.4 | | -0.1 |
| **D23K** | **Nanushuk River** | **2.40** | **261** | Pn | | Pn | 18 15 07.6 | | 0.0 |
| **F24K** | **Squaw Lake** | **2.40** | **217** | Pn | | Pn | 18 15 07.7 | | 0.0 |
| F24K | | | | IAML | | | 18 16 33.2 | | |
| | comp=E,68nm,0.7s | | | | | | | | |
| F24K | | | | IAML | | | 18 16 34.4 | | |
| | comp=N,77nm,0.9s | | | | | | | | |
| **H29M** | **Whitestone** | **3.93** | **144** | Pn | | Pn | 18 15 28.0 | | -0.5 |

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*NEIC **20** 18:15:08.6±2.8,69°.57N±0°.06×144°.35W±0°.10,h10km±2km,*
*Error ellipse: s-maj=9.4km s-min=5.6km az=2.0*
**AEIC 20 18:15:07.5±1.8,69°.51N±0°.06×144°.36W±0°.07,h3km±5km,**
**ML3.1,ML3.2/100(NEIC),Error ellipse: s-maj=8.3km**
**s-min=3.8km az=182.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **C26K** | **Camden Bay** | **0.45** | **335** | | | Pg | 18 15 16.4 | | +0.3 |
| C26K | | | | | | Sg | 18 15 21.1 | | -0.9 |
| **C26K** | **Camden Bay** | **0.45** | **335** | IAML | | | 18 15 24.6 | | |
| | comp=N,960nm,0.4s | | | | | | | | |
| C26K | | | | IAML | | | 18 15 31.9 | | |
| | comp=E,1μm,0.8s | | | | | | | | |
| **D25K** | **Kavik River** | **0.74** | **256** | | | Sg | 18 15 31.6 | | +0.5 |
| **D27M** | **Malcolm River** | **1.23** | **101** | Pg | | Pg | 18 15 30.3 | | -0.7 |
| **D27M** | **Malcolm River** | **1.23** | **101** | | | Sn | 18 15 50.2 | | +1.4 |
| **D27M** | **Malcolm River** | **1.23** | **101** | IAML | | | 18 15 52.7 | | |
| | comp=N,421nm,0.6s | | | | | | | | |
| D27M | | | | IAML | | | 18 15 54.9 | | |
| | comp=E,358nm,0.7s | | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.54** | **280** | Pn | | Pb | 18 15 36.2 | | -0.3 |
| C24K | | | | IAML | | | 18 16 01.6 | | |
| | comp=E,334nm,0.9s | | | | | | | | |
| **D24K** | **Happy Valley** | **1.62** | **259** | Pn | | Pn | 18 15 37.5 | | +0.5 |
| **E27K** | **Coleen River** | **1.67** | **142** | Pn | | Pn | 18 15 37.8 | | +0.3 |
| **E27K** | **Coleen River** | **1.67** | **142** | | | Sg | 18 15 41.8 | | +0.9 |
| **E27K** | **Coleen River** | **1.67** | **142** | IAML | | | 18 16 04.5 | | |
| | comp=N,141nm,1.1s | | | | | | | | |
| E27K | | | | IAML | | | 18 16 05.0 | | |
| | comp=E,167nm,0.6s | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.83** | **177** | Pn | | Pn | 18 15 39.8 | | 0.0 |
| **F26K** | **Sheenjek River** | **1.83** | **177** | | | Sg | 18 16 05.8 | | -0.2 |
| **F26K** | **Sheenjek River** | **1.83** | **177** | IAML | | | 18 16 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PRP** | **Porcupine Dome** | **4.04 187** | | Pn | 18 16 12.9 | +2.7 |
| PRP | | | IAML | | 18 17 04.0 | |
| | comp=E,26nm,0.7s | | | | | |
| PRP | | | IAML | | 18 17 04.2 | |
| | comp=N,32nm,0.6s | | | | | |
| **I27K** | **Kandik River** | **4.06 164** | | Pn | 18 16 12.7 | +2.2 |
| **F21K** | **Alatna River** | **4.08 240** | | Pn | 18 16 12.9 | +2.1 |
| F21K | | | IAML | | 18 17 22.5 | |
| | comp=N,33nm,0.7s | | | | | |
| F21K | | | IAML | | 18 17 27.6 | |
| | comp=E,36nm,0.9s | | | | | |
| **H23K** | **Yukon River** | **4.20 211** | | Pn | 18 16 14.9 | +2.6 |
| H23K | | | IAML | | 18 17 30.2 | |
| | comp=E,27nm,1.0s | | | | | |
| H23K | | | IAML | | 18 17 32.8 | |
| | comp=N,35nm,1.0s | | | | | |
| **I26K** | **Coal Creek Min** | **4.25 173** | | Pn | 18 16 16.0 | +3.0 |
| I26K | | | IAML | | 18 17 30.6 | |
| | comp=N,33nm,1.0s | | | | | |
| I26K | | | IAML | | 18 17 33.4 | |
| | comp=E,34nm,0.9s | | | | | |
| **EPYK** | **Eagle Plains** | **4.27 134** | | Pn | 18 16 14.9 | +1.6 |
| **I28M** | **Miner Creek** | **4.42 155** | | Pn | 18 16 18.8 | +3.3 |
| I28M | | | IAML | | 18 17 40.1 | |
| | comp=E,19nm,1.2s | | | | | |
| **D20K** | **Etivluk River** | **4.46 265** | | Pn | 18 16 17.8 | +1.9 |
| **B20K** | **Meade River** | **4.47 282** | Pn | Pn | 18 16 17.2 | +1.1 |
| **H22K** | **Ishtalitna Cre** | **4.51 220** | | Pn | 18 16 17.9 | +1.3 |
| **G31M** | **Satah River** | **4.57 120** | | Pn | 18 16 19.1 | +1.8 |
| G31M | | | IAML | | 18 17 40.5 | |
| | comp=E,21nm,1.1s | | | | | |
| G31M | | | IAML | | 18 17 48.9 | |
| | comp=N,18nm,1.1s | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.77 148** | | Pn | 18 16 21.7 | +1.5 |
| I29M | | | IAML | | 18 17 37.4 | |
| | comp=N,18nm,0.4s | | | | | |
| I29M | | | IAML | | 18 17 42.6 | |
| | comp=E,17nm,0.6s | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79 206** | | Pn | 18 16 22.4 | +2.0 |
| I23K | | | IAML | | 18 17 46.0 | |
| | comp=E,24nm,1.1s | | | | | |
| I23K | | | IAML | | 18 17 47.1 | |
| | comp=N,24nm,1.1s | | | | | |
| **MDM** | **Murphy Dome** | **4.81 200** | | Pn | 18 16 23.3 | +2.5 |
| MDM | | | IAML | | 18 17 46.6 | |
| | comp=N,17nm,1.0s | | | | | |
| MDM | | | IAML | | 18 17 49.1 | |
| | comp=E,14nm,0.9s | | | | | |
| **IL03** | **Eielson Array** | **4.86 193** | Pn | Pn | 18 16 24.0 | +2.7 |
| **IL31** | | **4.86 193** | | Pn | 18 16 25.2 | +3.8 |
| **ILAR** | **Eielson Array** | **4.86 193** | Pn | Pn | 18 16 23.6 | +2.2 |
| **EGAK** | **Eagle** | **4.92 164** | | Pn | 18 16 23.4 | +1.3 |
| EGAK | | | IAML | | 18 17 50.6 | |
| | comp=E,14nm,0.7s | | | | | |
| EGAK | | | IAML | | 18 18 02.0 | |
| | comp=E,19nm,0.5s | | | | | |
| **J25K** | **Salcha River,** | **4.94 185** | | Pn | 18 16 25.1 | +2.6 |
| J25K | | | IAML | | 18 17 50.7 | |
| | comp=E,13nm,1.1s | | | | | |
| **IMAR** | **Indian Mountai** | **5.03 230** | Pn | Pn | 18 16 25.1 | +1.4 |
| **H21K** | **Melozitna Rive** | **5.04 224** | Pn | Pn | 18 16 25.9 | +2.0 |
| H21K | | | IAML | | 18 17 55.3 | |
| | comp=E,17nm,1.0s | | | | | |
| H21K | | | IAML | | 18 18 00.4 | |
| | comp=N,13nm,1.1s | | | | | |
| **J26L** | **Joseph Creek** | **5.04 176** | | Pn | 18 16 26.1 | +2.1 |
| **CCB** | **Clear Creek Bu** | **5.07 197** | Pn | Pn | 18 16 26.6 | +2.4 |
| **MLY** | **Manley** | **5.13 212** | Pn | Pn | 18 16 27.0 | +1.8 |
| **E19K** | **Redstone River** | **5.17 253** | Pn | Pn | 18 16 27.1 | +1.6 |
| E19K | | | IAML | | 18 18 06.3 | |
| | comp=E,19nm,0.8s | | | | | |
| **HDA** | **Harding Lake** | **5.22 192** | | Pn | 18 16 28.8 | +2.4 |
| HDA | | | IAML | | 18 18 06.9 | |
| | comp=N,13nm,0.8s | | | | | |
| **WRH** | **Wood River Hil** | **5.27 198** | IAML | | 18 18 04.2 | |
| | comp=E,11nm,0.9s | | | | | |
| **I30M** | **Mount Dempster** | **5.29 141** | IAML | | 18 17 32.1 | |
| | comp=N,11nm,0.5s | | | | | |
| I30M | | | IAML | | 18 17 32.3 | |
| | comp=E,15nm,0.4s | | | | | |
| **C19K** | **Lookout Ridge** | **5.42 273** | Pn | Pn | 18 16 29.2 | +0.2 |
| **SCRK** | **Sand Creek** | **5.56 178** | | Pn | 18 16 34.2 | +3.1 |
| **K27K** | **Chicken** | **5.58 170** | Pn | Pn | 18 16 34.5 | +3.2 |
| **DAWY** | **Dawson** | **5.81 158** | | Pn | 18 16 36.0 | +1.5 |
| **J30M** | **Hart River** | **5.86 144** | Pn | Pn | 18 16 36.9 | +1.6 |
| **G19K** | **Purcell Mounta** | **5.88 241** | | Pn | 18 16 36.4 | +1.0 |
| **DOT** | **Dot Lake** | **5.89 179** | | Pn | 18 16 38.5 | +2.9 |
| **H19K** | **Roundabout Mou** | **6.12 235** | Pn | Pn | 18 16 40.6 | +2.1 |
| **E18K** | **Tukpahlearik C** | **6.33 258** | | Pn | 18 16 42.8 | +1.3 |
| **G18K** | **Tagagawik** | **6.53 243** | | Pn | 18 16 45.5 | +1.2 |
| **DHY** | **Denali Highway** | **6.58 192** | | Pn | 18 16 49.3 | +4.2 |
| **PAX** | **Paxson** | **6.58 184** | Pn | Pn | 18 16 47.7 | +2.5 |
| **J20K** | **Nowinta River** | **6.59 220** | Pn | Pn | 18 16 47.3 | +2.1 |
| **A36M** | **Sachs Harbour** | **6.77 60** | Pn | Pn | 18 16 46.3 | -1.3 |
| **H18K** | **Honhosa River** | **6.95 238** | Pn | Pn | 18 16 51.5 | +1.5 |
| **C36M** | **Paulatuk** | **7.14 82** | Pn | Pn | 18 16 51.6 | -0.9 |
| **H17K** | **Granite Mounta** | **7.57 240** | Pn | Pn | 18 17 00.3 | +1.8 |
| **C16K** | **Lisburne Hills** | **7.66 271** | Pn | Pn | 18 17 00.7 | +0.9 |
| **J17K** | **VABM Dome** | **8.48 231** | Pn | Pn | 18 17 12.6 | +1.5 |

**IDC 20 18:16:03.4±46.0, 16°30S×171°00W, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=905.7km s-min=184.7km az=80.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **45.61** | **241** | P | P | 18 24 26.2 | +0.5 |
| | 1.6nm,0.6s,baz=79,slow=10,SNR=4.7 1.6nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.89** | **257** | P | P | 18 25 13.6 | -0.6 |
| | 0.3nm,0.3s,baz=97,slow=7.0,SNR=16 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **52.04** | **253** | P | P | 18 25 15.2 | -0.1 |
| | 4.2nm,0.6s,baz=90,slow=8.2,SNR=79 4.2nm,0.6s | | | | | | |

*IDC **20** 18:28:51.0±6.7, 37°15N×56°79E, h0km, mb3.3/3, mbtmp3.6/5, ML3.5/2, MS2.6/1, Error ellipse: s-maj=115.1km s-min=20.1km az=8.0*
*TEH **20** 18:28:50.3, 37°20N×56°99E, h7km±153km, ML3.6*
**ISC 20 18:28:52.0±0.7, 37°24N±0°05×56°95E±0°03, h10km, n37, σ2s03/37, 3D, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRVT** | **Maraveh tapeh** | **0.81** | **302** | Pg | **Pn** | **18 29 08.1** | **-1.5** |
| **SBZV** | **Sabzevar** | **1.00** | **148** | Pg | **Pb** | **18 29 09.4** | **-2.2** |
| **IMND** | **Minoodasht** | **1.23** | **271** | Pg | **Pg** | **18 29 15.5** | **-0.3** |
| **IEMG** | **Emamgholi** | **1.37** | **82** | Pg | **Pg** | **18 29 17.1** | **-1.1** |
| **IAKL** | **Akhelmad** | **1.58** | **113** | Pg | **Pg** | **18 29 20.1** | **-2.3** |
| **IMOG** | **Moghan** | **2.23** | **120** | Pn | **Pb** | **18 29 30.5** | **-2.0** |
| **TAPT** | **Tabas- Tapeh t** | **2.36** | **176** | Pn | **Pb** | **18 29 31.9** | **-2.8** |
| **TBHD** | **Torbat heydari** | **2.59** | **134** | Pn | **Pb** | **18 29 35.5** | **-3.2** |
| **IGLO** | **Ghaloghah** | **2.61** | **255** | Pn | **Pb** | **18 29 35.6** | **-3.4** |
| **IMYA** | **Miami** | **2.68** | **109** | Pn | **Pb** | **18 29 36.6** | **-3.6** |
| **TBJM** | **Torbat-e-JAM** | **3.36** | **125** | Pn | Pb | 18 29 46.0 | -5.8 |
| **IPRN** | **Peran** | **3.84** | **256** | Pn | **Pn** | **18 29 52.9** | **+1.7** |
| **AFRZ** | **Afriz** | **4.16** | **156** | Pn | **Pn** | **18 29 57.1** | **+1.4** |
| **TPRV** | **Parvadeh(Tabas** | **4.21** | **183** | Pn | **Pn** | **18 29 57.6** | **+1.3** |
| **SHRT** | **Shahrakht** | **4.50** | **142** | Pn | **Pn** | **18 30 01.3** | **+0.9** |
| **ITEG** | **Tejag** | **4.58** | **161** | Pn | **Pn** | **18 30 02.5** | **+1.0** |
| **IVRN** | **Varamin** | **4.79** | **244** | Pn | **Pn** | **18 30 06.2** | **+1.9** |
| **ISFB** | **Sefidab** | **4.79** | **234** | Pn | **Pn** | **18 30 05.4** | **+1.1** |
| **ANAR** | **Anarak** | **4.83** | **214** | Pn | **Pn** | **18 30 05.7** | **+0.9** |
| **IKOO** | **Kooshah** | **5.09** | **160** | Pn | **Pn** | **18 30 09.3** | **+0.7** |
| **KRSH** | **Karshahi** | **5.10** | **232** | Pn | **Pn** | **18 30 10.1** | **+1.3** |
| **IGZV** | **Ghazvin** | **5.47** | **263** | Pn | **Pn** | **18 30 15.6** | **+1.8** |
| **QAMS** | **Qamsar** | **5.72** | **234** | Pn | **Pn** | **18 30 19.0** | **+1.7** |
| **IRAM** | **Ramesheh** | **6.60** | **216** | Pn | **Pn** | **18 30 31.5** | **+2.1** |
| **ZNGN** | **Zangian** | **7.17** | **226** | Pn | **Pn** | **18 30 37.7** | **+0.5** |
| **ISRB** | **Sarab** | **7.40** | **277** | Pn | **Pn** | **18 30 41.9** | **+1.6** |
| **IHRS** | **Heris** | **7.92** | **281** | Pn | **Pn** | **18 30 49.1** | **+1.6** |
| **IMRD** | **Marand** | **9.01** | **283** | Pn | **Pn** | **18 31 03.5** | **+1.2** |
| **ISHB** | **Shabestar** | **9.04** | **280** | Pn | **Pn** | **18 31 04.6** | **+1.8** |
| **KK31** | **Karatay Array** | **11.90** | **56** | P | **Pn** | **18 31 43.2** | **+1.4** |
| | 0.6nm,0.5s,baz=271,slow=7.0,SNR=9.0 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **18 33 57.4** | **+2.7** |
| | 1.1nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **12.21** | **9** | ⇓P | **Pn** | **18 31 46.8** | **+1.0** |
| | 0.2nm,0.5s,baz=193,slow=13,SNR=7.9 | | | | | | |
| AB31 | | | | ⇓S | **Sn** | **18 33 59.7** | **-2.2** |
| | 1.7nm,0.8s,baz=194,slow=24,SNR=2.6 | | | | | | |
| **KBZ** | **Khabaz** | **12.50** | **306** | Pn | **Pn** | **18 31 50.7** | **+0.8** |
| | 0.6nm,0.3s,baz=162,slow=7.1,SNR=6.0 | | | | | | |
| KBZ | | | | Sn | **Sn** | **18 34 05.1** | **-4.1** |
| | 0.1nm,0.3s,baz=46,slow=16,SNR=1.6 1.6nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **14.49** | **63** | LR | LR | 18 38 55.4 | |
| | comp=Z,26nm,21.3s,baz=278,slow=41 | | | | | | |
| **BVAR** | **Borovoye Array** | **18.36** | **26** | P | **P** | **18 33 09.4** | **+2.8** |
| | 0.1nm,0.3s,baz=211,slow=10,SNR=15 1.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.41** | **42** | P | Pn | 18 33 31.6 | +0.4 |
| | 0.2nm,0.3s,baz=242,slow=11,SNR=2.0 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **21.03** | **55** | P | **P** | **18 33 37.6** | **+1.7** |
| | 1.5nm,0.7s,baz=247,slow=9.4,SNR=12 1.5nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.43** | **40** | P | **P** | **18 34 20.6** | **+0.9** |
| | 0.5nm,0.4s,baz=251,slow=9.0,SNR=1.8 0.5nm,0.4s | | | | | | |

*IDC **20** 18:34:51.4±8.5, 17°95S×178°04W, h461km±91km, mb3.5/6, mbtmp4.3/6, Error ellipse: s-maj=45.1km s-min=23.7km az=43.0*
*NEIC **20** 18:34:58.6±1.4, 18°05S±0°3×178°10W±0°05, h554km±16km, mb4.4/20, Error ellipse: s-maj=48.1km s-min=5.4km az=184.0*
**ISC 20 18:34:58.5±0.8, 18°1S±0°2×178°2W±0°1, h550km, n31, σ0s81/31, mb4.3/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.63** | **275** | | **P** | **18 36 17.7** | **-0.1** |
| **NIUE** | **Niue** | **7.86** | **98** | P | **P** | **18 36 54.3** | **-0.6** |
| **URZ** | **Urewera** | **20.50** | **191** | P | **P** | **18 38 57.8** | **-1.1** |
| | 4.4nm,0.3s,baz=351,slow=2.4,SNR=7.3 4.4nm,0.3s | | | | | | |
| **EIDS** | **Eidsvold** | **29.43** | **250** | P | **P** | **18 40 17.7** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 18 40 39.6 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **30.05** | **240** | P | **P** | **18 40 24.3** | **+0.7** |
| **CTA** | **Charters Tower** | **33.66** | **261** | P | **P** | **18 40 54.0** | **-0.2** |
| CTAO | | | | IAmb | IAmb | 18 40 54.5 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **33.78** | **233** | P | **P** | **18 40 55.5** | **+0.3** |
| **TOO** | **Toolangi** | **37.24** | **231** | P | **P** | **18 41 24.6** | **+0.8** |
| **COEN** | **Coen** | **37.35** | **271** | P | **P** | **18 41 25.6** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.75** | **241** | P | **P** | **18 41 35.4** | **-0.7** |
| **STKA** | **Stephens Creek** | **38.75** | **241** | P | **P** | **18 41 36.9** | **+0.8** |
| | comp=Z,3.5nm,0.5s,baz=100,slow=6.1,SNR=11 comp=Z,3.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.53** | **241** | P | **P** | **18 42 14.2** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 18 42 43.6 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **18 42 23.1** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 18 43 05.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **18 42 22.9** | **-1.2** |
| WB2 | | | | IAmb | IAmb | 18 42 39.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | P | **P** | **18 42 23.0** | **-1.3** |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | P | **P** | **18 42 23.8** | **-0.5** |
| | comp=Z,1.2nm,0.3s,baz=98,slow=6.8,SNR=72 comp=Z,1.2nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **44.97** | **254** | P | **P** | **18 42 25.1** | **-0.2** |
| **ASAR** | **Alice Springs** | **44.97** | **254** | P | **P** | **18 42 25.2** | **-0.1** |
| | comp=Z,15nm,0.6s,baz=89,slow=8.2,SNR=242 comp=Z,15nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.04** | **269** | P | **P** | **18 42 55.0** | **-1.0** |
| MTN | | | | IAmb | IAmb | 18 43 34.1 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **50.15** | **245** | P | **P** | **18 43 03.5** | **-0.3** |
| FORT | | | | IAmb | IAmb | 18 43 05.5 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **KNRA** | **Kununurra** | **50.71** | **264** | P | **P** | **18 43 06.9** | **-1.3** |
| KNRA | | | | IAmb | IAmb | 18 43 27.0 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.24** | **261** | P | **P** | **18 43 26.8** | **+0.5** |
| **SOEI** | **Soe** | **56.31** | **270** | P | **P** | **18 43 49.0** | **+0.9** |
| SOEI | | | | IAmb | IAmb | 18 43 50.2 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **58.26** | **256** | P | **P** | **18 44 00.6** | **-0.5** |
| **MORW** | **Morawa** | **60.63** | **246** | P | **P** | **18 44 16.8** | **0.0** |
| MORW | | | | IAmb | IAmb | 18 44 44.4 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.95** | **180** | P | **P** | **18 45 27.9** | **+1.5** |
| **QSPA** | **South Pole Qui** | **71.95** | **180** | P | **P** | **18 45 27.9** | **+1.5** |
| | comp=Z,0.8nm,0.7s,baz=1.5,slow=0.5,SNR=6.0 comp=Z,0.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.02** | **13** | P | **P** | **18 46 41.0** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=226,slow=5.5,SNR=5.7 comp=Z,0.3nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.09** | **315** | PKPbc | **PKPab** | **18 53 35.5** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=102,slow=2.1,SNR=4.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.86** | **345** | PKPbc | **PKiKP** | **18 53 42.9** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=0.0,slow=2.9,SNR=2.7 | | | | | | |

**NNC 20 18:46:59.0±7.2, 34°48N×68°89E, h0km, mb3.7, mpv3.4, 3C-2D, Error ellipse: s-maj=75.8km s-min=56.4km az=116.0, Southeaster Afghanistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **8.70** | **8** | ⇑P | Pn | 18 49 07.5 | +1.4 |
| | 0.4nm,0.2s,baz=195,slow=14 | | | | | | |
| KK31 | | | | ⇓S | Sn | 18 50 47.4 | +2.5 |
| | 1.2nm,0.5s,baz=191,slow=23 | | | | | | |
| **AAK** | **Ala-Archa** | **9.25** | **27** | P | Pn | 18 49 12.6 | -1.1 |
| | 1.0nm,0.3s | | | | | | |
| AAK | | | | ⇑S | Sn | 18 50 57.7 | -0.8 |
| | 1.6nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **9.92** | **30** | ⇑P | Pn | 18 49 22.8 | -0.2 |
| | 0.4nm,0.3s | | | | | | |
| TKM2 | | | | ⇓S | Sn | 18 51 16.9 | +1.8 |
| | 1.5nm,0.7s | | | | | | |

*NOU **20** 18:48:21.3, 37°20S×179°62E, h0km, mb4.0/7, Off E. Coast of N. Island, N.Z.*
*WEL **20** 18:48:29.1±0.7, 37°S±5°×17°9E±°, h12km, M3.3/18, ML3.4/25, MLv3.3/18, Error ellipse: s-maj=0.0km s-min=0.0km az=125.5, confirmed*
**ISC 20 18:48:27.4±2.4, 37°28S±0°07×179°1E±0°1, h21km±5km, n56, σ1s28/70, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **0.72** | **247** | P | **Pb** | **18 48 41.8** | **+0.5** |
| **MXZ** | **Matakaoa Point** | **0.72** | **247** | P | **Pb** | **18 48 41.8** | **+0.5** |
| MXZ | | | | S | **Sb** | **18 48 49.3** | **-1.5** |
| **WMGZ** | **Waiomatatini S** | **0.79** | **227** | P | **Pn** | **18 48 44.7** | **+1.3** |
| WMGZ | | | | S | **Sn** | **18 48 55.2** | **+0.6** |
| **PKGZ** | **Pakihiroa** | **1.03** | **235** | P | **Pb** | **18 48 47.9** | **+1.4** |
| PKGZ | | | | S | **Sn** | **18 49 00.5** | **0.0** |
| **PUZ** | **Puketiti** | **1.06** | **221** | P | **Pb** | **18 48 48.4** | **+1.4** |
| PUZ | | | | S | **Sn** | **18 49 01.6** | **+0.4** |
| **HAZ** | **Te Kaha** | **1.18** | **246** | P | **Pn** | **18 48 49.0** | **+0.3** |
| HAZ | | | | S | **Sb** | **18 49 04.0** | **0.0** |
| **TWGZ** | **Tauwhareparae** | **1.29** | **225** | P | **Pb** | **18 48 51.8** | **+0.8** |
| TWGZ | | | | S | **Sb** | **18 49 07.9** | **+0.8** |
| **RUGZ** | **Raukumara Rang** | **1.35** | **239** | P | **Pb** | **18 48 52.7** | **+0.6** |
| RUGZ | | | | S | **Sb** | **18 49 09.3** | **+0.3** |
| **CNGZ** | **Carnagh Statio** | **1.41** | **211** | P | **Pb** | **18 48 54.3** | **+1.2** |
| **TKGZ** | **Te Karaka** | **1.55** | **221** | P | **Pb** | **18 48 54.7** | **-0.7** |
| **MWZ** | **Matawai** | **1.66** | **230** | P | **Pn** | **18 48 56.4** | **+1.1** |
| **RIGZ** | **Rimuhau** | **1.80** | **217** | P | **Pb** | **18 48 58.5** | **-1.1** |
| **RAGZ** | **Rawiri** | **1.83** | **228** | P | **Pb** | **18 48 59.2** | **-1.1** |
| **URZ** | **Urewera** | **1.89** | **238** | P | **Pb** | **18 49 00.4** | **-0.7** |
| **URZ** | **Urewera** | **1.89** | **238** | P | **Pb** | **18 49 00.1** | **-1.0** |
| URZ | | | | S | **Sn** | **18 49 21.6** | **0.0** |
| **PRGZ** | **Paritu Road** | **1.92** | **211** | P | **Pn** | **18 49 00.1** | **+1.1** |
| **KNZ** | **Kokohu** | **2.09** | **213** | P | **Pn** | **18 49 01.7** | **+0.4** |
| **MHGZ** | **Mahia Peninsul** | **2.11** | **207** | P | **Pn** | **18 49 02.8** | **+1.2** |
| **OPRZ** | **Ohinepanea** | **2.13** | **254** | P | **Pn** | **18 49 03.3** | **+1.5** |
| **RTZ** | **Ruatahuna** | **2.17** | **231** | P | **Pn** | **18 49 04.1** | **+1.7** |
| **MUGZ** | **Murupara** | **2.23** | **237** | P | **Pn** | **18 49 04.3** | **+1.2** |
| **MTHZ** | **Maungataniwha** | **2.40** | **228** | P | **Pn** | **18 49 07.2** | **+1.6** |
| MTHZ | | | | S | **Sn** | **18 49 34.2** | **-0.2** |
| **NMHZ** | **Naumai** | **2.59** | **225** | P | **Pn** | **18 49 09.7** | **+1.5** |
| **ARHZ** | **Aropaoanui** | **2.60** | **220** | P | **Pn** | **18 49 09.4** | **+1.1** |
| **MRHZ** | **Matea Rd** | **2.65** | **233** | P | **Pn** | **18 49 10.2** | **+1.2** |
| MRHZ | | | | S | **Sn** | **18 49 39.9** | **-0.7** |
| **KUZ** | **Kuaotunu** | **2.79** | **280** | P | **Pn** | **18 49 11.0** | **+0.2** |
| **KUZ** | **Kuaotunu** | **2.79** | **280** | P | **Pn** | **18 49 10.7** | **-0.1** |
| KUZ | | | | S | **Sn** | **18 49 39.6** | **-4.3** |
| **BKZ** | **Black Stump Fm** | **2.81** | **227** | P | **Pn** | **18 49 12.5** | **+1.3** |
| **BKZ** | **Black Stump Fm** | **2.81** | **227** | P | **Pn** | **18 49 12.1** | **+0.9** |
| **CKHZ** | **Cape Kidnapper** | **2.88** | **214** | P | **Pn** | **18 49 12.5** | **+0.4** |
| CKHZ | | | | S | **Sn** | **18 49 44.5** | **-1.5** |
| **MCHZ** | **McNeill Hill** | **2.90** | **221** | P | **Pn** | **18 49 12.8** | **+0.5** |
| **KWHZ** | **Kaweka Forest** | **3.03** | **224** | P | **Pn** | **18 49 14.6** | **+0.4** |
| **KAHZ** | **Kahuranaki** | **3.08** | **215** | P | **Pn** | **18 49 14.9** | **0.0** |
| **GRZ** | **Great Barrier** | **3.13** | **288** | P | **Pn** | **18 49 16.4** | **+0.9** |
| **MKAZ** | **Moumakai** | **3.18** | **272** | P | **Pn** | **18 49 16.8** | **+0.5** |
| **KRHZ** | **Kereru** | **3.21** | **222** | P | **Pn** | **18 49 16.9** | **+0.2** |
| KRHZ | | | | S | **Sn** | **18 49 52.1** | **-2.3** |
| **TMVZ** | **Te Maari** | **3.27** | **235** | P | **Pn** | **18 49 18.4** | **+0.8** |
| TMVZ | | | | S | **Sn** | **18 49 53.0** | **-3.0** |
| **ETVZ** | **East Tongariro** | **3.28** | **234** | P | **Pn** | **18 49 18.4** | **+0.7** |
| **NTVZ** | **North Tongarir** | **3.28** | **235** | P | **Pn** | **18 49 18.6** | **+0.9** |
| **KRVZ** | **Karewarewa** | **3.30** | **236** | P | **Pn** | **18 49 18.9** | **+0.9** |
| **OTVZ** | **Oturere** | **3.32** | **234** | P | **Pn** | **18 49 19.1** | **+0.7** |
| **NNVZ** | **North Ngauruho** | **3.34** | **235** | P | **Pn** | **18 49 19.9** | **+1.3** |
| **NGZ** | **Ngauruhoe** | **3.37** | **235** | P | **Pn** | **18 49 19.9** | **+0.9** |
| **WHVZ** | **Whangaehu Hut** | **3.44** | **233** | P | **Pn** | **18 49 20.7** | **+0.7** |
| **FWVZ** | **Far West T-bar** | **3.45** | **234** | P | **Pn** | **18 49 21.1** | **+0.9** |
| **WNVZ** | **Wahianoa** | **3.46** | **233** | P | **Pn** | **18 49 21.0** | **+0.8** |
| **PRHZ** | **Porangahau** | **3.57** | **213** | P | **Pn** | **18 49 20.7** | **-0.9** |
| **HIZ** | **Hauiti** | **3.61** | **249** | P | **Pn** | **18 49 24.4** | **+2.3** |
| **HIZ** | **Hauiti** | **3.61** | **249** | P | **Pn** | **18 49 24.5** | **+2.4** |
| **ANWZ** | **Angora Road** | **3.80** | **212** | P | **Pn** | **18 49 24.1** | **-0.6** |
| **VRZ** | **Vera Road** | **3.92** | **241** | P | **Pn** | **18 49 28.3** | **+2.0** |
| **BFZ** | **Birch Farm** | **4.08** | **213** | P | **Pn** | **18 49 27.9** | **-0.7** |
| **WAZ** | **Wanganui** | **4.09** | **232** | P | **Pn** | **18 49 30.3** | **+1.5** |
| **MRZ** | **Mangatainoka R** | **4.37** | **218** | P | **Pn** | **18 49 31.4** | **-1.3** |
| **OUZ** | **Omahuta** | **4.93** | **293** | P | **Pn** | **18 49 41.7** | **+1.4** |
| **OUZ** | **Omahuta** | **4.93** | **293** | P | **Pn** | **18 49 42.4** | **+2.2** |

*IDC **20** 18:53:25.9±1.8, 15°43S×71°97W, h98km±17km, mb3.6/4, mbtmp4.0/7, Error ellipse: s-maj=27.2km s-min=12.9km az=51.0*
*VAO **20** 18:53:37.5±2.6, 15°17S×71°27W, h163km±9km, mb3.9*
**ISC 20 18:53:29.1±0.7, 15°45S±0°08×72°04W±0°07, h150km, n23, σ2s35/25, mb3.7/4, Southern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **3.85** | **103** | P | **Pn** | **18 54 29.3** | **+1.3** |
| | 18nm,0.3s,baz=335,slow=6.2,SNR=91 | | | | | | |
| LPAZ | | | | S | **Sn** | **18 55 12.2** | **-1.4** |
| | 5.7nm,0.5s,baz=356,slow=10,SNR=1.1 | | | | | | |
| **LPAZ** | **La Paz** | **3.85** | **103** | *eP* | **Pn** | **18 54 29.3** | **+1.3** |
| **NNA** | **Nana** | **5.80** | **306** | P | **Pn** | **18 54 51.4** | **-1.8** |
| | 33nm,0.3s,baz=128,slow=12,SNR=6.7 | | | | | | |
| NNA | | | | S | **Sn** | **18 55 54.9** | **-4.0** |
| | 44nm,0.4s,baz=236,slow=19,SNR=8.8 | | | | | | |
| **LVC** | **Limon Verde** | **7.71** | **158** | P | **Pn** | **18 55 17.3** | **-1.7** |
| | 3.0nm,0.4s,baz=344,slow=9.1,SNR=8.4 | | | | | | |
| LVC | | | | S | **Sn** | **18 56 39.0** | **-6.3** |
| | 13nm,0.3s,baz=20,slow=23,SNR=14 | | | | | | |
| **ETMB** | **Extrema** | **7.97** | **46** | *eP* | **Pn** | **18 55 20.4** | **-1.8** |
| **SIV** | **San Ignacio** | **10.57** | **94** | P | **Pn** | **18 55 55.2** | **-1.6** |
| | 5.0nm,0.4s,baz=273,slow=11,SNR=27 | | | | | | |
| **SAML** | **Samuel** | **10.80** | **54** | *eP* | **Pn** | **18 55 57.2** | **-2.5** |
| **BBSD** | **Serra de San D** | **11.11** | **101** | *eP* | **Pn** | **18 56 01.6** | **-2.2** |
| **PTLB** | **Pontes e Lacer** | **12.44** | **92** | *eP* | **Pn** | **18 56 20.4** | **-0.8** |
| **PDRB** | **Porto dos Gac** | **15.36** | **78** | *eP* | **Pn** | **18 56 56.0** | **-2.2** |
| **SALV** | **Santo Antonio** | **15.75** | **94** | *eP* | **Pn** | **18 57 01.4** | **-1.4** |
| **AQDB** | **Aquidauana** | **16.32** | **110** | *eP* | **P** | **18 57 10.2** | **+0.2** |
| **NPGB** | **Novo Progresso** | **18.35** | **65** | *eP* | **Pn** | **18 57 33.3** | **-0.9** |
| **SNDB** | **Serra Nova Dou** | **20.44** | **83** | *eP* | **P** | **18 57 53.7** | **-1.3** |
| **CRSM** | **Crissiumal (Br** | **20.56** | **129** | *eP* | Pn | 18 57 58.8 | -1.4 |
| **ITRB** | **Iturama** | **21.09** | **105** | *eP* | **P** | **18 58 03.1** | **+1.2** |
| **IPMB** | **Ipameri, GO** | **22.95** | **100** | *eP* | **P** | **18 58 21.0** | **+0.3** |
| **TXAR** | **Lajitas Array** | **53.99** | **326** | P | **P** | **19 02 40.2** | **+2.3** |
| | 0.2nm,0.4s,baz=155,slow=11,SNR=3.0 0.2nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **68.93** | **162** | P | **P** | **19 04 20.4** | **+2.8** |
| | 1.0nm,0.6s,baz=270,slow=9.7,SNR=7.5 1.0nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.71** | **180** | P | **P** | **19 04 55.3** | **+3.2** |
| | 0.9nm,0.5s,baz=162,slow=6.4,SNR=16 0.9nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.27** | **73** | P | **P** | **19 05 14.1** | **+1.2** |
| | 1.0nm,0.6s,baz=266,slow=4.9,SNR=7.4 1.0nm,0.6s | | | | | | |
| **WRA** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.95** | **161** | P | P | 19 22 17.2 | -0.8 | |
| | 0.4nm,0.5s,baz=339,slow=11,SNR=6.1 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **26.32** | **164** | P | P | 19 22 50.3 | +0.7 | |
| | 0.3nm,0.7s,baz=348,slow=8.5,SNR=1.9 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.98** | **326** | P | P | 19 27 13.4 | 0.0 | |
| | 0.2nm,0.4s,baz=133,slow=7.5,SNR=2.0 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.21** | **328** | P | P | 19 27 41.9 | 0.0 | |
| | 0.1nm,0.4s,baz=130,slow=7.1,SNR=2.6 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |

*JMA* ***20*** *19:22:38.7±0.3, 47.˚N±1.˚×14.˚2E±.˚, h1km, MV2.8/13, SOUTH SAKHALIN*
*SKHL* ***20*** *19:22:39.2±0.5, 46.˚90N×141.˚80E, h13km±2km, mb4.2/4*
**ISC 20 19:22:38.5±2.0, 46.˚86N±0.˚07×141.˚7E±0.˚1, h18km±11km, n7, σ0≤94/12, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **NEVR** | **Nevel`sk** | **0.22** | **150** | *e*Pg | | **Pb** | **19 22 44.4** | **+0.5** |
| NEVR | | | | | AMB | AMB | 19 22 44.6 | |
| | 200nm,0.2s | | | | | | | |
| NEVR | | | | *e*Sg | | **Sg** | **19 22 47.8** | **+0.7** |
| NEVR | | | | | A | A | 19 22 49.9 | |
| | 2µm,0.2s | | | | | | | |
| NEVR | | | | | A | A | 19 22 49.9 | |
| | 3µm,0.2s | | | | | | | |
| **KHLM** | **Kholmsk** | **0.31** | **52** | *i* Pg | | **Pb** | **19 22 46.0** | **+0.5** |
| KHLM | | | | | AMB | AMB | 19 22 46.2 | |
| | 180nm,0.3s | | | | | | | |
| KHLM | | | | *e*Sg | | **Sb** | **19 22 51.1** | **+0.9** |
| KHLM | | | | | A | A | 19 22 52.5 | |
| | 3µm,0.4s | | | | | | | |
| KHLM | | | | | A | A | 19 22 52.5 | |
| | 2µm,0.4s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **0.73** | **83** | *e*Pg | | **Pn** | **19 22 53.2** | **-0.7** |
| YSS | | | | | AMB | AMB | 19 22 53.8 | |
| | 50nm,0.3s | | | | | | | |
| YSS | | | | *e*Sg | | **Sb** | **19 23 02.3** | **0.0** |
| YSS | | | | | A | A | 19 23 04.6 | |
| | 160nm,0.4s | | | | | | | |
| YSS | | | | | A | A | 19 23 04.6 | |
| | 260nm,0.4s | | | | | | | |
| **JRBN** | **Rebuntou** | **1.51** | **197** | P | | **Pb** | **19 23 06.3** | **+0.4** |
| JRBN | | | | *e*S | | **Sg** | **19 23 26.1** | **-1.0** |
| **JWK2** | **Keihoku** | **1.56** | **175** | *e*P | | **Pg** | **19 23 07.9** | **-0.5** |
| JWK2 | | | | *e*S | | **Sg** | **19 23 28.2** | **-0.4** |
| **JRR** | **Rishiri** | **1.75** | **189** | *e*S | | **Sb** | **19 23 33.4** | **+1.8** |
| **JSE** | **Soyaes** | **2.00** | **162** | *e*P | | **Pb** | **19 23 14.5** | **+0.1** |

**IDC 20 19:26:44.8±19.0, 18.˚22S×178.˚22W, h585km±251km, mb2.9/3, mbtmp3.9/3, Error ellipse: s-maj=253.4km s-min=61.7km az=171.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.75** | **260** | P | | P | 19 34 07.1 | -0.5 |
| | 0.5nm,0.6s,baz=96,slow=6.9,SNR=14 | | | | | | | |
| | 0.5nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.88** | **255** | P | | P | 19 34 08.7 | +0.2 |
| | 4.4nm,0.5s,baz=89,slow=8.3,SNR=96 | | | | | | | |
| | 4.4nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.01** | **58** | P | | P | 19 38 24.4 | -0.2 |
| | 0.3nm,0.6s,baz=227,slow=6.1,SNR=2.5 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **GERES** | **GERESS Array B** | **147.96** | **345** | PKPbc | | PKPbc | 19 45 24.7 | -0.4 |
| | 0.1nm,0.3s,baz=54,slow=2.6,SNR=1.4 | | | | | | | |

**ROM 20 19:30:42.6±0.2, 37.˚767N±0.˚005×14.˚89E±0.˚01, h29km±1km, ML1.7/9, 1C, Error ellipse: s-maj=0.8km s-min=0.6km az=289.0, Sicily**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EPZF** | **Pizzo Felice** | **0.06** | **333** | P | | Pb | 19 30 47.4 | -0.5 |
| EPZF | | | | S | | Sb | 19 30 51.5 | +0.1 |
| EPZF | | | | AML | | AML | | |
| | comp=E,2280µm,0.5s | | | | | | | |
| EPZF | | | | AML | | AML | | |
| | comp=E,2280µm,1.5s | | | | | | | |
| EPZF | | | | AML | | AML | | |
| | comp=N,1230µm,1.5s | | | | | | | |
| **ESLN** | **Serra La Nave** | **0.10** | **139** | P | | Pb | 19 30 48.1 | 0.0 |
| **EMCN** | **Etna Monte Con** | **0.11** | **78** | P | | Pb | 19 30 48.1 | -0.1 |
| **ESML** | **S. M. di Licod** | **0.15** | **185** | P | | Pb | 19 30 48.4 | +0.2 |
| **GALF** | **Gagliano Caste** | **0.27** | **258** | P | | Pb | 19 30 49.8 | +0.1 |
| GALF | | | | S | | Sn | 19 30 55.9 | +0.1 |
| GALF | | | | AML | | AML | | |
| | comp=N,166µm,0.5s | | | | | | | |
| GALF | | | | AML | | AML | | |
| | comp=N,166µm,1.5s | | | | | | | |
| GALF | | | | AML | | AML | | |
| | comp=E,209µm,0.6s | | | | | | | |
| **MUCR** | **Ucria** | **0.28** | **357** | P | | Pb | 19 30 49.6 | -0.2 |
| MUCR | | | | S | | Sb | 19 30 54.6 | -0.1 |
| MUCR | | | | AML | | AML | | |
| | comp=E,100µm,0.5s | | | | | | | |
| MUCR | | | | AML | | AML | | |
| | comp=N,102µm,0.4s | | | | | | | |
| MUCR | | | | AML | | AML | | |
| | comp=E,100µm,1.5s | | | | | | | |
| **NOV** | **Novara** | **0.32** | **36** | P | | Pb | 19 30 50.3 | -0.1 |
| NOV | | | | S | | Sn | 19 30 56.8 | -0.5 |
| **AIO** | **Antillo** | **0.34** | **53** | ⇑P | | Pb | 19 30 50.9 | +0.2 |
| AIO | | | | S | | Sb | 19 30 56.8 | +0.7 |
| AIO | | | | AML | | AML | | |
| | comp=E,89µm,1.6s | | | | | | | |
| AIO | | | | AML | | AML | | |
| | comp=N,88µm,1.5s | | | | | | | |
| AIO | | | | AML | | AML | | |
| | comp=N,88µm,0.5s | | | | | | | |
| AIO | | | | AML | | AML | | |
| | comp=E,89µm,0.4s | | | | | | | |
| **HLNI** | **Lentini** | **0.42** | **182** | P | | Pb | 19 30 51.6 | -0.1 |
| HLNI | | | | S | | Sb | 19 30 58.7 | +0.7 |
| **MPNC** | **Port Mandanici** | **0.52** | **44** | P | | Pn | 19 30 53.9 | -0.3 |
| MPNC | | | | AML | | AML | | |
| | comp=E,266µm,0.3s | | | | | | | |
| MPNC | | | | AML | | AML | | |
| | comp=N,280µm,1.4s | | | | | | | |
| **HAGA** | **Augusta** | **0.52** | **157** | P | | Pb | 19 30 53.3 | -0.1 |
| HAGA | | | | S | | Sn | 19 31 01.6 | -0.5 |
| HAGA | | | | AML | | AML | | |
| | comp=E,178µm,1.2s | | | | | | | |
| HAGA | | | | AML | | AML | | |
| | comp=E,148µm,1.2s | | | | | | | |
| HAGA | | | | AML | | AML | | |
| | comp=N,165µm,0.8s | | | | | | | |
| **HMDC** | **Modica** | **0.81** | **186** | P | | Pn | 19 30 58.1 | -0.1 |
| HMDC | | | | S | | Sn | 19 31 10.4 | +1.2 |
| HMDC | | | | AML | | AML | | |
| | comp=E,1171µm,0.3s | | | | | | | |
| HMDC | | | | AML | | AML | | |
| | comp=N,1022µm,0.5s | | | | | | | |
| HMDC | | | | AML | | AML | | |
| | comp=N,109µm,0.5s | | | | | | | |
| **CLTA** | **Licata** | **0.96** | **231** | AML | | AML | | |
| | comp=N,159µm,0.6s | | | | | | | |
| CLTA | | | | AML | | AML | | |
| | comp=E,248µm,0.5s | | | | | | | |

**ROM 20 19:31:03.7±0.1, 37.˚760N±0.˚006×14.˚92E±0.˚01, h24km±1km, ML2.6/60, 5C-2D, Error ellipse: s-maj=0.9km s-min=0.1km az=294.0, Sicily**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ESLN** | **Serra La Nave** | **0.08** | **147** | P | | Pb | 19 31 08.1 | -0.3 |
| ESLN | | | | S | | Sb | 19 31 11.9 | +0.4 |
| ESLN | | | | AML | | AML | | |
| | comp=N,2205µm,0.5s | | | | | | | |
| ESLN | | | | AML | | AML | | |
| | comp=E,2205µm,0.8s | | | | | | | |
| ESLN | | | | AML | | AML | | |
| | comp=N,2205µm,1.5s | | | | | | | |
| **EPZF** | **Pizzo Felice** | **0.08** | **322** | ⇑P | | Pb | 19 31 07.7 | -0.6 |
| EPZF | | | | S | | Sb | 19 31 11.8 | +0.3 |
| EPZF | | | | AML | | AML | | |
| | comp=N,9535µm,1.5s | | | | | | | |
| EPZF | | | | AML | | AML | | |
| | comp=E,19800µm,0.4s | | | | | | | |
| EPZF | | | | AML | | AML | | |
| | comp=N,9535µm,0.5s | | | | | | | |
| **EMCN** | **Etna Monte Con** | **0.10** | **71** | P | | Pb | 19 31 08.4 | -0.1 |
| EMCN | | | | S | | Sb | 19 31 12.3 | +0.5 |
| EMCN | | | | AML | | AML | | |
| | comp=N,6230µm,0.5s | | | | | | | |
| EMCN | | | | AML | | AML | | |
| | comp=E,7535µm,0.8s | | | | | | | |
| EMCN | | | | AML | | AML | | |
| | comp=N,6235µm,0.5s | | | | | | | |
| **ESML** | **S. M. di Licod** | **0.15** | **194** | P | | Pb | 19 31 08.6 | -0.1 |
| ESML | | | | AML | | AML | | |
| | comp=E,2445µm,0.4s | | | | | | | |
| ESML | | | | AML | | AML | | |
| | comp=N,2875µm,0.5s | | | | | | | |
| ESML | | | | AML | | AML | | |
| | comp=E,2445µm,1.6s | | | | | | | |
| ESML | | | | AML | | AML | | |
| | comp=N,2875µm,1.5s | | | | | | | |
| **EPOZ** | **Pozzillo** | **0.28** | **152** | P | | Pb | 19 31 10.2 | -0.1 |
| EPOZ | | | | AML | | AML | | |
| | comp=N,5500µm,0.7s | | | | | | | |
| EPOZ | | | | AML | | AML | | |
| | comp=E,6560µm,0.8s | | | | | | | |
| EPOZ | | | | AML | | AML | | |
| | comp=E,6560µm,1.2s | | | | | | | |
| EPOZ | | | | AML | | AML | | |
| | comp=N,5500µm,1.3s | | | | | | | |
| **GALF** | **Gagliano Caste** | **0.28** | **260** | ⇑P | | Pb | 19 31 10.2 | -0.3 |
| GALF | | | | S | | Sb | 19 31 16.2 | +1.1 |
| GALF | | | | AML | | AML | | |
| | comp=E,1940µm,0.6s | | | | | | | |
| GALF | | | | AML | | AML | | |
| | comp=N,1510µm,0.5s | | | | | | | |
| GALF | | | | AML | | AML | | |
| | comp=E,660µm,0.5s | | | | | | | |
| GALF | | | | AML | | AML | | |
| | comp=N,363µm,0.5s | | | | | | | |
| **MUCR** | **Ucria** | **0.28** | **353** | P | | Pb | 19 31 09.9 | -0.6 |
| MUCR | | | | S | | Sb | 19 31 15.3 | 0.0 |
| MUCR | | | | AML | | AML | | |
| | comp=E,859µm,0.6s | | | | | | | |
| MUCR | | | | AML | | AML | | |
| | comp=N,878µm,0.4s | | | | | | | |
| **NOV** | **Novara** | **0.32** | **32** | ⇑P | | Pb | 19 31 10.8 | -0.2 |
| NOV | | | | S | | Sb | 19 31 17.0 | +1.0 |
| NOV | | | | AML | | AML | | |
| | comp=E,2360µm,0.3s | | | | | | | |
| NOV | | | | AML | | AML | | |
| | comp=N,2685µm,0.3s | | | | | | | |
| **AIO** | **Antillo** | **0.33** | **49** | ⇑P | | Pb | 19 31 11.2 | 0.0 |
| AIO | | | | S | | Sb | 19 31 17.0 | +0.8 |
| AIO | | | | AML | | AML | | |
| | comp=N,676µm,1.5s | | | | | | | |
| AIO | | | | AML | | AML | | |
| | comp=E,848µm,1.1s | | | | | | | |
| AIO | | | | AML | | AML | | |
| | comp=E,848µm,0.9s | | | | | | | |
| **HLNI** | **Lentini** | **0.41** | **185** | P | | Pb | 19 31 12.0 | -0.4 |
| HLNI | | | | S | | Sb | 19 31 19.0 | +0.6 |
| HLNI | | | | AML | | AML | | |
| | comp=E,1340µm,0.5s | | | | | | | |
| HLNI | | | | AML | | AML | | |
| | comp=N,1110µm,0.3s | | | | | | | |
| **VAE** | **Valguarnera** | **0.49** | **235** | P | | Pn | 19 31 15.4 | +0.1 |
| VAE | | | | AML | | AML | | |
| | comp=E,16µm,1.6s | | | | | | | |
| VAE | | | | AML | | AML | | |
| | comp=N,24µm,0.7s | | | | | | | |
| VAE | | | | AML | | AML | | |
| | comp=E,16µm,0.4s | | | | | | | |
| **HAGA** | **Augusta** | **0.51** | **158** | ⇓P | | Pb | 19 31 13.7 | -0.3 |
| HAGA | | | | S | | Sb | 19 31 22.0 | +0.9 |
| HAGA | | | | AML | | AML | | |
| | comp=N,721µm,0.6s | | | | | | | |
| HAGA | | | | AML | | AML | | |
| | comp=E,536µm,1.1s | | | | | | | |
| **MPNC** | **Port Mandanici** | **0.51** | **41** | ⇑P | | Pb | 19 31 14.1 | 0.0 |
| MPNC | | | | S | | Sn | 19 31 22.5 | -1.1 |
| MPNC | | | | AML | | AML | | |
| | comp=N,733µm,0.6s | | | | | | | |
| MPNC | | | | AML | | AML | | |
| | comp=E,1043µm,0.5s | | | | | | | |
| MPNC | | | | AML | | AML | | |
| | comp=N,733µm,1.4s | | | | | | | |
| **AGST** | **Augusta-Monte** | **0.56** | **154** | ⇓P | | Pb | 19 31 14.5 | -0.4 |
| AGST | | | | S | | Sb | 19 31 23.4 | +0.9 |
| AGST | | | | AML | | AML | | |
| | comp=N,1355µm,0.7s | | | | | | | |
| AGST | | | | AML | | AML | | |
| | comp=E,1175µm,1.3s | | | | | | | |
| **MILZ** | **Milazzo** | **0.57** | **26** | P | | Pb | 19 31 14.8 | -0.2 |
| MILZ | | | | AML | | AML | | |
| | comp=N,906µm,0.8s | | | | | | | |
| MILZ | | | | AML | | AML | | |
| | comp=E,1020µm,0.6s | | | | | | | |
| MILZ | | | | AML | | AML | | |
| | comp=E,1020µm,1.4s | | | | | | | |
| MILZ | | | | AML | | AML | | |
| | comp=N,906µm,1.2s | | | | | | | |
| **VPL** | **Vulcano Piano** | **0.62** | **5** | P | | Pb | 19 31 16.0 | +0.1 |
| VPL | | | | AML | | AML | | |
| | comp=N,834µm,1.4s | | | | | | | |
| VPL | | | | AML | | AML | | |
| | comp=E,838µm,1.2s | | | | | | | |
| VPL | | | | AML | | AML | | |
| | comp=N,834µm,0.6s | | | | | | | |
| **MSRU** | **Castanea** | **0.68** | **43** | P | | Pb | 19 31 17.2 | +0.2 |
| MSRU | | | | AML | | AML | | |
| | comp=E,630µm,1.1s | | | | | | | |
| MSRU | | | | AML | | AML | | |
| | comp=N,414µm,0.8s | | | | | | | |
| MSRU | | | | AML | | AML | | |
| | comp=E,630µm,0.9s | | | | | | | |
| **RESU** | **Resuttano** | **0.69** | **261** | P | | Pn | 19 31 18.3 | +0.2 |
| RESU | | | | AML | | AML | | |
| | comp=E,160µm,1.4s | | | | | | | |
| RESU | | | | AML | | AML | | |
| | comp=N,203µm,0.7s | | | | | | | |
| RESU | | | | AML | | AML | | |
| | comp=E,160µm,0.6s | | | | | | | |
| **RAFF** | **Raffo Rosso** | **0.70** | **220** | P | | Pb | 19 31 17.1 | -0.1 |
| RAFF | | | | AML | | AML | | |
| | comp=N,392µm,0.5s | | | | | | | |
| RAFF | | | | AML | | AML | | |
| | comp=E,551µm,0.5s | | | | | | | |
| **HMDC** | **Modica** | **0.81** | **188** | P | | Pb | 19 31 18.5 | -0.6 |
| HMDC | | | | S | | Sn | 19 31 30.7 | -0.1 |
| HMDC | | | | AML | | AML | | |
| | comp=N,1022µm,0.5s | | | | | | | |
| HMDC | | | | AML | | AML | | |
| | comp=E,1171µm,0.3s | | | | | | | |
| **GMB** | **Gambarie** | **0.82** | **60** | P | | Pn | 19 31 20.0 | +0.1 |
| GMB | | | | AML | | AML | | |
| | comp=E,1015µm,1.5s | | | | | | | |
| GMB | | | | AML | | AML | | |
| | comp=N,840µm,0.8s | | | | | | | |
| GMB | | | | AML | | AML | | |
| | comp=N,840µm,1.2s | | | | | | | |
| GMB | | | | AML | | AML | | |
| | comp=E,1015µm,0.5s | | | | | | | |
| **IACL** | **Alicudi** | **0.89** | **330** | P | | Pb | 19 31 19.8 | -0.8 |
| IACL | | | | AML | | AML | | |
| | comp=E,488µm,0.6s | | | | | | | |
| IACL | | | | AML | | AML | | |
| | comp=N,405µm,0.4s | | | | | | | |
| **CEL** | **Celeste** | **0.92** | **57** | P | | Pn | 19 31 21.2 | +0.1 |
| CEL | | | | AML | | AML | | |
| | comp=N,150µm,1.2s | | | | | | | |
| CEL | | | | AML | | AML | | |
| | comp=E,152µm,0.9s | | | | | | | |
| CEL | | | | AML | | AML | | |
| | comp=N,150µm,0.8s | | | | | | | |
| **ALJA** | **Alia** | **0.93** | **270** | P | | Pn | 19 31 22.2 | +0.9 |
| ALJA | | | | AML | | AML | | |
| | comp=N,200µm,0.5s | | | | | | | |
| ALJA | | | | AML | | AML | | |
| | comp=E,181µm,0.6s | | | | | | | |
| **CLTA** | **Licata** | **0.97** | **232** | AML | | AML | | |
| | comp=N,159µm,1.4s | | | | | | | |
| CLTA | | | | AML | | AML | | |
| | comp=N,159µm,0.6s | | | | | | | |
| CLTA | | | | AML | | AML | | |
| | comp=E,248µm,0.5s | | | | | | | |
| **CROCE** | **Santa Croce Ca** | **0.97** | **199** | AML | | AML | | |
| | comp=N,784µm,1.1s | | | | | | | |
| CROCE | | | | AML | | AML | | |
| | comp=E,905µm,0.3s | | | | | | | |
| **FAVR** | **Favara** | **1.11** | **244** | P | | Pb | 19 31 25.1 | +0.9 |
| FAVR | | | | AML | | AML | | |
| | comp=E,62µm,0.8s | | | | | | | |
| FAVR | | | | AML | | AML | | |
| | comp=N,108µm,0.5s | | | | | | | |
| FAVR | | | | AML | | AML | | |
| | comp=N,108µm,1.5s | | | | | | | |
| FAVR | | | | AML | | AML | | |
| | comp=E,62µm,1.2s | | | | | | | |
| **JOPP** | **Joppolo** | **1.14** | **42** | P | | Pn | 19 31 23.9 | -0.2 |
| JOPP | | | | AML | | AML | | |
| | comp=E,112µm,1.6s | | | | | | | |
| JOPP | | | | AML | | AML | | |
| | comp=N,101µm,0.7s | | | | | | | |
| JOPP | | | | AML | | AML | | |
| | comp=E,112µm,0.4s | | | | | | | |
| JOPP | | | | AML | | AML | | |
| | comp=N,101µm,1.3s | | | | | | | |
| **PLAC** | **Placanica** | **1.38** | **60** | P | | Pb | 19 31 29.3 | +0.5 |
| PLAC | | | | AML | | AML | | |
| | comp=E,107µm,1.4s | | | | | | | |
| PLAC | | | | AML | | AML | | |
| | comp=N,116µm,0.6s | | | | | | | |
| PLAC | | | | AML | | AML | | |
| | comp=N,116µm,1.4s | | | | | | | |
| PLAC | | | | AML | | AML | | |
| | comp=E,107µm,0.6s | | | | | | | |
| **CAR1** | **CAROLEI** | **1.80** | **34** | P | | Pn | 19 31 33.2 | -0.1 |
| CAR1 | | | | AML | | AML | | |
| | comp=E,139µm,0.8s | | | | | | | |
| CAR1 | | | | AML | | AML | | |
| | comp=N,99µm,0.4s | | | | | | | |

*IDC* ***20*** *19:35:13.3±2.5, 22.˚75N×11.˚93W, h0km, mb3.8/4, mbtmp3.7/6, ML3.3/2, Error ellipse: s-maj=75.0km s-min=33.2km az=88.0*
**ISC 20 19:35:14.5±2.2, 22.˚7N±0.˚2×12.˚0W±0.˚4, h10km, n9, σ0≤38/8, mb3.7/4, Mauritania**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **16.09** | **124** | Pn | | **Pn** | **19 39 00.8** | **-0.1** |
| | 0.1nm,0.3s,baz=317,slow=12,SNR=3.4 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **DBIC** | **Dimbokro** | **17.36** | **156** | P | | **Pn** | **19 39 17.0** | **-0.1** |
| | 0.2nm,0.3s,baz=325,slow=12,SNR=1.5 | | | | | | | |
| | 1.3nm,0.5s | | | | | | | |
| **I42PT** | **GRACIOSA ISLAN** | **21.27** | **324** | I | | I | 21 46 10.0 | |
| | baz=139,slow=328,SNR=1.6 | | | | | | | |
| **KEST** | **Kesra** | **22.59** | **50** | P | | **P** | **19 40 15.6** | **+0.1** |
| | 1.8nm,0.9s,baz=253,slow=11,SNR=1.7 | | | | | | | |
| | 1.8nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **46.66** | **24** | P | | **P** | **19 43 42.4** | **-0.6** |
| | 7.4nm,1.2s,baz=220,slow=5.4,SNR=3.7 | | | | | | | |
| | 7.4nm,1.2s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.07** | **42** | P | | **P** | **19 46 45.1** | **+0.3** |
| | 0.4nm,0.6s,baz=290,slow=6.3,SNR=4.7 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **76.57** | **45** | P | | **P** | **19 47 05.7** | **+0.4** |
| | 0.4nm,0.7s,baz=307,slow=5.3,SNR=4.1 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **148.51** | **91** | PKPbc | | **PKPbc** | **19 55 02.4** | **0.0** |
| | 0.4nm,0.8s,baz=295,slow=3.8,SNR=1.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **148.64** | **99** | PKPbc | | **PKPbc** | **19 55 02.9** | **+0.3** |
| | 0.9nm,1.2s,baz=296,slow=2.2,SNR=4.7 | | | | | | | |

*IDC* ***20*** *19:40:17.6±4.4, 18.˚10S×178.˚04W, h503km±47km, mb3.4/11, mbtmp4.2/11, Error ellipse: s-maj=22.5km s-min=17.1km az=57.0*
*NEIC* ***20*** *19:40:24.3±2.1, 18.˚3S±0.˚2×178.˚24W±0.˚10, h563km±12km, mb4.7/20, Error ellipse: s-maj=26.2km s-min=13.4km az=174.0*
**ISC 20 19:40:24.7±0.5, 18.˚2S±0.˚1×178.˚19W±0.˚07, h590km, n56, σ1≤29/61, mb4.1/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.61** | **277** | | | **P** | **19 41 44.7** | **-2.2** |
| **NIUE** | **Niue** | **7.88** | **98** | | | **P** | **19 42 20.0** | **-2.6** |
| NIUE | | | | | S | **S** | **19 43 58.5** | **-0.6** |
| **URZ** | **Urewera** | **20.40** | **191** | P | | **P** | **19 44 19.8** | **-2.6** |
| | 7.8nm,0.3s,baz=2.5,slow=3.8,SNR=14 | | | | | | | |
| | 7.8nm,0.3s | | | | | | | |
| **PLWZ** | **Palliser** | **23.96** | **192** | P | | **P** | **19 44 52.3** | **-1.8** |
| **THZ** | **Tophouse** | **24.69** | **196** | P | | **P** | **19 44 58.6** | **-2.0** |
| **GVZ** | **Greta Valley S** | **25.79** | **195** | P | | **P** | **19 45 07.8** | **-2.4** |
| **LTZ** | **Lake Taylor** | **25.81** | **196** | P | | **P** | **19 45 07.4** | **-3.0** |
| **OXZ** | **Oxford** | **26.38** | **196** | P | | **P** | **19 45 13.9** | **-1.4** |
| **LBZ** | **Lake Benmore** | **27.87** | **198** | P | | **P** | **19 45 26.5** | **-1.9** |
| **MLZ** | **Mavora Lakes** | **29.39** | **200** | P | | **P** | **19 45 40.1** | **-1.5** |
| **DCZ** | **Deep Cove** | **29.80** | **201** | P | | **P** | **19 45 44.3** | **-0.7** |
| **ARMA** | **Armidale** | **29.98** | **240** | P | | **P** | **19 45 47.6** | **+0.6** |
| ARMA | | | | | IAmb | IAmb | 19 46 42.3 | |
| | comp=Z,50nm,1.6s | | | | | | | |
| **CTA** | **Charters Tower** | **33.61** | **261** | P | | **P** | **19 46 16.8** | **-0.9** |
| | comp=Z,0.1nm,0.3s,baz=96,slow=10,SNR=1.5 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.61** | **261** | P | | **P** | **19 46 16.9** | **-0.9** |
| CTAO | | | | | IAmb | IAmb | 19 46 36.2 | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **CAN** | **Canberra** | **33.70** | **233** | P | | **P** | **19 46 18.9** | **+0.6** |
| **TOO** | **Toolangi** | **37.15** | **231** | P | | **P** | **19 46 47.4** | **+0.6** |
| TOO | | | | | IAmb | IAmb | 19 47 11.7 | |
| | comp=Z,72nm,1.8s | | | | | | | |
| **COEN** | **Coen** | **37.32** | **271** | P | | **P** | **19 46 48.5** | **0.0** |
| **STKA** | **Stephens Creek** | **38.67** | **242** | P | | **P** | **19 46 59.8** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.67** | **242** | P | | **P** | **19 47 00.5** | **+1.2** |
| | comp=Z,3.8nm,0.8s,baz=89,slow=12,SNR=5.5 | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.45** | **241** | P | | **P** | **19 47 37.3** | **+0.4** |
| BBOO | | | | | IAmb | IAmb | 19 47 38.5 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.76** | **260** | P | | **P** | **19 47 46.8** | **-0.4** |
| WB0 | | | | | IAmb | IAmb | 19 49 29.2 | |
| | comp=Z,39nm,1.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.79** | **260** | P | | **P** | **19 47 46.8** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.79** | **260** | P | | **P** | **19 47 46.8** | **-0.7** |
| | comp=Z,1.1nm,0.4s,baz=96,slow=7.3,SNR=61 | | | | | | | |
| WRA | | | | | PcP | **PcP** | **19 49 18.0** | **+1.4** |
| | comp=Z,0.2nm,0.5s,baz=92,slow=3.7,SNR=1.4 | | | | | | | |
| WRA | | | | | S | **S** | **19 53 39.5** | **-3.3** |
| | comp=Z,0.6nm,0.8s,baz=96,slow=14,SNR=2.6 | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| **AS31** | **Alice Springs** | **44.91** | **255** | P | | **P** | **19 47 48.4** | **0.0** |
| **ASAR** | **Alice Springs** | **44.91** | **255** | P | | **P** | **19 47 47.8** | **-0.6** |
| **ASAR** | **Alice Springs** | **44.91** | **255** | P | | **P** | **19 47 48.7** | **+0.3** |
| | comp=Z,7.9nm,0.6s,baz=88,slow=8.6,SNR=169 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **19 49 17.9** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=110,slow=3.1,SNR=2.0 | | | | | | | |
| ASAR | | | | | S | **S** | **19 53 45.3** | **+0.7** |
| | comp=Z,1.4nm,0.8s,baz=92,slow=16,SNR=8.1 | | | | | | | |
| | comp=Z,7.9nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **49.00** | **269** | P | | **P** | **19 48 17.7** | **-1.3** |
| MTN | | | | | IAmb | IAmb | 19 50 18.5 | |
| | comp=Z,83nm,1.6s | | | | | | | |
| **KNRA** | **Kununurra** | **50.67** | **264** | P | | **P** | **19 48 32.7** | **+1.5** |
| KNRA | | | | | IAmb | IAmb | 19 50 29.6 | |
| | comp=Z,69nm,1.9s | | | | | | | |
| **FAKI** | **Fak Fak** | **50.84** | **281** | P | | **P** | **19 48 32.4** | **-0.1** |
| FAKI | | | | | IAmb | IAmb | 19 49 32.8 | |
| | comp=Z,54nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.19** | **261** | P | | **P** | **19 48 49.9** | **+0.6** |
| **MBWA** | **Marble Bar** | **58.21** | **256** | P | | **P** | **19 49 24.1** | **+0.2** |
| MBWA | | | | | IAmb | IAmb | 19 50 12.2 | |
| | comp=Z,21nm,1.6s | | | | | | | |
| **SBA** | **Scott Base** | **60.14** | **184** | P | | **P** | **19 49 38.9** | **+3.2** |
| **CASY** | **Casey** | **65.96** | **205** | P | | **P** | **19 50 13.4** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **68.27** | **323** | P | | **P** | **19 50 27.3** | **-0.5** |
| | comp=Z,1.8nm,0.5s,baz=159,slow=5.4,SNR=8.6 | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.86** | **180** | P | | **P** | **19 50 49.7** | **+1.0** |
| QSPA | | | | | IAmb | IAmb | 19 51 06.3 | |
| | comp=Z,21nm,1.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.86** | **180** | P | | **P** | **19 50 50.0** | **+1.3** |
| | comp=Z,2.3nm,0.6s,baz=58,slow=0.8,SNR=30 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.01** | **345** | P | | **P** | **19 51 01.4** | **+0.5** |
| | comp=Z,5.6nm,1.0s,baz=93,slow=5.6,SNR=1.9 | | | | | | | |
| | comp=Z,5.6nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.49** | **44** | P | | **P** | **19 51 31.1** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=241,slow=9.2,SNR=4.6 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.97** | **58** | P | | **P** | **19 52 04.7** | **+0.8** |

comp=Z,0.5nm,0.8s,baz=216,slow=6.0,SNR=4.8
comp=Z,0.5nm,0.8s
**CMAR Chiang Mai Arr 89.18 290** P **P** **19 52 19.9 +0.9**
comp=Z,0.5nm,0.6s,baz=139,slow=2.2,SNR=5.4
comp=Z,0.5nm,0.6s
**SNAA Sanae 90.30 179** P **P** **19 52 23.7 +0.5**
comp=Z,0.5nm,0.6s,baz=240,slow=20,SNR=1.6
comp=Z,0.5nm,0.6s
**BVAR Borovoye Array 117.20 321** PKP **PKPdf** **19 58 03.5 0.0**
comp=Z,0.1nm,0.3s,baz=67,slow=1.6,SNR=4.1
**BRTR Keskin Array B 145.14 315** PKPbc **PKPab** **19 58 58.2 -0.2**
comp=Z,1.1nm,0.8s,baz=128,slow=2.7,SNR=7.3
**CLL Collm 145.79 347** **PKPbc** **19 58 58.4 -0.2**
**MMAI Mount Meron Ar 146.48 303** PKPbc **PKPbc** **19 59 02.1 +0.9**
comp=Z,0.9nm,0.5s,baz=62,slow=6.0,SNR=4.9
**GERES GERESS Array B 147.95 345** PKPbc **PKPbc** **19 59 04.9 +0.4**
comp=Z,0.7nm,0.5s,baz=153,slow=9.0,SNR=5.6
**LESA Schwarzleotal 149.52 345** *e*PKP **PKiKP** **19 59 09.4 +0.2**
comp=Z,1.5nm,0.8s
**SOKA Soboth 149.58 342** *i* PKP **PKiKP** **19 59 10.6 +1.3**
comp=Z,3.2nm,1.1s
**KBA Koelnbreinsper 149.68 344** *e*PKP **PKiKP** **19 59 09.8 +0.2**
comp=Z,2.9nm,1.1s
**WTTA Wattenberg 149.91 347** *i* PKP **PKiKP** **19 59 10.2 +0.1**
comp=Z,3nm,0.5s
**MOTA Moosalm 149.95 347** *i* PKP **PKiKP** **19 59 10.7 +0.6**
comp=Z,4.1nm,1.0s
**SQTA Sankt Quirin 150.04 347** *e*PKP **PKiKP** **19 59 10.8 +0.5**
comp=Z,1.6nm,0.5s
**ABTA Abfaltersbach 150.19 345** *e*PKP **PKPbc** **19 59 09.8 -0.2**
comp=Z,2.2nm,0.6s
**DAVA Damuels 150.24 349** *e*PKP **PKiKP** **19 59 11.8 +1.0**
comp=Z,2.5nm,0.9s
**FETA Feichten 150.33 348** *i* PKP **PKiKP** **19 59 12.5 +1.5**
comp=Z,4.1nm,1.6s
**FUORN Ofenpass-Fuorn 150.81 348** **PKPbc** **19 59 12.2 +0.5**

*IDC **20** 19:40:46.4±1.0,3°.31S×100°.46E, h0km, mb4.1/15, mbtmp4.2/15, MS3.5/6, Error ellipse: s-maj=35.0km s-min=16.0km az=51.0*
*DJA **20** 19:40:48.3±3.3, 4°S±7°×10°1E±°, h27km±37km, M4.4/7, MLv4.4/7*
*NEIC **20** 19:40:51.2±2.4, 3°.4S±0°.1×100°.7E±0°.1, h33km±6km, mb4.5/22, Error ellipse: s-maj=24.5km s-min=11.9km az=48.0*
**ISC 20 19:40:50.1±0.7, 3°.4S±0°.1×100°.62E±0°.10, h29km, n65, σ1°.04/49, mb4.4/25, MS3.4/6, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.86** | **315** | P | **Pn** | **19 41 05.9** | **-0.4** |
| **PDSI** | **Padang** | **2.45** | **356** | P | **Pn** | **19 41 28.5** | **+0.3** |
| **MNAI** | **Manna** | **2.53** | **113** | Pn | **Pn** | **19 41 28.5** | **-0.8** |
| **MNAI** | **Manna** | **2.53** | **113** | P | **Pn** | **19 41 27.5** | **-1.7** |
| **PBSI** | **Pulau Batu** | **4.04** | **325** | P | **Pn** | **19 41 50.4** | **+0.3** |
| **KASI** | **Kota Agung** | **4.42** | **119** | P | **Pn** | **19 41 53.3** | **-1.9** |
| **GSI** | **Gunungsitoli** | **5.56** | **327** | Pn | **Pn** | **19 42 09.0** | **-1.8** |
| **IPM** | **Ipoh** | **7.81** | **3** | Pn | **Pn** | **19 42 42.6** | **+0.6** |
| **TOLI2** | **Tolitoli** | **20.64** | **78** | P | **P** | **19 45 25.7** | **-1.9** |
| **PHRA** | **Phrae** | **21.74** | **359** | P | **P** | **19 45 39.5** | **+0.1** |
| **CM31** | **Chiang Mai Arr** | **21.76** | **356** | P | **P** | **19 45 38.2** | **-1.3** |
| CM31 | | | | IAmb | IAmb | 19 45 43.4 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.76** | **356** | P | **P** | **19 45 38.2** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **21.76** | **356** | P | **P** | **19 45 38.7** | **-0.8** |
| | comp=Z,4.8nm,0.9s,baz=190,slow=9.0,SNR=18 | | | | | | |
| CMAR | | | | LR | LR | 19 55 34.4 | |
| | comp=Z,72nm,18.1s,baz=190,slow=41 | | | | | | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **PALK** | **Pallekele** | **22.52** | **298** | LR | LR | 19 53 36.1 | |
| | comp=Z,106nm,19.3s,baz=223,slow=34 | | | | | | |
| **CRAI** | **Chiangrai** | **23.46** | **359** | P | **P** | **19 45 56.6** | **-0.7** |
| **SLVN** | **Son La** | **24.77** | **7** | P | **P** | **19 46 10.0** | **+0.5** |
| **H08S2** | **Diego Garcia H** | **28.31** | **260** | T | T | 20 16 00.7 | |
| | baz=83,slow=75,SNR=1496 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.31** | **260** | T | T | 20 16 01.2 | |
| | baz=83,slow=75,SNR=1771 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.32** | **260** | T | T | 20 16 02.0 | |
| | baz=83,slow=75,SNR=895 | | | | | | |
| **SHL** | **Shillong** | **29.99** | **344** | P | **P** | **19 46 56.5** | **-0.1** |
| SHL | | | | IAmb | IAmb | 19 46 58.5 | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.26** | **154** | LR | LR | 20 00 36.2 | |
| | comp=Z,78nm,18.9s,baz=192,slow=36 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.77** | **160** | T | T | 20 23 06.3 | |
| | baz=336,slow=76,SNR=5.6 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.78** | **160** | T | T | 20 23 13.5 | |
| | baz=336,slow=76,SNR=7.6 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.78** | **160** | T | T | 20 23 13.3 | |
| | baz=336,slow=76,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.78** | **119** | P | **P** | **19 47 56.3** | **+0.8** |
| | comp=Z,0.4nm,0.3s,baz=307,slow=8.6,SNR=9.2 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **37.95** | **125** | P | **P** | **19 48 07.5** | **+2.0** |
| | comp=Z,1.1nm,0.4s,baz=305,slow=8.3,SNR=6.7 | | | | | | |
| ASAR | | | | LR | LR | 20 04 39.2 | |
| | comp=Z,62nm,20.0s,baz=332,slow=38 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **NIL** | **Nilore** | **44.99** | **327** | P | **P** | **19 49 02.5** | **-0.5** |
| NIL | | | | IAmb | IAmb | 19 49 03.9 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **47.78** | **131** | P | **P** | **19 49 28.6** | **+3.6** |
| | comp=Z,1.2nm,0.7s,baz=315,slow=10.0,SNR=3.1 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **47.90** | **29** | P | **P** | **19 49 26.4** | **+0.7** |
| | comp=Z,3.7nm,1.0s,baz=218,slow=8.9,SNR=6.8 | | | | | | |
| KSRS | | | | LR | LR | 20 11 33.3 | |
| | comp=Z,33nm,18.4s,baz=170,slow=39 | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **ARSB** | **Arslanbob** | **51.12** | **333** | P | **P** | **19 49 50.1** | **-0.4** |
| **SONM** | **Songino Array** | **51.25** | **5** | P | **P** | **19 49 51.6** | **+0.3** |
| **SONM** | **Songino Array** | **51.25** | **5** | P | **P** | **19 49 52.4** | **+1.1** |
| | comp=Z,8.4nm,0.7s,baz=189,slow=9.4,SNR=62 | | | | | | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.34** | **6** | P | **P** | **19 49 52.0** | **-0.1** |
| ULN | | | | IAmb | IAmb | 19 49 54.1 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **51.54** | **335** | LR | LR | 20 14 34.0 | |
| | comp=Z,66nm,18.3s,baz=167,slow=39 | | | | | | |
| **MK31** | **Makanchi Array** | **52.51** | **344** | IAmb | IAmb | 19 50 01.9 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.51** | **344** | P | **P** | **19 50 00.2** | **-0.4** |
| **MKAR** | **Makanchi Array** | **52.51** | **344** | P | **P** | **19 50 01.1** | **+0.5** |
| | comp=Z,5.4nm,0.8s,baz=147,slow=8.0,SNR=32 | | | | | | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **52.61** | **344** | P | **P** | **19 50 01.3** | **0.0** |
| MAKZ | | | | IAmb | IAmb | 19 50 03.5 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **53.65** | **333** | P | **P** | **19 50 08.7** | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **55.08** | **27** | P | **P** | **19 50 19.8** | **+0.4** |
| | comp=Z,3.9nm,0.8s,baz=224,slow=7.7,SNR=8.7 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.04** | **343** | P | **P** | **19 50 33.0** | **-0.2** |
| | comp=Z,3.0nm,0.9s,baz=162,slow=6.8,SNR=21 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **57.09** | **344** | P | **P** | **19 50 33.5** | **-0.2** |
| KURK | | | | IAmb | IAmb | 19 50 34.8 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.63** | **349** | P | **P** | **19 50 44.0** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **58.63** | **349** | P | **P** | **19 50 44.6** | **+0.3** |
| | comp=Z,7.9nm,0.9s,baz=163,slow=5.6,SNR=27 | | | | | | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **60.07** | **217** | T | T | 20 55 48.8 | |
| | baz=60,slow=75,SNR=525 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.08** | **217** | T | T | 20 55 48.9 | |
| | baz=60,slow=75,SNR=524 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.09** | **217** | T | T | 20 55 48.7 | |
| | baz=60,slow=75,SNR=469 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **60.34** | **216** | T | T | 20 56 04.8 | |
| | baz=59,slow=76,SNR=44 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **60.36** | **216** | T | T | 20 56 13.1 | |
| | baz=59,slow=76,SNR=84 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **60.36** | **216** | T | T | 20 56 06.5 | |
| | baz=59,slow=76,SNR=47 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.68** | **340** | P | **P** | **19 51 04.7** | **-0.7** |
| | comp=Z,1.8nm,0.6s,baz=145,slow=8.9,SNR=16 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **61.74** | **340** | P | **P** | **19 51 05.0** | **-0.8** |
| BRVK | | | | IAmb | IAmb | 19 51 06.5 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **62.32** | **31** | P | **P** | **19 51 10.0** | **+0.3** |
| YSS | | | | IAmb | IAmb | 19 51 20.5 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **63.14** | **331** | P | **P** | **19 51 14.1** | **-1.1** |
| ABKAR | | | | IAmb | IAmb | 19 51 15.4 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **68.91** | **14** | P | **P** | **19 51 51.0** | **-1.0** |
| **MMAI** | **Mount Meron Ar** | **71.34** | **306** | P | **P** | **19 52 08.4** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=100,slow=7.5,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.70** | **313** | P | **P** | **19 52 26.1** | **-1.4** |
| | comp=Z,0.4nm,0.7s,baz=154,slow=6.9,SNR=4.4 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **MLR** | **Muntele Rosu** | **81.72** | **317** | P | **P** | **19 53 06.3** | **+0.1** |
| | comp=Z,0.7nm,0.4s,baz=142,slow=20,SNR=1.8 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **85.61** | **332** | P | **P** | **19 53 26.8** | **+1.2** |
| | comp=Z,3.0nm,1.0s,baz=120,slow=8.2,SNR=1.8 | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **R50A** | **Paris** | **144.97** | **7** | | **PKPab** | **20 00 23.4** | **-0.8** |
| **SGCY** | **Sterling City** | **145.02** | **33** | PKPdf | **PKPbc** | **20 00 24.3** | **-0.4** |
| **PBMO** | **Poplar Bluff** | **145.24** | **16** | | **PKPbc** | **20 00 23.9** | **-1.2** |
| **TX31** | **Lajitas Ar. Si** | **145.39** | **39** | PKPdf | **PKPbc** | **20 00 26.2** | **+0.1** |
| **TXAR** | **Lajitas Array** | **145.39** | **39** | PKPdf | **PKPbc** | **20 00 26.1** | **0.0** |
| **TXAR** | **Lajitas Array** | **145.39** | **39** | PKPbc | **PKPbc** | **20 00 26.3** | **+0.2** |
| | comp=Z,3.9nm,0.8s,baz=290,slow=1.4,SNR=35 | | | | | | |

*SKHL **20** 19:42:25.7±0.5, 46°.80N×141°.80E, h13km±2km, mb3.9/5*
*JMA **20** 19:42:25.1±0.4, 47°N±2°×14°2E±°, h0km, MV2.7/14, SOUTH SAKHALIN*
**ISC 20 19:42:25.4±3.1, 46°.8N±0°.1×141°.7E±0°.2, h6km±21km, n5, σ0°.20/10, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KHLM** | **Kholmsk** | **0.33** | **42** | *i* Pg | **Pb** | **19 42 33.6** | **0.0** |
| KHLM | | | | AMB | AMB | 19 42 34.1 | |
| | 290nm,0.2s | | | | | | |
| KHLM | | | | *e*Sg | **Sb** | **19 42 39.3** | **+0.2** |
| KHLM | | | | A | A | 19 42 39.9 | |
| | 3μm,0.3s | | | | | | |
| KHLM | | | | A | A | 19 42 39.9 | |
| | 2μm,0.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **0.71** | **78** | *e*Pg | **Pg** | **19 42 38.9** | **-0.2** |
| YSS | | | | AMB | AMB | 19 42 39.0 | |
| | 10.0nm,0.4s | | | | | | |
| YSS | | | | *e*Sg | **Sg** | **19 42 48.4** | **+0.1** |
| YSS | | | | A | A | 19 42 49.2 | |
| | 240nm,0.3s | | | | | | |
| YSS | | | | A | A | 19 42 49.2 | |
| | 170nm,0.3s | | | | | | |
| **JRBN** | **Rebuntou** | **1.47** | **199** | *e*P | **Pn** | **19 42 52.4** | **+0.1** |
| JRBN | | | | *e*S | **Sn** | **19 43 11.5** | **-0.3** |
| **JWK2** | **Keihoku** | **1.50** | **176** | *e*P | **Pb** | **19 42 53.6** | **0.0** |
| JWK2 | | | | *e*S | **Sg** | **19 43 13.8** | **+0.2** |
| **JRR** | **Rishiri** | **1.70** | **190** | *e*P | **Pb** | **19 42 57.2** | **+0.2** |
| JRR | | | | *e*S | **Sg** | **19 43 19.9** | **-0.1** |

*IDC **20** 19:49:37.4±0.7, 1°.02S×24°.60W, h0km, mb4.0/15, mbtmp4.1/16, ML3.8/1, MS3.6/39, Error ellipse: s-maj=31.6km s-min=15.9km az=142.0*
*NEIC **20** 19:49:39.6±2.0, 1°.0S±0°.2×24°.58W±0°.07, h10km±1km, mb4.5/23, Error ellipse: s-maj=28.9km s-min=5.0km az=159.0*
**ISC 20 19:49:40.5±0.6, 1°.1S±0°.1×24°.62W±0°.09, h22km, n84, σ0°.95/47, mb4.4/27, MS3.7/37, 3C, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N3** | **ASCENSION HYDR** | **12.12** | **124** | T | T | 20 05 05.2 | |
| | baz=304,slow=74,SNR=97 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **12.12** | **124** | T | T | 20 04 55.7 | |
| | baz=304,slow=74,SNR=177 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **12.13** | **124** | T | T | 20 04 56.2 | |
| | baz=304,slow=74,SNR=200 | | | | | | |
| **RCBR** | **Riachuelo** | **12.21** | **247** | Pn | **Pn** | **19 52 31.0** | **-2.2** |
| **RCBR** | **Riachuelo** | **12.21** | **247** | Pn | **Pn** | **19 52 31.0** | **-2.2** |
| | 0.5nm,0.3s,baz=63,slow=18,SNR=10 | | | | | | |
| RCBR | | | | Sn | Sn | 19 54 36.7 | -12 |
| | 0.1nm,0.3s,baz=63,slow=22,SNR=1.2 | | | | | | |
| RCBR | | | | LR | LR | 19 56 11.0 | |
| | comp=Z,127nm,21.3s,baz=1.0,slow=32 | | | | | | |
| | 5.1nm,0.7s | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **12.63** | **129** | T | T | 20 05 34.0 | |
| | baz=307,slow=74,SNR=56 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **12.64** | **129** | T | T | 20 05 36.5 | |
| | baz=273,slow=74,SNR=39 | | | | | | |
| **BBTS** | **Babate** | **17.56** | **27** | LR | LR | 19 58 53.9 | |
| | comp=Z,162nm,21.5s,baz=104,slow=32 | | | | | | |
| **LIC** | **Lamto** | **20.86** | **69** | ↑*eP* | **P** | **19 54 20.9** | **-0.2** |
| | 54nm,1.0s | | | | | | |
| **TIC** | **Toumodi** | **21.01** | **68** | ↑*iP* | **P** | **19 54 22.9** | **+0.1** |
| | 1.6nm,0.2s | | | | | | |
| **DBIC** | **Dimbokro** | **21.17** | **68** | P | **P** | **19 54 23.5** | **-1.0** |
| DBIC | | | | IAmb | IAmb | 19 54 34.0 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **DBIC** | **Dimbokro** | **21.17** | **68** | P | **P** | **19 54 23.8** | **-0.7** |
| | comp=Z,13nm,0.9s,baz=235,slow=12,SNR=11 | | | | | | |
| DBIC | | | | LR | LR | 20 00 44.2 | |
| | comp=Z,330nm,20.9s,baz=248,slow=32 | | | | | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **KIC** | **Kosan Boka** | **21.17** | **69** | ↑*iP* | **P** | **19 54 24.2** | **-0.3** |
| | comp=Z,23nm,0.9s | | | | | | |
| **BDFB** | **Brasilia** | **27.24** | **237** | LR | LR | 20 05 31.0 | |
| | comp=Z,333nm,18.9s,baz=54,slow=35 | | | | | | |
| **MDP** | **Montagnes des** | **28.66** | **283** | LR | LR | 20 05 16.1 | |
| | comp=Z,50nm,21.8s,baz=112,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.68** | **61** | P | **P** | **19 55 44.3** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **29.68** | **61** | P | **P** | **19 55 44.3** | **-0.7** |
| | comp=Z,1.4nm,0.9s,baz=254,slow=8.8,SNR=7.0 | | | | | | |
| TORD | | | | PcP | **PcP** | **19 58 49.9** | **+0.7** |
| | comp=Z,0.3nm,0.7s,baz=225,slow=3.9,SNR=1.8 | | | | | | |
| TORD | | | | LR | LR | 20 06 14.8 | |
| | comp=Z,160nm,19.8s,baz=258,slow=34 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **TAM** | **Tamanrasset** | **37.74** | **49** | P | **P** | **19 56 55.0** | **-0.2** |
| **MDT** | **Midelt** | **38.64** | **27** | LR | LR | 20 12 09.9 | |
| | comp=Z,99nm,19.6s,baz=158,slow=35 | | | | | | |
| **SIV** | **San Ignacio** | **38.87** | **246** | P | **P** | **19 57 05.2** | **+0.6** |
| | comp=Z,0.6nm,0.3s,baz=109,slow=9.1,SNR=3.6 | | | | | | |
| SIV | | | | LR | LR | 20 12 20.2 | |
| | comp=Z,169nm,21.4s,baz=114,slow=35 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **SAML** | **Samuel** | **39.17** | **257** | P | **P** | **19 57 08.1** | **+0.9** |
| **CPUP** | **Villa Florida** | **40.25** | **229** | LR | LR | 20 13 35.8 | |
| | comp=Z,110nm,18.0s,baz=59,slow=36 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **41.36** | **287** | LR | LR | 20 13 15.4 | |
| | comp=Z,56nm,18.6s,slow=34 | | | | | | |
| **SMRT** | **St. Maarten** | **42.34** | **299** | P | **P** | **19 57 34.3** | **+1.0** |
| **MTE** | **Manteigas** | **44.12** | **19** | P | **P** | **19 57 48.5** | **+1.1** |
| MTE | | | | IAmb | IAmb | 19 58 31.5 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **CART** | **Cartagena** | **44.24** | **27** | P | **P** | **19 57 46.3** | **-1.9** |
| **ESDC** | **Sonseca Array** | **44.75** | **23** | P | **P** | **19 57 54.1** | **+1.7** |
| **ESDC** | **Sonseca Array** | **44.75** | **23** | P | **P** | **19 57 52.7** | **+0.3** |
| | comp=Z,1.3nm,1.0s,baz=222,slow=8.3,SNR=8.2 | | | | | | |
| | comp=Z,1.3nm,1.0s | | | | | | |
| **ESBB** | **Sonseca Array** | **44.75** | **23** | P | **P** | **19 57 53.1** | **+0.7** |
| ESBB | | | | IAmb | IAmb | 19 58 02.2 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **HUMP** | **Col San Antoni** | **44.83** | **297** | P | **P** | **19 57 53.0** | **-0.2** |
| **IGPR** | **InterUniversit** | **44.99** | **297** | P | **P** | **19 57 53.4** | **-1.2** |
| **LPAZ** | **La Paz** | **45.45** | **248** | P | **P** | **19 58 00.0** | **+1.0** |
| LPAZ | | | | IAmb | IAmb | 19 58 09.9 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **45.45** | **248** | P | **P** | **19 57 59.7** | **+0.8** |
| | comp=Z,1.3nm,0.8s,baz=84,slow=5.3,SNR=4.6 | | | | | | |
| LPAZ | | | | LR | LR | 20 16 04.1 | |
| | comp=Z,116nm,21.9s,baz=72,slow=35 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **SDV** | **Santo Domingo** | **46.90** | **283** | LR | LR | 20 15 42.3 | |
| | comp=Z,56nm,21.4s,baz=76,slow=33 | | | | | | |
| **LVC** | **Limon Verde** | **48.05** | **240** | LR | LR | 20 19 19.6 | |
| | comp=Z,85nm,18.4s,baz=20,slow=37 | | | | | | |
| **KEST** | **Kesra** | **48.41** | **37** | LR | LR | 20 19 51.3 | |
| | comp=Z,225nm,18.2s,baz=261,slow=38 | | | | | | |
| **ROSC** | **El Rosal** | **50.00** | **277** | LR | LR | 20 18 55.1 | |
| | comp=Z,100nm,18.6s,baz=78,slow=35 | | | | | | |
| **VAE** | **Valguarnera** | **52.66** | **39** | LR | LR | 20 22 59.4 | |
| | comp=Z,109nm,18.2s,baz=142,slow=38 | | | | | | |
| **NNA** | **Nana** | **52.91** | **256** | LR | LR | 20 20 26.0 | |
| | comp=Z,194nm,21.8s,baz=36,slow=35 | | | | | | |
| **ATAH** | **Atahualpa** | **53.94** | **262** | LR | LR | 20 21 25.3 | |
| | comp=Z,153nm,20.7s,baz=83,slow=35 | | | | | | |
| **MBAR** | **Mbarara** | **55.35** | **90** | LR | LR | 20 19 41.8 | |
| | comp=Z,160nm,20.2s,baz=227,slow=33 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **56.44** | **28** | LR | LR | 20 20 45.2 | |
| | comp=Z,17nm,21.8s,baz=260,slow=33 | | | | | | |
| **CTI** | **Castel Tesino** | **56.77** | **30** | P | **P** | **19 59 22.0** | **-1.0** |
| CTI | | | | IAmb | IAmb | 19 59 23.7 | |
| | comp=Z,6.4nm,1.5s | | | | | | |
| **PLCA** | **Paso Flores** | **57.28** | **220** | LR | LR | 20 22 20.2 | |
| | comp=Z,32nm,18.0s,baz=172,slow=34 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **58.91** | **14** | P | **P** | **19 59 37.9** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=201,slow=4.5,SNR=3.6 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **59.72** | **28** | P | **P** | **19 59 43.5** | **-0.1** |
| | comp=Z,0.3nm,0.4s,baz=224,slow=6.9,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **LODK** | **Lodwar** | **60.12** | **85** | P | **P** | **19 59 46.3** | **-0.7** |
| LODK | | | | IAmb | IAmb | 19 59 49.7 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **JTS** | **Las Juntas de** | **61.07** | **282** | LR | LR | 20 26 53.1 | |
| | comp=Z,18nm,19.0s,baz=219,slow=37 | | | | | | |
| **CLL** | **Collm** | **61.15** | **26** | *e*S | S | 20 08 21.0 | +10 |
| **VRAC** | **Vranov** | **61.43** | **29** | LR | LR | 20 27 13.7 | |
| | comp=Z,25nm,18.8s,baz=322,slow=37 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **61.86** | **91** | LR | LR | 20 23 54.2 | |
| | comp=Z,162nm,19.1s,baz=281,slow=33 | | | | | | |
| **MORC** | **Moravsky Berou** | **62.21** | **29** | P | **P** | **20 00 00.2** | **-0.2** |
| MORC | | | | IAmb | IAmb | 20 00 05.6 | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **MLR** | **Muntele Rosu** | **64.31** | **37** | P | **P** | **20 00 14.2** | **-0.4** |
| MLR | | | | IAmb | IAmb | 20 00 17.7 | |
| | comp=Z,8.1nm,1.2s | | | | | | |
| **MLR** | **Muntele Rosu** | **64.31** | **37** | P | **P** | **20 00 14.9** | **+0.4** |
| | comp=Z,6.6nm,1.2s,baz=83,slow=13,SNR=3.3 | | | | | | |
| MLR | | | | LR | LR | 20 28 41.4 | |
| | comp=Z,62nm,21.1s,baz=230,slow=36 | | | | | | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **EIL** | **Elat** | **64.43** | **56** | LR | LR | 20 29 45.3 | |
| | comp=Z,74nm,18.1s,baz=249,slow=37 | | | | | | |
| **TKL** | **Tuckaleechee C** | **66.01** | **310** | LR | LR | 20 22 44.8 | |
| | comp=Z,62nm,21.5s,baz=113,slow=30 | | | | | | |
| **SADO** | **Sadowa** | **66.41** | **321** | LR | LR | 20 25 45.9 | |
| | comp=Z,19nm,18.4s,baz=356,slow=33 | | | | | | |
| **BRTR** | **Keskin Array B** | **66.81** | **46** | P | **P** | **20 00 31.0** | **+0.1** |
| | comp=Z,0.9nm,0.8s,baz=218,slow=5.5,SNR=5.3 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **67.78** | **18** | LR | LR | 20 25 05.2 | |
| | comp=Z,6.1nm,21.7s,baz=55,slow=31 | | | | | | |
| **KIEV** | **Kiev** | **68.84** | **33** | P | **P** | **20 00 42.4** | **-0.8** |
| KIEV | | | | IAmb | IAmb | 20 00 43.7 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **68.85** | **33** | P | **P** | **20 00 42.6** | **-0.7** |
| | comp=Z,2.1nm,0.7s,baz=240,slow=6.9,SNR=6.4 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **AKBB** | **Malin Array Si** | **68.85** | **33** | P | **P** | **20 00 42.5** | **-0.7** |
| AKBB | | | | IAmb | IAmb | 20 00 43.8 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **CMIG** | **Matias Romero** | **71.49** | **288** | LR | LR | 20 33 53.5 | |
| | comp=Z,28nm,18.3s,baz=185,slow=37 | | | | | | |
| **GURO** | **Guroymak-BITLI** | **72.59** | **49** | P | **P** | **20 01 06.1** | **-0.4** |
| GURO | | | | IAmb | IAmb | 20 01 17.3 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **FINES** | **FINESS Array B** | **73.26** | **23** | P | **P** | **20 01 10.2** | **+0.4** |
| | comp=Z,2.4nm,0.9s,baz=238,slow=8.0,SNR=1.7 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **74.67** | **44** | P | **P** | **20 01 19.3** | **+0.9** |
| | comp=Z,3.3nm,0.9s,baz=178,slow=2.8,SNR=4.5 | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **ECSD** | **EROS Data Cent** | **77.81** | **315** | P | **P** | **20 01 36.9** | **+0.6** |
| ECSD | | | | IAmb | IAmb | 20 02 00.5 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **78.93** | **322** | LR | LR | 20 30 12.5 | |
| | comp=Z,34nm,22.0s,baz=348,slow=31 | | | | | | |
| **SAND** | **Sanderson** | **79.72** | **301** | P | **P** | **20 01 46.5** | **-0.6** |
| **TXAR** | **Lajitas Array** | **80.98** | **300** | P | **P** | **20 01 54.4** | **+0.4** |
| | comp=Z,0.3nm,0.7s,baz=120,slow=5.3,SNR=1.4 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **VHRN** | **Van Horn** | **82.27** | **301** | P | **P** | **20 02 01.4** | **+0.5** |
| VHRN | | | | IAmb | IAmb | 20 02 03.8 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **83.92** | **305** | LR | LR | 20 34 46.8 | |
| | comp=Z,36nm,20.2s,baz=186,slow=32 | | | | | | |
| **PDAR** | **Pinedale Array** | **87.00** | **313** | LR | LR | 20 35 29.6 | |
| | comp=Z,42nm,21.7s,baz=118,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **89.00** | **180** | | **P** | **20 02 35.7** | **+2.2** |
| **QSPA** | **South Pole Qui** | **89.00** | **180** | P | **P** | **20 02 34.9** | **+1.4** |
| | comp=Z,3.5nm,1.0s,baz=228,slow=1.4,SNR=3.2 | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.94** | **332** | P | **P** | **20 02 42.8** | **+0.3** |
| | comp=Z,1.1nm,0.8s,baz=83,slow=5.9,SNR=3.1 | | | | | | |
| YKA | | | | LR | LR | 20 38 51.4 | |
| | comp=Z,53nm,20.4s,baz=96,slow=32 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **ELK** | **Elko** | **91.17** | **311** | LR | LR | 20 38 57.0 | |
| | comp=Z,28nm,19.0s,baz=108,slow=32 | | | | | | |
| **

ASAR S S 20 21 10.1 -1.9
1.4nm,0.8s,baz=83,slow=16,SNR=8.2
2.1nm,0.7s
MTN Manton Dam 47.89 268 P P 20 15 48.2 +1.1
FORT Forrest 49.55 244 P P 20 15 59.7 +0.5
FORT IAmb IAmb 20 16 34.1
comp=Z,14nm,0.9s
KNRA Kununurra 49.65 264 P P 20 16 00.2 +0.1
KNRA IAmb IAmb 20 16 09.3
comp=Z,28nm,1.4s
CASY Casey 66.56 204 P P 20 17 54.9 +1.3
MJAR Matsushiro Arr 66.63 324 P P 20 17 53.7 -0.8
comp=Z,4.5nm,0.8s,baz=155,slow=5.7,SNR=11
comp=Z,4.5nm,0.8s
MAJO Matsushiro 66.63 324 P P 20 17 54.3 -0.2
NIKH Nikolski High 70.28 7 P P 20 18 15.7 -0.5
NIKH Nikolski High 70.28 7 P P 20 18 15.1 -1.1
baz=191
UNV Unalaska Valle 71.43 8 P P 20 18 21.6 -1.3
UNV Unalaska Valle 71.43 8 P P 20 18 21.9 -1.0
baz=193
PETK Petropavlovsk- 72.58 346 P P 20 18 29.4 -0.2
comp=Z,18nm,0.9s,baz=130,slow=6.7,SNR=8.8
comp=Z,18nm,0.9s
QSPA South Pole Qui 73.04 180 P 20 18 33.1 +0.8
KSRS Korea Array 73.41 319 P P 20 18 35.2 +0.5
comp=Z,3.1nm,1.0s,baz=146,slow=7.2,SNR=4.2
comp=Z,3.1nm,1.0s
CHNA Chernabura Isl 73.52 12 P P 20 18 34.2 -0.7
baz=200
SDPT Sand Point 73.84 11 P P 20 18 36.4 -0.3
baz=199
S12K Black Hills 73.90 10 P P 20 18 35.7 -1.4
S12K Black Hills 73.90 10 P P 20 18 36.5 -0.6
baz=197
S14K Fog Glacier 74.90 11 P P 20 18 42.5 -0.3
baz=200
CHIR Chirikof Islan 75.28 14 P P 20 18 44.8 0.0
baz=203
USRK Ussuriysk Ar. 75.35 326 P P 20 18 46.2 +0.7
comp=Z,1.7nm,0.8s,baz=116,slow=3.4,SNR=3.3
comp=Z,1.7nm,0.8s
SII Sitkinak Islan 76.28 14 P P 20 18 49.9 -0.5
baz=205
NJ2 Nanjing 76.64 310 eP P 20 18 54.3 +1.4
NJ2 pmax pmax
comp=Z,7.0nm,0.5s
NJ2 pmax pmax
comp=Z,210nm,4.4s
R17L Mt. Peulik Vol 76.79 12 P P 20 18 53.2 +0.1
baz=202
PLK4 Peulik 4 76.79 12 P P 20 18 52.7 -0.5
BCW Bitter Crk WRg 76.85 47 P P 20 18 53.7 -0.5
BCW IAmb IAmb 20 18 58.9
comp=Z,19nm,1.1s
MDJ Mudanjiang 76.91 325 P P 20 18 54.5 +0.4
MDJ IAmb IAmb 20 18 57.1
comp=Z,13nm,1.0s
OHAK Old Harbor 77.09 14 P P 20 18 54.6 -0.1
OHAK IAmb IAmb 20 18 57.8
comp=Z,35nm,1.4s
OHAK Old Harbor 77.09 14 P P 20 18 55.2 +0.5
baz=206
R18K Karluk 77.14 13 P P 20 18 54.8 -0.2
baz=204
O14K Tigyukauivet M 77.42 9 P P 20 18 55.6 -0.9
O14K IAmb IAmb 20 19 34.6
comp=Z,35nm,1.4s
Q17K Contact Creek 77.47 12 P P 20 18 56.9 0.0
baz=203
KDAK Kodiak Island 77.76 14 P P 20 18 58.7 +0.4
baz=206
CMB Columbia Colle 77.84 44 P P 20 18 59.5 +0.1
ISA Isabella, Lake 77.88 47 P P 20 19 00.3 +0.6
ISA IAmb IAmb 20 19 01.4
comp=Z,15nm,0.9s
AFDM Forest Hills D 77.95 43 P P 20 18 59.4 -0.5
MONP2 Monument Peak 77.95 50 P P 20 19 00.8 +0.5
baz=241
N14K Kuskokwak Cree 78.00 9 P P 20 19 00.1 +0.6
baz=197
Q18K Katmai Hardscr 78.01 13 P P 20 18 59.7 -0.1
baz=204
YUH Yuha Desert 78.20 50 P P 20 19 01.1 -0.3
P17K Kvichak River 78.22 12 P P 20 19 00.5 -0.3
baz=202
M13K Dall Lake 78.23 8 P P 20 19 01.0 +0.1
baz=196
O16K Kokwok River B 78.28 11 P P 20 19 00.3 -0.8
baz=201
PFO Pinyon Flats O 78.28 49 P P 20 19 02.0 +0.1
baz=240
TPFO Pinon Flats 78.28 49 P P 20 19 01.5 -0.5
baz=240
YBH Yreka Blue Hor 78.43 40 P P 20 19 03.1 +0.6
N15K Kwethluk River 78.48 10 P P 20 19 02.2 0.0
N15K IAmb IAmb 20 19 03.4
comp=Z,26nm,1.2s
N15K Kwethluk River 78.48 10 P P 20 19 02.0 -0.2
baz=199
OMMB Old Mammoth Mi 78.54 45 P P 20 19 03.7 +0.3
Q20K Shuyak Island 78.55 14 P P 20 19 02.8 +0.2
baz=206
Q19K Cape Douglas, 78.56 13 P P 20 19 02.6 -0.1
baz=205
O17K Koliganek Bris 78.63 11 P P 20 19 02.9 -0.1
baz=202
P18K Big Mountain, 78.64 12 P P 20 19 02.6 -0.5
P18K IAmb IAmb 20 19 03.8
comp=Z,20nm,0.8s
P18K Big Mountain, 78.64 12 P P 20 19 03.1 0.0
baz=204
WAKR Walker 78.72 44 P P 20 19 04.5 +0.3
M14K Bethel 78.75 9 P P 20 19 03.6 0.0
M14K IAmb IAmb 20 19 05.3
comp=Z,32nm,1.4s
M14K Bethel 78.75 9 P P 20 19 04.3 +0.7
baz=197
HUMO Hull Mountain 78.79 39 P P 20 19 04.9 +0.6
BNX BinXian 78.82 325 ⇑P P 20 19 05.0 +0.7
BNX pmax pmax
comp=Z,18nm,1.0s
KLR Kul'dur 78.86 330 P P 20 19 04.5 0.0
comp=Z,2.2nm,0.8s,baz=85,slow=2.7,SNR=3.6
comp=Z,2.2nm,0.8s
GSC Goldstone, Bar 78.87 48 P P 20 19 04.6 -0.3
M15K Kasigluk River 78.89 9 P P 20 19 04.7 +0.4
baz=198
PNTR Pine Nut 78.93 43 P P 20 19 05.5 +0.1
PNTR IAmb IAmb 20 19 07.1
comp=Z,17nm,0.9s
N16K Nishlik Lake 78.99 10 P P 20 19 05.7 +0.8
baz=200
O18K Koktuh Hills 79.07 12 P P 20 19 04.3 -1.1
O18K Koktuh Hills 79.07 12 P P 20 19 05.1 -0.3
baz=204
YERR Yerington 79.11 44 P P 20 19 05.5 -0.8
YERR IAmb IAmb 20 19 07.8
comp=Z,17nm,1.0s
DSP Deep Springs 79.11 45 P P 20 19 06.7 +0.6
DSP IAmb IAmb 20 19 08.1
comp=Z,18nm,1.1s
LHV Little Huntoon 79.21 44 IAmb IAmb 20 19 08.7
comp=Z,21nm,1.1s
L14K Kuka Creek 79.22 8 P P 20 19 05.7 -0.3
L14K Kuka Creek 79.22 8 P P 20 19 06.6 +0.6
baz=196
P19K Oil Pt 79.30 13 P P 20 19 06.6 -0.1
baz=205
N17K Nushagak Hills 79.32 11 P P 20 19 06.1 -0.6
N17K IAmb IAmb 20 19 08.0
comp=Z,18nm,1.4s
N17K Nushagak Hills 79.32 11 P P 20 19 06.7 0.0
baz=202
PAHR Pah Rah Range 79.40 43 P P 20 19 07.4 -0.4
NVAR Mina Array Bea 79.44 44 P P 20 19 07.8 -0.3
NVAR Mina Array Bea 79.44 44 P P 20 19 07.5 -0.6
comp=Z,7.1nm,0.9s,baz=227,slow=8.9,SNR=32
comp=Z,7.1nm,0.9s
M16K Timber Creek 79.47 10 P P 20 19 08.3 +0.9
M16K Timber Creek 79.47 10 P P 20 19 08.7 +1.3
baz=200,SNR=8.7
NV11 Mina Array Sit 79.54 44 IAmb IAmb 20 19 10.2
comp=Z,15nm,1.1s
K13K Kusilvak Mount 79.54 7 P P 20 19 08.9 +1.1
baz=194
O19K Port Alsworth 79.57 12 P P 20 19 08.1 +0.2
baz=204
ILSW Iliamna Southw 79.62 13 P P 20 19 07.5 -1.0
N18K Kilae Creek 79.70 12 P P 20 19 08.7 0.0
baz=203
L15K Ungalak Mounta 79.71 9 P P 20 19 09.1 +0.5
baz=197,SNR=5.8
O20K Slope Mountain 79.82 13 P P 20 19 09.5 +0.1
baz=206
BRSE Bradley Lake S 79.95 14 P P 20 19 10.1 +0.2
baz=208
L16K Owhat River 80.04 9 IAmb IAmb 20 19 11.9
comp=Z,14nm,1.1s
L16K Owhat River 80.04 9 P P 20 19 11.2 +0.9
baz=199
M17K Holitna River 80.09 11 P P 20 19 12.0 +1.3
baz=201,SNR=9.5
N19K Bonanza Creek 80.10 12 P P 20 19 10.7 -0.1
baz=204
214A Organ Pipe Nat 80.21 52 P P 20 19 13.0 +1.0
baz=243
J05D Fort Rock, OR 80.21 39 P P 20 19 11.9 0.0
K15K Wolf Creek Mou 80.29 8 P P 20 19 12.6 +0.9
baz=197,SNR=11
H04A Detroit Lake 80.45 37 P P 20 19 13.2 +0.2
H04A IAmb IAmb 20 19 14.2
comp=Z,17nm,1.2s
M18K Stony River 80.46 11 P P 20 19 13.0 +0.4
baz=203
SEW Seward 80.58 15 P P 20 19 12.9 -0.2
baz=209
L17K Donlin 80.63 10 P P 20 19 14.6 +1.1
baz=200,SNR=15
PINE Pine Mountain 80.68 39 IAmb IAmb 20 19 16.3
comp=Z,19nm,1.0s
E03A Lebam 80.76 35 P P 20 19 15.0 +0.5
SPU Mount Spurr 80.94 13 IAmb IAmb 20 19 16.2
comp=Z,16nm,1.2s
L18K Granite Mounta 80.98 11 P P 20 19 16.1 +0.8
baz=202,SNR=15
NLWA Neilton Lookou 81.10 35 IAmb IAmb 20 19 18.1
comp=Z,14nm,1.0s
M19K Big River Lodg 81.11 12 P P 20 19 15.5 -0.5
M19K IAmb IAmb 20 19 31.5
comp=Z,18nm,1.4s
M19K Big River Lodg 81.11 12 P P 20 19 15.6 -0.4
baz=204
PRN Pahroc Range 81.14 47 IAmb IAmb 20 19 19.0
comp=Z,19nm,1.0s
K17K Iditarod 81.18 10 IAmb IAmb 20 19 18.0
comp=Z,22nm,1.1s
K17K Iditarod 81.18 10 P P 20 19 17.3 +1.1
baz=200,SNR=5.2
BMN Battle Mountai 81.19 43 IAmb IAmb 20 19 18.8
comp=Z,22nm,1.1s
R11B Troy Canyon, C 81.23 46 P P 20 19 17.5 +0.1
baz=240
L19K White Mountain 81.28 11 IAmb IAmb 20 19 18.9
comp=Z,22nm,1.2s
L19K White Mountain 81.28 11 P P 20 19 17.4 +0.5
baz=204,SNR=9.0
WVOR Wild Horse Val 81.34 41 IAmb IAmb 20 19 19.5
comp=Z,16nm,1.0s
J16K Anvik River 81.37 8 P P 20 19 18.0 +0.8
baz=198,SNR=9.2
SUA Susitna One 81.48 13 IAmb IAmb 20 19 19.0
comp=Z,20nm,1.0s
SUA Susitna One 81.48 13 P P 20 19 17.6 -0.4
baz=208
PWL Port Wells 81.51 15 P P 20 19 17.4 -0.7
baz=210
HEH HeiHe 81.66 329 eP P 20 19 19.4 +0.4
HEH pmax pmax
comp=Z,6.0nm,1.2s
J17K VABM Dome 81.70 9 IAmb IAmb 20 19 20.5
comp=Z,18nm,0.9s
J17K VABM Dome 81.70 9 P P 20 19 19.5 +0.6
baz=200,SNR=8.7
I07A Izee 81.70 39 IAmb IAmb 20 19 21.3
comp=Z,16nm,1.0s
L20K Farewell, AK 81.74 12 P P 20 19 19.2 0.0
baz=204,SNR=7.8
GNW Green Mountain 81.77 35 P P 20 19 20.0 +0.3
GNW IAmb IAmb 20 19 21.2
comp=Z,11nm,1.0s
GLI Glacier Island 81.83 15 P P 20 19 18.6 -1.1
baz=211
M22K Willow 81.87 14 P P 20 19 19.1 -0.7
baz=208
TUC Tucson 81.90 53 P P 20 19 22.2 +1.4
TUC IAmb IAmb 20 19 23.4
comp=Z,17nm,1.1s
J08A Circle Bar Ran 81.94 40 IAmb IAmb 20 19 22.4
comp=Z,18nm,1.0s
PMR Palmer 81.96 14 P P 20 19 19.3 -0.9
PMR Palmer 81.96 14 P P 20 19 20.3 +0.1
baz=209
KNK Knik Glacier 81.96 14 P P 20 19 20.5 +0.1
baz=210
D05A Enumclaw 82.01 35 P P 20 19 21.2 +0.3
Q12A Willow Creek R 82.09 45 IAmb IAmb 20 19 23.4
comp=Z,22nm,1.1s
J18K Innoko River 82.14 10 IAmb IAmb 20 19 22.3
comp=Z,19nm,0.9s
J18K Innoko River 82.14 10 P P 20 19 21.4 +0.2
baz=202,SNR=16
GHO Glory Hole Cre 82.17 14 IAmb IAmb 20 19 21.9
comp=Z,15nm,0.8s
X16A Lo Mia Camp, P 82.34 51 P P 20 19 24.2 +1.1
X16A IAmb IAmb 20 19 25.4
comp=Z,16nm,1.1s
CCUT Cedar City 82.39 47 P P 20 19 24.2 +0.9
SIT Sitka 82.41 23 P P 20 19 22.6 0.0
baz=222
SPR3 Spring Creek 3 82.41 45 P P 20 19 22.9 -0.6
SPR3 IAmb IAmb 20 19 24.8
comp=Z,13nm,1.1s
CUT Chulitna 82.42 13 P P 20 19 21.8 -0.8
CUT Chulitna 82.42 13 P P 20 19 22.2 -0.4
baz=208
H16K Elim 82.45 7 P P 20 19 23.3 +0.6
baz=196
M23K Glacier View 82.47 15 P P 20 19 23.1 +0.2
baz=210
K20K Telida 82.51 11 P P 20 19 23.0 -0.1
baz=204,SNR=17
PSUT Pine Spring 82.51 46 P P 20 19 24.3 +0.4
PSUT IAmb IAmb 20 19 25.5
comp=Z,12nm,1.1s
U33K Whale Pass 82.55 24 P P 20 19 24.0 +0.6
baz=224
BMRM Bremner River 82.56 16 P P 20 19 23.5 +0.1
baz=213
G15K Niukluk 82.59 7 P P 20 19 24.0 +0.6
baz=195
V35K Ketchikan 82.60 25 P P 20 19 24.1 +0.5
baz=226
SCM Sheep Creek Mo 82.60 15 P P 20 19 24.0 +0.4
baz=211
MXC Moxie City 82.62 37 P P 20 19 22.6 -1.4
U15A North Rim 82.63 49 pwP 20 21 23.9 -0.7
KLU Klutina 82.66 15 P P 20 19 23.6 -0.3
baz=212
319A Douglas 82.66 54 IAmb IAmb 20 19 27.4
comp=Z,19nm,1.0s
G08A Pilot Rock 82.69 38 IAmb IAmb 20 19 26.0
comp=Z,13nm,1.1s
SEY Seymchan 82.69 347 P P 20 19 23.7 -0.3
comp=Z,18nm,0.8s,baz=135,slow=6.2,SNR=22
comp=Z,18nm,0.8s
S31K Pelican 82.76 22 P P 20 19 25.2 +0.8
baz=221
TNA Tin City 82.78 5 P P 20 19 25.0 +0.7
baz=191,SNR=6.1
LTY Liberty 82.79 36 IAmb IAmb 20 19 26.1
comp=Z,11nm,1.1s
CRQE Cirque 82.80 17 P P 20 19 25.2 +0.5
baz=215
J19K Poorman 82.81 10 IAmb IAmb 20 19 25.4
comp=Z,12nm,1.1s
J19K Poorman 82.81 10 P P 20 19 24.9 +0.3
baz=203,SNR=7.0
F14K Arctic Creek 82.83 5 P P 20 19 25.0 +0.4
baz=192,SNR=5.0
E07A Sunnyside 82.86 37 IAmb IAmb 20 19 26.8
comp=Z,16nm,0.9s
WUAZ Wupatki 82.88 50 P P 20 19 25.9 +0.1
WUAZ IAmb IAmb 20 19 27.9
comp=Z,15nm,1.1s
HAWA Hanford 82.95 37 IAmb IAmb 20 19 27.3
comp=Z,20nm,1.1s
S32K Killisnoo 82.99 23 P P 20 19 25.6 +0.1
baz=223
ENH Enshi 82.99 304 P P 20 19 27.5 +1.2
ENH IAmb IAmb 20 19 28.7
comp=Z,15nm,1.0s
H17K Granite Mounta 83.04 8 P P 20 19 25.5 -0.2
H17K IAmb IAmb 20 19 26.6
comp=Z,15nm,1.2s
H17K Granite Mounta 83.04 8 P P 20 19 26.4 +0.7
baz=199
WRAK Wrangell Islan 83.07 24 P P 20 19 26.8 +0.9
baz=225
PKCU Pink Cliffs 83.08 48 P P 20 19 28.6 +1.7
VRDI Verde Repeater 83.09 17 IAmb IAmb 20 19 26.8
comp=Z,28nm,1.3s
N25K Chitina, Valde 83.09 16 P P 20 19 26.1 -0.1
N25K IAmb IAmb 20 19 26.8
comp=Z,19nm,0.9s
N25K Chitina, Valde 83.09 16 P P 20 19 26.0 -0.1
baz=213
M24K Tolsona, Glenn 83.11 15 P P 20 19 26.3 +0.1
M24K Tolsona, Glenn 83.11 15 P P 20 19 26.3 +0.1
baz=212
WAT6 Susitna Watana 83.14 14 P P 20 19 26.3 -0.2
baz=210,SNR=7.3
G16K Koyuk River 83.17 7 P P 20 19 26.8 +0.5
baz=196
GLB Gilahina Butte 83.17 16 IAmb IAmb 20 19 26.4
comp=Z,18nm,1.1s
BELA Belgrano 2 83.17 173 P P 20 19 26.9 +0.6
WAT1 Susitna Watana 83.17 14 P P 20 19 26.6 +0.2
baz=210
F15K North Star Dit 83.22 6 P P 20 19 26.9 +0.4
baz=194
J20K Nowinta River 83.24 11 IAmb IAmb 20 19 27.6
comp=Z,14nm,0.9s
J20K Nowinta River 83.24 11 P P 20 19 26.9 +0.2
baz=204,SNR=11
E08A Dider Farm, El 83.28 37 IAmb IAmb 20 19 28.8
comp=Z,25nm,1.3s
DUN6 Lazy B Ranch 83.30 53 P P 20 19 29.4 +1.5
GCSA Galena City Sc 83.31 10 P P 20 19 27.4 +0.5
baz=202
MCARA McCarthy VSAT 83.33 17 P P 20 19 27.6 +0.4
baz=215
MTPU Mount Pierson 83.44 47 P P 20 19 30.2 +1.4
MTPU IAmb IAmb 20 19 31.3
comp=Z,15nm,1.1s
H18K Honhosa River 83.46 9 P P 20 19 27.6 -0.1
baz=200
CTG Chitna Glacier 83.47 18 P P 20 19 28.2 +0.1
baz=216
CTGM Chitina Glacie 83.47 18 IAmb IAmb 20 19 28.9
comp=Z,12nm,0.8s
G17K Kiwalik Mounta 83.48 8 P P 20 19 28.2 +0.4
baz=198
P29M Windy Craggy 83.52 20 IAmb IAmb 20 19 29.6
comp=Z,20nm,1.0s
P29M Windy Craggy 83.52 20 P P 20 19 28.2 -0.1
baz=220
MFID Camas Ranch 83.61 41 IAmb IAmb 20 19 30.8
comp=Z,16nm,1.2s
HARP HAARP 83.62 15 P P 20 19 28.8 +0.2
baz=213
O28M Mount Upton 83.65 18 P P 20 19 29.1 -0.1
baz=217
DHY Denali Highway 83.66 14 IAmb IAmb 20 19 29.4
comp=Z,11nm,1.2s
DHY Denali Highway 83.66 14 P P 20 19 29.0 0.0
baz=211
MSU Marysvale 83.66 47 P P 20 19 30.9 +1.2
D08A Wollman Farm, 83.67 37 IAmb IAmb 20 19 30.7
comp=Z,12nm,0.9s
I20K Naaghedeneel 83.75 10 P P 20 19 29.4 +0.2
I20K Naaghedeneel 83.75 10 P P 20 19 29.6 +0.5
baz=204
GYA Guiyang 83.77 300 P P 20 19 30.3 -0.1
GYA pmax pmax
comp=Z,6.0nm,1.0s
BPAW Bear Paw Mtn. 83.78 12 P P 20 19 27.6 -1.8
BPAW Bear Paw Mtn. 83.78 12 P P 20 19 28.1 -1.2
baz=207
O29M Mount Kennedy 83.78 19 P P 20 19 29.1 -0.5
baz=219
PLBC Pleasant Camp 83.84 21 P P 20 19 30.4 +0.7
baz=221,SNR=7.1
MCK McKinley 83.88 13 P P 20 19 29.4 -0.5
baz=209,SNR=7.2
W18A Petrified Fore 83.91 51 IAmb IAmb 20 19 32.9
comp=Z,15nm,1.2s
W18A Petrified Fore 83.91 51 P P 20 19 31.8 +0.9
baz=244
PAX Paxson 84.02 15 P P 20 19 30.6 -0.1
baz=212
F10A Beach Ranch, E 84.08 38 IAmb IAmb 20 19 32.4
comp=Z,17nm,1.0s
H19K Roundabout Mou 84.10 9 P P 20 19 30.7 -0.2
H19K IAmb IAmb 20 19 32.0
comp=Z,14nm,1.2s
H19K Roundabout Mou 84.10 9 P P 20 19 31.1 +0.2
baz=202
G18K Tagagawik 84.12 8 P P 20 19 30.5 -0.5
baz=200
P30M Million Dollar 84.15 20 P P 20 19 31.9 +0.6
baz=220,SNR=8.6
M26K Nabesna, AK 84.18 16 P P 20 19 31.2 -0.3
baz=215,SNR=14
YUK8 Steele Glacier 84.19 18 P P 20 19 31.9 +0.1
baz=218
SKAG Skagway 84.20 21 P P 20 19 32.5 +1.0
baz=222
121A Cookes Peak, D 84.30 54 P P 20 19 33.4 +0.5
baz=246
T35M Bob Quinn 84.30 25 P P 20 19 32.6 +0.5
baz=227
F17K Baldwin Pennin 84.30 7 P P 20 19 32.9 +1.1
baz=197
H20K Anotleneega Mo 84.32 10 P P 20 19 32.5 +0.5
baz=203,SNR=5.1
YUK6 Outpost Mounta 84.34 19 P P 20 19 32.8 +0.3
baz=219
YUK3 Moose Creek 84.37 17 P P 20 19 32.9 +0.2
baz=217,SNR=11
M27K Edge Creek, AK 84.45 17 P P 20 19 33.3 +0.4
baz=216,SNR=9.9
I21K Tanana 84.55 11 P P 20 19 33.2 +0.1
baz=206
YUK4 Talbot Arm 84.57 18 P P 20 19 33.8 +0.2
baz=219
HLID Hailey 84.58 41 IAmb IAmb 20 19 35.9
comp=Z,9.2nm,0.9s
G19K Purcell Mounta 84.58 9 P P 20 19 33.1 -0.1
baz=201
S34M Telegraph Cree 84.60 24 P P 20 19 34.3 +0.8
baz=226,SNR=13
L26K Log Cabin Wild 84.60 16 IAmb IAmb 20 19 34.3
comp=Z,13nm,1.0s
NEA2 Nenana 84.61 13 P P 20 19 31.4 -2.0
NEA2 Nenana 84.61 13 P P 20 19 32.3 -1.1
baz=209
MLY Manley 84.66 12 IAmb IAmb 20 19 34.2
comp=Z,8.7nm,1.0s
MLY Manley 84.66 12 P P 20 19 32.8 -0.9
baz=207,SNR=9.0
K24K Donnelly Dome 84.66 14 P P 20 19 32.8 -1.0
baz=212
WRH Wood River Hil 84.71 13 P P 20 19 32.6 -1.3
HVU Hansel Valley 84.78 44 IAmb IAmb 20 19 36.8
comp=Z,12nm,1.2s
RIDG Independent Ri 84.83 15 P P 20 19 33.6 -1.0
RIDG IAmb IAmb 20 19 35.1
comp=Z,15nm,1.0s
RIDG Independent Ri 84.83 15 P P 20 19 33.9 -0.7
baz=213,SNR=6.7
H21K Melozitna Rive 84.83 11 P P 20 19 35.3 +0.8
baz=205
P32M Atlin 84.85 21 IAmb IAmb 20 19 42.2
comp=Z,11nm,1.2s
P32M Atlin 84.85 21 P P 20 19 35.2 +0.4
baz=223
E17K Hotham Inlet 84.85 7 P P 20 19 35.2 +0.7
baz=197
HDA Harding Lake 84.91 14 IAmb IAmb 20 19 35.1
comp=Z,11nm,1.0s
HDA Harding Lake 84.91 14 P P 20 19 34.3 -0.6
baz=211,SNR=6.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Q32M | Nakina River | 84.91 | 22 | IAmb | IAmb | 20 19 36.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| Q32M | Nakina River | 84.91 | 22 | P | P | 20 19 35.4 | +0.1 |
| | baz=225 | | | | | | |
| O30N | Mendenhall | 84.93 | 20 | P | P | 20 19 35.4 | +0.2 |
| | baz=221 | | | | | | |
| IMAR | Indian Mountai | 84.96 | 10 | P | P | 20 19 34.7 | -0.4 |
| XAN | Xi'an | 84.97 | 308 | ⇑P | P | 20 19 38.0 | +2.0 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| L27K | Beaver Creek, | 85.03 | 16 | P | P | 20 19 35.5 | -0.1 |
| | baz=216 | | | | | | |
| I23K | Minto, Yukon-K | 85.03 | 12 | IAmb | IAmb | 20 19 36.4 | |
| | comp=Z,15nm,1.4s | | | | | | |
| I23K | Minto, Yukon-K | 85.03 | 12 | P | P | 20 19 35.5 | +0.1 |
| | baz=209 | | | | | | |
| BCAR | Beaver Creek A | 85.05 | 16 | P | P | 20 19 35.2 | -0.5 |
| COLA | College | 85.11 | 13 | P | P | 20 19 34.9 | -0.9 |
| IL31 | | 85.23 | 13 | IAmb | IAmb | 20 19 36.5 | |
| | comp=Z,19nm,1.4s | | | | | | |
| ILAR | Eielson Array | 85.23 | 13 | P | P | 20 19 35.4 | -1.0 |
| ILAR | Eielson Array | 85.23 | 13 | P | P | 20 19 35.6 | -0.9 |
| | comp=Z,5.0nm,0.9s,baz=230,slow=5.9,SNR=23 | | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| SCRK | Sand Creek | 85.23 | 15 | IAmb | IAmb | 20 19 37.3 | |
| | comp=Z,10nm,1.1s | | | | | | |
| SCRK | Sand Creek | 85.23 | 15 | P | P | 20 19 36.6 | 0.0 |
| | baz=214,SNR=8.0 | | | | | | |
| WHY | Whitehorse | 85.24 | 20 | IAmb | IAmb | 20 19 37.9 | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| WHY | Whitehorse | 85.24 | 20 | P | P | 20 19 36.5 | -0.2 |
| | baz=222 | | | | | | |
| H22K | Ishtalitna Cre | 85.31 | 11 | P | P | 20 19 36.6 | -0.2 |
| | baz=207,SNR=6.6 | | | | | | |
| D17K | Noatak River | 85.31 | 6 | P | P | 20 19 37.3 | +0.6 |
| | baz=196 | | | | | | |
| E18K | Tukpahlearik C | 85.32 | 7 | P | P | 20 19 37.1 | +0.3 |
| | baz=198 | | | | | | |
| DLBC | Dease Lake | 85.38 | 24 | IAmb | IAmb | 20 19 39.0 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| DLBC | Dease Lake | 85.38 | 24 | P | P | 20 19 37.9 | +0.5 |
| | baz=227,SNR=5.5 | | | | | | |
| J25K | Salcha River, | 85.44 | 14 | IAmb | IAmb | 20 19 38.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| J25K | Salcha River, | 85.44 | 14 | P | P | 20 19 37.2 | -0.4 |
| | baz=212,SNR=9.2 | | | | | | |
| BILL | Billibino | 85.45 | 355 | | P | 20 19 37.1 | -0.3 |
| M29M | Somme Creek | 85.48 | 18 | P | P | 20 19 37.8 | 0.0 |
| | baz=219 | | | | | | |
| G21K | Allakaket | 85.49 | 10 | P | P | 20 19 37.3 | -0.4 |
| | baz=205,SNR=6.7 | | | | | | |
| N31M | Braeburn, Yuko | 85.56 | 19 | P | P | 20 19 38.5 | +0.4 |
| | baz=221 | | | | | | |
| H23K | Yukon River | 85.59 | 12 | P | P | 20 19 38.6 | +0.4 |
| | baz=208 | | | | | | |
| P33M | Teslin, Yukon | 85.61 | 21 | P | P | 20 19 38.6 | +0.2 |
| | baz=224 | | | | | | |
| F20K | Avaraart Lake | 85.63 | 9 | P | P | 20 19 38.2 | 0.0 |
| | baz=203 | | | | | | |
| RDOG | Red Dog Mine | 85.67 | 6 | P | P | 20 19 38.8 | +0.3 |
| | baz=196 | | | | | | |
| R33M | Jennings River | 85.69 | 23 | IAmb | IAmb | 20 19 40.0 | |
| | comp=Z,15nm,1.2s | | | | | | |
| R33M | Jennings River | 85.69 | 23 | P | P | 20 19 39.8 | +0.8 |
| | baz=226,SNR=9.4 | | | | | | |
| K27K | Chicken | 85.76 | 16 | P | P | 20 19 39.1 | +0.2 |
| | baz=216 | | | | | | |
| J26L | Joseph Creek | 85.77 | 15 | IAmb | IAmb | 20 19 40.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| J26L | Joseph Creek | 85.77 | 15 | P | P | 20 19 39.1 | -0.1 |
| | baz=214,SNR=13 | | | | | | |
| E19K | Redstone River | 85.79 | 8 | IAmb | IAmb | 20 19 39.8 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| E19K | Redstone River | 85.79 | 8 | P | P | 20 19 39.0 | -0.1 |
| | baz=201,SNR=5.6 | | | | | | |
| HHC | Hu-ho-hao-te | 85.97 | 315 | eP | P | 20 19 42.6 | +1.9 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,93nm,4.4s | | | | | | |
| F21K | Alatna River | 86.14 | 10 | P | P | 20 19 40.5 | -0.2 |
| | baz=205 | | | | | | |
| PRP | Porcupine Dome | 86.17 | 13 | P | P | 20 19 40.9 | -0.2 |
| | baz=212 | | | | | | |
| N32M | Quiet Lake | 86.20 | 21 | P | P | 20 19 41.0 | -0.3 |
| | baz=224 | | | | | | |
| G22K | Bettles | 86.20 | 11 | P | P | 20 19 41.2 | +0.2 |
| | baz=207 | | | | | | |
| ANMO | Albuquerque | 86.28 | 52 | P | P | 20 19 42.6 | +0.2 |
| ANMO | | | | IAmb | IAmb | 20 19 44.6 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| G23K | Bananza Creek | 86.28 | 11 | P | P | 20 19 41.8 | +0.3 |
| | baz=208 | | | | | | |
| TXAR | Lajitas Array | 86.32 | 58 | P | P | 20 19 43.6 | +1.0 |
| TXAR | Lajitas Array | 86.32 | 58 | P | P | 20 19 42.2 | -0.4 |
| | comp=Z,7.8nm,1.1s,baz=227,slow=5.0,SNR=27 | | | | | | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| C18K | Utukok River | 86.43 | 7 | P | P | 20 19 42.7 | +0.6 |
| | baz=197 | | | | | | |
| DAWY | Dawson | 86.49 | 16 | P | P | 20 19 43.2 | +0.6 |
| | baz=218 | | | | | | |
| I26K | Coal Creek Min | 86.54 | 14 | P | P | 20 19 42.4 | -0.3 |
| | baz=214 | | | | | | |
| M31M | Drury Creek, Y | 86.54 | 19 | P | P | 20 19 42.6 | -0.2 |
| | baz=223 | | | | | | |
| EGAK | Eagle | 86.60 | 15 | P | P | 20 19 43.1 | +0.2 |
| | baz=216 | | | | | | |
| F22K | John River | 86.61 | 10 | P | P | 20 19 42.7 | -0.4 |
| | baz=206 | | | | | | |
| D19K | Kuna River | 86.65 | 8 | P | P | 20 19 43.4 | +0.2 |
| | baz=200 | | | | | | |
| E20K | Nigu River | 86.68 | 8 | P | P | 20 19 43.2 | -0.2 |
| | baz=202,SNR=6.2 | | | | | | |
| COLD | Coldfoot | 86.71 | 11 | P | P | 20 19 43.8 | +0.3 |
| | baz=208,SNR=10.0 | | | | | | |
| TPAW | Teton Pass | 86.76 | 43 | IAmb | IAmb | 20 19 45.5 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| G24K | Hadweenzic Riv | 86.77 | 12 | P | P | 20 19 43.6 | -0.2 |
| | baz=210 | | | | | | |
| FXWY | Fox Creek | 86.78 | 43 | IAmb | IAmb | 20 19 47.4 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| K29M | Barlow Dome | 86.84 | 17 | IAmb | IAmb | 20 19 45.5 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| K29M | Barlow Dome | 86.84 | 17 | P | P | 20 19 44.6 | +0.3 |
| | baz=220 | | | | | | |
| FARO | Faro, Yukon | 86.89 | 20 | P | P | 20 19 44.5 | 0.0 |
| | baz=224 | | | | | | |
| IMW | Indian Meadow | 86.95 | 42 | IAmb | IAmb | 20 19 47.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| C19K | Lookout Ridge | 87.04 | 7 | P | P | 20 19 45.2 | +0.2 |
| | baz=199 | | | | | | |
| B18K | Kokolik River | 87.05 | 6 | P | P | 20 19 46.0 | +1.0 |
| | baz=197 | | | | | | |
| D20K | Etivluk River | 87.05 | 8 | P | P | 20 19 45.5 | +0.5 |
| | baz=202 | | | | | | |
| G25K | Bearman Lake | 87.11 | 13 | P | P | 20 19 45.1 | -0.2 |
| | baz=212 | | | | | | |
| O20A | White River Ci | 87.12 | 47 | IAmb | IAmb | 20 19 47.9 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| S22A | 4UR Ranch, Cre | 87.13 | 49 | IAmb | IAmb | 20 19 48.5 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| S22A | 4UR Ranch, Cre | 87.13 | 49 | P | P | 20 19 46.8 | +0.3 |
| | baz=246 | | | | | | |
| I27K | Kandik River | 87.15 | 15 | P | P | 20 19 45.3 | -0.4 |
| | baz=216 | | | | | | |
| E21K | Killik River | 87.18 | 9 | P | P | 20 19 45.7 | +0.1 |
| | baz=204 | | | | | | |
| YHL | Hebgen Lake | 87.23 | 41 | IAmb | IAmb | 20 19 49.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| E22K | Anaktuvuk Pass | 87.24 | 10 | IAmb | IAmb | 20 19 46.6 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| E22K | Anaktuvuk Pass | 87.24 | 10 | P | P | 20 19 45.7 | -0.3 |
| | baz=206,SNR=6.0 | | | | | | |
| BOZ | Bozeman (W) | 87.30 | 41 | IAmb | IAmb | 20 19 48.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| PD31 | Pinedale Array | 87.35 | 44 | IAmb | IAmb | 20 19 48.5 | |
| | comp=Z,11nm,1.2s | | | | | | |
| PDAR | Pinedale Array | 87.35 | 44 | P | P | 20 19 46.8 | -0.5 |
| PDAR | Pinedale Array | 87.35 | 44 | P | P | 20 19 47.4 | 0.0 |
| | comp=Z,2.8nm,0.6s,baz=223,slow=3.7,SNR=24 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| F24K | Squaw Lake | 87.40 | 12 | IAmb | IAmb | 20 19 47.7 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| F24K | Squaw Lake | 87.40 | 12 | P | P | 20 19 46.9 | +0.1 |
| | baz=210 | | | | | | |
| I28M | Miner Creek | 87.45 | 15 | P | P | 20 19 46.8 | -0.2 |
| | baz=217 | | | | | | |
| TOAD | Toad River Com | 87.54 | 25 | P | P | 20 19 47.8 | +0.2 |
| | baz=231 | | | | | | |
| E23K | Chandalar | 87.55 | 11 | IAmb | IAmb | 20 19 48.3 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| E23K | Chandalar | 87.55 | 11 | P | P | 20 19 47.9 | +0.4 |
| | baz=208,SNR=6.2 | | | | | | |
| H27K | Steamboat Moun | 87.69 | 14 | P | P | 20 19 48.6 | +0.5 |
| | baz=216,SNR=5.9 | | | | | | |
| CMAR | Chiang Mai Arr | 87.69 | 290 | P | P | 20 19 50.3 | +1.1 |
| CMAR | Chiang Mai Arr | 87.69 | 290 | P | P | 20 19 49.5 | +0.3 |
| | comp=Z,2.3nm,1.0s,baz=96,slow=3.0,SNR=11 | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | |
| C21K | Knifeblade Rid | 87.72 | 9 | P | P | 20 19 48.5 | +0.4 |
| | baz=203 | | | | | | |
| G26K | Porcupine Rive | 87.76 | 13 | P | P | 20 19 48.8 | +0.4 |
| | baz=214,SNR=9.2 | | | | | | |
| E24K | Your Creek | 87.77 | 11 | P | P | 20 19 48.7 | +0.2 |
| | baz=209 | | | | | | |
| D22K | Ayikyak River | 87.78 | 9 | IAmb | IAmb | 20 19 49.4 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| D22K | Ayikyak River | 87.78 | 9 | P | P | 20 19 48.5 | +0.1 |
| | baz=205,SNR=5.7 | | | | | | |
| I29M | Ogilvie Camp, | 87.80 | 16 | IAmb | IAmb | 20 19 48.9 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| I29M | Ogilvie Camp, | 87.80 | 16 | P | P | 20 19 48.0 | -0.6 |
| | baz=219 | | | | | | |
| MMPY | Sheldon Lake, | 87.85 | 20 | P | P | 20 19 49.4 | +0.4 |
| | baz=225,SNR=9.7 | | | | | | |
| PZH | PanZhiHua | 87.90 | 298 | P | P | 20 19 51.9 | +1.8 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,130nm,4.7s | | | | | | |
| F25K | Christian Rive | 87.91 | 12 | IAmb | IAmb | 20 19 50.4 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| F25K | Christian Rive | 87.91 | 12 | P | P | 20 19 49.6 | +0.5 |
| | baz=212,SNR=5.5 | | | | | | |
| BMAR | Burnt Mountain | 87.99 | 13 | P | P | 20 19 49.4 | -0.1 |
| TOLK | Toolik Lake Re | 88.08 | 11 | P | P | 20 19 49.8 | -0.1 |
| | baz=208 | | | | | | |
| G27K | Doyon Strip | 88.13 | 14 | P | P | 20 19 50.7 | +0.6 |
| | baz=216 | | | | | | |
| TGTN | Hyland Airport | 88.13 | 22 | P | P | 20 19 51.1 | +0.8 |
| | baz=228 | | | | | | |
| B21K | Ikpikpuk River | 88.17 | 8 | P | P | 20 19 50.8 | +0.6 |
| | baz=204 | | | | | | |
| D23K | Nanushuk River | 88.17 | 10 | P | P | 20 19 50.8 | +0.6 |
| | baz=207 | | | | | | |
| I30M | Mount Dempster | 88.21 | 17 | IAmb | IAmb | 20 19 51.1 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| I30M | Mount Dempster | 88.21 | 17 | P | P | 20 19 50.7 | 0.0 |
| | baz=221 | | | | | | |
| F26K | Sheenjek River | 88.31 | 13 | IAmb | IAmb | 20 19 52.2 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| F26K | Sheenjek River | 88.31 | 13 | P | P | 20 19 51.5 | +0.6 |
| | baz=214,SNR=6.0 | | | | | | |
| H29M | Whitestone | 88.45 | 15 | IAmb | IAmb | 20 19 52.2 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| H29M | Whitestone | 88.45 | 15 | P | P | 20 19 51.7 | +0.1 |
| | baz=219 | | | | | | |
| RLMT | Red Lodge | 88.57 | 42 | IAmb | IAmb | 20 19 54.8 | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| D24K | Happy Valley | 88.66 | 10 | P | P | 20 19 52.8 | +0.3 |
| | baz=209 | | | | | | |
| T25A | Trifidad | 88.66 | 51 | P | P | 20 19 52.3 | -1.3 |
| | baz=248 | | | | | | |
| Q24A | Divide | 88.83 | 49 | P | P | 20 19 53.8 | -0.7 |
| | baz=247 | | | | | | |
| OZNA | Ozona | 88.94 | 57 | IAmb | IAmb | 20 19 56.4 | |
| | comp=Z,10nm,1.1s | | | | | | |
| C23K | Itkillik River | 88.96 | 10 | P | P | 20 19 54.1 | +0.2 |
| | baz=207 | | | | | | |
| B22K | Teshekpuk Lake | 88.99 | 9 | P | P | 20 19 54.1 | 0.0 |
| | baz=205 | | | | | | |
| EPYK | Eagle Plains | 89.00 | 16 | P | P | 20 19 53.7 | -0.5 |
| | baz=220 | | | | | | |
| N23A | Red Feather La | 89.03 | 47 | IAmb | IAmb | 20 19 57.7 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| N23A | Red Feather La | 89.03 | 47 | P | P | 20 19 55.8 | +0.6 |
| | baz=246 | | | | | | |
| G29M | Pine Creek | 89.08 | 15 | P | P | 20 19 54.6 | +0.1 |
| | baz=219 | | | | | | |
| C24K | Franklin Bluff | 89.18 | 10 | P | P | 20 19 55.1 | +0.2 |
| | baz=209 | | | | | | |
| F28M | Old Crow | 89.19 | 14 | P | P | 20 19 55.1 | +0.1 |
| | baz=217 | | | | | | |
| D25K | Kavik River | 89.24 | 11 | P | P | 20 19 55.5 | +0.2 |
| | baz=211 | | | | | | |
| E27K | Coleen River | 89.26 | 13 | IAmb | IAmb | 20 19 56.5 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| E27K | Coleen River | 89.26 | 13 | P | P | 20 19 55.6 | +0.2 |
| | baz=216 | | | | | | |
| A22K | Sinclair Lake | 89.39 | 8 | P | P | 20 19 56.2 | +0.4 |
| | baz=203 | | | | | | |
| G30M | tAoh Zraii Nji | 89.59 | 16 | P | P | 20 19 56.8 | -0.2 |
| | baz=221 | | | | | | |
| LZH | Lanzhou | 89.60 | 308 | eP | P | 20 19 59.5 | +1.6 |
| LZH | | | | sP | sP | 20 22 52.3 | -0.3 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| ELIB | Princess Elisa | 89.94 | 187 | dP | P | 20 19 58.9 | +0.1 |
| | comp=Z,2.6nm,0.7s | | | | | | |
| E28M | Babbage River | 90.05 | 14 | IAmb | IAmb | 20 19 59.8 | |
| | comp=Z,6.9nm,1.0s | | | | | | |
| E28M | Babbage River | 90.05 | 14 | P | P | 20 19 59.1 | +0.1 |
| | baz=218,SNR=7.1 | | | | | | |
| G31M | Satah River | 90.06 | 16 | P | P | 20 19 59.2 | +0.2 |
| | baz=223 | | | | | | |
| F30M | Barrier River | 90.18 | 15 | P | P | 20 19 59.6 | 0.0 |
| | baz=221 | | | | | | |
| D27M | Malcolm River | 90.25 | 13 | IAmb | IAmb | 20 20 02.0 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| D27M | Malcolm River | 90.25 | 13 | P | P | 20 20 00.5 | +0.5 |
| | baz=216 | | | | | | |
| E29M | Blow River | 90.26 | 14 | P | P | 20 20 00.5 | +0.6 |
| | baz=219 | | | | | | |
| F31M | Tsiigehtchic | 90.58 | 16 | P | P | 20 20 01.7 | +0.3 |
| | baz=223 | | | | | | |
| D28M | Stokes Point | 90.80 | 13 | P | P | 20 20 01.9 | -0.5 |
| | baz=218 | | | | | | |
| TROLL | Troll, Antarti | 91.19 | 181 | ⇑P | P | 20 20 04.8 | +0.2 |
| | comp=Z,256nm,0.7s | | | | | | |
| INK | Inuvik | 91.27 | 15 | P | P | 20 20 03.7 | -0.9 |
| | baz=223 | | | | | | |
| SNAA | Sanae | 91.51 | 179 | ⇑P | P | 20 20 06.4 | +0.5 |
| | comp=Z,28nm,0.6s | | | | | | |
| SNAA | Sanae | 91.51 | 179 | P | P | 20 20 06.1 | +0.2 |
| | comp=Z,1.4nm,0.8s,baz=233,slow=5.4,SNR=4.5 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| RSSD | Black Hills | 91.58 | 44 | | P | 20 20 06.4 | -0.5 |
| RSSD | | | | IAmb | IAmb | 20 20 07.8 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| VNA3 | Neumayer Olymp | 91.69 | 177 | ⇑P | P | 20 20 07.0 | +0.3 |
| | comp=Z,6.1nm,0.7s | | | | | | |
| ULN | Ulaanbaatar | 91.86 | 320 | P | P | 20 20 08.0 | 0.0 |
| ULN | | | | IAmb | IAmb | 20 20 09.5 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| VNA2 | Neumayer--Watz | 92.12 | 177 | ⇑P | P | 20 20 08.4 | -0.2 |
| | comp=Z,6.4nm,0.5s,baz=35,slow=2.0 | | | | | | |
| SONM | Songino Array | 92.26 | 320 | P | P | 20 20 09.0 | -0.8 |
| | comp=Z,1.6nm,0.9s,baz=125,slow=2.7,SNR=6.9 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 93.91 | 25 | P | P | 20 20 14.4 | -2.4 |
| | comp=Z,2.5nm,0.9s,baz=250,slow=4.6,SNR=8.1 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| C36M | Paulatuk | 94.51 | 17 | P | P | 20 20 19.0 | -0.4 |
| | baz=232 | | | | | | |
| BVAR | Borovoye Array | 115.56 | 321 | PKP | PKPdf | 20 25 37.1 | -0.7 |
| | comp=Z,1.1nm,0.7s,baz=80,slow=1.8,SNR=7.0 | | | | | | |
| UUPR | Utuado, UPR, P | 116.17 | 78 | | PKPdf | 20 25 38.1 | -1.8 |
| ARU | Arti | 121.58 | 326 | | PKPdf | 20 25 49.1 | -0.2 |
| ARU | Arti | 121.58 | 326 | PKP | PKPdf | 20 25 49.0 | -0.3 |
| | comp=Z,1.4nm,0.3s,baz=148,slow=4.2,SNR=5.2 | | | | | | |
| AKTO | Aktyubinsk | 123.58 | 320 | PKP | PKPdf | 20 25 53.3 | 0.0 |
| | comp=Z,1.7nm,0.8s,baz=295,slow=0.7,SNR=5.2 | | | | | | |
| ARCES | ARCESS Array B | 125.27 | 350 | PKP | PKPdf | 20 25 55.2 | -0.8 |
| | comp=Z,5.8nm,1.0s,baz=107,slow=1.6,SNR=8.4 | | | | | | |
| FINES | FINESS Array B | 132.07 | 344 | PKhKP | PKPpre | 20 26 01.7 | |
| | comp=Z,3.2nm,1.0s,baz=169,slow=21,SNR=1.7 | | | | | | |
| FINES | | | | PKP | PKPdf | 20 26 08.5 | -0.6 |
| | comp=Z,3.6nm,1.0s,baz=109,slow=1.7,SNR=5.3 | | | | | | |
| FINES | | | | SKPbc | SKPab | 20 28 46.9 | +1.0 |
| | comp=Z,3.5nm,0.9s,baz=116,slow=4.4,SNR=4.3 | | | | | | |
| NB2 | NORSAR Subarra | 135.37 | 353 | PKP | PKiKP | 20 26 16.4 | -0.7 |
| | comp=Z,0.4nm,0.5s,baz=17,slow=2.6 | | | | | | |
| TSUM | Tsumeb | 140.33 | 206 | | PKPpre | 20 26 19.8 | |
| EKA | Eskdalemuir Ar | 141.64 | 3 | PKhKP | PKPpre | 20 26 22.2 | |
| | comp=Z,0.2nm,0.4s,baz=355,slow=2.8,SNR=5.6 | | | | | | |
| LODK | Lodwar | 143.32 | 252 | | PKPbc | 20 26 29.9 | +0.2 |
| BURAR | Bucovina Array | 143.38 | 332 | | PKPbc | 20 26 29.6 | +0.7 |
| BURAR | Bucovina Array | 143.38 | 332 | ⇓P | PKPdf | 20 26 30.0 | -0.4 |
| GHRR | | 143.45 | 328 | ⇓P | PKPdf | 20 26 30.7 | +0.3 |
| BR131 | Keskin Array S | 143.48 | 315 | | PKPbc | 20 26 29.6 | 0.0 |
| BRTR | Keskin Array B | 143.48 | 315 | | PKPbc | 20 26 29.6 | 0.0 |
| BRTR | Keskin Array B | 143.48 | 315 | PKP | PKPbc | 20 26 30.1 | +0.5 |
| | comp=Z,13nm,1.0s,baz=80,slow=1.5,SNR=62 | | | | | | |
| TESR | Tescani | 143.51 | 329 | ⇑P | PKPbc | 20 26 29.9 | +0.6 |
| NEGRR | Negrea | 143.56 | 327 | ⇑P | PKPdf | 20 26 30.3 | -0.3 |
| PANC | Panciu | 143.71 | 328 | ⇓P | PKPdf | 20 26 31.2 | +0.4 |
| TPGR | Topolog | 143.73 | 326 | ⇓P | PKPdf | 20 26 31.0 | 0.0 |
| ONER | Baraj Valea Uz | 143.76 | 329 | ⇓P | PKPdf | 20 26 31.2 | +0.2 |
| ODBI | Odobesti | 143.83 | 328 | ⇓P | PKPdf | 20 26 32.1 | +1.0 |
| VRI | Vrincioaia | 143.93 | 329 | ⇑P | PKPdf | 20 26 31.2 | -0.1 |
| CRVS | Cervenica-Dubn | 143.94 | 336 | ePKP | PKPdf | 20 26 31.2 | 0.0 |
| PLOR | Plostina | 143.97 | 329 | ⇓P | PKPdf | 20 26 31.3 | -0.2 |
| HARR | Harsova | 144.10 | 326 | ⇑P | PKPdf | 20 26 32.5 | +0.9 |
| TLBR | Topalu | 144.14 | 326 | ⇓P | PKPdf | 20 26 33.1 | +1.4 |
| TURR | Turia | 144.14 | 329 | ⇑P | PKPdf | 20 26 31.9 | +0.2 |
| COVR | Voineasa-Covas | 144.20 | 329 | ⇓P | PKPdf | 20 26 31.9 | +0.1 |
| OZUR | | 144.22 | 330 | ⇓P | PKPab | 20 26 32.2 | +0.3 |
| OSTC | Ostas | 144.26 | 343 | ⇑ePKP | PKPab | 20 26 32.7 | +0.9 |
| CHVC | Chvalec | 144.28 | 343 | ⇑ePKP | PKPab | 20 26 32.5 | +0.6 |
| CLL | Collm | 144.38 | 347 | ⇓iPKPbc | PKPdf | 20 26 31.9 | 0.0 |
| | comp=Z,57nm,1.0s | | | | | | |
| DPC | Dobruska-Polom | 144.42 | 343 | ⇑ePKP | PKPab | 20 26 32.9 | +0.5 |
| LANS | Liptovska Anna | 144.47 | 339 | ePKP | PKPab | 20 26 33.7 | +1.0 |
| KRLC | Kraliky | 144.53 | 342 | ⇑ePKP | PKPab | 20 26 33.5 | +0.6 |
| ISR | Istrita | 144.54 | 328 | ⇑P | PKPab | 20 26 34.0 | +0.9 |
| MORC | Moravsky Berou | 144.56 | 341 | ePKP | PKPab | 20 26 33.1 | +0.1 |
| BRG | Berggiesshubel | 144.57 | 345 | Amp | | 20 26 34.0 | |
| | comp=Z,36nm,1.0s | | | | | | |
| BRG | Berggiesshubel | 144.57 | 345 | iPKP | PKPab | 20 26 32.8 | -0.1 |
| PVCC | Panska Ves | 144.73 | 345 | ⇑ePKP | PKPab | 20 26 33.8 | +0.2 |
| MMAI | Mount Meron Ar | 144.86 | 304 | PKPbc | PKPab | 20 26 34.9 | +0.1 |
| | comp=Z,18nm,0.9s,baz=69,slow=4.6,SNR=31 | | | | | | |
| MARR | Marisel-Cluj | 145.03 | 333 | ⇓P | PKPab | 20 26 34.6 | -0.4 |
| VOIR | | 145.06 | 329 | ⇑P | PKPbc | 20 26 34.6 | +0.4 |
| DRGR | | 145.12 | 333 | ⇓P | PKPab | 20 26 34.9 | -0.4 |
| PRU | Pruhonice | 145.23 | 344 | ⇑ePKP | PKPab | 20 26 35.5 | 0.0 |
| VYHS | Vyhne | 145.24 | 339 | ePKP | PKPab | 20 26 35.5 | -0.1 |
| VRAC | Vranov | 145.27 | 342 | ePKP | PKPbc | 20 26 34.9 | +0.3 |
| VRAC | Vranov | 145.27 | 342 | ⇓P | PKPbc | 20 26 34.9 | +0.3 |
| ARR | Arges | 145.31 | 330 | ⇓P | PKPbc | 20 26 34.9 | +0.1 |
| JAVC | Velka Javorina | 145.32 | 340 | ePKP | PKPab | 20 26 36.1 | +0.1 |
| KRUC | Moravsky | 145.54 | 342 | ePKP | PKPbc | 20 26 36.0 | +0.6 |
| ZVC | Zvikov | 145.83 | 344 | ⇑ePKP | PKPab | 20 26 37.3 | -0.6 |
| SIRR | Siria | 145.98 | 334 | ⇑P | PKPbc | 20 26 37.3 | +0.6 |
| SURR | Surduc | 146.18 | 333 | ⇓P | PKPbc | 20 26 37.6 | +0.4 |
| MEM | Membach | 146.20 | 354 | dPKP | PKPbc | 20 26 37.6 | +0.5 |
| BTNL | Ternell | 146.21 | 354 | dPKPdf | PKPdf | 20 26 35.1 | 0.0 |
| KHC | Kasperske Hory | 146.27 | 345 | ⇑ePKP | PKPbc | 20 26 38.2 | +0.8 |
| BSTI | Sart Tilman | 146.27 | 354 | dPKP | PKPbc | 20 26 37.4 | 0.0 |
| GRF | Grafenberg Arr | 146.28 | 348 | ePKP | PKPbc | 20 26 38.0 | +0.5 |
| | baz=18,slow=2.0 | | | | | | |
| GRFO | Grafenberg | 146.29 | 348 | | PKPbc | 20 26 38.2 | +0.8 |
| CKRC | Cesky Krumlov | 146.36 | 344 | ⇑ePKP | PKPbc | 20 26 38.5 | +0.8 |
| BHOU | Houvegnez | 146.45 | 354 | dPKPdf | PKPbc | 20 26 38.5 | +0.2 |
| BHOU | | | | dPKP | PKPbc | 20 26 38.2 | +0.3 |
| BCLA | Clavier | 146.46 | 355 | dPKP | PKPbc | 20 26 38.3 | +0.5 |
| GERES | GERESS Array B | 146.50 | 344 | | PKPbc | 20 26 37.9 | -0.2 |
| GERES | GERESS Array B | 146.50 | 344 | PKPbc | PKPbc | 20 26 38.2 | +0.1 |
| | comp=Z,6.3nm,0.9s,baz=161,slow=8.5,SNR=25 | | | | | | |
| BGES | Gesves | 146.51 | 355 | dPKP | PKiKP | 20 26 39.6 | -0.6 |
| BMRD | Maredsous | 146.62 | 355 | dPKP | PKPbc | 20 26 37.9 | -0.4 |
| CONA | Conrad Observa | 146.72 | 341 | iPKP | PKPbc | 20 26 39.5 | +0.7 |
| | comp=Z,20nm,1.0s,SNR=19 | | | | | | |
| RCHB | Rochefort | 146.72 | 355 | dPKP | PKPbc | 20 26 37.3 | -1.3 |
| RONA | Rosalia, Austr | 146.78 | 341 | iPKiKP | PKPbc | 20 26 39.8 | +0.9 |
| | comp=Z,18nm,1.0s,SNR=15 | | | | | | |
| DOU | Dourbes | 146.84 | 355 | dPKPbc | PKPbc | 20 26 39.0 | +0.1 |
| WLF | Walferdange | 147.12 | 353 | dPKP | PKPbc | 20 26 39.2 | -0.4 |
| MORH | Mrgy, Hungar | 147.24 | 337 | ⇑P | PKPbc | 20 26 39.4 | -0.6 |
| ARSA | Arzberg | 147.42 | 341 | iPKP | PKPbc | 20 26 40.7 | +0.1 |
| | comp=Z,7.7nm,1.1s | | | | | | |
| ELL | Elmali | 147.50 | 313 | | PKPbc | 20 26 40.6 | -0.6 |
| BIOA | Bad Ischl, Aus | 147.58 | 343 | iPKP | PKPbc | 20 26 41.2 | +0.2 |
| | comp=Z,7.3nm,0.9s,SNR=11 | | | | | | |
| LESA | Schwarzleotal | 148.08 | 344 | iPKP | PKPbc | 20 26 42.3 | 0.0 |
| | comp=Z,5.9nm,0.8s | | | | | | |
| SOKA | Soboth | 148.09 | 341 | iPKP | PKPbc | 20 26 42.2 | -0.1 |
| | comp=Z,15nm,1.4s,SNR=9.6 | | | | | | |
| PERS | Pernice | 148.10 | 341 | iPKPbc | PKPbc | 20 26 42.1 | -0.2 |
| BFO | Black Forest | 148.13 | 350 | | PKPbc | 20 26 42.1 | -0.2 |
| KBA | Koelnbreinsper | 148.22 | 343 | iPKP | PKPbc | 20 26 42.6 | -0.2 |
| | comp=Z,5.6nm,0.7s | | | | | | |
| OBKA | Obir | 148.39 | 341 | iPKP | PKPbc | 20 26 42.1 | -1.0 |
| | comp=Z,5.8nm,1.1s | | | | | | |
| WATA | Walderalm | 148.43 | 346 | iPKP | PKPbc | 20 26 43.3 | 0.0 |
| | comp=Z,13nm,1.0s,SNR=11 | | | | | | |
| RETA | Reutte | 148.47 | 347 | iPKP | PKPbc | 20 26 43.3 | 0.0 |
| | comp=Z,6.1nm,0.7s | | | | | | |
| WTTA | Wattenberg | 148.48 | 346 | iPKiKP | PKPbc | 20 26 43.8 | +0.3 |
| | comp=Z,23nm,0.9s,SNR=12 | | | | | | |
| MOTA | Moosalm | 148.53 | 346 | iPKP | PKPbc | 20 26 43.6 | 0.0 |
| | comp=Z,13nm,0.9s | | | | | | |
| MYKA | Terra Mystica | 148.54 | 343 | iPKP | PKPbc | 20 26 43.0 | -0.5 |
| | comp=Z,10nm,1.0s,SNR=5.4 | | | | | | |
| SQTA | Sankt Quirin | 148.62 | 346 | iPKP | PKPbc | 20 26 43.9 | +0.2 |
| | comp=Z,18nm,1.0s,SNR=9.2 | | | | | | |
| VNDS | Vrh nad Doljski | 148.71 | 341 | iPKPbc | PKPbc | 20 26 43.8 | -0.1 |
| ABTA | Abfaltersbach | 148

comp=Z,8.9nm,0.9s
**MAW Mawson 24.41 151** P **P** **20 14 29.5 +1.4**
comp=Z,12nm,0.7s,baz=304,slow=10,SNR=25
MAW LR LR 20 21 59.7
comp=Z,56nm,19.9s,baz=332,slow=32
comp=Z,12nm,0.7s
**LBTB Lobatse 24.49 348** P **P** **20 14 29.4 +0.1**
LBTB IAmb IAmb 20 14 35.1
comp=Z,27nm,1.5s
**LBTB Lobatse 24.49 348** LR LR 20 22 22.4
comp=Z,132nm,21.9s,baz=179,slow=32
**TROLL Troll, Antarti 26.31 200** ⇑P **P** **20 14 45.7 +0.3**
comp=Z,434nm,0.4s
**SNAA Sanae 27.35 203** P **P** **20 14 54.4 -0.3**
**SNAA Sanae 27.35 203** ⇑P **P** **20 14 55.0 +0.2**
comp=Z,176nm,0.7s
**SNAA Sanae 27.35 203** P **P** **20 14 55.0 +0.2**
comp=Z,5.0nm,0.6s,baz=229,slow=0.6,SNR=17
comp=Z,5.0nm,0.6s
**VNA2 Neumayer--Watz 28.16 206** ⇑P **P** **20 14 58.7 -3.2**
comp=Z,8.7nm,0.5s,baz=243,slow=3.9
**VNA1 Neumayer--Stat 28.27 206** ⇑P **P** **20 15 03.9 +1.0**
comp=Z,18nm,0.8s
**MATP Matopo 28.76 355** LR LR 20 25 48.7
comp=Z,79nm,21.8s,baz=239,slow=35
**VNA3 Neumayer Olymp 28.96 206** ⇑P **P** **20 15 08.9 -0.1**
comp=Z,2.9nm,0.5s
**TSUM Tsumeb 31.80 335** P **P** **20 15 34.4 -0.3**
TSUM IAmb IAmb 20 15 38.6
comp=Z,5.1nm,0.8s
**TSUM Tsumeb 31.80 335** LR LR 20 27 29.6
comp=Z,260nm,19.6s,baz=158,slow=34
**LSZ Lusaka 33.89 355** P **P** **20 15 52.9 0.0**
LSZ IAmb IAmb 20 15 59.9
comp=Z,12nm,1.3s
**BELA Belgrano 2 37.37 198** P **P** **20 16 21.6 -0.6**
BELA IAmb IAmb 20 16 25.8
comp=Z,17nm,1.5s
**QSPA South Pole Qui 41.04 180** P **P** **20 16 52.6 -0.6**
QSPA IAmb IAmb 20 17 01.6
comp=Z,14nm,0.9s
**QSPA South Pole Qui 41.04 180** P **P** **20 16 52.7 -0.5**
comp=Z,6.5nm,0.6s,baz=246,slow=2.1,SNR=97
comp=Z,6.5nm,0.6s
**KMBO Kilima Mbogo 48.16 8** LR LR 20 36 23.6
comp=Z,85nm,20.4s,baz=83,slow=34
**SMAI San Martin Ant 48.33 210** P **P** **20 17 51.3 +0.3**
**MBAR Mbarara 48.39 360** LR LR 20 37 29.9
comp=Z,124nm,18.7s,baz=150,slow=35
**PMSA Palmer Station 48.94 214** LR LR 20 35 31.1
comp=Z,141nm,18.9s,baz=53,slow=32
**SBA Scott Base 50.37 169** P **P** **20 18 07.4 +1.0**
SBA IAmb IAmb 20 18 08.8
comp=Z,6.8nm,0.8s
**H10S2 ASCENSION HYDR 55.27 301** T T 21 18 30.6
baz=144,slow=74,SNR=14
**H10S3 ASCENSION HYDR 55.28 301** T T 21 18 31.0
baz=76,slow=74,SNR=13
**FURI Furi 58.21 9** LR LR 20 42 53.4
comp=Z,65nm,20.1s,baz=190,slow=35
**NWAO Narrogin (SRO) 63.59 110** P **P** **20 19 40.8 0.0**
comp=Z,11nm,1.0s,baz=185,slow=21,SNR=2.6
comp=Z,11nm,1.0s
**DBIC Dimbokro 63.83 320** P **P** **20 19 43.1 +0.7**
**DBIC Dimbokro 63.83 320** P **P** **20 19 43.0 +0.6**
comp=Z,5.1nm,0.8s,baz=141,slow=7.6,SNR=5.0
DBIC LR LR 20 45 00.2
comp=Z,34nm,18.1s,baz=206,slow=34
comp=Z,5.1nm,0.8s
**PLCA Paso Flores 67.02 234** P **P** **20 20 02.7 -0.3**
PLCA IAmb IAmb 20 20 17.3
comp=Z,5.3nm,1.2s
**PLCA Paso Flores 67.02 234** P **P** **20 20 02.4 -0.6**
comp=Z,1.8nm,0.9s,baz=161,slow=5.5,SNR=4.4
comp=Z,1.8nm,0.9s
**TORD Torodi Ar. Bea 67.25 329** P **P** **20 20 05.4 +1.0**
TORD IAmb IAmb 20 20 08.6
comp=Z,4.9nm,0.8s
**TORD Torodi Ar. Bea 67.25 329** P **P** **20 20 06.0 +1.5**
comp=Z,4.2nm,0.8s,baz=159,slow=5.3,SNR=18
comp=Z,4.2nm,0.8s
**CPUP Villa Florida 69.53 253** P **P** **20 20 18.7 -0.1**
**CPUP Villa Florida 69.53 253** P **P** **20 20 18.0 -0.8**
comp=Z,1.9nm,0.6s,baz=128,slow=8.4,SNR=4.6
comp=Z,1.9nm,0.6s
**RCBR Riachuelo 70.61 284** P **P** **20 20 27.2 +1.6**
**PALK Pallekele 70.95 53** LR LR 20 45 25.6
comp=Z,70nm,19.9s,baz=1.7,slow=31
**BDFB Brasilia 71.19 268** P **P** **20 20 30.3 +1.1**
comp=Z,3.9nm,0.6s,baz=90,slow=7.3,SNR=3.2
BDFB LR LR 20 44 04.0
comp=Z,52nm,18.6s,baz=113,slow=30
comp=Z,3.9nm,0.6s
**STKA Stephens Creek 78.44 126** P **P** **20 21 08.7 -2.2**
**STKA Stephens Creek 78.44 126** P **P** **20 21 11.6 +0.7**
comp=Z,2.4nm,0.7s,baz=86,slow=3.0,SNR=4.6
comp=Z,2.4nm,0.7s
**LVC Limon Verde 79.41 248** LR LR 20 55 14.4
comp=Z,27nm,18.1s,baz=286,slow=35
**SIV San Ignacio 79.43 258** LR LR 20 50 45.3
comp=Z,58nm,20.4s,baz=116,slow=32
**ASAR Alice Springs 80.38 115** P **P** **20 21 22.6 +0.9**
comp=Z,1.7nm,0.7s,baz=215,slow=4.2,SNR=14
comp=Z,1.7nm,0.7s
**WRA Warramunga Arr 83.47 113** P **P** **20 21 38.8 +0.9**
comp=Z,1.1nm,0.6s,baz=212,slow=3.8,SNR=7.9
comp=Z,1.1nm,0.6s
**SAML Samuel 86.04 261** P **P** **20 21 50.7 -0.1**
SAML IAmb IAmb 20 21 52.3
comp=Z,5.6nm,1.1s
**KEST Kesra 86.71 342** LR LR 21 01 58.9
comp=Z,84nm,18.8s,baz=305,slow=36
**VAE Valguarnera 87.53 347** LR LR 21 01 13.9
comp=Z,105nm,20.0s,baz=134,slow=36
**MDT Midelt 87.58 331** LR LR 21 01 23.1
comp=Z,29nm,19.3s,baz=152,slow=36
**URZ Urewera 87.90 154** P **P** **20 22 00.0 +0.4**
comp=Z,28nm,1.1s,baz=191,slow=5.7,SNR=2.5
URZ LR LR 21 00 25.2
comp=Z,33nm,18.2s,baz=338,slow=35
comp=Z,28nm,1.1s
**BRTR Keskin Array B 88.55 2** P **P** **20 22 04.4 +2.0**
comp=Z,0.3nm,0.7s,baz=219,slow=3.7,SNR=2.2
comp=Z,0.3nm,0.7s
**GNI Garni 89.77 10** LR LR 21 03 18.4
comp=Z,13nm,18.0s,baz=181,slow=36
**CMAR Chiang Mai Arr 90.19 62** LR LR 20 56 28.5
comp=Z,23nm,19.9s,baz=255,slow=31
**NNA Nana 92.37 249** LR LR 21 01 28.1
comp=Z,16nm,18.0s,baz=182,slow=34
**ESDC Sonseca Array 93.72 334** LR LR 21 05 41.9
comp=Z,36nm,19.0s,baz=157,slow=36
**DAVOX Davos/Dischmat 97.33 346** LR LR 21 08 52.9
comp=Z,43nm,18.6s,baz=141,slow=37
**GERES GERESS Array B 98.78 349** LR LR 21 09 46.6
comp=Z,40nm,20.1s,baz=128,slow=37
**VRAC Vranov 98.89 350** LR LR 21 11 40.2
comp=Z,24nm,18.1s,baz=164,slow=38
**AKASG Malin Array Be 99.51 359** LR LR 21 10 44.0
comp=Z,22nm,20.0s,baz=168,slow=37
**TXAR Lajitas Array 140.43 257** PKhKP PKPpre 20 28 33.4
comp=Z,0.4nm,0.6s,baz=156,slow=4.1,SNR=3.7
**ECSD EROS Data Cent 144.13 282** PKPdf PKPbc 20 28 43.4 +0.1
**RTBA Rita Blanca 144.32 267** PKPdf **PKPab** **20 28 44.1 +0.2**
**MA2 Magadan 144.61 50** PKP **PKPdf** **20 28 45.6 +0.1**
comp=Z,5.9nm,0.8s,baz=225,slow=21,SNR=2.0
**121A Cookes Peak, D 145.19 257** **PKPbc** **20 28 46.4 -0.8**
**319A Douglas 145.37 254** **PKPbc** **20 28 46.8 -1.0**
**AGMN Agassiz Nation 145.56 289** PKPdf **PKPdf** **20 28 46.8 -0.6**
**K30B Basset 145.57 278** PKPdf **PKPdf** **20 28 45.1 -2.6**
**Y22D IRIS PASSCAL I 145.62 260** PKPdf **PKPdf** **20 28 46.3 -1.9**
**SEY Seymchan 145.81 44** PKPbc **PKPab** **20 28 49.6 +1.2**
comp=Z,1.2nm,0.4s,baz=33,slow=1.3,SNR=5.4
**T25A Trinidad 145.82 266** PKPdf **PKPdf** **20 28 45.7 -2.9**
**ANMO Albuquerque 145.86 262** PKPdf **PKPdf** **20 28 46.1 -2.6**
**ULM Lac du Bonnet 146.25 292** PKPbc **PKPab** **20 28 50.4 -0.2**
comp=Z,3.8nm,0.6s,baz=99,slow=1.7,SNR=8.6
**SDCO Great Sand Dun 146.88 266** **PKPbc** **20 28 52.5 +0.1**
**TUC Tucson 146.94 254** PKPdf **PKPdf** **20 28 49.9 -0.6**
**PDAR Pinedale Array 152.11 272** PKPbc **PKPbc** **20 29 04.7 -0.5**
comp=Z,1.3nm,0.9s,baz=131,slow=4.9,SNR=8.7

*IDC **20** 20:09:54.6±3.4, 17.°98S×177.°89W, h514km±37km, mb3.6/15, mbtmp4.5/15, Error ellipse: s-maj=17.8km s-min=15.9km az=124.0*
*NEIC **20** 20:09:58.7±1.8, 17.°9S±0.°1×177.°9W±0.°1, h561km±7km,*

*mb4.3/98, Error ellipse: s-maj=22.6km s-min=17.9km az=141.0*
**ISC 20 20:09:57.8**±0.4, **18.°01S**×0.°09×**177.°97W**×0.°07, **h550**km,
**n181**,σ1°**23**/173, **mb4.3**/66, **1C-5D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **MSVF** | **Nonsavu** | **3.80** | **274** | P | **P** | **20 11 21.6** | **+3.3** |
| MSVF | | | | S | **S** | **20 12 28.8** | **+4.8** |
| **NIUE** | **Niue** | **7.70** | **99** | P | **P** | **20 11 50.9** | **-1.8** |
| NIUE | | | | S | **S** | **20 13 33.6** | **+6.9** |
| **URZ** | **Urewera** | **20.63** | **191** | P | **P** | **20 13 57.0** | **-2.4** |
| | 13nm,0.5s,baz=211,slow=1.8,SNR=11 | | | | | | |
| | 13nm,0.5s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.25** | **193** | P | **P** | **20 14 20.8** | **-2.1** |
| **BHW** | **Baring Head** | **24.11** | **193** | P | **P** | **20 14 27.2** | **-3.4** |
| **PLWZ** | **Palliser** | **24.19** | **192** | P | **P** | **20 14 30.1** | **-1.1** |
| **KHZ** | **Kahutara** | **25.38** | **195** | P | **P** | **20 14 40.1** | **-1.6** |
| **GVZ** | **Greta Valley S** | **26.02** | **195** | P | **P** | **20 14 43.7** | **-3.7** |
| **LTZ** | **Lake Taylor** | **26.05** | **197** | P | **P** | **20 14 44.2** | **-3.5** |
| **INZ** | **Inchbonnie** | **26.23** | **198** | P | **P** | **20 14 47.0** | **-2.2** |
| **FOZ** | **Fox Glacier** | **27.46** | **199** | P | **P** | **20 14 59.7** | **-0.3** |
| **EIDS** | **Eidsvold** | **29.63** | **250** | P | **P** | **20 15 18.7** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 20 15 59.6 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.64** | **200** | P | **P** | **20 15 18.3** | **-0.7** |
| **COEN** | **Coen** | **37.52** | **270** | P | **P** | **20 16 27.4** | **+1.7** |
| **STKA** | **Stephens Creek** | **38.95** | **241** | P | **P** | **20 16 37.1** | **+0.1** |
| **STKA** | **Stephens Creek** | **38.95** | **241** | P | **P** | **20 16 37.8** | **+0.8** |
| | comp=Z,1.5nm,0.4s,baz=100,slow=11,SNR=5.6 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.72** | **241** | P | **P** | **20 17 15.2** | **+0.3** |
| **WB0** | **Warramunga Arr** | **44.99** | **260** | P | **P** | **20 17 24.7** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 20 17 28.8 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.01** | **260** | P | **P** | **20 17 23.9** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 20 17 47.4 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.02** | **260** | P | **P** | **20 17 23.8** | **-1.2** |
| **WRA** | **Warramunga Arr** | **45.02** | **260** | P | **P** | **20 17 24.5** | **-0.6** |
| | comp=Z,1.4nm,0.5s,baz=97,slow=6.9,SNR=14 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 18 54.2** | **-0.1** |
| | comp=Z,0.8nm,0.4s,baz=91,slow=3.7,SNR=7.1 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.16** | **254** | P | **P** | **20 17 25.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.17** | **254** | P | **P** | **20 17 25.9** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.17** | **254** | P | **P** | **20 17 26.0** | **-0.1** |
| | comp=Z,9.7nm,0.6s,baz=88,slow=8.5,SNR=29 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 18 54.7** | **-0.1** |
| | comp=Z,1.5nm,0.4s,baz=104,slow=3.9,SNR=11 | | | | | | |
| ASAR | | | | S | **S** | **20 23 23.2** | **-2.9** |
| | comp=Z,0.4nm,0.8s,baz=86,slow=15,SNR=2.1 | | | | | | |
| | comp=Z,9.7nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.21** | **268** | P | **P** | **20 17 56.4** | **-0.1** |
| **FORT** | **Forrest** | **50.34** | **245** | P | **P** | **20 18 04.3** | **-0.3** |
| FORT | | | | IAmb | IAmb | 20 18 04.8 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **50.90** | **264** | P | **P** | **20 18 08.7** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 20 18 12.5 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.42** | **261** | P | **P** | **20 18 27.4** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **58.29** | **255** | P | **P** | **20 19 00.1** | **-0.5** |
| **MBWA** | **Marble Bar** | **58.45** | **256** | P | **P** | **20 19 01.3** | **-0.4** |
| **LUWI** | **Luwuk** | **60.53** | **279** | P | **P** | **20 19 16.5** | **+0.8** |
| LUWI | | | | IAmb | IAmb | 20 19 32.8 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **TOLI2** | **Tolitoli** | **63.15** | **281** | P | **P** | **20 19 33.5** | **+0.8** |
| TOLI2 | | | | IAmb | IAmb | 20 19 37.2 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **CASY** | **Casey** | **66.22** | **205** | P | **P** | **20 19 51.4** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **66.46** | **268** | P | **P** | **20 19 52.6** | **-0.9** |
| **MJAR** | **Matsushiro Arr** | **68.24** | **323** | P | **P** | **20 20 02.9** | **-1.1** |
| | comp=Z,2.9nm,0.5s,baz=121,slow=7.7,SNR=7.3 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **KKM** | **Kota Kinabalu** | **69.17** | **284** | P | **P** | **20 20 10.6** | **+0.4** |
| KKM | | | | IAmb | IAmb | 20 20 32.4 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **UGM** | **Wanagama** | **70.06** | **268** | P | **P** | **20 20 15.5** | **+0.1** |
| **JNU** | **Nakatsue** | **70.50** | **316** | P | **P** | **20 20 17.7** | **+0.1** |
| **JKA** | **Kamikawa-asahi** | **71.56** | **331** | P | **P** | **20 20 24.9** | **+1.4** |
| JKA | | | | IAmb | IAmb | 20 20 25.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ASAJ** | **Asahikawa** | **71.57** | **331** | P | **P** | **20 20 24.8** | **+1.2** |
| | comp=Z,5.7nm,0.8s,baz=202,slow=7.1,SNR=4.0 | | | | | | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | **P** | **20 20 27.1** | **+0.9** |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | **P** | **20 20 27.1** | **+0.9** |
| | comp=Z,3.1nm,0.5s,baz=208,slow=0.7,SNR=8.5 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **UNV** | **Unalaska Valle** | **72.24** | **7** | P | **P** | **20 20 25.9** | **-1.3** |
| **SSLB** | **Suanglung** | **72.64** | **303** | P | **P** | **20 20 28.7** | **-1.6** |
| SSLB | | | | IAmb | IAmb | 20 20 30.6 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.89** | **345** | P | **P** | **20 20 35.8** | **-0.9** |
| **PETK** | **Petropavlovsk-** | **73.89** | **345** | P | **P** | **20 20 35.6** | **-1.1** |
| | comp=Z,9.7nm,0.9s,baz=133,slow=10,SNR=5.3 | | | | | | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **S12K** | **Black Hills** | **74.65** | **9** | P | **P** | **20 20 39.7** | **-1.2** |
| S12K | | | | IAmb | IAmb | 20 20 52.5 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **KSRS** | **Korea Array** | **75.06** | **318** | P | **P** | **20 20 44.1** | **+0.6** |
| | comp=Z,1.3nm,0.7s,baz=143,slow=6.4,SNR=3.1 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **PLK4** | **Peulik 4** | **77.48** | **12** | P | **P** | **20 20 55.4** | **-1.1** |
| **OHAK** | **Old Harbor** | **77.73** | **13** | P | **P** | **20 20 57.5** | **-0.3** |
| OHAK | | | | IAmb | IAmb | 20 21 11.7 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **DSP** | **Deep Springs** | **78.85** | **45** | P | **P** | **20 21 03.9** | **-0.4** |
| **O16K** | **Kokwok River B** | **79.01** | **10** | P | **P** | **20 21 03.5** | **-1.1** |
| **NVAR** | **Mina Array Bea** | **79.21** | **44** | P | **P** | **20 21 05.0** | **-1.5** |
| **NVAR** | **Mina Array Bea** | **79.21** | **44** | P | **P** | **20 21 07.3** | **+0.8** |
| | comp=Z,3.4nm,0.8s,baz=224,slow=9.0,SNR=14 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **N15K** | **Kwethluk River** | **79.24** | **9** | P | **P** | **20 21 05.8** | **-0.1** |
| N15K | | | | IAmb | IAmb | 20 21 10.5 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **P18K** | **Big Mountain,** | **79.34** | **12** | P | **P** | **20 21 05.6** | **-0.8** |
| P18K | | | | IAmb | IAmb | 20 21 06.1 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **KVN** | **Kaiserville** | **79.68** | **43** | P | **P** | **20 21 09.6** | **+0.7** |
| **O18K** | **Koktuh Hills** | **79.77** | **11** | P | **P** | **20 21 08.2** | **-0.5** |
| O18K | | | | IAmb | IAmb | 20 21 09.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.14** | **38** | P | **P** | **20 21 11.9** | **+0.7** |
| J05D | | | | IAmb | IAmb | 20 21 13.0 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **M16K** | **Timber Creek** | **80.23** | **9** | P | **P** | **20 21 11.6** | **+0.6** |
| M16K | | | | IAmb | IAmb | 20 21 12.9 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **N18K** | **Kilae Creek** | **80.42** | **11** | P | **P** | **20 21 11.3** | **-0.7** |
| **H04A** | **Detroit Lake** | **80.42** | **37** | P | **P** | **20 21 12.7** | **+0.3** |
| **PINE** | **Pine Mountain** | **80.61** | **38** | P | **P** | **20 21 13.3** | **-0.4** |
| PINE | | | | IAmb | IAmb | 20 21 15.6 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **N19K** | **Bonanza Creek** | **80.80** | **11** | P | **P** | **20 21 12.2** | **-1.9** |
| N19K | | | | IAmb | IAmb | 20 21 29.6 | |
| | comp=Z,9.5nm,1.3s | | | | | | |
| **L16K** | **Owhat River** | **80.81** | **9** | | **P** | **20 21 14.6** | **+0.6** |
| L16K | | | | IAmb | IAmb | 20 21 15.0 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **M17K** | **Holitna River** | **80.83** | **10** | P | **P** | **20 21 14.9** | **+0.8** |
| M17K | | | | IAmb | IAmb | 20 21 15.9 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.09** | **8** | P | **P** | **20 21 16.2** | **+0.8** |
| K15K | | | | IAmb | IAmb | 20 21 17.1 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **I07A** | **Izee** | **81.63** | **38** | IAmb | IAmb | 20 21 20.6 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **L18K** | **Granite Mounta** | **81.72** | **10** | P | **P** | **20 21 19.3** | **+0.6** |
| L18K | | | | IAmb | IAmb | 20 21 20.1 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **K17K** | **Iditarod** | **81.94** | **9** | P | **P** | **20 21 19.6** | **-0.2** |
| K17K | | | | IAmb | IAmb | 20 21 25.8 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **SUA** | **Susitna One** | **82.14** | **13** | P | **P** | **20 21 20.1** | **-0.8** |
| **J16K** | **Anvik River** | **82.16** | **8** | P | **P** | **20 21 21.3** | **+0.4** |
| **J17K** | **VABM Dome** | **82.47** | **8** | P | **P** | **20 21 22.3** | **-0.1** |
| J17K | | | | IAmb | IAmb | 20 21 46.3 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.81** | **13** | P | **P** | **20 21 23.6** | **-0.7** |
| GHO | | | | IAmb | IAmb | 20 21 24.5 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **J18K** | **Innoko River** | **82.89** | **9** | P | **P** | **20 21 24.7** | **+0.1** |
| J18K | | | | IAmb | IAmb | 20 21 25.5 | |
| | comp=Z,6.3nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SCM** | **Sheep Creek Mo** | **83.22** | **14** | P | **P** | **20 21 26.0** | **-0.4** |
| SCM | | | | IAmb | IAmb | 20 21 26.7 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **K20K** | **Telida** | **83.23** | **11** | IAmb | IAmb | 20 21 26.8 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **J19K** | **Poorman** | **83.56** | **10** | P | **P** | **20 21 27.3** | **-0.6** |
| **N25K** | **Chitina, Valde** | **83.69** | **15** | P | **P** | **20 21 28.5** | **-0.2** |
| N25K | | | | IAmb | IAmb | 20 21 29.3 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| **GLB** | **Gilahina Butte** | **83.75** | **16** | P | **P** | **20 21 27.9** | **-1.0** |
| GLB | | | | IAmb | IAmb | 20 21 29.0 | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **83.97** | **347** | P | **P** | **20 21 29.3** | **-0.6** |
| | comp=Z,5.7nm,0.6s,baz=113,slow=5.6,SNR=11 | | | | | | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **F10A** | **Beach Ranch, E** | **84.02** | **38** | | **P** | **20 21 29.8** | **-1.0** |
| F10A | | | | IAmb | IAmb | 20 21 31.7 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **RND** | **Reindeer** | **84.28** | **13** | IAmb | IAmb | 20 21 31.8 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **DHY** | **Denali Highway** | **84.30** | **13** | P | **P** | **20 21 30.9** | **-0.8** |
| DHY | | | | IAmb | IAmb | 20 21 55.9 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **84.47** | **12** | P | **P** | **20 21 30.4** | **-2.0** |
| **ENH** | **Enshi** | **84.67** | **304** | P | **P** | **20 21 34.7** | **+0.5** |
| ENH | | | | IAmb | IAmb | 20 21 36.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **M27K** | **Edge Creek, AK** | **85.02** | **16** | P | **P** | **20 21 34.6** | **-0.7** |
| M27K | | | | IAmb | IAmb | 20 21 36.0 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **I21K** | **Tanana** | **85.27** | **11** | P | **P** | **20 21 34.4** | **-1.8** |
| I21K | | | | IAmb | IAmb | 20 21 45.2 | |
| | comp=Z,8.7nm,1.5s | | | | | | |
| **Q32M** | **Nakina River** | **85.32** | **22** | P | **P** | **20 21 36.3** | **-0.6** |
| Q32M | | | | IAmb | IAmb | 20 21 38.3 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **WRH** | **Wood River Hil** | **85.38** | **13** | IAmb | IAmb | 20 21 37.4 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **O30N** | **Mendenhall** | **85.41** | **19** | P | **P** | **20 21 36.4** | **-0.7** |
| O30N | | | | IAmb | IAmb | 20 21 38.2 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **HDA** | **Harding Lake** | **85.56** | **13** | IAmb | IAmb | 20 21 38.0 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.59** | **13** | IAmb | IAmb | 20 21 38.7 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.70** | **57** | P | **P** | **20 21 39.6** | **+0.3** |
| TX31 | | | | IAmb | IAmb | 20 21 42.0 | |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.70** | **57** | | **P** | **20 21 40.7** | **+1.4** |
| **TXAR** | **Lajitas Array** | **85.70** | **57** | P | **P** | **20 21 39.0** | **-0.3** |
| | comp=Z,2.9nm,0.7s,baz=217,slow=6.1,SNR=17 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **MDM** | **Murphy Dome** | **85.78** | **12** | IAmb | IAmb | 20 21 39.2 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **IL31** | | **85.89** | **13** | IAmb | IAmb | 20 21 39.1 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **85.89** | **13** | P | **P** | **20 21 38.7** | **-0.6** |
| **ILAR** | **Eielson Array** | **85.89** | **13** | P | **P** | **20 21 38.4** | **-0.9** |
| | comp=Z,1.2nm,0.4s,baz=218,slow=5.3,SNR=22 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **M29M** | **Somme Creek** | **86.02** | **17** | P | **P** | **20 21 39.9** | **-0.2** |
| M29M | | | | IAmb | IAmb | 20 22 09.4 | |
| | comp=Z,8.1nm,1.5s | | | | | | |
| **J25K** | **Salcha River,** | **86.08** | **13** | P | **P** | **20 21 39.5** | **-0.8** |
| J25K | | | | IAmb | IAmb | 20 21 52.9 | |
| | comp=Z,7.9nm,1.5s | | | | | | |
| **E18K** | **Tukpahlearik C** | **86.14** | **7** | P | **P** | **20 21 40.3** | **-0.1** |
| E18K | | | | IAmb | IAmb | 20 21 51.0 | |
| | comp=Z,5.7nm,1.2s | | | | | | |
| **G21K** | **Allakaket** | **86.24** | **10** | P | **P** | **20 21 40.3** | **-0.5** |
| **E19K** | **Redstone River** | **86.58** | **8** | IAmb | IAmb | 20 21 42.9 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **XAN** | **Xi'an** | **86.65** | **307** | ⇑P | **P** | **20 21 45.1** | **+1.5** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.14** | **43** | P | **P** | **20 21 46.0** | **0.0** |
| | comp=Z,1.1nm,0.7s,baz=207,slow=2.7,SNR=8.0 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **ELIB** | **Princess Elisa** | **89.11** | **187** | *d*P | **P** | **20 21 54.6** | **+0.1** |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.31** | **290** | P | **P** | **20 21 57.5** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** | **89.31** | **290** | P | **P** | **20 21 57.8** | **+1.5** |
| | comp=Z,2.3nm,0.8s,baz=105,slow=2.8,SNR=12 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **OK032** | **Salt Plains WL** | **92.72** | **52** | P | **P** | **20 22 10.7** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **108.57** | **322** | PKiKP | **PKiKP** | **20 27 23.0** | **-1.0** |
| | comp=Z,0.4nm,0.5s,baz=94,slow=2.6,SNR=1.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **109.51** | **314** | PKiKP | **PKiKP** | | |
| | comp=Z,0.4nm,0.5s,baz=215,slow=0.3,SNR=4.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **112.23** | **318** | PKiKP | **PKiKP** | **20 27 29.6** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=95,slow=1.7,SNR=6.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.19** | **321** | PKP | **PKPdf** | **20 27 39.7** | **-0.9** |
| | comp=Z,1.0nm,0.4s,baz=135,slow=2.3,SNR=9.7 | | | | | | |
| **ARU** | **Arti** | **123.17** | **326** | PKP | **PKPdf** | **20 27 51.3** | **-0.6** |
| | comp=Z,1.9nm,0.5s,baz=237,slow=5.2,SNR=4.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **125.22** | **320** | PKP | **PKPdf** | **20 27 56.0** | **0.0** |
| | comp=Z,0.6nm,0.5s,baz=132,slow=0.8,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.49** | **350** | PKP | **PKPdf** | **20 27 57.0** | **-0.9** |
| | comp=Z,1.8nm,0.9s,baz=40,slow=2.1,SNR=8.5 | | | | | | |
| **FINES** | **FINESS Array B** | **133.40** | **344** | PKhKP | PKPpre | 20 28 05.2 | |
| | comp=Z,2.3nm,0.9s,baz=266,slow=25,SNR=3.6 | | | | | | |
| FINES | | | | PKP | **PKPdf** | **20 28 12.1** | **+0.9** |
| | comp=Z,3.1nm,1.0s,baz=48,slow=2.1,SNR=1.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **136.52** | **354** | PKP | **PKPdf** | **20 28 16.4** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=41,slow=2.1,SNR=1.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.53** | **5** | PKhKP | PKPpre | 20 28 24.2 | |
| | comp=Z,0.4nm,0.5s,baz=327,slow=3.2,SNR=5.9 | | | | | | |
| **GAZ** | **Gaziantep** | **143.72** | **309** | | PKPab | 20 28 30.3 | +0.4 |
| **ILGA** | **Ilgaz** | **144.44** | **317** | PKPdf | PKPbc | 20 28 31.7 | -0.5 |
| **OJC** | **Ojcow** | **144.85** | **340**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WATA** | **Walderalm** | **149.72** | **347** | *i* pPKP | **PKPbc** | **20 28 45.4** | **-0.6** |
| | comp=Z,2.9nm,0.5s,SNR=4.6 | | | | | | | |
| **OBKA** | **Obir** | **149.75** | **343** | *i* pPKP | **PKiKP** | **20 28 47.3** | **+0.5** |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.78** | **347** | *i* pPKP | **PKPbc** | **20 28 46.0** | **-0.2** |
| | comp=Z,8.5nm,0.6s,SNR=11 | | | | | | | |
| **MOTA** | **Moosalm** | **149.81** | **348** | *i* pPKP | **PKPbc** | **20 28 45.8** | **-0.4** |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.89** | **344** | *i* pPKP | **PKPbc** | **20 28 45.4** | **-0.9** |
| | comp=Z,4.2nm,0.6s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.91** | **347** | *i* pPKP | **PKPbc** | **20 28 46.3** | **-0.1** |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.06** | **345** | *i* pPKP | **PKPbc** | **20 28 46.0** | **-0.8** |
| | comp=Z,6.6nm,0.6s,SNR=13 | | | | | | | |
| **PRED** | **Cave del Predi** | **150.08** | **344** | PKPdf | **PKPdf** | **20 28 37.6** | **-3.5** |
| PRED | | | | | **PKPab** | **20 28 52.9** | **-2.2** |
| **DAVA** | **Damuels** | **150.10** | **349** | *i* pPKP | **PKPbc** | **20 28 47.3** | **+0.4** |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| **FETA** | **Feichten** | **150.19** | **348** | *i* pPKP | **PKPbc** | **20 28 47.2** | **0.0** |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **STAL** | **STALIGIAL** | **150.47** | **345** | PKPbc | **PKPbc** | **20 28 47.0** | **-0.6** |
| **FUORN** | **Ofenpass-Fuorn** | **150.67** | **348** | | **PKPbc** | **20 28 47.9** | **-0.5** |
| **FNA** | **Florina** | **151.86** | **328** | | **PKPbc** | **20 28 49.6** | **-1.4** |
| **ESDC** | **Sonseca Array** | **157.79** | **12** | PKPab | **PKPab** | **20 29 27.1** | **-1.1** |
| | comp=Z,0.2nm,0.4s,baz=343,slow=5.0,SNR=5.8 | | | | | | | |

*JMA* ***20*** *20:17:22.7±0.4, 45°N±2°×14°2E±°, h302km±3km, MV2.7/19, SOYA REGION*
*IDC* ***20*** *20:17:23.1±0.7, 45°.40N×141°.79E, h290km±9km, mb3.0/8, mbtmp3.6/11, Error ellipse: s-maj=20.8km s-min=14.4km az=3.0*
**ISC 20 20:17:23.3**±0.8, **45°.4N**±0°.1×**141°.80E**±0°.09, **h293**km±8km, **n22**, σ0°**49**/23, **mb3.2**/8, **Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JWK2** | **Keihoku** | **0.11** | **139** | **P** | | **Pn** | **20 18 01.6** | **+1.1** |
| **JRR** | **Rishiri** | **0.43** | **233** | *e*P | | **Pn** | **20 18 01.6** | **+0.7** |
| **JRBN** | **Rebuntou** | **0.52** | **273** | *e*P | | **Pn** | **20 18 01.3** | **+0.3** |
| **JSE** | **Soyaes** | **0.71** | **128** | *e*P | | **Pn** | **20 18 02.0** | **+0.3** |
| **ASAJ** | **Asahikawa** | **1.40** | **156** | P | | **Pn** | **20 18 05.5** | **+0.3** |
| | 16nm,0.4s,baz=306,slow=4.4,SNR=60 | | | | | | | |
| ASAJ | | | | S | | **S** | **20 18 37.5** | **-0.9** |
| | 4.4nm,0.5s,baz=177,slow=30,SNR=2.1 | | | | | | | |
| **ASAJ** | **Asahikawa** | **1.40** | **156** | *e*P | | **Pn** | **20 18 05.4** | **+0.3** |
| **JKK2** | **Kamakawa 2** | **1.67** | **156** | *e*P | | **Pn** | **20 18 07.3** | **+0.3** |
| **JMP** | **Maruseppu** | **1.78** | **141** | *e*P | | **Pn** | **20 18 07.9** | **+0.1** |
| **JTKR** | **Abashiri--Toko** | **2.07** | **133** | *e*P | | **Pn** | **20 18 10.3** | **+0.3** |
| **JAR** | **Ashorobuto** | **2.53** | **145** | *e*P | | **Pn** | **20 18 14.2** | **+0.1** |
| **JEW** | **Eniwo** | **2.57** | **186** | *e*P | | **Pn** | **20 18 14.9** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **7.08** | **264** | P | | **Pn** | **20 19 06.0** | **+0.5** |
| | 3.0nm,0.7s,baz=67,slow=14,SNR=6.5 | | | | | | | |
| **KLR** | **Kul'dur** | **7.83** | **303** | P | | **Pn** | **20 19 14.5** | **-0.1** |
| | 1.1nm,0.5s,baz=118,slow=16,SNR=6.1 | | | | | | | |
| **SEY** | **Seymchan** | **18.59** | **15** | P | | **P** | **20 21 19.4** | **+0.2** |
| | 5.3nm,0.7s,baz=208,slow=9.1,SNR=12 | | | | | | | |
| **SONM** | **Songino Array** | **24.31** | **289** | P | | **P** | **20 22 14.8** | **0.0** |
| | 0.5nm,0.5s,baz=83,slow=9.2,SNR=5.1 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.43** | **294** | P | | **P** | **20 24 33.1** | **-0.4** |
| | 0.6nm,0.7s,baz=82,slow=11,SNR=4.2 | | | | | | | |
| | 0.6nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.50** | **301** | P | | **P** | **20 24 41.7** | **-0.4** |
| | 0.5nm,0.4s,baz=68,slow=8.7,SNR=3.1 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **42.45** | **37** | P | | **P** | **20 24 49.5** | **0.0** |
| | 0.4nm,0.6s,baz=286,slow=8.3,SNR=5.3 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **45.48** | **307** | P | | **P** | **20 25 13.2** | **-0.3** |
| | 0.3nm,0.3s,baz=77,slow=10,SNR=5.5 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **69.11** | **188** | P | | **P** | **20 27 58.3** | **+0.3** |
| | 0.6nm,1.0s,baz=5.4,slow=3.9,SNR=3.6 | | | | | | | |
| | 0.6nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **69.87** | **55** | P | | **P** | **20 28 03.3** | **+0.5** |
| | 0.5nm,0.6s,baz=302,slow=5.2,SNR=5.1 | | | | | | | |
| | 0.5nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **71.69** | **47** | P | | **P** | **20 28 13.3** | **-0.4** |
| | 0.3nm,0.5s,baz=207,slow=1.0,SNR=4.6 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |

**NAM 20 20:22:35.7**±4.5, **19°.74S**×**14°.48E**, **h17**km±15km, **ML1.5, 4C-6D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.02** | **101** | *i* P | | Pg | 20 22 40.6 | +1.7 |
| ST3N | | | | *i* S | | Sg | 20 22 41.9 | +0.9 |
| ST3N | | | | IAML | | | 20 22 42.8 | |
| | comp=Z,122nm,0.3s | | | | | | | |
| **ST3N** | **ST3** | **0.02** | **101** | ⇓*i* P | | Pg | 20 22 40.6 | +1.8 |
| ST3N | | | | *i* S | | Sg | 20 22 42.0 | +1.0 |
| ST3N | | | | IAML | | | 20 22 42.2 | |
| | comp=Z,58nm,0.0s | | | | | | | |
| **ST9N** | **ST9** | **0.09** | **134** | *i* P | | Pg | 20 22 39.5 | +0.3 |
| ST9N | | | | *i* S | | Sg | 20 22 40.3 | -1.3 |
| ST9N | | | | IAML | | | 20 22 40.8 | |
| | comp=Z,675nm,0.3s | | | | | | | |
| **ST9N** | **ST9** | **0.09** | **134** | ⇓*i* P | | Pg | 20 22 39.5 | +0.3 |
| ST9N | | | | *i* S | | Sg | 20 22 40.2 | -1.4 |
| ST9N | | | | IAML | | | 20 22 40.5 | |
| | comp=Z,4μm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.10** | **231** | *i* P | | Pg | 20 22 41.8 | +2.4 |
| ST6N | | | | *i* S | | Sg | 20 22 44.1 | +2.3 |
| ST6N | | | | IAML | | | 20 22 44.7 | |
| | comp=Z,178nm,0.3s | | | | | | | |
| **ST6N** | **ST6** | **0.10** | **231** | ⇓*i* P | | Pg | 20 22 41.7 | +2.3 |
| ST6N | | | | ⇑*i* P | | | 20 22 41.8 | |
| ST6N | | | | IAML | | | 20 22 44.2 | |
| | comp=Z,60nm,0.1s | | | | | | | |
| ST6N | | | | IAML | | | 20 22 44.7 | |
| | comp=N,62nm,0.0s | | | | | | | |
| **ST1N** | **ST1** | **0.12** | **89** | *i* P | | Pb | 20 22 40.4 | +0.7 |
| ST1N | | | | *i* S | | Sg | 20 22 41.5 | -0.8 |
| ST1N | | | | IAML | | | 20 22 42.1 | |
| | comp=Z,349nm,0.3s | | | | | | | |
| **ST1N** | **ST1** | **0.12** | **89** | *i* P | | Pb | 20 22 40.3 | +0.6 |
| ST1N | | | | *i* S | | Sg | 20 22 41.5 | -0.8 |
| ST1N | | | | IAML | | | 20 22 41.7 | |
| | comp=Z,98nm,0.1s | | | | | | | |
| **ST8N** | **ST8** | **0.16** | **287** | *i* P | | Pb | 20 22 43.8 | +3.4 |
| ST8N | | | | *i* S | | Sb | 20 22 47.6 | +4.2 |
| ST8N | | | | IAML | | | 20 22 48.6 | |
| | comp=Z,79nm,0.3s | | | | | | | |
| **ST8N** | **ST8** | **0.16** | **287** | ⇓*i* P | | Pb | 20 22 43.8 | +3.5 |
| ST8N | | | | *i* S | | Sb | 20 22 47.2 | +3.8 |
| ST8N | | | | IAML | | | 20 22 48.5 | |
| | comp=Z,9.4nm,0.0s | | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | *i* P | | Pg | 20 22 40.8 | -0.1 |
| ST2N | | | | *i* S | | Sg | 20 22 41.9 | -2.6 |
| ST2N | | | | IAML | | | 20 22 43.0 | |
| | comp=Z,92nm,0.3s | | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | ⇑*i* P | | Pg | 20 22 40.9 | -0.1 |
| ST2N | | | | *i* S | | Sg | 20 22 42.7 | -1.8 |
| ST2N | | | | IAML | | | 20 22 45.0 | |
| | comp=Z,134nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.27** | **101** | *i* P | | Pb | 20 22 41.9 | -0.2 |
| ST5N | | | | *i* S | | Sg | 20 22 44.3 | -1.5 |
| ST5N | | | | IAML | | | 20 22 44.8 | |
| | comp=Z,158nm,0.3s | | | | | | | |
| **ST5N** | **ST5** | **0.27** | **101** | ⇓*i* P | | Pg | 20 22 41.9 | +0.2 |
| ST5N | | | | *i* S | | Sg | 20 22 44.5 | -1.3 |
| ST5N | | | | IAML | | | 20 22 44.9 | |
| | comp=Z,74nm,0.0s | | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | ⇑*i* P | | Pb | 20 22 43.4 | +1.1 |
| ST10N | | | | *i* S | | Sb | 20 22 46.9 | +0.3 |
| ST10N | | | | IAML | | | 20 22 48.5 | |
| | comp=Z,58nm,0.1s | | | | | | | |
| **ST11N** | **ST11** | **0.35** | **76** | *i* P | | Pb | 20 22 44.5 | +0.9 |
| ST11N | | | | *i* S | | Sb | 20 22 49.0 | 0.0 |
| ST11N | | | | IAML | | | 20 22 50.3 | |
| | comp=Z,28nm,0.3s | | | | | | | |
| **ST11N** | **ST11** | **0.35** | **76** | ⇑*i* P | | Pb | 20 22 44.5 | +0.9 |
| ST11N | | | | *i* S | | Sb | 20 22 49.0 | +0.1 |
| ST11N | | | | IAML | | | 20 22 51.0 | |
| | comp=Z,15nm,0.0s | | | | | | | |
| **ST4N** | **ST4** | **0.49** | **108** | ⇓*i* P | | Pb | 20 22 45.9 | -0.1 |
| ST4N | | | | *i* S | | Sg | 20 22 50.9 | -1.4 |
| ST4N | | | | IAML | | | 20 22 51.8 | |
| | comp=Z,24nm,0.1s | | | | | | | |

**ROM 20 20:24:14.6**±0.1, **41°.858N**±0°.005×**14°.866E**±0°.006, **h16**km±1km, **ML1.2**/16, **4C-2D, Error ellipse: s-maj=0.6km s-min=0.3km az=189.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **T1411** | **Guglionesi (CB** | **0.10** | **27** | ⇑P | | Pg | 20 24 18.3 | +0.2 |
| T1411 | | | | S | | Sg | 20 24 21.2 | +0.8 |
| T1411 | | | | AML | | AML | | |
| | comp=N,1146μm,0.1s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=N,1150μm,0.1s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=N,1166μm,0.2s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=E,1810μm,0.1s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=E,1770μm,0.1s | | | | | | | |
| **T1411** | **Guglionesi (CB** | **0.10** | **27** | AML | | AML | | |
| | comp=E,1770μm,0.1s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=N,1150μm,0.1s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=E,1810μm,0.1s | | | | | | | |
| T1411 | | | | AML | | AML | | |
| | comp=N,1166μm,0.2s | | | | | | | |
| **T1412** | **Lupara (CB)** | **0.10** | **225** | ⇑P | | Pg | 20 24 18.0 | -0.1 |
| T1412 | | | | S | | Sb | 20 24 20.8 | +0.2 |
| T1412 | | | | AML | | AML | | |
| | comp=E,488μm,0.2s | | | | | | | |
| T1412 | | | | AML | | AML | | |
| | comp=N,708μm,1.4s | | | | | | | |
| T1412 | | | | AML | | AML | | |
| | comp=E,488μm,0.2s | | | | | | | |
| T1412 | | | | AML | | AML | | |
| | comp=N,708μm,0.6s | | | | | | | |
| **T1412** | **Lupara (CB)** | **0.10** | **225** | AML | | AML | | |
| | comp=N,20μm,1.4s | | | | | | | |
| T1412 | | | | AML | | AML | | |
| | comp=E,488μm,0.2s | | | | | | | |
| T1412 | | | | AML | | AML | | |
| | comp=N,708μm,0.6s | | | | | | | |
| T1412 | | | | AML | | AML | | |
| | comp=E,527μm,0.2s | | | | | | | |
| **T1413** | **San Martino in** | **0.11** | **93** | ⇑P | | Pb | 20 24 18.3 | -0.1 |
| T1413 | | | | S | | Sb | 20 24 21.3 | +0.4 |
| T1413 | | | | AML | | AML | | |
| | comp=N,516μm,0.5s | | | | | | | |
| T1413 | | | | AML | | AML | | |
| | comp=N,516μm,0.5s | | | | | | | |
| T1413 | | | | AML | | AML | | |
| | comp=E,404μm,0.5s | | | | | | | |
| **T1413** | **San Martino in** | **0.11** | **93** | AML | | AML | | |
| | comp=N,516μm,0.5s | | | | | | | |
| T1413 | | | | AML | | AML | | |
| | comp=E,404μm,0.5s | | | | | | | |
| **FRES** | **Fresagrandinar** | **0.19** | **308** | P | | Pb | 20 24 19.5 | -0.1 |
| FRES | | | | AML | | AML | | |
| | comp=E,160μm,0.6s | | | | | | | |
| FRES | | | | AML | | AML | | |
| | comp=N,135μm,1.0s | | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **172** | ⇓P | | Pg | 20 24 19.7 | +0.2 |
| CIGN | | | | S | | Sb | 20 24 23.6 | +0.1 |
| CIGN | | | | AML | | AML | | |
| | comp=E,57μm,0.5s | | | | | | | |
| CIGN | | | | AML | | AML | | |
| | comp=N,71μm,0.4s | | | | | | | |
| CIGN | | | | AML | | AML | | |
| | comp=N,47μm,1.5s | | | | | | | |
| **MELA** | **Melanico ??? S** | **0.25** | **128** | ⇓P | | Pg | 20 24 20.1 | 0.0 |
| MELA | | | | S | | Sb | 20 24 24.6 | -0.1 |
| MELA | | | | AML | | AML | | |
| | comp=E,118μm,1.0s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=N,195μm,0.5s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=E,118μm,1.0s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=E,91μm,0.8s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=E,150μm,0.6s | | | | | | | |
| MELA | | | | AML | | AML | | |
| | comp=N,231μm,0.6s | | | | | | | |
| **TRIV** | **Trivento** | **0.25** | **249** | P | | Pb | 20 24 20.9 | +0.1 |
| TRIV | | | | S | | Sg | 20 24 24.3 | +0.2 |
| TRIV | | | | AML | | AML | | |
| | comp=E,34μm,1.0s | | | | | | | |
| TRIV | | | | AML | | AML | | |
| | comp=N,36μm,1.9s | | | | | | | |
| **BSSO** | **Busso** | **0.37** | **213** | P | | Pb | 20 24 22.8 | -0.1 |
| BSSO | | | | S | | Sb | 20 24 29.0 | +0.6 |
| **SACR** | **S. Croce Del S** | **0.48** | **195** | P | | Pg | 20 24 24.0 | -0.2 |
| SACR | | | | S | | Sb | 20 24 31.7 | +0.3 |
| **MIDA** | **Miranda** | **0.51** | **245** | P | | Pg | 20 24 24.2 | -0.5 |
| MIDA | | | | S | | Sg | 20 24 31.8 | +0.2 |
| MIDA | | | | AML | | AML | | |
| | comp=E,40μm,1.6s | | | | | | | |
| MIDA | | | | AML | | AML | | |
| | comp=N,30μm,1.0s | | | | | | | |
| MIDA | | | | AML | | AML | | |
| | comp=E,40μm,0.4s | | | | | | | |
| **APRC** | **Apricena** | **0.52** | **101** | P | | Pb | 20 24 25.2 | 0.0 |
| APRC | | | | S | | Sg | 20 24 32.0 | +0.1 |
| **MOCO** | **Biccari - m.te** | **0.54** | **156** | P | | Pb | 20 24 25.5 | -0.1 |
| **LPEL** | **Lama dei Pelig** | **0.54** | **291** | P | | Pg | 20 24 25.1 | -0.3 |
| LPEL | | | | S | | Sb | 20 24 33.6 | +0.3 |
| LPEL | | | | AML | | AML | | |
| | comp=N,43μm,1.0s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=E,40μm,1.0s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=N,43μm,1.0s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=E,40μm,1.0s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=N,39μm,0.5s | | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.56** | **254** | P | | Pb | 20 24 26.2 | +0.2 |
| **VAGA** | **Valle Agricola** | **0.65** | **227** | P | | Pb | 20 24 27.9 | +0.3 |
| **SGRT** | **San Giovanni R** | **0.66** | **99** | P | | Pg | 20 24 27.1 | -0.6 |
| **INTR** | **Introdacqua** | **0.73** | **282** | ⇑P | | Pg | 20 24 27.9 | -1.0 |
| INTR | | | | S | | Sb | 20 24 38.9 | +0.1 |
| INTR | | | | AML | | AML | | |
| | comp=N,29μm,2.2s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=E,13μm,2.3s | | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.79** | **100** | P | | Pg | 20 24 30.3 | +0.2 |
| **SGTA** | **Sant Agata di** | **0.81** | **152** | P | | Pb | 20 24 29.4 | -1.0 |
| **POFI** | **Posta Fibreno** | **0.88** | **261** | P | | Pb | 20 24 31.2 | -0.2 |

**NAM 20 20:24:50.6**±0.4, **19°.83S**×**14°.58E**, **h3**km±2km, **ML1.8, 4C-6D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.04** | **310** | ⇓*i* P | | Pg | 20 24 51.7 | +0.2 |
| ST9N | | | | *i* S | | Sg | 20 24 52.4 | +0.2 |
| ST9N | | | | IAML | | | 20 24 52.7 | |
| | comp=Z,5μm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.04** | **310** | *i* P | | Pg | 20 24 51.7 | +0.1 |
| ST9N | | | | *i* S | | Sg | 20 24 52.4 | +0.2 |
| ST9N | | | | IAML | | | 20 24 52.8 | |
| | comp=Z,4μm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.09** | **21** | ⇓*i* P | | Pg | 20 24 52.5 | 0.0 |
| ST1N | | | | *i* S | | Sg | 20 24 53.7 | 0.0 |
| ST1N | | | | IAML | | | 20 24 53.8 | |
| | comp=Z,154nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.09** | **21** | *i* P | | Pg | 20 24 52.5 | 0.0 |
| ST1N | | | | *i* S | | Sg | 20 24 53.8 | 0.0 |
| ST1N | | | | IAML | | | 20 24 54.0 | |
| | comp=Z,423nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.10** | **169** | ⇓*i* P | | Pg | 20 24 53.0 | +0.2 |
| ST2N | | | | IAML | | | 20 24 55.0 | |
| | comp=Z,178nm,0.1s | | | | | | | |
| ST2N | | | | *i* S | | Sg | 20 24 55.2 | +1.0 |
| **ST2N** | **ST2** | **0.10** | **169** | *i* P | | Pg | 20 24 53.0 | +0.3 |
| ST2N | | | | *i* S | | Sg | 20 24 54.1 | -0.1 |
| ST2N | | | | IAML | | | 20 24 56.2 | |
| | comp=Z,62nm,0.2s | | | | | | | |
| **ST3N** | **ST3** | **0.11** | **318** | ⇓*i* P | | Pg | 20 24 52.8 | 0.0 |
| ST3N | | | | *i* S | | Sg | 20 24 54.2 | -0.1 |
| ST3N | | | | IAML | | | 20 24 54.4 | |
| | comp=Z,78nm,0.1s | | | | | | | |
| **ST3N** | **ST3** | **0.11** | **318** | *i* P | | Pg | 20 24 52.8 | -0.1 |
| ST3N | | | | IAML | | | 20 24 54.5 | |
| | comp=Z,331nm,0.1s | | | | | | | |
| **ST6N** | **ST6** | **0.17** | **278** | ⇑*i* P | | Pg | 20 24 53.9 | 0.0 |
| ST6N | | | | *i* S | | Sg | 20 24 56.5 | +0.3 |
| ST6N | | | | IAML | | | 20 24 56.9 | |
| | comp=Z,60nm,0.0s | | | | | | | |
| **ST5N** | **ST5** | **0.17** | **79** | ⇑*i* P | | Pg | 20 24 54.1 | +0.1 |
| ST5N | | | | *i* S | | Sg | 20 24 56.6 | +0.3 |
| ST5N | | | | IAML | | | 20 24 56.8 | |
| | comp=Z,80nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.17** | **79** | *i* P | | Pg | 20 24 54.0 | 0.0 |
| ST5N | | | | *i* S | | Sg | 20 24 56.5 | +0.2 |
| ST5N | | | | IAML | | | 20 24 56.9 | |
| | comp=Z,246nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.25** | **226** | ⇓*i* P | | Pg | 20 24 55.4 | 0.0 |
| ST10N | | | | *i* S | | Sg | 20 24 59.3 | +0.7 |
| ST10N | | | | IAML | | | 20 24 59.9 | |
| | comp=Z,51nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.25** | **226** | *i* P | | Pg | 20 24 55.4 | 0.0 |
| ST10N | | | | *i* S | | Sg | 20 24 58.8 | +0.2 |
| ST10N | | | | IAML | | | 20 24 59.8 | |
| | comp=Z,212nm,0.2s | | | | | | | |
| **ST8N** | **ST8** | **0.28** | **299** | ⇓*i* P | | Pg | 20 24 56.0 | 0.0 |
| ST8N | | | | *i* S | | Sg | 20 24 59.7 | 0.0 |
| ST8N | | | | IAML | | | 20 25 00.0 | |
| | comp=Z,12nm,0.1s | | | | | | | |
| **ST11N** | **ST11** | **0.30** | **56** | ⇑*i* P | | Pg | 20 24 56.7 | +0.2 |
| ST11N | | | | *i* S | | Sg | 20 25 01.4 | +0.9 |
| ST11N | | | | IAML | | | 20 25 01.9 | |
| | comp=Z,13nm,0.1s | | | | | | | |
| **ST4N** | **ST4** | **0.38** | **100** | ⇑*i* P | | Pg | 20 24 58.0 | 0.0 |
| ST4N | | | | *i* S | | Sg | 20 25 03.0 | +0.1 |
| ST4N | | | | IAML | | | 20 25 03.9 | |
| | comp=Z,16nm,0.1s | | | | | | | |

*IDC* ***20*** *20:34:05.0±1.6, 8°.20S×116°.51E, h0km, mb3.4/4, mbtmp3.5/5, ML3.5/1, MS2.0/1, Error ellipse: s-maj=29.5km s-min=23.0km az=71.0*
*DJA* ***20*** *20:34:07.1±0.5, 8°S±6°×11°6E±°, h10km, M3.7/6, MLv3.7/6*
**ISC 20 20:34:09.8**±0.9, **8°.16S**±0°.07×**116°.51E**±0°.04, **h35**km, **n11**, σ1°**41**/15, **mb3.6**/3, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.68** | **147** | P | | **Pn** | **20 34 19.7** | **-3.2** |
| **SRBI** | **Singaraja** | **1.29** | **273** | P | | **Pn** | **20 34 29.5** | **-1.8** |
| SRBI | | | | S | | **Sn** | **20 34 47.4** | **+0.1** |
| **DNP** | **Denpasar** | **1.39** | **248** | P | | **Pn** | **20 34 33.0** | **+0.4** |
| DNP | | | | S | | **Sn** | **20 34 50.7** | **+1.0** |
| **PLAI** | **Plampang** | **1.42** | **118** | P | | **Pn** | **20 34 33.3** | **+0.2** |
| PLAI | | | | S | | **Sn** | **20 34 52.2** | **+1.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **262** | P | | **Pn** | **20 34 44.4** | **-1.6** |
| **WBSI** | **Waikabubak, Su** | **3.20** | **118** | P | | **Pn** | **20 34 57.3** | **-0.4** |
| **KAPI** | **Kappang** | **4.49** | **46** | Pn | | **Pn** | **20 35 14.5** | **-0.8** |
| | 2.3nm,0.3s,baz=234,slow=3.2,SNR=6.4 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **20 36 05.2** | **-1.2** |
| | 2.8nm,0.3s,baz=144,slow=17,SNR=2.0 | | | | | | | |
| KAPI | | | | Lg | | Lg | 20 36 27.9 | |
| | 2.4nm,0.3s,baz=118,slow=16,SNR=1.7 | | | | | | | |
| KAPI | | | | LR | | LR | 20 36 41.7 | |
| | comp=Z,19nm,19.4s,baz=60,slow=35 | | | | | | | |
| | 6.2nm,0.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.86** | **126** | P | | **P** | **20 38 48.6** | **-0.3** |
| | 0.7nm,0.5s,baz=299,slow=12,SNR=15 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.70** | **135** | P | | **P** | **20 39 08.4** | **-0.3** |
| | 1.0nm,0.8s,baz=309,slow=9.3,SNR=9.8 | | | | | | | |
| | 1.0nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **56.47** | **352** | P | | **P** | **20 43 49.1** | **+0.8** |
| | 0.4nm,0.7s,baz=187,slow=8.9,SNR=3.9 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.62** | **334** | P | | **P** | **20 44 31.4** | **+0.8** |
| | 0.3nm,0.6s,baz=144,slow=8.4,SNR=2.1 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |

**IDC 20 20:45:27.5**±1.7, **17°.82S**×**177°.08W**, **h0**km, **mb3.6**/4, **mbtmp3.6**/4, **Error ellipse: s-maj=52.4km s-min=40.4km az=141.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.89** | **259** | P | | P | 20 53 52.1 | -0.1 |
| | 0.5nm,0.9s,baz=92,slow=7.4,SNR=4.8 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **46.03** | **254** | P | | P | 20 53 53.2 | -0.1 |
| | 0.6nm,0.6s,baz=87,slow=8.6,SNR=5.2 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.23** | **180** | P | | P | 20 56 54.3 | -0.1 |
| | 0.4nm,0.5s,baz=172,slow=24,SNR=1.4 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.52** | **12** | P | | P | 20 58 07.1 | +0.1 |
| | 0.2nm,0.4s,baz=220,slow=4.3,SNR=4.1 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |

*NEIC* ***20*** *20:52:00.7±1.3, 18°.4N±0°.1×68°.05W±0°.05, h113km±5km, ML2.5/22, Md2.9/6(RSPR), Error ellipse: s-maj=20.9km s-min=5.8km az=190.0*
*OSPL* ***20*** *20:52:01.1±1.0, 18°.17N×68°.10W, h113km±20km, ML2.6*
*RSPR* ***20*** *20:52:02.0, 18°.27N×67°.85W, h129km±1km, MD2.9/6*
**ISC 20 20:52:02.5**±1.4, **18°.2N**±0°.1×**68°.02W**±0°.06, **h100**km, **n36**, σ1°**02**/38, **6C-1D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCDR** | **Punta Cana, DR** | **0.44** | **309** | Pn | | **Pn** | **20 52 16.8** | **-1.1** |
| PCDR | | | | IAML | | | 20 52 48.7 | |
| | comp=N,204nm,1.8s | | | | | | | |
| PCDR | | | | IAML | | | 20 52 50.7 | |
| | comp=E,84nm,1.6s | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.44** | **309** | *i* P | | **Pn** | **20 52 16.5** | **-1.4** |
| PCDR | | | | *e*S | | **Sn** | **20 52 29.0** | **-0.3** |
| PCDR | | | | IAML | | | 20 52 30.9 | |
| | comp=Z,143nm,1.0s | | | | | | | |
| **LSP** | **Las Mesas** | **0.89** | **93** | ⇑*e*P | | **Pn** | **20 52 22.4** | **+0.6** |
| **LSP** | **Las Mesas** | **0.89** | **93** | *e*S | | **Sn** | **20 52 38.1** | **+1.8** |
| **LSP** | **Las Mesas** | **0.89** | **93** | | | **Pn** | **20 52 22.4** | **+0.6** |
| LSP | | | | | | **Sn** | **20 52 38.1** | **+1.8** |
| **AGPR** | **Aguadilla, PR** | **0.89** | **75** | ⇑*e*P | | **Pn** | **20 52 21.9** | **+0.2** |
| **AGPR** | **Aguadilla, PR** | **0.89** | **75** | *e*S | | **Sn** | **20 52 38.0** | **+1.7** |
| **AGPR** | **Aguadilla, PR** | **0.89** | **75** | | | **Pn** | **20 52 21.9** | **+0.2** |
| AGPR | | | | | | **Sn** | **20 52 38.0** | **+1.7** |
| **AGPR** | **Aguadilla, PR** | **0.89** | **75** | IAML | | | 20 52 38.7 | |
| | comp=E,108nm,0.8s | | | | | | | |
| AGPR | | | | IAML | | | 20 52 55.7 | |
| | comp=N,96nm,2.1s | | | | | | | |
| **AGPR** | **Aguadilla, PR** | **0.89** | **75** | *i* P | | **Pn** | **20 52 21.9** | **+0.2** |
| AGPR | | | | *e*S | | **Sn** | **20 52 36.1** | **-0.2** |
| AGPR | | | | IAML | | | 20 52 40.4 | |
| | comp=Z,83nm,1.7s | | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **0.89** | **104** | ⇑*e*P | | **Pn** | **20 52 21.8** | **+0.1** |
| **CRPR** | **Cabo Rojo, PR** | **0.89** | **104** | *e*S | | **Sn** | **20 52 37.8** | **+1.6** |
| **CRPR** | **Cabo Rojo, PR** | **0.89** | **104** | | | **Sn** | **20 52 37.8** | **+1.6** |
| **CRPR** | **Cabo Rojo, PR** | **0.89** | **104** | Pn | | **Pn** | **20 52 21.4** | **-0.4** |
| **CRPR**

IGPR IAML 20 53 41.6
comp=E,24nm,1.1s
**PDPR Patillas Dam, 1.91 96** Pn **Pn** **20 52 33.2 -0.7**
**SDDR Presa de Saban 3.19 284** Pn **Pn** **20 52 51.7 +0.9**
SDDR IAML 20 53 14.6
comp=E,14nm,3.2s
SDDR IAML 20 54 32.9
comp=E,19nm,2.9s

*IDC **20** 20:58:16.2±0.9,8˚.37S×117˚.04E, h0km, mb3.8/8, mbtmp3.8/9, ML3.7/1, MS3.0/3, Error ellipse: s-maj=38.5km s-min=14.0km az=55.0*
*DJA **20** 20:58:17.9±0.4,8˚.5±.5˚×11˚.7E±˚, h10km, M4.1/8, MLv4.1/8*
**ISC 20 20:58:21.1±0.7, 8˚.36S±0.06×117˚.03E±0.05, h35km, n21, σ1§64/22, mb3.8/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.41** | **202** | P | **Pn** | **20 58 26.8** | **-3.7** |
| **PLAI** | **Plampang** | **0.87** | **122** | P | **Pn** | **20 58 35.3** | **-1.6** |
| PLAI | | | | S | **Sn** | **20 58 48.7** | **+0.4** |
| **SRBI** | **Singaraja** | **1.82** | **278** | P | **Pn** | **20 58 49.8** | **-0.2** |
| **DNP** | **Denpasar** | **1.83** | **260** | P | **Pn** | **20 58 51.5** | **+1.4** |
| **WBSI** | **Waikabubak, Su** | **2.65** | **119** | P | **Pn** | **20 59 01.5** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.85** | **268** | P | **Pn** | **20 59 01.8** | **-2.4** |
| **BSSI** | **Bau Bau, Buton** | **4.08** | **58** | P | **Pn** | **20 59 19.6** | **-1.4** |
| **KAPI** | **Kappang** | **4.28** | **39** | Pn | **Pn** | **20 59 22.1** | **-1.7** |
| | 4.6nm,0.3s,baz=210,slow=5.9,SNR=6.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **21 00 10.8** | **-1.8** |
| | 8.2nm,0.3s,baz=54,slow=21,SNR=8.7 | | | | | | |
| KAPI | | | | Lg | Lg | 21 00 29.6 | |
| | 10.0nm,0.3s,baz=291,slow=23,SNR=6.3 | | | | | | |
| KAPI | | | | LR | LR | 21 01 24.4 | |
| | comp=Z,120nm,19.6s,baz=290,slow=44 | | | | | | |
| | 11nm,0.2s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.62** | **95** | P | **Pn** | **20 59 28.3** | **-0.3** |
| **WRA** | **Warramunga Arr** | **20.32** | **126** | P | **P** | **21 02 54.2** | **-0.2** |
| | 5.0nm,0.4s,baz=303,slow=12,SNR=68 | | | | | | |
| | 5.0nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.20** | **135** | P | **P** | **21 03 14.1** | **-0.6** |
| | 1.2nm,0.5s,baz=313,slow=9.5,SNR=21 | | | | | | |
| ASAR | | | | S | **S** | **21 07 20.9** | **+3.7** |
| | 0.4nm,0.5s,baz=306,slow=22,SNR=1.9 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.45** | **180** | LR | LR | 21 11 59.9 | |
| | comp=Z,59nm,20.0s,baz=166,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.08** | **326** | LR | LR | 21 19 31.4 | |
| | comp=Z,28nm,18.2s,baz=205,slow=40 | | | | | | |
| **STKA** | **Stephens Creek** | **32.69** | **139** | P | **P** | **21 04 50.6** | **+0.3** |
| | 1.9nm,0.7s,baz=329,slow=9.5,SNR=6.5 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.74** | **351** | P | **P** | **21 08 01.1** | **-0.4** |
| | 0.4nm,0.8s,baz=164,slow=7.4,SNR=2.0 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.02** | **334** | P | **P** | **21 08 44.9** | **+0.3** |
| | 0.9nm,0.9s,baz=163,slow=6.0,SNR=3.2 | | | | | | |
| | 0.9nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.55** | **335** | P | **P** | **21 09 14.8** | **+1.0** |
| | 0.2nm,0.2s,baz=136,slow=4.7,SNR=1.6 | | | | | | |
| | 0.2nm,0.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.77** | **340** | P | **P** | **21 09 17.0** | **+1.9** |
| | 0.6nm,0.6s,baz=145,slow=5.4,SNR=3.5 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.63** | **180** | P | **P** | **21 10 35.9** | **+0.4** |
| | 0.5nm,0.8s,baz=333,slow=7.5,SNR=0.6 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.44** | **281** | PKP | **PKPdf** | **21 17 01.8** | **-0.5** |
| | 0.2nm,0.5s,baz=126,slow=2.7,SNR=2.5 | | | | | | |
| **CPUP** | **Villa Florida** | **145.09** | **189** | PKPbc | **PKPbc** | **21 17 54.7** | **-0.3** |
| | 3.3nm,0.8s,baz=113,slow=2.1,SNR=4.3 | | | | | | |

*IDC **20** 21:10:44.7±8.2, 18˚.35S×178˚.31W, h546km±85km, mb2.9/5, mbtmp3.8/5, Error ellipse: s-maj=43.4km s-min=31.8km az=42.0*
**ISC 20 21:10:44.5±0.9, 18˚.2S±0˚.3×178˚.3W±0˚.2, h550km, n20, σ0§65/22, mb3.5/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.57** | **241** | P | **P** | **21 17 21.6** | **+1.0** |
| | 1.0nm,0.7s,baz=101,slow=2.9,SNR=4.4 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.66** | **260** | P | **P** | **21 18 07.9** | **-1.0** |
| | 0.6nm,0.7s,baz=96,slow=6.9,SNR=9.2 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 19 40.2** | **+0.5** |
| | 0.7nm,0.9s,baz=90,slow=3.7,SNR=6.1 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.79** | **254** | P | **P** | **21 18 10.3** | **+0.4** |
| | 2.5nm,0.7s,baz=87,slow=8.4,SNR=21 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 19 40.3** | **+0.2** |
| | 0.3nm,0.5s,baz=93,slow=4.1,SNR=2.1 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **21 21 11.2** | **-0.7** |
| | 0.9nm,0.6s,baz=168,slow=1.8,SNR=7.1 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.07** | **58** | P | **P** | **21 22 28.7** | **+1.0** |
| | 0.3nm,0.8s,baz=214,slow=6.4,SNR=2.8 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.02** | **315** | PKPbc | **PKPbc** | **21 29 20.4** | **-0.1** |
| | 0.5nm,0.8s,baz=356,slow=4.5,SNR=2.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.35** | **303** | PKPbc | **PKPbc** | **21 29 24.6** | **+0.2** |
| | 0.6nm,0.6s,baz=64,slow=3.4,SNR=1.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.88** | **345** | PKPbc | **PKiKP** | **21 29 28.9** | **-0.6** |
| | 0.6nm,0.3s,baz=123,slow=4.9,SNR=5.8 | | | | | | |
| **CONA** | **Conrad Observa** | **148.14** | **342** | *i* PKP | **PKiKP** | **21 29 29.9** | **-0.1** |
| | 0.6nm,0.4s | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.21** | **341** | *i* PKP | **PKiKP** | **21 29 29.9** | **-0.2** |
| | 0.7nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **148.85** | **342** | *e*PKP | **PKPbc** | **21 29 29.6** | **-0.8** |
| | 0.2nm,0.2s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.46** | **345** | *i* PKP | **PKiKP** | **21 29 32.7** | **0.0** |
| | 0.6nm,0.3s | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.61** | **344** | *i* PKP | **PKiKP** | **21 29 32.6** | **-0.6** |
| | 1.1nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **149.80** | **347** | *i* PKP | **PKiKP** | **21 29 33.4** | **-0.1** |
| | 0.6nm,0.2s | | | | | | |
| **OBKA** | **Obir** | **149.80** | **342** | *e*PKP | **PKPbc** | **21 29 31.1** | **-1.6** |
| | 0.4nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **149.85** | **346** | *i* PKP | **PKiKP** | **21 29 33.5** | **-0.2** |
| | 1.0nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **149.89** | **347** | *e*PKP | **PKiKP** | **21 29 33.5** | **-0.2** |
| | 0.2nm,0.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.99** | **347** | *e*PKP | **PKiKP** | **21 29 33.8** | **0.0** |
| | 0.4nm,0.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.13** | **345** | *i* PKP | **PKPbc** | **21 29 33.5** | **0.0** |
| | 1.4nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **150.28** | **347** | *e*PKP | **PKiKP** | **21 29 34.5** | **0.0** |
| | 0.4nm,0.4s | | | | | | |

**NAM 20 21:12:40.0±4.4, 19.74S×14.48E, h19km±14km, ML1.0, 6C-4D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.02** | **112** | ⇑*i* P | Pg | 21 12 45.2 | +1.8 |
| ST3N | | | | *i* S | Sg | 21 12 46.6 | +0.9 |
| ST3N | | | | IAML | | 21 12 47.0 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.02** | **112** | *i* P | Pg | 21 12 45.2 | +1.8 |
| ST3N | | | | *i* S | Sg | 21 12 46.7 | +0.9 |
| ST3N | | | | IAML | | 21 12 46.9 | |
| | comp=Z,33nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **137** | ⇓*i* P | Pg | 21 12 44.2 | +0.3 |
| ST9N | | | | *i* S | Sg | 21 12 44.9 | -1.5 |
| ST9N | | | | IAML | | 21 12 45.2 | |
| | comp=Z,574nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **137** | *i* P | Pg | 21 12 44.1 | +0.3 |
| ST9N | | | | *i* S | Sg | 21 12 44.9 | -1.4 |
| ST9N | | | | IAML | | 21 12 45.3 | |
| | comp=Z,514nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **230** | ⇓*i* P | Pg | 21 12 46.4 | +2.4 |
| ST6N | | | | *i* S | Sg | 21 12 48.8 | +2.2 |
| ST6N | | | | IAML | | 21 12 49.0 | |
| | comp=Z,22nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **230** | *i* P | Pg | 21 12 46.4 | +2.4 |
| ST6N | | | | *i* S | Sg | 21 12 48.8 | +2.1 |
| ST6N | | | | IAML | | 21 12 49.5 | |
| | comp=Z,8.5nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **91** | ⇓*i* P | Pg | 21 12 45.0 | +0.8 |
| ST1N | | | | *i* S | Sg | 21 12 46.2 | -0.8 |
| ST1N | | | | IAML | | 21 12 46.3 | |
| | comp=Z,84nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **91** | *i* P | Pg | 21 12 44.9 | +0.8 |
| ST1N | | | | *i* S | Sg | 21 12 46.2 | -0.8 |
| ST1N | | | | IAML | | 21 12 46.4 | |
| | comp=Z,46nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **286** | ⇑*i* P | Pg | 21 12 48.4 | +3.8 |
| ST8N | | | | *i* S | Sg | 21 12 52.0 | +4.3 |
| ST8N | | | | IAML | | 21 12 53.7 | |
| | comp=Z,2.6nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | ⇑*i* P | Pg | 21 12 45.6 | +0.1 |
| ST2N | | | | *i* S | Sb | 21 12 47.2 | -1.2 |
| ST2N | | | | IAML | | 21 12 49.6 | |
| | comp=Z,34nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | *i* P | Pg | 21 12 45.5 | 0.0 |
| ST2N | | | | *i* S | Sb | 21 12 47.2 | -1.3 |
| ST2N | | | | IAML | | 21 12 47.8 | |
| | comp=Z,15nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **102** | ⇑*i* P | Pb | 21 12 46.6 | +0.4 |
| ST5N | | | | *i* S | Sb | 21 12 49.0 | -1.2 |
| ST5N | | | | IAML | | 21 12 49.2 | |
| | comp=Z,22nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **102** | *i* P | Pb | 21 12 46.6 | +0.4 |
| ST5N | | | | *i* S | Sb | 21 12 49.0 | -1.3 |
| ST5N | | | | IAML | | 21 12 49.2 | |
| | comp=Z,29nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | ⇑*i* P | Pn | 21 12 48.0 | -1.2 |
| ST10N | | | | *i* S | Sb | 21 12 51.5 | +0.9 |
| ST10N | | | | IAML | | 21 12 51.9 | |
| | comp=Z,19nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | *i* P | Pn | 21 12 48.0 | -1.2 |
| ST10N | | | | *i* S | Sb | 21 12 51.3 | +0.8 |
| ST10N | | | | IAML | | 21 12 52.1 | |
| | comp=Z,42nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **77** | ⇑*i* P | Pn | 21 12 49.2 | -1.1 |
| ST11N | | | | *i* S | Sb | 21 12 53.5 | +0.5 |
| ST11N | | | | IAML | | 21 12 53.9 | |
| | comp=Z,4.3nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **77** | *i* P | Pn | 21 12 49.2 | -1.1 |
| ST11N | | | | IAML | | 21 12 54.9 | |
| | comp=Z,2.8nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.49** | **109** | ⇓*i* P | Pb | 21 12 50.5 | +0.4 |
| ST4N | | | | *i* S | Sg | 21 12 55.6 | -1.1 |
| ST4N | | | | IAML | | 21 12 55.8 | |
| | comp=Z,5.1nm,0.1s | | | | | | |

*IDC **20** 21:24:03.4±3.1, 29˚.95N×70˚.19E, h0km, mb3.8/11, mbtmp3.8/13, ML3.2/2, MS3.2/3, Error ellipse: s-maj=65.6km s-min=22.5km az=137.0*
*NEIC **20** 21:24:06.9±1.6, 29˚.9N±0˚.1×70˚.3E±0˚.1, h25km±10km, mb4.1/5, Error ellipse: s-maj=18.0km s-min=14.9km az=145.0*
*NDI **20** 21:24:16.5±4.0, 30˚.11N×70˚.74E, h10km, ML3.6, MW4.0, mb4.1(NEIC)*
**ISC 20 21:24:05.2±0.5, 29˚.98N±0˚.04×70˚.24E±0˚.04, h12km, n46, σ1§97/48, mb3.8/12, 3C-1D, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JASL** | **Jaisalmer** | **3.10** | **169** | *e*P | **Pg** | **21 25 06.9** | **+2.2** |
| JASL | | | | *e*S | **Sg** | **21 25 45.2** | **+0.2** |
| **SRGN** | **SRI GANGA NAGA** | **3.16** | **90** | *e*P | **Pb** | **21 25 03.8** | **+2.4** |
| SRGN | | | | *e*S | **Sg** | **21 25 48.2** | **+1.3** |
| SRGN | | | | IAML | | 21 25 52.2 | |
| | comp=N,908nm,1.2s | | | | | | |
| SRGN | | | | IAML | | 21 25 53.6 | |
| | comp=E,514nm,0.4s | | | | | | |
| **BKNR** | **BIKANER** | **3.30** | **126** | *e*P | **Pg** | **21 25 08.8** | **+0.3** |
| BKNR | | | | *e*S | **Sg** | **21 25 54.0** | **+2.7** |
| BKNR | | | | IAML | | 21 25 58.4 | |
| | comp=E,782nm,0.4s | | | | | | |
| BKNR | | | | IAML | | 21 25 58.7 | |
| | comp=N,880nm,0.2s | | | | | | |
| **NIL** | **Nilore** | **4.46** | **34** | | **Pn** | **21 25 14.7** | **+1.9** |
| **KBL** | **Kabul** | **4.66** | **348** | Pn | **Pn** | **21 25 17.9** | **+2.4** |
| **JMU** | **Jammu** | **4.83** | **54** | *e*P | Pb | 21 25 25.3 | -4.4 |
| JMU | | | | *e*S | **Sn** | **21 26 12.4** | **-1.1** |
| **AJM** | **Ajmer** | **5.22** | **131** | *e*P | **Pb** | **21 25 33.0** | **-3.5** |
| AJM | | | | *e*S | **Sn** | **21 26 24.4** | **+1.0** |
| **BHK** | **Bhakra** | **5.51** | **73** | *e*P | **Pn** | **21 25 29.8** | **+2.7** |
| BHK | | | | *e*S | **Sn** | **21 26 27.8** | **-2.6** |
| **DHRM** | **DHARAMSHALA** | **5.67** | **65** | *e*P | **Pn** | **21 25 32.7** | **+3.3** |
| DHRM | | | | *e*S | **Sn** | **21 26 31.2** | **-3.4** |
| DHRM | | | | IAML | | 21 26 55.9 | |
| | comp=N,202nm,0.4s | | | | | | |
| DHRM | | | | IAML | | 21 26 58.3 | |
| | comp=E,169nm,1.0s | | | | | | |
| **KUDL** | **Kundal** | **5.77** | **107** | *e*P | Pn | 21 25 39.0 | +8.4 |
| KUDL | | | | *e*S | **Sn** | **21 26 34.7** | **-2.0** |
| KUDL | | | | IAML | | 21 26 36.4 | |
| | comp=N,45nm,0.2s | | | | | | |
| **SMLA** | **Simla** | **6.08** | **77** | *e*P | **Pn** | **21 25 38.4** | **+3.4** |
| SMLA | | | | *e*S | **Sn** | **21 26 42.6** | **-1.9** |
| SMLA | | | | IAML | | 21 26 46.5 | |
| | comp=E,126nm,0.3s | | | | | | |
| SMLA | | | | IAML | | 21 26 46.8 | |
| | comp=E,143nm,0.2s | | | | | | |
| **DDI** | **Dehra Dun** | **6.78** | **85** | *ex* | x | 21 25 53.7 | |
| DDI | | | | *e*S | **Sn** | **21 27 00.1** | **-1.6** |
| DDI | | | | IAML | | 21 27 03.9 | |
| | comp=E,90nm,0.3s | | | | | | |
| DDI | | | | IAML | | 21 27 05.9 | |
| | comp=E,149nm,0.2s | | | | | | |
| **JHNI** | **Jhansi** | **8.62** | **119** | *e*S | **Sn** | **21 27 44.2** | **-2.8** |
| **CHGR** | **Chuyangaron** | **8.70** | **354** | Pn | **Pn** | **21 26 11.5** | **+0.6** |
| **SIMJ** | **Simiganj** | **8.71** | **354** | Pn | **Pn** | **21 26 11.5** | **+0.3** |
| **LGTI** | **Lohaghat** | **8.72** | **91** | *e*P | **Pn** | **21 26 11.4** | **+0.2** |
| LGTI | | | | *e*S | **Sn** | **21 27 42.1** | **-7.3** |
| LGTI | | | | IAML | | 21 27 44.7 | |
| | comp=E,12nm,0.2s | | | | | | |
| LGTI | | | | IAML | | 21 27 44.9 | |
| | comp=N,16nm,0.2s | | | | | | |
| **GAR** | **Garm** | **8.99** | **0** | Pn | **Pn** | **21 26 15.7** | **+0.6** |
| **BHPL** | **Bhopal** | **9.29** | **135** | *ex* | x | 21 28 01.3 | |
| **BTK** | **Batken** | **10.06** | **3** | Pn | **Pn** | **21 26 31.2** | **+1.5** |
| **WSAR** | **Wadi Sarin** | **12.36** | **240** | Pn | **Pn** | **21 27 01.5** | **+0.3** |
| | comp=N,0.1nm,0.3s,baz=148,slow=15,SNR=1.6 | | | | | | |
| WSAR | | | | Sn | Sn | 21 29 06.4 | -13 |
| | comp=N,0.2nm,0.3s,baz=119,slow=12,SNR=1.3 | | | | | | |
| | comp=N,4.3nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **13.08** | **14** | LR | LR | 21 33 23.0 | |
| | comp=N,26nm,21.5s,baz=192,slow=43 | | | | | | |
| **KK31** | **Karatay Array** | **13.10** | **1** | Pn | **Pn** | **21 27 09.7** | **-1.4** |
| **KK31** | **Karatay Array** | **13.10** | **1** | ⇓P | Pn | 21 27 05.7 | -5.4 |
| | comp=N,0.5nm,0.3s,baz=180,slow=14,SNR=24 | | | | | | |
| KK31 | | | | ⇑S | Sn | 21 29 23.5 | -13 |
| | comp=N,1.6nm,0.6s,baz=191,slow=23,SNR=6.7 | | | | | | |
| **KKAR** | **Karatay Array** | **13.10** | **1** | Pn | **Pn** | **21 27 09.5** | **-1.6** |
| **BOOM** | **Boomskoye usch** | **13.30** | **19** | Pn | **Pn** | **21 27 13.3** | **-0.7** |
| **UOSS** | **Minazif** | **13.43** | **251** | Pn | **Pn** | **21 27 15.4** | **-0.4** |
| **TKM2** | **Tokmak 2** | **13.61** | **17** | ⇑P | Pn | 21 27 12.0 | -6.2 |
| | comp=N,0.5nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | Sn | 21 29 38.5 | -11 |
| | comp=N,0.7nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **19.11** | **25** | P | **P** | **21 28 27.9** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 21 28 48.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **19.22** | **26** | P | **P** | **21 28 29.5** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=219,slow=14,SNR=5.1 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **20.78** | **341** | P | **P** | **21 28 46.2** | **+0.2** |
| ABKAR | | | | IAmb | IAmb | 21 28 51.7 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.54** | **14** | P | **P** | **21 28 53.3** | **-0.8** |
| | comp=Z,0.9nm,0.3s,baz=206,slow=11,SNR=1.3 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.40** | **339** | P | **P** | **21 29 03.5** | **0.0** |
| | comp=Z,2.1nm,0.6s,baz=188,slow=3.8,SNR=6.5 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **23.02** | **0** | P | **P** | **21 29 10.8** | **+0.7** |
| | comp=Z,0.6nm,0.5s,baz=168,slow=9.1,SNR=3.8 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.18** | **20** | P | **P** | **21 29 40.2** | **+0.8** |
| | comp=Z,0.8nm,0.3s,baz=210,slow=9.7,SNR=7.0 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **31.38** | **298** | P | **P** | **21 30 25.5** | **-0.6** |
| | comp=Z,0.3nm,0.8s,baz=72,slow=4.7,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **BURAR** | **Bucovina Array** | **38.64** | **310** | P | **P** | **21 31 29.4** | **+0.9** |
| **BUR08** | **Bucovina Ar. S** | **38.66** | **310** | P | **P** | **21 31 28.9** | **+0.2** |
| BUR08 | | | | IAmb | IAmb | 21 31 29.7 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **FINES** | **FINESS Array B** | **42.68** | **330** | P | **P** | **21 32 01.6** | **0.0** |
| | comp=Z,10nm,1.2s,baz=115,slow=10,SNR=2.8 | | | | | | |
| | comp=Z,10nm,1.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **46.98** | **340** | P | **P** | **21 32 36.2** | **+0.5** |
| | comp=Z,3.2nm,1.0s,baz=114,slow=6.0,SNR=6.3 | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **47.94** | **326** | P | **P** | **21 32 44.1** | **+0.7** |
| | comp=Z,7.8nm,1.2s,baz=105,slow=9.8,SNR=2.2 | | | | | | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **NC405** | **NORSAR Array S** | **49.11** | **327** | P | **P** | **21 32 52.2** | **-0.2** |
| **NOA** | **NORSAR Array B** | **49.33** | **327** | LR | LR | 21 57 15.2 | |
| | comp=Z,13nm,20.4s,baz=90,slow=40 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **56.65** | **319** | P | **P** | **21 33 47.7** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=92,slow=7.4,SNR=10 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **60.10** | **301** | P | **P** | **21 34 12.2** | **-0.4** |
| | comp=Z,0.5nm,0.7s,baz=68,slow=6.9,SNR=5.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.07** | **271** | P | **P** | **21 34 45.4** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=53,slow=7.1,SNR=3.8 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **83.51** | **105** | LR | LR | 22 18 41.5 | |
| | comp=Z,84nm,18.0s,baz=202,slow=39 | | | | | | |

*IDC **20** 21:25:12.9±7.0, 18˚.01S×178˚.21W, h602km±78km, mb3.1/5, mbtmp4.1/5, Error ellipse: s-maj=46.4km s-min=37.1km az=8.0*
*NEIC **20** 21:25:12.0±0.8, 18˚.0S±0˚.2×178˚.1W±0˚.1, h595km±15km, mb4.2/14, Error ellipse: s-maj=31.3km s-min=10.5km az=150.0*
**ISC 20 21:25:11.5±0.8, 18˚.0S±0˚.2×178˚.1W±0˚.1, h590km, n23, σ0§59/25, mb4.1/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.65** | **273** | P | **P** | **21 26 34.9** | **+0.9** |
| **LBZ** | **Lake Benmore** | **28.09** | **198** | P | **P** | **21 30 17.6** | **+0.5** |
| **EIDS** | **Eidsvold** | **29.50** | **250** | P | **P** | **21 30 28.4** | **-1.1** |
| EIDS | | | | IAmb | IAmb | 21 30 53.2 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **30.14** | **240** | P | **P** | **21 30 35.0** | **0.0** |
| **COEN** | **Coen** | **37.38** | **270** | P | **P** | **21 31 36.3** | **+0.6** |
| COEN | | | | IAmb | IAmb | 21 32 05.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.97** | **81** | P | **P** | **21 31 40.1** | **-0.5** |
| **STKA** | **Stephens Creek** | **38.83** | **241** | P | **P** | **21 31 47.6** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.83** | **241** | P | **P** | **21 31 47.9** | **+0.7** |
| | comp=Z,3.8nm,0.8s,baz=86,slow=10.0,SNR=8.4 | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.60** | **241** | P | **P** | **21 32 24.8** | **-0.1** |
| BBOO | | | | IAmb | IAmb | 21 32 38.7 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **21 32 33.8** | **+0.4** |
| WR0 | | | | IAmb | IAmb | 21 33 12.8 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **21 32 34.1** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 21 33 14.4 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.87** | **260** | P | **P** | **21 32 33.8** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 21 32 35.1 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **21 32 34.6** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **21 32 34.3** | **-0.6** |
| | comp=Z,1.5nm,0.5s,baz=95,slow=7.2,SNR=50 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 34 02.6** | **-1.0** |
| | comp=Z,0.5nm,0.8s,baz=89,slow=3.5,SNR=2.3 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.03** | **254** | P | **P** | **21 32 35.6** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 21 32 37.1 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.03** | **254** | P | **P** | **21 32 35.6** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.03** | **254** | P | **P** | **21 32 36.1** | **+0.1** |
| | comp=Z,6.4nm,0.6s,baz=87,slow=8.6,SNR=69 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 34 03.8** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=91,slow=3.9,SNR=2.1 | | | | | | |
| | comp=Z,6.4nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **58.32** | **256** | P | **P** | **21 34 11.3** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.07** | **180** | P | **P** | **21 35 36.6** | **0.0** |
| QSPA | | | | IAmb | IAmb | 21 36 02.5 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.07** | **180** | P | **P** | **21 35 36.6** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=117,slow=2.3,SNR=2.1 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.81** | **58** | P | **P** | **21 36 50.6** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=224,slow=6.9,SNR=4.3 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.03** | **315** | PKP | **PKPbc** | **21 43 43.5** | **-0.2** |
| | comp=Z,0.2nm,0.4s,baz=52,slow=1.2,SNR=1.8 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.41** | **303** | PKPbc | **PKPbc** | **21 43 47.4** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=52,slow=5.7,SNR=2.8 | | | | | | |

**IDC 20 21:28:49.2±30.0, 18˚.07S×178˚.19W, h541km±273km, mb3.0/3, mbtmp4.0/3, Error ellipse: s-maj=221.0km s-min=100.4km az=92.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.73** | **241** | P | P | 21 35 27.6 | +0.3 |
| | 2.1nm,1.1s,baz=90,slow=6.1,SNR=2.1 | | | | | | |
| | 2.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.81** | **260** | P | P | 21 36 14.6 | -0.8 |
| | 0.5nm,0.4s,baz=98,slow=6.9,SNR=7.9 | | | | | | |
| WRA | | | | PcP | PcP | 21 37 45.5 | -0.3 |
| | 0.5nm,1.0s,baz=100,slow=3.8,SNR=1.6 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.95** | **254** | P | P | 21 36 16.6 | +0.1 |
| | 2.2nm,0.6s,baz=88,slow=8.7,SNR=21 | | | | | | |
| ASAR | | | | PcP | PcP | 21 37

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PWJI** | **Pagerwojo** | **4.64** | **272** | P | | **Pn** | **21 55 02.8** | **+1.0** |
| **EDFI** | **Ende, Flores** | **5.17** | **96** | P | | **Pn** | **21 55 10.2** | **+1.0** |
| | 85nm,0.8s,729nm0.3nm | | | | | | | |
| **MMRI** | **Maumere** | **5.70** | **95** | Pn | | **Pn** | **21 55 16.5** | **+0.1** |
| **UGM** | **Wanagama** | **5.91** | **273** | Pn | | **Pn** | **21 55 21.3** | **+2.0** |
| **UGM** | **Wanagama** | **5.91** | **273** | P | | **Pn** | **21 55 20.7** | **+1.4** |
| **SMRI** | **Semarang** | **6.11** | **281** | Pn | | **Pn** | **21 55 21.8** | **-0.1** |
| **SOEI** | **Soe** | **7.83** | **102** | Pn | | **Pn** | **21 55 49.0** | **+3.1** |
| **BBJI** | **Bungbulang** | **8.79** | **274** | P | | **Pn** | **21 56 00.5** | **+1.7** |
| **MBWA** | **Marble Bar** | **13.24** | **167** | P | | **Pn** | **21 56 58.6** | **-1.1** |
| **MBWA** | **Marble Bar** | **13.24** | **167** | Pn | | **Pn** | **21 56 57.2** | **-2.5** |
| **FITZ** | **Fitzroy Crossi** | **13.25** | **139** | Pn | | **Pn** | **21 56 59.7** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **167** | P | | **Pn** | **21 57 06.1** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **167** | Pn | | **Pn** | **21 57 03.3** | **-2.2** |
| **PSA00** | **Pilbara Seismi** | **13.66** | **167** | Pn | | **Pn** | **21 57 02.9** | **-2.6** |
| **KNRA** | **Kununurra** | **14.11** | **123** | Pn | | **Pn** | **21 57 09.3** | **-2.2** |
| **GIRL** | **Giralia** | **14.50** | **188** | P | | **Pn** | **21 57 15.5** | **-1.5** |
| **GIRL** | **Giralia** | **14.50** | **188** | Pn | | **Pn** | **21 57 14.8** | **-2.2** |
| **MTN** | **Manton Dam** | **15.11** | **109** | Pn | | **Pn** | **21 57 23.9** | **-1.4** |
| MTN | | | | IAmb | | IAmb | 21 58 01.3 | |
| | comp=Z,46nm,1.4s | | | | | | | |
| **DAV** | **Davao City (W)** | **17.69** | **31** | LR | | LR | 22 06 31.1 | |
| | comp=Z,117nm,18.4s,baz=184,slow=43 | | | | | | | |
| **MEEK** | **Meekatharra** | **18.43** | **174** | P | | **P** | **21 58 09.1** | **+1.9** |
| **WRKA** | **Warakurna** | **20.16** | **147** | P | | Pn | 21 58 28.3 | +0.1 |
| **MORW** | **Morawa** | **20.74** | **181** | P | | Pn | 21 58 34.8 | -0.1 |
| **WB0** | **Warramunga Arr** | **20.80** | **125** | P | | **P** | **21 58 32.9** | **-0.3** |
| WB0 | | | | IAmb | | IAmb | 21 58 59.3 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.84** | **126** | P | | **P** | **21 58 33.9** | **+0.2** |
| **WRA** | **Warramunga Arr** | **20.84** | **126** | P | | **P** | **21 58 33.0** | **-0.7** |
| | comp=Z,3.5nm,0.8s,baz=299,slow=12,SNR=28 | | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.85** | **126** | P | | **P** | **21 58 33.8** | **0.0** |
| WB2 | | | | IAmb | | IAmb | 21 59 01.0 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.01** | **126** | P | | **P** | **21 58 35.6** | **0.0** |
| WR0 | | | | IAmb | | IAmb | 21 58 43.0 | |
| | comp=Z,9.7nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **22.68** | **135** | P | | **P** | **21 58 55.8** | **+2.4** |
| **ASAR** | **Alice Springs** | **22.68** | **135** | P | | **P** | **21 58 54.0** | **+0.6** |
| **ASAR** | **Alice Springs** | **22.68** | **135** | P | | **P** | **21 58 52.8** | **-0.6** |
| | comp=Z,1.1nm,0.4s,baz=311,slow=9.6,SNR=19 | | | | | | | |
| ASAR | | | | S | | **S** | **22 03 00.7** | **-1.2** |
| | comp=Z,0.5nm,0.5s,baz=305,slow=23,SNR=2.3 | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| **AS01** | **Alice Springs** | **22.71** | **135** | P | | **P** | **21 58 54.6** | **+0.8** |
| **FORT** | **Forrest** | **24.91** | **156** | P | | **P** | **21 59 16.9** | **+2.0** |
| **FORT** | **Forrest** | **24.91** | **156** | P | | **P** | **21 59 16.1** | **+1.2** |
| **QIS** | **Mount Isa** | **25.49** | **121** | P | | **P** | **21 59 24.4** | **+4.2** |
| **OOD** | **Oodnadatta** | **26.61** | **139** | P | | **P** | **21 59 31.4** | **+1.1** |
| **MULG** | **Mulgathing** | **27.43** | **145** | P | | **P** | **21 59 40.2** | **+2.5** |
| **BBOO** | **Buckleboo** | **30.45** | **146** | P | | **P** | **22 00 06.2** | **+1.7** |
| **CMAR** | **Chiang Mai Arr** | **31.66** | **327** | P | | **P** | **22 00 16.6** | **+1.2** |
| | comp=Z,0.5nm,0.3s,baz=150,slow=7.3,SNR=6.3 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **33.15** | **139** | P | | **P** | **22 00 27.1** | **-1.1** |
| | comp=Z,1.9nm,1.0s,baz=277,slow=12,SNR=2.3 | | | | | | | |
| | comp=Z,1.9nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.03** | **14** | P | | **P** | **22 03 16.8** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **54.03** | **14** | P | | **P** | **22 03 15.9** | **-0.1** |
| | comp=Z,2.2nm,0.8s,baz=198,slow=6.2,SNR=5.0 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | | **P** | **22 03 35.4** | **+1.3** |
| SONM | | | | IAmb | | IAmb | 22 03 40.8 | |
| | comp=Z,3.3nm,1.3s | | | | | | | |
| **SONM** | **Songino Array** | **56.52** | **352** | P | | **P** | **22 03 33.9** | **-0.3** |
| | comp=Z,1.4nm,0.8s,baz=171,slow=9.1,SNR=5.5 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **62.57** | **327** | P | | **P** | **22 04 16.2** | **+0.1** |
| BOOM | | | | IAmb | | IAmb | 22 04 17.9 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.66** | **334** | P | | **P** | **22 04 16.0** | **-0.4** |
| **MKAR** | **Makanchi Array** | **62.66** | **334** | P | | **P** | **22 04 15.3** | **-1.1** |
| | comp=Z,1.1nm,0.7s,baz=145,slow=7.5,SNR=4.7 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.46** | **340** | P | | **P** | **22 04 45.9** | **-1.4** |
| | comp=Z,1.4nm,0.6s,baz=158,slow=4.2,SNR=6.8 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.77** | **180** | P | | **P** | **22 06 08.6** | **-2.0** |
| | comp=Z,0.4nm,0.8s,baz=121,slow=17,SNR=1.0 | | | | | | | |
| QSPA | | | | LR | | LR | 22 39 56.1 | |
| | comp=Z,63nm,19.9s,baz=252,slow=34 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **BELG** | **Belogornoye** | **83.89** | **325** | LR | | LR | 22 49 39.6 | |
| | comp=Z,23nm,18.6s,baz=151,slow=40 | | | | | | | |
| **SNAA** | **Sanae** | **91.07** | **196** | P | | **P** | **22 06 54.4** | **-1.6** |
| | comp=Z,0.7nm,0.8s,baz=336,slow=15,SNR=1.9 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.88** | **281** | PKP | | **PKPdf** | **22 12 33.8** | **-1.8** |
| | comp=Z,0.4nm,0.7s,baz=96,slow=1.1,SNR=2.4 | | | | | | | |

*IDC* ***20*** *21:55:23.9±0.7, 8.˚15S×116.˚43E, h0km, mb4.1/12, mbtmp4.2/13, ML3.8/1, Error ellipse: s-maj=30.2km s-min=15.8km az=67.0*

*NEIC* ***20*** *21:55:26.2±1.8, 8.˚24S±0.˚09×116.˚46E±0.˚06, h10km±1km, mb4.4/14, Error ellipse: s-maj=17.4km s-min=6.3km az=29.0*

*DJA* ***20*** *21:55:27.1±0.8, 8˚S±13˚×11˚6E±˚, h10km, M4.2/4, MLv4.2/4*

**ISC 20 21:55:25.4**±0.5**, 8˚18S**±0.˚06×**116˚51E**±0.˚05**, h10**km**, n48,** σ1**f15/48, mb4.4/15, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.67** | **146** | P | | **Pg** | **21** | **55** | **39.0** | **+0.7** |
| **SRBI** | **Singaraja** | **1.29** | **274** | P | | **Pn** | **21** | **55** | **49.7** | **+0.3** |
| **DNP** | **Denpasar** | **1.38** | **249** | P | | **Pg** | **21** | **55** | **52.0** | **+0.1** |
| **PLAI** | **Plampang** | **1.41** | **117** | P | | **Pb** | **21** | **55** | **53.0** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **263** | | | **Pn** | **21** | **56** | **03.6** | **-0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **263** | P | | **Pn** | **21** | **56** | **04.3** | **+0.2** |
| **KAPI** | **Kappang** | **4.50** | **46** | Pn | | **Pn** | **21** | **56** | **33.6** | **0.0** |
| | 4.1nm,0.3s,baz=99,slow=23,SNR=1.4 | | | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **21** | **57** | **24.8** | **-1.3** |
| | 2.1nm,0.3s,baz=36,slow=21,SNR=2.4 | | | | | | | | | |
| KAPI | | | | Lg | | Lg | 21 | 57 | 50.4 | |
| | 2.3nm,0.3s,baz=149,slow=20,SNR=1.7 | | | | | | | | | |
| | 49nm,0.7s | | | | | | | | | |
| **MMRI** | **Maumere** | **5.69** | **95** | Pn | | **Pn** | **21** | **56** | **50.5** | **+0.6** |
| **UGM** | **Wanagama** | **5.93** | **272** | Pn | | **Pn** | **21** | **56** | **53.4** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **13.27** | **139** | Pn | | **Pn** | **21** | **58** | **34.8** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **13.70** | **167** | Pn | | **Pn** | **21** | **58** | **38.1** | **-1.8** |
| **KNRA** | **Kununurra** | **14.11** | **123** | Pn | | **Pn** | **21** | **58** | **43.0** | **-2.4** |
| **GIRL** | **Giralia** | **14.55** | **188** | Pn | | **Pn** | **21** | **58** | **49.6** | **-1.9** |
| **MTN** | **Manton Dam** | **15.10** | **109** | Pn | | **Pn** | **21** | **58** | **56.1** | **-3.0** |
| **WB0** | **Warramunga Arr** | **20.80** | **125** | | | **P** | **22** | **00** | **07.2** | **+0.1** |
| WB0 | | | | IAmb | | IAmb | 22 | 00 | 12.5 | |
| | comp=Z,21nm,1.4s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.85** | **126** | P | | **P** | **22** | **00** | **07.3** | **-0.3** |
| **WRA** | **Warramunga Arr** | **20.85** | **126** | P | | **P** | **22** | **00** | **07.8** | **+0.2** |
| | comp=Z,3.8nm,0.8s,baz=299,slow=12,SNR=7.2 | | | | | | | | | |
| WRA | | | | S | | **S** | **22** | **03** | **58.1** | **-2.2** |
| | comp=Z,1.2nm,0.8s,baz=301,slow=28,SNR=3.1 | | | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.85** | **126** | P | | **P** | **22** | **00** | **07.0** | **-0.6** |
| WRAB | | | | IAmb | | IAmb | 22 | 00 | 36.2 | |
| | comp=Z,18nm,1.3s | | | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.86** | **126** | P | | **P** | **22** | **00** | **07.7** | **0.0** |
| **WR0** | **Warramunga Arr** | **21.02** | **126** | P | | **P** | **22** | **00** | **09.5** | **+0.1** |
| WR0 | | | | IAmb | | IAmb | 22 | 00 | 12.6 | |
| | comp=Z,28nm,1.5s | | | | | | | | | |
| **AS31** | **Alice Springs** | **22.69** | **135** | P | | **P** | **22** | **00** | **27.2** | **-0.2** |
| **ASAR** | **Alice Springs** | **22.69** | **135** | P | | **P** | **22** | **00** | **28.2** | **+0.8** |
| | comp=Z,2.7nm,0.8s,baz=314,slow=9.1,SNR=4.8 | | | | | | | | | |
| ASAR | | | | S | | **S** | **22** | **04** | **34.2** | **-1.8** |
| | comp=Z,1.5nm,0.9s,baz=312,slow=24,SNR=2.9 | | | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | | | |
| **BBOO** | **Buckleboo** | **30.48** | **146** | P | | **P** | **22** | **01** | **41.7** | **+3.1** |
| **CMAR** | **Chiang Mai Arr** | **31.64** | **327** | P | | **P** | **22** | **01** | **48.7** | **-0.3** |
| | comp=Z,2.6nm,0.3s,baz=151,slow=6.8,SNR=6.3 | | | | | | | | | |
| | comp=Z,2.6nm,0.3s | | | | | | | | | |
| **STKA** | **Stephens Creek** | **33.17** | **139** | P | | **P** | **22** | **02** | **03.4** | **+1.1** |
| | comp=Z,1.0nm,0.4s,baz=326,slow=12,SNR=2.9 | | | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.93** | **23** | P | | **P** | **22** | **04** | **12.1** | **+0.2** |
| | comp=Z,1.1nm,0.5s,baz=206,slow=8.8,SNR=2.1 | | | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **53.98** | **14** | P | | **P** | **22** | **04** | **49.6** | **+0.1** |
| USA0B | | | | IAmb | | IAmb | 22 | 05 | 09.0 | |
| | comp=Z,9.1nm,1.1s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.98** | **14** | P | | **P** | **22** | **04** | **50.2** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **53.98** | **14** | P | | **P** | **22** | **04** | **49.6** | **+0.1** |
| | comp=Z,2.4nm,0.7s,baz=184,slow=8.1,SNR=7.1 | | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | | |
| **SONM** | **Songino Array** | **56.48** | **352** | P | | **P** | **22** | **05** | **08.9** | **+1.2** |
| SONM | | | | IAmb | | IAmb | 22 | 05 | 16.0 | |
| | comp=Z,2.1nm,1.0s | | | | | | | | | |
| **SONM** | **Songino Array** | **56.48** | **352** | P | | **P** | **22** | **05** | **08.0** | **+0.3** |
| | comp=Z,1.9nm,0.8s,baz=172,slow=8.0,SNR=8.3 | | | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.16** | **22** | P | | **P** | **22** | **05** | **14.1** | **+1.7** |
| JKA | | | | IAmb | | IAmb | 22 | 05 | 18.7 | |
| | comp=Z,3.9nm,0.9s | | | | | | | | | |
| **KBL** | **Kabul** | **61.79** | **316** | P | | **P** | **22** | **05** | **45.1** | **+0.3** |
| KBL | | | | IAmb | | IAmb | 22 | 05 | 53.9 | |
| | comp=Z,5.1nm,1.5s | | | | | | | | | |
| **MK31** | **Makanchi Array** | **62.63** | **334** | P | | **P** | **22** | **05** | **51.3** | **+1.2** |
| **MKAR** | **Makanchi Array** | **62.63** | **334** | P | | **P** | **22** | **05** | **50.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **62.63** | **334** | P | | **P** | **22** | **05** | **49.9** | **-0.1** |
| | comp=Z,1.8nm,0.7s,baz=152,slow=6.8,SNR=6.2 | | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.70** | **223** | T | | T | 23 20 07.5 | | | |
| | baz=86 | | | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.71** | **223** | T | | T | 23 20 02.6 | | | |
| | baz=86 | | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.71** | **223** | T | | T | 23 20 10.1 | | | |
| | baz=86 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.17** | **335** | P | | **P** | **22** | **06** | **19.5** | **+0.1** |
| | comp=Z,0.7nm,0.2s,baz=151,slow=5.9,SNR=1.4 | | | | | | | | | |
| | comp=Z,0.7nm,0.2s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.42** | **340** | P | | **P** | **22** | **06** | **20.8** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **67.42** | **340** | P | | **P** | **22** | **06** | **20.1** | **-0.9** |
| | comp=Z,1.8nm,0.6s,baz=154,slow=4.1,SNR=7.4 | | | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.81** | **180** | P | | **P** | **22** | **07** | **45.7** | **+1.2** |
| QSPA | | | | IAmb | | IAmb | 22 | 07 | 52.7 | |
| | comp=Z,4.2nm,1.1s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.81** | **180** | P | | **P** | **22** | **07** | **45.2** | **+0.6** |
| | comp=Z,2.4nm,1.1s,baz=98,slow=6.8,SNR=2.4 | | | | | | | | | |
| | comp=Z,2.4nm,1.1s | | | | | | | | | |
| **SNAA** | **Sanae** | **91.11** | **196** | P | | **P** | **22** | **08** | **30.5** | **+0.4** |
| | comp=Z,1.9nm,0.9s,baz=274,slow=8.2,SNR=1.9 | | | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.89** | **281** | PKP | | **PKPdf** | **22** | **14** | **07.9** | **-1.6** |
| | comp=Z,0.3nm,0.5s,baz=91,slow=1.9,SNR=2.0 | | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.18** | **190** | PKPbc | | **PKPbc** | **22** | **15** | **03.8** | **+0.2** |
| | comp=Z,8.2nm,1.0s,baz=95,slow=12,SNR=4.4 | | | | | | | | | |
| **BDFB** | **Brasilia** | **151.80** | **213** | PKPbc | | **PKPbc** | **22** | **15** | **21.4** | **-0.3** |
| | comp=Z,1.3nm,0.3s,baz=224,slow=21,SNR=1.6 | | | | | | | | | |

*PRU* ***20*** *22:17:31.4, 41˚.42N×19˚.23E, h158km*

*LDG* ***20*** *22:17:39.4±0.4, 41˚.87N×15˚.28E, h11km, Ml3.0/15, Error ellipse: s-maj=10.3km s-min=6.6km az=47.0*

*ROM* ***20*** *22:17:40.5±0.1, 41˚.860N±0˚.004×14˚.853E±0˚.004, h18km, ML3.2/218, Error ellipse: s-maj=0.4km s-min=0.1km az=196.0*

*IDC* ***20*** *22:17:44.4±4.4, 42˚.02N×14˚.95E, h31km±49km, mb3.2/2, mbtmp3.5/8, ML3.3/4, MS2.4/3, Error ellipse: s-maj=23.1km s-min=15.7km az=70.0*

*BEO* ***20*** *22:17:44.3±0.8, 41˚.93N×14˚.98E, h13km±4km, ML3.4/8*

**ISC 20 22:17:40.2**±0.6**, 41˚86N**±0˚.02×**14˚85E**±0˚.02**, h12**km**, n172,** σ1**f71**/240**, 14C-14D, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| **T1412** | **Lupara (CB)** | **0.10** | **219** | ⇑P | | **Pg** | **22** | **17** | **44.0** | **+1.0** |
| T1412 | | | | S | | **Sg** | **22** | **17** | **46.5** | **+1.4** |
| T1412 | | | | AML | | AML | | | | |
| | comp=E,59900μm,0.6s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=N,65850μm,0.7s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=N,904μm,0.3s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=E,59950μm,0.6s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=N,65900μm,0.7s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=E,60600μm,0.6s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=E,59900μm,0.6s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=N,903μm,0.3s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=E,60650μm,0.6s | | | | | | | | | |
| T1412 | | | | AML | | AML | | | | |
| | comp=N,65900μm,0.7s | | | | | | | | | |
| **T1411** | **Guglionesi (CB** | **0.10** | **34** | ⇑P | | **Pb** | **22** | **17** | **44.5** | **+0.3** |
| T1411 | | | | S | | **Sg** | **22** | **17** | **47.5** | **+2.2** |
| T1411 | | | | AML | | AML | | | | |
| | comp=N,99050μm,0.3s | | | | | | | | | |
| T1411 | | | | AML | | AML | | | | |
| | comp=N,95550μm,0.3s | | | | | | | | | |
| T1411 | | | | AML | | AML | | | | |
| T1411 | | | | AML | | AML | | | | |
| T1411 | | | | AML | | AML | | | | |
| | comp=N,95500μm,0.3s | | | | | | | | | |
| T1411 | | | | AML | | AML | | | | |
| | comp=N,99000μm,0.3s | | | | | | | | | |
| T1411 | | | | AML | | AML | | | | |
| **T1413** | **San Martino in** | **0.13** | **93** | ⇑P | | **Pb** | **22** | **17** | **44.5** | **-0.1** |
| T1413 | | | | S | | **Sg** | **22** | **17** | **47.4** | **+1.7** |
| T1413 | | | | AML | | AML | | | | |
| | comp=E,76450μm,0.9s | | | | | | | | | |
| T1413 | | | | AML | | AML | | | | |
| T1413 | | | | AML | | AML | | | | |
| | comp=E,76450μm,1.1s | | | | | | | | | |
| **FRES** | **Fresagrandinar** | **0.18** | **311** | ⇓P | | **Pb** | **22** | **17** | **45.7** | **+0.2** |
| FRES | | | | S | | **Sg** | **22** | **17** | **48.8** | **+1.8** |
| FRES | | | | AML | | AML | | | | |
| | comp=N,9195μm,0.4s | | | | | | | | | |
| FRES | | | | AML | | AML | | | | |
| | comp=E,14850μm,0.5s | | | | | | | | | |
| FRES | | | | AML | | AML | | | | |
| | comp=N,9195μm,1.6s | | | | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **168** | ⇓P | | **Pb** | **22** | **17** | **45.7** | **-0.3** |
| CIGN | | | | S | | **Sg** | **22** | **17** | **49.6** | **+1.8** |
| CIGN | | | | AML | | AML | | | | |
| | comp=N,19100μm,0.5s | | | | | | | | | |
| CIGN | | | | AML | | AML | | | | |
| | comp=N,19100μm,1.5s | | | | | | | | | |
| CIGN | | | | AML | | AML | | | | |
| | comp=E,15750μm,0.5s | | | | | | | | | |
| **TRIV** | **Trivento** | **0.24** | **248** | ⇑P | | **Pb** | **22** | **17** | **46.6** | **+0.1** |
| TRIV | | | | S | | **Sg** | **22** | **17** | **51.0** | **+2.3** |
| TRIV | | | | AML | | AML | | | | |
| | comp=N,6305μm,0.8s | | | | | | | | | |
| TRIV | | | | AML | | AML | | | | |
| | comp=E,5155μm,0.4s | | | | | | | | | |
| TRIV | | | | AML | | AML | | | | |
| | comp=E,4905μm,0.4s | | | | | | | | | |
| TRIV | | | | AML | | AML | | | | |
| | comp=N,6545μm,0.8s | | | | | | | | | |
| **MELA** | **Melanico ??? S** | **0.26** | **126** | ⇓P | | **Pb** | **22** | **17** | **46.2** | **-0.6** |
| MELA | | | | S | | **Sb** | **22** | **17** | **50.6** | **-0.6** |
| MELA | | | | AML | | AML | | | | |
| | comp=E,21950μm,0.8s | | | | | | | | | |
| MELA | | | | AML | | AML | | | | |
| | comp=E,23750μm,0.8s | | | | | | | | | |
| MELA | | | | AML | | AML | | | | |
| | comp=N,21050μm,0.5s | | | | | | | | | |
| MELA | | | | AML | | AML | | | | |
| | comp=N,22200μm,0.5s | | | | | | | | | |
| MELA | | | | AML | | AML | | | | |
| | comp=E,21950μm,1.2s | | | | | | | | | |
| MELA | | | | AML | | AML | | | | |
| | comp=E,23750μm,1.2s | | | | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **172** | ⇑P | | **Pb** | **22** | **17** | **48.7** | **+0.3** |
| GATE | | | | S | | **Sb** | **22** | **17** | **53.8** | **0.0** |
| GATE | | | | AML | | AML | | | | |
| | comp=E,6485μm,0.7s | | | | | | | | | |
| GATE | | | | AML | | AML | | | | |
| | comp=N,5660μm,0.5s | | | | | | | | | |
| GATE | | | | AML | | AML | | | | |
| | comp=E,6575μm,0.6s | | | | | | | | | |
| GATE | | | | AML | | AML | | | | |
| | comp=N,5935μm,0.5s | | | | | | | | | |
| GATE | | | | AML | | AML | | | | |
| | comp=E,6575μm,1.4s | | | | | | | | | |
| GATE | | | | AML | | AML | | | | |
| | comp=N,5655μm,0.5s | | | | | | | | | |
| GATE | | | | AML | | AML | | | | |
| | comp=E,6480μm,0.7s | | | | | | | | | |
| **BSSO** | **Busso** | **0.37** | **211** | ⇑P | | **Pb** | **22** | **17** | **48.7** | **0.0** |
| BSSO | | | | AML | | AML | | | | |
| | comp=E,2270μm,0.7s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=N,2875μm,0.6s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=E,921μm,0.7s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=E,1935μm,1.1s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=N,1155μm,0.6s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=N,2875μm,1.4s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=N,1155μm,1.4s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=E,1935μm,0.9s | | | | | | | | | |
| BSSO | | | | AML | | AML | | | | |
| | comp=E,836μm,0.6s | | | | | | | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **193** | ⇑P | | **Pb** | **22** | **17** | **50.0** | **-0.5** |
| SACR | | | | S | | **Sb** | **22** | **17** | **57.4** | **-0.1** |
| SACR | | | | AML | | AML | | | | |
| | comp=N,2015μm,0.6s | | | | | | | | | |
| SACR | | | | AML | | AML | | | | |
| | comp=E,3025μm,0.5s | | | | | | | | | |
| SACR | | | | AML | | AML | | | | |
| | comp=N,2125μm,0.6s | | | | | | | | | |
| SACR | | | | AML | | AML | | | | |
| | comp=E,2935μm,0.5s | | | | | | | | | |
| SACR | | | | AML | | AML | | | | |
| | comp=N,2125μm,1.4s | | | | | | | | | |
| SACR | | | | AML | | AML | | | | |
| | comp=N,2015μm,1.4s | | | | | | | | | |
| **MIDA** | **Miranda** | **0.49** | **244** | ⇑P | | **Pb** | **22** | **17** | **50.3** | **-0.6** |
| MIDA | | | | S | | **Sb** | **22** | **17** | **58.0** | **-0.1** |
| MIDA | | | | AML | | AML | | | | |
| | comp=N,2440μm,0.2s | | | | | | | | | |
| MIDA | | | | AML | | AML | | | | |
| | comp=E,3365μm,0.8s | | | | | | | | | |
| MIDA | | | | AML | | AML | | | | |
| | comp=E,3220μm,0.8s | | | | | | | | | |
| MIDA | | | | AML | | AML | | | | |
| | comp=N,2700μm,0.2s | | | | | | | | | |
| MIDA | | | | AML | | AML | | | | |
| | comp=E,3365μm,1.2s | | | | | | | | | |
| MIDA | | | | AML | | AML | | | | |
| | comp=E,3220μm,1.2s | | | | | | | | | |
| **APRC** | **Apricena** | **0.53** | **101** | P | | **Pg** | **22** | **17** | **50.4** | **-0.2** |
| APRC | | | | S | | **Sb** | **22** | **17** | **58.6** | **-0.5** |
| APRC | | | | AML | | AML | | | | |
| | comp=N,9335μm,1.4s | | | | | | | | | |
| APRC | | | | AML | | AML | | | | |
| | comp=N,9335μm,0.6s | | | | | | | | | |
| APRC | | | | AML | | AML | | | | |
| | comp=E,6430μm,0.2s | | | | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.53** | **291** | ⇓P | | **Pb** | **22** | **17** | **51.2** | **-0.3** |
| LPEL | | | | S | | **Sb** | **22** | **17** | **59.2** | **+0.1** |
| LPEL | | | | AML | | AML | | | | |
| | comp=E,2780μm,0.2s | | | | | | | | | |
| LPEL | | | | AML | | AML | | | | |
| | comp=N,2665μm,0.8s | | | | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.54** | **154** | ⇓P | | **Pb** | **22** | **17** | **51.3** | **-0.4** |
| MOCO | | | | S | | **Sb** | **22** | **17** | **59.0** | **-0.5** |
| MOCO | | | | AML | | AML | | | | |
| | comp=E,2115μm,0.5s | | | | | | | | | |
| MOCO | | | | AML | | AML | | | | |
| | comp=N,1076μm,0.6s | | | | | | | | | |
| MOCO | | | | AML | | AML | | | | |
| | comp=E,2120μm,0.5s | | | | | | | | | |
| MOCO | | | | AML | | AML | | | | |
| | comp=N,1076μm,0.6s | | | | | | | | | |
| MOCO | | | | AML | | AML | | | | |
| | comp=E,2195μm,0.5s | | | | | | | | | |
| MOCO | | | | AML | | AML | | | | |
| | comp=E,2120μm,1.5s | | | | | | | | | |
| MOCO | | | | AML | | AML | | | | |
| | comp=N,1122μm,0.6s | | | | | | | | | |
| MOCO | | | | AML | | AML | | | | |
| | comp=E,2195μm,1.5s | | | | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.54** | **254** | ⇑P | | **Pb** | **22** | **17** | **51.4** | **-0.3** |
| RNI2 | | | | S | | **Sb** | **22** | **17** | **59.3** | **-0.2** |
| RNI2 | | | | AML | | AML | | | | |
| | comp=E,3815μm,0.7s | | | | | | | | | |
| RNI2 | | | | AML | | AML | | | | |
| | comp=E,3535μm,0.7s | | | | | | | | | |
| RNI2 | | | | AML | | AML | | | | |
| | comp=N,4450μm,0.7s | | | | | | | | | |
| RNI2 | | | | AML | | AML | | | | |
| | comp=N,4185μm,0.7s | | | | | | | | | |
| **SGG** | **Gregorio Mates** | **0.59** | **217** | ⇑P | | **Pg** | **22** | **17** | **51.7** | **0.0** |
| SGG | | | | AML | | AML | | | | |
| | comp=E,3.5nm,0.6s | | | | | | | | | |
| SGG | | | | AML | | AML | | | | |
| | comp=N,2.5nm,0.5s | | | | | | | | | |
| SGG | | | | AML | | AML | | | | |
| | comp=E,1160μm,0.6s | | | | | | | | | |
| SGG | | | | AML | | AML | | | | |
| | comp=N,906μm,0.4s | | | | | | | | | |
| **PSB1** | **Pescosannita** | **0.64** | **183** | P | | **Pg** | **22** | **17** | **52.5** | **-0.1** |
| **VAGA** | **Valle Agricola** | **0.64** | **226** | ⇑P | | **Pg** | **22** | **17** | **52.6** | **-0.1** |
| VAGA | | | | AML | | AML | | | | |
| | comp=N,1500μm,1.1s | | | | | | | | | |
| VAGA | | | | AML | | AML | | | | |
| | comp=E,1390μm,0.7s | | | | | | | | | |
| VAGA | | | | AML | | AML | | | | |
| | comp=N,1560μm,1.2s | | | | | | | | | |
| VAGA | | | | AML | | AML | | | | |
| | comp=E,1320μm,0.7s | | | | | | | | | |
| VAGA | | | | AML | | AML | | | | |
| | comp=N,1560μm,0.8s | | | | | | | | | |
| VAGA | | | | AML | | AML | | | | |
| | comp=N,1500μm,0.9s | | | | | | | | | |
| **CERA** | **Filignano** | **0.67** | **248** | ⇑P | | **Pg** | **22** | **17** | **53.0** | **-0.3** |
| CERA | | | | S | | **Sb** | **22** | **18** | **03.2** | **-0.1** |
| CERA | | | | AML | | AML | | | | |
| | comp=N,3485μm,0.7s

MRB1 AML AML
comp=N,3540µm,0.6s
MRB1 AML AML
comp=N,3540µm,1.4s
MRB1 AML AML
comp=N,3480µm,1.4s
MRB1 AML AML
comp=E,2515µm,1.4s
MRB1 AML AML
comp=E,2560µm,1.4s
**MSAG Monte S. Angel 0.81 100 P Pb 22 17 56.2 0.0**
MSAG S Sb 22 18 07.7 +0.6
MSAG AML AML
comp=N,10220µm,0.4s
MSAG AML AML
comp=E,3195µm,0.2s
MSAG AML AML
comp=N,4385µm,0.4s
MSAG AML AML
comp=E,1255µm,0.2s
**SGTA Sant Agata di 0.82 152 ⇓P Pg 22 17 55.4 -0.7**
SGTA S Sb 22 18 07.6 +0.1
SGTA AML AML
comp=E,8295µm,0.5s
SGTA AML AML
comp=E,8620µm,0.6s
SGTA AML AML
comp=E,8290µm,0.6s
SGTA AML AML
comp=N,4070µm,0.5s
SGTA AML AML
comp=N,4220µm,0.5s
SGTA AML AML
comp=E,8620µm,1.4s
SGTA AML AML
comp=E,8290µm,1.4s
**PIGN Pignataro Magg 0.83 218 P Pg 22 17 55.7 -0.5**
PIGN AML AML
comp=E,524µm,0.5s
PIGN AML AML
comp=N,416µm,0.4s
PIGN AML AML
comp=N,421µm,0.4s
PIGN AML AML
comp=N,422µm,0.4s
PIGN AML AML
comp=E,524µm,0.5s
PIGN AML AML
comp=E,504µm,0.5s
PIGN AML AML
comp=N,416µm,0.4s
PIGN AML AML
comp=N,422µm,1.6s
**PAOL Paolisi 0.85 194 P Pg 22 17 55.8 -0.9**
**MCI Monte Cassino 0.86 244 P Pb 22 17 57.0 0.0**
MCI S Sn 22 18 09.7 -1.0
MCI AML AML
comp=E,1995µm,0.7s
MCI AML AML
comp=N,1440µm,0.8s
**POFI Posta Fibreno 0.86 261 ⇑P Pg 22 17 56.2 -0.7**
POFI S Sb 22 18 08.6 -0.1
POFI AML AML
comp=E,1165µm,1.1s
POFI AML AML
comp=E,1265µm,1.1s
POFI AML AML
comp=N,750µm,0.9s
POFI AML AML
comp=N,732µm,0.9s
POFI AML AML
comp=E,1265µm,0.9s
POFI AML AML
comp=E,1165µm,0.9s
**T0110 Collepietro 0.88 295 ⇓P Pg 22 17 56.7 -0.5**
T0110 S Sb 22 18 09.5 +0.4
T0110 AML AML
comp=E,2840µm,0.8s
T0110 AML AML
comp=N,1940µm,0.8s
**CAFE Carife 0.88 160 ⇓P Pg 22 17 56.4 -0.8**
CAFE S Sb 22 18 09.3 +0.1
CAFE AML AML
comp=E,2525µm,0.8s
CAFE AML AML
comp=E,2640µm,0.8s
CAFE AML AML
comp=N,1575µm,0.5s
CAFE AML AML
comp=E,2525µm,0.7s
CAFE AML AML
comp=N,1580µm,0.5s
**VVLD Villa Vallelon 0.92 271 P Pg 22 17 57.0 -0.9**
VVLD S Sb 22 18 10.3 0.0
VVLD AML AML
comp=N,1390µm,1.5s
VVLD AML AML
comp=E,1270µm,0.8s
**VCEL Villa Celiera 0.92 306 P Pg 22 17 57.5 -0.5**
VCEL S Sn 22 18 11.6 -0.8
VCEL AML AML
comp=E,1810µm,0.3s
VCEL AML AML
comp=N,2345µm,0.8s
**MTMR Montemarano 0.95 173 P Pg 22 17 57.7 -0.8**
MTMR S Sn 22 18 11.8 -1.0
MTMR AML AML
comp=E,4160µm,0.7s
MTMR AML AML
comp=N,3730µm,0.5s
MTMR AML AML
comp=E,4160µm,1.3s
**LRP Arpino 0.97 258 ⇓P Pg 22 17 58.0 -0.9**
LRP S Sb 22 18 11.3 -0.3
LRP AML AML
comp=N,776µm,1.2s
LRP AML AML
comp=N,776µm,0.8s
LRP AML AML
comp=E,710µm,1.1s
**SNAL S. Angelo Dei 0.97 164 ⇓P Pg 22 17 57.5 -1.4**
SNAL S Sb 22 18 12.1 +0.3
SNAL AML AML
comp=N,2130µm,0.6s
SNAL AML AML
comp=N,2365µm,0.6s
SNAL AML AML
comp=N,2130µm,1.4s
SNAL AML AML
comp=N,2365µm,1.4s
SNAL AML AML
comp=E,3245µm,1.1s
SNAL AML AML
comp=E,3255µm,1.1s
**AND3 Andretta 1.00 158 P Pg 22 17 58.8 -0.6**
**LIK San Giovanni I 1.03 250 P Pn 22 18 00.4 -0.1**
LIK AML AML
comp=E,1705µm,0.7s
LIK AML AML
comp=N,1910µm,0.7s
LIK AML AML
comp=E,1705µm,1.3s
**NSC3 Nusco 1.03 168 P Pn 22 18 00.5 -0.1**
**VVDG Vesuvio Valle 1.07 197 P Pb 22 17 59.5 -1.3**
**CRTO Cratere Ovest, 1.08 197 P Pb 22 18 00.6 -0.3**
**OVO Vesuviano 1.08 198 P Pn 22 18 01.2 -0.1**
**VCRE Vesuvio Crater 1.08 197 P Pn 22 18 01.0 -0.3**
**PTQR Pietraquaria 1.09 279 P Pb 22 18 00.1 -1.0**
**VTIR Vesuvio Tirone 1.10 197 P Pn 22 18 01.5 +0.1**
VTIR AML AML
comp=N,492µm,0.6s
VTIR AML AML
comp=E,486µm,0.6s
VTIR AML AML
comp=N,492µm,1.4s
**MCRV Calabrutti - M 1.10 167 P Pb 22 18 00.6 -0.7**
**RDM3 Ruvo Del Monte 1.11 152 P Pb 22 18 00.8 -0.6**
**GIGS Gran Sasso 1.12 302 P Pn 22 18 02.1 +0.3**
GIGS AML AML
comp=E,325µm,0.8s
GIGS AML AML
comp=N,296µm,1.0s
**SNR3 Senerchia 1.15 167 P Pb 22 18 00.8 -1.4**
**CSOB Campi Flegrei 1.16 207 P Pg 22 18 02.1 -0.4**
**TRTR Tortoreto Alta 1.18 324 P Pb 22 18 02.2 -0.3**
TRTR AML AML
comp=E,5655µm,0.8s
TRTR AML AML
comp=N,4470µm,1.0s
TRTR AML AML
comp=E,5655µm,1.2s
TRTR AML AML
comp=N,4470µm,1.0s
**TERO Teramo 1.20 310 P Pn 22 18 01.9 -1.0**
TERO AML AML
comp=E,342µm,1.4s
TERO AML AML
comp=N,378µm,0.8s
TERO AML AML
comp=E,524µm,1.0s
TERO AML AML
comp=N,574µm,1.5s
TERO AML AML
comp=N,574µm,0.5s
**MRLC Muro Lucano 1.20 156 P Pn 22 18 02.1 -0.8**
MRLC AML AML
comp=E,560µm,0.5s
MRLC AML AML
comp=E,1235µm,0.5s
MRLC AML AML
comp=N,965µm,1.2s
MRLC AML AML
comp=N,965µm,0.8s
MRLC AML AML
comp=N,452µm,0.7s
MRLC AML AML
comp=E,560µm,1.5s
MRLC AML AML
comp=E,1235µm,1.5s
**COL3 Colliano 1.23 163 P Pn 22 18 02.3 -1.0**
**GIUL Giuliano Di Ro 1.23 256 P Pg 22 18 03.7 -0.2**
GIUL S Sn 22 18 22.2 +2.4
GIUL AML AML
comp=E,392µm,1.0s
GIUL AML AML
comp=N,536µm,1.5s
GIUL AML AML
comp=E,392µm,1.0s
GIUL AML AML
comp=N,536µm,0.5s
**PALZ Palazzo San Ge 1.24 137 ⇓P Pb 22 18 03.5 0.0**
PALZ S Sg 22 18 21.7 +1.6
PALZ AML AML
comp=N,2260µm,0.9s
PALZ AML AML
comp=E,2320µm,0.4s
**CAMP Campotosto 1.27 303 P Pb 22 18 04.1 0.0**
CAMP AML AML
comp=N,590µm,0.9s
CAMP AML AML
comp=E,392µm,0.8s
CAMP AML AML
comp=N,590µm,1.1s
**SCL3 Muro Lucano (S 1.27 157 P Pg 22 18 04.2 -0.3**
**PST3 Postiglione 1.33 167 P Pg 22 18 05.3 -0.5**
**ACER Acerenza 1.35 142 ⇓P Pb 22 18 05.2 -0.3**
ACER S Sg 22 18 25.8 +2.1
ACER AML AML
comp=E,1795µm,0.4s
ACER AML AML
comp=N,1385µm,0.4s
ACER AML AML
comp=E,1920µm,0.4s
ACER AML AML
comp=N,1290µm,0.4s
**FIAM Fiamignano 1.35 288 P Pb 22 18 05.4 -0.1**
FIAM AML AML
comp=E,527µm,0.8s
FIAM AML AML
comp=N,596µm,0.8s
FIAM AML AML
comp=E,527µm,1.2s
**SMA1 SAN MARTINO 1.36 305 P Pn 22 18 04.8 -0.3**
SMA1 AML AML
comp=E,850µm,0.6s
SMA1 AML AML
comp=E,850µm,1.4s
SMA1 AML AML
comp=N,748µm,1.0s
**RM33 Pellescritta ( 1.38 299 P Pn 22 18 05.0 -0.4**
RM33 AML AML
comp=N,428µm,1.0s
RM33 AML AML
comp=E,535µm,0.7s
RM33 AML AML
comp=N,398µm,1.1s
RM33 AML AML
comp=N,398µm,0.9s
RM33 AML AML
comp=E,614µm,0.8s
RM33 AML AML
comp=N,428µm,1.0s
**CERT Cerreto 1.40 274 P Pb 22 18 05.8 -0.4**
CERT AML AML
comp=N,318µm,0.9s
CERT AML AML
comp=E,741µm,0.7s
**MTRA Matera 1.40 310 P Pg 22 18 06.8 -0.4**
MTRA AML AML
comp=N,783µm,1.0s
MTRA AML AML
comp=E,648µm,0.8s
MTRA AML AML
comp=N,759µm,1.0s
MTRA AML AML
comp=N,783µm,1.0s
MTRA AML AML
comp=E,704µm,0.8s
**RCAV Rocca di Cave 1.42 270 P Pg 22 18 07.7 +0.2**
**SRN3 Sant'Arsenio 1.45 161 P Pb 22 18 07.0 -0.2**
**LATB Latina 1.46 256 P Pn 22 18 06.4 0.0**
LATB AML AML
comp=E,218µm,0.8s
LATB AML AML
comp=E,218µm,1.2s
LATB AML AML
comp=N,156µm,0.9s
**PGN3 Pignola, Italy 1.47 151 P Pn 22 18 06.5 -0.1**
**MF5 Montefalcone A 1.53 318 P Pb 22 18 08.2 -0.3**
MF5 AML AML
comp=E,959µm,1.5s
MF5 AML AML
comp=E,959µm,0.5s
MF5 AML AML
comp=N,956µm,0.6s
**MMO1 Montemonaco 1.53 313 P Pg 22 18 09.1 -0.6**
**LNSS Leonessa 1.54 300 P Pb 22 18 08.4 -0.2**
**CMPR Campora 1.58 167 P Pb 22 18 08.7 -0.7**
CMPR AML AML
comp=E,551µm,1.5s
CMPR AML AML
comp=E,551µm,0.5s
CMPR AML AML
comp=N,524µm,0.6s
**MTCE Montecelio 1.58 277 P Pb 22 18 09.4 +0.1**
**SLCN Sala Consilina 1.58 158 P Pn 22 18 08.6 +0.4**
SLCN AML AML
comp=N,726µm,0.8s
SLCN AML AML
comp=E,939µm,0.5s
SLCN AML AML
comp=N,674µm,0.7s
SLCN AML AML
comp=E,844µm,0.5s
SLCN AML AML
comp=N,726µm,1.2s
**NRCA Norcia 1.61 308 P Pn 22 18 09.1 +0.5**
NRCA AML AML
comp=N,612µm,0.7s
NRCA AML AML
comp=E,438µm,0.5s
NRCA AML AML
comp=N,612µm,1.3s
**MC2 Monte Cornacci 1.62 311 P Pn 22 18 08.7 -0.1**
**AMUR Altamura 1.63 125 ⇓P Pn 22 18 09.0 +0.2**
AMUR AML AML
comp=E,871µm,0.9s
AMUR AML AML
comp=N,790µm,0.6s
**GUMA Gualdo di Mace 1.64 318 P Pb 22 18 10.3 -0.2**
GUMA AML AML
comp=E,1745µm,0.6s
GUMA AML AML
comp=E,1715µm,0.7s
GUMA AML AML
comp=N,1607µm,0.8s
GUMA AML AML
comp=E,1715µm,1.3s
GUMA AML AML
comp=N,1340µm,0.6s
**MCEL Monticello 1.69 154 P Pb 22 18 11.2 -0.1**
**ARRO Arrone 1.71 296 P Pb 22 18 11.5 0.0**
**MTSN Montesano sull 1.73 156 P Pn 22 18 10.4 +0.1**
MTSN AML AML
comp=N,339µm,0.6s
MTSN AML AML
comp=N,339µm,1.4s
MTSN AML AML
comp=E,335µm,0.7s
**STON Ston 2.34 63 ePn Pn 22 18 19.3 +0.8**
**STON Ston 2.34 63 ePn Pn 22 18 18.8 +0.3**
**TREB Trebinje 2.74 71 ePn Pn 22 18 25.0 +1.1**
**TREB Trebinje 2.74 71 ePn Pn 22 18 24.3 +0.4**
**A050A Klekovaca 2.90 25 ePn Pn 22 18 28.1 +1.9**
**BRY Bratogost 2.93 68 ePn Pn 22 18 29.0 +2.3**
**DRME Dracevica, Mon 3.25 83 ePn Pn 22 18 32.4 +1.4**
**UPM Unac-Piva 3.29 65 ePn Pn 22 18 31.7 0.0**
**PDG Podgorica 3.33 79 ePn Pn 22 18 33.9 +1.9**
PDG eSn Sn 22 19 12.3 +0.8
**PDG Podgorica 3.33 79 ePn Pn 22 18 34.2 +2.2**
**BLY Banja Luka 3.35 30 ePn Pn 22 18 35.6 +3.2**
**A051A Mrakovica 3.49 25 ePn Pn 22 18 37.5 +3.1**
**BOJS Bojanci 3.66 4 ePn Pn 22 18 38.3 +1.7**
**SKDS Skadanscina 3.74 351 ePn Pn 22 18 37.9 +0.2**
**HAPS Han Pijesak,Bl 3.74 52 ePn Pn 22 18 40.1 +2.2**
**HAPS Han Pijesak,Bl 3.74 52 ePn Pn 22 18 39.5 +1.6**
**RUDO Rudo 3.77 61 ePn Pn 22 18 39.5 +1.4**
**CEY Cerknica 3.89 356 ePn Pb 22 18 47.9 -0.9**
**BBLS Lazi&#263i 3.91 58 ePn Pn 22 18 42.0 +1.9**
**BBLS Lazi&#263i 3.91 58 ePn Pn 22 18 41.9 +1.9**
**SJES Sjenica 4.04 68 ePn Pn 22 18 45.2 +3.3**
**SJES Sjenica 4.04 68 ePn Pn 22 18 45.6 +3.7**
**DIVS Divibare 4.39 58 ePn Pn 22 18 49.5 +2.8**
**VAE Valguarnera 4.39 185 Pn Pn 22 18 50.3 +3.6**
comp=E,7.1nm,0.8s,baz=331,slow=13,SNR=4.4
**OHR Ohrid 4.53 98 ePn Pn 22 18 51.7 +3.0**
OHR eSn Sn 22 19 42.1 +0.7
**OHR Ohrid 4.53 98 i Pn Pn 22 18 51.7 +3.0**
OHR i Sn Sn 22 19 42.0 +0.7
**OBKA Obir 4.65 357 i Pn Pn 22 18 51.9 +1.6**
comp=E,1.7nm,0.4s
OBKA i Sn Sn 22 19 44.3 -0.1
comp=E,40nm,0.8s
**OBKA Obir 4.65 357 ePn Pn 22 18 50.5 +0.1**
**TRUS Trudelj 4.71 58 ePn Pn 22 18 52.1 +1.0**
**GRUS Gruza 4.76 63 ePn Pn 22 18 54.8 +3.0**
**SOKA Soboth 4.82 2 i Pn Pn 22 18 53.9 +1.3**
comp=E,0.3nm,0.2s
SOKA eSn Sn 22 19 44.9 -3.6
comp=E,4.4nm,0.6s
**SELS Selova 4.83 72 ePn Pn 22 18 54.7 +2.0**
SELS eSn Sn 22 19 48.5 -0.1
**MYKA Terra Mystica 4.85 350 ePn Pn 22 18 56.9 +3.9**
comp=E,0.9nm,0.3s
MYKA i Sn Sn 22 19 48.6 -0.5
comp=E,11nm,0.6s
**FNA Florina 5.03 100 eSn Sn 22 19 53.0 -0.6**
**ABTA Abfaltersbach 5.17 342 ePn Pn 22 18 58.6 +1.1**
comp=E,0.4nm,0.3s
ABTA i Sn Sn 22 19 59.2 +2.2
comp=E,20nm,0.7s
**BARS Barje 5.25 77 ePn Pn 22 19 00.5 +2.0**
BARS eSn Sn 22 19 57.9 -1.1
**KBA Koelnbreinsper 5.33 349 i Pn Pn 22 19 02.0 +2.3**
comp=E,0.9nm,0.3s
KBA i Sn Sn 22 20 00.5 -0.6
comp=E,4.4nm,0.5s
KBA eSn Sb 22 20 03.4 -14
comp=E,3.9nm,0.3s
**ARSA Arzberg 5.41 5 i Pn Pn 22 19 02.1 +1.3**
comp=E,0.8nm,0.4s
ARSA i Sn Sn 22 20 00.9 -2.0
comp=E,5.1nm,0.6s
**LESA Schwarzleotal 5.78 345 i Pn Pn 22 19 07.0 +1.2**
comp=E,0.5nm,0.2s
**SBF Sospel 5.80 293 ePn Pn 22 19 07.5 +1.3**
SBF eSn Sn 22 20 13.4 +0.7
comp=E,0.9nm,0.2s
**WTTA Wattenberg 5.87 338 i Pn Pn 22 19 10.7 +3.5**
comp=E,0.6nm,0.2s
WTTA i Sn Sn 22 20 15.4 +0.9
comp=E,8.6nm,0.6s
**BIOA Bad Ischl, Aus 5.89 352 i Pn Pn 22 19 10.8 +3.4**
comp=E,0.9nm,0.2s
BIOA eSn Sn 22 20 16.3 +1.5
comp=E,12nm,0.5s
**ZAPS Zavoj 5.92 74 ePn Pn 22 19 09.6 +1.9**
ZAPS eSn Sn 22 20 13.8 -1.7
**RONA Rosalia, Austr 5.93 10 i Pn Pn 22 19 09.9 +2.0**
comp=E,0.2nm,0.1s
RONA eSn Sn 22 20 13.6 -2.2
comp=E,0.8nm,0.2s
**FETA Feichten 5.94 332 i Pn Pn 22 19 06.8 -1.4**
comp=E,1.7nm,0.6s
FETA i Sn Sn 22 20 18.2 +1.9
comp=E,2.4nm,0.5s
**WATA Walderalm 5.95 338 i Pn Pn 22 19 10.8 +2.5**
comp=E,0.8nm,0.2s
WATA i Sn Sn 22 20 18.0 +1.6
comp=E,7.6nm,0.6s
**SQTA Sankt Quirin 5.96 335 i Pn Pn 22 19 10.3 +2.0**
comp=E,0.8nm,0.3s
**MOA Molln 6.00 356 ePn Pn 22 19 11.4 +2.6**
comp=E,0.4nm,0.2s
MOA i Sn Sn 22 20 17.2 -0.3
comp=E,7.2nm,0.5s
**MOA Molln 6.00 356 ePn Pn 22 19 11.2 +2.3**
**DAVOX Davos/Dischmat 6.08 326 Pn Pn 22 19 12.8 +2.9**
comp=E,0.5nm,0.3s,baz=153,slow=14,SNR=25
DAVOX Sn Sn 22 20 19.8 +0.3
comp=E,0.4nm,0.3s,baz=124,slow=14,SNR=2.0
DAVOX LR LR 22 22 39.0
comp=E,27nm,19.8s,baz=94,slow=49
comp=E,5.8nm,0.7s
**MOTA Moosalm 6.10 335 i Pn Pn 22 19 12.2 +1.9**
comp=E,0.6nm,0.2s
MOTA i Sn Sn 22 20 16.6 -3.5
comp=E,3.7nm,0.5s
**CONA Conrad Observa 6.11 6 i Pn Pn 22 19 11.6 +1.2**
comp=E,1.0nm,0.5s
CONA i Sn Sn 22 20 18.4 -1.9
comp=E,5.4nm,0.5s
**VTS Vitosha 6.27 80 ePn Pn 22 19 15.0 +2.3**
**LMR La Mourre 6.33 286 ePn Pn 22 19 14.8 +1.5**
**RETA Reutte 6.34 334 ePn Pn 22 19 12.6 -0.8**
comp=E,0.6nm,0.3s
RETA i Sn Sn 22 20 28.5 +2.7
comp=E,7.9nm,0.8s
**DAVA Damuels 6.48 329 i Pn Pn 22 19 18.1 +2.6**
comp=E,1.6nm,0.5s
DAVA i Sn Sn 22 20 30.2 +0.7
comp=E,5.7nm,0.6s
**MBDF Montbardon 6.55 299 ePn Pn 22 19 17.8 +1.3**
**MBDF Montbardon 6.55 299 eP Pn** 22 19 22.2 +5.7
MBDF eSn Sn 22 20 30.9 -0.3
comp=E,0.3nm,0.2s
**SRS Serrai 6.61 94 ePn Pn 22 19 18.4 +1.2**
**LPG La Plagne 6.90 305 ePn Pn 22 19 21.5 0.0**
**LPG La Plagne 6.90 305 eP Pn** 22 19 26.6 +5.1
**LPL La Plagne 6.92 305 ePn Pn 22 19 22.4 +0.7**
**LPL La Plagne 6.92 305 eP Pn** 22 19 27.0 +5.3
LPL eSn Sn 22 20 38.7 -1.8
comp=E,0.1nm,0.1s
**CKRC Cesky Krumlov 6.97 357 ePN Pn 22 19 22.4 +0.3**
CKRC eSN Sn 22 20 38.1 -3.2
**GERES GERESS Array B 7.03 354 Pn Pn 22 19 23.9 +0.9**
comp=E,0.2nm,0.3s,baz=167,slow=9.1,SNR=2.3
GERES Sn Sn 22 20 38.9 -4.0
comp=E,0.7nm,0.3s,baz=170,slow=28,SNR=10
comp=E,0.3nm,0.4s
**SMRF Simiane la Rot 7.13 290 eP Pn** 22 19 29.8 +5.5
**VYHS Vyhne 7.21 22 ePN Pn 22 19 27.8 +2.4**
VYHS eSN Sn 22 20 44.8 -2.3
**ORIF Oris-en-Rattie 7.21 298 ePn Pn 22 19 27.5 +2.0**
ORIF eSn Sn 22 20 46.3 -1.1
comp=E,0.1nm,0.2s
**KHC Kasperske Hory 7.33 353 ePN Pn 22 19 27.5 +0.5**
KHC eSN Sn 22 20 45.1 -5.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KEST** | **Kesra** | **7.47** | **217** | Pn | Pn | 22 19 33.7 | +4.6 |
| | comp=E,0.2nm,0.3s,baz=288,slow=7.0,SNR=7.2 | | | | | | |
| KEST | | | | LR | LR | 22 23 06.7 | |
| | comp=E,37nm,19.2s,baz=354,slow=42 | | | | | | |
| | comp=E,4.2nm,0.7s | | | | | | |
| **ZVC** | **Zvikov** | **7.59** | **357** | *e*PN | **Pn** | **22 19 34.1** | **+3.4** |
| ZVC | | | | eSN | **Sn** | **22 20 49.7** | **-6.9** |
| **CABF** | **La Chapelle** | **7.88** | **310** | *e*Pn | **Pn** | **22 19 35.2** | **+0.5** |
| CABF | | | | eSn | **Sn** | **22 21 01.4** | **-2.4** |
| | comp=E,2.7nm,0.5s | | | | | | |
| **PRU** | **Pruhonice** | **8.13** | **359** | *e*SN | Sn | 22 21 00.0 | -10 |
| **HINF** | **Hinteralfeld** | **8.23** | **319** | *e*Pn | **Pn** | **22 19 39.0** | **-0.4** |
| HINF | | | | eSn | **Sn** | **22 21 08.0** | **-4.3** |
| | comp=E,2.7nm,0.4s | | | | | | |
| **CDF** | **Champ du Feu** | **8.46** | **323** | *e*Pn | **Pn** | **22 19 42.6** | **0.0** |
| CDF | | | | eSn | **Sn** | **22 21 13.8** | **-4.2** |
| | comp=E,1.2nm,0.3s | | | | | | |
| **HAU** | **Haudompre** | **8.61** | **318** | *e*Pn | **Pn** | **22 19 44.3** | **-0.3** |
| HAU | | | | eSn | **Sn** | **22 21 16.8** | **-4.7** |
| | comp=E,3.1nm,0.3s | | | | | | |
| **MLR** | **Muntele Rosu** | **8.82** | **62** | Pn | **Pn** | **22 19 49.5** | **+1.9** |
| | comp=E,0.2nm,0.3s,baz=36,slow=8.6,SNR=2.8 | | | | | | |
| MLR | | | | Sn | Sn | 22 21 16.2 | -11 |
| | baz=347,slow=20,SNR=1.4 | | | | | | |
| | comp=E,2.7nm,0.8s | | | | | | |
| **SMF** | **Signal de Mont** | **9.23** | **305** | *e*Pn | **Pn** | **22 19 52.6** | **-0.5** |
| SMF | | | | eSn | **Sn** | **22 21 34.1** | **-2.8** |
| | comp=E,1.5nm,0.3s | | | | | | |
| **SFTF** | **Sexfontaines** | **9.40** | **316** | *e*Pn | **Pn** | **22 19 55.6** | **+0.2** |
| SFTF | | | | eSn | **Sn** | **22 21 36.1** | **-4.9** |
| | comp=E,1.7nm,0.4s | | | | | | |
| **LOR** | **Lormes** | **9.52** | **308** | *e*Pn | Pn | 22 19 56.8 | -0.3 |
| LOR | | | | eSn | **Sn** | **22 21 41.2** | **-2.8** |
| | comp=E,2.1nm,0.5s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **9.58** | **317** | *e*Pn | **Pn** | **22 19 57.9** | **0.0** |
| MEZF | | | | eSn | **Sn** | **22 21 42.6** | **-2.9** |
| | comp=E,1.0nm,0.3s | | | | | | |
| **AVF** | **Avril sur Loir** | **9.60** | **305** | *e*Pn | **Pn** | **22 19 57.7** | **-0.4** |
| AVF | | | | eSn | **Sn** | **22 21 42.4** | **-3.4** |
| | comp=E,0.4nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **9.63** | **307** | *e*Pn | **Pn** | **22 19 58.0** | **-0.6** |
| SSF | | | | eSn | **Sn** | **22 21 42.0** | **-4.6** |
| | comp=E,0.9nm,0.3s | | | | | | |
| **BGF** | **Bois d'Agland** | **9.81** | **303** | *e*P | Pn | 22 20 07.1 | +6.0 |
| **IDI** | **Anoyia** | **10.23** | **127** | Pn | **Pn** | **22 20 07.9** | **+1.0** |
| | comp=E,7.7nm,1.1s,baz=55,slow=16,SNR=1.2 | | | | | | |
| IDI | | | | Sn | **Sn** | **22 21 58.5** | **-3.1** |
| | comp=E,0.3nm,0.3s,baz=64,slow=21,SNR=1.4 | | | | | | |
| **HYF** | **Humbligny** | **10.25** | **306** | *e*Sn | **Sn** | **22 21 57.9** | **-3.9** |
| **AKASG** | **Malin Array Be** | **13.29** | **43** | LR | LR | 22 26 02.1 | |
| | comp=E,22nm,21.4s,baz=228,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **20.75** | **15** | P | **P** | **22 22 20.1** | **-0.4** |
| | comp=E,1.0nm,0.8s,baz=186,slow=11,SNR=2.7 | | | | | | |
| | comp=E,1.0nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **38.27** | **54** | P | **P** | **22 25 00.8** | **+0.7** |
| | comp=E,0.6nm,0.8s,baz=245,slow=6.2,SNR=1.9 | | | | | | |
| | comp=E,0.6nm,0.8s | | | | | | |

**THE 20 22:18:38.2, 40°.05N×20°.19E, *h*26km±6km, ML1.3/4, Error ellipse: s-maj=7.2km s-min=0.3km az=209.0, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KEK** | **Kerkira** | **0.45** | **222** | P | Pb | 22 18 47.4 | -0.2 |
| KEK | | | | S | Sb | 22 18 54.4 | +0.5 |
| | 40nm,0.6s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.53** | **168** | P | Pb | 22 18 48.5 | -0.4 |
| IGT | | | | S | Sb | 22 18 56.7 | +0.6 |
| | 22nm,0.4s | | | | | | |
| **NEST** | **Nestorio** | **0.76** | **61** | P | Pb | 22 18 52.6 | -0.2 |
| NEST | | | | S | Sn | 22 19 03.4 | -0.6 |
| | 28nm,0.6s | | | | | | |
| **FNA** | **Florina** | **1.17** | **51** | P | Pn | 22 18 58.1 | -0.9 |
| FNA | | | | S | Sn | 22 19 14.0 | -0.2 |
| | 22nm,0.5s | | | | | | |
| **FNA** | **Florina** | **1.17** | **51** | *e*Pn | Pn | 22 18 57.9 | -1.1 |

*IDC **20** 22:28:33.8±0.7, 8°.14S×116°.45E, h0km, mb4.0/14, mbtmp4.0/15, ML3.7/1, MS3.0/2, Error ellipse: s-maj=21.7km s-min=14.6km az=71.0*
*NEIC **20** 22:28:35.7±2.9, 8°.14S±0°.06×116°.48E±0°.06, h10km±1km, mb4.2/11, Error ellipse: s-maj=12.1km s-min=9.6km az=223.0*
*DJA **20** 22:28:36.4±0.5, 8°S±5'×11°6E±', h13km±4km, M4.5/7, mb4.7/3, mB4.8/2, MLv4.3/7, Mw(mB)4.1/2*
**ISC 20 22:28:35.2±0.5, 8°.15S±0°.05×116°.51E±0°.04, h10km, n65, σ1°§63/69, mb4.2/16, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.69** | **148** | P | **Pg** | **22 28 48.7** | **+0.1** |
| **SRBI** | **Singaraja** | **1.28** | **273** | P | **Pn** | **22 28 58.9** | **-0.3** |
| SRBI | | | | S | **Sn** | **22 29 17.4** | **+0.9** |
| **DNP** | **Denpasar** | **1.39** | **248** | P | **Pg** | **22 29 02.2** | **+0.4** |
| **PLAI** | **Plampang** | **1.43** | **118** | P | **Pn** | **22 29 02.1** | **+0.9** |
| PLAI | | | | S | **Sn** | **22 29 21.4** | **+1.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **262** | P | **Pn** | **22 29 14.3** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **262** | | **Pn** | **22 29 12.7** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.35** | **262** | P | Pn | **22 29 13.7** | **-0.2** |
| JAGI | | | | S | Sn | **22 29 41.9** | **-1.0** |
| **WBSI** | **Waikabubak, Su** | **3.21** | **118** | P | **Pn** | **22 29 26.4** | **+0.6** |
| **BSSI** | **Bau Bau, Buton** | **4.43** | **63** | P | **Pn** | **22 29 43.3** | **+0.8** |
| **KAPI** | **Kappang** | **4.48** | **46** | Pn | **Pn** | **22 29 42.8** | **-0.4** |
| **KAPI** | **Kappang** | **4.48** | **46** | Pn | **Pn** | **22 29 42.7** | **-0.6** |
| | 3.8nm,0.3s,baz=213,slow=10,SNR=5.1 | | | | | | |
| KAPI | | | | Sn | **Sn** | **22 30 34.4** | **-1.1** |
| | 8.7nm,0.3s,baz=112,slow=19,SNR=6.2 | | | | | | |
| KAPI | | | | Lg | Lg | 22 30 58.8 | |
| | 5.6nm,0.3s,baz=167,slow=20,SNR=1.4 | | | | | | |
| | 9.6nm,0.2s | | | | | | |
| **BASI** | **Baing, Sumba** | **4.51** | **117** | P | **Pn** | **22 29 45.0** | **+1.3** |
| **PWJI** | **Pagerwojo** | **4.66** | **271** | P | **Pn** | **22 29 46.4** | **+0.7** |
| **EDFI** | **Ende, Flores** | **5.16** | **97** | P | **Pn** | **22 29 53.6** | **+0.9** |
| | 76nm,0.7s,747nm | | | | | | |
| **BNSI** | **Bone** | **5.17** | **44** | P | **Pn** | **22 29 54.4** | **+1.8** |
| | 67nm,0.7s,1μm | | | | | | |
| **UGM** | **Wanagama** | **5.93** | **272** | P | **Pn** | **22 30 07.4** | **+4.2** |
| **UGM** | **Wanagama** | **5.93** | **272** | Pn | **Pn** | **22 30 05.6** | **+2.4** |
| **UGM** | **Wanagama** | **5.93** | **272** | P | **Pn** | **22 30 03.9** | **+0.7** |
| **SOEI** | **Soe** | **7.83** | **102** | Pn | **Pn** | **22 30 31.3** | **+1.9** |
| **BBJI** | **Bungbulang** | **8.80** | **274** | P | **Pn** | **22 30 46.7** | **+4.0** |
| **FITZ** | **Fitzroy Crossi** | **13.29** | **139** | Pn | **Pn** | **22 31 43.6** | **-0.5** |
| **MBWA** | **Marble Bar** | **13.30** | **167** | P | **Pn** | **22 31 42.4** | **-1.8** |
| **MBWA** | **Marble Bar** | **13.30** | **167** | Pn | **Pn** | **22 31 41.6** | **-2.6** |
| **PSA00** | **Pilbara Seismi** | **13.73** | **167** | P | **Pn** | **22 31 49.7** | **-0.4** |
| **PSA00** | **Pilbara Seismi** | **13.73** | **167** | Pn | **Pn** | **22 31 47.4** | **-2.6** |
| **KNRA** | **Kununurra** | **14.13** | **123** | Pn | **Pn** | **22 31 56.7** | **+1.1** |
| **GIRL** | **Giralia** | **14.57** | **188** | P | **Pn** | **22 32 00.5** | **-1.1** |
| **GIRL** | **Giralia** | **14.57** | **188** | Pn | **Pn** | **22 31 58.5** | **-3.1** |
| **DAV** | **Davao City (W)** | **17.62** | **31** | LR | LR | 22 41 15.3 | |
| | comp=Z,38nm,18.1s,baz=210,slow=43 | | | | | | |
| **MEEK** | **Meekatharra** | **18.50** | **174** | P | **Pn** | **22 32 53.1** | **+1.3** |
| **WRKA** | **Warakurna** | **20.21** | **148** | P | Pn | 22 33 12.4 | 0.0 |
| **MORW** | **Morawa** | **20.81** | **181** | P | Pn | 22 33 21.8 | +2.4 |
| MORW | | | | IAmb | IAmb | 22 33 29.1 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.82** | **126** | P | **P** | **22 33 17.3** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 22 33 28.8 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.87** | **126** | P | **P** | **22 33 16.9** | **-0.8** |
| **WRA** | **Warramunga Arr** | **20.87** | **126** | P | **P** | **22 33 18.1** | **+0.4** |
| | comp=Z,3.6nm,0.7s,baz=299,slow=12,SNR=28 | | | | | | |
| WRA | | | | S | **S** | **22 37 06.8** | **-3.8** |
| | comp=Z,0.6nm,0.8s,baz=292,slow=26,SNR=2.3 | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.88** | **126** | P | **P** | **22 33 16.8** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 22 33 27.9 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.04** | **126** | P | **P** | **22 33 19.4** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 22 33 32.5 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **GSI** | **Gunungsitoli** | **21.08** | **296** | P | **P** | **22 33 14.2** | **-5.8** |
| **BLDU** | **Ballidu** | **22.35** | **180** | P | **P** | **22 33 34.5** | **+1.1** |
| **AS31** | **Alice Springs** | **22.71** | **135** | P | **P** | **22 33 40.2** | **+2.7** |
| **ASAR** | **Alice Springs** | **22.71** | **135** | P | **P** | **22 33 37.6** | **+0.1** |
| | comp=Z,2.1nm,0.8s,baz=318,slow=9.2,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 37 29.4** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=336,slow=2.0,SNR=1.7 | | | | | | |
| ASAR | | | | S | **S** | **22 37 43.3** | **-2.9** |
| | comp=Z,0.2nm,0.3s,baz=315,slow=23,SNR=2.3 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **31.61** | **327** | P | **P** | **22 34 59.0** | **+0.5** |
| | comp=Z,2.2nm,0.3s,baz=155,slow=7.3,SNR=7.3 | | | | | | |
| CMAR | | | | LR | LR | 22 48 51.9 | |
| | comp=Z,32nm,19.2s,baz=160,slow=39 | | | | | | |
| | comp=Z,2.2nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **33.19** | **139** | P | **P** | **22 35 12.4** | **+0.1** |
| | comp=Z,0.7nm,0.3s,baz=306,slow=19,SNR=1.5 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.91** | **23** | P | **P** | **22 37 21.1** | **-0.4** |
| | comp=Z,1.0nm,0.5s,baz=201,slow=8.5,SNR=4.7 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **53.96** | **14** | P | **P** | **22 37 59.6** | **+0.5** |
| USA0B | | | | IAmb | IAmb | 22 38 04.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.96** | **14** | P | **P** | **22 38 00.3** | **+1.2** |
| **USRK** | **Ussuriysk Ar.** | **53.96** | **14** | P | **P** | **22 37 59.9** | **+0.7** |
| | comp=Z,2.5nm,0.7s,baz=183,slow=8.0,SNR=7.5 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.45** | **352** | P | **P** | **22 38 18.6** | **+1.3** |
| SONM | | | | IAmb | IAmb | 22 38 19.8 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.45** | **352** | P | **P** | **22 38 17.7** | **+0.4** |
| | comp=Z,2.1nm,0.7s,baz=168,slow=8.8,SNR=16 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **58.68** | **12** | P | **P** | **22 38 33.3** | **+0.5** |
| | comp=Z,0.8nm,0.6s,baz=159,slow=6.0,SNR=3.6 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **HEH** | **HeiHe** | **58.93** | **8** | *e*P | **P** | **22 38 34.6** | **+0.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **KSH** | **Kashi** | **60.48** | **325** | P | **P** | **22 38 47.1** | **+1.5** |
| **MK31** | **Makanchi Array** | **62.60** | **334** | P | **P** | **22 38 59.8** | **+0.1** |
| **MKAR** | **Makanchi Array** | **62.60** | **334** | P | **P** | **22 38 58.8** | **-0.9** |
| **MKAR** | **Makanchi Array** | **62.60** | **334** | P | **P** | **22 38 59.4** | **-0.3** |
| | comp=Z,1.4nm,0.6s,baz=147,slow=7.1,SNR=9.2 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.14** | **335** | P | **P** | **22 39 29.4** | **+0.3** |
| | comp=Z,0.5nm,0.6s,baz=145,slow=5.0,SNR=5.9 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.40** | **340** | P | **P** | **22 39 30.6** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **67.40** | **340** | P | **P** | **22 39 30.1** | **-0.5** |
| | comp=Z,2.2nm,0.7s,baz=132,slow=4.5,SNR=8.8 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **72.41** | **333** | P | **P** | **22 40 00.7** | **-0.9** |
| | comp=Z,0.5nm,0.7s,baz=149,slow=6.4,SNR=3.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.46** | **326** | P | **P** | **22 40 18.2** | **-1.3** |
| **QSPA** | **South Pole Qui** | **81.84** | **180** | P | **P** | **22 40 55.2** | **+0.7** |
| QSPA | | | | IAmb | IAmb | 22 41 24.4 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.84** | **180** | P | **P** | **22 40 55.3** | **+0.7** |
| | comp=Z,0.9nm,0.8s,baz=141,slow=1.9,SNR=2.0 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **91.14** | **196** | P | **P** | **22 41 42.1** | **+2.0** |
| | comp=Z,1.3nm,0.7s,baz=142,slow=0.6,SNR=4.3 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.88** | **281** | PKP | **PKPdf** | **22 47 17.5** | **-1.8** |
| | comp=Z,0.3nm,0.5s,baz=42,slow=2.2,SNR=4.7 | | | | | | |
| **CPUP** | **Villa Florida** | **145.21** | **190** | PKPbc | **PKPbc** | **22 48 13.1** | **-0.4** |
| | comp=Z,1.1nm,0.5s,baz=123,slow=4.0,SNR=2.8 | | | | | | |

**NAM 20 22:41:56.8±4.3, 19°.74S×14°.48E, *h*22km±13km, ML1.0, 5C-5D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.02** | **106** | ↓*i*P | Pb | 22 42 02.4 | +1.7 |
| ST3N | | | | *i* S | Sb | 22 42 03.9 | +0.5 |
| ST3N | | | | IAML | | 22 42 04.1 | |
| | comp=Z,13nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.02** | **106** | *i* P | Pb | 22 42 02.4 | +1.7 |
| ST3N | | | | *i* S | Sb | 22 42 03.9 | +0.5 |
| ST3N | | | | IAML | | 22 42 04.1 | |
| | comp=Z,21nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **136** | ↑*i*P | Pb | 22 42 01.4 | +0.3 |
| ST9N | | | | *i* S | Sb | 22 42 02.1 | -1.8 |
| ST9N | | | | IAML | | 22 42 02.4 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **136** | *i* P | Pb | 22 42 01.3 | +0.2 |
| ST9N | | | | *i* S | Sb | 22 42 02.0 | -1.9 |
| ST9N | | | | IAML | | 22 42 02.5 | |
| | comp=Z,473nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **231** | ↓*i*P | Pb | 22 42 03.5 | +0.6 |
| ST6N | | | | *i* S | Sb | 22 42 05.9 | -1.3 |
| ST6N | | | | IAML | | 22 42 06.0 | |
| | comp=Z,18nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **231** | *i* P | Pb | 22 42 03.5 | +0.6 |
| ST6N | | | | *i* S | Sb | 22 42 06.0 | -1.3 |
| ST6N | | | | IAML | | 22 42 06.2 | |
| | comp=Z,16nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **90** | ↑*i*P | Pb | 22 42 02.2 | -0.6 |
| ST1N | | | | *i* S | Sb | 22 42 03.4 | -3.5 |
| ST1N | | | | IAML | | 22 42 03.5 | |
| | comp=Z,61nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **90** | *i* P | Pb | 22 42 02.1 | -0.6 |
| ST1N | | | | *i* S | Sb | 22 42 03.4 | -3.5 |
| ST1N | | | | IAML | | 22 42 03.6 | |
| | comp=Z,61nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **287** | ↓*i*P | Pb | 22 42 05.6 | +3.0 |
| ST8N | | | | *i* S | Sb | 22 42 09.3 | +2.6 |
| ST8N | | | | IAML | | 22 42 11.6 | |
| | comp=Z,2.5nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | ↓*i*P | Pb | 22 42 02.6 | -0.2 |
| ST2N | | | | *i* S | Sb | 22 42 04.5 | -2.5 |
| ST2N | | | | IAML | | 22 42 05.3 | |
| | comp=Z,33nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | *i* P | Pb | 22 42 02.6 | -0.2 |
| ST2N | | | | *i* S | Sb | 22 42 04.2 | -2.8 |
| ST2N | | | | IAML | | 22 42 06.0 | |
| | comp=Z,15nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **102** | ↓*i*P | Pb | 22 42 03.7 | +0.4 |
| ST5N | | | | *i* S | Sb | 22 42 06.1 | -1.6 |
| ST5N | | | | IAML | | 22 42 06.6 | |
| | comp=Z,14nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **102** | *i* P | Pb | 22 42 03.6 | +0.4 |
| ST5N | | | | *i* S | Sb | 22 42 06.1 | -1.6 |
| ST5N | | | | IAML | | 22 42 06.3 | |
| | comp=Z,42nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | ↑*i*P | Pn | 22 42 05.1 | -0.6 |
| ST10N | | | | *i* S | Sb | 22 42 08.9 | +1.1 |
| ST10N | | | | IAML | | 22 42 09.6 | |
| | comp=Z,16nm,0.0s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | *i* P | Pn | 22 42 05.0 | -0.6 |
| ST10N | | | | *i* S | Sb | 22 42 08.6 | +0.8 |
| ST10N | | | | IAML | | 22 42 09.7 | |
| | comp=Z,53nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **76** | ↑*i*P | Pn | 22 42 06.3 | -0.4 |
| ST11N | | | | *i* S | Sb | 22 42 10.8 | +1.2 |
| ST11N | | | | IAML | | 22 42 12.8 | |
| | comp=Z,3.3nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **76** | *i* P | Pn | 22 42 06.3 | -0.5 |
| ST11N | | | | *i* S | Sb | 22 42 10.8 | +1.2 |
| ST11N | | | | IAML | | 22 42 11.1 | |
| | comp=Z,2.7nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.49** | **108** | ↑*i*P | Pb | 22 42 07.6 | +0.8 |
| ST4N | | | | *i* S | Sb | 22 42 12.8 | -0.7 |
| ST4N | | | | IAML | | 22 42 16.7 | |
| | comp=Z,2.4nm,0.1s | | | | | | |
| **ST4N** | **ST4** | **0.49** | **108** | *i* P | Pb | 22 42 07.6 | +0.8 |
| ST4N | | | | *i* S | Sb | 22 42 12.7 | -0.8 |
| ST4N | | | | IAML | | 22 42 12.9 | |
| | comp=Z,12nm,0.1s | | | | | | |

**AUST 20 22:53:12.9±0.3, 31°S±2°×117°E±', *h*10km, mb4.5/1, Mjma3.5/7, ML2.2/7, MLv2.6/6, Error ellipse: s-maj=4.5km s-min=4.4km az=50.8, Western Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BLDU** | **Ballidu** | **0.33** | **257** | P | Pg | 22 53 19.7 | +0.3 |
| BLDU | | | | S | Sg | 22 53 23.6 | -0.2 |
| **KLBR** | **Kellerberrin** | **1.20** | **151** | P | Pg | 22 53 36.2 | +0.2 |
| **KLBR** | **Kellerberrin** | **1.20** | **151** | S | Sb | 22 53 51.4 | +0.1 |
| **MUN** | **Mundaring** | **1.62** | **207** | P | Pb | 22 53 43.3 | +0.4 |
| **MUN** | **Mundaring** | **1.62** | **207** | S | Sb | 22 54 03.2 | -0.1 |
| **MORW** | **Morawa** | **1.72** | **328** | P | Pn | 22 53 43.3 | +0.4 |
| **MORW** | **Morawa** | **1.72** | **328** | S | Sn | 22 54 05.4 | +0.4 |
| **MEEK** | **Meekatharra** | **4.12** | **20** | P | Pn | 22 54 17.7 | +1.7 |
| MEEK | | | | S | Sn | 22 55 04.7 | +0.6 |
| **KMBL** | **Kambalda** | **4.21** | **103** | P | Pn | 22 54 16.2 | -1.0 |
| **KMBL** | **Kambalda** | **4.21** | **103** | S | Sn | 22 55 05.4 | -1.0 |
| **FORT** | **Forrest** | **9.46** | **94** | P | Pn | 22 55 29.2 | -0.1 |
| | comp=Z,20nm,0.9s,comp=Z,1μmcomp=Z,0.1nm | | | | | | |
| FORT | | | | S | Sn | 22 57 10.1 | -5.7 |

*IDC **20** 22:56:14.0±1.6, 18°.12S×177°.96W, h532km±16km, mb3.9/16, mbtmp4.7/17, Error ellipse: s-maj=13.4km s-min=11.8km az=127.0*
*NEIC **20** 22:56:14.9±2.1, 18°.1S±0°.1×177°.96W±0°.10, h539km±6km, mb4.5/126, Error ellipse: s-maj=16.3km s-min=13.0km az=152.0*
*NOU **20** 22:56:20.8, 18°.21S×178°.44W, h564km, mb4.6/19, Fiji Islands Region*
**ISC 20 22:56:15.5±0.3, 18°.12S±0°.07×178°.01W±0°.06, h550km, n270, σ1°§11/257, mb4.4/85, 44C-22D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.77** | **275** | P | **P** | **22 57 39.5** | **+3.7** |
| **MSVF** | **Nonsavu** | **3.77** | **275** | P | **P** | **22 57 38.9** | **+3.1** |
| **AFI** | **Afiamalu** | **7.31** | **56** | P | **P** | **22 58 05.5** | **-1.1** |
| **NIUE** | **Niue** | **7.72** | **98** | P | **P** | **22 58 11.9** | **+1.4** |
| **LIFNC** | **LIFOU** | **14.16** | **257** | P | **P** | **22 59 15.5** | **-0.9** |
| **PINNC** | **Pines Island,** | **14.35** | **249** | P | **P** | **22 59 17.5** | **-0.8** |
| **DZM** | **Mont Dzumac** | **15.12** | **252** | P | **P** | **22 59 27.7** | **+1.3** |
| **DZM** | **Mont Dzumac** | **15.12** | **252** | P | **P** | **22 59 26.1** | **-0.3** |
| DZM | | | | IAmb | IAmb | 22 59 36.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.12** | **252** | P | **P** | **22 59 25.3** | **-1.0** |
| | comp=Z,5.6nm,0.4s,baz=204,slow=14,SNR=11 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **22 59 44.7** | **+1.5** |
| **KOUNC** | **Koumac, New Ca** | **16.89** | **259** | P | **P** | **22 59 43.9** | **+0.7** |
| **OUZ** | **Omahuta** | **18.60** | **202** | P | **P** | **23 00 01.9** | **+3.3** |
| **KUZ** | **Kuaotunu** | **19.36** | **195** | P | **P** | **23 00 08.9** | **+3.3** |
| **URZ** | **Urewera** | **20.52** | **191** | P | **P** | **23 00 13.6** | **-2.4** |
| | comp=Z,12nm,0.5s,baz=1.0,slow=1.9,SNR=9.6 | | | | | | |
| URZ | | | | S | **S** | **23 03 25.2** | **-5.6** |
| | comp=Z,10nm,0.9s,baz=245,slow=20,SNR=1.4 | | | | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.89** | **191** | P | **P** | **23 00 19.3** | **-0.2** |
| RTZ | | | | IAmb | IAmb | 23 00 23.0 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.13** | **192** | P | **P** | **23 00 38.4** | **-1.1** |
| **THZ** | **Tophouse** | **24.81** | **196** | P | **P** | **23 00 52.3** | **-2.1** |
| **PPT** | **Papeete** | **27.06** | **93** | P | **P** | **23 01 12.3** | **-2.2** |
| | comp=Z,18nm,0.3s,baz=258,slow=22,SNR=1.4 | | | | | | |
| | comp=Z,18nm,0.3s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.34** | **200** | P | **P** | **23 01 17.4** | **+0.8** |
| **JCZ** | **Jackson Bay** | **28.16** | **200** | P | **P** | **23 01 24.8** | **+0.9** |
| **EIDS** | **Eidsvold** | **29.56** | **250** | P | **P** | **23 01 36.4** | **+0.2** |
| **EIDS** | **Eidsvold** | **29.56** | **250** | P | **P** | **23 01 36.0** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 23 01 37.2 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.17** | **240** | P | **P** | **23 01 42.9** | **+1.4** |
| **ARMA** | **Armidale** | **30.17** | **240** | P | **P** | **23 01 42.5** | **+1.0** |
| ARMA | | | | IAmb | IAmb | 23 01 43.7 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **CNB** | **Canberra Magne** | **33.60** | **233** | P | **P** | **23 02 12.0** | **+1.3** |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **23 02 12.4** | **0.0** |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **23 02 12.4** | **0.0** |
| **CAN** | **Canberra** | **33.88** | **233** | P | **P** | **23 02 14.2** | **+1.2** |
| **CAN** | **Canberra** | **33.88** | **233** | P | **P** | **23 02 12.8** | **-0.1** |
| CAN | | | | IAmb | IAmb | 23 02 14.8 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **34.87** | **280** | P | **P** | **23 02 22.6** | **+1.2** |
| **CMSA** | **Cobar Meteorol** | **35.38** | **241** | P | **P** | **23 02 26.2** | **+0.7** |
| **QLP** | **Quilpie** | **35.82** | **250** | P | **P** | **23 02 29.6** | **+0.4** |
| **TOO** | **Toolangi** | **37.34** | **231** | P | **P** | **23 02 42.7** | **+1.2** |
| **TOO** | **Toolangi** | **37.34** | **231** | P | **P** | **23 02 42.6** | **+1.1** |
| **COEN** | **Coen** | **37.49** | **271** | P | **P** | **23 02 44.0** | **+0.9** |
| **COEN** | **Coen** | **37.49** | **271** | P | **P** | **23 02 43.9** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **23 02 55.3** | **+1.3** |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **23 02 54.7** | **+0.7** |
| STKA | | | | IAmb | IAmb | 23 02 56.0 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **23 02 54.7** | **+0.7** |
| | comp=Z,23nm,0.5s,baz=91,slow=10,SNR=62 | | | | | | |
| STKA | | | | PcP | **PcP** | **23 04 51.5** | **+0.5** |
| | comp=Z,1.6nm,0.4s,baz=259,slow=5.0,SNR=2.9 | | | | | | |
| | comp=Z,23nm,0.5s | | | | | | |
| **INKA** | **Innaminka** | **39.02** | **248** | P | **P** | **23 02 56.8** | **+1.5** |
| **ARPS** | **Mount Arapiles** | **39.84** | **234** | P | **P** | **23 03 02.5** | **+0.8** |
| **MLH** | **Mauna Loa** | **43.48** | **32** | P | **P** | **23 03 31.6** | **+0.7** |
| **HMH** | **Humu'ula Sheep** | **43.52** | **32** | P | **P** | **23 03 30.6** | **-0.7** |
| **BBOO** | **Buckleboo** | **43.64** | **241** | P | **P** | **23 03 31.8**

comp=Z,18nm,0.8s
**YULB Yu-li 72.20 303** IAmb IAmb 23 06 45.0
comp=Z,12nm,0.6s
**YHNB Yeheng 72.77 304** IAmb IAmb 23 06 49.3
comp=Z,18nm,0.8s
**S12K Black Hills 74.76 9** P **P** **23 06 57.8 -1.4**
S12K IAmb IAmb 23 07 24.4
comp=Z,26nm,1.4s
**KSRS Korea Array 75.11 318** P **P** **23 07 02.6 +1.1**
comp=Z,2.9nm,0.7s,baz=132,slow=6.1,SNR=7.4
comp=Z,2.9nm,0.7s
**PMPB Monarch Peak 76.42 44** P **P** **23 07 10.1 +1.1**
PMPB IAmb IAmb 23 07 11.0
comp=Z,26nm,1.5s
**USRK Ussuriysk Ar. 77.00 326** P **P** **23 07 13.4 +1.6**
comp=Z,1.8nm,0.6s,baz=120,slow=5.4,SNR=8.4
comp=Z,1.8nm,0.6s
**PLK4 Peulik 4 77.59 12** P **P** **23 07 14.0 -0.8**
**OHAK Old Harbor 77.85 13** P **P** **23 07 15.3 -0.8**
**YBH Yreka Blue Hor 78.45 39** P **P** **23 07 20.9 +1.1**
**MDJ Mudanjiang 78.58 325** P **P** **23 07 20.3 0.0**
MDJ pmax pmax
comp=Z,16nm,1.0s
**WAKR Walker 78.61 43** P **P** **23 07 21.1 +0.1**
WAKR IAmb IAmb 23 07 22.9
comp=Z,8.8nm,0.9s
**PNTR Pine Nut 78.84 43** P **P** **23 07 22.9 +0.8**
PNTR IAmb IAmb 23 07 24.0
comp=Z,16nm,0.9s
**YERR Yerington 79.01 43** P **P** **23 07 23.1 +0.1**
YERR IAmb IAmb 23 07 24.6
comp=Z,10nm,0.9s
**LHV Little Huntoon 79.08 44** IAmb IAmb 23 07 29.4
comp=Z,9.6nm,1.0s
**O16K Kokwok River B 79.12 10** P **P** **23 07 21.3 -1.6**
**NVAR Mina Array Bea 79.31 44** P **P** **23 07 23.6 -1.0**
**NVAR Mina Array Bea 79.31 44** P **P** **23 07 25.4 +0.8**
comp=Z,4.4nm,0.7s,baz=225,slow=8.9,SNR=24
comp=Z,4.4nm,0.7s
**N15K Kwethluk River 79.36 9** P **P** **23 07 24.0 -0.1**
N15K IAmb IAmb 23 07 25.0
comp=Z,23nm,1.4s
**KVN Kaiserville 79.78 43** P **P** **23 07 27.4 +0.2**
**O18K Koktuh Hills 79.88 11** P **P** **23 07 26.4 -0.5**
O18K IAmb IAmb 23 07 27.2
comp=Z,12nm,0.8s
**N17K Nushagak Hills 80.16 10** P **P** **23 07 27.5 -0.8**
**J05D Fort Rock, OR 80.25 38** IAmb IAmb 23 07 31.2
comp=Z,15nm,0.7s
**M16K Timber Creek 80.34 9** P **P** **23 07 29.7 +0.5**
M16K IAmb IAmb 23 07 30.9
comp=Z,16nm,1.1s
**BNX BinXian 80.49 325** ⇓P **P** **23 07 30.4 +0.1**
BNX pmax pmax
comp=Z,12nm,0.7s
**N18K Kilae Creek 80.53 11** P **P** **23 07 29.0 -1.2**
**H04A Detroit Lake 80.53 37** P **P** **23 07 31.0 +0.3**
H04A IAmb IAmb 23 07 31.3
comp=Z,7.2nm,0.6s
**PINE Pine Mountain 80.72 38** IAmb IAmb 23 07 33.9
comp=Z,10nm,0.8s
**SMAI San Martin Ant 80.82 159** P **P** **23 07 33.1 +1.3**
SMAI IAmb IAmb 23 07 34.4
comp=Z,10nm,0.8s
**M17K Holitna River 80.94 10** IAmb IAmb 23 07 34.0
comp=Z,12nm,0.9s
**PRN Pahroc Range 80.95 46** IAmb IAmb 23 07 35.3
comp=Z,8.5nm,0.9s
**BMN Battle Mountai 81.10 42** P **P** **23 07 34.7 +0.8**
BMN IAmb IAmb 23 07 35.5
comp=Z,7.0nm,1.0s
**K15K Wolf Creek Mou 81.20 8** P **P** **23 07 34.4 +0.8**
K15K IAmb IAmb 23 07 35.3
comp=Z,11nm,0.8s
**WVOR Wild Horse Val 81.32 40** IAmb IAmb 23 07 36.6
comp=Z,11nm,1.1s
**BELA Belgrano 2 81.91 173** P **P** **23 07 37.1 -0.1**
BELA IAmb IAmb 23 07 38.4
comp=Z,14nm,0.8s
**J08A Circle Bar Ran 81.94 39** IAmb IAmb 23 07 39.6
comp=Z,13nm,1.2s
**K17K Iditarod 82.05 9** P **P** **23 07 38.2 +0.2**
K17K IAmb IAmb 23 08 07.2
comp=Z,10nm,1.4s
**L19K White Mountain 82.11 11** P **P** **23 07 37.7 -0.7**
**PSUT Pine Spring 82.33 45** P **P** **23 07 40.8 +0.5**
**U15A North Rim 82.38 48** IAmb IAmb 23 07 42.8
comp=Z,10nm,0.8s
**ELK Elko 82.55 43** P **P** **23 07 41.6 +0.3**
**G08A Pilot Rock 82.74 38** P **P** **23 07 42.7 +0.7**
G08A IAmb IAmb 23 07 43.5
comp=Z,14nm,1.4s
**IPM Ipoh 82.83 277** IAmb IAmb 23 07 44.4
comp=Z,22nm,0.7s
**PKCU Pink Cliffs 82.85 47** IAmb IAmb 23 07 45.8
comp=Z,13nm,1.0s
**GHO Glory Hole Cre 82.92 13** P **P** **23 07 41.3 -1.2**
GHO IAmb IAmb 23 07 42.6
comp=Z,10.0nm,0.7s
**HAWA Hanford 83.05 36** IAmb IAmb 23 07 44.9
comp=Z,6.8nm,0.8s
**SCM Sheep Creek Mo 83.34 14** P **P** **23 07 44.0 -0.6**
SCM IAmb IAmb 23 07 44.9
comp=Z,14nm,0.8s
**KULM Kulim 83.44 278** P **P** **23 07 46.5 +0.4**
KULM IAmb IAmb 23 07 48.4
comp=Z,22nm,1.4s
**J19K Poorman 83.67 10** P **P** **23 07 46.0 0.0**
J19K IAmb IAmb 23 08 07.6
comp=Z,9.5nm,1.5s
**MAW Mawson 83.79 200** P **P** **23 07 47.5 +0.7**
comp=Z,3.3nm,0.5s,baz=136,slow=4.7,SNR=13
comp=Z,3.3nm,0.5s
**N25K Chitina, Valde 83.80 15** P **P** **23 07 45.8 -1.1**
N25K IAmb IAmb 23 07 47.4
comp=Z,5.7nm,0.7s
**GLB Gilahina Butte 83.86 16** P **P** **23 07 46.4 -0.7**
GLB IAmb IAmb 23 07 47.7
comp=Z,6.2nm,1.0s
**J20K Nowinta River 84.09 10** P **P** **23 07 47.7 -0.4**
**F10A Beach Ranch, E 84.13 38** IAmb IAmb 23 07 49.9
comp=Z,10.0nm,1.0s
**RPSI Rantau Prapat 84.25 275** IAmb IAmb 23 07 50.6
comp=Z,18nm,0.8s
**LYN LuoYang 84.26 309** P **P** **23 07 51.0 +1.3**
LYN pmax pmax
comp=Z,49nm,0.6s
**GYA Guiyang 85.47 300** P **P** **23 07 56.5 +0.6**
GYA pmax pmax
comp=Z,12nm,0.8s
**TX31 Lajitas Ar. Si 85.78 57** IAmb IAmb 23 08 00.0
comp=Z,8.9nm,1.0s
**TXAR Lajitas Array 85.78 57** P **P** **23 07 58.3 +1.0**
**TXAR Lajitas Array 85.78 57** P **P** **23 07 58.9 +1.6**
comp=Z,5.1nm,0.8s,baz=220,slow=6.3,SNR=42
comp=Z,5.1nm,0.8s
**ILAR Eielson Array 86.01 13** P **P** **23 07 56.4 -1.0**
comp=Z,0.9nm,0.4s,baz=217,slow=5.3,SNR=15
comp=Z,0.9nm,0.4s
**XAN Xi'an 86.69 307** ⇑P **P** **23 08 02.8 +1.4**
XAN pmax pmax
comp=Z,32nm,0.9s
**PDAR Pinedale Array 87.24 43** P **P** **23 08 04.4 +0.3**
comp=Z,1.8nm,0.7s,baz=230,slow=2.5,SNR=15
comp=Z,1.8nm,0.7s
**BOZ Bozeman (W) 87.28 40** P **P** **23 08 01.6 -2.4**
**HHC Hu-ho-hao-te 87.69 314** *e*P **P** **23 08 06.8 +0.7**
HHC PP **PP** **23 11 45.9 +3.8**
HHC pmax pmax
comp=Z,22nm,0.8s
HHC pmax pmax
comp=Z,120nm,6.2s
**MMPY Sheldon Lake, 88.44 20** IAmb IAmb 23 08 10.2
comp=Z,6.3nm,0.9s
**ELIB Princess Elisa 88.99 187** *d*P **P** **23 08 11.8 +0.1**
comp=Z,16nm,0.7s
**F26K Sheenjek River 89.10 12** IAmb IAmb 23 08 16.6
comp=Z,5.9nm,0.9s
**CMAR Chiang Mai Arr 89.32 290** P **P** **23 08 14.3 +0.4**
**CMAR Chiang Mai Arr 89.32 290** P **P** **23 08 14.5 +0.5**
comp=Z,5.4nm,0.8s,baz=112,slow=2.8,SNR=32
comp=Z,5.4nm,0.8s
**PZH PanZhiHua 89.59 298** P **P** **23 08 16.3 +1.0**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax

comp=Z,130nm,5.3s
**TROLL Troll, Antarti 90.10 180** ⇑P **P** **23 08 17.0 +0.2**
comp=Z,362nm,0.5s
**SNAA Sanae 90.38 178** ⇑P **P** **23 08 17.6 -0.3**
comp=Z,78nm,0.5s
**SNAA Sanae 90.38 178** P **P** **23 08 17.7 -0.3**
comp=Z,2.9nm,0.6s,baz=217,slow=7.8,SNR=16
comp=Z,2.9nm,0.6s
**VNA3 Neumayer Olymp 90.50 176** ⇑P **P** **23 08 18.6 +0.1**
comp=Z,13nm,0.5s
**E28M Babbage River 90.82 13** IAmb IAmb 23 08 21.7
comp=Z,3.1nm,0.7s
**VNA1 Neumayer--Stat 91.17 177** ⇑P **P** **23 08 22.5 +1.0**
comp=Z,12nm,0.8s
**F31M Tsiigehtchic 91.28 16** IAmb IAmb 23 08 22.0
comp=Z,5.5nm,0.7s
**LZH Lanzhou 91.32 308** *e*P **P** **23 08 21.5 -1.6**
LZH pP pP 23 10 22.0 -1.9
LZH pmax pmax
comp=Z,13nm,1.0s
**SONM Songino Array 93.96 319** P **P** **23 08 34.1 -0.8**
comp=Z,0.3nm,0.4s,baz=127,slow=6.0
comp=Z,0.3nm,0.4s
**ZALV Zalesovo Beam 108.64 322** PKiKP **PKiKP** **23 13 40.4 -1.4**
comp=Z,0.7nm,0.6s,baz=103,slow=3.1,SNR=2.4
**MKAR Makanchi Array 109.56 314** PKiKP **PKiKP** **23 13 42.2 -1.6**
comp=Z,1.0nm,0.5s,baz=197,slow=0.9,SNR=21
**KURBB Kurchatov Arra 112.29 318** PKiKP **PKiKP** **23 13 47.5 -1.4**
comp=Z,1.3nm,0.7s,baz=92,slow=1.7,SNR=15
**BVAR Borovoye Array 117.25 321** PKP **PKPdf** **23 13 57.2 -1.1**
comp=Z,2.5nm,0.4s,baz=120,slow=1.8,SNR=11
**KBL Kabul 118.72 300** PKPdf **PKPdf** **23 14 01.3 -0.7**
**ARU Arti 123.24 326** PKPdf **PKPdf** **23 14 08.4 -1.3**
**ARCES ARCESS Array B 126.59 350** PKP **PKPdf** **23 14 15.2 -0.6**
comp=Z,2.9nm,0.8s,baz=5.7,slow=2.4,SNR=7.4
**BOSA Boshof 128.38 206** PKP **PKiKP** **23 14 21.4 +0.1**
comp=Z,1.2nm,0.7s,baz=323,slow=6.7,SNR=1.5
**FINES FINESS Array B 133.50 344** PKP **PKPdf** **23 14 28.1 -0.9**
comp=Z,1.8nm,0.7s,baz=123,slow=7.0,SNR=4.9
FINES SKPbc **SKPbc** **23 17 07.0 +0.7**
comp=Z,3.1nm,0.9s,baz=42,slow=6.4,SNR=3.9
**HFS Hagfors 137.20 351** PKhKP PKPpre 23 14 25.7
comp=Z,1.5nm,0.6s,baz=94,slow=4.9,SNR=6.2
**AKASG Malin Array Be 140.92 333** PKhKP PKPpre 23 14 37.2
comp=Z,0.6nm,0.3s,baz=45,slow=3.9,SNR=4.5
**EKA Eskdalemuir Ar 142.65 5** PKhKP PKPpre 23 14 42.5
comp=Z,0.4nm,0.5s,baz=356,slow=2.4,SNR=6.4
**SORM Soroca 143.16 330** ⇑P PKPab 23 14 44.6 -0.3
**KWP Kalwaria Pacla 144.42 337** **PKPdf** **23 14 48.1 -1.2**
**VLDR Vladesti 144.90 328** ⇑P **PKPab** **23 14 51.6 0.0**
**OJC Ojcow 144.94 340** PKPdf **PKPdf** **23 14 49.5 -0.6**
**TLCR 144.96 326** ⇑P **PKPab** **23 14 51.1 -0.7**
**VARL Varlezi 144.98 328** ⇓P **PKPab** **23 14 52.1 +0.2**
**BURAR Bucovina Array 144.98 332** **PKPab** **23 14 51.5 -0.5**
**BURAR Bucovina Array 144.98 332** ⇑P **PKPab** **23 14 51.6 -0.4**
**GHRR 145.08 329** ⇓P **PKPab** **23 14 52.2 -0.1**
**TESR Tescani 145.13 330** ⇑P **PKPab** **23 14 51.6 -0.9**
**KOLS Kolonicke sedl 145.15 336** *e*PKP **PKPab** **23 14 51.8 -0.7**
**BRTR Keskin Array B 145.20 315** PKPbc **PKPbc** **23 14 51.2 -0.9**
**BRTR Keskin Array B 145.20 315** PKPbc **PKPbc** **23 14 51.6 -0.5**
comp=Z,8.8nm,0.7s,baz=131,slow=4.8,SNR=74
**NEGRR Negrea 145.21 327** ⇑P **PKPab** **23 14 52.5 -0.3**
**SLCR Slobozia Conac 145.23 328** ⇑P **PKPab** **23 14 52.1 -0.8**
**IZVR Izvoarele 145.26 328** ⇑P **PKPab** **23 14 52.5 -0.5**
**KIRS Kirsehir-Merke 145.30 314** ⇓P **PKPbc** **23 14 52.3 0.0**
**CFR Carcaliu 145.32 327** ⇑P **PKPbc** **23 14 51.7 -0.3**
**PANC Panciu 145.35 329** ⇑P **PKPab** **23 14 52.7 -0.6**
**ONER Baraj Valea Uz 145.38 330** ⇓P **PKPab** **23 14 52.8 -0.7**
**TPGR Topolog 145.39 326** ⇑P **PKPab** **23 14 53.0 -0.6**
**CRVS Cervenica-Dubn 145.48 337** *e*PKP **PKPbc** **23 14 52.6 +0.2**
**VRI Vrincioaia 145.56 329** ⇑P **PKPbc** **23 14 52.9 +0.2**
**PLOR Plostina 145.61 329** ⇑P **PKPbc** **23 14 52.2 -0.7**
**BMR Baia Mare 145.67 334** ⇑P **PKPab** **23 14 53.5 -1.1**
**ANTO Ankara 145.70 316** PKPdf **PKPdf** **23 14 51.1 -0.8**
**ANTO Ankara 145.70 316** ⇓P **PKPbc** **23 14 53.2 -0.3**
**OSTC Ostas 145.70 344**‖ *e*PKP **PKPab** **23 14 54.0 -0.6**
**CHVC Chvalec 145.71 344**‖ *e*PKP **PKPab** **23 14 53.5 -1.2**
**CLL Collm 145.75 348** ⇓ *i*PKPbc **PKPbc** **23 14 53.0 -0.1**
comp=Z,13nm,0.9s
**HARR Harsova 145.76 326** ⇓P **PKPbc** **23 14 53.0 -0.3**
**TURR Turia 145.77 330** ⇑P **PKPab** **23 14 54.1 -0.9**
**BISRR Bisoca 145.79 328** ⇑P **PKPab** **23 14 54.1 -1.1**
**TLBR Topalu 145.79 326** ⇓P **PKPbc** **23 14 53.3 -0.1**
**UPC Upice 145.80 344**‖ *e*PKP **PKPbc** **23 14 53.7 +0.4**
**COVR Voineasa-Covas 145.83 329** ⇓P **PKPbc** **23 14 53.3 -0.3**
**MFTR Murfatlar 145.84 325** ⇑P **PKPbc** **23 14 52.9 -0.7**
**OZUR 145.85 330** ⇑P **PKPbc** **23 14 53.8 +0.2**
**DPC Dobruska-Polom 145.86 344**‖ *e*PKP **PKPab** **23 14 54.0 -1.3**
**BOSR Bodos 145.92 330** ⇓P **PKPab** **23 14 54.7 -1.0**
**BRG Berggiesshubel 145.96 346** *i* PKP **PKPbc** **23 14 54.0 +0.3**
BRG Amp 23 14 54.7
comp=Z,6.2nm,0.9s
**LANS Liptovska Anna 145.97 339** *e*PKP **PKPab** **23 14 54.9 -0.9**
**KRLC Kraliky 145.98 343**‖ *e*PKP **PKPbc** **23 14 54.0 +0.1**
**MORC Moravsky Berou 146.03 342** *e*PKP **PKPdf** **23 14 50.3 -1.7**
**MORC Moravsky Berou 146.03 342** ⇓P **PKPab** **23 14 54.9 -1.1**
**DOPR Dopca 146.13 330** ⇑P **PKPab** **23 14 55.3 -1.2**
**ISR Istrita 146.18 328** ⇑P **PKPbc** **23 14 54.3 -0.3**
**MLR Muntele Rosu 146.21 329** ⇓P **PKPbc** **23 14 55.3 +0.5**
**ICOR Ion Corvin 146.21 326** ⇑P **PKPbc** **23 14 54.2 -0.4**
**HSKC Hora Svate Kat 146.32 347**‖ *e*PKP **PKPbc** **23 14 55.0 +0.2**
**MMAI Mount Meron Ar 146.58 303** PKPbc **PKPbc** **23 14 56.4 +0.3**
comp=Z,12nm,0.5s,baz=67,slow=6.4,SNR=106
**MARR Marisel-Cluj 146.62 333** ⇑P **PKPbc** **23 14 56.0 +0.2**
**PRU Pruhonice 146.65 345**‖ *e*PKP **PKPbc** **23 14 55.9 +0.3**
**VOIR 146.68 330** ⇓P **PKPbc** **23 14 56.2 +0.2**
**DRGR 146.70 334** ⇑P **PKPbc** **23 14 56.2 +0.3**
**VRAC Vranov 146.73 342** *e*PKP **PKPdf** **23 14 52.1 -1.1**
**VYHS Vyhne 146.75 339** *e*PKP **PKPbc** **23 14 56.4 +0.4**
**JAVC Velka Javorina 146.81 341** *e*PKP **PKiKP** **23 14 57.3 -0.8**
**PSZ Piszkesteto 146.88 338** ⇑P **PKPbc** **23 14 56.8 +0.4**
**ARR Arges 146.93 330** ⇓P **PKPbc** **23 14 56.9 +0.3**
**KRUC Moravsky 147.01 343** *e*PKP **PKPdf** **23 14 52.9 -0.7**
**TREC Trest 147.04 344**‖ *e*PKP **PKPbc** **23 14 56.9 +0.2**
**SGRR Singureni 147.10 327** ⇓P **PKPbc** **23 14 56.9 -0.1**
**ZVC Zvikov 147.24 345**‖ *e*PKP **PKiKP** **23 14 57.9 -1.0**
**HUMR Humele 147.38 329** ⇓P **PKPbc** **23 14 57.7 -0.1**
**CSS Mathiatis 147.51 307** PKPbc **PKPbc** **23 14 57.7 -0.7**
**COPA Copaceanca 147.54 328** ⇑P **PKPbc** **23 14 56.1 -2.0**
**SIRR Siria 147.55 334** ⇑P **PKiKP** **23 14 58.5 -1.2**
**GRF Grafenberg Arr 147.64 349** *e*PKP **PKPbc** **23 14 58.4 +0.2**
baz=16,slow=1.9
**KHC Kasperske Hory 147.68 346**‖ *e*PKP **PKPbc** **23 14 58.6 +0.2**
**GZR Gura Zlata 147.76 332** ⇓P **PKPbc** **23 14 58.5 -0.3**
**SURR Surduc 147.77 333** ⇑P **PKPbc** **23 14 58.7 0.0**
**CKRC Cesky Krumlov 147.79 345**‖ *e*PKP **PKiKP** **23 14 59.1 -1.0**
**BMRD Maredsous 147.82 357** *d*PKP **PKPbc** **23 14 58.5 -0.2**
**GERES GERESS Array B 147.91 345** PKPdf **PKPdf** **23 14 53.7 -1.6**
GERES PKPbc **PKPbc** **23 14 58.4 -0.7**
**GERES GERESS Array B 147.91 345** PKPbc **PKPbc** **23 14 59.0 -0.1**
comp=Z,3.3nm,0.6s,baz=168,slow=6.8,SNR=18
**ELND Elena 148.05 326** ⇑P **PKPbc** **23 14 58.5 -1.0**
**VLAD Vladila 148.05 329** ⇓P **PKPbc** **23 14 59.5 0.0**
**CONA Conrad Observa 148.18 342** *i* PKP **PKPbc** **23 14 60.0 +0.2**
comp=Z,2.6nm,0.6s
**RONA Rosalia, Austr 148.26 342** *i* PKP **PKiKP** **23 15 00.1 -1.0**
comp=Z,4.6nm,0.6s,SNR=5.5
**WLF Walferdange 148.35 355** *d*PKiKP **PKiKP** **23 15 00.8 -0.4**
**MOA Molln 148.69 344** *i* PKP **PKPbc** **23 15 00.6 -0.3**
comp=Z,5.2nm,1.3s
**ARSA Arzberg 148.89 342** *e*PKiKP **PKiKP** **23 15 01.9 -0.5**
comp=Z,2.2nm,0.7s
**BIOA Bad Ischl, Aus 149.00 345** *i* PKP **PKPbc** **23 15 01.5 -0.3**
comp=Z,2.9nm,0.8s
**BFO Black Forest 149.43 352** PKPbc **PKPbc** **23 15 02.6 -0.2**
**LESA Schwarzleotal 149.49 346** *i* PKiKP **PKiKP** **23 15 03.0 -0.7**
comp=Z,3.1nm,0.6s
**SOKA Soboth 149.55 342** *i* PKP **PKPbc** **23 15 02.5 -0.7**
comp=Z,4.7nm,0.9s
**KBA Koelnbreinsper 149.65 345** *i* PKP **PKPbc** **23 15 02.5 -1.0**
comp=Z,3.5nm,0.5s
**WATA Walderalm 149.82 347** *i* PKP **PKPbc** **23 15 03.3 -0.5**
comp=Z,4.1nm,0.6s,SNR=4.9
**RETA Reutte 149.84 348** *i* PKP **PKPbc** **23 15 03.6 -0.2**
comp=Z,1.8nm,0.6s
**OBKA Obir 149.85 343** *i* PKP **PKPbc** **23 15 03.8 -0.1**
comp=Z,2.4nm,0.8s
**WTTA Wattenberg 149.87 347** *i* PKP **PKPbc** **23 15 03.7 -0.3**
comp=Z,9.2nm,0.6s,SNR=14
**MOTA Moosalm 149.91 348** *i* PKP **PKPbc** **23 15 03.5 -0.6**
comp=Z,6.5nm,1.0s
**MYKA Terra Mystica 149.99 344** *i* PKP **PKPbc** **23 15 03.1 -1.1**
comp=Z,3.9nm,0.5s
**SQTA Sankt Quirin 150.00 347** *i* PKP **PKPbc** **23 15 03.9 -0.3**

comp=Z,5.5nm,0.6s
**ABTA Abfaltersbach 150.16 345** *i* PKP **PKPbc** **23 15 04.0 -0.6**
comp=Z,8.7nm,0.6s,SNR=9.8
**DAVA Damuels 150.20 349** *i* PKiKP **PKiKP** **23 15 05.3 0.0**
comp=Z,7.2nm,1.1s
**FETA Feichten 150.29 348** *i* PKiKP **PKiKP** **23 15 05.0 -0.6**
comp=Z,6.9nm,1.0s
**STAL STALIGIAL 150.57 345** PKPbc **PKPbc** **23 15 03.4 -2.1**
**FNA Florina 151.93 328** PKPbc **PKPbc** **23 15 06.9 -1.8**
**TORD Torodi Ar. Bea 175.05 177** PKP **PKPdf** **23 15 21.6 -1.6**
comp=Z,1.0nm,1.0s,baz=216,slow=1.8,SNR=3.6
TORD PKPab **PKPab** **23 17 02.2 -0.1**
comp=Z,0.7nm,0.7s,baz=186,slow=3.1,SNR=5.9

*IDC* ***20*** *23:20:17.2±2.1,8.˚21S×116.˚36E,h0km,mb3.5/3, mbtmp3.7/4,ML3.9/1,Error ellipse: s-maj=35.7km s-min=25.4km az=91.0*
*DJA* ***20*** *23:20:20.1±0.4,8.˚3S±6.˚×11.˚6E±.˚,h10km,M3.9/6,MLv3.9/6*
**ISC *20* 23:20:19.5±0.9,8.˚13S±0.˚07×116.˚48E±0.˚04,h10km,n11, σ0°45/14,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.72** | **147** | P | **Pg** | **23 20 33.3** | **-0.2** |
| **SRBI** | **Singaraja** | **1.25** | **272** | P | **Pn** | **23 20 43.0** | **-0.1** |
| SRBI | | | | S | **Sn** | **23 21 00.9** | **+0.9** |
| **PLAI** | **Plampang** | **1.46** | **118** | P | **Pb** | **23 20 47.0** | **+0.2** |
| PLAI | | | | S | **Sg** | **23 21 06.6** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.33** | **261** | P | **Pn** | **23 20 57.7** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **3.25** | **118** | P | **Pn** | **23 21 10.9** | **+0.3** |
| **BSSI** | **Bau Bau, Buton** | **4.44** | **64** | P | **Pn** | **23 21 27.4** | **+0.4** |
| **KAPI** | **Kappang** | **4.49** | **47** | Pn | **Pn** | **23 21 27.9** | **+0.3** |
| | 5.0nm,0.3s,baz=194,slow=3.6,SNR=8.5 | | | | | | |
| KAPI | | | | Sn | **Sn** | **23 22 19.4** | **-0.5** |
| | 1.0nm,0.3s,baz=8.7,slow=23,SNR=1.6 | | | | | | |
| KAPI | | | | Lg | Lg | 23 22 44.8 | |
| | 1.2nm,0.3s,baz=163,slow=22,SNR=1.3 | | | | | | |
| | 13nm,0.2s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.63** | **271** | P | **Pn** | **23 21 29.7** | **+0.2** |
| **WRA** | **Warramunga Arr** | **20.91** | **126** | P | **P** | **23 25 01.6** | **-0.7** |
| | 2.0nm,1.1s,baz=300,slow=12,SNR=7.9 | | | | | | |
| | 2.0nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **22.75** | **135** | P | **P** | **23 25 21.9** | **-0.2** |
| | 0.5nm,0.3s,baz=311,slow=8.2,SNR=5.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **56.43** | **352** | P | **P** | **23 30 01.3** | **-0.1** |
| | 0.4nm,0.4s,baz=159,slow=8.0,SNR=3.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |

*AUST* ***20*** *23:30:48.4±0.3,31.˚5S±2.˚×11.˚7E±.˚,h10km,mb4.1/1, Mjma3.7/8,ML2.9/6,MLv3.1/7,Error ellipse: s-maj=5.8km s-min=4.7km az=59.4*
*NOU* ***20*** *23:30:48.5,30.˚54S×117.˚10E,h0km,MLv3.3/8,Western Australia*
*CUPWA* ***20*** *23:30:49.7±0.8,30.˚53S×117.˚05E,h2km±11km,ML2.6, Region: WESTERN AUSTRALIA*
**ISC *20* 23:30:48.2±0.8,30.˚53S±0.˚03×117.˚09E±0.˚03,h8km,n33, σ1°53/38,Western Australia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CADX** | **Cadoux** | **0.24** | **171** | P | **Pg** | **23 30 54.2** | **+1.1** |
| CADX | | | | S | **Sg** | **23 30 57.4** | **+1.0** |
| **BLDU** | **Ballidu** | **0.34** | **255** | P | **Pg** | **23 30 55.1** | **+0.1** |
| **BLDU** | **Ballidu** | **0.34** | **255** | P | **Pg** | **23 30 55.0** | **+0.1** |
| BLDU | | | | S | **Sg** | **23 30 59.0** | **-0.5** |
| **BLDU** | **Ballidu** | **0.34** | **255** | P | **Pg** | **23 30 55.0** | **+0.1** |
| **KOO6** | **Koorda** | **0.45** | **131** | P | **Pg** | **23 30 58.2** | **+1.2** |
| KOO6 | | | | S | **Sg** | **23 31 04.1** | **+1.3** |
| **WYA2** | **Wyalkatchem** | **0.69** | **159** | P | **Pg** | **23 31 02.6** | **+1.0** |
| **BR4** | **Bonnie Rock 4** | **1.07** | **97** | P | **Pn** | **23 31 12.5** | **+2.9** |
| **KLBR** | **Kellerberrin** | **1.20** | **152** | P | **Pb** | **23 31 11.5** | **+0.3** |
| **KLBR** | **Kellerberrin** | **1.20** | **152** | P | **Pb** | **23 31 11.6** | **+0.3** |
| **KLBR** | **Kellerberrin** | **1.20** | **152** | P | **Pb** | **23 31 11.6** | **+0.3** |
| KLBR | | | | S | **Sg** | **23 31 26.7** | **-0.2** |
| **MUN** | **Mundaring** | **1.63** | **207** | P | **Pn** | **23 31 18.6** | **+1.3** |
| **MUN** | **Mundaring** | **1.63** | **207** | P | **Pn** | **23 31 17.9** | **+0.6** |
| **MUN** | **Mundaring** | **1.63** | **207** | S | **Sn** | **23 31 39.0** | **+0.5** |
| **MUN** | **Mundaring** | **1.63** | **207** | P | **Pn** | **23 31 17.9** | **+0.6** |
| **MUN** | **Mundaring** | **1.63** | **207** | S | **Sn** | **23 31 39.0** | **+0.5** |
| **CORI2** | **Corrigin** | **1.65** | **160** | P | **Pb** | **23 31 19.0** | **0.0** |
| **MORW** | **Morawa** | **1.72** | **328** | P | **Pn** | **23 31 19.3** | **+0.8** |
| **MORW** | **Morawa** | **1.72** | **328** | P | **Pn** | **23 31 19.3** | **+0.8** |
| **MORW** | **Morawa** | **1.72** | **328** | S | **Sn** | **23 31 40.7** | **+0.1** |
| **MORW** | **Morawa** | **1.72** | **328** | P | **Pn** | **23 31 19.2** | **+0.8** |
| **MORW** | **Morawa** | **1.72** | **328** | S | **Sn** | **23 31 40.7** | **+0.1** |
| **NWAO** | **Narrogin (SRO)** | **2.39** | **177** | P | **Pn** | **23 31 27.5** | **-0.2** |
| **NWAO** | **Narrogin (SRO)** | **2.39** | **177** | P | **Pn** | **23 31 27.5** | **-0.2** |
| **RKGY** | **Rocky Gully** | **4.07** | **181** | P | **Pn** | **23 31 50.6** | **-0.2** |
| **RKGY** | **Rocky Gully** | **4.07** | **181** | P | **Pn** | **23 31 50.6** | **-0.2** |
| **RKGY** | **Rocky Gully** | **4.07** | **181** | P | **Pn** | **23 31 50.6** | **-0.2** |
| **MEEK** | **Meekatharra** | **4.10** | **19** | P | **Pn** | **23 31 52.8** | **+1.5** |
| **MEEK** | **Meekatharra** | **4.10** | **19** | P | **Pn** | **23 31 52.3** | **+1.0** |
| **KMBL** | **Kambalda** | **4.20** | **103** | P | **Pn** | **23 31 53.0** | **+0.4** |
| **KMBL** | **Kambalda** | **4.20** | **103** | P | **Pn** | **23 31 52.2** | **-0.4** |
| **KMBL** | **Kambalda** | **4.20** | **103** | S | **Sn** | **23 32 39.4** | **-2.5** |
| **FORT** | **Forrest** | **9.45** | **94** | P | **Pn** | **23 33 06.0** | **+1.3** |
| **FORT** | **Forrest** | **9.45** | **94** | P | **Pn** | **23 33 03.9** | **-0.8** |
| | comp=Z,880nmcomp=Z,18nm,1.7s,comp=Z,0.1nm | | | | | | |
| FORT | | | | S | **Sn** | **23 34 44.2** | **-7.0** |

*TAP* ***20*** *23:32:59.8,23.˚88N×122.˚80E,h45km,ML3.0,D*
*JMA* ***20*** *23:32:59.3±0.1,23.˚8N±0.˚7×122.˚8E±0.˚5,h44km,MV2.6/13, NW OFF ISHIGAKIJIMA IS*
**ISC *20* 23:32:55.8±1.2,23.˚80N±0.˚03×122.˚80E±0.˚02,h6km±10km, n54,σ0°80/87,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS4** | **EOS4** | **0.54** | **306** | *e*P | **Pn** | **23 33 10.8** | **+1.1** |
| | baz=296 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **23 33 18.8** | **-0.2** |
| | baz=296 | | | | | | |
| **EOS3** | **EOS3** | **0.66** | **318** | *e*P | **Pn** | **23 33 12.5** | **+1.0** |
| | baz=318 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **23 33 21.7** | **-0.3** |
| | baz=318 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.69** | **16** | P | **Pn** | **23 33 12.1** | **0.0** |
| | baz=17 | | | | | | |
| YOJ | | | | S | **Sn** | **23 33 21.9** | **-1.2** |
| | baz=17 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.69** | **16** | P | **Pn** | **23 33 12.5** | **+0.4** |
| YOJ | | | | S | **Sn** | **23 33 21.6** | **-1.5** |
| **EOS2** | **EOS2** | **0.81** | **320** | *e*P | **Pn** | **23 33 15.3** | **+1.7** |
| | baz=320 | | | | | | |
| EOS2 | | | | *e*S | **Sn** | **23 33 26.7** | **+0.9** |
| | baz=320 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.01** | **58** | P | **Pn** | **23 33 17.4** | **+1.0** |
| IRIF | | | | S | **Sn** | **23 33 31.4** | **+0.5** |
| **TEYL** | **Yanliau Villag** | **1.10** | **274** | *e*P | **Pn** | **23 33 18.4** | **+0.7** |
| | baz=262 | | | | | | |
| TEYL | | | | *e*S | **Sn** | **23 33 32.9** | **-0.3** |
| | baz=262 | | | | | | |
| **SHUL** | **Shoufeng** | **1.13** | **270** | *e*P | **Pn** | **23 33 18.9** | **+0.8** |
| | baz=265 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **23 33 33.9** | **0.0** |
| | baz=265 | | | | | | |
| **TWD** | **Chiawan** | **1.13** | **285** | *e*P | **Pn** | **23 33 19.4** | **+1.2** |
| | baz=269 | | | | | | |
| TWD |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ETLH | | | | *e*S | **Sb** | **23 33 36.3** | **-0.4** |
| | baz=275 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.29** | **280** | *e*P | **Pn** | **23 33 21.2** | **+0.8** |
| | baz=269 | | | | | | | | |
| LXIB | | | | *e*S | **Sg** | **23 33 36.6** | **-0.6** |
| | baz=269 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.29** | **257** | *e*P | **Pg** | **23 33 21.1** | **+0.4** |
| | baz=252 | | | | | | | | |
| HGSD | | | | *e*S | **Sg** | **23 33 36.4** | **-1.0** |
| | baz=252 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.29** | **267** | P | **Pb** | **23 33 20.8** | **+0.2** |
| | baz=253 | | | | | | | | |
| WARBT | | | | *e*S | **Sg** | **23 33 36.7** | **-0.7** |
| | baz=253 | | | | | | | | |
| **ECBN** | **Changbin** | **1.32** | **249** | *e*P | **Pg** | **23 33 21.9** | **+0.8** |
| | baz=235 | | | | | | | | |
| ECBN | | | | *e*S | **Sg** | **23 33 37.8** | **-0.6** |
| | baz=235 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.35** | **65** | P | **Pg** | **23 33 22.2** | **+0.5** |
| JIJ | | | | S | **Sg** | **23 33 38.5** | **-0.8** |
| **LATG** | **Datong** | **1.37** | **303** | *e*P | **Pg** | **23 33 22.9** | **+0.8** |
| | baz=300 | | | | | | | | |
| **EHY** | **Hungye** | **1.38** | **258** | *e*P | **Pg** | **23 33 22.6** | **+0.2** |
| | baz=254 | | | | | | | | |
| EHY | | | | *e*S | **Sb** | **23 33 39.6** | **-0.4** |
| | baz=254 | | | | | | | | |
| **CHKH** | **Chenggong** | **1.42** | **245** | *e*S | **Sb** | **23 33 39.3** | **-1.7** |
| | baz=241 | | | | | | | | |
| **EYUL** | **Yuli** | **1.43** | **252** | *e*P | **Pb** | **23 33 23.3** | **+0.5** |
| | baz=240 | | | | | | | | |
| EYUL | | | | *e*S | **Sb** | **23 33 40.4** | **-0.9** |
| | baz=240 | | | | | | | | |
| **YULB** | **Yu-li** | **1.43** | **254** | P | **Pg** | **23 33 23.4** | **+0.1** |
| | baz=242 | | | | | | | | |
| YULB | | | | *e*S | **Sb** | **23 33 41.5** | **+0.1** |
| | baz=242 | | | | | | | | |
| **NNSB** | **Datong** | **1.44** | **296** | *e*P | **Pg** | **23 33 23.8** | **+0.4** |
| | baz=293 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.44** | **284** | *e*P | **Pg** | **23 33 23.7** | **+0.2** |
| | baz=269 | | | | | | | | |
| **TWF1** | **Yuli** | **1.45** | **252** | *e*P | **Pg** | **23 33 23.7** | **+0.2** |
| | baz=240 | | | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **23 33 42.0** | **+0.3** |
| | baz=240 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.46** | **311** | *e*P | **Pg** | **23 33 24.7** | **+0.9** |
| | baz=309 | | | | | | | | |
| **OWD** | **Renai** | **1.49** | **276** | *e*P | **Pg** | **23 33 24.2** | **-0.2** |
| | baz=272 | | | | | | | | |
| **FULB** | **Fuli** | **1.50** | **247** | *e*S | **Sn** | **23 33 42.0** | **-1.2** |
| | baz=236 | | | | | | | | |
| **CHGB** | **Renai** | **1.51** | **280** | *e*P | **Pg** | **23 33 24.7** | **0.0** |
| | baz=268 | | | | | | | | |
| CHGB | | | | *e*S | **Sn** | **23 33 42.8** | **-0.8** |
| | baz=268 | | | | | | | | |
| **VWDT** | **VWDT** | **1.52** | **269** | P | **Pg** | **23 33 24.7** | **-0.2** |
| | baz=257 | | | | | | | | |
| VWDT | | | | *e*S | **Sn** | **23 33 42.8** | **-0.7** |
| | baz=257 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.54** | **327** | *e*P | **Pg** | **23 33 25.0** | **-0.3** |
| | baz=326 | | | | | | | | |
| **WUSB** | **Renai** | **1.55** | **278** | *e*P | **Pg** | **23 33 25.3** | **-0.2** |
| | baz=273 | | | | | | | | |
| WUSB | | | | *e*S | **Sn** | **23 33 43.7** | **-0.8** |
| | baz=273 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.56** | **304** | P | **Pg** | **23 33 25.8** | **0.0** |
| | baz=289 | | | | | | | | |
| **NSK** | **Sanguang** | **1.58** | **304** | *e*P | **Pg** | **23 33 25.9** | **-0.1** |
| | baz=289 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.59** | **60** | P | **Pb** | **23 33 24.9** | **-0.7** |
| JISG | | | | S | **Sn** | **23 33 44.5** | **-0.9** |
| **EHD** | **Haiduan** | **1.60** | **246** | *e*P | **Pb** | **23 33 25.8** | **+0.1** |
| | baz=235 | | | | | | | | |
| EHD | | | | *e*S | **Sn** | **23 33 44.6** | **-0.9** |
| | baz=235 | | | | | | | | |
| **EDH** | **Donghe** | **1.60** | **239** | *e*P | **Pn** | **23 33 25.3** | **+0.8** |
| | baz=230 | | | | | | | | |
| EDH | | | | *e*S | **Sn** | **23 33 43.9** | **-1.7** |
| | baz=230 | | | | | | | | |
| **ECS** | **Chishang** | **1.61** | **245** | *e*S | **Sn** | **23 33 46.9** | **+1.1** |
| | baz=233 | | | | | | | | |
| **LDUT** | **Ludao** | **1.66** | **228** | *e*P | **Pn** | **23 33 25.9** | **+0.6** |
| | baz=225 | | | | | | | | |
| LDUT | | | | *e*S | **Sn** | **23 33 44.9** | **-2.0** |
| | baz=225 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.74** | **250** | *e*P | **Pn** | **23 33 27.7** | **+1.0** |
| | baz=247 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.74** | **299** | *e*P | **Pg** | **23 33 29.3** | **+0.1** |
| | baz=297 | | | | | | | | |
| **TYC** | **Yuchr** | **1.78** | **274** | *e*P | **Pb** | **23 33 28.8** | **0.0** |
| | baz=270 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.78** | **267** | *e*P | **Pb** | **23 33 29.3** | **+0.4** |
| | baz=258 | | | | | | | | |
| **LIOB** | **Emei** | **1.83** | **298** | *e*P | **Pg** | **23 33 30.5** | **-0.4** |
| | baz=296 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.85** | **239** | *e*P | **Pn** | **23 33 29.6** | **+1.5** |
| | baz=229 | | | | | | | | |
| TWGBT | | | | *e*S | **Sn** | **23 33 51.1** | **-0.7** |
| | baz=229 | | | | | | | | |
| **TWG** | **Pinlang** | **1.86** | **239** | *e*P | **Pn** | **23 33 29.6** | **+1.5** |
| | baz=229 | | | | | | | | |
| TWG | | | | *e*S | **Sn** | **23 33 51.5** | **-0.5** |
| | baz=229 | | | | | | | | |
| **JTJ** | **Tarama** | **1.93** | **64** | P | **Pn** | **23 33 30.1** | **+0.9** |
| **TPUB** | **Ta-pu** | **2.05** | **256** | *e*P | **Pb** | **23 33 33.9** | **+0.4** |
| | baz=245 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.17** | **254** | *e*P | **Pb** | **23 33 36.2** | **+0.7** |
| | baz=251 | | | | | | | | |
| **TWK** | **Hsinying** | **2.18** | **256** | *e*P | **Pb** | **23 33 36.2** | **+0.5** |
| | baz=245 | | | | | | | | |
| TWK | | | | *e*S | **Sb** | **23 34 03.2** | **+0.1** |
| | baz=245 | | | | | | | | |

**NAM 20 23:33:33.5±4.2, 19°74S×14°48E, h22km±13km, ML1.1, 4C-6D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.02** | **108** | ⇓*i*P | Pb | 23 33 39.2 | +1.7 |
| ST3N | | | | *i* S | Sb | 23 33 40.6 | +0.5 |
| ST3N | | | | IAML | | 23 33 41.2 | |
| | comp=Z,17nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.02** | **108** | *i* P | Pb | 23 33 39.1 | +1.7 |
| ST3N | | | | *i* S | Sb | 23 33 40.6 | +0.5 |
| ST3N | | | | IAML | | 23 33 41.3 | |
| | comp=Z,21nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **136** | ⇓*i*P | Pb | 23 33 38.1 | +0.3 |
| ST9N | | | | *i* S | Sb | 23 33 38.8 | -1.9 |
| ST9N | | | | IAML | | 23 33 39.1 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **136** | *i* P | Pb | 23 33 38.1 | +0.3 |
| ST9N | | | | *i* S | Sb | 23 33 38.8 | -1.9 |
| ST9N | | | | IAML | | 23 33 39.2 | |
| | comp=Z,752nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **230** | ⇑*i*P | Pb | 23 33 40.3 | +0.9 |
| ST6N | | | | *i* S | Sb | 23 33 42.5 | -1.1 |
| ST6N | | | | IAML | | 23 33 43.1 | |
| | comp=Z,16nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **230** | *i* P | Pb | 23 33 40.3 | +0.8 |
| ST6N | | | | *i* S | Sb | 23 33 42.7 | -0.9 |
| ST6N | | | | IAML | | 23 33 43.0 | |
| | comp=Z,11nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **90** | ⇓*i*P | Pb | 23 33 38.9 | -0.3 |
| ST1N | | | | *i* S | Sb | 23 33 40.1 | -3.2 |
| ST1N | | | | IAML | | 23 33 40.2 | |
| | comp=Z,90nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **90** | *i* P | Pb | 23 33 38.9 | -0.4 |
| ST1N | | | | *i* S | Sb | 23 33 40.1 | -3.2 |
| ST1N | | | | IAML | | 23 33 40.3 | |
| | comp=Z,79nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **287** | ⇑*i*P | Pb | 23 33 42.4 | +3.1 |
| ST8N | | | | *i* S | Sb | 23 33 46.0 | +2.8 |
| ST8N | | | | IAML | | 23 33 46.8 | |
| | comp=Z,3.3nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | ⇓*i*P | Pb | 23 33 39.5 | 0.0 |
| ST2N | | | | *i* S | Sb | 23 33 41.2 | -2.4 |
| ST2N | | | | IAML | | 23 33 41.6 | |
| | comp=Z,50nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | *i* P | Pb | 23 33 39.4 | -0.1 |
| ST2N | | | | *i* S | Sb | 23 33 41.3 | -2.3 |
| ST2N | | | | IAML | | 23 33 42.9 | |
| | comp=Z,9.0nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.27** | **102** | ⇓*i*P | Pb | 23 33 40.5 | +0.5 |
| ST5N | | | | IAML | | 23 33 43.1 | |
| | comp=Z,20nm,0.0s | | | | | | |
| ST5N | | | | *i* S | Sb | 23 33 43.2 | -1.2 |
| **ST5N** | **ST5** | **0.27** | **102** | *i* P | Pb | 23 33 40.5 | +0.5 |
| ST5N | | | | *i* S | Sb | 23 33 42.9 | -1.5 |
| ST5N | | | | IAML | | 23 33 43.1 | |
| | comp=Z,38nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | ⇑*i*P | Pn | 23 33 41.9 | -0.5 |
| ST10N | | | | *i* S | Sb | 23 33 45.4 | +0.9 |
| ST10N | | | | IAML | | 23 33 47.5 | |
| | comp=Z,19nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **199** | *i* P | Pn | 23 33 41.9 | -0.5 |
| ST10N | | | | *i* S | Sb | 23 33 45.4 | +0.9 |
| ST10N | | | | IAML | | 23 33 45.9 | |
| | comp=Z,45nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **77** | ⇑*i*P | Pb | 23 33 42.2 | +1.0 |
| ST11N | | | | IAML | | 23 33 43.9 | |
| | comp=Z,1.8nm,0.0s | | | | | | |
| ST11N | | | | *i* S | Sb | 23 33 47.7 | +1.3 |
| **ST4N** | **ST4** | **0.49** | **109** | ⇓*i*P | Pn | 23 33 44.4 | -0.9 |
| ST4N | | | | *i* S | Sb | 23 33 49.5 | -0.8 |
| ST4N | | | | IAML | | 23 33 52.1 | |
| | comp=Z,4.7nm,0.1s | | | | | | |

**NEIC 20 23:34:56.2±2.5, 41°38N±0°03×100°14W±0°03, h5km±1km, mb_Lg2.6/35, Error ellipse: s-maj=6.6km s-min=2.7km az=325.0, Nebraska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **K30B** | **Basset** | **1.35** | **17** | | Pn | 23 33 20.3 | -1.5 |
| K30B | | | | | Sg | 23 33 38.5 | -1.1 |
| **OGNE** | **Ogallala** | **1.49** | **254** | | Pn | 23 33 22.6 | -1.1 |
| **BGNE** | **Belgrade** | **1.50** | **88** | | Pn | 23 33 22.3 | -1.5 |
| **CBKS** | **Cedar Bluff** | **2.58** | **173** | Pn | Pn | 23 33 39.5 | +0.8 |
| **L34A** | **Svendsen Farm,** | **2.88** | **77** | Pn | Pn | 23 33 41.6 | -1.1 |
| **KSCO** | **Kaye Shedlock'** | **3.04** | **220** | Pn | Pn | 23 33 44.6 | -0.4 |
| **R32A** | **Long Quarter,** | **3.16** | **159** | Pn | Pn | 23 33 46.8 | +0.2 |
| **SUSD** | **Miller** | **3.18** | **16** | Pn | Pn | 23 33 47.3 | +0.5 |
| SUSD | | | | IAmb_Lg | | 23 36 43.3 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **BRIGG** | **Briggsdale** | **3.26** | **257** | IAmb_Lg | | 23 36 41.7 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **3.51** | **47** | Pn | Pn | 23 35 50.7 | -0.7 |
| **RSSD** | **Black Hills** | **3.96** | **315** | Pn | Pn | 23 35 58.8 | +1.0 |
| **PHWY** | **Pilot Hill** | **4.00** | **271** | Pn | Pn | 23 35 58.7 | +0.3 |
| **N23A** | **Red Feather La** | **4.41** | **266** | Pn | Pn | 23 36 03.8 | -0.2 |
| **ISCO** | **Idaho Springs** | **4.46** | **251** | Pn | Pn | 23 36 03.5 | -1.2 |
| ISCO | | | | IAmb_Lg | | 23 37 27.1 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **KAN14** | **Manchester OK** | **4.73** | **158** | Pn | Pn | 23 36 08.8 | +0.5 |
| KAN14 | | | | IAmb_Lg | | 23 37 27.3 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **NOKA** | **Waynoka** | **4.83** | **168** | Pn | Pn | 23 36 10.0 | +0.4 |
| NOKA | | | | IAmb_Lg | | 23 37 30.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **K22A** | **Casper** | **4.92** | **287** | Pn | Pn | 23 36 12.1 | +1.2 |
| K22A | | | | IAmb_Lg | | 23 37 37.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **OK038** | **West end E0370** | **5.02** | **167** | IAmb_Lg | | 23 37 39.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **SCIA** | **State Center** | **5.22** | **82** | IAmb_Lg | | 23 37 52.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.25** | **94** | IAmb_Lg | | 23 37 57.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **RWWY** | **Rawlins** | **5.31** | **276** | Pn | Pn | 23 36 17.3 | +0.8 |
| **RTBA** | **Rita Blanca** | **5.34** | **203** | Pn | Pn | 23 36 16.5 | -0.1 |
| RTBA | | | | IAmb_Lg | | 23 37 57.0 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **ELIS** | **Ellis County** | **5.34** | **174** | Pn | Pn | 23 36 16.2 | -0.4 |
| **T25A** | **Trinidad** | **5.38** | **219** | Pn | Pn | 23 36 15.6 | -1.7 |
| T25A | | | | IAmb_Lg | | 23 37 51.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.51** | **230** | Pn | Pn | 23 36 18.9 | -0.3 |
| **SMWD** | **Samnorwood** | **6.27** | **181** | IAmb_Lg | | 23 38 30.5 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **S39A** | **Bolivar** | **6.43** | **123** | Pn | Pn | 23 36 31.0 | -0.6 |
| **P40A** | **Paris** | **6.45** | **104** | IAmb_Lg | | 23 38 25.4 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **AMTX** | **Amarillo** | **6.60** | **191** | Pn | Pn | 23 36 34.0 | 0.0 |
| **WMOK** | **Wichita Mounta** | **6.72** | **170** | Pn | Pn | 23 36 36.4 | +0.8 |
| **R40A** | **Maddies Statio** | **6.80** | **114** | Pn | Pn | 23 36 35.9 | -0.7 |
| R40A | | | | IAmb_Lg | | 23 38 35.2 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **SN07** | **Snyder 07** | **8.30** | **184** | IAmb_Lg | | 23 39 27.4 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **SN05** | **Snyder 5** | **8.51** | **184** | IAmb_Lg | | 23 39 40.7 | |
| | comp=Z,6.5nm,0.9s | | | | | | |

*IDC **20** 23:50:06.8±0.7, 21°.85S×67°.22W, h180km±6km, mb4.3/12, mbtmp4.7/19, Error ellipse: s-maj=10.6km s-min=9.7km az=83.0*
*VAO **20** 23:50:06.6±0.3, 21°.75S×67°.26W, h184km±3km, mb4.6*
*NEIC **20** 23:50:06.4±1.6, 21°.86S±0°.06×67°.23W±0°.08, h177km±5km, mb4.9/374, Mwr4.8(GUC), Error ellipse: s-maj=11.2km s-min=8.6km az=78.0*
*SCB **20** 23:50:07.0±1.5, 21°.93S×67°.24W, h191km±17km, ML4.8/1, MW4.2, Error ellipse: s-maj=9.5km s-min=8.0km az=0.0*
*GUC **20** 23:50:07.5±0.7, 21°.81S×67°.36W, h201km±8km, ML4.8*
**ISC 20 23:50:06.0±0.5, 21°80S±0°04×67°29W±0°04, h177km±4km, n567, σ1§17/565, mb4.8/201, 5C-3D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AF01** | **San Pedro de A** | **1.42** | **216** | | **Pn** | **23 50 40.2** | **+3.0** |
| **AF01** | **San Pedro de A** | **1.42** | **216** | ⇓*i*P | **Pn** | **23 50 40.3** | **+3.1** |
| AF01 | | | | *e*S | **Sn** | **23 51 05.4** | **+4.0** |
| AF01 | | | | IAML | | 23 51 15.1 | |
| | comp=N,4μm,0.5s | | | | | | |
| **AF01** | **San Pedro de A** | **1.42** | **216** | Pg | **Pn** | **23 50 39.4** | **+2.2** |
| **MOCB** | **Mochara** | **1.63** | **71** | Pg | **Pn** | **23 50 43.0** | **+3.5** |
| MOCB | | | | Sg | **Sn** | **23 51 08.4** | **+3.2** |
| MOCB | | | | IAML | | 23 51 11.0 | |
| | comp=N,6μm,0.9s | | | | | | |
| **YJA** | **Yavi** | **1.69** | **103** | ⇓*e*P | **Pn** | **23 50 43.0** | **+2.9** |
| YJA | | | | IAML | | 23 51 10.7 | |
| | comp=E,3μm,0.6s | | | | | | |
| **LVC** | **Limon Verde** | **1.71** | **241** | P | **Pn** | **23 50 42.2** | **+2.1** |
| | comp=E,2μm,0.4s,baz=114,slow=0.7,SNR=3030 | | | | | | |
| LVC | | | | S | **Sn** | **23 51 07.9** | **+1.4** |
| | comp=E,1μm,0.3s,baz=302,slow=22,SNR=76 | | | | | | |
| **LVC** | **Limon Verde** | **1.71** | **241** | *e*P | **Pn** | **23 50 42.0** | **+1.8** |
| LVC | | | | IAML | | 23 51 09.6 | |
| | comp=E,15μm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **1.71** | **241** | *e*P | **Pn** | **23 50 42.2** | **+2.1** |
| LVC | | | | *e*S | **Sn** | **23 51 08.3** | **+1.8** |
| **PB09** | **IPOC Station P** | **1.82** | **270** | Pn | **Pn** | **23 50 43.6** | **+2.5** |
| **PB09** | **IPOC Station P** | **1.82** | **270** | ⇑*i*P | **Pn** | **23 50 43.7** | **+2.6** |
| PB09 | | | | *e*S | **Sn** | **23 51 10.6** | **+2.4** |
| PB09 | | | | IAML | | 23 51 16.9 | |
| | comp=E,3μm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **1.82** | **270** | Pg | **Pn** | **23 50 43.7** | **+2.6** |
| **AOVT** | **TarijaAcel** | **2.42** | **84** | Pg | **Pn** | **23 50 50.3** | **+2.5** |
| **PX03** | **IPOC Station P** | **2.59** | **302** | *e*P | **Pn** | **23 50 51.3** | **+1.6** |
| PX03 | | | | *e*S | **Sn** | **23 51 25.1** | **+1.4** |
| PX03 | | | | IAML | | 23 51 25.7 | |
| | comp=N,4μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **2.71** | **258** | Pn | **Pn** | **23 50 52.2** | **+1.1** |
| **PB04** | **IPOC Station P** | **2.71** | **258** | *e*P | **Pn** | **23 50 52.4** | **+1.2** |
| PB04 | | | | *e*S | **Sn** | **23 51 26.0** | **-0.3** |
| **GO01** | **Chusmiza** | **2.77** | **320** | | **Pn** | **23 50 55.0** | **+2.8** |
| **GO01** | **Chusmiza** | **2.77** | **320** | ⇑*i*P | **Pn** | **23 50 55.2** | **+2.9** |
| GO01 | | | | IAML | | 23 51 35.9 | |
| | comp=E,3μm,0.3s | | | | | | |
| **GO01** | **Chusmiza** | **2.77** | **320** | Pg | **Pn** | **23 50 55.4** | **+3.1** |
| **TA01** | **Diego Aracena** | **2.97** | **294** | | **Pn** | **23 50 55.4** | **+1.3** |
| **TA01** | **Diego Aracena** | **2.97** | **294** | ⇑*i*P | **Pn** | **23 50 55.2** | **+1.1** |
| TA01 | | | | *e*S | **Sn** | **23 51 31.6** | **+0.1** |
| **TA02** | **Huaiquique** | **3.06** | **299** | | **Pn** | **23 50 56.5** | **+1.2** |
| **TA02** | **Huaiquique** | **3.06** | **299** | *e*P | **Pn** | **23 50 56.5** | **+1.2** |
| **SOEO** | **Opoqueri** | **3.27** | **350** | Pg | **Pn** | **23 51 02.3** | **+4.0** |
| **SOET** | **ToroToro** | **3.92** | **21** | Pg | **Pn** | **23 51 09.1** | **+2.7** |
| **SOTI** | **Planta Incahua** | **3.92** | **61** | Pg | **Pn** | **23 51 07.8** | **+1.6** |
| **PX02** | **IPOC Station P** | **3.93** | **315** | *e*P | **Pn** | **23 51 05.9** | **-0.3** |
| **GO02** | **Mina Guanaco** | **3.96** | **212** | | **Pn** | **23 51 07.2** | **+0.5** |
| **GO02** | **Mina Guanaco** | **3.96** | **212** | *e*P | **Pn** | **23 51 07.4** | **+0.6** |
| **PB14** | **IPOC Station P** | **4.02** | **225** | | **Pn** | **23 51 07.5** | **0.0** |
| **AOEA** | **Aiquile** | **4.08** | **29** | Pg | **Pn** | **23 51 10.8** | **+2.4** |
| **AOEA** | **Aiquile** | **4.08** | **29** | Pg | **Pn** | **23 51 11.2** | **+2.8** |
| **AP01** | **Chacalluta** | **4.46** | **319** | | **Pn** | **23 51 13.2** | **+0.3** |
| **PB18** | **Visviri** | **4.67** | **333** | Pn | **Pn** | **23 51 17.7** | **+1.6** |
| **SOEJ** | **Jacaque** | **4.87** | **350** | Pg | **Pn** | **23 51 22.8** | **+4.0** |
| **BBOE** | **La Paz, Chanca** | **5.00** | **352** | Pg | **Pn** | **23 51 24.6** | **+4.1** |
| **BBOD** | **La Paz, Gloria** | **5.28** | **346** | Pg | **Pn** | **23 51 27.9** | **+3.8** |
| **AC01** | **Pan de Azucar** | **5.28** | **214** | | **Pn** | **23 51 22.3** | **-1.3** |
| **LPAZ** | **La Paz** | **5.54** | **352** | Pn | **Pn** | **23 51 29.9** | **+2.3** |
| **LPAZ** | **La Paz** | **5.54** | **352** | P | **Pn** | **23 51 30.9** | **+3.4** |
| | comp=E,72nm,0.4s,baz=148,slow=5.1,SNR=420 | | | | | | |
| LPAZ | | | | S | **Sn** | **23 52 32.1** | **+0.5** |
| | comp=E,23nm,0.6s,baz=58,slow=24,SNR=1.7 | | | | | | |
| **LPAZ** | **La Paz** | **5.54** | **352** | Pg | **Pn** | **23 51 30.8** | **+3.2** |
| **AC06** | **Mina Casimiro** | **6.20** | **206** | Pn | **Pn** | **23 51 33.4** | **-2.2** |
| **GO03** | **Copiap** | **6.36** | **204** | Pn | **Pn** | **23 51 35.6** | **-2.1** |
| **FDPY** | **Filadelfia** | **6.83** | **95** | *e*P | **Pn** | **23 51 44.0** | **+0.1** |
| **AC04** | **Llanos de Chal** | **7.24** | **208** | Pn | **Pn** | **23 51 45.6** | **-3.8** |
| **AC05** | **El Transito** | **7.51** | **200** | Pn | **Pn** | **23 51 51.2** | **-1.8** |
| **LCO** | **Las Campanas** | **7.82** | **203** | Pn | **Pn** | **23 51 54.1** | **-3.0** |
| **SIV** | **San Ignacio** | **8.24** | **47** | P | **Pn** | **23 52 02.3** | **-0.3** |
| | comp=E,104nm,0.4s,baz=240,slow=10,SNR=674 | | | | | | |
| SIV | | | | S | **Sn** | **23 53 29.0** | **-5.9** |
| | comp=E,26nm,0.4s,baz=229,slow=14,SNR=3.3 | | | | | | |
| **CO01** | **Juntas del Tor** | **8.53** | **197** | | **Pn** | **23 52 05.2** | **-1.3** |
| **BBLB** | **La Banda, Boli** | **8.55** | **70** | *e*P | **Pn** | **23 52 05.0** | **-1.7** |
| **PAPY** | **Pozo Azul** | **8.65** | **107** | *e*P | **Pn** | **23 52 09.0** | **+1.1** |
| **GO04** | **Tololo Observa** | **8.92** | **200** | | **Pn** | **23 52 09.3** | **-2.3** |
| **MURT** | **Porto Murtinho** | **9.00** | **91** | *e*P | **Pn** | **23 52 11.7** | **-0.8** |
| **CO03** | **El Pedregal** | **9.51** | **198** | Pn | **Pn** | **23 52 16.4** | **-2.8** |
| **ZON** | **Zonda** | **9.79** | **187** | Pn | **Pn** | **23 52 21.1** | **-1.8** |
| **CO02** | **Combarbal** | **9.94** | **199** | | **Pn** | **23 52 22.4** | **-2.5** |
| **PTLB** | **Pontes e Lacer** | **9.98** | **52** | Pn | **Pn** | **23 52 24.8** | **-0.6** |
| **PTLB** | **Pontes e Lacer** | **9.98** | **52** | *e*P | **Pn** | **23 52 24.4** | **-0.9** |
| **VBST** | **Vila Bela da S** | **10.00** | **45** | *e*P | **Pn** | **23 52 25.6** | **-0.1** |
| **CPUP** | **Villa Florida** | **10.15** | **118** | Pn | **Pn** | **23 52 27.3** | **-0.3** |
| **CPUP** | **Villa Florida** | **10.15** | **118** | P | **Pn** | **23 52 27.6** | **0.0** |
| | comp=E,9.7nm,0.5s,baz=305,slow=12,SNR=22 | | | | | | |
| **CPUP** | **Villa Florida** | **10.15** | **118** | *e*P | **Pn** | **23 52 28.2** | **+0.6** |
| **AQDB** | **Aquidauana** | **10.89** | **85** | Pn | **Pn** | **23 52 35.9** | **-1.4** |
| **AQDB** | **Aquidauana** | **10.89** | **85** | *e*P | **Pn** | **23 52 36.3** | **-1.0** |
| **VILB** | **Vilhena** | **11.09** | **39** | Pn | **Pn** | **23 52 40.4** | **+0.4** |
| **VILB** | **Vilhena** | **11.09** | **39** | *e*P | **Pn** | **23 52 41.1** | **+1.1** |
| **POCN** | **Pocone** | **11.22** | **64** | *e*P | **Pn** | **23 52 41.5** | **0.0** |
| **VA06** | **Catapilco** | **11.30** | **198** | Pn | **Pn** | **23 52 39.2** | **-3.2** |
| **VA03** | **San Esteban** | **11.30** | **194** | | **Pn** | **23 52 41.3** | **-1.3** |
| **AMBA** | **Amambai (Brazi** | **11.43** | **98** | *e*P | **Pn** | **23 52 44.9** | **+0.6** |
| **PTET** | **Porto Estrela** | **11.53** | **58** | *e*P | **Pn** | **23 52 44.9** | **-0.6** |
| **RVDE** | **Rio Verde (Bra** | **11.90** | **79** | *e*P | **Pn** | **23 52 48.6** | **-1.8** |
| **MT02** | **Curacav** | **11.91** | **196** | Pn | **Pn** | **23 52 48.1** | **-2.3** |
| **ETMB** | **Extrema** | **11.96** | **5** | Pn | **Pn** | **23 52 51.2** | **+0.2** |
| **ETMB** | **Extrema** | **11.96** | **5** | *e*P | **Pn** | **23 52 50.7** | **-0.4** |
| **MT03** | **Universidad Ad** | **11.99** | **193** | | **Pn** | **23 52 51.4** | **-0.2** |
| **MT13** | **San Alfonso** | **12.19** | **192** | | **Pn** | **23 52 53.6** | **-0.4** |
| **LMEL** | **Las Melosas** | **12.28** | **191** | | **Pn** | **23 52 55.7** | **+0.5** |
| **MT09** | **Talagante** | **12.37** | **195** | | **Pn** | **23 52 54.2** | **-2.2** |
| **ITQB** | **Itaqui** | **12.40** | **131** | Pn | **Pn** | **23 52 56.4** | **-0.1** |
| **PP1B** | **Ponte de Pedra** | **12.41** | **73** | *e*P | **Pn** | **23 52 56.7** | **-0.1** |
| **SALV** | **Santo Antonio** | **12.44** | **64** | *e*P | **Pn** | **23 52 57.6** | **+0.4** |
| **BO04** | **La Punta** | **12.49** | **193** | | **Pn** | **23 52 56.1** | **-1.7** |
| **MT01** | **Popeta** | **12.52** | **195** | | **Pn** | **23 52 56.0** | **-2.1** |
| **RPRD** | **Ribas do Rio P** | **12.75** | **87** | *e*P | **Pn** | **23 53 01.5** | **+0.4** |
| **BO01** | **Tunca** | **12.98** | **194** | Pn | **Pn** | **23 53 01.7** | **-2.3** |
| **UNIS** | **Unistalda (Bra** | **13.19** | **126** | *e*P | **Pn** | **23 53 06.9** | **+0.1** |
| **NBRS** | **Nobres** | **13.22** | **58** | *e*P | **Pn** | **23 53 07.6** | **+0.3** |
| **BO02** | **Sierra Bellavi** | **13.30** | **193** | | **Pn** | **23 53 06.1** | **-2.0** |
| **NNA** | **Nana** | **13.36** | **315** | | **Pn** | **23 53 07.1** | **-1.9** |
| **NNA** | **Nana** | **13.36** | **315** | P | **P** | **23 53 12.0** | **-0.4** |
| | comp=E,40nm,0.6s,baz=159,slow=10,SNR=15 | | | | | | |
| NNA | | | | S | **Sn** | **23 55 32.7** | **-5.1** |
| | comp=E,3.3nm,0.3s,baz=230,slow=22,SNR=1.3 | | | | | | |
| **SAML** | **Samuel** | **13.37** | **18** | Pn | **Pn** | **23 53 08.9** | **-0.2** |
| **SAML** | **Samuel** | **13.37** | **18** | *e*P | **Pn** | **23 53 09.1** | **0.0** |
| **TRCB** | **Terra Rica** | **13.60** | **97** | *e*P | **Pn** | **23 53 12.3** | **+0.4** |
| **GO05** | **Huala** | **13.78** | **196** | Pn | **Pn** | **23 53 12.1** | **-2.0** |
| **PTGB** | **Pitanga** | **14.29** | **105** | *e*P | **Pn** | **23 53 21.7** | **+1.1** |
| **PDRB** | **Porto dos Gac** | **14.30** | **47** | *e*P | **Pn** | **23 53 20.0** | **-0.8** |
| **ALGR** | **Alto Alegre (B** | **14.65** | **127** | *e*P | **Pn** | **23 53 25.1** | **+0.7** |
| **ITAB** | **Concordia** | **14.81** | **114** | P | **Pn** | **23 53 26.9** | **0.0** |
| **ITAB** | **Concordia** | **14.81** | **114** | *e*P | **P** | **23 53 28.5** | **+0.1** |
| **PCMB** | **Pacaembu** | **14.90** | **92** | *e*P | **Pn** | **23 53 28.1** | **+0.1** |
| **CZSB** | **Cruzeiro do Su** | **14.93** | **339** | | **Pn** | **23 53 26.2** | **-2.3** |
| **LDASE** | **Londrina, Braz** | **15.02** | **99** | *e*P | **Pn** | **23 53 29.4** | **-0.1** |
| **CPSB** | **Cacapava Do Su** | **15.10** | **127** | *e*P | **P** | **23 53 31.2** | **-0.3** |
| **DVLD** | **Dover

comp=Z,30nm,0.8s
**CRPR Cabo Rojo, PR 39.56 0** P **P** **23 57 19.0 -1.0**
CRPR IAmb IAmb 23 57 20.9

comp=Z,41nm,1.0s
**PDPR Patillas Dam, 39.59 2** P **P** **23 57 18.7 -1.5**
**ANWB Willy Bob 39.59 8** P **P** **23 57 19.6 -0.7**
**OBIP Obispado Ponce 39.60 1** P **P** **23 57 19.4 -1.0**
OBIP IAmb IAmb 23 57 21.1

comp=Z,28nm,0.7s
**CELP Cerrillos 39.63 1** P **P** **23 57 19.5 -1.2**
CELP IAmb IAmb 23 57 21.1

comp=Z,23nm,0.6s
**HUMP Col San Antoni 39.72 2** P **P** **23 57 20.9 -0.5**
HUMP IAmb IAmb 23 57 27.6

comp=Z,42nm,1.4s
**UUPR Utuado, UPR, P 39.81 1** P **P** **23 57 20.9 -1.2**
UUPR IAmb IAmb 23 57 21.9

comp=Z,23nm,0.9s
**AOPR Arecibo Observ 39.90 1** P **P** **23 57 21.6 -1.2**
AOPR IAmb IAmb 23 58 39.2

comp=Z,20nm,0.8s
**SDDR Presa de Saban 40.72 354** P **P** **23 57 31.1 +1.5**
SDDR IAmb IAmb 23 58 00.7

comp=Z,25nm,1.3s
**MTO3 Montecristo 41.99 327** P **P** **23 57 41.5 +1.3**
**GRTK Grand Turk 43.21 355** P **P** **23 57 49.0 -0.6**
**CAMR Camarioca 46.65 342** P **P** **23 58 17.8 +1.0**
CAMR IAmb IAmb 23 58 46.0

comp=Z,156nm,1.3s
**SOR Soroa 46.89 340** P **P** **23 58 19.4 +0.7**
**061Z Ochoppi 49.19 344** P **P** **23 58 36.7 +0.4**
**DWPF Disney Wildern 51.46 344** P **P** **23 58 54.0 +0.7**
**553A Crawfordville 54.25 342** P **P** **23 59 14.8 +1.1**
**352A Blakely 55.61 342** P **P** **23 59 23.9 +0.5**
**152A Waverly Hall 56.67 342** P **P** **23 59 30.8 -0.1**
152A IAmb IAmb 23 59 31.7

comp=Z,19nm,1.1s
**GOGA Godfrey 57.03 344** P **P** **23 59 33.7 +0.3**
GOGA IAmb IAmb 23 59 34.4

comp=Z,17nm,1.1s
**HBVL Hebbronville 57.29 327** P **P** **23 59 36.2 +0.8**
HBVL IAmb IAmb 00 00 17.6

comp=Z,50nm,1.9s
**JSC Jenkinsville 57.33 346** P **P** **23 59 36.1 +0.6**
JSC IAmb IAmb 23 59 37.1

comp=Z,16nm,0.8s
**BIRD Birdtown, Kers 57.51 347** P **P** **23 59 37.3 +0.6**
BIRD IAmb IAmb 23 59 38.5

comp=Z,34nm,1.1s
**HODGE Hodges 57.51 345** P **P** **23 59 36.7 -0.1**
HODGE IAmb IAmb 23 59 38.3

comp=Z,14nm,1.0s
**Y52A Lilburn 57.61 343** P **P** **23 59 37.0 -0.6**
Y52A IAmb IAmb 23 59 38.4

comp=Z,15nm,0.8s
**W57A Gilead 57.91 348** P **P** **23 59 39.8 +0.3**
W57A IAmb IAmb 23 59 41.0

comp=Z,17nm,0.9s
**PAULI Pauline 57.97 346** P **P** **23 59 40.3 +0.3**
PAULI IAmb IAmb 23 59 41.7

comp=Z,19nm,0.8s
**146A Union 57.99 338** P **P** **23 59 39.2 -0.9**
146A IAmb IAmb 23 59 41.5

comp=Z,18nm,0.8s
**KMSC Kings Mountain 58.18 346** P **P** **23 59 41.3 -0.1**
KMSC IAmb IAmb 23 59 43.1

comp=Z,27nm,0.9s
**Z47A Carrollton 58.18 340** P **P** **23 59 40.3 -1.1**
**Y49A Blount Mountai 58.27 341** P **P** **23 59 41.1 -0.9**
Y49A IAmb IAmb 23 59 42.8

comp=Z,17nm,1.1s
**HKT Hockley 58.32 331** P **P** **23 59 42.3 -0.1**
**V58A Windy Hill, Pi 58.36 349** P **P** **23 59 42.6 -0.1**
V58A IAmb IAmb 23 59 43.4

comp=Z,8.4nm,0.8s
**BG3 Lake Jocassee 58.40 345** P **P** **23 59 43.6 +0.6**
BG3 IAmb IAmb 23 59 44.6

comp=Z,25nm,0.8s
**X51A Calhoun 58.49 343** P **P** **23 59 43.6 +0.1**
**FPAL Fort Paine 58.67 342** P **P** **23 59 44.6 -0.3**
FPAL IAmb IAmb 23 59 45.7

comp=Z,17nm,0.8s
**833A Chaparral WMA, 58.68 327** P **P** **23 59 45.5 +0.4**
833A IAmb IAmb 23 59 46.9

comp=Z,27nm,0.9s
**W52A Murphy 58.74 344** P **P** **23 59 45.4 0.0**
W52A IAmb IAmb 23 59 46.7

comp=Z,22nm,0.8s
**V55A Taylorsville 58.83 347** P **P** **23 59 46.6 +0.7**
**X48A Hartselle 59.01 341** P **P** **23 59 46.8 -0.4**
**V53A Saluda 59.02 345** P **P** **23 59 47.4 +0.1**
**U56A King 59.14 348** P **P** **23 59 48.3 +0.3**
**T59A Double "B" Far 59.25 350** P **P** **23 59 48.6 -0.1**
T59A IAmb IAmb 23 59 50.0

comp=Z,9.2nm,0.8s
**NATX Nacogdoches 59.36 333** P **P** **23 59 49.9 +0.3**
NATX IAmb IAmb 23 59 52.0

comp=Z,30nm,1.0s
**T57A Hurt 59.56 349** IAmb IAmb 23 59 52.3

comp=Z,10.0nm,0.8s
**HNDO Hondo 59.61 328** P **P** **23 59 52.2 +0.7**
HNDO IAmb IAmb 23 59 53.1

comp=Z,15nm,0.8s
**PLAL Pickwick Lake 59.82 340** IAmb IAmb 23 59 53.2

comp=Z,20nm,0.9s
**435B Jarrell 59.83 330** P **P** **23 59 53.1 +0.2**
435B IAmb IAmb 00 00 40.0

comp=Z,12nm,0.8s
**BLA Blacksburg 59.98 348** P **P** **23 59 54.4 +0.6**
**TZTN Tazewell 60.03 345** IAmb IAmb 23 59 55.1

comp=Z,21nm,0.9s
**DRIO Del Rio 60.20 326** P **P** **23 59 55.1 -0.4**
**S57A Dark Hollow, R 60.25 349** P **P** **23 59 55.1 -0.4**
**R58B Mineral 60.27 350** P **P** **23 59 55.6 -0.1**
R58B IAmb IAmb 23 59 57.2

comp=Z,16nm,1.1s
**WLAR White Oak Lake 60.42 335** P **P** **23 59 57.1 +0.3**
**HDBT Hernando Brdge 60.62 339** P **P** **23 59 57.4 -0.8**
**JCT Junction City 60.65 328** P **P** **23 59 58.8 +0.3**
JCT IAmb IAmb 00 00 00.4

comp=Z,13nm,0.8s
**S54A Dingess, Beckl 60.73 347** P **P** **23 59 59.0 +0.1**
**WHTX Lake Whitney, 60.79 331** IAmb IAmb 00 00 00.9

comp=Z,12nm,0.9s
**T50A Nancy 60.80 344** P **P** **23 59 59.0 -0.3**
**WVT Waverly 60.80 341** P **P** **23 59 59.0 -0.3**
**WVT Waverly 60.80 341** P **P** **23 59 59.0 -0.3**
**BRDY Brady 60.92 329** P **P** **00 00 00.3 0.0**
**R55A Marlinton 60.97 348** P **P** **00 00 01.1 +0.6**
R55A IAmb IAmb 00 00 03.1

comp=Z,17nm,0.7s
**HPIG 61.05 321** P **P** **00 00 02.0 +0.6**
HPIG IAmb IAmb 00 00 03.7

comp=Z,16nm,1.4s
**S51A Beattyville 61.08 345** IAmb IAmb 00 00 02.1

comp=Z,16nm,0.8s
**UALR University of 61.09 337** P **P** **00 00 01.0 -0.4**
UALR IAmb IAmb 00 00 02.4

comp=Z,16nm,1.2s
**MIAR Mount Ida 61.35 335** **P** **00 00 02.8 -0.3**
MIAR IAmb IAmb 00 00 04.4

comp=Z,19nm,1.2s
**SAND Sanderson 61.41 326** P **P** **00 00 04.1 +0.5**
SAND IAmb IAmb 00 00 05.5

comp=Z,12nm,1.1s
**SNAA Sanae 61.51 161** P **P** **00 00 03.6 -0.2**
SNAA IAmb IAmb 00 00 05.2

comp=Z,8.6nm,0.8s
**SNAA Sanae 61.51 161** P **P** **00 00 04.1 +0.3**
comp=Z,133nm,0.7s
**SNAA Sanae 61.51 161** P **P** **00 00 04.1 +0.3**
comp=Z,6.1nm,0.7s,baz=273,slow=6.3,SNR=16
comp=Z,6.1nm,0.7s
**WHAR Wooly Hollow 61.53 337** P **P** **00 00 04.4 +0.1**
**Q56A Snyder Ridge, 61.54 349** P **P** **00 00 04.7 +0.5**
Q56A IAmb IAmb 00 00 06.3

comp=Z,20nm,0.8s
**OZNA Ozona 61.67 327** P **P** **00 00 05.3 0.0**
OZNA IAmb IAmb 00 00 07.0

comp=Z,9.0nm,0.5s
**TXAR Lajitas Array 61.75 324** P **P** **00 00 06.8 +0.8**
**TXAR Lajitas Array 61.75 324** P **P** **00 00 06.6 +0.6**
comp=Z,1.8nm,0.7s,baz=150,slow=8.6,SNR=27
comp=Z,1.8nm,0.7s
**Q54A Coxs Mills 61.78 348** P **P** **00 00 05.9 +0.1**

**P57A Homestead Farm 61.78 351** P **P** **00 00 06.3 +0.5**
**LCAR Lake Charles 61.83 338** P **P** **00 00 06.4 +0.2**
LCAR IAmb IAmb 00 00 07.0

comp=Z,14nm,1.1s
**Z35A Perchaven, San 61.83 332** P **P** **00 00 06.7 +0.3**
Z35A IAmb IAmb 00 00 08.2

comp=Z,21nm,0.9s
**PLPT Palo Pinto 61.87 331** P **P** **00 00 06.9 +0.3**
PLPT IAmb IAmb 00 00 08.2

comp=Z,8.8nm,0.8s
**R50A Paris 61.87 345** P **P** **00 00 05.8 -0.7**
R50A IAmb IAmb 00 00 07.4

comp=Z,18nm,1.1s
**T45A Paducah 61.87 341** P **P** **00 00 06.0 -0.5**
**FW03 Perrin-Whitt E 61.94 331** P **P** **00 00 07.5 +0.4**
FW03 IAmb IAmb 00 00 08.7

comp=Z,6.9nm,0.8s
**SSFO Shawnee State 62.00 346** P **P** **00 00 07.2 -0.1**
SSFO IAmb IAmb 00 00 08.2

comp=Z,13nm,0.7s
**FCAR Ozark Folk Cen 62.01 337** P **P** **00 00 07.0 -0.4**
**Q52A Bidwell 62.05 347** P **P** **00 00 07.6 -0.1**
**R49A Shelbyville 62.09 344** P **P** **00 00 07.6 -0.3**
R49A IAmb IAmb 00 00 08.5

comp=Z,14nm,0.8s
**X37A Clayton 62.11 334** **P** **00 00 08.5 +0.4**
X37A IAmb IAmb 00 00 10.1

comp=Z,12nm,0.8s
**PBMO Poplar Bluff 62.22 339** P **P** **00 00 08.7 -0.1**
PBMO IAmb IAmb 00 00 09.9

comp=Z,15nm,0.8s
**MCWV Mont Chateau 62.25 349** P **P** **00 00 08.8 -0.2**
**WCI Wyandotte Cave 62.32 343** P **P** **00 00 09.1 -0.4**
**WCI Wyandotte Cave 62.32 343** P **P** **00 00 09.0 -0.5**
**ABTX Abilene, Hawle 62.33 329** P **P** **00 00 09.8 +0.1**
ABTX IAmb IAmb 00 00 11.1

comp=Z,16nm,1.4s
**Q51A Peebles 62.35 346** P **P** **00 00 09.7 +0.1**
Q51A IAmb IAmb 00 00 10.6

comp=Z,18nm,0.8s
**LOOK Love County 62.36 332** P **P** **00 00 10.3 +0.5**
LOOK IAmb IAmb 00 00 11.6

comp=Z,25nm,1.2s
**P53A Whipple 62.38 348** P **P** **00 00 10.4 +0.6**
**CGM3 Cape Girardeau 62.45 340** P **P** **00 00 09.2 -1.1**
**USIN University of 62.46 342** P **P** **00 00 09.0 -1.3**
USIN IAmb IAmb 00 00 10.6

comp=Z,19nm,0.8s
**SGCY Sterling City 62.47 328** **P** **00 00 10.9 +0.2**
**ALPN Alpine 62.54 325** **P** **00 00 11.2 -0.1**
**P52A Corning 62.67 347** P **P** **00 00 11.7 -0.1**
**S44A Carbondale 62.68 340** IAmb IAmb 00 00 12.5

comp=Z,28nm,1.2s
**P51A Williamsport 62.72 346** P **P** **00 00 11.8 -0.3**
**WTFS Witchita Falls 62.73 331** P **P** **00 00 12.8 +0.5**
**MNHN Monahans 62.84 326** P **P** **00 00 13.6 +0.5**
MNHN IAmb IAmb 00 00 14.7

comp=Z,13nm,0.6s
**O54A Avella 62.86 349** P **P** **00 00 12.9 -0.1**
O54A IAmb IAmb 00 00 14.3

comp=Z,11nm,0.8s
**SSPA Standing Stone 62.89 351** P **P** **00 00 13.9 +0.7**
**HHAR Hobbs 63.02 336** P **P** **00 00 13.8 -0.4**
HHAR IAmb IAmb 00 00 15.3

comp=Z,12nm,0.9s
**O52A Adamsville 63.07 348** P **P** **00 00 14.2 -0.2**
**O53A New Philadelph 63.08 348** P **P** **00 00 14.2 -0.2**
O53A IAmb IAmb 00 00 15.7

comp=Z,18nm,0.7s
**SN05 Snyder 5 63.13 329** P **P** **00 00 15.2 +0.2**
**APMT Aspermont 63.13 329** P **P** **00 00 15.2 +0.2**
APMT IAmb IAmb 00 00 16.4

comp=Z,13nm,0.8s
**MGMO Mountain Grove 63.19 338** P **P** **00 00 15.0 -0.3**
MGMO IAmb IAmb 00 00 16.3

comp=Z,20nm,1.3s
**P48A Milroy 63.26 344** IAmb IAmb 00 00 15.3

comp=Z,16nm,0.6s
**SN07 Snyder 07 63.31 329** P **P** **00 00 16.3 +0.1**
SN07 IAmb IAmb 00 00 17.3

comp=Z,11nm,0.7s
**ODSA Odessa 63.35 327** P **P** **00 00 16.3 -0.2**
ODSA IAmb IAmb 00 00 17.6

comp=Z,7.5nm,0.6s
**TUL3 Leonard 63.42 334** P **P** **00 00 16.6 -0.2**
TUL3 IAmb IAmb 00 00 18.2

comp=Z,9.3nm,0.8s
**N53A Lisbon 63.55 349** P **P** **00 00 17.9 +0.3**
N53A IAmb IAmb 00 00 19.0

comp=Z,24nm,1.1s
**POST Post 63.59 328** P **P** **00 00 18.4 +0.4**
POST IAmb IAmb 00 00 20.7

comp=Z,12nm,0.8s
**VHRN Van Horn 63.59 324** P **P** **00 00 18.7 +0.5**
VHRN IAmb IAmb 00 00 19.4

comp=Z,10.0nm,0.6s
**DEOK Depew 63.65 334** P **P** **00 00 18.7 +0.4**
**CCM Cathedral Cave 63.65 339** P **P** **00 00 18.3 0.0**
**CCM Cathedral Cave 63.65 339** P **P** **00 00 18.3 0.0**
CCM PcP **PcP** **00 00 53.5 +0.5**
**O49A Covington 63.68 345** P **P** **00 00 18.2 -0.2**
**WMOK Wichita Mounta 63.69 331** **PcP** **00 00 53.6 +0.4**
**Q44A Meyer Farm, Va 63.72 341** P **P** **00 00 17.9 -0.8**
Q44A IAmb IAmb 00 00 18.8

comp=Z,17nm,0.9s
**DKNS Dickens 63.80 329** P **P** **00 00 19.5 +0.1**
**P46A Rosedale 63.87 343** P **P** **00 00 19.0 -0.6**
P46A IAmb IAmb 00 00 19.7

comp=Z,13nm,0.7s
**OK052 Battle Ridge R 63.91 334** P **P** **00 00 19.8 -0.2**
**N51A Ashland 63.95 347** P **P** **00 00 19.8 -0.4**
N51A IAmb IAmb 00 00 21.0

comp=Z,20nm,0.8s
**OK029 Liberty Lake 64.01 333** **P** **00 00 20.4 -0.3**
**QUOK Quay 64.02 334** P **P** **00 00 21.2 +0.5**
QUOK IAmb IAmb 00 00 22.1

comp=Z,22nm,1.0s
**S39A Bolivar 64.05 337** P **P** **00 00 20.7 -0.1**
**M53A WI Miller and 64.13 349** P **P** **00 00 22.1 +0.8**
M53A IAmb IAmb 00 00 22.6

comp=Z,14nm,0.8s
**R40A Maddies Statio 64.21 338** P **P** **00 00 21.4 -0.5**
**L56A Greenwood 64.32 352** P **P** **00 00 23.1 +0.6**
L56A IAmb IAmb 00 00 23.9

comp=Z,17nm,1.0s
**OK048 Pawnee Station 64.33 334** P **P** **00 00 22.3 -0.4**
OK048 IAmb IAmb 00 00 24.2

comp=Z,26nm,1.0s
**OK051 E0350 and S346 64.36 334** P **P** **00 00 22.9 0.0**
**CSTR Hydro, Custer 64.41 332** P **P** **00 00 23.2 -0.1**
**SFIN Lafayette 64.55 343** IAmb IAmb 00 00 23.9

comp=Z,20nm,0.8s
**P43A Skaggs, Pawnee 64.56 341** IAmb IAmb 00 00 24.4

comp=Z,20nm,0.9s
**SMWD Samnorwood 64.66 330** P **P** **00 00 25.5 +0.6**
SMWD IAmb IAmb 00 00 26.3

comp=Z,15nm,0.6s
**ERPA Erie 64.67 350** P **P** **00 00 25.0 +0.2**
**BLOK Blackwell 64.73 334** **P** **00 00 26.2 +0.8**
BLOK IAmb IAmb 00 00 26.9

comp=Z,28nm,1.2s
**CROK Carrier 64.84 333** P **P** **00 00 25.9 -0.2**
CROK IAmb IAmb 00 00 27.3

comp=Z,20nm,0.8s
**MSTX Muleshoe 64.94 328** P **P** **00 00 27.2 +0.3**
MSTX IAmb IAmb 00 00 28.7

comp=Z,22nm,0.8s
**KAN13 South Haven SW 65.06 334** P **P** **00 00 27.6 +0.1**
KAN13 IAmb IAmb 00 00 29.0

comp=Z,36nm,1.3s
**AMTX Amarillo 65.15 329** P **P** **00 00 28.0 -0.2**
**P40A Paris 65.25 339** P **P** **00 00 28.7 0.0**
P40A IAmb IAmb 00 00 30.0

comp=Z,17nm,1.1s
**L48A N Adams 65.38 346** P **P** **00 00 28.6 -0.8**
**K50A Casco 65.79 348** P **P** **00 00 31.5 -0.4**
**P38A Dawn 65.84 338** IAmb IAmb 00 00 32.9

comp=Z,17nm,0.7s
**N41A Harden Midland 65.94 341** P **P** **00 00 32.6 -0.3**
N41A IAmb IAmb 00 00 33.3

comp=Z,23nm,1.0s
**LONY Lake Ozonia 66.43 354** P **P** **00 00 36.6 +0.5**
LONY IAmb IAmb 00 00 37.6

comp=Z,9.5nm,0.8s

**319A Douglas 66.45 321** P **P** **00 00 37.7 +1.0**
319A IAmb IAmb 00 00 39.3

comp=Z,18nm,0.7s
**121A Cookes Peak, D 66.46 323** P **P** **00 00 37.3 +0.6**
121A IAmb IAmb 00 00 39.7

comp=Z,13nm,0.9s
**KSU1 Kansas State U 66.51 335** P **P** **00 00 36.1 -0.5**
KSU1 IAmb IAmb 00 00 37.7

comp=Z,20nm,0.9s
**J47A Sunmer 66.70 346** P **P** **00 00 37.3 -0.4**
J47A IAmb IAmb 00 00 38.8

comp=Z,26nm,0.8s
**G62A West of Eustis 66.76 358** P **P** **00 00 38.5 +0.4**
G62A IAmb IAmb 00 00 40.1

comp=Z,24nm,0.8s
**R32A Long Quarter, 66.77 334** P **P** **00 00 39.0 +0.6**
R32A IAmb IAmb 00 00 40.0

comp=Z,24nm,0.9s
**N38A Joes South For 66.78 339** P **P** **00 00 38.1 -0.2**
N38A IAmb IAmb 00 00 38.9

comp=Z,13nm,0.6s
**WBO Williamsburg 66.87 354** P **P** **00 00 39.2 +0.4**
WBO IAmb IAmb 00 00 40.4

comp=Z,18nm,0.8s
**RTBA Rita Blanca 66.91 329** P **P** **00 00 40.0 +0.6**
**I49A Point Hope 66.95 348** P **P** **00 00 38.5 -0.8**
**LIC Lamto 67.03 73** ⇓ *iP* **P** **00 00 40.0 -0.5**
comp=Z,4.2nm,0.3s
**DUN6 Lazy B Ranch 67.21 322** P **P** **00 00 41.8 +0.4**
DUN6 IAmb IAmb 00 00 44.4

comp=Z,28nm,1.0s
**TIC Toumodi 67.22 72** ⇑ *eP* **P** **00 00 40.7 -1.0**
comp=Z,2.8nm,0.3s
**MNTQ Montreal, Queb 67.22 355** P **P** **00 00 41.6 +0.6**
MNTQ IAmb IAmb 00 00 42.5

comp=Z,27nm,0.8s
**L40A Anamosa 67.29 341** IAmb IAmb 00 00 42.7

comp=Z,30nm,0.9s
**KIC Kosan Boka 67.34 73** ⇑ *iP* **P** **00 00 41.7 -0.8**
comp=Z,22nm,0.5s
**F64A Sherman 67.34 359** P **P** **00 00 41.9 +0.1**
F64A IAmb IAmb 00 00 43.3

comp=Z,22nm,0.8s
**DBIC Dimbokro 67.38 73** P **P** **00 00 41.4 -1.3**
DBIC IAmb IAmb 00 00 43.3

comp=Z,27nm,1.1s
**DBIC Dimbokro 67.38 73** P **P** **00 00 42.4 -0.3**
comp=Z,18nm,0.8s,baz=233,slow=6.4,SNR=21
comp=Z,18nm,0.8s
**DBIC Dimbokro 67.38 73** P **P** **00 00 42.3 -0.3**
DBIC sP **sP** **00 01 44.3 -1.2**
**CBKS Cedar Bluff 67.53 333** P **P** **00 00 43.9 +0.8**
**ANMO Albuquerque 67.58 326** P **P** **00 00 44.8 +1.0**
**ANMO Albuquerque 67.58 326** P **P** **00 00 45.2 +1.4**
ANMO PcP **PcP** **00 01 10.9 +1.3**
**TUC Tucson 68.01 321** P **P** **00 00 46.5 +0.1**
**TRQ Mont Tremblant 68.02 355** P **P** **00 00 46.1 0.0**
TRQ IAmb IAmb 00 00 47.3

comp=Z,18nm,0.7s
**GLMI Grayling 68.16 347** P **P** **00 00 46.8 -0.2**
**T25A Trinidad 68.27 329** P **P** **00 00 48.1 +0.1**
**I42A Draeger Farm, 68.31 343** P **P** **00 00 48.2 +0.4**
I42A IAmb IAmb 00 00 48.8

comp=Z,15nm,0.7s
**QSPA South Pole Qui 68.40 180** P **P** **00 00 49.3 +1.0**
comp=Z,8.2nm,0.6s,baz=199,slow=0.4,SNR=97
comp=Z,8.2nm,0.6s
**QSPA South Pole Qui 68.40 180** P **P** **00 00 49.4 +1.0**
QSPA PcP **PcP** **00 01 13.6 +1.1**
**H43A Windswept, Lux 68.56 344** P **P** **00 00 49.1 -0.3**
**D62A Allapoint, All 68.57 359** P **P** **00 00 49.7 +0.3**
D62A IAmb IAmb 00 00 51.0

comp=Z,18nm,0.8s
**BATG Bathurst New B 68.76 1** P **P** **00 00 51.0 +0.4**
BATG IAmb IAmb 00 00 52.0

comp=Z,9.3nm,0.8s
**L34A Svendsen Farm, 68.92 337** P **P** **00 00 51.9 +0.2**
**214A Organ Pipe Nat 68.96 319** P **P** **00 00 52.8 +0.6**
214A IAmb IAmb 00 00 55.3

comp=Z,13nm,1.1s
**X18A Snowflake 69.15 323** P **P** **00 00 54.4 +0.9**
**SDCO Great Sand Dun 69.28 328** P **P** **00 00 55.3 +0.9**
SDCO IAmb IAmb 00 00 56.9

comp=Z,12nm,0.8s
**W18A Petrified Fore 69.47 324** P **P** **00 00 56.7 +1.3**
W18A IAmb IAmb 00 00 58.2

comp=Z,13nm,0.9s
**E46A Sault Ste Mari 69.57 348** P **P** **00 00 55.4 -0.2**
E46A IAmb IAmb 00 00 56.3

comp=Z,22nm,0.8s
**I37A Lemond, Waseca 69.73 340** P **P** **00 00 56.3 -0.3**
I37A IAmb IAmb 00 00 57.5

comp=Z,22nm,0.9s
**X16A Lo Mia Camp, P 69.91 322** P **P** **00 00 59.6 +1.4**
**G40A Rib Lake 69.94 343** IAmb IAmb 00 00 59.1

comp=Z,38nm,1.6s
**S22A 4UR Ranch, Cre 69.94 328** P **P** **00 00 59.3 +0.9**
**Q24A Divide 70.08 329** P **P** **00 00 59.3 0.0**
Q24A IAmb IAmb 00 01 01.8

comp=Z,14nm,0.8s
**VLDQ Val d'Or 70.18 353** P **P** **00 00 60.0 +0.7**
VLDQ IAmb IAmb 00 01 00.8

comp=Z,17nm,1.1s
**OGNE Ogallala 70.28 333** P **P** **00 01 00.4 +0.2**
OGNE IAmb IAmb 00 01 02.2

comp=Z,18nm,0.7s
**MVCO Mesa Verde 70.38 326** P **P** **00 01 01.4 +0.4**
MVCO IAmb IAmb 00 01 03.6

comp=Z,28nm,1.4s
**VTX Valle De La Tr 70.41 317** P **P** **00 01 00.5 -0.6**
**Y14A Wickenburg 70.47 321** P **P** **00 01 02.0 +0.5**
**SPMN Marine on St. 70.64 341** P **P** **00 01 01.7 -0.4**
SPMN IAmb IAmb 00 01 02.8

comp=Z,14nm,0.9s
**WUAZ Wupatki 70.67 323** P **P** **00 01 03.6 +0.9**
WUAZ IAmb IAmb 00 01 05.9

comp=Z,15nm,0.9s
**K30B Basset 70.74 335** P **P** **00 01 03.0 +0.1**
**SMCO Snowmass 71.12 328** P **P** **00 01 06.3 +0.6**
**BLYC Blythe 71.24 320** P **P** **00 01 06.5 +0.5**
**DRLN Deer Lake 71.27 7** P **P** **00 01 05.1 -0.7**
DRLN IAmb IAmb 00 01 06.6

comp=Z,23nm,0.9s
**W13A Hualapai Mount 71.80 321** P **P** **00 01 10.3 +0.7**
**U15A North Rim 71.84 323** P **P** **00 01 09.9 0.0**
**N23A Red Feather La 71.98 330** P **P** **00 01 10.0 -0.6**
**HMU Henry Mountain 72.10 325** P **P** **00 01 12.3 +0.9**
HMU IAmb IAmb 00 01 14.6

comp=Z,20nm,1.2s
**F33A 5 Mile Ranch, 72.29 339** P **P** **00 01 11.7 -0.3**
F33A IAmb IAmb 00 01 12.7

comp=Z,10.0nm,0.8s
**PFO Pinyon Flats O 72.33 318** P **P** **00 01 12.9 +0.3**
**O20A White River Ci 72.48 328** P **P** **00 01 14.1 +0.6**
O20A IAmb IAmb 00 01 16.2

comp=Z,19nm,0.8s
**PMAR Madeira 72.48 43** *eP* **P** **00 01 13.6 0.0**
comp=Z,100nm,1.8s
**KNB Kanab 72.56 323** P **P** **00 01 15.4 +1.4**
KNB IAmb IAmb 00 01 17.6

comp=Z,27nm,1.0s
**V12A Nelson 72.81 321** P **P** **00 01 15.9 +0.5**
**SRU San Rafael Swe 72.86 326** P **P** **00 01 16.7 +1.0**
SRU IAmb IAmb 00 01 18.2

comp=Z,19nm,0.8s
**ELS Elsinore Mount 72.95 318** P **P** **00 01 16.7 +0.5**
ELS IAmb IAmb 00 01 18.6

comp=Z,23nm,1.7s
**MTPU Mount Pierson 72.95 324** P **P** **00 01 17.1 +0.6**
**Q16A Castle Valley 73.05 326** P **P** **00 01 17.6 +0.7**
**PMPST Porto Santo, M 73.08 43** *eP* **P** **00 01 17.8 +0.8**
comp=Z,153nm,1.6s
**P18A Preston Nutter 73.10 327** P **P** **00 01 18.4 +1.1**
P18A IAmb IAmb 00 01 20.2

comp=Z,20nm,0.7s
**SZCU Shurtz Canyon 73.12 323** P **P** **00 01 18.4 +1.1**
**RWWY Rawlins 73.19 330** IAmb IAmb 00 01 25.5

comp=Z,13nm,0.7s
**P17A Butcher Ranch, 73.24 326** P **P** **00 01 18.7 +0.8**
P17A IAmb IAmb 00 01 20.6

comp=Z,20nm,0.9s
**CCUT Cedar City 73.24 323** P **P** **00 01 19.6 +1.5**
CCUT IAmb IAmb 00 01 21.7

comp=Z,16nm,0.9s
**MSU Marysvale 73.29 325** P **P** **00 01 19.8 +1.5**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MVU | Marysvale | 73.30 | 325 | P | | P | 00 01 19.1 | +0.6 |
| TMUT | Trail Mountain | 73.35 | 326 | P | | P | 00 01 19.6 | +0.9 |
| RDMU | Red Mountain | 73.47 | 328 | P | | P | 00 01 19.8 | +0.4 |
| RDMU | | | | IAmb | IAmb | | 00 01 21.3 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| TCRU | Three Creeks R | 73.50 | 325 | P | | P | 00 01 21.2 | +1.6 |
| SHPR | Sheep Range | 73.53 | 321 | P | | P | 00 01 20.5 | +0.8 |
| K22A | Casper | 73.63 | 331 | P | | P | 00 01 21.0 | +0.8 |
| GSC | Goldstone, Bar | 73.67 | 320 | P | | P | 00 01 20.8 | +0.4 |
| RSSD | Black Hills | 73.73 | 333 | P | | P | 00 01 21.3 | +0.5 |
| RSSD | | | | IAmb | IAmb | | 00 01 23.0 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| PRN | Pahroc Range | 74.09 | 322 | P | | P | 00 01 24.2 | +1.3 |
| MPU | Maple Canyon | 74.10 | 326 | P | | P | 00 01 24.3 | +1.3 |
| GWY | Greenwater Val | 74.19 | 320 | P | | P | 00 01 23.6 | 0.0 |
| PSUT | Pine Spring | 74.21 | 324 | P | | P | 00 01 24.8 | +1.1 |
| NLU | North Lily Min | 74.29 | 326 | P | | P | 00 01 23.8 | -0.3 |
| CCAC | Calif City Air | 74.31 | 319 | P | | P | 00 01 24.9 | +0.8 |
| CCAC | | | | IAmb | IAmb | | 00 01 26.9 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| JLU | Jordanelle | 74.44 | 327 | P | | P | 00 01 26.1 | +1.1 |
| JLU | | | | IAmb | IAmb | | 00 01 27.8 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| E28A | Huff | 74.46 | 337 | P | | P | 00 01 25.1 | +0.4 |
| WCT | Wildcat Mounta | 74.58 | 321 | P | | P | 00 01 26.9 | +1.2 |
| TCUT | Toone Canyon | 74.80 | 327 | P | | P | 00 01 27.9 | +0.8 |
| TCUT | | | | IAmb | IAmb | | 00 01 29.7 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| SPR3 | Spring Creek 3 | 74.81 | 324 | P | | P | 00 01 27.5 | +0.3 |
| DUG | Dugway, Tooele | 74.85 | 326 | P | | P | 00 01 28.2 | +0.9 |
| ISA | Isabella, Lake | 74.93 | 319 | P | | P | 00 01 28.8 | +1.1 |
| R11B | Troy Canyon, C | 75.05 | 323 | P | | P | 00 01 29.5 | +1.0 |
| Q12A | Willow Creek R | 75.11 | 324 | IAmb | IAmb | | 00 01 31.8 | |
| | comp=Z,20nm,0.6s | | | | | | | |
| PD31 | Pinedale Array | 75.13 | 329 | P | | P | 00 01 29.6 | +0.8 |
| PDAR | Pinedale Array | 75.13 | 329 | P | | P | 00 01 29.7 | +0.8 |
| PDAR | Pinedale Array | 75.13 | 329 | P | | P | 00 01 29.9 | +1.0 |
| | comp=Z,3.1nm,0.6s,baz=126,slow=7.8,SNR=24 | | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| MDND | Maddock | 75.16 | 338 | P | | P | 00 01 28.5 | -0.1 |
| HWUT | Hardware Ranch | 75.24 | 327 | P | | P | 00 01 30.3 | +0.8 |
| GMN | Gold Mountain | 75.30 | 321 | P | | P | 00 01 31.3 | +1.3 |
| SPUT | South Promonto | 75.47 | 327 | IAmb | IAmb | | 00 01 33.3 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| BGU | Big Grassy Mou | 75.49 | 326 | P | | P | 00 01 32.2 | +1.3 |
| MZP | Montezuma Peak | 75.64 | 321 | P | | P | 00 01 32.3 | +0.3 |
| DSP | Deep Springs | 75.76 | 321 | P | | P | 00 01 32.4 | +0.1 |
| TPH | Tonopah | 75.80 | 321 | P | | P | 00 01 33.0 | +0.3 |
| TPH | | | | IAmb | IAmb | | 00 01 35.6 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| AHID | Auburn Hatcher | 75.87 | 328 | P | | P | 00 01 33.9 | +0.8 |
| AHID | | | | IAmb | IAmb | | 00 01 35.5 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| HVU | Hansel Valley | 75.98 | 327 | P | | P | 00 01 34.5 | +0.8 |
| TORD | Torodi Ar. Bea | 76.04 | 70 | P | | P | 00 01 34.2 | -0.2 |
| TORD | Torodi Ar. Bea | 76.04 | 70 | P | | P | 00 01 34.1 | -0.2 |
| | comp=Z,55nm,0.4s,baz=258,slow=5.3,SNR=1934 | | | | | | | |
| ULM | Lac du Bonnet | 76.06 | 342 | IAmb | IAmb | | 00 01 34.6 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| ULM | Lac du Bonnet | 76.06 | 342 | P | | P | 00 01 33.8 | +0.1 |
| | comp=Z,20nm,0.6s,baz=154,slow=6.3,SNR=40 | | | | | | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| REDW | Red Top Meadow | 76.20 | 329 | P | | P | 00 01 35.4 | +0.5 |
| LOHW | Long Hollow | 76.27 | 329 | P | | P | 00 01 36.2 | +0.9 |
| LOHW | | | | IAmb | IAmb | | 00 01 37.5 | |
| | comp=Z,8.9nm,0.7s | | | | | | | |
| TPAW | Teton Pass | 76.34 | 329 | IAmb | IAmb | | 00 01 37.5 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| FXWY | Fox Creek | 76.49 | 329 | P | | P | 00 01 37.5 | +0.9 |
| OMMB | Old Mammoth Mi | 76.53 | 320 | P | | P | 00 01 38.0 | +0.9 |
| ELK | Elko | 76.53 | 325 | P | | P | 00 01 37.6 | +0.7 |
| NV11 | Mina Array Sit | 76.58 | 321 | P | | P | 00 01 38.0 | +0.9 |
| IMW | Indian Meadow | 76.64 | 329 | P | | P | 00 01 37.4 | -0.2 |
| IMW | | | | IAmb | IAmb | | 00 01 40.2 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| LHV | Little Huntoon | 76.66 | 321 | P | | P | 00 01 38.0 | +0.7 |
| NVAR | Mina Array Bea | 76.66 | 321 | P | | P | 00 01 38.0 | +0.4 |
| NVAR | Mina Array Bea | 76.66 | 321 | P | | P | 00 01 39.1 | +1.4 |
| | comp=Z,3.3nm,0.8s,baz=151,slow=6.6,SNR=18 | | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| FLWY | Flagg Ranch | 76.67 | 329 | P | | P | 00 01 38.6 | +1.1 |
| FLWY | | | | IAmb | IAmb | | 00 01 40.6 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| LAO | LASA Array | 76.71 | 334 | P | | P | 00 01 38.6 | +1.0 |
| LAO | | | | IAmb | IAmb | | 00 01 39.2 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| RLMT | Red Lodge | 76.80 | 331 | P | | P | 00 01 39.1 | +0.8 |
| RLMT | | | | IAmb | IAmb | | 00 01 40.8 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| YPP | Pitchstone Pla | 76.86 | 329 | P | | P | 00 01 39.7 | +1.0 |
| YMP | Mirror Lake Pl | 76.91 | 330 | P | | P | 00 01 40.2 | +1.1 |
| RYN | Ryan | 76.92 | 321 | P | | P | 00 01 39.9 | +0.9 |
| KVN | Kaiserville | 76.96 | 322 | P | | P | 00 01 39.4 | +0.1 |
| YNR | Norris Junctio | 77.14 | 330 | P | | P | 00 01 41.1 | +0.9 |
| YHH | Holmes Hill | 77.27 | 330 | P | | P | 00 01 43.0 | +1.9 |
| DGMT | Dagmar | 77.35 | 336 | P | | P | 00 01 42.4 | +1.3 |
| WAKR | Walker | 77.38 | 321 | P | | P | 00 01 43.0 | +1.4 |
| YHL | Hebgen Lake | 77.48 | 330 | P | | P | 00 01 43.3 | +1.2 |
| YHL | | | | IAmb | IAmb | | 00 01 45.4 | |
| | comp=Z,43nm,1.7s | | | | | | | |
| YERR | Yerington | 77.58 | 321 | P | | P | 00 01 44.0 | +1.3 |
| PNTR | Pine Nut | 77.86 | 321 | P | | P | 00 01 45.1 | +0.8 |
| PNTR | | | | IAmb | IAmb | | 00 01 47.4 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| HLID | Hailey | 78.11 | 327 | P | | P | 00 01 46.6 | +1.1 |
| HLID | | | | IAmb | IAmb | | 00 01 48.7 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| PAHR | Pah Rah Range | 78.14 | 322 | P | | P | 00 01 47.3 | +1.5 |
| PAHR | | | | IAmb | IAmb | | 00 01 48.9 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| BOZ | Bozeman (W) | 78.24 | 330 | P | | P | 00 01 47.3 | +1.1 |
| TSUM | Tsumeb | 78.51 | 106 | P | | P | 00 01 48.2 | -0.1 |
| TSUM | | | | IAmb | IAmb | | 00 01 49.8 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| AFDM | Forest Hills D | 78.58 | 320 | P | | P | 00 01 48.6 | +0.5 |
| MFID | Camas Ranch | 78.72 | 326 | IAmb | IAmb | | 00 01 51.9 | |
| | comp=Z,20nm,1.5s | | | | | | | |
| AVE | Averroes | 79.11 | 48 | P | | P | 00 01 51.2 | +0.2 |
| AVE | | | | IAmb | IAmb | | 00 01 53.3 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| EGMT | Eagleton | 79.25 | 333 | P | | P | 00 01 52.0 | +0.5 |
| EGMT | | | | IAmb | IAmb | | 00 01 53.5 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| ORV | Oroville | 79.28 | 320 | P | | P | 00 01 52.6 | +0.8 |
| ORV | | | | IAmb | IAmb | | 00 01 54.8 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| LYMT | Lyon Mountain | 79.57 | 331 | P | | P | 00 01 54.1 | +0.6 |
| OVMT | Ovando | 79.97 | 330 | P | | P | 00 01 56.8 | +1.3 |
| J08A | Circle Bar Ran | 80.08 | 325 | P | | P | 00 01 57.5 | +1.3 |
| J08A | | | | IAmb | IAmb | | 00 01 59.1 | |
| | comp=Z,26nm,1.7s | | | | | | | |
| MSO | Missoula | 80.24 | 330 | P | | P | 00 01 58.0 | +1.1 |
| BMO | Blue Mountains | 80.49 | 326 | P | | P | 00 01 59.4 | +1.1 |
| BMO | | | | IAmb | IAmb | | 00 02 00.9 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| PTEO | Sao Teotonio | 80.72 | 43 | eP | | P | 00 02 01.8 | +2.3 |
| | comp=Z,50nm,1.6s | | | | | | | |
| PBDV | Barranco-do-Ve | 81.05 | 44 | eP | | P | 00 02 02.9 | +1.6 |
| | comp=Z,55nm,1.8s | | | | | | | |
| I07A | Izee | 81.12 | 325 | P | | P | 00 02 03.3 | +1.6 |
| PNCL | Nicolau / Gran | 81.18 | 43 | eP | | P | 00 02 03.3 | +1.3 |
| | comp=Z,24nm,1.8s | | | | | | | |
| PCVE | Castro Verde | 81.21 | 44 | eP | | P | 00 02 03.6 | +1.5 |
| MESJ | Messejana | 81.22 | 43 | P | | P | 00 02 03.2 | +1.0 |
| MESJ | | | | IAmb | IAmb | | 00 02 04.5 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| MESJ | Messejana | 81.22 | 43 | eP | | P | 00 02 03.4 | +1.2 |
| F10A | Beach Ranch, E | 81.23 | 327 | P | | P | 00 02 03.6 | +1.5 |
| GRHM | Grahamstown, E | 81.26 | 122 | P | | P | 00 02 03.2 | +0.4 |
| PVAQ | Vaqueiros | 81.28 | 44 | P | | P | 00 02 03.3 | +0.8 |
| PVAQ | | | | IAmb | IAmb | | 00 03 46.3 | |
| | comp=Z,54nm,1.8s | | | | | | | |
| PVAQ | Vaqueiros | 81.28 | 44 | eP | | P | 00 02 03.8 | +1.3 |
| J05D | Fort Rock, OR | 81.54 | 323 | P | | P | 00 02 04.9 | +1.0 |
| PBEJ | Beja | 81.55 | 43 | eP | | P | 00 02 05.5 | +1.6 |
| | comp=Z,18nm,1.7s | | | | | | | |
| G08A | Pilot Rock | 81.64 | 326 | P | | P | 00 02 05.5 | +1.1 |
| PINE | Pine Mountain | 81.70 | 324 | | | P | 00 02 06.5 | +1.6 |
| PINE | | | | IAmb | IAmb | | 00 02 07.8 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| EVO | Evora | 81.76 | 43 | eP | | P | 00 02 06.0 | +1.0 |
| PSBE | So Bento | 81.85 | 42 | eP | | P | 00 02 06.9 | +1.4 |
| PMTG | Montargil | 81.94 | 42 | eP | | P | 00 02 07.1 | +1.2 |
| | comp=Z,24nm,1.4s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BOSA | Boshof | 81.97 | 117 | P | | P | 00 02 06.5 | -0.1 |
| BOSA | | | | IAmb | IAmb | | 00 04 36.0 | |
| | comp=Z,59nm,1.9s | | | | | | | |
| BOSA | Boshof | 81.97 | 117 | P | | P | 00 02 06.8 | +0.1 |
| | comp=Z,5.0nm,0.6s,baz=263,slow=3.5,SNR=25 | | | | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| HUMO | Hull Mountain | 82.07 | 322 | P | | P | 00 02 07.2 | +0.6 |
| L02F | Cave Junction | 82.12 | 321 | P | | P | 00 02 08.6 | +1.8 |
| L02F | | | | IAmb | IAmb | | 00 05 09.8 | |
| | comp=Z,50nm,2.0s | | | | | | | |
| PBAR | Barrancos | 82.17 | 44 | eP | | P | 00 02 08.4 | +1.3 |
| | comp=Z,18nm,1.1s | | | | | | | |
| PESTR | Estremoz | 82.22 | 43 | P | | P | 00 02 08.2 | +0.8 |
| PESTR | | | | IAmb | IAmb | | 00 02 09.6 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| PESTR | Estremoz | 82.22 | 43 | eP | | P | 00 02 08.6 | +1.2 |
| PCAS | Casmilo, Conde | 82.36 | 41 | eP | | P | 00 02 09.2 | +1.1 |
| | comp=Z,28nm,1.9s | | | | | | | |
| DBO | Dodson Butte | 82.56 | 322 | P | | P | 00 02 10.8 | +1.7 |
| DBO | | | | IAmb | IAmb | | 00 02 39.5 | |
| | comp=Z,52nm,1.9s | | | | | | | |
| PMRV | Marv??o | 82.67 | 42 | eP | | P | 00 02 10.6 | +0.8 |
| HAWA | Hanford | 82.68 | 327 | P | | P | 00 02 11.2 | +1.6 |
| HAWA | | | | IAmb | IAmb | | 00 02 12.1 | |
| | comp=Z,9.3nm,0.8s | | | | | | | |
| PCBR | Castelo Branco | 82.86 | 42 | eP | | P | 00 02 11.3 | +0.6 |
| | comp=Z,16nm,2.1s | | | | | | | |
| J01E | Myrtle Point | 82.98 | 322 | P | | P | 00 02 13.1 | +1.9 |
| C09A | Chrisman Ranch | 83.01 | 328 | P | | P | 00 02 12.7 | +1.4 |
| C09A | | | | IAmb | IAmb | | 00 02 13.4 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| BUCK | Buck Mountain | 83.10 | 323 | P | | P | 00 02 12.6 | +0.7 |
| MTE | Manteigas | 83.15 | 42 | P | | P | 00 02 12.8 | +0.6 |
| MTE | Manteigas | 83.15 | 42 | eP | | P | 00 02 13.4 | +1.2 |
| | comp=Z,18nm,1.6s | | | | | | | |
| FCC | Fort Churchill | 83.27 | 346 | P | | P | 00 02 13.1 | +0.8 |
| LBTB | Lobatse | 83.52 | 114 | P | | P | 00 02 14.8 | +0.1 |
| LBTB | | | | IAmb | IAmb | | 00 02 16.0 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| POLO | Lamas de Olo | 83.57 | 41 | eP | | P | 00 02 15.5 | +1.1 |
| MAW | Mawson | 83.61 | 163 | P | | P | 00 02 14.4 | +0.3 |
| | comp=Z,5.4nm,0.6s,baz=223,slow=3.5,SNR=13 | | | | | | | |
| | comp=Z,5.4nm,0.6s | | | | | | | |
| TAM | Tamanrasset | 83.61 | 63 | P | | P | 00 02 15.4 | +0.3 |
| TAM | | | | IAmb | IAmb | | 00 02 16.9 | |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| PCAB | Cabril | 83.63 | 40 | eP | | P | 00 02 15.3 | +0.7 |
| | comp=Z,25nm,1.7s | | | | | | | |
| LTY | Liberty | 83.84 | 327 | P | | P | 00 02 15.9 | +0.3 |
| LTY | | | | IAmb | IAmb | | 00 02 17.6 | |
| | comp=Z,29nm,1.6s | | | | | | | |
| B08A | Colville Reser | 83.91 | 328 | | | P | 00 02 16.5 | +0.6 |
| MVO | Moncorvo | 83.91 | 41 | eP | | P | 00 02 17.0 | +0.9 |
| PBRG | Braganca | 84.46 | 41 | eP | | P | 00 02 19.7 | +0.8 |
| PAB | San Pablo | 84.67 | 44 | P | | P | 00 02 20.4 | +0.4 |
| PAB | | | | IAmb | IAmb | | 00 02 21.9 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| ESDC | Sonseca Array | 84.99 | 44 | P | | P | 00 02 21.5 | 0.0 |
| ESDC | Sonseca Array | 84.99 | 44 | P | | P | 00 02 22.4 | +0.8 |
| | comp=Z,5.7nm,0.9s,baz=238,slow=5.5,SNR=33 | | | | | | | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| ESBB | Sonseca Array | 85.00 | 44 | P | | P | 00 02 22.4 | +0.8 |
| ESBB | | | | IAmb | IAmb | | 00 02 23.6 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| YKA | Yellowknife Ar | 91.97 | 340 | P | | P | 00 02 54.1 | +0.1 |
| YKA | Yellowknife Ar | 91.97 | 340 | P | | P | 00 02 54.8 | +0.7 |
| | comp=Z,6.2nm,0.7s,baz=130,slow=4.1,SNR=39 | | | | | | | |
| | comp=Z,6.2nm,0.7s | | | | | | | |
| EKA | Eskdalemuir Ar | 94.09 | 31 | P | | P | 00 03 04.3 | +0.4 |
| | comp=Z,1.1nm,1.0s,baz=209,slow=7.3,SNR=3.7 | | | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | | | |
| FETA | Feichten | 97.89 | 43 | *i* Pdiff | | Pdif | 00 03 22.2 | +0.5 |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| RETA | Reutte | 98.09 | 42 | *e*Pdiff | | P | 00 03 21.9 | -0.5 |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| SQTA | Sankt Quirin | 98.27 | 42 | *i* Pdiff | | Pdif | 00 03 23.5 | +0.2 |
| | comp=Z,3.9nm,0.7s | | | | | | | |
| WTTA | Wattenberg | 98.55 | 43 | *i* Pdiff | | P | 00 03 24.3 | -0.3 |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| ABTA | Abfaltersbach | 98.91 | 43 | *e*Pdiff | | P | 00 03 25.3 | -0.8 |
| | comp=Z,2.9nm,1.0s | | | | | | | |
| LESA | Schwarzleotal | 99.27 | 43 | *e*Pdiff | | Pdif | 00 03 26.4 | -1.3 |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| KBA | Koelnbreinsper | 99.56 | 43 | *e*Pdiff | | Pdif | 00 03 29.5 | +0.3 |
| | comp=Z,1.8nm,1.0s | | | | | | | |
| OBKA | Obir | 100.13 | 44 | *e*Pdiff | | Pdif | 00 03 32.8 | +1.3 |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| CONA | Conrad Observa | 101.46 | 43 | *e*Pdiff | | Pdif | 00 03 39.7 | +2.2 |
| | comp=Z,1.8nm,1.0s | | | | | | | |
| RONA | Rosalia, Austr | 101.66 | 43 | *e*Pdiff | | Pdif | 00 03 39.3 | +1.0 |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| BRTR | Keskin Array B | 111.77 | 55 | PKiKP | | PKiKP | 00 08 19.3 | -0.8 |
| | comp=Z,0.4nm,0.7s,baz=263,slow=1.2,SNR=4.4 | | | | | | | |
| KBZ | Khabaz | 119.13 | 51 | PKP | | PKiKP | 00 08 34.1 | +0.2 |
| | comp=Z,2.2nm,0.8s,baz=68,slow=1.8,SNR=4.8 | | | | | | | |
| ARU | Arti | 127.54 | 35 | PKPdf | | PKPdf | 00 08 49.8 | +0.2 |
| ASAR | Alice Springs | 130.32 | 206 | PKP | | PKPdf | 00 08 56.0 | -0.1 |
| | comp=Z,3.3nm,0.8s,baz=155,slow=2.6,SNR=19 | | | | | | | |
| ASAR | | | | SKPbc | | SKPbc | 00 12 01.2 | -1.6 |
| | comp=Z,0.5nm,0.4s,baz=147,slow=3.2,SNR=3.5 | | | | | | | |
| ABKAR | Akbulak array | 130.34 | 43 | PKPdf | | PKPdf | 00 08 55.4 | +0.3 |
| WRA | Warramunga Arr | 133.44 | 209 | PKP | | PKPdf | 00 09 02.0 | +0.1 |
| | comp=Z,2.5nm,0.6s,baz=156,slow=1.8,SNR=10 | | | | | | | |
| WRA | | | | SKPbc | | SKPbc | 00 12 12.8 | -1.1 |
| | comp=Z,1.4nm,1.1s,baz=153,slow=3.3,SNR=3.0 | | | | | | | |
| PETK | Petropavlovsk- | 133.70 | 324 | PKP | | PKiKP | 00 09 02.5 | -0.2 |
| | comp=Z,6.9nm,1.1s,baz=74,slow=5.1,SNR=2.1 | | | | | | | |
| BVAR | Borovoye Array | 135.18 | 35 | PKP | | PKPdf | 00 09 02.5 | -1.7 |
| | comp=Z,1.7nm,0.8s,baz=296,slow=4.1,SNR=6.3 | | | | | | | |
| KURBB | Kurchatov Arra | 140.74 | 34 | PKhKP | | PKPpre | 00 09 09.2 | |
| | comp=Z,1.1nm,0.7s,baz=302,slow=2.5,SNR=6.6 | | | | | | | |
| ZALV | Zalesovo Beam | 141.56 | 26 | PKhKP | | PKPpre | 00 09 10.4 | |
| | comp=Z,1.4nm,0.6s,baz=285,slow=3.0,SNR=7.6 | | | | | | | |
| ZALV | | | | SKPbc | | SKPbc | 00 12 36.0 | -0.4 |
| | comp=Z,0.7nm,0.4s,baz=294,slow=1.9,SNR=2.3 | | | | | | | |
| KSH | Kashi | 144.10 | 52 | PKP | | PKPbc | 00 09 19.8 | +0.3 |
| PRZ | Przheval'sk | 144.71 | 46 | | | PKPdf | 00 09 23.6 | +1.6 |
| MK31 | Makanchi Array | 144.97 | 37 | | | PKPdf | 00 09 22.5 | +0.4 |
| MKAR | Makanchi Array | 144.97 | 37 | | | PKPdf | 00 09 22.3 | +0.2 |
| MKAR | Makanchi Array | 144.97 | 37 | PKP | | PKPdf | 00 09 22.5 | +0.4 |
| | comp=Z,25nm,0.8s,baz=317,slow=3.9,SNR=92 | | | | | | | |
| HEH | HeiHe | 149.33 | 341 | *e*P | | PKPab | 00 09 39.5 | +0.6 |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | | |
| KAPI | Kappang | 152.47 | 195 | PKPbc | | PKPbc | 00 09 40.5 | -1.7 |
| | comp=Z,4.9nm,0.7s,baz=121,slow=16,SNR=1.8 | | | | | | | |
| USRK | Ussuriysk Ar. | 152.56 | 329 | PKPbc | | PKiKP | 00 09 42.0 | +0.4 |
| | comp=Z,4.5nm,0.6s,baz=285,slow=0.8,SNR=17 | | | | | | | |
| MJAR | Matsushiro Arr | 153.43 | 309 | PKPbc | | PKPbc | 00 09 43.4 | -0.2 |
| | comp=Z,1.6nm,0.5s,baz=100,slow=0.7,SNR=2.2 | | | | | | | |
| SONM | Songjin Array | 153.53 | 10 | PKP | | PKPdf | 00 09 36.4 | +0.5 |
| | comp=Z,1.0nm,0.8s,baz=28,slow=0.3,SNR=5.4 | | | | | | | |
| SONM | | | | PKPbc | | PKiKP | 00 09 44.2 | +0.5 |
| | comp=Z,1.0nm,0.5s,baz=320,slow=1.5,SNR=7.3 | | | | | | | |
| SONM | | | | PKPab | | PKPab | 00 09 57.0 | +0.4 |
| | comp=Z,1.6nm,0.6s,baz=333,slow=3.6,SNR=6.7 | | | | | | | |
| KSRS | Korea Array | 159.59 | 323 | PKP | | PKPdf | 00 09 44.3 | +0.6 |
| | comp=Z,3.5nm,1.1s,baz=90,slow=0.2,SNR=5.2 | | | | | | | |
| KSRS | | | | PKPab | | PKPab | 00 10 23.0 | +0.1 |
| | comp=Z,1.7nm,0.8s,baz=57,slow=4.5,SNR=3.3 | | | | | | | |
| HHC | Hu-ho-hao-te | 160.98 | 3 | *e*P | | PKPdf | 00 09 47.6 | +2.3 |

*IDC **20** 23:51:24.1±4.3, 18°.08S×177°.87W, h558km±45km, mb3.6/10, mbtmp4.4/11, Error ellipse: s-maj=29.2km s-min=17.7km az=72.0*
*NEIC **20** 23:51:25.3±1.3, 18°.1S±0°.1×177°.9W±0°.1, h571km±8km, mb4.3/32, Error ellipse: s-maj=18.9km s-min=17.1km az=176.0*

**ISC 20 23:51:26.3±0.5, 18°.10S±0°.09×177°.81W±0°.09, h590km, n90, σ0°89/91, mb4.2/24, 1C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.96 | 275 | P | P | P | 23 52 53.0 | +2.2 |
| NIUE | Niue | 7.54 | 99 | P | P | P | 23 53 18.9 | -2.0 |
| DZM | Mont Dzumac | 15.30 | 252 | P | P | P | 23 54 36.3 | -1.5 |
| | 12nm,1.0s,baz=290,slow=16,SNR=2.2 | | | | | | | |
| RAR | Rarotonga | 17.27 | 103 | P | P | P | 23 54 55.1 | -0.6 |
| URZ | Urewera | 20.57 | 191 | P | P | P | 23 55 24.5 | -0.9 |
| | 11nm,0.8s,baz=337,slow=14,SNR=1.3 | | | | | | | |
| | 11nm,0.8s | | | | | | | |
| BHW | Baring Head | 24.06 | 194 | P | P | P | 23 55 54.9 | -1.5 |
| QRZ | Quartz Range | 24.12 | 198 | P | P | P | 23 55 56.3 | -0.7 |
| PLWZ | Palliser | 24.13 | 193 | P | P | P | 23 55 55.6 | -1.6 |
| THZ | Tophouse | 24.88 | 197 | P | P | P | 23 56 03.9 | +0.1 |
| THZ | | | | IAmb | IAmb | | 23 56 19.6 | |
| | comp=Z,22nm,1.2s | | | | | | | |
| KHZ | Kahutara | 25.33 | 195 | P | P | P | 23 56 06.2 | -1.4 |
| LTZ | Lake Taylor | 26.00 | 197 | P | P | P | 23 56 12.9 | -0.7 |
| FOZ | Fox Glacier | 27.42 | 200 | P | P | P | 23 56 25.8 | -0.2 |
| LBZ | Lake Benmore | 28.07 | 198 | P | P | P | 23 56 30.1 | -1.6 |
| LBZ | | | | IAmb | IAmb | | 23 56 49.0 | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| ODZ | Otahua Downs | 28.54 | 197 | P | P | P | 23 56 34.7 | -1.1 |
| ODZ | | | | IAmb | IAmb | | 23 56 52.3 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| MLZ | Mavora Lakes | 29.61 | 200 | P | P | P | 23 56 45.1 | +0.2 |
| EIDS | Eidsvold | 29.73 | 250 | P | P | P | 23 56 45.1 | -1.3 |
| EIDS | | | | IAmb | IAmb | | 23 56 51.7 | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| DCZ | Deep Cove | 30.02 | 201 | P | P | P | 23 56 48.5 | +0.1 |
| DCZ | | | | IAmb | IAmb | | 23 56 55.5 | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| CTA | Charters Tower | 33.97 | 261 | P | P | P | 23 57 21.6 | -0.7 |
| | comp=Z,0.2nm,0.5s,baz=100,slow=12,SNR=5.7 | | | | | | | |
| CTAO | Charters Tower | 33.97 | 261 | P | P | P | 23 57 21.9 | -0.5 |
| CTAO | | | | IAmb | IAmb | | 23 57 22.4 | |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| COEN | Coen | 37.67 | 270 | P | P | P | 23 57 53.0 | +0.1 |
| COEN | | | | IAmb | IAmb | | 23 57 56.2 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| BBOO | Buckleboo | 43.81 | 241 | P | P | P | 23 58 40.9 | -0.3 |
| BBOO | | | | IAmb | IAmb | | 23 58 49.5 | |
| | comp=Z,7.3nm,1.1s | | | | | | | |
| WRA | Warramunga Arr | 45.15 | 260 | P | P | P | 23 58 50.8 | -1.0 |
| WRA | Warramunga Arr | 45.15 | 260 | P | P | P | 23 58 50.9 | -1.0 |
| | comp=Z,3.5nm,0.5s,baz=95,slow=7.0,SNR=93 | | | | | | | |
| WRA | | | | PcP | PcP | PcP | 00 00 19.3 | 0.0 |
| | comp=Z,0.3nm,0.3s,baz=89,slow=3.5,SNR=2.5 | | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| AS31 | Alice Springs | 45.28 | 254 | P | P | P | 23 58 52.2 | -0.5 |
| ASAR | Alice Springs | 45.28 | 254 | P | P | P | 23 58 51.7 | -1.1 |
| ASAR | Alice Springs | 45.28 | 254 | P | P | P | 23 58 52.2 | -0.5 |
| | comp=Z,8.0nm,0.6s,baz=86,slow=8.8,SNR=73 | | | | | | | |
| ASAR | | | | PcP | PcP | PcP | 00 00 19.9 | +0.1 |
| | comp=Z,0.7nm,0.4s,baz=101,slow=4.0,SNR=5.3 | | | | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| MTN | Manton Dam | 49.36 | 268 | P | P | P | 23 59 22.2 | -1.0 |
| FORT | Forrest | 50.44 | 245 | P | P | P | 23 59 32.5 | +1.6 |
| FORT | | | | IAmb | IAmb | | 23 59 48.9 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| KNRA | Kununurra | 51.03 | 264 | P | P | P | 23 59 34.6 | -0.8 |
| KNRA | | | | IAmb | IAmb | | 23 59 42.0 | |
| | comp=Z,6.2nm,0.9s | | | | | | | |
| FITZ | Fitzroy Crossi | 53.55 | 261 | P | P | P | 23 59 52.3 | -1.1 |
| SOEI | Soe | 56.64 | 270 | P | P | P | 00 00 14.5 | -0.5 |
| SOEI | | | | IAmb | IAmb | | 00 00 16.7 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| SBA | Scott Base | 60.26 | 184 | P | P | P | 00 00 40.7 | +2.6 |
| MORW | Morawa | 60.92 | 246 | P | P | P | 00 00 43.8 | +0.5 |
| CASY | Casey | 66.20 | 205 | P | P | P | 00 01 16.2 | +0.1 |
| JAGI | Jajag, Banyuwa | 66.60 | 268 | P | P | P | 00 01 17.6 | -2.1 |
| JAGI | | | | IAmb | IAmb | | 00 01 18.3 | |
| | comp=Z,9.4nm,0.5s | | | | | | | |
| MJAR | Matsushiro Arr | 68.40 | 323 | P | P | P | 00 01 30.0 | -0.2 |
| | comp=Z,3.4nm,0.6s,baz=164,slow=6.5,SNR=7.0 | | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| MAJO | Matsushiro | 68.40 | 323 | P | P | P | 00 01 29.5 | -0.6 |
| MAJO | | | | IAmb | IAmb | | 00 01 30.6 | |
| | comp=Z,5.4nm,0.6s | | | | | | | |
| MJB9 | Matsu-Tunnel | 68.41 | 323 | P | P | P | 00 01 29.6 | -0.5 |
| JSD | Sado | 69.43 | 324 | P | P | P | 00 01 36.4 | +0.2 |
| JSD | | | | IAmb | IAmb | | 00 01 39.7 | |
| | comp=Z,7.8nm,0.7s | | | | | | | |
| UGM | Wanagama | 70.21 | 268 | P | P | P | 00 01 40.7 | -0.7 |
| QSPA | South Pole Qui | 71.95 | 180 | P | P | P | 00 01 51.9 | +1.1 |
| QSPA | | | | IAmb | IAmb | | 00 01 52.8 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| QSPA | South Pole Qui | 71.95 | 180 | P | P | P | 00 01 52.3 | +1.5 |
| | comp=Z,4.0nm,0.7s,baz=220,slow=2.0,SNR=6.8 | | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| QSPA | South Pole Qui | 71.95 | 180 | sP | | P | 

*az=156.0*
*NEIC **20** 23:56:39.2±0.9, 18°.2S±0°.2×178°.04W±0°.05, h566$^{km}$±10$^{km}$, mb4.1/11, Error ellipse: s-maj=26.9km s-min=5.0km az=188.0*

**ISC 20 23:56:38.6±0.6, 18°.2S±0°.2×178°.14W±0°.10, h550$^{km}$, n25, σ0$^{s}$.73/25, mb3.9/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.65** | **277** | P | **P** | **23 57 59.8** | **+1.7** |
| **NIUE** | **Niue** | **7.84** | **98** | P | **P** | **23 58 34.4** | **-0.3** |
| **HNR** | **Honiara** | **22.97** | **289** | P | **P** | **00 01 02.5** | **+0.9** |
| **CTA** | **Charters Tower** | **33.65** | **261** | P | **P** | **00 02 33.7** | **-0.6** |
| | 0.1nm,0.4s,baz=50,slow=7.9,SNR=1.0 | | | | | | |
| **STKA** | **Stephens Creek** | **38.71** | **242** | P | **P** | **00 03 16.1** | **+0.2** |
| | 1.3nm,0.5s,baz=32,slow=8.4,SNR=3.4 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.48** | **241** | P | **P** | **00 03 53.3** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 00 04 08.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **00 04 02.6** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 00 04 13.5 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **00 04 03.2** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 00 04 05.3 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.81** | **260** | P | **P** | **00 04 03.5** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 00 04 03.9 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **00 04 03.4** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **00 04 03.4** | **-0.9** |
| | comp=Z,2.0nm,0.5s,baz=97,slow=6.8,SNR=18 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.95** | **255** | P | **P** | **00 04 04.9** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 00 04 05.7 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.95** | **255** | P | **P** | **00 04 04.5** | **-0.8** |
| **ASAR** | **Alice Springs** | **44.95** | **255** | P | **P** | **00 04 04.8** | **-0.4** |
| | comp=Z,11nm,0.6s,baz=88,slow=8.6,SNR=92 | | | | | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **JNU** | **Nakatsue** | **70.53** | **316** | P | **P** | **00 06 58.7** | **+0.1** |
| JNU | | | | IAmb | IAmb | 00 07 03.5 | |
| | comp=Z,8.2nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.85** | **180** | P | **P** | **00 07 06.2** | **+0.3** |
| **QSPA** | **South Pole Qui** | **71.85** | **180** | P | **P** | **00 07 06.4** | **+0.6** |
| | comp=Z,0.7nm,0.7s,baz=146,slow=12,SNR=1.9 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **NACB** | **Ninganchiao** | **72.29** | **304** | P | **P** | **00 07 08.2** | **-0.8** |
| **NVAR** | **Mina Array Bea** | **79.46** | **44** | P | **P** | **00 07 48.9** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=221,slow=9.5,SNR=2.8 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **BELA** | **Belgrano 2** | **81.84** | **173** | P | **P** | **00 07 59.9** | **-0.1** |
| **TXAR** | **Lajitas Array** | **85.94** | **58** | P | **P** | **00 08 22.2** | **+1.0** |
| | comp=Z,0.7nm,0.8s,baz=230,slow=6.3,SNR=9.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.39** | **43** | P | **P** | **00 08 28.1** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=280,slow=5.4,SNR=1.8 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **INK** | **Inuvik** | **92.11** | **15** | P | **P** | **00 08 47.6** | **-1.2** |
| | comp=Z,1.0nm,0.3s,baz=267,slow=7.5,SNR=5.2 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.17** | **315** | PKPbc | **PKPdf** | **00 15 14.0** | **-0.2** |
| | comp=Z,0.2nm,0.6s,baz=104,slow=2.7,SNR=5.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.51** | **303** | PKPbc | **PKPbc** | **00 15 19.1** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=77,slow=7.2,SNR=4.1 | | | | | | |

*NIED **21** 00:13:07.5, 38°.89N×142°.11E, h45$^{km}$, MW3.6, Moment Tensor Solution. s3 Moment tensor: Scale 10$^{14}$Nm; $M_{rr}$0.72; $M_{\theta\theta}$0.40; $M_{\phi\phi}$-1.12; $M_{r\theta}$1.19; $M_{\theta\phi}$-0.46; $M_{r\phi}$2.03; Fault plane solution: $M_0$2.57000×10$^{14}$ NP1:$\phi_s$31.00000°, δ79.00000°, λ100.00000°. NP2:$\phi_s$167.00000°, δ14.00000°, λ47.00000°.*
*JMA **21** 00:13:07.5±0.1, 38°.9N±0°.3×142°.1E±0°.6, h45$^{km}$, MV3.8/40, KINKAZAN REGION*
*JMA Felt I J1 at KINKAZAN REGION .*
*IDC **21** 00:13:16.7±14.0, 38°.81N×141°.32E, h101$^{km}$±64$^{km}$, mb3.6/4, mbtmp3.8/6, ML2.6/2, Error ellipse: s-maj=199.9km s-min=44.8km az=85.0*

**ISC 21 00:13:06.7±2.2, 38°.85N±0°.07×142°.2E±0°.1, h41$^{km}$±15$^{km}$, n23, σ0$^{s}$.96/26, mb3.9/4, 12D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OFUJ** | **Ofunato** | **0.47** | **299** | ⇓*i*P | **Pn** | **00 13 17.3** | **+0.2** |
| OFUJ | | | | ⇓S | **Sn** | **00 13 23.9** | **-0.4** |
| **JKMT** | **Kesennumamotoy** | **0.56** | **266** | ⇓*i*P | **Pn** | **00 13 18.4** | **+0.1** |
| JKMT | | | | ⇓S | **Sn** | **00 13 25.9** | **-0.6** |
| **JMK** | **Ichinoseki** | **0.76** | **278** | ⇓*i*P | **Pn** | **00 13 21.1** | **0.0** |
| JMK | | | | ⇓S | **Sn** | **00 13 30.7** | **-0.7** |
| **JIO** | **Ouri** | **0.77** | **239** | ⇓*i*P | **Pn** | **00 13 21.3** | **+0.2** |
| JIO | | | | ⇓S | **Sn** | **00 13 30.8** | **-0.7** |
| **JOM** | **Ohasama** | **0.93** | **312** | ⇓*i*P | **Pn** | **00 13 23.5** | **+0.1** |
| JOM | | | | ⇓S | **Sn** | **00 13 34.6** | **-1.0** |
| **JTH** | **Tanohata** | **1.11** | **347** | *i* P | **Pn** | **00 13 26.0** | **+0.1** |
| **JOU** | **Okura** | **1.29** | **248** | *i* P | **Pn** | **00 13 28.8** | **+0.5** |
| JOU | | | | S | **Sn** | **00 13 44.3** | **-0.1** |
| **JRG** | **Rokugo** | **1.33** | **295** | ⇓*i*P | **Pn** | **00 13 29.0** | **+0.2** |
| JRG | | | | ⇓eS | **Sn** | **00 13 45.2** | **-0.1** |
| **JYK** | **Kaneyama** | **1.43** | **273** | *i* P | **Pn** | **00 13 30.5** | **+0.3** |
| JYK | | | | eS | **Sn** | **00 13 47.7** | **-0.1** |
| **JMM** | **Marumori** | **1.48** | **229** | P | **Pn** | **00 13 31.1** | **+0.3** |
| **JANG** | **Nango** | **1.61** | **341** | *i* P | **Pn** | **00 13 33.0** | **+0.3** |
| JANG | | | | S | **Sn** | **00 13 52.1** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **3.91** | **235** | P | **Pn** | **00 14 06.8** | **+2.6** |
| | 0.2nm,0.3s,baz=40,slow=13,SNR=7.4 | | | | | | |
| | 2.4nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.33** | **308** | P | **Pn** | **00 15 21.6** | **+3.1** |
| | 0.3nm,0.3s,baz=121,slow=15,SNR=5.9 | | | | | | |
| | 2.1nm,0.6s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 28.61** | **125** | | T | T | 00 49 22.5 | |
| | baz=318,slow=76,SNR=241 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 28.62** | **125** | | T | T | 00 49 23.0 | |
| | baz=318,slow=76,SNR=202 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 28.63** | **125** | | T | T | 00 49 23.7 | |
| | baz=318,slow=76,SNR=218 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 29.39** | **127** | | T | T | 00 50 20.9 | |
| | baz=319,slow=76,SNR=169 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 29.39** | **127** | | T | T | 00 50 21.1 | |
| | baz=319,slow=76,SNR=192 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 29.41** | **127** | | T | T | 00 50 22.2 | |
| | baz=319,slow=76,SNR=169 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.17** | **311** | P | **P** | **00 20 47.1** | **+0.2** |
| | 0.5nm,0.4s,baz=74,slow=7.7,SNR=3.9 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.70** | **301** | P | **P** | **00 21 07.2** | **-0.4** |
| | 0.7nm,0.5s,baz=81,slow=9.7,SNR=6.7 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.39** | **307** | P | **P** | **00 21 20.9** | **0.0** |
| | 1.7nm,0.4s,baz=81,slow=8.0,SNR=15 | | | | | | |
| | 1.7nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **49.82** | **311** | P | **P** | **00 21 54.6** | **-0.7** |
| | 0.9nm,0.4s,baz=77,slow=8.8,SNR=6.9 | | | | | | |
| | 0.9nm,0.4s | | | | | | |

*NEIC **21** 00:14:20.5±1.6, 0°.2N±0°.1×121°.8E±0°.1, h177$^{km}$±9$^{km}$, mb4.5/11, Error ellipse: s-maj=22.7km s-min=6.5km az=51.0*
*IDC **21** 00:14:23.8±3.4, 0°.13N×121°.89E, h214$^{km}$±33$^{km}$, mb3.6/9, mbtmp4.1/10, Error ellipse: s-maj=54.4km s-min=12.0km az=61.0*
*DJA **21** 00:14:24.1±2.1, 0°.N±9°×12°.2E±°, h122$^{km}$±29$^{km}$, M4.0/5, MLv4.0/5*

**ISC 21 00:14:21.9±0.6, 0°.21N±0°.08×122°.12E±0°.09, h202$^{km}$, n30, σ1$^{s}$.74/30, mb4.1/14, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GTOI** | **Gorontalo** | **0.98** | **64** | P | Pn | 00 14 46.6 | -5.1 |
| GTOI | | | | S | S | 00 15 06.9 | -7.8 |
| **LUWI** | **Luwuk** | **1.40** | **152** | | **Pn** | **00 14 52.7** | **-2.2** |
| LUWI | | | | Sn | **S** | **00 15 16.3** | **-4.0** |
| **LUWI** | **Luwuk** | **1.40** | **152** | P | **Pn** | **00 14 52.5** | **-2.4** |
| **TOLI2** | **Tolitoli** | **1.61** | **304** | Pn | Pn | 00 14 51.6 | -5.2 |
| TOLI2 | | | | Sn | S | 00 15 14.0 | -9.4 |
| **KMSI** | **Cibinong** | **1.89** | **79** | P | **Pn** | **00 14 57.8** | **-1.6** |
| KMSI | | | | S | **S** | **00 15 24.9** | **-3.2** |
| **KAPI** | **Kappang** | **5.70** | **205** | | **Pn** | **00 15 41.7** | **-3.7** |
| **KAPI** | **Kappang** | **5.70** | **205** | P | **Pn** | **00 15 45.4** | **0.0** |
| | 21nm,0.5s,baz=33,slow=7.6,SNR=18 | | | | | | |
| **MYLDM** | **Lahad Datu** | **6.12** | **324** | Pn | Pn | 00 15 46.1 | -4.7 |
| **MTN** | **Manton Dam** | **15.75** | **146** | P | **Pn** | **00 17 54.5** | **+1.3** |
| MTN | | | | IAmb | IAmb | 00 17 55.2 | |
| | comp=Z,28nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **17.09** | **158** | | **Pn** | **00 18 09.8** | **+0.5** |
| KNRA | | | | IAmb | IAmb | 00 18 11.0 | |
| | comp=Z,17nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.52** | **169** | P | **P** | **00 18 24.7** | **+1.4** |
| **PSA00** | **Pilbara Seismi** | **21.76** | **186** | P | **P** | **00 18 57.0** | **-0.7** |
| **WB0** | **Warramunga Arr** | **23.21** | **149** | P | **P** | **00 19 11.7** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 00 19 13.2 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.33** | **150** | P | **P** | **00 19 12.8** | **+0.6** |
| **WRA** | **Warramunga Arr** | **23.33** | **150** | P | **P** | **00 19 13.0** | **+0.8** |
| | comp=Z,5.5nm,0.5s,baz=324,slow=11,SNR=98 | | | | | | |
| | comp=Z,5.5nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.34** | **150** | P | **P** | **00 19 13.2** | **+1.0** |
| WB2 | | | | IAmb | IAmb | 00 19 14.4 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.45** | **149** | P | **P** | **00 19 14.0** | **+0.8** |
| **COEN** | **Coen** | **25.15** | **125** | P | **P** | **00 19 31.4** | **+2.7** |
| COEN | | | | IAmb | IAmb | 00 19 45.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **26.35** | **155** | P | **P** | **00 19 40.5** | **+1.0** |
| AS31 | | | | IAmb | IAmb | 00 19 41.9 | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **26.35** | **155** | P | **P** | **00 19 41.0** | **+1.6** |
| **ASAR** | **Alice Springs** | **26.35** | **155** | P | **P** | **00 19 40.8** | **+1.3** |
| | comp=Z,2.8nm,0.6s,baz=343,slow=14,SNR=50 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 23 00.3** | **+0.3** |
| | comp=Z,0.8nm,0.3s,baz=350,slow=2.0,SNR=8.1 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **36.85** | **152** | P | **P** | **00 21 12.4** | **+1.5** |
| | comp=Z,6.4nm,0.7s,baz=316,slow=5.3,SNR=9.7 | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **49.37** | **346** | P | **P** | **00 22 51.4** | **+0.5** |
| | comp=Z,0.8nm,0.6s,baz=154,slow=9.0,SNR=2.7 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.98** | **329** | P | **P** | **00 23 54.1** | **+0.7** |
| | comp=Z,1.4nm,0.4s,baz=125,slow=9.0,SNR=19 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **KBL** | **Kabul** | **60.14** | **310** | P | **P** | **00 24 08.2** | **-0.4** |
| KBL | | | | IAmb | IAmb | 00 24 09.5 | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.77** | **336** | P | **P** | **00 24 20.5** | **+1.6** |
| | comp=Z,0.3nm,0.3s,baz=127,slow=9.2,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.35** | **330** | P | **P** | **00 24 22.5** | **-0.4** |
| | comp=Z,0.9nm,0.9s,baz=127,slow=5.9,SNR=5.6 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **88.70** | **310** | P | **P** | **00 26 51.6** | **-1.2** |
| | comp=Z,0.3nm,0.8s,baz=134,slow=6.2,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **90.14** | **180** | P | **P** | **00 26 59.8** | **+0.9** |
| | comp=Z,0.8nm,0.4s,baz=19,slow=4.3,SNR=8.2 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.51** | **285** | PKP | **PKPdf** | **00 32 47.7** | **-0.8** |
| | comp=Z,0.5nm,0.8s,baz=30,slow=2.8,SNR=4.3 | | | | | | |

**IDC 21 00:27:55.7±3.6, 8°.22S×117°.53E, h0$^{km}$, mb3.3/3, mbtmp3.5/3, Error ellipse: s-maj=292.8km s-min=28.9km az=50.0, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.02** | **127** | P | P | 00 32 30.6 | +0.3 |
| | 1.6nm,0.6s,baz=301,slow=12,SNR=16 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **21.96** | **136** | P | P | 00 32 51.0 | -0.3 |
| | 0.5nm,0.6s,baz=319,slow=9.8,SNR=5.0 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.11** | **334** | P | P | 00 38 25.1 | 0.0 |
| | 0.3nm,0.6s,baz=153,slow=7.0,SNR=1.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*LDG **21** 00:28:55.7±0.2, 42°.74N×7°.74W, h10$^{km}$, Ml3.7/40, Error ellipse: s-maj=5.5km s-min=4.1km az=137.0*
*SFS **21** 00:28:56.5, 42°.73N×7°.71W, h15$^{km}$, mb3.8/6, ML4.2/16, ML4.6/12, MLv4.2/16*
*INMG **21** 00:28:56.4±2.3, 42°.73N×7°.69W, h16$^{km}$±3$^{km}$, ML3.7, Error ellipse: s-maj=2.5km s-min=2.5km az=113.0*
*IGIL **21** 00:28:57.3, 42°.77N×7°.82W, h21$^{km}$, ML3.4*
*MDD **21** 00:28:57.0±0.2, 42°.71N×7°.70W, h11$^{km}$, mb_Lg4.0/83, Error ellipse: s-maj=2.1km s-min=1.1km az=135.0*
*CNRM **21** 00:29:38.7, 39°.68N×7°.66W, h58$^{km}$, ML1.8*

**ISC 21 00:28:55.5±0.8, 42°.72N±0°.02×7°.65W±0°.02, h10$^{km}$±6$^{km}$, n181, σ2$^{s}$.92/308, 19C-7D, Spain**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EAGO** | **Agolada(Pontev** | **0.33** | **284** | ⇑Pg | **Pg** | **00 29 02.5** | **+0.3** |
| EAGO | | | | Sg | **Sg** | **00 29 06.6** | **0.0** |
| EAGO | | | | *i* Vmb_Lg | | 00 29 06.8 | |
| **EPON** | **Pontenova** | **0.71** | **31** | ⇑Pg | **Pg** | **00 29 09.7** | **+0.5** |
| EPON | | | | Sg | **Sg** | **00 29 19.0** | **+0.6** |
| EPON | | | | *i* Vmb_Lg | | 00 29 22.6 | |
| **PGAV** | **Gavieira, Arco** | **0.89** | **212** | ⇑*e*P | **Pg** | **00 29 12.4** | **-0.2** |
| PGAV | | | | *e*S | **Sg** | **00 29 23.5** | **-0.6** |
| PGAV | | | | A | A | 00 29 26.1 | |
| | 3μm,0.4s | | | | | | |
| **ELOB** | **Lobios** | **0.91** | **200** | ⇑Pg | **Pg** | **00 29 12.8** | **-0.2** |
| ELOB | | | | Sg | **Sg** | **00 29 23.9** | **-0.9** |
| ELOB | | | | *i* Vmb_Lg | | 00 29 26.3 | |
| **EZAM** | **Zamans** | **0.96** | **234** | ⇑Pg | **Pg** | **00 29 13.5** | **-0.6** |
| EZAM | | | | Sg | **Sg** | **00 29 26.0** | **-0.6** |
| EZAM | | | | *i* Vmb_Lg | | 00 29 27.5 | |
| **EMAZ** | **Mazaricos** | **1.00** | **283** | ⇑Pg | **Pg** | **00 29 14.1** | **-0.7** |
| EMAZ | | | | Sg | **Sg** | **00 29 26.7** | **-1.2** |
| EMAZ | | | | *i* Vmb_Lg | | 00 29 28.6 | |
| **ECAL** | **Calabor** | **1.03** | **139** | Pg | **Pb** | **00 29 15.6** | **0.0** |
| ECAL | | | | Sg | **Sg** | **00 29 29.3** | **+0.5** |
| **ECAL** | **Calabor** | **1.03** | **139** | ⇓Pg | **Pb** | **00 29 15.6** | **0.0** |
| ECAL | | | | Sg | **Sg** | **00 29 29.3** | **+0.5** |
| ECAL | | | | *i* Vmb_Lg | | 00 29 32.3 | |
| **PCAB** | **Cabril** | **1.05** | **196** | *e*P | **Pg** | **00 29 14.8** | **-0.9** |
| PCAB | | | | *e*S | **Sg** | **00 29 28.8** | **-0.6** |
| PCAB | | | | A | A | 00 29 30.1 | |
| | 2μm,0.4s | | | | | | |
| **PBRG** | **Braganca** | **1.14** | **143** | *e*P | **Pb** | **00 29 17.0** | **-0.4** |
| PBRG | | | | *e*S | **Sb** | **00 29 32.2** | **0.0** |
| PBRG | | | | A | A | 00 29 33.6 | |
| | 2μm,0.3s | | | | | | |
| **POLO** | **Lamas de Olo** | **1.35** | **185** | *e*Pn | **Pn** | **00 29 19.4** | **-1.2** |
| **POLO** | **Lamas de Olo** | **1.35** | **185** | *e*Pg | **Pn** | **00 29 21.1** | **+0.5** |
| POLO | | | | *e*Sg | **Sb** | **00 29 38.4** | **-0.1** |
| POLO | | | | A | A | 00 29 39.1 | |
| | 596nm,0.4s | | | | | | |
| **PVRL** | **Vila Real** | **1.45** | **182** | *e*Pn | **Pn** | **00 29 20.7** | **-1.2** |
| **PVRL** | **Vila Real** | **1.45** | **182** | *e*Pg | **Pn** | **00 29 22.8** | **+0.9** |
| PVRL | | | | *e*Sg | **Sn** | **00 29 41.5** | **+0.5** |
| PVRL | | | | A | A | 00 29 42.4 | |
| | 2μm,0.2s | | | | | | |
| **MVO** | **Moncorvo** | **1.62** | **163** | ⇓*e*Pn | **Pn** | **00 29 23.5** | **-0.8** |
| **MVO** | **Moncorvo** | **1.62** | **163** | *e*Pg | **Pn** | **00 29 26.1** | **+1.8** |
| MVO | | | | *e*Sg | **Sb** | **00 29 47.1** | **+0.8** |
| MVO | | | | A | A | 00 29 50.6 | |
| | 628nm,0.4s | | | | | | |
| **EARI** | **Arriondas** | **1.88** | **71** | Pn | **Pn** | **00 29 28.3** | **+0.4** |
| EARI | | | | Pg | **Pb** | **00 29 31.5** | **+1.5** |
| EARI | | | | Sn | **Sn** | **00 29 52.3** | **+0.7** |
| EARI | | | | Sg | **Sb** | **00 29 55.9** | **+2.3** |
| EARI | | | | *i* Vmb_Lg | | 00 30 00.6 | |
| **PVIS** | **Viseu** | **2.01** | **185** | *e*Pn | **Pn** | **00 29 28.8** | **-0.9** |
| **PVIS** | **Viseu** | **2.01** | **185** | *e*Pg | **Pb** | **00 29 33.6** | **+1.3** |
| PVIS | | | | *e*Sg | **Sb** | **00 29 58.3** | **+0.8** |
| **EJUZ** | **Juzbado, Salam** | **2.10** | **141** | Pn | **Pn** | **00 29 32.0** | **+1.1** |
| EJUZ | | | | Pg | **Pb** | **00 29 34.8** | **+1.0** |
| EJUZ | | | | Sg | **Sb** | **00 30 00.7** | **+0.8** |
| **MTE** | **Manteigas** | **2.32** | **178** | *e*Pn | **Pn** | **00 29 32.9** | **-1.0** |
| **MTE** | **Manteigas** | **2.32** | **178** | *e*Pg | **Pb** | **00 29 38.9** | **+1.3** |
| MTE | | | | *e*Sg | **Sb** | **00 30 07.9** | **+1.6** |
| MTE | | | | A | A | 00 30 12.9 | |
| | 681nm,0.4s | | | | | | |
| **COI** | **Coimbra** | **2.58** | **193** | *e*Pn | **Pn** | **00 29 37.9** | **+0.5** |
| **COI** | **Coimbra** | **2.58** | **193** | *e*Pg | **Pg** | **00 29 45.2** | **+0.3** |
| COI | | | | *e*Sg | **Sg** | **00 30 17.0** | **-1.3** |
| COI | | | | A | A | 00 30 23.8 | |
| | 478nm,0.6s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **2.74** | **194** | *e*Pn | **Pn** | **00 29 38.8** | **-0.9** |
| **PCAS** | **Casmilo, Conde** | **2.74** | **194** | *e*Pg | **Pg** | **00 29 47.4** | **-0.7** |
| PCAS | | | | *e*Sn | **Sn** | **00 30 10.2** | **-2.7** |
| PCAS | | | | *e*Sg | **Sb** | **00 30 21.2** | **+2.8** |
| PCAS | | | | A | A | 00 30 31.0 | |
| | 226nm,0.5s | | | | | | |
| **PCBR** | **Castelo Branco** | **2.88** | **177** | *e*Pn | **Pn** | **00 29 40.8** | **-0.8** |
| **PCBR** | **Castelo Branco** | **2.88** | **177** | *e*Pg | **Pb** | **00 29 49.8** | **+2.7** |
| PCBR | | | | *e*Sn | **Sn** | **00 30 14.3** | **-2.0** |
| PCBR | | | | *e*Sg | **Sb** | **00 30 25.8** | **+3.4** |
| PCBR | | | | A | A | 00 30 28.8 | |
| | 337nm,0.4s | | | | | | |
| **EPLA** | **Plasencia** | **2.91** | **156** | ⇓Pn | **Pn** | **00 29 41.5** | **-0.4** |
| EPLA | | | | Pg | **Pb** | **00 29 50.0** | **+2.5** |
| EPLA | | | | Sg | **Sb** | **00 30 25.5** | **+2.4** |
| EPLA | | | | *i* Vmb_Lg | | 00 30 33.0 | |
| **ELAN** | **Lanestosa** | **3.13** | **79** | ⇑Pn | **Pn** | **00 29 46.2** | **+1.1** |
| ELAN | | | | Pg | **Pb** | **00 29 54.1** | **+2.7** |
| ELAN | | | | Sn | **Sn** | **00 30 22.8** | **+0.2** |
| ELAN | | | | Sg | **Sb** | **00 30 34.9** | **+5.2** |
| ELAN | | | | *i* Vmb_Lg | | 00 30 38.6 | |
| **PMRV** | **Marv??o** | **3.30** | **177** | *e*Pn | **Pn** | **00 29 46.5** | **-0.8** |
| **PMRV** | **Marv??o** | **3.30** | **177** | *e*Pg | **Pb** | **00 29 57.5** | **+3.3** |
| PMRV | | | | *e*Sg | **Sb** | **00 30 37.4** | **+3.0** |
| PMRV | | | | A | A | 00 30 42.9 | |
| | 239nm,0.7s | | | | | | |
| **PSBE** | **So Bento** | **3.32** | **196** | *e*Pn | **Pn** | **00 29 46.8** | **-0.8** |
| PSBE | | | | *e*Sn | **Sn** | **00 30 26.7** | **-0.5** |
| PSBE | | | | *e*Sg | **Sb** | **00 30 38.6** | **+3.6** |
| PSBE | | | | A | A | 00 30 50.8 | |
| | 252nm,0.7s | | | | | | |
| **GUD** | **Guadarrama** | **3.34** | **127** | ⇑Pn | **Pn** | **00 29 48.1** | **+0.1** |
| GUD | | | | Pg | **Pb** | **00 29 58.1** | **+3.1** |
| GUD | | | | Sn | **Sn** | **00 30 26.0** | **-1.8** |
| GUD | | | | Sg | **Sb** | **00 30 39.6** | **+3.8** |
| GUD | | | | *i* Vmb_Lg | | 00 30 44.3 | |
| **PMTG** | **Montargil** | **3.68** | **187** | *e*Pn | **Pn** | **00 29 51.5** | **-1.0** |
| PMTG | | | | *e*Sn | **Sn** | **00 30 33.0** | **-2.9** |
| PMTG | | | | *e*Sg | **Sb** | **00 30 49.5** | **+4.3** |
| PMTG | | | | A | A | 00 30 53.2 | |
| | 65nm,0.6s | | | | | | |
| **PESTR** | **Estremoz** | **3.85** | **179** | *e*Pn | **Pn** | **00 29 54.1** | **-0.8** |
| PESTR | | | | *e*Sg | **Sb** | **00 30 55.3** | **+5.0** |
| PESTR | | | | A | A | 00 30 56.9 | |
| | 27nm,0.4s | | | | | | |
| **PESTR** | **Estremoz** | **3.85** | **179** | Pn | **Pn** | **00 29 54.1** | **-0.8** |
| PESTR | | | | Sg | **Sb** | **00 30 54.8** | **+4.5** |
| **PESTR** | **Estremoz** | **3.85** | **179** | P | **Pn** | **00 29 54.2** | **-0.7** |
| **EBAD** | **Badajoz** | **3.99** | **173** | Pn | **Pn** | **00 29 56.0** | **-0.8** |
| EBAD | | | | Sg | **Sb** | **00 30 59.7** | **+5.4** |
| **EBAD** | **Badajoz** | **3.99** | **173** | ⇑Pn | **Pn** | **00 29 56.0** | **-0.8** |
| EBAD | | | | Pg | **Pb** | **00 30 09.7** | **+3.7** |
| EBAD | | | | Sn | **Sn** | **00 30 40.7** | **-3.0** |
| EBAD | | | | Sg | **Sg** | **00 31 00.7** | **-3.0** |
| EBAD | | | | *i* Vmb_Lg | | 00 31 05.4 | |
| **PAB** | **San Pablo** | **4.04** | **141** | Pn | **Pn** | **00 29 57.4** | **-0.1** |
| PAB | | | | Pb | **Pb** | **00 30 05.3** | **-1.5** |
| PAB | | | | Pg | **Pg** | **00 30 11.0** | **-1.8** |
| PAB | | | | Sg | **Sb** | **00 31 00.8** | **+5.1** |
| PAB | | | | *i* Vmb_Lg | | 00 31 04.2 | |
| **UCM** | **Universidad Co** | **4.09** | **125** | Pn | **Pn** | **00 29 58.2** | **+0.3** |
| **ESDC** | **Sonseca Array** | **4.12** | **136** | ⇑Pn | **Pn** | **00 29 58.6** | **-0.1** |
| ESDC | | | | Pg | **Pb** | **00 30 12.1** | **+3.8** |
| ESDC | | | | Sn | **Sn** | **00 30 45.1** | **-1.9** |
| ESDC | | | | Sg | **Sb** | **00 31 03.1** | **+4.9** |
| ESDC | | | | *i* Vmb_Lg | | 00 31 09.0 | |
| **LIS** | **Lisbon** | **4.16** | **196** | *e*Sg | **Sb** | **00 31 04.5** | **+5.3** |
| LIS | | | | A | A | 00 31 13.6 | |
| | 138nm,0.4s | | | | | | |
| **EVO** | **Evora** | **4.20** | **184** | ⇓*e*Pn | **Pn** | **00 29 58.9** | **-0.7** |
| EVO | | | | *e*Sg | **Sb** | **00 31 05.5** | **+5.3** |
| EVO | | | | A | A | 00 31 08.3 | |
| | 112nm,0.4s | | | | | | |
| **EVO** | **Evora** | **4.20** | **184** | Pn | **Pn** | **00 29 58.7** | **-0.9** |
| EVO | | | | Sg | **Sb** | **00 31 05.3** | **+5.1** |
| **EARA** | **Aranguren** | **4.47** | **87** | Pn | **Pn** | **00 30 04.7** | **+1.3** |
| EARA | | | | Sn | **Sn** | **00 30 55.1** | **-0.4** |
| EARA | | | | Sg | **Sg** | **00 31 16.6** | **-2.4** |
| EARA | | | | *i* Vmb_Lg | | 00 31 25.4 | |
| **PBAR** | **Barrancos** | **4.57** | **174** | *e*Pn | **Pn** | **00 30 04.4** | **-0.3** |
| PBAR | | | | *e*Sg | **Sb** | **00 31 17.2** | **+6.3** |
| PBAR | | | | A | A | 00 31 22.4 | |
| | 116nm,0.5s | | | | | | |
| **PBAR** | **Barrancos** | **4.57** | **174** | Pn | **Pn** | **00 30 04.4** | **-0.3** |
| PBAR | | | | Sg | **Sb** | **00 31 16.7** | **+5.8** |
| **PNCL** | **Nicolau / Gran** | **4.66** | **189** | ⇓*e*Pn | **Pn** | **00 30 04.9** | **-1.0** |
| PNCL | | | | *e*Sn | **Sn** | **00 30 57.1** | **-2.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MORF | | | | *e*Sn | **Sn** | **00 31 18.3** | **-1.8** | | |
| MORF | | | | *e*Sg | **Sg** | **00 31 47.1** | **-3.9** | | |
| MORF | | | | A | A | 00 32 01.4 | | | |
| | comp=N,34nm,0.5s | | | | | | | | |
| **MORF** | **Marmelete** | **5.47** | **188** | *e*P | **Pn** | **00 30 16.2** | **-0.9** | | |
| **PBDV** | **Barranco-do-Ve** | **5.48** | **182** | *e*Pn | **Pn** | **00 30 16.9** | **-0.4** | | |
| PBDV | | | | *e*Sn | **Sn** | **00 31 17.8** | **-2.6** | | |
| PBDV | | | | *e*Sg | **Sg** | **00 31 47.5** | **-3.9** | | |
| PBDV | | | | A | A | 00 31 58.1 | | | |
| | comp=N,71nm,0.6s | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **5.48** | **182** | Pn | **Pn** | **00 30 16.7** | **-0.6** | | |
| PBDV | | | | Sg | **Sb** | **00 31 44.5** | **+7.4** | | |
| **PFVI** | **Vila Bisbo** | **5.66** | **190** | *e*Pn | **Pn** | **00 30 19.0** | **-0.7** | | |
| PFVI | | | | *e*Sn | **Sn** | **00 31 19.8** | **-4.9** | | |
| PFVI | | | | *e*Sg | **Sg** | **00 31 52.7** | **-4.4** | | |
| PFVI | | | | A | A | 00 31 59.6 | | | |
| | comp=N,39nm,0.6s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **5.66** | **190** | Pn | **Pn** | **00 30 18.4** | **-1.3** | | |
| **PFVI** | **Vila Bisbo** | **5.66** | **190** | P | **Pn** | **00 30 19.5** | **-0.2** | | |
| **E0802** | **Ubeda,Jaen** | **5.71** | **144** | Sg | **Sg** | **00 31 53.2** | **-5.7** | | |
| **ECHI** | **Chisagues Biel** | **5.78** | **88** | Pn | **Pn** | **00 30 22.1** | **+0.6** | | |
| ECHI | | | | Sn | **Sn** | **00 31 25.2** | **-2.7** | | |
| ECHI | | | | *i* Vmb_Lg | | 00 32 11.1 | | | |
| **EMOS** | **Mosqueruela** | **5.88** | **111** | ⇑Pn | **Pn** | **00 30 23.8** | **+0.9** | | |
| EMOS | | | | Sn | **Sn** | **00 31 26.4** | **-4.0** | | |
| EMOS | | | | Sg | **Sg** | **00 32 02.6** | **-1.6** | | |
| EMOS | | | | *i* Vmb_Lg | | 00 32 13.9 | | | |
| **EPF** | **Esparros** | **5.88** | **84** | *e*Pn | **Pn** | **00 30 24.4** | **+1.6** | | |
| EPF | | | | *e*Sn | **Sn** | **00 31 28.1** | **-2.1** | | |
| EPF | | | | *e*Sg | **Sg** | **00 32 02.1** | **-2.1** | | |
| | comp=N,35nm,0.5s | | | | | | | | |
| **ECHE** | **Chera** | **5.93** | **120** | Pn | **Pn** | **00 30 24.6** | **+1.1** | | |
| ECHE | | | | Sg | Sb | 00 31 59.9 | +10 | | |
| ECHE | | | | *i* Vmb_Lg | | 00 32 11.1 | | | |
| **ESPR** | **Espera** | **6.01** | **166** | Pn | **Pn** | **00 30 26.1** | **+1.6** | | |
| ESPR | | | | Sg | **Sg** | **00 32 08.3** | **-0.1** | | |
| ESPR | | | | *i* Vmb_Lg | | 00 32 26.4 | | | |
| **EVIV** | **Cofrentes, Val** | **6.03** | **123** | ⇑Pn | **Pn** | **00 30 25.8** | **+1.0** | | |
| EVIV | | | | Sg | **Sg** | **00 32 06.4** | **-2.6** | | |
| EVIV | | | | *i* Vmb_Lg | | 00 32 14.3 | | | |
| **QUIF** | **Quistinic** | **6.08** | **30** | *e*Pn | **Pn** | **00 30 23.8** | **-1.6** | | |
| QUIF | | | | *e*Sn | **Sn** | **00 31 28.5** | **-6.5** | | |
| | comp=N,22nm,0.4s | | | | | | | | |
| **ETOB** | **Tobarra** | **6.17** | **129** | ⇑Pn | **Pn** | **00 30 26.5** | **-0.4** | | |
| ETOB | | | | Sg | **Sg** | **00 32 10.4** | **-3.2** | | |
| **ERTA** | **Horta de San J** | **6.22** | **104** | Pn | **Pn** | **00 30 28.2** | **+0.8** | | |
| ERTA | | | | Sn | **Sn** | **00 31 36.7** | **-1.9** | | |
| ERTA | | | | Sg | Sb | 00 32 08.7 | +10 | | |
| ERTA | | | | *i* Vmb_Lg | | 00 32 30.1 | | | |
| **EGOR** | **Sierra Gorda,** | **6.23** | **153** | Sg | **Sg** | **00 32 10.4** | **-5.1** | | |
| EGOR | | | | *i* Vmb_Lg | | 00 32 23.0 | | | |
| **EQUE** | **Quentar** | **6.39** | **148** | Pn | **Pn** | **00 30 32.0** | **+2.2** | | |
| EQUE | | | | Sg | **Sg** | **00 32 15.4** | **-5.1** | | |
| EQUE | | | | *i* Vmb_Lg | | 00 32 27.9 | | | |
| **ROSF** | **Rostrenen** | **6.40** | **27** | *e*Pn | **Pn** | **00 30 28.2** | **-1.6** | | |
| ROSF | | | | *e*Sn | **Sn** | **00 31 36.6** | **-6.3** | | |
| | comp=N,16nm,0.3s | | | | | | | | |
| **LFF** | **La Frestale** | **6.46** | **67** | *e*Pn | **Pn** | **00 30 30.2** | **-0.5** | | |
| LFF | | | | *e*Sn | **Sn** | **00 31 41.3** | **-3.1** | | |
| | comp=N,18nm,0.6s | | | | | | | | |
| **EJIF** | **Jimena Fronter** | **6.49** | **164** | Sg | **Sg** | **00 32 22.8** | **-0.9** | | |
| **SGMF** | **Saint Gilles** | **6.59** | **31** | *e*Pn | **Pn** | **00 30 31.0** | **-1.4** | | |
| SGMF | | | | *e*Sn | **Sn** | **00 31 41.8** | **-5.8** | | |
| | comp=N,10nm,0.4s | | | | | | | | |
| **MFF** | **Saint Martin d** | **6.61** | **51** | *e*Pn | **Pn** | **00 30 31.9** | **-0.8** | | |
| MFF | | | | *e*Sn | **Sn** | **00 31 41.8** | **-6.3** | | |
| | comp=N,17nm,0.4s | | | | | | | | |
| **ELGU** | **Los Guajares,** | **6.62** | **151** | Pn | **Pn** | **00 30 34.2** | **+1.3** | | |
| ELGU | | | | Sn | **Sn** | **00 31 44.3** | **-4.2** | | |
| ELGU | | | | Sg | **Sg** | **00 32 22.6** | **-5.3** | | |
| ELGU | | | | *i* Vmb_Lg | | 00 32 43.1 | | | |
| **EPOB** | **Poblet** | **6.64** | **99** | Pn | **Pn** | **00 30 32.8** | **-0.5** | | |
| EPOB | | | | Pg | **Pb** | **00 30 55.3** | **+4.1** | | |
| EPOB | | | | Sn | **Sn** | **00 31 44.8** | **-4.2** | | |
| EPOB | | | | Sg | **Sb** | **00 32 18.9** | **+8.4** | | |
| EPOB | | | | *i* Vmb_Lg | | 00 32 31.8 | | | |
| **EZAR** | **Zarzadilla de** | **6.64** | **135** | Sg | **Sg** | **00 32 25.5** | **-3.3** | | |
| EZAR | | | | *i* Vmb_Lg | | 00 32 30.1 | | | |
| **TLOR** | **Lorca, Murcia** | **6.81** | **136** | Sg | **Sg** | **00 32 31.1** | **-3.1** | | |
| **EMIR** | **Miracle** | **6.85** | **94** | Pn | **Pn** | **00 30 37.3** | **+1.2** | | |
| EMIR | | | | Sn | **Sn** | **00 31 52.5** | **-1.7** | | |
| EMIR | | | | Sg | Sb | 00 32 26.0 | +9.5 | | |
| EMIR | | | | *i* Vmb_Lg | | 00 32 49.0 | | | |
| **EBER** | **Berja** | **6.87** | **146** | Pn | **Pn** | **00 30 38.5** | **+1.9** | | |
| **EBER** | **Berja** | **6.87** | **146** | Pn | **Pn** | **00 30 38.1** | **+1.5** | | |
| EBER | | | | Sg | **Sg** | **00 32 35.4** | **-0.8** | | |
| EBER | | | | *i* Vmb_Lg | | 00 32 46.9 | | | |
| **ECOL** | **Islas Columbre** | **6.88** | **111** | Pn | **Pn** | **00 30 36.8** | **+0.4** | | |
| ECOL | | | | Sn | **Sn** | **00 31 49.3** | **-5.5** | | |
| **EMUR** | **La Murta** | **6.91** | **133** | Pn | **Pn** | **00 30 37.1** | **+0.2** | | |
| EMUR | | | | Sg | **Sg** | **00 32 32.6** | **-4.7** | | |
| EMUR | | | | *i* Vmb_Lg | | 00 32 46.6 | | | |
| **EBEN2** | **Beniarda presa** | **6.96** | **123** | Sg | **Sg** | **00 32 34.0** | **-4.8** | | |
| EBEN2 | | | | *i* Vmb_Lg | | 00 32 45.2 | | | |
| **ETRV** | **Los Montesinos** | **7.05** | **129** | Sg | **Sg** | **00 32 39.9** | **-1.8** | | |
| ETRV | | | | *i* Vmb_Lg | | 00 32 49.3 | | | |
| **RJF** | **Les Rejaudoux** | **7.09** | **66** | *e*Pn | **Pn** | **00 30 38.1** | **-1.3** | | |
| RJF | | | | *e*Sn | **Sn** | **00 31 53.5** | **-6.6** | | |
| | comp=N,19nm,0.5s | | | | | | | | |
| **ENIJ** | **Nijar** | **7.11** | **142** | Sg | **Sg** | **00 32 36.9** | **-6.7** | | |
| ENIJ | | | | *i* Vmb_Lg | | 00 32 46.8 | | | |
| **MTLF** | **Montolieu** | **7.26** | **82** | *e*Pn | **Pn** | **00 30 41.5** | **-0.2** | | |
| MTLF | | | | *e*Sn | **Sn** | **00 32 01.0** | **-3.1** | | |
| MTLF | | | | *e*Sg | **Sg** | **00 32 45.7** | **-2.6** | | |
| | comp=N,5.1nm,0.4s | | | | | | | | |
| **CAF** | **Calviac** | **7.36** | **69** | *e*Pn | **Pn** | **00 30 42.1** | **-1.0** | | |
| CAF | | | | *e*Sn | **Sn** | **00 32 00.7** | **-6.0** | | |
| | comp=N,14nm,0.5s | | | | | | | | |
| **GRR** | **Gorron** | **7.40** | **38** | *e*Pn | **Pn** | **00 30 41.5** | **-2.1** | | |
| GRR | | | | *e*Sn | Sn | 00 31 59.5 | -8.1 | | |
| | comp=N,16nm,0.5s | | | | | | | | |
| **JSA** | **Saint Aubin** | **7.51** | **29** | Sn | Sn | 00 32 00.7 | -9.5 | | |
| **CCA1** | **Carnmenellis** | **7.65** | **12** | Sn | Sn | 00 32 03.6 | -10 | | |
| **EIBI** | **Ibiza** | **7.75** | **115** | Pn | **Pn** | **00 30 48.1** | **-0.3** | | |
| EIBI | | | | Sn | Sn | 00 32 07.7 | -8.5 | | |
| **EJON** | **La Jonquera** | **7.78** | **88** | ⇓Pn | **Pn** | **00 30 49.2** | **+0.3** | | |
| EJON | | | | Sn | **Sn** | **00 32 13.5** | **-3.6** | | |
| EJON | | | | *i* Vmb_Lg | | 00 33 02.5 | | | |
| **FLN** | **La Foliniere** | **7.85** | **37** | *e*Pn | **Pn** | **00 30 47.3** | **-2.4** | | |
| FLN | | | | *e*Sn | **Sn** | **00 32 11.9** | **-6.7** | | |
| | comp=N,7.9nm,0.3s | | | | | | | | |
| **LDF** | **La Druitiere** | **7.89** | **39** | *e*Pn | **Pn** | **00 30 47.4** | **-2.9** | | |
| LDF | | | | *e*Sn | Sn | 00 32 10.5 | -9.1 | | |
| | comp=N,7.4nm,0.4s | | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **7.90** | **60** | *e*Pn | **Pn** | **00 30 48.6** | **-1.8** | | |
| TCF | | | | *e*Sn | Sn | 00 32 10.8 | -9.1 | | |
| | comp=N,16nm,0.3s | | | | | | | | |
| **DYA** | **Yadsworthy** | **8.13** | **17** | Sn | Sn | 00 32 16.6 | -8.8 | | |
| **BGF** | **Bois d'Agland** | **8.41** | **59** | *e*Pn | **Pn** | **00 30 56.2** | **-1.2** | | |
| BGF | | | | *e*Sn | **Sn** | **00 32 26.0** | **-6.4** | | |
| | comp=N,30nm,0.4s | | | | | | | | |
| **ETOS** | **Mallorca** | **8.42** | **107** | Pn | **Pn** | **00 30 59.3** | **+1.7** | | |
| ETOS | | | | Sn | **Sn** | **00 32 26.1** | **-6.5** | | |
| **HTL** | **Hartland** | **8.55** | **14** | Sn | **Sn** | **00 32 28.8** | **-7.1** | | |
| **HYF** | **Humbligny** | **8.59** | **55** | *e*Pn | **Pn** | **00 30 59.2** | **-0.7** | | |
| HYF | | | | *e*Sn | **Sn** | **00 32 30.0** | **-6.8** | | |
| **AKLM** | **AKL** | **8.72** | **159** | P | **Pn** | **00 31 04.0** | **+2.2** | | |
| **CLF** | **Chambon-Foret** | **8.76** | **49** | Sn | Sn | 00 32 31.9 | -9.1 | | |
| **AVF** | **Avril sur Loir** | **8.82** | **59** | *e*Pn | **Pn** | **00 31 01.1** | **-2.0** | | |
| AVF | | | | *e*Sn | Sn | 00 32 35.1 | -7.4 | | |
| | comp=N,6.1nm,0.4s | | | | | | | | |
| **SSF** | **Saint Saulge** | **9.03** | **57** | *e*Pn | **Pn** | **00 31 04.1** | **-1.8** | | |
| SSF | | | | *e*Sn | **Sn** | **00 32 41.3** | **-6.3** | | |
| | comp=N,6.0nm,0.3s | | | | | | | | |
| **SMF** | **Signal de Mont** | **9.07** | **60** | *e*Pn | **Pn** | **00 31 04.7** | **-1.9** | | |
| SMF | | | | *e*Sn | Sn | 00 32 40.8 | -8.0 | | |
| | comp=N,2.2nm,0.3s | | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **9.16** | **72** | *e*Pn | **Pn** | **00 31 06.4** | **-1.4** | | |
| VIVF | | | | *e*Sn | Sn | 00 32 43.8 | -7.2 | | |
| | comp=N,17nm,0.9s | | | | | | | | |
| **ZHG** | **ZHG** | **9.29** | **175** | P | **Pn** | **00 31 11.3** | **+1.5** | | |
| **LOR** | **Lormes** | **9.33** | **57** | *e*Pn | **Pn** | **00 31 08.3** | **-1.8** | | |
| LOR | | | | *e*Sn | Sn | 00 32 47.6 | -7.5 | | |
| | comp=N,6.1nm,0.4s | | | | | | | | |
| **VAL** | **Valentia** | **9.39** | **350** | Sn | **Sn** | **00 32 48.9** | **-7.4** | | |
| **SMRF** | **Simiane la Rot** | **9.72** | **78** | *e*Pn | **Pn** | **00 31 15.5** | **+0.1** | | |
| SMRF | | | | *e*Sn | **Sn** | **00 32 59.1** | **-5.5** | | |
| | comp=N,4.5nm,0.5s | | | | | | | | |
| **MCH1** | **Michaelchurch** | **9.80** | **17** | Pn | **Pn** | **00 31 15.2** | **-1.2** | | |
| MCH1 | | | | Sn | Sn | 00 32 55.7 | -11 | | |
| **HMNX** | **Herstmonceux** | **9.81** | **31** | Pn | **Pn** | **00 31 15.9** | **-0.7** | | |
| HMNX | | | | Sn | Sn | 00 32 55.3 | -11 | | |
| **ORIF** | **Oris-en-Rattie** | **10.02** | **73** | *e*Pn | **Pn** | **00 31 18.9** | **-0.8** | | |
| ORIF | | | | *e*Sn | **Sn** | **00 33 06.5** | **-5.7** | | |
| | comp=N,0.4nm,0.2s | | | | | | | | |
| **MD31** | **MD31** | **10.10** | **166** | P | **Pn** | **00 31 20.5** | **-0.2** | | |
| **MDT** | **Midelt** | **10.18** | **165** | P | **Pn** | **00 31 21.5** | **-0.3** | | |
| **ELSH** | **Elham, Standar** | **10.34** | **32** | Pn | **Pn** | **00 31 22.7** | **-1.1** | | |
| ELSH | | | | Sn | Sn | 00 33 08.6 | -11 | | |
| **SFTF** | **Sexfontaines** | **10.46** | **54** | *e*Pn | **Pn** | **00 31 24.0** | **-1.5** | | |
| SFTF | | | | *e*Sn | Sn | 00 33 15.6 | -7.1 | | |
| | comp=N,7.0nm,0.5s | | | | | | | | |
| **CABF** | **La Chapelle** | **10.53** | **64** | *e*Pn | **Pn** | **00 31 25.6** | **-0.9** | | |
| CABF | | | | *e*Sn | **Sn** | **00 33 19.7** | **-4.8** | | |
| | comp=N,7.0nm,0.9s | | | | | | | | |
| **DSB** | **Dublin** | **10.56** | **4** | Sn | Sn | 00 33 16.1 | -9.2 | | |
| **FOEL** | **Foel Wylfa** | **10.60** | **15** | Pn | **Pn** | **00 31 26.9** | **-0.5** | | |
| **BNI** | **Bardonecchia** | **10.60** | **72** | Pn | **Pn** | **00 31 28.3** | **+0.6** | | |
| **MEZF** | **Maizieres J'vi** | **10.60** | **53** | *e*Pn | **Pn** | **00 31 25.8** | **-1.7** | | |
| MEZF | | | | *e*Sn | **Sn** | **00 33 19.4** | **-6.8** | | |
| | comp=N,7.5nm,0.5s | | | | | | | | |
| **MBDF** | **Montbardon** | **10.63** | **74** | *e*Pn | **Pn** | **00 31 26.8** | **-1.2** | | |
| **SAVF** | **Savonnieres en** | **10.70** | **52** | *e*Pn | **Pn** | **00 31 26.7** | **-2.1** | | |
| SAVF | | | | *e*Sn | Sn | 00 33 18.9 | -10 | | |
| | comp=N,2.2nm,0.2s | | | | | | | | |
| **LPL** | **La Plagne** | **10.71** | **70** | *e*Pn | **Pn** | **00 31 27.7** | **-1.5** | | |
| LPL | | | | *e*Sn | Sn | 00 33 22.0 | -7.2 | | |
| | comp=N,1.9nm,0.7s | | | | | | | | |
| **LPG** | **La Plagne** | **10.72** | **70** | *e*Pn | **Pn** | **00 31 28.6** | **-0.8** | | |
| LPG | | | | *e*Sn | Sn | 00 33 20.0 | -10 | | |
| | comp=N,0.2nm,0.2s | | | | | | | | |
| **WLF1** | **Llynfaes** | **10.79** | **10** | Pn | **Pn** | **00 31 30.1** | **0.0** | | |
| WLF1 | | | | Sn | Sn | 00 33 21.5 | -9.3 | | |
| **BRANT** | **Les Verrieres** | **10.88** | **62** | Pn | **Pn** | **00 31 31.6** | **+0.3** | | |
| **CWF** | **Charnwood Fore** | **10.89** | **21** | ⇓Pn | **Pn** | **00 31 30.0** | **-1.3** | | |
| **BAIF** | **Baives** | **10.98** | **44** | *e*Pn | **Pn** | **00 31 30.4** | **-2.3** | | |
| BAIF | | | | *e*Sn | Sn | 00 33 27.3 | -8.3 | | |
| | comp=N,1.5nm,0.3s | | | | | | | | |
| **PAGF** | **Fort de Pagny** | **11.02** | **53** | *e*Pn | **Pn** | **00 31 30.7** | **-2.6** | | |
| PAGF | | | | *e*Sn | Sn | 00 33 29.3 | -7.3 | | |
| | comp=N,3.1nm,0.4s | | | | | | | | |
| **HAU** | **Haudompre** | **11.17** | **57** | *e*Pn | **Pn** | **00 31 32.9** | **-2.4** | | |
| HAU | | | | *e*Sn | Sn | 00 33 32.7 | -7.5 | | |
| | comp=N,2.3nm,0.3s | | | | | | | | |
| **DOU** | **Dourbes** | **11.21** | **45** | Pn | **Pn** | **00 31 33.7** | **-2.0** | | |
| **SENIN** | **Lac Senin/Sane** | **11.27** | **66** | Pn | **Pn** | **00 31 36.9** | **0.0** | | |
| **GIVF** | **Givet** | **11.33** | **45** | *e*Pn | **Pn** | **00 31 35.9** | **-1.5** | | |
| GIVF | | | | *e*Sn | Sn | 00 33 36.9 | -7.1 | | |
| | comp=N,4.5nm,0.3s | | | | | | | | |
| **LBWR** | **Ladybower, Pea** | **11.39** | **18** | Pn | **Pn** | **00 31 37.1** | **-1.1** | | |
| **HINF** | **Hinteralfeld** | **11.41** | **59** | *e*Pn | **Pn** | **00 31 37.3** | **-1.3** | | |
| HINF | | | | *e*Sn | Sn | 00 33 38.5 | -7.7 | | |
| | comp=N,3.5nm,0.6s | | | | | | | | |
| **WACR** | **West Acre** | **11.45** | **26** | Pn | **Pn** | **00 31 38.3** | **-0.6** | | |
| **TIO** | **Tiouine** | **11.78** | **178** | P | **Pn** | **00 31 43.0** | **-0.7** | | |
| **LMK** | **Market Rasen** | **11.79** | **22** | Pn | **Pn** | **00 31 43.3** | **-0.4** | | |
| **WLF** | **Walferdange** | **11.81** | **49** | Pn | **Pn** | **00 31 43.7** | **-0.2** | | |
| **OUZM** | **OUZ** | **11.81** | **176** | P | **Pn** | **00 31 44.6** | **+0.4** | | |
| **PCP** | **Piancastagn** | **11.88** | **76** | Pn | **Pn** | **00 31 45.8** | **+0.8** | | |
| **CDF** | **Champ du Feu** | **11.90** | **56** | *e*Pn | Pn | 00 31 41.0 | -4.3 | | |
| CDF | | | | *e*Sn | Sn | 00 33 50.4 | -7.7 | | |
| | comp=N,1.3nm,0.3s | | | | | | | | |
| **GAL1** | **Galloway** | **12.31** | **8** | Pn | **Pn** | **00 31 50.2** | **-0.6** | | |
| **MUGIO** | **Muggio** | **12.37** | **69** | Pn | **Pn** | **00 31 53.4** | **+1.6** | | |
| **SLE** | **Schleitheim** | **12.44** | **61** | Pn | **Pn** | **00 31 51.8** | **-0.8** | | |
| **BFO** | **Black Forest** | **12.52** | **58** | Pn | **Pn** | **00 31 52.6** | **-1.2** | | |
| **EDMD** | **Edmundbyers** | **12.68** | **15** | Pn | **Pn** | **00 31 54.9** | **-0.9** | | |
| **FUORN** | **Ofenpass-Fuorn** | **13.33** | **67** | Pn | **Pn** | **00 32 07.6** | **+2.7** | | |
| **EDI** | **Edinburgh** | **13.53** | **11** | Pn | **Pn** | **00 32 06.5** | **-0.8** | | |
| **FETA** | **Feichten** | **13.72** | **65** | *e*Pn | **Pn** | **00 32 09.6** | **-0.6** | | |
| | comp=N,2.4nm,1.1s | | | | | | | | |
| **MOTA** | **Moosalm** | **14.04** | **64** | *e*Pn | **Pn** | **00 32 13.5** | **-1.0** | | |
| | comp=N,1.9nm,1.0s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **14.08** | **65** | *e*Pn | **Pn** | **00 32 17.2** | **+2.0** | | |
| | comp=N,2.0nm,0.8s | | | | | | | | |
| **WATA** | **Walderalm** | **14.35** | **65** | *i* Pn | **Pn** | **00 32 17.5** | **-1.3** | | |
| | comp=N,1.7nm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **14.37** | **65** | *e*Pn | **Pn** | **00 32 19.3** | **+0.1** | | |
| | comp=N,1.0nm,0.4s | | | | | | | | |

*IDC* **21** *00:33:42.6±1.1,44°.71N×10°.89E,h0km,mb4.2/4, mbtmp4.0/10,ML3.9/6,MS2.9/7,Error ellipse: s-maj=25.4km s-min=10.3km az=129.0*

*PRU* **21** *00:33:44.7,44°.75N×10°.76E,h6km,M4.1*

*BGR* **21** *00:33:44.0±0.8,44°.58N×10°.61E,h10km,ML4.2/14,Error ellipse: s-maj=18.9km s-min=13.3km az=51.0*

*LDG* **21** *00:33:44.8±0.3,44°.83N×10°.90E,h10km,Ml4.0/41,Error ellipse: s-maj=6.1km s-min=3.5km az=97.0*

*GEN* **21** *00:33:44.2,44°.78N×10°.70E,h19km,Ml3.9*

*STR* **21** *00:33:45.9±0.9,45°.N±4°×1°.1E±°,h10km,MLv4.2/64,Error ellipse: s-maj=0.0km s-min=0.0km az=113.7,preliminary*

*ROM* **21** *00:33:45.6±0.1,44°.793N±0°.003×10°.664E±0°.005, h8km,ML3.9/318,Mw3.7,Error ellipse: s-maj=0.4km s-min=0.2km az=306.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr3.28; Mθθ-3.94; Mφφ0.65; Mrθ-0.49; Mθφ0.73; Mφr1.62; Fault plane solution: Mo4.09010×10¹⁴ NP1:φs76.00000°,δ44.00000°, λ54.00000°. NP2:φs302.00000°,δ56.00000°,λ120.00000°.*

*MED_RC* **21** *00:33:45.0±0.5,44°.79N×10°.67E,h16km±3km,MW3.9/9, Moment Tensor Solution.Mantle waves: s9,c15; Duration: 1s0 Moment tensor: Scale 10¹⁵Nm; Mrr0.35±.20; Mθθ-0.88±.12; Mφφ0.52±.15; Mrθ0.05±.16; Mθφ-0.06±.09; Mφr0.69±.29; Best double couple: Mo1.01000×10¹⁵ NP1:φs50.00000°,δ66.00000°,λ36.00000°. NP2: φs304.00000°,δ58.00000°,λ151.00000°. Principal axes: T 1.1400, Plg41.0000°, Azm270.0000°; N -0.2500, Plg48.0000°, Azm80.0000°; P -0.8900, Plg5.0000°, Azm175.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=30s.*

*BNS* **21** *00:33:46.9±0.3,44°.82N×10°.57E,h10km,ML3.8*

*NEIC* **21** *00:33:46.6±2.0,44°.86N±0°.04×10°.68E±0°.07,h20km±7km, mb4.1/3,Error ellipse: s-maj=7.2km s-min=5.9km az=119.0*

*BEO* **21** *00:33:47.7±1.1,44°.77N×10°.93E,h0km,ML3.8/8*

**ISC 21 00:33:46.1±0.7,44°.82N±0°.01×10°.68E±0°.01,h18km±2km, n479,σ1♀33/620,mb4.0/6,10C-48D,Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NDIM** | **Novi di Modena** | **0.17** | **66** | ⇑P | **Pb** | **00 33 49.7** | **-0.4** |
| NDIM | | | | S | **Sg** | **00 33 54.3** | **+0.6** |
| NDIM | | | | AML | AML | | |
| NDIM | | | | AML | AML | | |
| NDIM | | | | AML | AML | | |
| NDIM | | | | AML | AML | | |
| **CAVE** | **Cavezzo** | **0.24** | **78** | ⇑P | **Pg** | **00 33 50.7** | **-0.9** |
| CAVE | | | | S | **Sb** | **00 33 56.0** | **+0.7** |
| CAVE | | | | AML | AML | | |
| | comp=E,65700μm,0.8s | | | | | | |
| CAVE | | | | AML | AML | | |
| | comp=E,65700μm,1.2s | | | | | | |
| CAVE | | | | AML | AML | | |
| | comp=N,65850μm,0.4s | | | | | | |
| **CAVE** | **Cavezzo** | **0.24** | **78** | P | **Pg** | **00 33 50.7** | **-0.9** |
| CAVE | | | | S | **Sb** | **00 33 55.5** | **+0.2** |
| **PRMA** | **PARMA** | **0.26** | **259** | | **Pg** | **00 33 51.7** | **-0.2** |
| PRMA | | | | Sg | **Sb** | **00 33 57.3** | **+1.1** |
| **PRMA** | **PARMA** | **0.26** | **259** | ⇓P | **Pg** | **00 33 51.8** | **-0.2** |
| PRMA | | | | S | **Sb** | **00 33 57.5** | **+1.2** |
| PRMA | | | | AML | AML | | |
| | comp=E,94050μm,0.3s | | | | | | |
| PRMA | | | | AML | AML | | |
| | comp=E,94050μm,1.7s | | | | | | |
| PRMA | | | | AML | AML | | |
| **PRMA** | **PARMA** | **0.26** | **259** | P | **Pg** | **00 33 51.8** | **-0.2** |
| **MODE** | **Modena** | **0.27** | **134** | ⇑P | **Pg** | **00 33 51.5** | **-0.6** |
| MODE | | | | S | **Sb** | **00 33 57.2** | **+0.7** |
| MODE | | | | AML | AML | | |
| MODE | | | | AML | AML | | |
| MODE | | | | AML | AML | | |
| **SBPO** | **S.Benedetto Po** | **0.29** | **36** | P | **Pb** | **00 33 52.6** | **-0.1** |
| SBPO | | | | S | **Sb** | **00 33 57.1** | **-0.1** |
| SBPO | | | | AML | AML | | |
| | comp=N,91400μm,0.7s | | | | | | |
| SBPO | | | | AML | AML | | |
| | comp=N,91350μm,0.7s | | | | | | |
| SBPO | | | | AML | AML | | |
| **MNTV** | **Mantova** | **0.34** | **14** | P | **Pb** | **00 33 54.0** | **+0.3** |
| **MNTV** | **Mantova** | **0.34** | **14** | P | **Pb** | **00 33 54.0** | **+0.3** |
| **NEVI** | **Neviano degli** | **0.35** | **228** | P | **Pg** | **00 33 52.9** | **-0.5** |
| NEVI | | | | AML | AML | | |
| | comp=N,46750μm,0.7s | | | | | | |
| NEVI | | | | AML | AML | | |
| | comp=E,28850μm,1.0s | | | | | | |
| **NEVI** | **Neviano degli** | **0.35** | **228** | P | **Pg** | **00 33 52.9** | **-0.5** |
| **GAZZ** | **Gazzo Veronese** | **0.42** | **45** | *e*Pg | **Pb** | **00 33 55.2** | **+0.2** |
| **GSCL** | **Gusciola** | **0.47** | **188** | ⇓P | **Pg** | **00 33 54.7** | **-0.9** |
| GSCL | | | | AML | AML | | |
| | comp=E,23350μm,0.7s | | | | | | |
| GSCL | | | | AML | AML | | |
| | comp=N,18900μm,0.7s | | | | | | |
| GSCL | | | | AML | AML | | |
| | comp=E,23350μm,1.3s | | | | | | |
| **GSCL** | **Gusciola** | **0.47** | **188** | P | **Pg** | **00 33 54.7** | **-0.9** |
| GSCL | | | | S | **Sb** | **00 34 04.0** | **+1.5** |
| **SERM** | **Sermide** | **0.48** | **66** | P | **Pg** | **00 33 55.7** | **-0.1** |
| SERM | | | | S | **Sb** | **00 34 04.3** | **+1.5** |
| SERM | | | | AML | AML | | |
| | comp=E,13950μm,1.1s | | | | | | |
| SERM | | | | AML | AML | | |
| | comp=N,17900μm,0.8s | | | | | | |
| SERM | | | | AML | AML | | |
| | comp=E,13950μm,0.9s | | | | | | |
| SERM | | | | AML | AML | | |
| | comp=N,17900μm,1.2s | | | | | | |
| **SERM** | **Sermide** | **0.48** | **66** | P | **Pg** | **00 33 55.8** | **0.0** |
| SERM | | | | S | **Sb** | **00 34 04.4** | **+1.7** |
| **ZCCA** | **Zocca** | **0.51** | **155** | Pg | **Pg** | **00 33 56.3** | **-0.1** |
| ZCCA | | | | Sg | **Sb** | **00 34 05.2** | **+1.6** |
| **ZCCA** | **Zocca** | **0.51** | **155** | ⇓P | **Pg** | **00 33 56.2** | **-0.1** |
| ZCCA | | | | AML | AML | | |
| | comp=E,33700μm,0.8s | | | | | | |
| ZCCA | | | | AML | AML | | |
| | comp=N,21500μm,1.0s | | | | | | |
| ZCCA | | | | AML | AML | | |
| | comp=E,34250μm,0.7s | | | | | | |
| ZCCA | | | | AML | AML | | |
| | comp=N,19200μm,1.0s | | | | | | |
| ZCCA | | | | AML | AML | | |
| | comp=N,21500μm,1.0s | | | | | | |
| **ZCCA** | **Zocca** | **0.51** | **155** | P | **Pg** | **00 33 56.2** | **-0.1** |
| ZCCA | | | | S | **Sn** | **00 34 06.8** | **0.0** |
| **OPPE** | **Oppeano** | **0.60** | **35** | P | **Pg** | **00 33 56.8** | **-1.3** |
| OPPE | | | | AML | AML | | |
| | comp=N,23550μm,1.1s | | | | | | |
| OPPE | | | | AML | AML | | |
| | comp=E,18750μm,0.6s | | | | | | |
| OPPE | | | | AML | AML | | |
| | comp=N,23550μm,0.9s | | | | | | |
| **OPPE** | **Oppeano** | **0.60** | **35** | P | **Pb** | **00 33 58.2** | **+0.2** |
| **FIU** | **Minerbio Fiu** | **0.61** | **107** | P | **Pb** | **00 33 58.7** | **+0.7** |
| FIU | | | | AML | AML | | |
| | comp=E,27850μm,0.5s | | | | | | |
| FIU | | | | AML | AML | | |
| | comp=E,35550μm,1.6s | | | | | | |
| FIU | | | | AML | AML | | |
| | comp=N,32750μm,0.9s | | | | | | |
| FIU | | | | AML | AML | | |
| | comp=E,35550μm,0.4s | | | | | | |
| **FERS** | **Ferrara-Casagl** | **0.62** | **82** | P | **Pb** | **00 33 58.4** | **0.0** |
| FERS | | | | S | **Sb** | **00 34 07.7** | **+1.0** |
| FERS | | | | AML | AML | | |
| | comp=E,25250μm,0.3s | | | | | | |
| FERS | | | | AML | AML | | |
| | comp=N,22800μm,0.4s | | | | | | |
| **QUINZ** | **Quinzano d'Ogl** | **0.66** | **317** | *e*Pg | **Pn** | **00 34 00.3** | **-0.2** |
| QUINZ | | | | *e*Sg | **Sn** | **00 34 10.9** | **+0.5** |
| **SARO** | **Sassorosso** | **0.66** | **197** | P | **Pb** | **00 33 57.7** | **-1.4** |
| SARO | | | | S | **Sg** | **00 34 07.8** | **-0.2** |
| SARO | | | | AML | AML | | |
| | comp=N,19000μm,0.5s | | | | | | |
| SARO | | | | AML | AML | | |
| | comp=E,14900μm,0.4s | | | | | | |
| SARO | | | | AML | AML | | |
| | comp=N,19000μm,1.5s | | | | | | |
| **SARO** | **Sassorosso** | **0.66** | **197** | P | **Pb** | **00 33 57.5** | **-1.6** |
| SARO | | | | S | **Sg** | **00 34 07.8** | **-0.2** |
| **VLC** | **Villacollemand** | **0.69** | **198** | ⇓P | **Pb** | **00 33 57.8** | **-1.7** |
| VLC | | | | S | **Sb** | **00 34 08.6** | **0.0** |
| VLC | | | | AML | AML | | |
| | comp=E,5825μm,1.5s | | | | | | |
| VLC | | | | AML | AML | | |
| | comp=N,9685μm,1.0s | | | | | | |
| VLC | | | | AML | AML | | |
| | comp=E,5870μm,1.5s | | | | | | |
| VLC | | | | AML | AML | | |
| | comp=N,9690μ

comp=E,4850µm,1.0s
CARD AML AML
comp=N,7510µm,0.6s
CARD Cardoso 0.80 190 P Pb 00 34 00.1 -1.4
CARD S Sg 00 34 12.2 -0.2
MTCR Monte La Croce 0.82 164 ⇑P Pb 00 34 00.8 -1.1
MTCR Monte La Croce 0.82 164 P Pb 00 34 00.8 -1.1
ZEN8 San Zeno di Mo 0.82 3 P Pb 00 34 01.6 -0.3
VOBA Vobarno 0.84 352 P Pg 00 34 02.3 -0.1
VOBA AML AML
comp=E,32850µm,0.9s
VOBA AML AML
comp=N,25150µm,0.4s
CMPO Campotto Po 0.84 106 P Pn 00 34 02.8 -0.2
CNCS Concesio 0.85 338 P Pb 00 34 02.3 -0.1
ZOVE Zovencedo 0.86 42 P Pb 00 34 02.2 -0.2
ZOVE S Sg 00 34 14.5 +0.3
BALD Monte Baldo 0.87 7 ePg Pb 00 34 02.6 -0.2
BALD eSg Sn 00 34 16.8 +0.7
BALD Monte Baldo 0.87 7 ⇓P Pb 00 34 02.6 -0.3
BALD Monte Baldo 0.87 7 P Pb 00 34 02.6 -0.3
BALD S Sn 00 34 17.5 +1.5
GARGN Gargnano BS 0.87 359 ePg Pg 00 34 03.2 0.0
GARGN eSg Sn 00 34 17.3 +1.4
BOB Bobbio (Coli) 0.88 267 P Pb 00 34 02.7 0.0
BOB AML AML
comp=N,5875µm,0.6s
BOB AML AML
comp=E,6520µm,0.7s
BOB AML AML
comp=E,6155µm,0.7s
BOB AML AML
comp=N,5805µm,0.6s
BOB AML AML
comp=N,5805µm,1.4s
BOB AML AML
comp=E,6155µm,1.3s
BOB AML AML
comp=N,5875µm,1.4s
BOB AML AML
comp=E,6520µm,1.3s
BOB Bobbio (Coli) 0.88 267 P Pb 00 34 02.7 0.0
BOB S Sn 00 34 17.7 +1.9
IMOL Imola, Italy 0.89 121 P Pn 00 34 04.1 +0.5
IMOL AML AML
comp=E,7295µm,0.7s
IMOL AML AML
comp=N,9960µm,0.4s
IMOL AML AML
comp=N,9960µm,1.6s
IMOL Imola, Italy 0.89 121 P Pn 00 34 05.0 +1.4
MOCL Monte Cuccoli 0.89 156 P Pb 00 34 01.8 -1.1
MOCL AML AML
comp=E,4600µm,1.1s
MOCL AML AML
comp=N,5075µm,0.7s
MOCL AML AML
comp=E,4600µm,0.9s
TEOL Teolo 0.89 52⇓ePg Pb 00 34 03.0 +0.1
TEOL eSg Sn 00 34 17.0 +0.8
TEOL Teolo 0.89 52 Pg Pb 00 34 02.8 -0.2
TEOL Sn 00 34 15.8 -0.4
TEOL Teolo 0.89 52 ⇓P Pb 00 34 03.0 0.0
TEOL S Sn 00 34 15.7 -0.4
TEOL AML AML
comp=N,32850µm,1.5s
TEOL AML AML
comp=E,31500µm,0.9s
TEOL AML AML
comp=N,32850µm,0.5s
MBAL Monte Baldo - 0.89 8 ⇓P Pb 00 34 02.8 -0.3
MBAL AML AML
comp=E,34600µm,1.0s
MBAL AML AML
comp=N,30800µm,1.0s
MBAL AML AML
comp=E,32250µm,1.0s
MBAL AML AML
comp=N,28500µm,1.0s
BRIS BRISIGHELLA 0.90 138 P Pn 00 34 05.5 +1.8
BRIS AML AML
comp=E,3835µm,1.1s
BRIS AML AML
comp=N,3240µm,1.4s
BRIS AML AML
comp=E,3910µm,1.1s
BRIS AML AML
comp=N,3635µm,0.5s
BRIS AML AML
comp=N,3240µm,0.6s
BRIS AML AML
comp=E,3910µm,0.9s
BRIS AML AML
comp=E,3835µm,0.9s
SEI Scarperia 0.90 147 P Pb 00 34 03.0 -0.2
SEI AML AML
comp=E,9340µm,0.5s
SEI AML AML
comp=N,11600µm,0.4s
SEI Scarperia 0.90 147 P Pb 00 34 03.0 -0.2
MARN Marana (Italy) 0.91 24 ePg Pb 00 34 03.1 -0.1
MARN eSg Sn 00 34 17.4 +0.9
MARN Marana (Italy) 0.91 24 ⇓P Pb 00 34 03.0 -0.2
MARN S Sn 00 34 17.3 +0.7
MPPT Montemurlo 0.91 161 P Pb 00 34 02.5 -0.8
MPPT AML AML
comp=N,4335µm,0.6s
MPPT AML AML
comp=E,6210µm,0.6s
MPPT AML AML
comp=N,4335µm,1.4s
MAIM Mastiano 0.91 188 ⇓P Pb 00 34 01.7 -1.6
MAIM AML AML
comp=E,4540µm,0.4s
MAIM AML AML
comp=N,4975µm,0.3s
MAIM Mastiano 0.91 188 P Pb 00 34 02.0 -1.3
MAIM S Sn 00 34 16.3 -0.3
MSSA Maissana 0.97 239 Pb 00 34 03.5 -0.8
MSSA Maissana 0.97 239 P Pb 00 34 03.3 -1.0
MSSA AML AML
comp=N,4465µm,0.2s
MSSA AML AML
comp=E,4750µm,1.5s
MSSA Maissana 0.97 239 P Pb 00 34 03.6 -0.8
MSSA S Sn 00 34 18.4 +0.3
CAPR Capriolo 0.97 328 P Pn 00 34 04.8 0.0
ADRI Adria, Italy 0.98 76 ePg Pb 00 34 04.7 +0.2
ADRI eSg Sn 00 34 18.8 +0.5
FAEN Faenza 1.01 121 P Pg 00 34 07.1 +1.5
GORR Gorreto 1.01 259 P Pb 00 34 04.8 -0.1
GORR AML AML
comp=E,5960µm,0.6s
GORR AML AML
comp=N,8185µm,0.4s
GORR Gorreto 1.01 259 P Pb 00 34 04.6 -0.4
GORR Gorreto 1.01 259 P Pb 00 34 04.9 -0.1
GORR S Sn 00 34 20.6 +1.6
BAG8 Bagolino 1.02 352 P Pb 00 34 04.8 -0.4
BAG8 Bagolino 1.02 352 P Pb 00 34 05.1 -0.1
BAG8 S Sn 00 34 20.6 +1.3
VARA Varagna 1.02 9 ePg Pn 00 34 05.7 0.0
VARA eSg Sn 00 34 21.3 +1.6
VARA Varagna 1.02 9 ⇓P Pb 00 34 05.2 -0.2
VARA AML AML
comp=E,33100µm,0.4s
VARA AML AML
comp=N,30900µm,0.4s
VARA AML AML
comp=E,42700µm,0.3s
VARA AML AML
comp=N,41250µm,0.3s
ZONE Zone 1.03 338 P Pb 00 34 05.1 -0.3
ZONE AML AML
comp=E,6475µm,0.6s
ZONE AML AML
comp=N,12300µm,0.6s
ZONE AML AML
comp=E,27650µm,0.6s
ZONE AML AML
comp=N,51300µm,1.0s
ZONE AML AML
comp=E,27650µm,1.4s
ZONE AML AML
comp=E,6475µm,1.4s
ZONE AML AML
comp=N,12300µm,1.4s
ZONE AML AML
comp=N,51300µm,1.0s
LMD Lutirano 1.04 135 P Pn 00 34 06.0 +0.2
LMD AML AML
comp=E,2210µm,0.8s
LMD AML AML
comp=N,2345µm,0.8s
LMD AML AML
comp=E,2210µm,1.2s
LMD AML AML
comp=N,2345µm,1.2s
LMD Lutirano 1.04 135 P Pn 00 34 06.1 +0.2
LMD S Sg 00 34 22.6 +2.6
CRMI Carmignano 1.05 168 P Pb 00 34 05.1 -0.5
CRMI AML AML
comp=E,3235µm,0.6s
CRMI AML AML
comp=N,1700µm,1.4s
CRMI AML AML
comp=N,1820µm,1.4s
CRMI AML AML
comp=E,3240µm,0.6s
CRMI AML AML
comp=E,3400µm,0.6s
CRMI AML AML
comp=N,1820µm,0.6s
CRMI AML AML
comp=N,1700µm,0.6s
SANR Sandrigo 1.06 38 P Pb 00 34 05.8 0.0
GAVI Passo Gaver BS 1.11 352⇓ePg Pn 00 34 07.0 0.0
GAVI eSg Sg 00 34 24.3 +2.0
DOSS Dosso del Somm 1.12 19 ePg Pn 00 34 07.1 0.0
DOSS eSg Sg 00 34 23.8 +1.1
DOSS Dosso del Somm 1.12 19 ⇓P Pn 00 34 06.8 -0.3
DOSS AML AML
comp=N,26400µm,0.5s
DOSS AML AML
comp=E,27600µm,0.5s
DOSS AML AML
comp=N,17850µm,0.5s
DOSS AML AML
comp=E,17750µm,0.5s
DOSS Dosso del Somm 1.12 19 P Pn 00 34 06.8 -0.3
DOSS S Sg 00 34 23.6 +0.9
BRSN Barisano 1.13 117 P Pg 00 34 08.1 +0.1
BRSN AML AML
comp=E,12695µm,1.0s
BRSN AML AML
comp=E,13650µm,0.6s
BRSN AML AML
comp=N,12800µm,0.9s
BRSN AML AML
comp=E,12695µm,1.0s
BRSN AML AML
comp=N,12950µm,0.7s
BRSN AML AML
comp=E,13650µm,1.4s
BRSN AML AML
comp=N,12800µm,1.1s
RUFI Rufina 1.15 148 P Pb 00 34 07.5 +0.2
RUFI AML AML
comp=E,2900µm,0.8s
RUFI AML AML
comp=N,2220µm,1.3s
RUFI AML AML
comp=N,2220µm,0.7s
RUFI Rufina 1.15 148 P Pb 00 34 07.6 +0.3
EUCT Pavia 1.16 290 P Pg 00 34 09.3 +0.8
LUSI Trento, Gardas 1.16 9 ⇓P Pn 00 34 07.5 0.0
LUSI S Sg 00 34 24.2 +0.4
LUSI AML AML
comp=E,28150µm,0.7s
LUSI AML AML
comp=N,37450µm,0.3s
RONC Roncone 1.17 358 ePg Pb 00 34 08.0 +0.2
RONC eSg Sg 00 34 25.6 +1.6
RONC Roncone 1.17 358 ⇓P Pn 00 34 07.6 -0.1
RONC AML AML
comp=E,21050µm,0.7s
RONC AML AML
comp=N,16450µm,0.2s
RONC AML AML
comp=E,14650µm,0.7s
RONC AML AML
comp=E,14650µm,1.3s
RONC AML AML
comp=N,20100µm,0.2s
MDI Monti di Nese 1.18 325 P Pn 00 34 07.8 +0.1
MDI AML AML
comp=N,13050µm,0.4s
MDI AML AML
comp=N,14150µm,0.4s
MDI AML AML
comp=E,11510µm,0.9s
MDI AML AML
comp=E,11090µm,0.9s
MDI AML AML
comp=N,13050µm,1.6s
MDI AML AML
comp=N,14150µm,1.6s
MDI Monti di Nese 1.18 325 P Pb 00 34 08.0 0.0
MDI S Sg 00 34 25.2 +0.9
MILN Milano 1.22 304 P Pg 00 34 09.3 -0.4
MILN AML AML
comp=E,20250µm,0.6s
MILN AML AML
comp=N,26200µm,1.0s
MILN AML AML
comp=E,24750µm,0.6s
MILN AML AML
comp=N,26250µm,1.0s
MERA Merate 1.23 314 P Pb 00 34 09.3 +0.5
SFI Santa Sofia 1.24 137 P Pn 00 34 08.7 +0.2
SFI AML AML
comp=E,1680µm,1.4s
SFI AML AML
comp=N,2350µm,1.0s
SFI AML AML
comp=E,1730µm,1.4s
SFI AML AML
comp=N,2335µm,1.0s
SFI AML AML
comp=N,2350µm,1.0s
SFI AML AML
comp=N,2335µm,1.0s
SFI AML AML
comp=E,1680µm,0.6s
SFI AML AML
comp=E,1730µm,0.6s
MABI Malga Bissina 1.24 355 P Pb 00 34 09.0 -0.1
MABI S Sg 00 34 26.2 -0.2
MABI AML AML
comp=E,4685µm,1.0s
MABI AML AML
comp=N,5660µm,0.2s
SARZ Sarezzano 1.26 273 P Pg 00 34 10.2 -0.2
SARZ AML AML
comp=N,10615µm,0.6s
SARZ AML AML
comp=E,7565µm,0.5s
SARZ AML AML
comp=E,7380µm,0.5s
SARZ AML AML
comp=N,10835µm,0.6s
SARZ Sarezzano 1.26 273 P Pg 00 34 11.0 +0.6
SARZ S Sg 00 34 32.2 +5.4
RNCA Ronca, Sant'Ol 1.28 255 P Pb 00 34 09.9 +0.3
RNCA Ronca, Sant'Ol 1.28 255 P Pb 00 34 09.3 -0.3
RNCA Ronca, Sant'Ol 1.28 255 S Sg 00 34 28.1 +0.7
RNCA Ronca, Sant'Ol 1.28 255 P Pn 00 34 09.2 +0.2
RNCA S Sg 00 34 27.9 +0.4
GAGG Gaggia 1.28 9 ePg Pb 00 34 09.7 0.0
GAGG eSg Sg 00 34 28.2 +0.5
GAGG Gaggia 1.28 9 P Pn 00 34 09.4 +0.1
GAGG S Sg 00 34 27.5 -0.2
GENL Genova Univers 1.29 252 P Pb 00 34 10.1 +0.5
GENL S Sg 00 34 28.4 +0.7
ASQU Asqua 1.29 141 P Pb 00 34 10.0 +0.1
ASQU AML AML
comp=N,1920µm,0.5s
ASQU AML AML
comp=E,1870µm,0.7s
PANI Panarotta 1.32 20 ePg Pn 00 34 10.0 +0.2
PANI eSg Sg 00 34 29.5 +0.7
CGRP Cima Grappa 1.33 36 ePg Pb 00 34 10.3 -0.2
CGRP eSg Sg 00 34 29.4 +0.3
CTI Castel Tesino 1.41 29 Pn 00 34 10.8 -0.2
CTI Castel Tesino 1.41 29 P Pn 00 34 10.9 -0.1
CSNT Castellina Chi 1.41 162 P Pn 00 34 11.1 +0.2
PCP Piancastagn 1.54 261 P Pb 00 34 14.0 -0.2
PCP Piancastagn 1.54 261 P Pb 00 34 14.0 -0.2
PCP S Sg 00 34 36.8 +0.8
MUGIO Muggio 1.60 314 AML AML
comp=E,3375µm,1.0s
MUGIO AML AML
comp=N,3415µm,0.5s
ROTM Rocchetta Tana 1.65 272 P Pb 00 34 16.0 0.0
ROTM Rocchetta Tana 1.65 272 S Sg 00 34 43.4 +4.0
BERNI Berninapass 1.66 344 AML AML
comp=E,2445µm,1.4s
BERNI AML AML
comp=E,2445µm,0.6s
BERNI AML AML
comp=N,2175µm,0.8s
FUORN Ofenpass-Fuorn 1.83 351 Pn Pn 00 34 17.7 +0.9
FUORN Ofenpass-Fuorn 1.83 351 AML AML
comp=E,2015µm,0.5s
FUORN AML AML
comp=N,1555µm,0.6s
FUORN AML AML
comp=N,1555µm,1.4s
CANO Canova, Maglio 1.85 252 P Pn 00 34 17.2 +0.3
CANO Canova, Maglio 1.85 252 S Sb 00 34 41.9 -0.2
RORO Rocca Rossa 2.00 250 P Pn 00 34 18.9 0.0
BRES Bressanone 2.02 21 AML AML
comp=N,3005µm,1.0s
BRES AML AML
comp=E,2690µm,0.4s
CASP Castiglione de 2.03 176 Pn Pn 00 34 19.3 -0.1
STAL STALIGIAL 2.03 44 Pn Pn 00 34 18.8 -0.6
DAVOX Davos/Dischmat 2.04 344 AML AML
comp=E,1235µm,0.6s
DAVOX AML AML
comp=N,1695µm,0.7s
DAVOX AML AML
comp=N,1695µm,1.3s
DAVOX Davos/Dischmat 2.04 344 Pn Pb 00 34 22.0 -0.8
comp=N,57nm,0.3s,baz=161,slow=16,SNR=456
DAVOX Sn Sb 00 34 47.5 -0.4
baz=292,slow=19
DAVOX LR LR 00 35 16.3
comp=N,202nm,18.4s,baz=126,slow=43
comp=N,146nm,0.3s
MORSI Morsiglia 2.09 207 P Pn 00 34 19.5 -0.7
MORSI S Sn 00 34 46.0 +0.3
GBOS Grotte di Boss 2.11 255 P Pn 00 34 20.7 +0.3
FUSIO Fusio 2.16 320 AML AML
comp=E,2785µm,0.7s
FUSIO AML AML
comp=N,1740µm,0.4s
TRAV Traversella 2.19 290 P Pn 00 34 20.5 -1.1
FETA Feichten 2.21 1 i Pn Pb 00 34 23.9 -1.6
comp=N,34nm,0.3s,SNR=165
FETA eSn Sg 00 34 55.8 -1.3
comp=N,131nm,0.4s
MMK Mattmark 2.27 304 AML AML
comp=E,1995µm,0.8s
MMK AML AML
comp=E,1995µm,1.2s
MMK AML AML
comp=N,1785µm,0.6s
MMK AML AML
comp=N,1785µm,1.4s
PIAF les Granges de 2.30 253 P Pn 00 34 23.3 +0.2
ABTA Abfaltersbach 2.32 33 ePn Pn 00 34 24.7 +1.3
comp=N,22nm,0.2s,SNR=72
ABTA eSn Sb 00 34 54.7 -1.1
comp=N,464nm,0.6s
SABO M.te Sabotino 2.37 59 Pn Pn 00 34 23.9 -0.1
SAOF Saorge 2.38 251 P Pn 00 34 25.0 +0.7
SAOF S Sb 00 34 55.4 -2.2
ENR Entracque 2.40 257 P Pn 00 34 25.1 +0.5
PLONS Plons/SG 2.41 338 AML AML
comp=N,785µm,0.5s
PLONS AML AML
comp=E,1132µm,0.7s
BHB Bricherasio 2.43 272 P Pn 00 34 23.8 -1.0
SQTA Sankt Quirin 2.43 9 ePn Pn 00 34 26.9 +1.9
comp=E,117nm,0.2s,SNR=280
SQTA eSn Sb 00 34 60.0 +0.9
comp=E,431nm,0.3s
RSP Reno Superiore 2.44 279 P Pn 00 34 23.4 -1.7
STV Sant Anna di V 2.46 258 P Pn 00 34 25.8 +0.4
BURY Giardini Botan 2.47 246 P Pn 00 34 25.2 -0.1
SKDS Skadanscina 2.47 72 i Pn Pn 00 34 24.4 -1.0
SKDS i Sn Sn 00 34 53.1 -2.1
SKDS IAML 00 35 15.5
comp=Z,413nm,0.5s
SKDS Skadanscina 2.47 72⇓i Pn Pn 00 34 24.4 -1.0
FDMO Fiordimonte 2.49 135 Pn Pn 00 34 26.7 +1.0
TURF col de Turini 2.50 251 P Pn 00 34 26.4 +0.4
TURF S Sn 00 34 58.4 +2.4
SBF Sospel 2.51 249 ePn Pn 00 34 26.9 +0.9
SBF eSn Sn 00 34 57.9 +1.7
comp=Z,734nm,0.5s
DAVA Damuels 2.53 348 ePn Pb 00 34 29.0 -2.2
comp=Z,70nm,0.3s,SNR=92
DAVA i Sn Sb 00 35 02.0 +0.1
comp=Z,508nm,0.4s
DAVA Damuels 2.53 348 ePn Pb 00 34 28.9 -2.2
DAVA Damuels 2.53 348 ePn Pb 00 34 28.9 -2.2
WTTA Wattenberg 2.54 15 ePn Pn 00 34 28.0 +1.5
comp=Z,148nm,0.3s,SNR=163
WTTA eSn Sb 00 35 04.2 +2.1
comp=Z,152nm,0.2s
WTTA Wattenberg 2.54 15 ePn Pn 00 34 28.2 +1.7
WTTA Wattenberg 2.54 15 ePn Pn 00 34 28.2 +1.7
MOTA Moosalm 2.55 7 i Pn Pb 00 34 29.2 -2.1
comp=Z,30nm,0.2s
MOTA eSn Sb 00 35 02.2 -0.1
comp=Z,341nm,0.3s
PZZ Stroppo 2.56 264 P Pn 00 34 26.0 -0.8
MON Monaco 2.58 246 P Pn 00 34 27.1 +0.3
SPIF crte de Spivo 2.58 254 P Pn 00 34 28.0 +1.0
BNALP Bannalp 2.59 323 AML AML
comp=N,1018µm,1.5s
BNALP AML AML
comp=E,958µm,0.6s
BNALP AML AML
comp=N,1018µm,0.5s
LSD Lago del Serru 2.59 286 P Pn 00 34 25.5 -1.8
WATA Walderalm 2.60 14 ePn Pn 00 34 28.9 +1.6
comp=N,33nm,0.2s,SNR=200
WATA eSn Sb 00 35 04.0 +0.2
comp=N,243nm,0.2s
GUMA Gualdo di Mace 2.60 131 P Pn 00 34 27.9 +0.7
OBER Oberstdorf 2.60 354 ePn Pn 00 34 29.7 +2.4
OBER Oberstdorf 2.60 354 ePn Pn 00 34 29.7 +2.4
DIX Grande Dixence 2.62 300 P Pn 00 34 27.6 -0.1
NRCA Norcia 2.65 137 P Pn 00 34 28.5 +0.5
GAVE Gavelli 2.66 142 AML AML
comp=E,908µm,0.6s
GAVE AML AML
comp=N,784µm,0.4s
GAVE AML AML
comp=N,784µm,1.6s
ISO Isola 2.67 258 P Pn 00 34 28.3 +0.1
RETA Reutte 2.67 1 ePn Pn 00 34 30.4 +2.1
comp=N,24nm,0.2s,SNR=73
RETA i Sn Sb 00 35 04.3 -1.6
comp=N,118nm,0.4s
REMY Saint-Rhmy-en 2.68 294 P Pn 00 34 28.0 -0.6
MVIF Mont Vial 2.69 251 P Pn 00 34 29.7 +1.2
PART Garmisch-Parte 2.70 6 eSn Sb 00 35 04.7 -1.9
PART Garmisch-Parte 2.70 6 eSn Sb 00 35 04.7 -1.9
MYKA Terra Mystica 2.76 48 ePn Pn 00 34 29.9 +0.4
comp=N,7.8nm,0.2s,SNR=16
MYKA eSn Sn 00 35 05.1 +2.8
comp=N,96nm,0.4s
RRL Rocca Remolon 2.76 274 P Pn 00 34 28.6 -1.0
MBDF Montbardon 2.78 270 ePn Pn 00 34 29.1 -0.7
MBDF eSn Sn 00 35 04.4 +1.4
comp=N,146nm,0.5s
CEY Cerknica 2.80 69⇓i Pn Pn 00 34 29.0 -1.0
JAUF Jausiers 2.83 264 P Pn 00 34 30.0 -0.5
SENIN Lac Senin/Sane 2.83 304 P Pn 00 34 31.1 +0.6
EILF Villa Eilenroc 2.85 245 P Pn 00 34 30.5 -0.1
BNI Bardonecchia 2.85 276 P Pn 00 34 30.3 -0.4
OGMO Fort Saint-Gob 2.86 279 P Pn 00 34 30.0 -0.8

LPG **La Plagne** 2.86 285 *e*Pn **Pn** 00 34 30.0 -1.0
LPG *e*Sn **Sn** 00 35 06.2 +1.1
comp=N,224nm,0.5s
**LPL La Plagne** 2.88 285 *e*Pn **Pn** 00 34 30.9 -0.3
LPL *e*Sn **Sn** 00 35 06.5 +1.1
comp=N,60nm,0.3s
**ENAUX Enaux** 2.88 257 P **Pn** 00 34 32.4 +1.2
**UBR Ueberruh** 2.89 352 *e*Pn **Pn** 00 34 33.1 +1.9
**UBR Ueberruh** 2.89 352 *e*Pn **Pn** 00 34 33.1 +1.9
**CALF Calern** 2.90 250 P **Pn** 00 34 32.2 +0.8
**CREF Crivoux** 2.90 266 P **Pn** 00 34 31.1 -0.4
**SMPL Sampolo** 2.90 201 P **Pn** 00 34 32.6 +1.2
**KBA Koelnbreinsper** 2.93 39 *e*Pn **Pn** 00 34 33.0 +1.1
comp=N,16nm,0.2s,SNR=26
KBA *e*Sn **Sg** 00 35 21.5 +1.3
comp=N,66nm,0.3s
**ZUR Degenried** 2.94 331 P **Pn** 00 34 33.2 +1.3
**LESA Schwarzleotal** 2.96 27 *e*Pn **Pn** 00 34 34.4 +2.3
comp=N,123nm,0.4s
LESA *e*Sn **Sb** 00 35 12.7 -1.4
comp=N,86nm,0.3s
**OGAG Argentiere** 2.97 264 P **Pn** 00 34 32.2 -0.2
**CAMP Campotosto** 3.02 138 Pn **Pn** 00 34 33.4 +0.3
**OGSI Sixt** 3.03 296 P **Pn** 00 34 34.9 +1.8
**OBKA Obir** 3.20 57 *i* Pn **Pn** 00 34 35.7 +0.2
comp=N,12nm,0.2s,SNR=12
OBKA *i* Sn **Sb** 00 35 17.5 -3.6
comp=N,113nm,0.3s
**OBKA Obir** 3.20 57 ⇓*i* Pn **Pn** 00 34 35.1 -0.4
**OBKA Obir** 3.20 57 *e*Pn **Pn** 00 34 35.3 -0.2
**OBKA Obir** 3.20 57 *e*Pn **Pn** 00 34 35.3 -0.2
**OGDI Digne** 3.21 259 P **Pn** 00 34 37.8 +2.2
**SULZ Cheisacher** 3.25 328 P **Pn** 00 34 36.8 +0.8
**TRIGF Trigance** 3.25 252 P **Pn** 00 34 37.1 +0.9
**TORNY Torny/Romont** 3.25 308 P **Pn** 00 34 37.3 +1.0
**RJOB Jochberg** 3.27 26 *e*Pn **Pn** 00 34 38.2 +1.7
**RJOB Jochberg** 3.27 26 *e*Pn **Pn** 00 34 38.2 +1.7
**BOJS Bojanci** 3.31 76 ⇓*i* Pn **Pn** 00 34 36.6 -0.3
**SLE Schleitheim** 3.31 334 P **Pn** 00 34 37.5 +0.5
**LMR La Mourre** 3.35 245 *e*Pn **Pn** 00 34 37.6 +0.1
LMR *e*Sn **Sn** 00 35 16.8 +0.1
comp=N,216nm,0.3s
**FUR Furstenfeldbru** 3.38 7 *e*Pn **Pn** 00 34 39.0 +1.2
FUR *e*Sn **Sn** 00 35 18.8 +1.4
**FUR Furstenfeldbru** 3.38 7 *e*Pn **Pn** 00 34 39.0 +1.2
FUR *e*Sn **Sn** 00 35 18.8 +1.4
**ORIF Oris-en-Rattie** 3.41 273 *e*Pn **Pn** 00 34 39.5 +1.0
ORIF *e*Sn **Sn** 00 35 19.2 +0.8
comp=N,130nm,0.4s
**ORIF Oris-en-Rattie** 3.41 273 P **Pn** 00 34 39.4 +1.0
**GUT Gutenstein** 3.43 342 P **Pn** 00 34 38.9 +0.3
**BLAF les Blancs** 3.43 257 P **Pn** 00 34 39.3 +0.7
**BOURR Bourrignon** 3.52 318 P **Pn** 00 34 40.4 +0.5
**BIOA Bad Ischl, Aus** 3.54 34 *i* Pn **Pn** 00 34 41.4 +1.4
comp=N,20nm,0.3s,SNR=35
BIOA *e*Sn **Sn** 00 35 24.9 +3.5
comp=N,155nm,0.4s
**GIMEL St. Georges /** 3.54 301 AML AML
comp=N,260µm,1.3s
GIMEL AML AML
comp=E,220µm,0.5s
GIMEL AML AML
comp=N,260µm,0.7s
**GIMEL St. Georges /** 3.54 301 P **Pn** 00 34 41.0 +0.8
**ENDD Endenburg** 3.54 326 P **Pn** 00 34 40.4 +0.2
**SOKA Soboth** 3.57 57 *i* Pn **Pn** 00 34 40.9 +0.2
comp=N,7.1nm,0.3s,SNR=16
SOKA *i* Sn **Sn** 00 35 23.7 +1.2
comp=N,24nm,0.3s
**FELD Feldberg im Sc** 3.58 330 P **Pn** 00 34 41.0 +0.3
**OGSM Saint Maurice** 3.61 284 P **Pn** 00 34 41.4 +0.4
**MLYF Mely** 3.61 258 P **Pn** 00 34 42.2 +1.1
**STUF Presbytere Uff** 3.61 323 P **Pn** 00 34 41.4 +0.3
**BRANT Les Verrieres** 3.62 307 P **Pn** 00 34 41.9 +0.6
**INTR Introdacqua** 3.66 139 Pn **Pn** 00 34 42.8 +1.0
**KIZ Kirchzarten** 3.67 330 P **Pn** 00 34 42.2 +0.2
**CABF La Chapelle** 3.68 301 *e*Pn **Pn** 00 34 43.1 +1.0
CABF *e*Sn **Sn** 00 35 25.5 +0.4
comp=N,153nm,0.7s
**CHMF Charmoille** 3.71 312 P **Pn** 00 34 43.1 +0.6
**BSTF la Bastide-des** 3.73 257 P **Pn** 00 34 43.9 +1.2
**SMRF Simiane la Rot** 3.75 259 *e*Pn **Pn** 00 34 44.0 +1.0
SMRF *e*Sn **Sn** 00 35 28.3 +1.6
comp=N,73nm,0.5s
**OG35 Corcelles** 3.80 291 P **Pn** 00 34 44.1 +0.4
**LEPF PUYLOUBIER** 3.81 252 P **Pn** 00 34 44.5 +0.7
**RIVEL MONT RIVEL** 3.85 302 P **Pn** 00 34 45.3 +0.9
**STBO Bollwiller** 3.85 323 P **Pn** 00 34 44.9 +0.5
**BFO Black Forest** 3.87 336 Pn **Pn** 00 34 44.7 0.0
**BFO Black Forest** 3.87 336 *e*Pn **Pn** 00 34 45.0 +0.3
BFO *e*Sn **Sn** 00 35 28.0 -1.7
**BFO Black Forest** 3.87 336 *e*Pn **Pn** 00 34 45.0 +0.3
BFO *e*Sn **Sn** 00 35 28.0 -1.7
**VOGT Vogtsburg - To** 3.87 329 P **Pn** 00 34 45.0 +0.3
**MOF Molkenrain** 3.90 322 P **Pn** 00 34 45.6 +0.4
**NORI Noordlinger Ri** 3.91 360 *e*Pn **Pn** 00 34 44.7 -0.4
NORI *e*Sn **Sn** 00 35 29.3 -1.3
**NORI Noordlinger Ri** 3.91 360 *e*Pn **Pn** 00 34 44.7 -0.4
NORI *e*Sn **Sn** 00 35 29.3 -1.3
**BOUC Bouclans** 3.92 310 P **Pn** 00 34 45.6 +0.3
**MOA Molln** 3.92 38 *i* Pn **Pn** 00 34 46.4 +1.0
comp=N,27nm,0.2s,SNR=30
MOA *i* Sn **Sn** 00 35 34.1 +3.1
comp=N,51nm,0.4s
**MOA Molln** 3.92 38 *e*Pn **Pn** 00 34 46.5 +1.1
MOA *e*Sn **Sn** 00 35 34.0 +3.1
**MOA Molln** 3.92 38 *e*Pn **Pn** 00 34 46.2 +0.8
**MOA Molln** 3.92 38 *e*Pn **Pn** 00 34 46.2 +0.8
**WALT Westhalten** 3.93 324 P **Pn** 00 34 45.8 +0.3
**HINF Hinteralfeld** 4.00 320 *e*Pn **Pn** 00 34 46.2 -0.3
HINF *e*Sn **Sn** 00 35 31.6 -1.3
comp=N,137nm,0.2s
**RONF Ronchamp** 4.02 317 P **Pn** 00 34 46.9 +0.1
**OPP Oppenau** 4.06 336 P **Pn** 00 34 47.8 +0.5
**STU Stuttgart** 4.09 346 Pn **Pn** 00 34 48.0 +0.4
**SAUF chteau de Sau** 4.09 260 P **Pn** 00 34 48.2 +0.6
**ARSA Arzberg** 4.16 52 *i* Pn **Pn** 00 34 48.5 -0.2
comp=N,22nm,0.3s,SNR=19
ARSA *i* Sn **Sn** 00 35 37.4 +0.5
comp=N,17nm,0.5s
**ECH Echery** 4.18 326 Pn **Pn** 00 34 48.7 -0.2
**ECH Echery** 4.18 326 P **Pn** 00 34 49.0 +0.1
**A050A Klekovaca** 4.19 93 *e*Pn **Pn** 00 34 49.4 +0.3
**T1412 Lupara (CB)** 4.25 134 AML AML
comp=N,26µm,1.6s
T1412 AML AML
comp=E,495µm,1.6s
T1412 AML AML
comp=E,495µm,0.4s
**BABA Baden-Baden-Ne** 4.26 337 P **Pn** 00 34 50.7 +0.7
**WLS Welschbruch** 4.26 329 P **Pn** 00 34 50.3 +0.2
**VIVF Saint-Julien-l** 4.27 273 *e*Pn **Pn** 00 34 49.9 -0.3
VIVF *e*Sn **Sn** 00 35 39.8 +0.3
comp=E,31nm,0.3s
**CDF Champ du Feu** 4.29 328 *e*Pn **Pn** 00 34 50.6 +0.1
CDF *e*Sn **Sn** 00 35 38.9 -1.3
comp=E,103nm,0.3s
**PRIJ Prijedor** 4.29 86 *e*Pn **Pn** 00 34 48.9 -1.6
**SSB Saint Sauveur** 4.37 278 Pn **Pn** 00 34 51.1 -0.4
**SSB Saint Sauveur** 4.37 278 P **Pn** 00 34 50.9 -0.7
**HAU Haudompre** 4.37 318 *e*Pn **Pn** 00 34 51.8 +0.2
HAU *e*Sn **Sn** 00 35 40.1 -2.0
comp=E,174nm,0.2s
**HOHE HOHENGOEFT** 4.43 331 P **Pn** 00 34 52.4 +0.2
**A051A Mrakovica** 4.43 85 *e*Pn **Pn** 00 34 51.9 -0.5
**NEEW Neewiller pres** 4.50 338 P **Pn** 00 34 54.1 +0.8
**GEC2 GERESS Array S** 4.53 26 Pn **Pn** 00 34 53.8 0.0
**GEC2 GERESS Array S** 4.53 26 *e*Pn **Pn** 00 34 53.8 0.0
**GEC2 GERESS Array S** 4.53 26 *e*Pn **Pn** 00 34 53.8 0.0
**GERES GERESS Array B** 4.53 26 Pn **Pn** 00 34 53.6 -0.2
**GERES GERESS Array B** 4.53 26 Pn **Pn** 00 34 53.8 0.0
comp=E,10.0nm,0.3s,baz=199,slow=12,SNR=217
GERES Sn **Sn** 00 35 44.2 -1.9
comp=E,7.0nm,0.3s,baz=189,slow=32,SNR=4.5
GERES Lg Lg 00 36 10.0
comp=E,12nm,0.3s,baz=213,slow=30,SNR=4.7
comp=E,12nm,0.3s
**XAFF Xaffevillers** 4.55 324 P **Pn** 00 34 54.7 +0.7
**WET Wettzell** 4.58 18 *e*Pn **Pn** 00 34 54.3 -0.2
**WET Wettzell** 4.58 18 *e*Pn **Pn** 00 34 54.3 -0.2
**CIEL Dossenheim-sur** 4.62 332 P **Pn** 00 34 55.2 +0.3
**BLY Banja Luka** 4.63 89 *e*Pn **Pn** 00 34 55.2 +0.1
**BLY Banja Luka** 4.63 89 ⇓*i* Pn **Pn** 00 34 55.1 0.0

**PLYF Puligny Montra** 4.66 299 P **Pn** 00 34 55.9 +0.4
**LEMB Lembach** 4.67 336 P **Pn** 00 34 55.2 -0.4
**CKRC Cesky Krumlov** 4.72 31 *e*Pn **Pn** 00 34 56.5 +0.2
CKRC *e*SN **Sn** 00 35 50.9 +0.4
**PAOL Paolisi** 4.74 142 Pn **Pn** 00 34 59.0 +2.3
**CONA Conrad Observa** 4.75 47 *i* Pn **Pn** 00 34 57.3 +0.5
comp=E,8.0nm,0.3s,SNR=45
CONA *i* Sn **Sn** 00 35 53.1 +1.7
comp=E,37nm,0.6s
**KHC Kasperske Hory** 4.75 24 Pn **Pn** 00 34 56.6 -0.2
**KHC Kasperske Hory** 4.75 24 *e*PN **Pn** 00 34 57.0 +0.2
KHC x x 00 35 16.0
KHC *e*SN **Sn** 00 35 51.3 -0.1
KHC x x 00 36 14.0
**SGRT San Giovanni R** 4.80 128 Pn **Pn** 00 34 56.4 -1.1
**VOEL Voellerdingen** 4.81 331 P **Pn** 00 34 58.1 +0.5
**KTD Kalmit** 4.84 339 P **Pn** 00 34 58.5 +0.5
**RONA Rosalia, Austr** 4.85 52 *i* Pn **Pn** 00 34 57.8 -0.3
comp=E,2.5nm,0.1s,SNR=24
RONA *i* Sn **Sn** 00 35 50.8 -3.0
comp=E,32nm,0.4s
**GRFO Grafenberg** 4.89 4 Pn **Pn** 00 34 57.2 -1.5
**GRA1 Grafenberg Arr** 4.89 4 Pn **Pn** 00 34 57.3 -1.4
**GRF Grafenberg Arr** 4.89 4 *e*Pn **Pn** 00 34 57.4 -1.3
**GRF Grafenberg Arr** 4.89 4 *e*Pn **Pn** 00 34 57.4 -1.3
**COLF Collangettes** 4.99 281 P **Pn** 00 34 59.2 -0.8
**PAGF Fort de Pagny** 5.06 319 *e*Pn **Pn** 00 35 01.8 +0.8
baz=130
PAGF *e*Sn **Sn** 00 35 57.4 -1.5
comp=E,56nm,0.3s
**ROTZ Rotzenmuhle** 5.06 11 *e*Pn **Pn** 00 34 59.8 -1.2
**ROTZ Rotzenmuhle** 5.06 11 *e*Pn **Pn** 00 34 59.8 -1.2
**SMF Signal de Mont** 5.12 293 *e*Pn **Pn** 00 35 01.9 0.0
SMF *e*Sn **Sn** 00 36 00.3 -0.2
comp=E,231nm,0.4s
**SFTF Sexfontaines** 5.16 313 *e*Pn **Pn** 00 35 02.4 0.0
baz=127
SFTF *e*Sn **Sn** 00 36 00.2 -1.2
comp=E,46nm,0.3s
**MANO Manonville** 5.17 323 P **Pn** 00 35 03.5 +1.0
**ZVC Zvikov** 5.21 26 *e*PN **Pn** 00 35 03.1 +0.1
ZVC *e*SN **Sn** 00 36 01.2 -1.4
**MANZ Manzenberg** 5.26 10 *e*Pn **Pn** 00 35 02.5 -1.3
MANZ *e*Sn **Sn** 00 36 01.3 -2.7
**MANZ Manzenberg** 5.26 10 *e*Pn **Pn** 00 35 02.5 -1.3
MANZ *e*Sn **Sn** 00 36 01.3 -2.7
**LBL Lubilhac** 5.28 277 P **Pn** 00 35 03.1 -1.0
**LOR Lormes** 5.34 300 *e*Pn **Pn** 00 35 05.2 +0.3
baz=121
LOR *e*Sn **Sn** 00 36 05.2 -0.7
comp=E,107nm,0.3s
**MEZF Maizieres J'vi** 5.34 316 *e*Pn **Pn** 00 35 05.3 +0.4
baz=128
MEZF *e*Sn **Sn** 00 36 05.4 -0.5
comp=E,76nm,0.4s
**VSL Villasalto** 5.40 191 Pn **Pn** 00 35 07.7 +2.0
**STON Ston** 5.44 108 *e*Pn **Pn** 00 35 06.7 +0.5
STON *e*Sn **Sn** 00 36 05.5 -2.7
**STON Ston** 5.44 108 *e*Pn **Pn** 00 35 05.9 -0.3
**AGO Saint Agoulin** 5.45 286 P **Pn** 00 35 05.9 -0.5
**SSF Saint Saulge** 5.48 297 *e*Pn **Pn** 00 35 05.9 -0.9
SSF *e*Sn **Sn** 00 36 07.8 -1.5
comp=E,40nm,0.4s
**AVF Avril sur Loir** 5.49 294 *e*Pn **Pn** 00 35 06.9 +0.1
AVF *e*Sn **Sn** 00 36 07.0 -2.5
comp=E,37nm,0.4s
**ABH Alteburg** 5.49 338 P **Pn** 00 35 07.5 +0.6
**TREC Trest** 5.56 35 *e*PN **Pn** 00 35 07.7 -0.1
TREC *e*SN **Sn** 00 36 09.8 -1.4
**ZST Bratislava** 5.58 50 *e*PN **Pn** 00 35 08.3 +0.2
ZST *e*SN **Sn** 00 36 09.8 -1.8
**NAST IGS Nastaetten** 5.71 342 *e*Pn **Pn** 00 35 10.2 +0.3
**CLAF Gruissan** 5.73 256 P **Pn** 00 35 09.8 -0.3
**WLF Walferdange** 5.75 329 Pn **Pn** 00 35 11.5 +1.1
**WLF Walferdange** 5.75 329 P **Pn** 00 35 11.2 +0.8
**WLF Walferdange** 5.75 329 *d*PP Pn 00 35 17.2 +6.8
WLF *d*S **Sn** 00 36 14.5 -1.2
**BGF Bois d'Agland** 5.75 290 *e*Pn **Pn** 00 35 10.5 0.0
BGF *e*Sn **Sn** 00 36 15.3 -0.8
comp=E,108nm,0.5s
**FRNF Fournols** 5.77 279 P **Pn** 00 35 11.0 +0.1
**MORH Mrgy, Hungar** 5.77 73 ⇓P **Pn** 00 35 10.6 -0.1
**KRUC Moravsky** 5.78 41 *e*PN **Pn** 00 35 10.4 -0.4
KRUC *e*SN **Sn** 00 36 14.7 -1.9
**PRU Pruhonice** 5.80 26 *e*PN **Pn** 00 35 11.1 -0.1
**GOPC GO Pecny, Ondr** 5.81 27 *e*PN **Pn** 00 35 11.5 +0.1
**PRA Prague** 5.84 25 *e*PN **Pn** 00 35 11.9 +0.2
**BGG Burgeitz** 5.85 338 *e*Pn **Pn** 00 35 11.8 0.0
BGG *e*Sn **Sn** 00 36 16.7 -1.6
comp=E,27nm,0.6s
**TREB Trebinje** 5.94 108 *e*Pn **Pn** 00 35 14.3 +1.2
**TREB Trebinje** 5.94 108 *e*Pn **Pn** 00 35 13.2 +0.1
**HAPS Han Pijesak,Bl** 5.97 94 *e*Pn **Pn** 00 35 13.8 +0.2
**HAPS Han Pijesak,Bl** 5.97 94 *e*Pn **Pn** 00 35 13.3 -0.3
**BRY Bratogost** 6.00 106 *e*Pn **Pn** 00 35 15.0 +1.0
**VRAC Vranov** 6.04 40 *e*PN **Pn** 00 35 13.7 -0.8
VRAC *e*SN **Sn** 00 36 21.3 -1.9
**VRAC Vranov** 6.04 40 Pn **Pn** 00 35 13.7 -0.8
comp=E,1.3nm,0.3s,baz=239,slow=14,SNR=15
VRAC Sn **Sn** 00 36 20.6 -2.5
comp=E,1.4nm,0.3s,baz=236,slow=14,SNR=5.8
VRAC Lg Lg 00 36 55.6
comp=E,1.5nm,0.3s,baz=319,slow=13,SNR=3.4
VRAC LR LR 00 38 17.7
comp=E,104nm,18.2s,baz=228,slow=46
comp=E,3.0nm,0.3s
**VRAC Vranov** 6.04 40 ⇓P **Pn** 00 35 13.5 -1.0
**HSKC Hora Svate Kat** 6.08 17 *e*PN **Pn** 00 35 15.2 +0.1
HSKC *e*SN **Sn** 00 36 23.6 -0.6
**MATE Matera** 6.09 131 ⇑P **Pn** 00 35 16.1 +1.1
**HYF Humbligny** 6.11 297 *e*Pn **Pn** 00 35 16.1 +0.7
HYF *e*Sn **Sn** 00 36 22.7 -2.1
**SJAF Saint Jean de** 6.12 250 P **Pn** 00 35 15.5 0.0
**CAF Calviac** 6.12 274 *e*Pn **Pn** 00 35 15.6 0.0
CAF *e*Sn **Sn** 00 36 23.9 -1.2
comp=E,17nm,0.5s
**TCF Toulx Ste Croi** 6.12 287 *e*Pn **Pn** 00 35 16.3 +0.7
TCF *e*Sn **Sn** 00 36 23.9 -1.3
comp=E,34nm,0.4s
**UPM Unac-Piva** 6.15 102 *e*Pn **Pn** 00 35 16.5 +0.4
**RICC Richard** 6.18 21 *e*PN **Pn** 00 35 16.2 -0.1
**MTLF Montolieu** 6.27 259 *e*Pn **Pn** 00 35 17.8 +0.2
MTLF *e*Sn **Sn** 00 36 29.0 +0.3
comp=E,14nm,0.6s
**MTLF Montolieu** 6.27 259 P **Pn** 00 35 17.5 -0.1
**JAVC Velka Javorina** 6.27 47 *e*PN **Pn** 00 35 18.0 +0.3
**PVCC Panska Ves** 6.29 23 *e*PN **Pn** 00 35 17.7 -0.2
PVCC *e*SN **Sn** 00 36 27.3 -1.9
**FILF Fillols** 6.30 252 P **Pn** 00 35 19.8 +1.7
**TEKS Tekeris** 6.32 89 *e*Pn **Pn** 00 35 17.4 -0.9
**TEKS Tekeris** 6.32 89 *e*Pn **Pn** 00 35 17.1 -1.2
**BBLS Lazi&#263i** 6.33 96 *e*Pn **Pn** 00 35 18.7 +0.2
**BBLS Lazi&#263i** 6.33 96 *e*Pn **Pn** 00 35 18.0 -0.5
**RUDO Rudo** 6.36 98 *e*Pn **Pn** 00 35 17.0 -1.9
**BHOU Houvegnez** 6.38 332 *d*P **Pn** 00 35 20.6 +1.6
BHOU *d*S **Sn** 00 36 28.4 -3.0
**BRG Berggiesshubel** 6.45 19 Pn **Pn** 00 35 19.8 -0.2
BRG Sn **Sn** 00 36 30.2 -2.8
BRG Sg **Sg** 00 37 14.9 +2.1
BRG Amp 00 37 30.8
comp=Z,42nm,0.8s
BRG Amp 00 38 10.0
comp=E,0.1nm,10.9s
BRG Amp 00 38 17.0
comp=Z,0.3nm,10.1s
BRG Amp 00 38 19.0
comp=N,0.2nm,10.8s
**FRGS Fruska Gora** 6.49 84 *e*Pn **Pn** 00 35 21.2 +0.6
**FRGS Fruska Gora** 6.49 84 *e*Pn **Pn** 00 35 20.0 -0.6
**RCHB Rochefort** 6.49 327 P **Pn** 00 35 22.7 +2.0
**RCHB Rochefort** 6.49 327 *d*P **Pn** 00 35 22.4 +1.8
**RJF Les Rejaudoux** 6.51 278 *e*Pn **Pn** 00 35 21.5 +0.6
RJF *e*Sn **Sn** 00 36 34.3 -0.3
comp=N,5.1nm,0.3s
**BTNL Ternell** 6.54 334 *d*P **Pn** 00 35 23.6 +2.4
BTNL *d*S **Sn** 00 36 30.6 -4.7
**CARF Carcanieres** 6.55 254 P **Pn** 00 35 21.7 +0.2
**DREG Dreilaegerbach** 6.57 334 *e*Pn **Pn** 00 35 22.0 +0.3
**BNS Bensberg** 6.59 340 *e*Pn **Pn** 00 35 22.4 +0.5
**MEM Membach** 6.60 333 *d*P **Pn** 00 35 23.9 +1.8
MEM *d*S **Sn** 00 36 33.1 -3.6
**GIVF Givet** 6.61 325 *e*Pn **Pn** 00 35 23.3 +1.1

GIVF *e*Sn **Sn** 00 36 32.6 -4.5
comp=N,33nm,0.5s
**CLF Chambon-Foret** 6.64 302 Pn **Pn** 00 35 22.8 +0.1
**CLF Chambon-Foret** 6.64 302 P **Pn** 00 35 23.3 +0.6
**PDG Podgorica** 6.67 108 Pn **Pn** 00 35 23.5 +0.4
**PDG Podgorica** 6.67 108 *e*Pn **Pn** 00 35 23.9 +0.9
PDG *e*Sn **Sn** 00 36 35.6 -2.9
**PDG Podgorica** 6.67 108 ⇓*i* Pn **Pn** 00 35 23.2 +0.2
**PDG Podgorica** 6.67 108 ⇓P **Pn** 00 35 23.7 +0.7
**BCLA Clavier** 6.68 329 *d*P **Pn** 00 35 24.6 +1.4
BCLA *d*S **Sn** 00 36 35.4 -3.3
**CLL Collm** 6.68 13 Pn **Pn** 00 35 22.2 -1.0
**CLL Collm** 6.68 13 *e*Pn **Pn** 00 35 22.0 -1.2
CLL *ex* 00 35 27.0
CLL *ex* x 00 36 34.0
CLL *e*(Pg) **Pg** 00 35 56.0 +2.1
CLL *e*Sn Sn 00 36 28.0 -11
CLL *ex* x 00 36 34.0
CLL *ex* x 00 36 46.0
CLL *e*Sb **Sb** 00 36 57.0 -4.0
CLL AMS AMS 00 37 00.0
CLL *e*Sg **Sg** 00 37 19.0 -1.3
**KRLC Kraliky** 6.69 36 *e*PN **Pn** 00 35 23.6 +0.2
KRLC *e*SN **Sn** 00 36 36.5 -2.7
**DOU Dourbes** 6.70 324 *d*P **Pn** 00 35 25.6 +2.1
DOU *d*S **Sn** 00 36 39.0 -0.2
**DIVS Divibare** 6.71 93 *e*Pn **Pn** 00 35 25.7 +2.0
**VYHS Vyhne** 6.71 54 *e*PN **Pn** 00 35 22.4 -1.3
VYHS *e*SN **Sn** 00 36 36.1 -3.5
**DRME Dracevica, Mon** 6.72 110 *e*Pn **Pn** 00 35 23.8 0.0
**VALC Valcebollere** 6.72 252 P **Pn** 00 35 25.0 +1.0
**DPC Dobruska-Polom** 6.72 33 *e*PN **Pn** 00 35 23.4 -0.5
**BGES Gesves** 6.73 328 *d*P **Pn** 00 35 26.0 +2.1
BGES *d*S **Sn** 00 36 39.0 -1.0
**UPC Upice** 6.74 30 *e*PN **Pn** 00 35 23.3 -0.7
**MONQ Montcuq** 6.79 270 P **Pn** 00 35 25.0 +0.3
**BMRD Maredsous** 6.79 326 *d*P **Pn** 00 35 27.2 +2.5
**MORC Moravsky Berou** 6.81 41 Pn **Pn** 00 35 23.9 -1.2
**MORC Moravsky Berou** 6.81 41 *e*PN **Pn** 00 35 24.4 -0.7
**MORC Moravsky Berou** 6.81 41 ⇓P **Pn** 00 35 24.2 -0.8
**CHVC Chvalec** 6.82 30 *e*PN **Pn** 00 35 24.5 -0.7
**BAIF Baives** 6.84 322 *e*Pn **Pn** 00 35 25.7 +0.4
BAIF *e*Sn **Sn** 00 36 39.6 -3.0
comp=N,48nm,0.9s
**OSTC Ostas** 6.85 31 *e*PN **Pn** 00 35 25.7 +0.1
**SJES Sjenica** 6.88 100 *e*Pn **Pn** 00 35 26.3 +0.2
**SJES Sjenica** 6.88 100 *e*Pn **Pn** 00 35 25.6 -0.5
**LFF La Frestale** 7.06 274 *e*Pn **Pn** 00 35 29.0 +0.6
LFF *e*Sn **Sn** 00 36 47.8 -0.4
comp=N,32nm,0.8s
**PSZ Piszkesteto** 7.09 61 Pn **Pn** 00 35 28.4 -0.5
**PSZ Piszkesteto** 7.09 61 ⇑P **Pn** 00 35 28.5 -0.4
**KSP Ksiaz** 7.12 30 *e*Pn **Pn** 00 35 28.4 -0.8
KSP *e*Pg **Pg** 00 35 56.2 -5.9
KSP *e*Sn **Sn** 00 36 57.5 +8.0
KSP *e*Sg **Sg** 00 37 29.9 -4.3
**CEST Esterri de Car** 7.18 255 Pn **Pn** 00 35 31.8 +1.6
**CRAS Crastes** 7.22 265 P **Pn** 00 35 31.7 +1.0
**TIP Timpagrande** 7.23 139 ⇑P **Pn** 00 35 32.6 +1.8
**GRUS Gruza** 7.26 94 *e*Pn **Pn** 00 35 30.9 -0.2
**PUK Puka** 7.26 109 Pn **Pn** 00 35 31.5 +0.3
**LANS Liptovska Anna** 7.41 51 *e*PN **Pn** 00 35 33.9 +0.6
LANS *e*SN **Sn** 00 36 55.1 -1.8
**SCTE Santa Cesarea** 7.46 127 Pn **Pn** 00 35 32.9 -1.0
**TIR Tirane** 7.57 114 Pn **Pn** 00 35 34.7 -0.7
**TIR Tirane** 7.57 114 *e*Pn **Pn** 00 35 35.0 -0.4
**TIR Tirane** 7.57 114 ⇓P **Pn** 00 35 36.9 +1.5
**EPF Esparros** 7.67 260 *e*Pn **Pn** 00 35 37.2 +0.3
EPF *e*Sn **Sn** 00 37 00.8 -2.6
comp=N,6.5nm,0.5s
**KECS Kecovo** 7.68 58 *e*PN **Pn** 00 35 37.6 +0.6
**SELS Selova** 7.70 98 *e*Pn **Pn** 00 35 37.5 +0.3
**MFF Saint Martin d** 7.78 287 *e*Pn **Pn** 00 35 37.9 -0.4
MFF *e*Sn **Sn** 00 37 03.6 -2.4
comp=N,3.7nm,0.2s
**MFF Saint Martin d** 7.78 287 P **Pn** 00 35 37.9 -0.4
**MDVR Moldovita** 7.85 86 *e*Pn **Pn** 00 35 39.3 -0.1
**MDVR Moldovita** 7.85 86 ⇓P **Pn** 00 35 40.0 +0.6
**ECHI Chisagues Biel** 7.89 258 P **Pn** 00 35 43.6 +3.7
**CHIF Chize** 7.90 284 P **Pn** 00 35 40.9 +0.9
**BOVS Bovan** 8.01 95 ⇑P **Pn** 00 35 43.5 +2.1
**SURR Surduc** 8.13 79 ⇑P **Pn** 00 35 43.3 +0.2
**OHR Ohrid** 8.29 113 *i* Pn **Pn** 00 35 49.5 +4.0
**BARS Barje** 8.30 100 *e*Pn **Pn** 00 35 45.6 +0.1
**LDF La Druitiere** 8.33 301 *e*Pn **Pn** 00 35 46.4 +0.6
LDF *e*Sn **Sn** 00 37 17.1 -2.2
comp=N,3.9nm,0.2s
**ETSF Etsaut** 8.34 261 *e*Pn **Pn** 00 35 46.1 0.0
ETSF *e*Sn **Sn** 00 37 19.6 -0.3
comp=N,3.7nm,0.4s
**HERR Herculane** 8.34 85 ⇓P **Pn** 00 35 46.8 +0.7
**KEK Kerkira** 8.47 124 Pn **Pn** 00 35 46.4 -1.4
**GZR Gura Zlata** 8.58 82 ⇓P **Pn** 00 35 50.1 +0.8
**FLN La Foliniere** 8.61 301 *e*Pn **Pn** 00 35 50.4 +0.7
baz=115
FLN *e*Sn **Sn** 00 37 21.6 -4.7
comp=N,12nm,0.4s
**DRGR** 8.64 73 *e*Pn **Pn** 00 35 50.6 +0.4
**DRGR** 8.64 73 ⇑P **Pn** 00 35 50.6 +0.5
**GRR Gorron** 8.71 298 *e*Pn **Pn** 00 35 51.0 0.0
GRR *e*Sn **Sn** 00 37 25.4 -3.2
comp=N,8.2nm,0.3s
**SJPF Ste Jean** 8.75 263 *e*Pn **Pn** 00 35 52.6 +0.9
SJPF *e*Sn **Sn** 00 37 27.3 -2.5
comp=N,2.8nm,0.5s
**FNA Florina** 8.84 113 *e*Pn **Pn** 00 35 53.5 +0.6
**MARR Marisel-Cluj** 8.90 74 ⇓P **Pn** 00 35 53.5 -0.3
**KOLS Kolonicke sedl** 8.95 58 *e*PN **Pn** 00 35 55.8 +1.5
**LOUF Saint-Loup** 9.07 299 P **Pn** 00 35 54.9 -1.1
**KEST Kesra** 9.13 187 Pn **Pn** 00 35 60.0 +3.0
comp=N,0.9nm,0.3s,baz=338,slow=1.8,SNR=20
**SGMF Saint Gilles** 9.75 295 *e*Pn **Pn** 00 36 04.9 -0.3
SGMF *e*Sn **Sn** 00 37 50.8 -3.3
comp=N,6.6nm,0.3s
**QUIF Quistinic** 10.06 293 *e*Pn **Pn** 00 36 08.3 -1.2
QUIF *e*Sn **Sn** 00 37 58.1 -3.7
comp=N,14nm,0.6s
**SRS Serrai** 10.16 107 *e*Pn **Pn** 00 36 10.9 -0.1
**ROSF Rostrenen** 10.23 295 *e*Pn **Pn** 00 36 12.9 +1.0
ROSF *e*Sn **Sn** 00 37 58.6 -7.4
comp=N,24nm,0.8s
**BUR08 Bucovina Ar. S** 10.45 69 Pn **Pn** 00 36 15.9 +0.8
**BURAR Bucovina Array** 10.46 69 Pn **Pn** 00 36 16.8 +1.6
**BURAR Bucovina Array** 10.46 69 ⇓P **Pn** 00 36 15.7 +0.5
**ALN Alexandroupoli** 11.94 104 Pn **Pn** 00 36 39.4 +4.1
**ESBB Sonseca Array** 12.00 250 Pn **Pn** 00 36 38.1 +1.9
**ESDC Sonseca Array** 12.00 250 Pn **Pn** 00 36 37.0 +0.8
comp=N,0.2nm,0.3s,baz=62,slow=14,SNR=7.8
comp=N,1.1nm,0.4s
**PAB San Pablo** 12.32 250 Pn **Pn** 00 36 41.2 +0.6
**EKA Eskdalemuir Ar** 13.74 325 Pn **Pn** 00 37 00.0 +0.2
baz=137,slow=14
EKA Sn Sn 00 39 22.8 -9.1
baz=138,slow=24
comp=N,0.3nm,0.4s
**DSB Dublin** 13.98 313 Pn **Pn** 00 37 02.3 -0.8
**HFS Hagfors** 15.45 6 LR LR 00 43 05.3
comp=N,39nm,20.2s,baz=214,slow=36
**NOA NORSAR Array B** 16.26 1 Pn **P** 00 37 37.2 +0.9
baz=182,slow=11,SNR=4.2
NOA LR LR 00 44 30.2
comp=N,13nm,18.7s,baz=185,slow=40
**FINES FINESS Array B** 18.96 23 **P** 00 38 06.3 +0.3
**FINES FINESS Array B** 18.96 23 P **Pn** 00 38 06.7 0.0
comp=N,0.2nm,0.3s,baz=179,slow=12,SNR=6.1
FINES LR LR 00 45 22.1
comp=N,54nm,18.6s,baz=196,slow=37
comp=N,2.7nm,0.7s
**FIA1 FINESS Array S** 18.96 23 P **P** 00 38 05.2 -0.8
FIA1 IAmb IAmb 00 38 27.2
comp=Z,63nm,1.4s
**MMAI Mount Meron Ar** 22.47 113 P **P** 00 38 47.0 +2.8
comp=Z,1.9nm,0.8s,baz=322,slow=13,SNR=2.8
MMAI LR LR 00 50 27.9
comp=Z,42nm,18.5s,baz=180,slow=45
**ARCES ARCESS Array B** 25.90 12 LR LR 00 50 35.0
comp=Z,27nm,20.0s,baz=101,slow=39
**TOA0 Torodi Ar. Sit** 32.48 196 P **P** 00 40 14.0 -1.5
TOA0 IAmb IAmb 00 40 14.9
comp=Z,0.2nm,1.4s

comp=Z,2.2nm,0.5s,baz=9.2,slow=9.2,SNR=41
comp=Z,2.2nm,0.5s
**ULM Lac du Bonnet 65.89 318** P **P** **00 44 30.1 -0.3**
comp=Z,3.7nm,0.6s,baz=45,slow=4.8,SNR=7.1
comp=Z,3.7nm,0.6s
**LZH Lanzhou 67.66 61** *eP* **P** **00 44 42.8 +0.7**
**HHC Hu-ho-hao-te 69.16 53** *eP* **P** **00 44 51.3 -0.1**
**PZH PanZhiHua 72.55 70** P **P** **00 45 12.5 +0.3**
**PDAR Pinedale Array 77.80 319** P **P** **00 45 42.7 +0.3**
comp=Z,0.5nm,0.5s,baz=57,slow=5.5,SNR=4.3
comp=Z,0.5nm,0.5s
**TXAR Lajitas Array 85.06 307** P **P** **00 46 21.8 +1.0**
comp=Z,1.4nm,0.9s,baz=78,slow=3.6,SNR=12
comp=Z,1.4nm,0.9s

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*IDC **21** 00:51:17.8±10.0, 1°.33N×98°.92E, h96km±90km, mb3.7/11, mbtmp4.0/12, ML4.2/1, Error ellipse: s-maj=57.1km s-min=15.9km az=56.0*
*DJA **21** 00:51:20.6±0.6, 2°.7N±3°×9°.9E±°, h70km±11km, M3.8/8, MLv3.8/8*
**ISC 21 00:51:18.4±0.7, 1°.52N±0.05×98°.94E±0.08, h90km, n21, σ1§30/21, mb3.9/11, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **1.38** | **261** | P | **Pn** | **00 51 44.2** | **+1.6** |
| GSI | | | | S | **Sn** | **00 52 01.4** | **+0.4** |
| **PBSI** | **Pulau Batu** | **1.70** | **203** | P | **Pn** | **00 51 48.0** | **+1.3** |
| PBSI | | | | S | **Sn** | **00 52 07.9** | **-0.3** |
| **KCSI** | **Kotacane, Aceh** | **2.31** | **330** | P | **Pn** | **00 51 55.7** | **+1.0** |
| KCSI | | | | S | **Sn** | **00 52 23.1** | **+0.7** |
| **SNSI** | **Sinabang, Aceh** | **2.76** | **289** | P | **Pn** | **00 52 01.4** | **+0.7** |
| **PDSI** | **Padang** | **2.85** | **148** | P | **Pn** | **00 52 04.6** | **+2.6** |
| **MLSI** | **Meulaboh, Aceh** | **3.72** | **317** | P | **Pn** | **00 52 14.9** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** | **16.83** | **0** | P | **Pn** | **00 55 10.5** | **+1.9** |
| | 0.3nm,0.3s,baz=193,slow=9.8,SNR=11 | | | | | | |
| | 1.7nm,0.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.91** | **251** | T | T | 01 24 33.3 | |
| | baz=70,slow=75,SNR=8.1 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.91** | **251** | T | T | 01 24 23.0 | |
| | baz=70,slow=75,SNR=2.6 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.93** | **251** | T | T | 01 24 37.3 | |
| | baz=70,slow=75,SNR=6.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.74** | **123** | P | **P** | **00 58 49.1** | **-1.7** |
| | 2.0nm,0.7s,baz=302,slow=9.0,SNR=19 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **42.22** | **129** | P | **P** | **00 59 00.5** | **-2.3** |
| | 0.4nm,0.5s,baz=303,slow=7.9,SNR=7.6 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **44.61** | **33** | P | **P** | **00 59 21.1** | **-0.8** |
| | 1.5nm,0.8s,baz=221,slow=9.1,SNR=2.3 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **46.58** | **7** | P | **P** | **00 59 38.1** | **+0.7** |
| | 0.5nm,0.3s,baz=196,slow=8.1,SNR=4.3 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **47.38** | **344** | P | **P** | **00 59 43.9** | **+0.4** |
| | 0.6nm,0.4s,baz=152,slow=9.1,SNR=10 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.90** | **344** | P | **P** | **01 00 17.4** | **-0.2** |
| | 0.4nm,0.3s,baz=160,slow=7.3,SNR=5.4 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.54** | **350** | P | **P** | **01 00 29.6** | **-0.1** |
| | 2.0nm,0.3s,baz=177,slow=5.6,SNR=10.0 | | | | | | |
| | 2.0nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **56.54** | **340** | P | **P** | **01 00 50.3** | **-1.0** |
| | 0.8nm,0.6s,baz=157,slow=8.0,SNR=3.6 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **70.19** | **312** | P | **P** | **01 02 21.0** | **-0.9** |
| | 0.3nm,0.6s,baz=143,slow=7.1,SNR=2.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.83** | **340** | P | **P** | **01 03 31.9** | **-0.5** |
| | 4.2nm,1.1s,baz=99,slow=4.7,SNR=4.7 | | | | | | |
| | 4.2nm,1.1s | | | | | | |
| **HFS** | **Hagfors** | **86.31** | **330** | P | **P** | **01 03 50.6** | **+0.4** |
| | 5.6nm,1.1s,baz=142,slow=5.6,SNR=4.0 | | | | | | |
| | 5.6nm,1.1s | | | | | | |

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*CATAC **21** 01:04:25.9±0.6, 13°.29N×89°.82W, h39km±5km, ML4.0*
*SNET **21** 01:04:27.0±0.8, 13°.38N×89°.77W, h62km±6km, ML3.6*
*GCG **21** 01:04:28.5±0.4, 13°.60N×89°.75W, h88km±24km, MD3.7*
**ISC 21 01:04:28.2±1.7, 13°.40N±0°.09×89°.72W±0°.05, h57km±10km, n52, σ0°78/68, 11C-2D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAYA** | **Jayaque - finc** | **0.36** | **46** | *eP* | **Pn** | **01 04 38.0** | **-0.8** |
| **JAYA** | **Jayaque - finc** | **0.36** | **46** | *iP* | **Pn** | **01 04 37.8** | **-1.0** |
| JAYA | | | | IAML | | 01 04 38.3 | |
| | comp=Z,12μm,1.0s | | | | | | |
| JAYA | | | | *iS* | **Sn** | **01 04 46.5** | **+0.1** |
| **LALI** | **Alcalda de L** | **0.39** | **78** | *eP* | **Pn** | **01 04 37.9** | **-0.9** |
| **LALI** | **Alcalda de L** | **0.39** | **78** | *iP* | **Pn** | **01 04 37.3** | **-1.5** |
| LALI | | | | IAML | | 01 04 54.7 | |
| | comp=Z,530nm,1.0s | | | | | | |
| **CEVE** | **Cerro Verde** | **0.43** | **12** | *eP* | **Pn** | **01 04 38.9** | **-0.6** |
| **CEVE** | **Cerro Verde** | **0.43** | **12** | *iP* | **Pn** | **01 04 39.0** | **-0.6** |
| CEVE | | | | *iS* | **Sn** | **01 04 49.7** | **+2.0** |
| CEVE | | | | IAML | | 01 04 50.2 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **0.44** | **12** | *iP* | **Pn** | **01 04 39.0** | **-0.6** |
| SBLS | | | | *eS* | **Sn** | **01 04 48.4** | **+0.5** |
| **SNJE** | **San Jose** | **0.47** | **13** | *eP* | **Pn** | **01 04 39.3** | **-0.7** |
| **RTR** | **El Retiro** | **0.50** | **8** | *iP* | **Pn** | **01 04 39.6** | **-0.5** |
| **PMON** | **Piamonte** | **0.50** | **52** | *eP* | **Pn** | **01 04 39.6** | **-0.4** |
| **PMON** | **Piamonte** | **0.50** | **52** | *iP* | **Pn** | **01 04 39.7** | **-0.4** |
| PMON | | | | *iS* | **Sn** | **01 04 50.1** | **+1.5** |
| PMON | | | | IAML | | 01 04 52.9 | |
| | comp=Z,11μm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **0.50** | **353** | *iP* | **Pn** | **01 04 39.2** | **-0.9** |
| **NUBE** | **Las Nubes** | **0.50** | **353** | *iP* | **Pn** | **01 04 39.0** | **-1.1** |
| NUBE | | | | IAML | | 01 04 39.5 | |
| | comp=Z,4μm,1.0s | | | | | | |
| NUBE | | | | *iS* | **Sn** | **01 04 48.9** | **+0.1** |
| **ITCA** | **Escuela Especi** | **0.50** | **58** | *eP* | **Pn** | **01 04 39.7** | **-0.4** |
| **ITCA** | **Escuela Especi** | **0.50** | **58** | *iP* | **Pn** | **01 04 39.7** | **-0.4** |
| ITCA | | | | *iS* | **Sn** | **01 04 49.9** | **+1.2** |
| ITCA | | | | IAML | | 01 04 56.4 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **0.51** | **38** | *eP* | **Pn** | **01 04 40.0** | **0.0** |
| **BOQS** | **Boqueron** | **0.54** | **52** | *eP* | **Pn** | **01 04 40.3** | **-0.3** |
| **SNET** | **Serv Nac Est T** | **0.55** | **59** | *eP* | **Pn** | **01 04 40.0** | **-0.6** |
| **SNET** | **Serv Nac Est T** | **0.55** | **59** | *iP* | **Pn** | **01 04 40.0** | **-0.6** |
| SNET | | | | IAML | | 01 04 53.4 | |
| | comp=Z,9μm,1.0s | | | | | | |
| **UEES** | **Universidad Ev** | **0.56** | **56** | *eP* | **Pn** | **01 04 40.2** | **-0.5** |
| **UEES** | **Universidad Ev** | **0.56** | **56** | *iP* | **Pn** | **01 04 40.2** | **-0.5** |
| UEES | | | | *iS* | **Sn** | **01 04 50.7** | **+0.9** |
| UEES | | | | IAML | | 01 04 53.5 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **PANCS** | **Alcalda de** | **0.56** | **68** | *eP* | **Pn** | **01 04 39.9** | **-0.8** |
| **PANCS** | **Alcalda de** | **0.56** | **68** | *iP* | **Pn** | **01 04 39.8** | **-0.9** |
| PANCS | | | | *iS* | **Sn** | **01 04 50.1** | **+0.3** |
| PANCS | | | | IAML | | 01 04 52.2 | |
| | comp=Z,20μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **0.58** | **66** | *eP* | **Pn** | **01 04 40.4** | **-0.6** |
| **LOMA** | **Loma Larga** | **0.58** | **66** | *iP* | **Pn** | **01 04 40.4** | **-0.6** |
| LOMA | | | | *iS* | **Sn** | **01 04 51.1** | **+0.8** |
| LOMA | | | | IAML | | 01 04 53.1 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **0.59** | **354** | *eP* | **Pn** | **01 04 40.2** | **-1.0** |
| **LOAL** | **Lomas de Alarc** | **0.59** | **354** | *iP* | **Pn** | **01 04 40.1** | **-1.0** |
| LOAL | | | | *iS* | **Sn** | **01 04 51.3** | **+0.8** |
| LOAL | | | | IAML | | 01 04 53.5 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **UNIC** | **Universidad Ca** | **0.60** | **16** | *iP* | **Pn** | **01 04 39.8** | **-1.4** |
| UNIC | | | | IAML | | 01 04 41.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **0.61** | **45** | *iP* | **Pn** | **01 04 40.9** | **-0.3** |
| QUEZ | | | | IAML | | 01 04 55.3 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **IGN** | **Direccin Gen** | **0.61** | **60** | *eP* | **Pn** | **01 04 41.0** | **-0.4** |
| **IGN** | **Direccin Gen** | **0.61** | **60** | *iP* | **Pn** | **01 04 40.9** | **-0.4** |
| IGN | | | | *iS* | **Sn** | **01 04 51.9** | **+1.0** |
| IGN | | | | IAML | | 01 04 55.3 | |
| | comp=Z,16μm,1.0s | | | | | | |
| **AEIL** | **Aeropuerto Ilo** | **0.65** | **63** | *eP* | **Pn** | **01 04 41.7** | **-0.1** |
| **LFRS** | **El Faro** | **0.67** | **71** | *iP* | **Pn** | **01 04 41.7** | **-0.4** |
| LFRS | | | | *eS* | **Sn** | **01 04 52.5** | **+0.3** |
| **LFU** | **La Fuente** | **0.68** | **60** | *eP* | **Pn** | **01 04 42.2** | **0.0** |
| **COEG** | **Centro de Oper** | **0.84** | **75** | *eP* | **Pn** | **01 04 43.5** | **-0.6** |
| **COEG** | **Centro de Oper** | **0.84** | **75** | *iP* | **Pn** | **01 04 43.6** | **-0.6** |
| COEG | | | | *iS* | **Sn** | **01 04 57.0** | **+1.1** |
| COEG | | | | IAML | | 01 05 00.1 | |
| | comp=Z,2.2nm,0.5s,baz=9.2,slow=9.2,SNR=41 | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.92** | **82** | *eP* | **Pn** | **01 04 44.4** | **-0.7** |
| **UESV** | **Universidad de** | **0.93** | **75** | *eP* | **Pn** | **01 04 44.5** | **-0.8** |
| **UESV** | **Universidad de** | **0.93** | **75** | *iP* | **Pn** | **01 04 44.3** | **-1.0** |
| UESV | | | | *iS* | **Sn** | **01 04 58.7** | **+0.8** |
| UESV | | | | IAML | | 01 05 05.6 | |
| | comp=Z,810nm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **1.05** | **19** | *iP* | **Pn** | **01 04 45.9** | **-1.2** |
| **MTO3** | **Montecristo** | **1.05** | **19** | *iP* | **Pn** | **01 04 45.8** | **-1.2** |
| MTO3 | | | | IAML | | 01 04 46.0 | |
| | comp=Z,580nm,1.0s | | | | | | |
| MTO3 | | | | *iS* | **Sn** | **01 05 00.7** | **-0.2** |
| **TECA** | **Tecapa** | **1.19** | **85** | *eP* | **Pn** | **01 04 48.2** | **-0.6** |
| **ESQI** | **Esquipulas** | **1.21** | **18** | *iP* | **Pn** | **01 04 48.1** | **-0.9** |
| **PCG** | **Pacaya** | **1.31** | **319** | *eP* | **Pn** | **01 04 50.8** | **+0.2** |
| **NBG** | **Las Nubes** | **1.33** | **333** | *eP* | **Pn** | **01 04 50.6** | **-0.1** |
| **LCY** | **Lacayo** | **1.38** | **89** | *eP* | **Pn** | **01 04 51.1** | **-0.3** |
| **JUCU** | **Jucuarn** | **1.44** | **96** | *eP* | **Pn** | **01 04 51.5** | **-0.5** |
| **BLLM** | **Bellamira** | **1.44** | **88** | *eP* | **Pn** | **01 04 51.7** | **-0.4** |
| **FUG** | **Fuego 3** | **1.51** | **314** | *eP* | **Pn** | **01 04 52.8** | **-0.3** |
| FUG | | | | *eS* | **Sn** | **01 05 12.0** | **+0.2** |
| **LCND** | **La Caada** | **1.78** | **93** | *eP* | **Pn** | **01 04 55.8** | **-0.8** |
| **CNCH** | **Conchagua** | **1.84** | **94** | *eP* | **Pn** | **01 04 56.7** | **-0.8** |
| **STG3** | **Santiaguito 3,** | **2.22** | **306** | *eP* | **Pn** | **01 05 02.6** | **-0.2** |

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*IDC **21** 01:04:54.9±1.4, 5°.76S×130°.18E, h0km, mb4.0/3, mbtmp4.1/6, ML4.1/3, MS4.3/1, Error ellipse: s-maj=59.2km s-min=24.5km az=67.0*
*DJA **21** 01:04:59.3±0.3, 6°.5S±3°×13°.0E±°, h10km, M4.4/9, mb4.5/5, mB4.6/1, MLv4.3/9, Mw(mB)3.7/1*
*NEIC **21** 01:05:01.2±1.2, 5°.85S±0°.07×130°.15E±0°.08, h42km±6km, mb4.4/13, Error ellipse: s-maj=12.1km s-min=9.7km az=62.0*
**ISC 21 01:04:59.7±0.6, 5°.80S±0°.05×130°.14E±0°.07, h35km, n57, σ1§85/55, mb4.4/6, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.29** | **349** | P | **Pn** | **01 05 19.0** | **-2.2** |
| **BNDI** | **Bandanaira** | **1.29** | **349** | P | Pn | 01 05 18.5 | -2.7 |
| BNDI | | | | S | **Sn** | **01 05 33.7** | **-3.5** |
| **SAUI** | **Saumlaki** | **2.46** | **152** | Pn | **Pn** | **01 05 38.0** | **+0.7** |
| **SAUI** | **Saumlaki** | **2.46** | **152** | P | Pn | 01 05 43.6 | +6.3 |
| SAUI | | | | S | Sn | 01 06 16.1 | +10 |
| **MSAI** | **Masohi** | **2.72** | **334** | P | Pn | 01 05 38.2 | -2.7 |
| **FAKI** | **Fak Fak** | **3.55** | **36** | P | **Pn** | **01 05 53.8** | **+1.5** |
| **FAKI** | **Fak Fak** | **3.55** | **36** | | **Pn** | **01 05 54.0** | **+1.7** |
| **FAKI** | **Fak Fak** | **3.55** | **36** | P | **Pn** | **01 05 53.3** | **+1.0** |
| **NLAI** | **Namlea** | **3.96** | **310** | P | **Pn** | **01 05 57.4** | **-0.5** |
| **KMPI** | **Kaimana, Papua** | **4.14** | **59** | P | **Pn** | **01 06 02.9** | **+2.5** |
| **SWI** | **Sorong** | **5.03** | **13** | P | **Pn** | **01 06 12.0** | **-0.7** |
| **SANI** | **Sanana** | **5.57** | **312** | P | **Pn** | **01 06 18.7** | **-1.4** |
| **SANI** | **Sanana** | **5.57** | **312** | P | **Pn** | **01 06 18.4** | **-1.7** |
| **MTN** | **Manton Dam** | **7.07** | **172** | Pn | **Pn** | **01 06 42.5** | **+1.7** |
| **KDU** | **Kakadu** | **7.22** | **162** | P | **Pn** | **01 06 44.4** | **+1.6** |
| **MMRI** | **Maumere** | **8.33** | **250** | Pn | **Pn** | **01 06 59.0** | **+1.0** |
| **LUWI** | **Luwuk** | **8.74** | **302** | Pn | **Pn** | **01 07 06.1** | **+2.4** |
| **EDFI** | **Ende, Flores** | **8.88** | **250** | P | **Pn** | **01 07 06.9** | **+1.2** |
| **GTOI** | **Gorontalo** | **9.57** | **312** | P | **Pn** | **01 07 17.4** | **+2.4** |
| | 22nm,0.9s,235nm | | | | | | |
| **KNRA** | **Kununurra** | **9.91** | **188** | Pn | **Pn** | **01 07 19.6** | **-0.2** |
| **KAPI** | **Kappang** | **10.37** | **274** | Pn | **Pn** | **01 07 27.2** | **+1.1** |
| **KAPI** | **Kappang** | **10.37** | **274** | Pn | **Pn** | **01 07 26.4** | **+0.4** |
| | 1.4nm,0.3s,baz=115,slow=11,SNR=5.7 | | | | | | |
| | 11nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.99** | **199** | P | **Pn** | **01 08 00.0** | **-1.9** |
| **FITZ** | **Fitzroy Crossi** | **12.99** | **199** | Pn | **Pn** | **01 07 59.6** | **-2.3** |
| **WB0** | **Warramunga Arr** | **14.49** | **164** | Pn | **Pn** | **01 08 19.9** | **-2.5** |
| **WRAB** | **Tennant Creek** | **14.63** | **164** | Pn | **Pn** | **01 08 24.2** | **-0.2** |
| **WRA** | **Warramunga Arr** | **14.64** | **164** | Pn | **Pn** | **01 08 20.9** | **-3.5** |
| **WRA** | **Warramunga Arr** | **14.64** | **164** | Pn | **Pn** | **01 08 22.4** | **-2.0** |
| | 1.0nm,0.3s,baz=346,slow=13,SNR=24 | | | | | | |
| WRA | | | | Sn | **Sn** | **01 10 59.7** | **-5.9** |
| | 0.9nm,0.3s,baz=350,slow=24,SNR=5.0 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **14.64** | **164** | Pn | **Pn** | **01 08 21.7** | **-2.8** |
| **WR0** | **Warramunga Arr** | **14.71** | **163** | Pn | **Pn** | **01 08 23.1** | **-2.3** |
| **COEN** | **Coen** | **15.18** | **123** | P | **Pn** | **01 08 33.0** | **+1.4** |
| **COEN** | **Coen** | **15.18** | **123** | Pn | **Pn** | **01 08 31.8** | **+0.2** |
| COEN | | | | IAmb | IAmb | 01 08 42.4 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **PMG** | **Port Moresby** | **17.24** | **103** | Pn | **Pn** | **01 08 57.9** | **0.0** |
| PMG | | | | IAmb | IAmb | 01 09 12.8 | |
| | comp=Z,46nm,1.2s | | | | | | |
| **QIS** | **Mount Isa** | **17.31** | **149** | P | **P** | **01 09 01.2** | **+1.3** |
| **AS31** | **Alice Springs** | **18.13** | **169** | P | **P** | **01 09 09.9** | **+0.9** |
| **ASAR** | **Alice Springs** | **18.13** | **169** | | **Pn** | **01 09 08.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **18.13** | **169** | P | **Pn** | **01 09 09.3** | **+0.5** |
| | comp=Z,0.9nm,0.3s,baz=346,slow=9.6,SNR=39 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **18.14** | **169** | P | **P** | **01 09 10.4** | **+1.3** |
| **MBWA** | **Marble Bar** | **18.30** | **212** | | **P** | **01 09 11.1** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **18.58** | **211** | P | **P** | **01 09 13.1** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **18.58** | **211** | P | **P** | **01 09 12.8** | **-1.1** |
| PSA00 | | | | IAmb | IAmb | 01 09 16.9 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **WRKA** | **Warakurna** | **19.21** | **185** | P | **P** | **01 09 21.7** | **+0.8** |
| **SBUM** | **Sibu** | **19.68** | **294** | | **P** | **01 09 27.5** | **+1.4** |
| **OOD** | **Oodnadatta** | **22.50** | **167** | P | **P** | **01 09 58.7** | **+2.4** |
| **MULG** | **Mulgathing** | **24.63** | **172** | P | **P** | **01 10 19.9** | **+2.9** |
| **XMIS** | **Christmas Isla** | **24.68** | **258** | P | **P** | **01 10 17.2** | **-0.4** |
| **FORT** | **Forrest** | **24.93** | **184** | P | **P** | **01 10 22.6** | **+2.9** |
| **FORT** | **Forrest** | **24.93** | **184** | P | **P** | **01 10 22.2** | **+2.6** |
| FORT | | | | IAmb | IAmb | 01 10 40.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **26.71** | **208** | P | **P** | **01 10 36.6** | **+0.7** |
| MORW | | | | IAmb | IAmb | 01 10 46.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **27.44** | **169** | P | **P** | **01 10 42.7** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 01 11 00.3 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **29.55** | **202** | LR | LR | 01 24 05.0 | |
| | comp=Z,572nm,20.6s,baz=302,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.31** | **326** | P | **P** | **01 15 51.4** | **+0.3** |
| **MKAR** | **Makanchi Array** | **67.31** | **326** | P | **P** | **01 15 51.5** | **+0.5** |
| | comp=Z,0.9nm,0.6s,baz=119,slow=7.5,SNR=6.8 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **67.49** | **326** | P | **P** | **01 15 52.4** | **+0.2** |
| **KURBB** | **Kurchatov Arra** | **71.57** | **328** | P | **P** | **01 16 17.6** | **+0.4** |
| | comp=Z,0.7nm,0.5s,baz=122,slow=4.9,SNR=7.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.17** | **180** | P | **P** | **01 17 27.9** | **+0.7** |
| QSPA | | | | IAmb | IAmb | 01 17 42.3 | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.17** | **180** | P | **P** | **01 17 28.2** | **+1.0** |
| | comp=Z,1.5nm,1.0s,baz=315,slow=1.5,SNR=5.6 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |

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**IDC 21 01:06:25.7±2.7, 8°.37S×116°.98E, h0km, mb3.9/3, mbtmp4.0/4, ML3.5/1, Error ellipse: s-maj=51.3km s-min=21.7km az=113.0, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.32** | **40** | Pn | Pn | 01 07 33.0 | +0.3 |
| | 2.6nm,0.3s,baz=217,slow=4.7,SNR=5.2 | | | | | | |
| KAPI | | | | Sn | Sn | 01 08 22.6 | -1.3 |
| | 3.5nm,0.3s,baz=230,slow=23,SNR=8.8 | | | | | | |
| KAPI | | | | Lg | Lg | 01 08 43.6 | |
| | 0.7nm,0.3s,baz=73,slow=19,SNR=1.8 | | | | | | |
| | 7.4nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.37** | **126** | P | P | 01 11 04.2 | +0.1 |
| | 3.9nm,0.7s,baz=300,slow=12,SNR=6.0 | | | | | | |
| | 3.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.23** | **135** | P | P | 01 11 24.4 | +0.2 |
| | 2.7nm,0.9s,baz=308,slow=9.3,SNR=6.3 | | | | | | |
| | 2.7nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **32.73** | **139** | P | P | 01 12 59.8 | -0.5 |
| | 1.6nm,0.5s,baz=333,slow=11,SNR=3.0 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **CPUP** | **Villa Florida** | **145.07** | **189** | PKPbc | PKPbc | 01 26 04.5 | -0.7 |
| | 3.9nm,0.9s,baz=184,slow=2.6,SNR=4.6 | | | | | | |

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*IDC **21** 01:09:06.1±5.1, 2°.13N×127°.11E, h0km, mb4.1/10, mbtmp4.1/10, Error ellipse: s-maj=112.9km s-min=47.5km az=147.0*
*NEIC **21** 01:09:16.1±1.5, 2°.94N±0°.08×127°.11E±0°.09, h28km±4km, mb4.6/24, Error ellipse: s-maj=16.3km s-min=7.9km az=49.0*

**ISC 21 01:09:17.4±0.5, 2°.85N±0°.06×127°.03E±0°.10, h44km, n42, σ1§01/43, mb4.4/19, 1C, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.09** | **171** | | **Pn** | **01 09 49.9** | **-0.1** |
| **CDOP** | **Cateel, Davao** | **4.94** | **353** | *eP* | **Pn** | **01 10 30.5** | **+1.4** |
| CDOP | | | | *eS* | **Sn** | **01 11 26.9** | **+2.0** |
| **LUWI** | **Luwuk** | **5.75** | **228** | Pn | **Pn** | **01 10 42.0** | **+1.7** |
| **TOLI2** | **Tolitoli** | **6.47** | **255** | | **Pn** | **01 10 50.7** | **+0.5** |
| **MYLDM** | **Lahad Datu** | **8.81** | **285** | Pn | **Pn** | **01 11 22.6** | **+0.3** |
| **SSLB** | **Suanglung** | **21.63** | **345** | P | **P** | **01 14 03.5** | **-0.5** |
| **WB0** | **Warramunga Arr** | **23.61** | **162** | P | **P** | **01 14 25.1** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 01 14 27.6 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **24.91** | **196** | P | **P** | **01 14 37.3** | **+0.9** |
| **PSA00** | **Pilbara Seismi** | **25.27** | **196** | P | **P** | **01 14 40.5** | **+0.8** |
| PSA00 | | | | IAmb | IAmb | 01 14 48.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.27** | **196** | P | **P** | **01 14 39.8** | **+0.1** |
| PSA00 | | | | IAmb | IAmb | 01 14 48.4 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **28.25** | **206** | P | **P** | **01 15 07.0** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **31.57** | **301** | P | **P** | **01 15 35.9** | **-0.2** |
| | comp=Z,1.3nm,0.2s,baz=112,slow=6.3,SNR=4.1 | | | | | | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| **KSRS** | **Korea Array** | **34.45** | **1** | P | **P** | **01 16 01.6** | **+0.7** |
| | comp=Z,1.6nm,0.7s,baz=167,slow=9.4,SNR=4.4 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **40.57** | **146** | P | **P** | **01 16 53.7** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **41.41** | **5** | P | **P** | **01 17 00.5** | **+1.0** |
| | comp=Z,3.4nm,0.8s,baz=163,slow=9.1,SNR=5.7 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.04** | **342** | P | **P** | **01 17 53.2** | **+0.7** |
| ULN | | | | IAmb | IAmb | 01 17 54.6 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **48.22** | **341** | P | **P** | **01 17 54.7** | **+0.9** |
| **SONM** | **Songino Array** | **48.22** | **341** | P | **P** | **01 17 54.9** | **+1.0** |
| | comp=Z,1.1nm,0.9s,baz=155,slow=11,SNR=4.2 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **MSVF** | **Nonsavu** | **54.28** | **114** | P | **P** | **01 18 38.7** | **-1.0** |
| MSVF | | | | IAmb | IAmb | 01 18 42.4 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **56.13** | **22** | P | **P** | **01 18 51.7** | **-0.7** |
| **MK31** | **Makanchi Array** | **58.44** | **325** | P | **P** | **01 19 08.2** | **-0.6** |
| **MKAR** | **Makanchi Array** | **58.44** | **325** | P | **P** | **01 19 08.0** | **-0.8** |
| **MKAR** | **Makanchi Array** | **58.44** | **325** | P | **P** | **01 19 07.7** | **-1.2** |
| | comp=Z,0.9nm,0.5s,baz=122,slow=7.8,SNR=9.8 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **58.63** | **325** | P | **P** | **01 19 09.1** | **-1.0** |
| MAKZ | | | | IAmb | IAmb | 01 19 09.9 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.50** | **333** | P | **P** | **01 19 27.2** | **-2.4** |
| | comp=Z,0.4nm,0.3s,baz=138,slow=6.5,SNR=3.8 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.63** | **328** | P | **P** | **01 19 36.3** | **-1.0** |
| | comp=Z,1.7nm,0.7s,baz=129,slow=6.1,SNR=14 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **62.64** | **328** | P | **P** | **01 19 36.7** | **-0.6** |
| KURK | | | | IAmb | IAmb | 01 19 37.6 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **MCQ** | **Macquarie Isla** | **62.98** | **160** | P | **P** | **01 19 39.3** | **-0.1** |
| **KKAR** | **Karatay Array** | **64.07** | **317** | P | **P** | **01 19 46.0** | **-1.0** |
| **KKAR** | **Karatay Array** | **64.07** | **317** | P | **P** | **01 19 45.8** | **-1.2** |
| KKAR | | | | IAmb | IAmb | 01 19 46.9 | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **68.21** | **327** | P | **P** | **01 20 12.4** | **-0.9** |
| | comp=Z,1.6nm,0.7s,baz=130,slow=7.8,SNR=5.0 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **68.29** | **327** | P | **P** | **01 20 12.7** | **-1.1** |
| BRVK | | | | IAmb | IAmb | 01 20 14.1 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **UOSS** | **Minazif** | **71.42** | **295** | P | **P** | **01 20 34.0** | **+0.3** |
| UOSS | | | | IAmb | IAmb | 01 20 39.8 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **ABKAR** | **

**BKB Balikpapan 7.22 360** Pn Pn 01 11 15.3 +4.7
**SOEI Soe 7.32 100** P **Pn** **01 11 16.6 +4.4**
**SOEI Soe 7.32 100** Pn **Pn** **01 11 11.3 -0.8**
**SOEI Soe 7.32 100** P **Pn** **01 11 12.6 +0.4**
290nm,1.0s,4µm1.2nm
**CMJI Cimerak 8.46 274** P **Pn** **01 11 26.8 -0.9**
116nm,0.9s,2µm
**BBJI Bungbulang 9.28 276** P **Pn** **01 11 39.5 +0.5**
**CNJI Cibinong 9.81 276** P **Pn** **01 11 45.2 -1.1**
57nm,0.8s,990nm
**TOLI2 Tolitoli 10.30 22** Pn **Pn** **01 11 54.1 +1.1**
**SBUM Sibu 11.88 336** Pn **Pn** **01 12 16.6 +2.0**
**KSM Kuching 11.94 326** Pn **Pn** **01 12 16.2 +0.7**
**FITZ Fitzroy Crossi 12.72 139** **Pn** **01 12 25.5 -0.5**
**FITZ Fitzroy Crossi 12.72 139** P **Pn** **01 12 26.8 +0.7**
comp=Z,1µm,1.1s
**MBWA Marble Bar 12.84 168** P **Pn** **01 12 27.4 -0.3**
**MBWA Marble Bar 12.84 168** Pn **Pn** **01 12 26.6 -1.1**
**MBWA Marble Bar 12.84 168** P **Pn** **01 12 27.1 -0.7**
comp=Z,1µmcomp=Z,55nm,0.9s
**PSAD1 Pilbara Seismi 13.15 168** P **Pn** **01 12 30.8 -1.1**
comp=Z,1µmcomp=Z,48nm,0.9s
**PSA00 Pilbara Seismi 13.27 168** P **Pn** **01 12 33.8 +0.2**
**PSA00 Pilbara Seismi 13.27 168** Pn **Pn** **01 12 32.6 -1.0**
**PSA00 Pilbara Seismi 13.27 168** **Pn** **01 12 33.6 +0.1**
**PSA00 Pilbara Seismi 13.27 168** P **Pn** **01 12 33.6 +0.1**
comp=Z,1µmcomp=Z,58nm,0.8s
**KNRA Kununurra 13.55 123** Pn **Pn** **01 12 37.3 -0.1**
**KNRA Kununurra 13.55 123** P **Pn** **01 12 35.9 -1.5**
comp=Z,809nmcomp=Z,65nm,1.7s
**MYLDM Lahad Datu 13.70 6** Pn Pn 01 12 38.0 -1.5
**GIRL Giralia 14.28 190** P **Pn** **01 12 45.3 -2.1**
**GIRL Giralia 14.28 190** **Pn** **01 12 45.5 -1.9**
**GIRL Giralia 14.28 190** P **Pn** **01 12 45.5 -1.9**
comp=Z,2µmcomp=Z,350nm,0.9s
**MNAI Manna 14.52 286** P **Pn** **01 12 49.6 -1.1**
**MTN Manton Dam 14.57 108** P **Pn** **01 12 53.6 +2.2**
**MTN Manton Dam 14.57 108** Pn 01 12 49.5 -1.9
**MTN Manton Dam 14.57 108** P Pn 01 12 47.9 -3.5
**KDU Kakadu 15.80 107** P Pn 01 13 03.2 -4.5
**DAV Davao City (W) 17.72 29** LR LR 01 22 19.9
comp=Z,724nm,18.2s,baz=202,slow=44
**MEEK Meekatharra 18.08 175** P **Pn** **01 13 38.4 +1.9**
**MEEK Meekatharra 18.08 175** P **Pn** **01 13 37.6 +1.1**
comp=Z,1µmcomp=Z,89nm,0.8s
**BKNI Bangkinang 18.14 298** Pn **Pn** **01 13 35.0 -2.2**
**WRKA Warakurna 19.66 148** P **P** **01 13 57.2 +2.9**
**WRKA Warakurna 19.66 148** P **P** **01 13 56.1 +1.9**
comp=Z,2µmcomp=Z,68nm,0.9s
**WB0 Warramunga Arr 20.24 125** P **P** **01 14 00.9 +0.3**
WB0 IAmb IAmb 01 14 02.9
comp=Z,71nm,0.7s
**WRA Warramunga Arr 20.29 126** P **P** **01 14 01.3 +0.2**
**WRA Warramunga Arr 20.29 126** P **P** **01 14 01.7 +0.6**
comp=Z,52nm,0.7s,baz=300,slow=12,SNR=100
WRA S **S** **01 17 50.8 +2.0**
comp=Z,9.5nm,1.0s,baz=298,slow=25,SNR=6.0
WRA LR LR 01 22 45.0
comp=Z,861nm,18.2s,baz=288,slow=39
comp=Z,52nm,0.7s
**WRA Warramunga Arr 20.29 126** *i* P **P** **01 14 01.7 +0.6**
WRA pmax pmax
comp=Z,68nm,0.7s
**WRAB Tennant Creek 20.29 126** P **P** **01 14 01.3 +0.2**
WRAB IAmb IAmb 01 14 03.2
comp=Z,69nm,0.8s
**WRAB Tennant Creek 20.29 126** *i* P **P** **01 14 01.2 0.0**
WRAB pmax pmax
comp=Z,73nm,0.8s
**WB2 Warramunga Arr 20.30 126** IAmb IAmb 01 14 03.1
comp=Z,61nm,0.8s
**MORW Morawa 20.45 182** P **P** **01 14 04.4 +1.6**
**MORW Morawa 20.45 182** P **P** **01 14 02.4 -0.4**
**MORW Morawa 20.45 182** P **P** **01 14 04.5 +1.6**
comp=Z,36nm,1.3s
**WR0 Warramunga Arr 20.46 126** P **P** **01 14 02.7 -0.3**
WR0 IAmb IAmb 01 14 05.1
comp=Z,96nm,0.8s
**IPM Ipoh 20.48 309** P **P** **01 14 03.3 0.0**
**RPSI Rantau Prapat 21.16 301** P **P** **01 14 09.7 -0.8**
RPSI IAmb IAmb 01 14 17.7
comp=Z,159nm,1.5s
**PSI Prapat 21.21 301** P **P** **01 14 09.7 -1.6**
PSI pmax pmax
comp=Z,159nm,1.5s
**KULM Kulim 21.28 310** P **P** **01 14 10.7 -1.2**
**BLDU Ballidu 21.98 181** P **P** **01 14 19.7 +0.5**
**BLDU Ballidu 21.98 181** P **P** **01 14 18.5 -0.7**
comp=Z,40nm,1.1s
**AS31 Alice Springs 22.14 135** P **P** **01 14 21.1 +0.1**
**AS31 Alice Springs 22.14 135** P **P** **01 14 21.2 +0.1**
comp=Z,15nm,0.7s
**ASAR Alice Springs 22.14 135** P **P** **01 14 20.8 -0.2**
**ASAR Alice Springs 22.14 135** P **P** **01 14 21.4 +0.4**
comp=Z,32nm,0.8s,baz=307,slow=8.4,SNR=53
ASAR PcP **PcP** **01 18 16.8 -1.6**
comp=Z,3.4nm,0.8s,baz=302,slow=2.6,SNR=4.6
ASAR LR LR 01 22 51.8
comp=Z,622nm,21.1s,baz=315,slow=36
comp=Z,32nm,0.8s
**KLBR Kellerberrin 22.96 178** P **P** **01 14 34.7 +5.0**
**KMBL Kambalda 23.18 169** P **P** **01 14 33.5 +1.5**
comp=Z,92nm,1.0s
**LHMI Lhok Sumawe 24.18 304** P **P** **01 14 41.8 -0.1**
**SRIT Nakonsritamara 24.26 314** P **P** **01 14 41.0 -1.5**
SRIT IAmb IAmb 01 14 48.7
comp=Z,74nm,1.4s
**NWAO Narrogin (SRO) 24.28 179** P **P** **01 14 45.0 +2.4**
comp=Z,34nm,1.1s,baz=353,slow=8.1,SNR=5.7
comp=Z,34nm,1.1s
**NWAO Narrogin (SRO) 24.28 179** P **P** **01 14 45.0 +2.4**
**FORT Forrest 24.45 156** P **P** **01 14 43.9 -0.3**
FORT IAmb IAmb 01 14 50.5
comp=Z,65nm,0.7s
**FORT Forrest 24.45 156** P **P** **01 14 44.2 0.0**
comp=Z,104nm,0.7s
**QIS Mount Isa 24.93 121** P **P** **01 14 48.8 +0.2**
comp=Z,94nm,0.8s
**COEN Coen 26.26 104** P **P** **01 14 59.1 -1.6**
COEN IAmb IAmb 01 15 02.3
comp=Z,25nm,0.8s
**COEN Coen 26.26 104** P **P** **01 14 58.6 -2.2**
**QIZ Qiongzhong 28.27 346** P **P** **01 15 19.8 +1.2**
QIZ S **S** **01 20 07.9 +3.0**
QIZ PcS **PcS** **01 22 11.4 -3.1**
QIZ LR LR
comp=Z,550nm,14.5s
QIZ LR LR
comp=Z,290nm,12.4s
QIZ LR LR
comp=Z,580nm,13.9s
**PMG Port Moresby 29.84 94** LR LR 01 29 57.3
comp=Z,390nm,19.5s,baz=268,slow=41
**BBOO Buckleboo 29.94 146** P **P** **01 15 32.6 -0.9**
BBOO IAmb IAmb 01 15 35.0
comp=Z,21nm,0.8s
**BBOO Buckleboo 29.94 146** P P 01 15 29.9 -3.5
**CTA Charters Tower 30.57 115** P **P** **01 15 39.8 +0.6**
comp=Z,1.8nm,1.0s,baz=288,slow=9.9,SNR=10
comp=Z,1.8nm,1.0s
**CTAO Charters Tower 30.57 115** P **P** **01 15 38.4 -0.8**
CTAO IAmb IAmb 01 15 41.3
comp=Z,20nm,0.9s
**CTAO Charters Tower 30.57 115** P **P** **01 15 38.4 -0.8**
CTAO pmax pmax
comp=Z,20nm,0.9s
**QLP Quilpie 31.48 128** P **P** **01 15 46.8 -0.4**
comp=Z,34nm,0.9s
**PHRA Phrae 31.52 329** P **P** **01 15 48.5 +1.0**
**HTT Hallett 32.02 144** P **P** **01 15 50.6 -1.3**
comp=Z,19nm,0.8s
**CM31 Chiang Mai Air 32.17 327** P **P** **01 15 53.5 +0.2**
CM31 IAmb IAmb 01 15 59.5
comp=Z,58nm,1.1s
**CMAR Chiang Mai Air 32.17 327** P **P** **01 15 52.0 -1.2**
**CMAR Chiang Mai Air 32.17 327** P **P** **01 15 53.9 +0.6**
comp=Z,17nm,1.1s,baz=156,slow=7.1,SNR=28
**CMAR Chiang Mai Air 32.17 327** P **P** **01 15 52.0 -1.2**
**SLVN Son La 32.33 337** P **P** **01 15 54.1 -0.5**
SLVN IAmb IAmb 01 16 01.3
comp=Z,29nm,1.3s
**STKA Stephens Creek 32.62 139** P **P** **01 15 56.2 -0.8**
**STKA Stephens Creek 32.62 139** P **P** **01 15 55.2 -1.9**
comp=Z,8.7nm,0.8s
**STKA Stephens Creek 32.62 139** P **P** **01 15 57.9 +0.8**
comp=Z,24nm,0.8s,baz=313,slow=10,SNR=40
STKA LR LR 01 29 58.4
comp=Z,432nm,20.1s,baz=271,slow=38
comp=Z,24nm,0.8s
**STKA Stephens Creek 32.62 139** *i* P **P** **01 15 56.7 -0.4**
**CRAI Chiangrai 32.91 330** P **P** **01 16 00.2 +0.5**
CRAI IAmb IAmb 01 16 06.2
comp=Z,42nm,1.2s
**YHNB Yeheng 33.27 7** P **P** **01 16 03.8 +0.9**
**CMSA Cobar Meteorol 35.19 135** P P 01 16 17.4 -2.1
comp=Z,16nm,1.1s
**GUMO Guam 35.36 52** LR LR 01 28 42.1
comp=Z,46nm,20.6s,baz=250,slow=33
**ARPS Mount Arapiles 36.07 145** P **P** **01 16 25.9 -1.0**
comp=Z,23nm,0.8s
**GYA Guiyang 36.18 344** P P 01 16 33.0 +4.9
GYA S **S** **01 22 12.1 +3.8**
GYA pmax pmax
comp=Z,22nm,1.3s
GYA pmax pmax
comp=Z,310nm,4.7s
GYA LR LR
comp=Z,500nm,16.2s
GYA LR LR
comp=Z,450nm,9.2s
GYA LR LR
comp=Z,570nm,17.8s
**KMI Kunming 36.20 338** ⇑P **P** **01 16 30.1 +1.7**
KMI pP pP 01 16 33.9 +2.4
KMI S **S** **01 22 10.1 +1.3**
KMI pmax pmax
comp=Z,40nm,1.1s
KMI pmax pmax
comp=Z,190nm,6.2s
KMI LR LR
comp=Z,350nm,17.8s
KMI LR LR
comp=Z,460nm,16.9s
KMI LR LR
comp=Z,450nm,27.8s
**EIDS Eidsvold 36.53 122** P **P** **01 16 30.2 -0.9**
**JOW Kunigami 36.82 17** LR LR 01 31 29.1
comp=Z,226nm,21.6s,baz=244,slow=36
**PZH PanZhiHua 37.83 337** P **P** **01 16 42.1 0.0**
PZH S **S** **01 22 31.1 -2.3**
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,60nm,3.5s
PZH LR LR
comp=Z,330nm,12.4s
PZH LR LR
comp=Z,350nm,11.6s
PZH LR LR
comp=Z,410nm,17.1s
**TNCH TengChong 37.88 332** P **P** **01 16 45.3 +2.6**
TNCH pP pP 01 16 47.3 +1.5
TNCH S **S** **01 22 36.3 +1.9**
TNCH pmax pmax
comp=Z,71nm,0.6s
TNCH LR LR
comp=Z,640nm,9.2s
TNCH LR LR
comp=Z,610nm,10.7s
TNCH LR LR
comp=Z,900nm,13.0s
**TOO Toolangi 38.75 143** P **P** **01 16 49.5 -0.2**
TOO IAmb IAmb 01 16 55.3
comp=Z,34nm,1.2s
**TOO Toolangi 38.75 143** P **P** **01 16 50.0 +0.3**
comp=Z,35nm,1.1s
**TOO Toolangi 38.75 143** P **P** **01 16 49.5 -0.2**
TOO pmax pmax
comp=Z,34nm,1.2s
**WHN Wuhan 38.93 356** P P 01 16 57.0 +5.9
**ARMA Armidale 39.02 129** P **P** **01 16 51.3 -0.9**
ARMA IAmb IAmb 01 16 56.4
comp=Z,16nm,0.8s
**ARMA Armidale 39.02 129** P **P** **01 16 53.0 +0.9**
comp=Z,26nm,0.8s
**ENH Enshi 39.24 350** IAmb IAmb 01 16 59.0
comp=Z,60nm,1.2s
**PALK Pallekele 39.40 292** LR LR 01 33 06.5
comp=Z,403nm,20.9s,baz=221,slow=36
**NJ2 Nanjing 40.39 2** *eP* **P** **01 17 04.4 +1.1**
NJ2 pmax pmax
comp=Z,35nm,0.9s
**CD2 Chengdu 41.20 343** P **P** **01 17 09.4 -0.7**
CD2 pP pP 01 17 13.3 +0.1
CD2 S **S** **01 23 27.4 +3.5**
CD2 pmax pmax
comp=Z,110nm,1.1s
CD2 pmax pmax
comp=Z,240nm,7.6s
CD2 LR LR
comp=Z,530nm,12.6s
CD2 LR LR
comp=Z,510nm,10.6s
CD2 LR LR
comp=Z,610nm,14.7s
**SHL Shillong 41.76 325** P **P** **01 17 13.6 -1.3**
**SHL Shillong 41.76 325** P **P** **01 17 13.6 -1.3**
SHL pmax pmax
comp=Z,105nm,1.1s
**HNR Honiara 42.45 95** P P 01 17 18.5 -2.0
**HNR Honiara 42.45 95** LR LR 01 36 25.7
comp=Z,3µm,19.4s,baz=256,slow=38
**HNR Honiara 42.45 95** P P 01 17 18.5 -2.1
HNR pmax pmax
comp=Z,165nm,1.4s
**XAN Xi'an 43.01 350** ⇓P **P** **01 17 23.4 -1.4**
XAN pP pP 01 17 27.8 -0.2
XAN S **S** **01 23 48.8 -1.7**
XAN pmax pmax
comp=Z,16nm,1.0s
XAN pmax pmax
comp=Z,270nm,7.3s
XAN LR LR
comp=Z,680nm,18.2s
XAN LR LR
comp=Z,350nm,16.7s
XAN LR LR
comp=Z,900nm,22.1s
**LYN LuoYang 43.05 355** *eP* **P** **01 17 24.0 -1.1**
LYN pmax pmax
comp=Z,25nm,0.9s
LYN pmax pmax
comp=Z,400nm,7.9s
**JNU Nakatsue 43.48 17** LR LR 01 38 38.2
comp=Z,133nm,19.4s,baz=146,slow=40
**JMN Monobe 44.99 20** P **P** **01 17 42.8 +2.0**
**LSA Lhasa 45.40 328** P **P** **01 17 45.1 +0.5**
**HNS HongShan 45.73 357** ⇑P **P** **01 17 45.8 -0.7**
HNS S **S** **01 24 26.9 -2.9**
HNS pmax pmax
comp=Z,7.0nm,0.9s
HNS LR LR
comp=Z,500nm,22.6s
HNS LR LR
comp=Z,560nm,20.6s
**LZH Lanzhou 46.06 345** *eP* **P** **01 17 53.0 +3.7**
LZH pP sP 01 17 58.0 +4.3
LZH pmax pmax
comp=Z,32nm,1.1s
LZH LR LR
comp=Z,410nm,14.8s
LZH LR LR
comp=Z,360nm,13.1s
LZH LR LR
comp=Z,440nm,16.1s
**JHJ Hachijo jima 2 46.77 27** LR LR 01 34 54.6
comp=Z,255nm,21.4s,baz=79,slow=33
**KSAR Wonju Array Be 46.86 12** P **P** **01 17 54.6 -0.7**
**KSAR Wonju Array Be 46.86 12** P **P** **01 17 54.6 -0.7**
**KSRS Korea Array 46.88 12** P **P** **01 17 54.7 -0.8**
comp=Z,3.6nm,0.9s,baz=185,slow=8.1,SNR=8.1
KSRS LR LR 01 42 10.2
comp=Z,44nm,18.2s,baz=190,slow=42
comp=Z,3.6nm,0.9s
**BJI Beijing 48.33 359** P **P** **01 18 09.6 +2.9**
BJI pmax pmax
comp=Z,9.0nm,1.1s
**MJAR Matsushiro Arr 49.08 23** P P 01 18 10.6 -2.0
comp=Z,21nm,1.0s,baz=193,slow=7.1,SNR=10
MJAR LR LR 01 37 17.4
comp=Z,101nm,21.5s,baz=209,slow=34
comp=Z,21nm,1.0s
**MJB9 Matsu-Tunnel 49.08 23** P **P** **01 18 12.5 -0.1**
**BTO Baotou 49.30 353** *eP* **P** **01 18 13.9 -0.5**
BTO pP **pP** **01 18 18.3 +0.8**
BTO sP **sP** **01 18 21.5 +2.8**
BTO PP **PP** **01 20 13.4 +4.9**
BTO S **S** **01 25 20.3 -0.5**
BTO SS **SS** **01 28 52.0 -0.7**
BTO pmax pmax
comp=Z,28nm,1.1s
BTO pmax pmax
comp=Z,440nm,5.5s
BTO LR LR
comp=Z,400nm,8.9s
BTO LR LR
comp=Z,290nm,6.1s
BTO LR LR
comp=Z,720nm,20.4s
**DZM Mont Dzumac 49.38 112** LR LR 01 38 55.8
comp=Z,337nm,21.5s,baz=320,slow=36
**HHC Hu-ho-hao-te 49.38 355** *eP* **P** **01 18 18.1 +3.2**
HHC pmax pmax
comp=Z,16nm,0.5s
HHC pmax pmax
comp=Z,140nm,4.3s
HHC LR LR
comp=Z,120nm,11.0s
HHC LR LR
comp=Z,150nm,10.0s
HHC LR LR
comp=Z,210nm,11.8s
**JSD Sado 50.41 22** P P 01 18 20.8 -1.9
JSD IAmb IAmb 01 18 26.7
comp=Z,42nm,1.1s
**JMM Marumori 51.24 24** P **P** **01 18 28.1 -0.8**
**XLT XiLinHaoTe 52.18 359** *eP* **P** **01 18 38.1 +2.1**
XLT sP sP 01 18 44.1 +3.7
XLT S **S** **01 26 00.1 -0.5**
XLT sS sS 01 26 09.3 +3.4
XLT ScS **ScS** **01 28 23.3 -3.0**
XLT pmax pmax
comp=Z,38nm,1.2s
XLT LR LR
comp=Z,40nm,14.5s
XLT LR LR
comp=Z,270nm,16.6s
XLT LR LR
comp=Z,440nm,16.6s
**CN2 Changchun 52.65 8** *eP* **P** **01 18 41.3 +2.0**
CN2 pmax pmax
comp=Z,10.0nm,0.7s
**JTM Tenmabayashi 53.87 23** P **P** **01 18 47.0 -1.4**
**USRK Ussuriysk Ar. 54.22 13** P **P** **01 18 50.1 -0.7**
**USRK Ussuriysk Ar. 54.22 13** P **P** **01 18 49.5 -1.4**
comp=Z,12nm,0.8s,baz=191,slow=7.2,SNR=16
comp=Z,12nm,0.8s
**BNX BinXian 54.83 9** ⇓P P 01 18 53.3 -1.9
BNX pmax pmax
comp=Z,13nm,1.4s
**ULN Ulaanbaatar 56.83 352** P P 01 19 08.0 -1.7
ULN IAmb IAmb 01 19 14.5
comp=Z,31nm,1.2s
**ULN Ulaanbaatar 56.83 352** *ce*P **P** **01 19 08.6 -1.2**
ULN pmax pmax
comp=Z,33nm,1.7s
**SONM Songino Array 56.89 352** P **P** **01 19 09.2 -1.0**
SONM IAmb IAmb 01 19 14.8
comp=Z,34nm,1.2s
**SONM Songino Array 56.89 352** P P 01 19 08.7 -1.5
comp=Z,28nm,1.2s,baz=173,slow=6.6,SNR=20
SONM LR LR 01 45 18.1
comp=Z,300nm,19.6s,baz=171,slow=38
comp=Z,28nm,1.2s
**ASAJ Asahikawa 57.31 22** LR LR 01 45 33.8
comp=Z,82nm,19.7s,baz=196,slow=38
**ASAJ Asahikawa 57.31 22** P **P** **01 19 14.1 +1.0**
ASAJ pmax pmax
comp=Z,59nm,1.5s
**JKA Kamikawa-asahi 57.31 22** P **P** **01 19 14.1 +1.0**
JKA IAmb IAmb 01 19 18.2
comp=Z,59nm,1.5s
**HIA Hailar 57.60 2** IAmb IAmb 01 19 19.2
comp=Z,52nm,1.3s
**CASY Casey 57.84 183** P **P** **01 19 15.8 -0.7**
**LBZ Lake Benmore 58.18 137** P **P** **01 19 19.3 0.0**
LBZ IAmb IAmb 01 19 38.1
comp=Z,48nm,1.4s
**WMQ Urumqi 58.47 335** *eP* P 01 19 19.3 -2.0
WMQ pmax pmax
comp=Z,32nm,1.1s
WMQ pmax pmax
comp=Z,160nm,4.5s
WMQ LR LR
comp=Z,220nm,24.1s
WMQ LR LR
comp=Z,280nm,19.3s
WMQ LR LR
comp=Z,290nm,20.9s
**RPZ Rata Peaks 58.53 136** P **P** **01 19 21.5 -0.3**
**KLR Kul'dur 58.96 11** LR LR 01 49 09.2
comp=Z,95nm,18.1s,baz=204,slow=41
**KLR Kul'dur 58.96 11** *ce*P **P** **01 19 24.2 -0.3**
KLR pmax pmax
comp=Z,23nm,1.7s
**HEH HeiHe 59.24 8** *eP* P 01 19 24.8 -1.6
HEH pmax pmax
comp=Z,28nm,1.2s
HEH pmax pmax
comp=Z,310nm,4.5s
**YSS Yuzh-Sakhalins 59.82 20** **P** **01 19 29.6 -0.9**
**YSS Yuzh-Sakhalins 59.82 20** *eP* **P** **01 19 29.4 -1.1**
YSS pmax pmax
comp=Z,30nm,0.8s
YSS MLR MLR
comp=Z,200nm,17.0s
**ZAK Zakamensk 59.86 350** *eP* P 01 19 28.6 -2.3
ZAK pmax pmax
comp=Z,11nm,1.2s
**MSVF Nonsavu 59.98 106** P **P** **01 19 31.6 -0.7**
MSVF IAmb IAmb 01 19 34.3
comp=Z,23nm,0.8s
**MSVF Nonsavu 59.98 106** *i* P **P** **01 19 31.5 -0.8**
**TCW Tory Channel 60.02 133** P **P** **01 19 31.3 -0.9**
**TOZ Tahuroa Road 60.06 129** **P** **01 19 31.1 -1.3**
TOZ IAmb IAmb 01 19 52.6
comp=Z,50nm,1.5s
**CIT Chita 60.38 358** *eP* **P** **01 19 37.2 +2.9**
CIT *e* 01 19 44.4
CIT *e* 01 20 17.0
**KSH Kashi 61.04 325** P **P** **01 19 41.3 +2.1**
KSH sP sP 01 19 47.6 +4.0
KSH pmax pmax
comp=Z,9.0nm,0.8s
**KNGR Kungurtug, Tuv 61.26 346** *i* P **P** **01 19 40.3 -0.2**
KNGR pmax pmax
comp=Z,17nm,1.4s
**MOY Mondy 61.51 349** *eP* **P** **01 19 40.9 -1.2**
MOY pmax pmax
comp=Z,30nm,2.7s
**UZB Uzynbulak 61.93 329** *eP* **P** **01 19 44.5 -0.7**
comp=Z,4.8nm,1.1s,baz=329
**UZB Uzynbulak 61.93 329** *eP* **P** **01 19 44.5 -0.7**
UZB pmax pmax
comp=Z,5.0nm,1.1s
**SATY Saty 62.18 329** *eP* **P** **01 19 46.1 -0.7**
comp=Z,3.9nm,0.9s,baz=329
**SATY Saty 62.18 329** *eP* **P** **01 19 46.1 -0.7**
SATY pmax pmax
comp=Z,4.0nm,0.9s
**MXZ Matakaoa Point 62.21 128** P **P** **01 19 45.9 -1.1**
**KPKS Kokpek 62.33 329** *eP* **P** **01 19 47.2 -0.6**
comp=Z,7.2nm,1.0s,baz=329
**KPKS Kokpek 62.33 329** *eP* **P** **01 19 47.2 -0.6**
KPKS pmax pmax
comp=Z,7.0nm,1.0s
**ZSN Zaisan 62.58 336** *eP* **P** **01 19 48.3 -1.0**
comp=Z,12nm,1.0s,baz=336
**ZSN Zaisan 62.58 336** *eP* **P** **01 19 48.3 -1.0**
ZSN pmax pmax
comp=Z,12nm,1.0s
**ZEA Zeya 62.63 7** *eP* **P** **01 19 48.4 -1.1**
ZEA pmax pmax
comp=N,20nm,1.3s
ZEA pmax pmax
comp=Z,30nm,1.0s
**TNSS Tian-Shan 62.92 328** *eP* **P** **01 19 51.1 -1.0**

baz=328
**TNSS Tian-Shan 62.92 328** *e*P **P** **01 19 51.1 -1.0**
**MDOK Medeo 62.95 328** *e*P **P** **01 19 51.4 -0.7**
baz=328
**MDOK Medeo 62.95 328** *e*P **P** **01 19 51.3 -0.7**
**MK31 Makanchi Array 63.13 334** IAmb IAmb 01 19 57.5
comp=Z,18nm,1.0s
**MK31 Makanchi Array 63.13 334** *ce*P **P** **01 19 52.1 -0.9**
**MKAR Makanchi Array 63.13 334** P P **01 19 51.6 -1.4**
**MKAR Makanchi Array 63.13 334** P P 01 19 49.7 -3.3
comp=Z,1.5nm,0.6s,baz=124,slow=7.1,SNR=3.8
MKAR LR LR 01 49 27.2
comp=Z,245nm,20.8s,baz=144,slow=38
comp=Z,1.5nm,0.6s
**MKAR Makanchi Array 63.13 334** P **P** **01 19 51.6 -1.4**
**TYV Tymovskoe 63.20 18** *e*P P 01 20 06.7 +13
TYV pmax pmax
comp=Z,11nm,1.2s
TYV pmax pmax
comp=Z,200nm,6.7s
**DGZ Jazzator, Alta 63.46 339** *i*P **P** **01 19 54.7 -0.6**
DGZ pmax pmax
comp=Z,30nm,0.9s
**CHKK Chushkaly 63.47 329** *e*P **P** **01 19 54.8 -0.5**
baz=329
**CHKK Chushkaly 63.47 329** *e*P **P** **01 19 54.8 -0.5**
**TDK Taldyqorghan 63.58 330** *e*P **P** **01 19 55.2 -0.8**
comp=Z,4.8nm,0.5s,baz=330
**TDK Taldyqorghan 63.58 330** *e*P **P** **01 19 55.1 -0.8**
TDK pmax pmax
comp=Z,5.0nm,0.5s
**AAK Ala-Archa 63.96 326** *ce*P **P** **01 19 58.5 -0.2**
AAK pmax pmax
comp=Z,5.0nm,0.8s
**SGDS Sogindy 64.43 327** *e*P **P** **01 20 00.8 -0.9**
baz=327
**SGDS Sogindy 64.43 327** *e*P **P** **01 20 00.8 -0.9**
**CHGR Chuyangaron 64.62 320** P **P** **01 20 01.9 -1.2**
CHGR IAmb IAmb 01 20 23.0
comp=Z,13nm,1.1s
**CHGR Chuyangaron 64.62 320** P **P** **01 20 01.9 -1.2**
CHGR pmax pmax
comp=Z,13nm,1.1s
**SIMJ Simiganj 64.72 320** P **P** **01 20 02.8 -0.9**
**KK31 Karatay Array 66.49 325** P **P** **01 20 14.8 -0.2**
**KK31 Karatay Array 66.49 325** P **P** **01 20 14.8 -0.2**
KK31 pmax pmax
comp=Z,2.0nm,0.9s
**HRA Herat 67.06 313** P **P** **01 20 19.2 +0.2**
**KURBB Kurchatov Arra 67.67 335** P P 01 20 19.7 -2.5
comp=Z,2.8nm,0.8s,baz=135,slow=6.2,SNR=1.9
comp=Z,2.8nm,0.8s
**KURK Kurchatov 67.70 335** P **P** **01 20 22.4 0.0**
KURK IAmb IAmb 01 20 26.2
comp=Z,29nm,1.5s
**KURK Kurchatov 67.70 335** *ce*P **P** **01 20 23.5 +1.1**
KURK pmax pmax
comp=Z,23nm,1.7s
**ZAA0 Zalesovo Array 67.90 340** **P** **01 20 22.6 -1.1**
ZAA0 IAmb IAmb 01 20 26.6
comp=Z,13nm,1.2s
**ZALV Zalesovo Beam 67.90 340** P P 01 20 20.0 -3.6
comp=Z,3.3nm,0.7s,baz=135,slow=3.8,SNR=7.5
ZALV LR LR 01 53 10.6
comp=Z,130nm,18.4s,baz=206,slow=39
comp=Z,3.3nm,0.7s
**ZALV Zalesovo Beam 67.90 340** *i*P P 01 20 21.2 -2.4
ZALV pmax pmax
comp=Z,3.0nm,0.7s
**VOI Vohitsoka 68.51 250** P **P** **01 20 29.2 +0.8**
VOI IAmb IAmb 01 20 33.6
comp=Z,40nm,1.3s
**MAW Mawson 69.00 199** P **P** **01 20 30.7 +0.4**
**MAW Mawson 69.00 199** P **P** **01 20 31.1 +0.7**
comp=Z,8.5nm,0.8s,baz=55,slow=6.1,SNR=16
MAW LR LR 01 43 35.6
comp=Z,156nm,20.2s,baz=60,slow=30
comp=Z,8.5nm,0.8s
**YAK Yakutsk 71.04 6** *i*P **P** **01 20 43.2 +0.4**
YAK pmax pmax
comp=Z,23nm,1.0s
**NIUE Niue 71.36 107** P **P** **01 20 45.6 -0.2**
**BVAR Borovoye Array 72.94 333** P P 01 20 52.1 -2.4
comp=Z,2.3nm,0.8s,baz=120,slow=8.5,SNR=6.0
comp=Z,2.3nm,0.8s
**MA2 Magadan 73.05 17** P **P** **01 20 55.1 +0.1**
MA2 IAmb IAmb 01 20 59.9
comp=Z,37nm,1.2s
**MA2 Magadan 73.05 17** LR LR 01 54 34.9
comp=Z,26nm,20.4s,baz=222,slow=37
**MA2 Magadan 73.05 17** *ce*P **P** **01 20 57.3 +2.3**
MA2 pmax pmax
comp=Z,69nm,2.5s
**SBA Scott Base 73.79 170** P **P** **01 20 59.9 +0.8**
**SBA Scott Base 73.79 170** P **P** **01 20 59.9 +0.8**
SBA pmax pmax
comp=Z,6.0nm,0.9s
**SEY Seymchan 76.25 16** *ce*P **P** **01 21 15.4 +2.0**
SEY pmax pmax
comp=Z,27nm,1.3s
**FURI Furi 79.87 281** LR LR 01 56 59.7
comp=Z,105nm,18.1s,baz=144,slow=36
**TIXI Tiksi 80.39 4** LR LR 02 01 22.2
comp=Z,140nm,19.1s,baz=204,slow=39
**TIXI Tiksi 80.39 4** *ce*P **P** **01 21 37.0 +0.8**
TIXI pmax pmax
comp=Z,15nm,2.0s
**ARU Arti 80.47 331** *c i*P **P** **01 21 36.4 -0.6**
ARU 01 24 39.5
ARU S **S** **01 31 43.8 +0.4**
ARU SS **SS** **01 36 50.6 -5.1**
ARU pmax pmax
comp=Z,5.0nm,1.2s
**RAR Rarotonga 80.72 110** LR LR 01 55 32.3
comp=Z,85nm,21.9s,baz=254,slow=34
**MAK Makhachkala 81.09 316** *e*P P 01 21 36.2 -4.4
MAK *e*S **S** **01 31 44.9 -5.5**
MAK *e*SSS SSS 01 40 33.8
MAK pmax pmax
comp=Z,316nm,1.6s
MAK MLR MLR
comp=Z,102nm,15.0s
**QSPA South Pole Qui 81.47 180** P **P** **01 21 42.8 +0.4**
QSPA IAmb IAmb 01 22 07.1
comp=Z,18nm,1.2s
**QSPA South Pole Qui 81.47 180** P **P** **01 21 42.2 -0.2**
comp=Z,5.8nm,0.9s,baz=320,slow=1.7,SNR=18
comp=Z,5.8nm,0.9s
**POGA Pongola 81.94 244** P **P** **01 21 44.5 -1.1**
POGA IAmb IAmb 01 21 50.5
comp=Z,21nm,0.8s
**LODK Lodwar 82.21 275** P **P** **01 21 46.0 -1.2**
**GURO Guroymak-BITLI 83.67 310** P **P** **01 21 53.8 -0.6**
**BILL Bilibino 83.91 17** *e*P **P** **01 21 55.5 +0.7**
BILL *e* 01 25 11.8
BILL *e*PPP PPP 01 26 58.5
BILL *e*S **SKSac** **01 32 10.2 -7.4**
BILL *e*SSS SSS 01 41 09.0
BILL pmax pmax
comp=Z,9.0nm,1.6s
**BELG Belogornoye 84.40 325** *i*P **P** **01 21 56.9 -0.7**
BELG pmax pmax
comp=Z,2.0nm,1.1s
**KBZ Khabaz 84.52 316** P **P** **01 21 56.8 -1.6**
comp=Z,2.5nm,0.9s,baz=76,slow=4.8,SNR=3.9
comp=Z,2.5nm,0.9s
**KIV Kislovodsk 84.74 316** *e*P **P** **01 21 59.3 -0.3**
KIV pmax pmax
comp=Z,5.0nm,1.1s
**ARPR Arapgir-MALATY 86.60 310** IAmb IAmb 01 22 11.9
comp=Z,9.9nm,0.8s
**LSZ Lusaka 86.61 255** P P 01 22 07.8 -1.8
**LSZ Lusaka 86.61 255** P P 01 22 07.8 -1.8
LSZ pmax pmax
comp=Z,46nm,1.4s
**BOSA Boshof 87.46 242** IAmb IAmb 01 22 18.4
comp=Z,20nm,1.1s
**BOSA Boshof 87.46 242** P **P** **01 22 12.6 -0.9**
comp=Z,7.5nm,0.9s,baz=103,slow=5.3,SNR=7.7
comp=Z,7.5nm,0.9s
**MMAI Mount Meron Ar 87.58 304** P P 01 22 11.5 -2.4
comp=Z,0.2nm,0.3s,baz=104,slow=6.1,SNR=3.1
MMAI LR LR 02 05 43.7
comp=Z,83nm,18.7s,baz=56,slow=39
comp=Z,0.2nm,0.3s
**LBTB Lobatse 87.67 245** IAmb IAmb 01 22 19.5
comp=Z,17nm,0.9s
**ANN Anapa 88.59 316** *e*P P 01 22 15.5 -2.8
ANN pmax pmax
comp=Z,52nm,1.4s
**BRTR Keskin Array B 90.29 310** P P 01 22 24.4 -2.2
comp=Z,2.1nm,1.1s,baz=134,slow=6.2,SNR=7.5
comp=Z,2.1nm,1.1s
**BRTR Keskin Array B 90.29 310** *i*P **P** **01 22 27.3 +0.7**
BRTR pmax pmax
comp=Z,1.0nm,1.0s
**PPT Papeete 90.74 108** LR LR 01 59 16.7
comp=Z,86nm,21.0s,baz=200,slow=33
**SNAA Sanae 90.91 196** P **P** **01 22 28.1 -0.6**
SNAA IAmb IAmb 01 22 34.2
comp=Z,6.7nm,1.0s
**SNAA Sanae 90.91 196** ⇑P **P** **01 22 29.1 +0.3**
comp=Z,16nm,0.3s
**SNAA Sanae 90.91 196** P **P** **01 22 29.2 +0.4**
comp=Z,2.4nm,0.5s,baz=110,slow=5.6,SNR=13
comp=Z,2.4nm,0.5s
**OBN Obninsk 91.47 325** ⇑*e*P **P** **01 22 31.0 -0.5**
OBN *e* 01 22 33.8
OBN *e* 01 26 12.2
OBN *e*PPP PPP 01 28 05.7
OBN pmax pmax
comp=Z,5.0nm,0.7s
**BELA Belgrano 2 92.29 186** IAmb IAmb 01 22 36.5
comp=Z,8.5nm,0.7s
**KDAK Kodiak Island 97.39 33** LR LR 02 02 48.7
comp=Z,42nm,20.2s,baz=265,slow=33
**FINES FINESS Array B 97.84 331** LR LR 02 12 13.0
comp=Z,165nm,21.6s,baz=80,slow=39
**TORD Torodi Ar. Bea 116.39 280** PKP **PKPdf** **01 28 07.1 -2.9**
comp=Z,0.9nm,0.6s,baz=32,slow=2.6,SNR=13
**ESDC Sonseca Array 119.07 311** PKP **PKPdf** **01 28 15.2 +0.6**
comp=Z,0.6nm,0.7s,baz=44,slow=2.4,SNR=5.7
**NVAR Mina Array Bea 122.26 50** PKP **PKPdf** **01 28 19.7 -1.3**
comp=Z,0.6nm,0.7s,baz=292,slow=1.5,SNR=5.9
**HLID Hailey 123.37 43** PKPdf **PKPdf** **01 28 21.1 -1.8**
**ELK Elko 123.81 46** PKPdf **PKPdf** **01 28 22.4 -1.6**
**ELK Elko 123.81 46** PKIKP **PKPdf** **01 28 22.4 -1.6**
**V12A Nelson 125.68 52** PKPdf **PKPdf** **01 28 25.9 -1.5**
**CPUP Villa Florida 144.91 189** PKPbc **PKPab** **01 29 02.3 0.0**
comp=Z,29nm,0.8s,baz=171,slow=2.8,SNR=58
**CLTN Cedars of Leba 145.31 34** **PKPbc** **01 29 00.0 -3.3**
**SSPA Standing Stone 145.40 20** **PKPbc** **01 29 00.3 -3.2**
**Z47A Carrollton 146.27 40** **PKPdf** **01 29 03.8 -1.6**
**AF01 San Pedro de A 148.31 171** **PKPdf** **01 29 14.1 +4.6**
**LVC Limon Verde 148.53 170** PKPab **PKPdf** **01 29 14.2 +4.3**
**LVC Limon Verde 148.53 170** PKP2 **PKPdf** **01 29 14.2 +4.3**
**AQDB Aquidauana 150.29 194** **PKPdf** **01 29 16.6 +4.3**
**BDFB Brasília 151.75 212** PKP **PKPdf** **01 29 13.6 -1.2**
comp=Z,1.0nm,0.3s,baz=126,slow=4.1,SNR=2.0
BDFB PKPbc **pPKPdf** **01 29 19.2 +0.9**
comp=Z,5.6nm,0.6s,baz=144,slow=4.6,SNR=8.3
**LPAZ La Paz 154.84 168** PKPbc **PKPdf** **01 29 26.9 +7.1**
comp=Z,3.5nm,1.0s,baz=98,slow=3.6,SNR=6.4
LPAZ PKPab **PKPab** **01 29 44.0 +0.7**
comp=Z,4.0nm,0.9s,baz=167,slow=3.7,SNR=6.9
**LPAZ La Paz 154.84 168** PKP2 **PKPab** **01 29 44.0 +0.7**
**TULM Tulcn-Chalpat 163.39 117** **PKPdf** **01 29 27.5 -2.4**

**NAM 21 01:20:54.7±4.2, 19.71S×14.46E, h21km±15km, ML0.4, 3C-6D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.05** | **139** | ⇑*i*P | Pb | 01 21 00.4 | +1.7 |
| ST3N | | | | *i* S | Sb | 01 21 01.9 | +0.6 |
| ST3N | | | | IAML | | 01 21 02.1 | |
| | comp=Z,4.6nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.05** | **139** | *i* P | Pb | 01 21 00.4 | +1.7 |
| ST3N | | | | *i* S | Sb | 01 21 01.9 | +0.5 |
| ST3N | | | | IAML | | 01 21 02.2 | |
| | comp=Z,4.7nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.11** | **212** | ⇑*i*P | Pb | 01 21 01.5 | +0.3 |
| ST6N | | | | *i* S | Sb | 01 21 04.0 | -1.8 |
| ST6N | | | | IAML | | 01 21 04.7 | |
| | comp=Z,2.4nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.11** | **212** | *i* P | Pb | 01 21 01.4 | +0.2 |
| ST6N | | | | *i* S | Sb | 01 21 03.8 | -2.0 |
| ST6N | | | | IAML | | 01 21 04.2 | |
| | comp=Z,2.9nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.12** | **141** | ⇓*i*P | Pb | 01 20 59.3 | -1.8 |
| ST9N | | | | *i* S | Sb | 01 20 60.0 | -5.7 |
| ST9N | | | | IAML | | 01 21 00.1 | |
| | comp=Z,108nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.12** | **141** | *i* P | Pb | 01 20 59.2 | -1.9 |
| ST9N | | | | *i* S | Sb | 01 20 59.9 | -5.7 |
| ST9N | | | | IAML | | 01 21 00.4 | |
| | comp=Z,86nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.14** | **276** | ⇓*i*P | Pb | 01 21 03.7 | +2.7 |
| ST8N | | | | *i* S | Sb | 01 21 07.2 | +1.9 |
| ST8N | | | | IAML | | 01 21 08.2 | |
| | comp=Z,0.9nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.14** | **103** | ⇓*i*P | Pb | 01 21 00.1 | -0.8 |
| ST1N | | | | *i* S | Sb | 01 21 01.3 | -3.9 |
| ST1N | | | | IAML | | 01 21 01.6 | |
| | comp=Z,9.7nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.14** | **103** | *i* P | Pb | 01 21 00.1 | -0.8 |
| ST1N | | | | *i* S | Sb | 01 21 01.4 | -3.9 |
| ST1N | | | | IAML | | 01 21 01.6 | |
| | comp=Z,13nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.26** | **151** | ⇓*i*P | Pb | 01 21 00.4 | -0.7 |
| ST2N | | | | IAML | | 01 21 02.8 | |
| | comp=Z,3.0nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.26** | **151** | *i* P | Pb | 01 21 00.3 | -0.8 |
| ST2N | | | | *i* S | Sb | 01 21 01.8 | -3.7 |
| ST2N | | | | IAML | | 01 21 03.9 | |
| | comp=Z,2.5nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.29** | **107** | ⇑*i*P | Pb | 01 21 01.6 | +0.2 |
| ST5N | | | | *i* S | Sb | 01 21 04.0 | -2.0 |
| ST5N | | | | IAML | | 01 21 04.1 | |
| | comp=Z,4.2nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.29** | **107** | *i* P | Pb | 01 21 01.5 | +0.1 |
| ST5N | | | | *i* S | Sb | 01 21 04.0 | -2.1 |
| ST5N | | | | IAML | | 01 21 04.2 | |
| | comp=Z,13nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **194** | ⇓*i*P | Pn | 01 21 02.9 | -1.0 |
| ST10N | | | | *i* S | Sb | 01 21 06.3 | +0.1 |
| ST10N | | | | IAML | | 01 21 06.9 | |
| | comp=Z,5.3nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **194** | *i* P | Pn | 01 21 02.9 | -1.0 |
| ST10N | | | | *i* S | Sb | 01 21 06.2 | 0.0 |
| ST10N | | | | IAML | | 01 21 06.6 | |
| | comp=Z,6.7nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.36** | **82** | ⇓*i*P | Pn | 01 21 04.3 | -0.5 |
| ST11N | | | | *i* S | Sb | 01 21 08.7 | +1.0 |
| ST11N | | | | IAML | | 01 21 09.2 | |
| | comp=Z,0.7nm,0.1s | | | | | | |

*NEIC **21** 01:34:10.9±0.4, 35.899N±0.009×97.35W±0.01, h5km±1km, Error ellipse: s-maj=2.8km s-min=1.6km az=186.0*
**TUL 21 01:34:11±0.5, 35.895N±0.003×97.35W±0.01, h5km±3km, ML2.2, mb_Lg2.0/5(NEIC), ML2.1/49(NEIC), Error ellipse: s-maj=1.5km s-min=0.4km az=89.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK029** | **Liberty Lake** | **0.13** | **222** | Pg | Pg | 01 34 13.9 | +0.2 |
| **ADOK** | **Arcadia Dam** | **0.24** | **185** | Pg | Pg | 01 34 16.2 | +0.5 |
| ADOK | | | | Sg | Sg | 01 34 19.9 | +1.0 |
| **OK031** | **S. Brethren Rd** | **0.41** | **82** | Pg | Pg | 01 34 19.4 | +0.4 |
| OK031 | | | | Sg | Sg | 01 34 25.4 | +0.9 |
| OK031 | | | | IAML | | 01 34 27.8 | |
| | 282nm,0.5s | | | | | | |
| **OK052** | **Battle Ridge R** | **0.45** | **77** | Pg | Pg | 01 34 20.1 | +0.3 |
| OK052 | | | | Sg | Sg | 01 34 26.6 | +1.0 |
| OK052 | | | | IAML | | 01 34 28.9 | |
| | 177nm,0.4s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.49** | **189** | Pg | Pg | 01 34 20.9 | +0.4 |
| **QUOK** | **Quay** | **0.58** | **62** | Pg | Pg | 01 34 22.4 | +0.1 |
| QUOK | | | | Sg | Sg | 01 34 30.3 | +0.4 |
| QUOK | | | | IAML | | 01 34 31.0 | |
| | comp=N,82nm,0.3s | | | | | | |
| QUOK | | | | IAML | | 01 34 36.7 | |
| | comp=E,83nm,0.2s | | | | | | |
| **FNO** | **Franklin** | **0.64** | **184** | Pg | Pg | 01 34 23.3 | 0.0 |
| FNO | | | | IAML | | 01 34 35.2 | |
| | comp=N,76nm,0.2s | | | | | | |
| **DEOK** | **Depew** | **0.69** | **94** | Pg | Pg | 01 34 24.3 | 0.0 |
| DEOK | | | | IAML | | 01 34 34.6 | |
| | comp=E,61nm,0.1s | | | | | | |
| DEOK | | | | IAML | | 01 34 36.2 | |
| | comp=N,109nm,0.5s | | | | | | |
| **OK051** | **E0350 and S346** | **0.73** | **34** | Pg | Pg | 01 34 25.1 | 0.0 |
| OK051 | | | | IAML | | 01 34 41.3 | |
| | comp=N,95nm,0.2s | | | | | | |
| OK051 | | | | IAML | | 01 34 46.6 | |
| | comp=N,79nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.80** | **320** | Pg | Pg | 01 34 26.0 | -0.3 |
| CROK | | | | IAML | | 01 34 46.3 | |
| | comp=N,102nm,0.3s | | | | | | |
| CROK | | | | IAML | | 01 34 47.6 | |
| | comp=E,72nm,0.3s | | | | | | |
| **CSTR** | **Hydro, Custer** | **1.12** | **258** | Pg | Pg | 01 34 32.1 | -0.4 |
| **KAN13** | **South Haven SW** | **1.12** | **355** | Pg | Pg | 01 34 32.4 | -0.1 |
| **OK032** | **Salt Plains WL** | **1.15** | **323** | Pg | Pg | 01 34 31.9 | -1.1 |
| OK032 | | | | IAML | | 01 34 49.8 | |
| | comp=E,67nm,0.1s | | | | | | |
| OK032 | | | | IAML | | 01 34 59.1 | |
| | comp=E,66nm,0.1s | | | | | | |
| **KAN14** | **Manchester OK** | **1.17** | **335** | Pg | Pg | 01 34 32.9 | -0.6 |
| **KAN17** | **Caldwell West** | **1.20** | **344** | Pg | Pg | 01 34 33.5 | -0.5 |
| **T35A** | **Sooner Cattle** | **1.22** | **33** | Pg | Pg | 01 34 33.7 | -0.7 |
| T35A | | | | IAML | | 01 34 51.5 | |
| | comp=E,26nm,0.1s | | | | | | |
| T35A | | | | IAML | | 01 34 53.0 | |
| | comp=N,31nm,0.2s | | | | | | |
| **TUL3** | **Leonard** | **1.26** | **89** | Pg | Pg | 01 34 33.8 | -1.4 |
| TUL3 | | | | IAML | | 01 34 52.0 | |
| | comp=N,36nm,0.4s | | | | | | |
| TUL3 | | | | IAML | | 01 34 55.0 | |
| | comp=E,23nm,0.5s | | | | | | |
| **OK038** | **West end E0370** | **1.27** | **298** | | Pg | 01 34 33.9 | -1.5 |
| **KAN01** | **Argonia South** | **1.30** | **345** | | Pn | 01 34 35.0 | -0.8 |
| KAN01 | | | | IAML | | 01 34 53.4 | |
| | comp=E,55nm,0.2s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.35** | **197** | | Pn | 01 34 36.1 | -0.4 |
| **NOKA** | **Waynoka** | **1.48** | **300** | | Pn | 01 34 37.5 | -0.8 |
| **WMOK** | **Wichita Mounta** | **1.65** | **226** | | Pn | 01 34 40.9 | +0.3 |
| WMOK | | | | IAmb_Lg | | 01 35 06.7 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **RLO** | **Rose Lookout** | **1.90** | **81** | Pn | Pn | 01 34 44.5 | +0.5 |
| **X37A** | **Clayton** | **2.08** | **128** | Pn | Pn | 01 34 46.7 | +0.3 |
| **MIAR** | **Mount Ida** | **3.37** | **112** | Pn | Pn | 01 35 04.4 | +0.2 |
| **BRDY** | **Brady** | **4.80** | **197** | IAmb_Lg | | 01 36 44.6 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.65** | **79** | IAmb_Lg | | 01 37 12.4 | |
| | comp=Z,4.4nm,0.9s | | | | | | |

**IDC 21 01:34:29.5±1.8, 3.07N×96.17E, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=69.2km s-min=30.6km az=49.0, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **43.90** | **123** | P | P | 01 42 38.2 | -0.2 |
| | 0.6nm,0.8s,baz=301,slow=9.2,SNR=3.9 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.19** | **347** | P | P | 01 42 47.9 | -0.4 |
| | 0.5nm,0.4s,baz=163,slow=9.4,SNR=8.1 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **45.46** | **10** | P | P | 01 42 50.6 | +0.1 |
| | 0.3nm,0.5s,baz=209,slow=11,SNR=2.1 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **62.75** | **213** | T | T | 02 52 39.8 | |
| | baz=52,slow=75,SNR=7.1 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **62.76** | **213** | T | T | 02 52 39.6 | |
| | baz=52,slow=75,SNR=6.8 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **62.77** | **213** | T | T | 02 52 39.3 | |
| | baz=52,slow=75,SNR=8.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **67.10** | **312** | P | P | 01 45 25.4 | +0.1 |
| | 0.7nm,0.8s,baz=142,slow=3.3,SNR=5.8 | | | | | | |
| | 0.7nm,0.8s | | | | | | |

**DJA 21 01:46:11.7±0.3, 2.5S×112.1E±, h10km, M3.9/12, mb4.1/2, MLv3.9/12, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LUWI** | **Luwuk** | **1.92** | **51** | P | Pn | 01 46 43.6 | -0.9 |
| **BNSI** | **Bone** | **2.43** | **209** | P | Pn | 01 46 52.0 | +0.5 |
| **MRSI** | **Marisa** | **2.79** | **14** | P | Pn | 01 46 55.9 | -0.6 |
| **MPSI** | **Mapaga** | **2.91** | **332** | P | Pn | 01 46 58.3 | +0.2 |
| **GTOI** | **Gorontalo** | **3.35** | **31** | P | Pn | 01 47 04.3 | +0.1 |
| **BSSI** | **Bau Bau, Buton** | **3.94** | **191** | P | Pn | 01 47 13.8 | +1.4 |

**IDC 21 01:47:46.1±17.0, 17.02S×178.36W, h471km±209km, mb3.0/3, mbtmp3.8/3, Error ellipse: s-maj=249.2km s-min=47.7km az=167.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.84** | **259** | P | P | 01 55 17.3 | -0.2 |
| | 0.6nm,0.5s,baz=94,slow=7.2,SNR=12 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **253** | P | P | 01 55 19.2 | -0.1 |
| | 1.5nm,0.4s,baz=86,slow=8.7,SNR=15 | | | | | | |
| | 1.5nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.49** | **58** | P | P | 01 59 33.8 | 0.0 |
| | 0.3nm,0.7s,baz=233,slow=7.5,SNR=4.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.69** | **304** | PKPbc | PKPdf | 02 06 31.2 | +0.5 |
| | 0.4nm,0.4s,baz=66,slow=4.9,SNR=1.9 | | | | | | |

**DJA 21 01:49:07.0±0.3, 8.3S±3.3×111.7E±, h10km, M4.1/9, mb4.7/2, MLv3.8/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.45** | **167** | P | Pb | 01 49 17.9 | +0.9 |
| TWSI | | | | S | Sb | 01 49 22.9 | -0.8 |
| **PLAI** | **Plampang** | **1.12** | **118** | P | Pg | 01 49 28.5 | 0.0 |
| **SRBI** | **Singaraja** | **1.57** | **278** | P | Pn | 01 49 35.1 | +0.2 |
| **DNP** | **Denpasar** | **1.60** | **256** | P | Pn | 01 49 35.2 | -0.1 |
| **JAGI** | **Jajag, Banyuwa** | **2.61** | **266** | P | Pn | 01 49 49.2 | 0.0 |
| **WBSI** | **Waikabubak, Su** | **2.90** | **118** | P | Pn | 01 49 53.2 | -0.2 |
| **BASI** | **Baing, Sumba** | **4.21** | **117** | P | Pg | 01 50 29.8 | +2.2 |
| **BSSI** | **Bau Bau, Buton** | **4.26** | **60** | P | Pn | 01 50 11.1 | -0.9 |
| **EDFI** | **Ende, Flores** | **4.88** | **96** | P | Pn | 01 50 21.2 | +0.6 |
| **PWJI** | **Pagerwojo** | **4.93** | **273** | P | Pn | 01 50 20.9 | -0.3 |
| **NGJI** | **Ngawi** | **5.35** | **280** | P | Pn | 01 50 27.2 | +0.2 |

**IDC 21 01:53:14.1±15.0, 18.00S×178.16W, h534km±167km, mb3.0/4, mbtmp3.9/4, Error ellipse: s-maj=68.5km s-min=41.5km az=70.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | P | 02 00 40.8 | -0.4 |
| | 0.9nm,0.5s,baz=96,slow=7.1,SNR=26 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.00** | **254** | P | P | 02 00 42.4 | +0.1 |
| | 5.1nm,0.5s,baz=88,slow=8.7,SNR=52 | | | | | | |
| | 5.1nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | P | 02 03 44.1 | +0.1 |
| | 0.4nm,0.6s,baz=256,slow=1.7,SNR=1.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | P | 02 04 57.1 | 0.0 |
| | 0.4nm,1.0s,baz=221,slow=5.3,SNR=2.5 | | | | | | |
| | 0.4nm,1.0s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.39** | **303** | PKPbc | PKPbc | 02 11 55.0 | -0.8 |
| | 0.2nm,0.4s,baz=69,slow=7.9,SNR=1.5 | | | | | | |

*SJA **21** 01:59:22.1±0.8, 34.50S×71.62W, h60km±3km, ML3.4, MW3.6*
*GUC **21** 01:59:23.6±0.8, 34.50S×71.60W, h58km±3km, ML3.5*
**ISC 21 01:59:22.9±1.1, 34.47S±0.02×71.52W±0.03, h10km±9km, n56, σ1.63/106, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BO03** | **Pichilemu** | **0.36** | **265** | *e*P | **Pb** | **01 59 33.4** | **+2.0** |
| BO03 | | | | *i* S | **Sb** | **01 59 40.2** | **+3.1** |
| BO03 | | | | IAML | | 01 59 41.4 | |
| | comp=N,3μm,0.2s | | | | | | |
| **BO01** | **Tunca** | **0.37** | **79** | *e*P | **Pn** | **01 59 34.5** | **+0.2** |
| BO01 | | | | *e*S | **Sb** | **01 59 42.7** | **+5.3** |
| BO01 | | | | IAML | | 01 59 42.9 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **BO01** | **Tunca** | **0.37** | **79** | *e*P | **Pn** | **01 59 34.6** | **+0.3** |
| BO01 | | | | *i* S | **Sb** | **01 59 42.6** | **+5.2** |
| BO01 | | | | IAML | | 01 59 44.5 | |

comp=N,2µm,0.2s
**GO05 Huala 0.64 211** *e*P **Pg 01 59 35.9 +0.6**
GO05 *e*S **Sg 01 59 44.7 +1.1**
GO05 IAML 01 59 47.0
comp=Z,1µm,0.1s
**GO05 Huala 0.64 211** *e*P **Pg 01 59 36.0 +0.8**
GO05 *i* S **Sg 01 59 45.5 +1.9**
**MT01 Popeta 0.64 21** *e*P **Pn 01 59 37.7 -0.3**
MT01 *e*S **Sn 01 59 49.3 +1.1**
MT01 IAML 01 59 50.2
comp=Z,2µm,0.1s
**MT01 Popeta 0.64 21** *e*P **Pn 01 59 37.8 -0.3**
MT01 *i* S **Sn 01 59 48.1 -0.2**
MT01 IAML 01 59 51.4
comp=E,3µm,0.1s
**BO02 Sierra Bellavi 0.69 118** *e*P **Pb 01 59 37.9 +0.8**
BO02 *e*S **Sn 01 59 49.3 -0.4**
BO02 *e*S **Sb 01 59 49.8 +3.0**
**BO02 Sierra Bellavi 0.69 118** *e*P **Pb 01 59 38.2 +1.1**
BO02 *i* S **Sb 01 59 49.0 +2.2**
**VA05 Santo Domingo 0.81 355** *e*P **Pb 01 59 39.3 +0.3**
VA05 *i* S **Sn 01 59 51.1 -1.2**
VA05 IAML 01 59 54.5
comp=N,3µm,0.2s
**MT09 Talagante 0.82 33** *e*P **Pn 01 59 40.5 -0.1**
MT09 *i* S **Sn 01 59 53.0 +0.2**
MT09 IAML 01 59 54.7
comp=N,5µm,0.3s
**BO04 La Punta 0.89 58** *e*P **Pn 01 59 41.4 -0.2**
BO04 *i* S **Sn 01 59 54.6 0.0**
BO04 IAML 01 59 55.4
comp=N,6µm,0.1s
**MT12 Pirque 1.09 48** *e*P **Pn 01 59 44.1 -0.1**
MT12 *i* S **Sn 01 59 58.8 -0.6**
**MT15 Las Vizcachas 1.21 45** *e*P **Pn 01 59 45.7 -0.2**
MT15 *i* S **Sn 02 00 02.5 +0.1**
MT15 IAML 02 00 05.3
comp=E,3µm,0.2s
**MT02 Curacav 1.25 15** *e*P **Pb 01 59 45.8 -0.6**
MT02 *e*S **Sn 02 00 04.2 +1.0**
MT02 IAML 02 00 04.4
comp=Z,464nm,0.7s
**MT02 Curacav 1.25 15** *e*P **Pb 01 59 45.9 -0.6**
MT02 *i* S **Sn 02 00 02.2 -0.9**
**MT05 Renca 1.25 32** *e*P **Pb 01 59 42.7 -3.9**
MT05 *e*P **Pg 01 59 47.9 +1.0**
MT05 *e*S **Sn 02 00 06.4 +3.0**
MT05 IAML 02 00 09.0
comp=Z,452nm,0.4s
**MT05 Renca 1.25 32** *e*P **Pg 01 59 47.9 +1.0**
MT05 *i* S **Sn 02 00 03.7 +0.2**
MT05 IAML 02 00 10.4
comp=N,848nm,0.4s
**MT13 San Alfonso 1.25 55** *e*P **Pn 01 59 46.5 0.0**
MT13 *e*P **Pg 01 59 46.7 -0.3**
MT13 *e*S **Sn 02 00 03.2 -0.4**
MT13 IAML 02 00 09.4
comp=Z,426nm,0.1s
**MT13 San Alfonso 1.25 55** *e*P **Pn 01 59 46.5 0.0**
MT13 *i* S **Sn 02 00 03.8 +0.2**
MT13 IAML 02 00 05.2
comp=E,1µm,0.3s
**LMEL Las Melosas 1.26 61** *e*P **Pn 01 59 46.7 +0.1**
LMEL *e*S **Sn 02 00 05.0 +1.4**
LMEL IAML 02 00 07.2
comp=Z,948nm,0.1s
**LMEL Las Melosas 1.26 61** *e*P **Pn 01 59 46.7 +0.1**
LMEL *i* S **Sn 02 00 03.8 +0.1**
LMEL IAML 02 00 06.1
comp=N,3µm,0.2s
**MT03 Universidad Ad 1.28 41** *e*P Pn 01 59 41.2 -5.8
MT03 *e*P **Pb 01 59 46.7 -0.5**
MT03 *e*P **Pg 01 59 46.8 -0.7**
MT03 *e*S **Sn 02 00 04.9 +0.6**
MT03 IAML 02 00 08.2
comp=Z,1µm,0.2s
**MT03 Universidad Ad 1.28 41** *e*P **Pn 01 59 46.5 -0.4**
MT03 *i* S **Sn 02 00 04.2 -0.1**
**ML02 Panimavida 1.30 176** *e*P Pn 01 59 37.9 -9.1
ML02 *e*P **Pb 01 59 44.5 -2.9**
ML02 *e*S **Sb 01 59 59.9 -4.2**
ML02 IAML 02 00 01.8
comp=Z,508nm,0.6s
**ML02 Panimavida 1.30 176** *e*P **Pn 01 59 45.2 -1.9**
ML02 *i* S **Sb 02 00 01.6 -2.5**
ML02 IAML 02 00 02.4
comp=N,1µm,0.3s
**MT16 CCHEN 1.33 39** *e*P **Pn 01 59 47.2 -0.3**
MT16 *i* S **Sn 02 00 05.5 +0.2**
**MT14 Cerro Cal¡n 1.35 38** *e*P **Pn 01 59 47.3 -0.5**
MT14 *i* S **Sg 02 00 06.2 0.0**
**VA01 Torpederas 1.44 356** *e*P **Pn 01 59 48.2 -0.8**
VA01 *e*S Sn 01 59 48.5 -20
**VA01 Torpederas 1.44 356** *e*P **Pn 01 59 47.9 -1.2**
VA01 *i* S **Sn 02 00 04.2 -3.8**
**MT10 Hacienda Santa 1.45 35** *e*P **Pn 01 59 49.1 -0.1**
MT10 *i* S **Sg 02 00 08.4 -0.9**
MT10 IAML 02 00 15.6
comp=N,1µm,0.2s
**PEL Peldehue 1.49 28** *e*P **Pn 01 59 49.7 -0.1**
PEL *e*S **Sg 02 00 12.2 +1.4**
PEL IAML 02 00 14.4
comp=Z,396nm,0.2s
**PEL Peldehue 1.49 28** *e*P **Pn 01 59 49.7 -0.1**
PEL *i* S **Sg 02 00 09.2 -1.6**
PEL IAML 02 00 15.3
comp=N,821nm,0.1s
**FCH Farellones 1.53 42** *e*P **Pn 01 59 50.5 0.0**
FCH *i* S **Sg 02 00 10.8 -1.3**
**ROC1 El Roble 1.54 16** *e*P **Pn 01 59 50.4 -0.2**
ROC1 *e*S **Sg 02 00 12.1 -0.5**
**MT04 Ro Olivares 1.56 48** *e*P **Pn 01 59 50.4 -0.5**
MT04 *e*S **Sg 02 00 13.0 -0.3**
MT04 IAML 02 00 15.1
comp=Z,399nm,0.2s
**MT04 Ro Olivares 1.56 48** *e*P **Pn 01 59 51.0 +0.1**
MT04 *i* S **Sb 02 00 11.5 -0.5**
MT04 IAML 02 00 16.8
comp=N,705nm,0.2s
**MT08 Bocatoma Ro 1.61 51** *e*P **Pn 01 59 51.6 0.0**
MT08 *e*S **Sg 02 00 14.6 -0.2**
MT08 IAML 02 00 17.7
comp=Z,195nm,0.2s
**MT08 Bocatoma Ro 1.61 51** *e*P **Pb 01 59 52.1 -0.7**
MT08 *i* S **Sb 02 00 13.1 -0.3**
**VA03 San Esteban 1.88 26** *e*P Pn 01 59 42.7 -12
VA03 *e*P **Pn 01 59 55.0 -0.2**
VA03 *e*S **Sg 02 00 21.9 -1.4**
VA03 IAML 02 00 26.9
comp=Z,364nm,0.2s
**VA03 San Esteban 1.88 26** *e*P **Pn 01 59 54.9 -0.2**
VA03 *i* S **Sb 02 00 19.3 -1.7**
**EDS3 Malargue 2.17 127** *e*P **Pb 02 00 02.1 -0.3**
**RFA San Rafael 2.54 98** *e*P Pn 01 59 59.2 -5.0
RFA *e*P **Pb 02 00 04.7 -3.9**
RFA *e*S Sn 02 00 24.4 -11
**AAGR Agrelo 2.63 59** *e*P **Pn 02 00 03.2 -2.3**
AAGR *e*P **Pb 02 00 07.9 -2.3**
AAGR *e*S Sn 02 00 27.6 -10
**AVIZ Vizcacheras 2.69 69** *e*P Pg 02 00 22.5 +8.1
AVIZ *e*S **Sb 02 00 45.5 +1.3**
**ASAL Salagasta 2.92 51** *e*P **Pn 02 00 11.8 +2.3**
ASAL *e*S **Sn 02 00 46.8 +2.1**
**RTLS Leoncito 3.25 36** *e*P **Pn 02 00 15.9 +1.8**
RTLS *e*S **Sb 02 00 59.2 -1.4**
**CO02 Combarbal 3.28 8** *e*P **Pn 02 00 13.7 -0.8**
CO02 *e*S **Sn 02 00 52.7 -0.9**
**CO03 El Pedregal 3.68 11** *e*S **Sn 02 01 02.9 -0.6**
**DOCA Reserva Natura 4.07 31** *e*P **Pn 02 00 25.9 +0.4**
DOCA *e*S **Sb 02 01 25.2 +1.1**
**ACCO Cerro Coronel 4.39 29** *e*S **Sn 02 01 26.0 +4.8**
**AROD Rodeo 4.62 23** *e*S **Sb 02 01 41.4 +1.2**
**CO01 Juntas del Tor 4.64 16** *e*P **Pn 02 00 33.4 +0.2**
CO01 *e*S **Sb 02 01 40.6 +0.2**
**ACDV Cuesta del Vie 4.74 26** *e*P **Pn 02 00 34.8 +0.3**
**GO06 Curarrehue 5.11 180** *e*P **Pn 02 00 37.8 -1.8**
**AVFE Valle Fertil 5.12 43** *e*S **Sn 02 01 41.2 +2.3**

*IDC **21** 02:16:20.8±48.0, 17°.29S×177°.61W, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=886.0km s-min=163.5km az=79.0*
*NEIC **21** 02:17:18.1±0.6, 18°.3S×0°.5×178°.2W±0°.5, h561km±13km, mb3.9/10, Error ellipse: s-maj=92.4km s-min=30.8km az=219.0*

**ISC 21 02:17:17.7±3.9, 17°.9S±0°.4×178°.1W±0°.4, h590km, n15, σ1°.22/15, mb3.7/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.68** | **272** | | **P** | **02 18 38.0** | **-2.4** |
| **MLZ** | **Mavora Lakes** | **29.68** | **200** | P | **P** | **02 22 35.3** | **-1.8** |
| MLZ | | | | IAmb | IAmb | 02 22 36.4 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **33.74** | **261** | P | **P** | **02 23 12.2** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.89** | **241** | P | **P** | **02 23 54.4** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.89** | **241** | P | **P** | **02 23 54.8** | **+0.8** |
| | comp=Z,1.3nm,0.5s,baz=53,slow=10,SNR=3.4 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **02 24 41.4** | **+0.2** |
| **WB2** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **02 24 39.8** | **-1.6** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **02 24 41.6** | **+0.1** |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **02 24 41.8** | **+0.4** |
| | comp=Z,0.5nm,0.5s,baz=96,slow=7.2,SNR=16 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.08** | **254** | P | **P** | **02 24 43.0** | **+0.4** |
| AS31 | | | | IAmb | IAmb | 02 24 44.3 | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | **P** | **02 24 43.0** | **+0.4** |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | **P** | **02 24 43.6** | **+1.0** |
| | comp=Z,3.5nm,0.5s,baz=88,slow=8.8,SNR=42 | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.32** | **260** | P | **P** | **02 25 44.0** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **58.20** | **255** | P | **P** | **02 26 18.2** | **+1.4** |
| PSA00 | | | | IAmb | IAmb | 02 26 18.8 | |
| | comp=Z,2.3nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.13** | **180** | P | **P** | **02 27 44.4** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 02 28 09.3 | |
| | comp=Z,1.4nm,1.1s | | | | | | |

*IDC **21** 02:18:47.2±4.0, 11°.40S×166°.31E, h70km±34km, mb4.2/18, mbtmp4.4/19, ML4.0/1, MS3.6/22, Error ellipse: s-maj=21.7km s-min=15.8km az=102.0*
*NEIC **21** 02:18:47.9±1.5, 11°.41S±0°.09×166°.3E±0°.1, h75km±7km, mb4.7/66, Error ellipse: s-maj=17.2km s-min=12.4km az=75.0*

**ISC 21 02:18:45.9±0.4, 11°.45S±0°.06×166°.34E±0°.09, h59km, n122, σ0°.95/112, mb4.7/58, MS3.6/21, 1D, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **6.60** | **287** | Pn | **Pn** | **02 20 20.3** | **0.0** |
| **HNR** | **Honiara** | **6.60** | **287** | LR | LR | 02 23 10.8 | |
| | comp=Z,9µm,19.1s,baz=140,slow=40 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **9.26** | **192** | Pn | **Pn** | **02 20 58.3** | **+1.5** |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | Pn | **Pn** | **02 21 15.5** | **+0.8** |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | P | **Pn** | **02 21 15.9** | **+1.3** |
| | 1.1nm,0.3s,baz=319,slow=15,SNR=10 | | | | | | |
| DZM | | | | S | **Sn** | **02 23 07.9** | **-3.7** |
| | 5.3nm,0.5s,baz=319,slow=19,SNR=1.3 | | | | | | |
| DZM | | | | LR | LR | 02 25 06.8 | |
| | comp=Z,430nm,19.5s,baz=13,slow=36 | | | | | | |
| | 3.3nm,0.4s | | | | | | |
| **PINNC** | **Pines Island,** | **11.15** | **175** | Pn | **Pn** | **02 21 25.8** | **+3.2** |
| **PMG** | **Port Moresby** | **18.97** | **274** | LR | LR | 02 30 00.9 | |
| | comp=Z,171nm,20.0s,baz=118,slow=36 | | | | | | |
| **PATS** | **Pohnpei** | **19.84** | **336** | P | **P** | **02 23 11.9** | **-0.2** |
| **EIDS** | **Eidsvold** | **20.00** | **224** | P | **P** | **02 23 14.8** | **+1.0** |
| **CTA** | **Charters Tower** | **21.13** | **244** | P | **P** | **02 23 28.5** | **+2.4** |
| | 0.8nm,0.8s,baz=76,slow=10,SNR=10 | | | | | | |
| CTA | | | | LR | LR | 02 30 24.4 | |
| | comp=Z,13nm,20.0s,baz=92,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **21.13** | **244** | P | **P** | **02 23 26.9** | **+0.8** |
| **RAO** | **Raoul Island** | **23.01** | **143** | P | **P** | **02 23 45.6** | **-0.3** |
| **ARMA** | **Armidale** | **23.30** | **214** | P | **P** | **02 23 48.1** | **-0.8** |
| ARMA | | | | IAmb | IAmb | 02 23 51.6 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **28.38** | **162** | LR | LR | 02 33 38.2 | |
| | comp=Z,167nm,21.3s,baz=49,slow=31 | | | | | | |
| **RTZ** | **Ruatahuna** | **28.67** | **162** | P | **P** | **02 24 37.9** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **29.04** | **164** | P | **P** | **02 24 40.3** | **-0.2** |
| BKZ | | | | IAmb | IAmb | 02 24 41.5 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **QRZ** | **Quartz Range** | **29.77** | **171** | P | **P** | **02 24 47.6** | **+0.8** |
| **MRZ** | **Mangatainoka R** | **30.22** | **166** | P | **P** | **02 24 49.9** | **-0.9** |
| MRZ | | | | IAmb | IAmb | 02 25 24.3 | |
| | comp=Z,30nm,1.3s | | | | | | |
| **BFZ** | **Birch Farm** | **30.40** | **165** | P | **P** | **02 24 50.7** | **-1.8** |
| **TCW** | **Tory Channel** | **30.46** | **168** | P | **P** | **02 24 53.2** | **+0.3** |
| **STKA** | **Stephens Creek** | **30.56** | **224** | P | **P** | **02 24 55.2** | **+1.2** |
| **STKA** | **Stephens Creek** | **30.56** | **224** | P | **P** | **02 24 55.0** | **+1.0** |
| | comp=Z,5.2nm,0.8s,baz=54,slow=8.2,SNR=10.0 | | | | | | |
| STKA | | | | PcP | **PcP** | **02 27 50.6** | **-1.1** |
| | comp=Z,1.9nm,0.6s,baz=72,slow=6.4,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 02 36 05.0 | |
| | comp=Z,182nm,19.9s,baz=28,slow=34 | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **THZ** | **Tophouse** | **30.74** | **170** | P | **P** | **02 24 56.8** | **+1.2** |
| THZ | | | | IAmb | IAmb | 02 25 01.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **LTZ** | **Lake Taylor** | **31.64** | **172** | P | **P** | **02 25 03.6** | **+0.2** |
| **WR0** | **Warramunga Arr** | **31.71** | **251** | P | **P** | **02 25 03.0** | **-1.4** |
| WR0 | | | | IAmb | IAmb | 02 25 04.8 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.81** | **251** | P | **P** | **02 25 04.5** | **-0.7** |
| **WB2** | **Warramunga Arr** | **31.88** | **251** | P | **P** | **02 25 04.9** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 02 25 06.2 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.89** | **251** | P | **P** | **02 25 03.7** | **-2.2** |
| **WRA** | **Warramunga Arr** | **31.89** | **251** | P | **P** | **02 25 05.4** | **-0.6** |
| | comp=Z,6.7nm,0.8s,baz=81,slow=9.2,SNR=26 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 27 55.5** | **0.0** |
| | comp=Z,2.1nm,0.8s,baz=78,slow=3.2,SNR=8.8 | | | | | | |
| WRA | | | | LR | LR | 02 35 48.4 | |
| | comp=Z,187nm,20.9s,baz=16,slow=32 | | | | | | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **GVZ** | **Greta Valley S** | **31.94** | **171** | P | **P** | **02 25 06.3** | **+0.3** |
| **FOZ** | **Fox Glacier** | **32.11** | **175** | P | **P** | **02 25 07.1** | **-0.3** |
| **MQZ** | **McQueen's Vall** | **32.60** | **171** | P | **P** | **02 25 11.1** | **-0.7** |
| **GUMO** | **Guam** | **32.75** | **319** | LR | LR | 02 39 34.0 | |
| | comp=Z,20nm,18.9s,baz=178,slow=38 | | | | | | |
| **AS31** | **Alice Springs** | **33.13** | **244** | P | **P** | **02 25 16.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **33.14** | **244** | P | **P** | **02 25 16.7** | **-0.1** |
| **ASAR** | **Alice Springs** | **33.14** | **244** | P | **P** | **02 25 16.1** | **-0.7** |
| | comp=Z,8.3nm,0.7s,baz=74,slow=9.4,SNR=52 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 27 58.7** | **-0.2** |
| | comp=Z,3.1nm,0.8s,baz=75,slow=3.1,SNR=13 | | | | | | |
| ASAR | | | | LR | LR | 02 37 41.5 | |
| | comp=Z,134nm,19.2s,baz=94,slow=34 | | | | | | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **RAR** | **Rarotonga** | **33.87** | **111** | LR | LR | 02 37 01.0 | |
| | comp=Z,45nm,19.4s,baz=222,slow=32 | | | | | | |
| **BBOO** | **Buckleboo** | **34.98** | **228** | P | **P** | **02 25 32.7** | **0.0** |
| BBOO | | | | IAmb | IAmb | 02 25 57.8 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **PPT** | **Papeete** | **43.04** | **103** | LR | LR | 02 42 15.8 | |
| | comp=Z,59nm,18.6s,baz=208,slow=33 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **45.55** | **251** | P | **P** | **02 27 01.1** | **+0.9** |
| **MBWA** | **Marble Bar** | **45.62** | **252** | P | **P** | **02 27 00.7** | **0.0** |
| MBWA | | | | IAmb | IAmb | 02 27 02.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **49.72** | **236** | P | **P** | **02 27 32.0** | **-0.4** |
| **NWAO** | **Narrogin (SRO)** | **49.72** | **236** | P | **P** | **02 27 32.3** | **-0.1** |
| | comp=Z,16nm,0.7s,baz=106,slow=3.8,SNR=8.5 | | | | | | |
| NWAO | | | | LR | LR | 02 47 48.0 | |
| | comp=Z,169nm,20.2s,baz=104,slow=35 | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MORW** | **Morawa** | **49.94** | **242** | P | **P** | **02 27 33.5** | **-0.6** |
| MORW | | | | IAmb | IAmb | 02 27 35.4 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **KKM** | **Kota Kinabalu** | **52.81** | **287** | P | **P** | **02 27 54.2** | **-1.7** |
| **JGF** | **Kuroka** | **54.23** | **331** | P | **P** | **02 28 04.5** | **-1.3** |
| **JMN** | **Monobe** | **54.52** | **327** | P | **P** | **02 28 08.0** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **54.60** | **332** | P | **P** | **02 28 07.6** | **-0.9** |
| | comp=Z,2.3nm,0.6s,baz=168,slow=9.3,SNR=7.9 | | | | | | |
| MJAR | | | | LR | LR | 02 49 13.5 | |
| | comp=Z,30nm,20.9s,baz=176,slow=34 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **60.54** | **325** | P | **P** | **02 28 49.0** | **-1.1** |
| | comp=Z,1.4nm,0.6s,baz=138,slow=7.9,SNR=5.2 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **62.71** | **315** | *e*P | **P** | **02 29 05.3** | **+0.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **63.57** | **333** | P | **P** | **02 29 10.5** | **+0.2** |
| USRK | | | | LR | LR | 02 54 02.7 | |
| | comp=Z,14nm,20.8s,baz=192,slow=33 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **64.72** | **354** | P | **P** | **02 29 17.7** | **0.0** |
| | comp=Z,4.8nm,0.9s,baz=122,slow=11,SNR=2.5 | | | | | | |
| PETK | | | | LR | LR | 02 53 29.9 | |
| | comp=Z,34nm,20.8s,baz=106,slow=32 | | | | | | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **CASY** | **Casey** | **66.22** | **201** | P | **P** | **02 29 27.2** | **0.0** |
| CASY | | | | IAmb | IAmb | 02 29 28.3 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **KLR** | **Kul'dur** | **67.66** | **336** | LR | LR | 02 55 10.5 | |
| | comp=Z,35nm,20.9s,baz=184,slow=32 | | | | | | |
| **GYA** | **Guiyang** | **69.12** | **304** | P | **P** | **02 29 46.4** | **-0.1** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **70.82** | **312** | ⇓P | **P** | **02 29 56.9** | **+0.3** |
| XAN | | | | pP | sP | 02 30 19.0 | +0.2 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **S12K** | **Black Hills** | **71.94** | **18** | P | **P** | **02 30 01.9** | **-0.9** |
| S12K | | | | IAmb | IAmb | 02 30 07.0 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **72.52** | **319** | *e*P | **P** | **02 30 08.6** | **+1.9** |
| HHC | | | | sP | sP | 02 30 36.1 | +7.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,4.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.81** | **293** | P | **P** | **02 30 09.9** | **+1.1** |
| | comp=Z,1.4nm,0.4s,baz=120,slow=4.5,SNR=9.9 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **PZH** | **PanZhiHua** | **73.18** | **302** | P | **P** | **02 30 12.6** | **+1.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,70nm,3.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **76.74** | **21** | LR | LR | 02 57 51.8 | |
| | comp=Z,61nm,19.3s,baz=238,slow=31 | | | | | | |
| **P18K** | **Big Mountain,** | **77.08** | **19** | P | **P** | **02 30 31.8** | **-0.8** |
| **M16K** | **Timber Creek** | **77.28** | **17** | P | **P** | **02 30 33.3** | **-0.3** |
| M16K | | | | IAmb | IAmb | 02 30 59.6 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **O18K** | **Koktuh Hills** | **77.45** | **19** | P | **P** | **02 30 33.9** | **-0.8** |
| O18K | | | | IAmb | IAmb | 02 31 16.2 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **77.66** | **15** | P | **P** | **02 30 36.1** | **+0.4** |
| K15K | | | | IAmb | IAmb | 02 30 37.1 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **M17K** | **Holitna River** | **78.02** | **17** | P | **P** | **02 30 38.5** | **+0.8** |
| M17K | | | | IAmb | IAmb | 02 30 44.1 | |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **78.56** | **180** | P | **P** | **02 30 40.9** | **0.0** |
| QSPA | | | | IAmb | IAmb | 02 30 42.0 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **78.56** | **180** | P | **P** | **02 30 41.1** | **+0.1** |
| | comp=Z,12nm,0.8s,baz=346,slow=0.8,SNR=52 | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **J16K** | **Anvik River** | **78.73** | **15** | P | **P** | **02 30 41.3** | **-0.3** |
| J16K | | | | IAmb | IAmb | 02 30 47.2 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **K17K** | **Iditarod** | **78.85** | **16** | P | **P** | **02 30 42.8** | **+0.5** |
| K17K | | | | IAmb | IAmb | 02 31 17.5 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **L18K** | **Granite Mounta** | **78.89** | **17** | P | **P** | **02 30 42.9** | **+0.4** |
| L18K | | | | IAmb | IAmb | 02 30 44.2 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **J17K** | **VABM Dome** | **79.21** | **15** | P | **P** | **02 30 44.2** | **0.0** |
| J17K | | | | IAmb | IAmb | 02 30 49.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **79.33** | **324** | P | **P** | **02 30 45.5** | **0.0** |
| | comp=Z,1.6nm,0.6s,baz=145,slow=3.7,SNR=7.7 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **L19K** | **White Mountain** | **79.38** | **17** | P | **P** | **02 30 44.9** | **-0.4** |
| **GTA** | **Gaotai** | **79.76** | **314** | *e*P | **P** | **02 30 49.5** | **+1.5** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **J18K** | **Innoko River** | **79.88** | **16** | P | **P** | **02 30 47.7** | **-0.2** |
| **G16K** | **Koyuk River** | **80.12** | **13** | P | **P** | **02 30 49.1** | **0.0** |
| G16K | | | | IAmb | IAmb | 02 31 11.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **J20K** | **Nowinta River** | **81.14** | **16** | P | **P** | **02 30 54.0** | **-0.7** |
| **E18K** | **Tukpahlearik C** | **82.22** | **12** | P | **P** | **02 30 59.5** | **-0.8** |
| **N25K** | **Chitina, Valde** | **82.31** | **21** | P | **P** | **02 31 01.1** | **+0.1** |
| N25K | | | | IAmb | IAmb | 02 31 04.2 | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **E19K** | **Redstone River** | **82.98** | **13** | P | **P** | **02 31 04.5** | **+0.3** |
| E19K | | | | IAmb | IAmb | 02 31 07.8 | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **WRH** | **Wood River Hil** | **83.13** | **18** | P | **P** | **02 31 03.8** | **-1.2** |
| WRH | | | | IAmb | IAmb | 02 31 07.7 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **C18K** | **Utukok River** | **83.14** | **11** | P | **P** | **02 31 05.0** | **-0.1** |
| C18K | | | | IAmb | IAmb | 02 31 27.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.34** | **18** | P | **P** | **02 31 05.0** | **-1.1** |
| **D19K** | **Kuna River** | **83.64** | **12** | P | **P** | **02 31 07.3** | **-0.3** |
| D19K | | | | IAmb | IAmb | 02 31 08.6 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **83.68** | **17** | P | **P** | **02 31 08.0** | **+0.1** |
| **F21K** | **Alatna River** | **83.69** | **15** | P | **P** | **02 31 08.2** | **+0.3** |
| **ILAR** | **Eielson Array** | **83.71** | **18** | P | **P** | **02 31 07.4** | **-0.7** |
| **ILAR** | **Eielson Array** | **83.71** | **18** | P | **P** | **02 31 07.5** | **-0.5** |
| | comp=Z,1.7nm,0.6s,baz=254,slow=5.4,SNR=16 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **C19K** | **Lookout Ridge** | **83.84** | **12** | P | **P** | **02 31 07.7** | **-1.0** |
| C19K | | | | IAmb | IAmb | 02 31 49.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **J25K** | **Salcha River,** | **84.08** | **19** | P | **P** | **02 31 09.4** | **-0.6** |
| J25K | | | | IAmb | IAmb | 02 31 11.1 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **SCRK** | **Sand Creek** | **84.10** | **20** | P | **P** | **02 31 09.8** | **-0.4** |
| SCRK | | | | IAmb | IAmb | 02 31 13.5 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **G23K** | **Bananza Creek** | **84.19** | **16** | P | **P** | **02 31 11.2** | **+0.7** |
| **L27K** | **Beaver Creek,** | **84.24** | **21** | P | **P** | **02 31 10.4** | **-0.5** |
| **BCAR** | **Beaver Creek A** | **84.26** | **21** | P | **P** | **02 31 11.3** | **+0.4** |
| **MAW** | **Mawson** | **84.57** | **202** | P | **P** | **02 31 13.0** | **+0.6** |
| | comp=Z,1.5nm,0.6s,baz=66,slow=6.6,SNR=3.7 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **BBB** | **Bella Bella** | **84.58** | **34** | LR | LR | 03 02 18.5 | |
| | comp=Z,43nm,19.1s,baz=203,slow=31 | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **84.80** | **15** | P | **P** | **02 31 13.9** | **+0.4** |
| E22K | | | | IAmb | IAmb | 02 31 22.7 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **84.89** | **17** | P | **P** | **02 31 13.9** | **-0.1** |
| G24K | | | | IAmb | IAmb | 02 31 39.0 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **I26K** | **Coal Creek Min** | **85.24** | **19** | P | **P** | **02 31 16.1** | **+0.3** |
| I26K | | | | IAmb | IAmb | 02 31 17.0 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **85.73** | **15** | P | **P** | **02 31 18.7** | **+0.5** |
| TOLK | | | | IAmb | IAmb | 02 31 41.7 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **DSP** | **Deep Springs** | **85.77** | **51** | P | **P** | **02 31 18.8** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **85.84** | **50** | P | **P** | **02 31 20.3** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=221,slow=10,SNR=6.0 | | | | | | |
| NVAR | | | | LR | LR | 03 00 33.1 | |
| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **97.46** | **309** | P | Pdif | 02 32 17.8 | +4.1 |
| **BVAR** | **Borovoye Array** | **102.62** | **322** | P | **Pdif** | **02 32 36.7** | **+0.5** |
| | comp=Z,1.0nm,0.5s,baz=98,slow=7.4,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **116.87** | **346** | PKP | **PKPdf** | **02 37 22.2** | **-1.1** |
| | comp=Z,2.9nm,0.9s,baz=65,slow=2.5,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **122.36** | **339** | PKP | **PKPdf** | **02 37 32.4** | **-1.7** |
| | comp=Z,3.5nm,0.9s,baz=119,slow=2.4,SNR=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **127.24** | **345** | PKP | **PKPdf** | **02 37 43.0** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=26,slow=2.0,SNR=2.4 | | | | | | |
| **KEST** | **Kesra** | **148.09** | **323** | PKPbc | **PKPbc** | **02 38 24.7** | **-0.8** |
| | comp=Z,4.1nm,0.8s,baz=171,slow=0.5,SNR=8.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **150.60** | **345** | PKPbc | **PKPbc** | **02 38 31.6** | **0.0** |
| | comp=Z,1.0nm,0.8s,baz=8.5,slow=2.8,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **164.90** | **278** | PKP | **PKPdf** | **02 38 44.2** | **-0.1** |
| | comp=Z,0.5nm,1.0s,baz=34,slow=0.7,SNR=1.8 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **02 39 41.0** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=82,slow=5.8,SNR=4.5 | | | | | | |

**DJA 21 02:22:39.3±0.4, 8°S±3°×117°E±°, h10km, M3.6/6, mb3.7/1, MLv3.5/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.34** | **190** | P | Pb | 02 22 47.0 | -0.5 |
| TWSI | | | | S | Sb | 02 22 52.5 | -0.5 |
| **PLAI** | **Plampang** | **0.93** | **117** | P | Pg | 02 22 57.2 | 0.0 |
| PLAI | | | | S | Sb | 02 23 09.8 | -0.2 |
| **SRBI** | **Singaraja** | **1.74** | **280** | P | Pn | 02 23 10.4 | +0.8 |
| **WBSI** | **Waikabubak, Su** | **2.72** | **117** | P | Pn | 02 23 23.6 | +0.5 |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **268** | P | Pn | 02 23 22.0 | -1.6 |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **58** | P | Pn | 02 23 42.6 | -0.5 |
| **PWJI** | **Pagerwojo** | **5.10** | **274** | P | Pn | 02 23 56.4 | +0.6 |

**IDC 21 02:25:44.0±19.0, 17°98S×177°83W, h434km±179km, mb3.1/3, mbtmp3.9/3, Error ellipse: s-maj=260.4km s-min=63.8km az=139.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.16** | **260** | P | P | 02 33 20.0 | -0.6 |
| | 0.4nm,0.3s,baz=96,slow=7.2,SNR=12 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.30** | **254** | P | P | 02 33 21.9 | +0.2 |
| | 2.3nm,0.5s,baz=88,slow=8.8,SNR=25 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.84** | **13** | P | P | 02 37 35.9 | 0.0 |
| | 0.4nm,0.6s,baz=216,slow=5.3,SNR=5.1 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.22** | **315** | PKPbc | PKPdf | 02 44 31.3 | -0.2 |
| | 0.3nm,0.6s,baz=63,slow=2.3,SNR=1.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.82** | **346** | PKPbc | PKPbc | 02 44 38.4 | -0.7 |
| | 0.3nm,0.5s,baz=28,slow=4.4,SNR=1.8 | | | | | | |

*TEH **21** 02:27:19.3, 34.4°64N×46.4°28E, h6km±42km, ML3.7*
*IDC **21** 02:27:19.9±1.3, 34.4°63N×46.4°21E, h0km, mb3.8/9, mbtmp3.9/16, ML3.4/5, MS2.9/6, Error ellipse: s-maj=25.1km s-min=16.0km az=156.0*

**ISC 21 02:27:20.8±1.2, 34°57N±0°.03×46°31E±0°.03, h11km±8km, n156, σ1§76/180, mb4.0/27, MS3.0/3, 5C-4D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **24** | **Pg** | **Pg** | **02 27 23.1** | **-1.2** |
| **IGHG** | **Ghaleghazi** | **0.32** | **138** | Pg | **Pb** | **02 27 28.2** | **-0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **217** | **Pg** | **Pg** | **02 27 31.8** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.60** | **264** | **Pg** | **Pg** | **02 27 31.8** | **-0.7** |
| **ILIN** | **Lien** | **0.64** | **56** | Pg | **Pg** | **02 27 32.3** | **-1.0** |
| **KCHF** | **Cheshme Sefid,** | **0.67** | **116** | Pg | **Pg** | **02 27 34.0** | **+0.2** |
| KCHF | | | | Sg | **Sb** | **02 27 46.0** | **+2.0** |
| **ILBA** | **Ilam Banvizeh** | **0.94** | **185** | Pg | **Pn** | **02 27 40.2** | **+0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.12** | **75** | Pg | **Pn** | **02 27 42.7** | **0.0** |
| **IBZA** | **Bozab** | **1.28** | **94** | Pg | **Pb** | **02 27 45.2** | **+0.1** |
| **IKFM** | **Kafar-mosalman** | **1.64** | **129** | Pg | **Pg** | **02 27 52.3** | **-0.1** |
| **SDS1** | **Sardasht. Az.** | **1.72** | **337** | Pg | **Pn** | **02 27 50.2** | **-0.6** |
| **IDOB** | **Doab** | **1.73** | **116** | Pg | **Pg** | **02 27 53.8** | **-0.2** |
| **HSAM** | **Samen** | **1.93** | **100** | Pn | **Pb** | **02 27 56.8** | **+0.7** |
| **MAHB** | **Mahabad** | **2.25** | **347** | Pn | **Pb** | **02 27 59.6** | **-2.0** |
| **HAGD** | **Aghdareh** | **2.34** | **83** | Pn | **Pb** | **02 28 02.2** | **-0.9** |
| **IHSH** | **Hashtrud** | **2.84** | **15** | Pn | **Pn** | **02 28 07.7** | **+1.3** |
| **QABG** | **Abgarm-Qazvin** | **2.91** | **66** | Pn | **Pb** | **02 28 10.5** | **-2.4** |
| **IRAZ** | **Razeghan** | **3.08** | **73** | Pn | **Pb** | **02 28 13.0** | **-2.8** |
| **IAZR** | **Azarshahr** | **3.12** | **355** | Pn | **Pn** | **02 28 11.8** | **+1.7** |
| **ISRB** | **Sarab** | **3.43** | **18** | Pn | **Pn** | **02 28 16.4** | **+2.0** |
| **ISHB** | **Shabestar** | **3.75** | **352** | Pn | **Pn** | **02 28 19.6** | **+0.8** |
| **IHRS** | **Heris** | **3.79** | **9** | Pn | **Pn** | **02 28 21.4** | **+2.0** |
| **IMRD** | **Marand** | **4.17** | **353** | Pn | **Pn** | **02 28 26.9** | **+2.4** |
| **IPIR** | **Pirpir** | **4.26** | **115** | Pn | **Pn** | **02 28 28.2** | **+2.4** |
| **QAMS** | **Qamsar** | **4.29** | **100** | Pn | **Pn** | **02 28 30.0** | **+3.6** |
| **JHBN** | **Jahan bin** | **4.32** | **121** | Pn | **Pn** | **02 28 29.8** | **+3.1** |
| **IVRN** | **Varamin** | **4.48** | **83** | Pn | **Pn** | **02 28 31.6** | **+3.0** |
| **ZNGN** | **Zangian** | **4.52** | **121** | Pn | **Pn** | **02 28 32.7** | **+3.2** |
| **IKLH** | **Kolahrood** | **4.55** | **104** | Pn | **Pn** | **02 28 34.3** | **+4.4** |
| **IBRJ** | **Brojen** | **4.92** | **121** | Pn | **Pn** | **02 28 38.4** | **+3.5** |
| **IGAR** | **Gharneh** | **5.25** | **113** | Pn | **Pn** | **02 28 43.0** | **+3.6** |
| **KBD** | **Kabd** | **5.50** | **167** | P | **Pn** | **02 28 44.4** | **+1.7** |
| KBD | | | | S | **Sn** | **02 29 47.1** | **+1.2** |
| **KLNJ** | **Kolanjah** | **5.69** | **127** | Pn | **Pn** | **02 28 47.9** | **+2.4** |
| **GNI** | **Garni** | **5.71** | **348** | Pg | **Pb** | **02 29 01.8** | **+1.2** |
| | 1.0nm,0.3s,baz=94,slow=13,SNR=1.6 | | | | | | |
| GNI | | | | Lg | Lg | 02 30 26.4 | |
| | 0.7nm,0.3s,baz=267,slow=14,SNR=4.0 | | | | | | |
| GNI | | | | LR | LR | 02 30 56.6 | |
| | comp=Z,43nm,18.1s,baz=166,slow=38 | | | | | | |
| **IRAM** | **Ramesheh** | **5.78** | **117** | Pn | **Pn** | **02 28 49.5** | **+2.8** |
| **DSBU** | **Dashti - Bushe** | **7.49** | **144** | Pn | **Pn** | **02 29 13.4** | **+3.4** |
| **ASF** | **Jabal al Asfar** | **8.23** | **256** | Pn | **Pn** | **02 29 19.9** | **-0.4** |
| | 0.7nm,0.3s,baz=208,slow=0.0,SNR=7.6 | | | | | | |
| ASF | | | | Lg | Lg | 02 31 28.6 | |
| | 0.6nm,0.3s,baz=236,slow=0.4,SNR=2.4 | | | | | | |
| | 1.8nm,0.3s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.21** | **263** | Pn | **Pn** | **02 29 34.9** | **+1.2** |
| | 1.1nm,0.3s,baz=71,slow=18,SNR=5.1 | | | | | | |
| MMAI | | | | Lg | Lg | 02 31 59.1 | |
| | 1.2nm,0.3s,baz=317,slow=53,SNR=2.5 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **SAKB** | **Bahrain** | **9.30** | **156** | P | **Pn** | **02 29 36.3** | **+1.5** |
| **SMRA** | **Abu-Samra** | **10.54** | **157** | P | **Pn** | **02 29 52.7** | **+0.8** |
| SMRA | | | | S | **Sn** | **02 31 48.0** | **-1.9** |
| **TRNA** | **Turayna** | **10.68** | **155** | P | **Pn** | **02 29 54.0** | **+0.3** |
| | SNR=12 | | | | | | |
| TRNA | | | | S | **Sn** | **02 31 52.3** | **-1.1** |
| **EIL** | **Elat** | **10.80** | **246** | Pn | **Pn** | **02 29 55.8** | **+0.5** |
| | 0.3nm,0.3s,baz=16,slow=8.5,SNR=2.6 | | | | | | |
| | 3.0nm,0.9s | | | | | | |
| **RAYN** | **Ar Rayn** | **11.03** | **184** | Pn | **Pn** | **02 29 57.7** | **-0.8** |
| **RAYN** | **Ar Rayn** | **11.03** | **184** | P | **Pn** | **02 29 58.4** | **-0.2** |
| RAYN | | | | S | **Sn** | **02 32 00.2** | **-1.8** |
| **JRN** | **Qarnain Island** | **11.14** | **148** | P | **Pn** | **02 30 00.2** | **+0.2** |
| **BRTR** | **Keskin Array B** | **11.35** | **301** | Pn | **Pn** | **02 30 05.2** | **+2.2** |
| | 0.1nm,0.3s,baz=115,slow=13,SNR=11 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **SLWR** | **Sila** | **11.46** | **154** | P | **Pn** | **02 30 05.0** | **+0.6** |
| SLWR | | | | S | **Sn** | **02 32 10.9** | **-1.6** |
| **SHME** | **Shamm** | **12.00** | **132** | Pn | **Pn** | **02 30 11.8** | **0.0** |
| **SHME** | **Shamm** | **12.00** | **132** | P | **Pn** | **02 30 12.5** | **+0.7** |
| SHME | | | | P | **Pn** | **02 30 12.5** | **+0.7** |
| SHME | | | | S | **Sn** | **02 32 24.7** | **-0.9** |
| SHME | | | | S | **Sn** | **02 32 24.7** | **-0.9** |
| **GHWR** | **Ruwais** | **12.01** | **150** | P | **Pn** | **02 30 13.1** | **+1.1** |
| GHWR | | | | S | **Sn** | **02 32 23.5** | **-2.5** |
| **BANOM** | **Banah** | **12.19** | **132** | P | **Pn** | **02 30 16.2** | **+1.8** |
| BANOM | | | | S | **Sn** | **02 32 29.8** | **-0.5** |
| **AJN** | **Ajban** | **12.50** | **141** | *i* Pn | **Pn** | **02 30 20.1** | **+1.5** |
| | SNR=9.2 | | | | | | |
| **AJN** | **Ajban** | **12.50** | **141** | P | **Pn** | **02 30 19.8** | **+1.2** |
| | SNR=9.4 | | | | | | |
| AJN | | | | S | **Sn** | **02 32 37.7** | **-0.1** |
| **MASF** | **Masafi** | **12.52** | **134** | P | **Pn** | **02 30 19.4** | **+0.5** |
| | SNR=6.0 | | | | | | |
| MASF | | | | S | **Sn** | **02 32 34.4** | **-3.9** |
| **NAZ** | **Nazwa, Dubai** | **12.52** | **137** | *i* Pn | **Pn** | **02 30 20.7** | **+1.7** |
| | SNR=29 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **12.52** | **137** | P | **Pn** | **02 30 20.6** | **+1.6** |
| | SNR=29 | | | | | | |
| NAZ | | | | S | **Sn** | **02 32 36.2** | **-2.3** |
| **MSFE** | **Esma-Masafi** | **12.52** | **134** | Pn | **Pn** | **02 30 19.5** | **+0.5** |
| **ASUD** | **Al Ashush, Dub** | **12.63** | **139** | *i* Pn | **Pn** | **02 30 21.8** | **+1.4** |
| | SNR=13 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **12.63** | **139** | P | **Pn** | **02 30 21.7** | **+1.3** |
| | SNR=13 | | | | | | |
| ASUD | | | | S | **Sn** | **02 32 40.1** | **-0.9** |
| **MZWR** | **Madinat Zayed** | **12.63** | **147** | P | **Pn** | **02 30 21.3** | **+0.9** |
| MZWR | | | | S | **Sn** | **02 32 39.4** | **-1.7** |
| **MDH** | **Madha** | **12.65** | **134** | Pn | **Pn** | **02 30 21.0** | **+0.3** |
| **MDH** | **Madha** | **12.65** | **134** | P | **Pn** | **02 30 21.0** | **+0.3** |
| **FAQ** | **Al Faqa, Dubai** | **12.68** | **138** | *i* Pn | **Pn** | **02 30 22.0** | **+1.0** |
| | SNR=11 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **12.68** | **138** | P | **Pn** | **02 30 21.9** | **+0.8** |
| | SNR=11 | | | | | | |
| FAQ | | | | S | **Sn** | **02 32 39.9** | **-2.4** |
| **UOSS** | **Minazif** | **12.87** | **136** | *i* Pn | **Pn** | **02 30 24.1** | **+0.5** |
| | SNR=15 | | | | | | |
| **UOSS** | **Minazif** | **12.87** | **136** | P | **Pn** | **02 30 24.4** | **+0.8** |
| UOSS | | | | S | **Sn** | **02 32 41.8** | **-5.0** |
| **HATD** | **Hatta, Dubai** | **12.92** | **136** | Pn | **Pn** | **02 30 25.0** | **+0.6** |
| HATD | | | | Sn | **Sn** | **02 32 40.8** | **-7.4** |
| **HATD** | **Hatta, Dubai** | **12.92** | **136** | P | **Pn** | **02 30 24.9** | **+0.6** |
| HATD | | | | S | **Sn** | **02 32 46.0** | **-2.2** |
| **ASHO** | **Ashiyiah** | **12.98** | **137** | *i* Pn | **Pn** | **02 30 25.8** | **+0.4** |
| | SNR=13 | | | | | | |
| **ASHO** | **Ashiyiah** | **12.98** | **137** | P | **Pn** | **02 30 26.0** | **+0.6** |
| | SNR=15 | | | | | | |
| ASHO | | | | S | **Sn** | **02 32 44.4** | **-5.4** |
| | SNR=7.2 | | | | | | |
| **MZR** | **Muzera** | **13.12** | **150** | *i* Pn | **Pn** | **02 30 27.9** | **+0.7** |
| | SNR=11 | | | | | | |
| **MZR** | **Muzera** | **13.12** | **150** | P | **Pn** | **02 30 28.0** | **+0.9** |
| | SNR=11 | | | | | | |
| MZR | | | | S | **Sn** | **02 32 50.5** | **-2.6** |
| **ALNE** | **Al Ain** | **13.31** | **139** | *i* Pn | **Pn** | **02 30 30.2** | **+0.5** |
| | SNR=11 | | | | | | |
| **ALNE** | **Al Ain** | **13.31** | **139** | P | **Pn** | **02 30 30.2** | **+0.5** |
| | SNR=11 | | | | | | |
| **SOHO** | **SOHO** | **13.68** | **137** | *i* Pn | **Pn** | **02 30 34.1** | **-0.6** |
| | SNR=8.3 | | | | | | |
| **SOHO** | **SOHO** | **13.68** | **137** | P | **Pn** | **02 30 34.5** | **-0.3** |
| SOHO | | | | S | **Sn** | **02 33 06.0** | **-0.8** |
| **ARQ** | **Araqi** | **14.31** | **139** | P | **Pn** | **02 30 43.6** | **+0.2** |
| | SNR=23 | | | | | | |
| ARQ | | | | S | **Sn** | **02 33 19.0** | **-3.2** |
| **HOQ** | **Hoqain** | **14.55** | **136** | P | **Pn** | **02 30 46.5** | **-0.2** |
| **BIDO** | **Bidbid** | **15.08** | **134** | P | **Pn** | **02 30 53.4** | **-0.4** |
| **BSY** | **Bisya** | **15.15** | **138** | P | **Pn** | **02 30 55.1** | **+0.2** |
| | SNR=6.9 | | | | | | |
| **SMDO** | **Samad** | **15.39** | **135** | P | **Pn** | **02 30 57.6** | **-0.4** |
| SMDO | | | | S | **Sn** | **02 33 44.0** | **-4.6** |
| **WSAR** | **Wadi Sarin** | **15.60** | **133** | Pn | **Pn** | **02 31 00.3** | **-0.3** |
| | 6.2nm,0.4s,baz=318,slow=11,SNR=23 | | | | | | |
| WSAR | | | | LR | LR | 02 38 53.5 | |
| | comp=Z,26nm,18.6s,baz=352,slow=44 | | | | | | |
| **JMDO** | **Jabal Madar** | **15.96** | **137** | P | **Pn** | **02 31 04.9** | **-0.4** |
| **WBK** | **Wadi Bani Khal** | **16.27** | **134** | P | **Pn** | **02 31 09.6** | **+0.2** |
| **JLN** | **Jalan Bani Buh** | **16.89** | **134** | P | **Pn** | **02 31 16.6** | **-0.6** |
| **MHTO** | **MHTO** | **16.99** | **140** | P | **Pn** | **02 31 18.5** | **0.0** |
| **DOK** | **Doka** | **17.34** | **154** | P | **Pn** | **02 31 22.0** | **-0.9** |
| | SNR=9.9 | | | | | | |
| **IDI** | **Anyia** | **17.58** | **278** | P | **Pn** | **02 31 25.8** | **-0.1** |
| | 9.4nm,0.9s,baz=20,slow=12,SNR=3.5 | | | | | | |
| **DQM** | **DQM** | **17.65** | **143** | P | **Pn** | **02 31 27.5** | **+0.8** |
| **WHFO** | **Wadi Hawf** | **17.87** | **156** | P | **Pn** | **02 31 27.3** | **-2.2** |
| | SNR=26 | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.02** | **25** | P | **P** | **02 31 33.2** | **+1.7** |
| | 0.2nm,0.3s,baz=227,slow=9.1,SNR=5.3 | | | | | | |
| AKTO | | | | LR | LR | 02 39 13.3 | |
| | comp=Z,50nm,18.3s,baz=28,slow=40 | | | | | | |
| | 1.7nm,0.6s | | | | | | |
| **ABTO** | **Aybut** | **18.25** | **158** | P | **Pn** | **02 31 32.0** | **-2.1** |
| **RBK** | **Rabkut** | **18.40** | **155** | P | **P** | **02 31 34.0** | **-2.0** |
| **SHAO** | **Shalim** | **18.45** | **151** | P | **P** | **02 31 34.4** | **-2.1** |
| **DMTO** | **DMTO** | **18.47** | **153** | P | **P** | **02 31 35.5** | **-1.2** |
| **MLR** | **Muntele Rosu** | **18.98** | **311** | P | **Pn** | **02 31 46.3** | **+3.3** |
| | 1.3nm,0.5s,baz=185,slow=3.5,SNR=5.8 | | | | | | |
| **TESR** | **Tescani** | **19.07** | **315** | ⇓P | **P** | **02 31 40.3** | **-2.8** |
| **VOIR** | | **19.52** | **310** | ⇑P | **Pn** | **02 31 49.6** | **+0.2** |
| **DOPR** | **Dopca** | **19.55** | **312** | ⇓P | **Pn** | **02 31 48.7** | **-1.0** |
| **AK10** | **Malin Array Si** | **20.28** | **327** | P | **P** | **02 31 55.3** | **-1.0** |
| **AK08** | **Malin Array Si** | **20.30** | **327** | P | **P** | **02 31 55.7** | **-0.8** |
| **AK05** | **Malin Array Si** | **20.32** | **327** | P | **P** | **02 31 56.8** | **+0.1** |
| **KMPD** | **K-Podol'skiy** | **20.32** | **319** | P | **P** | **02 31 56.1** | **-0.6** |
| KMPD | | | | P | **P** | **02 31 55.8** | **-0.9** |
| **AK12** | **Malin Array Si** | **20.36** | **327** | P | **P** | **02 31 57.3** | **+0.2** |
| **AKASG** | **Malin Array Be** | **20.37** | **328** | P | **P** | **02 31 56.2** | **-1.0** |
| | 0.9nm,0.4s,baz=138,slow=9.3,SNR=3.0 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **AK14** | **Malin Array Si** | **20.37** | **327** | P | **P** | **02 31 56.9** | **-0.3** |
| **KIEV** | **Kiev** | **20.37** | **327** | P | **P** | **02 31 56.2** | **-1.0** |
| | 19nm,1.0s | | | | | | |
| **AK03** | **Malin Array Si** | **20.39** | **328** | P | **P** | **02 31 57.3** | **-0.1** |
| **AK19** | **Malin Array Si** | **20.48** | **327** | P | **P** | **02 31 58.9** | **+0.5** |
| **BURAR** | **Bucovina Array** | **20.48** | **316** | ⇑P | **P** | **02 31 59.1** | **+0.5** |
| **LUBAR** | **Lubar, Ukraine** | **20.51** | **324** | P | **P** | **02 31 58.4** | **-0.4** |
| **HORU** | **Horodok** | **20.73** | **321** | P | **P** | **02 32 00.5** | **-0.7** |
| **MI30** | **MI30,Zelenitsa** | **20.86** | **326** | P | **P** | **02 32 01.4** | **-1.2** |
| **KSV** | **Ksov** | **20.94** | **317** | P | **P** | **02 32 04.0** | **+0.5** |
| **GZR** | **Gura Zlata** | **20.95** | **308** | ⇓P | **P** | **02 32 04.2** | **+0.4** |
| **HERR** | **Herculane** | **21.00** | **307** | ⇑P | **P** | **02 32 03.2** | **-0.9** |
| **BOVS** | **Bovan** | **21.07** | **303** | ⇑P | **P** | **02 32 05.2** | **+0.2** |
| **MARR** | **Marisel-Cluj** | **21.27** | **312** | ⇓P | **P** | **02 32 08.2** | **+1.0** |
| **DRGR** | | **21.57** | **312** | ⇑P | **P** | **02 32 10.9** | **+0.5** |
| **MORS** | **Morshin** | **22.04** | **318** | P | **P** | **02 32 15.6** | **+0.3** |
| **BRIU** | **Brid** | **22.12** | **316** | P | **P** | **02 32 16.7** | **+0.6** |
| **RNPP8** | **Varash** | **22.35** | **325** | P | **P** | **02 32 18.8** | **+0.2** |
| **SHIU** | **Shidnytsya** | **22.38** | **318** | P | **P** | **02 32 19.9** | **+0.9** |
| **KOLS** | **Kolonicke sedl** | **22.84** | **316** | *eP* | **P** | **02 32 27.3** | **+3.4** |
| **CRVS** | **Cervenica-Dubn** | **23.30** | **315** | *eP* | **P** | **02 32 33.4** | **+4.9** |
| **LANS** | **Liptovska Anna** | **24.57** | **315** | *eP* | **P** | **02 32 41.9** | **+1.2** |
| **VYHS** | **Vyhne** | **24.67** | **313** | *eP* | **P** | **02 32 43.8** | **+2.2** |
| **OJC** | **Ojcow** | **24.88** | **317** | P | **P** | **02 32 43.9** | **+0.5** |
| | 15nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **25.15** | **35** | P | **P** | **02 32 47.6** | **+1.8** |
| | 1.7nm,0.7s,baz=238,slow=8.5,SNR=5.3 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| **RONA** | **Rosalia, Austr** | **25.96** | **309** | *i* P | **P** | **02 32 55.4** | **+2.1** |
| | 3.7nm,1.0s | | | | | | |
| **CONA** | **Conrad Observa** | **26.31** | **310** | *i* pP | **P** | **02 32 59.6** | **+3.1** |
| | 2.4nm,0.8s | | | | | | |
| **ARSA** | **Arzberg** | **26.31** | **308** | *i* P | **P** | **02 32 55.6** | **-0.8** |
| | 0.8nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **26.35** | **313** | LR | LR | 02 43 55.5 | |
| | comp=Z,37nm,18.7s,baz=124,slow=38 | | | | | | |
| **SOKA** | **Soboth** | **26.47** | **307** | *ep*P | **P** | **02 32 58.9** | **+0.9** |
| | 0.2nm,0.2s | | | | | | |
| **OBKA** | **Obir** | **26.74** | **306** | *i* P | **P** | **02 33 02.5** | **+2.1** |
| | 4.3nm,1.1s | | | | | | |
| **MOA** | **Molln** | **27.30** | **309** | *i* P | **P** | **02 33 03.1** | **-2.3** |
| | 3.9nm,1.5s | | | | | | |
| **MYKA** | **Terra Mystica** | **27.38** | **306** | *ep*P | **P** | **02 33 06.3** | **+0.2** |
| | 2.6nm,0.6s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **27.66** | **308** | *ep*P | **P** | **02 33 09.9** | **+1.3** |
| | 1.6nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **27.69** | **307** | *i* pP | **P** | **02 33 09.3** | **+0.2** |
| | 2.2nm,0.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **28.16** | **306** | *ep*P | **P** | **02 33 13.4** | **+0.2** |
| | 3.0nm,1.0s | | | | | | |
| **LESA** | **Schwarzleotal** | **28.22** | **307** | *eP* | **P** | **02 33 13.2** | **-0.5** |
| | 3.7nm,1.0s | | | | | | |
| **WTTA** | **Wattenberg** | **28.87** | **307** | *i* P | **P** | **02 33 18.9** | **-0.6** |
| | 2.5nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **28.92** | **307** | *i* pP | **P** | **02 33 19.9** | **-0.1** |
| | 1.9nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **29.14** | **306** | *i* P | **P** | **02 33 21.2** | **-0.7** |
| | 1.9nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **29.24** | **307** | *i* P | **P** | **02 33 22.0** | **-0.8** |
| | 0.8nm,0.4s | | | | | | |
| **FETA** | **Feichten** | **29.42** | **306** | *i* pP | **P** | **02 33 24.2** | **-0.2** |
| | 1.4nm,0.5s | | | | | | |
| **RETA** | **Reutte** | **29.50** | **307** | *i* P | **P** | **02 33 24.4** | **-0.6** |
| | 1.0nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.63** | **55** | P | **P** | **02 33 28.1** | **+1.9** |
| | 0.9nm,0.7s,baz=255,slow=5.5,SNR=3.2 | | | | | | |
| MKAR | | | | LR | LR | 02 47 40.4 | |
| | comp=Z,70nm,18.6s,baz=324,slow=41 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **29.85** | **340** | P | **P** | **02 33 27.1** | **-0.6** |
| | 1.0nm,0.6s,baz=154,slow=11,SNR=4.8 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **DAVA** | **Damuels** | **30.04** | **306** | *i* P | **P** | **02 33 29.0** | **-0.8** |
| | 3.7nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.15** | **42** | P | **P** | **02 33 56.6** | **-0.4** |
| | 0.7nm,0.5s,baz=233,slow=10,SNR=2.0 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **33.19** | **330** | P | **P** | **02 33 56.7** | **-0.5** |
| | 1.7nm,0.5s,baz=124,slow=7.9,SNR=8.6 | | | | | | |
| | 1.7nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **34.72** | **331** | LR | LR | 02 49 08.6 | |
| | comp=Z,14nm,18.2s,baz=140,slow=38 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.65** | **317** | P | **P** | **02 34 51.8** | **-0.7** |
| | 1.3nm,0.5s,baz=106,slow=8.4,SNR=27 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.99** | **293** | P | **P** | **02 34 55.2** | **-0.4** |
| | 1.3nm,0.8s,baz=63,slow=7.9,SNR=17 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.59** | **253** | P | **P** | **02 35 41.5** | **+0.4** |
| | 0.7nm,0.8s,baz=44,slow=6.4,SNR=8.0 | | | | | | |
| | 0.7nm,0.8s | | | | | | |

**STR 21 02:27:27.3±1.8, 50°N±8°×±°, h10km, MLv1.5/4, Error ellipse: s-maj=0.0km s-min=0.0km az=33.9, preliminary, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABH** | **Alteburg** | **0.28** | **217** | Pg | Pg | 02 27 32.7 | -0.2 |
| ABH | | | | Sg | Sg | 02 27 37.1 | +0.4 |
| **LEMB** | **Lembach** | **1.07** | **182** | Pg | Pg | 02 27 47.1 | -0.7 |
| LEMB | | | | Sg | Sb | 02 28 02.1 | +0.2 |
| **WLF** | **Walferdange** | **1.16** | **248** | Pg | Pb | 02 27 48.3 | -1.0 |
| WLF | | | | Sg | Sn | 02 28 05.1 | -0.2 |
| **CIEL** | **Dossenheim-sur** | **1.30** | **193** | Pn | Pn | 02 27 51.1 | -0.4 |

**NAM 21 02:29:34.9±4.4, 19.74S×14.48E, h22km±13km, ML0.6, 5C-4D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.02** | **106** | ⇓*i* P | Pb | 02 29 40.5 | +1.7 |
| ST3N | | | | *i* S | Sb | 02 29 42.0 | +0.5 |
| ST3N | | | | IAML | | 02 29 42.2 | |
| | comp=Z,8.2nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.02** | **106** | *i* P | Pb | 02 29 40.5 | +1.7 |
| ST3N | | | | *i* S | Sb | 02 29 42.0 | +0.5 |
| ST3N | | | | IAML | | 02 29 42.1 | |
| | comp=Z,9.1nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **136** | ⇑*i* P | Pb | 02 29 39.5 | +0.3 |
| ST9N | | | | *i* S | Sb | 02 29 40.2 | -1.9 |
| ST9N | | | | IAML | | 02 29 40.5 | |
| | comp=Z,519nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **136** | *i* P | Pb | 02 29 39.4 | +0.3 |
| ST9N | | | | *i* S | Sb | 02 29 40.2 | -1.9 |
| ST9N | | | | IAML | | 02 29 40.6 | |
| | comp=Z,180nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **231** | ⇑*i* P | Pb | 02 29 41.7 | +1.0 |
| ST6N | | | | *i* S | Sb | 02 29 44.0 | -0.7 |
| ST6N | | | | IAML | | 02 29 44.0 | |
| | comp=Z,6.5nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **231** | *i* P | Pb | 02 29 41.6 | +1.0 |
| ST6N | | | | *i* S | Sb | 02 29 44.1 | -0.5 |
| ST6N | | | | IAML | | 02 29 44.2 | |
| | comp=Z,5.7nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **90** | ⇓*i* P | Pb | 02 29 40.3 | -0.2 |
| ST1N | | | | *i* S | Sb | 02 29 41.5 | -3.0 |
| ST1N | | | | IAML | | 02 29 41.6 | |
| | comp=Z,21nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **90** | *i* P | Pb | 02 29 40.1 | -0.4 |
| ST1N | | | | *i* S | Sb | 02 29 41.5 | -2.9 |
| ST1N | | | | IAML | | 02 29 41.7 | |
| | comp=Z,16nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **287** | ⇓*i* P | Pb | 02 29 43.7 | +3.2 |
| ST8N | | | | *i* S | Sb | 02 29 47.2 | +2.8 |
| ST8N | | | | IAML | | 02 29 47.7 | |
| | comp=Z,1.1nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.22** | **150** | ⇓*i* P | Pb | 02 29 40.7 | -0.2 |
| ST2N | | | | *i* S | Sb | 02 29 42.6 | -2.4 |
| ST2N | | | | IAML | | 

comp=Z,7.6nm,0.5s,baz=93,slow=6.9,SNR=42
comp=Z,7.6nm,0.5s
**AS31** **Alice Springs** **45.17 254** P **P** **02 43 36.5 -0.4**
AS31 IAmb IAmb 02 43 37.5
comp=Z,8.3nm,0.5s
**ASAR** **Alice Springs** **45.17 254** P **P** **02 43 36.5 -0.3**
**ASAR** **Alice Springs** **45.17 254** P **P** **02 43 36.8 -0.1**
comp=Z,12nm,0.4s,baz=88,slow=8.8,SNR=177
comp=Z,12nm,0.4s
**FORT** **Forrest** **50.32 245** P **P** **02 44 14.1 -0.9**
FORT IAmb IAmb 02 44 14.9
comp=Z,17nm,0.8s
**KNRA** **Kununurra** **50.93 264** P **P** **02 44 19.1 -0.5**
KNRA IAmb IAmb 02 44 36.5
comp=Z,18nm,1.1s
**FITZ** **Fitzroy Crossi** **53.45 261** P **P** **02 44 37.4 -0.2**
**SOEI** **Soe** **56.54 270** P **P** **02 45 00.6 +1.3**
SOEI IAmb IAmb 02 45 01.1
comp=Z,24nm,0.7s
**PSA00** **Pilbara Seismi** **58.30 255** P **P** **02 45 10.3 -0.6**
**PSA00** **Pilbara Seismi** **58.30 255** P **P** **02 45 10.5 -0.5**
PSA00 IAmb IAmb 02 45 36.8
comp=Z,20nm,1.4s
**MBWA** **Marble Bar** **58.47 256** P **P** **02 45 11.2 -0.9**
**MJAR** **Matsushiro Arr** **68.39 323** P **P** **02 46 14.4 -0.7**
comp=Z,2.9nm,0.5s,baz=165,slow=6.3,SNR=5.9
comp=Z,2.9nm,0.5s
**UGM** **Wanagama** **70.11 268** P **P** **02 46 25.4 -0.4**
**QSPA** **South Pole Qui** **71.89 180** P **P** **02 46 36.9 +1.5**
**QSPA** **South Pole Qui** **71.89 180** P **P** **02 46 36.8 +1.5**
comp=Z,5.1nm,0.7s,baz=285,slow=0.4,SNR=45
comp=Z,5.1nm,0.7s
**SSLB** **Suanglung** **72.77 303** P **P** **02 46 40.3 -0.7**
SSLB IAmb IAmb 02 46 40.7
comp=Z,6.7nm,0.4s
**TPUB** **Ta-pu** **72.79 302** P **P** **02 46 40.5 -0.7**
TPUB IAmb IAmb 02 46 40.6
comp=Z,19nm,0.7s
**PEA0B** **Petropavlovsk-** **74.05 345** P **P** **02 46 46.9 -0.7**
**PETK** **Petropavlovsk-** **74.05 345** P **P** **02 46 48.5 +0.9**
**S12K** **Black Hills** **74.80 9** P **P** **02 46 50.8 -0.9**
S12K IAmb IAmb 02 47 15.7
comp=Z,19nm,1.1s
**NVAR** **Mina Array Bea** **79.28 44** P **P** **02 47 18.5 +1.7**
comp=Z,0.3nm,0.7s,baz=218,slow=10,SNR=3.4
**KLR** **Kul'dur** **80.57 329** P **P** **02 47 21.7 -1.3**
comp=Z,0.8nm,0.5s,baz=184,slow=14,SNR=2.1
comp=Z,0.8nm,0.5s
**X18A** **Snowflake** **83.13 50** P **P** **02 47 38.6 +2.1**
**ILAR** **Eielson Array** **86.03 13** P **P** **02 47 49.5 -0.2**
comp=Z,0.8nm,0.4s,baz=218,slow=4.9,SNR=13
comp=Z,0.8nm,0.4s
**SDCO** **Great Sand Dun** **87.78 49** P **P** **02 47 58.8 -0.1**
**CMAR** **Chiang Mai Arr** **89.41 290** P **P** **02 48 07.8 +1.2**
comp=Z,1.7nm,0.3s,baz=99,slow=2.8,SNR=5.9
comp=Z,1.7nm,0.3s
**VNA3** **Neumayer Olymp** **90.45 176** ⇑P **P** **02 48 10.9 +0.5**
comp=Z,3.9nm,0.6s
**VA03** **San Esteban** **94.14 126** P **P** **02 48 29.6 +1.4**
**ARCES** **ARCESS Array B** **126.65 350** PKP **PKPdf** **02 54 07.0 -0.7**
comp=Z,2.7nm,1.0s,baz=0.0,slow=2.4,SNR=4.6
**EKA** **Eskdalemuir Ar** **142.68 5** PKhKP PKPpre 02 54 34.5
comp=Z,0.4nm,0.6s,baz=321,slow=2.3,SNR=5.0
**BUR08** **Bucovina Ar. S** **145.04 332** PKPbc **PKPab** **02 54 44.1 -0.1**
**BR131** **Keskin Array S** **145.30 315** **PKPbc** **02 54 44.2 0.0**
**BRTR** **Keskin Array B** **145.30 315** PKPbc **PKPbc** **02 54 44.1 -0.1**
comp=Z,1.6nm,0.5s,baz=120,slow=3.6,SNR=17
**CLL** **Collm** **145.81 348** PKPbc **PKPbc** **02 54 45.4 +0.3**
**MMAI** **Mount Meron Ar** **146.68 303** PKPbc **PKPbc** **02 54 48.6 +0.4**
comp=Z,2.4nm,0.5s,baz=60,slow=5.0,SNR=9.0
**GERES** **GERESS Array B** **147.98 345** PKPbc **PKiKP** **02 54 51.8 -0.6**
comp=Z,1.5nm,0.6s,baz=168,slow=6.8,SNR=7.9
**CONA** **Conrad Observa** **148.25 342** *i* PKiKP **PKiKP** **02 54 52.9 -0.1**
comp=Z,5.8nm,1.4s
**RONA** **Rosalia, Austr** **148.33 342** *i* PKiKP **PKiKP** **02 54 54.1 +1.0**
comp=Z,3.5nm,0.7s
**BIOA** **Bad Ischl, Aus** **149.07 345** *e*PKP **PKiKP** **02 54 54.5 -0.1**
comp=Z,2.1nm,0.7s
**LESA** **Schwarzleotal** **149.55 346** *e*PKP **PKiKP** **02 54 55.5 -0.2**
comp=Z,1.2nm,0.5s
**SOKA** **Soboth** **149.62 342** *e*PKP **PKPbc** **02 54 55.1 0.0**
comp=Z,1.9nm,0.8s
**WATA** **Walderalm** **149.88 347** *i* PKP **PKiKP** **02 54 56.2 -0.2**
comp=Z,2.4nm,0.6s
**RETA** **Reutte** **149.90 348** *e*PKP **PKiKP** **02 54 56.0 -0.4**
comp=Z,1.1nm,0.6s
**WTTA** **Wattenberg** **149.94 347** *i* PKP **PKiKP** **02 54 56.5 -0.1**
comp=Z,4.1nm,0.6s
**MOTA** **Moosalm** **149.97 348** *i* PKP **PKiKP** **02 54 56.3 -0.3**
comp=Z,3.0nm,0.8s
**MYKA** **Terra Mystica** **150.05 344** *e*PKP **PKPbc** **02 54 55.6 -0.5**
comp=Z,2.6nm,0.7s
**SQTA** **Sankt Quirin** **150.07 347** *i* PKP **PKiKP** **02 54 56.6 -0.2**
comp=Z,2.5nm,0.6s
**ABTA** **Abfaltersbach** **150.23 345** *i* PKP **PKPbc** **02 54 56.5 0.0**
comp=Z,3.6nm,0.6s
**DAVA** **Damuels** **150.26 349** *i* PKP **PKPbc** **02 54 56.3 -0.4**
comp=Z,1.8nm,0.6s
**FETA** **Feichten** **150.35 348** *i* PKP **PKiKP** **02 54 57.5 +0.1**
comp=Z,2.0nm,0.7s
**FUORN** **Ofenpass-Fuorn** **150.83 348** **PKiKP** **02 54 58.3 -0.3**

*IDC **21** 02:40:00.5±1.3, 37.°41N× 142.°00E, h0km, mb3.6/4, mbtmp3.7/7, ML3.9/2, Error ellipse: s-maj=30.3km s-min=20.1km az=109.0*
*JMA **21** 02:40:05.2±0.2, 37.°4N±0.°5× 14.°2E±°, h42km±2km, MV3.8/33, E OFF FUKUSHIMA PREF*
*NIED **21** 02:40:05.2, 37.°37N× 141.°76E, h42km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$5.45; $M_{\theta\theta}$-4.74; $M_{\phi\phi}$-0.72; $M_{r\theta}$1.78; $M_{\theta\phi}$-1.02; $M_{r\phi}$-0.64; Fault plane solution: $M_0$5.54000×$10^{14}$ NP1:φ₁86.00000°, δ54.00000°, λ101.00000°. NP2:φ₂248.00000°, δ37.00000°, λ75.00000°.*
*NEIC **21** 02:40:07.2±1.5, 37.°38N±0.°05× 141.°60E±0.°06, h48km±9km, mb4.4/17 Error ellipse: s-maj=9.7km s-min=4.0km az=219.0*
**ISC 21 02:40:04.4±1.9, 37.°35N±0.°05× 141.°74E±0.°08, h29km±13km, n56, σ1°13/58, mb4.3/13, 9D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JFK** | **Kawauchi** | **0.69** | **272** | P | | | **Pn** | **02 40 18.8** | **+0.6** |
| JFK | | | | *e*S | | | **Sb** | 02 40 28.1 | +0.9 |
| **JMST** | **Minamisoumatoc** | **0.77** | **300** | ⇓P | | | **Pn** | **02 40 19.7** | **+0.4** |
| JMST | | | | ⇓*e*S | | | **Sb** | 02 40 29.8 | +0.3 |
| **ONAJ** | **Iwakimizuishiy** | **0.79** | **252** | P | | | **Pn** | **02 40 20.1** | **+0.5** |
| ONAJ | | | | S | | | **Sb** | **02 40 30.6** | **+0.6** |
| **JMM** | **Marumori** | **0.91** | **305** | | | | **Pb** | **02 40 21.7** | **+0.1** |
| JMM | | | | | Sn | | **Sb** | **02 40 32.9** | **-0.6** |
| **JMM** | **Marumori** | **0.91** | **305** | ⇓P | | | **Pb** | **02 40 21.8** | **+0.1** |
| JMM | | | | ⇓*e*S | | | **Sb** | **02 40 33.2** | **-0.2** |
| **JIKH** | **Ishinomakikobu** | **0.99** | **348** | ⇓P | | | **Pn** | **02 40 22.1** | **-0.2** |
| JIKH | | | | ⇓*e*S | | | **Sb** | **02 40 34.1** | **-1.5** |
| **JOTO** | **OTAMA OYAMA** | **1.14** | **281** | *e*P | | | **Pb** | **02 40 26.2** | **+0.7** |
| JOTO | | | | *e*S | | | **Sb** | **02 40 40.7** | **+0.8** |
| **JIO** | **Ouri** | **1.15** | **345** | ⇓P | | | **Pn** | **02 40 24.6** | **+0.1** |
| JIO | | | | ⇓*e*S | | | **Sn** | **02 40 38.1** | **-1.2** |
| **JHO** | **Hitachi** | **1.19** | **232** | P | | | **Pn** | **02 40 25.4** | **+0.4** |
| **JOU** | **Okura** | **1.32** | **321** | P | | | **Pn** | **02 40 28.1** | **+1.1** |
| **JYS** | **Shirataka** | **1.59** | **304** | P | | | **Pb** | **02 40 32.6** | **-0.5** |
| **JFY** | **Yanaizu** | **1.62** | **273** | P | | | **Pb** | **02 40 32.8** | **-0.8** |
| **JMK** | **Ichinoseki** | **1.65** | **346** | ⇓P | | | **Pn** | **02 40 32.2** | **+0.7** |
| **JSD** | **Sado** | **2.84** | **285** | Pn | | | **Pn** | **02 40 49.4** | **+1.6** |
| **MJAR** | **Matsushiro Arr** | **2.94** | **255** | Pn | | | **Pb** | **02 40 52.8** | **-3.3** |
| | 1.7nm,0.3s,baz=78,slow=15,SNR=9.9 | | | | | | | | |
| MJAR | | | | | Sn | | **Sb** | **02 41 31.1** | **-0.5** |
| | 0.9nm,0.3s,baz=197,slow=20,SNR=7.4 | | | | | | | | |
| **MAJO** | **Matsushiro** | **2.94** | **255** | Pn | | | **Pn** | **02 40 49.9** | **+0.7** |
| **MJB9** | **Matsu-Tunnel** | **2.94** | **255** | Pn | | | **Pn** | **02 40 50.1** | **+0.9** |
| **JTM** | **Tenmabayashi** | **3.48** | **352** | | | | **Pn** | **02 40 58.7** | **+2.2** |
| **JGF** | **Kuroka** | **3.94** | **245** | Pn | | | **Pn** | **02 41 04.3** | **+1.4** |
| **INU** | **Inuyama** | **4.30** | **244** | Pn | | | **Pn** | **02 41 07.6** | **-0.3** |
| **JHJ2** | **Mitsune** | **4.51** | **201** | Pn | | | **Pn** | **02 41 12.0** | **+1.3** |
| **JHJ** | **Hachijo jima 2** | **4.51** | **201** | Pn | | | **Pn** | **02 41 12.4** | **+1.7** |
| | 13nm,0.3s,baz=53,slow=18,SNR=1.5 | | | | | | | | |
| JHJ | | | | | Sn | | **Sn** | **02 42 01.1** | **-1.1** |
| | 24nm,0.3s,baz=78,slow=21,SNR=4.7 | | | | | | | | |
| | 46nm,0.4s | | | | | | | | |
| **ERM** | **Erimo** | **4.79** | **13** | Pn | | | **Pn** | **02 41 14.8** | **+0.2** |
| **ASAJ** | **Asahikawa** | **6.79** | **5** | Pn | | | **Pn** | **02 41 42.0** | **-0.1** |
| | 2.2nm,0.3s,baz=268,slow=4.9,SNR=5.4 | | | | | | | | |
| ASAJ | | | | | Sn | | **Sn** | **02 42 56.5** | **-1.9** |
| | 0.5nm,0.3s,baz=102,slow=20,SNR=1.6 | | | | | | | | |
| | 4.8nm,0.3s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **19.29** | **30** | P | | | **Pn** | **02 44 28.1** | **+0.2** |
| **H11N2** | **WAKE ISLAND Hy** | **28.09** | **122** | T | | | T | 03 15 24.5 | |
| | baz=315,slow=75,SNR=70 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.10** | **122** | T | | | T | 03 15 21.3 | |
| | baz=315,slow=75,SNR=59 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.11** | **122** | T | | | T | 03 15 20.1 | |
| | baz=315,slow=75,SNR=53 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.82** | **124** | T | | | T | 03 16 17.9 | |
| | baz=316,slow=76,SNR=48 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.82** | **124** | T | | | T | 03 16 07.0 | |
| | baz=316,slow=76,SNR=46 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.83** | **124** | T | | | T | 03 16 15.0 | |
| | baz=316,slow=76,SNR=45 | | | | | | | | |
| **C18K** | **Utukok River** | **43.88** | **26** | P | | | **P** | **02 48 09.4** | **+1.5** |
| C18K | | | | | | IAmb | IAmb | 02 48 27.8 | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.17** | **302** | P | | | **P** | **02 48 11.8** | **+1.3** |
| | comp=Z,0.7nm,0.8s,baz=81,slow=8.9,SNR=3.1 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| **E19K** | **Redstone River** | **45.08** | **28** | P | | | **P** | **02 48 18.3** | **+0.9** |
| **KURBB** | **Kurchatov Arra** | **46.01** | **308** | P | | | **P** | **02 48 25.1** | **+0.1** |
| | comp=Z,0.4nm,0.5s,baz=84,slow=8.6,SNR=3.4 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **46.70** | **42** | P | | | **P** | **02 48 28.8** | **-1.4** |
| **H23K** | **Yukon River** | **47.97** | **31** | P | | | **P** | **02 48 40.8** | **+0.7** |
| H23K | | | | | | IAmb | IAmb | 02 48 58.5 | |
| | comp=Z,4.2nm,1.4s | | | | | | | | |
| **GHO** | **Glory Hole Cre** | **48.31** | **37** | P | | | **P** | **02 48 44.2** | **+1.3** |
| **WRH** | **Wood River Hil** | **48.59** | **33** | P | | | **P** | **02 48 45.2** | **+0.4** |
| WRH | | | | | | IAmb | IAmb | 02 48 49.0 | |
| | comp=Z,4.3nm,1.3s | | | | | | | | |
| **ILAR** | **Eielson Array** | **49.09** | **33** | P | | | **P** | **02 48 48.5** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=254,slow=6.0,SNR=4.0 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| **I28M** | **Miner Creek** | **51.96** | **31** | P | | | **P** | **02 49 12.5** | **+2.0** |
| I28M | | | | | | IAmb | IAmb | 02 49 20.4 | |
| | comp=Z,4.0nm,1.4s | | | | | | | | |
| **G29M** | **Pine Creek** | **52.53** | **29** | P | | | **P** | **02 49 15.6** | **+1.0** |
| **G30M** | **tAoh Zraii Nji** | **53.22** | **29** | P | | | **P** | **02 49 20.5** | **+0.8** |
| G30M | | | | | | IAmb | IAmb | 02 49 22.7 | |
| | comp=Z,6.6nm,1.3s | | | | | | | | |
| **I30M** | **Mount Dempster** | **53.47** | **31** | P | | | **P** | **02 49 23.9** | **+2.2** |
| I30M | | | | | | IAmb | IAmb | 02 49 28.1 | |
| | comp=Z,7.8nm,1.5s | | | | | | | | |
| **G31M** | **Satah River** | **53.98** | **29** | P | | | **P** | **02 49 26.9** | **+1.7** |
| G31M | | | | | | IAmb | IAmb | 02 49 44.9 | |
| | comp=Z,8.3nm,1.4s | | | | | | | | |
| **P32M** | **Atlin** | **56.04** | **38** | P | | | **P** | **02 49 40.6** | **+0.3** |
| **WB0** | **Warramunga Arr** | **57.23** | **188** | P | | | **P** | **02 49 50.1** | **+1.1** |
| WB0 | | | | | | IAmb | IAmb | 02 49 51.3 | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **57.40** | **188** | P | | | **P** | **02 49 50.1** | **-0.2** |
| WR0 | | | | | | IAmb | IAmb | 02 49 59.2 | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.41** | **188** | P | | | **P** | **02 49 50.3** | **0.0** |
| **WRA** | **Warramunga Arr** | **57.41** | **188** | P | | | **P** | **02 49 51.0** | **+0.7** |
| | comp=Z,0.4nm,0.4s,baz=6.2,slow=7.1,SNR=12 | | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **57.94** | **310** | P | | | **P** | **02 49 52.3** | **-1.5** |
| **ABKAR** | **Akbulak array** | **57.94** | **310** | P | | | **P** | **02 49 53.0** | **-0.8** |
| ABKAR | | | | | | IAmb | IAmb | 02 49 55.5 | |
| | comp=Z,3.1nm,1.4s | | | | | | | | |
| **MRNZ** | **Matariki Terra** | **83.35** | **157** | P | | | **P** | **02 52 28.0** | **-0.2** |
| **H03N2** | **Juan Fernandez** | **146.80** | **96** | T | | | T | 05 43 53.5 | |
| | baz=291,slow=76,SNR=3.5 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **146.81** | **96** | T | | | T | 05 43 53.3 | |
| | baz=291,slow=76,SNR=3.6 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **146.82** | **96** | T | | | T | 05 43 54.0 | |
| | baz=291,slow=76,SNR=3.3 | | | | | | | | |

**NAM 21 02:40:14.7±4.7, 19.°66S× 14.°44E, h13km±22km, ML0.2, 6C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.10** | **145** | ⇓*i*P | | | Pg | 02 40 19.6 | +1.8 |
| ST3N | | | | *i* S | | | Sg | 02 40 20.7 | +0.7 |
| ST3N | | | | IAML | | | | 02 40 21.0 | |
| | comp=Z,2.2nm,0.1s | | | | | | | | |
| **ST3N** | **ST3** | **0.10** | **145** | *i* P | | | Pg | 02 40 19.6 | +1.8 |
| ST3N | | | | *i* S | | | Sg | 02 40 20.6 | +0.7 |
| ST3N | | | | IAML | | | | 02 40 21.0 | |
| | comp=Z,2.4nm,0.1s | | | | | | | | |
| **ST8N** | **ST8** | **0.12** | **257** | ⇑*i*P | | | Pb | 02 40 22.8 | +3.9 |
| ST8N | | | | *i* S | | | Sb | 02 40 26.4 | +4.6 |
| ST8N | | | | IAML | | | | 02 40 26.6 | |
| | comp=Z,0.4nm,0.1s | | | | | | | | |
| **ST6N** | **ST6** | **0.14** | **196** | ⇑*i*P | | | Pb | 02 40 20.9 | +1.5 |
| ST6N | | | | IAML | | | | 02 40 23.3 | |
| | comp=Z,2.8nm,0.1s | | | | | | | | |
| ST6N | | | | *i* S | | | Sb | 02 40 23.4 | +0.9 |
| **ST9N** | **ST9** | **0.17** | **144** | ⇓*i*P | | | Pg | 02 40 18.7 | 0.0 |
| ST9N | | | | *i* S | | | Sg | 02 40 19.3 | -2.2 |
| ST9N | | | | IAML | | | | 02 40 19.7 | |
| | comp=Z,91nm,0.1s | | | | | | | | |
| **ST9N** | **ST9** | **0.17** | **144** | *i* P | | | Pg | 02 40 18.7 | 0.0 |
| ST9N | | | | *i* S | | | Sg | 02 40 19.3 | -2.2 |
| ST9N | | | | IAML | | | | 02 40 19.9 | |
| | comp=Z,148nm,0.1s | | | | | | | | |
| **ST1N** | **ST1** | **0.18** | **114** | ⇓*i*P | | | Pb | 02 40 19.4 | -0.5 |
| ST1N | | | | *i* S | | | Sg | 02 40 20.6 | -1.2 |
| ST1N | | | | IAML | | | | 02 40 20.7 | |
| | comp=Z,22nm,0.1s | | | | | | | | |
| **ST1N** | **ST1** | **0.18** | **114** | *i* P | | | Pb | 02 40 19.5 | -0.5 |
| ST1N | | | | *i* S | | | Sg | 02 40 20.6 | -1.2 |
| ST1N | | | | IAML | | | | 02 40 20.8 | |
| | comp=Z,14nm,0.1s | | | | | | | | |
| **ST2N** | **ST2** | **0.30** | **151** | ⇑*i*P | | | Pg | 02 40 20.6 | -0.4 |
| ST2N | | | | *i* S | | | Sg | 02 40 22.8 | -2.4 |
| ST2N | | | | IAML | | | | 02 40 23.5 | |
| | comp=Z,3.2nm,0.1s | | | | | | | | |
| **ST5N** | **ST5** | **0.32** | **113** | ⇑*i*P | | | Pg | 02 40 21.5 | +0.1 |
| ST5N | | | | *i* S | | | Sg | 02 40 24.1 | -1.7 |
| ST5N | | | | IAML | | | | 02 40 24.7 | |
| | comp=Z,1.6nm,0.0s | | | | | | | | |
| **ST10N** | **ST10** | **0.34** | **189** | ⇑*i*P | | | Pb | 02 40 22.9 | +0.2 |
| ST10N | | | | *i* S | | | Sg | 02 40 26.3 | +0.1 |
| ST10N | | | | IAML | | | | 02 40 27.2 | |
| | comp=Z,2.2nm,0.1s | | | | | | | | |
| **ST10N** | **ST10** | **0.34** | **189** | *i* P | | | Pb | 02 40 22.9 | +0.3 |
| ST10N | | | | *i* S | | | Sg | 02 40 26.3 | +0.1 |
| ST10N | | | | IAML | | | | 02 40 26.6 | |
| | comp=Z,6.3nm,0.1s | | | | | | | | |
| **ST4N** | **ST4** | **0.55** | **114** | ⇑*i*P | | | Pg | 02 40 25.3 | -0.3 |
| ST4N | | | | IAML | | | | 02 40 33.2 | |
| | comp=Z,0.7nm,0.1s | | | | | | | | |
| ST4N | | | | *i* S | | | Sn | 02 40 36.7 | -0.8 |

*IDC **21** 02:41:15.0±1.1, 50.°89N× 172.°55W, h0km, mb4.0/16, mbtmp3.9/18, ML3.4/2, MS3.3/4, Error ellipse: s-maj=33.7km s-min=16.5km az=9.0*
*NEIC **21** 02:41:19.2±1.3, 50.°90N±0.°09× 172.°55W±0.°07, h27km±6km, mb4.2/44, ML3.5(AEIC), Error ellipse: s-maj=13.6km s-min=6.6km az=177.0*
*AEIC **21** 02:41:19.4±1.7, 50.°6N±0.°1× 172.°50W±0.°10, h10km±5km, Error ellipse: s-maj=17.5km s-min=8.9km az=176.0*
**ISC 21 02:41:16.0±3.6, 50.°86N±0.°09× 172.°50W±0.°04, h7km±22km, n108, σ0°85/105, mb4.1/32, MS3.4/4, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|---|
| **KOFP** | **Korovin Flat P** | **1.73** | **326** | | | | **Pn** | **02 41 46.8** | **+0.1** |
| **KOKL** | **Mount Kliuchef** | **1.81** | **325** | | | | **Pn** | **02 41 47.9** | **+0.2** |
| KOKL | | | | | | | **Sn** | **02 42 10.4** | **-0.5** |
| **KONE** | **Korovin Northe** | **1.84** | **327** | | | | **Pn** | **02 41 48.5** | **+0.5** |
| KONE | | | | | | | **Sn** | **02 42 12.4** | **+0.9** |
| **GSMY** | **Great Sitkin M** | **2.52** | **299** | | | | **Pn** | **02 41 56.9** | **-0.4** |
| GSMY | | | | | | | **Sn** | **02 42 26.4** | **-1.9** |
| **CLES** | **Cleveland East** | **2.55** | **38** | | | | **Pn** | **02 41 57.7** | **0.0** |
| CLES | | | | | | | **Sn** | **02 42 27.9** | **-1.0** |
| **GSCK** | **Great Sitkin C** | **2.56** | **298** | | | | **Pn** | **02 41 57.5** | **-0.5** |
| GSCK | | | | | | | **Sn** | **02 42 26.8** | **-2.7** |
| **CLCO** | **Concord Point,** | **2.59** | **41** | | | | **Pn** | **02 41 58.5** | **+0.2** |
| CLCO | | | | | | | **Sn** | **02 42 29.4** | **-0.6** |
| **ADAG** | **Mount Adagdak** | **2.80** | **295** | | | | **Pn** | **02 42 01.5** | **+0.2** |
| **KIRH** | **Kanaga Island** | **3.06** | **292** | | | | **Pn** | **02 42 04.7** | **-0.1** |
| **KIWB** | **Kanaga Island** | **3.08** | **291** | Pn | | | **Pn** | **02 42 05.0** | **-0.1** |
| **NIKH** | **Nikolski High** | **3.10** | **45** | P | | | **Pn** | **02 42 04.8** | **-0.5** |
| **NIKH** | **Nikolski High** | **3.10** | **45** | | | | **Pn** | **02 42 04.9** | **-0.3** |
| NIKH | | | | | | | **Sn** | **02 42 40.7** | **-1.8** |
| **KICM** | **Kanaga Island** | **3.13** | **292** | | | | **Pn** | **02 42 05.5** | **-0.1** |
| **TAFP** | **Tanaga Falls P** | **3.59** | **289** | | | | **Pn** | **02 42 12.5** | **+0.4** |
| **TASE** | **Tanaga Southea** | **3.60** | **288** | | | | **Pn** | **02 42 12.9** | **+0.5** |
| **OKTU** | **Okmok Mt. Tuli** | **3.74** | **46** | | | | **Pn** | **02 42 14.6** | **+0.5** |
| **GAEA** | **Gareloi East** | **4.03** | **286** | | | | **Pn** | **02 42 18.6** | **+0.5** |
| **GANE** | **Gareloi Northe** | **4.05** | **286** | | | | **Pn** | **02 42 18.9** | **+0.5** |
| **MAPS** | **Pakushin South** | **4.51** | **47** | | | | **Pn** | **02 42 25.3** | **+0.6** |
| **MGOD** | **Makushin Gods** | **4.54** | **47** | | | | **Pn** | **02 42 25.3** | **+0.2** |
| **UNV** | **Unalaska Valle** | **4.74** | **49** | P | | | **Pn** | **02 42 27.6** | **-0.2** |
| **UNV** | **Unalaska Valle** | **4.74** | **49** | | | | **Pn** | **02 42 28.0** | **+0.2** |
| **LVA** | **Lava Point** | **5.15** | **48** | | | | **Pn** | **02 42 34.8** | **+1.3** |
| **SDPT** | **Sand Point** | **8.52** | **53** | P | | | **Pn** | **02 43 19.7** | **+0.1** |
| **SII** | **Sitkinak Islan** | **12.24** | **55** | P | | | **Pn** | **02 44 10.6** | **-0.1** |
| **OHAK** | **Old Harbor** | **12.94** | **53** | P | | | **Pn** | **02 44 20.0** | **-0.1** |
| **KDAK** | **Kodiak Island** | **13.50** | **51** | Pn | | | **Pn** | **02 44 25.2** | **-2.6** |
| | 0.6nm,0.3s,baz=220,slow=2.6,SNR=14 | | | | | | | | |
| **MLY** | **Manley** | **18.16** | **30** | P | | | **P** | **02 45 29.5** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **18.43** | **289** | P | | | **Pn** | **02 45 33.0** | **+1.2** |
| | 0.2nm,0.3s,baz=82,slow=17,SNR=4.4 | | | | | | | | |
| | 5.6nm,0.8s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **18.68** | **31** | P | | | **P** | **02 45 34.6** | **+0.3** |
| **CCB** | **Clear Creek Bu** | **18.91** | **34** | P | | | **P** | **02 45 35.8** | **-1.1** |
| **ILAR** | **Eielson Array** | **19.30** | **34** | P | | | **P** | **02 45 40.0** | **-1.2** |
| | 0.3nm,0.3s,baz=236,slow=9.6,SNR=21 | | | | | | | | |
| | 1.2nm,0.8s | | | | | | | | |
| **H24K** | **Noodor Dome** | **19.59** | **31** | P | | | **P** | **02 45 44.6** | **+0.1** |
| **J25K** | **Salcha River,** | **19.76** | **36** | P | | | **P** | **02 45 45.5** | **-0.8** |
| J25K | | | | | | IAmb | IAmb | 02 45 48.4 | |
| | comp=Z,6.6nm,0.7s | | | | | | | | |
| **E21K** | **Killik River** | **19.81** | **20** | P | | | **P** | **02 45 47.1** | **+0.3** |
| **G24K** | **Hadweenzic Riv** | **20.26** | **29** | | | | **P** | **02 45 52.9** | **+1.2** |
| **J26L** | **Joseph Creek** | **20.39** | **37** | | | | **P** | **02 45 52.4** | **-0.8** |
| J26L | | | | | | IAmb | IAmb | 02 45 55.2 | |
| | comp=Z,6.1nm,0.6s | | | | | | | | |
| **D22K** | **Ayikyak River** | **20.44** | **21** | P | | | **P** | **02 45 54.4** | **+0.8** |
| D22K | | | | | | IAmb | IAmb | 02 46 08.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| **PNL** | **Peninsula** | **20.62** | **52** | P | | | Pn | 02 45 59.4 | +1.5 |
| **E24K** | **Your Creek** | **20.88** | **25** | P | | | **P** | **02 45 59.4** | **+0.9** |
| E24K | | | | | | IAmb | IAmb | 02 46 04.5 | |
| | comp=Z,4.5nm,0.7s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **20.93** | **35** | P | | | **P** | **02 45 57.7** | **-1.2** |
| I26K | | | | | | IAmb | IAmb | 02 46 14.3 | |
| | comp=Z,4.4nm,0.6s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **21.00** | **23** | P | | | **P** | **02 45 59.2** | **-0.5** |
| TOLK | | | | | | IAmb | IAmb | 02 46 14.9 | |
| | comp=Z,9.7nm,0.8s | | | | | | | | |
| **EGAK** | **Eagle** | **21.43** | **38** | P | | | **P** | **02 46 04.5** | **+0.1** |
| EGAK | | | | | | IAmb | IAmb | 02 46 08.2 | |
| | comp=Z,9.7nm,1.2s | | | | | | | | |
| **F26K** | **Sheenjek River** | **21.90** | **29** | P | | | **P** | **02 46 11.2** | **+1.9** |
| F26K | | | | | | IAmb | IAmb | 02 46 14.6 | |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **I28M** | **Miner Creek** | **22.19** | **37** | | | | **P** | **02 46 12.5** | **-0.1** |
| **K29M** | **Barlow Dome** | **22.55** | **41** | P | | | **P** | **02 46 18.7** | **+2.2** |
| **E27K** | **Coleen River** | **22.97** | **29** | P | | | **P** | **02 46 20.7** | **-0.1** |
| E27K | | | | | | IAmb | IAmb | 02 46 38.2 | |
| | comp=Z,6.1nm,1.1s | | | | | | | | |
| E27K | | | | | | | **S** | **02 50 32.9** | **+1.7** |
| **H29M** | **Whitestone** | **23.11** | **35** | P | | | **P** | **02 46 21.8** | **-0.4** |
| H29M | | | | | | IAmb | IAmb | 02 46 24.6 | |
| | comp=Z,5.3nm,0.8s | | | | | | | | |
| **I30M** | **Mount Dempster** | **23.48** | **39** | P | | | **P** | **02 46 24.8** | **-1.2** |
| **EPYK** | **Eagle Plains** | **23.78** | **36** | P | | | **P** | **02 46 29.0** | **+0.2** |
| EPYK | | | | | | IAmb | IAmb | 02 46 31.3 | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| **E29M** | **Blow River** | **24.26** | **31** | P | | | **P** | **02 46 33.6** | **+0.3** |
| **MMPY** | **Sheldon Lake,** | **25.01** | **46** | | | | **P** | **02 46 41.4** | **+1.2** |
| MMPY | | | | | | IAmb | IAmb | 02 46 56.0 | |
| | comp=Z,9.5nm,1.5s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **25.27** | **34** | P | | | **P** | **02 46 41.7** | **-0.8** |
| F31M | | | | | | IAmb | IAmb | 02 46 49.2 | |
| | comp=Z,5.3nm,1.1s | | | | | | | | |
| **INK** | **Inuvik** | **25.68** | **33** | P | | | **P** | **02 46 46.7** | **+0.5** |
| INK | | | | | | IAmb | IAmb | 02 46 48.0 | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **32.70** | **47** | P | | | **P** | **02 47 48.0** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=275,slow=7.8,SNR=5.7 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **35.00** | **85** | LR | | | LR | 02 59 01.2 | |
| | comp=Z,40nm,20.7s,baz=291,slow=30 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.07** | **215** | T | | | T | 03 26 34.8 | |
| | baz=23 | | | | | | | | |
| **H11N3** | **WAKE ISLAND

ABKAR IAmb IAmb 02 52 33.2
comp=Z,4.3nm,1.1s
**EKA Eskdalemuir Ar 73.81 6** P **P** **02 52 51.4 +0.7**
comp=Z,0.4nm,0.5s,baz=328,slow=2.6,SNR=6.0
comp=Z,0.4nm,0.5s
**AKASG Malin Array Be 77.14 346** P **P** **02 53 09.4 -0.4**
comp=Z,0.5nm,0.3s,baz=16,slow=5.0,SNR=2.6
comp=Z,0.5nm,0.3s
**CLL Collm 78.10 356** *e*P **P** **02 53 15.0 -0.2**
**GERES GERESS Array B 86.93 340** P **P** **02 53 29.4 +0.6**
comp=Z,0.4nm,0.6s,baz=159,slow=14,SNR=3.1
comp=Z,0.4nm,0.6s
**KBZ Khabaz 80.89 335** LR LR 03 34 47.0
comp=Z,16nm,18.9s,baz=35,slow=40
**GNI Garni 83.68 332** LR LR 03 36 48.9
comp=Z,12nm,18.4s,baz=96,slow=40
**BRTR Keskin Array B 86.93 340** P **P** **02 54 01.6 -0.1**
comp=Z,0.4nm,0.6s,baz=40,slow=2.5,SNR=2.4
comp=Z,0.4nm,0.6s
**ESDC Sonseca Array 89.29 9** P **P** **02 54 12.9 +0.1**
comp=Z,0.3nm,0.6s,baz=356,slow=6.0,SNR=1.8
comp=Z,0.3nm,0.6s
**QSPA South Pole Qui 140.62 180** PKP **PKPdf** **03 00 45.7 +0.9**
comp=Z,0.6nm,0.7s,baz=280,slow=1.1,SNR=7.0
**MAW Mawson 148.48 217** PKPbc **PKPbc** **03 01 00.8 -1.1**
comp=Z,2.2nm,0.6s,baz=120,slow=2.6,SNR=6.2

**ISC 21 02:41:44.2±1.1, 26°64′N±0′.04×110°.97W±0′.04, h30km±12km, n9, σ0.42/17, 7C-1D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNIRB** | **San Nicol¡s** | **0.53** | **260** | *i*P | **Pb** | **02 41 54.8** | **-0.3** |
| SNIRB | | | | *i* S | **Sb** | **02 42 02.6** | **0.0** |
| SNIRB | | | | ↑*e* | | 02 42 03.6 | |
| SNIRB | | | | IAML | | 02 42 03.6 | |
| | comp=E,4μm,0.5s | | | | | | |
| **NE77** | **Loreto B.C.S** | **0.71** | **210** | *e*P | **Pb** | **02 41 58.0** | **-0.2** |
| NE77 | | | | *e*S | **Sn** | **02 42 08.0** | **-0.2** |
| NE77 | | | | IAML | | 02 42 09.1 | |
| | comp=N,1μm,0.8s | | | | | | |
| NE77 | | | | ↑*e* | | 02 42 09.1 | |
| NE77 | | | | ↓*e* | | 02 42 09.1 | |
| NE77 | | | | IAML | | 02 42 09.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| **CDOB** | **Cd. Obregon** | **1.07** | **44**↑ | *e*P | **Pb** | **02 42 03.9** | **-0.2** |
| CDOB | | | | *e*S | **Sb** | **02 42 18.6** | **+0.7** |
| **UAGRB** | **Rancho Ultima** | **1.10** | **194** | *e*P | **Pn** | **02 42 03.4** | **-0.2** |
| UAGRB | | | | *e*S | **Sb** | **02 42 19.0** | **+0.3** |
| **SRIG** | **Santa Rosalia** | **1.33** | **301** | *e*P | **Pn** | **02 42 06.9** | **+0.3** |
| SRIG | | | | *e*S | **Sn** | **02 42 23.3** | **0.0** |
| SRIG | | | | ↑*e* | | 02 42 27.5 | |
| SRIG | | | | IAML | | 02 42 27.5 | |
| | comp=N,834nm,0.5s | | | | | | |
| SRIG | | | | IAML | | 02 42 29.5 | |
| | comp=E,458nm,0.5s | | | | | | |
| SRIG | | | | *e* | | 02 42 29.5 | |
| **NE80** | **Navojoa** | **1.57** | **80**↑ | *e*P | **Pn** | **02 42 10.2** | **+0.1** |
| NE80 | | | | *e*S | **Sn** | **02 42 28.9** | **-0.5** |
| NE80 | | | | IAML | | 02 42 36.1 | |
| | comp=E,633nm,0.4s | | | | | | |
| NE80 | | | | ↑*e* | | 02 42 36.1 | |
| **EVAR0** | **San Evaristo** | **1.73** | **172** | *e*P | **Pn** | **02 42 12.6** | **+0.4** |
| EVAR0 | | | | *e*S | **Sn** | **02 42 33.9** | **+0.6** |
| **TSIG** | **Topolobambo** | **2.02** | **120** | *e*P | **Pn** | **02 42 16.2** | **+0.1** |
| TSIG | | | | *e*S | **Sn** | **02 42 39.6** | **-0.7** |
| **BKIRB** | **Bahia Kino** | **2.39** | **338** | *e*P | **Pn** | **02 42 21.3** | **0.0** |

*OSPL **21** 02:50:40.0±1.3, 18°.80N×64°.56W, h101km±72km, ML3.2*
**ISC 21 02:50:39.6±2.6, 19°3N±0°.3×64°.80W±0°.06, h35km, n7, σ1.9 39/12, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AOPR** | **Arecibo Observ** | **2.09** | **243** | *e*P | **Pn** | **02 51 12.8** | **+0.6** |
| **AGPR** | **Aguadilla, PR** | **2.35** | **249** | *i* P | **Pn** | **02 51 16.2** | **+0.6** |
| AGPR | | | | *e*S | **Sn** | **02 51 44.6** | **+1.3** |
| AGPR | | | | IAML | | 02 51 57.2 | |
| | comp=Z,73nm,1.3s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.55** | **240** | *i* P | **Pn** | **02 51 18.8** | **+0.4** |
| CRPR | | | | *e*S | **Sn** | **02 51 46.2** | **-2.1** |
| CRPR | | | | IAML | | 02 51 59.0 | |
| | comp=Z,37nm,1.4s | | | | | | |
| **ANWB** | **Willy Bob** | **3.29** | **119** | *e*P | **Pn** | **02 51 25.9** | **-2.8** |
| ANWB | | | | *e*S | **Sn** | **02 52 06.8** | **+0.2** |
| **PCDR** | **Punta Cana, DR** | **3.49** | **257** | *i* P | **Pn** | **02 51 31.6** | **+0.3** |
| PCDR | | | | *e*S | **Sn** | **02 52 10.8** | **-0.6** |
| PCDR | | | | IAML | | 02 52 25.1 | |
| | comp=Z,85nm,2.6s | | | | | | |
| **ANBD** | **Bethesda, Anti** | **3.66** | **128** | *e*P | **Pn** | **02 51 33.5** | **-0.2** |
| ANBD | | | | *e*S | **Sn** | **02 52 17.0** | **+1.4** |
| **SDDR** | **Presa de Saban** | **6.15** | **268** | *i* P | **Pn** | **02 52 08.3** | **+0.3** |
| SDDR | | | | IAML | | 02 53 17.5 | |
| | comp=Z,9.1nm,2.5s | | | | | | |

*IDC **21** 02:53:56.8±1.3, 7°.27S×105°.94E, h0km, mb4.0/10, mbtmp4.0/10, MS3.0/1, Error ellipse: s-maj=61.8km s-min=17.0km az=50.0*
*DJA **21** 02:53:58.6±0.3, 8°.3×10°.6E±°, h10km, M4.5/14, mb4.9/2, MLv4.2/14*
*NEIC **21** 02:54:01.6±1.9, 7°.67S±0°.08×105°.90E±0°.09, h48km±8km, mb4.5/13, Error ellipse: s-maj=13.9km s-min=10.5km az=225.0*
**ISC 21 02:53:59.9±0.6, 7°.65S±0°.06×105°.82E±0°.05, h32km, n54, σ1.9 38/48, mb4.3/16, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKJI** | **Sukabumi** | **0.97** | **49** | P | **Pn** | **02 54 17.5** | **+0.1** |
| **CNJI** | **Cibinong** | **1.34** | **75** | P | **Pn** | **02 54 22.6** | **+0.2** |
| CNJI | | | | S | **Sn** | **02 54 39.8** | **+0.6** |
| **DBJI** | **Dramaga** | **1.43** | **40** | P | **Pb** | **02 54 25.0** | **-1.0** |
| DBJI | | | | S | **Sb** | **02 54 44.7** | **+0.8** |
| **SBJI** | **Serang** | **1.55** | **11** | P | **Pb** | **02 54 26.9** | **-1.2** |
| **TNG** | **Tangerang** | **1.69** | **29** | P | **Pb** | **02 54 29.1** | **-1.2** |
| TNG | | | | P | **Pb** | **02 54 29.1** | **-1.2** |
| **BLSI** | **Bandar Lampung** | **2.34** | **346** | P | **Pn** | **02 54 37.0** | **+0.8** |
| **KASI** | **Kota Agung** | **2.49** | **328** | P | **Pn** | **02 54 40.2** | **+1.9** |
| **CMJI** | **Cimerak** | **2.61** | **93** | P | **Pn** | **02 54 40.6** | **+0.7** |
| **JCJI** | **Jatiwangi** | **2.69** | **65** | P | **Pn** | **02 54 41.4** | **+0.4** |
| **XMIS** | **Christmas Isla** | **2.81** | **183** | | **Pn** | **02 54 42.7** | **0.0** |
| **KPJI** | **Karang Pucung** | **3.10** | **84** | P | **Pn** | **02 54 49.7** | **+3.1** |
| **LWLI** | **Liwa** | **3.15** | **326** | P | **Pn** | **02 54 49.6** | **+2.2** |
| **MNAI** | **Manna** | **4.34** | **319** | Pn | **Pn** | **02 55 04.8** | **+1.1** |
| **UGM** | **Wanagama** | **4.67** | **93** | Pn | **Pn** | **02 55 05.9** | **-2.3** |
| **UGM** | **Wanagama** | **4.67** | **93** | P | **Pn** | **02 55 09.7** | **+1.5** |
| **PWJI** | **Pagerwojo** | **5.94** | **94** | P | **Pn** | **02 55 27.4** | **+1.7** |
| | 35nm,0.5s,0.2nm | | | | | | |
| **PPSI** | **Pulau Pagai** | **7.55** | **310** | P | **Pn** | **02 55 48.0** | **+0.1** |
| **MTN** | **Manton Dam** | **25.43** | **104** | P | **P** | **02 59 23.9** | **-1.1** |
| MTN | | | | IAmb | IAmb | 02 59 28.6 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.82** | **345** | LR | LR | 03 10 01.2 | |
| | comp=Z,28nm,19.3s,baz=170,slow=36 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **28.16** | **165** | T | T | 03 29 33.8 | |
| | baz=344,slow=76,SNR=7.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **28.17** | **165** | T | T | 03 29 37.6 | |
| | baz=344,slow=76,SNR=8.9 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **28.17** | **165** | T | T | 03 29 37.4 | |
| | baz=344,slow=76,SNR=10 | | | | | | |
| **WB0** | **Warramunga Arr** | **30.20** | **116** | P | **P** | **03 00 06.3** | **-1.4** |
| WB0 | | | | IAmb | IAmb | 03 00 09.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **30.21** | **117** | P | **P** | **03 00 09.4** | **+1.6** |
| | comp=Z,0.4nm,0.7s,baz=286,slow=12,SNR=7.7 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **30.21** | **117** | P | **P** | **03 00 09.3** | **+1.4** |
| **WB2** | **Warramunga Arr** | **30.22** | **117** | P | **P** | **03 00 06.3** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 03 00 11.0 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **30.39** | **117** | P | **P** | **03 00 09.9** | **+0.5** |
| **ASAR** | **Alice Springs** | **31.28** | **124** | P | **P** | **03 00 20.0** | **+2.7** |
| | comp=Z,0.4nm,0.4s,baz=299,slow=8.3,SNR=7.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **33.03** | **268** | T | T | 03 36 00.3 | |
| | baz=92,slow=75,SNR=23 | | | | | | |
| **H08S3** | **Diego Garcia H** | **33.04** | **268** | T | T | 03 35 59.7 | |
| | baz=92,slow=75,SNR=54 | | | | | | |
| **H08S1** | **Diego Garcia H** | **33.04** | **268** | T | T | 03 36 00.3 | |
| | baz=92,slow=75,SNR=17 | | | | | | |
| **COEN** | **Coen** | **37.19** | **103** | P | **P** | **03 01 08.0** | **-0.5** |
| **STKA** | **Stephens Creek** | **41.09** | **131** | P | **P** | **03 01 44.3** | **+3.4** |
| | comp=Z,1.5nm,0.4s,baz=334,slow=8.4,SNR=4.0 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **55.25** | **0** | P | **P** | **03 03 29.8** | **-0.3** |
| | comp=Z,0.4nm,0.3s,baz=181,slow=9.1,SNR=3.9 | | | | | | |
| SONM | | | | PcP | **PcP** | **03 04 30.6** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=168,slow=3.6,SNR=3.5 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.77** | **22** | P | **P** | **03 03 40.2** | **-0.7** |
| **MK31** | **Makanchi Array** | **58.11** | **341** | P | **P** | **03 03 49.7** | **-0.6** |
| **MKAR** | **Makanchi Array** | **58.11** | **341** | P | **P** | **03 03 49.5** | **-0.8** |
| | comp=Z,1.4nm,0.5s,baz=139,slow=7.9,SNR=9.8 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **UOSS** | **Minazif** | **58.16** | **306** | P | **P** | **03 03 48.8** | **-2.3** |
| **H04N2** | **CROZET ISLANDS** | **60.01** | **220** | T | T | 04 09 53.6 | |
| | baz=67,slow=75,SNR=20 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.02** | **221** | T | T | 04 09 54.9 | |
| | baz=67,slow=75,SNR=22 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.03** | **220** | T | T | 04 09 53.4 | |
| | baz=67,slow=75,SNR=20 | | | | | | |
| **KLR** | **Kul'dur** | **61.02** | **19** | P | **P** | **03 04 09.2** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=219,slow=13,SNR=2.3 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.67** | **341** | P | **P** | **03 04 21.3** | **-0.1** |
| | comp=Z,1.6nm,0.6s,baz=151,slow=6.3,SNR=14 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **62.72** | **341** | P | **P** | **03 04 21.8** | **+0.1** |
| KURK | | | | IAmb | IAmb | 03 04 22.6 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.88** | **346** | P | **P** | **03 04 29.1** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **63.88** | **346** | P | **P** | **03 04 28.6** | **-0.7** |
| | comp=Z,2.0nm,0.3s,baz=154,slow=6.0,SNR=7.9 | | | | | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **67.52** | **338** | P | **P** | **03 04 53.2** | **+0.4** |
| | comp=Z,2.4nm,0.5s,baz=148,slow=9.7,SNR=13 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **67.58** | **338** | P | **P** | **03 04 52.3** | **-0.9** |
| BRVK | | | | IAmb | IAmb | 03 04 52.5 | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **69.38** | **330** | P | **P** | **03 05 04.9** | **+0.3** |
| **ABKAR** | **Akbulak array** | **69.38** | **330** | P | **P** | **03 05 04.8** | **+0.3** |
| ABKAR | | | | IAmb | IAmb | 03 05 05.8 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **81.39** | **312** | P | **P** | **03 06 14.8** | **+0.8** |
| **BRTR** | **Keskin Array B** | **81.39** | **312** | P | **P** | **03 06 14.9** | **+0.9** |
| | comp=Z,1.2nm,0.7s,baz=139,slow=6.8,SNR=9.5 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.34** | **180** | P | **P** | **03 06 16.2** | **-2.3** |
| QSPA | | | | IAmb | IAmb | 03 06 24.8 | |
| | comp=Z,6.0nm,1.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **144.87** | **48** | PKP | **PKPdf** | **03 13 35.8** | **+1.2** |
| | comp=Z,0.4nm,0.5s,baz=308,slow=1.3,SNR=3.9 | | | | | | |

**IDC 21 03:03:50.9±7.3, 17°.16S×177°.47W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=319.2km s-min=37.7km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.66** | **259** | P | P | 03 12 13.7 | 0.0 |
| | 0.9nm,0.5s,baz=94,slow=7.0,SNR=7.3 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.86** | **253** | P | P | 03 12 15.2 | -0.2 |
| | 3.5nm,0.6s,baz=88,slow=8.8,SNR=20 | | | | | | |
| | 3.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.96** | **13** | P | P | 03 16 27.6 | 0.0 |
| | 0.1nm,0.4s,baz=225,slow=4.7,SNR=4.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **21** 03:05:11.2±6.7, 6°.94S×155°.91E, h86km±56km, mb4.1/12, mbtmp4.4/13, ML4.2/1, MS3.3/8, Error ellipse: s-maj=27.9km s-min=18.3km az=77.0*
*NEIC **21** 03:05:11.5±1.4, 6°.85S±0°.1×155°.85E±0°.09, h90km±9km, mb4.5/20, Error ellipse: s-maj=18.9km s-min=9.2km az=214.0*
**ISC 21 03:05:08.8±0.5, 6°.82S±0°.08×155°.76E±0°.07, h62km, n55, σ1.9 08/48, mb4.5/19, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **4.43** | **306** | Pn | **Pn** | **03 06 13.2** | **-0.4** |
| **HNR** | **Honiara** | **4.89** | **122** | Pn | **Pn** | **03 06 22.0** | **+2.1** |
| HNR | | | | | **Sn** | **03 07 17.0** | **+1.8** |
| **HNR** | **Honiara** | **4.89** | **122** | LR | LR | 03 07 38.5 | |
| | comp=Z,860nm,19.4s,baz=334,slow=31 | | | | | | |
| **PATS** | **Pohnpei** | **13.81** | **11** | Pn | **Pn** | **03 08 22.5** | **+0.8** |
| **COEN** | **Coen** | **14.26** | **239** | Pn | **Pn** | **03 08 29.8** | **+2.1** |
| **CTA** | **Charters Tower** | **16.09** | **214** | LR | LR | 03 13 44.7 | |
| | comp=Z,13nm,19.7s,baz=91,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.34** | **147** | | **Pn** | **03 09 18.6** | **-0.4** |
| **DZM** | **Mont Dzumac** | **18.34** | **147** | P | **Pn** | **03 09 18.3** | **-0.7** |
| | 0.7nm,0.3s,baz=159,slow=22,SNR=5.6 | | | | | | |
| DZM | | | | LR | LR | 03 14 54.2 | |
| | comp=Z,89nm,20.9s,baz=14,slow=32 | | | | | | |
| | 5.9nm,0.6s | | | | | | |
| **GUMO** | **Guam** | **22.98** | **332** | LR | LR | 03 18 41.7 | |
| | comp=Z,33nm,18.7s,baz=118,slow=35 | | | | | | |
| **MSVF** | **Nonsavu** | **24.30** | **119** | P | **P** | **03 10 20.1** | **-0.7** |
| MSVF | | | | IAmb | IAmb | 03 10 21.2 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.38** | **236** | P | **P** | **03 10 21.7** | **+0.3** |
| **WB0** | **Warramunga Arr** | **24.41** | **236** | P | **P** | **03 10 21.6** | **-0.1** |
| **WB2** | **Warramunga Arr** | **24.53** | **236** | P | **P** | **03 10 23.2** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 03 10 25.7 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.54** | **236** | P | **P** | **03 10 21.9** | **-1.0** |
| **WRA** | **Warramunga Arr** | **24.54** | **236** | P | **P** | **03 10 23.1** | **+0.2** |
| | comp=Z,4.8nm,0.6s,baz=63,slow=9.6,SNR=66 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 13 59.9** | **-0.1** |
| | comp=Z,1.1nm,0.6s,baz=64,slow=2.6,SNR=6.1 | | | | | | |
| WRA | | | | LR | LR | 03 19 56.4 | |
| | comp=Z,65nm,18.3s,baz=14,slow=36 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **24.98** | **254** | P | **P** | **03 10 27.7** | **+0.8** |
| MTN | | | | IAmb | IAmb | 03 10 29.1 | |
| | comp=Z,44nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **26.85** | **229** | P | **P** | **03 10 42.6** | **-1.3** |
| **ASAR** | **Alice Springs** | **26.85** | **229** | P | **P** | **03 10 43.4** | **-0.5** |
| | comp=Z,1.7nm,0.5s,baz=59,slow=9.7,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 14 04.8** | **-0.5** |
| | comp=Z,0.8nm,0.4s,baz=52,slow=3.0,SNR=7.6 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.37** | **23** | T | T | 03 39 14.1 | |
| | baz=202,slow=76,SNR=660 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.38** | **23** | T | T | 03 39 14.3 | |
| | baz=202,slow=76,SNR=557 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.39** | **23** | T | T | 03 39 17.3 | |
| | baz=202,slow=76,SNR=363 | | | | | | |
| **KNRA** | **Kununurra** | **27.87** | **249** | P | **P** | **03 10 52.8** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 03 10 55.7 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **28.21** | **206** | P | **P** | **03 10 56.9** | **+1.0** |
| | comp=Z,1.3nm,0.5s,baz=21,slow=16,SNR=3.3 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.56** | **22** | T | T | 03 40 37.6 | |
| | baz=202,slow=76,SNR=6.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.57** | **22** | T | T | 03 40 46.9 | |
| | baz=202,slow=76,SNR=45 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.58** | **22** | T | T | 03 40 42.3 | |
| | baz=202,slow=76,SNR=21 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **31.41** | **246** | P | **P** | **03 11 24.4** | **0.0** |
| **FORT** | **Forrest** | **35.23** | **224** | P | **P** | **03 11 56.6** | **-0.9** |
| **TOLI2** | **Tolitoli** | **35.78** | **281** | P | **P** | **03 12 03.7** | **+1.3** |
| TOLI2 | | | | IAmb | IAmb | 03 12 08.5 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **37.63** | **244** | P | **P** | **03 12 18.1** | **+0.1** |
| MBWA | | | | IAmb | IAmb | 03 12 24.5 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **THZ** | **Tophouse** | **37.98** | **159** | P | **P** | **03 12 18.9** | **-1.9** |
| THZ | | | | IAmb | IAmb | 03 12 19.0 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **TCW** | **Tory Channel** | **38.01** | **157** | P | **P** | **03 12 19.6** | **-1.4** |
| **LTZ** | **Lake Taylor** | **38.67** | **160** | P | **P** | **03 12 25.2** | **-1.3** |
| **RPZ** | **Rata Peaks** | **39.12** | **162** | P | **P** | **03 12 29.4** | **-0.9** |
| **KSRS** | **Korea Array** | **51.15** | **332** | LR | LR | 03 35 02.6 | |
| | comp=Z,39nm,18.1s,baz=165,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.40** | **295** | P | **P** | **03 15 20.6** | **+1.6** |
| | comp=Z,1.3nm,0.3s,baz=132,slow=6.4,SNR=5.4 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **PBA** | **Port Blair** | **65.31** | **286** | P | **P** | **03 15 43.9** | **-1.1** |
| **SONM** | **Songino Array** | **69.60** | **327** | P | **P** | **03 16 10.4** | **-1.2** |
| SONM | | | | IAmb | IAmb | 03 16 14.7 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **69.60** | **327** | P | **P** | **03 16 13.6** | **+2.0** |
| | comp=Z,5.3nm,0.8s,baz=136,slow=6.6,SNR=20 | | | | | | |
| SONM | | | | LR | LR | 03 46 32.5 | |
| | comp=Z,36nm,19.0s,baz=99,slow=36 | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **82.94** | **21** | P | **P** | **03 17 25.8** | **-0.9** |
| | comp=Z,0.3nm,0.4s,baz=246,slow=5.2,SNR=9.8 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.15** | **180** | P | **P** | **03 17 26.9** | **-1.1** |
| QSPA | | | | IAmb | IAmb | 03 17 28.9 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.15** | **180** | P | **P** | **03 17 27.1** | **-0.9** |
| | comp=Z,3.9nm,0.5s,baz=260,slow=0.3,SNR=62 | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **83.78** | **319** | P | **P** | **03 17 32.5** | **+1.0** |
| | comp=Z,3.3nm,0.5s,baz=99,slow=6.1,SNR=29 | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.46** | **326** | P | **P** | **03 17 34.6** | **-0.1** |
| | comp=Z,2.4nm,0.5s,baz=125,slow=6.3,SNR=8.0 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **84.84** | **203** | P | **P** | **03 17 35.6** | **-0.8** |
| | comp=Z,2.4nm,0.7s,baz=85,slow=4.8,SNR=5.2 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **87.20** | **322** | P | **P** | **03 17 48.5** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=96,slow=5.2,SNR=9.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **92.62** | **323** | P | **P** | **03 18 12.8** | **-0.9** |
| | comp=Z,1.5nm,0.5s,baz=118,slow=4.8,SNR=8.4 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **NEW** | **Newport** | **93.12** | **42** | LR | LR | 03 52 17.8 | |
| | comp=Z,32nm,20.6s,baz=250,slow=30 | | | | | | |
| **AKASG** | **Main Array Be** | **117.84** | **325** | PKP | **PKPdf** | **03 23 46.8** | **-1.5** |
| | comp=Z,0.5nm,0.4s,baz=43,slow=2.6,SNR=1.9 | | | | | | |
| **BOSA** | **Boshof** | **120.72** | **231** | PKP | **PKPdf** | **03 23 53.2** | **-1.5** |
| | comp=Z,1.7nm,0.7s,baz=75,slow=5.0,SNR=4.1 | | | | | | |
| **GERES** | **GERESS Array B** | **127.30** | **329** | PKP | **PKiKP** | **03 24 07.0** | **-0.2** |
| | comp=Z,0.7nm,0.5s,baz=188,slow=4.0,SNR=4.4 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **128.78** | **345** | PKP | **PKPdf** | **03 24 08.8** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=20,slow=2.7,SNR=3.4 | | | | | | |
| **BDFB** | **Brasilia** | **147.56** | **134** | PKPbc | **PKPdf** | **03 24 45.2** | **+0.6** |
| | comp=Z,2.4nm,0.5s,baz=230,slow=4.2,SNR=5.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.71** | **286** | PKP | **PKPdf** | **03 24 55.1** | **+1.1** |
| | comp=Z,0.7nm,0.9s,baz=86,slow=1.9,SNR=3.0 | | | | | | |
| TORD | | | | PKPbc | **PKPbc** | **03 25 00.6** | **-1.3** |
| | comp=Z,1.7nm,0.8s,baz=29,slow=2.7,SNR=13 | | | | | | |
| **DBIC** | **Dimbokro** | **160.75** | **271** | PKPab | **PKPab** | **03 25 45.5** | **+0.3** |
| | comp=Z,3.8nm,0.5s,baz=83,slow=7.6,SNR=11 | | | | | | |

**IDC 21 03:11:13.2±2.2, 2.78N×127.24E, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=145.1km s-min=28.5km az=66.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.63** | **163** | P | P | 03 16 26.2 | 0.0 |
| | 1.0nm,0.6s,baz=343,slow=11,SNR=9.0 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **27.07** | **166** | P | P | 03 16 57.7 | 0.0 |
| | 0.4nm,0.8s,baz=347,slow=6.7,SNR=2.7 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.62** | **325** | P | P | 03 21 12.0 | -0.1 |
| | 0.2nm,0.5s,baz=120,slow=8.5,SNR=1.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **21** 03:28:04.0±2.7, 18°.22S×178°.20W, h558km±31km, mb3.5/12, mbtmp4.4/12, Error ellipse: s-maj=16.4km s-min=12.6km az=139.0*
*NEIC **21** 03:28:07.1±1.7, 18°.2S±0°.1×178°.4W±0°.1, h595km±8km, mb4.2/86, Error ellipse: s-maj=18.1km s-min=16.1km az=134.0*
**ISC 21 03:28:05.9±0.4, 18°.13S±0°.08×178°.45W±0°.07, h579km, n133, σ1.9 05/134, mb4.2/59, 1C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.35** | **276** | P | **P** | **03 29 28.2** | **+2.7** |
| **NIUE** | **Niue** | **8.14** | **98** | P | **P** | **03 30 07.0** | **+1.2** |
| NIUE | | | | S | **S** | **03 31 45.8** | **+1.6** |
| **PINNC** | **Pines Island,** | **13.96** | **249** | P | **P** | **03 31 02.5** | **-2.0** |
| **URZ** | **Urewera** | **20.43** | **190** | P | **P** | **03 32 01.1** | **-3.2** |
| | 12nm,0.6s,baz=2.2,slow=1.3,SNR=13 | | | | | | |
| | 12nm,0.6s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.80** | **190** | P | **P** | **03 32 05.3** | **-2.4** |
| **QRZ** | **Tuartz Range** | **23.92** | **197** | P | **P** | **03 32 35.2** | **-0.2** |
| **PLWZ** | **Palliser** | **23.98** | **192** | P | **P** | **03 32 34.2** | **-1.8** |
| **THZ** | **Tophouse** | **24.69** | **196** | P | **P** | **03 32 41.3** | **-1.0** |
| **DSZ** | **Denniston Nort** | **24.97** | **197** | P | **P** | **03 32 44.5** | **-0.3** |
| **KHZ** | **Kahutara** | **25.16** | **194** | P | **P** | **03 32 43.8** | **-2.5** |
| **INZ** | **Inchbonnie** | **25.98** | **197** | P | **P** | **03 32 52.2** | **-1.4** |
| **FOZ** | **Fox Glacier** | **27.20** | **199** | P | **P** | **03 33 03.8** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **29.38** | **199** | P | **P** | **03 33 23.2** | **0.0** |
| **STKA** | **Stephens Creek** | **38.49** | **241** | P | **P** | **03 34 39.9** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.49** | **241** | P | **P** | **03 34 41.8** | **+2.2** |
| | 2.8nm,0.5s,baz=87,slow=9.4,SNR=7.5 | | | | | | |
| | 2.8nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **M14K** | **Bethel** | **79.72** | **8** | P | **P** | **03 39 14.2** | **+0.4** | |
| M14K | | | | IAmb | IAmb | 03 39 55.6 | | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.97** | **12** | P | **P** | **03 39 14.7** | **-0.6** | |
| O18K | | | | IAmb | IAmb | 03 39 15.1 | | |
| | comp=Z,9.3nm,0.6s | | | | | | | |
| **KVN** | **Kaiserville** | **80.08** | **43** | P | **P** | **03 39 16.4** | **-0.2** | |
| **L14K** | **Kuka Creek** | **80.20** | **8** | P | **P** | **03 39 16.9** | **+0.6** | |
| L14K | | | | IAmb | IAmb | 03 39 56.7 | | |
| | comp=Z,8.9nm,1.2s | | | | | | | |
| **M16K** | **Timber Creek** | **80.42** | **9** | P | **P** | **03 39 18.2** | **+0.7** | |
| M16K | | | | IAmb | IAmb | 03 39 18.7 | | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| **CNPM** | **China Poot** | **80.50** | **14** | P | **P** | **03 39 17.1** | **-0.9** | |
| **J05D** | **Fort Rock, OR** | **80.52** | **38** | P | **P** | **03 39 18.9** | **+0.2** | |
| J05D | | | | IAmb | IAmb | 03 39 19.7 | | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **N18K** | **Kilae Creek** | **80.61** | **11** | P | **P** | **03 39 17.9** | **-0.7** | |
| N18K | | | | IAmb | IAmb | 03 39 21.9 | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **H04A** | **Detroit Lake** | **80.79** | **37** | P | **P** | **03 39 19.4** | **-0.5** | |
| **SMAI** | **San Martin Ant** | **80.97** | **159** | P | **P** | **03 39 19.9** | **-0.5** | |
| SMAI | | | | IAmb | IAmb | 03 39 21.2 | | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **PINE** | **Pine Mountain** | **80.99** | **38** | P | **P** | **03 39 21.5** | **+0.4** | |
| PINE | | | | IAmb | IAmb | 03 39 21.9 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **L16K** | **Owhat River** | **80.99** | **9** | P | **P** | **03 39 21.0** | **+0.5** | |
| L16K | | | | IAmb | IAmb | 03 39 22.3 | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **M17K** | **Holitna River** | **81.02** | **10** | P | **P** | **03 39 21.5** | **+0.9** | |
| M17K | | | | IAmb | IAmb | 03 39 22.3 | | |
| | comp=Z,9.8nm,0.8s | | | | | | | |
| **RSO** | **Redoubt South** | **81.02** | **13** | P | **P** | **03 39 20.1** | **-0.8** | |
| **K15K** | **Wolf Creek Mou** | **81.26** | **8** | P | **P** | **03 39 22.8** | **+0.9** | |
| **NLWA** | **Neilton Lookou** | **81.51** | **34** | P | **P** | **03 39 23.8** | **+0.2** | |
| NLWA | | | | IAmb | IAmb | 03 40 03.0 | | |
| | comp=Z,8.9nm,1.3s | | | | | | | |
| **L18K** | **Granite Mounta** | **81.92** | **10** | P | **P** | **03 39 25.6** | **+0.4** | |
| L18K | | | | IAmb | IAmb | 03 39 26.4 | | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **81.95** | **173** | P | **P** | **03 39 24.4** | **-1.0** | |
| BELA | | | | IAmb | IAmb | 03 39 25.2 | | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **I07A** | **Izee** | **82.00** | **39** | P | **P** | **03 39 25.9** | **-0.3** | |
| **K17K** | **Iditarod** | **82.13** | **9** | P | **P** | **03 39 26.5** | **+0.3** | |
| K17K | | | | IAmb | IAmb | 03 40 09.3 | | |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| **GNW** | **Green Mountain** | **82.18** | **34** | P | **P** | **03 39 26.8** | **0.0** | |
| **L19K** | **White Mountain** | **82.20** | **11** | P | **P** | **03 39 26.9** | **+0.3** | |
| L19K | | | | IAmb | IAmb | 03 39 27.2 | | |
| | comp=Z,9.9nm,1.5s | | | | | | | |
| **J16K** | **Anvik River** | **82.34** | **8** | P | **P** | **03 39 27.8** | **+0.5** | |
| **PSUT** | **Pine Spring** | **82.64** | **46** | P | **P** | **03 39 29.4** | **-0.2** | |
| **J17K** | **VABM Dome** | **82.66** | **9** | P | **P** | **03 39 29.2** | **+0.3** | |
| J17K | | | | IAmb | IAmb | 03 39 32.0 | | |
| | comp=Z,9.8nm,1.3s | | | | | | | |
| **U15A** | **North Rim** | **82.69** | **48** | P | **P** | **03 39 30.5** | **+0.4** | |
| **J18K** | **Innoko River** | **83.08** | **10** | P | **P** | **03 39 31.1** | **+0.1** | |
| J18K | | | | IAmb | IAmb | 03 39 32.2 | | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **K20K** | **Telida** | **83.42** | **11** | P | **P** | **03 39 32.7** | **-0.1** | |
| K20K | | | | IAmb | IAmb | 03 39 33.1 | | |
| | comp=Z,5.4nm,0.7s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.45** | **14** | P | **P** | **03 39 32.5** | **-0.4** | |
| **J19K** | **Poorman** | **83.75** | **10** | P | **P** | **03 39 34.6** | **+0.3** | |
| J19K | | | | IAmb | IAmb | 03 40 01.2 | | |
| | comp=Z,8.6nm,1.5s | | | | | | | |
| **N25K** | **Chitina, Valde** | **83.92** | **16** | P | **P** | **03 39 35.1** | **-0.2** | |
| N25K | | | | IAmb | IAmb | 03 39 35.3 | | |
| | comp=Z,7.7nm,0.8s | | | | | | | |
| **GLB** | **Gilahina Butte** | **83.98** | **16** | P | **P** | **03 39 35.3** | **-0.3** | |
| GLB | | | | IAmb | IAmb | 03 39 53.5 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **J20K** | **Nowinta River** | **84.17** | **10** | P | **P** | **03 39 36.5** | **+0.1** | |
| J20K | | | | IAmb | IAmb | 03 39 36.9 | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **RND** | **Reindeer** | **84.49** | **13** | P | **P** | **03 39 37.5** | **-0.6** | |
| **DHY** | **Denali Highway** | **84.52** | **14** | P | **P** | **03 39 37.5** | **-0.8** | |
| DHY | | | | IAmb | IAmb | 03 40 12.2 | | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **H19K** | **Roundabout Mou** | **85.06** | **9** | P | **P** | **03 39 40.5** | **-0.1** | |
| **G18K** | **Tagagawik** | **85.09** | **8** | P | **P** | **03 39 40.1** | **-0.7** | |
| **M27K** | **Edge Creek, AK** | **85.26** | **16** | P | **P** | **03 39 41.9** | **-0.1** | |
| M27K | | | | IAmb | IAmb | 03 39 42.3 | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **MLY** | **Manley** | **85.56** | **11** | P | **P** | **03 39 42.1** | **-1.1** | |
| MLY | | | | IAmb | IAmb | 03 39 43.0 | | |
| | comp=Z,5.8nm,1.4s | | | | | | | |
| **O30N** | **Mendenhall** | **85.67** | **19** | P | **P** | **03 39 44.2** | **+0.4** | |
| O30N | | | | IAmb | IAmb | 03 40 00.2 | | |
| | comp=Z,5.8nm,1.2s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.80** | **13** | P | **P** | **03 39 43.0** | **-1.2** | |
| CCB | | | | IAmb | IAmb | 03 39 43.3 | | |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| **IL31** | | **86.11** | **13** | P | **P** | **03 39 44.8** | **-0.8** | |
| IL31 | | | | IAmb | IAmb | 03 39 45.4 | | |
| | comp=Z,8.9nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.11** | **13** | P | **P** | **03 39 45.3** | **-0.4** | |
| **ILAR** | **Eielson Array** | **86.11** | **13** | P | **P** | **03 39 44.6** | **-1.1** | |
| | comp=Z,1.5nm,0.4s,baz=220,slow=5.0,SNR=41 | | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | | |
| **IL03** | **Eielson Array** | **86.11** | **13** | P | **P** | **03 39 44.9** | **-0.8** | |
| **TX31** | **Lajitas Ar. Si** | **86.14** | **58** | P | **P** | **03 39 47.4** | **+0.6** | |
| **TXAR** | **Lajitas Array** | **86.15** | **58** | P | **P** | **03 39 47.0** | **+0.2** | |
| **TXAR** | **Lajitas Array** | **86.15** | **58** | P | **P** | **03 39 47.4** | **+0.5** | |
| | comp=Z,1.1nm,0.7s,baz=217,slow=6.0,SNR=18 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **J25K** | **Salcha River,** | **86.30** | **14** | P | **P** | **03 39 46.3** | **-0.4** | |
| J25K | | | | IAmb | IAmb | 03 39 46.8 | | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **86.31** | **7** | P | **P** | **03 39 46.5** | **-0.1** | |
| E18K | | | | IAmb | IAmb | 03 39 48.4 | | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **J26L** | **Joseph Creek** | **86.62** | **14** | P | **P** | **03 39 48.7** | **+0.4** | |
| J26L | | | | IAmb | IAmb | 03 39 50.0 | | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.39** | **314** | *e*P | **P** | **03 39 53.3** | **+0.8** | |
| HHC | | | | S | **S** | **03 49 39.8** | **-5.5** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.5s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,130nm,6.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.54** | **43** | P | **P** | **03 39 52.6** | **-0.7** | |
| | comp=Z,0.8nm,0.7s,baz=230,slow=3.8,SNR=8.7 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **G24K** | **Hadweenzic River** | **87.67** | **12** | P | **P** | **03 39 52.3** | **-0.7** | |
| G24K | | | | IAmb | IAmb | 03 39 58.5 | | |
| | comp=Z,6.2nm,1.5s | | | | | | | |
| **F24K** | **Squaw Lake** | **88.31** | **11** | P | **P** | **03 39 56.2** | **+0.1** | |
| F24K | | | | IAmb | IAmb | 03 39 57.1 | | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **ELIB** | **Princess Elisa** | **88.94** | **187** | *d*P | **P** | **03 39 58.5** | **-0.7** | |
| | comp=Z,6.4nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **89.22** | **298** | P | **P** | **03 40 02.0** | **+0.7** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.5s | | | | | | | |
| **SNAA** | **Sanae** | **90.38** | **179** | P | **P** | **03 40 04.4** | **-1.4** | |
| | comp=Z,1.1nm,0.5s,baz=214,slow=9.3,SNR=4.7 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.53** | **176** | ⇑P | **P** | **03 40 05.5** | **-0.9** | |
| | comp=Z,8.2nm,0.6s | | | | | | | |
| **LZH** | **Lanzhou** | **90.99** | **308** | *e*P | **P** | **03 40 07.3** | **-2.1** | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **F31M** | **Tsiigehtchic** | **91.40** | **16** | P | **P** | **03 40 09.9** | **-0.3** | |
| **ARCES** | **ARCESS Array B** | **126.52** | **350** | PKP | **PKPdf** | **03 46 03.0** | **-0.2** | |
| | comp=Z,2.2nm,0.8s,baz=25,slow=2.4,SNR=4.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **140.73** | **332** | PKhKP | PKPpre | 03 46 24.9 | | |
| | comp=Z,0.1nm,0.3s,baz=44,slow=4.2,SNR=4.1 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.69** | **4** | PKhKP | PKPpre | 03 46 29.8 | | |
| | comp=Z,0.1nm,0.3s,baz=310,slow=2.5,SNR=5.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.91** | **315** | PKPbc | **PKPbc** | **03 46 39.0** | **+0.2** | |
| | comp=Z,0.8nm,0.4s,baz=96,slow=2.0,SNR=12 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.22** | **303** | PKPbc | **PKPbc** | **03 46 43.5** | **+0.8** | |
| | comp=Z,0.9nm,0.5s,baz=77,slow=5.2,SNR=5.9 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.81** | **345** | PKPbc | **PKPbc** | **03 46 46.0** | **-0.5** | |
| | comp=Z,1.4nm,0.6s,baz=165,slow=5.5,SNR=7.8 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.06** | **342** | *e*PKiKP | **PKPbc** | **03 46 47.5** | **+0.4** | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **MOA** | **Molln** | **148.58** | **343** | *e*PKiKP | **PKPbc** | **03 46 48.2** | **-0.1** | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.89** | **344** | *i* PKP | **PKPbc** | **03 46 48.8** | **-0.2** | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.38** | **345** | *e*PKiKP | **PKiKP** | **03 46 51.0** | **-0.1** | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **SOKA** | **Soboth** | **149.43** | **342** | *i* PKP | **PKPbc** | **03 46 49.9** | **-0.5** | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.54** | **344** | *e*PKiKP | **PKPbc** | **03 46 50.7** | **-0.1** | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **OBKA** | **Obir** | **149.72** | **342** | *e*PKiKP | **PKiKP** | **03 46 51.7** | **-0.2** | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **RETA** | **Reutte** | **149.76** | **348** | *e*PKiKP | **PKPbc** | **03 46 51.1** | **-0.1** | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.78** | **346** | *i* PKiKP | **PKPbc** | **03 46 51.6** | **+0.2** | |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **149.82** | **347** | *i* PKiKP | **PKPbc** | **03 46 51.2** | **-0.3** | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.87** | **343** | *e*PKiKP | **PKPbc** | **03 46 51.2** | **-0.3** | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.91** | **347** | *e*PKP | **PKPbc** | **03 46 50.8** | **-0.8** | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.06** | **345** | *i* PKP | **PKPbc** | **03 46 49.3** | **-2.6** | |
| | comp=Z,6.7nm,1.2s | | | | | | | |
| **DAVA** | **Damuels** | **150.12** | **349** | *e*PKiKP | **PKiKP** | **03 46 52.8** | **+0.1** | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **150.21** | **347** | *i* PKiKP | **PKPbc** | **03 46 52.7** | **+0.3** | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **ESDC** | **Sonseca Array** | **158.00** | **11** | PKPab | **PKPab** | **03 47 33.9** | **-0.6** | |
| | comp=Z,0.2nm,0.8s,baz=339,slow=4.3,SNR=4.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.05** | **182** | PKPab | **PKPab** | **03 48 49.3** | **-0.8** | |
| | comp=Z,0.3nm,0.7s,baz=197,slow=3.2,SNR=5.2 | | | | | | | |

*JMA* ***21*** *03:34:00.3±0.2,43.1°N±0.5°×145.6°E±0.7,h55km±1km, MV3.7/40,OFF NEMURO PENINSULA*
*JMA Felt I J1 at OFF NEMURO PENINSULA .*
*SKHL* ***21*** *03:34:00.5±0.5,43.00°N×145.70°E,h36km±1km,mb4.6/3*

**ISC 21 03:34:00.6±1.7,43.12N±0.07°×145.60E±0.05,h52km±10km, n12,σ0°61/24,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NEM2** | **Nemuro 2** | **0.26** | **24** | P | | | **Pn** | **03 34 09.6** | **0.0** |
| NEM2 | | | | S | | | **Sn** | **03 34 16.0** | **-0.1** |
| **JKHN** | **Kushirohamanak** | **0.32** | **263** | *i* P | | | **Pn** | **03 34 10.4** | **+0.2** |
| JKHN | | | | S | | | **Sn** | **03 34 17.7** | **+0.8** |
| **JAK** | **Akkeshi** | **0.67** | **259** | P | | | **Pn** | **03 34 13.8** | **-0.3** |
| JAK | | | | S | | | **Sn** | **03 34 23.7** | **-0.1** |
| **JNSB** | **Nemuroshibetsu** | **0.78** | **327** | *i* P | | | **Pn** | **03 34 15.3** | **-0.2** |
| JNSB | | | | *e*S | | | **Sn** | **03 34 26.2** | **-0.2** |
| **JNK** | **Nakash** | **0.79** | **306** | *i* P | | | **Pn** | **03 34 15.2** | **-0.4** |
| JNK | | | | S | | | **Sn** | **03 34 25.6** | **-1.0** |
| **JRA** | **Rausu** | **0.89** | **337** | *i* P | | | **Pn** | **03 34 16.8** | **0.0** |
| JRA | | | | S | | | **Sn** | **03 34 28.9** | **+0.1** |
| **YUK** | **Yuzh-Kuril'sk** | **0.93** | **12** | *i* P | | | **Pn** | **03 34 17.1** | **-0.4** |
| YUK | | | | AMB | | AMB | | 03 34 18.1 | |
| | 440nm,0.2s | | | | | | | | |
| YUK | | | | *e*S | | | **Sn** | **03 34 29.5** | **-0.3** |
| YUK | | | | A | | A | | 03 34 33.4 | |
| | 3μm,0.3s | | | | | | | | |
| YUK | | | | A | | A | | 03 34 33.4 | |
| | 3μm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **1.17** | **50** | *i* P | | | **Pn** | **03 34 19.9** | **-0.7** |
| SHO | | | | AMB | | AMB | | 03 34 20.9 | |
| | 60nm,0.2s | | | | | | | | |
| SHO | | | | *e*S | | | **Sn** | **03 34 34.2** | **-1.3** |
| SHO | | | | A | | A | | 03 34 35.9 | |
| | 470nm,0.3s | | | | | | | | |
| SHO | | | | A | | A | | 03 34 35.9 | |
| | 2μm,0.3s | | | | | | | | |
| **JOB** | **Onbets** | **1.31** | **261** | P | | | **Pn** | **03 34 22.4** | **-0.1** |
| JOB | | | | S | | | **Sn** | **03 34 38.6** | **-0.3** |
| **JAR** | **Ashorobuto** | **1.35** | **278** | *i* P | | | **Pn** | **03 34 23.1** | **0.0** |
| JAR | | | | S | | | **Sn** | **03 34 39.8** | **-0.1** |
| **JTKR** | **Abashiri--Toko** | **1.49** | **305** | *i* P | | | **Pn** | **03 34 25.5** | **+0.5** |
| JTKR | | | | *e*S | | | **Sn** | **03 34 43.7** | **+0.4** |
| **KUR** | **Kuril'sk** | **2.67** | **37** | *e*P | | | **Pn** | **03 34 42.2** | **+1.1** |
| KUR | | | | AMB | | AMB | | 03 34 45.7 | |
| | 40nm,0.3s | | | | | | | | |
| KUR | | | | *i* S | | | **Sn** | **03 35 13.3** | **+1.1** |
| KUR | | | | A | | A | | 03 35 18.7 | |
| | 130nm,0.4s | | | | | | | | |
| KUR | | | | A | | A | | 03 35 18.7 | |
| | 160nm,0.4s | | | | | | | | |

**NAM 21 03:38:43.3±3.1,19.79S×14.54E,h16km±11km,ML0.0, 5C-4D,Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ST9N** | **ST9** | **0.01** | **175** | *i*P | | | Pg | 03 38 46.2 | +0.1 |
| ST9N | | | | *i* S | | | Sg | 03 38 46.9 | -1.2 |
| ST9N | | | | IAML | | | | 03 38 47.3 | |
| | comp=Z,35nm,0.1s | | | | | | | | |
| **ST9N** | **ST9** | **0.01** | **175** | *i* P | | | Pg | 03 38 46.3 | +0.1 |
| ST9N | | | | *i* S | | | Sg | 03 38 47.0 | -1.2 |
| ST9N | | | | IAML | | | | 03 38 47.5 | |
| | comp=Z,69nm,0.3s | | | | | | | | |
| **ST3N** | **ST3** | **0.07** | **318** | ⇑*i*P | | | Pg | 03 38 47.5 | +1.0 |
| ST3N | | | | *i* S | | | Sg | 03 38 49.0 | +0.4 |
| ST3N | | | | IAML | | | | 03 38 49.1 | |
| | comp=Z,0.7nm,0.1s | | | | | | | | |
| **ST1N** | **ST1** | **0.08** | **50** | ⇑*i*P | | | Pg | 03 38 47.2 | +0.6 |
| ST1N | | | | *i* S | | | Sg | 03 38 48.6 | -0.2 |
| ST1N | | | | IAML | | | | 03 38 48.6 | |
| | comp=Z,6.6nm,0.0s | | | | | | | | |
| **ST1N** | **ST1** | **0.08** | **50** | *i* P | | | Pg | 03 38 47.9 | +1.2 |
| ST1N | | | | *i* S | | | Sg | 03 38 48.7 | -0.1 |
| ST1N | | | | IAML | | | | 03 38 48.7 | |
| | comp=Z,4.3nm,0.1s | | | | | | | | |
| **ST6N** | **ST6** | **0.14** | **266** | ⇓*i*P | | | Pb | 03 38 48.5 | +0.8 |
| ST6N | | | | *i* S | | | Sb | 03 38 50.8 | +0.3 |
| ST6N | | | | IAML | | | | 03 38 50.9 | |
| | comp=Z,3.3nm,0.1s | | | | | | | | |
| **ST2N** | **ST2** | **0.14** | **160** | ⇓*i*P | | | Pg | 03 38 47.4 | 0.0 |
| ST2N | | | | *i* S | | | Sg | 03 38 49.1 | -0.9 |
| ST2N | | | | IAML | | | | 03 38 49.6 | |
| | comp=Z,3.1nm,0.0s | | | | | | | | |
| **ST2N** | **ST2** | **0.14** | **160** | *i* P | | | Pg | 03 38 47.3 | 0.0 |
| ST2N | | | | *i* S | | | Sg | 03 38 48.7 | -1.3 |
| ST2N | | | | IAML | | | | 03 38 49.0 | |
| | comp=Z,2.3nm,0.1s | | | | | | | | |
| **ST5N** | **ST5** | **0.20** | **90** | ⇓*i*P | | | Pb | 03 38 48.6 | -0.1 |
| ST5N | | | | ⇓*i*P | | | Pg | 03 38 48.6 | +0.5 |
| ST5N | | | | IAML | | | | 03 38 51.4 | |
| | comp=N,7.7nm,0.1s | | | | | | | | |
| ST5N | | | | IAML | | | | 03 38 51.7 | |
| | comp=Z,1.4nm,0.1s | | | | | | | | |
| **ST5N** | **ST5** | **0.20** | **90** | *i* P | | | Pb | 03 38 48.6 | -0.1 |
| ST5N | | | | *i* S | | | Sg | 03 38 51.1 | -0.3 |
| ST5N | | | | IAML | | | | 03 38 51.4 | |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| **ST8N** | **ST8** | **0.24** | **295** | ⇑*i*P | | | Pb | 03 38 50.5 | +1.1 |
| ST8N | | | | IAML | | | | 03 38 56.0 | |
| | comp=Z,0.3nm,0.1s | | | | | | | | |
| **ST10N** | **ST10** | **0.25** | **216** | ⇑*i*P | | | Pb | 03 38 49.9 | +0.3 |
| ST10N | | | | *i* S | | | Sg | 03 38 53.2 | +0.5 |
| ST10N | | | | IAML | | | | 03 38 54.9 | |
| | comp=Z,1.5nm,0.0s | | | | | | | | |
| **ST10N** | **ST10** | **0.25** | **216** | *i* P | | | Pb | 03 38 49.9 | +0.3 |
| ST10N | | | | *i* S | | | Sb | 03 38 53.3 | -0.5 |
| ST10N | | | | IAML | | | | 03 38 53.5 | |
| | comp=Z,3.5nm,0.1s | | | | | | | | |

*UCR* ***21*** *03:41:27.7±1.1,8.56N×83.24W,h18km±2km,MW3.6*

**UPA 21 03:41:27.4±1.7,8.64N×83.17W,h0km±9km,ML3.3,9C-5D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EDAD** | **Golfito** | **0.01** | **25** | ⇑*e*P | | | Pg | 03 41 30.8 | +3.2 |
| EDAD | | | | *e*S | | | Sg | 03 41 33.6 | +5.9 |
| **FITO** | **Golfito** | **0.02** | **139** | ⇑*i*P | | | Pg | 03 41 30.7 | +2.8 |
| FITO | | | | *e*S | | | Sg | 03 41 33.3 | +5.1 |
| **PTJ1** | **Puerto Jimnez** | **0.17** | **231** | ⇑*i*P | | | Pg | 03 41 31.0 | +0.3 |
| PTJ1 | | | | *e*S | | | Sg | 03 41 34.5 | +1.7 |
| **PTJ1** | **Puerto Jimnez** | **0.17** | **231** | ⇑*i*P | | | Pg | 03 41 31.0 | +0.4 |
| **JIME** | **Puerto Jimenez** | **0.18** | **236** | ⇑*i*P | | | Pg | 03 41 31.2 | +0.3 |
| JIME | | | | *e*S | | | Sg | 03 41 34.8 | +1.5 |
| **NELY** | **Ciudad Neily** | **0.22** | **88** | ⇑*i*P | | | Pg | 03 41 34.2 | +2.6 |
| NELY | | | | *e*S | | | Sg | 03 41 39.6 | +5.1 |
| **VITO** | **San Vito** | **0.26** | **48** | ⇓*e*P | | | Pb | 03 41 35.5 | +0.4 |
| VITO | | | | *e*S | | | Sb | 03 41 42.2 | +1.9 |
| **EDP2** | **Potrero Grande** | **0.37** | **359** | ⇓*e*P | | | Pb | 03 41 36.7 | -0.2 |
| EDP2 | | | | *e*S | | | Sb | 03 41 43.9 | +0.6 |
| **EDPN** | **Palmar Norte** | **0.42** | **318** | ⇑*i*P | | | Pg | 03 41 36.0 | +0.4 |
| EDPN | | | | *e*S | | | Sb | 03 41 43.0 | -1.8 |
| **BRU2** | **Volcan** | **0.50** | **72** | *e*P | | | Pb | 03 41 38.9 | -0.2 |
| BRU2 | | | | *e*S | | | Sb | 03 41 47.8 | +0.8 |
| **PTPM** | **Petroterminale** | **0.52** | **147** | ⇓*i*P | | | Pg | 03 41 38.3 | +0.8 |
| PTPM | | | | AMP | | | | 03 41 39.4 | |
| | comp=Z,2μm,0.2s | | | | | | | | |
| PTPM | | | | *e*S | | | Sb | 03 41 47.6 | 0.0 |
| **EDBA** | **Buenos Aires** | **0.53** | **349** | ⇓*e*P | | | Pb | 03 41 38.9 | -0.7 |
| EDBA | | | | *e*S | | | Sb | 03 41 48.1 | +0.4 |
| **BURE** | **Buenos Aires** | **0.55** | **343** | ⇑*i*P | | | Pb | 03 41 39.5 | -0.5 |
| BURE | | | | *e*S | | | Sb | 03 41 48.2 | -0.2 |
| **DRK0** | **Durika** | **0.62** | **353** | *i* P | | | Pb | 03 41 40.3 | -0.9 |
| DRK0 | | | | *e*S | | | Sb | 03 41 50.3 | -0.3 |
| **DRK0** | **Durika** | **0.62** | **353** | ⇓*i*P | | | Pb | 03 41 40.3 | -0.9 |
| DRK0 | | | | *e*S | | | Sb | 03 41 50.0 | -0.6 |
| **DVD** | **David** | **0.74** | **106** | *e*P | | | Pb | 03 41 43.9 | +0.7 |
| DVD | | | | *e*S | | | Sb | 03 41 54.9 | +1.0 |
| **CNI2** | **El Empalme, Bo** | **1.04** | **42** | *e*P | | | Pb | 03 41 47.8 | -0.5 |
| CNI2 | | | | *e*S | | | Sb | 03 42 03.3 | +0.8 |
| **CHGR2** | **Aguacate** | **1.05** | **74** | *e*P | | | Pg | 03 41 47.4 | -0.3 |
| CHGR2 | | | | *e*S | | | Sb | 03 42 03.1 | +0.1 |
| **BUS1** | **Rivas** | **1.07** | **328** | *e*P | | | Pg | 03 41 47.0 | -0.9 |
| BUS1 | | | | *e*S | | | Sb | 03 42 03.0 | -0.8 |
| **LLNJ** | **Naranjito** | **1.23** | **312** | *e*P | | | Pg | 03 41 49.4 | -1.7 |
| **LCR2** | **La Lucha 2** | **1.37** | **323** | *e*P | | | Pg | 03 41 51.8 | -1.9 |
| **ABE2** | **San Pablo** | **1.37** | **320** | *e*P | | | Pg | 03 41 52.6 | -1.1 |
| **VTCV** | **VTCV, Calle Va** | **1.44** | **338** | *e*P | | | Pg | 03 41 52.9 | -2.1 |
| **CVTV** | **Tajo** | **1.47** | **337** | *e*P | | | Pn | 03 41 53.9 | -1.6 |
| **CVTQ** | **Turrialba Volc** | **1.48** | **337** | *e*P | | | Pn | 03 41 54.6 | -1.0 |
| **VTLA** | **Turrialba Volc** | **1.48** | **336** | ⇑*e*P | | | Pn | 03 41 54.8 | -0.8 |
| **LCOCO** | **El Coco** | **1.48** | **345** | *e*P | | | Pn | 03 41 54.6 | -0.8 |
| LCOCO | | | | *e*S | | | Sg | 03 42 14.7 | -0.4 |
| **VTR0** | **Volcan Turrial** | **1.48** | **337** | *e*P | | | Pn | 03 41 55.1 | -0.7 |
| **CVTR** | **Volcan Turrial** | **1.49** | **337** | *e*P | | | Pn | 03 41 54.7 | -1.1 |
| **ACOS** | **Acosta** | **1.51** | **319** | *e*P | | | Pn | 03 41 55.3 | -0.6 |
| **BELE** | **Belen** | **1.66** | **323** | *e*P | | | Pn | 03 41 57.0 | -1.0 |
| BELE | | | | *e*S | | | Sn | 03 42 19.1 | -0.9 |
| **SOCE** | **Pocosol** | **2.24** | **321** | *e*P | | | Pb | 03 42 07.6 | -1.3 |
| **VACR** | **Volcan Arenal** | **2.35** | **321** | *e*P | | | Pn | 03 42 08.7 | +1.4 |
| **JTS** | **Las Juntas de** | **2.40** | **313** | *e*P | | | Pn | 03 42 08.5 | +0.4 |
| **CUI** | **Cuipilapa** | **2.81** | **316** | *e*P | | | Pn | 03 42 15.4 | +1.7 |

*IDC* ***21*** *03:42:03.7±0.9,8.54N×83.14W,h0km,mb3.9/10, mbtmp4.0/15,ML3.2/4,MS3.2/7,Error ellipse: s-maj=32.7km s-min=14.7km az=40.0*
*NEIC* ***21*** *03:42:06.8±1.4,8.61N±0.06×83.22W±0.02,h17km±5km, mb4.4/21,Mwr4.1/18,Error ellipse: s-maj=8.7km s-min=1.9km az=193.0,Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr1.33; Mθθ-1.08; Mφφ-0.25; Mrθ0.23; Mθφ0.74; Mφr-0.58; Fault plane solution: M0 1.56000×10^15 NP1:φs135.46000°,δ56.59000°, λ108.25000°. NP2:φs284.55000°,δ37.55000°,λ64.60000°. Principal axes: T 1.5239, Plg72.0000°, Azm291.0000°; N 0.0787, Plg15.0000°, Azm305.0000°; P -1.6027, Plg10.0000°, Azm212.0000°;*
*CATAC* ***21*** *03:42:06.3±0.3,8.63N×83.24W,h4km±2km,ML4.6*
*UPA* ***21*** *03:42:06.5±1.4,8.63N×83.23W,h10km±6km,MD4.0, ML4.1,MW4.2*
*NEIC* ***21*** *03:42:06.5,8.62N×83.23W,h14km*
*UCR* ***21*** *03:42:06.1±1.1,8.58N×83.25W,h18km±2km,MW4.8, Fault plane solution: NP1:φs306.08000°,δ50.73000°, λ77.04000°.*

**ISC 21 03:42:06.4±0.6,8.60N±0.02×83.23W±0.02,h16km±4km, n119,σ1s07/139,mb4.3/20,MS3.2/4,9C-7D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.08** | **70** | ⇑*e*P | | | **Pg** | **03 42 09.0** | **-0.7** |
| FITO | | | | *e*S | | | **Sg** | **03 42 11.4** | **-0.3** |
| **EDAD** | **Golfito** | **0.08** | **49** | ⇑*e*P | | | **Pg** | **03 42 09.2** | **-0.6** |
| EDAD | | | | *e*S | | | **Sg** | **03 42 12.0** | **+0.1** |
| **PTJ1** | **Puerto Jimnez** | **0.10** | **230** | *i* P | | | **Pg** | **03 42 09.3** | **-0.5** |
| PTJ1 | | | | IAML | | | | 03 42 09.6 | |
| | comp=Z,730μm,1.0s | | | | | | | | |
| PTJ1 | | | | *

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JTS** | **Las Juntas de** | **2.39** | **315** | Pn | | **Pn** | **03 42 45.4** | **+0.4** |
| | comp=Z,23nm,0.3s,baz=154,slow=22,SNR=8.7 | | | | | | | |
| JTS | | | | Sn | | **Sn** | **03 43 14.7** | **+0.7** |
| | comp=Z,86nm,0.3s,baz=8.3,slow=19,SNR=7.0 | | | | | | | |
| JTS | | | | LR | | LR | 03 43 46.4 | |
| | comp=Z,283nm,19.8s,baz=92,slow=41 | | | | | | | |
| | comp=Z,239nm,0.3s | | | | | | | |
| **JTS** | **Las Juntas de** | **2.39** | **315** | *eP* | | **Pn** | **03 42 44.9** | **-0.1** |
| **JTS** | **Las Juntas de** | **2.39** | **315** | *eP* | | **Pn** | **03 42 44.8** | **-0.2** |
| **COVE** | **Coope Vega, Sa** | **2.41** | **331** | *i* P | | **Pn** | **03 42 46.8** | **+1.6** |
| COVE | | | | IAML | | | 03 43 37.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **INDI** | **Punta indio, G** | **2.58** | **299** | *i* P | | **Pn** | **03 42 47.6** | **+0.1** |
| INDI | | | | IAML | | | 03 43 41.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CACAO** | **El Cacao, Vera** | **2.65** | **118** | *eP* | | **Pn** | **03 42 48.3** | **-0.3** |
| CACAO | | | | *eS* | | **Sn** | **03 43 20.9** | **+0.4** |
| **CHIT3** | **Chitre** | **2.85** | **103** | *eP* | | **Pn** | **03 42 51.9** | **+0.5** |
| CHIT3 | | | | *eS* | | **Sn** | **03 43 26.5** | **+1.1** |
| **AZU** | **Azuero** | **3.03** | **105⇑** | *iP* | | **Pn** | **03 42 55.1** | **+1.3** |
| AZU | | | | *eS* | | **Sn** | **03 43 31.0** | **+1.2** |
| **AZU** | **Azuero** | **3.03** | **105⇑** | *eP* | | **Pn** | **03 42 55.0** | **+1.3** |
| **BCIP** | **Isla Barro Col** | **3.40** | **80** | Pn | | **Pn** | **03 42 59.2** | **+0.4** |
| **BCIP** | **Isla Barro Col** | **3.40** | **80** | *i* P | | **Pn** | **03 42 59.7** | **+0.9** |
| BCIP | | | | IAML | | | 03 44 01.6 | |
| | comp=Z,500nm,1.0s | | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.40** | **80** | *eP* | | **Pn** | **03 42 59.3** | **+0.4** |
| **BLUN** | **Bluefields** | **3.43** | **351** | *i* P | | **Pn** | **03 42 58.3** | **-0.9** |
| BLUN | | | | IAML | | | 03 43 52.4 | |
| | comp=Z,560nm,1.0s | | | | | | | |
| **UPA** | **Univ. de Panam** | **3.67** | **84** | *eP* | | **Pn** | **03 43 03.3** | **+0.7** |
| **ESPN** | **Las Esperanzas** | **3.73** | **344** | Pn | | **Pn** | **03 43 03.3** | **-0.1** |
| **ESPN** | **Las Esperanzas** | **3.73** | **344** | *eP* | | **Pn** | **03 43 03.2** | **-0.1** |
| **JAPN** | **Al SSO del Vol** | **3.78** | **321** | *i* P | | **Pb** | **03 43 14.5** | **+1.7** |
| **ACON** | **Acoyapa** | **3.86** | **330** | | | **Pn** | **03 43 05.7** | **+0.5** |
| **ACON** | **Acoyapa** | **3.86** | **330** | *i* P | | **Pn** | **03 43 06.2** | **+1.0** |
| ACON | | | | IAML | | | 03 43 09.4 | |
| | comp=Z,380nm,1.0s | | | | | | | |
| **ACON** | **Acoyapa** | **3.86** | **330** | P | | **Pn** | **03 43 06.2** | **+1.0** |
| **ACON** | **Acoyapa** | **3.86** | **330⇑** | *eP* | | **Pn** | **03 43 05.9** | **+0.8** |
| **CHPO** | **Chepo, Panama** | **4.10** | **82** | *eP* | | **Pn** | **03 43 09.2** | **+0.6** |
| CHPO | | | | *eS* | | **Sn** | **03 43 57.0** | **+0.7** |
| **BOAB** | **BOACO BROADBAN** | **4.52** | **328** | | | **Pn** | **03 43 14.3** | **+0.1** |
| **BOAB** | **BOACO BROADBAN** | **4.52** | **328** | *i* P | | **Pn** | **03 43 15.2** | **+1.0** |
| BOAB | | | | IAML | | | 03 43 30.7 | |
| | comp=Z,180nm,1.0s | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **4.52** | **328** | P | | **Pn** | **03 43 14.9** | **+0.6** |
| **CRIN** | **San Cristobal** | **5.54** | **318** | P | | **Pn** | **03 43 30.0** | **+1.6** |
| **TGUH** | **Tegucigalpa,Un** | **6.72** | **324** | P | | **Pn** | **03 43 44.6** | **-0.1** |
| **MTO3** | **Montecristo** | **8.33** | **314** | Pn | | **Pn** | **03 44 08.7** | **+1.9** |
| **APG** | **El Apazote** | **9.52** | **313** | Pn | | **Pn** | **03 44 25.4** | **+2.2** |
| | comp=Z,0.1nm,0.3s,baz=160,slow=2.8,SNR=11 | | | | | | | |
| APG | | | | Sn | | **Sn** | **03 46 17.1** | **+7.0** |
| | comp=Z,0.5nm,0.3s,baz=61,slow=22,SNR=5.7 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| **ROSC** | **El Rosal** | **9.60** | **112** | Pn | | **Pn** | **03 44 23.9** | **-0.6** |
| | comp=Z,1.2nm,0.3s,baz=150,slow=17,SNR=2.9 | | | | | | | |
| | comp=Z,4.1nm,0.5s | | | | | | | |
| **MTDJ** | **Mount Denham** | **11.05** | **29** | Pn | | **Pn** | **03 44 44.8** | **+0.7** |
| **SDV** | **Santo Domingo** | **12.45** | **88** | LR | | LR | 03 51 40.6 | |
| | comp=Z,96nm,18.8s,baz=252,slow=47 | | | | | | | |
| **CMIG** | **Matias Romero** | **14.15** | **308** | Pn | | **Pn** | **03 45 28.7** | **+2.3** |
| | comp=Z,8.5nm,0.3s,baz=89,slow=12,SNR=42 | | | | | | | |
| **BAUV** | **El Baul** | **15.01** | **88** | Pn | | **Pn** | **03 45 37.7** | **-0.5** |
| BAUV | | | | IAmb | | IAmb | 03 45 50.3 | |
| | comp=Z,33nm,1.4s | | | | | | | |
| **SDDR** | **Presa de Saban** | **15.51** | **47** | Pn | | **Pn** | **03 45 46.2** | **+1.4** |
| **ATAH** | **Atahualpa** | **16.36** | **163** | LR | | LR | 03 51 28.7 | |
| | comp=Z,130nm,19.8s,baz=335,slow=35 | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **18.41** | **84** | P | | **P** | **03 46 20.8** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=306,slow=8.7,SNR=2.0 | | | | | | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **BOAV** | **Boa Vista** | **23.41** | **104** | P | | **P** | **03 47 14.4** | **-0.6** |
| **LRAL** | **Lakeview Retre** | **24.57** | **352** | P | | **P** | **03 47 26.0** | **+0.3** |
| LRAL | | | | IAmb | | IAmb | 03 47 28.7 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **GOGA** | **Godfrey** | **24.69** | **360** | P | | **P** | **03 47 27.4** | **+0.6** |
| GOGA | | | | IAmb | | IAmb | 03 47 29.8 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **ETMB** | **Extrema** | **24.93** | **137** | P | | **P** | **03 47 28.5** | **-0.7** |
| **Y52A** | **Lilburn** | **25.16** | **358** | P | | **P** | **03 47 30.3** | **-0.7** |
| **HODGE** | **Hodges** | **25.53** | **2** | P | | **P** | **03 47 33.5** | **-0.9** |
| HODGE | | | | IAmb | | IAmb | 03 47 35.9 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **26.94** | **359** | LR | | LR | 03 58 35.6 | |
| | comp=Z,83nm,18.7s,baz=172,slow=37 | | | | | | | |
| **V58A** | **Windy Hill, Pi** | **27.33** | **7** | P | | **P** | **03 47 49.9** | **-0.7** |
| **V61A** | **Roper** | **27.74** | **12** | P | | **P** | **03 47 57.2** | **+2.9** |
| **WHAR** | **Wooly Hollow** | **27.83** | **344** | P | | **P** | **03 47 54.6** | **-0.5** |
| WHAR | | | | IAmb | | IAmb | 03 47 59.7 | |
| | comp=Z,5.9nm,1.0s | | | | | | | |
| **TXAR** | **Lajitas Array** | **28.17** | **320** | P | | **P** | **03 47 59.4** | **+1.0** |
| | comp=Z,0.4nm,0.8s,baz=138,slow=11,SNR=3.8 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **LCAR** | **Lake Charles** | **28.29** | **346** | P | | **P** | **03 47 57.9** | **-1.3** |
| LCAR | | | | IAmb | | IAmb | 03 47 59.2 | |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| **LPAZ** | **La Paz** | **28.89** | **149** | P | | **P** | **03 48 04.0** | **-1.5** |
| | comp=Z,0.8nm,0.8s,baz=352,slow=16,SNR=4.3 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **T42A** | **Van Buren** | **29.19** | **347** | P | | **P** | **03 48 05.8** | **-1.5** |
| T42A | | | | IAmb | | IAmb | 03 48 11.6 | |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| **MGMO** | **Mountain Grove** | **29.59** | **345** | P | | **P** | **03 48 10.2** | **-0.6** |
| **CCM** | **Cathedral Cave** | **30.21** | **347** | P | | **P** | **03 48 15.6** | **-0.6** |
| CCM | | | | IAmb | | IAmb | 03 48 20.7 | |
| | comp=Z,5.9nm,0.7s | | | | | | | |
| **MDP** | **Montagnes des** | **30.56** | **95** | LR | | LR | 04 01 13.9 | |
| | comp=Z,92nm,19.8s,baz=238,slow=38 | | | | | | | |
| **M57A** | **Sunshine Farm,** | **33.05** | **8** | P | | **P** | **03 48 40.1** | **-1.1** |
| **SADO** | **Sadowa** | **36.21** | **5** | LR | | LR | 04 05 14.5 | |
| | comp=Z,30nm,20.8s,baz=308,slow=38 | | | | | | | |
| **PDAR** | **Pinedale Array** | **41.13** | **330** | LR | | LR | 04 08 32.8 | |
| | comp=Z,15nm,18.5s,baz=101,slow=38 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **42.00** | **175** | T | | T | 04 34 29.5 | |
| | baz=354,slow=76,SNR=8.6 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **42.01** | **175** | T | | T | 04 34 34.6 | |
| | baz=354,slow=76,SNR=8.0 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **42.02** | **175** | T | | T | 04 34 31.0 | |
| | baz=354,slow=76,SNR=9.5 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **43.32** | **319** | P | | **P** | **03 50 09.4** | **+1.4** |
| | comp=Z,1.0nm,0.6s,baz=127,slow=7.6,SNR=7.1 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **PLCA** | **Paso Flores** | **50.46** | **168** | P | | **P** | **03 51 02.7** | **-0.9** |
| | comp=Z,1.6nm,0.7s,baz=337,slow=13,SNR=3.7 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **58.43** | **344** | P | | **P** | **03 52 00.3** | **-0.9** |
| | comp=Z,1.0nm,0.8s,baz=120,slow=9.6,SNR=6.3 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **I30M** | **Mount Dempster** | **67.38** | **339** | | | **P** | **03 53 00.3** | **-0.6** |
| I30M | | | | IAmb | | IAmb | 03 53 01.8 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **SUMG** | **Summit** | **69.32** | **13** | P | | **P** | **03 53 12.2** | **-1.1** |
| **ILAR** | **Eielson Array** | **71.20** | **336** | P | | **P** | **03 53 23.8** | **-0.6** |
| | comp=Z,1.7nm,0.7s,baz=116,slow=4.6,SNR=16 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **G23K** | **Bananza Creek** | **73.07** | **338** | P | | **P** | **03 53 35.1** | **-0.5** |
| G23K | | | | IAmb | | IAmb | 03 53 51.5 | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **G21K** | **Allakaket** | **74.35** | **337** | P | | **P** | **03 53 43.4** | **+0.3** |
| G21K | | | | IAmb | | IAmb | 03 53 44.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **ESDC** | **Sonseca Array** | **76.31** | **51** | P | | **P** | **03 53 55.2** | **+0.2** |
| | comp=Z,1.5nm,0.7s,baz=267,slow=4.6,SNR=9.3 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **77.33** | **35** | P | | **P** | **03 54 00.2** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=254,slow=4.2,SNR=3.6 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **DBIC** | **Dimbokro** | **77.58** | **85** | P | | **P** | **03 54 02.4** | **-0.1** |
| | comp=Z,3.3nm,0.8s,baz=276,slow=9.2,SNR=3.6 | | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.18** | **78** | P | | **P** | **03 54 31.7** | **-0.9** |
| | comp=Z,0.4nm,0.7s,baz=308,slow=3.8,SNR=5.6 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **141.98** | **249** | PKhKP | | PKPpre | 04 01 32.5 | |
| | comp=Z,0.7nm,0.7s,baz=106,slow=2.5,SNR=6.1 | | | | | | | |

**IDC 21 03:43:27.9±8.9, 32°.61S×180°.00W, h301km±98km, mb3.0/2, mbtmp3.8/3, Error ellipse: s-maj=110.8km s-min=45.8km az=2.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **6.11** | **202** | P | Pn | 03 44 59.1 | +0.7 |
| | 6.5nm,0.3s,baz=344,slow=4.5,SNR=29 | | | | | | |
| URZ | | | | S | S | 03 46 10.8 | -0.6 |
| | 5.6nm,0.3s,baz=240,slow=20,SNR=2.2 | | | | | | |
| **ASAR** | **Alice Springs** | **41.35** | **270** | P | P | 03 50 45.6 | +0.4 |
| | 0.4nm,0.4s,baz=101,slow=7.4,SNR=4.4 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.54** | **276** | P | P | 03 50 54.5 | -0.4 |
| | 0.5nm,0.3s,baz=112,slow=8.0,SNR=15 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **146.58** | **337** | PKPbc | PKPbc | 04 02 32.4 | -0.9 |
| | 2.0nm,1.0s,baz=35,slow=5.1,SNR=5.2 | | | | | | |

**NAM 21 03:45:09.2±4.5, 19°.74S×14°.46E, h13km±20km, ML0.0, 5C-2D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.03** | **101⇑** | *i* P | Pg | 03 45 13.3 | +1.6 |
| ST3N | | | | *i* S | Sg | 03 45 14.9 | +1.5 |
| ST3N | | | | IAML | | 03 45 15.0 | |
| | comp=Z,2.2nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.03** | **101** | *i* P | Pg | 03 45 13.3 | +1.7 |
| ST3N | | | | *i* S | Sg | 03 45 14.9 | +1.5 |
| ST3N | | | | IAML | | 03 45 15.3 | |
| | comp=Z,2.1nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.09** | **223⇑** | *i* P | Pg | 03 45 14.7 | +2.5 |
| ST6N | | | | IAML | | 03 45 20.3 | |
| | comp=N,1.1nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.10** | **129⇑** | *i* P | Pg | 03 45 12.2 | -0.1 |
| ST9N | | | | *i* S | Sg | 03 45 12.9 | -1.6 |
| ST9N | | | | IAML | | 03 45 13.4 | |
| | comp=Z,36nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.10** | **129** | *i* P | Pg | 03 45 12.2 | -0.1 |
| ST9N | | | | *i* S | Sg | 03 45 12.9 | -1.5 |
| ST9N | | | | IAML | | 03 45 13.2 | |
| | comp=Z,60nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.14** | **91⇓** | *i* P | Pg | 03 45 12.5 | -0.3 |
| ST1N | | | | *i* S | Sg | 03 45 13.5 | -1.8 |
| ST1N | | | | IAML | | 03 45 13.6 | |
| | comp=Z,8.6nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.14** | **91** | *i* P | Pg | 03 45 12.6 | -0.2 |
| ST1N | | | | *i* S | Sg | 03 45 13.5 | -1.8 |
| ST1N | | | | IAML | | 03 45 13.7 | |
| | comp=Z,4.3nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.14** | **288⇑** | *i* P | Pb | 03 45 16.7 | +2.8 |
| ST8N | | | | *i* S | Sb | 03 45 21.7 | +4.7 |
| ST8N | | | | IAML | | 03 45 24.5 | |
| | comp=Z,0.3nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.23** | **147⇑** | *i* P | Pg | 03 45 13.7 | -0.5 |
| ST2N | | | | IAML | | 03 45 15.4 | |
| | comp=Z,8.0nm,0.1s | | | | | | |
| ST2N | | | | *i* S | Sg | 03 45 15.4 | -2.2 |
| **ST2N** | **ST2** | **0.23** | **147** | *i* P | Pg | 03 45 13.7 | -0.5 |
| ST2N | | | | *i* S | Sg | 03 45 15.3 | -2.4 |
| ST2N | | | | IAML | | 03 45 15.4 | |
| | comp=Z,7.9nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.27** | **195** | *i* P | Pb | 03 45 16.3 | +0.3 |
| ST10N | | | | *i* S | Sb | 03 45 20.3 | -0.3 |
| ST10N | | | | IAML | | 03 45 21.2 | |
| | comp=Z,1.3nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.28** | **101** | *i* P | Pg | 03 45 14.1 | -1.0 |
| ST5N | | | | *i* S | Sg | 03 45 16.4 | -2.7 |
| ST5N | | | | IAML | | 03 45 16.9 | |
| | comp=Z,1.5nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.37** | **77⇓** | *i* P | Pb | 03 45 18.8 | +1.0 |
| ST11N | | | | IAML | | 03 45 22.1 | |
| | comp=Z,0.6nm,0.0s | | | | | | |

**IDC 21 03:48:47.4±53.0, 16°.91S×176°.70W, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=988.4km s-min=171.0km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **40.54** | **241** | P | P | 03 56 28.6 | 0.0 |
| | 0.6nm,0.3s,baz=74,slow=18,SNR=3.1 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.42** | **258** | P | P | 03 57 15.9 | -0.4 |
| | 0.4nm,0.6s,baz=95,slow=7.2,SNR=14 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **46.63** | **253** | P | P | 03 57 17.9 | 0.0 |
| | 1.4nm,0.6s,baz=87,slow=8.8,SNR=13 | | | | | | |
| | 1.4nm,0.6s | | | | | | |

*DJA **21** 03:52:51.7±0.3, 8°.5S×11°.7E±°, h10km, M4.1/10, mb4.4/2, MLv3.9/10*
*IDC **21** 03:52:58.2±2.1, 8°.49S×117°.92E, h0km, mb3.3/2, mbtmp3.4/4, ML3.6/2, Error ellipse: s-maj=49.7km s-min=26.4km az=68.0*
**ISC 21 03:52:51.0±0.9, 8°.40S±0°.07×116°.86E±0°.05, h10km, n15, σ0s92/16, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.34** | **176** | P | **Pb** | **03 52 59.7** | **+0.5** |
| TWSI | | | | S | **Sb** | **03 53 04.1** | **-0.6** |
| **PLAI** | **Plampang** | **1.01** | **115** | P | **Pg** | **03 53 09.6** | **-0.8** |
| **DNP** | **Denpasar** | **1.65** | **260** | P | **Pb** | **03 53 22.2** | **+0.7** |
| **SRBI** | **Singaraja** | **1.66** | **281** | P | **Pn** | **03 53 20.7** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.68** | **268** | P | **Pn** | **03 53 34.6** | **+0.4** |
| **WBSI** | **Waikabubak, Su** | **2.79** | **116** | P | **Pn** | **03 53 37.2** | **+1.4** |
| **BSSI** | **Bau Bau, Buton** | **4.24** | **58** | P | **Pn** | **03 53 55.7** | **-0.1** |
| **KAPI** | **Kappang** | **4.42** | **41** | Pn | **Pn** | **03 53 58.4** | **+0.2** |
| | 2.0nm,0.3s,baz=186,slow=15,SNR=2.8 | | | | | | |
| KAPI | | | | Sn | **Sn** | **03 54 49.0** | **-0.8** |
| | 3.1nm,0.3s,baz=72,slow=19,SNR=2.3 | | | | | | |
| KAPI | | | | Lg | Lg | 03 55 10.0 | |
| | 1.4nm,0.3s,baz=229,slow=20,SNR=1.5 | | | | | | |
| | 5.3nm,0.3s | | | | | | |
| **GRJI** | **Gresik** | **4.58** | **288** | P | **Pn** | **03 54 01.3** | **+0.9** |
| **EDFI** | **Ende, Flores** | **4.79** | **95** | P | **Pn** | **03 54 04.9** | **+1.5** |
| **PWJI** | **Pagerwojo** | **5.01** | **274** | P | **Pn** | **03 54 07.2** | **+0.8** |
| | 19nm,0.5s,0.1nm | | | | | | |
| **UGM** | **Wanagama** | **6.29** | **274** | P | **Pn** | **03 54 23.1** | **-0.8** |
| **WRA** | **Warramunga Arr** | **20.45** | **126** | P | **P** | **03 57 27.5** | **-1.3** |
| | 0.2nm,0.3s,baz=301,slow=12,SNR=16 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.30** | **135** | P | **P** | **03 57 49.1** | **+0.3** |
| | 0.6nm,0.8s,baz=312,slow=9.8,SNR=2.7 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.97** | **334** | P | P | 04 03 30.5 | +13 |
| | 0.5nm,0.7s,baz=123,slow=5.3,SNR=3.1 | | | | | | |
| | 0.5nm,0.7s | | | | | | |

**IDC 21 04:04:25.9±6.1, 23°.54S×148°.70E, h0km, mbtmp3.0/3, ML2.7/3, Error ellipse: s-maj=48.5km s-min=34.9km az=105.0, Queensland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **4.12** | **326** | Pn | Pn | 04 05 30.4 | +0.3 |
| | 0.2nm,0.3s,baz=143,slow=17,SNR=13 | | | | | | |
| CTA | | | | Lg | Lg | 04 06 35.6 | |
| | 0.2nm,0.3s,baz=184,slow=18,SNR=6.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **10.42** | **216** | Sn | Sn | 04 08 54.9 | +0.8 |
| | 0.2nm,0.3s,baz=303,slow=20,SNR=2.9 | | | | | | |
| STKA | | | | Lg | Lg | 04 09 58.2 | |
| | 0.2nm,0.3s,baz=350,slow=18,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **13.57** | **267** | Pn | Pn | 04 07 41.1 | +1.4 |
| | 0.1nm,0.3s,baz=97,slow=13,SNR=4.9 | | | | | | |
| ASAR | | | | Sn | Sn | 04 10 14.8 | +3.4 |
| | baz=92,slow=21 | | | | | | |
| ASAR | | | | Lg | Lg | 04 11 37.0 | |
| | 0.2nm,0.3s,baz=91,slow=29,SNR=5.5 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **13.81** | **282** | Pn | Pn | 04 07 41.9 | -1.2 |
| | baz=105,slow=9.6,SNR=1.8 | | | | | | |
| WRA | | | | Lg | Lg | 04 11 43.4 | |
| | 0.1nm,0.3s,baz=113,slow=28,SNR=9.1 | | | | | | |
| | 0.7nm,1.1s | | | | | | |
| **I07AU** | **WARRAMUNGA INF** | **13.83** | **282** | I | I | 05 34 55.0 | |
| | baz=109,slow=323,SNR=2.7 | | | | | | |

**IDC 21 04:04:47.8±3.1, 19°.69S×176°.56W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=339.4km s-min=32.7km az=160.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **46.03** | **256** | P | P | 04 13 14.2 | +0.7 |
| | 2.3nm,0.7s,baz=91,slow=7.4,SNR=11 | | | | | | |
| | 2.3nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.06** | **261** | P | P | 04 13 12.8 | -1.1 |
| | 0.4nm,0.3s,baz=100,slow=7.8,SNR=5.7 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.48** | **57** | P | P | 04 17 28.0 | 0.0 |
| | 0.3nm,0.7s,baz=213,slow=6.4,SNR=6.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC **21** 04:07:59.6±2.8, 9°.11S×116°.05E, h0km, mb4.1/3, mbtmp4.2/3, Error ellipse: s-maj=168.7km s-min=35.8km az=32.0*
*DJA **21** 04:08:02.6±0.3, 8°.5S±3°×11°.7E±°, h10km, M4.3/11, mb4.5/3, MLv4.2/11*
*NEIC **21** 04:08:05.0±0.9, 9°.11S±0°.07×116°.60E±0°.06, h10km±1km, mb4.4/11, Error ellipse: s-maj=13.6km s-min=9.7km az=328.0*
**ISC 21 04:08:02.3±0.7, 8°.41S±0°.05×116°.88E±0°.05, h10km, n47, σ1s52/47, mb4.4/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.32** | **180** | P | **Pb** | **04 08 10.1** | **-0.1** |
| TWSI | | | | S | **Sb** | **04 08 14.9** | **-0.6** |
| **TWSI** | **Taliwang, Sumb** | **0.32** | **180** | P | **Pg** | **04 08 09.6** | **+0.8** |
| TWSI | | | | S | **Sg** | **04 08 14.5** | **+1.4** |
| **PLAI** | **Plampang** | **0.97** | **115** | P | **Pg** | **04 08 20.7** | **-0.4** |
| **PLAI** | **Plampang** | **0.97** | **115** | P | **Pg** | **04 08 20.5** | **-0.6** |
| PLAI | | | | S | **Sg** | **04 08 33.9** | **+0.1** |
| **DNP** | **Denpasar** | **1.68** | **261** | P | **Pn** | **04 08 32.4** | **+0.7** |
| **SRBI** | **Singaraja** | **1.69** | **281** | P | **Pn** | **04 08 32.2** | **+0.3** |
| **SRBI** | **Singaraja** | **1.69** | **281** | P | **Pn** | **04 08 31.8** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.70** | **269** | | **Pn** | **04 08 45.7** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.70** | **269** | P | **Pn** | **04 08 46.4** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.70** | **269** | P | **Pn** | **04 08 45.5** | **-0.4** |
| **WBSI** | **Waikabubak, Su** | **2.76** | **116** | P | **Pn** | **04 08 47.9** | **+1.2** |
| **WBSI** | **Waikabubak, Su** | **2.76** | **116** | P | **Pn** | **04 08 46.8** | **+0.1** |
| **BASI** | **Baing, Sumba** | **4.06** | **116** | P | **Pn** | **04 09 03.5** | **-1.1** |
| **BSSI** | **Bau Bau, Buton** | **4.23** | **58** | P | **Pn** | **04 09 06.4** | **-0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.23** | **58** | P | **Pn** | **04 09 04.7** | **-2.2** |
| **EDFI** | **Ende, Flores** | **4.76** | **94** | P | **Pn** | **04 09 14.8** | **+0.4** |
| **EDFI** | **Ende, Flores** | **4.76** | **94** | P | **Pn** | **04 09 13.9** | **-0.5** |
| **PWJI** | **Pagerwojo** | **5.04** | **274** | P | **Pn** | **04 09 18.5** | **+0.4** |
| | 31nm,0.6s,0.3nm | | | | | | |
| **PWJI** | **Pagerwojo** | **5.04** | **274** | P | **Pn** | **04 09 17.2** | **-0.9** |
| | 31nm,0.6s,0.3nm | | | | | | |
| **BNSI** | **Bone** | **5.11** | **39** | P | **Pn** | **04 09 19.2** | **+0.1** |
| | 24nm,0.7s,0.3nm | | | | | | |
| **BNSI** | **Bone** | **5.11** | **39** | P | **Pn** | **04 09 17.8** | **-1.3** |
| | 24nm,0.7s,0.3nm | | | | | | |
| **UGM** | **Wanagama** | **6.32** | **274** | Pn | **Pn** | **04 09 35.6** | **0.0** |
| **UGM** | **Wanagama** | **6.32** | **274** | P | **Pn** | **04 09 36.0** | **+0.4** |
| **UGM** | **Wanagama** | **6.32** | **274** | P | **Pn** | **04 09 32.6** | **-3.0** |
| | 75nm,1.7s | | | | | | |
| **KPJI** | **Karang Pucung** | **7.95** | **277** | P | **Pn** | **04 09 56.6** | **-1.5** |
| **FITZ** | **Fitzroy Crossi** | **12.85** | **139** | Pn | **Pn** | **04 11 02.8** | **-2.5** |
| **MBWA** | **Marble Bar** | **12.96** | **168** | Pn | Pn | 04 11 00.6 | -6.1 |
| **PSAN** | **Pilbara Seismi** | **13.39** | **168** | Pn | Pn | 04 11 06.4 | -6.1 |
| **KNRA** | **Kununurra** | **13.67** | **123** | Pn | **Pn** | **04 11 17.4** | **+0.9** |
| **GIRL** | **Giralia** | **14.38** | **190** | Pn | Pn | 04 11 17.8 | -8.2 |
| **BKNI** | **Bangkinang** | **18.02** | **298** | | **P** | **04 12 16.4** | **+2.8** |
| **WB0** | **Warramunga Arr** | **20.36** | **125** | P | **P** | **04 12 39.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 04 12 40.0 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.41** | **126** | P | **P** | **04 12 39.2** | **-0.6** |
| **WRA** | **Warramunga Arr** | **20.41** | **126** | P | **P** | **04 12 40.0** | **+0.2** |
| | comp=Z,3.6nm,0.5s,baz=300,slow=12,SNR=58 | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.42** | **126** | P | **P** | **04 12 40.1** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 04 12 40.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.42** | **126** | P | **P** | **04 12 39.8** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 04 12 40.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.58** | **126** | P | **P** | **04 12 41.8** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 04 12 42.5 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.27** | **135** | P | **P** | **04 13 00.1** | **+0.3** |
| | comp=Z,3.2nm,0.8s,baz=312,slow=9.7,SNR=11 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **30.08** | **147** | P | **P** | **04 14 10.8** | **-1.2** |
| BBOO | | | | IAmb | IAmb | 04 14 49.4 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.75** | **139** | P | **P** | **04 14 35.6** | **+0.1** |
| **STKA** | **Stephens Creek** | **32.75** | **139** | P | **P** | **04 14 36.0** | **+0.4** |
| | comp=Z,3.2nm,0.5s,baz=316,slow=10,SNR=9.7 | | | | | | |
| | comp=Z,3.2nm,0.5s | | |

**BBPB Basco Batanes 1.51 30⇓** *i*P **Pb 04 10 54.1 -0.9**
BBPB *e*S **Sb 04 11 16.4 +2.6**
**BBP Basco 1.51 30⇓** *e*P **Pn 04 10 53.6 +0.4**
BBP *i* S **Sb 04 11 14.2 +0.4**
**ABRA Dolores 1.53 196⇓** *e*P **Pb 04 10 55.0 -0.2**
ABRA *e*S **Sn 04 11 13.1 +0.6**
**CVP Callao Caves 1.55 156⇑** *e*P **Pb 04 10 55.5 -0.1**
CVP *e*S **Sb 04 11 15.7 +0.9**
**SZP Santa 1.70 203** P **Pb 04 10 59.3 +1.1**
**SAMP Sagada Mountai 2.05 187⇓** *e*P **Pb 04 11 03.0 -1.2**
SAMP *e*S **Sb 04 11 30.1 +0.9**
**CAUP Cauayan 2.26 164⇑** *e*P **Pb 04 11 07.8 +0.1**
CAUP *e*S **Sb 04 11 36.2 +0.9**
**TWGBT Beinan 3.68 359** P **Pn 04 11 23.0 0.0**
**TWG Pinlang 3.68 359** - **Pn 04 11 21.7 -1.3**
**RTBP Dona Remedios 4.13 181⇓** *e*P **Pn 04 11 32.5 +3.3**
RTBP *e*S **Sn 04 12 22.6 +5.9**
**TPUB Ta-pu 4.18 353** P **Pn 04 11 29.5 -0.5**
**TPUB Ta-pu 4.18 353** Pn **Pn 04 11 28.7 -1.3**
**YULB Yu-li 4.25 2** P **Pn 04 11 30.8 -0.1**
**YULB Yu-li 4.25 2** Pn **Pn 04 11 30.2 -0.7**
**ABPP Abucay Bataan 4.41 189⇓** *e*P **Pn 04 11 37.5 +4.4**
ABPP *e*S **Sb 04 12 31.2 -6.0**
**POLP Polilio Island 4.43 170⇓** *e*P **Pn 04 11 37.4 +4.0**
POLP *e*S **Sn 04 12 30.7 +6.4**
**QVP Quezon City--P 4.48 182⇓** *e*P **Pn 04 11 38.2 +4.2**
QVP *e*S **Sb 04 12 36.7 -2.5**
**QVP Quezon City--P 4.48 182⇑** *e*P **Pb 04 11 40.8 -4.7**
QVP *e*S Sn 04 12 05.2 -20
**SSLB Suanglung 4.64 358** P **Pn 04 11 36.3 0.0**
**SSLB Suanglung 4.64 358** Pn **Pn 04 11 36.4 +0.1**
**MACP Maragondon, Ca 4.85 185⇓** *e*P **Pn 04 11 43.4 +4.2**
MACP *e*S **Sb 04 12 44.5 -5.5**
**LBLP Los Banos, Lag 4.93 179⇑** *e*P Pn 04 11 45.4 +5.1
LBLP *e*S **Sb 04 12 46.1 -6.1**
**LQP Lukban 5.00 176⇓** *e*P **Pn 04 11 43.6 +2.3**
**JCNP Jose Panganiba 5.03 163⇑** *e*P **Pn 04 11 44.6 +3.1**
JCNP *e*S **Sn 04 12 45.0 +6.0**
**JCNP Jose Panganiba 5.03 163⇓** *e*P **Pn 04 11 44.9 +3.3**
JCNP *e*S **Sn 04 12 41.8 +2.8**
**NACB Ninganchiao 5.04 5** P **Pn 04 11 41.7 0.0**
**NACB Ninganchiao 5.04 5** Pn **Pn 04 11 41.1 -0.6**
**GQP Guinayangan 5.33 166⇑** *e*P **Pn 04 11 49.1 +3.3**
GQP *e*S **Sn 04 12 40.6 -5.9**
**YHNB Yeheng 5.52 2** Pn **Pn 04 11 49.0 +0.6**
**YOJ Yonaguni jima 5.58 18** P **Pn 04 11 50.9 +1.7**
**YOJ Yonaguni jima 5.58 18** Pn **Pn 04 11 50.5 +1.3**
**YOJ Yonaguni jima 5.58 18** P **Pn 04 11 50.5 +1.3**
**PGP Puerto Galera 5.59 182⇓** *i*P **Pn 04 11 53.4 +4.0**
PGP *e*S Pb 04 12 09.7 +5.1
**BOAC Boac 5.67 173⇑** *e*P Pn 04 11 55.7 +5.3
**TATO Taipei 5.83 3** P **Pn 04 11 54.1 +1.5**
**TATO Taipei 5.83 3** Pn **Pn 04 11 52.3 -0.3**
**SCSP San Jose Seism 5.89 157⇓** *e*P Pn 04 11 58.6 +5.2
SCSP *e*S **Sn 04 13 06.8 +6.5**
**KNMB Chin-men Tao 5.90 335** Pn **Pn 04 11 51.4 -2.2**
**AUQP San Andres 5.95 166⇓** *e*P Pn 04 11 59.4 +5.1
**PVCP Virac 6.20 152⇑** *e*P **Pn 04 12 00.7 +3.0**
PVCP *e*S **Sn 04 13 11.7 +3.8**
**QZH Quanzhou 6.26 338** Pn **Pn 04 11 56.8 -1.7**
QZH Sn **Sn 04 13 03.3 -6.0**
QZH smax smax
comp=N,210nm,0.7s
QZH smax smax
comp=E,430nm,0.8s
QZH LR LR
comp=N,4µm,14.8s
QZH LR LR
comp=E,1µm,15.5s
QZH LR LR
comp=E,5µm,19.6s
**SJMP San Jose 6.62 180⇑** *e*P Pn 04 12 09.2 +5.6
**OTRP Odiongan 6.77 173** *e*P Pb 04 12 19.2 -5.5
**HKPS Hong Kong Po S 7.28 297** P **Pn 04 12 11.2 -1.3**
**HKPS Hong Kong Po S 7.28 297** Pn **Pn 04 12 10.6 -1.9**
**ENPP El Nido 8.05 192⇓** *e*P **Pn 04 12 26.7 +3.6**
ENPP *e*S Sn 04 13 27.8 -26
**BESP Borongan 8.54 151** *e*P **Pn 04 12 34.0 +4.2**
**PLP Palo 8.73 154⇓** *e*P **Pn 04 12 36.2 +3.8**
**GNOP Guihulngan Cit 9.08 167⇑** *e*P Pn 04 12 42.5 +5.3
**TABP Talibon, Bohol 9.49 161⇓** *e*P **Pn 04 12 47.1 +4.3**
**DACP Dalaguete, Ceb 9.58 166⇓** *e*P Pn 04 12 49.4 +5.3
**LDIP Loreto 9.69 153⇓** *e*P **Pn 04 12 49.7 +4.1**
**GHBP Garcia Hernand 9.92 162⇑** *e*P **Pn 04 12 47.5 -1.3**
**JOW Kunigami 10.09 39** P **Pn 04 12 52.8 +1.8**
12nm,0.3s,baz=265,slow=24,SNR=4.9
40nm,0.4s
**QIZ Qiongzhong 10.70 271** P **Pn 04 12 58.0 -1.5**
**QIZ Qiongzhong 10.70 271** P **Pn 04 12 58.6 -0.9**
QIZ S **Sn 04 15 01.8 +3.2**
QIZ pmax pmax
comp=Z,65nm,0.7s
QIZ LR LR
comp=N,2µm,14.5s
QIZ LR LR
comp=E,2µm,17.3s
QIZ LR LR
comp=Z,3µm,19.0s
**QIZ Qiongzhong 10.70 271** Pn **Pn 04 12 58.6 -0.9**
**CNSH ChangSha 11.75 322** P **Pn 04 13 11.8 -1.9**
CNSH S **Sn 04 15 20.3 -3.8**
CNSH pmax pmax
comp=Z,14nm,0.4s
CNSH LR LR
comp=N,2µm,16.7s
CNSH LR LR
comp=E,2µm,16.1s
CNSH LR LR
comp=Z,3µm,16.8s
**SSE Sheshan 11.92 0** P **Pn 04 13 15.6 -0.5**
SSE S **Sn 04 15 28.3 0.0**
SSE pmax pmax
comp=Z,11nm,0.6s
SSE LR LR
comp=N,570nm,23.7s
SSE LR LR
comp=E,560nm,24.4s
**WHN Wuhan 12.94 333** P **Pn 04 13 28.6 -1.4**
WHN LR LR
comp=N,6µm,15.0s
WHN LR LR
comp=E,5µm,19.5s
WHN LR LR
comp=Z,9µm,17.9s
**NJ2 Nanjing 13.04 351** *e*P **Pn 04 13 34.8 +3.4**
NJ2 pmax pmax
comp=Z,10.0nm,0.5s
NJ2 pmax pmax
comp=Z,340nm,8.1s
NJ2 LR LR
comp=N,1µm,18.5s
NJ2 LR LR
comp=E,1µm,17.5s
NJ2 LR LR
comp=Z,1µm,17.0s
**MYLDM Lahad Datu 14.10 191** Pn **Pn 04 13 42.9 -3.1**
**GYA Guiyang 15.22 301** P **Pn 04 14 00.5 -0.7**
GYA pmax pmax
comp=Z,47nm,1.5s
GYA pmax pmax
comp=Z,470nm,7.3s
GYA LR LR
comp=N,2µm,15.4s
GYA LR LR
comp=E,2µm,14.4s
GYA LR LR
comp=Z,3µm,15.4s
**ENH Enshi 15.34 319** Pn **Pn 04 14 01.2 -1.5**
ENH IAmb IAmb 04 14 05.1
comp=Z,138nm,1.3s
**UBPT Khong Chiam 15.47 258** Pn **Pn 04 14 05.1 +0.8**
**SLVN Son La 16.34 281** Pn **Pn 04 14 14.9 -0.7**
**JNU Nakatsue 16.43 30** P **Pn 04 14 17.1 +0.4**
**JNU Nakatsue 16.43 30** Pn **Pn 04 14 17.0 +0.3**
**JNU Nakatsue 16.43 30** P **Pn 04 14 17.9 +1.3**
comp=Z,0.7nm,0.3s,baz=182,slow=6.5,SNR=12
JNU LR LR 04 20 56.6
comp=Z,578nm,21.5s,baz=141,slow=38
comp=Z,57nm,1.1s
**JTU Tsushima 17.00 24** P **P 04 14 25.9 +0.4**
**LYN LuoYang 17.20 335** ⇑P **P 04 14 27.6 -0.1**
LYN pP sP 04 14 35.5 -1.5
LYN S **Sn 04 17 37.6 +0.7**
LYN pmax pmax
comp=Z,69nm,1.9s
LYN pmax pmax
comp=Z,860nm,6.3s
LYN LR LR
comp=Z,2µm,17.5s
LYN LR LR
comp=Z,2µm,17.9s
LYN LR LR
comp=Z,2µm,21.0s
**TIA Tai'an 17.39 349** *e*P **P 04 14 30.8 +1.0**
TIA pmax pmax
comp=Z,35nm,1.8s
TIA pmax pmax
comp=Z,480nm,7.5s
TIA LR LR
comp=Z,1µm,17.7s
TIA LR LR
comp=Z,720nm,15.7s
TIA LR LR
comp=Z,2µm,14.2s
**TOLI2 Tolitoli 17.91 181** **Pn 04 14 34.4 -0.8**
**TJN Taejon 18.04 16** *i* P **Pn 04 14 35.9 -0.7**
**KMI Kunming 18.07 293** ⇑P **P 04 14 39.0 +1.3**
KMI sP pwP 04 14 53.8 +6.2
KMI pmax pmax
comp=Z,33nm,1.3s
KMI pmax pmax
comp=Z,430nm,8.3s
KMI LR LR
comp=Z,1µm,13.8s
KMI LR LR
comp=Z,2µm,15.3s
KMI LR LR
comp=Z,3µm,16.1s
**XAN Xi'an 18.43 326** ⇓P **Pn 04 14 41.6 +0.1**
XAN sP sP 04 14 51.5 +1.1
XAN pmax pmax
comp=Z,34nm,1.3s
XAN pmax pmax
comp=Z,1µm,7.5s
XAN LR LR
comp=Z,2µm,15.7s
XAN LR LR
comp=Z,1µm,16.5s
XAN LR LR
comp=Z,2µm,18.2s
**GTOI Gorontalo 18.46 174** P **Pn 04 14 42.5 +0.5**
**KMSI Cibinong 18.64 171** P **Pn 04 14 45.3 +1.2**
comp=Z,97nm,0.8s
**MPSI Mapaga 18.71 184** P **Pn 04 14 46.7 +1.7**
**SBUM Sibu 18.74 209** P **Pn 04 14 45.7 +0.3**
**HNS HongShan 19.06 344** ⇓P **Pn 04 14 49.8 +0.7**
HNS pmax pmax
comp=Z,44nm,1.8s
HNS LR LR
comp=Z,2µm,17.3s
HNS LR LR
comp=Z,590nm,16.6s
HNS LR LR
comp=Z,2µm,17.5s
**KSAR Wonju Array Be 19.18 16** P **P 04 14 48.6 -0.8**
**KSAR Wonju Array Be 19.18 16** P **P 04 14 48.7 -0.8**
**KSRS Korea Array 19.20 17** P **P 04 14 48.9 -0.8**
comp=Z,1.0nm,0.3s,baz=197,slow=12,SNR=21
KSRS PcP **PcP 04 19 12.8 0.0**
comp=Z,2.1nm,0.7s,baz=235,slow=2.8,SNR=5.7
KSRS LR LR 04 23 15.1
comp=Z,913nm,19.7s,baz=205,slow=40
comp=Z,7.8nm,0.7s
**KS19 Wonju Array Si 19.23 16** P **P 04 14 48.1 -1.9**
KS19 IAmb IAmb 04 14 56.3
comp=Z,158nm,1.8s
**PZH PanZhiHua 19.33 296** P **Pn 04 14 53.3 +0.7**
PZH S **Sn 04 18 26.5 -2.4**
PZH pmax pmax
comp=Z,20nm,1.2s
PZH pmax pmax
comp=Z,670nm,4.1s
PZH LR LR
comp=Z,870nm,16.0s
PZH LR LR
comp=Z,1µm,17.4s
PZH LR LR
comp=Z,2µm,16.7s
**CRAI Chiangrai 19.61 277** P **Pn 04 14 55.8 0.0**
**CD2 Chengdu 19.62 310** P **Pn 04 14 55.4 -0.6**
CD2 pP sP 04 15 04.3 +0.5
CD2 sP pP 04 15 07.8 +7.0
CD2 pmax pmax
comp=Z,60nm,0.8s
CD2 pmax pmax
comp=Z,720nm,4.1s
CD2 LR LR
comp=Z,2µm,16.3s
CD2 LR LR
comp=Z,2µm,14.4s
CD2 LR LR
comp=Z,2µm,17.1s
**DL2 Dalian 19.72 1** *e*P **Pn 04 14 57.6 +0.7**
DL2 S **S 04 18 36.8 +0.4**
DL2 pmax pmax
comp=Z,26nm,0.7s
DL2 LR LR
comp=Z,2µm,16.2s
DL2 LR LR
comp=Z,1µm,13.9s
DL2 LR LR
comp=Z,2µm,18.9s
**PHRA Phrae 19.82 272** P **Pn 04 14 58.4 0.0**
**TIY Taiyuan 20.03 339** *e*P Pn 04 15 03.3 +2.6
TIY S **S 04 18 42.6 -0.4**
TIY pmax pmax
comp=Z,23nm,0.6s
TIY LR LR
comp=Z,1µm,16.3s
TIY LR LR
comp=Z,860nm,13.1s
TIY LR LR
comp=Z,2µm,16.1s
**LUWI Luwuk 20.10 175** P Pn 04 15 02.0 +0.4
comp=Z,74nm,0.8s,comp=Z,3µm
**KSM Kuching 20.51 212** P **P 04 15 04.5 +0.3**
**JCJ Chichijima 20.88 64** LR LR 04 21 20.1
comp=Z,709nm,21.5s,baz=312,slow=31
**CM31 Chiang Mai Arr 21.04 272** P **P 04 15 11.3 +1.3**
**CMAR Chiang Mai Arr 21.04 272** P **P 04 15 10.5 +0.5**
**CMAR Chiang Mai Arr 21.04 272** P **P 04 15 12.2 +2.2**
comp=Z,7.0nm,0.7s,baz=75,slow=9.2,SNR=37
CMAR LR LR 04 24 17.1
comp=Z,1µm,18.0s,baz=85,slow=39
comp=Z,7.0nm,0.7s
**STKI Sintang 21.19 208** P **P 04 15 12.8 +1.3**
comp=Z,27nm,0.7s,comp=Z,12µm
**BJT Baijiatuau 21.26 349** P **P 04 15 11.1 -1.0**
**BJT Baijiatuau 21.26 349** P **P 04 15 11.1 -1.0**
BJT pmax pmax
comp=Z,33nm,0.9s
**BJI Beijing 21.28 349** P **P 04 15 15.4 +3.1**
BJI S **S 04 19 06.3 -1.3**
BJI pmax pmax
comp=Z,19nm,0.8s
BJI LR LR
comp=Z,500nm,17.5s
BJI LR LR
comp=Z,290nm,17.7s
BJI LR LR
comp=Z,650nm,15.7s
**INU Inuyama 21.40 38** P **P 04 15 14.5 +0.9**
**SANI Sanana 21.57 167** P **P 04 15 17.9 +2.3**
comp=Z,41nm,0.8s
**JGF Kuroka 21.77 38** P **P 04 15 18.1 +0.4**
**TNCH TengChong 21.77 290** P **P 04 15 19.9 +1.9**
TNCH pmax pmax
comp=Z,100nm,0.8s
TNCH pmax pmax
comp=Z,460nm,2.6s
TNCH LR LR
comp=Z,750nm,12.3s
TNCH LR LR
comp=Z,1µm,17.9s
TNCH LR LR
comp=Z,2µm,17.7s
**LZH Lanzhou 22.76 321** ⇓*i*P **P 04 15 29.3 +0.9**
LZH pP sP 04 15 37.9 +0.3
LZH sP pP 04 15 42.4 +7.7
LZH S **S 04 19 36.1 0.0**
LZH pmax pmax
comp=Z,32nm,1.2s
LZH LR LR
comp=Z,2µm,16.8s
LZH LR LR
comp=Z,1µm,17.2s
LZH LR LR
comp=Z,2µm,17.5s
**MAJO Matsushiro 22.92 37** P **P 04 15 28.9 -1.1**
**MAJO Matsushiro 22.92 37** P **P 04 15 28.9 -1.1**
MAJO pmax pmax
comp=Z,27nm,0.9s
**MJB9 Matsu-Tunnel 22.92 37** P **P 04 15 29.3 -0.7**
**MJAR Matsushiro Arr 22.93 37** P **P 04 15 29.8 -0.2**
comp=Z,7.1nm,0.7s,baz=231,slow=9.5,SNR=10
comp=Z,7.1nm,0.7s
**HHC Hu-ho-hao-te 23.16 341** *e*P **P 04 15 33.8 +1.4**
HHC sP sP 04 15 41.6 -0.5
HHC S **S 04 19 39.3 -3.4**
HHC SS **SnSn 04 20 21.0 +4.0**
HHC pmax pmax
comp=Z,11nm,0.5s
HHC pmax pmax
comp=Z,250nm,4.1s
HHC LR LR
comp=Z,2µm,17.5s
HHC LR LR
comp=Z,830nm,17.5s
HHC LR LR
comp=Z,2µm,16.7s
**GUMO Guam 23.39 100** LR LR 04 22 39.6
comp=Z,1µm,21.7s,baz=276,slow=31
**BTO Baotou 23.45 338** *e*P **P 04 15 37.9 +2.6**
BTO pP **sP 04 15 45.4 +0.4**
BTO sP pP 04 15 52.0 +10
BTO pmax pmax
comp=Z,21nm,0.5s
BTO pmax pmax
comp=Z,380nm,5.7s
BTO LR LR
comp=Z,3µm,15.9s
BTO LR LR
comp=Z,860nm,9.8s
BTO LR LR
comp=Z,2µm,17.1s
**KAPI Kappang 24.03 183** P **P 04 15 41.4 +0.6**
**KAPI Kappang 24.03 183** P **P 04 15 41.4 +0.6**
KAPI pmax pmax
comp=Z,16nm,1.0s
**IPM Ipoh 24.45 236** P **P 04 15 44.6 -0.2**
IPM IAmb IAmb 04 16 01.0
comp=Z,31nm,0.9s
**XLT XiLinHaoTe 25.07 351** *e*P **P 04 15 51.5 +1.3**
XLT pP pP 04 15 57.5 +0.3
XLT sP sP 04 16 00.3 +0.2
XLT PP **PnPn 04 16 31.8 +7.6**
XLT pmax pmax
comp=Z,25nm,0.9s
XLT pmax pmax
comp=Z,400nm,3.8s
XLT LR LR
comp=Z,61nm,14.9s
XLT LR LR
comp=Z,360nm,15.7s
XLT LR LR
comp=Z,790nm,16.2s
**MDJ Mudanjiang 26.38 14** P **P 04 15 59.9 -2.1**
**MDJ Mudanjiang 26.38 14** P **P 04 16 04.3 +2.3**
MDJ pmax pmax
comp=Z,21nm,1.8s
MDJ pmax pmax
comp=Z,290nm,6.7s
**USRK Ussuriysk Ar. 26.60 18** P **P 04 16 04.1 +0.1**
comp=Z,6.7nm,0.7s,baz=213,slow=8.1,SNR=13
comp=Z,6.7nm,0.7s
**BNX BinXian 27.04 10** ⇑P **P 04 16 08.1 +0.1**
BNX pmax pmax
comp=Z,8.0nm,0.8s
**GTA Gaotai 27.36 322** *e*P **P 04 16 12.8 +1.7**
GTA pP sP 04 16 22.0 +1.0
GTA S **S 04 20 53.3 +3.6**
GTA pmax pmax
comp=Z,7.0nm,1.2s
GTA LR LR
comp=Z,590nm,18.2s
GTA LR LR
comp=Z,550nm,17.4s
GTA LR LR
comp=Z,760nm,17.8s
**JTM Tenmabayashi 27.51 34** P **P 04 16 11.2 -1.0**
JTM IAmb IAmb 04 16 32.9
comp=Z,48nm,0.9s
**GOMU GeErMu 28.74 312** P **P 04 16 25.5 +1.8**
GOMU S S 04 21 00.6 -11
GOMU pmax pmax
comp=Z,13nm,0.5s
GOMU LR LR
comp=Z,2µm,17.7s
GOMU LR LR
comp=Z,2µm,17.7s
GOMU LR LR
comp=Z,4µm,17.1s
**ERM Erimo 29.49 35** P **P 04 16 28.8 -1.0**
**JEM Erimo 29.49 35** P **P 04 16 28.8 -1.0**
**HIA Hailar 30.09 358** *i* P **P 04 16 35.0 -0.1**
HIA pmax pmax
comp=Z,12nm,1.1s
**ASAJ Asahikawa 30.71 31** LR LR 04 29 24.1
comp=Z,416nm,21.0s,baz=234,slow=37
**ULN Ulaanbaatar 30.88 341** P **P 04 16 42.1 -0.2**
ULN IAmb IAmb 04 16 50.8
comp=Z,34nm,1.7s
**ULN Ulaanbaatar 30.88 341** *c*eP **P 04 16 43.0 +0.7**
ULN pmax pmax
comp=Z,19nm,1.7s
**SONM Songino Array 31.06 341** P **P 04 16 44.2 +0.4**
**SONM Songino Array 31.06 341** P **P 04 16 45.0 +1.2**
comp=Z,4.1nm,0.8s,baz=154,slow=7.9,SNR=9.7
SONM LR LR 04 30 21.5
comp=Z,1µm,19.5s,baz=163,slow=38
comp=Z,4.1nm,0.8s
**KLR Kul'dur 31.22 13** LR LR 04 30 41.4
comp=Z,950nm,20.3s,baz=196,slow=39
**KLR Kul'dur 31.22 13** *i* P **P 04 16 45.2 +0.1**
KLR pmax pmax
comp=Z,8.0nm,0.8s
**HEH HeiHe 31.46 8** *e*P **P 04 16 48.8 +1.7**
HEH pmax pmax
comp=Z,4.0nm,0.9s
**DRS Darwin Rock St 32.79 162** P **P 04 16 58.4 -0.7**
**YSS Yuzh-Sakhalins 32.92 28** P **P 04 16 59.8 -0.2**
**YSS Yuzh-Sakhalins 32.92 28** *e*P **P 04 17 00.8 +0.8**
YSS *e*S **S 04 22 13.7 -2.7**
YSS *e*SS **SnSn 04 24 21.6 +7.2**
YSS 04 27 26.0
YSS pmax pmax
comp=Z,30nm,1.1s
YSS MLR MLR
comp=Z,300nm,13.0s
**ZAK Zakamensk 34.28 340** *e*P **P 04 17 12.4 +0.4**
ZAK pmax pmax
comp=Z,6.0nm,1.4s
**ZEA Zeya 34.87 6** *e*P **P 04 17 17.0 +0.2**
ZEA pmax pmax
comp=Z,20nm,0.5s
ZEA MLR MLR
comp=N,400nm,19.0s
ZEA MLR MLR
comp=Z,300nm,15.0s
**MOY Mondy 36.14 339** *e*P **P 04 17 32.0 +4.0**
MOY pmax pmax
comp=Z,21nm,1.7s
**KNGR Kungurtug, Tuv 36.59 335** *i* P **P 04 17 32.7 +0.9**
KNGR pmax pmax
comp=Z,15nm,1.4s
**WMQ Urumqi 37.29 319** *e*P **P 04 17 39.3 +1.5**
WMQ LR LR
comp=Z,1µm,14.5s
WMQ LR LR
comp=Z,930nm,13.7s
WMQ LR LR
comp=Z,670nm,16.7s
**PMG Port Moresby 38.22 136** LR LR 04 33 51.3
comp=Z,178nm,20.0s,baz=294,slow=37
**DGZ Jazzator, Alta 40.69 326** *i* P **P 04 18 07.1 +0.8**

DGZ pmax pmax
comp=Z,15nm,1.7s
**WB0 Warramunga Arr 40.77 161** P **P** **04 18 03.2 -3.8**
WB0 IAmb IAmb 04 18 39.5
comp=Z,56nm,1.8s
**WRAB Tennant Creek 40.91 161** P **P** **04 18 05.5 -2.7**
**WRAB Tennant Creek 40.91 161** *i* P **P** **04 18 07.2 -1.0**
WRAB pmax pmax
comp=Z,23nm,1.6s
**WRA Warramunga Arr 40.92 161** P **P** **04 18 05.3 -2.9**
**WRA Warramunga Arr 40.92 161** P **P** **04 18 05.5 -2.8**
comp=Z,3.4nm,0.5s,baz=343,slow=9.1,SNR=28
WRA PcP **PcP** **04 20 08.1 -0.6**
comp=Z,2.8nm,0.7s,baz=338,slow=3.4,SNR=5.7
WRA LR LR 04 37 50.1
comp=Z,224nm,18.6s,baz=96,slow=40
comp=Z,3.4nm,0.5s
**WB2 Warramunga Arr 40.92 161** P **P** **04 18 05.2 -3.2**
**WR0 Warramunga Arr 41.00 161** P **P** **04 18 05.9 -3.0**
**PALK Pallekele 41.00 259** LR LR 04 34 45.9
comp=Z,442nm,19.8s,baz=157,slow=35
**MK31 Makanchi Array 42.06 320** P **P** **04 18 18.3 +0.9**
**MK31 Makanchi Array 42.06 320** *i* P **P** **04 18 18.5 +1.0**
**MKAR Makanchi Array 42.06 320** P **P** **04 18 18.8 +1.3**
comp=Z,1.8nm,0.4s,baz=113,slow=8.4,SNR=34
MKAR LR LR 04 36 57.4
comp=Z,412nm,19.7s,baz=131,slow=38
comp=Z,1.8nm,0.4s
**MAKZ Makanchi 42.26 320** P **P** **04 18 19.8 +0.7**
**MAKZ Makanchi 42.26 320** P **P** **04 18 19.8 +0.7**
MAKZ pmax pmax
comp=Z,17nm,1.2s
**H11S3 WAKE ISLAND Hy 43.01 83** T T 05 04 09.2
baz=279,slow=75,SNR=278
**H11S1 WAKE ISLAND Hy 43.02 83** T T 05 04 06.9
baz=279,slow=75,SNR=198
**H11S2 WAKE ISLAND Hy 43.03 83** T T 05 04 10.2
baz=279,slow=75,SNR=188
**H11N1 WAKE ISLAND Hy 43.03 81** T T 05 04 07.5
baz=277,slow=75,SNR=2617
**H11N2 WAKE ISLAND Hy 43.04 81** T T 05 04 07.8
baz=277,slow=75,SNR=1697
**H11N3 WAKE ISLAND Hy 43.05 81** T T 05 04 08.8
baz=277,slow=75,SNR=1449
**QIS Mount Isa 43.38 154** P **P** **04 18 26.7 -1.7**
**QIS Mount Isa 43.38 154** P **P** **04 18 26.3 -2.1**
comp=Z,13nm,0.7s
**KSH Kashi 43.79 308** P **P** **04 18 36.3 +4.6**
KSH pP sP 04 18 42.0 +0.6
KSH S **S** **04 25 08.8 +7.6**
KSH pmax pmax
comp=Z,8.0nm,1.0s
KSH LR LR
comp=Z,480nm,16.3s
KSH LR LR
comp=Z,980nm,18.4s
KSH LR LR
comp=Z,2μm,17.5s
**PETK Petropavlovsk- 44.13 31** P **P** **04 18 32.9 -1.1**
**PETK Petropavlovsk- 44.13 31** P **P** **04 18 34.2 +0.1**
comp=Z,7.7nm,0.8s,baz=216,slow=4.8,SNR=6.7
PETK LR LR 04 38 20.6
comp=Z,214nm,19.8s,baz=223,slow=38
comp=Z,7.7nm,0.8s
**NRN Naryn 44.27 310** P **P** **04 18 35.1 -0.7**
**NRN Naryn 44.27 310** P **P** **04 18 35.1 -0.7**
NRN pmax pmax
comp=Z,13nm,1.0s
**AS31 Alice Springs 44.31 163** P **P** **04 18 33.8 -2.0**
**AS31 Alice Springs 44.31 163** P **P** **04 18 35.2 -0.6**
comp=Z,3.0nm,0.5s
**ASAR Alice Springs 44.31 163** P **P** **04 18 36.6 +0.8**
**ASAR Alice Springs 44.31 163** P **P** **04 18 35.0 -0.8**
comp=Z,3.0nm,0.4s,baz=344,slow=6.9,SNR=29
ASAR PcP **PP** **04 20 19.6 +0.1**
comp=Z,1.2nm,0.7s,baz=345,slow=4.4,SNR=4.3
ASAR LR LR 04 39 42.8
comp=Z,221nm,18.1s,baz=340,slow=40
comp=Z,3.0nm,0.4s
**ASAR Alice Springs 44.31 163** P **P** **04 18 36.6 +0.8**
**AS01 Alice Springs 44.32 163** P **P** **04 18 35.1 -0.8**
**WRKA Warakurna 44.44 171** P **P** **04 18 36.2 -0.6**
**WRKA Warakurna 44.44 171** P **P** **04 18 35.8 -1.1**
comp=Z,13nm,0.6s
**ZALV Zalesovo Beam 44.53 330** P **P** **04 18 37.5 +0.3**
**ZALV Zalesovo Beam 44.53 330** P **P** **04 18 38.1 +0.9**
comp=Z,3.4nm,0.7s,baz=103,slow=7.1,SNR=9.3
ZALV LR LR 04 38 19.4
comp=Z,781nm,18.9s,baz=109,slow=37
comp=Z,3.4nm,0.7s
**NIL Nilore 44.90 299** P **P** **04 18 40.6 0.0**
NIL IAmb IAmb 04 19 00.3
comp=Z,19nm,0.8s
**NIL Nilore 44.90 299** P **P** **04 18 40.6 0.0**
NIL pmax pmax
comp=Z,19nm,0.8s
**MEEK Meekatharra 45.56 183** P **P** **04 18 43.9 -1.8**
**MA2 Magadan 45.68 21** LR LR 04 38 27.2
comp=Z,369nm,21.8s,baz=226,slow=37
**AAK Ala-Archa 45.69 311** LR LR 04 40 04.9
comp=Z,689nm,20.1s,baz=102,slow=39
**KURK Kurchatov 46.03 323***ce*P **P** **04 18 50.1 +0.9**
KURK pmax pmax
comp=Z,20nm,2.5s
**KURBB Kurchatov Arra 46.04 323** P **P** **04 18 50.2 +1.0**
comp=Z,4.4nm,0.6s,baz=118,slow=8.1,SNR=21
KURBB LR LR 04 39 11.1
comp=Z,230nm,20.0s,baz=156,slow=37
comp=Z,4.4nm,0.6s
**BTK Batken 47.79 307** P **P** **04 19 02.4 -0.8**
**BTK Batken 47.79 307** P **P** **04 19 02.4 -0.8**
BTK pmax pmax
comp=Z,11nm,1.1s
**GAR Garm 47.98 306** P **P** **04 19 04.6 -0.2**
**MORW Morawa 48.16 186** P **P** **04 19 04.9 -1.1**
**MORW Morawa 48.16 186** P **P** **04 19 04.7 -1.3**
**KK31 Karatay Array 48.64 311** P **P** **04 19 11.7 +2.0**
KK31 IAmb IAmb 04 19 24.0
comp=Z,14nm,1.2s
**KK31 Karatay Array 48.64 311** P **P** **04 19 11.7 +2.0**
KK31 pmax pmax
comp=Z,14nm,1.2s
**KKAR Karatay Array 48.64 311** P **P** **04 19 10.2 +0.5**
**KKAR Karatay Array 48.64 311** P **P** **04 19 10.2 +0.5**
**OOD Oodnadatta 48.72 163** P **P** **04 19 09.3 -1.0**
**SEY Seymchan 48.74 18***ce*P **P** **04 19 10.2 +0.1**
SEY pmax pmax
comp=Z,16nm,2.5s
**CHGR Chuyangaron 48.83 305** P **P** **04 19 12.2 +0.9**
**CHGR Chuyangaron 48.83 305** P **P** **04 19 12.2 +0.9**
CHGR pmax pmax
comp=Z,21nm,0.8s
**SIMJ Simiganj 48.94 305** P **P** **04 19 11.6 -0.6**
SIMJ IAmb IAmb 04 19 27.6
comp=Z,33nm,1.6s
**BLDU Ballidu 49.64 185** P **P** **04 19 15.8 -1.5**
**FORT Forrest 50.06 172** P **P** **04 19 19.7 -0.8**
**KMBL Kambalda 50.21 179** P **P** **04 19 20.3 -1.3**
**INKA Innaminka 50.30 157** P **P** **04 19 22.0 -0.4**
**KLBR Kellerberrin 50.53 184** P **P** **04 19 22.8 -1.2**
**KLBR Kellerberrin 50.53 184** P **P** **04 19 22.0 -2.1**
comp=Z,44nm,0.7s
**MULG Mulgathing 50.67 166** P **P** **04 19 24.3 -0.8**
**BVAR Borovoye Array 51.63 323** P **P** **04 19 33.4 +1.3**
comp=Z,1.5nm,0.4s,baz=124,slow=8.3,SNR=10
BVAR PcP **PcP** **04 20 44.8 -0.9**
comp=Z,3.3nm,0.6s,baz=109,slow=4.3,SNR=5.6
BVAR LR LR 04 43 52.7
comp=Z,396nm,19.0s,baz=112,slow=39
comp=Z,1.5nm,0.4s
**NWAO Narrogin (SRO) 51.89 184** P **P** **04 19 33.0 -1.2**
**NWAO Narrogin (SRO) 51.89 184** LR LR 04 43 08.0
comp=Z,112nm,22.0s,baz=48,slow=38
**LCRK Leigh Creek 51.95 161** P **P** **04 19 34.2 -0.5**
**TIXI Tiksi 52.72 3** P **P** **04 19 38.1 -1.8**
TIXI IAmb IAmb 04 19 47.4
comp=Z,20nm,0.9s
**TIXI Tiksi 52.72 3** LR LR 04 43 27.7
comp=Z,358nm,21.2s,baz=207,slow=38
**TIXI Tiksi 52.72 3***ce*P **P** **04 19 38.5 -1.4**
TIXI pmax pmax
comp=Z,32nm,1.3s
**BBOO Buckleboo 53.57 164** P **P** **04 19 46.2 -0.5**
**BBOO Buckleboo 53.57 164** P **P** **04 19 44.7 -2.0**
**BBOO Buckleboo 53.57 164** P **P** **04 19 45.4 -1.3**
comp=Z,41nm,1.0s

**STKA Stephens Creek 54.37 159** P **P** **04 19 50.5 -2.0**
**STKA Stephens Creek 54.37 159** P **P** **04 19 51.1 -1.4**
comp=Z,5.2nm,0.8s,baz=314,slow=6.0,SNR=7.2
STKA LR LR 04 44 42.0
comp=Z,162nm,19.8s,baz=11,slow=38
comp=Z,5.2nm,0.8s
**HTT Hallett 54.94 162** P **P** **04 19 56.0 -0.7**
**BILL Bilibino 56.45 19***ce*P **P** **04 20 05.5 -1.5**
BILL *e* 04 22 15.7
BILL *e*PPP PPP 04 23 27.7
BILL pmax pmax
comp=Z,12nm,1.0s
BILL MLR MLR
comp=Z,209nm,20.0s
**ABKAR Akbulak array 57.02 317** P **P** **04 20 11.6 +0.2**
ABKAR IAmb IAmb 04 20 20.9
comp=Z,22nm,1.2s
**SVE Sverdlovsk 58.14 326** *e*P **P** **04 20 20.6 +1.4**
SVE pmax pmax
comp=Z,29nm,1.0s
**AKTO Aktyubinsk 58.43 318** P **P** **04 20 22.1 +0.8**
comp=Z,3.3nm,0.5s,baz=147,slow=3.6,SNR=5.4
AKTO LR LR 04 46 51.3
comp=Z,341nm,19.8s,baz=319,slow=37
comp=Z,3.3nm,0.5s
**ARPS Mount Arapiles 58.92 161** P **P** **04 20 24.3 -0.5**
**ARU Arti 59.17 325***d* *i*P **P** **04 20 27.0 +0.6**
ARU 04 22 35.4
ARU S **S** **04 28 34.8 +2.4**
ARU SS **SS** **04 32 26.6 0.0**
ARU pmax pmax
comp=Z,10.0nm,0.6s
ARU MLR MLR
comp=Z,564nm,17.0s
**ARU Arti 59.17 325** P **P** **04 20 26.9 +0.6**
comp=Z,16nm,0.6s
**DZM Mont Dzumac 60.30 131** LR LR 04 42 42.8
comp=Z,486nm,21.3s,baz=279,slow=32
**TOO Toolangi 60.87 158** P **P** **04 20 37.0 -1.2**
**TOO Toolangi 60.87 158** P **P** **04 20 37.0 -1.2**
TOO pmax pmax
comp=Z,23nm,1.2s
**SPIA Saint Paul Isl 62.55 35** P **P** **04 20 48.0 -1.3**
baz=263
**NIKH Nikolski High 62.93 40** P **P** **04 20 50.1 -1.8**
**NIKH Nikolski High 62.93 40** P **P** **04 20 50.5 -1.5**
baz=266
**GAMB Gambell 62.94 27** P **P** **04 20 50.9 -0.9**
baz=258
**KIRV Kirov 64.37 327** LR LR 04 51 15.8
comp=Z,630nm,18.4s,baz=98,slow=38
**KIRV Kirov 64.37 327***ce*P **P** **04 21 01.9 +0.6**
**UNV Unalaska Valle 64.39 39** P **P** **04 21 00.2 -1.3**
**TNA Tin City 64.87 26** P **P** **04 21 03.9 -0.5**
baz=260
**M11K Mekoryuk 64.99 32** P **P** **04 21 05.1 -0.2**
baz=264
**BELG Belogornoye 65.07 320** LR LR 04 50 56.8
comp=Z,231nm,18.8s,baz=76,slow=37
**BELG Belogornoye 65.07 320** *i* P **P** **04 21 07.0 +1.0**
BELG pmax pmax
comp=Z,6.0nm,1.1s
**MAK Makhachkala 65.39 309** *e*P **P** **04 21 07.3 -0.9**
MAK *e* 04 23 27.8
MAK *e*PPP PPP 04 25 05.9
MAK *e*S **S** **04 29 51.2 0.0**
MAK *e*SS **SS** **04 34 06.5 +2.2**
MAK pmax pmax
comp=Z,353nm,1.8s
MAK MLR MLR
comp=Z,593nm,16.0s
**F14K Arctic Creek 65.51 26** P **P** **04 21 08.3 -0.3**
baz=262
**FALS False Pass 66.22 38** P **P** **04 21 12.6 -0.8**
baz=270
**F15K North Star Dit 66.23 26** P **P** **04 21 12.9 -0.4**
baz=264
**C16K Lisburne Hills 66.28 23** P **P** **04 21 13.5 -0.1**
baz=262
**M13K Dall Lake 66.41 32** P **P** **04 21 14.0 -0.4**
baz=267
**G15K Niukluk 66.41 27** P **P** **04 21 14.3 -0.2**
baz=264
**J14K Nanvaranak Lak 66.44 29** P **P** **04 21 14.4 -0.2**
baz=266
**L14K Kuka Creek 66.77 31** P **P** **04 21 17.1 +0.3**
**L14K Kuka Creek 66.77 31** P **P** **04 21 16.8 0.0**
baz=267,SNR=16
**MSVF Nonsavu 66.82 120** *i* P **P** **04 21 16.3 -1.6**
**S12K Black Hills 66.99 37** P **P** **04 21 17.9 -0.5**
baz=270
**D17K Noatak River 67.06 24** P **P** **04 21 18.7 +0.2**
baz=264,SNR=6.4
**C17K DeLong Mountai 67.10 23** P **P** **04 21 19.2 +0.3**
baz=264
**M14K Bethel 67.10 31** P **P** **04 21 18.5 -0.3**
**M14K Bethel 67.10 31** P **P** **04 21 18.8 -0.1**
baz=268,SNR=12
**H16K Elim 67.15 27** P **P** **04 21 19.3 +0.1**
baz=266
**G16K Koyuk River 67.16 26** P **P** **04 21 19.4 +0.3**
baz=266
**N14K Kuskokwak Cree 67.22 32** P **P** **04 21 19.3 -0.4**
baz=269
**K15K Wolf Creek Mou 67.36 30** P **P** **04 21 20.4 -0.1**
K15K IAmb IAmb 04 21 46.7
comp=Z,12nm,1.0s
**K15K Wolf Creek Mou 67.36 30** P **P** **04 21 20.3 -0.2**
baz=268,SNR=5.2
**L15K Ungalak Mounta 67.36 30** P **P** **04 21 20.3 -0.2**
baz=268
**O14K Tigyukuivet M 67.43 33** P **P** **04 21 20.5 -0.5**
baz=269
**E17K Hotham Inlet 67.49 24** P **P** **04 21 21.5 +0.2**
baz=266
**F17K Baldwin Pennin 67.68 25** P **P** **04 21 22.8 +0.3**
F17K IAmb IAmb 04 21 24.1
comp=Z,13nm,0.7s
**F17K Baldwin Pennin 67.68 25** P **P** **04 21 22.7 +0.3**
baz=266
**B18K Kokolik River 67.69 22** P **P** **04 21 22.7 +0.2**
baz=265
**GNI Garni 67.71 306** LR LR 04 54 11.7
comp=Z,167nm,22.0s,baz=98,slow=39
**M15K Kasigluk River 67.73 31** P **P** **04 21 22.9 +0.1**
baz=269,SNR=5.6
**I17K Unalakleet 67.79 28** P **P** **04 21 23.7 +0.5**
baz=268
**J16K Anvik River 67.81 29** P **P** **04 21 23.4 0.0**
J16K IAmb IAmb 04 21 25.9
comp=Z,9.7nm,1.0s
**J16K Anvik River 67.81 29** P **P** **04 21 23.6 +0.2**
baz=268
**C18K Utukok River 67.85 23** P **P** **04 21 23.8 +0.2**
baz=266
**G17K Kiwalik Mounta 67.87 26** P **P** **04 21 23.5 -0.3**
baz=267,SNR=9.6
**SDPT Sand Point 67.90 37** P **P** **04 21 23.0 -1.0**
baz=272
**E18K Tukpahlearik C 67.99 24** P **P** **04 21 24.5 +0.1**
baz=267
**N15K Kwethluk River 68.02 32** P **P** **04 21 24.4 -0.4**
**N15K Kwethluk River 68.02 32** P **P** **04 21 24.6 -0.1**
baz=270,SNR=12
**H17K Granite Mounta 68.16 27** P **P** **04 21 25.4 -0.2**
H17K IAmb IAmb 04 21 27.2
comp=Z,10nm,0.8s
**H17K Granite Mounta 68.16 27** P **P** **04 21 25.3 -0.2**
baz=268,SNR=6.6
**O15K Ungalikthiuk R 68.17 33** P **P** **04 21 25.3 -0.3**
baz=271
**L16K Owhat River 68.32 30** P **P** **04 21 25.9 -0.7**
**L16K Owhat River 68.32 30** P **P** **04 21 26.1 -0.4**
baz=270,SNR=7.7
**F18K Selawik 68.32 25** P **P** **04 21 26.3 -0.2**
baz=268,SNR=10
**CHNA Chernabura Isl 68.43 38** P **P** **04 21 26.1 -1.3**
baz=273
**CNBA Chernabura Isl 68.43 38** P **P** **04 21 25.1 -2.3**
**C19K Lookout Ridge 68.46 22** P **P** **04 21 27.5 +0.1**
baz=267
**J17K VABM Dome 68.50 28** P **P** **04 21 27.9 +0.1**
J17K IAmb IAmb 04 21 29.4
comp=Z,16nm,0.9s
**J17K VABM Dome 68.50 28** P **P** **04 21 27.8 +0.1**
baz=270,SNR=8.0
**M16K Timber Creek 68.57 31** P **P** **04 21 27.7 -0.5**

M16K IAmb IAmb 04 21 29.4
comp=Z,15nm,0.8s
**M16K Timber Creek 68.57 31** P **P** **04 21 28.2 0.0**
baz=271,SNR=5.5
**KBZ Khabaz 68.67 310** P **P** **04 21 30.1 +1.0**
comp=Z,2.0nm,0.7s,baz=124,slow=7.3,SNR=2.5
KBZ LR LR 04 55 34.7
comp=Z,445nm,18.3s,baz=67,slow=39
comp=Z,2.0nm,0.7s
**N16K Nishlik Lake 68.68 32** P **P** **04 21 28.7 -0.2**
baz=271,SNR=8.4
**G18K Tagagawik 68.71 26** P **P** **04 21 28.8 -0.2**
G18K IAmb IAmb 04 21 30.1
comp=Z,12nm,0.9s
**G18K Tagagawik 68.71 26** P **P** **04 21 28.9 -0.1**
baz=269,SNR=9.1
**KVAR Kislovodsk Arr 68.79 311** LR LR 04 54 13.2
comp=Z,246nm,21.8s,baz=246,slow=38
**KIV Kislovodsk 68.80 311** *e*P **P** **04 21 31.2 +1.2**
KIV pmax pmax
comp=Z,11nm,1.1s
KIV MLR MLR
comp=Z,255nm,17.0s
**H18K Honhosa River 68.82 27** P **P** **04 21 29.4 -0.3**
H18K IAmb IAmb 04 21 30.8
comp=Z,8.4nm,0.8s
**H18K Honhosa River 68.82 27** P **P** **04 21 29.5 -0.3**
baz=270
**SHA1 Shidzhatmaz 68.84 310***ce*P **P** **04 21 29.4 -1.1**
**K17K Iditarod 68.86 29** P **P** **04 21 30.1 +0.2**
**K17K Iditarod 68.86 29** P **P** **04 21 30.1 +0.2**
baz=271,SNR=8.1
**L17K Donlin 68.87 30** P **P** **04 21 30.3 +0.3**
baz=271,SNR=5.3
**D19K Kuna River 68.97 23** P **P** **04 21 30.9 +0.3**
D19K IAmb IAmb 04 21 35.0
comp=Z,14nm,0.7s
**D19K Kuna River 68.97 23** P **P** **04 21 30.7 +0.2**
baz=268
**CHGN Chignik 69.02 36** P **P** **04 21 30.6 -0.4**
baz=273
**O16K Kokwok River B 69.04 33** P **P** **04 21 30.6 -0.5**
**O16K Kokwok River B 69.04 33** P **P** **04 21 30.9 -0.2**
baz=272,SNR=6.4
**P16K Nushagak River 69.12 33** P **P** **04 21 31.1 -0.5**
baz=272
**E19K Redstone River 69.29 24** P **P** **04 21 32.8 +0.2**
E19K IAmb IAmb 04 21 57.6
comp=Z,12nm,0.9s
**E19K Redstone River 69.29 24** P **P** **04 21 33.1 +0.5**
baz=270,SNR=8.6
**M17K Holitna River 69.30 31** P **P** **04 21 32.8 +0.1**
M17K IAmb IAmb 04 21 34.5
comp=Z,19nm,0.9s
**M17K Holitna River 69.30 31** P **P** **04 21 32.9 +0.1**
baz=272,SNR=6.2
**B20K Meade River 69.34 21** P **P** **04 21 33.3 +0.5**
**B20K Meade River 69.34 21** P **P** **04 21 32.8 +0.1**
baz=269
**G19K Purcell Mounta 69.35 25** P **P** **04 21 32.8 -0.1**
G19K IAmb IAmb 04 21 34.1
comp=Z,12nm,1.1s
**G19K Purcell Mounta 69.35 25** P **P** **04 21 32.8 -0.1**
baz=270,SNR=7.1
**N17K Nushagak Hills 69.46 32** P **P** **04 21 33.6 -0.1**
N17K IAmb IAmb 04 21 35.4
comp=Z,16nm,1.0s
**N17K Nushagak Hills 69.46 32** P **P** **04 21 33.6 -0.1**
baz=272,SNR=6.1
**GCSA Galena City Sc 69.46 27** P **P** **04 21 33.7 +0.1**
baz=271
**D20K Etivluk River 69.52 23** P **P** **04 21 34.2 +0.3**
baz=270,SNR=8.2
**O17K Koliganek Bris 69.54 32** P **P** **04 21 34.0 -0.2**
baz=273
**J18K Innoko River 69.57 28** P **P** **04 21 34.2 -0.1**
**J18K Innoko River 69.57 28** P **P** **04 21 34.2 -0.1**
baz=272,SNR=6.8
**H19K Roundabout Mou 69.62 26** P **P** **04 21 34.7 +0.1**
H19K IAmb IAmb 04 21 36.2
comp=Z,16nm,0.8s
**H19K Roundabout Mou 69.62 26** P **P** **04 21 34.6 0.0**
baz=271,SNR=14
**L18K Granite Mounta 69.62 30** P **P** **04 21 34.6 -0.1**
**L18K Granite Mounta 69.62 30** P **P** **04 21 34.6 -0.1**
baz=272,SNR=9.9
**E20K Nigu River 69.68 23** P **P** **04 21 35.2 +0.2**
baz=270,SNR=8.8
**Q16K King Salmon 69.83 33** P **P** **04 21 35.7 -0.2**
baz=274
**RAYN Ar Rayn 69.86 289** P **P** **04 21 37.3 +0.3**
RAYN IAmb IAmb 04 21 53.0
comp=Z,17nm,1.1s
**RAYN Ar Rayn 69.86 289** P **P** **04 21 37.3 +0.3**
RAYN pmax pmax
comp=Z,17nm,1.1s
**F20K Avaraart Lake 69.88 24** P **P** **04 21 36.0 -0.2**
F20K IAmb IAmb 04 21 37.7
comp=Z,13nm,1.1s
**F20K Avaraart Lake 69.88 24** P **P** **04 21 36.2 +0.1**
baz=271
**P17K Kvichak River 69.91 33** P **P** **04 21 36.6 +0.2**
baz=274,SNR=8.3
**J19K Poorman 70.03 28** P **P** **04 21 37.0 -0.1**
J19K IAmb IAmb 04 21 54.9
comp=Z,25nm,1.7s
**J19K Poorman 70.03 28** P **P** **04 21 37.3 +0.1**
baz=272
**R17L Mt. Peulik Vol 70.06 35** P **P** **04 21 37.1 -0.3**
baz=274
**M18K Stony River 70.07 30** P **P** **04 21 37.4 -0.1**
baz=273,SNR=6.6
**N18K Kilae Creek 70.09 31** P **P** **04 21 37.3 -0.3**
baz=273
**C21K Knifeblade Rid 70.18 22** P **P** **04 21 38.6 +0.7**
baz=271
**B21K Ikpikpuk River 70.22 22** P **P** **04 21 38.0 -0.3**
**B21K Ikpikpuk River 70.22 22** P **P** **04 21 38.5 +0.3**
baz=271
**Q17K Contact Creek 70.26 34** P **P** **04 21 37.8 -1.0**
baz=274
**H20K Anoteneega Mo 70.28 26** P **P** **04 21 38.4 -0.3**
baz=273,SNR=9.3
**I20K Naaghedeneel 70.48 27** P **P** **04 21 40.4 +0.5**
**I20K Naaghedeneel 70.48 27** P **P** **04 21 40.1 +0.2**
baz=273,SNR=6.4
**L19K White Mountain 70.48 30** P **P** **04 21 39.9 -0.1**
L19K IAmb IAmb 04 21 41.5
comp=Z,12nm,0.9s
**L19K White Mountain 70.48 30** P **P** **04 21 39.9 -0.1**
baz=274,SNR=6.7
**O18K Koktuh Hills 70.49 32** P **P** **04 21 39.6 -0.4**
**O18K Koktuh Hills 70.49 32** P **P** **04 21 39.6 -0.4**
baz=274,SNR=13
**E21K Killik River 70.50 23** P **P** **04 21 39.6 -0.4**
E21K IAmb IAmb 04 21 49.4
comp=Z,9.8nm,0.8s
**E21K Killik River 70.50 23** P **P** **04 21 39.7 -0.3**
baz=272
**P18K Big Mountain, 70.51 33** P **P** **04 21 39.0 -1.3**
P18K IAmb IAmb 04 23 08.4
comp=Z,20nm,1.0s
**P18K Big Mountain, 70.51 33** P **P** **04 21 40.3 0.0**
baz=274
**CHIR Chirikof Islan 70.62 36** P **P** **04 21 40.4 -0.5**
baz=275
**J20K Nowinta River 70.67 28** P **P** **04 21 41.0 -0.1**
J20K IAmb IAmb 04 21 42.7
comp=Z,13nm,0.7s
**J20K Nowinta River 70.67 28** P **P** **04 21 41.4 +0.4**
baz=274,SNR=12
**Q18K Katmai Hardscr 70.69 33** P **P** **04 21 40.5 -0.9**
baz=275
**M19K Big River Lodg 70.72 30** P **P** **04 21 41.3 -0.1**
M19K IAmb IAmb 04 21 43.0
comp=Z,12nm,0.8s
**M19K Big River Lodg 70.72 30** P **P** **04 21 41.4 -0.1**
baz=274,SNR=7.2
**F21K Alatna River 70.75 24** P **P** **04 21 41.6 +0.1**
baz=273
**K20K Telida 70.76 28** P **P** **04 21 41.5 -0.1**
K20K IAmb IAmb 04 21 42.9
comp=Z,8.0nm,0.8s
**K20K Telida 70.76 28** P **P** **04 21 41.9 +0.2**
baz=274
**N19K Bonanza Creek 70.77 31** P **P** **04 21 41.4 -0.4**
N19K IAmb IAmb 04 22 04.1

comp=Z,12nm,0.9s
**N19K Bonanza Creek** 70.77 31 P P 04 21 41.8 0.0
baz=275
**G21K Allakaket** 70.78 25 P P 04 21 41.7 0.0
G21K IAmb IAmb 04 21 43.2
comp=Z,16nm,1.1s
**G21K Allakaket** 70.78 25 P P 04 21 42.0 +0.2
baz=274,SNR=7.1
**O19K Port Alsworth** 70.90 32 P P 04 21 42.3 -0.2
**O19K Port Alsworth** 70.90 32 P P 04 21 42.3 -0.2
baz=275
**L20K Farewell, AK** 70.92 29 P P 04 21 42.5 -0.1
baz=274
**D22K Ayikyak River** 70.95 22 P P 04 21 42.6 -0.1
D22K IAmb IAmb 04 21 44.5
comp=Z,24nm,1.3s
**D22K Ayikyak River** 70.95 22 P P 04 21 43.1 +0.4
baz=273
**SOC Sochi** 70.98 311 eP P 04 21 40.8 -2.5
SOC ePPP PPP 04 26 04.8
SOC eS **S** 04 31 00.9 +3.0
SOC eSS **SS** 04 35 35.1 +4.4
SOC eSSS SSS 04 38 36.7
SOC MLR MLR
comp=Z,220nm,17.0s
**H21K Melozitna Rive** 71.13 26 P P 04 21 43.5 -0.4
H21K IAmb IAmb 04 21 45.5
comp=Z,11nm,0.9s
**H21K Melozitna Rive** 71.13 26 P P 04 21 44.2 +0.4
baz=274,SNR=12
**LVZ Lovozero** 71.14 336 i P P 04 21 42.2 -1.7
**F22K John River** 71.23 24 P P 04 21 44.4 0.0
baz=274
**E22K Anaktuvuk Pass** 71.32 23 P P 04 21 44.7 -0.3
E22K IAmb IAmb 04 21 46.5
comp=Z,18nm,1.3s
**E22K Anaktuvuk Pass** 71.32 23 P P 04 21 44.9 -0.1
baz=274,SNR=6.6
**M20K Styx River** 71.32 30 P P 04 21 45.0 -0.2
M20K IAmb IAmb 04 21 46.6
comp=Z,8.2nm,0.8s
**M20K Styx River** 71.32 30 P P 04 21 45.0 -0.2
baz=275
**SII Sitkinak Islan** 71.34 36 P P 04 21 44.3 -1.0
**SII Sitkinak Islan** 71.34 36 P P 04 21 44.9 -0.4
baz=276
**Q19K Cape Douglas,** 71.37 33 P P 04 21 44.7 -0.8
baz=276
**OBN Obninsk** 71.47 323 ceP P 04 21 46.3 +0.3
OBN e 04 24 21.5
OBN ePPP PPP 04 26 08.2
OBN i S S 04 30 53.5 -10
OBN eSSS SSS 04 38 45.0
OBN pmax pmax
comp=Z,6.0nm,0.8s
OBN MLR MLR
comp=Z,186nm,16.0s
**P19K Oil Pt** 71.50 32 P P 04 21 45.8 -0.4
baz=276
**G22K Bettles** 71.54 25 P P 04 21 46.2 -0.1
baz=275
**C23K Itkillik River** 71.60 21 P P 04 21 46.7 +0.1
baz=275
**RSO Redoubt South** 71.65 31 P P 04 21 46.6 -0.7
**D23K Nanushuk River** 71.66 22 P P 04 21 47.0 0.0
D23K IAmb IAmb 04 21 48.8
comp=Z,25nm,1.2s
**D23K Nanushuk River** 71.66 22 P P 04 21 47.4 +0.4
baz=275,SNR=6.6
**H22K Ishtalitna Cre** 71.69 26 P P 04 21 47.3 +0.1
baz=276,SNR=9.5
**OHAK Old Harbor** 71.75 35 P P 04 21 46.1 -1.6
**OHAK Old Harbor** 71.75 35 P P 04 21 46.4 -1.3
**OHAK Old Harbor** 71.75 35 P P 04 21 46.8 -0.9
baz=277
**N20K Mount Spurr** 71.83 31 P P 04 21 47.7 -0.5
baz=276
**SPCR Spurr Chakacha** 71.83 31 P P 04 21 47.6 -0.7
baz=276
**COLD Coldfoot** 72.02 24 P P 04 21 49.0 -0.2
baz=276
**MLY Manley** 72.05 26 P P 04 21 49.0 -0.5
MLY IAmb IAmb 04 21 50.8
comp=Z,13nm,0.8s
**MLY Manley** 72.05 26 P P 04 21 49.0 -0.5
baz=276,SNR=19
**Q20K Shuyak Island** 72.05 33 P P 04 21 49.1 -0.4
baz=277
**BPAW Bear Paw Mtn.** 72.06 27 P P 04 21 49.0 -0.5
BPAW IAmb IAmb 04 21 50.7
comp=Z,22nm,1.2s
**BPAW Bear Paw Mtn.** 72.06 27 P P 04 21 48.9 -0.5
baz=276,SNR=7.9
**KDAK Kodiak Island** 72.06 34 P P 04 21 48.3 -1.3
**KDAK Kodiak Island** 72.06 34 P P 04 21 48.9 -0.6
baz=277
**KDAK Kodiak Island** 72.06 34 P P 04 21 48.3 -1.3
KDAK pmax pmax
comp=Z,77nm,0.3s
**SKT Skwentna** 72.06 30 P P 04 21 48.9 -0.7
baz=277
**TOLK Toolik Lake Re** 72.10 23 P P 04 21 49.8 +0.1
TOLK IAmb IAmb 04 21 51.0
comp=Z,26nm,1.4s
**TOLK Toolik Lake Re** 72.10 23 P P 04 21 49.8 +0.1
baz=276,SNR=6.8
**E23K Chandalar** 72.15 23 P P 04 21 49.8 -0.2
E23K IAmb IAmb 04 22 18.0
comp=Z,13nm,0.8s
**E23K Chandalar** 72.15 23 P P 04 21 50.0 0.0
baz=276
**G23K Bananza Creek** 72.15 25 P P 04 21 50.8 +0.8
G23K IAmb IAmb 04 21 51.7
comp=Z,17nm,1.2s
**G23K Bananza Creek** 72.15 25 P P 04 21 49.9 -0.1
baz=277,SNR=8.5
**C24K Franklin Bluff** 72.28 21 P P 04 21 50.4 -0.2
C24K IAmb IAmb 04 22 09.3
comp=Z,20nm,0.8s
**C24K Franklin Bluff** 72.28 21 P P 04 21 50.4 -0.2
baz=277
**HOM Homer** 72.30 32 P P 04 21 50.1 -0.9
baz=277
**D24K Happy Valley** 72.30 22 P P 04 21 50.4 -0.4
baz=277
**H23K Yukon River** 72.45 26 P P 04 21 52.0 +0.2
H23K IAmb IAmb 04 22 21.1
comp=Z,16nm,0.9s
**H23K Yukon River** 72.45 26 P P 04 21 51.6 -0.3
baz=277,SNR=8.1
**SUA Susitna One** 72.50 30 P P 04 21 51.2 -1.1
**SUA Susitna One** 72.50 30 P P 04 21 51.5 -0.8
baz=278
**CNPM China Poot** 72.52 32 P P 04 21 51.0 -1.4
**E24K Your Creek** 72.57 23 P P 04 21 50.2 -2.3
E24K IAmb IAmb 04 22 20.8
comp=Z,20nm,1.3s
**E24K Your Creek** 72.57 23 P P 04 21 52.2 -0.3
baz=278
**CUT Chulitna** 72.59 29 P P 04 21 52.3 -0.4
baz=278
**I23K Minto, Yukon-K** 72.62 26 P P 04 21 52.6 -0.2
I23K IAmb IAmb 04 22 21.0
comp=Z,14nm,1.1s
**I23K Minto, Yukon-K** 72.62 26 P P 04 21 52.3 -0.4
baz=278
**BRLK Bradley Lake** 72.67 32 P P 04 21 52.7 -0.5
**BRSE Bradley Lake S** 72.74 32 P P 04 21 52.7 -1.0
baz=278
**M22K Willow** 72.75 30 P P 04 21 52.4 -1.2
**M22K Willow** 72.75 30 P P 04 21 52.9 -0.7
baz=278
**NEA2 Nenana** 72.82 27 P P 04 21 53.5 -0.5
NEA2 IAmb IAmb 04 21 54.9
comp=Z,15nm,0.8s
**NEA2 Nenana** 72.82 27 P P 04 21 53.5 -0.5
baz=278,SNR=9.2
**F24K Squaw Lake** 72.87 24 P P 04 21 53.8 -0.5
F24K IAmb IAmb 04 22 04.4
comp=Z,10nm,0.8s
**F24K Squaw Lake** 72.87 24 P P 04 21 54.2 -0.1
baz=278,SNR=9.4
**MCK McKinley** 73.00 28 P P 04 21 54.6 -0.6
baz=278
**RC01 Rabbit Creek A** 73.03 31 P P 04 21 54.5 -0.8
baz=279
**RND Reindeer** 73.09 28 P P 04 21 54.2 -1.5
**RND Reindeer** 73.09 28 P P 04 21 54.2 -1.5
RND pmax pmax
comp=Z,26nm,0.8s
**MDM Murphy Dome** 73.12 26 P P 04 21 55.5 -0.3
MDM IAmb IAmb 04 22 20.6
comp=Z,14nm,1.0s
**H24K Noodor Dome** 73.13 25 P P 04 21 55.5 -0.4
**H24K Noodor Dome** 73.13 25 P P 04 21 55.7 -0.2
baz=279,SNR=5.2
**O22K Cooper Landing** 73.13 31 P P 04 21 55.1 -0.8
baz=279
**G24K Hadweenzic Riv** 73.15 25 P P 04 21 55.6 -0.4
G24K IAmb IAmb 04 21 57.6
comp=Z,13nm,1.1s
**G24K Hadweenzic Riv** 73.15 25 P P 04 21 55.8 -0.2
baz=279,SNR=7.1
**PMR Palmer** 73.25 30 P P 04 21 54.9 -1.6
PMR IAmb IAmb 04 22 04.9
comp=Z,14nm,0.9s
**PMR Palmer** 73.25 30 P P 04 21 55.3 -1.2
baz=279,SNR=5.4
**PMR Palmer** 73.25 30 P P 04 21 54.9 -1.6
PMR pmax pmax
comp=Z,14nm,0.9s
**WRH Wood River Hil** 73.25 27 P P 04 21 56.0 -0.5
**WAT1 Susitna Watana** 73.31 29 P P 04 21 56.2 -0.8
baz=279
**CCB Clear Creek Bu** 73.35 27 P P 04 21 56.6 -0.5
**POKR Poker Plat Res** 73.43 26 P P 04 21 56.5 -1.0
baz=279
**C26K Camden Bay** 73.55 21 P P 04 21 57.5 -0.7
baz=280
**SML Sawmill** 73.58 30 P P 04 21 57.7 -0.9
SML IAmb IAmb 04 21 58.6
comp=Z,16nm,0.8s
**SML Sawmill** 73.58 30 P P 04 21 57.6 -1.0
baz=280
**KNK Knik Glacier** 73.59 30 P P 04 21 57.5 -1.2
**KNK Knik Glacier** 73.59 30 P P 04 21 58.0 -0.6
baz=280
**G25K Bearman Lake** 73.68 24 P P 04 21 58.8 -0.2
baz=280,SNR=5.9
**F25K Christian Rive** 73.71 24 P P 04 21 58.0 -1.2
**F25K Christian Rive** 73.71 24 P P 04 21 58.9 -0.3
baz=280
**IL31** 73.72 27 P P 04 21 58.0 -1.2
**ILAR Eielson Array** 73.72 27 P P 04 21 58.2 -1.0
**ILAR Eielson Array** 73.72 27 P P 04 21 57.5 -1.8
comp=Z,2.1nm,0.7s,baz=267,slow=4.4,SNR=19
comp=Z,2.1nm,0.7s
**ILAR Eielson Array** 73.72 27 P P 04 21 58.3 -1.0
**WAT6 Susitna Watana** 73.73 29 P P 04 21 58.8 -0.8
baz=280
**PWL Port Wells** 73.75 31 P P 04 21 58.4 -1.1
**PWL Port Wells** 73.75 31 P P 04 21 58.6 -1.0
baz=280
**HDA Harding Lake** 73.75 27 P P 04 21 57.7 -1.8
**HDA Harding Lake** 73.75 27 P P 04 21 58.7 -0.8
baz=280
**DHY Denali Highway** 73.80 28 P P 04 21 59.3 -0.7
**DHY Denali Highway** 73.80 28 P P 04 21 59.1 -1.0
baz=280
**M23K Glacier View** 73.87 30 P P 04 21 59.4 -0.8
baz=280
**H25L Birch Creek** 73.88 25 P P 04 21 59.8 -0.4
baz=280,SNR=6.0
**SCM Sheep Creek Mo** 74.05 30 P P 04 22 00.2 -1.2
**SCM Sheep Creek Mo** 74.05 30 P P 04 22 00.4 -1.0
baz=280,SNR=6.1
**SCM Sheep Creek Mo** 74.05 30 P P 04 22 00.2 -1.2
SCM pmax pmax
comp=Z,35nm,0.8s
**BMAR Burnt Mountain** 74.14 24 P P 04 22 01.9 +0.2
**PRP Porcupine Dome** 74.14 26 P P 04 22 00.9 -1.1
**PRP Porcupine Dome** 74.14 26 P P 04 22 01.2 -0.8
baz=281
**ARCES ARCESS Array B** 74.21 339 P P 04 22 02.2 +0.1
comp=Z,6.3nm,0.7s,baz=73,slow=7.9,SNR=27
ARCES LR LR 04 58 28.5
comp=Z,317nm,19.7s,baz=78,slow=39
comp=Z,6.3nm,0.7s
**F26K Shenjek River** 74.25 23 P P 04 22 01.7 -0.7
baz=282
**GLI Glacier Island** 74.34 31 P P 04 22 02.0 -1.0
baz=281
**P23K Montague Islan** 74.36 31 P P 04 22 02.3 -0.8
baz=281
**K24K Donnelly Dome** 74.37 27 P P 04 22 02.4 -0.8
baz=281,SNR=5.5
**J25K Salcha River,** 74.39 27 P P 04 22 00.9 -2.4
J25K IAmb IAmb 04 23 07.9
comp=Z,27nm,2.0s
**J25K Salcha River,** 74.39 27 P P 04 22 02.0 -1.3
baz=281
**SPITS Spitsbergen Ar** 74.40 348 P P 04 22 02.5 -0.6
comp=Z,8.9nm,0.9s,baz=91,slow=9.4,SNR=5.5
SPITS LR LR 04 57 54.3
comp=Z,175nm,22.0s,baz=34,slow=38
comp=Z,8.9nm,0.9s
**M24K Tolsona, Glenn** 74.53 29 P P 04 22 03.7 -0.4
**M24K Tolsona, Glenn** 74.53 29 P P 04 22 03.3 -0.9
baz=281
**G26K Porcupine Rive** 74.54 24 P P 04 22 04.3 +0.2
baz=282,SNR=8.4
**PAX Paxson** 74.68 28 P P 04 22 04.5 -0.6
baz=282
**KLU Klutina** 74.77 30 P P 04 22 04.9 -0.7
baz=282
**RIDG Independent Ri** 74.79 27 P P 04 22 04.0 -1.7
RIDG IAmb IAmb 04 22 22.0
comp=Z,19nm,1.2s
**RIDG Independent Ri** 74.79 27 P P 04 22 05.3 -0.4
baz=282
**D27M Malcolm River** 75.05 21 P P 04 22 06.8 -0.2
baz=284
**EYAK Cordova Ski Ar** 75.05 31 P P 04 22 06.5 -0.6
baz=282
**E27K Coleen River** 75.08 23 P P 04 22 07.1 -0.1
baz=284
**SCRK Sand Creek** 75.11 27 P P 04 22 06.0 -1.5
**SCRK Sand Creek** 75.11 27 P P 04 22 06.8 -0.8
baz=283
**I26K Coal Creek Min** 75.16 26 P P 04 22 07.0 -0.6
**I26K Coal Creek Min** 75.16 26 P P 04 22 07.2 -0.5
baz=283
**J26L Joseph Creek** 75.17 26 P P 04 22 06.7 -1.2
**J26L Joseph Creek** 75.17 26 P P 04 22 07.5 -0.3
baz=283,SNR=6.6
**N25K Chitina, Valde** 75.37 30 P P 04 22 08.5 -0.6
baz=283
**G27K Doyon Strip** 75.39 24 P P 04 22 08.5 -0.6
**G27K Doyon Strip** 75.39 24 P P 04 22 09.2 +0.1
baz=284,SNR=6.2
**BMRM Bremner River** 75.51 30 P P 04 22 09.4 -0.5
baz=283
**H27K Steamboat Moun** 75.59 25 P P 04 22 10.0 -0.1
baz=284,SNR=6.9
**L26K Log Cabin Wild** 75.61 28 P P 04 22 09.6 -0.8
L26K IAmb IAmb 04 22 11.7
comp=Z,35nm,1.8s
**L26K Log Cabin Wild** 75.61 28 P P 04 22 10.0 -0.4
baz=284
**E28M Babbage River** 75.71 22 P P 04 22 10.0 -0.8
baz=286,SNR=7.7
**I27K Kandik River** 75.71 25 P P 04 22 10.4 -0.5
baz=284,SNR=8.1
**GLB Gilahina Butte** 75.77 30 P P 04 22 11.0 -0.3
**D28M Stokes Point** 75.79 21 P P 04 22 10.8 -0.3
baz=286
**FINES FINESS Array B** 75.80 330 P P 04 22 11.6 +0.2
comp=Z,3.0nm,0.7s,baz=64,slow=6.6,SNR=7.4
FINES LR LR 04 58 23.2
comp=Z,279nm,18.4s,baz=75,slow=38
comp=Z,3.0nm,0.7s
**FINES FINESS Array B** 75.80 330 ceP P 04 22 11.3 -0.1
FINES pmax pmax
comp=Z,3.0nm,0.7s
**F28M Old Crow** 75.86 23 P P 04 22 11.3 -0.3
F28M IAmb IAmb 04 22 13.7
comp=Z,44nm,1.7s
**F28M Old Crow** 75.86 23 P P 04 22 11.6 -0.1
baz=285,SNR=8.2
**K27K Chicken** 75.92 27 P P 04 22 11.8 -0.3
K27K IAmb IAmb 04 22 13.6
comp=Z,21nm,1.3s
**K27K Chicken** 75.92 27 P P 04 22 11.7 -0.3
baz=284
**M26K Nabesna, AK** 75.92 29 P P 04 22 11.6 -0.5
**M26K Nabesna, AK** 75.92 29 P P 04 22 11.9 -0.2
baz=284,SNR=8.5
**EGAK Eagle** 76.11 26 P P 04 22 12.7 -0.4
EGAK IAmb IAmb 04 22 13.7
comp=Z,29nm,1.4s
**EGAK Eagle** 76.11 26 P P 04 22 12.8 -0.4
baz=285,SNR=5.7
**MCARA McCarthy VSAT** 76.16 30 P P 04 22 13.0 -0.4
baz=284
**BR131 Keskin Array S** 76.18 307 i P P 04 22 14.3 +0.1
**BRTR Keskin Array B** 76.18 307 P P 04 22 13.6 -0.6
**BRTR Keskin Array B** 76.18 307 P P 04 22 13.9 -0.2
comp=Z,0.6nm,0.5s,baz=138,slow=3.2,SNR=7.9
comp=Z,0.6nm,0.5s
**BRTR Keskin Array B** 76.18 307 P P 04 22 14.0 -0.2
**L27K Beaver Creek,** 76.27 28 P P 04 22 13.7 -0.4
L27K IAmb IAmb 04 22 15.6
comp=Z,25nm,1.5s
**L27K Beaver Creek,** 76.27 28 P P 04 22 13.6 -0.4
baz=285,SNR=8.0
**BCAR Beaver Creek A** 76.29 28 P P 04 22 13.6 -0.6
**BGLC Bering Glacier** 76.35 31 P P 04 22 13.9 -0.6
baz=284
**E29M Blow River** 76.35 22 P P 04 22 13.9 -0.5
baz=287
**I28M Miner Creek** 76.43 25 P P 04 22 14.7 -0.3
**I28M Miner Creek** 76.43 25 P P 04 22 14.7 -0.3
baz=286,SNR=9.4
**M27K Edge Creek, AK** 76.43 28 P P 04 22 14.5 -0.7
**M27K Edge Creek, AK** 76.43 28 P P 04 22 14.3 -0.9
baz=285
**AK09 Malin Array Si** 76.62 319 P P 04 22 16.0 -0.3
**AK08 Malin Array Si** 76.64 319 P P 04 22 16.0 -0.4
**AKASG Malin Array Be** 76.64 319 P P 04 22 14.3 -2.1
comp=Z,2.8nm,0.8s,baz=67,slow=5.0,SNR=4.7
AKASG LR LR 04 58 17.5
comp=Z,197nm,18.2s,baz=80,slow=37
**AKASG Malin Array Be** 76.64 319 ceP P 04 22 15.6 -0.8
AKASG pmax pmax
comp=Z,3.0nm,0.8s
**AKBB Malin Array Si** 76.64 319 ceP P 04 22 14.9 -1.5
AKBB pmax pmax
comp=Z,4.0nm,0.9s
**AKBB Malin Array Si** 76.64 319 P P 04 22 15.9 -0.5
**AK10 Malin Array Si** 76.65 319 P P 04 22 16.1 -0.3
**AK01 Malin Array Si** 76.65 319 P P 04 22 15.6 -0.8
**AK07 Malin Array Si** 76.69 319 P P 04 22 16.4 -0.2
**AK22 Malin Array Si** 76.72 319 P P 04 22 16.0 -0.8
**G29M Pine Creek** 76.75 23 P P 04 22 17.1 +0.4
G29M IAmb IAmb 04 22 17.8
comp=Z,18nm,0.9s
**G29M Pine Creek** 76.75 23 P P 04 22 16.5 -0.2
baz=287,SNR=8.4
**AK20 Malin Array Si** 76.76 319 P P 04 22 16.2 -0.9
**H29M Whitestone** 76.82 24 P P 04 22 16.2 -0.9
**H29M Whitestone** 76.82 24 P P 04 22 16.9 -0.2
baz=287,SNR=7.2
**DAWY Dawson** 77.04 26 P P 04 22 17.4 -1.1
DAWY IAmb IAmb 04 22 19.4
comp=Z,21nm,1.4s
**DAWY Dawson** 77.04 26 P P 04 22 18.2 -0.3
baz=287,SNR=8.1
**CTG Chitna Glacier** 77.05 30 P P 04 22 18.0 -0.7
baz=286,SNR=5.3
**CTGM Chitina Glacie** 77.06 30 P P 04 22 16.9 -1.8
**I29M Ogilvie Camp,** 77.10 25 P P 04 22 18.5 -0.2
baz=287
**F30M Barrier River** 77.35 22 P P 04 22 19.8 -0.2
baz=289,SNR=8.2
**G30M tAoh Zraii Nji** 77.40 23 P P 04 22 19.1 -1.3
G30M IAmb IAmb 04 22 27.6
comp=Z,10nm,0.8s
**G30M tAoh Zraii Nji** 77.40 23 P P 04 22 19.4 -1.0
baz=289,SNR=6.9
**EPYK Eagle Plains** 77.41 24 P P 04 22 19.6 -0.8
EPYK IAmb IAmb 04 22 27.9
comp=Z,12nm,0.7s
**EPYK Eagle Plains** 77.41 24 P P 04 22 19.6 -0.8
baz=288,SNR=8.7
**J29N Klondike Camp** 77.42 26 P P 04 22 19.9 -0.7
baz=288
**EIL Elat** 77.60 297 LR LR 05 01 41.5
comp=Z,210nm,18.7s,baz=66,slow=40
**O28M Mount Upton** 77.65 30 P P 04 22 21.4 -0.8
baz=287
**K29M Barlow Dome** 77.90 26 P P 04 22 22.9 -0.5
K29M IAmb IAmb 04 22 25.6
comp=Z,46nm,2.0s
**K29M Barlow Dome** 77.90 26 P P 04 22 22.9 -0.5
baz=288,SNR=5.8
**INK Inuvik** 77.91 22 P P 04 22 22.1 -0.9
INK IAmb IAmb 04 22 23.5
comp=Z,29nm,1.4s
**INK Inuvik** 77.91 22 LR LR 05 00 12.9
comp=Z,102nm,19.6s,baz=249,slow=38
**INK Inuvik** 77.91 22 P P 04 22 23.3 +0.2
baz=291,SNR=7.1
**INK Inuvik** 77.91 22 P P 04 22 22.2 -0.9
INK pmax pmax
comp=Z,29nm,1.5s
**I30M Mount Dempster** 77.92 25 P P 04 22 22.6 -0.9
**I30M Mount Dempster** 77.92 25 P P 04 22 23.3 -0.1
baz=289,SNR=9.3
**M29M Somme Creek** 77.93 28 P P 04 22 23.2 -0.4
M29M IAmb IAmb 04 22 29.1
comp=Z,11nm,0.8s
**M29M Somme Creek** 77.93 28 P P 04 22 23.4 -0.2
baz=288,SNR=17
**G31M Satah River** 78.14 23 P P 04 22 23.0 -1.4
**G31M Satah River** 78.14 23 P P 04 22 23.6 -0.9
baz=291
**F31M Tsiigehtchic** 78.15 22 P P 04 22 22.9 -1.6
F31M IAmb IAmb 04 22 31.6
comp=Z,12nm,0.7s
**F31M Tsiigehtchic** 78.15 22 P P 04 22 23.4 -1.0
baz=291,SNR=6.5
**J30M Hart River** 78.15 26 P P 04 22 24.3 -0.5
**J30M Hart River** 78.15 26 P P 04 22 24.2 -0.6
baz=289
**PNL Peninsula** 78.36 31 P P 04 22 24.9 -1.0
baz=288
**YUK6 Outpost Mounta** 78.45 29 P P 04 22 26.0 -0.6
baz=288
**O29M Mount Kennedy** 78.55 30 P P 04 22 26.9 -0.2
baz=288
**N30M Aishikik Lake** 78.86 29 P P 04 22 28.5 -0.1
N30M IAmb IAmb 04 22 30.5
comp=Z,20nm,1.2s
**N30M Aishikik Lake** 78.86 29 P P 04 22 28.6 -0.1
baz=289,SNR=7.0
**A36M Sachs Harbour** 78.94 17 P P 04 22 28.4 -0.4
baz=288
**P29M Windy Craggy** 79.17 31 P P 04 22 30.4 +0.1
P29M IAmb IAmb 04 22 32.0
comp=Z,12nm,0.8s
**P29M Windy Craggy** 79.17 31 P P 04 22 30.4 +0.1
baz=289
**P30M Million Dollar** 79.37 30 P P 04 22 31.2 -0.2
baz=290
**N31M Braeburn, Yuko** 79.44 28 P P 04 22 31.5 -0.3
N31M IAmb IAmb 04 23 01.1
comp=Z,11nm,0.9s
**N31M Braeburn, Yuko** 79.44 28 P P 04 22 31.6 -0.2
baz=290
**O30N Mendenhall** 79.55 29 P P 04 22 31.9 -0.5
O30N IAmb IAmb 04 22 34.0
comp=Z,15nm,1.2s
**O30N Mendenhall** 79.55 29 P P 04 22 32.4 -0.1
baz=290
**ELL Elmali** 79.78 305 P P 04 22 33.6 -0.7
**ELL Elmali** 79.78 305 P P 04 22 33.6 -0.7
ELL pmax pmax
comp=Z,42nm,1.0s
**M31M Drury Creek, Y** 79.80 27 P P 04 22 33.3 -0.4
**M31M Drury Creek, Y** 79.80 27 P P 04 22 33.5 -0.3
baz=291,SNR=5.4
**PLBC Pleasant Camp** 79.88 30 P P 04 22 33.8 -0.4
baz=290
**EUNU Eureka** 79.92 5 P P 04 22 33.7 -0.4
**BUR08 Bucovina Ar. S** 80.01 317 P P 04 22 34.8 -0.4
**FURI Furi** 80.08 276 LR LR 04 57 07.9
comp=Z,103nm,20.6s,baz=80,slow=35
**WHY Whitehorse** 80.15 29 P P 04 22 35.1 -0.6
WHY IAmb IAmb 04 22 37.3

comp=Z,22nm,1.2s
**WHY Whitehorse** 80.15 29 P P 04 22 36.1 +0.4
baz=291,SNR=5.9
**MLR Muntele Rosu** 80.15 315 LR LR 05 02 13.9
comp=Z,313nm,21.1s,baz=70,slow=39
**FARO Faro, Yukon** 80.25 27 P P 04 22 35.0 -1.2
FARO IAmb IAmb 04 22 37.3
comp=Z,14nm,1.0s
**FARO Faro, Yukon** 80.25 27 P P 04 22 36.5 +0.3
baz=292,SNR=12
**SKAG Skagway** 80.38 30 P P 04 22 36.9 +0.1
baz=291
**C36M Paulatuk** 80.57 19 P P 04 22 36.2 -1.4
**C36M Paulatuk** 80.57 19 P P 04 22 37.4 -0.3
baz=299
**N32M Quiet Lake** 80.78 28 P P 04 22 38.6 -0.4
N32M IAmb IAmb 04 22 40.3
comp=Z,17nm,0.9s
**N32M Quiet Lake** 80.78 28 P P 04 22 39.0 0.0
baz=293,SNR=7.7
**KWP Kalwaria Pacla** 80.96 319 eP P 04 22 39.7 -0.5
**KWP Kalwaria Pacla** 80.96 319 P P 04 22 40.6 +0.4
**KWP Kalwaria Pacla** 80.96 319 P P 04 22 40.6 +0.4
KWP pmax pmax
comp=Z,48nm,0.6s
**KWP Kalwaria Pacla** 80.96 319 P P 04 22 40.1 -0.1
comp=Z,18nm,1.8s
**P32M Atlin** 81.09 30 P P 04 22 40.8 +0.1
baz=292
**R32K Eaglecrest** 81.21 31 P P 04 22 40.7 -0.6
**R32K Eaglecrest** 81.21 31 P P 04 22 41.4 +0.1
baz=292
**SIT Sitka** 81.26 33 P P 04 22 41.5 0.0
baz=291
**P33M Teslin, Yukon** 81.27 29 P P 04 22 40.5 -1.2
P33M IAmb IAmb 04 23 08.2
comp=Z,20nm,1.6s
**P33M Teslin, Yukon** 81.27 29 P P 04 22 41.3 -0.3
baz=293
**S32K Killisnoo** 81.48 32 P P 04 22 42.5 -0.2
baz=292
**HFS Hagfors** 81.96 331 P P 04 22 44.4 -0.8
comp=Z,3.0nm,0.6s,baz=108,slow=4.8,SNR=9.5
HFS LR LR 05 01 57.6
comp=Z,380nm,18.5s,baz=62,slow=38
comp=Z,3.0nm,0.6s
**CRVS Cervenica-Dubn** 81.97 319 eP P 04 22 46.5 +0.9
**CRVS Cervenica-Dubn** 81.97 319 eP P 04 22 46.5 +0.9
**Q32M Nakina River** 82.02 30 P P 04 22 45.7 -0.1
baz=294
**R33M Jennings River** 82.45 29 P P 04 22 47.8 -0.2
**R33M Jennings River** 82.45 29 P P 04 22 47.6 -0.4
baz=295
**NIE Niedzica** 82.51 320 eP P 04 22 49.3 +0.9
**OJC Ojcow** 82.53 321 eP P 04 22 48.3 -0.1
**NB2 NORSAR Subarra** 82.67 333 P P 04 22 47.5 -1.5
comp=Z,1.3nm,0.8s,baz=65,slow=5.1
**NOA NORSAR Array B** 82.67 333 P P 04 22 47.6 -1.4
comp=Z,1.7nm,0.7s,baz=64,slow=5.0,SNR=9.2
NOA LR LR 05 02 41.8
comp=Z,703nm,19.2s,baz=65,slow=38
comp=Z,1.7nm,0.7s
**TGTN Hyland Airport** 82.72 27 P P 04 22 49.4 +0.1
baz=297
**U33K Whale Pass** 82.75 33 P P 04 22 49.4 0.0
baz=293
**S34M Telegraph Cree** 83.00 31 P P 04 22 50.5 -0.2
S34M IAmb IAmb 04 22 52.5
comp=Z,11nm,0.9s
**S34M Telegraph Cree** 83.00 31 P P 04 22 51.1 +0.4
baz=295,SNR=5.5
**CRAG Craig** 83.00 34 P P 04 22 50.6 -0.1
baz=293
**WRAK Wrangell Islan** 83.02 32 P P 04 22 51.0 +0.2
baz=294
**WTLY Watson Lake, Y** 83.13 28 P P 04 22 50.5 -0.9
WTLY IAmb IAmb 04 22 53.2
comp=Z,16nm,1.1s
**WTLY Watson Lake, Y** 83.13 28 P P 04 22 51.4 0.0
baz=296
**DLBC Dease Lake** 83.31 30 P P 04 22 52.4 +0.1
DLBC IAmb IAmb 04 22 54.3
comp=Z,12nm,1.1s
**DLBC Dease Lake** 83.31 30 P P 04 22 52.3 -0.1
baz=296,SNR=6.1
**JMIC Jan Mayen** 83.69 345 LR LR 05 04 36.7
comp=Z,159nm,19.3s,baz=52,slow=39
**VYHS Vyhne** 83.75 319 eP P 04 22 55.9 +1.1
**VYHS Vyhne** 83.75 319 eP P 04 22 55.9 +1.1
**T35M Bob Quinn** 83.83 31 P P 04 22 54.8 -0.3
baz=296
**V35K Ketchikan** 83.84 33 P P 04 22 54.7 -0.4
baz=295
**WRGLY Wrigley** 83.87 24 P P 04 22 54.5 -0.5
baz=301
**MORC Moravsky Berou** 84.05 321 eP P 04 22 56.8 +0.5
MORC e 04 23 04.6
**JAVC Velka Javorina** 84.33 320 eP P 04 22 59.6 +1.8
**KSP Ksiaz** 84.37 322 eP P 04 22 58.0 0.0
**KSP Ksiaz** 84.37 322 P P 04 22 57.9 0.0
comp=Z,9.1nm,0.9s
**DPC Dobruska-Polom** 84.55 322 eP P 04 23 01.1 +2.2
DPC eS S 04 33 25.6 +1.2
**DPC Dobruska-Polom** 84.55 322 eP P 04 23 01.1 +2.2
DPC eS S 04 33 25.6 +1.2
**KMBO Kilima Mbogo** 84.61 267 P P 04 23 00.4 +0.3
comp=Z,2.1nm,0.7s,baz=61,slow=9.8,SNR=4.7
KMBO LR LR 04 58 38.7
comp=Z,162nm,20.6s,baz=80,slow=34
comp=Z,2.1nm,0.7s
**LIRD Liard River Hi** 84.67 28 P P 04 22 59.3 +0.1
baz=299
**UPC Upice** 84.67 322 eP P 04 22 59.2 -0.2
UPC eSKS SKSac 04 33 19.6 -2.5
**UPC Upice** 84.67 322 eP P 04 22 59.2 -0.2
UPC eS SKSac 04 33 19.6 -2.5
**VRAC Vranov** 84.80 320 eP P 04 23 00.7 +0.6
VRAC e 04 23 07.5
**VRAC Vranov** 84.80 320 LR LR 05 03 51.0
comp=Z,196nm,20.1s,baz=58,slow=38
**KRUC Moravsky** 85.02 320 eP P 04 23 00.7 -0.5
**TOAD Toad River Com** 85.33 29 P P 04 23 02.5 -0.1
baz=300
**RONA Rosalia, Austr** 85.62 319 eP P 04 23 04.6 +0.3
comp=Z,4.0nm,1.1s
**GOPC GO Pecny, Ondr** 85.63 322 eP P 04 23 14.7 +10
GOPC eS S 04 33 35.8 +0.8
**BRG Berggiesshubel** 85.72 323 eP P 04 23 05.4 +0.7
BRG Amp 04 23 07.9
comp=Z,1.7nm,0.7s
**BRG Berggiesshubel** 85.72 323 P P 04 23 10.7 +6.1
BRG Amp 04 23 14.3
comp=Z,5.1nm,1.1s
**BRG Berggiesshubel** 85.72 323 S S 04 33 33.0 -2.8
**BRG Berggiesshubel** 85.72 323 SS SS 04 39 17.0 +5.3
BRG Amp 05 04 47.0
comp=N,0.1nm,20.9s
BRG Amp 05 04 47.0
comp=E,0.1nm,14.9s
BRG Amp 05 04 50.0
comp=Z,0.2nm,19.1s
**PRU Pruhonice** 85.75 322 eP P 04 23 08.8 +4.0
PRU eSKS SKSac 04 33 30.5 +1.6
**CONA Conrad Observa** 85.80 319 iP P 04 23 05.5 +0.3
comp=Z,9.2nm,0.9s
**CLL Collm** 86.07 323 eP P 04 23 06.0 -0.3
CLL iPP pP 04 23 13.5 -0.5
CLL ePP PP 04 26 28.0 +1.8
CLL eSKSac SKSac 04 33 32.0 +1.1
CLL eS S 04 33 41.0 +1.8
CLL ex x 04 34 27.0
CLL ePPS PPS 04 35 12.0
CLL eSS SS 04 39 21.0 +4.2
CLL AMS AMS 05 07 00.0
comp=Z,300nm,20.0s
**CLL Collm** 86.07 323 eP P 04 23 06.0 -0.3
CLL i 04 23 13.5
CLL e 04 33 32.0
CLL eS S 04 33 41.0 +1.8
CLL MLR MLR
comp=Z,300nm,20.0s
**HSKC Hora Svate Kat** 86.13 323 eS SKSac 04 33 27.6 -3.8
**ARSA Arzberg** 86.28 319 iP P 04 23 07.7 +0.2
comp=Z,4.6nm,1.1s
**CKRC Cesky Krumlov** 86.37 321 eS S 04 33 37.9 -4.4

**KHC Kasperske Hory** 86.68 321 eSKS SKSac 04 33 37.3 +2.4
**GERES GERESS Array B** 86.73 321 P P 04 23 09.6 -0.2
comp=Z,0.3nm,0.3s,baz=143,slow=12,SNR=3.8
comp=Z,0.3nm,0.3s
**MOA Molln** 86.81 320 iPcP P 04 23 10.4 +0.3
comp=Z,8.3nm,1.7s
**SOKA Soboth** 86.83 319 iPcP P 04 23 10.7 +0.4
comp=Z,3.6nm,1.0s
**OBKA Obir** 87.20 318 ePcP P 04 23 13.3 +1.2
comp=Z,6.4nm,1.1s
**SUMG Summit** 87.51 354 P P 04 23 13.0 -0.5
SUMG IAmb IAmb 04 23 14.3
comp=Z,11nm,1.1s
**SUMG Summit** 87.51 354 P P 04 23 13.0 -0.5
SUMG pmax pmax
comp=Z,11nm,1.1s
**YKA Yellowknife Ar** 87.62 23 P P 04 23 12.2 -1.4
**YKA Yellowknife Ar** 87.62 23 P P 04 23 12.1 -1.6
comp=Z,11nm,0.8s,baz=315,slow=4.9,SNR=40
comp=Z,11nm,0.8s
**YKA Yellowknife Ar** 87.62 23 cePcP P 04 23 13.1 -0.6
YKA pmax pmax
comp=Z,12nm,0.8s
**KBA Koelnbreinsper** 87.70 319 eP P 04 23 11.1 -3.6
comp=Z,4.9nm,1.5s
**ABTA Abfaltersbach** 88.36 319 iP P 04 23 16.6 -1.1
comp=Z,3.7nm,1.1s
**SQTA Sankt Quirin** 88.95 320 ePcP P 04 23 20.3 -0.2
comp=Z,2.6nm,0.7s
**MOTA Moosalm** 88.95 320 ePcP P 04 23 20.6 +0.1
comp=Z,2.0nm,0.6s
**FETA Feichten** 89.33 320 ePcP P 04 23 22.1 -0.3
comp=Z,2.5nm,1.0s
**FUORN Ofenpass-Fuorn** 89.80 320 P P 04 23 23.7 -1.0
**DAVOX Davos/Dischmat** 89.96 320 LR LR 05 08 15.7
comp=Z,262nm,18.2s,baz=56,slow=38
**MBAR Mbarara** 90.59 270 LR LR 05 02 19.3
comp=Z,139nm,21.5s,baz=57,slow=34
**VAE Valguarnera** 91.11 310 LR LR 05 14 29.4
comp=Z,64nm,19.5s,baz=72,slow=42
**BORG Borgarnes** 91.58 345 LR LR 05 07 23.4
comp=Z,82nm,20.9s,baz=24,slow=37
**EKA Eskdalemuir Ar** 92.14 332 P P 04 23 33.0 -2.0
comp=Z,0.5nm,0.7s,baz=27,slow=4.0,SNR=3.5
comp=Z,0.5nm,0.7s
**GNW Green Mountain** 92.36 38 P P 04 23 36.3 +0.2
GNW IAmb IAmb 04 23 38.3
comp=Z,5.2nm,1.1s
**F04A Amboy** 93.46 39 P P 04 23 40.0 -1.2
**B08A Colville Reser** 93.90 36 P P 04 23 43.4 +0.1
B08A IAmb IAmb 04 23 44.6
comp=Z,7.2nm,0.8s
**HOOD Mount Hood Mea** 94.24 39 P P 04 23 45.7 +0.5
**MXC Moxie City** 94.35 37 P P 04 23 45.7 +0.3
MXC IAmb IAmb 04 23 47.1
comp=Z,7.2nm,0.9s
**D08A Wollman Farm,** 94.86 36 P P 04 23 47.3 -0.5
D08A IAmb IAmb 04 23 49.1
comp=Z,6.0nm,0.8s
**NEW Newport** 95.16 35 P P 04 23 49.0 -0.1
NEW IAmb IAmb 04 23 50.4
comp=Z,5.2nm,0.8s
**NEW Newport** 95.16 35 P P 04 23 49.0 -0.1
NEW pmax pmax
comp=Z,5.0nm,0.8s
**PINE Pine Mountain** 95.50 40 P P 04 23 49.7 -1.2
**J05D Fort Rock, OR** 95.59 41 P P 04 23 49.1 -2.2
J05D IAmb IAmb 04 23 52.8
comp=Z,6.3nm,0.8s
**F10A Beach Ranch, E** 96.44 37 P P 04 23 54.6 -0.5
**FRB Frobisher Bay** 97.05 4 LR LR 05 10 52.1
comp=Z,120nm,20.7s,baz=5.0,slow=37
**J08A Circle Bar Ran** 97.23 39 P P 04 23 58.3 -0.4
J08A IAmb IAmb 04 24 00.2
comp=Z,4.8nm,0.8s
**PAHR Pah Rah Range** 98.71 43 P P 04 24 04.4 -1.1
PAHR IAmb IAmb 04 24 07.0
comp=Z,5.9nm,1.2s
**HLID Hailey** 99.49 37 Pdif 04 24 08.4 -0.6
**NVAR Mina Array Bea** 100.12 43 P Pdif 04 24 12.0 +0.1
comp=Z,0.9nm,0.7s,baz=291,slow=5.2,SNR=8.4
**TORD Torodi Ar. Bea** 112.30 294 PKiKP PKiKP 04 29 01.1 -1.2
comp=Z,0.7nm,0.9s,baz=358,slow=2.8,SNR=3.9
**TXAR Lajitas Array** 115.27 43 PKP PKiKP 04 29 07.0 -0.8
comp=Z,2.2nm,0.7s,baz=243,slow=0.6,SNR=30
**U38A Gravette** 115.33 31 PKiKP 04 29 06.8 -0.8
**JCT Junction City** 116.87 39 PKPdf PKPdf 04 29 09.9 -0.9
**JCT Junction City** 116.87 39 PKIKP PKPdf 04 29 10.0 -0.9
**P52A Corning** 117.63 20 P PKPdf 04 29 10.8 -1.2
baz=335
**WVT Waverly** 118.58 27 PKPdf PKPdf 04 29 12.7 -1.2
**WVT Waverly** 118.58 27 PKIKP PKPdf 04 29 12.7 -1.2
**S51A Beattyville** 118.92 22 PKPdf 04 29 13.5 -1.0
**PLAL Pickwick Lake** 119.45 27 PKPdf PKPdf 04 29 13.7 -1.9
**W50A Signal Mountai** 120.42 25 PKPdf 04 29 16.3 -1.2
**VNA3 Neumayer Olymp** 120.54 197 ⇑PKPdf PKPdf 04 29 15.4 -1.2
comp=Z,4.0nm,0.6s
**TKL Tuckaleechee C** 120.61 24 PKPdf PKPdf 04 29 16.6 -1.2
**TKL Tuckaleechee C** 120.61 24 PKIKP PKPdf 04 29 16.6 -1.2
**W52A Murphy** 121.05 24 PKPdf 04 29 17.8 -0.9
**Y49A Blount Mountai** 121.12 27 PKPdf 04 29 17.4 -1.5
**PAULI Pauline** 122.08 22 PKPdf 04 29 20.0 -0.7
**152A Waverly Hall** 122.86 26 PKPdf 04 29 21.5 -0.7
**ROSC El Rosal** 151.73 34 PKP PKPdf 04 30 14.4 -0.9
comp=Z,2.8nm,0.3s,baz=169,slow=18,SNR=1.9
ROSC PKPbc PKiKP 04 30 22.1 0.0
comp=Z,17nm,0.7s,baz=81,slow=18,SNR=12
**PLCA Paso Flores** 156.24 157 PKPab PKPab 04 30 47.0 -1.3
comp=Z,3.7nm,0.9s,baz=180,slow=4.0,SNR=6.3
**PLCA Paso Flores** 156.24 157 PKP2 PKPab 04 30 47.0 -1.3

*IDC **21** 04:17:53.1±13.0, 17.96S×177.84W, h520km±146km, mb3.3/4, mbtmp4.2/4, Error ellipse: s-maj=60.3km s-min=29.0km az=70.0*

**ISC 21 04:17:59.1±1.4, 18.0S±0.3×178.0W±0.2, h590km, n6, σ0s29/6, mb3.7/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| CTA | Charters Tower | 33.79 | 261 | P | P | P | 04 23 53.9 | +0.1 |
| | 0.2nm,0.6s,baz=100,slow=6.1,SNR=2.8 | | | | | | | |
| WRA | Warramunga Arr | 44.97 | 260 | P | P | P | 04 25 23.0 | -0.3 |
| | 2.0nm,0.5s,baz=94,slow=7.1,SNR=59 | | | | | | | |
| | 2.0nm,0.5s | | | | | | | |
| ASAR | Alice Springs | 45.12 | 254 | P | P | P | 04 25 24.3 | -0.1 |
| | 2.9nm,0.4s,baz=86,slow=8.8,SNR=41 | | | | | | | |
| | 2.9nm,0.4s | | | | | | | |
| QSPA | South Pole Qui | 72.07 | 180 | P | P | P | 04 28 24.3 | 0.0 |
| | 1.7nm,0.7s,baz=269,slow=1.2,SNR=11 | | | | | | | |
| | 1.7nm,0.7s | | | | | | | |
| ILAR | Eielson Array | 85.88 | 13 | P | P | P | 04 29 36.8 | -0.1 |
| | 0.3nm,0.4s,baz=225,slow=4.1,SNR=6.7 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| BRTR | Keskin Array B | 145.09 | 315 | PKPbc | PKPbc | PKPbc | 04 36 31.9 | +0.4 |
| | 0.7nm,0.6s,baz=117,slow=2.7,SNR=4.9 | | | | | | | |

*NEIC **21** 04:28:16.8±1.9, 14.80S±0.04×173.40W±0.02, h10km±1km, mb4.6/10, Error ellipse: s-maj=13.1km s-min=6.4km az=277.0*

*IDC **21** 04:28:17.0±0.9, 14.87S×173.92W, h0km, mb4.3/7, mbtmp4.3/7, MS3.7/12, Error ellipse: s-maj=50.6km s-min=20.8km az=147.0*

*GCMT **21** 04:28:21.8±0.3, 14.74S±0.02×173.60W±0.02, h13km±2km, MW4.8/83, Moment Tensor Solution. s13,c14; s83,c112; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr-0.82±.13; Mθθ-0.40±.10; Mϕϕ 1.22±. 10; Mrθ-0.13±.24; Mθϕ 1.91±.10; Mϕr 0.67±.24; Best double couple: M0 2.22300×10^16 NP1:ϕs172.00000°, δ79.00000°, λ-156.00000°. NP2: ϕs77.00000°, δ66.00000°, λ-12.00000°. Principal axes: T 2.5560, Plg8.0000°, Azm303.0000°; N -0.6640, Plg63.0000°, Azm196.0000°; P -1.8900, Plg25.0000°, Azm37.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 21 04:28:20.0±0.6, 14.85S±0.07×173.44W±0.08, h30km, n57, σ1s74/39, mb4.5/12, MS3.8/11, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 1.87 | 60 | Pn | Pn | Pn | 04 28 48.4 | -1.6 |
| AFI | | | | | | Sn | 04 29 09.7 | -2.9 |

**NIUE Niue** 5.38 142 Pn Pn 04 29 38.3 +0.1
NIUE Sn Sn 04 30 38.1 -1.1
**MSVF Nonsavu** 8.66 250 Pn Pn 04 30 23.2 -0.1
**RAR Rarotonga** 14.45 118 LR LR 04 36 03.6
comp=Z,512nm,18.5s,baz=283,slow=31
**PPT Papeete** 23.07 100 LR LR 04 39 52.4
comp=Z,223nm,21.5s,baz=270,slow=30
**INZ Inchbonnie** 30.67 202 P P 04 34 30.0 -1.8
**MLZ Mavora Lakes** 34.17 203 P P 04 35 03.0 +0.4
MLZ IAmb IAmb 04 35 10.3
comp=Z,6.5nm,0.9s
**H11S2 WAKE ISLAND Hy** 38.48 329 T T 05 16 21.9
baz=149,slow=76,SNR=16
**H11S3 WAKE ISLAND Hy** 38.49 329 T T 05 16 17.3
baz=149,slow=76,SNR=13
**H11S1 WAKE ISLAND Hy** 38.49 329 T T 05 16 14.8
baz=149,slow=76,SNR=14
**CTA Charters Tower** 38.73 256 LR LR 04 48 49.4
comp=Z,18nm,19.5s,baz=80,slow=32
**PMG Port Moresby** 38.86 273 LR LR 04 49 17.2
comp=Z,248nm,20.1s,baz=89,slow=33
**H11N3 WAKE ISLAND Hy** 39.42 330 T T 05 17 42.8
baz=150,slow=76,SNR=14
**H11N1 WAKE ISLAND Hy** 39.42 330 T T 05 17 30.4
baz=150,slow=76,SNR=18
**H11N2 WAKE ISLAND Hy** 39.44 330 T T 05 17 34.2
baz=150,slow=76,SNR=17
**STKA Stephens Creek** 44.27 239 P P 04 36 25.8 -1.4
**WR0 Warramunga Arr** 49.74 256 P P 04 37 08.4 -1.6
**WB0 Warramunga Arr** 49.89 257 P P 04 37 09.2 -1.9
WB0 IAmb IAmb 04 37 10.7
comp=Z,13nm,1.4s
**WB2 Warramunga Arr** 49.92 256 P P 04 37 10.8 -0.6
WB2 IAmb IAmb 04 37 12.6
comp=Z,9.8nm,1.2s
**WRAB Tennant Creek** 49.92 256 P P 04 37 10.4 -1.0
WRAB IAmb IAmb 04 37 15.0
comp=Z,16nm,1.4s
**WRA Warramunga Arr** 49.93 256 P P 04 37 10.5 -0.9
**WRA Warramunga Arr** 49.93 256 P P 04 37 08.8 -2.7
comp=Z,3.3nm,1.0s,baz=91,slow=7.6,SNR=14
comp=Z,3.3nm,1.0s
**GUMO Guam** 50.01 302 LR LR 04 54 44.2
comp=Z,61nm,20.9s,baz=125,slow=32
**AS31 Alice Springs** 50.24 251 P P 04 37 12.7 -1.1
AS31 IAmb IAmb 04 37 16.5
comp=Z,5.2nm,0.9s
**ASAR Alice Springs** 50.24 251 P P 04 37 12.2 -1.6
**ASAR Alice Springs** 50.24 251 P P 04 37 11.8 -2.0
comp=Z,17nm,0.9s,baz=87,slow=7.7,SNR=29
ASAR LR LR 04 56 31.9
comp=Z,143nm,19.3s,baz=96,slow=34
comp=Z,17nm,0.9s
**NWAO Narrogin (SRO)** 64.85 240 LR LR 05 04 40.1
comp=Z,100nm,19.9s,baz=82,slow=34
**GSTR Great Sitkin T** 66.70 358 P P 04 39 08.3 +0.4
**PFO Pinyon Flats O** 72.58 47 LR LR 05 03 39.3
comp=Z,214nm,21.3s,baz=254,slow=29
**NVAR Mina Array Bea** 73.95 42 P P 04 39 56.3 +3.5
comp=Z,2.1nm,0.9s,baz=224,slow=10.0,SNR=8.2
comp=Z,2.1nm,0.9s
**QSPA South Pole Qui** 75.19 180 P P 04 39 59.7 +0.2
QSPA IAmb IAmb 04 40 06.5
comp=Z,7.2nm,1.1s
**QSPA South Pole Qui** 75.19 180 P P 04 40 01.3 +1.8
comp=Z,4.6nm,1.0s,baz=71,slow=3.7,SNR=3.0
comp=Z,4.6nm,1.0s
**MA2 Magadan** 79.64 342 LR LR 05 11 42.9
comp=Z,26nm,20.4s,baz=186,slow=33
**TXAR Lajitas Array** 80.34 56 P P 04 40 33.2 +4.4
comp=Z,1.8nm,0.9s,baz=242,slow=2.7,SNR=14
comp=Z,1.8nm,0.9s
**PDAR Pinedale Array** 81.89 42 P P 04 40 39.9 +3.0
comp=Z,1.1nm,0.4s,baz=198,slow=2.6,SNR=24
comp=Z,1.1nm,0.4s
**ILAR Eielson Array** 81.92 11 P P 04 40 38.0 +1.7
comp=Z,0.6nm,0.7s,baz=203,slow=8.8,SNR=2.5
ILAR LR LR 05 10 18.0
comp=Z,36nm,20.3s,baz=248,slow=31
comp=Z,0.6nm,0.7s
**H03S2 Juan Fernandez** 85.54 124 T T 06 15 48.0
baz=252,slow=75,SNR=11
**H03S1 Juan Fernandez** 85.55 124 T T 06 15 51.0
baz=252,slow=75,SNR=8.6
**H03S3 Juan Fernandez** 85.55 124 T T 06 15 49.4
baz=252,slow=75,SNR=7.7
**YAK Yakutsk** 88.60 337 LR LR 05 13 22.7
comp=Z,38nm,21.7s,baz=80,slow=31
**TIXI Tiksi** 94.47 344 LR LR 05 21 58.4
comp=Z,30nm,19.3s,baz=112,slow=34
**BRTR Keskin Array B** 145.71 321 PKPbc PKiKP 04 47 58.5 -1.6
comp=Z,2.4nm,1.0s,baz=93,slow=1.3,SNR=9.5
**CONA Conrad Observa** 146.13 349 iPKiKP PKiKP 04 48 01.2 +0.5
comp=Z,6.7nm,1.6s
**RONA Rosalia, Austr** 146.27 348 iPKiKP PKiKP 04 48 01.7 +0.8
comp=Z,1.6nm,0.6s
**MOA Molln** 146.49 351 iPKiKP PKiKP 04 48 04.9 +3.6
comp=Z,5.8nm,1.5s
**ARSA Arzberg** 146.85 349 ePKP PKiKP 04 48 01.8 -0.2
comp=Z,1.1nm,0.7s
**LESA Schwarzleotal** 147.13 352 iPKP PKPab 04 48 01.0 -0.8
comp=Z,2.5nm,1.4s
**RETA Reutte** 147.28 355 iPKiKP PKiKP 04 48 06.7 +3.7
comp=Z,2.3nm,1.0s
**WATA Walderalm** 147.35 354 ePKiKP PKiKP 04 48 04.9 +1.6
comp=Z,1.9nm,0.5s
**KBA Koelnbreinsper** 147.38 351 ePKiKP PKiKP 04 48 04.8 +1.4
comp=Z,1.1nm,0.5s
**MOTA Moosalm** 147.38 354 iPKP PKiKP 04 48 02.4 -0.9
comp=Z,1.7nm,0.5s
**SOKA Soboth** 147.49 349 ePKP PKiKP 04 48 03.3 -0.2
comp=Z,0.1nm,0.3s
**SQTA Sankt Quirin** 147.50 354 iPKP PKPab 04 48 01.8 -1.5
comp=Z,4.9nm,1.2s
**DAVA Damuels** 147.55 356 ePKP PKPbc 04 48 00.6 -0.9
comp=Z,3.0nm,0.9s
**OBKA Obir** 147.74 350 iPKP PKPdf 04 47 59.3 +0.1
comp=Z,2.9nm,0.7s
**FETA Feichten** 147.74 355 iPKiKP PKPab 04 48 05.4 +1.0
comp=Z,3.9nm,1.2s
**MYKA Terra Mystica** 147.77 351 iPKP PKPab 04 48 04.7 +0.3
comp=Z,2.2nm,0.8s

*OSPL **21** 04:28:43.6±2.5, 20.17N×70.74W, h0km±28km, ML2.0 SDD **21** 04:28:46.7±1.7, 19.89N×70.78W, h31km±11km, MD3.4, ML2.2, MW2.8*

**ISC 21 04:28:43.9±1.9, 20.09N±0.05×70.78W±0.06, h26km±16km, n9, σ1s88/14, 10C, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| SODR | Sosua Marina B | 0.39 | 150 | ⇑ePg | Pb | Pb | 04 28 51.8 | -0.6 |
| SODR | | | | ⇑eSg | Sb | Sb | 04 28 58.0 | -0.1 |
| SODR | | | | IAML | | | 04 29 05.3 | |
| | comp=E,210nm,0.3s | | | | | | | |
| SODR | | | | IAML | | | 04 29 07.2 | |
| | comp=N,208nm,0.5s | | | | | | | |
| SC01 | Santiago de lo | 0.66 | 176 | iP | P | Pn | 04 28 57.0 | -0.6 |
| SC01 | | | | IAML | | | 04 29 22.3 | |
| | comp=Z,49nm,1.9s | | | | | | | |
| MCDR | Montecristi | 0.85 | 257 | ⇑ePg | Pn | Pn | 04 29 01.3 | +1.2 |
| MCDR | | | | IAML | | | 04 29 16.7 | |
| | comp=E,81nm,1.8s | | | | | | | |
| MCDR | | | | IAML | | | 04 29 19.2 | |
| | comp=N,68nm,1.3s | | | | | | | |
| SDDR | Presa de Saban | 1.20 | 203 | ⇑ePg | Pn | Pn | 04 29 04.9 | -0.2 |
| SDDR | | | | IAML | | | 04 29 23.2 | |
| | comp=E,30nm,0.3s | | | | | | | |
| SDDR | | | | IAML | | | 04 29 25.8 | |
| | comp=N,41nm,0.3s | | | | | | | |
| SDDR | Presa de Saban | 1.20 | 203 | iP | Pn | Pn | 04 29 05.2 | +0.2 |
| SDDR | | | | eS | Sn | Sn | 04 29 23.0 | +2.5 |
| SDDR | | | | IAML | | | 04 29 25.9 | |
| | comp=Z,22nm,0.3s | | | | | | | |
| ABDR | Alto Bandera | 1.28 | 173 | ⇑ePg | Pn | Pn | 04 29 06.4 | 0.0 |
| ABDR | | | | ⇑eSg | Sn | Sn | 04 29 18.4 | -4.5 |
| ABDR | | | | IAML | | | 04 29 26.2 | |
| | comp=E,39nm,0.3s | | | | | | | |
| ABDR | | | | IAML | | | 04 29 29.1 | |
| | comp=N,41nm,0.2s | | | | | | | |
| GRTK | Grand Turk | 1.45 | 347 | iP | Pn | Pn | 04 29 07.0 | -1.4 |
| GRTK | | | | eS | Sn | Sn | 04 29 27.3 | +0.7 |
| GRTK | | | | IAML | | | 04 29 34.9 | |
| | comp=Z,75nm,1.4s | | | | | | | |
| JIDR | Jimani | 1.88 | 213 | ⇑ePg | Pn | Pn | 04 29 14.9 | +0.5 |
| JIDR | | | | IAML | | | 04 29 32.9 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,38nm,1.1s | | | | | | | | |
| JIDR | | | | ⇑*e*Sg | | **Sn** | **04 29 36.6** | **-0.7** |
| JIDR | | | | IAML | | | 04 29 44.3 | |
| | comp=E,72nm,0.4s | | | | | | | | |
| JIDR | | | | IAML | | | 04 29 48.6 | |
| | comp=N,38nm,3.0s | | | | | | | | |
| **MIDR** | **Miches** | **1.97** | **124** | ⇑*e*Pg | | **Pn** | **04 29 17.0** | **+1.4** |
| MIDR | | | | IAML | | | 04 29 25.8 | |
| | comp=N,31nm,1.9s | | | | | | | | |
| MIDR | | | | ⇑*e*Sg | | **Sn** | **04 29 40.8** | **+1.4** |
| MIDR | | | | IAML | | | 04 29 43.7 | |
| | comp=E,28nm,2.9s | | | | | | | | |
| MIDR | | | | IAML | | | 04 29 49.4 | |
| | comp=N,27nm,1.6s | | | | | | | | |

**IDC 21 04:30:00.1±3.2, 14°43S×174°11W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=431.7km s-min=35.6km az=156.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **49.40** | **256** | P | P | 04 38 52.1 | 0.0 |
| | 1.3nm,1.0s,baz=91,slow=6.8,SNR=3.5 1.3nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **49.77** | **251** | P | P | 04 38 54.6 | -0.2 |
| | 3.9nm,0.8s,baz=85,slow=8.0,SNR=5.1 3.9nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.65** | **57** | P | P | 04 42 15.4 | 0.0 |
| | 0.4nm,0.9s,baz=218,slow=5.7,SNR=2.2 0.4nm,0.9s | | | | | | |

*OSPL **21** 04:40:01.9±2.6, 20°17N×70°70W, h0km±28km, ML2.4*
*SDD **21** 04:40:03.8±2.6, 20°01N×70°86W, h31km±41km, MD3.4, ML2.2, MW3.8*

**ISC 21 04:40:00.8±1.2, 20°14N±0°04×70°73W±0°04, h29km±14km, n9, σ1§19/18, 12C-2D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SODR** | **Sosua Marina B** | **0.41** | **159** | ⇑*e*Pg | **Pn** | **04 40 11.2** | **+0.4** |
| SODR | | | | ⇓*e*Sg | **Sn** | **04 40 19.1** | **+1.6** |
| SODR | | | | IAML | | 04 40 20.5 | |
| | comp=N,186nm,2.1s | | | | | | |
| SODR | | | | IAML | | 04 40 23.4 | |
| | comp=E,135nm,1.2s | | | | | | |
| **SC01** | **Santiago de lo** | **0.71** | **180** | ⇑*e*Pg | **Pb** | **04 40 13.7** | **-1.0** |
| SC01 | | | | ⇑*e*Sg | **Sn** | **04 40 24.1** | **-0.6** |
| SC01 | | | | IAML | | 04 40 34.1 | |
| | comp=N,59nm,3.5s | | | | | | |
| SC01 | | | | IAML | | 04 40 38.9 | |
| | comp=E,37nm,1.9s | | | | | | |
| **MCDR** | **Montecristi** | **0.90** | **254** | ⇑*e*Pg | **Pn** | **04 40 18.3** | **+0.8** |
| MCDR | | | | ⇑*e*Sg | **Sb** | **04 40 28.9** | **-0.7** |
| MCDR | | | | IAML | | 04 40 43.4 | |
| | comp=E,39nm,0.8s | | | | | | |
| MCDR | | | | IAML | | 04 40 57.7 | |
| | comp=N,64nm,4.3s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.26** | **204** | ⇓*e*Pg | **Pb** | **04 40 24.1** | **+0.1** |
| SDDR | | | | ⇑*e*Sg | **Sn** | **04 40 36.3** | **-2.2** |
| SDDR | | | | IAML | | 04 40 42.0 | |
| | comp=E,21nm,0.3s | | | | | | |
| SDDR | | | | IAML | | 04 40 44.5 | |
| | comp=N,24nm,0.3s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.26** | **204** | *i* P | **Pb** | **04 40 23.9** | **-0.2** |
| SDDR | | | | *e*S | **Sb** | **04 40 41.9** | **+1.9** |
| SDDR | | | | IAML | | 04 40 44.8 | |
| | comp=E,16nm,0.8s | | | | | | |
| **GRTK** | **Grand Turk** | **1.42** | **345** | *i* P | **Pb** | **04 40 25.7** | **-0.9** |
| GRTK | | | | *e*S | **Sb** | **04 40 45.5** | **+1.3** |
| GRTK | | | | IAML | | 04 40 54.0 | |
| | comp=Z,51nm,2.1s | | | | | | |
| **JIDR** | **Jimani** | **1.95** | **213** | ⇑*e*Pg | **Pn** | **04 40 32.7** | **+0.8** |
| JIDR | | | | ⇑*e*Sg | **Sn** | **04 40 54.2** | **-1.2** |
| JIDR | | | | IAML | | 04 41 03.1 | |
| | comp=N,36nm,2.3s | | | | | | |
| JIDR | | | | IAML | | 04 41 03.2 | |
| | comp=E,48nm,1.0s | | | | | | |
| **MIDR** | **Miches** | **1.96** | **126** | ⇑*e*Pg | **Pb** | **04 40 35.6** | **-0.2** |
| MIDR | | | | IAML | | 04 40 54.0 | |
| | comp=N,32nm,2.2s | | | | | | |
| MIDR | | | | ⇑*e*Sg | **Sb** | **04 41 00.1** | **+0.3** |
| MIDR | | | | IAML | | 04 41 20.1 | |
| | comp=E,16nm,1.0s | | | | | | |
| MIDR | | | | IAML | | 04 41 30.9 | |
| | comp=N,17nm,1.2s | | | | | | |
| **HIDR** | **Higuey Centro** | **2.45** | **129** | ⇑*e*Pg | **Pb** | **04 40 43.2** | **-1.0** |
| HIDR | | | | ⇑*e*Sg | **Sb** | **04 41 13.5** | **-0.4** |
| HIDR | | | | IAML | | 04 41 31.9 | |
| | comp=E,64nm,0.1s | | | | | | |
| HIDR | | | | IAML | | 04 41 36.3 | |
| | comp=N,79nm,0.1s | | | | | | |

*NEIC **21** 04:41:54.9±1.1, 18°0S±0°3×178°3W±0°1, h575km±13km, mb4.1/29, Error ellipse: s-maj=42.9km s-min=2.2km az=155.0*
*IDC **21** 04:41:55.7±3.1, 17°93S×178°47W, h578km±36km, mb3.1/9, mbtmp4.1/9, Error ellipse: s-maj=39.9km s-min=13.6km az=149.0*

**ISC 21 04:41:55.4±0.7, 18°0S±0°1×178°5W±0°1, h579km, n45, σ0§60/45, mb4.0/24, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.32** | **274** | | **P** | **04 43 14.7** | **-0.2** |
| **RAO** | **Raoul Island** | **11.21** | **178** | P | **P** | **04 44 26.5** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **16.48** | **258** | P | **P** | **04 45 17.1** | **-1.0** |
| **EIDS** | **Eidsvold** | **29.18** | **250** | P | **P** | **04 47 11.8** | **+0.5** |
| **ARMA** | **Armidale** | **29.84** | **240** | P | **P** | **04 47 17.6** | **+0.6** |
| **CTA** | **Charters Tower** | **33.37** | **261** | P | **P** | **04 47 47.2** | **+0.1** |
| | 0.2nm,0.6s,baz=84,slow=10,SNR=3.0 | | | | | | |
| **CTAO** | **Charters Tower** | **33.37** | **261** | P | **P** | **04 47 47.1** | **0.0** |
| CTAO | | | | IAmb | IAmb | 04 47 48.0 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **37.07** | **231** | P | **P** | **04 48 16.4** | **-1.1** |
| **STKA** | **Stephens Creek** | **38.53** | **241** | P | **P** | **04 48 30.3** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.53** | **241** | P | **P** | **04 48 30.1** | **+0.7** |
| | comp=Z,2.4nm,0.5s,baz=86,slow=8.5,SNR=7.6 comp=Z,2.4nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.31** | **241** | P | **P** | **04 49 07.1** | **-0.2** |
| **WB2** | **Warramunga Arr** | **44.54** | **260** | P | **P** | **04 49 16.5** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 04 49 22.2 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **260** | P | **P** | **04 49 16.6** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.56** | **260** | P | **P** | **04 49 17.1** | **0.0** |
| | comp=Z,0.6nm,0.5s,baz=98,slow=6.8,SNR=5.1 comp=Z,0.6nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.71** | **254** | P | **P** | **04 49 18.7** | **+0.5** |
| AS31 | | | | IAmb | IAmb | 04 49 19.5 | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.71** | **254** | P | **P** | **04 49 18.4** | **+0.2** |
| **ASAR** | **Alice Springs** | **44.71** | **254** | P | **P** | **04 49 18.7** | **+0.5** |
| | comp=Z,4.7nm,0.5s,baz=88,slow=8.6,SNR=44 | | | | | | |
| ASAR | | | | S | **S** | **04 55 13.8** | **+0.2** |
| | comp=Z,0.7nm,0.7s,baz=93,slow=15,SNR=6.8 comp=Z,4.7nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.94** | **323** | P | **P** | **04 51 58.0** | **+0.6** |
| | comp=Z,2.6nm,0.5s,baz=136,slow=6.4,SNR=5.6 comp=Z,2.6nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.75** | **345** | P | **P** | **04 52 31.4** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **73.75** | **345** | P | **P** | **04 52 30.9** | **-0.2** |
| | comp=Z,2.1nm,0.6s,baz=112,slow=7.3,SNR=7.4 comp=Z,2.1nm,0.6s | | | | | | |
| **OHAK** | **Old Harbor** | **77.83** | **14** | P | **P** | **04 52 53.0** | **-0.4** |
| **O16K** | **Kokwok River B** | **79.08** | **10** | P | **P** | **04 52 58.6** | **-1.4** |
| **N15K** | **Kwethluk River** | **79.31** | **9** | P | **P** | **04 53 01.1** | **-0.1** |
| N15K | | | | IAmb | IAmb | 04 53 05.6 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **P18K** | **Big Mountain,** | **79.42** | **12** | P | **P** | **04 53 01.0** | **-0.9** |
| **NVAR** | **Mina Array Bea** | **79.53** | **44** | P | **P** | **04 53 02.9** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=228,slow=8.5,SNR=4.8 comp=Z,0.4nm,0.6s | | | | | | |
| **O18K** | **Koktuh Hills** | **79.85** | **12** | P | **P** | **04 53 03.5** | **-0.6** |
| O18K | | | | IAmb | IAmb | 04 53 08.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **M16K** | **Timber Creek** | **80.30** | **9** | P | **P** | **04 53 07.3** | **+0.9** |
| M16K | | | | IAmb | IAmb | 04 53 07.6 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.43** | **39** | P | **P** | **04 53 07.8** | **+0.1** |
| **H04A** | **Detroit Lake** | **80.70** | **37** | P | **P** | **04 53 08.2** | **-0.7** |
| H04A | | | | IAmb | IAmb | 04 53 15.4 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| **L16K** | **Owhat River** | **80.87** | **9** | P | **P** | **04 53 10.0** | **+0.7** |
| L16K | | | | IAmb | IAmb | 04 53 10.7 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **N19K** | **Bonanza Creek** | **80.88** | **12** | P | **P** | **04 53 09.3** | **-0.2** |
| **M17K** | **Holitna River** | **80.90** | **10** | P | **P** | **04 53 10.2** | **+0.7** |
| M17K | | | | IAmb | IAmb | 04 53 11.1 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.14** | **8** | P | **P** | **04 53 11.1** | **+0.4** |
| K15K | | | | IAmb | IAmb | 04 53 11.9 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **L18K** | **Granite Mounta** | **81.79** | **10** | P | **P** | **04 53 14.2** | **+0.2** |
| L18K | | | | IAmb | IAmb | 04 53 15.3 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **K17K** | **Iditarod** | **82.00** | **9** | P | **P** | **04 53 15.5** | **+0.4** |
| K17K | | | | IAmb | IAmb | 04 53 24.2 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **J16K** | **Anvik River** | **82.22** | **8** | P | **P** | **04 53 16.2** | **+0.1** |
| J16K | | | | IAmb | IAmb | 04 53 17.3 | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **PWL** | **Port Wells** | **82.24** | **14** | P | **P** | **04 53 16.2** | **-0.2** |
| **J17K** | **VABM Dome** | **82.53** | **9** | P | **P** | **04 53 17.7** | **0.0** |
| J17K | | | | IAmb | IAmb | 04 53 23.5 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **J18K** | **Innoko River** | **82.96** | **10** | P | **P** | **04 53 19.6** | **-0.3** |
| J18K | | | | IAmb | IAmb | 04 53 20.3 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.99** | **13** | P | **P** | **04 53 33.5** | **-1.1** |
| | comp=Z,0.6nm,0.4s,baz=222,slow=5.3,SNR=10 comp=Z,0.6nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.09** | **58** | P | **P** | **04 53 36.5** | **+0.4** |
| | comp=Z,0.3nm,0.6s,baz=220,slow=5.1,SNR=6.3 comp=Z,0.3nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.46** | **43** | P | **P** | **04 53 41.6** | **-0.8** |
| | comp=Z,0.4nm,0.6s,baz=242,slow=3.2,SNR=3.8 comp=Z,0.4nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.80** | **315** | PKP | PKPbc | 05 00 28.1 | 0.0 |
| | comp=Z,1.3nm,0.7s,baz=75,slow=2.7,SNR=8.4 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.14** | **303** | PKPbc | **PKPbc** | **05 00 32.6** | **+0.7** |
| | comp=Z,1.4nm,0.5s,baz=83,slow=6.8,SNR=4.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.68** | **345** | PKPbc | **PKPbc** | **05 00 35.8** | **+0.2** |
| | comp=Z,1.5nm,0.7s,baz=165,slow=5.5,SNR=4.9 | | | | | | |

**IDC 21 04:42:51.5±3.9, 5°52S×150°47E, h0km, mb3.6/2, mbtmp3.7/2, Error ellipse: s-maj=140.1km s-min=53.3km az=117.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.25** | **226** | P | P | 04 47 40.2 | +0.7 |
| | 4.3nm,0.4s,baz=51,slow=9.9,SNR=29 4.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **24.08** | **220** | P | P | 04 48 08.3 | -0.6 |
| | 0.2nm,0.3s,baz=52,slow=9.0,SNR=2.2 0.2nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.29** | **286** | PKPbc | PKPbc | 05 02 40.1 | -0.8 |
| | 0.6nm,0.8s,baz=69,slow=1.2,SNR=2.7 | | | | | | |

**IDC 21 04:48:45.9±2.6, 17°37S×177°63W, h0km, mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=307.1km s-min=30.4km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.46** | **259** | P | P | 04 57 07.0 | -0.2 |
| | 0.2nm,0.4s,baz=95,slow=7.4,SNR=9.7 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.65** | **254** | P | P | 04 57 08.6 | -0.1 |
| | 0.8nm,0.5s,baz=86,slow=8.5,SNR=7.0 0.8nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.08** | **57** | P | P | 05 01 24.2 | 0.0 |
| | 0.6nm,0.7s,baz=215,slow=6.4,SNR=10 0.6nm,0.7s | | | | | | |

*IDC **21** 04:53:09.1±6.3, 18°14S×178°13W, h471km±72km, mb3.4/9, mbtmp4.2/9, Error ellipse: s-maj=27.9km s-min=21.9km az=19.0*
*NEIC **21** 04:53:16.9±1.8, 18°3S±0°1×178°2W±0°1, h562km±8km, mb4.1/32, Error ellipse: s-maj=24.1km s-min=11.2km az=137.0*

**ISC 21 04:53:16.4±0.6, 18°3S±0°1×178°3W±0°1, h550km, n47, σ1§10/41, mb4.0/24, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.53** | **278** | P | **P** | **04 54 36.6** | **+1.6** |
| **URZ** | **Urewera** | **20.32** | **190** | P | **P** | **04 57 12.3** | **-2.9** |
| | 6.0nm,0.3s,baz=328,slow=4.5,SNR=9.4 6.0nm,0.3s | | | | | | |
| **MRZ** | **Mangatainoka R** | **22.93** | **192** | P | **P** | **04 57 36.5** | **-2.2** |
| **KHZ** | **Kahutara** | **25.06** | **194** | P | **P** | **04 57 55.9** | **-1.6** |
| **EIDS** | **Eidsvold** | **29.26** | **251** | P | **P** | **04 58 34.1** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 04 58 36.2 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.30** | **200** | P | **P** | **04 58 35.3** | **+0.6** |
| MLZ | | | | IAmb | IAmb | 04 58 40.6 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.23** | **271** | P | **P** | **04 59 42.1** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.56** | **242** | P | **P** | **04 59 53.2** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.56** | **242** | P | **P** | **04 59 52.6** | **+0.1** |
| | comp=Z,2.7nm,0.6s,baz=79,slow=8.9,SNR=6.9 comp=Z,2.7nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **43.34** | **241** | P | **P** | **05 00 30.6** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.49** | **260** | P | **P** | **05 00 39.4** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 05 00 45.6 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **05 00 40.4** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 05 00 42.9 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.67** | **260** | P | **P** | **05 00 40.1** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 05 00 45.5 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.67** | **260** | P | **P** | **05 00 39.9** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 05 00 40.5 | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **05 00 40.1** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.69** | **260** | P | **P** | **05 00 40.4** | **-0.6** |
| | comp=Z,2.9nm,0.5s,baz=96,slow=6.8,SNR=89 comp=Z,2.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.81** | **255** | P | **P** | **05 00 41.7** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 05 00 42.8 | |
| | comp=Z,6.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.81** | **255** | P | **P** | **05 00 41.7** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.81** | **255** | P | **P** | **05 00 41.9** | **0.0** |
| | comp=Z,20nm,0.5s,baz=88,slow=8.4,SNR=158 comp=Z,20nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **48.91** | **269** | P | P | 05 01 09.6 | -3.3 |
| **FORT** | **Forrest** | **49.96** | **245** | P | **P** | **05 01 19.9** | **-0.6** |
| **KNRA** | **Kununurra** | **50.57** | **264** | P | **P** | **05 01 24.0** | **-1.1** |
| KNRA | | | | IAmb | IAmb | 05 01 26.7 | |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.09** | **261** | P | **P** | **05 01 42.9** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **57.94** | **256** | P | **P** | **05 02 16.1** | **-0.7** |
| **MBWA** | **Marble Bar** | **58.10** | **256** | P | **P** | **05 02 16.8** | **-1.1** |
| **SBA** | **Scott Base** | **60.07** | **184** | P | **P** | **05 02 31.5** | **+1.4** |
| **GIRL** | **Giralia** | **62.91** | **253** | P | **P** | **05 02 50.1** | **+0.5** |
| **QSPA** | **South Pole Qui** | **71.79** | **180** | P | **P** | **05 03 43.6** | **+0.3** |
| **QSPA** | **South Pole Qui** | **71.79** | **180** | P | **P** | **05 03 43.9** | **+0.6** |
| | comp=Z,2.2nm,1.0s,baz=78,slow=0.2,SNR=9.3 comp=Z,2.2nm,1.0s | | | | | | |
| **OHAK** | **Old Harbor** | **78.05** | **14** | P | P | 05 04 16.5 | -1.6 |
| OHAK | | | | IAmb | IAmb | 05 04 18.4 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **O16K** | **Kokwok River B** | **79.31** | **10** | P | P | 05 04 22.8 | -2.0 |
| O16K | | | | IAmb | IAmb | 05 04 23.5 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **N15K** | **Kwethluk River** | **79.54** | **9** | P | **P** | **05 04 24.7** | **-1.3** |
| **NVAR** | **Mina Array Bea** | **79.60** | **44** | P | **P** | **05 04 26.8** | **-0.3** |
| | comp=Z,0.5nm,0.8s,baz=229,slow=9.6,SNR=3.6 comp=Z,0.5nm,0.8s | | | | | | |
| **P18K** | **Big Mountain,** | **79.65** | **12** | P | P | 05 04 24.6 | -2.1 |
| P18K | | | | IAmb | IAmb | 05 04 25.5 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **O18K** | **Koktuh Hills** | **80.08** | **12** | P | P | 05 04 27.2 | -1.6 |
| O18K | | | | IAmb | IAmb | 05 04 28.7 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **L14K** | **Kuka Creek** | **80.31** | **8** | P | **P** | **05 04 29.3** | **-0.6** |
| L14K | | | | IAmb | IAmb | 05 04 36.9 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.53** | **38** | P | **P** | **05 04 31.4** | **-0.3** |
| **M16K** | **Timber Creek** | **80.53** | **9** | P | **P** | **05 04 30.2** | **-1.0** |
| M16K | | | | IAmb | IAmb | 05 04 31.5 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **L16K** | **Owhat River** | **81.11** | **9** | P | **P** | **05 04 33.0** | **-1.0** |
| L16K | | | | IAmb | IAmb | 05 04 34.2 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **M17K** | **Holitna River** | **81.13** | **10** | P | **P** | **05 04 33.2** | **-1.1** |
| **K15K** | **Wolf Creek Mou** | **81.38** | **8** | P | **P** | **05 04 34.6** | **-0.9** |
| K15K | | | | IAmb | IAmb | 05 04 35.6 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.09** | **58** | P | **P** | **05 05 00.4** | **+0.7** |
| | comp=Z,0.4nm,0.7s,baz=219,slow=5.7,SNR=7.0 comp=Z,0.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.21** | **13** | P | P | 05 04 56.8 | -2.5 |
| | comp=Z,0.4nm,0.4s,baz=220,slow=5.1,SNR=14 comp=Z,0.4nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.53** | **43** | P | **P** | **05 05 05.7** | **-0.7** |
| | comp=Z,0.5nm,0.7s,baz=202,slow=2.7,SNR=4.0 comp=Z,0.5nm,0.7s | | | | | | |
| **H29M** | **Whitestone** | **89.38** | **15** | P | **P** | **05 05 13.7** | **-0.4** |
| **BRTR** | **Keskin Array B** | **145.12** | **315** | PKPbc | **PKPdf** | **05 11 51.8** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=92,slow=2.6,SNR=5.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.99** | **345** | PKPbc | **PKPdf** | **05 11 59.4** | **+3.1** |
| | comp=Z,0.7nm,0.3s,baz=163,slow=10,SNR=5.1 | | | | | | |

*IDC **21** 05:05:50.6±11.0, 20°71S×148°83E, h0km, mbtmp2.9/1, ML2.8/1, Error ellipse: s-maj=128.1km s-min=85.1km az=1.0*
*NOU **21** 05:05:59.1, 21°53S×148°23E, h0km, MLv3.7/5, Queensland, Australia*

**ISC 21 05:06:00.1±1.6, 21°6S±0°2×148°2E±0°2, h10km, n9, σ0§43/6, Queensland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **2.33** | **308** | P | **Pn** | **05 06 38.6** | **0.0** |
| **CTAO** | **Charters Tower** | **2.33** | **308** | P | **Pn** | **05 06 38.7** | **+0.1** |
| **TV1H** | **Townsville Har** | **2.64** | **330** | P | **Pn** | **05 06 43.0** | **+0.3** |
| **RK1H** | **Rockhampton Ha** | **2.80** | **131** | P | **Pn** | **05 06 44.6** | **-0.4** |
| **EIDS** | **Eidsvold** | **4.63** | **146** | P | **Pn** | **05 07 10.7** | **+0.6** |
| **WRA** | **Warramunga Arr** | **13.07** | **275** | Pn | **Pn** | **05 09 05.8** | **-0.2** |
| | 0.1nm,0.3s,baz=95,slow=12,SNR=1.4 | | | | | | |
| WRA | | | | Lg | Lg | 05 13 01.1 | |
| | baz=94,slow=30 0.1nm,0.3s | | | | | | |
| **I07AU** | **WARRAMUNGA INI** | **13.08** | **275** | I | I | 06 28 20.0 | |
| | 0.1nm,0.8s,baz=101,slow=320,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **13.37** | **258** | Lg | Lg | 05 13 13.5 | |
| | 0.1nm,0.3s,baz=69,slow=29,SNR=4.2 | | | | | | |
| **I22FR** | **PORTLAGUERRE I** | **17.32** | **96** | I | I | 06 39 10.0 | |
| | 0.1nm,1.2s,baz=267,slow=314,SNR=2.3 | | | | | | |

**NAM 21 05:09:49.1±4.4, 19°71S×14°47E, h21km±16km, ML0.8, 5C-4D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.04** | **143** | ⇓*i* P | Pb | 05 09 54.7 | +1.6 |
| ST3N | | | | *i* S | Sb | 05 09 56.1 | +0.4 |
| ST3N | | | | IAML | | 05 09 56.2 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.04** | **143** | *i* P | Pb | 05 09 54.7 | +1.6 |
| ST3N | | | | *i* S | Sb | 05 09 56.1 | +0.4 |
| ST3N | | | | IAML | | 05 09 56.3 | |
| | comp=Z,19nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.12** | **142** | ⇑*i* P | Pb | 05 09 53.9 | -1.7 |
| ST9N | | | | *i* S | Sb | 05 09 54.8 | -5.5 |
| ST9N | | | | IAML | | 05 09 55.1 | |
| | comp=Z,158nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.12** | **142** | *i* P | Pb | 05 09 53.9 | -1.7 |
| ST9N | | | | *i* S | Sb | 05 09 54.8 | -5.5 |
| ST9N | | | | IAML | | 05 09 55.7 | |
| | comp=Z,279nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **216** | ⇓*i* P | Pb | 05 09 56.0 | +0.3 |
| ST6N | | | | *i* S | Sb | 05 09 58.4 | -1.9 |
| ST6N | | | | IAML | | 05 09 59.0 | |
| | comp=Z,6.4nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.14** | **102** | ⇓*i* P | Pb | 05 09 54.4 | -1.1 |
| ST1N | | | | *i* S | Sb | 05 09 55.5 | -4.4 |
| ST1N | | | | IAML | | 05 09 55.8 | |
| | comp=Z,66nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.14** | **102** | *i* P | Pb | 05 09 54.3 | -1.1 |
| ST1N | | | | *i* S | Sb | 05 09 55.5 | -4.4 |
| ST1N | | | | IAML | | 05 09 55.6 | |
| | comp=Z,50nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.15** | **277** | ⇓*i* P | Pb | 05 09 57.9 | +2.5 |
| ST8N | | | | *i* S | Sb | 05 10 01.4 | +1.7 |
| ST8N | | | | IAML | | 05 10 01.7 | |
| | comp=Z,2.1nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.25** | **152** | ⇑*i* P | Pb | 05 09 55.4 | 0.0 |
| ST2N | | | | *i* S | Sb | 05 09 57.5 | -2.3 |
| ST2N | | | | IAML | | 05 09 58.2 | |
| | comp=Z,16nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.25** | **152** | *i* P | Pb | 05 09 55.5 | +0.1 |
| ST2N | | | | *i* S | Sb | 05 09 57.4 | -2.4 |
| ST2N | | | | IAML | | 05 09 57.6 | |
| | comp=Z,11nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.28** | **107** | ⇑*i* P | Pb | 05 09 56.1 | +0.4 |
| ST5N | | | | *i* S | Sb | 05 09 58.6 | -1.7 |
| ST5N | | | | IAML | | 05 09 58.9 | |
| | comp=Z,7.7nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.28** | **107** | *i* P | Pb | 05 09 56.1 | +0.4 |
| ST5N | | | | *i* S | Sb | 05 09 58.5 | -1.9 |
| ST5N | | | | IAML | | 05 09 58.7 | |
| | comp=Z,7.0nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **195** | ⇑*i* P | Pn | 05 09 57.9 | -0.5 |
| ST10N | | | | *i* S | Sb | 05 10 01.2 | +0.6 |
| ST10N | | | | IAML | | 05 10 02.2 | |
| | comp=Z,8.4nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **195** | *i* P | Pn | 05 09 57.8 | -0.5 |
| ST10N | | | | *i* S | Sb | 05 10 01.4 | +0.8 |
| ST10N | | | | IAML | | 05 10 01.6 | |
| | comp=Z,12nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.36** | **82** | ⇑*i* P | Pn | 05 09 58.5 | -0.6 |
| ST11N | | | | *i* S | Sb | 05 10 02.7 | +0.8 |
| ST11N | | | | IAML | | 05 10 03.3 | |
| | comp=Z,2.1nm,0.0s | | | | | | |

*IDC **21** 05:10:42.0±1.0, 14°83S×173°96W, h0km, mb3.7/7, mbtmp3.7/7, MS3.6/16, Error ellipse: s-maj=51.3km s-min=23.7km az=144.0*

**ISC 21 05:10:51.7±0.9, 14°8S±0°3×174°1W±0°2, h73km, n31, σ1§27/8, mb3.5/7, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPT** | **Papeete** | **23.66** | **100** | LR | LR | 05 22 16.7 | |
| | comp=Z,78nm,21.7s,baz=278,slow=30 | | | | | | |
| **URZ** | **Urewera** | **24.64** | **197** | LR | LR | 05 24 34.6 | |
| | comp=Z,214nm,19.5s,baz=86,slow=34 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.14** | **330** | T | T | 05 58 35.4 | |
| | baz=149,slow=76,SNR=12 | | | | | | |
| **H11S3**

comp=Z,51nm,19.8s,baz=221,slow=29
**QSPA South Pole Qui 75.23 180** P **P** **05 22 26.7 +0.3**
1.4nm,1.0s,baz=351,slow=0.5,SNR=2.8
1.4nm,1.0s
**ELK Elko 77.56 42** LR LR 05 51 48.4
comp=Z,39nm,18.1s,baz=258,slow=32
**BBB Bella Bella 77.64 27** LR LR 05 51 00.0
comp=Z,33nm,18.9s,baz=260,slow=31
**TXAR Lajitas Array 80.80 56** P **P** **05 22 57.8 0.0**
0.3nm,0.9s,baz=224,slow=5.0,SNR=3.2
0.3nm,0.9s
**ANMO Albuquerque 80.90 50** LR LR 05 51 36.1
comp=Z,42nm,20.6s,baz=24,slow=30
**ILAR Eielson Array 81.99 11** P **P** **05 23 03.2 0.0**
0.3nm,0.6s,baz=227,slow=5.7,SNR=4.6
0.3nm,0.6s
**PDAR Pinedale Array 82.24 42** P **P** **05 23 03.5 -1.9**
0.2nm,0.4s,baz=214,slow=3.1,SNR=2.0
0.2nm,0.4s
**H03S2 Juan Fernandez 86.05 124** T T 06 58 18.1
baz=251,slow=75,SNR=4.7
**H03S1 Juan Fernandez 86.06 124** T T 06 58 17.0
baz=251,slow=75,SNR=4.2
**H03S3 Juan Fernandez 86.06 124** T T 06 58 17.5
baz=251,slow=75,SNR=3.5
**YKA Yellowknife Ar 89.81 24** LR LR 05 58 50.6
comp=Z,40nm,18.1s,baz=308,slow=32
**ULM Lac du Bonnet 93.87 39** LR LR 05 57 54.2
comp=Z,46nm,21.1s,baz=212,slow=30
**BRTR Keskin Array B 145.31 321** PKPbc **PKPab** **05 30 23.4 +1.7**
1.4nm,1.1s,baz=126,slow=2.1,SNR=5.4

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*IDC **21** 05:17:12.9±2.7, 18°.21S×178°.32W, h543km±32km, mb3.3/10, mbtmp4.2/11, Error ellipse: s-maj=29.1km s-min=13.4km az=150.0*
**ISC 21 05:17:13.7±0.8, 18°.2S±0°.2×178°.4W±0°.1, h550km, n14, σ1s71/18, mb3.5/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.71** | **252** | P | **P** | **05 20 20.7** | **+0.4** |
| | 9.0nm,1.0s,baz=58,slow=19,SNR=1.9 | | | | | | |
| **URZ** | **Urewera** | **20.38** | **190** | P | **P** | **05 21 10.8** | **-2.2** |
| | 3.4nm,0.5s,baz=314,slow=6.9,SNR=1.0 | | | | | | |
| | 3.4nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **38.48** | **241** | P | **P** | **05 23 49.6** | **+0.6** |
| | 3.6nm,0.8s,baz=89,slow=6.6,SNR=5.9 | | | | | | |
| | 3.6nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.55** | **260** | P | **P** | **05 24 37.9** | **+0.6** |
| | 0.5nm,0.3s,baz=91,slow=7.7,SNR=29 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 26 08.8** | **+0.3** |
| | 0.3nm,0.5s,baz=89,slow=3.8,SNR=5.6 | | | | | | |
| WRA | | | | S | **S** | **05 30 29.8** | **-3.5** |
| | 0.4nm,1.1s,baz=106,slow=12,SNR=1.5 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.69** | **254** | P | **P** | **05 24 39.2** | **+0.9** |
| | 3.5nm,0.5s,baz=89,slow=8.9,SNR=41 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 26 09.0** | **+0.1** |
| | 0.6nm,0.5s,baz=98,slow=3.8,SNR=2.2 | | | | | | |
| ASAR | | | | S | **S** | **05 30 35.9** | **+0.7** |
| | 0.3nm,0.4s,baz=84,slow=16,SNR=4.1 | | | | | | |
| | 3.5nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.11** | **323** | P | **P** | **05 27 18.9** | **-0.1** |
| | 2.2nm,0.6s,baz=166,slow=6.3,SNR=4.6 | | | | | | |
| | 2.2nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.93** | **345** | P | **P** | **05 27 52.0** | **-0.8** |
| | 4.0nm,0.8s,baz=123,slow=5.5,SNR=2.2 | | | | | | |
| | 4.0nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.64** | **44** | P | **P** | **05 28 24.1** | **-0.5** |
| | 1.0nm,0.8s,baz=224,slow=8.8,SNR=7.5 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.16** | **13** | P | **P** | **05 28 54.3** | **-2.0** |
| | 0.4nm,0.4s,baz=223,slow=5.3,SNR=10 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.16** | **58** | P | **P** | **05 28 58.0** | **+0.7** |
| | 0.8nm,0.8s,baz=222,slow=6.4,SNR=13 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.57** | **43** | P | **P** | **05 29 03.1** | **-0.7** |
| | 0.4nm,0.6s,baz=207,slow=6.3,SNR=4.7 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.95** | **315** | PKPbc | **PKPdf** | **05 35 49.5** | **+0.6** |
| | 0.9nm,0.6s,baz=141,slow=4.3,SNR=7.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.26** | **303** | PKPbc | **PKPdf** | **05 35 53.8** | **+2.6** |
| | 0.6nm,0.3s,baz=64,slow=7.5,SNR=5.1 | | | | | | |
| **GERES** | **GERESS Array B** | **147.86** | **345** | PKPbc | **PKPdf** | **05 35 56.8** | **+3.4** |
| | 0.8nm,0.4s,baz=346,slow=3.2,SNR=4.5 | | | | | | |

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*IDC **21** 05:26:36.8±8.0, 17°.82S×178°.13W, h511km±87km, mb3.0/5, mbtmp3.9/5, Error ellipse: s-maj=36.3km s-min=31.2km az=119.0*
*NEIC **21** 05:26:39.9±1.1, 18°.0S±0°.1×178°.1W±0°.1, h550km±12km, mb4.3/16, Error ellipse: s-maj=22.2km s-min=17.9km az=149.0*
**ISC 21 05:26:39.5±0.6, 18°.0S±0°.1×178°.10W±0°.10, h550km, n26, σ0s96/28, mb4.2/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.67** | **273** | P | **P** | **05 27 57.5** | **-1.6** |
| **NIUE** | **Niue** | **7.84** | **100** | P | **P** | **05 28 34.4** | **-1.3** |
| **RAO** | **Raoul Island** | **11.25** | **179** | P | **P** | **05 29 10.0** | **-0.2** |
| **DZM** | **Mont Dzumac** | **15.09** | **252** | P | **P** | **05 29 50.5** | **+0.5** |
| **EIDS** | **Eidsvold** | **29.53** | **250** | P | P | 05 31 56.6 | -3.4 |
| EIDS | | | | IAmb | IAmb | 05 32 13.1 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **ARMA** | **Armidale** | **30.17** | **240** | P | **P** | **05 32 05.6** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 05 32 10.0 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **COEN** | **Coen** | **37.40** | **270** | P | **P** | **05 33 06.0** | **-0.3** |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **05 33 17.9** | **-0.2** |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **05 33 19.9** | **+1.8** |
| | comp=Z,4.2nm,0.7s,baz=91,slow=9.6,SNR=6.9 | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **HUH** | **Hualalai** | **43.32** | **31** | P | **P** | **05 33 53.5** | **-0.2** |
| **UWE** | **Uwekahuna** | **43.37** | **32** | P | **P** | **05 33 53.9** | **-0.1** |
| **BBOO** | **Buckleboo** | **43.64** | **241** | P | **P** | **05 33 55.1** | **-0.8** |
| **WR0** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **05 34 03.0** | **-1.4** |
| **WB2** | **Warramunga Arr** | **44.90** | **260** | P | **P** | **05 34 05.1** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 05 34 20.8 | |
| | comp=Z,13nm,1.5s | | | | | | |
| WB2 | | | | PcP | **PcP** | **05 35 35.2** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **05 34 05.0** | **-0.8** |
| | comp=Z,2.0nm,0.5s,baz=96,slow=7.0,SNR=59 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 35 36.2** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=92,slow=3.9,SNR=2.4 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.06** | **254** | P | **P** | **05 34 06.5** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 05 34 10.0 | |
| | comp=Z,6.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.06** | **254** | P | **P** | **05 34 06.5** | **-0.5** |
| | comp=Z,17nm,0.5s,baz=89,slow=7.9,SNR=79 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 35 36.3** | **+0.2** |
| | comp=Z,0.6nm,0.5s,baz=104,slow=3.7,SNR=2.9 | | | | | | |
| **MTN** | **Manton Dam** | **49.09** | **268** | P | **P** | **05 34 37.7** | **+0.4** |
| MTN | | | | IAmb | IAmb | 05 34 39.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **50.25** | **245** | P | **P** | **05 34 45.0** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **58.18** | **255** | P | **P** | **05 35 42.1** | **+0.6** |
| PSA00 | | | | IAmb | IAmb | 05 35 43.8 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **58.35** | **256** | P | **P** | **05 35 42.4** | **-0.3** |
| MBWA | | | | IAmb | IAmb | 05 35 48.2 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.11** | **180** | P | **P** | **05 37 09.3** | **+1.1** |
| **QSPA** | **South Pole Qui** | **72.11** | **180** | P | **P** | **05 37 09.4** | **+1.1** |
| | comp=Z,0.9nm,0.8s,baz=332,slow=9.4,SNR=6.6 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.25** | **44** | P | **P** | **05 37 48.0** | **-0.4** |
| | comp=Z,0.3nm,0.6s,baz=176,slow=3.9,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.86** | **13** | P | **P** | **05 38 22.2** | **+1.4** |
| | comp=Z,0.1nm,0.4s,baz=215,slow=6.0,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.02** | **315** | PKP | **PKPdf** | **05 45 16.9** | **+2.1** |
| | comp=Z,0.7nm,0.8s,baz=123,slow=3.1,SNR=3.8 | | | | | | |

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*SOME **21** 05:31:31.3, 42°.82N×81°.70E, h0km*
*NNC **21** 05:31:34.1±1.2, 42°.85N×81°.73E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=10.3km s-min=5.1km az=153.0*
**ISC 21 05:31:36.3±1.8, 42°.90N±0°.08×81°.54E±0°.07, h10km, n35, σ1s25/55, 13C-5D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PDGK** | **Podgornoye** | **1.56** | **287** | ⇓P | **Pb** | **05 32 05.2** | **-0.2** |
| | 107nm,0.3s | | | | | | |
| PDGK | | | | ⇑S | **Sg** | **05 32 29.5** | **+3.0** |
| | 141nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **1.86** | **278** | *eP* | **Pb** | **05 32 09.8** | **-0.7** |
| | 76nm,0.3s | | | | | | |
| UZB | | | | *eS* | **Sg** | **05 32 38.0** | **+1.8** |
| | 222nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **1.91** | **319** | *eP* | **Pb** | **05 32 10.9** | **-0.4** |
| | 34nm,0.2s | | | | | | |
| DJR | | | | *eS* | **Sg** | **05 32 39.6** | **+1.8** |
| | 588nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **1.91** | **319** | Pg | **Pb** | **05 32 10.9** | **-0.4** |
| | 34nm,0.2s | | | | | | |
| DJR | | | | Lg | Lg | 05 32 39.6 | |
| | 588nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **2.16** | **286** | *eP* | **Pb** | **05 32 15.3** | **-0.3** |
| | 50nm,0.2s | | | | | | |
| KPKS | | | | *eS* | **Sg** | **05 32 47.0** | **+1.2** |
| | 208nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.16** | **286** | Pg | **Pb** | **05 32 15.4** | **-0.3** |
| | 50nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 05 32 47.0 | |
| | 208nm,0.4s | | | | | | |
| **KNOS** | **Konyrlen** | **2.25** | **311** | Pg | **Pb** | **05 32 16.9** | **-0.3** |
| | 26nm,0.2s | | | | | | |
| KNOS | | | | Lg | Lg | 05 32 49.5 | |
| | 109nm,0.4s | | | | | | |
| **ZHN** | **Zhinishke** | **2.29** | **278** | *eP* | **Pb** | **05 32 17.4** | **-0.4** |
| | 32nm,0.3s | | | | | | |
| ZHN | | | | *eS* | **Sg** | **05 32 50.3** | **+0.4** |
| | 214nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.29** | **278** | Pg | **Pb** | **05 32 17.4** | **-0.4** |
| | 32nm,0.3s | | | | | | |
| ZHN | | | | Lg | Lg | 05 32 50.3 | |
| | 214nm,0.2s | | | | | | |
| **SATY** | **Saty** | **2.30** | **275** | *eP* | **Pb** | **05 32 18.1** | **+0.1** |
| | 26nm,0.2s | | | | | | |
| SATY | | | | *eS* | **Sg** | **05 32 51.6** | **+1.3** |
| | 165nm,0.1s | | | | | | |
| **KURS** | **Kuram** | **2.53** | **285** | *eP* | **Pb** | **05 32 21.3** | **-0.6** |
| | 11nm,0.4s | | | | | | |
| KURS | | | | *eS* | **Sg** | **05 32 57.1** | **-0.5** |
| | 40nm,0.7s | | | | | | |
| **KURS** | **Kuram** | **2.53** | **285** | Pg | **Pb** | **05 32 21.3** | **-0.6** |
| | 11nm,0.4s | | | | | | |
| KURS | | | | Lg | Lg | 05 32 57.1 | |
| | 40nm,0.7s | | | | | | |
| **ARXS** | **Arharly** | **3.00** | **297** | *eP* | **Pb** | **05 32 30.6** | **+0.7** |
| | 7.7nm,0.3s | | | | | | |
| ARXS | | | | *eS* | **Sg** | **05 33 13.0** | **+0.4** |
| | 79nm,0.3s | | | | | | |
| **TDK** | **Taldyqorghan** | **3.09** | **314** | *eP* | **Pb** | **05 32 32.1** | **+0.8** |
| | 21nm,0.2s | | | | | | |
| TDK | | | | *eS* | **Sg** | **05 33 15.4** | **0.0** |
| | 127nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.26** | **277** | *eP* | **Pb** | **05 32 34.1** | **-0.2** |
| | 7.0nm,0.3s | | | | | | |
| KOTS | | | | *eS* | **Sg** | **05 33 19.2** | **-1.9** |
| | 80nm,0.5s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.26** | **277** | Pg | **Pb** | **05 32 34.1** | **-0.2** |
| | 11nm,0.2s | | | | | | |
| KOTS | | | | Lg | Lg | 05 33 19.2 | |
| | 80nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.30** | **276** | ⇑Pn | **Pn** | **05 32 30.0** | **+1.8** |
| | 5.9nm,0.5s | | | | | | |
| MDOK | | | | ⇑Pg | **Pg** | **05 32 39.0** | **-0.6** |
| | 10nm,0.6s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 05 33 23.5 | |
| | 32nm,0.6s | | | | | | |
| **KNDC** | **Almaty** | **3.37** | **277** | ⇑Pg | **Pg** | **05 32 38.8** | **-2.0** |
| | 18nm,0.4s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 05 33 26.5 | |
| | 40nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.37** | **274** | *eP* | **Pb** | **05 32 37.1** | **+0.7** |
| | 13nm,0.4s | | | | | | |
| TNSS | | | | *eS* | **Sg** | **05 33 24.3** | **-0.3** |
| | 31nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.37** | **274** | Pg | **Pb** | **05 32 37.1** | **+0.7** |
| | 13nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 05 33 24.3 | |
| | 32nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **3.45** | **288** | *eP* | **Pb** | **05 32 38.4** | **+0.9** |
| | 21nm,0.5s | | | | | | |
| CHKK | | | | *eS* | **Sg** | **05 33 26.7** | **-0.4** |
| | 45nm,0.2s | | | | | | |
| **KTBS** | **Karatobe** | **3.64** | **285** | *eP* | **Pb** | **05 32 41.7** | **+1.0** |
| | 24nm,0.6s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **05 33 32.1** | **-1.0** |
| | 41nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **3.64** | **285** | Pg | **Pb** | **05 32 41.7** | **+1.0** |
| | 25nm,0.6s | | | | | | |
| KTBS | | | | Lg | Lg | 05 33 32.1 | |
| | 29nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **3.92** | **286** | *eP* | **Pb** | **05 32 46.1** | **+0.7** |
| | 7.0nm,0.1s | | | | | | |
| KUU | | | | *eS* | **Sg** | **05 33 39.9** | **-2.1** |
| | 23nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **3.92** | **286** | Pg | **Pb** | **05 32 46.1** | **+0.7** |
| | 9.1nm,0.4s | | | | | | |
| KUU | | | | Lg | Lg | 05 33 39.9 | |
| | 21nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **3.92** | **4** | ⇓Pn | **Pn** | **05 32 36.0** | **-0.6** |
| | 1.3nm,0.2s | | | | | | |
| MAKZ | | | | ⇓Pg | **Pb** | **05 32 46.0** | **+0.5** |
| | 3.7nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | **05 33 24.2** | **+1.6** |
| | 4.6nm,0.4s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 05 33 38.2 | |
| | 15nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **3.93** | **8** | Pn | **Pn** | **05 32 36.5** | **-0.2** |
| | 0.2nm,0.2s,baz=187,slow=13,SNR=116 | | | | | | |
| MK31 | | | | Pg | **Pb** | **05 32 46.1** | **+0.4** |
| | 2.2nm,0.3s,baz=185,slow=13,SNR=30 | | | | | | |
| MK31 | | | | Lg | Lg | 05 33 40.5 | |
| | 17nm,0.5s,baz=189,slow=27,SNR=15 | | | | | | |
| **KST** | **Kastek** | **4.09** | **274** | *eP* | **Pb** | **05 32 50.0** | **+1.4** |
| | 9.3nm,0.4s | | | | | | |
| KST | | | | *eS* | **Sg** | **05 33 46.2** | **-1.5** |
| | 24nm,0.7s | | | | | | |
| **KST** | **Kastek** | **4.09** | **274** | Pg | **Pb** | **05 32 50.0** | **+1.4** |
| | 9.3nm,0.6s | | | | | | |
| KST | | | | Lg | Lg | 05 33 46.2 | |
| | 24nm,0.7s | | | | | | |
| **KRBS** | **Karabastau** | **4.35** | **283** | *eP* | **Pb** | **05 32 53.6** | **+0.7** |
| | 3.7nm,0.3s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **05 33 53.6** | **-2.4** |
| | 9.0nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **4.35** | **283** | Pg | **Pb** | **05 32 53.6** | **+0.7** |
| | 3.7nm,0.4s | | | | | | |
| KRBS | | | | Lg | Lg | 05 33 53.6 | |
| | 10nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.36** | **272** | ⇑Pn | **Pn** | **05 32 45.0** | **+2.2** |
| | 4.5nm,0.8s | | | | | | |
| TKM2 | | | | ⇑Pg | **Pb** | **05 32 54.6** | **+1.4** |
| | 4.6nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 05 33 59.0 | |
| | 15nm,0.4s | | | | | | |
| **CHMS** | **Chumysh** | **4.98** | **273** | ⇑Pg | **Pg** | **05 33 08.4** | **-3.3** |
| | 2.5nm,0.5s | | | | | | |
| CHMS | | | | ⇓Lg | Lg | 05 34 19.1 | |
| | 7.9nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **5.19** | **269** | Pg | **Pg** | **05 33 14.2** | **-1.5** |
| | 5.4nm,0.6s | | | | | | |
| AAK | | | | Lg | Lg | 05 34 23.3 | |
| | 13nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **8.09** | **275** | ⇑Pg | Pg | 05 34 04.0 | -7.1 |
| | 0.2nm,0.3s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 05 35 56.8 | |
| | 1.6nm,0.5s,baz=93,slow=30,SNR=5.2 | | | | | | |

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*IDC **21** 05:37:08.2±2.7, 17°.97S×177°.75W, h504km±25km, mb3.7/7, mbtmp4.6/7, Error ellipse: s-maj=26.0km s-min=19.2km az=100.0*
*NEIC **21** 05:37:18.1±1.3, 18°.1S±0°.1×178°.09W±0°.08, h609km±10km, mb4.4/24, Error ellipse: s-maj=20.8km s-min=9.6km az=159.0*
**ISC 21 05:37:17.1±0.6, 18°.0S±0°.1×178°.17W±0°.10, h590km, n41, σ2s14/47, mb4.3/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.61** | **274** | P | **P** | **05 38 42.0** | **+2.7** |
| **NIUE** | **Niue** | **7.89** | **99** | P | **P** | **05 39 15.9** | **+0.9** |
| **THZ** | **Tophouse** | **24.86** | **196** | P | **P** | **05 41 53.1** | **-1.3** |
| **MLZ** | **Mavora Lakes** | **29.56** | **200** | P | **P** | **05 42 34.8** | **-0.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CTAO** | **Charters Tower** | **33.65** | **261** | P | **P** | **05 43 10.8** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 05 43 48.7 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **37.27** | **231** | P | **P** | **05 43 38.9** | **-1.3** |
| TOO | | | | IAmb | IAmb | 05 44 09.2 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **COEN** | **Coen** | **37.33** | **270** | P | **P** | **05 43 41.8** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.77** | **241** | P | **P** | **05 43 53.1** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.77** | **241** | P | **P** | **05 43 53.1** | **+0.7** |
| | comp=Z,2.5nm,0.5s,baz=98,slow=11,SNR=6.8 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.55** | **241** | P | **P** | **05 44 29.9** | **-0.2** |
| BBOO | | | | IAmb | IAmb | 05 44 33.4 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **05 44 38.7** | **0.0** |
| WR0 | | | | IAmb | IAmb | 05 45 11.1 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **05 44 39.0** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 05 44 40.1 | |
| | comp=Z,7.9nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.82** | **260** | P | **P** | **05 44 39.8** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 05 45 23.0 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.82** | **260** | P | **P** | **05 44 39.6** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 05 44 39.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **05 44 39.2** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **05 44 39.6** | **-0.5** |
| | comp=Z,5.6nm,0.6s,baz=95,slow=7.0,SNR=125 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 46 08.7** | **-0.4** |
| | comp=Z,0.5nm,0.5s,baz=92,slow=3.7,SNR=3.2 | | | | | | |
| WRA | | | | ScP | **ScP** | **05 49 14.6** | **+8.7** |
| | comp=Z,0.3nm,0.4s,baz=96,slow=7.2,SNR=2.2 | | | | | | |
| WRA | | | | S | **S** | **05 50 33.9** | **-2.0** |
| | comp=Z,0.6nm,1.1s,baz=108,slow=13,SNR=2.0 | | | | | | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **44.98** | **254** | | **P** | **05 44 41.0** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 05 44 42.2 | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | **P** | **05 44 40.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | **P** | **05 44 41.2** | **0.0** |
| | comp=Z,12nm,0.6s,baz=86,slow=8.7,SNR=94 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 46 09.2** | **-0.4** |
| | comp=Z,0.8nm,0.5s,baz=105,slow=3.6,SNR=4.2 | | | | | | |
| ASAR | | | | ScP | **ScP** | **05 49 15.7** | **+9.3** |
| | comp=Z,1.4nm,0.6s,baz=88,slow=8.7,SNR=11 | | | | | | |
| ASAR | | | | S | **S** | **05 50 36.5** | **-1.3** |
| | comp=Z,1.2nm,0.9s,baz=84,slow=16,SNR=6.3 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.02** | **268** | P | **P** | **05 45 10.7** | **-1.0** |
| **FORT** | **Forrest** | **50.16** | **245** | P | **P** | **05 45 18.8** | **-1.0** |
| FORT | | | | IAmb | IAmb | 05 45 18.9 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **50.70** | **264** | P | **P** | **05 45 22.9** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 05 45 24.3 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **SBA** | **Scott Base** | **60.31** | **184** | P | **P** | **05 46 29.8** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **68.14** | **323** | P | **P** | **05 47 19.3** | **-0.1** |
| | comp=Z,2.6nm,0.4s,baz=155,slow=6.1,SNR=5.5 | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | **05 47 41.4** | **-0.7** |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | **05 47 41.2** | **-0.8** |
| | comp=Z,1.7nm,0.5s,baz=15,slow=2.1,SNR=26 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.85** | **345** | P | **P** | **05 47 51.4** | **-1.0** |
| **PETK** | **Petropavlovsk-** | **73.85** | **345** | P | **P** | **05 47 52.2** | **-0.2** |
| | comp=Z,3.6nm,0.6s,baz=114,slow=7.6,SNR=6.4 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **S12K** | **Black Hills** | **74.70** | **9** | P | **P** | **05 47 56.3** | **-0.8** |
| S12K | | | | IAmb | IAmb | 05 48 08.9 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **PLK4** | **Peulik 4** | **77.53** | **12** | P | **P** | **05 48 11.5** | **-1.2** |
| **OHAK** | **Old Harbor** | **77.79** | **14** | P | **P** | **05 48 13.8** | **-0.1** |
| OHAK | | | | IAmb | IAmb | 05 48 36.6 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **78.46** | **14** | P | **P** | **05 48 17.3** | **-0.3** |
| **N15K** | **Kwethluk River** | **79.29** | **9** | P | **P** | **05 48 22.1** | **+0.1** |
| **O18K** | **Koktuh Hills** | **79.83** | **12** | P | **P** | **05 48 24.3** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **89.14** | **290** | P | **P** | **05 49 12.0** | **+0.8** |
| | comp=Z,0.8nm,0.3s,baz=107,slow=3.0,SNR=6.1 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.08** | **321** | PKP | **PKPdf** | **05 54 54.5** | **-1.1** |
| | comp=Z,0.4nm,0.4s,baz=172,slow=2.9,SNR=2.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.47** | **350** | PKP | **PKPdf** | **05 55 12.5** | **-0.8** |
| | comp=Z,1.1nm,0.8s,baz=0.0,slow=2.5,SNR=1.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **140.77** | **332** | PKP | **PKiKP** | **05 55 41.6** | **-1.7** |
| | comp=Z,0.8nm,0.4s,baz=51,slow=3.8,SNR=4.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.03** | **315** | PKPbc | **PKPbc** | **05 55 48.7** | **-0.7** |
| | comp=Z,1.3nm,0.5s,baz=126,slow=4.1,SNR=12 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.40** | **303** | PKPbc | **PKPbc** | **05 55 52.0** | **-1.4** |
| | comp=Z,1.3nm,0.5s,baz=72,slow=2.9,SNR=5.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.78** | **345** | PKPbc | **PKPbc** | **05 55 55.4** | **-1.1** |
| | comp=Z,0.4nm,0.2s,baz=326,slow=5.9,SNR=5.5 | | | | | | |

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**ISC 21 05:41:21.3±2.0, 59°.07N±0°.08×138°.03W±0°.05, h12km±14km, n13, σ0s76/18, Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **P29M** | **Windy Craggy** | **0.58** | **15** | P | **Pg** | **05 41 32.7** | **+0.1** |
| | baz=196,SNR=21 | | | | | | |
| P29M | | | | S | **Sg** | **05 41 40.2** | **0.0** |
| | baz=196 | | | | | | |
| **PNL** | **Peninsula** | **0.92** | **311** | P | **Pb** | **05 41 39.0** | **-0.2** |
| | baz=128,SNR=89 | | | | | | |
| PNL | | | | S | **Sg** | **05 41 51.4** | **+0.3** |
| | baz=128 | | | | | | |
| **PLBC** | **Pleasant Camp** | **0.94** | **65** | P | **Pb** | **05 41 38.5** | **-0.9** |
| | baz=249,SNR=29 | | | | | | |
| PLBC | | | | S | **Sb** | **05 41 51.5** | **-0.3** |
| | baz=249 | | | | | | |
| **P30M** | **Million Dollar** | **1.18** | **27** | P | **Pn** | **05 41 43.2** | **-0.5** |
| | baz=209,SNR=21 | | | | | | |
| P30M | | | | S | **Sg** | **05 41 59.2** | **-0.2** |
| | baz=209 | | | | | | |
| **O29M** | **Mount Kennedy** | **1.27** | **347** | P | **Pn** | **05 41 44.2** | **-0.7** |
| | baz=167 | | | | | | |
| O29M | | | | S | **Sb** | **05 42 00.4** | **-1.0** |
| | baz=167 | | | | | | |
| **SKA

21nm,1.5s,0.2nm
**PWJI Pagerwojo 5.07 274** P **Pn** **05 44 19.5 +0.3**
23nm,2.3s,0.2nm
**UGM Wanagama 6.35 274** P **Pn** **05 44 36.5 -0.3**
**WRA Warramunga Arr 20.41 126** P **P** **05 47 40.2 -0.3**
2.1nm,0.5s,baz=301,slow=12,SNR=39
2.1nm,0.5s
**ASAR Alice Springs 22.27 135** P **P** **05 47 59.8 -0.8**
1.3nm,0.6s,baz=313,slow=8.5,SNR=12
1.3nm,0.6s
**STKA Stephens Creek 32.76 139** P **P** **05 49 36.3 0.0**
1.7nm,0.7s,baz=291,slow=5.0,SNR=3.0
1.7nm,0.7s
**CPUP Villa Florida 145.05 189** PKPbc **PKPab** **06 02 41.5 +0.6**
2.1nm,0.7s,baz=162,slow=3.7,SNR=5.3

*IDC **21** 05:45:31.9±1.3,23°.45N×142°.88E,h0km,mb3.9/3, mbtmp4.0/4,ML4.0/1,Error ellipse: s-maj=100.3km s-min=23.2km az=101.0*
**ISC 21 05:45:36.8±1.3,23°.54N±0°.10×142°.5E±0°.5,h35km,n7, σ0s83/5,mb3.9/3,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.55** | **355** | Pn | **Pn** | **05 46 30.2** | **+0.8** |
| | 12nm,0.3s,baz=146,slow=18,SNR=1.4 | | | | | | |
| JCJ | | | | Sn | **Sn** | **05 47 09.4** | **-0.9** |
| | 44nm,0.3s,baz=73,slow=19,SNR=10 | | | | | | |
| | 34nm,0.3s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.94** | **95** | T | T | 06 14 57.3 | |
| | baz=283,slow=74 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.94** | **95** | T | T | 06 15 06.8 | |
| | baz=283,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.96** | **95** | T | T | 06 14 39.4 | |
| | baz=283 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.96** | **191** | P | **P** | **05 53 40.6** | **-0.1** |
| | 2.3nm,0.4s,baz=12,slow=8.6,SNR=27 | | | | | | |
| | 2.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **47.67** | **191** | P | **P** | **05 54 09.8** | **-0.2** |
| | 0.4nm,0.4s,baz=16,slow=13,SNR=8.9 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **60.68** | **28** | P | **P** | **05 55 44.1** | **-0.1** |
| | 0.6nm,0.7s,baz=258,slow=5.4,SNR=5.3 | | | | | | |
| | 0.6nm,0.7s | | | | | | |

*AEIC **21** 05:47:35.4±1.1,69°.55N±0°.04×144°.67W±0°.04,h14km±6km, ML3.4,ML3.5/80(NEIC),Error ellipse: s-maj=6.1km s-min=1.5km az=170.0*
*IDC **21** 05:47:36.3±5.5,69°.63N×144°.44W,h0km,mb3.2/1, mbtmp3.5/4,ML3.6/3,MS2.8/2,Error ellipse: s-maj=74.6km s-min=27.0km az=147.0*
*NEIC **21** 05:47:36.7±1.5,69°.59N±0°.03×144°.58W±0°.05,h10km±2km, Error ellipse: s-maj=5.9km s-min=3.1km az=332.0*
**ISC 21 05:47:35.9±1.0,69°.58N±0°.04×144°.59W±0°.02,h11**km±9km, **n67,σ1s26/77,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.31** | **81** | | **Pg** | **05 47 42.0** | **-0.2** |
| C27K | | | | Sg | **Sg** | **05 47 46.4** | **0.0** |
| C27K | | | | IAML | | 05 47 48.4 | |
| | comp=E,6μm,0.6s | | | | | | |
| C27K | | | | IAML | | 05 47 48.7 | |
| | comp=N,6μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.36** | **342** | | **Pg** | **05 47 43.5** | **+0.5** |
| C26K | | | | | **Sg** | **05 47 49.0** | **+1.2** |
| **D25K** | **Kavik River** | **0.68** | **249** | | **Pg** | **05 47 47.3** | **-1.7** |
| D25K | | | | | **Sg** | **05 47 56.7** | **-1.3** |
| **D27M** | **Malcolm River** | **1.33** | **103** | | **Pn** | **05 47 59.4** | **-0.9** |
| D27M | | | | | **Sg** | **05 48 20.5** | **+1.9** |
| D27M | | | | IAML | | 05 48 23.2 | |
| | comp=E,928nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.44** | **278** | | **Pn** | **05 48 02.2** | **+0.4** |
| C24K | | | | | **Sg** | **05 48 22.8** | **+0.5** |
| C24K | | | | IAML | | 05 48 24.1 | |
| | comp=E,714nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.56** | **256** | | **Pn** | **05 48 04.3** | **+0.9** |
| D24K | | | | | **Sg** | **05 48 26.7** | **+0.7** |
| D24K | | | | IAML | | 05 48 31.6 | |
| | comp=E,674nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.77** | **141** | Pn | **Pn** | **05 48 07.3** | **+0.9** |
| E27K | | | | | **Sn** | **05 48 29.3** | **+0.4** |
| E27K | | | | IAML | | 05 48 33.3 | |
| | comp=E,482nm,0.8s | | | | | | |
| E27K | | | | IAML | | 05 48 35.4 | |
| | comp=N,348nm,0.3s | | | | | | |
| **F26K** | **Sheenjek River** | **1.90** | **175** | Pn | **Pn** | **05 48 09.3** | **+1.1** |
| F26K | | | | | **Sb** | **05 48 34.8** | **+0.5** |
| F26K | | | | IAML | | 05 48 41.6 | |
| | comp=N,401nm,0.5s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.02** | **245** | | **Pn** | **05 48 10.9** | **+1.1** |
| **F25K** | **Christian Rive** | **2.03** | **191** | Pn | **Pn** | **05 48 11.1** | **+1.1** |
| F25K | | | | | **Sb** | **05 48 38.7** | **+0.7** |
| F25K | | | | IAML | | 05 48 42.0 | |
| | comp=E,391nm,0.9s | | | | | | |
| F25K | | | | IAML | | 05 48 42.1 | |
| | comp=N,416nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.06** | **116** | Pn | **Pn** | **05 48 11.8** | **+1.5** |
| E28M | | | | IAML | | 05 48 46.1 | |
| | comp=N,277nm,0.6s | | | | | | |
| E28M | | | | IAML | | 05 48 51.7 | |
| | comp=E,265nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.07** | **225** | | **Pn** | **05 48 11.7** | **+1.1** |
| **D28M** | **Stokes Point** | **2.08** | **94** | | **Pb** | **05 48 13.2** | **-0.3** |
| **C23K** | **Itkillik River** | **2.12** | **280** | Pn | **Pn** | **05 48 12.5** | **+1.4** |
| **BMAR** | **Burnt Mountain** | **2.16** | **180** | | **Pn** | **05 48 13.0** | **+1.3** |
| **D23K** | **Nanushuk River** | **2.25** | **257** | | **Pn** | **05 48 14.2** | **+1.2** |
| D23K | | | | IAML | | 05 49 01.1 | |
| | comp=E,224nm,1.0s | | | | | | |
| D23K | | | | IAML | | 05 49 03.4 | |
| | comp=N,273nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **2.38** | **232** | | **Pn** | **05 48 15.1** | **+0.2** |
| **F24K** | **Squaw Lake** | **2.40** | **212** | | **Pn** | **05 48 16.1** | **+1.1** |
| F24K | | | | IAML | | 05 48 53.7 | |
| | comp=E,184nm,0.4s | | | | | | |
| **F28M** | **Old Crow** | **2.63** | **137** | | **Pn** | **05 48 18.9** | **+0.8** |
| F28M | | | | IAML | | 05 49 03.4 | |
| | comp=E,195nm,0.6s | | | | | | |
| F28M | | | | IAML | | 05 49 03.6 | |
| | comp=N,187nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.69** | **113** | Pn | **Pn** | **05 48 20.8** | **+1.7** |
| E29M | | | | IAML | | 05 49 05.1 | |
| | comp=N,221nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **2.97** | **260** | | **Pn** | **05 48 23.3** | **+0.5** |
| D22K | | | | IAML | | 05 49 20.8 | |
| | comp=N,170nm,1.1s | | | | | | |
| D22K | | | | IAML | | 05 49 21.9 | |
| | comp=E,182nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.99** | **244** | | **Pn** | **05 48 23.6** | **+0.5** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **202** | | **Pn** | **05 48 24.9** | **+0.4** |
| G24K | | | | IAML | | 05 49 13.2 | |
| | comp=E,169nm,0.6s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.13** | **288** | | **Pn** | **05 48 26.4** | **+1.3** |
| **COLD** | **Coldfoot** | **3.14** | **224** | | **Pn** | **05 48 26.3** | **+1.1** |
| **H25L** | **Birch Creek** | **3.36** | **188** | | **Pn** | **05 48 29.1** | **+1.0** |
| **F22K** | **John River** | **3.48** | **237** | | **Pn** | **05 48 31.1** | **+1.3** |
| **B21K** | **Ikpikpuk River** | **3.51** | **275** | | **Pn** | **05 48 31.2** | **+1.0** |
| B21K | | | | IAML | | 05 49 41.0 | |
| | comp=E,87nm,0.8s | | | | | | |
| **G23K** | **Bananza Creek** | **3.52** | **218** | | **Pn** | **05 48 32.0** | **+1.5** |
| G23K | | | | IAML | | 05 49 31.3 | |
| | comp=E,106nm,0.8s | | | | | | |
| G23K | | | | IAML | | 05 49 36.6 | |
| | comp=N,76nm,0.8s | | | | | | |
| **H27K** | **Steamboat Moun** | **3.56** | **160** | | **Pn** | **05 48 32.0** | **+1.1** |
| **E21K** | **Killik River** | **3.56** | **256** | | **Pn** | **05 48 31.4** | **+0.4** |
| E21K | | | | IAML | | 05 49 36.3 | |
| | comp=E,97nm,1.3s | | | | | | |
| E21K | | | | IAML | | 05 49 39.4 | |
| | comp=N,114nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **3.63** | **134** | Pn | **Pn** | **05 48 33.0** | **+1.1** |
| **C21K** | **Knifeblade Rid** | **3.63** | **268** | | **Pn** | **05 48 33.2** | **+1.3** |
| **F30M** | **Barrier River** | **3.79** | **117** | | **Pn** | **05 48 36.3** | **+2.2** |
| **A22K** | **Sinclair Lake** | **3.80** | **297** | | **Pn** | **05 48 35.2** | **+1.1** |
| **H24K** | **Noodor Dome** | **3.96** | **200** | Pn | **Pn** | **05 48 36.8** | **+0.3** |
| H24K | | | | IAML | | 05 49 43.3 | |
| | comp=E,58nm,1.1s | | | | | | |
| H24K | | | | IAML | | 05 49 50.2 | |
| | comp=N,53nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.05** | **238** | | **Pn** | **05 48 38.1** | **+0.4** |
| **G30M** | **tAoh Zraii Nji** | **4.06** | **126** | | **Pn** | **05 48 39.4** | **+1.5** |
| G30M | | | | IAML | | 05 50 09.6 | |
| | comp=E,62nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.10** | **185** | Pn | **Pn** | **05 48 39.3** | **+0.9** |
| PRP | | | | IAML | | 05 49 31.3 | |
| | comp=N,56nm,0.5s | | | | | | |
| **H29M** | **Whitestone** | **4.11** | **142** | Pn | **Pn** | **05 48 39.8** | **+1.3** |
| H29M | | | | IAML | | 05 49 35.3 | |
| | comp=E,70nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **4.19** | **103** | | **Pn** | **05 48 40.6** | **+1.0** |
| **INK** | **Inuvik** | **4.19** | **103** | Pn | **Pn** | **05 48 40.9** | **+1.4** |
| | comp=E,1.4nm,0.3s,baz=302,slow=9.9,SNR=72 | | | | | | |
| INK | | | | Sn | **Sn** | **05 49 24.7** | **-3.7** |
| | comp=E,2.6nm,0.3s,baz=274,slow=15,SNR=6.4 | | | | | | |
| | comp=E,7.6nm,0.4s | | | | | | |
| **H23K** | **Yukon River** | **4.21** | **209** | | **Pn** | **05 48 40.8** | **+0.9** |
| H23K | | | | IAML | | 05 49 57.4 | |
| | comp=E,60nm,0.9s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.33** | **172** | | **Pn** | **05 48 42.5** | **+1.1** |
| **D20K** | **Etivluk River** | **4.38** | **264** | | **Pn** | **05 48 43.7** | **+1.5** |
| **E20K** | **Nigu River** | **4.39** | **258** | | **Pn** | **05 48 43.6** | **+1.2** |
| **A21K** | **Barrow** | **4.40** | **299** | | **Pn** | **05 48 43.0** | **+0.6** |
| **H22K** | **Ishtalitna Cre** | **4.51** | **218** | | **Pn** | **05 48 44.7** | **+0.7** |
| **I28M** | **Miner Creek** | **4.52** | **154** | Pn | **Pn** | **05 48 45.4** | **+1.2** |
| I28M | | | | IAML | | 05 49 45.8 | |
| | comp=N,41nm,0.6s | | | | | | |
| I28M | | | | IAML | | 05 50 12.4 | |
| | comp=E,46nm,1.1s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.53** | **113** | | **Pn** | **05 48 45.7** | **+1.5** |
| F31M | | | | IAML | | 05 50 09.8 | |
| | comp=N,41nm,1.5s | | | | | | |
| F31M | | | | IAML | | 05 50 15.6 | |
| | comp=E,42nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.82** | **205** | | **Pn** | **05 48 48.9** | **+0.7** |
| I23K | | | | IAML | | 05 50 29.1 | |
| | comp=E,38nm,1.6s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.85** | **244** | | **Pn** | **05 48 49.3** | **+0.8** |
| F20K | | | | IAML | | 05 50 26.4 | |
| | comp=N,28nm,1.0s | | | | | | |
| **MDM** | **Murphy Dome** | **4.85** | **199** | | **Pn** | **05 48 49.2** | **+0.6** |
| MDM | | | | IAML | | 05 50 13.3 | |
| | comp=E,34nm,0.6s | | | | | | |
| MDM | | | | IAML | | 05 50 14.9 | |
| | comp=N,30nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **4.91** | **192** | | **Pn** | **05 48 49.9** | **+0.4** |
| **ILAR** | **Eielson Array** | **4.91** | **192** | Pn | **Pn** | **05 48 50.5** | **+1.0** |
| | comp=N,2.6nm,0.3s,baz=6.0,slow=12,SNR=70 | | | | | | |
| ILAR | | | | Sn | **Sn** | **05 49 46.7** | **+0.5** |
| | comp=N,2.6nm,0.3s,baz=9.5,slow=21,SNR=8.7 | | | | | | |
| ILAR | | | | LR | LR | 05 51 09.9 | |
| | comp=N,59nm,19.2s,baz=141,slow=43 | | | | | | |
| | comp=N,4.7nm,0.3s | | | | | | |
| **A19K** | **Wainwright** | **5.72** | **284** | | **Pn** | **05 49 02.0** | **+1.6** |
| **K24K** | **Donnelly Dome** | **5.82** | **185** | | **Pn** | **05 49 03.8** | **+1.8** |
| **DOT** | **Dot Lake** | **5.96** | **178** | | **Pn** | **05 49 05.3** | **+1.4** |
| **B18K** | **Kokolik River** | **6.05** | **276** | | **Pn** | **05 49 06.2** | **+1.0** |
| **F18K** | **Selawik** | **6.37** | **249** | | **Pn** | **05 49 10.2** | **+0.7** |
| **C17K** | **DeLong Mountai** | **6.75** | **269** | | **Pn** | **05 49 14.1** | **-0.7** |
| **E17K** | **Hotham Inlet** | **6.85** | **257** | | **Pn** | **05 49 16.1** | **+0.1** |
| **D17K** | **Noatak River** | **7.00** | **263** | | **Pn** | **05 49 17.7** | **-0.5** |
| **YUK2** | **White River** | **7.97** | **167** | | **Pn** | **05 49 33.6** | **+2.0** |
| **YKA** | **Yellowknife Ar** | **13.96** | **106** | Pn | **Pn** | **05 50 49.9** | **-3.3** |
| | comp=N,0.4nm,0.3s,baz=310,slow=12,SNR=12 | | | | | | |
| YKA | | | | Sn | Sn | 05 53 15.3 | -13 |
| | comp=N,0.2nm,0.3s,baz=317,slow=23,SNR=2.5 | | | | | | |
| | comp=N,0.5nm,0.3s | | | | | | |
| **FRB** | **Frobisher Bay** | **28.80** | **64** | LR | LR | 06 06 15.7 | |
| | comp=N,30nm,18.9s,baz=222,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.31** | **128** | P | **P** | **05 54 06.9** | **+2.2** |
| | comp=N,0.1nm,0.3s,baz=341,slow=8.7,SNR=2.3 | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | |

*MOS **21** 05:47:55.2±1.0,10°.73S×41°.30E,h10km,mb4.8/17,Error ellipse: s-maj=10.1km s-min=7.6km az=81.1*
*IDC **21** 05:47:55.4±0.6,10°.81S×41°.42E,h0km,mb4.1/24, mbtmp4.1/25,ML5.0/2,MS3.8/44,Error ellipse: s-maj=17.8km s-min=16.1km az=111.0*
*NEIC **21** 05:47:57.4±2.1,10°.73S±0°.06×41°.35E±0°.06,h10km±1km, mb5.0/24,Error ellipse: s-maj=13.4km s-min=5.2km az=221.0*
**ISC 21 05:47:56.6±0.3,10°.81S±0°.05×41°.24E±0°.05,h10km,n215, σ1s81/179,mb4.6/79,MS3.8/42,7C-2D,Northwest of Madagascar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DODT** | **Dodoma, Tanzan** | **7.11** | **310** | *i* P | **Pn** | **05 49 40.3** | **-0.7** |
| DODT | | | | *i* S | Sn | 05 50 53.1 | -8.9 |
| **ZOMB** | **Zomba** | **7.32** | **231** | *i* PN | **Pn** | **05 49 46.6** | **+2.8** |
| ZOMB | | | | *i* SN | **Sn** | **05 51 03.2** | **-3.8** |
| **ZOMB** | **Zomba** | **7.32** | **231** | *i* PN | **Pn** | **05 49 46.6** | **+2.8** |
| ZOMB | | | | *i* SN | **Sn** | **05 51 03.2** | **-3.8** |
| **SBV** | **Sambava** | **8.88** | **108** | *eP* | **Pn** | **05 50 02.8** | **-2.4** |
| **KIBK** | **Kibwezi** | **8.99** | **339** | Pn | **Pn** | **05 50 05.7** | **-1.1** |
| **OPO** | **Ambohidratompo** | **9.62** | **144** | Pn | **Pn** | **05 50 15.1** | **-0.3** |
| | 2.4nm,0.3s,baz=312,slow=15,SNR=107 | | | | | | |
| OPO | | | | Sn | **Sn** | **05 51 55.6** | **-8.1** |
| | 6.0nm,0.3s,baz=66,slow=23,SNR=8.4 | | | | | | |
| OPO | | | | LR | LR | 05 53 49.6 | |
| | comp=Z,323nm,18.4s,baz=264,slow=37 | | | | | | |
| **ABPO** | **Ambohimpanom** | **10.00** | **145** | Pn | **Pn** | **05 50 20.8** | **+0.2** |
| **ABPO** | **Ambohimpanom** | **10.00** | **145** | *eP* | **Pn** | **05 50 21.1** | **+0.5** |
| **ABPO** | **Ambohimpanom** | **10.00** | **145** | P | **Pn** | **05 50 20.8** | **+0.2** |
| **KMBO** | **Kilima Mbogo** | **10.41** | **337** | Pn | **Pn** | **05 50 22.8** | **-3.5** |
| | 3.2nm,0.3s,baz=164,slow=14,SNR=18 | | | | | | |
| KMBO | | | | Sn | Sn | 05 52 12.3 | -11 |
| | 5.7nm,0.3s,baz=53,slow=17,SNR=8.2 | | | | | | |
| KMBO | | | | LR | LR | 05 54 33.1 | |
| | comp=Z,587nm,19.0s,baz=178,slow=38 | | | | | | |
| **VOI** | **Vohitsoka** | **12.25** | **155** | Pn | **Pn** | **05 50 51.4** | **+0.1** |
| **VOI** | **Vohitsoka** | **12.25** | **155** | *eP* | **Pn** | **05 50 51.6** | **+0.2** |
| **CHIPN** | **CHIPINGE** | **12.50** | **220** | *eP* | **Pn** | **05 50 56.1** | **+1.3** |
| **CHIPN** | **CHIPINGE** | **12.50** | **220** | *i* P | **Pn** | **05 50 55.1** | **+0.4** |
| CHIPN | | | | *i* S | Sn | 05 53 06.0 | -8.3 |
| **CHIPN** | **CHIPINGE** | **12.50** | **220** | *i* P | **Pn** | **05 50 55.1** | **+0.4** |
| CHIPN | | | | *i* S | Sn | 05 53 06.0 | -8.3 |
| **KRI** | **Karoi** | **12.78** | **241** | *eP* | **Pn** | **05 50 59.9** | **+1.3** |
| **KRI** | **Karoi** | **12.78** | **241** | *i* P | **Pn** | **05 50 58.7** | **0.0** |
| KRI | | | | *i* S | **Sn** | **05 53 16.2** | **-4.9** |
| **KRI** | **Karoi** | **12.78** | **241** | *i* P | **Pn** | **05 50 58.7** | **0.0** |
| KRI | | | | *i* S | **Sn** | **05 53 16.2** | **-4.9** |
| **LSZ** | **Lusaka** | **13.47** | **249** | Pn | **Pn** | **05 51 07.7** | **-0.4** |
| **LSZ** | **Lusaka** | **13.47** | **249** | *eP* | **Pn** | **05 51 08.1** | **0.0** |
| **LSZ** | **Lusaka** | **13.47** | **249** | P | **Pn** | **05 51 07.7** | **-0.4** |
| **MBAR** | **Mbarara** | **14.55** | **313** | Pn | **Pn** | **05 51 20.4** | **-2.6** |
| **MBAR** | **Mbarara** | **14.55** | **313** | *eP* | **Pn** | **05 51 20.4** | **-2.6** |
| **MBAR** | **Mbarara** | **14.55** | **313** | Pn | **Pn** | **05 51 20.7** | **-2.3** |
| | 7.2nm,0.3s,baz=105,slow=20,SNR=14 | | | | | | |
| MBAR | | | | Sn | Sn | 05 53 50.2 | -14 |
| | 6.2nm,0.3s,baz=29,slow=21,SNR=2.8 | | | | | | |
| MBAR | | | | LR | LR | 05 57 13.1 | |
| | comp=Z,578nm,18.7s,baz=123,slow=38 | | | | | | |
| **MBAR** | **Mbarara** | **14.55** | **313** | *i* P | **Pn** | **05 51 21.0** | **-2.0** |
| **FOMA** | **Nahampoana Res** | **15.10** | **160** | P | **Pn** | **05 51 32.7** | **+2.5** |
| FOMA | | | | IAmb | IAmb | 05 51 41.2 | |
| | comp=Z,57nm,0.9s | | | | | | |
| **LODK** | **Lodwar** | **15.30** | **337** | P | **P** | **05 51 36.6** | **-1.2** |
| **MSEY** | **Mahe Island** | **15.36** | **68** | | **Pn** | **05 51 31.6** | **-2.2** |
| MSEY | | | | IAmb | IAmb | 05 51 41.6 | |
| | comp=Z,66nm,0.8s | | | | | | |
| **MSEY** | **Mahe Island** | **15.36** | **68** | P | **Pn** | **05 51 31.6** | **-2.2** |
| MSEY | | | | pmax | pmax | | |
| | comp=Z,66nm,0.8s | | | | | | |
| **MATP** | **Matopo** | **15.55** | **231** | Pn | **Pn** | **05 51 38.4** | **+2.2** |
| | comp=Z,3.8nm,0.3s,baz=47,slow=14,SNR=112 | | | | | | |
| MATP | | | | Sn | **Sn** | **05 54 23.2** | **-5.4** |
| | comp=Z,2.1nm,0.3s,baz=337,slow=9.3,SNR=3.5 | | | | | | |
| MATP | | | | LR | LR | 05 57 48.4 | |
| | comp=Z,298nm,19.7s,baz=56,slow=38 | | | | | | |
| | comp=Z,21nm,0.6s | | | | | | |
| **MATP** | **Matopo** | **15.55** | **231** | *i* P | **P** | **05 51 40.0** | **-0.6** |
| **MATP** | **Matopo** | **15.55** | **231** | *i* P | **P** | **05 51 40.0** | **-0.6** |
| **MOPA** | **Mopani** | **15.74** | **215** | *eP* | **Pn** | **05 51 38.4** | **-0.2** |
| **MOPA** | **Mopani** | **15.74** | **215** | *i* P | **Pn** | **05 51 40.1** | **+1.5** |
| **MOPA** | **Mopani** | **15.74** | **215** | *i* P | **Pn** | **05 51 40.1** | **+1.5** |
| **MUSN** | **Musina, Limpop** | **15.78** | **222** | *eP* | **Pn** | **05 51 40.9** | **+1.8** |
| **MUSN** | **Musina, Limpop** | **15.78** | **222** | *i* P | **Pn** | **05 51 41.7** | **+2.6** |
| **MUSN** | **Musina, Limpop** | **15.78** | **222** | *i* P | **Pn** | **05 51 41.7** | **+2.6** |
| **MPHEP** | **Siloam, Limpop** | **16.01** | **220** | *eP* | **Pn** | **05 51 44.8** | **+2.6** |
| **HOED** | **Hoedspruit, Li** | **16.70** | **215** | *eP* | **Pn** | **05 51 52.5** | **+1.5** |
| **CRAIL** | **Swartwater, Li** | **17.22** | **225** | *eP* | **P** | **05 51 59.8** | **+0.7** |
| **PILG** | **Pilgrimsrest,** | **17.24** | **214** | *eP* | **Pn** | **05 51 59.0** | **+1.2** |
| **RER** | **Riviere de l'E** | **17.31** | **128** | | **Pn** | **05 51 59.2** | **+0.5** |
| RER | | | | IAmb | IAmb | 05 52 10.1 | |
| | comp=Z,61nm,0.8s | | | | | | |
| **WTBG** | **Waterberg Wild** | **17.77** | **220** | *eP* | **P** | **05 52 06.7** | **+1.4** |
| **LEPH** | **Lephalale, Lim** | **18.23** | **223** | *eP* | **P** | **05 52 13.6** | **+3.4** |
| **CRLN** | **Carolina, Mapu** | **18.46** | **214** | *eP* | **P** | **05 52 13.7** | **+0.9** |
| **POGA** | **Pongola** | **18.74** | **207** | | **P** | **05 52 16.5** | **+0.8** |
| **POGA** | **Pongola** | **18.74** | **207** | *eP* | **Pn** | **05 52 17.6** | **+1.5** |
| **NHAM** | **Northam, North** | **19.27** | **221** | *eP* | **Pn** | **05 52 24.8** | **+2.1** |
| **NYAT** | **Nyati, Northwe** | **19.43** | **220** | *eP* | **Pn** | **05 52 25.8** | **+1.2** |
| **HRAO** | **HartRAO** | **19.73** | **219** | *eP* | **Pn** | **05 52 29.2** | **+0.9** |
| **FURI** | **Furi** | **19.74** | **352** | LR | LR | 06 00 11.1 | |
| | comp=Z,314nm,19.0s,baz=161,slow=37 | | | | | | |
| **NWCL** | **Newcastle** | **19.93** | **211** | *eP* | **P** | **05 52 30.7** | **+1.8** |
| **LBTB** | **Lobatse** | **20.49** | **224** | P | Pn | 05 52 38.0 | +0.9 |
| **LBTB** | **Lobatse** | **20.49** | **224** | *eP* | **P** | **05 52 37.1** | **+2.1** |
| LBTB | | | | IAmb | IAmb | 05 52 43.3 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **LBTB** | **Lobatse** | **20.49** | **224** | P | **P** | **05 52 36.8** | **+1.7** |
| | comp=Z,11nm,0.7s,baz=36,slow=12,SNR=18 | | | | | | |
| LBTB | | | | S | **S** | **05 56 19.0** | **-5.5** |
| | comp=Z,6.7nm,0.7s,baz=114,slow=22,SNR=2.0 | | | | | | |
| LBTB | | | | LR | LR | 06 00 46.0 | |
| | comp=Z,342nm,19.8s,baz=46,slow=37 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **LBTB** | **Lobatse** | **20.49** | **224** | *i* P | Pn | 05 52 37.5 | +0.3 |
| **LBTB** | **Lobatse** | **20.49** | **224** | P | Pn | 05 52 38.0 | +0.8 |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **LBTB** | **Lobatse** | **20.49** | **224** | *i* P | Pn | 05 52 37.5 | +0.3 |
| **PRYS** | **Parys** | **20.69** | **217** | *eP* | Pn | 05 52 40.6 | +1.1 |
| PRYS | | | | IAmb | IAmb | 05 52 44.1 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **SNKL** | **Senekal, Frees** | **21.48** | **214** | *eP* | **P** | **05 52 48.3** | **+2.5** |
| SNKL | | | | IAmb | IAmb | 05 52 49.2 | |
| | comp=Z,106nm,1.2s | | | | | | |
| **ATD** | **Arta Tunnel** | **22.25** | **4** | LR | LR | 06 00 49.1 | |
| | comp=Z,7.9nm,21.7s,baz=202,slow=35 | | | | | | |
| **BOSA** | **Boshof** | **23.19** | **218** | P | **P** | **05 53 06.3** | **+2.4** |
| BOSA | | | | IAmb | IAmb | 05 53 08.2 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **23.19** | **218** | *eP* | **P** | **05 53 05.6** | **+1.7** |
| BOSA | | | | IAmb | IAmb | 05 53 08.0 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **23.19** | **218** | P | **P** | **05 53 05.5** | **+1.6** |
| | comp=Z,44nm,0.7s,baz=49,slow=9.4,SNR=88 | | | | | | |
| BOSA | | | | LR | LR | 06 02 14.9 | |
| | comp=Z,259nm,19.7s,baz=42,slow=37 | | | | | | |
| | comp=Z,44nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **23.19** | **218** | *i* P | **P** | **05 53 05.4** | **+1.6** |
| **BOSA** | **Boshof** | **23.19** | **218** | P | **P** | **05 53 06.3** | **+2.4** |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,44nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **23.19** | **218** | *i* P | **P** | **05 53 05.4** | **+1.6** |
| **TSUM** | **Tsumeb** | **24.30** | **247** | P | **P** | **05 53 17.2** | **+2.5** |
| TSUM | | | | IAmb | IAmb | 05 53 28.8 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **TSUM** | **Tsumeb** | **24.30** | **247** | LR | LR | 06 03 18.3 | |
| | comp=Z,342nm,21.6s,baz=70,slow=38 | | | | | | |
| **GRHM** | **Grahamstown, E** | **26.20** | **209** | P | **P** | **05 53 34.5** | **+2.8** |
| GRHM | | | | IAmb | IAmb | 05 53 37.5 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **SUR** | **Sutherland** | **28.56** | **218** | LR | LR | 06 05 24.7 | |
| | comp=Z,233nm,18.9s,baz=44,slow=37 | | | | | | |
| **DGAR** | **Diego Garcia** | **30.99** | **86** | *i* P | **P** | **05 54 14.9** | **+0.3** |
| **WSAR** | **Wadi Sarin** | **37.88** | **27** | LR | LR | 06 09 45.1 | |
| | comp=Z,81nm,20.1s,baz=231,slow=35 | | | | | | |
| **UOSS** | **Minazif** | **38.42** | **22** | P | **P** | **05 55 15.9** | **-2.7** |
| UOSS | | | | IAmb | IAmb | 05 55 28.3 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **EIL** | **Elat** | **40.70** | **352** | LR | LR | 06 12 12.1 | |
| | comp=Z,136nm,19.9s,baz=244,slow=36 | | | | | | |
| **PALK** | **Pallekele** | **43.19** | **67** | LR | LR | 06 11 05.6 | |
| | comp=Z,145nm,18.5s,baz=345,slow=32 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **43.94** | **353** | LR | LR | 06 13 33.1 | |
| | comp=Z,141nm,21.8s,baz=107,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.90** | **300** | P | **P** | **05 56 19.9** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **45.90** | **300** | P | **P** | **05 56 20.8** | **+1.0** |
| | comp=Z,1.0nm,0.6s,baz=132,slow=8.8,SNR=10 | | | | | | |
| TORD | | | | LR | LR | 06 15 47.0 | |
| | comp=Z,174nm,19.5s,baz=120,slow=36 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **IDI** | **Anoyia** | **48.39** | **342** | LR | LR | 06 19 18.7 | |
| | comp=Z,74nm,19.3s,baz=344,slow=39 | | | | | | |
| **KIC** | **Kosan Boka** | **48.85** | **288** | ⇑ *i* P | P | 05 56 53.5 | +11 |
| | comp=Z,15nm,1.0s | | | | | | |
| **DBIC** | **Dimbokro** | **49.06** | **289** | P | **P** | **05 56 45.4** | **+0.9** |
| | comp=Z,1.5nm,0.6s,baz=23,slow=11,SNR=1.4 | | | | | | |
| DBIC | | | | LR | LR | 06 18 16.2 | |
| | comp=Z,134nm,18.5s,baz=72,slow=37 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **LIC** | **Lamto** | **49.07** | **288** | ⇑ *eP* | P | 05 56 54.6 | +10 |
| | comp=Z,28nm,0.9s | | | | | | |
| **TIC** | **Toumodi** | **49.21** | **289** | ⇑ *iP* | P | 05 56 55.0 | +9.4 |
| | comp=Z,1.6nm,0.3s | | | | | | |
| **APE** | **Apeiranthos** | **49.86** | **344** | *i* P | **P** | **05 56 48.1** | **-2.1** |
| APE | | | | pmax | pmax | | |
| | comp=Z,62nm,1.2s | | | | | | |
| **BR104** | **Keskin Array S** | **50.75** | **352** | P | **P** | **05 56 56.5** | **-0.5** |
| | comp=Z,4.0nm,1.1s,comp=Z,39nm | | | | | | |
|

**UZHM Uzhgorod 61.51 346 P P 05 58 13.4 -0.2**
UZHM pP **pP 05 58 16.7 +0.5**
**MDT Midelt 61.59 317** LR LR 06 26 55.3
comp=Z,142nm,18.4s,baz=144,slow=38
**LUBAR Lubar, Ukraine 61.62 350 P P 05 58 14.1 -0.2**
**SOKA Soboth 61.85 340** *e*pP pP 05 58 22.2 +3.6
comp=Z,9.7nm,1.1s
**OBKA Obir 61.87 339** *i* pP pP 05 58 21.2 +2.4
comp=Z,9.9nm,0.9s
**AK07 Malin Array Si 62.00 351 P P 05 58 16.7 -0.2**
**ABKAR Akbulak array 62.03 14 P P 05 58 16.9 -0.3**
**AK10 Malin Array Si 62.04 351 P P 05 58 16.9 -0.2**
**ELIB Princess Elisa 62.06 186** *d*P **P 05 58 19.2 +2.0**
comp=Z,3.8nm,1.0s
**AK12 Malin Array Si 62.10 351 P P 05 58 17.2 -0.3**
**AKASG Malin Array Be 62.14 351 P P 05 58 18.4 +0.5**
comp=Z,0.2nm,0.3s,baz=176,slow=6.3,SNR=1.5
AKASG LR LR 06 27 36.9
comp=Z,41nm,19.1s,baz=142,slow=38
comp=Z,0.2nm,0.3s
**AKBB Malin Array Si 62.14 351** *i* P **P 05 58 18.7 +0.9**
AKBB pmax pmax
comp=Z,4.0nm,0.9s
**AKBB Malin Array Si 62.14 351 P P 05 58 17.5 -0.3**
**ARSA Arzberg 62.19 340** *i* pP pP 05 58 23.7 +2.9
comp=Z,7.9nm,1.1s
**MYKA Terra Mystica 62.29 339** *e*pP pP 05 58 23.8 +2.2
comp=Z,1.5nm,0.5s
**RONA Rosalia, Austr 62.33 341** *i* pP pP 05 58 24.7 +2.9
comp=Z,13nm,1.0s
**BBTS Babate 62.60 293** LR LR 06 25 59.6
comp=Z,108nm,18.2s,baz=342,slow=36
**CONA Conrad Observa 62.67 341** *i* pP pP 05 58 25.9 +1.8
comp=Z,7.3nm,1.0s
**LSA Lhasa 62.70 49 P P 05 58 23.8 +1.2**
**AKTO Aktyubinsk 62.72 12 P P 05 58 21.4 -0.3**
comp=Z,1.1nm,0.6s,baz=212,slow=6.5,SNR=2.0
AKTO LR LR 06 28 02.0
comp=Z,67nm,20.8s,baz=216,slow=38
comp=Z,1.1nm,0.6s
**KBA Koelnbreinsper 62.78 339** *e*pP pP 05 58 27.1 +2.1
comp=Z,4.3nm,1.0s
**ABTA Abfaltersbach 62.80 338** *i* pP pP 05 58 29.0 +4.0
comp=Z,1.8nm,0.6s
**MOA Molln 63.13 340** *i* pP pP 05 58 29.4 +2.3
comp=Z,9.0nm,0.9s
**BELG Belogornoye 63.19 4 P P 05 58 29.9 +5.1**
comp=Z,8.1nm,0.8s,baz=197,slow=14,SNR=1.1
BELG LR LR 06 27 05.9
comp=Z,47nm,21.7s,baz=147,slow=37
**BIOA Bad Ischl, Aus 63.20 339** *i* pP pP 05 58 31.2 +3.6
comp=Z,3.1nm,0.4s
**RNPP5 Staryi Chortor 63.21 349 P P 05 58 24.6 -0.3**
**LESA Schwarzleotal 63.31 339** *i* pP pP 05 58 32.7 +4.3
comp=Z,4.4nm,0.9s
**RNPP9 Sopachiv 63.38 349 P P 05 58 25.8 -0.3**
**KRUC Moravsky 63.51 342** *e*P **P 05 58 26.7 -0.3**
**WTTA Wattenberg 63.56 338** *i* pP pP 05 58 32.1 +2.0
comp=Z,2.8nm,0.6s
**VRAC Vranov 63.67 342** LR LR 06 29 36.9
comp=Z,52nm,18.4s,baz=198,slow=39
**FETA Feichten 63.69 337** *e*pP pP 05 58 33.1 +2.1
comp=Z,5.6nm,0.9s
**MORC Moravsky Berou 63.81 343** *e*P **P 05 58 29.9 +0.9**
**DAVOX Davos/Dischmat 63.82 337** LR LR 06 29 04.7
comp=Z,44nm,18.5s,baz=97,slow=39
**MOTA Moosalm 63.82 338** *i* pP pP 05 58 34.1 +2.2
comp=Z,2.9nm,0.7s
**CMAR Chiang Mai Arr 63.92 63 P P 05 58 30.7 +0.3**
comp=Z,1.5nm,0.3s,baz=246,slow=8.0,SNR=7.7
CMAR LR LR 06 24 06.6
comp=Z,54nm,18.1s,baz=235,slow=34
comp=Z,1.5nm,0.3s
**GERES GERESS Array B 64.18 340 P P 05 58 32.2 +0.7**
comp=Z,0.3nm,0.2s,baz=160,slow=15,SNR=1.5
comp=Z,0.3nm,0.2s
**KHC Kasperske Hory 64.47 340** *e*P P 05 58 42.5 +9.1
**KHC Kasperske Hory 64.47 340** *i* P **P 05 58 34.2 +0.8**
KHC pmax pmax
comp=Z,3.0nm,1.1s
**PHRA Phrae 65.06 64 P P 05 58 37.4 -0.5**
**ESDC Sonseca Array 65.43 323 P P 05 58 42.6 +2.7**
comp=Z,0.7nm,0.6s,baz=138,slow=7.3,SNR=6.7
comp=Z,0.7nm,0.6s
**OBN Obninsk 65.79 357**⇑ *e*P **P 05 58 42.2 +0.5**
OBN *e* 06 01 05.6
OBN *e*PPP PPP 06 02 36.6
OBN *e*SS SS 06 11 45.3 +2.2
OBN pmax pmax
comp=Z,6.0nm,0.8s
OBN MLR MLR
comp=Z,55nm,17.0s
**MNK Minsk 66.04 352** *i* P P 05 58 55.4 +12
MNK *i* S S 06 07 55.0 +24
MNK pmax pmax
comp=N,13nm,0.9s
MNK pmax pmax
comp=Z,29nm,0.9s
MNK pmax pmax
comp=E,35nm,0.9s
**SNAA Sanae 66.42 194 P P 05 58 49.0 +3.3**
comp=E,2.1nm,1.0s,baz=34,slow=7.0,SNR=4.5
SNAA LR LR 06 25 36.5
comp=E,58nm,18.0s,baz=29,slow=34
**SNAA Sanae 66.42 194** *ce*P **P 05 58 47.6 +1.9**
SNAA pmax pmax
comp=Z,10.0nm,1.7s
**CLL Collm 66.53 341** *e*Px Px 05 58 51.0
CLL *ex* x 05 58 56.0
**CLL Collm 66.53 341** *e*P P 05 58 56.0 +9.4
**MK31 Makanchi Array 68.06 29** *i* P **P 05 58 57.4 +1.0**
**MKAR Makanchi Array 68.06 29 P P 05 58 56.1 -0.4**
**MKAR Makanchi Array 68.06 29 P P 05 58 55.7 -0.8**
comp=Z,0.5nm,0.6s,baz=200,slow=6.4,SNR=3.0
MKAR LR LR 06 27 31.0
comp=Z,42nm,21.6s,baz=247,slow=35
comp=Z,0.5nm,0.6s
**MKAR Makanchi Array 68.06 29 P P 05 58 56.1 -0.4**
**BVAR Borovoye Array 68.30 18 P P 05 58 56.4 -1.3**
comp=Z,0.6nm,0.5s,baz=199,slow=13,SNR=3.5
BVAR LR LR 06 31 11.8
comp=Z,87nm,18.3s,baz=185,slow=38
comp=Z,0.6nm,0.5s
**ARU Arti 68.52 10** LR LR 06 33 13.5
comp=Z,70nm,18.8s,baz=182,slow=40
**ARU Arti 68.52 10***c* *i*P **P 05 58 59.2 +0.1**
ARU 06 01 26.2
ARU S **S 06 08 03.5 +2.4**
ARU SS **SS 06 12 25.6 +0.1**
ARU pmax pmax
comp=Z,16nm,3.3s
**GOMU GeErMu 68.76 44 P P 05 59 02.4 +0.9**
GOMU pP sP 05 59 06.3 +1.4
GOMU sP pwP 05 59 09.6 +2.4
GOMU pmax pmax
comp=Z,7.0nm,1.0s
**KURBB Kurchatov Arra 69.25 24 P P 05 59 03.7 0.0**
comp=Z,0.4nm,0.5s,baz=230,slow=7.0,SNR=3.6
comp=Z,0.4nm,0.5s
**KURK Kurchatov 69.36 24 P P 05 59 04.0 -0.4**
KURK IAmb IAmb 05 59 17.9
comp=Z,9.4nm,0.9s
**KURK Kurchatov 69.36 24** *i* P **P 05 59 04.3 -0.1**
KURK pmax pmax
comp=Z,9.0nm,1.0s
**PZH PanZhiHua 69.46 56 P P 05 59 07.1 +1.3**
PZH pmax pmax
comp=Z,20nm,0.6s
PZH pmax pmax
comp=Z,160nm,3.9s
**KIRV Kirov 69.47 5** *i* P **P 05 59 05.1 +0.2**
**DGZ Jazzator, Alta 72.55 29** *i* P **P 05 59 24.8 +0.8**
DGZ pmax pmax
comp=Z,12nm,1.3s
**FINES FINESS Array B 73.01 352 P P 05 59 27.0 +0.7**
comp=Z,3.1nm,1.0s,baz=179,slow=19,SNR=1.6
FINES LR LR 06 33 32.6
comp=Z,38nm,18.6s,baz=108,slow=38
comp=Z,3.1nm,1.0s
**FINES FINESS Array B 73.01 352 P P 05 59 27.0 +0.7**
**HFS Hagfors 74.06 346 P P 05 59 33.6 +1.1**
comp=Z,2.8nm,0.9s,baz=106,slow=11,SNR=2.7
HFS LR LR 06 37 04.4
comp=Z,33nm,18.2s,baz=132,slow=40
comp=Z,2.8nm,0.9s
**ZALV Zalesovo Beam 74.31 25 P P 05 59 34.0 -0.1**
comp=Z,0.8nm,0.4s,baz=237,slow=5.0,SNR=1.5
ZALV LR LR 06 34 31.1
comp=Z,45nm,18.3s,baz=62,slow=38
comp=Z,0.8nm,0.4s
**ZALV Zalesovo Beam 74.31 25 P P 05 59 34.0 -0.1**
**KONO Kongsberg 74.68 344** *i* P **P 05 59 36.6 +0.5**
KONO pmax pmax
comp=Z,17nm,1.4s
**LZH Lanzhou 75.11 48** *e*P **P 05 59 43.4 +4.0**
LZH sP PcP 05 59 49.9 -3.1
LZH pmax pmax
comp=Z,11nm,1.0s
**NOA NORSAR Array B 75.45 345 P P 05 59 41.2 +0.5**
comp=Z,0.6nm,0.8s,baz=199,slow=10,SNR=2.0
NOA LR LR 06 38 29.2
comp=Z,12nm,18.0s,baz=205,slow=40
comp=Z,0.6nm,0.8s
**EKA Eskdalemuir Ar 75.63 336 P P 05 59 43.1 +1.4**
comp=Z,0.5nm,0.7s,baz=219,slow=9.9,SNR=1.4
comp=Z,0.5nm,0.7s
**XAN Xi'an 78.11 52** ⇓P **P 05 59 59.6 +3.3**
XAN pmax pmax
comp=Z,4.0nm,0.7s
**QSPA South Pole Qui 79.28 180 P P 06 00 04.3 +2.1**
**QSPA South Pole Qui 79.28 180 P P 06 00 05.1 +2.9**
comp=Z,16nm,1.0s,baz=243,slow=4.2,SNR=35
**ARCES ARCESS Array B 80.90 354 P P 06 00 11.5 +0.9**
comp=Z,6.3nm,1.1s,baz=178,slow=2.7,SNR=2.4
ARCES LR LR 06 37 23.2
comp=Z,19nm,18.1s,baz=200,slow=37
comp=Z,6.3nm,1.1s
**SONM Songino Array 81.93 38 P P 06 00 16.2 -0.5**
comp=Z,0.4nm,0.6s,baz=242,slow=3.1,SNR=2.4
comp=Z,0.4nm,0.6s
**HHC Hu-ho-hao-te 82.56 46** *e*P **P 06 00 21.3 +1.2**
HHC pmax pmax
comp=Z,15nm,0.5s
HHC pmax pmax
comp=Z,120nm,5.5s
**NJ2 Nanjing 85.38 56** *e*P **P 06 00 33.4 -1.2**
NJ2 pmax pmax
comp=Z,12nm,0.5s
**BDFB Brasilia 86.43 255 P P 06 00 40.2 -0.1**
comp=Z,1.7nm,0.7s,baz=85,slow=9.8,SNR=3.5
BDFB LR LR 06 36 56.3
comp=Z,36nm,18.1s,baz=180,slow=34
comp=Z,1.7nm,0.7s
**XLT XiLinHaoTe 86.73 44** *e*P **P 06 00 38.3 -2.9**
XLT pP PcP 06 00 42.8 -0.7
XLT sP pP 06 00 44.5 +0.8
XLT pmax pmax
comp=Z,9.0nm,1.0s
**ASAR Alice Springs 88.13 114 P P 06 00 48.3 -0.1**
comp=Z,2.2nm,0.8s,baz=262,slow=4.6,SNR=18
comp=Z,2.2nm,0.8s
**JMIC Jan Mayen 88.17 346** LR LR 06 43 53.7
comp=Z,19nm,18.7s,baz=92,slow=38
**BORG Borgarnes 88.52 338** LR LR 06 44 46.8
comp=Z,34nm,18.4s,baz=328,slow=38
**WRA Warramunga Arr 89.24 110 P P 06 00 53.5 -0.1**
**WRA Warramunga Arr 89.24 110 P P 06 00 52.8 -0.8**
comp=Z,3.4nm,0.8s,baz=263,slow=3.5,SNR=22
comp=Z,3.4nm,0.8s
**WB2 Warramunga Arr 89.25 110 P P 06 00 52.9 -0.8**
**WRAB Tennant Creek 89.25 110 P P 06 00 53.1 -0.6**
WRAB IAmb IAmb 06 01 08.3
comp=Z,7.3nm,0.9s
**WRAB Tennant Creek 89.25 110 P P 06 00 53.1 -0.6**
WRAB pmax pmax
comp=Z,7.0nm,0.9s
**WB0 Warramunga Arr 89.32 110 P P 06 00 53.9 -0.1**
WB0 IAmb IAmb 06 00 56.1
comp=Z,8.4nm,1.1s
**WR0 Warramunga Arr 89.42 110 P P 06 00 54.0 -0.5**
WR0 IAmb IAmb 06 01 18.6
comp=Z,13nm,1.4s
**SPITS Spitsbergen Ar 89.92 355** LR LR 06 41 06.3
comp=Z,38nm,22.0s,baz=154,slow=36
**STKA Stephens Creek 93.00 123 P P 06 01 10.3 -0.6**
comp=Z,1.5nm,0.5s,baz=316,slow=8.7,SNR=3.5
comp=Z,1.5nm,0.5s
**KLR Kul'dur 98.42 42** *i* P **P 06 01 35.4 +0.3**
KLR pmax pmax
comp=Z,1.0nm,1.3s
**BILL Bilibino 112.63 19**⇑ *i*PKIKP **PKiKP 06 06 32.4 -0.5**
BILL *e* 06 07 23.1
BILL *e*PPP PPP 06 09 41.0
BILL *e*SSS SSS 06 27 21.0
BILL pmax pmax
comp=Z,3.0nm,1.2s
**ILAR Eielson Array 125.82 4** PKP **PKPdf 06 06 58.2 -0.1**
comp=Z,0.4nm,0.9s,baz=322,slow=3.4,SNR=3.2
**TXAR Lajitas Array 142.45 305** PKP **PKPdf 06 07 28.5 -2.1**
comp=Z,0.6nm,0.9s,baz=32,slow=7.5,SNR=3.2
**NVAR Mina Array Bea 146.97 330** PKPbc **PKPbc 06 07 40.2 -0.1**
comp=Z,2.6nm,0.8s,baz=93,slow=0.8,SNR=18

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*IDC **21** 06:15:59.1±4.7, 69.91N×144.65W, h0km, mb3.6/1, mbtmp3.7/6, ML3.6/5, MS3.2/2, Error ellipse: s-maj=66.3km s-min=32.3km az=135.0*
*AEIC **21** 06:16:01.9±1.1, 69.50N±0.05×144.16W±0.07, h16km±6km, ML3.6, ML3.7/110(NEIC), Mwr3.6/22(NEIC), Error ellipse: s-maj=7.8km s-min=3.7km az=176.0*
*NEIC **21** 06:16:03.0±1.0, 69.57N±0.05×144.12W±0.04, h10km±2km, Error ellipse: s-maj=8.4km s-min=3.0km az=14.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.21; $M_{\theta\theta}$-2.33; $M_{\phi\phi}$2.12; $M_{r\theta}$0.14; $M_{\theta\phi}$-2.83; $M_{r\phi}$-0.06; Fault plane solution: $M_0$3.61000×$10^{14}$ NP1: $\phi_s$109.09000°, $\delta$89.65000°, $\lambda$177.54000°. NP2: $\phi_s$199.11000°, $\delta$87.54000°, $\lambda$0.35000°. Principal axes: T 3.5003, Plg2.0000°, Azm64.0000°; N 0.2113, Plg88.0000°, Azm281.0000°; P -3.7116, Plg1.0000°, Azm154.0000°;*
*NEIC **21** 06:16:03.3, 69.54N×144.14W, h10km*
**ISC 21 06:16:02.2±0.9, 69.59N±0.04×144.12W±0.02, h14km±7km, n91, σ1s24/104, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **C27K** | **Jago River** | **0.15** | **74** | | **Pg** | **06 16 06.3** | **+0.3** |
| C27K | | | | Sg | **Sg** | **06 16 09.2** | **+0.7** |
| **C26K** | **Camden Bay** | **0.43** | **321** | | **Pb** | **06 16 12.4** | **+0.8** |
| C26K | | | | | **Sn** | **06 16 20.6** | **-1.1** |
| **D25K** | **Kavik River** | **0.84** | **253** | | **Pg** | **06 16 16.4** | **-2.0** |
| D25K | | | | | **Sg** | **06 16 28.1** | **-1.4** |
| **D27M** | **Malcolm River** | **1.17** | **106** | | **Pn** | **06 16 23.0** | **-1.2** |
| D27M | | | | | **Sg** | **06 16 40.3** | **+0.4** |
| **C24K** | **Franklin Bluff** | **1.61** | **277** | | **Pb** | **06 16 31.8** | **+0.2** |
| C24K | | | | | **Sg** | **06 16 53.8** | **-0.1** |
| C24K | | | | IAML | | 06 16 55.1 | |
| comp=N,862nm,0.8s | | | | | | | |
| **E27K** | **Coleen River** | **1.68** | **146** | | **Pn** | **06 16 31.4** | **+0.3** |
| E27K | | | | | **Sn** | **06 16 53.6** | **+1.1** |
| **D24K** | **Happy Valley** | **1.72** | **258** | | **Pn** | **06 16 32.7** | **+1.0** |
| D24K | | | | | **Sg** | **06 16 57.3** | **-0.2** |
| **F26K** | **Sheenjek River** | **1.90** | **180** | | **Pn** | **06 16 35.2** | **+1.0** |
| F26K | | | | | **Sn** | **06 16 58.8** | **+0.8** |
| F26K | | | | IAML | | 06 17 03.6 | |
| comp=N,736nm,0.8s | | | | | | | |
| **D28M** | **Stokes Point** | **1.92** | **95** | | **Pb** | **06 16 36.4** | **-0.6** |
| D28M | | | | | **Sg** | **06 17 04.6** | **+0.8** |
| **E28M** | **Babbage River** | **1.92** | **119** | Pn | **Pn** | **06 16 36.2** | **+1.7** |
| E28M | | | | | **Sb** | **06 17 01.0** | **+0.2** |
| **F25K** | **Christian Rive** | **2.08** | **196** | | **Pn** | **06 16 37.7** | **+1.0** |
| F25K | | | | | **Sn** | **06 17 03.6** | **+1.2** |
| **TOLK** | **Toolik Lake Re** | **2.17** | **247** | | **Pn** | **06 16 38.6** | **+0.6** |
| TOLK | | | | IAML | | 06 17 16.2 | |
| comp=N,508nm,0.6s | | | | | | | |
| TOLK | | | | IAML | | 06 17 19.2 | |
| comp=E,457nm,0.7s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.17** | **185** | | **Pn** | **06 16 38.9** | **+0.9** |
| **E24K** | **Your Creek** | **2.19** | **228** | | **Pn** | **06 16 39.2** | **+0.9** |
| E24K | | | | | **Sb** | **06 17 08.5** | **-0.3** |
| **C23K** | **Itkillik River** | **2.28** | **279** | Pn | **Pn** | **06 16 41.2** | **+1.8** |
| C23K | | | | | **Sn** | **06 17 08.4** | **+1.2** |
| **D23K** | **Nanushuk River** | **2.42** | **258** | Pn | **Pn** | **06 16 42.9** | **+1.6** |
| D23K | | | | IAML | | 06 17 25.1 | |
| comp=E,287nm,1.0s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.50** | **215** | | **Pn** | **06 16 43.1** | **+0.6** |
| **E23K** | **Chandalar** | **2.52** | **235** | | **Pn** | **06 16 43.7** | **+0.9** |
| E23K | | | | IAML | | 06 17 26.4 | |
| comp=E,289nm,0.9s | | | | | | | |
| **F28M** | **Old Crow** | **2.52** | **140** | | **Pn** | **06 16 43.5** | **+0.8** |
| F28M | | | | IAML | | 06 17 23.7 | |

comp=N,278nm,0.9s
**E29M Blow River 2.54 115** Pn **Pn 06 16 44.3 +1.2**
E29M IAML 06 17 25.4
comp=N,366nm,0.8s
E29M IAML 06 17 27.4
comp=E,429nm,0.7s
**G25K Bearman Lake 2.93 196 Pn 06 16 49.0 +0.7**
**G27K Doyon Strip 2.94 161 Pn 06 16 49.1 +0.6**
**FYU Fort Yukon 3.06 188 Pn 06 16 51.0 +0.8**
**D22K Ayikyak River 3.13 261** Pn **Pn 06 16 52.5 +1.3**
D22K IAML 06 17 48.5
comp=N,247nm,0.9s
D22K IAML 06 17 52.5
comp=E,232nm,1.2s
**E22K Anaktuvuk Pass 3.15 246** Pn **Pn 06 16 51.7 +0.4**
**G24K Hadweenzic Riv 3.16 205 Pn 06 16 51.6 +0.1**
G24K IAML 06 17 47.1
comp=N,246nm,1.2s
**COLD Coldfoot 3.27 226 Pn 06 16 54.0 +1.1**
**B22K Teshekpuk Lake 3.29 288** Pn **Pn 06 16 55.4 +2.1**
**H25L Birch Creek 3.40 192 Pn 06 16 55.4 +0.6**
**G29M Pine Creek 3.52 137** Pn **Pn 06 16 57.7 +1.3**
G29M IAML 06 18 00.3
comp=N,178nm,1.1s
**F22K John River 3.62 239 Pn 06 16 59.1 +1.2**
**G23K Bananza Creek 3.63 220 Pn 06 16 58.3 +0.3**
G23K IAML 06 18 07.3
comp=E,184nm,1.1s
G23K IAML 06 18 10.6
comp=N,113nm,1.2s
**B21K Ikpikpuk River 3.67 275** Pn **Pn 06 17 00.2 +1.7**
B21K IAML 06 18 12.1
comp=E,167nm,1.2s
**E21K Killik River 3.73 257 Pn 06 16 59.8 +0.4**
E21K IAML 06 18 03.0
comp=E,138nm,0.7s
E21K IAML 06 18 11.5
comp=N,142nm,0.7s
**C21K Knifeblade Rid 3.80 268 Pn 06 17 01.8 +1.5**
**A22K Sinclair Lake 3.94 296 Pn 06 17 03.9 +1.7**
**H29M Whitestone 4.02 145** Pn **Pn 06 17 04.6 +1.3**
H29M IAML 06 18 18.9
comp=N,116nm,0.9s
H29M IAML 06 18 19.9
comp=E,129nm,1.1s
**H24K Noodor Dome 4.03 203 Pn 06 17 03.9 +0.4**
H24K IAML 06 17 52.3
comp=N,82nm,0.9s
H24K IAML 06 18 14.0
comp=E,120nm,1.3s
**INK Inuvik 4.03 104** Pn **Pn 06 17 04.8 +1.4**
**INK Inuvik 4.03 104** Pn **Pn 06 17 04.5 +1.0**
comp=E,1.1nm,0.3s,baz=316,slow=12,SNR=32
INK Sn **Sn 06 17 47.5 -2.9**
comp=E,2.5nm,0.3s,baz=17,slow=11,SNR=5.0
comp=E,5.1nm,0.4s
**I27K Kandik River 4.11 165 Pn 06 17 06.0 +1.3**
**PRP Porcupine Dome 4.12 188** Pn **Pn 06 17 05.9 +1.0**
PRP IAML 06 18 10.5
comp=E,129nm,0.8s
PRP IAML 06 18 11.9
comp=N,92nm,0.7s
**F21K Alatna River 4.20 240** Pn **Pn 06 17 06.6 +0.8**
F21K IAML 06 18 19.8
comp=N,76nm,1.0s
F21K IAML 06 18 22.1
comp=E,84nm,0.7s
**EPYK Eagle Plains 4.26 136 Pn 06 17 07.9 +1.2**
**H23K Yukon River 4.30 211 Pn 06 17 07.6 +0.4**
H23K IAML 06 18 21.9
comp=E,104nm,0.9s
H23K IAML 06 18 29.4
comp=N,101nm,0.9s
**I26K Coal Creek Min 4.32 175 Pn 06 17 07.8 +0.4**
**I28M Miner Creek 4.46 157** Pn **Pn 06 17 10.5 +1.1**
I28M IAML 06 18 04.4
comp=N,64nm,0.6s
I28M IAML 06 18 27.0
comp=E,61nm,1.4s
**G31M Satah River 4.53 121** Pn **Pn 06 17 12.0 +1.7**
G31M IAML 06 18 29.3
comp=E,94nm,0.9s
**B20K Meade River 4.54 281 Pn 06 17 12.3 +1.9**
**A21K Barrow 4.54 298 Pn 06 17 12.9 +2.5**
**D20K Etivluk River 4.55 265 Pn 06 17 12.3 +1.7**
**E20K Nigu River 4.56 259 Pn 06 17 11.2 +1.0**
**H22K Ishtalitna Cre 4.62 220 Pn 06 17 11.2 -0.3**
**G21K Allakaket 4.68 233** Pn **Pn 06 17 12.6 +0.2**
G21K IAML 06 18 37.4
comp=N,61nm,1.0s
G21K IAML 06 18 41.8
comp=E,78nm,1.1s
**I29M Ogilvie Camp, 4.79 149 Pn 06 17 14.8 +0.8**
I29M IAML 06 18 34.2
comp=E,61nm,0.8s
I29M IAML 06 18 35.0
comp=N,53nm,0.5s
**I23K Minto, Yukon-K 4.89 207 Pn 06 17 15.8 +0.5**
I23K IAML 06 18 42.5
comp=E,67nm,1.3s
**MDM Murphy Dome 4.91 201 Pn 06 17 16.8 +1.2**
MDM IAML 06 18 35.0
comp=N,51nm,0.8s
MDM IAML 06 18 39.5
comp=E,70nm,0.9s
**ILAR Eielson Array 4.96 194 Pn 06 17 16.9 +0.7**
**ILAR Eielson Array 4.96 194** Pn **Pn 06 17 16.4 +0.2**
comp=E,1.5nm,0.3s,baz=5.8,slow=14,SNR=92
ILAR Sn **Sn 06 18 12.8 -0.3**
comp=E,3.2nm,0.3s,baz=9.4,slow=23,SNR=8.9
comp=E,5.7nm,0.5s
**EGAK Eagle 4.97 165 Pn 06 17 17.2 +0.9**
EGAK IAML 06 18 16.0
comp=E,51nm,1.1s
EGAK IAML 06 18 52.0
comp=E,46nm,1.6s
**F20K Avaraart Lake 5.00 245 Pn 06 17 17.9 +1.1**
F20K IAML 06 18 52.7
comp=E,37nm,1.4s
F20K IAML 06 19 06.0
comp=N,38nm,1.2s
**J25K Salcha River, 5.02 186 Pn 06 17 18.0 +0.9**
J25K IAML 06 18 49.7
comp=N,52nm,1.1s
**J26L Joseph Creek 5.11 177 Pn 06 17 19.2 +0.8**
J26L IAML 06 18 22.8
comp=N,36nm,0.6s
J26L IAML 06 18 48.6
comp=E,51nm,1.0s
**D19K Kuna River 5.14 264** Pn **Pn 06 17 20.0 +1.3**
D19K IAML 06 18 21.4
comp=N,53nm,0.4s
**H21K Melozitna Rive 5.15 224** Pn **Pn 06 17 19.6 +0.7**
H21K IAML 06 18 54.7
comp=N,51nm,0.9s
H21K IAML 06 18 55.6
comp=E,40nm,0.9s
**CCB Clear Creek Bu 5.17 198** Pn **Pn 06 17 20.1 +1.1**
CCB IAML 06 18 50.1
comp=E,39nm,1.2s
**MLY Manley 5.24 212 Pn 06 17 20.9 +0.7**
MLY IAML 06 18 54.5
comp=N,37nm,1.2s
**E19K Redstone River 5.27 252 Pn 06 17 20.8 +0.4**
E19K IAML 06 18 55.2
comp=E,47nm,0.7s
E19K IAML 06 18 59.0
comp=N,53nm,0.8s
**I30M Mount Dempster 5.30 142** Pn **Pn 06 17 21.6 +0.6**
I30M IAML 06 18 23.9
comp=E,49nm,0.6s
I30M IAML 06 18 24.3
comp=N,46nm,0.5s
**WRH Wood River Hil 5.37 199 Pn 06 17 22.8 +1.0**
WRH IAML 06 18 25.0
comp=N,45nm,0.8s
WRH IAML 06 18 55.2
comp=E,51nm,0.9s
**C19K Lookout Ridge 5.49 272** Pn **Pn 06 17 25.3 +1.7**
**K27K Chicken 5.64 171 Pn 06 17 26.5 +1.0**
**F19K Shaleruckik Mo 5.78 248** Pn **Pn 06 17 28.1 +0.6**
**A19K Wainwright 5.88 284 Pn 06 17 30.4 +1.6**
**DOT Dot Lake 5.96 180 Pn 06 17 30.7 +0.6**
**B18K Kokolik River 6.22 276 Pn 06 17 34.2 +0.8**
**F18K Selawik 6.53 250 Pn 06 17 38.5 +0.8**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **A36M** | **Sachs Harbour** | **6.66** | **60** | | **Pn** | **06 17 39.6** | **+0.1** |
| **PAX** | **Paxson** | **6.67** | **185** | | **Pn** | **06 17 40.5** | **+0.8** |
| **C17K** | **DeLong Mountai** | **6.92** | **270** | | **Pn** | **06 17 43.3** | **+0.2** |
| **E17K** | **Hotham Inlet** | **7.01** | **257** | | **Pn** | **06 17 44.4** | **+0.1** |
| **WAT7** | **Susitna Watana** | **7.04** | **198** | | **Pn** | **06 17 47.8** | **+2.8** |
| **C36M** | **Paulatuk** | **7.05** | **83** | | **Pn** | **06 17 44.5** | **-0.2** |
| **D17K** | **Noatak River** | **7.17** | **264** | | **Pn** | **06 17 45.9** | **-0.5** |
| **YUK2** | **White River** | **7.95** | **169** | | **Pn** | **06 17 59.0** | **+1.7** |
| **DLBC** | **Dease Lake** | **12.73** | **144** | Pn | **Pn** | **06 19 02.4** | **-0.3** |
| | comp=E,0.2nm,0.3s,baz=339,slow=8.6,SNR=4.1 | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.80** | **106** | Pn | **Pn** | **06 19 14.4** | **-2.7** |
| | comp=E,0.4nm,0.3s,baz=316,slow=14,SNR=9.9 | | | | | | |
| YKA | | | | Sn | Sn | 06 21 36.5 | -13 |
| | comp=E,0.2nm,0.3s,baz=308,slow=11,SNR=2.1 | | | | | | |
| | comp=E,1.1nm,0.6s | | | | | | |
| **RES** | **Resolute Bay** | **15.49** | **49** | Pn | **Pn** | **06 19 36.8** | **-3.1** |
| | comp=E,0.6nm,0.3s,baz=274,slow=3.9,SNR=2.0 | | | | | | |
| RES | | | | Sn | Sn | 06 22 19.6 | -11 |
| | comp=E,0.2nm,0.3s,baz=331,slow=19,SNR=1.4 | | | | | | |
| | comp=E,2.6nm,0.5s | | | | | | |
| **FRB** | **Frobisher Bay** | **28.65** | **64** | LR | LR | 06 34 25.3 | |
| | comp=E,57nm,18.7s,baz=265,slow=39 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.06** | **147** | LR | LR | 06 35 13.5 | |
| | comp=E,27nm,18.9s,baz=143,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.14** | **142** | P | **P** | **06 22 50.3** | **+3.6** |
| | comp=E,0.8nm,0.9s,baz=339,slow=7.2,SNR=1.5 | | | | | | |
| | comp=E,0.8nm,0.9s | | | | | | |

*IDC* ***21*** *06:16:41.3±1.5,36˚.19N×71˚.12E,h0km,mb3.8/5, mbtmp3.8/6,ML2.8/1,Error ellipse: s-maj=35.9km s-min=31.0km az=82.0*

**ISC 21 06:16:54.4±1.3,36˚.7N±0˚.1×71˚.1E±0˚.2,h100km,n9, σ1s56/11,mb3.7/4,1C-2D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **KK31** | **Karatay Array** | **6.42** | **356** | ⇑Pn | | **Pn** | **06 18 27.0** | **+0.7** |
| | 9.6nm,0.8s,baz=172,slow=12,SNR=42 | | | | | | | |
| KK31 | | | | ⇓Sn | | **Sn** | **06 19 35.8** | **-2.3** |
| | 2.9nm,0.4s,baz=173,slow=22 | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 06 20 06.4 | |
| | 6.3nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **6.49** | **23** | Pn | | **Pn** | **06 18 28.5** | **+1.1** |
| | 5.0nm,0.5s | | | | | | | |
| AAK | | | | Sn | | **Sn** | **06 19 40.1** | **+0.1** |
| | 6.1nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.91** | **19** | Pn | | **Pn** | **06 20 20.6** | **+0.8** |
| | baz=206,slow=11,SNR=4.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.34** | **358** | Pn | | **Pn** | **06 20 35.9** | **-1.8** |
| | baz=159,slow=13,SNR=6.1 | | | | | | | |
| | 0.8nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.71** | **25** | P | | **P** | **06 21 15.1** | **-0.5** |
| | 1.3nm,0.4s,baz=224,slow=10,SNR=7.2 | | | | | | | |
| | 1.3nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **37.37** | **326** | P | | **P** | **06 23 58.6** | **+1.7** |
| | 1.9nm,0.8s,baz=125,slow=10.0,SNR=4.8 | | | | | | | |
| | 1.9nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | **42.97** | **322** | P | | **P** | **06 24 45.2** | **+2.0** |
| | 4.4nm,1.0s,baz=110,slow=11,SNR=5.7 | | | | | | | |
| | 4.4nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.80** | **269** | P | | **P** | **06 27 28.3** | **-0.9** |
| | 0.1nm,0.4s,baz=46,slow=6.8,SNR=4.7 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.02** | **122** | P | | **P** | **06 29 02.7** | **-1.0** |
| | 0.6nm,0.9s,baz=327,slow=4.8,SNR=2.0 | | | | | | | |
| | 0.6nm,0.9s | | | | | | | |

**HEL 21 06:20:44.5±0.6,67˚.94N×20˚.05E,h0km,ML1.3, Suspected explosion,Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **LANU** | **Lannavaara** | **0.74** | **80** | PG | | Pg | 06 20 57.7 | -1.0 |
| | baz=265 | | | | | | | |
| LANU | | | | SG | | Sg | 06 21 07.8 | -0.5 |
| **HEF** | **Hetta** | **1.43** | **69** | PG | | Pn | 06 21 10.4 | -1.3 |
| HEF | | | | MSG | | | 06 21 27.5 | |
| | comp=Z,2.0nm,0.2s | | | | | | | |
| HEF | | | | SG | | Sg | 06 21 28.9 | -1.5 |
| **PAJU** | **Pajala** | **1.50** | **126** | PG | | Pn | 06 21 12.6 | 0.0 |
| **KLF** | **Kolari** | **1.66** | **113** | PG | | Pn | 06 21 13.0 | -1.8 |
| KLF | | | | SG | | Sn | 06 21 34.0 | -2.8 |
| KLF | | | | MSG | | | 06 21 34.0 | |
| | comp=Z,1.7nm,0.2s | | | | | | | |
| **KALU** | **Kalix** | **2.46** | **146** | SN | | Sn | 06 21 56.5 | +0.1 |
| **TOF** | **Tornio** | **2.51** | **136** | PN | | Pn | 06 21 26.4 | -0.1 |
| TOF | | | | SN | | Sn | 06 21 58.3 | +0.6 |
| TOF | | | | MSG | | | 06 21 58.6 | |
| | comp=Z,1.3nm,0.2s | | | | | | | |
| **RNF** | **Rovaniemi** | **2.67** | **117** | PN | | Pn | 06 21 28.8 | +0.1 |
| RNF | | | | SB | | Sn | 06 22 02.9 | +1.1 |
| **KEV** | **Kevo** | **3.12** | **51** | MSG | | | 06 22 16.0 | |
| | comp=Z,1.0nm,0.2s | | | | | | | |
| KEV | | | | SB | | Sb | 06 22 16.0 | -3.2 |
| **RAJF** | **Raja-Jooseppi** | **3.13** | **76** | PG | | Pb | 06 21 41.6 | +0.7 |
| RAJF | | | | SB | | Sb | 06 22 17.3 | -2.3 |
| **RANF** | **Ranua** | **3.28** | **123** | PG | | Pb | 06 21 42.8 | -0.6 |
| RANF | | | | SB | | Sb | 06 22 23.0 | -0.8 |
| **KU6** | **Riekki** | **4.32** | **112** | PG | | Pb | 06 22 01.9 | +0.8 |

*IDC* ***21*** *06:24:14.5±0.5,15˚.23S×173˚.24W,h0km,mb4.7/18, mbtmp4.8/19,ML3.7/1,MS4.1/47,Error ellipse: s-maj=20.0km s-min=13.2km az=125.0*

*MOS* ***21*** *06:24:15.3±1.6,15˚.16S×173˚.09W,h10km,mb5.2/21, Error ellipse: s-maj=12.0km s-min=8.7km az=49.2*

*NEIC* ***21*** *06:24:16.6±2.4,15˚.06S±0˚.06×173˚.07W±0˚.03,h10km±1km, mb5.1/400,Error ellipse: s-maj=10.6km s-min=3.8km az=199.0*

*GCMT* ***21*** *06:24:19.6±0.4,15˚.33S±0˚.03×173˚.00W±0˚.02,h43km±1km, MW5.0/77,Moment Tensor Solution. s27,c33; s77,c96; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr~2.81±.23; Mθθ2.97±.14; Mϕϕ~0.16±.15; Mrθ~2.72±.14; Mθϕ1.36±.10; Mϕr~0.28±.10; Best double couple: M=4.18000×10^16^ NP1:ϕs80.00000°,δ66.00000°,λ-79.00000°. NP2: ϕs236.00000°,δ26.00000°,λ-112.00000°. Principal axes: T 4.4540, Plg20.0000°, Azm162.0000°; N -0.5530, Plg10.0000°, Azm256.0000°; P -3.9050, Plg67.0000°, Azm10.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NOU* ***21*** *06:24:22.5,15˚.26S×172˚.80W,h60km,mb5.1/13,Samoa Islands Region*

**ISC 21 06:24:19.3±0.3,15˚.15S±0˚.05×173˚.11W±0˚.06,h29km, n724,σ1s13/531,mb5.1/225,MS4.2/49,30C-26D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **AFI** | **Afiamalu** | **1.79** | **47** | Pn | | **Pn** | **06 24 45.3** | **-3.0** |
| **AFI** | **Afiamalu** | **1.79** | **47** | P | | **Pn** | **06 24 45.3** | **-3.0** |
| **NIUE** | **Niue** | **4.95** | **143** | P | | **Pn** | **06 25 30.5** | **-1.3** |
| **NIUE** | **Niue** | **4.95** | **143** | Pn | | **Pn** | **06 25 30.3** | **-1.4** |
| **MSVF** | **Nonsavu** | **8.86** | **252** | Pn | | **Pn** | **06 26 26.2** | **+0.7** |
| **MSVF** | **Nonsavu** | **8.86** | **252** | P | | **Pn** | **06 26 26.2** | **+0.7** |
| **FUNA** | **Funafuti** | **10.00** | **310** | Pn | | **Pn** | **06 26 38.5** | **-2.5** |
| **RAR** | **Rarotonga** | **14.04** | **117** | P | | **Pn** | **06 27 34.3** | **-2.0** |
| **RAR** | **Rarotonga** | **14.04** | **117** | Pn | | **Pn** | **06 27 33.7** | **-2.6** |
| **RAR** | **Rarotonga** | **14.04** | **117** | Pn | | **Pn** | **06 27 34.0** | **-2.3** |
| | 3.7nm,0.3s,baz=264,slow=7.9,SNR=17 | | | | | | | |
| RAR | | | | Sn | | Sn | 06 29 58.9 | -12 |
| | 0.9nm,0.3s,baz=358,slow=12,SNR=1.7 | | | | | | | |
| RAR | | | | LR | | LR | 06 31 44.2 | |
| | comp=Z,408nm,20.2s,baz=309,slow=32 | | | | | | | |
| | 87nm,0.7s | | | | | | | |
| **RAR** | **Rarotonga** | **14.04** | **117** | P | | **Pn** | **06 27 34.0** | **-2.3** |
| **LIFNC** | **LIFOU** | **19.50** | **250** | P | | **P** | **06 28 44.2** | **-0.1** |
| LIFNC | | | | IAmb | | IAmb | 06 28 51.9 | |
| | comp=Z,140nm,1.5s | | | | | | | |
| **PINNC** | **Pines Island,** | **19.82** | **245** | P | | **P** | **06 28 48.5** | **+0.7** |
| PINNC | | | | IAmb | | IAmb | 06 28 53.1 | |
| | comp=Z,93nm,1.4s | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.55** | **247** | P | | Pn | 06 28 59.8 | +1.7 |
| **DZM** | **Mont Dzumac** | **20.55** | **247** | P | | **P** | **06 28 55.5** | **-0.3** |
| **DZM** | **Mont Dzumac** | **20.55** | **247** | P | | **P** | **06 28 54.7** | **-1.1** |
| | comp=Z,6.4nm,0.7s,baz=105,slow=20,SNR=1.5 | | | | | | | |
| DZM | | | | LR | | LR | 06 35 22.4 | |
| | comp=Z,858nm,20.2s,baz=35,slow=33 | | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PPT** | **Papeete** | **22.71** | **99** | LR | | LR | 06 37 09.3 |
| | comp=Z,173nm,18.7s,baz=256,slow=34 | | | | | | |
| **OUZ** | **Omahuta** | **23.28** | **208** | P | | **P** | **06 29 25.5** | **+0.9** |
| **KUZ** | **Kuaotunu** | **23.70** | **203** | P | | **P** | **06 29 29.8** | **+1.1** |
| **URZ** | **Urewera** | **24.59** | **199** | P | | **P** | **06 29 37.2** | **+0.3** |
| **URZ** | **Urewera** | **24.59** | **199** | P | | **P** | **06 29 34.9** | **-2.0** |
| | comp=Z,36nm,0.6s,baz=95,slow=2.8,SNR=25 | | | | | | | |
| URZ | | | | LR | | LR | 06 37 59.2 | |
| | comp=Z,782nm,20.1s,baz=110,slow=34 | | | | | | | |
| | comp=Z,36nm,0.6s | | | | | | | |
| **TOZ** | **Tahuroa Road** | **24.65** | **202** | P | | **P** | **06 29 37.5** | **0.0** |
| TOZ | | | | IAmb | | IAmb | 06 29 40.6 | |
| | comp=Z,41nm,1.0s | | | | | | | |
| **RTZ** | **Ruatahuna** | **24.96** | **199** | P | | **P** | **06 29 40.7** | **+0.4** |
| RTZ | | | | IAmb | | IAmb | 06 29 43.5 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **HIZ** | **Hauiti** | **25.58** | **202** | P | | **P** | **06 29 47.4** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **25.61** | **199** | P | | **P** | **06 29 46.5** | **+0.3** |
| **TCW** | **Tory Channel** | **28.18** | **200** | P | | **P** | **06 30 11.2** | **+2.0** |
| **QRZ** | **Quartz Range** | **28.47** | **203** | P | | **P** | **06 30 12.1** | **+0.2** |
| **QRZ** | **Quartz Range** | **28.47** | **203** | P | | **P** | **06 30 12.1** | **+0.2** |
| **TUWZ** | **Tuamarina** | **28.49** | **201** | P | | **P** | **06 30 15.1** | **+3.1** |
| **NNZ** | **Nelson** | **28.50** | **202** | P | | **P** | **06 30 12.8** | **+0.8** |
| **MRNZ** | **Matariki Terra** | **28.88** | **202** | P | | **P** | **06 30 15.6** | **+0.1** |
| **THZ** | **Tophouse** | **29.15** | **202** | P | | **P** | **06 30 15.9** | **-2.0** |
| **KHZ** | **Kahutara** | **29.50** | **200** | P | | **P** | **06 30 19.7** | **-1.3** |
| **KHZ** | **Kahutara** | **29.50** | **200** | P | | **P** | **06 30 20.7** | **-0.2** |
| **GVZ** | **Greta Valley S** | **30.16** | **200** | P | | **P** | **06 30 25.7** | **-1.2** |
| **LTZ** | **Lake Taylor** | **30.27** | **202** | P | | **P** | **06 30 25.8** | **-2.0** |
| LTZ | | | | IAmb | | IAmb | 06 30 33.2 | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **LTZ** | **Lake Taylor** | **30.27** | **202** | P | | **P** | **06 30 26.9** | **-0.9** |
| **INZ** | **Inchbonnie** | **30.52** | **203** | P | | **P** | **06 30 28.2** | **-1.8** |
| **INZ** | **Inchbonnie** | **30.52** | **203** | P | | **P** | **06 30 28.8** | **-1.1** |
| **OXZ** | **Oxford** | **30.82** | **201** | P | | **P** | **06 30 31.1** | **-1.5** |
| OXZ | | | | IAmb | | IAmb | 06 30 32.6 | |
| | comp=Z,35nm,0.7s | | | | | | | |
| **RPZ** | **Rata Peaks** | **31.52** | **202** | P | | **P** | **06 30 37.8** | **-1.0** |
| | comp=Z,11nm,0.7s,baz=23,slow=3.4,SNR=7.0 | | | | | | | |
| RPZ | | | | LR | | LR | 06 43 10.8 | |
| | comp=Z,471nm,20.0s,baz=84,slow=36 | | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **JCZ** | **Jackson Bay** | **32.69** | **204** | P | | **P** | **06 30 47.9** | **-1.3** |
| **SYZ** | **Scrubby Hill** | **34.63** | **202** | P | | **P** | **06 31 05.9** | **0.0** |
| **STCH** | **Steam Cracks** | **38.61** | **28** | P | | **P** | **06 31 42.0** | **+1.8** |
| **H11S2** | **WAKE ISLAND Hy** | **38.89** | **329** | T | | T | 07 12 08.8 | |
| | baz=146,slow=76,SNR=48 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.90** | **329** | T | | T | 07 12 13.5 | |
| | baz=146,slow=76,SNR=78 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.91** | **329** | T | | T | 07 12 20.0 | |
| | baz=146,slow=76,SNR=42 | | | | | | | |
| **HPAH** | **Hawaii Prepara** | **38.93** | **27** | P | | **P** | **06 31 44.8** | **+1.9** |
| **CTA** | **Charters Tower** | **38.97** | **257** | LR | | LR | 06 46 32.4 | |
| | comp=Z,13nm,18.6s,baz=324,slow=34 | | | | | | | |
| **MHA** | **Mahukona** | **38.98** | **26** | P | | **P** | **06 31 46.0** | **+2.8** |
| **MHA** | **Mahukona** | **38.98** | **26** | P | | **P** | **06 31 46.0** | **+2.8** |
| **KIP** | **Kipapa** | **39.25** | **23** | P | | **P** | **06 31 45.2** | **-0.2** |
| **KIP** | **Kipapa** | **39.25** | **23** | ⇑eP | | **P** | **06 31 46.4** | **+1.0** |
| KIP | | | | pmax | | pmax | | |
| | comp=Z,34nm,1.2s | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.83** | **330** | T | | T | 07 13 30.4 | |
| | baz=148,slow=75,SNR=42 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.84** | **330** | T | | T | 07 13 32.1 | |
| | baz=148 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.85** | **330** | T | | T | 07 13 26.8 | |
| | baz=148,slow=75,SNR=39 | | | | | | | |
| **STKA** | **Stephens Creek** | **44.40** | **240** | P | | **P** | **06 32 26.6** | **-0.9** |
| **STKA** | **Stephens Creek** | **44.40** | **240** | P | | **P** | **06 32 24.9** | **-2.7** |
| | comp=Z,4.9nm,0.6s,baz=98,slow=12,SNR=13 | | | | | | | |
| STKA | | | | LR | | LR | 06 48 21.4 | |
| | comp=Z,186nm,21.9s,baz=66,slow=33 | | | | | | | |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **44.40** | **240** | *i* P | | **P** | **06 32 25.4** | **-2.2** |
| **BBOO** | **Buckleboo** | **49.18** | **240** | P | | **P** | **06 33 03.3** | **-1.6** |
| **WRAB** | **Tennant Creek** | **50.16** | **257** | *i* P | | **P** | **06 33 09.7** | **-2.9** |
| **WRA** | **Warramunga Arr** | **50.17** | **257** | P | | **P** | **06 33 11.2** | **-1.5** |
| **WRA** | **Warramunga Arr** | **50.17** | **257** | P | | **P** | **06 33 10.5** | **-2.2** |
| | comp=Z,2.5nm,0.6s,baz=92,slow=6.7,SNR=51 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **06 34 32.8** | **+0.9** |
| | comp=Z,0.7nm,0.7s,baz=95,slow=7.0,SNR=1.4 | | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.17** | **257** | P | | **P** | **06 33 11.2** | **-1.5** |
| WRA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,2.0s | | | | | | | |
| **GUMO** | **Guam** | **50.43** | **302** | LR | | LR | 06 52 12.4 | |
| | comp=Z,46nm,18.8s,baz=118,slow=33 | | | | | | | |
| **AS31** | **Alice Springs** | **50.45** | **252** | P | | **P** | **06 33 13.3** | **-1.5** |
| **ASAR** | **Alice Springs** | **50.45** | **252** | P | | **P** | **06 33 13.1** | **-1.8** |
| **ASAR** | **Alice Springs** | **50.45** | **252** | P | | **P** | **06 33 12.4** | **-2.4** |
| | comp=Z,9.2nm,0.8s,baz=88,slow=7.9,SNR=59 | | | | | | | |
| ASAR | | | | LR | | LR | 06 52 49.9 | |
| | comp=Z,288nm,21.4s,baz=99,slow=34 | | | | | | | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **50.45** | **252** | P | | **P** | **06 33 13.1** | **-1.8** |
| **FORT** | **Forrest** | **55.78** | **243** | P | | **P** | **06 33 52.0** | **-1.8** |
| FORT | | | | IAmb | | IAmb | 06 33 52.6 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **RPN** | **Rapa Nui** | **60.13** | **113** | LR | | LR | 06 55 00.1 | |
| | comp=Z,60nm,18.9s,baz=240,slow=31 | | | | | | | |
| **SBA** | **Scott Base** | **63.52** | **185** | P | | **P** | **06 34 48.4** | **+1.9** |
| SBA | | | | IAmb | | IAmb | 06 34 50.4 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **SBA** | **Scott Base** | **63.52** | **185** | P | | **P** | **06 34 48.4** | **+1.9** |
| SBA | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **64.98** | **240** | LR | | LR | 07 00 49.8 | |
| | comp=Z,144nm,19.4s,baz=187,slow=34 | | | | | | | |
| **NIKH** | **Nikolski High** | **67.94** | **3** | P | | **P** | **06 35 14.8** | **-0.3** |
| | baz=185 | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **68.49** | **352** | LR | | LR | 06 58 39.8 | |
| | comp=Z,336nm,21.3s,baz=135,slow=30 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.93** | **320** | P | | **P** | **06 35 21.5** | **-0.3** |
| | comp=Z,6.0nm,0.9s,baz=149,slow=5.6,SNR=8.0 | | | | | | | |
| MJAR | | | | LR | | LR | 06 59 20.5 | |
| | comp=Z,222nm,21.8s,baz=140,slow=31 | | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **MAJO** | **Matsushiro** | **68.93** | **320** | ⇑*i* P | | **P** | **06 35 22.4** | **+0.7** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **UNV** | **Unalaska Valle** | **68.95** | **4** | P | | **P** | **06 35 21.2** | **-0.2** |
| | baz=187 | | | | | | | |
| **FALS** | **False Pass** | **70.21** | **6** | P | | **P** | **06 35 28.6** | **-0.6** |
| | baz=190 | | | | | | | |
| **CHNA** | **Chernabura Isl** | **70.64** | **8** | P | | **P** | **06 35 31.9** | **+0.1** |
| | baz=194 | | | | | | | |
| **CASY** | **Casey** | **70.75** | **205** | P | | **P** | **06 35 32.5** | **0.0** |
| **SDPT** | **Sand Point** | **71.03** | **8** | P | | **P** | **06 35 33.9** | **-0.3** |
| | baz=193 | | | | | | | |
| **S12K** | **Black Hills** | **71.19** | **7** | IAmb | | IAmb | 06 35 35.8 | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **S12K** | **Black Hills** | **71.19** | **7** | P | | **P** | **06 35 35.2** | **0.0** |
| | baz=192 | | | | | | | |
| **ASAJ** | **Asahikawa** | **71.47** | **328** | LR | | LR | 07 03 50.0 | |
| | comp=Z,53nm,19.0s,baz=176,slow=33 | | | | | | | |
| **P08K** | **Saint George I** | **71.54** | **2** | P | | **P** | **06 35 37.7** | **+0.5** |
| | baz=184 | | | | | | | |
| **JNU** | **Nakatsue** | **71.83** | **313** | LR | | LR | 07 00 24.9 | |
| | comp=Z,195nm,19.9s,baz=146,slow=30 | | | | | | | |
| **S14K** | **Fog Glacier** | **72.06** | **8** | P | | **P** | **06 35 40.4** | **-0.1** |
| | baz=194 | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **72.09** | **2** | P | | **P** | **06 35 41.1** | **+0.6** |
| | baz=183 | | | | | | | |
| **CHIR** | **Chirikof Islan** | **72.22** | **10** | P | | **P** | **06 35 41.9** | **+0.6** |
| | baz=198 | | | | | | | |
| **CHGN** | **Chignik** | **72.24** | **9** | P | | **P** | **06 35 41.8** | **+0.4** |
| | baz=195 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.48** | **342** | P | | **P** | **06 35 42.8** | **-0.2** |
| | comp=Z,15nm,0.8s,baz=133,slow=8.3,SNR=14 | | | | | | | |
| PETK | | | | LR | | LR | 07 03 13.2 | |
| | comp=Z,98nm,20.2s,baz=145,slow=32 | | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **72.55** | **47** | LR | | LR | 07 01 18.1 | |
| | comp=Z,179nm,19.1s,baz=252,slow=31 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **72.55** | **47** | ⇓*e*P | | **P** | **06 35 43.6** | **-0.4** |
| PFO | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | | |
| **TPFO** | **Pinon Flats** | **72.55** | **47** | P | | **P** | **06 35 44.4** | **+0.4** |
| | baz=238 | | | | | | | |
| **LPIG** | **La Paz** | **72.67** | **58** | LR | | LR | 06 58 54.0 | |
| | comp=Z,101nm,21.4s,baz=215,slow=29 | | | | | | | |
| **SII** | **Sitkinak Islan** | **73.17** | **11** | P | | **P** | **06 35 47.3** | **+0.2** |
| | baz=199 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **73.23** | **37** | LR | | LR | 07 01 55.8 | |
| | comp=Z,158nm,19.1s,baz=240,slow=31 | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **73.40** | **330** | *e*P | | **P** | **06 35 49.8** | **+1.2** |
| YSS | | | | *e*S | | **SKiKP** | **06 45 22.0** | **+4.2** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,200nm,15.0s | | | | | | | |
| **PNTR** | **Pine Nut** | **73.51** | **41** | IAmb | | IAmb | 06 35 53.9 | |
| | comp=Z,32nm,1.6s | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **73.83** | **9** | P | | **P** | **06 35 51.6** | **+0.7** |
| | baz=197 | | | | | | | |
| **PLK4** | **Peulik 4** | **73.83** | **9** | IAmb | | IAmb | 06 35 52.2 | |
| | comp=Z,28nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.96** | **42** | P | | **P** | **06 35 52.5** | **+0.1** |
| **NVAR** | **Mina Array Bea** | **73.96** | **42** | P | | **P** | **06 35 52.7** | **+0.4** |
| | comp=Z,5.3nm,0.8s,baz=228,slow=9.7,SNR=38 | | | | | | | |
| NVAR | | | | LR | | LR | 07 01 54.0 | |
| | comp=Z,193nm,20.2s,baz=270,slow=30 | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **OHAK** | **Old Harbor** | **73.96** | **11** | P | | **P** | **06 35 51.9** | **+0.3** |
| | baz=200 | | | | | | | |
| **R18K** | **Karluk** | **74.08** | **10** | P | | **P** | **06 35 53.0** | **+0.8** |
| | baz=199 | | | | | | | |
| **214A** | **Organ Pipe Nat** | **74.34** | **50** | P | | **P** | **06 35 54.7** | **+0.2** |
| | baz=241 | | | | | | | |
| **TPH** | **Tonopah** | **74.46** | **43** | IAmb | | IAmb | 06 36 01.0 | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **Q17K** | **Contact Creek** | **74.51** | **9** | P | | **P** | **06 35 55.0** | **0.0** |
| | baz=198 | | | | | | | |
| **KDAK** | **Kodiak Island** | **74.62** | **11** | P | | **P** | **06 35 55.9** | **+0.4** |
| KDAK | | | | IAmb | | IAmb | 06 35 56.8 | |
| | comp=Z,33nm,0.9s | | | | | | | |
| **KDAK** | **Kodiak Island** | **74.62** | **11** | LR | | LR | 07 01 25.4 | |
| | comp=Z,244nm,21.9s,baz=233,slow=30 | | | | | | | |
| **KDAK** | **Kodiak Island** | **74.62** | **11** | P | | **P** | **06 35 56.0** | **+0.6** |
| | baz=201 | | | | | | | |
| **KDAK** | **Kodiak Island** | **74.62** | **11** | ⇑*i* P | | **P** | **06 35 56.6** | **+1.2** |
| KDAK | | | | pmax | | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| **O15K** | **Umgalikthiuk R** | **74.85** | **7** | P | | **P** | **06 35 56.8** | **+0.1** |
| | baz=194 | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.89** | **180** | P | | **P** | **06 35 58.0** | **+0.7** |
| QSPA | | | | IAmb | | IAmb | 06 35 59.9 | |
| | comp=Z,27nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.89** | **180** | P | | **P** | **06 35 56.2** | **-1.1** |
| | comp=Z,23nm,0.9s,baz=34,slow=1.3,SNR=87 | | | | | | | |
| QSPA | | | | LR | | LR | 07 03 56.5 | |
| | comp=Z,100nm,20.6s,baz=71,slow=32 | | | | | | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **P16K** | **Nushagak River** | **74.94** | **8** | P | | **P** | **06 35 57.7** | **+0.5** |
| | baz=195 | | | | | | | |
| **Q18K** | **Katmai Hardscr** | **75.02** | **10** | P | | **P** | **06 35 57.7** | **-0.2** |
| | baz=198,SNR=5.0 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **75.05** | **36** | IAmb | | IAmb | 06 36 01.2 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **P17K** | **Kvichak River** | **75.32** | **9** | P | | **P** | **06 35 59.9** | **+0.4** |
| | baz=197,SNR=6.9 | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **75.38** | **6** | P | | **P** | **06 36 00.2** | **+0.5** |
| | baz=192 | | | | | | | |
| **H04A** | **Detroit Lake** | **75.39** | **35** | IAmb | | IAmb | 06 36 02.2 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **Q20K** | **Shuyak Island** | **75.43** | **11** | P | | **P** | **06 36 01.0** | **+0.9** |
| | baz=201 | | | | | | | |
| **O16K** | **Kokwok River B** | **75.47** | **8** | P | | **P** | **06 36 00.1** | **-0.2** |
| O16K | | | | IAmb | | IAmb | 06 36 01.0 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **O16K** | **Kokwok River B** | **75.47** | **8** | P | | **P** | **06 36 00.1** | **-0.2** |
| | baz=195,SNR=6.0 | | | | | | | |
| **M11K** | **Mekoryuk** | **75.48** | **4** | P | | **P** | **06 36 00.9** | **+0.6** |
| | baz=187 | | | | | | | |
| **Q19K** | **Cape Douglas,** | **75.51** | **10** | P | | **P** | **06 36 00.5** | **-0.1** |
| | baz=200 | | | | | | | |
| **PINE** | **Pine Mountain** | **75.53** | **36** | P | | **P** | **06 36 02.0** | **+0.7** |
| PINE | | | | IAmb | | IAmb | 06 36 04.1 | |
| | comp=Z,24nm,0.8s | | | | | | | |
| **I05D** | **Terrebonne, OR** | **75.65** | **36** | IAmb | | IAmb | 06 36 04.3 | |
| | comp=Z,32nm,1.4s | | | | | | | |
| **R11B** | **Troy Canyon, C** | **75.69** | **43** | P | | **P** | **06 36 03.3** | **+1.0** |
| | baz=237 | | | | | | | |
| **P18K** | **Big Mountain,** | **75.69** | **9** | P | | **P** | **06 36 01.3** | **-0.4** |
| **P18K** | **Big Mountain,** | **75.69** | **9** | P | | **P** | **06 36 01.7** | **+0.1** |
| | baz=198,SNR=11 | | | | | | | |
| **M13K** | **Dall Lake** | **75.71** | **5** | P | | **P** | **06 36 02.8** | **+1.2** |
| | baz=190,SNR=5.5 | | | | | | | |
| **O17K** | **Koliganek Bris** | **75.78** | **8** | P | | **P** | **06 36 02.6** | **+0.6** |
| | baz=196,SNR=7.9 | | | | | | | |
| **N15K** | **Kwethluk River** | **75.79** | **7** | IAmb | | IAmb | 06 36 03.5 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **N15K** | **Kwethluk River** | **75.79** | **7** | P | | **P** | **06 36 02.7** | **+0.6** |
| | baz=193 | | | | | | | |
| **E03A** | **Lebam** | **75.85** | **33** | IAmb | | IAmb | 06 36 07.3 | |
| | comp=Z,25nm,1.0s | | | | | | | |
| **TUC** | **

**M17K Holitna River** 77.31 8 P P 06 36 11.9 +1.2
baz=196,SNR=8.0

**USRK Ussuriysk Ar.** 77.35 323 LR LR 07 03 20.1
comp=Z,208nm,21.8s,baz=145,slow=30

**L16K Owhat River** 77.36 7 P P 06 36 10.6 -0.4
L16K IAmb IAmb 06 36 13.6
comp=Z,28nm,1.1s

**L16K Owhat River** 77.36 7 P P 06 36 12.2 +1.2
baz=194,SNR=17

**SEW Seward** 77.39 12 P P 06 36 11.6 +0.5
baz=204

**F07A Phinny Hill Vi** 77.39 35 IAmb IAmb 06 36 13.8
comp=Z,14nm,1.1s

**BBB Bella Bella** 77.54 26 LR LR 07 01 59.2
comp=Z,125nm,19.8s,baz=233,slow=29

**G08A Pilot Rock** 77.57 36 IAmb IAmb 06 36 15.0
comp=Z,24nm,1.2s

**M18K Stony River** 77.61 8 P P 06 36 13.1 +0.7
baz=197,SNR=5.6

**P23K Montague Islan** 77.72 13 P P 06 36 13.6 +0.6
baz=206

**K15K Wolf Creek Mou** 77.72 6 P P 06 36 14.4 +1.4
baz=192,SNR=31

**MTPU Mount Pierson** 77.81 45 IAmb IAmb 06 36 18.2
comp=Z,16nm,1.4s

**E07A Sunnyside** 77.84 34 P P 06 36 15.0 +0.9
E07A IAmb IAmb 06 36 17.0
comp=Z,16nm,1.0s

**N20K Mount Spurr** 77.90 10 P P 06 36 15.0 +0.9
baz=201

**SPCR Spurr Chakacha** 77.90 10 P P 06 36 14.8 +0.7
baz=201

**L17K Donlin** 77.91 7 P P 06 36 15.5 +1.4
baz=195,SNR=21

**HAWA Hanford** 77.91 35 P P 06 36 14.9 +0.5
HAWA IAmb IAmb 06 36 16.8
comp=Z,17nm,1.1s

**CRAG Craig** 78.00 22 P P 06 36 15.9 +1.2
baz=220

**J14K Nanvaranak Lak** 78.00 4 P P 06 36 15.6 +1.1
baz=190

**W18A Petrified Fore** 78.11 48 P P 06 36 17.2 +1.1
baz=242

**L18K Granite Mounta** 78.19 8 P P 06 36 17.3 +1.7
baz=196,SNR=26

**M19K Big River Lodg** 78.21 9 IAmb IAmb 06 36 16.9
comp=Z,12nm,0.8s

**M19K Big River Lodg** 78.21 9 P P 06 36 16.1 +0.3
baz=199,SNR=8.1

**E08A Dider Farm, El** 78.23 35 IAmb IAmb 06 36 18.5
comp=Z,16nm,1.1s

**RC01 Rabbit Creek A** 78.24 11 P P 06 36 17.1 +1.2
baz=203

**PWL Port Wells** 78.31 12 P P 06 36 16.7 +0.4
baz=205

**KAIM Kayak Island** 78.33 14 P P 06 36 17.8 +1.4
baz=208

**121A Cookes Peak, D** 78.37 52 IAmb IAmb 06 36 20.4
comp=Z,9.3nm,0.8s

**121A Cookes Peak, D** 78.37 52 P P 06 36 19.0 +1.5
baz=244,SNR=11

**M20K Styx River** 78.39 10 IAmb IAmb 06 36 18.3
comp=Z,11nm,0.8s

**M20K Styx River** 78.39 10 P P 06 36 17.8 +1.0
baz=200

**SUA Susitna One** 78.40 11 P P 06 36 17.5 +0.6
baz=202,SNR=8.1

**L19K White Mountain** 78.41 9 P P 06 36 17.2 +0.3
baz=198,SNR=5.6

**V35K Ketchikan** 78.45 23 P P 06 36 18.7 +1.6
baz=221

**K17K Iditarod** 78.48 7 IAmb IAmb 06 36 20.0
comp=Z,35nm,1.1s

**K17K Iditarod** 78.48 7 P P 06 36 18.8 +1.6
baz=195,SNR=12

**DUG Dugway, Tooele** 78.49 43 P P 06 36 18.2 +0.2

**DUG Dugway, Tooele** 78.49 43 P P 06 36 18.2 +0.2
DUG pmax pmax
comp=Z,8.0nm,1.0s

**SIT Sitka** 78.49 20 P P 06 36 18.2 +0.9
baz=217

**U33K Whale Pass** 78.50 22 P P 06 36 19.0 +1.6
baz=220

**EYAK Cordova Ski Ar** 78.58 13 P P 06 36 18.7 +0.9
baz=207

**GLI Glacier Island** 78.58 13 P P 06 36 18.3 +0.5
baz=206

**D08A Wollman Farm,** 78.65 34 IAmb IAmb 06 36 20.8
comp=Z,19nm,1.1s

**SKT Skwentna** 78.75 10 IAmb IAmb 06 36 19.2
comp=Z,17nm,1.0s

**SKT Skwentna** 78.75 10 P P 06 36 18.5 -0.2
baz=202,SNR=6.5

**M22K Willow** 78.78 11 P P 06 36 19.1 +0.3
baz=203,SNR=8.3

**J16K Anvik River** 78.79 6 P P 06 36 20.6 +1.7
baz=192,SNR=29

**KNK Knik Glacier** 78.79 12 IAmb IAmb 06 36 20.4
comp=Z,26nm,0.8s

**KNK Knik Glacier** 78.79 12 P P 06 36 19.2 +0.3
baz=204,SNR=5.5

**PMR Palmer** 78.82 11 P P 06 36 17.8 -1.3

**PMR Palmer** 78.82 11 P P 06 36 18.8 -0.2
baz=204,SNR=9.3

**PMR Palmer** 78.82 11 P P 06 36 17.8 -1.3
PMR pmax pmax
comp=Z,52nm,1.3s

**L20K Farewell, AK** 78.84 9 P P 06 36 19.0 -0.2
baz=199,SNR=13

**S31K Pelican** 78.93 19 P P 06 36 20.5 +0.8
baz=216

**F10A Beach Ranch, E** 78.95 36 P P 06 36 19.3 -1.0
F10A IAmb IAmb 06 36 22.1
comp=Z,20nm,1.1s

**WRAK Wrangell Islan** 79.02 22 IAmb IAmb 06 36 22.5
comp=Z,15nm,0.9s

**WRAK Wrangell Islan** 79.02 22 P P 06 36 21.4 +1.1
baz=220

**J17K VABM Dome** 79.05 6 IAmb IAmb 06 36 23.2
comp=Z,31nm,0.9s

**J17K VABM Dome** 79.05 6 P P 06 36 21.6 +1.3
baz=194,SNR=16

**S32K Killisnoo** 79.07 20 P P 06 36 21.9 +1.4
baz=218

**TMUT Trail Mountain** 79.10 44 IAmb IAmb 06 36 25.2
comp=Z,12nm,0.8s

**MESA MESA** 79.16 15 P P 06 36 22.4 +1.2
baz=211

**SML Sawmill** 79.17 12 P P 06 36 22.1 +1.0
baz=205

**BMRM Bremner River** 79.21 14 P P 06 36 21.8 +0.5
baz=208,SNR=6.9

**HLID Hailey** 79.26 39 IAmb IAmb 06 36 24.8
comp=Z,15nm,1.0s

**M23K Glacier View** 79.28 12 P P 06 36 22.8 +1.2
baz=205

**CUT Chulitna** 79.36 11 P P 06 36 22.0 0.0

**CUT Chulitna** 79.36 11 P P 06 36 22.3 +0.3
baz=203

**I17K Unalakleet** 79.37 6 IAmb IAmb 06 36 25.1
comp=Z,30nm,1.0s

**I17K Unalakleet** 79.37 6 P P 06 36 23.6 +1.6
baz=192,SNR=5.3

**CRQE Cirque** 79.37 14 P P 06 36 23.5 +1.2
baz=210,SNR=5.3

**KLU Klutina** 79.38 13 IAmb IAmb 06 36 23.8
comp=Z,13nm,0.8s

**KLU Klutina** 79.38 13 P P 06 36 22.9 +0.6
baz=207

**J18K Innoko River** 79.39 7 P P 06 36 22.5 +0.3

**J18K Innoko River** 79.39 7 P P 06 36 23.6 +1.4
baz=196,SNR=38

**SCM Sheep Creek Mo** 79.40 12 P P 06 36 23.3 +0.9
baz=206,SNR=8.5

**PNL Peninsula** 79.40 17 P P 06 36 22.9 +0.6
baz=213

**C09A Chrisman Ranch** 79.45 34 IAmb IAmb 06 36 24.7
comp=Z,26nm,1.4s

**SRU San Rafael Swe** 79.47 45 IAmb IAmb 06 36 26.1
comp=Z,19nm,1.4s

**K20K Telida** 79.64 9 IAmb IAmb 06 36 26.1
comp=Z,32nm,1.0s

**K20K Telida** 79.64 9 P P 06 36 23.9 +0.3
baz=199

**GRNC Granite Creek** 79.69 15 IAmb IAmb 06 36 25.8
comp=Z,29nm,0.9s

**ANM Nome** 79.69 3 P P 06 36 24.5 +0.8
baz=188

**VRDI Verde Repeater** 79.70 14 P P 06 36 22.9 -1.3
VRDI IAmb IAmb 06 36 25.8
comp=Z,30nm,1.0s

**R32K Eaglecrest** 79.73 20 P P 06 36 25.0 +0.9
baz=218

**N25K Chitina, Valde** 79.77 13 IAmb IAmb 06 36 26.1
comp=Z,32nm,0.8s

**N25K Chitina, Valde** 79.77 13 P P 06 36 25.1 +0.7
baz=208,SNR=10

**GLB Gilahina Butte** 79.81 14 IAmb IAmb 06 36 26.1
comp=Z,22nm,0.9s

**P29M Windy Craggy** 79.84 17 IAmb IAmb 06 36 26.9
comp=Z,27nm,0.8s

**P29M Windy Craggy** 79.84 17 P P 06 36 25.9 +1.2
baz=215,SNR=6.1

**TCUT Toone Canyon** 79.88 43 IAmb IAmb 06 36 28.2
comp=Z,30nm,1.0s

**M24K Tolsona, Glenn** 79.88 12 P P 06 36 23.1 -1.9

**M24K Tolsona, Glenn** 79.88 12 P P 06 36 26.0 +1.0
baz=207,SNR=6.6

**MCARA McCarthy VSAT** 79.94 14 IAmb IAmb 06 36 26.9
comp=Z,20nm,0.9s

**MCARA McCarthy VSAT** 79.94 14 P P 06 36 25.7 +0.5
baz=210

**LOGN Logan Glacier** 79.95 15 IAmb IAmb 06 36 28.9
comp=Z,37nm,1.2s

**MVCO Mesa Verde** 79.97 47 P P 06 36 26.1 -0.2

**H16K Elim** 79.97 5 P P 06 36 26.5 +1.2
baz=191,SNR=8.3

**CTG Chitna Glacier** 79.99 15 P P 06 36 26.0 +0.4
baz=211,SNR=5.4

**CTGM Chitina Glacie** 79.99 15 IAmb IAmb 06 36 27.4
comp=Z,24nm,0.9s

**WAT6 Susitna Watana** 79.99 12 P P 06 36 26.0 +0.3
baz=205,SNR=8.2

**MA2 Magadan** 80.01 342 LR LR 07 06 56.7
comp=Z,71nm,19.9s,baz=158,slow=32

**J19K Poman** 80.04 8 IAmb IAmb 06 36 28.3
comp=Z,21nm,1.1s

**J19K Poorman** 80.04 8 P P 06 36 26.8 +1.1
baz=197,SNR=12

**WAT1 Susitna Watana** 80.07 11 P P 06 36 26.4 +0.5
baz=204

**PLBC Pleasant Camp** 80.10 18 P P 06 36 27.2 +1.1
baz=216,SNR=6.4

**O28M Mount Upton** 80.12 16 P P 06 36 27.1 +0.5
baz=205,SNR=6.6

**O29M Mount Kennedy** 80.16 17 IAmb IAmb 06 36 28.7
comp=Z,19nm,0.9s

**O29M Mount Kennedy** 80.16 17 P P 06 36 27.8 +1.3
baz=214,SNR=6.2

**G15K Niukluk** 80.20 4 P P 06 36 27.9 +1.4
baz=189,SNR=15

**T35M Bob Quinn** 80.20 22 P P 06 36 28.5 +1.8
baz=222

**NJ2 Nanjing** 80.23 307 eP P 06 36 27.6 +0.1
NJ2 pmax pmax
comp=Z,10.0nm,0.5s

**TXAR Lajitas Array** 80.24 56 P P 06 36 28.6 +0.8

**TXAR Lajitas Array** 80.24 56 P P 06 36 28.7 +0.9
TXAR LR LR 07 04 17.6
comp=Z,7.6nm,1.1s,baz=221,slow=6.5,SNR=39
comp=Z,61nm,20.1s,baz=246,slow=30
comp=Z,7.6nm,1.1s

**TRF Thorofare Moun** 80.33 10 P P 06 36 28.9 +1.4
baz=203

**NEW Newport** 80.34 34 LR LR 07 05 44.7
comp=Z,98nm,19.2s,baz=230,slow=31

**HARP HAARP** 80.36 13 P P 06 36 28.8 +1.3
baz=208

**J20K Nowinta River** 80.41 8 P P 06 36 28.6 +0.9
baz=199,SNR=40

**SKAG Skagway** 80.42 19 IAmb IAmb 06 36 30.4
comp=Z,15nm,1.0s

**SKAG Skagway** 80.42 19 P P 06 36 29.2 +1.5
baz=217,SNR=7.1

**ANMO Albuquerque** 80.43 50 P P 06 36 29.8 +1.0

**ANMO Albuquerque** 80.43 50 LR LR 07 04 49.1
comp=Z,97nm,20.9s,baz=352,slow=30

**ANMO Albuquerque** 80.43 50 *d* iP P 06 36 30.1 +1.4
ANMO pmax pmax
comp=Z,4.0nm,1.0s

**KLR Kul'dur** 80.46 327 LR LR 07 06 19.6
comp=Z,114nm,20.6s,baz=152,slow=31

**KLR Kul'dur** 80.46 327⇑ eP P 06 36 28.2 -0.1
KLR pmax pmax
comp=Z,9.0nm,2.0s

**P30M Million Dollar** 80.47 17 P P 06 36 29.7 +1.5
baz=216

**H17K Granite Mounta** 80.47 6 IAmb IAmb 06 36 30.2
comp=Z,20nm,1.2s

**H17K Granite Mounta** 80.47 6 P P 06 36 29.0 +0.9
baz=193

**DHY Denali Highway** 80.51 12 IAmb IAmb 06 36 29.8
comp=Z,13nm,0.9s

**DHY Denali Highway** 80.51 12 P P 06 36 28.9 +0.4
baz=205,SNR=5.8

**F14K Arctic Creek** 80.54 3 P P 06 36 29.8 +1.4
baz=187

**TNA Tin City** 80.56 2 P P 06 36 29.7 +1.2
baz=185

**S34M Telegraph Cree** 80.58 21 IAmb IAmb 06 36 31.1
comp=Z,16nm,0.9s

**S34M Telgraph Cree** 80.58 21 P P 06 36 30.2 +1.5
baz=221,SNR=9.2

**YUK8 Steele Glacier** 80.67 16 P P 06 36 30.4 +0.9
baz=213

**G16K Koyuk River** 80.71 5 IAmb IAmb 06 36 31.7
comp=Z,21nm,1.0s

**G16K Koyuk River** 80.71 5 P P 06 36 30.5 +1.3
baz=191,SNR=8.7

**YUK6 Outpost Mounta** 80.75 16 P P 06 36 30.9 +1.0
baz=214

**PAX Paxson** 80.80 12 P P 06 36 30.0 +0.1
baz=207,SNR=6.6

**BPAW Bear Paw Mtn.** 80.82 10 P P 06 36 30.3 +0.3
baz=202

**MCK McKinley** 80.83 11 P P 06 36 30.4 +0.4
baz=204,SNR=38

**M26K Nabesna, AK** 80.84 14 P P 06 36 31.0 +0.9
baz=210,SNR=20

**H18K Honosa River** 80.84 6 IAmb IAmb 06 36 31.9
comp=Z,14nm,1.1s

**H18K Honhosa River** 80.84 6 P P 06 36 31.0 +1.0
baz=195,SNR=6.2

**F15K North Star Dit** 80.87 4 IAmb IAmb 06 36 32.9
comp=Z,16nm,1.1s

**F15K North Star Dit** 80.87 4 P P 06 36 30.7 +0.6
baz=188

**BNX BinXian** 80.91 322 ⇑P P 06 36 31.6 +0.8
BNX pmax pmax
comp=Z,9.0nm,0.9s

**YUK3 Moose Creek** 80.91 15 P P 06 36 31.4 +0.8
baz=212,SNR=7.9

**G17K Kiwalik Mounta** 80.96 5 P P 06 36 31.7 +1.1
baz=192,SNR=7.9

**I20K Naaghedeneel** 80.96 8 IAmb IAmb 06 36 34.5
comp=Z,38nm,1.1s

**I20K Naaghedeneel** 80.96 8 P P 06 36 31.7 +1.2
baz=198,SNR=12

**Q32M Nakina River** 81.00 20 P P 06 36 32.2 +1.0
baz=220,SNR=6.3

**P32M Atlin** 81.02 19 IAmb IAmb 06 36 33.4
comp=Z,24nm,1.4s

**P32M Atlin** 81.02 19 P P 06 36 31.9 +0.8
baz=219

**M27K Edge Creek, AK** 81.06 14 P P 06 36 32.3 +0.9
baz=211,SNR=19

**O30N Mendenhall** 81.25 17 IAmb IAmb 06 36 34.5
comp=Z,25nm,0.9s

**O30N Mendenhall** 81.25 17 P P 06 36 33.2 +0.9
baz=216,SNR=8.3

**L26K Log Cabin Wild** 81.31 13 IAmb IAmb 06 36 34.5
comp=Z,18nm,0.9s

**L26K Log Cabin Wild** 81.31 13 P P 06 36 33.4 +0.8
baz=209,SNR=14

**MSO Missoula** 81.31 37 P P 06 36 33.1 0.0
MSO IAmb IAmb 06 36 34.6
comp=Z,21nm,1.1s

**DLMT Dillon** 81.32 38 IAmb IAmb 06 36 35.6
comp=Z,14nm,0.9s

**TPAW Teton Pass** 81.37 41 P P 06 36 32.6 -1.1
TPAW IAmb IAmb 06 36 35.1
comp=Z,15nm,0.8s

**DLBC Dease Lake** 81.37 21 LR LR 07 07 18.1
comp=Z,116nm,18.1s,baz=231,slow=32

**DLBC Dease Lake** 81.37 21 P P 06 36 34.1 +1.1
baz=222,SNR=5.0

**S22A 4UR Ranch, Cre** 81.40 47 P P 06 36 35.3 +1.3
baz=244,SNR=14

**H19K Roundabout Mou** 81.41 7 IAmb IAmb 06 36 35.5
comp=Z,28nm,0.9s

**H19K Roundabout Mou** 81.41 7 P P 06 36 34.1 +1.1
baz=196,SNR=18

**SNOW Snow King Moun** 81.48 41 IAmb IAmb 06 36 36.6
comp=Z,19nm,0.9s

**K24K Donnelly Dome** 81.49 12 P P 06 36 34.4 +0.9
baz=207,SNR=14

**WHY Whitehorse** 81.51 18 P P 06 36 34.8 +1.0
baz=217,SNR=5.2

**N30M Aishikik Lake** 81.53 17 P P 06 36 34.6 +0.8
baz=215

**G18K Tagagawik** 81.53 6 IAmb IAmb 06 36 35.6
comp=Z,25nm,1.0s

**G18K Tagagawik** 81.53 6 P P 06 36 34.3 +0.6
baz=194,SNR=19

**H20K Anotleneega Mo** 81.57 8 P P 06 36 35.1 +1.2
baz=198,SNR=21

**IMW Indian Meadow** 81.58 40 IAmb IAmb 06 36 37.3
comp=Z,13nm,0.8s

**NEA2 Nenana** 81.59 10 IAmb IAmb 06 36 35.9
comp=Z,26nm,0.9s

**NEA2 Nenana** 81.59 10 P P 06 36 33.7 -0.3
baz=204,SNR=28

**RIDG Independent Ri** 81.62 12 P P 06 36 33.8 -0.4

**RIDG Independent Ri** 81.62 12 P P 06 36 34.2 0.0
baz=208,SNR=10

**L27K Beaver Creek,** 81.68 14 P P 06 36 35.4 +0.9
baz=211,SNR=7.3

**BCAR Beaver Creek A** 81.69 14 P P 06 36 34.5 -0.1

**MLY Manley** 81.72 9 IAmb IAmb 06 36 35.7
comp=Z,28nm,0.9s

**MLY Manley** 81.72 9 P P 06 36 34.7 -0.1
baz=202,SNR=34

**R33M Jennings River** 81.77 20 P P 06 36 35.8 +0.7
baz=221,SNR=6.3

**P33M Teslin, Yukon** 81.79 19 P P 06 36 36.6 +1.3
baz=219

**HDA Harding Lake** 81.81 11 P P 06 36 35.0 -0.1
baz=206,SNR=30

**FLWY Flagg Ranch** 81.82 40 IAmb IAmb 06 36 38.8
comp=Z,20nm,0.9s

**F17K Baldwin Pennin** 81.83 5 P P 06 36 35.0 -0.1
F17K IAmb IAmb 06 36 37.5
comp=Z,27nm,0.8s

**F17K Baldwin Pennin** 81.83 5 P P 06 36 35.7 +0.5
baz=192,SNR=12

**PD31 Pinedale Array** 81.89 42 IAmb IAmb 06 36 38.2
comp=Z,37nm,1.8s

**PDAR Pinedale Array** 81.89 42 P P 06 36 35.6 -0.7

**PDAR Pinedale Array** 81.89 42 P P 06 36 36.8 +0.4
comp=Z,4.5nm,0.8s,baz=211,slow=3.3,SNR=28
PDAR LR LR 07 08 31.4
comp=Z,130nm,19.0s,baz=234,slow=32
comp=Z,4.5nm,0.8s

**SMAI San Martin Ant** 81.89 159 P P 06 36 37.0 +1.3
SMAI IAmb IAmb 06 36 38.7
comp=Z,27nm,1.2s

**YHL Hebgen Lake** 81.91 39 IAmb IAmb 06 36 39.6
comp=Z,27nm,0.8s

**N31M Braeburn, Yuko** 81.92 17 IAmb IAmb 06 36 37.9
comp=Z,30nm,1.0s

**N31M Braeburn, Yuko** 81.92 17 P P 06 36 36.9 +1.0
baz=216,SNR=8.8

**YFT Old Faithful** 81.92 40 IAmb IAmb 06 36 40.1
comp=Z,9.3nm,0.8s

**G19K Purcell Mounta** 81.94 7 P P 06 36 36.7 +0.9
baz=196,SNR=29

**M29M Somme Creek** 81.98 15 IAmb IAmb 06 36 38.0
comp=Z,16nm,0.9s

**M29M Somme Creek** 81.98 15 P P 06 36 37.1 +0.9
baz=214,SNR=14

**H21K Melozitna River** 82.00 8 IAmb IAmb 06 36 38.5
comp=Z,21nm,1.0s

**H21K Melozitna Rive** 82.00 8 P P 06 36 36.8 +0.6
baz=200,SNR=28

**SCRK Sand Creek** 82.01 13 IAmb IAmb 06 36 38.0
comp=Z,24nm,0.8s

**SCRK Sand Creek** 82.01 13 P P 06 36 36.7 +0.4
baz=209,SNR=27

**BOZ Bozeman (W)** 82.02 39 IAmb IAmb 06 36 39.3
comp=Z,19nm,1.0s

**I23K Minto, Yukon-K** 82.06 10 IAmb IAmb 06 36 37.7
comp=Z,24nm,0.9s

**I23K Minto, Yukon-K** 82.06 10 P P 06 36 36.6 +0.2
baz=203,SNR=20

**COLA College** 82.06 11 P P 06 36 36.2 -0.2

**COLA College** 82.06 11 P P 06 36 36.8 +0.4
baz=205

**COLA College** 82.06 11 *d* iP P 06 36 36.5 +0.1
COLA pmax pmax
comp=Z,79nm,0.9s

**F18K Selawik** 82.12 5 P P 06 36 37.1 +0.4
baz=193,SNR=8.6

**IL31** 82.15 11 P P 06 36 36.2 -0.7
IL31 IAmb IAmb 06 36 37.6
comp=Z,13nm,0.8s

**ILAR Eielson Array** 82.15 11 P P 06 36 36.0 -0.9

**ILAR Eielson Array** 82.15 11 P P 06 36 36.8 -0.2
comp=Z,12nm,0.9s,baz=212,slow=5.7,SNR=91
ILAR LR LR 07 06 06.1
comp=Z,112nm,21.6s,baz=196,slow=30
comp=Z,12nm,0.9s

**ODSA Odessa** 82.23 54 IAmb IAmb 06 36 41.8
comp=Z,22nm,1.2s

**J25K Salcha River,** 82.29 12 P P 06 36 38.4 +0.6
baz=207,SNR=36

**SDCO Great Sand Dun** 82.34 48 IAmb IAmb 06 36 41.5
comp=Z,17nm,1.4s

**SEY Seymchan** 82.35 345⇓ eP P 06 36 38.2 +0.2
SEY pmax pmax
comp=Z,21nm,1.3s

**POKR Poker Plat Res** 82.36 11 P P 06 36 37.3 -0.7

**POKR Poker Plat Res** 82.36 11 P P 06 36 38.4 +0.4
baz=205,SNR=22

**E17K Hotham Inlet** 82.42 4 P P 06 36 39.6 +1.4
baz=191,SNR=10

**H22K Ishtalitna Cre** 82.43 9 P P 06 36 39.0 +0.6
baz=201,SNR=24

**N32M Quiet Lake** 82.44 18 IAmb IAmb 06 36 40.7
comp=Z,16nm,0.9s

**N32M Quiet Lake** 82.44 18 P P 06 36 39.5 +1.0
baz=219

**K27K Chicken** 82.46 13 IAmb IAmb 06 36 41.0
comp=Z,31nm,1.4s

**K27K Chicken** 82.46 13 P P 06 36 39.5 +0.9
baz=210

**YMP Mirror Lake Pl** 82.49 40 IAmb IAmb 06 36 54.1
comp=Z,14nm,1.0s

**F19K Shaleruckik Mo** 82.53 6 P P 06 36 39.7 +0.9
baz=195,SNR=29

**J26L Joseph Creek** 82.56 12 P P 06 36 40.3 +1.1
baz=209,SNR=28

**H23K Yukon River** 82.65 10 IAmb IAmb 06 36 40.7
comp=Z,9.6nm,0.8s

**H23K Yukon River** 82.65 10 P P 06 36 39.8 +0.3
baz=203,SNR=8.7

**G21K Allakaket** 82.72 8 IAmb IAmb 06 36 42.1
comp=Z,18nm,0.8s

**G21K Allakaket** 82.72 8 P P 06 36 41.0 +1.1
baz=199,SNR=24

**DRIO Del Rio** 82.73 57 IAmb IAmb 06 36 44.7
comp=Z,16nm,0.8s

**E18K Tukpahlearik C** 82.85 5 IAmb IAmb 06 36 42.4
comp=Z,19nm,0.8s

**E18K Tukpahlearik C** 82.85 5 P P 06 36 41.4 +0.9
baz=192,SNR=16

**T25A Trinidad** 82.87 49 IAmb IAmb 06 36 43.8
comp=Z,11nm,0.9s

**T25A Trinidad** 82.87 49 P P 06 36 42.6 +1.0
baz=245,SNR=8.1

**M31M Drury Creek, Y** 82.89 17 IAmb IAmb 06 36 42.2
comp=Z,28nm,1.6s

**M31M Drury Creek, Y** 82.89 17 P P 06 36 41.3 +0.4
baz=218,SNR=8.3

**D17K Noatak River** 82.94 4 P P 06 36 42.0 +1.1
baz=190,SNR=5.7

**H24K Noodor Dome** 82.94 10 P P 06 36 40.6 -0.4
baz=205,SNR=7.3

**F20K Avaraart Lake** 82.96 7 IAmb IAmb 06 36 43.3
comp=Z,14nm,0.9s

**F20K Avaraart Lake** 82.96 7 P P 06 36 42.0 +1.0
baz=197

**WTLY Watson Lake, Y** 83.03 21 P P 06 36 43.1 +1.4
baz=223

**PRP Porcupine Dome** 83.07 11 P P 06 36 42.7 +0.9

baz=207,SNR=46
**DAWY Dawson 83.11 14** P **P** **06 36 41.5 -0.6**
**DAWY Dawson 83.11 14** P **P** **06 36 43.1 +1.1**
baz=213,SNR=27
**Q24A Divide 83.12 47** IAmb IAmb 06 36 45.6
comp=Z,22nm,1.0s
**Q24A Divide 83.12 47** P **P** **06 36 44.4 +1.4**
baz=245,SNR=11
**E19K Redstone River 83.19 6** P **P** **06 36 43.7 +1.4**
baz=196,SNR=27
**FARO Faro, Yukon 83.21 18** P **P** **06 36 43.0 +0.5**
baz=219,SNR=6.8
**RLMT Red Lodge 83.22 40** IAmb IAmb 06 36 45.9
comp=Z,22nm,1.0s
**SGCY Sterling City 83.26 55** IAmb IAmb 06 36 46.5
comp=Z,7.7nm,0.7s
**EGAK Eagle 83.31 13** P **P** **06 36 42.5 -0.4**
EGAK IAmb IAmb 06 36 44.9
comp=Z,17nm,0.9s
**EGAK Eagle 83.31 13** P **P** **06 36 43.8 +0.8**
baz=211,SNR=19
**833A Chaparral WMA, 83.33 58** IAmb IAmb 06 36 46.0
comp=Z,12nm,0.8s
**833A Chaparral WMA, 83.33 58** P **P** **06 36 44.7 +0.8**
baz=249
**I26K Coal Creek Min 83.35 12** P **P** **06 36 44.2 +1.1**
baz=209,SNR=17
**G22K Bettles 83.38 8** P **P** **06 36 44.6 +1.3**
baz=201
**K29M Barlow Dome 83.38 15** IAmb IAmb 06 36 45.7
comp=Z,21nm,0.9s
**K29M Barlow Dome 83.38 15** P **P** **06 36 44.5 +1.0**
baz=215,SNR=20
**C16K Lisburne Hills 83.38 3** P **P** **06 36 44.4 +1.2**
baz=188
**F21K Alatna River 83.40 8** IAmb IAmb 06 36 44.9
comp=Z,11nm,0.7s
**F21K Alatna River 83.40 8** P **P** **06 36 44.4 +1.0**
baz=199,SNR=14
**G23K Bananza Creek 83.40 9** P **P** **06 36 44.1 +0.7**
baz=203,SNR=21
**TOAD Toad River Com 83.41 23** P **P** **06 36 44.4 +0.7**
baz=226,SNR=24
**POST Post 83.41 53** P **P** **06 36 43.5 -0.7**
**N23A Red Feather La 83.41 45** IAmb IAmb 06 36 47.0
comp=Z,20nm,0.9s
**N23A Red Feather La 83.41 45** P **P** **06 36 45.8 +1.4**
baz=244,SNR=14
**LIRD Liard River Hi 83.48 22** P **P** **06 36 44.9 +1.0**
baz=226,SNR=5.3
**HBVL Hebbronville 83.49 60** IAmb IAmb 06 36 47.9
comp=Z,13nm,0.9s
**CMIG Matias Romero 83.54 70** LR LR 07 07 07.8
comp=Z,72nm,18.5s,baz=188,slow=31
**H25L Birch Creek 83.69 11** P **P** **06 36 45.5 +0.7**
baz=207,SNR=5.3
**C17K DeLong Mountai 83.70 4** P **P** **06 36 46.2 +1.3**
baz=190
**J29N Klondike Camp 83.72 14** P **P** **06 36 46.8 +1.6**
baz=214
**JCT Junction City 83.78 56** P **P** **06 36 44.4 -1.8**
JCT IAmb IAmb 06 36 51.7
comp=Z,7.2nm,0.8s
**JCT Junction City 83.78 56** P **P** **06 36 44.4 -1.8**
JCT pmax pmax
comp=Z,7.0nm,0.9s
**G24K Hadweenzic Riv 83.80 10** P **P** **06 36 46.6 +1.2**
baz=205
**RTBA Rita Blanca 83.80 50** IAmb IAmb 06 36 47.8
comp=Z,15nm,0.9s
**K22A Casper 83.81 43** IAmb IAmb 06 36 48.9
comp=Z,15nm,0.9s
**SN05 Snyder 5 83.82 54** P **P** **06 36 47.0 +0.6**
**F22K John River 83.84 8** P **P** **06 36 46.8 +1.2**
baz=200
**COLD Coldfoot 83.85 9** P **P** **06 36 47.0 +1.4**
baz=202,SNR=26
**SN07 Snyder 07 83.89 54** IAmb IAmb 06 36 48.3
comp=Z,32nm,1.4s
**PHWY Pilot Hill 83.92 44** IAmb IAmb 06 36 48.9
comp=Z,11nm,0.8s
**I27K Kandik River 83.93 13** P **P** **06 36 47.4 +1.2**
baz=211,SNR=12
**C18K Utukok River 84.01 4** P **P** **06 36 47.5 +1.0**
baz=192
**E20K Nigu River 84.07 6** P **P** **06 36 48.2 +1.3**
baz=197,SNR=36
**DKNS Dickens 84.08 53** IAmb IAmb 06 36 50.7
comp=Z,11nm,0.8s
**G25K Bearman Lake 84.09 10** P **P** **06 36 48.0 +1.2**
baz=206
**D19K Kuna River 84.11 6** P **P** **06 36 48.2 +1.2**
baz=195,SNR=12
**I28M Miner Creek 84.16 13** IAmb IAmb 06 36 49.1
comp=Z,14nm,0.9s
**I28M Miner Creek 84.16 13** P **P** **06 36 48.0 +0.6**
baz=212,SNR=13
**BELA Belgrano 2 84.21 172** P **P** **06 36 47.3 -0.2**
BELA IAmb IAmb 06 36 49.3
comp=Z,10nm,1.2s
**TGTN Hyland Airport 84.25 20** P **P** **06 36 49.3 +1.4**
baz=223,SNR=10
**J30M Hart River 84.28 15** IAmb IAmb 06 36 50.0
comp=Z,15nm,0.8s
**J30M Hart River 84.28 15** P **P** **06 36 49.2 +1.1**
baz=216,SNR=18
**PMSA Palmer Station 84.29 156** LR LR 07 09 00.7
comp=Z,310nm,18.4s,baz=62,slow=32
**BILL Bilibino 84.30 352** *d i* P **P** **06 36 48.3 +0.4**
BILL *e* 06 40 08.1
BILL pmax pmax
comp=Z,12nm,1.3s
**BRIGG Briggsdale 84.39 46** IAmb IAmb 06 36 51.4
comp=Z,11nm,0.7s
**I29M Ogilvie Camp, 84.45 14** IAmb IAmb 06 36 50.4
comp=Z,20nm,0.9s
**I29M Ogilvie Camp, 84.45 14** P **P** **06 36 49.4 +0.6**
baz=214,SNR=17
**D20K Etivluk River 84.47 6** P **P** **06 36 50.2 +1.4**
baz=196,SNR=18
**E22K Anaktuvuk Pass 84.48 8** P **P** **06 36 50.1 +1.2**
baz=201,SNR=41
**F24K Squaw Lake 84.48 9** IAmb IAmb 06 36 51.3
comp=Z,15nm,0.9s
**F24K Squaw Lake 84.48 9** P **P** **06 36 50.3 +1.4**
baz=205,SNR=13
**H27K Steamboat Moun 84.49 12** P **P** **06 36 50.0 +1.0**
baz=211,SNR=17
**E21K Killik River 84.50 7** P **P** **06 36 50.0 +1.0**
baz=199
**C19K Lookout Ridge 84.58 5** P **P** **06 36 50.6 +1.2**
baz=193,SNR=7.7
**B18K Kokolik River 84.67 4** P **P** **06 36 51.4 +1.6**
baz=191
**G26K Porcupine Rive 84.67 11** P **P** **06 36 51.3 +1.5**
baz=209,SNR=66
**E23K Chandalar 84.71 9** IAmb IAmb 06 36 52.5
comp=Z,22nm,0.9s
**E23K Chandalar 84.71 9** P **P** **06 36 51.3 +1.2**
baz=203
**BRDY Brady 84.72 56** IAmb IAmb 06 36 54.8
comp=Z,15nm,1.1s
**KOTAN Kotaneelee Air 84.72 22** P **P** **06 36 51.0 +0.8**
baz=227,SNR=6.1
**I30M Mount Dempster 84.80 15** P **P** **06 36 51.5 +0.9**
baz=216,SNR=26
**E24K Your Creek 84.89 9** IAmb IAmb 06 36 54.3
comp=Z,17nm,1.2s
**E24K Your Creek 84.89 9** P **P** **06 36 52.9 +1.9**
baz=204
**F25K Christian Rive 84.91 10** IAmb IAmb 06 36 53.8
comp=Z,17nm,1.0s
**F25K Christian Rive 84.91 10** P **P** **06 36 52.8 +1.6**
baz=207,SNR=16
**BMAR Burnt Mountain 84.95 11** P **P** **06 36 53.1 +1.8**
**G27K Doyon Strip 84.96 12** IAmb IAmb 06 36 53.1
comp=Z,12nm,1.0s
**G27K Doyon Strip 84.96 12** P **P** **06 36 52.4 +1.0**
baz=211,SNR=15
**D22K Ayikyak River 85.07 7** P **P** **06 36 53.5 +1.6**
baz=200,SNR=22
**C21K Knifeblade Rid 85.09 6** P **P** **06 36 53.3 +1.4**
baz=198,SNR=11
**SMWD Samnorwood 85.15 52** IAmb IAmb 06 36 54.9
comp=Z,20nm,1.5s
**H29M Whitestone 85.16 13** P **P** **06 36 53.3 +1.0**
baz=214,SNR=24
**TOLK Toolik Lake Re 85.26 8** P **P** **06 36 53.4 +0.6**
baz=203,SNR=13
**F26K Sheenjek River 85.27 11** IAmb IAmb 06 36 55.7
comp=Z,21nm,1.0s
**F26K Sheenjek River 85.27 11** P **P** **06 36 54.7 +1.8**
baz=208,SNR=15
**D23K Nanushuk River 85.41 8** P **P** **06 36 55.3 +1.8**
baz=202,SNR=13
**A19K Wainwright 85.55 4** P **P** **06 36 55.2 +1.1**
baz=192
**B21K Ikpikpuk River 85.55 6** P **P** **06 36 54.9 +0.7**
baz=198
**EPYK Eagle Plains 85.66 14** IAmb IAmb 06 36 56.6
comp=Z,22nm,0.9s
**EPYK Eagle Plains 85.66 14** P **P** **06 36 55.7 +0.8**
baz=215,SNR=12
**B20K Meade River 85.67 5** P **P** **06 36 55.7 +1.0**
baz=196
**435B Jarrell 85.67 57** IAmb IAmb 06 36 58.1
comp=Z,22nm,1.1s
**435B Jarrell 85.67 57** P **P** **06 36 56.9 +1.2**
baz=250
**G29M Pine Creek 85.81 13** IAmb IAmb 06 36 57.3
comp=Z,25nm,1.0s
**G29M Pine Creek 85.81 13** P **P** **06 36 56.5 +0.9**
baz=214,SNR=13
**D24K Happy Valley 85.84 8** IAmb IAmb 06 36 57.9
comp=Z,16nm,0.9s
**D24K Happy Valley 85.84 8** P **P** **06 36 56.7 +1.1**
baz=204
**F28M Old Crow 86.01 12** IAmb IAmb 06 36 58.6
comp=Z,16nm,0.9s
**F28M Old Crow 86.01 12** P **P** **06 36 57.6 +1.1**
baz=212,SNR=18
**WTFS Witchita Falls 86.03 54** IAmb IAmb 06 36 59.4
comp=Z,23nm,0.9s
**RSSD Black Hills 86.09 42** P **P** **06 36 57.3 -0.4**
RSSD IAmb IAmb 06 36 59.8
comp=Z,13nm,0.8s
**RSSD Black Hills 86.09 42** P **P** **06 36 57.3 -0.4**
RSSD pmax pmax
comp=Z,13nm,0.9s
**ELIS Ellis County 86.13 51** IAmb IAmb 06 37 02.0
comp=Z,19nm,1.0s
**E27K Coleen River 86.17 11** IAmb IAmb 06 36 59.9
comp=Z,20nm,1.0s
**E27K Coleen River 86.17 11** P **P** **06 36 58.8 +1.4**
baz=211,SNR=15
**FW07 Weatherford 86.18 55** IAmb IAmb 06 37 00.3
comp=Z,22nm,0.9s
**C23K Itkillik River 86.23 8** IAmb IAmb 06 36 59.9
comp=Z,17nm,0.8s
**C23K Itkillik River 86.23 8** P **P** **06 36 59.0 +1.5**
baz=202,SNR=5.4
**G30M tAoh Zrail Nji 86.27 14** P **P** **06 36 58.7 +0.8**
baz=216,SNR=19
**C24K Franklin Bluff 86.38 8** IAmb IAmb 06 37 00.5
comp=Z,24nm,1.1s
**C24K Franklin Bluff 86.38 8** P **P** **06 36 59.4 +1.2**
baz=204,SNR=5.3
**G31M Satah River 86.68 14** P **P** **06 37 00.4 +0.6**
baz=218,SNR=12
**X34A Smith Ranch, M 86.81 53** IAmb IAmb 06 37 06.3
comp=Z,17nm,0.9s
**HKT Hockley 86.81 58** P **P** **06 37 02.1 +0.8**
HKT IAmb IAmb 06 37 04.1
comp=Z,8.8nm,0.9s
**HKT Hockley 86.81 58** ⇓ *i* P **P** **06 37 02.6 +1.4**
HKT pmax pmax
comp=Z,10.0nm,1.1s
**F30M Barrier River 86.89 13** P **P** **06 37 01.7 +0.8**
baz=216
**CBKS Cedar Bluff 86.92 49** P **P** **06 37 01.6 -0.1**
CBKS IAmb IAmb 06 37 03.8
comp=Z,8.2nm,0.8s
**CBKS Cedar Bluff 86.92 49** P **P** **06 37 01.6 -0.1**
CBKS pmax pmax
comp=Z,8.0nm,0.9s
**E28M Babbage River 86.92 12** P **P** **06 37 02.1 +1.1**
baz=213
**APG El Apazote 86.99 74** LR LR 07 07 59.0
comp=Z,6.7nm,19.2s,baz=96,slow=30
**E29M Blow River 87.07 12** P **P** **06 37 02.8 +1.0**
baz=214
**LOOK Love County 87.11 54** IAmb IAmb 06 37 07.0
comp=Z,17nm,1.2s
**XLT XiLinHaoTe 87.13 317** *e* P **P** **06 37 04.3 +1.6**
XLT sP sP 06 37 12.8 -1.1
XLT pmax pmax
comp=Z,9.0nm,0.8s
**D27M Malcolm River 87.20 11** IAmb IAmb 06 37 05.8
comp=Z,21nm,1.6s
**D27M Malcolm River 87.20 11** P **P** **06 37 03.1 +0.7**
baz=211
**F31M Tsiigehtchic 87.22 14** P **P** **06 37 03.1 +0.7**
baz=218,SNR=13
**OK032 Salt Plains WL 87.31 51** IAmb IAmb 06 37 05.7
comp=Z,12nm,0.8s
**FNO Franklin 87.37 53** IAmb IAmb 06 37 06.4
comp=Z,7.2nm,0.7s
**R32A Long Quarter, 87.52 49** IAmb IAmb 06 37 06.9
comp=Z,18nm,0.9s
**D28M Stokes Point 87.69 12** P **P** **06 37 06.0 +1.3**
baz=213
**KAN09 Caldwell North 87.87 51** IAmb IAmb 06 37 08.6
comp=Z,8.7nm,0.6s
**INK Inuvik 87.96 14** P **P** **06 37 05.7 -0.2**
INK IAmb IAmb 06 37 07.4
comp=Z,13nm,0.9s
**INK Inuvik 87.96 14** LR LR 07 09 04.7
comp=Z,153nm,21.7s,baz=206,slow=30
**INK Inuvik 87.96 14** P **P** **06 37 06.6 +0.7**
baz=218,SNR=9.2
**INK Inuvik 87.96 14** P **P** **06 37 05.7 -0.2**
INK pmax pmax
comp=Z,13nm,1.0s
**MAW Mawson 88.12 199** P **P** **06 37 07.0 +0.1**
comp=Z,4.1nm,0.7s,baz=134,slow=6.8,SNR=12
MAW LR LR 07 14 18.2
comp=Z,208nm,19.3s,baz=111,slow=34
comp=Z,4.1nm,0.7s
**MAW Mawson 88.12 199** P **P** **06 37 07.0 +0.1**
**XAN Xi'an 88.71 306** ⇑ P **P** **06 37 10.0 -0.4**
XAN pmax pmax
comp=Z,8.0nm,1.2s
**X37A Clayton 88.72 54** IAmb IAmb 06 37 12.8
comp=Z,16nm,1.4s
**TUL3 Leonard 88.83 52** IAmb IAmb 06 37 14.1
comp=Z,8.5nm,0.9s
**YAK Yakutsk 88.99 337** LR LR 07 13 40.5
comp=Z,49nm,19.1s,baz=132,slow=33
**HHC Hu-ho-hao-te 89.06 313** *e* P **P** **06 37 13.3 +1.3**
HHC pmax pmax
comp=Z,10.0nm,0.7s
HHC pmax pmax
comp=Z,93nm,4.0s
**GO06 Curarrehue 89.19 131** P **P** **06 37 14.8 +2.1**
GO06 IAmb IAmb 06 37 15.8
comp=Z,8.9nm,1.1s
**PLCA Paso Flores 89.47 132** LR LR 07 08 44.7
comp=Z,117nm,19.5s,baz=211,slow=30
**YKA Yellowknife Ar 89.76 23** P **P** **06 37 14.8 +0.3**
comp=Z,6.5nm,0.9s,baz=246,slow=4.4,SNR=15
YKA LR LR 07 12 06.2
comp=Z,158nm,19.2s,baz=250,slow=32
comp=Z,6.5nm,0.9s
**BTO Baotou 90.07 312** *e* P **P** **06 37 19.0 +2.3**
BTO pP **pP** **06 37 23.6 -1.8**
BTO sP **sP** **06 37 26.1 -1.9**
BTO PP PP 06 40 42.1 -8.3
**BTO Baotou 90.07 312** S **S** **06 48 14.6 +6.3**
**MT01 Popeta 91.21 125** P **P** **06 37 24.2 +2.1**
MT01 IAmb IAmb 06 37 25.0
comp=Z,12nm,1.0s
**S39A Bolivar 91.28 51** IAmb IAmb 06 37 23.4
comp=Z,4.7nm,0.8s
**WHAR Wooly Hollow 91.34 54** IAmb IAmb 06 37 25.4
comp=Z,9.9nm,0.9s
**P38A Dawn 91.72 49** IAmb IAmb 06 37 25.5
comp=Z,10.0nm,0.8s
**F33A 5 Mile Ranch, 91.82 43** IAmb IAmb 06 37 25.4
comp=Z,9.0nm,1.1s
**MGMO Mountain Grove 91.91 52** IAmb IAmb 06 37 27.5
comp=Z,12nm,0.8s
**R40A Maddies Statio 92.25 51** IAmb IAmb 06 37 28.6
comp=Z,10nm,0.9s
**PZH PanZhiHua 92.41 297** P **P** **06 37 27.8 -0.1**
PZH pmax pmax
comp=Z,10.0nm,1.1s
PZH pmax pmax
comp=Z,160nm,6.9s
**ELIB Princess Elisa 92.41 185** *d* P **P** **06 37 27.8 +0.7**
comp=Z,12nm,0.9s
**LCAR Lake Charles 92.45 53** IAmb IAmb 06 37 29.3
comp=Z,6.5nm,1.0s
**T42A Van Buren 92.78 53** IAmb IAmb 06 37 30.8
comp=Z,5.9nm,0.9s
**P40A Paris 92.79 50** IAmb IAmb 06 37 29.7
comp=Z,8.3nm,0.9s
**CMAR Chiang Mai Arr 92.80 288** LR LR 07 14 15.2
comp=Z,37nm,21.8s,baz=100,slow=32
**NNA Nana 92.84 103** LR LR 07 12 27.0
comp=Z,19nm,18.9s,baz=206,slow=31
**NNA Nana 92.84 103** ⇓ *e* P **P** **06 37 29.7 -0.4**
NNA pmax pmax
comp=Z,66nm,1.4s
**AGMN Agassiz Nation 92.92 41** IAmb IAmb 06 37 30.1
comp=Z,9.1nm,1.2s
**CCM Cathedral Cave 92.96 51** P **P** **06 37 29.0 -1.0**
CCM IAmb IAmb 06 37 31.2
comp=Z,8.7nm,1.1s
**CCM Cathedral Cave 92.96 51** P **P** **06 37 29.0 -1.0**
CCM pmax pmax
comp=Z,9.0nm,1.1s
**SNAA Sanae 93.14 177** P **P** **06 37 30.8 +0.4**
**SNAA Sanae 93.14 177** P **P** **06 37 30.2 -0.1**
comp=Z,6.3nm,1.1s,baz=175,slow=12,SNR=4.5
SNAA LR LR 07 13 37.5
comp=Z,117nm,20.3s,baz=212,slow=32
comp=Z,6.3nm,1.1s
**SNAA Sanae 93.14 177** ⇑ *e* P **P** **06 37 30.6 +0.2**
SNAA pmax pmax
comp=Z,8.0nm,1.2s
**I37A Lemond, Waseca 93.17 45** IAmb IAmb 06 37 32.8
comp=Z,12nm,0.9s
**LZH Lanzhou 93.30 306** *e* P **P** **06 37 28.4 -3.4**
LZH sP PcP 06 37 35.8 +3.4
LZH pmax pmax
comp=Z,14nm,0.9s
**FVM French Village 93.56 52** IAmb IAmb 06 37 34.1
comp=Z,12nm,1.0s
**ULM Lac du Bonnet 93.56 39** P **P** **06 37 31.9 -0.5**
comp=Z,5.1nm,0.8s,baz=209,slow=5.0,SNR=6.0
ULM LR LR 07 14 22.0
comp=Z,210nm,19.6s,baz=241,slow=32
comp=Z,5.1nm,0.8s
**ULM Lac du Bonnet 93.56 39** *de* P **P** **06 37 31.4 -1.1**
**SPMN Marine on St. 93.95 44** IAmb IAmb 06 37 36.3
comp=Z,10nm,0.9s
**ULN Ulaanbaatar 94.43 318** ⇓ *e* P **P** **06 37 36.4 -0.3**
ULN pmax pmax
comp=Z,3.0nm,0.8s
**PLAL Pickwick Lake 94.57 55** P **P** **06 37 37.1 -0.4**
PLAL IAmb IAmb 06 37 38.8
comp=Z,6.4nm,0.8s
**TIXI Tiksi 94.84 344** LR LR 07 16 47.1
comp=Z,130nm,20.4s,baz=122,slow=33
**SONM Songino Array 94.84 318** LR LR 07 14 46.7
comp=Z,111nm,21.1s,baz=94,slow=32
**WVT Waverly 95.06 54** P **P** **06 37 39.6 -0.1**
WVT IAmb IAmb 06 37 41.0
comp=Z,5.2nm,1.0s
**WVT Waverly 95.06 54** P **P** **06 37 39.6 -0.1**
WVT pmax pmax
comp=Z,5.0nm,1.0s
**SWET Sewanee 96.33 55** IAmb IAmb 06 37 46.5
comp=Z,5.3nm,0.8s
**152A Waverly Hall 96.70 58** IAmb IAmb 06 37 45.0
comp=Z,5.6nm,0.8s
**U49A Red Boiling Sp 96.76 54** IAmb IAmb 06 37 49.6
comp=Z,11nm,1.1s
**W50A Signal Mountai 96.82 56** IAmb IAmb 06 37 50.4
comp=Z,7.7nm,1.1s
**LVC Limon Verde 96.87 116** LR LR 07 13 56.1
comp=Z,80nm,18.3s,baz=219,slow=31
**TKL Tuckaleechee C 98.14 55** LR LR 07 17 46.7
comp=Z,80nm,18.6s,baz=288,slow=33
**P49A Miami Univ. Ec 98.27 51** P **P** **06 37 54.2 0.0**
baz=258
**P52A Corning 100.24 52** P **Pdif** **06 38 03.4 +0.4**
baz=259
**O53A New Philadelph 101.05 51** P **Pdif** **06 38 07.1 +0.6**
baz=260
**M53A WI Miller and 101.66 50** P **Pdif** **06 38 09.5 +0.2**
baz=260
**WMQ Urumqi 106.91 312** Pdif **Pdif** **06 38 33.4 +0.8**
**BVAR Borovoye Array 117.85 322** PKP **PKPdf** **06 43 02.5 -0.3**
comp=Z,1.0nm,0.6s,baz=64,slow=3.4,SNR=6.1
**ARU Arti 123.27 329** *i* PKIKP **PKiKP** **06 43 13.8 +0.4**
ARU 06 44 57.0
ARU 06 50 24.1
ARU SS SS 07 01 42.7 +5.5
**ARCES ARCESS Array B 124.40 352** PKP **PKPdf** **06 43 14.7 -0.3**
comp=Z,2.6nm,0.8s,baz=29,slow=2.8,SNR=4.7
**KIRV Kirov 126.44 334** *c i* PKIKP **PKiKP** **06 43 19.6 0.0**
**AKASG Malin Array Be 140.21 338** *ce* PKIKP **PKiKP** **06 43 47.0 -0.7**
**HORU Horodok 142.45 339** PKP **PKPdf** **06 43 48.4 -0.9**
**KMPD K-Podol'skiy 142.99 338** PKP **PKPdf** **06 43 46.4 -3.9**
**CLL Collm 143.60 354** *e* PKPdf PKPbc 06 43 49.0 +0.4
CLL *i* x x 06 44 10.0
**CLL Collm 143.60 354** *e* PKIKP PKPbc 06 43 49.0 +0.4
**BURAR Bucovina Array 144.24 339** ⇑ P **PKPdf** **06 43 52.2 -0.5**
**BURAR Bucovina Array 144.24 339** ⇑ PKIKP **PKPdf** **06 43 52.2 -0.5**
**CRVS Cervenica-Dubn 144.28 343** *e* PKIKP PKPbc 06 43 51.6 +0.8
**CRVS Cervenica-Dubn 144.28 343** *e* PKP PKPbc 06 43 51.6 +0.8
**MORC Moravsky Berou 144.39 348** *e* PKP PKPbc 06 43 51.5 +0.3
MORC 06 43 57.9
**MEM Membach 144.62 1** *d* PKPdf PKPbc 06 43 52.1 +0.3
**BMRD Maredsous 144.90 2** *d* PKPdf PKPbc 06 43 53.1 +0.4
**VRAC Vranov 145.02 349** *e* PKP **PKPdf** **06 43 54.3 +0.5**
VRAC 06 43 59.7
**RCHB Rochefort 145.06 2** *d* PKPdf **PKPdf** **06 43 53.9 0.0**
**DOU Dourbes 145.09 3** *d* PKPdf **PKPdf** **06 43 54.0 +0.1**
**PLOR Plostina 145.18 336** ⇑ P **PKPdf** **06 43 54.2 0.0**
**PLOR Plostina 145.18 336** ⇑ PKIKP **PKPdf** **06 43 54.2 0.0**
**TPGR Topolog 145.23 333** ⇑ P **PKPdf** **06 43 55.1 +0.7**
**JAVC Velka Javorina 145.23 347** *e* PKP **PKPdf** **06 43 55.7 +1.4**
**KRUC Moravsky 145.29 349** *e* PKP **PKPdf** **06 43 54.6 +0.3**
KRUC *e* 06 44 00.1
**OZUR 145.31 337** ⇓ P **PKPdf** **06 43 55.6 +1.1**
**VYHS Vyhne 145.32 346** *e* PKIKP **PKPdf** **06 43 55.4 +1.0**
**VYHS Vyhne 145.32 346** *e* PKP **PKPdf** **06 43 55.4 +1.0**
**COVR Voineasa-Covas 145.36 336** ⇑ P **PKiKP** **06 43 56.7 -1.8**
**GRF Grafenberg Arr 145.37 355** *e* PKP **PKPab** **06 43 54.9 +0.5**
baz=7.5,slow=2.9
**DOPR Dopca 145.57 337** ⇑ P **PKPab** **06 43 56.8 +1.5**
**WLF Walferdange 145.57 1** *d* PKP **PKPab** **06 43 56.0 +0.9**
**HARR Harsova 145.57 333** ⇓ P **PKPab** **06 43 56.8 +1.5**
**HARR Harsova 145.57 333** ⇓ PKIKP **PKPab** **06 43 56.8 +1.5**
**KHC Kasperske Hory 145.67 352** PKPdf **PKPbc** **06 43 55.3 0.0**
**KHC Kasperske Hory 145.67 352** *e* PKP **PKPab** **06 43 56.0 +0.3**
KHC x x 06 44 08.5
**KHC Kasperske Hory 145.67 352** *d i* PKP2 **PKPab** **06 43 55.9 +0.3**
KHC pmax pmax
comp=Z,57nm,1.0s
**MLR Muntele Rosu 145.75 336** ⇓ P **PKPab** **06 43 57.6 +1.4**
**MLR Muntele Rosu 145.75 336** ⇓ PKP2 **PKPab** **06 43 57.6 +1.4**
**MARR Marisel-Cluj 145.76 340** ⇓ P **PKPab** **06 43 56.5 +0.4**
**DRGR 145.80 341** ⇓ P **PKPab** **06 43 56.6 +0.4**
**DRGR 145.80 341** ⇓ PKP2 **PKPab** **06 43 56.6 +0.4**
**ISR Istrita 145.82 335** ⇑ P **PKPab** **06 43 57.3 +1.0**
**ISR Istrita 145.82 335** ⇑ PKP2 **PKPab** **06 43 57.3 +1.0**
**KMBO Kilima Mbogo 145.89 244** PKPbc **PKPdf** **06 43 55.0 -1.7**
comp=Z,1.8nm,0.4s,baz=102,slow=14,SNR=2.4
**GEC2 GERESS Array S 145.93 352** **PKPdf** **06 43 54.0 -1.6**
**GERES GERESS Array B 145.93 352** **PKPdf** **06 43 55.5 0.0**
**GERES GERESS Array B 145.93 352** PKPbc **PKPbc** **06 43 56.2 0.0**
comp=Z,7.7nm,0.9s,baz=336,slow=3.4,SNR=25
**GERES GERESS Array B 145.93 352** PKP2 **PKPdf** **06 43 55.6 0.0**
**BRTR Keskin Array B 146.13 321** PKPbc **PKPab** **06 43 58.0 +0.1**
comp=Z,20nm,0.9s,baz=103,slow=2.4,SNR=87
**BRTR Keskin Array B 146.13 321** PKP2 **PKPab** **06 43 58.0 +0.1**
**VOIR 146.15 337** ⇑ P **PKPab** **06 43 58.2 +0.6**
**VOIR 146.15 337** ⇑ PKP2 **PKPab** **06 43 58.2 +0.6**
**KIRS Kirsehir-Merke 146.33 320** ⇑ P **PKPab** **06 43 59.0 +0.5**
**ARR Arges 146.36 337** ⇑ P **PKiKP** **06 43 59.9 -0.7**
**CONA Conrad Observa 146.48 349** *i* PKiKP **PKPab** **06 43 59.1 +0.3**
comp=Z,10nm,0.9s,SNR=6.6
**ANTO Ankara 146.55 322** ⇓ P **PKPab** **06 43 59.9 +0.6**
**ANTO Ankara 146.55 322** ⇓ PKP2 **PKPab** **06 43 59.9 +0.6**
**SIRR Siria 146.59 341** ⇑ P **PKPab** **06 43 59.2 0.0**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RONA | Rosalia, Austr | 146.62 | 348 | *i* PKiKP | PKPab | 06 43 59.7 | +0.4 | |
| | comp=Z,15nm,0.9s,SNR=6.1 | | | | | | | |
| MOA | Molln | 146.82 | 351 | *i* PKP | PKPab | 06 43 59.7 | -0.3 | |
| | comp=Z,13nm,1.0s,SNR=7.6 | | | | | | | |
| BFO | Black Forest | 146.89 | 358 | | PKPbc | 06 43 58.9 | -0.1 | |
| BFO | Black Forest | 146.89 | 358 | PKP2 | PKPbc | 06 43 58.9 | -0.1 | |
| SURR | Surduc | 146.90 | 340 | ⇓P | PKPab | 06 43 59.8 | -0.6 | |
| GZR | Gura Zlata | 147.00 | 339 | ⇑P | PKPbc | 06 44 00.1 | +0.7 | |
| GZR | Gura Zlata | 147.00 | 339 | ⇑PKP2 | PKPbc | 06 44 00.1 | +0.7 | |
| BIOA | Bad Ischl, Aus | 147.07 | 352 | *i* PKP | PKPab | 06 44 00.7 | -0.3 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| BZS | Buzias | 147.19 | 341 | ⇑P | PKPab | 06 44 00.7 | -0.8 | |
| BZS | Buzias | 147.19 | 341 | ⇑PKP2 | PKPab | 06 44 00.7 | -0.8 | |
| ARSA | Arzberg | 147.19 | 349 | *i* PKP | PKPab | 06 44 00.8 | -0.7 | |
| | comp=Z,6.8nm,1.0s | | | | | | | |
| LESA | Schwarzleotal | 147.46 | 353 | *i* PKP | PKPab | 06 44 01.9 | -0.7 | |
| | comp=Z,17nm,1.5s | | | | | | | |
| MORH | Mrgy, Hungar | 147.50 | 345 | ⇑P | PKPbc | 06 44 01.2 | +0.6 | |
| HERR | Herculane | 147.58 | 339 | ⇑P | PKPbc | 06 44 01.6 | +0.7 | |
| RETA | Reutte | 147.59 | 355 | *i* PKP | PKiKP | 06 44 02.2 | -0.9 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| WATA | Walderalm | 147.67 | 354 | *i* PKP | PKPbc | 06 44 01.7 | +0.4 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| MOTA | Moosalm | 147.71 | 355 | *i* PKP | PKPbc | 06 44 02.2 | +0.8 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| KBA | Koelnbreinsper | 147.71 | 352 | *i* PKP | PKPbc | 06 44 01.2 | -0.3 | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| WTTA | Wattenberg | 147.74 | 354 | *i* PKP | PKPbc | 06 44 01.5 | -0.1 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| SQTA | Sankt Quirin | 147.82 | 354 | *i* PKP | PKPbc | 06 44 02.6 | +1.0 | |
| | comp=Z,9.2nm,0.7s | | | | | | | |
| SOKA | Soboth | 147.84 | 349 | *i* PKP | PKPbc | 06 44 01.6 | -0.1 | |
| | comp=Z,13nm,0.9s,SNR=6.5 | | | | | | | |
| DAVA | Damuels | 147.86 | 356 | *i* PKP | PKiKP | 06 44 02.9 | -0.9 | |
| | comp=Z,26nm,1.1s,SNR=5.5 | | | | | | | |
| PERS | Pernice | 147.86 | 349 | *i* PKPbc | PKPbc | 06 44 01.7 | 0.0 | |
| FETA | Feichten | 148.06 | 355 | *i* PKP | PKPbc | 06 44 03.2 | +0.8 | |
| | comp=Z,12nm,1.1s,SNR=7.3 | | | | | | | |
| OBKA | Obir | 148.08 | 350 | *i* PKP | PKPbc | 06 44 02.8 | +0.4 | |
| | comp=Z,7.1nm,1.1s | | | | | | | |
| MYKA | Terra Mystica | 148.11 | 351 | *i* PKP | PKPbc | 06 44 02.6 | +0.1 | |
| | comp=Z,8.1nm,0.9s | | | | | | | |
| ABTA | Abfaltersbach | 148.15 | 353 | *i* PKP | PKPbc | 06 44 02.6 | +0.1 | |
| | comp=Z,14nm,0.9s,SNR=6.6 | | | | | | | |
| FUORN | Ofenpass-Fuorn | 148.50 | 356 | PKPab | PKiKP | 06 44 04.5 | -0.7 | |
| MMAI | Mount Meron Ar | 148.62 | 310 | PKPbc | PKPbc | 06 44 04.5 | +0.3 | |
| | comp=Z,9.5nm,0.8s,baz=60,slow=4.9,SNR=15 | | | | | | | |
| GBAS | Gorenja Brezov | 148.66 | 350 | *i* PKPbc | PKPbc | 06 44 04.0 | +0.2 | |
| SENIN | Lac Senin/Sane | 148.88 | 359 | PKPab | PKiKP | 06 44 05.7 | -0.3 | |
| CSS | Mathiatis | 149.13 | 315 | PKPab | PKPbc | 06 44 05.7 | +0.4 | |
| SSB | Saint Sauveur | 149.90 | 3 | PKPab | PKiKP | 06 44 07.8 | -0.1 | |
| SSB | Saint Sauveur | 149.90 | 3 | PKP2 | PKiKP | 06 44 07.8 | -0.1 | |
| BNI | Bardonecchia | 150.19 | 0 | PKPab | PKiKP | 06 44 08.8 | +0.3 | |
| BNI | Bardonecchia | 150.19 | 0 | PKIKP | PKiKP | 06 44 08.9 | +0.3 | |
| POLO | Lamas de Olo | 150.93 | 23 | *e*PKPab | PKPab | 06 44 18.0 | +1.1 | |
| PBRG | Braganca | 150.94 | 21 | *e*PKPbc | PKPbc | 06 44 08.6 | -1.0 | |
| PBRG | Braganca | 150.94 | 21 | *e*PKPab | PKPab | 06 44 18.0 | +1.1 | |
| MVO | Moncorvo | 151.40 | 22 | *e*PKPbc | PKiKP | 06 44 12.3 | +1.1 | |
| PVIS | Viseu | 151.46 | 24 | *e*PKPab | PKPab | 06 44 20.2 | +1.1 | |
| PSBE | So Bento | 152.10 | 27 | *e*PKPab | PKPab | 06 44 23.1 | +1.3 | |
| PCBR | Castelo Branco | 152.37 | 24 | *e*PKPbc | PKPbc | 06 44 11.9 | -0.9 | |
| PMTG | Montargil | 152.72 | 26 | *e*PKPbc | PKiKP | 06 44 14.6 | +0.8 | |
| PMRV | Marv??o | 152.76 | 25 | *e*PKPbc | PKiKP | 06 44 18.1 | +4.2 | |
| PESTR | Estremoz | 153.15 | 26 | *e*PKPab | PKPab | 06 44 26.5 | +0.3 | |
| EVO | Evora | 153.26 | 27 | *e*PKPab | PKPab | 06 44 27.3 | +0.7 | |
| PNCL | Nicolau / Gran | 153.37 | 28 | *e*PKPab | PKPab | 06 44 27.2 | +0.1 | |
| PBEJ | Beja | 153.74 | 27 | *e*PKPbc | PKiKP | 06 44 16.5 | +0.5 | |
| ESDC | Sonseca Array | 153.78 | 19 | PKPbc | PKiKP | 06 44 16.3 | +0.2 | |
| | comp=Z,1.0nm,0.8s,baz=316,slow=2.2,SNR=3.4 | | | | | | | |
| ESDC | | | | PKPab | PKPab | 06 44 29.7 | +0.8 | |
| | comp=Z,5.9nm,1.0s,baz=328,slow=3.7,SNR=23 | | | | | | | |
| PBAR | Barrancos | 153.97 | 26 | *e*PKPab | PKPab | 06 44 30.1 | +0.5 | |
| PCVE | Castro Verde | 153.99 | 28 | *e*PKPab | PKPab | 06 44 31.1 | +1.4 | |
| TORD | Torodi Ar. Bea | 174.59 | 111 | PKP | PKPdf | 06 44 26.8 | -0.5 | |
| | comp=Z,0.7nm,1.1s,baz=186,slow=9.1,SNR=2.9 | | | | | | | |
| TORD | | | | PKPab | PKPab | 06 46 00.6 | -0.1 | |
| | comp=Z,0.8nm,1.0s,baz=266,slow=3.8,SNR=2.8 | | | | | | | |

*MOS **21** 06:28:55.5±1.5, 17.°82S×178.°24W, h535km, mb4.8/10, MS4.6/7, Error ellipse: s-maj=13.3km s-min=10.1km az=164.6*

*BJI **21** 06:28:56.1±0.0, 18.°25S×178.°17W, h561km, mb4.7/21, mB5.0/8*

*IDC **21** 06:28:57.3±0.5, 18.°09S×178.°07W, h564km±5km, mb3.9/16, mbtmp4.9/18, Error ellipse: s-maj=11.1km s-min=10.3km az=143.0*

*NEIC **21** 06:28:57.0±1.6, 17.°98S±0.°07×178.°09W±0.°08, h556km±6km, mb5.0/65, Error ellipse: s-maj=15.0km s-min=1.7km az=130.0*

*NOU **21** 06:28:57.6, 18.°16S×178.°10W, h558km, mb5.2/83, Fiji Islands Region*

**ISC 21 06:28:57.1±0.4, 18°09S±0°05×178°10W±0°05, h562km±4km, h563km; pP-P, n509, σ1s12/508, mb5.0/93, 45C-43D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 3.68 | 275 | P | P | 06 30 19.2 | +1.5 |
| MSVF | Nonsavu | 3.68 | 275 | P | P | 06 30 19.9 | +2.2 |
| MSVF | Nonsavu | 3.68 | 275 | P | P | 06 30 19.9 | +2.2 |
| AFI | Afiamalu | 7.36 | 57 | P | P | 06 30 46.2 | -3.0 |
| AFI | Afiamalu | 7.36 | 57 | P | P | 06 30 46.2 | -3.0 |
| NIUE | Niue | 7.81 | 99 | P | P | 06 30 53.5 | +0.1 |
| FUNA | Funafuti | 9.86 | 344 | P | P | 06 31 15.4 | +1.5 |
| FUNA | Funafuti | 9.86 | 344 | P | P | 06 31 10.4 | -3.5 |
| GLKZ | Green Lake | 11.12 | 179 | P | P | 06 31 24.7 | -1.8 |
| GLKZ | | | | S | S | 06 33 31.5 | +2.1 |
| RTV | Rentapao | 12.83 | 269 | P | P | 06 31 45.4 | +1.2 |
| DVP | Devils Point | 13.06 | 269 | P | P | 06 31 47.7 | +1.1 |
| MARNC | Mare, Loyalty | 13.48 | 253 | P | P | 06 31 51.7 | +0.8 |
| LIFNC | LIFOU | 14.09 | 257 | P | P | 06 31 55.8 | -1.4 |
| LIFNC | LIFOU | 14.09 | 257 | P | P | 06 31 55.7 | -1.4 |
| PINNC | Pines Island, | 14.28 | 249 | P | P | 06 31 58.5 | -0.6 |
| YATNC | Mamie plateau, | 14.64 | 252 | P | P | 06 32 03.1 | +0.4 |
| DZM | Mont Dzumac | 15.05 | 252 | P | P | 06 32 06.7 | -0.2 |
| DZM | Mont Dzumac | 15.05 | 252 | P | P | 06 32 06.0 | -0.9 |
| DZM | Mont Dzumac | 15.05 | 252 | P | P | 06 32 05.6 | -1.3 |
| | 174nm,0.6s,baz=78,slow=20,SNR=47 | | | | | | |
| NOUC | Port Laguerre | 15.18 | 252 | P | P | 06 32 08.1 | 0.0 |
| KOUNC | Koumac, New Ca | 16.80 | 259 | P | P | 06 32 24.5 | +1.0 |
| KOUNC | Koumac, New Ca | 16.80 | 259 | P | P | 06 32 23.8 | +0.3 |
| RAR | Rarotonga | 17.54 | 103 | P | P | 06 32 30.7 | +0.5 |
| RAR | Rarotonga | 17.54 | 103 | P | P | 06 32 30.6 | +0.5 |
| RAR | Rarotonga | 17.54 | 103 | P | P | 06 32 29.9 | -0.3 |
| | 88nm,1.0s,baz=246,slow=5.9,SNR=7.2 | | | | | | |
| RAR | Rarotonga | 17.54 | 103 | P | P | 06 32 30.7 | +0.5 |
| OUZ | Omahuta | 18.59 | 202 | P | P | 06 32 42.4 | +2.8 |
| WCZ | Waipu Caves | 19.00 | 199 | P | P | 06 32 45.7 | +2.4 |
| KUZ | Kuaotunu | 19.37 | 195 | P | P | 06 32 47.6 | +1.0 |
| HAZ | Te Kaha | 19.92 | 190 | P | P | 06 32 49.7 | -1.9 |
| PKGZ | Pakihiroa | 19.99 | 189 | P | P | 06 32 51.7 | -0.6 |
| RUGZ | Raukumara Rang | 20.14 | 190 | P | P | 06 32 51.5 | -2.3 |
| PUZ | Puketiti | 20.16 | 188 | P | P | 06 32 52.6 | -1.3 |
| OPRZ | Ohinepanea | 20.23 | 192 | P | P | 06 32 54.7 | +0.2 |
| TWGZ | Tauwhareparae | 20.31 | 189 | P | P | 06 32 54.8 | -0.4 |
| TOZ | Tahuroa Road | 20.36 | 195 | P | P | 06 32 56.9 | +1.3 |
| KMRZ | Kaimai | 20.36 | 194 | P | P | 06 32 57.5 | +1.8 |
| EDRZ | Edgecumbe | 20.45 | 192 | P | P | 06 32 55.9 | -0.6 |
| OMRZ | Omania | 20.52 | 193 | P | P | 06 32 57.5 | +0.3 |
| URZ | Urewera | 20.53 | 191 | P | P | 06 32 55.9 | -1.2 |
| URZ | Urewera | 20.53 | 191 | P | P | 06 32 54.4 | -2.8 |
| | 173nm,0.5s,baz=52,slow=2.4,SNR=89 | | | | | | |
| URZ | | | | S | S | 06 36 05.1 | -6.2 |
| | 8.7nm,0.6s,baz=18,slow=20,SNR=1.6 | | | | | | |
| URZ | Urewera | 20.53 | 191 | P | P | 06 32 54.4 | -2.8 |
| URZ | | | | S | S | 06 36 08.8 | -2.5 |
| MWZ | Matawai | 20.53 | 190 | P | P | 06 32 55.0 | -2.2 |
| CNGZ | Carnagh Statio | 20.57 | 188 | P | P | 06 32 57.0 | -0.6 |
| TKGZ | Te Karaka | 20.58 | 189 | P | P | 06 32 57.0 | -0.6 |
| RAGZ | Rawiri | 20.71 | 190 | P | P | 06 32 57.3 | -1.5 |
| RRRZ | Republican Roa | 20.72 | 192 | P | P | 06 32 58.1 | -0.8 |
| GRRZ | Galatos Road | 20.81 | 193 | P | P | 06 32 59.8 | +0.1 |
| HRRZ | Handcock Road | 20.81 | 192 | P | P | 06 32 59.4 | -0.4 |
| RIGZ | Rimuhau | 20.86 | 189 | P | P | 06 32 58.4 | -1.7 |
| TLZ | Tolley Road | 20.92 | 194 | P | P | 06 33 02.3 | +1.6 |
| ALRZ | Allen Road | 20.97 | 192 | P | P | 06 33 01.7 | +0.5 |
| SNGZ | Shannon Statio | 21.00 | 190 | P | P | 06 33 00.5 | -0.9 |
| KUTZ | Kaahu Road | 21.01 | 193 | P | P | 06 33 02.0 | +0.5 |
| PRGZ | Paritu Road | 21.05 | 189 | P | P | 06 33 02.2 | +0.3 |
| MTHZ | Maungataniwha | 21.15 | 191 | P | P | 06 33 01.4 | -1.5 |
| KNZ | Kokohu | 21.18 | 189 | P | P | 06 33 01.1 | -1.8 |
| MRHZ | Matea Rd | 21.21 | 192 | P | P | 06 33 01.7 | -1.7 |
| HIZ | Hauiti | 21.26 | 195 | P | P | 06 33 05.6 | +1.9 |
| MHGZ | Mahia Peninsul | 21.27 | 189 | P | P | 06 33 03.6 | -0.3 |
| WHHZ | Waihua | 21.30 | 190 | P | P | 06 33 03.9 | -0.2 |
| RATZ | Rangitukua | 21.38 | 193 | P | P | 06 33 04.5 | -0.4 |
| NMHZ | Naumai | 21.40 | 191 | P | P | 06 33 03.9 | -1.2 |
| BKZ | Black Stump Fm | 21.52 | 192 | P | P | 06 33 04.5 | -1.7 |
| BKZ | Black Stump Fm | 21.52 | 192 | P | P | 06 33 03.7 | -2.4 |
| ARHZ | Aropaoanui | 21.52 | 190 | P | P | 06 33 05.8 | -0.3 |
| KRVZ | Karewarewa | 21.63 | 193 | P | P | 06 33 06.9 | -0.3 |
| TMVZ | Te Maari | 21.63 | 193 | P | P | 06 33 05.7 | -1.6 |
| TWVZ | Taurewa | 21.65 | 194 | P | P | 06 33 06.5 | -0.9 |
| ETVZ | East Tongariro | 21.65 | 193 | P | P | 06 33 05.8 | -1.6 |
| WTVZ | West Tongariro | 21.66 | 193 | P | P | 06 33 05.6 | -1.9 |
| NNVZ | North Ngauruho | 21.67 | 193 | P | P | 06 33 07.1 | -0.5 |
| OTVZ | Oturere | 21.69 | 193 | P | P | 06 33 06.1 | -1.7 |
| NGZ | Ngauruhoe | 21.71 | 193 | P | P | 06 33 07.3 | -0.7 |
| SNVZ | South Ngauruho | 21.71 | 193 | P | P | 06 33 05.2 | -2.9 |
| COVZ | Chateau Observ | 21.75 | 193 | P | P | 06 33 06.8 | -1.5 |
| MCHZ | McNeill Hill | 21.75 | 191 | P | P | 06 33 06.8 | -1.3 |
| KWHZ | Kaweka Forest | 21.79 | 191 | P | P | 06 33 06.5 | -2.0 |
| TUVZ | Tukino | 21.79 | 193 | P | P | 06 33 06.7 | -1.9 |
| FWVZ | Far West T-bar | 21.80 | 193 | P | P | 06 33 07.1 | -1.7 |
| WHVZ | Whangaehu Hut | 21.82 | 193 | P | P | 06 33 07.4 | -1.7 |
| TRVZ | Turoa | 21.84 | 193 | P | P | 06 33 07.5 | -1.7 |
| WNVZ | Wahianoa | 21.86 | 193 | P | P | 06 33 07.7 | -1.6 |
| VRZ | Vera Road | 21.86 | 195 | P | P | 06 33 10.0 | +0.9 |
| CKHZ | Cape Kidnapper | 21.90 | 190 | P | P | 06 33 08.2 | -1.2 |
| MOVZ | Moawhango | 21.90 | 193 | P | P | 06 33 07.5 | -2.1 |
| KRHZ | Kereru | 22.01 | 191 | P | P | 06 33 07.9 | -2.5 |
| KAHZ | Kahuranaki | 22.06 | 190 | P | P | 06 33 09.6 | -1.3 |
| NEZ | North Egmont | 22.17 | 196 | P | P | 06 33 14.5 | +2.5 |
| KHEZ | Kahui Hut | 22.21 | 196 | P | P | 06 33 14.5 | +2.1 |
| PXZ | Pawanui | 22.30 | 190 | P | P | 06 33 11.7 | -1.3 |
| PNHZ | Pukenui | 22.30 | 192 | P | P | 06 33 12.1 | -1.0 |
| WAZ | Wanganui | 22.41 | 194 | P | P | 06 33 13.4 | -0.6 |
| PRHZ | Porangahau | 22.56 | 191 | P | P | 06 33 14.3 | -1.0 |
| DVHZ | Dannevirke | 22.68 | 191 | P | P | 06 33 14.6 | -1.8 |
| ANWZ | Angora Road | 22.78 | 191 | P | P | 06 33 12.9 | -4.4 |
| PRWZ | Pori Road | 22.96 | 192 | P | P | 06 33 18.6 | -0.4 |
| HNR | Honiara | 22.97 | 289 | P | P | 06 33 19.9 | +0.5 |
| BFZ | Birch Farm | 23.04 | 191 | P | P | 06 33 17.9 | -1.7 |
| SNZO | South Karori | 23.95 | 193 | P | P | 06 33 26.4 | -1.3 |
| QRZ | Quartz Range | 24.05 | 198 | P | P | 06 33 28.7 | +0.1 |
| QRZ | Quartz Range | 24.05 | 198 | P | P | 06 33 28.9 | +0.3 |
| TUWZ | Tuamarina | 24.24 | 195 | P | P | 06 33 29.0 | -1.2 |
| CTZ | Chatham Island | 25.60 | 178 | P | P | 06 33 43.5 | +1.3 |
| RPZ | Rata Peaks | 27.14 | 197 | P | P | 06 33 55.7 | -0.1 |
| | 31nm,0.5s,baz=18,slow=2.1,SNR=11 | | | | | | |
| | 31nm,0.5s | | | | | | |
| PPT | Papeete | 27.15 | 93 | P | P | 06 33 55.8 | -0.5 |
| | 48nm,0.6s,baz=233,slow=20,SNR=14 | | | | | | |
| | 48nm,0.6s | | | | | | |
| PPTF | Pamatai, Papee | 27.16 | 93 | P | P | 06 33 57.2 | +0.8 |
| GC1S | Gold Coast 1 S | 27.90 | 244 | P | P | 06 34 03.7 | +1.0 |
| JCZ | Jackson Bay | 28.16 | 200 | P | P | 06 34 04.9 | +0.1 |
| | 345nm,0.5s | | | | | | |
| GD1S | Gladstone Soft | 29.23 | 253 | P | P | 06 34 14.9 | +0.7 |
| EIDS | Eidsvold | 29.48 | 250 | P | P | 06 34 16.4 | -0.1 |
| EIDS | Eidsvold | 29.48 | 250 | P | P | 06 34 16.6 | +0.1 |
| EIDS | Eidsvold | 29.48 | 250 | P | P | 06 34 16.3 | -0.1 |
| | comp=Z,111nm,0.7s | | | | | | |
| RK1H | Rockhampton Ha | 29.80 | 254 | P | P | 06 34 19.2 | 0.0 |
| | comp=Z,64nm,0.8s | | | | | | |
| ARMA | Armidale | 30.11 | 240 | P | P | 06 34 23.0 | +1.1 |
| ARMA | Armidale | 30.11 | 240 | P | P | 06 34 23.2 | +1.3 |
| ARMA | | | | | IAmb | IAmb | 06 34 24.0 | |
| | comp=Z,51nm,0.8s | | | | | | | |
| ARMA | Armidale | 30.11 | 240 | P | P | 06 34 22.7 | +0.8 |
| | comp=Z,66nm,0.9s | | | | | | | |
| AUPHS | Peel High Scho | 30.91 | 239 | P | P | 06 34 29.9 | +1.2 |
| AULRC | Lightning Ridg | 32.92 | 244 | P | P | 06 34 45.9 | +0.1 |
| AUDCS | Dubbo College | 33.09 | 238 | P | P | 06 34 48.1 | +0.9 |
| TV1H | Townsville Har | 33.24 | 262 | P | P | 06 34 48.7 | +0.1 |
| CNB | Canberra Magne | 33.55 | 233 | P | P | 06 34 52.4 | +1.3 |
| CNB | Canberra Magne | 33.55 | 233 | P | P | 06 34 52.6 | +1.5 |
| | comp=Z,50nm,0.9s | | | | | | |
| CTA | Charters Tower | 33.71 | 261 | P | P | 06 34 52.8 | +0.2 |
| CTA | Charters Tower | 33.71 | 261 | ScP | ScP | 06 40 09.6 | +2.2 |
| | comp=Z,0.8nm,1.0s,baz=40,slow=5.4,SNR=3.9 | | | | | | | |
| CTAO | Charters Tower | 33.71 | 261 | P | P | 06 34 52.6 | 0.0 |
| CTAO | Charters Tower | 33.71 | 261 | P | P | 06 34 52.7 | +0.2 |
| CTAO | Charters Tower | 33.71 | 261 | P | P | 06 34 52.7 | +0.2 |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,121nm,0.8s | | | | | | | |
| CTAO | Charters Tower | 33.71 | 261 | P | P | 06 34 52.6 | 0.0 |
| CTAO | | | | ScP | ScP | 06 40 10.2 | +2.8 |
| CAN | Canberra | 33.83 | 233 | P | P | 06 34 54.3 | +0.9 |
| CAN | | | | IAmb | IAmb | 06 34 55.9 | | |
| | comp=Z,66nm,1.5s | | | | | | | |
| CAN | Canberra | 33.83 | 233 | P | P | 06 34 54.3 | +0.9 |
| CAN | | | | pmax | pmax | | | |
| | comp=Z,66nm,1.5s | | | | | | | |
| CAN | Canberra | 33.83 | 233 | P | P | 06 34 54.7 | +1.3 |
| PATS | Pohnpei | 33.99 | 315 | P | P | 06 34 54.5 | -0.4 |
| KAVG | Kavieng | 34.16 | 293 | P | P | 06 34 57.1 | +0.8 |
| PMG | Port Moresby | 34.78 | 280 | P | P | 06 35 02.7 | +1.2 |
| PMG | Port Moresby | 34.78 | 280 | P | P | 06 35 02.4 | +0.9 |
| PMG | Port Moresby | 34.78 | 280 | P | P | 06 35 02.6 | +1.0 |
| PMG | Port Moresby | 34.78 | 280 | *d* iP | P | 06 35 01.8 | +0.3 |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,302nm,0.9s | | | | | | | |
| PMG | Port Moresby | 34.78 | 280 | P | P | 06 35 02.5 | +1.0 |
| CMSA | Cobar Meteorol | 35.32 | 241 | P | P | 06 35 06.4 | +0.6 |
| | comp=Z,110nm,0.8s | | | | | | | |
| CMSA | Cobar Meteorol | 35.32 | 241 | P | P | 06 35 06.3 | +0.6 |
| | comp=Z,111nm,0.8s | | | | | | | |
| MTSU | Mount Surprise | 35.68 | 264 | P | P | 06 35 09.5 | +0.5 |
| QLP | Quilpie | 35.75 | 250 | P | P | 06 35 10.0 | +0.6 |
| QLP | Quilpie | 35.75 | 250 | P | P | 06 35 09.6 | +0.2 |
| | comp=Z,433nm,0.5s | | | | | | | |
| TOO | Toolangi | 37.28 | 231 | P | P | 06 35 22.9 | +1.0 |
| TOO | | | | IAmb | IAmb | 06 35 23.8 | | |
| | comp=Z,22nm,0.6s | | | | | | | |
| TOO | Toolangi | 37.28 | 231 | P | P | 06 35 22.1 | +0.1 |
| | comp=Z,32nm,0.7s | | | | | | | |
| TOO | Toolangi | 37.28 | 231 | P | P | 06 35 22.9 | +1.0 |
| TOO | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.6s | | | | | | | |
| COEN | Coen | 37.40 | 271 | P | P | 06 35 24.0 | +0.8 |
| COEN | Coen | 37.40 | 271 | P | P | 06 35 23.6 | +0.4 |
| COEN | Coen | 37.40 | 271 | P | P | 06 35 23.3 | +0.1 |
| | comp=Z,273nm,0.9s | | | | | | | |
| MANU | Manus Island | 37.44 | 291 | P | P | 06 35 22.9 | -0.6 |
| TAU | Tasmania Unive | 38.30 | 222 | P | P | 06 35 30.7 | +0.6 |
| TAU | | | | IAmb | IAmb | 06 37 17.7 | | |
| | comp=Z,118nm,1.5s | | | | | | | |
| TAU | Tasmania Unive | 38.30 | 222 | P | P | 06 35 30.7 | +0.6 |
| TAU | | | | pmax | pmax | | | |
| | comp=Z,118nm,1.5s | | | | | | | |
| BRAT | Ballarat | 38.44 | 232 | P | P | 06 35 32.5 | +1.3 |
| STKA | Stephens Creek | 38.80 | 241 | P | P | 06 35 35.2 | +0.9 |
| STKA | Stephens Creek | 38.80 | 241 | P | P | 06 35 35.3 | +1.0 |
| STKA | Stephens Creek | 38.80 | 241 | P | P | 06 35 35.1 | +0.8 |
| | comp=Z,19nm,0.9s | | | | | | | |
| STKA | Stephens Creek | 38.80 | 241 | P | P | 06 35 35.5 | +1.2 |
| | comp=Z,60nm,0.8s,baz=90,slow=10.0,SNR=76 | | | | | | | |
| STKA | | | | S | S | 06 40 47.2 | -5.0 | |
| | comp=Z,3.2nm,1.0s,baz=100,slow=22,SNR=1.3 | | | | | | | |
| | comp=Z,60nm,0.8s | | | | | | | |
| STKA | Stephens Creek | 38.80 | 241 | *d* iP | P | 06 35 35.2 | +0.9 |
| INKA | Innaminka | 38.95 | 248 | P | P | 06 35 37.0 | +1.5 |
| QIS | Mount Isa | 39.91 | 259 | P | P | 06 35 43.1 | -0.3 |
| QIS | Mount Isa | 39.91 | 259 | P | P | 06 35 42.7 | -0.7 |
| | comp=Z,26nm,0.6s | | | | | | | |
| HTT | Hallett | 41.31 | 240 | P | P | 06 35 55.5 | +1.1 |
| HTT | Hallett | 41.31 | 240 | P | P | 06 35 54.8 | +0.4 |
| | comp=Z,52nm,1.2s | | | | | | | |
| LCRK | Leigh Creek | 41.44 | 244 | P | P | 06 35 56.0 | +0.6 |
| TABU | Tabubil | 41.71 | 283 | P | P | 06 35 59.3 | +1.5 |
| WHYH | Whyalla | 42.35 | 241 | P | P | 06 36 03.2 | +0.7 |
| JAY | Jayapura | 43.24 | 286 | P | P | 06 36 09.7 | 0.0 |
| | comp=Z,226nm,1.0s,comp=Z,2um | | | | | | | |
| OOD | Oodnadatta | 43.42 | 248 | P | P | 06 36 12.0 | +1.1 |
| HMH | Humu'ula Sheep | 43.54 | 32 | P | P | 06 36 12.1 | -0.2 |
| BBOO | Buckleboo | 43.58 | 241 | P | P | 06 36 12.6 | +0.5 |
| | comp=Z,46nm,1.3s | | | | | | | |
| BBOO | Buckleboo | 43.58 | 241 | P | P | 06 36 12.6 | +0.5 |
| BBOO | | | | IAmb | IAmb | 06 36 13.1 | | |
| | comp=Z,33nm,0.7s | | | | | | | |
| BBOO | Buckleboo | 43.58 | 241 | P | P | 06 36 11.7 | -0.3 |
| | comp=Z,46nm,1.3s | | | | | | | |
| GENI | Genyem | 43.70 | 286 | P | P | 06 36 14.7 | +1.4 |
| GENI | Genyem | 43.70 | 286 | P | P | 06 36 13.6 | +0.3 |
| | comp=Z,278nm,0.8s,comp=Z,3μm | | | | | | | |
| KIP | Kipapa | 43.92 | 27 | ⇓*e*P | P | 06 36 14.2 | -0.6 | |
| KIP | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| WR0 | Warramunga Arr | 44.70 | 260 | P | P | 06 36 19.9 | -1.0 | |
| WR0 | | | | IAmb | IAmb | 06 36 21.4 | | |
| | comp=Z,106nm,1.6s | | | | | | | |
| WB0 | Warramunga Arr | 44.86 | 260 | P | P | 06 36 21.4 | -0.8 | |
| WB0 | | | | IAmb | IAmb | 06 36 22.6 | | |
| | comp=Z,80nm,0.8s | | | | | | | |
| WB2 | Warramunga Arr | 44.88 | 260 | P | P | 06 36 21.7 | -0.6 | |
| WRAB | Tennant Creek | 44.88 | 260 | P | P | 06 36 21.7 | -0.7 | |
| WRAB | | | | IAmb | IAmb | 06 36 22.7 | | |
| | comp=Z,64nm,0.7s | | | | | | | |
| WRAB | Tennant Creek | 44.88 | 260 | *d* iP | P | 06 36 21.6 | -0.7 | |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,68nm,1.0s | | | | | | | |
| WRA | Warramunga Arr | 44.89 | 260 | P | P | 06 36 22.1 | -0.3 | |
| WRA | Warramunga Arr | 44.89 | 260 | P | P | 06 36 21.7 | -0.7 | |
| | comp=Z,59nm,0.7s,baz=96,slow=7.0,SNR=289 | | | | | | | |
| WRA | | | | ScP | ScP | 06 40 52.0 | +1.0 | |
| | comp=Z,2.1nm,0.8s,baz=92,slow=4.3,SNR=3.2 | | | | | | | |
| WRA | | | | S | S | 06 42 14.0 | -5.9 | |
| | comp=Z,1.7nm,0.8s,baz=157,slow=30,SNR=5.4 | | | | | | | |
| | comp=Z,59nm,0.7s | | | | | | | |
| WRA | Warramunga Arr | 44.89 | 260 | P | P | 06 36 22.1 | -0.3 | |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| AS01 | Alice Springs | 44.98 | 254 | P | P | 06 36 23.0 | -0.1 | |
| | comp=Z,564nm,0.7s | | | | | | | |
| MULG | Mulgathing | 45.00 | 245 | P | P | 06 36 23.4 | +0.3 | |
| AS31 | Alice Springs | 45.02 | 254 | P | P | 06 36 23.6 | +0.1 | |
| AS31 | Alice Springs | 45.02 | 254 | P | P | 06 36 23.3 | -0.1 | |
| | comp=Z,129nm,0.7s | | | | | | | |
| ASAR | Alice Springs | 45.02 | 254 | P | P | 06 36 23.8 | +0.4 | |
| ASAR | Alice Springs | 45.02 | 254 | P | P | 06 36 23.3 | -0.1 | |
| | comp=Z,297nm,0.6s,baz=88,slow=8.8,SNR=624 | | | | | | | |
| ASAR | | | | PcP | PcP | 06 37 50.4 | -1.9 | |
| | comp=Z,9.0nm,0.6s,baz=100,slow=4.5,SNR=4.2 | | | | | | | |
| ASAR | | | | ScP | ScP | 06 40 52.8 | +1.3 | |
| | comp=Z,3.4nm,0.7s,baz=99,slow=4.1,SNR=5.2 | | | | | | | |
| ASAR | | | | S | S | 06 42 20.6 | -1.2 | |
| | comp=Z,15nm,0.9s,baz=90,slow=15,SNR=30 | | | | | | | |
| ASAR | Alice Springs | 45.02 | 254 | P | P | 06 36 23.8 | +0.4 | |
| KDU | Kakadu | 47.85 | 269 | P | P | 06 36 44.6 | -0.2 | |
| KDU | Kakadu | 47.85 | 269 | P | P | 06 36 44.3 | -0.5 | |
| | comp=Z,138nm,0.6s | | | | | | | |
| GUMO | Guam | 48.22 | 308 | P | P | 06 36 46.7 | -0.8 | |
| GUMO | Guam | 48.22 | 308 | P | P | 06 36 46.7 | -0.8 | |
| GUMO | | | | pmax | pmax | | | |
| | comp=Z,198nm,0.8s | | | | | | | |
| GUMO | Guam | 48.22 | 308 | P | P | 06 36 47.9 | +0.4 | |
| MTN | Manton Dam | 49.09 | 269 | P | P | 06 36 54.1 | +0.1 | |
| MTN | Manton Dam | 49.09 | 269 | P | P | 06 36 53.5 | -0.4 | |
| MTN | Manton Dam | 49.09 | 269 | P | P | 06 36 53.3 | -0.7 | |
| | comp=Z,126nm,1.0s | | | | | | | |
| DRS | Darwin Rock St | 49.40 | 269 | P | P | 06 36 56.2 | -0.1 | |
| WRKA | Warakurna | 50.07 | 252 | P | P | 06 37 01.5 | +0.4 | |
| WRKA | Warakurna | 50.07 | 252 | P | P | 06 37 00.8 | -0.3 | |
| | comp=Z,118nm,1.2s | | | | | | | |
| FORT | Forrest | 50.20 | 245 | P | P | 06 37 02.4 | +0.5 | |
| FORT | Forrest | 50.20 | 245 | P | P | 06 37 01.7 | -0.2 | |
| FORT | | | | IAmb | IAmb | 06 37 02.3 | | |
| | comp=Z,54nm,0.6s | | | | | | | |
| FORT | Forrest | 50.20 | 245 | P | P | 06 37 01.3 | -0.6 | |
| | comp=Z,85nm,0.6s | | | | | | | |
| KNRA | Kununurra | 50.76 | 264 | P | P | 06 37 05.8 | -0.4 | |
| KNRA | | | | IAmb | IAmb | 06 37 06.8 | | |
| | comp=Z,56nm,0.7s | | | | | | | |

comp=Z,64nm,0.6s
**YOJ Yonaguni jima 71.29 305 P P 06 39 20.0 -0.6**
YOJ pmax pmax
comp=Z,64nm,0.6s
**QSPA South Pole Qui 71.97 180 P P 06 39 25.1 +1.2**
**QSPA South Pole Qui 71.97 180 P P 06 39 24.2 +0.2**
comp=Z,106nm,0.8s,baz=244,slow=0.6,SNR=342
QSPA S **SKiKP 06 48 01.8 +0.8**
comp=Z,1.1nm,1.0s,baz=96,slow=22,SNR=1.6
**YULB Yu-li 72.11 303 P P 06 39 27.5 +2.1**
**YULB Yu-li 72.11 303** IAmb IAmb 06 39 25.3
comp=Z,16nm,0.7s
**NACB Ninganchiao 72.26 304 P P 06 39 26.9 +0.7**
**NACB Ninganchiao 72.26 304** IAmb IAmb 06 39 26.6
comp=Z,33nm,0.9s
**SSLB Suanglung 72.58 303 P P 06 39 27.8 -0.3**
**SSLB Suanglung 72.58 303 P P 06 39 27.2 -1.0**
SSLB IAmb IAmb 06 39 27.9
comp=Z,24nm,0.6s
**TPUB Ta-pu 72.60 302 P P 06 39 28.8 +0.6**
**TPUB Ta-pu 72.60 302 P P 06 39 27.1 -1.1**
**YHNB Yeheng 72.68 304 P P 06 39 29.8 +1.1**
**KSM Kuching 73.00 277 P P 06 39 31.6 +0.9**
comp=Z,79nm,0.9s
**YSS Yuzh-Sakhalins 73.71 333** *e*P **P 06 39 34.8 +0.8**
YSS pmax pmax
comp=Z,20nm,0.7s
**PETK Petropavlovsk- 73.93 345 P P 06 39 35.1 0.0**
comp=Z,2.2nm,0.6s,baz=122,slow=7.6,SNR=2.2
PETK pP **pwP 06 41 32.4 -2.1**
comp=Z,12nm,0.9s,baz=108,slow=9.5,SNR=6.3
comp=Z,2.2nm,0.6s
**KSRS Korea Array 75.03 318 P P 06 39 42.6 +1.0**
comp=Z,2.2nm,0.6s,baz=126,slow=6.2,SNR=7.4
comp=Z,2.2nm,0.6s
**USA0B Ussuriysk Arra 76.93 326**⇑ *e*P **P 06 39 51.2 -0.8**
**USRK Ussuriysk Ar. 76.93 326 P P 06 39 52.7 +0.7**
comp=Z,3.2nm,0.9s,baz=119,slow=5.1,SNR=4.9
comp=Z,3.2nm,0.9s
**OHAK Old Harbor 77.84 14 P P 06 39 56.7 +0.2**
OHAK IAmb IAmb 06 43 01.4
comp=Z,104nm,2.0s
**NJ2 Nanjing 78.28 309** *e*P **P 06 40 00.1 +0.6**
NJ2 pmax pmax
comp=Z,9.0nm,0.7s
**N15K Kwethluk River 79.34 9 P P 06 40 04.8 +0.2**
**NVAR Mina Array Bea 79.35 44 P P 06 40 06.2 +0.8**
comp=Z,0.5nm,0.6s,baz=220,slow=7.4,SNR=5.3
NVAR pP **pwP 06 42 05.8 -1.2**
comp=Z,0.7nm,0.7s,baz=226,slow=9.4,SNR=2.9
comp=Z,0.5nm,0.6s
**O18K Koktuh Hills 79.87 12 P P 06 40 06.8 -0.5**
**M16K Timber Creek 80.33 9 P P 06 40 10.0 +0.3**
**CN2 Changchun 80.34 322** *e*P **P 06 40 12.8 +2.7**
CN2 pmax pmax
comp=Z,10.0nm,0.7s
**SMAI San Martin Ant 80.88 159 P P 06 40 14.1 +1.5**
SMAI IAmb IAmb 06 40 14.9
comp=Z,98nm,0.9s
**K15K Wolf Creek Mou 81.18 8 P P 06 40 14.9 +0.8**
**U15A North Rim 82.42 48 P P 06 40 21.5 +0.1**
**J18K Innoko River 82.99 9 P P 06 40 23.3 +0.1**
**TCRU Three Creeks R 83.37 46 P P 06 40 26.0 0.0**
**MAW Mawson 83.79 200 P P 06 40 27.4 +0.1**
comp=Z,23nm,0.8s,baz=134,slow=6.1,SNR=43
comp=Z,23nm,0.8s
**SEY Seymchan 84.02 347**⇑ *e*P **P 06 40 26.9 -1.4**
SEY pmax pmax
comp=Z,10.0nm,1.5s
**J20K Nowinta River 84.07 10 P P 06 40 28.8 +0.3**
J20K IAmb IAmb 06 42 34.8
comp=Z,40nm,1.9s
**LYN LuoYang 84.17 309** *e*P **P 06 40 30.8 +1.1**
LYN pmax pmax
comp=Z,29nm,0.7s
LYN pmax pmax
comp=Z,470nm,7.8s
**PSI Prapat 84.19 275 P P 06 40 31.0 +0.5**
comp=Z,15nm,0.9s
**ENH Enshi 84.61 304 P P 06 40 33.3 +1.2**
comp=Z,29nm,1.1s
**CCB Clear Creek Bu 85.69 13 P P 06 40 35.3 -1.1**
CCB IAmb IAmb 06 42 39.9
comp=Z,40nm,1.9s
**TXAR Lajitas Array 85.84 57 P P 06 40 39.0 +0.9**
comp=Z,1.8nm,0.8s,baz=219,slow=6.6,SNR=17
TXAR PKKPbc **PKKPbc 06 58 36.1 +0.3**
comp=Z,0.2nm,0.5s,baz=144,slow=3.5,SNR=5.3
comp=Z,1.8nm,0.8s
**COLA College 85.89 12**⇓ *e*P **P 06 40 36.0 -1.3**
COLA pmax pmax
comp=Z,12nm,1.9s
**ANMO Albuquerque 85.98 51**⇓ *e*P **P 06 40 38.2 -0.5**
ANMO pmax pmax
comp=Z,3.0nm,2.8s
**ILAR Eielson Array 86.00 13 P P 06 40 36.2 -1.6**
comp=Z,0.7nm,0.4s,baz=221,slow=5.2,SNR=13
ILAR pP **pP 06 42 39.1 +0.3**
comp=Z,3.6nm,1.0s,baz=230,slow=4.8,SNR=9.1
comp=Z,0.7nm,0.4s
**XLT XiLinHaoTe 86.08 319** *e*P **P 06 40 40.8 +2.0**
XLT pmax pmax
comp=Z,9.0nm,0.9s
**XAN Xi'an 86.60 307**⇓ P **P 06 40 42.3 +0.8**
XAN S **S 06 50 32.8 +0.9**
XAN pmax pmax
comp=Z,20nm,1.0s
XAN pmax pmax
comp=Z,460nm,6.4s
**HIA Hailar 86.69 325**⇓ *e*P **P 06 40 41.5 0.0**
HIA pmax pmax
comp=Z,4.0nm,0.6s
**PDAR Pinedale Array 87.28 43 P P 06 40 44.6 -0.1**
comp=Z,0.9nm,0.7s,baz=212,slow=2.6,SNR=5.8
comp=Z,0.9nm,0.7s
**HHC Hu-ho-hao-te 87.61 314** *e*P **P 06 40 48.9 +2.8**
HHC pmax pmax
comp=Z,23nm,0.6s
HHC pmax pmax
comp=Z,90nm,5.3s
**F24K Squaw Lake 88.21 11 P P 06 40 48.4 +0.1**
**LL05 Los Muermos 88.70 133 P P 06 40 52.2 +1.0**
**ELIB Princess Elisa 89.01 187** *d*P **P 06 40 52.2 0.0**
comp=Z,84nm,0.7s
**CMAR Chiang Mai Arr 89.22 290 P P 06 40 55.0 +1.0**
comp=Z,3.1nm,0.9s,baz=103,slow=3.3,SNR=12
comp=Z,3.1nm,0.9s
**PZH PanZhiHua 89.50 298 P P 06 40 55.8 +0.5**
PZH pmax pmax
comp=Z,20nm,0.6s
PZH pmax pmax
comp=Z,160nm,5.5s
**SNAA Sanae 90.41 179 P P 06 40 58.2 -0.4**
SNAA IAmb IAmb 06 40 59.2
comp=Z,51nm,1.3s
**SNAA Sanae 90.41 179** ⇑P **P 06 40 58.1 -0.4**
comp=Z,381nm,0.6s
**SNAA Sanae 90.41 179 P P 06 40 58.0 -0.6**
comp=Z,17nm,0.6s,baz=202,slow=5.1,SNR=43
comp=Z,17nm,0.6s
**SNAA Sanae 90.41 179***c* *i*P **P 06 40 58.2 -0.4**
SNAA pmax pmax
comp=Z,27nm,1.1s
**VNA3 Neumayer Olymp 90.54 176** ⇑P **P 06 40 58.8 -0.3**
comp=Z,84nm,0.6s
**VNA2 Neumayer--Watz 90.98 177** ⇑P **P 06 41 01.0 -0.2**
comp=Z,74nm,0.7s,baz=213,slow=8.9
**PLCA Paso Flores 90.99 134 P P 06 41 01.6 -0.4**
comp=Z,8.0nm,0.9s,baz=238,slow=5.0,SNR=21
comp=Z,8.0nm,0.9s
**NVL N'lazarevskaya 91.11 183** *e*P **P 06 41 00.4 -1.3**
NVL pmax pmax
comp=Z,44nm,0.9s
**VNA1 Neumayer--Stat 91.21 177** ⇑P **P 06 41 02.3 +0.2**
comp=Z,68nm,0.9s
**SONM Songino Array 93.88 319** pP **pP 06 43 19.4 +1.3**
comp=Z,0.8nm,0.9s,baz=131,slow=4.1,SNR=2.5
SONM PKKPbc **PKKPdf 06 58 13.7 -1.8**
comp=Z,1.5nm,1.1s,baz=222,slow=2.0,SNR=4.9
**ULM Lac du Bonnet 98.86 40**⇑ *e*P **P 06 41 38.3 +1.2**
**WMQ Urumqi 105.27 312** Pdif **Pdif 06 42 05.8 0.0**
**ZALV Zalesovo Beam 108.56 322** PKiKP **PKiKP 06 46 20.9 -1.1**
comp=Z,1.5nm,0.5s,baz=66,slow=0.5,SNR=5.1
**MKAR Makanchi Array 109.47 314** PKiKP **PKiKP 06 46 22.8 -1.3**
comp=Z,1.6nm,0.5s,baz=196,slow=1.1,SNR=18
MKAR PKKPbc **PKKPbc 06 57 30.6 -1.1**
comp=Z,1.3nm,0.7s,baz=272,slow=4.4,SNR=8.5

**KURK Kurchatov 112.16 318***d* PKiKP **PKiKP 06 46 27.8 -1.1**
**KURBB Kurchatov Arra 112.21 318** PKiKP **PKiKP 06 46 27.8 -1.2**
comp=Z,2.8nm,0.7s,baz=96,slow=1.8,SNR=19
**BVAR Borovoye Array 117.17 321** PKP **PKPdf 06 46 37.2 -1.3**
comp=Z,4.5nm,0.5s,baz=92,slow=1.8,SNR=19
**KKAR Karatay Array 117.66 310 PKPdf 06 46 39.0 -0.7**
**KKAR Karatay Array 117.66 310** PKiKP **PKPdf 06 46 39.1 -0.7**
**KBL Kabul 118.63 300 PKPdf 06 46 41.9 -0.3**
**KBL Kabul 118.63 300** PKiKP **PKPdf 06 46 41.9 -0.3**
**ARU Arti 123.16 326** *i* PKiKP **PKPdf 06 46 49.5 -0.4**
ARU 06 48 37.7
ARU 06 53 08.7
ARU SS SS 07 04 37.4 -4.1
**ABKAR Akbulak array 124.26 318** PKPdf **PKPdf 06 46 50.8 -1.4**
**ARCES ARCESS Array B 126.54 350** PKP **PKPdf 06 46 55.7 -0.4**
comp=Z,6.0nm,0.8s,baz=48,slow=1.8,SNR=7.9
**KIRV Kirov 126.83 331***d* *i* PKiKP **PKPdf 06 46 56.4 -0.4**
**BOSA Boshof 128.37 206** PKP **PKPdf 06 47 00.9 -0.1**
comp=Z,3.9nm,0.7s,baz=146,slow=3.6,SNR=6.9
**FINES FINESS Array B 133.44 344** PKP **PKPdf 06 47 08.4 -0.9**
comp=Z,3.1nm,0.7s,baz=357,slow=3.8,SNR=5.8
FINES SKPbc **SKPbc 06 49 46.0 +0.6**
comp=Z,4.3nm,0.8s,baz=103,slow=6.1,SNR=5.8
**NB2 NORSAR Subarra136.59 353** PKP PKPdf 06 47 07.4 -7.9
comp=Z,5.6nm,1.7s,baz=16,slow=3.2
NB2 SKPa 06 49 56.8
comp=Z,1.7nm,0.9s,baz=9.8,slow=2.9
**NOA NORSAR Array B 136.59 353** PKhKP PKPpre 06 47 07.6
comp=Z,1.0nm,0.7s,baz=24,slow=3.9,SNR=4.6
NOA SKPbc **SKPbc 06 49 55.9 +0.5**
comp=Z,3.7nm,1.0s,baz=15,slow=4.5,SNR=4.6
**KBZ Khabaz 137.14 316***e* PKiKP **PKPdf 06 47 17.4 +0.7**
**HFS Hagfors 137.16 351** PKhKP PKPpre 06 47 09.2
comp=Z,1.3nm,0.5s,baz=64,slow=6.8,SNR=5.5
HFS PKP **PKPdf 06 47 16.2 0.0**
comp=Z,2.9nm,0.6s,baz=81,slow=3.8,SNR=4.4
**KIV Kislovodsk 137.19 316** *i* PKiKP **PKPdf 06 47 15.9 -1.1**
KIV pmax pmax
comp=Z,8.0nm,1.1s
KIV MLR MLR
comp=Z,79nm,24.0s
**NACGM Naroch 138.62 338** *e*PKP **PKPdf 06 47 18.7 -0.4**
comp=Z,657nm,0.9s,baz=38
**RAYN Ar Rayn 139.00 285 PKPdf 06 47 19.8 -1.0**
**RAYN Ar Rayn 139.00 285** PKiKP **PKPdf 06 47 19.8 -1.0**
**KMBO Kilima Mbogo 140.32 245** PKhKP PKPpre 06 47 18.8
comp=Z,0.9nm,0.3s,baz=111,slow=3.3,SNR=3.9
**AKASG Malin Array Be 140.86 332** PKhKP PKPpre 06 47 17.2
comp=Z,0.6nm,0.3s,baz=44,slow=3.9,SNR=2.0
AKASG PKP **PKPdf 06 47 24.8 +1.6**
comp=Z,2.0nm,0.5s,baz=40,slow=3.4,SNR=4.8
AKASG SKPbc **SKPbc 06 50 06.1 -1.2**
comp=Z,0.4nm,0.4s,baz=49,slow=1.5,SNR=4.1
AKASG SKPab **SKPab 06 50 21.6 0.0**
comp=Z,0.3nm,0.3s,baz=38,slow=5.5,SNR=5.3
**AKBB Malin Array Si 140.86 332**⇑ *e*PKiKP **PKPdf 06 47 21.9 -1.4**
**EKA Eskdalemuir Ar 142.62 5** PKhKP PKPpre 06 47 21.9
comp=Z,0.8nm,0.5s,baz=332,slow=3.2,SNR=5.6
EKA SKPab SKiKP 06 50 30.0 +17
comp=Z,0.1nm,0.3s,baz=310,slow=3.1,SNR=4.3
**KMPD K-Podol'skiy 143.65 332** PKP PKPab 06 47 25.3 -1.9
**LVV L'vov 143.69 336** *e*PKHKP PKPpre 06 47 26.7
**LODK Lodwar 144.14 250** PKPbc 06 47 29.9 0.0
**SHIU Shidnytsya 144.43 336** PKP PKPbc 06 47 28.8 -0.9
**OJC Ojcow 144.88 340** *e*PKP **PKPdf 06 47 30.4 0.0**
**TLCR 144.88 326** ⇑P PKPbc 06 47 31.4 +0.3
**TLCR 144.88 326** ⇑PKiKP PKPbc 06 47 31.4 +0.3
**BURAR Bucovina Array 144.91 332** PKPdf PKPbc 06 47 31.9 +0.6
**BURAR Bucovina Array 144.91 332** ⇓P **PKPab 06 47 32.0 -0.2**
**BURAR Bucovina Array 144.91 332** ⇓PKiKP **PKPab 06 47 32.0 -0.2**
**TESR Tescani 145.06 330** ⇓P **PKPdf 06 47 31.4 +0.6**
**KOLS Kolonicke sedl 145.09 336** *e*PKiKP **PKPbc 06 47 32.3 +0.6**
**KOLS Kolonicke sedl 145.09 336** *e*PKP **PKPbc 06 47 32.3 +0.6**
**BR131 Keskin Array S 145.12 315 PKPdf 06 47 31.1 -0.2**
**BR131 Keskin Array S 145.12 315**⇑ *e*PKiKP **PKPdf 06 47 31.0 -0.3**
**BRTR Keskin Array B 145.12 315 PKPdf 06 47 30.8 -0.5**
**BRTR Keskin Array B 145.12 315** PKPbc **PKPdf 06 47 30.0 -1.3**
comp=Z,11nm,0.8s,baz=130,slow=4.9,SNR=32
BRTR pPKP **pPKPdf 06 49 42.0 -0.6**
comp=Z,2.8nm,0.9s,baz=119,slow=1.5,SNR=7.8
BRTR SKPbc **SKPbc 06 50 19.1 +1.0**
comp=Z,3.1nm,1.0s,baz=141,slow=4.3,SNR=6.4
**BRTR Keskin Array B 145.12 315** PKiKP **PKPdf 06 47 30.8 -0.5**
**KIRS Kirsehir-Merke 145.21 314** ⇑P **PKPdf 06 47 31.4 0.0**
**CFR Carcaliu 145.25 327** ⇑P **PKPbc 06 47 32.8 +0.6**
**CFR Carcaliu 145.25 327** ⇑PKiKP **PKPbc 06 47 32.8 +0.6**
**ONER Baraj Valea Uz 145.31 330** ⇓P **PKPbc 06 47 33.1 +0.7**
**TPGR Topolog 145.31 326** ⇓P **PKPbc 06 47 33.0 +0.5**
**KSP Ksiaz 145.37 344** *e*PKP **PKPbc 06 47 32.3 -0.1**
**NIE Niedzica 145.40 339** *e*PKP **PKPbc 06 47 33.5 +0.9**
**CRVS Cervenica-Dubn 145.42 337** *e*PKP2 **PKPbc 06 47 33.3 +0.7**
**CRVS Cervenica-Dubn 145.42 337** *e*PKP **PKPbc 06 47 33.3 +0.7**
**VRI Vrincioaia 145.49 329** ⇑P **PKPbc 06 47 33.5 +0.6**
**VRI Vrincioaia 145.49 329** ⇑PKiKP **PKPbc 06 47 33.5 +0.6**
**PLOR Plostina 145.53 329** ⇑P **PKPbc 06 47 33.5 +0.4**
**PLOR Plostina 145.53 329** ⇑PKiKP **PKPbc 06 47 33.5 +0.4**
**ANTO Ankara 145.61 316** PKPdf **PKPdf 06 47 32.6 +0.5**
**ANTO Ankara 145.61 316** ⇓P **PKPbc 06 47 33.5 -0.1**
**ANTO Ankara 145.61 316** ⇓PKiKP **PKPbc 06 47 33.5 -0.1**
**OSTC Ostas 145.65 344** *e*PKP **PKPab 06 47 34.4 -0.4**
OSTC AMS AMS 07 46 10.0
comp=Z,200nm,23.1s
**OSTC Ostas 145.65 344** *e*PKP2 **PKPab 06 47 34.4 -0.4**
OSTC MLR MLR
comp=Z,200nm,23.1s
**CHVC Chvalec 145.66 344** AMS AMS 07 46 00.0
comp=Z,200nm,16.7s
**HARR Harsova 145.68 326** ⇑P **PKPbc 06 47 34.0 +0.5**
**HARR Harsova 145.68 326** ⇑PKiKP **PKPbc 06 47 34.0 +0.5**
**ARCR ARCALIA 145.69 332** ⇓P **PKPbc 06 47 34.0 +0.5**
**TURR Turia 145.70 330** ⇑P **PKPab 06 47 34.7 -0.5**
**CLL Collm 145.70 348**⇑ *i* PKPbc **PKPbc 06 47 33.2 -0.1**
CLL *e*pPKPdf **pPKPdf 06 49 44.0 +1.4**
CLL *e*SKPbc **SKiKP 06 50 21.0 +1.8**
**CLL Collm 145.70 348**⇑ *i* PKiKP **PKPbc 06 47 33.2 -0.1**
CLL pmax pmax
comp=Z,32nm,0.9s
**OKC Ostrava-Krasne 145.74 341** AMS AMS 07 46 30.0
comp=Z,200nm,25.6s
**UPC Upice 145.74 344** *e*PKP **PKPbc 06 47 34.1 +0.6**
UPC AMS AMS 07 46 20.0
comp=Z,200nm,22.1s
**UPC Upice 145.74 344** *e*PKP2 **PKPbc 06 47 34.1 +0.6**
UPC MLR MLR
comp=Z,200nm,22.1s
**COVR Voineasa-Covas 145.76 329** ⇑P **PKPbc 06 47 33.4 -0.4**
**OZUR 145.78 330** ⇓P **PKPbc 06 47 34.1 +0.3**
**DPC Dobruska-Polom 145.81 344** *e*PKP **PKPbc 06 47 34.4 +0.7**
DPC AMS AMS 07 43 50.0
comp=Z,100nm,19.9s
**DPC Dobruska-Polom 145.81 344** *e*PKP2 **PKPbc 06 47 34.4 +0.7**
DPC MLR MLR
comp=Z,100nm,19.9s
**BRG Berggiesshubel 145.91 346** *e*PKP **PKPdf 06 47 32.7 +0.7**
BRG Amp 06 47 33.1
comp=Z,4.4nm,0.8s
**BRG Berggiesshubel 145.91 346** P **PKPbc 06 47 34.3 +0.4**
BRG Amp 06 47 35.0
comp=Z,14nm,0.8s
**BRG Berggiesshubel 145.91 346** P **PKiKP 06 47 40.5 +4.0**
BRG Amp 06 47 41.3
comp=Z,8.0nm,1.0s
**KRLC Kraliky 145.93 343** *e*PKP **PKPbc 06 47 34.3 +0.2**
**KRLC Kraliky 145.93 343** *e*PKiKP **PKPbc 06 47 34.3 +0.2**
**MORC Moravsky Berou 145.97 342** *e*PKP **PKPbc 06 47 34.0 -0.2**
MORC *e* 06 49 43.7
**MORC Moravsky Berou 145.97 342** ⇓P **PKPbc 06 47 34.3 +0.1**
**MORC Moravsky Berou 145.97 342** ⇓PKiKP **PKPbc 06 47 34.3 +0.1**
**DOPR Dopca 146.06 330** ⇑P **PKPbc 06 47 35.3 +0.8**
**PVCC Panska Ves 146.09 345** AMS AMS 07 46 20.0
comp=Z,200nm,20.6s
**ISR Istrita 146.10 328** ⇓P **PKPbc 06 47 35.5 +0.7**
**ISR Istrita 146.10 328** ⇓PKP2 **PKPbc 06 47 35.5 +0.7**
**MLR Muntele Rosu 146.14 329** ⇑P **PKPbc 06 47 35.2 +0.2**
**MLR Muntele Rosu 146.14 329** ⇑PKiKP **PKPbc 06 47 35.2 +0.2**
**HSKC Hora Svate Kat 146.27 347** *e*PKP **PKPbc 06 47 35.3 +0.3**
HSKC AMS AMS 07 45 20.0
comp=Z,100nm,20.6s
**CJR Cluj-Napoca 146.31 333** ⇓P **PKPbc 06 47 35.5 +0.2**
**CJR Cluj-Napoca 146.31 333** ⇓PKiKP **PKPbc 06 47 35.5 +0.2**
**MMAI Mount Meron Ar 146.49 303** PKPbc **PKPbc 06 47 36.5 +0.3**
comp=Z,13nm,0.5s,baz=64,slow=5.7,SNR=41
MMAI pPKPbc **pPKPdf 06 49 45.8 +0.6**

comp=Z,5.5nm,0.6s,baz=66,slow=4.8,SNR=6.8
**PRA Prague 146.54 345** AMS AMS 07 46 30.0
comp=Z,200nm,30.9s
**MARR Marisel-Cluj 146.55 333** ⇓P **PKPbc 06 47 36.3 +0.4**
**PRU Pruhonice 146.59 345** *e*PKP **PKPbc 06 47 36.4 +0.5**
PRU AMS AMS 07 46 50.0
comp=Z,200nm,22.0s
**PRU Pruhonice 146.59 345** *e*PKP2 **PKPbc 06 47 36.4 +0.5**
PRU MLR MLR
comp=Z,200nm,22.0s
**GOPC GO Pecny, Ondr 146.60 345** *e*PKP **PKPbc 06 47 35.7 -0.2**
GOPC AMS AMS 07 46 40.0
comp=Z,200nm,20.7s
**GOPC GO Pecny, Ondr 146.60 345** *e*PKIKP **PKPbc 06 47 35.7 -0.2**
GOPC MLR MLR
comp=Z,200nm,20.7s
**VOIR 146.61 330** ⇑P **PKPbc 06 47 36.5 +0.3**
**VOIR 146.61 330** ⇑PKP2 **PKPbc 06 47 36.5 +0.3**
**DRGR 146.63 334** ⇓P **PKPbc 06 47 36.7 +0.5**
**DRGR 146.63 334** ⇓PKP2 **PKPbc 06 47 36.7 +0.5**
**VRAC Vranov 146.67 342** *e*PKP **PKPbc 06 47 35.9 -0.2**
VRAC *e* 06 49 45.6
**VYHS Vyhne 146.69 339** *e*PKP2 **PKPbc 06 47 36.6 +0.4**
**VYHS Vyhne 146.69 339** *e*PKP **PKPbc 06 47 36.6 +0.4**
**JAVC Velka Javorina 146.75 341** *e*PKP **PKPbc 06 47 37.4 +1.0**
JAVC *e* 06 49 46.9
**PSZ Piszkesteto 146.81 338** ⇑P **PKPbc 06 47 36.5 -0.1**
**PSZ Piszkesteto 146.81 338** ⇑PKiKP **PKPbc 06 47 36.5 -0.1**
**ARR Arges 146.86 330** ⇑P **PKiKP 06 47 38.1 -0.6**
**KRUC Moravsky 146.95 342** *e*PKP **PKPbc 06 47 36.5 -0.3**
KRUC *e* 06 49 46.5
**TREC Trest 146.99 344** AMS AMS 07 45 30.0
comp=Z,200nm,20.4s
**ZVC Zvikov 147.19 345** *e*PKP **PKPbc 06 47 38.2 +0.7**
ZVC AMS AMS 07 46 30.0
comp=Z,100nm,16.9s
**MEM Membach 147.39 355** *d*PKPbc **PKPbc 06 47 37.7 -0.2**
**BTNL Ternell 147.40 355** *d*PKPbc **PKPbc 06 47 38.0 0.0**
BTNL *dp*PKP **pPKPab 06 49 47.8 +0.8**
**BSTI Sart Tilman 147.45 356** *d*PKPdf **PKPdf 06 47 34.6 0.0**
BSTI *d*PKPbc **PKPbc 06 47 37.7 -0.4**
**SIRR Siria 147.49 334** ⇑P **PKPbc 06 47 39.2 +0.8**
**GRF Grafenberg Arr 147.59 349** *e*PKP **PKPbc 06 47 38.6 +0.1**
baz=17,slow=2.1
GRF *ep*PKP **pPKPab 06 49 48.7 +0.9**
**KHC Kasperske Hory 147.62 346** *e*PKP **PKPbc 06 47 39.1 +0.4**
KHC AMS AMS 07 47 00.0
comp=Z,100nm,20.2s
**KHC Kasperske Hory 147.62 346**⇓ *e*PKHKP PKPpre 06 47 34.8
KHC pmax pmax
comp=Z,44nm,1.3s
**BHOU Houvegnez 147.64 355** *d*PKPbc **PKPbc 06 47 38.7 +0.1**
**GZR Gura Zlata 147.69 332** ⇑P **PKPbc 06 47 38.7 -0.3**
**GZR Gura Zlata 147.69 332** ⇑PKHKP PKPpre 06 47 38.7
**SURR Surduc 147.70 333** ⇓P **PKPbc 06 47 38.9 0.0**
**CKRC Cesky Krumlov 147.73 345** *e*PKP **PKPbc 06 47 39.5 +0.6**
CKRC AMS AMS 07 47 40.0
comp=Z,100nm,22.9s
**CKRC Cesky Krumlov 147.73 345** *e*PKP2 **PKPbc 06 47 39.5 +0.6**
CKRC MLR MLR
comp=Z,100nm,22.9s
**BMRD Maredsous 147.78 357** *d*PKPbc **PKPbc 06 47 38.6 -0.3**
**GERES GERESS Array B 147.86 345 PKPdf 06 47 35.6 +0.1**
**GERES GERESS Array B 147.86 345** PKP **PKPdf 06 47 34.9 -0.7**
comp=Z,3.9nm,0.8s,baz=350,slow=5.3,SNR=3.5
GERES PKPbc **PKPbc 06 47 39.4 +0.1**
comp=Z,6.9nm,0.6s,baz=348,slow=7.5,SNR=23
GERES pPKPbc **pPKPab 06 49 49.0 0.0**
comp=Z,1.0nm,0.3s,baz=167,slow=30,SNR=2.5
**GERES GERESS Array B 147.86 345** PKiKP **PKPdf 06 47 35.6 +0.1**
**RCHB Rochefort 147.90 356** *d*PKPbc **PKPbc 06 47 39.1 -0.1**
**DOU Dourbes 148.00 357** *d*PKPbc **PKPbc 06 47 39.4 -0.1**
**BZS Buzias 148.03 333** ⇑P **PKPbc 06 47 39.5 -0.2**
**BZS Buzias 148.03 333** ⇑PKHKP PKPpre 06 47 39.5
**CONA Conrad Observa 148.12 342** *i* PKP **PKPbc 06 47 40.3 +0.3**
comp=Z,11nm,0.7s,SNR=9.8
**CONA Conrad Observa 148.12 342** *i* pPKiKP pPKiKP 06 49 50.7 -0.9
comp=Z,8.9nm,1.1s
**RONA Rosalia, Austr 148.20 341** *i* PKP **PKPbc 06 47 40.5 +0.3**
comp=Z,11nm,0.7s,SNR=6.4
**RONA Rosalia, Austr 148.20 341** *i* pPKiKP pPKiKP 06 49 50.7 -0.9
comp=Z,10nm,1.1s
**HERR Herculane 148.25 332** ⇑P **PKPbc 06 47 40.1 -0.2**
**WLF Walferdange 148.31 355** *d*PKP **PKPbc 06 47 40.7 +0.4**
**MOA Molln 148.64 344** *i* PKP **PKPbc 06 47 41.1 -0.1**
comp=Z,11nm,1.2s
**MOA Molln 148.64 344** *i* pPKiKP pPKiKP 06 49 51.6 -1.0
comp=Z,4.4nm,0.8s
**ARSA Arzberg 148.84 342** *i* PKP **PKPbc 06 47 41.8 0.0**
comp=Z,5.3nm,0.8s
**ARSA Arzberg 148.84 342** *ep*PKiKP pPKiKP 06 49 52.7 -0.3
comp=Z,2.3nm,0.5s
**BIOA Bad Ischl, Aus 148.95 345** *i* PKP **PKPbc 06 47 41.6 -0.4**
comp=Z,11nm,1.0s
**BIOA Bad Ischl, Aus 148.95 345** *ep*PKiKP pPKiKP 06 49 52.9 -0.4
comp=Z,3.0nm,0.7s
**BFO Black Forest 149.38 352 PKPbc 06 47 42.7 -0.3**
**BFO Black Forest 149.38 352** PKHKP PKPpre 06 47 42.7
**LESA Schwarzleotal 149.43 346** *i* PKP **PKPbc 06 47 42.7 -0.5**
comp=Z,9.5nm,0.8s
**LESA Schwarzleotal 149.43 346** *i* pPKP pPKPdf 06 49 53.0 +3.9
comp=Z,1.4nm,0.5s
**SOKA Soboth 149.50 342** *i* PKP **PKPbc 06 47 42.9 -0.5**
comp=Z,14nm,1.1s,SNR=7.1
**SOKA Soboth 149.50 342** *i* pPKP pPKPdf 06 49 53.1 +4.0
comp=Z,4.0nm,1.0s
**BOVS Bovan 149.54 331** ⇑P **PKPbc 06 47 42.6 -0.9**
**KBA Koelnbreinsper 149.59 344** *i* PKP **PKPbc 06 47 43.2 -0.6**
comp=Z,16nm,1.2s,SNR=6.7
**KBA Koelnbreinsper 149.59 344** *i* pPKiKP pPKiKP 06 49 53.3 -1.5
comp=Z,7.0nm,1.2s
**WATA Walderalm 149.77 347** *i* PKP **PKPbc 06 47 43.7 -0.4**
comp=Z,14nm,0.7s
**WATA Walderalm 149.77 347** *ep*PKP pPKPdf 06 49 55.1 +5.4
comp=Z,7.0nm,0.6s
**OBKA Obir 149.79 343** *e*PKP **PKPbc 06 47 43.7 -0.4**
comp=Z,4.1nm,0.5s
**OBKA Obir 149.79 343** *ep*PKP pPKPdf 06 49 54.9 +5.3
comp=Z,5.7nm,1.1s
**RETA Reutte 149.79 348** *i* PKP **PKPbc 06 47 43.6 -0.4**
comp=Z,4.6nm,0.7s
**RETA Reutte 149.79 348** *i* pPKP pPKPdf 06 49 55.4 +5.7
comp=Z,4.7nm,1.0s
**WTTA Wattenberg 149.82 347** *i* PKP **PKPbc 06 47 44.1 -0.2**
comp=Z,27nm,0.6s,SNR=10.0
**WTTA Wattenberg 149.82 347** *i* pPKP pPKPdf 06 49 55.3 +5.4
comp=Z,10nm,1.4s
**MOTA Moosalm 149.86 347** *i* PKP **PKPbc 06 47 43.9 -0.4**
comp=Z,14nm,0.8s
**MOTA Moosalm 149.86 347** *i* pPKiKP pPKiKP 06 49 54.7 -0.5
comp=Z,3.5nm,0.7s
**MYKA Terra Mystica 149.93 344** *i* PKP **PKPbc 06 47 43.8 -0.6**
comp=Z,11nm,0.5s,SNR=5.6
**MYKA Terra Mystica 149.93 344** *i* pPKiKP pPKiKP 06 49 54.4 -0.9
comp=Z,4.5nm,1.0s
**SQTA Sankt Quirin 149.96 347** *i* PKP **PKPbc 06 47 44.3 -0.2**
comp=Z,18nm,0.7s,SNR=5.3
**SQTA Sankt Quirin 149.96 347** *i* pPKiKP pPKiKP 06 49 54.5 -0.8
comp=Z,6.5nm,1.1s
**ABTA Abfaltersbach 150.11 345** *i* PKP **PKPbc 06 47 44.1 -0.8**
comp=Z,24nm,0.7s,SNR=8.7
**ABTA Abfaltersbach 150.11 345** *i* pPKiKP pPKiKP 06 49 54.2 -1.5
comp=Z,6.9nm,1.1s
**DAVA Damuels 150.15 349** *i* PKP **PKPbc 06 47 44.8 -0.2**
comp=Z,18nm,0.8s,SNR=5.8
**DAVA Damuels 150.15 349** *i* pPKiKP pPKiKP 06 49 55.4 -0.4
comp=Z,5.7nm,1.0s
**LJU Ljubljana 150.22 342** *i* PKPbc **PKPbc 06 47 44.9 -0.2**
**FETA Feichten 150.24 348** *i* PKP **PKPbc 06 47 45.3 +0.1**
comp=Z,25nm,1.0s
**FETA Feichten 150.24 348** *i* pPKiKP pPKiKP 06 49 54.4 -1.6
comp=Z,7.6nm,1.4s
**CRNS Crni Vrh 150.26 343** *i* PKPbc **PKPbc 06 47 44.5 -0.7**
**BOJS Bojanci 150.49 341** *i* PKPbc **PKPbc 06 47 45.8 +0.1**
**OHR Ohrid 151.90 329** *i* P **PKPbc 06 47 49.1 0.0**
**MVO Moncorvo 155.76 17** *e*PKPdf **PKPdf 06 47 48.0 +0.6**
**MTE Manteigas 156.32 18** *e*PKPdf **PKPdf 06 47 48.5 +0.4**
**PCAS Casmilo, Conde 156.34 20** *e*PKPdf **PKPdf 06 47 47.7 -0.4**
**PCBR Castelo Branco 156.85 19** *e*PKPdf **PKPdf 06 47 48.9 +0.2**
**PMPST Porto Santo, M 157.84 44** *e*PKPdf **PKPdf 06 47 47.6 -2.6**
**ESDC Sonseca Array 157.90 12** PKP **PKPdf 06 47 49.7 -0.4**
comp=Z,0.6nm,0.5s,baz=337,slow=2.5,SNR=5.1
ESDC PKPab **PKPab 06 48 25.6 -1.1**
comp=Z,0.2nm,0.3s,baz=310,slow=1.7,SNR=2.1
**PNCL Nicolau / Gran 158.06 22** *e*PKPdf **PKPdf 06 47 50.7 +0.4**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PBEJ** | **Beja** | **158.38** | **21** | *e*PKPdf | **PKPdf** | **06 47 51.4** | **+0.7** |
| **MESJ** | **Messejana** | **158.42** | **22** | *e*PKPdf | **PKPdf** | **06 47 51.7** | **+1.0** |
| **MORF** | **Marmelete** | **158.73** | **24** | *e*PKPdf | **PKPdf** | **06 47 52.0** | **+0.8** |
| **PBDV** | **Barranco-do-Ve** | **159.05** | **22** | *e*PKPdf | **PKPdf** | **06 47 52.2** | **+0.7** |
| **DBIC** | **Dimbokro** | **166.88** | **149** | PKP | **PKPdf** | **06 47 58.1** | **-1.4** |
| | comp=Z,4.5nm,0.7s,baz=255,slow=2.7,SNR=5.4 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **06 49 06.7** | **0.0** |
| | comp=Z,6.4nm,0.8s,baz=171,slow=4.7,SNR=5.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.08** | **178** | | **PKPdf** | **06 48 02.3** | **-1.3** |
| **TORD** | **Torodi Ar. Bea** | **175.08** | **178** | PKP | **PKPdf** | **06 48 02.0** | **-1.6** |
| | comp=Z,4.9nm,1.0s,baz=184,slow=2.8,SNR=16 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **06 49 42.9** | **-0.1** |
| | comp=Z,4.5nm,0.7s,baz=192,slow=2.0,SNR=19 | | | | | | |
| TORD | | | | PP | **PP** | **06 53 34.8** | **+0.4** |
| | comp=Z,2.2nm,0.8s,baz=186,slow=2.5,SNR=7.5 | | | | | | |

**IDC 21 06:38:24.4±3.0, 54°.37N×86°.98E, h0km, mbtmp3.0/2, ML2.6/2, Error ellipse: s-maj=24.4km s-min=16.5km az=61.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.34** | **252** | I | I | 06 45 30.0 | |
| | baz=68,slow=326,SNR=3.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.34** | **252** | Pg | Pg | 06 38 48.6 | -1.4 |
| | 0.9nm,0.3s,baz=68,slow=18,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 06 39 06.6 | |
| | 1.1nm,0.3s,baz=73,slow=29,SNR=9.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.38** | **237** | Pn | Pn | 06 40 00.8 | +1.3 |
| | 0.1nm,0.3s,baz=54,slow=14,SNR=10.0 | | | | | | |
| KURBB | | | | Sn | Sn | 06 41 13.2 | +0.3 |
| | 0.1nm,0.3s,baz=49,slow=36,SNR=5.9 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.15** | **203** | Pn | Pn | 06 40 24.2 | +0.3 |
| | 0.1nm,0.3s,baz=18,slow=32,SNR=4.1 | | | | | | |
| MKAR | | | | Sn | Sn | 06 41 56.3 | -0.3 |
| | 0.3nm,0.3s,baz=20,slow=26,SNR=9.1 | | | | | | |
| MKAR | | | | Lg | Lg | 06 42 39.2 | |
| | baz=24,slow=33,SNR=2.5 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*JMA **21** 06:45:26.4±0.3, 35°.N±1°.×13°.8E±°, h253km±2km, MV3.6/35, SOUTHERN SURUGA BAY REG*
*JMA Felt I J1 at SOUTHERN SURUGA BAY REG .*
*IDC **21** 06:45:26.3±0.6, 34°.74N×138°.38E, h260km±8km, mb3.1/4, mbtmp3.8/9, Error ellipse: s-maj=31.7km s-min=7.8km az=67.0*
**ISC 21 06:45:26.8±0.8, 34°.68N±0°.06×138°.24E±0°.06, h251km±7km, n29, σ0§96/37, mb3.5/5, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSG** | **Sagara** | **0.05** | **270** | *e*P | **Pn** | **06 46 00.0** | **+0.9** |
| **JHMK** | **Hamakita** | **0.42** | **290** | P | **Pn** | **06 45 59.3** | **-0.1** |
| **JYN** | **Shimob** | **0.86** | **17** | P | **Pn** | **06 46 01.3** | **0.0** |
| **JOD2** | **Odawara 2** | **0.91** | **50** | P | **Pn** | **06 46 01.4** | **-0.1** |
| JOD2 | | | | *e*S | **S** | **06 46 29.5** | **+0.7** |
| **JIE** | **Ise** | **1.30** | **258** | P | **Pn** | **06 46 03.9** | **0.0** |
| JIE | | | | S | **S** | **06 46 32.2** | **-0.7** |
| **JRY** | **Ryogami san** | **1.44** | **22** | *i* P | **Pn** | **06 46 05.5** | **+0.6** |
| JRY | | | | S | **S** | **06 46 34.4** | **-0.4** |
| **JYTA** | **Yamagatataniai** | **1.54** | **307** | *i* P | **Pn** | **06 46 05.7** | **+0.2** |
| JYTA | | | | S | **S** | **06 46 35.3** | **-0.7** |
| **TTO1** | **TONANKAI O.B.S** | **1.60** | **229** | P | **Pn** | **06 46 06.2** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **1.86** | **359** | P | **Pn** | **06 46 07.5** | **-0.6** |
| | 59nm,0.4s,baz=175,slow=9.7,SNR=151 | | | | | | |
| MJAR | | | | S | **S** | **06 46 40.5** | **-0.3** |
| | 28nm,0.9s,baz=196,slow=21,SNR=11 | | | | | | |
| **MAT** | **Matsushiro** | **1.86** | **359** | *i* P | **Pn** | **06 46 08.4** | **+0.2** |
| MAT | | | | S | **S** | **06 46 40.2** | **-0.7** |
| **JAG** | **Ashikaga** | **2.01** | **29** | *i* P | **Pn** | **06 46 08.9** | **-0.5** |
| **JHJ** | **Hachijo jima 2** | **2.01** | **140** | P | **Pn** | **06 46 09.1** | **-0.4** |
| | 50nm,0.4s,baz=333,slow=20,SNR=16 | | | | | | |
| JHJ | | | | S | **S** | **06 46 45.3** | **+2.1** |
| | 148nm,0.2s,baz=285,slow=10,SNR=8.7 | | | | | | |
| **JHJ2** | **Mitsune** | **2.04** | **140** | *e*P | **Pn** | **06 46 09.5** | **-0.2** |
| **JKG** | **Kaga** | **2.23** | **316** | P | **Pn** | **06 46 11.7** | **+0.2** |
| **JWY** | **Kouya** | **2.24** | **259** | P | **Pn** | **06 46 11.8** | **-0.1** |
| **BSO1** | **Boso 1** | **2.25** | **90** | P | **Pn** | **06 46 10.7** | **-0.5** |
| BSO1 | | | | S | **S** | **06 46 46.0** | **-0.2** |
| **JTNC** | **Tanabenakahech** | **2.34** | **249** | P | **Pn** | **06 46 12.3** | **-0.3** |
| **JWT** | **Wachi** | **2.41** | **285** | *i* P | **Pn** | **06 46 13.4** | **+0.2** |
| **JSZ** | **Suzu** | **2.86** | **346** | P | **Pn** | **06 46 18.0** | **+0.3** |
| **JAI** | **Aioi** | **3.26** | **255** | P | **Pn** | **06 46 21.8** | **-0.4** |
| **JNU** | **Nakatsue** | **6.32** | **258** | P | **Pn** | **06 46 58.7** | **-0.2** |
| | 7.7nm,0.7s,baz=68,slow=22,SNR=2.1 | | | | | | |
| **KSRS** | **Korea Array** | **8.80** | **291** | P | **Pn** | **06 47 31.7** | **+1.5** |
| | 7.3nm,0.8s,baz=107,slow=13,SNR=15 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.67** | **335** | P | **Pn** | **06 47 54.3** | **+0.7** |
| | 3.0nm,0.8s,baz=137,slow=8.2,SNR=3.8 | | | | | | |
| **KLR** | **Kul'dur** | **15.31** | **344** | P | **P** | **06 48 49.0** | **-0.8** |
| | 3.4nm,0.5s,baz=157,slow=11,SNR=11 | | | | | | |
| **BTO** | **Baotou** | **23.06** | **293** | SS | **S** | **06 54 05.8** | **+3.6** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,380nm,7.1s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=N,580nm,6.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=E,280nm,5.5s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,560nm,6.4s | | | | | | |
| **SONM** | **Songino Array** | **27.10** | **309** | P | **P** | **06 50 47.0** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=117,slow=9.9,SNR=3.5 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.24** | **304** | P | **P** | **06 53 03.8** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=88,slow=11,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **54.44** | **185** | P | **P** | **06 54 26.9** | **-1.6** |
| | comp=Z,0.6nm,0.3s,baz=0.3,slow=7.7,SNR=22 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **58.17** | **185** | P | **P** | **06 54 53.2** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=1.8,slow=7.2,SNR=8.6 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |

*DJA **21** 06:46:47.0±0.3, 8°.3S±0°.07×116°.93E±0°.05, h10km, n11, σ1§17/13, Sumbawa region*

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.37** | **187** | P | **Pg** | **06 46 54.2** | **-0.8** |
| TWSI | | | | S | **Sg** | **06 46 59.0** | **-0.9** |
| **PLAI** | **Plampang** | **0.95** | **119** | P | **Pg** | **06 47 04.9** | **-1.1** |
| PLAI | | | | S | **Sg** | **06 47 17.7** | **-0.8** |
| **SRBI** | **Singaraja** | **1.72** | **279** | P | **Pn** | **06 47 17.5** | **-0.1** |
| **WBSI** | **Waikabubak, Su** | **2.74** | **118** | P | **Pn** | **06 47 32.0** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **268** | P | **Pn** | **06 47 31.3** | **-0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **58** | P | **Pn** | **06 47 50.5** | **-0.8** |
| **KAPI** | **Kappang** | **4.35** | **40** | Pn | **Pn** | **06 47 53.4** | **-0.4** |
| | 1.9nm,0.3s,baz=216,slow=19,SNR=2.5 | | | | | | |
| KAPI | | | | Sn | **Sn** | **06 48 44.3** | **-0.4** |
| | 2.3nm,0.3s,baz=234,slow=23,SNR=4.5 | | | | | | |
| KAPI | | | | Lg | Lg | 06 49 03.4 | |
| | 1.7nm,0.3s,baz=151,slow=9.3,SNR=2.4 | | | | | | |
| | 4.4nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.72** | **95** | P | **Pn** | **06 47 59.0** | **-0.1** |
| **WRA** | **Warramunga Arr** | **20.41** | **126** | P | **P** | **06 51 24.3** | **-0.7** |
| | 0.6nm,0.3s,baz=300,slow=12,SNR=35 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **22.27** | **135** | P | **P** | **06 51 44.7** | **-0.4** |
| | 0.9nm,0.8s,baz=309,slow=8.7,SNR=13 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **32.76** | **139** | P | **P** | **06 53 23.9** | **+3.0** |
| | 1.0nm,0.4s,baz=309,slow=9.2,SNR=3.1 | | | | | | |
| | 1.0nm,0.4s | | | | | | |

**IDC 21 07:03:53.3±3.1, 53°.60N×88°.06E, h0km, mbtmp2.8/2, ML2.6/2, Error ellipse: s-maj=27.9km s-min=18.6km az=59.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.96** | **282** | I | I | 07 16 00.0 | |
| | baz=96,slow=322,SNR=7.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.96** | **282** | Pn | Pn | 07 04 27.9 | +0.2 |
| | 1.3nm,0.3s,baz=101,slow=14,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 07 04 54.6 | |
| | 2.3nm,0.3s,baz=101,slow=28,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.58** | **247** | Pn | Pn | 07 05 32.2 | +0.9 |
| | 0.2nm,0.3s,baz=62,slow=14,SNR=4.9 | | | | | | |
| KURBB | | | | Lg | Lg | 07 07 22.1 | |
| | baz=63,slow=32,SNR=6.9 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.75** | **211** | Pn | Pn | 07 05 48.0 | +0.7 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=1.7 | | | | | | |
| MKAR | | | | Lg | Lg | 07 08 00.1 | |
| | baz=32,slow=33,SNR=1.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*IDC **21** 07:07:03.6±0.7, 7°.46S×127°.57E, h0km, mb4.2/8, mbtmp4.1/9, ML4.0/1, Error ellipse: s-maj=66.0km s-min=15.9km az=60.0*
*NEIC **21** 07:07:11.1±2.6, 7°.36S±0°.03×128°.01E±0°.09, h65km±10km, mb4.4/12, Error ellipse: s-maj=13.1km s-min=4.7km az=92.0*
**ISC 21 07:07:09.9±0.6, 7°.47S±0°.07×128°.02E±0°.09, h50km, n38, σ1§90/37, mb4.2/13, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **4.35** | **238** | Pn | **Pn** | **07 08 14.9** | **+1.3** |
| **MTN** | **Manton Dam** | **6.16** | **150** | Pn | **Pn** | **07 08 41.0** | **+2.6** |
| **FAKI** | **Fak Fak** | **6.18** | **43** | Pn | **Pn** | **07 08 38.7** | **0.0** |
| **KNRA** | **Kununurra** | **8.19** | **175** | | **Pn** | **07 09 07.5** | **+1.2** |
| **FITZ** | **Fitzroy Crossi** | **10.82** | **192** | Pn | **Pn** | **07 09 40.9** | **-1.3** |
| **WB0** | **Warramunga Arr** | **13.70** | **154** | | **Pn** | **07 10 19.6** | **-2.1** |
| **WRAB** | **Tennant Creek** | **13.83** | **154** | | Pn | 07 10 20.9 | -2.5 |
| **WRA** | **Warramunga Arr** | **13.83** | **154** | Pn | Pn | 07 10 18.7 | -4.8 |
| **WRA** | **Warramunga Arr** | **13.83** | **154** | Pn | Pn | 07 10 20.7 | -2.8 |
| | 1.3nm,0.3s,baz=328,slow=14,SNR=41 | | | | | | |
| WRA | | | | Sn | Sn | 07 12 49.8 | -5.8 |
| | 1.1nm,0.3s,baz=325,slow=25,SNR=9.7 | | | | | | |
| **WB2** | **Warramunga Arr** | **13.84** | **154** | | **Pn** | **07 10 21.4** | **-2.1** |
| **WR0** | **Warramunga Arr** | **13.94** | **154** | | **Pn** | **07 10 22.6** | **-2.2** |
| **PSA00** | **Pilbara Seismi** | **16.09** | **209** | P | **Pn** | **07 10 52.6** | **-0.2** |
| **COEN** | **Coen** | **16.22** | **115** | P | **Pn** | **07 10 55.4** | **+0.8** |
| COEN | | | | IAmb | IAmb | 07 11 01.1 | |
| | comp=Z,38nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **17.07** | **161** | P | **Pn** | **07 11 05.0** | **-0.2** |
| **ASAR** | **Alice Springs** | **17.07** | **161** | P | **Pn** | **07 11 04.8** | **-0.3** |
| **ASAR** | **Alice Springs** | **17.07** | **161** | P | **Pn** | **07 11 04.2** | **-1.0** |
| | comp=Z,0.5nm,0.3s,baz=336,slow=9.8,SNR=24 | | | | | | |
| ASAR | | | | S | **Sn** | **07 14 07.7** | **-6.5** |
| | comp=Z,0.5nm,0.6s,baz=330,slow=18,SNR=2.6 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **CTA** | **Charters Tower** | **21.67** | **127** | P | **P** | **07 12 00.4** | **+3.8** |
| | comp=Z,0.1nm,0.3s,baz=282,slow=9.3,SNR=2.2 | | | | | | |
| **FORT** | **Forrest** | **23.19** | **180** | P | **P** | **07 12 13.1** | **+0.7** |
| **MORW** | **Morawa** | **24.27** | **206** | P | **P** | **07 12 22.2** | **-0.4** |
| MORW | | | | IAmb | IAmb | 07 12 53.5 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **26.30** | **165** | P | **P** | **07 12 41.7** | **+0.7** |
| BBOO | | | | IAmb | IAmb | 07 13 22.9 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **27.24** | **200** | P | **P** | **07 12 49.4** | **+0.1** |
| **STKA** | **Stephens Creek** | **27.39** | **154** | P | **P** | **07 12 52.3** | **+1.6** |
| **STKA** | **Stephens Creek** | **27.39** | **154** | P | **P** | **07 12 52.8** | **+2.1** |
| | comp=Z,1.5nm,0.5s,baz=333,slow=13,SNR=6.6 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.55** | **312** | P | **P** | **07 14 25.9** | **-2.2** |
| | comp=Z,1.3nm,0.3s,baz=132,slow=6.4,SNR=2.1 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **MSVF** | **Nonsavu** | **49.75** | **107** | P | **P** | **07 15 54.8** | **-3.0** |
| **SONM** | **Songino Array** | **58.29** | **343** | P | **P** | **07 16 58.4** | **-1.3** |
| | comp=Z,0.6nm,0.4s,baz=162,slow=6.1,SNR=2.7 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **67.55** | **328** | P | **P** | **07 18 01.1** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 07 18 01.7 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.55** | **328** | P | **P** | **07 18 01.3** | **+0.1** |
| **MKAR** | **Makanchi Array** | **67.55** | **328** | P | **P** | **07 18 00.8** | **-0.4** |
| | comp=Z,1.6nm,0.5s,baz=121,slow=8.0,SNR=23 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **67.73** | **328** | P | **P** | **07 18 00.7** | **-1.6** |
| MAKZ | | | | IAmb | IAmb | 07 18 04.3 | |
| | comp=Z,6.4nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.15** | **335** | P | **P** | **07 18 22.3** | **-0.8** |
| | comp=Z,1.8nm,0.6s,baz=111,slow=5.6,SNR=6.4 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.89** | **329** | P | **P** | **07 18 27.5** | **-0.2** |
| | comp=Z,1.3nm,0.6s,baz=130,slow=5.1,SNR=5.3 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **77.42** | **328** | P | **P** | **07 18 59.5** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=104,slow=6.1,SNR=4.1 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.51** | **180** | P | **P** | **07 19 28.1** | **+0.9** |
| QSPA | | | | IAmb | IAmb | 07 19 46.4 | |
| | comp=Z,3.8nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.51** | **180** | P | **P** | **07 19 28.0** | **+0.9** |
| | comp=Z,1.4nm,0.9s,baz=215,slow=1.3,SNR=7.8 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **126.97** | **281** | PKP | **PKPdf** | **07 26 09.3** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=32,slow=3.7,SNR=2.9 | | | | | | |
| **CPUP** | **Villa Florida** | **146.00** | **171** | PKPbc | **PKPdf** | **07 26 45.9** | **+1.7** |
| | comp=Z,1.6nm,0.8s,baz=167,slow=4.5,SNR=4.3 | | | | | | |
| **LPAZ** | **La Paz** | **151.50** | **146** | PKPbc | **PKPbc** | **07 27 01.6** | **+1.3** |
| | comp=Z,0.4nm,0.4s,baz=144,slow=21,SNR=1.9 | | | | | | |
| LPAZ | | | | PKPab | **PKPab** | **07 27 10.8** | **+2.3** |
| | comp=Z,1.0nm,0.7s,baz=172,slow=1.1,SNR=8.9 | | | | | | |

*DJA **21** 07:09:23.3±0.3, 2°.N±4°.×12°.6E±°, h10km, M4.6/15, mb4.8/6, mB5.1/3, MLv4.5/15, Mw(mB)4.5/3*
*BJI **21** 07:09:24.4±0.0, 1°.68N×126°.51E, h84km, mB5.3/8, mb4.8/33, Ms4.5/1*
*IDC **21** 07:09:24.1±2.1, 1°.78N×126°.37E, h57km±18km, mb4.1/20, mbtmp4.4/21, ML3.9/1, MS3.1/9, Error ellipse: s-maj=25.9km s-min=9.7km az=71.0*
*NEIC **21** 07:09:24.1±1.9, 1°.88N±0°.08×126°.35E±0°.07, h50km±7km, mb4.8/47, Error ellipse: s-maj=12.9km s-min=9.1km az=213.0*
**ISC 21 07:09:23.7±0.3, 1°.85N±0°.04×126°.46E±0°.06, h50km, n141, σ1§36/141, mb4.7/53, MS3.1/8, 2C-4D, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.40** | **140** | P | **Pn** | **07 09 47.9** | **+1.0** |
| **TNTI** | **Ternate** | **1.40** | **140** | Pn | **Pn** | **07 09 47.7** | **+0.8** |
| **TNTI** | **Ternate** | **1.40** | **140** | P | **Pn** | **07 09 47.8** | **+0.8** |
| **LBMI** | **Labuha** | **2.68** | **157** | P | **Pn** | **07 10 06.8** | **+2.4** |
| **KMSI** | **Cibinong** | **2.78** | **243** | P | **Pn** | **07 10 06.9** | **+1.1** |
| **GTOI** | **Gorontalo** | **3.65** | **251** | P | **Pn** | **07 10 19.0** | **+1.2** |
| **SANI** | **Sanana** | **3.90** | **187** | P | **Pn** | **07 10 20.5** | **-0.7** |
| **LUWI** | **Luwuk** | **4.67** | **232** | | **Pn** | **07 10 34.2** | **+2.4** |
| **LUWI** | **Luwuk** | **4.67** | **232** | P | **Pn** | **07 10 33.3** | **+1.5** |
| **MRSI** | **Marisa** | **4.72** | **253** | P | **Pn** | **07 10 33.6** | **+1.2** |
| **NLAI** | **Namlea** | **5.09** | **173** | P | **Pn** | **07 10 38.2** | **+0.6** |
| **KCP** | **Kidapawan** | **5.31** | **345** | *i* P | Pn | 07 10 45.5 | +4.9 |
| **TOLI2** | **Tolitoli** | **5.72** | **263** | Pn | **Pn** | **07 10 45.8** | **-0.4** |
| **CDOP** | **Cateel, Davao** | **5.90** | **360** | *i* P | **Pn** | **07 10 51.1** | **+2.6** |
| CDOP | | | | *i* S | **Sn** | **07 11 57.4** | **+2.5** |
| **BIPH** | **Bislig** | **6.29** | **359** | *e*P | **Pn** | **07 10 54.5** | **+0.4** |
| BIPH | | | | *e*S | **Sn** | **07 12 03.7** | **-1.0** |
| **ZCP** | **Zamboanga City** | **6.68** | **319** | *e*P | **Pn** | **07 11 00.7** | **+1.4** |
| **PAGZ** | **Pagadian** | **6.70** | **333** | *i* P | **Pn** | **07 11 00.9** | **+1.3** |
| PAGZ | | | | *i* S | **Sn** | **07 12 17.5** | **+2.8** |
| **MPSI** | **Mapaga** | **6.73** | **257** | P | **Pn** | **07 11 01.1** | **+1.1** |
| | 64nm,0.6s,0.2nm | | | | | | |
| **FAKI** | **Fak Fak** | **7.48** | **129** | Pn | **Pn** | **07 11 14.1** | **+3.8** |
| **FAKI** | **Fak Fak** | **7.48** | **129** | P | **Pn** | **07 11 13.7** | **+3.4** |
| | 65nm,1.7s,0.3nm | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.61** | **293** | Pn | **Pn** | **07 11 29.0** | **+3.3** |
| **BNSI** | **Bone** | **8.88** | **226** | P | **Pn** | **07 11 30.4** | **+0.9** |
| **KAPI** | **Kappang** | **9.56** | **224** | P | **Pn** | **07 11 39.0** | **+0.2** |
| | 1.0nm,0.3s,baz=41,slow=20,SNR=2.2 | | | | | | |
| KAPI | | | | LR | LR | 07 15 24.5 | |
| | comp=Z,132nm,20.4s,baz=77,slow=38 | | | | | | |
| | 4.4nm,0.3s | | | | | | |
| **KKM** | **Kota Kinabalu** | **11.04** | **292** | | **Pn** | **07 12 02.6** | **+3.5** |
| **SBUM** | **Sibu** | **14.24** | **273** | Pn | **Pn** | **07 12 44.5** | **+1.8** |
| **MTN** | **Manton Dam** | **15.31** | **162** | Pn | **Pn** | **07 12 55.3** | **-1.5** |
| **KSM** | **Kuching** | **16.15** | **269** | P | **P** | **07 13 12.5** | **+2.5** |
| **KNRA** | **Kununurra** | **17.56** | **173** | P | **Pn** | **07 13 24.5** | **-0.6** |
| **GUMO** | **Guam** | **21.62** | **56** | LR | LR | 07 21 52.2 | |
| | comp=Z,27nm,21.8s,baz=245,slow=34 | | | | | | |
| **YULB** | **Yu-li** | **21.99** | **347** | P | **P** | **07 14 11.0** | **-2.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TPUB** | **Ta-pu** | **22.06** | **346** | P | **P** | **07 14 12.8** | **-1.7** |
| TPUB | | | | IAmb | IAmb | 07 14 17.3 | |
| | comp=Z,28nm,0.7s | | | | | | |
| **COEN** | **Coen** | **22.83** | **134** | P | **P** | **07 14 24.1** | **+1.4** |
| **COEN** | **Coen** | **22.83** | **134** | P | **P** | **07 14 22.3** | **-0.4** |
| **WB0** | **Warramunga Arr** | **22.85** | **160** | P | **P** | **07 14 22.4** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 07 14 25.8 | |
| | comp=Z,37nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.99** | **161** | P | **P** | **07 14 24.2** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 07 14 29.7 | |
| | comp=Z,28nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.99** | **161** | P | **P** | **07 14 24.7** | **+0.2** |
| **WRA** | **Warramunga Arr** | **22.99** | **161** | P | **P** | **07 14 23.0** | **-1.4** |
| | comp=Z,17nm,0.4s,baz=337,slow=11,SNR=35 | | | | | | |
| WRA | | | | S | **S** | **07 18 30.6** | **-0.7** |
| | comp=Z,4.4nm,0.8s,baz=348,slow=17,SNR=4.9 | | | | | | |
| WRA | | | | ScP | **ScP** | **07 21 46.4** | **-0.6** |
| | comp=Z,0.3nm,0.4s,baz=339,slow=2.5,SNR=2.1 | | | | | | |
| | comp=Z,17nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.00** | **161** | P | **P** | **07 14 24.8** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 07 14 29.8 | |
| | comp=Z,40nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.08** | **160** | P | **P** | **07 14 25.5** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 07 14 27.5 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **23.46** | **119** | LR | LR | 07 27 03.7 | |
| | comp=Z,107nm,18.4s,baz=246,slow=45 | | | | | | |
| **MBWA** | **Marble Bar** | **23.80** | **196** | P | **P** | **07 14 30.8** | **-1.2** |
| **MBWA** | **Marble Bar** | **23.80** | **196** | P | **P** | **07 14 30.6** | **-1.5** |
| MBWA | | | | IAmb | IAmb | 07 14 31.8 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **24.16** | **195** | P | **P** | **07 14 34.9** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 07 15 03.5 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **JOW** | **Kunigami** | **24.90** | **4** | P | **P** | **07 14 37.4** | **-4.8** |
| **QIS** | **Mount Isa** | **25.73** | **151** | P | **P** | **07 14 49.8** | **+0.1** |
| **AS31** | **Alice Springs** | **26.37** | **164** | P | **P** | **07 14 55.5** | **-0.1** |
| **ASAR** | **Alice Springs** | **26.38** | **164** | P | **P** | **07 14 57.8** | **+2.3** |
| **ASAR** | **Alice Springs** | **26.38** | **164** | P | **P** | **07 14 54.4** | **-1.2** |
| | comp=Z,3.8nm,0.4s,baz=345,slow=12,SNR=20 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 18 19.9** | **-0.6** |
| | comp=Z,1.6nm,0.4s,baz=334,slow=2.4,SNR=5.1 | | | | | | |
| ASAR | | | | ScP | **ScP** | **07 21 54.2** | **-2.2** |
| | comp=Z,1.2nm,0.6s,baz=0.5,slow=2.2,SNR=5.1 | | | | | | |
| | comp=Z,3.8nm,0.4s | | | | | | |
| **AS01** | **Alice Springs** | **26.39** | **164** | P | **P** | **07 14 56.0** | **+0.4** |
| **WRKA** | **Warakurna** | **26.79** | **176** | P | **P** | **07 14 59.5** | **+0.3** |
| **GIRL** | **Giralia** | **27.11** | **205** | P | **P** | **07 15 02.1** | **+0.1** |
| **CTA** | **Charters Tower** | **29.19** | **139** | P | **P** | **07 15 21.8** | **+1.0** |
| | comp=Z,0.2nm,0.8s,baz=301,slow=17,SNR=1.7 | | | | | | |
| **MEEK** | **Meekatharra** | **29.32** | **194** | P | **P** | **07 15 21.1** | **-0.7** |
| **NJ2** | **Nanjing** | **30.89** | **347** | *e*P | **P** | **07 15 36.8** | **+1.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **GYA** | **Guiyang** | **30.99** | **324** | P | **P** | **07 15 39.1** | **+2.4** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.63** | **303** | P | **P** | **07 15 42.6** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=111,slow=6.5,SNR=7.6 | | | | | | |
| CMAR | | | | LR | LR | 07 28 55.0 | |
| | comp=Z,21nm,19.1s,baz=110,slow=37 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **MORW** | **Morawa** | **32.32** | **197** | P | **P** | **07 15 47.1** | **-1.2** |
| **FORT** | **Forrest** | **32.48** | **177** | P | **P** | **07 15 49.1** | **-0.5** |
| **FORT** | **Forrest** | **32.48** | **177** | P | **P** | **07 15 49.7** | **+0.1** |
| FORT | | | | IAmb | IAmb | 07 15 50.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **MULG** | **Mulgathing** | **32.76** | **168** | P | **P** | **07 15 51.8** | **-0.3** |
| **KMBL** | **Kambalda** | **33.32** | **187** | P | **P** | **07 15 56.2** | **-0.7** |
| **JHJ** | **Hachijo jima 2** | **33.53** | **20** | LR | LR | 07 31 44.1 | |
| | comp=Z,31nm,18.2s,baz=60,slow=40 | | | | | | |
| **BLDU** | **Ballidu** | **33.59** | **195** | P | **P** | **07 15 58.8** | **-0.5** |
| **LCRK** | **Leigh Creek** | **34.02** | **162** | P | **P** | **07 16 02.6** | **-0.4** |
| **PZH** | **PanZhiHua** | **34.13** | **318** | P | **P** | **07 16 05.3** | **+1.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,90nm,6.9s | | | | | | |
| **KLBR** | **Kellerberrin** | **34.27** | **193** | P | **P** | **07 16 04.7** | **-0.5** |
| **RK1H** | **Rockhampton Ha** | **34.30** | **138** | P | **P** | **07 16 06.5** | **+0.9** |
| **KSRS** | **Korea Array** | **35.46** | **2** | P | **P** | **07 16 16.2** | **+0.9** |
| | comp=Z,2.9nm,0.7s,baz=177,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SIMJ | Simiganj | 63.84 | 313 | P | | P | | 07 19 50.7 | -0.7 |
| KK31 | Karatay Array | 64.42 | 318 | P | | P | | 07 19 54.1 | -0.9 |
| KKAR | Karatay Array | 64.42 | 318 | P | | P | | 07 19 53.9 | -1.1 |
| KKAR | Karatay Array | 64.42 | 318 | P | | P | | 07 19 53.4 | -1.6 |
| KKAR | | | | IAmb | | IAmb | | 07 20 01.6 | |
| | comp=Z,2.7nm,1.1s | | | | | | | | |
| BVAR | Borovoye Array | 68.75 | 327 | P | | P | | 07 20 21.8 | -0.5 |
| | comp=Z,2.2nm,0.5s,baz=104,slow=6.3,SNR=10 | | | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | | | |
| BRVK | Borovoye | 68.82 | 327 | P | | P | | 07 20 22.7 | -0.1 |
| CASY | Casey | 68.93 | 187 | P | | P | | 07 20 23.5 | +0.4 |
| CASY | | | | IAmb | | IAmb | | 07 21 44.6 | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| DRV | Dumont d'Urvil | 69.04 | 174 | P | | P | | 07 20 23.5 | -0.3 |
| ABKAR | Akbulak array | 73.43 | 321 | P | | P | | 07 20 49.9 | -0.9 |
| ABKAR | Akbulak array | 73.43 | 321 | P | | P | | 07 20 49.8 | -0.9 |
| ARU | Arti | 76.38 | 328 | P | | P | | 07 21 06.2 | -1.4 |
| ARU | | | | IAmb | | IAmb | | 07 21 07.6 | |
| | comp=Z,8.7nm,0.7s | | | | | | | | |
| RAYN | Ar Rayn | 80.97 | 293 | P | | P | | 07 21 32.4 | -1.3 |
| MAW | Mawson | 81.91 | 200 | P | | P | | 07 21 36.1 | -1.4 |
| | comp=Z,1.3nm,0.7s,baz=36,slow=2.6,SNR=2.4 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| L18K | Granite Mounta | 82.25 | 27 | | | P | | 07 21 39.1 | -0.4 |
| J18K | Innoko River | 82.47 | 26 | | | P | | 07 21 42.4 | +1.7 |
| J18K | | | | IAmb | | IAmb | | 07 21 43.4 | |
| | comp=Z,3.7nm,0.6s | | | | | | | | |
| SBA | Scott Base | 82.52 | 172 | P | | P | | 07 21 41.6 | +1.0 |
| SBA | | | | IAmb | | IAmb | | 07 24 40.9 | |
| | comp=Z,14nm,1.9s | | | | | | | | |
| G19K | Purcell Mounta | 82.85 | 23 | | | P | | 07 21 44.3 | +1.8 |
| G19K | | | | IAmb | | IAmb | | 07 21 45.7 | |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| D19K | Kuna River | 82.96 | 21 | | | P | | 07 21 44.5 | +1.3 |
| H19K | Roundabout Mou | 82.98 | 24 | | | P | | 07 21 45.5 | +2.2 |
| H19K | | | | IAmb | | IAmb | | 07 21 46.5 | |
| | comp=Z,10nm,0.7s | | | | | | | | |
| J19K | Poorman | 83.05 | 26 | | | P | | 07 21 45.4 | +1.7 |
| J19K | | | | IAmb | | IAmb | | 07 21 46.8 | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| F20K | Avaraart Lake | 83.56 | 23 | P | | P | | 07 21 48.0 | +1.8 |
| F20K | | | | IAmb | | IAmb | | 07 22 11.8 | |
| | comp=Z,7.4nm,1.2s | | | | | | | | |
| KDAK | Kodiak Island | 83.61 | 32 | P | | P | | 07 21 48.0 | +1.4 |
| KBZ | Khabaz | 84.07 | 314 | P | | P | | 07 21 48.5 | -0.8 |
| | comp=Z,2.2nm,0.8s,baz=145,slow=8.2,SNR=4.1 | | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | | |
| ILAR | Eielson Array | 86.91 | 25 | P | | P | | 07 22 02.6 | -0.4 |
| | comp=Z,0.3nm,0.5s,baz=255,slow=5.1,SNR=9.9 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |
| MMAI | Mount Meron Ar | 89.89 | 303 | P | | P | | 07 22 17.9 | 0.0 |
| | comp=Z,0.6nm,0.4s,baz=71,slow=6.2,SNR=5.0 | | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | | |
| BRTR | Keskin Array B | 91.01 | 310 | P | | P | | 07 22 21.6 | -1.5 |
| | comp=Z,0.6nm,0.8s,baz=124,slow=5.8,SNR=4.4 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| QSPA | South Pole Qui | 91.77 | 180 | P | | P | | 07 22 25.8 | -0.2 |
| QSPA | South Pole Qui | 91.77 | 180 | P | | P | | 07 22 25.7 | -0.3 |
| | comp=Z,0.6nm,0.4s,baz=148,slow=1.9,SNR=19 | | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | | |
| ARCES | ARCESS Array B | 92.11 | 340 | P | | P | | 07 22 26.9 | -0.5 |
| | comp=Z,2.4nm,0.8s,baz=45,slow=6.6,SNR=1.1 | | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| FARO | Faro, Yukon | 93.12 | 27 | P | | P | | 07 22 32.5 | +0.3 |
| FARO | | | | IAmb | | IAmb | | 07 22 34.3 | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| FINES | FINESS Array B | 93.35 | 332 | P | | P | | 07 22 32.9 | -0.3 |
| | comp=Z,3.2nm,0.8s,baz=35,slow=5.1,SNR=11 | | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | | |
| TXAR | Lajitas Array | 122.95 | 53 | PKP | | PKiKP | | 07 28 15.4 | -0.2 |
| | comp=Z,0.2nm,0.6s,baz=321,slow=2.3,SNR=4.1 | | | | | | | | |
| TORD | Torodi Ar. Bea | 123.23 | 287 | PKP | | PKPdf | | 07 28 15.9 | -0.2 |
| | comp=Z,0.7nm,0.6s,baz=84,slow=1.5,SNR=5.9 | | | | | | | | |
| PLCA | Paso Flores | 138.34 | 160 | PKP | | PKPdf | | 07 28 44.6 | +0.5 |
| | comp=Z,2.7nm,1.1s,baz=250,slow=6.3,SNR=3.5 | | | | | | | | |
| LPAZ | La Paz | 159.69 | 136 | PKP | | PKPdf | | 07 29 19.6 | +0.8 |
| | comp=Z,0.3nm,0.5s,baz=254,slow=5.8,SNR=4.2 | | | | | | | | |

*IDC **21** 07:13:06.4±0.7, 3°.68N×128°.08E, h145km±6km, mb3.9/14, mbtmp4.3/15, Error ellipse: s-maj=23.7km s-min=8.6km az=72.0*
*DJA **21** 07:13:07.9±0.6, 4°N±5°×12°.8E±°, h140km±6km, M4.6/13, mb4.5/10, mB5.0/4, MLv4.7/13, Mw(mB)4.3/4*
*NEIC **21** 07:13:07.5±1.2, 3°.74N±0°.09×128°.1E±0°.1, h150km±8km, mb4.6/25, Error ellipse: s-maj=18.7km s-min=12.4km az=75.0*

**ISC 21 07:13:07.2±0.4, 3°.77N±0°.04×128°.12E±0°.08, h150km, n76, σ1°68/84, mb4.5/28, 3C-2D, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| TNTI | Ternate | 3.07 | 194 | | | Pn | 07 13 55.4 | -0.1 |
| TNTI | | | | Sn | | Sn | 07 14 34.5 | +1.6 |
| TNTI | Ternate | 3.07 | 194 | P | | Pn | 07 13 56.5 | +1.0 |
| TNTI | | | | S | | Sn | 07 14 33.2 | +0.3 |
| DAV | Davao City (W) | 4.14 | 322 | P | | Pn | 07 14 10.2 | +0.9 |
| | 265nm,0.3s,baz=82,slow=7.5,SNR=1.8 | | | | | | | |
| DAV | | | | S | | Sn | 07 14 57.6 | 0.0 |
| | 341nm,0.4s,baz=66,slow=7.4,SNR=1.8 | | | | | | | |
| DMPH | Davao City--Mi | 4.19 | 322 | *e*P | | Pn | 07 14 10.2 | +0.2 |
| CDOP | Cateel, Davao | 4.32 | 337 | *i*P | | Pn | 07 14 10.4 | -1.3 |
| CDOP | | | | *i* S | | Sn | 07 14 56.2 | -5.7 |
| KCP | Kidapawan | 4.41 | 317 | *i*P | | Pn | 07 14 13.6 | +0.7 |
| KCP | | | | *i* S | | Sn | 07 15 05.1 | +1.1 |
| BIPH | Bislig | 4.72 | 338 | *e*P | | Pn | 07 14 15.4 | -1.5 |
| BIPH | | | | *e*S | | Sn | 07 15 01.0 | -10 |
| TASP | Talacogon, Agu | 5.19 | 334 | *e*P | | Pn | 07 14 24.7 | +1.6 |
| TASP | | | | *e*S | | Sn | 07 15 15.2 | -7.1 |
| KMSI | Cibinong | 5.22 | 233 | P | | Pn | 07 14 23.9 | +0.4 |
| SWI | Sorong | 5.57 | 146 | P | | Pn | 07 14 29.5 | +1.3 |
| | 144nm,0.8s,2μm0.5nm | | | | | | | |
| GTOI | Gorontalo | 5.98 | 239 | P | | Pn | 07 14 33.2 | -0.5 |
| | 18nm,0.6s | | | | | | | |
| SANI | Sanana | 6.16 | 200 | P | | Pn | 07 14 33.2 | -2.9 |
| MRSI | Marisa | 6.99 | 242 | P | | Pn | 07 14 46.3 | -0.8 |
| | 85nm,0.6s,3μm0.5nm | | | | | | | |
| LUWI | Luwuk | 7.17 | 228 | Pn | | Pn | 07 14 49.8 | +0.3 |
| LUWI | Luwuk | 7.17 | 228 | P | | Pn | 07 14 48.3 | -1.3 |
| | 81nm,0.8s | | | | | | | |
| TOLI2 | Tolitoli | 7.79 | 250 | Pn | | Pn | 07 14 56.8 | -1.1 |
| FAKI | Fak Fak | 7.82 | 148 | Pn | | Pn | 07 14 59.1 | +0.8 |
| FAKI | Fak Fak | 7.82 | 148 | P | | Pn | 07 14 59.1 | +0.8 |
| | 77nm,1.2s,0.3nm | | | | | | | |
| MPSI | Mapaga | 8.90 | 248 | P | | Pn | 07 15 11.1 | -1.5 |
| MTN | Manton Dam | 16.78 | 170 | P | | P | 07 16 50.9 | -2.2 |
| MTN | | | | IAmb | | IAmb | 07 17 13.0 | |
| | comp=Z,36nm,1.5s | | | | | | | |
| KNRA | Kununurra | 19.33 | 178 | | | P | 07 17 20.5 | -0.5 |
| KNRA | | | | IAmb | | IAmb | 07 17 22.0 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| TPUB | Ta-pu | 20.72 | 340 | P | | P | 07 17 35.4 | -0.5 |
| TPUB | | | | IAmb | | IAmb | 07 17 35.9 | |
| | comp=Z,22nm,0.9s | | | | | | | |
| SSLB | Suanglung | 21.07 | 341 | P | | P | 07 17 39.3 | -0.4 |
| WB0 | Warramunga Arr | 24.19 | 165 | P | | P | 07 18 09.1 | -0.8 |
| WRAB | Tennant Creek | 24.34 | 166 | P | | P | 07 18 10.5 | -0.8 |
| WRAB | | | | IAmb | | IAmb | 07 18 11.7 | |
| | comp=Z,15nm,0.6s | | | | | | | |
| WRA | Warramunga Arr | 24.35 | 166 | P | | P | 07 18 09.8 | -1.6 |
| WRA | Warramunga Arr | 24.35 | 166 | P | | P | 07 18 09.8 | -1.6 |
| | comp=Z,12nm,0.6s,baz=342,slow=11,SNR=14 | | | | | | | |
| WRA | | | | S | | S | 07 22 22.3 | +2.4 |
| | comp=Z,1.8nm,1.0s,baz=338,slow=19,SNR=5.3 | | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| WB2 | Warramunga Arr | 24.35 | 166 | P | | P | 07 18 11.3 | -0.1 |
| WB2 | | | | IAmb | | IAmb | 07 18 11.7 | |
| | comp=Z,17nm,0.7s | | | | | | | |
| WR0 | Warramunga Arr | 24.41 | 165 | P | | P | 07 18 11.2 | -0.7 |
| WR0 | | | | IAmb | | IAmb | 07 18 12.4 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| AS31 | Alice Springs | 27.85 | 169 | P | | P | 07 18 42.2 | -0.6 |
| AS31 | | | | PcP | | PcP | 07 21 55.0 | -0.2 |
| ASAR | Alice Springs | 27.85 | 169 | P | | P | 07 18 42.2 | -0.6 |
| ASAR | Alice Springs | 27.85 | 169 | P | | P | 07 18 42.0 | -0.9 |
| | comp=Z,3.9nm,0.5s,baz=358,slow=8.5,SNR=16 | | | | | | | |
| ASAR | | | | S | | S | 07 23 10.9 | -4.3 |
| | comp=Z,0.9nm,0.8s,baz=351,slow=18,SNR=2.9 | | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| NJ2 | Nanjing | 29.45 | 344 | *e*P | | P | 07 18 59.3 | +2.5 |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | | |
| CMAR | Chiang Mai Arr | 32.05 | 299 | P | | P | 07 19 20.9 | +0.9 |
| | comp=Z,3.3nm,0.7s,baz=118,slow=7.3,SNR=15 | | | | | | | |
| CMAR | | | | pP | | pP | 07 19 51.4 | 0.0 |
| | comp=Z,1.1nm,0.3s,baz=110,slow=7.8,SNR=1.5 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| KSRS | Korea Array | 33.52 | 360 | P | | P | 07 19 32.5 | +0.1 |
| | comp=Z,1.1nm,0.6s,baz=174,slow=10,SNR=2.4 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| PZH | PanZhiHua | 33.89 | 314 | P | | P | 07 19 38.9 | +2.9 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,160nm,5.1s | | | | | | | |
| MJAR | Matsushiro Arr | 33.91 | 15 | P | | P | 07 19 34.7 | -1.2 |
| | comp=Z,1.9nm,0.4s,baz=177,slow=8.5,SNR=5.7 | | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | | |
| FORT | Forrest | 34.36 | 180 | P | | P | 07 19 39.2 | -0.5 |
| EIDS | Eidsvold | 36.55 | 144 | P | | P | 07 19 55.1 | -3.4 |
| BBOO | Buckleboo | 37.15 | 169 | P | | P | 07 20 02.7 | -0.9 |
| BBOO | | | | IAmb | | IAmb | 07 20 03.5 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| STKA | Stephens Creek | 37.70 | 161 | P | | P | 07 20 06.8 | -1.4 |
| STKA | Stephens Creek | 37.70 | 161 | P | | P | 07 20 06.7 | -1.5 |
| | comp=Z,4.2nm,0.3s,baz=348,slow=8.0,SNR=16 | | | | | | | |
| | comp=Z,4.2nm,0.3s | | | | | | | |
| LZH | Lanzhou | 39.18 | 328 | *e*P | | P | 07 20 22.6 | +1.8 |
| LZH | | | | pP | | pP | 07 20 31.9 | -21 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | | |
| HHC | Hu-ho-hao-te | 39.81 | 340 | *e*P | | P | 07 20 29.5 | +3.7 |
| HHC | | | | pP | | sP | 07 21 10.1 | -4.1 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,210nm,5.9s | | | | | | | |
| USRK | Ussuriysk Ar. | 40.41 | 4 | P | | P | 07 20 31.9 | +1.4 |
| | comp=Z,1.2nm,0.4s,baz=216,slow=7.1,SNR=4.3 | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.45 | 66 | T | | T | 08 04 27.3 | |
| | baz=252 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.46 | 66 | T | | T | 08 04 06.9 | |
| | baz=252 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.46 | 66 | T | | T | 08 04 21.8 | |
| | baz=252 | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.99 | 64 | T | | T | 08 05 01.9 | |
| | baz=250 | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.00 | 64 | T | | T | 08 05 05.7 | |
| | baz=250 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 41.00 | 64 | T | | T | 08 05 22.3 | |
| | baz=250 | | | | | | | |
| TOO | Toolangi | 44.19 | 160 | P | | P | 07 21 01.4 | +0.1 |
| TOO | | | | IAmb | | IAmb | 07 21 35.4 | |
| | comp=Z,25nm,1.3s | | | | | | | |
| SONM | Songino Array | 47.71 | 340 | P | | P | 07 21 28.9 | +0.1 |
| | comp=Z,0.5nm,0.5s,baz=157,slow=7.8,SNR=2.1 | | | | | | | |
| SONM | | | | pP | | pP | 07 22 03.3 | +1.4 |
| | comp=Z,0.9nm,0.7s,baz=163,slow=5.3,SNR=2.0 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| WMQ | Urumqi | 53.49 | 324 | *e*P | | P | 07 22 14.5 | +2.3 |
| WMQ | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| PETK | Petropavlovsk- | 54.88 | 21 | P | | P | 07 22 23.3 | +1.3 |
| PETK | Petropavlovsk- | 54.88 | 21 | P | | P | 07 22 22.9 | +1.0 |
| | comp=Z,3.4nm,0.5s,baz=191,slow=6.8,SNR=4.6 | | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | | |
| MK31 | Makanchi Array | 58.32 | 325 | P | | P | 07 22 46.4 | -0.1 |
| MKAR | Makanchi Array | 58.32 | 325 | P | | P | 07 22 46.6 | +0.1 |
| MKAR | Makanchi Array | 58.32 | 325 | P | | P | 07 22 46.5 | 0.0 |
| | comp=Z,2.0nm,0.5s,baz=110,slow=7.5,SNR=11 | | | | | | | |
| MKAR | | | | pP | | pP | 07 23 22.0 | +1.0 |
| | comp=Z,2.3nm,0.5s,baz=123,slow=8.4,SNR=6.9 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| BOOM | Boomskoye usch | 60.23 | 318 | P | | P | 07 22 59.0 | -0.8 |
| LBZ | Lake Benmore | 60.95 | 147 | P | | P | 07 23 04.1 | -0.3 |
| ZALV | Zalesovo Beam | 61.19 | 332 | P | | P | 07 23 04.9 | -0.9 |
| | comp=Z,0.6nm,0.6s,baz=126,slow=7.3,SNR=1.8 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| KURK | Kurchatov | 62.46 | 327 | P | | P | 07 23 14.0 | -0.4 |
| KURK | | | | IAmb | | IAmb | 07 23 21.5 | |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| KURBB | Kurchatov Arra | 62.46 | 327 | P | | P | 07 23 13.9 | -0.5 |
| | comp=Z,1.3nm,0.4s,baz=128,slow=6.4,SNR=7.8 | | | | | | | |
| KURBB | | | | pP | | pP | 07 23 47.6 | -1.9 |
| | comp=Z,2.5nm,0.7s,baz=124,slow=6.7,SNR=5.2 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| GAR | Garm | 62.92 | 312 | P | | P | 07 23 17.2 | -0.7 |
| GAR | | | | IAmb | | IAmb | 07 23 18.8 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| KKAR | Karatay Array | 64.15 | 317 | P | | P | 07 23 25.1 | -0.7 |
| BVAR | Borovoye Array | 68.05 | 327 | P | | P | 07 23 50.3 | -0.1 |
| | comp=Z,1.0nm,0.6s,baz=132,slow=8.5,SNR=4.6 | | | | | | | |
| BVAR | | | | pP | | pP | 07 24 24.6 | -1.1 |
| | comp=Z,3.0nm,0.9s,baz=128,slow=9.3,SNR=4.4 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| LVA | Lava Point | 72.96 | 34 | P | | P | 07 24 19.9 | -0.3 |
| ABKAR | Akbulak array | 73.00 | 321 | P | | P | 07 24 19.9 | -0.5 |
| L14K | Kuka Creek | 76.81 | 28 | P | | P | 07 24 42.5 | +0.4 |
| L14K | | | | IAmb | | IAmb | 07 24 50.5 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| M14K | Bethel | 76.99 | 28 | P | | P | 07 24 43.9 | +0.8 |
| M14K | | | | IAmb | | IAmb | 07 25 01.4 | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| QSPA | South Pole Qui | 93.68 | 180 | P | | P | 07 26 06.3 | -0.2 |
| QSPA | | | | IAmb | | IAmb | 07 26 07.9 | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| QSPA | South Pole Qui | 93.68 | 180 | P | | P | 07 26 05.9 | -0.6 |
| | comp=Z,4.2nm,0.9s,baz=359,slow=0.7,SNR=10 | | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| TXAR | Lajitas Array | 120.47 | 53 | PKP | | PKPdf | | 07 31 41.8 | 0.0 |
| | comp=Z,0.4nm,0.7s,baz=281,slow=0.5,SNR=6.8 | | | | | | | | |
| PLCA | Paso Flores | 139.54 | 158 | PKP | | PKiKP | | 07 32 20.0 | +0.2 |
| | comp=Z,1.4nm,0.8s,baz=207,slow=4.5,SNR=3.1 | | | | | | | | |
| LPAZ | La Paz | 159.76 | 129 | PKPab | | PKPab | | 07 33 31.1 | +1.6 |
| | comp=Z,2.1nm,0.8s,baz=195,slow=2.1,SNR=12 | | | | | | | | |

*NEIC **21** 07:14:34.3±1.3, 17°.9S±0°.1×178°.3W±0°.2, h513km±11km, mb4.3/20, Error ellipse: s-maj=26.5km s-min=8.4km az=127.0*
*IDC **21** 07:14:36.5±5.2, 17°.92S×178°.41W, h539km±57km, mb3.3/8, mbtmp4.2/8, Error ellipse: s-maj=40.5km s-min=21.6km az=146.0*

**ISC 21 07:14:39.7±0.8, 18°.0S±0°.2×178°.5W±0°.1, h579km, n39, σ0°60/38, mb4.3/20, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| AFI | Afiamalu | 7.64 | 59 | P | | P | 07 16 24.0 | -11 |
| NIUE | Niue | 8.22 | 99 | P | | P | 07 16 31.3 | -9.1 |
| ARMA | Armidale | 29.82 | 240 | P | | P | 07 20 01.0 | -0.1 |
| ARMA | | | | IAmb | | IAmb | 07 20 23.1 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| CTA | Charters Tower | 33.33 | 261 | P | | P | 07 20 31.3 | +0.3 |
| | comp=Z,0.2nm,0.8s,baz=94,slow=8.6,SNR=4.0 | | | | | | | |
| COEN | Coen | 37.00 | 271 | P | | P | 07 21 01.5 | 0.0 |
| STKA | Stephens Creek | 38.51 | 241 | P | | P | 07 21 13.8 | +0.3 |
| STKA | Stephens Creek | 38.51 | 241 | P | | P | 07 21 13.8 | +0.3 |
| | comp=Z,5.1nm,0.5s,baz=94,slow=8.4,SNR=5.1 | | | | | | | |
| | comp=Z,5.1nm,0.5s | | | | | | | |
| BBOO | Buckleboo | 43.28 | 241 | P | | P | 07 21 51.3 | 0.0 |
| BBOO | | | | IAmb | | IAmb | 07 21 51.8 | |
| | comp=Z,7.8nm,0.7s | | | | | | | |
| WR0 | Warramunga Arr | 44.33 | 260 | P | | P | 07 21 59.6 | +0.1 |
| WR0 | | | | IAmb | | IAmb | 07 22 40.4 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| WB0 | Warramunga Arr | 44.48 | 260 | P | | P | 07 22 00.4 | -0.4 |
| WB0 | | | | IAmb | | IAmb | 07 22 23.9 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| WB2 | Warramunga Arr | 44.51 | 260 | P | | P | 07 22 00.8 | -0.1 |
| WB2 | | | | IAmb | | IAmb | 07 22 31.9 | |
| | comp=Z,15nm,1.4s | | | | | | | |
| WRA | Warramunga Arr | 44.52 | 260 | P | | P | 07 22 00.8 | -0.2 |
| WRA | Warramunga Arr | 44.52 | 260 | P | | P | 07 22 00.8 | -0.2 |
| | comp=Z,3.6nm,0.7s,baz=98,slow=6.7,SNR=23 | | | | | | | |
| WRA | | | | PcP | | PcP | 07 23 32.1 | +0.6 |
| | comp=Z,0.7nm,0.7s,baz=91,slow=3.4,SNR=2.9 | | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | | |
| AS31 | Alice Springs | 44.67 | 254 | P | | P | 07 22 02.5 | +0.4 |
| AS31 | | | | IAmb | | IAmb | 07 22 03.5 | |
| | comp=Z,8.1nm,0.7s | | | | | | | |
| ASAR | Alice Springs | 44.67 | 254 | P | | P | 07 22 01.8 | -0.4 |
| ASAR | Alice Springs | 44.67 | 254 | P | | P | 07 22 02.5 | +0.3 |
| | comp=Z,28nm,0.6s,baz=88,slow=8.3,SNR=187 | | | | | | | |
| ASAR | | | | PcP | | PcP | 07 23 32.8 | +0.7 |
| | comp=Z,1.0nm,0.5s,baz=106,slow=3.9,SNR=4.1 | | | | | | | |
| FORT | Forrest | 49.88 | 245 | P | | P | 07 22 40.4 | -0.6 |
| PSA00 | Pilbara Seismi | 57.79 | 255 | P | | P | 07 23 35.7 | -1.1 |
| PSA00 | | | | IAmb | | IAmb | 07 23 37.7 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| GIRL | Giralia | 62.78 | 253 | P | | P | 07 24 08.8 | -0.9 |
| MJAR | Matsushiro Arr | 67.90 | 323 | P | | P | 07 24 41.0 | -0.4 |
| | comp=Z,1.2nm,0.4s,baz=122,slow=7.1,SNR=4.6 | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | |
| QSPA | South Pole Qui | 72.08 | 180 | P | | P | 07 25 06.3 | +0.5 |
| PEA0B | Petropavlovsk- | 73.72 | 345 | P | | P | 07 25 15.5 | +0.4 |
| PETK | Petropavlovsk- | 73.72 | 345 | P | | P | 07 25 15.5 | +0.3 |
| | comp=Z,3.9nm,0.6s,baz=124,slow=8.6,SNR=5.1 | | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | | |
| PLK4 | Peulik 4 | 77.55 | 12 | P | | P | 07 25 35.9 | -0.4 |
| NVAR | Mina Array Bea | 79.55 | 44 | P | | P | 07 25 47.3 | -0.3 |
| | comp=Z,0.4nm,0.6s,baz=232,slow=7.3,SNR=3.6 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| O18K | Koktuh Hills | 79.84 | 12 | P | | P | 07 25 47.7 | -0.6 |
| O18K | | | | IAmb | | IAmb | 07 25 48.7 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| M17K | Holitna River | 80.89 | 10 | P | | P | 07 25 54.4 | +0.7 |
| M17K | | | | IAmb | | IAmb | 07 25 55.5 | |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| K15K | Wolf Creek Mou | 81.13 | 8 | | | P | 07 25 55.2 | +0.3 |
| K15K | | | | IAmb | | IAmb | 07 25 56.8 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| J18K | Innoko River | 82.95 | 10 | | | P | 07 26 04.0 | -0.1 |
| TX31 | Lajitas Ar. Si | 86.12 | 58 | P | | P | 07 26 20.2 | -0.3 |
| TXAR | Lajitas Array | 86.12 | 58 | P | | P | 07 26 21.0 | +0.5 |
| TXAR | Lajitas Array | 86.12 | 58 | P | | P | 07 26 20.5 | 0.0 |
| | comp=Z,1.1nm,0.7s,baz=217,slow=5.8,SNR=18 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| PDAR | Pinedale Array | 87.47 | 43 | P | | P | 07 26 26.2 | -0.5 |
| | comp=Z,2.3nm,0.7s,baz=204,slow=2.0,SNR=3.9 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| CMAR | Chiang Mai Arr | 88.81 | 290 | P | | P | 07 26 35.4 | +2.2 |
| | comp=Z,0.7nm,0.3s,baz=114,slow=2.3,SNR=5.3 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| BVAR | Borovoye Array | 116.83 | 321 | PKP | | PKPdf | | 07 32 18.2 | -0.6 |
| | comp=Z,0.6nm,0.5s,baz=64,slow=3.4,SNR=4.0 | | | | | | | | |
| EKA | Eskdalemuir Ar | 142.54 | 4 | PKiKP | | PKPpre | | 07 33 04.0 | |
| | comp=Z,0.5nm,0.5s,baz=319,slow=2.8,SNR=3.9 | | | | | | | | |
| BRTR | Keskin Array B | 144.76 | 315 | PKP | | PKPab | | 07 33 12.9 | -0.1 |
| | comp=Z,1.2nm,0.5s,baz=88,slow=3.0,SNR=9.6 | | | | | | | | |
| MMAI | Mount Meron Ar | 146.09 | 303 | PKPbc | | PKPbc | | 07 33 15.7 | -0.4 |
| | comp=Z,1.6nm,0.5s,baz=72,slow=4.7,SNR=5.6 | | | | | | | | |
| KHC | Kasperske Hory | 147.42 | 345 | *e*PKP | | PKiKP | | 07 33 20.0 | -0.7 |

**DJA 21 07:21:11.6±0.3, 8°S±3°×11°7E±°, h10km, M3.9/8, mb4.0/1, mB5.0/1, MLv3.8/8, Mw(mB)4.4/1, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| TWSI | Taliwang, Sumb | 0.37 | 198 | P | | Pg | 07 21 19.7 | +0.7 |
| TWSI | | | | S | | Sb | 07 21 25.6 | -0.7 |
| PLAI | Plampang | 0.89 | 120 | P | | Pg | 07 21 28.6 | -0.1 |
| PLAI | | | | S | | Sb | 07 21 41.2 | +0.2 |
| SRBI | Singaraja | 1.79 | 279 | P | | Pn | 07 21 42.0 | -0.6 |
| DNP | Denpasar | 1.79 | 260 | P | | Pn | 07 21 42.7 | +0.1 |
| WBSI | Waikabubak, Su | 2.67 | 118 | P | | Pn | 07 21 55.4 | +0.6 |
| JAGI | Jajag, Banyuwa | 2.82 | 268 | P | | Pn | 07 21 55.2 | -1.6 |
| BSSI | Bau Bau, Buton | 4.12 | 58 | P | | Pn | 07 22 13.7 | -0.9 |
| EDFI | Ende, Flores | 4.65 | 95 | P | | Pn | 07 22 22.6 | +0.5 |
| PWJI | Pagerwojo | 5.16 | 274 | P | | Pn | 07 22 31.2 | +2.3 |

*IDC **21** 07:25:49.6±0.8, 29°.43N×132°.32E, h0km, mb3.9/11, mbtmp3.8/14, ML3.0/3, Error ellipse: s-maj=29.8km s-min=17.7km az=72.0*
*JMA **21** 07:25:54.0±0.2, 29°.5N±0°.8×13°.2E±°, h91km, MV3.7/27, N PHILIPPINE BASIN*

**ISC 21 07:25:56.2±0.8, 29°.41N±0°.05×132°.15E±0°.07, h56km, n26, σ2°31/38, mb3.8/11, Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| JMTN | Minamitane | 1.47 | 312 | P | | Pn | 07 26 18.9 | -1.5 |
| JMTN | | | | *e*S | | Sn | 07 26 37.4 | -1.1 |
| JTN | Tanegashima 3 | 1.60 | 321 | P | | Pn | 07 26 20.5 | -1.8 |
| JTN | | | | *e*S | | Sn | 07 26 40.4 | -1.5 |
| JYAK | Yakushimahirau | 1.65 | 300 | P | | Pn | 07 26 21.3 | -1.5 |
| JYAK | | | | *e*S | | Sn | 07 26 41.5 | -1.4 |
| JKC | Kuchinoerabu | 2.00 | 302 | *e*P | | Pn | 07 26 26.8 | -0.7 |
| JTSR | Tashiro 2 | 2.05 | 329 | P | | Pn | 07 26 26.4 | -1.9 |
| JTSR | | | | S | | Sn | 07 26 50.6 | -2.1 |
| JNAR | Kushima--Naru | 2.24 | 340 | P | | Pn | 07 26 29.2 | -1.7 |
| JNAR | | | | S | | Sn | 07 26 55.9 | -1.5 |
| JTZ | Takazaki | 2.65 | 340 | P | | Pn | 07 26 34.9 | -1.5 |
| JTZ | | | | *e*S | | Sn | 07 27 05.9 | -1.4 |
| JAMN | Amaminishikomi | 2.86 | 247 | P | | Pn | 07 26 37.2 | -2.1 |
| JAMN | | | | S | | Sn | 07 27 09.6 | -3.0 |
| JSJ | Shimokoshiki | 3.09 | 318 | P | |

KASI S Sn 07 28 56.6 -0.9
**H01W3 Cape Leeuwin H 28.13 166** T T 08 03 22.5
baz=344,slow=76,SNR=6.0
**H01W1 Cape Leeuwin H 28.15 166** T T 08 03 22.5
baz=344,slow=76,SNR=6.6
**H01W2 Cape Leeuwin H 28.15 166** T T 08 03 25.1
baz=344,slow=76,SNR=8.8
**WRA Warramunga Arr 30.12 117** P P 07 33 56.9 +2.4
0.6nm,0.9s,baz=289,slow=11,SNR=5.0
0.6nm,0.9s
**ASAR Alice Springs 31.20 124** P P 07 34 07.0 +3.0
0.3nm,0.6s,baz=299,slow=8.3,SNR=6.0
0.3nm,0.6s
**H08S2 Diego Garcia H 33.12 268** T T 08 09 42.2
baz=92,slow=75,SNR=9.5
**H08S3 Diego Garcia H 33.13 268** T T 08 09 50.7
baz=92,slow=75,SNR=17
**H08S1 Diego Carcia H 33.14 268** T T 08 09 44.8
baz=92,slow=75,SNR=6.1
**STKA Stephens Creek 41.02 131** P P 07 35 29.0 +1.4
0.9nm,0.4s,baz=281,slow=10,SNR=3.5
0.9nm,0.4s
**SONM Songino Array 55.25 0** P P 07 37 16.6 -0.8
0.6nm,0.4s,baz=192,slow=9.0,SNR=3.6
0.6nm,0.4s
**USRK Ussuriysk Ar. 56.74 22** P P 07 37 26.9 -1.0
1.4nm,0.7s,baz=224,slow=4.4,SNR=2.6
1.4nm,0.7s
**MKAR Makanchi Array 58.15 341** P P 07 37 35.7 -2.1
1.1nm,0.6s,baz=144,slow=5.2,SNR=0.9
1.1nm,0.6s
**KURBB Kurchatov Arra 62.70 341** P P 07 38 08.1 -0.7
1.0nm,0.5s,baz=153,slow=6.1,SNR=3.4
1.0nm,0.5s
**ZALV Zalesovo Beam 63.91 346** P P 07 38 14.8 -1.9
1.1nm,0.3s,baz=161,slow=4.3,SNR=4.1
1.1nm,0.3s
**BVAR Borovoye Array 67.56 338** P P 07 38 38.1 -2.1
1.7nm,0.5s,baz=142,slow=8.5,SNR=6.8
1.7nm,0.5s
**BRTR Keskin Array B 81.46 312** P P 07 40 00.9 -0.6
0.7nm,0.7s,baz=145,slow=5.6,SNR=5.6
0.7nm,0.7s
**TXAR Lajitas Array 144.81 48** PKP **PKPdf** 07 47 21.7 +0.2
0.2nm,0.4s,baz=326,slow=1.7,SNR=8.7

*IDC **21** 07:29:28.8±4.8, 18°.15S×178°.05W, h572km±53km, mb3.2/8, mbtmp4.1/8, Error ellipse: s-maj=27.2km s-min=21.8km az=49.0*
*NEIC **21** 07:29:29.5±0.8, 18°.1S±0°.2×178°.0W±0°.2, h585km±12km, mb4.4/18, Error ellipse: s-maj=23.5km s-min=20.5km az=149.0*
**ISC 21 07:29:29.9±0.6, 18°.2S±0°.1×178°.0W±0°.1, h590km, n32, σ1s10/34, mb4.2/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.79** | **276** | P | **P** | **07 30 54.2** | **+1.0** |
| **NIUE** | **Niue** | **7.71** | **98** | P | **P** | **07 31 23.5** | **-2.6** |
| **URZ** | **Urewera** | **20.47** | **191** | P | **P** | **07 33 26.8** | **-1.3** |
| | 2.4nm,0.4s,baz=47,slow=13,SNR=0.9 2.4nm,0.4s | | | | | | |
| **THZ** | **Tophouse** | **24.77** | **196** | P | **P** | **07 34 06.0** | **-0.4** |
| **EIDS** | **Eidsvold** | **29.55** | **251** | P | **P** | **07 34 47.8** | **-0.5** |
| EIDS | | | | IAmb | IAmb | 07 35 29.6 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **30.15** | **240** | P | **P** | **07 34 54.1** | **+0.6** |
| ARMA | | | | IAmb | IAmb | 07 35 24.7 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **CTA** | **Charters Tower** | **33.79** | **261** | P | **P** | **07 35 24.1** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=99,slow=10.0,SNR=5.1 | | | | | | |
| **COEN** | **Coen** | **37.50** | **271** | P | **P** | **07 35 53.3** | **-1.7** |
| **STKA** | **Stephens Creek** | **38.85** | **242** | P | **P** | **07 36 06.4** | **+0.6** |
| | comp=Z,1.3nm,0.4s,baz=72,slow=9.6,SNR=3.6 comp=Z,1.3nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.62** | **241** | P | **P** | **07 36 43.0** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 07 37 23.9 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **07 36 51.8** | **-0.7** |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **07 36 52.8** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 07 37 30.7 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **07 36 53.2** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 07 37 32.1 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.96** | **260** | P | **P** | **07 36 53.5** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 07 36 55.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **07 36 53.5** | **-0.5** |
| **WR4** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **07 36 53.2** | **-0.8** |
| | comp=Z,1.9nm,0.5s,baz=95,slow=7.2,SNR=65 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 38 22.4** | **+0.1** |
| | comp=Z,0.5nm,0.7s,baz=90,slow=3.6,SNR=2.2 comp=Z,1.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.09** | **254** | P | **P** | **07 36 54.5** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **07 36 54.2** | **-0.7** |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **07 36 54.9** | **-0.1** |
| | comp=Z,7.5nm,0.7s,baz=87,slow=8.9,SNR=95 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 38 22.9** | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=102,slow=4.0,SNR=5.8 comp=Z,7.5nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **50.25** | **245** | P | **P** | **07 37 32.1** | **-1.1** |
| FORT | | | | IAmb | IAmb | 07 37 51.4 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.37** | **261** | P | **P** | **07 37 53.8** | **-1.9** |
| **SBA** | **Scott Base** | **60.18** | **184** | P | **P** | **07 38 43.4** | **+2.2** |
| **QSPA** | **South Pole Qui** | **71.89** | **180** | P | **P** | **07 39 55.1** | **+1.0** |
| QSPA | | | | IAmb | IAmb | 07 40 09.9 | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.89** | **180** | P | **P** | **07 39 54.9** | **+0.9** |
| | comp=Z,1.1nm,0.5s,baz=205,slow=1.2,SNR=16 comp=Z,1.1nm,0.5s | | | | | | |
| **S12K** | **Black Hills** | **74.81** | **9** | P | **P** | **07 40 09.1** | **-1.4** |
| S12K | | | | IAmb | IAmb | 07 40 29.3 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **PLK4** | **Peulik 4** | **77.64** | **12** | P | **P** | **07 40 25.9** | **-0.1** |
| **OHAK** | **Old Harbor** | **77.89** | **13** | P | **P** | **07 40 27.1** | **-0.2** |
| OHAK | | | | IAmb | IAmb | 07 40 41.7 | |
| | comp=Z,25nm,1.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.34** | **44** | P | **P** | **07 40 37.7** | **+2.0** |
| | comp=Z,0.2nm,0.6s,baz=208,slow=4.9,SNR=2.0 comp=Z,0.2nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.05** | **13** | P | **P** | **07 41 08.0** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=223,slow=4.8,SNR=12 comp=Z,0.4nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **94.00** | **319** | P | **P** | **07 41 46.5** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=108,slow=4.7,SNR=1.6 comp=Z,0.3nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.24** | **315** | PKPbc | **PKPbc** | **07 48 02.6** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=116,slow=2.7,SNR=6.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.61** | **303** | PKPbc | **PKPdf** | **07 48 05.6** | **+1.6** |
| | comp=Z,0.4nm,0.3s,baz=90,slow=4.5,SNR=3.8 | | | | | | |

*IDC **21** 07:38:20.3±1.6, 16°.71S×177°.69W, h0km, mb4.3/4, mbtmp4.3/4, Error ellipse: s-maj=151.0km s-min=27.8km az=155.0*
*NOU **21** 07:38:52.9, 14°.44S×174°.81W, h459km, mb4.6/12, Samoa Islands Region*
*NEIC **21** 07:39:18.7±1.0, 17°.7S±0°.2×177°.8W±0°.1, h616km±5km, mb4.1/7, Error ellipse: s-maj=36.6km s-min=17.3km az=161.0*
**ISC 21 07:39:17.8±0.8, 17°.9S±0°.2×177°.9W±0°.1, h590km, n24, σ1s47/24, mb4.1/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.87** | **271** | P | **P** | **07 40 44.5** | **+2.8** |
| **MSVF** | **Nonsavu** | **3.87** | **271** | | **P** | **07 40 44.9** | **+3.2** |
| **AFI** | **Afiamalu** | **7.07** | **57** | P | **P** | **07 41 08.5** | **+0.2** |
| **CTAO** | **Charters Tower** | **33.94** | **260** | P | **P** | **07 45 12.7** | **-0.9** |
| **CAN** | **Canberra** | **34.12** | **233** | P | **P** | **07 45 15.1** | **0.0** |
| **TOO** | **Toolangi** | **37.58** | **231** | P | **P** | **07 45 44.2** | **+0.7** |
| TOO | | | | IAmb | IAmb | 07 45 44.4 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.59** | **270** | P | **P** | **07 45 43.8** | **0.0** |
| **STKA** | **Stephens Creek** | **39.08** | **241** | P | **P** | **07 45 55.6** | **0.0** |
| **STKA** | **Stephens Creek** | **39.08** | **241** | P | **P** | **07 45 55.7** | **+0.1** |
| | comp=Z,2.8nm,0.5s,baz=85,slow=11,SNR=8.8 comp=Z,2.8nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.86** | **241** | P | **P** | **07 46 32.2** | **-1.0** |
| **WR0** | **Warramunga Arr** | **44.93** | **259** | P | **P** | **07 46 40.9** | **-0.7** |
| **WB0** | **Warramunga Arr** | **45.09** | **260** | P | **P** | **07 46 41.4** | **-1.4** |
| **WB2** | **Warramunga Arr** | **45.11** | **259** | P | **P** | **07 46 41.9** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 07 46 42.4 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.12** | **259** | P | **P** | **07 46 42.2** | **-0.9** |
| **WRA** | **Warramunga Arr** | **45.12** | **259** | P | **P** | **07 46 42.0** | **-1.1** |
| | comp=Z,1.6nm,0.5s,baz=95,slow=7.2,SNR=65 comp=Z,1.6nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.27** | **254** | P | **P** | **07 46 43.9** | **-0.3** |
| AS31 | | | | IAmb | IAmb | 07 46 44.7 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.28** | **254** | P | **P** | **07 46 43.3** | **-1.0** |
| **ASAR** | **Alice Springs** | **45.28** | **254** | P | **P** | **07 46 43.7** | **-0.5** |
| | comp=Z,6.0nm,0.6s,baz=86,slow=8.8,SNR=85 comp=Z,6.0nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.29** | **268** | P | **P** | **07 47 12.4** | **-1.9** |
| **FORT** | **Forrest** | **50.47** | **245** | P | **P** | **07 47 21.3** | **-1.4** |
| FORT | | | | IAmb | IAmb | 07 47 21.5 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.52** | **260** | P | **P** | **07 47 44.4** | **-0.3** |
| **QSPA** | **South Pole Qui** | **72.20** | **180** | P | **P** | **07 49 44.2** | **+0.4** |
| **SFX** | **San Felipe** | **77.63** | **52** | P | **P** | **07 50 11.6** | **-2.8** |
| SFX | | | | IAmb | IAmb | 07 50 12.1 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.55** | **57** | P | **P** | **07 50 57.0** | **+2.1** |
| | comp=Z,0.6nm,0.7s,baz=223,slow=3.7,SNR=9.8 comp=Z,0.6nm,0.7s | | | | | | |

*NEIC **21** 07:39:38.5±2.0, 18°.2S±0°.2×178°.2W±0°.1, h565km±10km, mb4.3/35, Error ellipse: s-maj=23.5km s-min=16.4km az=148.0*
*IDC **21** 07:39:41.2±2.0, 18°.26S×178°.33W, h594km±23km, mb3.6/16, mbtmp4.5/17, Error ellipse: s-maj=16.6km s-min=10.2km az=148.0*
**ISC 21 07:39:37.7±0.4, 18°.18S±0°.09×178°.26W±0°.08, h550km, n162, σ2s17/157, mb4.2/41, 10C-4D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.54** | **277** | P | **P** | **07 41 01.2** | **+4.8** |
| **AFI** | **Afiamalu** | **7.54** | **57** | P | **P** | **07 41 29.8** | **-1.3** |
| **NIUE** | **Niue** | **7.95** | **98** | P | **P** | **07 41 36.1** | **+1.2** |
| **LIFNC** | **LIFOU** | **13.92** | **257** | P | **P** | **07 42 35.7** | **-0.4** |
| **PINNC** | **Pines Island,** | **14.11** | **249** | P | **P** | **07 42 38.1** | **0.0** |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | **P** | **07 42 48.4** | **+2.3** |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | **P** | **07 42 47.8** | **+1.7** |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | **P** | **07 42 46.6** | **+0.5** |
| | 13nm,0.6s,baz=86,slow=19,SNR=7.7 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.64** | **259** | P | **P** | **07 43 03.8** | **+0.5** |
| **OUZ** | **Omahuta** | **18.45** | **202** | P | **P** | **07 43 22.6** | **+3.0** |
| **KUZ** | **Kuaotunu** | **19.25** | **195** | P | **P** | **07 43 28.0** | **+1.2** |
| **URZ** | **Urewera** | **20.41** | **191** | P | **P** | **07 43 35.6** | **-1.8** |
| **URZ** | **Urewera** | **20.41** | **191** | P | **P** | **07 43 34.4** | **-2.9** |
| | 17nm,0.4s,baz=50,slow=0.9,SNR=21 | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.41** | **191** | P | **P** | **07 43 46.4** | **0.0** |
| **BFZ** | **Birch Farm** | **22.92** | **191** | P | **P** | **07 43 59.9** | **0.0** |
| **SNZO** | **South Karori** | **23.83** | **193** | P | **P** | **07 44 07.5** | **-0.4** |
| **TCW** | **Tory Channel** | **23.83** | **194** | P | **P** | **07 44 07.5** | **-0.5** |
| **BHW** | **Baring Head** | **23.89** | **193** | P | **P** | **07 44 06.9** | **-1.5** |
| **PLWZ** | **Palliser** | **23.97** | **192** | P | **P** | **07 44 07.4** | **-1.8** |
| **KHZ** | **Kahutara** | **25.15** | **194** | P | **P** | **07 44 18.2** | **-1.4** |
| **RPZ** | **Rata Peaks** | **27.01** | **197** | P | **P** | **07 44 34.7** | **-1.3** |
| | 5.1nm,0.7s,baz=39,slow=14,SNR=1.2 5.1nm,0.7s | | | | | | |
| **JCZ** | **Jackson Bay** | **28.03** | **200** | P | **P** | **07 44 45.2** | **+0.2** |
| **ODZ** | **Otahua Downs** | **28.35** | **197** | P | **P** | **07 44 47.9** | **+0.2** |
| **CTA** | **Charters Tower** | **33.55** | **261** | P | **P** | **07 45 32.9** | **+0.3** |
| | 0.4nm,0.7s,baz=98,slow=11,SNR=4.4 | | | | | | |
| **CAN** | **Canberra** | **33.66** | **233** | P | **P** | **07 45 33.8** | **+0.4** |
| **TOO** | **Toolangi** | **37.12** | **231** | P | **P** | **07 46 02.6** | **+0.6** |
| **COEN** | **Coen** | **37.25** | **271** | P | **P** | **07 46 03.9** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.63** | **241** | | **P** | **07 46 15.4** | **+1.0** |
| **STKA** | **Stephens Creek** | **38.63** | **241** | P | **P** | **07 46 14.8** | **+0.4** |
| | 12nm,0.8s,baz=91,slow=12,SNR=16 12nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.41** | **241** | P | **P** | **07 46 52.1** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.54** | **260** | P | **P** | **07 47 00.7** | **-0.5** |
| **WB0** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **07 47 02.4** | **0.0** |
| WB0 | | | | IAmb | IAmb | 07 47 34.2 | |
| | comp=Z,9.5nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **07 47 02.2** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **07 47 02.2** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **07 47 02.2** | **-0.4** |
| | comp=Z,3.1nm,0.7s,baz=97,slow=6.9,SNR=23 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 48 32.7** | **-0.4** |
| | comp=Z,0.8nm,0.4s,baz=86,slow=3.8,SNR=6.4 | | | | | | |
| WRA | | | | S | **S** | **07 52 54.7** | **-5.2** |
| | comp=Z,1.3nm,0.8s,baz=99,slow=12,SNR=6.1 comp=Z,3.1nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **44.86** | **254** | | **P** | **07 47 04.0** | **+0.4** |
| **ASAR** | **Alice Springs** | **44.86** | **254** | P | **P** | **07 47 02.7** | **-0.9** |
| **ASAR** | **Alice Springs** | **44.86** | **254** | P | **P** | **07 47 03.6** | **-0.1** |
| | comp=Z,14nm,0.6s,baz=88,slow=8.5,SNR=65 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 48 32.9** | **-0.7** |
| | comp=Z,2.0nm,0.7s,baz=100,slow=3.9,SNR=8.0 | | | | | | |
| ASAR | | | | S | **S** | **07 52 58.0** | **-3.7** |
| | comp=Z,3.3nm,0.9s,baz=90,slow=17,SNR=17 comp=Z,14nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.13** | **261** | P | **P** | **07 48 04.6** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **68.21** | **323** | P | **P** | **07 49 43.1** | **-0.6** |
| | comp=Z,6.2nm,0.6s,baz=134,slow=6.0,SNR=4.3 comp=Z,6.2nm,0.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **71.58** | **331** | P | **P** | **07 50 03.9** | **+0.3** |
| | comp=Z,5.5nm,0.5s,baz=260,slow=6.8,SNR=4.0 comp=Z,5.5nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **07 50 05.2** | **0.0** |
| QSPA | | | | IAmb | IAmb | 07 50 06.3 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **07 50 04.5** | **-0.7** |
| | comp=Z,4.3nm,0.9s,baz=90,slow=5.1,SNR=29 comp=Z,4.3nm,0.9s | | | | | | |
| **PET** | **Petropavlovsk** | **73.67** | **346** | P | **P** | **07 50 14.9** | **-0.4** |
| | comp=Z,77nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.98** | **345** | P | **P** | **07 50 16.6** | **-0.5** |
| | comp=Z,7.4nm,0.6s,baz=118,slow=5.1,SNR=9.3 comp=Z,7.4nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **75.00** | **318** | P | **P** | **07 50 23.5** | **+0.3** |
| | comp=Z,1.2nm,0.6s,baz=121,slow=6.7,SNR=2.6 comp=Z,1.2nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.92** | **326** | P | **P** | **07 50 33.9** | **+0.2** |
| | comp=Z,2.1nm,0.7s,baz=105,slow=7.2,SNR=4.7 comp=Z,2.1nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.52** | **44** | P | **P** | **07 50 47.8** | **-0.2** |
| | comp=Z,1.5nm,0.7s,baz=221,slow=8.0,SNR=14 comp=Z,1.5nm,0.7s | | | | | | |
| **P18K** | **Big Mountain,** | **79.55** | **12** | P | **P** | **07 50 46.1** | **-1.4** |
| P18K | | | | IAmb | IAmb | 07 50 47.2 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **O18K** | **Koktuh Hills** | **79.99** | **12** | P | **P** | **07 50 48.7** | **-1.0** |
| O18K | | | | IAmb | IAmb | 07 50 49.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **M16K** | **Timber Creek** | **80.44** | **9** | P | **P** | **07 50 52.0** | **0.0** |
| **PINE** | **Pine Mountain** | **80.91** | **38** | P | **P** | **07 50 55.0** | **-0.1** |
| PINE | | | | IAmb | IAmb | 07 50 56.7 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **L16K** | **Owhat River** | **81.02** | **9** | P | **P** | **07 50 54.6** | **-0.3** |
| L16K | | | | IAmb | IAmb | 07 50 56.6 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **I07A** | **Izee** | **81.92** | **38** | P | **P** | **07 51 00.3** | **+0.1** |
| I07A | | | | IAmb | IAmb | 07 51 01.4 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **L18K** | **Granite Mounta** | **81.93** | **10** | P | **P** | **07 50 59.6** | **0.0** |
| L18K | | | | IAmb | IAmb | 07 51 00.7 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **U15A** | **North Rim** | **82.59** | **48** | P | **P** | **07 51 04.2** | **+0.3** |
| U15A | | | | IAmb | IAmb | 07 51 05.6 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **J17K** | **VABM Dome** | **82.68** | **9** | P | **P** | **07 51 03.1** | **-0.3** |
| J17K | | | | IAmb | IAmb | 07 51 03.8 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **K20K** | **Telida** | **83.44** | **11** | P | **P** | **07 51 06.5** | **-0.7** |
| K20K | | | | IAmb | IAmb | 07 51 07.4 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **LYN** | **LuoYang** | **84.11** | **309** | *e*P | **P** | **07 51 12.3** | **+1.1** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,380nm,5.7s | | | | | | |
| **B08A** | **Colville Reser** | **84.47** | **35** | P | **P** | **07 51 11.5** | **-1.3** |
| **HLID** | **Hailey** | **84.74** | **41** | P | **P** | **07 51 14.5** | **+0.2** |
| **M27K** | **Edge Creek, AK** | **85.25** | **16** | P | **P** | **07 51 15.8** | **-0.6** |
| M27K | | | | IAmb | IAmb | 07 51 17.1 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.02** | **58** | P | **P** | **07 51 21.2** | **+0.5** |
| | comp=Z,2.2nm,0.8s,baz=218,slow=5.7,SNR=30 comp=Z,2.2nm,0.8s | | | | | | |

**IL31** **86.11 13** P P 07 51 18.4 -1.8
IL31 IAmb IAmb 07 51 19.7
comp=Z,12nm,1.4s
**ILAR Eielson Array 86.11 13** P **P** **07 51 18.9 -1.3**
comp=Z,1.8nm,0.4s,baz=221,slow=5.0,SNR=42
comp=Z,1.8nm,0.4s
**J25K Salcha River, 86.31 14** P **P** **07 51 20.4 -0.8**
J25K IAmb IAmb 07 51 20.5
comp=Z,3.6nm,0.8s
**G21K Allakaket 86.45 10** P **P** **07 51 20.4 -1.3**
G21K IAmb IAmb 07 51 21.8
comp=Z,3.8nm,0.8s
**XAN Xi'an 86.54 307** ⇑P **P** **07 51 23.8 +0.8**
XAN pP PcP 07 51 45.5 +21
XAN pmax pmax
comp=Z,16nm,0.9s
**DLMT Dillon 86.77 40** P **P** **07 51 23.9 0.0**
DLMT IAmb IAmb 07 51 24.9
comp=Z,3.8nm,0.8s
**I26K Coal Creek Min 87.40 14** P **P** **07 51 25.4 -0.8**
I26K IAmb IAmb 07 51 27.4
comp=Z,6.2nm,1.4s
**EGAK Eagle 87.44 15** P **P** **07 51 25.9 -0.5**
EGAK IAmb IAmb 07 51 49.9
comp=Z,9.5nm,1.5s
**PD31 Pinedale Array 87.45 43** P **P** **07 51 26.6 -0.7**
**PDAR Pinedale Array 87.45 43** P **P** **07 51 27.3 0.0**
**PDAR Pinedale Array 87.45 43** P **P** **07 51 26.6 -0.7**
comp=Z,1.3nm,0.7s,baz=215,slow=3.3,SNR=14
comp=Z,1.3nm,0.7s
**HHC Hu-ho-hao-te 87.56 314** *e*P **P** **07 51 28.8 +1.1**
HHC pmax pmax
comp=Z,12nm,0.5s
HHC pmax pmax
comp=Z,190nm,5.2s
HHC pmax pmax
comp=Z,18nm,0.5s
HHC pmax pmax
comp=Z,190nm,5.1s
**F24K Squaw Lake 88.33 11** P **P** **07 51 30.2 -0.3**
F24K IAmb IAmb 07 51 31.0
comp=Z,3.9nm,0.8s
**ELIB Princess Elisa 88.91 187** *d*P **P** **07 51 32.5 -1.0**
comp=Z,1.8nm,0.7s
**CMAR Chiang Mai Arr 89.11 290** P **P** **07 51 35.8 +0.5**
comp=Z,1.8nm,0.3s,baz=116,slow=3.0,SNR=11
comp=Z,1.8nm,0.3s
**PZH PanZhiHua 89.41 298** P **P** **07 51 37.0 +0.3**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.8s
**SONM Songino Array 93.85 319** P **P** **07 51 56.2 -0.4**
comp=Z,0.3nm,0.5s,baz=114,slow=3.5,SNR=1.8
comp=Z,0.3nm,0.5s
**MKAR Makanchi Array 109.43 314** PKiKP **PKiKP** **07 57 04.1 -1.7**
comp=Z,0.4nm,0.5s,baz=152,slow=1.0,SNR=5.8
**KURBB Kurchatov Arra 112.18 318** PKiKP **PKiKP** **07 57 09.0 -1.8**
comp=Z,0.7nm,0.6s,baz=88,slow=1.9,SNR=5.8
**BVAR Borovoye Array 117.14 321** PKP **PKPdf** **07 57 18.8 -1.6**
comp=Z,1.5nm,0.4s,baz=136,slow=1.3,SNR=7.7
**ARCES ARCESS Array B 126.60 350** PKP **PKPdf** **07 57 36.6 -1.5**
comp=Z,2.0nm,0.6s,baz=28,slow=4.1,SNR=6.5
**FINES FINESS Array B 133.49 344** PKP **PKPdf** **07 57 49.5 -1.8**
comp=Z,2.2nm,0.9s,baz=72,slow=4.5,SNR=1.5
**NOA NORSAR Array B 136.66 353** PKP **PKPdf** **07 57 57.3 0.0**
comp=Z,0.7nm,0.6s,baz=46,slow=2.4,SNR=2.6
**AKASG Malin Array 140.87 332** PKiKP PKPpre 07 57 56.6
comp=Z,0.9nm,0.3s,baz=46,slow=4.4,SNR=4.4
**EKA Eskdalemuir Ar 142.72 5** PKhKP PKPpre 07 58 03.3
comp=Z,0.7nm,0.5s,baz=325,slow=2.6,SNR=5.9
**LVV L'vov 143.71 335** *e*P PKPbc 07 58 08.5 -0.8
**WIM Isle of Man 143.76 6** *e*P PKPbc 07 58 08.2 -1.0
**HPK Haverah Park 144.19 3** *e*P PKPbc 07 58 09.3 -1.3
HPK IAmb IAmb 07 58 10.3
comp=Z,20nm,0.8s
**WME Myndd Eilian 144.54 6** *e*P **PKPdf** **07 58 10.5 -1.1**
**WLF1 Llynfaes 144.63 6** *e*P **PKPdf** **07 58 11.1 -0.7**
WLF1 IAmb IAmb 07 58 11.5
comp=Z,29nm,0.7s
**BRTR Keskin Array B 145.07 315** PKPbc **PKPdf** **07 58 12.9 -0.2**
comp=Z,3.6nm,0.8s,baz=138,slow=4.8,SNR=23
**BRTR Keskin Array B 145.07 315** *ce*P **PKPdf** **07 58 13.3 +0.2**
**BRTR Keskin Array B 145.07 315** pmax pmax
comp=Z,4.0nm,0.8s
**KOLS Kolonicke sedl 145.11 336** *e*P **PKPdf** **07 58 13.8 +1.1**
**KOLS Kolonicke sedl 145.11 336** *e*PKP **PKPdf** **07 58 13.8 +1.1**
**FOEL Foel Wylfa 145.14 5** *e*P **PKPdf** **07 58 12.2 -0.4**
FOEL IAmb IAmb 07 58 13.4
comp=Z,20nm,0.7s
**IWEX Carrickbyrne, 145.22 9** *e*P **PKPdf** **07 58 13.2 +0.4**
**ASF Jabal al Asfar 145.44 301** PKPbc **PKPdf** **07 58 15.1 +1.2**
comp=Z,3.3nm,0.7s,baz=226,slow=0.3,SNR=7.2
**CRVS Cervenica-Dubn 145.44 337** *e*P **PKPdf** **07 58 14.5 +1.2**
**CRVS Cervenica-Dubn 145.44 337** *e*PKP **PKPdf** **07 58 14.5 +1.2**
**WACR West Acre 145.51 1** *e*P **PKPdf** **07 58 13.2 0.0**
WACR IAmb IAmb 07 58 14.4
comp=Z,32nm,0.8s
**HLM1 Long Mynd 145.54 5** *e*P **PKPdf** **07 58 13.6 +0.2**
HLM1 IAmb IAmb 07 58 14.4
comp=Z,11nm,0.9s
**OSTC Ostas 145.69 344**⇑ *e*PKP **PKPdf** **07 58 15.5 +1.8**
**OSTC Ostas 145.69 344** *e*P **PKPdf** **07 58 15.5 +1.8**
**CLL Collm 145.76 347**‖ *i*PKPbc **PKPdf** **07 58 14.9 +1.2**
comp=Z,20nm,0.6s
**CLL Collm 145.76 347**‖ *i*P **PKPdf** **07 58 14.9 +1.2**
**CLL Collm 145.76 347** pmax pmax
comp=Z,20nm,0.6s
**UPC Upice 145.79 344**⇑ *e*PKP **PKPdf** **07 58 15.3 +1.5**
**UPC Upice 145.79 344** *e*P **PKPdf** **07 58 15.3 +1.5**
**DPC Dobruska-Polom 145.85 343**⇑ *e*PKP **PKPdf** **07 58 15.9 +1.9**
**DPC Dobruska-Polom 145.85 343** *e*P **PKPdf** **07 58 15.9 +1.9**
**RSBS Rosebush, Pemb 145.91 7** *e*P **PKPdf** **07 58 14.6 +0.6**
**LANS Liptovska Anna 145.94 339** *e*P **PKPdf** **07 58 16.5 +2.3**
**LANS Liptovska Anna 145.94 339** *e*PKP **PKPdf** **07 58 16.5 +2.3**
**BRG Berggiesshubel 145.96 346** Amp 07 58 16.5
comp=Z,7.7nm,0.8s
**BRG Berggiesshubel 145.96 346** *i*P **PKPdf** **07 58 15.9 +1.8**
**KRLC Kraliky 145.97 343**⇑ *e*PKP **PKPdf** **07 58 15.9 +1.7**
**KRLC Kraliky 145.97 343** *e*P **PKPdf** **07 58 15.9 +1.7**
**MORC Moravsky Berou 146.01 342** *e*PKP **PKPdf** **07 58 15.9 +1.6**
**MCH1 Michaelchurch 146.05 5** *e*P **PKPdf** **07 58 14.8 +0.7**
MCH1 IAmb IAmb 07 58 16.0
comp=Z,6.6nm,0.9s
**PVCC Panska Ves 146.13 345**⇑ *e*PKP **PKPdf** **07 58 16.8 +2.4**
**PVCC Panska Ves 146.13 345** *e*P **PKPdf** **07 58 16.8 

comp=Z,6.9nm,1.1s
**WATA Walderalm 149.82 347** *i* PKP **PKPdf 07 58 25.2 +4.5**
comp=Z,6.1nm,0.6s
**OBKA Obir 149.83 342** *e*PKP **PKPdf 07 58 25.4 +4.8**
comp=Z,1.7nm,0.4s
**RETA Reutte 149.85 348** *e*PKP **PKPdf 07 58 25.4 +4.8**
comp=Z,3.0nm,0.7s
**WTTA Wattenberg 149.87 347** *i* PKP **PKPdf 07 58 25.6 +4.8**
comp=Z,11nm,0.5s
**MOTA Moosalm 149.91 347** *i* PKP **PKPdf 07 58 25.5 +4.6**
comp=Z,8.2nm,0.9s
**MYKA Terra Mystica 149.97 344** *i* PKP **PKPdf 07 58 25.1 +4.2**
comp=Z,5.7nm,0.6s
**SQTA Sankt Quirin 150.01 347** *i* PKiKP **PKPdf 07 58 26.1 +5.1**
comp=Z,10nm,0.6s
**ABTA Abfaltersbach 150.16 345** *i* PKP **PKPdf 07 58 25.7 +4.6**
comp=Z,11nm,0.6s
**DAVA Damuels 150.21 349** *e*PKiKP **PKPdf 07 58 26.7 +5.4**
comp=Z,7.3nm,0.7s
**FETA Feichten 150.30 348** *i* PKP **PKPdf 07 58 26.6 +5.2**
comp=Z,10.0nm,1.0s
**ESDC Sonseca Array 158.01 12** PKPab **PKPab 07 59 07.0 -2.0**
comp=Z,0.3nm,0.3s,baz=129,slow=1.8,SNR=6.1
**TORD Torodi Ar. Bea 175.00 179** PKP **PKPdf 07 58 43.0 -2.5**
comp=Z,0.7nm,0.9s,baz=94,slow=0.4,SNR=3.5

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*MOS* ***21*** *07:45:59.1±0.9,32˚.69N×140˚.54E, h67km, mb4.7/18, Error ellipse: s-maj=15.6km s-min=6.5km az=120.9*
*NIED* ***21*** *07:46:01.0,32˚.90N×140˚.71E, h58km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr=0.09; Mθθ 0.29; Mφφ -0.21; Mrθ 0.35; Mθφ 0.41; Mrφ -2.19; Fault plane solution: M₀2.24000×10¹⁵ NP1: φs173.00000°,δ89.00000°,λ99.00000°. NP2: φs272.00000°,δ9.00000°,λ9.00000°.*
*JMA* ***21*** *07:46:01.0±0.2,32˚.9N±0˚.3×14˚1E±˚, h58km±4km, MD4.0/38, MV4.5/38, E OFF HACHIJOJIMA ISLAND*
*JMA Felt I J1 at E OFF HACHIJOJIMA ISLAND.*
*IDC* ***21*** *07:46:00.8±1.1,32˚.76N×140˚.47E, h62km±8km, mb3.8/17, mbtmp4.1/20, MS3.2/2, Error ellipse: s-maj=19.8km s-min=11.9km az=77.0*
*NEIC* ***21*** *07:46:00.9±2.9,32˚.8N±0˚.1×140˚.8E±0˚.1, h59km±7km, mb4.6/21, Error ellipse: s-maj=15.5km s-min=12.1km az=151.0*

**ISC 21 07:46:00.4±1.1, 32˚.86N±0˚.05×140˚.74E±0˚.07, h57km±8km, n133, σ1s 44/142, mb4.4/40, 15C-10D, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **0.82** | **289** | P | | **Pn** | **07 46 16.4** | **+0.5** |
| **JHJ2** | **Mitsune** | **0.82** | **289** | Pn | | **Pn** | **07 46 16.5** | **+0.5** |
| **JHJ2** | **Mitsune** | **0.82** | **289** | P | | **Pn** | **07 46 16.4** | **+0.5** |
| JHJ2 | | | | *e*S | | **Sn** | **07 46 27.6** | **+0.3** |
| **JHJ2** | **Mitsune** | **0.82** | **289** | A | | A | 07 46 16.4 | |
| | comp=E,18nm,0.2s,comp=N,13nm,0.9s | | | | | | | |
| **JHCJ** | **Hachijojimakas** | **0.82** | **286** | P | | **Pn** | **07 46 16.3** | **+0.3** |
| JHCJ | | | | *e*S | | **Sn** | **07 46 27.0** | **-0.4** |
| **JHCJ** | **Hachijojimakas** | **0.82** | **286** | A | | A | 07 46 16.3 | |
| | comp=E,11nm,0.9s,comp=N,10.0nm,0.4s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **0.84** | **288** | P | | **Pn** | **07 46 16.5** | **+0.2** |
| | comp=N,5μm,0.4s,baz=83,slow=19,SNR=1980 | | | | | | | |
| JHJ | | | | S | | **Sn** | **07 46 26.0** | **-2.0** |
| | baz=73,slow=19 | | | | | | | |
| **JAOM** | **Aogashimamukai** | **0.91** | **245** | P | | **Pn** | **07 46 17.8** | **+0.6** |
| JAOM | | | | *e*S | | **Sn** | **07 46 30.1** | **+0.6** |
| **JMKN** | **Mikurajimanish** | **1.41** | **317** | P | | **Pn** | **07 46 24.2** | **+0.4** |
| JMKN | | | | S | | **Sn** | **07 46 40.9** | **-0.5** |
| **JMYK** | **Miyake Tsubota** | **1.56** | **321** | P | | **Pn** | **07 46 26.5** | **+0.7** |
| JMYK | | | | S | | **Sn** | **07 46 45.1** | **+0.1** |
| **BSO1** | **Boso 1** | **1.81** | **6** | P | | **Pn** | **07 46 29.1** | **+0.4** |
| **JKO** | **Kozu shima** | **1.89** | **315** | P | | **Pn** | **07 46 31.1** | **+0.8** |
| JKO | | | | *e*S | | **Sn** | **07 46 53.3** | **+0.4** |
| **BSO3** | **Boso 3** | **1.95** | **354** | P | | **Pn** | **07 46 31.5** | **+0.6** |
| BSO3 | | | | *e*S | | **Sn** | **07 46 54.4** | **+0.2** |
| **JIM2** | **Oshima 3** | **2.15** | **330** | ⇓P | | **Pn** | **07 46 34.5** | **+0.5** |
| JIM2 | | | | ⇓S | | **Sn** | **07 46 58.2** | **-1.3** |
| **JIZS** | **Izushimoda** | **2.42** | **321** | ⇓*e*P | | **Pn** | **07 46 38.8** | **+1.2** |
| JIZS | | | | ⇓*e*S | | **Sn** | **07 47 06.8** | **+0.8** |
| **JOD2** | **Odawara 2** | **2.77** | **331** | ⇓P | | **Pn** | **07 46 43.1** | **+0.8** |
| JOD2 | | | | ⇓S | | **Sn** | **07 47 13.1** | **-1.4** |
| **JSG** | **Sagara** | **2.79** | **311** | P | | **Pn** | **07 46 45.1** | **+2.4** |
| **JSG** | **Sagara** | **2.79** | **311** | Pn | | **Pn** | **07 46 44.2** | **+1.5** |
| **JFNN** | **Fujinakano** | **2.89** | **324** | ⇓P | | **Pn** | **07 46 46.0** | **+2.0** |
| **SHZ3** | **Shizuoka 3** | **3.05** | **317** | P | | **Pn** | **07 46 48.3** | **+2.1** |
| **JYN** | **Shimob** | **3.20** | **326** | ⇓P | | **Pn** | **07 46 50.4** | **+2.0** |
| **TTO2** | **TONANKAI O.B.S** | **3.23** | **287** | P | | **Pn** | **07 46 50.4** | **+2.0** |
| **TTO1** | **TONANKAI O.B.S** | **3.40** | **284** | P | | **Pn** | **07 46 52.3** | **+1.6** |
| **JGF** | **Kuroka** | **3.92** | **315** | P | | **Pn** | **07 47 00.9** | **+2.8** |
| **JGF** | **Kuroka** | **3.92** | **315** | | | **Pn** | **07 47 00.7** | **+2.6** |
| **INU** | **Inuyama** | **3.96** | **310** | P | | **Pn** | **07 47 01.2** | **+2.5** |
| **INU** | **Inuyama** | **3.96** | **310** | | | **Pn** | **07 47 00.6** | **+1.9** |
| **MJAR** | **Matsushiro Arr** | **4.23** | **331** | P | | **Pn** | **07 47 03.7** | **+1.4** |
| | comp=N,92nm,0.6s,baz=157,slow=14,SNR=111 | | | | | | | |
| MJAR | | | | S | | **Sn** | **07 47 52.0** | **+1.6** |
| | comp=N,29nm,0.7s,baz=136,slow=15,SNR=4.8 | | | | | | | |
| MJAR | | | | LR | | LR | 07 48 55.3 | |
| | comp=N,166nm,18.7s,baz=178,slow=41 | | | | | | | |
| **MAJO** | **Matsushiro** | **4.23** | **331** | P | | **Pn** | **07 47 04.2** | **+1.9** |
| **MAJO** | **Matsushiro** | **4.23** | **331** | Pn | | **Pn** | **07 47 04.0** | **+1.6** |
| **MAJO** | **Matsushiro** | **4.23** | **331** | *ce*P | | **Pn** | **07 47 03.9** | **+1.6** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,85nm,0.8s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **4.23** | **331** | Pn | | **Pn** | **07 47 05.8** | **+3.4** |
| **JMM** | **Marumori** | **5.00** | **0** | P | | **Pn** | **07 47 12.4** | **-0.4** |
| **JMM** | **Marumori** | **5.00** | **0** | | | **Pn** | **07 47 12.5** | **-0.4** |
| **JSD** | **Sado** | **5.55** | **339** | P | | **Pn** | **07 47 21.3** | **+0.9** |
| **JSD** | **Sado** | **5.55** | **339** | | | **Pn** | **07 47 20.7** | **+0.3** |
| **JMN** | **Monobe** | **5.81** | **280** | P | | **Pn** | **07 47 26.1** | **+2.1** |
| **JMN** | **Monobe** | **5.81** | **280** | Pn | | **Pn** | **07 47 26.1** | **+2.1** |
| **JCJ** | **Chichijima** | **5.88** | **167** | P | | **Pn** | **07 47 29.5** | **+4.6** |
| | comp=Z,108nm,0.8s,baz=15,slow=14,SNR=2.1 | | | | | | | |
| **JTM** | **Tenmabayashi** | **7.92** | **2** | P | | **Pn** | **07 47 52.2** | **-0.7** |
| **JTM** | **Tenmabayashi** | **7.92** | **2** | Pn | | **Pn** | **07 47 52.0** | **-0.9** |
| **JNU** | **Nakatsue** | **8.29** | **275** | P | | **Pn** | **07 48 00.8** | **+2.8** |
| **JNU** | **Nakatsue** | **8.29** | **275** | P | | **Pn** | **07 48 00.6** | **+2.6** |
| | comp=Z,5.0nm,0.4s,baz=31,slow=6.8,SNR=7.8 | | | | | | | |
| **ERM** | **Erimo** | **9.34** | **11** | P | | **Pn** | **07 48 10.9** | **-1.4** |
| | comp=Z,33nm,0.9s | | | | | | | |
| **ERM** | **Erimo** | **9.34** | **11** | Pn | | **Pn** | **07 48 11.5** | **-0.8** |
| **ERM** | **Erimo** | **9.34** | **11** | *ce*P | | **Pn** | **07 48 11.5** | **-0.8** |
| ERM | | | | pmax | | pmax | | |
| | comp=Z,46nm,2.5s | | | | | | | |
| **JEM** | **Erimo** | **9.34** | **11** | P | | **Pn** | **07 48 11.0** | **-1.3** |
| **ASAJ** | **Asahikawa** | **11.34** | **7** | P | | **Pn** | **07 48 36.5** | **-3.1** |
| | comp=Z,9.8nm,0.4s,baz=222,slow=11,SNR=15 | | | | | | | |
| **ASAJ** | **Asahikawa** | **11.34** | **7** | P | | **Pn** | **07 48 37.4** | **-2.2** |
| **JKA** | **Kamikawa-asahi** | **11.34** | **7** | | | **Pn** | **07 48 37.4** | **-2.2** |
| **KSRS** | **Korea Array** | **11.45** | **297** | P | | **Pn** | **07 48 41.0** | **-0.1** |
| | comp=Z,1.4nm,0.8s,baz=113,slow=14,SNR=1.5 | | | | | | | |
| **TJN** | **Taejon** | **11.56** | **291** | ⇑*e*P | | **Pn** | **07 48 41.6** | **-1.1** |
| **USRK** | **Ussuriysk Ar.** | **13.23** | **331** | P | | **Pn** | **07 49 07.3** | **+2.0** |
| | comp=Z,1.2nm,0.6s,baz=132,slow=11,SNR=1.8 | | | | | | | |
| **KLR** | **Kul'dur** | **17.69** | **340** | P | | **Pn** | **07 49 57.8** | **-4.8** |
| | comp=Z,2.4nm,0.5s,baz=172,slow=11,SNR=8.6 | | | | | | | |
| **KLR** | **Kul'dur** | **17.69** | **340** | ⇑*e*P | | **Pn** | **07 50 01.8** | **-0.8** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **NJ2** | **Nanjing** | **18.49** | **273** | *e*P | | **P** | **07 50 12.0** | **+0.2** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | | |
| **HIA** | **Hailar** | **22.67** | **322** | ⇑*e*P | | **P** | **07 50 56.7** | **-0.2** |
| HIA | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **ZEA** | **Zeya** | **22.99** | **339** | *e*P | | **P** | **07 51 00.2** | **+0.1** |
| ZEA | | | | pmax | | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | | |
| ZEA | | | | pmax | | pmax | | |
| | comp=N,20nm,0.7s | | | | | | | |
| ZEA | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **24.59** | **297** | *e*P | | **P** | **07 51 14.3** | **-0.9** |
| **H11N2** | **WAKE ISLAND Hy** | **26.76** | **113** | T | | T | 08 20 36.7 | |
| | baz=306,slow=75,SNR=173 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.77** | **113** | T | | T | 08 20 32.6 | |
| | baz=306,slow=75,SNR=144 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.78** | **113** | T | | T | 08 20 41.7 | |
| | baz=306,slow=75,SNR=140 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.32** | **115** | T | | T | 08 21 10.9 | |
| | baz=307,slow=75,SNR=12 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.32** | **115** | T | | T | 08 21 12.6 | |
| | baz=307,slow=75,SNR=13 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.33** | **115** | T | | T | 08 21 12.0 | |
| | baz=307,slow=75,SNR=12 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.45** | **311** | ⇑*e*P | | **P** | **07 51 59.4** | **+0.6** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,3.1s | | | | | | | |
| **SONM** | **Songino Array** | **29.86** | **310** | P | | **P** | **07 52 01.8** | **-0.6** |
| | comp=Z,0.9nm,0.6s,baz=120,slow=10,SNR=4.4 | | | | | | | |
| SONM | | | | LR | | LR | 08 04 02.3 | |
| | comp=Z,75nm,19.5s,baz=89,slow=36 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **SEY** | **Seymchan** | **30.99** | **10** | ⇑*e*P | | **P** | **07 52 14.7** | **+2.7** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **34.33** | **270** | P | | **P** | **07 52 43.0** | **+1.2** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,140nm,6.1s | | | | | | | |
| **BILL** | **Bilibino** | **38.19** | **15** | ⇑*e*P | | **P** | **07 53 16.0** | **+1.9** |
| BILL | | | | *i* | | | 07 54 48.2 | |
| BILL | | | | *i* S | | **S** | **07 59 02.2** | **-1.0** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.6s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,40nm,19.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.04** | **260** | P | | **P** | **07 53 28.0** | **-2.2** |
| | comp=Z,1.2nm,0.3s,baz=42,slow=9.6,SNR=1.0 | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **42.51** | **310** | *ce*P | | **P** | **07 53 50.2** | **0.0** |
| DGZ | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.41** | **316** | P | | **P** | **07 54 03.5** | **-1.7** |
| | comp=Z,0.8nm,0.4s,baz=110,slow=7.8,SNR=5.2 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.41** | **316** | *i* P | | **P** | **07 54 04.3** | **-1.0** |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **45.98** | **305** | P | | **P** | **07 54 17.3** | **-0.6** |
| **MK31** | **Makanchi Array** | **45.98** | **305** | *c* P | | **P** | **07 54 17.2** | **-0.6** |
| **MKAR** | **Makanchi Array** | **45.98** | **305** | P | | **P** | **07 54 17.3** | **-0.6** |
| **MKAR** | **Makanchi Array** | **45.98** | **305** | P | | **P** | **07 54 16.8** | **-1.0** |
| | comp=Z,3.2nm,0.5s,baz=90,slow=9.5,SNR=25 | | | | | | | |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.98** | **305** | *ce*P | | **P** | **07 54 17.2** | **-0.6** |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **46.19** | **306** | P | | **P** | **07 54 18.8** | **-0.7** |
| **MAKZ** | **Makanchi** | **46.19** | **306** | P | | **P** | **07 54 18.8** | **-0.7** |
| MAKZ | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **48.16** | **311** | P | | **P** | **07 54 33.7** | **-1.0** |
| KURK | | | | IAmb | | IAmb | 07 54 34.3 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **48.16** | **311** | *ce*P | | **P** | **07 54 33.5** | **-1.2** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.22** | **311** | P | | **P** | **07 54 33.8** | **-1.5** |
| | comp=Z,1.9nm,0.5s,baz=86,slow=7.6,SNR=24 | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **H18K** | **Honhosa River** | **48.52** | **30** | P | | **P** | **07 54 38.4** | **+1.1** |
| H18K | | | | IAmb | | IAmb | 07 54 52.5 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **G18K** | **Tagagawik** | **48.55** | **29** | P | | **P** | **07 54 38.4** | **+0.9** |
| **E19K** | **Redstone River** | **49.43** | **27** | P | | **P** | **07 54 44.4** | **+0.2** |
| E19K | | | | IAmb | | IAmb | 07 54 51.2 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **KSH** | **Kashi** | **51.70** | **297** | P | | **P** | **07 55 02.6** | **+0.7** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **52.08** | **301** | ⇑*e*P | | **P** | **07 55 03.4** | **-1.3** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **52.85** | **188** | P | | **P** | **07 55 09.3** | **-1.1** |
| | comp=Z,1.9nm,0.3s,baz=5.7,slow=7.6,SNR=71 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **07 56 18.1** | **-0.9** |
| | comp=Z,1.7nm,0.7s,baz=3.0,slow=4.3,SNR=5.4 | | | | | | | |
| | comp=Z,1.9nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **53.04** | **315** | P | | **P** | **07 55 10.8** | **-0.7** |
| | comp=Z,2.9nm,0.6s,baz=114,slow=6.8,SNR=11 | | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **53.34** | **31** | P | | **P** | **07 55 13.4** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=268,slow=5.1,SNR=6.5 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **KK31** | **Karatay Array** | **54.82** | **303** | P | | **P** | **07 55 23.9** | **-0.7** |
| KK31 | | | | IAmb | | IAmb | 07 55 24.5 | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **KK31** | **Karatay Array** | **54.82** | **303** | P | | **P** | **07 55 23.9** | **-0.7** |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **54.82** | **303** | P | | **P** | **07 55 23.9** | **-0.7** |
| KKAR | | | | IAmb | | IAmb | 07 55 24.5 | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **54.82** | **303** | | | **P** | **07 55 24.2** | **-0.4** |
| **KKAR** | **Karatay Array** | **54.82** | **303** | P | | **P** | **07 55 23.9** | **-0.7** |
| KKAR | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **L27K** | **Beaver Creek,** | **55.66** | **33** | P | | **P** | **07 55 31.8** | **+1.4** |
| L27K | | | | IAmb | | IAmb | 07 55 41.8 | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **55.68** | **33** | P | | **P** | **07 55 30.9** | **+0.3** |
| **AS31** | **Alice Springs** | **56.58** | **188** | P | | **P** | **07 55 36.4** | **-1.0** |
| **ASAR** | **Alice Springs** | **56.58** | **188** | P | | **P** | **07 55 36.2** | **-1.2** |
| **ASAR** | **Alice Springs** | **56.58** | **188** | P | | **P** | **07 55 36.5** | **-0.9** |
| | comp=Z,1.3nm,0.4s,baz=3.6,slow=6.8,SNR=38 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **07 56 34.2** | **+0.9** |
| | comp=Z,1.1nm,0.7s,baz=10.0,slow=3.9,SNR=5.6 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **CHGR** | **Chuyangaron** | **57.03** | **298** | P | | **P** | **07 55 39.7** | **-0.9** |
| **CHGR** | **Chuyangaron** | **57.03** | **298** | P | | **P** | **07 55 39.7** | **-0.9** |
| CHGR | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **EPYK** | **Eagle Plains** | **57.44** | **28** | P | | **P** | **07 55 44.3** | **+1.3** |
| **I30M** | **Mount Dempster** | **57.75** | **30** | | | **P** | **07 55 46.2** | **+0.9** |
| I30M | | | | IAmb | | IAmb | 07 55 51.4 | |
| | comp=Z,8.2nm,1.3s | | | | | | | |
| **ARU** | **Arti** | **59.16** | **320** | *d* P | | **P** | **07 55 54.1** | **-1.0** |
| ARU | | | | | | | 07 58 08.4 | |
| ARU | | | | S | | **S** | **08 03 58.8** | **+0.7** |
| ARU | | | | SS | | **SS** | **08 07 54.9** | **+2.3** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **60.26** | **312** | P | | **P** | **07 56 01.8** | **-0.9** |
| **ABKAR** | **Akbulak array** | **60.26** | **312** | | | **P** | **07 56 01.9** | **-0.8** |
| **P33M** | **Teslin, Yukon** | **60.40** | **35** | P | | **P** | **07 56 05.0** | **+1.3** |
| **KIRV** | **Kirov** | **63.27** | **324** | ⇑*e*P | | **P** | **07 56 22.3** | **-0.5** |
| **STKA** | **Stephens Creek** | **64.39** | **179** | P | | **P** | **07 56 28.7** | **-1.6** |
| | comp=Z,1.7nm,0.8s,baz=24,slow=10.0,SNR=3.3 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **67.71** | **340** | P | | **P** | **07 56 51.1** | **-0.3** |
| | comp=Z,1.4nm,0.8s,baz=78,slow=8.4,SNR=3.6 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **72.26** | **333** | P | | **P** | **07 57 18.5** | **-0.7** |
| | comp=Z,3.5nm,0.8s,baz=46,slow=6.0,SNR=11 | | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **72.26** | **333** | *i* P | | **P** | **07 57 20.2** | **+0.9** |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **KBZ** | **Khabaz** | **73.22** | **311** | P | | **P** | **07 57 25.5** | **+0.2** |
| | comp=Z,1.6nm,0.7s,baz=85,slow=4.6,SNR=3.0 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **73.22** | **311** | *ce*P | | **P** | **07 57 25.2** | **-0.1** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **77.27** | **323** | P | | **P** | **07 57 46.1** | **-2.3** |
| | comp=Z,0.2nm,0.3s,baz=51,slow=5.0,SNR=1.7 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.96** | **52** | P | | **P** | **07 57 54.3** | **+1.5** |
| | comp=Z,0.3nm,0.6s,baz=284,slow=6.9,SNR=4.3 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **80.09** | **5** | | | **P** | **07 58 02.3** | **-1.3** |
| **SFJD** | **Kangerlussuaq** | **80.09** | **5** | P | | **P** | **07 58 02.3** | **-1.3** |
| SFJD | | | | pmax | | pmax | | |
| | comp=Z,31nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **81.01** | **45** | P | | **P** | **07 58 10.2** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=336,slow=2.0,SNR=2.1 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **81.20** | **324** | P | | **P** | **07 58 10.7** | **+0.8** |
| **KWP** | **Kalwaria Pacla** | **81.20** | **324** | P | | **P** | **07 58 10.7** | **+0.8** |
| KWP | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **BR131** | **Keskin Array S** | **81.21** | **312** | | | **P** | **07 58 11.6** | **+1.2** |
| BR131 | | | | IAmb | | IAmb | 07 58 14.0 | |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| **BR131** | **Keskin Array S** | **81.21** | **312** | *de*P | | **P** | **07 58 10.4** | **0.0** |
| **BRTR** | **Keskin Array B** | **81.21** | **312** | | | **P** | **07 58 11.3** | **+1.0** |
| **BUR08** | **Bucovina Ar. S** | **81.23** | **322** | | | **P** | **07 58 12.0** | **+1.7** |
| BUR08 | | | | IAmb | | IAmb | 07 58 14.1 | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| **BURAR** | **Bucovina Array** | **81.24** | **322** | | | **P** | **07 58 11.6** | **+1.3** |
| BURAR | | | | IAmb | | IAmb | 07 58 14.4 | |
| | comp=Z,4.5nm,0.6s | | | | | | | |
| **ANTO** | **Ankara** | **81.65** | **312** | P | | **P** | **07 58 14.9** | **+2.3** |
| ANTO | | | | IAmb | | IAmb | 07 58 17.7 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **ANTO** | **Ankara** | **81.65** | **312** | P | | **P** | **07 58 14.9** | **+2.3** |
| ANTO | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **93.11** | **52** | P | | **P** | **07 59 09.2** | **+0.7** |
| | comp=Z,0.9nm,0.6s,baz=298,slow=3.5,SNR=17 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **LPAZ** | **La Paz** | **149.14** | **65** | PKPbc | | **PKPbc** | **08 05 44.1** | **+0.5** |
| | comp=Z,1.4nm,0.6s,baz=279,slow=2.2,SNR=11 | | | | | | | |

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**JMA 21 07:46:07.1±0.2, 36˚.6N±0˚.2×137˚.6E±0˚.2, h0km±1km, MV0.7/20, HIDA MOUNTAINS REGION, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JTT** | **Ttatey** | **0.25** | **281** | *e*P | | Pg | 07 46 12.8 | +0.8 |
| **JNG** | **Nsakai** | **0.40** | **112** | P | | Pg | 07 46 15.3 | +0.6 |
| JNG | | | | *e*S | | Sg | 07 46 20.8 | +0.9 |
| **JGN** | **Niukaw** | **0.43** | **219** | P | | Pg | 07 46 15.5 | +0.3 |
| JGN | | | | S | | Sg | 07 46 21.1 | +0.4 |
| **MAT** | **Matsushiro** | **0.45** | **92** | *e*S | | Sg | 07 46 22.4 | +0.7 |

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**IDC 21 07:56:32.4±3.1, 53˚.67N×86˚.86E, h0km, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=28.6km s-min=16.4km az=67.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.24** | **284** | I | | I | 08 02 40.0 | |
| | baz=102,slow=331,SNR=1.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.24** | **284** | Pg | | Pg | 07 56 55.6 | -0.6 |
| | 0.9nm,0.3s,baz=107,slow=12,SNR=7.4 | | | | | | | |
| ZALV | | | | Lg | | Lg | 07 57 13.7 | |
| | 1.0nm,0.3s,baz=102,slow=25,SNR=5.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.97** | **243** | Pn | | Pn | 07 58 01.5 | -0.4 |
| | 0.1nm,0.3s,baz=56,slow=13,SNR=2.6 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.48** | **205** | Pn | | Pn | 07 58 24.7 | +2.0 |
| | 0.1nm,0.3s,baz=24,slow=13,SNR=1.7 | | | | | | | |
| | 0.2nm,0.2s | | | | | | | |

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*IDC* ***21*** *08:00:32.1±0.9,35˚.20N×23˚.59E, h0km, mb3.9/13, mbtmp3.8/17, ML3.3/4, Error ellipse: s-maj=22.2km s-min=10.0km az=180.0*
*THE* ***21*** *08:00:34.4,35˚.20N×23˚.60E, h1km, ML3.6/6, Error ellipse: s-maj=0.7km s-min=0.2km az=226.0*
*ISK* ***21*** *08:00:34.1,35˚.19N×23˚.60E, h4km, ML3.7/8*
*ATH* ***21*** *08:00:34.6,35˚.17N×23˚.60E, h6km±1km, ML3.5/11, Error ellipse: s-maj=1.4km s-min=0.8km az=42.0*

**ISC 21 08:00:33.8±1.0, 35˚.18N±0˚.03×23˚.58E±0˚.03, h7km±6km, n70, σ1s 32/99, mb3.9/13, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.10** | **58** | Pg | | **Pg** | **08 00 35.8** | **-0.3** |
| KNDR | | | | Sg | | **Sg** | **08 00 36.8** | **-0.8** |
| **KNDR** | **Palaiochora Ch** | **0.10** | **58** | P | | **Pg** | **08 00 36.2** | **+0.1** |
| KNDR | | | | S | | **Sg** | **08 00 37.4** | **-0.2** |
| KNDR | | | | AML | | AML | 08 00 37.8 | |
| KNDR | | | | AML | | AML | 08 00 37.8 | |
| **RODP** | **Rodopos** | **0.41** | **21** | Pg | | **Pg** | **08 00 42.3** | **+0.6** |
| RODP | | | | Sg | | **Sb** | **08 00 48.5** | **-1.3** |
| **RODP** | **Rodopos** | **0.41** | **21** | P | | **Pg** | **08 00 41.9** | **+0.2** |
| RODP | | | | S | | **Sg** | **08 00 47.9** | **+0.8** |
| **IMMV** | **Iera Moni Meta** | **0.43** | **49** | Pg | | **Pg** | **08 00 42.8** | **+0.6** |
| IMMV | | | | Sg | | **Sg** | **08 00 48.9** | **+1.1** |
| **IMMV** | **Iera Moni Meta** | **0.43** | **49** | P | | **Pg** | **08 00 42.4** | **+0.2** |
| IMMV | | | | S | | **Sg** | **08 00 48.8** | **+1.0** |
| | 8μm,0.3s | | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.43** | **49** | P | | **Pg** | **08 00 42.1** | **-0.1** |
| IMMV | | | | S | | **Sg** | **08 00 49.0** | **+1.2** |
| IMMV | | | | AML | | AML | 08 00 50.8 | |
| | comp=N,21572μm,0.3s | | | | |

comp=E,1036µm,0.6s
SANT AML AML 08 01 42.9
comp=N,509µm,0.4s
**THR8 Santorini-Mono 1.97 51** P **Pn** **08 01 07.2 -0.4**
**ZKR Zakros 2.16 91** Pn **Pn** **08 01 11.7 +1.4**
**ZKR Zakros 2.16 91** P **Pn** **08 01 09.7 -0.5**
**KRND KRANIDI 2.23 351** P **Pn** **08 01 11.5 +0.3**
KRND S **Sn** **08 01 40.1 +1.2**
comp=N,438nm,0.4s
**KRND KRANIDI 2.23 351** P **Pn** **08 01 12.0 +0.8**
**PYL PYLOS 2.27 319** P **Pn** **08 01 12.5 +0.7**
PYL S **Sn** **08 01 41.7 +1.7**
**PYL PYLOS 2.27 319** P **Pn** **08 01 12.7 +0.9**
**APE Apeiranthos 2.46 39** P **Pn** **08 01 14.9 +0.4**
APE S **Sn** **08 01 44.3 -0.4**
APE AML AML 08 01 56.0
comp=E,875µm,0.5s
APE AML AML 08 01 58.4
comp=N,500µm,0.3s
**ATHU Athens Univers 2.79 3** P **Pn** **08 01 19.8 +0.9**
**DION Dionisos Attik 2.91 5** P **Pn** **08 01 21.8 +1.3**
**GUR Goura 2.93 340** P **Pn** **08 01 23.9 +3.0**
**GUR Goura 2.93 340** P **Pn** **08 01 22.5 +1.6**
**VIL2 Platees 3.04 355** P **Pn** **08 01 22.7 +0.3**
**KLV Kalavryta, Ach 3.08 338** P **Pn** **08 01 23.6 +0.6**
KLV S **Sn** **08 02 01.9 +1.8**
**KLV Kalavryta, Ach 3.08 338** P **Pn** **08 01 24.5 +1.5**
**BRTR Keskin Array B 9.19 57** Pn **Pn** **08 02 49.8 +2.8**
comp=N,0.2nm,0.3s,baz=244,slow=16,SNR=22
comp=N,3.3nm,0.8s
**MMAI Mount Meron Ar 10.04 99** Pn **Pn** **08 02 57.7 -0.9**
comp=N,0.6nm,0.3s,baz=294,slow=14,SNR=2.0
MMAI Sn Sn 08 04 40.5 -11
comp=N,1.3nm,0.3s,baz=160,slow=34,SNR=1.1
comp=N,0.3nm,0.3s
**MLR Muntele Rosu 10.46 9** Pn Pn 08 03 09.2 +4.9
comp=N,0.3nm,0.3s,baz=301,slow=20,SNR=3.8
**EIL Elat 11.06 117** Pn **Pn** **08 03 10.0 -2.5**
comp=N,0.3nm,0.3s,baz=40,slow=14,SNR=2.7
EIL Sn Sn 08 05 07.0 -10
comp=N,0.2nm,0.3s,baz=321,slow=23,SNR=1.7
comp=N,1.9nm,0.7s
**VRAC Vranov 15.03 342** Pn **P** **08 04 12.2 +0.1**
comp=N,0.8nm,0.3s,baz=123,slow=9.7,SNR=5.5
**GERES GERESS Array B 15.48 335** Pn **P** **08 04 18.1 +0.8**
comp=N,0.4nm,0.3s,baz=160,slow=21,SNR=7.2
**DAVOX Davos/Dischmat 15.51 322** Pn **Pn** **08 04 15.2 +2.1**
comp=N,0.2nm,0.3s,baz=137,slow=18,SNR=1.6
**KHC Kasperske Hory 15.77 335** *e*P **P** **08 04 21.5 +1.2**
**AKASG Malin Array Be 16.05 13** Pn **Pn** **08 04 21.1 +1.3**
comp=N,1.5nm,0.3s,baz=211,slow=9.9,SNR=4.3
**KBZ Khabaz 17.16 54** P **Pn** **08 04 34.0 0.0**
comp=N,0.1nm,0.3s,baz=248,slow=16,SNR=2.4
comp=N,1.6nm,0.6s
**NACGM Naroch 19.85 5** *e*P **P** **08 05 06.1 +1.0**
comp=Z,800nm,0.7s,baz=188
**ESDC Sonseca Array 22.29 290** P **P** **08 05 32.0 +0.2**
comp=Z,0.9nm,0.8s,baz=91,slow=10,SNR=6.8
comp=Z,0.9nm,0.8s
**HFS Hagfors 25.78 349** P **P** **08 06 05.0 -0.2**
comp=Z,2.8nm,0.6s,baz=141,slow=9.6,SNR=17
comp=Z,2.8nm,0.6s
**FINES FINESS Array B 26.33 3** P **P** **08 06 07.9 -2.2**
comp=Z,3.3nm,0.8s,baz=157,slow=10,SNR=4.3
comp=Z,3.3nm,0.8s
**EKA Eskdalemuir Ar 27.29 326** P **P** **08 06 19.0 +0.2**
comp=Z,1.6nm,0.6s,baz=122,slow=9.1,SNR=10
comp=Z,1.6nm,0.6s
**TORD Torodi Ar. Bea 29.53 227** P **P** **08 06 38.9 -0.2**
comp=Z,0.3nm,0.5s,baz=36,slow=11,SNR=3.0
comp=Z,0.3nm,0.5s
**BVAR Borovoye Array 37.27 47** P **P** **08 07 44.7 -1.5**
comp=Z,0.5nm,0.6s,baz=229,slow=40,SNR=2.3
comp=Z,0.5nm,0.6s
**DBIC Dimbokro 38.59 229** P **P** **08 07 57.0 -0.5**
comp=Z,2.1nm,0.9s,baz=22,slow=5.4,SNR=1.3
comp=Z,2.1nm,0.9s
**KURBB Kurchatov Arra 42.11 51** P **P** **08 08 25.0 -1.5**
comp=Z,1.5nm,0.6s,baz=278,slow=8.5,SNR=12
comp=Z,1.5nm,0.6s
**MKAR Makanchi Array 44.84 56** P **P** **08 08 47.4 -1.2**
comp=Z,1.2nm,0.7s,baz=271,slow=6.9,SNR=8.3
comp=Z,1.2nm,0.7s
**ZALV Zalesovo Beam 45.92 46** P **P** **08 08 54.6 -2.4**
comp=Z,1.4nm,0.6s,baz=278,slow=9.2,SNR=4.9
comp=Z,1.4nm,0.6s
**USRK Ussuriysk Ar. 77.73 44** P **P** **08 12 29.5 -1.9**
comp=Z,0.8nm,0.5s,baz=267,slow=3.5,SNR=4.5
comp=Z,0.8nm,0.5s
**KSRS Korea Array 79.29 52** P **P** **08 12 39.7 -0.4**
comp=Z,0.5nm,0.5s,baz=280,slow=2.8,SNR=1.8
comp=Z,0.5nm,0.5s
**ILAR Eielson Array 80.10 356** P **P** **08 12 44.0 0.0**
comp=Z,0.3nm,0.8s,baz=348,slow=3.7,SNR=4.1
comp=Z,0.3nm,0.8s

**NAM 21 08:07:24.8±4.3, 19.72S×14.47E, h21km±14km, ML1.4, 6C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.03** | **127** | ↑*i*P | Pb | 08 07 30.3 | +1.7 |
| ST3N | | | | *i* S | Sb | 08 07 31.7 | +0.5 |
| ST3N | | | | IAML | | 08 07 33.1 | |
| | comp=Z,28nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.03** | **127** | *i* P | Pb | 08 07 30.3 | +1.7 |
| ST3N | | | | *i* S | Sb | 08 07 31.5 | +0.3 |
| ST3N | | | | IAML | | 08 07 31.9 | |
| | comp=Z,38nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.10** | **138** | ↓*i*P | Pb | 08 07 29.2 | -2.4 |
| ST9N | | | | *i* S | Sb | 08 07 29.9 | -6.6 |
| ST9N | | | | IAML | | 08 07 30.2 | |
| | comp=Z,2µm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.10** | **138** | *i* P | Pb | 08 07 29.2 | -2.4 |
| ST9N | | | | *i* S | Sb | 08 07 29.8 | -6.6 |
| ST9N | | | | IAML | | 08 07 30.2 | |
| | comp=Z,3µm,0.5s | | | | | | |
| **ST6N** | **ST6** | **0.10** | **222** | ↓*i*P | Pb | 08 07 31.4 | -0.1 |
| ST6N | | | | *i* S | Sb | 08 07 33.8 | -2.6 |
| ST6N | | | | IAML | | 08 07 34.7 | |
| | comp=Z,41nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.13** | **96** | ↑*i*P | Pb | 08 07 30.1 | -1.1 |
| ST1N | | | | *i* S | Sb | 08 07 31.3 | -4.3 |
| ST1N | | | | IAML | | 08 07 31.4 | |
| | comp=Z,169nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.13** | **96** | *i* P | Pb | 08 07 30.1 | -1.1 |
| ST1N | | | | *i* S | Sb | 08 07 31.3 | -4.3 |
| ST1N | | | | IAML | | 08 07 31.5 | |
| | comp=Z,178nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.15** | **283** | ↑*i*P | Pb | 08 07 33.5 | +2.5 |
| ST8N | | | | *i* S | Sb | 08 07 37.3 | +2.0 |
| ST8N | | | | IAML | | 08 07 38.3 | |
| | comp=Z,5.9nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.23** | **150** | ↑*i*P | Pb | 08 07 30.6 | -0.4 |
| ST2N | | | | *i* S | Sb | 08 07 32.8 | -2.5 |
| ST2N | | | | IAML | | 08 07 32.9 | |
| | comp=Z,79nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.23** | **150** | *i* P | Pb | 08 07 30.6 | -0.3 |
| ST2N | | | | *i* S | Sb | 08 07 32.2 | -3.0 |
| ST2N | | | | IAML | | 08 07 32.4 | |
| | comp=Z,56nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.28** | **104** | ↓*i*P | Pb | 08 07 31.7 | +0.4 |
| ST5N | | | | *i* S | Sb | 08 07 34.3 | -1.6 |
| ST5N | | | | IAML | | 08 07 35.1 | |
| | comp=Z,28nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.28** | **104** | *i* P | Pb | 08 07 31.7 | +0.4 |
| ST5N | | | | *i* S | Sb | 08 07 34.3 | -1.5 |
| ST5N | | | | IAML | | 08 07 34.7 | |
| | comp=Z,20nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.28** | **196** | ↑*i*P | Pn | 08 07 33.1 | -0.8 |
| ST10N | | | | *i* S | Sb | 08 07 36.8 | +0.9 |
| ST10N | | | | IAML | | 08 07 37.5 | |
| | comp=Z,35nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.28** | **196** | *i* P | Pn | 08 07 33.1 | -0.8 |
| ST10N | | | | *i* S | Sb | 08 07 36.2 | +0.2 |
| ST10N | | | | IAML | | 08 07 38.1 | |
| | comp=Z,57nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.36** | **79** | ↑*i*P | Pn | 08 07 34.4 | -0.5 |
| ST11N | | | | *i* S | Sb | 08 07 38.5 | +0.8 |
| ST11N | | | | IAML | | 08 07 39.9 | |
| | comp=Z,7.4nm,0.0s | | | | | | |

*IDC **21** 08:08:14.0±6.3, 18°.14S×177°.98W, h540km±70km, mb3.0/6, mbtmp3.9/6, Error ellipse: s-maj=32.9km s-min=25.4km az=35.0*
*NEIC **21** 08:08:19.8±1.0, 18°.1S±0°.2×178°.1W±0°.2, h612km±8km, mb4.0/15, Error ellipse: s-maj=32.4km s-min=15.0km az=124.0*

**ISC 21 08:08:18.3±0.8, 18°.2S±0°.2×178°.1W±0°.2, h590km, n23, σ0s98/24, mb3.9/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.67** | **277** | P | **P** | **08 09 43.1** | **+2.2** |
| **URZ** | **Urewera** | **20.37** | **191** | P | **P** | **08 12 14.0** | **-1.6** |
| | 9.0nm,0.9s,baz=300,slow=16,SNR=1.7 | | | | | | |
| | 9.0nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **43.48** | **241** | P | **P** | **08 15 30.6** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **08 15 40.3** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 08 15 45.3 | |
| | comp=Z,5.4nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.80** | **260** | P | **P** | **08 15 41.1** | **0.0** |
| WB0 | | | | IAmb | IAmb | 08 15 42.2 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.82** | **260** | P | **P** | **08 15 41.2** | **0.0** |
| WB2 | | | | IAmb | IAmb | 08 15 55.6 | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.82** | **260** | P | P | 08 15 36.5 | -4.7 |
| WRAB | | | | IAmb | IAmb | 08 15 49.6 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **08 15 40.9** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **08 15 41.4** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=95,slow=7.1,SNR=35 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 17 10.6** | **+0.4** |
| | comp=Z,0.4nm,1.1s,baz=89,slow=3.3,SNR=1.7 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.95** | **255** | P | **P** | **08 15 42.1** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.95** | **255** | P | **P** | **08 15 43.0** | **+0.8** |
| | comp=Z,1.4nm,0.4s,baz=88,slow=8.8,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 17 10.8** | **+0.1** |
| | comp=Z,0.3nm,0.5s,baz=103,slow=4.0,SNR=2.2 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.08** | **256** | P | **P** | **08 17 14.7** | **-1.9** |
| PSA00 | | | | IAmb | IAmb | 08 17 16.0 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.81** | **180** | P | **P** | **08 18 43.2** | **+1.2** |
| QSPA | | | | IAmb | IAmb | 08 18 51.7 | |
| | comp=Z,5.6nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.81** | **180** | P | **P** | **08 18 42.8** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=216,slow=1.9,SNR=7.5 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **M16K** | **Timber Creek** | **80.48** | **9** | P | **P** | **08 19 28.6** | **-0.7** |
| **L16K** | **Owhat River** | **81.06** | **9** | P | **P** | **08 19 31.4** | **-0.9** |
| L16K | | | | IAmb | IAmb | 08 19 36.8 | |
| | comp=Z,4.8nm,1.3s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.34** | **8** | P | **P** | **08 19 33.0** | **-0.7** |
| **BELA** | **Belgrano 2** | **81.80** | **173** | P | **P** | **08 19 36.3** | **+0.4** |
| **L18K** | **Granite Mounta** | **81.98** | **10** | P | **P** | **08 19 36.5** | **-0.4** |
| L18K | | | | IAmb | IAmb | 08 19 49.0 | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **J16K** | **Anvik River** | **82.41** | **8** | P | **P** | **08 19 38.0** | **-1.1** |
| J16K | | | | IAmb | IAmb | 08 19 49.3 | |
| | comp=Z,14nm,1.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.95** | **57** | P | **P** | **08 19 58.0** | **+0.6** |
| | comp=Z,0.1nm,0.7s,baz=231,slow=5.1,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.15** | **13** | P | **P** | **08 19 56.0** | **-1.3** |
| | comp=Z,0.2nm,0.4s,baz=218,slow=5.0,SNR=7.2 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.20** | **315** | PKPbc | **PKPbc** | **08 26 50.6** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=84,slow=3.5,SNR=2.3 | | | | | | |

*NEIC **21** 08:23:56.4±1.1, 5°.1N±0°.1×125°.7E±0°.2, h10km±2km, mb4.6/14, Error ellipse: s-maj=35.2km s-min=20.3km az=66.0*
*IDC **21** 08:24:06.1±1.6, 3°.74N×125°.80E, h0km, mb4.1/7, mbtmp4.1/7, MS3.2/1, Error ellipse: s-maj=216.6km s-min=17.4km az=64.0*
*DJA **21** 08:24:21.5±1.3, 4°.N±11°.×12°.6E±°., h80km±26km, M4.8/12, mb5.0/6, mB5.3/7, MLv4.7/12, Mw(mB)4.8/7*

**ISC 21 08:24:19.9±0.6, 3°.69N±0°.05×126°.17E±0°.08, h116km, n40, σ2s07/47, mb4.5/13, 6C-1D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSPH** | **General Santos** | **2.67** | **333** | ↓*i*P | **Pn** | **08 25 01.5** | **-0.4** |
| GSPH | | | | *i* S | **Sn** | **08 25 34.0** | **-0.2** |
| **TNTI** | **Ternate** | **3.14** | **158** | Pn | **Pn** | **08 25 07.0** | **-1.0** |
| **TNTI** | **Ternate** | **3.14** | **158** | P | **Pn** | **08 25 07.1** | **-0.8** |
| **DMPH** | **Davao City--Mi** | **3.43** | **349** | ↑*e*P | **Pn** | **08 25 13.1** | **+1.3** |
| DMPH | | | | *i* S | **Sn** | **08 25 54.9** | **+2.9** |
| **KCP** | **Kidapawan** | **3.46** | **342** | ↑*i*P | **Pn** | **08 25 13.8** | **+1.5** |
| **KMSI** | **Cibinong** | **3.79** | **215** | P | **Pn** | **08 25 15.8** | **-0.8** |
| **CDOP** | **Cateel, Davao** | **4.07** | **4** | ↑*e*P | **Pn** | **08 25 21.8** | **+1.4** |
| CDOP | | | | *e*S | **Sn** | **08 26 08.7** | **+1.5** |
| **GTOI** | **Gorontalo** | **4.38** | **226** | P | **Pn** | **08 25 24.4** | **-0.1** |
| **BIPH** | **Bislig** | **4.46** | **2** | ↑*e*P | **Pn** | **08 25 27.0** | **+1.3** |
| BIPH | | | | *e*S | **Sn** | **08 26 08.5** | **-8.1** |
| **LBMI** | **Labuha** | **4.50** | **163** | P | **Pn** | **08 25 25.8** | **-0.4** |
| **PAGZ** | **Pagadian** | **4.97** | **326** | ↑*e*P | **Pn** | **08 25 32.6** | **+0.2** |
| **MRSI** | **Marisa** | **5.30** | **233** | P | **Pn** | **08 25 37.4** | **+0.6** |
| | 199nm,0.9s,2µm0.7nm | | | | | | |
| **SANI** | **Sanana** | **5.71** | **182** | P | **Pn** | **08 25 39.0** | **-3.4** |
| **TOLI2** | **Tolitoli** | **5.96** | **245** | | **Pn** | **08 25 45.5** | **-0.4** |
| **TABP** | **Talibon, Bohol** | **6.61** | **344** | ↑*e*P | **Pn** | **08 25 57.5** | **+2.8** |
| TABP | | | | *e*S | Sn | 08 26 11.5 | -57 |
| **NLAI** | **Namlea** | **6.95** | **172** | P | **Pn** | **08 25 57.2** | **-2.0** |
| **FAKI** | **Fak Fak** | **8.95** | **137** | Pn | **Pn** | **08 26 24.7** | **-1.6** |
| **MTN** | **Manton Dam** | **17.15** | **163** | P | **P** | **08 28 10.5** | **-1.9** |
| MTN | | | | IAmb | IAmb | 08 28 38.6 | |
| | comp=Z,46nm,1.5s | | | | | | |
| **KNRA** | **Kununurra** | **19.42** | **172** | P | **P** | **08 28 37.3** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 08 28 39.3 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **21.66** | **181** | P | **P** | **08 28 59.7** | **-1.5** |
| **COEN** | **Coen** | **24.33** | **136** | P | **P** | **08 29 26.0** | **-1.1** |
| COEN | | | | IAmb | IAmb | 08 29 28.9 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **WB0** | **Warramunga Arr** | **24.68** | **161** | P | **P** | **08 29 30.6** | **+0.5** |
| **WRAB** | **Tennant Creek** | **24.82** | **161** | P | **P** | **08 29 31.7** | **+0.3** |
| WRAB | | | | IAmb | IAmb | 08 29 33.5 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.82** | **161** | P | **P** | **08 29 31.5** | **0.0** |
| **WRA** | **Warramunga Arr** | **24.82** | **161** | P | **P** | **08 29 31.7** | **+0.2** |
| | comp=Z,12nm,0.6s,baz=340,slow=10,SNR=102 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 33 06.3** | **+1.3** |
| | comp=Z,0.2nm,0.4s,baz=343,slow=2.2,SNR=1.5 | | | | | | |
| WRA | | | | S | **S** | **08 33 53.0** | **+7.1** |
| | comp=Z,0.7nm,0.9s,baz=331,slow=17,SNR=3.4 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.83** | **161** | P | **P** | **08 29 31.8** | **+0.2** |
| **WR0** | **Warramunga Arr** | **24.90** | **161** | P | **P** | **08 29 32.7** | **+0.5** |
| WR0 | | | | IAmb | IAmb | 08 29 34.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **28.22** | **165** | P | **P** | **08 30 02.8** | **+0.7** |
| **ASAR** | **Alice Springs** | **28.22** | **165** | P | **P** | **08 30 02.5** | **+0.5** |
| | comp=Z,0.8nm,0.4s,baz=357,slow=8.2,SNR=28 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 33 14.3** | **+1.3** |
| | comp=Z,0.4nm,0.4s,baz=345,slow=2.6,SNR=2.9 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **34.33** | **177** | P | **P** | **08 30 56.1** | **+0.6** |
| FORT | | | | IAmb | IAmb | 08 31 06.6 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **37.50** | **166** | P | **P** | **08 31 23.1** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 08 31 23.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **37.67** | **141** | P | **P** | **08 31 23.6** | **-0.5** |
| EIDS | | | | IAmb | IAmb | 08 32 05.3 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **38.30** | **159** | P | **P** | **08 31 29.7** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.30** | **159** | P | **P** | **08 31 30.3** | **+1.0** |
| | comp=Z,3.1nm,0.6s,baz=339,slow=9.6,SNR=8.6 | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.27** | **326** | P | **P** | **08 33 55.6** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=116,slow=7.0,SNR=11 | | | | | | |
| MKAR | | | | PcP | **PcP** | **08 34 49.1** | **+0.7** |
| | comp=Z,0.7nm,0.4s,baz=124,slow=4.5,SNR=6.2 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **MA2** | **Magadan** | **58.88** | **14** | LR | LR | 09 02 32.5 | |
| | comp=Z,19nm,18.3s,baz=260,slow=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.47** | **328** | P | **P** | **08 34 21.4** | **-2.7** |
| | comp=Z,0.4nm,0.4s,baz=119,slow=6.7,SNR=2.0 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **89.61** | **310** | P | **P** | **08 37 04.0** | **-1.1** |
| | comp=Z,0.2nm,0.6s,baz=36,slow=5.3,SNR=1.8 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **91.60** | **332** | P | **P** | **08 37 13.5** | **-0.1** |
| | comp=Z,4.3nm,1.1s,baz=58,slow=4.7,SNR=1.6 | | | | | | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.40** | **288** | PKP | **PKiKP** | **08 43 02.5** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=75,slow=2.2,SNR=6.1 | | | | | | |

*IDC **21** 08:28:24.4±5.9, 18°.28S×178°.26W, h548km±68km, mb3.0/7, mbtmp3.9/7, Error ellipse: s-maj=33.0km s-min=27.0km az=8.0*
*NEIC **21** 08:28:26.2±0.8, 18°.2S±0°.2×178°.2W±0°.1, h578km±12km, mb4.0/12, Error ellipse: s-maj=31.8km s-min=13.8km az=166.0*

**ISC 21 08:28:24.7±0.9, 18°.4S±0°.2×178°.2W±0°.2, h550km, n22, σ1s31/23, mb3.8/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.64** | **279** | P | **P** | **08 29 47.0** | **+3.0** |
| **URZ** | **Urewera** | **20.25** | **191** | P | **P** | **08 32 22.1** | **-0.7** |
| | 8.1nm,1.0s,baz=154,slow=5.5,SNR=2.1 | | | | | | |
| | 8.1nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **38.60** | **242** | P | **P** | **08 35 01.6** | **+0.5** |
| **STKA** | **Stephens Creek** | **38.60** | **242** | P | **P** | **08 35 00.2** | **-0.9** |
| | 1.2nm,0.7s,baz=80,slow=11,SNR=3.2 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.38** | **241** | P | **P** | **08 35 38.8** | **-0.2** |
| **WR0** | **Warramunga Arr** | **44.57** | **260** | P | **P** | **08 35 47.1** | **-1.3** |
| **WB0** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **08 35 48.6** | **-1.1** |
| WB0 | | | | IAmb | IAmb | 08 36 23.1 | |
| | comp=Z,9.2nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.75** | **260** | P | **P** | **08 35 48.5** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 08 36 02.3 | |
| | comp=Z,8.9nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.75** | **260** | P | **P** | **08 35 48.2** | **-1.6** |
| **WRA** | **Warramunga Arr** | **44.76** | **260** | P | **P** | **08 35 48.8** | **-1.1** |
| **WRA** | **Warramunga Arr** | **44.76** | **260** | P | **P** | **08 35 49.0** | **-0.9** |
| | comp=Z,0.9nm,0.4s,baz=96,slow=7.1,SNR=26 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 37 19.4** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=90,slow=3.6,SNR=1.4 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.88** | **255** | P | **P** | **08 35 50.2** | **-0.5** |
| AS31 | | | | IAmb | IAmb | 08 35 51.5 | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.88** | **255** | P | **P** | **08 35 50.2** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.88** | **255** | P | **P** | **08 35 50.7** | **-0.1** |
| | comp=Z,5.3nm,0.5s,baz=88,slow=8.7,SNR=90 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 37 20.0** | **-0.6** |
| | comp=Z,0.2nm,0.5s,baz=112,slow=3.8,SNR=2.2 | | | | | | |
| | comp=Z,5.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.69** | **180** | P | **P** | **08 38 51.8** | **+0.7** |
| **QSPA** | **South Pole Qui** | **71.69** | **180** | P | **P** | **08 38 51.9** | **+0.9** |
| | comp=Z,2.0nm,1.2s,baz=186,slow=5.6,SNR=2.0 | | | | | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.60** | **44** | P | **P** | **08 39 37.2** | **+1.8** |
| | comp=Z,0.2nm,0.6s,baz=212,slow=6.2,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **O18K** | **Koktuh Hills** | **80.15** | **12** | P | P | 08 39 34.5 | -3.0 |
| O18K | | | | IAmb | IAmb | 08 39 40.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **L18K** | **Granite Mounta** | **82.10** | **10** | P | **P** | **08 39 46.3** | **-1.2** |
| L18K | | | | IAmb | IAmb | 08 39 50.4 | |
| | comp=Z,3.2nm,1.2s | | | | | | |
| **J17K** | **VABM Dome** | **82.85** | **9** | P | **P** | **08 39 50.3** | **-0.9** |
| J17K | | | | IAmb | IAmb | 08 39 54.2 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **86.28** | **13** | P | **P** | **08 40 05.5** | **-2.5** |
| | comp=Z,0.1nm,0.4s,baz=218,slow=5.3,SNR=4.8 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.25** | **314** | PKPbc | **PKPdf** | **08 46 59.6** | **-0.8** |
| | comp=Z,0.3nm,0.4s,baz=85,slow=2.4,SNR=4.6 | | | | | | |

**NAM 21 08:31:49.3±4.2, 19.69S×14.46E, h18km±17km, ML1.1, 6C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.06** | **143** | ↓*i*P | Pg | 08 31 54.5 | +1.8 |
| ST3N | | | | *i* S | Sg | 08 31 56.0 | +0.9 |
| ST3N | | | | IAML | | 08 31 56.2 | |
| | comp=Z,71nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.06** | **143** | *i* P | Pg | 08 31 54.5 | +1.7 |
| ST3N | | | | *i* S | Sg | 08 31 56.0 | +0.9 |
| ST3N | | | | IAML | | 08 31 56.2 | |
| | comp=Z,69nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **207** | ↑*i*P | Pg | 08 31 55.8 | +2.4 |
| ST6N | | | | *i* S | Sg | 08 31 58.3 | +2.2 |
| ST6N | | | | IAML | | 08 31 58.5 | |
| | comp=Z,27nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.13** | **270** | ↑*i*P | Pg | 08 31 57.7 | +4.3 |
| ST8N | | | | *i* S | Sg | 08 32 01.4 | +5.2 |
| ST8N | | | | IAML | | 08 32 01.7 | |
| | comp=Z,2.8nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.14** | **143** | ↑*i*P | Pg | 08 31 53.7 | +0.2 |
| ST9N | | | | *i* S | Sb | 08 31 54.6 | -1.1 |
| ST9N | | | | IAML | | 08 31 55.0 | |
| | comp=Z,290nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.14** | **143** | *i* P | Pg | 08 31 53.7 | +0.2 |
| ST9N | | | | *i* S | Sb | 08 31 54.6 | -1.1 |
| ST9N | | | | IAML | | 08 31 55.6 | |
| | comp=Z,717nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.15** | **108** | ↑*i*P | Pg | 08 31 54.1 | +0.4 |
| ST1N | | | | *i* S | Sb | 08 31 55.4 | -0.9 |
| ST1N | | | | IAML | | 08 31 55.5 | |
| | comp=Z,250nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.15** | **108** | *i* P | Pg | 08 31 54.1 | +0.4 |
| ST1N | | | | *i* S | Sb | 08 31 55.3 | -1.0 |
| ST1N | | | | IAML | | 08 31 55.6 | |
| | comp=Z,139nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.27** | **151** | ↓*i*P | Pg | 08 31 55.1 | -0.4 |
| ST2N | | | | *i* S | Sg | 08 31 57.0 | -2.6 |
| ST2N | | | | IAML | | 08 31 57.4 | |
| | comp=Z,34nm,0.0s | | | | | | |
| **ST10N** | **ST10** | **0.31** | **192** | ↑*i*P | Pb | 08 31 57.5 | +1.0 |
| ST10N | | | | *i* S | Sb | 08 32 01.6 | +0.4 |
| ST10N | | | | IAML | | 08 32 02.5 | |
| | comp=Z,20nm,0.1s | | | | | | |
| **ST11N** | **ST11** | **0.37** | **84** | ↑*i*P | Pb | 08 31 58.2 | +0.8 |
| ST11N | | | | *i* S | Sg | 08 32 02.5 | +0.3 |
| ST11N | | | | IA

0.4nm,0.6s,baz=103,slow=7.2,SNR=5.2
0.4nm,0.6s
**WRA Warramunga Arr 42.26 276** P **P** **08 48 00.3 -0.9**
0.6nm,0.4s,baz=114,slow=7.6,SNR=16
0.6nm,0.4s
**FINES FINESS Array B 146.66 337** PKPbc **PKPdf** **08 59 37.1 -0.1**
2.1nm,0.8s,baz=166,slow=32,SNR=1.4

*IDC **21** 08:47:41.8±0.8,25°.17S×175°.68W,h0km,mb4.1/9, mbtmp4.1/10,ML3.7/1,MS3.2/1,Error ellipse: s-maj=28.0km s-min=22.1km az=140.0*
*NEIC **21** 08:47:41.7±1.2,25°.25S±0°.09×175°.32W±0°.06,h10km±1km, mb4.6/9,Error ellipse: s-maj=16.6km s-min=8.3km az=156.0*
**ISC 21 08:47:43.4±0.7,25°.37S±0°.08×175°.5W±0°.1,h10km,n31, σ1§38/30,mb4.2/14,South of Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **4.42** | **208** | Pn | **Pn** | **08 48 50.5** | **0.0** |
| **RAO** | **Raoul Island** | **4.42** | **208** | Sn | **Sn** | **08 49 41.9** | **-0.2** |
| | 202nm,0.3s,baz=76,slow=23,SNR=2.1 | | | | | | |
| **NIUE** | **Niue** | **8.12** | **41** | Pn | Pn | 08 49 33.1 | -8.4 |
| **MSVF** | **Nonsavu** | **9.68** | **321** | Pn | **Pn** | **08 50 05.1** | **+2.3** |
| **URZ** | **Urewera** | **14.29** | **204** | Pn | **Pn** | **08 51 04.9** | **-0.9** |
| | 0.4nm,0.3s,baz=136,slow=18,SNR=1.5 | | | | | | |
| URZ | | | | Sn | Sn | 08 53 32.6 | -12 |
| | 0.4nm,0.3s,baz=37,slow=15,SNR=1.8 | | | | | | |
| | 7.0nm,0.8s | | | | | | |
| **RAR** | **Rarotonga** | **15.04** | **77** | Pn | Pn | 08 51 06.8 | -9.2 |
| | 1.4nm,0.3s,baz=258,slow=6.9,SNR=20 | | | | | | |
| RAR | | | | Sn | Sn | 08 53 36.8 | -26 |
| | 0.5nm,0.3s,baz=136,slow=11,SNR=1.3 | | | | | | |
| **MSWZ** | **Moikau Station** | **17.75** | **203** | P | **Pn** | **08 51 51.2** | **+0.6** |
| **PPT** | **Papeete** | **25.32** | **77** | LR | LR | 09 02 12.3 | |
| | comp=Z,49nm,18.7s,baz=228,slow=34 | | | | | | |
| **EIDS** | **Eidsvold** | **30.14** | **263** | P | **P** | **08 53 53.9** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 08 53 55.2 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.02** | **250** | P | **P** | **08 55 02.4** | **+0.4** |
| | comp=Z,0.6nm,0.5s,baz=99,slow=13,SNR=3.4 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.83** | **261** | P | **P** | **08 56 05.1** | **-0.9** |
| **ASAR** | **Alice Springs** | **45.83** | **261** | P | **P** | **08 56 04.7** | **-1.3** |
| | comp=Z,2.1nm,0.8s,baz=94,slow=7.4,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 57 42.9** | **-0.5** |
| | comp=Z,0.2nm,0.6s,baz=116,slow=4.5,SNR=4.5 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.20** | **266** | P | **P** | **08 56 07.2** | **-1.7** |
| WR0 | | | | IAmb | IAmb | 08 56 32.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **46.37** | **266** | P | **P** | **08 56 09.0** | **-1.3** |
| **WRAB** | **Tennant Creek** | **46.38** | **266** | P | **P** | **08 56 08.7** | **-1.5** |
| WRAB | | | | IAmb | IAmb | 08 56 52.2 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.38** | **266** | P | **P** | **08 56 08.6** | **-1.7** |
| **WRA** | **Warramunga Arr** | **46.38** | **266** | P | **P** | **08 56 07.8** | **-2.6** |
| | comp=Z,1.6nm,0.7s,baz=100,slow=7.2,SNR=21 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 57 45.6** | **+0.3** |
| | comp=Z,0.6nm,0.8s,baz=81,slow=3.8,SNR=3.0 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **46.38** | **266** | P | **P** | **08 56 08.6** | **-1.7** |
| WB0 | | | | IAmb | IAmb | 08 56 11.7 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **49.65** | **250** | P | **P** | **08 56 34.4** | **-1.0** |
| **QSPA** | **South Pole Qui** | **64.72** | **180** | P | **P** | **08 58 23.2** | **+1.5** |
| QSPA | | | | IAmb | IAmb | 08 58 28.0 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **64.72** | **180** | P | **P** | **08 58 22.7** | **+1.0** |
| | comp=Z,3.5nm,1.0s,baz=36,slow=1.4,SNR=13 | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **BELA** | **Belgrano 2** | **74.45** | **172** | P | **P** | **08 59 21.6** | **+0.3** |
| **MAW** | **Mawson** | **77.77** | **200** | P | **P** | **08 59 42.1** | **+1.8** |
| | comp=Z,1.2nm,0.5s,baz=295,slow=8.6,SNR=2.2 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.05** | **42** | P | **P** | **09 00 09.6** | **+0.2** |
| | comp=Z,0.5nm,0.7s,baz=221,slow=8.8,SNR=5.5 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **87.80** | **56** | P | **P** | **09 00 32.9** | **-0.3** |
| | comp=Z,0.3nm,0.8s,baz=208,slow=7.0,SNR=5.4 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **87.86** | **329** | P | **P** | **09 00 31.8** | **-1.1** |
| | comp=Z,0.4nm,0.3s,baz=234,slow=15,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **92.56** | **12** | P | **P** | **09 00 53.8** | **-0.7** |
| | comp=Z,0.4nm,0.7s,baz=226,slow=6.1,SNR=3.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.87** | **288** | P | **P** | **09 01 02.6** | **+1.0** |
| | comp=Z,1.6nm,0.4s,baz=134,slow=3.2,SNR=7.2 | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **144.67** | **352** | PKP | **PKPdf** | **09 07 17.9** | **-2.0** |
| | comp=Z,2.0nm,0.8s,baz=99,slow=4.7,SNR=2.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.71** | **308** | PKPbc | **PKPbc** | **09 07 36.0** | **-2.6** |
| | comp=Z,0.6nm,0.9s,baz=104,slow=4.0,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **167.56** | **167** | PKPab | **PKPab** | **09 08 57.5** | **+1.3** |
| | comp=Z,0.5nm,0.8s,baz=238,slow=2.7,SNR=2.4 | | | | | | |

*IDC **21** 08:52:37.9±10.0,17°.31S×178°.85W,h430km±111km, mb3.0/8,mbtmp3.8/8,Error ellipse: s-maj=33.3km s-min=27.0km az=42.0*
**ISC 21 08:52:47.0±1.0,17°.5S±0°.2×179°.0W±0°.2,h539km,n8, σ1§14/8,mb3.1/7,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.99** | **189** | P | **P** | **08 56 50.7** | **-1.8** |
| | 9.4nm,1.0s,baz=245,slow=21,SNR=1.8 | | | | | | |
| | 9.4nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **38.36** | **241** | P | **P** | **08 59 22.8** | **+0.6** |
| | 0.6nm,0.4s,baz=73,slow=11,SNR=1.8 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.17** | **259** | P | **P** | **09 00 07.6** | **-0.8** |
| | 0.2nm,0.3s,baz=93,slow=8.0,SNR=21 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.38** | **254** | P | **P** | **09 00 10.2** | **+0.2** |
| | 2.5nm,0.4s,baz=89,slow=8.1,SNR=46 | | | | | | |
| | 2.5nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.58** | **180** | P | **P** | **09 03 20.9** | **+1.4** |
| | 1.6nm,0.9s,baz=352,slow=0.5,SNR=9.4 | | | | | | |
| | 1.6nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.50** | **44** | P | **P** | **09 03 58.4** | **+0.2** |
| | 0.4nm,0.7s,baz=222,slow=6.6,SNR=2.8 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.23** | **58** | P | **P** | **09 04 31.9** | **-0.1** |
| | 0.2nm,0.8s,baz=210,slow=5.2,SNR=2.7 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.42** | **44** | P | **P** | **09 04 37.0** | **-0.5** |
| | 0.1nm,0.4s,baz=232,slow=5.6,SNR=2.2 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **21** 08:53:24.5±9.1,17°.54S×178°.71W,h587km±93km,mb2.8/5, mbtmp3.7/5,Error ellipse: s-maj=224.7km s-min=26.7km az=153.0*
**ISC 21 08:53:20.8±2.3,18°.S±1°×178°.5W±0°.7,h550km,n6,σ0§57/7, mb3.2/5,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.55** | **260** | P | **P** | **09 00 44.5** | **+0.1** |
| | 0.4nm,0.5s,baz=92,slow=7.6,SNR=6.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 02 15.3** | **-0.2** |
| | 0.1nm,0.3s,baz=93,slow=3.3,SNR=1.3 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.72** | **254** | P | **P** | **09 00 46.0** | **+0.3** |
| | 1.5nm,0.5s,baz=87,slow=8.8,SNR=12 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 02 15.5** | **-0.6** |
| | 0.2nm,0.7s,baz=104,slow=4.0,SNR=1.7 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.46** | **44** | P | **P** | **09 04 31.1** | **+0.3** |
| | 0.2nm,0.5s,baz=212,slow=8.2,SNR=3.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.05** | **58** | P | **P** | **09 05 04.3** | **+0.4** |
| | 0.4nm,0.8s,baz=212,slow=4.4,SNR=5.9 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.39** | **43** | P | **P** | **09 05 09.3** | **-0.7** |
| | 0.2nm,0.5s,baz=238,slow=5.2,SNR=2.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.70** | **315** | PKP | PKPbc | 09 11 54.3 | -1.6 |
| | 0.3nm,0.6s,baz=85,slow=3.7,SNR=2.8 | | | | | | |

**LSZ 21 08:55:05.5±0.3,8°.79S×33°.24E,h10km,MD3.0,Tanzania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PDHT** | **Panda Hill** | **0.19** | **180** | *i* P | Pg | 08 55 11.8 | +2.1 |
| PDHT | | | | *i* S | Sg | 08 55 15.5 | +2.9 |
| **KSMZ** | **Kasama** | **2.42** | **235** | *i* P | Pn | 08 55 45.5 | +0.2 |
| KSMZ | | | | *i* | | 08 55 45.7 | |
| | baz=230,slow=6.9 | | | | | | |
| KSMZ | | | | *i* S | Sn | 08 56 15.2 | +0.1 |
| **KSMZ** | **Kasama** | **2.42** | **235** | *i* P | Pn | 08 55 45.7 | +0.4 |
| KSMZ | | | | *i* | | 08 55 45.7 | |
| | baz=56,slow=12 | | | | | | |
| KSMZ | | | | *i* S | Sn | 08 56 15.0 | 0.0 |

*IDC **21** 08:56:05.2±1.8,18°.11S×178°.25W,h490km±21km, mb3.8/22,mbtmp4.6/24,Error ellipse: s-maj=12.6km s-min=11.0km az=165.0*
*BJI **21** 08:56:06.0±0.0,18°.10S×178°.30W,h506km,mb4.5/20, mB5.0/8*
*NEIC **21** 08:56:07.2±1.7,18°.01S±0°.05×178°.3W±0°.1,h506km±8km, mb4.9/42,Error ellipse: s-maj=16.0km s-min=6.8km az=100.0*
*NOU **21** 08:56:07.5,18°.06S×178°.28W,h512km,mb5.1/61,Fiji Islands Region*
**ISC 21 08:56:06.3±0.3,18°.14S±0°.05×178°.35W±0°.06,h500km, n251,σ1§65/267,mb4.9/79,5C-2D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.45** | **276** | P | **P** | **08 57 23.0** | **+2.4** |
| **MSVF** | **Nonsavu** | **3.45** | **276** | P | **P** | **08 57 21.1** | **+0.5** |
| **AFI** | **Afiamalu** | **7.59** | **57** | P | **P** | **08 57 56.9** | **-1.8** |
| **NIUE** | **Niue** | **8.04** | **98** | P | **P** | **08 58 04.4** | **+1.2** |
| **NIUE** | **Niue** | **8.04** | **98** | P | **P** | **08 58 04.0** | **+0.8** |
| **NIUE** | **Niue** | **8.04** | **98** | P | **P** | **08 58 04.7** | **+1.4** |
| | comp=Z,1μm,0.7s | | | | | | |
| **FUNA** | **Funafuti** | **9.85** | **346** | P | **P** | **08 58 22.7** | **+0.5** |
| **FUNA** | **Funafuti** | **9.85** | **346** | P | **P** | **08 58 22.6** | **+0.3** |
| **GLKZ** | **Green Lake** | **11.08** | **178** | P | **P** | **08 58 34.2** | **-0.8** |
| GLKZ | | | | S | **S** | **09 00 39.4** | **+1.9** |
| **LIFNC** | **LIFOU** | **13.84** | **257** | P | **P** | **08 59 05.3** | **+0.9** |
| **LIFNC** | **LIFOU** | **13.84** | **257** | P | **P** | **08 59 04.9** | **+0.4** |
| **PINNC** | **Pines Island,** | **14.04** | **249** | P | **P** | **08 59 08.6** | **+2.1** |
| **PINNC** | **Pines Island,** | **14.04** | **249** | P | **P** | **08 59 07.5** | **+1.0** |
| **YATNC** | **Mamie plateau,** | **14.40** | **252** | P | **P** | **08 59 12.2** | **+1.9** |
| **DZM** | **Mont Dzumac** | **14.81** | **252** | P | **P** | **08 59 15.8** | **+1.1** |
| **DZM** | **Mont Dzumac** | **14.81** | **252** | P | **P** | **08 59 15.3** | **+0.6** |
| **DZM** | **Mont Dzumac** | **14.81** | **252** | P | **P** | **08 59 15.5** | **+0.8** |
| | comp=Z,20nm,0.5s,baz=74,slow=22,SNR=16 | | | | | | |
| **NOUC** | **Port Laguerre** | **14.94** | **252** | P | **P** | **08 59 19.1** | **+3.1** |
| **KOUNC** | **Koumac, New Ca** | **16.56** | **259** | P | **P** | **08 59 34.1** | **+1.2** |
| **KOUNC** | **Koumac, New Ca** | **16.56** | **259** | P | **P** | **08 59 33.8** | **+0.8** |
| **RAR** | **Rarotonga** | **17.76** | **103** | P | **P** | **08 59 43.7** | **-0.9** |
| | comp=Z,26nm,0.8s,baz=264,slow=11,SNR=4.5 | | | | | | |
| **OUZ** | **Omahuta** | **18.46** | **201** | P | **P** | **08 59 54.1** | **+3.4** |
| **WCZ** | **Waipu Caves** | **18.88** | **199** | P | **P** | **08 59 58.4** | **+3.8** |
| **HAZ** | **Te Kaha** | **19.84** | **189** | P | **P** | **09 00 03.3** | **-0.1** |
| HAZ | | | | S | **S** | **09 03 11.2** | **-4.8** |
| **PKGZ** | **Pakihiroa** | **19.90** | **188** | P | **P** | **09 00 05.1** | **+1.1** |
| **RUGZ** | **Raukumara Rang** | **20.06** | **189** | P | **P** | **09 00 07.9** | **+2.4** |
| **PUZ** | **Puketiti** | **20.08** | **188** | P | **P** | **09 00 06.0** | **+0.4** |
| PUZ | | | | S | **S** | **09 03 15.6** | **-4.5** |
| **TGRZ** | **Tauranga** | **20.08** | **193** | P | **P** | **09 00 08.2** | **+2.6** |
| **OPRZ** | **Ohinepanea** | **20.14** | **192** | P | **P** | **09 00 07.7** | **+1.6** |
| **TWGZ** | **Tauwhareparae** | **20.22** | **188** | P | **P** | **09 00 07.5** | **+0.5** |
| TWGZ | | | | S | **S** | **09 03 18.1** | **-4.2** |
| **TOZ** | **Tahuroa Road** | **20.25** | **194** | P | **P** | **09 00 09.7** | **+2.6** |
| **URZ** | **Urewera** | **20.44** | **190** | P | **P** | **09 00 08.8** | **0.0** |
| **URZ** | **Urewera** | **20.44** | **190** | P | **P** | **09 00 07.2** | **-1.6** |
| | comp=Z,46nm,0.5s,baz=36,slow=1.0,SNR=51 | | | | | | |
| URZ | | | | S | **S** | **09 03 18.6** | **-7.1** |
| | comp=Z,14nm,0.9s,baz=81,slow=22,SNR=1.6 | | | | | | |
| | comp=Z,46nm,0.5s | | | | | | |
| **URZ** | **Urewera** | **20.44** | **190** | P | **P** | **09 00 06.8** | **-2.0** |
| URZ | | | | S | **S** | **09 03 19.1** | **-6.6** |
| **MWZ** | **Matawai** | **20.44** | **189** | P | **P** | **09 00 07.7** | **-1.2** |
| MWZ | | | | S | **S** | **09 03 20.0** | **-5.9** |
| **TKGZ** | **Te Karaka** | **20.50** | **189** | P | **P** | **09 00 09.7** | **+0.3** |
| **RAGZ** | **Rawiri** | **20.62** | **189** | P | **P** | **09 00 10.1** | **-0.5** |
| **RRRZ** | **Republican Roa** | **20.62** | **192** | P | **P** | **09 00 10.8** | **+0.3** |
| **MUGZ** | **Murupara** | **20.71** | **191** | P | **P** | **09 00 09.4** | **-1.9** |
| MUGZ | | | | S | **S** | **09 03 19.5** | **-1.1** |
| **RIGZ** | **Rimuhau** | **20.77** | **189** | P | **P** | **09 00 08.8** | **-3.1** |
| **KNZ** | **Kokohu** | **21.09** | **189** | P | **P** | **09 00 14.8** | **+0.1** |
| **MRHZ** | **Matea Rd** | **21.12** | **191** | P | **P** | **09 00 14.5** | **-0.5** |
| **NGZ** | **Ngauruhoe** | **21.61** | **193** | P | **P** | **09 00 22.5** | **+2.9** |
| **MCHZ** | **McNeill Hill** | **21.66** | **190** | P | **P** | **09 00 20.1** | **+0.2** |
| MCHZ | | | | S | **S** | **09 03 46.3** | **+1.2** |
| **KWHZ** | **Kaweka Forest** | **21.69** | **191** | P | **P** | **09 00 20.9** | **+0.7** |
| **MOVZ** | **Moawhango** | **21.80** | **192** | P | **P** | **09 00 21.3** | **0.0** |
| **KRHZ** | **Kereru** | **21.91** | **191** | P | **P** | **09 00 21.6** | **-0.6** |
| KRHZ | | | | S | **S** | **09 03 41.9** | **-7.2** |
| **KAHZ** | **Kahuranaki** | **21.97** | **190** | P | **P** | **09 00 22.3** | **-0.4** |
| KAHZ | | | | S | **S** | **09 03 45.9** | **-4.2** |
| **PXZ** | **Pawanui** | **22.21** | **190** | P | **P** | **09 00 24.2** | **-0.6** |
| PXZ | | | | S | **S** | **09 03 48.8** | **-4.8** |
| **DVHZ** | **Dannevirke** | **22.59** | **191** | P | **P** | **09 00 27.6** | **-0.6** |
| **ANWZ** | **Angora Road** | **22.69** | **190** | P | **P** | **09 00 29.7** | **+0.6** |
| ANWZ | | | | S | **S** | **09 03 59.2** | **-2.1** |
| **BFZ** | **Birch Farm** | **22.95** | **191** | P | **P** | **09 00 30.4** | **-1.0** |
| **PPT** | **Papeete** | **27.38** | **93** | P | **P** | **09 01 08.7** | **-2.4** |
| | comp=Z,22nm,0.7s,baz=359,slow=3.6,SNR=5.7 | | | | | | |
| | comp=Z,22nm,0.7s | | | | | | |
| **EIDS** | **Eidsvold** | **29.24** | **250** | P | **P** | **09 01 27.7** | **+0.4** |
| **EIDS** | **Eidsvold** | **29.24** | **250** | P | **P** | **09 01 27.6** | **+0.4** |
| **EIDS** | **Eidsvold** | **29.24** | **250** | P | **P** | **09 01 27.1** | **-0.1** |
| | comp=Z,101nm,0.7s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **29.56** | **254** | P | **P** | **09 01 30.9** | **+0.9** |
| **ARMA** | **Armidale** | **29.87** | **240** | P | **P** | **09 01 34.5** | **+1.7** |
| **ARMA** | **Armidale** | **29.87** | **240** | P | **P** | **09 01 34.1** | **+1.3** |
| ARMA | | | | IAmb | IAmb | 09 01 35.4 | |
| | comp=Z,44nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **29.87** | **240** | P | **P** | **09 01 34.1** | **+1.3** |
| | comp=Z,71nm,1.0s | | | | | | |
| **AUPHS** | **Peel High Scho** | **30.68** | **239** | P | **P** | **09 01 41.6** | **+1.9** |
| **AUAYR** | **Ayr State High** | **32.40** | **262** | P | **P** | **09 01 55.4** | **+0.9** |
| **AULRC** | **Lightning Ridg** | **32.69** | **244** | P | **P** | **09 01 58.0** | **+1.2** |
| **AUDCS** | **Dubbo College** | **32.86** | **238** | P | **P** | **09 01 59.9** | **+1.6** |
| **TV1H** | **Townsville Har** | **33.00** | **262** | P | **P** | **09 02 00.1** | **+0.5** |
| **CNB** | **Canberra Magne** | **33.33** | **233** | P | **P** | **09 02 04.1** | **+1.8** |
| **CNB** | **Canberra Magne** | **33.33** | **233** | P | **P** | **09 02 03.3** | **+1.0** |
| | comp=Z,59nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **33.46** | **261** | P | **P** | **09 02 04.0** | **+0.6** |
| **CTA** | **Charters Tower** | **33.46** | **261** | P | **P** | **09 02 04.2** | **+0.6** |
| | comp=Z,7.4nm,0.6s,baz=92,slow=9.7,SNR=71 | | | | | | |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.46** | **261** | P | **P** | **09 02 04.1** | **+0.6** |
| **CTAO** | **Charters Tower** | **33.46** | **261** | P | **P** | **09 02 04.2** | **+0.6** |
| **CTAO** | **Charters Tower** | **33.46** | **261** | ||P | **P** | **09 02 04.1** | **+0.6** |
| **CAN** | **Canberra** | **33.61** | **233** | P | **P** | **09 02 06.2** | **+1.6** |
| **CAN** | **Canberra** | **33.61** | **233** | P | **P** | **09 02 05.5** | **+0.9** |
| CAN | | | | IAmb | IAmb | 09 02 07.0 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.61** | **233** | P | **P** | **09 02 05.7** | **+1.1** |
| | comp=Z,53nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **33.61** | **233** | P | **P** | **09 02 06.0** | **+1.4** |
| CAN | | | | PcP | **PcP** | **09 04 36.6** | **+5.9** |
| **PMG** | **Port Moresby** | **34.55** | **280** | P | **P** | **09 02 14.1** | **+1.3** |
| **PMG** | **Port Moresby** | **34.55** | **280** | P | **P** | **09 02 14.0** | **+1.3** |
| **PMG** | **Port Moresby** | **34.55** | **280** | P | **P** | **09 02 13.2** | **+0.4** |
| PMG | | | | IAmb | IAmb | 09 02 14.7 | |
| | comp=Z,56nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **34.55** | **280** | P | **P** | **09 02 14.2** | **+1.3** |
| **CMSA** | **Cobar Meteorol** | **35.09** | **241** | P | **P** | **09 02 18.0** | **+1.0** |
| **CMSA** | **Cobar Meteorol** | **35.09** | **241** | P | **P** | **09 02 17.6** | **+0.6** |
| | comp=Z,90nm,0.8s | | | | | | |
| **MTSU** | **Mount Surprise** | **35.44** | **264** | P | **P** | **09 02 20.3** | **+0.1** |
| **QLP** | **Quilpie** | **35.51** | **250** | P | **P** | **09 02 21.7** | **+1.1** |
| **QLP** | **Quilpie** | **35.51** | **250** | P | **P** | **09 02 20.6** | **0.0** |
| | comp=Z,247nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **37.07** | **231** | P | **P** | **09 02 35.2** | **+1.8** |
| **TOO** | **Toolangi** | **37.07** | **231** | P | **P** | **09 02 34.6** | **+1.1** |
| TOO | | | | IAmb | IAmb | 09 02 35.8 | |
| | comp=Z,52nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **37.07** | **231** | P | **P** | **09 02 32.6** | **-0.8** |
| | comp=Z,77nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.16** | **271** | P | **P** | **09 02 35.6** | **+1.1** |
| **COEN** | **Coen** | **37.16** | **271** | P | **P** | **09 02 35.0** | **+0.5** |
| **COEN** | **Coen** | **37.16** | **271** | P | **P** | **09 02 34.7** | **+0.3** |
| | comp=Z,170nm,1.0s | | | | | | |
| **MANU** | **Manus Island** | **37.23** | **292** | P | **P** | **09 02 36.1** | **+1.1** |
| **BRAT** | **Ballarat** | **38.22** | **232** | P | **P** | **09 02 44.4** | **+1.6** |
| **STKA** | **Stephens Creek** | **38.57** | **241** | P | **P** | **09 02 47.0** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.57** | **241** | P | **P** | **09 02 47.0** | **+1.2** |
| **STKA** | **Stephens Creek** | **38.57** | **241** | P | **P** | **09 02 46.8** | **+1.1** |
| | comp=Z,19nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.57** | **241** | P | **P** | **09 02 47.2** | **+1.4** |
| | comp=Z,56nm,0.7s,baz=92,slow=10,SNR=135 | | | | | | |
| | comp=Z,56nm,0.7s | | | | | | |
| **INKA** | **Innaminka** | **38.71** | **248** | P | **P** | **09 02 48.3** | **+1.4** |
| **ARPS** | **Mount Arapiles** | **39.56** | **234** | P | **P** | **09 02 54.9** | **+1.2** |
| **ARPS** | **Mount Arapiles** | **39.56** | **234** | P | **P** | **09 02 53.7** | **0.0** |
| | comp=Z,58nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **39.67** | **259** | P | **P** | **09 02 55.2** | **+0.4** |
| **QIS** | **Mount Isa** | **39.67** | **259** | P | **P** | **09 02 54.7** | **-0.1** |
| | comp=Z,22nm,0.6s | | | | | | |
| **HTT** | **Hallett** | **41.08** | **240** | P | **P** | **09 03 07.1** | **+1.1** |
| **HTT** | **Hallett** | **41.08** | **240** | P | **P** | **09 03 06.5** | **+0.5** |
| | comp=Z,93nm,0.7s | | | | | | |
| **LCRK** | **Leigh Creek** | **41.21** | **244** | P | **P** | **09 03 07.8** | **+0.8** |
| **TABU** | **Tabubil** | **41.49** | **283** | P | **P** | **09 03 11.0** | **+1.5** |
| **WHYH** | **Whyalla** | **42.12** | **241** | P | **P** | **09 03 15.4** | **+1.2** |
| **JAY** | **Jayapura** | **43.02** | **286** | P | **P** | **09 03 22.0** | **+0.4** |
| | comp=Z,54nm,0.8s | | | | | | |
| **OOD** | **Oodnadatta** | **43.19** | **249** | P | **P** | **09 03 23.8** | **+1.2** |
| **BBOO** | **Buckleboo** | **43.34** | **241** | P | **P** | **09 03 24.4** | **+0.6** |
| **BBOO** | **Buckleboo** | **43.34** | **241** | P | **P** | **09 03 24.6** | **+0.7** |
| **BBOO** | **Buckleboo** | **43.34** | **241** | P | **P** | **09 03 24.3** | **+0.5** |
| | comp=Z,96nm,0.8s | | | | | | |
| **GENI** | **Genyem** | **43.48** | **286** | P | **P** | **09 03 25.3** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.45** | **260** | P | **P** | **09 03 32.1** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 09 03 33.3 | |
| | comp=Z,50nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.61** | **260** | P | **P** | **09 03 33.3** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 09 03 34.3 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.63** | **260** | P | **P** | **09 03 33.9** | **-0.1** |
| **WRAB** | **Tennant Creek** | **44.64** | **260** | P | **P** | **09 03 33.7** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 09 03 34.4 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **09 03 33.3** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **09 03 33.5** | **-0.7** |
| | comp=Z,39nm,0.7s,baz=97,slow=6.8,SNR=510 | | | | | | |
| WRA | | | | S | **S** | **09 09 27.5** | **-6.2** |
| | comp=Z,1.6nm,0.9s,baz=94,slow=13,SNR=4.7 | | | | | | |
| | comp=Z,39nm,0.7s | | | | | | |
| **AS01** | **Alice Springs** | **44.74** | **254** | P | **P** | **09 03 35.4** | **+0.6** |
| **MULG** | **Mulgathing** | **44.77** | **245** | P | **P** | **09 03 35.1** | **+0.2** |
| **AS31** | **Alice Springs** | **44.78** | **254** | P | **P** | **09 03 35.5** | **+0.3** |
| **AS31** | **Alice Springs** | **44.78** | **254** | P | **P** | **09 03 34.8** | **-0.4** |
| | comp=Z,107nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | **P** | **09 03 35.5** | **+0.3** |
| | comp=Z,220nm,0.6s,baz=88,slow=8.3,SNR=1732 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 05 05.8** | **-1.0** |
| | comp=Z,2.1nm,0.5s,baz=86,slow=4.2,SNR=2.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **09 08 11.3** | **0.0** |
| | comp=Z,0.9nm,0.6s,baz=112,slow=4.5,SNR=3.1 | | | | | | |
| ASAR | | | | S | **S** | **09 09 32.2** | **-3.4** |
| | comp=Z,2.0nm,0.8s,baz=89,slow=15,SNR=7.5 | | | | | | |
| **KDU** | **Kakadu** | **47.61** | **269** | P | **P** | **09 03 56.8** | **+0.1** |
| **KDU** | **Kakadu** | **47.61** | **269** | P | **P** | **09 03 56.1** | **-0.6** |
| | comp=Z,89nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **48.85** | **269** | P | **P** | **09 04 05.6** | **-0.4** |
| **MTN** | **Manton Dam** | **48.85** | **269** | P | **P** | **09 04 05.2** | **-0.8** |
| MTN | | | | IAmb | IAmb | 09 04 06.4 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **48.85** | **269** | P | **P** | **09 04 04.7** | **-1.3** |
| | comp=Z,7nm,1.1s | | | | | | |
| **DRS** | **Darwin Rock St** | **49.16** | **269** | P | **P** | **09 04 08.2** | **-0.1** |
| **WRKA** | **Warakurna** | **49.83** | **252** | P | **P** | **09 04 13.5** | **+0.3** |
| **WRKA** | **Warakurna** | **49.83** | **252** | P | **P** | **09 04 13.0** | **-0.2** |
| | comp=Z,163nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **49.96** | **245** | P | **P** | **09 04 14.0** | **0.0** |
| **FORT** | **Forrest** | **49.96** | **245** | P | **P** | **09 04 13.8** | **-0.2** |
| **FORT** | **Forrest** | **49.96** | **245** | P | **P** | **09 04 13.2** | **-0.8** |
| | comp=Z,110nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **50.52** | **264** | P | **P** | **09 04 18.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KASI** | **Kota Agung** | **76.11** | **269** | P | | **P** | **09 07 01.4** | **-1.5** |
| **USRK** | **Ussuriysk Ar.** | **76.83** | **326** | P | | **P** | **09 07 06.8** | **+0.6** |
| | comp=Z,2.2nm,0.8s,baz=103,slow=4.7,SNR=5.9 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **PLK4** | **Peulik 4** | **77.67** | **12** | P | | **P** | **09 07 09.3** | **-1.2** |
| PLK4 | | | | IAmb | | IAmb | 09 08 53.4 | |
| | comp=Z,98nm,1.8s | | | | | | | |
| **NJ2** | **Nanjing** | **78.13** | **309** | *e*P | | **P** | **09 07 15.3** | **+1.8** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.55** | **44** | P | | **P** | **09 07 21.1** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=225,slow=9.2,SNR=9.5 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **CN2** | **Changchun** | **80.24** | **322** | *e*P | | **P** | **09 07 23.1** | **-1.3** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| **BNX** | **BinXian** | **80.31** | **325** | ⇑P | | **P** | **09 07 24.8** | **0.0** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **KLR** | **Kul'dur** | **80.34** | **329** | P | | **P** | **09 07 24.6** | **-0.2** |
| | comp=Z,0.6nm,0.3s,baz=97,slow=10,SNR=3.0 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **SMAI** | **San Martin Ant** | **80.92** | **159** | P | | **P** | **09 07 28.6** | **+1.0** |
| SMAI | | | | IAmb | | IAmb | 09 07 29.6 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.26** | **8** | P | | **P** | **09 07 29.3** | **0.0** |
| **BELA** | **Belgrano 2** | **81.93** | **173** | P | | **P** | **09 07 32.4** | **-0.3** |
| BELA | | | | IAmb | | IAmb | 09 07 33.3 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **K17K** | **Iditarod** | **82.12** | **9** | P | | **P** | **09 07 33.4** | **-0.3** |
| **J16K** | **Anvik River** | **82.34** | **8** | P | | **P** | **09 07 34.6** | **-0.2** |
| **U15A** | **North Rim** | **82.63** | **48** | P | | **P** | **09 07 37.2** | **-0.1** |
| **J17K** | **VABM Dome** | **82.65** | **9** | P | | **P** | **09 07 36.4** | **0.0** |
| **MAW** | **Mawson** | **83.66** | **200** | P | | **P** | **09 07 41.8** | **+0.2** |
| | comp=Z,1.8nm,0.7s,baz=101,slow=4.2,SNR=4.3 | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **83.92** | **275** | P | | **P** | **09 07 42.9** | **-1.1** |
| RPSI | | | | IAmb | | IAmb | 09 07 44.1 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **PSI** | **Prapat** | **83.96** | **275** | P | | **P** | **09 07 43.5** | **-0.7** |
| **SEY** | **Seymchan** | **84.01** | **347** | P | | **P** | **09 07 41.8** | **-1.3** |
| | comp=Z,5.0nm,0.5s,baz=131,slow=5.3,SNR=18 | | | | | | | |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **85.96** | **319** | *e*P | | **P** | **09 07 49.8** | **-3.4** |
| XLT | | | | sP | | sP | 09 10 32.8 | -1.9 |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,290nm,6.1s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.07** | **58** | P | | **P** | **09 07 54.9** | **+0.7** |
| **TXAR** | **Lajitas Array** | **86.07** | **58** | P | | **P** | **09 07 55.2** | **+1.1** |
| | comp=Z,1.7nm,0.8s,baz=220,slow=6.3,SNR=24 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **IL31** | | **86.10** | **13** | P | | **P** | **09 07 52.0** | **-1.2** |
| **ILAR** | **Eielson Array** | **86.10** | **13** | P | | **P** | **09 07 51.8** | **-1.5** |
| | comp=Z,0.7nm,0.4s,baz=221,slow=5.5,SNR=8.2 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **XAN** | **Xi'an** | **86.44** | **307** | ⇑P | | **P** | **09 07 56.5** | **+0.8** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.47** | **314** | *e*P | | **P** | **09 08 03.0** | **+2.5** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,110nm,4.2s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.48** | **43** | P | | **P** | **09 08 00.1** | **-0.5** |
| | comp=Z,0.4nm,0.6s,baz=203,slow=3.1,SNR=6.6 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **ELIB** | **Princess Elisa** | **88.94** | **187** | *d*P | | **P** | **09 08 06.4** | **-0.5** |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.01** | **290** | P | | **P** | **09 08 08.3** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **89.01** | **290** | P | | **P** | **09 08 08.1** | **0.0** |
| | comp=Z,1.9nm,0.5s,baz=120,slow=3.2,SNR=14 | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **89.31** | **298** | P | | **P** | **09 08 10.4** | **+1.0** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,50nm,3.5s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.08** | **180** | ⇑P | | **P** | **09 08 11.8** | **-0.4** |
| | comp=Z,223nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **90.37** | **179** | ⇑P | | **P** | **09 08 12.7** | **-0.7** |
| | comp=Z,64nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.37** | **179** | P | | **P** | **09 08 12.7** | **-0.7** |
| | comp=Z,2.4nm,0.6s,baz=306,slow=3.5,SNR=6.8 | | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.51** | **176** | ⇑P | | **P** | **09 08 13.6** | **-0.4** |
| | comp=Z,10nm,0.6s | | | | | | | |
| **LZH** | **Lanzhou** | **91.07** | **308** | *e*P | | **P** | **09 08 18.3** | **+0.9** |
| LZH | | | | pP | | pP | 09 10 11.3 | +2.7 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **PLCA** | **Paso Flores** | **91.13** | **134** | P | | **P** | **09 08 17.4** | **-0.2** |
| | comp=Z,2.6nm,1.0s,baz=235,slow=9.6,SNR=3.0 | | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **93.76** | **319** | P | | **P** | **09 08 28.7** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=104,slow=6.1,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **WMQ** | **Urumqi** | **105.13** | **312** | Pdif | | **Pdif** | **09 09 20.5** | **+0.2** |
| **BVAR** | **Borovoye Array** | **117.06** | **321** | PKP | | **PKPdf** | **09 13 52.1** | **-1.7** |
| | comp=Z,1.0nm,0.4s,baz=221,slow=0.5,SNR=4.5 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.69** | **5** | PKhKP | | PKPpre | 09 14 36.8 | |
| | comp=Z,0.3nm,0.5s,baz=20,slow=2.5,SNR=1.8 | | | | | | | |
| **GAZ** | **Gaziantep** | **143.52** | **309** | PKPdf | | PKPab | 09 14 41.9 | -0.6 |
| **BURAR** | **Bucovina Array** | **144.84** | **332** | PKPdf | | **PKPdf** | **09 14 46.0** | **-0.2** |
| **BR131** | **Keskin Array S** | **144.98** | **315** | PKPdf | | **PKPdf** | **09 14 45.5** | **-1.2** |
| **BRTR** | **Keskin Array B** | **144.98** | **315** | PKPbc | | **PKPdf** | **09 14 46.5** | **-0.2** |
| | comp=Z,2.6nm,0.7s,baz=122,slow=3.5,SNR=19 | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **145.03** | **336** | *e*PKP | | **PKPdf** | **09 14 47.1** | **+0.8** |
| **CLL** | **Collm** | **145.70** | **347** | *i* PKPbc | | **PKPdf** | **09 14 48.0** | **+0.7** |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.31** | **303** | PKPbc | | **PKPdf** | **09 14 50.9** | **+1.8** |
| | comp=Z,4.3nm,0.6s,baz=72,slow=5.4,SNR=12 | | | | | | | |
| **VYHS** | **Vyhne** | **146.65** | **339** | *e*PKP | | **PKPbc** | **09 14 51.3** | **-0.3** |
| **KHC** | **Kasperske Hory** | **147.61** | **345** | *e*PKP | | **PKPbc** | **09 14 53.5** | **-0.6** |
| **GERES** | **GERESS Array B** | **147.85** | **345** | PKPbc | | **PKPbc** | **09 14 53.9** | **-0.9** |
| | comp=Z,1.5nm,0.5s,baz=156,slow=10,SNR=5.4 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.10** | **342** | *i* PKP | | **PKPbc** | **09 14 54.9** | **-0.5** |
| | comp=Z,8.1nm,1.5s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.17** | **341** | *i* PKiKP | | **PKPbc** | **09 14 56.1** | **+0.6** |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **MOA** | **Molln** | **148.62** | **344** | *e*PKiKP | | **PKPbc** | **09 14 57.0** | **+0.3** |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.93** | **344** | *i* PKP | | **PKPdf** | **09 14 55.8** | **+3.0** |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.42** | **345** | *e*PKP | | **PKPbc** | **09 14 58.0** | **-0.8** |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **SOKA** | **Soboth** | **149.47** | **342** | *e*PKiKP | | **PKPbc** | **09 14 59.2** | **+0.3** |
| | comp=Z,1.4nm,1.0s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.57** | **344** | *i* PKP | | **PKPbc** | **09 14 58.0** | **-1.3** |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **WATA** | **Walderalm** | **149.76** | **347** | *i* PKP | | **PKPbc** | **09 14 59.1** | **-0.5** |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **RETA** | **Reutte** | **149.79** | **348** | *e*PKiKP | | **PKiKP** | **09 15 01.1** | **+0.9** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.81** | **346** | *i* PKP | | **PKPbc** | **09 14 59.0** | **-0.8** |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **MOTA** | **Moosalm** | **149.85** | **347** | *i* PKP | | **PKPbc** | **09 14 58.7** | **-1.1** |
| | comp=Z,3.1nm,0.7s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.91** | **343** | *i* PKP | | **PKPbc** | **09 14 58.4** | **-1.5** |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.95** | **347** | *i* PKP | | **PKPbc** | **09 14 59.4** | **-0.7** |
| | comp=Z,6.4nm,0.7s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.09** | **345** | *i* PKP | | **PKPbc** | **09 14 59.2** | **-1.1** |
| | comp=Z,2.9nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **150.24** | **347** | *i* PKP | | **PKPbc** | **09 14 59.2** | **-1.6** |
| | comp=Z,1.4nm,0.6s | | | | | | | |

**IDC 21 08:58:54.8±3.3, 54°27N×87°12E, h0km, mbtmp3.0/2, ML2.1/2, Error ellipse: s-maj=29.7km s-min=18.0km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.39** | **258** | I | I | 09 07 50.0 | |
| | baz=77,slow=320,SNR=3.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.39** | **258** | Pg | Pn | 08 59 19.9 | -1.6 |
| | 0.8nm,0.3s,baz=74,slow=15,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 08 59 39.4 | |
| | 0.8nm,0.3s,baz=76,slow=25,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.39** | **239** | Pn | Pn | 09 00 30.8 | +0.6 |
| | baz=53,slow=14,SNR=2.5 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.09** | **204** | Pn | Pn | 09 00 55.0 | +1.6 |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=4.3 | | | | | | |
| MKAR | | | | Sn | Sn | 09 02 24.9 | -0.7 |
| | 0.1nm,0.3s,baz=26,slow=26,SNR=5.7 | | | | | | |
| MKAR | | | | Lg | Lg | 09 03 03.0 | |
| | baz=22,slow=28 | | | | | | |
| | 0.8nm,0.8s | | | | | | |

*NEIC **21** 09:03:26.7±2.0, 18°.1S±0°.2×177°.8W±0°.1, h544km±10km, mb4.3/13, Error ellipse: s-maj=24.4km s-min=16.8km az=172.0*
*IDC **21** 09:03:31.4±5.8, 17°.93S×178°.11W, h586km±65km, mb3.0/7, mbtmp3.9/7, Error ellipse: s-maj=39.7km s-min=29.4km az=148.0*

**ISC 21 09:03:31.3±0.7, 18°.1S±0°.2×178°.0W±0°.1, h590km, n28, σ0s81/28, mb4.1/15, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.76** | **275** | P | **P** | **09 04 55.7** | **+1.2** |
| **AFI** | **Afiamalu** | **7.30** | **56** | P | P | 09 05 12.9 | -11 |
| **NIUE** | **Niue** | **7.74** | **99** | P | P | 09 05 17.9 | -10 |
| **MSWZ** | **Moikau Station** | **23.95** | **193** | P | **P** | **09 07 58.2** | **-2.3** |
| **CTA** | **Charters Tower** | **33.78** | **261** | P | **P** | **09 09 25.6** | **-0.2** |
| | 0.2nm,0.7s,baz=335,slow=15,SNR=2.1 | | | | | | |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **09 10 08.0** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **09 10 07.9** | **+0.5** |
| | 1.6nm,0.5s,baz=99,slow=11,SNR=5.1 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.64** | **241** | P | **P** | **09 10 45.3** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 09 11 07.9 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.77** | **260** | P | **P** | **09 10 53.5** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 09 11 00.1 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.93** | **260** | P | **P** | **09 10 54.5** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 09 11 28.4 | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **09 10 54.7** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 09 11 01.6 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.96** | **260** | P | **P** | **09 10 54.5** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 09 11 09.4 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **09 10 54.9** | **-0.5** |
| | comp=Z,1.3nm,0.5s,baz=95,slow=7.2,SNR=27 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 12 23.6** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=90,slow=3.8,SNR=4.7 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.10** | **254** | P | **P** | **09 10 56.4** | **0.0** |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **09 10 55.9** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **09 10 56.2** | **-0.1** |
| | comp=Z,5.3nm,0.6s,baz=87,slow=8.7,SNR=38 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 12 24.2** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=107,slow=3.8,SNR=5.1 | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.27** | **245** | P | **P** | **09 11 35.1** | **+0.4** |
| FORT | | | | IAmb | IAmb | 09 11 38.1 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.37** | **261** | P | **P** | **09 11 56.6** | **-0.5** |
| **MBWA** | **Marble Bar** | **58.39** | **256** | P | **P** | **09 12 31.5** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 09 12 51.1 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | **P** | **09 13 57.1** | **+1.2** |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | **P** | **09 13 56.9** | **+1.0** |
| | comp=Z,0.6nm,0.8s,baz=35,slow=8.2,SNR=1.5 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.78** | **57** | P | **P** | **09 15 10.3** | **+0.7** |
| | comp=Z,2.2nm,0.6s,baz=246,slow=4.5,SNR=3.0 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.98** | **13** | P | **P** | **09 15 08.4** | **-1.1** |
| | comp=Z,0.5nm,0.8s,baz=193,slow=7.4,SNR=1.1 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **RDMU** | **Red Mountain** | **86.21** | **45** | P | **P** | **09 15 11.5** | **+0.1** |
| **PDAR** | **Pinedale Array** | **87.23** | **43** | P | **P** | **09 15 16.7** | **+0.5** |
| | comp=Z,2.0nm,0.4s,baz=202,slow=4.7,SNR=2.0 | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **90.01** | **10** | P | **P** | **09 15 26.9** | **-1.2** |
| **BRTR** | **Keskin Array B** | **145.18** | **315** | PKP | **PKPdf** | **09 22 02.8** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=119,slow=4.5,SNR=6.1 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.56** | **303** | PKPbc | **PKPbc** | **09 22 07.3** | **-0.6** |
| | comp=Z,0.7nm,0.3s,baz=90,slow=4.2,SNR=4.1 | | | | | | |

*CATAC **21** 09:03:31.3±0.9, 8°.54N×83°.26W, h3km±4km, ML2.8*
*UPA **21** 09:03:32.4±1.0, 8°.61N×83°.18W, h4km±9km, ML3.4*

**ISC 21 09:03:32.4±1.4, 8°.62N±0°.07×83°.21W±0°.04, h13km±11km, n11, σ0s82/21, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CDITO** | **Canoas** | **0.34** | **97** | *i* P | **Pg** | **09 03 39.4** | **+0.1** |
| CDITO | | | | *i* S | **Sg** | **09 03 44.1** | **+0.2** |
| CDITO | | | | IAML | | 09 03 48.2 | |
| | comp=Z,410nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.55** | **71** | *i* P | **Pb** | **09 03 43.7** | **-0.2** |
| BRU2 | | | | *i* S | **Sb** | **09 03 52.3** | **+0.6** |
| BRU2 | | | | IAML | | 09 03 57.2 | |
| | comp=Z,550nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.55** | **71** | *e*P | **Pb** | **09 03 43.6** | **-0.2** |
| BRU2 | | | | *e*S | **Sb** | **09 03 52.5** | **+0.8** |
| **OCHAL** | **Ojochal** | **0.64** | **318** | *i* P | **Pg** | **09 03 44.1** | **-0.8** |
| OCHAL | | | | *i* S | **Sg** | **09 03 54.1** | **+0.7** |
| OCHAL | | | | IAML | | 09 03 56.7 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.64** | **357** | *i* P | **Pg** | **09 03 45.1** | **+0.1** |
| DRK0 | | | | *i* S | **Sg** | **09 03 55.1** | **+1.6** |
| DRK0 | | | | IAML | | 09 03 55.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **BCO2** | **Palmira** | **0.68** | **82** | *i* P | **Pg** | **09 03 45.8** | **+0.1** |
| BCO2 | | | | AMP | | 09 03 46.3 | |
| | comp=Z,2μm,0.1s | | | | | | |
| BCO2 | | | | *e*S | **Sb** | **09 03 56.8** | **+1.1** |
| **DVD** | **David** | **0.78** | **103** | *e*P | **Pb** | **09 03 47.5** | **-0.2** |
| DVD | | | | *e*S | **Sb** | **09 03 59.1** | **+1.0** |
| **LOCO3** | **Loma Colorada,** | **0.81** | **105** | *e*P | **Pb** | **09 03 48.5** | **+0.2** |
| **CNI2** | **El Empalme, Bo** | **1.09** | **42** | *e*P | **Pg** | **09 03 52.6** | **-0.7** |
| CNI2 | | | | *e*S | **Sg** | **09 04 07.1** | **-0.4** |
| **CHGR2** | **Aguacate** | **1.10** | **73** | *e*P | **Pg** | **09 03 51.9** | **-1.7** |
| CHGR2 | | | | *e*S | **Sg** | **09 04 07.9** | **-0.2** |
| **LCR2** | **La Lucha 2** | **1.36** | **325** | *i* P | **Pn** | **09 03 56.9** | **-0.4** |
| LCR2 | | | | *i* S | **Sg** | **09 04 16.1** | **-0.3** |
| LCR2 | | | | IAML | | 09 04 18.3 | |
| | comp=Z,110nm,1.0s | | | | | | |

**IDC 21 09:04:43.2±5.9, 53°.51N×91°.79E, h0km, mbtmp3.0/3, ML2.4/3, Error ellipse: s-maj=62.2km s-min=31.1km az=47.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **4.17** | **279** | I | I | 09 32 00.0 | |
| | baz=96,slow=319,SNR=2.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **4.17** | **279** | Pn | Pn | 09 05 48.4 | +0.5 |
| | 0.2nm,0.3s,baz=93,slow=15,SNR=2.8 | | | | | | |
| ZALV | | | | Sn | Sn | 09 06 39.3 | +2.1 |
| | 0.7nm,0.3s,baz=91,slow=25,SNR=3.3 | | | | | | |
| ZALV | | | | Lg | Lg | 09 06 55.1 | |
| | 0.5nm,0.3s,baz=89,slow=26,SNR=1.1 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.67** | **256** | Pn | Pn | 09 06 48.9 | -0.7 |
| | 0.1nm,0.3s,baz=63,slow=14,SNR=1.4 | | | | | | |
| KURBB | | | | Lg | Lg | 09 09 10.1 | |
| | 0.2nm,0.3s,baz=67,slow=33,SNR=2.1 | | | | | | |
| | 0.8nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **9.07** | **226** | Pn | Pn | 09 06 56.1 | +0.8 |
| | 0.1nm,0.3s,baz=42,slow=16,SNR=1.6 | | | | | | |
| MKAR | | | | Lg | Lg | 09 09 26.2 | |
| | baz=36,slow=32,SNR=3.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

**IDC 21 09:05:12.0±4.7, 53°.50N×90°.87E, h0km, mbtmp3.2/3, ML2.4/3, Error ellipse: s-maj=48.3km s-min=36.6km az=91.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.62** | **280** | I | I | 09 27 00.0 | |
| | baz=91,slow=314,SNR=1.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.62** | **280** | Pn | Pn | 09 06 09.9 | +0.5 |
| | 0.4nm,0.3s,baz=92,slow=16,SNR=4.3 | | | | | | |
| | 2.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.13** | **254** | Pn | Pn | 09 07 11.4 | +0.1 |
| | 0.1nm,0.3s,baz=65,slow=15,SNR=1.8 | | | | | | |
| KURBB | | | | Lg | Lg | 09 09 29.8 | |
| | 0.2nm,0.3s,baz=70,slow=32,SNR=8.8 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.68** | **223** | Pn | Pn | 09 07 19.2 | +0.4 |
| | 0.1nm,0.3s,baz=34,slow=16,SNR=2.8 | | | | | | |
| MKAR | | | | Lg | Lg | 09 09 47.2 | |
| | baz=37,slow=27,SNR=1.6 | | | | | | |
| | 0.5nm,0.6s | | | | | | |

*IDC **21** 09:07:51.6±1.8, 8°.81S×67°.33E, h0km, mb4.0/8, mbtmp4.0/8, MS3.6/20, Error ellipse: s-maj=51.5km s-min=26.2km az=53.0*
*NEIC **21** 09:07:54.7±0.5, 8°.9S±0°.1×67°.64E±0°.09, h10km±1km, mb4.7/11, Error ellipse: s-maj=21.7km s-min=14.8km az=172.0*

**ISC 21 09:07:54.3±0.6, 8°.9S±0°.1×67°.61E±0°.08, h13km, n50, σ0s90/30, mb4.3/15, MS3.6/20, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Garcia H** | **4.96** | **76** | Pn | **Pn** | **09 09 08.6** | **+0.1** |
| | baz=271,slow=74 | | | | | | |
| H08S1 | | | | T | T | 09 14 19.2 | |
| | baz=265 | | | | | | |
| **H08S3** | **Diego Garcia H** | **4.98** | **76** | Pn | **Pn** | **09 09 08.8** | **+0.1** |
| | baz=145,slow=74 | | | | | | |
| H08S3 | | | | T | T | 09 14 25.7 | |
| | baz=265 | | | | | | |
| **H08S2** | **Diego Garcia H** | **4.98** | **76** | Pn | **Pn** | **09 09 08.8** | **+0.1** |
| H08S2 | | | | T | T | 09 14 19.4 | |
| | baz=265 | | | | | | |
| **MSEY** | **Mahe Island** | **12.75** | **288** | Pn | **Pn** | **09 10 56.2** | **+0.6** |
| **PALK** | **Pallekele** | **20.68** | **40** | LR | LR | 09 18 34.7 | |
| | comp=Z,162nm,21.2s,baz=321,slow=31 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **31.19** | **283** | LR | LR | 09 24 26.0 | |
| | comp=Z,50nm,18.4s,baz=93,slow=32 | | | | | | |
| **WSAR** | **Wadi Sarin** | **33.11** | **345** | LR | LR | 09 24 32.9 | |
| | comp=Z,78nm,20.2s,baz=176,slow=30 | | | | | | |
| **FURI** | **Furi** | **33.80** | **301** | LR | LR | 09 25 18.9 | |
| | comp=Z,65nm,21.8s,baz=186,slow=31 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **39.55** | **197** | T | T | 09 57 37.5 | |
| | baz=30,slow=76,SNR=8.0 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **39.55** | **197** | T | T | 09 57 38.1 | |
| | baz=30,slow=76,SNR=14 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **39.57** | **197** | T | T | 09 57 36.4 | |
| | baz=30,slow=76,SNR=12 | | | | | | |
| **CRZF** | **Crozet Islands** | **39.77** | **197** | P | **P** | **09 15 27.2** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **41.16** | **49** | P | **P** | **09 15 37.5** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **41.16** | **49** | P | **P** | **09 15 40.4** | **+1.7** |
| | 1.0nm,0.3s,baz=246,slow=8.4,SNR=1.4 | | | | | | |
| CMAR | | | | LR | LR | 09 31 13.8 | |
| | comp=Z,27nm,18.2s,baz=255,slow=34 | | | | | | |
| | 1.0nm,0.3s | | | | | | |
| **SOE** | **Somerset East** | **45.49** | **232** | P | **P** | **09 16 13.2** | **-0.5** |
| SOE | | | | IAmb | IAmb | 09 16 16.7 | |
| | comp=Z,66nm,1.5s | | | | | | |
| **SBUM** | **Sibu** | **45.86** | **78** | P | **P** | **09 16 16.1** | **-0.7** |
| SBUM | | | | IAmb | IAmb | 09 16 20.3 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **49.74** | **129** | T | T | 10 10 21.1 | |
| | baz=290,slow=75,SNR=24 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **49.74** | **129** | T | T | 10 10 18.3 | |
| | baz=290,slow=75,SNR=31 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **49.75** | **129** | T | T | 10 10 21.9 | |
| | baz=290,slow=75,SNR=23 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **51.58** | **125** | LR | LR | 09 34 30.0 | |
| | comp=Z,73nm,20.0s,baz=290,slow=31 | | | | | | |
| **AAK** | **Ala-Archa** | **51.65** | **6** | LR | LR | 09 38 11.1 | |
| | comp=Z,48nm,18.8s,baz=170,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **51.87** | **89** | LR | LR | 09 36 22.7 | |
| | comp=Z,44nm,21.0s,baz=264,slow=33 | | | | | | |
| **CSS** | **Mathiatis** | **54.33** | **325** | P | **P** | **09 17 20.9** | **+0.2** |
| CSS | | | | IAmb | IAmb | 09 17 27.4 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **ENH** | **Enshi** | **55.97** | **44** | P | **P** | **09 17 32.5** | **-0.2** |
| **MK31** | **Makanchi Array** | **56.95** | **12** | P | **P** | **09 17 40.2** | **+0.8** |
| **MKAR** | **Makanchi Array** | **56.95** | **12** | P | **P** | **09 17 39.6** | **+0.2** |
| **MKAR** | **Makanchi Array** | **56.95** | **12** | P | **P** | **09 17 38.3** | **-1.1** |
| | comp=Z,1.0nm,0.8s,baz=195,slow=7.8,SNR=4.5 | | | | | | |
| MKAR | | | | LR | LR | 09 39 22.4 | |
| | comp=Z,34nm,19.2s,baz=192,slow=33 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **BR231** | **Keskin MP Arra** | **58.23** | **329** | P | **P** | **09 17 49.1** | **+0.5** |
| BR231 | | | | IAmb | IAmb | 09 18 00.2 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.28** | **354** | P | **P** | **09 17 49.0** | **+0.4** |
| **AKTO** | **Aktyubinsk** | **59.66** | **353** | LR | LR | 09 43 57.1 | |
| | comp=Z,38nm,18.2s,baz=154,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.01** | **8** | P | **P** | **09 17 59.7** | **-0.9** |
| | comp=Z,0.6nm,0.2s,baz=202,slow=6.6,SNR=4.4 | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PDHT** | **Panda Hill** | **6.41** | **94** | *i* P | | **Pn** | **09 26 54.6** | **+3.1** |
| PDHT | | | | *i* S | | **Sn** | **09 28 04.3** | **-0.7** |
| **LSZ** | **Lusaka** | **6.74** | **168** | | | **Pn** | **09 26 59.4** | **+3.4** |
| **LSZ** | **Lusaka** | **6.74** | **168**⇑ | *i* P | | **Pn** | **09 26 59.0** | **+2.9** |
| LSZ | | | | *e*S | | **Sn** | **09 28 12.7** | **-0.3** |
| LSZ | | | | IAML | | | 09 29 04.8 | |
| | comp=Z,351nm,0.7s | | | | | | | |
| **KRI** | **Karoi** | **8.60** | **161** | *e*P | | **Pn** | **09 27 22.0** | **+0.4** |
| KRI | | | | *e*S | | **Sn** | **09 28 58.5** | **-0.3** |
| **KRI** | **Karoi** | **8.60** | **161** | *i* P | | **Pn** | **09 27 24.4** | **+2.8** |
| KRI | | | | *i* S | | **Sn** | **09 28 53.1** | **-5.8** |
| **MBAR** | **Mbarara** | **8.91** | **27** | | | **Pn** | **09 27 24.5** | **-1.5** |
| **MBAR** | **Mbarara** | **8.91** | **27** | *e*P | | **Pn** | **09 27 25.7** | **-0.2** |
| MBAR | | | | *e*S | | **Sn** | **09 29 05.9** | **-0.7** |
| MBAR | | | | IAML | | | 09 29 56.6 | |
| | comp=Z,123nm,0.7s | | | | | | | |
| **MATP** | **Matopo** | **11.84** | **172** | Pn | | **Pn** | **09 28 09.4** | **+3.5** |
| | comp=Z,16nm,0.5s,baz=358,slow=13,SNR=76 | | | | | | | |
| MATP | | | | Sn | | **Sn** | **09 30 16.2** | **-2.0** |
| | comp=Z,0.8nm,0.3s,baz=272,slow=17,SNR=2.4 | | | | | | | |
| MATP | | | | Lg | Lg | | 09 31 34.5 | |
| | comp=Z,2.0nm,0.3s,baz=82,slow=8.2,SNR=4.3 | | | | | | | |
| MATP | | | | LR | LR | | 09 33 12.8 | |
| | comp=Z,165nm,20.6s,baz=54,slow=40 | | | | | | | |
| **MATP** | **Matopo** | **11.84** | **172** | *i* P | | **Pn** | **09 28 06.0** | **+0.1** |
| **KMBO** | **Kilima Mbogo** | **12.84** | **55** | Pn | | **Pn** | **09 28 15.8** | **-4.0** |
| | comp=Z,0.6nm,0.3s,baz=229,slow=13,SNR=10 | | | | | | | |
| KMBO | | | | Sn | | Sn | 09 30 31.4 | -12 |
| | comp=Z,0.8nm,0.3s,baz=152,slow=23,SNR=2.7 | | | | | | | |
| KMBO | | | | Lg | Lg | | 09 31 47.5 | |
| | comp=Z,2.0nm,0.3s,baz=199,slow=15,SNR=4.0 | | | | | | | |
| KMBO | | | | LR | LR | | 09 33 15.4 | |
| | comp=Z,212nm,18.9s,baz=258,slow=38 | | | | | | | |
| **CHIPN** | **CHIPINGE** | **12.85** | **154** | *e*P | | **Pn** | **09 28 18.5** | **-1.3** |
| CHIPN | | | | *e*S | | **Sn** | **09 30 36.3** | **-6.8** |
| **CHIPN** | **CHIPINGE** | **12.85** | **154** | *i* P | | **Pn** | **09 28 16.2** | **-3.6** |
| CHIPN | | | | *i* S | | Sn | 09 30 20.2 | -23 |
| **KIBK** | **Kibwezi** | **12.85** | **61** | Pn | | **Pn** | **09 28 15.8** | **-4.0** |
| **TSUM** | **Tsumeb** | **13.76** | **219** | | | **Pn** | **09 28 33.8** | **+1.5** |
| **TSUM** | **Tsumeb** | **13.76** | **219** | Pn | | **Pn** | **09 28 32.8** | **+0.5** |
| | comp=Z,1.7nm,0.3s,baz=12,slow=11,SNR=9.7 | | | | | | | |
| TSUM | | | | Sn | | **Sn** | **09 30 59.1** | **-6.3** |
| | comp=Z,1.5nm,0.3s,baz=297,slow=7.3,SNR=4.7 | | | | | | | |
| TSUM | | | | Lg | Lg | | 09 32 26.9 | |
| | comp=Z,1.6nm,0.3s,baz=97,slow=20,SNR=1.1 | | | | | | | |
| | comp=Z,5.7nm,0.4s | | | | | | | |
| **MUSN** | **Musina, Limpop** | **13.89** | **168** | *e*P | | **Pn** | **09 28 33.3** | **-0.6** |
| **MUSN** | **Musina, Limpop** | **13.89** | **168** | *i* P | | **Pn** | **09 28 32.8** | **-1.1** |
| **CRAIL** | **Swartwater, Li** | **14.15** | **174** | *e*P | | **Pn** | **09 28 38.6** | **+1.1** |
| **MPHEP** | **Siloam, Limpop** | **14.56** | **167** | *e*P | | **Pn** | **09 28 42.1** | **-1.1** |
| **LODK** | **Lodwar** | **14.73** | **36** | Pn | | Pn | 09 28 39.8 | -5.8 |
| **MOPA** | **Mopani** | **15.44** | **164** | *e*P | | **Pn** | **09 28 54.1** | **-0.9** |
| **MOPA** | **Mopani** | **15.44** | **164** | *i* P | | **P** | **09 28 58.2** | **-1.3** |
| **LBTB** | **Lobatse** | **16.32** | **184** | | | **P** | **09 29 08.5** | **-0.8** |
| LBTB | | | | | | **PcP** | **09 33 59.6** | **-0.5** |
| **LBTB** | **Lobatse** | **16.32** | **184** | Pn | | **P** | **09 29 08.2** | **-1.1** |
| | comp=Z,6.1nm,0.6s,baz=0.6,slow=12,SNR=11 | | | | | | | |
| LBTB | | | | Sn | | **Sn** | **09 32 04.3** | **-3.3** |
| | baz=270,slow=22 | | | | | | | |
| LBTB | | | | Lg | Lg | | 09 33 51.8 | |
| | baz=29,slow=18 | | | | | | | |
| LBTB | | | | LR | LR | | 09 36 01.3 | |
| | comp=Z,100nm,19.5s,baz=12,slow=39 | | | | | | | |
| **LBTB** | **Lobatse** | **16.32** | **184** | *i* P | | **P** | **09 29 09.9** | **+0.6** |
| LBTB | | | | *i* S | | **Sn** | **09 32 06.6** | **-1.0** |
| **PILG** | **Pilgrimsrest,** | **16.63** | **167** | *e*P | | **Pn** | **09 29 10.4** | **0.0** |
| **POGA** | **Pongola** | **19.18** | **167** | P | | **Pn** | **09 29 44.2** | **+2.5** |
| **BOSA** | **Boshof** | **19.92** | **184** | P | | **Pn** | **09 29 53.2** | **+2.6** |
| **BOSA** | **Boshof** | **19.92** | **184** | *e*P | | **Pn** | **09 29 52.9** | **+2.3** |
| **BOSA** | **Boshof** | **19.92** | **184** | P | | **Pn** | **09 29 51.2** | **+0.7** |
| | comp=Z,4.4nm,0.6s,baz=7.1,slow=8.4,SNR=11 | | | | | | | |
| BOSA | | | | Lg | Lg | | 09 35 36.1 | |
| | comp=Z,0.3nm,0.3s,baz=80,slow=17,SNR=3.5 | | | | | | | |
| BOSA | | | | LR | LR | | 09 38 06.6 | |
| | comp=Z,96nm,18.6s,baz=19,slow=38 | | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **BOSA** | **Boshof** | **19.92** | **184** | *i* P | | **Pn** | **09 29 53.5** | **+3.0** |
| **FURI** | **Furi** | **21.08** | **35** | LR | | LR | 09 38 14.7 | |
| | comp=Z,92nm,18.1s,baz=180,slow=37 | | | | | | | |
| **OPO** | **Ambohidratompo** | **22.14** | **119** | LR | | LR | 09 37 41.9 | |
| | comp=Z,201nm,19.0s,baz=116,slow=34 | | | | | | | |
| **BFON** | **Badsfontein, M** | **23.22** | **187** | *e*P | | **P** | **09 30 25.7** | **+1.3** |
| **SOE** | **Somerset East** | **23.98** | **182** | P | | **P** | **09 30 34.4** | **+2.7** |
| **SUR** | **Sutherland** | **24.26** | **192** | P | | **P** | **09 30 37.7** | **+3.2** |
| SUR | | | | IAmb | | IAmb | 09 30 41.4 | |
| | comp=Z,41nm,1.3s | | | | | | | |
| **SUR** | **Sutherland** | **24.26** | **192** | LR | | LR | 09 40 31.0 | |
| | comp=Z,265nm,18.3s,baz=63,slow=38 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **32.99** | **311** | P | | **P** | **09 31 52.2** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **32.99** | **311** | | | **P** | **09 31 51.8** | **-0.6** |
| TORD | | | | IAmb | | IAmb | 09 31 52.7 | |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.99** | **311** | P | | **P** | **09 31 51.6** | **-0.8** |
| | comp=Z,6.1nm,0.4s,baz=123,slow=8.7,SNR=42 | | | | | | | |
| | comp=Z,6.1nm,0.4s | | | | | | | |
| **KIC** | **Kosan Boka** | **34.77** | **294**⇑ | *i* P | | **P** | **09 32 07.3** | **-0.5** |
| | comp=Z,20nm,0.7s | | | | | | | |
| **LIC** | **Lamto** | **34.97** | **294**⇑ | *e*P | | **P** | **09 32 08.8** | **-0.8** |
| | comp=Z,23nm,0.8s | | | | | | | |
| **DBIC** | **Dimbokro** | **35.00** | **295** | P | | **P** | **09 32 09.2** | **-0.6** |
| DBIC | | | | IAmb | | IAmb | 09 32 37.5 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **DBIC** | **Dimbokro** | **35.00** | **295** | P | | **P** | **09 32 08.9** | **-0.9** |
| | comp=Z,3.6nm,0.6s,baz=104,slow=6.1,SNR=7.6 | | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| **TIC** | **Toumodi** | **35.14** | **295**⇑ | *e*P | | **P** | **09 32 08.7** | **-2.3** |
| | comp=Z,5.8nm,0.3s | | | | | | | |
| **RAYN** | **Ar Rayn** | **36.85** | **29** | P | | **P** | **09 32 24.9** | **-0.7** |
| **EIL** | **Elat** | **38.90** | **11** | LR | | LR | 09 48 38.8 | |
| | comp=Z,66nm,18.8s,baz=249,slow=36 | | | | | | | |
| **RAFF** | **Raffo Rosso** | **47.08** | **346** | P | | **P** | **09 33 48.1** | **-0.8** |
| **KEST** | **Kesra** | **47.09** | **341** | P | | **P** | **09 33 49.1** | **-0.1** |
| KEST | | | | IAmb | | IAmb | 09 33 52.7 | |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| **KEST** | **Kesra** | **47.09** | **341** | P | | **P** | **09 33 49.3** | **+0.1** |
| | comp=Z,5.8nm,0.8s,baz=137,slow=4.2,SNR=9.6 | | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **BNN** | **Bunyan** | **48.00** | **10** | P | | **P** | **09 33 55.2** | **-1.1** |
| BNN | | | | IAmb | | IAmb | 09 34 29.1 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| **TIP** | **Timpagrande** | **48.48** | **350** | P | | **P** | **09 33 59.6** | **-0.3** |
| **BRTR** | **Keskin Array B** | **48.54** | **7** | P | | **P** | **09 34 00.2** | **-0.2** |
| **BRTR** | **Keskin Array B** | **48.54** | **7** | P | | **P** | **09 33 59.9** | **-0.5** |
| | comp=Z,1.7nm,0.7s,baz=182,slow=10,SNR=16 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **BR131** | **Keskin Array S** | **48.54** | **7** | | | **P** | **09 34 00.2** | **-0.2** |
| **ARPR** | **Arapgir-MALATY** | **48.69** | **12** | P | | **P** | **09 34 01.7** | **0.0** |
| ARPR | | | | IAmb | | IAmb | 09 34 03.1 | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **HMDM** | **Hanimaadhoo** | **48.74** | **73** | P | | **P** | **09 34 02.1** | **-0.1** |
| **VSL** | **Villasalto** | **50.54** | **343** | P | | **P** | **09 34 15.1** | **-0.4** |
| **MDT** | **Midelt** | **50.92** | **326** | LR | | LR | 09 59 48.2 | |
| | comp=Z,76nm,18.2s,baz=120,slow=41 | | | | | | | |
| **HRA** | **Herat** | **54.41** | **36** | P | | **P** | **09 34 45.1** | **+0.5** |
| HRA | | | | IAmb | | IAmb | 09 34 48.5 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **ZCCA** | **Zocca** | **54.65** | **346** | P | | **P** | **09 34 44.5** | **-1.4** |
| **ESDC** | **Sonseca Array** | **55.87** | **332** | P | | **P** | **09 34 55.0** | **+0.2** |
| **ESDC** | **Sonseca Array** | **55.87** | **332** | P | | **P** | **09 34 54.9** | **+0.1** |
| | comp=Z,2.9nm,0.9s,baz=150,slow=6.9,SNR=20 | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **OBKA** | **Obir** | **55.98** | **350** | *e*pP | | **P** | **09 34 58.7** | **+3.2** |
| | comp=Z,4.1nm,1.1s | | | | | | | |
| **SOKA** | **Soboth** | **56.06** | **350** | *e*P | | **P** | **09 34 56.8** | **+0.7** |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| **STAL** | **STALIGIAL** | **56.08** | **348** | P | | **P** | **09 34 55.9** | **-0.3** |
| STAL | | | | IAmb | | IAmb | 09 34 56.6 | |
| | comp=Z,9.1nm,1.3s | | | | | | | |
| **PRED** | **Cave del Predi** | **56.09** | **349** | P | | **P** | **09 34 55.9** | **-0.5** |
| PRED | | | | IAmb | | IAmb | 09 34 56.4 | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **CTI** | **Castel Tesino** | **56.10** | **347** | P | | **P** | **09 34 55.6** | **-0.8** |
| CTI | | | | IAmb | | IAmb | 09 34 57.6 | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **MYKA** | **Terra Mystica** | **56.26** | **349** | *e*P | | **P** | **09 34 56.6** | **-0.9** |
| | comp=Z,4.3nm,1.0s | | | | | | | |
| **BNI** | **Bardonecchia** | **56.43** | **343** | P | | **P** | **09 34 59.2** | **+0.4** |
| BNI | | | | IAmb | | IAmb | 09 35 00.3 | |
| | comp=Z,4.4nm,1.0s | | | | | | | |
| **ARSA** | **Arzberg** | **56.54** | **351** | *i* P | | **P** | **09 35 00.4** | **+1.0** |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **56.74** | **349** | *i* P | | **P** | **09 35 01.3** | **+0.2** |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **56.86** | **352** | *i* P | | **P** | **09 35 01.8** | **+0.1** |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| **CONA** | **Conrad Observa** | **57.14** | **351** | *i* P | | **P** | **09 35 03.5** | **-0.3** |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **57.19** | **346** | LR | | LR | 09 59 38.5 | |
| | comp=Z,46nm,19.6s,baz=257,slow=36 | | | | | | | |
| **LESA** | **Schwarzleotal** | **57.20** | **349** | *i* P | | **P** | **09 35 04.1** | **-0.2** |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **FETA** | **Feichten** | **57.23** | **347** | *i* P | | **P** | **09 35 04.1** | **-0.4** |
| | comp=Z,5.9nm,1.0s | | | | | | | |
| **WTTA** | **Wattenberg** | **57.26** | **348** | *i* P | | **P** | **09 35 04.9** | **+0.1** |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **SSB** | **Saint Sauveur** | **57.28** | **341** | P | | **P** | **09 35 03.9** | **-0.9** |
| SSB | | | | IAmb | | IAmb | 09 35 06.0 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **57.28** | **349** | *i* P | | **P** | **09 35 04.4** | **-0.3** |
| | comp=Z,3.2nm,1.0s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **57.31** | **347** | *e*P | | **P** | **09 35 04.7** | **-0.3** |
| | comp=Z,4.2nm,0.6s | | | | | | | |
| **MOA** | **Molln** | **57.32** | **350** | *i* P | | **P** | **09 35 04.7** | **-0.3** |
| | comp=Z,6.9nm,0.7s | | | | | | | |
| **MOTA** | **Moosalm** | **57.45** | **347** | *i* P | | **P** | **09 35 05.5** | **-0.6** |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **57.46** | **344** | P | | **P** | **09 35 05.1** | **-1.1** |
| **RETA** | **Reutte** | **57.66** | **347** | *i* P | | **P** | **09 35 06.7** | **-0.7** |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **DAVA** | **Damuels** | **57.67** | **346** | *i* P | | **P** | **09 35 07.0** | **-0.6** |
| | comp=Z,26nm,0.9s | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **58.13** | **357** | P | | **P** | **09 35 10.8** | **+0.2** |
| KWP | | | | IAmb | | IAmb | 09 35 11.5 | |
| | comp=Z,8.6nm,1.0s | | | | | | | |
| **MTE** | **Manteigas** | **58.17** | **330** | P | | **P** | **09 35 10.8** | **-0.3** |
| MTE | | | | IAmb | | IAmb | 09 35 11.9 | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **GEC2** | **GERESS Array S** | **58.38** | **350** | P | | **P** | **09 35 12.3** | **-0.2** |
| GEC2 | | | | IAmb | | IAmb | 09 35 13.0 | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **GERES** | **GERESS Array B** | **58.38** | **350** | P | | **P** | **09 35 12.0** | **-0.5** |
| | comp=Z,1.9nm,0.7s,baz=302,slow=47,SNR=1.6 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **KHC** | **Kasperske Hory** | **58.68** | **350** | P | | **P** | **09 35 14.2** | **-0.3** |
| KHC | | | | IAmb | | IAmb | 09 35 15.0 | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **KHC** | **Kasperske Hory** | **58.68** | **350** | *e*P | | **P** | **09 35 13.5** | **-1.0** |
| **KBL** | **Kabul** | **58.69** | **41** | P | | **P** | **09 35 13.6** | **-1.5** |
| **MORC** | **Moravsky Berou** | **58.73** | **353** | P | | **P** | **09 35 13.8** | **-1.1** |
| **BFO** | **Black Forest** | **59.02** | **346** | P | | **P** | **09 35 16.4** | **-0.4** |
| BFO | | | | IAmb | | IAmb | 09 35 17.2 | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **KIEV** | **Kiev** | **59.13** | **2** | P | | **P** | **09 35 15.6** | **-1.9** |
| KIEV | | | | IAmb | | IAmb | 09 35 17.8 | |
| | comp=Z,5.8nm,1.2s | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.14** | **2** | P | | **P** | **09 35 15.9** | **-1.6** |
| | comp=Z,0.4nm,0.3s,baz=192,slow=6.7,SNR=5.8 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **AKBB** | **Malin Array Si** | **59.14** | **2** | P | | **P** | **09 35 15.6** | **-1.9** |
| AKBB | | | | IAmb | | IAmb | 09 35 17.8 | |
| | comp=Z,6.5nm,1.2s | | | | | | | |
| **ECH** | **Echery** | **59.20** | **345** | P | | **P** | **09 35 17.8** | **-0.4** |
| ECH | | | | IAmb | | IAmb | 09 35 18.6 | |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| **GRFO** | **Grafenberg** | **59.66** | **348** | P | | **P** | **09 35 21.3** | **+0.1** |
| **GRA1** | **Grafenberg Arr** | **59.66** | **348** | P | | **P** | **09 35 20.6** | **-0.6** |
| **CLF** | **Chambon-Foret** | **60.44** | **341** | P | | **P** | **09 35 27.1** | **+0.5** |
| **WLF** | **Walferdange** | **60.80** | **345** | P | | **P** | **09 35 28.9** | **-0.2** |
| WLF | | | | IAmb | | IAmb | 09 35 33.2 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **CLL** | **Collm** | **60.88** | **350** | P | | **P** | **09 35 30.4** | **+0.8** |
| CLL | | | | IAmb | | IAmb | 09 35 30.9 | |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| **CLL** | **Collm** | **60.88** | **350** | *e*P | | **P** | **09 35 30.0** | **+0.5** |
| **SIMJ** | **Simiganj** | **61.30** | **37** | P | | **P** | **09 35 32.5** | **-0.4** |
| SIMJ | | | | IAmb | | IAmb | 09 35 34.0 | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **CHGR** | **Chuyangaron** | **61.39** | **37** | P | | **P** | **09 35 32.9** | **-0.5** |
| **GAR** | **Garm** | **62.30** | **37** | P | | **P** | **09 35 39.7** | **+0.2** |
| GAR | | | | IAmb | | IAmb | 09 35 41.0 | |
| | comp=Z,9.1nm,0.9s | | | | | | | |
| **OBN** | **Obninsk** | **64.05** | **6** | LR | | LR | 10 07 19.2 | |
| | comp=Z,41nm,18.4s,baz=194,slow=40 | | | | | | | |
| **ABKAR** | **Akbulak array** | **64.57** | **23** | P | | **P** | **09 35 54.1** | **-0.1** |
| **KK31** | **Karatay Array** | **65.07** | **34** | P | | **P** | **09 35 56.9** | **-0.8** |
| KK31 | | | | IAmb | | IAmb | 09 35 59.0 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **KKAR** | **Karatay Array** | **65.07** | **34** | P | | **P** | **09 35 57.6** | **0.0** |
| **KSH** | **Kashi** | **66.10** | **40** | P | | **P** | **09 36 04.8** | **+0.3** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **68.46** | **342** | P | | **P** | **09 36 18.5** | **-0.4** |
| | comp=Z,1.2nm,0.6s,baz=141,slow=7.3,SNR=6.7 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **69.87** | **360** | P | | **P** | **09 36 27.7** | **+0.1** |
| **ARU** | **Arti** | **69.95** | **18** | P | | **P** | **09 36 28.6** | **+0.4** |
| ARU | | | | IAmb | | IAmb | 09 36 29.1 | |
| | comp=Z,9.8nm,0.9s | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.53** | **352** | P | | **P** | **09 36 31.3** | **-0.4** |
| | comp=Z,0.8nm,0.8s,baz=168,slow=5.5,SNR=4.5 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **71.74** | **26** | P | | **P** | **09 36 38.5** | **-0.6** |
| | comp=Z,2.5nm,0.8s,baz=250,slow=4.3,SNR=11 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **73.80** | **36** | P | | **P** | **09 36 51.6** | **0.0** |
| **MKAR** | **Makanchi Array** | **73.97** | **36** | P | | **P** | **09 36 52.9** | **+0.3** |
| **MKAR** | **Makanchi Array** | **73.97** | **36** | P | | **P** | **09 36 52.7** | **+0.1** |
| | comp=Z,1.9nm,0.7s,baz=250,slow=5.1,SNR=11 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **73.97** | **36** | P | | **P** | **09 36 52.6** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **74.06** | **31** | P | | **P** | **09 36 52.7** | **-0.2** |
| | comp=Z,2.5nm,0.8s,baz=242,slow=6.2,SNR=12 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **74.16** | **31** | P | | **P** | **09 36 53.0** | **-0.5** |
| **BELA** | **Belgrano 2** | **75.76** | **191** | P | | **P** | **09 37 04.8** | **+2.4** |
| **CMAR** | **Chiang Mai Arr** | **76.10** | **69** | P | | **P** | **09 37 06.5** | **+1.0** |
| **CMAR** | **Chiang Mai Arr** | **76.10** | **69** | P | | **P** | **09 37 06.0** | **+0.6** |
| | comp=Z,1.5nm,0.6s,baz=256,slow=7.5,SNR=8.3 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **PHRA** | **Phrae** | **77.29** | **69** | P | | **P** | **09 37 12.6** | **+0.4** |
| **CRAI** | **Chiangrai** | **77.84** | **67** | P | | **P** | **09 37 15.3** | **+0.1** |
| CRAI | | | | IAmb | | IAmb | 09 37 17.5 | |
| | comp=Z,7.1nm,1.0s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.00** | **360** | P | | **P** | **09 37 15.2** | **+0.1** |
| ARCES | | | | IAmb | | IAmb | 09 37 55.5 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.00** | **360** | P | | **P** | **09 37 14.4** | **-0.6** |
| | comp=Z,2.7nm,0.6s,baz=180,slow=5.9,SNR=11 | | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.11** | **31** | P | | **P** | **09 37 20.5** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **79.11** | **31** | P | | **P** | **09 37 21.0** | **-0.5** |
| | comp=Z,1.2nm,0.7s,baz=225,slow=5.5,SNR=4.1 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **80.60** | **61** | P | | **P** | **09 37 32.3** | **+2.0** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.45** | **180** | P | | **P** | **09 37 37.3** | **+3.2** |
| QSPA | | | | IAmb | | IAmb | 09 37 41.3 | |
| | comp=Z,7.6nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.45** | **180** | P | | **P** | **09 37 36.9** | **+2.8** |
| | comp=Z,4.0nm,1.0s,baz=254,slow=3.1,SNR=7.6 | | | | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **GTA** | **Gaotai** | **82.59** | **48** | *e*P | | **P** | **09 37 42.4** | **+1.8** |
| GTA | | | | pP | | PcP | 09 37 47.5 | +1.8 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **MG04** | **Isla Riesco** | **88.18** | **217** | P | | **P** | **09 38 08.8** | **+0.7** |
| **SAML** | **Samuel** | **88.63** | **261** | P | | **P** | **09 38 12.9** | **+1.9** |
| **HHC** | **Hu-ho-hao-te** | **91.68** | **49** | *e*P | | **P** | **09 38 25.3** | **+0.5** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,160nm,5.1s | | | | | | | |
| **LPAZ** | **La Paz** | **92.26** | **253** | P | | **P** | **09 38 27.4** | **-1.2** |
| | comp=Z,1.2nm,0.9s,baz=200,slow=1.9,SNR=2.7 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **95.43** | **47** | *e*P | | **P** | **09 38 41.5** | **-0.5** |
| XLT | | | | pP | | sP | 09 38 47.0 | +0.1 |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **NJ2** | **Nanjing** | **96.28** | **59** | *e*P | | **P** | **09 38 47.1** | **+1.1** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **PDAR** | **Pinedale Array** | **128.87** | **319** | PKP | | **PKPdf** | **09 44 25.6** | **+0.2** |
| | comp=Z,0.9nm,1.0s,baz=96,slow=4.6,SNR=4.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **129.25** | **301** | PKP | | **PKiKP** | **09 44 27.5** | **+0.4** |
| | comp=Z,0.4nm,0.9s,baz=96,slow=2.5,SNR=4.5 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **136.81** | **319** | PKP | | **PKiKP** | **09 44 41.8** | **-0.5** |
| | comp=Z,0.7nm,0.8s,baz=151,slow=3.4,SNR=5.0 | | | | | | | |

*TAP **21** 09:27:28.8,24.93N×122.42E,h123km±1km,ML3.1,D*
*JMA **21** 09:27:28.9±0.2,25.0N±0.2×122.4E±0.5,h118km±2km,*
*MV2.1/12,NW OFF ISHIGAKIJIMA IS*

**ISC 21 09:27:28.8**±1.9,**24.91N**±0.07×**122.44E**±0.03,
**h122**km±11km,**n54,s60/88,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.42** | **283** | *i* P | **Pn** | **09 27 46.5** | **+0.1** |
| | baz=281 | | | | | | |
| **EOS2** | **EOS2** | **0.53** | **201** | *e*P | **Pn** | **09 27 47.3** | **+0.3** |
| | baz=198 | | | | | | |
| EOS2 | | | | S | **Sn** | **09 28 01.7** | **+1.1** |
| | baz=198 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.55** | **289** | P | **Pn** | **09 27 47.1** | **-0.1** |
| | baz=288 | | | | | | |
| SXI1 | | | | S | **Sn** | **09 28 01.2** | **0.0** |
| | baz=288 | | | | | | |
| **TIPB** | **Shuangxi** | **0.56** | **276** | P | **Pn** | **09 27 47.4** | **0.0** |
| | baz=274 | | | | | | |
| TIPB | | | | *e*S | **Sn** | **09 28 00.9** | **-0.4** |
| | baz=274 | | | | | | |
| **TWC** | **Suao** | **0.62** | **241** | *e*P | **Pn** | **09 27 47.4** | **-0.3** |
| | baz=238 | | | | | | |
| **EOS3** | **EOS3** | **0.63** | **190** | *e*P | **Pn** | **09 27 48.2** | **+0.6** |
| | baz=188 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **09 28 02.8** | **+1.0** |
| | baz=188 | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.65** | **135** | P | **Pn** | **09 27 47.8** | **-0.1** |
| JYNG | | | | S | **Sn** | **09 28 02.1** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **0.68** | **131** | *e*S | **Sn** | **09 28 02.9** | **+0.1** |
| | baz=130 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.68** | **131** | *e*S | **Sn** | **09 28 02.7** | **0.0** |
| **NDS** | **Dongshan** | **0.72** | **247** | *e*P | **Pn** | **09 27 48.6** | **+0.2** |
| | baz=245 | | | | | | |
| **TWE** | **Neicheng** | **0.73** | **255** | P | **Pn** | **09 27 48.7** | **+0.2** |
| | baz=252 | | | | | | |
| TWE | | | | *i* S | **Sn** | **09 28 03.0** | **-0.4** |
| | baz=252 | | | | | | |
| **EWUT** | **Wuta** | **0.76** | **233** | *e*P | **Pn** | **09 27 49.0** | **+0.2** |
| | baz=230 | | | | | | |
| EWUT | | | | *e*S | **Sn** | **09 28 03.3** | **-0.6** |
| | baz=230 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.79** | **259** | *i* P | **Pn** | **09 27 49.1** | **0.0** |
| | baz=257 | | | | | | |
| **EOS4** | **EOS4** | **0.80** | **188** | *e*P | **Pn** | **09 27 48.9** | **+0.2** |
| | baz=186 | | | | | | |
| **ENA** | **Nanau** | **0.80** | **233** | *e*P | **Pn** | **09 27 49.3** | **+0.1** |
| | baz=230 | | | | | | |
| ENA | | | | *e*S | **Sn** | **09 28 04.2** | **-0.2** |
| | baz=230 | | | | | | |
| **YM01** | **YM01** | **0.82** | **287** | *e*P | **Pn** | **09 27 49.5** | **+0.1** |
| | baz=285 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **09 28 05.1** | **+0.1** |
| | baz=285 | | | | | | |
| **ENTT** | **Nioudou** | **0.84** | **251** | P | **Pn** | **09 27 49.7** | **+0.2** |
| | baz=249 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **09 28 05.9** | **+0.7** |
| | baz=249 | | | | | | |
| **NWLT** | **Wulai** | **0.86** | **261** | *e*P | **Pn** | **09 27 49.5** | **-0.2** |
| | baz=259 | | | | | | |
| **NDT** | **Datong Townshi** | **0.90** | **250** | *e*P | **Pn** | **09 27 50.5** | **+0.5** |
| | baz=248 | | | | | | |
| NDT | | | | *e*S | **Sn** | **09 28 06.2** | **+0.2** |
| | baz=248 | | | | | | |
| **LATG** | **Datong** | **0.91** | **246** | P | **Pn** | **09 27 50.8** | **+0.5** |
| | baz=244 | | | | | | |
| LATG | | | | *e*S | **Sn** | **09 28 06.0** | **-0.5** |
| | baz=244 | | | | | | |
| **YHNB** | **Yeheng

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=229 | | | | | | | | |
| **YULB** | **Yu-li** | **1.84** | **215** | *e*P | | **Pn** | **09 28 00.3** | **0.0** | |
| | baz=213 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.89** | **230** | *e*P | | **Pn** | **09 28 01.8** | **+0.8** | |
| | baz=229 | | | | | | | | |
| **JTJ** | **Tarama** | **2.07** | **97** | *e*S | | **Sn** | **09 28 29.0** | **-0.5** | |

*GUC **21** 09:28:12.2±0.5,21°.11S×69°.01W,h106km±17km,ML3.2*
*VAO **21** 09:28:16.1±0.4,22°.29S×67°.43W,h75km±11km,mb4.7*
*IDC **21** 09:28:23.7±8.7,20°.31S×68°.08W,h170km±63km,mb3.0/1, mbtmp3.4/3,Error ellipse: s-maj=100.8km s-min=59.5km az=45.0*

**ISC 21 09:28:10.6**±0.9,**21°.08S**±0°.06×**68°.84W**±0°.08,**h112**km,**n10,** σ1§**50/14,Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TA01** | **Diego Aracena** | **1.36** | **292** | *e*P | | **Pn** | **09 28 35.8** | **-0.1** |
| TA01 | | | | *i* S | | **Sn** | **09 28 54.1** | **-1.0** |
| TA01 | | | | IAML | | | 09 28 55.6 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **GO01** | **Chusmiza** | **1.45** | **347** | *e*P | | **Pn** | **09 28 39.2** | **+1.7** |
| GO01 | | | | *i* S | | **Sn** | **09 28 59.7** | **+2.0** |
| GO01 | | | | IAML | | | 09 29 01.2 | |
| | comp=N,810nm,0.3s | | | | | | | |
| **TA02** | **Huaiquique** | **1.46** | **304** | *e*P | | **Pn** | **09 28 37.1** | **+0.1** |
| TA02 | | | | *i* S | | **Sn** | **09 28 56.1** | **-0.9** |
| TA02 | | | | IAML | | | 09 29 02.2 | |
| | comp=N,246nm,0.2s | | | | | | | |
| **LVC** | **Limon Verde** | **1.52** | **182** | *e*P | | **Pn** | **09 28 39.2** | **+1.0** |
| LVC | | | | *e*S | | **Sn** | **09 28 59.1** | **0.0** |
| **LPAZ** | **La Paz** | **4.82** | **8** | P | | Pn | 09 29 25.2 | +3.6 |
| | comp=N,0.7nm,0.3s,baz=186,slow=5.8,SNR=8.7 | | | | | | | |
| LPAZ | | | | S | | **Sn** | **09 30 13.6** | **-3.1** |
| | comp=N,2.2nm,0.6s,baz=202,slow=4.0,SNR=5.2 | | | | | | | |
| **BBSD** | **Serra de San D** | **8.69** | **65** | *e*P | | **Pn** | **09 30 12.5** | **-1.1** |
| **PDRB** | **Porto dos Gac** | **14.95** | **53** | *e*P | | **P** | **09 31 40.6** | **+1.5** |
| **SNDB** | **Serra Nova Dou** | **19.09** | **64** | *e*P | | **P** | **09 32 24.8** | **+0.1** |
| **BDFB** | **Brasilia** | **20.48** | **78** | P | | P | **09 32 39.6** | **-0.3** |
| | comp=N,1.2nm,0.4s,baz=259,slow=11,SNR=2.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.15** | **70** | P | | **P** | **09 39 54.0** | **+1.5** |
| | comp=N,0.3nm,0.6s,baz=258,slow=5.0,SNR=1.8 | | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | | |

*UCR **21** 09:29:22.8±0.8,10°.72N×86°.43W,h15km±9km,MW3.9*
*CATAC **21** 09:29:24.5±0.6,10°.75N×86°.37W,h8km±5km,ML3.3*

**ISC 21 09:29:23.8**±1.5,**10°.73N**±0°.05×**86°.33W**±0°.06,**h9**km±11km, **n42,** σ0§**62/50,4C-3D,Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ELI1** | **Hacienda Flor** | **0.77** | **96** | *e*P | | **Pb** | **09 29 39.9** | **+0.6** |
| **LCRUZ** | **La Cruz** | **0.77** | **63** | *e*P | | **Pb** | **09 29 40.0** | **+0.6** |
| LCRUZ | | | | *e*S | | **Sn** | **09 29 52.5** | **0.0** |
| **ALIBA** | **Liberia Airpor** | **0.79** | **100** | *e*P | | **Pb** | **09 29 39.8** | **+0.2** |
| **DELF** | **Filadelfia** | **0.82** | **110** | *e*P | | **Pn** | **09 29 40.8** | **-0.7** |
| **ERIA** | **Liberia** | **0.88** | **96** | *e*P | | **Pb** | **09 29 41.5** | **+0.2** |
| **GPS3** | **Bodega del ICE** | **0.95** | **89** | *e*P | | **Pg** | **09 29 42.3** | **+0.2** |
| **VRLE** | **La Escondida,** | **0.95** | **87** | *e*P | | **Pg** | **09 29 41.9** | **-0.2** |
| **GPS2** | **Hotel Rincn d** | **0.96** | **89** | *e*P | | **Pg** | **09 29 42.1** | **-0.2** |
| **VORI** | **VORI** | **0.97** | **85** | *e*P | | **Pg** | **09 29 42.6** | **+0.1** |
| **JAPN** | **Al SSO del Vol** | **1.02** | **39** | *i* P | | **Pn** | **09 29 44.1** | **-0.1** |
| JAPN | | | | IAML | | | 09 29 44.9 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **NADN** | **Granada** | **1.05** | **16** | *i* P | | **Pb** | **09 29 43.7** | **-0.5** |
| NADN | | | | IAML | | | 09 29 44.2 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| NADN | | | | *i* S | | **Sn** | **09 29 59.6** | **+0.1** |
| **NICO** | **Nicoya** | **1.05** | **124** | *e*P | | **Pb** | **09 29 42.6** | **-1.5** |
| **BAGA** | **Bagaces** | **1.07** | **101** | *e*P | | **Pb** | **09 29 44.1** | **-0.4** |
| **COLC** | **Colonia** | **1.11** | **93** | *e*P | | **Pb** | **09 29 44.5** | **-0.7** |
| **CUI** | **Cuipilapa** | **1.15** | **94** | *e*P | | **Pb** | **09 29 45.2** | **-0.7** |
| **INDI** | **Punta indio, G** | **1.19** | **136** | *i* P | | **Pg** | **09 29 47.2** | **+0.6** |
| INDI | | | | IAML | | | 09 30 18.7 | |
| | comp=Z,190nm,1.0s | | | | | | | |
| **RA5A7** | **El Crucero** | **1.25** | **1** | *i* P | | **Pg** | **09 29 47.9** | **0.0** |
| RA5A7 | | | | IAML | | | 09 30 13.3 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **TENO** | **El Achiote** | **1.33** | **91** | *e*P | | **Pn** | **09 29 47.6** | **-1.0** |
| **R0529** | **La Mascota** | **1.39** | **4** | *i* P | | **Pn** | **09 29 49.0** | **-0.3** |
| R0529 | | | | IAML | | | 09 29 56.7 | |
| | comp=Z,540nm,1.0s | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.40** | **3** | *i* P | | **Pn** | **09 29 48.5** | **-1.0** |
| TISN | | | | IAML | | | 09 29 49.5 | |
| | comp=Z,42nm,1.0s | | | | | | | |
| **R4DEC** | **Barrio San Lui** | **1.41** | **3** | *i* P | | **Pn** | **09 29 49.3** | **-0.3** |
| R4DEC | | | | *i* P | | **Pn** | **09 29 49.3** | **-0.3** |
| R4DEC | | | | IAML | | | 09 29 50.4 | |
| | comp=Z,390nm,1.0s | | | | | | | |
| R4DEC | | | | *i* S | | **Sg** | **09 30 09.7** | **+0.5** |
| R4DEC | | | | IAML | | | 09 30 33.3 | |
| | comp=Z,420nm,1.0s | | | | | | | |
| **JUNT** | **Juntas** | **1.42** | **108** | *e*P | | **Pn** | **09 29 49.3** | **-0.4** |
| **JTS** | **Las Juntas de** | **1.43** | **108** | *e*P | | **Pn** | **09 29 48.6** | **-1.2** |
| **WILN** | **Americas 2** | **1.43** | **6** | *i* P | | **Pb** | **09 29 50.1** | **-0.4** |
| WILN | | | | *i* S | | **Sg** | **09 30 10.1** | **+0.3** |
| WILN | | | | IAML | | | 09 30 20.5 | |
| | comp=Z,240nm,1.0s | | | | | | | |
| **SAPS** | **Ciudad Sandino** | **1.43** | **357** | *i* P | | **Pb** | **09 29 50.2** | **-0.4** |
| SAPS | | | | IAML | | | 09 30 21.8 | |
| | comp=Z,640nm,1.0s | | | | | | | |
| **APQ2** | **Apoyeque** | **1.46** | **0** | *i* P | | **Pn** | **09 29 50.3** | **+0.1** |
| APQ2 | | | | *i* S | | **Sg** | **09 30 10.6** | **-0.1** |
| APQ2 | | | | IAML | | | 09 30 12.9 | |
| | comp=Z,720nm,1.0s | | | | | | | |
| **COPN** | **Copaltepe** | **1.46** | **350** | *i* P | | **Pn** | **09 29 50.0** | **-0.3** |
| COPN | | | | IAML | | | 09 30 14.2 | |
| | comp=Z,330nm,1.0s | | | | | | | |
| **MTEVE** | **Monteverde** | **1.54** | **105** | *e*P | | **Pb** | **09 29 52.0** | **-0.5** |
| **HUEN** | | **1.60** | **6** | *i* P | | **Pn** | **09 29 52.2** | **-0.1** |
| HUEN | | | | IAML | | | 09 29 53.1 | |
| | comp=Z,230nm,1.0s | | | | | | | |
| **ARE1** | **Arenal 1** | **1.61** | **99** | *e*P | | **Pn** | **09 29 52.2** | **-0.1** |
| **LCHIL** | **Los Chiles** | **1.62** | **79** | *e*P | | **Pn** | **09 29 52.6** | **+0.1** |
| **CEDE** | **Laguna Cedeo** | **1.62** | **98** | *e*P | | **Pn** | **09 29 52.2** | **-0.4** |
| **ACON** | **Acoyapa** | **1.67** | **43** | *i* P | | **Pn** | **09 29 53.0** | **-0.2** |
| ACON | | | | IAML | | | 09 29 53.6 | |
| | comp=Z,200nm,1.0s | | | | | | | |
| ACON | | | | *i* S | | **Sn** | **09 30 15.0** | **+0.2** |
| **SOCE** | **Pocosol** | **1.72** | **101** | *i* P | | **Pb** | **09 29 54.7** | **-0.9** |
| SOCE | | | | IAML | | | 09 30 34.6 | |
| | comp=Z,200nm,1.0s | | | | | | | |
| **MACN** | **El Madrono** | **1.76** | **349** | *i* P | | **Pn** | **09 29 54.3** | **-0.1** |
| MACN | | | | IAML | | | 09 30 24.7 | |
| | comp=Z,150nm,1.0s | | | | | | | |
| **CNGA** | **Al SSO del Vol** | **1.79** | **348** | *i* P | | **Pn** | **09 29 55.4** | **+0.5** |
| CNGA | | | | IAML | | | 09 30 23.0 | |
| | comp=Z,280nm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.79** | **349** | *i* P | | **Pb** | **09 29 55.6** | **-1.2** |
| CNGN | | | | IAML | | | 09 30 27.9 | |
| | comp=Z,190nm,1.0s | | | | | | | |
| **QUEN** | **Al S del Volca** | **1.92** | **345** | *i* P | | **Pn** | **09 29 56.5** | **-0.1** |
| QUEN | | | | IAML | | | 09 30 27.5 | |
| | comp=Z,310nm,1.0s | | | | | | | |
| **PKGN** | **Cerro Pekin** | **2.03** | **342** | *i* P | | **Pn** | **09 29 58.7** | **+0.6** |
| PKGN | | | | *i* S | | **Sn** | **09 30 24.3** | **+0.8** |
| PKGN | | | | IAML | | | 09 30 28.7 | |
| | comp=Z,630nm,1.0s | | | | | | | |
| **TCS1** | **Tacares** | **2.11** | **109** | *i* P | | **Pb** | **09 30 02.5** | **+0.2** |
| TCS1 | | | | IAML | | | 09 30 47.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **2.49** | **113** | *i* P | | **Pn** | **09 30 06.5** | **+1.8** |
| LCR2 | | | | IAML | | | 09 30 49.4 | |
| | comp=Z,80nm,1.0s | | | | | | | |
| **LCND** | **La Caada** | **2.98** | **329** | *i* P | | **Pn** | **09 30 11.6** | **+0.4** |
| LCND | | | | IAML | | | 09 31 01.8 | |
| | comp=Z,54nm,1.0s | | | | | | | |

*IDC **21** 09:31:14.6±13.0,17°.65S×177°.93W,h350km±139km, mb3.1/6,mbtmp3.8/6,Error ellipse: s-maj=38.6km s-min=28.7km az=43.0*
*NEIC **21** 09:31:31.7±0.8,17°.9S±0°.1×178°.0W±0°.2,h522km±14km, mb4.0/6,Error ellipse: s-maj=30.1km s-min=7.1km az=58.0*

**ISC 21 09:31:29.3**±1.0,**17°.9S**±0°.1×**177°.9W**±0°.2,**h500**km,**n16,** σ2§**14/14,mb3.6/9,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.89** | **272** | P | | **P** | **09 32 50.3** | **+3.3** |
| **RAO** | **Raoul Island** | **11.31** | **180** | P | | **P** | **09 34 02.4** | **+2.0** |
| **URZ** | **Urewera** | **20.76** | **191** | P | | **P** | **09 35 31.5** | **-3.2** |
| | 7.1nm,0.7s,baz=76,slow=18,SNR=1.8 | | | | | | | |
| | 7.1nm,0.7s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.95** | **260** | P | | **P** | **09 37 30.0** | **-0.7** |
| **STKA** | **Stephens Creek** | **39.09** | **241** | P | | P | 09 38 09.0 | -4.0 |
| | 0.5nm,0.3s,baz=30,slow=20,SNR=1.7 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.95** | **259** | P | | **P** | **09 38 58.4** | **-1.1** |
| WR0 | | | | IAmb | | IAmb | 09 39 14.7 | |
| | comp=Z,4.3nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.10** | **260** | P | | **P** | **09 38 59.4** | **-1.2** |
| WB0 | | | | IAmb | | IAmb | 09 39 14.9 | |
| | comp=Z,8.4nm,1.3s | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.13** | **259** | P | | **P** | **09 39 00.1** | **-0.8** |
| WRAB | | | | IAmb | | IAmb | 09 39 02.6 | |
| | comp=Z,5.6nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.14** | **259** | P | | P | 09 38 57.2 | -3.7 |
| | comp=Z,0.4nm,0.6s,baz=91,slow=6.9,SNR=9.2 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **AS31** | **Alice Springs** | **45.29** | **254** | P | | **P** | **09 38 59.9** | **-2.1** |
| **ASAR** | **Alice Springs** | **45.29** | **254** | P | | **P** | **09 38 59.1** | **-2.9** |
| **ASAR** | **Alice Springs** | **45.29** | **254** | P | | **P** | **09 38 59.6** | **-2.4** |
| | comp=Z,1.2nm,0.5s,baz=88,slow=8.3,SNR=28 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.16** | **180** | P | | **P** | **09 42 03.7** | **+1.0** |
| **QSPA** | **South Pole Qui** | **72.16** | **180** | P | | **P** | **09 42 03.2** | **+0.6** |
| | comp=Z,1.1nm,0.9s,baz=211,slow=1.6,SNR=7.0 | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.06** | **44** | P | | **P** | **09 42 40.6** | **-1.1** |
| | comp=Z,0.5nm,0.9s,baz=206,slow=6.1,SNR=3.6 | | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | | |
| **E23K** | **Chandalar** | **88.15** | **10** | P | | **P** | **09 43 26.6** | **+0.5** |
| E23K | | | | IAmb | | IAmb | 09 43 44.1 | |
| | comp=Z,2.4nm,1.0s | | | | | | | |

*SJA **21** 09:32:45.5±0.6,22°.28S×68°.75W,h107km±4km,ML3.5, MW3.6*
*GUC **21** 09:32:46.3±0.7,22°.18S×68°.71W,h103km±7km,ML3.6*

**ISC 21 09:32:46.8**±1.4,**22°.25S**±0°.04×**68°.76W**±0°.05, **h103**km±10km,**n19,** σ1§**61/31,2C-1D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **0.38** | **201** | *e*P | | **Pn** | **09 33 02.0** | **-0.6** |
| LVC | | | | *e*S | | **Sn** | **09 33 14.7** | **+0.2** |
| LVC | | | | IAML | | | 09 33 15.4 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **LVC** | **Limon Verde** | **0.38** | **201** | *i* P | | **Pn** | **09 33 01.5** | **-1.1** |
| LVC | | | | *i* S | | **Sn** | **09 33 13.8** | **-0.7** |
| **AF01** | **San Pedro de A** | **0.88** | **142** | *e*P | | **Pn** | **09 33 06.2** | **-0.4** |
| AF01 | | | | *e*S | | **Sn** | **09 33 24.9** | **+3.5** |
| AF01 | | | | IAML | | | 09 33 38.2 | |
| | comp=Z,793nm,1.2s | | | | | | | |
| **AF01** | **San Pedro de A** | **0.88** | **142** | *i* P | | **Pn** | **09 33 06.2** | **-0.4** |
| AF01 | | | | *i* S | | **Sn** | **09 33 21.2** | **-0.2** |
| AF01 | | | | IAML | | | 09 33 23.3 | |
| | comp=E,2μm,0.3s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.28** | **266** | *e*P | | **Pn** | **09 33 10.8** | **0.0** |
| PB04 | | | | *e*S | | **Sn** | **09 33 31.2** | **+2.2** |
| PB04 | | | | IAML | | | 09 33 33.4 | |
| | comp=Z,817nm,0.1s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.28** | **266** | *i* P | | **Pn** | **09 33 10.8** | **0.0** |
| PB04 | | | | *i* S | | **Sn** | **09 33 29.8** | **+0.8** |
| PB04 | | | | IAML | | | 09 33 32.0 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **TA01** | **Diego Aracena** | **2.14** | **322** | *e*P | | **Pn** | **09 33 20.8** | **-0.5** |
| TA01 | | | | *e*S | | **Sn** | **09 33 48.2** | **+0.6** |
| TA01 | | | | IAML | | | 09 33 54.1 | |
| | comp=Z,290nm,0.3s | | | | | | | |
| **TA01** | **Diego Aracena** | **2.14** | **322** | *e*P | | **Pn** | **09 33 20.1** | **-1.2** |
| TA01 | | | | *i* S | | **Sn** | **09 33 46.6** | **-1.0** |
| TA01 | | | | IAML | | | 09 33 53.8 | |
| | comp=E,645nm,0.2s | | | | | | | |
| **TA02** | **Huaiquique** | **2.35** | **327** | *e*P | | **Pn** | **09 33 24.5** | **+0.4** |
| TA02 | | | | *e*S | | **Sn** | **09 33 53.8** | **+1.2** |
| TA02 | | | | IAML | | | 09 33 59.0 | |
| | comp=Z,287nm,0.6s | | | | | | | |
| **TA02** | **Huaiquique** | **2.35** | **327** | *e*S | | **Sn** | **09 33 51.2** | **-1.4** |
| TA02 | | | | IAML | | | 09 34 00.8 | |
| | comp=N,279nm,0.2s | | | | | | | |
| **GO01** | **Chusmiza** | **2.60** | **351** | *e*P | | **Pn** | **09 33 27.5** | **-0.4** |
| GO01 | | | | *e*S | | **Sn** | **09 34 01.3** | **+2.0** |
| GO01 | | | | IAML | | | 09 34 07.4 | |
| | comp=Z,264nm,0.4s | | | | | | | |
| **GO01** | **Chusmiza** | **2.60** | **351** | *e*P | | **Pn** | **09 33 27.3** | **-0.6** |
| GO01 | | | | *i* S | | **Sn** | **09 33 58.0** | **-1.3** |
| **PB14** | **IPOC Station P** | **2.80** | **212** | *e*P | | **Pn** | **09 33 32.7** | **+2.4** |
| PB14 | | | | *e*S | | Sn | 09 34 13.2 | +10 |
| PB14 | | | | IAML | | | 09 34 13.6 | |
| | comp=Z,119nm,0.8s | | | | | | | |
| **PB14** | **IPOC Station P** | **2.80** | **212** | *e*P | | **Pn** | **09 33 33.1** | **+2.9** |
| PB14 | | | | IAML | | | 09 34 12.6 | |
| | comp=E,117nm,0.8s | | | | | | | |
| **GO02** | **Mina Guanaco** | **2.99** | **194** | *e*P | | **Pn** | **09 33 33.0** | **+0.2** |
| GO02 | | | | *e*S | | **Sn** | **09 34 03.7** | **-4.6** |
| GO02 | | | | IAML | | | 09 34 35.3 | |
| | comp=Z,111nm,0.5s | | | | | | | |
| **GO02** | **Mina Guanaco** | **2.99** | **194** | *e*P | | **Pn** | **09 33 32.7** | **-0.2** |
| GO02 | | | | IAML | | | 09 34 34.2 | |
| | comp=N,195nm,0.6s | | | | | | | |
| **YJA** | **Yavi** | **3.01** | **89** | *e*P | | **Pn** | **09 33 33.8** | **+0.6** |
| **AZAP** | **Zapla** | **3.93** | **121** | *e*P | | **Pn** | **09 33 45.3** | **0.0** |
| **AC01** | **Pan de Azucar** | **4.22** | **203** | *e*P | | **Pn** | **09 33 47.7** | **-1.4** |
| AC01 | | | | *e*S | | Sn | 09 34 47.2 | +10 |

*UPA **21** 09:34:52.9±12.0,9°.61N×84°.26W,h185km±113km,MD4.3, MW4.5*
*UCR **21** 09:34:57.6±1.2,9°.27N×84°.22W,h21km±3km,MW4.7*
*IDC **21** 09:34:57.1±1.0,10°.03N×83°.81W,h0km,mb3.8/7, mbtmp3.8/8,ML2.6/2,MS3.3/11,Error ellipse: s-maj=28.7km s-min=11.8km az=12.0*
*CATAC **21** 09:34:58.3±0.4,9°.32N×84°.13W,h8km±3km,ML4.4*
*NEIC **21** 09:34:58.9±1.8,9°.36N±0°.05×84°.22W±0°.04,h33km±6km, mb4.2/21,Error ellipse: s-maj=6.9km s-min=5.4km az=192.0*

**ISC 21 09:34:56.4**±0.5,**9°.26N**±0°.02×**84°.20W**±0°.02,**h21**km±1km, **n176,** σ1§**46/209,mb4.2/17,MS3.5/8,8C-64D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SVQ2** | **Quepos** | **0.18** | **10** | *i* P | | **Pb** | **09 35 02.1** | **-0.2** |
| SVQ2 | | | | *e*S | | **Sb** | **09 35 05.7** | **-0.7** |
| **LLNJ** | **Naranjito** | **0.24** | **23** | *i* P | | **Pb** | **09 35 03.1** | **+0.7** |
| LLNJ | | | | *e*S | | **Sb** | **09 35 07.6** | **+1.0** |
| **RITA** | **Parrita** | **0.30** | **333** | *i* P | | **Pn** | **09 35 04.6** | **-0.9** |
| RITA | | | | *e*S | | **Sn** | **09 35 10.4** | **-0.9** |
| **RAZU** | **San Marcos de** | **0.44** | **23** | *i* P | | **Pb** | **09 35 06.4** | **+1.0** |
| RAZU | | | | *e*S | | **Sn** | **09 35 13.6** | **-1.4** |
| **ABE2** | **San Pablo** | **0.47** | **17** | *i* P | | **Pb** | **09 35 06.8** | **+0.8** |
| **ZELE** | **Perez Zeledon** | **0.50** | **76** | *i* P | | **Pn** | **09 35 07.6** | **-0.7** |
| ZELE | | | | *e*S | | **Sn** | **09 35 15.4** | **-1.0** |
| **LCR2** | **La Lucha 2** | **0.52** | **21** | | | **Pb** | **09 35 07.5** | **+0.5** |
| LCR2 | | | | | | **Sb** | **09 35 15.4** | **+1.3** |
| **LCR2** | **La Lucha 2** | **0.52** | **21** | *i* P | | **Pb** | **09 35 07.5** | **+0.5** |
| LCR2 | | | | IAML | | | 09 35 08.8 | |
| | comp=Z,15μm,1.0s | | | | | | | |
| LCR2 | | | | *i* S | | **Sb** | **09 35 14.1** | **-0.1** |
| **LCR2** | **La Lucha 2** | **0.52** | **21** | *i* P | | **Pb** | **09 35 07.5** | **+0.5** |
| LCR2 | | | | *e*S | | **Sb** | **09 35 14.9** | **+0.7** |
| **BUS1** | **Rivas** | **0.53** | **56** | *i* P | | **Pb** | **09 35 07.9** | **+0.5** |
| BUS1 | | | | *e*S | | **Sb** | **09 35 15.9** | **+1.1** |
| **ACOS** | **Acosta** | **0.54** | **3** | *i* P | | **Pb** | **09 35 07.7** | **+0.4** |
| ACOS | | | | *e*S | | **Sb** | **09 35 15.4** | **+0.7** |
| **OCHAL** | **Ojochal** | **0.57** | **106** | *i* P | | **Pn** | **09 35 08.7** | **-0.5** |
| OCHAL | | | | *i* S | | **Sb** | **09 35 16.3** | **+0.9** |
| OCHAL | | | | IAML | | | 09 35 22.6 | |
| | comp=Z,10μm,1.0s | | | | | | | |
| **AMPA** | **Desamparados** | **0.65** | **12** | *i* P | | **Pn** | **09 35 10.3** | **-0.2** |
| AMPA | | | | *e*S | | **Sb** | **09 35 18.8** | **+0.8** |
| **REPA** | **Paraso** | **0.66** | **30** | *i* P | | **Pn** | **09 35 10.8** | **+0.2** |
| **TAGO** | **Cartago** | **0.66** | **24** | *i* P | | **Pn** | **09 35 09.9** | **+0.5** |
| **SANTA** | **Santa Ana** | **0.67** | **1** | *i* P | | **Pb** | **09 35 09.7** | **+0.1** |
| SANTA | | | | *e*S | | **Sb** | **09 35 19.7** | **+1.1** |
| **LUJA** | **Lujan** | **0.68** | **10** | *i* P | | **Pn** | **09 35 11.0** | **+0.1** |
| LUJA | | | | *e*S | | **Sn** | **09 35 21.0** | **+0.1** |
| **CENT** | **San Jose** | **0.68** | **10** | *e*P | | **Pn** | **09 35 10.9** | **0.0** |
| CENT | | | | *e*S | | **Sn** | **09 35 21.6** | **+0.6** |
| **MEXI** | **Barrio Mexico** | **0.69** | **9** | *i* P | | **Pb** | **09 35 10.2** | **+0.3** |
| MEXI | | | | *e*S | | **Sb** | **09 35 20.1** | **+1.1** |
| **SJS3** | **Mercedes San J** | **0.69** | **12** | *i* P | | **Pb** | **09 35 10.4** | **+0.5** |
| SJS3 | | | | *e*S | | **Sn** | **09 35 21.5** | **+0.2** |
| **SJS** | **Escuela Geolog** | **0.69** | **12** | *i* P | | **Pb** | **09 35 10.2** | **+0.3** |
| SJS | | | | *e*S | | **Sn** | **09 35 21.3** | **-0.1** |
| **TRB2** | **Turrubares** | **0.70** | **339** | *e*P | | **Pb** | **09 35 09.8** | **-0.1** |
| **LUPE** | **Guadalupe** | **0.70** | **11** | *i* P | | **Pb** | **09 35 10.4** | **+0.3** |
| LUPE | | | | *e*S | | **Sn** | **09 35 21.2** | **-0.3** |
| **TIBA** | **Tibas** | **0.71** | **10** | *i* P | | **Pn** | **09 35 11.7** | **+0.3** |
| **BELE** | **Belen** | **0.72** | **1** | *i* P | | **Pb** | **09 35 10.4** | **+0.2** |
| BELE | | | | *e*S | | **Sn** | **09 35 21.3** | **-0.6** |
| **DOMI** | **Santo Domingo** | **0.73** | **8** | *i* P | | **Pb** | **09 35 11.0** | **+0.5** |
| DOMI | | | | *e*S | | **Sn** | **09 35 21.5** | **-0.7** |
| **CORON** | **Coronado** | **0.74** | **15** | *i* P | | **Pb** | **09 35 11.3** | **+0.6** |
| **HDC** | **Heredia** | **0.75** | **6** | | | **Pb** | **09 35 11.2** | **+0.5** |
| HDC | | | | | | Sn | | |
| **HDC** | **Heredia** | **0.75** | **6** | *e*P | | **Pb** | **09 35 11.2** | **+0.5** |
| **HDC** | **Heredia** | **0.75** | **6** | *i* P | | **Pb** | **09 35 11.3** | **+0.5** |
| HDC | | | | *e*S | | **Sb** | **09 35 21.5** | **+1.0** |
| **HDC3** | **Heredia 3** | **0.75** | **6** | *i* P | | **Pb** | **09 35 11.1** | **+0.3** |
| HDC3 | | | | *i* S | | **Sb** | **09 35 21.0** | **+0.4** |
| HDC3 | | | | IAML | | | 09 35 28.6 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **PCAYA** | **Pacayas** | **0.76** | **30** | *i* P | | **Pb** | **09 35 11.6** | **+0.6** |
| **VINA** | **Juan Vinas** | **0.78** | **35** | *e*P | | **Pb** | **09 35 11.8** | **+0.5** |
| **EDPN** | **Palmar Norte** | **0.79** | **112** | *e*P | | **Pn** | **09 35 12.4** | **+0.1** |
| **TCS1** | **Tacares** | **0.79** | **353** | *i* P | | **Pb** | **09 35 11.9** | **+0.5** |
| **RAFA** | **San Farael, Vo** | **0.80** | **28** | *i* P | | **Pb** | **09 35 12.2** | **+0.5** |
| RAFA | | | | *i* S | | **Sn** | **09 35 23.6** | **-0.5** |
| RAFA | | | | IAML | | | 09 35 27.4 | |
| | comp=Z,41μm,1.0s | | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.80** | **28** | *i* P | | **Pb** | **09 35 12.2** | **+0.5** |
| **VICA** | **Volcano Irazu** | **0.80** | **26** | *i* P | | **Pb** | **09 35 12.4** | **+0.4** |
| **CVIMO** | **Finca Echandi** | **0.81** | **18** | *i* P | | **Pb** | **09 35 12.4** | **-0.3** |
| **TURIB** | **Turrialba** | **0.82** | **38** | *i* P | | **Pb** | **09 35 12.3** | **+0.3** |
| TURIB | | | | *e*S | | **Sn** | **09 35 23.7** | **-0.7** |
| **GREC** | **Grecia** | **0.82** | **352** | *i* P | | **Pn** | **09 35 13.6** | **+0.7** |
| **SARCI** | **Sarchi** | **0.84** | **350** | *e*P | | **Pn** | **09 35 12.9** | **-0.2** |
| **VERB** | **Verbena** | **0.84** | **36** | *e*P | | **Pn** | **09 35 13.1** | **-0.2** |
| VERB | | | | *e*S | | **Sn** | **09 35 25.1** | **0.0** |
| **BURE** | **Buenos Aires** | **0.85** | **95** | *e*P | | **Pn** | **09 35 13.9** | **+0.7** |
| BURE | | | | *e*S | | **Sn** | **09 35 26.5** | **+1.5** |
| **VTLA** | **Turrialba Volc** | **0.85** | **29** | *i* P | | **Pn** | **09 35 13.3** | **-0.2** |
| **CVTQ** | **Turrialba Volc** | **0.86** | **30** | *i* P | | **Pn** | **09 35 13.4** | **-0.2** |
| **NARAN** | **Naranjo de Ala** | **0.86** | **348** | *e*P | | **Pn** | **09 35 14.1** | **+0.7** |
| **VTCV** | **VTCV, Calle Va** | **0.86** | **33** | *i* P | | **Pn** | **09 35 13.3** | **-0.2** |
| **CVTU** | **Tajo** | **0.87** | **31** | *i* P | | **Pn** | **09 35 13.6** | **-0.1** |
| **RAMO** | **San Ramon** | **0.87** | **342** | *e*P | | **Pn** | **09 35 13.9** | **+0.4** |
| **SRA1** | **San Ramn** | **0.87** | **341** | *e*P | | **Pb** | **09 35 12.9** | **0.0** |
| **VTR0** | **Volcan Turrial** | **0.87** | **30** | *i* P | | **Pn** | **09 35 13.7** | **-0.1** |
| **CVTR** | **Volcan Turrial** | **0.87** | **30** | *i* P | | **Pn** | **09 35 13.6** | **-0.3** |
| **RVSTA** | **Santa Teresita** | **0.90** | **37** | *e*P | | **Pn** | **09 35 13.9** | **0.0** |
| RVSTA | | | | *e*S | | **Sn** | **09 35 27.4** | **+1.1** |
| **EDBA** | **Buenos Aires** | **0.91** | **96** | *e*P | | **Pn** | **09 35 14.0** | **-0.1** |
| **VPS6** | **Volcano Poas** | **0.93** | **358** | *i* P | | **Pn** | **09 35 14.4** | **-0.2** |
| **DRK0** | **Durika** | **0.94** | **89** | *i* P | | **Pn** | **09 35 15.2** | **+0.7** |
| DRK0 | | | | *i* S | | **Sn** | **09 35 28.3** | **+0.9** |
| DRK0 | | | | IAML | | | 09 35 30.5 | |
| | comp=Z,220μm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **0.94** | **89** | *e*P | | **Pn** | **09 35 14.8** | **+0.3** |
| **ZARE** | **Zarcero** | **0.94** | **348** | *e*P | | **Pn** | **09 35 14.8** | **+0.2** |
| **CBL1** | **Cabuya** | **0.94** | **291** | *e*P | | **Pb** | **09 35 14.0** | **-0.1** |
| CBL1 | | | | *e*S | | **Sb** | **09 35 25.6** | **-0.5** |
| **EDD2** | **Potrero Grande** | **1.03** | **103** | *e*P | | **Pn** | **09 35 17.1** | **+1.4** |
| **LCOCO** | **El Coco** | **1.04** | **37** | *i* P | | **Pn** | **09 35 16.3** | **+0.6** |
| **RVLA** | **Villa Bonita** | **1.04** | **35** | *e*P | | **Pn** | **09 35 16.4** | **+0.6** |
| **IRES** | **Siquirres** | **1.08** | **39** | *i* P | | **Pb** | **09 35 17.1** | **+0.8** |
| **JIME** | **Puerto Jimenez** | **1.12** | **130** | *e*P | | **Pb** | **09 35 17.1** | **+0.1** |
| **TAAN** | **Batan** | **1.18** | **45** | *i* P | | **Pb** | **09 35 19.1** | **+1.1** |
| **ITAL** | **Pital** | **1.19** | **356** | *i* P | | **Pb** | **09 35 18.6** | **+0.3** |
| ITAL | | | | *e*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BCIP** | **Isla Barro Col** | **4.30** | **91** | ⇑P | **Pn** | **09 36 03.6** | **+3.0** |
| **CRIN** | **San Cristobal** | **4.42** | **321** | Pn | **Pn** | **09 36 02.0** | **-0.4** |
| **PRVC** | **Isla de Provid** | **4.95** | **34** | Pn | **Pn** | **09 36 09.5** | **-0.1** |
| **TGUH** | **Tegucigalpa,Un** | **5.64** | **328** | Pn | **Pn** | **09 36 19.1** | **-0.2** |
| **SNET** | **Serv Nac Est T** | **6.61** | **312** | Pn | **Pn** | **09 36 31.4** | **-1.2** |
| **MTO3** | **Montecristo** | **7.19** | **316** | Pn | **Pn** | **09 36 40.3** | **-0.3** |
| **APG** | **El Apazote** | **8.38** | **314** | Pn | **Pn** | **09 36 58.1** | **+1.2** |
| | baz=155,slow=22,SNR=5.8 | | | | | | |
| APG | | | | LR | LR | 09 40 33.2 | |
| | comp=Z,11nm,19.4s,baz=109,slow=41 | | | | | | |
| **CCIG** | **Comitan** | **10.43** | **313** | Pn | **Pn** | **09 37 23.9** | **-1.0** |
| **CMIG** | **Matias Romero** | **12.99** | **308** | Pn | **Pn** | **09 38 00.6** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=15,slow=4.7,SNR=2.1 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **SDV** | **Santo Domingo** | **13.40** | **90** | LR | LR | 09 45 32.5 | |
| | comp=Z,43nm,20.4s,baz=310,slow=49 | | | | | | |
| **CAMR** | **Camarioca** | **13.99** | **11** | Pn | **Pn** | **09 38 11.9** | **-1.6** |
| **BAUV** | **El Baul** | **15.96** | **90** | Pn | **P** | **09 38 42.2** | **-1.1** |
| BAUV | | | | IAmb | IAmb | 09 38 59.3 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **ATAH** | **Atahualpa** | **17.28** | **160** | LR | LR | 09 44 55.1 | |
| | comp=Z,173nm,19.8s,baz=345,slow=33 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **19.30** | **86** | LR | LR | 09 48 51.8 | |
| | comp=Z,80nm,18.9s,slow=44 | | | | | | |
| **152A** | **Waverly Hall** | **23.30** | **359** | P | **P** | **09 40 01.9** | **-1.1** |
| 152A | | | | IAmb | IAmb | 09 40 05.3 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **LRAL** | **Lakeview Retre** | **23.81** | **354** | P | **P** | **09 40 07.6** | **-0.3** |
| **Z47A** | **Carrollton** | **24.10** | **352** | P | **P** | **09 40 07.2** | **-3.3** |
| Z47A | | | | IAmb | IAmb | 09 40 14.0 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **25.66** | **343** | P | **P** | **09 40 24.7** | **-0.1** |
| WLAR | | | | IAmb | IAmb | 09 40 34.3 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **BRDY** | **Brady** | **25.89** | **330** | P | **P** | **09 40 25.2** | **-1.7** |
| **SWET** | **Sewanee** | **25.89** | **357** | P | **P** | **09 40 27.4** | **+0.5** |
| SWET | | | | IAmb | IAmb | 09 40 40.8 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **KMSC** | **Kings Mountain** | **25.90** | **5** | P | **P** | **09 40 23.9** | **-3.0** |
| KMSC | | | | IAmb | IAmb | 09 40 59.9 | |
| | comp=Z,8.5nm,1.3s | | | | | | |
| **ETMB** | **Extrema** | **26.07** | **136** | P | **P** | **09 40 30.1** | **+1.5** |
| ETMB | | | | IAmb | IAmb | 09 40 41.0 | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **TKL** | **Tuckaleechee C** | **26.29** | **1** | LR | LR | 09 50 37.3 | |
| | comp=Z,67nm,20.9s,baz=166,slow=37 | | | | | | |
| **MIAR** | **Mount Ida** | **26.60** | **343** | P | **P** | **09 40 31.0** | **-2.3** |
| MIAR | | | | IAmb | IAmb | 09 40 44.0 | |
| | comp=Z,9.8nm,1.4s | | | | | | |
| **WHAR** | **Wooly Hollow** | **26.95** | **345** | P | **P** | **09 40 36.5** | **0.0** |
| **TXAR** | **Lajitas Array** | **27.06** | **320** | P | **P** | **09 40 35.6** | **-2.0** |
| **TXAR** | **Lajitas Array** | **27.06** | **320** | P | **P** | **09 40 38.8** | **+1.2** |
| | comp=Z,0.4nm,0.5s,baz=152,slow=11,SNR=3.2 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **T42A** | **Van Buren** | **28.35** | **348** | P | **P** | **09 40 47.5** | **-1.4** |
| **CCM** | **Cathedral Cave** | **29.37** | **349** | P | **P** | **09 40 57.7** | **-0.3** |
| CCM | | | | IAmb | IAmb | 09 40 59.0 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **N35A** | **Tabor** | **33.08** | **344** | P | **P** | **09 41 29.6** | **-1.1** |
| **L40A** | **Anamosa** | **33.26** | **350** | P | **P** | **09 41 31.4** | **-0.8** |
| **LVC** | **Limon Verde** | **35.03** | **155** | LR | LR | 09 56 00.7 | |
| | comp=Z,74nm,18.4s,baz=183,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **35.65** | **6** | LR | LR | 09 56 59.6 | |
| | comp=Z,75nm,19.1s,baz=242,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **40.10** | **331** | LR | LR | 10 01 04.7 | |
| | comp=Z,18nm,19.2s,baz=68,slow=40 | | | | | | |
| **SPUT** | **South Promonto** | **40.52** | **327** | P | **P** | **09 42 32.9** | **-1.4** |
| **CO01** | **Juntas del Tor** | **41.30** | **161** | P | **P** | **09 42 41.9** | **+1.1** |
| **ULM** | **Lac du Bonnet** | **42.00** | **349** | P | **P** | **09 42 43.9** | **-2.2** |
| | comp=Z,2.6nm,0.8s,baz=184,slow=3.6,SNR=2.7 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **42.20** | **319** | P | **P** | **09 42 49.5** | **+1.3** |
| | comp=Z,0.3nm,0.7s,baz=123,slow=5.9,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **SCHQ** | **Schefferville** | **47.51** | **14** | LR | LR | 10 04 19.6 | |
| | comp=Z,63nm,18.6s,baz=308,slow=38 | | | | | | |
| **PLCA** | **Paso Flores** | **51.31** | **167** | P | P | 09 44 08.4 | +9.3 |
| | comp=Z,3.0nm,0.9s,baz=350,slow=8.9,SNR=6.7 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **FRB** | **Frobisher Bay** | **55.54** | **8** | LR | LR | 10 07 50.9 | |
| | comp=Z,70nm,19.8s,baz=155,slow=36 | | | | | | |
| **I30M** | **Mount Dempster** | **66.42** | **339** | P | **P** | **09 45 43.9** | **-0.1** |
| I30M | | | | IAmb | IAmb | 09 46 07.2 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **67.29** | **333** | P | **P** | **09 45 49.8** | **+0.3** |
| **G29M** | **Pine Creek** | **67.88** | **340** | P | **P** | **09 45 53.5** | **+0.5** |
| **G21K** | **Allakaket** | **73.37** | **337** | P | **P** | **09 46 27.1** | **+0.6** |
| G21K | | | | IAmb | IAmb | 09 47 04.0 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **76.65** | **51** | P | **P** | **09 46 46.5** | **+0.5** |
| | comp=Z,1.3nm,0.8s,baz=280,slow=6.0,SNR=8.0 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **77.35** | **35** | P | **P** | **09 46 49.2** | **-0.4** |
| | comp=Z,1.2nm,0.7s,baz=261,slow=5.1,SNR=7.3 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.97** | **78** | P | **P** | **09 47 26.0** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=298,slow=6.1,SNR=2.5 | | | | | | |
| TORD | | | | LR | LR | 10 25 30.2 | |
| | comp=Z,38nm,18.3s,baz=170,slow=36 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **84.59** | **29** | LR | LR | 10 20 40.7 | |
| | comp=Z,6.2nm,21.9s,baz=320,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **141.32** | **250** | PKP | **PKiKP** | **09 54 29.9** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=101,slow=2.1,SNR=2.1 | | | | | | |

**WEL 21 09:42:48.8±0.9, 36°S±6°×17°8E±°, h155km±8km, M3.4/12, ML3.6/19, MLv3.4/12, Error ellipse: s-maj=0.0km s-min=0.0km az=96.5, confirmed, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.17** | **180** | P | Pn | 09 43 15.9 | +0.4 |
| MXZ | | | | S | Sn | 09 43 35.2 | -0.8 |
| **HAZ** | **Te Kaha** | **1.42** | **197** | P | Pn | 09 43 17.8 | -0.1 |
| HAZ | | | | S | Sn | 09 43 41.1 | +0.7 |
| **RUGZ** | **Raukumara Rang** | **1.64** | **197** | P | Pn | 09 43 20.6 | +0.2 |
| RUGZ | | | | S | Sn | 09 43 44.5 | -0.2 |
| **PUZ** | **Puketiti** | **1.67** | **181** | P | Pn | 09 43 21.2 | +0.6 |
| PUZ | | | | S | Sn | 09 43 45.0 | -0.2 |
| **TWGZ** | **Tauwhareparae** | **1.80** | **188** | P | Pn | 09 43 23.5 | +1.5 |
| TWGZ | | | | S | Sn | 09 43 49.0 | +1.4 |
| **OPRZ** | **Ohinepanea** | **2.01** | **223** | P | Pn | 09 43 24.5 | +0.2 |
| **MWZ** | **Matawai** | **2.03** | **197** | P | Pn | 09 43 25.5 | +0.9 |
| MWZ | | | | S | Sn | 09 43 53.5 | +1.2 |
| **TKGZ** | **Te Karaka** | **2.07** | **190** | P | Pn | 09 43 26.1 | +1.1 |
| TKGZ | | | | S | Sn | 09 43 53.7 | +0.7 |
| **CNGZ** | **Carnagh Statio** | **2.09** | **182** | P | Pn | 09 43 26.5 | +1.2 |
| **URZ** | **Urewera** | **2.09** | **207** | P | Pn | 09 43 25.4 | +0.1 |
| URZ | | | | S | Sn | 09 43 53.3 | -0.1 |
| **KUZ** | **Kuaotunu** | **2.10** | **260** | P | Pn | 09 43 23.8 | -1.6 |
| **GRZ** | **Great Barrier** | **2.30** | **273** | P | Pn | 09 43 25.3 | -2.4 |
| **SNGZ** | **Shannon Statio** | **2.50** | **197** | P | Pn | 09 43 31.6 | +1.4 |
| SNGZ | | | | S | Sn | 09 44 03.4 | +1.1 |
| **MKAZ** | **Moumakai** | **2.62** | **253** | P | Pn | 09 43 30.9 | -0.7 |
| **KNZ** | **Kokohu** | **2.67** | **190** | P | Pn | 09 43 32.2 | 0.0 |
| KNZ | | | | S | Sn | 09 44 05.4 | -0.5 |
| **MTHZ** | **Maungataniwha** | **2.71** | **205** | P | Pn | 09 43 33.6 | +0.8 |
| MTHZ | | | | S | Sn | 09 44 06.0 | -0.9 |
| **ETAZ** | **East Tamaki Re** | **2.77** | **257** | P | Pn | 09 43 33.3 | -0.1 |
| **MRHZ** | **Matea Rd** | **2.86** | **211** | P | Pn | 09 43 34.4 | -0.3 |
| **NMHZ** | **Naumai** | **2.94** | **203** | P | Pn | 09 43 36.6 | +0.8 |
| **BKZ** | **Black Stump Fm** | **3.11** | **207** | P | Pn | 09 43 37.4 | -0.5 |
| BKZ | | | | S | Sn | 09 44 16.5 | +0.6 |
| **WCZ** | **Waipu Caves** | **3.23** | **277** | P | Pn | 09 43 46.7 | +7.4 |
| **MCHZ** | **McNeill Hill** | **3.30** | **202** | P | Pn | 09 43 40.1 | 0.0 |
| **KWHZ** | **Kaweka Forest** | **3.37** | **206** | P | Pn | 09 43 39.4 | -1.7 |
| KWHZ | | | | S | Sn | 09 44 21.4 | -0.3 |
| **HIZ** | **Hauiti** | **3.46** | **231** | P | Pn | 09 43 45.5 | +3.3 |
| **KAHZ** | **Kahuranaki** | **3.57** | **198** | P | Pn | 09 43 43.5 | -0.2 |
| KAHZ | | | | S | Sn | 09 44 26.1 | -0.3 |
| **KRHZ** | **Kereru** | **3.58** | **205** | P | Pn | 09 43 42.5 | -1.2 |
| KRHZ | | | | S | Sn | 09 44 25.0 | -1.5 |
| **FWVZ** | **Far West T-bar** | **3.59** | **216** | P | Pn | 09 43 44.4 | +0.3 |
| **PXZ** | **Pawanui** | **3.80** | **197** | P | Pn | 09 43 46.2 | -0.4 |
| PXZ | | | | S | Sn | 09 44 29.7 | -1.8 |
| **PRHZ** | **Porangahau** | **4.08** | **198** | P | Pn | 09 43 49.4 | -0.8 |
| PRHZ | | | | S | Sn | 09 44 36.0 | -2.0 |

*IDC **21** 09:48:12.3±0.8, 52°.83S×9°.71E, h0km, mb4.2/10, mbtmp4.2/11, ML3.7/1, MS3.7/22, Error ellipse:*
*s-maj=27.0km s-min=17.8km az=94.0*
*NEIC **21** 09:48:14.9±1.8, 52°.82S±0°.07×9°.8E±0°.2, h10km±1km, mb4.7/22, Error ellipse: s-maj=21.9km s-min=9.9km az=72.0*

**ISC 21 09:48:14.5±0.5, 52°.82S±0°.07×9°.7E±0°.1, h10km, n56, σ0s81/36, mb4.5/16, MS3.7/21, 3C, Southwest of Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TROLL** | **Troll, Antarti** | **19.52** | **187** | ⇑P | **Pn** | **09 52 42.9** | **-0.1** |
| | comp=Z,761nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **19.72** | **192** | P | **P** | **09 52 44.0** | **+0.1** |
| SNAA | | | | IAmb | IAmb | 09 52 48.2 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **19.72** | **192** | ⇑P | **P** | **09 52 43.9** | **+0.1** |
| | comp=Z,355nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **19.72** | **192** | P | **P** | **09 52 43.2** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=21,slow=12,SNR=20 | | | | | | |
| SNAA | | | | LR | LR | 09 58 22.0 | |
| | comp=Z,187nm,21.2s,baz=28,slow=31 | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **20.41** | **198** | ⇑P | **P** | **09 52 51.3** | **-0.1** |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **SUR** | **Sutherland** | **21.94** | **26** | P | **P** | **09 53 08.9** | **+0.6** |
| SUR | | | | IAmb | IAmb | 09 53 09.7 | |
| | comp=Z,48nm,1.2s | | | | | | |
| **SUR** | **Sutherland** | **21.94** | **26** | P | **P** | **09 53 08.2** | **-0.1** |
| | comp=Z,15nm,0.9s,baz=191,slow=8.6,SNR=7.0 | | | | | | |
| SUR | | | | LR | LR | 10 00 04.2 | |
| | comp=Z,127nm,18.0s,baz=160,slow=32 | | | | | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **26.77** | **31** | P | **P** | **09 53 54.2** | **-0.3** |
| **BOSA** | **Boshof** | **26.77** | **31** | P | **P** | **09 53 53.6** | **-0.9** |
| | comp=Z,5.3nm,0.9s,baz=222,slow=7.4,SNR=3.9 | | | | | | |
| BOSA | | | | LR | LR | 10 02 24.7 | |
| | comp=Z,172nm,19.8s,baz=190,slow=32 | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **27.52** | **95** | T | T | 10 23 02.7 | |
| | baz=242,slow=75,SNR=21 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **27.53** | **95** | T | T | 10 23 05.2 | |
| | baz=242,slow=75,SNR=21 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **27.54** | **95** | T | T | 10 23 01.8 | |
| | baz=242,slow=75,SNR=21 | | | | | | |
| **MAW** | **Mawson** | **29.12** | **141** | P | **P** | **09 54 15.3** | **+0.4** |
| | comp=Z,1.8nm,0.9s,baz=258,slow=13,SNR=2.6 | | | | | | |
| MAW | | | | LR | LR | 10 04 36.0 | |
| | comp=Z,174nm,18.9s,baz=308,slow=34 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **BELA** | **Belgrano 2** | **29.71** | **197** | P | **P** | **09 54 19.8** | **-0.4** |
| **LBTB** | **Lobatse** | **30.24** | **29** | P | **P** | **09 54 25.5** | **+0.1** |
| LBTB | | | | IAmb | IAmb | 09 54 27.8 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **LBTB** | **Lobatse** | **30.24** | **29** | LR | LR | 10 04 58.6 | |
| | comp=Z,122nm,18.2s,baz=162,slow=33 | | | | | | |
| **TSUM** | **Tsumeb** | **34.10** | **13** | P | **P** | **09 55 00.4** | **+1.0** |
| TSUM | | | | IAmb | IAmb | 09 55 00.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **TSUM** | **Tsumeb** | **34.10** | **13** | LR | LR | 10 06 55.9 | |
| | comp=Z,134nm,20.1s,baz=156,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **37.42** | **180** | P | **P** | **09 55 27.3** | **-0.2** |
| QSPA | | | | IAmb | IAmb | 09 55 29.7 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **37.42** | **180** | P | **P** | **09 55 26.6** | **-0.8** |
| | comp=Z,2.1nm,1.1s,baz=239,slow=6.1,SNR=3.6 | | | | | | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **PMSA** | **Palmer Station** | **37.75** | **222** | P | **P** | **09 55 30.7** | **+0.7** |
| PMSA | | | | IAmb | IAmb | 09 55 31.0 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **ASCN** | **Ascension** | **48.87** | **328** | P | **P** | **09 56 59.6** | **-0.7** |
| **TRQA** | **Tornquist** | **50.34** | **257** | P | **P** | **09 57 11.3** | **-0.1** |
| TRQA | | | | IAmb | IAmb | 09 57 20.6 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **PLCA** | **Paso Flores** | **53.53** | **249** | LR | LR | 10 19 40.6 | |
| | comp=Z,50nm,18.1s,baz=164,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **55.74** | **271** | P | **P** | **09 57 52.0** | **+0.7** |
| CPUP | | | | IAmb | IAmb | 09 57 58.1 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **CPUP** | **Villa Florida** | **55.74** | **271** | P | **P** | **09 57 50.5** | **-0.8** |
| | comp=Z,1.6nm,0.6s,baz=111,slow=9.8,SNR=3.8 | | | | | | |
| CPUP | | | | LR | LR | 10 19 27.6 | |
| | comp=Z,60nm,19.3s,baz=184,slow=34 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **56.38** | **34** | LR | LR | 10 20 12.8 | |
| | comp=Z,60nm,18.6s,baz=104,slow=34 | | | | | | |
| **BDFB** | **Brasilia** | **58.33** | **287** | LR | LR | 10 18 02.1 | |
| | comp=Z,113nm,19.0s,baz=179,slow=31 | | | | | | |
| **LODK** | **Lodwar** | **60.05** | **30** | P | **P** | **09 58 20.7** | **-0.9** |
| **DBIC** | **Dimbokro** | **60.54** | **343** | P | **P** | **09 58 24.5** | **-0.3** |
| DBIC | | | | IAmb | IAmb | 09 58 25.4 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro** | **60.54** | **343** | P | **P** | **09 58 24.5** | **-0.3** |
| | comp=Z,7.3nm,0.6s,baz=148,slow=8.8,SNR=12 | | | | | | |
| DBIC | | | | LR | LR | 10 20 43.7 | |
| | comp=Z,56nm,18.1s,baz=100,slow=32 | | | | | | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| **LCO** | **Las Campanas** | **61.85** | **258** | P | **P** | **09 58 33.2** | **-0.8** |
| LCO | | | | IAmb | IAmb | 09 58 45.8 | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **AC06** | **Mina Casimiro** | **62.86** | **260** | P | **P** | **09 58 41.8** | **+1.3** |
| AC06 | | | | IAmb | IAmb | 09 59 18.0 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **LVC** | **Limon Verde** | **65.53** | **264** | LR | LR | 10 25 02.0 | |
| | comp=Z,47nm,19.9s,baz=174,slow=34 | | | | | | |
| **SIV** | **San Ignacio** | **65.83** | **275** | LR | LR | 10 22 34.1 | |
| | comp=Z,73nm,20.8s,baz=115,slow=31 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.06** | **351** | P | **P** | **09 59 00.6** | **-0.7** |
| | comp=Z,2.5nm,0.8s,baz=183,slow=6.4,SNR=12 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **FURI** | **Furi** | **66.25** | **31** | LR | LR | 10 27 24.4 | |
| | comp=Z,80nm,18.0s,baz=195,slow=36 | | | | | | |
| **TA02** | **Huaiquique** | **68.04** | **265** | P | **P** | **09 59 15.3** | **+1.3** |
| **LPAZ** | **La Paz** | **69.88** | **269** | P | **P** | **09 59 27.3** | **+1.0** |
| LPAZ | | | | IAmb | IAmb | 09 59 29.8 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **LPAZ** | **La Paz** | **69.88** | **269** | P | **P** | **09 59 26.1** | **-0.2** |
| | comp=Z,1.9nm,0.8s,baz=151,slow=4.6,SNR=8.6 | | | | | | |
| LPAZ | | | | LR | LR | 10 29 35.5 | |
| | comp=Z,37nm,18.8s,baz=122,slow=36 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **MCQ** | **Macquarie Isla** | **70.04** | **161** | P | **P** | **09 59 27.1** | **+1.1** |
| **H01W2** | **Cape Leeuwin H** | **70.82** | **123** | T | T | 11 17 29.1 | |
| | baz=219,slow=75,SNR=16 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **70.83** | **123** | T | T | 11 17 32.9 | |
| | baz=219,slow=75,SNR=8.0 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **70.83** | **123** | T | T | 11 17 35.7 | |
| | baz=219,slow=75,SNR=14 | | | | | | |
| **SAML** | **Samuel** | **72.60** | **278** | P | **P** | **09 59 40.8** | **-1.3** |
| **TAM** | **Tamanrasset** | **75.37** | **356** | P | **P** | **09 59 58.5** | **+0.4** |
| **MDP** | **Montagnes des** | **77.87** | **295** | LR | LR | 10 30 02.6 | |
| | comp=Z,74nm,21.0s,baz=120,slow=32 | | | | | | |
| **EIL** | **Elat** | **85.04** | **22** | LR | LR | 10 36 54.6 | |
| | comp=Z,45nm,19.0s,baz=250,slow=34 | | | | | | |
| **CAN** | **Canberra** | **85.34** | **148** | P | **P** | **10 00 52.2** | **+0.5** |
| **MDT** | **Midelt** | **86.18** | **349** | LR | LR | 10 35 07.5 | |
| | comp=Z,64nm,19.0s,baz=158,slow=33 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **88.36** | **21** | LR | LR | 10 40 43.8 | |
| | comp=Z,35nm,18.2s,baz=129,slow=36 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **88.77** | **289** | LR | LR | 10 36 37.5 | |
| | comp=Z,78nm,19.0s,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **89.73** | **131** | P | **P** | **10 01 11.6** | **-1.5** |
| | comp=Z,0.4nm,0.9s,baz=223,slow=6.3,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **91.24** | **283** | LR | LR | 10 38 11.0 | |
| | comp=Z,41nm,21.6s,baz=182,slow=33 | | | | | | |
| **ESDC** | **Sonseca Array** | **92.88** | **349** | P | **P** | **10 01 28.0** | **+1.0** |
| | comp=Z,0.6nm,0.7s,baz=185,slow=3.8,SNR=5.3 | | | | | | |
| ESDC | | | | LR | LR | 10 38 20.0 | |
| | comp=Z,21nm,18.4s,baz=147,slow=32 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **149.64** | **311** | PKPbc | **PKPdf** | **10 07 59.8** | **+1.5** |
| | comp=Z,2.2nm,1.0s,baz=74,slow=2.9,SNR=4.7 | | | | | | |

**HEL 21 09:50:42.8±1.0, 65°.32N×29°.28E, h0km, ML0.9, Suspected explosion, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSF** | **Maaselka** | **0.60** | **350** | PG | Pg | 09 50 53.8 | -0.5 |
| MSF | | | | SG | Sg | 09 51 01.8 | -0.2 |
| **KU6** | **Riekki** | **0.75** | **19** | PG | Pg | 09 50 56.4 | -0.7 |
| KU6 | | | | MSG | | 09 51 06.2 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| KU6 | | | | SB | Sg | 09 51 06.4 | -0.4 |
| **OLKF** | **Oulanka, Finla** | **1.00** | **3** | PB | Pg | 09 51 01.0 | -0.9 |
| OLKF | | | | MSG | | 09 51 13.4 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| OLKF | | | | SN | Sb | 09 51 16.4 | -0.3 |
| **RMF** | **Romuvaara** | **1.15** | **166** | MSG | | 09 51 17.5 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| RMF | | | | SN | Sb | 09 51 20.6 | -0.2 |
| **RANF** | **Ranua** | **1.25** | **305** | PG | Pg | 09 51 05.0 | -1.6 |
| RANF | | | | SG | Sg | 09 51 21.4 | -1.3 |
| **OUL** | **Oulu** | **1.45** | **262** | SN | Sg | 09 51 27.9 | -1.4 |
| **RNF** | **Rovaniemi** | **1.86** | **315** | SG | Sn | 09 51 40.3 | +0.3 |
| **TOF** | **Tornio** | **2.19** | **293** | MSG | | 09 51 47.6 | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| TOF | | | | SG | Sb | 09 51 49.8 | -1.0 |
| **KTK1** | **Kautokeino** | **4.39** | **330** | SG | Sb | 09 52 58.5 | +4.4 |

**HEL 21 09:52:27.2±0.5, 60°.14N×23°.95E, h0km, ML1.5, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MEF** | **Metsahovi** | **0.23** | **71** | PG | Pg | 09 52 31.1 | -0.6 |
| MEF | | | | SG | Sg | 09 52 34.4 | -0.2 |
| **HEL1** | **Helsinki** | **0.47** | **85** | PG | Pg | 09 52 36.0 | -0.1 |
| HEL1 | | | | SG | Sg | 09 52 41.1 | -1.0 |
| **NUR** | **Nurmijrvi** | **0.51** | **43** | PG | Pg | 09 52 36.5 | -0.4 |
| NUR | | | | SG | Sg | 09 52 39.4 | -4.0 |
| NUR | | | | MSG | | 09 52 43.5 | |
| | comp=Z,3.5nm,0.2s | | | | | | |
| **PVF** | **Pernaja** | **1.03** | **66** | PG | Pg | 09 52 46.2 | -0.8 |
| PVF | | | | MSG | | 09 52 58.6 | |
| | comp=Z,2.7nm,0.2s | | | | | | |
| PVF | | | | SN | Sn | 09 53 06.4 | +2.4 |
| **RAF** | **Rauma** | **1.40** | **310** | PG | Pn | 09 52 52.0 | -1.9 |
| RAF | | | | MSG | | 09 53 09.2 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| RAF | | | | SG | Sg | 09 53 10.8 | -1.3 |
| **FIA0** | **FINESS Array S** | **1.67** | **38** | PG | Pn | 09 52 57.0 | -0.7 |
| FIA0 | | | | MSG | | 09 53 17.2 | |
| | comp=Z,7.7nm,0.2s | | | | | | |
| **KPF** | **Kankaanpaa** | **1.93** | **332** | PG | Pn | 09 53 02.2 | +0.9 |
| KPF | | | | SG | Sn | 09 53 26.8 | +0.6 |
| **AAL** | **Aland** | **1.98** | **273** | SB | Sb | 09 53 29.2 | 0.0 |
| **KEF** | **Keuruu** | **2.08** | **12** | MSG | | 09 53 28.9 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| **SUF** | **Sumiainen** | **2.79** | **21** | MSG | | 09 53 49.3 | |
| | comp=Z,3.7nm,0.2s | | | | | | |

*IDC **21** 09:54:15.6±1.6, 30°.16N×50°.89E, h0km, mb4.0/14, mbtmp4.0/15, ML3.1/1, MS3.2/3, Error ellipse: s-maj=36.3km s-min=18.1km az=157.0*
*TEH **21** 09:54:16.8, 30°.22N×51°.07E, h8km±36km, ML3.5*
*NEIC **21** 09:54:16.3±1.3, 29°.96N±0°.05×50°.85E±0°.1, h10km±1km, mb4.2/24, Error ellipse: s-maj=15.5km s-min=6.0km az=246.0*
*OMAN **21** 09:54:20.7±0.2, 29°.93N×51°.17E, h10km, mb4.5/13, Error ellipse: s-maj=4.1km s-min=1.9km az=352.0*
*DSN **21** 09:54:21.6±2.5, 29°.68N×50°.99E, h10km, ML3.6/12, Error ellipse: s-maj=34.3km s-min=9.8km az=3.0*

**ISC 21 09:54:17.2±0.5, 30°.22N±0°.03×51°.08E±0°.03, h10km, n131, σ1s83/152, mb4.2/23, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAZ2** | **Kazeron-Fars-I** | **0.78** | **140** | Pg | **Pg** | **09 54 32.3** | **0.0** |
| **ABEH** | **Behbahan** | **0.81** | **298** | Pg | **Pb** | **09 54 33.1** | **-0.3** |
| **KLNJ** | **Kolanjah** | **0.90** | **29** | Pg | **Pg** | **09 54 34.1** | **-0.5** |
| **AHBU** | **AHRAM** | **1.36** | **172** | Pg | **Pg** | **09 54 43.7** | **+0.4** |
| AHBU | | | | Sg | **Sg** | **09 55 05.9** | **+5.0** |
| **SHI** | **Shiraz** | **1.37** | **114** | Pg | **Pg** | **09 54 44.1** | **+0.6** |
| SHI | | | | Sg | **Sg** | **09 55 06.8** | **+5.6** |
| **IBRJ** | **Brojen** | **1.69** | **5** | Pg | **Pg** | **09 54 49.0** | **-0.7** |
| **DSBU** | **Dashti - Bushe** | **1.85** | **175** | Pn | **Pb** | **09 54 51.0** | **-0.2** |
| **ZNGN** | **Zangian** | **1.91** | **354** | Pn | **Pb** | **09 54 52.0** | **0.0** |
| **IRAM** | **Ramesheh** | **1.94** | **35** | Pn | **Pb** | **09 54 53.2** | **+0.5** |
| **JHBN** | **Jahan bin** | **2.04** | **350** | Pn | **Pb** | **09 54 54.1** | **-0.4** |
| **IGAR** | **Gharneh** | **2.33** | **20** | Pn | **Pb** | **09 54 58.6** | **-0.8** |
| **QIR1** | **Qir** | **2.44** | **135** | Pn | **Pb** | **09 54 59.3** | **-1.9** |
| **IPIR** | **Pirpir** | **2.47** | **356** | Pn | **Pb** | **09 54 59.7** | **-2.0** |
| **JHRM** | **Jahrom** | **2.77** | **127** | Pn | **Pb** | **09 55 04.8** | **-2.0** |
| **ISAD** | **Sadrabad** | **2.80** | **52** | Pn | **Pb** | **09 55 05.5** | **-2.0** |
| **IZEF** | **Zefreh** | **2.88** | **21** | Pn | **Pb** | **09 55 06.3** | **-2.5** |
| **IKLH** | **Kolahrood** | **3.12** | **8** | Pn | **Pn** | **09 55 09.1** | **+2.4** |
| **KBD** | **Kabd** | **3.13** | **251** | P | **Pn** | **09 55 07.9** | **+1.4** |
| KBD | | | | S | **Sn** | **09 55 46.0** | **+2.1** |
| **IMEH** | **Mehriz** | **3.25** | **68** | Pn | **Pn** | **09 55 11.6** | **+3.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SMDO** | **Samad** | **9.46** | **137** | P | **Pn** | 09 56 33.3 | **-0.4** |
| SMDO | | | | S | **Sn** | 09 58 17.3 | **-3.0** |
| **WSAR** | **Wadi Sarin** | **9.68** | **134** | LR | LR | 10 01 27.2 | |
| | comp=Z,26nm,18.6s,baz=146,slow=44 | | | | | | |
| **JMDO** | **Jabal Madar** | **10.03** | **140** | P | **Pn** | 09 56 41.6 | **+0.2** |
| JMDO | | | | S | **Sn** | 09 58 29.7 | **-4.4** |
| **NGCH** | **Negor - Chabah** | **10.13** | **116** | P | **Pn** | 09 56 44.2 | **+1.5** |
| **WBK** | **Wadi Bani Khal** | **10.36** | **135** | P | **Pn** | 09 56 46.1 | **+0.3** |
| WBK | | | | S | **Sn** | 09 58 39.8 | **-2.2** |
| **MHTO** | **MHTO** | **11.09** | **144** | P | **Pn** | 09 56 55.3 | **-0.5** |
| MHTO | | | | S | **Sn** | 09 58 55.7 | **-4.3** |
| **MARD** | **Mardin** | **11.11** | **312** | Pn | **Pn** | 09 56 55.7 | **-0.6** |
| **DQM** | **DQM** | **11.79** | **149** | P | **Pn** | 09 57 05.5 | **0.0** |
| DQM | | | | S | **Sn** | 09 59 09.4 | **-7.8** |
| **DOK** | **Doka** | **11.87** | **166** | P | **Pn** | 09 57 07.7 | **+1.1** |
| **WHFO** | **Wadi Hawf** | **12.48** | **168** | P | **Pn** | 09 57 14.4 | **-0.6** |
| **DMTO** | **DMTO** | **12.93** | **163** | P | **Pn** | 09 57 20.3 | **-0.8** |
| **ABTO** | **Aybut** | **12.96** | **171** | P | **Pn** | 09 57 20.6 | **-1.0** |
| **RBK** | **Rabkut** | **12.97** | **167** | P | **Pn** | 09 57 21.3 | **-0.4** |
| **ARPR** | **Arapgir-MALATY** | **13.72** | **314** | Pn | **Pn** | 09 57 29.3 | **-2.6** |
| **BNN** | **Bunyan** | **15.21** | **309** | Pn | **Pn** | 09 57 50.4 | **-1.8** |
| **CSS** | **Mathiatis** | **15.69** | **292** | Pn | **Pn** | 09 57 55.3 | **-3.1** |
| CSS | | | | IAmb | IAmb | 09 57 55.9 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **KBL** | **Kabul** | **15.77** | **69** | Pn | **Pn** | 09 58 00.7 | **+1.1** |
| **SIMJ** | **Simiganj** | **17.00** | **56** | Pn | **P** | 09 58 17.7 | **+0.6** |
| **CHGR** | **Chuyangaron** | **17.10** | **56** | | **P** | 09 58 20.9 | **+2.7** |
| **BR131** | **Keskin Array S** | **17.13** | **308** | Pn | **Pn** | 09 58 14.6 | **-2.3** |
| **BRTR** | **Keskin Array B** | **17.13** | **308** | P | **Pn** | 09 58 16.6 | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=123,slow=11,SNR=6.7 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **20.15** | **45** | P | Pn | 09 58 53.3 | -0.1 |
| KK31 | | | | IAmb | IAmb | 09 59 02.4 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **20.15** | **45** | P | Pn | 09 58 53.2 | -0.2 |
| **ABKAR** | **Akbulak array** | **20.17** | **17** | P | Pn | 09 58 52.6 | -0.9 |
| **BELG** | **Belogornoye** | **22.30** | **354** | P | **P** | 09 59 16.5 | **+1.9** |
| | comp=Z,5.0nm,0.5s,baz=69,slow=22,SNR=1.7 | | | | | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **22.47** | **50** | P | **P** | 09 59 16.7 | **0.0** |
| AAK | | | | IAmb | IAmb | 09 59 23.3 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **22.47** | **50** | P | **P** | 09 59 20.1 | **+3.4** |
| | comp=Z,1.6nm,0.3s,baz=218,slow=12,SNR=3.5 | | | | | | |
| | comp=Z,1.6nm,0.3s | | | | | | |
| **BOOM** | **Boomskoye usch** | **23.38** | **52** | P | **P** | 09 59 28.1 | **+2.0** |
| **MLR** | **Muntele Rosu** | **24.89** | **315** | P | **P** | 09 59 40.3 | **+0.1** |
| | comp=Z,2.6nm,0.5s,baz=91,slow=2.2,SNR=3.8 | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **26.19** | **328** | P | **P** | 09 59 50.2 | **-1.6** |
| | comp=Z,0.4nm,0.3s,baz=130,slow=8.7,SNR=2.1 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **AKBB** | **Malin Array Si** | **26.19** | **328** | P | **P** | 09 59 51.4 | **-0.4** |
| AKBB | | | | IAmb | IAmb | 10 00 27.6 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **26.20** | **328** | P | **P** | 09 59 51.4 | **-0.5** |
| KIEV | | | | IAmb | IAmb | 10 00 27.6 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **26.81** | **26** | P | **P** | 09 59 58.0 | **+0.7** |
| | comp=Z,2.0nm,0.7s,baz=232,slow=7.3,SNR=9.1 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.92** | **37** | P | **P** | 10 00 17.6 | **+1.3** |
| | comp=Z,0.4nm,0.6s,baz=241,slow=9.0,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **29.02** | **37** | P | **P** | 10 00 19.2 | **+2.1** |
| KURK | | | | IAmb | IAmb | 10 01 01.0 | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **29.06** | **47** | P | **P** | 10 00 18.7 | **+1.1** |
| MAKZ | | | | IAmb | IAmb | 10 00 50.6 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **29.25** | **47** | P | **P** | 10 00 21.4 | **+2.1** |
| **MKAR** | **Makanchi Array** | **29.25** | **47** | P | **P** | 10 00 19.8 | **+0.5** |
| **MKAR** | **Makanchi Array** | **29.25** | **47** | P | **P** | 10 00 20.6 | **+1.3** |
| | comp=Z,1.3nm,0.9s,baz=242,slow=11,SNR=5.5 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **GEC2** | **GERESS Array S** | **33.87** | **314** | P | **P** | 10 00 58.9 | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **33.96** | **36** | P | **P** | 10 01 01.7 | **+1.1** |
| **ZALV** | **Zalesovo Beam** | **33.96** | **36** | P | **P** | 10 01 01.2 | **+0.6** |
| | comp=Z,1.1nm,0.5s,baz=249,slow=9.3,SNR=5.3 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **FIA1** | **FINESS Array S** | **35.31** | **339** | P | **P** | 10 01 12.5 | **+0.4** |
| **FINES** | **FINESS Array B** | **35.31** | **339** | P | **P** | 10 01 12.4 | **+0.4** |
| **FINES** | **FINESS Array B** | **35.31** | **339** | P | **P** | 10 01 11.8 | **-0.3** |
| | comp=Z,3.0nm,0.9s,baz=123,slow=10,SNR=3.5 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **35.77** | **309** | LR | LR | 10 17 39.7 | |
| | comp=Z,36nm,18.4s,baz=78,slow=39 | | | | | | |
| **HFS** | **Hagfors** | **38.95** | **331** | P | **P** | 10 01 41.8 | **-1.2** |
| | comp=Z,1.7nm,0.6s,baz=115,slow=9.7,SNR=2.4 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.98** | **347** | P | **P** | 10 02 08.5 | **+0.4** |
| **EKA** | **Eskdalemuir Ar** | **45.58** | **320** | P | **P** | 10 02 37.1 | **0.0** |
| | comp=Z,0.6nm,0.7s,baz=85,slow=8.8,SNR=3.7 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.55** | **261** | P | **P** | 10 02 59.6 | **-1.2** |
| | comp=Z,1.0nm,0.6s,baz=49,slow=8.3,SNR=9.8 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.45** | **351** | P | **P** | 10 03 13.8 | **-0.8** |
| | comp=Z,1.3nm,0.4s,baz=114,slow=3.6,SNR=4.9 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **DBIC** | **Dimbokro** | **57.36** | **258** | P | **P** | 10 04 04.5 | **-1.5** |
| | comp=Z,2.8nm,0.8s,baz=55,slow=8.9,SNR=1.8 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **63.49** | **53** | LR | LR | 10 35 35.5 | |
| | comp=Z,62nm,18.4s,baz=168,slow=39 | | | | | | |
| **D23K** | **Nanushuk River** | **79.82** | **8** | P | **P** | 10 06 26.8 | **+1.5** |
| D23K | | | | IAmb | IAmb | 10 06 44.7 | |
| | comp=Z,7.6nm,1.3s | | | | | | |
| **D24K** | **Happy Valley** | **79.85** | **7** | P | **P** | 10 06 26.3 | **+0.8** |
| **TOLK** | **Toolik Lake Re** | **80.26** | **8** | P | **P** | 10 06 29.4 | **+1.6** |
| TOLK | | | | IAmb | IAmb | 10 06 54.7 | |
| | comp=Z,5.9nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **80.32** | **11** | P | **P** | 10 06 28.6 | **+0.5** |
| E19K | | | | IAmb | IAmb | 10 06 42.8 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **80.47** | **8** | P | **P** | 10 06 29.9 | **+1.0** |
| E22K | | | | IAmb | IAmb | 10 06 32.6 | |
| | comp=Z,3.3nm,1.1s | | | | | | |
| **G19K** | **Purcell Mounta** | **81.54** | **11** | P | **P** | 10 06 35.4 | **+0.8** |
| G19K | | | | IAmb | IAmb | 10 07 02.5 | |
| | comp=Z,3.8nm,1.4s | | | | | | |

*IDC **21** 09:58:16.6±2.2, 17°.30S×178°.22W, h406km±21km, mb3.7/15, mbtmp4.4/15, Error ellipse: s-maj=17.0km s-min=11.6km az=98.0*
*NEIC **21** 09:58:18.0±1.8, 17°.2S±0°.1×178°.0W±0°.1, h421km±6km, mb4.5/69, Error ellipse: s-maj=15.5km s-min=13.6km az=135.0*

**ISC 21 09:58:15.8±0.3, 17°.20S±0°.07×178°.18W±0°.06, h400km, n139, σ1§38/142, mb4.5/58, 4C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.64** | **261** | | | | Pn | 09 59 34.1 | +9.4 |
| **AFI** | **Afiamalu** | **6.98** | **63** | P | | P | **Pn** | **09 59 58.4** | **-1.0** |
| AFI | | | | S | | S | **S** | **10 01 22.0** | **-2.0** |
| **NIUE** | **Niue** | **8.06** | **105** | | | P | **P** | **10 00 13.8** | **+1.9** |
| NIUE | | | | S | | S | **S** | **10 01 47.0** | **+0.6** |
| **TARA** | **Tarawa** | **20.42** | **334** | P | | P | **P** | **10 02 26.1** | **+1.9** |
| **TOZ** | **Tahuroa Road** | **21.20** | **194** | P | | P | **P** | **10 02 32.0** | **+0.9** |
| **URZ** | **Urewera** | **21.39** | **190** | P | | P | **P** | **10 02 30.4** | **-2.3** |
| | 6.9nm,0.3s,baz=349,slow=9.7,SNR=2.0 | | | | | | | | |
| URZ | | | | S | | | **S** | **10 06 01.3** | **-0.8** |
| | 17nm,1.0s,baz=87,slow=14,SNR=2.6 | | | | | | | | |
| | 6.9nm,0.3s | | | | | | | | |
| **BFZ** | **Birch Farm** | **23.89** | **191** | P | | P | **P** | **10 02 56.4** | **+0.9** |
| **TKNZ** | **Takaka Hill** | **24.95** | **196** | P | | P | **P** | **10 03 05.9** | **+0.9** |
| **LTZ** | **Lake Taylor** | **26.77** | **196** | P | | P | **P** | **10 03 21.4** | **+0.4** |
| LTZ | | | | IAmb | | IAmb | IAmb | 10 03 33.8 | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **ARMA** | **Armidale** | **30.49** | **239** | P | | P | **P** | **10 03 55.2** | **+1.2** |
| **CTAO** | **Charters Tower** | **33.79** | **259** | P | | P | **P** | **10 04 23.4** | **+1.0** |
| **COEN** | **Coen** | **37.33** | **269** | P | | P | **P** | **10 04 53.3** | **+1.1** |
| COEN | | | | IAmb | | IAmb | IAmb | 10 05 19.1 | |
| | comp=Z,37nm,1.4s | | | | | | | | |
| **TOO** | **Toolangi** | **37.79** | **230** | P | | P | **P** | **10 04 55.5** | **-0.3** |
| TOO | | | | IAmb | | IAmb | IAmb | 10 05 12.4 | |
| | comp=Z,23nm,1.4s | | | | | | | | |
| **STKA** | **Stephens Creek** | **39.17** | **240** | P | | P | **P** | **10 05 08.2** | **+1.1** |
| **STKA** | **Stephens Creek** | **39.17** | **240** | P | | P | **P** | **10 05 07.7** | **+0.5** |
| | comp=Z,2.5nm,0.7s,baz=94,slow=8.5,SNR=6.6 | | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **MLH** | **Mauna Loa** | **42.79** | **33** | P | | P | **P** | **10 05 35.6** | **-1.0** |
| **BBOO** | **Buckleboo** | **43.95** | **240** | P | | P | **P** | **10 05 45.7** | **+0.4** |
| **WR0** | **Warramunga Arr** | **44.79** | **259** | P | | P | **P** | **10 05 52.2** | **+0.1** |
| **WB0** | **Warramunga Arr** | **44.95** | **259** | P | | P | **P** | **10 05 53.3** | **-0.1** |
| **WB2** | **Warramunga Arr** | **44.97** | **259** | P | | P | **P** | **10 05 53.0** | **-0.6** |
| **WRAB** | **Tennant Creek** | **44.97** | **259** | P | | P | **P** | **10 05 53.1** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.98** | **259** | P | | P | **P** | **10 05 52.9** | **-0.8** |
| **WRA** | **Warramunga Arr** | **44.98** | **259** | P | | P | **P** | **10 05 52.9** | **-0.8** |
| | comp=Z,0.7nm,0.3s,baz=91,slow=7.3,SNR=20 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **10 07 26.8** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=95,slow=2.9,SNR=3.8 | | | | | | | | |
| WRA | | | | ScP | | | **ScP** | **10 10 38.6** | **-2.0** |
| | comp=Z,1.0nm,0.8s,baz=90,slow=4.0,SNR=5.0 | | | | | | | | |
| WRA | | | | S | | | **S** | **10 11 55.5** | **-6.2** |
| | comp=Z,0.3nm,0.8s,baz=143,slow=15,SNR=1.9 | | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | | |
| **AS31** | **Alice Springs** | **45.20** | **254** | P | | P | **P** | **10 05 55.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.20** | **254** | P | | P | **P** | **10 05 55.5** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.20** | **254** | P | | P | **P** | **10 05 55.2** | **-0.1** |
| | comp=Z,9.3nm,0.5s,baz=88,slow=7.9,SNR=205 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **10 07 27.3** | **-0.5** |
| | comp=Z,1.2nm,0.5s,baz=100,slow=4.1,SNR=4.2 | | | | | | | | |
| ASAR | | | | ScP | | | **ScP** | **10 10 39.7** | **-1.8** |
| | comp=Z,3.7nm,1.2s,baz=92,slow=4.7,SNR=7.3 | | | | | | | | |
| ASAR | | | | S | | | **S** | **10 11 59.3** | **-5.5** |
| | comp=Z,0.7nm,0.8s,baz=87,slow=16,SNR=5.2 | | | | | | | | |
| | comp=Z,9.3nm,0.5s | | | | | | | | |
| **MTN** | **Manton Dam** | **49.04** | **268** | P | | P | **P** | **10 06 25.1** | **+0.4** |
| MTN | | | | IAmb | | IAmb | IAmb | 10 06 44.0 | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **FORT** | **Forrest** | **50.51** | **244** | P | | P | **P** | **10 06 34.9** | **-0.5** |
| FORT | | | | IAmb | | IAmb | IAmb | 10 06 52.5 | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **FAKI** | **Fak Fak** | **50.66** | **281** | P | | P | **P** | **10 06 37.6** | **+0.9** |
| **KNRA** | **Kununurra** | **50.78** | **264** | P | | P | **P** | **10 06 37.3** | **-0.2** |
| KNRA | | | | IAmb | | IAmb | IAmb | 10 06 42.2 | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.37** | **260** | P | | P | **P** | **10 06 56.8** | **+0.5** |
| **SOEI** | **Soe** | **56.29** | **270** | P | | P | **P** | **10 07 18.1** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **58.30** | **255** | P | | P | **P** | **10 07 31.2** | **+0.4** |
| **MBWA** | **Marble Bar** | **58.46** | **255** | P | | P | **P** | **10 07 32.7** | **+0.7** |
| **MORW** | **Morawa** | **60.97** | **246** | P | | P | **P** | **10 07 48.5** | **-0.3** |
| MORW | | | | IAmb | | IAmb | IAmb | 10 08 15.7 | |
| | comp=Z,10nm,1.0s | | | | | | | | |
| **SBA** | **Scott Base** | **61.14** | **184** | P | | P | **P** | **10 07 51.2** | **+2.3** |
| **TOLI2** | **Tolitoli** | **62.80** | **280** | P | | P | **P** | **10 08 02.8** | **+1.8** |
| TOLI2 | | | | IAmb | | IAmb | IAmb | 10 08 05.7 | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **JHJ2** | **Mitsune** | **64.13** | **321** | P | | P | **P** | **10 08 09.7** | **+0.5** |
| **JSG** | **Sagara** | **66.19** | **322** | P | | P | **P** | **10 08 21.0** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **66.28** | **268** | P | | P | **P** | **10 08 22.0** | **-1.3** |
| **JGF** | **Kuroka** | **67.32** | **322** | P | | P | **P** | **10 08 30.1** | **+0.8** |
| JGF | | | | IAmb | | IAmb | IAmb | 10 08 32.6 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.47** | **323** | P | | P | **P** | **10 08 30.4** | **+0.2** |
| | comp=Z,14nm,0.9s,baz=141,slow=6.0,SNR=24 | | | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **MAJO** | **Matsushiro** | **67.48** | **323** | P | | P | **P** | **10 08 31.0** | **+0.7** |
| MAJO | | | | IAmb | | IAmb | IAmb | 10 08 31.5 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **67.48** | **323** | | | | **P** | **10 08 32.3** | **+2.0** |
| MJB9 | | | | IAmb | | | IAmb | 10 08 32.9 | |
| | comp=Z,9.9nm,0.8s | | | | | | | | |
| **JOW** | **Kunigami** | **67.94** | **309** | P | | P | **P** | **10 08 34.0** | **+0.7** |
| **KKM** | **Kota Kinabalu** | **68.79** | **284** | P | | P | **P** | **10 08 38.4** | **-0.5** |
| KKM | | | | IAmb | | IAmb | IAmb | 10 08 47.7 | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| **JNU** | **Nakatsue** | **69.78** | **316** | P | | P | **P** | **10 08 43.6** | **-0.8** |
| **UGM** | **Wanagama** | **69.89** | **268** | P | | P | **P** | **10 08 46.6** | **+1.1** |
| **JKA** | **Kamikawa-asahi** | **70.76** | **331** | P | | P | **P** | **10 08 51.7** | **+1.7** |
| JKA | | | | IAmb | | IAmb | IAmb | 10 08 52.6 | |
| | comp=Z,10nm,0.7s | | | | | | | | |
| **SBUM** | **Sibu** | **71.32** | **279** | P | | P | **P** | **10 08 54.3** | **+0.3** |
| **YULB** | **Yu-li** | **71.57** | **303** | P | | P | **P** | **10 08 55.6** | **+0.4** |
| YULB | | | | IAmb | | IAmb | IAmb | 10 09 09.7 | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **SSLB** | **Suanglung** | **72.04** | **303** | P | | P | **P** | **10 08 58.5** | **+0.5** |
| SSLB | | | | IAmb | | IAmb | IAmb | 10 08 58.9 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **TPUB** | **Ta-pu** | **72.07** | **302** | P | | P | **P** | **10 08 58.4** | **+0.2** |
| **QSPA** | **South Pole Qui** | **72.85** | **180** | P | | P | **P** | **10 09 02.7** | **+0.5** |
| QSPA | | | | IAmb | | IAmb | IAmb | 10 09 03.6 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.85** | **180** | P | | P | **P** | **10 09 02.2** | **+0.1** |
| | comp=Z,17nm,0.9s,baz=27,slow=1.5,SNR=88 | | | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.05** | **345** | P | | P | **P** | **10 09 03.3** | **+0.1** |
| | comp=Z,4.8nm,0.7s,baz=128,slow=9.6,SNR=5.3 | | | | | | | | |
| | comp=Z,4.8nm,0.7s | | | | | | | | |
| **S12K** | **Black Hills** | **73.89** | **9** | P | | P | **P** | **10 09 07.5** | **-0.5** |
| **KSRS** | **Korea Array** | **74.32** | **318** | P | | P | **P** | **10 09 12.4** | **+1.6** |
| | comp=Z,2.9nm,0.7s,baz=126,slow=5.7,SNR=11 | | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **76.16** | **326** | P | | P | **P** | **10 09 19.8** | **-1.2** |
| | comp=Z,3.0nm,0.9s,baz=142,slow=14,SNR=4.6 | | | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **PLK4** | **Peulik 4** | **76.73** | **12** | P | | P | **P** | **10 09 24.0** | **0.0** |
| **VTX** | **Valle De La Tr** | **76.91** | **51** | P | | P | **P** | **10 09 25.0** | **-0.6** |
| VTX | | | | IAmb | | IAmb | IAmb | 10 09 47.3 | |
| | comp=Z,7.2nm,1.2s | | | | | | | | |
| **OHAK** | **Old Harbor** | **76.99** | **14** | P | | P | **P** | **10 09 26.0** | **+0.6** |
| OHAK | | | | IAmb | | IAmb | IAmb | 10 09 45.0 | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **NJ2** | **Nanjing** | **77.66** | **309** | *e*P | | P | **P** | **10 09 31.9** | **+2.3** |
| NJ2 | | | | pmax | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **77.66** | **14** | P | | P | **P** | **10 09 29.8** | **+0.8** |
| KDAK | | | | IAmb | | IAmb | IAmb | 10 09 37.1 | |
| | comp=Z,26nm,1.5s | | | | | | | | |
| **O16K** | **Kokwok River B** | **78.25** | **10** | P | | P | **P** | **10 09 31.7** | **-0.5** |
| O16K | | | | IAmb | | IAmb | IAmb | 10 09 56.3 | |
| | comp=Z,8.2nm,1.3s | | | | | | | | |
| **N15K** | **Kwethluk River** | **78.48** | **9** | P | | P | **P** | **10 09 34.2** | **+0.8** |
| N15K | | | | IAmb | | IAmb | IAmb | 10 09 36.1 | |
| | comp=Z,5.8nm,1.0s | | | | | | | | |
| **P18K** | **Big Mountain,** | **78.58** | **12** | P | | P | **P** | **10 09 34.1** | **0.0** |
| P18K | | | | IAmb | | IAmb | IAmb | 10 09 34.5 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.76** | **44** | P | | P | **P** | **10 09 36.3** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=214,slow=9.4,SNR=3.8 | | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | | |
| **M14K** | **Bethel** | **78.77** | **8** | P | | P | **P** | **10 09 35.6** | **+0.7** |
| M14K | | | | IAmb | | IAmb | IAmb | 10 09 38.2 | |
| | comp=Z,9.3nm,1.1s | | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.02** | **12** | P | | P | **P** | **10 09 36.1** | **-0.3** |
| O18K | | | | IAmb | | IAmb | IAmb | 10 09 37.2 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **N17K** | **Nushagak Hills** | **79.29** | **10** | P | | P | **P** | **10 09 37.6** | **-0.2** |
| **M16K** | **Timber Creek** | **79.46** | **9** | P | | P | **P** | **10 09 38.5** | **-0.2** |
| M16K | | | | IAmb | | IAmb | IAmb | 10 09 41.6 | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **O19K** | **Port Alsworth** | **79.51** | **12** | P | | P | **P** | **10 09 38.4** | **-0.4** |
| **ILSW** | **Iliamna Southw** | **79.55** | **12** | P | | P | **P** | **10 09 38.0** | **-1.3** |
| ILSW | | | | IAmb | | IAmb | IAmb | 10 09 40.8 | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **BNX** | **BinXian** | **79.65** | **325** | ⇑P | | P | **P** | **10 09 40.9** | **+0.9** |
| BNX | | | | pmax | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **L16K** | **Owhat River** | **80.04** | **9** | P | | P | **P** | **10 09 42.4** | **+0.6** |
| L16K | | | | IAmb | | IAmb | IAmb | 10 09 43.5 | |
| | comp=Z,8.6nm,1.1s | | | | | | | | |
| **M17K** | **Holitna River** | **80.07** | **10** | P | | P | **P** | **10 09 42.4** | **+0.5** |
| M17K | | | | IAmb | | IAmb | IAmb | 10 09 44.1 | |
| | comp=Z,9.1nm,0.8s | | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **80.31** | **8** | P | | P | **P** | **10 09 44.3** | **+1.1** |
| K15K | | | | IAmb | | IAmb | IAmb | 10 09 45.2 | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **L18K** | **Granite Mounta** | **80.96** | **10** | P | | P | **P** | **10 09 47.8** | **+1.2** |
| L18K | | | | IAmb | | IAmb | IAmb | 10 09 48.5 | |
| | comp=Z,8.1nm,1.0s | | | | | | | | |
| **SMAI** | **San Martin Ant** | **81.74** | **159** | P | | P | **P** | **10 09 50.8** | **+0.2** |
| SMAI | | | | IAmb | | IAmb | IAmb | 10 09 51.8 | |
| | comp=Z,8.2nm,0.7s | | | | | | | | |
| **J18K** | **Innoko River** | **82.13** | **10** | P | | P | **P** | **10 09 52.9** | **+0.3** |
| **K20K** | **Telida** | **82.47** | **11** | P | | P | **P** | **10 09 54.8** | **+0.5** |
| K20K | | | | IAmb | | IAmb | IAmb | 10 09 55.4 | |
| | comp=Z,6.3nm,0.9s | | | | | | | | |
| **BELA** | **Belgrano 2** | **82.84** | **173** | P | | P | **P** | **10 09 55.3** | **-0.8** |
| BELA | | | | IAmb | | IAmb | IAmb | 10 09 57.2 | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| **H17K** | **Granite Mounta** | **83.06** | **8** | P | | P | **P** | **10 09 57.6** | **+0.3** |
| **RND** | **Reindeer** | **83.53** | **13** | P | | P | **P** | **10 09 59.8** | **0.0** |
| RND | | | | IAmb | | IAmb | IAmb | 10 10 00.4 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **MAW** | **Mawson** | **84.60** | **200** | P | | P | **P** | **10 10 04.6** | **-0.4** |
| | comp=Z,3.8nm,0.7s,baz=125,slow=8.9,SNR=9.2 | | | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| **GYA** | **Guiyang** | **84.88** | **300** | P | | P | **P** | **10 10 10.6** | **+3.2** |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **85.36** | **319** | *e*P | | P | **P** | **10 10 09.0** | **-0.3** |
| XLT | | | | pP | | pP | | 10 11 47.8 | +7.1 |
| XLT | | | | sP | | sP | | 10 12 34.4 | +12 |
| XLT | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.43** | **58** | P | | P | **P** | **10 10 11.6** | **+1.6** |
| | comp=Z,0.9nm,0.7s,baz=218,slow=6.2,SNR=15 | | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | | |
| **XAN** | **Xi'an** | **86.01** | **307** | ⇓P | | P | **P** | **10 10 13.8** | **+1.1** |
| XAN | | | | pP | | PcP | | 10 10 15.8 | +1.1 |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **86.69** | **43** | P | | P | **P** | **10 10 16.1** | **+0.1** |
| | comp=Z,0.2nm,0.4s,baz=223,slow=1.5,SNR=4.6 | | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **86.94** | **314** | *e*P | | P | **P** | **10 10 16.6** | **-0.4** |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,170nm,5.2s | | | | | | | | |
| **Q24A** | **Divide** | **88.08** | **48** | P | | P | **P** | **10 10 19.7** | **-3.0** |
| Q24A | | | | IAmb | | IAmb | | 10 10 46.4 | |
| | comp=Z,4.7nm,0.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.86** | **290** | P | | P | **P** | **10 10 27.2** | **+0.9** |
| | comp=Z,0.6nm,0.3s,baz=106,slow=3.5,SNR=6.9 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **PZH** | **PanZhiHua** | **89.02** | **298** | P | | P | **P** | **10 10 27.6** | **+0.5** |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,170nm,6.0s | | | | | | | | |
| **ELIB** | **Princess Elisa** | **89.89** | **187** | *d*P | | P | **P** | **10 10 29.7** | **-0.6** |
| | comp=Z,6.7nm,0.8s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.01** | **180** | ⇑P | | P | **P** | **10 10 34.6** | **-0.9** |
| | comp=Z,172nm,4.4s | | | | | | | | |
| **SNAA** | **Sanae** | **91.30** | **179** | ⇑P | | P | **P** | **10 10 35.7** | **-1.1** |
| | comp=Z,41nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **91.30** | **179** | P | | P | **P** | **10 10 35.7** | **-1.1** |
| | comp=Z,2.0nm,0.5s,baz=209,slow=13,SNR=7.2 | | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.43** | **176** | ⇑P | | P | **P** | **10 10 36.0** | **-1.4** |
| | comp=Z,8.1nm,0.6s | | | | | | | | |
| **BNN** | **Bunyan** | **143.34** | **313** | | | | PKPab | 10 17 01.9 | +0.5 |
| **KWP** | **Kalwaria Pacla** | **143.51** | **337** | PKPdf | | | PKPab | 10 17 01.7 | +0.3 |
| **BUR08** | **Bucovina Ar. S** | **144.08** | **333** | PKPbc | | | PKPbc | 10 17 02.0 | -1.7 |
| **BURAR** | **Bucovina Array** | **144.09** | **333** | PKPbc | | | PKPbc | 10 17 01.6 | -2.1 |
| **BRTR** | **Keskin Array B** | **144.44** | **316** | | | | PKPbc | 10 17 03.8 | -1.4 |
| **BRTR** | **Keskin Array B** | **144.44** | **316** | PKP | | | PKPbc | 10 17 04.9 | -0.3 |
| | comp=Z,2.4nm,0.7s,baz=132,slow=4.7,SNR=20 | | | | | | | | |
| **CLL** | **Collm** | **144.82** | **348** | PKPbc | | | **PKPdf** | **10 17 05.5** | **-0.2**

comp=Z,11nm,1.5s
**WRA Warramunga Arr 44.55 260** P **P** **10 14 11.1 -0.8**
comp=Z,1.2nm,0.4s,baz=92,slow=7.7,SNR=67
WRA PcP **PcP** **10 15 42.3 0.0**
comp=Z,0.3nm,0.4s,baz=91,slow=3.7,SNR=1.9
comp=Z,1.2nm,0.4s
**AS31 Alice Springs 44.70 254** P **P** **10 14 13.3 +0.4**
AS31 IAmb IAmb 10 14 14.1
comp=Z,3.7nm,0.5s
**ASAR Alice Springs 44.70 254** P **P** **10 14 12.9 -0.1**
**ASAR Alice Springs 44.70 254** P **P** **10 14 13.0 +0.1**
ASAR PcP **PcP** **10 15 43.0 +0.2**
comp=Z,10nm,0.5s,baz=88,slow=8.5,SNR=243
comp=Z,0.7nm,0.5s,baz=102,slow=3.9,SNR=5.3
ASAR S **S** **10 20 07.9 -0.5**
comp=Z,0.4nm,0.8s,baz=92,slow=15,SNR=4.7
comp=Z,10nm,0.5s
**FORT Forrest 49.89 245** P **P** **10 14 51.8 +0.2**
**FITZ Fitzroy Crossi 52.95 261** P **P** **10 15 14.4 +0.5**
**PSA00 Pilbara Seismi 57.82 256** P **P** **10 15 47.8 +0.1**
PSA00 IAmb IAmb 10 16 01.5
comp=Z,13nm,1.4s
**MJAR Matsushiro Arr 68.01 323** P **P** **10 16 52.3 -0.3**
comp=Z,1.8nm,0.5s,baz=128,slow=6.8,SNR=5.4
comp=Z,1.8nm,0.5s
**QSPA South Pole Qui 71.98 180** P **P** **10 17 15.2 -0.6**
comp=Z,1.2nm,0.7s,baz=37,slow=1.0,SNR=10
comp=Z,1.2nm,0.7s
**PETK Petropavlovsk- 73.83 345** P **P** **10 17 25.9 -0.4**
comp=Z,2.2nm,0.6s,baz=108,slow=9.3,SNR=1.8
comp=Z,2.2nm,0.6s
**KSRS Korea Array 74.80 318** P **P** **10 17 33.9 +1.8**
comp=Z,0.6nm,0.5s,baz=126,slow=5.8,SNR=1.8
comp=Z,0.6nm,0.5s
**USRK Ussuriysk Ar. 76.73 326** P **P** **10 17 43.3 +0.7**
comp=Z,1.3nm,0.7s,baz=136,slow=7.0,SNR=2.5
comp=Z,1.3nm,0.7s
**MDPB Devils Postpil 78.63 44** P **P** **10 17 54.1 +0.7**
**YBH Yreka Blue Hor 78.68 39** P **P** **10 17 54.5 +1.2**
YBH IAmb IAmb 10 17 59.4
comp=Z,7.3nm,1.4s
**WAKR Walker 78.88 43** P **P** **10 17 55.4 +0.8**
WAKR IAmb IAmb 10 17 59.5
comp=Z,6.1nm,1.3s
**MPK Martis Peak 78.93 42** P **P** **10 17 55.9 +0.9**
MPK IAmb IAmb 10 18 07.9
comp=Z,4.7nm,1.0s
**PNTR Pine Nut 79.09 43** P **P** **10 17 56.9 +1.2**
**O16K Kokwok River B 79.16 10** P **P** **10 17 54.3 -1.0**
O16K IAmb IAmb 10 17 56.7
comp=Z,7.0nm,1.4s
**DSP Deep Springs 79.23 45** P **P** **10 17 56.9 +0.8**
**YERR Yerington 79.27 43** P **P** **10 17 56.7 0.0**
**N15K Kwethluk River 79.38 9** P **P** **10 17 56.3 -0.2**
N15K IAmb IAmb 10 17 56.6
comp=Z,16nm,1.5s
**RYN Ryan 79.54 44** P **P** **10 17 57.7 -0.3**
**NVAR Mina Array Bea 79.58 44** P **P** **10 17 58.3 0.0**
**NVAR Mina Array Bea 79.58 44** P **P** **10 17 57.9 -0.4**
comp=Z,1.2nm,0.7s,baz=225,slow=8.6,SNR=12
comp=Z,1.2nm,0.7s
**PAHR Pah Rah Range 79.58 42** P **P** **10 17 57.7 -0.5**
**GMN Gold Mountain 79.67 45** P **P** **10 17 58.4 -0.4**
**J05D Fort Rock, OR 80.48 39** P **P** **10 18 03.4 +0.6**
J05D IAmb IAmb 10 18 03.9
comp=Z,5.4nm,0.7s
**L16K Owhat River 80.95 9** P **P** **10 18 04.7 +0.2**
L16K IAmb IAmb 10 18 05.8
comp=Z,7.0nm,1.1s
**PINE Pine Mountain 80.95 38** P **P** **10 18 05.5 +0.2**
PINE IAmb IAmb 10 18 06.5
comp=Z,4.7nm,0.9s
**M17K Holitna River 80.97 10** P **P** **10 18 05.3 +0.5**
M17K IAmb IAmb 10 18 06.2
comp=Z,9.3nm,1.0s
**WVOR Wild Horse Val 81.56 40** P **P** **10 18 08.1 -0.2**
WVOR IAmb IAmb 10 18 09.3
comp=Z,4.6nm,1.1s
**I07A Izee 81.97 39** P **P** **10 18 10.8 +0.4**
I07A IAmb IAmb 10 18 11.3
comp=Z,3.2nm,0.8s
**X16A Lo Mia Camp, P 82.33 50** P **P** **10 18 13.2 +0.7**
**U15A North Rim 82.67 48** P **P** **10 18 15.0 +0.7**
U15A IAmb IAmb 10 18 15.5
comp=Z,3.1nm,0.8s
**ELK Elko 82.81 43** P **P** **10 18 14.8 -0.1**
**J18K Innoko River 83.03 10** P **P** **10 18 15.2 +0.1**
J18K IAmb IAmb 10 18 15.7
comp=Z,4.2nm,0.9s
**F10A Beach Ranch, E 84.36 38** P **P** **10 18 22.2 0.0**
F10A IAmb IAmb 10 18 23.0
comp=Z,3.5nm,0.9s
**ILAR Eielson Array 86.06 13** P **P** **10 18 28.1 -1.7**
comp=Z,0.6nm,0.5s,baz=222,slow=4.8,SNR=9.4
comp=Z,0.6nm,0.5s
**TX31 Lajitas Ar. Si 86.12 58** P **P** **10 18 32.0 +0.9**
TX31 IAmb IAmb 10 18 32.7
comp=Z,4.8nm,1.2s
**TXAR Lajitas Array 86.12 58** P **P** **10 18 32.1 +1.0**
**TXAR Lajitas Array 86.12 58** P **P** **10 18 31.6 +0.6**
comp=Z,1.6nm,0.9s,baz=218,slow=5.7,SNR=17
comp=Z,1.6nm,0.9s
**PDAR Pinedale Array 87.51 43** P **P** **10 18 36.8 -0.6**
comp=Z,0.8nm,0.7s,baz=210,slow=2.6,SNR=8.6
comp=Z,0.8nm,0.7s
**E24K Your Creek 88.64 11** P **P** **10 18 42.0 0.0**
**CMAR Chiang Mai Arr 88.90 290** P **P** **10 18 45.5 +1.4**
comp=Z,1.1nm,0.3s,baz=152,slow=3.8,SNR=4.1
comp=Z,1.1nm,0.3s
**F31M Tsiigehtchic 91.36 16** P **P** **10 18 54.0 -0.4**
**BVAR Borovoye Array 116.94 321** PKP **PKPdf** **10 24 28.3 -1.3**
comp=Z,0.7nm,0.4s,baz=19,slow=9.2,SNR=2.4
**BR131 Keskin Array S 144.87 315** PKPdf **PKPdf** **10 25 22.6 +0.2**
**BRTR Keskin Array B 144.87 315** PKPdf PKPbc 10 25 23.2 +0.2
**BRTR Keskin Array B 144.87 315** PKPbc **PKPdf** **10 25 22.8 +0.4**
comp=Z,1.0nm,0.6s,baz=119,slow=3.0,SNR=8.7
**ANTO Ankara 145.37 315** PKPdf **PKPbc** **10 25 24.3 -0.1**
**BR231 Keskin MP Arra 145.39 315** PKPdf **PKPdf** **10 25 23.9 +0.7**
**CLL Collm 145.62 347** PKPdf **PKPbc** **10 25 24.7 0.0**
**MDUB Mudurnu 146.10 317** PKPdf **PKPdf** **10 25 25.2 +0.8**
**MMAI Mount Meron Ar 146.19 303** PKPbc **PKPbc** **10 25 27.2 +0.2**
comp=Z,1.7nm,0.5s,baz=58,slow=5.0,SNR=4.8
**GHAJ Ghor Haditha 146.54 300** PKPdf **PKPdf** **10 25 25.7 +0.5**
**KHC Kasperske Hory 147.53 345** PKPbc **PKPbc** **10 25 30.6 +0.7**
**GEC2 GERESS Array S 147.76 345** PKPbc **PKPbc** **10 25 30.9 +0.2**
**GERES GERESS Array B 147.76 345** PKPbc **PKPbc** **10 25 30.9 +0.2**
**GERES GERESS Array B 147.76 345** PKPbc **PKPbc** **10 25 30.3 -0.3**
comp=Z,1.7nm,0.6s,baz=8.9,slow=7.0,SNR=6.7
**CONA Conrad Observa 148.01 342** *i* PKP **PKPbc** **10 25 32.0 +0.7**
comp=Z,4.6nm,1.5s
**WLF Walferdange 148.27 354** PKPbc **PKiKP** **10 25 32.5 -0.5**
**BFO Black Forest 149.32 351** PKPbc **PKPbc** **10 25 34.1 -0.3**
**LESA Schwarzleotal 149.34 345** *e*PKP **PKPbc** **10 25 34.3 -0.2**
comp=Z,1.8nm,0.6s
**SOKA Soboth 149.38 342** *i* PKP **PKPbc** **10 25 34.4 -0.3**
comp=Z,2.2nm,0.8s
**KBA Koelnbreinsper 149.49 344** *e*PKP **PKPbc** **10 25 34.8 -0.3**
comp=Z,1.2nm,0.6s
**WATA Walderalm 149.68 346** *e*PKP **PKPbc** **10 25 35.0 -0.5**
comp=Z,2.8nm,0.7s
**RETA Reutte 149.71 348** *e*PKiKP **PKiKP** **10 25 36.3 +0.2**
comp=Z,1.4nm,0.5s
**WTTA Wattenberg 149.73 346** *i* PKP **PKPbc** **10 25 35.5 -0.1**
comp=Z,2.9nm,0.7s
**MOTA Moosalm 149.77 347** *i* PKP **PKPbc** **10 25 35.4 -0.3**
comp=Z,5.0nm,1.1s
**SQTA Sankt Quirin 149.87 347** *i* PKP **PKPbc** **10 25 35.8 -0.1**
comp=Z,2.6nm,0.5s
**ABTA Abfaltersbach 150.01 345** *i* PKP **PKPbc** **10 25 34.0 -2.2**
comp=Z,5.0nm,0.7s
**PRED Cave del Predi 150.01 343** PKPdf **PKPdf** **10 25 31.1 +0.6**
PRED PKPab **PKPab** **10 25 43.9 -0.6**
**DAVA Damuels 150.07 349** *i* PKP **PKPab** **10 25 42.1 -2.7**
comp=Z,4.9nm,1.0s
**FETA Feichten 150.16 347** *i* PKP **PKPbc** **10 25 36.2 -0.4**
comp=Z,4.3nm,1.0s
**FUORN Ofenpass-Fuorn 150.64 348** PKPdf **PKPdf** **10 25 31.5 -0.2**
FUORN **PKiKP** **10 25 38.3 0.0**
FUORN PKPab **PKPab** **10 25 47.6 +0.3**

*AEIC **21** 10:08:43.0±2.9, 69.46N±0.04×144.1W±0.1, h6km±6km, ML3.7, ML3.8/120(NEIC), Mwr3.7/25(NEIC), Error ellipse: s-maj=6.2km s-min=4.7km az=144.0*
*NEIC **21** 10:08:43.5±2.9, 69.47N±0.04×144.1W±0.1, h10km±2km,*

*Error ellipse: s-maj=7.6km s-min=5.6km az=333.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.51; $M_{\theta\theta}$=2.63; $M_{\phi\phi}$=3.14; $M_{r\theta}$=-0.37; $M_{\theta\phi}$=-3.30; $M_{\phi r}$=1.31; Fault plane solution: $M_0$=4.61000×$10^{14}$ NP1: $\phi_s$=289.69000°, $\delta$77.84000°, $\lambda$172.60000°. NP2: $\phi_s$=21.26000°, $\delta$82.76000°, $\lambda$12.25000°. Principal axes: T 4.9700, Plg14.0000°, Azm246.0000°; N -0.8308, Plg76.0000°, Azm51.0000°; P -4.1392, Plg3.0000°, Azm155.0000°;*
*NEIC **21** 10:08:44.4, 69.51N×144.08W, h2km*
*IDC **21** 10:08:45.4±4.8, 69.56N×143.72W, h0km, mb3.1/3, mbtmp3.3/5, ML3.8/2, MS3.2/1, Error ellipse: s-maj=72.9km s-min=28.2km az=147.0*
**ISC 21 10:08:44.0±0.7, 69.46N±0.05×144.12W±0.04, h10km, n191, σ1ş48/194, mb3.3/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.22** | **41** | Pg | **Pg** | **10 08 47.7** | **-0.9** |
| C27K | | | | | **Sg** | **10 08 50.6** | **-1.0** |
| C27K | | | | IAML | | 10 08 51.2 | |
| | comp=E,23μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.54** | **329** | | **Pg** | **10 08 54.3** | **-0.1** |
| **D25K** | **Kavik River** | **0.81** | **261** | | **Pg** | **10 08 58.3** | **-1.3** |
| **D27M** | **Malcolm River** | **1.14** | **100** | | **Pb** | **10 09 04.3** | **-1.5** |
| D27M | | | | | **Sn** | **10 09 22.6** | **+0.8** |
| D27M | | | | IAML | | 10 09 23.9 | |
| | comp=N,2μm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.58** | **143** | | **Pb** | **10 09 13.1** | **-0.1** |
| E27K | | | | IAML | | 10 09 37.0 | |
| | comp=E,1μm,0.5s | | | | | | |
| E27K | | | | IAML | | 10 09 38.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.63** | **281** | | **Pb** | **10 09 14.0** | **-0.1** |
| C24K | | | | IAML | | 10 09 38.0 | |
| | comp=N,882nm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.70** | **262** | | **Pn** | **10 09 13.0** | **-0.7** |
| D24K | | | | IAML | | 10 09 46.4 | |
| | comp=N,1μm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.78** | **180** | Pn | **Pn** | **10 09 13.4** | **-1.3** |
| F26K | | | | | **Pb** | **10 09 14.7** | **-1.9** |
| F26K | | | | IAML | | 10 09 43.7 | |
| | comp=E,896nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.86** | **115** | | **Pn** | **10 09 14.6** | **-1.3** |
| E28M | | | | IAML | | 10 09 47.2 | |
| | comp=N,702nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **1.91** | **91** | | **Pn** | **10 09 14.9** | **-1.6** |
| **F25K** | **Christian River** | **1.96** | **197** | | **Pn** | **10 09 16.6** | **-0.7** |
| F25K | | | | IAML | | 10 09 50.4 | |
| | comp=N,968nm,0.4s | | | | | | |
| F25K | | | | IAML | | 10 09 50.6 | |
| | comp=E,982nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.05** | **185** | Pn | **Pn** | **10 09 19.2** | **+0.7** |
| **E24K** | **Your Creek** | **2.11** | **231** | Pn | **Pn** | **10 09 18.2** | **-1.2** |
| **TOLK** | **Toolik Lake Re** | **2.13** | **250** | Pn | **Pn** | **10 09 18.4** | **-1.2** |
| TOLK | | | | IAML | | 10 09 59.2 | |
| | comp=N,520nm,1.0s | | | | | | |
| TOLK | | | | IAML | | 10 10 03.9 | |
| | comp=E,470nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **2.30** | **282** | Pn | **Pn** | **10 09 20.9** | **-1.0** |
| **D23K** | **Nanushuk River** | **2.39** | **261** | | **Pn** | **10 09 22.1** | **-1.1** |
| **F24K** | **Squaw Lake** | **2.40** | **217** | | **Pn** | **10 09 21.6** | **-1.7** |
| **F28M** | **Old Crow** | **2.43** | **138** | | **Pn** | **10 09 22.5** | **-1.2** |
| F28M | | | | IAML | | 10 10 03.3 | |
| | comp=N,466nm,0.5s | | | | | | |
| F28M | | | | IAML | | 10 10 08.3 | |
| | comp=E,426nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **2.45** | **237** | Pn | **Pn** | **10 09 22.4** | **-1.6** |
| **E29M** | **Blow River** | **2.49** | **113** | Pn | **Pn** | **10 09 23.0** | **-1.6** |
| E29M | | | | IAML | | 10 10 06.7 | |
| | comp=E,416nm,0.8s | | | | | | |
| E29M | | | | IAML | | 10 10 07.5 | |
| | comp=N,505nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.53** | **177** | | **Pn** | **10 09 26.7** | **+1.7** |
| **G25K** | **Bearman Lake** | **2.81** | **196** | | **Pn** | **10 09 31.4** | **+2.6** |
| **G27K** | **Doyon Strip** | **2.82** | **160** | | **Pn** | **10 09 27.1** | **-2.0** |
| **FYU** | **Fort Yukon** | **2.94** | **189** | | **Pn** | **10 09 29.8** | **-0.8** |
| **G24K** | **Hadweenzic Riv** | **3.05** | **206** | | **Pn** | **10 09 32.4** | **+0.2** |
| **E22K** | **Anaktuvuk Pass** | **3.10** | **248** | | **Pn** | **10 09 33.0** | **+0.1** |
| E22K | | | | IAML | | 10 10 35.6 | |
| | comp=N,192nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **3.12** | **263** | | **Pn** | **10 09 32.8** | **-0.3** |
| D22K | | | | IAML | | 10 10 29.1 | |
| | comp=N,233nm,0.9s | | | | | | |
| D22K | | | | IAML | | 10 10 38.0 | |
| | comp=E,241nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.18** | **228** | | **Pn** | **10 09 34.6** | **+0.5** |
| **H25L** | **Birch Creek** | **3.27** | **192** | | **Pn** | **10 09 36.8** | **+1.6** |
| **B22K** | **Teshekpuk Lake** | **3.33** | **290** | Pn | **Pn** | **10 09 36.9** | **+0.8** |
| **H27K** | **Steamboat Moun** | **3.39** | **162** | | **Pn** | **10 09 39.0** | **+2.0** |
| **G29M** | **Pine Creek** | **3.43** | **135** | | **Pn** | **10 09 39.0** | **+1.6** |
| **G23K** | **Bananza Creek** | **3.54** | **221** | | **Pn** | **10 09 39.1** | **+0.1** |
| G23K | | | | IAML | | 10 10 42.7 | |
| | comp=E,175nm,1.1s | | | | | | |
| **F22K** | **John River** | **3.56** | **240** | | **Pn** | **10 09 41.4** | **+2.2** |
| **F30M** | **Barrier River** | **3.58** | **117** | | **Pn** | **10 09 42.0** | **+2.4** |
| **B21K** | **Ikpikpuk River** | **3.69** | **277** | Pn | **Pn** | **10 09 42.5** | **+1.5** |
| B21K | | | | IAML | | 10 10 55.5 | |
| | comp=N,178nm,1.0s | | | | | | |
| B21K | | | | IAML | | 10 11 07.5 | |
| | comp=E,195nm,1.4s | | | | | | |
| **E21K** | **Killik River** | **3.70** | **259** | | **Pn** | **10 09 42.2** | **+1.0** |
| E21K | | | | IAML | | 10 10 46.3 | |
| | comp=N,134nm,0.8s | | | | | | |
| E21K | | | | IAML | | 10 10 54.3 | |
| | comp=E,143nm,0.9s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.80** | **270** | | **Pn** | **10 09 43.9** | **+1.4** |
| **G30M** | **tAoh Zraii Nji** | **3.85** | **127** | | **Pn** | **10 09 44.5** | **+1.2** |
| G30M | | | | IAML | | 10 11 00.9 | |
| | comp=N,137nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.91** | **203** | | **Pn** | **10 09 46.0** | **+1.8** |
| H24K | | | | IAML | | 10 10 57.1 | |
| | comp=E,136nm,1.5s | | | | | | |
| **H29M** | **Whitestone** | **3.92** | **144** | | **Pn** | **10 09 46.1** | **+2.0** |
| H29M | | | | IAML | | 10 10 34.5 | |
| | comp=E,165nm,0.7s | | | | | | |
| H29M | | | | IAML | | 10 10 56.2 | |
| | comp=N,154nm,0.9s | | | | | | |
| **I27K** | **Kandik River** | **3.99** | **165** | | **Pn** | **10 09 47.4** | **+2.2** |
| **A22K** | **Sinclair Lake** | **4.00** | **298** | | **Pn** | **10 09 46.2** | **+1.0** |
| **INK** | **Inuvik** | **4.00** | **102** | | **Pn** | **10 09 45.7** | **+0.4** |
| **F21K** | **Alatna River** | **4.13** | **241** | | **Pn** | **10 09 47.2** | **+0.1** |
| F21K | | | | IAML | | 10 11 03.9 | |
| | comp=N,97nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.17** | **135** | | **Pn** | **10 09 48.5** | **+0.8** |
| **I26K** | **Coal Creek Min** | **4.19** | **174** | | **Pn** | **10 09 48.1** | **+0.2** |
| I26K | | | | IAML | | 10 11 06.4 | |
| | comp=E,138nm,0.6s | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **212** | | **Pn** | **10 09 47.6** | **-0.5** |
| H23K | | | | IAML | | 10 11 09.1 | |
| | comp=E,127nm,0.8s | | | | | | |
| H23K | | | | IAML | | 10 11 09.2 | |
| | comp=N,114nm,0.8s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.33** | **113** | | **Pn** | **10 09 50.1** | **+0.4** |
| F31M | | | | IAML | | 10 11 03.2 | |
| | comp=N,106nm,0.7s | | | | | | |
| F31M | | | | IAML | | 10 11 10.5 | |
| | comp=E,128nm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **4.34** | **156** | Pn | **Pn** | **10 09 48.0** | **-2.0** |
| I28M | | | | IAML | | 10 11 14.2 | |
| | comp=E,93nm,1.1s | | | | | | |
| I28M | | | | IAML | | 10 11 17.0 | |
| | comp=N,76nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **4.47** | **120** | | **Pn** | **10 09 49.4** | **-2.2** |
| G31M | | | | IAML | | 10 11 14.0 | |
| | comp=E,96nm,1.5s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.53** | **221** | | **Pn** | **10 09 53.7** | **+1.2** |
| **E20K** | **Nigu River** | **4.53** | **260** | | **Pn** | **10 09 54.2** | **+1.5** |
| **D20K** | **Etivluk River** | **4.54** | **266** | | **Pn** | **10 09 54.5** | **+1.8** |
| **POKR** | **Poker Plat Res** | **4.55** | **198** | | **Pn** | **10 09 52.7** | **-0.1** |
| POKR | | | | IAML | | 10 10 50.4 | |
| | comp=N,73nm,1.1s | | | | | | |
| **B20K** | **Meade River** | **4.57** | **283** | | **Pn** | **10 09 50.5** | **-2.6** |
| B20K | | | | IAML | | 10 11 37.6 | |
| | comp=N,103nm,1.6s | | | | | | |
| **A21K** | **Barrow** | **4.60** | **300** | | **Pn** | **10 09 54.4** | **+0.8** |
| **G21K** | **Allakaket** | **4.61** | **235** | | **Pn** | **10 09 52.2** | **-1.4** |
| G21K | | | | IAML | | 10 11 27.1 | |
| | comp=N,91nm,1.4s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.69** | **149** | | **Pn** | **10 09 56.4** | **+1.7** |
| I29M | | | | IAML | | 10 10 53.3 | |
| | comp=N,95nm,0.6s | | | | | | |
| I29M | | | | IAML | | 10 11 26.6 | |
| | comp=E,77nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **208** | | **Pn** | **10 09 57.0** | **+1.0** |
| I23K | | | | IAML | | 10 11 24.3 | |
| | comp=N,85nm,1.1s | | | | | | |
| I23K | | | | IAML | | 10 11 27.6 | |
| | comp=E,78nm,1.3s | | | | | | |
| **MDM** | **Murphy Dome** | **4.80** | **201** | | **Pn** | **10 09 57.1** | **+0.9** |
| MDM | | | | IAML | | 10 11 16.3 | |
| | comp=E,70nm,0.8s | | | | | | |
| MDM | | | | IAML | | 10 11 21.2 | |
| | comp=N,68nm,0.7s | | | | | | |
| **IL03** | **Eielson Array** | **4.83** | **194** | Pn | **Pn** | **10 09 55.6** | **-1.1** |
| **COLA** | **College** | **4.83** | **199** | Pn | **Pn** | **10 09 57.6** | **+1.0** |
| **IL31** | | **4.83** | **194** | | **Pn** | **10 09 55.9** | **-0.8** |
| **ILAR** | **Eielson Array** | **4.83** | **194** | | **Pn** | **10 09 55.9** | **-0.8** |
| **ILAR** | **Eielson Array** | **4.83** | **194** | Pn | **Pn** | **10 09 59.0** | **+2.3** |
| | comp=N,3.0nm,0.3s,baz=6.8,slow=13,SNR=93 | | | | | | |
| ILAR | | | | | Sn | **10 10 53.8** | **+1.1** |
| | comp=N,4.9nm,0.3s,baz=17,slow=17,SNR=5.6 | | | | | | |
| ILAR | | | | | Lg | 10 11 13.1 | |
| | comp=N,3.5nm,0.3s,baz=12,slow=15,SNR=6.1 | | | | | | |
| | comp=N,4.4nm,0.4s | | | | | | |
| **EGAK** | **Eagle** | **4.84** | **165** | | **Pn** | **10 09 56.3** | **-0.6** |
| **J25K** | **Salcha River,** | **4.90** | **186** | | **Pn** | **10 09 56.7** | **-0.9** |
| J25K | | | | IAML | | 10 11 19.1 | |
| | comp=E,74nm,1.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.95** | **246** | | **Pn** | **10 09 58.1** | **-0.1** |
| F20K | | | | IAML | | 10 11 36.2 | |
| | comp=N,47nm,1.5s | | | | | | |
| **J26L** | **Joseph Creek** | **4.99** | **177** | | **Pn** | **10 09 59.4** | **+0.4** |
| J26L | | | | IAML | | 10 11 25.8 | |
| | comp=E,53nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.05** | **198** | | **Pn** | **10 10 01.8** | **+2.2** |
| CCB | | | | IAML | | 10 11 01.6 | |
| | comp=N,46nm,1.1s | | | | | | |
| CCB | | | | IAML | | 10 11 02.7 | |
| | comp=E,48nm,0.5s | | | | | | |
| **H21K** | **Melozitna River** | **5.06** | **225** | | **Pn** | **10 09 58.0** | **-1.9** |
| H21K | | | | IAML | | 10 11 31.3 | |
| | comp=E,57nm,0.9s | | | | | | |
| H21K | | | | IAML | | 10 11 42.5 | |
| | comp=N,64nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **5.13** | **266** | | **Pn** | **10 10 00.4** | **-0.4** |
| D19K | | | | IAML | | 10 11 57.9 | |
| | comp=N,67nm,1.4s | | | | | | |
| **MLY** | **Manley** | **5.14** | **213** | | **Pn** | **10 10 00.2** | **-0.7** |
| **HDA** | **Harding Lake** | **5.20** | **194** | | **Pn** | **10 10 02.7** | **+1.0** |
| **I30M** | **Mount Dempster** | **5.20** | **141** | | **Pn** | **10 10 03.3** | **+1.5** |
| I30M | | | | IAML | | 10 11 04.3 | |
| | comp=N,58nm,0.4s | | | | | | |
| **E19K** | **Redstone River** | **5.23** | **254** | | **Pn** | **10 10 02.0** | **-0.1** |
| E19K | | | | IAML | | 10 11 47.8 | |
| | comp=N,50nm,0.9s | | | | | | |
| E19K | | | | IAML | | 10 11 51.6 | |
| | comp=E,39nm,1.0s | | | | | | |
| **WRH** | **Wood River Hil** | **5.25** | **199** | | **Pn** | **10 10 01.9** | **-0.5** |
| WRH | | | | IAML | | 10 11 06.4 | |
| | comp=N,56nm,0.9s | | | | | | |
| WRH | | | | IAML | | 10 11 38.6 | |
| | comp=E,66nm,1.5s | | | | | | |
| **NEA2** | **Nenana** | **5.26** | **204** | | **Pn** | **10 10 00.8** | **-1.8** |
| NEA2 | | | | IAML | | 10 11 38.1 | |
| | comp=E,38nm,1.3s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.50** | **274** | Pn | **Pn** | **10 10 07.4** | **+1.5** |
| **SCRK** | **Sand Creek** | **5.51** | **179** | Pn | **Pn** | **10 10 05.6** | **-0.5** |
| **K27K** | **Chicken** | **5.52** | **171** | | **Pn** | **10 10 04.1** | **-2.0** |
| **J29N** | **Klondike Camp** | **5.54** | **152** | Pn | **Pn** | **10 10 04.3** | **-2.2** |
| **BWN** | **Browne** | **5.71** | **204** | | **Pn** | **10 10 06.3** | **-2.5** |
| **K24K** | **Donnelly Dome** | **5.72** | **187** | | **Pn** | **10 10 12.1** | **+3.1** |
| **DAWY** | **Dawson** | **5.73** | **159** | | **Pn** | **10 10 08.9** | **-0.2** |
| **F19K** | **Shaleruckik Mo** | **5.74** | **249** | Pn | **Pn** | **10 10 07.5** | **-1.6** |
| **J30M** | **Hart River** | **5.77** | **144** | | **Pn** | **10 10 11.5** | **+1.8** |
| **DOT** | **Dot Lake** | **5.84** | **180** | | **Pn** | **10 10 13.2** | **+2.6** |
| **A19K** | **Wainwright** | **5.91** | **285** | | **Pn** | **10 10 12.5** | **+1.1** |
| **G19K** | **Purcell Mounta** | **5.93** | **242** | | **Pn** | **10 10 09.9** | **-1.9** |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **210** | Pn | **Pn** | **10 10 10.4** | **-2.7** |
| **MCK** | **McKinley** | **6.06** | **201** | | **Pn** | **10 10 12.0** | **-1.6** |
| **H19K** | **Roundabout Mou** | **6.16** | **236** | Pn | **Pn** | **10 10 14.1** | **-0.8** |
| **C18K** | **Utukok River** | **6.17** | **270** | Pn | **Pn** | **10 10 16.1** | **+0.9** |
| **I20K** | **Naaghedeneel** | **6.18** | **226** | Pn | **Pn** | **10 10 15.9** | **+0.7** |
| **K29M** | **Barlow Dome** | **6.22** | **152** | | **Pn** | **10 10 17.6** | **+1.8** |
| **B18K** | **Kokolik River** | **6.23** | **277** | | **Pn** | **10 10 15.9** | **+0.1** |
| **RND** | **Reindeer** | **6.37** | **200** | Pn | **Pn** | **10 10 19.3** | **+1.5** |
| **E18K** | **Tukpahlearik C** | **6.41** | **259** | Pn | **Pn** | **10 10 19.5** | **+1.3** |
| **F18K** | **Selawik** | **6.49** | **251** | | **Pn** | **10 10 20.7** | **+1.4** |
| **BCAR** | **Beaver Creek A** | **6.49** | **171** | Pn | **Pn** | **10 10 19.2** | **-0.3** |
| **PAX** | **Paxson** | **6.54** | **185** | | **Pn** | **10 10 19.7** | **-0.6** |
| **DHY** | **Denali Highway** | **6.55** | **193** | Pn | **Pn** | **10 10 22.3** | **+1.9** |
| **G18K** | **Tagagawik** | **6.58** | **244** | Pn | **Pn** | **10 10 20.6** | **-0.1** |
| **J20K** | **Nowinta River** | **6.61** | **221** | Pn | **Pn** | **10 10 22.4** | **+1.3** |
| **A36M** | **Sachs Harbour** | **6.73** | **59** | Pn | **Pn** | **10 10 22.2** | **-0.5** |
| **C17K** | **DeLong Mountai** | **6.92** | **271** | | **Pn** | **10 10 25.0** | **-0.4** |
| **WAT7** | **Susitna Watana** | **6.92** | **198** | | **Pn** | **10 10 29.2** | **+3.7** |
| **RDOG** | **Red Dog Mine** | **6.96** | **267** | Pn | **Pn** | **10 10 24.6** | **-1.3** |
| **E17K** | **Hotham Inlet** | **6.98** | **258** | | **Pn** | **10 10 26.7** | **+0.4** |
| **H18K** | **Honhosa River** | **6.99** | **239** | Pn | **Pn** | **10 10 24.7** | **-1.6** |
| **C36M** | **Paulatuk** | **7.06** | **82** | Pn | **Pn** | **10 10 25.6** | **-1.6** |
| **HARP** | **HAARP** | **7.11** | **184** | | **Pn** | **10 10 31.4** | **+3.4** |
| **F17K** | **Baldwin Pennin** | **7.11** | **253** | Pn | **Pn** | **10 10 26.8** | **-1.1** |
| **J19K** | **Poorman** | **7.12** | **225** | Pn | **Pn** | **10 10 29.1** | **+1.0** |
| **D17K** | **Noatak River** | **7.16** | **265** | | **Pn** | **10 10 28.2** | **-0.4** |
| **M27K** | **Edge Creek, AK** | **7.19** | **172** | Pn | **Pn** | **10 10 28.3** | **-0.9** |
| **K20K** | **Telida** | **7.30** | **218** | Pn | **Pn** | **10 10 29.3** | **-1.3** |
| **M29M** | **Somme Creek** | **7.41** | **159** | Pn | **Pn** | **10 10 30.5** | **-1.7** |
| **G17K** | **Kiwalik Mounta** | **7.47** | **246** | | **Pn** | **10 10 34.3** | **+1.4** |
| **H17K** | **Granite Mounta** | **7.62** | **241** | Pn | **Pn** | **10 10 36.4** | **+1.5** |
| **C16K** | **Lisburne Hills** | **7.75** | **271** | | **Pn** | **10 10 36.6** | **0.0** |
| **YUK2** | **White River** | **7.83** | **168** | | **Pn** | **10 10 40.7** | **+2.8** |
| **J18K** | **Innoko River** | **7.84** | **226** | | **Pn** | **10 10 39.0** | **+1.1** |
| **N25K** | **Chitina, Valde** | **7.89** | **182** | Pn | **Pn** | **10 10 38.3** | **-0.4** |
| **GHO** | **Glory Hole Cre** | **7.97** | **197** | Pn | **Pn** | **10 10 38.6** | **-1.2** |
| **KLU** | **Klutina** | **8.04** | **186** | Pn | **Pn** | **10 10 39.9** | **-0.8** |
| **L20K** | **Farewell, AK** | **8.05** | **214** | | **Pn** | **10 10 41.9** | **+1.0** |
| **GLB** | **Gilahina Butte** | **8.06** | **179** | Pn | **Pn** | **10 10 41.5** | **+0.6** |
| **G16K** | **Koyuk River** | **8.10** | **249** | Pn | **Pn** | **10 10 41.7** | **+0.3** |
| **SKT** | **Skwentna** | **8.10** | **206** | Pn | **Pn** | **10 10 41.1** | **-0.5** |
| **MCARA** | **McCarthy VSAT** | **8.13** | **176** | Pn | **Pn** | **10 10 41.6** | **-0.2** |
| **PMR** | **Palmer** | **8.17** | **197** | Pn | **Pn** | **10 10 41.8**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **P18K** | **Big Mountain,** | **11.16** | **211** | Pn | | **Pn** | **10 11 22.9** | **-0.5** |
| **N15K** | **Kwethluk River** | **11.49** | **224** | Pn | | **Pn** | **10 11 26.7** | **-1.3** |
| **R33M** | **Jennings River** | **11.55** | **144** | Pn | | **Pn** | **10 11 28.0** | **-0.9** |
| **Q32M** | **Nakina River** | **11.70** | **148** | Pn | | **Pn** | **10 11 30.3** | **-0.7** |
| **KDAK** | **Kodiak Island** | **12.29** | **202** | Pn | | **Pn** | **10 11 37.0** | **-1.8** |
| **O14K** | **Tigyukauivet M** | **12.58** | **224** | Pn | | **Pn** | **10 11 41.0** | **-1.8** |
| **PLK4** | **Peulik 4** | **13.02** | **210** | Pn | | **Pn** | **10 11 47.3** | **-1.6** |
| **YKA** | **Yellowknife Ar** | **13.76** | **106** | Pn | | **Pn** | **10 11 54.8** | **-4.1** |
| | comp=E,0.6nm,0.3s,baz=316,slow=15,SNR=16 | | | | | | | |
| YKA | | | | Sn | | Sn | 10 14 19.6 | -12 |
| | comp=E,0.5nm,0.3s,baz=320,slow=22,SNR=3.5 | | | | | | | |
| | comp=E,1.3nm,0.5s | | | | | | | |
| **T35M** | **Bob Quinn** | **13.94** | **147** | Pn | | **Pn** | **10 11 59.8** | **-1.6** |
| **NEW** | **Newport** | **25.01** | **134** | LR | | LR | 10 24 50.4 | |
| | comp=E,54nm,18.5s,baz=334,slow=39 | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.11** | **128** | P | | **P** | **10 15 13.0** | **+1.7** |
| | comp=E,0.2nm,0.5s,baz=353,slow=6.4,SNR=2.2 | | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.04** | **142** | P | | **P** | **10 15 32.7** | **+4.6** |
| | comp=E,0.2nm,0.6s,baz=347,slow=7.4,SNR=2.2 | | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.33** | **128** | P | | **P** | **10 17 11.8** | **+2.0** |
| | comp=E,0.2nm,0.7s,baz=347,slow=7.4,SNR=2.5 | | | | | | | |
| | comp=E,0.2nm,0.7s | | | | | | | |

*IDC* ***21*** *10:15:24.0±1.8,8˚.23S×116˚.72E,h0km,mb3.6/4, mbtmp3.7/5,ML3.2/1,MS3.3/1,Error ellipse: s-maj=26.4km s-min=18.3km az=72.0*

*DJA* ***21*** *10:15:27.7±0.6,8˚.S±.7˚×11˚.7E±˚,h10km±6km,M4.0/8, mb4.2/1,MLv3.9/8*

**ISC 21 10:15:27.2±0.9,8˚.27S±0˚.07×116˚.80E±0˚.04,h10km,n14, σ0§89/16,mb3.5/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.47** | **170** | P | **Pg** | **10 15 36.5** | **+0.1** |
| **PLAI** | **Plampang** | **1.11** | **120** | P | **Pb** | **10 15 48.4** | **-0.2** |
| PLAI | | | | S | **Sg** | **10 16 03.5** | **+0.4** |
| **SRBI** | **Singaraja** | **1.58** | **277** | P | **Pn** | **10 15 55.1** | **-0.3** |
| SRBI | | | | S | **Sn** | **10 16 17.2** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.63** | **266** | P | **Pn** | **10 16 09.7** | **-0.1** |
| **WBSI** | **Waikabubak, Su** | **2.90** | **118** | P | **Pn** | **10 16 13.5** | **0.0** |
| **BSSI** | **Bau Bau, Buton** | **4.23** | **60** | P | **Pn** | **10 16 32.0** | **+0.2** |
| **KAPI** | **Kappang** | **4.37** | **42** | Pn | **Pn** | **10 16 33.5** | **-0.2** |
| | 1.4nm,0.3s,baz=220,slow=17,SNR=14 | | | | | | |
| KAPI | | | | Sn | **Sn** | **10 17 23.3** | **-1.5** |
| | 5.8nm,0.3s,baz=248,slow=19,SNR=9.8 | | | | | | |
| KAPI | | | | Lg | Lg | 10 17 41.4 | |
| | 5.8nm,0.3s,baz=198,slow=20,SNR=6.2 | | | | | | |
| | 4.6nm,0.2s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.86** | **96** | P | **Pn** | **10 16 41.4** | **+0.8** |
| **BNSI** | **Bone** | **5.06** | **41** | P | **Pn** | **10 16 45.0** | **+1.8** |
| **WRA** | **Warramunga Arr** | **20.56** | **126** | P | **P** | **10 20 05.8** | **-0.6** |
| | 1.5nm,0.5s,baz=300,slow=12,SNR=51 | | | | | | |
| WRA | | | | S | **S** | **10 23 57.7** | **+1.2** |
| | 0.2nm,0.9s,baz=292,slow=30,SNR=2.3 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.42** | **135** | P | **P** | **10 20 26.0** | **-0.4** |
| | 1.6nm,0.8s,baz=310,slow=9.7,SNR=18 | | | | | | |
| | 1.6nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **32.91** | **139** | P | **P** | **10 22 01.2** | **-0.7** |
| | 1.0nm,0.5s,baz=306,slow=8.8,SNR=2.9 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **ASAJ** | **Asahikawa** | **57.14** | **22** | LR | LR | 10 51 06.5 | |
| | comp=Z,27nm,18.7s,baz=191,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | P | P | 10 25 50.6 | -2.6 |
| | 0.3nm,0.8s,baz=131,slow=5.9,SNR=2.0 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

**HEL 21 10:32:06.6±0.0,64˚.69N×24˚.77E,h0km,ML1.5, Explosion,Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OBF4** | **Vikkela, Lumij** | **0.19** | **50** | *e*P | Pg | 10 32 09.8 | -0.4 |
| OBF4 | | | | *e*S | Sg | 10 32 11.2 | -1.5 |
| **OBF0** | **Syolatti, Pyha** | **0.30** | **230** | *e*P | Pg | 10 32 11.7 | -0.6 |
| OBF0 | | | | *e*S | Sg | 10 32 16.0 | -0.2 |
| **OUF** | **Merijarvi** | **0.33** | **183** | *e*P | Pg | 10 32 12.4 | -0.4 |
| OUF | | | | *e*S | Sg | 10 32 17.0 | 0.0 |
| **OUL** | **Oulu** | **0.62** | **50** | *e*P | Pg | 10 32 17.7 | -0.8 |
| OUL | | | | *e*S | Sg | 10 32 26.1 | -0.5 |
| **KALU** | **Kalix** | **1.31** | **334** | *e*PN | Pg | 10 32 31.7 | -0.1 |
| KALU | | | | *e*SB | Sg | 10 32 47.3 | -1.4 |
| **TOF** | **Tornio** | **1.41** | **353** | *e*PG | Pn | 10 32 31.8 | -1.6 |
| TOF | | | | *e*SB | Sg | 10 32 50.4 | -1.3 |
| TOF | | | | MSG | | 10 32 55.5 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| **RANF** | **Ranua** | **1.58** | **32** | *e*P | Pn | 10 32 34.6 | -1.1 |
| RANF | | | | *e*SG | Sn | 10 32 55.3 | -1.5 |
| **VAF** | **Ylistaro** | **1.90** | **210** | *e*PG | Pn | 10 32 40.7 | +0.6 |
| VAF | | | | *e*SG | Sb | 10 33 06.2 | -0.1 |
| VAF | | | | MSG | | 10 33 07.8 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| **UMAU** | **Umeaa** | **1.96** | **247** | *e*PB | Pn | 10 32 41.4 | +0.3 |
| UMAU | | | | *e*SG | Sn | 10 33 06.9 | +0.6 |
| **RNF** | **Rovaniemi** | **1.99** | **14** | *e*PB | Pn | 10 32 41.7 | +0.2 |
| RNF | | | | *e*SB | Sn | 10 33 07.3 | +0.2 |
| RNF | | | | MSG | | 10 33 09.5 | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| **SUF** | **Sumiainen** | **2.07** | **162** | *e*SG | Sb | 10 33 11.4 | +0.1 |
| SUF | | | | MSG | | 10 33 14.3 | |
| | comp=Z,3.9nm,0.3s | | | | | | |
| **RMF** | **Romuvaara** | **2.29** | **100** | *e*SG | Sb | 10 33 18.2 | +0.7 |
| **PAJU** | **Pajala** | **2.44** | **345** | *e*SG | Sb | 10 33 21.6 | -0.3 |

*OSPL* ***21*** *10:51:29.6±1.4,18˚.42N×71˚.66W,h21km±11km,ML1.5*
*SDD* ***21*** *10:51:29.2±1.8,18˚.53N×71˚.61W,h0km±357km,MD2.5, ML1.5,MW1.7*

**ISC 21 10:51:28.4±1.1,18˚.49N±0˚.04×71˚.61W±0˚.03,h5km±13km, n8,σ1§09/14,8C-1D,Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NEDR** | **Neiba UASD** | **0.19** | **93** | ⇑*e*Sg | **Sg** | **10 51 33.2** | **-1.4** |
| NEDR | | | | IAML | | 10 51 40.8 | |
| | comp=E,155nm,0.2s | | | | | | |
| NEDR | | | | IAML | | 10 51 40.9 | |
| | comp=N,288nm,0.2s | | | | | | |
| **JIDR** | **Jimani** | **0.23** | **269** | ⇑*e*Pg | **Pg** | **10 51 32.7** | **-0.1** |
| JIDR | | | | ⇑*e*Sg | **Sg** | **10 51 36.4** | **+0.6** |
| JIDR | | | | IAML | | 10 51 37.5 | |
| | comp=E,128nm,0.4s | | | | | | |
| JIDR | | | | IAML | | 10 51 37.7 | |
| | comp=N,100nm,0.5s | | | | | | |
| **PODR** | **Polo** | **0.45** | **136** | ⇑*e*Pg | **Pg** | **10 51 37.9** | **+0.7** |
| PODR | | | | ⇑*e*Sg | **Sg** | **10 51 43.9** | **+0.7** |
| PODR | | | | IAML | | 10 51 46.4 | |
| | comp=E,35nm,1.1s | | | | | | |
| PODR | | | | IAML | | 10 51 59.7 | |
| | comp=N,42nm,1.4s | | | | | | |
| **PODR** | **Polo** | **0.45** | **136** | *i* P | **Pn** | **10 51 41.1** | **-0.7** |
| PODR | | | | *e*S | **Sb** | **10 51 45.9** | **-0.2** |
| **SDDR** | **Presa de Saban** | **0.57** | **32** | ‖*e*Pg | **Pg** | **10 51 39.3** | **-0.2** |
| SDDR | | | | ⇑*e*Sg | **Sg** | **10 51 45.6** | **-1.4** |
| SDDR | | | | IAML | | 10 51 49.1 | |
| | comp=E,14nm,2.5s | | | | | | |
| SDDR | | | | IAML | | 10 51 50.5 | |
| | comp=N,19nm,1.9s | | | | | | |
| **SDDR** | **Presa de Saban** | **0.57** | **32** | *i* P | **Pg** | **10 51 41.1** | **+1.6** |
| SDDR | | | | *e*S | **Sb** | **10 51 50.7** | **+1.2** |
| SDDR | | | | IAML | | 10 51 55.9 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **PAPH** | **Port-au-Prince** | **0.65** | **273** | *e*S | **Sg** | **10 51 49.0** | **-0.4** |
| **ABDR** | **Alto Bandera** | **0.99** | **71** | ⇑*e*Pg | **Pg** | **10 51 48.5** | **+1.0** |
| ABDR | | | | ⇑*e*Sg | **Sg** | **10 51 59.3** | **-1.0** |
| ABDR | | | | IAML | | 10 52 05.0 | |
| | comp=E,20nm,0.5s | | | | | | |
| ABDR | | | | IAML | | 10 52 45.0 | |
| | comp=N,30nm,2.2s | | | | | | |

*IDC* ***21*** *10:51:52.7±4.4,17˚.94S×178˚.16W,h514km±49km, mb3.2/11,mbtmp4.0/11,Error ellipse: s-maj=22.4km s-min=19.2km az=150.0*

*NEIC* ***21*** *10:51:54.9±2.3,18˚.0S±0˚.1×178˚.1W±0˚.2,h530km±7km, mb4.1/66,Error ellipse: s-maj=22.4km s-min=18.8km az=130.0*

**ISC 21 10:51:56.8±0.5,18˚.0S±0˚.1×178˚.2W±0˚.1,h550km,n102, σ1§57/97,mb4.1/44,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.56** | **274** | P | **P** | **10 53 16.1** | **+0.5** |
| **KOUNC** | **Koumac, New Ca** | **16.69** | **259** | P | **P** | **10 55 23.4** | **+0.6** |
| **URZ** | **Urewera** | **20.55** | **190** | P | **P** | **10 55 55.3** | **-2.3** |
| | 10nm,0.9s,baz=14,slow=4.2,SNR=1.7 | | | | | | |
| | 10nm,0.9s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.17** | **192** | P | **P** | **10 56 21.5** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.72** | **241** | P | **P** | **10 58 33.8** | **-0.3** |
| **STKA** | **Stephens Creek** | **38.72** | **241** | P | **P** | **10 58 33.5** | **-0.6** |
| | 1.9nm,1.0s,baz=90,slow=8.8,SNR=3.7 | | | | | | |
| | 1.9nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **43.49** | **241** | P | **P** | **10 59 12.1** | **+0.1** |
| **WR0** | **Warramunga Arr** | **44.59** | **260** | P | **P** | **10 59 20.8** | **+0.2** |
| **WB0** | **Warramunga Arr** | **44.74** | **260** | P | **P** | **10 59 21.5** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 10 59 38.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.77** | **260** | P | **P** | **10 59 21.2** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 11 00 01.5 | |
| | comp=Z,8.6nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.77** | **260** | P | **P** | **10 59 21.1** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 11 00 01.3 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **10 59 21.6** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **10 59 20.8** | **-1.3** |
| | comp=Z,0.5nm,0.4s,baz=92,slow=7.0,SNR=26 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 00 51.7** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=94,slow=3.6,SNR=1.5 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.92** | **254** | P | **P** | **10 59 23.1** | **0.0** |
| **ASAR** | **Alice Springs** | **44.92** | **254** | P | **P** | **10 59 22.5** | **-0.7** |
| **ASAR** | **Alice Springs** | **44.92** | **254** | P | **P** | **10 59 22.9** | **-0.3** |
| | comp=Z,4.2nm,0.6s,baz=89,slow=8.4,SNR=103 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 00 52.2** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=103,slow=3.9,SNR=6.2 | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.11** | **245** | P | **P** | **11 00 01.5** | **-0.4** |
| **KNRA** | **Kununurra** | **50.65** | **264** | P | **P** | **11 00 06.4** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **68.11** | **323** | P | P | 11 01 59.5 | -2.6 |
| | comp=Z,1.0nm,0.7s,baz=169,slow=6.2,SNR=3.3 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **71.47** | **331** | P | **P** | **11 02 23.3** | **+1.3** |
| **YULB** | **Yu-li** | **71.98** | **303** | P | **P** | **11 02 24.5** | **-0.9** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **11 02 25.5** | **+0.5** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **11 02 24.4** | **-0.6** |
| | comp=Z,0.3nm,0.4s,baz=358,slow=8.5,SNR=8.6 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **PLK4** | **Peulik 4** | **77.56** | **12** | P | **P** | **11 02 54.7** | **-1.2** |
| **OHAK** | **Old Harbor** | **77.82** | **14** | P | **P** | **11 02 56.1** | **-1.1** |
| **KDAK** | **Kodiak Island** | **78.49** | **14** | P | **P** | **11 02 59.8** | **-1.0** |
| **EMB** | **Emerald Bay** | **78.53** | **42** | P | **P** | **11 03 01.3** | **-0.5** |
| EMB | | | | IAmb | IAmb | 11 03 01.5 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **WAKR** | **Walker** | **78.70** | **43** | P | **P** | **11 03 02.7** | **0.0** |
| **PNTR** | **Pine Nut** | **78.92** | **43** | P | **P** | **11 03 04.5** | **+0.7** |
| **DSP** | **Deep Springs** | **79.05** | **45** | P | **P** | **11 03 04.5** | **+0.2** |
| **O16K** | **Kokwok River B** | **79.08** | **10** | P | P | 11 03 01.9 | -2.1 |
| O16K | | | | IAmb | IAmb | 11 03 14.1 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **N15K** | **Kwethluk River** | **79.31** | **9** | P | **P** | **11 03 04.3** | **-0.8** |
| **NVAR** | **Mina Array Bea** | **79.40** | **44** | P | **P** | **11 03 05.6** | **-0.8** |
| | comp=Z,0.7nm,0.7s,baz=226,slow=8.9,SNR=7.2 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **P18K** | **Big Mountain,** | **79.42** | **12** | P | P | 11 03 03.9 | -1.9 |
| P18K | | | | IAmb | IAmb | 11 03 04.1 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **GMN** | **Gold Mountain** | **79.49** | **45** | P | P | 11 03 05.0 | -1.9 |
| **O18K** | **Koktuh Hills** | **79.85** | **12** | P | **P** | **11 03 06.7** | **-1.3** |
| O18K | | | | IAmb | IAmb | 11 03 07.0 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **KVN** | **Kaiserville** | **79.87** | **43** | P | **P** | **11 03 08.3** | **-0.6** |
| **N17K** | **Nushagak Hills** | **80.12** | **10** | P | **P** | **11 03 08.2** | **-1.2** |
| N17K | | | | IAmb | IAmb | 11 03 46.6 | |
| | comp=Z,6.6nm,1.4s | | | | | | |
| **M16K** | **Timber Creek** | **80.30** | **9** | P | **P** | **11 03 10.1** | **-0.3** |
| M16K | | | | IAmb | IAmb | 11 03 10.8 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.32** | **38** | P | **P** | **11 03 10.9** | **-0.1** |
| J05D | | | | IAmb | IAmb | 11 03 11.2 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **N18K** | **Kilae Creek** | **80.49** | **11** | P | **P** | **11 03 10.1** | **-1.3** |
| N18K | | | | IAmb | IAmb | 11 03 29.1 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **H04A** | **Detroit Lake** | **80.59** | **37** | P | **P** | **11 03 11.6** | **-0.7** |
| **L16K** | **Owhat River** | **80.88** | **9** | P | **P** | **11 03 12.9** | **-0.3** |
| L16K | | | | IAmb | IAmb | 11 03 13.9 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| **M17K** | **Holitna River** | **80.90** | **10** | P | **P** | **11 03 13.4** | **0.0** |
| M17K | | | | IAmb | IAmb | 11 03 13.9 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.15** | **8** | P | **P** | **11 03 14.5** | **-0.2** |
| K15K | | | | IAmb | IAmb | 11 03 15.4 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **L18K** | **Granite Mounta** | **81.79** | **10** | P | **P** | **11 03 17.6** | **-0.3** |
| L18K | | | | IAmb | IAmb | 11 03 20.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **I07A** | **Izee** | **81.80** | **38** | P | **P** | **11 03 18.4** | **-0.2** |
| **M19K** | **Big River Lodg** | **81.90** | **11** | P | **P** | **11 03 17.5** | **-1.0** |
| M19K | | | | IAmb | IAmb | 11 03 42.7 | |
| | comp=Z,6.4nm,1.3s | | | | | | |
| **K17K** | **Iditarod** | **82.01** | **9** | P | **P** | **11 03 18.6** | **-0.4** |
| K17K | | | | IAmb | IAmb | 11 03 32.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **BELA** | **Belgrano 2** | **82.01** | **173** | P | **P** | **11 03 19.3** | **+0.3** |
| **J16K** | **Anvik River** | **82.23** | **8** | P | **P** | **11 03 19.9** | **-0.3** |
| J16K | | | | IAmb | IAmb | 11 03 36.6 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **KNB** | **Kanab** | **82.39** | **47** | P | **P** | **11 03 22.4** | **+0.5** |
| **U15A** | **North Rim** | **82.48** | **48** | P | **P** | **11 03 22.7** | **+0.2** |
| **J17K** | **VABM Dome** | **82.54** | **9** | P | **P** | **11 03 21.2** | **-0.6** |
| J17K | | | | IAmb | IAmb | 11 03 26.1 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **G08A** | **Pilot Rock** | **82.81** | **38** | P | **P** | **11 03 23.4** | **-0.3** |
| **J18K** | **Innoko River** | **82.96** | **10** | P | **P** | **11 03 23.1** | **-0.7** |
| J18K | | | | IAmb | IAmb | 11 03 23.8 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **83.94** | **347** | P | **P** | **11 03 27.2** | **-1.5** |
| | comp=Z,2.4nm,0.5s,baz=162,slow=7.8,SNR=4.5 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.92** | **58** | P | **P** | **11 03 38.8** | **-0.5** |
| TX31 | | | | IAmb | IAmb | 11 03 40.4 | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.92** | **58** | P | **P** | **11 03 39.6** | **+0.3** |
| **TXAR** | **Lajitas Array** | **85.92** | **58** | P | **P** | **11 03 39.1** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=216,slow=6.5,SNR=12 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.98** | **13** | P | **P** | **11 03 37.5** | **-1.0** |
| **ILAR** | **Eielson Array** | **85.98** | **13** | P | P | 11 03 36.1 | -2.5 |
| | comp=Z,0.5nm,0.4s,baz=221,slow=5.3,SNR=16 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **85.99** | **8** | P | **P** | **11 03 37.3** | **-1.3** |
| F19K | | | | IAmb | IAmb | 11 04 07.5 | |
| | comp=Z,6.2nm,1.5s | | | | | | |
| **M29M** | **Somme Creek** | **86.12** | **17** | P | **P** | **11 03 38.5** | **-1.0** |
| M29M | | | | IAmb | IAmb | 11 03 48.0 | |
| | comp=Z,8.3nm,1.5s | | | | | | |
| **P33M** | **Teslin, Yukon** | **86.17** | **21** | P | **P** | **11 03 39.6** | **-0.1** |
| P33M | | | | IAmb | IAmb | 11 04 06.0 | |
| | comp=Z,5.3nm,1.4s | | | | | | |
| **J25K** | **Salcha River,** | **86.17** | **14** | P | **P** | **11 03 38.0** | **-1.6** |
| J25K | | | | IAmb | IAmb | 11 03 49.5 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **E18K** | **Tukpahlearik C** | **86.20** | **7** | P | **P** | **11 03 38.4** | **-1.1** |
| E18K | | | | IAmb | IAmb | 11 04 21.4 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **R33M** | **Jennings River** | **86.22** | **22** | P | **P** | **11 03 39.5** | **-0.5** |
| R33M | | | | IAmb | IAmb | 11 03 55.4 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **G21K** | **Allakaket** | **86.31** | **10** | P | **P** | **11 03 38.9** | **-1.2** |
| G21K | | | | IAmb | IAmb | 11 03 39.6 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **86.49** | **14** | P | **P** | **11 03 40.6** | **-0.5** |
| J26L | | | | IAmb | IAmb | 11 04 17.6 | |
| | comp=Z,2.6nm,1.2s | | | | | | |
| **E19K** | **Redstone River** | **86.65** | **8** | P | **P** | **11 03 40.3** | **-1.4** |
| E19K | | | | IAmb | IAmb | 11 03 51.4 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **86.91** | **13** | P | **P** | **11 03 41.5** | **-1.7** |
| **PDAR** | **Pinedale Array** | **87.33** | **43** | P | **P** | **11 03 44.9** | **-0.9** |
| **PDAR** | **Pinedale Array** | **87.33** | **43** | P | **P** | **11 03 44.4** | **-1.4** |
| | comp=Z,0.6nm,0.7s,baz=245,slow=3.6,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **88.06** | **10** | P | **P** | **11 03 47.2** | **-1.2** |
| E22K | | | | IAmb | IAmb | 11 04 20.7 | |
| | comp=Z,4.7nm,1.4s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I28M** | **Miner Creek** | **88.15** | **15** | P | **P** | **11 03 48.4** | **-0.5** |
| I28M | | | | IAmb | IAmb | 11 04 18.9 | |
| | comp=Z,5.5nm,1.5s | | | | | | |
| **F24K** | **Squaw Lake** | **88.19** | **11** | P | **P** | **11 03 48.0** | **-0.9** |
| F24K | | | | IAmb | IAmb | 11 03 56.2 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **D22K** | **Ayikyak River** | **88.61** | **9** | P | **P** | **11 03 50.2** | **-0.7** |
| **BMAR** | **Burnt Mountain** | **88.75** | **12** | P | **P** | **11 03 51.1** | **-0.5** |
| **D23K** | **Nanushuk River** | **89.00** | **10** | P | **P** | **11 03 52.0** | **-0.6** |
| **H29M** | **Whitestone** | **89.15** | **15** | P | **P** | **11 03 52.9** | **-0.5** |
| H29M | | | | IAmb | IAmb | 11 03 59.8 | |
| | comp=Z,3.5nm,1.2s | | | | | | |
| **G29M** | **Pine Creek** | **89.79** | **15** | P | **P** | **11 03 56.0** | **-0.4** |
| **G31M** | **Satah River** | **90.74** | **16** | P | **P** | **11 03 59.3** | **-1.3** |
| **MKAR** | **Makanchi Array** | **109.35** | **314** | PKiKP | **PKiKP** | **11 09 22.6** | **-2.2** |
| | comp=Z,0.5nm,0.5s,baz=149,slow=1.1,SNR=3.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **112.09** | **318** | PKiKP | **PKiKP** | **11 09 27.5** | **-2.3** |
| | comp=Z,0.1nm,0.4s,baz=120,slow=2.3,SNR=4.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **117.06** | **321** | PKP | **PKPdf** | **11 09 37.5** | **-1.7** |
| | comp=Z,1.1nm,0.4s,baz=105,slow=1.9,SNR=6.2 | | | | | | |
| **GAZ** | **Gaziantep** | **143.55** | **309** | PKPbc | PKPab | 11 10 28.5 | +0.3 |
| **BNN** | **Bunyan** | **143.87** | **312** | PKPbc | PKPbc | 11 10 29.4 | +0.1 |
| **BUR08** | **Bucovina Ar. S** | **144.79** | **332** | PKPdf | **PKPdf** | **11 10 32.3** | **+0.9** |
| **BURAR** | **Bucovina Array** | **144.81** | **332** | PKPdf | **PKPdf** | **11 10 30.5** | **-0.9** |
| **BR131** | **Keskin Array S** | **145.00** | **315** | | **PKPdf** | **11 10 32.0** | **-0.1** |
| **BRTR** | **Keskin Array B** | **145.00** | **315** | PKP | **PKPdf** | **11 10 32.0** | **-0.1** |
| | comp=Z,1.7nm,0.5s,baz=126,slow=4.4,SNR=18 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.36** | **303** | PKPbc | **PKPdf** | **11 10 36.5** | **+2.0** |
| | comp=Z,2.7nm,0.4s,baz=72,slow=5.4,SNR=9.9 | | | | | | |
| **GEC2** | **GERESS Array S** | **147.78** | **345** | PKPbc | **PKPdf** | **11 10 40.0** | **+3.6** |
| **GERES** | **GERESS Array B** | **147.78** | **345** | PKPbc | **PKPdf** | **11 10 39.8** | **+3.5** |
| **GERES** | **GERESS Array B** | **147.78** | **345** | PKPbc | **PKPdf** | **11 10 38.9** | **+2.5** |
| | comp=Z,1.6nm,0.5s,baz=12,SNR=6.3 | | | | | | |
| **STAL** | **STALIGIAL** | **150.44** | **345** | | **PKPdf** | **11 10 45.2** | **+4.7** |
| **FUORN** | **Ofenpass-Fuorn** | **150.65** | **348** | | **PKPdf** | **11 10 46.9** | **+5.7** |
| **PUK** | **Puka** | **151.51** | **331** | PKPbc | **PKPbc** | **11 10 48.6** | **-0.5** |
| **KARP** | **Karpathos** | **151.53** | **313** | PKPbc | **PKPdf** | **11 10 48.7** | **+6.1** |
| **FNA** | **Florina** | **151.75** | **327** | | **PKPdf** | **11 10 48.7** | **+6.0** |
| **BNI** | **Bardonecchia** | **152.76** | **352** | PKPbc | **PKPbc** | **11 10 51.8** | **0.0** |

**NAM 21 10:56:18.6±4.4,19˚.71S×14˚.48E,h22km±14km,ML1.7, 6C-4D,Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.03** | **158** | ⇓*i*P | Pb | 10 56 24.2 | +1.6 |
| ST3N | | | | *i* S | Sb | 10 56 25.7 | +0.4 |
| ST3N | | | | IAML | | 10 56 26.0 | |
| | comp=Z,108nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.03** | **158** | *i* P | Pb | 10 56 24.2 | +1.6 |
| ST3N | | | | *i* S | Sb | 10 56 25.8 | +0.4 |
| ST3N | | | | IAML | | 10 56 25.9 | |
| | comp=Z,255nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.10** | **147** | ⇑*i*P | Pb | 10 56 23.4 | -0.9 |
| ST9N | | | | *i* S | Sb | 10 56 24.3 | -4.0 |
| ST9N | | | | IAML | | 10 56 24.8 | |
| | comp=Z,794nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.10** | **147** | *i* P | Pb | 10 56 23.4 | -0.9 |
| ST9N | | | | *i* S | Sb | 10 56 24.3 | -3.9 |
| ST9N | | | | IAML | | 10 56 24.5 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **222** | ⇓*i*P | Pb | 10 56 25.5 | +1.3 |
| ST6N | | | | *i* S | Sb | 10 56 28.4 | +0.2 |
| ST6N | | | | IAML | | 10 56 30.2 | |
| | comp=Z,51nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **222** | *i* P | Pb | 10 56 25.5 | +1.3 |
| ST6N | | | | *i* S | Sb | 10 56 27.9 | -0.3 |
| ST6N | | | | IAML | | 10 56 28.1 | |
| | comp=Z,104nm,0.2s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **102** | ⇑*i*P | Pb | 10 56 23.9 | -0.3 |
| ST1N | | | | *i* S | Sb | 10 56 25.1 | -3.1 |
| ST1N | | | | IAML | | 10 56 25.3 | |
| | comp=Z,545nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **102** | *i* P | Pb | 10 56 23.9 | -0.3 |
| ST1N | | | | *i* S | Sb | 10 56 25.0 | -3.1 |
| ST1N | | | | IAML | | 10 56 25.3 | |
| | comp=Z,762nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **277** | ⇓*i*P | Pb | 10 56 27.4 | +3.2 |
| ST8N | | | | *i* S | Sb | 10 56 30.9 | +2.8 |
| ST8N | | | | IAML | | 10 56 33.0 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.24** | **154** | ⇓*i*P | Pb | 10 56 25.0 | +0.3 |
| ST2N | | | | IAML | | 10 56 26.3 | |

**PPT Papeete** 27.09 93 P P 11 01 31.9 +0.6
comp=Z,27nm,0.6s,baz=207,slow=6.8,SNR=9.6
comp=Z,27nm,0.6s
**PPTF Pamatai, Papee** 27.10 93 P P 11 01 32.3 +0.8
**EIDS Eidsvold** 29.51 250 P P 11 01 53.3 +1.0
EIDS IAmb IAmb 11 01 53.3
comp=Z,19nm,0.9s
**ARMA Armidale** 30.12 240 P P 11 01 56.7 -0.9
ARMA IAmb IAmb 11 02 11.1
comp=Z,27nm,1.4s
**AULRC Lightning Ridg** 32.94 244 P P 11 02 22.0 +0.6
**CTAO Charters Tower** 33.75 261 P P 11 02 28.7 +0.3
**CTAO Charters Tower** 33.75 261 P P 11 02 28.8 +0.5
**CAN Canberra** 33.83 233 P P 11 02 30.2 +1.3
CAN IAmb IAmb 11 02 39.1
comp=Z,26nm,1.2s
**PATS Pohnpei** 34.08 315 P P 11 02 32.1 +1.1
**PMG Port Moresby** 34.84 280 P P 11 02 39.0 +1.5
**PMG Port Moresby** 34.84 280 P P 11 02 38.9 +1.5
**PMG Port Moresby** 34.84 280 P P 11 02 39.0 +1.5
**TOO Toolangi** 37.29 231 P P 11 02 59.2 +1.9
TOO IAmb IAmb 11 03 07.0
comp=Z,22nm,1.0s
**COEN Coen** 37.45 271 P P 11 03 00.1 +1.2
**MANU Manus Island** 37.51 291 P P 11 03 00.9 +1.4
**TAOE Nuku Hiva Isla** 37.92 81 P P 11 03 04.1 +1.3
**STKA Stephens Creek** 38.82 242 P P 11 03 10.8 +1.0
**STKA Stephens Creek** 38.82 242 P P 11 03 11.2 +1.4
**STKA Stephens Creek** 38.82 242 P P 11 03 10.3 +0.5
comp=Z,19nm,0.8s,baz=94,slow=9.3,SNR=36
STKA S S 11 08 25.9 -0.5
comp=Z,2.2nm,0.9s,baz=135,slow=20,SNR=1.8
comp=Z,19nm,0.8s
**INKA Innaminka** 38.98 248 P P 11 03 12.4 +1.3
**QIS Mount Isa** 39.95 259 P P 11 03 18.9 -0.1
**WAKE Wake Island** 40.12 337 P P 11 03 20.5 +0.2
**HTT Hallett** 41.32 240 P P 11 03 30.7 +0.9
**LCRK Leigh Creek** 41.46 244 P P 11 03 31.5 +0.7
**TABU Tabubil** 41.78 283 P P 11 03 34.8 +1.2
**JAY Jayapura** 43.31 286 P P 11 03 45.5 0.0
comp=Z,89nm,1.0s,comp=Z,821nm
**OOD Oodnadatta** 43.45 249 P P 11 03 47.1 +0.7
**BBOO Buckleboo** 43.59 241 P P 11 03 47.8 +0.4
**BBOO Buckleboo** 43.59 241 P P 11 03 48.1 +0.6
BBOO IAmb IAmb 11 03 56.4
comp=Z,23nm,0.8s
**GENI Genyem** 43.77 286 P P 11 03 50.3 +1.3
**GENI Genyem** 43.77 286 P P 11 03 49.5 +0.5
comp=Z,94nm,0.8s
**WR0 Warramunga Arr** 44.74 260 P P 11 03 56.2 -0.3
WR0 IAmb IAmb 11 04 04.8
comp=Z,43nm,1.4s
**WB0 Warramunga Arr** 44.90 260 P P 11 03 57.3 -0.4
**WB2 Warramunga Arr** 44.92 260 P P 11 03 57.5 -0.4
**WRAB Tennant Creek** 44.92 260 P P 11 03 57.8 -0.1
**WRA Warramunga Arr** 44.93 260 P P 11 03 57.6 -0.3
**WRA Warramunga Arr** 44.93 260 P P 11 03 57.5 -0.4
comp=Z,21nm,0.6s,baz=95,slow=7.0,SNR=582
WRA PcP PcP 11 05 26.1 -0.3
comp=Z,3.4nm,0.8s,baz=92,slow=3.3,SNR=1.6
WRA S S 11 09 49.1 -5.1
comp=Z,3.9nm,0.8s,baz=98,slow=13,SNR=8.4
comp=Z,21nm,0.6s
**AS01 Alice Springs** 45.02 254 P P 11 03 58.9 +0.3
**MULG Mulgathing** 45.02 245 P P 11 03 58.4 -0.1
**AS31 Alice Springs** 45.06 254 P P 11 03 59.1 +0.3
AS31 IAmb IAmb 11 03 59.9
comp=Z,26nm,1.1s
**ASAR Alice Springs** 45.06 254 P P 11 03 59.3 +0.4
**ASAR Alice Springs** 45.06 254 P P 11 03 59.0 +0.2
comp=Z,52nm,0.6s,baz=88,slow=8.7,SNR=552
ASAR PcP PcP 11 05 26.7 -0.2
comp=Z,3.7nm,0.6s,baz=108,slow=3.6,SNR=4.7
ASAR S S 11 09 53.5 -2.5
comp=Z,11nm,0.9s,baz=88,slow=16,SNR=38
comp=Z,52nm,0.6s
**KDU Kakadu** 47.90 269 P P 11 04 20.2 -0.1
**MTN Manton Dam** 49.14 269 P P 11 04 29.0 -0.5
**MTN Manton Dam** 49.14 269 P P 11 04 29.2 -0.3
**WRKA Warakurna** 50.10 252 P P 11 04 36.3 -0.2
**FORT Forrest** 50.22 245 P P 11 04 37.1 -0.1
**FORT Forrest** 50.22 245 P P 11 04 37.3 +0.1
**KNRA Kununurra** 50.81 264 P P 11 04 41.7 0.0
KNRA IAmb IAmb 11 04 41.9
comp=Z,21nm,0.8s
**FAKI Fak Fak** 50.97 281 P P 11 04 43.4 +0.5
FAKI IAmb IAmb 11 04 51.6
comp=Z,30nm,0.9s
**SWI Sorong** 52.64 283 P P 11 04 54.2 -0.6
**FITZ Fitzroy Crossi** 53.33 261 P P 11 05 00.0 +0.3
**FITZ Fitzroy Crossi** 53.33 261 P P 11 05 00.0 +0.3
**SOEI Soe** 56.42 270 P P 11 05 22.7 +1.3
**SOEI Soe** 56.42 270 P P 11 05 22.7 +1.3
**SOEI Soe** 56.42 270 P P 11 05 21.3 -0.1
**PSA00 Pilbara Seismi** 58.19 256 P P 11 05 32.7 -0.4
**PSA00 Pilbara Seismi** 58.19 256 P P 11 05 33.2 +0.1
PSA00 IAmb IAmb 11 05 33.8
comp=Z,34nm,1.1s
**MBWA Marble Bar** 58.35 256 P P 11 05 34.1 -0.2
**MBWA Marble Bar** 58.35 256 P P 11 05 34.1 -0.2
**MMRI Maumere** 58.65 271 P P 11 05 36.4 0.0
**EDFI Ende, Flores** 59.14 271 P P 11 05 38.8 -1.0
comp=Z,44nm,1.1s,comp=Z,558nm
**NWAO Narrogin (SRO)** 59.40 242 P P 11 05 40.9 -0.2
NWAO IAmb IAmb 11 06 13.7
comp=Z,74nm,1.4s
**SBA Scott Base** 60.20 184 P P 11 05 48.1 +2.6
**MORW Morawa** 60.70 246 P P 11 05 49.7 0.0
MORW IAmb IAmb 11 06 10.7
comp=Z,39nm,1.5s
**GTOI Gorontalo** 60.85 281 P P 11 05 51.6 +0.6
comp=Z,19nm,1.1s
**TOLI2 Tolitoli** 63.10 281 P P 11 06 05.3 -0.2
**TOLI2 Tolitoli** 63.10 281 P P 11 06 06.0 +0.5
TOLI2 IAmb IAmb 11 06 13.9
comp=Z,21nm,1.0s
**MPSI Mapaga** 63.66 280 P P 11 06 08.6 -0.5
comp=Z,29nm,0.9s,comp=Z,580nm
**JHJ2 Mitsune** 64.95 322 P P 11 06 17.4 +0.7
**CASY Casey** 66.06 205 P P 11 06 23.9 +0.7
**JAGI Jajag, Banyuwa** 66.38 269 P P 11 06 25.4 -0.8
**JMM Marumori** 67.84 326 P P 11 06 34.7 +0.3
**JGF Kuroka** 68.14 322 P P 11 06 36.9 +0.4
JGF IAmb IAmb 11 06 49.3
comp=Z,32nm,1.5s
**MJAR Matsushiro Arr** 68.31 323 P P 11 06 36.8 -0.6
comp=Z,12nm,0.6s,baz=161,slow=5.9,SNR=49
comp=Z,12nm,0.6s
**MAJO Matsushiro** 68.31 323 P P 11 06 37.4 0.0
**MAJO Matsushiro** 68.31 323 IAmb IAmb 11 06 37.6
comp=Z,18nm,0.6s
MAJO P P 11 06 37.7 +0.2
**MJB9 Matsu-Tunnel** 68.31 323 IAmb IAmb 11 06 39.0
comp=Z,17nm,0.6s
MJB9 P 11 06 39.1 +1.6
**JOW Kunigami** 68.64 309 P P 11 06 40.4 +0.8
**JMN Monobe** 69.00 318 P P 11 06 42.8 +1.1
**KKM Kota Kinabalu** 69.14 284 P P 11 06 43.6 +0.6
KKM IAmb IAmb 11 06 49.6
comp=Z,18nm,1.0s
**JSD Sado** 69.34 324 IAmb IAmb 11 06 44.6
comp=Z,14nm,0.6s
JSD P P 11 06 44.6 +1.1
**JTM Tenmabayashi** 69.86 328 P P 11 06 47.3 +0.8
**UGM Wanagama** 69.99 268 P P 11 06 48.4 +0.4
**NIKH Nikolski High** 71.27 6 P P 11 06 53.1 -1.5
baz=189
**YOJ Yonaguni jima** 71.37 305 P P 11 06 56.2 +0.4
**SBUM Sibu** 71.59 279 P P 11 06 58.7 +1.4
**JKA Kamikawa-asahi** 71.66 331 P P 11 06 58.8 +1.7
JKA IAmb IAmb 11 06 58.9
comp=Z,13nm,0.7s
**QSPA South Pole Qui** 71.90 180 P P 11 06 59.4 +1.0
QSPA IAmb IAmb 11 07 00.4
comp=Z,34nm,1.3s
**QSPA South Pole Qui** 71.90 180 P P 11 06 58.9 +0.6
comp=Z,12nm,0.8s,baz=40,slow=3.0,SNR=141
QSPA S SKiKP 11 15 33.7 +0.8
comp=Z,1.1nm,1.1s,baz=46,slow=14,SNR=1.8
comp=Z,12nm,0.8s
**YULB Yu-li** 72.19 303 P P 11 07 00.3 -0.3
YULB IAmb IAmb 11 07 16.5
comp=Z,9.0nm,0.8s
**NACB Ninganchiao** 72.34 304 P P 11 07 01.3 -0.1
**NACB Ninganchiao** 72.34 304 P P 11 07 01.3 -0.1
**UNV Unalaska Valle** 72.39 7 P P 11 06 59.8 -1.2
baz=192
**SSLB Suanglung** 72.66 303 P P 11 07 03.1 -0.2
**TPUB Ta-pu** 72.68 302 P P 11 07 02.7 -0.7
**TPUB Ta-pu** 72.68 302 P P 11 07 02.8 -0.7
**YHNB Yeheng** 72.76 304 P P 11 07 04.2 +0.3
**KSM Kuching** 73.06 277 P P 11 07 06.9 +1.1
**YSS Yuzh-Sakhalins** 73.79 333 P P 11 07 10.0 +0.8
**PEA0B Petropavlovsk-** 74.00 345 P P 11 07 10.3 +0.1
PEA0B IAmb IAmb 11 07 10.6
comp=Z,31nm,0.9s
**PETK Petropavlovsk-** 74.00 345 P P 11 07 10.3 0.0
**PETK Petropavlovsk-** 74.00 345 P P 11 07 09.7 -0.6
comp=Z,14nm,0.6s,baz=109,slow=7.7,SNR=40
comp=Z,14nm,0.6s
**CHNA Chernabura Isl** 74.38 11 P P 11 07 11.4 -0.9
baz=198
**SDPT Sand Point** 74.72 10 P P 11 07 13.7 -0.5
**SDPT Sand Point** 74.72 10 P P 11 07 12.5 -1.7
baz=197
**S12K Black Hills** 74.80 9 P P 11 07 13.9 -0.8
S12K IAmb IAmb 11 07 14.3
comp=Z,21nm,0.7s
**S12K Black Hills** 74.80 9 P P 11 07 13.9 -0.8
baz=196,SNR=5.6
**KSRS Korea Array** 75.11 318 P P 11 07 17.4 +0.6
comp=Z,2.0nm,0.6s,baz=129,slow=6.5,SNR=8.3
comp=Z,2.0nm,0.6s
**KSAR Wonju Array Be** 75.13 318 P P 11 07 17.0 +0.1
**S14K Fog Glacier** 75.77 11 P P 11 07 19.3 -0.8
baz=198
**CHGN Chignik** 75.99 11 P P 11 07 20.6 -0.6
**CHGN Chignik** 75.99 11 P P 11 07 19.8 -1.4
baz=199
**USRK Ussuriysk Ar.** 77.01 326 P P 11 07 27.8 +0.7
**USRK Ussuriysk Ar.** 77.01 326 P P 11 07 27.7 +0.6
comp=Z,2.0nm,0.5s,baz=122,slow=4.1,SNR=11
comp=Z,2.0nm,0.5s
**SII Sitkinak Islan** 77.08 13 P P 11 07 27.3 +0.1
**SII Sitkinak Islan** 77.08 13 P P 11 07 27.1 -0.1
baz=203
**R17L Mt. Peulik Vol** 77.63 12 P P 11 07 29.8 -0.3
baz=201
**PLK4 Peulik 4** 77.63 12 P P 11 07 30.3 +0.1
PLK4 IAmb IAmb 11 07 38.6
comp=Z,29nm,0.8s
**OHAK Old Harbor** 77.89 13 P P 11 07 31.4 -0.1
OHAK IAmb IAmb 11 07 39.6
comp=Z,18nm,1.0s
**OHAK Old Harbor** 77.89 13 P P 11 07 31.1 -0.4
baz=204
**R18K Karluk** 77.95 13 P P 11 07 31.4 -0.4
baz=203
**Q17K Contact Creek** 78.31 12 P P 11 07 33.4 -0.5
baz=201
**O14K Tigyukauivet M** 78.34 9 P P 11 07 33.6 -0.3
O14K IAmb IAmb 11 08 17.0
comp=Z,20nm,1.4s
**O14K Tigyukauivet M** 78.34 9 P P 11 07 33.4 -0.5
baz=196
**NJ2 Nanjing** 78.36 309 *e*P P 11 07 35.4 +0.8
NJ2 pmax pmax
comp=Z,17nm,0.5s
**ACHA Angle Creek He** 78.37 12 P P 11 07 34.4 +0.2
**KDAK Kodiak Island** 78.56 14 P P 11 07 35.4 +0.3
KDAK IAmb IAmb 11 07 44.5
comp=Z,19nm,0.9s
**KDAK Kodiak Island** 78.56 14 P P 11 07 34.9 -0.1
comp=Z,6.8nm,0.7s,baz=247,slow=4.3,SNR=11
comp=Z,6.8nm,0.7s
**KDAK Kodiak Island** 78.56 14 P P 11 07 34.3 -0.8
baz=205
**MDJ Mudanjiang** 78.58 325 P P 11 07 36.7 +1.1
**MDJ Mudanjiang** 78.58 325 P P 11 07 36.9 +1.4
MDJ pmax pmax
comp=Z,26nm,1.1s
**MDJ Mudanjiang** 78.58 325 P P 11 07 36.9 +1.4
MDJ IAmb IAmb 11 07 45.3
comp=Z,26nm,0.9s
**P16K Nushagak River** 78.65 10 P P 11 07 34.9 -0.6
baz=199
**Q18K Katmai Hardscr** 78.84 12 P P 11 07 36.0 -0.7
baz=202
**M11K Mekoryuk** 78.84 6 P P 11 07 35.5 -1.0
baz=191
**PNTR Pine Nut** 78.88 43 P P 11 07 37.7 +0.1
**N14K Kuskokwak Cree** 78.93 8 P P 11 07 36.2 -0.8
baz=196,SNR=8.6
**DSP Deep Springs** 79.00 45 P P 11 07 39.0 +1.1
**P17K Kvichak River** 79.08 11 P P 11 07 37.5 -0.3
baz=201
**O16K Kokwok River B** 79.16 10 P P 11 07 37.1 -1.1
**O16K Kokwok River B** 79.16 10 P P 11 07 37.2 -1.1
baz=199,SNR=5.2
**M13K Dall Lake** 79.19 7 P P 11 07 39.2 +0.9
M13K IAmb IAmb 11 07 41.0
comp=Z,12nm,0.8s
**M13K Dall Lake** 79.19 7 P P 11 07 37.4 -0.9
baz=194
**Q20K Shuyak Island** 79.35 13 P P 11 07 38.4 -0.8
baz=205
**SYI Shuyak Island** 79.35 13 P P 11 07 39.5 +0.3
SYI IAmb IAmb 11 07 51.1
comp=Z,42nm,1.3s
**NVAR Mina Array Bea** 79.36 44 P P 11 07 40.7 +0.6
comp=Z,0.6nm,0.6s,baz=223,slow=8.7,SNR=9.5
comp=Z,0.6nm,0.6s
**Q19K Cape Douglas,** 79.38 13 P P 11 07 39.5 +0.1
Q19K IAmb IAmb 11 07 47.6
comp=Z,25nm,0.9s
**N15K Kwethluk River** 79.39 9 P P 11 07 40.0 +0.5
N15K IAmb IAmb 11 07 48.5
comp=Z,8.3nm,0.6s
**N15K Kwethluk River** 79.39 9 P P 11 07 39.1 -0.3
baz=197
**P18K Big Mountain,** 79.49 12 P P 11 07 39.5 -0.5
P18K IAmb IAmb 11 07 48.0
comp=Z,19nm,0.7s
**P18K Big Mountain,** 79.49 12 P P 11 07 39.7 -0.3
baz=202
**O17K Koliganek Bris** 79.50 11 P P 11 07 39.1 -0.9
baz=200,SNR=5.4
**M14K Bethel** 79.69 8 P P 11 07 41.9 +0.9
M14K IAmb IAmb 11 07 50.0
comp=Z,24nm,1.2s
**M14K Bethel** 79.69 8 P P 11 07 40.5 -0.5
baz=196
**M15K Kasigluk River** 79.81 9 P P 11 07 41.0 -0.6
baz=197,SNR=6.3
**KVN Kaiserville** 79.83 43 P P 11 07 43.8 +1.2
**N16K Nishlik Lake** 79.89 10 P P 11 07 41.4 -0.7
baz=199
**O18K Koktuh Hills** 79.92 11 P P 11 07 42.2 -0.1
O18K IAmb IAmb 11 07 50.5
comp=Z,24nm,0.7s
**O18K Koktuh Hills** 79.92 11 P P 11 07 41.7 -0.6
baz=202
**P19K Oil Pt** 80.13 12 P P 11 07 43.4 +0.1
P19K IAmb IAmb 11 07 53.1
comp=Z,59nm,1.4s
**P19K Oil Pt** 80.13 12 P P 11 07 42.6 -0.8
baz=204
**L14K Kuka Creek** 80.17 7 P P 11 07 44.8 +1.3
**L14K Kuka Creek** 80.17 7 P P 11 07 43.1 -0.4
baz=195
**N17K Nushagak Hills** 80.20 10 P P 11 07 43.5 0.0
**N17K Nushagak Hills** 80.20 10 P P 11 07 43.6 0.0
baz=200
**M16K Timber Creek** 80.38 9 P P 11 07 45.7 +1.1
M16K IAmb IAmb 11 07 54.3
comp=Z,42nm,1.1s
**M16K Timber Creek** 80.38 9 P P 11 07 44.7 +0.1
baz=198,SNR=9.5
**O19K Port Alsworth** 80.41 12 P P 11 07 44.6 -0.1
**O19K Port Alsworth** 80.41 12 P P 11 07 43.7 -1.0
baz=203
**CNPM China Poot** 80.44 13 P P 11 07 45.1 +0.2
CNPM IAmb IAmb 11 08 03.8
comp=Z,26nm,1.4s
**BNX BinXian** 80.49 325 ⇑P P 11 07 46.0 +0.5
BNX pmax pmax
comp=Z,20nm,0.9s
**N18K Kilae Creek** 80.57 11 P P 11 07 45.4 -0.2
**N18K Kilae Creek** 80.57 11 P P 11 07 45.0 -0.6
baz=201
**L15K Ungalak Mounta** 80.65 8 P P 11 07 45.5 -0.4
baz=196,SNR=7.0
**BRSE Bradley Lake S** 80.74 14 P P 11 07 46.4 -0.1
baz=206
**SMAI San Martin Ant** 80.81 159 P P 11 07 48.4 +1.6
SMAI IAmb IAmb 11 07 49.2
comp=Z,19nm,1.1s
**N19K Bonanza Creek** 80.95 11 P P 11 07 47.1 -0.5
**N19K Bonanza Creek** 80.95 11 P P 11 07 47.4 -0.3
baz=203
**L16K Owhat River** 80.96 9 P P 11 07 48.3 +0.8
L16K IAmb IAmb 11 07 56.9
comp=Z,25nm,1.2s
**L16K Owhat River** 80.96 9 P P 11 07 47.8 +0.2
baz=198,SNR=9.6
**M17K Holitna River** 80.98 10 P P 11 07 48.8 +1.1
M17K IAmb IAmb 11 07 57.4
comp=Z,26nm,0.8s
**M17K Holitna River** 80.98 10 P P 11 07 48.7 +1.1
baz=200,SNR=9.7
**R11B Troy Canyon, C** 81.12 45 P P 11 07 48.8 -0.4
baz=238
**K15K Wolf Creek Mou** 81.24 8 P P 11 07 50.2 +1.2
**K15K Wolf Creek Mou** 81.24 8 P P 11 07 49.8 +0.8
baz=196
**M18K Stony River** 81.34 11 P P 11 07 49.8 +0.3
baz=201
**J14K Nanvaranak Lak** 81.44 7 P P 11 07 50.4 +0.4
J14K IAmb IAmb 11 07 51.2
comp=Z,29nm,1.4s
**J14K Nanvaranak Lak** 81.44 7 P P 11 07 49.8 -0.2
baz=194
**MA2 Magadan** 81.52 345 P P 11 07 49.4 -1.0
comp=Z,5.4nm,0.6s,baz=138,slow=7.5,SNR=8.2
comp=Z,5.4nm,0.6s
**L17K Donlin** 81.54 9 P P 11 07 50.7 +0.2
baz=199,SNR=9.0
**I07A Izee** 81.78 38 P P 11 07 53.4 +1.1
**L18K Granite Mounta** 81.87 10 P P 11 07 52.9 +0.7
L18K IAmb IAmb 11 07 53.7
comp=Z,12nm,0.7s
**L18K Granite Mounta** 81.87 10 P P 11 07 52.0 -0.3
baz=200,SNR=15
**BELA Belgrano 2** 81.88 173 P P 11 07 52.5 +0.3
BELA IAmb IAmb 11 07 53.3
comp=Z,14nm,0.9s
**M19K Big River Lodg** 81.98 11 P P 11 07 52.8 -0.1
**M19K Big River Lodg** 81.98 11 P P 11 07 52.7 -0.1
baz=203
**CLRS Cowichan Lake** 82.08 33 P P 11 07 54.5 +1.0
CLRS IAmb IAmb 11 08 02.3
comp=Z,16nm,1.5s
**K17K Iditarod** 82.09 9 P P 11 07 53.9 +0.6
**K17K Iditarod** 82.09 9 P P 11 07 52.7 -0.6
baz=199
**L19K White Mountain** 82.15 11 P P 11 07 54.1 +0.4
**L19K White Mountain** 82.15 11 P P 11 07 53.3 -0.3
baz=202,SNR=7.4
**M20K Styx River** 82.19 12 P P 11 07 53.3 -0.7
baz=204
**PWL Port Wells** 82.29 14 P P 11 07 53.5 -0.8
baz=208
**SUA Susitna One** 82.29 13 P P 11 07 54.8 +0.3
SUA IAmb IAmb 11 08 02.4
comp=Z,13nm,0.6s
**SUA Susitna One** 82.29 13 P P 11 07 53.2 -1.3
baz=206
**J16K Anvik River** 82.31 8 P P 11 07 55.2 +0.8
J16K IAmb IAmb 11 07 55.5
comp=Z,9.9nm,0.7s
**J16K Anvik River** 82.31 8 P P 11 07 53.7 -0.7
baz=197
**KAIM Kayak Island** 82.46 16 P P 11 07 54.8 -0.4
baz=212
**SKT Skwentna** 82.60 12 P P 11 07 55.0 -0.9
baz=205
**GLI Glacier Island** 82.60 15 P P 11 07 55.8 -0.1
**GLI Glacier Island** 82.60 15 P P 11 07 55.7 -0.3
baz=210
**L20K Farewell, AK** 82.60 11 P P 11 07 54.8 -1.1
baz=203
**J17K VABM Dome** 82.62 8 P P 11 07 56.7 +0.7
J17K IAmb IAmb 11 08 05.0
comp=Z,8.2nm,0.7s
**J17K VABM Dome** 82.62 8 P P 11 07 55.4 -0.6
baz=198,SNR=7.2
**M22K Willow** 82.69 13 P P 11 07 55.9 -0.4
baz=207
**KNK Knik Glacier** 82.75 14 P P 11 07 55.6 -1.1
baz=208
**PMR Palmer** 82.76 13 P P 11 07 56.6 0.0
PMR IAmb IAmb 11 08 05.0
comp=Z,30nm,1.5s
**PMR Palmer** 82.76 13 P P 11 07 55.7 -1.0
baz=208
**IPM Ipoh** 82.80 277 P P 11 07 58.7 +0.7
**I17K Unalakleet** 82.88 8 P P 11 07 58.1 +0.9
**GHO Glory Hole Cre** 82.96 13 P P 11 07 57.6 -0.2
GHO IAmb IAmb 11 08 06.0
comp=Z,23nm,0.7s
**J18K Innoko River** 83.04 9 P P 11 07 58.6 +0.5
J18K IAmb IAmb 11 08 06.8
comp=Z,16nm,0.8s
**J18K Innoko River** 83.04 9 P P 11 07 57.8 -0.3
baz=200,SNR=17
**U33K Whale Pass** 83.07 23 P P 11 07 59.5 +1.1
U33K IAmb IAmb 11 08 39.4
comp=Z,23nm,1.4s
**U33K Whale Pass** 83.07 23 P P 11 07 57.7 -0.6
baz=222
**V35K Ketchikan** 83.08 25 P P 11 07 58.4 0.0
baz=224
**SML Sawmill** 83.13 14 P P 11 07 58.3 -0.3
baz=208
**DIV Divide** 83.14 15 P P 11 07 59.6 +0.9
DIV IAmb IAmb 11 08 06.9
comp=Z,17nm,0.8s
**CUT Chulitna** 83.24 13 P P 11 07 59.0 0.0
**CUT Chulitna** 83.24 13 P P 11 07 58.4 -0.6
baz=206
**M23K Glacier View** 83.25 14 P P 11 07 59.1 -0.1
baz=209
**BMRM Bremner River** 83.30 16 P P 11 07 59.7 +0.2
BMRM IAmb IAmb 11 08 07.9
comp=Z,21nm,0.9s
**BMRM Bremner River** 83.30 16 P P 11 07 59.7 +0.2
baz=212
**MESA MESA** 83.35 17 P P 11 07 59.1 -0.8
baz=214
**S31K Pelican** 83.35 21 P P 11 08 00.6 +0.9
S31K IAmb IAmb 11 08 08.4
comp=Z,38nm,1.4s
**S31K Pelican** 83.35 21 P P 11 07 59.1 -0.6
baz=220
**SCM Sheep Creek Mo** 83.38 14 P P 11 08 00.0 +0.2
**SCM Sheep Creek Mo** 83.38 14 P P 11 07 59.4 -0.5
baz=209
**K20K Telida** 83.38 11 P P 11 08 00.1 +0.3
K20K IAmb IAmb 11 08 08.2
comp=Z,16nm,0.7s
**K20K Telida** 83.38 11 P P 11 07 59.2 -0.6
baz=203
**KLU Klutina** 83.42 15 P P 11 07 59.0 -1.1
baz=211
**H16K Elim** 83.42 7 P P 11 07 58.4 -1.5
baz=195
**CRQE Cirque** 83.51 16 P P 11 07 59.8 -0.8
baz=213
**S32K Killisnoo** 83.55 22 P P 11 07 59.5 -1.2
baz=221
**G15K Niukluk** 83.58 6 P P 11 08 00.5 -0.1
baz=193
**WRAK Wrangell Islan** 83.59 24 P P 11 08 00.4 -0.5
baz=223
**W18A Petrified Fore** 83.64 50 P P 11 08 00.2 -1.8
baz=243
**PNL Peninsula** 83.68 19 P P 11 08 00.4 -1.0
baz=217
**J19K Poorman** 83.71 10 P P 11 08 02.4 +1.0
**J19K Poorman** 83.71 10 P P 11 08 01.1 -0.3
baz=201,SNR=5.7
**MAW Mawson** 83.75 200 P P 11 08 00.9 -0.8
comp=Z,2.0nm,0.9s,baz=90,slow=16,SNR=2.6
comp=Z,2.0nm,0.9s
**TABL Table Mountain** 83.79 17 P P 11 08 02.7 +0.6
**N25K Chitina, Valde** 83.84 15 P P 11 08 02.5 +0.3
N25K IAmb IAmb 11 08 10.7

comp=Z,18nm,0.7s
**N25K Chitina, Valde** 83.84 15 P P 11 08 02.0 -0.2
baz=212
**F14K Arctic Creek** 83.84 5 P P 11 08 01.7 -0.2
baz=191
**M24K Tolsona, Glenn** 83.89 14 P P 11 08 01.9 -0.5
baz=210
**GLB Gilahina Butte** 83.90 16 P P 11 08 02.6 +0.1
GLB IAmb IAmb 11 08 03.1
comp=Z,12nm,0.7s
**121A Cookes Peak, D** 83.94 53 P P 11 08 02.2 -1.3
baz=244
**WAT6 Susitna Watana** 83.94 14 P P 11 08 02.3 -0.5
baz=209
**WAT1 Susitna Watana** 83.98 13 P P 11 08 01.6 -1.2
baz=208
**H17K Granite Mounta** 83.99 8 P P 11 08 02.8 +0.1
H17K IAmb IAmb 11 08 03.6
comp=Z,13nm,1.4s
**H17K Granite Mounta** 83.99 8 P P 11 08 02.2 -0.5
baz=197
**SEY Seymchan** 84.09 347 P P 11 08 03.0 -0.3
comp=Z,11nm,0.5s,baz=148,slow=5.6,SNR=50
comp=Z,11nm,0.5s
**J20K Nowinta River** 84.12 10 P P 11 08 03.1 -0.3
baz=203,SNR=11
**G16K Koyuk River** 84.14 7 P P 11 08 03.7 +0.2
**G16K Koyuk River** 84.14 7 P P 11 08 03.0 -0.5
baz=195
**P29M Windy Craggy** 84.16 19 P P 11 08 03.3 -0.4
baz=218
**CTG Chitna Glacier** 84.17 17 P P 11 08 03.1 -0.7
baz=215
**R32K Eaglecrest** 84.18 21 P P 11 08 04.1 +0.3
baz=221
**BJI Beijing** 84.20 315 P P 11 08 04.8 +0.5
BJI pmax pmax
comp=Z,4.0nm,0.7s
**F15K North Star Dit** 84.22 6 P P 11 08 03.9 +0.1
F15K IAmb IAmb 11 08 04.8
comp=Z,16nm,1.4s
**F15K North Star Dit** 84.22 6 P P 11 08 03.9 +0.1
baz=193
**LYN LuoYang** 84.25 309 eP P 11 08 06.1 +1.4
LYN pmax pmax
comp=Z,56nm,0.5s
LYN pmax pmax
comp=Z,270nm,4.9s
**PSI Prapat** 84.25 275 P P 11 08 05.1 -0.3
**O28M Mount Upton** 84.34 18 P P 11 08 04.5 -0.4
baz=216
**HARP HAARP** 84.38 15 P P 11 08 04.4 -0.3
baz=211
**H18K Honhosa River** 84.40 8 P P 11 08 04.3 -0.4
**H18K Honhosa River** 84.40 8 P P 11 08 04.1 -0.7
baz=199
**RND Reindeer** 84.43 13 P P 11 08 05.6 +0.6
**O29M Mount Kennedy** 84.44 19 P P 11 08 05.0 -0.2
baz=217
**G17K Kiwalik Mounta** 84.44 7 P P 11 08 05.1 +0.2
baz=197
**DHY Denali Highway** 84.46 13 P P 11 08 05.1 -0.1
**DHY Denali Highway** 84.46 13 P P 11 08 04.0 -1.3
baz=209
**PLBC Pleasant Camp** 84.46 20 P P 11 08 05.2 +0.1
baz=219
**BPAW Bear Paw Mtn.** 84.62 12 P P 11 08 06.8 +0.9
**BPAW Bear Paw Mtn.** 84.62 12 P P 11 08 05.1 -0.7
baz=206
**I20K Naaghedeneel** 84.64 10 P P 11 08 06.4 +0.5
I20K IAmb IAmb 11 08 14.8
comp=Z,18nm,1.1s
**I20K Naaghedeneel** 84.64 10 P P 11 08 05.6 -0.3
baz=202
**ENH Enshi** 84.69 304 P P 11 08 08.1 +1.0
**MCK McKinley** 84.70 13 P P 11 08 06.3 0.0
MCK IAmb IAmb 11 08 14.3
comp=Z,15nm,0.9s
**MCK McKinley** 84.70 13 P P 11 08 05.4 -0.8
baz=208,SNR=6.6
**P30M Million Dollar** 84.79 19 P P 11 08 06.2 -0.6
baz=219
**PAX Paxson** 84.80 14 P P 11 08 06.4 -0.4
baz=211
**T35M Bob Quinn** 84.80 24 P P 11 08 06.1 -0.8
baz=225
**SKAG Skagway** 84.81 20 P P 11 08 06.4 -0.4
baz=220
**M26K Nabesna, AK** 84.92 16 P P 11 08 06.7 -0.8
baz=213
**H19K Roundabout Mou** 85.02 9 P P 11 08 08.1 +0.3
**H19K Roundabout Mou** 85.02 9 P P 11 08 08.0 +0.3
baz=200
**G18K Tagagawik** 85.06 8 P P 11 08 07.4 -0.6
**G18K Tagagawik** 85.06 8 P P 11 08 07.6 -0.4
baz=198
**YUK3 Moose Creek** 85.08 17 P P 11 08 07.7 -0.6
baz=216
**S34M Telegraph Cree** 85.13 23 P P 11 08 08.1 -0.4
baz=224
**M27K Edge Creek, AK** 85.17 16 P P 11 08 09.4 +0.6
M27K IAmb IAmb 11 08 17.8
comp=Z,19nm,1.1s
**M27K Edge Creek, AK** 85.17 16 P P 11 08 08.9 +0.1
baz=214
**H20K Anotleneega Mo** 85.23 9 P P 11 08 08.6 -0.2
baz=202
**Y22D IRIS PASSCAL I** 85.26 52 P P 11 08 08.5 -1.4
baz=244
**F17K Baldwin Pennin** 85.28 7 P P 11 08 09.2 +0.3
**F17K Baldwin Pennin** 85.28 7 P P 11 08 08.3 -0.6
baz=196
**L26K Log Cabin Wild** 85.36 15 P P 11 08 10.2 +0.7
**L26K Log Cabin Wild** 85.36 15 P P 11 08 09.5 +0.1
baz=213
**NEA2 Nenana** 85.44 12 P P 11 08 10.4 +0.6
baz=208
**P32M Atlin** 85.44 21 P P 11 08 10.9 +0.9
**P32M Atlin** 85.44 21 P P 11 08 10.1 +0.2
baz=222
**K24K Donnelly Dome** 85.45 14 P P 11 08 10.1 +0.2
baz=211
**GYA Guiyang** 85.46 300 P P 11 08 11.6 +0.7
GYA pmax pmax
comp=Z,14nm,1.2s
**Q32M Nakina River** 85.48 22 P P 11 08 11.3 +1.0
Q32M IAmb IAmb 11 08 19.6
comp=Z,6.4nm,0.7s
**Q32M Nakina River** 85.48 22 P P 11 08 10.3 -0.1
baz=223
**G19K Purcell Mounta** 85.51 8 P P 11 08 10.1 0.0
**G19K Purcell Mounta** 85.51 8 P P 11 08 09.6 -0.5
baz=200
**MLY Manley** 85.51 11 P P 11 08 10.0 -0.1
baz=206
**O30N Mendenhall** 85.57 19 P P 11 08 11.3 +0.7
O30N IAmb IAmb 11 08 19.6
comp=Z,7.8nm,0.8s
**O30N Mendenhall** 85.57 19 P P 11 08 10.6 +0.1
baz=220
**RIDG Independent Ri** 85.61 14 P P 11 08 10.8 +0.2
baz=211
**F18K Selawik** 85.61 7 P P 11 08 10.6 0.0
baz=198
**H21K Melozitna Rive** 85.72 10 P P 11 08 10.8 -0.3
baz=204
**HDA Harding Lake** 85.72 13 IAmb IAmb 11 08 19.0
comp=Z,7.5nm,0.8s
**HDA Harding Lake** 85.72 13 P P 11 08 10.5 -0.6
baz=210,SNR=5.7
**CCB Clear Creek Bu** 85.75 13 IAmb IAmb 11 08 18.8
comp=Z,20nm,1.2s
**L27K Beaver Creek,** 85.77 16 P P 11 08 11.3 -0.2
baz=214
**N30M Aishikik Lake** 85.80 18 P P 11 08 11.2 -0.4
baz=219
**TXAR Lajitas Array** 85.83 57 P P 11 08 14.7 +2.1
**TXAR Lajitas Array** 85.83 57 P P 11 08 14.4 +1.8
comp=Z,1.4nm,0.7s,baz=223,slow=6.1,SNR=23
comp=Z,1.4nm,0.7s
**E17K Hotham Inlet** 85.83 6 P P 11 08 11.4 -0.2
baz=195
**WHY Whitehorse** 85.87 20 P P 11 08 11.7 -0.4
baz=221
**I23K Minto, Yukon-K** 85.88 12 P P 11 08 11.3 -0.5
baz=207
**DLBC Dease Lake** 85.92 23 P P 11 08 11.6 -0.7
baz=225
**MDM Murphy Dome** 85.93 12 IAmb IAmb 11 08 19.8
comp=Z,10nm,1.0s
**COLA College** 85.94 12 P P 11 08 11.1 -1.0
**COLA College** 85.94 12 P P 11 08 11.1 -1.0
COLA IAmb IAmb 11 08 12.0
comp=Z,12nm,0.7s
**COLA College** 85.94 12 P P 11 08 11.5 -0.6
baz=209
**SCRK Sand Creek** 86.01 14 P P 11 08 11.9 -0.7
baz=212
**IL31** 86.05 13 P P 11 08 11.8 -0.8
IL31 IAmb IAmb 11 08 20.4
comp=Z,11nm,1.1s
**ILAR Eielson Array** 86.05 13 P P 11 08 12.3 -0.4
**ILAR Eielson Array** 86.05 13 P P 11 08 11.6 -1.1
comp=Z,2.1nm,0.4s,baz=222,slow=4.8,SNR=45
comp=Z,2.1nm,0.4s
**IL03 Eielson Array** 86.05 13 P P 11 08 12.3 -0.4
**F19K Shaleruckik Mo** 86.07 8 P P 11 08 12.6 -0.1
F19K IAmb IAmb 11 08 14.6
comp=Z,5.1nm,0.7s
**F19K Shaleruckik Mo** 86.07 8 P P 11 08 12.0 -0.7
baz=199
**XLT XiLinHaoTe** 86.16 319 eP P 11 08 14.8 +1.0
XLT pP pP 11 10 18.0 -2.3
XLT pmax pmax
comp=Z,15nm,1.0s
**M29M Somme Creek** 86.18 17 P P 11 08 14.0 +0.5
**M29M Somme Creek** 86.18 17 P P 11 08 12.5 -1.0
baz=217
**H22K Ishtalitna Cre** 86.18 11 P P 11 08 12.4 -0.9
baz=205,SNR=6.2
**P33M Teslin, Yukon** 86.21 21 P P 11 08 12.8 -0.8
baz=222
**N31M Braeburn, Yuko** 86.22 19 P P 11 08 13.6 0.0
baz=220
**POKR Poker Plat Res** 86.23 12 P P 11 08 12.3 -1.2
baz=209
**J25K Salcha River,** 86.24 13 IAmb IAmb 11 08 13.6
comp=Z,5.6nm,0.8s
**J25K Salcha River,** 86.24 13 P P 11 08 12.8 -0.9
baz=211,SNR=8.6
**R33M Jennings River** 86.26 22 P P 11 08 12.5 -1.5
baz=224
**E18K Tukpahlearik C** 86.29 7 P P 11 08 13.1 -0.7
baz=197
**D17K Noatak River** 86.31 6 P P 11 08 13.5 -0.3
baz=194
**G21K Allakaket** 86.39 10 P P 11 08 13.4 -0.9
baz=203
**H23K Yukon River** 86.45 11 P P 11 08 14.1 -0.5
baz=207
**K27K Chicken** 86.51 15 P P 11 08 14.4 -0.5
baz=214
**J26L Joseph Creek** 86.55 14 IAmb IAmb 11 08 16.7
comp=Z,6.6nm,0.7s
**J26L Joseph Creek** 86.55 14 P P 11 08 14.4 -0.8
baz=213,SNR=11
**F20K Avaraart Lake** 86.55 9 P P 11 08 15.1 +0.2
**F20K Avaraart Lake** 86.55 9 P P 11 08 14.4 -0.6
baz=201
**DLMT Dillon** 86.62 40 P P 11 08 17.2 +1.1
**XAN Xi'an** 86.68 307 ⇓P P 11 08 17.4 +0.9
XAN pmax pmax
comp=Z,34nm,1.1s
**E19K Redstone River** 86.73 8 P P 11 08 15.2 -0.6
baz=200
**H24K Noodor Dome** 86.78 12 P P 11 08 15.0 -1.2
baz=209
**N32M Quiet Lake** 86.82 20 P P 11 08 16.5 0.0
baz=222
**S22A 4UR Ranch, Cre** 86.91 49 P P 11 08 16.2 -1.6
baz=244
**PRP Porcupine Dome** 86.98 13 P P 11 08 16.9 -0.3
**PRP Porcupine Dome** 86.98 13 P P 11 08 17.4 +0.2
baz=211
**F21K Alatna River** 87.05 9 P P 11 08 17.5 +0.2
**F21K Alatna River** 87.05 9 P P 11 08 17.7 +0.4
baz=203
**C17K DeLong Mountai** 87.06 5 P P 11 08 18.2 +0.9
baz=194
**G22K Bettles** 87.09 10 P P 11 08 17.3 -0.2
baz=205
**G23K Bananza Creek** 87.16 11 P P 11 08 17.5 -0.4
baz=206
**FLWY Flagg Ranch** 87.17 42 IAmb IAmb 11 08 21.2
comp=Z,11nm,1.4s
**M31M Drury Creek, Y** 87.19 19 P P 11 08 17.8 -0.4
baz=221
**DAWY Dawson** 87.22 16 P P 11 08 19.1 +0.8
DAWY IAmb IAmb 11 08 27.0
comp=Z,13nm,1.4s
**DAWY Dawson** 87.22 16 P P 11 08 18.0 -0.2
baz=216
**YHL Hebgen Lake** 87.24 41 IAmb IAmb 11 08 29.4
comp=Z,9.0nm,0.9s
**PD31 Pinedale Array** 87.29 43 P P 11 08 20.2 +0.9
**PDAR Pinedale Array** 87.29 43 P P 11 08 20.0 +0.6
**PDAR Pinedale Array** 87.29 43 P P 11 08 19.8 +0.4
comp=Z,0.6nm,0.6s,baz=218,slow=4.0,SNR=7.3
comp=Z,0.6nm,0.6s
**I26K Coal Creek Min** 87.33 14 P P 11 08 18.5 -0.1
baz=213
**EGAK Eagle** 87.36 15 P P 11 08 19.2 +0.4
EGAK IAmb IAmb 11 08 27.4
comp=Z,6.3nm,0.8s
**EGAK Eagle** 87.36 15 P P 11 08 19.1 +0.3
baz=215
**C18K Utukok River** 87.41 6 P P 11 08 18.8 -0.3
C18K IAmb IAmb 11 08 34.0
comp=Z,16nm,1.4s
**F22K John River** 87.51 10 P P 11 08 19.5 0.0
baz=204
**FARO Faro, Yukon** 87.53 19 P P 11 08 19.9 +0.2
**FARO Faro, Yukon** 87.53 19 P P 11 08 19.1 -0.6
baz=222
**WTLY Watson Lake, Y** 87.55 22 P P 11 08 19.7 -0.1
baz=226
**K29M Barlow Dome** 87.55 17 P P 11 08 20.3 +0.4
K29M IAmb IAmb 11 08 28.9
comp=Z,17nm,1.5s
**K29M Barlow Dome** 87.55 17 P P 11 08 19.4 -0.5
baz=218
**H25L Birch Creek** 87.57 12 P P 11 08 19.0 -0.8
baz=210
**COLD Coldfoot** 87.59 10 P P 11 08 20.2 +0.4
COLD IAmb IAmb 11 08 28.7
comp=Z,7.9nm,0.8s
**COLD Coldfoot** 87.59 10 P P 11 08 19.9 0.0
baz=206
**D19K Kuna River** 87.61 7 P P 11 08 19.9 0.0
D19K IAmb IAmb 11 08 28.2
comp=Z,6.5nm,0.8s
**D19K Kuna River** 87.61 7 P P 11 08 19.1 -0.9
baz=199
**G24K Hadweenzic Riv** 87.62 12 P P 11 08 20.1 0.0
**G24K Hadweenzic Riv** 87.62 12 P P 11 08 19.7 -0.4
baz=209
**E20K Nigu River** 87.62 8 P P 11 08 19.6 -0.5
baz=201
**HHC Hu-ho-hao-te** 87.69 314 eP P 11 08 20.1 -1.0
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,140nm,5.0s
**I27K Kandik River** 87.93 14 P P 11 08 20.9 -0.7
baz=214
**G25K Bearman Lake** 87.94 12 P P 11 08 21.4 -0.1
baz=210
**FYU Fort Yukon** 87.95 13 P P 11 08 21.0 -0.5
FYU IAmb IAmb 11 08 21.7
comp=Z,5.5nm,0.7s
**D20K Etivluk River** 88.00 8 P P 11 08 21.0 -0.8
baz=200
**C19K Lookout Ridge** 88.02 7 P P 11 08 21.9 0.0
**C19K Lookout Ridge** 88.02 7 P P 11 08 21.0 -0.9
baz=198
**TOAD Toad River Com** 88.04 24 P P 11 08 21.8 -0.4
baz=229
**E21K Killik River** 88.10 9 P P 11 08 21.9 -0.4
E21K IAmb IAmb 11 08 31.0
comp=Z,12nm,1.2s
**E21K Killik River** 88.10 9 P P 11 08 21.6 -0.7
baz=203
**E22K Anaktuvuk Pass** 88.14 10 P P 11 08 22.5 0.0
E22K IAmb IAmb 11 08 31.0
comp=Z,12nm,1.1s
**E22K Anaktuvuk Pass** 88.14 10 P P 11 08 21.9 -0.6
baz=205
**I28M Miner Creek** 88.21 15 P P 11 08 22.8 -0.1
I28M IAmb IAmb 11 08 31.2
comp=Z,5.2nm,0.8s
**I28M Miner Creek** 88.21 15 P P 11 08 22.4 -0.5
baz=216,SNR=5.1
**F24K Squaw Lake** 88.26 11 P P 11 08 23.4 +0.4
F24K IAmb IAmb 11 08 31.7
comp=Z,6.3nm,0.7s
**F24K Squaw Lake** 88.26 11 P P 11 08 22.0 -1.1
baz=208
**E23K Chandalar** 88.44 10 P P 11 08 24.5 +0.6
E23K IAmb IAmb 11 08 33.0
comp=Z,7.0nm,1.0s
**E23K Chandalar** 88.44 10 P P 11 08 23.5 -0.5
baz=207
**J30M Hart River** 88.45 17 P P 11 08 24.6 +0.5
**J30M Hart River** 88.45 17 P P 11 08 23.4 -0.7
baz=219
**H27K Steamboat Moun** 88.47 14 P P 11 08 24.5 +0.5
baz=214
**I29M Ogilvie Camp,** 88.55 16 P P 11 08 24.3 -0.1
I29M IAmb IAmb 11 08 32.6
comp=Z,10nm,1.2s
**I29M Ogilvie Camp,** 88.55 16 P P 11 08 24.6 +0.2
baz=217
**G26K Porcupine Rive** 88.58 13 P P 11 08 24.1 -0.3
baz=212,SNR=9.1
**Q24A Divide** 88.62 48 P P 11 08 24.6 -1.1
baz=245
**E24K Your Creek** 88.64 11 P P 11 08 25.3 +0.5
**E24K Your Creek** 88.64 11 P P 11 08 24.8 -0.1
baz=208
**C21K Knifeblade Rid** 88.65 8 P P 11 08 24.7 -0.1
baz=202
**D22K Ayikyak River** 88.69 9 P P 11 08 25.4 +0.4
**D22K Ayikyak River** 88.69 9 P P 11 08 24.5 -0.5
baz=204
**TGTN Hyland Airport** 88.71 21 P P 11 08 24.5 -0.7
baz=226
**F25K Christian Rive** 88.75 12 P P 11 08 26.0 +0.6
**F25K Christian Rive** 88.75 12 P P 11 08 24.7 -0.7
baz=211
**BMAR Burnt Mountain** 88.82 12 P P 11 08 26.4 +0.7
**G27K Doyon Strip** 88.92 14 P P 11 08 26.4 +0.3
**G27K Doyon Strip** 88.92 14 P P 11 08 25.8 -0.3
baz=214
**I30M Mount Dempster** 88.94 16 P P 11 08 26.4 +0.1
I30M IAmb IAmb 11 08 34.8
comp=Z,8.3nm,1.1s
**I30M Mount Dempster** 88.94 16 P P 11 08 26.1 -0.3
baz=219,SNR=5.6
**ELIB Princess Elisa** 88.96 187 dP P 11 08 26.3 -0.2
comp=Z,6.1nm,0.6s
**TOLK Toolik Lake Re** 88.96 10 P P 11 08 27.2 +1.0
TOLK IAmb IAmb 11 08 28.2
comp=Z,9.3nm,1.2s
**TOLK Toolik Lake Re** 88.96 10 P P 11 08 26.3 0.0
baz=207
**D23K Nanushuk River** 89.08 10 P P 11 08 27.4 +0.7
**D23K Nanushuk River** 89.08 10 P P 11 08 26.6 -0.1
baz=206
**F26K Sheenjek River** 89.14 12 P P 11 08 27.9 +0.8
F26K IAmb IAmb 11 08 36.4
comp=Z,4.2nm,0.9s
**F26K Sheenjek River** 89.14 12 P P 11 08 26.8 -0.3
baz=215
**B20K Meade River** 89.15 7 P P 11 08 27.2 +0.2
baz=200
**H29M Whitestone** 89.21 15 P P 11 08 27.8 +0.4
**H29M Whitestone** 89.21 15 P P 11 08 27.0 -0.4
baz=217,SNR=6.9
**CMAR Chiang Mai Arr** 89.29 290 P P 11 08 29.7 +0.8
**CMAR Chiang Mai Arr** 89.29 290 P P 11 08 30.1 +1.2
comp=Z,4.2nm,0.9s,baz=109,slow=2.6,SNR=26
comp=Z,4.2nm,0.9s
**KOTAN Kotaneelee Air** 89.33 24 P P 11 08 28.3 +0.2
baz=230
**D24K Happy Valley** 89.55 10 P P 11 08 28.8 -0.1
baz=208
**PZH PanZhiHua** 89.58 298 P P 11 08 27.9 -2.3
PZH pmax pmax
comp=Z,10.0nm,0.6s
PZH pmax pmax
comp=Z,90nm,4.3s
**EPYK Eagle Plains** 89.75 15 P P 11 08 30.2 +0.2
EPYK IAmb IAmb 11 08 38.5
comp=Z,10nm,0.9s
**EPYK Eagle Plains** 89.75 15 P P 11 08 29.6 -0.4
baz=219
**G29M Pine Creek** 89.85 15 P P 11 08 31.3 +0.9
G29M IAmb IAmb 11 08 38.9
comp=Z,7.0nm,0.9s
**G29M Pine Creek** 89.85 15 P P 11 08 30.2 -0.2
baz=218
**C23K Itkillik River** 89.87 9 P P 11 08 31.2 +0.8
**C23K Itkillik River** 89.87 9 P P 11 08 30.0 -0.4
baz=206
**B22K Teshekpuk Lake** 89.93 8 P P 11 08 30.1 -0.5
baz=203
**F28M Old Crow** 89.98 14 P P 11 08 30.2 -0.8
baz=216
**TROLL Troll, Antarti** 90.07 180 ⇑P P 11 08 31.4 -0.3
comp=Z,260nm,0.7s
**C24K Franklin Bluff** 90.07 10 P P 11 08 31.0 -0.3
baz=208
**E27K Coleen River** 90.08 13 P P 11 08 32.3 +0.9
**E27K Coleen River** 90.08 13 P P 11 08 31.0 -0.5
baz=214
**D25K Kavik River** 90.11 11 P P 11 08 30.6 -1.0
baz=210
**G30M tAoh Zraii Nji** 90.35 15 P P 11 08 32.8 +0.1
**G30M tAoh Zraii Nji** 90.35 15 P P 11 08 31.6 -1.1
baz=219,SNR=6.4
**SNAA Sanae** 90.35 178 ⇑P P 11 08 32.6 -0.4
comp=Z,52nm,0.6s
**SNAA Sanae** 90.35 178 P P 11 08 32.5 -0.4
comp=Z,2.4nm,0.7s,baz=196,slow=14,SNR=6.5
comp=Z,2.4nm,0.7s
**A22K Sinclair Lake** 90.35 7 P P 11 08 32.0 -0.5
baz=202
**VNA3 Neumayer Olymp** 90.47 176 ⇑P P 11 08 33.5 +0.1
comp=Z,12nm,1.0s
**G31M Satah River** 90.80 16 P P 11 08 34.8 +0.1
**G31M Satah River** 90.80 16 P P 11 08 34.5 -0.2
baz=221,SNR=6.3
**E28M Babbage River** 90.86 13 P P 11 08 35.7 +0.6
E28M IAmb IAmb 11 08 43.7
comp=Z,6.8nm,0.9s
**E28M Babbage River** 90.86 13 P P 11 08 35.6 +0.6
baz=216
**C27K Jago River** 90.86 11 P P 11 08 35.0 0.0
baz=212
**PLCA Paso Flores** 90.91 134 P P 11 08 37.2 +1.0
comp=Z,1.9nm,0.7s,baz=230,slow=7.9,SNR=3.6
comp=Z,1.9nm,0.7s
**F30M Barrier River** 90.94 15 P P 11 08 35.2 -0.2
baz=220
**E29M Blow River** 91.05 14 P P 11 08 35.8 -0.1
baz=218
**VNA1 Neumayer--Stat** 91.14 177 ⇑P P 11 08 37.0 +0.6
comp=Z,12nm,0.8s
**F31M Tsiigehtchic** 91.33 16 P P 11 08 37.4 +0.2
**F31M Tsiigehtchic** 91.33 16 P P 11 08 36.6 -0.5
baz=222,SNR=5.7
**INK Inuvik** 92.03 15 P P 11 08 40.3 -0.1
INK IAmb IAmb 11 08 48.4
comp=Z,5.9nm,0.9s
**INK Inuvik** 92.03 15 P P 11 08 39.7 -0.7
baz=222
**SONM Songino Array** 93.96 319 P P 11 08 49.3 -0.6
comp=Z,0.7nm,0.7s,baz=116,slow=3.4,SNR=3.9
comp=Z,0.7nm,0.7s
**ZALV Zalesovo Beam** 108.64 322 PKiKP PKiKP 11 13 55.3 -1.2
comp=Z,0.3nm,0.3s,baz=95,slow=1.6,SNR=1.7
**MKAR Makanchi Array** 109.55 314 PKiKP PKiKP 11 13 57.3 -1.2
comp=Z,0.6nm,0.5s,baz=180,slow=0.3,SNR=9.0
**KURBB Kurchatov Arra** 112.29 318 PKiKP PKiKP 11 14 02.1 -1.4
comp=Z,0.2nm,0.2s,baz=106,slow=1.8,SNR=7.1
**BVAR Borovoye Array** 117.25 321 PKP PKPdf 11 14 11.4 -1.6
comp=Z,1.3nm,0.4s,baz=80,slow=1.8,SNR=6.9
**ABKAR Akbulak array** 124.35 318 PKPdf PKPdf 11 14 26.1 -0.6
**ARCES ARCESS Array B** 126.61 350 PKPdf PKPdf 11 14 30.8 +0.3
**ARCES ARCESS Array B** 126.61 350 PKP PKPdf 11 14 30.0 -0.5
comp=Z,2.1nm,0.7s,baz=297,slow=0.3,SNR=7.2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINES Array B** | **133.52** | **344** | PKPdf | **PKPdf** | 11 | **14** | **43.1** | **-0.6** |
| **FINES** | **FINES Array B** | **133.52** | **344** | PKhKP | PKPpre | 11 | 14 | 31.8 | |
| | comp=Z,3.8nm,0.8s,baz=31,slow=3.2,SNR=2.4 | | | | | | | | |
| FINES | | | | PKP | **PKPdf** | **11** | **14** | **42.8** | **-0.9** |
| | comp=Z,1.6nm,0.7s,baz=114,slow=2.3,SNR=4.3 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **136.66** | **353** | PKP | **PKPdf** | **11** | **14** | **48.2** | **-1.5** |
| | comp=Z,0.5nm,0.6s,baz=32,slow=3.4,SNR=3.4 | | | | | | | | |
| **NB000** | **NORSAR Array S** | **136.71** | **354** | PKPdf | **PKPdf** | **11** | **14** | **50.5** | **+0.8** |
| **HFS** | **Hagfors** | **137.22** | **351** | PKhKP | PKPpre | 11 | 14 | 39.6 | |
| | comp=Z,0.7nm,0.4s,baz=79,slow=10,SNR=1.7 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **140.94** | **332** | PKhKP | PKPpre | 11 | 14 | 48.7 | |
| AKASG | comp=Z,0.4nm,0.3s,baz=48,slow=3.5,SNR=5.4 | | | PKP | **PKPdf** | **11** | **14** | **57.8** | **+0.1** |
| | comp=Z,1.0nm,0.3s,baz=44,slow=3.5,SNR=7.1 | | | | | | | | |
| **KIEV** | **Kiev** | **140.95** | **332** | ↑P | **PKPdf** | **11** | **14** | **51.6** | **-6.1** |
| **EKA** | **Eskdalemuir Ar** | **142.68** | **5** | PKhKP | PKPpre | 11 | 14 | 56.8 | |
| | comp=Z,0.9nm,0.5s,baz=312,slow=2.6,SNR=7.8 | | | | | | | | |
| **SQRM** | **Soroca** | **143.17** | **330** | ↓P | PKPab | 11 | 14 | 59.2 | -0.6 |
| **GAZ** | **Gaziantep** | **143.76** | **309** | ↑P | PKPab | 11 | 15 | 02.8 | +0.2 |
| **MILM** | **Milestii Mici** | **143.80** | **328** | ↑P | **PKiKP** | **11** | **15** | **09.7** | **+3.1** |
| **BNN** | **Bunyan** | **144.07** | **312** | | PKPbc | 11 | 15 | 03.6 | +0.2 |
| **LODK** | **Lodwar** | **144.17** | **250** | PKPbc | PKPbc | 11 | 15 | 02.9 | -1.5 |
| **DSB** | **Dublin** | **144.38** | **9** | PKPbc | **PKPdf** | **11** | **15** | **03.6** | **-0.1** |
| **KWP** | **Kalwaria Pacla** | **144.43** | **337** | *e*PKP | **PKPdf** | **11** | **15** | **03.9** | **-0.1** |
| **KWP** | **Kalwaria Pacla** | **144.43** | **337** | | **PKPab** | **11** | **15** | **04.4** | **-0.2** |
| **ILGA** | **Ilgaz** | **144.49** | **317** | PKPbc | **PKPab** | **11** | **15** | **05.4** | **0.0** |
| **OJC** | **Ojcow** | **144.96** | **340** | *e*PKP | PKPbc | 11 | 15 | 05.5 | -0.2 |
| **OJC** | **Ojcow** | **144.96** | **340** | PKPbc | PKPbc | 11 | 15 | 05.6 | 0.0 |
| **BUR08** | **Bucovina Ar. S** | **144.98** | **332** | PKPbc | **PKPab** | **11** | **15** | **06.8** | **-0.2** |
| **BURAR** | **Bucovina Array** | **144.99** | **332** | PKPbc | PKPbc | 11 | 15 | 06.2 | +0.3 |
| **BURAR** | **Bucovina Array** | **144.99** | **332** | ↓P | **PKPab** | **11** | **15** | **06.8** | **-0.2** |
| **TESR** | **Tescani** | **145.14** | **330** | ↑P | **PKPbc** | **11** | **15** | **06.7** | **+0.4** |
| **KOLS** | **Kolonicke sedl** | **145.17** | **336** | *e*PKP | **PKPbc** | **11** | **15** | **06.9** | **+0.6** |
| **BR131** | **Keskin Array S** | **145.20** | **315** | | **PKPbc** | **11** | **15** | **06.5** | **-0.4** |
| **BRTR** | **Keskin Array B** | **145.20** | **315** | | **PKPbc** | **11** | **15** | **06.8** | **-0.1** |
| **BRTR** | **Keskin Array B** | **145.20** | **315** | PKPbc | **PKPbc** | **11** | **15** | **06.5** | **-0.4** |
| | comp=Z,4.7nm,0.5s,baz=130,slow=4.4,SNR=47 | | | | | | | | |
| **KIRS** | **Kirsehir-Merke** | **145.29** | **314** | ↓P | **PKPbc** | **11** | **15** | **07.0** | **-0.1** |
| **CFR** | **Carcaliu** | **145.33** | **327** | ↑P | **PKPbc** | **11** | **15** | **07.2** | **+0.4** |
| **ONER** | **Baraj Valea Uz** | **145.39** | **330** | ↓P | **PKPab** | **11** | **15** | **07.9** | **-0.6** |
| **TPGR** | **Topolog** | **145.40** | **326** | ↑P | **PKPab** | **11** | **15** | **07.9** | **-0.7** |
| **KSP** | **Ksiaz** | **145.44** | **344** | *e*PKP | **PKPbc** | **11** | **15** | **07.3** | **+0.3** |
| **NIE** | **Niedzica** | **145.48** | **339** | *e*PKP | **PKPab** | **11** | **15** | **08.4** | **-0.3** |
| **CRVS** | **Cervenica-Dubn** | **145.50** | **337** | *e*PKP | **PKPab** | **11** | **15** | **08.2** | **-0.6** |
| **VRI** | **Vrincioaia** | **145.57** | **329** | ↓P | **PKPbc** | **11** | **15** | **07.5** | **0.0** |
| **PLOR** | **Plostina** | **145.62** | **329** | ↓P | **PKPbc** | **11** | **15** | **07.7** | **0.0** |
| **ANTO** | **Ankara** | **145.70** | **316** | PKPbc | **PKPbc** | **11** | **15** | **08.7** | **+0.5** |
| **BR231** | **Keskin MP Arra** | **145.72** | **316** | PKPbc | **PKPbc** | **11** | **15** | **08.6** | **+0.3** |
| **OSTC** | **Ostas** | **145.72** | **344** | ↑*e*PKP | **PKPab** | **11** | **15** | **08.9** | **-0.7** |
| **CHVC** | **Chvalec** | **145.74** | **344** | ↑*e*PKP | **PKPbc** | **11** | **15** | **08.5** | **+0.6** |
| **CLL** | **Collm** | **145.78** | **348** | PKPbc | **PKPbc** | **11** | **15** | **08.0** | **+0.1** |
| **TURR** | **Turia** | **145.78** | **330** | ↓P | **PKPab** | **11** | **15** | **09.4** | **-0.6** |
| **OKC** | **Ostrava-Krasne** | **145.81** | **341** | ↑*e*PKP | **PKPbc** | **11** | **15** | **08.6** | **+0.5** |
| **DPC** | **Dobruska-Polom** | **145.88** | **344** | ↑*e*PKP | **PKPbc** | **11** | **15** | **09.0** | **+0.7** |
| DPC | | | | *e*PKPAB | **PKiKP** | **11** | **15** | **16.7** | **+5.8** |
| **BRG** | **Berggiesshubel** | **145.98** | **346** | *i* PKP | **PKPbc** | **11** | **15** | **08.9** | **+0.4** |
| BRG | | | | Amp | | 11 | 15 | 09.3 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.98** | **346** | P | **PKiKP** | **11** | **15** | **16.6** | **+5.6** |
| BRG | | | | Amp | | 11 | 15 | 17.4 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **145.99** | **339** | *e*PKP | **PKPbc** | **11** | **15** | **09.7** | **+1.0** |
| **KRLC** | **Kraliky** | **146.00** | **343** | ↑*e*PKP | **PKPbc** | **11** | **15** | **09.2** | **+0.5** |
| KRLC | | | | *e*PKPAB | **PKiKP** | **11** | **15** | **16.9** | **+5.8** |
| **MORC** | **Moravsky Berou** | **146.05** | **342** | | **PKPbc** | **11** | **15** | **09.1** | **+0.3** |
| **MORC** | **Moravsky Berou** | **146.05** | **342** | *e*PKP | **PKPbc** | **11** | **15** | **08.9** | **+0.1** |
| **MORC** | **Moravsky Berou** | **146.05** | **342** | ↑P | **PKPbc** | **11** | **15** | **09.2** | **+0.4** |
| **DOPR** | **Dopca** | **146.14** | **330** | ↑P | **PKPbc** | **11** | **15** | **10.2** | **+1.1** |
| **PVCC** | **Panska Ves** | **146.16** | **346** | ↑*e*PKP | **PKPbc** | **11** | **15** | **09.8** | **+0.8** |
| PVCC | | | | *e*PKPAB | **PKiKP** | **11** | **15** | **17.4** | **+6.0** |
| **MLR** | **Muntele Rosu** | **146.22** | **329** | | **PKPbc** | **11** | **15** | **09.4** | **-0.1** |
| **MLR** | **Muntele Rosu** | **146.22** | **329** | ↑P | **PKPbc** | **11** | **15** | **09.7** | **+0.2** |
| **HSKC** | **Hora Svate Kat** | **146.35** | **347** | ↑*e*PKP | **PKPbc** | **11** | **15** | **09.5** | **-0.1** |
| HSKC | | | | *e*PKPAB | **PKPab** | **11** | **15** | **17.6** | **+5.5** |
| **MDUB** | **Mudurnu** | **146.43** | **318** | | **PKPbc** | **11** | **15** | **09.9** | **-0.3** |
| **MMAI** | **Mount Meron Ar** | **146.57** | **303** | PKPbc | **PKPbc** | **11** | **15** | **11.0** | **+0.2** |
| | comp=Z,8.9nm,0.6s,baz=64,slow=5.7,SNR=16 | | | | | | | | |
| **MARR** | **Marisel-Cluj** | **146.63** | **333** | ↓P | **PKPbc** | **11** | **15** | **10.4** | **-0.2** |
| **PRU** | **Pruhonice** | **146.67** | **345** | ↑*e*PKP | **PKPbc** | **11** | **15** | **10.7** | **+0.3** |
| **GOPC** | **GO Pecny, Ondr** | **146.68** | **345** | ↑*e*PKP | **PKPbc** | **11** | **15** | **11.0** | **+0.5** |
| GOPC | | | | *e*PKPAB | **PKPab** | **11** | **15** | **18.7** | **+5.2** |
| **VOIR** | | **146.69** | **330** | ↑P | **PKPbc** | **11** | **15** | **10.9** | **+0.1** |
| **DRGR** | | **146.71** | **334** | ↑P | **PKPbc** | **11** | **15** | **11.8** | **+1.0** |
| **VRAC** | **Vranov** | **146.75** | **342** | *e*PKP | **PKPbc** | **11** | **15** | **11.1** | **+0.4** |
| **VYHS** | **Vyhne** | **146.77** | **339** | *e*PKP | **PKPbc** | **11** | **15** | **11.3** | **+0.5** |
| **JAVC** | **Velka Javorina** | **146.83** | **341** | *e*PKP | **PKiKP** | **11** | **15** | **12.1** | **-0.8** |
| **PSZ** | **Piszkesteto** | **146.89** | **338** | PKPbc | **PKPbc** | **11** | **15** | **11.5** | **+0.3** |
| **GHAJ** | **Ghor Haditha** | **146.92** | **300** | PKPbc | **PKPbc** | **11** | **15** | **11.7** | **0.0** |
| **KRUC** | **Moravsky** | **147.03** | **342** | *e*PKP | **PKPbc** | **11** | **15** | **11.5** | **+0.1** |
| **BORA** | **Eskisehir** | **147.22** | **317** | PKPbc | **PKPbc** | **11** | **15** | **12.1** | **-0.3** |
| **BTNL** | **Ternell** | **147.47** | **355** | *d*PKP | **PKPbc** | **11** | **15** | **12.4** | **-0.2** |
| **CSS** | **Mathiatis** | **147.50** | **307** | PKPbc | **PKPbc** | **11** | **15** | **12.8** | **-0.3** |
| **SIRR** | **Siria** | **147.57** | **334** | ↓P | **PKPbc** | **11** | **15** | **13.3** | **+0.3** |
| **GRA1** | **Grafenberg Arr** | **147.66** | **349** | PKPbc | **PKPbc** | **11** | **15** | **13.3** | **+0.2** |
| **GRF** | **Grafenberg Arr** | **147.66** | **349** | *e*PKP | **PKPbc** | **11** | **15** | **13.2** | **+0.2** |
| | baz=16,slow=2.3 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.70** | **346** | | **PKPbc** | **11** | **15** | **13.3** | **+0.1** |
| **KHC** | **Kasperske Hory** | **147.70** | **346** | ↑*e*PKP | **PKPbc** | **11** | **15** | **13.6** | **+0.4** |
| KHC | | | | *e*PKPAB | **PKPab** | **11** | **15** | **21.5** | **+3.8** |
| **GZR** | **Gura Zlata** | **147.78** | **332** | ↓P | PKPdf | 11 | 14 | 57.7 | -12 |
| **SURR** | **Surduc** | **147.78** | **333** | ↑P | **PKPbc** | **11** | **15** | **13.4** | **0.0** |
| **CKRC** | **Cesky Krumlov** | **147.81** | **345** | ↑*e*PKP | **PKPbc** | **11** | **15** | **13.8** | **+0.3** |
| CKRC | | | | *e*PKPAB | **PKPab** | **11** | **15** | **21.8** | **+3.7** |
| **BMRD** | **Maredsous** | **147.85** | **357** | *d*PKP | **PKPbc** | **11** | **15** | **12.7** | **-0.7** |
| **GEC2** | **GERESS Array S** | **147.94** | **345** | | **PKPbc** | **11** | **15** | **14.0** | **+0.1** |
| **GERES** | **GERESS Array B** | **147.94** | **345** | PKPbc | **PKPbc** | **11** | **15** | **13.7** | **-0.2** |
| **GERES** | **GERESS Array B** | **147.94** | **345** | PKPbc | **PKPbc** | **11** | **15** | **13.5** | **-0.4** |
| | comp=Z,4.5nm,0.6s,baz=263,slow=1.6,SNR=18 | | | | | | | | |
| **BZS** | **Buzias** | **148.11** | **333** | ↑P | **PKPbc** | **11** | **15** | **14.5** | **+0.2** |
| **CONA** | **Conrad Observa** | **148.20** | **342** | *i* PKiKP | **PKPbc** | **11** | **15** | **14.8** | **+0.2** |
| | comp=Z,17nm,1.2s,SNR=11 | | | | | | | | |
| CONA | | | | *i* PKP | **PKPab** | **11** | **15** | **20.0** | **+0.1** |
| | comp=Z,9.5nm,0.7s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.28** | **341** | *i* PKiKP | **PKPbc** | **11** | **15** | **14.8** | **+0.1** |
| | comp=Z,4.5nm,0.7s,SNR=5.4 | | | | | | | | |
| RONA | | | | *i* PKP | **PKPab** | **11** | **15** | **20.9** | **+0.8** |
| | comp=Z,7.8nm,0.9s | | | | | | | | |
| **HERR** | **Herculane** | **148.33** | **332** | ↓P | **PKPbc** | **11** | **15** | **14.5** | **-0.4** |
| **WLF** | **Walferdange** | **148.38** | **355** | PKPbc | **PKiKP** | **11** | **15** | **15.5** | **-0.5** |
| **WLF** | **Walferdange** | **148.38** | **355** | *d*PKP | **PKiKP** | **11** | **15** | **15.4** | **-0.5** |
| **MOA** | **Molln** | **148.72** | **344** | *i* PKiKP | **PKPbc** | **11** | **15** | **16.3** | **+0.5** |
| | comp=Z,4.8nm,0.9s | | | | | | | | |
| MOA | | | | *i* PKP | **PKPab** | **11** | **15** | **21.9** | **+0.1** |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **MDVR** | **Moldovita** | **148.72** | **332** | ↓P | **PKPbc** | **11** | **15** | **15.8** | **-0.1** |
| **MORH** | **Mrgy, Hungar** | **148.79** | **337** | ↓P | **PKPbc** | **11** | **15** | **15.5** | **-0.5** |
| **ARSA** | **Arzberg** | **148.91** | **342** | *e*PKiKP | **PKiKP** | **11** | **15** | **16.8** | **-0.3** |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| ARSA | | | | *i* PKP | **PKPab** | **11** | **15** | **23.5** | **+0.8** |
| | comp=Z,7.6nm,1.1s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.02** | **345** | *i* PKP | **PKPbc** | **11** | **15** | **16.5** | **0.0** |
| | comp=Z,2.9nm,0.5s | | | | | | | | |
| BIOA | | | | *i* PKP | **PKPab** | **11** | **15** | **23.6** | **+0.4** |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **ALN** | **Alexandroupoli** | **149.31** | **323** | PKPdf | **PKPdf** | **11** | **15** | **10.2** | **-2.0** |
| ALN | | | | PKPbc | **PKPbc** | **11** | **15** | **16.7** | **-0.7** |
| ALN | | | | PKPab | **PKPab** | **11** | **15** | **25.0** | **+0.5** |
| **BFO** | **Black Forest** | **149.46** | **352** | PKPdf | **PKPdf** | **11** | **15** | **10.6** | **-1.7** |
| BFO | | | | PKPbc | **PKPbc** | **11** | **15** | **17.8** | **+0.3** |
| BFO | | | | PKPab | **PKPab** | **11** | **15** | **24.6** | **-0.3** |
| **LESA** | **Schwarzleotal** | **149.51** | **346** | *i* PKP | **PKPbc** | **11** | **15** | **17.5** | **-0.3** |
| | comp=Z,7.6nm,1.1s | | | | | | | | |
| LESA | | | | *i* PKP | **PKPab** | **11** | **15** | **25.3** | **+0.1** |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **SOKA** | **Soboth** | **149.57** | **342** | *i* PKP | **PKPbc** | **11** | **15** | **17.5** | **-0.4** |
| | comp=Z,5.2nm,0.7s,SNR=6.4 | | | | | | | | |
| SOKA | | | | *i* PKP | **PKPab** | **11** | **15** | **25.3** | **-0.2** |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **PERS** | **Pernice** | **149.59** | **342** | *i* PKPbc | **PKPbc** | **11** | **15** | **17.2** | **-0.8** |
| **BOVS** | **Bovan** | **149.62** | **331** | ↓P | **PKPbc** | **11** | **15** | **17.1** | **-0.9** |
| **KBA** | **Koelnbreinsper** | **149.67** | **345** | *i* PKP | **PKPbc** | **11** | **15** | **17.6** | **-0.7** |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| KBA | | | | *i* PKP | **PKPab** | **11** | **15** | **25.6** | **-0.4** |
| | comp=Z,7.2nm,0.9s | | | | | | | | |
| **AKAS** | **Kas** | **149.68** | **312** | PKPdf | **PKPdf** | **11** | **15** | **11.5** | **-1.7** |
| AKAS | | | | PKPbc | **PKPbc** | **11** | **15** | **18.1** | **-0.5** |
| AKAS | | | | PKPab | **PKPab** | **11** | **15** | **25.8** | **-0.9** |
| **WATA** | **Walderalm** | **149.84** | **347** | *i* PKiKP | **PKPbc** | **11** | **15** | **18.5** | **-0.1** |
| | comp=Z,7.4nm,0.8s | | | | | | | | |
| WATA | | | | *i* PKP | **PKPab** | **11** | **15** | **26.0** | **-0.7** |
| | comp=Z,7.6nm,0.6s | | | | | | | | |
| **RETA** | **Reutte** | **149.86** | **348** | *e*PKiKP | **PKPbc** | **11** | **15** | **18.6** | **0.0** |
| | comp=Z,10nm,1.3s | | | | | | | | |
| RETA | | | | *i* PKP | **PKPab** | **11** | **15** | **25.9** | **-0.8** |
| | comp=Z,7.6nm,1.0s | | | | | | | | |
| **OBKA** | **Obir** | **149.87** | **343** | *i* PKP | **PKPbc** | **11** | **15** | **18.2** | **-0.5** |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| OBKA | | | | *i* PKP | **PKPab** | **11** | **15** | **26.4** | **-0.4** |
| | comp=Z,4.4nm,0.7s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.90** | **347** | *i* PKiKP | **PKPbc** | **11** | **15** | **18.7** | **-0.1** |
| | comp=Z,15nm,0.6s,SNR=7.1 | | | | | | | | |
| WTTA | | | | *i* PKP | **PKPab** | **11** | **15** | **26.8** | **-0.1** |
| | comp=Z,13nm,0.6s | | | | | | | | |
| **MOTA** | **Moosalm** | **149.93** | **348** | *i* PKP | **PKPbc** | **11** | **15** | **18.4** | **-0.4** |
| | comp=Z,8.3nm,0.8s | | | | | | | | |
| MOTA | | | | *i* PKP | **PKPab** | **11** | **15** | **26.4** | **-0.7** |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.01** | **344** | *i* PKP | **PKPbc** | **11** | **15** | **18.1** | **-0.8** |
| | comp=Z,8.0nm,0.7s,SNR=5.3 | | | | | | | | |
| MYKA | | | | *i* PKP | **PKPab** | **11** | **15** | **25.6** | **-1.7** |
| | comp=Z,8.6nm,0.7s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.03** | **347** | *i* PKiKP | **PKPbc** | **11** | **15** | **19.1** | **+0.1** |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| SQTA | | | | *i* PKP | **PKPab** | **11** | **15** | **26.8** | **-0.6** |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.18** | **345** | *i* PKP | **PKPbc** | **11** | **15** | **18.8** | **-0.5** |
| | comp=Z,14nm,0.7s,SNR=7.4 | | | | | | | | |
| ABTA | | | | *i* PKP | **PKPab** | **11** | **15** | **26.3** | **-1.7** |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **PRED** | **Cave del Predi** | **150.20** | **344** | PKPdf | **PKPdf** | **11** | **15** | **10.8** | **-2.8** |
| PRED | | | | | **PKPbc** | **11** | **15** | **18.7** | **-0.7** |
| PRED | | | | PKPab | **PKPab** | **11** | **15** | **27.1** | **-1.0** |
| **CLF** | **Chambon-Foret** | **150.20** | **360** | PKPdf | **PKPdf** | **11** | **15** | **11.6** | **-1.8** |
| CLF | | | | | **PKiKP** | **11** | **15** | **20.0** | **+0.3** |
| CLF | | | | PKPab | **PKPab** | **11** | **15** | **27.7** | **-0.3** |
| **DAVA** | **Damuels** | **150.22** | **349** | *i* PKiKP | **PKiKP** | **11** | **15** | **20.1** | **0.0** |
| | comp=Z,4.7nm,0.5s | | | | | | | | |
| DAVA | | | | *i* PKP | **PKPab** | **11** | **15** | **28.0** | **-0.4** |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **LJU** | **Ljubljana** | **150.30** | **342** | *i* PKPbc | **PKPbc** | **11** | **15** | **19.3** | **-0.3** |
| LJU | | | | *i* PKPab | **PKPab** | **11** | **15** | **26.7** | **-1.8** |
| **FETA** | **Feichten** | **150.32** | **348** | *i* PKiKP | **PKPbc** | **11** | **15** | **20.0** | **+0.3** |
| | comp=Z,8.0nm,0.8s,SNR=5.4 | | | | | | | | |
| FETA | | | | *i* PKP | **PKPab** | **11** | **15** | **27.3** | **-1.4** |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **BOJS** | **Bojanci** | **150.56** | **341** | *i* PKPbc | **PKPbc** | **11** | **15** | **20.2** | **+0.1** |
| BOJS | | | | *i* PKPab | **PKPab** | **11** | **15** | **27.9** | **-1.6** |
| **STAL** | **STALIGIAL** | **150.59** | **345** | PKPdf | **PKPdf** | **11** | **15** | **12.3** | **-1.8** |
| STAL | | | | PKPbc | **PKPbc** | **11** | **15** | **19.7** | **-0.6** |
| STAL | | | | PKPab | **PKPab** | **11** | **15** | **27.2** | **-2.5** |
| **SABO** | **M.te Sabotino** | **150.62** | **343** | PKPab | **PKPab** | **11** | **15** | **27.9** | **-1.9** |
| **FUORN** | **Ofenpass-Fuorn** | **150.79** | **348** | | **PKPbc** | **11** | **15** | **20.9** | **0.0** |
| FUORN | | | | PKPab | **PKPab** | **11** | **15** | **29.3** | **-1.6** |
| **CTI** | **Castel Tesino** | **151.04** | **346** | | **PKPbc** | **11** | **15** | **20.5** | **-0.9** |
| CTI | | | | PKPab | **PKPab** | **11** | **15** | **28.7** | **-3.0** |
| **SENIN** | **Lac Senin/Sane** | **151.52** | **352** | PKPdf | **PKPdf** | **11** | **15** | **14.1** | **-1.7** |
| SENIN | | | | PKPbc | **PKPbc** | **11** | **15** | **22.4** | **-0.1** |
| SENIN | | | | PKPab | **PKPab** | **11** | **15** | **33.5** | **-0.4** |
| **TEOL** | **Teolo** | **151.69** | **345** | PKPdf | **PKPdf** | **11** | **15** | **14.4** | **-1.4** |
| TEOL | | | | PKPab | **PKPab** | **11** | **15** | **34.9** | **+0.5** |
| **FNA** | **Florina** | **151.94** | **328** | PKPdf | **PKPdf** | **11** | **15** | **15.3** | **-1.0** |
| FNA | | | | | **PKPbc** | **11** | **15** | **22.7** | **-0.8** |
| **BNI** | **Bardonecchia** | **152.89** | **353** | PKPdf | **PKPdf** | **11** | **15** | **16.4** | **-1.3** |
| BNI | | | | PKPbc | **PKPbc** | **11** | **15** | **25.5** | **0.0** |
| BNI | | | | PKPab | **PKPab** | **11** | **15** | **38.9** | **-0.7** |
| **ESDC** | **Sonseca Array** | **157.95** | **12** | PKPab | **PKPab** | **11** | **16** | **00.4** | **-1.0** |
| | comp=Z,1.0nm,0.8s,baz=339,slow=4.3,SNR=6.4 | | | | | | | | |
| **KEST** | **Kesra** | **161.30** | **341** | PKPab | **PKPab** | **11** | **16** | **16.1** | **-0.2** |
| | comp=Z,1.5nm,0.5s,baz=53,slow=5.2,SNR=5.6 | | | | | | | | |
| **TATN** | **Tataouine** | **163.69** | **333** | PKPdf | **PKPdf** | **11** | **15** | **28.7** | **-2.0** |
| TATN | | | | PKPab | **PKPab** | **11** | **16** | **25.5** | **-1.3** |
| **DBIC** | **Dimbokro** | **166.79** | **149** | PKPdf | **PKPdf** | **11** | **15** | **32.2** | **-1.5** |
| DBIC | | | | PKPab | **PKPab** | **11** | **16** | **38.9** | **-2.0** |
| **TORD** | **Torodi Ar. Bea** | **175.02** | **177** | PKPab | **PKPab** | **11** | **17** | **16.6** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=178,slow=3.2,SNR=2.3 | | | | | | | | |

*JMA **21** 11:07:45.8±0.1,25°N±1°×122°4E±0°3,h115km±1km,*
*MV1.9/10,TAIWAN REGION*
*TAP **21** 11:07:46.0,24°80N×122°39E,h114km±1km,ML2.6,C*
**ISC 21 11:07:45.1**±1.6,**24°82N**±0°04×**122°39E**±0°03,**h120**km±8km,
**n65,σ0°81/123,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.41** | **298** | *e*P | **Pn** | **11 08 02.8** | **+0.3** |
| | baz=300 | | | | | | |
| TWB1 | | | | *e*S | **Sn** | **11 08 15.6** | **+0.1** |
| | baz=300 | | | | | | |
| **EGS** | | **0.41** | **274** | *e*P | **Pn** | **11 08 03.9** | **+1.4** |
| | baz=276 | | | | | | |
| EGS | | | | *e*S | **Sn** | **11 08 14.6** | **-1.0** |
| | baz=276 | | | | | | |
| **EOS2** | **EOS2** | **0.42** | **200** | *e*P | **Pn** | **11 08 04.7** | **+2.3** |
| | baz=200 | | | | | | |
| EOS2 | | | | *e*S | **Sn** | **11 08 15.8** | **+0.5** |
| | baz=200 | | | | | | |
| **EOS3** | **EOS3** | **0.53** | **187** | *e*P | **Pn** | **11 08 03.7** | **+0.7** |
| | baz=187 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **11 08 16.6** | **+0.1** |
| | baz=187 | | | | | | |
| **TWC** | **Suao** | **0.53** | **247** | *e*P | **Pn** | **11 08 03.1** | **0.0** |
| | baz=248 | | | | | | |
| TWC | | | | *e*S | **Sn** | **11 08 15.5** | **-1.3** |
| | baz=248 | | | | | | |
| **TIPB** | **Shuangxi** | **0.53** | **287** | *e*P | **Pn** | **11 08 03.5** | **+0.3** |
| | baz=289 | | | | | | |
| TIPB | | | | *e*S | **Sn** | **11 08 16.4** | **-0.4** |
| | baz=289 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.54** | **301** | *e*P | **Pn** | **11 08 03.6** | **+0.3** |
| | baz=302 | | | | | | |
| SXI1 | | | | S | **Sn** | **11 08 15.5** | **-1.6** |
| | baz=302 | | | | | | |
| **ESAO** | **Su ao** | **0.55** | **244** | P | **Pn** | **11 08 02.5** | **-0.7** |
| | baz=246 | | | | | | |
| ESAO | | | | *e*S | **Sn** | **11 08 15.7** | **-1.2** |
| | baz=246 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.61** | **295** | P | **Pn** | **11 08 03.6** | **-0.2** |
| | baz=296 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.62** | **125** | *e*P | **Pn** | **11 08 03.8** | **0.0** |
| JYNG | | | | *e*S | **Sn** | **11 08 17.3** | **-0.6** |
| **TWE** | **Neicheng** | **0.66** | **262** | *e*P | **Pn** | **11 08 04.4** | **+0.3** |
| | baz=263 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.67** | **122** | *e*P | **Pn** | **11 08 04.2** | **+0.1** |
| | baz=120 | | | | | | |
| YOJ | | | | *e*S | **Sn** | **11 08 18.5** | **0.0** |
| | baz=120 | | | | | | |
| **EOS4** | **EOS4** | **0.69** | **185** | *e*P | **Pn** | **11 08 04.8** | **+0.9** |
| | baz=185 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **11 08 17.7** | **-0.4** |
| | baz=185 | | | | | | |
| **ENA** | **Nanau** | **0.70** | **237** | *e*P | **Pn** | **11 08 04.7** | **+0.3** |
| | baz=237 | | | | | | |
| ENA | | | | *e*S | **Sn** | **11 08 18.3** | **-0.7** |
| | baz=237 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.73** | **266** | P | **Pn** | **11 08 05.2** | **+0.5** |
| | baz=267 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **11 08 20.5** | **+1.0** |
| | baz=267 | | | | | | |
| **ENTT** | **Nioudou** | **0.77** | **257** | *e*P | **Pn** | **11 08 05.7** | **+0.7** |
| | baz=258 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **11 08 20.4** | **+0.5** |
| | baz=258 | | | | | | |
| **NWLT** | **Wulai** | **0.81** | **268** | *e*P | **Pn** | **11 08 06.0** | **+0.7** |
| | baz=268 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **11 08 20.7** | **+0.1** |
| | baz=268 | | | | | | |
| **YM01** | **YM01** | **0.81** | **294** | P | **Pn** | **11 08 05.8** | **+0.5** |
| | baz=295 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **11 08 20.5** | **-0.2** |
| | baz=295 | | | | | | |
| **YM08** | **YM08** | **0.81** | **297** | *e*P | **Pn** | **11 08 07.0** | **+1.7** |
| | baz=298 | | | | | | |
| YM08 | | | | *e*S | **Sn** | **11 08 20.4** | **-0.3** |
| | baz=298 | | | | | | |
| **NDT** | **Datong Townshi** | **0.82** | **255** | *e*P | **Pn** | **11 08 06.4** | **+1.0** |
| | baz=256 | | | | | | |
| NDT | | | | *e*S | **Sn** | **11 08 20.7** | **0.0** |
| | baz=256 | | | | | | |
| **TAP** | **Taipei** | **0.83** | **286** | P | **Pn** | **11 08 05.0** | **-0.4** |
| | baz=286 | | | | | | |
| TAP | | | | *e*S | **Sn** | **11 08 20.2** | **-0.7** |
| | baz=286 | | | | | | |
| **LATG** | **Datong** | **0.83** | **251** | *e*P | **Pn** | **11 08 06.4** | **+0.8** |
| | baz=251 | | | | | | |
| LATG | | | | S | **Sn** | **11 08 20.7** | **-0.4** |
| | baz=251 | | | | | | |
| **TWY** | **Chenhua** | **0.85** | **303** | *e*P | **Pn** | **11 08 03.5** | **-2.2** |
| | baz=303 | | | | | | |
| TWY | | | | *e*S | **Sn** | **11 08 21.7** | **+0.6** |
| | baz=303 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.86** | **341** | *e*P | **Pn** | **11 08 06.4** | **+0.7** |
| | baz=341 | | | | | | |
| PCYT | | | | *e*S | **Sn** | **11 08 21.2** | **-0.2** |
| | baz=341 | | | | | | |
| **YHNB** | **Yeheng** | **0.93** | **261** | *e*P | **Pn** | **11 08 07.0** | **+0.5** |
| | baz=262 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **11 08 22.5** | **-0.1** |
| | baz=262 | | | | | | |
| **NSK** | **Sanguang** | **0.95** | **262** | P | **Pn** | **11 08 06.9** | **+0.3** |
| | baz=262 | | | | | | |
| NSK | | | | *e*S | **Sn** | **11 08 22.0** | **-0.8** |
| | baz=262 | | | | | | |
| **ETL** | **Fush Village** | **0.95** | **227** | P | **Pn** | **11 08 06.7** | **0.0** |
| | baz=227 | | | | | | |
| ETL | | | | *e*S | **Sn** | **11 08 22.4** | **-0.6** |
| | baz=227 | | | | | | |
| **NACB** | **Ninganchiao** | **0.96** | **229** | *i* P | **Pn** | **11 08 06.6** | **-0.1** |
| | baz=229 | | | | | | |
| NACB | | | | S | **Sn** | **11 08 21.9** | **-1.1** |
| | baz=229 | | | | | | |
| **NNSB** | **Datong** | **0.99** | **247** | *e*P | **Pn** | **11 08 07.7** | **+0.5** |
| | baz=248 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **11 08 23.4** | **-0.4** |
| | baz=248 | | | | | | |
| **NNS** | **Nan Shan** | **0.99** | **248** | *e*P | **Pn** | **11 08 07.5** | **+0.3** |
| | baz=248 | | | | | | |
| NNS | | | | *e*S | **Sn** | **11 08 23.4** | **-0.5** |
| | baz=248 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.02** | **234** | P

| | | | | | | |
|---|---|---|---|---|---|---|
| **RUGZ** | **Raukumara Rang** | **3.02** | **200** | P | Pn | 11 27 44.1 +1.0 |
| RUGZ | | | | S | Sn | 11 28 20.8 -0.9 |
| **TWGZ** | **Tauwhareparae** | **3.15** | **194** | P | Pn | 11 27 46.0 +1.4 |
| TWGZ | | | | S | Sn | 11 28 23.9 -0.5 |
| **MWZ** | **Matawai** | **3.41** | **199** | P | Pn | 11 27 47.6 -0.2 |
| MWZ | | | | S | Sn | 11 28 30.9 +0.8 |
| **CNGZ** | **Carnagh Statio** | **3.41** | **190** | P | Pn | 11 27 49.2 +1.5 |
| **TKGZ** | **Te Karaka** | **3.43** | **195** | P | Pn | 11 27 46.4 -1.6 |
| TKGZ | | | | S | Sn | 11 28 30.2 -0.3 |
| **URZ** | **Urewera** | **3.47** | **205** | P | Pn | 11 27 48.1 -0.4 |
| URZ | | | | S | Sn | 11 28 30.9 -0.3 |
| **RIGZ** | **Rimuhau** | **3.71** | **195** | P | Pn | 11 27 52.0 +0.5 |
| RIGZ | | | | S | Sn | 11 28 37.3 +0.6 |
| **SNGZ** | **Shannon Statio** | **3.88** | **199** | P | Pn | 11 27 54.1 +0.5 |
| SNGZ | | | | S | Sn | 11 28 41.0 +0.5 |
| **KNZ** | **Kokohu** | **4.03** | **195** | P | Pn | 11 27 55.3 -0.1 |
| **ARHZ** | **Aropaoanui** | **4.42** | **200** | P | Pn | 11 28 00.4 0.0 |
| ARHZ | | | | S | Sn | 11 28 53.8 +1.0 |
| **BKZ** | **Black Stump Fm** | **4.50** | **205** | P | Pn | 11 28 00.1 -1.3 |
| BKZ | | | | S | Sn | 11 28 54.8 +0.2 |
| **MCHZ** | **McNeill Hill** | **4.68** | **202** | P | Pn | 11 28 03.8 +0.1 |
| MCHZ | | | | S | Sn | 11 28 59.0 +0.2 |
| **KAHZ** | **Kahuranaki** | **4.95** | **199** | P | Pn | 11 28 05.4 -1.8 |
| KAHZ | | | | S | Sn | 11 29 04.2 -0.9 |
| **PXZ** | **Pawanui** | **5.18** | **198** | P | Pn | 11 28 08.8 -1.3 |
| PXZ | | | | S | Sn | 11 29 07.8 -2.5 |
| **PNHZ** | **Pukenui** | **5.26** | **204** | P | Pn | 11 28 10.1 -1.2 |
| PNHZ | | | | S | Sn | 11 29 12.4 0.0 |
| **PRHZ** | **Porangahau** | **5.46** | **199** | P | Pn | 11 28 11.4 -2.4 |
| PRHZ | | | | S | Sn | 11 29 14.9 -2.0 |
| **BFZ** | **Birch Farm** | **5.95** | **200** | P | Pn | 11 28 19.0 -1.2 |
| BFZ | | | | S | Sn | 11 29 25.6 -2.9 |

*IDC **21** 11:27:36.1±0.9, 25°.51N × 142°.53E, h0km, mb3.8/12, mbtmp3.9/13, ML3.8/1, MS3.6/4, Error ellipse: s-maj=31.8km s-min=16.4km az=85.0*
*NEIC **21** 11:27:36.0±0.8, 25°.22N±0°.08 × 142°.0E±0°.1, h10km±1km, mb4.5/15, Error ellipse: s-maj=22.5km s-min=12.4km az=103.0*
**ISC 21 11:27:36.1±0.7, 25°.29N±0°.08 × 142°.1E±0°.1, h10km, n44, σ1§71/35, mb4.2/19, MS3.6/4, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **1.81** | **3** | | **Pn** | **11 28 08.1** | **+0.8** |
| **JCJ** | **Chichijima** | **1.81** | **3** | Pn | **Pn** | **11 28 04.2** | **-3.1** |
| | 50nm,0.3s,baz=109,slow=16,SNR=7.4 | | | | | | |
| JCJ | | | | Sn | **Sn** | **11 28 27.6** | **-2.7** |
| | 106nm,0.3s,baz=240,slow=20,SNR=8.8 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **8.06** | **346** | Pn | **Pn** | **11 29 34.7** | **+1.5** |
| | 4.2nm,0.3s,baz=259,slow=15,SNR=1.4 | | | | | | |
| | 84nm,0.7s | | | | | | |
| **JOW** | **Kunigami** | **12.49** | **280** | Pn | **Pn** | **11 30 32.1** | **-1.9** |
| **JMM** | **Marumori** | **12.59** | **355** | Pn | **Pn** | **11 30 35.6** | **+0.3** |
| **JSD** | **Sado** | **13.12** | **347** | Pn | **Pn** | **11 30 41.7** | **-0.8** |
| **KSAR** | **Wonju Array Be** | **17.11** | **318** | Pn | **Pn** | **11 31 34.3** | **-1.0** |
| **KS19** | **Wonju Array Si** | **17.16** | **319** | Pn | **Pn** | **11 31 34.9** | **-1.1** |
| **YOJ** | **Yonaguni jima** | **17.31** | **271** | Pn | **Pn** | **11 31 35.7** | **-2.2** |
| YOJ | | | | IAmb | IAmb | 11 31 51.3 | |
| | comp=Z,99nm,1.5s | | | | | | |
| **YULB** | **Yu-li** | **19.02** | **269** | P | **P** | **11 31 56.7** | **-1.5** |
| YULB | | | | IAmb | IAmb | 11 32 11.2 | |
| | comp=Z,23nm,1.5s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.58** | **99** | T | T | 11 56 21.2 | |
| | baz=291,slow=74 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.58** | **99** | T | T | 11 56 18.6 | |
| | baz=291 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.59** | **99** | T | T | 11 56 20.2 | |
| | baz=291,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **23.80** | **102** | T | T | 11 56 34.9 | |
| | baz=292 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **23.81** | **102** | T | T | 11 56 41.4 | |
| | baz=292 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **23.82** | **102** | T | T | 11 56 37.8 | |
| | baz=292 | | | | | | |
| **KLR** | **Kul'dur** | **25.23** | **344** | P | **P** | **11 33 03.4** | **+1.3** |
| | comp=Z,1.2nm,0.6s,baz=150,slow=9.1,SNR=5.0 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.17** | **19** | P | **P** | **11 33 45.7** | **-0.6** |
| | comp=Z,4.4nm,1.0s,baz=252,slow=13,SNR=1.6 | | | | | | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **35.96** | **318** | P | **P** | **11 34 40.3** | **+3.2** |
| | comp=Z,0.5nm,0.4s,baz=187,slow=8.7,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.56** | **190** | P | **P** | **11 35 55.2** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 11 36 20.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.57** | **190** | P | **P** | **11 35 54.7** | **-1.6** |
| WRAB | | | | IAmb | IAmb | 11 36 19.6 | |
| | comp=Z,8.8nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.58** | **190** | P | **P** | **11 35 55.1** | **-1.4** |
| WB2 | | | | IAmb | IAmb | 11 36 22.1 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.58** | **190** | P | **P** | **11 35 54.8** | **-1.6** |
| **WRA** | **Warramunga Arr** | **45.58** | **190** | P | P | 11 36 00.6 | +4.1 |
| | comp=Z,0.7nm,0.4s,baz=8.0,slow=8.6,SNR=20 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **49.30** | **190** | P | **P** | **11 36 28.4** | **+3.0** |
| | comp=Z,0.5nm,0.9s,baz=8.4,slow=6.1,SNR=1.9 | | | | | | |
| ASAR | | | | LR | LR | 11 55 31.3 | |
| | comp=Z,54nm,19.4s,baz=154,slow=34 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.56** | **311** | P | **P** | **11 36 45.8** | **+3.4** |
| | comp=Z,0.4nm,0.7s,baz=74,slow=9.5,SNR=2.8 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **52.69** | **151** | LR | LR | 11 56 55.4 | |
| | comp=Z,77nm,18.4s,baz=337,slow=33 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.24** | **315** | P | **P** | **11 37 04.5** | **+2.5** |
| | comp=Z,1.3nm,0.7s,baz=91,slow=8.3,SNR=12 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **CNPM** | **China Poot** | **56.77** | **34** | P | **P** | **11 37 19.4** | **-0.7** |
| **STKA** | **Stephens Creek** | **56.84** | **180** | P | **P** | **11 37 19.7** | **-1.1** |
| **G21K** | **Allakaket** | **56.92** | **26** | P | **P** | **11 37 20.5** | **-0.6** |
| G21K | | | | IAmb | IAmb | 11 37 35.2 | |
| | comp=Z,3.1nm,1.3s | | | | | | |
| **AAK** | **Ala-Archa** | **57.21** | **306** | LR | LR | 12 00 51.9 | |
| | comp=Z,32nm,21.1s,baz=148,slow=35 | | | | | | |
| **D23K** | **Nanushuk River** | **58.50** | **23** | P | **P** | **11 37 33.0** | **+0.8** |
| D23K | | | | IAmb | IAmb | 11 38 00.6 | |
| | comp=Z,6.1nm,1.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **59.31** | **318** | P | **P** | **11 37 39.7** | **+1.7** |
| | comp=Z,1.5nm,0.5s,baz=82,slow=9.3,SNR=5.9 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **59.35** | **28** | P | **P** | **11 37 36.9** | **-1.2** |
| | comp=Z,0.4nm,0.9s,baz=260,slow=5.8,SNR=4.6 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| **SCRK** | **Sand Creek** | **60.55** | **29** | P | **P** | **11 37 47.2** | **+0.7** |
| SCRK | | | | IAmb | IAmb | 11 38 03.0 | |
| | comp=Z,2.5nm,1.3s | | | | | | |
| **BCPM** | **Bancas Point** | **62.65** | **34** | P | **P** | **11 38 01.3** | **+0.7** |
| **G31M** | **Satah River** | **64.55** | **26** | P | **P** | **11 38 13.4** | **+0.4** |
| G31M | | | | IAmb | IAmb | 11 38 21.4 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **66.28** | **315** | P | **P** | **11 38 24.1** | **-0.4** |
| **TULEG** | **Thule** | **76.65** | **7** | P | **P** | **11 39 26.9** | **+0.3** |
| **FINES** | **FINESS Array B** | **79.52** | **334** | P | **P** | **11 39 42.9** | **+0.1** |
| | comp=Z,4.8nm,1.1s,baz=48,slow=8.4,SNR=1.5 | | | | | | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.72** | **51** | P | **P** | **11 39 54.5** | **-0.9** |
| | comp=Z,0.3nm,0.7s,baz=331,slow=11,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **84.01** | **324** | LR | LR | 12 20 56.8 | |
| | comp=Z,32nm,19.2s,baz=50,slow=38 | | | | | | |
| **NOA** | **NORSAR Array B** | **85.25** | **338** | P | **P** | **11 40 14.2** | **+1.4** |
| | comp=Z,0.7nm,0.7s,baz=44,slow=4.6,SNR=2.3 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |

*HEL **21** 11:29:01.5±0.0, 63°.99N × 28°.16E, h0km, ML1.8, Explosion*
*IDC **21** 11:29:02.4±1.7, 63°.92N × 27°.67E, h0km, mbtmp2.8/2, ML1.7/2, Error ellipse: s-maj=41.1km s-min=8.5km az=97.0*
**ISC 21 11:28:59.9±0.8, 63°.97N±0°.02 × 28°.14E±0°.03, h0km, n21, σ0§69/39, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIF** | **Nilsia** | **0.59** | **194** | *e*P | **Pb** | **11 29 13.0** | **-0.2** |
| NIF | | | | *e*S | **Sb** | **11 29 21.1** | **-1.0** |
| **RMF** | **Romuvaara** | **0.83** | **71** | *e*PB | **Pb** | **11 29 16.7** | **-0.4** |
| RMF | | | | *e*S | **Sg** | **11 29 26.6** | **+0.2** |
| **OUL** | **Oulu** | **1.48** | **320** | *e*PG | **Pg** | **11 29 28.2** | **-0.1** |
| OUL | | | | *e*SB | **Sg** | **11 29 47.3** | **-0.2** |
| **SUF** | **Sumiainen** | **1.54** | **216** | *e*P | **Pg** | **11 29 29.2** | **-0.1** |
| SUF | | | | *e*SB | **Sg** | **11 29 50.1** | **+0.9** |
| **OUF** | **Merijarvi** | **1.54** | **287** | *e*P | **Pb** | **11 29 29.0** | **-0.3** |
| OUF | | | | *e*S | **Sn** | **11 29 48.9** | **-0.5** |
| **OBF4** | **Vikkela, Lumij** | **1.57** | **304** | *e*P | **Pb** | **11 29 29.4** | **-0.3** |
| OBF4 | | | | *e*SN | **Sg** | **11 29 51.2** | **+1.0** |
| **JOF** | **Joensuu** | **1.77** | **125** | *e*P | **Pb** | **11 29 33.0** | **-0.2** |
| JOF | | | | *e*SN | **Sg** | **11 29 56.4** | **-0.3** |
| JOF | | | | MSG | | 11 30 00.2 | |
| | comp=Z,4.8nm,0.1s | | | | | | |
| **OBF0** | **Syolatti, Pyha** | **1.79** | **289** | *e*PG | **Pg** | **11 29 33.6** | **-0.4** |
| OBF0 | | | | *e*S | **Sb** | **11 29 56.2** | **-0.1** |
| **MSF** | **Maaselka** | **1.99** | **11** | *e*PG | **Pb** | **11 29 37.0** | **0.0** |
| MSF | | | | *e*SG | **Sb** | **11 30 02.0** | **-0.3** |
| **KAF** | **Kangasniemi** | **2.04** | **205** | *e*PB | **Pb** | **11 29 37.5** | **-0.2** |
| KAF | | | | *e*SB | **Sb** | **11 30 03.9** | **+0.4** |
| **RANF** | **Ranua** | **2.14** | **345** | *e*PG | **Pb** | **11 29 39.5** | **+0.1** |
| RANF | | | | *e*SB | **Sb** | **11 30 05.3** | **-1.1** |
| **KU6** | **Riekki** | **2.20** | **19** | *e*PG | **Pb** | **11 29 40.3** | **-0.1** |
| KU6 | | | | *e*SG | **Sb** | **11 30 08.1** | **-0.1** |
| **KEF** | **Keuruu** | **2.34** | **221** | *e*PB | **Pb** | **11 29 42.7** | **-0.1** |
| KEF | | | | *e*SB | **Sb** | **11 30 12.4** | **+0.3** |
| KEF | | | | MSG | | 11 30 14.2 | |
| | comp=Z,7.0nm,0.2s | | | | | | |
| **OLKF** | **Oulanka, Finla** | **2.42** | **12** | *e*PG | **Pb** | **11 29 44.5** | **+0.1** |
| OLKF | | | | *e*SB | **Sb** | **11 30 14.2** | **-0.5** |
| OLKF | | | | MSG | | 11 30 17.7 | |
| | comp=Z,2.8nm,0.2s | | | | | | |
| **RUF** | **Ruokolahti** | **2.58** | **171** | *e*PB | **Pb** | **11 29 46.5** | **-0.4** |
| RUF | | | | *e*SB | **Sb** | **11 30 19.6** | **+0.5** |
| RUF | | | | MSG | | 11 30 20.9 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| **VAF** | **Ylistaro** | **2.62** | **252** | *e*PB | **Pb** | **11 29 47.3** | **-0.3** |
| VAF | | | | *e*SB | **Sb** | **11 30 19.2** | **-1.0** |
| VAF | | | | MSG | | 11 30 22.1 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **2.70** | **201** | *e*PB | **Pb** | **11 29 48.4** | **-0.6** |
| FIA0 | | | | *e*SB | **Sb** | **11 30 21.8** | **-0.9** |
| FIA0 | | | | MSN | | 11 30 23.7 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **2.70** | **201** | Pn | **Pb** | **11 29 48.1** | **-0.9** |
| | comp=Z,0.3nm,0.3s,baz=18,slow=15,SNR=9.1 | | | | | | |
| FINES | | | | Lg | Lg | 11 30 23.1 | |
| | comp=Z,0.6nm,0.3s,baz=17,slow=26,SNR=14 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **RNF** | **Rovaniemi** | **2.80** | **342** | *e*PB | **Pb** | **11 29 49.8** | **-0.9** |
| RNF | | | | *e*SB | **Sb** | **11 30 25.1** | **-0.4** |
| RNF | | | | MSN | | 11 30 29.4 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **5.69** | **351** | Pn | **Pn** | **11 30 27.5** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=169,slow=12,SNR=1.7 | | | | | | |
| ARCES | | | | Sn | **Sn** | **11 31 29.7** | **-1.8** |
| | comp=Z,0.1nm,0.3s,baz=173,slow=22,SNR=1.8 | | | | | | |
| ARCES | | | | Lg | Lg | 11 31 53.1 | |
| | comp=Z,0.1nm,0.3s,baz=166,slow=34,SNR=2.3 | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | |
| **I37NO** | **I37NO** | **6.38** | **328** | I | I | 12 08 30.0 | |
| | baz=138,slow=333,SNR=1.0 | | | | | | |

*MIRAS **21** 11:31:41.1, 56°.97N × 61°.50E, h0km, ML2.8/4*
**ISC 21 11:31:41.8±1.4, 56°.91N±0°.07 × 61°.54E±0°.09, h10km, n5, σ1§07/10, 2C-1D, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVE** | **Sverdlovsk** | **0.50** | **261** | *i* P | **Pg** | **11 31 50.9** | **-0.6** |
| | 31nm,0.2s,baz=254 | | | | | | |
| SVE | | | | *i* S | **Sg** | **11 31 57.5** | **-0.6** |
| | baz=254 | | | | | | |
| SVE | | | | *i* AML | AML | 11 32 01.8 | |
| | 283nm,0.8s | | | | | | |
| **ARU** | **Arti** | **1.71** | **255** | *i* P | **Pn** | **11 32 12.7** | **+1.1** |
| | 38nm,0.4s,baz=253 | | | | | | |
| ARU | | | | *i* S | **Sb** | **11 32 35.4** | **+0.6** |
| | 14nm,0.3s,baz=253 | | | | | | |
| ARU | | | | *i* AML | AML | 11 32 37.7 | |
| | 126nm,0.6s | | | | | | |
| **PR7R** | **Sarany** | **2.22** | **319** | *i* P | **Pn** | **11 32 17.6** | **-1.0** |
| | 53nm,0.4s,baz=318 | | | | | | |
| PR7R | | | | *i* S | **Sn** | **11 32 46.7** | **+0.6** |
| | baz=318 | | | | | | |
| PR7R | | | | *i* AML | AML | 11 32 50.3 | |
| | 98nm,0.5s | | | | | | |
| **SVUR** | **Severouralsk** | **3.40** | **347** | *i* P | **Pn** | **11 32 33.6** | **-1.2** |
| | 4.3nm,0.4s,baz=347 | | | | | | |
| SVUR | | | | *i* S | **Sn** | **11 33 16.7** | **+1.6** |
| | baz=347 | | | | | | |
| SVUR | | | | *i* AML | AML | 11 33 27.5 | |
| | 9.1nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **7.73** | **188** | ⇑Pn | **Pn** | **11 33 34.9** | **+0.6** |
| | 0.5nm,0.7s,baz=12,slow=12,SNR=5.8 | | | | | | |
| AB31 | | | | ⇓Sn | **Sn** | **11 35 01.7** | **-0.1** |
| | 0.3nm,0.4s,baz=18,slow=23,SNR=3.7 | | | | | | |
| AB31 | | | | ⇑Lg | Lg | 11 35 41.4 | |
| | 1.3nm,0.5s,baz=3.0,slow=24,SNR=3.6 | | | | | | |

*IDC **21** 11:33:11.7±9.0, 18°.10S × 178°.28W, h516km±101km, mb2.9/7, mbtmp3.8/7, Error ellipse: s-maj=36.0km s-min=28.3km az=134.0*
**ISC 21 11:33:17.1±0.9, 18°.1S±0°.3 × 178°.5W±0°.2, h579km, n8, σ0§74/9, mb3.3/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.57** | **260** | P | **P** | **11 40 38.5** | **-0.3** |
| | 0.6nm,0.6s,baz=97,slow=6.8,SNR=19 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.71** | **254** | P | **P** | **11 40 40.5** | **+0.6** |
| | 4.0nm,0.5s,baz=88,slow=8.5,SNR=114 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 42 10.1** | **+0.5** |
| | 0.2nm,0.5s,baz=106,slow=4.0,SNR=1.7 | | | | | | |
| | 4.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.00** | **180** | P | **P** | **11 43 42.2** | **-0.6** |
| | 1.2nm,1.0s,baz=94,slow=3.0,SNR=5.6 | | | | | | |
| | 1.2nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.55** | **44** | P | **P** | **11 44 24.9** | **-0.1** |
| | 0.3nm,0.6s,baz=235,slow=6.9,SNR=3.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.03** | **13** | P | **P** | **11 44 55.6** | **-1.0** |
| | 0.3nm,0.8s,baz=240,slow=4.9,SNR=3.1 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.11** | **58** | P | **P** | **11 44 58.9** | **+1.1** |
| | 0.4nm,0.8s,baz=224,slow=3.5,SNR=5.0 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.48** | **43** | P | **P** | **11 45 04.0** | **-0.1** |
| | 0.4nm,0.7s,baz=233,slow=4.4,SNR=2.4 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.85** | **315** | PKPbc | **PKPbc** | **11 51 50.2** | **+0.3** |
| | 0.2nm,0.5s,baz=68,slow=3.8,SNR=2.6 | | | | | | |

*IDC **21** 11:40:01.1±1.0, 5°.93S × 146°.64E, h0km, mb3.7/5, mbtmp3.7/7, ML1.8/2, Error ellipse: s-maj=48.1km s-min=19.2km az=93.0*
**ISC 21 11:40:08.2±0.9, 6°.04S±0°.09 × 146°.5E±0°.2, h52km, n9, σ0§99/11, mb3.8/5, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.41** | **169** | Pn | **Pn** | **11 40 58.6** | **-0.2** |
| | 4.6nm,0.3s,baz=294,slow=7.0,SNR=17 | | | | | | |
| PMG | | | | Sn | **Sn** | **11 41 39.5** | **+1.5** |
| | 13nm,0.3s,baz=58,slow=23,SNR=9.0 | | | | | | |
| | 16nm,0.2s | | | | | | |
| **CTA** | **Charters Tower** | **13.97** | **181** | Pn | **Pn** | **11 43 22.1** | **-1.4** |
| | baz=30,slow=20,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.20** | **219** | P | **Pn** | **11 44 16.7** | **-0.5** |
| | 0.6nm,0.5s,baz=47,slow=12,SNR=20 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 48 49.6** | **+1.3** |
| | 0.4nm,0.7s,baz=28,slow=2.3,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **21.32** | **213** | P | **P** | **11 44 51.3** | **+0.4** |
| | 0.5nm,0.5s,baz=52,slow=8.5,SNR=20 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.70** | **347** | P | **P** | **11 49 10.5** | **+0.5** |
| | 0.8nm,0.5s,baz=168,slow=7.4,SNR=2.3 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **77.22** | **321** | P | **P** | **11 51 57.2** | **+0.3** |
| | 0.2nm,0.4s,baz=99,slow=9.2,SNR=2.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.93** | **180** | P | **P** | **11 52 32.9** | **+0.4** |
| | 0.5nm,0.5s,baz=317,slow=0.9,SNR=11 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.71** | **23** | P | **P** | **11 52 40.2** | **-1.0** |
| | 0.7nm,0.6s,baz=252,slow=5.1,SNR=7.8 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.63** | **284** | PKP | **PKPdf** | **11 59 39.9** | **-0.2** |
| | 0.6nm,0.4s,baz=61,slow=2.3,SNR=10.0 | | | | | | |

*IDC **21** 11:41:35.3±1.0, 5°.90S × 146°.66E, h0km, mb3.8/9, mbtmp3.8/11, ML3.7/1, MS2.9/2, Error ellipse: s-maj=40.8km s-min=17.8km az=89.0*
*NEIC **21** 11:41:39.5±1.7, 5°.96S±0°.10 × 146°.6E±0°.1, h27km±4km, mb4.4/26, Error ellipse: s-maj=18.4km s-min=13.8km az=78.0*
**ISC 21 11:41:42.1±0.6, 6°.03S±0°.07 × 146°.6E±0°.1, h52km, n43, σ1§08/45, mb4.2/21, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.41** | **170** | Pn | **Pn** | **11 42 31.1** | **-1.7** |
| **PMG** | **Port Moresby** | **3.41** | **170** | Pn | **Pn** | **11 42 33.1** | **+0.2** |
| | 29nm,0.5s,baz=325,slow=7.9,SNR=6.6 | | | | | | |
| PMG | | | | Sn | **Sn** | **11 43 13.5** | **+1.4** |
| | 14nm,0.3s,baz=90,slow=23,SNR=6.8 | | | | | | |
| PMG | | | | LR | LR | 11 44 17.9 | |
| | comp=Z,191nm,21.7s,baz=4.0,slow=46 | | | | | | |
| **COEN** | **Coen** | **8.55** | **203** | Pn | **Pn** | **11 43 42.6** | **-0.7** |
| **WB0** | **Warramunga Arr** | **18.06** | **220** | | **P** | **11 45 48.9** | **-0.5** |
| **WR0** | **Warramunga Arr** | **18.11** | **219** | P | **P** | **11 45 48.4** | **-1.5** |
| WR0 | | | | IAmb | IAmb | 11 45 51.7 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.21** | **219** | | **P** | **11 45 48.4** | **-2.7** |
| **WB2** | **Warramunga Arr** | **18.22** | **219** | P | **P** | **11 45 49.9** | **-1.2** |
| **WRA** | **Warramunga Arr** | **18.22** | **220** | P | **Pn** | **11 45 50.9** | **-0.6** |
| **WRA** | **Warramunga Arr** | **18.22** | **220** | P | **Pn** | **11 45 51.2** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=44,slow=12,SNR=6.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 50 24.5** | **+2.2** |
| | comp=Z,0.4nm,0.6s,baz=28,slow=2.1,SNR=2.1 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **21.34** | **213** | P | **P** | **11 46 22.6** | **-2.5** |
| **ASAR** | **Alice Springs** | **21.34** | **213** | P | **P** | **11 46 23.6** | **-1.5** |
| **ASAR** | **Alice Springs** | **21.34** | **213** | P | **P** | **11 46 26.5** | **+1.3** |
| | comp=Z,0.6nm,0.5s,baz=53,slow=8.6,SNR=7.5 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ARMA** | **Armidale** | **24.73** | **169** | P | **P** | **11 46 59.3** | **+0.4** |
| ARMA | | | | IAmb | IAmb | 11 47 41.6 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **26.13** | **190** | P | **P** | **11 47 12.0** | **+0.6** |
| **BBOO** | **Buckleboo** | **28.38** | **199** | P | **P** | **11 47 32.2** | **+0.5** |
| BBOO | | | | IAmb | IAmb | 11 48 07.3 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **MSVF** | **Nonsavu** | **32.89** | **113** | P | **P** | **11 48 10.0** | **-1.7** |
| MSVF | | | | IAmb | IAmb | 11 48 52.4 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **46.62** | **340** | P | **P** | **11 50 05.5** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=152,slow=8.7,SNR=4.7 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.69** | **347** | P | **P** | **11 50 44.0** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=198,slow=9.5,SNR=2.1 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.87** | **298** | P | **P** | **11 50 53.9** | **+0.7** |
| | comp=Z,0.5nm,0.3s,baz=110,slow=7.8,SNR=1.8 | | | | | | |
| CMAR | | | | LR | LR | 12 15 02.2 | |
| | comp=Z,14nm,19.1s,baz=40,slow=38 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **CASY** | **Casey** | **65.11** | **195** | P | **P** | **11 52 18.3** | **+1.1** |
| CASY | | | | IAmb | IAmb | 11 52 51.1 | |
| | comp=Z,7.2nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **77.23** | **321** | P | **P** | **11 53 29.2** | **-1.7** |
| **MKAR** | **Makanchi Array** | **77.23** | **321** | P | **P** | **11 53 30.7** | **-0.2** |
| | comp=Z,0.1nm,0.4s,baz=97,slow=6.0,SNR=2.0 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **L14K** | **Kuka Creek** | **77.77** | **22** | P | **P** | **11 53 32.4** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **78.80** | **328** | P | **P** | **11 53 38.8** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=120,slow=9.2,SNR=1.6 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **G18K** | **Tagagawik** | **81.93** | **20** | P | **P** | **11 53 56.8** | **+0.8** |
| G18K | | | | IAmb | IAmb | 11 54 05.4 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **83.28** | **19** | P | **P** | **11 54 03.0** | **+0.1** |
| E19K | | | | IAmb | IAmb | 11 54 05.3 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **83.51** | **17** | P | **P** | **11 54 04.3** | **+0.2** |
| **F20K** | **Avaraart Lake** | **83.55** | **19** | P | **P** | **11 54 04.9** | **+0.7** |
| F20K | | | | IAmb | IAmb | 11 54 23.7 | |
| | comp=Z,3.8nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **83.59** | **18** | P | **P** | **11 54 04.7** | **+0.2** |
| **QSPA** | **South Pole Qui** | **83.94** | **180** | P | **P** | **11 54 07.6** | **+1.1** |
| **QSPA** | **South Pole Qui** | **83.94** | **180** | P | **P** | **11 54 07.2** | **+0.7** |
| | comp=Z,1.3nm,0.7s,baz=77,slow=4.3,SNR=8.2 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **RND** | **Reindeer** | **84.33** | **24** | P | **P** | **11 54 08.0** | **-0.4** |
| **H23K** | **Yukon River** | **85.12** | **22** | P | **P** | **11 54 13.0** | **+0.7** |
| H23K | | | | IAmb | IAmb | 11 54 53.0 | |
| | comp=Z,2.5nm,1.4s | | | | | | |
| **B21K** | **Ikpikpuk River** | **85.27** | **18** | P | **P** | **11 54 11.7** | **-1.2** |
| **G23K** | **Bananza Creek** | **85.34** | **21** | P | **P** | **11 54 14.2** | **+0.8** |
| G23K | | | | IAmb | IAmb | 11 54 42.5 | |
| | comp=Z,6.9nm,1.5s | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ABKAR | **Akbulak array** | **21.71** | **320** | P | **P** | **11 58 51.3** | **+0.4** |
| ABKAR | **Akbulak array** | **21.71** | **320** | P | **P** | **11 58 49.7** | **-1.2** |
| CMAR | **Chiang Mai Arr** | **22.28** | **131** | P | P | 11 59 08.5 | +11 |
| | comp=Z,0.8nm,0.3s,baz=316,slow=9.8,SNR=2.1 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| SONM | **Songino Array** | **23.06** | **47** | P | P | 11 59 14.1 | +8.7 |
| | comp=Z,0.5nm,0.3s,baz=242,slow=10,SNR=5.4 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| HMDM | **Hanimaadhoo** | **28.47** | **197** | P | **P** | **11 59 57.6** | **+2.4** |
| GNI | **Garni** | **29.56** | **292** | LR | LR | 12 13 30.3 | |
| | comp=Z,27nm,18.5s,baz=156,slow=40 | | | | | | |
| HKPS | **Hong Kong Po S** | **31.14** | **104** | P | **P** | **12 00 17.9** | **-0.9** |
| RPSI | **Rantau Prapat** | **35.51** | **149** | P | **P** | **12 00 56.0** | **-0.9** |
| RPSI | | | | IAmb | IAmb | 12 01 19.2 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| YHNB | **Yeheng** | **35.95** | **95** | P | **P** | **12 00 59.2** | **-1.6** |
| YHNB | | | | IAmb | IAmb | 12 01 35.7 | |
| | comp=Z,13nm,1.2s | | | | | | |
| ELL | **Elmali** | **41.51** | **289** | P | **P** | **12 01 47.3** | **-0.1** |
| ELL | | | | IAmb | IAmb | 12 01 54.5 | |
| | comp=Z,46nm,1.0s | | | | | | |
| KSM | **Kuching** | **42.44** | **134** | P | **P** | **12 01 54.4** | **-0.7** |
| KSM | | | | IAmb | IAmb | 12 02 36.9 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| SBUM | **Sibu** | **42.84** | **131** | P | **P** | **12 01 59.3** | **+1.1** |
| SBUM | | | | IAmb | IAmb | 12 02 28.3 | |
| | comp=Z,4.1nm,1.4s | | | | | | |
| MLR | **Muntele Rosu** | **43.14** | **302** | P | **P** | **12 01 59.7** | **-0.9** |
| MLR | | | | IAmb | IAmb | 12 02 15.5 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| BURAR | **Bucovina Array** | **43.48** | **305** | P | **P** | **12 02 02.0** | **-1.3** |
| BURAR | | | | IAmb | IAmb | 12 02 26.0 | |
| | comp=Z,1.6nm,1.2s | | | | | | |
| BUR08 | **Bucovina Ar. S** | **43.49** | **305** | P | **P** | **12 02 02.9** | **-0.5** |
| BUR08 | | | | IAmb | IAmb | 12 02 23.8 | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| FIA1 | **FINESS Array S** | **44.02** | **325** | P | **P** | **12 02 07.2** | **-0.1** |
| FINES | **FINESS Array B** | **44.02** | **325** | P | **P** | **12 02 07.1** | **-0.2** |
| FINES | **FINESS Array B** | **44.02** | **325** | P | P | 12 02 13.5 | +6.3 |
| | comp=Z,4.6nm,1.0s,baz=104,slow=12,SNR=2.2 | | | | | | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| NC204 | **NORSAR Array S** | **51.34** | **324** | P | **P** | **12 03 04.2** | **+0.1** |
| NC204 | | | | IAmb | IAmb | 12 03 30.4 | |
| | comp=Z,7.6nm,1.3s | | | | | | |
| SPB2 | **Spitsbergen Ar** | **51.55** | **346** | P | **P** | **12 03 06.2** | **+0.8** |
| SPB2 | | | | IAmb | IAmb | 12 03 45.1 | |
| | comp=Z,40nm,1.4s | | | | | | |
| WRA | **Warramunga Arr** | **73.86** | **129** | P | P | 12 05 43.2 | +8.2 |
| | comp=Z,0.4nm,0.4s,baz=325,slow=5.7,SNR=11 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| TORD | **Torodi Ar. Bea** | **74.23** | **275** | P | P | 12 05 44.9 | +7.5 |
| | comp=Z,1.6nm,0.5s,baz=43,slow=5.7,SNR=17 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | **76.29** | **131** | P | P | 12 05 57.3 | +8.3 |
| | comp=Z,0.3nm,0.7s,baz=320,slow=5.3,SNR=6.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |

*IDC **21** 12:03:21.8±5.1, 37.93N×16.74E, h0km, mb3.8/3, mbtmp3.6/5, ML3.3/2, Error ellipse: s-maj=84.7km s-min=41.0km az=1.0*
*ROM **21** 12:04:00.7±0.3, 38.83N±0.03×14.61E±0.03, h353km±2km, ML3.1/34, Error ellipse: s-maj=3.5km s-min=1.6km az=138.0*
**ISC 21 12:04:02.1±1.2, 38.9N±0.1×14.6E±0.1, h348km±11km, n42, σ1s02/48, mb3.5/3, 1D, Sicily**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| IACL | **Alicudi** | **0.39** | **215** | P | | **Pn** | **12 04 46.4** | **+0.4** |
| LLI | **Lipari** | **0.47** | **149** | P | | **Pn** | **12 04 46.3** | **+0.2** |
| VPL | **Vulcano Piano** | **0.55** | **150** | P | | **Pn** | **12 04 46.9** | **+0.6** |
| MILZ | **Milazzo** | **0.74** | **141** | P | | **Pn** | **12 04 47.0** | **+0.3** |
| MILZ | | | | S | | **S** | **12 05 22.6** | **+0.1** |
| MILZ | | | | | AML | AML | | |
| | comp=E,94μm,0.4s | | | | | | | |
| MILZ | | | | | AML | AML | | |
| | comp=N,83μm,1.0s | | | | | | | |
| MILZ | | | | | AML | AML | | |
| | comp=E,94μm,0.4s | | | | | | | |
| MILZ | | | | | AML | AML | | |
| | comp=N,83μm,1.0s | | | | | | | |
| MUCR | **Ucria** | **0.83** | **167** | P | | **Pn** | **12 04 48.0** | **+0.8** |
| MSRU | **Castanea** | **0.90** | **131** | P | | **Pn** | **12 04 47.5** | **+0.2** |
| MSRU | | | | S | | **S** | **12 05 23.6** | **+0.2** |
| MSRU | | | | | AML | AML | | |
| | comp=N,115μm,1.6s | | | | | | | |
| MSRU | | | | | AML | AML | | |
| | comp=N,114μm,1.6s | | | | | | | |
| MSRU | | | | | AML | AML | | |
| | comp=N,114μm,0.4s | | | | | | | |
| MSRU | | | | | AML | AML | | |
| | comp=E,122μm,0.4s | | | | | | | |
| MPNC | **Port Mandanici** | **0.90** | **141** | P | | **Pn** | **12 04 47.6** | **+0.3** |
| NOV | **Novara** | **0.91** | **155** | P | | **Pn** | **12 04 48.6** | **+1.2** |
| NOV | | | | | AML | AML | | |
| | comp=E,204μm,0.4s | | | | | | | |
| NOV | | | | | AML | AML | | |
| | comp=N,168μm,0.6s | | | | | | | |
| AIO | **Antillo** | **1.00** | **152** | P | | **Pn** | **12 04 48.5** | **+0.7** |
| JOPP | **Joppolo** | **1.00** | **104** | P | | **Pn** | **12 04 48.2** | **+0.6** |
| JOPP | | | | S | | **S** | **12 05 22.9** | **-1.2** |
| JOPP | | | | | AML | AML | | |
| | comp=E,26μm,0.4s | | | | | | | |
| JOPP | | | | | AML | AML | | |
| | comp=N,39μm,1.0s | | | | | | | |
| JOPP | | | | | AML | AML | | |
| | comp=E,93μm,1.3s | | | | | | | |
| JOPP | | | | | AML | AML | | |
| | comp=N,97μm,0.9s | | | | | | | |
| JOPP | | | | | AML | AML | | |
| | comp=E,93μm,0.7s | | | | | | | |
| EPZF | **Pizzo Felice** | **1.04** | **171** | P | | **Pn** | **12 04 49.5** | **+1.5** |
| GALF | **Gagliano Caste** | **1.14** | **183** | P | | **Pn** | **12 04 49.2** | **+0.8** |
| GALF | | | | | AML | AML | | |
| | comp=E,37μm,0.5s | | | | | | | |
| GALF | | | | | AML | AML | | |
| | comp=N,31μm,1.0s | | | | | | | |
| CEL | **Celeste** | **1.15** | **121** | P | | **Pn** | **12 04 48.6** | **+0.3** |
| CEL | | | | S | | **S** | **12 05 23.9** | **-1.4** |
| CEL | | | | | AML | AML | | |
| | comp=E,81μm,1.2s | | | | | | | |
| CEL | | | | | AML | AML | | |
| | comp=N,59μm,0.2s | | | | | | | |
| MPG | **Monte Pellegri** | **1.22** | **236** | ↓P | | **Pn** | **12 04 48.8** | **+0.2** |
| MPG | | | | | AML | AML | | |
| | comp=E,105μm,0.3s | | | | | | | |
| MPG | | | | | AML | AML | | |
| | comp=N,76μm,0.8s | | | | | | | |
| MPG | | | | | AML | AML | | |
| | comp=N,76μm,1.2s | | | | | | | |
| MPG | | | | | AML | AML | | |
| | comp=E,105μm,1.7s | | | | | | | |
| CET2 | **Cetraro** | **1.22** | **56** | P | | **Pn** | **12 04 49.5** | **+0.9** |
| CET2 | | | | S | | **S** | **12 05 25.8** | **0.0** |
| CET2 | | | | | AML | AML | | |
| | comp=E,90μm,0.8s | | | | | | | |
| CET2 | | | | | AML | AML | | |
| | comp=N,154μm,0.8s | | | | | | | |
| CET2 | | | | | AML | AML | | |
| | comp=E,90μm,1.2s | | | | | | | |
| CET2 | | | | | AML | AML | | |
| | comp=N,154μm,1.2s | | | | | | | |
| CAR1 | **CAROLEI** | **1.29** | **71** | P | | **Pn** | **12 04 49.5** | **+0.6** |
| CAR1 | | | | S | | **S** | **12 05 25.3** | **-1.1** |
| CAR1 | | | | | AML | AML | | |
| | comp=E,5615μm,1.2s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=N,7035μm,1.3s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=E,6205μm,1.1s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=N,7860μm,1.1s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=E,110μm,0.9s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=N,115μm,1.5s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=N,7860μm,0.9s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=E,6205μm,0.9s | | | | | | | |
| CAR1 | | | | | AML | AML | | |
| | comp=N,115μm,0.5s | | | | | | | |
| RESU | **Resuttano** | **1.29** | **201** | P | | **Pn** | **12 04 50.6** | **+1.6** |
| GRIS | **Grisolia** | **1.29** | **46** | P | | **Pn** | **12 04 50.0** | **+1.1** |
| ALJA | **Alia** | **1.30** | **213** | P | | **Pn** | **12 04 49.8** | **+0.7** |
| ALJA | | | | | AML | AML | | |
| | comp=N,114μm,0.4s | | | | | | | |
| ALJA | | | | | AML | AML | | |
| | comp=E,130μm,1.2s | | | | | | | |
| SOI | **Samo** | **1.36** | **125** | P | | **Pn** | **12 04 50.0** | **+0.7** |
| SOI | | | | S | | **S** | **12 05 26.4** | **-0.7** |
| SOI | | | | | AML | AML | | |
| | comp=N,64μm,1.1s | | | | | | | |
| SOI | | | | | AML | AML | | |
| | comp=E,48μm,1.3s | | | | | | | |
| SOI | | | | | AML | AML | | |
| | comp=N,64μm,0.9s | | | | | | | |
| EPOZ | **Pozzillo** | **1.38** | **165** | | AML | AML | | |
| | comp=E,1845μm,0.1s | | | | | | | |
| EPOZ | | | | | AML | AML | | |
| | comp=N,1175μm,0.2s | | | | | | | |
| GRI | **Girifalco** | **1.39** | **91** | P | | **Pn** | **12 04 50.7** | **+1.3** |
| GRI | | | | | AML | AML | | |
| | comp=N,138μm,0.7s | | | | | | | |
| GRI | | | | | AML | AML | | |
| | comp=E,190μm,0.6s | | | | | | | |
| CORL | **Corleone** | **1.42** | **228** | P | | **Pn** | **12 04 50.2** | **+0.5** |
| CORL | | | | | AML | AML | | |
| | comp=E,94μm,1.1s | | | | | | | |
| CORL | | | | | AML | AML | | |
| | comp=N,132μm,0.3s | | | | | | | |
| PLAC | **Placanica** | **1.46** | **105** | P | | **Pn** | **12 04 50.7** | **+0.8** |
| PLAC | | | | S | | **S** | **12 05 26.9** | **-1.2** |
| PLAC | | | | | AML | AML | | |
| | comp=E,122μm,0.3s | | | | | | | |
| PLAC | | | | | AML | AML | | |
| | comp=N,90μm,0.4s | | | | | | | |
| HLNI | **Lentini** | **1.51** | **173** | P | | **Pn** | **12 04 50.5** | **+0.4** |
| CMPR | **Campora** | **1.55** | **19** | P | | **Pn** | **12 04 51.3** | **+1.0** |
| MBFT | **Monte Bonifato** | **1.60** | **236** | P | | **Pn** | **12 04 51.0** | **+0.3** |
| SERS | **Sersale** | **1.61** | **83** | P | | **Pn** | **12 04 52.0** | **+1.3** |
| SERS | | | | | AML | AML | | |
| | comp=E,67μm,1.1s | | | | | | | |
| SERS | | | | | AML | AML | | |
| | comp=N,70μm,0.5s | | | | | | | |
| SERS | | | | | AML | AML | | |
| | comp=E,67μm,1.1s | | | | | | | |
| SERS | | | | | AML | AML | | |
| | comp=N,70μm,1.5s | | | | | | | |
| RAFF | **Raffo Rosso** | **1.64** | **188** | P | | **Pn** | **12 04 51.7** | **+0.8** |
| SALB | **San Lorenzo Be** | **1.67** | **52** | P | | **Pn** | **12 04 52.7** | **+1.7** |
| TIP | **Timpagrande** | **1.68** | **78** | P | | **Pn** | **12 04 52.5** | **+1.4** |
| TIP | | | | S | | **S** | **12 05 29.9** | **-0.6** |
| TIP | | | | | AML | AML | | |
| | comp=E,57μm,1.0s | | | | | | | |
| TIP | | | | | AML | AML | | |
| | comp=N,51μm,0.6s | | | | | | | |
| MFNL | **Monte Finestre** | **1.72** | **232** | | AML | AML | | |
| | comp=N,242μm,0.1s | | | | | | | |
| MFNL | | | | | AML | AML | | |
| | comp=E,189μm,0.7s | | | | | | | |
| MMGO | **Monte Magaggia** | **1.77** | **228** | P | | **Pn** | **12 04 51.9** | **+0.2** |
| MMGO | | | | | AML | AML | | |
| | comp=N,32μm,1.3s | | | | | | | |
| MMGO | | | | | AML | AML | | |
| | comp=E,40μm,0.3s | | | | | | | |
| MMGO | | | | | AML | AML | | |
| | comp=N,32μm,1.3s | | | | | | | |
| CLTA | **Licata** | **1.77** | **198** | P | | **Pn** | **12 04 52.8** | **+1.0** |
| CLTA | | | | | AML | AML | | |
| | comp=N,76μm,1.1s | | | | | | | |
| CLTA | | | | | AML | AML | | |
| | comp=N,76μm,1.1s | | | | | | | |
| CLTA | | | | | AML | AML | | |
| | comp=E,55μm,0.4s | | | | | | | |
| CLTA | | | | | AML | AML | | |
| | comp=N,76μm,0.9s | | | | | | | |
| PIPA | **Pietrapaola** | **1.81** | **69** | P | | **Pn** | **12 04 53.5** | **+1.7** |
| LADO | **San Nicola del** | **1.87** | **76** | P | | **Pn** | **12 04 53.7** | **+1.4** |
| HMDC | **Modica** | **1.90** | **177** | P | | **Pn** | **12 04 53.9** | **+1.3** |
| MARS | **Marsala (TP) I** | **1.97** | **237** | P | | **Pn** | **12 04 54.4** | **+1.4** |
| ESDC | **Sonseca Array** | **14.44** | **279** | Pn | | **P** | **12 07 11.5** | **+0.9** |
| | comp=N,0.1nm,0.3s,baz=82,slow=11,SNR=7.8 | | | | | | | |
| | comp=N,0.8nm,0.7s | | | | | | | |
| HFS | **Hagfors** | **21.31** | **359** | P | | **P** | **12 08 20.1** | **-1.7** |
| | comp=N,1.4nm,0.6s,baz=173,slow=13,SNR=2.8 | | | | | | | |
| | comp=N,1.4nm,0.6s | | | | | | | |
| FINES | **FINESS Array B** | **23.70** | **14** | P | | **P** | **12 08 42.1** | **-1.3** |
| | comp=N,2.4nm,0.8s,baz=188,slow=8.4,SNR=6.4 | | | | | | | |
| | comp=N,2.4nm,0.8s | | | | | | | |
| ARCES | **ARCESS Array B** | **31.29** | **7** | P | | P | 12 09 48.0 | -2.5 |
| | comp=N,1.7nm,0.7s,baz=184,slow=11,SNR=4.3 | | | | | | | |
| | comp=N,1.7nm,0.7s | | | | | | | |

*IDC **21** 12:06:59.9±1.5, 12.76N×87.46W, h0km, mb4.0/4, mbtmp3.9/6, ML3.3/2, MS3.3/3, Error ellipse: s-maj=66.2km s-min=19.0km az=42.0*
*CATAC **21** 12:07:01.3±0.6, 12.23N×88.03W, h14km±4km, ML4.1*
*SNET **21** 12:07:01.6±2.2, 12.29N×88.00W, h20km, ML4.0*
*UCR **21** 12:07:04.1±0.9, 12.35N×87.93W, h35km, MB4.3(NEIC)*
*NEIC **21** 12:07:04.5±2.3, 12.35N±0.08×87.93W±0.02, h35km±2km, mb4.3/95, Error ellipse: s-maj=14.4km s-min=3.0km az=190.0*
**ISC 21 12:07:00.4±1.3, 12.26N±0.05×88.00W±0.03, h15km±7km, n173, σ1s09/192, mb4.3/49, MS3.4/3, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JUCU | **Jucuarįn** | **1.02** | **346** | *eP* | | **Pn** | **12 07 20.3** | **+0.1** |
| JUCU | | | | *eS* | | **Sg** | **12 07 33.8** | **+0.3** |
| JUCU | **Jucuarįn** | **1.02** | **346** | *i* P | | **Pn** | **12 07 20.5** | **+0.2** |
| JUCU | | | | | IAML | | 12 07 45.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| CNCH | **Conchagua** | **1.02** | **9** | *eP* | | **Pn** | **12 07 21.1** | **+0.7** |
| CNCH | **Conchagua** | **1.02** | **9** | *i* P | | **Pn** | **12 07 21.5** | **+1.1** |
| CNCH | | | | *i* S | | **Sn** | **12 07 35.7** | **+1.1** |
| CNCH | | | | | IAML | | 12 07 43.5 | |
| | comp=Z,16μm,1.0s | | | | | | | |
| CRIN | **San Cristobal** | **1.03** | **65** | | | **Pn** | **12 07 21.5** | **+1.1** |
| CRIN | **San Cristobal** | **1.03** | **65** | *i* P | | **Pn** | **12 07 21.7** | **+1.3** |
| CRIN | | | | | IAML | | 12 07 44.2 | |
| | comp=Z,20μm,1.0s | | | | | | | |
| CRIN | **San Cristobal** | **1.03** | **65** | *eP* | | **Pn** | **12 07 21.3** | **+0.9** |
| LCND | **La Caada** | **1.05** | **6** | *eP* | | **Pg** | **12 07 21.3** | **+0.5** |
| LCND | | | | *eS* | | **Sn** | **12 07 35.8** | **+0.7** |
| LCND | **La Caada** | **1.05** | **6** | *i* P | | **Pg** | **12 07 21.3** | **+0.5** |
| LCND | | | | *i* P | | **Pn** | **12 07 22.5** | **+1.8** |
| LCND | | | | *i* S | | **Sn** | **12 07 35.8** | **+0.7** |
| LCND | | | | | IAML | | 12 07 45.4 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| PKGN | **Cerro Pekin** | **1.08** | **68** | *i* P | | **Pg** | **12 07 22.1** | **+0.7** |
| PKGN | | | | *i* S | | **Sn** | **12 07 37.3** | **+1.5** |
| PKGN | | | | | IAML | | 12 07 40.9 | |
| | comp=Z,28μm,1.0s | | | | | | | |
| QUEN | **Al S del Volca** | **1.17** | **74** | *i* P | | **Pn** | **12 07 21.8** | **-0.6** |
| QUEN | | | | | IAML | | 12 07 41.6 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| LCY | **Lacayo** | **1.19** | **346** | *eP* | | **Pg** | **12 07 23.5** | **+0.1** |
| VSM | **San Miguel** | **1.19** | **347** | *eP* | | **Pg** | **12 07 23.6** | **+0.1** |
| HERN | **Volcan Telica** | **1.20** | **73** | *i* P | | **Pg** | **12 07 23.2** | **-0.4** |
| HERN | | | | *i* S | | **Sg** | **12 07 40.6** | **+1.4** |
| HERN | | | | | IAML | | 12 07 46.1 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| CNGA | **Al SSO del Vol** | **1.29** | **79** | *i* P | | **Pn** | **12 07 22.3** | **-1.7** |
| CNGA | | | | | IAML | | 12 07 48.4 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| CNGN | **Cerro Negro** | **1.30** | **79** | | | **Pb** | **12 07 24.4** | **-0.2** |
| CNGN | **Cerro Negro** | **1.30** | **79** | *i* P | | **Pg** | **12 07 25.0** | **-0.5** |
| CNGN | | | | *i* S | | **Sg** | **12 07 43.5** | **+1.1** |
| CNGN | | | | | IAML | | 12 07 50.0 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| CNGN | **Cerro Negro** | **1.30** | **79** | *eP* | | **Pn** | **12 07 24.1** | **0.0** |
| ILCN | **San Idelfonso** | **1.31** | **76** | *i* P | | **Pb** | **12 07 24.8** | **0.0** |
| ILCN | | | | *i* S | | **Sg** | **12 07 43.1** | **+0.3** |
| ILCN | | | | | IAML | | 12 07 49.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| MACN | **El Madrono** | **1.31** | **81** | *i* P | | **Pg** | **12 07 25.6** | **-0.2** |
| MACN | | | | | IAML | | 12 07 58.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| TECA | **Tecapa** | **1.32** | **338** | *eP* | | **Pn** | **12 07 24.8** | **+0.2** |
| LEVN | **Ruinas Leon Vi** | **1.36** | **84** | *i* P | | **Pg** | **12 07 26.2** | **-0.5** |
| LEVN | | | | *i* S | | **Sg** | **12 07 45.8** | **+1.3** |
| LEVN | | | | | IAML | | 12 07 55.4 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| COPN | **Copaltepe** | **1.38** | **93** | *i* P | | **Pb** | **12 07 26.1** | **+0.1** |
| COPN | | | | | IAML | | 12 07 50.6 | |
| | comp=Z,4μm,1.0s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BC86 | **Nagarote** | **1.41** | **90** | *i* P | | **Pb** | **12 07 26.4** | **0.0** |
| BC86 | | | | *i* S | | **Sg** | **12 07 45.3** | **-0.6** |
| BC86 | | | | | IAML | | 12 07 49.2 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| PQSS | **Presa 15 de Se** | **1.46** | **338** | *eP* | | **Pn** | **12 07 26.8** | **+0.5** |
| PQSS | | | | *eS* | | **Sn** | **12 07 44.9** | **-0.4** |
| PQSS | **Presa 15 de Se** | **1.46** | **338** | *i* P | | **Pb** | **12 07 27.2** | **-0.2** |
| PQSS | | | | *i* S | | **Sb** | **12 07 46.3** | **+0.5** |
| PQSS | | | | | IAML | | 12 07 51.4 | |
| | comp=Z,880nm,1.0s | | | | | | | |
| TECO | **Alcaldia de Te** | **1.48** | **329** | *eP* | | **Pn** | **12 07 26.7** | **+0.1** |
| TECO | | | | *eS* | | **Sn** | **12 07 44.6** | **-1.1** |
| TECO | **Alcaldia de Te** | **1.48** | **329** | *i* P | | **Pb** | **12 07 28.0** | **+0.3** |
| TECO | | | | | IAML | | 12 07 53.2 | |
| | comp=Z,910nm,1.0s | | | | | | | |
| MOM2 | **El Cardon** | **1.50** | **83** | *i* P | | **Pb** | **12 07 28.0** | **+0.1** |
| MOM2 | | | | *i* S | | **Sg** | **12 07 48.0** | **-0.7** |
| MOM2 | | | | | IAML | | 12 08 02.3 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| CAHU | **Cacacuatique** | **1.52** | **352** | *eP* | | **Pb** | **12 07 28.6** | **+0.2** |
| SAPS | **Ciudad Sandino** | **1.56** | **93** | *i* P | | **Pb** | **12 07 29.3** | **+0.2** |
| SAPS | | | | *i* S | | **Sg** | **12 07 50.0** | **-0.9** |
| SAPS | | | | | IAML | | 12 07 57.8 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| UESV | **Universidad de** | **1.57** | **331** | *i* P | | **Pb** | **12 07 29.3** | **+0.1** |
| UESV | | | | *i* S | | **Sb** | **12 07 49.7** | **+0.8** |
| UESV | | | | | IAML | | 12 07 58.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| SNVI | **San Vicente** | **1.57** | **329** | *eP* | | **Pb** | **12 07 29.2** | **-0.2** |
| APQ3 | **Volcan Apoyequ** | **1.60** | **89** | *i* P | | **Pb** | **12 07 29.4** | **-0.3** |
| APQ3 | | | | | IAML | | 12 07 55.3 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| COEG | **Centro de Oper** | **1.60** | **328** | *eP* | | **Pb** | **12 07 29.5** | **-0.2** |
| COEG | | | | *eS* | | **Sn** | **12 07 48.8** | **+0.1** |
| COEG | **Centro de Oper** | **1.60** | **328** | *i* P | | **Pb** | **12 07 30.1** | **+0.3** |
| COEG | | | | | IAML | | 12 07 57.5 | |
| | comp=Z,750nm,1.0s | | | | | | | |
| APQ2 | **Apoyeque** | **1.64** | **92** | *i* P | | **Pb** | **12 07 30.0** | **-0.4** |
| APQ2 | | | | | IAML | | 12 07 54.4 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| ABCN | **Banco Central** | **1.66** | **95** | *i* P | | **Pb** | **12 07 30.5** | **-0.3** |
| ABCN | | | | | IAML | | 12 07 55.0 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| TISN | **Laguna Tiscapa** | **1.70** | **94** | *i* P | | **Pn** | **12 07 29.8** | **+0.2** |
| TISN | | | | | IAML | | 12 08 00.8 | |
| | comp=Z,260nm,1.0s | | | | | | | |
| LFRS | **El Faro** | **1.70** | **323** | *eP* | | **Pn** | **12 07 29.9** | **+0.1** |
| LFRS | | | | *eS* | | **Sn** | **12 07 51.5** | **+0.1** |
| R4DEC | **Barrio San Lui** | **1.72** | **93** | *i* P | | **Pb** | **12 07 30.9** | **-0.9** |
| R4DEC | | | | *i* P | | **Pb** | **12 07 30.9** | **-0.9** |
| R4DEC | | | | *i* S | | **Sb** | **12 07 53.0** | **-0.2** |
| R4DEC | | | | | IAML | | 12 07 59.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| R4DEC | | | | | IAML | | 12 07 59.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| MGAN | **Managua** | **1.72** | **94** | Pn | | **Pn** | **12 07 30.0** | **+0.1** |
| R0529 | **La Mascota** | **1.73** | **94** | *i* P | | **Pb** | **12 07 31.2** | **-0.8** |
| R0529 | | | | | IAML | | 12 07 59.0 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| LALI | **Alcalda de L** | **1.77** | **314** | *eP* | | **Pn** | **12 07 30.3** | **-0.3** |
| LALI | | | | *eS* | | **Sn** | **12 07 51.6** | **-1.3** |
| WILN | **Americas 2** | **1.78** | **93** | *i* P | | **Pb** | **12 07 31.7** | **-1.1** |
| WILN | | | | *i* S | | **Sb** | **12 07 54.5** | **-0.4** |
| WILN | | | | | IAML | | 12 08 06.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| LOMA | **Loma Larga** | **1.79** | **321** | *eP* | | **Pn** | **12 07 31.8** | **+0.9** |
| LOMA | | | | *eS* | | **Sn** | **12 07 53.7** | **+0.3** |
| LOMA | **Loma Larga** | **1.79** | **321** | *i* P | | **Pn** | **12 07 31.9** | **+1.0** |
| LOMA | | | | | IAML | | 12 07 58.3 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| HUEN | | **1.79** | **87** | *i* P | | **Pb** | **12 07 32.2** | **-0.8** |
| HUEN | | | | | IAML | | 12 07 59.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| MASN | **Masaya** | **1.83** | **98** | *i* P | | **Pb** | **12 07 32.8** | **-0.9** |
| MASN | | | | | IAML | | 12 08 03.3 | |
| | comp=Z,930nm,1.0s | | | | | | | |
| SNET | **Serv Nac Est T** | **1.86** | **320** | Pn | | **Pn** | **12 07 32.8** | **+0.9** |
| BOQS | **Boqueron** | **1.92** | **320** | *eP* | | **Pn** | **12 07 33.4** | **+0.5** |
| BOQS | | | | *eS* | | **Sn** | **12 07 57.3** | **+0.4** |
| TGUH | **Tegucigalpa,Un** | **1.92** | **22** | | | **Pb** | **12 07 34.4** | **-0.9** |
| PMON | **Piamonte** | **1.93** | **319** | *i* P | | **Pb** | **12 07 34.4** | **-1.0** |
| PMON | | | | | IAML | | 12 08 05.8 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| JAYA | **Jayaque - finc** | **1.98** | **315** | *eP* | | **Pn** | **12 07 34.0** | **+0.5** |
| JAYA | | | | *eS* | | **Sn** | **12 07 56.7** | **-1.5** |
| JAYA | **Jayaque - finc** | **1.98** | **315** | *i* P | | **Pn** | **12 07 34.1** | **+0.5** |
| JAYA | | | | | IAML | | 12 08 03.7 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| NUBE | **Las Nubes** | **2.38** | **314** | *eP* | | **Pn** | **12 07 39.0** | **-0.1** |
| NUBE | | | | *eS* | | **Sn** | **12 08 06.8** | **-1.4** |
| NUBE | **Las Nubes** | **2.38** | **314** | *i* P | | **Pn** | **12 07 39.3** | **+0.2** |
| NUBE | | | | *i* S | | **Sn** | **12 08 08.9** | **+0.8** |
| NUBE | | | | | IAML | | 12 08 14.3 | |
| | comp=Z,920nm,1.0s | | | | | | | |
| JAPN | **Al SSO del Vol** | **2.39** | **108** | *i* P | | **Pn** | **12 07 40.6** | **+1.5** |
| JAPN | | | | | IAML | | 12 08 21.2 | |
| | comp=Z,730nm,1.0s | | | | | | | |
| SLOZ | **Alcaldia de Sa** | **2.47** | **316** | *eP* | | **Pn** | **12 07 40.5** | **+0.3** |
| MTO3 | **Montecristo** | **2.50** | **328** | | | **Pn** | **12 07 41.5** | **+0.7** |
| MTO3 | **Montecristo** | **2.50** | **328** | *eP* | | **Pn** | **12 07 42.1** | **+1.2** |
| MTO3 | **Montecristo** | **2.50** | **328** | *i* P | | **Pn** | **12 07 42.0** | **+1.2** |
| MTO3 | | | | | IAML | | 12 08 10.2 | |
| | comp=Z,250nm,1.0s | | | | | | | |
| ACON | **Acoyapa** | **2.78** | **96** | | | **Pn** | **12 07 44.4** | **-0.1** |
| ACON | **Acoyapa** | **2.78** | **96** | *i* P | | **Pn** | **12 07 45.3** | **+0.8** |
| ACON | | | | | IAML | | 12 08 36.1 | |
| | comp=Z,370nm,1.0s | | | | | | | |
| ACON | **Acoyapa** | **2.78** | **96** | *eP* | | **Pn** | **12 07 45.0** | **+0.5** |
| ALIBA | **Liberia Airpor** | **2.92** | **124** | *eP* | | **Pn** | **12 07 48.4** | **+2.0** |
| CUI | **Cuipilapa** | **3.21** | **119** | *eP* | | **Pn** | **12 07 52.5** | **+2.1** |
| JTS | **Las Juntas de** | **3.58** | **123** | Pn | | **Pn** | **12 07 57.3** | **+1.9** |
| JTS | **Las Juntas de** | **3.58** | **123** | Pn | | **Pn** | **12 07 56.4** | **+1.0** |
| | comp=Z,3.7nm,0.3s,baz=306,slow=19,SNR=16 | | | | | | | |
| JTS | | | | | Sn | **Sn** | **12 08 37.9** | **+0.5** |
| | comp=Z,16nm,0.3s,baz=249,slow=16,SNR=7.2 | | | | | | | |
| | comp=Z,9.9nm,0.3s | | | | | | | |
| JTS | **Las Juntas de** | **3.58** | **123** | *eP* | | **Pn** | **12 07 57.0** | **+1.5** |
| ESPN | **Las Esperanzas** | **3.62** | **91** | Pn | | **Pn** | **12 07 56.3** | **+0.3** |
| APG | **El Apazote** | **3.63** | **319** | Pn | | **Pn** | **12 07 59.0** | **+2.6** |
| | baz=124,slow=11,SNR=2.5 | | | | | | | |
| APG | | | | | Sn | **Sn** | **12 08 42.9** | **+3.8** |
| | comp=Z,0.1nm,0.3s,baz=302,slow=18,SNR=6.2 | | | | | | | |
| SOCE | **Pocosol** | **3.81** | **119** | | | **Pn** | **12 07 58.9** | **+0.3** |
| RTAL | **Retalhuleu** | **4.24** | **302** | Pn | | **Pn** | **12 08 05.3** | **+0.8** |
| HDC | **Heredia** | **4.43** | **120** | Pn | | **Pn** | **12 08 07.0** | **-0.2** |
| LCR2 | **La Lucha 2** | **4.66** | **122** | Pn | | **Pn** | **12 08 14.0** | **+3.6** |
| BUS1 | **Rivas** | **4.97** | **122** | *eP* | | **Pn** | **12 08 17.9** | **+2.8** |
| DRK0 | **Durika** | **5.54** | **122** | *eP* | | **Pn** | **12 08 25.6** | **+2.9** |
| CCIG | **Comitan** | **5

comp=Z,11nm,0.8s
HODGE **Hodges** **22.49 13** P **P** **12 11 59.9 +0.5**
HODGE IAmb IAmb 12 12 03.1
comp=Z,12nm,1.0s
**PLPT** **Palo Pinto** **22.54 337** P **P** **12 11 59.1 -0.9**
PLPT IAmb IAmb 12 12 04.3
comp=Z,6.3nm,0.7s
**X40A** **Basin Creek Fa** **22.56 350** P **P** **12 11 58.9 -1.3**
**PLAL** **Pickwick Lake** **22.62 360** P **P** **12 11 60.0 -0.8**
**MIAR** **Mount Ida** **22.76 348** P **P** **12 12 02.1 -0.2**
MIAR IAmb IAmb 12 12 06.1
comp=Z,12nm,0.8s
**UALR** **University of** **22.76 351** P **P** **12 12 02.3 0.0**
**JSC** **Jenkinsville** **22.77 15** P **P** **12 12 00.6 -1.7**
JSC IAmb IAmb 12 12 13.2
comp=Z,14nm,1.3s
**SWET** **Sewanee** **22.93 4** P **P** **12 12 02.4 -1.7**
**SGCY** **Sterling City** **22.99 330** P **P** **12 12 05.6 +0.8**
SGCY IAmb IAmb 12 12 08.4
comp=Z,10nm,0.8s
**W52A** **Murphy** **23.03 9** P **P** **12 12 03.3 -1.8**
W52A IAmb IAmb 12 12 16.6
comp=Z,9.0nm,1.0s
**BG3** **Lake Jocassee** **23.10 11** P **P** **12 12 03.5 -2.3**
BG3 IAmb IAmb 12 12 09.0
comp=Z,6.6nm,0.8s
**ALPN** **Alpine** **23.12 324** P **P** **12 12 05.7 -0.6**
ALPN IAmb IAmb 12 12 10.0
comp=Z,6.8nm,0.9s
**PAULI** **Pauline** **23.15 13** P **P** **12 12 04.4 -2.0**
PAULI IAmb IAmb 12 12 09.4
comp=Z,10nm,1.1s
**WHAR** **Wooly Hollow** **23.26 351** P **P** **12 12 07.5 +0.1**
WHAR IAmb IAmb 12 12 10.0
comp=Z,7.2nm,0.9s
**MNHN** **Monahans** **23.37 327** P **P** **12 12 09.0 +0.4**
**TKL** **Tuckaleechee C** **23.61 9** P **P** **12 12 12.3 +1.4**
TKL IAmb IAmb 12 12 14.2
comp=Z,12nm,0.9s
**SN05** **Snyder 5** **23.68 332** P **P** **12 12 12.9 +1.3**
SN05 IAmb IAmb 12 12 14.6
comp=Z,9.8nm,0.8s
**APMT** **Aspermont** **23.72 334** P **P** **12 12 12.8 +0.7**
APMT IAmb IAmb 12 12 14.3
comp=Z,12nm,1.2s
**CLTN** **Cedars of Leba** **23.78 3** P **P** **12 12 12.7 +0.2**
**FCAR** **Ozark Folk Cen** **23.82 352** P **P** **12 12 13.5 +0.6**
**SN07** **Snyder 07** **23.86 332** P **P** **12 12 13.7 +0.3**
SN07 IAmb IAmb 12 12 15.6
comp=Z,5.2nm,0.7s
**ODSA** **Odessa** **23.87 328** P **P** **12 12 14.4 +0.8**
ODSA IAmb IAmb 12 12 17.1
comp=Z,12nm,0.8s
**LCAR** **Lake Charles** **23.88 354** P **P** **12 12 12.9 -0.5**
**X34A** **Smith Ranch, M** **23.97 340** P **P** **12 12 15.5 +1.1**
**POST** **Post** **24.12 331** P **P** **12 12 15.9 0.0**
**VHRN** **Van Horn** **24.22 322** P **P** **12 12 14.9 -2.0**
**DKNS** **Dickens** **24.36 333** P **P** **12 12 18.3 +0.2**
**WMOK** **Wichita Mounta** **24.43 338** P **P** **12 12 18.1 -0.5**
**FNO** **Franklin** **24.43 341** P **P** **12 12 18.9 +0.2**
**HHAR** **Hobbs** **24.51 348** P **P** **12 12 19.2 -0.2**
HHAR IAmb IAmb 12 12 22.5
comp=Z,5.0nm,0.7s
**TZTN** **Tazewell** **24.51 9** P **P** **12 12 18.1 -1.2**
TZTN IAmb IAmb 12 12 46.1
comp=Z,7.7nm,1.1s
**PBMO** **Poplar Bluff** **24.51 355** P **P** **12 12 18.6 -0.7**
PBMO IAmb IAmb 12 12 20.7
comp=Z,7.4nm,0.8s
**DEOK** **Depew** **24.70 343** P **P** **12 12 21.4 +0.3**
**U38A** **Gravette** **24.75 348** P **P** **12 12 21.1 -0.4**
U38A IAmb IAmb 12 12 24.8
comp=Z,11nm,1.0s
**U54A** **Nelsons Funny** **24.79 12** P **P** **12 12 22.0 0.0**
U54A IAmb IAmb 12 12 33.8
comp=Z,15nm,1.1s
**T42A** **Van Buren** **24.82 354** P **P** **12 12 20.1 -2.1**
**OK031** **S. Brethren Rd** **24.90 343** P **P** **12 12 22.9 0.0**
OK031 IAmb IAmb 12 12 24.3
comp=Z,12nm,0.9s
**OK052** **Battle Ridge R** **24.93 343** P **P** **12 12 22.3 -0.8**
OK052 IAmb IAmb 12 12 24.5
comp=Z,13nm,1.0s
**SMWD** **Samnorwood** **25.31 336** P **P** **12 12 27.4 +0.8**
**MSTX** **Muleshoe** **25.46 330** P **P** **12 12 28.7 +0.5**
**AMTX** **Amarillo** **25.72 333** P **P** **12 12 31.3 +0.9**
AMTX IAmb IAmb 12 12 35.4
comp=Z,9.9nm,0.8s
**S39A** **Bolivar** **25.77 350** P **P** **12 12 30.9 +0.1**
S39A IAmb IAmb 12 12 32.5
comp=Z,7.5nm,0.7s
**CCM** **Cathedral Cave** **25.85 354** P **P** **12 12 31.3 -0.2**
CCM IAmb IAmb 12 12 32.8
comp=Z,6.9nm,0.8s
**NOKA** **Waynoka** **26.19 340** P **P** **12 12 35.1 +0.5**
**SSFO** **Shawnee State** **26.67 8** P **P** **12 12 36.8 -2.1**
**121A** **Cookes Peak, D** **27.14 321** P **P** **12 12 42.6 -0.8**
**SDCO** **Great Sand Dun** **29.82 331** P **P** **12 13 08.2 +0.9**
**ETMB** **Extrema** **30.82 134** P **P** **12 13 17.7 +1.7**
ETMB IAmb IAmb 12 13 23.3
comp=Z,3.0nm,0.7s
**SMCO** **Snowmass** **31.65 331** P **P** **12 13 25.2 +1.6**
**SAML** **Samuel** **32.44 129** P **P** **12 13 29.3 -1.1**
SAML IAmb IAmb 12 13 30.5
comp=Z,4.0nm,0.8s
**MTPU** **Mount Pierson** **33.53 324** IAmb IAmb 12 13 48.8
comp=Z,3.9nm,0.8s
**PFO** **Pinyon Flats O** **33.55 314** LR LR 12 29 01.8
comp=Z,31nm,18.7s,baz=206,slow=39
**RWWY** **Rawlins** **33.78 334** P **P** **12 13 43.8 +1.7**
RWWY IAmb IAmb 12 13 45.0
comp=Z,4.4nm,0.8s
**MPU** **Maple Canyon** **34.62 327** IAmb IAmb 12 13 53.3
comp=Z,2.6nm,0.7s
**PDAR** **Pinedale Array** **35.69 332** P **P** **12 13 59.1 +0.6**
comp=Z,1.2nm,0.7s,baz=126,slow=10,SNR=11
comp=Z,1.2nm,0.7s
**HWUT** **Hardware Ranch** **35.76 329** P **P** **12 14 00.6 +1.5**
HWUT IAmb IAmb 12 14 03.1
comp=Z,4.0nm,0.8s
**LOHW** **Long Hollow** **36.82 332** P **P** **12 14 09.0 +0.8**
LOHW IAmb IAmb 12 14 10.9
comp=Z,4.9nm,0.9s
**TPAW** **Teton Pass** **36.89 332** P **P** **12 14 09.2 +0.4**
**IMW** **Indian Meadow** **37.20 332** IAmb IAmb 12 14 19.2
comp=Z,2.7nm,0.8s
**RLMT** **Red Lodge** **37.45 335** IAmb IAmb 12 14 17.0
comp=Z,6.2nm,1.2s
**NVAR** **Mina Array Bea** **37.49 319** P **P** **12 14 16.6 +2.6**
comp=Z,0.7nm,0.8s,baz=140,slow=7.8,SNR=5.3
NVAR ScP **ScP** **12 20 21.4 +2.2**
comp=Z,0.3nm,0.6s,baz=111,slow=4.9,SNR=3.6
comp=Z,0.7nm,0.8s
**YMP** **Mirror Lake Pl** **37.51 334** IAmb IAmb 12 14 35.5
comp=Z,6.0nm,1.0s
**YFT** **Old Faithful** **37.58 333** P **P** **12 14 15.8 +1.1**
**ULM** **Lac du Bonnet** **38.43 352** P **P** **12 14 19.4 -2.0**
comp=Z,4.0nm,0.8s,baz=163,slow=11,SNR=4.8
comp=Z,4.0nm,0.8s
**BOZ** **Bozeman (W)** **38.83 333** P **P** **12 14 25.8 +0.7**
BOZ IAmb IAmb 12 14 29.3
comp=Z,7.2nm,1.1s
**DLMT** **Dillon** **39.08 332** P **P** **12 14 28.4 +1.2**
DLMT IAmb IAmb 12 14 30.2
comp=Z,6.9nm,0.9s
**BPMT** **Black Pine Rid** **40.28 333** P **P** **12 14 35.2 -2.1**
**MSO** **Missoula** **40.80 333** P **P** **12 14 42.5 +1.1**
MSO IAmb IAmb 12 14 44.2
comp=Z,7.6nm,1.2s
**F10A** **Beach Ranch, E** **41.74 329** P **P** **12 14 48.2 -1.0**
**YBH** **Yreka Blue Hor** **42.15 321** LR LR 12 34 08.3
comp=Z,46nm,18.0s,baz=162,slow=39
**D08A** **Wollman Farm,** **43.34 329** P **P** **12 15 02.7 +0.7**
D08A IAmb IAmb 12 15 05.3
comp=Z,3.0nm,0.7s
**C09A** **Chrisman Ranch** **43.53 330** P **P** **12 15 04.1 +0.5**
C09A IAmb IAmb 12 15 06.4
comp=Z,3.5nm,0.8s
**MXC** **Moxie City** **43.72 328** P **P** **12 15 05.3 +0.2**
**FFC** **Flin Flon** **43.77 348** P **P** **12 15 04.0 -1.3**
FFC IAmb IAmb 12 15 12.6
comp=Z,8.1nm,1.3s
**INK** **Inuvik** **63.23 343** LR LR 12 47 07.6
comp=Z,24nm,19.4s,baz=342,slow=38
**ASAR** **Alice Springs** **138.70 248** PKhKP PKPpre 12 26 25.5
comp=Z,0.5nm,1.1s,baz=107,slow=2.9,SNR=2.1
**WRA** **Warramunga Arr** **138.70 254** PKhKP PKPpre 12 26 24.8
comp=Z,0.3nm,0.7s,baz=92,slow=1.7,SNR=2.0
**CMAR** **Chiang Mai Arr** **148.72 347** PKPbc **PKPbc** **12 26 47.1 -1.0**
comp=Z,0.8nm,0.6s,baz=328,slow=3.2,SNR=4.5

**IDC 21 12:07:25.1±2.3, 3.36N×127.27E, h0km, mb3.4/3, mbtmp3.4/3, 1C, Error ellipse: s-maj=151.6km s-min=29.8km az=67.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TABP** | **Talibol, Bohol** | **7.29** | **337** | *e*P | Pn | 12 09 01.6 | -11 |
| TABP | | | | *e*S | | 12 09 23.9 | |
| **WRA** | **Warramunga Arr** | **24.18** | **164** | P | P | 12 12 43.7 | +0.3 |
| | 1.3nm,0.9s,baz=344,slow=10,SNR=3.4 | | | | | | |
| | 1.3nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **27.63** | **167** | P | P | 12 13 14.3 | -0.3 |
| | 0.2nm,0.7s,baz=341,slow=6.7,SNR=2.0 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.16** | **325** | P | P | 12 17 20.8 | -0.1 |
| | 0.5nm,0.9s,baz=138,slow=7.0,SNR=2.8 | | | | | | |
| | 0.5nm,0.9s | | | | | | |

**MEX 21 12:09:50.6±0.5, 15.23N×94.61W, h18km±18km, MD3.8, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CARR** | **Arriaga** | **1.21** | **33** | *e*P | Pn | 12 10 08.9 | -3.8 |
| CARR | | | | *e*S | Sb | 12 10 22.4 | -5.9 |
| **NILT** | **Santiago Nilte** | **1.32** | **360** | *e*S | Sn | 12 10 24.2 | -7.2 |
| **PCIG** | | **1.42** | **71** | *e*P | Pn | 12 10 12.4 | -3.1 |
| PCIG | | | | *e*S | Sn | 12 10 29.2 | -4.5 |
| **HUIG** | **Huatulco** | **1.54** | **290** | *e*P | Pn | 12 10 13.6 | -3.6 |
| HUIG | | | | *e*S | Sn | 12 10 30.2 | -6.6 |
| **CMIG** | **Matias Romero** | **1.87** | **352** | *e*P | Pn | 12 10 18.3 | -3.4 |
| CMIG | | | | *e*S | Sn | 12 10 39.7 | -5.1 |
| **TGIG** | | **2.10** | **43** | *e*P | Pn | 12 10 24.2 | -0.8 |
| TGIG | | | | *e*S | Sn | 12 10 47.8 | -2.9 |
| **UXUV** | **UXUV** | **2.12** | **12** | *e*P | Pn | 12 10 22.9 | -2.2 |
| UXUV | | | | *e*S | Sn | 12 10 47.6 | -3.5 |
| **PAVE** | **Pavencul** | **2.35** | **91** | *e*P | Pn | 12 10 26.0 | -2.5 |
| PAVE | | | | *e*S | Sn | 12 10 53.2 | -3.8 |
| **CHUJ** | **Union Juarez** | **2.42** | **93** | *e*P | Pn | 12 10 26.7 | -2.8 |
| CHUJ | | | | *e*S | Sn | 12 10 53.4 | -5.4 |
| **PEIG** | **Puerto Escondi** | **2.56** | **288** | *e*S | Sn | 12 10 53.8 | -8.2 |

*CNRM **21** 12:18:23.3, 34.92N×0.36W, h8km, ML2.6*
*MDD **21** 12:18:35.0±1.8, 35.72N×1.17W, h0km, mb_Lg2.2/4, Error ellipse: s-maj=14.0km s-min=8.9km az=155.0*
**ISC 21 12:18:25.7±1.8, 35.37N±0.06×0.76W±0.09, h14km, n16, σ2s00/20, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAF** | **Taforalt** | **1.47** | **248** | P | **Pb** | **12 18 53.3** | **+0.4** |
| **TAF** | **Taforalt** | **1.47** | **248** | S | **Sg** | **12 19 15.4** | **+2.3** |
| **GOG** | **Mont Gurugu** | **1.84** | **266** | P | **Pb** | **12 18 59.1** | **-0.1** |
| **GOG** | **Mont Gurugu** | **1.84** | **266** | S | **Sg** | **12 19 28.7** | **+3.8** |
| **ENIJ** | **Nijar** | **1.98** | **324** | P | **Pb** | **12 19 01.2** | **-0.3** |
| ENIJ | | | | S | **Sn** | **12 19 22.0** | **-1.5** |
| ENIJ | | | | *i* Vmb_Lg | | 12 19 22.8 | |
| **CART** | **Cartagena** | **2.22** | **355** | P | **Pb** | **12 19 06.1** | **+0.5** |
| **CART** | **Cartagena** | **2.22** | **355** | S | **Sg** | **12 19 41.7** | **+4.6** |
| **EBER** | **Berja** | **2.30** | **312** | P | **Pb** | **12 19 05.8** | **-1.3** |
| EBER | | | | *i* Vmb_Lg | | 12 19 25.0 | |
| EBER | | | | S | **Sn** | **12 19 29.7** | **-1.9** |
| **EMUR** | **La Murta** | **2.50** | **351** | P | **Pb** | **12 19 10.3** | **0.0** |
| EMUR | | | | S | **Sn** | **12 19 36.4** | **+0.2** |
| EMUR | | | | *i* Vmb_Lg | | 12 19 38.7 | |
| **AKLM** | **AKL** | **2.69** | **252** | S | **Sb** | **12 19 47.1** | **+0.4** |
| **ELGU** | **Los Guajares,** | **2.76** | **304** | S | **Sn** | **12 19 39.6** | **-3.2** |
| **ETOB** | **Tobarra** | **3.33** | **349** | P | **Pb** | **12 19 23.2** | **-1.3** |
| ETOB | | | | S | **Sn** | **12 19 56.5** | **-0.3** |
| ETOB | | | | *i* Vmb_Lg | | 12 21 22.5 | |
| **MDT** | **Midelt** | **4.09** | **232** | P | **Pn** | **12 19 26.0** | **-1.9** |
| **MDT** | **Midelt** | **4.09** | **232** | S | **Sn** | **12 20 15.9** | **+0.3** |
| **MD31** | **MD31** | **4.16** | **234** | P | **Pn** | **12 19 27.3** | **-1.5** |
| **MD31** | **MD31** | **4.16** | **234** | S | **Sn** | **12 20 17.2** | **0.0** |

**IDC 21 12:33:14.6±2.2, 16.97S×177.77W, h0km, mb3.5/4, mbtmp3.5/4, Error ellipse: s-maj=131.3km s-min=28.9km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.41** | **259** | P | P | 12 41 35.7 | +0.2 |
| | 0.2nm,0.5s,baz=97,slow=7.7,SNR=7.2 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.64** | **253** | P | P | 12 41 36.9 | -0.4 |
| | 0.9nm,0.6s,baz=84,slow=8.5,SNR=8.2 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.84** | **13** | P | P | 12 45 50.2 | -0.5 |
| | 0.3nm,1.0s,baz=220,slow=6.3,SNR=5.0 | | | | | | |
| | 0.3nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.98** | **57** | P | P | 12 45 52.7 | +0.4 |
| | 0.3nm,0.6s,baz=236,slow=6.4,SNR=4.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

**TAP 21 12:45:39.0, 24.82N×121.91E, h9km, ML1.6, 1C-1D, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.04** | **30** | ⇓*i*P | Pg | 12 45 40.5 | -0.2 |
| EGS | baz=44 | | | *i* S | Sg | 12 45 42.0 | +0.1 |
| | baz=44 | | | | | | |
| **NTC** | **Toucheng** | **0.09** | **297** | P | Pg | 12 45 40.7 | -0.6 |
| NTC | baz=297 | | | S | Sg | 12 45 43.2 | +0.4 |
| | baz=297 | | | | | | |
| **ILA** | **Ilan** | **0.16** | **252** | P | Pg | 12 45 42.3 | -0.1 |
| ILA | baz=250 | | | S | Sg | 12 45 44.9 | +0.2 |
| | baz=250 | | | | | | |
| **TIPB** | **Shuangxi** | **0.17** | **333** | ⇑P | Pg | 12 45 42.7 | 0.0 |
| TIPB | baz=332 | | | S | Sg | 12 45 45.8 | +0.5 |
| | baz=332 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.20** | **20** | P | Pg | 12 45 42.8 | -0.4 |
| TWB1 | baz=21 | | | *e*S | Sg | 12 45 45.6 | -0.5 |
| | baz=21 | | | | | | |
| **TWC** | **Suao** | **0.21** | **196** | *e*P | Pg | 12 45 43.0 | -0.3 |
| TWC | baz=193 | | | *e*S | Sg | 12 45 46.0 | -0.3 |
| | baz=193 | | | | | | |
| **TWE** | **Neicheng** | **0.24** | **247** | P | Pg | 12 45 44.1 | +0.2 |
| TWE | baz=245 | | | S | Sg | 12 45 47.5 | +0.3 |
| | baz=245 | | | | | | |
| **ESAO** | **Su ao** | **0.25** | **195** | *i* P | Pg | 12 45 44.1 | +0.1 |
| ESAO | baz=194 | | | *e*S | Sg | 12 45 49.2 | +1.9 |
| | baz=194 | | | | | | |
| **NDS** | **Dongshan** | **0.25** | **225** | P | Pg | 12 45 44.4 | +0.3 |
| NDS | baz=224 | | | *e*S | Sb | 12 45 49.7 | -0.5 |
| | baz=224 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.28** | **353** | P | Pg | 12 45 44.5 | -0.1 |
| SXI1 | baz=352 | | | S | Sg | 12 45 48.7 | +0.3 |
| | baz=352 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.30** | **260** | P | Pg | 12 45 45.1 | +0.1 |
| FUSB | baz=259 | | | S | Sg | 12 45 49.0 | -0.1 |
| | baz=259 | | | | | | |
| **TWA** | **Mucha** | **0.34** | **299** | P | Pg | 12 45 45.4 | -0.3 |
| TWA | baz=299 | | | *i* S | Sg | 12 45 50.7 | +0.4 |
| | baz=299 | | | | | | |
| **TNOU** | **National Taiwa** | **0.36** | **339** | P | Pg | 12 45 46.1 | 0.0 |
| TNOU | baz=339 | | | *i* S | Sg | 12 45 51.5 | +0.7 |
| | baz=339 | | | | | | |
| **ENTT** | **Nioudou** | **0.36** | **241** | *e*P | Pg | 12 45 46.6 | +0.5 |
| ENTT | baz=240 | | | *e*S | Sg | 12 45 51.0 | +0.2 |
| | baz=240 | | | | | | |
| **NWLT** | **Wulai** | **0.38** | **264** | P | Pg | 12 45 46.3 | -0.1 |
| | baz=264 | | | | | | |
| NWLT | | | | *e*S | Sg | 12 45 50.9 | -0.4 |
| | baz=264 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.38** | **293** | *e*P | Pg | 12 45 45.5 | -1.0 |
| | baz=292 | | | | | | |
| NHDH | | | | *e*S | Sg | 12 45 50.9 | -0.7 |
| | baz=292 | | | | | | |
| **EWUT** | **Wuta** | **0.39** | **198** | *e*P | Pg | 12 45 46.8 | +0.2 |
| | baz=198 | | | | | | |
| EWUT | | | | *e*S | Sg | 12 45 51.3 | -0.4 |
| | baz=198 | | | | | | |
| **ENA** | **Nanau** | **0.42** | **202** | *e*P | Pb | 12 45 48.7 | +0.2 |
| | baz=201 | | | | | | |
| ENA | | | | *e*S | Sg | 12 45 52.3 | -0.3 |
| | baz=201 | | | | | | |
| **NDT** | **Datong Townshi** | **0.42** | **240** | P | Pg | 12 45 47.1 | -0.1 |
| | baz=239 | | | | | | |
| NDT | | | | *e*S | Sg | 12 45 53.0 | +0.2 |
| | baz=239 | | | | | | |
| **LATG** | **Datong** | **0.45** | **232** | P | Pg | 12 45 47.1 | -0.7 |
| | baz=231 | | | | | | |
| LATG | | | | *e*S | Sb | 12 45 55.3 | -0.7 |
| | baz=231 | | | | | | |
| **YM01** | **YM01** | **0.45** | **317** | P | Pg | 12 45 48.5 | +0.7 |
| | baz=316 | | | | | | |
| YM01 | | | | *e*S | Sg | 12 45 54.6 | +0.8 |
| | baz=316 | | | | | | |
| **EOS2** | **EOS2** | **0.49** | **144** | *i* P | Pg | 12 45 48.6 | +0.1 |
| | baz=143 | | | | | | |
| EOS2 | | | | *e*S | Sb | 12 45 57.3 | +0.4 |
| | baz=143 | | | | | | |
| **YHNB** | **Yeheng** | **0.51** | **254** | *e*P | Pg | 12 45 48.4 | -0.5 |
| | baz=253 | | | | | | |
| YHNB | | | | *e*S | Sg | 12 45 54.8 | -0.9 |
| | baz=253 | | | | | | |
| **NSK** | **Sanguang** | **0.52** | **255** | *i* P | Pg | 12 45 48.6 | -0.6 |
| | baz=254 | | | | | | |
| NSK | | | | *e*S | Sg | 12 45 55.8 | -0.3 |
| | baz=254 | | | | | | |
| **NNSB** | **Datong** | **0.62** | **232** | *e*P | Pg | 12 45 51.0 | +0.1 |
| | baz=231 | | | | | | |
| NNSB | | | | *e*S | Sg | 12 45 59.5 | +0.4 |
| | baz=231 | | | | | | |
| **EOS3** | **EOS3** | **0.64** | **145** | *i* P | Pg | 12 45 51.2 | -0.2 |
| | baz=145 | | | | | | |
| EOS3 | | | | *e*S | Sb | 12 46 00.8 | -0.5 |
| | baz=145 | | | | | | |
| **NACB** | **Ninganchiao** | **0.70** | **204** | *e*P | Pg | 12 45 52.6 | 0.0 |
| | baz=204 | | | | | | |
| NACB | | | | *e*S | Sg | 12 46 02.2 | +0.6 |
| | baz=204 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.72** | **213** | *e*P | Pg | 12 45 53.2 | +0.3 |
| | baz=213 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.75** | **256** | *e*P | Pn | 12 45 55.4 | -0.3 |
| | baz=255 | | | | | | |

**TAP 21 12:45:51.2, 24.05N×122.31E, h41km, ML2.2, D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS4** | **EOS4** | **0.07** | **5** | P | Pn | 12 45 57.9 | +0.5 |
| | baz=4.0 | | | | | | |
| EOS4 | | | | *i* S | Sn | 12 46 03.2 | +1.5 |
| | baz=4.0 | | | | | | |
| **EOS3** | **EOS3** | **0.24** | **1** | *i* P | Pn | 12 45 59.3 | +0.5 |
| | baz=1.0 | | | | | | |
| EOS3 | | | | S | Sn | 12 46 05.5 | +1.5 |
| | baz=1.0 | | | | | | |
| **EOS2** | **EOS2** | **0.38** | **349** | S | Sn | 12 46 08.5 | +1.8 |
| | baz=348 | | | | | | |
| **EAHA** | **Aohua** | **0.59** | **298** | *e*P | Pn | 12 46 03.2 | 0.0 |
| | baz=298 | | | | | | |
| EAHA | | | | *e*S | Sn | 12 46 13.8 | +2.0 |
| | baz=298 | | | | | | |
| **EWUT** | **Wuta** | **0.63** | **309** | *e*P | Pn | 12 46 03.5 | -0.2 |
| | baz=309 | | | | | | |
| EWUT | | | | *i* S | Sn | 12 46 13.9 | +1.3 |
| | baz=309 | | | | | | |
| **ETL** | **Fush Village** | **0.64** | **280** | *e*P | Pn | 12 46 04.0 | +0.2 |
| | baz=280 | | | | | | |
| ETL | | | | *e*S | Sn | 12 46 15.3 | +2.4 |
| | baz=280 | | | | | | |
| **ENA** | **Nanau** | **0.65** | **306** | P | Pn | 12 46 04.1 | +0.2 |
| | baz=306 | | | | | | |
| ENA | | | | *e*S | Sn | 12 46 15.2 | +2.2 |
| | baz=306 | | | | | | |
| **HWA** | **Hwalien** | **0.65** | **264** | *e*P | Pn | 12 46 03.3 | -0.6 |
| | baz=263 | | | | | | |
| HWA | | | | *e*S | Sn | 12 46 15.0 | +2.0 |
| | baz=263 | | | | | | |
| **NACB** | **Ninganchiao** | **0.67** | **281** | S | Sn | 12 46 14.5 | +0.9 |
| | baz=280 | | | | | | |
| **SHUL** | **Shoufeng** | **0.73** | **250** | P | Pn | 12 46 05.6 | +0.6 |
| | baz=249 | | | | | | |
| SHUL | | | | S | Sn | 12 46 16.6 | +1.6 |
| | baz=249 | | | | | | |
| **ETM** | **Tongmen** | **0.75** | **264** | P | Pn | 12 46 05.5 | +0.1 |
| | baz=263 | | | | | | |
| ETM | | | | *e*S | Sn | 12 46 16.2 | +0.6 |
| | baz=263 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.77** | **282** | *e*P | Pn | 12 46 06.1 | +0.3 |
| | baz=281 | | | | | | |
| ETLH | | | | S | Sn | 12 46 17.0 | +0.7 |
| | baz=281 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.82** | **268** | *i* P | Pn | 12 46 07.0 | +0.6 |
| | baz=268 | | | | | | |
| LXIB | | | | S | Sn | 12 46 18.2 | +0.7 |
| | baz=268 | | | | | | |
| **ESL** | **Shilin** | **0.84** | **254** | P | Pn | 12 46 07.0 | +0.5 |
| | baz=253 | | | | | | |
| ESL | | | | *e*S | Sn | 12 46 19.2 | +1.6 |
| | baz=253 | | | | | | |
| **LATG** | **Datong** | **0.87** | **304** | *e*P | Pn | 12 46 08.1 | +1.1 |
| | baz=304 | | | | | | |
| LATG | | | | *e*S | Sn | 12 46 20.5 | +1.9 |
| | baz=304 | | | | | | |
| **EGFH** | **Guangfu** | **0.89** | **245** | *e*P | Pn | 12 46 09.2 | +2.0 |
| | baz=245 | | | | | | |
| EGFH | | | | *e*S | Sn | 12 46 21.1 | +2.0 |
| | baz=245 | | | | | | |
| **ENTT** | **Nioudou** | **0.90** | **311** | *i* P | Pn | 12 46 08.1 | +0.7 |
| | baz=311 | | | | | | |
| ENTT | | | | S | Sn | 12 46 20.0 | +0.8 |
| | baz=311 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.91** | **249** | P | Pn | 12 46 08.9 | +1.4 |
| | baz=248 | | | | | | |
| WARBT | | | | *e*S | Sn | 12 46 20.2 | +0.8 |
| | baz=248 | | | | | | |
| **NNSB** | **Datong** | **0.93** | **294** | *i* P | Pn | 12 46 08.6 | +0.8 |
| | baz=294 | | | | | | |
| NNSB | | | | S | Sn | 12 46 21.0 | +0.9 |
| | baz=294 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.96** | **276** | *i* P | Pn | 12 46 09.0 | +0.4 |
| | baz=275 | | | | | | |
| WHF | | | | *e*S | Sn | 12 46 22.2 | +0.9 |
| | baz=275 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.97** | **317** | *i* P | Pn | 12 46 09.2 | +0.8 |
| | baz=317 | | | | | | |
| FUSB | | | | *i* S | Sn | 12 46 22.4 | +1.4 |
| | baz=317 | | | | | | |
| **HGSD** | **Ruisui** | **0.98** | **236** | *e*P | Pn | 12 46 09.6 | +1.1 |
| | baz=235 | | | | | | |
| HGSD | | | | *e*S | Sn | 12 46 19.7 | -1.5 |
| | baz=235 | | | | | | |
| **FUSS** | **Fushou** | **0.99** | **282** | *e*P | Pn | 12 46 09.7 | +0.8 |
| | baz=281 | | | | | | |
| FUSS | | | | *e*S | Sn | 12 46 22.6 | +0.7 |
| | baz=281 | | | | | | |
| **TIPB** | **Shuangxi** | **1.02** | **334** | *i* P | Pn | 12 46 10.0 | +0.9 |
| | baz=334 | | | | | | |
| TIPB | | | | *e*S | Sn | 12 46 23.1 | +0.8 |
| | baz=334 | | | | | | |
| **NWLT** | **Wulai** | **1.04** | **315** | *i* P | Pn | 12 46 10.1 | +0.9 |
| | baz=314 | | | | | | |
| NWLT | | | | S | Sn | 12 46 23.7 | +1.1 |
| | baz=314 | | | | | | |
| **CHGB** | **Renai** | **1.04** | **271** | P | Pn | 12 46 10.4 | +0.9 |
| | baz=270 | | | | | | |
| CHGB | | | | S | Sn | 12 46 24.4 | +1.4 |
| | baz=270 | | | | | | |
| **OWD** | **Renai** | **1.04** | **265** | *e*P | Pn | 12 46 10.8 | +1.4 |
| | baz=264 | | | | | | |
| OWD | | | | *e*S | Sn | 12 46 23.9 | +1.0 |
| | baz=264 | | | | | | |
| **EHY** | **Hungye** | **1.05** | **240** | *e*P | Pn | 12 46 11.1 | +1.6 |
| | baz=239 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EHY | | | | *e*S | | Sn | 12 46 24.9 | +1.9 | |
| | baz=239 | | | | | | | | |
| **YHNB** | **Yeheng** | **1.05 306** | | *e*P | | Pn | 12 46 10.8 | +1.3 | |
| | baz=306 | | | | | | | | |
| YHNB | | | | *i* S | | Sn | 12 46 24.3 | +1.2 | |
| | baz=306 | | | | | | | | |
| **TWT** | **Tachien** | **1.06 281** | | *e*P | | Pn | 12 46 10.3 | +0.6 | |
| | baz=280 | | | | | | | | |
| TWT | | | | *i* S | | Sn | 12 46 24.8 | +1.5 | |
| | baz=280 | | | | | | | | |
| **NSK** | **Sanguang** | **1.07 306** | | P | | Pn | 12 46 10.5 | +0.7 | |
| | baz=305 | | | | | | | | |
| NSK | | | | *i* S | | Sn | 12 46 24.7 | +1.1 | |
| | baz=305 | | | | | | | | |
| **TDCB** | **Techi** | **1.07 281** | | P | | Pn | 12 46 11.2 | +1.3 | |
| | baz=281 | | | | | | | | |
| TDCB | | | | *e*S | | Sn | 12 46 24.7 | +1.0 | |
| | baz=281 | | | | | | | | |
| **WUSB** | **Renai** | **1.09 267** | | *e*P | | Pn | 12 46 11.2 | +1.0 | |
| | baz=267 | | | | | | | | |
| WUSB | | | | S | | Sn | 12 46 25.8 | +1.7 | |
| | baz=267 | | | | | | | | |
| **VWDT** | **VWDT** | **1.11 255** | | *e*P | | Pn | 12 46 10.3 | 0.0 | |
| | baz=254 | | | | | | | | |
| VWDT | | | | *e*S | | Sn | 12 46 25.9 | +1.6 | |
| | baz=254 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.12 339** | | *e*P | | Pn | 12 46 10.7 | +0.3 | |
| | baz=339 | | | | | | | | |
| SXI1 | | | | *e*S | | Sn | 12 46 25.0 | +0.4 | |
| | baz=339 | | | | | | | | |
| **YULB** | **Yu-li** | **1.13 235** | | *e*P | | Pn | 12 46 12.0 | +1.4 | |
| | baz=234 | | | | | | | | |
| YULB | | | | *e*S | | Sn | 12 46 25.8 | +0.8 | |
| | baz=234 | | | | | | | | |
| **TWA** | **Mucha** | **1.14 325** | | *e*P | | Pn | 12 46 11.3 | +0.6 | |
| | baz=324 | | | | | | | | |
| TWA | | | | *e*S | | Sn | 12 46 24.3 | -0.8 | |
| | baz=324 | | | | | | | | |
| **EYUL** | **Yuli** | **1.15 233** | | *e*P | | Pn | 12 46 11.4 | +0.7 | |
| | baz=232 | | | | | | | | |
| EYUL | | | | *e*S | | Sn | 12 46 26.9 | +1.7 | |
| | baz=232 | | | | | | | | |
| **TWF1** | **Yuli** | **1.16 234** | | *e*P | | Pn | 12 46 12.0 | +1.1 | |
| | baz=233 | | | | | | | | |
| TWF1 | | | | *e*S | | Sn | 12 46 26.5 | +0.9 | |
| | baz=233 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.23 298** | | *e*P | | Pn | 12 46 13.9 | +1.9 | |
| | baz=298 | | | | | | | | |
| NFF | | | | *e*S | | Sn | 12 46 30.7 | +3.2 | |
| | baz=298 | | | | | | | | |
| **FULB** | **Fuli** | **1.26 228** | | *e*P | | Pn | 12 46 12.2 | -0.1 | |
| | baz=227 | | | | | | | | |
| FULB | | | | *e*S | | Sn | 12 46 29.7 | +1.6 | |
| | baz=227 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.27 259** | | P | | Pn | 12 46 13.9 | +1.5 | |
| | baz=258 | | | | | | | | |
| SSLB | | | | S | | Sn | 12 46 29.6 | +1.3 | |
| | baz=258 | | | | | | | | |
| **WHP** | **Taichung City** | **1.27 281** | | *e*P | | Pn | 12 46 15.2 | +2.7 | |
| | baz=280 | | | | | | | | |
| WHP | | | | *e*S | | Sn | 12 46 31.3 | +2.9 | |
| | baz=280 | | | | | | | | |
| **YM01** | **YM01** | **1.29 329** | | *e*P | | Pn | 12 46 13.3 | +0.6 | |
| | baz=328 | | | | | | | | |
| YM01 | | | | S | | Sn | 12 46 30.2 | +1.5 | |
| | baz=328 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.38 256** | | *e*P | | Pn | 12 46 15.8 | +1.8 | |
| | baz=255 | | | | | | | | |
| WHYT | | | | *e*S | | Sn | 12 46 33.3 | +2.3 | |
| | baz=255 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.46 235** | | P | | Pn | 12 46 16.2 | +1.0 | |
| | baz=234 | | | | | | | | |
| ELDTW | | | | *e*S | | Sn | 12 46 33.4 | +0.2 | |
| | baz=234 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.71 245** | | *e*P | | Pn | 12 46 18.8 | +0.2 | |
| | baz=244 | | | | | | | | |
| TPUB | | | | *e*S | | Sn | 12 46 42.6 | +3.4 | |
| | baz=244 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.75 243** | | *e*P | | Pn | 12 46 20.7 | +1.6 | |
| | baz=242 | | | | | | | | |
| WTP | | | | *e*S | | Sn | 12 46 43.7 | +3.6 | |
| | baz=242 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.77 266** | | *e*P | | Pn | 12 46 21.0 | +1.6 | |
| | baz=265 | | | | | | | | |
| WRL | | | | S | | Sn | 12 46 42.1 | +1.4 | |
| | baz=265 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.10 228** | | *e*P | | Pn | 12 46 23.8 | -0.1 | |
| | baz=227 | | | | | | | | |
| MASBT | | | | *e*S | | Sn | 12 46 52.2 | +3.5 | |
| | baz=227 | | | | | | | | |
| **EAST** | **Anshuo** | **2.13 219** | | *e*P | | Pn | 12 46 25.7 | +1.4 | |
| | baz=218 | | | | | | | | |
| EAST | | | | *e*S | | Sn | 12 46 50.0 | +0.3 | |
| | baz=218 | | | | | | | | |

**JMA 21 12:46:47.2±0.2, 24.1N±0.6×123.7E±0.5, h23km±1km, MV1.2/8, NEAR ISHIGAKIJIMA ISLAND, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HATJ** | **Hateruma jima** | **0.08** | **127** | P | Pb | 12 46 51.2 | -0.2 |
| HATJ | | | | *e*S | Sb | 12 46 54.0 | -0.2 |
| **IRIF** | **Iriomote-Funau** | **0.23** | **359** | *i* P | Pb | 12 46 52.9 | -0.1 |
| IRIF | | | | *e*S | Sb | 12 46 56.9 | 0.0 |
| **JKRS** | **Kuro-shima** | **0.28** | **62** | P | Pb | 12 46 53.9 | +0.1 |
| JKRS | | | | *e*S | Sb | 12 46 58.8 | +0.5 |
| **JIJ** | **Ishigaki jima** | **0.45** | **55** | P | Pb | 12 46 56.2 | -0.4 |
| JIJ | | | | *e*S | Sb | 12 47 02.3 | -0.6 |
| **JISG** | **Ishigakijimahi** | **0.71** | **48** | *e*P | Pb | 12 47 00.6 | -0.3 |
| JISG | | | | *e*S | Sb | 12 47 10.1 | -0.1 |
| **JTJ** | **Tarama** | **1.03** | **59** | *e*P | Pn | 12 47 06.1 | -0.2 |
| JTJ | | | | *e*S | Sn | 12 47 19.8 | -0.2 |

*NEIC **21** 12:47:36.8±2.3, 69.54N±0.06×144.33W±0.02, h10km±2km, Error ellipse: s-maj=10.7km s-min=3.1km az=5.0*

**AEIC 21 12:47:35.8±2.7, 69.50N±0.01×144.28W±0.04, h10km±6km, ML3.4, ML3.5/124(NEIC), Error ellipse: s-maj=2.2km s-min=2.0km az=103.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **57** | | Pg | 12 47 41.3 | +0.7 |
| C27K | | | | | Sg | 12 47 44.4 | +0.5 |
| C27K | | | | IAML | | 12 47 44.9 | |
| | comp=N,8μm,0.5s | | | | | | |
| C27K | | | | IAML | | 12 47 45.5 | |
| | comp=E,10μm,0.4s | | | | | | |
| **C26K** | **Camden Bay** | **0.47** | **332** | | Pb | 12 47 45.8 | -0.5 |
| C26K | | | | IAML | | 12 47 56.1 | |
| | comp=N,4μm,0.4s | | | | | | |
| C26K | | | | IAML | | 12 47 56.3 | |
| | comp=E,4μm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.76** | **257** | | Pg | 12 47 50.7 | +0.2 |
| D25K | | | | Sg | Sg | 12 47 59.4 | -1.1 |
| **D27M** | **Malcolm River** | **1.20** | **101** | | Pb | 12 47 58.2 | -0.5 |
| D27M | | | | IAML | | 12 48 17.8 | |
| | comp=N,805nm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.57** | **280** | | Pn | 12 48 03.6 | 0.0 |
| C24K | | | | | Sb | 12 48 24.9 | +0.2 |
| **E27K** | **Coleen River** | **1.64** | **142** | | Pg | 12 48 06.8 | -0.4 |
| E27K | | | | | Sg | 12 48 29.0 | +0.5 |
| E27K | | | | IAML | | 12 48 31.2 | |
| | comp=N,576nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.65** | **260** | | Pg | 12 48 07.0 | -0.5 |
| D24K | | | | IAML | | 12 48 33.2 | |
| | comp=N,663nm,0.4s | | | | | | |
| D24K | | | | IAML | | 12 48 34.2 | |
| | comp=E,651nm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **178** | Pg | Pg | 12 48 10.0 | -0.6 |
| **E28M** | **Babbage River** | **1.93** | **116** | | Pb | 12 48 10.4 | -0.7 |
| E28M | | | | IAML | | 12 48 43.5 | |
| | comp=N,395nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.97** | **92** | Pn | Pn | 12 48 09.1 | 0.0 |
| D28M | | | | IAML | | 12 48 42.8 | |
| | comp=E,471nm,0.7s | | | | | | |
| **F25K** | **Christian Rive** | **1.98** | **195** | | Pn | 12 48 09.6 | +0.1 |
| **BMAR** | **Burnt Mountain** | **2.08** | **183** | | Pn | 12 48 11.4 | +0.6 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **248** | | Pb | 12 48 12.6 | -1.2 |
| TOLK | | | | IAML | | 12 48 46.8 | |
| | comp=E,428nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **229** | | Pn | 12 48 11.3 | +0.2 |
| E24K | | | | IAML | | 12 48 49.1 | |
| | comp=N,294nm,0.9s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **C23K** | **Itkillik River** | **2.24** | **282** | | Pn | Pn | 12 48 12.8 | -0.1 | |
| C23K | | | | | IAML | | 12 48 58.6 | | |
| | comp=N,350nm,0.4s | | | | | | | | |
| C23K | | | | | IAML | | 12 49 01.0 | | |
| | comp=E,300nm,0.6s | | | | | | | | |
| **D23K** | **Nanushuk River** | **2.35** | **260** | | | Pn | 12 48 14.7 | +0.4 | |
| **F24K** | **Squaw Lake** | **2.40** | **215** | | | Pn | 12 48 13.6 | -1.5 | |
| F24K | | | | | IAML | | 12 48 56.2 | | |
| | comp=E,210nm,0.6s | | | | | | | | |
| F24K | | | | | IAML | | 12 48 58.5 | | |
| | comp=N,232nm,0.5s | | | | | | | | |
| **E23K** | **Chandalar** | **2.42** | **236** | Pn | | Pn | 12 48 17.1 | +1.5 | |
| E23K | | | | | IAML | | 12 48 56.0 | | |
| | comp=N,213nm,0.8s | | | | | | | | |
| E23K | | | | | IAML | | 12 49 00.2 | | |
| | comp=E,258nm,0.8s | | | | | | | | |
| **F28M** | **Old Crow** | **2.49** | **137** | | | Pn | 12 48 18.0 | +1.5 | |
| **E29M** | **Blow River** | **2.56** | **113** | | | Pb | 12 48 19.6 | -2.2 | |
| E29M | | | | | IAML | | 12 49 00.9 | | |
| | comp=N,270nm,0.7s | | | | | | | | |
| E29M | | | | | IAML | | 12 49 03.1 | | |
| | comp=E,287nm,0.5s | | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.57** | **176** | | | Pn | 12 48 19.6 | +2.1 | |
| **G25K** | **Bearman Lake** | **2.83** | **195** | | | Pn | 12 48 23.4 | +2.4 | |
| **G27K** | **Doyon Strip** | **2.88** | **159** | | | Pn | 12 48 23.4 | +1.7 | |
| **FYU** | **Fort Yukon** | **2.97** | **187** | Pn | | Pn | 12 48 23.8 | +0.9 | |
| FYU | | | | | IAML | | 12 49 14.1 | | |
| | comp=E,194nm,0.6s | | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.06** | **205** | | | Pn | 12 48 24.8 | +0.6 | |
| G24K | | | | | IAML | | 12 49 19.7 | | |
| | comp=E,180nm,0.8s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **247** | Pn | | Pn | 12 48 25.1 | +0.8 | |
| **D22K** | **Ayikyak River** | **3.07** | **262** | Pn | | Pn | 12 48 24.9 | +0.6 | |
| D22K | | | | | IAML | | 12 49 18.7 | | |
| | comp=N,132nm,0.8s | | | | | | | | |
| D22K | | | | | IAML | | 12 49 23.8 | | |
| | comp=E,129nm,0.8s | | | | | | | | |
| **COLD** | **Coldfoot** | **3.17** | **227** | | | Pn | 12 48 27.7 | +2.0 | |
| **B22K** | **Teshekpuk Lake** | **3.27** | **289** | Pn | | Pn | 12 48 25.5 | -1.5 | |
| B22K | | | | | IAML | | 12 49 35.5 | | |
| | comp=E,153nm,0.8s | | | | | | | | |
| **H25L** | **Birch Creek** | **3.30** | **191** | | | Pn | 12 48 29.7 | +2.2 | |
| **H27K** | **Steamboat Moun** | **3.45** | **161** | | | Pn | 12 48 32.2 | +2.7 | |
| **G29M** | **Pine Creek** | **3.49** | **135** | Pn | | Pn | 12 48 30.9 | +0.8 | |
| **F22K** | **John River** | **3.53** | **239** | | | Pn | 12 48 33.1 | +2.4 | |
| **G23K** | **Bananza Creek** | **3.53** | **220** | | | Pn | 12 48 30.3 | -0.5 | |
| G23K | | | | | IAML | | 12 49 34.3 | | |
| | comp=E,103nm,1.2s | | | | | | | | |
| G23K | | | | | IAML | | 12 49 34.6 | | |
| | comp=N,87nm,1.1s | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.63** | **277** | | | Pn | 12 48 33.6 | +1.6 | |
| B21K | | | | | IAML | | 12 49 37.8 | | |
| | comp=E,71nm,0.7s | | | | | | | | |
| B21K | | | | | IAML | | 12 49 43.3 | | |
| | comp=N,73nm,0.8s | | | | | | | | |
| **F30M** | **Barrier River** | **3.65** | **117** | | | Pn | 12 48 35.0 | +2.7 | |
| **E21K** | **Killik River** | **3.65** | **258** | | | Pn | 12 48 33.0 | +0.6 | |
| E21K | | | | | IAML | | 12 49 44.4 | | |
| | comp=E,70nm,0.6s | | | | | | | | |
| E21K | | | | | IAML | | 12 49 48.8 | | |
| | comp=N,68nm,0.7s | | | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.74** | **270** | | | Pn | 12 48 35.7 | +2.1 | |
| **G30M** | **tAoh Zraii Nji** | **3.92** | **126** | | | Pn | 12 48 38.3 | +2.3 | |
| G30M | | | | | IAML | | 12 49 52.0 | | |
| | comp=E,56nm,0.7s | | | | | | | | |
| G30M | | | | | IAML | | 12 49 52.5 | | |
| | comp=N,71nm,0.8s | | | | | | | | |
| **H24K** | **Noodor Dome** | **3.93** | **202** | | | Pn | 12 48 38.0 | +1.8 | |
| **A22K** | **Sinclair Lake** | **3.93** | **298** | | | Pn | 12 48 38.1 | +2.0 | |
| **H29M** | **Whitestone** | **3.98** | **143** | Pn | | Pn | 12 48 39.4 | +2.6 | |
| **PRP** | **Porcupine Dome** | **4.03** | **187** | | | Pn | 12 48 39.1 | +1.5 | |
| PRP | | | | | IAML | | 12 49 30.6 | | |
| | comp=N,58nm,0.5s | | | | | | | | |
| **INK** | **Inuvik** | **4.07** | **102** | | | Pn | 12 48 39.0 | +1.0 | |
| **F21K** | **Alatna River** | **4.11** | **240** | Pn | | Pn | 12 48 41.0 | +2.4 | |
| F21K | | | | | IAML | | 12 49 54.2 | | |
| | comp=N,58nm,1.2s | | | | | | | | |
| F21K | | | | | IAML | | 12 49 55.0 | | |
| | comp=E,60nm,0.7s | | | | | | | | |
| **H23K** | **Yukon River** | **4.20** | **211** | Pn | | Pn | 12 48 42.0 | +2.1 | |
| H23K | | | | | IAML | | 12 49 57.8 | | |
| | comp=E,56nm,0.9s | | | | | | | | |
| H23K | | | | | IAML | | 12 49 59.7 | | |
| | comp=N,54nm,1.2s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.24** | **174** | | | Pn | 12 48 42.7 | +2.3 | |
| I26K | | | | | IAML | | 12 50 01.8 | | |
| | comp=N,66nm,0.7s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.24** | **134** | | | Pn | 12 48 42.8 | +2.4 | |
| **F31M** | **Tsiigehtchic** | **4.40** | **113** | Pn | | Pn | 12 48 43.3 | +0.8 | |
| F31M | | | | | IAML | | 12 49 54.9 | | |
| | comp=N,40nm,1.2s | | | | | | | | |
| F31M | | | | | IAML | | 12 50 00.9 | | |
| | comp=E,42nm,0.7s | | | | | | | | |
| **I28M** | **Miner Creek** | **4.40** | **156** | Pn | | Pn | 12 48 45.5 | +2.8 | |
| I28M | | | | | IAML | | 12 49 38.9 | | |
| | comp=E,58nm,0.3s | | | | | | | | |
| **E20K** | **Nigu River** | **4.49** | **259** | | | Pn | 12 48 45.9 | +2.1 | |
| **D20K** | **Etivluk River** | **4.49** | **266** | | | Pn | 12 48 46.7 | +2.9 | |
| **B20K** | **Meade River** | **4.50** | **282** | | | Pn | 12 48 46.2 | +2.2 | |
| B20K | | | | | IAML | | 12 50 17.1 | | |
| | comp=N,51nm,1.4s | | | | | | | | |
| **A21K** | **Barrow** | **4.54** | **299** | | | Pn | 12 48 46.5 | +2.1 | |
| **G31M** | **Satah River** | **4.54** | **120** | | | Pn | 12 48 46.6 | +2.2 | |
| **POKR** | **Poker Plat Res** | **4.57** | **197** | | | Pn | 12 48 48.2 | +3.3 | |
| POKR | | | | | IAML | | 12 50 02.1 | | |
| | comp=E,43nm,0.6s | | | | | | | | |
| POKR | | | | | IAML | | 12 50 13.0 | | |
| | comp=N,37nm,0.9s | | | | | | | | |
| **G21K** | **Allakaket** | **4.58** | **234** | | | Pn | 12 48 46.2 | +1.1 | |
| **I29M** | **Ogilvie Camp,** | **4.75** | **148** | IAML | | | 12 50 16.4 | | |
| | comp=E,48nm,0.9s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **207** | IAML | | | 12 50 15.0 | | |
| | comp=E,38nm,1.4s | | | | | | | | |
| I23K | | | | | IAML | | 12 50 31.4 | | |
| | comp=N,32nm,1.2s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **200** | IAML | | | 12 50 17.7 | | |
| | comp=E,35nm,0.8s | | | | | | | | |
| **COLA** | **College** | **4.85** | **198** | | | Pn | 12 48 51.5 | +2.7 | |
| **EGAK** | **Eagle** | **4.90** | **164** | IAML | | | 12 49 49.6 | | |
| | comp=E,36nm,0.8s | | | | | | | | |
| EGAK | | | | | IAML | | 12 49 50.0 | | |
| | comp=E,32nm,0.8s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.91** | **245** | | | Pn | 12 48 51.6 | +2.0 | |
| **J25K** | **Salcha River,** | **4.93** | **185** | IAML | | | 12 50 24.5 | | |
| | comp=E,27nm,1.2s | | | | | | | | |
| **J26L** | **Joseph Creek** | **5.03** | **176** | IAML | | | 12 49 55.7 | | |
| | comp=E,27nm,0.5s | | | | | | | | |
| J26L | | | | | IAML | | 12 49 55.9 | | |
| | comp=N,28nm,0.4s | | | | | | | | |
| **H21K** | **Melozitna River** | **5.05** | **224** | | | Pn | 12 48 53.7 | +2.1 | |
| **H21K** | **Melozitna Rive** | **5.05** | **224** | IAML | | | 12 50 24.0 | | |
| | comp=E,38nm,1.2s | | | | | | | | |
| H21K | | | | | IAML | | 12 50 28.7 | | |
| | comp=N,28nm,1.1s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **197** | | | Pn | 12 48 53.8 | +2.1 | |
| **D19K** | **Kuna River** | **5.08** | **265** | | | Pn | 12 48 53.4 | +1.5 | |
| **D19K** | **Kuna River** | **5.08** | **265** | IAML | | | 12 50 41.7 | | |
| | comp=E,34nm,1.2s | | | | | | | | |
| **E19K** | **Redstone River** | **5.19** | **253** | | | Pn | 12 48 55.0 | +1.5 | |
| **E19K** | **Redstone River** | **5.19** | **253** | IAML | | | 12 50 34.5 | | |
| | comp=N,24nm,0.8s | | | | | | | | |
| E19K | | | | | IAML | | 12 50 39.6 | | |
| | comp=E,28nm,0.8s | | | | | | | | |
| **HDA** | **Harding Lake** | **5.22** | **193** | | | Pn | 12 48 56.9 | +3.1 | |
| **HDA** | **Harding Lake** | **5.22** | **193** | IAML | | | 12 50 27.9 | | |
| | comp=N,28nm,1.0s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.27** | **141** | | | Pn | 12 48 56.4 | +1.8 | |
| **WRH** | **Wood River Hil** | **5.27** | **198** | | | Pn | 12 48 57.0 | +2.4 | |
| **WRH** | **Wood River Hil** | **5.27** | **198** | IAML | | | 12 50 25.8 | | |
| | comp=E,24nm,1.3s | | | | | | | | |
| WRH | | | | | IAML | | 12 50 27.0 | | |
| | comp=N,21nm,1.4s | | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.44** | **273** | | | Pn | 12 48 59.0 | +2.1 | |
| **K27K** | **Chicken** | **5.56** | **170** | | | Pn | 12 49 01.2 | +2.6 | |
| **F19K** | **Shaleruckik Mo** | **5.70** | **248** | | | Pn | 12 49 01.7 | +1.3 | |
| **K24K** | **Donnelly Dome** | **5.75** | **187** | | | Pn | 12 49 04.4 | +3.1 | |
| **RIDG** | **Independent Ri** | **5.79** | **183** | | | Pn | 12 49 04.5 | +2.7 | |
| **J30M** | **Hart River** | **5.84** | **144** | | | Pn | 12 49 04.3 | +1.8 | |
| **A19K** | **Wainwright** | **5.84** | **285** | | | Pn | 12 49 04.4 | +2.1 | |
| **DOT** | **Dot Lake** | **5.88** | **179** | | | Pn | 12 49 05.7 | +2.8 | |
| **BPAW** | **Bear Paw Mtn.** | **6.04** | **209** | | | Pn | 12 49 07.3 | +2.3 | |
| **MCK** | **McKinley** | **6.08** | **200** | | | Pn | 12 49 08.3 | +2.6 | |
| **C18K** | **Utukok River** | **6.12** | **270** | | | Pn | 12 49 07.9 | +1.7 | |
| **B18K** | **Kokolik River** | **6.17** | **277** | | | Pn | 12 49 08.5 | +1.6 | |
| **E18K** | **Tukpahlearik C** | **6.36** | **259** | | | Pn | 12 49 11.3 | +1.9 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **RND** | **Reindeer** | **6.39** | **199** | | | Pn | 12 49 13.0 | +3.0 | |
| **F18K** | **Selawik** | **6.45** | **251** | | | Pn | 12 49 12.5 | +1.8 | |
| **L26K** | **Log Cabin Wild** | **6.52** | **176** | | | Pn | 12 49 14.3 | +2.7 | |
| **L27K** | **Beaver Creek,** | **6.54** | **170** | | | Pn | 12 49 14.7 | +2.7 | |
| **DHY** | **Denali Highway** | **6.57** | **192** | | | Pn | 12 49 15.6 | +3.0 | |
| **PAX** | **Paxson** | **6.58** | **185** | | | Pn | 12 49 15.9 | +3.3 | |
| **J20K** | **Nowinta River** | **6.61** | **221** | | | Pn | 12 49 14.5 | +1.7 | |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | | | Pn | 12 49 15.2 | +0.4 | |
| **C17K** | **DeLong Mountai** | **6.87** | **270** | | | Pn | 12 49 16.9 | +0.5 | |
| **RDOG** | **Red Dog Mine** | **6.91** | **267** | | | Pn | 12 49 17.7 | +0.7 | |
| **E17K** | **Hotham Inlet** | **6.94** | **258** | | | Pn | 12 49 18.3 | +0.9 | |
| **WAT7** | **Susitna Watana** | **6.95** | **198** | | | Pn | 12 49 21.4 | +3.8 | |
| **F17K** | **Baldwin Pennin** | **7.07** | **252** | | | Pn | 12 49 19.9 | +0.8 | |
| **WAT6** | **Susitna Watana** | **7.09** | **193** | | | Pn | 12 49 22.7 | +3.1 | |
| **D17K** | **Noatak River** | **7.10** | **264** | | | Pn | 12 49 20.0 | +0.3 | |
| **J19K** | **Poorman** | **7.11** | **224** | | | Pn | 12 49 21.4 | +1.7 | |
| **M26K** | **Nabesna, AK** | **7.15** | **175** | | | Pn | 12 49 24.0 | +3.6 | |
| **M27K** | **Edge Creek, AK** | **7.24** | **171** | | | Pn | 12 49 24.6 | +2.9 | |
| **G17K** | **Kiwalik Mounta** | **7.44** | **245** | | | Pn | 12 49 25.6 | +1.3 | |
| **M29M** | **Somme Creek** | **7.47** | **159** | | | Pn | 12 49 27.2 | +2.4 | |
| **H17K** | **Granite Mounta** | **7.59** | **240** | | | Pn | 12 49 28.1 | +1.8 | |
| **C16K** | **Lisburne Hills** | **7.69** | **271** | | | Pn | 12 49 27.9 | +0.2 | |
| **YUK2** | **White River** | **7.88** | **168** | | | Pn | 12 49 33.5 | +3.2 | |
| **G16K** | **Koyuk River** | **8.06** | **248** | | | Pn | 12 49 34.3 | +1.6 | |

**ROM 21 12:48:05.9±0.2, 37.768N±0.007×14.90E±0.01, h24km±1km, ML2.0/18, Error ellipse: s-maj=1.0km s-min=0.3km az=122.0, Sicily**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EPZF** | **Pizzo Felice** | **0.07** | **330** | P | Pb | 12 48 09.9 | -0.6 |
| EPZF | | | | S | Sb | 12 48 13.9 | +0.5 |
| EPZF | | | | AML | AML | | |
| | comp=N,3370μm,0.6s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=E,4410μm,0.4s | | | | | | |
| **ESLN** | **Serra La Nave** | **0.10** | **141** | P | Pb | 12 48 10.8 | +0.1 |
| **EMCN** | **Etna Monte Con** | **0.11** | **78** | P | Pb | 12 48 10.8 | 0.0 |
| **ESML** | **S. M. di Licod** | **0.15** | **186** | P | Pb | 12 48 11.1 | +0.2 |
| **GALF** | **Gagliano Caste** | **0.27** | **258** | P | Pb | 12 48 12.4 | -0.1 |
| GALF | | | | S | Sb | 12 48 18.1 | +1.1 |
| GALF | | | | AML | AML | | |
| | comp=E,1200μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,270μm,0.5s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,382μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,892μm,0.8s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,270μm,1.5s | | | | | | |
| **MUCR** | **Ucria** | **0.28** | **356** | P | Pb | 12 48 12.3 | -0.4 |
| MUCR | | | | S | Sb | 12 48 17.3 | +0.1 |
| MUCR | | | | AML | AML | | |
| | comp=N,181μm,0.8s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=E,178μm,1.6s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=E,178μm,0.4s | | | | | | |
| **NOV** | **Novara** | **0.32** | **36** | P | Pb | 12 48 13.5 | +0.2 |
| **AIO** | **Antillo** | **0.33** | **53** | P | Pb | 12 48 13.5 | 0.0 |
| AIO | | | | S | Sb | 12 48 19.3 | +0.6 |
| AIO | | | | AML | AML | | |
| | comp=E,244μm,1.1s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=N,332μm,1.5s | | | | | | |
| **HLNI** | **Lentini** | **0.42** | **183** | P | Pb | 12 48 14.5 | -0.3 |
| HLNI | | | | S | Sb | 12 48 21.3 | +0.6 |
| HLNI | | | | AML | AML | | |
| | comp=E,254μm,0.5s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=N,174μm,0.2s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=E,254μm,1.5s | | | | | | |
| **MPNC** | **Port Mandanici** | **0.52** | **44** | P | Pb | 12 48 16.7 | +0.2 |
| MPNC | | | | S | Sb | 12 48 24.7 | +1.0 |
| MPNC | | | | AML | AML | | |
| | comp=E,318μm,0.5s | | | | | | |
| MPNC | | | | AML | AML | | |
| | comp=N,394μm,0.3s | | | | | | |
| **RESU** | **Resuttano** | **0.68** | **260** | P | Pn | 12 48 19.8 | -0.3 |
| RESU | | | | AML | AML | | |
| | comp=N,71μm,1.1s | | | | | | |
| RESU | | | | AML | AML | | |
| | comp=E,54μm,1.0s | | | | | | |
| RESU | | | | AML | AML | | |
| | comp=N,71μm,0.9s | | | | | | |
| **RAFF** | **Raffo Rosso** | **0.69** | **218** | P | Pb | 12 48 19.6 | +0.3 |
| RAFF | | | | AML | AML | | |
| | comp=N,73μm,1.6s | | | | | | |
| RAFF | | | | AML | AML | | |
| | comp=E,106μm,0.3s | | | | | | |
| RAFF | | | | AML | AML | | |
| | comp=N,73μm,0.4s | | | | | | |

**ROM 21 12:48:41.5±0.2, 37.779N±0.007×14.87E±0.01, h30km±1km, ML1.8/10, Error ellipse: s-maj=1.1km s-min=0.9km az=306.0, Sicily**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EPZF** | **Pizzo Felice** | **0.05** | **348** | P | Pb | 12 48 46.4 | -0.3 |
| EPZF | | | | S | Sb | 12 48 50.2 | 0.0 |
| EPZF | | | | AML | AML | | |
| | comp=N,1940μm,0.3s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=E,1665μm,0.5s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,1938μm,0.3s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=E,1668μm,0.5s | | | | | | |
| **ESLN** | **Serra La Nave** | **0.12** | **135** | P | Pb | 12 48 46.9 | -0.2 |
| **EMCN** | **Etna Monte Con** | **0.13** | **84** | P | Pb | 12 48 47.2 | 0.0 |
| **ESML** | **S. M. di Licod** | **0.16** | **178** | P | Pb | 12 48 47.3 | +0.1 |
| ESML | | | | AML | AML | | |
| | comp=E,340μm,0.3s | | | | | | |
| ESML | | | | AML | AML | | |
| | comp=N,361μm,0.7s | | | | | | |
| **GALF** | **Gagliano Caste** | **0.25** | **254** | P | Pb | 12 48 48.7 | +0.4 |
| **MUCR** | **Ucria** | **0.26** | **1** | P | Pb | 12 48 48.5 | -0.1 |
| MUCR | | | | S | Sb | 12 48 53.8 | +0.4 |
| MUCR | | | | AML | AML | | |
| | comp=E,166μm,0.4s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=N,149μm,0.6s | | | | | | |
| **NOV** | **Novara** | **0.33** | **40** | P | Pb | 12 48 49.4 | +0.1 |
| NOV | | | | S | Sn | 12 48 55.6 | -0.5 |
| **AIO** | **Antillo** | **0.35** | **56** | P | Pb | 12 48 49.8 | +0.1 |
| AIO | | | | S | Sn | 12 48 55.9 | -0.7 |
| AIO | | | | AML | AML | | |
| | comp=N,87μm,0.2s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=E,70μm,0.2s | | | | | | |
| **HLNI** | **Lentini** | **0.43** | **180** | P | Pb | 12 48 50.7 | -0.1 |
| HLNI | | | | S | Sn | 12 48 58.1 | -0.4 |
| HLNI | | | | AML | AML | | |
| | comp=E,140μm,0.1s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=N,110μm,1.1s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=E,139μm,0.1s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=N,102μm,0.1s | | | | | | |
| **HAGA** | **Augusta** | **0.54** | **155** | P | Pb | 12 48 52.3 | -0.3 |
| **HMDC** | **Modica** | **0.82** | **185** | P | Pn | 12 48 57.1 | 0.0 |
| HMDC | | | | S | Sn | 12 49 09.6 | +1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| URZ | | | | Sn | **Sn** | **12 52 33.8** | **+0.4** |
| | 1.0nm,0.3s,baz=49,slow=23,SNR=1.1 | | | | | | |
| | 9.5nm,0.3s | | | | | | |
| **RTZ** | **Ruatahuna** | **6.74** | **204** | Pn | **Pn** | **12 51 25.5** | **-1.5** |
| **BKZ** | **Black Stump Fm** | **7.40** | **205** | Pn | **Pn** | **12 51 35.2** | **-0.8** |
| **DZM** | **Mont Dzumac** | **16.25** | **306** | LR | LR | 12 58 27.2 | |
| | comp=Z,182nm,18.1s,baz=194,slow=32 | | | | | | |
| **AFI** | **Afiamalu** | **19.81** | **23** | P | **P** | **12 54 17.0** | **-1.2** |
| **COEN** | **Coen** | **38.71** | **290** | P | **P** | **12 57 12.3** | **+1.0** |
| COEN | | | | IAmb | IAmb | 12 57 40.8 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **41.79** | **270** | P | **P** | **12 57 37.3** | **+0.4** |
| **ASAR** | **Alice Springs** | **41.79** | **270** | P | **P** | **12 57 37.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **41.79** | **270** | P | **P** | **12 57 36.8** | **-0.1** |
| | comp=Z,1.7nm,0.8s,baz=106,slow=7.4,SNR=7.9 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.79** | **275** | P | **P** | **12 57 44.8** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 12 58 21.5 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.96** | **275** | P | **P** | **12 57 46.1** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 12 57 53.2 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.97** | **275** | P | **P** | **12 57 46.2** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 12 58 24.5 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.97** | **275** | P | **P** | **12 57 46.0** | **-0.5** |
| **WRA** | **Warramunga Arr** | **42.97** | **275** | P | **P** | **12 57 45.7** | **-0.8** |
| | comp=Z,1.8nm,0.7s,baz=115,slow=7.7,SNR=10 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.00** | **275** | P | **P** | **12 57 46.2** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 12 57 54.7 | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **57.60** | **180** | P | **P** | **12 59 38.3** | **+1.6** |
| QSPA | | | | IAmb | IAmb | 12 59 40.2 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **57.60** | **180** | P | **P** | **12 59 37.7** | **+1.0** |
| | comp=Z,4.3nm,1.0s,baz=59,slow=1.3,SNR=14 | | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **GO09** | **Cerro Castillo** | **74.94** | **142** | P | **P** | **13 01 28.2** | **+0.3** |
| **SNAA** | **Sanae** | **76.08** | **179** | P | **P** | **13 01 34.4** | **+0.3** |
| SNAA | | | | IAmb | IAmb | 13 01 37.6 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **H03S2** | **Juan Fernandez** | **80.35** | **124** | T | T | 14 30 29.3 | |
| | baz=235,slow=74,SNR=8.0 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.36** | **124** | T | T | 14 30 31.9 | |
| | baz=235,slow=74,SNR=9.6 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.36** | **124** | T | T | 14 30 32.5 | |
| | baz=235,slow=74,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **100.27** | **14** | Pdif | **Pdif** | **13 03 33.0** | **+0.6** |
| **IL03** | **Eielson Array** | **100.27** | **14** | Pdif | **Pdif** | **13 03 33.8** | **+1.3** |
| **TORD** | **Torodi Ar. Bea** | **160.69** | **183** | PKPab | **PKPab** | **13 10 27.6** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=180,slow=1.4,SNR=2.0 | | | | | | |

*IDC **21** 12:49:53.9±4.2, 15°.58S×176°.22W, h0km, mb4.3/4, mbtmp4.3/4, Error ellipse: s-maj=115.8km s-min=40.3km az=24.0*

*NEIC **21** 12:51:00.1±0.8, 17°.0S±0°.4×177°.74W±0°.09, h557km±23km, mb4.0/11, Error ellipse: s-maj=59.0km s-min=7.2km az=170.0*

**ISC 21 12:51:03.4**±3.6, **17°.6S**±0°.5×**178°.2W**±0°.4, **h550**km, **n17**, σ**05**1**51**/18, **mb4.0**/10, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.58** | **267** | P | **P** | **12 52 22.8** | **+0.4** |
| **CTAO** | **Charters Tower** | **33.70** | **260** | P | **P** | **12 56 59.5** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 12 57 06.7 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **38.96** | **241** | P | **P** | **12 57 43.5** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.96** | **241** | P | **P** | **12 57 43.0** | **+0.3** |
| | comp=Z,1.6nm,0.5s,baz=88,slow=12,SNR=5.0 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | **P** | **12 58 20.4** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.70** | **259** | P | **P** | **12 58 27.0** | **-1.1** |
| **WB0** | **Warramunga Arr** | **44.86** | **259** | P | **P** | **12 58 29.6** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 12 58 35.0 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.88** | **259** | P | **P** | **12 58 28.8** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 12 58 55.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.88** | **259** | P | **P** | **12 58 28.9** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 12 59 07.9 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **259** | P | **P** | **12 58 29.0** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.89** | **259** | P | **P** | **12 58 29.1** | **-0.6** |
| | comp=Z,0.9nm,0.6s,baz=93,slow=7.2,SNR=11 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.07** | **254** | P | **P** | **12 58 31.1** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 12 58 31.4 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.07** | **254** | P | **P** | **12 58 30.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.07** | **254** | P | **P** | **12 58 30.9** | **-0.2** |
| | comp=Z,11nm,0.5s,baz=89,slow=8.0,SNR=81 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 00 00.2** | **+0.2** |
| | comp=Z,0.6nm,0.7s,baz=108,slow=3.6,SNR=4.5 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **CASY** | **Casey** | **66.51** | **205** | P | **P** | **13 00 58.4** | **-0.1** |
| CASY | | | | IAmb | IAmb | 13 01 24.3 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.46** | **180** | P | **P** | **13 01 34.1** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 13 01 34.7 | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.46** | **180** | P | **P** | **13 01 34.3** | **+0.1** |
| | comp=Z,1.3nm,0.5s,baz=220,slow=1.3,SNR=16 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |

*IDC **21** 12:52:01.4±1.8, 8°.18S×117°.24E, h0km, mb3.4/3, mbtmp3.6/4, ML3.4/1, Error ellipse: s-maj=42.5km s-min=25.0km az=63.0*

*DJA **21** 12:52:02.3±0.8, 8°.5S±10°×11°.7E±°, h10km, M3.7/5, MLv3.7/5*

**ISC 21 12:52:01.8**±1.0, **8°.24S**±0°.08×**117°.17E**±0°.06, **h10**km, **n8**, σ**1**9**21**/9, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.57** | **209** | P | **Pg** | **12 52 12.4** | **-0.6** |
| **PLAI** | **Plampang** | **0.84** | **134** | P | **Pg** | **12 52 17.4** | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **2.60** | **123** | P | **Pn** | **12 52 44.3** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.99** | **265** | P | **Pn** | **12 52 49.1** | **-0.3** |
| **KAPI** | **Kappang** | **4.11** | **39** | Pn | **Pn** | **12 53 05.4** | **+0.7** |
| | 2.4nm,0.3s,baz=191,slow=10,SNR=9.2 | | | | | | |
| KAPI | | | | Sn | **Sn** | **12 53 50.5** | **-2.3** |
| | 2.6nm,0.3s,baz=34,slow=23,SNR=2.0 | | | | | | |
| | 5.3nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.29** | **127** | P | **P** | **12 56 38.8** | **+0.8** |
| | 0.7nm,0.5s,baz=300,slow=12,SNR=23 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.20** | **136** | P | **P** | **12 56 59.2** | **+0.7** |
| | 0.9nm,0.5s,baz=312,slow=9.7,SNR=19 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.97** | **334** | P | **P** | **13 02 29.7** | **+0.9** |
| | 0.5nm,0.7s,baz=157,slow=7.2,SNR=5.2 | | | | | | |
| | 0.5nm,0.7s | | | | | | |

*PGC **21** 13:10:05.6±1.6, 50°.66N×130°.48W, h10km, mb4.6, MLSn4.2/38, Mw4.9, 215km west of Pt. Hardy, Bc Vancouver Island, Canada Region*

*NEIC **21** 13:10:05.6, 50°.66N×130°.47W, h5km, Moment Tensor Solution. Moment tensor: Scale 10**16**Nm; Mrr0.45; Mθθ-1.67; Mϕϕ0.84; Mrθ-1.27; Mrϕ1.12; Mθϕ2.00; Fault plane solution: M0 3.00000×10**16** NP1:ϕ=328.00000°, δ83.00000°, λ123.00000°. NP2:ϕ=69.00000°, δ34.00000°, λ13.00000°. Principal axes: T 2.7845, Plg42.0000°, Azm269.0000°; N 0.3072, Plg33.0000°, Azm143.0000°; P -3.0916, Plg30.0000°, Azm31.0000°;*

*IDC **21** 13:10:06.6±0.6, 50°.83N×130°.26W, h0km, mb4.2/17, mbtmp4.1/26, ML3.8/7, MS4.0/73 Error ellipse: s-maj=11.6km s-min=8.6km az=58.0*

*NEIC **21** 13:10:07.5±1.6, 50°.85N±0°.04×130°.15W±0°.10, h10km±1km, mb4.6/246, Mwr4.9(OTT), Error ellipse: s-maj=10.6km s-min=7.4km az=257.0*

*MOS **21** 13:10:08.4±1.4, 50°.78N×129°.96W, h18km, mb4.9/20, Error ellipse: s-maj=13.4km s-min=6.6km az=109.2*

*GCMT **21** 13:10:09.5±0.2, 50°.60N±0°.01×130°.44W±0°.02, h16km±1km, MW4.9/106, Moment Tensor Solution. s32,c39; s106,c157; Duration: 0 Moment tensor: Scale 10**16**Nm; Mrr-0.01±.09; Mθθ-2.13±.07; Mϕϕ2.14±.07; Mrθ-0.49±.23; Mθϕ1.32±.07; Mϕr-0.92±.24; Best double couple: M0 2.70200×10**16** NP1:ϕ=242.00000°, δ80.00000°, λ18.00000°. NP2:ϕ=149.00000°, δ72.00000°, λ170.00000°. Principal axes: T 2.8770, Plg20.0000°, Azm107.0000°; N -0.3490, Plg70.0000°, Azm270.0000°; P -2.5270, Plg6.0000°, Azm15.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 21 13:10:07.1**±0.4, **50.71N**±0°.05×**130°.31W**±0°.04, **h10**km, **n622**, σ1§**56**/457, **mb4.7**/84, **MS4.0**/66, **11C-7D, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.39** | **92** | | **Pn** | **13 10 30.2** | **-2.4** |
| **HOLB** | **Holberg** | **1.39** | **92** | P | **Pn** | **13 10 30.4** | **-2.2** |
| **HG4B** | **Hotspring** | **1.68** | **341** | Pn | **Pn** | **13 10 33.1** | **-3.4** |
| **JEDB** | **Jedway, Haida** | **1.68** | **341** | Pn | **Pn** | **13 10 32.9** | **-3.7** |
| JEDB | | | | Sn | **Sn** | **13 10 53.6** | **-4.5** |
| **PACB** | **Port Alice, BC** | **1.82** | **98** | Pn | **Pn** | **13 10 36.2** | **-2.3** |
| PACB | | | | Sn | **Sn** | **13 10 57.7** | **-3.8** |
| **PHC** | **Port Hardy** | **1.83** | **89** | Pn | **Pn** | **13 10 36.8** | **-1.8** |
| PHC | | | | Sn | **Sn** | **13 10 58.6** | **-3.2** |
| **BBB** | **Bella Bella** | **2.02** | **42** | | **Pn** | **13 10 39.4** | **-1.8** |
| **BBB** | **Bella Bella** | **2.02** | **42** | Pn | **Pn** | **13 10 39.5** | **-1.7** |
| | 63nm,0.3s,baz=233,slow=7.5,SNR=879 | | | | | | |
| BBB | | | | Sn | **Sn** | **13 11 02.6** | **-3.8** |
| | 202nm,0.3s,baz=271,slow=18,SNR=9.3 | | | | | | |
| BBB | | | | LR | LR | 13 11 22.5 | |
| | comp=Z,761nm,20.2s,baz=233,slow=40 | | | | | | |
| **BBB** | **Bella Bella** | **2.02** | **42** | Pn | **Pn** | **13 10 39.4** | **-1.7** |
| **BNB** | **Barry Inlet** | **2.07** | **335** | Pn | **Pn** | **13 10 38.4** | **-3.6** |
| **WOSB** | **Woss** | **2.45** | **102** | Pn | **Pn** | **13 10 45.6** | **-1.7** |
| WOSB | | | | Sn | **Sn** | **13 11 14.9** | **-2.4** |
| **HG1B** | **Mitchell Dam** | **2.50** | **334** | Pn | **Pn** | **13 10 45.1** | **-2.7** |
| **BUTB** | **Butedale** | **2.62** | **25** | Pn | **Pn** | **13 10 48.1** | **-1.4** |
| BUTB | | | | Sn | **Sn** | **13 11 19.7** | **-1.7** |
| **GRIB** | **Gribbell Islan** | **2.73** | **15** | Pn | **Pn** | **13 10 49.0** | **-2.0** |
| **NCRB** | **Newcastle Ridg** | **2.73** | **95** | Pn | **Pn** | **13 10 49.4** | **-1.8** |
| **ETB** | **Estevan Point** | **2.77** | **117** | Pn | **Pn** | **13 10 49.1** | **-2.5** |
| **BNAB** | **Bonilla** | **2.79** | **356** | Pn | **Pn** | **13 10 49.4** | **-2.5** |
| **DIB** | **Dawson Inlet,** | **2.83** | **333** | | **Pn** | **13 10 49.3** | **-3.1** |
| **DIB** | **Dawson Inlet,** | **2.83** | **333** | Pn | **Pn** | **13 10 49.3** | **-3.1** |
| **GDR** | **Gold River** | **2.90** | **107** | Pn | **Pn** | **13 10 51.3** | **-2.0** |
| **HWKB** | **Hawksbury Isla** | **2.98** | **13** | Pn | **Pn** | **13 10 52.6** | **-1.9** |
| HWKB | | | | Sn | **Sn** | **13 11 27.6** | **-2.7** |
| **NC89** | **ODP889** | **3.04** | **131** | Pn | **Pn** | **13 10 54.7** | **-0.4** |
| **GRNB** | **Grenville Isla** | **3.15** | **4** | | **Pn** | **13 10 54.7** | **-2.0** |
| **GRNB** | **Grenville Isla** | **3.15** | **4** | Pn | **Pn** | **13 10 54.9** | **-1.9** |
| **CBB** | **Campbell River** | **3.24** | **100** | | **Pn** | **13 10 56.6** | **-1.4** |
| **CBB** | **Campbell River** | **3.24** | **100** | Pn | **Pn** | **13 10 56.8** | **-1.2** |
| CBB | | | | Sn | **Sn** | **13 11 33.8** | **-2.8** |
| **NCBC** | **Barkley Canyon** | **3.53** | **129** | Pn | **Pn** | **13 11 01.9** | **0.0** |
| **B012** | **Ucluelet** | **3.57** | **118** | Pn | **Pn** | **13 11 00.5** | **-2.0** |
| **OZB** | **Mount Ozzard** | **3.58** | **117** | | **Pn** | **13 10 60.0** | **-2.7** |
| **OZB** | **Mount Ozzard** | **3.58** | **117** | Pn | **Pn** | **13 11 00.1** | **-2.7** |
| **RUBB** | **Prince Rupert** | **3.62** | **1** | | **Pn** | **13 11 01.1** | **-2.1** |
| **RUBB** | **Prince Rupert** | **3.62** | **1** | Pn | **Pn** | **13 11 01.5** | **-1.7** |
| **BFSB** | **Bamfield** | **3.84** | **117** | Pn | **Pn** | **13 11 04.1** | **-2.2** |
| **B928** | **Bamfield** | **3.85** | **117** | Pn | **Pn** | **13 11 04.2** | **-2.1** |
| **B927** | **Port Alberni** | **3.85** | **111** | Pn | **Pn** | **13 11 04.7** | **-1.7** |
| **LIB** | **Langara Island** | **3.93** | **336** | Pn | **Pn** | **13 11 04.7** | **-2.7** |
| **SHB** | **Sechelt** | **4.29** | **103** | Pn | **Pn** | **13 11 11.3** | **-1.2** |
| **NLLB** | **Nanaimo Lost L** | **4.34** | **108** | Pn | **Pn** | **13 11 12.0** | **-1.2** |
| **PFB** | **Port Renfrew** | **4.38** | **117** | Pg | **Pn** | **13 11 24.9** | **+0.2** |
| **PTRF** | **Port Renfrew** | **4.41** | **117** | Pn | **Pn** | **13 11 13.0** | **-1.0** |
| **B926** | **Mesachie Lake** | **4.43** | **113** | Pn | **Pn** | **13 11 13.2** | **-1.1** |
| **CLRS** | **Cowichan Lake** | **4.43** | **113** | | **Pn** | **13 11 12.3** | **-2.0** |
| **CLRS** | **Cowichan Lake** | **4.43** | **113** | Pn | **Pn** | **13 11 12.8** | **-1.6** |
| **UBRB** | **Upper Baezaeko** | **4.44** | **58** | Pn | **Pn** | **13 11 15.2** | **+0.6** |
| **C03A** | **Quillayute Air** | **4.67** | **124** | | **Pn** | **13 11 17.1** | **-0.4** |
| **WPB** | **Watts Point** | **4.68** | **100** | Pn | **Pn** | **13 11 17.4** | **-0.4** |
| **V35K** | **Ketchikan** | **4.69** | **351** | | **Pn** | **13 11 16.1** | **-1.8** |
| **V35K** | **Ketchikan** | **4.69** | **351** | P | **Pn** | **13 11 16.0** | **-1.9** |
| | baz=168,SNR=6.7 | | | | | | |
| V35K | | | | S | **Sn** | **13 12 09.6** | **-2.7** |
| | baz=168 | | | | | | |
| V35K | | | | S | **Sn** | **13 12 09.6** | **-2.7** |
| | baz=168 | | | | | | |
| **V35K** | **Ketchikan** | **4.69** | **351** | Pn | **Pn** | **13 11 16.2** | **-1.7** |
| V35K | | | | Sn | **Sn** | **13 12 09.1** | **-3.2** |
| **BIB** | **Bowen Island** | **4.70** | **103** | Pn | **Pn** | **13 11 17.2** | **-0.8** |
| **GOBB** | **Galiano Island** | **4.74** | **109** | Pn | **Pn** | **13 11 18.1** | **-0.5** |
| GOBB | | | | Sn | **Sn** | **13 12 10.3** | **-3.3** |
| **SYMB** | **Survey Mountai** | **4.75** | **114** | Pn | **Pn** | **13 11 17.1** | **-1.7** |
| **WSLR** | **Whistler** | **4.76** | **94** | Pn | **Pn** | **13 11 18.2** | **-0.8** |
| **B010** | **North Saanich** | **4.91** | **112** | Pn | **Pn** | **13 11 19.9** | **-1.0** |
| **PGC** | **Sidney** | **4.91** | **112** | | **Pn** | **13 11 19.8** | **-1.1** |
| **PGC** | **Sidney** | **4.91** | **112** | Pn | **Pn** | **13 11 20.0** | **-0.9** |
| **B009** | **North Saanich** | **4.91** | **112** | Pn | **Pn** | **13 11 20.4** | **-0.5** |
| **B011** | **North Saanich** | **4.91** | **112** | Pn | **Pn** | **13 11 19.9** | **-1.0** |
| **SNB** | **Saturna Island** | **5.02** | **110** | Pn | **Pn** | **13 11 22.7** | **+0.2** |
| **STW** | **Striped Peak** | **5.03** | **118** | Pn | **Pn** | **13 11 22.2** | **-0.4** |
| **CRAG** | **Craig** | **5.06** | **342** | Pn | **Pn** | **13 11 20.9** | **-2.1** |
| **CRAG** | **Craig** | **5.06** | **342** | P | **Pn** | **13 11 21.0** | **-1.9** |
| | baz=157 | | | | | | |
| CRAG | | | | S | **Sn** | **13 12 20.1** | **-1.2** |
| | baz=157 | | | | | | |
| **VGZ** | **Gonzales** | **5.09** | **114** | Pn | **Pn** | **13 11 23.0** | **-0.5** |
| **B04A** | **Port Angeles** | **5.18** | **118** | | **Pn** | **13 11 22.1** | **-2.6** |
| **HNBB** | **Haney** | **5.19** | **103** | Pn | **Pn** | **13 11 24.3** | **-0.5** |
| **OSD** | **Olympics--Snow** | **5.20** | **121** | Pn | **Pn** | **13 11 24.6** | **-0.7** |
| **U35K** | **Hyder** | **5.22** | **2** | Pn | **Pn** | **13 11 22.8** | **-2.3** |
| **U35K** | **Hyder** | **5.22** | **2** | P | **Pn** | **13 11 23.4** | **-1.7** |
| | baz=181 | | | | | | |
| **FSJB** | **Fort St James** | **5.25** | **42** | Sn | **Sn** | **13 12 24.3** | **-1.8** |
| **MCW** | **Mount Constitu** | **5.26** | **110** | Pn | **Pn** | **13 11 25.6** | **-0.2** |
| **LLLB** | **Lillooet** | **5.36** | **88** | Pn | **Pn** | **13 11 26.4** | **-0.8** |
| **NLWA** | **Neilton Lookou** | **5.38** | **126** | | **Pn** | **13 11 26.6** | **-0.9** |
| **WISH** | **Wishkah** | **5.61** | **127** | | **Pn** | **13 11 28.8** | **-1.8** |
| **WISH** | **Wishkah** | **5.61** | **127** | Pn | **Pn** | **13 11 30.6** | **0.0** |
| **HDW** | **Hoodsport** | **5.66** | **120** | Pn | **Pn** | **13 11 31.2** | **-0.1** |
| **U33K** | **Whale Pass** | **5.67** | **344** | | **Pn** | **13 11 29.5** | **-1.8** |
| **U33K** | **Whale Pass** | **5.67** | **344** | P | **Pn** | **13 11 29.4** | **-1.8** |
| | baz=160 | | | | | | |
| U33K | | | | S | **Sn** | **13 12 33.3** | **-3.0** |
| | baz=160 | | | | | | |
| U33K | | | | S | **Sn** | **13 12 33.3** | **-3.0** |
| | baz=160 | | | | | | |
| **U33K** | **Whale Pass** | **5.67** | **344** | Pn | **Pn** | **13 11 29.5** | **-1.8** |
| **MBW** | **Mount Baker** | **5.78** | **106** | Pn | **Pn** | **13 11 33.4** | **+0.3** |
| **GNW** | **Green Mountain** | **5.83** | **120** | | **Pn** | **13 11 32.5** | **-1.2** |
| **GNW** | **Green Mountain** | **5.83** | **120** | Pn | **Pn** | **13 11 33.6** | **0.0** |
| **WRAK** | **Wrangell Islan** | **5.84** | **349** | P | **Pn** | **13 11 32.5** | **-1.3** |
| | baz=166 | | | | | | |
| WRAK | | | | S | **Sn** | **13 12 37.8** | **-2.9** |
| | baz=166 | | | | | | |
| **WRAK** | **Wrangell Islan** | **5.84** | **349** | Pn | **Pn** | **13 11 32.5** | **-1.3** |
| **HOPB** | **Hope** | **5.88** | **100** | Pn | **Pn** | **13 11 34.0** | **-0.3** |
| **JCW** | **Jim Creek** | **6.02** | **112** | Pn | **Pn** | **13 11 36.0** | **-0.2** |
| **CPW** | **Capitol Peak** | **6.03** | **126** | Pn | **Pn** | **13 11 36.3** | **-0.2** |
| **E03A** | **Lebam** | **6.11** | **130** | Pn | **Pn** | **13 11 37.4** | **-0.1** |
| **RPW** | **Rockport** | **6.15** | **108** | Pn | **Pn** | **13 11 38.6** | **+0.6** |
| **T35M** | **Bob Quinn** | **6.28** | **0** | P | **Pn** | **13 11 38.5** | **-1.3** |
| | baz=179,SNR=14 | | | | | | |
| **T35M** | **Bob Quinn** | **6.28** | **0** | Pn | **Pn** | **13 11 40.1** | **+0.4** |
| **T33K** | **Petersburg** | **6.31** | **347** | P | **Pn** | **13 11 39.6** | **-0.5** |
| | baz=163 | | | | | | |
| **D05A** | **Enumclaw** | **6.52** | **120** | Pn | **Pn** | **13 11 44.3** | **+1.3** |
| **FMW** | **Mount Fremont** | **6.84** | **120** | Pn | **Pn** | **13 11 48.4** | **+0.7** |
| **LON** | **Longmire** | **6.88** | **122** | Pn | **Pn** | **13 11 48.8** | **+0.7** |
| **S32K** | **Killisnoo** | **7.22** | **341** | P | **Pn** | **13 11 52.1** | **-0.5** |
| | baz=157 | | | | | | |
| **S32K** | **Killisnoo** | **7.22** | **341** | Pn | **Pn** | **13 11 52.4** | **-0.2** |
| **LTY** | **Liberty** | **7.22** | **115** | Pn | **Pn** | **13 11 53.4** | **+0.6** |
| **S34M** | **Telegraph Cree** | **7.23** | **357** | P | **Pn** | **13 11 52.0** | **-0.8** |
| | baz=175 | | | | | | |
| S34M | | | | S | **Sn** | **13 13 14.2** | **-0.6** |
| | baz=175 | | | | | | |
| **S34M** | **Telegraph Cree** | **7.23** | **357** | Pn | **Pn** | **13 11 53.1** | **+0.3** |
| **B08A** | **Colville Reser** | **7.52** | **104** | Pn | **Pn** | **13 11 57.1** | **+0.2** |
| **COR** | **Corvallis** | **7.74** | **140** | | **Pn** | **13 12 00.1** | **+0.3** |
| **COR** | **Corvallis** | **7.74** | **140** | P | **Pn** | **13 12 00.1** | **+0.3** |
| **DLBC** | **Dease Lake** | **7.74** | **1** | | **Pn** | **13 11 57.7** | **-2.2** |
| **DLBC** | **Dease Lake** | **7.74** | **1** | Pn | **Pn** | **13 11 58.4** | **-1.5** |
| | 0.8nm,0.3s,baz=186,slow=11,SNR=20 | | | | | | |
| DLBC | | | | Sn | **Sn** | **13 13 26.7** | **-0.9** |
| | baz=76,slow=22 | | | | | | |
| DLBC | | | | Lg | Lg | 13 14 08.2 | |
| | 0.3nm,0.3s,baz=60,slow=2.9,SNR=4.6 | | | | | | |
| DLBC | | | | LR | LR | 13 14 51.8 | |
| | comp=Z,2μm,21.3s,baz=187,slow=37 | | | | | | |
| | 6.7nm,0.6s | | | | | | |
| **DLBC** | **Dease Lake** | **7.74** | **1** | P | **Pn** | **13 11 59.0** | **-0.8** |
| | baz=180,SNR=7.8 | | | | | | |
| **DLBC** | **Dease Lake** | **7.74** | **1** | Pn | **Pn** | **13 12 00.3** | **+0.4** |
| **R32K** | **Eaglecrest** | **7.96** | **344** | P | **Pn** | **13 12 01.8** | **-1.0** |
| | baz=159 | | | | | | |
| **R32K** | **Eaglecrest** | **7.96** | **344** | Pn | **Pn** | **13 12 01.8** | **-1.0** |
| **BDMTA** | **Bald Mountain** | **8.04** | **55** | Pn | **Pn** | **13 12 05.5** | **+1.6** |
| **S31K** | **Pelican** | **8.04** | **337** | Pn | **Pn** | **13 12 02.8** | **-1.0** |
| **BESE** | **Bessie Mountai** | **8.31** | **343** | Pn | **Pn** | **13 12 07.1** | **-0.5** |
| **Q32M** | **Nakina River** | **8.34** | **353** | P | **Pn** | **13 12 07.6** | **-0.6** |
| | baz=170 | | | | | | |
| **Q32M** | **Nakina River** | **8.34** | **353** | Pn | **Pn** | **13 12 08.2** | **0.0** |
| **C09A** | **Chrisman Ranch** | **8.40** | **106** | Pn | **Pn** | **13 12 09.2** | **+0.4** |
| **TOAD** | **Toad River Com** | **8.66** | **18** | P | **Pn** | **13 12 12.3** | **-0.2** |
| | baz=201,SNR=18 | | | | | | |
| **R33M** | **Jennings River** | **8.71** | **358** | P | **Pn** | **13 12 12.9** | **-0.2** |
| | baz=176,SNR=10 | | | | | | |
| **R33M** | **Jennings River** | **8.71** | **358** | Pn | **Pn** | **13 12 13.8** | **+0.7** |
| **NEW** | **Newport** | **8.93** | **101** | Pn | **Pn** | **13 12 16.4** | **+0.3** |
| | 1.1nm,0.3s,baz=293,slow=12,SNR=9.3 | | | | | | |
| NEW | | | | Lg | Lg | 13 14 45.3 | |
| | baz=18,slow=15 | | | | | | |
| NEW | | | | LR | LR | 13 15 40.0 | |
| | comp=Z,3μm,18.7s,baz=290,slow=37 | | | | | | |
| | 7.1nm,0.6s | | | | | | |
| **LIRD** | **Liard River Hi** | **9.04** | **14** | P | **Pn** | **13 12 17.4** | **-0.2** |
| | baz=197 | | | | | | |
| **P32M** | **Atlin** | **9.11** | **349** | P | **Pn** | **13 12 18.0** | **-0.5** |
| | baz=165 | | | | | | |
| **P32M** | **Atlin** | **9.11** | **349** | Pn | **Pn** | **13 12 18.3** | **-0.3** |
| **FNSB** | **Fort Nelson** | **9.21** | **25** | Pn | **Pn** | **13 12 20.0** | **0.0** |
| **SWHSA** | **Sweathouse Loo** | **9.22** | **58** | Pn | **Pn** | **13 12 20.7** | **+0.6** |
| **SKAG** | **Skagway** | **9.22** | **344** | P | **Pn** | **13 12 20.4** | **+0.3** |
| | baz=159 | | | | | | |
| **G08A** | **Pilot Rock** | **9.34** | **121** | | **Pn** | **13 12 21.3** | **-0.6** |
| **PLBC** | **Pleasant Camp** | **9.42** | **341** | P | **Pn** | **13 12 21.8** | **-1.0** |
| | baz=155 | | | | | | |
| **PLBC** | **Pleasant Camp** | **9.42** | **341** | Pn | **Pn** | **13 12 22.0** | **-0.8** |
| **NBC6** | **NorthernBC 6** | **9.44** | **30** | Pn | **Pn** | **13 12 23.2** | **+0.1** |
| **WTLY** | **Watson Lake, Y** | **9.46** | **5** | | **Pn** | **13 12 21.5** | **-1.9** |
| **WTLY** | **Watson Lake, Y** | **9.46** | **5** | P | **Pn** | **13 12 21.5** | **-1.9** |
| | baz=185 | | | | | | |
| **P33M** | **Teslin, Yukon** | **9.63** | **352** | P | **Pn** | **13 12 24.6** | **-1.1** |
| | baz=170 | | | | | | |
| **P33M** | **Teslin, Yukon** | **9.63** | **352** | Pn | **Pn** | **13 12 25.2** | **-0.4** |
| **KOTAN** | **Kotaneelee Air** | **10.08** | **18** | P | **Pn** | **13 12 30.6** | **-1.2** |
| | baz=203,SNR=12 | | | | | | |
| **P30M** | **Million Dollar** | **10.15** | **341** | P | **Pn** | **13 12 31.4** | **-1.5** |
| | baz=154 | | | | | | |
| **P30M** | **Million Dollar** | **10.15** | **341** | Pn | **Pn** | **13 12 32.5** | **-0.4** |
| **WHY** | **Whitehorse** | **10.30** | **347** | | **Pn** | **13 12 34.7** | **-0.2** |
| **WHY** | **Whitehorse** | **10.30** | **347** | P | **Pn** | **13 12 33.6** | **-1.2** |
| | baz=163,SNR=5.2 | | | | | | |
| **WHY** | **Whitehorse** | **10.30** | **347** | Pn | **Pn** | **13 12 34.7** | **-0.2** |
| **YBH** | **Yreka Blue Hor** | **10.40** | **147** | | **Pn** | **13 12 37.5** | **+1.1** |
| **YBH** | **Yreka Blue Hor** | **10.40** | **147** | Pn | **Pn** | **13 12 37.8** | **+1.4** |
| | 0.1nm,0.3s,baz=329,slow=11,SNR=13 | | | | | | |
| YBH | | | | LR | LR | 13 16 05.5 | |
| | comp=Z,572nm,21.8s,baz=332,slow=34 | | | | | | |
| | 7.9nm,1.1s | | | | | | |
| **BSMT** | **Bassoo Peak** | **10.54** | **100** | Pn | **Pn** | **13 12 39.3** | **+1.0** |
| **N32M** | **Quiet Lake** | **10.58** | **353** | P | **Pn** | **13 12 37.6** | **-1.1** |
| | baz=170 | | | | | | |
| **N32M** | **Quiet Lake** | **10.58** | **353** | Pn | **Pn** | **13 12 38.9** | **+0.2** |
| **O30N** | **Mendenhall** | **10.59** | **344** | P | **Pn** | **13 12 37.7** | **-1.2** |
| | baz=159 | | | | | | |
| **O30N** | **Mendenhall** | **10.59** | **344** | Pn | **Pn** | **13 12 39.2** | **+

I30M **Mount Dempster** 14.89 350 P Pn 13 13 37.3 -0.3
baz=164,SNR=5.7
SML **Sawmill** 14.89 325 P Pn 13 13 36.2 -1.4
baz=129
NVAR **Mina Array Bea** 14.94 141 Pn P 13 13 41.3 -2.9
0.9nm,0.7s,baz=322,slow=12,SNR=8.1
NVAR LR LR 13 18 49.1
comp=Z,317nm,19.8s,baz=326,slow=35
Q20K **Shuyak Island** 14.97 310 P Pn 13 13 36.2 -2.4
baz=112
RC01 **Rabbit Creek A** 14.99 321 P Pn 13 13 37.5 -1.4
baz=124
NV11 **Mina Array Sit** 15.00 140 IAmb IAmb 13 13 45.9
comp=Z,31nm,2.0s
HVU **Hansel Valley** 15.04 120 IAmb IAmb 13 13 45.6
comp=Z,55nm,1.9s
PMR **Palmer** 15.05 324 P Pn 13 13 38.0 -1.7
baz=127
SNOW **Snow King Moun** 15.14 111 IAmb IAmb 13 13 46.7
comp=Z,24nm,1.1s
REDW **Red Top Meadow** 15.14 112 IAmb IAmb 13 13 46.5
comp=Z,21nm,1.2s
LOHW **Long Hollow** 15.14 110 IAmb IAmb 13 13 46.5
comp=Z,28nm,1.1s
RLMT **Red Lodge** 15.15 103 IAmb IAmb 13 13 44.5
comp=Z,21nm,1.1s
SCRK **Sand Creek** 15.15 336 P Pn 13 13 40.1 -1.1
baz=144
RIDG **Independent Ri** 15.19 335 P Pn 13 13 40.3 -1.2
baz=142,SNR=9.8
WAT6 **Susitna Watana** 15.20 328 P Pn 13 13 40.0 -1.8
baz=133,SNR=6.4
EGAK **Eagle** 15.21 342 IAmb IAmb 13 13 45.9
comp=Z,25nm,2.0s
EGAK **Eagle** 15.21 342 P Pn 13 13 41.2 -0.5
baz=152,SNR=7.7
I29M **Ogilvie Camp,** 15.27 347 P Pn 13 13 42.0 -0.5
baz=160
SII **Sitkinak Island** 15.28 302 P Pn 13 13 40.8 -1.8
baz=102
OMMB **Old Mammoth Mi** 15.38 144 IAmb IAmb 13 13 52.4
comp=Z,32nm,1.8s
DHY **Denali Highway** 15.43 330 P Pn 13 13 44.2 -0.6
baz=135,SNR=19
BGU **Big Grassy Mou** 15.49 123 IAmb IAmb 13 13 52.9
comp=Z,20nm,1.3s
J26L **Joseph Creek** 15.49 338 P Pn 13 13 44.7 -0.8
baz=146,SNR=15
K24K **Donnelly Dome** 15.50 334 P Pn 13 13 45.0 -0.5
baz=140
I28M **Miner Creek** 15.60 345 P Pn 13 13 47.0 +0.1
baz=156
SUA **Susitna One** 15.60 321 P Pn 13 13 46.2 -0.8
baz=124
BBGB **Big Mountain B** 15.62 151 IAmb IAmb 13 13 56.4
comp=Z,52nm,1.2s
R18K **Karluk** 15.66 305 P Pn 13 13 46.4 -1.2
baz=105
TPH **Tonopah** 15.69 139 IAmb IAmb 13 13 54.0
comp=Z,35nm,1.0s
O20K **Slope Mountain** 15.69 315 P Pn 13 13 46.5 -1.6
baz=116
Q19K **Cape Douglas,** 15.69 311 P Pn 13 13 47.2 -0.9
baz=111
P19K **Oil Pt** 15.78 313 P Pn 13 13 47.8 -1.4
baz=114
HWUT **Hardware Ranch** 15.82 118 IAmb IAmb 13 13 55.1
comp=Z,76nm,1.5s
CHIR **Chirikof Islan** 15.94 299 P Pn 13 13 49.2 -2.0
baz=98
CUT **Chulitna** 15.98 325 P Pn 13 13 51.1 -0.7
baz=127
DSP **Deep Springs** 15.99 142 IAmb IAmb 13 14 00.1
comp=Z,52nm,1.9s
J25K **Salcha River,** 16.03 336 P Pn 13 13 52.0 -0.4
baz=143,SNR=12
PMPB **Monarch Peak** 16.03 151 IAmb IAmb 13 14 00.0
comp=Z,42nm,1.1s
I27K **Kandik River** 16.04 343 P Pn 13 13 52.1 -0.4
baz=153
EPYK **Eagle Plains** 16.04 351 P P 13 13 53.8 -2.2
EPYK **Eagle Plains** 16.04 351 P Pn 13 13 52.0 -0.6
baz=165
N20K **Mount Spurr** 16.05 319 P Pn 13 13 51.7 -1.2
baz=120
SPCR **Spurr Chakacha** 16.05 319 P Pn 13 13 51.7 -1.2
baz=120
I26K **Coal Creek Min** 16.08 340 P P 13 13 53.2 -3.2
baz=149,SNR=35
H29M **Whitestone** 16.09 348 P P 13 13 53.5 -3.0
baz=161,SNR=7.4
R11B **Troy Canyon, C** 16.18 134 IAmb IAmb 13 14 02.3
comp=Z,46nm,2.0s
R11B **Troy Canyon, C** 16.18 134 P Pn 13 13 54.8 +0.1
baz=325,SNR=9.9
SKT **Skwentna** 16.21 322 P Pn 13 13 54.1 -0.5
baz=124
TCUT **Toone Canyon** 16.24 119 IAmb IAmb 13 14 02.6
comp=Z,73nm,1.7s
PD31 **Pinedale Array** 16.26 111 IAmb IAmb 13 13 59.8
comp=Z,56nm,1.2s
PDAR **Pinedale Array** 16.26 111 P P 13 13 58.2 -0.5
PDAR **Pinedale Array** 16.26 111 Pn P 13 13 58.4 -0.4
comp=Z,0.3nm,0.3s,baz=311,slow=11,SNR=121
PDAR LR LR 13 20 07.7
comp=Z,411nm,21.8s,baz=310,slow=37
comp=Z,23nm,0.9s
Q18K **Katmai Hardscr** 16.27 309 P Pn 13 13 54.3 -1.3
baz=108
G31M **Satah River** 16.38 354 P P 13 13 57.3 -2.4
baz=171
MCK **McKinley** 16.40 330 P Pn 13 13 56.8 -0.3
baz=133,SNR=19
O19K **Port Alsworth** 16.51 314 P Pn 13 13 57.7 -0.7
baz=114
ILAR **Eielson Array** 16.55 335 P P 13 14 01.7 0.0
ILAR **Eielson Array** 16.55 335 Pn P 13 13 59.9 -1.8
comp=Z,0.6nm,0.8s,baz=156,slow=15,SNR=4.5
ILAR LR LR 13 19 43.3
comp=Z,328nm,19.9s,baz=130,slow=35
H27K **Steamboat Moun** 16.58 344 P P 13 13 59.8 -2.2
baz=154
G30M **tAoh Zraii Nji** 16.59 352 P P 13 13 59.9 -2.2
baz=166
Q17K **Contact Creek** 16.59 307 P Pn 13 13 58.5 -1.2
baz=105
P18K **Big Mountain,** 16.62 311 P Pn 13 13 59.0 -1.0
baz=110
PLK4 **Peulik 4** 16.68 305 Pn P 13 14 01.0 -2.1
PLK4 IAmb IAmb 13 14 09.0
comp=Z,52nm,1.4s
R17L **Mt. Peulik Vol** 16.68 305 P Pn 13 13 58.8 -1.9
baz=103
NLU **North Lily Min** 16.69 123 IAmb IAmb 13 14 09.0
comp=Z,32nm,1.0s
G29M **Pine Creek** 16.71 349 IAmb IAmb 13 14 06.1
comp=Z,43nm,1.6s
G29M **Pine Creek** 16.71 349 P P 13 14 01.1 -2.3
baz=162
O18K **Koktuh Hills** 16.78 313 P Pn 13 14 00.4 -1.7
baz=111,SNR=6.0
M20K **Styx River** 16.79 320 P Pn 13 14 00.7 -1.5
baz=121
PRP **Porcupine Dome** 16.80 338 P Pn 13 14 01.4 -1.0
baz=144,SNR=21
N19K **Bonanza Creek** 16.84 316 P Pn 13 14 01.1 -1.7
baz=115,SNR=10.0
F31M **Tsiigehtchic** 16.87 355 P Pn 13 14 02.4 -0.6
baz=172
COLA **College** 16.90 334 P Pn 13 14 02.6 -0.8
baz=138
COLA **College** 16.90 334 *de*P P 13 14 09.6 +4.2
POKR **Poker Flat Res** 16.97 335 P Pn 13 14 03.5 -0.8
baz=140
WCT **Wildcat Mounta** 17.03 140 IAmb IAmb 13 14 11.5
comp=Z,77nm,1.7s
NEA2 **Nenana** 17.05 332 P Pn 13 14 04.6 -0.7
baz=135
G27K **Doyon Strip** 17.13 345 P P 13 14 06.6 -1.5
baz=154,SNR=14
P17K **Kvichak River** 17.14 310 P Pn 13 14 05.5 -1.0
baz=108
F30M **Barrier River** 17.17 353 P P 13 14 07.0 -1.5
baz=168
M19K **Big River Lodg** 17.31 320 IAmb IAmb 13 14 17.0
comp=Z,63nm,1.9s
M19K **Big River Lodg** 17.31 320 P Pn 13 14 07.7 -1.0
baz=119

BPAW **Bear Paw Mtn.** 17.31 329 P P 13 14 08.0 -2.1
baz=130,SNR=8.6
L20K **Farewell, AK** 17.40 322 P Pn 13 14 08.7 -1.1
baz=121
N18K **Kilae Creek** 17.41 315 P P 13 14 09.4 -1.9
baz=113
H25L **Birch Creek** 17.49 339 P P 13 14 10.9 -1.1
baz=145,SNR=12
I23K **Minto, Yukon-K** 17.54 333 P P 13 14 10.8 -1.6
baz=136
FFC **Flin Flon** 17.57 66 P P 13 14 12.2 -0.7
FFC IAmb IAmb 13 14 17.6
comp=Z,19nm,0.8s
FFC **Flin Flon** 17.57 66 P P 13 14 12.2 -0.7
FFC pmax pmax
comp=Z,19nm,0.8s
FYU **Fort Yukon** 17.61 340 IAmb IAmb 13 14 20.9
comp=Z,50nm,1.1s
F28M **Old Crow** 17.61 348 IAmb IAmb 13 14 15.6
comp=Z,60nm,2.0s
F28M **Old Crow** 17.61 348 P P 13 14 12.6 -0.7
baz=159,SNR=8.4
L19K **White Mountain** 17.64 320 P P 13 14 11.9 -1.9
baz=119,SNR=24
BCW **Bitter Crk WRg** 17.64 149 IAmb IAmb 13 14 23.4
comp=Z,43nm,1.4s
G26K **Porcupine Rive** 17.64 342 P P 13 14 13.1 -0.5
baz=150,SNR=4.9
O17K **Koliganek Bris** 17.64 311 P P 13 14 12.0 -1.7
baz=108
H24K **Noodor Dome** 17.65 336 IAmb IAmb 13 14 20.3
comp=Z,33nm,1.1s
H24K **Noodor Dome** 17.65 336 P P 13 14 13.2 -0.6
baz=140,SNR=26
MVU **Marysvale** 17.69 127 IAmb IAmb 13 14 18.8
comp=Z,89nm,1.2s
INK **Inuvik** 17.72 356 P P 13 14 13.1 -1.4
baz=167,slow=9.0,SNR=1.6
INK LR LR 13 21 40.9
comp=Z,425nm,19.9s,baz=180,slow=39
comp=Z,6.0nm,1.0s
INK **Inuvik** 17.72 356 P P 13 14 13.9 -0.6
baz=173
M18K **Stony River** 17.73 317 P P 13 14 13.4 -1.2
baz=115
P16K **Nushagak River** 17.86 308 P Pn 13 14 14.1 -1.3
baz=105
MLY **Manley** 17.86 331 IAmb IAmb 13 14 23.9
comp=Z,32nm,1.2s
MLY **Manley** 17.86 331 P P 13 14 15.4 -0.8
baz=133,SNR=8.6
P18A **Preston Nutter** 17.91 120 IAmb IAmb 13 14 22.6
comp=Z,56nm,1.8s
N17K **Nushagak Hills** 17.95 313 P 13 14 17.9 +0.8
N17K **Nushagak Hills** 17.95 313 P P 13 14 16.5 -0.6
baz=110,SNR=8.9
K20K **Telida** 17.95 324 IAmb IAmb 13 14 25.9
comp=Z,29nm,1.1s
K20K **Telida** 17.95 324 P P 13 14 16.1 -1.0
baz=123,SNR=11
SZCU **Shurtz Canyon** 17.96 130 IAmb IAmb 13 14 25.8
comp=Z,104nm,2.0s
G25K **Bearman Lake** 17.96 340 P P 13 14 17.4 +0.3
baz=145,SNR=13
O16K **Kokwok River B** 18.07 310 P P 13 14 17.8 -0.6
baz=107,SNR=6.7
H23K **Yukon River** 18.09 334 P P 13 14 18.9 +0.3
baz=137
E29M **Blow River** 18.12 351 P P 13 14 19.2 +0.3
baz=164
CHNA **Chernabura Isl** 18.12 295 P P 13 14 17.3 -1.7
baz=90
K22A **Casper** 18.15 107 IAmb IAmb 13 14 25.8
comp=Z,36nm,0.8s
S14K **Fog Glacier** 18.18 299 P P 13 14 18.2 -1.6
baz=95
BMAR **Burnt Mountain** 18.21 342 P P 13 14 21.4 +1.4
G24K **Hadweenzic Riv** 18.23 338 P P 13 14 20.1 -0.1
baz=143,SNR=10
RWWY **Rawlins** 18.30 111 IAmb IAmb 13 14 26.5
comp=Z,22nm,1.0s
I21K **Tanana** 18.35 330 P P 13 14 21.8 +0.3
baz=131
F26K **Sheenjek River** 18.36 343 IAmb IAmb 13 14 30.2
comp=Z,66nm,1.6s
F26K **Sheenjek River** 18.36 343 P P 13 14 22.3 +0.7
baz=151,SNR=24
E27K **Coleen River** 18.38 347 P P 13 14 22.5 +0.7
baz=156,SNR=12
M17K **Holitna River** 18.39 316 P P 13 14 21.4 -0.6
baz=113
L18K **Granite Mounta** 18.42 319 P Pn 13 14 21.9 -0.3
baz=116,SNR=20
J20K **Nowinta River** 18.45 326 IAmb IAmb 13 14 31.7
comp=Z,52nm,1.1s
J20K **Nowinta River** 18.45 326 P Pn 13 14 23.2 +0.6
baz=125,SNR=13
PKCU **Pink Cliffs** 18.46 129 IAmb IAmb 13 14 31.2
comp=Z,58nm,1.4s
E28M **Babbage River** 18.50 349 P Pn 13 14 24.2 +0.9
baz=161
F25K **Christian Rive** 18.57 341 IAmb IAmb 13 14 33.7
comp=Z,74nm,1.4s
F25K **Christian Rive** 18.57 341 P Pn 13 14 24.4 +0.4
baz=148,SNR=36
SDPT **Sand Point** 18.64 296 P Pn 13 14 25.1 +0.1
baz=91
H22K **Ishtalitna Cre** 18.66 333 P Pn 13 14 25.9 +0.7
baz=134,SNR=20
N16K **Nishlik Lake** 18.67 312 P Pn 13 14 25.6 +0.3
baz=97
O20A **White River Ci** 18.68 116 IAmb IAmb 13 14 35.1
comp=Z,28nm,0.9s
O15K **Ungalikthiuk R** 18.81 308 P Pn 13 14 27.1 0.0
baz=103
HMU **Henry Mountain** 18.88 125 IAmb IAmb 13 14 38.1
comp=Z,31nm,1.0s
G23K **Bananza Creek** 18.88 336 IAmb IAmb 13 14 36.6
comp=Z,36nm,1.2s
G23K **Bananza Creek** 18.88 336 P Pn 13 14 28.7 +0.9
baz=138,SNR=26
J19K **Poorman** 18.88 324 IAmb IAmb 13 14 38.0
comp=Z,41nm,1.1s
J19K **Poorman** 18.88 324 P Pn 13 14 27.9 0.0
baz=122,SNR=18
RSSD **Black Hills** 18.90 100 P Pn 13 14 27.5 -1.0
RSSD IAmb IAmb 13 14 34.0
comp=Z,32nm,0.8s
RSSD **Black Hills** 18.90 100 P Pn 13 14 27.5 -1.0
RSSD pmax pmax
comp=Z,31nm,0.8s
H21K **Melozitna Rive** 18.93 331 IAmb IAmb 13 14 38.3
comp=Z,41nm,1.4s
H21K **Melozitna Rive** 18.93 331 P Pn 13 14 28.7 +0.2
baz=131,SNR=13
I20K **Naaghedeneel** 18.93 327 IAmb IAmb 13 14 36.6
comp=Z,34nm,1.1s
I20K **Naaghedeneel** 18.93 327 P Pn 13 14 28.5 +0.1
baz=126
M16K **Timber Creek** 18.94 314 P Pn 13 14 28.7 +0.1
baz=110
F24K **Squaw Lake** 18.98 339 IAmb IAmb 13 14 37.4
comp=Z,64nm,1.9s
F24K **Squaw Lake** 18.98 339 P Pn 13 14 29.7 +0.5
baz=143
J18K **Innoko River** 19.02 322 IAmb IAmb 13 14 37.7
comp=Z,36nm,1.2s
J18K **Innoko River** 19.02 322 P Pn 13 14 29.3 -0.3
baz=119,SNR=22
L17K **Donlin** 19.06 318 P Pn 13 14 30.1 0.0
baz=114,SNR=5.7
N15K **Kwethluk River** 19.20 311 P Pn 13 14 30.0 -1.8
N15K **Kwethluk River** 19.20 311 P Pn 13 14 30.8 -0.9
baz=106
U15A **North Rim** 19.27 131 IAmb IAmb 13 14 40.0
comp=Z,22nm,0.9s
D27M **Malcolm River** 19.28 348 IAmb IAmb 13 14 42.9
comp=Z,31nm,1.3s
D27M **Malcolm River** 19.28 348 P Pn 13 14 32.7 -0.1
baz=159,SNR=9.8
K17K **Iditarod** 19.31 319 P Pn 13 14 32.0 -1.1
baz=115
COLD **Coldfoot** 19.31 336 P Pn 13 14 32.8 -0.2
baz=139,SNR=18
L16K **Owhat River** 19.41 316 P Pn 13 14 34.2 -0.1
baz=111,SNR=7.2
G22K **Bettles** 19.43 335 P Pn 13 14 34.7 +0.3
baz=136

H20K **Anotleneega Mo** 19.49 329 P Pn 13 14 34.5 -0.7
baz=127
ELS **Elsinore Mount** 19.49 146 IAmb IAmb 13 14 44.8
comp=Z,86nm,1.9s
N23A **Red Feather La** 19.54 111 IAmb IAmb 13 14 42.6
comp=Z,45nm,1.2s
N23A **Red Feather La** 19.54 111 P Pn 13 14 36.6 +0.3
baz=309,SNR=14
O14K **Tigyukauivet M** 19.55 308 P Pn 13 14 34.7 -1.3
baz=102
S12K **Black Hills** 19.55 297 P Pn 13 14 34.4 -1.7
baz=91
E24K **Your Creek** 19.57 340 IAmb IAmb 13 14 45.7
comp=Z,52nm,1.3s
E24K **Your Creek** 19.57 340 P Pn 13 14 36.1 -0.1
baz=143,SNR=25
PHWY **Pilot Hill** 19.58 109 IAmb IAmb 13 14 40.8
comp=Z,29nm,0.8s
M15K **Kasigluk River** 19.64 312 P Pn 13 14 36.2 -0.8
baz=106
G21K **Allakaket** 19.72 332 P Pn 13 14 37.2 -0.7
baz=132
E23K **Chandalar** 19.81 338 P Pn 13 14 38.5 -0.7
baz=141,SNR=17
PFO **Pinyon Flats O** 19.88 144 P Pn 13 14 39.7 -0.4
PFO IAmb IAmb 13 14 50.4
comp=Z,32nm,1.4s
PFO **Pinyon Flats O** 19.88 144 P Pn 13 14 40.2 0.0
comp=Z,0.2nm,0.3s,baz=314,slow=12,SNR=10
PFO LR LR 13 22 43.2
comp=Z,383nm,18.4s,baz=319,slow=38
comp=Z,6.5nm,1.0s
TPFO **Pinon Flats** 19.88 144 P Pn 13 14 39.6 -0.6
baz=334
N14K **Kuskokwak Cree** 19.91 310 P Pn 13 14 38.5 -1.7
baz=103,SNR=5.6
J17K **VABM Dome** 19.93 321 IAmb IAmb 13 14 46.9
comp=Z,44nm,1.1s
J17K **VABM Dome** 19.93 321 P Pn 13 14 39.0 -1.4
baz=116,SNR=9.2
C27K **Jago River** 20.02 346 P Pn 13 14 40.1 -1.3
baz=154
F22K **John River** 20.04 335 P Pn 13 14 40.8 -0.9
baz=136,SNR=22
H19K **Roundabout Mou** 20.04 328 IAmb IAmb 13 14 53.0
comp=Z,29nm,1.1s
H19K **Roundabout Mou** 20.04 328 P Pn 13 14 40.6 -1.1
baz=125
SMCO **Snowmass** 20.05 116 IAmb IAmb 13 14 49.7
comp=Z,32nm,1.2s
D25K **Kavik River** 20.19 343 P Pn 13 14 42.9 -0.6
baz=149,SNR=17
F21K **Alatna River** 20.19 334 P Pn 13 14 42.0 -1.6
baz=133
M14K **Bethel** 20.25 312 P Pn 13 14 42.2 -2.0
baz=105,SNR=12
TOLK **Toolik Lake Re** 20.27 340 P Pn 13 14 43.7 -0.7
baz=142,SNR=10
L15K **Ungalak Mounta** 20.30 315 P Pn 13 14 42.8 -2.0
baz=108,SNR=9.3
FALS **False Pass** 20.33 295 P Pn 13 14 42.7 -2.5
baz=88
E22K **Anaktuvuk Pass** 20.40 337 P Pn 13 14 44.3 -1.7
E22K **Anaktuvuk Pass** 20.40 337 P Pn 13 14 44.7 -1.4
baz=138,SNR=14
ISCO **Idaho Springs** 20.43 113 IAmb IAmb 13 14 50.1
comp=Z,57nm,1.6s
WUAZ **Wupatki** 20.45 131 IAmb IAmb 13 14 54.7
comp=Z,29nm,1.1s
H18K **Honhosa River** 20.50 325 P Pn 13 14 45.1 -2.1
baz=121
J16K **Anvik River** 20.50 319 P Pn 13 14 44.7 -2.5
J16K IAmb IAmb 13 14 53.4
comp=Z,33nm,1.0s
J16K **Anvik River** 20.50 319 P Pn 13 14 45.4 -1.8
baz=113,SNR=17
D24K **Happy Valley** 20.52 341 IAmb IAmb 13 14 58.3
comp=Z,64nm,1.6s
D24K **Happy Valley** 20.52 341 P Pn 13 14 46.1 -1.3
baz=144
K15K **Wolf Creek Mou** 20.53 316 Pn Pn 13 14 47.1 -0.4
K15K **Wolf Creek Mou** 20.53 316 P Pn 13 14 45.3 -2.2
baz=110
MVCO **Mesa Verde** 20.60 123 IAmb IAmb 13 14 56.0
comp=Z,34nm,0.9s
G19K **Purcell Mounta** 20.61 329 IAmb IAmb 13 14 59.6
comp=Z,18nm,0.9s
G19K **Purcell Mounta** 20.61 329 P Pn 13 14 46.4 -1.9
baz=125,SNR=10
BRIGG **Briggsdale** 20.70 109 IAmb IAmb 13 14 53.0
comp=Z,38nm,0.9s
F20K **Avaraart Lake** 20.73 332 P Pn 13 14 48.3 -1.5
baz=129,SNR=28
L14K **Kuka Creek** 20.75 313 IAmb IAmb 13 15 03.8
comp=Z,35nm,1.3s
L14K **Kuka Creek** 20.75 313 P P 13 14 47.1 -0.5
baz=106,SNR=6.2
D23K **Nanushuk River** 20.77 339 P P 13 14 46.5 -1.4
D23K **Nanushuk River** 20.77 339 P Pn 13 14 49.1 -1.2
baz=141,SNR=16
I17K **Unalakleet** 20.79 321 P Pn 13 14 48.4 -2.1
baz=114,SNR=7.2
M13K **Dall Lake** 20.83 310 Pn Pn 13 14 51.1 +0.1
M13K **Dall Lake** 20.83 310 P P 13 14 47.7 -0.8
baz=102
H17K **Granite Mounta** 20.96 324 IAmb IAmb 13 14 58.5
comp=Z,28nm,0.9s
H17K **Granite Mounta** 20.96 324 P Pn 13 14 50.6 -1.9
baz=118,SNR=11
C24K **Franklin Bluff** 20.97 342 P Pn 13 14 51.6 -0.9
baz=146
CBX **Cerro Bola** 20.97 146 IAmb IAmb 13 14 58.9
comp=Z,37nm,1.0s
G18K **Tagagawik** 21.00 327 P P 13 14 50.0 -0.3
G18K IAmb IAmb 13 15 01.9
comp=Z,68nm,1.9s
G18K **Tagagawik** 21.00 327 P Pn 13 14 50.7 -2.2
baz=122
Y14A **Wickenburg** 21.00 136 IAmb IAmb 13 15 01.8
comp=Z,24nm,1.0s
GLA **Glamis** 21.00 141 IAmb IAmb 13 15 00.3
comp=Z,39nm,1.1s
S22A **4UR Ranch, Cre** 21.13 119 IAmb IAmb 13 14 55.6
comp=Z,54nm,1.6s
S22A **4UR Ranch, Cre** 21.13 119 P P 13 14 53.5 +1.2
baz=316,SNR=26
D22K **Ayikyak River** 21.18 338 P P 13 14 53.6 +1.3
baz=138
E21K **Killik River** 21.18 336 P P 13 14 52.4 +0.1
baz=135,SNR=7.7
F19K **Shaleruckik Mo** 21.24 330 IAmb IAmb 13 15 07.1
comp=Z,38nm,1.2s
F19K **Shaleruckik Mo** 21.24 330 P P 13 14 53.9 +1.0
baz=126,SNR=16
Q24A **Divide** 21.25 114 IAmb IAmb 13 15 05.8
comp=Z,39nm,1.8s
Q24A **Divide** 21.25 114 P P 13 14 55.1 +1.5
baz=312
X16A **Lo Mia Camp, P** 21.31 133 IAmb IAmb 13 15 06.8
comp=Z,26nm,1.0s
E19K **Redstone River** 21.45 331 P P 13 14 56.3 +1.2
baz=128
C23K **Itkillik River** 21.45 341 IAmb IAmb 13 15 05.1
comp=Z,40nm,1.1s
C23K **Itkillik River** 21.45 341 P P 13 14 55.3 +0.2
baz=142
A36M **Sachs Harbour** 21.47 4 P P 13 14 56.6 +1.3
baz=188
ESJX **Sierra Juarez** 21.51 145 IAmb IAmb 13 15 06.2
comp=Z,46nm,1.2s
G17K **Kiwalik Mounta** 21.51 325 P P 13 14 55.9 +0.1
baz=118,SNR=6.7
J14K **Nanvaranak Lak** 21.57 317 P P 13 14 56.0 -0.4
baz=108
W18A **Petrified Fore** 21.57 128 P P 13 14 58.7 +1.8
baz=323
E20K **Nigu River** 21.65 334 P P 13 14 58.3 +0.8
baz=131
H16K **Elim** 21.72 322 P P 13 14 59.0 +0.9
baz=114,SNR=6.6
F18K **Selawik** 21.72 328 P P 13 14 58.9 +0.8
baz=122,SNR=6.0
ULM **Lac du Bonnet** 21.81 78 P P 13 14 57.8 -1.4
ULM IAmb IAmb 13 15 06.0
comp=Z,29nm,0.8s
ULM **Lac du Bonnet** 21.81 78 P P 13 14 58.9 -0.2
comp=Z,14nm,0.6s,baz=288,slow=9.1,SNR=11
ULM LR LR 13 22 24.0

comp=Z,415nm,21.0s,baz=286,slow=34
comp=Z,14nm,0.6s
**SDCO Great Sand Dun 21.88 117** IAmb IAmb 13 15 08.5
comp=Z,28nm,1.3s
**C21K Knifeblade Rid 21.90 337** P **P** **13 15 00.4 +0.4**
baz=135
**D20K Etivluk River 22.07 334** P **P** **13 15 01.5 -0.4**
baz=131
**G16K Koyuk River 22.09 324** P **P** **13 15 01.4 -0.6**
baz=116
**VTX Valle De La Tr 22.12 145** IAmb IAmb 13 15 06.2
comp=Z,23nm,1.3s
**F17K Baldwin Pennin 22.19 327** IAmb IAmb 13 15 12.4
comp=Z,43nm,1.1s
**F17K Baldwin Pennin 22.19 327** P **P** **13 15 02.4 -0.7**
baz=120,SNR=5.6
**B21K Ikpikpuk River 22.19 338** P **P** **13 15 02.4 -0.7**
baz=136
**UNV Unalaska Valle 22.21 292** P **P** **13 15 01.8 -1.6**
baz=83
**M11K Mekoryuk 22.22 310** P **P** **13 15 02.8 -0.6**
baz=99
**D19K Kuna River 22.35 333** P **P** **13 15 04.6 -0.4**
baz=128
**B22K Teshekpuk Lake 22.45 340** P **P** **13 15 04.5 -1.3**
baz=139
**E18K Tukpahlearik C 22.48 329** P **P** **13 15 05.0 -1.2**
baz=123
**G15K Niukluk 22.57 322** P **P** **13 15 06.2 -0.9**
baz=113
**E17K Hotham Inlet 22.71 328** P **P** **13 15 07.2 -1.4**
baz=120
**214A Organ Pipe Nat 22.78 139** IAmb IAmb 13 15 20.0
comp=Z,27nm,1.0s
**214A Organ Pipe Nat 22.78 139** P **P** **13 15 09.6 -0.1**
baz=331
**T25A Trinidad 22.92 116** IAmb IAmb 13 15 21.1
comp=Z,31nm,1.4s
**T25A Trinidad 22.92 116** P **P** **13 15 10.5 -0.8**
baz=315,SNR=7.5
**ANM Nome 22.94 320** P **P** **13 15 09.4 -1.7**
baz=110
**F15K North Star Dit 23.09 323** IAmb IAmb 13 15 31.9
comp=Z,51nm,1.9s
**F15K North Star Dit 23.09 323** P **P** **13 15 11.1 -1.5**
baz=113
**B20K Meade River 23.09 337** P **P** **13 15 11.2 -1.4**
baz=132
**C19K Lookout Ridge 23.15 334** P **P** **13 15 11.8 -1.6**
baz=127
**C18K Utukok River 23.35 332** IAmb IAmb 13 15 36.5
comp=Z,46nm,1.6s
**C18K Utukok River 23.35 332** P **P** **13 15 12.9 -2.4**
baz=124
**TUC Tucson 23.37 134** P **P** **13 15 16.7 +0.9**
**TUC Tucson 23.37 134** P **P** **13 15 16.7 +0.9**
TUC pmax pmax
comp=Z,48nm,1.3s
**ANMO Albuquerque 23.39 123** P **P** **13 15 16.5 +0.3**
ANMO IAmb IAmb 13 15 25.3
comp=Z,20nm,1.1s
**ANMO Albuquerque 23.39 123** LR LR 13 24 15.7
comp=Z,294nm,21.1s,baz=48,slow=36
**ANMO Albuquerque 23.39 123** *c iP* **P** **13 15 16.9 +0.7**
ANMO pmax pmax
comp=Z,12nm,1.1s
**D17K Noatak River 23.44 329** P **P** **13 15 13.2 -3.0**
baz=120
**F14K Arctic Creek 23.64 322** P **P** **13 15 16.3 -1.8**
baz=111
**NIKH Nikolski High 23.73 291** P **P** **13 15 15.4 -3.7**
baz=79
**P08K Saint George I 23.73 300** P **P** **13 15 15.5 -3.6**
baz=87
**C17K DeLong Mountai 23.87 330** P **P** **13 15 18.3 -2.1**
baz=121
**C16K Lisburne Hills 24.47 329** P **P** **13 15 24.8 -1.0**
baz=118
**CBKS Cedar Bluff 24.57 107** IAmb IAmb 13 15 31.5
comp=Z,24nm,1.1s
**121A Cookes Peak, D 24.61 129** P **P** **13 15 27.8 +0.2**
baz=325,SNR=25
**SPMN Marine on St. 25.51 88** IAmb IAmb 13 15 41.3
comp=Z,16nm,0.8s
**MSTX Muleshoe 26.13 119** IAmb IAmb 13 15 52.2
comp=Z,23nm,1.3s
**OK032 Salt Plains WL 26.79 109** IAmb IAmb 13 15 52.3
comp=Z,16nm,0.7s
**DKNS Dickens 27.39 117** IAmb IAmb 13 16 00.8
comp=Z,16nm,1.1s
**VHRN Van Horn 27.42 127** IAmb IAmb 13 16 05.6
comp=Z,14nm,1.0s
**POST Post 27.51 119** IAmb IAmb 13 15 57.8
comp=Z,13nm,0.9s
**OK048 Pawnee Station 27.81 108** IAmb IAmb 13 16 00.9
comp=Z,13nm,0.8s
**OK051 E0350 and S346 27.81 108** IAmb IAmb 13 16 11.5
comp=Z,13nm,0.8s
**WMOK Wichita Mounta 27.86 113** P **P** **13 15 57.0 +0.2**
**WMOK Wichita Mounta 27.86 113** P **P** **13 15 57.0 +0.2**
WMOK pmax pmax
comp=Z,17nm,0.9s
**APMT Aspermont 28.09 117** IAmb IAmb 13 16 07.3
comp=Z,17nm,1.0s
**RES Resolute Bay 28.14 19** LR LR 13 27 28.9
comp=Z,634nm,20.3s,baz=210,slow=37
**FNO Franklin 28.31 110** IAmb IAmb 13 16 03.3
comp=Z,15nm,1.0s
**ALPN Alpine 28.44 125** IAmb IAmb 13 16 10.6
comp=Z,12nm,1.2s
**S39A Bolivar 29.21 102** IAmb IAmb 13 16 58.4
comp=Z,7.3nm,1.0s
**TX31 Lajitas Ar. S 29.26 127** IAmb IAmb 13 16 18.9
comp=Z,18nm,1.1s
**TXAR Lajitas Array 29.26 127** P **P** **13 16 10.4 +1.0**
**TXAR Lajitas Array 29.26 127** P **P** **13 16 10.6 +1.2**
comp=Z,5.0nm,0.9s,baz=330,slow=7.2,SNR=31
TXAR LR LR 13 28 38.8
comp=Z,254nm,18.8s,baz=315,slow=38
comp=Z,5.0nm,0.9s
**SAND Sanderson 29.57 124** IAmb IAmb 13 16 20.5
comp=Z,8.3nm,0.9s
**X37A Clayton 29.98 109** IAmb IAmb 13 16 20.9
comp=Z,14nm,0.9s
**MGMO Mountain Grove 30.20 102** IAmb IAmb 13 16 20.2
comp=Z,18nm,1.4s
**CCM Cathedral Cave 30.29 99** P **P** **13 16 18.3 0.0**
CCM IAmb IAmb 13 17 11.4
comp=Z,20nm,1.4s
**CCM Cathedral Cave 30.29 99** P **P** **13 16 18.3 0.0**
CCM pmax pmax
comp=Z,20nm,1.4s
**LPIG La Paz 30.75 142** LR LR 13 29 45.4
comp=Z,92nm,19.1s,baz=346,slow=38
**DRIO Del Rio 30.79 122** IAmb IAmb 13 16 30.9
comp=Z,11nm,1.0s
**LCAR Lake Charles 31.58 102** IAmb IAmb 13 16 33.1
comp=Z,7.2nm,0.9s
**HKT Hockley 33.04 116** *eP* **P** **13 16 44.7 +2.2**
HKT pmax pmax
comp=Z,20nm,1.6s
**WVT Waverly 33.62 99** P **P** **13 16 47.0 -0.6**
**WVT Waverly 33.62 99** P **P** **13 16 47.0 -0.6**
WVT pmax pmax
comp=Z,37nm,2.0s
**SHEM Shemya Is, Ala 33.77 296** LR LR 13 28 00.7
comp=Z,198nm,21.1s,baz=115,slow=32
**PLAL Pickwick Lake 34.20 101** IAmb IAmb 13 17 01.3
comp=Z,8.3nm,0.9s
**SADO Sadowa 34.34 80** LR LR 13 30 10.6
comp=Z,304nm,20.8s,baz=296,slow=35
**FRB Frobisher Bay 34.40 44** LR LR 13 31 30.3
comp=Z,268nm,20.8s,baz=237,slow=37
**R50A Paris 34.52 93** IAmb IAmb 13 17 09.3
comp=Z,11nm,0.9s
**BILL Bilibino 34.69 324** *eP* **P** **13 16 58.9 +2.3**
BILL *e* 13 18 14.1
BILL *e*PPP PPP 13 18 27.1
BILL pmax pmax
comp=Z,17nm,2.0s
BILL MLR MLR
comp=Z,177nm,16.0s
**FPAL Fort Paine 36.03 99** IAmb IAmb 13 17 17.6
comp=Z,4.6nm,0.9s
**TKL Tuckaleechee C 36.48 96** LR LR 13 32 38.3
comp=Z,662nm,20.3s,baz=313,slow=37
**SCHQ Schefferville 37.45 58** LR LR 13 31 15.3
comp=Z,381nm,18.4s,baz=297,slow=34

**152A Waverly Hall 37.82 101** IAmb IAmb 13 17 31.3
comp=Z,7.6nm,0.8s
**J59A Piesco 37.88 79** P **P** **13 17 24.4 +0.3**
J59A IAmb IAmb 13 17 42.2
comp=Z,21nm,1.4s
**SFJD Kangerlussuaq 41.02 36** LR LR 13 35 32.2
comp=Z,335nm,18.3s,baz=287,slow=37
**SEY Seymchan 41.38 318** P **P** **13 17 54.0 +1.1**
comp=Z,4.6nm,1.1s,baz=98,slow=7.9,SNR=4.4
comp=Z,4.6nm,1.1s
**SEY Seymchan 41.38 318** *eP* P 13 17 56.6 +3.6
SEY pmax pmax
comp=Z,9.0nm,1.1s
**PETK Petropavlovsk- 42.75 302** P **P** **13 18 05.7 +1.4**
comp=Z,2.4nm,0.9s,baz=72,slow=14,SNR=2.9
PETK LR LR 13 33 12.4
comp=Z,136nm,19.7s,baz=63,slow=32
comp=Z,2.4nm,0.9s
**MA2 Magadan 43.40 313** LR LR 13 35 02.8
comp=Z,212nm,21.6s,baz=70,slow=34
**MA2 Magadan 43.40 313** *eP* P 13 18 13.3 +3.9
MA2 pmax pmax
comp=Z,11nm,0.9s
**CMIG Matias Romero 43.87 127** LR LR 13 38 59.8
comp=Z,55nm,20.7s,baz=324,slow=40
**TIXI Tiksi 46.03 334** LR LR 13 38 37.2
comp=Z,148nm,18.3s,baz=72,slow=37
**TIXI Tiksi 46.03 334** *eP* P 13 18 35.0 +4.8
TIXI pmax pmax
comp=Z,8.0nm,1.5s
**APG El Apazote 47.91 123** LR LR 13 41 46.1
comp=Z,6.8nm,18.1s,baz=32,slow=40
**SPITS Spitsbergen Ar 49.78 9** LR LR 13 41 20.0
comp=Z,251nm,18.2s,baz=300,slow=38
**YAK Yakutsk 51.05 323** LR LR 13 41 23.7
comp=Z,228nm,18.4s,baz=57,slow=37
**YAK Yakutsk 51.05 323** *eP* P 13 19 13.2 +4.2
YAK pmax pmax
comp=Z,10.0nm,0.8s
YAK pmax pmax
comp=E,5.0nm,1.2s
YAK pmax pmax
comp=N,3.0nm,1.3s
**JMIC Jan Mayen 51.73 21** LR LR 13 41 40.3
comp=N,170nm,18.3s,baz=320,slow=37
**BORG Borgarnes 52.52 31** LR LR 13 40 44.8
comp=N,152nm,18.5s,baz=310,slow=35
**YSS Yuzh-Sakhalins 54.15 302** *eP* **P** **13 19 33.7 +1.5**
YSS pmax pmax
comp=Z,10.0nm,1.3s
**JTS Las Juntas de 54.78 121** LR LR 13 46 07.3
comp=Z,77nm,19.4s,baz=316,slow=39
**ASAJ Asahikawa 56.03 300** LR LR 13 40 20.8
comp=Z,60nm,21.9s,baz=22,slow=32
**H11N2 WAKE ISLAND Hy 57.80 262** T T 14 22 23.6
baz=42,slow=75,SNR=3496
**H11N3 WAKE ISLAND Hy 57.80 262** T T 14 22 28.6
baz=42,slow=75,SNR=4092
**H11N1 WAKE ISLAND Hy 57.82 262** T T 14 22 24.9
baz=42,slow=75,SNR=3187
**KLR Kul'dur 58.31 310** LR LR 13 44 43.3
comp=Z,138nm,19.6s,baz=26,slow=36
**ARCES ARCESS Array B 58.76 10** LR LR 13 47 03.5
comp=Z,116nm,18.4s,baz=310,slow=38
**HEH HeiHe 59.66 313** *eP* **P** **13 20 13.3 +2.1**
HEH pmax pmax
comp=Z,13nm,0.7s
**USRK Ussuriysk Ar. 61.64 306** P **P** **13 20 26.5 +1.7**
comp=Z,3.6nm,0.9s,baz=20,slow=4.6,SNR=4.3
USRK LR LR 13 47 04.3
comp=Z,123nm,19.5s,baz=51,slow=36
comp=Z,3.6nm,0.9s
**MJAR Matsushiro Arr 63.62 296** LR LR 13 44 11.4
comp=Z,200nm,21.6s,baz=90,slow=32
**SDV Santo Domingo 64.17 109** LR LR 13 51 15.3
comp=Z,100nm,19.2s,baz=282,slow=38
**NOA NORSAR Array B 64.40 20** P **P** **13 20 44.4 +1.5**
comp=Z,0.8nm,0.7s,baz=338,slow=5.9,SNR=3.0
NOA LR LR 13 48 59.0
comp=Z,175nm,20.3s,baz=330,slow=36
comp=Z,0.8nm,0.7s
**ROSC El Rosal 65.23 115** LR LR 13 52 54.9
comp=Z,68nm,19.3s,baz=252,slow=39
**EKA Eskdalemuir Ar 65.54 30** P **P** **13 20 51.6 +1.3**
comp=Z,1.5nm,0.8s,baz=284,slow=6.9,SNR=4.8
comp=Z,1.5nm,0.8s
**HFS Hagfors 65.75 19** LR LR 13 50 09.3
comp=Z,222nm,19.1s,baz=336,slow=37
**FINES FINESS Array B 66.61 12** LR LR 13 49 49.3
comp=Z,156nm,21.7s,baz=316,slow=36
**PCRV Puerto La Cruz 66.84 103** LR LR 13 50 53.6
comp=Z,174nm,20.8s,slow=37
**KSRS Korea Array 68.64 303** LR LR 13 48 05.8
comp=Z,26nm,21.3s,baz=65,slow=33
**PPT Papeete 70.06 200** LR LR 13 44 52.9
comp=Z,94nm,19.1s,baz=345,slow=30
**SONM Songino Array 70.41 323** P **P** **13 21 22.4 +1.1**
comp=Z,0.4nm,0.3s,baz=18,slow=5.2,SNR=3.5
SONM LR LR 13 52 37.1
comp=Z,181nm,19.7s,baz=28,slow=36
comp=Z,0.4nm,0.3s
**KIRV Kirov 71.06 0** *eP* **P** **13 21 26.9 +2.1**
**ZAA0 Zalesovo Array 71.62 339** IAmb IAmb 13 21 35.2
comp=Z,10nm,1.4s
**ZALV Zalesovo Beam 71.62 339** P **P** **13 21 28.1 -0.2**
**ZALV Zalesovo Beam 71.62 339** P **P** **13 21 28.4 +0.1**
comp=Z,2.3nm,0.9s,baz=14,slow=6.4,SNR=13
ZALV LR LR 13 57 50.1
comp=Z,61nm,18.6s,baz=1.5,slow=40
comp=Z,2.3nm,0.9s
**SVE Sverdlovsk 72.44 354** *eP* **P** **13 21 34.2 +1.0**
SVE pmax pmax
comp=Z,16nm,1.3s
**ARU Arti 72.97 355** P **P** **13 21 35.8 -0.5**
**ARU Arti 72.97 355** LR LR 13 54 49.1
comp=Z,64nm,21.5s,baz=2.0,slow=37
**ARU Arti 72.97 355** *d iP* **P** **13 21 38.2 +1.9**
ARU S **SKiKP** **13 31 05.2 -3.6**
ARU SS **SS** **13 35 41.0 -0.8**
ARU pmax pmax
comp=Z,13nm,1.4s
**OBN Obninsk 73.98 8** LR LR 13 57 23.6
comp=Z,88nm,18.5s,baz=317,slow=38
**OBN Obninsk 73.98 8** *eP* **P** **13 21 44.3 +2.1**
OBN *e* 13 24 31.4
OBN *e*PPP PPP 13 26 14.6
OBN *eS* **SKSac** **13 31 56.4 +7.3**
OBN pmax pmax
comp=Z,12nm,1.3s
OBN MLR MLR
comp=Z,69nm,15.0s
**HHC Hu-ho-hao-te 74.00 316** *eP* **P** **13 21 40.3 -2.5**
HHC pP pP 13 21 43.8 -1.6
HHC pmax pmax
comp=Z,8.0nm,0.6s
HHC pmax pmax
comp=Z,84nm,3.6s
**DGZ Jazzator, Alta 74.89 336** *eP* **P** **13 21 50.9 +3.0**
DGZ pmax pmax
comp=Z,12nm,1.3s
**BVAR Borovoye Array 75.17 347** P **P** **13 21 48.3 -1.0**
comp=Z,0.9nm,0.6s,baz=9.5,slow=4.4,SNR=9.7
comp=Z,0.9nm,0.6s
**BOAV Boa Vista 75.43 104** P **P** **13 21 51.8 +0.5**
BOAV IAmb IAmb 13 21 59.7
comp=Z,5.7nm,1.0s
**KHC Kasperske Hory 75.84 24** *eP* **P** **13 21 55.8 +2.6**
KHC pmax pmax
comp=Z,14nm,1.7s
**KURK Kurchatov 75.99 342** *eP* **P** **13 21 56.3 +2.3**
KURK pmax pmax
comp=Z,11nm,1.3s
**KURBB Kurchatov Arra 76.10 342** P **P** **13 21 53.4 -1.2**
comp=Z,4.0nm,1.1s,baz=20,slow=5.6,SNR=9.4
comp=Z,4.0nm,1.1s
**RAR Rarotonga 76.18 208** LR LR 13 46 51.0
comp=Z,85nm,19.1s,baz=342,slow=29
**GUMO Guam 76.35 275** LR LR 13 48 29.1
comp=Z,93nm,20.3s,baz=47,slow=30
**VRAC Vranov 76.41 22** LR LR 13 57 07.1
comp=Z,63nm,18.7s,baz=332,slow=37
**RNPP5 Staryi Chortor 76.44 15** P **P** **13 21 55.2 -1.3**
**DAVOX Davos/Dischmat 76.99 27** LR LR 13 56 52.2
comp=Z,121nm,20.3s,baz=266,slow=36
**BELG Belogornoye 77.25 1** LR LR 13 59 24.1
comp=Z,49nm,20.0s,baz=6.4,slow=38
**BELG Belogornoye 77.25 1** *d iP* **P** **13 22 03.4 +2.3**
BELG pmax pmax
comp=Z,4.0nm,1.1s
**AKASG Malin Array Be 77.47 13** P **P** **13 22 02.2 -0.1**
comp=Z,0.5nm,0.3s,baz=346,slow=5.5,SNR=8.2
AKASG LR LR 13 56 57.1
comp=Z,144nm,19.1s,baz=38,slow=36
comp=Z,0.5nm,0.3s
**AKBB Malin Array Si 77.47 13** P **P** **13 22 02.1 -0.2**
**AKBB Malin Array Si 77.47 13** *eP* **P** **13 22 04.4 +2.1**
**KIEV Kiev 77.47 13** P **P** **13 22 01.7 -0.7**
KIEV IAmb IAmb 13 22 06.0
comp=Z,10nm,1.3s
**KIEV Kiev 77.47 13** P **P** **13 22 01.7 -0.7**
KIEV pmax pmax
comp=Z,10.0nm,1.3s
**NJ2 Nanjing 77.55 306** *eP* **P** **13 22 02.3 -0.8**
NJ2 pmax pmax
comp=Z,6.0nm,0.6s
**LUBAR Lubar, Ukraine 78.01 14** P **P** **13 22 04.1 -1.3**
**MDP Montagnes des 78.26 96** LR LR 13 56 25.5
comp=Z,81nm,21.8s,baz=189,slow=36
**ESDC Sonseca Array 78.46 39** P **P** **13 22 08.8 +0.7**
comp=Z,0.6nm,0.7s,baz=308,slow=5.4,SNR=5.4
comp=Z,0.6nm,0.7s
**MK31 Makanchi Array 78.88 338** *deP* **P** **13 22 12.4 +2.1**
**MKAR Makanchi Array 78.88 338** P **P** **13 22 10.2 -0.1**
**MKAR Makanchi Array 78.88 338** P **P** **13 22 11.0 +0.7**
comp=Z,1.4nm,0.8s,baz=34,slow=5.0,SNR=9.1
MKAR LR LR 14 01 46.3
comp=Z,86nm,18.1s,baz=38,slow=39
comp=Z,1.4nm,0.8s
**AKTO Aktyubinsk 78.98 355** LR LR 14 01 50.7
comp=Z,46nm,18.1s,baz=104,slow=39
**KMPD K-Podol'skiy 79.11 15** P **P** **13 22 10.4 -1.1**
**ABKAR Akbulak array 80.03 353** P **P** **13 22 16.3 -0.1**
**WMQ Urumqi 80.21 333** *eP* **P** **13 22 19.1 +1.5**
WMQ LR LR
comp=Z,93nm,17.7s
**LZH Lanzhou 81.31 318** *eP* **P** **13 22 26.4 +2.6**
LZH sP PcP 13 22 32.5 +2.6
LZH pmax pmax
comp=Z,8.0nm,1.0s
**MLR Muntele Rosu 81.99 17** LR LR 13 59 56.8
comp=Z,231nm,20.1s,baz=0.0,slow=36
**MDT Midelt 84.04 43** LR LR 13 56 03.1
comp=Z,86nm,18.1s,baz=148,slow=33
**AAK Ala-Archa 84.54 342** LR LR 14 06 21.2
comp=Z,65nm,18.1s,baz=32,slow=40
**KIV Kislovodsk 85.52 5** *eP* **P** **13 22 48.3 +3.1**
KIV pmax pmax
comp=Z,11nm,1.1s
KIV MLR MLR
comp=Z,79nm,20.0s
**KVAR Kislovodsk Arr 85.52 5** LR LR 14 02 30.9
comp=Z,68nm,21.3s,baz=308,slow=37
**KBZ Khabaz 85.75 5** P **P** **13 22 46.5 +0.4**
comp=Z,2.5nm,0.8s,baz=333,slow=4.5,SNR=3.7
KBZ LR LR 14 02 45.2
comp=Z,72nm,20.7s,baz=1.5,slow=37
comp=Z,2.5nm,0.8s
**KBZ Khabaz 85.75 5** *eP* **P** **13 22 48.7 +2.5**
KBZ pmax pmax
comp=Z,10.0nm,1.8s
**LPAZ La Paz 86.00 122** P **P** **13 22 50.2 +1.8**
comp=Z,3.2nm,0.8s,baz=356,slow=5.7,SNR=6.8
comp=Z,3.2nm,0.8s
**VAE Valguarnera 86.86 27** LR LR 14 02 48.9
comp=Z,110nm,19.3s,baz=345,slow=36
**KEST Kesra 86.87 32** LR LR 14 02 55.2
comp=Z,94nm,18.2s,baz=265,slow=36
**KSH Kashi 87.23 340** P **P** **13 22 55.6 +1.8**
KSH pmax pmax
comp=Z,4.0nm,1.5s
**BR131 Keskin Array S 88.84 12** P **P** **13 23 03.4 +2.0**
**BRTR Keskin Array B 88.85 12** P **P** **13 23 01.6 +0.2**
comp=Z,1.8nm,1.2s,baz=318,slow=1.7,SNR=5.6
BRTR LR LR 14 05 38.9
comp=Z,51nm,20.2s,baz=336,slow=38
comp=Z,1.8nm,1.2s
**GNI Garni 89.41 4** LR LR 14 07 11.3
comp=Z,33nm,20.2s,baz=10,slow=38
**PZH PanZhiHua 90.44 315** P **P** **13 23 09.0 -0.1**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,120nm,4.3s
**BBTS Babate 93.09 62** LR LR 14 02 00.2
comp=Z,66nm,18.6s,baz=186,slow=34
**DAV Davao City (W) 93.41 285** LR LR 13 57 16.7
comp=Z,75nm,21.7s,baz=212,slow=30
**MMAI Mount Meron Ar 95.69 12** LR LR 14 09 57.3
comp=Z,51nm,19.1s,baz=272,slow=38
**BDFB Brasilia 97.16 106** LR LR 14 10 28.2
comp=Z,76nm,20.8s,baz=334,slow=37
**RCBR Riachuelo 97.27 90** LR LR 14 05 11.8
comp=Z,51nm,18.7s,baz=156,slow=34
**CMAR Chiang Mai Arr 98.68 313** LR LR 14 11 59.4
comp=Z,34nm,18.8s,baz=55,slow=38
**EIL Elat 98.92 13** LR LR 14 10 56.8
comp=Z,46nm,19.1s,baz=252,slow=37
**SNAA Sanae 148.72 151** PKPbc **PKPab** **13 29 56.0 -1.0**
comp=Z,6.2nm,1.1s,baz=357,slow=2.8,SNR=7.0
**SNAA Sanae 148.72 151** PKP2 **PKPab** **13 29 56.0 -1.0**

*HEL* ***21*** *13:18:13.0±0.2, 61.28N×29.79E, h0km, ML2.0, Explosion*
*IDC* ***21*** *13:18:16.5±2.3, 61.38N×29.47E, h0km, mbtmp3.3/3,*
*ML2.4/3, Error ellipse: s-maj=21.1km s-min=10.7km*
*az=149.0*
**ISC 21 13:18:12.0±1.3, 61.27N±0.05×29.71E±0.06, h0km, n25,**
**σ1°59/38, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RUF** | **Ruokolahti** | **0.40** | **293** | PG | **Pg** | **13 18 20.7** | **+1.1** |
| | baz=106 | | | | | | |
| RUF | | | | SG | **Sg** | **13 18 26.0** | **+1.3** |
| **VJF** | **Virojoki** | **1.28** | **236** | PG | **Pg** | **13 18 36.5** | **0.0** |
| | baz=51 | | | | | | |
| VJF | | | | MSG | | 13 18 52.7 | |
| | comp=Z,18nm,0.2s | | | | | | |
| VJF | | | | SG | **Sg** | **13 18 54.0** | **+0.9** |
| **FIA0** | **FINESS Array S** | **1.76** | **277** | PG | **Pn** | **13 18 44.6** | **+0.9** |
| FIA0 | | | | MSG | | 13 19 06.7 | |
| | comp=Z,12nm,0.2s | | | | | | |
| FIA0 | | | | SG | **Sg** | **13 19 09.2** | **+0.8** |
| **FINES** | **FINESS Array B** | **1.76** | **277** | Pg | **Pb** | **13 18 45.0** | **-0.1** |
| | comp=Z,0.7nm,0.3s,baz=92,slow=15,SNR=22 | | | | | | |
| FINES | | | | Lg | Lg | 13 19 08.0 | |
| | comp=Z,1.5nm,0.3s,baz=92,slow=27,SNR=19 | | | | | | |
| **JOF** | **Joensuu** | **1.82** | **24** | eP | **Pn** | **13 18 44.0** | **-0.4** |
| **JOF** | **Joensuu** | **1.82** | **24** | PG | **Pn** | **13 18 45.2** | **+0.7** |
| JOF | | | | SG | **Sn** | **13 19 08.7** | **+0.5** |
| **KAF** | **Kangasniemi** | **1.83** | **299** | PG | **Pb** | **13 18 46.4** | **+0.2** |
| KAF | | | | MSG | | 13 19 08.2 | |
| | comp=Z,22nm,0.2s | | | | | | |
| KAF | | | | SG | **Sg** | **13 19 10.2** | **-0.4** |
| **PVF** | **Pernaja** | **2.02** | **251** | PB | **Pn** | **13 18 48.8** | **+1.6** |
| | baz=66 | | | | | | |
| PVF | | | | MSG | | 13 19 13.9 | |
| | comp=Z,13nm,0.2s | | | | | | |
| PVF | | | | SG | **Sg** | **13 19 17.0** | **+0.3** |
| **SUF** | **Sumiainen** | **2.22** | **312** | PG | **Pb** | **13 18 52.8** | **-0.2** |
| SUF | | | | MSG | | 13 19 19.6 | |
| | comp=Z,5.9nm,0.2s | | | | | | |
| SUF | | | | SG | **Sg** | **13 19 22.6** | **-0.7** |
| **NIF** | **Nilsia** | **2.31** | **338** | PG | **Pb** | **13 18 53.4** | **-1.0** |
| | baz=156 | | | | | | |
| NIF | | | | SG | **Sb** | **13 19 23.6** | **+0.2** |
| **KEF** | **Keuruu** | **2.47** | **293** | eP | **Pb** | **13 18 56.5** | **-0.7** |
| **KEF** | **Keuruu** | **2.47** | **293** | PG | **Pb** | **13 18 57.0** | **-0.2** |
| KEF | | | | MSG | | 13 19 27.1 | |
| | comp=Z,5.5nm,0.2s | | | | | | |
| KEF | | | | SB | **Sb** | **13 19 28.8** | **+0.6** |
| **NUR** | **Nurmijrvi** | **2.59** | **255** | PN | **Pn** | **13 18 56.8** | **+1.7** |
| | baz=73 | | | | | | |
| NUR | | | | MSG | | 13 19 30.5 | |
| | comp=Z,3.5nm,0.2s | | | | | | |
| **MEF** | **Metsahovi** | **2.81** | **250** | eP | **Pn** | **13 18 57.7** | **-0.4** |
| **MEF** | **Metsahovi** | **2.81** | **250** | PG | **Pb** | **13 19 02.6** | **-0.5** |
| MEF | | | | MSG | | 13 19 37.0 | |
| | comp=Z,4.7nm,0.2s | | | | | | |
| MEF | | | | SB | **Sb** | **13 19 37.9** | **-0.1** |
| **RMF** | **Romuvaara** | **2.96** | **2** | PB | **Pn** | **13 19 02.2** | **+2.0** |
| RMF | | | | MSG | | 13 19 39.8 | |
| | comp=Z,3.6nm,0.2s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| RMF | | | SG | **Sb** | 13 19 40.9 | **-1.3** |
| **VAF** | **Ylistaro** | **3.75 301** | *e*P | **Pn** | 13 19 14.7 | **+3.7** |
| **RAF** | **Rauma** | **3.86 270** | *e*P | **Pn** | 13 19 14.1 | **+1.6** |
| **MSF** | **Maaselka** | **4.67 357** | SG | **Sb** | 13 20 34.3 | **+3.0** |
| **KU6** | **Riekki** | **4.78 1** | PN | **Pn** | 13 19 25.4 | **+0.3** |
| | baz=177 | | | | | |
| KU6 | | | SN | **Sn** | 13 20 19.6 | **-1.5** |
| **AAL** | **Aland** | **4.89 261** | *e*P | **Pn** | 13 19 27.2 | **+0.5** |
| **HFS** | **Hagfors** | **7.94 269** | Pn | **Pn** | 13 20 09.8 | **+1.3** |
| | comp=Z,0.2nm,0.3s,baz=180,slow=36,SNR=2.3 | | | | | |
| HFS | | | Sn | **Sn** | 13 21 35.8 | **-3.1** |
| | comp=Z,0.1nm,0.3s,baz=174,slow=40,SNR=1.6 comp=Z,4.2nm,1.1s | | | | | |
| **ARCES** | **ARCESS Array B** | **8.48 350** | Pn | **Pn** | 13 20 16.6 | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=164,slow=11,SNR=1.7 | | | | | |
| ARCES | | | Sn | **Sn** | 13 21 47.0 | **-5.2** |
| | baz=165,slow=24,SNR=1.2 comp=Z,4.3nm,1.1s | | | | | |
| **NOA** | **NORSAR Array B** | **8.94 277** | Pn | **Pn** | 13 20 23.4 | **+1.1** |
| | baz=61,slow=8.1,SNR=1.6 comp=Z,0.2nm,0.5s | | | | | |
| **I37NO** | **I37NO** | **9.10 334** | I | I | 14 14 50.0 | |
| | baz=143,slow=328,SNR=1.1 | | | | | |

**TAP 21 13:33:32.4,24°33N×121°93E,h33km,ML2.3,2D,C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EAHA** | **Aohua** | **0.17** | **271** | P | Pn | 13 33 37.9 | -0.7 |
| | baz=278 | | | | | | |
| EAHA | | | | *e*S | Sb | 13 33 44.0 | +1.1 |
| | baz=278 | | | | | | |
| **EWUT** | **Wuta** | **0.18** | **311** | *i* P | Pb | 13 33 38.0 | -0.8 |
| | baz=318 | | | | | | |
| EWUT | | | | S | Sb | 13 33 42.8 | -0.3 |
| | baz=318 | | | | | | |
| **ENA** | **Nanau** | **0.20** | **301** | *i* P | Pb | 13 33 38.1 | -0.8 |
| | baz=308 | | | | | | |
| ENA | | | | S | Sb | 13 33 43.6 | +0.2 |
| | baz=308 | | | | | | |
| **ESAO** | **Su ao** | **0.26** | **343** | *e*P | Pb | 13 33 38.6 | -1.1 |
| | baz=343 | | | | | | |
| ESAO | | | | *e*S | Sn | 13 33 45.1 | +0.3 |
| | baz=343 | | | | | | |
| **TWC** | **Suao** | **0.29** | **346** | ⇓*i* P | Pb | 13 33 39.3 | -0.7 |
| | baz=353 | | | | | | |
| TWC | | | | *i* S | Sb | 13 33 44.8 | -0.4 |
| | baz=353 | | | | | | |
| **EOS2** | **EOS2** | **0.29** | **72** | P | Pb | 13 33 39.1 | -0.8 |
| | baz=70 | | | | | | |
| EOS2 | | | | S | Sn | 13 33 45.4 | -0.1 |
| | baz=70 | | | | | | |
| **ETL** | **Fush Village** | **0.32** | **239** | P | Pb | 13 33 39.8 | -0.7 |
| | baz=238 | | | | | | |
| ETL | | | | S | Sn | 13 33 47.3 | +0.8 |
| | baz=238 | | | | | | |
| **NACB** | **Ninganchiao** | **0.34** | **243** | *i* P | Pb | 13 33 39.8 | -0.8 |
| | baz=243 | | | | | | |
| NACB | | | | S | Sb | 13 33 46.3 | +0.1 |
| | baz=243 | | | | | | |
| **EOS3** | **EOS3** | **0.36** | **96** | *i* P | Pb | 13 33 40.1 | -0.7 |
| | baz=90 | | | | | | |
| EOS3 | | | | *i* S | Sn | 13 33 46.8 | -0.3 |
| | baz=90 | | | | | | |
| **NDS** | **Dongshan** | **0.36** | **328** | P | Pb | 13 33 40.8 | -0.2 |
| | baz=328 | | | | | | |
| NDS | | | | *i* S | Sn | 13 33 47.9 | +0.5 |
| | baz=328 | | | | | | |
| **TWD** | **Chiawan** | **0.39** | **231** | *i* P | Pn | 13 33 41.6 | -0.1 |
| | baz=229 | | | | | | |
| TWD | | | | S | Sn | 13 33 48.3 | +0.3 |
| | baz=229 | | | | | | |
| **EOS4** | **EOS4** | **0.41** | **120** | *e*P | Pb | 13 33 40.8 | -0.5 |
| | baz=120 | | | | | | |
| EOS4 | | | | *e*S | Sn | 13 33 48.3 | +0.2 |
| | baz=120 | | | | | | |
| **LATG** | **Datong** | **0.42** | **300** | *i* P | Pb | 13 33 41.9 | 0.0 |
| | baz=299 | | | | | | |
| LATG | | | | *i* S | Sn | 13 33 49.7 | +0.7 |
| | baz=299 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.42** | **254** | *i* P | Pb | 13 33 41.3 | -0.6 |
| | baz=244 | | | | | | |
| ETLH | | | | *i* S | Sn | 13 33 50.1 | +1.1 |
| | baz=244 | | | | | | |
| **ENTT** | **Nioudou** | **0.45** | **314** | ⇓*i* P | Pn | 13 33 42.6 | -0.1 |
| | baz=307 | | | | | | |
| ENTT | | | | *i* S | Sn | 13 33 50.6 | +0.9 |
| | baz=307 | | | | | | |
| **TWE** | **Neicheng** | **0.46** | **329** | *i* P | Pb | 13 33 42.4 | 0.0 |
| | baz=330 | | | | | | |
| TWE | | | | S | Sn | 13 33 50.4 | +0.6 |
| | baz=330 | | | | | | |
| **NDT** | **Datong Townshi** | **0.47** | **306** | *i* P | Pn | 13 33 42.8 | -0.1 |
| | baz=305 | | | | | | |
| NDT | | | | *i* S | Sn | 13 33 51.0 | +1.0 |
| | baz=305 | | | | | | |
| **NNSB** | **Datong** | **0.51** | **282** | *i* P | Pb | 13 33 43.3 | +0.1 |
| | baz=282 | | | | | | |
| NNSB | | | | *i* S | Sn | 13 33 51.7 | +0.5 |
| | baz=282 | | | | | | |
| **NNSH** | **Datong** | **0.51** | **282** | *i* P | Pn | 13 33 43.4 | -0.1 |
| | baz=282 | | | | | | |
| NNSH | | | | *i* S | Sn | 13 33 51.6 | +0.5 |
| | baz=282 | | | | | | |
| **NNS** | **Nan Shan** | **0.52** | **283** | *i* P | Pn | 13 33 43.6 | 0.0 |
| | baz=282 | | | | | | |
| NNS | | | | *i* S | Sn | 13 33 52.1 | +0.7 |
| | baz=282 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.53** | **325** | *i* P | Pn | 13 33 43.9 | +0.1 |
| | baz=319 | | | | | | |
| FUSB | | | | S | Sn | 13 33 52.5 | +0.8 |
| | baz=319 | | | | | | |
| **ETM** | **Tongmen** | **0.53** | **228** | P | Pb | 13 33 42.8 | -0.8 |
| | baz=219 | | | | | | |
| ETM | | | | *e*S | Sn | 13 33 53.0 | +1.4 |
| | baz=219 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.56** | **237** | *i* P | Pb | 13 33 43.4 | -0.7 |
| | baz=236 | | | | | | |
| LXIB | | | | S | Sn | 13 33 53.5 | +1.0 |
| | baz=236 | | | | | | |
| **NWLT** | **Wulai** | **0.59** | **319** | *i* P | Pn | 13 33 44.6 | 0.0 |
| | baz=319 | | | | | | |
| NWLT | | | | *i* S | Sn | 13 33 54.4 | +1.3 |
| | baz=319 | | | | | | |
| **YHNB** | **Yeheng** | **0.61** | **304** | *i* P | Pn | 13 33 44.9 | +0.1 |
| | baz=297 | | | | | | |
| YHNB | | | | S | Sn | 13 33 54.8 | +1.2 |
| | baz=297 | | | | | | |
| **NSK** | **Sanguang** | **0.62** | **304** | *i* P | Pn | 13 33 45.1 | +0.1 |
| | baz=297 | | | | | | |
| NSK | | | | *i* S | Sn | 13 33 54.9 | +0.9 |
| | baz=297 | | | | | | |
| **FUSS** | **Fushou** | **0.63** | **263** | *i* P | Pb | 13 33 45.2 | 0.0 |
| | baz=263 | | | | | | |
| FUSS | | | | *i* S | Sn | 13 33 55.6 | +1.3 |
| | baz=263 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.63** | **254** | *i* P | Pb | 13 33 45.0 | -0.4 |
| | baz=252 | | | | | | |
| WHF | | | | *i* S | Sn | 13 33 55.9 | +1.3 |
| | baz=252 | | | | | | |
| **SHUL** | **Shoufeng** | **0.63** | **212** | *i* P | Pn | 13 33 44.7 | -0.4 |
| | baz=210 | | | | | | |
| SHUL | | | | S | Sn | 13 33 55.4 | +1.4 |
| | baz=210 | | | | | | |
| **TIPB** | **Shuangxi** | **0.65** | **352** | P | Pb | 13 33 45.6 | +0.2 |
| | baz=352 | | | | | | |
| TIPB | | | | *i* S | Sn | 13 33 55.2 | +0.6 |
| | baz=352 | | | | | | |
| **ESL** | **Shilin** | **0.68** | **222** | *i* P | Pn | 13 33 44.8 | -1.0 |
| | baz=233 | | | | | | |
| ESL | | | | *e*S | Sn | 13 33 55.5 | +0.2 |
| | baz=233 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.68** | **5** | P | Pb | 13 33 46.7 | +0.7 |
| | baz=7.0 | | | | | | |
| TWB1 | | | | S | Sn | 13 33 56.8 | +1.5 |
| | baz=7.0 | | | | | | |
| **TWT** | **Tachien** | **0.69** | **264** | P | Pb | 13 33 46.8 | +0.6 |
| | baz=263 | | | | | | |
| TWT | | | | *e*S | Sn | 13 33 57.5 | +1.8 |
| | baz=263 | | | | | | |
| **TWA** | **Mucha** | **0.72** | **335** | *i* P | Pb | 13 33 48.4 | +1.7 |
| | baz=328 | | | | | | |
| TWA | | | | *i* S | Sn | 13 33 58.9 | +2.5 |
| | baz=328 | | | | | | |
| **CHGB** | **Renai** | **0.74** | **249** | *i* P | Pn | 13 33 46.4 | -0.3 |
| | baz=240 | | | | | | |
| CHGB | | | | *e*S | Sn | 13 33 58.0 | +1.0 |
| | baz=240 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.77** | **357** | *i* P | Pb | 13 33 47.5 | 0.0 |
| | baz=357 | | | | | | |
| SXI1 | | | | S | Sb | 13 34 00.9 | +3.2 |
| | baz=357 | | | | | | |
| **OWD** | **Renai** | **0.78** | **242** | *i* P | Pn | 13 33 47.1 | -0.1 |
| | baz=241 | | | | | | |
| OWD | | | | S | Sb | 13 33 58.6 | +0.6 |
| | baz=241 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.78** | **219** | *i* P | Pn | 13 33 46.3 | -0.9 |
| | baz=218 | | | | | | |
| WARBT | | | | S | Sb | 13 33 59.6 | +1.6 |
| | baz=218 | | | | | | |
| **EGFH** | **Guangfu** | **0.80** | **215** | *e*P | Pn | 13 33 47.1 | -0.3 |
| | baz=228 | | | | | | |
| EGFH | | | | *e*S | Sb | 13 33 58.5 | +0.1 |
| | baz=228 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.80** | **293** | *i* P | Pb | 13 33 48.5 | +0.6 |
| | baz=286 | | | | | | |
| NFF | | | | *i* S | Sb | 13 34 00.8 | +2.3 |
| | baz=286 | | | | | | |
| **WUSB** | **Renai** | **0.81** | **246** | P | Pn | 13 33 47.7 | 0.0 |
| | baz=238 | | | | | | |
| WUSB | | | | *e*S | Sb | 13 33 59.4 | +0.5 |
| | baz=238 | | | | | | |
| **YM01** | **YM01** | **0.88** | **338** | *i* P | Pb | 13 33 49.6 | +0.3 |
| | baz=338 | | | | | | |
| YM01 | | | | *e*S | Sb | 13 34 01.7 | +0.9 |
| | baz=338 | | | | | | |
| **LIOB** | **Emei** | **0.89** | **291** | *i* P | Pb | 13 33 50.5 | +1.0 |
| | baz=290 | | | | | | |
| LIOB | | | | *e*S | Sb | 13 34 02.3 | +1.3 |
| | baz=290 | | | | | | |
| **NSTT** | **Nanjuang** | **0.90** | **290** | *i* P | Pb | 13 33 50.4 | +0.8 |
| | baz=289 | | | | | | |
| NSTT | | | | *e*S | Sb | 13 34 02.3 | +1.1 |
| | baz=289 | | | | | | |
| **WHP** | **Taichung City** | **0.90** | **267** | *i* P | Pb | 13 33 50.4 | +0.8 |
| | baz=266 | | | | | | |
| WHP | | | | S | Sb | 13 34 02.3 | +1.0 |
| | baz=266 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.90** | **329** | *e*P | Pb | 13 33 49.7 | +0.1 |
| | baz=329 | | | | | | |
| TWS1 | | | | *e*S | Sb | 13 34 04.7 | +3.4 |
| | baz=329 | | | | | | |
| **YM08** | **YM08** | **0.91** | **340** | P | Pb | 13 33 50.2 | +0.4 |
| | baz=340 | | | | | | |
| YM08 | | | | *e*S | Sb | 13 34 02.7 | +1.0 |
| | baz=340 | | | | | | |
| **VWDT** | **VWDT** | **0.92** | **232** | *i* P | Pb | 13 33 49.6 | -0.3 |
| | baz=231 | | | | | | |
| VWDT | | | | *e*S | Sb | 13 34 01.7 | 0.0 |
| | baz=231 | | | | | | |
| **ANP** | **Anpu** | **0.93** | **337** | *e*P | Pn | 13 33 49.6 | +0.3 |
| | baz=337 | | | | | | |
| ANP | | | | *e*S | Sb | 13 34 03.0 | +0.6 |
| | baz=337 | | | | | | |
| **HGSD** | **Ruisui** | **0.95** | **209** | *i* P | Pn | 13 33 48.8 | -0.7 |
| | baz=193 | | | | | | |
| HGSD | | | | *e*S | Sb | 13 34 04.3 | +1.6 |
| | baz=193 | | | | | | |
| **WCS** | **Beigang Elemen** | **0.96** | **254** | P | Pn | 13 33 49.3 | -0.4 |
| | baz=253 | | | | | | |
| WCS | | | | *e*S | Sb | 13 34 04.2 | +1.1 |
| | baz=253 | | | | | | |
| **EHY** | **Hungye** | **0.99** | **214** | *e*P | Pn | 13 33 49.2 | -0.8 |
| | baz=212 | | | | | | |
| EHY | | | | *e*S | Sn | 13 34 03.1 | +0.2 |
| | baz=212 | | | | | | |
| **SSLB** | **Suanglung** | **1.04** | **239** | *e*P | Pb | 13 33 51.8 | -0.2 |
| | baz=231 | | | | | | |
| SSLB | | | | *e*S | Sb | 13 34 05.4 | +0.1 |
| | baz=231 | | | | | | |
| **TYC** | **Yuchr** | **1.06** | **247** | *i* P | Pb | 13 33 52.1 | -0.2 |
| | baz=236 | | | | | | |
| TYC | | | | *e*S | Sb | 13 34 06.6 | +0.6 |
| | baz=236 | | | | | | |
| **YULB** | **Yu-li** | **1.09** | **212** | *i* P | Pn | 13 33 50.0 | -1.5 |
| | baz=222 | | | | | | |
| YULB | | | | S | Sn | 13 34 05.1 | -0.4 |
| | baz=222 | | | | | | |
| **TWF1** | **Yuli** | **1.13** | **211** | *e*P | Pn | 13 33 51.3 | -0.6 |
| | baz=221 | | | | | | |
| TWF1 | | | | *e*S | Sb | 13 34 07.4 | -0.3 |
| | baz=221 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.16** | **238** | P | Pb | 13 33 54.3 | +0.3 |
| | baz=226 | | | | | | |
| WHYT | | | | S | Sb | 13 34 09.7 | +0.8 |
| | baz=226 | | | | | | |
| **CHN5** | **Tsauling** | **1.35** | **238** | *e*P | Pb | 13 33 58.1 | +0.8 |
| | baz=223 | | | | | | |
| CHN5 | | | | *e*S | Sb | 13 34 15.3 | +1.0 |
| | baz=223 | | | | | | |
| **WTP** | **Ta-pu** | **1.61** | **228** | *e*P | Pb | 13 34 00.7 | -0.9 |
| | baz=213 | | | | | | |
| WTP | | | | *e*S | Sb | 13 34 21.2 | -0.4 |
| | baz=213 | | | | | | |

**JMA 21 13:34:27.1±0.2,24°1N±0°5×123°7E±0°5,h23km±1km, MV1.4/9,NEAR ISHIGAKIJIMA ISLAND,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HATJ** | **Hateruma jima** | **0.08** | **127** | P | Pb | 13 34 31.1 | -0.2 |
| HATJ | | | | S | Sb | 13 34 33.9 | -0.2 |
| **IRIF** | **Iriomote-Funau** | **0.23** | **359** | *i* P | Pb | 13 34 32.8 | -0.1 |
| IRIF | | | | S | Sb | 13 34 36.8 | 0.0 |
| **JKRS** | **Kuro-shima** | **0.28** | **63** | *i* P | Pb | 13 34 33.8 | +0.1 |
| JKRS | | | | S | Sb | 13 34 38.6 | +0.5 |
| **JIJ** | **Ishigaki jima** | **0.45** | **56** | P | Pb | 13 34 36.1 | -0.4 |
| JIJ | | | | S | Sb | 13 34 42.2 | -0.6 |
| **JISG** | **Ishigakijimahi** | **0.71** | **48** | P | Pb | 13 34 40.4 | -0.4 |
| JISG | | | | S | Sb | 13 34 50.1 | -0.1 |
| **YOJ** | **Yonaguni jima** | **0.75** | **298** | *e*S | Sb | 13 34 51.6 | +0.4 |
| **JTJ** | **Tarama** | **1.03** | **59** | *e*P | Pb | 13 34 46.3 | +0.1 |
| JTJ | | | | S | Sn | 13 34 60.0 | +0.1 |

**DJA 21 13:38:12.1±0.4,0°S±5°×122°4E±°,h88km±10km,M3.6/10, mb3.6/1,MLv3.7/10,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **0.84** | **9** | P | Pn | 13 38 30.4 | +0.5 |
| KMSI | | | | S | Sn | 13 38 45.5 | +2.4 |
| **GTOI** | **Gorontalo** | **1.22** | **317** | P | Pn | 13 38 36.4 | +2.1 |
| GTOI | | | | S | Sn | 13 38 54.3 | +3.3 |
| **LUWI** | **Luwuk** | **1.33** | **234** | P | Pn | 13 38 36.6 | +1.0 |
| **MRSI** | **Marisa** | **2.04** | **291** | P | Pn | 13 38 43.8 | -1.0 |
| **SANI** | **Sanana** | **2.78** | **130** | P | Pn | 13 38 53.0 | -1.6 |
| **MPSI** | **Mapaga** | **4.00** | **279** | P | Pn | 13 39 12.7 | +1.6 |
| **NLAI** | **Namlea** | **4.39** | **132** | P | Pn | 13 39 16.8 | +0.3 |

*IDC **21** 13:54:26.6±8.1, 19°.46S×176°.43W,h0km,mb4.3/4, mbtmp4.3/4,Error ellipse: s-maj=207.1km s-min=47.3km az=30.0*

*NEIC **21** 13:55:25.5±0.5,20°.2S±0°.3×177°.5W±0°.2,h531km±21km, mb4.1/17,Error ellipse: s-maj=41.7km s-min=17.4km az=198.0*

**ISC 21 13:55:25.6±0.9,20°.0S±0°.2×177°.5W±0°.1,h550km,n25, σ0°66/25,mb4.1/13,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.74** | **297** | P | **P** | **13 56 52.6** | **-0.9** |
| **NIUE** | **Niue** | **7.22** | **84** | P | **P** | **13 57 15.2** | **-0.6** |
| **AFI** | **Afiamalu** | **8.15** | **43** | P | **P** | **13 57 25.2** | **+0.2** |
| **EIDS** | **Eidsvold** | **29.43** | **254** | P | **P** | **14 00 44.9** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 14 01 20.4 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **33.99** | **263** | P | **P** | **14 01 24.5** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 14 01 25.3 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **COEN** | **Coen** | **38.00** | **273** | P | **P** | **14 01 58.5** | **+1.1** |
| **STKA** | **Stephens Creek** | **38.43** | **244** | P | **P** | **14 02 00.2** | **-0.5** |
| **STKA** | **Stephens Creek** | **38.43** | **244** | P | **P** | **14 02 00.1** | **-0.6** |
| | comp=Z,1.7nm,0.6s,baz=75,slow=12,SNR=3.0 comp=Z,1.7nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **43.19** | **243** | P | **P** | **14 02 36.8** | **-1.7** |
| BBOO | | | | IAmb | IAmb | 14 03 02.9 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.93** | **261** | P | **P** | **14 02 51.9** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 14 03 07.3 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **45.08** | **256** | P | **P** | **14 02 53.3** | **0.0** |
| **ASAR** | **Alice Springs** | **45.08** | **256** | P | **P** | **14 02 52.9** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.08** | **256** | P | **P** | **14 02 53.4** | **+0.1** |
| | comp=Z,7.1nm,0.5s,baz=96,slow=7.6,SNR=130 comp=Z,7.1nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.10** | **262** | P | **P** | **14 02 53.2** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 14 02 54.2 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.11** | **261** | P | **P** | **14 02 53.4** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 14 02 54.2 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.11** | **261** | P | **P** | **14 02 53.3** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 14 02 54.2 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.12** | **261** | P | **P** | **14 02 53.5** | **-0.1** |
| **WRA** | **Warramunga Arr** | **45.12** | **261** | P | **P** | **14 02 53.6** | **0.0** |
| | comp=Z,2.9nm,0.5s,baz=98,slow=8.3,SNR=49 comp=Z,2.9nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **49.92** | **246** | P | **P** | **14 03 28.7** | **-0.6** |
| **KNRA** | **Kununurra** | **51.14** | **266** | P | **P** | **14 03 38.8** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **53.55** | **262** | P | **P** | **14 03 56.7** | **+1.1** |
| **PSA00** | **Pilbara Seismi** | **58.23** | **256** | P | **P** | **14 04 28.2** | **+0.2** |
| PSA00 | | | | IAmb | IAmb | 14 04 53.3 | |
| | comp=Z,9.7nm,1.3s | | | | | | |
| **MBWA** | **Marble Bar** | **58.41** | **257** | P | **P** | **14 04 29.4** | **+0.1** |
| MBWA | | | | IAmb | IAmb | 14 05 11.8 | |
| | comp=Z,9.1nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.11** | **180** | P | **P** | **14 05 43.2** | **+0.5** |
| **QSPA** | **South Pole Qui** | **70.11** | **180** | P | **P** | **14 05 43.7** | **+1.0** |
| | comp=Z,1.5nm,1.0s,baz=138,slow=3.5,SNR=2.3 comp=Z,1.5nm,1.0s | | | | | | |

**IGQ 21 13:57:48.1±0.6,0°N±5°×8°0W±°,h91km,M4.4/13,Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PTGL** | **Punta Galera** | **0.58** | **36** | P | Pn | 13 58 06.0 | +2.4 |
| **PAC1** | **Pacto, Paraso** | **1.58** | **92** | P | Pn | 13 58 09.4 | -5.7 |
| **GGPT** | **Toaza - Volcan** | **1.83** | **107** | P | Pn | 13 58 18.3 | -0.2 |
| **PULU** | **Pululahua** | **1.89** | **99** | P | Pn | 13 58 32.8 | +13 |
| **COTA** | **Cotacachi** | **2.03** | **89** | P | Pn | 13 58 16.3 | -5.0 |
| **URCU** | **Urcuqui** | **2.12** | **87** | P | Pn | 13 58 21.0 | -1.3 |
| **BNAS** | **Cotopaxi Volca** | **2.13** | **117** | P | Pn | 13 58 29.4 | +6.9 |
| **BREF** | **Cotopaxi Volca** | **2.16** | **117** | P | Pn | 13 58 27.4 | +4.3 |
| **BVC2** | **Cotopaxi Volca** | **2.18** | **116** | P | Pn | 13 58 18.4 | -4.9 |
| **BTAM** | **Cotopaxi Volca** | **2.20** | **116** | P | Pn | 13 58 19.1 | -4.5 |
| **ANTS** | **Antisana-Sarah** | **2.34** | **110** | P | Pn | 13 58 27.8 | +2.4 |
| **ANGU** | **Angureal** | **2.38** | **96** | P | Pn | 13 58 28.6 | +2.7 |
| **CHL2** | **Volc¡n Chiles** | **2.50** | **79** | P | Pn | 13 58 29.1 | +1.7 |
| **BONI** | **La Bonita** | **2.85** | **87** | P | Pn | 13 58 32.1 | +0.3 |
| **BOSC** | **San Juan Bosco** | **3.92** | **151** | P | Pn | 13 58 42.1 | -4.1 |
| **CRIN** | **San Cristobal** | **13.98** | **332** | P | Pn | 14 01 02.2 | 0.0 |

*IDC **21** 14:01:43.4±2.2,35°.00N×140°.13E,h0km,mb3.8/4, mbtmp3.7/5,ML2.4/1,Error ellipse: s-maj=58.6km s-min=16.8km az=72.0*

*JMA **21** 14:01:47.5±0.2,35°.2N±0°.5×140°.3E±0°.6,h13km±1km, MV3.2/20,KUJUKURI COAST BOSO PEN*

*JMA Felt I J1 at KUJUKURI COAST BOSO PEN .*

*NIED **21** 14:01:47.5,35°.15N×140°.26E,h13km,MW3.5,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr1.27; Mθθ-1.71; Mφφ0.43; Mrθ0.43; Mφθ0.46; Mrφ0.83; Fault plane solution: M0 1.86000×10¹⁴ NP1:φs72.00000°, δ58.00000°,λ,50.00000°. NP2:φs310.00000°,δ49.00000°, λ136.00000°.*

*NEIC **21** 14:01:47.6±0.9,35°.08N±0°.05×140°.10E±0°.05,h35km±2km, mb4.4/5 Error ellipse: s-maj=10.1km s-min=3.6km az=140.0*

**ISC 21 14:01:45.8±0.9,35°.07N±0°.04×140°.20E±0°.04,h18km±4km, n36,σ1§14/33,mb3.9/6,3D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKUC** | **kamogawauchiur** | **0.09** | **2** | *i* P | **Pg** | **14 01 49.5** | **+0.1** |
| JKUC | | | | *e*S | **Sg** | **14 01 52.1** | **+0.2** |
| **KTR** | **Katsuura** | **0.13** | **50** | *i* P | **Pg** | **14 01 49.8** | **0.0** |
| KTR | | | | S | **Sg** | **14 01 52.6** | **+0.1** |
| **BSO4** | **Boso 4** | **0.14** | **123** | *i* P | **Pg** | **14 01 51.5** | **+1.7** |
| BSO4 | | | | X | | 14 01 56.4 | |
| **TATJ** | **Tateyama 2** | **0.25** | **262** | *i* P | **Pn** | **14 01 54.5** | **-0.1** |
| TATJ | | | | S | **Sn** | **14 02 01.9** | **+1.8** |
| **JCN** | **Nagara** | **0.35** | **1** | ⇓*i* P | **Pb** | **14 01 54.0** | **+0.4** |
| JCN | | | | ⇓S | **Sb** | **14 02 00.4** | **+1.5** |
| **BSO3** | **Boso 3** | **0.37** | **135** | P | **Pn** | **14 01 55.7** | **-0.3** |
| **JSMT** | **Sammumatsuo** | **0.61** | **20** | ⇓P | **Pg** | **14 01 57.9** | **-0.1** |
| **JIM2** | **Oshima 3** | **0.72** | **241** | S | **Sg** | **14 02 11.1** | **+1.6** |
| **KTJ3** | **Kamata3** | **0.93** | **262** | S | **Sb** | **14 02 16.2** | **+0.7** |
| **JSG** | **Sagara** | **1.70** | **257** | Pn | **Pn** | **14 02 13.1** | **-1.5** |
| **JHJ** | **Hachijo jima 2** | **1.97** | **190** | Pn | **Pn** | **14 02 18.4** | **0.0** |
| | 18nm,0.3s,baz=60,slow=16,SNR=11 | | | | | | |
| JHJ | | | | Sn | **Sn** | **14 02 42.7** | **+0.1** |
| | 62nm,0.3s,baz=320,slow=23,SNR=13 | | | | | | |
| **JHJ2** | **Mitsune** | **1.97** | **189** | Pn | **Pn** | **14 02 17.2** | **-1.1** |
| **MJAR** | **Matsushiro Arr** | **2.19** | **313** | Pn | **Pn** | **14 02 22.0** | **+0.7** |
| | 1.2nm,0.3s,baz=135,slow=15,SNR=58 | | | | | | |
| MJAR | | | | Sn | **Sn** | **14 02 50.3** | **+2.4** |
| | 0.8nm,0.3s,baz=137,slow=12,SNR=6.4 8.2nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **2.19** | **313** | | **Pn** | **14 02 20.7** | **-0.6** |
| **JGF** | **Kuroka** | **2.38** | **284** | | **Pn** | **14 02 22.8** | **-1.2** |
| **INU** | **Inuyama** | **2.62** | **277** | Pn | **Pn** | **14 02 25.3** | **-1.9** |
| **JMM** | **Marumori** | **2.84** | **10** | | **Pn** | **14 02 29.6** | **-0.6** |
| **TATO** | **Taipei** | **19.04** | **243** | P | **P** | **14 06 05.6** | **-1.4** |
| TATO | | | | IAmb | IAmb | 14 06 32.4 | |
| | comp=Z,64nm,1.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.08** | **116** | T | T | 14 37 12.0 | |
| | baz=309,slow=75,SNR=68 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.09** | **116** | T | T | 14 36 53.9 | |
| | baz=309,slow=75,SNR=70 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.10** | **116** | T | T | 14 36 54.7 | |
| | baz=309,slow=75,SNR=47 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.71** | **118** | T | T | 14 37 37.8 | |
| | baz=311,slow=76,SNR=16 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.71** | **118** | T | T | 14 37 40.4 | |
| | baz=311,slow=76,SNR=34 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.73** | **118** | T | T | 14 37 39.8 | |
| | baz=311,slow=76,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.54** | **314** | P | **P** | **14 09 40.2** | **+0.1** |
| | comp=Z,0.6nm,0.4s,baz=94,slow=6.2,SNR=2.2 comp=Z,0.6nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **44.35** | **304** | P | **P** | **14 09 53.0** | **-1.9** |
| MK31 | | | | IAmb | IAmb | 14 10 16.5 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.35** | **304** | P | **P** | **14 09 53.5** | **-1.5** |
| **MKAR** | **Makanchi Array** | **44.35** | **304** | P | **P** | **14 09 55.0** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=81,slow=9.9,SNR=5.7 comp=Z,0.8nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **46.39** | **309** | P | **P** | **14 10 09.7** | **-1.3** |
| KURK | | | | IAmb | IAmb | 14 10 11.4 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.46** | **309** | P | **P** | **14 10 11.4** | **-0.1** |
| | comp=Z,1.6nm,0.6s,baz=83,slow=7.7,SNR=10 comp=Z,1.6nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **54.98** | **186** | P | **P** | **14 11 15.4** | **-0.6** |
| **WRA** | **Warramunga Arr** | **54.99** | **187** | P | **P** | **14 11 15.3** | **-0.7** |
| **WRA** | **Warramunga Arr** | **54.99** | **187** | P | **P** | **14 11 15.5** | **-0.6** |
| | comp=Z,0.4nm,0.6s,baz=0.4,slow=7.5,SNR=9.7 comp=Z,0.4nm,0.6s | | | | | | |
| **H03N2** | **Juan Fernandez** | **147.76** | **99** | T | T | 17 06 27.3 | |
| | baz=289,slow=76,SNR=4.5 | | | | | | |
| **H03N3** | **Juan Fernandez** | **147.77** | **99** | T | T | 17 06 28.8 | |
| | baz=289,slow=76,SNR=6.6 | | | | | | |
| **H03N1** | **Juan Fernandez** | **147.77** | **99** | T | T | 17 06 29.1 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BSSI** | **Bau Bau, Buton** | **4.08** | **59** | P | | Pn | 14 10 15.1 | -0.3 |
| **BNSI** | **Bone** | **4.96** | **39** | P | | Pn | 14 10 27.5 | +0.1 |
| **PWJI** | **Pagerwojo** | **5.13** | **273** | P | | Pn | 14 10 31.0 | +1.2 |

*SJA **21** 14:11:27.1±0.5,26°.61S×71°.46W,h7km,ML4.2,MW3.9*
*IDC **21** 14:11:30.7±0.6,26°.71S×70°.84W,h0km,mb4.1/9,*
*mbtmp4.0/12,ML3.9/3,MS3.2/11,Error ellipse:*
*s-maj=22.9km s-min=18.0km az=94.0*
*GUC **21** 14:11:32.4±0.5,26°.75S×71°.11W,h33km±2km,ML4.1*
*NEIC **21** 14:11:33.1±1.4,26°.76S±0°.02×71°.0W±0°.1,h17km±5km,*
*mb4.6/11,ML4.1(GUC),Error ellipse: s-maj=13.7km*
*s-min=1.6km az=99.0*
*VAO **21** 14:11:38.1±3.5,26°.66S×70°.74W,h46km±15km,mb4.3*
**ISC 21 14:11:31.5**±1.4,**26°.76S**±0°.02×**71°.07W**±0°.05,**h9**km±8km,
**n116,**σ1**9**52/130,**mb4.4**/13,**MS3.3**/6,**5C-4D,Off coast of**
**northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AC01** | **Pan de Azucar** | **0.74** | **35** | | | **Pn** | **14 11 47.8** | **-0.3** |
| **AC01** | **Pan de Azucar** | **0.74** | **35** | *eP* | | Pg | 14 11 34.2 | -12 |
| AC01 | | | | *eS* | | **Sn** | **14 11 58.0** | **-1.6** |
| AC01 | | | | IAML | | | 14 11 59.1 | |
| | comp=Z,9μm,0.8s | | | | | | | |
| **AC01** | **Pan de Azucar** | **0.74** | **35** | ⇓*iP* | | **Pn** | **14 11 47.9** | **-0.3** |
| AC01 | | | | *i* S | | **Sn** | **14 11 57.2** | **-2.4** |
| AC01 | | | | IAML | | | 14 12 00.3 | |
| | comp=N,13μm,0.3s | | | | | | | |
| **AC06** | **Mina Casimiro** | **0.87** | **133** | Pg | | **Pg** | **14 11 49.6** | **+1.4** |
| **AC06** | **Mina Casimiro** | **0.87** | **133** | ⇓*iP* | | **Pg** | **14 11 49.7** | **+1.4** |
| AC06 | | | | *i* S | | **Sb** | **14 12 00.2** | **-0.4** |
| AC06 | | | | IAML | | | 14 12 00.9 | |
| | comp=E,14μm,0.1s | | | | | | | |
| **GO03** | **Copiap** | **1.11** | **138** | Pn | | **Pn** | **14 11 53.7** | **+0.3** |
| **GO03** | **Copiap** | **1.11** | **138** | *eP* | | **Pg** | **14 11 53.9** | **+0.9** |
| GO03 | | | | *eS* | | **Sg** | **14 12 08.8** | **+1.4** |
| **GO03** | **Copiap** | **1.11** | **138** | ⇓*iP* | | **Pn** | **14 11 53.7** | **+0.3** |
| GO03 | | | | *i* S | | **Sb** | **14 12 07.2** | **-0.4** |
| GO03 | | | | IAML | | | 14 12 08.6 | |
| | comp=E,9μm,0.3s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.44** | **180** | Pn | | **Pn** | **14 11 57.8** | **0.0** |
| **AC04** | **Llanos de Chal** | **1.44** | **180** | *eP* | | **Pn** | **14 11 57.8** | **0.0** |
| AC04 | | | | *eS* | | **Sn** | **14 12 17.3** | **+0.6** |
| AC04 | | | | IAML | | | 14 12 23.4 | |
| | comp=Z,2μm,0.7s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.44** | **180** | ⇓*iP* | | **Pn** | **14 11 57.6** | **-0.1** |
| AC04 | | | | *i* S | | **Sn** | **14 12 15.6** | **-1.2** |
| **GO02** | **Mina Guanaco** | **2.07** | **40** | | | **Pn** | **14 12 07.7** | **+1.0** |
| **GO02** | **Mina Guanaco** | **2.07** | **40** | *eP* | | **Pb** | **14 12 08.4** | **-1.1** |
| GO02 | | | | *eS* | | **Sg** | **14 12 38.0** | **-0.3** |
| **GO02** | **Mina Guanaco** | **2.07** | **40** | *eP* | | **Pb** | **14 12 07.9** | **-1.6** |
| GO02 | | | | *i* S | | **Sb** | **14 12 35.2** | **-0.3** |
| **AC05** | **El Transito** | **2.18** | **161** | | | **Pn** | **14 12 10.0** | **+1.9** |
| **AC05** | **El Transito** | **2.18** | **161** | *eP* | | **Pb** | **14 12 10.4** | **-0.9** |
| AC05 | | | | *eS* | | **Sn** | **14 12 34.2** | **-1.1** |
| AC05 | | | | *eS* | | **Sg** | **14 12 44.0** | **+2.2** |
| **AC05** | **El Transito** | **2.18** | **161** | ⇑*iP* | | **Pn** | **14 12 10.2** | **+2.1** |
| AC05 | | | | *i* S | | **Sn** | **14 12 36.4** | **+1.1** |
| AC05 | | | | IAML | | | 14 12 47.5 | |
| | comp=N,2μm,0.6s | | | | | | | |
| **PB14** | **IPOC Station P** | **2.21** | **16** | | | **Pn** | **14 12 08.5** | **-0.1** |
| **PB14** | **IPOC Station P** | **2.21** | **16** | *eP* | | **Pn** | **14 12 08.2** | **-0.4** |
| PB14 | | | | *eS* | | **Sn** | **14 12 35.7** | **-0.5** |
| **PB14** | **IPOC Station P** | **2.21** | **16** | ⇑*iP* | | **Pn** | **14 12 08.5** | **-0.1** |
| PB14 | | | | *i* S | | **Sb** | **14 12 08.0** | **-1.4** |
| PB14 | | | | IAML | | | 14 12 45.7 | |
| | comp=E,2μm,0.6s | | | | | | | |
| **LCO** | **Las Campanas** | **2.27** | **172** | | | **Pn** | **14 12 09.5** | **+0.1** |
| **LCO** | **Las Campanas** | **2.27** | **172** | *eP* | | **Pn** | **14 12 10.8** | **+1.4** |
| **LCO** | **Las Campanas** | **2.27** | **172** | *iP* | | **Pn** | **14 12 11.4** | **+2.1** |
| LCO | | | | *i* S | | **Sn** | **14 12 38.2** | **+0.7** |
| **CO05** | **La Serena** | **3.15** | **183** | Pn | | **Pn** | **14 12 22.4** | **+1.1** |
| **CO05** | **La Serena** | **3.15** | **183** | *i* S | | **Sn** | **14 12 59.6** | **+0.6** |
| **VCA** | **Vinchina** | **3.21** | **128** | *eP* | | **Pb** | **14 12 26.2** | **-2.6** |
| VCA | | | | *eS* | | **Sb** | **14 13 10.3** | **+2.3** |
| **CO01** | **Juntas del Tor** | **3.32** | **165** | | | **Pn** | **14 12 24.8** | **+1.0** |
| **CO01** | **Juntas del Tor** | **3.32** | **165** | *eP* | | **Pn** | **14 12 26.4** | **+2.6** |
| CO01 | | | | *eS* | | **Sn** | **14 13 07.1** | **+3.6** |
| CO01 | | | | IAML | | | 14 13 18.7 | |
| | comp=Z,503nm,0.6s | | | | | | | |
| **CO01** | **Juntas del Tor** | **3.32** | **165** | *eS* | | **Sn** | **14 13 04.0** | **+0.6** |
| **GO04** | **Tololo Observa** | **3.41** | **176** | | | **Pn** | **14 12 26.2** | **+1.2** |
| **GO04** | **Tololo Observa** | **3.41** | **176** | *eP* | | **Pn** | **14 12 26.7** | **+1.7** |
| GO04 | | | | *eS* | | **Sn** | **14 13 08.3** | **+2.6** |
| **GO04** | **Tololo Observa** | **3.41** | **176** | *eP* | | **Pn** | **14 12 26.3** | **+1.3** |
| **AROD** | **Rodeo** | **3.67** | **158** | *eP* | | **Pb** | **14 12 33.5** | **-3.3** |
| **ACDV** | **Cuesta del Vie** | **3.81** | **154** | *eP* | | **Pb** | **14 12 35.5** | **-3.4** |
| ACDV | | | | IAML | | | 14 13 42.3 | |
| | comp=Z,269nm,1.7s | | | | | | | |
| **CO06** | **Fray Jorge** | **3.93** | **187** | | | **Pn** | **14 12 31.4** | **-0.6** |
| **CO06** | **Fray Jorge** | **3.93** | **187** | *eP* | | **Pn** | **14 12 31.3** | **-0.8** |
| **CO03** | **El Pedregal** | **4.08** | **175** | Pn | | **Pn** | **14 12 34.9** | **+0.7** |
| **CO03** | **El Pedregal** | **4.08** | **175** | *eP* | | **Pn** | **14 12 36.0** | **+1.9** |
| CO03 | | | | *eS* | | Sn | 14 13 11.9 | -10 |
| CO03 | | | | IAML | | | 14 13 52.2 | |
| | comp=Z,580nm,0.7s | | | | | | | |
| **CO03** | **El Pedregal** | **4.08** | **175** | *eP* | | **Pn** | **14 12 34.8** | **+0.6** |
| **ACCO** | **Cerro Coronel** | **4.20** | **156** | *eP* | | Pn | 14 12 40.8 | +4.8 |
| ACCO | | | | *eS* | | **Sb** | **14 13 33.7** | **-3.0** |
| **CO02** | **Combarbal** | **4.43** | **179** | | | **Pn** | **14 12 39.1** | **+0.1** |
| **CO02** | **Combarbal** | **4.43** | **179** | *eP* | | **Pn** | **14 12 39.8** | **+0.8** |
| CO02 | | | | *eS* | | **Sb** | **14 13 39.2** | **-3.9** |
| **CO02** | **Combarbal** | **4.43** | **179** | *eP* | | **Pn** | **14 12 39.2** | **+0.2** |
| **PB04** | **IPOC Station P** | **4.49** | **11** | Pn | | **Pn** | **14 12 38.4** | **-1.5** |
| **PB04** | **IPOC Station P** | **4.49** | **11** | *eP* | | **Pn** | **14 12 38.4** | **-1.5** |
| PB04 | | | | *eS* | | **Sb** | **14 13 46.7** | **+1.9** |
| **PB04** | **IPOC Station P** | **4.49** | **11** | ⇑*iP* | | **Pn** | **14 12 38.6** | **-1.2** |
| PB04 | | | | *i* S | | **Sn** | **14 13 32.1** | **-0.1** |
| **ACLC** | **CERRO LA CRUZ** | **4.50** | **127** | *eP* | | **Pn** | **14 12 44.2** | **+4.1** |
| ACLC | | | | *eS* | | **Sb** | **14 13 42.3** | **-3.0** |
| ACLC | | | | IAML | | | 14 13 59.2 | |
| | comp=Z,130nm,0.8s | | | | | | | |
| **DOCA** | **Reserva Natura** | **4.52** | **158** | *eP* | | **Pn** | **14 12 44.2** | **+3.7** |
| DOCA | | | | *eS* | | **Sb** | **14 13 41.0** | **-5.1** |
| **LVC** | **Limon Verde** | **4.57** | **26** | | | **Pn** | **14 12 41.4** | **+0.2** |
| **LVC** | **Limon Verde** | **4.57** | **26** | Pn | | **Pn** | **14 12 42.2** | **+1.0** |
| | comp=Z,6.1nm,0.3s,baz=199,slow=9.9,SNR=36 | | | | | | | |
| LVC | | | | Lg | | Lg | 14 13 45.1 | |
| | comp=Z,63nm,0.3s,baz=328,slow=19,SNR=9.3 | | | | | | | |
| LVC | | | | LR | | LR | 14 13 58.4 | |
| | comp=Z,83nm,21.1s,baz=238,slow=33 | | | | | | | |
| **LVC** | **Limon Verde** | **4.57** | **26** | *eP* | | **Pn** | **14 12 41.9** | **+0.7** |
| LVC | | | | *eS* | | **Sn** | **14 13 36.4** | **+1.7** |
| **LVC** | **Limon Verde** | **4.57** | **26** | *eP* | | **Pn** | **14 12 41.9** | **+0.7** |
| **ZON** | **Zonda** | **5.21** | **157** | Pn | | **Pn** | **14 12 50.3** | **+0.7** |
| **PB09** | **IPOC Station P** | **5.21** | **19** | | | **Pn** | **14 12 50.0** | **+0.1** |
| **PB09** | **IPOC Station P** | **5.21** | **19** | ⇑*eP* | | **Pn** | **14 12 50.0** | **+0.1** |
| PB09 | | | | *eS* | | **Sn** | **14 13 50.2** | **0.0** |
| **VA06** | **Catapilco** | **5.78** | **182** | Pn | | **Pn** | **14 12 56.0** | **-1.5** |
| **VA03** | **San Esteban** | **6.00** | **176** | | | **Pn** | **14 13 00.8** | **+0.2** |
| **TA01** | **Diego Aracena** | **6.22** | **8** | Pn | | **Pn** | **14 13 01.2** | **-2.3** |
| **PEL** | **Peldehue** | **6.37** | **177** | Pn | | **Pn** | **14 13 06.5** | **+0.9** |
| **MT02** | **Curacav** | **6.48** | **181** | | | **Pn** | **14 13 07.1** | **+0.1** |
| **MT09** | **Talagante** | **6.99** | **179** | | | **Pn** | **14 13 14.2** | **0.0** |
| **MT13** | **San Alfonso** | **6.99** | **175** | Pn | | **Pn** | **14 13 15.3** | **+1.1** |
| **MT01** | **Popeta** | **7.08** | **181** | | | **Pn** | **14 13 15.1** | **-0.2** |
| **BO02** | **Sierra Bellavi** | **8.01** | **178** | | | **Pn** | **14 13 28.9** | **+0.7** |
| **PB18** | **Visviri** | **9.24** | **9** | Pn | | **Pn** | **14 13 45.5** | **-0.1** |
| **H03N1** | **Juan Fernandez** | **9.51** | **224** | T | | T | 14 23 43.4 | |
| | baz=51,slow=71,SNR=2087 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **9.52** | **224** | T | | T | 14 23 43.2 | |
| | baz=51,slow=71,SNR=878 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **9.53** | **224** | T | | T | 14 23 37.6 | |
| | baz=51,slow=71,SNR=2080 | | | | | | | |
| **LPAZ** | **La Paz** | **10.77** | **15** | Pn | | **Pn** | **14 14 06.4** | **-0.1** |
| | comp=Z,0.6nm,0.3s,baz=204,slow=4.1,SNR=9.9 | | | | | | | |
| LPAZ | | | | Sn | | **Sn** | **14 16 08.4** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=43,slow=24,SNR=1.5 | | | | | | | |
| LPAZ | | | | LR | | LR | 14 18 42.5 | |
| | comp=Z,206nm,19.5s,baz=176,slow=40 | | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | | |
| **LPAZ** | **La Paz** | **10.77** | **15** | *eP* | | **Pn** | **14 14 06.6** | **0.0** |
| **CPUP** | **Villa Florida** | **12.31** | **91** | Pn | | **Pn** | **14 14 25.8** | **-1.1** |
| CPUP | | | | Sn | | **Sn** | **14 16 43.4** | **-0.9** |
| | comp=Z,0.1nm,0.3s,baz=296,slow=9.1,SNR=1.7 | | | | | | | |
| CPUP | | | | LR | | LR | 14 19 41.5 | |
| | comp=Z,0.2nm,0.3s,baz=201,slow=14,SNR=1.6 | | | | | | | |
| | comp=Z,141nm,21.4s,baz=246,slow=41 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **BBSD** | **Serra de San D** | **13.59** | **48** | *eP* | | **Pn** | **14 14 44.8** | **+0.3** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SIV** | **San Ignacio** | **14.19** | **43** | Pn | | **Pn** | **14 14 49.3** | **-3.4** |
| | comp=Z,0.1nm,0.3s,baz=237,slow=5.5,SNR=5.6 | | | | | | | |
| SIV | | | | LR | | LR | 14 19 22.4 | |
| | comp=Z,92nm,21.5s,baz=142,slow=34 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **NNA** | **Nana** | **15.67** | **339** | LR | | LR | 14 20 12.5 | |
| | comp=Z,47nm,18.9s,baz=156,slow=33 | | | | | | | |
| **ITAB** | **Concordia** | **16.89** | **96** | | | **P** | **14 15 28.8** | **-1.4** |
| **ETMB** | **Extrema** | **17.47** | **16** | *eP* | | **P** | **14 15 37.4** | **+0.8** |
| **SAML** | **Samuel** | **19.23** | **24** | | | **P** | **14 15 55.4** | **-0.7** |
| **SAML** | **Samuel** | **19.23** | **24** | *eP* | | **P** | **14 15 54.9** | **-1.2** |
| **PDRB** | **Porto dos Gac** | **20.23** | **45** | *eP* | | **P** | **14 16 06.5** | **-0.5** |
| **ATAH** | **Atahualpa** | **20.73** | **339** | LR | | LR | 14 24 15.3 | |
| | comp=Z,38nm,19.7s,baz=250,slow=37 | | | | | | | |
| **VAO** | **Valinhos** | **22.17** | **86** | P | | **P** | **14 16 27.1** | **-0.9** |
| VAO | | | | IAmb | | IAmb | 14 16 28.1 | |
| | comp=Z,25nm,0.7s | | | | | | | |
| **VAO** | **Valinhos** | **22.17** | **86** | *eP* | | **P** | **14 16 27.1** | **-0.9** |
| **IPMB** | **Ipameri, GO** | **22.84** | **72** | *eP* | | **P** | **14 16 33.4** | **-1.7** |
| **SNDB** | **Serra Nova Dou** | **23.70** | **55** | *eP* | | **P** | **14 16 42.8** | **-1.0** |
| **TEFE** | **Tefe** | **23.93** | **16** | *eP* | | **P** | **14 16 47.0** | **+1.0** |
| **BDFB** | **Brasilia** | **24.13** | **67** | P | | **P** | **14 16 46.1** | **-1.9** |
| BDFB | | | | IAmb | | IAmb | 14 16 59.7 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **BDFB** | **Brasilia** | **24.13** | **67** | P | | **P** | **14 16 45.7** | **-2.3** |
| | comp=Z,3.7nm,0.5s,baz=248,slow=8.4,SNR=5.1 | | | | | | | |
| BDFB | | | | LR | | LR | 14 25 57.8 | |
| | comp=Z,61nm,20.0s,baz=147,slow=36 | | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| **NPGB** | **Novo Progresso** | **24.65** | **40** | *eP* | | **P** | **14 16 52.1** | **-0.5** |
| **PAYG** | **Puerto Ayora** | **31.85** | **321** | P | | **P** | **14 17 57.6** | **+0.6** |
| **RPN** | **Rapa Nui** | **34.03** | **261** | LR | | LR | 14 27 05.0 | |
| | comp=Z,16nm,21.1s,baz=93,slow=27 | | | | | | | |
| **BAUV** | **El Baul** | **35.61** | **5** | P | | **P** | **14 18 29.1** | **-0.5** |
| BAUV | | | | IAmb | | IAmb | 14 18 31.0 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **58.01** | **160** | P | | **P** | **14 21 24.5** | **+0.2** |
| SNAA | | | | IAmb | | IAmb | 14 21 25.3 | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **58.01** | **160** | ⇑*P* | | **P** | **14 21 24.6** | **+0.3** |
| | comp=Z,4.3nm,0.2s | | | | | | | |
| **SNAA** | **Sanae** | **58.01** | **160** | P | | **P** | **14 21 24.9** | **+0.6** |
| | comp=Z,1.9nm,0.5s,baz=272,slow=9.6,SNR=7.9 | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **63.45** | **180** | P | | **P** | **14 22 02.9** | **+1.3** |
| QSPA | | | | IAmb | | IAmb | 14 22 03.6 | |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **63.45** | **180** | P | | **P** | **14 22 03.1** | **+1.6** |
| | comp=Z,3.0nm,0.5s,baz=141,slow=2.0,SNR=42 | | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **63.93** | **328** | P | | **P** | **14 22 06.2** | **+1.1** |
| | comp=Z,0.6nm,0.7s,baz=147,slow=7.4,SNR=4.6 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **R40A** | **Maddies Statio** | **67.69** | **342** | P | | **P** | **14 22 29.2** | **+0.3** |
| R40A | | | | IAmb | | IAmb | 14 22 31.0 | |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **DBIC** | **Dimbokro** | **72.15** | **73** | P | | **P** | **14 22 56.6** | **-0.3** |
| **DBIC** | **Dimbokro** | **72.15** | **73** | P | | **P** | **14 22 56.8** | **-0.1** |
| | comp=Z,2.6nm,0.7s,baz=234,slow=12,SNR=1.7 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **73.97** | **341** | P | | **P** | **14 23 07.8** | **+0.7** |
| ECSD | | | | IAmb | | IAmb | 14 23 08.9 | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **77.74** | **332** | P | | **P** | **14 23 30.3** | **+1.4** |
| | comp=Z,0.3nm,0.6s,baz=136,slow=4.7,SNR=2.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.49** | **324** | P | | **P** | **14 23 35.6** | **+2.4** |
| | comp=Z,0.3nm,0.6s,baz=179,slow=7.7,SNR=3.1 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **MAW** | **Mawson** | **79.87** | **164** | P | | **P** | **14 23 40.8** | **+0.7** |
| | comp=Z,2.5nm,0.9s,baz=221,slow=7.2,SNR=5.1 | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.97** | **70** | P | | **P** | **14 23 46.6** | **-0.3** |
| | comp=Z,4.9nm,0.6s,baz=273,slow=5.0,SNR=28 | | | | | | | |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **LBTB** | **Lobatse** | **84.59** | **115** | LR | | LR | 14 59 16.0 | |
| | comp=Z,82nm,18.4s,baz=149,slow=34 | | | | | | | |
| **NEW** | **Newport** | **85.33** | **331** | LR | | LR | 15 01 31.1 | |
| | comp=Z,20nm,18.2s,baz=24,slow=35 | | | | | | | |
| **ESDC** | **Sonseca Array** | **90.93** | **45** | LR | | LR | 15 03 48.0 | |
| | comp=Z,25nm,19.0s,baz=182,slow=35 | | | | | | | |
| **ASAR** | **Alice Springs** | **124.36** | **208** | PKP | | **PKPdf** | **14 30 31.2** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=142,slow=2.1,SNR=5.0 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **126.42** | **274** | T | | T | 16 49 59.7 | |
| | baz=110,slow=75,SNR=6.1 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **126.43** | **274** | T | | T | 16 50 05.8 | |
| | baz=110,slow=75,SNR=6.1 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **126.44** | **274** | T | | T | 16 50 01.0 | |
| | baz=110,slow=75,SNR=7.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **127.44** | **211** | PKP | | **PKPdf** | **14 30 37.6** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=156,slow=1.8,SNR=8.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **146.77** | **36** | PKPbc | | **PKPbc** | **14 31 13.1** | **-0.5** |
| | comp=Z,1.8nm,0.5s,baz=303,slow=3.2,SNR=14 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **147.53** | **27** | PKPbc | | **PKPdf** | **14 31 14.0** | **+0.9** |
| | comp=Z,9.2nm,0.8s,baz=304,slow=3.5,SNR=31 | | | | | | | |
| **MKAR** | **Makanchi Array** | **150.99** | **39** | PKPbc | | **PKiKP** | **14 31 24.9** | **-0.4** |
| | comp=Z,6.9nm,0.7s,baz=319,slow=2.2,SNR=61 | | | | | | | |

**RSNC 21 14:28:36.4**±0.0,6°**N**±2°.×**7°6W**±°,**h10**km±3km,**M3.0,mb4.1,**
**ML3.0,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CBOC** | **Ciudad Bolivar** | **0.28** | **157** | P | | Pg | 14 28 41.4 | -0.7 |
| CBOC | | | | S | | Sg | 14 28 46.7 | +0.8 |
| **DBBC** | **Dabeiba** | **0.90** | **354** | P | | Pg | 14 28 51.3 | -2.4 |
| DBBC | | | | S | | Sb | 14 29 05.9 | -0.3 |
| **PLMC** | **San Jos del P** | **1.22** | **188** | P | | Pn | 14 28 56.3 | -3.3 |
| PLMC | | | | S | | Sb | 14 29 14.0 | -1.4 |
| **NORC** | **Norcasia** | **1.36** | **114** | P | | Pn | 14 28 57.3 | -4.2 |
| NORC | | | | S | | Sb | 14 29 14.1 | -5.5 |
| **PTBC** | **PUERTO BERRIO,** | **1.71** | **76** | P | | Pn | 14 29 02.8 | -3.4 |
| PTBC | | | | S | | Sn | 14 29 24.7 | -3.4 |
| **UREC** | **San Jos de Ur** | **1.72** | **20** | P | | Pn | 14 29 03.6 | -2.9 |
| UREC | | | | S | | Sn | 14 29 26.3 | -2.3 |
| **APAC** | **Apartado, Choc** | **1.83** | **346** | P | | Pn | 14 29 07.3 | -0.6 |
| APAC | | | | S | | Sb | 14 29 33.5 | +0.6 |
| **ZARC** | **Zaragoza, Cauc** | **1.85** | **43** | P | | Pn | 14 29 05.3 | -3.0 |
| ZARC | | | | S | | Sn | 14 29 28.7 | -3.1 |
| **PTAC** | **Punta Ardita,** | **1.96** | **301** | P | | Pn | 14 29 06.7 | -3.1 |
| **SPBC** | **San Pablo de B** | **2.09** | **103** | P | | Pn | 14 29 08.9 | -2.7 |
| SPBC | | | | S | | Sn | 14 29 38.3 | +0.6 |
| **YOTC** | **Yotoco, Valle** | **2.13** | **186** | P | | Pn | 14 29 09.0 | -3.2 |
| YOTC | | | | S | | Sn | 14 29 35.8 | -3.1 |
| **ROSC** | **El Rosal** | **2.20** | **125** | P | | Pn | 14 29 12.2 | -1.1 |
| ROSC | | | | S | | Sb | 14 29 43.2 | -0.7 |
| **ORTC** | **Ortega, Tolima** | **2.36** | **158** | P | | Pn | 14 29 14.3 | -1.0 |
| ORTC | | | | S | | Sn | 14 29 44.8 | +0.4 |
| **BRJC** | **Barrancabermej** | **2.51** | **70** | P | | Pn | 14 29 14.4 | -2.9 |
| **PRAC** | **Prado** | **2.69** | **153** | P | | Pn | 14 29 19.5 | -0.3 |
| PRAC | | | | S | | Sb | 14 29 56.2 | -1.6 |
| **CAPC** | **Capurgana** | **2.78** | **334** | P | | Pn | 14 29 19.3 | -1.7 |
| **CHIC** | **Chingaza** | **2.80** | **122** | P | | Pn | 14 29 20.0 | -1.7 |
| **JAMC** | **Jamundi, Valle** | **2.94** | **191** | P | | Pn | 14 29 19.9 | -3.5 |
| JAMC | | | | S | | Sn | 14 29 54.7 | -4.2 |
| **BARC** | **Barichara** | **2.96** | **81** | P | | Pn | 14 29 21.3 | -2.4 |
| **RUSC** | **La Rusia** | **3.03** | **94** | P | | Pn | 14 29 22.2 | -2.7 |
| **POPC** | **Popayan, Colom** | **3.60** | **189** | P | | Pn | 14 29 30.8 | -1.7 |
| **SJCC** | **San Jacinto, C** | **3.87** | **14** | P | | Pn | 14 29 33.9 | -2.1 |
| SJCC | | | | S | | Sn | 14 30 16.6 | -5.0 |
| **CRJC** | **Cerrejon, Guaj** | **5.83** | **33** | P | | Pn | 14 29 59.9 | -3.1 |
| | 20nm,0.7s | | | | | | | |
| CRJC | | | | S | | Sn | 14 31 02.4 | -7.6 |
| | 20nm,0.7s | | | | | | | |
| **SDV** | **Santo Domingo** | **6.09** | **63** | P | | Pn | 14 30 04.6 | -2.2 |
| SDV | | | | S | | Sn | 14 31 10.7 | -6.1 |
| **PAC1** | **Pacto, Paraso** | **6.40** | **205** | P | | Pn | 14 30 12.2 | +1.3 |

*NOU **21** 14:41:08.5,38°.83S×176°.37E,h127km,MLv3.7/10,North*
*Island, New Zealand*
*WEL **21** 14:41:13.0±0.5,39°.S±3°.×17°.6E±°,h75km±5km,M3.2/44,*
*ML3.2/45,MLv3.2/44,Error ellipse: s-maj=0.0km*
*s-min=0.0km az=149.8,confirmed*
**ISC 21 14:41:10.2**±1.5,**38.77S**±0°.04×**176.17E**±0°.04,**h107**km±7km,
**n119,**σ0**9**98/135,**North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HATZ** | **Hinemaiaia** | **0.14** | **205** | P | | **Pn** | **14 41 25.2** | **0.0** |
| HATZ | | | | S | | **Sn** | **14 41 34.8** | **-1.7** |
| **WHTZ** | **Whakaora** | **0.19** | **301** | P | | **Pn** | **14 41 25.7** | **+0.3** |
| **MRHZ** | **Matea Rd** | **0.21** | **109** | P | | **Pn** | **14 41 25.4** | **0.0** |
| MRHZ | | | | S | | **Sn** | **14 41 34.9** | **-1.8** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ALRZ** | **Allen Road** | **0.25** | **34** | P | | **Pn** | **14 41 25.3** | **-0.2** |
| ALRZ | | | | S | | **Sn** | **14 41 35.7** | **-1.2** |
| **RATZ** | **Rangitukua** | **0.33** | **252** | P | | **Pn** | **14 41 26.1** | **+0.2** |
| **WATZ** | **Wairara** | **0.34** | **280** | P | | **Pn** | **14 41 26.2** | **+0.3** |
| **KUTZ** | **Kaahu Road** | **0.39** | **316** | P | | **Pn** | **14 41 26.4** | **+0.3** |
| **GRRZ** | **Galatos Road** | **0.42** | **354** | P | | **Pn** | **14 41 26.7** | **+0.4** |
| **KATZ** | **Kakaramea** | **0.42** | **240** | P | | **Pn** | **14 41 27.0** | **+0.6** |
| **HSRZ** | **Hossack Road** | **0.46** | **8** | P | | **Pn** | **14 41 26.7** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **0.47** | **148** | P | | **Pn** | **14 41 26.9** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **0.47** | **148** | P | | **Pn** | **14 41 27.2** | **+0.5** |
| BKZ | | | | S | | **Sn** | **14 41 38.2** | **-0.8** |
| **TMVZ** | **Te Maari** | **0.50** | **226** | P | | **Pn** | **14 41 27.7** | **+0.7** |
| TMVZ | | | | S | | **Sn** | **14 41 39.0** | **-0.5** |
| **NTVZ** | **North Tongarir** | **0.51** | **229** | P | | **Pn** | **14 41 28.0** | **+1.0** |
| NTVZ | | | | S | | **Sn** | **14 41 39.4** | **-0.1** |
| **RRRZ** | **Republican Roa** | **0.51** | **33** | P | | **Pn** | **14 41 26.8** | **0.0** |
| **ETVZ** | **East Tongariro** | **0.51** | **224** | P | | **Pn** | **14 41 27.8** | **+0.8** |
| **KRVZ** | **Karewarewa** | **0.53** | **231** | P | | **Pn** | **14 41 27.8** | **+0.7** |
| **MTHZ** | **Maungataniwha** | **0.53** | **99** | P | | **Pn** | **14 41 27.5** | **+0.4** |
| MTHZ | | | | S | | **Sn** | **14 41 39.1** | **-0.6** |
| **HLRZ** | **Highlands Stat** | **0.53** | **16** | P | | **Pn** | **14 41 28.0** | **+0.9** |
| **MUGZ** | **Murupara** | **0.55** | **59** | P | | **Pn** | **14 41 27.0** | **-0.1** |
| **OTVZ** | **Oturere** | **0.56** | **225** | P | | **Pn** | **14 41 28.3** | **+0.9** |
| OTVZ | | | | S | | **Sn** | **14 41 40.1** | **-0.1** |
| **NNVZ** | **North Ngauruho** | **0.56** | **230** | P | | **Pn** | **14 41 28.2** | **+0.8** |
| **WTVZ** | **West Tongariro** | **0.57** | **232** | P | | **Pn** | **14 41 28.1** | **+0.7** |
| **SNVZ** | **South Ngauruho** | **0.59** | **224** | P | | **Pn** | **14 41 28.7** | **+1.1** |
| **UTU** | **Utuhina** | **0.59** | **2** | P | | **Pn** | **14 41 28.0** | **+0.5** |
| **TARZ** | **Mount Tarawera** | **0.59** | **27** | P | | **Pn** | **14 41 27.8** | **+0.2** |
| **NMHZ** | **Naumai** | **0.60** | **124** | P | | **Pn** | **14 41 29.0** | **+1.4** |
| NMHZ | | | | S | | **Sn** | **14 41 41.8** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **0.60** | **227** | P | | **Pn** | **14 41 28.5** | **+0.8** |
| **TUVZ** | **Tukino** | **0.64** | **219** | P | | **Pn** | **14 41 29.1** | **+1.1** |
| **TWVZ** | **Taurewa** | **0.65** | **242** | P | | **Pn** | **14 41 28.7** | **+0.8** |
| TWVZ | | | | S | | **Sn** | **14 41 40.9** | **-0.4** |
| **COVZ** | **Chateau Observ** | **0.65** | **228** | P | | **Pn** | **14 41 28.7** | **+0.7** |
| **RTZ** | **Ruatahuna** | **0.65** | **77** | P | | **Pn** | **14 41 28.3** | **+0.3** |
| RTZ | | | | S | | **Sn** | **14 41 40.6** | **-0.8** |
| **OMRZ** | **Omania** | **0.68** | **14** | P | | **Pn** | **14 41 28.4** | **+0.2** |
| **FWVZ** | **Far West T-bar** | **0.68** | **224** | P | | **Pn** | **14 41 29.2** | **+0.7** |
| FWVZ | | | | S | | **Sn** | **14 41 42.5** | **+0.4** |
| **WHVZ** | **Whangaehu Hut** | **0.68** | **221** | P | | **Pn** | **14 41 29

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRAB** | **Tennant Creek** | **44.22 259** | P | **P** | **14 55 19.2** | **-0.8** |
| WRAB | | | IAmb | IAmb | 14 55 34.6 | |
| | comp=Z,9.0nm,1.4s | | | | | |
| **WRA** | **Warramunga Arr** | **44.23 259** | P | **P** | **14 55 19.4** | **-0.6** |
| **WRA** | **Warramunga Arr** | **44.23 259** | P | **P** | **14 55 19.6** | **-0.5** |
| | comp=Z,0.4nm,0.3s,baz=91,slow=7.7,SNR=24 | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | |
| **AS31** | **Alice Springs** | **44.45 254** | P | **P** | **14 55 21.7** | **0.0** |
| AS31 | | | IAmb | IAmb | 14 55 22.5 | |
| | comp=Z,1.9nm,0.6s | | | | | |
| **ASAR** | **Alice Springs** | **44.45 254** | P | **P** | **14 55 21.4** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.45 254** | P | **P** | **14 55 21.9** | **+0.2** |
| | comp=Z,6.4nm,0.6s,baz=89,slow=7.8,SNR=160 | | | | | |
| ASAR | | | PcP | **PcP** | **14 56 53.8** | **+0.4** |
| | comp=Z,0.3nm,0.5s,baz=107,slow=4.0,SNR=5.5 | | | | | |
| | comp=Z,6.4nm,0.6s | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.62 260** | P | **P** | **14 56 22.5** | **+0.2** |
| **QSPA** | **South Pole Qui** | **72.67 180** | P | **P** | **14 58 31.4** | **+0.5** |
| QSPA | | | IAmb | IAmb | 14 58 56.8 | |
| | comp=Z,5.2nm,1.3s | | | | | |
| **QSPA** | **South Pole Qui** | **72.67 180** | P | **P** | **14 58 31.3** | **+0.3** |
| | comp=Z,1.2nm,0.8s,baz=77,slow=1.6,SNR=8.0 | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | |
| **BELA** | **Belgrano 2** | **82.75 173** | P | **P** | **14 59 24.6** | **-0.3** |
| BELA | | | IAmb | IAmb | 14 59 46.7 | |
| | comp=Z,3.7nm,1.5s | | | | | |

**IDC 21 14:52:26.6±3.4, 18°.64S×175°.27W, h0km, mb3.6/2, mbtmp3.6/2, Error ellipse: s-maj=193.6km s-min=53.4km az=149.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **47.43** | **260** | P | P | 15 01 02.5 | -0.8 |
| | 0.1nm,0.4s,baz=95,slow=6.8,SNR=6.1 | | | | | | |
| WRA | | | | PcP | PcP | 15 02 32.7 | -1.3 |
| | 0.5nm,1.1s,baz=88,slow=3.7,SNR=2.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **47.47** | **255** | P | P | 15 01 04.5 | +0.8 |
| | 1.0nm,0.5s,baz=88,slow=8.9,SNR=46 | | | | | | |
| ASAR | | | | PcP | PcP | 15 02 33.0 | -1.1 |
| | 0.2nm,0.4s,baz=110,slow=3.9,SNR=5.0 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **147.39** | **316** | PKPbc | PKPbc | 15 12 12.6 | -0.2 |
| | 0.5nm,0.7s,baz=90,slow=3.3,SNR=3.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **149.03** | **304** | PKPbc | PKPbc | 15 12 17.2 | 0.0 |
| | 1.5nm,0.4s,baz=90,slow=5.8,SNR=4.1 | | | | | | |

*JMA **21** 15:01:35.8±0.4, 33°.4N×134°.8E±°, h351km, MV2.9/22, FAR S OFF TOKAI DISTRICT*
*IDC **21** 15:01:38.7±0.8, 33°.30N×137°.98E, h335km±22km, mb2.7/4, mbtmp3.4/6, Error ellipse: s-maj=64.3km s-min=15.3km az=59.0*
**ISC 21 15:01:38.4±1.0, 33°.44N±0°.09×138°.16E±0°.09, h350km, n20, σ1s14/24, mb2.8/4, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TTO5** | **TONANKAI O.B.S** | **0.89** | **336** | *e*P | **Pn** | **15 02 23.1** | **-0.3** |
| **JHJ** | **Hachijo jima 2** | **1.40** | **103** | P | **Pn** | **15 02 25.6** | **-0.4** |
| | 92nm,0.7s,baz=44,slow=18,SNR=1.9 | | | | | | |
| JHJ | | | | S | **S** | **15 03 03.6** | **-0.5** |
| | 165nm,1.0s,baz=81,slow=9.9,SNR=1.8 | | | | | | |
| **JIE** | **Ise** | **1.53** | **309** | *e*P | **Pn** | **15 02 25.5** | **-1.2** |
| **JOD2** | **Odawara 2** | **1.97** | **23** | *e*P | **Pn** | **15 02 29.4** | **0.0** |
| JOD2 | | | | *e*S | **S** | **15 03 10.8** | **+0.4** |
| **JYN** | **Shimob** | **2.08** | **9** | *e*P | **Pn** | **15 02 30.5** | **+0.3** |
| **JTNC** | **Tanabenakahech** | **2.16** | **281** | *e*P | **Pn** | **15 02 28.8** | **-2.0** |
| **JWY** | **Kouya** | **2.27** | **291** | *e*P | **Pn** | **15 02 30.4** | **-1.3** |
| **JYTA** | **Yamagatataniai** | **2.44** | **332** | *e*P | **Pn** | **15 02 32.5** | **-0.4** |
| **BSO1** | **Boso 1** | **2.64** | **62** | *e*P | **Pn** | **15 02 33.0** | **-0.8** |
| BSO1 | | | | *e*S | **S** | **15 03 16.6** | **-2.1** |
| **JRY** | **Ryogami san** | **2.64** | **13** | *e*P | **Pn** | **15 02 35.1** | **+0.5** |
| **JWT** | **Wachi** | **2.92** | **310** | *e*P | **Pn** | **15 02 35.9** | **-1.1** |
| **MJAR** | **Matsushiro Arr** | **3.09** | **1** | P | **Pn** | **15 02 38.4** | **-0.2** |
| | 12nm,0.7s,baz=208,slow=19,SNR=32 | | | | | | |
| **MAT** | **Matsushiro** | **3.09** | **1** | *e*P | **Pn** | **15 02 38.6** | **0.0** |
| **JAG** | **Ashikaga** | **3.16** | **19** | *e*P | **Pn** | **15 02 38.6** | **-0.5** |
| JAG | | | | *e*S | **S** | **15 03 25.1** | **-3.0** |
| **JHS** | **Saijyo** | **4.45** | **292** | *e*P | **Pn** | **15 02 51.9** | **-0.2** |
| **KSRS** | **Korea Array** | **9.26** | **298** | P | **Pn** | **15 03 47.6** | **+0.2** |
| | 1.8nm,0.7s,baz=109,slow=13,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.87** | **305** | P | **P** | **15 09 12.6** | **+1.3** |
| | 0.1nm,0.4s,baz=81,slow=9.8,SNR=1.8 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.20** | **310** | P | **P** | **15 09 30.6** | **+1.3** |
| | 0.3nm,0.6s,baz=91,slow=8.4,SNR=4.2 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.21** | **184** | P | **P** | **15 10 22.2** | **+0.3** |
| | 0.5nm,0.4s,baz=0.3,slow=7.8,SNR=21 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **56.94** | **185** | P | **P** | **15 10 48.9** | **+0.6** |
| | 0.2nm,0.5s,baz=2.1,slow=6.4,SNR=12 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*JMA **21** 15:06:19.9±0.8, 46°.N±7°.×151°.1E±°, h30km, MV3.8/10, KURILE ISLANDS REGION*
**SKHL 21 15:06:20.2±0.5, 45°.00N×151°.70E, h33km±2km, mb4.2/3, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.72** | **276** | *e*P | Pn | 15 07 01.8 | +0.2 |
| KUR | | | | AMB | AMB | 15 07 02.4 | |
| | 30nm,0.3s | | | | | | |
| KUR | | | | *e*S | Sn | 15 07 32.6 | -0.7 |
| KUR | | | | A | A | 15 07 40.9 | |
| | 100nm,0.4s | | | | | | |
| KUR | | | | A | A | 15 07 40.9 | |
| | 60nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **3.67** | **254** | *e*P | Pn | 15 07 14.8 | +0.3 |
| SHO | | | | AMB | AMB | 15 07 18.5 | |
| | 10.0nm,0.3s | | | | | | |
| SHO | | | | *e*S | Sn | 15 07 55.8 | -0.8 |
| SHO | | | | A | A | 15 08 01.1 | |
| | 40nm,0.3s | | | | | | |
| SHO | | | | A | A | 15 08 01.1 | |
| | 10.0nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **4.29** | **259** | *e*P | Pn | 15 07 24.1 | +1.1 |
| YUK | | | | AMB | AMB | 15 07 26.4 | |
| | 30nm,0.4s | | | | | | |
| YUK | | | | *i* S | Sn | 15 08 12.1 | +0.2 |
| YUK | | | | A | A | 15 08 20.8 | |
| | 60nm,0.6s | | | | | | |
| YUK | | | | A | A | 15 08 20.8 | |
| | 80nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **4.59** | **251** | *e*P | Pn | 15 07 27.4 | +0.2 |
| NEM2 | | | | *e*S | Sn | 15 08 18.0 | -1.2 |
| **JRA** | **Rausu** | **4.83** | **260** | *e*P | Pn | 15 07 32.5 | +2.0 |
| JRA | | | | *e*S | Sn | 15 08 27.2 | +2.0 |
| **JNK** | **Nakash** | **5.21** | **257** | *e*P | Pn | 15 07 37.2 | +1.5 |
| **JAK** | **Akkeshi** | **5.43** | **251** | *e*P | Pn | 15 07 39.1 | +0.3 |
| JAK | | | | *e*S | Sn | 15 08 38.7 | -1.5 |
| **JAR** | **Ashorobuto** | **5.96** | **256** | *e*P | Pn | 15 07 47.8 | +1.8 |
| JAR | | | | *e*S | Sn | 15 08 53.0 | -0.1 |
| **JOB** | **Onbets** | **6.05** | **252** | *e*P | Pn | 15 07 48.8 | +1.5 |
| JOB | | | | *e*S | Sn | 15 08 54.5 | -0.9 |
| **JCH** | **Churui** | **6.49** | **251** | *e*P | Pn | 15 07 54.1 | +0.8 |
| JCH | | | | *e*S | Sn | 15 09 03.6 | -2.5 |
| **JNBK** | **Urakawa-nobuka** | **7.04** | **250** | *e*P | Pn | 15 08 00.8 | 0.0 |
| JNBK | | | | *e*S | Sn | 15 09 17.4 | -2.3 |

**KRSC 21 15:19:20.9±1.4, 53°.61N×162°.97E, h45km±30km, MI3.7, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **1.84** | **255** | *e*P | Pn | 15 19 52.3 | +2.4 |
| SPN | | | | *e*S | Sn | 15 20 14.2 | +2.2 |
| **NLC** | **Nalytchevo** | **2.21** | **260** | *e*P | Pn | 15 19 57.7 | +2.7 |
| NLC | | | | *e*S | Sn | 15 20 23.9 | +2.7 |
| **TUMR** | **Tumrok** | **2.35** | **317** | *e*P | Pn | 15 20 00.4 | +3.4 |
| **UGLR** | **Uglovaya** | **2.51** | **262** | *e*P | Pn | 15 20 02.6 | +3.4 |
| UGLR | | | | *e*S | Sn | 15 20 32.6 | +3.9 |
| **SMAR** | **Somma** | **2.52** | **264** | *e*P | Pn | 15 20 02.5 | +3.1 |
| SMAR | | | | *e*S | Sn | 15 20 31.8 | +2.9 |
| **AVH** | **Avacha** | **2.56** | **264** | *e*P | Pn | 15 20 03.4 | +3.6 |
| AVH | | | | *e*S | Sn | 15 20 33.8 | +4.2 |
| **DALK** | **Dalny** | **2.59** | **259** | *e*P | Pn | 15 20 03.5 | +3.2 |
| DALK | | | | *e*S | Sn | 15 20 33.2 | +2.7 |
| **KOK** | **Koryaka** | **2.61** | **265** | *e*P | Pn | 15 20 03.9 | +3.4 |
| KOK | | | | *e*S | Sn | 15 20 34.7 | +3.7 |
| **PET** | **Petropavlovsk** | **2.66** | **259** | *e*P | Pn | 15 20 04.0 | +2.9 |
| PET | | | | *e*S | Sn | 15 20 34.1 | +2.1 |
| **KMNR** | **Kamenistaya** | **2.67** | **325** | *e*P | Pn | 15 20 04.7 | +3.3 |
| KMNR | | | | *e*S | Sn | 15 20 36.9 | +4.2 |
| **BZGR** | **Bezymyannyi-Gr** | **2.68** | **332** | *e*P | Pn | 15 20 04.0 | +2.4 |
| **BZP** | **Bezymyannyi-Pe** | **2.70** | **330** | *e*P | Pn | 15 20 04.8 | +2.9 |
| **BZMR** | **Bezymyannaya** | **2.74** | **329** | *e*P | Pn | 15 20 04.8 | +2.4 |
| **GNL** | **Ganaly** | **2.99** | **274** | *e*P | Pn | 15 20 10.2 | +4.3 |
| **KRMR** | **Karymshinskiy** | **3.01** | **257** | *e*P | Pn | 15 20 09.7 | +3.7 |
| KRMR | | | | *e*S | Sn | 15 20 44.2 | +3.4 |
| **KOZ** | **Kozyrevsk** | **3.04** | **325** | *e*P | Pn | 15 20 09.8 | +3.5 |
| **MTVR** | **Mutnovka** | **3.10** | **251** | *e*P | Pn | 15 20 10.5 | +3.1 |
| MTVR | | | | *e*S | Sn | 15 20 46.4 | +3.2 |
| **GRL** | **Gorelyy** | **3.14** | **252** | *e*P | Pn | 15 20 11.2 | +3.4 |
| GRL | | | | *e*S | Sn | 15 20 47.1 | +3.0 |
| **ESO** | **Esso** | **3.39** | **315** | *e*P | Pn | 15 20 13.7 | +2.5 |
| **KDTR** | **Khodutka, Kamc** | **3.48** | **241** | *e*P | Pn | 15 20 14.5 | +2.1 |
| **APC** | **Apacha** | **3.56** | **261** | *e*P | Pn | 15 20 18.4 | +5.0 |
| APC | | | | *e*S | Sn | 15 21 00.1 | +6.0 |

*TEH **21** 15:29:35.9, 36°.70N×54°.87E, h6km±133km, ML3.9*
*IDC **21** 15:29:39.2±2.1, 36°.96N×54°.87E, h0km, mb3.2/4, mbtmp3.4/6, ML2.9/2, MS3.1/1, Error ellipse: s-maj=46.2km s-min=24.5km az=8.0*
**ISC 21 15:29:36.6±0.6, 36°.76N±0°.04×54°.86E±0°.03, h10km, n61, σ2s84/64, mb3.4/5, 1C-2D, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IMND** | **Minoodasht** | **0.66** | **41** | Pg | **Pg** | **15 29 49.7** | **+0.3** |
| **IGLO** | **Ghaloghah** | **0.86** | **253** | Pg | **Pb** | **15 29 53.6** | **-0.2** |
| **MRVT** | **Maraveh tapeh** | **1.33** | **47** | Pg | **Pg** | **15 30 02.5** | **+0.3** |
| **IALA** | **Alasht** | **1.78** | **248** | Pg | **Pg** | **15 30 10.2** | **-0.6** |
| **IFIR** | **Firoozkooh** | **2.03** | **237** | Pn | **Pg** | **15 30 13.8** | **-1.8** |
| **IPRN** | **Peran** | **2.09** | **256** | Pn | **Pb** | **15 30 14.9** | **+0.2** |
| **SBZV** | **Sabzevar** | **2.25** | **99** | Pn | **Pb** | **15 30 16.5** | **-0.9** |
| **TAPT** | **Tabas- Tapeh t** | **2.65** | **134** | Pn | **Pb** | **15 30 21.1** | **-3.1** |
| **MZPU** | **Pul - Mazandar** | **2.67** | **264** | Pn | **Pb** | **15 30 23.2** | **-1.4** |
| **IVRN** | **Varamin** | **3.09** | **236** | Pn | **Pb** | **15 30 27.9** | **-3.8** |
| **IEMG** | **Emamgholi** | **3.10** | **77** | Pn | **Pb** | **15 30 28.9** | **-3.2** |
| **TNSJ** | **Nastanj** | **3.13** | **152** | Pn | **Pb** | **15 30 27.9** | **-4.5** |
| **IAKL** | **Akhelmad** | **3.14** | **92** | Pn | **Pb** | **15 30 28.8** | **-3.9** |
| **ISFB** | **Sefidab** | **3.21** | **222** | Pn | **Pn** | **15 30 28.6** | **+1.4** |
| **KRSH** | **Karshahi** | **3.56** | **219** | Pn | **Pn** | **15 30 34.0** | **+1.9** |
| **IQOM** | **Qom** | **3.62** | **239** | Pn | **Pn** | **15 30 35.6** | **+2.6** |
| **TKDS** | **Koohdasht(Taba** | **3.65** | **149** | Pn | **Pn** | **15 30 35.4** | **+2.2** |
| **ANAR** | **Anarak** | **3.68** | **195** | Pn | **Pn** | **15 30 35.1** | **+1.4** |
| **IKRD** | **Kardeh** | **3.74** | **88** | Pn | **Pn** | **15 30 37.7** | **+3.1** |
| **IGZV** | **Ghazvin** | **3.75** | **266** | Pn | **Pb** | **15 30 38.4** | **-4.6** |
| **TPRV** | **Parvadeh(Tabas** | **4.01** | **157** | Pn | **Pn** | **15 30 40.0** | **+1.8** |
| **QAMS** | **Qamsar** | **4.14** | **224** | Pn | **Pn** | **15 30 41.7** | **+1.6** |
| **IRAZ** | **Razeghan** | **4.21** | **253** | Pn | **Pn** | **15 30 44.0** | **+2.9** |
| **IMYA** | **Miami** | **4.24** | **94** | Pn | **Pn** | **15 30 43.6** | **+2.1** |
| **IKLH** | **Kolahrood** | **4.36** | **219** | Pn | **Pn** | **15 30 45.6** | **+2.5** |
| **IZEF** | **Zefreh** | **4.38** | **209** | Pn | **Pn** | **15 30 45.4** | **+2.0** |
| **TBJM** | **Torbat-e-JAM** | **4.68** | **107** | Pn | **Pn** | **15 30 49.9** | **+2.5** |
| **AFRZ** | **Afriz** | **4.76** | **133** | Pn | **Pn** | **15 30 51.0** | **+2.4** |
| **IGAR** | **Gharneh** | **4.93** | **209** | Pn | **Pn** | **15 30 53.5** | **+2.6** |
| **ISAD** | **Sadrabad** | **4.93** | **192** | Pn | **Pn** | **15 30 52.5** | **+1.5** |
| **ITEG** | **Tejag** | **5.01** | **139** | Pn | **Pn** | **15 30 54.7** | **+2.7** |
| **IBAF** | **Bafgh** | **5.19** | **173** | Pn | **Pn** | **15 30 56.9** | **+2.5** |
| **IPIR** | **Pirpir** | **5.21** | **220** | Pn | **Pn** | **15 30 57.6** | **+2.7** |
| **IRAM** | **Ramesheh** | **5.35** | **203** | Pn | **Pn** | **15 30 59.7** | **+3.0** |
| **IMEH** | **Mehriz** | **5.36** | **182** | Pn | **Pn** | **15 30 58.8** | **+2.0** |
| **SHRT** | **Shahrakht** | **5.42** | **123** | Pn | **Pn** | **15 30 59.6** | **+2.0** |
| **IKOO** | **Kooshah** | **5.51** | **140** | Pn | **Pn** | **15 31 01.3** | **+2.3** |
| **IBRJ** | **Brojen** | **5.68** | **213** | Pn | **Pn** | **15 31 04.2** | **+2.9** |
| **JHBN** | **Jahan bin** | **5.69** | **219** | Pn | **Pn** | **15 31 04.5** | **+3.0** |
| **ISRB** | **Sarab** | **5.83** | **283** | Pn | **Pn** | **15 31 06.5** | **+3.2** |
| **BSRN** | **Basiran** | **5.94** | **142** | Pn | **Pn** | **15 31 06.6** | **+1.8** |
| **SNQR** | **Sonqor, Kerman** | **6.17** | **254** | Pn | **Pn** | **15 31 11.2** | **+3.1** |
| **KLNJ** | **Kolanjah** | **6.34** | **206** | Pn | **Pn** | **15 31 13.5** | **+3.0** |
| **NHDN** | **Nehbandan** | **6.87** | **140** | Pn | **Pn** | **15 31 19.9** | **+2.4** |
| **ISHB** | **Shabestar** | **7.50** | **284** | Pn | **Pn** | **15 31 28.9** | **+2.6** |
| **VSHL** | **Vashlovani** | **7.95** | **307** | P | **Pn** | **15 31 34.0** | **+1.7** |
| VSHL | | | | S | **Sn** | **15 32 57.8** | **-4.5** |
| **LGD** | **Lagodekhi** | **8.38** | **310** | P | **Pn** | **15 31 39.5** | **+1.4** |
| LGD | | | | S | **Sn** | **15 33 09.5** | **-3.3** |
| **DGRG** | **David-gareji** | **8.73** | **305** | P | **Pn** | **15 31 46.2** | **+3.3** |
| **CHRG** | **Chargali** | **9.47** | **309** | P | **Pn** | **15 31 55.5** | **+2.3** |
| CHRG | | | | S | **Sn** | **15 33 35.3** | **-4.4** |
| **SHTL** | **Shatili** | **9.51** | **311** | P | **Pn** | **15 31 57.3** | **+3.6** |
| **AB31** | **Akbulak array** | **13.03** | **15** | P | **Pn** | **15 32 38.4** | **-3.3** |
| | 0.5nm,0.5s,baz=203,slow=14,SNR=12 | | | | | | |
| AB31 | | | | ⇓S | **Sn** | **15 34 59.0** | **-7.6** |
| | 0.8nm,0.5s,baz=201,slow=25,SNR=7.1 | | | | | | |
| **KK31** | **Karatay Array** | **13.57** | **57** | ⇑P | **Pn** | **15 32 52.4** | **+3.3** |
| | 0.8nm,0.6s,baz=242,slow=11,SNR=4.6 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **15 35 19.8** | **-0.2** |
| | 1.8nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **16.84** | **74** | P | **Pn** | **15 33 28.9** | **-3.6** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **16.93** | **287** | Pn | **P** | **15 33 38.0** | **+2.4** |
| | baz=117,slow=11,SNR=4.0 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **EIL** | **Elat** | **18.08** | **253** | LR | LR | 15 42 09.9 | |
| | comp=Z,58nm,18.9s,baz=199,slow=41 | | | | | | |
| **BVAR** | **Borovoye Array** | **19.57** | **29** | P | **Pn** | **15 34 06.0** | **+0.3** |
| | baz=212,slow=9.5,SNR=8.8 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.90** | **43** | P | **P** | **15 34 31.8** | **+2.2** |
| | comp=Z,0.4nm,0.6s,baz=242,slow=11,SNR=3.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **22.68** | **55** | P | **P** | **15 34 41.4** | **+3.3** |
| | comp=Z,0.4nm,0.6s,baz=248,slow=13,SNR=3.3 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **23.03** | **315** | P | **P** | **15 34 45.1** | **+3.5** |
| | comp=Z,0.5nm,0.4s,baz=108,slow=9.1,SNR=2.1 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **NACGM** | **Naroch** | **26.40** | **322** | *e*P | **P** | **15 35 13.3** | **+0.3** |
| | comp=Z,553nm,0.5s,baz=123 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.69** | **103** | P | P | 15 37 38.2 | +4.4 |
| | comp=Z,0.5nm,0.6s,baz=295,slow=8.6,SNR=4.5 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |

*TIR **21** 15:37:41.8, 41°.89N×13°.97E, h1km±2km, MI3.7*
*LDG **21** 15:37:56.2±0.1, 41°.88N×14°.87E, h18km, MI3.1/7, Error ellipse: s-maj=2.6km s-min=1.8km az=42.0*
*ROM **21** 15:37:56.6±0.1, 41°.855N±0°.005×14°.863E±0°.006, h19km±1km, ML2.9/141, Error ellipse: s-maj=0.6km s-min=0.0km az=199.0*
**ISC 21 15:37:56.5±0.9, 41°.88N±0°.02×14°.84E±0°.02, h19km±2km, n90, σ1s92/109, 11C-3D, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T1411** | **Guglionesi (CB** | **0.10** | **45** | ⇑P | **Pg** | **15 38 00.7** | **+0.4** |
| T1411 | | | | S | **Sg** | **15 38 03.7** | **+0.9** |
| T1411 | | | | AML | AML | | |
| | comp=N,36700µm,0.8s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,58750µm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,38150µm,0.8s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,36650µm,0.8s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,59900µm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,59901µm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,58743µm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,37055µm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,35555µm,0.1s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,59901µm,1.7s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,58743µm,1.7s | | | | | | |
| **T1412** | **Lupara (CB)** | **0.11** | **208** | ⇑P | **Pg** | **15 38 00.2** | **-0.2** |
| T1412 | | | | S | **Sg** | **15 38 02.8** | **-0.2** |
| T1412 | | | | AML | AML | | |
| | comp=N,58600µm,0.5s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=E,43550µm,1.1s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=N,780µm,0.4s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=E,38950µm,1.1s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=E,43500µm,1.1s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=N,780µm,0.4s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=N,690µm,0.1s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=N,53525µm,0.2s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=E,33721µm,0.4s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=E,36918µm,0.4s | | | | | | |
| **FRES** | **Fresagrandinar** | **0.16** | **308** | P | **Pg** | **15 38 01.9** | **+0.9** |
| FRES | | | | S | **Sg** | **15 38 05.0** | **+1.0** |
| FRES | | | | AML | AML | | |
| | comp=N,5845µm,0.7s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,7650µm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,5842µm,0.2s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,7586µm,0.1s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.23** | **167** | ⇑P | **Pb** | **15 38 02.0** | **+0.2** |
| CIGN | | | | S | **Sg** | **15 38 05.7** | **-0.1** |
| **TRIV** | **Trivento** | **0.24** | **243** | ⇑P | **Pg** | **15 38 02.9** | **+0.7** |
| TRIV | | | | S | **Sg** | **15 38 07.3** | **+1.2** |
| TRIV | | | | AML | AML | | |
| | comp=E,4220µm,0.7s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,3630µm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,3870µm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,4225µm,0.7s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,3625µm,0.9s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,4430µm,0.7s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,3635µm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,3468µm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,3635µm,1.7s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,4248µm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,4009µm,0.5s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.28** | **128** | ⇓P | **Pg** | **15 38 02.4** | **-0.3** |
| MELA | | | | S | **Sg** | **15 38 06.8** | **-0.2** |
| MELA | | | | AML | AML | | |
| | comp=N,6080µm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,9725µm,0.8s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,8755µm,0.8s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,6545µm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,7049µm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,7640µm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,4933µm,0.3s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,5139µm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,7640µm,1.8s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,7049µm,1.8s | | | | | | |
| **GATE** | **Gambatesa** | **0.37** | **171** | P | **Pb** | **15 38 04.9** | **+0.3** |
| GATE | | | | S | **Sb** | **15 38 10.4** | **+0.4** |
| GATE | | | | AML | AML | | |
| | comp=N,2955µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,3125µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,3640µm,1.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,2950µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,3600µm,1.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,2951µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,3427µm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=E,3384µm,0.5s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,3123µm,0.4s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,2951µm,1.6s | | | | | | |
| GATE | | | | AML | AML | | |
| | comp=N,3123µm,1.6s | | | | | | |
| **BSSO** | **Busso** | **0.38** | **209** | ⇑P | **Pb** | **15 38 04.9** | **+0.1** |
| BSSO | | | | S | **Sb** | **15 38 11.5** | **+1.1** |
| BSSO | | | | AML | AML | | |
| | comp=N,1565µm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,695µm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,620µm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,1560µm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,620µm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,1560µm,1.7s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,620µm,1.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,1565µm,1.4s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.49** | **191** | ⇑P | **Pg** | **15 38 06.2** | **-0.3** |
| SACR | | | | S | **Sb** | **15 38 13.5** | **0.0** |
| SACR | | | | AML | AML | | |
| | comp=E,2100µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,1010µm,0.8s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2185µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,1038µm,0.8s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2187µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,930µm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,953µm,0.5s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2099µm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2187µm,1.7s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,2099µm,1.7s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,953µm,1.6s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,930µm,1.6s | | | | | | |
| **MIDA** | **Miranda** | **0.49** | **242** | ⇑P | **Pg** | **15 38 06.6** | **0.0** |
| MIDA | | | | S | **Sb** | **15 38 13.7** | **+0.1** |
| MIDA | | | | AML | AML | | |
| | comp=E,3725µm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,3275µm,0.3s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,3330µm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,3170µm,0.3s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,3169µm,0.3s |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RNI2 | **Rionero Sannit** | **0.54 251** | ⇑P | | **Pg** | **15 38 07.6** | **+0.2** |
| RNI2 | | | S | | **Sb** | **15 38 16.1** | **+1.4** |
| RNI2 | | | AML | AML | | | |
| | comp=N,6895µm,0.2s | | | | | | |
| RNI2 | | | AML | AML | | | |
| | comp=E,3800µm,0.2s | | | | | | |
| RNI2 | | | AML | AML | | | |
| | comp=E,4230µm,0.2s | | | | | | |
| RNI2 | | | AML | AML | | | |
| | comp=N,6480µm,0.2s | | | | | | |
| RNI2 | | | AML | AML | | | |
| | comp=N,6894µm,0.2s | | | | | | |
| RNI2 | | | AML | AML | | | |
| | comp=N,6480µm,0.2s | | | | | | |
| RNI2 | | | AML | AML | | | |
| | comp=E,3799µm,0.1s | | | | | | |
| RNI2 | | | AML | AML | | | |
| | comp=E,4233µm,0.1s | | | | | | |
| **APRC** | **Apricena** | **0.54 103** | P | | **Pb** | **15 38 06.3** | **-1.2** |
| APRC | | | S | | **Sb** | **15 38 13.6** | **-1.2** |
| APRC | | | AML | AML | | | |
| | comp=N,3315µm,0.3s | | | | | | |
| APRC | | | AML | AML | | | |
| | comp=E,1880µm,0.2s | | | | | | |
| APRC | | | AML | AML | | | |
| | comp=N,3222µm,0.2s | | | | | | |
| APRC | | | AML | AML | | | |
| | comp=E,1742µm,0.2s | | | | | | |
| APRC | | | AML | AML | | | |
| | comp=E,1876µm,0.2s | | | | | | |
| APRC | | | AML | AML | | | |
| | comp=N,1765µm,0.3s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.56 154** | P | | **Pb** | **15 38 07.5** | **-0.3** |
| MOCO | | | AML | AML | | | |
| | comp=E,806µm,1.5s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=N,384µm,0.4s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=E,806µm,1.5s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=N,342µm,0.4s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=E,860µm,1.5s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=N,342µm,0.4s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=N,342µm,0.4s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=E,745µm,0.4s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=N,384µm,0.4s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=E,790µm,0.3s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=N,342µm,1.6s | | | | | | |
| MOCO | | | AML | AML | | | |
| | comp=N,384µm,1.6s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.60 215** | ⇑P | | **Pb** | **15 38 07.9** | **-0.4** |
| SGG | | | S | | **Sb** | **15 38 16.2** | **-0.2** |
| SGG | | | AML | AML | | | |
| | comp=E,2.5nm,0.5s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=N,2.0nm,0.4s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=E,2.5nm,0.5s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=E,846µm,0.5s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=N,686µm,0.4s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=N,2.1nm,0.4s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=N,686µm,0.4s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=E,846µm,0.5s | | | | | | |
| SGG | | | AML | AML | | | |
| | comp=E,2.3nm,0.5s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.65 224** | ⇑P | | **Pb** | **15 38 08.8** | **-0.4** |
| VAGA | | | AML | AML | | | |
| | comp=E,994µm,0.4s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=N,1310µm,0.3s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=E,990µm,0.4s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=E,1050µm,0.4s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=N,1375µm,0.3s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=E,991µm,0.4s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=E,1050µm,0.4s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=N,1311µm,0.3s | | | | | | |
| VAGA | | | AML | AML | | | |
| | comp=N,1373µm,0.3s | | | | | | |
| **CERA** | **Filignano** | **0.67 246** | ⇑P | | **Pb** | **15 38 09.2** | **-0.4** |
| CERA | | | AML | AML | | | |
| | comp=N,1905µm,0.8s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=E,995µm,0.7s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=E,1060µm,0.7s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=N,2005µm,0.8s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=N,1909µm,0.8s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=N,1995µm,0.6s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=E,997µm,0.7s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=E,1059µm,0.7s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=E,1059µm,1.3s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=E,997µm,1.3s | | | | | | |
| CERA | | | AML | AML | | | |
| | comp=N,1909µm,1.2s | | | | | | |
| **SGRT** | **San Giovanni R** | **0.69 100** | P | | **Pb** | **15 38 08.6** | **-1.4** |
| | baz=95 | | | | | | |
| SGRT | | | S | | **Sg** | **15 38 20.2** | **+0.8** |
| | baz=95 | | | | | | |
| SGRT | | | AMP | | | | |
| | comp=E,4.6nm,0.3s,baz=95 | | | | | | |
| **SGRT** | **San Giovanni R** | **0.69 100** | P | | **Pb** | **15 38 09.2** | **-0.7** |
| SGRT | | | S | | **Sb** | **15 38 19.3** | **+0.1** |
| SGRT | | | AML | AML | | | |
| | comp=E,1450µm,0.3s | | | | | | |
| SGRT | | | AML | AML | | | |
| | comp=N,1575µm,0.5s | | | | | | |
| SGRT | | | AML | AML | | | |
| | comp=E,1451µm,0.3s | | | | | | |
| SGRT | | | AML | AML | | | |
| | comp=N,1417µm,0.4s | | | | | | |
| **INTR** | **Introdacqua** | **0.71 281** | ⇓P | | **Pb** | **15 38 10.3** | **0.0** |
| INTR | | | S | | **Sn** | **15 38 21.1** | **-1.0** |
| INTR | | | AML | AML | | | |
| | comp=E,1055µm,1.5s | | | | | | |
| INTR | | | AML | AML | | | |
| | comp=N,2330µm,0.5s | | | | | | |
| INTR | | | AML | AML | | | |
| | comp=N,1896µm,0.3s | | | | | | |
| INTR | | | AML | AML | | | |
| | comp=E,934µm,0.3s | | | | | | |
| **MRB1** | **Monte Rocchett** | **0.76 172** | P | | **Pb** | **15 38 11.3** | **+0.2** |
| MRB1 | | | AML | AML | | | |
| | comp=E,1260µm,0.5s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=N,1350µm,0.5s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=E,1255µm,0.4s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=E,1310µm,0.4s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=N,1420µm,0.5s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=E,1306µm,0.4s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=E,1259µm,0.5s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=N,1421µm,0.5s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=E,1306µm,1.6s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=E,1259µm,1.6s | | | | | | |
| MRB1 | | | AML | AML | | | |
| | comp=N,1352µm,0.5s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MSAG** | **Monte S. Angel** | **0.82 101** | P | | **Pb** | **15 38 11.8** | **-0.4** |
| **PIGN** | **Pignataro Magg** | **0.84 216** | P | | **Pb** | **15 38 12.3** | **-0.2** |
| PIGN | | | AML | AML | | | |
| | comp=E,418µm,0.4s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=N,267µm,0.3s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=E,432µm,0.4s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=N,293µm,0.5s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=E,417µm,0.4s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=E,432µm,1.6s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=E,417µm,1.6s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=N,267µm,0.3s | | | | | | |
| PIGN | | | AML | AML | | | |
| | comp=N,293µm,1.5s | | | | | | |
| **SGTA** | **Sant Agata di** | **0.84 152** | P | | **Pb** | **15 38 11.6** | **-1.0** |
| SGTA | | | AML | AML | | | |
| | comp=E,2320µm,0.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=N,1280µm,0.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=N,1280µm,0.4s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=E,2445µm,0.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=N,1315µm,0.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=N,1316µm,0.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=E,2319µm,0.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=E,2445µm,0.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=N,1316µm,1.5s | | | | | | |
| SGTA | | | AML | AML | | | |
| | comp=N,1278µm,0.5s | | | | | | |
| **POFI** | **Posta Fibreno** | **0.85 260** | P | | **Pb** | **15 38 12.4** | **-0.4** |
| POFI | | | AML | AML | | | |
| | comp=N,530µm,0.7s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=N,560µm,0.7s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=E,797µm,0.4s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=N,530µm,0.7s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=E,782µm,0.4s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=N,517µm,0.5s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=E,797µm,0.4s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=N,524µm,0.5s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=E,782µm,0.4s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=N,517µm,1.5s | | | | | | |
| POFI | | | AML | AML | | | |
| | comp=N,524µm,1.5s | | | | | | |
| **T0110** | **Collepietro** | **0.86 294** | P | | **Pb** | **15 38 12.8** | **-0.1** |
| T0110 | | | AML | AML | | | |
| | comp=N,908µm,0.9s | | | | | | |
| T0110 | | | AML | AML | | | |
| | comp=E,1310µm,0.6s | | | | | | |
| T0110 | | | AML | AML | | | |
| | comp=E,1292µm,0.4s | | | | | | |
| T0110 | | | AML | AML | | | |
| | comp=N,846µm,0.5s | | | | | | |
| **PAOL** | **Paolisi** | **0.87 193** | P | | **Pb** | **15 38 12.2** | **-0.9** |
| PAOL | | | AML | AML | | | |
| | comp=E,866µm,0.7s | | | | | | |
| PAOL | | | AML | AML | | | |
| | comp=N,599µm,0.6s | | | | | | |
| PAOL | | | AML | AML | | | |
| | comp=E,946µm,0.7s | | | | | | |
| PAOL | | | AML | AML | | | |
| | comp=N,580µm,0.3s | | | | | | |
| PAOL | | | AML | AML | | | |
| | comp=E,946µm,0.7s | | | | | | |
| PAOL | | | AML | AML | | | |
| | comp=E,866µm,0.7s | | | | | | |
| PAOL | | | AML | AML | | | |
| | comp=N,580µm,0.3s | | | | | | |
| PAOL | | | AML | AML | | | |
| | comp=N,573µm,0.4s | | | | | | |
| **CAFE** | **Carife** | **0.90 160** | P | | **Pb** | **15 38 12.7** | **-0.9** |
| CAFE | | | AML | AML | | | |
| | comp=E,1174µm,0.8s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=N,774µm,0.4s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=E,1220µm,0.8s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=N,780µm,0.4s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=E,1173µm,0.8s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=E,1124µm,0.3s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=N,775µm,0.4s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=N,780µm,0.4s | | | | | | |
| CAFE | | | AML | AML | | | |
| | comp=E,1052µm,0.3s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.90 305** | P | | **Pb** | **15 38 13.8** | **+0.1** |
| VCEL | | | AML | AML | | | |
| | comp=E,1125µm,0.4s | | | | | | |
| VCEL | | | AML | AML | | | |
| | comp=N,1435µm,1.0s | | | | | | |
| VCEL | | | AML | AML | | | |
| | comp=N,1359µm,0.2s | | | | | | |
| VCEL | | | AML | AML | | | |
| | comp=E,1126µm,0.4s | | | | | | |
| **MTMR** | **Montemarano** | **0.97 172** | P | | **Pb** | **15 38 13.6** | **-1.2** |
| MTMR | | | AML | AML | | | |
| | comp=E,1555µm,0.4s | | | | | | |
| MTMR | | | AML | AML | | | |
| | comp=N,1360µm,0.5s | | | | | | |
| MTMR | | | AML | AML | | | |
| | comp=N,1357µm,0.5s | | | | | | |
| MTMR | | | AML | AML | | | |
| | comp=N,653µm,0.4s | | | | | | |
| MTMR | | | AML | AML | | | |
| | comp=E,1556µm,0.4s | | | | | | |
| MTMR | | | AML | AML | | | |
| | comp=E,769µm,0.4s | | | | | | |
| **SNAL** | **S. Angelo Dei** | **0.99 163** | P | | **Pb** | **15 38 13.8** | **-1.3** |
| SNAL | | | AML | AML | | | |
| | comp=N,705µm,0.8s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=E,1076µm,1.2s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=E,1126µm,1.2s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=N,751µm,0.8s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=E,780µm,0.5s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=E,856µm,0.5s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=N,574µm,0.9s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=N,598µm,0.5s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=E,856µm,1.5s | | | | | | |
| SNAL | | | AML | AML | | | |
| | comp=E,780µm,1.5s | | | | | | |
| **VCRE** | **Vesuvio Crater** | **1.10 196** | AML | AML | | | |
| | comp=N,957µm,0.5s | | | | | | |
| VCRE | | | AML | AML | | | |
| | comp=E,1142µm,1.6s | | | | | | |
| VCRE | | | AML | AML | | | |
| | comp=N,956µm,0.5s | | | | | | |
| VCRE | | | AML | AML | | | |
| | comp=E,1098µm,0.4s | | | | | | |
| VCRE | | | AML | AML | | | |
| | comp=E,1098µm,1.6s | | | | | | |
| **GIGS** | **Gran Sasso** | **1.10 302** | P | | **Pb** | **15 38 16.6** | **-0.5** |
| GIGS | | | AML | AML | | | |
| | comp=E,159µm,0.4s | | | | | | |
| GIGS | | | AML | AML | | | |
| | comp=N,133µm,0.6s | | | | | | |
| GIGS | | | AML | AML | | | |
| | comp=E,159µm,0.4s | | | | | | |
| GIGS | | | AML | AML | | | |
| | comp=N,133µm,0.6s | | | | | | |
| **VTIR** | **Vesuvio Tirone** | **1.11 196** | AML | AML | | | |
| | comp=N,288µm,1.3s | | | | | | |
| VTIR | | | AML | AML | | | |
| | comp=E,329µm,0.4s | | | | | | |
| VTIR | | | AML | AML | | | |
| | comp=E,329µm,0.4s | | | | | | |
| VTIR | | | AML | AML | | | |
| | comp=N,276µm,0.4s | | | | | | |
| **TRTR** | **Tortoreto Alta** | **1.15 324** | AML | AML | | | |
| | comp=E,2495µm,0.6s | | | | | | |
| TRTR | | | AML | AML | | | |
| | comp=N,2115µm,1.0s | | | | | | |
| TRTR | | | AML | AML | | | |
| | comp=N,2023µm,0.4s | | | | | | |
| TRTR | | | AML | AML | | | |
| | comp=E,2495µm,0.6s | | | | | | |
| **TERO** | **Teramo** | **1.18 310** | P | | **Pn** | **15 38 18.1** | **0.0** |
| TERO | | | AML | AML | | | |
| | comp=E,212µm,0.6s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=N,203µm,0.3s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=E,272µm,0.4s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=N,422µm,0.4s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=N,203µm,0.3s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=N,335µm,0.4s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=E,272µm,0.4s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=E,212µm,0.6s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=N,335µm,1.6s | | | | | | |
| TERO | | | AML | AML | | | |
| | comp=E,272µm,1.6s | | | | | | |
| **MRLC** | **Muro Lucano** | **1.22 156** | P | | **Pb** | **15 38 19.1** | **0.0** |
| MRLC | | | AML | AML | | | |
| | comp=E,222µm,0.5s | | | | | | |
| MRLC | | | AML | AML | | | |
| | comp=N,190µm,0.8s | | | | | | |
| MRLC | | | AML | AML | | | |
| | comp=E,504µm,0.5s | | | | | | |
| MRLC | | | AML | AML | | | |
| | comp=N,396µm,0.8s | | | | | | |
| MRLC | | | AML | AML | | | |
| | comp=E,505µm,0.6s | | | | | | |
| MRLC | | | AML | AML | | | |
| | comp=N,167µm,0.3s | | | | | | |
| MRLC | | | AML | AML | | | |
| | comp=E,222µm,0.6s | | | | | | |
| MRLC | | | AML | AML | | | |
| | comp=N,379µm,0.4s | | | | | | |
| **GIUL** | **Giuliano Di Ro** | **1.23 255** | P | | **Pg** | **15 38 20.2** | **0.0** |
| GIUL | | | AML | AML | | | |
| | comp=E,263µm,0.7s | | | | | | |
| GIUL | | | AML | AML | | | |
| | comp=N,310µm,0.7s | | | | | | |
| GIUL | | | AML | AML | | | |
| | comp=N,310µm,0.7s | | | | | | |
| GIUL | | | AML | AML | | | |
| | comp=E,263µm,0.7s | | | | | | |
| GIUL | | | AML | AML | | | |
| | comp=E,263µm,1.3s | | | | | | |
| **PALZ** | **Palazzo San Ge** | **1.26 137** | P | | **Pb** | **15 38 19.8** | **+0.1** |
| PALZ | | | AML | AML | | | |
| | comp=E,626µm,1.0s | | | | | | |
| PALZ | | | AML | AML | | | |
| | comp=N,646µm,0.8s | | | | | | |
| PALZ | | | AML | AML | | | |
| | comp=E,623µm,0.5s | | | | | | |
| PALZ | | | AML | AML | | | |
| | comp=N,647µm,0.8s | | | | | | |
| **ACER** | **Acerenza** | **1.37 142** | P | | **Pn** | **15 38 21.2** | **+0.4** |
| ACER | | | AML | AML | | | |
| | comp=E,612µm,0.4s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=N,425µm,0.4s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=E,622µm,0.4s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=N,451µm,0.4s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=E,622µm,0.4s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=E,613µm,0.4s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=N,425µm,0.5s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=N,451µm,0.4s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=N,451µm,1.6s | | | | | | |
| ACER | | | AML | AML | | | |
| | comp=N,425µm,1.6s | | | | | | |
| **VENT** | **Ventotene** | **1.52 225** | AML | AML | | | |
| | comp=E,183µm,0.9s | | | | | | |
| VENT | | | AML | AML | | | |
| | comp=N,217µm,0.9s | | | | | | |
| VENT | | | AML | AML | | | |
| | comp=E,168µm,0.7s | | | | | | |
| VENT | | | AML | AML | | | |
| | comp=N,204µm,0.4s | | | | | | |
| VENT | | | AML | AML | | | |
| | comp=E,168µm,1.3s | | | | | | |
| **NRCA** | **Norcia** | **1.59 307** | AML | AML | | | |
| | comp=N,257µm,0.6s | | | | | | |
| NRCA | | | AML | AML | | | |
| | comp=E,284µm,0.2s | | | | | | |
| NRCA | | | AML | AML | | | |
| | comp=N,231µm,0.2s | | | | | | |
| **MC2** | **Monte Cornacci** | **1.60 311** | P | | **Pb** | **15 38 25.0** | **-0.6** |
| **AMUR** | **Altamura** | **1.65 125** | P | | **Pn** | **15 38 25.2** | **+0.7** |
| AMUR | | | AML | AML | | | |
| | comp=E,315µm,0.3s | | | | | | |
| AMUR | | | AML | AML | | | |
| | comp=N,366µm,1.0s | | | | | | |
| AMUR | | | AML | AML | | | |
| | comp=E,315µm,0.3s | | | | | | |
| AMUR | | | AML | AML | | | |
| | comp=N,335µm,0.3s | | | | | | |
| **CSP1** | **Cessapalombo** | **1.71 316** | P | | **Pb** | **15 38 27.6** | **+0.1** |
| **FDMO** | **Fiordimonte** | **1.74 312** | AML | AML | | | |
| | comp=E,144µm,1.5s | | | | | | |
| FDMO | | | AML | AML | | | |
| | comp=E,150µm,0.5s | | | | | | |
| FDMO | | | AML | AML | | | |
| | comp=N,240µm,0.3s | | | | | | |
| FDMO | | | AML | AML | | | |
| | comp=E,144µm,0.5s | | | | | | |
| FDMO | | | AML | AML | | | |
| | comp=N,241µm,0.3s | | | | | | |
| **CESI** | **CESI - Serrava** | **1.82 309** | P | | **Pb** | **15 38 29.2** | **-0.1** |
| CESI | | | AML | AML | | | |
| | comp=E,225µm,0.6s | | | | | | |
| CESI | | | AML | AML | | | |
| | comp=N,252µm,0.5s | | | | | | |
| CESI | | | AML | AML | | | |
| | comp=N,253µm,0.5s | | | | | | |
| CESI | | | AML | AML | | | |
| | comp=E,225µm,0.6s | | | | | | |
| **NOCI** | **Noci** | **2.00 122** | P | | **Pn** | **15 38 28.8** | **-0.5** |
| | baz=114 | | | | | | |
| NOCI | | | S | | **Sg** | **15 39 03.5** | **+2.6** |
| | baz=114 | | | | | | |
| NOCI | | | AMP | | | | |
| | comp=E,0.8nm,0.2s,baz=114 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **STON** | **Ston** | **2.34** | **64** | *e*Pn | **Pn** | **15 38 34.8** | **+0.8** |
| **TREB** | **Trebinje** | **2.74** | **71** | *e*Pn | **Pn** | **15 38 41.1** | **+1.6** |
| **A050A** | **Klekovaca** | **2.88** | **25** | *e*Pn | **Pn** | **15 38 43.7** | **+2.2** |
| **BRY** | **Bratogost** | **2.93** | **68** | *e*Pn | **Pn** | **15 38 42.1** | **-0.1** |
| **DRME** | **Dracevica, Mon** | **3.25** | **83** | *e*Pn | **Pn** | **15 38 48.7** | **+2.1** |
| **SCTE** | **Santa Cesarea** | **3.29** | **122** | P | **Pn** | **15 38 48.3** | **+1.3** |
| | baz=116 | | | | | | |
| SCTE | | | | S | **Sb** | **15 39 37.1** | **+3.2** |
| | baz=116 | | | | | | |
| SCTE | | | | AMP | | | |
| | comp=N,0.1nm,0.5s,baz=116 | | | | | | |
| **PDG** | **Podgorica** | **3.33** | **79** | *e*Pn | **Pn** | **15 38 47.0** | **-0.6** |
| **BLY** | **Banja Luka** | **3.34** | **30** | *e*Pn | **Pb** | **15 38 53.8** | **-1.4** |
| **A051A** | **Mrakovica** | **3.48** | **25** | *e*Pn | **Pb** | **15 38 54.7** | **-2.8** |
| **BOJS** | **Bojanci** | **3.64** | **5** | *e*Pn | **Pn** | **15 38 53.3** | **+1.5** |
| **SKDS** | **Skadanscina** | **3.71** | **351** | *e*Pn | **Pn** | **15 38 51.2** | **-1.7** |
| **HAPS** | **Han Pijesak,BI** | **3.74** | **52** | *e*Pn | **Pb** | **15 38 58.3** | **-3.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RUDO** | **Rudo** | **3.77** | **61** | *e*Pn | | **Pn** | **15 38 56.7** | **+3.1** |
| **PUK** | **Puka** | **3.78** | **86** | P | | **Pn** | **15 38 56.0** | **+2.2** |
| | baz=85 | | | | | | | |
| PUK | | | | AMP | | | | |
| | comp=N,0.3nm,0.5s,baz=85 | | | | | | | |
| **BBLS** | **Lazi&#263i** | **3.90** | **58** | *e*Pn | | **Pn** | **15 38 59.0** | **+3.5** |
| **PGF** | **Pioggiola** | **4.38** | **281** | *e*P | | **Pn** | **15 39 04.7** | **+2.5** |
| PGF | | | | *e*Sn | | **Sn** | **15 39 47.7** | **-5.1** |
| | comp=N,10nm,0.7s | | | | | | | |
| **SRN** | **Sarande** | **4.39** | **115** | P | | **Pn** | **15 39 04.3** | **+2.1** |
| | baz=111 | | | | | | | |
| **OBKA** | **Obir** | **4.63** | **358** | *e*Pn | | **Pn** | **15 39 07.6** | **+2.0** |
| | comp=N,0.2nm,0.1s | | | | | | | |
| OBKA | | | | *e*Sn | | **Sn** | **15 39 59.4** | **+0.4** |
| | comp=N,13nm,0.8s | | | | | | | |
| **OBKA** | **Obir** | **4.63** | **358** | *e*Pn | | **Pn** | **15 39 09.7** | **+4.1** |
| **IGT** | **Igoumenitsa** | **4.79** | **117** | P | | **Pn** | **15 39 10.1** | **+2.4** |
| | baz=113 | | | | | | | |
| **SOKA** | **Soboth** | **4.80** | **2** | *e*Pn | | **Pn** | **15 39 09.7** | **+1.8** |
| | comp=N,0.4nm,0.3s | | | | | | | |
| **MYKA** | **Terra Mystica** | **4.83** | **350** | *e*Pn | | Pn | 15 39 13.5 | +5.3 |
| | comp=N,0.6nm,0.2s | | | | | | | |
| MYKA | | | | *e*Sn | | **Sn** | **15 40 04.2** | **+0.5** |
| | comp=N,3.7nm,0.6s | | | | | | | |
| **FNA** | **Florina** | **5.04** | **100** | P | | **Pn** | **15 39 14.4** | **+3.1** |
| | baz=98 | | | | | | | |
| **ABTA** | **Abfaltersbach** | **5.15** | **342** | *e*Pn | | **Pn** | **15 39 14.2** | **+1.6** |
| | comp=N,0.5nm,0.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **5.31** | **349** | *e*Pn | | **Pn** | **15 39 16.1** | **+1.2** |
| | comp=N,0.9nm,0.4s | | | | | | | |
| KBA | | | | *e*Sn | | **Sn** | **15 40 15.9** | **+0.3** |
| | comp=N,2.1nm,0.3s | | | | | | | |
| **LKD2** | **Lefkada island** | **5.41** | **123** | P | | **Pn** | **15 39 18.6** | **+2.4** |
| | baz=119 | | | | | | | |
| **LESA** | **Schwarzleotal** | **5.75** | **345** | *e*Sn | | **Sn** | **15 40 28.1** | **+1.6** |
| | comp=N,1.1nm,0.2s | | | | | | | |
| **SBF** | **Sospel** | **5.79** | **293** | *e*P | | **Pn** | **15 39 24.9** | **+3.5** |
| **WTTA** | **Wattenberg** | **5.85** | **338** | *e*Pn | | **Pn** | **15 39 23.4** | **+1.0** |
| | comp=N,0.6nm,0.3s | | | | | | | |
| WTTA | | | | *e*Sn | | **Sn** | **15 40 29.1** | **+0.1** |
| | comp=N,1.6nm,0.3s | | | | | | | |
| **FETA** | **Feichten** | **5.92** | **332** | *e*Pn | | **Pn** | **15 39 26.7** | **+3.4** |
| | comp=N,0.6nm,0.2s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **5.94** | **335** | *e*Pn | | **Pn** | **15 39 26.4** | **+2.9** |
| | comp=N,0.5nm,0.2s | | | | | | | |
| **CONA** | **Conrad Observa** | **6.09** | **7** | *e*Sn | | **Sn** | **15 40 34.5** | **-0.4** |
| | comp=N,2.3nm,0.4s | | | | | | | |
| **LMR** | **La Mourre** | **6.31** | **286** | *e*Pn | | Pn | 15 39 24.9 | -3.7 |
| **MBDF** | **Montbardon** | **6.54** | **299** | *e*P | | **Pn** | **15 39 34.3** | **+2.5** |
| **LPG** | **La Plagne** | **6.88** | **304** | *e*P | | **Pn** | **15 39 39.5** | **+2.8** |
| LPG | | | | *e*Sn | | **Sn** | **15 40 48.6** | **-6.1** |
| | comp=N,1.5nm,0.4s | | | | | | | |
| **LPL** | **La Plagne** | **6.91** | **305** | *e*P | | **Pn** | **15 39 39.8** | **+2.9** |
| LPL | | | | *e*Sn | | **Sn** | **15 40 49.2** | **-5.9** |
| | comp=N,1.2nm,0.3s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **7.20** | **298** | *e*P | | **Pn** | **15 39 43.9** | **+3.1** |
| ORIF | | | | *e*Sn | | Sn | 15 40 54.9 | -7.1 |
| | comp=N,1.1nm,0.3s | | | | | | | |
| **CABF** | **La Chapelle** | **7.86** | **310** | *e*P | | **Pn** | **15 39 51.8** | **+1.9** |
| **HINF** | **Hinteralfeld** | **8.21** | **319** | *e*Pn | | **Pn** | **15 39 52.2** | **-2.4** |
| HINF | | | | *e*Sn | | **Sn** | **15 41 21.0** | **-5.8** |
| | comp=N,3.7nm,0.4s | | | | | | | |
| **CDF** | **Champ du Feu** | **8.44** | **323** | *e*P | | **Pn** | **15 39 59.0** | **+1.2** |
| **HAU** | **Haudompre** | **8.59** | **318** | *e*Pn | | **Pn** | **15 39 57.2** | **-2.6** |
| **HAU** | **Haudompre** | **8.59** | **318** | *e*P | | **Pn** | **15 40 00.1** | **+0.3** |
| HAU | | | | *e*Sn | | Sn | 15 41 28.7 | -7.4 |
| | comp=N,4.6nm,0.3s | | | | | | | |

*IDC **21** 15:45:19.5±27.0, 17°.69S×177°.65W, h480km±230km, mb3.3/5, mbtmp4.1/5, Error ellipse: s-maj=238.2km s-min=26.2km az=40.0*
*NEIC **21** 15:45:26.6±1.1, 18°.0S±0°.2×177°.6W±0°.1, h567km±15km, mb4.3/18, Error ellipse: s-maj=27.1km s-min=16.4km az=160.0*

**ISC 21 15:45:25.4±1.2, 17°.9S±0°.2×177°.8W±0°.1, h550km, n26, σ0s72/27, mb4.2/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.00** | **272** | P | | P | 15 46 53.5 | +6.2 |
| **NIUE** | **Niue** | **7.52** | **100** | P | | **P** | **15 47 17.9** | **-0.6** |
| **URZ** | **Urewera** | **20.77** | **191** | P | | **P** | **15 49 27.7** | **-0.5** |
| | 8.1nm,0.9s,baz=42,slow=12,SNR=1.2 | | | | | | | |
| | 8.1nm,0.9s | | | | | | | |
| **THZ** | **Tophouse** | **25.08** | **197** | P | | **P** | **15 50 06.3** | **-0.5** |
| **KHZ** | **Kahutara** | **25.53** | **195** | P | | **P** | **15 50 09.3** | **-1.3** |
| **LBZ** | **Lake Benmore** | **28.28** | **198** | P | | **P** | **15 50 33.5** | **-1.2** |
| LBZ | | | | IAmb | | IAmb | 15 50 51.6 | |
| | comp=Z,54nm,1.5s | | | | | | | |
| **CTAO** | **Charters Tower** | **34.06** | **260** | P | | **P** | **15 51 24.8** | **+0.2** |
| CTAO | | | | IAmb | | IAmb | 15 51 58.8 | |
| | comp=Z,9.6nm,1.4s | | | | | | | |
| **COEN** | **Coen** | **37.72** | **270** | P | | **P** | **15 51 54.1** | **-0.8** |
| COEN | | | | IAmb | | IAmb | 15 52 19.7 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **39.17** | **241** | P | | **P** | **15 52 06.8** | **+0.3** |
| **STKA** | **Stephens Creek** | **39.17** | **241** | P | | **P** | **15 52 06.7** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=82,slow=15,SNR=3.9 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.95** | **241** | P | | **P** | **15 52 44.3** | **+0.2** |
| BBOO | | | | IAmb | | IAmb | 15 53 27.2 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **45.05** | **259** | P | | **P** | **15 52 53.0** | **+0.2** |
| **WB0** | **Warramunga Arr** | **45.21** | **260** | P | | **P** | **15 52 54.0** | **-0.1** |
| WB0 | | | | IAmb | | IAmb | 15 53 10.3 | |
| | comp=Z,9.0nm,1.3s | | | | | | | |
| **WB2** | **Warramunga Arr** | **45.23** | **259** | P | | **P** | **15 52 54.0** | **-0.2** |
| WB2 | | | | IAmb | | IAmb | 15 53 02.6 | |
| | comp=Z,6.5nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.23** | **259** | P | | **P** | **15 52 53.8** | **-0.4** |
| WRAB | | | | IAmb | | IAmb | 15 53 19.6 | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.24** | **259** | P | | **P** | **15 52 54.2** | **0.0** |
| | comp=Z,1.0nm,0.5s,baz=96,slow=7.3,SNR=50 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **15 54 23.6** | **+0.9** |
| | comp=Z,0.8nm,1.2s,baz=91,slow=4.0,SNR=2.2 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **45.38** | **254** | P | | **P** | **15 52 55.3** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.38** | **254** | P | | **P** | **15 52 54.6** | **-0.8** |
| **ASAR** | **Alice Springs** | **45.38** | **254** | P | | **P** | **15 52 55.5** | **+0.2** |
| | comp=Z,4.2nm,0.6s,baz=90,slow=8.3,SNR=107 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **15 54 23.8** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=100,slow=4.0,SNR=1.8 | | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **49.42** | **268** | P | | **P** | **15 53 25.4** | **-0.3** |
| MTN | | | | IAmb | | IAmb | 15 53 53.1 | |
| | comp=Z,32nm,1.4s | | | | | | | |
| **KNRA** | **Kununurra** | **51.10** | **264** | P | | **P** | **15 53 38.0** | **0.0** |
| KNRA | | | | IAmb | | IAmb | 15 53 48.1 | |
| | comp=Z,23nm,1.5s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.64** | **260** | P | | **P** | **15 53 56.2** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **58.51** | **255** | P | | **P** | **15 54 29.0** | **-0.7** |
| PSA00 | | | | IAmb | | IAmb | 15 55 07.0 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **UGM** | **Wanagama** | **70.26** | **268** | P | | **P** | **15 55 44.2** | **0.0** |
| **QSPA** | **South Pole Qui** | **72.15** | **180** | P | | **P** | **15 55 55.7** | **+1.3** |
| **QSPA** | **South Pole Qui** | **72.15** | **180** | P | | **P** | **15 55 56.1** | **+1.7** |
| | comp=Z,1.1nm,0.6s,baz=76,slow=4.2,SNR=9.1 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |

*JMA **21** 15:55:18.8±0.7, 45°N±4°×15°0E±°, h30km, MV3.6/13, SE OFF ETOROFU*
*SKHL **21** 15:55:18.8±0.6, 44°.30N×150°.20E, h36km±3km, mb3.9/3*

**ISC 21 15:55:16.4±4.2, 44°.1N±0°.1×150°.4E±0°.2, h35km, n14, σ2s58/23, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.13** | **302** | *e*P | | **Pn** | **15 55 48.7** | **-0.7** |
| KUR | | | | AMB | | AMB | 15 55 50.6 | |
| | 40nm,0.4s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **15 56 11.6** | **-3.0** |
| KUR | | | | A | | A | 15 56 16.8 | |
| | 120nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 15 56 16.8 | |
| | 130nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **2.60** | **266** | *e*P | | **Pn** | **15 55 56.9** | **+1.0** |
| SHO | | | | AMB | | AMB | 15 55 58.2 | |
| | 10.0nm,0.3s | | | | | | | |
| SHO | | | | *i* S | | **Sn** | **15 56 25.2** | **-1.0** |
| SHO | | | | A | | A | 15 56 26.9 | |
| | 20nm,0.4s | | | | | | | |
| SHO | | | | A | | A | 15 56 26.9 | |
| | 60nm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.28** | **270** | *e*P | | **Pn** | **15 56 06.8** | **+1.5** |
| YUK | | | | AMB | | AMB | 15 56 10.2 | |
| | 30nm,0.4s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **15 56 42.6** | **-0.4** |
| YUK | | | | A | | A | 15 56 49.0 | |
| | 90nm,0.6s | | | | | | | |
| YUK | | | | A | | A | 15 56 49.0 | |
| | 100nm,0.6s | | | | | | | |
| **NEM2** | **Nemuro 2** | **3.47** | **259** | P | | **Pn** | **15 56 09.1** | **+1.3** |
| NEM2 | | | | *e*S | | **Sn** | **15 56 46.2** | **-1.4** |
| **JRA** | **Rausu** | **3.82** | **269** | P | | **Pn** | **15 56 15.0** | **+2.3** |
| **JNK** | **Nakash** | **4.15** | **264** | P | | **Pn** | **15 56 19.1** | **+1.8** |
| JNK | | | | *e*S | | **Sn** | **15 57 04.8** | **+0.2** |
| **JAK** | **Akkeshi** | **4.30** | **257** | *e*P | | **Pn** | **15 56 20.9** | **+1.6** |
| JAK | | | | *e*S | | **Sn** | **15 57 07.0** | **-1.3** |
| **JTKR** | **Abashiri--Toko** | **4.69** | **270** | *e*P | | **Pn** | **15 56 27.2** | **+2.6** |
| **JAR** | **Ashorobuto** | **4.89** | **263** | *e*P | | **Pn** | **15 56 30.0** | **+2.7** |
| JAR | | | | *e*S | | **Sn** | **15 57 23.3** | **+0.6** |
| **JOB** | **Onbets** | **4.94** | **258** | *e*S | | **Sn** | **15 57 23.6** | **-0.3** |
| **JCH** | **Churui** | **5.36** | **256** | P | | **Pn** | **15 56 36.7** | **+2.9** |
| JCH | | | | *e*S | | **Sn** | **15 57 33.7** | **-0.5** |
| **JNBK** | **Urakawa-nobuka** | **5.89** | **254** | *e*P | | **Pn** | **15 56 43.3** | **+2.1** |
| JNBK | | | | *e*S | | **Sn** | **15 57 47.9** | **+0.4** |
| **JANG** | **Nango** | **7.59** | **243** | *e*S | | **Sn** | **15 58 24.1** | **-5.1** |
| **JTH** | **Tanohata** | **7.61** | **240** | *e*S | | **Sn** | **15 58 22.8** | **-7.0** |

**RSNC 21 15:56:02.9±0.0, 7°N±1°×7°3W±°, h141km±3km, M3.1, mb3.7, ML3.1, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.24** | **198** | P | | Pn | 15 56 21.1 | -1.4 |
| BARC | | | | S | | Sn | 15 56 35.8 | -1.6 |
| **PAMC** | **Pamplona, Colo** | **0.66** | **38** | P | | Pn | 15 56 24.1 | -0.6 |
| PAMC | | | | S | | Sn | 15 56 40.7 | -0.6 |
| **RUSC** | **La Rusia** | **0.92** | **178** | P | | Pn | 15 56 25.1 | -1.6 |
| RUSC | | | | S | | Sn | 15 56 43.3 | -1.5 |
| **TAMC** | **Tame, Arauca** | **1.36** | **106** | P | | Pn | 15 56 29.4 | -1.0 |
| TAMC | | | | S | | Sn | 15 56 50.7 | -0.7 |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **258** | P | | Pn | 15 56 28.0 | -2.4 |
| PTBC | | | | S | | Sn | 15 56 48.4 | -2.9 |
| **OCAC** | **Ocana** | **1.43** | **352** | P | | Pn | 15 56 29.7 | -1.5 |
| OCAC | | | | S | | Sn | 15 56 51.2 | -1.6 |
| **SPBC** | **San Pablo de B** | **1.50** | **220** | P | | Pn | 15 56 29.8 | -2.1 |
| SPBC | | | | S | | Sn | 15 56 52.4 | -1.7 |
| **ZARC** | **Zaragoza, Cauc** | **1.86** | **291** | P | | Pn | 15 56 34.4 | -1.4 |
| ZARC | | | | S | | Sn | 15 57 00.1 | -1.0 |
| **NORC** | **Norcasia** | **2.15** | **235** | P | | Pn | 15 56 37.6 | -1.8 |
| NORC | | | | S | | Sn | 15 57 05.4 | -1.9 |
| **CHIC** | **Chingaza** | **2.26** | **196** | P | | Pn | 15 56 39.5 | -1.6 |
| CHIC | | | | S | | Sn | 15 57 08.3 | -2.1 |
| **ROSC** | **El Rosal** | **2.31** | **212** | P | | Pn | 15 56 41.5 | -0.1 |
| ROSC | | | | S | | Sn | 15 57 10.8 | -0.5 |
| **UREC** | **San Jos de Ur** | **2.58** | **291** | P | | Pn | 15 56 43.1 | -1.5 |
| UREC | | | | S | | Sn | 15 57 13.4 | -3.2 |
| **VILC** | **Villavicencio,** | **2.75** | **192** | P | | Pn | 15 56 44.4 | -2.5 |
| VILC | | | | S | | Sn | 15 57 20.0 | -0.9 |
| **PTGC** | **Puerto Gaitan,** | **2.78** | **159** | P | | Pn | 15 56 44.4 | -2.8 |
| PTGC | | | | S | | Sn | 15 57 17.7 | -3.6 |
| **RECRC** | **Villamaria, Ca** | **2.90** | **230** | P | | Pn | 15 56 50.2 | +1.1 |
| RECRC | | | | S | | Sn | 15 57 28.2 | +3.5 |
| **CBOC** | **Ciudad Bolivar** | **3.04** | **252** | P | | Pn | 15 56 49.8 | -0.8 |
| CBOC | | | | S | | Sn | 15 57 26.0 | -1.3 |
| **SDV** | **Santo Domingo** | **3.20** | **50** | P | | Pn | 15 56 51.0 | -1.7 |
| SDV | | | | S | | Sn | 15 57 28.1 | -3.0 |
| **ANIL** | **Santa Ana** | **3.25** | **225** | P | | Pn | 15 56 53.0 | -0.4 |
| ANIL | | | | S | | Sn | 15 57 32.2 | -0.3 |
| **PRAC** | **Prado** | **3.56** | **210** | P | | Pn | 15 56 55.2 | -2.0 |
| PRAC | | | | S | | Sn | 15 57 36.9 | -2.4 |
| **ORTC** | **Ortega, Tolima** | **3.59** | **216** | P | | Pn | 15 56 56.2 | -1.4 |
| ORTC | | | | S | | Sn | 15 57 39.4 | -0.6 |
| **APAC** | **Apartado, Choc** | **3.60** | **288** | P | | Pn | 15 56 55.5 | -2.3 |
| APAC | | | | S | | Sn | 15 57 38.2 | -2.1 |
| **SJCC** | **San Jacinto, C** | **3.68** | **326** | P | | Pn | 15 56 56.1 | -2.7 |
| SJCC | | | | S | | Sn | 15 57 37.7 | -4.4 |
| **PLMC** | **San Jos del P** | **3.69** | **239** | P | | Pn | 15 56 57.5 | -1.4 |
| PLMC | | | | S | | Sn | 15 57 41.8 | -0.5 |
| **URMC** | **La Uribe, Meta** | **3.77** | **200** | P | | Pn | 15 56 58.7 | -1.3 |
| URMC | | | | S | | Sn | 15 57 43.2 | -1.1 |
| **CRJC** | **Cerrejon, Guaj** | **4.18** | **3** | P | | Pn | 15 57 02.1 | -3.3 |
| CRJC | | | | S | | Sn | 15 57 49.4 | -4.6 |
| **YOTC** | **Yotoco, Valle** | **4.28** | **229** | P | | Pn | 15 57 04.5 | -2.3 |
| YOTC | | | | S | | Sn | 15 57 53.8 | -2.6 |
| **JAMC** | **Jamundi, Valle** | **5.04** | **225** | P | | Pn | 15 57 17.3 | +0.3 |
| JAMC | | | | S | | Sn | 15 58 13.4 | -1.3 |

*IDC **21** 16:04:08.9±0.8, 8°.23S×116°.76E, h0km, mb4.1/10, mbtmp4.1/11, ML4.1/1, MS3.3/4, Error ellipse: s-maj=22.2km s-min=15.7km az=62.0*
*NEIC **21** 16:04:11.0±1.3, 8°.30S±0°.02×116°.71E±0°.06, h10km±1km, mb4.5/21, Error ellipse: s-maj=10.3km s-min=3.6km az=85.0*
*DJA **21** 16:04:11.7±0.2, 8°S±3°×11°7E±°, h10km, M4.7/19, mb4.8/6, mB4.8/1, MLv4.7/19, Mw(mB)4.1/1*

**ISC 21 16:04:10.8±0.4, 8°.32S±0°.05×116°.73E±0°.05, h10km, n76, σ1s38/77, mb4.4/23, 1D, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.44** | **160** | P | | **Pg** | **16 04 21.7** | **+2.2** |
| **PLAI** | **Plampang** | **1.16** | **116** | P | | **Pb** | **16 04 33.6** | **+0.7** |
| PLAI | | | | S | | **Sb** | **16 04 50.0** | **+2.1** |
| **SRBI** | **Singaraja** | **1.52** | **279** | P | | **Pn** | **16 04 38.4** | **+0.4** |
| **DNP** | **Denpasar** | **1.54** | **257** | P | | **Pn** | **16 04 39.4** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.55** | **266** | | | **Pn** | **16 04 52.7** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.55** | **266** | P | | **Pn** | **16 04 53.0** | **+0.7** |
| **WBSI** | **Waikabubak, Su** | **2.94** | **117** | P | | **Pn** | **16 04 58.4** | **+0.7** |
| **BASI** | **Baing, Sumba** | **4.25** | **117** | P | | **Pn** | **16 05 17.0** | **+1.4** |
| **BSSI** | **Bau Bau, Buton** | **4.32** | **60** | P | | **Pn** | **16 05 16.4** | **-0.2** |
| **GRJI** | **Gresik** | **4.43** | **288** | P | | **Pn** | **16 05 19.4** | **+1.2** |
| **KAPI** | **Kappang** | **4.45** | **43** | Pn | | **Pn** | **16 05 17.9** | **-0.5** |
| | 9.5nm,0.3s,baz=203,slow=7.9,SNR=48 | | | | | | | |
| KAPI | | | | | Sn | **Sn** | **16 06 07.7** | **-2.6** |
| | 21nm,0.3s,baz=46,slow=23,SNR=7.0 | | | | | | | |
| KAPI | | | | | Lg | Lg | 16 06 27.4 | |
| | 20nm,0.3s,baz=272,slow=20,SNR=4.0 | | | | | | | |
| KAPI | | | | | LR | LR | 16 07 21.8 | |
| | comp=Z,202nm,21.1s,baz=215,slow=44 | | | | | | | |
| | 20nm,0.3s | | | | | | | |
| **BWJI** | **Bawean** | **4.72** | **301** | P | | **Pn** | **16 05 22.3** | **+0.1** |
| **PWJI** | **Pagerwojo** | **4.88** | **273** | P | | **Pn** | **16 05 25.5** | **+1.2** |
| **EDFI** | **Ende, Flores** | **4.93** | **95** | P | | **Pn** | **16 05 26.2** | **+1.1** |
| **BNSI** | **Bone** | **5.14** | **41** | P | | **Pn** | **16 05 29.1** | **+1.2** |
| | 129nm,0.8s,1µm0.7nm | | | | | | | |
| **MMRI** | **Maumere** | **5.46** | **94** | | | **Pn** | **16 05 32.7** | **+0.3** |
| **MMRI** | **Maumere** | **5.46** | **94** | P | | **Pn** | **16 05 32.6** | **+0.3** |
| **UGM** | **Wanagama** | **6.15** | **273** | Pn | | **Pn** | **16 05 41.9** | **0.0** |
| **UGM** | **Wanagama** | **6.15** | **273** | P | | **Pn** | **16 05 43.1** | **+1.2** |
| | 140nm,2.0s,0.5nm | | | | | | | |
| **BATI** | **Baumata** | **7.10** | **106** | P | | **Pn** | **16 05 55.4** | **+0.5** |
| | 85nm,0.5s,0.3nm | | | | | | | |
| **SOEI** | **Soe** | **7.58** | **101** | Pn | | **Pn** | **16 06 03.0** | **+1.4** |
| **SOEI** | **Soe** | **7.58** | **101** | P | | **Pn** | **16 06 02.8** | **+1.2** |
| | 50nm,0.8s | | | | | | | |
| **XMIS** | **Christmas Isla** | **11.13** | **258** | Pn | | **Pn** | **16 06 49.7** | **-0.6** |
| **SBUM** | **Sibu** | **11.60** | **337** | Pn | | **Pn** | **16 06 56.0** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **13.02** | **139** | Pn | | **Pn** | **16 07 15.0** | **-1.0** |
| **MBWA** | **Marble Bar** | **13.09** | **168** | Pn | | **Pn** | **16 07 15.3** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **13.52** | **167** | Pn | | **Pn** | **16 07 22.0** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **13.52** | **167** | Pn | | **Pn** | **16 07 22.1** | **-0.7** |
| **KNRA** | **Kununurra** | **13.85** | **123** | Pn | | **Pn** | **16 07 26.8** | **-0.5** |
| **KKM** | **Kota Kinabalu** | **14.28** | **358** | Pn | | **Pn** | **16 07 33.7** | **+0.4** |
| **GIRL** | **Giralia** | **14.44** | **189** | Pn | | **Pn** | **16 07 34.0** | **-1.4** |
| **MTN** | **Manton Dam** | **14.86** | **109** | Pn | | Pn | 16 07 38.7 | -2.4 |
| **FAKI** | **Fak Fak** | **16.35** | **72** | Pn | | **Pn** | **16 07 59.0** | **-1.6** |
| FAKI | | | | | | IAmb | IAmb | 16 08 13.4 |
| | comp=Z,45nm,1.1s | | | | | | | |
| **DAV** | **Davao City (W)** | **17.65** | **30** | LR | | LR | 16 16 33.0 | |
| | comp=Z,84nm,18.3s,baz=158,slow=42 | | | | | | | |
| **BKNI** | **Bangkinang** | **17.84** | **298** | | | **Pn** | **16 08 17.9** | **-1.5** |
| **COCO** | **West Island** | **19.94** | **257** | P | | **P** | **16 08 41.4** | **-1.7** |
| **WB0** | **Warramunga Arr** | **20.55** | **125** | P | | **P** | **16 08 49.7** | **0.0** |
| WB0 | | | | | | IAmb | IAmb | 16 09 04.5 |
| | comp=Z,15nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.59** | **126** | P | | **P** | **16 08 49.7** | **-0.6** |
| **WRA** | **Warramunga Arr** | **20.59** | **126** | P | | **P** | **16 08 50.3** | **+0.1** |
| | comp=Z,7.2nm,0.7s,baz=302,slow=12,SNR=121 | | | | | | | |
| WRA | | | | S | | **S** | **16 12 35.1** | **-5.6** |
| | comp=Z,0.9nm,0.8s,baz=294,slow=26,SNR=3.6 | | | | | | | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.60** | **126** | P | | **P** | **16 08 50.3** | **0.0** |
| WRAB | | | | IAmb | | IAmb | 16 09 00.1 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.61** | **126** | P | | **P** | **16 08 50.3** | **-0.1** |
| **WR0** | **Warramunga Arr** | **20.77** | **126** | P | | **P** | **16 08 52.1** | **+0.1** |
| WR0 | | | | IAmb | | IAmb | 16 09 08.2 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **AS31** | **Alice Springs** | **22.44** | **135** | P | | **P** | **16 09 10.2** | **0.0** |
| **ASAR** | **Alice Springs** | **22.44** | **135** | P | | **P** | **16 09 10.3** | **+0.2** |
| | comp=Z,7.1nm,0.7s,baz=310,slow=9.5,SNR=212 | | | | | | | |
| ASAR | | | | S | | **S** | **16 13 12.2** | **-4.5** |
| | comp=Z,0.4nm,0.8s,baz=309,slow=24,SNR=1.5 | | | | | | | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **FORT** | **Forrest** | **24.73** | **156** | P | | **P** | **16 09 32.3** | **-0.1** |
| FORT | | | | IAmb | | IAmb | 16 09 50.4 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.24** | **146** | P | | **P** | **16 10 22.2** | **+0.3** |
| BBOO | | | | IAmb | | IAmb | 16 10 22.9 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.87** | **327** | P | | **P** | **16 10 37.1** | **+0.7** |
| | comp=Z,2.1nm,0.9s,baz=157,slow=7.1,SNR=9.7 | | | | | | | |
| CMAR | | | | LR | | LR | 16 25 08.1 | |
| | comp=Z,40nm,18.1s,baz=175,slow=40 | | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | |
| **NACB** | **Ninganchiao** | **32.64** | **8** | P | | **P** | **16 10 43.6** | **+0.6** |
| **STKA** | **Stephens Creek** | **32.92** | **139** | P | | **P** | **16 10 45.1** | **-0.5** |
| **STKA** | **Stephens Creek** | **32.92** | **139** | P | | **P** | **16 10 46.0** | **+0.5** |
| | comp=Z,3.2nm,0.6s,baz=314,slow=8.9,SNR=15 | | | | | | | |
| STKA | | | | LR | | LR | 16 24 35.0 | |
| | comp=Z,78nm,18.6s,baz=205,slow=37 | | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | | |
| **PZH** | **PanZhiHua** | **37.55** | **338** | P | | **P** | **16 11 26.9** | **+1.4** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,200nm,5.5s | | | | | | | |
| **TOO** | **Toolangi** | **39.05** | **143** | P | | **P** | **16 11 37.5** | **-0.5** |
| TOO | | | | IAmb | | IAmb | 16 12 10.2 | |
| | comp=Z,26nm,1.4s | | | | | | | |
| **NJ2** | **Nanjing** | **40.20** | **3** | *e*P | | **P** | **16 11 49.0** | **+1.5** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **SHL** | **Shillong** | **41.46** | **325** | P | | **P** | **16 11 59.1** | **+0.9** |
| **XAN** | **Xi'an** | **42.77** | **350** | ⇓P | | **P** | **16 12 10.3** | **+1.6** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.16** | **355** | *e*P | | **P** | **16 13 01.8** | **+2.8** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,29nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,170nm,5.2s | | | | | | | |
| **GTA** | **Gaotai** | **50.01** | **343** | *e*P | | **P** | **16 13 08.8** | **+3.2** |
| GTA | | | | pP | | sP | 16 13 13.0 | +3.0 |
| GTA | | | | sP | | pP | 16 13 17.4 | +8.6 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.3s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.07** | **14** | P | | **P** | **16 13 34.7** | **-0.9** |
| **USRK** | **Ussuriysk Ar.** | **54.07** | **14** | P | | P | 16 13 33.6 | -1.9 |
| | comp=Z,1.7nm,0.6s,baz=196,slow=6.5,SNR=6.1 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **54.07** | **14** | P | | **P** | **16 13 34.7** | **-0.9** |
| USA0B | | | | IAmb | | IAmb | 16 14 15.5 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **56.65** | **352** | P | | **P** | **16 13 53.7** | **-0.6** |
| | comp=Z,1.1nm,0.7s,baz=170,slow=10,SNR=4.4 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.21** | **22** | P | | **P** | **16 13 58.4** | **+0.3** |
| **CASY** | **Casey** | **58.03** | **183** | P | | **P** | **16 14 04.2** | **+0.5** |
| CASY | | | | IAmb | | IAmb | 16 14 14.0 | |
| | comp=Z,3.4nm,1.1s | | | | | | | |
| **HEH** | **HeiHe** | **59.07** | **8** | *e*P | | **P** | **16 14 11.3** | **+0.3** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **KSH** | **Kashi** | **60.74** | **325** | P | | **P** | **16 14 24.8** | **+1.8** |
| KSH | | | | pP | | sP | 16 14 30.5 | +3.1 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **62.85** | **334** | P | | **P** | **16 14 36.2** | **-0.7** |
| MK31 | | | | IAmb | | IAmb | 16 14 44.9 | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **M

| | | | | | | |
|---|---|---|---|---|---|---|
| **ESAO** | **Su ao** | **0.84 324** | P | **Pb** | **16 21 26.4** | **-0.5** |
| | baz=320 | | | | | |
| ESAO | | | S | **Sb** | **16 21 36.8** | **-1.1** |
| | baz=320 | | | | | |
| **TWC** | **Suao** | **0.87 325** | *i* P | **Pb** | **16 21 26.7** | **-0.7** |
| | baz=322 | | | | | |
| TWC | | | *i* S | **Sb** | **16 21 37.9** | **-0.7** |
| | baz=322 | | | | | |
| **ESL** | **Shilin** | **0.88 265** | *e*P | **Pb** | **16 21 26.9** | **-0.7** |
| | baz=249 | | | | | |
| ESL | | | S | **Sb** | **16 21 39.3** | **+0.4** |
| | baz=249 | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.89 291** | *e*P | **Pb** | **16 21 27.4** | **-0.4** |
| | baz=272 | | | | | |
| ETLH | | | S | **Sb** | **16 21 39.8** | **+0.6** |
| | baz=272 | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.91 278** | *e*P | **Pb** | **16 21 27.7** | **-0.3** |
| | baz=263 | | | | | |
| LXIB | | | S | **Sb** | **16 21 40.5** | **+0.8** |
| | baz=263 | | | | | |
| **EGFH** | **Guangfu** | **0.91 256** | *e*S | **Sb** | **16 21 40.7** | **+1.0** |
| | baz=250 | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.94 260** | *e*P | **Pn** | **16 21 29.2** | **+0.3** |
| | baz=254 | | | | | |
| WARBT | | | *i* S | **Sb** | **16 21 40.9** | **+0.4** |
| | baz=254 | | | | | |
| **NDS** | **Dongshan** | **0.96 320** | *e*P | **Pb** | **16 21 28.8** | **-0.2** |
| | baz=317 | | | | | |
| **HGSD** | **Ruisui** | **0.97 246** | *e*P | **Pb** | **16 21 28.9** | **-0.2** |
| | baz=241 | | | | | |
| HGSD | | | *e*S | **Sb** | **16 21 41.5** | **0.0** |
| | baz=241 | | | | | |
| **LATG** | **Datong** | **1.02 309** | *e*P | **Pb** | **16 21 29.8** | **-0.2** |
| | baz=313 | | | | | |
| LATG | | | *e*S | **Sn** | **16 21 44.3** | **+0.5** |
| | baz=313 | | | | | |
| **ECBN** | **Changbin** | **1.04 237** | *e*S | **Sb** | **16 21 43.1** | **-0.2** |
| | baz=232 | | | | | |
| **EGS** | | **1.04 336** | P | **Pn** | **16 21 30.9** | **+0.6** |
| | baz=335 | | | | | |
| **EHYH** | **Wanrong** | **1.04 248** | *e*S | **Sb** | **16 21 44.0** | **+0.6** |
| | baz=243 | | | | | |
| **ILA** | **Ilan** | **1.05 326** | *e*P | **Pn** | **16 21 30.7** | **+0.2** |
| | baz=323 | | | | | |
| **EHY** | **Hungye** | **1.05 249** | P | **Pn** | **16 21 30.8** | **+0.3** |
| | baz=243 | | | | | |
| EHY | | | *e*S | **Sb** | **16 21 43.8** | **-0.1** |
| | baz=243 | | | | | |
| **TWE** | **Neicheng** | **1.06 321** | *i* P | **Pn** | **16 21 30.4** | **-0.1** |
| | baz=318 | | | | | |
| TWE | | | S | **Sn** | **16 21 44.0** | **-0.6** |
| | baz=318 | | | | | |
| **ENTT** | **Nioudou** | **1.06 315** | *i* P | **Pn** | **16 21 30.7** | **+0.1** |
| | baz=319 | | | | | |
| ENTT | | | *e*S | **Sn** | **16 21 44.3** | **-0.5** |
| | baz=319 | | | | | |
| **WHF** | **Hehuan Shan** | **1.06 284** | *i* P | **Pb** | **16 21 30.5** | **-0.4** |
| | baz=265 | | | | | |
| WHF | | | S | **Sb** | **16 21 42.7** | **-1.8** |
| | baz=265 | | | | | |
| **NNSB** | **Datong** | **1.07 300** | *i* P | **Pb** | **16 21 30.7** | **-0.1** |
| | baz=283 | | | | | |
| NNSB | | | S | **Sn** | **16 21 44.7** | **-0.3** |
| | baz=283 | | | | | |
| **NDT** | **Datong Townshi** | **1.07 312** | P | **Pn** | **16 21 30.8** | **0.0** |
| | baz=315 | | | | | |
| NDT | | | *e*S | **Sn** | **16 21 46.0** | **+1.1** |
| | baz=315 | | | | | |
| **NNS** | **Nan Shan** | **1.08 301** | *e*P | **Pb** | **16 21 30.8** | **-0.2** |
| | baz=283 | | | | | |
| NNS | | | S | **Sn** | **16 21 45.1** | **-0.3** |
| | baz=283 | | | | | |
| **FUSS** | **Fushou** | **1.11 289** | *e*P | **Pn** | **16 21 31.2** | **-0.2** |
| | baz=284 | | | | | |
| FUSS | | | S | **Sn** | **16 21 46.1** | **-0.1** |
| | baz=284 | | | | | |
| **OWD** | **Renai** | **1.11 273** | P | **Pn** | **16 21 31.0** | **-0.5** |
| | baz=268 | | | | | |
| OWD | | | S | **Sb** | **16 21 44.7** | **-1.1** |
| | baz=268 | | | | | |
| **YULB** | **Yu-li** | **1.12 244** | *e*P | **Pn** | **16 21 31.4** | **0.0** |
| | baz=239 | | | | | |
| YULB | | | *i* S | **Sb** | **16 21 45.6** | **-0.2** |
| | baz=239 | | | | | |
| **EYUL** | **Yuli** | **1.12 241** | *e*P | **Pn** | **16 21 31.9** | **+0.5** |
| | baz=237 | | | | | |
| EYUL | | | *i* S | **Sb** | **16 21 46.6** | **+0.8** |
| | baz=237 | | | | | |
| **CHGB** | **Renai** | **1.13 279** | *i* P | **Pn** | **16 21 31.4** | **-0.3** |
| | baz=262 | | | | | |
| CHGB | | | S | **Sn** | **16 21 47.1** | **+0.4** |
| | baz=262 | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.13 320** | P | **Pb** | **16 21 31.8** | **-0.1** |
| | baz=316 | | | | | |
| FUSB | | | S | **Sn** | **16 21 47.1** | **+0.5** |
| | baz=316 | | | | | |
| **TWF1** | **Yuli** | **1.14 242** | *i* P | **Pn** | **16 21 31.4** | **-0.3** |
| | baz=237 | | | | | |
| TWF1 | | | *i* S | **Sb** | **16 21 46.1** | **-0.2** |
| | baz=237 | | | | | |
| **CHKH** | **Chenggong** | **1.15 233** | *e*S | **Sb** | **16 21 45.7** | **-0.9** |
| | baz=229 | | | | | |
| **VWDT** | **VWDT** | **1.15 263** | P | **Pn** | **16 21 31.9** | **+0.1** |
| | baz=258 | | | | | |
| VWDT | | | S | **Sb** | **16 21 47.1** | **+0.4** |
| | baz=258 | | | | | |
| **TWT** | **Tachien** | **1.17 288** | P | **Pb** | **16 21 32.9** | **+0.4** |
| | baz=272 | | | | | |
| TWT | | | S | **Sn** | **16 21 47.7** | **+0.1** |
| | baz=272 | | | | | |
| **TWB1** | **Santiao Chiao** | **1.17 342** | P | **Pb** | **16 21 32.9** | **+0.4** |
| | baz=327 | | | | | |
| TWB1 | | | S | **Sn** | **16 21 47.3** | **-0.1** |
| | baz=327 | | | | | |
| **WUSB** | **Renai** | **1.17 275** | *e*P | **Pn** | **16 21 32.2** | **-0.1** |
| | baz=270 | | | | | |
| WUSB | | | *e*S | **Sb** | **16 21 47.2** | **-0.1** |
| | baz=270 | | | | | |
| **TIPB** | **Shuangxi** | **1.19 334** | P | **Pb** | **16 21 33.1** | **+0.2** |
| | baz=332 | | | | | |
| TIPB | | | *i* S | **Sn** | **16 21 48.3** | **+0.3** |
| | baz=332 | | | | | |
| **NWLT** | **Wulai** | **1.20 318** | *e*P | **Pb** | **16 21 33.0** | **0.0** |
| | baz=314 | | | | | |
| NWLT | | | *e*S | **Sn** | **16 21 47.7** | **-0.4** |
| | baz=314 | | | | | |
| **YHNB** | **Yeheng** | **1.21 310** | *e*P | **Pn** | **16 21 32.9** | **+0.2** |
| | baz=306 | | | | | |
| **FULB** | **Fuli** | **1.22 236** | *e*S | **Sn** | **16 21 48.2** | **-0.6** |
| | baz=219 | | | | | |
| **NSK** | **Sanguang** | **1.23 310** | *e*P | **Pn** | **16 21 33.0** | **+0.1** |
| | baz=306 | | | | | |
| NSK | | | S | **Sb** | **16 21 48.2** | **-0.7** |
| | baz=306 | | | | | |
| **SXI1** | **Grass Mountain** | **1.29 339** | *e*P | **Pn** | **16 21 33.4** | **-0.3** |
| | baz=337 | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.30 70** | *e*P | **Pb** | **16 21 35.0** | **+0.3** |
| **TWA** | **Mucha** | **1.31 326** | P | **Pb** | **16 21 35.3** | **+0.4** |
| | baz=323 | | | | | |
| TWA | | | S | **Sb** | **16 21 52.0** | **+0.7** |
| | baz=323 | | | | | |
| **SSLB** | **Suanglung** | **1.32 266** | *e*P | **Pb** | **16 21 36.0** | **+0.9** |
| | baz=262 | | | | | |
| **NHDH** | **Xindian Distri** | **1.33 324** | *e*P | **Pb** | **16 21 35.7** | **+0.5** |
| | baz=321 | | | | | |
| **EDH** | **Donghe** | **1.35 228** | *e*S | **Sn** | **16 21 50.9** | **-1.1** |
| | baz=224 | | | | | |
| **WCS** | **Beigang Elemen** | **1.36 277** | *e*P | **Pn** | **16 21 35.0** | **+0.2** |
| | baz=273 | | | | | |
| **TNOU** | **National Taiwa** | **1.37 336** | *e*P | **Pb** | **16 21 36.8** | **+0.8** |
| | baz=334 | | | | | |
| **NFF** | **Wufeng Townshi** | **1.38 303** | P | **Pb** | **16 21 36.1** | **+0.1** |
| | baz=299 | | | | | |
| **WHP** | **Taichung City** | **1.38 286** | P | **Pb** | **16 21 36.6** | **+0.5** |
| | baz=271 | | | | | |
| **TYC** | **Yuchr** | **1.41 271** | *e*P | **Pn** | **16 21 35.0** | **-0.3** |
| | baz=267 | | | | | |
| **WHYT** | **Xinyi Township** | **1.42 262** | *e*P | **Pn** | **16 21 35.4** | **-0.2** |
| | baz=258 | | | | | |
| **ELDTW** | **Lidau** | **1.44 241** | *e*P | **Pn** | **16 21 36.3** | **+0.4** |
| | baz=237 | | | | | |
| ELDTW | | | *i* S | **Sn** | **16 21 54.2** | **-0.1** |
| | baz=237 | | | | | |
| **YM01** | **YM01** | **1.46 329** | *e*P | **Pn** | **16 21 36.3** | **+0.3** |
| | baz=342 | | | | | |
| **LIOB** | **Emei** | **1.46 301** | *e*P | **Pb** | **16 21 37.7** | **+0.2** |
| | baz=297 | | | | | |
| **NSTT** | **Nanjuang** | **1.47 300** | *e*P | **Pb** | **16 21 37.6** | **+0.1** |
| | baz=283 | | | | | |
| NSTT | | | *e*S | **Sb** | **16 21 56.2** | **+0.5** |
| | baz=283 | | | | | |
| **LDUT** | **Ludao** | **1.48 215** | *e*P | **Pn** | **16 21 35.4** | **-0.9** |
| | baz=213 | | | | | |
| **YM08** | **YM08** | **1.48 331** | *e*P | **Pn** | **16 21 36.9** | **+0.4** |
| | baz=328 | | | | | |
| **ANP** | **Anpu** | **1.51 329** | *e*P | **Pn** | **16 21 37.0** | **+0.1** |
| | baz=326 | | | | | |
| **LONT** | **Longtian** | **1.52 230** | *e*P | **Pn** | **16 21 36.5** | **-0.4** |
| | baz=217 | | | | | |
| **TWQ1** | **Liyutan** | **1.55 287** | *e*P | **Pb** | **16 21 39.1** | **+0.1** |
| | baz=283 | | | | | |
| TWQ1 | | | *e*S | **Sb** | **16 21 58.9** | **+0.8** |
| | baz=283 | | | | | |
| **TWGBT** | **Beinan** | **1.61 229** | *e*P | **Pn** | **16 21 37.7** | **-0.5** |
| | baz=238 | | | | | |
| **JIJ** | **Ishigaki jima** | **1.67 73** | *e*P | **Pn** | **16 21 39.7** | **+0.8** |
| JIJ | | | *e*S | **Sn** | **16 22 00.2** | **+0.6** |
| **TWK** | **Hsinying** | **1.85 251** | *e*P | **Pn** | **16 21 42.9** | **+1.3** |
| | baz=247 | | | | | |
| **JISG** | **Ishigakijimahi** | **1.88 68** | *e*P | **Pn** | **16 21 42.4** | **+0.5** |

**IDC 21 16:21:28.9±26.0, 17.75S×178.14W, h650km±346km, mb2.6/6, mbtmp3.6/6, Error ellipse: s-maj=107.7km s-min=32.1km az=93.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.91** | **259** | P | P | 16 28 48.7 | 0.0 |
| | 0.2nm,0.3s,baz=97,slow=7.5,SNR=10 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | P | 16 28 50.1 | +0.2 |
| | 0.4nm,0.5s,baz=90,slow=7.7,SNR=14 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.31** | **180** | P | P | 16 31 50.8 | +0.2 |
| | 0.9nm,0.8s,baz=184,slow=1.5,SNR=5.6 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.13** | **44** | P | P | 16 32 29.7 | +1.0 |
| | 0.5nm,0.6s,baz=219,slow=8.1,SNR=4.2 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.67** | **13** | P | P | 16 33 00.1 | -0.4 |
| | 0.2nm,0.4s,baz=205,slow=8.0,SNR=2.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.06** | **43** | P | P | 16 33 06.9 | -0.9 |
| | 0.3nm,0.6s,baz=245,slow=7.5,SNR=2.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*AEIC **21** 16:24:40.8±0.7, 69.49N±0.02×144.53W±0.06, h8km±7km, ML3.5, ML3.6/114(NEIC), Mwr3.5/21(NEIC), Error ellipse: s-maj=3.5km s-min=3.0km az=172.0*

*NEIC **21** 16:24:40.7±1.8, 69.47N±0.02×144.68W±0.04, h10km±1km, Error ellipse: s-maj=3.4km s-min=2.4km az=317.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.63; $M_{\theta\theta}$1.26; $M_{\phi\phi}$0.37; $M_{r\theta}$-1.12; $M_{\theta\phi}$-1.71; $M_{\phi r}$-0.43; Fault plane solution: $M_o$2.56000×$10^{14}$ NP1: $\phi_s$338.46000°, $\delta$46.83000°, $\lambda$-40.06000°. NP2:$\phi_s$98.38000°, $\delta$62.00000°, $\lambda$-129.21000°. Principal axes: T 2.6762, Plg9.0000°, Azm215.0000°; N -0.2526, Plg34.0000°, Azm119.0000°; P -2.4236, Plg55.0000°, Azm318.0000°;*

*IDC **21** 16:24:41.7±0.9, 69.67N×144.38W, h0km, mb3.7/7, mbtmp3.7/11, ML3.7/4, MS2.5/2 Error ellipse: s-maj=19.7km s-min=15.3km az=38.0*

*NEIC **21** 16:24:41.6, 69.53N×144.49W, h1km*

**ISC 21 16:24:41.3±1.1, 69.53N±0.04×144.46W±0.02, h4km±8km, n107, σ0.99/116, mb3.7/7, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.28** | **69** | | **Pg** | **16 24 46.8** | **+0.1** |
| C27K | | | | | **Sg** | **16 24 51.2** | **+0.8** |
| C27K | | | | IAML | | 16 24 51.6 | |
| | comp=E,7μm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.42** | **338** | | **Pg** | **16 24 49.7** | **+0.2** |
| C26K | | | | | **Sg** | **16 24 56.2** | **+1.3** |
| C26K | | | | IAML | | 16 24 57.8 | |
| | comp=N,4μm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.71** | **254** | | **Pg** | **16 24 53.2** | **-1.7** |
| **D27M** | **Malcolm River** | **1.27** | **101** | | **Pn** | **16 25 04.9** | **-1.0** |
| D27M | | | | IAML | | 16 25 27.2 | |
| | comp=E,838nm,0.5s | | | | | | |
| D27M | | | | IAML | | 16 25 27.6 | |
| | comp=N,1μm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.50** | **279** | Pn | **Pn** | **16 25 07.2** | **-1.7** |
| C24K | | | | | **Sg** | **16 25 30.6** | **+1.3** |
| **D24K** | **Happy Valley** | **1.59** | **258** | | **Pb** | **16 25 11.3** | **0.0** |
| D24K | | | | | **Sg** | **16 25 33.1** | **+0.6** |
| D24K | | | | IAML | | 16 25 34.0 | |
| | comp=E,862nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.70** | **141** | | **Pn** | **16 25 10.3** | **-1.5** |
| **F26K** | **Sheenjek River** | **1.84** | **176** | | **Pn** | **16 25 10.6** | **-3.1** |
| F26K | | | | | **Sb** | **16 25 39.7** | **+0.6** |
| F26K | | | | IAML | | 16 25 43.0 | |
| | comp=N,454nm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **1.99** | **193** | Pn | **Pn** | **16 25 13.4** | **-2.4** |
| F25K | | | | IAML | | 16 25 49.8 | |
| | comp=N,489nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.00** | **115** | | **Pn** | **16 25 17.0** | **+1.2** |
| E28M | | | | | **Sb** | **16 25 43.8** | **+0.5** |
| **D28M** | **Stokes Point** | **2.03** | **93** | | **Pb** | **16 25 18.6** | **-0.1** |
| D28M | | | | | **Sg** | **16 25 47.7** | **+1.3** |
| **TOLK** | **Toolik Lake Re** | **2.04** | **247** | Pn | **Pn** | **16 25 17.4** | **+0.9** |
| TOLK | | | | | **Sg** | **16 25 47.3** | **+0.5** |
| TOLK | | | | IAML | | 16 25 54.5 | |
| | comp=N,476nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.07** | **227** | | **Pn** | **16 25 17.8** | **+0.9** |
| E24K | | | | | **Sb** | **16 25 46.1** | **+0.7** |
| **C23K** | **Itkillik River** | **2.17** | **281** | Pn | **Pn** | **16 25 18.9** | **+0.7** |
| C23K | | | | IAML | | 16 26 03.5 | |
| | comp=N,399nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.29** | **259** | Pn | **Pn** | **16 25 20.8** | **+1.0** |
| **F24K** | **Squaw Lake** | **2.38** | **214** | Pn | **Pn** | **16 25 21.5** | **+0.4** |
| F24K | | | | IAML | | 16 25 57.2 | |
| | comp=N,274nm,0.5s | | | | | | |
| **E23K** | **Chandalar** | **2.39** | **234** | | **Pn** | **16 25 22.5** | **+1.2** |
| E23K | | | | IAML | | 16 26 01.7 | |
| | comp=N,272nm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.56** | **137** | | **Pn** | **16 25 23.9** | **+0.4** |
| **E29M** | **Blow River** | **2.63** | **113** | Pn | **Pn** | **16 25 25.2** | **+0.7** |
| E29M | | | | IAML | | 16 26 12.2 | |
| | comp=E,277nm,0.6s | | | | | | |
| **G27K** | **Doyon Strip** | **2.92** | **158** | Pn | **Pn** | **16 25 28.9** | **+0.3** |
| **FYU** | **Fort Yukon** | **2.99** | **186** | Pn | **Pn** | **16 25 30.0** | **+0.6** |
| **D22K** | **Ayikyak River** | **3.01** | **261** | Pn | **Pn** | **16 25 30.1** | **+0.4** |
| D22K | | | | IAML | | 16 26 23.0 | |
| | comp=E,194nm,0.7s | | | | | | |
| D22K | | | | IAML | | 16 26 26.4 | |
| | comp=N,203nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.01** | **246** | Pn | **Pn** | **16 25 29.8** | **0.0** |
| **G24K** | **Hadweenzic Riv** | **3.06** | **203** | Pn | **Pn** | **16 25 30.3** | **-0.1** |
| **COLD** | **Coldfoot** | **3.14** | **225** | | **Pn** | **16 25 32.3** | **+0.8** |
| **B22K** | **Teshekpuk Lake** | **3.20** | **289** | | **Pn** | **16 25 32.8** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **3.20** | **289** | IAML | | 16 26 34.5 | |
| | comp=N,164nm,0.8s | | | | | | |
| **H25L** | **Birch Creek** | **3.32** | **190** | | **Pn** | **16 25 34.0** | **+0.1** |
| **F22K** | **John River** | **3.49** | **238** | | **Pn** | **16 25 36.4** | **+0.1** |
| **H27K** | **Steamboat Moun** | **3.49** | **160** | | **Pn** | **16 25 37.0** | **+0.6** |
| **G23K** | **Bananza Creek** | **3.51** | **219** | Pn | **Pn** | **16 25 36.9** | **+0.2** |
| **G29M** | **Pine Creek** | **3.56** | **135** | Pn | **Pn** | **16 25 37.9** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **3.56** | **276** | Pn | **Pn** | **16 25 38.3** | **+1.0** |
| B21K | | | | IAML | | 16 26 49.7 | |
| | comp=E,103nm,0.8s | | | | | | |
| B21K | | | | IAML | | 16 26 52.3 | |
| | comp=N,113nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.60** | **257** | | **Pn** | **16 25 38.1** | **+0.3** |
| E21K | | | | IAML | | 16 26 44.1 | |
| | comp=N,123nm,1.4s | | | | | | |
| E21K | | | | IAML | | 16 26 51.1 | |
| | comp=E,108nm,1.1s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.68** | **269** | | **Pn** | **16 25 39.2** | **+0.3** |
| **F30M** | **Barrier River** | **3.72** | **117** | | **Pn** | **16 25 41.2** | **+1.8** |
| **A22K** | **Sinclair Lake** | **3.86** | **297** | | **Pn** | **16 25 42.1** | **+0.8** |
| **H24K** | **Noodor Dome** | **3.93** | **201** | Pn | **Pn** | **16 25 42.4** | **-0.1** |
| H24K | | | | IAML | | 16 26 50.6 | |
| | comp=N,77nm,0.9s | | | | | | |
| H24K | | | | IAML | | 16 26 57.3 | |
| | comp=E,83nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.04** | **142** | Pn | **Pn** | **16 25 44.8** | **+0.9** |
| H29M | | | | IAML | | 16 27 02.0 | |
| | comp=N,79nm,1.2s | | | | | | |
| H29M | | | | IAML | | 16 27 05.7 | |
| | comp=E,91nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.05** | **186** | Pn | **Pn** | **16 25 44.9** | **+0.8** |
| PRP | | | | IAML | | 16 26 34.6 | |
| | comp=E,76nm,0.6s | | | | | | |
| PRP | | | | IAML | | 16 26 35.2 | |
| | comp=N,100nm,0.7s | | | | | | |
| **F21K** | **Alatna River** | **4.06** | **240** | Pn | **Pn** | **16 25 44.8** | **+0.5** |
| F21K | | | | IAML | | 16 26 56.7 | |
| | comp=N,73nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **4.13** | **102** | Pn | **Pn** | **16 25 47.1** | **+2.0** |
| | comp=N,1.9nm,0.3s,baz=300,slow=16,SNR=8.3 | | | | | | |
| INK | | | | Sn | **Sn** | **16 26 33.7** | **-0.1** |
| | comp=N,4.8nm,0.3s,baz=257,slow=6.4,SNR=4.1 | | | | | | |
| INK | | | | Lg | Lg | 16 26 52.4 | |
| | comp=N,2.1nm,0.3s,baz=55,slow=17,SNR=1.8 | | | | | | |
| | comp=N,4.6nm,0.3s | | | | | | |
| **H23K** | **Yukon River** | **4.19** | **210** | Pn | **Pn** | **16 25 46.3** | **+0.3** |
| **I26K** | **Coal Creek Min** | **4.27** | **173** | | **Pn** | **16 25 47.3** | **+0.3** |
| **EPYK** | **Eagle Plains** | **4.31** | **134** | | **Pn** | **16 25 48.0** | **+0.5** |
| **D20K** | **Etivluk River** | **4.43** | **265** | | **Pn** | **16 25 50.2** | **+1.0** |
| **B20K** | **Meade River** | **4.44** | **282** | Pn | **Pn** | **16 25 49.6** | **+0.3** |
| B20K | | | | IAML | | 16 27 31.8 | |
| | comp=E,53nm,1.2s | | | | | | |
| **I28M** | **Miner Creek** | **4.45** | **155** | Pn | **Pn** | **16 25 50.6** | **+1.0** |
| I28M | | | | IAML | | 16 27 16.9 | |
| | comp=E,58nm,0.8s | | | | | | |
| **A21K** | **Barrow** | **4.47** | **299** | | **Pn** | **16 25 50.9** | **+1.2** |
| **G21K** | **Allakaket** | **4.55** | **233** | Pn | **Pn** | **16 25 50.8** | **0.0** |
| G21K | | | | IAML | | 16 27 14.0 | |
| | comp=N,66nm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.58** | **196** | | **Pn** | **16 25 52.1** | **+0.8** |
| POKR | | | | IAML | | 16 26 48.4 | |
| | comp=E,67nm,0.7s | | | | | | |
| POKR | | | | IAML | | 16 27 23.2 | |
| | comp=N,48nm,0.7s | | | | | | |
| **G31M** | **Satah River** | **4.61** | **120** | Pn | **Pn** | **16 25 51.8** | **+0.2** |
| G31M | | | | IAML | | 16 27 12.4 | |
| | comp=E,60nm,1.1s | | | | | | |
| G31M | | | | IAML | | 16 27 29.9 | |
| | comp=N,58nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.79** | **206** | | **Pn** | **16 25 54.3** | **+0.2** |
| I23K | | | | IAML | | 16 27 24.9 | |
| | comp=E,55nm,0.8s | | | | | | |
| I23K | | | | IAML | | 16 27 26.0 | |
| | comp=N,55nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.81** | **148** | | **Pn** | **16 25 54.8** | **+0.4** |
| I29M | | | | IAML | | 16 27 02.0 | |
| | comp=N,38nm,0.6s | | | | | | |
| I29M | | | | IAML | | 16 27 13.3 | |
| | comp=E,42nm,0.6s | | | | | | |
| **MDM** | **Murphy Dome** | **4.82** | **199** | | **Pn** | **16 25 54.6** | **0.0** |
| MDM | | | | IAML | | 16 27 15.0 | |
| | comp=N,51nm,0.8s | | | | | | |
| MDM | | | | IAML | | 16 27 20.9 | |
| | comp=E,54nm,0.8s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.87** | **245** | Pn | **Pn** | **16 25 56.1** | **+0.9** |
| F20K | | | | IAML | | 16 27 37.4 | |
| | comp=N,37nm,1.3s | | | | | | |
| **IL31** | | **4.87** | **192** | | **Pn** | **16 25 55.7** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.87** | **192** | | **Pn** | **16 25 55.6** | **+0.3** |
| **ILAR** | **Eielson Array** | **4.87** | **192** | Pn | **Pn** | **16 25 55.9** | **+0.6** |
| | comp=N,2.3nm,0.3s,baz=4.6,slow=13,SNR=56 | | | | | | |
| ILAR | | | | Sn | **Sn** | **16 26 53.6** | **+1.6** |
| | comp=N,4.5nm,0.3s,baz=8.8,slow=26,SNR=7.1 | | | | | | |
| ILAR | | | | Lg | Lg | 16 27 14.7 | |
| | comp=N,4.8nm,0.3s,baz=360,slow=31,SNR=4.7 | | | | | | |
| ILAR | | | | LR | LR | 16 28 23.3 | |
| | comp=N,14nm,19.8s,baz=270,slow=44 | | | | | | |
| | comp=N,7.2nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **4.94** | **163** | | **Pn** | **16 25 57.0** | **+0.7** |
| EGAK | | | | IAML | | 16 26 57.5 | |
| | comp=N,38nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 16 27 25.7 | |
| | comp=N,42nm,1.3s | | | | | | |
| **J25K** | **Salcha River,** | **4.95** | **185** | | **Pn** | **16 25 56.9** | **+0.5** |
| J25K | | | | IAML | | 16 26 58.5 | |
| | comp=N,48nm,0.8s | | | | | | |
| J25K | | | | IAML | | 16 27 28.7 | |
| | comp=E,41nm,1.1s | | | | | | |
| **D19K** | **Kuna River** | **5.02** | **265** | Pn | **Pn** | **16 25 58.0** | **+0.7** |
| D19K | | | | IAML | | 16 26 58.5 | |
| | comp=E,48nm,0.5s | | | | | | |
| **H21K** | **Melozitna River** | **5.03** | **223** | Pn | **Pn** | **16 25 57.9** | **+0.5** |
| H21K | | | | IAML | | 16 27 27.4 | |
| | comp=E,40nm,1.1s | | | | | | |
| H21K | | | | IAML | | 16 27 30.2 | |
| | comp=N,38nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.06** | **176** | Pn | **Pn** | **16 25 58.7** | **+0.7** |
| J26L | | | | IAML | | 16 27 00.4 | |
| | comp=N,36nm,0.5s | | | | | | |
| J26L | | | | IAML | | 16 27 22.4 | |
| | comp=E,44nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.07** | **197** | Pn | **Pn** | **16 25 58.5** | **+0.4** |
| CCB | | | | IAML | | 16 27 27.9 | |
| | comp=E,30nm,0.7s | | | | | | |
| **MLY** | **Manley** | **5.13** | **211** | Pn | **Pn** | **16 25 59.3** | **+0.4** |
| MLY | | | | IAML | | 16 27 34.1 | |
| | comp=E,34nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **5.14** | **252** | | **Pn** | **16 25 59.0** | **0.0** |
| E19K | | | | IAML | | 16 27 31.5 | |
| | comp=E,38nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.27** | **202** | | **Pn** | **16 26 00.9** | **+0.1** |
| NEA2 | | | | IAML | | 16 27 04.8 | |
| | comp=N,30nm,0.4s | | | | | | |
| **WRH** | **Wood River Hil** | **5.27** | **197** | Pn | **Pn** | **16 26 01.8** | **+1.0** |
| WRH | | | | IAML | | 16 27 29.9 | |
| | comp=E,39nm,0.8s | | | | | | |
| WRH | | | | IAML | | 16 27 31.4 | |
| | comp=N,26nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.33** | **140** | Pn | **Pn** | **16 26 02.0** | **+0.3** |
| I30M | | | | IAML | | 16 27 05.5 | |
| | comp=N,27nm,0.3s | | | | | | |
| I30M | | | | IAML | | 16 27 37.6 | |
| | comp=E,34nm,0.6s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.38** | **273** | Pn | **Pn** | **16 26 02.8** | **+0.5** |
| C19K | | | | IAML | | 16 27 58.6 | |
| | comp=E,26nm,1.3s | | | | | | |
| **SCRK** | **Sand Creek** | **5.58** | **178** | Pn | **Pn** | **16 26 06.1** | **+1.0** |
| **K27K** | **Chicken** | **5.60** | **169** | | **Pn** | **16 26 06.4** | **+1.0** |
| **F19K** | **Shaleruckik Mo** | **5.65** | **248** | Pn | **Pn** | **16 26 06.5** | **+0.6** |
| **A19K** | **Wainwright** | **5.78** | **284** | | **Pn** | **16 26 07.6** | **0.0** |
| **RIDG** | **Independent Ri** | **5.82** | **182** | | **Pn** | **16 26 09.3** | **+1.0** |
| **DAWY** | **Dawson** | **5.84** | **158** | | **Pn** | **16 26 09.6** | **+1.0** |
| **G19K** | **Purcell Mounta** | **5.86** | **241** | Pn | **Pn** | **16 26 08.8** | **0.0** |
| **J30M** | **Hart River** | **5.90** | **144** | Pn | **Pn** | **16 26 10.2** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **6.03** | **208** | | **Pn** | **16 26 11.3** | **+0.1** |
| **C18K** | **Utukok River** | **6.05** | **270** | Pn | **Pn** | **16 26 11.7** | **+0.1** |
| **B18K** | **Kokolik River** | **6.11** | **277** | | **Pn** | **16 26 11.7** | **-0.5** |
| **E18K** | **Tukpahlearik C** | **6.30** | **258** | Pn | **Pn** | **16 26 15.1** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.33** | **151** | Pn | **Pn** | **16 26 16.7** | **+1.3** |
| **F18K** | **Selawik** | **6.40** | **250** | | **Pn** | **16 26 16.5** | **+0.3** |
| **G18K** | **Tagagawik** | **6.51** | **243** | Pn | **Pn** | **16 26 17.7** | **0.0** |
| **BCAR** | **Beaver Creek A** | **6.58** | **169** | Pn | **Pn** | **16 26 19.7** | **+0.9** |
| **J20K** | **Nowinta River** | **6.58** | **220** | Pn | **Pn** | **16 26 19.3** | **+0.5** |
| **PAX** | **Paxson** | **6.60** | **184** | | **Pn** | **16 26 20.5** | **+1.4** |
| **A36M** | **Sachs Harbour** | **6.80** | **60** | | **Pn** | **16 26 20.6** | **-1.0** |
| **C17K** | **DeLong Mountai** | **6.80** | **270** | | **Pn** | **16 26 20.6** | **-1.1** |
| **E17K** | **Hotham Inlet** | **6.88** | **257** | | **Pn** | **16 26 22.2** | **-0.6** |
| **HARP** | **HAARP** | **7.17** | **183** | | **Pn** | **16 26 29.7** | **+2.9** |
| **L20K** | **Farewell, AK** | **8.04** | **213** | | **Pn** | **16 26 38.8** | **0.0** |
| **

comp=E,0.4nm,0.4s
**MKAR Makanchi Array 59.04 324 P P 16 34 42.7 +0.8**
comp=E,0.2nm,0.6s,baz=42,slow=6.7,SNR=2.2
comp=E,0.2nm,0.6s
**AKASG Malin Array Be 60.00 5 P P 16 34 49.5 +1.1**
comp=E,0.6nm,0.4s,baz=359,slow=6.3,SNR=4.4
comp=E,0.6nm,0.4s
**BRTR Keskin Array B 71.05 2 P P 16 35 59.4 -0.8**
comp=E,0.3nm,0.7s,baz=354,slow=7.6,SNR=2.3
comp=E,0.3nm,0.7s

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*IDC **21** 16:29:52.0±0.7,31°.70S×58°.38E, h0km, mb4.2/13, mbtmp4.2/14, ML3.8/1, MS3.7/32, Error ellipse: s-maj=25.0km s-min=17.3km az=62.0*
*NEIC **21** 16:29:54.0±2.0,31°.6S±0°.1×58°.22E±0°.07, h10km±1km, mb4.6/17, Error ellipse: s-maj=19.3km s-min=9.2km az=194.0*
**ISC 21 16:29:54.0**±0.6,**31°.61S**±0°.10×**58°.32E**±0°.10,**h14**km,**n73,** σ1**908**/39,**mb4.4**/21,**MS3.7**/33,**Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RER** | **Riviere de l'E** | **10.65** | **347** | Pn | **Pn** | **16 32 23.1** | **-3.2** |
| **FOMA** | **Nahampoana Res** | **11.97** | **301** | Pn | **Pn** | **16 32 41.3** | **-2.9** |
| **VOI** | **Vohitsoka** | **14.11** | **310** | Pn | **Pn** | **16 33 13.8** | **+0.3** |
| **H04N2** | **CROZET ISLANDS** baz=22,slow=75 | **15.39** | **197** | T | T | 16 49 23.7 | |
| **H04N1** | **CROZET ISLANDS** baz=22,slow=75 | **15.39** | **197** | T | T | 16 49 29.6 | |
| **H04N3** | **CROZET ISLANDS** baz=22,slow=75 | **15.40** | **197** | T | T | 16 49 26.6 | |
| **ABPO** | **Ambohimpanom** | **16.04** | **319** | | **Pn** | **16 33 41.0** | **+1.6** |
| **OPO** | **Ambohidrampo** baz=156,slow=20,SNR=2.1 | **16.42** | **320** | Pn | **Pn** | **16 33 45.2** | **+1.0** |
| OPO | 0.1nm,0.3s,baz=95,slow=11,SNR=6.0 2.8nm,0.5s | | | Sn | Sn | 16 36 35.6 | -11 |
| **POGA** | **Pongola** | **23.53** | **274** | P | **P** | **16 35 03.5** | **-0.3** |
| POGA | comp=Z,37nm,1.3s | | | IAmb | IAmb | 16 35 33.3 | |
| **H08S1** | **Diego Carcia H** baz=206,slow=76,SNR=103 | **27.25** | **32** | T | T | 17 03 54.9 | |
| **H08S2** | **Diego Garcia H** baz=206,slow=76,SNR=71 | **27.26** | **32** | T | T | 17 03 54.1 | |
| **H08S3** | **Diego Garcia H** baz=206,slow=76,SNR=121 | **27.27** | **32** | T | T | 17 03 56.4 | |
| **BOSA** | **Boshof** | **28.69** | **267** | P | **P** | **16 35 49.9** | **-1.0** |
| BOSA | comp=Z,14nm,1.5s | | | IAmb | IAmb | 16 36 05.7 | |
| **SUR** | **Sutherland** comp=Z,182nm,19.1s,baz=110,slow=32 | **31.71** | **259** | LR | LR | 16 46 53.8 | |
| **LSZ** | **Lusaka** | **31.92** | **294** | P | **P** | **16 36 19.4** | **-0.1** |
| LSZ | comp=Z,4.3nm,0.9s | | | IAmb | IAmb | 16 36 21.8 | |
| **MAW** | **Mawson** comp=Z,4.4nm,0.9s,baz=7.3,slow=9.8,SNR=5.7 | **36.13** | **177** | P | **P** | **16 36 54.4** | **-0.9** |
| MAW | comp=Z,189nm,21.5s,baz=11,slow=29 comp=Z,4.4nm,0.9s | | | LR | LR | 16 47 27.6 | |
| **KMBO** | **Kilima Mbogo** comp=Z,46nm,20.7s,baz=34,slow=31 | **36.27** | **323** | LR | LR | 16 48 37.5 | |
| **TSUM** | **Tsumeb** | **38.60** | **279** | P | **P** | **16 37 16.7** | **-0.3** |
| TSUM | comp=Z,8.3nm,0.9s | | | IAmb | IAmb | 16 37 18.5 | |
| **PALK** | **Pallekele** comp=Z,70nm,20.2s,baz=288,slow=30 | **44.19** | **33** | LR | LR | 16 52 15.1 | |
| **FURI** | **Furi** comp=Z,39nm,21.8s,baz=160,slow=32 | **44.44** | **332** | LR | LR | 16 53 23.7 | |
| **ATD** | **Arta Tunnel** comp=Z,5.0nm,19.9s,baz=146,slow=32 | **45.38** | **338** | LR | LR | 16 53 50.7 | |
| **H01W2** | **Cape Leeuwin H** baz=257,slow=75,SNR=19 | **46.29** | **110** | T | T | 17 27 28.9 | |
| **H01W3** | **Cape Leeuwin H** baz=257,slow=75,SNR=12 | **46.29** | **110** | T | T | 17 27 29.3 | |
| **H01W1** | **Cape Leeuwin H** baz=257,slow=75,SNR=14 | **46.30** | **110** | T | T | 17 27 30.2 | |
| **SNAA** | **Sanae** comp=Z,124nm,21.5s,baz=44,slow=30 | **51.32** | **201** | LR | LR | 16 55 35.9 | |
| **WSAR** | **Wadi Sarin** comp=Z,97nm,20.1s,baz=208,slow=30 | **54.53** | **0** | LR | LR | 16 57 17.4 | |
| **QSPA** | **South Pole Qui** | **58.56** | **180** | P | **P** | **16 39 49.9** | **-0.1** |
| QSPA | comp=Z,9.0nm,0.9s | | | IAmb | IAmb | 16 40 03.0 | |
| **QSPA** | **South Pole Qui** comp=Z,3.0nm,0.7s,baz=269,slow=1.6,SNR=36 | **58.56** | **180** | P | **P** | **16 39 49.8** | **-0.1** |
| QSPA | comp=Z,89nm,20.4s,baz=260,slow=33 comp=Z,3.0nm,0.7s | | | LR | LR | 17 01 57.2 | |
| **CMAR** | **Chiang Mai Arr** | **63.22** | **44** | P | **P** | **16 40 20.6** | **-1.5** |
| **CMAR** | **Chiang Mai Arr** comp=Z,1.9nm,0.7s,baz=231,slow=7.1,SNR=11 | **63.22** | **44** | P | **P** | **16 40 22.8** | **+0.7** |
| CMAR | comp=Z,75nm,21.9s,baz=225,slow=31 comp=Z,1.9nm,0.7s | | | LR | LR | 17 02 58.0 | |
| **EIL** | **Elat** comp=Z,46nm,20.9s,baz=58,slow=32 | **64.86** | **338** | LR | LR | 17 04 02.2 | |
| **ASAR** | **Alice Springs** | **66.24** | **104** | P | **P** | **16 40 41.9** | **-0.1** |
| **ASAR** | **Alice Springs** comp=Z,2.1nm,0.7s,baz=238,slow=5.8,SNR=35 | **66.24** | **104** | P | **P** | **16 40 42.0** | **+0.1** |
| ASAR | comp=Z,33nm,19.9s,baz=234,slow=32 comp=Z,2.1nm,0.7s | | | LR | LR | 17 04 53.1 | |
| **AS31** | **Alice Springs** | **66.24** | **104** | P | **P** | **16 40 41.9** | **-0.1** |
| **MMAI** | **Mount Meron Ar** comp=Z,23nm,18.2s,baz=103,slow=34 | **67.82** | **339** | LR | LR | 17 08 23.8 | |
| **WRA** | **Warramunga Arr** | **68.24** | **101** | P | **P** | **16 40 54.6** | **0.0** |
| **WRA** | **Warramunga Arr** comp=Z,6.6nm,0.8s,baz=243,slow=5.6,SNR=17 comp=Z,2.6nm,0.8s | **68.24** | **101** | P | **P** | **16 40 54.3** | **-0.4** |
| **WB2** | **Warramunga Arr** | **68.25** | **101** | P | **P** | **16 40 54.1** | **-0.6** |
| **WB0** | **Warramunga Arr** | **68.37** | **100** | P | **P** | **16 40 55.0** | **-0.5** |
| WB0 | comp=Z,6.9nm,0.9s | | | IAmb | IAmb | 16 41 05.1 | |
| **STKA** | **Stephens Creek** comp=Z,1.3nm,0.8s,baz=187,slow=6.2,SNR=3.8 comp=Z,1.3nm,0.8s | **68.96** | **115** | P | **P** | **16 40 58.7** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** comp=Z,1.5nm,0.9s,baz=112,slow=5.5,SNR=7.6 | **70.16** | **300** | P | **P** | **16 41 07.2** | **+0.7** |
| TORD | comp=Z,58nm,18.9s,baz=125,slow=36 comp=Z,1.5nm,0.9s | | | LR | LR | 17 11 51.0 | |
| **GNI** | **Garni** comp=Z,44nm,21.9s,baz=160,slow=33 | **72.50** | **349** | LR | LR | 17 10 02.2 | |
| **SMAI** | **San Martin Ant** | **72.65** | **199** | P | **P** | **16 41 21.3** | **+0.6** |
| SMAI | comp=Z,5.3nm,1.1s | | | IAmb | IAmb | 16 41 30.0 | |
| **BR131** | **Keskin Array S** | **74.58** | **340** | P | **P** | **16 41 32.9** | **+0.5** |
| **BRTR** | **Keskin Array B** | **74.58** | **340** | P | **P** | **16 41 33.2** | **+0.7** |
| **BRTR** | **Keskin Array B** comp=Z,0.7nm,0.6s,baz=167,slow=7.8,SNR=7.2 | **74.58** | **340** | P | **P** | **16 41 33.3** | **+0.8** |
| BRTR | comp=Z,14nm,19.7s,baz=138,slow=33 comp=Z,0.7nm,0.6s | | | LR | LR | 17 11 20.5 | |
| **DAV** | **Davao City (W)** comp=Z,22nm,18.9s,baz=326,slow=35 | **74.72** | **72** | LR | LR | 17 12 59.3 | |
| **AAK** | **Ala-Archa** comp=Z,77nm,21.5s,baz=196,slow=33 | **75.36** | **12** | LR | LR | 17 11 36.5 | |
| **KBZ** | **Khabaz** comp=Z,32nm,18.6s,baz=162,slow=36 | **76.29** | **349** | LR | LR | 17 15 14.7 | |
| **RAFF** | **Raffo Rosso** | **79.85** | **326** | P | **P** | **16 42 02.1** | **+0.1** |
| **VAE** | **Valguarnera** comp=Z,30nm,18.5s,baz=136,slow=36 | **80.03** | **326** | LR | LR | 17 17 52.8 | |
| **ABKAR** | **Akbulak array** | **80.51** | **1** | P | **P** | **16 42 06.1** | **+0.9** |
| **MKAR** | **Makanchi Array** | **80.98** | **16** | P | **P** | **16 42 08.8** | **+0.9** |
| **MKAR** | **Makanchi Array** comp=Z,0.4nm,0.7s,baz=204,slow=2.7,SNR=4.5 | **80.98** | **16** | P | **P** | **16 42 07.7** | **-0.2** |
| MKAR | comp=Z,55nm,21.7s,baz=232,slow=33 comp=Z,0.4nm,0.7s | | | LR | LR | 17 14 43.5 | |
| **AKTO** | **Aktyubinsk** comp=Z,35nm,21.9s,baz=56,slow=33 | **81.68** | **360** | LR | LR | 17 14 23.6 | |
| **MLR** | **Muntele Rosu** | **82.17** | **338** | P | **P** | **16 42 14.3** | **0.0** |
| **MLR** | **Muntele Rosu** comp=Z,35nm,18.0s,baz=138,slow=35 | **82.17** | **338** | LR | LR | 17 18 08.4 | |
| **KURBB** | **Kurchatov Arra** comp=Z,2.0nm,0.2s,baz=207,slow=5.5,SNR=6.0 comp=Z,2.0nm,0.2s | **83.80** | **13** | P | **P** | **16 42 23.3** | **+0.9** |
| **KURK** | **Kurchatov** | **83.91** | **13** | P | **P** | **16 42 24.3** | **+1.3** |
| KURK | comp=Z,4.9nm,1.1s | | | IAmb | IAmb | 16 42 36.8 | |
| **BELG** | **Belogornoye** comp=Z,22nm,18.2s,baz=101,slow=37 | **84.16** | **353** | LR | LR | 17 22 03.8 | |
| **BVAR** | **Borovoye Array** comp=Z,2.7nm,0.8s,baz=177,slow=5.9,SNR=12 comp=Z,2.7nm,0.8s | **84.93** | **7** | P | **P** | **16 42 29.2** | **+1.1** |
| **BRVK** | **Borovoye** | **84.95** | **7** | P | **P** | **16 42 29.8** | **+1.6** |
| BRVK | comp=Z,7.9nm,1.3s | | | IAmb | IAmb | 16 42 45.9 | |
| **MDT** | **Midelt** comp=Z,52nm,18.3s,baz=157,slow=37 | **87.38** | **311** | LR | LR | 17 23 23.7 | |
| **ARU** | **Arti** comp=Z,20nm,19.7s,baz=156,slow=34 | **87.69** | **0** | LR | LR | 17 19 00.8 | |
| **ZALV** | **Zalesovo Beam** comp=Z,0.3nm,0.3s,baz=227,slow=5.7,SNR=1.7 | **88.24** | **15** | P | **P** | **16 42 45.5** | **+1.2** |
| ZALV | comp=Z,34nm,19.3s,baz=187,slow=34 comp=Z,0.3nm,0.3s | | | LR | LR | 17 19 26.5 | |
| **DAVOX** | **Davos/Dischmat** comp=Z,17nm,18.8s,baz=79,slow=37 | **89.42** | **329** | LR | LR | 17 25 38.4 | |
| **SONM** | **Songino Array** comp=Z,124nm,19.2s,baz=175,slow=34 | **90.08** | **30** | LR | LR | 17 20 43.8 | |
| **ESDC** | **Sonseca Array** comp=Z,1.3nm,0.8s,baz=115,slow=3.7,SNR=8.8 comp=Z,1.3nm,0.8s | **91.45** | **317** | P | **P** | **16 43 01.2** | **+1.4** |
| **PLCA** | **Paso Flores** comp=Z,88nm,18.2s,baz=160,slow=31 | **93.89** | **216** | LR | LR | 17 18 16.9 | |
| **KSRS** | **Korea Array** comp=Z,17nm,18.1s,baz=190,slow=35 | **94.54** | **48** | LR | LR | 17 25 12.1 | |
| **BDFB** | **Brasilia** comp=Z,59nm,20.2s,baz=19,slow=30 | **95.24** | **248** | LR | LR | 17 17 28.5 | |
| **CPUP** | **Villa Florida** comp=Z,34nm,19.5s,baz=212,slow=31 | **95.82** | **234** | LR | LR | 17 18 41.6 | |
| **YKA** | **Yellowknife Ar** comp=Z,1.9nm,0.8s,baz=2.3,slow=3.6,SNR=6.9 | **148.76** | **354** | PKPbc | **PKPbc** | **16 49 39.9** | **-0.3** |

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**IDC 21 16:36:24.1**±1.3,**31°.24S**×**57°.86E**,**h0**km,**mb3.8**/4, **mbtmp3.8**/4,**Error ellipse: s-maj=47.0km s-min=31.5km az=45.0,Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H04N2** | **CROZET ISLANDS** baz=21,slow=75,SNR=19 | **15.63** | **196** | T | T | 16 55 24.6 | |
| **H04N1** | **CROZET ISLANDS** baz=21,slow=75,SNR=19 | **15.63** | **196** | T | T | 16 55 25.7 | |
| **H04N3** | **CROZET ISLANDS** baz=21,slow=75,SNR=13 | **15.65** | **196** | T | T | 16 55 24.5 | |
| **H08S1** | **Diego Carcia H** baz=208,slow=76 | **27.15** | **33** | T | T | 17 10 38.0 | |
| **H08S2** | **Diego Garcia H** baz=208 | **27.16** | **33** | T | T | 17 10 39.0 | |
| **H08S3** | **Diego Garcia H** baz=208,slow=76 | **27.17** | **33** | T | T | 17 10 40.4 | |
| **KMBO** | **Kilima Mbogo** 1.1nm,0.4s,baz=59,slow=22,SNR=3.5 1.1nm,0.4s | **35.74** | **323** | P | P | 16 43 24.9 | -0.1 |
| **H01W2** | **Cape Leeuwin H** baz=257 | **46.78** | **110** | T | T | 17 34 45.0 | |
| **H01W3** | **Cape Leeuwin H** baz=257 | **46.78** | **110** | T | T | 17 34 41.3 | |
| **H01W1** | **Cape Leeuwin H** baz=257 | **46.80** | **110** | T | T | 17 34 48.4 | |
| **QSPA** | **South Pole Qui** 1.6nm,1.0s,baz=259,slow=1.4,SNR=5.9 1.6nm,1.0s | **58.93** | **180** | P | P | 16 46 24.9 | 0.0 |
| **ASAR** | **Alice Springs** 0.5nm,0.6s,baz=237,slow=5.8,SNR=9.7 0.5nm,0.6s | **66.71** | **104** | P | P | 16 47 17.3 | 0.0 |
| **WRA** | **Warramunga Arr** 0.5nm,0.7s,baz=244,slow=5.5,SNR=5.6 0.5nm,0.7s | **68.69** | **101** | P | P | 16 47 29.8 | 0.0 |

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**IDC 21 16:40:18.3**±5.4,**15°.83S**×**175°.81W**,**h0**km,**mb4.1**/3, **mbtmp4.1**/3,**Error ellipse: s-maj=175.2km s-min=107.9km az=156.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** 1.5nm,0.8s,baz=80,slow=12,SNR=2.2 1.5nm,0.8s | **41.81** | **240** | P | P | 16 48 10.0 | +0.1 |
| **WRA** | **Warramunga Arr** 0.6nm,0.5s,baz=93,slow=6.9,SNR=18 0.6nm,0.5s | **47.48** | **257** | P | P | 16 48 55.3 | -0.1 |
| **ASAR** | **Alice Springs** 5.4nm,0.5s,baz=88,slow=7.9,SNR=153 | **47.77** | **252** | P | P | 16 48 57.4 | -0.3 |
| ASAR | 0.4nm,1.1s,baz=105,slow=3.3,SNR=1.5 5.4nm,0.5s | | | PcP | PcP | 16 50 26.8 | -0.1 |

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**IDC 21 16:47:31.7**±8.4,**16°.91S**×**174°.75W**,**h0**km,**mb3.5**/3, **mbtmp3.5**/3,**Error ellipse: s-maj=369.9km s-min=41.2km az=140.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** 0.2nm,0.5s,baz=94,slow=7.5,SNR=5.4 0.2nm,0.5s | **48.25** | **258** | P | P | 16 56 14.4 | -0.4 |
| **ASAR** | **Alice Springs** 0.5nm,0.4s,baz=90,slow=8.0,SNR=18 0.5nm,0.4s | **48.42** | **253** | P | P | 16 56 16.1 | +0.1 |
| **ILAR** | **Eielson Array** 0.3nm,0.7s,baz=196,slow=5.2,SNR=1.9 0.3nm,0.7s | **84.17** | **12** | P | P | 17 00 04.3 | 0.0 |

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*NEIC **21** 16:52:54.8±0.9,5°.69S±0°.09×146°.0E±0°.1, h125km±9km, mb4.2/13, Error ellipse: s-maj=18.2km s-min=12.1km az=107.0*
*IDC **21** 16:52:56.4±4.2,5°.80S×146°.07E, h138km±41km, mb3.6/2, mbtmp4.1/4, Error ellipse: s-maj=65.5km s-min=35.5km az=88.0*
**ISC 21 16:52:52.4**±0.9,**5°.63S**±0°.08×**145°.9E**±0°.1,**h100**km,**n21,** σ1**931**/23,**mb4.0**/5,**Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** 27nm,0.8s,baz=8.3,slow=9.3,SNR=24 | **3.97** | **161** | P | **Pn** | **16 53 52.1** | **+0.8** |
| PMG | 27nm,0.6s,baz=196,slow=22,SNR=12 | | | S | **Sn** | **16 54 37.7** | **+0.8** |
| **RABL** | **Rabaul** | **6.43** | **77** | Pn | **Pn** | **16 54 25.4** | **+0.7** |
| **CTA** | **Charters Tower** 0.1nm,0.7s,baz=0.0,slow=20,SNR=1.7 | **14.38** | **179** | P | **Pn** | **16 56 11.3** | **-0.1** |
| **CTAO** | **Charters Tower** | **14.38** | **179** | Pn | **Pn** | **16 56 09.2** | **-2.2** |
| **MTN** | **Manton Dam** | **16.21** | **243** | Pn | **Pn** | **16 56 34.9** | **+0.5** |
| **WB0** | **Warramunga Arr** | **17.95** | **217** | | **P** | **16 56 56.8** | **+1.9** |
| **WR0** | **Warramunga Arr** | **18.01** | **217** | | **P** | **16 56 57.6** | **+2.0** |
| WR0 | comp=Z,10nm,0.8s | | | IAmb | IAmb | 16 56 58.4 | |
| **WRAB** | **Tennant Creek** | **18.10** | **217** | | **P** | **16 56 58.6** | **+2.0** |
| WRAB | comp=Z,10nm,0.6s | | | IAmb | IAmb | 16 57 03.4 | |
| **WB2** | **Warramunga Arr** | **18.11** | **217** | | **P** | **16 56 58.7** | **+2.1** |
| WB2 | comp=Z,9.5nm,0.6s | | | IAmb | IAmb | 16 57 03.5 | |
| **WRA** | **Warramunga Arr** comp=Z,6.8nm,0.5s,baz=39,slow=11,SNR=67 | **18.12** | **217** | P | **P** | **16 56 58.9** | **+2.2** |
| **AS31** | **Alice Springs** | **21.32** | **212** | P | **P** | **16 57 31.4** | **0.0** |
| AS31 | comp=Z,2.9nm,0.3s | | | IAmb | IAmb | 16 57 42.2 | |
| **ASAR** | **Alice Springs** | **21.32** | **212** | P | **P** | **16 57 31.5** | **+0.1** |
| **ASAR** | **Alice Springs** comp=Z,3.5nm,0.5s,baz=47,slow=8.3,SNR=48 | **21.32** | **212** | P | **P** | **16 57 31.8** | **+0.3** |
| ASAR | comp=Z,0.4nm,0.8s,baz=36,slow=20,SNR=3.5 comp=Z,3.5nm,0.5s | | | S | **S** | **17 01 21.2** | **-1.6** |
| **FITZ** | **Fitzroy Crossi** | **23.32** | **236** | P | **P** | **16 57 51.9** | **0.0** |
| **TOLI2** | **Tolitoli** | **25.93** | **284** | P | **P** | **16 58 16.2** | **+0.6** |
| **KAPI** | **Kappang** | **26.01** | **270** | P | **P** | **16 58 17.1** | **+0.8** |
| **STKA** | **Stephens Creek** | **26.42** | **188** | P | **P** | **16 58 19.0** | **-0.8** |
| **STKA** | **Stephens Creek** comp=Z,0.8nm,0.3s,baz=343,slow=17,SNR=3.6 comp=Z,0.8nm,0.3s | **26.42** | **188** | P | **P** | **16 58 19.2** | **-0.7** |
| **H17K** | **Granite Mounta** | **80.81** | **20** | P | **P** | **17 04 55.2** | **+0.4** |
| H17K | comp=Z,6.4nm,1.4s | | | IAmb | IAmb | 17 05 18.8 | |
| **G19K** | **Purcell Mounta** | **82.46** | **20** | P | **P** | **17 05 02.9** | **-0.6** |
| G19K | comp=Z,4.1nm,1.4s | | | IAmb | IAmb | 17 05 13.2 | |
| **CUT** | **Chulitna** | **83.22** | **25** | P | **P** | **17 05 06.2** | **-1.2** |

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**IDC 21 16:56:31.8**±8.6,**5°.41S**×**150°.60E**,**h73**km±62km,**mb3.0**/2, **mbtmp3.4**/3,**ML1.9**/1,**Error ellipse: s-maj=109.4km s-min=56.3km az=121.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** 2.6nm,0.3s,baz=66,slow=7.5,SNR=9.1 | **5.24** | **220** | P | Pn | 16 57 48.2 | +0.5 |
| PMG | 22nm,0.6s,baz=42,slow=16,SNR=3.5 6.5nm,0.3s | | | S | Sn | 16 58 47.3 | +0.4 |
| **WRA** | **Warramunga Arr** 0.7nm,0.7s,baz=52,slow=10,SNR=8.5 | **21.43** | **226** | P | P | 17 01 13.9 | -0.1 |
| WRA | 0.3nm,1.0s,baz=47,slow=2.2,SNR=1.6 0.7nm,0.7s | | | PcP | PcP | 17 05 14.2 | -1.0 |
| **ASAR** | **Alice Springs** 0.5nm,0.7s,baz=52,slow=8.7,SNR=6.9 0.5nm,0.7s | **24.26** | **220** | P | P | 17 01 42.5 | +0.2 |
| **TORD** | **Torodi Ar. Bea** 0.5nm,0.4s,baz=76,slow=1.9,SNR=7.5 | **148.40** | **286** | PKPbc | PKPbc | 17 16 10.7 | -0.4 |

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*IDC **21** 17:00:48.9±1.5,26°.79N×143°.27E, h0km, mb3.7/5, mbtmp3.8/9, ML3.6/4, Error ellipse: s-maj=35.9km s-min=19.0km az=63.0*
**ISC 21 17:00:53.4**±1.3,**26°.99N**±0°.09×**143°.4E**±0°.1,**h35**km,**n10,** σ1**976**/12,**mb3.8**/5,**Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** 17nm,0.3s,baz=270,slow=20,SNR=1.2 | **1.05** | **276** | Pn | **Pn** | **17 01 09.8** | **-1.8** |
| JCJ | 95nm,0.3s,baz=272,slow=22,SNR=14 | | | Sn | **Sn** | **17 01 27.0** | **+1.9** |
| **JHJ** | **Hachijo jima 2** 5.5nm,0.3s,baz=79,slow=5.2,SNR=2.8 182nm,1.0s | **6.85** | **334** | Pn | **Pn** | **17 02 30.9** | **-0.3** |
| **MJAR** | **Matsushiro Arr** 0.3nm,0.3s,baz=149,slow=11,SNR=7.3 | **10.48** | **337** | Pn | **Pn** | **17 03 20.5** | **-0.6** |
| MJAR | baz=80,slow=9.4,SNR=1.3 2.0nm,0.4s | | | Sn | **Sn** | **17 05 14.3** | **-3.0** |
| **KSRS** | **Korea Array** 0.1nm,0.3s,baz=130,slow=9.8,SNR=6.5 1.8nm,0.9s | **16.69** | **312** | Pn | **P** | **17 04 46.5** | **0.0** |
| **USRK** | **Ussuriysk Ar.** 0.2nm,0.3s,baz=145,slow=9.5,SNR=5.6 2.1nm,0.8s | **19.47** | **335** | P | **Pn** | **17 05 19.6** | **+1.1** |
| **WRA** | **Warramunga Arr** 0.9nm,0.9s,baz=12,slow=8.5,SNR=5.7 0.9nm,0.9s | **47.47** | **192** | P | **P** | **17 09 24.0** | **-0.9** |
| **ASAR** | **Alice Springs** 0.2nm,0.9s,baz=8.9,slow=6.6,SNR=1.1 0.2nm,0.9s | **51.18** | **191** | P | **P** | **17 09 52.0** | **-1.3** |
| **MKAR** | **Makanchi Array** 0.4nm,0.5s,baz=93,slow=8.7,SNR=5.8 0.4nm,0.5s | **51.35** | **310** | P | **P** | **17 09 55.8** | **+1.4** |
| **KURBB** | **Kurchatov Arra** 0.8nm,0.4s,baz=90,slow=8.2,SNR=5.7 0.8nm,0.4s | **53.86** | **314** | P | **P** | **17 10 14.4** | **+1.6** |
| **BVAR** | **Borovoye Array** 0.8nm,0.4s,baz=88,slow=7.8,SNR=5.6 0.8nm,0.4s | **58.83** | **318** | P | **P** | **17 10 50.0** | **+1.8** |

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*IDC **21** 17:16:45.6±1.6,8°.77S×115°.14E, h0km, mb3.5/5, mbtmp3.6/6, ML3.4/1, Error ellipse: s-maj=41.1km s-min=17.0km az=57.0*
*DJA **21** 17:17:01.0±0.4,9°.5±8°×11°.6E±°, h83km±5km, M4.1/12, mb4.1/6, MLv4.1/12*
**ISC 21 17:16:59.4**±0.9,**8°.74S**±0°.10×**115°.51E**±0°.05,**h98**km,**n18,** σ2**911**/23,**mb3.4**/5,**Bali region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DNP** | **Denpasar** | **0.30** | **282** | P | **Pn** | **17 17 16.2** | **+2.5** |
| DNP | | | | S | **Sn** | **17 17 27.1** | **+2.7** |
| **SRBI** | **Singaraja** | **0.71** | **336** | P | **Pn** | **17 17 18.9** | **+2.2** |
| SRBI | | | | S | **Sn** | **17 17 32.3** | **+2.6** |
| **TWSI** | **Taliwang, Sumb** | **1.36** | **90** | P | **Pn** | **17 17 25.2** | **+1.4** |
| TWSI | | | | S | **Sn** | **17 17 43.5** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **1.36** | **281** | P | **Pn** | **17 17 25.3** | **+1.4** |
| JAGI | | | | S | **Sn** | **17 17 42.9** | **+0.5** |
| **PLAI** | **Plampang** | **2.25** | **92** | P | **Pn** | **17 17 37.5** | **+2.4** |
| **PWJI** | **Pageriwojo** | **3.73** | **281** | P | **Pn** | **17 17 56.3** | **+1.4** |
| **WBSI** | **Waikabubak, Su** | **3.94** | **103** | P | **Pn** | **17 17 57.4** | **-0.3** |
| **UGM** | **Wanagama** 82nm,1.4s | **5.00** | **279** | P | **Pn** | **17 18 15.6** | **+3.5** |
| **BSSI** | **Bau Bau, Buton** 61nm,2.3s,0.3nm | **5.58** | **63** | P | **Pn** | **17 18 21.9** | **+2.0** |
| **KAPI** | **Kappang** 1.0nm,0.3s,baz=138,slow=17,SNR=2.2 | **5.61** | **49** | Pn | Pn | 17 18 15.9 | -4.4 |
| KAPI | 0.5nm,0.3s,baz=88,slow=23,SNR=1.6 2.7nm,0.3s | | | Sn | **Sn** | **17 19 25.1** | **+1.6** |
| **BNSI** | **Bone** 19nm,1.5s,0.1nm | **6.28** | **47** | P | **Pn** | **17 18 32.2** | **+2.7** |
| **KPJI** | **Karang Pucung** | **6.66** | **282** | P | **Pn** | **17 18 36.3** | **+1.7** |
| **CMJI** | **Cimerak** | **7.05** | **277** | P | **Pn** | **17 18 40.9** | **+0.9** |
| **WRA** | **Warramunga Arr** 0.5nm,0.5s,baz=299,slow=12,SNR=8.8 | **21.35** | **123** | P | **P** | **17 21 37.3** | **-1.5** |
| WRA | 0.2nm,0.7s,baz=42,slow=27,SNR=1.1 0.5nm,0.5s | | | S | **S** | **17 25 33.0** | **+2.4** |
| **ASAR** | **Alice Springs** 0.9nm,0.7s,baz=310,slow=9.5,SNR=16 | **23.03** | **132** | P | **P** | **17 21 55.5** | **-0.8** |
| ASAR | 0.2nm,0.8s,baz=301,slow=22,SNR=2.0 0.9nm,0.7s | | | S | S | 17 26 10.2 | +11 |
| **USRK** | **Ussuriysk Ar.** 0.8nm,0.5s,baz=200,slow=7.6,SNR=4.2 0.8nm,0.5s | **54.77** | **14** | P | **P** | **17 26 16.6** | **-2.2** |
| **SONM** | **Songino Array** 0.5nm,0.7s,baz=164,slow=7.8,SNR=4.4 0.5nm,0.7s | **56.90** | **353** | P | **P** | **17 26 32.5** | **-1.7** |
| **MKAR** | **Makanchi Array** 0.2nm,0.4s,baz=148,slow=6.1,SNR=2.8 0.2nm,0.4s | **62.71** | **335** | P | **P** | **17 27 12.0** | **-1.9** |

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*IDC **21** 17:17:13.1±1.4,35°.53N×23°.41E, h0km, mb3.5/6, mbtmp3.4/8, ML3.3/2, Error ellipse: s-maj=33.7km s-min=25.3km az=156.0*
*ATH **21** 17:17:16.5,35°.10N×23°.03E, h51km±5km, ML3.2/9, Error ellipse: s-maj=5.3km s-min=1.3km az=68.0*
*THE **21** 17:17:18.0,35°.14N×23°.14E, h28km±4km, ML2.9/8, Error ellipse: s-maj=4.5km s-min=0.8km az=218.0*
**ISC 21 17:17:16.9**±1.3,**35°.13N**±0°.06×**23°.12E**±0°.06,**h52**km±10km, **n49,** σ0**994**/68,**mb3.5**/7,**Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.48** | **77** | P | **Pn** | **17 17 27.1** | **-0.8** |
| KNDR | | | | S | **Sn** | **17 17 35.8** | **-0.1** |
| KNDR | comp=E,11845μm,0.5s | | | AML | AML | 17 17 37.4 | |
| KNDR | comp=N,10403μm,0.8s | | | AML | AML | 17 17 42.1 | |
| **RODP** | **Rodopos** | **0.68** | **50** | P | **Pn** | **17 17 30.3** | **-0.1** |
| RODP | comp=N,618nm,0.5s | | | S | **Sn** | **17 17 40.7** | **+0.5** |
| **ANKY** | **Antikythira Is** | **0.75** | **11** | P | **Pn** | **17 17 31.2** | **-0.1** |
| ANKY | comp=N,1μm,0.5s | | | S | **Sn** | **17 17 42.5** | **+0.6** |
| **ANKY** | **Antikythira Is** | **0.75** | **11** | P | **Pn** | **17 17 31.2** | **-0.1** |
| ANKY | | | | S | **Sn** | **17 17 42.0** | **+0.2** |
| ANKY | comp=E,2548μm,0.6s | | | AML | AML | 17 17 43.2 | |
| ANKY | comp=N,3323μm,0.5s | | | AML | AML | 17 17 43.5 | |
| **IMMV** | **Iera Moni Meta** | **0.78** | **65** | P | **Pn** | **17 17 31.9** | **+0.2** |
| IMMV | comp=N,2μm,0.4s | | | S | **Sn** | **17 17 43.0** | **+0.5** |
| **IMMV** | **Iera Moni Meta** | **0.78** | **65** | P | **Pn** | **17 17 32.0** | **+0.3** |
| IMMV | | | | S | **Sn** | **17 17 43.6** | **+1.1** |
| IMMV | comp=N,3882μm,0.4s | | | AML | AML | 17 17 45.3 | |
| IMMV | comp=E,3181μm,0.6s | | | AML | AML | 17 17 47.6 | |
| **GVD** | **Gavdhos** | **0.85** | **110** | P | **Pn** | **17 17 33.5** | **+0.9** |
| GVD | comp=E,1μm,0.4s | | | S | **Sn** | **17 17 44.5** | **+0.4** |
| **GVD** | **Gavdhos** | **0.85** | **110** | P | **Pn** | **17 17 33.4** | **+0.9** |
| GVD | | | | S | **Sn** | **17 17 44.8** | **+0.7** |
| GVD | comp=E,2185μm,0.5s | | | AML | AML | 17 17 50.1 | |
| GVD | comp=N,1708μm,0.4s | | | AML | AML | 17 17 50.4 | |
| **CHAN** | **Chania** | **0.85** | **63** | P | **Pn** | **17 17 

comp=N,3388µm,0.7s
CHAN AML AML 17 17 55.8
comp=E,3291µm,0.5s
**KTHA Kythira Island 1.12 358** P **Pn** **17 17 37.4 +1.1**
KTHA S **Sn** **17 17 52.1 +1.3**
comp=E,692nm,0.5s
**KTHA Kythira Island 1.12 358** P **Pn** **17 17 36.5 +0.1**
KTHA S **Sn** **17 17 50.4 -0.4**
KTHA AML AML 17 17 58.8
comp=E,1692µm,0.4s
KTHA AML AML 17 17 59.2
comp=N,578µm,0.3s
**IDI Anoyia 1.46 83** P **Pn** **17 17 41.9 +1.0**
IDI S **Sn** **17 17 59.7 +0.8**
comp=N,165nm,0.6s
**IDI Anoyia 1.46 83** P **Pn** **17 17 42.0 +1.2**
IDI S **Sn** **17 17 59.2 +0.3**
IDI AML AML 17 18 18.2
comp=N,423µm,0.5s
IDI AML AML 17 18 18.7
comp=E,374µm,0.5s
**MHLO Agia Marina, M 1.87 33** P **Pn** **17 17 47.5 +1.0**
MHLO S **Sn** **17 18 09.8 +0.9**
comp=E,995nm,0.6s
**MHLO Agia Marina, M 1.87 33** P **Pn** **17 17 47.8 +1.3**
MHLO S **Sn** **17 18 10.2 +1.3**
MHLO AML AML 17 18 26.8
comp=N,2026µm,0.6s
MHLO AML AML 17 18 30.9
comp=E,1626µm,0.7s
**PYL PYLOS 2.08 328** P **Pn** **17 17 50.6 +1.2**
PYL S **Sn** **17 18 16.0 +1.8**
**PYL PYLOS 2.08 328** P **Pn** **17 17 49.2 -0.2**
PYL S **Sn** **17 18 12.0 -2.2**
**THR6 Thira Island, 2.22 56** P **Pn** **17 17 51.9 +0.7**
**THR5 Thira Island, 2.22 54** P **Pn** **17 17 51.1 -0.1**
**THR5 Thira Island, 2.22 54** P **Pn** **17 17 51.1 -0.1**
**SAP3 Santorini-Thir 2.23 54** P **Pn** **17 17 52.3 +0.9**
**SNT5 Nea Kammeni, S 2.25 55** P **Pn** **17 17 51.5 0.0**
**KRND KRANIDI 2.25 1** P **Pn** **17 17 52.8 +1.2**
KRND S **Sn** **17 18 19.7 +1.6**
comp=E,152nm,1.2s
**KRND KRANIDI 2.25 1** P **Pn** **17 17 52.9 +1.2**
**THR3 Thira Island, 2.25 55** P **Pn** **17 17 51.8 +0.2**
**THR3 Thira Island, 2.25 55** P **Pn** **17 17 51.4 -0.2**
**THR8 Santorini-Mono 2.30 56** P **Pn** **17 17 52.4 +0.1**
**APE Apeiranthos 2.75 45** P **Pn** **17 17 58.1 -0.4**
**GUR Goura 2.87 348** P **Pn** **17 18 01.4 +1.2**
**GUR Goura 2.87 348** P **Pn** **17 18 00.1 -0.1**
**ATHU Athens Univers 2.88 11** P **Pn** **17 18 00.9 +0.6**
ATHU S **Sn** **17 18 33.4 -0.3**
**KLV Kalavryta, Ach 3.01 345** P **Pn** **17 18 03.5 +1.4**
**KLV Kalavryta, Ach 3.01 345** P **Pn** **17 18 03.3 +1.2**
**DION Dionisos Attik 3.01 12** P **Pn** **17 18 03.0 +0.9**
DION S **Sn** **17 18 36.8 -0.2**
**VIL2 Platees 3.08 2** P **Pn** **17 18 02.5 -0.5**
**PSDA Pessada-Kefalo 3.61 326** P **Pn** **17 18 09.7 -0.5**
**MAKR Makrakomi, Fth 3.96 349** P **Pn** **17 18 16.6 +1.6**
**MAKR Makrakomi, Fth 3.96 349** P **Pn** **17 18 15.7 +0.7**
MAKR AML AML 17 19 03.0
comp=N,102µm,0.5s
MAKR AML AML 17 19 04.0
comp=E,135µm,0.2s
**LKD2 Lefkada island 4.15 332** P **Pn** **17 18 18.3 +0.7**
**NEST Nestorio 5.52 343** P **Pn** **17 18 37.1 +0.5**
**BRTR Keskin Array B 9.54 58** Pn **Pn** **17 19 29.4 -2.3**
comp=E,0.1nm,0.3s,baz=235,slow=15,SNR=4.5
comp=E,0.6nm,0.8s
**MMAI Mount Meron Ar 10.41 98** Pn **Pn** **17 19 41.9 -1.6**
comp=E,0.9nm,0.3s,baz=271,slow=10,SNR=5.3
comp=E,0.3nm,0.3s
**HFS Hagfors 25.76 349** P **P** **17 22 42.2 -0.2**
comp=E,0.5nm,0.4s,baz=163,slow=10,SNR=5.1
comp=E,0.5nm,0.4s
**TORD Torodi Ar. Bea 29.22 227** P P 17 23 20.7 +6.9
comp=E,0.2nm,0.4s,baz=28,slow=9.7,SNR=1.8
comp=E,0.2nm,0.4s
**KURBB Kurchatov Arra 42.44 51** P **P** **17 25 06.7 +0.3**
comp=E,0.2nm,0.4s,baz=276,slow=8.3,SNR=1.9
comp=E,0.2nm,0.4s
**SPITS Spitsbergen Ar 43.25 358** P **P** **17 25 12.8 +0.2**
comp=E,12nm,1.0s,baz=135,slow=8.6,SNR=5.3
**MKAR Makanchi Array 45.18 56** P **P** **17 25 28.2 -0.3**
comp=E,0.2nm,0.3s,baz=267,slow=7.1,SNR=13
comp=E,0.2nm,0.3s
**ZALV Zalesovo Beam 46.23 46** P **P** **17 25 34.8 -1.8**
comp=E,0.3nm,0.3s,baz=279,slow=7.2,SNR=2.7
comp=E,0.3nm,0.3s
**SONM Songino Array 60.79 50** P **P** **17 27 23.4 -0.1**
comp=E,0.3nm,0.6s,baz=298,slow=6.7,SNR=2.1
comp=E,0.3nm,0.6s

**IDC 21 17:32:06.8±3.5, 47.54N×92.71W, h0km, mbtmp2.8/2, ML0.8/1, Error ellipse: s-maj=37.3km s-min=17.9km az=86.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.42** | **324** | Pn | Pn | 17 33 00.1 | -1.2 |
| | 0.2nm,0.3s,baz=142,slow=16,SNR=1.9 | | | | | | |
| ULM | | | | Pg | Pb | 17 33 07.6 | -0.6 |
| | 0.8nm,0.3s,baz=143,slow=16,SNR=12 | | | | | | |
| ULM | | | | Lg | Lg | 17 33 52.5 | |
| | 3.3nm,0.3s,baz=53,slow=20,SNR=23 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.45** | **322** | I | I | 17 53 00.0 | |
| | baz=136,slow=323,SNR=4.7 | | | | | | |
| **PDAR** | **Pinedale Array** | **12.81** | **254** | Pn | Pn | 17 35 07.9 | -2.4 |
| | 0.2nm,0.5s,baz=68,slow=13,SNR=1.8 | | | | | | |
| PDAR | | | | Lg | Lg | 17 38 38.9 | |
| | 0.1nm,0.3s,baz=68,slow=31,SNR=2.1 | | | | | | |

*IDC **21** 17:57:43.2±5.7, 9.16N×10.12W, h0km, mb3.8/3, mbtmp3.8/5, ML3.5/2, Error ellipse: s-maj=110.0km s-min=23.8km az=41.0*

**ISC 21 17:57:43.9±1.4, 9.4N±0.2×10.15W±0.1, h10km, n6, σ3≥23/9, mb3.7/3, Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **5.89** | **117** | Pn | **Pn** | **17 59 11.0** | **-0.4** |
| | 0.9nm,0.3s,baz=279,slow=12,SNR=21 | | | | | | |
| DBIC | | | | Sn | **Sn** | **18 00 16.3** | **-2.8** |
| | 2.1nm,0.3s,baz=194,slow=18,SNR=3.0 | | | | | | |
| DBIC | | | | Lg | Lg | 18 00 45.8 | |
| | 3.9nm,0.3s,baz=188,slow=16,SNR=20 | | | | | | |
| | 3.2nm,0.4s | | | | | | |
| **BBTS** | **Babate** | **8.15** | **311** | Pn | **Pn** | **17 59 42.0** | **-0.4** |
| | 1.9nm,0.3s,baz=158,slow=3.4,SNR=1.2 | | | | | | |
| BBTS | | | | Sn | **Sn** | **18 01 09.9** | **-4.8** |
| | 3.1nm,0.3s,baz=232,slow=0.9,SNR=1.8 | | | | | | |
| BBTS | | | | Lg | Lg | 18 02 01.8 | |
| | 2.7nm,0.3s,baz=56,slow=7.3,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **12.20** | **71** | Pn | **Pn** | **18 00 38.8** | **+0.8** |
| | 0.5nm,0.3s,baz=254,slow=14,SNR=12 | | | | | | |
| TORD | | | | Sn | **Sn** | **18 02 50.2** | **-4.0** |
| | 0.3nm,0.3s,baz=246,slow=21,SNR=5.5 | | | | | | |
| TORD | | | | Lg | Lg | 18 04 09.0 | |
| | 1.2nm,0.3s,baz=258,slow=26,SNR=9.3 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **GERES** | **GERESS Array B** | **44.13** | **23** | P | **P** | **18 05 55.1** | **+2.5** |
| | 0.6nm,0.5s,baz=209,slow=5.0,SNR=3.0 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **49.27** | **45** | P | **P** | **18 06 36.1** | **+2.9** |
| | 0.5nm,0.6s,baz=254,slow=7.1,SNR=5.2 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **58.36** | **19** | P | **P** | **18 07 40.0** | **+0.8** |
| | 2.1nm,0.8s,baz=208,slow=5.7,SNR=1.7 | | | | | | |
| | 2.1nm,0.8s | | | | | | |

*AEIC **21** 18:23:42.8±1.3, 69.47N±0.03×144.37W±0.06, h5km≤6km, ML3.7, mb4.0/1(NEIC), ML3.8/120(NEIC), Mwr3.8/30(NEIC), Error ellipse: s-maj=4.3km s-min=3.1km az=202.0*

*IDC **21** 18:23:44.4±0.9, 69.74N×144.31W, h0km, mb3.6/7, mbtmp3.8/12, ML4.0/5, MS2.9/5, Error ellipse: s-maj=20.7km s-min=14.0km az=51.0*

*NEIC **21** 18:23:44.3±1.0, 69.52N±0.05×144.32W±0.09, h5km≤6km, Error ellipse: s-maj=7.0km s-min=4.0km az=158.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁴Nm; Mrr0.69; Mθθ-4.80; Mφφ4.11; Mrθ1.21; Mθφ-4.05; Mrφ-2.53; Fault plane solution: M0 6.67000×10¹⁴ NP1: ϕs206.52000°, δ71.77000°, λ16.21000°. NP2: ϕs111.33000°, δ74.62000°, λ161.07000°. Principal axes: T 6.9311, Plg24.0000°, Azm68.0000°; N -0.5583, Plg66.0000°, Azm254.0000°; P -6.3728, Plg2.0000°, Azm159.0000°;*

**ISC 21 18:23:43.9±0.5, 69.53N±0.03×144.32W±0.03, h10km, n167, σ1≥31/171, mb3.6/7, MS3.1/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **65** | Pg | **Pg** | **18 23 48.0** | **-0.7** |
| C27K | | | | | **Sg** | **18 23 51.1** | **-0.8** |
| **C26K** | **Camden Bay** | **0.44** | **332** | | **Pb** | **18 23 52.7** | **-1.0** |
| C26K | | | | | **Sb** | **18 24 00.6** | **+0.1** |
| **D25K** | **Kavik River** | **0.76** | **255** | Pg | **Pg** | **18 23 56.7** | **-1.8** |
| **D27M** | **Malcolm River** | **1.22** | **102** | | **Pb** | **18 24 05.4** | **-1.7** |
| D27M | | | | IAML | | 18 24 27.8 | |
| | comp=N,2µm,0.5s | | | | | | |
| D27M | | | | IAML | | 18 24 29.4 | |
| | comp=E,2µm,0.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.55** | **279** | | **Pg** | **18 24 12.4** | **-1.2** |
| C24K | | | | IAML | | 18 24 35.4 | |
| | comp=N,1µm,1.1s | | | | | | |
| C24K | | | | IAML | | 18 24 37.3 | |
| | comp=E,1µm,1.3s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **259** | | **Pb** | **18 24 13.2** | **-1.0** |
| D24K | | | | | **Sg** | **18 24 36.4** | **-0.2** |
| D24K | | | | IAML | | 18 24 40.7 | |
| | comp=N,1µm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.67** | **143** | | **Pb** | **18 24 14.1** | **-0.6** |
| E27K | | | | | **Sb** | **18 24 34.6** | **-1.1** |
| E27K | | | | IAML | | 18 24 38.9 | |
| | comp=E,901nm,0.4s | | | | | | |
| E27K | | | | IAML | | 18 24 39.2 | |
| | comp=N,1µm,0.5s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **178** | | **Pb** | **18 24 17.0** | **-0.6** |
| F26K | | | | | **Sb** | **18 24 40.9** | **+0.2** |
| F26K | | | | IAML | | 18 24 45.0 | |
| | comp=N,1µm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.95** | **116** | Pn | **Pb** | **18 24 18.5** | **-1.0** |
| E28M | | | | IAML | | 18 24 49.6 | |
| | comp=N,896nm,0.6s | | | | | | |
| **D28M** | **Stokes Point** | **1.98** | **93** | | **Pb** | **18 24 18.1** | **-1.9** |
| **F25K** | **Christian Rive** | **2.00** | **195** | | **Pb** | **18 24 19.1** | **-1.3** |
| F25K | | | | | **Sb** | **18 24 44.7** | **-0.7** |
| F25K | | | | IAML | | 18 24 50.5 | |
| | comp=E,896nm,1.4s | | | | | | |
| F25K | | | | IAML | | 18 24 50.5 | |
| | comp=N,1µm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.09** | **247** | | **Pn** | **18 24 19.5** | **+0.5** |
| TOLK | | | | IAML | | 18 24 59.2 | |
| | comp=E,563nm,1.1s | | | | | | |
| **E24K** | **Your Creek** | **2.10** | **228** | | **Pb** | **18 24 20.2** | **-1.9** |
| E24K | | | | IAML | | 18 24 54.6 | |
| | comp=E,554nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.11** | **183** | | **Pb** | **18 24 20.4** | **-1.8** |
| **C23K** | **Itkillik River** | **2.22** | **281** | | **Pb** | **18 24 21.7** | **-2.3** |
| C23K | | | | IAML | | 18 25 05.1 | |
| | comp=N,688nm,0.8s | | | | | | |
| C23K | | | | IAML | | 18 25 05.8 | |
| | comp=E,665nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.34** | **259** | | **Pn** | **18 24 23.0** | **+0.6** |
| **F24K** | **Squaw Lake** | **2.41** | **215** | | **Pn** | **18 24 24.3** | **+0.9** |
| **E23K** | **Chandalar** | **2.43** | **235** | | **Pn** | **18 24 24.7** | **+1.0** |
| **F28M** | **Old Crow** | **2.52** | **138** | | **Pn** | **18 24 25.9** | **+1.0** |
| F28M | | | | IAML | | 18 25 06.0 | |
| | comp=E,617nm,0.4s | | | | | | |
| **E29M** | **Blow River** | **2.58** | **113** | | **Pb** | **18 24 27.2** | **-3.0** |
| E29M | | | | IAML | | 18 25 09.2 | |
| | comp=E,466nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.60** | **175** | | **Pb** | **18 24 27.3** | **-3.2** |
| **G25K** | **Bearman Lake** | **2.86** | **194** | | **Pn** | **18 24 31.0** | **+1.5** |
| **G27K** | **Doyon Strip** | **2.91** | **159** | | **Pn** | **18 24 30.9** | **+0.7** |
| **FYU** | **Fort Yukon** | **3.00** | **187** | | **Pn** | **18 24 32.6** | **+1.2** |
| FYU | | | | IAML | | 18 25 21.8 | |
| | comp=E,434nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **3.06** | **262** | | **Pn** | **18 24 32.8** | **+0.6** |
| D22K | | | | IAML | | 18 25 29.2 | |
| | comp=N,245nm,0.9s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **246** | | **Pn** | **18 24 32.7** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **204** | | **Pn** | **18 24 33.1** | **+0.6** |
| G24K | | | | IAML | | 18 25 30.4 | |
| | comp=N,284nm,0.7s | | | | | | |
| **COLD** | **Coldfoot** | **3.18** | **226** | | **Pn** | **18 24 35.0** | **+1.2** |
| **B22K** | **Teshekpuk Lake** | **3.24** | **289** | Pn | **Pn** | **18 24 35.8** | **+1.1** |
| **H25L** | **Birch Creek** | **3.33** | **191** | | **Pn** | **18 24 36.9** | **+1.0** |
| **H27K** | **Steamboat Moun** | **3.48** | **161** | | **Pn** | **18 24 39.5** | **+1.5** |
| **G29M** | **Pine Creek** | **3.52** | **135** | Pn | **Pn** | **18 24 39.7** | **+1.1** |
| **F22K** | **John River** | **3.53** | **239** | | **Pn** | **18 24 39.8** | **+1.0** |
| **G23K** | **Bananza Creek** | **3.55** | **220** | | **Pn** | **18 24 39.6** | **+0.6** |
| G23K | | | | IAML | | 18 25 39.4 | |
| | comp=E,170nm,0.7s | | | | | | |
| G23K | | | | IAML | | 18 25 44.0 | |
| | comp=N,161nm,1.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.61** | **276** | Pn | **Pn** | **18 24 41.0** | **+1.2** |
| B21K | | | | IAML | | 18 25 55.2 | |
| | comp=N,224nm,1.0s | | | | | | |
| B21K | | | | IAML | | 18 26 04.7 | |
| | comp=E,233nm,1.7s | | | | | | |
| **E21K** | **Killik River** | **3.65** | **257** | | **Pn** | **18 24 41.0** | **+0.7** |
| E21K | | | | IAML | | 18 25 51.8 | |
| | comp=N,146nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.67** | **118** | | **Pn** | **18 24 43.1** | **+2.4** |
| **C21K** | **Knifeblade Rid** | **3.73** | **269** | | **Pn** | **18 24 42.8** | **+1.3** |
| **A22K** | **Sinclair Lake** | **3.91** | **297** | | **Pn** | **18 24 45.0** | **+1.1** |
| **H24K** | **Noodor Dome** | **3.95** | **202** | Pn | **Pn** | **18 24 45.1** | **+0.6** |
| H24K | | | | IAML | | 18 25 52.4 | |
| | comp=E,115nm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.95** | **127** | | **Pn** | **18 24 45.1** | **+0.5** |
| G30M | | | | IAML | | 18 25 57.4 | |
| | comp=N,159nm,1.2s | | | | | | |
| G30M | | | | IAML | | 18 25 58.2 | |
| | comp=E,115nm,0.6s | | | | | | |
| **H29M** | **Whitestone** | **4.01** | **143** | Pn | **Pn** | **18 24 46.7** | **+1.3** |
| **PRP** | **Porcupine Dome** | **4.06** | **187** | Pn | **Pn** | **18 24 47.8** | **+1.7** |
| PRP | | | | IAML | | 18 25 38.5 | |
| | comp=N,143nm,0.5s | | | | | | |
| PRP | | | | IAML | | 18 25 56.2 | |
| | comp=E,137nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **4.09** | **102** | Pn | **Pn** | **18 24 48.7** | **+2.4** |
| | comp=E,3.5nm,0.3s,baz=276,slow=4.1,SNR=8.8 | | | | | | |
| INK | | | | Sn | **Sn** | **18 25 36.0** | **+1.9** |
| | comp=E,6.8nm,0.3s,baz=258,slow=26,SNR=4.9 | | | | | | |
| INK | | | | Lg | Lg | 18 25 54.9 | |
| | comp=E,6.6nm,0.3s,baz=115,slow=12,SNR=6.4 | | | | | | |
| INK | | | | LR | LR | 18 26 18.6 | |
| | comp=E,36nm,19.5s,baz=328,slow=37 | | | | | | |
| | comp=E,7.9nm,0.3s | | | | | | |
| **F21K** | **Alatna River** | **4.11** | **240** | Pn | **Pn** | **18 24 47.5** | **+0.8** |
| F21K | | | | IAML | | 18 26 01.9 | |
| | comp=N,100nm,1.4s | | | | | | |
| F21K | | | | IAML | | 18 26 03.8 | |
| | comp=E,119nm,0.8s | | | | | | |
| **H23K** | **Yukon River** | **4.22** | **211** | | **Pn** | **18 24 49.1** | **+0.9** |
| H23K | | | | IAML | | 18 26 02.2 | |
| | comp=E,138nm,1.1s | | | | | | |
| H23K | | | | IAML | | 18 26 07.2 | |
| | comp=N,125nm,1.1s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.26** | **173** | | **Pn** | **18 24 49.8** | **+1.0** |
| **EPYK** | **Eagle Plains** | **4.27** | **134** | | **Pn** | **18 24 49.9** | **+1.0** |
| **F31M** | **Tsiigehtchic** | **4.42** | **113** | | **Pn** | **18 24 51.1** | **+0.2** |
| **I28M** | **Miner Creek** | **4.43** | **156** | Pn | **Pn** | **18 24 52.3** | **+1.2** |
| I28M | | | | IAML | | 18 25 46.4 | |
| | comp=N,97nm,0.6s | | | | | | |
| I28M | | | | IAML | | 18 25 50.2 | |
| | comp=E,118nm,0.8s | | | | | | |
| **E20K** | **Nigu River** | **4.48** | **259** | | **Pn** | **18 24 53.4** | **+1.6** |
| **B20K** | **Meade River** | **4.49** | **282** | Pn | **Pn** | **18 24 52.6** | **+0.8** |
| **A21K** | **Barrow** | **4.51** | **299** | | **Pn** | **18 24 53.1** | **+1.0** |
| **G31M** | **Satah River** | **4.56** | **120** | Pn | **Pn** | **18 24 53.3** | **+0.4** |
| **G21K** | **Allakaket** | **4.59** | **233** | Pn | **Pn** | **18 24 53.5** | **+0.3** |
| G21K | | | | IAML | | 18 26 15.4 | |
| | comp=N,108nm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.59** | **197** | | **Pn** | **18 24 54.1** | **+0.8** |
| POKR | | | | IAML | | 18 25 51.3 | |
| | comp=E,92nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.78** | **148** | | **Pn** | **18 24 56.4** | **+0.5** |
| I29M | | | | IAML | | 18 25 55.7 | |
| | comp=N,103nm,0.5s | | | | | | |
| I29M | | | | IAML | | 18 26 17.7 | |
| | comp=E,88nm,0.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **206** | | **Pn** | **18 24 57.4** | **+1.2** |
| I23K | | | | IAML | | 18 26 19.9 | |
| | comp=E,69nm,1.2s | | | | | | |
| I23K | | | | IAML | | 18 26 23.5 | |
| | comp=N,85nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **200** | | **Pn** | **18 24 57.7** | **+1.1** |
| MDM | | | | IAML | | 18 26 18.8 | |
| | comp=E,80nm,0.8s | | | | | | |
| MDM | | | | IAML | | 18 26 20.6 | |
| | comp=N,93nm,0.7s | | | | | | |
| **COLA** | **College** | **4.87** | **198** | | **Pn** | **18 24 58.2** | **+1.1** |
| **IL31** | | **4.88** | **193** | | **Pn** | **18 24 57.6** | **+0.4** |
| **ILAR** | **Eielson Array** | **4.88** | **193** | | **Pn** | **18 24 57.4** | **+0.1** |
| **ILAR** | **Eielson Array** | **4.88** | **193** | Pn | **Pn** | **18 24 59.7** | **+2.4** |
| | comp=N,2.1nm,0.3s,baz=7.0,slow=14,SNR=47 | | | | | | |
| ILAR | | | | Sn | **Sn** | **18 25 55.7** | **+1.9** |
| | comp=N,2.7nm,0.3s,baz=10,slow=30,SNR=8.0 | | | | | | |
| ILAR | | | | Lg | Lg | 18 26 14.6 | |
| | comp=N,6.1nm,0.3s,baz=7.2,slow=32,SNR=5.4 | | | | | | |
| | comp=N,4.1nm,0.4s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.91** | **245** | Pn | **Pn** | **18 24 57.9** | **+0.3** |
| F20K | | | | IAML | | 18 26 24.4 | |
| | comp=N,60nm,1.0s | | | | | | |
| F20K | | | | IAML | | 18 26 33.6 | |
| | comp=E,55nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **4.93** | **164** | | **Pn** | **18 24 58.3** | **+0.4** |
| EGAK | | | | IAML | | 18 25 58.9 | |
| | comp=E,62nm,0.6s | | | | | | |
| EGAK | | | | IAML | | 18 25 59.1 | |
| | comp=E,68nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **185** | | **Pn** | **18 24 59.0** | **+0.6** |
| J25K | | | | IAML | | 18 26 25.1 | |
| | comp=E,70nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.06** | **176** | Pn | **Pn** | **18 25 00.5** | **+0.7** |
| J26L | | | | IAML | | 18 26 22.9 | |
| | comp=E,68nm,0.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.06** | **224** | Pn | **Pn** | **18 25 00.2** | **+0.4** |
| H21K | | | | IAML | | 18 26 31.0 | |
| | comp=E,82nm,1.4s | | | | | | |
| H21K | | | | IAML | | 18 26 31.9 | |
| | comp=N,78nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **5.07** | **265** | Pn | **Pn** | **18 25 00.5** | **+0.7** |
| D19K | | | | IAML | | 18 26 40.6 | |
| | comp=N,80nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **197** | Pn | **Pn** | **18 25 00.8** | **+0.7** |
| CCB | | | | IAML | | 18 26 31.2 | |
| | comp=E,55nm,0.5s | | | | | | |
| **MLY** | **Manley** | **5.16** | **212** | | **Pn** | **18 25 01.9** | **+0.8** |
| **E19K** | **Redstone River** | **5.18** | **252** | | **Pn** | **18 25 01.5** | **+0.1** |
| E19K | | | | IAML | | 18 26 44.8 | |
| | comp=E,76nm,0.9s | | | | | | |
| **HDA** | **Harding Lake** | **5.25** | **193** | | **Pn** | **18 25 03.4** | **+1.2** |
| HDA | | | | IAML | | 18 26 34.0 | |
| | comp=N,54nm,1.2s | | | | | | |
| HDA | | | | IAML | | 18 26 37.2 | |
| | comp=E,75nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **5.29** | **198** | | **Pn** | **18 25 04.0** | **+1.1** |
| WRH | | | | IAML | | 18 26 33.5 | |
| | comp=E,44nm,0.9s | | | | | | |
| WRH | | | | IAML | | 18 26 35.5 | |
| | comp=N,51nm,0.9s | | | | | | |
| **NEA2** | **Nenana** | **5.29** | **203** | | **Pn** | **18 25 04.3** | **+1.4** |
| **I30M** | **Mount Dempster** | **5.30** | **141** | Pn | **Pn** | **18 25 03.8** | **+0.7** |
| I30M | | | | IAML | | 18 26 06.1 | |
| | comp=N,64nm,0.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.43** | **273** | Pn | **Pn** | **18 25 05.1** | **+0.3** |
| **SCRK** | **Sand Creek** | **5.58** | **179** | Pn | **Pn** | **18 25 08.0** | **+1.1** |
| **K27K** | **Chicken** | **5.59** | **170** | | **Pn** | **18 25 08.7** | **+1.7** |
| **J29N** | **Klondike Camp** | **5.63** | **152** | | **Pn** | **18 25 07.9** | **+0.3** |
| **F19K** | **Shaleruckik Mo** | **5.70** | **248** | Pn | **Pn** | **18 25 08.4** | **0.0** |
| **BWN** | **Browne** | **5.75** | **203** | Pn | **Pn** | **18 25 09.6** | **+0.5** |
| **K24K** | **Donnelly Dome** | **5.78** | **186** | | **Pn** | **18 25 12.3** | **+2.7** |
| **RIDG** | **Independent Ri** | **5.82** | **182** | | **Pn** | **18 25 11.5** | **+1.4** |
| **DAWY** | **Dawson** | **5.82** | **158** | | **Pn** | **18 25 11.3** | **+1.1** |
| **A19K** | **Wainwright** | **5.82** | **284** | | **Pn** | **18 25 10.8** | **+0.7** |
| **J30M** | **Hart River** | **5.87** | **144** | Pn | **Pn** | **18 25 12.1** | **+1.2** |
| **G19K** | **Purcell Mounta** | **5.90** | **241** | Pn | **Pn** | **18 25 11.4** | **+0.2** |
| **DOT** | **Dot Lake** | **5.91** | **179** | | **Pn** | **18 25 13.3** | **+1.9** |
| **BPAW** | **Bear Paw Mtn.** | **6.05** | **209** | | **Pn** | **18 25 13.6** | **+0.2** |
| **C18K** | **Utukok River** | **6.10** | **270** | | **Pn** | **18 25 14.0** | **0.0** |
| **H19K** | **Roundabout Mou** | **6.14** | **235** | | **Pn** | **18 25 15.2** | **+0.8** |
| **B18K** | **Kokolik River** | **6.16** | **277** | | **Pn** | **18 25 14.8** | **+0.1** |
| **I20K** | **Naaghedeneel** | **6.18** | **225** | | **Pn** | **18 25 15.9** | **+0.9** |
| **K29M** | **Barlow Dome** | **6.31** | **152** | Pn | **Pn** | **18 25 17.8** | **+0.8** |
| **E18K** | **Tukpahlearik C** | **6.35** | **258** | Pn | **Pn** | **18 25 18.4** | **+1.0** |
| **RND** | **Reindeer** | **6.41** | **199** | | **Pn** | **18 25 19.3** | **+1.0** |
| **L26K** | **Log Cabin Wild** | **6.54** | **176** | | **Pn** | **18 25 20.7** | **+0.6** |
| **G18K** | **Tagagawik** | **6.55** | **243** | Pn | **Pn** | **18 25 20.9** | **+0.7** |
| **BCAR** | **Beaver Creek A** | **6.57** | **170** | Pn | **Pn** | **18 25 21.0** | **+0.5** |
| **L27K** | **Beaver Creek,** | **6.57** | **170** | Pn | **Pn** | **18 25 21.6** | **+1.1** |
| **DHY** | **Denali Highway** | **6.60** | **192** | Pn | **Pn** | **18 25 21.8** | **+0.8** |
| **PAX** | **Paxson** | **6.60** | **185** | | **Pn** | **18 25 23.6** | **+2.6** |
| **J20K** | **Nowinta River** | **6.62** | **220** | Pn | **Pn** | **18 25 21.9** | **+0.8** |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | Pn | **Pn** | **18 25 22.0** | **-0.8** |
| **C17K** | **DeLong Mountai** | **6.85** | **270** | | **Pn** | **18 25 23.9** | **-0.4** |
| **RDOG** | **Red Dog Mine** | **6.90** | **266** | | **Pn** | **18 25 24.9** | **0.0** |
| **E17K** | **Hothanz Inlet** | **6.93** | **258** | | **Pn** | **18 25 25.1** | **-0.2** |
| **WAT1** | **Susitna Watana** | **6.94** | **196** | | **Pn** | **18 25 28.2** | **+2.7** |
| **H18K** | **Honhosa River** | **6.97** | **238** | | **Pn** | **18 25 26.1** | **+0.2** |
| **F17K** | **Baldwin Pennin** | **7.07** | **252** | Pn | **Pn** | **18 25 27.0** | **-0.2** |
| **D17K** | **Noatak River** | **7.09** | **264** | | **Pn** | **18 25 26.8** | **-0.8** |
| **J19K** | **Poorman** | **7.12** | **224** | Pn | **Pn** | **18 25 27.4** | **-0.6** |
| **C36M** | **Paulatuk** | **7.12** | **82** | | **Pn** | **18 25 27.9** | **-0.1** |
| **HARP** | **HAARP** | **7.17** | **183** | | **Pn** | **18 25 31.9** | **+3.3** |
| **M26K** | **Nabesna, AK** | **7.18** | **175** | Pn | **Pn** | **18 25 28.4** | **-0.4** |
| **M27K** | **Edge Creek, AK** | **7.27** | **171** | | **Pn** | **18 25 29.1** | **-1.0** |
| **K20K** | **Telida** | **7.32** | **217** | Pn | **Pn** | **18 25 30.2** | **-0.5** |
| **G17K** | **Kiwalik Mounta** | **7.44** | **245** | | **Pn** | **18 25 32.7** | **+0.4** |
| **M29M** | **Somme Creek** | **7.50** | **159** | Pn | **Pn** | **18 25 32.8** | **-0.5** |
| **H17K** | **Granite Mounta** | **7.59** | **240** | Pn | **Pn** | **18 25 34.5** | **+0.2** |
| **C16K** | **Lisburne Hills** | **7.68** | **271** | Pn | **Pn** | **18 25 34.9** | **-0.6** |
| **YUK2** | **White River** | **7.91** | **168** | | **Pn** | **18 25 41.0** | **+2.2** |
| **G16K** | **Koyuk River** | **8.06** | **248** | Pn | **Pn** | **18 25 40.8** | **+0.1** |
| **M31M** | **Muury Creek, Y** | **8.39** | **146** | Pn | **Pn** | **18 25 45.2** | **-0.2** |
| **M20K** | **Styx River** | **8.48** | **209** | | **Pn** | **18 25 47.3** | **+0.6** |
| **J17K** | **VABM Dome** | **8.51** | **231** | Pn | **Pn** | **18 25 47.1** | **+0.1** |
| **L19K** | **White Mountain** | **8.53** | **215** | | **Pn** | **18 25 47.6** | **+0.3** |
| **FARO** | **Faro, Yukon** | **8.58** | **143** | | **Pn** | **18 25 47.7** | **-0.3** |
| **F15K** | **North Star Dit** | **8.63** | **253** | Pn | **Pn** | **18 25 48.1** | **-0.4** |
| **N30M** | **Aishikik Lake** | **8.63** | **156** | Pn | **Pn** | **18 25 48.9** | **+0.1** |
| **M19K** | **Big River Lodg** | **8.69** | **213** | | **Pn** | **18 25 50.9** | **+1.3** |
| **MMPY** | **Sheldon Lake,** | **8.71** | **136** | Pn | **Pn** | **18 25 50.6** | **+0.8** |
| **N31M** | **Braeburn, Yuko** | **8.81** | **152** | | **Pn** | **18 25 51.4** | **+0.3** |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **49.14** | **6** | P | | **P** | **18 32 31.1** | **+0.1** |
| | comp=Z,3.5nm,0.9s,baz=357,slow=9.7,SNR=2.7 comp=Z,3.5nm,0.9s | | | | | | | |
| **ARU** | **Arti** | **53.26** | **344** | LR | | LR | 19 00 01.7 | |
| | comp=Z,13nm,18.2s,baz=102,slow=41 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.13** | **329** | P | | **P** | **18 33 23.1** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=16,slow=8.1,SNR=5.0 comp=Z,0.4nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.06** | **324** | P | | **P** | **18 33 44.8** | **+1.1** |
| | comp=Z,0.1nm,0.5s,baz=23,slow=7.3,SNR=1.4 comp=Z,0.1nm,0.5s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **59.23** | **344** | LR | | LR | 19 01 31.8 | |
| | comp=Z,16nm,19.4s,baz=4.0,slow=38 | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.99** | **5** | P | | **P** | **18 33 50.1** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=359,slow=6.8,SNR=2.2 comp=Z,0.5nm,0.4s | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.28** | **32** | P | | **P** | **18 34 40.3** | **+2.0** |
| | comp=Z,0.2nm,0.5s,baz=339,slow=5.1,SNR=1.8 comp=Z,0.2nm,0.5s | | | | | | | |
| **GNI** | **Garni** | **70.43** | **353** | LR | | LR | 19 11 19.3 | |
| | comp=Z,10nm,18.1s,baz=138,slow=41 | | | | | | | |

*IDC **21** 18:35:19.4±4.1, 17°.95S×178°.20W, h474km±45km, mb3.5/10, mbtmp4.3/11, Error ellipse: s-maj=20.1km s-min=18.8km az=57.0*
*NEIC **21** 18:35:23.1±1.9, 17°.9S±0°.1×178°.1W±0°.1, h520km±7km, mb4.5/35, Error ellipse: s-maj=19.7km s-min=15.8km az=164.0*

**ISC 21 18:35:26.2±0.6, 18°.1S±0°.1×178°.3W±0°.1, h550km, n62, σ1s21/55, mb4.4/26, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.51** | **275** | | | P | 18 36 41.4 | -3.3 |
| **AFI** | **Afiamalu** | **7.51** | **57** | P | | P | 18 37 10.3 | -9.1 |
| **NIUE** | **Niue** | **7.99** | **98** | P | | P | 18 37 18.7 | -5.2 |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | | **P** | **18 38 37.0** | **+2.4** |
| **DZM** | **Mont Dzumac** | **14.88** | **252** | P | | P | 18 38 29.7 | -4.9 |
| | 5.6nm,0.9s,baz=90,slow=19,SNR=1.8 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.63** | **259** | P | | **P** | **18 38 53.0** | **+1.3** |
| **URZ** | **Urewera** | **20.49** | **190** | P | | **P** | **18 39 24.0** | **-2.5** |
| | 16nm,1.0s,baz=357,slow=2.7,SNR=2.1 16nm,1.0s | | | | | | | |
| **EIDS** | **Eidsvold** | **29.31** | **250** | P | | **P** | **18 40 44.5** | **-0.4** |
| EIDS | | | | IAmb | | IAmb | 18 40 45.0 | |
| | comp=Z,9.3nm,0.7s | | | | | | | |
| **ARMA** | **Armidale** | **29.95** | **240** | P | | **P** | **18 40 50.4** | **0.0** |
| ARMA | | | | IAmb | | IAmb | 18 40 51.8 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.53** | **261** | P | | **P** | **18 41 19.6** | **-1.4** |
| CTAO | | | | IAmb | | IAmb | 18 41 21.1 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **33.68** | **233** | P | | **P** | **18 41 22.5** | **+0.4** |
| **TOO** | **Toolangi** | **37.14** | **231** | P | | **P** | **18 41 51.6** | **+0.9** |
| **COEN** | **Coen** | **37.22** | **271** | P | | **P** | **18 41 51.2** | **-0.4** |
| COEN | | | | IAmb | | IAmb | 18 41 52.2 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **MANU** | **Manus Island** | **37.27** | **291** | P | | **P** | **18 41 51.9** | **-0.2** |
| **STKA** | **Stephens Creek** | **38.64** | **241** | P | | **P** | **18 42 03.3** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.64** | **241** | P | | **P** | **18 42 02.8** | **-0.2** |
| | comp=Z,8.1nm,0.8s,baz=85,slow=9.2,SNR=16 comp=Z,8.1nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.42** | **241** | P | | **P** | **18 42 40.8** | **0.0** |
| BBOO | | | | IAmb | | IAmb | 18 42 41.7 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.68** | **260** | P | | **P** | **18 42 49.4** | **-1.4** |
| WB0 | | | | IAmb | | IAmb | 18 42 50.4 | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.70** | **260** | P | | **P** | **18 42 49.6** | **-1.4** |
| WB2 | | | | IAmb | | IAmb | 18 42 50.6 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.70** | **260** | P | | **P** | **18 42 49.6** | **-1.4** |
| WRAB | | | | IAmb | | IAmb | 18 42 50.6 | |
| | comp=Z,8.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.71** | **260** | P | | **P** | **18 42 49.5** | **-1.6** |
| **WRA** | **Warramunga Arr** | **44.71** | **260** | P | | **P** | **18 42 49.7** | **-1.4** |
| | comp=Z,5.4nm,0.5s,baz=96,slow=6.9,SNR=186 comp=Z,5.4nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **44.85** | **254** | P | | **P** | **18 42 51.7** | **-0.4** |
| AS31 | | | | IAmb | | IAmb | 18 42 52.7 | |
| | comp=Z,16nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.85** | **254** | P | | **P** | **18 42 51.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **44.85** | **254** | P | | **P** | **18 42 51.8** | **-0.4** |
| | comp=Z,56nm,0.6s,baz=88,slow=8.3,SNR=848 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **18 44 21.8** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=104,slow=3.0,SNR=3.4 | | | | | | | |
| **MTN** | **Manton Dam** | **48.91** | **269** | P | | **P** | **18 43 21.4** | **-1.3** |
| MTN | | | | IAmb | | IAmb | 18 43 53.6 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **50.03** | **245** | P | | **P** | **18 43 30.2** | **-0.5** |
| FORT | | | | IAmb | | IAmb | 18 43 44.6 | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **KNRA** | **Kununurra** | **50.59** | **264** | P | | **P** | **18 43 34.2** | **-0.8** |
| KNRA | | | | IAmb | | IAmb | 18 43 35.0 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **FAKI** | **Fak Fak** | **50.73** | **281** | P | | **P** | **18 43 35.3** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **53.11** | **261** | P | | **P** | **18 43 52.8** | **-0.4** |
| **SOEI** | **Soe** | **56.19** | **270** | P | | **P** | **18 44 15.9** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **57.98** | **256** | P | | **P** | **18 44 26.4** | **-0.5** |
| PSA00 | | | | IAmb | | IAmb | 18 44 56.6 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| **MBWA** | **Marble Bar** | **58.14** | **256** | P | | **P** | **18 44 26.9** | **-1.1** |
| **MORW** | **Morawa** | **60.51** | **246** | P | | **P** | **18 44 43.4** | **-0.4** |
| MORW | | | | IAmb | | IAmb | 18 44 54.1 | |
| | comp=Z,35nm,1.4s | | | | | | | |
| **TOLI2** | **Tolitoli** | **62.87** | **281** | P | | **P** | **18 45 00.6** | **+1.4** |
| **GIRL** | **Giralia** | **62.95** | **253** | P | | **P** | **18 45 00.1** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **68.13** | **323** | P | | **P** | **18 45 30.4** | **-1.3** |
| | comp=Z,3.5nm,0.8s,baz=119,slow=9.4,SNR=8.6 comp=Z,3.5nm,0.8s | | | | | | | |
| **UGM** | **Wanagama** | **69.76** | **268** | P | | **P** | **18 45 41.5** | **-0.5** |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | | **P** | **18 45 55.3** | **+1.2** |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | | **P** | **18 45 55.0** | **+0.9** |
| | comp=Z,1.4nm,0.7s,baz=114,slow=1.2,SNR=14 comp=Z,1.4nm,0.7s | | | | | | | |
| **KSM** | **Kuching** | **72.82** | **277** | P | | **P** | **18 45 59.4** | **-0.5** |
| KSM | | | | IAmb | | IAmb | 18 46 01.2 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **74.92** | **318** | P | | **P** | **18 46 10.8** | **-0.4** |
| | comp=Z,1.3nm,0.7s,baz=132,slow=6.1,SNR=7.2 comp=Z,1.3nm,0.7s | | | | | | | |
| **SNCC** | **San Nicolas Is** | **75.82** | **48** | P | | P | 18 46 12.1 | -4.3 |
| **NVAR** | **Mina Array Bea** | **79.48** | **44** | P | | **P** | **18 46 36.0** | **-0.3** |
| **NVAR** | **Mina Array Bea** | **79.48** | **44** | P | | **P** | **18 46 35.7** | **-0.6** |
| | comp=Z,1.1nm,0.7s,baz=221,slow=8.5,SNR=9.1 comp=Z,1.1nm,0.7s | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.91** | **12** | P | | P | 18 46 34.8 | -3.1 |
| **J05D** | **Fort Rock, OR** | **80.39** | **38** | P | | **P** | **18 46 40.4** | **-0.5** |
| **SMAI** | **San Martin Ant** | **80.94** | **159** | P | | **P** | **18 46 43.3** | **+0.2** |
| **ENH** | **Enshi** | **84.47** | **304** | P | | **P** | **18 47 01.5** | **-0.2** |
| ENH | | | | IAmb | | IAmb | 18 47 03.1 | |
| | comp=Z,9.3nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.00** | **58** | P | | **P** | **18 47 09.1** | **0.0** |
| | comp=Z,1.5nm,0.7s,baz=226,slow=5.0,SNR=9.7 comp=Z,1.5nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.41** | **43** | P | | **P** | **18 47 14.7** | **-0.9** |
| | comp=Z,0.4nm,0.7s,baz=240,slow=4.7,SNR=1.9 comp=Z,0.4nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.06** | **290** | P | | **P** | **18 47 24.9** | **+1.3** |
| | comp=Z,1.1nm,0.8s,baz=106,slow=2.9,SNR=6.5 comp=Z,1.1nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.06** | **321** | PKP | | **PKPdf** | **18 53 07.9** | **-0.9** |
| | comp=Z,0.7nm,0.5s,baz=180,slow=1.5,SNR=5.4 | | | | | | | |
| **GAZ** | **Gaziantep** | **143.54** | **309** | | | PKPab | 18 53 57.2 | -0.4 |
| **BNN** | **Bunyan** | **143.87** | **312** | | | PKPbc | 18 53 57.9 | -0.9 |
| **BR131** | **Keskin Array S** | **145.00** | **315** | | | **PKPdf** | **18 54 00.8** | **-0.7** |
| **BRTR** | **Keskin Array B** | **145.00** | **315** | | | **PKPdf** | **18 54 00.9** | **-0.7** |
| **BRTR** | **Keskin Array B** | **145.00** | **315** | PKP | | **PKPdf** | **18 54 01.7** | **+0.2** |
| | comp=Z,3.2nm,0.8s,baz=124,slow=3.7,SNR=21 | | | | | | | |
| **ANTO** | **Ankara** | **145.49** | **315** | | | **PKPdf** | **18 54 02.2** | **-0.1** |
| **MMAI** | **Mount Meron Ar** | **146.34** | **303** | PKPbc | | **PKPdf** | **18 54 06.5** | **+2.6** |
| | comp=Z,5.4nm,0.7s,baz=57,slow=6.1,SNR=15 | | | | | | | |
| **FNA** | **Florina** | **151.77** | **327** | | | **PKPdf** | **18 54 17.1** | **+4.8** |
| **TORD** | **Torodi Ar. Bea** | **175.08** | **180** | PKP | | **PKPdf** | **18 54 33.2** | **-0.9** |
| | comp=Z,0.3nm,0.8s,baz=315,slow=2.0,SNR=1.5 | | | | | | | |

*IDC **21** 18:47:58.9±1.1, 8°.04N×127°.56E, h0km, mb3.9/8, mbtmp3.9/9, ML4.2/1, Error ellipse: s-maj=33.4km s-min=20.9km az=81.0*
*NEIC **21** 18:48:02.4±0.7, 7°.83N±0°.03×127°.3E±0°.1, h10km±1km, mb4.5/11, Error ellipse: s-maj=17.3km s-min=5.7km az=91.0*

**ISC 21 18:48:00.9±1.8, 7°.92N±0°.04×127°.29E±0°.06, h8km±10km, n41, σ1s73/55, mb4.2/11, 7C-7D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CDOP** | **Cateel, Davao** | **0.86** | **261** | ⇓*i* | P | **Pg** | **18 48 17.3** | **-0.1** |
| CDOP | | | | *i* | S | **Sg** | **18 48 27.9** | **-0.7** |
| **BIPH** | **Bislig** | **0.96** | **286** | ⇑*i* | P | **Pb** | **18 48 19.9** | **+0.1** |
| BIPH | | | | *i* | S | **Sg** | **18 48 31.0** | **-0.8** |
| **TASP** | **Talacogon, Agu** | **1.56** | **290** | ⇑*i* | P | **Pb** | **18 48 30.1** | **-0.1** |
| TASP | | | | *i* | S | **Sg** | **18 48 54.9** | **+3.7** |
| **DAV** | **Davao City (W)** | **1.90** | **244** | Pn | | **Pb** | **18 48 35.6** | **-0.2** |
| **DAV** | **Davao City (W)** | **1.90** | **244** | Pn | | **Pg** | **18 48 37.8** | **+0.5** |
| | 64nm,0.3s,baz=67,slow=7.7,SNR=2.2 | | | | | | | |
| DAV | | | | Sn | | **Sg** | **18 49 03.8** | **+2.0** |
| | 66nm,0.3s,baz=285,slow=24,SNR=7.2 210nm,0.4s | | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.95** | **245** | ⇓*e* | P | **Pb** | **18 48 36.2** | **-0.6** |
| DMPH | | | | *i* | S | **Sg** | **18 49 04.9** | **+1.1** |
| **KCP** | **Kidapawan** | **2.36** | **248** | ⇓*i* | P | **Pn** | **18 48 41.0** | **+0.9** |
| KCP | | | | *i* | S | **Sn** | **18 49 09.0** | **-0.4** |
| **SCPH** | **Surigao** | **2.57** | **316** | ⇓*e* | P | **Pb** | **18 48 45.5** | **-1.8** |
| SCPH | | | | *e* | S | **Sb** | **18 49 18.3** | **-0.9** |
| **CGP** | **Cagayan de Oro** | **2.63** | **282** | ⇑*e* | P | **Pn** | **18 48 45.2** | **+1.5** |
| CGP | | | | *e* | S | **Sn** | **18 49 18.6** | **+2.8** |
| **CTBH** | **Cotabato--PC H** | **3.10** | **257** | ⇑*e* | P | **Pn** | **18 48 51.2** | **+1.0** |
| CTBH | | | | *i* | S | Sn | 18 49 14.1 | -13 |
| **MSLP** | **Maasin** | **3.26** | **313** | ⇓*e* | P | **Pn** | **18 48 55.7** | **+3.3** |
| MSLP | | | | *e* | S | **Sg** | **18 49 48.1** | **+2.4** |
| **GHBP** | **Garcia Hernand** | **3.40** | **300** | ⇓*e* | P | **Pn** | **18 48 57.2** | **+3.0** |
| GHBP | | | | *e* | S | **Sb** | **18 49 41.7** | **-1.2** |
| **TABP** | **Talibon, Bohol** | **3.64** | **307** | ⇑*e* | P | **Pn** | **18 48 59.0** | **+1.4** |
| TABP | | | | *e* | S | **Sb** | **18 49 47.4** | **-2.4** |
| **LSIP** | **Lazi, Siquijor** | **3.82** | **289** | ⇑*e* | P | **Pn** | **18 49 01.6** | **+1.6** |
| **TBP** | **Tagbilaran** | **3.82** | **298** | *e* | P | **Pn** | **18 49 02.5** | **+2.3** |
| TBP | | | | *e* | S | **Sb** | **18 49 51.0** | **-4.2** |
| **PAGZ** | **Pagadian** | **3.88** | **269** | ⇑*e* | P | **Pn** | **18 49 02.3** | **+1.4** |
| PAGZ | | | | *i* | S | **Pg** | **18 49 13.8** | **-1.4** |
| **PLP** | **Palo** | **3.95** | **325** | ⇑*e* | P | **Pb** | **18 49 10.3** | **-0.6** |
| **LLP** | **Lapu-Lapu** | **4.06** | **306** | *e* | P | **Pb** | **18 49 09.2** | **-3.5** |
| LLP | | | | *e* | S | **Sb** | **18 49 58.5** | **-3.5** |
| **SNPH** | **Sibulan** | **4.25** | **290** | *e* | P | **Pn** | **18 49 08.1** | **+2.0** |
| SNPH | | | | *e* | S | **Sn** | **18 49 57.7** | **+1.6** |
| **TNTI** | **Ternate** | **7.10** | **179** | Pn | | **Pn** | **18 49 44.9** | **-0.3** |
| **TOLI2** | **Tolitoli** | **9.37** | **224** | Pn | | **Pn** | **18 50 15.0** | **-1.4** |
| **FAKI** | **Fak Fak** | **11.85** | **155** | Pn | | **Pn** | **18 50 50.0** | **-0.4** |
| **SBUM** | **Sibu** | **15.96** | **251** | P | | P | **18 51 50.9** | **+1.3** |
| **MTN** | **Manton Dam** | **20.98** | **169** | | | **P** | **18 52 44.3** | **-0.4** |
| MTN | | | | IAmb | | IAmb | 18 52 48.9 | |
| | comp=Z,33nm,1.5s | | | | | | | |
| **KNRA** | **Kununurra** | **23.49** | **176** | P | | **P** | **18 53 11.2** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **25.90** | **184** | P | | **P** | **18 53 32.9** | **-0.8** |
| **WB0** | **Warramunga Arr** | **28.38** | **166** | P | | **P** | **18 53 55.6** | **-0.4** |
| WB0 | | | | IAmb | | IAmb | 18 54 25.2 | |
| | comp=Z,9.9nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.54** | **166** | P | | **P** | **18 53 57.5** | **+0.1** |
| | comp=Z,0.4nm,1.1s,baz=355,slow=8.4,SNR=1.6 comp=Z,0.4nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **28.61** | **166** | | | **P** | **18 53 57.5** | **-0.5** |
| WR0 | | | | IAmb | | IAmb | 18 54 20.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **32.05** | **169** | P | | **P** | **18 54 27.2** | **-1.2** |
| | comp=Z,0.3nm,0.6s,baz=346,slow=7.7,SNR=2.1 comp=Z,0.3nm,0.6s | | | | | | | |
| **MORW** | **Morawa** | **38.34** | **196** | P | | **P** | **18 55 22.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **54.50** | **323** | P | | **P** | **18 57 28.0** | **-1.3** |
| **MKAR** | **Makanchi Array** | **54.50** | **323** | P | | **P** | **18 57 28.2** | **-1.2** |
| | comp=Z,1.1nm,0.7s,baz=123,slow=7.6,SNR=7.7 comp=Z,1.1nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.16** | **332** | P | | **P** | **18 57 47.1** | **-1.2** |
| | comp=Z,0.5nm,0.4s,baz=107,slow=9.7,SNR=3.7 comp=Z,0.5nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.57** | **326** | P | | **P** | **18 57 57.7** | **-0.5** |
| | comp=Z,1.2nm,0.7s,baz=125,slow=6.3,SNR=9.0 comp=Z,1.2nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **64.17** | **326** | P | | **P** | **18 58 35.5** | **-0.6** |
| | comp=Z,0.7nm,0.5s,baz=123,slow=11,SNR=5.2 comp=Z,0.7nm,0.5s | | | | | | | |
| **M16K** | **Timber Creek** | **75.26** | **29** | P | | **P** | **18 59 45.3** | **+1.0** |
| **J17K** | **VABM Dome** | **75.65** | **26** | P | | P | 18 59 51.6 | +5.1 |
| J17K | | | | IAmb | | IAmb | 19 00 33.3 | |
| | comp=Z,7.0nm,1.5s | | | | | | | |
| **O18K** | **Koktuh Hills** | **76.92** | **30** | P | | **P** | **18 59 56.3** | **+2.5** |
| **ARCES** | **ARCESS Array B** | **86.74** | **340** | P | | **P** | **19 00 45.5** | **+0.2** |
| | comp=Z,5.0nm,1.1s,baz=76,slow=5.7,SNR=4.3 comp=Z,5.0nm,1.1s | | | | | | | |
| **FINES** | **FINESS Array B** | **88.43** | **332** | P | | **P** | **19 00 53.1** | **-0.5** |
| | comp=Z,2.1nm,0.9s,baz=87,slow=8.5,SNR=5.7 comp=Z,2.1nm,0.9s | | | | | | | |

**DJA 21 18:51:41.9±0.3, 8°.5S±3°×11°.7E±°, h10km, M4.0/9, mb4.4/1, MLv3.8/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.51** | **152** | P | | Pb | 18 51 52.6 | -0.5 |
| TWSI | | | | S | | Sb | 18 52 00.3 | -0.3 |
| **PLAI** | **Plampang** | **1.25** | **116** | P | | Pn | 18 52 05.4 | 0.0 |
| **SRBI** | **Singaraja** | **1.43** | **278** | P | | Pn | 18 52 07.6 | -0.3 |
| **DNP** | **Denpasar** | **1.47** | **254** | P | | Pb | 18 52 09.2 | -0.1 |
| **JAGI** | **Jajag, Banyuwa** | **2.47** | **265** | P | | Pn | 18 52 21.5 | -0.7 |
| **WBSI** | **Waikabubak, Su** | **3.04** | **117** | P | | Pn | 18 52 29.7 | -0.4 |
| **BSSI** | **Bau Bau, Buton** | **4.37** | **61** | P | | Pn | 18 52 47.4 | -1.0 |
| **PWJI** | **Pagerwojo** | **4.79** | **273** | P | | Pn | 18 52 54.9 | +0.7 |
| **BNSI** | **Bone** | **5.17** | **42** | P | | Pn | 18 52 59.7 | +0.3 |
| **UGM** | **Wanagama** | **6.07** | **273** | P | | Pn | 18 53 11.6 | -0.2 |

*JMA **21** 18:58:51.9±0.3, 34°.N±3°×13°.7E±°, h381km, MV3.2/38, SE OFF KII PENINSULA*
*IDC **21** 18:58:52.5±2.3, 33°.27N×137°.49E, h326km±53km, mb2.7/3, mbtmp3.4/4, Error ellipse: s-maj=95.3km s-min=27.8km az=57.0*

**ISC 21 18:58:53.7±1.1, 33°.5N±0°.1×137°.6E±0°.1, h352km, n15, σ0s84/18, mb2.8/3, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JNY** | **Yasuok** | **1.89** | **8** | *e*P | | **Pn** | **18 59 45.0** | **+0.5** |
| **JOD2** | **Odawara 2** | **2.19** | **35** | *e*P | | **Pn** | **18 59 47.2** | **+0.7** |
| **JWT** | **Wachi** | **2.53** | **316** | *e*P | | **Pn** | **18 59 48.4** | **-0.8** |
| **BSO4** | **Boso 4** | **2.75** | **56** | S | | **S** | **19 00 37.8** | **+0.9** |
| **JHU** | **Hanno** | **2.76** | **30** | P | | **Pn** | **18 59 51.2** | **+0.1** |
| JHU | | | | *e*S | | **S** | **19 00 37.1** | **-0.2** |
| **JRY** | **Ryogami san** | **2.77** | **23** | P | | **Pn** | **18 59 51.8** | **+0.7** |
| JRY | | | | *e*S | | **S** | **19 00 37.7** | **+0.5** |
| **BSO3** | **Boso 3** | **2.78** | **61** | *e*S | | **S** | **19 00 36.9** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **3.10** | **10** | P | | **Pn** | **18 59 53.9** | **-0.2** |
| | 6.9nm,0.4s,baz=179,slow=8.8,SNR=36 | | | | | | | |
| MJAR | | | | S | | **S** | **19 00 41.5** | **-1.3** |
| | 0.9nm,0.5s,baz=193,slow=29,SNR=1.5 | | | | | | | |
| **MAT** | **Matsushiro** | **3.10** | **10** | *e*P | | **Pn** | **18 59 53.9** | **-0.1** |
| **JAG** | **Ashikaga** | **3.33** | **27** | *e*P | | **Pn** | **18 59 55.1** | **-1.0** |
| **JYT** | **Yasato** | **3.50** | **38** | *e*P | | **Pn** | **18 59 57.0** | **-0.7** |
| **JHO** | **Hitachi** | **3.98** | **37** | *e*P | | **Pn** | **19 00 01.6** | **-0.9** |
| **SONM** | **Songino Array** | **27.43** | **311** | P | | **P** | **19 04 10.1** | **+1.7** |
| | 0.4nm,0.6s,baz=108,slow=8.2,SNR=2.3 0.4nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **53.21** | **184** | P | | **P** | **19 07 36.4** | **-0.7** |
| | 0.1nm,0.3s,baz=359,slow=7.6,SNR=1.5 0.1nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **56.93** | **184** | P | | **P** | **19 08 02.9** | **-0.4** |
| | 0.4nm,1.0s,baz=11,slow=7.1,SNR=5.6 0.4nm,1.0s | | | | | | | |

**ISC 21 19:03:09.6±1.0, 26°.38N±0°.06×110°.62W±0°.06, h10km, n5, σ0s83/10, 2C-1D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **NE77** | **Loreto B.C.S** | **0.76** | **241** | *e*P | | **Pg** | **19 03 24.7** | **+0.4** |
| NE77 | | | | *e*S | | **Sg** | **19 03 34.5** | **+0.3** |
| NE77 | | | | IAML | | | 19 03 35.9 | |
| | comp=N,394nm,0.9s | | | | | | | |
| NE77 | | | | ⇑*e* | | | 19 03 35.9 | |
| **SNIRB** | **San Nicol¡s** | **0.85** | **281** | *e*P | | **Pg** | **19 03 25.3** | **-0.6** |
| SNIRB | | | | *e*S | | **Sg** | **19 03 36.1** | **-0.8** |
| SNIRB | | | | IAML | | | 19 03 37.7 | |
| | comp=E,551nm,0.3s | | | | | | | |
| SNIRB | | | | ⇓*e* | | | 19 03 37.7 | |
| **UAGRB** | **Rancho Ultima** | **1.00** | **215** | *e*P | | **Pg** | **19 03 28.5** | **-0.3** |
| UAGRB | | | | *e*S | | **Sg** | **19 03 41.7** | **-0.1** |
| **CDOB** | **Cd. Obregon** | **1.12** | **23** | *e*P | | **Pb** | **19 03 32.0** | **+1.0** |
| CDOB | | | | *e*S | | **Sn** | **19 03 47.5** | **+0.8** |
| **NE80** | **Navojoa** | **1.35** | **67** | *e*P | | **Pn** | **19 03 34.1** | **-0.4** |
| NE80 | | | | *e*S | | **Sb** | **19 03 51.1** | **-1.2** |
| NE80 | | | | IAML | | | 19 03 56.9 | |
| | comp=N,322nm,0.2s | | | | | | | |
| NE80 | | | | ⇑*e* | | | 19 03 56.9 | |

*DJA **21** 19:38:15.8±0.2, 4°.S±3°×12°.9E±°, h106km±4km, M4.2/11, mb4.3/6, MLv4.1/11*
*NEIC **21** 19:38:15.2±1.9, 4°.08S±0°.09×129°.17E±0°.06, h101km±11km, mb4.2/8, Error ellipse: s-maj=12.6km s-min=7.4km az=196.0*
*IDC **21** 19:38:17.1±7.8, 3°.99S×129°.27E, h124km±71km, mb3.5/6, mbtmp4.0/8, Error ellipse: s-maj=86.8km s-min=18.0km az=59.0*

**ISC 21 19:38:14.7±0.6, 4°.02S±0°.06×129°.24E±0°.05, h100km, n47, σ1s91/49, mb3.6/5, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **0.74** | **335** | P | | **Pn** | **19 38 33.8** | **+1.3** |
| MSAI | | | | S | | **Sn** | **19 38 46.2** | **+0.4** |
| **BNDI** | **Bandanaira** | **0.83** | **127** | P | | **Pn** | **19 38 36.9** | **+3.6** |
| **BNDI** | **Bandanaira** | **0.83** | **127** | P | | **Pn** | **19 38 36.8** | **+3.5** |
| **NLAI** | **Namlea** | **2.27** | **290** | P | | **Pn** | **19 38 52.8** | **+2.0** |
| **FAKI** | **Fak Fak** | **3.20** | **70** | P | | **Pn** | **19 39 05.5** | **+2.4** |
| **FAKI** | **Fak Fak** | **3.20** | **70** | | | **Pn** | **19 39 05.3** | **+2.2** |
| FAKI | | | | Sn | | **Sn** | **19 39 39.3** | **-1.2** |
| **FAKI** | **Fak Fak** | **3.20** | **70** | P | | **Pn** | **19 39 05.4** | **+2.4** |
| **SWI** | **Sorong** | **3.73** | **33** | P | | **Pn** | **19 39 10.6** | **+0.3** |
| **SANI** | **Sanana** | **3.79** | **301** | P | | **Pn** | **19 39 11.2** | **+0.2** |
| **SANI** | **Sanana** | **3.79** | **301** | P | | **Pn** | **19 39 10.7** | **-0.3** |
| **SAUI** | **Saumlaki** | **4.44** | **153** | Pn | | **Pn** | **19 39 19.2** | **-0.6** |
| **KMPI** | **Kaimana, Papua** | **4.47** | **86** | P | | **Pn** | **19 39 22.0** | **+1.8** |
| KMPI | | | | S | | **Sn** | **19 40 09.3** | **-1.9** |
| **TNTI** | **Ternate** | **5.12** | **339** | P | | **Pn** | **19 39 30.2** | **+1.2** |
| **TNTI** | **Ternate** | **5.12** | **339** | | | **Pn** | **19 39 29.8** | **+0.9** |
| **TNTI** | **Ternate** | **5.12** | **339** | P | | **Pn** | **19 39 29.9** | **+0.9** |
| **KAPI** | **Kappang** | **9.51** | **264** | Pn | | **Pn** | **19 40 28.4** | **-0.3** |
| **KAPI** | **Kappang** | **9.51** | **264** | P | | **Pn** | **19 40 32.3** | **+3.5** |
| | 5.0nm,0.5s,baz=112,slow=5.4,SNR=2.1 | | | | | | | |
| **KNRA** | **Kununurra** | **11.59** | **182** | Pn | | **Pn** | **19 40 56.4** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **14.43** | **194** | Pn | | Pn | 19 41 28.6 | -5.6 |
| **JAGI** | **Jajag, Banyuwa** | **15.63** | **253** | P | | **Pn** | **19 41 49.4** | **-0.1** |
| **WB0** | **Warramunga Arr** | **16.44** | **163** | | | **Pn** | **19 41 58.8** | **-0.7** |
| **WRAB** | **Tennant Creek** | **16.58** | **163** | P | | **Pn** | **19 42 01.3** | **0.0** |
| WRAB | | | | IAmb | | IAmb | 19 42 04.0 | |
| | comp=Z,5.3nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.59** | **163** | P | | **P** | **19 42 03.0** | **+0.9** |
| | comp=Z,3.2nm,0.4s,baz=343,slow=12,SNR=53 | | | | | | | |
| WRA | | | | S | | **Sn** | **19 44 56.6** | **-8.9** |
| | comp=Z,0.2nm,0.6s,baz=358,slow=23,SNR=1.3 | | | | | | | |
| **WB2** | **Warramunga Arr** | **16.59** | **163** | | | **Pn** | **19 42 01.5** | **+0.1** |
| **COEN** | **Coen** | **16.93** | **127** | P | | **P** | **19 42 07.2** | **+1.3** |
| **COEN** | **Coen** | **16.93** | **127** | | | **Pn** | **19 42 05.6** | **+0.1** |
| COEN | | | | IAmb | | IAmb | 19 42 31.8 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **NGJI** | **Ngawi** | **18.00** | **259** | P | | **Pn** | **19 42 18.3** | **-0.2** |
| | comp=Z,24nm,1.1s | | | | | | | |
| **QIS** | **Mount Isa** | **19.29** | **149** | P | | **P** | **19 42 33.1** | **+1.3** |
| **AS31** | **Alice Springs** | **20.04** | **167** | | | Pn | 19 42 41.5 | -1.1 |
| AS31 | | | | IAmb | | IAmb | 19 42 41.7 | |
| | comp=Z,5.7nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **20.04** | **167** | | | **P** | **19 42 40.7** | **+0.7** |
| **ASAR** | **Alice Springs** | **20.04** | **167

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **3.50** | **187** | P | **Pn** | **20 17 12.8** | **+3.0** |
| **MXZ** | **Matakaoa Point** | **3.50** | **187** | Pn | **Pn** | **20 17 11.1** | **+1.3** |
| MXZ | | | | Sn | **Sn** | **20 17 55.4** | **+1.8** |
| **KUZ** | **Kuaotunu** | **3.69** | **223** | P | Pn | 20 17 18.1 | +6.0 |
| **HAZ** | **Te Kaha** | **3.77** | **193** | P | **Pn** | **20 17 16.0** | **+2.9** |
| HAZ | | | | S | **Sn** | **20 18 00.9** | **+1.5** |
| **PKGZ** | **Pakihiroa** | **3.83** | **189** | P | **Pn** | **20 17 17.0** | **+3.1** |
| PKGZ | | | | S | **Sn** | **20 18 02.9** | **+2.1** |
| **RUGZ** | **Raukumara Rang** | **3.99** | **194** | P | **Pn** | **20 17 18.8** | **+2.8** |
| **WCZ** | **Waipu Caves** | **4.14** | **242** | P | Pn | 20 17 23.9 | +6.2 |
| **TWGZ** | **Tauwhareparae** | **4.15** | **190** | P | **Pn** | **20 17 20.6** | **+2.8** |
| TWGZ | | | | S | **Sn** | **20 18 10.7** | **+2.8** |
| **OPRZ** | **Ohinepanea** | **4.19** | **206** | P | Pn | 20 17 23.1 | +4.7 |
| **MWZ** | **Matawai** | **4.38** | **194** | P | **Pn** | **20 17 23.2** | **+2.5** |
| MWZ | | | | S | **Sn** | **20 18 13.6** | **+0.5** |
| **URZ** | **Urewera** | **4.40** | **198** | P | **Pn** | **20 17 23.4** | **+2.4** |
| **URZ** | **Urewera** | **4.40** | **198** | P | **Pn** | **20 17 22.9** | **+1.9** |
| | 27nm,0.3s,baz=341,slow=4.7,SNR=82 | | | | | | |
| URZ | | | | S | **Sn** | **20 18 13.9** | **+0.3** |
| | 135nm,0.4s,baz=357,slow=16,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **4.40** | **198** | P | **Pn** | **20 17 23.2** | **+2.3** |
| URZ | | | | S | **Sn** | **20 18 13.3** | **-0.3** |
| **CNGZ** | **Carnagh Statio** | **4.42** | **187** | P | **Pn** | **20 17 23.5** | **+2.3** |
| **TKGZ** | **Te Karaka** | **4.42** | **190** | P | **Pn** | **20 17 23.4** | **+2.2** |
| TKGZ | | | | S | **Sn** | **20 18 14.8** | **+0.7** |
| **OUZ** | **Omahuta** | **4.48** | **254** | P | Pn | 20 17 28.1 | +6.0 |
| **OUZ** | **Omahuta** | **4.48** | **254** | P | Pn | 20 17 27.7 | +5.6 |
| **TOZ** | **Tahuroa Road** | **4.54** | **216** | Pn | Pn | 20 17 28.8 | +6.0 |
| **RAGZ** | **Rawiri** | **4.55** | **194** | P | **Pn** | **20 17 26.0** | **+2.9** |
| **MUGZ** | **Murupara** | **4.70** | **200** | P | **Pn** | **20 17 28.1** | **+3.3** |
| **RIGZ** | **Rimuhau** | **4.70** | **191** | P | **Pn** | **20 17 26.5** | **+1.7** |
| RIGZ | | | | S | **Sn** | **20 18 20.5** | **0.0** |
| **RTZ** | **Ruatahuna** | **4.77** | **198** | | **Pn** | **20 17 27.1** | **+1.4** |
| RTZ | | | | Sn | **Sn** | **20 18 19.9** | **-2.3** |
| **RTZ** | **Ruatahuna** | **4.77** | **198** | P | **Pn** | **20 17 27.9** | **+2.2** |
| **SNGZ** | **Shannon Statio** | **4.84** | **194** | P | **Pn** | **20 17 28.7** | **+2.1** |
| SNGZ | | | | S | **Sn** | **20 18 25.1** | **+1.2** |
| **PRGZ** | **Paritu Road** | **4.89** | **189** | P | **Pn** | **20 17 28.5** | **+1.2** |
| **TLZ** | **Tolley Road** | **5.01** | **211** | P | Pn | 20 17 34.0 | +5.2 |
| **KNZ** | **Kokohu** | **5.02** | **191** | P | **Pn** | **20 17 29.5** | **+0.7** |
| KNZ | | | | S | **Sn** | **20 18 26.4** | **-1.3** |
| **MTHZ** | **Maungataniwha** | **5.03** | **198** | P | **Pn** | **20 17 30.6** | **+1.6** |
| MTHZ | | | | S | **Sn** | **20 18 29.2** | **+1.2** |
| **MHCZ** | **Mahia Peninsul** | **5.12** | **188** | P | **Pn** | **20 17 31.5** | **+1.4** |
| **MRHZ** | **Matea Rd** | **5.13** | **202** | P | **Pn** | **20 17 33.0** | **+2.6** |
| **NMHZ** | **Naumai** | **5.27** | **198** | P | **Pn** | **20 17 33.8** | **+1.7** |
| **ARHZ** | **Aropaoanui** | **5.38** | **196** | P | **Pn** | **20 17 34.9** | **+1.4** |
| **BKZ** | **Black Stump Fm** | **5.42** | **200** | P | **Pn** | **20 17 35.7** | **+1.7** |
| **BKZ** | **Black Stump Fm** | **5.42** | **200** | Pn | **Pn** | **20 17 35.4** | **+1.4** |
| BKZ | | | | Sn | **Sn** | **20 18 37.0** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **5.42** | **200** | P | **Pn** | **20 17 35.4** | **+1.4** |
| **HIZ** | **Hauiti** | **5.47** | **215** | Pn | **Pn** | **20 17 36.2** | **+1.6** |
| **GLKZ** | **Green Lake** | **5.54** | **31** | P | **Pn** | **20 17 35.2** | **-0.4** |
| GLKZ | | | | S | **Sn** | **20 18 38.5** | **-1.2** |
| **MCHZ** | **McNeill Hill** | **5.62** | **197** | P | **Pn** | **20 17 37.6** | **+1.0** |
| **TMVZ** | **Te Maari** | **5.63** | **206** | P | **Pn** | **20 17 40.0** | **+3.3** |
| **ETVZ** | **East Tongariro** | **5.64** | **206** | P | **Pn** | **20 17 39.5** | **+2.5** |
| **NNVZ** | **North Ngauruho** | **5.67** | **206** | P | **Pn** | **20 17 41.1** | **+3.8** |
| **KWHZ** | **Kaweka Forest** | **5.68** | **199** | P | **Pn** | **20 17 38.6** | **+1.2** |
| **OTVZ** | **Oturere** | **5.68** | **206** | P | **Pn** | **20 17 40.3** | **+2.8** |
| **SNVZ** | **South Ngauruho** | **5.71** | **206** | P | **Pn** | **20 17 40.5** | **+2.6** |
| **CKHZ** | **Cape Kidnapper** | **5.74** | **194** | P | **Pn** | **20 17 38.4** | **+0.2** |
| **FWVZ** | **Far West T-bar** | **5.80** | **206** | P | **Pn** | **20 17 41.6** | **+2.5** |
| **MAVZ** | **Matarangi** | **5.81** | **206** | P | **Pn** | **20 17 42.3** | **+3.0** |
| **WHVZ** | **Whangaehu Hut** | **5.81** | **206** | P | **Pn** | **20 17 41.6** | **+2.4** |
| **WNVZ** | **Wahianoa** | **5.85** | **206** | P | **Pn** | **20 17 41.4** | **+1.7** |
| **MOVZ** | **Moawhango** | **5.87** | **204** | P | **Pn** | **20 17 40.3** | **+0.5** |
| **KRHZ** | **Kereru** | **5.90** | **199** | P | **Pn** | **20 17 40.4** | **+0.2** |
| **KAHZ** | **Kahuranaki** | **5.92** | **195** | P | **Pn** | **20 17 40.8** | **+0.4** |
| **PXZ** | **Pawanui** | **6.15** | **194** | P | **Pn** | **20 17 42.6** | **-0.7** |
| **PNHZ** | **Pukenui** | **6.20** | **199** | P | **Pn** | **20 17 43.8** | **-0.2** |
| **WPHZ** | **Waipukurau** | **6.27** | **197** | P | **Pn** | **20 17 46.0** | **+1.0** |
| **PRHZ** | **Porangahau** | **6.42** | **195** | P | **Pn** | **20 17 46.8** | **-0.1** |
| **ANWZ** | **Angora Road** | **6.64** | **196** | P | **Pn** | **20 17 50.3** | **+0.5** |
| **POWZ** | **Post Office Ro** | **6.76** | **200** | P | **Pn** | **20 17 51.7** | **+0.4** |
| **PRWZ** | **Pori Road** | **6.86** | **199** | P | **Pn** | **20 17 52.8** | **+0.3** |
| **BFZ** | **Birch Farm** | **6.91** | **197** | P | **Pn** | **20 17 52.9** | **-0.3** |
| **BFZ** | **Birch Farm** | **6.91** | **197** | | **Pn** | **20 17 51.4** | **-1.8** |
| BFZ | | | | Sn | **Sn** | **20 19 05.8** | **-5.8** |
| **BFZ** | **Birch Farm** | **6.91** | **197** | P | **Pn** | **20 17 52.2** | **-1.0** |
| **MRZ** | **Mangatainoka R** | **7.06** | **201** | | **Pn** | **20 17 53.6** | **-1.6** |
| MRZ | | | | Sn | Sn | 20 19 08.8 | -6.6 |
| **MRZ** | **Mangatainoka R** | **7.06** | **201** | P | **Pn** | **20 17 53.8** | **-1.5** |
| **TIWZ** | **Tintock** | **7.09** | **199** | P | **Pn** | **20 17 55.2** | **-0.3** |
| **CPWZ** | **Castlepoint** | **7.13** | **196** | P | **Pn** | **20 17 55.6** | **-0.5** |
| **HOWZ** | **Holdsworth Sta** | **7.30** | **200** | P | **Pn** | **20 17 56.5** | **-1.8** |
| **OGWZ** | **Otaki Gorge** | **7.33** | **202** | P | **Pn** | **20 17 57.5** | **-1.2** |
| **TMWZ** | **Te Maipa** | **7.39** | **198** | P | **Pn** | **20 17 58.2** | **-1.3** |
| **KIW** | **Kapiti Island** | **7.46** | **204** | P | **Pn** | **20 17 58.9** | **-1.5** |
| **CAW** | **Cannon Point** | **7.63** | **202** | P | **Pn** | **20 18 00.8** | **-1.8** |
| **TRWZ** | **Traveller** | **7.72** | **198** | P | **Pn** | **20 18 01.8** | **-2.0** |
| **PAWZ** | **Paruwai Farm** | **7.78** | **199** | P | **Pn** | **20 18 02.5** | **-2.0** |
| **MSWZ** | **Moikau Station** | **7.86** | **200** | P | **Pn** | **20 18 03.4** | **-2.1** |
| **SNZO** | **South Karori** | **7.93** | **203** | P | **Pn** | **20 18 04.9** | **-1.5** |
| **BHW** | **Baring Head** | **7.96** | **202** | Pn | **Pn** | **20 18 04.1** | **-2.8** |
| **PLWZ** | **Palliser** | **8.00** | **200** | P | Pn | **20 18 05.0** | **-2.4** |
| **TUMZ** | **Tuamarina** | **8.30** | **207** | | Pn | **20 18 08.9** | **-2.4** |
| **QRZ** | **Quartz Range** | **8.40** | **215** | P | Pn | **20 18 12.1** | **-0.5** |
| **QRZ** | **Quartz Range** | **8.40** | **215** | Pn | Pn | **20 18 11.5** | **-1.1** |
| **KHZ** | **Kahutara** | **9.31** | **205** | P | **Pn** | **20 18 22.6** | **-1.8** |
| **GVZ** | **Greta Valley S** | **9.97** | **205** | Pn | **Pn** | **20 18 30.7** | **-2.3** |
| **CTZ** | **Chatham Island** | **10.26** | **161** | P | **Pn** | **20 18 35.0** | **-1.7** |
| **MQZ** | **McQueen's Vall** | **10.75** | **205** | Pn | Pn | 20 18 38.3 | -4.7 |
| **ODZ** | **Otahua Downs** | **12.64** | **208** | P | Pn | 20 19 04.0 | -3.1 |
| **ODZ** | **Otahua Downs** | **12.64** | **208** | Pn | **Pn** | **20 19 04.2** | **-2.8** |
| **JCZ** | **Jackson Bay** | **12.67** | **215** | P | **Pn** | **20 19 04.9** | **-2.6** |
| **WKZ** | **Wanaka** | **13.14** | **212** | Pn | Pn | 20 19 09.9 | -3.4 |
| **KOUNC** | **Koumac, New Ca** | **18.66** | **313** | P | **P** | **20 20 17.8** | **+0.5** |
| **CTA** | **Charters Tower** | **32.05** | **287** | P | **P** | **20 22 24.4** | **+2.1** |
| | 0.4nm,0.7s,baz=117,slow=9.2,SNR=7.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **32.05** | **287** | P | **P** | **20 22 22.2** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 20 22 25.5 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **35.55** | **260** | P | **P** | **20 22 52.9** | **+0.6** |
| BBOO | | | | IAmb | IAmb | 20 23 09.8 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.98** | **293** | P | **P** | **20 23 12.8** | **-0.3** |
| COEN | | | | IAmb | IAmb | 20 23 56.3 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **40.43** | **273** | P | **P** | **20 23 34.0** | **+0.7** |
| **ASAR** | **Alice Springs** | **40.43** | **273** | P | **P** | **20 23 33.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **40.43** | **273** | P | **P** | **20 23 34.3** | **+1.0** |
| | comp=Z,6.4nm,0.7s,baz=115,slow=7.8,SNR=94 | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **41.76** | **278** | P | **P** | **20 23 43.9** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 20 23 45.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.77** | **278** | P | **P** | **20 23 44.1** | **-0.1** |
| **WRA** | **Warramunga Arr** | **41.77** | **278** | P | **P** | **20 23 44.7** | **+0.5** |
| | comp=Z,4.5nm,0.5s,baz=115,slow=8.5,SNR=102 | | | | | | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **42.65** | **260** | P | **P** | **20 23 51.3** | **+0.2** |
| **MTN** | **Manton Dam** | **48.11** | **284** | P | **P** | **20 24 34.5** | **+0.4** |
| MTN | | | | IAmb | IAmb | 20 24 36.6 | |
| | comp=Z,9.9nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **48.50** | **279** | P | **P** | **20 24 38.0** | **+0.9** |
| KNRA | | | | IAmb | IAmb | 20 25 09.7 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **49.84** | **275** | P | **P** | **20 24 48.0** | **+0.7** |
| **QSPA** | **South Pole Qui** | **56.03** | **180** | P | **P** | **20 25 32.1** | **+0.1** |
| **QSPA** | **South Pole Qui** | **56.03** | **180** | P | **P** | **20 25 32.5** | **+0.4** |
| | comp=Z,1.1nm,0.5s,baz=36,slow=14,SNR=27 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **147.55** | **336** | PKPbc | **PKPdf** | **20 35 29.2** | **-1.8** |
| | comp=Z,0.5nm,0.3s,baz=42,slow=4.3,SNR=7.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **149.62** | **278** | PKPbc | **PKPbc** | **20 35 38.9** | **-1.4** |
| | comp=Z,0.4nm,0.4s,baz=96,slow=4.1,SNR=5.7 | | | | | | |

*IDC **21** 20:19:51.3±0.7,23°.72S×176°.51W, h0km, mb3.9/9, mbtmp4.0/10, ML4.2/1, MS3.5/5, Error ellipse: s-maj=26.6km s-min=21.2km az=156.0*
*NEIC **21** 20:19:52.5±2.4,23°.8S±0°.1×176°.3W±0°.1, h10km±1km, mb4.6/17, Error ellipse: s-maj=22.9km s-min=16.9km az=159.0*
**ISC 21 20:20:01.8**±0.7,**23°.9S**±0°.1×**176°.6W**±0°.1,**h82**km,**n51,** σ1ᵖ**38**/37,**mb4.2**/15,**South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **5.42** | **192** | LR | LR | 20 23 17.2 | |
| | comp=Z,705nm,19.2s,baz=322,slow=36 | | | | | | |
| **NIUE** | **Niue** | **7.86** | **53** | | Pn | 20 21 42.3 | -11 |
| **MSVF** | **Nonsavu** | **7.95** | **320** | | Pn | 20 21 59.0 | +4.2 |
| **AFI** | **Afiamalu** | **10.96** | **25** | Pn | Pn | 20 22 25.6 | -10 |
| **PINNC** | **Pines Island,** | **14.73** | **272** | Pn | **Pn** | **20 23 26.1** | **+0.2** |
| **URZ** | **Urewera** | **15.25** | **199** | Pn | **Pn** | **20 23 32.5** | **+0.1** |
| | 1.0nm,0.3s,baz=49,slow=11,SNR=1.8 | | | | | | |
| URZ | | | | Sn | Sn | 20 26 09.4 | -11 |
| | 0.4nm,0.3s,baz=344,slow=20,SNR=1.2 | | | | | | |
| | 8.4nm,0.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.74** | **273** | LR | LR | 20 28 30.9 | |
| | comp=Z,159nm,18.7s,baz=42,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **15.77** | **83** | Pn | Pn | 20 23 30.3 | -8.8 |
| RAR | | | | IAmb | IAmb | 20 23 50.2 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **RAR** | **Rarotonga** | **15.77** | **83** | Pn | Pn | 20 23 30.8 | -8.2 |
| | comp=Z,4.2nm,0.3s,baz=276,slow=9.2,SNR=2.7 | | | | | | |
| RAR | | | | LR | LR | 20 29 52.4 | |
| | comp=Z,44nm,19.4s,baz=283,slow=38 | | | | | | |
| **KHZ** | **Kahutara** | **20.17** | **202** | P | **P** | **20 24 23.8** | **-5.7** |
| KHZ | | | | IAmb | IAmb | 20 24 59.8 | |
| | comp=Z,33nm,1.3s | | | | | | |
| **PPT** | **Papeete** | **26.02** | **81** | LR | LR | 20 35 31.9 | |
| | comp=Z,33nm,18.2s,baz=318,slow=36 | | | | | | |
| **HNR** | **Honiara** | **26.65** | **299** | LR | LR | 20 35 54.0 | |
| | comp=Z,580nm,18.3s,baz=24,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **34.60** | **269** | P | **P** | **20 26 43.3** | **+0.2** |
| | comp=Z,0.5nm,0.8s,baz=110,slow=9.8,SNR=9.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **34.60** | **269** | P | **P** | **20 26 44.6** | **+1.5** |
| CTAO | | | | IAmb | IAmb | 20 26 45.5 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **37.48** | **286** | P | **P** | **20 27 06.4** | **-1.4** |
| **PMG** | **Port Moresby** | **37.48** | **286** | P | **P** | **20 27 07.2** | **-0.5** |
| | comp=Z,20nm,0.7s,baz=113,slow=7.7,SNR=4.2 | | | | | | |
| **STKA** | **Stephens Creek** | **37.61** | **248** | P | **P** | **20 27 08.2** | **-0.5** |
| **STKA** | **Stephens Creek** | **37.61** | **248** | P | **P** | **20 27 09.8** | **+1.1** |
| | comp=Z,3.3nm,1.0s,baz=102,slow=12,SNR=5.8 | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **42.30** | **247** | P | **P** | **20 27 48.5** | **+1.0** |
| BBOO | | | | IAmb | IAmb | 20 28 02.1 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.10** | **260** | P | **P** | **20 28 09.0** | **-1.2** |
| **ASAR** | **Alice Springs** | **45.11** | **260** | P | **P** | **20 28 08.8** | **-1.4** |
| **ASAR** | **Alice Springs** | **45.11** | **260** | P | **P** | **20 28 09.2** | **-1.0** |
| | comp=Z,1.5nm,0.8s,baz=91,slow=7.6,SNR=19 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 29 51.0** | **+1.4** |
| | comp=Z,0.8nm,0.7s,baz=105,slow=4.1,SNR=5.1 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.33** | **265** | P | **P** | **20 28 11.2** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 20 28 19.6 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.51** | **265** | P | **P** | **20 28 12.8** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 20 28 55.1 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.52** | **265** | P | **P** | **20 28 12.9** | **-0.6** |
| | comp=Z,2.6nm,0.8s,baz=102,slow=8.2,SNR=10 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 29 52.4** | **+1.4** |
| | comp=Z,0.7nm,0.7s,baz=99,slow=3.5,SNR=2.6 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **MORW** | **Morawa** | **59.79** | **249** | P | **P** | **20 29 59.4** | **+0.7** |
| **CASY** | **Casey** | **61.45** | **206** | P | **P** | **20 30 09.9** | **+0.7** |
| CASY | | | | IAmb | IAmb | 20 30 11.8 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **TOLI2** | **Tolitoli** | **65.62** | **283** | P | **P** | **20 30 36.6** | **-1.0** |
| TOLI2 | | | | IAmb | IAmb | 20 30 38.0 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.14** | **180** | | **P** | **20 30 41.5** | **+1.2** |
| QSPA | | | | IAmb | IAmb | 20 31 11.5 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.14** | **180** | P | **P** | **20 30 41.7** | **+1.4** |
| | comp=Z,1.4nm,0.8s,baz=69,slow=2.0,SNR=5.8 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **MYLDM** | **Lahad Datu** | **69.50** | **286** | P | **P** | **20 31 01.8** | **-0.2** |
| **JMZ** | **Minamidaito 2** | **70.68** | **311** | P | **P** | **20 31 09.0** | **0.0** |
| **SBUM** | **Sibu** | **73.89** | **280** | | **P** | **20 31 29.0** | **+0.7** |
| **MAW** | **Mawson** | **78.78** | **200** | P | **P** | **20 31 56.8** | **+1.6** |
| | comp=Z,1.7nm,0.8s,baz=96,slow=10,SNR=3.9 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.64** | **42** | P | **P** | **20 32 15.4** | **-1.0** |
| | comp=Z,0.6nm,0.5s,baz=240,slow=8.0,SNR=3.4 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **H03S2** | **Juan Fernandez** | **82.98** | **124** | T | T | 22 03 51.1 | |
| | baz=244,slow=75,SNR=318 | | | | | | |
| **H03S1** | **Juan Fernandez** | **83.00** | **124** | T | T | 22 03 51.1 | |
| | baz=244,slow=75,SNR=445 | | | | | | |
| **H03S3** | **Juan Fernandez** | **83.00** | **124** | T | T | 22 03 48.6 | |
| | baz=244,slow=75,SNR=299 | | | | | | |
| **H03N2** | **Juan Fernandez** | **83.14** | **123** | T | T | 22 04 02.4 | |
| | baz=250,slow=73,SNR=130 | | | | | | |
| **H03N3** | **Juan Fernandez** | **83.14** | **123** | T | T | 22 04 01.1 | |
| | baz=250,slow=73,SNR=144 | | | | | | |
| **H03N1** | **Juan Fernandez** | **83.16** | **123** | T | T | 22 04 03.6 | |
| | baz=250,slow=73,SNR=84 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.82** | **57** | P | **P** | **20 32 42.3** | **-0.1** |
| | comp=Z,0.1nm,0.4s,baz=224,slow=6.3,SNR=2.3 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.48** | **289** | P | **P** | **20 33 05.3** | **+1.1** |
| | comp=Z,0.5nm,0.4s,baz=140,slow=4.7,SNR=1.6 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **122.53** | **319** | PKP | **PKPdf** | **20 38 47.0** | **-0.5** |
| | comp=Z,0.5nm,0.7s,baz=78,slow=1.9,SNR=2.4 | | | | | | |
| **HFS** | **Hagfors** | **143.12** | **351** | PKiKP | PKPpre | 20 39 21.7 | |
| | comp=Z,1.0nm,0.7s,baz=40,slow=12,SNR=2.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.64** | **330** | PKPbc | **PKPbc** | **20 39 33.6** | **-0.2** |
| | comp=Z,3.0nm,0.6s,baz=43,slow=4.0,SNR=8.0 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **148.27** | **7** | PKPbc | **PKiKP** | **20 39 39.1** | **-0.6** |
| | comp=Z,1.0nm,0.7s,baz=12,slow=3.6,SNR=2.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **150.06** | **309** | PKPbc | **PKiKP** | **20 39 44.1** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=112,slow=2.5,SNR=11 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **150.56** | **295** | PKPbc | **PKiKP** | **20 39 45.9** | **+0.7** |
| | comp=Z,2.5nm,0.7s,baz=77,slow=6.2,SNR=10 | | | | | | |
| **GERES** | **GERESS Array B** | **153.85** | **344** | PKPab | **PKPab** | **20 40 03.1** | **-1.7** |
| | comp=Z,0.9nm,0.7s,baz=34,slow=4.2,SNR=6.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.14** | **171** | PKPab | **PKPab** | **20 41 12.8** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=206,slow=3.3,SNR=3.8 | | | | | | |

*IDC **21** 20:26:31.6±7.1,6°.93S×130°.34E, h216km±76km, mb3.1/1, mbtmp3.3/3, Error ellipse: s-maj=110.1km s-min=27.6km az=73.0*
**ISC 21 20:26:31.2**±1.4,**7°.0S**±0°.1×**130°.1E**±0°.2,**h200**km,**n9,** σ1ᵖ**55**/**9**,**Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.53** | **128** | P | **Pn** | **20 27 06.1** | **+0.9** |
| **DRS** | **Darwin Rock St** | **5.42** | **171** | P | **Pn** | **20 27 52.1** | **+1.1** |
| **MTN** | **Manton Dam** | **5.86** | **170** | P | **Pn** | **20 27 57.1** | **+0.4** |
| **KDU** | **Kakadu** | **6.09** | **157** | P | **Pn** | **20 28 00.3** | **+0.7** |
| **SOEI** | **Soe** | **6.35** | **244** | P | Pn | 20 27 57.6 | -5.6 |
| **FITZ** | **Fitzroy Crossi** | **11.81** | **201** | P | Pn | 20 29 10.4 | -3.4 |
| **WRA** | **Warramunga Arr** | **13.48** | **163** | P | **Pn** | **20 29 34.7** | **0.0** |
| | 0.2nm,0.3s,baz=348,slow=12,SNR=1.0 | | | | | | |
| WRA | | | | S | **S** | **20 32 02.2** | **-2.8** |
| | 1.2nm,0.4s,baz=334,slow=23,SNR=1.0 | | | | | | |
| **ASAR** | **Alice Springs** | **16.94** | **168** | P | **P** | **20 30 17.1** | **+1.6** |
| | 0.4nm,0.8s,baz=348,slow=9.1,SNR=1.9 | | | | | | |
| ASAR | | | | S | **S** | **20 33 22.4** | **+0.4** |
| | 0.2nm,0.4s,baz=0.2,slow=30,SNR=1.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.30** | **327** | P | **P** | **20 37 09.7** | **-0.9** |
| | 0.3nm,0.3s,baz=114,slow=8.1,SNR=8.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*IDC **21** 20:29:59.4±8.2, 17°.44S×178°.51W, h530km±84km, mb3.1/4, mbtmp4.0/4, Error ellipse: s-maj=107.7km s-min=34.6km az=150.0*
**ISC 21 20:30:00.8**±1.8,**17°.4S**±0°.6×**178°.6W**±0°.4,**h547**km,**n7,** σ0ᵍ**64**/**9**,**mb3.4**/4,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.57** | **259** | P | **P** | **20 37 24.8** | **0.0** |
| | 0.8nm,0.4s,baz=91,slow=7.7,SNR=24 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 38 55.4** | **-0.6** |
| | 0.4nm,0.8s,baz=90,slow=3.8,SNR=2.8 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | **P** | **20 37 26.5** | **+0.2** |
| | 6.4nm,0.5s,baz=88,slow=8.5,SNR=122 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 38 55.8** | **-0.9** |
| | 0.2nm,0.4s,baz=98,slow=4.0,SNR=2.1 | | | | | | |
| | 6.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.40** | **13** | P | **P** | **20 41 39.5** | **-0.7** |
| | 0.3nm,0.6s,baz=205,slow=4.0,SNR=2.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.85** | **58** | P | **P** | **20 41 43.6** | **+0.3** |
| | 0.3nm,0.5s,baz=212,slow=6.9,SNR=4.0 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.28** | **315** | PKP | **PKPab** | **20 48 36.0** | **+0.7** |
| | 0.2nm,0.5s,baz=54,slow=1.5,SNR=4.8 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.70** | **304** | PKPbc | **PKPbc** | **20 48 39.8** | **+0.4** |
| | 0.3nm,0.3s,baz=72,slow=4.7,SNR=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **147.04** | **345** | PKPbc | **PKPbc** | **20 48 42.9** | **+0.3** |
| | 0.4nm,0.5s,baz=88,slow=8.0,SNR=2.6 | | | | | | |

**IDC 21 20:38:59.6**±5.2,**0°.20S**×**102°.30E**,**h0**km,**mb3.5**/3, **mbtmp3.5**/3,**Error ellipse: s-maj=290.5km s-min=30.2km az=54.0,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **37.00** | **124** | P | P | 20 46 11.7 | +0.4 |
| | 0.7nm,0.7s,baz=304,slow=9.2,SNR=7.8 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **38.53** | **130** | P | P | 20 46 23.6 | -0.6 |
| | 0.6nm,0.5s,baz=301,slow=8.0,SNR=11 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **49.98** | **342** | P | P | 20 47 55.5 | -0.1 |
| | 0.3nm,0.8s,baz=150,slow=6.7,SNR=2.2 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

*JMA **21** 20:46:38.3±0.1,36°.7N±0°.3×140°.6E±0°.5, h90km, MV3.2/36, NORTHERN IBARAKI PREF*
*JMA Felt I J1 at NORTHERN IBARAKI PREF .*
*IDC **21** 20:46:45.9±2.6,36°.62N×139°.11E, h165km±11km, mb2.9/2, mbtmp3.3/2, Error ellipse: s-maj=71.7km s-min=13.4km az=79.0*
**ISC 21 20:46:36.1**±1.2,**36°.72N**±0°.06×**140°.62E**±0°.07,**h104**km±8km, **n15,** σ1ᵖ**64**/**26**,**15D**,**Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.11** | **200** | ⇓P | **Pn** | **20 46 51.0** | **+0.5** |
| JHO | | | | ⇓S | **Sn** | **20 47 00.3** | **-1.0** |
| **JFFD** | **Fukushimafurud** | **0.38** | **353** | ⇓*i*P | **Pn** | **20 46 52.2** | **+0.7** |
| JFFD | | | | ⇓S | **Sn** | **20 47 02.4** | **-0.8** |
| **JHYU** | **Hitachinakayam** | **0.38** | **184** | P | **Pn** | **20 46 52.2** | **+0.7** |
| JHYU | | | | S | **Sn** | **20 47 02.5** | **-0.4** |
| **ONAJ** | **Iwakimizuishiy** | **0.41** | **21** | ⇓*i*P | **Pn** | **20 46 52.5** | **+0.7** |
| ONAJ | | | | ⇓S | **Sn** | **20 47 03.0** | **-0.5** |
| **JFK** | **Kawauchi** | **0.68** | **17** | ⇓*i*P | **Pn** | **20 46 54.7** | **+0.9** |
| JFK | | | | ⇓S | **Sn** | **20 47 06.9** | **-0.1** |
| **JOTO** | **OTAMA OYAMA** | **0.87** | **345** | *i* P | **Pn** | **20 46 56.5** | **+1.0** |
| JOTO | | | | S | **Sn** | **20 47 10.4** | **+0.3** |
| **JAG** | **Ashikaga** | **0.

*GCMT* ***21*** *21:32:02.6±0.1, 10.76N×63.05W, h160km, MW7.3/160, Moment Tensor Solution. s160,c402; s159,c821; Duration: 10s5 Moment tensor: Scale 10²⁰Nm; Mrr0.66±.00; Mθθ-0.54±.00; Mϕϕ-0.11±.00; Mrθ0.64±.00; Mθϕ-0.45±.00; Mϕr-0.17±.00; Best double couple: M₀1.00000×10²⁰ NP1:ϕ₁85.00000°,δ67.00000°, λ118.00000°. NP2:ϕ₂212.00000°,δ35.00000°,λ43.00000°. Principal axes: T 1.0320, Plg59.0000°, Azm34.0000°; N -0.0630, Plg25.0000°, Azm254.0000°; P -0.9680, Plg17.0000°, Azm155.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to surface/mantle waves, cutoff=150s. Triangular moment-rate function*

*NEIC* ***21*** *21:32:14.4, 11.09N×63.03W, h155km, Moment Tensor Solution. Duration: 24s6 Moment tensor: Scale 10²⁰Nm; Mrr0.75; Mθθ-0.62; Mϕϕ-0.13; Mrθ0.72; Mθϕ-0.42; Mϕr-0.11; Fault plane solution: M₀1.09000×10²⁰ NP1: ϕs218.23000°,δ31.50000°,λ48.79000°. NP2:ϕ₂83.99000°, δ66.85000°,λ111.98000°. Principal axes: T 1.1195, Plg62.0000°, Azm28.0000°; N -0.0561, Plg20.0000°, Azm255.0000°; P -1.0633, Plg19.0000°, Azm158.0000°;*

**ISC 21 21:31:42.5±0.3, 10.72N±0.02×62.90W±0.02, h120km±2km, h120km:pP-P,n2643,σ2s19/3483,mb6.9/487,288C-173D, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.47** | **92** | *eP* | | **Pn** | | **21 32 05.5** | **-4.2** |
| **GRFF** | **Grenada Fort F** | **1.75** | **41** | *eP* | | **Pn** | | **21 32 10.7** | **-2.2** |
| **PCRV** | **Puerto La Cruz** | **1.79** | **253** | ⇑*iP* | | | | **21 32 12.3** | **-1.2** |
| **PCRV** | **Puerto La Cruz** | **1.79** | **253** | *eP* | | **Pn** | | **21 32 11.1** | **-2.4** |
| PCRV | | | | *eS* | | **Sn** | | **21 32 33.2** | **-3.9** |
| **PCRV** | **Puerto La Cruz** | **1.79** | **253** | ⇑*eP* | | **Pn** | | **21 32 11.5** | **-2.0** |
| PCRV | | | | *eS* | | **Sn** | | **21 32 33.5** | **-3.5** |
| **PCRV** | **Puerto La Cruz** | **1.79** | **253** | P | | **Pn** | | **21 32 13.2** | **-0.3** |
| | 32μm,0.6s,baz=58,slow=12,SNR=1511 | | | | | | | | |
| PCRV | | | | S | | **Sn** | | **21 32 38.8** | **+1.7** |
| | 137μm,0.4s,baz=59,slow=17,SNR=9.2 | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **1.79** | **253** | *eP* | | **Pn** | | **21 32 12.2** | **-1.3** |
| **TBH** | **Brigand Hill** | **1.82** | **97** | *eP* | | **Pn** | | **21 32 09.2** | **-4.5** |
| **GRGR** | **Grenville** | **1.86** | **41** | Pn | | **Pn** | | **21 32 10.7** | **-3.7** |
| **GRGR** | **Grenville** | **1.86** | **41** | | | **Pn** | | **21 32 14.8** | **+0.5** |
| **GRGR** | **Grenville** | **1.86** | **41** | ⇓P | | **Pn** | | **21 32 10.8** | **-3.5** |
| **GRGR** | **Grenville** | **1.86** | **41** | *eP* | | **Pn** | | **21 32 10.9** | **-3.5** |
| **GRW** | **Mount Saint Ca** | **1.88** | **40** | *e* | | **Pn** | | **21 32 11.2** | **-3.5** |
| **GRW** | **Mount Saint Ca** | **1.88** | **40** | *eP* | | **Pn** | | **21 32 12.6** | **-2.0** |
| **GRHS** | **Sauteurs** | **1.94** | **39** | *eP* | | **Pn** | | **21 32 12.2** | **-3.1** |
| **GRSS** | **Sisters** | **2.02** | **39** | *eP* | | **Pn** | | **21 32 14.6** | **-1.6** |
| **GRIC** | **Isle de Caille** | **2.02** | **39** | *eP* | | **Pn** | | **21 32 13.7** | **-2.6** |
| **TPR** | **Prospect** | **2.14** | **77** | *eP* | | **Pn** | | **21 32 13.4** | **-4.3** |
| **GCMP** | **Grenada, Carri** | **2.28** | **39** | *eP* | | **Pn** | | **21 32 17.3** | **-2.2** |
| **SVOC** | **Richmond Hill,** | **2.93** | **34** | *eP* | | **Pn** | | **21 32 24.4** | **-3.5** |
| **SVT** | **Saint Vincent** | **2.93** | **33** | *eP* | | **Pn** | | **21 32 24.4** | **-3.5** |
| **SVB** | **Belmont** | **3.01** | **32** | *eP* | | **Pn** | | **21 32 26.5** | **-2.5** |
| **SVS** | **Soufriere Volc** | **3.07** | **32** | *eP* | | **Pn** | | **21 32 27.4** | **-2.4** |
| **SSV** | **Crater Summit** | **3.09** | **33** | *eP* | | **Pn** | | **21 32 27.6** | **-2.4** |
| **SLDE** | **Delcer** | **3.56** | **30** | *eP* | | **Pn** | | **21 32 34.4** | **-1.8** |
| **SLB** | **Belfond** | **3.59** | **30** | *eP* | | **Pn** | | **21 32 33.8** | **-2.8** |
| **MERV** | **Las Mercedes** | **3.65** | **247** | *eP* | | **Pn** | | **21 32 36.1** | **-1.3** |
| MERV | | | | *eS* | | **Sn** | | **21 33 15.9** | **-4.1** |
| **MERV** | **Las Mercedes** | **3.65** | **247** | ⇓*eP* | | **Pn** | | **21 32 36.1** | **-1.3** |
| MERV | | | | *eS* | | **Sn** | | **21 33 15.3** | **-4.6** |
| **MERV** | **Las Mercedes** | **3.65** | **247** | *eP* | | **Pn** | | **21 32 36.1** | **-1.3** |
| MERV | | | | *eS* | | **Sn** | | **21 33 16.1** | **-3.9** |
| **SLAC** | **Saint Lucia, A** | **3.72** | **32** | *eP* | | **Pn** | | **21 32 35.3** | **-3.1** |
| **SLBI** | **Saint Lucia, B** | **3.79** | **30** | *eP* | | **Pn** | | **21 32 35.8** | **-3.5** |
| **SLW** | **Petit Monier** | **3.80** | **30** | *eP* | | **Pn** | | **21 32 35.4** | **-4.1** |
| **FUNV** | **FUNVISIS** | **3.85** | **267** | *eP* | | **Pn** | | **21 32 40.0** | **-0.3** |
| FUNV | | | | *eS* | | **Sn** | | **21 33 22.9** | **-2.0** |
| **FUNV** | **FUNVISIS** | **3.85** | **267** | ⇓*eP* | | **Pn** | | **21 32 40.0** | **-0.3** |
| FUNV | | | | *eS* | | **Sn** | | **21 33 22.6** | **-2.3** |
| **FUNV** | **FUNVISIS** | **3.85** | **267** | ⇓*eP* | | **Pn** | | **21 32 40.0** | **-0.3** |
| FUNV | | | | *eS* | | **Sn** | | **21 33 22.6** | **-2.3** |
| **BCHC** | **Barbados, Cave** | **4.00** | **53** | *eP* | | **Pn** | | **21 32 38.7** | **-3.4** |
| **BBGH** | **Gun Hill** | **4.06** | **53** | | | **Pn** | | **21 32 40.7** | **-2.3** |
| **BBGH** | **Gun Hill** | **4.06** | **53** | Pn | | **Pn** | | **21 32 44.9** | **+2.0** |
| **BBGH** | **Gun Hill** | **4.06** | **53** | ⇑P | | **Pn** | | **21 32 42.2** | **-0.7** |
| **BBGH** | **Gun Hill** | **4.06** | **53** | *eP* | | **Pn** | | **21 32 41.9** | **-1.1** |
| **BBGH** | **Gun Hill** | **4.06** | **53** | *eP* | | **Pn** | | **21 32 41.9** | **-1.1** |
| **TACV** | **Tcata** | **4.10** | **262** | ⇓*eP* | | **Pn** | | **21 32 42.3** | **-1.2** |
| **TACV** | **Tcata** | **4.10** | **262** | *eP* | | **Pn** | | **21 32 42.6** | **-0.9** |
| **BIM** | **Bigot** | **4.18** | **25** | | | **Pn** | | **21 32 41.9** | **-2.7** |
| **BIM** | **Bigot** | **4.18** | **25** | Pn | | **Pn** | | **21 32 45.7** | **+1.1** |
| **BIM** | **Bigot** | **4.18** | **25** | *eP* | | **Pn** | | **21 32 43.0** | **-1.5** |
| **H05S1** | **Guadeloupe/Mar** | **4.20** | **28** | P | | **Pn** | | **21 32 48.6** | **+3.8** |
| H05S1 | | | | S | | **Sn** | | **21 33 35.2** | **+2.1** |
| **MPOM** | **Morne Pois Mar** | **4.21** | **28** | | | **Pn** | | **21 32 42.2** | **-2.6** |
| **MPOM** | **Morne Pois Mar** | **4.21** | **28** | Pn | | **Pn** | | **21 32 46.1** | **+1.2** |
| **FDF** | **Fort de France** | **4.34** | **23** | | | **Pn** | | **21 32 44.3** | **-2.5** |
| **FDF** | **Fort de France** | **4.34** | **23** | Pn | | **Pn** | | **21 32 48.9** | **+2.1** |
| **FDF** | **Fort de France** | **4.34** | **23** | ⇑P | | **Pn** | | **21 32 44.1** | **-2.6** |
| **SVN** | **Savane Anatole** | **4.44** | **22** | | | **Pn** | | **21 32 45.5** | **-2.5** |
| **SVN** | **Savane Anatole** | **4.44** | **22** | Pn | | **Pn** | | **21 32 50.1** | **+2.1** |
| **SVN** | **Savane Anatole** | **4.44** | **22** | *eP* | | **Pn** | | **21 32 44.8** | **-3.2** |
| **ILAM** | **Ilet Lapin Mar** | **4.49** | **26** | | | **Pn** | | **21 32 46.3** | **-2.4** |
| **ILAM** | **Ilet Lapin Mar** | **4.49** | **26** | Pn | | **Pn** | | **21 32 50.3** | **+1.6** |
| **BENV** | **Beln** | **4.69** | **261** | *eP* | | **Pn** | | **21 32 50.5** | **-0.8** |
| BENV | | | | *eS* | | **Sn** | | **21 33 41.2** | **-3.6** |
| **BENV** | **Beln** | **4.69** | **261** | ⇑*eP* | | **Pn** | | **21 32 50.6** | **-0.8** |
| BENV | | | | *eS* | | **Sn** | | **21 33 41.0** | **-3.8** |
| **CACV** | **CAICARA DEL OR** | **4.77** | **229** | ⇑*iP* | | Pn | | 21 32 45.1 | -7.3 |
| CACV | | | | *eS* | | Sn | | 21 33 33.2 | -13 |
| **CACV** | **CAICARA DEL OR** | **4.77** | **229** | ⇑*eP* | | Pn | | 21 32 45.2 | -7.2 |
| CACV | | | | *eS* | | Sn | | 21 33 31.5 | -15 |
| **CACV** | **CAICARA DEL OR** | **4.77** | **229** | ⇑*eP* | | Pn | | 21 32 45.2 | -7.2 |
| CACV | | | | *eS* | | Sn | | 21 33 32.6 | -14 |
| **TURV** | **Turiamo** | **4.87** | **267** | ⇓*eP* | | **Pn** | | **21 32 52.3** | **-1.4** |
| TURV | | | | *eS* | | **Sn** | | **21 33 45.8** | **-3.2** |
| **TURV** | **Turiamo** | **4.87** | **267** | *eP* | | **Pn** | | **21 32 52.1** | **-1.5** |
| TURV | | | | *eS* | | **Sn** | | **21 33 45.0** | **-4.1** |
| **TURV** | **Turiamo** | **4.87** | **267** | *eP* | | **Pn** | | **21 32 52.9** | **-0.8** |
| TURV | | | | *eS* | | **Sn** | | **21 33 45.5** | **-3.5** |
| **LUEV** | **Luepa** | **5.04** | **164** | ⇓*iP* | | **Pn** | | **21 32 51.6** | **-4.6** |
| LUEV | | | | *eS* | | Sn | | 21 33 43.5 | -10 |
| **LUEV** | **Luepa** | **5.04** | **164** | ⇓*iP* | | **Pn** | | **21 32 51.6** | **-4.6** |
| LUEV | | | | *eS* | | Sn | | 21 33 42.2 | -11 |
| **LUEV** | **Luepa** | **5.04** | **164** | ⇓*eP* | | **Pn** | | **21 32 51.7** | **-4.6** |
| LUEV | | | | *eS* | | Sn | | 21 33 42.0 | -12 |
| **TBG** | **Guadaloupe-3** | **5.25** | **13** | *eP* | | **Pn** | | **21 32 54.5** | **-4.4** |
| **BAUV** | **El Baul** | **5.37** | **251** | | | **Pn** | | **21 32 57.9** | **-2.5** |
| **BAUV** | **El Baul** | **5.37** | **251** | Pn | | **Pn** | | **21 33 01.9** | **+1.5** |
| **BAUV** | **El Baul** | **5.37** | **251** | ⇓*eP* | | **Pn** | | **21 32 57.9** | **-2.5** |
| BAUV | | | | *eS* | | **Sn** | | **21 33 56.5** | **-4.7** |
| **BAUV** | **El Baul** | **5.37** | **251** | ⇑*eP* | | **Pn** | | **21 32 58.0** | **-2.4** |
| BAUV | | | | *eS* | | **Sn** | | **21 33 56.2** | **-5.0** |
| **BAUV** | **El Baul** | **5.37** | **251** | ⇑*eP* | | **Pn** | | **21 32 58.3** | **-2.1** |
| BAUV | | | | *eS* | | **Sn** | | **21 33 55.8** | **-5.3** |
| **BAUV** | **El Baul** | **5.37** | **251** | *eP* | | **Pn** | | **21 32 58.8** | **-1.6** |
| **MAGL** | **Barre de l'ile** | **5.44** | **17** | | | **Pn** | | **21 33 00.7** | **-0.7** |
| **MAGL** | **Barre de l'ile** | **5.44** | **17** | Pn | | **Pn** | | **21 33 03.9** | **+2.5** |
| **CBE** | **Ff, Capester** | **5.47** | **13** | | | **Pn** | | **21 33 00.2** | **-1.7** |
| **CBE** | **Ff, Capester** | **5.47** | **13** | Pn | | **Pn** | | **21 33 03.7** | **+1.8** |
| **MAPV** | **Macapo** | **5.54** | **261** | *eP* | | **Pn** | | **21 33 01.5** | **-1.3** |
| MAPV | | | | *eS* | | **Sn** | | **21 34 01.7** | **-3.7** |
| **MAPV** | **Macapo** | **5.54** | **261** | ⇑*eP* | | **Pn** | | **21 33 01.6** | **-1.3** |
| MAPV | | | | *eS* | | **Sn** | | **21 34 00.6** | **-4.9** |
| **GDHS** | **Morne Mazeau,** | **5.63** | **11** | | | **Pn** | | **21 33 02.1** | **-2.0** |
| **GDHS** | **Morne Mazeau,** | **5.63** | **11** | Pn | | **Pn** | | **21 33 05.7** | **+1.6** |
| **JACV** | **Jacura** | **5.84** | **274** | *eP* | | **Pn** | | **21 33 05.9** | **-0.9** |
| JACV | | | | *eS* | | **Sn** | | **21 34 06.8** | **-5.7** |
| **JACV** | **Jacura** | **5.84** | **274** | *eP* | | **Pn** | | **21 33 06.6** | **-0.2** |
| JACV | | | | *eS* | | **Sn** | | **21 34 08.4** | **-4.2** |
| **JACV** | **Jacura** | **5.84** | **274** | ⇑*eP* | | **Pn** | | **21 33 06.0** | **-0.9** |
| JACV | | | | *eS* | | **Sn** | | **21 34 08.0** | **-4.6** |
| **GDSD** | **La Dsirade Is** | **5.84** | **18** | Pn | | **Pn** | | **21 33 04.9** | **-2.0** |
| **GDSD** | **La Dsirade Is** | **5.84** | **18** | Pn | | **Pn** | | **21 33 08.0** | **+1.1** |
| **H05N1** | **Guadeloupe/Mar** | **5.85** | **18** | P | | **Pn** | | **21 33 05.8** | **-1.2** |
| **ABD** | **La Joyeuse, An** | **5.89** | **13** | | | **Pn** | | **21 33 06.1** | **-1.3** |
| **ABD** | **La Joyeuse, An** | **5.89** | **13** | Pn | | **Pn** | | **21 33 09.2** | **+1.7** |
| **MBWH** | | **6.03** | **6** | *eP* | | **Pn** | | **21 33 07.5** | **-1.9** |
| **MBFL** | **Flemmings, Mon** | **6.04** | **6** | *eP* | | **Pn** | | **21 33 08.0** | **-1.5** |
| **HATO** | **Hato, Curacao** | **6.12** | **284** | | | **Pn** | | **21 33 10.1** | **-0.4** |
| **HATO** | **Hato, Curacao** | **6.12** | **284** | Pn | | **Pn** | | **21 33 13.2** | **+2.7** |
| **TEPV** | **Terepaima** | **6.24** | **264** | *eP* | | **Pn** | | **21 33 10.9** | **-1.3** |
| TEPV | | | | *eS* | | **Sn** | | **21 34 16.4** | **-5.9** |
| **TEPV** | **Terepaima** | **6.24** | **264** | *eP* | | **Pn** | | **21 33 11.2** | **-1.0** |
| TEPV | | | | *eS* | | **Sn** | | **21 34 17.0** | **-5.3** |
| **TEPV** | **Terepaima** | **6.24** | **264** | *eP* | | **Pn** | | **21 33 11.2** | **-1.0** |
| TEPV | | | | *eS* | | **Sn** | | **21 34 16.6** | **-5.6** |
| **ANBD** | **Bethesda, Anti** | **6.39** | **10** | *eP* | | **Pn** | | **21 33 11.5** | **-2.8** |
| **SKOC** | **St. Kitts, UWI** | **6.54** | **1** | *eP* | | **Pn** | | **21 33 19.3** | **+3.0** |
| **SKI** | **Saint Kitts** | **6.58** | **1** | *eP* | | **Pn** | | **21 33 15.8** | **-1.1** |
| **SEUS** | **St. Eustatius** | **6.74** | **359** | | | **Pn** | | **21 33 17.4** | **-1.6** |
| **SEUS** | **St. Eustatius** | **6.74** | **359** | Pn | | **Pn** | | **21 33 21.5** | **+2.6** |
| **SABA** | **Saba** | **6.87** | **357** | | | **Pn** | | **21 33 19.8** | **-1.0** |
| **SABA** | **Saba** | **6.87** | **357** | Pn | | **Pn** | | **21 33 23.3** | **+2.5** |
| **ANWB** | **Willy Bob** | **7.00** | **9** | | | **Pn** | | **21 33 21.4** | **-1.0** |
| **ANWB** | **Willy Bob** | **7.00** | **9** | Pn | | **Pn** | | **21 33 24.2** | **+1.8** |
| **ANWB** | **Willy Bob** | **7.00** | **9** | ⇓P | | **Pn** | | **21 33 21.0** | **-1.5** |
| **ANWB** | **Willy Bob** | **7.00** | **9** | *eP* | | **Pn** | | **21 33 20.9** | **-1.5** |
| **AUA1** | **Aruba** | **7.19** | **285** | | | **Pn** | | **21 33 24.0** | **-1.1** |
| **AUA1** | **Aruba** | **7.19** | **285** | Pn | | **Pn** | | **21 33 28.1** | **+3.1** |
| **SMRT** | **St. Maarten** | **7.29** | **359** | Pn | | **Pn** | | **21 33 25.6** | **-0.9** |
| **SMRT** | **St. Maarten** | **7.29** | **359** | Pn | | **Pn** | | **21 33 28.4** | **+1.9** |
| **SDV** | **Santo Domingo** | **7.84** | **257** | Pn | | **Pn** | | **21 33 34.9** | **+0.8** |
| **SDV** | **Santo Domingo** | **7.84** | **257** | P | | **Pn** | | **21 33 31.6** | **-2.4** |
| | 2μm,0.5s,baz=81,slow=13,SNR=171 | | | | | | | | |
| SDV | | | | P3KPbc | | | | 22 10 48.2 | |
| | 11nm,0.9s,baz=334,slow=4.8,SNR=3.9 | | | | | | | | |
| **SDV** | **Santo Domingo** | **7.84** | **257** | *eP* | | **Pn** | | **21 33 31.4** | **-2.6** |
| **IGPR** | **InterUniversit** | **7.85** | **337** | | | **Pn** | | **21 33 31.6** | **-2.4** |
| **IGPR** | **InterUniversit** | **7.85** | **337** | Pn | | **Pn** | | **21 33 36.1** | **+2.1** |
| **PDPR** | **Patillas Dam,** | **7.87** | **338** | | | **Pn** | | **21 33 31.6** | **-2.6** |
| **PDPR** | **Patillas Dam,** | **7.87** | **338** | Pn | | **Pn** | | **21 33 35.0** | **+0.8** |
| **HUMP** | **Col San Antoni** | **7.92** | **339** | | | **Pn** | | **21 33 32.5** | **-2.5** |
| **HUMP** | **Col San Antoni** | **7.92** | **339** | Pn | | **Pn** | | **21 33 36.0** | **+1.1** |
| **OBIP** | **Obispado Ponce** | **8.12** | **334** | | | **Pn** | | **21 33 35.8** | **-1.8** |
| **OBIP** | **Obispado Ponce** | **8.12** | **334** | Pn | | **Pn** | | **21 33 38.8** | **+1.1** |
| **CELP** | **Cerrillos** | **8.14** | **334** | | | **Pn** | | **21 33 36.2** | **-1.7** |
| **CELP** | **Cerrillos** | **8.14** | **334** | Pn | | **Pn** | | **21 33 39.1** | **+1.2** |
| **GCPR** | **Guaynabo City** | **8.15** | **338** | | | **Pn** | | **21 33 37.3** | **-0.8** |
| **GCPR** | **Guaynabo City** | **8.15** | **338** | Pn | | **Pn** | | **21 33 41.1** | **+2.9** |
| **SOCV** | **Socops** | **8.21** | **254** | *eP* | | **Pn** | | **21 33 35.9** | **-3.1** |
| SOCV | | | | *eS* | | Sn | | 21 34 59.9 | -10 |
| **SOCV** | **Socops** | **8.21** | **254** | *eP* | | **Pn** | | **21 33 36.8** | **-2.2** |
| SOCV | | | | *eS* | | Sn | | 21 35 00.8 | -9.3 |
| **MLPR** | **Magueyes Islan** | **8.25** | **331** | Pn | | **Pn** | | **21 33 41.6** | **+2.2** |
| **CRPR** | **Cabo Rojo, PR** | **8.32** | **331** | | | **Pn** | | **21 33 40.1** | **-0.2** |
| **CRPR** | **Cabo Rojo, PR** | **8.32** | **331** | Pn | | **Pn** | | **21 33 44.0** | **+3.7** |
| **UUPR** | **Utuado, UPR, P** | **8.36** | **334** | | | **Pn** | | **21 33 40.2** | **-0.7** |
| **UUPR** | **Utuado, UPR, P** | **8.36** | **334** | Pn | | **Pn** | | **21 33 42.4** | **+1.5** |
| **AOPR** | **Arecibo Observ** | **8.46** | **334** | | | **Pn** | | **21 33 40.6** | **-1.6** |
| **AOPR** | **Arecibo Observ** | **8.46** | **334** | Pn | | **Pn** | | **21 33 43.7** | **+1.5** |
| **AOPR** | **Arecibo Observ** | **8.46** | **334** | *eP* | | **Pn** | | **21 33 40.9** | **-1.3** |
| **EMPR** | **Esperanza - Ma** | **8.48** | **336** | | | **Pn** | | **21 33 41.5** | **-1.0** |
| **EMPR** | **Esperanza - Ma** | **8.48** | **336** | Pn | | **Pn** | | **21 33 44.9** | **+2.4** |
| **PRSN** | **Puerto Rico Se** | **8.52** | **332** | | | **Pn** | | **21 33 41.5** | **-1.5** |
| **PRSN** | **Puerto Rico Se** | **8.52** | **332** | Pn | | **Pn** | | **21 33 45.0** | **+2.0** |
| **BOAV** | **Boa Vista** | **8.60** | **164** | | | Pn | | 21 33 39.3 | -4.8 |
| **BOAV** | **Boa Vista** | **8.60** | **164** | Pn | | **Pn** | | **21 33 43.7** | **-0.4** |
| **BOAV** | **Boa Vista** | **8.60** | **164** | *eP* | | Pn | | 21 33 38.8 | -5.3 |
| **AGPR** | **Aguadilla, PR** | **8.72** | **333** | Pn | | **Pn** | | **21 33 47.6** | **+1.9** |
| **URI** | **Uribia** | **8.97** | **277** | *iP* | | **Pn** | | **21 33 48.5** | **-0.7** |
| URI | | | | IVmB_BB | | | | 21 34 17.3 | |
| | comp=Z,120μm,1.0s | | | | | | | | |
| URI | | | | *i* S | | **Sn** | | **21 35 31.8** | **+3.2** |
| **PCDR** | **Punta Cana, DR** | **9.39** | **326** | Pn | | **Pn** | | **21 33 53.6** | **-1.2** |
| **PCDR** | **Punta Cana, DR** | **9.39** | **326** | Pn | | **Pn** | | **21 33 57.7** | **+2.8** |
| **MCQV** | **Machiques** | **9.50** | **267** | *eP* | | **Pn** | | **21 33 54.2** | **-2.1** |
| **MCQV** | **Machiques** | **9.50** | **267** | *eP* | | **Pn** | | **21 33 53.1** | **-3.3** |
| **MCQV** | **Machiques** | **9.50** | **267** | *eP* | | **Pn** | | **21 33 57.7** | **-2.6** |
| **CAPV** | **Capacho** | **9.71** | **254** | *eP* | | **Pn** | | **21 33 56.1** | **-3.3** |
| CAPV | | | | *eS* | | Sn | | 21 35 36.0 | -11 |
| **CAPV** | **Capacho** | **9.71** | **254** | *eP* | | **Pn** | | **21 33 56.1** | **-3.3** |
| CAPV | | | | *eS* | | Sn | | 21 35 36.1 | -11 |
| **CAPV** | **Capacho** | **9.71** | **254** | *eP* | | **Pn** | | **21 33 56.1** | **-3.3** |
| CAPV | | | | *eS* | | Sn | | 21 35 35.5 | -11 |
| **SDD** | **Santo Domingo** | **10.26** | **319** | *iP* | | Pn | | 21 34 14.3 | +7.8 |
| SDD | | | | IAML | | | | 21 34 45.4 | |
| | comp=N,2μm,0.7s | | | | | | | | |
| **BANI** | **BANI** | **10.50** | **317** | *i* P | | Pn | | 21 34 16.1 | +6.1 |
| BANI | | | | IAML | | | | 21 34 46.4 | |
| | comp=N,15μm,1.1s | | | | | | | | |
| **PODR** | **Polo** | **10.99** | **313** | *i* P | | **Pn** | | **21 34 19.3** | **+2.8** |
| PODR | | | | IAML | | | | 21 35 05.2 | |
| | comp=N,7μm,0.9s | | | | | | | | |
| **RUSI** | **La Rusia** | **11.16** | **245** | *i* P | | **Pn** | | **21 34 19.3** | **+0.2** |
| RUSI | | | | IVmB_BB | | | | 21 35 10.2 | |
| | comp=Z,260μm,1.0s | | | | | | | | |
| **NEDR** | **Neiba UASD** | **11.29** | **314** | *i* P | | **Pn** | | **21 34 24.2** | **+3.8** |
| NEDR | | | | IAML | | | | 21 35 20.5 | |
| | comp=N,7μm,1.1s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **11.54** | **316** | | | **Pn** | | **21 34 26.3** | **+2.5** |
| **SDDR** | **Presa de Saban** | **11.54** | **316** | *eP* | | **Pn** | | **21 34 25.8** | **+2.0** |
| **MDP** | **Montagnes des** | **11.59** | **118** | P | | Pn | | 21 34 17.2 | -7.1 |
| | comp=N,273nm,0.4s,baz=303,slow=17,SNR=121 | | | | | | | | |
| MDP | | | | S | | Sn | | 21 36 21.7 | -10 |
| | comp=N,13μm,0.5s,baz=279,slow=13,SNR=8.0 | | | | | | | | |
| **JIDR** | **Jimani** | **11.61** | **313** | *i* P | | **Pn** | | **21 34 27.8** | **+3.2** |
| JIDR | | | | IAML | | | | 21 35 11.8 | |
| | comp=N,7μm,1.6s | | | | | | | | |
| **SODR** | **Sosua Marina B** | **11.64** | **321** | *i* P | | **P** | | **21 34 35.3** | **+1.8** |
| SODR | | | | IAML | | | | 21 35 26.1 | |
| | comp=N,25μm,3.1s | | | | | | | | |
| **REDR** | **Restauracion** | **11.74** | **317** | *i* P | | **P** | | **21 34 35.8** | **+1.3** |
| REDR | | | | IAML | | | | 21 36 19.7 | |
| | comp=N,2μm,2.6s | | | | | | | | |
| **MCDR** | **Montecristi** | **12.43** | **318** | *i* P | | **P** | | **21 34 40.4** | **-1.9** |
| MCDR | | | | IAML | | | | 21 36 03.0 | |
| | comp=N,6μm,2.3s | | | | | | | | |
| **ROSC** | **El Rosal** | **12.73** | **244** | Pn | | **Pn** | | **21 34 37.4** | **-2.3** |
| **ROSC** | **El Rosal** | **12.73** | **244** | Pn | | **Pn** | | **21 34 42.3** | **+2.6** |
| **ROSC** | **El Rosal** | **12.73** | **244** | P | | **Pn** | | **21 34 40.1** | **+0.4** |
| | comp=N,2μm,0.4s,baz=65,slow=9.5,SNR=56 | | | | | | | | |
| ROSC | | | | S | | **Sn** | | **21 37 02.1** | **+1.9** |
| | comp=N,14μm,0.9s,baz=60,slow=20,SNR=2.2 | | | | | | | | |
| **ROSC** | **El Rosal** | **12.73** | **244** | P | | **Pn** | | **21 34 42.3** | **+2.6** |
| **UREC** | **San Jos de Ur** | **12.81** | **258** | *eP* | | **Pn** | | **21 34 41.7** | **+1.3** |
| **GRTK** | **Grand Turk** | **13.33** | **325** | Pn | | **Pn** | | **21 34 47.3** | **+0.2** |
| **GRTK** | **Grand Turk** | **13.33** | **325** | ⇑P | | **Pn** | | **21 34 46.2** | **-0.8** |
| **GRTK** | **Grand Turk** | **13.33** | **325** | *eP* | | **Pn** | | **21 34 47.1** | **+0.1** |
| **LCBC** | **Los crdobas,** | **13.40** | **263** | ⇑*iP* | | **Pn** | | **21 34 49.7** | **+1.6** |
| **MACA** | **Manacapuru-AM** | **13.96** | **171** | Pn | | **Pn** | | **21 34 51.2** | **-4.1** |
| **MACA** | **Manacapuru-AM** | **13.96** | **171** | Pn | | **Pn** | | **21 34 54.3** | **-1.0** |
| **MACA** | **Manacapuru-AM** | **13.96** | **171** | *eP* | | **Pn** | | **21 34 52.0** | **-3.2** |
| **TEFE** | **Tefe** | **14.23** | **187** | *eP* | | **Pn** | | **21 34 56.4** | **-2.3** |
| **MASC** | **Masc** | **14.41** | **312** | *eP* | | **Pn** | | **21 35 00.8** | **-0.1** |
| **QMBU** | **Quimbuelo** | **14.85** | **311** | *eP* | | **Pn** | | **21 35 05.7** | **-0.9** |
| **GTBY** | **Guantanamo Bay** | **14.91** | **309** | Pn | | **P** | | **21 35 08.8** | **-1.1** |
| **GTBY** | **Guantanamo Bay** | **14.91** | **309** | ⇑*iP* | | **P** | | **21 35 10.1** | **+0.2** |
| **GTBY** | **Guantanamo Bay** | **14.91** | **309** | ⇑P | | **Pn** | | **21 35 07.4** | **+0.1** |
| **GTBY** | **Guantanamo Bay** | **14.91** | **309** | *eP* | | **Pn** | | **21 35 07.2** | **-0.1** |
| **UPD2** | **Meteti** | **15.06** | **263** | *eP* | | **P** | | **21 35 12.0** | **+0.4** |
| UPD2 | | | | *eS* | | **Sn** | | **21 37 59.6** | **+3.7** |
| **NMDO** | **Nuevo Mundo** | **15.20** | **312** | Pn | | **Pn** | | **21 35 10.3** | **-0.5** |
| **NMDO** | **Nuevo Mundo** | **15.20** | **312** | *eP* | | **Pn** | | **21 35 10.1** | **-0.8** |
| **MOAC** | **Moa** | **15.24** | **312** | *eP* | | **Pn** | | **21 35 09.8** | **-1.6** |
| **HOJ** | **Hope** | **15.24** | **300** | ⇓*iP* | | **P** | | **21 35 15.4** | **+1.8** |
| **TOTI** | **Torti** | **15.29** | **265** | *eP* | | **P** | | **21 35 13.7** | **-0.5** |
| TOTI | | | | *i* S | | **Sn** | | **21 38 00.1** | **-1.3** |
| **STH** | **Stony Hill** | **15.33** | **300** | ⇓*iP* | | **P** | | **21 35 16.1** | **+1.5** |
| **MAL2** | **Monte Alegre,** | **15.34** | **145** | Pn | | **Pn** | | **21 35 07.3** | **-5.5** |
| MAL2 | | | | IAmb | | IAmb | | 21 35 09.3 | |
| | comp=Z,344nm,1.7s | | | | | | | | |
| **MAL2** | **Monte Alegre,** | **15.34** | **145** | Pn | | **Pn** | | **21 35 13.3** | **+0.6** |
| **RCC** | **Rio Carpintero** | **15.40** | **308** | *eP* | | **Pn** | | **21 35 11.2** | **-2.2** |
| **MARVS** | **Santiago de Cu** | **15.56** | **308** | *eP* | | **P** | | **21 35 16.3** | **-0.8** |
| **CNTA3** | **Canitas, Panam** | **15.82** | **266** | *eP* | | **P** | | **21 35 20.5** | **+0.4** |
| **CHIV** | **Chivirico** | **15.95** | **307** | | | **P** | | **21 35 21.3** | **-0.1** |
| **CHIV** | **Chivirico** | **15.95** | **307** | *eP* | | **P** | | **21 35 21.6** | **+0.2** |
| CHIV | | | | IAmb | | IAmb | | 21 36 54.2 | |
| | comp=Z,2μm,1.3s | | | | | | | | |
| **MTDJ** | **Mount Denham** | **16.01** | **299** | | | **P** | | **21 35 22.4** | **+0.2** |
| **MTDJ** | **Mount Denham** | **16.01** | **299** | ⇑*iP* | | **P** | | **21 35 23.9** | **+1.6** |
| **MTDJ** | **Mount Denham** | **16.01** | **299** | ⇑P | | **P** | | **21 35 21.9** | **-0.3** |
| **MTDJ** | **Mount Denham** | **16.01** | **299** | *eP* | | **P** | | **21 35 22.3** | **0.0** |
| **CHPO** | **Chepo, Panama** | **16.05** | **266** | *eP* | | **P** | | **21 35 23.5** | **+1.0** |
| **YAR** | **Yar** | **16.12** | **308** | *eP* | | **Pn** | | **21 35 22.5** | **+0.1** |
| **HLGC** | **Holguin** | **16.20** | **310** | *eP* | | **P** | | **21 35 25.9** | **+1.7** |
| **TBTG** | **Tabatinga, AM** | **16.37** | **206** | P | | **Pn** | | **21 35 23.5** | **-1.9** |
| TBTG | | | | IAmb | | IAmb | | 21 35 25.4 | |
| | comp=Z,200nm,1.3s | | | | | | | | |
| **TBTG** | **Tabatinga, AM** | **16.37** | **206** | P | | **P** | | **21 35 27.9** | **+1.9** |
| **TBTG** | **Tabatinga, AM** | **16.37** | **206** | *eP* | | **Pn** | | **21 35 23.5** | **-1.9** |
| **LMGC** | **Las Mercedes** | **16.46** | **306** | *eP* | | **Pn** | | **21 35 25.3** | **-1.2** |
| **UPA** | **Univ. de Panam** | **16.48** | **265** | *iP* | | **P** | | **21 35 28.3** | **+1.0** |
| **ARRA3** | **Arrajan, Pana** | **16.60** | **265** | *eP* | | **P** | | **21 35 31.4** | **+2.6** |
| **FRIJ** | **El Hiral** | **16.64** | **266** | *eP* | | **P** | | **21 35 29.9** | **+0.8** |
| **BCIP** | **Isla Barro Col** | **16.76** | **266** | P | | **Pn** | | **21 35 28.1** | **-2.0** |
| **BCIP** | **Isla Barro Col** | **16.76** | **266** | P | | **P** | | **21 35 31.6** | **+1.3** |
| **BCIP** | **Isla Barro Col** | **16.76

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JTS | Las Juntas de | 21.69 271 | P | | P | 21 36 26.6 | +2.6 |
| JTS | Las Juntas de | 21.69 271 | ⇑P | | P | 21 36 24.1 | +0.1 |
| JTS | Las Juntas de | 21.69 271 | P | | P | 21 36 23.8 | -0.2 |
| | comp=Z,168nm,0.7s,baz=83,slow=9.5,SNR=50 | | | | | | |
| JTS | | | S | | S | 21 40 17.1 | +0.1 |
| | comp=Z,169nm,0.9s,baz=90,slow=19,SNR=1.3 | | | | | | |
| JTS | Las Juntas de | 21.69 271 | *e*P | | P | 21 36 25.0 | +1.0 |
| JTS | Las Juntas de | 21.69 271 | ⇓*i*P | | P | 21 36 26.2 | +2.2 |
| JTS | Las Juntas de | 21.69 271 | *e*P | | P | 21 36 24.9 | +0.8 |
| ACON | Acoyapa | 21.88 275 | P | | P | 21 36 28.8 | +2.9 |
| ACON | | | IAmb | IAmb | | 21 36 43.5 | |
| | comp=Z,6μm,1.0s | | | | | | |
| ACON | Acoyapa | 21.88 275 | *i* P | | P | 21 36 28.2 | +2.2 |
| ACON | | | IVmB_BB | | | 21 36 42.7 | |
| | comp=Z,130μm,1.0s | | | | | | |
| ACON | | | *i* S | | S | 21 40 23.8 | +3.5 |
| ACON | Acoyapa | 21.88 275 | *e*P | | P | 21 36 25.8 | -0.2 |
| COLC | Colonia | 21.92 272 | *e*P | | P | 21 36 28.1 | +1.6 |
| VORI | VORI | 22.05 272 | *e*P | | P | 21 36 29.1 | +1.1 |
| INDI | Punta indio, G | 22.26 270 | *i* P | | P | 21 36 31.5 | +1.6 |
| INDI | | | IVmB_BB | | | 21 36 46.5 | |
| | comp=Z,39μm,1.0s | | | | | | |
| INDI | | | *i* S | | S | 21 40 28.4 | +1.7 |
| ALIBA | Liberia Airpor | 22.26 272 | *e*P | | P | 21 36 32.3 | +2.4 |
| JAPN | Al SSO del Vol | 22.37 274 | *i* P | | P | 21 36 36.7 | +5.7 |
| JAPN | | | IVmB_BB | | | 21 36 51.6 | |
| | comp=Z,11μm,1.0s | | | | | | |
| BOAB | BOACO BROADBAN | 22.37 277 | P | | P | 21 36 28.8 | -2.3 |
| BOAB | BOACO BROADBAN | 22.37 277 | P | | P | 21 36 32.5 | +1.4 |
| BOAB | | | IAmb | IAmb | | 21 36 48.3 | |
| | comp=Z,22μm,1.5s | | | | | | |
| BOAB | BOACO BROADBAN | 22.37 277 | ⇑P | | P | 21 36 30.0 | -1.0 |
| BOAB | BOACO BROADBAN | 22.37 277 | *i* P | | P | 21 36 34.8 | +3.8 |
| BOAB | | | IVmB_BB | | | 21 36 47.4 | |
| | comp=Z,87μm,1.0s | | | | | | |
| BOAB | | | *i* S | | S | 21 40 34.2 | +5.6 |
| CLDB | Colider | 22.58 162 | *e*P | | P | 21 36 31.7 | -1.4 |
| MASN | Masaya | 22.83 275 | *i* P | | P | 21 36 39.1 | +3.4 |
| AERN | Aeropuerto Man | 22.85 276 | *i* P | | P | 21 36 38.2 | +2.4 |
| AERN | | | IVmB_BB | | | 21 36 56.2 | |
| | comp=Z,1000μm,1.0s | | | | | | |
| HUEN | | 22.86 276 | *i* P | | P | 21 36 38.9 | +3.0 |
| HUEN | | | IVmB_BB | | | 21 36 52.5 | |
| | comp=Z,110μm,1.0s | | | | | | |
| WILN | Americas 2 | 22.87 276 | *i* P | | P | 21 36 39.6 | +3.7 |
| WILN | | | IVmB_BB | | | 21 37 07.7 | |
| | comp=Z,49μm,1.0s | | | | | | |
| WILN | | | *i* S | | S | 21 40 43.7 | +7.1 |
| R0529 | La Mascota | 22.92 276 | *i* P | | P | 21 36 40.0 | +3.6 |
| R0529 | | | IVmB_BB | | | 21 36 53.3 | |
| | comp=Z,67μm,1.0s | | | | | | |
| MGA1 | Managua | 22.93 276 | *i* P | | P | 21 36 34.8 | -1.7 |
| R4DEC | Barrio San Lui | 22.93 276 | *i* P | | P | 21 36 38.6 | +2.1 |
| R4DEC | | | *i* P | | P | 21 36 41.0 | +4.5 |
| R4DEC | | | IVmB_BB | | | 21 36 52.2 | |
| | comp=Z,56μm,1.0s | | | | | | |
| R4DEC | | | IVmB_BB | | | 21 36 53.1 | |
| | comp=Z,160μm,1.0s | | | | | | |
| R4DEC | | | *i* S | | S | 21 40 44.1 | +6.6 |
| TISN | Laguna Tiscapa | 22.95 276 | *i* P | | P | 21 36 39.1 | +2.4 |
| TISN | | | IVmB_BB | | | 21 36 53.5 | |
| | comp=Z,4μm,1.0s | | | | | | |
| UNAN | Cigeo UNAN | 22.95 276 | *i* P | | P | 21 36 40.5 | +3.8 |
| UNAN | | | IVmB_BB | | | 21 36 53.5 | |
| | comp=Z,390μm,1.0s | | | | | | |
| UNAN | | | *i* S | | S | 21 40 47.0 | +9.1 |
| USIM | UNAN | 22.95 276 | *i* P | | P | 21 36 42.9 | +6.1 |
| ALLN | Telcor Managua | 22.95 276 | *i* P | | P | 21 36 38.6 | +1.8 |
| CRUN | El Crucero | 22.98 275 | *i* P | | P | 21 36 35.3 | -1.8 |
| CRUN | | | IVmB_BB | | | 21 36 58.9 | |
| | comp=Z,220μm,1.0s | | | | | | |
| BC87 | San Francisco | 22.98 277 | *i* P | | P | 21 36 43.4 | +6.4 |
| BC87 | | | IVmB_BB | | | 21 36 53.6 | |
| | comp=Z,770μm,1.0s | | | | | | |
| APQN | BB Volcan Apoy | 22.98 276 | *i* P | | P | 21 36 41.0 | +4.0 |
| RA5A7 | El Crucero | 22.99 275 | *i* P | | P | 21 36 41.9 | +4.7 |
| RA5A7 | | | IVmB_BB | | | 21 37 06.0 | |
| | comp=Z,160μm,1.0s | | | | | | |
| ABCN | Banco Central | 22.99 276 | *i* P | | P | 21 36 40.0 | +2.9 |
| ABCN | | | IVmB_BB | | | 21 36 52.3 | |
| | comp=Z,1100μm,1.0s | | | | | | |
| APQ2 | Apoyeque | 23.01 276 | *i* P | | P | 21 36 41.0 | +3.8 |
| APQ2 | | | IVmB_BB | | | 21 36 54.0 | |
| | comp=Z,53μm,1.0s | | | | | | |
| PDRB | Porto dos Gac | 23.01 164 | *e*P | | P | 21 36 36.5 | -0.8 |
| APYN | Apoyeque | 23.03 276 | *i* P | | P | 21 36 41.0 | +3.5 |
| APYN | | | IVmB_BB | | | 21 37 07.7 | |
| | comp=Z,230nm,1.0s | | | | | | |
| BRAN | Las Pilas | 23.05 277 | *i* P | | P | 21 36 40.5 | +2.9 |
| BRAN | | | IVmB_BB | | | 21 37 18.4 | |
| | comp=Z,110μm,1.0s | | | | | | |
| LIMN | Finca el Limon | 23.08 278 | *i* P | | P | 21 36 41.5 | +3.4 |
| LIMN | | | IVmB_BB | | | 21 36 54.9 | |
| | comp=Z,120μm,1.0s | | | | | | |
| SAPS | Ciudad Sandino | 23.08 276 | *i* P | | P | 21 36 40.5 | +2.5 |
| SAPS | | | IVmB_BB | | | 21 36 57.0 | |
| | comp=Z,84μm,1.0s | | | | | | |
| 060A | Indiantown | 23.11 317 | P | | P | 21 36 38.6 | +0.5 |
| MOM2 | El Cardon | 23.17 277 | *i* P | | P | 21 36 42.9 | +4.1 |
| MOM2 | | | IVmB_BB | | | 21 36 58.6 | |
| | comp=Z,61μm,1.0s | | | | | | |
| MOM2 | | | *i* S | | S | 21 40 54.0 | +13 |
| BC84 | Volcan Momotom | 23.22 276 | *i* P | | P | 21 36 40.0 | +0.7 |
| BC84 | | | IVmB_BB | | | 21 37 31.1 | |
| | comp=Z,750μm,1.0s | | | | | | |
| BC86 | Nagarote | 23.24 276 | *i* P | | P | 21 36 44.8 | +5.4 |
| BC86 | | | IVmB_BB | | | 21 37 15.8 | |
| | comp=Z,1000μm,1.0s | | | | | | |
| COPN | Copaltepe | 23.27 276 | *i* P | | P | 21 36 41.9 | +2.2 |
| COPN | | | IVmB_BB | | | 21 37 09.2 | |
| | comp=Z,25μm,1.0s | | | | | | |
| LEVN | Ruinas Leon Vi | 23.30 276 | *i* P | | P | 21 36 43.4 | +3.5 |
| LEVN | | | IVmB_BB | | | 21 36 55.7 | |
| | comp=Z,46μm,1.0s | | | | | | |
| LEVN | | | *i* S | | S | 21 40 52.7 | +9.3 |
| SOMN | Somoto | 23.34 279 | *i* P | | P | 21 36 41.5 | +1.0 |
| SOMN | | | IVmB_BB | | | 21 36 56.9 | |
| | comp=Z,4μm,1.0s | | | | | | |
| MACN | El Madrono | 23.36 277 | *i* P | | P | 21 36 43.4 | +2.9 |
| MACN | | | IVmB_BB | | | 21 37 03.5 | |
| | comp=Z,4μm,1.0s | | | | | | |
| CNGN | Cerro Negro | 23.38 277 | P | | P | 21 36 40.8 | 0.0 |
| CNGN | | | IAmb | IAmb | | 21 36 59.7 | |
| | comp=Z,8μm,1.1s | | | | | | |
| CNGN | Cerro Negro | 23.38 277 | *i* P | | P | 21 36 44.8 | +4.0 |
| CNGN | | | IVmB_BB | | | 21 36 57.6 | |
| | comp=Z,150μm,1.0s | | | | | | |
| CNGN | | | *i* S | | S | 21 40 54.4 | +10 |
| CNGA | Al SSO del Vol | 23.38 277 | *i* P | | P | 21 36 41.9 | +1.1 |
| CNGA | | | IVmB_BB | | | 21 36 56.6 | |
| | comp=Z,8μm,1.0s | | | | | | |
| ILCN | San Idelfonso | 23.38 277 | *i* P | | P | 21 36 44.3 | +3.5 |
| ILCN | | | IVmB_BB | | | 21 36 57.4 | |
| | comp=Z,10μm,1.0s | | | | | | |
| HERN | Volcan Telica | 23.51 277 | *i* P | | P | 21 36 45.3 | +3.3 |
| HERN | | | IVmB_BB | | | 21 37 00.6 | |
| | comp=Z,130μm,1.0s | | | | | | |
| HERN | | | *i* S | | S | 21 40 55.2 | +8.1 |
| QUEN | Al S del Volca | 23.53 277 | *i* P | | P | 21 36 44.8 | +2.6 |
| QUEN | | | IVmB_BB | | | 21 37 01.4 | |
| | comp=Z,11μm,1.0s | | | | | | |
| YUSH | Yuscaran | 23.61 280 | *i* P | | P | 21 36 44.8 | +1.9 |
| PKGN | Cerro Pekin | 23.66 277 | *i* P | | P | 21 36 46.2 | +3.0 |
| PKGN | | | IVmB_BB | | | 21 36 59.3 | |
| | comp=Z,73μm,1.0s | | | | | | |
| PKGN | | | *i* S | | S | 21 40 55.6 | +6.3 |
| VILB | Vilhena | 23.67 173 | P | | P | 21 36 43.8 | +0.5 |
| VILB | Vilhena | 23.67 173 | *e*P | | P | 21 36 43.4 | +0.2 |
| CRIN | San Cristobal | 23.73 277 | P | | P | 21 36 43.8 | -0.2 |
| CRIN | San Cristobal | 23.73 277 | *i* P | | P | 21 36 47.6 | +3.6 |
| CRIN | | | IVmB_BB | | | 21 37 02.1 | |
| | comp=Z,230μm,1.0s | | | | | | |
| CRIN | | | *i* S | | S | 21 40 56.9 | +6.3 |
| CRIN | San Cristobal | 23.73 277 | *e*P | | P | 21 36 45.2 | +1.2 |
| TGUH | Tegucigalpa,Un | 24.03 280 | P | | P | 21 36 46.7 | -0.1 |
| TGUH | | | IAmb | IAmb | | 21 37 05.5 | |
| | comp=Z,7μm,1.1s | | | | | | |
| TGUH | Tegucigalpa,Un | 24.03 280 | *i* P | | P | 21 36 49.5 | +2.7 |
| TGUH | | | IVmB_BB | | | 21 37 04.8 | |
| | comp=Z,130μm,1.0s | | | | | | |
| COMHN | El Horno | 24.34 281 | *i* P | | P | 21 36 50.5 | +0.8 |
| AMPH | Amapala | 24.35 279 | *i* P | | P | 21 36 54.7 | +5.2 |
| AMPH | | | *i* S | | S | 21 40 59.3 | -1.1 |
| CNCH | Conchagua | 24.52 278 | *i* P | | P | 21 36 54.7 | +3.5 |
| CNCH | | | IVmB_BB | | | 21 37 08.9 | |
| | comp=Z,160μm,1.0s | | | | | | |
| CNCH | | | *i* S | | S | 21 41 05.5 | +2.1 |
| DWPF | Disney Wildern | 24.54 317 | P | | P | 21 36 50.9 | -0.2 |
| DWPF | Disney Wildern | 24.54 317 | ⇑P | | P | 21 36 51.0 | 0.0 |
| DWPF | Disney Wildern | 24.54 317 | *e*P | | P | 21 36 50.9 | -0.2 |
| LCND | La Caada | 24.58 279 | *i* P | | P | 21 36 53.8 | +2.2 |
| LCND | | | IVmB_BB | | | 21 37 09.5 | |
| | comp=Z,35μm,1.0s | | | | | | |
| LCND | | | *i* S | | S | 21 41 10.1 | +6.1 |
| SMTB | Santa Maria do | 24.70 141 | *e*P | | P | 21 36 51.9 | -0.9 |
| MARCA | Marcala la Paz | 24.78 281 | *i* P | | P | 21 36 56.6 | +3.1 |
| MARCA | | | *i* S | | S | 21 41 18.3 | +11 |
| CNRM | Centro Naciona | 24.86 279 | *i* P | | P | 21 37 01.8 | +7.7 |
| CNRM | | | IVmB_BB | | | 21 37 51.3 | |
| | comp=Z,500μm,1.0s | | | | | | |
| CNRM | | | *i* S | | S | 21 41 11.3 | +2.8 |
| INTHN | La Esperanza I | 24.86 281 | *i* P | | P | 21 36 57.1 | +2.7 |
| JUCU | Jucuarįn | 24.92 278 | *i* P | | P | 21 36 56.2 | +1.4 |
| JUCU | | | IVmB_BB | | | 21 37 13.1 | |
| | comp=Z,33μm,1.0s | | | | | | |
| JUCU | | | *i* S | | S | 21 41 08.4 | -1.2 |
| RANC | El Ranchito | 24.97 279 | *i* P | | P | 21 36 58.1 | +2.8 |
| RANC | | | IVmB_BB | | | 21 37 13.8 | |
| | comp=Z,19μm,1.0s | | | | | | |
| RANC | | | *i* S | | S | 21 41 17.5 | +6.9 |
| PACA | Pacayal | 25.01 279 | *i* P | | P | 21 36 59.5 | +3.9 |
| PACA | | | IVmB_BB | | | 21 37 55.3 | |
| | comp=Z,95μm,1.0s | | | | | | |
| PQSS | Presa 15 de Se | 25.25 279 | *i* P | | P | 21 36 57.6 | 0.0 |
| SNDB | Serra Nova Dou | 25.32 153 | *e*P | | P | 21 36 57.7 | -0.6 |
| SCLA | Alcaldia de Sa | 25.41 279 | *i* P | | P | 21 37 01.8 | +2.6 |
| SCLA | | | IVmB_BB | | | 21 37 18.4 | |
| | comp=Z,9μm,1.0s | | | | | | |
| SCLA | | | *i* S | | S | 21 41 22.5 | +5.1 |
| TECO | Alcaldia de Te | 25.45 279 | *i* P | | P | 21 37 04.7 | +5.1 |
| TECO | | | IVmB_BB | | | 21 37 18.1 | |
| | comp=Z,11μm,1.0s | | | | | | |
| UESV | Universidad de | 25.47 279 | *i* P | | P | 21 37 00.9 | +1.2 |
| UESV | | | IVmB_BB | | | 21 37 56.1 | |
| | comp=Z,79μm,1.0s | | | | | | |
| COEG | Centro de Oper | 25.56 279 | *i* P | | P | 21 37 02.3 | +1.8 |
| COEG | | | IVmB_BB | | | 21 37 18.2 | |
| | comp=Z,9μm,1.0s | | | | | | |
| LLGN | La Laguna | 25.66 280 | *i* P | | P | 21 37 05.2 | +3.7 |
| LLGN | | | *i* S | | S | 21 41 21.2 | -0.1 |
| UDBS | Universidad Do | 25.83 279 | *i* P | | P | 21 37 04.2 | +1.2 |
| LOMA | Loma Larga | 25.84 279 | *i* P | | P | 21 37 06.1 | +2.9 |
| LOMA | | | IVmB_BB | | | 21 38 05.1 | |
| | comp=Z,7μm,1.0s | | | | | | |
| SNET | Serv Nac Est T | 25.90 279 | P | | P | 21 37 03.2 | -0.4 |
| SNET | | | IAmb | IAmb | | 21 37 45.4 | |
| | comp=Z,3μm,1.3s | | | | | | |
| SNET | Serv Nac Est T | 25.90 279 | *i* P | | P | 21 37 06.1 | +2.4 |
| SNET | | | IVmB_BB | | | 21 38 04.4 | |
| | comp=Z,62μm,1.0s | | | | | | |
| UEES | Universidad Ev | 25.91 279 | *i* P | | P | 21 37 08.5 | +4.7 |
| ITCA | Escuela Especi | 25.95 279 | *i* P | | P | 21 37 09.9 | +5.8 |
| QUEZ | Alcaldia de Qu | 25.95 280 | *i* P | | P | 21 37 09.4 | +5.3 |
| QUEZ | | | IVmB_BB | | | 21 37 23.2 | |
| | comp=Z,310μm,1.0s | | | | | | |
| LALI | Alcalda de L | 25.98 279 | *i* P | | P | 21 37 07.1 | +2.9 |
| LALI | | | IVmB_BB | | | 21 38 01.5 | |
| | comp=Z,4μm,1.0s | | | | | | |
| PMON | Piamonte | 25.98 279 | *i* P | | P | 21 37 09.0 | +4.6 |
| PMON | | | IVmB_BB | | | 21 37 24.9 | |
| | comp=Z,6μm,1.0s | | | | | | |
| CEDA | San Andres | 26.07 279 | *i* P | | P | 21 37 16.1 | +11 |
| CEDA | | | IVmB_BB | | | 21 38 08.9 | |
| | comp=Z,77μm,1.0s | | | | | | |
| ESQI | Esquipulas | 26.07 281 | P | | P | 21 37 05.5 | +0.3 |
| ESQI | Esquipulas | 26.07 281 | *i* P | | P | 21 37 06.1 | +0.8 |
| ESQI | | | IVmB_BB | | | 21 38 03.7 | |
| | comp=Z,93μm,1.0s | | | | | | |
| ESQI | | | *i* S | | S | 21 41 39.8 | +12 |
| MTO3 | Montecristo | 26.08 281 | P | | P | 21 37 05.3 | -0.2 |
| MTO3 | | | IAmb | IAmb | | 21 37 21.6 | |
| | comp=Z,3μm,1.2s | | | | | | |
| MTO3 | Montecristo | 26.08 281 | *i* P | | P | 21 37 09.0 | +3.6 |
| MTO3 | | | IVmB_BB | | | 21 38 03.2 | |
| | comp=Z,55μm,1.0s | | | | | | |
| MTO3 | | | *i* S | | S | 21 41 27.8 | -0.4 |
| JAYA | Jayaque - finc | 26.11 279 | *i* P | | P | 21 37 11.3 | +5.7 |
| JAYA | | | IVmB_BB | | | 21 38 09.1 | |
| | comp=Z,77μm,1.0s | | | | | | |
| UNIC | Universidad Ca | 26.23 280 | *i* P | | P | 21 37 11.3 | +4.7 |
| PTLB | Pontes e Lacer | 26.26 172 | P | | P | 21 37 08.5 | +1.8 |
| PTLB | | | IAmb | IAmb | | 21 37 11.4 | |
| | comp=Z,2μm,1.1s | | | | | | |
| PTLB | Pontes e Lacer | 26.26 172 | *e*P | | P | 21 37 05.3 | -1.4 |
| CEVE | Cerro Verde | 26.29 280 | *i* P | | P | 21 37 10.8 | +3.4 |
| CEVE | | | IVmB_BB | | | 21 37 27.7 | |
| | comp=Z,8μm,1.0s | | | | | | |
| NUBE | Las Nubes | 26.45 280 | *i* P | | P | 21 37 11.3 | +2.6 |
| NUBE | | | IVmB_BB | | | 21 38 05.6 | |
| | comp=Z,49μm,1.0s | | | | | | |
| LOAL | Lomas de Alarc | 26.45 280 | *i* P | | P | 21 37 12.3 | +3.7 |
| LOAL | | | IVmB_BB | | | 21 38 02.2 | |
| | comp=Z,720μm,1.0s | | | | | | |
| NNA | Nana | 26.47 212 | P | | P | 21 37 10.6 | +1.9 |
| NNA | Nana | 26.47 212 | P | | P | 21 37 10.6 | +1.9 |
| NNA | | | pmax | pmax | | | |
| | comp=Z,5μm,0.8s | | | | | | |
| SIV | San Ignacio | 26.60 176 | LR | LR | | 21 49 37.7 | |
| | comp=Z,138μm,18.4s,baz=16,slow=40 | | | | | | |
| PETF | Flores | 26.89 286 | P | | P | 21 37 13.7 | +1.3 |
| PETF | Flores | 26.89 286 | *i* P | | P | 21 37 15.1 | +2.7 |
| PETF | | | IVmB_BB | | | 21 37 29.3 | |
| | comp=Z,63μm,1.0s | | | | | | |
| PETF | | | *i* S | | S | 21 41 44.8 | +4.3 |
| Y60A | Bolivia | 27.09 331 | P | | P | 21 37 15.5 | +1.4 |
| GCG4 | OSOP | 27.23 281 | *i* P | | P | 21 37 21.7 | +6.0 |
| GUMI | Mixco | 27.31 281 | *i* P | | P | 21 37 15.6 | -0.9 |
| GUMI | | | IVmB_BB | | | 21 37 23.5 | |
| | comp=Z,140μm,1.0s | | | | | | |
| LPAZ | La Paz | 27.32 191 | P | | P | 21 37 15.7 | -1.3 |
| LPAZ | La Paz | 27.32 191 | P | | P | 21 37 19.2 | +2.2 |
| LPAZ | | | IAmb | IAmb | | 21 38 17.1 | |
| | comp=Z,2μm,0.9s | | | | | | |
| LPAZ | La Paz | 27.32 191 | ⇓P | | P | 21 37 16.9 | -0.1 |
| LPAZ | La Paz | 27.32 191 | P | | P | 21 37 19.5 | +2.6 |
| | comp=Z,467nm,0.8s,baz=10.0,slow=8.2,SNR=187 | | | | | | |
| LPAZ | | | S | | S | 21 41 54.3 | +5.8 |
| | comp=Z,351nm,1.0s,baz=9.5,slow=6.1,SNR=1.6 | | | | | | |
| LPAZ | | | LR | LR | | 21 50 15.1 | |
| | comp=Z,76μm,19.2s,baz=8.0,slow=40 | | | | | | |
| LPAZ | | | P3KPbc | | | 22 09 48.5 | |
| | comp=Z,6.0nm,0.8s,baz=158,slow=6.7,SNR=4.4 | | | | | | |
| | comp=Z,467nm,0.8s | | | | | | |
| LPAZ | La Paz | 27.32 191 | *e*P | | P | 21 37 16.5 | -0.5 |
| NHSC | New Hope | 27.37 327 | ⇑P | | P | 21 37 16.6 | +0.1 |
| SALV | Santo Antonio | 27.39 165 | *e*P | | P | 21 37 15.5 | -1.3 |
| CHTG | Tecpan | 27.68 281 | *i* P | | P | 21 37 25.5 | +5.7 |
| CHTG | | | IVmB_BB | | | 21 37 43.8 | |
| | comp=Z,40μm,1.0s | | | | | | |
| BBSD | Serra de San D | 27.82 175 | *e*P | | P | 21 37 20.3 | -0.3 |
| QUIS | Sacapulas | 27.83 282 | *i* P | | P | 21 37 24.1 | +3.1 |
| QUIS | | | IVmB_BB | | | 21 37 36.6 | |
| | comp=Z,29μm,1.0s | | | | | | |
| QUIS | | | *i* S | | S | 21 42 02.5 | +6.8 |
| CNNC | Cliffs of the | 27.97 333 | P | | P | 21 37 24.2 | +2.4 |
| CNNC | Cliffs of the | 27.97 333 | ⇑P | | P | 21 37 22.8 | +0.9 |
| SOKI | Kika Raxquin | 28.09 281 | *i* P | | P | 21 37 27.4 | +3.8 |
| SOKI | | | IVmB_BB | | | 21 37 41.0 | |
| | comp=Z,29μm,1.0s | | | | | | |
| Y57A | Sumter | 28.18 328 | P | | P | 21 37 23.9 | +0.1 |
| Y57A | | | IAmb | IAmb | | 21 37 25.3 | |
| | comp=Z,116nm,1.1s | | | | | | |
| QUEO | Labor Ovalle | 28.20 281 | *i* P | | P | 21 37 31.2 | +6.7 |
| QUEO | | | IVmB_BB | | | 21 38 18.0 | |
| | comp=Z,59μm,1.0s | | | | | | |
| HUEH | Huehuetenango | 28.23 282 | P | | P | 21 37 27.4 | +2.8 |
| HUEH | | | IAmb | IAmb | | 21 37 40.3 | |
| | comp=Z,2μm,0.8s | | | | | | |
| HUEH | Huehuetenango | 28.23 282 | *i* P | | P | 21 37 27.9 | +3.2 |
| HUEH | | | IVmB_BB | | | 21 38 24.4 | |
| | comp=Z,42μm,1.0s | | | | | | |
| HUEH | | | *i* S | | S | 21 42 17.0 | +15 |
| NBPB | Pedra_Branca-C | 28.28 124 | *e*P | | P | 21 37 25.7 | +0.8 |
| RTAL | Retalhuleu | 28.34 281 | *i* P | | P | 21 37 29.8 | +4.4 |
| RTAL | | | IVmB_BB | | | 21 38 23.1 | |
| | comp=Z,22μm,1.0s | | | | | | |
| RTAL | | | *i* S | | S | 21 42 03.0 | -0.5 |
| ARAG | Araguaiana, MT | 28.45 157 | *e*P | | P | 21 37 25.6 | -0.8 |
| NBCL | Cascavel-CE | 28.64 120 | *e*P | | P | 21 37 26.4 | -1.6 |
| BIRD | Birdtown, Kers | 28.71 329 | P | | P | 21 37 27.9 | -0.5 |
| BIRD | | | IAmb | IAmb | | 21 37 29.9 | |
| | comp=Z,82nm,1.2s | | | | | | |
| PB18 | Visviri | 28.86 193 | P | | P | 21 37 32.5 | +1.9 |
| PB18 | | | IAmb | IAmb | | 21 38 26.3 | |
| | comp=Z,3μm,1.1s | | | | | | |
| CCIG | Comitan | 28.95 284 | P | | P | 21 37 33.4 | +2.4 |
| CCIG | Comitan | 28.95 284 | *i* P | | P | 21 37 32.6 | +1.6 |
| CCIG | | | IVmB_BB | | | 21 37 47.8 | |
| | comp=Z,94μm,1.0s | | | | | | |
| CCIG | | | *i* S | | S | 21 42 14.9 | +1.6 |
| 352A | Blakely | 29.03 319 | P | | P | 21 37 31.0 | -0.3 |
| SDBA | SAO DESIDERIO | 29.11 142 | *e*P | | P | 21 37 30.7 | -1.5 |
| T59A | Double "B" Far | 29.30 336 | P | | P | 21 37 32.7 | -0.9 |
| T59A | | | IAmb | IAmb | | 21 37 35.0 | |
| | comp=Z,109nm,1.4s | | | | | | |
| GOGA | Godfrey | 29.44 323 | P | | P | 21 37 37.1 | +2.2 |
| GOGA | Godfrey | 29.44 323 | ⇑P | | P | 21 37 34.7 | -0.2 |
| GOGA | Godfrey | 29.44 323 | P | | P | 21 37 37.1 | +2.2 |
| GOGA | | | pmax | pmax | | | |
| | comp=Z,1μm,1.1s | | | | | | |
| PAYG | Puerto Ayora | 29.49 249 | P | | P | 21 37 34.6 | -1.1 |
| PAYG | Puerto Ayora | 29.49 249 | P | | P | 21 37 38.4 | +2.8 |
| PAYG | | | IAmb | IAmb | | 21 38 04.8 | |
| | comp=Z,908nm,0.9s | | | | | | |
| PAYG | Puerto Ayora | 29.49 249 | ⇓P | | P | 21 37 37.9 | +2.2 |
| PAYG | Puerto Ayora | 29.49 249 | *i* P | | P | 21 37 38.8 | +3.2 |
| PAYG | | | IVmB_BB | | | 21 37 50.2 | |
| | comp=Z,44μm,1.0s | | | | | | |
| KMSC | Kings Mountain | 29.55 328 | P | | P | 21 37 37.9 | +2.0 |
| PAULI | Pauline | 29.55 327 | P | | P | 21 37 38.2 | +2.2 |
| PAULI | | | IAmb | IAmb | | 21 37 56.2 | |
| | comp=Z,3μm,0.8s | | | | | | |
| U56A | King | 30.03 331 | P | | P | 21 37 40.0 | -0.1 |
| U56A | King | 30.03 331 | P | | P | 21 37 42.9 | +2.8 |
| U56A | | | IAmb | IAmb | | 21 38 01.0 | |
| | comp=Z,3μm,0.8s | | | | | | |
| I09BR | BRASILIA INFRA | 30.05 150 | S | S | | 21 42 45.0 | +15 |
| | baz=319,slow=28,SNR=11 | | | | | | |
| BDFB | Brasilia | 30.05 150 | P | | P | 21 37 38.4 | -2.2 |
| BDFB | Brasilia | 30.05 150 | P | | P | 21 37 43.1 | +2.5 |
| BDFB | | | IAmb | IAmb | | 21 37 45.8 | |
| | comp=Z,3μm,1.1s | | | | | | |
| BDFB | Brasilia | 30.05 150 | P | | P | 21 37 43.4 | +2.8 |
| | comp=Z,2μm,1.0s,baz=333,slow=9.3,SNR=260 | | | | | | |
| BDFB | | | S | | S | 21 42 35.8 | +5.4 |
| | comp=Z,319nm,0.8s,baz=0.0,slow=18,SNR=1.9 | | | | | | |
| BDFB | | | ScP | | ScP | 21 44 10.8 | -0.4 |
| | comp=Z,906nm,0.9s,baz=309,slow=16,SNR=3.7 | | | | | | |
| BDFB | | | LR | LR | | 21 51 09.6 | |
| | comp=Z,220μm,19.1s,baz=336,slow=38 | | | | | | |
| | comp=Z,2μm,1.0s | | | | | | |
| BRAL | Brewton | 30.25 316 | P | | P | 21 37 44.7 | +2.5 |
| BRAL | Brewton | 30.25 316 | ⇑P | | P | 21 37 42.7 | +0.6 |
| CBN | Corbin Frederi | 30.29 337 | P | | P | 21 37 44.6 | +2.2 |
| CBN | | | IAmb | IAmb | | 21 38 04.1 | |
| | comp=Z,2μm,0.7s | | | | | | |
| CBN | Corbin Frederi | 30.29 337 | ⇑P | | P | 21 37 42.3 | -0.1 |
| BLA | Blacksburg | 30.75 332 | P | | P | 21 37 49.0 | +2.5 |
| BLA | | | IAmb | IAmb | | 21 37 53.5 | |
| | comp=Z,3μm,1.1s | | | | | | |
| BLA | Blacksburg | 30.75 332 | ⇑P | | P | 21 37 46.7 | +0.3 |
| BLA | Blacksburg | 30.75 332 | P | | P | 21 37 49.0 | +2.5 |
| BLA | | | pmax | pmax | | | |
| | comp=Z,3μm,1.1s | | | | | | |
| GO01 | Chusmiza | 30.82 192 | P | | P | 21 37 48.1 | +0.3 |
| SDMD | Soldier's Deli | 31.16 339 | P | | P | 21 37 52.1 | +2.1 |
| TKL | Tuckaleechee C | 31.24 326 | P | | P | 21 37 52.9 | +2.1 |
| TKL | | | IAmb | IAmb | | 21 38 10.9 | |
| | comp=Z,3μm,1.3s | | | | | | |
| TKL | Tuckaleechee C | 31.24 326 | P | | P | 21 37 52.9 | +2.1 |
| TKL | | | pmax | pmax | | | |
| | comp=Z,3μm,1.3s | | | | | | |
| LRAL | Lakeview Retre | 31.37 319 | P | | P | 21 37 54.3 | +2.3 |
| LRAL | | | IAmb | IAmb | | 21 38 12.0 | |
| | comp=Z,3μm,1.0s | | | | | | |
| LRAL | Lakeview Retre | 31.37 319 | ⇑P | | P | 21 37 52.0 | +0.1 |
| M65A | Busby, Falmout | 31.47 349 | P | | P | 21 37 52.2 | -0.5 |
| | baz=165 | | | | | | |
| M65A | | | S | | S | 21 42 55.9 | +4.0 |
| | baz=165 | | | | | | |
| FPAL | Fort Paine | 31.50 322 | P | | P | 21 37 55.6 | +2.5 |
| FPAL | | | IAmb | IAmb | | 21 38 14.1 | |
| | comp=Z,1μm,0.8s | | | | | | |
| RCBR | Riachuelo | 31.50 120 | P | | P | 21 37 56.1 | +2.7 |
| RCBR | | | IAmb | IAmb | | 21 38 20.9 | |
| | comp=Z,1μm,0.9s | | | | | | |
| RCBR | Riachuelo | 31.50 120 | ⇑P | | P | 21 37 53.4 | 0.0 |
| RCBR | Riachuelo | 31.50 120 | LR | LR | | 21 51 58.9 | |
| | comp=Z,21μm,21.4s,baz=333,slow=38 | | | | | | |
| RCBR | Riachuelo | 31.50 120 | P | | P | 21 37 56.1 | +2.7 |
| RCBR | | | pmax | pmax | | | |
| | comp=Z,1μm,0.9s | | | | | | |
| RCBR | Riachuelo | 31.50 120 | *e*P | | P | 21 37 52.7 | -0.7 |
| JANB | Januaria | 31.54 144 | *e*P | | P | 21 37 51.8 | -1.9 |
| HMBC | Humberstone | 31.56 193 | P | | P | 21 37 53.9 | +0.1 |
| HMBC | | | IAmb | IAmb | | 21 38 02.8 | |
| | comp=Z,2μm,0.7s | | | | | | |
| TA02 | Huaiquique | 31.60 193 | P | | P | 21 37 54.4 | +0.4 |
| TZTN | Tazewell | 31.78 327 | P | | P | 21 37 58.0 | +2.5 |
| TZTN | Tazewell | 31.78 327 | ⇑P | | P | 21 37 55.5 | 0.0 |
| AQDB | Aquidauana | 31.79 167 | P | | P | 21 37 58.8 | +3.0 |
| AQDB | | | IAmb | IAmb | | 21 38 07.3 | |
| | comp=Z,2μm,0.9s | | | | | | |
| AQDB | Aquidauana | 31.79 167 | *e*P | | P | 21 37 55.8 | 0.0 |
| TA01 | Diego Aracena | 31.90 193 | P | | P | 21 37 57.0 | +0.4 |
| TA01 | | | IAmb | IAmb | | 21 38 15.7 | |
| | comp=Z,1μm,0.8s | | | | | | |
| IPMB | Ipameri, GO | 31.99 153 | *e*P | | P | 21 37 57.0 | -0.6 |
| SWET | Sewanee | 32.16 323 | P | | P | 21 38 01.4 | +2.6 |
| BCX | Boston College | 32.32 348 | P | | P | 21 38 02.0 | +1.9 |
| BCX | | | IAmb | IAmb | | 21 38 10.7 | |
| | comp=Z,2μm,0.9s | | | | | | |
| MCWV | Mont Chateau | 32.52 335 | P | | P | 21 38 04.9 | +2.9 |
| MCWV | | | IAmb | IAmb | | 21 38 07.9 | |
| | comp=Z,3μm,1.0s | | | | | | |
| MCWV | Mont Chateau | 32.52 335 | ⇑P | | P | 21 38 03.0 | +1.0 |
| HRV | Adam Dziewonsk | 32.56 348 | ⇓P | | P | 21 38 02.8 | +0.5 |
| HRV | Adam Dziewonsk | 32.56 348 | P | | P | 21 38 04.5 | +2.2 |
| HRV | | | pmax | pmax | | | |
| | comp=Z,2μm,1.2s | | | | | | |

HAL IAmb IAmb 21 38 35.0
comp=Z,3µm,0.9s
**HAL Halifax 33.81 359** P **P** **21 38 14.9 +1.9**
HAL pmax pmax
comp=Z,3µm,0.9s
**AF01 San Pedro de A 33.86 189** P **P** **21 38 15.7 +1.7**
**OXF Oxford 33.86 319** ⇑P **P** **21 38 13.0 -0.6**
**WVT Waverly 33.91 322** P **P** **21 38 15.8 +1.8**
**WVT Waverly 33.91 322** ⇑P **P** **21 38 13.3 -0.7**
**WVT Waverly 33.91 322** P **P** **21 38 15.8 +1.8**
WVT pmax pmax
comp=Z,3µm,0.6s
**PCMB Pacaembu 34.09 160** *e*P **P** **21 38 15.3 -0.4**
**LBNH Lisbon 34.30 348** P **P** **21 38 19.5 +2.1**
LBNH IAmb IAmb 21 38 39.2
comp=Z,2µm,0.9s
**LBNH Lisbon 34.30 348** ⇓P **P** **21 38 18.0 +0.6**
**LBNH Lisbon 34.30 348** P **P** **21 38 19.5 +2.1**
LBNH pmax pmax
comp=Z,2µm,1.0s
**ACSO Alum Creek Sta 34.36 332** P **P** **21 38 20.2 +2.3**
ACSO IAmb IAmb 21 38 24.9
comp=Z,2µm,0.8s
**ACSO Alum Creek Sta 34.36 332** ⇑P **P** **21 38 17.2 -0.8**
**M53A WI Miller and 34.37 336** P **P** **21 38 20.2 +2.2**
**M53A WI Miller and 34.37 336** P **P** **21 38 18.4 +0.5**
baz=148
M53A S **S** **21 43 39.7 +2.9**
baz=148
**GGN Saint George 34.45 355** P **P** **21 38 20.5 +2.0**
GGN IAmb IAmb 21 38 40.6
comp=Z,3µm,1.0s
**WCI Wyandotte Cave 34.49 326** P **P** **21 38 21.2 +2.1**
**WCI Wyandotte Cave 34.49 326** ⇑P **P** **21 38 19.0 -0.1**
**WCI Wyandotte Cave 34.49 326** P **P** **21 38 21.2 +2.1**
WCI pmax pmax
comp=Z,7µm,1.5s
**DIAM Diamantina, MG 34.51 146** *e*P **P** **21 38 18.1 -1.5**
**MET Memphis--Engin 34.57 319** P **P** **21 38 21.3 +1.5**
**GBN Guysborough 34.59 2** P **P** **21 38 21.2 +1.4**
GBN IAmb IAmb 21 38 42.0
comp=Z,3µm,0.9s
**BB19B Bebedouro 34.60 156** *e*P **P** **21 38 20.0 -0.2**
**P49A Miami Univ. Ec 34.64 330** P **P** **21 38 20.5 +0.1**
baz=140
P49A S **S** **21 43 45.0 +3.9**
baz=140
**ERPA Erie 34.68 337** P **P** **21 38 23.1 +2.4**
ERPA IAmb IAmb 21 38 27.2
comp=Z,3µm,0.8s
**ERPA Erie 34.68 337** ⇑P **P** **21 38 20.4 -0.2**
**CMC01 Camacan, BA 34.75 138** *e*P **P** **21 38 20.3 -1.2**
**TRCB Terra Rica 34.79 163** P **P** **21 38 24.4 +2.6**
TRCB IAmb IAmb 21 38 45.4
comp=Z,2µm,0.7s
**PKME Peaks-Kenny Pk 34.86 352** P **P** **21 38 24.1 +2.0**
PKME IAmb IAmb 21 38 45.2
comp=Z,1µm,0.8s
**PKME Peaks-Kenny Pk 34.86 352** ⇓P **P** **21 38 22.5 +0.4**
**PAPY Pozo Azul 34.89 173** *e*P **P** **21 38 22.4 -0.2**
**MEDO Medina 35.05 340** P **P** **21 38 26.0 +2.2**
MEDO IAmb IAmb 21 38 28.6
comp=Z,2µm,1.0s
**LMN Caledonia Moun 35.05 358** P **P** **21 38 25.4 +1.6**
LMN IAmb IAmb 21 38 45.5
comp=Z,2µm,0.9s
**CCAR Cane Creek 35.09 316** P **P** **21 38 26.5 +2.2**
**LONY Lake Ozonia 35.25 345** P **P** **21 38 27.6 +2.1**
LONY IAmb IAmb 21 38 46.7
comp=Z,2µm,0.9s
**LONY Lake Ozonia 35.25 345** ⇑P **P** **21 38 24.8 -0.7**
**GUA01 Guaratinga, BA 35.46 140** *e*P **P** **21 38 26.7 -0.9**
**WBO Williamsburg 35.78 345** P **P** **21 38 31.9 +1.9**
WBO IAmb IAmb 21 38 34.6
comp=Z,2µm,0.9s
**LDASE Londrina, Braz 35.80 161** *e*P **P** **21 38 30.5 0.0**
**MNTQ Montreal, Queb 35.86 347** P **P** **21 38 32.6 +1.9**
MNTQ IAmb IAmb 21 38 53.0
comp=Z,3µm,1.2s
**PB14 IPOC Station P 35.88 192** P **P** **21 38 31.6 +0.2**
**DELO Deloro Mine 35.99 342** P **P** **21 38 33.9 +2.0**
**UNM Universidad Na 36.01 288** P **P** **21 38 34.9 +2.2**
**UNM Universidad Na 36.01 288** P **P** **21 38 34.9 +2.2**
**NATX Nacogdoches 36.05 310** ⇑P **P** **21 38 32.2 -0.2**
**HKT Hockley 36.13 307** P **P** **21 38 35.3 +2.1**
HKT IAmb IAmb 21 38 51.4
comp=Z,2µm,0.7s
**HKT Hockley 36.13 307** ⇑P **P** **21 38 32.8 -0.4**
**HKT Hockley 36.13 307***c i*P **P** **21 38 32.2 -1.0**
HKT pmax pmax
comp=Z,3µm,0.8s
**BSCB Bom Sucesso 36.20 151** *e*P **P** **21 38 33.2 -0.8**
**NAN01 Guarapari, ES 36.21 141** *e*P **P** **21 38 32.5 -1.5**
**RCLB Rio Claro- Sao 36.21 155** *e*P **P** **21 38 34.6 +0.6**
**SJMB Sao Joao De Ma 36.24 144** *e*P **P** **21 38 33.0 -1.2**
**GO02 Mina Guanaco 36.25 190** P **P** **21 38 35.3 +0.7**
GO02 IAmb IAmb 21 38 37.6
comp=Z,2µm,0.9s
**GO02 Mina Guanaco 36.25 190** ⇑P **P** **21 38 33.1 -1.4**
**FRTB Fartura 36.28 159** *e*P **P** **21 38 34.7 +0.1**
FRTB *ep*P **pP** **21 38 58.5 -2.7**
**AAM Ann Arbor 36.33 334** P **P** **21 38 37.4 +2.7**
**AAM Ann Arbor 36.33 334** ⇑P **P** **21 38 35.0 +0.3**
**AAM Ann Arbor 36.33 334** P **P** **21 38 37.4 +2.7**
AAM pmax pmax
comp=Z,4µm,0.8s
**BATG Bathurst New B 36.54 356** P **P** **21 38 37.9 +1.4**
BATG IAmb IAmb 21 38 57.9
comp=Z,2µm,1.0s
**MIAR Mount Ida 36.68 315** P **P** **21 38 39.1 +1.3**
**MIAR Mount Ida 36.68 315** ⇑P **P** **21 38 36.5 -1.4**
**MIAR Mount Ida 36.68 315** P **P** **21 38 39.1 +1.3**
MIAR pmax pmax
comp=Z,2µm,1.3s
**SADO Sadowa 36.70 341** LR LR 21 53 23.1
comp=Z,121µm,20.2s,baz=140,slow=36
**TRQ Mont Tremblant 36.76 346** P **P** **21 38 40.1 +1.7**
**KVTX Kingsville 36.88 302** P **P** **21 38 42.5 +2.9**
**KVTX Kingsville 36.88 302** ⇓P **P** **21 38 41.2 +1.6**
**VAO Valinhos 36.96 155** P **P** **21 38 43.6 +3.1**
VAO IAmb IAmb 21 38 45.9
comp=Z,4µm,1.1s
**VAO Valinhos 36.96 155** *e*P **P** **21 38 41.3 +0.9**
VAO *ep*P **pP** **21 39 04.6 -2.6**
**MLDN Muldoon 37.04 306** P **P** **21 38 43.3 +2.3**
**RIB01 Linhares ES 37.18 143** *e*P **P** **21 38 41.5 -0.7**
**ABR01 Abrolhos, BA 37.19 140** *e*P **P** **21 38 44.2 +2.0**
**CPUP Villa Florida 37.22 172** P **P** **21 38 43.5 +1.2**
CPUP IAmb IAmb 21 38 51.8
comp=Z,2µm,0.8s
**CPUP Villa Florida 37.22 172** ⇓P **P** **21 38 40.8 -1.6**
**CPUP Villa Florida 37.22 172** P **P** **21 38 43.6 +1.2**
comp=Z,2µm,1.0s,baz=353,slow=11,SNR=231
CPUP S **S** **21 44 23.1 +2.5**
comp=Z,47nm,0.9s,baz=15,slow=20,SNR=1.1
CPUP ScP **ScP** **21 44 34.8 -1.3**
comp=Z,340nm,1.0s,baz=358,slow=5.1,SNR=7.3
comp=Z,2µm,1.0s
**CCM Cathedral Cave 37.23 322** P **P** **21 38 43.8 +1.3**
**CCM Cathedral Cave 37.23 322** P **P** **21 38 43.8 +1.3**
CCM pmax pmax
comp=Z,5µm,1.4s
**I41PY VILLA FLORIDA 37.23 172** P **P** **21 38 45.5 +3.0**
baz=355,slow=8.1,SNR=6.4
**LMQ La Malbaie 37.24 352** P **P** **21 38 44.1 +1.6**
LMQ IAmb IAmb 21 39 04.1
comp=Z,4µm,0.9s
**SPB Sao Paulo 37.30 156** P **P** **21 38 45.6 +2.4**
**SPB Sao Paulo 37.30 156** ⇑P **P** **21 38 45.4 +2.2**
**SPB Sao Paulo 37.30 156** *e*P **P** **21 38 45.0 +1.8**
**AC01 Pan de Azucar 37.40 191** P **P** **21 38 44.1 +0.1**
**JRQG Juriquilla Cam 37.40 290** P **P** **21 38 46.5 +2.1**
**HDIL Hopedale 37.78 326** P **P** **21 38 48.6 +1.6**
**LDAQ Lac Daran 37.79 351** P **P** **21 38 48.7 +1.6**
LDAQ IAmb IAmb 21 39 08.3
comp=Z,3µm,1.0s
**PARB Paraibuna 37.83 154** *e*P **P** **21 38 48.7 +1.0**
**435B Jarrell 37.86 307** P **P** **21 38 47.6 -0.2**
baz=114
435B S **S** **21 44 32.0 +1.7**
baz=114
**MOIG Morelia 37.94 288** P **P** **21 38 50.5 +1.5**
MOIG IAmb IAmb 21 39 04.5
comp=Z,1µm,0.9s
**MOIG Morelia 37.94 288** ⇓P **P** **21 38 49.3 +0.4**
**VAS01 Vassouras-RJ 37.94 150** *e*P **P** **21 38 48.2 -0.4**
**X37A Clayton 37.96 314** **P** **21 38 49.6 +0.9**
**PET01 Itanhaem-SP 37.99 156** *e*P **P** **21 38 49.1 +0.1**
PET01 *ep*P **pP** **21 39 12.2 -3.6**
**R40A Maddies Statio 38.01 321** P **P** **21 38 49.9 +0.9**
R40A IAmb IAmb 21 39 05.5
comp=Z,3µm,1.2s
**ALF01 Guarapari-ES 38.01 145** *e*P **P** **21 38 48.2 -0.9**
**MAN01 Angra dos Reis 38.18 151** *e*P **P** **21 38 50.0 -0.7**
**L44A Lake County Fo 38.23 329** P **P** **21 38 50.5 -0.3**
baz=138
L44A S **S** **21 44 36.5 +0.8**
baz=138
**DUB01 Friburgo-RJ 38.31 148** *e*P **P** **21 38 51.1 -0.6**
**833A Chaparral WMA, 38.40 302** P **P** **21 38 51.7 -0.7**
baz=110,SNR=333
833A S **S** **21 44 38.3 -0.3**
baz=110
**CAM01 Campos-RJ 38.48 147** *e*P **P** **21 38 52.4 -0.6**
**SACV Santiago Islan 38.51 79** P **P** **21 38 56.1 +2.6**
SACV IAmb IAmb 21 39 21.1
comp=Z,2µm,0.9s
**SACV Santiago Islan 38.51 79** ⇑P **P** **21 38 56.1 +2.6**
**AC06 Mina Casimiro 38.53 191** P **P** **21 38 53.7 +0.2**
**DRLN Deer Lake 38.68 6** P **P** **21 38 55.6 +1.2**
**DRLN Deer Lake 38.68 6** ⇑P **P** **21 38 52.8 -1.7**
**GO03 Copiap 38.74 190** P **P** **21 38 55.8 +0.5**
GO03 IAmb IAmb 21 38 58.6
comp=Z,2µm,1.2s
**GO03 Copiap 38.74 190** ⇓P **P** **21 38 54.9 -0.4**
**GLMI Grayling 38.78 335** ⇑P **P** **21 38 55.5 +0.1**
**FW07 Weatherford 38.83 310** P **P** **21 38 57.4 +1.5**
**ICQ Pointe Anglais 38.86 355** P **P** **21 38 57.1 +1.2**
ICQ IAmb IAmb 21 39 16.8
comp=Z,3µm,0.7s
**CRSM Crissiumal (Br 38.94 167** *e*P **P** **21 38 55.5 -1.3**
**ITAB Concordia 39.14 165** P **P** **21 39 00.4 +1.9**
ITAB IAmb IAmb 21 39 02.7
comp=Z,3µm,1.3s
**ITAB Concordia 39.14 165** *e*P **P** **21 38 58.2 -0.4**
**AC04 Llanos de Chal 39.49 191** P **P** **21 39 01.9 +0.5**
AC04 IAmb IAmb 21 39 05.0
comp=Z,5µm,1.6s
**JCT Junction City 39.49 305** ⇑P **P** **21 39 00.6 -1.0**
**ZAIG Zacatecas 39.71 293** P **P** **21 39 06.0 +2.3**
ZAIG IAmb IAmb 21 39 20.7
comp=Z,3µm,0.9s
**ZAIG Zacatecas 39.71 293** ⇑P **P** **21 39 04.1 +0.4**
**ZAIG Zacatecas 39.71 293** *i* P **P** **21 39 05.1 +1.4**
ZAIG IVmB_BB 21 39 19.8
comp=Z,44µm,1.0s
ZAIG *i* S S 21 44 47.4 -12
**ADOK Arcadia Dam 39.91 314** **P** **21 39 05.9 +1.0**
**JFWS Jewell Farm 39.95 328** P **P** **21 39 07.1 +2.0**
**JFWS Jewell Farm 39.95 328** ⇑P **P** **21 39 04.1 -1.0**
**JFWS Jewell Farm 39.95 328** P **P** **21 39 07.1 +2.0**
JFWS pmax pmax
comp=Z,5µm,0.8s
**AC05 El Transito 39.96 190** P **P** **21 39 06.4 +0.9**
AC05 IAmb IAmb 21 39 09.1
comp=Z,4µm,1.3s
**H07S1 FLORES T-PHASE 40.11 39** P **P** **21 39 09.8 +3.3**
SNR=338
**LCO Las Campanas 40.20 191** P **P** **21 39 08.1 +0.5**
**LCO Las Campanas 40.20 191** ⇑P **P** **21 39 06.7 -0.9**
**LCO Las Campanas 40.20 191** *e*P **P** **21 39 07.0 -0.6**
**ALGR Alto Alegre (B 40.42 167** *e*P **P** **21 39 07.3 -1.9**
**WMOK Wichita Mounta 40.49 312** **P** **21 39 10.1 +0.4**
**WMOK Wichita Mounta 40.49 312** ⇑P **P** **21 39 07.3 -2.4**
**WMOK Wichita Mounta 40.49 312** P **P** **21 39 10.1 +0.4**
WMOK pmax pmax
comp=Z,1µm,1.0s
**ITQB Itaqui 40.60 172** P **P** **21 39 11.7 +1.1**
ITQB IAmb IAmb 21 39 20.0
comp=Z,4µm,1.0s
**ITQB Itaqui 40.60 172** *e*P **P** **21 39 09.2 -1.4**
**SCIA State Center 40.87 325** P **P** **21 39 14.3 +1.6**
SCIA IAmb IAmb 21 39 29.9
comp=Z,3µm,0.9s
**SCIA State Center 40.87 325** ⇑P **P** **21 39 11.8 -0.9**
**KS21 Milan North St 40.94 316** P **P** **21 39 15.1 +1.7**
**CO01 Juntas del Tor 41.05 190** P **P** **21 39 15.8 +1.3**
**SGCY Sterling City 41.08 307** P **P** **21 39 15.8 +1.1**
SGCY IAmb IAmb 21 39 31.8
comp=Z,4µm,0.9s
**CO05 La Serena 41.19 191** P **P** **21 39 15.6 +0.2**
**TER01 Tubaro-SC 41.23 161** *e*P **P** **21 39 14.9 -0.8**
**CALA Caldeira 41.25 42** *e*P **P** **21 39 19.3 +3.3**
comp=Z,5µm,1.2s
CALA *e*LQ LQ 21 48 54.2
**HOR Horta 41.27 42** *e*P **P** **21 39 19.9 +3.9**
comp=Z,3µm,1.2s
**PCED Cedros 41.28 42** *e*P **P** **21 39 19.4 +3.3**
comp=Z,4µm,1.6s
**PCAN Candelaria 41.33 42** *e*P **P** **21 39 19.3 +2.7**
comp=Z,3µm,1.2s
**GO04 Tololo Observa 41.36 190** P **P** **21 39 17.7 +0.6**
**GO04 Tololo Observa 41.36 190** ⇓P **P** **21 39 17.6 +0.6**
**PICO Pico 41.39 42** *e*P **P** **21 39 20.3 +3.2**
comp=Z,3µm,1.4s
PICO *e*LQ LQ 21 48 46.6
**CNLB Canela 41.46 164** *e*P **P** **21 39 18.4 +0.7**
**PPNO Prainha do Nor 41.48 42** *e*P **P** **21 39 20.5 +2.7**
comp=Z,2µm,1.2s
**RODS Rosario do Sul 41.49 170** *e*P **P** **21 39 16.2 -1.6**
**PID Ribeirinha 41.56 42** *e*P **P** **21 39 20.8 +2.4**
comp=Z,2µm,1.1s
**ROSA Rosais 41.63 42** *e*P **P** **21 39 22.2 +3.2**
comp=Z,4µm,1.3s
ROSA *e*LQ LQ 21 49 02.6
**ROSA Rosais 41.63 42** ⇓P **P** **21 39 20.9 +1.9**
**PMAN Manadas 41.68 42** *e*P **P** **21 39 22.3 +2.9**
comp=Z,2µm,1.1s
**COWI Conover 41.75 332** P **P** **21 39 21.7 +1.8**
COWI IAmb IAmb 21 39 39.4
comp=Z,3µm,0.8s
**COWI Conover 41.75 332** ⇑P **P** **21 39 19.1 -0.7**
**PSAL Palomas, Salto 41.87 173** *e*P **P** **21 39 18.9 -1.9**
**CPSB Cacapava Do Su 41.88 168** *e*P **P** **21 39 19.4 -1.7**
**SRBC Serra Branca 41.93 42** *e*P **P** **21 39 22.7 +1.3**
**I42PT GRACIOSA ISLAN 41.96 42** P **P** **21 39 22.0 +0.4**
baz=192,slow=2.9,SNR=2.3
**PGRA Graciosa 41.97 42** *e*P P 21 39 35.1 +13
comp=Z,7µm,1.0s
PGRA *e*LQ LQ 21 49 17.7
**CO03 El Pedregal 41.99 190** P **P** **21 39 22.7 +0.7**
CO03 IAmb IAmb 21 39 41.1
comp=Z,4µm,1.9s
**CO06 Fray Jorge 42.00 191** P **P** **21 39 22.6 +0.7**
**PSBA Serra de Santa 42.26 43** *e*P **P** **21 39 27.1 +3.0**
comp=Z,5µm,1.1s
**ADH Angra Heroismo 42.26 43** *e*P **P** **21 39 26.6 +2.5**
comp=Z,4µm,1.4s
**TXAR Lajitas Array 42.27 302** P **P** **21 39 26.0 +1.5**
**TXAR Lajitas Array 42.27 302** P **P** **21 39 23.7 -0.8**
comp=Z,52nm,0.5s,baz=118,slow=9.3,SNR=136
TXAR ScP **ScP** **21 44 54.2 -1.7**
comp=Z,256nm,0.9s,baz=109,slow=4.2,SNR=8.1
TXAR S **S** **21 45 34.3 -2.1**
comp=Z,46nm,0.9s,baz=100,slow=8.4,SNR=0.8
TXAR PKPPKP **P'P'df** **22 11 24.4 -3.1**
comp=Z,4.2nm,1.0s,baz=315,slow=0.1,SNR=2.6
TXAR PKP2ab 22 12 39.8
comp=Z,4.5nm,1.1s,baz=289,slow=2.8,SNR=2.3
TXAR P4KPbc 22 17 28.2
comp=Z,1.2nm,0.8s,baz=106,slow=8.0,SNR=4.6
comp=Z,52nm,0.5s
**PAGU Agualva, Azore 42.35 43** *e*P **P** **21 39 27.8 +2.9**
comp=Z,4µm,1.1s
PAGU *e*LQ LQ 21 49 17.7
**PSCM Serra do Cume 42.36 43** *e*P **P** **21 39 28.4 +3.4**
comp=Z,5µm,1.1s
**ZON Zonda 42.38 187** P **P** **21 39 26.1 +1.0**
**ZON Zonda 42.38 187** ⇑P **P** **21 39 24.5 -0.7**
**ZON Zonda 42.38 187** P **P** **21 39 26.1 +1.0**
ZON pmax pmax
comp=Z,2µm,1.0s
**CO02 Combarbal 42.40 190** P **P** **21 39 25.5 +0.1**
**CO02 Combarbal 42.40 190** ⇓P **P** **21 39 25.3 0.0**
**TBOT Tacuaremb 42.68 171** *e*P **P** **21 39 27.1 -0.4**
**AMTX Amarillo 42.69 311** P **P** **21 39 28.5 +0.7**
AMTX IAmb IAmb 21 39 43.7
comp=Z,2µm,0.8s
**AMTX Amarillo 42.69 311** ⇑P **P** **21 39 26.1 -1.6**
**PSET Sete Cidades 42.87 45** *e*P **P** **21 39 31.9 +2.8**
comp=Z,4µm,1.2s
PSET *e*LQ LQ 21 49 17.7
**PDA Ponta Delgada 42.87 45** *e*P **P** **21 39 31.5 +2.5**
**PSMA Santa Maria 42.89 46** *e*P **P** **21 39 31.9 +2.7**
comp=Z,3µm,1.1s
**PSMN Pico do Norte, 42.94 46** *e*P **P** **21 39 32.0 +2.4**
comp=Z,2µm,1.3s
PSMN eLQ LQ 21 49 17.7
**CMLA Cha da Macela 42.98 45** P **P** **21 39 32.9 +3.0**
**CMLA Cha da Macela 42.98 45** ⇑P **P** **21 39 31.3 +1.4**
**CMLA Cha da Macela 42.98 45** P **P** **21 39 32.9 +3.0**
CMLA pmax pmax
comp=Z,4µm,0.8s
**PCALD Caldeiras da R 43.02 45** *e*P **P** **21 39 33.5 +3.3**
comp=Z,4µm,0.9s
**PGRON Lagoa das Cont 43.09 45** *e*P **P** **21 39 34.1 +3.3**
comp=Z,4µm,1.4s
**CBKS Cedar Bluff 43.13 317** ⇑P **P** **21 39 29.3 -1.9**
**PLTB Pedras Altas 43.16 168** P **P** **21 39 32.5 +1.1**
**PLTB Pedras Altas 43.16 168** *e*P **P** **21 39 30.7 -0.7**
**BART Pico Bartolome 43.23 45** *e*P **P** **21 39 34.9 +2.9**
comp=Z,3µm,1.1s
**HPIG 43.34 298** P **P** **21 39 34.9 +1.7**
**HPIG 43.34 298** ⇑P **P** **21 39 32.4 -0.8**
**HPIG 43.34 298** *i* P **P** **21 39 33.5 +0.3**
HPIG IVmB_BB 21 39 48.8
comp=Z,73µm,1.0s
**VA06 Catapilco 43.77 190** P **P** **21 39 36.7 +0.5**
**VA03 San Esteban 43.85 189** P **P** **21 39 38.3 +1.3**
VA03 IAmb IAmb 21 39 56.7
comp=Z,2µm,0.7s
**ECSD EROS Data Cent 43.96 325** P **P** **21 39 38.4 +0.7**
**ECSD EROS Data Cent 43.96 325** ⇑P **P** **21 39 35.7 -2.0**
**SCHQ Schefferville 44.12 357** P **P** **21 39 40.2 +1.5**
**SCHQ Schefferville 44.12 357** P **P** **21 39 37.5 -1.3**
comp=Z,3µm,0.7s,baz=178,slow=9.5,SNR=78
SCHQ ScP **ScP** **21 45 01.0 -1.7**
comp=Z,244nm,0.9s,baz=186,slow=6.2,SNR=2.7
SCHQ LR LR 21 56 06.7
comp=Z,41µm,20.5s,baz=164,slow=33
SCHQ PKPPKP **P'P'df** **22 11 20.4 -2.6**
comp=Z,9.8nm,0.9s,baz=346,slow=4.2,SNR=4.1
comp=Z,3µm,0.7s
**EYMN Ely 44.20 333** P **P** **21 39 40.4 +0.8**
**EYMN Ely 44.20 333** ⇑P **P** **21 39 37.8 -1.8**
**PEL Peldehue 44.24 189** P **P** **21 39 40.8 +0.7**
PEL IAmb IAmb 21 39 58.7
comp=Z,6µm,1.7s
**PEL Peldehue 44.24 189** ⇓P **P** **21 39 40.1 +0.1**
**PEL Peldehue 44.24 189** P **P** **21 39 40.8 +0.7**
PEL pmax pmax
comp=Z,6µm,1.7s
**VA01 Torpederas 44.29 191** P **P** **21 39 41.0 +0.6**
**MNTX Cornudas Mount 44.41 305** ⇑P **P** **21 39 40.5 -0.9**
**MT02 Curacav 44.43 190** P **P** **21 39 42.0 +0.5**
MT02 IAmb IAmb 21 39 50.7
comp=Z,2µm,0.7s
**MT08 Bocatoma Ro 44.43 189** P **P** **21 39 43.3 +1.5**
**MT16 CCHEN 44.49 189** P **P** **21 39 43.2 +1.1**
MT16 IAmb IAmb 21 40 01.8
comp=Z,2µm,0.9s
**MT13 San Alfonso 44.77 189** P **P** **21 39 45.8 +1.5**
MT13 IAmb IAmb 21 39 48.2
comp=Z,3µm,1.0s
**LMEL Las Melosas 44.86 189** P **P** **21 39 46.4 +1.3**
LMEL IAmb IAmb 21 39 55.6
comp=Z,10µm,2.0s
**VA05 Santo Domingo 44.90 190** P **P** **21 39 45.5 +0.4**
**BO04 La Punta 45.06 189** P **P** **21 39 47.5 +1.0**
BO04 IAmb IAmb 21 39 49.8
comp=Z,3µm,1.2s
**EPT El Paso 45.34 304** P **P** **21 39 50.0 +1.0**
EPT IAmb IAmb 21 40 04.7
comp=Z,4µm,1.0s
**LPA La Plata 45.62 174***d i*P **P** **21 39 50.6 -0.2**
LPA PCP **PcP** **21 41 32.7 +5.5**
LPA PP PP 21 41 53.2 +13
LPA PPP PPP 21 42 32.9
LPA S **S** **21 46 31.1 +6.7**
LPA PKIKP **PKiKP** **21 48 23.2 -1.1**
LPA SS SS 21 50 06.4 +16
**T25A Trinidad 45.64 312** P **P** **21 39 52.9 +1.5**
T25A IAmb IAmb 21 40 08.1
comp=Z,4µm,1.1s
**T25A Trinidad 45.64 312** P **P** **21 39 50.5 -1.0**
baz=114,SNR=618
T25A S **S** **21 46 26.7 +1.3**
baz=114
**OGNE Ogallala 45.73 318** P **P** **21 39 52.1 +0.2**
OGNE IAmb IAmb 21 40 07.5
comp=Z,4µm,0.9s
**OGNE Ogallala 45.73 318** ⇑P **P** **21 39 49.8 -2.1**
**BO02 Sierra Bellavi 45.87 189** P **P** **21 39 54.3 +1.3**
**BO02 Sierra Bellavi 45.87 189** ⇓P **P** **21 39 51.8 -1.1**
**GO05 Huala 46.27 190** P **P** **21 39 56.5 +0.5**
GO05 IAmb IAmb 21 39 59.8
comp=Z,3µm,1.5s
**GO05 Huala 46.27 190** ⇑P **P** **21 39 54.5 -1.5**
**ANMO Albuquerque 46.34 309** P **P** **21 39 59.0 +2.1**
ANMO IAmb IAmb 21 40 14.0
comp=Z,4µm,0.9s
**ANMO Albuquerque 46.34 309** LR LR 22 01 36.4
comp=Z,43µm,18.8s,baz=200,slow=39
**ANMO Albuquerque 46.34 309***c i*P **P** **21 39 56.4 -0.5**
ANMO pmax pmax
comp=Z,2µm,0.9s
**Y22D IRIS PASSCAL I 46.40 307** P **P** **21 39 57.3 -0.1**
baz=110,SNR=52
Y22D S **S** **21 46 40.0 +3.8**
baz=110
**H03N1 Juan Fernandez 46.48 199** P **P** **21 40 00.2 +2.9**
baz=131,slow=14,SNR=485
**H03N2 Juan Fernandez 46.49 199** P **P** **21 40 00.4 +3.0**
baz=131,slow=14,SNR=748
**H03N3 Juan Fernandez 46.50 199** P **P** **21 39 59.8 +2.2**
baz=131,slow=14,SNR=386
**AGMN Agassiz Nation 46.52 330** ⇑P **P** **21 39 56.1 -1.7**
**SLBS Sierra La Lagu 46.55 292** P **P** **21 40 00.8 +2.3**
**SLBS Sierra La Lagu 46.55 292** ⇑P **P** **21 39 58.6 +0.1**
**121A Cookes Peak, D 46.60 305** P **P** **21 39 57.5 -1.4**
baz=107,SNR=454
121A S **S** **21 46 41.6 +2.3**
baz=107
**VA04 Juan Fernndez 46.65 198** P **P** **21 40 00.5 +1.6**
**VA04 Juan Fernndez 46.65 198** ⇓P **P** **21 40 00.3 +1.4**
**SDCO Great Sand Dun 46.68 312** P **P** **21 40 00.8 +1.2**
SDCO IAmb IAmb 21 40 17.4
comp=Z,2µm,0.8s
**MACI Morro de la Ar 46.77 61** P **P** **21 40 02.5 +2.2**
**H03S3 Juan Fernandez 46.84 198** P **P** **21 40 02.6 +2.5**
baz=3.0,slow=12,SNR=252
**H03S1 Juan Fernandez 46.85 198** P **P** **21 40 02.1 +1.9**
baz=3.0,slow=12,SNR=156
**H03S2 Juan Fernandez 46.85 198** P **P** **21 40 02.2 +2.0**
baz=3.0,slow=12,SNR=214
**Q24A Divide 46.94 314** P **P** **21 40 00.3 -1.3**
baz=115,SNR=195
Q24A S **S** **21 46 44.3 +0.2**
baz=115
**H06S1 SOCORRO T 47.04 286** P **P** **21 40 03.7 +1.3**
**PMOZ Porto Moniz, M 47.34 55** P **P** **21 40 07.1 +2.5**
**PMOZ Porto Moniz, M 47.34 55***i*⇑*i*P **P** **21 40 07.5 +2.9**
comp=Z,9µm,1.0s
PMOZ *ep*P **pP** **21 40 26.1 -6.3**
PMOZ *e*S **S** **21 46 53.2 +3.6**
PMOZ A A 21 58 21.4
comp=Z,26µm,20.0s
**PMOZ Porto Moniz, M 47.34 55** P **P** **21 40 05.4 +0.8**
**PMOZ Porto Moniz, M 47.34 55** ⇑P **P** **21 40 04.8 +0.1**
**FUL Funchal 47.54 55***i*⇑*i*P **P** **21 40 08.1 +2.1**
comp=Z,2µm,1.1s
FUL *ep*P **pP** **21 40 27.9 -5.9**
**PMAR Madeira 47.55 55***i*⇑*i*P **P** **21 40 08.9 +2.6**
comp=Z,4µm,1.3s
PMAR *ep*P **pP** **21 40 27.9 -6.2**
**EOSO Osorio 47.55 62** P **P** **21 40 08.6 +2.3**
**ISCO Idaho Springs 47.62 315** P **P** **21 40 08.2 +1.3**
ISCO IAmb IAmb 21 40 23.4
comp=Z,3µm,1.0s
**ISCO Idaho Springs 47.62 315** ⇑P **P** **21 40 05.7 -1.2**
**ISCO Idaho Springs 47.62 315** P **P** **21 40 08.2 +1.3**
ISCO pmax pmax
comp=Z,3µm,1.0s

**S22A 4UR Ranch, Cre 47.65 312 P P 21 40 06.3 -0.9**
baz=113,SNR=493
S22A S **S** **21 46 54.6 +0.4**
baz=113
**BI02 San Fabin de 47.78 189 P P 21 40 08.5 +0.7**
**ULM Lac du Bonnet 47.86 332 P P 21 40 08.4 +0.3**
**ULM Lac du Bonnet 47.86 332 ⇑P P 21 40 05.9 -2.3**
**ULM Lac du Bonnet 47.86 332 P P 21 40 05.9 -2.3**
comp=Z,3µm,0.7s,baz=129,slow=9.2,SNR=348
ULM ScP **ScP** **21 45 14.9 -3.5**
comp=Z,701nm,0.8s,baz=151,slow=4.0,SNR=6.6
ULM S **S** **21 46 52.4 -3.7**
comp=Z,62nm,0.8s,baz=105,slow=20,SNR=1.3
ULM P4KPbc 22 17 47.3
comp=Z,7.4nm,0.8s,baz=135,slow=4.9,SNR=5.9
comp=Z,3µm,0.7s
**I10CA LAC DU BONNET 47.90 332 P P 21 40 07.3 -1.1**
baz=130,slow=7.3,SNR=5.9
**PMPS Porto Santo 48.11 55⇑*i*P P 21 40 12.6 +2.2**
comp=Z,4µm,1.3s
PMPS *ep*P **pP** **21 40 32.7 -5.5**
**PMPST Porto Santo, M 48.11 55⇑*i*P P 21 40 13.0 +2.6**
comp=Z,6µm,1.4s
PMPST *ep*P **pP** **21 40 31.6 -6.7**
**PHWY Pilot Hill 48.17 317 P P 21 40 11.8 +0.6**
PHWY IAmb IAmb 21 40 27.1
comp=Z,2µm,1.2s
**SMCO Snowmass 48.32 314 ⇑P P 21 40 11.1 -1.3**
**N23A Red Feather La 48.32 316 P P 21 40 10.8 -1.5**
baz=116,SNR=347
N23A S **S** **21 47 04.2 +0.7**
baz=116
**TRQA Tornquist 48.52 179 P P 21 40 14.0 +0.6**
**TRQA Tornquist 48.52 179 P P 21 40 14.0 +0.6**
TRQA pmax pmax
comp=Z,885nm,1.0s
**RSSD Black Hills 48.61 321 P P 21 40 14.8 +0.5**
**RSSD Black Hills 48.61 321 ⇑P P 21 40 11.2 -3.1**
**RSSD Black Hills 48.61 321 P P 21 40 14.8 +0.5**
RSSD pmax pmax
comp=Z,1µm,1.1s
**MVCO Mesa Verde 48.68 311 P P 21 40 16.7 +1.6**
MVCO IAmb IAmb 21 40 33.1
comp=Z,2µm,1.0s
**MVCO Mesa Verde 48.68 311 ⇑P P 21 40 14.3 -0.8**
**W18A Petrified Fore 48.93 308 P P 21 40 15.9 -1.1**
baz=108,SNR=94
W18A S **S** **21 47 14.5 +2.4**
baz=108
**SRIG Santa Rosalia 49.15 297 P P 21 40 20.2 +1.8**
**SRIG Santa Rosalia 49.15 297 ⇑P P 21 40 18.1 -0.3**
**SRIG Santa Rosalia 49.15 297 *i*P P 21 40 19.0 +0.5**
SRIG IVmB_BB 21 40 34.0
comp=Z,90µm,1.0s
**LC02 Puerto Saavedr 50.21 191 P P 21 40 29.0 +2.8**
LC02 IAmb IAmb 21 41 27.9
comp=Z,3µm,0.9s
**WUAZ Wupatki 50.33 307 P P 21 40 29.8 +2.3**
**WUAZ Wupatki 50.33 307 ⇑P P 21 40 27.3 -0.2**
**214A Organ Pipe Nat 50.56 303 P P 21 40 28.5 -0.7**
baz=103,SNR=63
214A S **S** **21 47 36.8 +2.3**
baz=103
**HMU Henry Mountain 50.61 311 P P 21 40 31.1 +1.4**
HMU IAmb IAmb 21 40 47.7
comp=Z,3µm,0.9s
**GO06 Curarrehue 50.67 189 P P 21 40 31.3 +1.5**
GO06 IAmb IAmb 21 40 33.6
comp=Z,3µm,1.1s
**GO06 Curarrehue 50.67 189 ⇓P P 21 40 28.7 -1.1**
**DGMT Dagmar 51.01 326 P P 21 40 34.2 +2.1**
**DGMT Dagmar 51.01 326 ⇑P P 21 40 31.7 -0.4**
**PIX Pinacate 51.01 302 P P 21 40 33.7 +1.2**
**LAO LASA Array 51.23 323 P P 21 40 35.0 +1.0**
LAO IAmb IAmb 21 40 51.6
comp=Z,4µm,1.2s
**LAO LASA Array 51.23 323 ⇑P P 21 40 32.4 -1.5**
**LR04 Corral 51.28 190 P P 21 40 35.9 +1.7**
**LR05 Currie 51.38 189 P P 21 40 36.3 +1.4**
**113A Mohawk Valley, 51.53 303 P P 21 40 37.7 +1.4**
113A IAmb IAmb 21 40 52.7
comp=Z,3µm,1.6s
**IVI Ivigtut 51.55 9 P P 21 40 37.1 +1.2**
**IVI Ivigtut 51.55 9 ⇑P P 21 40 35.4 -0.5**
**IVI Ivigtut 51.55 9 *i*P P 21 40 35.9 0.0**
IVI IAmb IAmb 21 40 39.3
comp=Z,1µm,1.1s
**BW06 Boulder Array 51.56 317 ⇑P P 21 40 34.6 -2.0**
**PD31 Pinedale Array 51.56 317 P P 21 40 37.4 +0.7**
PD31 IAmb IAmb 21 40 52.5
comp=Z,4µm,1.1s
**PDAR Pinedale Array 51.56 317 P P 21 40 38.1 +1.4**
**PDAR Pinedale Array 51.56 317 P P 21 40 34.5 -2.1**
comp=Z,296nm,0.5s,baz=117,slow=9.2,SNR=346
PDAR ScP **ScP** **21 45 31.9 -2.9**
comp=Z,52nm,0.5s,baz=103,slow=4.0,SNR=5.8
PDAR S **S** **21 47 45.4 -3.0**
comp=Z,27nm,1.0s,baz=103,slow=7.9,SNR=1.3
PDAR LR LR 22 01 48.0
comp=Z,65µm,21.6s,baz=83,slow=35
PDAR PKPPKP P'P'df 22 11 02.0 -13
comp=Z,2.1nm,0.9s,baz=159,slow=0.8,SNR=4.5
PDAR PKP2ab 22 11 56.8
comp=Z,3.4nm,0.8s,baz=303,slow=4.2,SNR=1.9
PDAR P4KPbc 22 18 05.0
comp=Z,4.8nm,0.8s,baz=115,slow=5.6,SNR=6.3
comp=Z,296nm,0.5s
**H10N3 ASCENSION HYDR 51.58 109 P P 21 40 39.6 +3.0**
baz=285,slow=7.4,SNR=18
H10N3 T T 22 36 38.2
baz=293,slow=75,SNR=26
**H10N2 ASCENSION HYDR 51.58 109 P P 21 40 39.6 +3.0**
baz=285,slow=7.4,SNR=13
H10N2 T T 22 36 49.9
baz=293,slow=75,SNR=26
**H10N1 ASCENSION HYDR 51.60 109 P P 21 40 39.7 +3.0**
baz=285,slow=7.4,SNR=34
H10N1 T T 22 36 50.9
baz=293,slow=75,SNR=26
**PLCA Paso Flores 51.67 187 P P 21 40 39.0 +1.8**
**PLCA Paso Flores 51.67 187 ⇓P P 21 40 36.5 -0.7**
**PLCA Paso Flores 51.67 187 P P 21 40 36.9 -0.3**
comp=Z,2µm,0.8s,baz=9.0,slow=10,SNR=112
PLCA ScP **ScP** **21 45 34.7 -0.2**
comp=Z,142nm,1.0s,baz=0.6,slow=6.5,SNR=3.0
PLCA S **S** **21 47 52.8 +3.3**
comp=Z,29nm,0.9s,baz=31,slow=5.9,SNR=1.5
PLCA P4KPbc 22 18 05.9
comp=Z,3.2nm,0.9s,baz=14,slow=11,SNR=4.0
**PLCA Paso Flores 51.67 187 P P 21 40 39.0 +1.8**
PLCA pmax pmax
comp=Z,5µm,1.1s
**PLCA Paso Flores 51.67 187 *e*P P 21 40 36.4 -0.8**
**ASCN Ascension 51.74 109 P P 21 40 40.7 +2.6**
ASCN IAmb IAmb 21 41 02.6
comp=Z,3µm,1.2s
**H10S3 ASCENSION HYDR 51.82 110 T T 22 37 06.4**
baz=292,slow=74,SNR=21
**H10S2 ASCENSION HYDR 51.84 110 T T 22 37 08.6**
baz=288,slow=74,SNR=20
**MVU Marysvale 51.89 311 P P 21 40 41.1 +1.9**
**LL04 Puerto Octay 52.11 189 P P 21 40 41.7 +1.3**
**LL03 Petrohue 52.33 189 P P 21 40 43.3 +1.3**
**RLMT Red Lodge 52.37 320 P P 21 40 43.7 +1.1**
RLMT IAmb IAmb 21 41 00.8
comp=Z,3µm,0.9s
**RLMT Red Lodge 52.37 320 ⇑P P 21 40 40.9 -1.7**
**BLYC Blythe 52.38 304 P P 21 40 44.3 +1.8**
**HWUT Hardware Ranch 52.49 315 ⇑P P 21 40 41.5 -2.0**
**AHID Auburn Hatcher 52.60 316 P P 21 40 45.0 +0.6**
AHID IAmb IAmb 21 41 01.4
comp=Z,3µm,0.8s
**LL05 Los Muermos 52.77 190 P P 21 40 46.5 +1.3**
LL05 IAmb IAmb 21 41 23.9
comp=Z,2µm,0.9s
**YMP Mirror Lake PI 52.77 319 P P 21 40 46.4 +0.7**
YMP IAmb IAmb 21 41 04.0
comp=Z,2µm,0.9s
**LKWY Lake 52.86 319 P P 21 40 47.7 +1.5**
LKWY IAmb IAmb 21 41 04.4
comp=Z,2µm,1.0s
**LKWY Lake 52.86 319 ⇑P P 21 40 46.3 0.0**
**LKWY Lake 52.86 319 P P 21 40 47.7 +1.5**
LKWY pmax pmax
comp=Z,2µm,1.0s

**DUG Dugway, Tooele 52.88 313 P P 21 40 47.8 +1.4**
DUG IAmb IAmb 21 41 02.9
comp=Z,3µm,1.0s
**DUG Dugway, Tooele 52.88 313 ⇑P P 21 40 45.1 -1.2**
**DUG Dugway, Tooele 52.88 313 P P 21 40 47.8 +1.4**
DUG pmax pmax
comp=Z,3µm,1.0s
**H17A Grant Village 52.90 318 P P 21 40 46.4 -0.2**
baz=114,SNR=58
H17A S **S** **21 48 05.3 -1.4**
baz=114
**VTX Valle De La Tr 52.92 301 P P 21 40 48.5 +1.8**
**YPP Pitchstone Pla 53.00 318 P P 21 40 48.6 +1.2**
**FRB Frobisher Bay 53.10 357 ⇑P P 21 40 45.6 -1.7**
**FCC Fort Churchill 53.43 340 P P 21 40 50.4 +0.6**
**FCC Fort Churchill 53.43 340 P P 21 40 50.4 +0.6**
FCC pmax pmax
comp=Z,4µm,0.9s
**LL01 San Ignacio de 53.55 189 P P 21 40 52.1 +1.3**
**LL01 San Ignacio de 53.55 189 ⇓P P 21 40 49.6 -1.3**
**SPR3 Spring Creek 3 53.62 311 P P 21 40 53.7 +1.7**
**FFC Flin Flon 53.63 333 P P 21 40 51.7 +0.3**
**FFC Flin Flon 53.63 333 ⇑P P 21 40 48.9 -2.5**
**FFC Flin Flon 53.63 333 *e*P P 21 40 48.9 -2.5**
**PRN Pahroc Range 53.71 309 ⇓P P 21 40 52.9 +0.5**
**TPFO Pinon Flats 53.91 304 P P 21 40 53.1 -0.9**
baz=102,SNR=163
TPFO S **S** **21 48 22.2 +1.7**
baz=102
**PFO Pinyon Flats O 53.92 304 P P 21 40 55.7 +1.7**
PFO IAmb IAmb 21 41 10.6
comp=Z,2µm,1.1s
**PFO Pinyon Flats O 53.92 304*c i*P P 21 40 52.9 -1.1**
PFO pmax pmax
comp=Z,3µm,1.1s
**NUUK Nuuk 53.96 6 ⇑P P 21 40 54.7 +1.1**
**NUUK Nuuk 53.96 6 *i*P P 21 40 55.6 +2.0**
NUUK IAmb IAmb 21 41 15.7
comp=Z,1µm,1.2s
**EGMT Eagleton 53.98 323 P P 21 40 55.2 +1.1**
EGMT IAmb IAmb 21 41 12.1
comp=Z,2µm,1.0s
**EGMT Eagleton 53.98 323 ⇑P P 21 40 51.8 -2.4**
**BOZ Bozeman (W) 54.08 319 ⇑P P 21 40 48.7 -6.3**
**LL07 Hotel Espejo d 54.16 190 P P 21 40 56.7 +1.4**
**LL02 Futaleuf 54.26 188 P P 21 40 57.5 +1.5**
LL02 IAmb IAmb 21 40 59.9
comp=Z,2µm,1.0s
**LL02 Futaleuf 54.26 188 ⇑P P 21 40 55.3 -0.7**
**R11B Troy Canyon, C 54.37 310 P P 21 40 56.6 -0.7**
baz=106,SNR=504
R11B S **S** **21 48 29.9 +3.4**
baz=106
**GO07 Milladeo Hill, 54.46 190 P P 21 40 58.9 +1.4**
**ELK Elko 54.81 313 P P 21 41 01.5 +1.0**
ELK IAmb IAmb 21 41 17.4
comp=Z,990nm,0.8s
**ELK Elko 54.81 313 ⇑P P 21 40 59.0 -1.4**
**ELK Elko 54.81 313 P P 21 41 01.5 +1.0**
ELK pmax pmax
comp=Z,990nm,0.8s
**LYMT Lyon Mountain 55.06 321 P P 21 41 04.3 +2.1**
**PFVI Vila Bisbo 55.12 52 P P 21 41 04.6 +2.2**
**PFVI Vila Bisbo 55.12 52⇑*i*P P 21 41 05.2 +2.7**
comp=Z,4µm,1.5s
PFVI *ep*P **pP** **21 41 23.8 -7.2**
PFVI *e*S **S** **21 48 40.7 +4.5**
**PFVI Vila Bisbo 55.12 52 P P 21 41 04.8 +2.3**
**HLID Hailey 55.15 316 P P 21 41 04.4 +1.5**
HLID IAmb IAmb 21 41 19.2
comp=Z,3µm,1.1s
**HLID Hailey 55.15 316 ⇑P P 21 41 01.3 -1.5**
**TIO Tiouine 55.17 60 P P 21 41 05.1 +2.0**
**PMAFR Mafra 55.23 50 P P 21 41 05.4 +2.1**
**PMAFR Mafra 55.23 50 P P 21 41 05.1 +1.8**
**LIS Lisbon 55.27 50⇑*i*P P 21 41 06.3 +2.7**
comp=Z,4µm,1.1s
LIS *ep*P **pP** **21 41 24.4 -7.7**
**LIS Lisbon 55.27 50** *eP* **P** **21 41 05.8 +2.3**
LIS IAmb IAmb 21 41 28.9
comp=Z,2µm,0.9s
LIS *e*S **S** **21 48 40.8 +2.7**
**LIS Lisbon 55.27 50 ⇑P P 21 41 06.2 +2.7**
**LIS Lisbon 55.27 50** *eP* **P** **21 41 05.8 +2.3**
LIS *e*S **S** **21 48 40.8 +2.7**
**MORF Marmelete 55.29 52 P P 21 41 06.3 +2.5**
**MORF Marmelete 55.29 52⇑*i*P P 21 41 06.6 +2.8**
comp=Z,5µm,1.3s
MORF *ep*P **pP** **21 41 24.9 -7.5**
MORF *e*S **S** **21 48 43.7 +5.1**
**MORF Marmelete 55.29 52** *eP* **P** **21 41 06.2 +2.5**
MORF IAmb IAmb 21 41 27.9
comp=Z,6µm,1.4s
MORF *e*S **S** **21 48 41.3 +2.7**
**MORF Marmelete 55.29 52 ⇑P P 21 41 04.4 +0.7**
**MORF Marmelete 55.29 52** *eP* **P** **21 41 06.2 +2.4**
MORF *e*S **S** **21 48 41.3 +2.7**
**PTEO Sao Teotonio 55.30 52⇑*i*P P 21 41 06.5 +2.8**
comp=Z,3µm,1.2s
PTEO *ep*P **pP** **21 41 25.5 -6.8**
**AVE Averroes 55.44 57 P P 21 41 07.1 +2.3**
AVE IAmb IAmb 21 41 29.8
comp=Z,2µm,0.9s
**AVE Averroes 55.44 57 P P 21 41 07.3 +2.4**
**AVE Averroes 55.44 57 ⇑P P 21 41 04.8 0.0**
**TPH Tonopah 55.54 309 P P 21 41 07.4 +1.6**
**TPH Tonopah 55.54 309 P P 21 41 07.4 +1.6**
TPH pmax pmax
comp=Z,10µm,1.0s
**PNCL Nicolau / Gran 55.59 51⇑*i*P P 21 41 08.6 +2.8**
comp=Z,3µm,3.3s
PNCL *ep*P **pP** **21 41 26.8 -7.6**
PNCL *e*S **S** **21 48 46.9 +4.5**
**PNCL Nicolau / Gran 55.59 51 P P 21 41 07.0 +1.2**
**PSBE So Bento 55.75 49⇑*i*P P 21 41 09.8 +2.8**
comp=Z,4µm,1.3s
PSBE *ep*P **pP** **21 41 28.1 -7.5**
PSBE *e*S **S** **21 48 48.5 +3.9**
**MESJ Messejana 55.76 51 P P 21 41 09.7 +2.7**
MESJ IAmb IAmb 21 41 30.8
comp=Z,4µm,1.7s
**MESJ Messejana 55.76 51⇑*i*P P 21 41 10.0 +3.0**
comp=Z,2µm,1.5s
MESJ *ep*P **pP** **21 41 28.5 -7.1**
**MESJ Messejana 55.76 51** *eP* **P** **21 41 09.5 +2.4**
MESJ IAmb IAmb 21 41 30.4
comp=Z,6µm,2.0s
MESJ *e*S **S** **21 48 47.3 +2.6**
**MESJ Messejana 55.76 51** *eP* **P** **21 41 09.5 +2.4**
MESJ *e*S **S** **21 48 47.3 +2.6**
**PBDV Barranco-do-Ve 55.84 52⇑*i*P P 21 41 10.9 +3.2**
comp=Z,3µm,1.5s
PBDV *ep*P **pP** **21 41 29.2 -7.1**
PBDV *e*S **S** **21 48 51.1 +5.2**
**PBDV Barranco-do-Ve 55.84 52 P P 21 41 10.6 +2.9**
**PCVE Castro Verde 55.85 52⇑*i*P P 21 41 10.7 +3.0**
comp=Z,3µm,1.2s
PCVE *ep*P **pP** **21 41 29.3 -7.0**
PCVE *e*S **S** **21 48 51.1 +5.2**
PVAQ **Castro Verde 55.85 52 P P 21 41 10.6 +3.0**
**RTC Rabat Centre 56.02 56 P P 21 41 11.2 +2.3**
**RTC Rabat Centre 56.02 56 ⇑P P 21 41 11.4 +2.4**
**PVAQ Vaqueiros 56.04 52 P P 21 41 11.8 +2.7**
PVAQ IAmb IAmb 21 41 33.1
comp=Z,4µm,1.9s
**PVAQ Vaqueiros 56.04 52⇑*i*P P 21 41 12.2 +3.1**
comp=Z,2µm,1.6s
PVAQ *ep*P **pP** **21 41 30.6 -7.1**
PVAQ *e*S **S** **21 48 54.2 +5.7**
PVAQ A A 22 02 54.6
comp=Z,24µm,22.0s
**PVAQ Vaqueiros 56.04 52 P P 21 41 12.2 +3.1**
**PVAQ Vaqueiros 56.04 52 ⇑P P 21 41 10.7 +1.6**
**MSO Missoula 56.04 320 P P 21 41 09.5 +0.4**
MSO IAmb IAmb 21 41 26.7
comp=Z,3µm,1.9s
**MSO Missoula 56.04 320 ⇑P P 21 41 07.2 -1.8**
**PMTG Montargil 56.06 50⇑*i*P P 21 41 11.8 +2.6**
comp=Z,6µm,1.0s
PMTG *ep*P pP 21 41 29.8 -8.0
PMTG *e*S **S** **21 48 52.5 +3.8**
**PBEJ Beja 56.07 51⇑*i*P P 21 41 12.2 +2.9**
comp=Z,2µm,2.2s

PBEJ *ep*P **pP** **21 41 31.1 -6.8**
**EVO Evora 56.09 51⇑*i*P P 21 41 12.2 +2.8**
comp=Z,3µm,3.0s
EVO *ep*P pP 21 41 30.0 -8.0
**EVO Evora 56.09 51 P P 21 41 11.8 +2.4**
**PCAS Casmilo, Conde 56.12 49⇑*i*P P 21 41 12.3 +2.7**
comp=Z,5µm,1.3s
PCAS *ep*P pP 21 41 30.2 -8.0
PCAS *e*S **S** **21 48 52.9 +3.5**
**COI Coimbra 56.22 49 P P 21 41 12.8 +2.5**
**COI Coimbra 56.22 49⇑*i*P P 21 41 13.6 +3.3**
comp=Z,7µm,1.1s
COI *ep*P **pP** **21 41 31.4 -7.5**
COI *e*S **S** **21 48 54.3 +3.6**
**COI Coimbra 56.22 49 ⇑P P 21 41 10.1 -0.2**
**COI Coimbra 56.22 49 P P 21 41 12.8 +2.5**
COI pmax pmax
comp=Z,5µm,1.0s
**EGRO El Granado 56.25 52 P P 21 41 13.9 +3.3**
**NV11 Mina Array Sit 56.34 309 P P 21 41 12.7 +1.3**
NV11 IAmb IAmb 21 41 28.5
comp=Z,3µm,1.3s
**NVAR Mina Array Bea 56.45 309 P P 21 41 13.5 +1.2**
**NVAR Mina Array Bea 56.45 309 P P 21 41 11.0 -1.3**
comp=Z,67nm,0.6s,baz=106,slow=6.7,SNR=99
NVAR ScP **ScP** **21 45 54.0 -2.2**
comp=Z,104nm,1.0s,baz=115,slow=4.3,SNR=3.0
NVAR S **S** **21 48 52.9 -1.5**
comp=Z,5.5nm,0.8s,baz=113,slow=19,SNR=1.0
NVAR LR LR 22 07 57.5
comp=Z,43µm,18.1s,baz=104,slow=39
NVAR PKPPKP **P'P'df** **22 11 04.6 -3.6**
comp=Z,2.3nm,0.7s,baz=298,slow=1.9,SNR=4.1
NVAR PKP2bc 22 11 18.7
comp=Z,8.6nm,0.9s,baz=300,slow=2.0,SNR=7.9
NVAR PKP2ab 22 11 35.3
comp=Z,27nm,1.1s,baz=270,slow=4.1,SNR=6.9
NVAR P4KPbc 22 18 27.9
comp=Z,1.0nm,0.6s,baz=124,slow=4.7,SNR=4.5
comp=Z,67nm,0.6s
**COYC Coyhaique 56.63 188 P P 21 41 14.6 +1.6**
COYC IAmb IAmb 21 41 17.3
comp=Z,2µm,1.0s
**COYC Coyhaique 56.63 188 ⇑P P 21 41 12.3 -0.6**
**PVIS Viseu 56.74 48⇑*i*P P 21 41 16.6 +2.6**
comp=Z,3µm,1.2s
PVIS *ep*P pP 21 41 34.6 -8.1
**ARNO Arenosillo 56.74 53 P P 21 41 16.4 +2.4**
**PBAR Barrancos 56.74 51⇑*i*P P 21 41 17.1 +3.1**
comp=Z,3µm,1.4s
PBAR *ep*P **pP** **21 41 35.3 -7.4**
PBAR *e*S **S** **21 49 03.2 +5.5**
**PBAR Barrancos 56.74 51 P P 21 41 17.0 +3.0**
**PMRV Marv??o 56.78 50⇑*i*P P 21 41 16.8 +2.5**
comp=Z,3µm,1.3s
PMRV *ep*P pP 21 41 34.9 -8.1
PMRV *e*S **S** **21 49 01.4 +3.2**
PMRV A A 22 02 55.6
comp=Z,25µm,22.0s
**PGAV Gavieira, Arco 56.82 47⇑*i*P P 21 41 17.1 +2.5**
comp=Z,4µm,1.6s
PGAV *ep*P pP 21 41 34.8 -8.5
PGAV *e*S **S** **21 49 01.1 +2.3**
PGAV A A 22 03 46.1
comp=Z,19µm,18.0s
**PCBR Castelo Branco 56.82 49⇑*i*P P 21 41 17.0 +2.5**
comp=Z,3µm,1.3s
PCBR *ep*P **pP** **21 41 35.8 -7.4**
**SFJD Kangerlussuaq 56.82 6 P P 21 41 14.7 +0.7**
SFJD IAmb IAmb 21 41 34.0
comp=Z,2µm,1.1s
**SFJD Kangerlussuaq 56.82 6 P P 21 41 14.7 +0.7**
**SFJD Kangerlussuaq 56.82 6 *i*P P 21 41 14.6 +0.6**
SFJD IAmb IAmb 21 41 33.6
comp=Z,2µm,1.1s
**DY2G Dye2 56.83 8 *i*P P 21 41 15.3 +0.9**
DY2G IAmb IAmb 21 41 35.2
comp=Z,4µm,0.6s
**MDPB Devils Postpil 56.87 308 P P 21 41 17.0 +1.8**
MDPB IAmb IAmb 21 41 31.9
comp=Z,2µm,0.9s
**EBAD Badajoz 56.90 51 P P 21 41 15.4 +0.3**
**MTE Manteigas 56.91 49 P P 21 41 17.3 +2.1**
MTE IAmb IAmb 21 41 39.4
comp=Z,2µm,1.0s
**MTE Manteigas 56.91 49⇑*i*P P 21 41 17.8 +2.5**
comp=Z,3µm,1.3s
MTE *ep*P pP 21 41 35.6 -8.4
MTE *e*S **S** **21 49 02.1 +2.1**
MTE A A 22 02 49.9
comp=Z,17µm,20.0s
**MTE Manteigas 56.91 49 ⇓P P 21 41 14.8 -0.5**
**PCAB Cabril 56.92 47⇑*i*P P 21 41 17.6 +2.3**
comp=Z,3µm,1.4s
PCAB *ep*P **pP** **21 41 36.7 -7.3**
**EMIN Mina Concepcio 56.93 52 P P 21 41 18.2 +2.8**
**POLO Lamas de Olo 56.99 47⇑*i*P P 21 41 18.4 +2.5**
comp=Z,2µm,1.7s
POLO *ep*P pP 21 41 36.2 -8.4
POLO *e*S **S** **21 49 02.6 +1.5**
**SFS San Fernando 57.02 53 P P 21 41 18.9 +2.9**
SFS IAmb IAmb 21 41 40.5
comp=Z,3µm,1.2s
**SFS San Fernando 57.02 53 P P 21 41 19.0 +3.0**
**SFS San Fernando 57.02 53 ⇑P P 21 41 19.5 +3.5**
**SFS San Fernando 57.02 53 P P 21 41 18.9 +2.9**
SFS pmax pmax
comp=Z,3µm,1.2s
**PVRL Vila Real 57.02 48⇑*i*P P 21 41 18.6 +2.6**
comp=Z,3µm,3.3s
PVRL *ep*P **pP** **21 41 37.4 -7.3**
**ISOG Isortoq, Green 57.19 12 ⇓P P 21 41 14.9 -1.7**
**ISOG Isortoq, Green 57.19 12 *i*P P 21 41 17.2 +0.6**
ISOG IAmb IAmb 21 41 36.2
comp=Z,2µm,0.8s
**TIC Toumodi 57.29 89** *eP* **P** **21 41 19.0 +0.7**
comp=Z,64nm,0.7s
**LIC Lamto 57.35 89** *eP* **P** **21 41 17.5 -1.2**
comp=Z,200nm,0.4s
**IFR Ifrane 57.36 57 P P 21 41 18.5 -0.2**
**ESPR Espera 57.38 53 P P 21 41 19.9 +1.4**
**I17CI DIMBOKRO INFRA 57.45 89 P P 21 41 22.0 +2.6**
baz=286,slow=8.7,SNR=4.3
**DBIC Dimbokro 57.45 89 P P 21 41 18.3 -1.1**
DBIC IAmb IAmb 21 41 19.9
comp=Z,18nm,0.9s
**DBIC Dimbokro 57.45 89 P P 21 41 21.3 +1.9**
DBIC IAmb IAmb 21 41 44.6
comp=Z,2µm,0.9s
**DBIC Dimbokro 57.45 89** *eP* **P** **21 41 20.2 +0.8**
**DBIC Dimbokro 57.45 89 ⇑P P 21 41 18.4 -1.1**
**DBIC Dimbokro 57.45 89 P P 21 41 21.4 +2.0**
comp=Z,171nm,0.5s,baz=275,slow=8.9,SNR=61
DBIC S **S** **21 49 08.2 +0.5**
comp=Z,30nm,0.7s,baz=302,slow=19,SNR=1.3
DBIC LR LR 22 02 50.4
comp=Z,19µm,20.2s,baz=254,slow=32
DBIC PKPPKP **P'P'df** **22 11 01.5 -5.8**
comp=Z,8.5nm,0.9s,baz=103,slow=3.1,SNR=3.8
DBIC PKP2bc 22 11 16.9
comp=Z,15nm,1.0s,baz=103,slow=4.5,SNR=4.6
DBIC PKP2ab 22 11 28.0
comp=Z,31nm,1.0s,baz=94,slow=3.5,SNR=8.0
comp=Z,171nm,0.5s
**MVO Moncorvo 57.49 48⇑*i*P P 21 41 21.9 +2.6**
comp=Z,5µm,1.0s
MVO *ep*P pP 21 41 39.6 -8.5
MVO *e*S **S** **21 49 06.5 -1.1**
MVO A A 21 59 11.1
comp=Z,14µm,20.0s
**ANGG Ammassalik, Gr 57.52 12 P P 21 41 19.4 +0.5**
ANGG IAmb IAmb 21 41 38.7
comp=Z,2µm,1.1s
**ANGG Ammassalik, Gr 57.52 12 ⇓P P 21 41 16.8 -2.1**
**ANGG Ammassalik, Gr 57.52 12 *i*P P 21 41 19.0 0.0**
ANGG IAmb IAmb 21 41 38.4
comp=Z,1µm,1.0s
**BMO Blue Mountains 57.54 317 P P 21 41 20.0 +0.3**
BMO IAmb IAmb 21 41 35.2
comp=Z,2µm,1.1s
**BMO Blue Mountains 57.54 317 ⇑P P 21 41 17.0 -2.7**
**BMO Blue Mountains 57.54 317 P P 21 41 20.0 +0.3**
BMO pmax pmax
comp=Z,2µm,1.2s
**ECEU Ceuta 57.57 54 P P 21 41 22.9 +3.1**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CEU** | **Ceuta** | **57.57** | **54** | P | | **P** | **21 41 22.6 +2.7** |
| **KIC** | **Kosan Boka** | **57.61** | **89** | *e*P | | **P** | **21 41 19.5 -1.0** |
| | comp=Z,156nm,0.7s | | | | | | |
| **WVOR** | **Wild Horse Val** | **57.74** | **314** | P | | **P** | **21 41 21.6 +0.5** |
| WVOR | | | | IAmb | IAmb | | 21 41 37.1 |
| | comp=Z,3μm,1.3s | | | | | | |
| **WVOR** | **Wild Horse Val** | **57.74** | **314** | ⇑P | | **P** | **21 41 19.3 -1.8** |
| **WVOR** | **Wild Horse Val** | **57.74** | **314** | P | | **P** | **21 41 21.7 +0.5** |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,3μm,1.3s | | | | | | |
| **LIJA** | **Lijar** | **57.74** | **53** | P | | **P** | **21 41 22.5 +1.3** |
| **F10A** | **Beach Ranch, E** | **57.85** | **318** | P | | **P** | **21 41 21.9 0.0** |
| **F10A** | **Beach Ranch, E** | **57.85** | **318** | ⇓P | | **P** | **21 41 19.7 -2.2** |
| **PBRG** | **Braganca** | **57.87** | **47** | ⇑*i*P | | **P** | **21 41 24.5 +2.6** |
| | comp=Z,2μm,2.1s | | | | | | |
| PBRG | | | | *e*pP | | pP | 21 41 42.3 -8.4 |
| PBRG | | | | *e*S | | **S** | **21 49 15.0 +2.6** |
| **ECAL** | **Calabor** | **57.91** | **47** | P | | **P** | **21 41 23.6 +1.4** |
| **ECAB** | **El Cabril** | **57.97** | **52** | P | | **P** | **21 41 24.3 +1.6** |
| **PVLZ** | **Peæn de** | **58.30** | **55** | P | | **P** | **21 41 27.0 +2.0** |
| **AY03** | **Cochrane** | **58.35** | **188** | P | | **P** | **21 41 27.6 +2.7** |
| AY03 | | | | IAmb | IAmb | | 21 41 30.5 |
| | comp=Z,2μm,0.9s | | | | | | |
| **EMAL** | **Malaga-Limoner** | **58.48** | **53** | P | | **P** | **21 41 28.0 +1.8** |
| **SAO** | **San Andreas Ge** | **58.54** | **307** | ⇓P | | **P** | **21 41 26.4 -0.3** |
| **NEW** | **Newport** | **58.58** | **321** | P | | **P** | **21 41 27.0 +0.2** |
| NEW | | | | IAmb | IAmb | | 21 41 43.6 |
| | comp=Z,2μm,1.2s | | | | | | |
| **NEW** | **Newport** | **58.58** | **321** | ⇑P | | **P** | **21 41 24.4 -2.4** |
| **NEW** | **Newport** | **58.58** | **321** | P | | **P** | **21 41 24.8 -1.9** |
| | comp=Z,194nm,0.7s,baz=116,slow=9.8,SNR=97 | | | | | | |
| NEW | | | | S | | **S** | **21 49 18.2 -3.3** |
| | comp=Z,23nm,0.9s,baz=133,slow=19,SNR=1.5 | | | | | | |
| NEW | | | | LR | LR | | 22 05 47.5 |
| | comp=Z,73μm,19.7s,baz=106,slow=35 | | | | | | |
| | comp=Z,194nm,0.7s | | | | | | |
| **NEW** | **Newport** | **58.58** | **321** | P | | **P** | **21 41 27.0 +0.2** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,2μm,1.2s | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **58.58** | **321** | P | | **P** | **21 41 25.8 -1.0** |
| | baz=119,slow=14,SNR=2.1 | | | | | | |
| **EADA** | **Adamuz** | **58.63** | **52** | P | | **P** | **21 41 30.1 +2.7** |
| **RPN** | **Rapa Nui** | **58.68** | **229** | P | | **P** | **21 41 28.9 +1.2** |
| RPN | | | | IAmb | IAmb | | 21 41 43.1 |
| | comp=Z,4μm,2.0s | | | | | | |
| **RPN** | **Rapa Nui** | **58.68** | **229** | ⇓P | | **P** | **21 41 28.8 +1.2** |
| **RPN** | **Rapa Nui** | **58.68** | **229** | P | | **P** | **21 41 28.9 +1.2** |
| RPN | | | | pmax | pmax | | |
| | comp=Z,4μm,2.0s | | | | | | |
| **VA02** | **Isla de Pascua** | **58.77** | **229** | P | | **P** | **21 41 29.8 +1.5** |
| VA02 | | | | IAmb | IAmb | | 21 41 43.7 |
| | comp=Z,4μm,1.9s | | | | | | |
| **VA02** | **Isla de Pascua** | **58.77** | **229** | ⇓P | | **P** | **21 41 29.5 +1.2** |
| **EGOR** | **Sierra Gorda,** | **58.80** | **53** | P | | **P** | **21 41 28.5 -0.1** |
| **VAL** | **Valentia** | **59.06** | **35** | P | | **P** | **21 41 29.5 -0.4** |
| **VAL** | **Valentia** | **59.06** | **35** | P | | **P** | **21 41 31.7 +1.8** |
| **VAL** | **Valentia** | **59.06** | **35** | ⇑P | | **P** | **21 41 28.8 -1.1** |
| **PAB** | **San Pablo** | **59.09** | **50** | P | | **P** | **21 41 32.9 +2.4** |
| PAB | | | | IAmb | IAmb | | 21 41 54.8 |
| | comp=Z,2μm,0.8s | | | | | | |
| **PAB** | **San Pablo** | **59.09** | **50** | ⇑P | | **P** | **21 41 29.9 -0.6** |
| **PAB** | **San Pablo** | **59.09** | **50** | P | | **P** | **21 41 32.9 +2.4** |
| PAB | | | | pmax | pmax | | |
| | comp=Z,2μm,0.8s | | | | | | |
| **ELGU** | **Los Guajares,** | **59.13** | **53** | P | | **P** | **21 41 30.9 0.0** |
| **EQTA** | **Presa de Quent** | **59.34** | **53** | P | | **P** | **21 41 35.3 +3.0** |
| **ESDC** | **Sonseca Array** | **59.41** | **50** | P | | **P** | **21 41 35.3 +2.6** |
| **ESDC** | **Sonseca Array** | **59.41** | **50** | P | | **P** | **21 41 32.1 -0.6** |
| | comp=Z,1μm,1.1s,baz=260,slow=4.1,SNR=282 | | | | | | |
| ESDC | | | | ScP | | **ScP** | **21 46 07.5 -1.6** |
| | comp=Z,86nm,1.1s,baz=264,slow=4.1,SNR=3.7 | | | | | | |
| ESDC | | | | S | | **S** | **21 49 30.6 -1.9** |
| | comp=Z,11nm,1.1s,baz=254,slow=9.2,SNR=1.1 | | | | | | |
| ESDC | | | | LR | LR | | 22 04 34.3 |
| | comp=Z,22μm,20.0s,baz=264,slow=33 | | | | | | |
| ESDC | | | | PKP2bc | | | 22 11 07.7 |
| | comp=Z,4.6nm,1.1s,baz=41,slow=2.1,SNR=8.4 | | | | | | |
| ESDC | | | | PKP2ab | | | 22 11 21.4 |
| | comp=Z,29nm,1.0s,baz=82,slow=2.3,SNR=15 | | | | | | |
| | comp=Z,1μm,1.1s | | | | | | |
| **EMLI** | **Melilla** | **59.41** | **55** | P | | **P** | **21 41 35.5 +2.8** |
| **ESBB** | **Sonseca Array** | **59.41** | **50** | P | | **P** | **21 41 35.4 +2.7** |
| **EALB** | **Alboran** | **59.45** | **55** | P | | **P** | **21 41 35.5 +2.6** |
| **HAWA** | **Hanford** | **59.51** | **318** | P | | **P** | **21 41 33.4 +0.3** |
| HAWA | | | | IAmb | IAmb | | 21 41 50.2 |
| | comp=Z,1μm,1.1s | | | | | | |
| **HAWA** | **Hanford** | **59.51** | **318** | ⇓P | | **P** | **21 41 31.9 -1.2** |
| **GO08** | **Villa O'Higgin** | **59.54** | **187** | P | | **P** | **21 41 35.6 +2.5** |
| **EBER** | **Berja** | **59.72** | **54** | P | | **P** | **21 41 35.6 +0.6** |
| **PINE** | **Pine Mountain** | **59.73** | **315** | P | | **P** | **21 41 36.3 +1.4** |
| PINE | | | | IAmb | IAmb | | 21 41 51.0 |
| | comp=Z,2μm,0.8s | | | | | | |
| **MCCM** | **Marconi Confer** | **59.91** | **308** | ⇓P | | **P** | **21 41 35.9 -0.1** |
| **UCM** | **Universidad Co** | **60.09** | **50** | P | | **P** | **21 41 38.0 +0.8** |
| **IGLA** | **Glengowla, Co** | **60.15** | **34** | P | | **P** | **21 41 37.2 -0.2** |
| **IGLA** | **Glengowla, Co** | **60.15** | **34** | *e*P | | **P** | **21 41 39.1 +1.7** |
| IGLA | | | | IAmb | IAmb | | 21 41 40.9 |
| | comp=Z,3μm,1.1s | | | | | | |
| **ICESG** | **Greenland Ices** | **60.23** | **9** | *i* P | | **P** | **21 41 37.7 -0.4** |
| ICESG | | | | IAmb | IAmb | | 21 41 58.8 |
| | comp=Z,6μm,1.0s | | | | | | |
| **ENIJ** | **Nijar** | **60.27** | **54** | P | | **P** | **21 41 39.7 +1.1** |
| **UMMG** | **Uummannaq** | **60.29** | **4** | *i* P | | **P** | **21 41 38.2 +0.2** |
| UMMG | | | | IAmb | IAmb | | 21 41 57.2 |
| | comp=Z,1μm,1.0s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **60.50** | **312** | P | | **P** | **21 41 38.3 -1.9** |
| | comp=Z,77nm,0.7s,baz=96,slow=8.2,SNR=71 | | | | | | |
| YBH | | | | S | | **S** | **21 49 43.1 -3.4** |
| | comp=Z,21nm,1.1s,baz=105,slow=13,SNR=1.4 | | | | | | |
| YBH | | | | LR | LR | | 22 09 37.7 |
| | comp=Z,44μm,20.8s,baz=98,slow=38 | | | | | | |
| | comp=Z,77nm,0.7s | | | | | | |
| **TLOR** | **Lorca, Murcia** | **60.79** | **53** | P | | **P** | **21 41 44.3 +2.2** |
| **HUMO** | **Hull Mountain** | **60.87** | **313** | ⇓P | | **P** | **21 41 40.6 -2.0** |
| **SOEG** | **Soedalen** | **61.04** | **13** | *i* P | | **P** | **21 41 44.0 +0.8** |
| SOEG | | | | IAmb | IAmb | | 21 41 56.9 |
| | comp=Z,621nm,0.7s | | | | | | |
| **ETOB** | **Tobarra** | **61.06** | **52** | P | | **P** | **21 41 44.9 +0.9** |
| **NUUG** | **Nuugaatsiaq** | **61.07** | **4** | *i* P | | **P** | **21 41 43.8 +0.5** |
| NUUG | | | | IAmb | IAmb | | 21 42 02.7 |
| | comp=Z,1μm,1.1s | | | | | | |
| **BORG** | **Borgarnes** | **61.17** | **19** | P | | **P** | **21 41 46.3 +2.2** |
| BORG | | | | IAmb | IAmb | | 21 41 55.7 |
| | comp=Z,4μm,1.8s | | | | | | |
| **BORG** | **Borgarnes** | **61.17** | **19** | LR | LR | | 22 05 38.4 |
| | comp=Z,7μm,19.8s,baz=240,slow=33 | | | | | | |
| **BORG** | **Borgarnes** | **61.17** | **19** | P | | **P** | **21 41 46.3 +2.2** |
| BORG | | | | pmax | pmax | | |
| | comp=Z,4μm,1.8s | | | | | | |
| **EMUR** | **La Murta** | **61.17** | **53** | P | | **P** | **21 41 45.5 +0.8** |
| **IWEX** | **Carrickbyrne,** | **61.20** | **36** | P | | **P** | **21 41 43.5 -1.0** |
| **IWEX** | **Carrickbyrne,** | **61.20** | **36** | *e*P | | **P** | **21 41 46.5 +2.0** |
| IWEX | | | | IAmb | IAmb | | 21 41 47.9 |
| | comp=Z,1μm,0.8s | | | | | | |
| **CART** | **Cartagena** | **61.32** | **53** | P | | **P** | **21 41 46.5 +0.9** |
| **CART** | **Cartagena** | **61.32** | **53** | P | | **P** | **21 41 46.5 +0.9** |
| **CART** | **Cartagena** | **61.32** | **53** | ⇑P | | **P** | **21 41 46.5 +0.9** |
| **CCA1** | **Carnmenellis** | **61.36** | **38** | *e*P | | **P** | **21 41 47.9 +2.3** |
| CCA1 | | | | IAmb | IAmb | | 21 41 49.7 |
| | comp=Z,3μm,1.2s | | | | | | |
| **COR** | **Corvallis** | **61.57** | **315** | P | | **P** | **21 41 48.2 +1.0** |
| COR | | | | IAmb | IAmb | | 21 42 04.8 |
| | comp=Z,3μm,1.1s | | | | | | |
| **COR** | **Corvallis** | **61.57** | **315** | ⇑P | | **P** | **21 41 47.2 0.0** |
| **COR** | **Corvallis** | **61.57** | **315** | P | | **P** | **21 41 48.2 +1.0** |
| COR | | | | pmax | pmax | | |
| | comp=Z,2μm,1.1s | | | | | | |
| **ECHE** | **Chera** | **61.67** | **51** | P | | **P** | **21 41 49.6 +1.6** |
| **DSB** | **Dublin** | **61.74** | **35** | P | | **P** | **21 41 47.8 -0.4** |
| **DSB** | **Dublin** | **61.74** | **35** | P | | **P** | **21 41 49.8 +1.6** |
| **DSB** | **Dublin** | **61.74** | **35** | P | | **P** | **21 41 49.0 +0.8** |
| **DSB** | **Dublin** | **61.74** | **35** | ⇑P | | **P** | **21 41 47.8 -0.4** |
| **IDGL** | **Inch Island, C** | **61.83** | **32** | P | | **P** | **21 41 48.3 -0.4** |
| **IDGL** | **Inch Island, C** | **61.83** | **32** | *e*P | | **P** | **21 41 50.1 +1.4** |
| IDGL | | | | IAmb | IAmb | | 21 41 53.1 |
| | comp=Z,635nm,0.7s | | | | | | |
| **ROSF** | **Rostrenen** | **62.02** | **41** | ⇑P | | **P** | **21 41 49.3 -0.8** |
| **ILTH** | **Belurgan, Co L** | **62.05** | **34** | P | | **P** | **21 41 48.8 -1.4** |
| **ILTH** | **Belurgan, Co L** | **62.05** | **34** | *e*P | | **P** | **21 41 51.4 +1.2** |
| **HTL** | **Hartland** | **62.07** | **38** | *e*P | | **P** | **21 41 52.5 +2.1** |
| HTL | | | | IAmb | IAmb | | 21 41 54.5 |
| | comp=Z,2μm,1.2s | | | | | | |
| **UPNV** | **Upernavik** | **62.16** | **2** | *i* P | | **P** | **21 41 50.2 -0.4** |
| UPNV | | | | IAmb | IAmb | | 21 42 12.7 |
| | comp=Z,695nm,0.8s | | | | | | |
| **RSBS** | **Rosebush, Pemb** | **62.22** | **36** | *e*P | | **P** | **21 41 53.0 +1.6** |
| RSBS | | | | IAmb | IAmb | | 21 41 57.5 |
| | comp=Z,1μm,0.7s | | | | | | |
| **DYA** | **Yadsworthy** | **62.23** | **38** | *e*P | | **P** | **21 41 53.3 +1.8** |
| DYA | | | | IAmb | IAmb | | 21 41 55.3 |
| | comp=Z,2μm,1.2s | | | | | | |
| **GO09** | **Cerro Castillo** | **62.27** | **187** | P | | **P** | **21 41 53.8 +2.2** |
| GO09 | | | | IAmb | IAmb | | 21 41 56.2 |
| | comp=Z,1μm,1.1s | | | | | | |
| **EFI** | **East Falkland** | **62.27** | **177** | P | | **P** | **21 41 54.0 +2.4** |
| EFI | | | | IAmb | IAmb | | 21 41 56.2 |
| | comp=Z,2μm,1.1s | | | | | | |
| **EFI** | **East Falkland** | **62.27** | **177** | *c*eP | | **P** | **21 41 51.8 +0.2** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,985nm,1.1s | | | | | | |
| **SHEL** | **Horse Pasture** | **62.46** | **114** | *e*P | | **P** | **21 41 56.3 +2.7** |
| **CLGH** | **Cloghs, Cushen** | **62.57** | **33** | *e*P | | **P** | **21 41 55.2 +1.5** |
| CLGH | | | | IAmb | IAmb | | 21 41 57.1 |
| | comp=Z,815nm,1.0s | | | | | | |
| **NLWA** | **Neilton Lookou** | **62.64** | **318** | P | | **P** | **21 41 55.7 +1.3** |
| NLWA | | | | IAmb | IAmb | | 21 42 10.2 |
| | comp=Z,2μm,0.8s | | | | | | |
| **NLWA** | **Neilton Lookou** | **62.64** | **318** | ⇑P | | **P** | **21 41 52.9 -1.5** |
| **PGC** | **Sidney** | **62.70** | **319** | P | | **P** | **21 41 55.3 +0.7** |
| PGC | | | | IAmb | IAmb | | 21 42 11.7 |
| | comp=Z,2μm,0.8s | | | | | | |
| **YRC** | **Rhoscolyn** | **62.76** | **35** | *e*P | | **P** | **21 41 56.4 +1.5** |
| **WPS** | **Cemaes, Angles** | **62.85** | **35** | *e*P | | **P** | **21 41 56.9 +1.4** |
| WPS | | | | IAmb | IAmb | | 21 41 58.4 |
| | comp=Z,2μm,1.3s | | | | | | |
| **WLF1** | **Llynfaes** | **62.87** | **35** | *e*P | | **P** | **21 41 57.2 +1.5** |
| **JSA** | **Saint Aubin** | **62.96** | **40** | *e*P | | **P** | **21 41 58.5 +2.2** |
| JSA | | | | IAmb | IAmb | | 21 42 00.2 |
| | comp=Z,2μm,1.3s | | | | | | |
| **JSA** | **Saint Aubin** | **62.96** | **40** | ⇑P | | **P** | **21 41 55.9 -0.4** |
| **WIM** | **Isle of Man** | **63.01** | **34** | *e*P | | **P** | **21 41 58.1 +1.5** |
| **JLP** | **Les Platons** | **63.01** | **40** | *e*P | | **P** | **21 41 58.6 +1.9** |
| **TOA0** | **Torodi Ar. Sit** | **63.10** | **81** | P | | **P** | **21 41 59.7 +1.8** |
| **TORD** | **Torodi Ar. Bea** | **63.10** | **81** | P | | **P** | **21 41 56.5 -1.3** |
| **TORD** | **Torodi Ar. Bea** | **63.10** | **81** | P | | **P** | **21 41 59.6 +1.7** |
| TORD | | | | IAmb | IAmb | | 21 42 22.3 |
| | comp=Z,2μm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **63.10** | **81** | P | | **P** | **21 41 59.6 +1.7** |
| | comp=Z,138nm,0.4s,baz=287,slow=6.2,SNR=415 | | | | | | |
| TORD | | | | PcP | | **PcP** | **21 42 33.0 -1.6** |
| | comp=Z,229nm,0.6s,baz=284,slow=5.8,SNR=4.5 | | | | | | |
| TORD | | | | S | | **S** | **21 50 20.4 +0.6** |
| | comp=Z,22nm,1.1s,baz=281,slow=15,SNR=2.2 | | | | | | |
| TORD | | | | PKKP | | **PKKPdf** | **22 02 33.7 -3.7** |
| | comp=Z,3.2nm,0.8s,baz=58,slow=2.2,SNR=3.6 | | | | | | |
| TORD | | | | PKPPKP | | **P'P'df** | **22 10 54.3 -4.2** |
| | comp=Z,7.0nm,0.9s,baz=103,slow=1.5,SNR=3.9 | | | | | | |
| | comp=Z,138nm,0.4s | | | | | | |
| **IOMK** | **Kirk Michael** | **63.11** | **34** | *e*P | | **P** | **21 41 58.7 +1.4** |
| IOMK | | | | IAmb | IAmb | | 21 42 00.2 |
| | comp=Z,4μm,1.4s | | | | | | |
| **CLRS** | **Cowichan Lake** | **63.18** | **320** | P | | **P** | **21 41 58.9 +1.1** |
| CLRS | | | | IAmb | IAmb | | 21 42 15.3 |
| | comp=Z,2μm,1.0s | | | | | | |
| **GAL1** | **Galloway** | **63.24** | **33** | *e*P | | **P** | **21 41 59.3 +1.2** |
| GAL1 | | | | IAmb | IAmb | | 21 42 00.8 |
| | comp=Z,2μm,1.4s | | | | | | |
| **MCH1** | **Michaelchurch** | **63.26** | **37** | *e*P | | **P** | **21 41 59.1 +0.8** |
| MCH1 | | | | IAmb | IAmb | | 21 42 01.1 |
| | comp=Z,1μm,1.2s | | | | | | |
| **MONM** | **Monmouth** | **63.33** | **37** | *e*P | | **P** | **21 41 59.2 +0.5** |
| MONM | | | | IAmb | IAmb | | 21 42 02.3 |
| | comp=Z,2μm,1.0s | | | | | | |
| **EIBI** | **Ibiza** | **63.35** | **52** | P | | **P** | **21 42 00.3 +1.1** |
| **LAWE** | **Loch Awe, Argy** | **63.39** | **32** | *e*P | | **P** | **21 41 59.9 +0.9** |
| LAWE | | | | IAmb | IAmb | | 21 42 02.2 |
| | comp=Z,657nm,1.3s | | | | | | |
| **LEWI** | **Lewis, Hebride** | **63.40** | **29** | *e*P | | **P** | **21 42 00.2 +1.1** |
| LEWI | | | | IAmb | IAmb | | 21 42 03.4 |
| | comp=Z,534nm,0.8s | | | | | | |
| **FOEL** | **Foel Wylfa** | **63.42** | **36** | *e*P | | **P** | **21 42 00.6 +1.2** |
| FOEL | | | | IAmb | IAmb | | 21 42 02.1 |
| | comp=Z,2μm,1.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.49** | **336** | P | | **P** | **21 42 00.1 +0.5** |
| **YKA** | **Yellowknife Ar** | **63.49** | **336** | P | | **P** | **21 41 57.2 -2.4** |
| | comp=Z,1μm,0.9s,baz=104,slow=7.0,SNR=244 | | | | | | |
| YKA | | | | PcP | | **PcP** | **21 42 32.6 -2.6** |
| | comp=Z,150nm,0.5s,baz=137,slow=2.4,SNR=1.1 | | | | | | |
| YKA | | | | LR | LR | | 22 07 58.9 |
| | comp=Z,73μm,21.4s,baz=118,slow=34 | | | | | | |
| YKA | | | | PKPPKP | | **P'P'df** | **22 10 53.6 -1.9** |
| | comp=Z,4.0nm,0.9s,baz=303,slow=2.6,SNR=5.4 | | | | | | |
| YKA | | | | PKP2bc | | | 22 11 00.5 |
| | comp=Z,14nm,0.8s,baz=308,slow=3.0,SNR=20 | | | | | | |
| YKA | | | | P4KPbc | | | 22 18 54.5 |
| | comp=Z,0.7nm,0.8s,baz=100,slow=5.1,SNR=3.1 | | | | | | |
| | comp=Z,1μm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.49** | **336** | P | | **P** | **21 42 00.1 +0.5** |
| **HLM1** | **Long Mynd** | **63.49** | **36** | *e*P | | **P** | **21 42 00.7 +0.8** |
| HLM1 | | | | IAmb | IAmb | | 21 42 03.3 |
| | comp=Z,3μm,1.1s | | | | | | |
| **SUMG** | **Summit** | **63.53** | **8** | P | | **P** | **21 42 01.3 +1.1** |
| **SUMG** | **Summit** | **63.53** | **8** | P | | **P** | **21 42 01.3 +1.1** |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,3μm,0.8s | | | | | | |
| **SUMG** | **Summit** | **63.53** | **8** | *i* P | | **P** | **21 42 01.2 +1.0** |
| SUMG | | | | IAmb | IAmb | | 21 42 16.9 |
| | comp=Z,4μm,1.1s | | | | | | |
| **NEWG** | **New Galloway** | **63.59** | **33** | *e*P | | **P** | **21 42 01.1 +0.8** |
| NEWG | | | | IAmb | IAmb | | 21 42 03.1 |
| | comp=Z,1μm,1.1s | | | | | | |
| **KPL** | **Plockton** | **63.67** | **31** | *e*P | | **P** | **21 42 01.9 +1.1** |
| **STRD** | **Stroud** | **63.69** | **37** | *e*P | | **P** | **21 42 01.9 +0.8** |
| STRD | | | | IAmb | IAmb | | 21 42 04.6 |
| | comp=Z,3μm,1.1s | | | | | | |
| **PGBU** | **Glenifferbraes** | **63.70** | **32** | *e*P | | **P** | **21 42 01.8 +0.7** |
| PGBU | | | | IAmb | IAmb | | 21 42 03.7 |
| | comp=Z,1μm,1.1s | | | | | | |
| **SWN1** | **Swindon** | **63.83** | **38** | *e*P | | **P** | **21 42 03.7 +1.6** |
| SWN1 | | | | IAmb | IAmb | | 21 42 05.6 |
| | comp=Z,3μm,1.0s | | | | | | |
| **CEST** | **Esterri de Car** | **63.84** | **48** | P | | **P** | **21 42 05.1 +2.6** |
| CEST | | | | IAmb | IAmb | | 21 42 25.4 |
| | comp=Z,3μm,1.2s | | | | | | |
| **KULLO** | **Kullorsuaq** | **63.92** | **2** | *i* P | | **P** | **21 42 01.9 -0.3** |
| KULLO | | | | IAmb | IAmb | | 21 42 21.4 |
| | comp=Z,3μm,1.1s | | | | | | |
| **GO10** | **Punta Arenas** | **64.00** | **185** | P | | **P** | **21 42 06.2 +3.2** |
| **KESW** | **Keswick, Cumbr** | **64.02** | **34** | *e*P | | **P** | **21 42 04.5 +1.2** |
| KESW | | | | IAmb | IAmb | | 21 42 06.0 |
| | comp=Z,1μm,1.4s | | | | | | |
| **STNC** | **Stoke** | **64.06** | **36** | *e*P | | **P** | **21 42 04.9 +1.4** |
| STNC | | | | IAmb | IAmb | | 21 42 09.3 |
| | comp=Z,582nm,0.8s | | | | | | |
| **INVG** | **Invergeldie, C** | **64.15** | **32** | *e*P | | **P** | **21 42 05.1 +1.1** |
| INVG | | | | IAmb | IAmb | | 21 42 05.5 |
| | comp=Z,315nm,1.3s | | | | | | |
| **LINV** | **Loch Inver, As** | **64.21** | **30** | *e*P | | **P** | **21 42 04.7 +0.4** |
| LINV | | | | IAmb | IAmb | | 21 42 06.4 |
| | comp=Z,489nm,1.1s | | | | | | |
| **ESK** | **Eskdalemuir** | **64.21** | **33** | P | | **P** | **21 42 05.8 +1.3** |
| **ESK** | **Eskdalemuir** | **64.21** | **33** | *e*P | | **P** | **21 42 05.2 +0.8** |
| **ESK** | **Eskdalemuir** | **64.21** | **33** | P | | **P** | **21 42 05.8 +1.3** |
| ESK | | | | pmax | pmax | | |
| | comp=Z,2μm,1.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **64.24** | **33** | P | | **P** | **21 42 03.1 -1.6** |
| | comp=Z,17nm,0.3s,baz=250,slow=8.1,SNR=86 | | | | | | |
| EKA | | | | S | | **S** | **21 50 30.3 -2.3** |
| | comp=Z,11nm,1.0s,baz=246,slow=5.1,SNR=1.9 | | | | | | |
| EKA | | | | PKPPKP | | **P'P'df** | **22 10 53.3 -1.4** |
| | comp=Z,9.4nm,1.0s,baz=79,slow=3.8,SNR=6.0 | | | | | | |
| | comp=Z,17nm,0.3s | | | | | | |
| **CBB** | **Campbell River** | **64.27** | **321** | P | | **P** | **21 42 06.0 +1.1** |
| **EDI** | **Edinburgh** | **64.43** | **33** | *e*P | | **P** | **21 42 06.9 +1.1** |
| EDI | | | | IAmb | IAmb | | 21 42 07.3 |
| | comp=Z,689nm,1.4s | | | | | | |
| **LBWR** | **Ladybower, Pea** | **64.43** | **36** | *e*P | | **P** | **21 42 06.9 +1.0** |
| LBWR | | | | IAmb | IAmb | | 21 42 09.5 |
| | comp=Z,2μm,1.2s | | | | | | |
| **CWF** | **Charnwood Fore** | **64.47** | **36** | *e*P | | **P** | **21 42 07.2 +1.0** |
| CWF | | | | IAmb | IAmb | | 21 42 08.8 |
| | comp=Z,2μm,1.4s | | | | | | |
| **ETOS** | **Mallorca** | **64.58** | **51** | P | | **P** | **21 42 08.3 +1.1** |
| **HPK** | **Haverah Park** | **64.65** | **35** | *e*P | | **P** | **21 42 08.6 +1.3** |
| HPK | | | | IAmb | IAmb | | 21 42 10.1 |
| | comp=Z,2μm,1.3s | | | | | | |
| **MTLF** | **Montolieu** | **64.66** | **47** | ⇑P | | **P** | **21 42 06.2 -1.4** |
| **ESY** | **Stoneypath** | **64.73** | **33** | *e*P | | **P** | **21 42 08.5 +0.7** |
| **EDMD** | **Edmundbyers** | **64.73** | **34** | *e*P | | **P** | **21 42 08.9 +1.0** |
| EDMD | | | | IAmb | IAmb | | 21 42 10.3 |
| | comp=Z,882nm,1.1s | | | | | | |
| **SCO** | **Scoresbysund** | **64.95** | **14** | P | | **P** | **21 42 10.1 +1.1** |
| **SCO** | **Scoresbysund** | **64.95** | **14** | P | | **P** | **21 42 10.1 +1.1** |
| SCO | | | | pmax | pmax | | |
| | comp=Z,1μm,1.4s | | | | | | |
| **SCO** | **Scoresbysund** | **64.95** | **14** | *i* P | | **P** | **21 42 09.8 +0.8** |
| SCO | | | | IAmb | IAmb | | 21 42 28.6 |
| | comp=Z,1μm,1.4s | | | | | | |
| **HMNX** | **Herstmonceux** | **64.95** | **39** | *e*P | | **P** | **21 42 11.2 +1.9** |
| HMNX | | | | IAmb | IAmb | | 21 42 14.7 |
| | comp=Z,2μm,0.8s | | | | | | |
| **MCD** | **Coleburn Disti** | **64.97** | **31** | *e*P | | **P** | **21 42 10.4 +1.1** |
| MCD | | | | IAmb | IAmb | | 21 42 11.4 |
| | comp=Z,763nm,1.0s | | | | | | |
| **BIGH** | **Upper Bighouse** | **64.97** | **30** | *e*P | | **P** | **21 42 10.3 +1.0** |
| BIGH | | | | IAmb | IAmb | | 21 42 11.5 |
| | comp=Z,889nm,1.2s | | | | | | |
| **EJON** | **La Jonquera** | **65.00** | **48** | P | | **P** | **21 42 10.0 0.0** |
| **DRUM** | **Mains of Drumt** | **65.13** | **32** | *e*P | | **P** | **21 42 11.4 +1.1** |
| **GDLE** | **Glaisdale, N Y** | **65.24** | **35** | *e*P | | **P** | **21 42 12.1 +0.9** |
| GDLE | | | | IAmb | IAmb | | 21 42 14.0 |
| | comp=Z,2μm,1.2s | | | | | | |
| **LMK** | **Market Rasen** | **65.24** | **36** | *e*P | | **P** | **21 42 12.7 +1.5** |
| LMK | | | | IAmb | IAmb | | 21 42 14.6 |
| | comp=Z,3μm,1.2s | | | | | | |
| **USHA** | **Ushuaia** | **65.46** | **184** | LR | LR | | 22 11 23.2 |
| | comp=Z,38μm,21.0s,baz=10,slow=36 | | | | | | |
| **ELSH** | **Elham, Standar** | **65.51** | **38** | *e*P | | **P** | **21 42 14.3 +1.4** |
| ELSH | | | | IAmb | IAmb | | 21 42 16.2 |
| | comp=Z,2μm,1.1s | | | | | | |
| **CLF** | **Charnbon-Foret** | **65.54** | **42** | P | | **P** | **21 42 15.0 +1.8** |
| **WACR** | **West Acre** | **65.60** | **37** | *e*P | | **P** | **21 42 13.9 +0.5** |
| **ELMS** | **Elmsett, Ipswi** | **65.66** | **37** | *e*P | | **P** | **21 42 15.3 +1.4** |
| ELMS | | | | IAmb | IAmb | | 21 42 16.2 |
| | comp=Z,2μm,1.3s | | | | | | |
| **TULEG** | **Thule** | **65.88** | **358** | P | | **P** | **21 42 15.1 +0.2** |
| **TULEG** | **Thule** | **65.88** | **358** | *i* P | | **P** | **21 42 15.2 +0.3** |
| TULEG | | | | IAmb | IAmb | | 21 42 33.5 |
| | comp=Z,3μm,1.2s | | | | | | |
| **TAM** | **Tamanrasset** | **66.13** | **70** | P | | **P** | **21 42 20.8 +3.1** |
| **TAM** | **Tamanrasset** | **66.13** | **70** | P | | **P** | **21 42 20.8 +3.1** |
| TAM | | | | pmax | pmax | | |
| | comp=Z,3μm,1.1s | | | | | | |
| **HOLB** | **Holberg** | **66.14** | **321** | P | | **P** | **21 42 18.3 +1.3** |
| **SET** | **Setif** | **66.26** | **55** | P | | **P** | **21 42 21.0 +2.8** |
| **RES** | **Resolute Bay** | **66.45** | **351** | S | | **S** | **21 50 55.9 -3.1** |
| | comp=Z,58nm,0.9s,baz=90,slow=20,SNR=2.0 | | | | | | |
| **BBB** | **Bella Bella** | **66.47** | **322** | P | | **P** | **21 42 20.9 +1.8** |
| **BBB** | **Bella Bella** | **66.47** | **322** | P | | **P** | **21 42 18.0 -1.1** |
| | comp=Z,252nm,0.9s,baz=109,slow=7.6,SNR=58 | | | | | | |
| BBB | | | | S | | **S** | **21 50 58.8 -1.1** |
| | comp=Z,18nm,1.0s,baz=128,slow=18,SNR=1.3 | | | | | | |
| BBB | | | | LR | LR | | 22 10 18.8 |
| | comp=Z,68μm,21.4s,baz=108,slow=35 | | | | | | |
| | comp=Z,252nm,0.9s | | | | | | |
| **KOTAN** | **Kotaneelee Air** | **66.59** | **331** | P | | **P** | **21 42 18.7 -1.0** |
| | baz=110,SNR=474 | | | | | | |
| KOTAN | | | | S | | **S** | **21 51 00.5 -0.7** |
| | baz=110 | | | | | | |
| **SSB** | **Saint Sauveur** | **66.61** | **45** | P | | **P** | **21 42 22.2 +2.0** |
| **SSB** | **Saint Sauveur** | **66.61** | **45** | P | | **P** | **21 42 22.2 +2.0** |
| SSB | | | | pmax | pmax | | |
| | comp=Z,928nm,1.1s | | | | | | |
| **DFRA** | **Djebel Bou Aff** | **66.67** | **55** | P | | P | 21 42 28.4 +7.6 |
| **TOAD** | **Toad River Com** | **66.73** | **330** | P | | **P** | **21 42 19.2 -1.5** |
| | baz=109,SNR=365 | | | | | | |
| TOAD | | | | S | | **S** | **21 51 01.4 -1.6** |
| | baz=109 | | | | | | |
| **LRW** | **Lerwick** | **66.86** | **29** | *e*P | | **P** | **21 42 22.4 +1.0** |
| LRW | | | | IAmb | IAmb | | 21 42 24.5 |
| | comp=Z,701nm,1.1s | | | | | | |
| **NEEM** | **North Greenlan** | **67.00** | **3** | *i* P | | **P** | **21 42 22.8 +0.4** |
| NEEM | | | | IAmb | IAmb | | 21 42 42.7 |
| | comp=Z,3μm,1.0s | | | | | | |
| **CTEI** | **Djebel Teioual** | **67.07** | **55** | P | | **P** | **21 42 26.5 +3.1** |
| **CASM** | **Ain Smara** | **67.14** | **55** | P | | **P** | **21 42 25.7 +1.9** |
| **TRIS** | **Tristan da Cun** | **67.15** | **138** | P | | **P** | **21 42 26.5 +3.0** |
| TRIS | | | | IAmb | IAmb | | 21 42 47.3 |
| | comp=Z,3μm,0.9s | | | | | | |
| **TRIS** | **Tristan da Cun** | **67.15** | **138** | ⇓*i*P

baz=107,SNR=518
TGTN S **S** **21 51 31.4 +1.4**
baz=107
**DLBC Dease Lake 69.02 329** P **P** **21 42 34.2 -0.9**
comp=Z,724nm,1.1s,baz=104,slow=5.2,SNR=95
DLBC LR LR 22 12 00.8
comp=Z,48µm,20.6s,baz=89,slow=35
comp=Z,724nm,1.1s
**DLBC Dease Lake 69.02 329** P **P** **21 42 34.2 -0.9**
baz=104,SNR=438
DLBC S **S** **21 51 32.4 +2.0**
baz=104
**AHRW Bad Neuenahr-A 69.09 40** *e*P **P** **21 42 35.1 -0.4**
comp=Z,1µm,1.2s,baz=265,slow=6.0
AHRW *e*S **S** **21 51 27.9 -3.4**
baz=263,slow=12
**V35K Ketchikan 69.18 325** P **P** **21 42 34.7 -1.2**
baz=102,SNR=64
V35K S **S** **21 51 34.6 +2.5**
baz=102
V35K S **S** **21 51 34.6 +2.5**
baz=102
**DIB Dawson Inlet, 69.28 323** P **P** **21 42 38.3 +1.7**
DIB IAmb IAmb 21 42 55.1
comp=Z,1µm,1.0s
**H02S1 DAWSON INLET T 69.28 323** P **P** **21 42 35.7 -0.9**
**BUG Bochum–Univer 69.34 39** *e*P **P** **21 42 36.2 -0.8**
comp=Z,2µm,1.2s,baz=265,slow=6.0
BUG *e*S **S** **21 51 30.4 -3.8**
baz=263,slow=12
**KEST Kesra 69.44 56** P **P** **21 42 40.5 +2.4**
KEST IAmb IAmb 21 43 03.1
comp=Z,2µm,0.9s
**KEST Kesra 69.44 56** P **P** **21 42 38.6 +0.5**
comp=Z,727nm,1.0s,baz=260,slow=11,SNR=155
KEST S **S** **21 51 41.6 +5.5**
comp=Z,20nm,0.9s,baz=287,slow=20,SNR=11
KEST PKP2bc 22 10 39.0
comp=Z,15nm,0.9s,baz=146,slow=3.9,SNR=6.5
comp=Z,727nm,1.0s
**S34M Telegraph Cree 69.47 328** P **P** **21 42 36.8 -0.9**
baz=103,SNR=204
S34M S **S** **21 51 37.7 +2.3**
baz=103
**BFO Black Forest 69.60 42** P **P** **21 42 39.6 +0.8**
**BFO Black Forest 69.60 42** P **P** **21 42 39.6 +0.8**
BFO pmax pmax
comp=Z,1µm,1.7s
**BFO Black Forest 69.60 42** *e*P **P** **21 42 37.9 -0.9**
comp=Z,368nm,1.1s,baz=265,slow=6.0
BFO *e*S **S** **21 51 33.8 -3.6**
baz=263,slow=12
**VSL Villasalto 69.60 52** P **P** **21 42 41.0 +2.0**
VSL IAmb IAmb 21 42 58.5
comp=Z,1µm,1.0s
**KMY Karmoy 69.72 31** *e*P **P** **21 42 39.8 +0.5**
KMY IVmB_BB 21 42 56.2
comp=Z,17µm,3.4s
KMY *e*PP **PP** **21 45 15.1 +0.3**
KMY *e*S **S** **21 51 37.1 -1.2**
KMY *e*SS **SS** **21 56 09.7 +0.9**
KMY IVMs_BB IVMs_BB 22 05 31.0
comp=Z,8µm,23.5s
**R33M Jennings River 69.72 330** P **P** **21 42 38.9 -0.6**
baz=104,SNR=957
R33M S **S** **21 51 38.9 +0.1**
baz=104
**IBBN Ibbenburen 69.78 38** *e*P **P** **21 42 38.9 -0.8**
comp=Z,2µm,1.2s,baz=265,slow=6.0
IBBN *e*S **S** **21 51 36.2 -3.1**
baz=263,slow=12
**WRAK Wrangell Islan 69.80 326** P **P** **21 42 41.4 +1.6**
**WRAK Wrangell Islan 69.80 326** P **P** **21 42 38.8 -1.0**
baz=101
WRAK S **S** **21 51 40.5 +1.1**
baz=101
**TNS Taunus Mts 69.91 40** *e*P **P** **21 42 40.1 -0.6**
comp=Z,1µm,0.8s,baz=265,slow=6.0
TNS *e*S **S** **21 51 39.8 -1.2**
baz=263,slow=12
**SUE Sulen 69.93 29** *e*P **P** **21 42 41.5 +1.0**
SUE IVmB_BB 21 42 57.9
comp=Z,16µm,3.7s
SUE *e*PP **PP** **21 45 16.8 +0.2**
SUE *e*S **S** **21 51 41.4 +0.7**
SUE *e*SS **SS** **21 56 13.5 +1.6**
SUE IVMs_BB IVMs_BB 22 05 32.6
comp=Z,13µm,22.2s
**ASK Askoy 70.00 29** *e*P **P** **21 42 41.9 +1.0**
ASK IVmB_BB 21 42 58.5
comp=Z,16µm,2.3s
ASK *e*PP **PP** **21 45 17.1 0.0**
ASK *e*S **S** **21 51 41.5 0.0**
**DAG Danmarks Havn 70.01 10** P **P** **21 42 39.9 -0.8**
**DAG Danmarks Havn 70.01 10** *i* P **P** **21 42 40.8 +0.1**
DAG IAmb IAmb 21 42 57.0
comp=Z,2µm,1.6s
**MSSA Maissana 70.02 47** P **P** **21 42 42.4 +0.9**
MSSA IAmb IAmb 21 42 45.5
comp=Z,2µm,1.3s
**KASTN Kahler Asten 70.02 39** *e*P **P** **21 42 40.5 -0.8**
comp=Z,475nm,1.1s,baz=265,slow=6.0
KASTN *e*S **S** **21 51 38.7 -3.6**
baz=263,slow=12
**BER Bergen 70.04 29** *e*P **P** **21 42 42.2 +1.0**
BER IVmBBB 21 42 43.1
comp=Z,10µm,5.0s
BER *e*S **S** **21 51 42.1 +0.1**
BER *e*SS **SS** **21 56 15.7 +2.1**
BER IVMs_BB IVMs_BB 22 04 32.4
comp=Z,11µm,43.0s
**CRAG Craig 70.05 325** P **P** **21 42 42.5 +1.2**
**CRAG Craig 70.05 325** P **P** **21 42 40.2 -1.1**
baz=100,SNR=50
CRAG S **S** **21 51 45.2 +2.9**
baz=100
**C36M Paulatuk 70.07 341** P **P** **21 42 40.4 -0.8**
**C36M Paulatuk 70.07 341** P **P** **21 42 40.5 -0.7**
baz=114,SNR=39
C36M S **S** **21 51 37.5 -4.6**
baz=114
**HLG Helgoland 70.15 36** *e*P **P** **21 42 41.2 -0.7**
comp=Z,2µm,1.0s,baz=265,slow=6.0
HLG *e*S **S** **21 51 41.3 -2.2**
baz=263,slow=12
**U33K Whale Pass 70.17 326** P **P** **21 42 41.2 -0.8**
baz=100,SNR=66
U33K S **S** **21 51 46.4 +2.8**
baz=100
U33K S **S** **21 51 46.4 +2.8**
baz=100
**FOO Floro 70.20 28** *e*P **P** **21 42 43.1 +1.0**
FOO IVmB_BB 21 42 59.9
comp=Z,11µm,2.8s
FOO *e*S **S** **21 51 44.7 +0.9**
FOO *e*SS **SS** **21 56 20.0 +4.0**
FOO IVMs_BB IVMs_BB 22 05 20.2
comp=Z,11µm,68.2s
**T33K Petersburg 70.20 327** P **P** **21 42 41.4 -0.8**
baz=101,SNR=10
T33K S **S** **21 51 45.3 +1.3**
baz=101
**STU Stuttgart 70.22 42** P **P** **21 42 43.4 +0.9**
STU IAmb IAmb 21 42 45.7
comp=Z,2µm,1.4s
**STU Stuttgart 70.22 42** P **P** **21 42 43.4 +0.9**
STU pmax pmax
comp=Z,2µm,1.4s
**STU Stuttgart 70.22 42** *e*P **P** **21 42 41.5 -1.0**
comp=Z,7µm,1.4s,baz=265,slow=6.0
STU *e*S **S** **21 51 42.1 -2.4**
baz=263,slow=12
**Q32M Nakina River 70.28 329** P **P** **21 42 41.2 -1.7**
baz=102,SNR=378
Q32M S **S** **21 51 46.2 +0.8**
baz=102
**BLS5 Blasjo 70.37 31** *e*P **P** **21 42 44.6 +1.3**
BLS5 IVmB_BB 21 43 01.1
comp=Z,21µm,3.5s
BLS5 *e*PP **PP** **21 45 20.7 +0.3**
BLS5 *e*S **S** **21 51 46.0 -0.1**
BLS5 *e*SS **SS** **21 56 19.3 +0.4**
BLS5 IVMs_BB IVMs_BB 22 05 33.6
comp=Z,11µm,55.1s
**TATN Tataouine 70.39 59** P **P** **21 42 46.0 +2.1**
**DAVA Damuels 70.53 44** *e*P **P** **21 42 43.4 -1.2**
comp=Z,2µm,1.2s,SNR=1284
DAVA S **S** **21 51 48.5 -0.1**
comp=Z,46nm,1.2s
**DAVA Damuels 70.53 44** *e*PcP **P'P'ab** **22 10 41.2 -1.5**
comp=Z,115nm,1.2s
**DAVA Damuels 70.53 44** ⇑P **P** **21 42 43.6 -1.1**
**SNART Snartemo 70.53 32** *e*P **P** **21 42 45.0 +0.8**
SNART IVmBBB 21 42 48.5
comp=Z,17µm,2.4s
SNART *e*S **S** **21 51 47.3 -0.5**
**ODD1 Odda 70.56 30** *e*P **P** **21 42 46.0 +1.6**
ODD1 IVmB_BB 21 43 02.3
comp=Z,19µm,3.6s
ODD1 *e*PP **PP** **21 45 21.6 -0.4**
ODD1 *e*S **S** **21 51 47.4 -0.9**
ODD1 *e*SS **SS** **21 56 25.2 +3.5**
ODD1 IVMs_BB IVMs_BB 22 04 53.4
comp=Z,11µm,28.1s
**VLC Villacollemand 70.63 47** P **P** **21 42 43.9 -1.3**
**HYA Hoyanger 70.63 29** *e*P **P** **21 42 46.1 +1.4**
HYA IVmB_BB 21 43 02.4
comp=Z,19µm,3.7s
HYA *e*PP **PP** **21 45 22.5 -0.1**
HYA *e*S **S** **21 51 49.4 +0.5**
HYA *e*SS **SS** **21 56 25.6 +3.0**
HYA IVMs_BB IVMs_BB 22 05 28.8
comp=Z,11µm,67.7s
**MMPY Sheldon Lake, 70.65 333** P **P** **21 42 44.2 -0.8**
baz=104,SNR=272
MMPY S **S** **21 51 50.6 +1.4**
baz=104
**UBR Ueberruh 70.72 43** *e*P **P** **21 42 45.2 -0.4**
comp=Z,733nm,1.2s,baz=265,slow=6.0
UBR *e*S **S** **21 51 47.0 -3.6**
baz=263,slow=12
**FUORN Ofenpass-Fuorn 70.73 44** P **P** **21 42 47.6 +1.6**
**RETH Rethem/Aller, 70.81 38** *e*P **P** **21 42 45.5 -0.5**
comp=Z,1µm,1.4s,baz=265,slow=6.0
**P33M Teslin, Yukon 70.82 330** P **P** **21 42 44.6 -1.4**
baz=102,SNR=328
P33M S **S** **21 51 52.5 +1.2**
baz=102
**UBBA Unterbreizbach 70.97 40** *e*P **P** **21 42 46.2 -0.7**
comp=Z,576nm,1.4s,baz=265,slow=6.0
UBBA *e*S **S** **21 51 52.0 -1.0**
baz=263,slow=12
**GTTG Gottingen 71.03 39** *e*P **P** **21 42 46.7 -0.6**
comp=Z,676nm,1.0s,baz=265,slow=6.0
GTTG *e*S **S** **21 51 51.6 -2.2**
baz=263,slow=12
**ZCCA Zocca 71.06 47** P **P** **21 42 49.5 +1.6**
**FETA Feichten 71.08 44** *e*P **P** **21 42 46.6 -1.4**
comp=Z,2µm,1.2s,SNR=1822
FETA *e*S **S** **21 51 50.3 -4.7**
comp=Z,76nm,2.2s
**FETA Feichten 71.08 44** *e*PcP **P'P'ab** **22 10 37.7 -3.0**
comp=Z,38nm,1.0s
**P32M Atlin 71.14 329** P **P** **21 42 47.2 -0.7**
baz=101,SNR=60
P32M S **S** **21 51 54.9 -0.1**
baz=101
**RETA Reutte 71.14 43** *i* P **P** **21 42 46.8 -1.5**
comp=Z,653nm,1.1s,SNR=788
RETA *e*S **S** **21 51 53.2 -2.3**
comp=Z,24nm,1.2s
**RETA Reutte 71.14 43** *e*PcP **P'P'ab** **22 10 38.1 -2.3**
comp=Z,24nm,2.3s
**N32M Quiet Lake 71.15 331** P **P** **21 42 46.8 -1.2**
baz=102
N32M S **S** **21 51 53.9 -1.1**
baz=102
**HOMB Homborsund 71.19 32** *e*P **P** **21 42 49.5 +1.3**
HOMB IVmBBB 21 43 06.3
comp=Z,20µm,3.2s
HOMB *e*PP **PP** **21 45 27.2 -0.2**
HOMB *e*S **S** **21 51 55.8 +0.4**
HOMB *e*SS **SS** **21 56 36.8 +5.5**
HOMB IVMs_BB IVMs_BB 22 05 10.0
comp=Z,11µm,59.7s
**S32K Killisnoo 71.19 327** P **P** **21 42 48.2 0.0**
baz=100,SNR=125
S32K S **S** **21 51 56.5 +1.1**
baz=100
S32K S **S** **21 51 56.5 +1.1**
baz=100
**NRDL Niedersach Rie 71.23 38** *e*P **P** **21 42 48.1 -0.4**
comp=Z,1µm,1.1s,baz=265,slow=6.0
NRDL *e*S **S** **21 51 54.4 -1.5**
baz=263,slow=12
**JIS Juneau Island 71.23 328** P **P** **21 42 48.9 +0.5**
**MUD Monsted U'grnd 71.24 34** *i* P **P** **21 42 50.2 +1.7**
MUD IAmb IAmb 21 43 10.5
comp=Z,2µm,1.0s
**R32K Eaglecrest 71.30 328** P **P** **21 42 50.8 +1.9**
**R32K Eaglecrest 71.30 328** P **P** **21 42 48.5 -0.4**
baz=100,SNR=71
**CLZ Clausthal 71.31 39** *e*P **P** **21 42 48.5 -0.6**
comp=Z,1µm,1.3s,baz=265,slow=6.0
CLZ *e*S **S** **21 51 55.8 -1.5**
baz=263,slow=12
**SSRD Sdr. Stenderup 71.35 35** *i* P **P** **21 42 50.6 +1.5**
SSRD IAmb IAmb 21 43 08.4
comp=Z,5µm,1.5s
**MOTA Moosalm 71.36 44** *i* P **P** **21 42 48.0 -1.6**
comp=Z,940nm,1.0s
MOTA *e*S **S** **21 51 54.6 -3.6**
comp=Z,24nm,1.3s
**MOTA Moosalm 71.36 44** PcP **P'P'ab** **22 10 36.9 -2.7**
comp=Z,48nm,1.3s
**SQTA Sankt Quirin 71.42 44** *e*P **P** **21 42 48.5 -1.5**
comp=Z,1µm,1.1s,SNR=1279
SQTA *e*S **S** **21 51 55.0 -3.8**
comp=Z,45nm,1.6s
**SQTA Sankt Quirin 71.42 44** *e*PcP **P'P'ab** **22 10 35.1 -4.3**
comp=Z,75nm,2.4s
**A36M Sachs Harbour 71.49 343** P **P** **21 42 49.8 +0.1**
A36M IAmb IAmb 21 43 07.1
comp=Z,1µm,0.7s
**A36M Sachs Harbour 71.49 343** P **P** **21 42 49.8 +0.1**
baz=113,SNR=81
A36M S **S** **21 51 56.2 -2.3**
baz=113
**FARO Faro, Yukon 71.50 332** P **P** **21 42 49.0 -1.1**
baz=102,SNR=467
FARO S **S** **21 51 59.7 +0.7**
baz=102
**SIT Sitka 71.53 327** P **P** **21 42 51.6 +1.4**
**SIT Sitka 71.53 327** P **P** **21 42 52.2 +2.0**
SIT IAmb IAmb 21 43 09.4
comp=Z,3µm,1.2s
**SIT Sitka 71.53 327** P **P** **21 42 49.5 -0.7**
baz=99,SNR=47
SIT S **S** **21 52 01.6 +2.3**
baz=99
**SIT Sitka 71.53 327** P **P** **21 42 52.2 +2.0**
SIT pmax pmax
comp=Z,3µm,1.2s
**BSEG Bad Segeberg 71.53 37** *e*P **P** **21 42 49.6 -0.7**
comp=Z,1µm,1.1s,baz=265,slow=6.0
BSEG *e*S **S** **21 51 57.9 -1.6**
baz=263,slow=12
**SKAR Skarslia 71.54 29** *e*P **P** **21 42 51.6 +1.2**
SKAR IVmB_BB 21 43 08.2
comp=Z,16µm,3.4s
SKAR *e*S **S** **21 51 59.5 0.0**
SKAR *e*SS **SS** **21 56 39.0 +2.3**
SKAR IVMs_BB IVMs_BB 22 06 20.6
comp=Z,8µm,24.0s
**FUR Furstenfeldbru 71.54 43** *e*P **P** **21 42 49.8 -0.7**
comp=Z,2µm,1.4s,baz=265,slow=6.0
FUR *e*S **S** **21 51 55.8 -4.2**
baz=263,slow=12
**MOL Molde 71.58 27** *e*P **P** **21 42 51.4 +1.0**
MOL IVmB_BB 21 43 08.2
comp=Z,12µm,3.1s
MOL *e*PP **PP** **21 45 31.3 +0.7**
MOL *e*S **S** **21 52 01.1 +1.4**
MOL *e*SS **SS** **21 56 39.4 +2.3**
MOL IVMs_BB IVMs_BB 22 05 37.1
comp=Z,15µm,43.2s
**GRFO Grafenberg 71.63 41** P **P** **21 42 52.3 +1.3**
GRFO IAmb IAmb 21 43 09.4
comp=Z,3µm,1.8s
**GRFO Grafenberg 71.63 41** P **P** **21 42 52.3 +1.3**
GRFO pmax pmax
comp=Z,3µm,1.8s
**GRA1 Grafenberg Arr 71.63 41** P **P** **21 42 52.2 +1.1**
GRA1 IAmb IAmb 21 43 09.5
comp=Z,3µm,1.8s
**GRF Grafenberg Arr 71.63 41** P **P** **21 42 52.2 +1.1**
GRF pmax pmax
comp=Z,3µm,1.8s
**GRF Grafenberg Arr 71.63 41** *e*P **P** **21 42 50.2 -0.9**
comp=Z,967nm,1.2s,baz=265,slow=6.0
GRF *e*S **S** **21 51 56.4 -4.5**
baz=263,slow=12
GRF *e*PKPPKP P'P'df 22 10 21.5 -21
baz=100,slow=2.8
GRF *e*X 22 33 30.4
baz=100,slow=2.8
**CTI Castel Tesino 71.64 45** P **P** **21 42 52.4 +1.0**
**CTI Castel Tesino 71.64 45** P **P** **21 42 52.4 +1.0**
CTI pmax pmax
comp=Z,2µm,1.2s
**WATA Walderalm 71.68 44** *e*P **P** **21 42 49.5 -2.1**
comp=Z,753nm,1.2s,SNR=371
WATA S **S** **21 51 58.0 -3.8**
comp=Z,28nm,1.2s
**WATA Walderalm 71.68 44** PcP **P'P'ab** **22 10 34.5 -3.9**
comp=Z,15nm,1.1s
**WTTA Wattenberg 71.72 44** *e*P **P** **21 42 50.2 -1.6**
comp=Z,1µm,1.2s,SNR=665
WTTA *e*S **S** **21 52 01.8 -0.5**
comp=Z,49nm,1.0s
**WTTA Wattenberg 71.72 44** PcP **P'P'ab** **22 10 35.6 -2.7**
comp=Z,19nm,1.3s
**FLTG Flechtingen 71.90 38** *e*P **P** **21 42 51.4 -1.1**
comp=Z,608nm,1.0s,baz=265,slow=6.0
FLTG *e*S **S** **21 52 01.8 -2.0**
baz=263,slow=12
**WHY Whitehorse 71.91 330** P **P** **21 42 53.6 +0.9**
**WHY Whitehorse 71.91 330** P **P** **21 42 50.8 -1.8**
baz=100,SNR=132
WHY S **S** **21 52 03.9 -0.1**
baz=100
**SKAG Skagway 71.92 329** P **P** **21 42 53.2 +0.7**
**SKAG Skagway 71.92 329** P **P** **21 42 54.2 +1.7**
SKAG IAmb IAmb 21 43 11.5
comp=Z,5µm,1.8s
**SKAG Skagway 71.92 329** P **P** **21 42 51.4 -1.1**
baz=100,SNR=40
SKAG S **S** **21 52 05.7 +1.9**
baz=100
**R31K City Hall, Gus 71.96 328** P **P** **21 42 51.7 -1.1**
baz=99
R31K S **S** **21 52 05.9 +1.7**
baz=99
**MOX Moxa 71.97 40** *e*P **P** **21 42 52.3 -0.8**
comp=Z,316nm,1.2s,baz=265,slow=6.0
MOX *e*S **S** **21 52 02.9 -1.9**
baz=263,slow=12
**M31M Drury Creek, Y 71.98 332** P **P** **21 42 52.1 -0.8**
baz=102,SNR=928
M31M S **S** **21 52 05.2 +0.7**
baz=102
**KONO Kongsberg 71.99 31** P **P** **21 42 54.2 +1.3**
**KONO Kongsberg 71.99 31** *e*P **P** **21 42 54.5 +1.5**
KONO *e*PP **PP** **21 45 33.8 -0.4**
KONO *e*S **S** **21 52 04.3 -0.2**
KONO *e*SS **SS** **21 56 48.3 +4.8**
KONO IVMs_BB IVMs_BB 22 05 33.9
comp=Z,10µm,35.5s
**KONO Kongsberg 71.99 31** *d i* P **P** **21 42 52.5 -0.4**
KONO pmax pmax
comp=Z,1µm,1.7s
**GORT1 Trebel 72.01 38** *e*P **P** **21 42 52.3 -0.9**
comp=Z,1µm,1.3s,baz=265,slow=6.0
**NEUB Neuenburg 72.12 40** *e*P **P** **21 42 53.1 -0.8**
comp=Z,784nm,1.1s,baz=265,slow=6.0
NEUB *e*S **S** **21 52 05.1 -1.3**
baz=263,slow=12
**S31K Pelican 72.15 328** P **P** **21 42 52.8 -1.1**
baz=98
S31K S **S** **21 52 07.9 +1.5**
baz=98
S31K S **S** **21 52 07.9 +1.5**
baz=98
**DOMB Dombas 72.16 28** *e*P **P** **21 42 55.5 +1.5**
DOMB *e*PP **PP** **21 45 35.8 0.0**
DOMB *e*S **S** **21 52 06.1 -0.5**
DOMB *e*SS **SS** **21 56 48.2 +2.1**
DOMB IVMs_BB IVMs_BB 22 05 55.7
comp=Z,14µm,41.2s
**MANZ Manzenberg 72.23 41** *e*P **P** **21 42 54.1 -0.5**
comp=Z,194nm,1.1s,baz=265,slow=6.0
MANZ *e*S **S** **21 52 04.7 -3.1**
baz=263,slow=12
**ROTZ Rotzenmuhle 72.28 41** *e*P **P** **21 42 54.3 -0.6**
comp=Z,118nm,1.2s,baz=265,slow=6.0
ROTZ *e*S **S** **21 52 06.4 -1.9**
baz=263,slow=12
**ABTA Abfaltersbach 72.28 44** *e*P **P** **21 42 53.4 -1.8**
comp=Z,2µm,1.1s,SNR=756
ABTA S **S** **21 52 04.9 -3.8**
comp=Z,48nm,1.4s
**PLN Plauen 72.30 40** *e*P **P** **21 42 54.4 -0.7**
comp=Z,741nm,1.2s,baz=265,slow=6.0
PLN *e*S **S** **21 52 06.9 -1.6**
baz=263,slow=12
**LESA Schwarzleotal 72.43 44** *e*P **P** **21 42 54.3 -1.6**
comp=Z,2µm,1.2s
LESA *e*S **S** **21 52 06.4 -3.9**
comp=Z,18nm,1.0s
**LESA Schwarzleotal 72.43 44** *e*PcP P'P'ab 22 10 32.5
comp=Z,8.0nm,1.0s
**PLBC Pleasant Camp 72.44 329** P **P** **21 42 54.2 -1.5**
baz=99
PLBC S **S** **21 52 09.7 -0.1**
baz=99
**N31M Braeburn, Yuko 72.49 331** P **P** **21 42 54.7 -1.3**
baz=100,SNR=287
N31M S **S** **21 52 09.5 -0.8**
baz=100
**TANN Tannenbergstha 72.49 40** *e*P **P** **21 42 55.6 -0.6**
comp=Z,604nm,1.1s,baz=265,slow=6.0
TANN *e*S **S** **21 52 07.6 -3.2**
baz=263,slow=12
**O30N Mendenhall 72.52 330** P **P** **21 42 54.4 -1.8**
baz=100,SNR=314
O30N S **S** **21 52 10.6 -0.2**
baz=100
**RJOB Jochberg 72.53 43** *e*P **P** **21 42 55.8 -0.7**
comp=Z,534nm,0.7s,baz=265,slow=6.0
RJOB *e*S **S** **21 52 08.2 -3.1**
baz=263,slow=12
**CLTB Caltabellotta 72.57 54** P **P** **21 42 58.8 +1.8**
**OSL Oslo 72.59 30** *e*P **P** **21 42 58.0 +1.5**
OSL IVmB_BB 21 43 14.5
comp=Z,19µm,3.3s
OSL *e*PP **PP** **21 45 40.2 +0.8**
OSL *e*S **S** **21 52 11.7 +0.3**
OSL *e*SS **SS** **21 56 54.3 +1.6**
OSL IVMs_BB IVMs_BB 22 05 52.0
comp=Z,10µm,32.2s
**WET Wettzell 72.67 42** *e*P **P** **21 42 56.7 -0.6**
comp=Z,634nm,1.1s,baz=265,slow=6.0
WET *e*S **S** **21 52 09.7 -3.1**
baz=263,slow=12
**NAO01 NORSAR Array S 72.82 29** P **P** **21 42 59.2 +1.3**
NAO01 IAmb IAmb 21 43 18.5
comp=Z,2µm,1.1s
**P30M Million Dollar 72.84 330** P **P** **21 42 57.0 -1.1**
baz=98
P30M S **S** **21 52 14.8 +0.4**
baz=98
**F31M Tsiigehtchic 72.85 338** P **P** **21 42 55.7 -2.2**
baz=104,SNR=104
F31M S **S** **21 52 10.8 -3.3**
baz=104
**KBA Koelnbreinsper 72.87 44** *e*P **P** **21 42 56.8 -1.8**
comp=Z,2µm,1.2s,SNR=1631
KBA *e*S **S** **21 52 10.2 -5.3**
comp=Z,27nm,1.1s
**KBA Koelnbreinsper 72.87 44** *e*PcP P'P'ab 22 10 30.1
comp=Z,9.8nm,1.5s
**CLL Collm 72.90 40** P **P** **21 42 59.8 +1.3**
**CLL Collm 72.90 40** *i* P **P** **21 42 58.2 -0.3**
CLL *e*pP **pP** **21 43 27.0 -1.5**
**CLL Collm 72.90 40** ⇑*i*P **P** **21 43 00.1 +1.6**
comp=Z,763nm,1.1s
CLL *e*Pmax 21 43 15.0
CLL *ex* x 21 44 18.0
CLL *e*PP **PP** **21 45 42.0 -0.2**
CLL *ex* x 21 47 00.0

CLL ex x 21 50 26.0
CLL eS **S** **21 52 15.0 -0.3**
comp=N,34µm,25.3s
CLL eS **S** **21 52 15.0 -0.3**
comp=E,24µm,23.6s
CLL eS **S** **21 52 15.0 -0.3**
comp=Z,14µm,30.4s
CLL eSKSac **ScS** **21 52 57.0 +1.7**
CLL epS **sS** **21 53 06.0 -0.8**
CLL eSS **SS** **21 57 02.0 +4.3**
CLL eSSS SSS 22 00 24.0
CLL eSSSS 22 02 20.0
CLL *i* SKKPdf **SKKPdf** **22 05 46.4 +0.2**
CLL ex x 22 10 14.0
CLL ePKPPKPd **P'P'df** **22 10 37.0 -3.2**
comp=Z,65nm,1.9s
CLL esPKPPKPd 22 11 25.0
CLL ex x 22 13 44.0
CLL eSKPPKPdf 22 13 59.0
comp=Z,68nm,1.7s
CLL eSKPPKPab 22 14 11.0
CLL ex x 22 33 11.0
CLL *i* SKPP 22 33 44.1
comp=Z,75nm,2.5s
**CLL Collm 72.90 40** *i* P **P** **21 42 58.2 -0.3**
CLL e*PP **pP** **21 43 27.0 -1.5**
CLL eS **S** **21 52 15.0 -0.3**
CLL e 21 52 57.0
CLL pmax pmax
comp=Z,763nm,1.1s
**CLL Collm 72.90 40** eP **P** **21 42 57.7 -0.8**
comp=Z,604nm,1.0s,baz=265,slow=6.0
CLL eS **S** **21 52 12.4 -2.9**
baz=263,slow=12
**TBLU Trondheim 72.93 27** eP **P** **21 43 00.2 +1.8**
TBLU IVmB_BB 21 43 16.7
comp=Z,15µm,3.2s
TBLU eS **S** **21 52 16.7 +1.6**
TBLU eSS **SS** **21 56 59.8 +2.1**
TBLU IVms_BB IVms_BB 22 06 19.9
comp=Z,11µm,34.2s
**G31M Satah River 72.93 337** P **P** **21 42 56.1 -2.3**
baz=103,SNR=482
G31M S **S** **21 52 10.8 -4.2**
baz=103
**COP Copenhagen 72.95 35** *i* P **P** **21 43 00.1 +1.4**
COP IAmb IAmb 21 43 18.8
comp=Z,5µm,1.6s
**INK Inuvik 72.98 338** P **P** **21 42 58.6 -0.1**
INK IAmb IAmb 21 43 16.4
comp=Z,3µm,1.0s
**INK Inuvik 72.98 338** P **P** **21 42 57.0 -1.7**
comp=Z,1µm,0.9s,baz=100,slow=5.6,SNR=111
INK PKP2bc 22 10 28.9
comp=Z,8.8nm,0.9s,baz=217,slow=5.7,SNR=4.4
INK LR LR 22 13 56.3
comp=Z,71µm,21.4s,baz=118,slow=35
comp=Z,1µm,0.9s
**INK Inuvik 72.98 338** P **P** **21 42 57.3 -1.4**
baz=104,SNR=634
INK S **S** **21 52 10.7 -4.9**
baz=104
**INK Inuvik 72.98 338** P **P** **21 42 58.6 -0.1**
INK pmax pmax
comp=Z,3µm,1.0s
**PRED Cave del Predi 72.99 45** P **P** **21 43 00.6 +1.3**
PRED IAmb IAmb 21 43 03.0
comp=Z,3µm,1.3s
**SABO M.te Sabotino 73.00 45** P **P** **21 43 00.9 +1.7**
SABO IAmb IAmb 21 43 21.5
comp=Z,2µm,1.4s
**NB2 NORSAR Subarra 73.00 29** P **P** **21 43 00.2 +1.2**
comp=Z,3µm,2.0s,baz=262,slow=6.2
NB2 P'P' 22 10 38.5
comp=Z,82nm,0.8s,baz=79,slow=4.4
**NB2 NORSAR Subarra 73.00 29** P **P** **21 43 00.2 +1.2**
baz=262,slow=6.2
**NOA NORSAR Array B 73.00 29** P **P** **21 42 57.7 -1.3**
comp=Z,304nm,1.0s,baz=262,slow=5.8,SNR=179
NOA S **S** **21 52 13.0 -3.2**
comp=Z,1.4nm,0.8s,baz=258,slow=12,SNR=1.0
NOA PKKPbc **PKKPbc** **22 02 41.7 +1.6**
comp=Z,1.4nm,0.8s,baz=13,slow=1.9,SNR=3.5
NOA PKPPKP 22 10 38.8
comp=Z,3.2nm,1.0s,baz=76,slow=2.0,SNR=4.1
NOA LR LR 22 11 43.3
comp=Z,9µm,19.7s,baz=265,slow=33
comp=Z,304nm,1.0s
**MYKA Terra Mystica 73.05 44** eP **P** **21 42 57.9 -1.8**
comp=Z,997nm,1.1s,SNR=906
MYKA eS **S** **21 52 12.8 -4.6**
comp=Z,54nm,1.8s
**BIOA Bad Ischl, Aus 73.10 43** eP **P** **21 42 58.0 -1.8**
comp=Z,256nm,0.6s,SNR=1183
BIOA eS **S** **21 52 11.0 -6.8**
comp=Z,32nm,1.2s
**BIOA Bad Ischl, Aus 73.10 43** PcP P'P'ab 22 10 30.5
comp=Z,9.8nm,1.2s
**CADS Cadrg 73.10 45** *i* P **P** **21 42 58.5 -1.5**
CADS *i* PcP **PcP** **21 43 17.5 +1.5**
CADS eS **S** **21 52 17.8 -0.1**
**N30M Aishikik Lake 73.11 331** P **P** **21 42 58.1 -1.6**
baz=99,SNR=276
N30M S **S** **21 52 17.5 +0.1**
baz=99
**NC602 NORSAR Array S 73.12 30** eP **P** **21 43 00.9 +1.2**
NC602 IVmB_BB 21 43 17.8
comp=Z,25µm,3.4s
NC602 ePP **PP** **21 45 44.2 +0.3**
NC602 eS **S** **21 52 17.1 -0.3**
NC602 eSS **SS** **21 57 02.8 +2.1**
NC602 IVms_BB IVms_BB 22 06 57.7
comp=Z,9µm,48.9s
**HSKC Hora Svate Kat 73.12 40** eP **P** **21 42 58.8 -1.1**
HSKC ePCP **PcP** **21 43 17.0 +1.0**
HSKC eS **S** **21 52 18.0 +0.1**
HSKC eSS SS 21 57 27.6 +26
HSKC AMS AMS 22 06 50.0
comp=Z,153µm,54.6s
HSKC ePKPPKP P'P'df 22 10 54.4 +14
**KHC Kasperske Hory 73.13 42** P **P** **21 43 01.2 +1.2**
**KHC Kasperske Hory 73.13 42** eP **P** **21 42 59.5 -0.5**
KHC ePCP **PcP** **21 43 16.8 +0.7**
KHC eS **S** **21 52 17.3 -0.8**
KHC eSS SS 21 57 27.2 +26
KHC AMS AMS 22 06 50.0
comp=Z,133µm,55.5s
KHC ePKPPKP **P'P'df** **22 10 46.7 +6.7**
**KHC Kasperske Hory 73.13 42** eP **P** **21 42 59.5 -0.5**
KHC *e* 21 43 16.8
KHC eS **S** **21 52 17.3 -0.8**
**P29M Windy Craggy 73.16 329** P **P** **21 42 59.0 -1.0**
baz=98,SNR=62
P29M S **SKiKP** **21 52 19.6 -0.5**
baz=98
**GEC2 GERESS Array S 73.19 42** P **P** **21 43 01.6 +1.1**
**GEC2 GERESS Array S 73.19 42** eP **P** **21 42 59.6 -0.9**
comp=Z,1µm,1.1s,baz=265,slow=6.0
GEC2 eS **S** **21 52 14.7 -4.2**
baz=263,slow=12
**GERES GERESS Array B 73.19 42** P **P** **21 43 01.0 +0.5**
**GERES GERESS Array B 73.19 42** P **P** **21 42 58.9 -1.6**
comp=Z,580nm,0.9s,baz=246,slow=7.4,SNR=169
GERES S **S** **21 52 16.9 -2.1**
comp=Z,3.5nm,0.8s,baz=236,slow=7.0,SNR=1.1
GERES PKPPKP 22 10 38.7
comp=Z,1.3nm,0.8s,baz=108,slow=3.2,SNR=3.5
comp=Z,580nm,0.9s
**GERES GERESS Array B 73.19 42** P **P** **21 43 01.0 +0.5**
**SKDS Skadanscina 73.27 46**⇑ *i*P **P** **21 42 59.3 -1.6**
**J30M Hart River 73.29 334** P **P** **21 42 59.9 -0.9**
baz=100,SNR=1000
J30M S **SKiKP** **21 52 19.9 -0.3**
baz=100
**RGN Rugen 73.35 36** P **P** **21 43 02.7 +1.7**
RGN IAmb IAmb 21 43 23.4
comp=Z,2µm,1.1s
**RGN Rugen 73.35 36** eP **P** **21 43 02.8 +1.7**
**RGN Rugen 73.35 36** eP **P** **21 43 00.5 -0.6**
comp=Z,1µm,1.1s,baz=265,slow=6.0
RGN eS **S** **21 52 19.0 -1.1**
baz=263,slow=12
**I30M Mount Dempster 73.42 335** P **P** **21 43 00.1 -1.4**
baz=101,SNR=1000
I30M S **S** **21 52 21.1 +0.1**
baz=101

**BRG Berggiesshubel 73.46 40** eP **P** **21 43 00.4 -1.4**
BRG Amp 21 43 02.5
comp=Z,32nm,0.9s
**BRG Berggiesshubel 73.46 40** P **P** **21 43 03.8 +2.0**
BRG Amp 21 43 05.1
comp=Z,702nm,1.1s
BRG ⇑PP **PcP** **21 43 15.4 -2.0**
BRG Amp 21 43 21.1
comp=Z,817nm,1.0s
**BRG Berggiesshubel 73.46 40** S **SKiKP** **21 52 21.0 +0.3**
**BRG Berggiesshubel 73.46 40** eP **P** **21 43 01.2 -0.6**
comp=Z,699nm,1.1s,baz=265,slow=6.0
BRG eS **SKiKP** **21 52 18.2 -2.5**
baz=263,slow=12
**RUE Ruedersdorf 73.46 38** eP **P** **21 43 03.1 +1.3**
**RUE Ruedersdorf 73.46 38** eP **P** **21 43 01.0 -0.8**
comp=Z,864nm,0.7s,baz=265,slow=6.0
RUE eS **SKiKP** **21 52 19.4 -1.2**
baz=263,slow=12
**MOA Molln 73.53 43** eP **P** **21 43 00.6 -1.7**
comp=Z,352nm,1.0s,SNR=881
MOA eS **SKiKP** **21 52 16.0 -4.9**
comp=Z,36nm,1.7s
**MOA Molln 73.53 43** ePcP P'P'df 22 10 28.8 -11
comp=Z,20nm,1.2s
**RICC Richard 73.54 40** eP **P** **21 43 02.5 +0.2**
RICC ePCP **PcP** **21 43 20.0 +2.3**
RICC eS **S** **21 52 23.2 +0.7**
RICC eSS SS 21 57 35.6 +28
RICC AMS AMS 22 07 00.0
comp=Z,27µm,32.1s
RICC ePKPPKP 22 10 57.9
**ZVC Zvikov 73.55 42** eP **P** **21 43 03.4 +1.0**
ZVC ePCP **PcP** **21 43 19.0 +1.2**
ZVC eS **S** **21 52 22.4 -0.3**
ZVC eSS SS 21 57 33.3 +26
ZVC AMS AMS 22 07 00.0
comp=Z,86µm,42.7s
ZVC ePKPPKP P'P'df 22 10 56.0 +17
**CEY Cerknica 73.57 45**⇑ *i*P **P** **21 43 01.5 -1.1**
**NOR Nord 73.58 6** *i* P **P** **21 43 01.8 -0.2**
NOR IAmb IAmb 21 43 20.4
comp=Z,1µm,1.2s
**CKRC Cesky Krumlov 73.59 42** eP **P** **21 43 01.2 -1.5**
CKRC ePCP **PcP** **21 43 19.5 +1.5**
CKRC eS **SKiKP** **21 52 21.4 +0.4**
CKRC eSS SS 21 57 33.4 +25
CKRC AMS AMS 22 07 30.0
comp=Z,171µm,64.1s
CKRC ePKPPKP 22 10 51.6
**CKRC Cesky Krumlov 73.59 42** eP **P** **21 43 01.2 -1.5**
CKRC *e* 21 43 19.5
CKRC eS **SKiKP** **21 52 21.4 +0.4**
**YUK6 Outpost Mounta 73.64 330** P **P** **21 43 00.9 -2.1**
baz=98,SNR=172
YUK6 S **S** **21 52 25.0 +1.2**
baz=98
**LJU Ljubljana 73.65 45** *i* P **P** **21 43 02.0 -1.1**
LJU *i* PcP **PcP** **21 43 20.9 +2.6**
LJU eS **S** **21 52 24.5 +0.5**
LJU eSS **SS** **21 57 15.4 +6.0**
LJU *e* 22 02 55.7
LJU *e* 22 08 17.9
LJU *e* 22 10 44.3
LJU *e* 22 13 43.5
LJU *e* 22 30 34.2
**F30M Barrier River 73.66 338** P **P** **21 43 00.6 -2.1**
baz=102,SNR=716
F30M S **SKiKP** **21 52 18.1 -2.4**
baz=102
**O29M Mount Kennedy 73.67 330** P **P** **21 43 01.2 -1.8**
baz=97,SNR=140
O29M S **S** **21 52 23.9 0.0**
baz=97
**K29M Barlow Dome 73.67 334** P **P** **21 43 01.5 -1.5**
baz=99,SNR=921
K29M S **S** **21 52 24.4 +0.5**
baz=99
**OBKA Obir 73.67 45** eP **P** **21 43 01.7 -1.7**
comp=Z,691nm,1.1s,SNR=384
OBKA S **SKiKP** **21 52 18.3 -3.0**
comp=Z,39nm,1.2s
**OBKA Obir 73.67 45** PcP P'P'df 22 10 26.2 -13
comp=Z,14nm,1.2s
**OBKA Obir 73.67 45**⇑ *i*P **P** **21 43 01.6 -1.7**
**G30M tAoh Zraii Nji 73.69 337** P **P** **21 43 01.6 -1.4**
baz=101,SNR=133
G30M S **SKiKP** **21 52 20.5 -0.1**
baz=101
**PRA Prague 73.73 41** eP **P** **21 43 04.3 +0.9**
PRA ePCP **PcP** **21 43 21.0 +2.5**
PRA eS **S** **21 52 26.2 +1.5**
PRA eSS SS 21 57 34.7 +24
PRA AMS AMS 22 07 30.0
comp=Z,229µm,79.6s
PRA ePKPPKP P'P'df 22 10 56.5 +18
**PRA Prague 73.73 41** eP **P** **21 43 04.3 +0.9**
PRA *e* 21 43 21.0
PRA eS **S** **21 52 26.2 +1.5**
**EPYK Eagle Plains 73.77 336** P **P** **21 43 04.2 +0.7**
EPYK IAmb IAmb 21 43 21.8
comp=Z,3µm,0.9s
**EPYK Eagle Plains 73.77 336** P **P** **21 43 01.6 -1.8**
baz=101,SNR=619
EPYK S **SKiKP** **21 52 21.0 +0.2**
baz=101
**PRU Pruhonice 73.80 41** eP **P** **21 43 02.6 -1.2**
PRU ePCP **PcP** **21 43 21.2 +2.4**
PRU eS **S** **21 52 26.2 +0.7**
PRU eSS SS 21 57 34.3 +23
PRU AMS AMS 22 07 10.0
comp=Z,133µm,55.2s
PRU ePKPPKP 22 10 54.2
**PRU Pruhonice 73.80 41** eP **P** **21 43 02.6 -1.2**
PRU *e* 21 43 21.2
PRU eS **S** **21 52 26.2 +0.7**
**DEL Delary 73.83 34** eP **P** **21 43 05.5 +1.6**
**YUK4 Talbot Arm 73.83 331** P **P** **21 43 02.6 -1.5**
baz=98
YUK4 S **S** **21 52 26.8 +0.9**
baz=98
**PVCC Panska Ves 73.84 40** eP **P** **21 43 03.1 -1.0**
PVCC ePCP **PcP** **21 43 21.2 +2.2**
PVCC eS **S** **21 52 26.0 +0.1**
PVCC eSS SS 21 57 40.9 +29
PVCC AMS AMS 22 07 10.0
comp=Z,156µm,60.8s
PVCC ePKPPKP 22 10 56.9
**PVCC Panska Ves 73.84 40** eP **P** **21 43 03.1 -1.0**
PVCC *e* 21 43 21.2
PVCC eS **S** **21 52 26.0 +0.1**
**NSS Namsos 73.89 26** eP **P** **21 43 04.9 +0.9**
NSS IVmB_BB 21 43 21.6
comp=Z,15µm,2.7s
NSS ePP **PP** **21 45 50.7 +0.5**
NSS eS **S** **21 52 25.3 -0.6**
NSS eSS **SS** **21 57 15.0 +2.8**
NSS IVms_BB IVms_BB 22 06 20.6
comp=Z,8µm,33.2s
**M29M Somme Creek 73.89 332** P **P** **21 43 03.0 -1.3**
baz=98,SNR=370
M29M S **S** **21 52 24.3 -2.0**
baz=98
**GOPC GO Pecny, Ondr 73.95 41** eP **P** **21 43 04.1 -0.7**
GOPC ePCP **PcP** **21 43 21.9 +2.4**
GOPC eS **S** **21 52 26.5 -0.8**
GOPC eSS SS 21 57 38.8 +25
GOPC AMS AMS 22 07 10.0
comp=Z,88µm,43.8s
**GOPC GO Pecny, Ondr 73.95 41** eP **P** **21 43 04.1 -0.7**
GOPC *e* 21 43 21.9
GOPC eS **S** **21 52 26.5 -0.8**
**PNL Peninsula 74.00 329** P **P** **21 43 05.6 +0.7**
**PNL Peninsula 74.00 329** P **P** **21 43 03.6 -1.2**
baz=96,SNR=32
PNL S **S** **21 52 30.2 +2.8**
baz=96
**SOKA Soboth 74.01 44** eP **P** **21 43 03.1 -2.1**
comp=Z,451nm,1.3s,SNR=351
SOKA eS **SKiKP** **21 52 21.4 -0.4**
comp=Z,18nm,1.4s
**SOKA Soboth 74.01 44** PcP P'P'df 22 10 24.6 -14
comp=Z,15nm,1.3s
**PERS Pernice 74.07 45** *i* P **P** **21 43 03.5 -2.1**

PERS *i* PcP **PcP** **21 43 22.5 +2.4**
PERS *e* 22 08 16.4
**J29N Klondike Camp 74.07 334** P **P** **21 43 04.2 -1.1**
baz=99,SNR=270
J29N S **S** **21 52 28.4 +0.2**
baz=99
**HFS Hagfors 74.10 30** P **P** **21 43 03.6 -1.8**
comp=Z,129nm,0.6s,baz=245,slow=3.0,SNR=86
HFS S **S** **21 52 26.5 -2.0**
comp=Z,8.8nm,0.9s,baz=237,slow=6.6,SNR=1.4
HFS LR LR 22 11 29.2
comp=Z,12µm,21.9s,baz=264,slow=32
comp=Z,129nm,0.6s
**BOJS Bojanci 74.14 46**⇑ *i*P **P** **21 43 04.8 -1.1**
**BCPM Bancas Point 74.15 329** P **P** **21 43 07.4 +1.7**
**I29M Ogilvie Camp, 74.25 335** P **P** **21 43 04.5 -1.6**
baz=99,SNR=1000
I29M S **S** **21 52 29.0 -1.0**
baz=99
**BSD Bornholm Skovb 74.31 36** eP **P** **21 43 07.8 +1.2**
**BSD Bornholm Skovb 74.31 36** *i* P **P** **21 43 08.0 +1.3**
BSD IAmb IAmb 21 43 26.4
comp=Z,2µm,1.6s
**ARSA Arzberg 74.36 44** eP **P** **21 43 05.2 -2.0**
comp=Z,210nm,0.6s,SNR=652
ARSA eS **SKiKP** **21 52 26.6 +4.4**
comp=Z,24nm,2.0s
**ARSA Arzberg 74.36 44** PcP P'P'df 22 10 24.2 -14
comp=Z,12nm,1.3s
**YUK8 Steele Glacier 74.36 331** P **P** **21 43 06.1 -1.2**
baz=96,SNR=70
YUK8 S **S** **21 52 32.7 +0.8**
baz=96
**G29M Pine Creek 74.38 337** P **P** **21 43 05.1 -1.8**
baz=100,SNR=644
G29M S **S** **21 52 28.9 -2.6**
baz=100
**TREC Trest 74.39 42** eP **P** **21 43 06.6 -0.7**
TREC ePCP **PcP** **21 43 24.5 +3.1**
TREC eS **S** **21 52 32.1 0.0**
TREC eSS SS 21 57 44.3 +24
TREC AMS AMS 22 07 50.0
comp=Z,124µm,60.7s
**TREC Trest 74.39 42** eP **P** **21 43 06.6 -0.7**
TREC *e* 21 43 24.5
TREC eS **S** **21 52 32.1 0.0**
**H29M Whitestone 74.41 336** P **P** **21 43 05.5 -1.6**
baz=99,SNR=1000
H29M S **S** **21 52 28.6 -3.1**
baz=99
**SGRT San Giovanni R 74.49 50** *i* P **P** **21 43 08.3 +0.1**
**O28M Mount Upton 74.51 330** P **P** **21 43 06.4 -1.8**
baz=96
O28M S **S** **21 52 34.5 +0.8**
baz=96
**DAWY Dawson 74.52 334** P **P** **21 43 06.3 -1.6**
baz=98,SNR=468
DAWY S **S** **21 52 32.4 -0.8**
baz=98
**E29M Blow River 74.58 338** P **P** **21 43 06.5 -1.6**
baz=100,SNR=1000
E29M S **S** **21 52 27.9 -5.7**
baz=100
**STOK Stokkvaagen 74.60 24** eP **P** **21 43 09.4 +1.3**
STOK IVmB_BB 21 43 25.9
comp=Z,20µm,3.3s
STOK ePP **PP** **21 45 55.0 -1.3**
STOK eS **S** **21 52 34.2 +0.5**
STOK eSS **SS** **21 57 26.8 +3.9**
STOK IVms_BB IVms_BB 22 06 52.0
comp=Z,8µm,68.2s
**CONA Conrad Observa 74.60 43** eP **P** **21 43 07.0 -1.6**
comp=Z,216nm,1.0s,SNR=577
CONA eS **SKiKP** **21 52 27.5 +4.8**
comp=Z,16nm,1.1s
**CONA Conrad Observa 74.60 43** ePcP P'P'df 22 10 23.6 -14
comp=Z,12nm,1.6s
**KONS Konsvik 74.67 24** eP **P** **21 43 08.7 +0.2**
KONS eS **S** **21 52 34.7 +0.2**
**YUK3 Moose Creek 74.74 331** P **P** **21 43 07.9 -1.5**
baz=96,SNR=129
YUK3 S **S** **21 52 36.2 +0.2**
baz=96
**UPC Upice 74.76 40** eP **P** **21 43 08.6 -0.8**
UPC ePCP **PcP** **21 43 25.8 +2.8**
UPC eS **S** **21 52 36.5 +0.3**
UPC eSS **SS** **21 57 26.3 +0.2**
UPC AMS AMS 22 07 40.0
comp=Z,187µm,63.1s
UPC ePKPPKP P'P'df 22 10 56.0 +19
**UPC Upice 74.76 40** eP **P** **21 43 08.6 -0.8**
UPC *e* 21 43 25.8
UPC eS **S** **21 52 36.5 +0.3**
UPC eSS **SS** **21 57 26.3 +0.2**
**CHVC Chvalec 74.79 40** eP **P** **21 43 08.7 -0.9**
CHVC ePCP **PcP** **21 43 26.2 +3.1**
CHVC eS **S** **21 52 36.7 +0.1**
CHVC eSS **SS** **21 57 30.4 +3.8**
CHVC AMS AMS 22 08 00.0
comp=Z,168µm,59.1s
CHVC ePKPPKP P'P'df 22 10 54.2 +17
**CHVC Chvalec 74.79 40** eP **P** **21 43 08.7 -0.9**
CHVC *e* 21 43 26.2
CHVC eS **S** **21 52 36.7 +0.1**
CHVC eSS **SS** **21 57 30.4 +3.8**
**RONA Rosalia, Austr 74.89 43** eP **P** **21 43 08.6 -1.7**
comp=Z,168nm,1.2s,SNR=456
RONA eS **SKiKP** **21 52 30.4 +7.4**
comp=Z,25nm,1.5s
**RONA Rosalia, Austr 74.89 43** ePcP P'P'df 22 10 23.2 -14
comp=Z,16nm,1.7s
**OSTC Ostas 74.89 40** eP **P** **21 43 09.4 -0.8**
OSTC ePCP **PcP** **21 43 27.6 +4.0**
OSTC eS **S** **21 52 37.9 +0.2**
OSTC eSS **SS** **21 57 33.4 +5.2**
OSTC AMS AMS 22 08 10.0
comp=Z,176µm,60.8s
OSTC ePKPPKP P'P'df 22 10 55.2 +18
**OSTC Ostas 74.89 40** eP **P** **21 43 09.4 -0.8**
OSTC *e* 21 43 27.6
OSTC eS **S** **21 52 37.9 +0.2**
OSTC eSS **SS** **21 57 33.4 +5.2**
**LOGN Logan Glacier 74.91 330** P **P** **21 43 11.9 +1.6**
**I28M Miner Creek 74.93 335** P **P** **21 43 08.5 -1.8**
baz=97,SNR=954
I28M S **S** **21 52 36.5 -1.4**
baz=97
**KSP Ksiaz 74.95 40** eP **P** **21 43 09.4 -1.1**
KSP eS **S** **21 52 36.2 -2.1**
KSP eSS **SS** **21 57 29.8 +0.9**
KSP eL L 22 07 58.5
comp=Z,101µm,47.8s
**DPC Dobruska-Polom 74.95 41** eP **P** **21 43 09.8 -0.8**
DPC ePCP **PcP** **21 43 27.7 +3.8**
DPC eS **S** **21 52 38.6 +0.1**
DPC eSS **SS** **21 57 31.9 +2.7**
DPC AMS AMS 22 07 40.0
comp=Z,163µm,62.3s
DPC ePKPPKP P'P'df 22 10 53.9 +17
**DPC Dobruska-Polom 74.95 41** eP **P** **21 43 09.8 -0.8**
DPC *e* 21 43 27.7
DPC eS **S** **21 52 38.6 +0.1**
DPC eSS **SS** **21 57 31.9 +2.7**
**KRUC Moravsky 74.98 42** eP **P** **21 43 09.4 -1.3**
KRUC ePCP **PcP** **21 43 24.3 +0.4**
KRUC *e* 21 43 28.1
KRUC ePP **PP** **21 46 00.6 +0.7**
KRUC eS **S** **21 52 39.1 +0.4**
KRUC ePKPPKP 22 10 33.5
KRUC *e* 22 13 39.8
KRUC *e* 22 30 23.1
KRUC *e* 22 33 31.9
**D28M Stokes Point 75.05 339** P **P** **21 43 09.0 -1.7**
baz=100,SNR=453
D28M S **S** **21 52 34.5 -4.2**
baz=100
**A050A Klekovaca 75.05 47**⇑ *i*P **P** **21 43 10.2 -1.1**
**LOF Lofoten 75.07 22** eP **P** **21 43 11.7 +0.9**
LOF IVmB_BB 21 43 27.9
comp=Z,16µm,3.4s
LOF ePP **PP** **21 46 00.2 0.0**
LOF eS **S** **21 52 39.0 0.0**
LOF eSS **SS** **21 57 32.9 +2.9**
LOF IVms_BB IVms_BB 22 08 26.8

comp=Z,13µm,48.8s
**CTGM Chitina Glacie 75.09 330 P P 21 43 12.9 +1.7**
**CTG Chitina Glacier 75.09 330 P P 21 43 09.3 -1.9**
baz=95,SNR=75
CTG S **S** **21 52 40.4 +0.6**
baz=95
**VRAC Vranov 75.11 42** *e*P **P** **21 43 10.3 -1.2**
VRAC *e*PCP **PcP** **21 43 24.9 +0.4**
VRAC *e* 21 43 28.9
VRAC *e*PP **PP** **21 46 01.9 +0.9**
VRAC *e*S **S** **21 52 40.6 +0.4**
VRAC *e*SS **SS** **21 57 32.1 +0.6**
VRAC *e*PKPPKP 22 10 33.2
VRAC *e* 22 13 42.0
**VRAC Vranov 75.11 42** S **S** **21 52 38.7 -1.4**
comp=Z,14nm,1.1s,baz=218,slow=12,SNR=7.3
**VRAC Vranov 75.11 42** ⇑P **P** **21 43 13.3 +1.8**
**VRAC Vranov 75.11 42** P **P** **21 43 13.3 +1.8**
**MOR8 Moi Rana 75.15 24** *e*P **P** **21 43 12.8 +1.5**
MOR8 *i* 21 46 08.0
MOR8 *e*S **S** **21 52 40.9 +0.9**
MOR8 *e*SS **SS** **21 57 35.8 +4.5**
MOR8 IVMs_BB IVMs_BB 22 08 51.4
comp=Z,7µm,27.8s
**PRIJ Prijedor 75.17 46**⇑*i*P **P** **21 43 13.6 +1.7**
**F28M Old Crow 75.20 337** P **P** **21 43 09.5 -2.2**
baz=98,SNR=521
F28M S **S** **21 52 36.2 -4.3**
baz=98
**E28M Babbage River 75.22 338** P **P** **21 43 09.7 -2.0**
baz=98,SNR=629
E28M S **S** **21 52 35.0 -5.6**
baz=98
**MATE Matera 75.24 51** P **P** **21 43 12.7 +0.4**
**MATE Matera 75.24 51** ⇓P **P** **21 43 13.7 +1.3**
**KRLC Kraliky 75.24 41** *e*P **P** **21 43 12.3 0.0**
KRLC *e*PCP **PcP** **21 43 29.7 +4.6**
KRLC *e*S **S** **21 52 42.6 +0.9**
KRLC *e*SS **SS** **21 57 42.1 +8.5**
KRLC *e*PKPPKP P'P'df 22 10 53.8 +18
**KRLC Kraliky 75.24 41** *e*P **P** **21 43 12.3 0.0**
KRLC *e* 21 43 29.7
KRLC *e*S **S** **21 52 42.6 +0.9**
**GRNC Granite Creek 75.27 330** P **P** **21 43 14.1 +1.6**
**PMSA Palmer Station 75.28 181** P **P** **21 43 14.9 +3.1**
PMSA IAmb IAmb 21 43 17.2
comp=Z,2µm,1.0s
**PMSA Palmer Station 75.28 181** LR LR 22 19 19.1
comp=Z,21µm,19.8s,baz=359,slow=38
**PMSA Palmer Station 75.28 181** *e*P **P** **21 43 12.3 +0.5**
**A051A Mrakovica 75.31 46**⇑*i*P **P** **21 43 11.7 -1.1**
**TIP Timpagrande 75.32 52** P **P** **21 43 13.3 +0.3**
**TIP Timpagrande 75.32 52** ⇑P **P** **21 43 14.5 +1.5**
**MESA MESA 75.33 330** P **P** **21 43 10.5 -2.3**
baz=94,SNR=20
MESA S **S** **21 52 44.0 +1.4**
baz=94
**EGAK Eagle 75.37 334** P **P** **21 43 13.6 +1.0**
**EGAK Eagle 75.37 334** P **P** **21 43 11.2 -1.5**
baz=96,SNR=1000
EGAK S **S** **21 52 42.9 +0.5**
baz=96
**ZST Bratislava 75.44 43** *e*P **P** **21 43 13.5 +0.2**
ZST *e* 21 43 31.8
ZST *e*S **S** **21 52 42.1 -1.7**
ZST pmax pmax
comp=Z,3µm,1.1s
**ZST Bratislava 75.44 43** *e*P **P** **21 43 13.5 +0.2**
ZST *e* 21 43 31.8
ZST *e*S **S** **21 52 42.1 -1.7**
ZST *e*SS SS 21 57 54.2 +18
**M27K Edge Creek, AK 75.46 332** P **P** **21 43 12.0 -1.4**
baz=95,SNR=427
M27K S **S** **21 52 45.2 +1.3**
baz=95
M27K S **S** **21 52 45.2 +1.3**
baz=95
**BCAR Beaver Creek A 75.48 333** P **P** **21 43 15.0 +1.7**
**L27K Beaver Creek, 75.50 333** P **P** **21 43 12.4 -1.0**
baz=95,SNR=753
L27K S **S** **21 52 44.1 0.0**
baz=95
**NOCI Noci 75.51 51** *i*P **P** **21 43 14.1 +0.1**
**BLY Banja Luka 75.51 46**⇑*i*P **P** **21 43 12.3 -1.5**
**ISLE Juniper Island 75.55 330** P **P** **21 43 15.6 +1.7**
**GKP Gorka Klasztor 75.59 38** *e*P **P** **21 43 14.2 +0.1**
GKP *e*S **S** **21 52 44.5 -0.8**
**GKP Gorka Klasztor 75.59 38** *e*P **P** **21 43 15.8 +1.7**
**FAUS Fauske 75.63 23** *e*P **P** **21 43 15.3 +1.3**
FAUS IVmB_BB 21 43 31.5
comp=Z,18µm,3.4s
FAUS *e*PP **PP** **21 46 05.3 +0.4**
FAUS *e*S **S** **21 52 46.0 +0.9**
FAUS *e*SS **SS** **21 57 40.4 +1.9**
FAUS IVMs_BB IVMs_BB 22 08 27.9
comp=Z,14µm,23.0s
**I27K Kandik River 75.65 335** P **P** **21 43 12.5 -1.8**
baz=96,SNR=1000
I27K S **S** **21 52 42.3 -3.3**
baz=96
I27K S **S** **21 52 42.3 -3.3**
baz=96
**SMOL Smolenice 75.66 43** *e*P **P** **21 43 15.4 +0.8**
SMOL *e* 21 43 32.6
SMOL *e*S **S** **21 52 46.8 +0.6**
SMOL pmax pmax
comp=Z,438nm,1.2s
**H27K Steamboat Moun 75.68 336** P **P** **21 43 12.3 -2.1**
baz=96,SNR=790
H27K S **S** **21 52 42.0 -3.9**
baz=96
**STEI Steigen 75.68 22** *e*P **P** **21 43 14.7 +0.4**
STEI IVmB_BB 21 43 31.4
comp=Z,15µm,3.6s
STEI *e*PP **PP** **21 46 06.4 +1.1**
STEI *e*S **S** **21 52 44.7 -1.0**
STEI *e*SS **SS** **21 57 40.6 +1.4**
STEI IVMs_BB IVMs_BB 22 08 22.9
comp=Z,13µm,40.5s
**K27K Chicken 75.69 333** P **P** **21 43 12.6 -1.9**
baz=95
K27K S **S** **21 52 45.1 -1.0**
baz=95
K27K S **S** **21 52 45.1 -1.0**
baz=95
**MORC Moravsky Berou 75.73 41** P **P** **21 43 16.9 +1.8**
**MORC Moravsky Berou 75.73 41** *e*P **P** **21 43 14.0 -1.1**
MORC *e* 21 43 33.0
MORC *e*PP **PP** **21 46 03.6 -2.7**
MORC *e*S **S** **21 52 47.8 +0.7**
MORC *e*PKPPKP **P'P'df** **22 10 32.1 -3.3**
MORC *e* 22 13 44.2
MORC *e* 22 30 26.6
MORC *e* 22 33 34.0
**MORC Moravsky Berou 75.73 41** ⇓P **P** **21 43 16.2 +1.1**
**MORC Moravsky Berou 75.73 41** P **P** **21 43 16.9 +1.8**
MORC pmax pmax
comp=Z,2µm,1.4s
**G27K Doyon Strip 75.79 336** P **P** **21 43 12.8 -2.2**
baz=96,SNR=980
G27K S **S** **21 52 43.5 -3.6**
baz=96
**JAVC Velka Javorina 75.81 42** *e*P **P** **21 43 15.5 -0.1**
JAVC *e* 21 43 34.0
JAVC *e* 22 13 35.4
**D27M Malcolm River 75.82 339** P **P** **21 43 13.4 -1.8**
baz=97,SNR=245
D27M S **S** **21 52 43.2 -4.1**
baz=97
**E27K Coleen River 75.92 338** P **P** **21 43 13.7 -2.0**
baz=96,SNR=712
E27K S **S** **21 52 43.8 -4.6**
baz=96
**MAUC Maruska 75.92 42** *e*P **P** **21 43 15.9 -0.2**
MAUC *e*PKPPKP P'P'df 22 10 51.9 +17
**STON Ston 75.92 48**⇑*i*P **P** **21 43 14.7 -1.5**
**CRQE Cirque 75.93 330** P **P** **21 43 14.6 -1.5**
baz=93,SNR=42
CRQE S **S** **21 52 49.9 +0.9**
baz=93
**MCARA McCarthy VSAT 75.93 331** P **P** **21 43 17.6 +1.7**
MCARA IAmb IAmb 21 43 33.9
comp=Z,3µm,1.0s
**MCARA McCarthy VSAT 75.93 331** P **P** **21 43 14.0 -1.9**
baz=94,SNR=209
MCARA S **S** **21 52 50.5 +1.7**
baz=94
**M26K Nabesna, AK 75.98 332** P **P** **21 43 14.7 -1.6**
baz=94,SNR=224
M26K S **S** **21 52 50.5 +1.1**
baz=94
M26K S **S** **21 52 50.5 +1.1**
baz=94
**BGLC Bering Glacier 75.99 329** P **P** **21 43 14.8 -1.4**
baz=93
BGLC S **S** **21 52 51.8 +2.5**
baz=93
**UPP Uppsala 76.05 31** *e*P **P** **21 43 16.8 +0.3**
**OKC Ostrava-Krasne 76.12 41** *e*P **P** **21 43 16.9 -0.3**
OKC *e*PCP **PcP** **21 43 34.4 +5.5**
OKC *e*S **S** **21 52 52.5 +1.2**
OKC *e*SS SS 21 58 15.0 +28
OKC *e*PKPPKP P'P'df 22 10 54.1 +19
**OKC Ostrava-Krasne 76.12 41** *e*P **P** **21 43 16.9 -0.3**
OKC *e* 21 43 34.4
OKC *e*S **S** **21 52 52.5 +1.2**
**VRDI Verde Repeater 76.13 331** P **P** **21 43 18.7 +1.4**
VRDI IAmb IAmb 21 43 34.6
comp=Z,2µm,1.2s
**DOB Doboj 76.16 46** *e*P **P** **21 43 19.5 +2.0**
**L26K Log Cabin Wild 76.19 332** P **P** **21 43 14.8 -2.6**
baz=94,SNR=985
L26K S **S** **21 52 52.4 +0.8**
baz=94
L26K S **S** **21 52 52.4 +0.8**
baz=94
**SRO Srobarova 76.25 43** *e*P **P** **21 43 19.9 +1.9**
**I26K Coal Creek Min 76.26 335** P **P** **21 43 15.6 -2.0**
baz=94
I26K S **S** **21 52 50.0 -2.2**
baz=94
I26K S **S** **21 52 50.0 -2.2**
baz=94
**GLB Gilahina Butte 76.31 331** P **P** **21 43 19.5 +1.3**
**J26L Joseph Creek 76.38 334** P **P** **21 43 16.6 -1.9**
baz=94,SNR=465
J26L S **S** **21 52 51.9 -1.8**
baz=94
J26L S **S** **21 52 51.9 -1.8**
baz=94
**TREB Trebinje 76.41 49**⇑*i*P **P** **21 43 20.5 +1.5**
**MORH Mrgy, Hungar 76.51 45** ⇑P **P** **21 43 21.1 +1.7**
**SCRK Sand Creek 76.53 333** P **P** **21 43 20.4 +1.0**
SCRK IAmb IAmb 21 43 37.6
comp=Z,2µm,0.9s
**SCRK Sand Creek 76.53 333** P **P** **21 43 17.4 -2.0**
baz=93,SNR=1000
SCRK S **S** **21 52 53.6 -1.9**
baz=93
**BRY Bratogost 76.54 48**⇑*i*P **P** **21 43 20.2 +0.3**
**BRY Bratogost 76.54 48**⇑*i*P **P** **21 43 21.8 +1.9**
**KAIM Kayak Island 76.55 329** P **P** **21 43 17.5 -1.9**
baz=92,SNR=8.8
KAIM S **S** **21 52 57.3 +1.8**
baz=92
**VYHS Vyhne 76.59 43** *e*P **P** **21 43 18.8 -1.1**
VYHS *e* 21 43 37.3
VYHS *e*S **S** **21 52 55.7 -0.8**
VYHS pmax pmax
comp=Z,731nm,1.3s
**VYHS Vyhne 76.59 43** *e*P **P** **21 43 18.8 -1.1**
VYHS *e* 21 43 37.3
VYHS *e*S **S** **21 52 55.7 -0.8**
**SCTE Santa Cesarea 76.61 51** P **P** **21 43 21.8 +1.6**
SCTE IAmb IAmb 21 43 42.9
comp=Z,2µm,0.9s
**SCTE Santa Cesarea 76.61 51** *i*P **P** **21 43 20.7 +0.6**
**G26K Porcupine Rive 76.64 336** P **P** **21 43 17.8 -2.0**
baz=94,SNR=228
G26K S **S** **21 52 54.9 -1.3**
baz=94
**KBS Kingsbay 76.65 11** P **P** **21 43 20.9 +1.2**
**KBS Kingsbay 76.65 11** *e*P **P** **21 43 20.6 +1.0**
KBS IVmB_BB 21 43 37.5
comp=Z,15µm,3.0s
KBS *e*S **S** **21 52 55.6 -0.4**
KBS *e*SS **SS** **21 57 54.8 +1.3**
KBS IVMs_BB IVMs_BB 22 08 49.3
comp=Z,15µm,27.5s
**KBS Kingsbay 76.65 11** *de*P **P** **21 43 18.8 -0.8**
KBS pmax pmax
comp=Z,978nm,1.3s
**KBS Kingsbay 76.65 11** *i*P **P** **21 43 20.8 +1.2**
**BMRM Bremner River 76.68 330** P **P** **21 43 18.4 -1.8**
baz=92,SNR=140
BMRM S **S** **21 52 57.5 +0.5**
baz=92
**N25K Chitina, Valde 76.70 331** P **P** **21 43 18.2 -2.1**
baz=92,SNR=174
N25K S **S** **21 52 55.8 -1.5**
baz=92
**HAPS Han Pijesak,Bl 76.79 47**⇑*i*P **P** **21 43 20.4 -0.9**
**UPM Unac-Piva 76.79 48**⇑*i*P **P** **21 43 22.3 +0.9**
**UPM Unac-Piva 76.79 48**⇑*i*P **P** **21 43 23.8 +2.4**
**C27K Jago River 76.82 339** P **P** **21 43 19.2 -1.6**
baz=95,SNR=400
C27K S **S** **21 52 54.1 -4.1**
baz=95
**BUM Brajici-Budva 76.82 49**⇑*i*P **P** **21 43 24.0 +2.6**
**CEME Cevo 76.83 49**⇑*i*P **P** **21 43 23.6 +2.2**
**F26K Sheenjek River 76.83 337** P **P** **21 43 19.2 -1.7**
baz=94,SNR=245
F26K S **S** **21 52 55.8 -2.7**
baz=94
**NKME Niksic 76.85 48**⇑*i*P **P** **21 43 24.0 +2.5**
**RIDG Independent Ri 76.90 333** P **P** **21 43 22.3 +0.9**
**RIDG Independent Ri 76.90 333** P **P** **21 43 19.8 -1.6**
baz=92,SNR=417
RIDG S **S** **21 52 57.4 -1.9**
baz=92
**BMAR Burnt Mountain 76.98 337** P **P** **21 43 22.9 +1.1**
**HARP HAARP 76.99 332** P **P** **21 43 20.7 -1.1**
baz=92,SNR=72
HARP S **S** **21 53 00.1 -0.3**
baz=92
**LANS Liptovska Anna 77.00 42** *e*P **P** **21 43 22.1 -0.1**
LANS *e* 21 43 40.7
LANS pmax pmax
comp=Z,425nm,1.4s
**LANS Liptovska Anna 77.00 42** *e*P **P** **21 43 22.1 -0.1**
LANS *e* 21 43 40.7
**HSPB Hornsund (broa 77.03 13** *e*P **P** **21 43 22.9 +1.2**
HSPB *e*S **S** **21 53 00.0 -0.1**
HSPB *e*SS **SS** **21 58 08.3 +9.1**
HSPB *e*L L 22 08 34.0
comp=Z,225µm,50.9s
**DRME Dracevica, Mon 77.05 49**⇑*i*P **P** **21 43 22.2 -0.4**
**DRME Dracevica, Mon 77.05 49**⇑*i*P **P** **21 43 25.3 +2.7**
**PDG Podgorica 77.09 49**⇑*i*P **P** **21 43 22.1 -0.7**
**PDG Podgorica 77.09 49** ⇓P **P** **21 43 24.3 +1.5**
**PDG Podgorica 77.09 49**⇑*i*P **P** **21 43 25.2 +2.4**
**RUDO Rudo 77.11 48** *e*P **P** **21 43 23.7 +0.7**
**BBLS Lazi&#263i 77.13 47**⇑*i*P **P** **21 43 22.4 -0.7**
**PLE Pljevlja 77.14 48**⇑*i*P **P** **21 43 24.0 +0.8**
**PAX Paxson 77.15 332** P **P** **21 43 20.9 -2.0**
baz=92,SNR=289
PAX S **S** **21 53 00.7 -1.5**
baz=92
**J25K Salcha River, 77.16 334** P **P** **21 43 20.8 -2.0**
J25K IAmb IAmb 21 43 22.9
comp=Z,63nm,0.8s
**J25K Salcha River, 77.16 334** P **P** **21 43 23.5 +0.6**
J25K IAmb IAmb 21 43 40.1
comp=Z,915nm,0.8s
**J25K Salcha River, 77.16 334** P **P** **21 43 20.9 -2.0**
baz=92,SNR=512
J25K S **S** **21 52 60.0 -2.2**
baz=92
J25K S **S** **21 52 60.0 -2.2**
baz=92
**TRO Tromso 77.18 21** *e*P **P** **21 43 23.6 +0.8**
TRO IVmB_BB 21 43 40.1
comp=Z,22µm,3.4s
TRO *e*PP **PP** **21 46 17.7 -0.1**
TRO *e*S **S** **21 53 00.4 -1.5**
TRO *e*SS **SS** **21 58 03.5 +1.9**
TRO IVMs_BB IVMs_BB 22 08 52.3
comp=Z,15µm,52.6s
**OJC Ojcow 77.19 41** *e*P **P** **21 43 22.5 -0.7**
OJC *e*S **S** **21 52 59.5 -3.3**
OJC *e*SS SS 21 58 14.5 +12
OJC *e*L L 22 09 22.3
comp=Z,251µm,79.6s
**OJC Ojcow 77.19 41** P **P** **21 43 25.0 +1.8**
**OJC Ojcow 77.19 41** P **P** **21 43 25.0 +1.8**
OJC pmax pmax
comp=Z,2µm,1.2s
**FYU Fort Yukon 77.19 336** P **P** **21 43 21.0 -1.9**
**TEKS Tekeris 77.19 47**⇑*i*P **P** **21 43 22.3 -1.1**
**EYAK Cordova Ski Ar 77.23 330** P **P** **21 43 24.0 +0.8**
**EYAK Cordova Ski Ar 77.23 330** P **P** **21 43 21.6 -1.6**
baz=91,SNR=39
EYAK S **S** **21 53 01.7 -1.2**
baz=91
**AAL Aland 77.25 31** *e*P **P** **21 43 23.4 +0.2**
**KOME Kolasin 77.26 48**⇑*i*P **P** **21 43 26.5 +2.6**
**C26K Camden Bay 77.26 339** P **P** **21 43 21.5 -1.7**
baz=94,SNR=34
C26K S **S** **21 52 60.0 -2.9**
baz=94
**PRP Porcupine Dome 77.26 335** P **P** **21 43 24.4 +0.9**
PRP IAmb IAmb 21 43 41.5
comp=Z,2µm,0.8s
**PRP Porcupine Dome 77.26 335** P **P** **21 43 21.6 -1.8**
baz=92,SNR=663
PRP S **S** **21 53 01.8 -1.6**
baz=92
**PSZ Piszkesteto 77.31 43** P **P** **21 43 25.5 +1.5**
**PSZ Piszkesteto 77.31 43** ⇓P **P** **21 43 25.1 +1.0**
**PSZ Piszkesteto 77.31 43** P **P** **21 43 25.5 +1.5**
PSZ pmax pmax
comp=Z,1µm,1.4s
**K24K Donnelly Dome 77.31 333** P **P** **21 43 22.0 -1.7**
baz=92,SNR=191
K24K S **S** **21 53 01.6 -2.2**
baz=92
K24K S **S** **21 53 01.6 -2.2**
baz=92
**KLU Klutina 77.33 331** P **P** **21 43 25.2 +1.3**
**KLU Klutina 77.33 331** P **P** **21 43 22.4 -1.5**
baz=91,SNR=119
KLU S **S** **21 53 01.4 -2.7**
baz=91
**FRGS Fruska Gora 77.36 46**⇑*i*P **P** **21 43 23.1 -1.2**
**VLO Vlora 77.37 51** *i*P **P** **21 43 27.3 +2.9**
**SPB3 Spitsbergen Ar 77.38 12** P **P** **21 43 24.8 +1.1**
**SPA0 Spitsbergen Ar 77.38 12** *e*P **P** **21 43 24.4 +0.6**
SPA0 *e*S **S** **21 53 04.1 0.0**
**SPITS Spitsbergen Ar 77.38 12** P **P** **21 43 21.8 -2.0**
comp=Z,196nm,0.4s,baz=212,slow=5.1,SNR=160
SPITS S **S** **21 52 60.0 -4.1**
comp=Z,16nm,1.0s,baz=276,slow=14,SNR=1.8
comp=Z,196nm,0.4s
**F25K Christian Rive 77.40 337** P **P** **21 43 22.9 -1.2**
baz=93,SNR=1000
F25K S **S** **21 53 03.1 -1.5**
baz=93
**H25L Birch Creek 77.41 336** P **P** **21 43 22.3 -1.8**
baz=92
H25L S **S** **21 53 03.6 -1.0**
baz=92
**M24K Tolsona, Glenn 77.46 331** P **P** **21 43 22.4 -2.1**
baz=91,SNR=75
M24K S **S** **21 53 03.7 -1.8**
baz=91
**MID Middleton Isla 77.52 329** P **P** **21 43 26.5 +1.7**
**Q23K Middleton Isla 77.52 329** P **P** **21 43 22.4 -2.4**
baz=90
Q23K S **S** **21 53 03.0 -3.0**
baz=90
Q23K S **S** **21 53 03.0 -3.0**
baz=90
**NIE Niedzica 77.53 42** *e*P **P** **21 43 25.8 +0.6**
NIE *e*S **S** **21 53 07.9 +1.2**
NIE *e*SS **SS** **21 58 04.7 -3.4**
NIE *e*L L 22 09 18.1
comp=Z,36µm,38.7s
**IVA Berane 77.53 48**⇑*i*P **P** **21 43 27.8 +2.4**
**G25K Bearman Lake 77.54 336** P **P** **21 43 23.7 -1.1**
baz=92,SNR=462
G25K S **S** **21 53 05.2 -0.8**
baz=92
**SJES Sjenica 77.57 48**⇑*i*P **P** **21 43 24.8 -0.8**
**BJO1 Bjornoya 77.58 16** *e*P **P** **21 43 26.3 +1.4**
BJO1 IVmB_BB 21 43 42.7
comp=Z,18µm,2.5s
BJO1 *e*S **S** **21 53 06.5 +0.4**
BJO1 *e*SS **SS** **21 58 08.4 +0.8**
BJO1 IVMs_BB IVMs_BB 22 09 09.4
comp=Z,11µm,51.3s
**PUK Puka 77.58 49** P **P** **21 43 28.2 +2.5**
**PUK Puka 77.58 49** *i*P **P** **21 43 26.5 +0.9**
**BSZH Besenyszg 77.59 44**⇑*i*P **P** **21 43 27.3 +1.9**
**PVY Plav 77.60 49**⇑*i*P **P** **21 43 29.3 +3.5**
**TIR Tirane 77.60 50** P **P** **21 43 27.4 +1.7**
**TIR Tirane 77.60 50** P **P** **21 43 28.4 +2.8**
TIR IAmb IAmb 21 43 47.6
comp=Z,3µm,1.5s
**TIR Tirane 77.60 50** *i*P **P** **21 43 28.4 +2.8**
**TIR Tirane 77.60 50** ⇑P **P** **21 43 28.1 +2.5**
**TIR Tirane 77.60 50** P **P** **21 43 28.1 +2.5**
**KEK Kerkira 77.65 52** P **P** **21 43 26.7 +0.7**
**KEK Kerkira 77.65 52** P **P** **21 43 28.4 +2.4**
KEK IAmb IAmb 21 43 49.0
comp=Z,2µm,1.0s
**KECS Kecovo 77.69 43** *e*P **P** **21 43 27.9 +1.9**
KECS pmax pmax
comp=Z,443nm,1.0s
**KECS Kecovo 77.69 43** *e*P **P** **21 43 27.9 +1.9**
KECS *e* 21 43 45.8
**BCI Bajram Curri 77.69 49** *i*P **P** **21 43 27.8 +1.6**
**D25K Kavik River 77.74 339** P **P** **21 43 24.2 -1.7**
baz=92,SNR=1000
D25K S **S** **21 53 04.7 -3.5**
baz=92
**BEL Belsk 77.77 39** *e*P **P** **21 43 26.7 +0.3**
BEL *e*S **S** **21 53 10.2 +1.2**
BEL *e*L L 22 09 13.5
comp=Z,133µm,54.9s
**SRN Sarande 77.79 51** *i*P **P** **21 43 28.8 +2.1**
**IL31 77.82 334** P **P** **21 43 27.1 +0.7**
IL31 IAmb IAmb 21 43 43.9
comp=Z,1µm,0.7s
**ILAR Eielson Array 77.82 334** P **P** **21 43 26.9 +0.5**
**ILAR Eielson Array 77.82 334** P **P** **21 43 24.2 -2.2**
comp=Z,321nm,0.5s,baz=103,slow=3.9,SNR=305
ILAR PP **PP** **21 46 26.5 +3.1**
comp=Z,227nm,1.1s,baz=93,slow=5.5,SNR=6.6
ILAR S **S** **21 53 04.8 -4.3**
comp=Z,22nm,1.1s,baz=111,slow=7.2,SNR=3.2
ILAR PKKP **PKKPdf** **22 02 16.2 -0.2**
comp=Z,5.1nm,1.2s,baz=246,slow=1.9,SNR=1.9
ILAR LR LR 22 17 37.9
comp=Z,118µm,20.9s,baz=86,slow=36
comp=Z,321nm,0.5s
**ILAR Eielson Array 77.82 334** P **P** **21 43 26.9 +0.5**
**HDA Harding Lake 77.84 334** P **P** **21 43 24.9 -1.7**
baz=91,SNR=303
HDA S **S** **21 53 06.3 -3.0**
baz=91
**GLI Glacier Island 77.89 330** P **P** **21 43 25.4 -1.6**
GLI IAmb IAmb 21 43 27.6
comp=Z,50nm,1.0s
**GLI Glacier Island 77.89 330** P **P** **21 43 28.1 +1.2**
GLI IAmb IAmb 21 43 43.1
comp=Z,2µm,1.1s
**GLI Glacier Island 77.89 330** P **P** **21 43 25.9 -1.0**
baz=90,SNR=82
GLI S **S** **21 53 08.7 -1.3**
baz=90
**SCM Sheep Creek Mo 78.00 331** P **P** **21 43 26.0 -1.6**
baz=90,SNR=167
SCM S **S** **21 53 09.9 -1.5**
baz=90
**DHY Denali Highway 78.02 332** P **P** **21 43 25.9 -1.9**
baz=90,SNR=126
DHY S **S** **21 53 10.2 -1.5**
baz=90
**P23K Montague Islan 78.05 329** P **P** **21 43 26.4 -1.4**
baz=89
P23K S **S** **21 53 10.1 -1.6**
baz=89
P23K S **S** **21 53 10.1 -1.6**
baz=89
**POKR Poker Plat Res 78.06 335** P **P** **21 43 25.9 -1.8**

**POKR Poker Plat Res** 78.06 335 P **P** 21 43 28.7 +1.0
POKR IAmb IAmb 21 43 45.9
comp=Z,4µm,0.9s
**POKR Poker Plat Res** 78.06 335 P **P** 21 43 26.0 -1.8
baz=90,SNR=397
POKR S **S** 21 53 09.1 -2.6
baz=90
**IGT Igoumenitsa** 78.07 52 *i*P **P** 21 43 29.1 +0.8
**G24K Hadweenzic Riv** 78.09 336 P **P** 21 43 26.5 -1.4
baz=91,SNR=622
G24K S **S** 21 53 11.4 -0.6
baz=91
**RAF Rauma** 78.12 30 *e*P **P** 21 43 28.2 +0.1
**M23K Glacier View** 78.19 331 P **P** 21 43 27.3 -1.3
baz=89,SNR=144
M23K S **S** 21 53 10.6 -2.6
baz=89
**WAT6 Susitna Watana** 78.19 332 P **P** 21 43 27.3 -1.5
baz=90,SNR=438
WAT6 S **S** 21 53 10.9 -2.7
baz=90
**CCB Clear Creek Bu** 78.21 334 P **P** 21 43 26.3 -2.3
CCB IAmb IAmb 21 43 28.4
comp=Z,42nm,0.8s
**CCB Clear Creek Bu** 78.21 334 P **P** 21 43 29.0 +0.5
CCB IAmb IAmb 21 43 46.1
comp=Z,778nm,1.0s
**COLA College** 78.23 334 P **P** 21 43 27.3 -1.4
**COLA College** 78.23 334 P **P** 21 43 29.4 +0.7
COLA IAmb IAmb 21 43 45.9
comp=Z,1µm,0.7s
**COLA College** 78.23 334 P **P** 21 43 27.2 -1.4
baz=90
COLA S **S** 21 53 10.6 -2.8
baz=90
**COLA College** 78.23 334 *d*P **P** 21 43 27.2 -1.4
COLA pmax pmax
comp=Z,3µm,1.9s
**I53US FAIRBANKS INFR** 78.24 334 P **P** 21 43 28.0 -0.7
baz=104,slow=5.2,SNR=1.9
**H24K Noodor Dome** 78.24 335 P **P** 21 43 27.2 -1.6
baz=90,SNR=609
H24K S **S** 21 53 13.0 -0.7
baz=90
H24K S **S** 21 53 13.0 -0.7
baz=90
**F24K Squaw Lake** 78.26 337 P **P** 21 43 27.4 -1.4
baz=90,SNR=317
F24K S **S** 21 53 12.3 -1.5
baz=90
**BANR Banloc** 78.29 46 ⇑P **P** 21 43 31.5 +2.1
**PBUR Paburge** 78.31 35 *e*P **P** 21 43 30.8 +1.5
**CRVS Cervenica-Dubn** 78.31 42 *e*P **P** 21 43 29.2 -0.3
CRVS *e*S **S** 21 53 12.5 -2.6
CRVS pmax pmax
comp=Z,1µm,1.1s
**CRVS Cervenica-Dubn** 78.31 42 *e*P **P** 21 43 29.2 -0.3
CRVS *e* 21 43 47.8
CRVS *e*S **S** 21 53 12.5 -2.6
CRVS *e*SS SS 21 58 37.2 +17
CRVS *e* 22 10 39.0
CRVS *e* 22 13 35.9
**OHR Ohrid** 78.32 50 *i*P **P** 21 43 31.6 +1.9
**TIM Timisoara** 78.33 45 ⇑P **P** 21 43 30.9 +1.4
**TIM Timisoara** 78.33 45 P **P** 21 43 30.9 +1.4
**KBN Korca** 78.34 51 *i*P **P** 21 43 30.9 +1.0
**MDM Murphy Dome** 78.39 334 P **P** 21 43 30.3 +0.6
**SLIT Slitere, Latvi** 78.46 33 *e*P **P** 21 43 30.5 +0.5
**SML Sawmill** 78.48 331 P **P** 21 43 28.6 -1.6
baz=89,SNR=116
SML S **S** 21 53 14.8 -1.6
baz=89
**E24K Your Creek** 78.49 338 P **P** 21 43 28.8 -1.3
baz=90,SNR=423
E24K S **S** 21 53 14.1 -2.2
baz=90
**PWL Port Wells** 78.50 330 P **P** 21 43 31.3 +1.1
PWL IAmb IAmb 21 43 48.8
comp=Z,3µm,1.0s
**PWL Port Wells** 78.50 330 P **P** 21 43 28.7 -1.5
baz=89,SNR=110
PWL S **S** 21 53 15.5 -1.1
baz=89
**VAF Vlistaro** 78.52 28 *e*P **P** 21 43 31.1 +0.8
**KNK Knik Glacier** 78.55 331 P **P** 21 43 28.9 -1.7
baz=89,SNR=102
KNK S **S** 21 53 15.2 -1.9
baz=89
**WAT1 Susitna Watana** 78.56 332 P **P** 21 43 29.4 -1.2
baz=89
WAT1 S **S** 21 53 15.0 -2.2
baz=89
**C24K Franklin Bluff** 78.57 339 P **P** 21 43 28.9 -1.5
baz=90
C24K S **S** 21 53 12.4 -4.6
baz=90
**SIRR Siria** 78.60 45 ⇑P **P** 21 43 33.3 +2.2
**BZS Buzias** 78.61 45 P **P** 21 43 30.2 -1.0
**BZS Buzias** 78.61 45 ⇑P **P** 21 43 33.0 +1.8
**BZS Buzias** 78.61 45 P **P** 21 43 32.9 +1.8
**D24K Happy Valley** 78.61 339 P **P** 21 43 29.1 -1.6
baz=90,SNR=125
D24K S **S** 21 53 14.8 -2.7
baz=90
**BORR Bors** 78.63 44 ⇑P **P** 21 43 33.8 +2.5
**KTK1 Kautokeino** 78.69 22 *e*P **P** 21 43 32.1 +1.0
KTK1 IVmB_BB 21 43 48.2
comp=Z,21µm,3.4s
KTK1 *e*PP **PP** 21 46 30.7 +0.2
KTK1 *e*S **S** 21 53 15.7 -2.6
KTK1 *e*SS **SS** 21 58 25.3 +0.9
KTK1 IVMs_BB IVMs_BB 22 09 28.6
comp=Z,13µm,65.5s
**LTVH Ltavrtes, Hu** 78.69 44 ⇑P **P** 21 43 33.2 +1.6
**SMAI San Martin Ant** 78.70 182 P **P** 21 43 33.9 +2.9
SMAI IAmb IAmb 21 43 52.4
comp=Z,4µm,1.0s
**MCK McKinley** 78.72 333 P **P** 21 43 29.9 -1.5
baz=89,SNR=182
MCK S **S** 21 53 15.9 -3.0
baz=89
**MDVR Moldovita** 78.73 46 ⇑P **P** 21 43 33.3 +1.4
**NEA2 Nenana** 78.76 334 P **P** 21 43 29.9 -1.7
baz=89,SNR=1000
NEA2 S **S** 21 53 15.3 -3.9
baz=89
**FNA Florina** 78.78 50 P **P** 21 43 31.2 -1.1
**FNA Florina** 78.78 50 *i*P **P** 21 43 31.8 -0.4
**BOVS Bovan** 78.81 47 ⇑P **P** 21 43 33.5 +1.2
**HAMF Hammerfest** 78.83 20 *e*P **P** 21 43 32.8 +0.9
HAMF IVmB_BB 21 43 48.9
comp=Z,16µm,3.3s
HAMF *e*S **S** 21 53 17.7 -2.0
HAMF *e*SS **SS** 21 58 29.6 +3.1
HAMF IVMs_BB IVMs_BB 22 09 35.4
comp=Z,13µm,46.2s
**KOLS Kolonicke sedl** 78.85 42 *e*P **P** 21 43 33.1 +0.7
KOLS pmax pmax
comp=Z,444nm,1.1s
**KOLS Kolonicke sedl** 78.85 42 *e*P **P** 21 43 33.1 +0.7
**PMR Palmer** 78.87 331 P **P** 21 43 31.9 -0.3
**PMR Palmer** 78.87 331 P **P** 21 43 30.4 -1.8
baz=88,SNR=104
PMR S **S** 21 53 18.0 -2.3
baz=88
**I23K Minto, Yukon-K** 78.87 335 P **P** 21 43 30.4 -1.8
baz=89,SNR=659
I23K S **S** 21 53 18.5 -1.7
baz=89
I23K S **S** 21 53 18.5 -1.7
baz=89
**UZHM Uzhgorod** 78.88 42 P **P** 21 43 34.1 +1.6
**TOLK Toolik Lake Re** 78.89 338 P **P** 21 43 30.4 -1.9
baz=89,SNR=122
TOLK S **S** 21 53 17.3 -3.2
baz=89
**E23K Chandalar** 78.91 338 P **P** 21 43 30.9 -1.6
baz=89,SNR=219
E23K S **S** 21 53 18.0 -2.9
baz=89
**H23K Yukon River** 78.93 335 P **P** 21 43 31.0 -1.6
baz=89,SNR=558
H23K S **S** 21 53 19.9 -1.1
baz=89
H23K S **S** 21 53 19.9 -1.1
baz=89

**BWN Browne** 78.94 334 P **P** 21 43 30.6 -2.0
**BWN Browne** 78.94 334 P **P** 21 43 33.2 +0.6
BWN IAmb IAmb 21 43 48.4
comp=Z,2µm,0.8s
**SURR Surduc** 78.95 45 ⇓P **P** 21 43 34.3 +1.2
**SEW Seward** 79.08 329 P **P** 21 43 32.1 -1.3
baz=88,SNR=135
SEW S **S** 21 53 21.0 -1.7
baz=88
**KWP Kalwaria Pacla** 79.09 41 *e*P **P** 21 43 34.7 +1.0
KWP *e*S **S** 21 53 23.5 +0.2
KWP *e*SS SS 21 58 46.2 +15
KWP *e*L L 22 10 00.9
comp=Z,82µm,44.5s
**KWP Kalwaria Pacla** 79.09 41 P **P** 21 43 35.4 +1.7
KWP IAmb IAmb 21 43 55.3
comp=Z,6µm,1.5s
**KWP Kalwaria Pacla** 79.09 41 P **P** 21 43 35.4 +1.7
KWP pmax pmax
comp=Z,6µm,1.5s
**G23K Bananza Creek** 79.10 336 P **P** 21 43 32.2 -1.3
baz=88,SNR=644
G23K S **S** 21 53 21.9 -1.0
baz=88
**SUW Suwalki** 79.12 37 *e*P **P** 21 43 32.1 -1.6
SUW *e*S **S** 21 53 19.1 -4.2
**SUW Suwalki** 79.12 37 P **P** 21 43 34.8 +1.1
SUW IAmb IAmb 21 43 55.5
comp=Z,2µm,0.9s
**SUW Suwalki** 79.12 37 *e*P **P** 21 43 35.3 +1.6
**SUW Suwalki** 79.12 37 P **P** 21 43 34.8 +1.1
SUW pmax pmax
comp=Z,2µm,0.9s
**COLD Coldfoot** 79.16 337 P **P** 21 43 32.3 -1.4
baz=88,SNR=234
COLD S **S** 21 53 21.1 -2.2
baz=88
**HOPEN Hopen** 79.17 14 *e*P **P** 21 43 34.0 +0.4
HOPEN IVmB_BB 21 43 50.7
comp=Z,18µm,2.8s
HOPEN *e*PP **PP** 21 46 35.0 +0.7
HOPEN *e*S **S** 21 53 22.3 -0.8
HOPEN *e*SS **SS** 21 58 31.7 +0.3
HOPEN IVMs_BB IVMs_BB 22 09 38.9
comp=Z,22µm,46.5s
**RC01 Rabbit Creek A** 79.18 330 P **P** 21 43 32.9 -1.1
baz=88,SNR=163
RC01 S **S** 21 53 21.8 -1.9
baz=88
**O22K Cooper Landing** 79.20 330 P **P** 21 43 32.4 -1.6
baz=87
O22K S **S** 21 53 22.4 -1.5
baz=87
**HERR Herculane** 79.22 46 ⇑P **P** 21 43 35.9 +1.4
**MTSE Matsula** 79.22 32 *e*P **P** 21 43 35.3 +1.1
**C23K Itkillik River** 79.23 339 P **P** 21 43 32.9 -1.2
baz=88,SNR=276
C23K S **S** 21 53 20.8 -3.2
baz=88
**TAOE Nuku Hiva Isla** 79.27 259 P **P** 21 43 37.3 +1.8
**D23K Nanushuk River** 79.28 338 P **P** 21 43 33.1 -1.3
baz=88,SNR=249
D23K S **S** 21 53 22.1 -2.5
baz=88
**DRGR** 79.29 44 P **P** 21 43 36.6 +1.7
**DRGR** 79.29 44 ⇑P **P** 21 43 36.3 +1.4
**DRGR** 79.29 44 P **P** 21 43 36.3 +1.4
**M22K Willow** 79.33 331 P **P** 21 43 33.5 -1.2
baz=87,SNR=87
M22K S **S** 21 53 23.7 -1.6
baz=87
**CUT Chulitna** 79.37 332 P **P** 21 43 36.1 +1.2
**CUT Chulitna** 79.37 332 P **P** 21 43 33.6 -1.4
baz=87,SNR=62
CUT S **S** 21 53 22.5 -3.1
baz=87
**MESR Meseseni** 79.42 44 ⇑P **P** 21 43 37.1 +1.6
**VSVD Vaisvydziai** 79.44 35 *e*P **P** 21 43 38.2 +2.8
**RMGR Halanga-Turnu** 79.44 46 ⇓P **P** 21 43 37.7 +2.1
**GZR Gura Zlata** 79.44 46 ⇓P **P** 21 43 37.2 +1.4
**GZR Gura Zlata** 79.44 46 P **P** 21 43 37.1 +1.4
**MEF Metsahovi** 79.44 30 *e*P **P** 21 43 35.8 +0.5
**MLY Manley** 79.46 334 P **P** 21 43 33.4 -2.1
baz=87,SNR=1000
MLY S **S** 21 53 23.3 -3.4
baz=87
**ARA0 ARCESS Array S** 79.48 21 *e*P **P** 21 43 35.8 +0.3
ARA0 *e*PP **PP** 21 46 36.3 -0.8
ARA0 *e*S **S** 21 53 23.7 -3.0
ARA0 *e*SS **SS** 21 58 38.1 +1.7
**ARCES ARCESS Array B** 79.48 21 P **P** 21 43 35.7 +0.3
**ARCES ARCESS Array B** 79.48 21 P **P** 21 43 33.3 -2.1
comp=Z,456nm,0.9s,baz=276,slow=4.4,SNR=112
ARCES S **S** 21 53 22.6 -4.1
comp=Z,7.6nm,1.0s,baz=271,slow=12,SNR=1.2
ARCES PKKP **PKKPdf** 22 02 11.5 -2.4
comp=Z,6.5nm,0.9s,baz=90,slow=1.8,SNR=2.3
ARCES PKKPbc **PKKPbc** 22 02 25.6 -0.7
comp=Z,5.9nm,0.9s,baz=90,slow=2.7,SNR=1.8
ARCES PKPPKP **P'P'df** 22 10 27.0 -0.6
comp=Z,8.5nm,1.0s,baz=62,slow=2.1,SNR=2.4
comp=Z,456nm,0.9s
**ARCES ARCESS Array B** 79.48 21 P **P** 21 43 35.7 +0.3
ARCES pmax pmax
comp=Z,1µm,1.0s
**PABE Paberze** 79.49 35 P **P** 21 43 37.2 +1.5
**PABE Paberze** 79.49 35 *e*P **P** 21 43 37.1 +1.5
**DEV Deva** 79.49 45 ⇑P **P** 21 43 37.7 +1.7
**DEV Deva** 79.49 45 P **P** 21 43 37.6 +1.7
**KEF Keuruu** 79.57 28 *e*P **P** 21 43 36.6 +0.6
**MARR Marisel-Cluj** 79.58 44 ⇑P **P** 21 43 37.9 +1.4
**BPAW Bear Paw Mtn.** 79.61 333 P **P** 21 43 34.4 -1.9
baz=87,SNR=644
BPAW S **S** 21 53 24.1 -4.2
baz=87
**VAY Valandovo** 79.63 50 *i*P **P** 21 43 37.9 +1.1
**PUNG Punghina** 79.64 47 ⇑P **P** 21 43 38.3 +1.5
**SUA Susitna One** 79.64 331 P **P** 21 43 35.3 -1.3
baz=87,SNR=120
SUA S **S** 21 53 26.9 -2.0
baz=87
**G22K Bettles** 79.68 336 P **P** 21 43 34.8 -1.8
baz=87
G22K S **S** 21 53 26.5 -2.2
baz=87
**H22K Ishtalitna Cre** 79.68 335 P **P** 21 43 35.0 -1.7
baz=87,SNR=250
H22K S **S** 21 53 27.4 -1.6
baz=87
H22K S **S** 21 53 27.4 -1.6
baz=87
**E22K Anaktuvuk Pass** 79.73 338 P **P** 21 43 35.0 -1.9
baz=87,SNR=754
E22K S **S** 21 53 25.0 -4.4
baz=87
**BRSE Bradley Lake S** 79.75 329 P **P** 21 43 35.5 -1.6
baz=86,SNR=107
BRSE S **S** 21 53 28.8 -1.0
baz=86
**BMR Baia Mare** 79.75 43 ⇑P **P** 21 43 38.9 +1.5
**BMR Baia Mare** 79.75 43 P **P** 21 43 38.8 +1.5
**SRE Strehaia** 79.80 46 ⇓P **P** 21 43 39.3 +1.6
**SRE Strehaia** 79.80 46 P **P** 21 43 39.3 +1.6
**CAPN Captain Cook N** 79.89 330 P **P** 21 43 37.0 -0.7
baz=86,SNR=8.8
CAPN S **S** 21 53 31.9 +0.8
baz=86
**CJR Cluj-Napoca** 79.90 44 ⇑P **P** 21 43 39.9 +1.6
**CJR Cluj-Napoca** 79.90 44 P **P** 21 43 39.8 +1.6
**F22K John River** 79.91 337 P **P** 21 43 35.9 -1.9
baz=86
F22K S **S** 21 53 26.7 -4.5
baz=86
**LVV L'vov** 79.93 41 *e*P **P** 21 43 38.4 +0.1
LVV *e* 21 43 51.4
LVV *e**PP **pP** 21 44 11.6 +2.9
LVV *e* 21 46 45.0
LVV *e*S **S** 21 53 28.0 -4.1
LVV pmax pmax
comp=Z,2µm,1.7s
LVV MLR MLR
comp=E,6µm,17.0s
LVV MLR MLR
comp=N,6µm,18.0s
LVV MLR MLR

comp=Z,11µm,18.0s
**BAIL Bailesti** 79.96 47 ⇑P **P** 21 43 40.7 +2.2
**SKT Skwentna** 79.99 331 P **P** 21 43 37.1 -1.2
baz=86,SNR=382
SKT S **S** 21 53 28.8 -3.5
baz=86
**KEV Kevo** 80.00 21 P **P** 21 43 38.5 +0.3
**KEV Kevo** 80.00 21 P **P** 21 43 38.5 +0.3
KEV pmax pmax
comp=Z,877nm,1.0s
**KKB Krupnik** 80.00 49 P **P** 21 43 41.7 +2.9
**VTS Vitosha** 80.01 48 P **P** 21 43 41.4 +2.4
**D22K Ayikyak River** 80.01 338 P **P** 21 43 37.0 -1.4
baz=86,SNR=228
D22K S **S** 21 53 27.8 -4.5
baz=86
**VALD Valchedram** 80.05 47 P **P** 21 43 39.1 +0.1
**HORT Hortiatis** 80.10 50 P **P** 21 43 36.6 -2.9
**LOT Lotru** 80.13 46 P **P** 21 43 37.0 -2.6
**LOT Lotru** 80.13 46 ⇑P **P** 21 43 40.5 +0.9
**B22K Teshekpuk Lake** 80.17 340 P **P** 21 43 37.6 -1.5
baz=86,SNR=31
B22K S **S** 21 53 31.8 -2.0
baz=86
**FINES FINESS Array B** 80.19 29 P **P** 21 43 37.4 -2.0
**FINES FINESS Array B** 80.19 29 P **P** 21 43 39.9 +0.6
**FINES FINESS Array B** 80.19 29 P **P** 21 43 37.6 -1.8
comp=Z,126nm,0.6s,baz=269,slow=3.1,SNR=116
FINES S **S** 21 53 31.1 -3.2
comp=Z,12nm,0.9s,baz=300,slow=3.1,SNR=1.9
FINES PKKPbc **PKKPbc** 22 02 23.9 -0.5
comp=Z,4.3nm,0.6s,baz=105,slow=3.2,SNR=3.4
FINES PKPPKP **P'P'df** 22 10 27.4 +0.7
comp=Z,8.9nm,1.0s,baz=98,slow=4.2,SNR=2.3
FINES LR LR 22 12 17.4
comp=Z,13µm,22.0s,baz=262,slow=30
comp=Z,126nm,0.6s
**FINES FINESS Array B** 80.19 29 P **P** 21 43 39.9 +0.6
**FIA1 FINESS Array S** 80.19 29 P **P** 21 43 37.0 -2.3
FIA1 IAmb IAmb 21 43 38.0
comp=Z,14nm,0.4s
**FIA1 FINESS Array S** 80.19 29 P **P** 21 43 39.9 +0.5
FIA1 IAmb IAmb 21 44 00.2
comp=Z,3µm,0.8s
**HOM Homer** 80.21 329 P **P** 21 43 41.1 +1.6
**HOM Homer** 80.21 329 P **P** 21 43 38.2 -1.3
baz=86,SNR=46
HOM S **S** 21 53 34.7 +0.1
baz=86
**H21K Melozitna Rive** 80.28 335 P **P** 21 43 38.2 -1.7
baz=86,SNR=1000
H21K S **S** 21 53 32.4 -2.8
baz=86
H21K S **S** 21 53 32.4 -2.8
baz=86
**ARBE Arbavere** 80.30 31 *e*P **P** 21 43 40.8 +0.9
**MPEP Malo Peshtene** 80.31 48 P **P** 21 43 42.8 +2.4
**N20K Mount Spurr** 80.37 331 P **P** 21 43 39.2 -1.3
baz=85,SNR=168
N20K S **S** 21 53 34.2 -2.2
baz=85
**SPCR Spurr Chakacha** 80.37 331 P **P** 21 43 39.2 -1.2
baz=85,SNR=144
SPCR S **S** 21 53 34.5 -1.9
baz=85
**ARCR ARCALIA** 80.38 44 ⇑P **P** 21 43 42.4 +1.7
**F21K Alatna River** 80.43 337 P **P** 21 43 38.8 -1.8
baz=85,SNR=160
F21K S **S** 21 53 33.2 -3.6
baz=85
**TNR Turnu Rosu** 80.46 45 ⇑P **P** 21 43 42.9 +1.6
**TNR Turnu Rosu** 80.46 45 P **P** 21 43 42.8 +1.6
**MDB Medias** 80.49 45 ⇑P **P** 21 43 43.6 +2.2
**MDB Medias** 80.49 45 P **P** 21 43 43.5 +2.2
**MMB Musomishta** 80.49 49 P **P** 21 43 43.9 +2.4
**G21K Allakaket** 80.50 336 P **P** 21 43 39.8 -1.2
baz=85,SNR=701
G21K S **S** 21 53 36.2 -1.3
baz=85
**E21K Killik River** 80.51 338 P **P** 21 43 39.1 -1.9
baz=85
E21K S **S** 21 53 31.7 -5.9
baz=85
**KTHA Kythira Island** 80.52 55 P **P** 21 43 44.5 +2.8
**TGMR Targu Mures** 80.55 44 ⇓P **P** 21 43 44.2 +2.5
**PAIG Paliouri** 80.61 51 P **P** 21 43 41.3 -0.8
**A22K Sinclair Lake** 80.63 341 P **P** 21 43 40.9 -0.7
baz=84
A22K S **S** 21 53 36.2 -2.4
baz=84
**B21K Ikpikpuk River** 80.64 339 P **P** 21 43 40.0 -1.6
baz=85,SNR=127
B21K S **S** 21 53 35.6 -3.1
baz=85
**O20K Slope Mountain** 80.67 329 P **P** 21 43 40.6 -1.4
baz=85,SNR=101
O20K S **S** 21 53 38.4 -1.1
baz=85
O20K S **S** 21 53 38.4 -1.1
baz=85
**Q20K Shuyak Island** 80.68 328 P **P** 21 43 40.3 -1.8
baz=85,SNR=26
Q20K S **S** 21 53 40.3 +0.8
baz=85
**ISAL Salakas** 80.70 35 *e*P **P** 21 43 43.0 +0.8
**PGB Panagyurishte** 80.71 48 P **P** 21 43 45.0 +2.4
**VLAD Vladila** 80.72 47 ⇑P **P** 21 43 44.7 +2.1
**C21K Knifeblade Rid** 80.74 339 P **P** 21 43 41.0 -1.2
baz=84,SNR=161
C21K S **S** 21 53 36.2 -3.7
baz=84
**ARR Arges** 80.74 46 ⇑P **P** 21 43 44.3 +1.5
**M20K Styx River** 80.75 331 P **P** 21 43 41.0 -1.5
baz=85,SNR=482
M20K S **S** 21 53 37.5 -2.9
baz=85
M20K S **S** 21 53 37.5 -2.9
baz=85
**IZAR Zarasai** 80.75 35 *e*P **P** 21 43 43.2 +0.7
**VSU Vasula** 80.77 32 *d*P **P** 21 43 41.4 -1.1
VSU pmax pmax
comp=Z,3µm,0.8s
**VADS Vadso** 80.78 20 *e*P **P** 21 43 42.8 +0.5
VADS IVmB_BB 21 43 59.2
comp=Z,14µm,3.2s
VADS *e*PP **PP** 21 46 48.6 +0.8
VADS *e*S **S** 21 53 37.8 -2.3
VADS *e*SS **SS** 21 58 57.8 +2.3
VADS IVMs_BB IVMs_BB 22 10 27.9
comp=Z,12µm,47.0s
**IIGN Ignalina** 80.78 35 *e*P **P** 21 43 43.4 +0.7
**OUR Ouranopolis** 80.80 51 P **P** 21 43 43.5 +0.4
**KDAK Kodiak Island** 80.86 327 P **P** 21 43 41.6 -1.5
KDAK IAmb IAmb 21 43 43.7
comp=Z,32nm,0.8s
**KDAK Kodiak Island** 80.86 327 P **P** 21 43 44.1 +1.1
KDAK IAmb IAmb 21 44 01.1
comp=Z,2µm,0.9s
**KDAK Kodiak Island** 80.86 327 P **P** 21 43 41.8 -1.2
comp=Z,143nm,0.5s,baz=105,slow=4.1,SNR=57
KDAK PKKPbc **PKKPbc** 22 02 22.5 -0.3
comp=Z,4.1nm,0.4s,baz=222,slow=2.1,SNR=8.1
KDAK LR LR 22 20 09.3
comp=Z,50µm,19.2s,baz=106,slow=36
comp=Z,143nm,0.5s
**KDAK Kodiak Island** 80.86 327 P **P** 21 43 41.1 -1.9
baz=84
KDAK S **S** 21 53 41.5 +0.1
baz=84
**KDAK Kodiak Island** 80.86 327 *de*P **P** 21 43 42.1 -0.9
KDAK pmax pmax
comp=Z,3µm,0.9s
**BUR08 Bucovina Ar. S** 80.90 43 P **P** 21 43 45.9 +2.2
BUR08 IAmb IAmb 21 43 48.4
comp=Z,2µm,1.2s
**BURAR Bucovina Array** 80.92 43 P **P** 21 43 45.9 +2.1
BURAR IAmb IAmb 21 43 48.8
comp=Z,2µm,1.3s
**BURAR Bucovina Array** 80.92 43 ⇑P **P** 21 43 45.6 +1.8
**BURAR Bucovina Array** 80.92 43 P **P** 21 43 45.5 +1.8
**RNPP8 Varash** 80.95 39 P **P** 21 43 45.1 +1.4
**J20K Nowinta River** 80.99 334 P **P** 21 43 41.8 -1.8
baz=84,SNR=663
J20K S **S** 21 53 38.0 -4.6
baz=84
J20K S **S** 21 53 38.0 -4.6

baz=84
**P19K Oil Pt** 81.01 329 P **P** 21 43 41.9 -2.0
baz=84,SNR=98
P19K S **S** 21 53 42.3 -0.7
baz=84
**STFAR Stefanesti-Arg** 81.03 46 ⇓P **P** 21 43 46.5 +2.3
**VOIR** 81.03 45 ⇑P **P** 21 43 46.5 +2.1
**VOIR** 81.03 45 P **P** 21 43 46.4 +2.1
**K20K Telida** 81.04 333 P **P** 21 43 42.0 -1.9
baz=84,SNR=698
K20K S **S** 21 53 39.0 -4.1
baz=84
K20K S **S** 21 53 39.0 -4.1
baz=84
**L20K Farewell, AK** 81.04 332 P **P** 21 43 42.2 -1.7
baz=84,SNR=559
L20K S **S** 21 53 39.1 -4.2
baz=84
L20K S **S** 21 53 39.1 -4.2
baz=84
**MTUR Matau** 81.06 46 ⇓P **P** 21 43 46.0 +1.5
**MTUR Matau** 81.06 46 P **P** 21 43 46.0 +1.5
**I20K Naaghedeneel** 81.06 334 P **P** 21 43 42.1 -1.8
baz=84,SNR=114
I20K S **S** 21 53 39.2 -4.1
baz=84
**HUMR Humele** 81.08 46 ⇑P **P** 21 43 46.2 +1.7
**A21K Barrow** 81.12 341 P **P** 21 43 42.9 -1.2
baz=83,SNR=11
A21K S **S** 21 53 41.9 -1.8
baz=83
**KNDR Palaiochora Ch** 81.14 56 P **P** 21 43 46.8 +1.8
**NACGM Naroch** 81.14 36 *e*P **P** 21 43 44.9 +0.3
**H20K Anotleneega Mo** 81.16 335 P **P** 21 43 42.8 -1.8
baz=84,SNR=491
H20K S **S** 21 53 41.5 -2.8
baz=84
**RODP Rodopos** 81.16 55 P P 21 43 50.1 +5.0
**PLD Plovdiv** 81.17 49 P **P** 21 43 46.9 +1.9
**DOPR Dopca** 81.21 45 ⇑P **P** 21 43 46.7 +1.5
**RZN Rozhen** 81.21 49 P **P** 21 43 47.5 +2.0
**COPA Copaceanca** 81.29 47 ⇑P **P** 21 43 47.3 +1.7
**OHAK Old Harbor** 81.29 327 P **P** 21 43 45.4 +0.1
**OHAK Old Harbor** 81.29 327 P **P** 21 43 43.7 -1.6
baz=84,SNR=32
OHAK S **S** 21 53 46.5 +0.5
baz=84
**Q19K Cape Douglas,** 81.30 328 P **P** 21 43 44.0 -1.4
baz=84,SNR=46
Q19K S **S** 21 53 46.2 +0.1
baz=84
Q19K S **S** 21 53 46.2 +0.1
baz=84
**F20K Avaraart Lake** 81.32 337 P **P** 21 43 43.9 -1.4
baz=83,SNR=495
F20K S **S** 21 53 43.7 -2.2
baz=83
**M19K Big River Lodg** 81.34 331 P **P** 21 43 44.1 -1.4
baz=84,SNR=853
M19K S **S** 21 53 44.3 -2.0
baz=84
M19K S **S** 21 53 44.3 -2.0
baz=84
**E20K Nigu River** 81.35 338 P **P** 21 43 44.0 -1.6
baz=83,SNR=522
E20K S **S** 21 53 43.3 -3.0
baz=83
**IMMV Iera Moni Meta** 81.35 56 P **P** 21 43 48.0 +1.9
**BOSR Bodos** 81.39 45 ⇑P **P** 21 43 48.4 +2.3
**D20K Etivluk River** 81.45 338 P **P** 21 43 44.5 -1.5
baz=83,SNR=206
D20K S **S** 21 53 44.4 -2.9
baz=83
**OZUR** 81.47 45 ⇑P **P** 21 43 47.8 +1.2
**B20K Meade River** 81.47 340 P **P** 21 43 45.0 -1.1
baz=82,SNR=140
B20K S **S** 21 53 45.3 -2.1
baz=82
**N19K Bonanza Creek** 81.51 330 P **P** 21 43 44.9 -1.6
baz=83,SNR=313
N19K S **S** 21 53 46.0 -2.3
baz=83
N19K S **S** 21 53 46.0 -2.3
baz=83
**GVD Gavdhos** 81.52 56 P **P** 21 43 48.4 +1.4
**L19K White Mountain** 81.52 332 P **P** 21 43 44.9 -1.6
baz=83,SNR=859
L19K S **S** 21 53 44.5 -3.8
baz=83
L19K S **S** 21 53 44.5 -3.8
baz=83
**PRAR RASCA** 81.62 43 ⇓P **P** 21 43 49.0 +1.7
**TURR Turia** 81.63 45 ⇑P **P** 21 43 49.6 +2.1
**KMPD K-Podol'skiy** 81.64 42 P **P** 21 43 46.8 -0.6
**MLR Muntele Rosu** 81.65 45 P **P** 21 43 45.9 -1.8
**MLR Muntele Rosu** 81.65 45 P **P** 21 43 46.7 -1.0
**MLR Muntele Rosu** 81.65 45 P **P** 21 43 49.7 +2.0
MLR IAmb IAmb 21 43 51.9
comp=Z,3μm,1.2s
**MLR Muntele Rosu** 81.65 45 S **S** 21 53 49.3 -1.1
comp=Z,25nm,0.8s,baz=319,slow=19,SNR=20
MLR PKKPbc PKKPbc 22 02 20.4 -0.2
comp=Z,4.6nm,0.7s,baz=52,slow=3,9,SNR=2.5
**MLR Muntele Rosu** 81.65 45 ⇑P **P** 21 43 49.4 +1.8
**MLR Muntele Rosu** 81.65 45 P **P** 21 43 49.4 +1.8
**J19K Poorman** 81.65 334 P **P** 21 43 45.5 -1.6
baz=83,SNR=199
J19K S **S** 21 53 45.9 -3.5
baz=83
J19K S **S** 21 53 45.9 -3.5
baz=83
**KDZ Kurdzhali** 81.67 49 P **P** 21 43 49.3 +1.6
**KDZ Kurdzhali** 81.67 49 P **P** 21 43 49.6 +1.9
**DRBR Darabani** 81.78 43 ⇓P **P** 21 43 49.4 +1.3
**COVR Voineasa-Covas** 81.79 45 ⇑P **P** 21 43 50.1 +1.9
**H19K Roundabout Mou** 81.80 335 P **P** 21 43 46.5 -1.3
baz=82,SNR=1000
H19K S **S** 21 53 48.8 -2.1
baz=82
**SGRR Singureni** 81.82 47 ⇓P **P** 21 43 49.8 +1.4
**MNK Minsk** 81.82 36 *i* P **P** 21 43 48.3 +0.1
comp=E,85nm,0.9s
MNK *i* P **P** 21 43 48.3 +0.1
comp=N,537nm,1.1s
MNK *i* P **P** 21 43 48.3 +0.1
comp=Z,885nm,1.1s,baz=277
MNK *i* pP pP 21 44 09.7 -9.1
MNK *i* sP sP 21 44 20.3 -11
MNK *i* PP **PP** 21 46 56.1 -0.6
MNK *i* PPP PPP 21 48 46.8
MNK *i* S **S** 21 53 51.4 -0.1
MNK *i* sS **pS** 21 54 35.4 +6.0
MNK *i* SS SS 21 59 23.5 +12
MNK *i* SSS SSS 22 03 06.2
**MNK Minsk** 81.82 36 *i* P **P** 21 43 48.3 +0.1
MNK *i* *SP **pP** 21 44 20.2 +1.4
MNK *i* 21 46 56.1
MNK *i* PPP PPP 21 48 46.8
MNK *i* S **S** 21 53 51.4 -0.1
MNK *i* *SS **pS** 21 54 35.3 +6.0
MNK pmax pmax
comp=Z,885nm,1.1s
MNK pmax pmax
comp=N,537nm,1.1s
MNK pmax pmax
comp=E,85nm,0.9s
**E19K Redstone River** 81.85 337 P **P** 21 43 46.7 -1.4
baz=82,SNR=898
E19K S **S** 21 53 48.3 -3.1
baz=82
**SII Sitkinak Islan** 81.86 326 P **P** 21 43 49.5 +1.1
**SII Sitkinak Islan** 81.86 326 P **P** 21 43 46.6 -1.8
baz=83,SNR=14
SII S **S** 21 53 52.6 +0.7
baz=83
**ONER Baraj Valea Uz** 81.86 44 ⇑P **P** 21 43 50.7 +2.1
**R18K Karluk** 81.88 327 P **P** 21 43 46.9 -1.5
baz=83
R18K S **S** 21 53 52.7 +0.7
baz=83
R18K S **S** 21 53 52.7 +0.7
baz=83
**NEHR Nehoiu** 81.90 45 ⇓P **P** 21 43 50.3 +1.5
**ELND Elena** 81.91 48 ⇓P **P** 21 43 50.2 +1.3
**INCR INCERC-Sediu C** 81.93 46 ⇓P **P** 21 43 50.9 +2.0
**SZH Strazhitsa** 81.94 48 P **P** 21 43 51.1 +2.0

**SULR** 81.96 46 ⇓P **P** 21 43 49.8 +0.6
**G19K Purcell Mounta** 81.98 336 P **P** 21 43 47.4 -1.4
baz=82,SNR=937
G19K S **S** 21 53 51.1 -1.7
baz=82
**O18K Koktuh Hills** 81.98 329 P **P** 21 43 47.2 -1.8
baz=83,SNR=162
O18K S **S** 21 53 51.4 -1.7
baz=83
O18K S **S** 21 53 51.4 -1.7
baz=83
**TESR Tescani** 82.01 44 ⇓P **P** 21 43 50.3 +0.9
**D19K Kuna River** 82.02 338 P **P** 21 43 47.9 -1.1
baz=81,SNR=587
D19K S **S** 21 53 50.0 -3.2
baz=81
**Q18K Katmai Hardscr** 82.04 328 P **P** 21 43 47.9 -1.5
baz=83,SNR=158
Q18K S **S** 21 53 54.3 +0.4
baz=83
**P18K Big Mountain,** 82.05 329 P **P** 21 43 47.6 -1.8
baz=82,SNR=78
P18K S **S** 21 53 52.8 -1.1
baz=82
**M18K Stony River** 82.07 331 P **P** 21 43 47.9 -1.5
baz=82,SNR=474
M18K S **S** 21 53 52.6 -1.2
baz=82
**GCSA Galena City Sc** 82.09 334 P **P** 21 43 48.1 -1.3
baz=82,SNR=123
GCSA S **S** 21 53 53.8 -0.1
baz=82
**PLOR Plostina** 82.10 45 ⇑P **P** 21 43 50.7 +0.8
**PLOR Plostina** 82.10 45 P **P** 21 43 50.6 +0.8
**IDI Anoyia** 82.11 56 P **P** 21 43 51.7 +1.5
**IDI Anoyia** 82.11 56 P **P** 21 43 49.6 -0.6
IDI IAmb IAmb 21 43 51.6
comp=Z,61nm,1.1s
**IDI Anoyia** 82.11 56 P **P** 21 43 52.2 +2.0
IDI IAmb IAmb 21 44 13.0
comp=Z,2μm,1.0s
**IDI Anoyia** 82.11 56 P **P** 21 43 51.1 +0.9
**IDI Anoyia** 82.11 56 S **S** 21 53 54.5 -0.9
comp=Z,83nm,1.2s,baz=294,slow=20,SNR=3.8
**ISR Istrita** 82.11 46 ⇑P **P** 21 43 50.7 +0.6
**ISR Istrita** 82.11 46 P **P** 21 43 50.6 +0.6
**VRI Vrincioaia** 82.15 45 P **P** 21 43 49.9 -0.2
**VRI Vrincioaia** 82.15 45 ⇓P **P** 21 43 51.1 +1.0
**VRI Vrincioaia** 82.15 45 P **P** 21 43 51.1 +1.0
**F19K Shaleruckik Mo** 82.15 337 P **P** 21 43 48.1 -1.6
baz=81,SNR=1000
F19K S **S** 21 53 54.0 -0.4
baz=81
**BISRR Bisoca** 82.18 45 ⇑P **P** 21 43 52.7 +2.4
**SPBR Spulber** 82.18 45 ⇓P **P** 21 43 51.3 +1.0
**J18K Innoko River** 82.20 333 P **P** 21 43 49.0 -1.1
baz=82,SNR=356
J18K S **S** 21 53 55.9 +0.7
baz=82
**N18K Kilae Creek** 82.21 330 P **P** 21 43 48.6 -1.5
baz=82,SNR=292
N18K S **S** 21 53 54.9 -0.5
baz=82
N18K S **S** 21 53 54.9 -0.5
baz=82
**ACHA Angle Creek He** 82.26 328 P **P** 21 43 51.6 +1.1
**GADA Gvkgeada** 82.27 51 P **P** 21 43 52.0 +1.2
**ALN Alexandroupoli** 82.29 50 P **P** 21 43 51.3 +0.4
**LUBAR Lubar, Ukraine** 82.32 41 P **P** 21 43 50.2 -0.7
LUBAR pP **pP** 21 44 22.4 +0.9
**SIGR SIGRI** 82.36 52 P **P** 21 43 50.9 -0.4
**L18K Granite Mounta** 82.37 332 P **P** 21 43 49.8 -1.1
baz=82,SNR=374
L18K S **S** 21 53 55.7 -1.1
baz=82
L18K S **S** 21 53 55.7 -1.1
baz=82
**GRER** 82.38 45 ⇑P **P** 21 43 53.5 +2.1
**ODBI Odobesti** 82.39 45 ⇓P **P** 21 43 54.0 +2.7
**ENEZ Enez** 82.39 50 P **P** 21 43 52.0 +0.6
**LEHL Lehliu** 82.39 46 ⇓P **P** 21 43 52.9 +1.6
**APE Apeiranthos** 82.39 54 P **P** 21 43 52.9 +1.3
**APE Apeiranthos** 82.39 54 ⇓P **P** 21 43 53.8 +2.2
**APE Apeiranthos** 82.39 54 *c* *i*P **P** 21 43 52.3 +0.7
APE pmax pmax
comp=Z,1μm,1.3s
**CAVK Edirne/Enez-Ca** 82.41 50 ⇓P **P** 21 43 54.3 +2.8
**SANT Santorini** 82.43 54 P **P** 21 43 54.4 +2.6
**SANT Santorini** 82.43 54 P **P** 21 43 54.4 +2.6
SANT IAmb IAmb 21 44 10.4
comp=Z,5μm,1.8s
**SANT Santorini** 82.43 54 ⇑P **P** 21 43 54.2 +2.4
**PANC Panciu** 82.44 45 ⇓P **P** 21 43 52.9 +1.3
**JMB Yambol** 82.44 48 P **P** 21 43 50.7 -1.0
**PGOR Pogoanele** 82.45 46 ⇑P **P** 21 43 52.2 +0.6
**PUL Pulkovo** 82.45 31 *c* *i*P **P** 21 43 52.1 +0.8
PUL pmax pmax
comp=Z,2μm,0.7s
**C19K Lookout Ridge** 82.45 339 P **P** 21 43 50.1 -1.2
baz=80,SNR=347
C19K S **S** 21 53 56.9 -0.7
baz=80
**JOF Joensuu** 82.46 27 *e*P **P** 21 43 51.6 +0.3
**VALR Valaam** 82.49 29 *c* *i*P **P** 21 43 51.7 +0.2
VALR pmax pmax
comp=Z,2μm,0.9s
**IAS Iasi** 82.54 43 ⇑P **P** 21 43 53.7 +1.6
**IAS Iasi** 82.54 43 P **P** 21 43 53.7 +1.6
**Q17K Contact Creek** 82.55 328 P **P** 21 43 50.8 -1.2
baz=82,SNR=115
Q17K S **S** 21 53 59.0 0.0
baz=82
**APA Apatity** 82.58 23 ⇓*i*P **P** 21 43 52.4 +0.5
APA *i* S **S** 21 53 57.0 -1.8
APA *i* SS **SS** 21 59 19.0 -3.4
APA pmax pmax
comp=Z,250nm,0.8s
APA MLR MLR
comp=Z,22μm,23.0s
**GHRR** 82.59 45 ⇓P **P** 21 43 54.0 +1.6
**CHOS Chios island** 82.63 52 P **P** 21 43 54.9 +2.1
**EZN Ezine** 82.64 51 P **P** 21 43 52.4 -0.4
**G18K Tagagawik** 82.65 336 P **P** 21 43 51.2 -1.1
baz=80,SNR=1000
G18K S **S** 21 53 58.2 -1.4
baz=80
**H18K Honhosa River** 82.65 335 P **P** 21 43 51.3 -1.0
baz=80,SNR=510
H18K S **S** 21 53 59.0 -0.7
baz=80
**ERIK Erikli-Kesan** 82.67 50 P **P** 21 43 52.9 0.0
**GELI Tayfur-Gelibol** 82.68 50 P **P** 21 43 53.2 +0.3
**EDRB Edirne** 82.68 49 P **P** 21 43 51.9 -1.1
**P17K Kvichak River** 82.70 329 P **P** 21 43 51.1 -1.5
baz=82,SNR=121
P17K S **SKSac** 21 54 00.8 -1.9
baz=82
P17K S **SKSac** 21 54 00.8 -1.9
baz=82
**UKOP Uzunkopru-Edir** 82.70 50 P **P** 21 43 53.2 +0.2
**BIR Birlad** 82.72 44 ⇑P **P** 21 43 54.4 +1.4
**BIR Birlad** 82.72 44 P **P** 21 43 54.4 +1.4
**COMU Canakkale** 82.72 51 P **P** 21 43 53.6 +0.4
**AMRR Amara** 82.74 46 ⇑P **P** 21 43 54.3 +1.1
**AMRR Amara** 82.74 46 P **P** 21 43 54.2 +1.1
**CHIR Chirikof Islan** 82.75 325 P **P** 21 43 51.5 -1.5
baz=82,SNR=9.9
CHIR S **SKSac** 21 54 01.7 -1.6
baz=82
**A19K Wainwright** 82.76 340 P **P** 21 43 51.4 -1.3
baz=79,SNR=30
A19K S **SKSac** 21 54 01.9 -0.9
baz=79
**TUDR** 82.84 45 ⇑P **P** 21 43 54.1 +0.4
**M17K Holitna River** 82.85 331 P **P** 21 43 51.9 -1.5
baz=81,SNR=158
M17K S **S** 21 54 00.5 -1.2
baz=81
**N17K Nushagak Hills** 82.86 330 P **P** 21 43 51.9 -1.6
baz=81,SNR=88
N17K S **S** 21 54 00.4 -1.6
baz=81
**Q16K King Salmon** 82.89 328 P **P** 21 43 52.1 -1.5
baz=81,SNR=53
Q16K S **SKSac** 21 54 02.6 -1.4

baz=81
**R17L Mt. Peulik Vol** 82.89 327 P **P** 21 43 52.5 -1.3
baz=81,SNR=79
R17L S **SKSac** 21 54 03.1 -1.1
baz=81
**LPK Lapseki** 82.90 50 P **P** 21 43 55.9 +1.8
**IZVR Izvoarele** 82.91 45 ⇓P **P** 21 43 54.9 +0.9
**VARL Varlezi** 82.92 45 ⇑P **P** 21 43 55.2 +1.1
**F18K Selawik** 82.92 336 P **P** 21 43 52.5 -1.2
baz=80,SNR=1000
F18K S **S** 21 54 00.9 -1.3
baz=80
**O17K Koliganek Bris** 82.94 329 P **P** 21 43 52.5 -1.3
baz=81,SNR=211
O17K S **SKSac** 21 54 02.9 -1.5
baz=81
**SORM Soroca** 82.95 42 ⇑P **P** 21 43 55.1 +0.9
**SORM Soroca** 82.95 42 P **P** 21 43 55.0 +0.9
**SCHL Schela** 82.96 45 ⇑P **P** 21 43 54.9 +0.6
**SCHLR Schela** 82.97 45 ⇑P **P** 21 43 54.7 +0.4
**LVZ Lovozero** 82.99 22 P **P** 21 43 54.6 +0.6
**LVZ Lovozero** 82.99 22 *ce*P **P** 21 43 53.9 -0.1
LVZ pmax pmax
comp=Z,1μm,0.9s
**NEGRR Negrea** 82.99 45 ⇓P **P** 21 43 55.6 +1.1
**PRD Provadia** 82.99 47 P **P** 21 43 56.3 +1.8
**AK20 Malin Array Si** 83.00 40 P **P** 21 43 55.4 +1.0
**AK19 Malin Array Si** 83.01 40 P **P** 21 43 55.4 +1.0
**AK21 Malin Array Si** 83.02 40 P **P** 21 43 55.6 +1.1
**K17K Iditarod** 83.03 332 P **P** 21 43 53.5 -0.8
baz=80,SNR=1000
K17K S **SKSac** 21 54 03.3 -1.6
baz=80
**URLA Izmir** 83.05 52 P **P** 21 43 55.3 +0.3
**SCTR Scanteiesti** 83.05 45 ⇑P **P** 21 43 55.5 +0.7
**VLDR Vladesti** 83.09 45 ⇑P **P** 21 43 55.8 +0.9
**C18K Utukok River** 83.11 339 P **P** 21 43 53.8 -0.9
baz=78,SNR=158
C18K S **S** 21 54 03.2 -1.1
baz=78
**L17K Donlin** 83.13 332 P **P** 21 43 53.8 -1.0
baz=80,SNR=450
L17K S **SKSac** 21 54 04.9 -0.7
baz=80
**KIEV Kiev** 83.13 40 P **P** 21 43 55.8 +0.7
**KIEV Kiev** 83.13 40 ⇓P **P** 21 43 56.5 +1.4
**KIEV Kiev** 83.13 40 P **P** 21 43 56.5 +1.4
**E18K Tukpahlearik C** 83.14 337 P **P** 21 43 53.5 -1.3
baz=79,SNR=521
E18K S **SKSac** 21 54 04.4 -1.0
baz=79
**ICOR Ion Corvin** 83.14 47 ⇑P **P** 21 43 56.5 +1.2
**AKASG Malin Array Be** 83.14 40 P **P** 21 43 55.7 +0.6
**AKASG Malin Array Be** 83.14 40 P **P** 21 43 53.4 -1.7
comp=Z,38nm,0.5s,baz=279,slow=4.3,SNR=168
AKASG S **S** 21 54 00.9 -4.2
comp=Z,3.6nm,0.7s,baz=266,slow=7.8,SNR=2.8
AKASG PKKPbc **PKKPbc** 22 02 17.4 +0.1
comp=Z,3.8nm,0.7s,baz=79,slow=2.8,SNR=3.1
AKASG PKPPKP 22 10 20.2
comp=Z,1.7nm,0.8s,baz=83,slow=1.9,SNR=1.1
comp=Z,38nm,0.5s
**AKASG Malin Array Be** 83.14 40 *i* P **P** 21 43 54.0 -1.1
AKASG pmax pmax
comp=Z,70nm,0.7s
**AKBB Malin Array Si** 83.14 40 P **P** 21 43 55.7 +0.6
**AKBB Malin Array Si** 83.14 40 *d* *i*P **P** 21 43 54.0 -1.1
**AKBB Malin Array Si** 83.14 40 P **P** 21 43 55.9 +0.8
**HARR Harsova** 83.15 46 ⇓P **P** 21 43 56.2 +0.9
**HARR Harsova** 83.15 46 P **P** 21 43 56.1 +0.9
**RKY Sarkoy-Tekirda** 83.17 50 P **P** 21 43 56.9 +1.3
**B18K Kokolik River** 83.18 339 P **P** 21 43 54.2 -0.7
baz=78,SNR=132
B18K S **S** 21 54 04.1 -0.7
baz=78
**DKL Dikili** 83.19 52 P **P** 21 43 57.4 +1.8
**ZKR Zakros** 83.21 56 P **P** 21 43 57.5 +1.7
**CFR Carcaliu** 83.22 45 ⇓P **P** 21 43 56.3 +0.7
**CFR Carcaliu** 83.22 45 P **P** 21 43 56.3 +0.7
**GIUM Giurgiulesti** 83.23 45 ⇓P **P** 21 43 56.2 +0.6
**TLBR Topalu** 83.25 46 ⇓P **P** 21 43 56.7 +0.9
**J17K VABM Dome** 83.26 333 P **P** 21 43 55.0 -0.5
baz=80,SNR=440
J17K S **SKSac** 21 54 05.6 -0.8
baz=80
J17K S **SKSac** 21 54 05.6 -0.8
baz=80
**CVDA Cernavoda** 83.27 46 ⇓P **P** 21 43 58.0 +2.0
**KRBG Karabiga-Canak** 83.30 50 P **P** 21 43 57.4 +1.2
**H17K Granite Mounta** 83.34 335 P **P** 21 43 54.8 -1.0
baz=79,SNR=404
H17K S **SKSac** 21 54 06.2 -0.7
baz=79
**KIS Kishinev** 83.42 44 ⇓P **P** 21 43 58.1 +1.4
**KIS Kishinev** 83.42 44 P **P** 21 43 58.0 +1.4
**MILM Milestii Mici** 83.43 44 *i* P **P** 21 43 54.4 -2.3
comp=Z,2μm,1.3s
MILM *e*pP **pP** 21 44 27.0 -0.3
MILM *i* S **SKSac** 21 54 01.0 -7.1
**MILM Milestii Mici** 83.43 44 ⇑P **P** 21 43 57.1 +0.5
**MILM Milestii Mici** 83.43 44 *c* *i*P **P** 21 43 54.4 -2.3
MILM *e**PP **pP** 21 44 27.0 -0.3
MILM *i* S **SKSac** 21 54 01.0 -7.1
MILM *i* PS **PnS** 21 55 03.0 -13
MILM pmax pmax
comp=Z,2μm,1.3s
**O16K Kokwok River B** 83.47 329 P **P** 21 43 54.7 -1.9
baz=80,SNR=122
O16K S **S** 21 54 08.2 +0.1
baz=80
**TPGR Topolog** 83.47 46 ⇑P **P** 21 43 58.2 +1.2
**MRMT Marmara Adasi** 83.50 50 P **P** 21 43 58.2 +0.9
**P16K Nushagak River** 83.51 329 P **P** 21 43 54.9 -1.9
baz=80,SNR=44
P16K S **SKSac** 21 54 07.4 -0.7
baz=80
P16K S **SKSac** 21 54 07.4 -0.7
baz=80
**CRLT Corlu** 83.52 49 P **P** 21 43 58.2 +0.9
**G17K Kiwalik Mounta** 83.53 335 P **P** 21 43 55.8 -1.1
baz=78,SNR=730
G17K S **SKSac** 21 54 06.9 -1.2
baz=78
**R16K Pilot Point** 83.54 327 P **P** 21 43 56.1 -0.9
baz=80
R16K S **S** 21 54 07.8 -1.1
baz=80
R16K S **S** 21 54 07.8 -1.1
baz=80
**MFTR Murfatlar** 83.57 46 ⇑P **P** 21 43 58.9 +1.5
**F17K Baldwin Pennin** 83.58 336 P **P** 21 43 55.8 -1.2
baz=78,SNR=389
F17K S **SKSac** 21 54 07.2 -1.1
baz=78
**M16K Timber Creek** 83.64 331 P **P** 21 43 56.7 -0.8
baz=80,SNR=342
M16K S **S** 21 54 11.4 +1.7
baz=80
**GCAM G?zelcaml?** 83.64 53 P **P** 21 43 59.5 +1.5
**N16K Nishlik Lake** 83.65 330 P **P** 21 43 56.9 -0.7
baz=80,SNR=113
N16K S **S** 21 54 08.8 -1.1
baz=80
**SOMA Soma-Manisa** 83.66 51 P **P** 21 43 59.3 +1.2
**E17K Hotham Inlet** 83.67 337 P **P** 21 43 56.3 -1.2
baz=78,SNR=1000
E17K S **S** 21 54 11.6 +1.7
baz=78
**TLCR** 83.70 45 ⇓P **P** 21 43 59.4 +1.3
**TLCR** 83.70 45 P **P** 21 43 59.3 +1.3
**EDC Edincik** 83.73 50 P **P** 21 43 59.9 +1.5
**EFOR EFORIE** 83.73 46 ⇑P **P** 21 44 00.9 +2.6
**TSCT Constanta Port** 83.74 46 ⇑P **P** 21 44 00.7 +2.4
**L16K Owhat River** 83.75 332 P **P** 21 43 57.9 -0.1
baz=79,SNR=371
L16K S **S** 21 54 11.5 +0.6
baz=79
**BODT Bodrum** 83.80 54 P **P** 21 43 58.9 +0.1
**JURR Jurilovca** 83.80 46 ⇑P **P** 21 43 59.7 +1.1
**C17K DeLong Mountai** 83.86 339 P **P** 21 43 57.5 -1.0
baz=76,SNR=96
C17K S **SKSac** 21 54 08.6 -1.6
baz=76
**RDOG Red Dog Mine** 83.86 338 P **P** 21 43 57.6 -0.9
baz=77,SNR=94

RDOG S SKSac 21 54 08.3 -1.8
baz=77
SLVT Silivri 83.86 49 P P 21 43 59.7 +0.7
I17K Unalakleet 83.88 334 P P 21 43 58.1 -0.5
baz=78,SNR=191
I17K S S 21 54 11.3 -0.7
baz=78
CTYL Yalikoy Yolu 83.88 49 P P 21 43 59.9 +0.8
KARP Karpathos 83.91 55 P P 21 44 00.3 +0.8
KARP Karpathos 83.91 55 P P 21 44 00.8 +1.3
KARP IAmb IAmb 21 44 19.6
comp=Z,2μm,0.9s
BAND Balkesir-Ban 83.91 50 ⇑P P 21 44 01.0 +1.7
J16K Anvik River 83.96 333 P P 21 43 58.6 -0.5
baz=78,SNR=328
J16K S S 21 54 12.8 -0.1
baz=78
SUSR Susurluk-Balik 83.96 51 P P 21 43 58.4 -1.2
D17K Noatak River 84.01 338 P P 21 43 57.8 -1.4
baz=76,SNR=168
D17K S S 21 54 15.1 +1.9
baz=76
DAT Datca 84.06 54 P P 21 43 59.9 -0.4
CTKS Kestanelik-??a 84.08 49 P P 21 44 00.7 +0.6
KCTX Karacabey (Bur 84.12 50 P P 21 43 58.9 -1.5
AYDB Zeytinkoy-Aydi 84.12 53 P P 21 44 00.7 +0.1
MLSB Milas 84.13 53 P P 21 44 00.4 -0.1
GORD Gordes-Manisa 84.19 52 P P 21 44 00.1 -0.8
ODEM Odemis-Izmir 84.21 52 P P 21 44 01.2 +0.2
PURM Purcari 84.21 44 ⇑P P 21 44 02.0 +1.4
CHGN Chignik 84.22 326 P P 21 43 58.9 -1.6
baz=80
CHGN S S 21 54 14.2 -1.4
baz=80
G16K Koyuk River 84.25 335 P P 21 43 59.4 -1.1
baz=77,SNR=354
G16K S S 21 54 16.3 +0.6
baz=77
BGKT Bogazkoy 84.29 49 P P 21 44 01.8 +0.6
N15K Kwethluk River 84.35 330 P P 21 44 00.5 -0.6
baz=78,SNR=172
N15K S S 21 54 17.1 +0.2
baz=78
H16K Elim 84.38 335 P P 21 44 00.5 -0.6
baz=77,SNR=83
H16K S S 21 54 17.2 +0.3
baz=77
O15K Ungalikthiuk R 84.42 329 P P 21 44 00.5 -0.9
baz=79,SNR=44
O15K S S 21 54 17.4 -0.1
baz=79
NAZL Nazilli-Aydin 84.43 53 P P 21 44 03.0 +1.0
ARMT Armutlu 84.45 50 P P 21 44 02.1 0.0
KLYT Kilyos 84.48 49 P P 21 44 02.7 +0.6
MDNY Mudanya-Bursa 84.50 50 P P 21 44 03.1 +0.8
ISK Istanbul-Kandi 84.52 49 P P 21 44 02.8 +0.5
KAVV Kandilli-Istan 84.52 49 P P 21 44 03.5 +1.1
M15K Kasigluk River 84.53 331 P P 21 44 01.4 -0.5
baz=78,SNR=187
M15K S S 21 54 21.9 +3.3
baz=78
YER Yerkesik 84.56 53 P P 21 44 02.6 -0.1
TURN Turunc 84.58 54 P P 21 44 01.2 -1.5
K15K Wolf Creek Mou 84.59 332 P P 21 44 02.2 -0.1
baz=77,SNR=106
K15K S S 21 54 20.4 +1.2
baz=77
KULA Kula-Manisa 84.63 52 P P 21 44 03.5 +0.4
TSUM Tsumeb 84.65 111 P P 21 44 05.9 +2.3
TSUM IAmb IAmb 21 44 27.3
comp=Z,2μm,1.1s
TSUM Tsumeb 84.65 111 ⇓*i*P P 21 44 06.5 +3.0
TSUM IAmb IAmb 21 44 26.9
comp=Z,2μm,1.1s
C16K Lisburne Hills 84.69 339 P P 21 44 02.7 +0.1
baz=74,SNR=172
C16K S S 21 54 21.4 +1.5
baz=74
L15K Ungalak Mounta 84.70 332 P P 21 44 02.5 -0.3
baz=77,SNR=172
L15K S S 21 54 22.5 +2.2
baz=77
GEMT Gemlik 84.72 50 P P 21 44 03.7 +0.3
SIMA Simav-Kutahya 84.79 51 P P 21 44 02.9 -1.0
YLV Yalova 84.84 50 P P 21 44 02.6 -1.5
S14K Fog Glacier 84.85 326 P P 21 44 02.6 -1.2
baz=78
S14K S S 21 54 22.3 +0.1
baz=78
DALY Dalyan (Mula) 84.90 54 P P 21 44 04.2 -0.1
HRT Hereke 85.02 50 P P 21 44 04.9 0.0
G15K Niukluk 85.04 335 P P 21 44 03.8 -0.6
baz=75,SNR=264
G15K S S 21 54 24.2 +0.7
baz=75
F15K North Star Dit 85.10 336 P P 21 44 04.2 -0.5
baz=75,SNR=192
F15K S S 21 54 24.5 +0.4
baz=75
GEDZ Gediz 85.12 51 P P 21 44 06.3 +0.8
O14K Tigyukauivet M 85.12 329 P P 21 44 03.7 -1.2
baz=77,SNR=16
O14K S S 21 54 24.1 -0.4
baz=77
M14K Bethel 85.13 331 P P 21 44 03.5 -1.4
baz=77,SNR=129
M14K S S 21 54 26.5 +2.0
baz=77
ADVT Abdulvahap 85.14 50 P P 21 44 03.9 -1.5
CHNA Chernabura Isl 85.16 325 P P 21 44 03.9 -1.3
baz=78,SNR=16
CHNA S S 21 54 24.8 -0.2
baz=78
N14K Kuskokwak Cree 85.18 330 P P 21 44 04.4 -0.8
baz=77,SNR=80
N14K S S 21 54 27.6 +2.5
baz=77
AUSN Aus 85.24 118 *e*P P 21 44 08.8 +2.4
AUSN IAmb IAmb 21 44 26.2
comp=Z,4μm,2.3s
CAVI Cavuskoy 85.25 50 P P 21 44 04.9 -1.2
FETY Fethiye 85.27 54 P P 21 44 05.8 -0.5
APMY Acipayam-Deniz 85.30 53 P P 21 44 05.7 -0.8
ADZR Andozero 85.33 26 ⇑*i*P P 21 44 06.5 +0.6
ADZR *PP pP 21 44 38.4 +1.7
ADZR *i* S SKSac 21 54 17.1 -2.4
ADZR pmax pmax
comp=Z,1μm,0.8s
J14K Nanvaranak Lak 85.39 333 P P 21 44 06.1 -0.1
baz=76,SNR=205
J14K S S 21 54 29.1 +2.1
baz=76
CAME Cameli-Denizli 85.39 53 P P 21 44 06.2 -0.8
SAUV Serdivan-Sakar 85.52 50 P P 21 44 07.3 -0.1
SDPT Sand Point 85.55 325 P P 21 44 07.9 +0.8
SDPT Sand Point 85.55 325 P P 21 44 07.9 +0.8
SDPT IAmb IAmb 21 44 25.7
comp=Z,3μm,0.8s
SDPT Sand Point 85.55 325 P P 21 44 06.6 -0.5
baz=78,SNR=13
SDPT S S 21 54 27.8 -1.0
baz=78
ANM Nome 85.70 335 P P 21 44 06.8 -1.0
baz=74,SNR=43
ANM S S 21 54 30.6 +0.6
baz=74
GULT Gulveren 85.72 50 P P 21 44 07.6 -0.9
AKAS Kas 85.76 54 P P 21 44 09.7 +0.9
BASM Basmaki-Afyon 85.81 52 P P 21 44 08.6 -0.4
F14K Arctic Creek 85.84 336 P P 21 44 08.1 -0.3
baz=73,SNR=350
F14K S S 21 54 31.3 -0.1
baz=73
M13K Dall Lake 85.88 331 P P 21 44 08.0 -0.6
baz=76,SNR=167
M13K S S 21 54 32.0 +0.2
baz=76
ELL Elmali 85.91 54 P P 21 44 08.7 -0.8
ELL Elmali 85.91 54 P P 21 44 11.6 +2.1
ELL Elmali 85.91 54 P P 21 44 11.6 +2.1
ELL pmax pmax
comp=Z,5μm,1.1s
SHUT Suhut-Afyon 86.08 52 P P 21 44 09.7 -0.7
KORT Korkueli 86.21 53 P P 21 44 10.5 -0.5
MDUB Mudurnu 86.22 50 P P 21 44 10.0 -1.0
MDUB Mudurnu 86.22 50 P P 21 44 12.3 +1.3
MDUB IAmb IAmb 21 44 35.8
comp=Z,2μm,1.0s
BCK Bucak 86.31 53 P P 21 44 11.2 -0.3
CIFT Cifteler, Eski 86.33 51 P P 21 44 10.3 -1.2
S12K Black Hills 86.35 326 P P 21 44 10.0 -1.1
baz=76,SNR=26
S12K S S 21 54 36.4 -0.3
baz=76
TNA Tin City 86.45 336 P P 21 44 10.6 -0.7
baz=72,SNR=276
TNA S S 21 54 39.2 +2.0
baz=72
ANTB Antalya 86.47 53 P P 21 44 13.8 +1.7
YUVA Yuva-Kibriscik 86.61 50 P P 21 44 13.6 +0.7
OBN Obninsk 86.66 35 P P 21 44 13.4 +0.8
OBN IAmb IAmb 21 44 33.4
comp=Z,2μm,0.8s
OBN Obninsk 86.66 35 S SKSac 21 54 22.8 -5.4
comp=Z,50nm,0.9s,baz=319,slow=19,SNR=14
OBN LR LR 22 19 55.5
comp=Z,14μm,20.8s,baz=276,slow=34
OBN Obninsk 86.66 35 ⇑P P 21 44 13.2 +0.6
OBN Obninsk 86.66 35 *d* *i*P P 21 44 11.3 -1.3
OBN *e**PP pP 21 44 46.4 +3.0
OBN *i* 21 47 38.9
OBN *i* S SKSac 21 54 20.2 -8.0
OBN *i* SS SS 22 00 20.0 -2.9
OBN pmax pmax
comp=Z,2μm,0.8s
SVRH Sivrihisar-ESK 86.66 51 P P 21 44 12.2 -0.9
PLTM Poltava 86.71 40 P P 21 44 14.1 +1.1
KIZT Kizilcal 87.04 51 P P 21 44 15.8 +0.8
KOMG Komaggas 87.05 121 ⇓*i*P P 21 44 17.6 +2.6
KOMG IAmb IAmb 21 44 37.8
comp=Z,2μm,1.3s
MOS Moscow 87.09 34 *e*P P 21 44 12.4 -2.3
MOS *e* 21 47 34.8
MOS *i* 21 54 25.6
MOS *e*S S 21 54 43.2 -0.6
MOS *e*SSS SSS 22 04 03.6
MOS pmax pmax
comp=Z,1μm,1.4s
MOS pmax pmax
comp=Z,8μm,3.0s
MOS smax smax
comp=N,19μm,5.5s
MOS MLR MLR
comp=N,9μm,19.0s
MOS MLR MLR
comp=E,13μm,19.0s
MOS MLR MLR
comp=Z,16μm,19.0s
CIDE Kastamonu/Cide 87.24 48 ⇓P P 21 44 16.9 +1.1
M11K Mekoryuk 87.25 331 P P 21 44 14.8 -0.6
baz=73,SNR=30
M11K S S 21 54 45.2 +0.1
baz=73
SEYD Seydisehir-KON 87.30 53 P P 21 44 15.5 -0.8
FALS False Pass 87.31 325 P P 21 44 16.6 +0.9
FALS False Pass 87.31 325 P P 21 44 14.6 -1.1
baz=75,SNR=8.6
FALS S S 21 54 45.5 -0.3
baz=75
SIM Simferopol' 87.43 45 *α* *i*P P 21 44 18.0 +1.4
SIM *i* S S 21 54 47.5 0.0
SIM pmax pmax
comp=Z,830nm,0.9s
SIM pmax pmax
comp=Z,3μm,3.2s
SIM smax smax
comp=N,16μm,7.9s
BR231 Keskin MP Arra 87.53 50 P P 21 44 18.9 +1.5
ANTO Ankara 87.54 50 P P 21 44 18.9 +1.6
ANTO Ankara 87.54 50 ⇑P P 21 44 19.3 +2.0
ANTO Ankara 87.54 50 P P 21 44 18.9 +1.6
ANTO pmax pmax
comp=Z,708nm,1.0s
LADK Ladik-KONYA 87.55 52 P P 21 44 16.6 -0.9
KONT Konya--Tatoy 87.60 52 P P 21 44 16.6 -1.0
KHAM Kharkiv 87.69 40 P P 21 44 18.9 +1.1
AFSR Afar-Bala (An 87.84 50 P P 21 44 19.7 +0.9
KULU Kulu 87.87 51 P P 21 44 18.8 -0.2
CHBY Cihanbeyli 87.88 51 P P 21 44 17.8 -1.2
HDMB Hadim 87.89 53 P P 21 44 19.3 0.0
GAZI Gazipasa 87.91 54 P P 21 44 16.6 -2.5
BZK Bozkurt 88.00 48 P P 21 44 19.4 +0.1
BZK Bozkurt 88.00 48 P P 21 44 20.3 +1.0
BZK Bozkurt 88.00 48 ⇓P P 21 44 20.8 +1.5
CANT Cankiri 88.00 49 P P 21 44 19.8 +0.3
BR131 Keskin Array S 88.21 50 P P 21 44 18.9 -1.7
BR131 Keskin Array S 88.21 50 P P 21 44 21.7 +1.1
BR131 Keskin Array S 88.21 50 *o* *i*P P 21 44 18.9 -1.7
BRTR Keskin Array B 88.21 50 P P 21 44 21.5 +0.9
BRTR Keskin Array B 88.21 50 P P 21 44 19.3 -1.3
comp=Z,242nm,1.0s,baz=270,slow=2.9,SNR=151
BRTR S SKSac 21 54 33.9 -4.7
comp=Z,5.7nm,0.9s,baz=270,slow=2.9,SNR=1.6
BRTR PKKPbc PKKPbc 22 02 05.9 +0.8
comp=Z,6.1nm,1.0s,baz=147,slow=3.7,SNR=4.5
BRTR PKPPKP P'P'df 22 10 12.4 -0.8
comp=Z,1.6nm,0.9s,baz=119,slow=3.0,SNR=2.7
comp=Z,242nm,1.0s
BRTR Keskin Array B 88.21 50 *i* P P 21 44 19.0 -1.7
BRTR pmax pmax
comp=Z,513nm,1.2s
SERE Sereflikochisa 88.32 51 P P 21 44 22.2 +1.1
KAMT Kaman 88.34 50 P P 21 44 19.8 -1.4
SULT Sultanhani-AKS 88.44 52 P P 21 44 20.8 -0.8
GRTLG Ghanzi 88.45 112 *i* P P 21 44 24.6 +2.6
KRMN Karaman 88.46 53 P P 21 44 22.1 +0.3
YAYX Yaylak 88.51 51 P P 21 44 22.6 +0.6
KIRS Kirsehir-Merke 88.55 51 ⇓P P 21 44 24.2 +2.1
TEKE Tekeli-Mersin 88.56 54 P P 21 44 21.4 -0.7
ARMS Ukamas 88.57 119 *e*P P 21 44 25.1 +2.7
ARMS IAmb IAmb 21 44 44.8
comp=Z,1μm,0.9s
GAMB Gambell 88.58 335 P P 21 44 20.8 -0.8
baz=68,SNR=16
GAMB S S 21 54 57.8 +0.2
baz=68
LEF Lefka 88.59 55 P P 21 44 22.6 +0.3
LPSR Galich'ya Gora 88.65 37 *e*P P 21 44 22.5 +0.3
LPSR *e* 21 54 33.3
LPSR pmax pmax
comp=Z,1μm,0.8s
YESY Yesilyurt 88.70 52 P P 21 44 22.0 -0.9
TEVE Tevekalti-Mers 88.76 53 P P 21 44 23.9 +0.7
CORM Corum 88.85 49 P P 21 44 23.9 +0.3
SNOP Sinop 88.86 48 P P 21 44 24.4 +1.0
AKKU Akkuyu-Mersin 88.90 54 P P 21 44 23.6 -0.1
KEBE Keben-Mersin 88.97 53 P P 21 44 24.7 +0.6
DIKM Dikmen 88.98 48 P P 21 44 24.8 +0.8
DIKM Dikmen 88.98 48 ⇓P P 21 44 26.5 +2.5
CSS Mathiatis 88.98 55 P P 21 44 24.9 +0.7
CSS Mathiatis 88.98 55 P P 21 44 26.1 +1.9
CSS IAmb IAmb 21 44 46.8
comp=Z,1μm,0.9s
IKL Isikli 88.99 53 P P 21 44 23.8 -0.3
VORR Voronezh 89.07 38 *e*P P 21 44 24.5 +0.3
VORR *e* 21 47 50.5
VORR *e* 21 54 39.0
VORR pmax pmax
comp=Z,1μm,1.0s
VNA3 Neumayer Olymp 89.11 165 ⇓P P 21 44 26.4 +2.5
comp=Z,420nm,1.1s
VNA3 ⇓SKSac SKSac 21 54 41.6 -0.6
comp=Z,8.2nm,0.7s
VNA3 ⇑PKKPbc PKKPdf 22 02 01.6 +2.4
comp=Z,0.0nm,0.1s
VNA1 Neumayer--Stat 89.11 164 ⇓P P 21 44 26.8 +2.9
comp=Z,469nm,1.0s
VNA1 ⇑PKKPbc PKKPbc 22 02 03.7 -0.7
comp=Z,38nm,1.0s
SILI Silifke-Mersin 89.15 53 P P 21 44 25.7 +0.8
PRTV Porterville,We 89.16 124 ⇓*i* P 21 44 28.1 +3.1
PRTV ⇓*i*P P 21 44 28.1 +3.1
PRTV IAmb IAmb 21 44 48.2
comp=Z,1μm,1.2s
VSR Storozhevoye 89.17 38 *e*P P 21 44 24.9 +0.2
VSR *e* 21 47 53.3
VSR *e* 21 54 34.3
VSR pmax pmax
comp=Z,1μm,1.0s
AUGR Augrabies 89.21 119 ⇓*i*P P 21 44 28.0 +2.7
AUGR IAmb IAmb 21 44 47.8
comp=Z,2μm,1.3s
KIZK Mersin 89.30 53 P P 21 44 25.7 +0.1
VORD Divnogorie 89.32 38 *e*P P 21 44 25.4 +0.1
VORD *e* 21 47 53.3
VORD *e* 21 54 37.1
VORD pmax pmax
comp=Z,780nm,1.0s
UNV Unalaska Valle 89.32 325 P P 21 44 25.7 +0.4
UNV Unalaska Valle 89.32 325 P P 21 44 24.2 -1.1
baz=73,SNR=37
UNV S S 21 55 04.7 -0.2
baz=73
CVNA Calvinia 89.35 122 ⇓*i*P P 21 44 28.9 +2.9
CVNA IAmb IAmb 21 44 48.9
comp=Z,2μm,1.1s
CER Ceres 89.39 124 ⇓*i*P P 21 44 28.6 +2.5
CER IAmb IAmb 21 44 48.6
comp=Z,412nm,0.9s
YOZ Yozgat 89.49 50 P P 21 44 26.9 +0.3
VNA2 Neumayer--Watz 89.51 164 ⇓P P 21 44 28.2 +2.5
comp=Z,231nm,0.7s,baz=306,slow=6.3
VNA2 ⇓SKSac SKSac 21 54 44.2 -0.3
comp=N,20nm,1.0s,baz=349,slow=11
VNA2 ⇓PKKPbc PKKPbc 22 02 01.3 -2.1
comp=Z,26nm,0.6s,baz=154,slow=1.2
EREN Erenkoy 89.53 54 P P 21 44 28.3 +1.6
KVT Kavak 89.69 48 P P 21 44 27.6 +0.2
CMRD Camardi-Nigde 89.69 52 P P 21 44 26.3 -1.3
ANN Anapa 89.76 44 *e*P P 21 44 25.3 -2.2
ANN *e**PP pP 21 44 57.0 -1.6
ANN *e* 21 47 58.2
ANN *e*S SKSac 21 54 42.3 -4.9
ANN *e*SS SS 22 01 06.0 -2.5
ANN pmax pmax
comp=Z,684nm,1.4s
KEIM Keimoes 89.77 119 ⇓*i*P P 21 44 30.5 +2.5
KEIM IAmb IAmb 21 44 50.8
comp=Z,2μm,1.1s
KARA Karaisali 89.84 52 P P 21 44 27.5 -0.6
BELA Belgrano 2 89.86 174 P P 21 44 26.9 -0.3
BELA Belgrano 2 89.86 174 P P 21 44 29.8 +2.5
UPI Upington 89.94 119 ⇓*i*P P 21 44 31.3 +2.5
UPI IAmb IAmb 21 44 51.6
comp=Z,3μm,1.0s
ELIM Elim 90.03 125 ⇓*i*P P 21 44 31.8 +2.7
ELIM IAmb IAmb 21 44 51.6
comp=Z,799nm,0.9s
PPTF Pamatai, Papee 90.06 252 P P 21 44 35.9 +6.4
BNN Bunyan 90.07 51 P P 21 44 28.7 -0.6
BNN Bunyan 90.07 51 P P 21 44 31.0 +1.6
P08K Saint George I 90.11 328 P P 21 44 27.6 -1.3
baz=70
P08K S S 21 55 11.7 -0.3
baz=70
P08K S S 21 55 11.7 -0.3
baz=70
TOKT Tokat 90.24 49 P P 21 44 29.0 -1.0
SPIA Saint Paul Isl 90.27 329 P P 21 44 29.2 -0.4
baz=70
SPIA S S 21 55 13.5 0.0
baz=70
KOZT Kozan 90.38 52 P P 21 44 29.7 -1.0
MATJ Matjiesfontein 90.42 124 *e*P P 21 44 32.0 +1.1
MATJ IAmb IAmb 21 44 53.8
comp=Z,2μm,1.1s
SUR Sutherland 90.42 123 P 21 44 33.6 +2.5
SUR IAmb IAmb 21 44 54.1
comp=Z,1μm,0.9s
SUR Sutherland 90.42 123 ⇓*i*P P 21 44 33.8 +2.7
SUR IAmb IAmb 21 44 53.7
comp=Z,1μm,0.9s
SARI SarD1z-Kayseri 90.61 51 P P 21 44 32.2 +0.3
SVSK Karacayir 90.68 49 P P 21 44 31.6 -0.3
VRH Novokhopyorsk 90.72 38 *e*P P 21 44 32.2 +0.4
VRH *e* 21 48 06.7
VRH *e* 21 54 43.8
VRH pmax pmax
comp=Z,990nm,0.9s
PHPEN Phepeng 90.76 116 *i*P P 21 44 29.9 -2.8
RSDY Resadiye-TOKAT 90.80 49 P P 21 44 33.3 +0.7
FRAZ Fraserburg 90.82 122 ⇓*i*P P 21 44 35.6 +2.7
FRAZ IAmb IAmb 21 44 55.5
comp=Z,1μm,1.0s
KIP Kipapa 90.83 292 P P 21 44 38.5 +5.5
TAHT Tahtakopru-Hat 90.93 53 P P 21 44 34.7 +1.5
NIKH Nikolski High 90.93 324 P P 21 44 33.9 +1.1
NIKH Nikolski High 90.93 324 P P 21 44 32.7 -0.1
baz=71,SNR=13
NIKH S S 21 55 17.9 -1.9
baz=71
MERW Merweville 91.07 123 ⇓*i*P P 21 44 36.4 +2.4
MERW IAmb IAmb 21 44 56.4
comp=Z,1μm,0.9s
BHL Bhannes 91.09 55 *e*P P 21 44 36.1 +2.0
MMAI Mount Meron Ar 91.09 56 P P 21 44 34.0 -0.1
comp=Z,110nm,0.9s,baz=291,slow=1.2,SNR=116
MMAI S SKSac 21 54 53.9 -1.6
comp=Z,16nm,1.2s,baz=298,slow=3.1,SNR=1.5
MMAI PKKPbc PKKPbc 22 01 56.8 -0.7
comp=Z,1.0nm,0.4s,baz=90,slow=2.9,SNR=4.7
MMAI PKPPKP P'P'df 22 10 05.3 -2.8
comp=Z,1.5nm,0.9s,baz=98,slow=6.5,SNR=1.8
comp=Z,110nm,0.9s
SNAA Sanae 91.15 164 P P 21 44 35.8 +2.3
SNAA Sanae 91.15 164 ⇓*i*P P 21 44 35.7 +2.3
SNAA IAmb IAmb 21 44 54.2
comp=Z,114μm,1.0s
SNAA Sanae 91.15 164 ⇓P P 21 44 35.9 +2.5
comp=Z,14μm,1.2s
SNAA ⇓SKSac SKSac 21 54 55.0 +0.9
comp=Z,709nm,0.9s
SNAA ⇓PKKPbc PKKPbc 22 01 57.6 -1.8
comp=Z,179nm,0.7s
SNAA Sanae 91.15 164 P P 21 44 35.8 +2.3
comp=Z,592nm,1.0s,baz=318,slow=5.9,SNR=250
SNAA S SKSac 21 54 54.4 +0.4
comp=Z,40nm,1.1s,baz=353,slow=8.1,SNR=30
SNAA PKPPKP P'P'df 22 10 05.5 +0.9
comp=Z,4.8nm,0.9s,baz=122,slow=7.1,SNR=3.8
SNAA LR LR 22 26 06.6
comp=Z,10μm,20.7s,baz=298,slow=36
comp=Z,592nm,1.0s
SNAA Sanae 91.15 164 *ce*P P 21 44 33.7 +0.3
SNAA pmax pmax
comp=Z,2μm,1.0s
KMRS Kahramanmaras 91.20 52 P P 21 44 35.1 +0.6
HWQ Hawqa 91.24 55 *e*P P 21 44 36.6 +1.8
MMLI Mount Malkishu 91.24 57 P P 21 44 34.7 -0.1
PHDHD Phuduhudu 91.27 110 *i*P P 21 44 37.6 +2.5
DARE Darende-Malaty 91.38 50 P P 21 44 34.6 -0.8
KSANE Kasane 91.40 108 *i*P P 21 44 38.6 +2.8
HRFI Mount Harif 91.47 59 P P 21 44 36.9 +1.0
EIL Elat 91.48 60 P P 21 44 36.2 +0.3
EIL Elat 91.48 60 S SKSac 21 54 56.7 -1.1
comp=Z,8.0nm,1.1s,baz=287,slow=20,SNR=1.0
EIL LR LR 22 26 11.5
comp=Z,12μm,20.2s,baz=291,slow=36
GAZ Gaziantep 91.53 52 P P 21 44 36.6 +0.5
GAZ Gaziantep 91.53 52 P P 21 44 38.4 +2.3
GAZ IAmb IAmb 21 44 58.4
comp=Z,916nm,1.2s
GRAN Grantham 91.53 122 *e*P P 21 44 38.8 +2.7
GRAN IAmb IAmb 21 44 58.9
comp=Z,739nm,1.0s
SKOMA Sekoma 91.53 115 *i*P P 21 44 39.0 +2.8
ERBR Yeremizino-Bor 91.58 43 *e*P P 21 44 36.5 +0.5
ERBR *e**PP pP 21 45 10.2 +3.1
ERBR *e* 21 48 19.5
ERBR *e*S SKSac 21 54 54.4 -3.3
ERBR *e*SS SS 22 01 47.2 +12
ERBR pmax pmax
comp=Z,648nm,1.5s
GHAJ Ghor Haditha 91.62 58 P 21 44 38.8 +2.3
SOC Sochi 91.67 45 *e*P P 21 44 34.6 -1.8
SOC *e**PP pP 21 45 06.4 -1.1
SOC *e**SP sP 21 45 20.0 -0.2
SOC *e* 21 48 15.0
SOC *e* 21 54 55.0
SOC *e*SS SS 22 01 34.3 -1.8
SOC *e*SSS SSS 22 05 15.2
SOC pmax pmax
comp=Z,261nm,0.5s

ESPY Espiye-Giresun 91.69 48 P P 21 44 35.2 -1.5
ARPR Arapgir-MALATY 91.89 50 P 21 44 40.0 +2.2
ARPR IAmb IAmb 21 45 00.1
comp=Z,776nm,1.0s
ILIC ilic-Erzincan 91.97 49 P P 21 44 42.1 +4.0
BRAK Brakfontein 92.03 122⇓ iP P 21 44 40.7 +2.3
BRAK IAmb IAmb 21 45 00.7
comp=Z,932nm,1.2s
LABN Labinsk 92.06 44 eP P 21 44 39.5 +1.3
LABN e 21 54 56.7
LABN e 21 55 21.2
LABN pmax pmax
comp=Z,120nm,0.6s
KIRV Kirov 92.18 29 S SKSac 21 54 58.2 -2.2
comp=Z,26nm,1.0s,baz=210,slow=20,SNR=23
KIRV SKKPbc SKKPbc 22 05 19.5 -2.9
comp=Z,10nm,0.7s,baz=81,slow=1.4,SNR=3.8
KIRV LR LR 22 24 37.6
comp=Z,5μm,18.3s,baz=297,slow=34
KIRV Kirov 92.18 29d iP P 21 44 36.6 -1.9
BFON Badsfontein, M 92.70 122⇓ iP P 21 44 44.3 +2.7
BFON IAmb IAmb 21 45 04.2
comp=Z,1μm,1.0s
URFA Urfa 92.70 51 P P 21 44 42.6 +1.1
ROOI Rooidraai Farm 92.71 122⇓ iP P 21 44 43.7 +2.1
ROOI IAmb IAmb 21 45 03.8
comp=Z,1μm,1.3s
PTK Pertek 92.74 50 P P 21 44 40.9 -0.9
TROLL Troll, Antarti 92.78 164 ⇓P P 21 44 43.6 +2.5
comp=Z,20μm,1.1s
TROLL ⇓SKSac SKSac 21 55 04.0 +0.6
comp=Z,2μm,1.2s
TROLL ⇑PKKPbc PKKPbc 22 02 00.8 +5.5
comp=Z,781nm,0.5s
ERZN Erzincan 92.79 49 P P 21 44 43.7 +1.8
SVRC Sivrice-ELAZID 92.81 50 P P 21 44 42.2 +0.1
BAYT Aydıntepe-Bayb 92.87 48 P P 21 44 43.7 +1.4
SOOWA Sowa 92.88 110 i P P 21 44 45.0 +2.4
LBTB Lobatse 93.11 115 P P 21 44 45.8 +2.2
LBTB Lobatse 93.11 115 eP P 21 44 46.3 +2.7
LBTB IAmb IAmb 21 45 06.2
comp=Z,316nm,1.0s
LBTB Lobatse 93.11 115 LR LR 22 22 01.9
comp=Z,10μm,21.8s,baz=286,slow=32
LBTB Lobatse 93.11 115 i P P 21 44 48.5 +5.0
LBTB Lobatse 93.11 115 P P 21 44 45.8 +2.2
LBTB pmax pmax
comp=Z,289nm,1.0s
LBTB Lobatse 93.11 115 i P P 21 44 48.5 +5.0
SWZ Schweizer 93.26 117 eP P 21 44 46.4 +2.1
SWZ IAmb IAmb 21 45 06.5
comp=Z,1μm,1.3s
BOSA Boshof 93.45 118 P P 21 44 47.0 +1.9
BOSA IAmb IAmb 21 45 07.5
comp=Z,2μm,1.4s
BOSA Boshof 93.45 118⇓ iP P 21 44 47.0 +1.9
BOSA IAmb IAmb 21 45 07.1
comp=Z,2μm,1.4s
BOSA Boshof 93.45 118 P P 21 44 46.7 +1.6
comp=Z,207nm,1.0s,baz=281,slow=5.1,SNR=106
BOSA PP PP 21 48 32.0 +0.9
comp=Z,71nm,1.0s,baz=280,slow=7.1,SNR=2.9
BOSA S SKSac 21 55 10.3 +1.4
comp=Z,19nm,1.1s,baz=323,slow=20,SNR=10
BOSA PKKPbc PKKPbc 22 01 52.3 +0.6
comp=Z,3.8nm,0.7s,baz=119,slow=3.9,SNR=1.6
BOSA LR LR 22 22 24.2
comp=Z,11μm,20.7s,baz=284,slow=32
comp=Z,207nm,1.0s
BOSA Boshof 93.45 118 P P 21 44 47.0 +1.9
BOSA pmax pmax
comp=Z,2μm,1.4s
GRAF Camdeboo Natio 93.45 122⇓ iP P 21 44 48.3 +3.3
GRAF IAmb IAmb 21 45 07.6
comp=Z,1μm,1.3s
GOF Gofitskoye 93.50 43c iP P 21 44 46.1 +1.2
GOF eS SKSac 21 55 05.3 -3.0
DYBB Diyarbakir 93.56 50 P P 21 44 46.6 +1.2
KIV Kislovodsk 93.61 44 P P 21 44 47.0 +1.5
KIV IAmb IAmb 21 45 07.5
comp=Z,580nm,1.2s
KIV Kislovodsk 93.61 44 P P 21 44 47.0 +1.5
KIV Kislovodsk 93.61 44 ⇓P P 21 44 47.5 +2.0
KIV Kislovodsk 93.61 44 eP P 21 44 44.4 -1.1
KIV e 21 48 30.2
KIV e 21 55 06.6
KIV eSS SS 22 02 05.2 +1.1
KIV eSSS SSS 22 05 45.8
KIV pmax pmax
comp=Z,149nm,1.0s
KIV pmax pmax
comp=Z,593nm,4.3s
KVAR Kislovodsk Arr 93.61 44 S SKSac 21 55 06.1 -3.2
comp=Z,65nm,1.2s,baz=273,slow=2.4,SNR=4.6
BCA Borcka 93.64 47 P P 21 44 45.4 -0.2
BCA Borcka 93.64 47 ⇑P P 21 44 46.3 +0.7
SHA1 Shidzhatmaz 93.66 44deP P 21 44 45.7 -0.2
BNGB Bingl 93.67 49 P P 21 44 47.7 +1.7
BELG Belogornoye 93.74 35 S SKSac 21 55 06.5 -2.7
comp=Z,68nm,1.0s,baz=322,slow=20,SNR=17
BELG PKKPbc PKKPbc 22 01 52.9 +1.5
comp=Z,39nm,0.9s,baz=146,slow=3.6,SNR=4.2
BELG LR LR 22 24 25.2
comp=Z,10μm,22.0s,baz=290,slow=34
BELG Belogornoye 93.74 35d iP P 21 44 44.4 -1.3
BELG pmax pmax
comp=Z,163nm,0.9s
LSZ Lusaka 93.81 105 P P 21 44 49.3 +2.3
LSZ IAmb IAmb 21 45 10.1
comp=Z,737nm,1.1s
LSZ Lusaka 93.81 105⇓ iP P 21 44 50.7 +3.7
LSZ IAmb IAmb 21 45 09.7
comp=Z,898nm,1.0s
LSZ Lusaka 93.81 105 P P 21 44 49.3 +2.3
LSZ pmax pmax
comp=Z,737nm,1.1s
KBZ Khabaz 93.83 44 P P 21 44 46.8 +0.4
comp=Z,50nm,1.1s,baz=274,slow=5.6,SNR=56
KBZ S SKSac 21 55 07.5 -2.6
comp=Z,18nm,1.0s,baz=345,slow=20,SNR=11
KBZ PKKPbc PKKPbc 22 01 55.2 +4.4
comp=Z,5.8nm,0.9s,baz=135,slow=2.9,SNR=1.8
KBZ PKPPKP 22 10 01.8
comp=Z,1.1nm,0.8s,baz=123,slow=3.8,SNR=1.4
KBZ LR LR 22 22 23.1
comp=Z,10μm,21.9s,baz=283,slow=32
comp=Z,50nm,1.1s
KBZ Khabaz 93.83 44c iP P 21 44 47.8 +1.4
KBZ pmax pmax
comp=Z,224nm,1.1s
MAZI Mazidag 93.94 51 P P 21 44 47.9 +0.7
BUFB Buffelsbos 94.00 124 eP P 21 44 49.4 +2.1
BUFB IAmb IAmb 21 45 09.2
comp=Z,395nm,0.8s
HVD Gariep Dam 94.00 120⇓ iP P 21 44 50.0 +2.3
HVD IAmb IAmb 21 45 08.3
comp=Z,1μm,1.5s
BILL Bilibino 94.05 343 P P 21 44 47.0 +0.1
BILL IAmb IAmb 21 45 03.2
comp=Z,583nm,1.1s
BILL Bilibino 94.05 343c iP P 21 44 46.7 -0.2
BILL e*PP pP 21 45 22.2 +4.2
BILL i 21 48 34.5
BILL i S SKSac 21 55 13.6 +3.2
BILL i SS SS 22 02 12.1 +3.5
BILL eSSS SSS 22 05 57.6
BILL pmax pmax
comp=Z,663nm,1.1s
MTLB Matlabas, Limp 94.21 113 eP P 21 44 51.8 +3.1
MTLB IAmb IAmb 21 45 11.1
comp=Z,813nm,0.9s
MARD Mardin 94.23 51 P P 21 44 50.3 +1.7
KOPR Koprukoy-ERZUR 94.25 48 P P 21 44 50.6 +1.9
SOE Somerset East 94.42 122 P P 21 44 51.7 +2.3
SOE IAmb IAmb 21 45 13.3
comp=Z,444nm,0.9s
SOE Somerset East 94.42 122 eP P 21 44 51.8 +2.3
SOE IAmb IAmb 21 45 12.6
comp=Z,433nm,0.9s
SENK Senkaya-Erzuru 94.43 47 P P 21 44 50.8 +1.3
NHAM Northam, North 94.63 114 eP P 21 44 52.2 +1.6
NHAM IAmb IAmb 21 45 12.5
comp=Z,92nm,0.8s
NMMU Nelson Mandela 94.72 124 eP P 21 44 52.1 +1.5
GURO Guroymak-BITLI 94.81 49 P P 21 44 52.7 +1.5
GURO Guroymak-BITLI 94.81 49 P P 21 44 53.1 +1.9
GURO IAmb IAmb 21 45 13.2
comp=Z,314nm,0.8s
LEPH Lephalale, Lim 94.89 113⇓ iP P 21 44 54.2 +2.4
LEPH IAmb IAmb 21 45 14.4
comp=Z,713nm,1.0s
NYAT Nyati, Northwe 94.93 115 eP P 21 44 56.6 +4.6
NYAT IAmb IAmb 21 45 31.1
comp=Z,54nm,0.8s
KARS Kars 94.94 47 P P 21 44 53.4 +1.6
KARS Kars 94.94 47 P P 21 44 53.8 +2.0
KARS IAmb IAmb 21 45 37.1
comp=Z,1μm,1.3s
KARS Kars 94.94 47 P P 21 44 53.8 +2.0
KARS pmax pmax
comp=Z,1μm,1.3s
MATP Matopo 94.97 110 i P P 21 44 57.0 +4.7
MATP Matopo 94.97 110 i P P 21 44 57.0 +4.7
WDLM Western Deep L 94.97 116 eP P 21 44 54.4 +2.2
WDLM IAmb IAmb 21 45 14.4
comp=Z,951nm,0.8s
PRYS Parys 95.00 116⇓ iP P 21 44 54.6 +2.4
PRYS IAmb IAmb 21 45 14.4
comp=Z,427nm,0.8s
NVL N'lazarevskaya 95.08 161 eP P 21 44 50.8 -0.6
NVL eS SKSac 21 55 13.3 -2.2
NVL eSSS SSS 22 06 03.2
NVL pmax pmax
comp=Z,1μm,0.9s
NVL MLR MLR
comp=Z,12μm,17.0s
CRAIL Swartwater, Li 95.12 112 eP P 21 44 55.0 +2.2
HRAO HartRAO 95.12 115 eP P 21 44 54.5 +1.7
GRHM Grahamstown, E 95.19 123 P P 21 44 55.2 +2.3
GRHM IAmb IAmb 21 45 15.3
comp=Z,434nm,1.1s
GRHM Grahamstown, E 95.19 123⇓ iP P 21 44 54.8 +1.9
GRHM IAmb IAmb 21 45 14.7
comp=Z,426nm,1.1s
AGRB Hanur-Agry 95.21 48 P P 21 44 53.9 +0.8
TSWA Tswaing Meteor 95.40 115 eP P 21 44 56.4 +2.3
TSWA IAmb IAmb 21 45 16.8
comp=Z,426nm,1.1s
KRI Karoi 95.42 106⇓ iP P 21 44 57.5 +3.1
SNKL Senekal, Frees 95.58 116⇓ iP P 21 44 57.6 +2.7
SNKL IAmb IAmb 21 45 16.7
comp=Z,716nm,0.8s
RUST Rust De Winter 95.76 115 eP P 21 44 58.0 +2.3
RUST IAmb IAmb 21 45 16.4
comp=Z,562nm,1.7s
WTBG Waterberg Wild 95.92 113 eP P 21 44 58.6 +2.1
WTBG IAmb IAmb 21 45 17.9
comp=Z,140nm,1.2s
TASB TASBURUN-IGDIR 95.99 48 P P 21 44 57.8 +1.3
CLDR Caldiran 96.03 48 P P 21 44 52.6 -4.3
GNI Garni 96.30 47 P P 21 44 59.6 +1.6
GNI Garni 96.30 47 S SKSac 21 55 22.3 -1.6
comp=Z,16nm,0.9s,baz=308,slow=19,SNR=6.0
GNI Garni 96.30 47deP P 21 44 57.6 -0.4
GNI pmax pmax
comp=Z,200nm,0.8s
MUSN Musina, Limpop 96.52 111 eP P 21 45 01.8 +2.7
MUSN IAmb IAmb 21 45 22.5
comp=Z,139nm,0.8s
MUSN Musina, Limpop 96.52 111 i P P 21 45 04.1 +4.9
MUSN Musina, Limpop 96.52 111 i P P 21 45 04.1 +4.9
MPHEP Siloam, Limpop 96.90 112 eP P 21 45 03.9 +3.0
MPHEP IAmb IAmb 21 45 24.7
comp=Z,288nm,0.8s
CRLN Carolina, Mapu 97.22 115 eP Pdif 21 45 07.1 +4.6
CRLN IAmb IAmb 21 45 26.2
comp=Z,120nm,1.1s
MAK Makhachkala 97.24 44d iP P 21 45 01.6 -0.4
MAK e*PP pP 21 45 34.1 +1.0
MAK e*SP sP 21 45 48.2 +2.4
MAK e 21 48 59.3
MAK ePPP PPP 21 51 02.7
MAK e 21 55 26.3
MAK pmax pmax
comp=Z,467nm,1.3s
KSTD Kokstad 97.25 120 eP Pdif 21 45 05.8 +3.3
KSTD IAmb IAmb 21 45 27.4
comp=Z,150nm,1.1s
DULL Dullstroom, Mp 97.26 114 eP Pdif 21 45 06.8 +4.1
DULL IAmb IAmb 21 45 26.8
comp=Z,197nm,1.1s
NWCL Newcastle 97.35 117 eP Pdif 21 45 05.8 +2.9
NWCL IAmb IAmb 21 45 26.4
comp=Z,249nm,0.8s
TIXI Tiksi 97.44 356 LR LR 22 29 47.8
comp=Z,20μm,19.9s,baz=34,slow=36
LODK Lodwar 97.47 85 P Pdif 21 45 06.0 +2.2
LODK Lodwar 97.47 85 eP Pdif 21 45 07.3 +3.6
LODK eS SKSac 21 55 28.9 -1.7
LODK Lodwar 97.47 85 eP Pdif 21 45 06.7 +2.9
LODK eS SKSac 21 55 31.0 +0.3
LODK IAMs_20 IAMs_20 21 58 08.7
comp=E,14μm,28.9s
ARU Arti 97.55 29 P Pdif 21 45 03.4 +0.3
ARU IAmb IAmb 21 49 02.2
comp=Z,503nm,1.8s
ARU Arti 97.55 29 P P 21 45 02.8 -0.3
comp=Z,27nm,0.7s,baz=295,slow=4.1,SNR=27
ARU PP PP 21 49 00.0 -1.3
comp=Z,40nm,0.9s,baz=311,slow=19,SNR=1.5
ARU S SKSac 21 55 25.0 -4.2
comp=Z,15nm,0.9s,baz=270,slow=20,SNR=1.4
ARU PKKPbc PKKPdf 22 01 42.3 -0.3
comp=Z,7.1nm,0.5s,baz=87,slow=1.6,SNR=6.3
ARU LR LR 22 28 06.2
comp=Z,8μm,18.4s,baz=306,slow=35
comp=Z,27nm,0.7s
ARU Arti 97.55 29c iP Pdif 21 45 03.1 0.0
ARU 21 49 02.4
ARU S SKSac 21 55 23.3 -5.9
ARU PS PS 21 58 30.8 +35
ARU pmax pmax
comp=Z,51nm,1.9s
PDHT Panda Hill 97.61 98 i P Pdif 21 45 13.1 +8.6
PILG Pilgrimsrest, 97.68 114 eP Pdif 21 45 07.2 +2.6
PILG IAmb IAmb 21 45 28.4
comp=Z,139nm,0.7s
HOED Hoedspruit, Li 97.80 113 eP Pdif 21 45 06.8 +1.9
HOED IAmb IAmb 21 45 28.6
comp=Z,174nm,1.0s
MOPA Mopani 98.10 112 eP Pdif 21 45 09.2 +3.0
MOPA IAmb IAmb 21 45 29.9
comp=Z,430nm,1.1s
MOPA Mopani 98.10 112 i P Pdif 21 45 11.0 +4.7
MOPA Mopani 98.10 112 i P Pdif 21 45 11.0 +4.7
PMBG Pietermaritzbu 98.13 118 eP Pdif 21 45 12.3 +6.0
PMBG IAmb IAmb 21 45 26.2
comp=Z,623nm,2.0s
SVE Sverdlovsk 98.29 28d iP Pdif 21 45 06.9 +0.5
SVE i S SKSac 21 55 29.4 -3.6
SVE e 22 06 51.9
SVE pmax pmax
comp=Z,82nm,1.0s
CHIPN CHIPINGE 98.78 109 eP Pdif 21 45 13.6 +4.2
CHIPN CHIPINGE 98.78 109 i P Pdif 21 45 15.7 +6.2
CHIPN CHIPINGE 98.78 109 i P Pdif 21 45 15.7 +6.2
POGA Pongola 98.89 116 eP Pdif 21 45 14.3 +4.6
POGA IAmb IAmb 21 45 34.3
comp=Z,182nm,0.8s
ELIB Princess Elisa 98.94 162 dP Pdif 21 45 10.9 +1.8
comp=Z,93nm,0.0s
ELIB dPP PP 21 49 09.8 -2.6
ELIB dSKS SKSac 21 55 35.6 -0.1
ELIB dS ScS 21 56 26.1 -2.8
TEMBE Tembe Elephant 99.49 116 eP Pdif 21 45 31.2 +19
TEMBE IAmb IAmb 21 45 37.5
comp=Z,214nm,1.0s
FURI Furi 99.58 79 LR LR 22 31 30.3
comp=Z,8μm,19.3s,baz=288,slow=36
FURI Furi 99.58 79 eP Pdif 21 45 13.5 +0.1
FURI eS SKSac 21 55 46.1 +4.3
FURI IAMs_20 IAMs_20 22 14 06.9
comp=Z,28μm,34.4s
FURI Furi 99.58 79 eP Pdif 21 45 14.6 +1.2
FURI eS SKSac 21 55 37.5 -4.3
FURI IAMs_20 IAMs_20 21 59 07.0
comp=Z,17μm,20.1s
DODT Dodoma, Tanzan 99.60 95 i P Pdif 21 45 28.4 +15
KMBO Kilima Mbogo 100.18 89 P Pdif 21 45 17.7 +1.6
comp=Z,1.2nm,0.6s,baz=192,slow=6.9,SNR=2.6
KMBO PP PP 21 49 26.2 +2.8
comp=Z,9.8nm,0.9s,baz=284,slow=11,SNR=1.7
KMBO S SKSac 21 55 42.8 -1.8
comp=Z,4.5nm,1.0s,baz=252,slow=20,SNR=1.2
SHEM Shemya Is, Ala 100.31 329 P Pdif 21 45 14.9 -0.5
comp=Z,79nm,1.1s,baz=63,slow=16,SNR=2.3
AKTO Aktyubinsk 100.42 34 P Pdif 21 45 16.6 +0.6
comp=Z,13nm,0.7s,baz=304,slow=4.8,SNR=27
AKTO PP PP 21 49 18.9 -4.5
comp=Z,37nm,0.9s,baz=308,slow=9.0,SNR=1.9
AKTO S SKSac 21 55 41.5 -2.4
comp=Z,14nm,0.9s,baz=338,slow=19,SNR=10
AKTO PKKPbc PKKPbc 22 01 32.4 -0.8
comp=Z,8.8nm,0.9s,baz=157,slow=2.1,SNR=2.8
AKTO PKPPKP P'P'df 22 09 48.9 -0.3
comp=Z,17nm,1.3s,baz=107,slow=2.1,SNR=4.5
QSPA South Pole Qui 100.71 180 P Pdif 21 45 19.2 +2.2
comp=Z,67nm,1.0s,baz=142,slow=5.9,SNR=74
QSPA PP PP 21 49 19.6 -6.1
comp=Z,123nm,1.0s,baz=160,slow=10,SNR=4.2
QSPA S SKSac 21 55 42.9 -1.7
comp=Z,52nm,1.2s,baz=197,slow=19,SNR=24
QSPA PKKPbc PKKPbc 22 01 29.9 -4.0
comp=Z,19nm,0.8s,baz=347,slow=3.8,SNR=7.3
SEY Seymchan 101.70 344 PKKPbc PKKPbc 22 01 28.6 -1.3
comp=Z,4.9nm,0.5s,baz=202,slow=3.8,SNR=2.5
SEY Seymchan 101.70 344c iP Pdif 21 45 21.6 +0.2
SEY pmax pmax
comp=Z,308nm,1.7s
RAYN Ar Rayn 102.21 63 Pdif Pdif 21 45 26.1 +1.5
RAYN Ar Rayn 102.21 63 Pdiff Pdif 21 45 25.5 +0.9
RAYN Ar Rayn 102.21 63 P Pdif 21 45 26.1 +1.5
ATD Arta Tunnel 102.99 75 eP Pdif 21 45 29.0 +0.8
ATD eS SKSac 21 55 57.4 -0.1
ATD Arta Tunnel 102.99 75 eP Pdif 21 45 30.0 +1.8
ATD eS SKSac 21 55 57.6 +0.1
MA2 Magadan 104.91 343 PKKPbc PKKPbc 22 01 19.8 -0.6
comp=Z,7.4nm,0.5s,baz=174,slow=10,SNR=2.4
BVAR Borovoye Array 105.06 27 Pdiff Pdif 21 45 37.1 +0.5
comp=Z,4.2nm,0.7s,baz=313,slow=4.5,SNR=17
BVAR PP PP 21 49 55.0 -2.9
comp=Z,23nm,0.7s,baz=316,slow=8.0,SNR=5.1
BVAR PKKPbc PKKPbc 22 01 18.4 -1.3
comp=Z,4.5nm,0.4s,baz=136,slow=3.2,SNR=6.6
BVAR SKKPbc SKKPbc 22 04 46.3 -3.5
comp=Z,12nm,0.7s,baz=146,slow=3.5,SNR=2.7
BVAR PKPPKP P'P'df 22 09 40.3 +0.3
comp=Z,2.3nm,0.9s,baz=134,slow=4.2,SNR=2.6
YAK Yakutsk 106.82 354 Pdiff Pdif 21 45 43.5 -0.6
comp=Z,15nm,0.8s,baz=4.0,slow=9.7,SNR=3.5
YAK PP PP 21 50 03.1 -7.2
comp=Z,101nm,0.8s,baz=12,slow=13,SNR=6.1
YAK Yakutsk 106.82 354 eP Pdif 21 45 38.6 -5.6
YAK MLR MLR
comp=Z,10μm,15.0s
YAK MLR MLR
comp=N,13μm,17.0s
YAK MLR MLR
comp=E,3μm,16.0s
PET Petropavlovsk 107.28 335 eP Pdif 21 45 40.6 -5.8
PET e 21 56 12.2
PET eSP SP 21 59 29.5 +6.9
PET eSS SS 22 05 08.5 -4.1
PET eSSS SSS 22 09 18.6
PET pmax pmax
comp=Z,5μm,14.7s
PET MLR MLR
comp=Z,10μm,18.0s
PET MLR MLR
comp=Z,10μm,16.0s
PETK Petropavlovsk- 107.61 336 Pdiff Pdif 21 45 47.1 -0.9
comp=Z,0.6nm,0.5s,baz=64,slow=7.6,SNR=1.2
PETK PP PP 21 50 11.7 -4.8
comp=Z,46nm,0.9s,baz=51,slow=7.8,SNR=5.6
PETK PKKPbc PKKPbc 22 01 10.2 -1.7
comp=Z,3.2nm,0.7s,baz=180,slow=1.3,SNR=2.1
PETK PKKPab PKKPab 22 01 27.4 +0.7
comp=Z,22nm,1.0s,baz=208,slow=2.9,SNR=7.8
PETK PKPPKP P'P'df 22 09 35.4 +0.4
comp=Z,1.4nm,0.5s,baz=228,slow=3.7,SNR=2.3
ZAA0 Zalesovo Array 110.01 20 Pdif Pdif 21 45 58.6 +0.1
ZALV Zalesovo Beam 110.01 20 Pdiff Pdif 21 45 58.1 -0.5
comp=Z,1.8nm,0.8s,baz=327,slow=10,SNR=2.9
ZALV PKiKP PKiKP 21 49 59.1 -0.7
comp=Z,10.0nm,0.5s,baz=306,slow=1.2,SNR=11
ZALV PKKPbc PKKPbc 22 01 02.1 -2.2
comp=Z,8.0nm,0.6s,baz=174,slow=1.4,SNR=4.2
ASUD Al Ashush, Dub 110.27 59 PKiKP PKiKP 21 49 58.5 -2.6
KURK Kurchatov 110.27 25 i PKiKP PKiKP 21 50 00.2 -0.2
KURBB Kurchatov Arra 110.31 25 Pdiff Pdif 21 45 59.5 -0.5
comp=Z,2.8nm,1.0s,baz=317,slow=5.0,SNR=10
KURBB PKiKP PKiKP 21 50 00.2 -0.2
comp=Z,10nm,0.9s,baz=308,slow=2.3,SNR=4.6
KURBB PKKPbc PKKPbc 22 01 01.3 -1.9
comp=Z,4.2nm,0.6s,baz=143,slow=3.1,SNR=8.2
KURBB PKKPab PKKPab 22 01 13.6 -1.0
comp=Z,23nm,0.8s,baz=144,slow=3.5,SNR=4.1
KURBB PKPPKP P'P'df 22 09 29.7 -0.2
comp=Z,4.8nm,1.2s,baz=165,slow=2.1,SNR=2.1
SHME Shamm 110.39 57 PKiKP PKiKP 21 49 59.8 -1.5
NAZ Nazwa, Dubai 110.41 58 PKiKP PKiKP 21 49 58.6 -2.8
HATD Hatta, Dubai 110.87 58 PKiKP PKiKP 21 50 01.8 -0.5
BOD Bodaibo 111.66 2 eP Pdif 21 46 05.6 -0.2
BOD pmax pmax
comp=Z,50nm,1.7s
VOI Vohitsoka 112.09 109 eP PKiKP 21 50 07.9 +3.1
BTLS Baital 112.26 32 ePKiKP PKiKP 21 50 03.4 -1.0
baz=32
BTLS ePP PP 21 50 50.3 0.0
baz=32
BTLS Baital 112.26 32 i PKiKP PKiKP 21 50 03.4 -1.0
BTLS e 21 50 50.2
ABPO Ambohimpanom 112.32 106 eP PKiKP 21 50 06.5 +1.2
ABPO IAmb IAmb 21 50 22.6
comp=Z,75nm,1.0s
MAW Mawson 113.00 160 Pdiff Pdif 21 46 13.1 +1.6
comp=Z,6.0nm,1.1s,baz=237,slow=16,SNR=3.4
MAW PKiKP PKiKP 21 50 06.1 +1.1
comp=Z,12nm,0.7s,baz=226,slow=1.6,SNR=7.4
MAW PKKPbc PKKPbc 22 00 52.8 -2.0
comp=Z,7.7nm,0.9s,baz=63,slow=4.5,SNR=1.9
MAW SKKPbc SKKPbc 22 04 24.5 -5.5
comp=Z,31nm,0.9s,baz=347,slow=4.4,SNR=6.0
NKL Nikolayevsk 113.27 345 eP Pdif 21 46 10.6 -2.5
NKL i 21 50 04.6
NKL e 21 50 57.3
NKL MLR MLR
comp=N,41μm,17.0s
NKL MLR MLR
comp=Z,43μm,19.0s
SGDS Sogindy 113.66 32 ePKiKP PKiKP 21 50 06.7 -0.5
baz=32
SGDS ePP PP 21 51 00.8 +0.5
baz=32
SGDS Sogindy 113.66 32 i PKiKP PKiKP 21 50 06.6 -0.6
SGDS e 21 51 00.8
AAK Ala-Archa 114.15 33 PKiKP PKiKP 21 50 09.3 +1.0
AAK Ala-Archa 114.15 33 PKiKP PKiKP 21 50 09.0 +0.7
comp=Z,3.1nm,0.4s,baz=202,slow=3.1,SNR=4.1
AAK PP PP 21 51 03.1 -0.9
comp=Z,67nm,1.1s,baz=306,slow=8.0,SNR=6.2
AAK PKKPbc PKKPbc 22 00 50.5 0.0
comp=Z,6.3nm,0.5s,baz=135,slow=4.6,SNR=2.9
KUU Kurty 114.24 31 ePKP PKiKP 21 50 07.2 -1.0
baz=31
KUU Kurty 114.24 31 ePKiKP PKiKP 21 50 07.2 -1.0
TDK Taldyqorghan 114.46 29 ePKP PKiKP 21 50 07.8 -0.8
baz=29
TDK ePP PP 21 51 06.0 +0.2
baz=29
TDK Taldyqorghan 114.46 29 ePKiKP PKiKP 21 50 07.8 -0.8
TDK e 21 51 06.0
ARXS Arharly 114.75 30 i PKiKP PKiKP 21 50 08.3 -1.0
MK31 Makanchi Array 114.85 26⇓ iPKiKP PKiKP 21 50 07.2 -2.1
MKAR Makanchi Array 114.85 26 Pdiff Pdif 21 46 23.2 +2.8
comp=Z,0.4nm,0.9s,baz=324,slow=4.4,SNR=2.2
MKAR PKP PKiKP 21 50 08.7 -0.6
comp=Z,14nm,0.9s,baz=337,slow=1.7,SNR=10.0
MKAR PKKPbc PKKPbc 22 00 45.2 -2.8
comp=Z,12nm,0.9s,baz=145,slow=3.5,SNR=3.4
MKAR SKKPbc SKKPbc 22 04 19.1 -2.5
comp=Z,16nm,0.8s,baz=126,slow=3.8,SNR=3.9
AAA Alma-Ata 115.02 31 ePKP PKiKP 21 50 08.6 -1.3
baz=31
AAA Alma-Ata 115.02 31 ePKiKP PKiKP 21 50 08.5 -1.3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MDOK** | **Medeo** | **115.12** | **31** | *e*PKP | **PKiKP** | **21 50 09.1** | **-1.0** |
| | baz=31 | | | | | | | | |
| **MDOK** | **Medeo** | **115.12** | **31** | *e*PKiKP | **PKiKP** | **21 50 09.1** | **-1.0** |
| **TNSS** | **Tian-Shan** | **115.16** | **31** | *e*PKP | **PKiKP** | **21 50 09.2** | **-1.4** |
| | baz=31 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **115.16** | **31** | *e*PKiKP | **PKiKP** | **21 50 09.1** | **-1.4** |
| **ZEA** | **Zeya** | **115.22** | **353** | *e*P | **Pdif** | **21 46 32.6** | **+11** |
| ZEA | | | | *e* | | 21 51 11.5 | | | |
| ZEA | | | | *e* | | 22 00 48.5 | | | |
| ZEA | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| ZEA | | | | MLR | MLR | | | | |
| | comp=E,7μm,18.0s | | | | | | | | |
| ZEA | | | | MLR | MLR | | | | |
| | comp=N,12μm,21.0s | | | | | | | | |
| ZEA | | | | MLR | MLR | | | | |
| | comp=Z,15μm,20.0s | | | | | | | | |
| **ZSN** | **Zaisan** | **115.38** | **24** | *e*PKP | **PKiKP** | **21 50 09.5** | **-0.8** |
| | baz=24 | | | | | | | | |
| **ZSN** | **Zaisan** | **115.38** | **24** | *e*PKiKP | **PKiKP** | **21 50 09.4** | **-0.8** |
| **KPKS** | **Kokpek** | **115.72** | **30** | *e*PKP | **PKiKP** | **21 50 10.1** | **-1.2** |
| | baz=30 | | | | | | | | |
| **KPKS** | **Kokpek** | **115.72** | **30** | *e*PKiKP | **PKiKP** | **21 50 10.0** | **-1.2** |
| **ZHN** | **Zhinishke** | **115.82** | **31** | *e*PKP | **PKiKP** | **21 50 10.0** | **-1.5** |
| | baz=30 | | | | | | | | |
| **ZHN** | **Zhinishke** | **115.82** | **31** | *e*PKiKP | **PKiKP** | **21 50 09.9** | **-1.5** |
| **SATY** | **Saty** | **115.88** | **31** | *e*PKP | **PKiKP** | **21 50 10.6** | **-0.9** |
| | baz=31 | | | | | | | | |
| **SATY** | **Saty** | **115.88** | **31** | *e*PKiKP | **PKiKP** | **21 50 10.6** | **-0.9** |
| **KBL** | **Kabul** | **115.98** | **43** | | **PKPdf** | **21 50 11.9** | **-0.2** |
| **KBL** | **Kabul** | **115.98** | **43** | PKiKP | **PKPdf** | **21 50 11.9** | **-0.2** |
| **UZB** | **Uzynbulak** | **116.12** | **30** | *e*PKP | **PKPdf** | **21 50 11.1** | **-0.9** |
| | baz=30 | | | | | | | | |
| **UZB** | **Uzynbulak** | **116.12** | **30** | *e*PKiKP | **PKPdf** | **21 50 11.1** | **-0.9** |
| **MOY** | **Mondy** | **116.33** | **11** | *e*P | **Pdif** | **21 46 33.4** | **+6.5** |
| MOY | | | | pmax | pmax | | | | |
| | comp=Z,42nm,2.5s | | | | | | | | |
| **IRK** | **Irkutsk** | **116.33** | **9** | *e*P | **Pdif** | **21 46 34.5** | **+7.7** |
| IRK | | | | *e* | | 21 56 49.9 | | | |
| IRK | | | | pmax | pmax | | | | |
| | comp=Z,50nm,1.3s | | | | | | | | |
| **GRNR** | **Gornyy** | **116.50** | **346** | *e*P | **Pdif** | **21 46 27.8** | **+0.2** |
| GRNR | | | | MLR | MLR | | | | |
| | comp=E,5μm,18.0s | | | | | | | | |
| **KSH** | **Kashi** | **117.10** | **35** | PKP | **PKiKP** | **21 50 14.9** | **+0.9** |
| KSH | | | | PP | **PP** | **21 51 28.3** | **+3.6** |
| KSH | | | | SS | SS | 22 07 23.4 | -0.4 |
| KSH | | | | AMB | AMB | | | | |
| | comp=E,3μm,5.2s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=E,9μm,22.0s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=E,10μm,20.6s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=E,15μm,21.3s | | | | | | | | |
| **CIT** | **Chita** | **117.45** | **2** | *e*PKiKP | **PKPdf** | **21 50 12.2** | **-2.0** |
| CIT | | | | *e* | | 21 50 55.8 | | | |
| CIT | | | | *e* | | 21 51 25.4 | | | |
| **ZAK** | **Zakamensk** | **117.97** | **10** | *e*PKiKP | **PKPdf** | **21 50 14.5** | **-0.8** |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,82nm,1.7s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **118.19** | **340** | *e*P | **Pdif** | **21 46 38.1** | **+3.0** |
| YSS | | | | *i* | | 21 50 17.2 | | | |
| YSS | | | | | | 21 50 58.9 | | | |
| YSS | | | | *e* | | 21 56 56.5 | | | |
| YSS | | | | *e*PS | PKKPdf | 22 01 12.7 | +8.6 | | |
| YSS | | | | *e*SS | SS | 22 07 40.5 | +3.9 | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,100nm,0.9s | | | | | | | | |
| YSS | | | | MLR | MLR | | | | |
| | comp=Z,17μm,20.0s | | | | | | | | |
| YSS | | | | MLR | MLR | | | | |
| | comp=N,11μm,19.0s | | | | | | | | |
| YSS | | | | MLR | MLR | | | | |
| | comp=E,14μm,17.0s | | | | | | | | |
| **HEH** | **HeiHe** | **118.62** | **352** | SKS | **SKSac** | **21 57 03.4** | **+3.2** |
| **HEH** | **HeiHe** | **118.62** | **352** | PKP | **PKPdf** | **21 50 15.4** | **-1.0** |
| HEH | | | | PP | **PP** | **21 51 34.5** | **+0.2** |
| HEH | | | | AMB | AMB | | | | |
| | comp=E,7μm,6.5s | | | | | | | | |
| **KLR** | **Kul'dur** | **118.94** | **349** | *d i*PKiKP | **PKPdf** | **21 50 16.4** | **-0.7** |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| **NIL** | **Nilore** | **119.30** | **42** | | **PKPdf** | **21 50 17.4** | **-0.8** |
| **NIL** | **Nilore** | **119.30** | **42** | PKiKP | **PKPdf** | **21 50 17.5** | **-0.8** |
| **WMQ** | **Urumqi** | **119.49** | **24** | PKP | **PKPdf** | **21 50 18.3** | **-0.1** |
| WMQ | | | | PP | **PP** | **21 51 42.0** | **+1.3** |
| WMQ | | | | SKKS | | 21 58 25.4 | | | |
| WMQ | | | | SS | **SS** | **22 07 55.6** | **+1.7** |
| WMQ | | | | AMB | AMB | | | | |
| | comp=Z,2μm,5.9s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,24μm,21.5s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,27μm,21.5s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,20μm,21.5s | | | | | | | | |
| **URZ** | **Urewera** | **120.04** | **232** | PKKPbc | PKKPbc | 22 00 28.2 | -0.9 | | |
| | comp=Z,25nm,1.1s,baz=262,slow=3.5,SNR=1.4 | | | | | | | | |
| **MSVF** | **Nonsavu** | **120.71** | **256** | | **PKiKP** | **21 50 22.1** | **+0.6** |
| **MSVF** | **Nonsavu** | **120.71** | **256** | PKiKP | **PKiKP** | **21 50 22.1** | **+0.6** |
| **JKA** | **Kamikawa-asahi** | **120.72** | **339** | | **PKPdf** | **21 50 20.4** | **-0.2** |
| **ASAJ** | **Asahikawa** | **120.72** | **339** | PKiKP | **PKPdf** | **21 50 20.4** | **-0.2** |
| **ASAJ** | **Asahikawa** | **120.72** | **339** | P | **PKPdf** | **21 50 19.5** | **-1.1** |
| **SONM** | **Songino Array** | **120.94** | **8** | | **PKPdf** | **21 50 21.1** | **0.0** |
| **SONM** | **Songino Array** | **120.94** | **8** | Pdiff | **Pdif** | **21 46 59.3** | **+12** |
| | comp=Z,1.8nm,1.0s,baz=344,slow=3.7,SNR=4.4 | | | | | | | | |
| SONM | | | | PKP | **PKPdf** | **21 50 21.0** | **-0.2** |
| | comp=Z,17nm,0.4s,baz=329,slow=0.8,SNR=36 | | | | | | | | |
| SONM | | | | PP | **PP** | **21 51 48.7** | **-1.7** |
| | comp=Z,77nm,1.1s,baz=343,slow=3.5,SNR=4.6 | | | | | | | | |
| SONM | | | | SKP | | 21 53 44.7 | | | |
| | comp=Z,25nm,0.6s,baz=357,slow=2.9,SNR=2.2 | | | | | | | | |
| SONM | | | | PKKPbc | **PKKPbc** | **22 00 24.8** | **-1.7** | | |
| | comp=Z,17nm,0.7s,baz=179,slow=3.3,SNR=18 | | | | | | | | |
| SONM | | | | SKKPbc | SKKPbc | 22 03 59.8 | -3.0 | | |
| | comp=Z,7.4nm,0.8s,baz=172,slow=4.2,SNR=2.5 | | | | | | | | |
| SONM | | | | SKKP | | 22 04 20.1 | | | |
| | comp=Z,12nm,0.8s,baz=197,slow=3.7,SNR=4.1 | | | | | | | | |
| **SONM** | **Songino Array** | **120.94** | **8** | PKiKP | **PKPdf** | **21 50 21.0** | **-0.2** |
| **JMU** | **Jammu** | **120.96** | **41** | *e*P | **PKiKP** | **21 50 21.7** | **+0.2** |
| JMU | | | | IAmb | IAmb | 21 50 32.8 | | | |
| | comp=Z,108nm,0.8s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **121.00** | **8** | | **PKiKP** | **21 50 21.4** | **0.0** |
| **ULN** | **Ulaanbaatar** | **121.00** | **8** | *c i*PKiKP | **PKPdf** | **21 50 20.5** | **-0.8** |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,51nm,1.7s | | | | | | | | |
| **CMWZ** | **Cape Campbell** | **121.46** | **227** | P | PKiKP | 21 50 37.4 | +15 | | |
| **THN** | **Thein Dam** | **121.67** | **41** | *e*P | **PKiKP** | **21 50 23.3** | **+0.4** |
| THN | | | | IAmb | IAmb | 21 50 42.1 | | | |
| | comp=Z,281nm,1.0s | | | | | | | | |
| **HIZ** | **Hauiti** | **121.73** | **231** | PKPdf | **PKPdf** | **21 50 22.4** | **-0.3** |
| **TEY** | **Ternei** | **121.78** | **344** | *e*PKiKP | **PKPdf** | **21 50 16.5** | **-6.1** |
| **MOZ** | **McQueen's Vall** | **122.03** | **225** | P | PKiKP | 21 50 32.8 | +10 | | |
| **DHRM** | **DHARAMSHALA** | **122.16** | **41** | *e*P | **PKPdf** | **21 50 21.4** | **-2.6** |
| **JEM** | **Erimo** | **122.33** | **337** | P | **PKPdf** | **21 50 22.4** | **-1.4** |
| **ERM** | **Erimo** | **122.33** | **337** | | **PKPdf** | **21 50 23.1** | **-0.6** |
| **ERM** | **Erimo** | **122.33** | **337** | *d i*PKiKP | **PKPdf** | **21 50 21.6** | **-2.2** |
| ERM | | | | pmax | pmax | | | | |
| | comp=Z,114nm,1.7s | | | | | | | | |
| **TKNZ** | **Takaka Hill** | **122.55** | **228** | P | PKiKP | 21 50 32.5 | +8.1 | | |
| **LTZ** | **Lake Taylor** | **122.56** | **226** | P | **PKiKP** | **21 50 25.2** | **+0.8** |
| **OXZ** | **Oxford** | **122.57** | **225** | P | **PKiKP** | **21 50 25.1** | **+0.8** |
| **BHUJ** | **Bhuj** | **122.60** | **54** | *e*P | **PKiKP** | **21 50 25.8** | **+0.8** |
| BHUJ | | | | IAmb | IAmb | 21 50 43.7 | | | |
| | comp=Z,295nm,1.1s | | | | | | | | |
| **BHK** | **Bhakra** | **122.78** | **42** | *e*P | **PKiKP** | **21 50 25.4** | **+0.2** |
| BHK | | | | IAmb | IAmb | 21 50 40.4 | | | |
| | comp=Z,258nm,1.1s | | | | | | | | |
| **JSH** | **Shimam** | **122.90** | **340** | P | **PKPdf** | **21 50 24.3** | **-0.6** |
| **TMZ** | **Timaru** | **122.95** | **224** | P | **PKiKP** | **21 50 25.6** | **+0.5** |
| **ARCZ** | **Arundel** | **122.97** | **224** | P | **PKiKP** | **21 50 25.3** | **+0.2** |
| **ODZ** | **Otahua Downs** | **122.98** | **223** | P | **PKiKP** | **21 50 26.0** | **+0.9** |
| **BNX** | **BinXian** | **123.05** | **351** | ⇓PKP | **PKPdf** | **21 50 24.1** | **-1.0** |
| BNX | | | | SS | SS | 22 08 36.8 | -1.7 | | |
| BNX | | | | AMB | AMB | | | | |
| | comp=Z,4μm,7.3s | | | | | | | | |
| BNX | | | | LR | LR | | | | |
| | comp=Z,13μm,23.5s | | | | | | | | |
| BNX | | | | LR | LR | | | | |
| | comp=Z,14μm,19.7s | | | | | | | | |
| BNX | | | | LR | LR | | | | |
| | comp=Z,22μm,20.2s | | | | | | | | |
| **INZ** | **Inchbonnie** | **123.16** | **226** | P | **PKPdf** | **21 50 24.2** | **-1.1** |
| **SMLA** | **Simla** | **123.45** | **41** | *e*P | **PKiKP** | **21 50 26.4** | **0.0** |
| SMLA | | | | IAmb | IAmb | 21 50 45.5 | | | |
| | comp=Z,333nm,1.1s | | | | | | | | |
| **HNLY** | **HANLEY** | **123.49** | **39** | *e*P | **PKiKP** | **21 50 27.9** | **+0.7** |
| **LBZ** | **Lake Benmore** | **123.50** | **223** | P | **PKiKP** | **21 50 26.1** | **-0.1** |
| **WVZ** | **Waitaha Valley** | **123.55** | **225** | P | **PKPdf** | **21 50 25.6** | **-0.4** |
| **JOT** | **Ohata** | **123.66** | **338** | P | **PKPdf** | **21 50 26.1** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **123.70** | **347** | | **PKPdf** | **21 50 25.9** | **-0.5** |
| **USRK** | **Ussuriysk Ar.** | **123.70** | **347** | PKP | **PKPdf** | **21 50 25.4** | **-0.9** |
| | comp=Z,26nm,0.7s,baz=42,slow=3.4,SNR=19 | | | | | | | | |
| USRK | | | | PP | **PP** | **21 52 05.1** | **-3.8** | | |
| | comp=Z,88nm,0.8s,baz=18,slow=4.7,SNR=6.4 | | | | | | | | |
| USRK | | | | PKKPbc | **PKKPbc** | **22 00 15.4** | **-0.2** | | |
| | comp=Z,2.4nm,0.5s,baz=192,slow=2.1,SNR=4.7 | | | | | | | | |
| USRK | | | | SKKPbc | SKKPbc | 22 03 50.9 | -2.6 | | |
| | comp=Z,3.7nm,0.6s,baz=206,slow=2.7,SNR=5.1 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **123.70** | **347** | PKIKP | **PKPdf** | **21 50 25.9** | **-0.5** |
| **MDJ** | **Mudanjiang** | **123.78** | **349** | PKP | **PKPdf** | **21 50 24.8** | **-1.7** |
| MDJ | | | | SKS | **SKSdf** | **21 57 22.8** | **-4.7** |
| MDJ | | | | SS | **SS** | **22 08 50.9** | **+3.1** |
| MDJ | | | | AMB | AMB | | | | |
| | comp=Z,3μm,7.9s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **123.78** | **349** | | **PKPdf** | **21 50 26.0** | **-0.5** |
| **EAZ** | **Earnscleugh** | **123.80** | **222** | P | **PKiKP** | **21 50 29.1** | **+2.4** |
| **KLP** | **Kalpa** | **123.88** | **40** | *e*P | **PKiKP** | **21 50 28.1** | **+0.3** |
| KLP | | | | IAmb | IAmb | 21 50 31.8 | | | |
| | comp=Z,92nm,0.4s | | | | | | | | |
| **FOZ** | **Fox Glacier** | **124.04** | **224** | P | **PKPdf** | **21 50 26.8** | **-0.2** |
| **APZ** | **The Paps** | **124.05** | **220** | P | PKiKP | 21 50 38.8 | +12 | | |
| **WKZ** | **Wanaka** | **124.14** | **223** | P | **PKiKP** | **21 50 28.3** | **+0.9** |
| **JTM** | **Tenmabayashi** | **124.17** | **338** | | **PKPdf** | **21 50 26.3** | **-1.1** |
| **CASY** | **Casey** | **124.33** | **177** | | **PKiKP** | **21 50 27.7** | **+0.6** |
| **WHZ** | **Wether Hill Ro** | **124.44** | **221** | P | **PKiKP** | **21 50 28.3** | **+0.3** |
| **MLZ** | **Mavora Lakes** | **124.53** | **222** | P | **PKiKP** | **21 50 28.6** | **+0.4** |
| **DDI** | **Dehra Dun** | **124.56** | **41** | *e*P | **PKiKP** | **21 50 29.4** | **+0.6** |
| DDI | | | | IAmb | IAmb | 21 50 48.2 | | | |
| | comp=Z,890nm,1.1s | | | | | | | | |
| **JCZ** | **Jackson Bay** | **124.56** | **223** | P | **PKiKP** | **21 50 28.4** | **+0.1** |
| **AJM** | **Ajmer** | **124.61** | **47** | *e*P | **PKPdf** | **21 50 27.1** | **-1.5** |
| AJM | | | | IAmb | IAmb | 21 50 46.6 | | | |
| | comp=Z,166nm,1.1s | | | | | | | | |
| **KUDL** | **Kundal** | **124.90** | **44** | *e*P | **PKiKP** | **21 50 29.6** | **+0.1** |
| KUDL | | | | IAmb | IAmb | 21 50 44.5 | | | |
| | comp=Z,348nm,1.0s | | | | | | | | |
| **MSZ** | **Milford Sound** | **124.92** | **222** | P | **PKiKP** | **21 50 29.7** | **+0.8** |
| **NPLP** | **NPLP New Delhi** | **125.06** | **44** | *e*P | **PKPdf** | **21 50 28.9** | **-0.5** |
| NPLP | | | | IAmb | IAmb | 21 50 47.4 | | | |
| | comp=Z,188nm,1.0s | | | | | | | | |
| **NDI** | **New Delhi** | **125.06** | **43** | *e*P | **PKiKP** | **21 50 30.1** | **+0.3** |
| **DCZ** | **Deep Cove** | **125.12** | **221** | P | PKiKP | 21 50 41.3 | +12 | | |
| **CN2** | **Changchun** | **125.22** | **353** | PKP | **PKPdf** | **21 50 28.3** | **-1.0** |
| CN2 | | | | sPKP | | 21 51 05.6 | | | |
| CN2 | | | | *e*PP | **PP** | **21 52 21.8** | **+2.8** | | |
| CN2 | | | | *e*SS | SS | 22 09 06.1 | +0.3 | | |
| CN2 | | | | AMB | AMB | | | | |
| | comp=Z,3μm,6.0s | | | | | | | | |
| **JOM** | **Ohasama** | **125.23** | **337** | P | **PKiKP** | **21 50 29.8** | **0.0** |
| **SONA** | **Sohna** | **125.24** | **44** | *e*P | **PKPdf** | **21 50 29.4** | **-0.4** |
| SONA | | | | IAmb | IAmb | 21 50 46.6 | | | |
| | comp=Z,150nm,0.9s | | | | | | | | |
| **BHV** | **Bhavnagar** | **125.34** | **54** | *e*P | **PKPdf** | **21 50 29.6** | **-0.5** |
| BHV | | | | IAmb | IAmb | 21 50 45.9 | | | |
| | comp=Z,388nm,1.3s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **125.64** | **1** | ⇑*i*PKP | **PKPdf** | **21 50 29.6** | **-0.6** |
| XLT | | | | PP | **PP** | **21 52 23.9** | **+2.0** |
| XLT | | | | SKS | **SKSdf** | **21 57 28.8** | **-2.5** |
| XLT | | | | SKKS | **SKKSac** | **21 59 05.5** | **-4.3** |
| XLT | | | | SS | **SS** | **22 09 08.3** | **-3.0** |
| XLT | | | | LR | LR | | | | |
| | comp=Z,2μm,24.7s | | | | | | | | |
| XLT | | | | LR | LR | | | | |
| | comp=Z,12μm,20.4s | | | | | | | | |
| XLT | | | | LR | LR | | | | |
| | comp=Z,111μm,56.1s | | | | | | | | |
| **LGTI** | **Lohaghat** | **126.55** | **41** | *e*P | **PKPdf** | **21 50 30.0** | **-2.2** |
| LGTI | | | | IAmb | IAmb | 21 50 51.5 | | | |
| | comp=Z,220nm,0.8s | | | | | | | | |
| **JYA** | **Atsumi** | **126.60** | **338** | P | **PKPdf** | **21 50 32.1** | **0.0** |
| **JMM** | **Marumori** | **126.82** | **337** | | **PKPdf** | **21 50 32.3** | **-0.2** |
| **JMM** | **Marumori** | **126.82** | **337** | P | **PKPdf** | **21 50 31.4** | **-1.1** |
| **GTA** | **Gaotai** | **127.60** | **17** | Pdif | **Pdif** | **21 47 21.0** | **+3.6** |
| GTA | | | | PKP | **PKPdf** | **21 50 32.4** | **-1.8** |
| GTA | | | | PP | **PP** | **21 52 37.8** | **+2.7** |
| GTA | | | | PKS | **PKSdf** | **21 54 09.6** | **-1.3** |
| GTA | | | | SKS | **SKSdf** | **21 57 35.8** | **+0.6** |
| GTA | | | | SKKS | **SKKSac** | **21 59 22.8** | **+0.3** |
| GTA | | | | SS | **SS** | **22 09 43.1** | **+6.9** |
| GTA | | | | AMB | AMB | | | | |
| | comp=Z,3μm,7.3s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,19μm,25.0s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,9μm,24.4s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,40μm,25.0s | | | | | | | | |
| **JSD** | **Sado** | **127.62** | **339** | | **PKPdf** | **21 50 33.2** | **-0.8** |
| **JSD** | **Sado** | **127.62** | **339** | P | **PKPdf** | **21 50 33.0** | **-1.0** |
| **GUNA** | **GUNA** | **127.64** | **47** | *e*P | **PKPdf** | **21 50 33.4** | **-1.1** |
| GUNA | | | | IAmb | IAmb | 21 50 51.8 | | | |
| | comp=Z,616nm,1.1s | | | | | | | | |
| **JHNI** | **Jhansi** | **128.00** | **46** | *e*P | **PKPdf** | **21 50 35.1** | **0.0** |
| JHNI | | | | IAmb | IAmb | 21 50 50.2 | | | |
| | comp=Z,392nm,1.0s | | | | | | | | |
| **POO** | **Poona** | **128.38** | **56** | *e*P | **PKiKP** | **21 50 36.5** | **-0.2** |
| POO | | | | IAmb | IAmb | 21 50 55.7 | | | |
| | comp=Z,253nm,1.0s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **128.44** | **5** | ⇑*i*PKP | **PKPdf** | **21 50 35.8** | **+0.1** |
| HHC | | | | PP | **PP** | **21 52 42.8** | **+2.4** |
| HHC | | | | SKS | **SKSac** | **21 57 31.0** | **-1.7** |
| HHC | | | | SKKS | **SKKSac** | **21 59 22.0** | **-5.6** |
| HHC | | | | SS | **SS** | **22 09 51.8** | **+5.6** |
| HHC | | | | LR | LR | | | | |
| | comp=Z,12μm,19.6s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,16μm,21.6s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,20μm,19.1s | | | | | | | | |
| **BTO** | **Baotou** | **128.52** | **7** | *e*PKP | **PKPdf** | **21 50 34.8** | **-1.0** |
| BTO | | | | PP | **PP** | **21 52 40.8** | **-0.2** |
| BTO | | | | SKS | **SKSdf** | **21 57 37.3** | **+0.5** |
| BTO | | | | SS | **SS** | **22 09 47.3** | **+0.1** |
| BTO | | | | LR | LR | | | | |
| | comp=Z,32μm,20.0s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,17μm,16.3s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,26μm,19.9s | | | | | | | | |
| **BHPL** | **Bhopal** | **128.56** | **49** | *e*P | **PKPdf** | **21 50 35.7** | **-0.6** |
| **GOMU** | **GeErMu** | **128.82** | **23** | PKP | **PKPdf** | **21 50 35.8** | **-1.1** |
| GOMU | | | | PP | **PP** | **21 52 42.9** | **-0.7** |
| GOMU | | | | SS | SS | 22 09 51.8 | -0.3 | | |
| GOMU | | | | AMB | AMB | | | | |
| | comp=Z,5μm,7.8s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,31μm,20.0s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,12μm,19.6s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,35μm,20.1s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **128.97** | **338** | | **PKPdf** | **21 50 36.9** | **+0.2** |
| **MAJO** | **Matsushiro** | **128.97** | **338** | | **PKPdf** | **21 50 36.3** | **-0.4** |
| **MAJO** | **Matsushiro** | **128.97** | **338** | PKIKP | **PKPdf** | **21 50 36.3** | **-0.4** |
| **MAT** | **Matsushiro** | **128.97** | **338** | P | **PKPdf** | **21 50 35.3** | **-1.4** |
| **MJAR** | **Matsushiro Arr** | **128.97** | **338** | PKP | **PKPdf** | **21 50 35.8** | **-0.9** |
| | comp=Z,57nm,0.9s,baz=33,slow=1.3,SNR=26 | | | | | | | | |
| MJAR | | | | PP | **PP** | **21 52 42.6** | **-1.4** | | |
| | comp=Z,148nm,1.2s,baz=6.6,slow=7.5,SNR=8.2 | | | | | | | | |
| MJAR | | | | SKPbc | SKiKP | 21 53 44.7 | -18 | | |
| | comp=Z,470nm,1.0s,baz=27,slow=3.2,SNR=20 | | | | | | | | |
| MJAR | | | | SKKPbc | **SKKPbc** | **22 03 34.3** | **-1.1** | | |
| | comp=Z,18nm,0.9s,baz=197,slow=3.9,SNR=6.5 | | | | | | | | |
| **SUJ** | **Sinuiju** | **128.98** | **353** | PKPbc | **PKPdf** | **21 50 34.8** | **-1.7** |
| SUJ | | | | AmB | | | | | |
| | comp=Z,157nm,1.2s | | | | | | | | |
| SUJ | | | | AMS | AMS | | | | |
| | comp=Z,56μm,38.1s | | | | | | | | |
| **JRY** | **Ryogami san** | **129.17** | **337** | P | **PKPdf** | **21 50 32.8** | **-4.3** |
| **KAD** | **Karad** | **129.27** | **57** | *e*P | **PKPdf** | **21 50 37.4** | **-0.3** |
| **BJI** | **Beijing** | **129.50** | **1** | Pdif | **Pdif** | **21 47 23.8** | **-1.8** |
| BJI | | | | PKP | **PKPdf** | **21 50 36.0** | **-1.5** |
| BJI | | | | sPKP | | 21 51 16.6 | | | |
| BJI | | | | PP | **PP** | **21 52 47.8** | **+0.7** |
| BJI | | | | SKS | **SKSac** | **21 57 32.8** | **-2.7** |
| BJI | | | | SS | **SS** | **22 10 06.6** | **+7.7** |
| BJI | | | | LR | LR | | | | |
| | comp=Z,7μm,22.3s | | | | | | | | |
| BJI | | | | LR | LR | | | | |
| | comp=Z,7μm,21.4s | | | | | | | | |
| **BJT** | **Baijiatuao** | **129.52** | **1** | | **PKPdf** | **21 50 37.6** | **0.0** |
| **BJT** | **Baijiatuao** | **129.52** | **1** | PKIKP | **PKPdf** | **21 50 37.6** | **0.0** |
| **JGN** | **Niukaw** | **129.57** | **339** | P | **PKPdf** | **21 50 37.2** | **-0.7** |
| **JOD2** | **Odawara 2** | **129.76** | **337** | P | **PKPdf** | **21 50 36.8** | **-1.5** |
| **PYAG** | **Pyongyang** | **129.84** | **351** | PKPbc | **PKPdf** | **21 50 36.5** | **-1.7** |
| PYAG | | | | PP | **PP** | **21 52 51.2** | **+1.8** | | |
| PYAG | | | | AmB | | | | | |
| | comp=Z,92nm,1.2s | | | | | | | | |
| PYAG | | | | AMS | AMS | | | | |
| | comp=Z,22μm,28.2s | | | | | | | | |
| **ALBI** | **Allahabad** | **130.35** | **43** | *e*P | **PKPdf** | **21 50 38.7** | **-0.9** |
| ALBI | | | | IAmb | IAmb | 21 50 56.8 | | | |
| | comp=Z,533nm,1.3s | | | | | | | | |
| **DL2** | **Dalian** | **130.46** | **355** | Pdif | **Pdif** | **21 47 33.3** | **+3.4** |
| DL2 | | | | PKP | **PKPdf** | **21 50 38.8** | **-0.6** |
| DL2 | | | | PP | **PP** | **21 52 58.8** | **+5.4** |
| DL2 | | | | SKS | **SKSdf** | **21 57 41.6** | **+1.5** |
| DL2 | | | | AMB | AMB | | | | |
| | comp=Z,6μm,5.7s | | | | | | | | |
| **INU** | **Inuyama** | **130.46** | **339** | | **PKPdf** | **21 50 39.4** | **-0.1** |
| **HJU** | **Haeju** | **130.83** | **351** | PKPbc | **PKPdf** | **21 50 38.9** | **-1.2** |
| HJU | | | | AMS | AMS | | | | |
| | comp=Z,408nm,4.1s | | | | | | | | |
| **KS19** | **Wonju Array Si** | **130.99** | **349** | | **PKPdf** | **21 50 40.2** | **-0.3** |
| **NGP** | **Nagpur** | **131.01** | **50** | *e*P | **PKPdf** | **21 50 40.5** | **-0.5** |
| **KSRS** | **Korea Array** | **131.02** | **349** | PKP | **PKPdf** | **21 50 40.0** | **-0.5** |
| | comp=Z,52nm,1.0s,baz=8.8,slow=1.2,SNR=29 | | | | | | | | |
| KSRS | | | | PP | **PP** | **21 52 55.7** | **-1.4** | | |
| | comp=Z,56nm,0.8s,baz=6.4,slow=5.2,SNR=7.8 | | | | | | | | |
| KSRS | | | | SKPbc | **SKPbc** | **21 53 52.1** | **-2.0** | | |
| | comp=Z,656nm,1.1s,baz=3.1,slow=3.6,SNR=29 | | | | | | | | |
| KSRS | | | | SKKPbc | **SKKPbc** | **22 03 26.6** | **-1.5** | | |
| | comp=Z,22nm,0.9s,baz=199,slow=2.4,SNR=4.7 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **131.04** | **349** | PKPdf | **PKPdf** | **21 50 39.9** | **-0.7** |
| **KSAR** | **Wonju Array Be** | **131.04** | **349** | PKiKP | **PKPdf** | **21 50 39.9** | **-0.7** |
| **INCN** | **Inchon** | **131.23** | **350** | | **PKPdf** | **21 50 40.1** | **-0.9** |
| **INCN** | **Inchon** | **131.23** | **350** | PKIKP | **PKPdf** | **21 50 40.1** | **-0.9** |
| **DZM** | **Mont Dzumac** | **131.53** | **250** | PKPdf | **PKPdf** | **21 50 42.2** | **+0.2** |
| **TIY** | **Taiyuan** | **131.63** | **5** | *e*Pdif | **Pdif** | **21 47 39.3** | **+4.1** |
| TIY | | | | PKP | **PKPdf** | **21 50 41.9** | **+0.1** |
| TIY | | | | PP | **PP** | **21 53 02.8** | **+1.7** |
| TIY | | | | SKKS | | 21 59 38.6 | | | |
| TIY | | | | SS | **SS** | **22 10 30.3** | **+5.1** |
| TIY | | | | AMB | AMB | | | | |
| | comp=Z,3μm,12.0s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,18μm,23.4s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,15μm,20.6s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,21μm,27.5s | | | | | | | | |
| **LZH** | **Lanzhou** | **131.80** | **14** | P | PKiKP | 21 50 56.1 | +13 | | |
| **LZH** | **Lanzhou** | **131.80** | **14** | Pdif | **Pdif** | **21 47 37.8** | **+1.7** |
| LZH | | | | PKP | **PKiKP** | **21 50 42.8** | **-0.5** |
| LZH | | | | sPKP | | 21 51 25.8 | | | |
| LZH | | | | PP | **PP** | **21 53 05.1** | **+2.7** |
| LZH | | | | PKS | | 21 54 10.3 | | | |
| LZH | | | | SKS | **SKSac** | **21 57 38.1** | **-4.3** |
| LZH | | | | SS | **SS** | **22 10 33.9** | **+6.2** |
| LZH | | | | AMB | AMB | | | | |
| | comp=Z,5μm,7.9s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,19μm,22.9s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,20μm,22.2s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,55μm,23.5s | | | | | | | | |
| **MNGI** | **Mangalore** | **131.90** | **62** | *e*P | **PKiKP** | **21 50 43.7** | **-0.1** |
| **HNS** | **HongShan** | **132.09** | **3** | PKP | **PKPdf** | **21 50 38.5** | **-4.0** |
| HNS | | | | PP | **PP** | **21 53 05.6** | **+1.7** |
| HNS | | | | SKS | **SKSac** | **21 57 40.4** | **-2.3** |
| HNS | | | | SS | **SS** | **22 10 29.9** | **-0.7** |
| HNS | | | | LR | LR | | | | |
| | comp=Z,21μm,19.8s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,9μm,17.5s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,23μm,19.4s | | | | | | | | |
| **TJN** | **Taejon** | **132.17** | **349** | *c i*PKiKP | **PKPdf** | **21 50 41.2** | **-1.5** |
| **LSA** | **Lhasa** | **132.67** | **31** | PKP | PKPdf | 21 50 28.1 | -16 | | |
| LSA | | | | PP | **PP** | **21 53 11.8** | **+2.9** |
| **LSA** | **Lhasa** | **132.67** | **31** | | **PKPdf** | **21 50 44.2** | **-0.3** |
| **LSA** | **Lhasa** | **132.67** | **31** | PKiKP | **PKPdf** | **21 50 43.8** | **-0.7** |
| **LSA** | **Lhas

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **137.82** | **268** | PKIKP | **PKPdf** | **21 50 53.6** | **-0.2** |
| **IMP** | **Imphal** | **138.07** | **32** | *e*P | **PKPdf** | **21 50 52.4** | **-1.7** |
| IMP | | | | IAmb | IAmb | 21 51 13.1 | |
| | comp=Z,198nm,1.0s | | | | | | |
| **SSE** | **Sheshan** | **138.25** | **355** | PKP | **PKPdf** | **21 50 52.6** | **-1.6** |
| SSE | | | | PP | **PP** | **21 53 42.1** | **-0.6** |
| SSE | | | | SS | SS | 22 11 44.9 | +0.6 |
| SSE | | | | AMB | AMB | | |
| | comp=Z,2μm,6.6s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,6μm,28.1s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,6μm,23.9s | | | | | | |
| **WHN** | **Wuhan** | **138.90** | **4** | PKP | **PKPdf** | **21 50 49.4** | **-6.0** |
| WHN | | | | PP | **PP** | **21 53 47.0** | **+0.3** |
| WHN | | | | PKS | | 21 54 27.8 | |
| WHN | | | | SKKS | | 22 00 27.3 | |
| WHN | | | | LR | LR | | |
| | comp=Z,28μm,15.5s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,26μm,14.4s | | | | | | |
| **PALK** | **Pallekele** | **139.60** | **65** | PKPdf | **PKPdf** | **21 50 56.5** | **-0.6** |
| **PALK** | **Pallekele** | **139.60** | **65** | SKKPbc | SKKPbc | 22 02 56.1 | +0.2 |
| | comp=Z,14nm,1.0s,baz=268,slow=1.5,SNR=1.9 | | | | | | |
| **PALK** | **Pallekele** | **139.60** | **65** | PKIKP | **PKPdf** | **21 50 56.6** | **-0.6** |
| **PZH** | **PanZhiHua** | **140.11** | **22** | Pdif | **Pdif** | **21 48 10.1** | **-3.1** |
| PZH | | | | PKP | **PKPdf** | **21 50 55.0** | **-2.9** |
| PZH | | | | AMB | AMB | | |
| | comp=Z,3μm,5.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,11μm,30.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,11μm,30.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,35μm,31.4s | | | | | | |
| **TNCH** | **TengChong** | **140.12** | **27** | PKP | **PKPdf** | **21 50 50.4** | **-7.6** |
| TNCH | | | | sPKP | | 21 51 32.6 | |
| TNCH | | | | PP | **PP** | **21 53 53.8** | **-1.2** |
| TNCH | | | | SKS | **SKSdf** | **21 57 53.4** | **-4.5** |
| TNCH | | | | SKKS | **SKKSac** | **22 00 33.9** | **-5.0** |
| TNCH | | | | AMB | AMB | | |
| | comp=Z,8μm,5.9s | | | | | | |
| **GYA** | **Guiyang** | **141.68** | **15** | ⇓PKP | **PKPdf** | **21 50 54.8** | **-5.9** |
| GYA | | | | PP | **PP** | **21 54 06.1** | **+2.0** |
| GYA | | | | SKKS | | 22 00 42.5 | |
| GYA | | | | SS | **SS** | **22 12 23.4** | **-1.8** |
| GYA | | | | LR | LR | | |
| | comp=Z,14μm,20.7s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,7μm,19.1s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,18μm,27.7s | | | | | | |
| **KMI** | **Kunming** | **141.73** | **21** | PKP | **PKPdf** | **21 50 56.0** | **-5.0** |
| KMI | | | | PP | **PP** | **21 54 05.5** | **+0.8** |
| KMI | | | | PKS | | 21 54 30.3 | |
| KMI | | | | SKKS | | 22 00 40.5 | |
| KMI | | | | LR | LR | | |
| | comp=Z,14μm,24.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,13μm,24.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,45μm,63.9s | | | | | | |
| **CAN** | **Canberra** | **142.06** | **225** | | **PKPdf** | **21 51 01.3** | **+0.3** |
| **CAN** | **Canberra** | **142.06** | **225** | PKIKP | **PKPdf** | **21 51 01.3** | **+0.3** |
| **GULI** | **GuiLin** | **143.62** | **10** | ⇓PKP | PKPbc | 21 51 01.8 | +0.1 |
| GULI | | | | LR | LR | | |
| | comp=Z,10μm,23.9s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,10μm,24.0s | | | | | | |
| GULI | | | | LR | LR | | |
| | comp=Z,14μm,24.5s | | | | | | |
| **TATO** | **Taipei** | **144.27** | **353** | | **PKPab** | **21 51 02.4** | **-0.8** |
| **QZH** | **Quanzhou** | **144.53** | **358** | PKP | **PKPab** | **21 51 03.3** | **-0.9** |
| QZH | | | | pPKP | **pPKPdf** | **21 51 32.8** | **-5.3** |
| QZH | | | | SS | SS | 22 13 03.3 | +5.9 |
| QZH | | | | LR | LR | | |
| | comp=Z,18μm,30.9s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,13μm,22.3s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,44μm,27.5s | | | | | | |
| **YOJ** | **Yonaguni jima** | **144.56** | **351** | | **PKPab** | **21 51 02.9** | **-1.4** |
| **YOJ** | **Yonaguni jima** | **144.56** | **351** | PKIKP | **PKPab** | **21 51 02.9** | **-1.4** |
| **YOJ** | **Yonaguni jima** | **144.56** | **351** | P | **PKPab** | **21 51 02.6** | **-1.7** |
| **YHNB** | **Yeheng** | **144.59** | **353** | | **PKPab** | **21 51 03.2** | **-1.4** |
| **RABL** | **Rabaul** | **144.66** | **278** | | **PKPab** | **21 51 03.5** | **-1.7** |
| **EIDS** | **Eidsvold** | **144.68** | **241** | | **PKPab** | **21 51 04.6** | **-0.2** |
| **CRAI** | **Chiangrai** | **145.12** | **28** | | **PKPbc** | **21 51 05.7** | **-0.7** |
| **CM31** | **Chiang Mai Arr** | **145.92** | **32** | | **PKPbc** | **21 51 09.1** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **145.92** | **32** | PKPbc | **PKPdf** | **21 51 07.8** | **-0.4** |
| | comp=Z,81nm,0.6s,baz=313,slow=3.8,SNR=164 | | | | | | |
| CMAR | | | | SKPbc | **SKPbc** | **21 54 36.1** | **-1.2** |
| | comp=Z,260nm,1.0s,baz=319,slow=2.9,SNR=5.7 | | | | | | |
| CMAR | | | | SKKPab | **SKKPbc** | **22 02 29.5** | **-0.8** |
| | comp=Z,32nm,0.9s,baz=152,slow=4.1,SNR=8.4 | | | | | | |
| **PHRA** | **Phrae** | **146.54** | **30** | | **PKPdf** | **21 51 09.3** | **+0.1** |
| **HKPS** | **Hong Kong Po S** | **147.08** | **5** | | **PKPdf** | **21 51 10.5** | **+0.5** |
| **PBA** | **Port Blair** | **147.14** | **48** | *e*P | **PKPdf** | **21 51 10.4** | **+0.1** |
| PBA | | | | IAmb | IAmb | 21 51 34.5 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **MCO** | **Taipa Grande** | **147.18** | **6** | P | **PKPbc** | **21 51 12.0** | **-0.5** |
| **STKA** | **Stephens Creek** | **149.09** | **223** | | **PKPdf** | **21 51 12.8** | **-0.3** |
| **STKA** | **Stephens Creek** | **149.09** | **223** | PKP | **PKPdf** | **21 51 12.1** | **-0.9** |
| | comp=Z,43nm,0.5s,baz=117,slow=4.6,SNR=43 | | | | | | |
| STKA | | | | PKPbc | **PKPbc** | **21 51 16.1** | **-1.2** |
| | comp=Z,102nm,0.7s,baz=132,slow=2.7,SNR=35 | | | | | | |
| **STKA** | **Stephens Creek** | **149.09** | **223** | PKHKP | PKPpre | 21 51 12.8 | |
| **QIZ** | **Qiongzhong** | **149.59** | **14** | PKPbc | **PKPdf** | **21 51 12.5** | **-1.7** |
| QIZ | | | | pPKP | **pPKPdf** | **21 51 41.0** | **-5.7** |
| QIZ | | | | SKKS | | 22 01 26.8 | |
| QIZ | | | | SS | **SS** | **22 13 54.3** | **-0.5** |
| QIZ | | | | AMB | AMB | | |
| | comp=Z,6μm,10.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,14μm,24.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,11μm,25.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,42μm,57.4s | | | | | | |
| **QIZ** | **Qiongzhong** | **149.59** | **14** | | **PKPdf** | **21 51 13.5** | **-0.7** |
| **PMG** | **Port Moresby** | **150.38** | **270** | | **PKPdf** | **21 51 14.9** | **-0.6** |
| **PMG** | **Port Moresby** | **150.38** | **270** | *c i*PKIKP | **PKPbc** | **21 51 18.6** | **-2.3** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,208nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **150.43** | **248** | PKP | **PKPdf** | **21 51 15.2** | **-0.4** |
| | comp=Z,6.9nm,1.0s,baz=96,slow=1.0,SNR=26 | | | | | | |
| CTA | | | | PKPbc | **PKiKP** | **21 51 21.4** | **-0.2** |
| | comp=Z,22nm,0.8s,baz=119,slow=2.1,SNR=33 | | | | | | |
| **CTAO** | **Charters Tower** | **150.43** | **248** | | **PKPdf** | **21 51 15.1** | **-0.4** |
| **CTAO** | **Charters Tower** | **150.43** | **248** | PKIKP | **PKPdf** | **21 51 15.1** | **-0.4** |
| **PIP** | **Pasuquin** | **150.94** | **353** | ⇑*e*P | **PKPbc** | **21 51 21.3** | **-0.8** |
| **CMBY** | **CAMPBELL BAY** | **150.98** | **54** | *e*P | **PKPdf** | **21 51 14.9** | **-1.6** |
| CMBY | | | | IAmb | IAmb | 21 51 40.9 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **CVP** | **Callao Caves** | **151.38** | **351** | ⇑*e*P | **PKPbc** | **21 51 21.8** | **-1.3** |
| **BBOO** | **Buckeboo** | **151.93** | **216** | | **PKPdf** | **21 51 17.8** | **+0.3** |
| **PCPS** | **Palayan City** | **154.49** | **351** | ⇓*e*P | **PKPdf** | **21 51 20.9** | **-0.7** |
| **LQP** | **Lukban** | **154.94** | **350** | ⇓*e*P | **PKPdf** | **21 51 22.9** | **+0.4** |
| **GQP** | **Guinayangan** | **154.97** | **348** | ⇓*e*P | **PKPdf** | **21 51 24.0** | **+1.7** |
| **PLP** | **Palo** | **156.90** | **340** | ⇑*e*P | **PKPdf** | **21 51 22.2** | **-2.6** |
| **IBAJ** | **Ibajay, Aklan** | **157.06** | **347** | ⇑*e*P | **PKPab** | **21 51 52.5** | **-3.1** |
| **FORT** | **Forrest** | **157.59** | **205** | PKPdf | **PKPdf** | **21 51 24.2** | **-1.1** |
| **NWAO** | **Narrogin (SRO)** | **157.89** | **180** | PKP | **PKPdf** | **21 51 25.2** | **-0.4** |
| | comp=Z,38nm,1.1s,baz=178,slow=4.3,SNR=4.7 | | | | | | |
| NWAO | | | | PKPab | **PKPab** | **21 52 00.5** | **+1.6** |
| | comp=Z,150nm,1.0s,baz=176,slow=3.9,SNR=4.9 | | | | | | |
| **SCPH** | **Surigao** | **158.00** | **337** | ⇑*e*P | **PKPdf** | **21 51 24.7** | **-1.5** |
| **LLP** | **Lapu-Lapu** | **158.02** | **342** | *e*P | **PKPdf** | **21 51 25.7** | **-0.5** |
| **TBP** | **Tagbilaran** | **158.64** | **341** | ⇑*e*P | **PKPdf** | **21 51 25.8** | **-1.2** |
| **BIPH** | **Bislig** | **159.09** | **333** | ⇓*e*P | **PKPdf** | **21 51 25.8** | **-1.8** |
| **SNPH** | **Sibulan** | **159.16** | **343** | *e*P | **PKPdf** | **21 51 24.7** | **-3.0** |
| **AS31** | **Alice Springs** | **159.45** | **229** | | **PKPdf** | **21 51 27.8** | **+0.1** |
| **ASAR** | **Alice Springs** | **159.45** | **229** | | **PKPdf** | **21 51 27.7** | **0.0** |
| **ASAR** | **Alice Springs** | **159.45** | **229** | PKP | **PKPdf** | **21 51 25.2** | **-2.5** |
| | comp=Z,9.8nm,0.6s,baz=128,slow=1.4,SNR=64 | | | | | | |
| **ASAR** | **Alice Springs** | **159.45** | **229** | PKIKP | **PKPdf** | **21 51 27.7** | **0.0** |
| **CGP** | **Cagayan de Oro** | **159.51** | **338** | ⇓*e*P | PKPdf | 21 51 39.7 | +12 |
| **DCPH** | **Dipolog City** | **159.84** | **342** | ⇑*e*P | PKPdf | 21 51 39.5 | +11 |
| **DAV** | **Davao City (W)** | **160.42** | **334** | P | PKPdf | 21 51 41.0 | +12 |
| **DMPH** | **Davao City--Mi** | **160.44** | **334** | ⇓*e*P | PKPdf | 21 51 40.1 | +11 |
| **KCP** | **Kidapawan** | **160.68** | **335** | ⇑*i*P | **PKPdf** | **21 51 28.5** | **-1.0** |
| **WRA** | **Warramunga Arr** | **161.03** | **239** | | **PKPdf** | **21 51 28.0** | **-1.6** |
| **WRA** | **Warramunga Arr** | **161.03** | **239** | PKP | **PKPdf** | **21 51 28.6** | **-0.9** |
| | comp=Z,65nm,1.0s,baz=105,slow=0.4,SNR=58 | | | | | | |
| WRA | | | | PKPab | **PKPab** | **21 52 12.3** | **-0.8** |
| | comp=Z,72nm,0.7s,baz=113,slow=3.0,SNR=2.3 | | | | | | |
| **MORW** | **Morawa** | **161.71** | **177** | PKPdf | **PKPdf** | **21 51 29.0** | **-1.0** |
| **ZCP** | **Zamboanga City** | **161.78** | **344** | ⇑*e*P | **PKPab** | **21 52 17.0** | **+0.8** |
| **FAKI** | **Fak Fak** | **163.09** | **296** | PKPdf | **PKPdf** | **21 51 30.3** | **-1.5** |
| **KKM** | **Kota Kinabalu** | **163.33** | **3** | | **PKPdf** | **21 51 30.9** | **-1.2** |
| **SAUI** | **Saumlaki** | **165.73** | **280** | PKPdf | **PKPdf** | **21 51 32.4** | **-1.8** |
| **SBUM** | **Sibu** | **166.05** | **21** | PKPdf | **PKPdf** | **21 51 32.6** | **-1.8** |
| **MTN** | **Manton Dam** | **166.10** | **260** | PKPdf | **PKPdf** | **21 51 33.5** | **-0.8** |
| **KNRA** | **Kununurra** | **167.62** | **245** | PKPdf | **PKPdf** | **21 51 34.2** | **-1.2** |
| **TOLI2** | **Tolitoli** | **167.69** | **342** | | **PKPdf** | **21 51 34.3** | **-1.4** |
| **XMIS** | **Christmas Isla** | **168.74** | **90** | | **PKPdf** | **21 51 35.3** | **-1.0** |
| **LUWI** | **Luwuk** | **168.86** | **329** | | **PKPdf** | **21 51 35.2** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **168.89** | **193** | PKPdf | **PKPdf** | **21 51 35.8** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **168.94** | **227** | PKPdf | **PKPdf** | **21 51 35.3** | **-1.0** |
| **BKB** | **Balikpapan** | **170.60** | **1** | | **PKPdf** | **21 51 36.3** | **-1.1** |
| **SMRI** | **Semarang** | **172.48** | **62** | | **PKPdf** | **21 51 36.3** | **-2.0** |
| **SOEI** | **Soe** | **172.88** | **277** | | **PKPdf** | **21 51 36.5** | **-2.1** |
| **UGM** | **Wanagama** | **172.94** | **67** | | **PKPdf** | **21 51 36.5** | **-2.1** |
| **MMRI** | **Maumere** | **174.53** | **292** | | **PKPdf** | **21 51 37.9** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **176.34** | **53** | | **PKPdf** | **21 51 37.6** | **-1.9** |

*AEIC* ***21*** *21:35:10.1±1.5,56.°49N±0.°09×148.°65W±0.°10,h12*$^{km}$*±7km, Error ellipse: s-maj=13.7km s-min=7.2km az=167.0*

**NEIC 21 21:35:05.1±1.2,56.°35N±0.°04×148.°6W±0.°1,h21**$^{km}$**±7km, ML3.6/48,ML3.4(AEIC),Error ellipse: s-maj=8.8km s-min=5.1km az=110.0,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KDAK** | **Kodiak Island** | **2.62** | **305** | | Pn | 21 35 45.9 | -0.1 |
| KDAK | | | | Sn | Sn | 21 36 14.4 | -2.8 |
| **OHAK** | **Old Harbor** | **2.74** | **291** | Pn | Pn | 21 35 47.0 | -0.6 |
| OHAK | | | | Sn | Sn | 21 36 16.6 | -3.5 |
| **SYI** | **Shuyak Island** | **3.06** | **319** | Pn | Pn | 21 35 52.1 | -0.1 |
| SYI | | | | Sn | Sn | 21 36 26.4 | -1.7 |
| **SII** | **Sitkinak Islan** | **3.12** | **276** | | Pn | 21 35 52.7 | -0.3 |
| SII | | | | IAML | | 21 36 28.0 | |
| | comp=N,210nm,1.0s | | | | | | |
| SII | | | | IAML | | 21 36 30.4 | |
| | comp=E,186nm,1.3s | | | | | | |
| **SII** | **Sitkinak Islan** | **3.12** | **276** | | Sn | 21 36 27.4 | -2.2 |
| **Q23K** | **Middleton Isla** | **3.31** | **20** | Pn | Pn | 21 35 55.1 | -0.4 |
| Q23K | | | | IAML | | 21 36 34.8 | |
| | comp=N,176nm,1.4s | | | | | | |
| Q23K | | | | IAML | | 21 36 37.2 | |
| | comp=E,177nm,1.1s | | | | | | |
| **Q23K** | **Middleton Isla** | **3.31** | **20** | | Sn | 21 36 30.6 | -3.5 |
| **MID** | **Middleton Isla** | **3.31** | **20** | Pn | Pn | 21 35 55.1 | -0.4 |
| MID | | | | IAML | | 21 36 37.2 | |
| | comp=E,165nm,1.1s | | | | | | |
| **MID** | **Middleton Isla** | **3.31** | **20** | | Sn | 21 36 30.4 | -3.7 |
| **R18K** | **Karluk** | **3.44** | **293** | | Pn | 21 35 56.9 | -0.5 |
| R18K | | | | | Sn | 21 36 34.7 | -2.8 |
| **R18K** | **Karluk** | **3.44** | **293** | IAML | | 21 36 36.5 | |
| | comp=N,123nm,0.5s | | | | | | |
| R18K | | | | IAML | | 21 36 45.1 | |
| | comp=E,144nm,0.5s | | | | | | |
| **CNPM** | **China Poot** | **3.49** | **337** | | Pn | 21 35 57.8 | -0.2 |
| **BRSE** | **Bradley Lake S** | **3.59** | **342** | | Pn | 21 35 58.9 | -0.6 |
| **BRLK** | **Bradley Lake** | **3.64** | **341** | | Pn | 21 35 59.8 | -0.3 |
| BRLK | | | | IAML | | 21 36 45.5 | |
| | comp=E,71nm,1.0s | | | | | | |
| BRLK | | | | IAML | | 21 36 45.8 | |
| | comp=N,71nm,1.0s | | | | | | |
| **P23K** | **Montague Islan** | **3.71** | **9** | | Pn | 21 36 00.6 | -0.4 |
| **Q19K** | **Cape Douglas,** | **3.76** | **316** | | Pn | 21 36 02.0 | +0.3 |
| **SEW** | **Seward** | **3.79** | **353** | | Pn | 21 36 01.5 | -0.6 |
| **KAKN** | **Katmai Knife C** | **4.02** | **302** | | Pn | 21 36 06.2 | +0.8 |
| **ACHA** | **Angle Creek He** | **4.11** | **300** | | Pn | 21 36 07.8 | +1.2 |
| **P19K** | **Oil Pt** | **4.13** | **325** | Pn | Pn | 21 36 07.8 | +0.9 |
| P19K | | | | IAML | | 21 37 01.9 | |
| | comp=N,103nm,0.5s | | | | | | |
| P19K | | | | IAML | | 21 37 02.5 | |
| | comp=E,103nm,0.8s | | | | | | |
| **KAHC** | **Katmai Hardscr** | **4.17** | **306** | | Pn | 21 36 08.1 | +0.6 |
| **ANCK** | **Angle Creek** | **4.19** | **299** | | Pn | 21 36 09.3 | +1.6 |
| **KAIM** | **Kayak Island** | **4.21** | **30** | Pn | Pn | 21 36 07.8 | -0.1 |
| **SLKM** | **Skilak Lake** | **4.26** | **349** | | Pn | 21 36 08.1 | -0.5 |
| **O20K** | **Slope Mountain** | **4.31** | **332** | | Pn | 21 36 09.5 | +0.1 |
| **ILSW** | **Iliamna Southw** | **4.37** | **328** | | Pn | 21 36 10.3 | +0.1 |
| **CNTC** | **Contact Creek** | **4.40** | **299** | | Pn | 21 36 11.5 | +0.8 |
| **PLK4** | **Peulik 4** | **4.45** | **290** | | Pn | 21 36 12.3 | +1.0 |
| PLK4 | | | | IAML | | 21 37 13.6 | |
| | comp=N,64nm,0.9s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **4.46** | **18** | | Pn | 21 36 11.4 | +0.1 |
| **PWL** | **Port Wells** | **4.52** | **1** | Pn | Pn | 21 36 12.0 | -0.3 |
| PWL | | | | IAML | | 21 37 03.2 | |
| | comp=N,72nm,0.9s | | | | | | |
| PWL | | | | IAML | | 21 37 08.3 | |
| | comp=E,78nm,0.9s | | | | | | |
| **GLI** | **Glacier Island** | **4.61** | **9** | Pn | Pn | 21 36 13.1 | -0.3 |
| **RED** | **Redoubt Volcan** | **4.64** | **333** | | Pn | 21 36 13.3 | -0.5 |
| **RSO** | **Redoubt South** | **4.67** | **334** | | Pn | 21 36 14.3 | -0.1 |
| **P18K** | **Big Mountain,** | **4.68** | **313** | | Pn | 21 36 14.0 | -0.4 |
| **RDWB** | **Redoubt West** | **4.72** | **333** | | Pn | 21 36 14.4 | -0.6 |
| **RC01** | **Rabbit Creek A** | **4.79** | **353** | | Pn | 21 36 15.9 | 0.0 |
| RC01 | | | | IAML | | 21 37 10.6 | |
| | comp=E,58nm,0.7s | | | | | | |
| RC01 | | | | IAML | | 21 37 14.2 | |
| | comp=N,53nm,0.8s | | | | | | |
| **O18K** | **Koktuh Hills** | **4.97** | **318** | | Pn | 21 36 18.1 | -0.3 |
| O18K | | | | IAML | | 21 37 17.5 | |
| | comp=E,20nm,1.3s | | | | | | |
| O18K | | | | IAML | | 21 37 17.9 | |
| | comp=N,27nm,1.2s | | | | | | |
| **BMRM** | **Bremner River** | **5.07** | **22** | | Pn | 21 36 20.1 | +0.3 |
| **KNK** | **Knik Glacier** | **5.08** | **1** | Pn | Pn | 21 36 20.3 | +0.4 |
| KNK | | | | IAML | | 21 37 25.7 | |
| | comp=N,35nm,0.8s | | | | | | |
| KNK | | | | IAML | | 21 37 29.6 | |
| | comp=E,36nm,0.8s | | | | | | |
| **P17K** | **Kvichak River** | **5.08** | **307** | | Pn | 21 36 20.8 | +0.9 |
| **WAX** | **Waxell Ridge** | **5.09** | **34** | Pn | Pn | 21 36 20.0 | -0.1 |
| **SPU** | **Mount Spurr** | **5.17** | **341** | Pn | Pn | 21 36 21.4 | +0.2 |
| SPU | | | | IAML | | 21 37 25.1 | |
| | comp=N,22nm,0.8s | | | | | | |
| SPU | | | | IAML | | 21 37 25.2 | |
| | comp=E,22nm,0.5s | | | | | | |
| **SUA** | **Susitna One** | **5.25** | **349** | Pn | Pn | 21 36 21.7 | -0.6 |
| SUA | | | | IAML | | 21 37 34.8 | |
| | comp=E,23nm,1.4s | | | | | | |
| SUA | | | | IAML | | 21 37 35.5 | |
| | comp=N,22nm,1.3s | | | | | | |
| **KLU** | **Klutina** | **5.34** | **14** | | Pn | 21 36 23.7 | +0.2 |
| **STLK** | **Strandline Lak** | **5.43** | **343** | | Pn | 21 36 24.6 | -0.2 |
| **N19K** | **Bonanza Creek** | **5.44** | **328** | | Pn | 21 36 24.7 | -0.2 |
| **GHO** | **Glory Hole Cre** | **5.44** | **358** | Pn | Pn | 21 36 25.3 | +0.4 |
| **SML** | **Sawmill** | **5.47** | **1** | | Pn | 21 36 25.6 | +0.3 |
| **SCM** | **Sheep Creek Mo** | **5.54** | **6** | Pn | Pn | 21 36 26.7 | +0.5 |
| **KIAG** | **Kiagna River** | **5.62** | **33** | | Pn | 21 36 27.1 | -0.3 |
| **N25K** | **Chitina, Valde** | **5.66** | **20** | | Pn | 21 36 28.5 | +0.7 |
| **GLB** | **Gilahina Butte** | **5.67** | **24** | | Pn | 21 36 28.3 | +0.3 |
| **BALM** | **Baldy** | **5.71** | **32** | | Pn | 21 36 28.9 | +0.3 |
| **P16K** | **Nushagak River** | **5.72** | **302** | | Pn | 21 36 29.4 | +0.8 |
| **N18K** | **Kilae Creek** | **5.79** | **322** | | Pn | 21 36 28.9 | -0.7 |
| **PTPK** | **Patty Peak** | **5.80** | **31** | | Pn | 21 36 30.3 | +0.4 |
| **MCARA** | **McCarthy VSAT** | **5.81** | **27** | Pn | Pn | 21 36 29.9 | 0.0 |
| **PNL** | **Peninsula** | **5.90** | **52** | | Pn | 21 36 31.8 | +0.6 |
| **M24K** | **Tolsona, Glenn** | **5.90** | **11** | Pn | Pn | 21 36 32.4 | +1.2 |
| **BCPM** | **Bancas Point** | **5.95** | **49** | | Pn | 21 36 32.2 | +0.4 |
| **O16K** | **Kokwok River B** | **6.02** | **307** | | Pn | 21 36 33.0 | +0.3 |
| **M20K** | **Styx River** | **6.02** | **339** | | Pn | 21 36 33.6 | +0.7 |
| **N17K** | **Nushagak Hills** | **6.16** | **316** | Pn | Pn | 21 36 34.6 | -0.1 |
| **WAT6** | **Susitna Watana** | **6.26** | **4** | | Pn | 21 36 37.4 | +1.2 |
| **M19K** | **Big River Lodg** | **6.32** | **334** | | Pn | 21 36 36.3 | -0.6 |
| **CNBA** | **Chernabura Isl** | **6.43** | **261** | Pn | Pn | 21 36 38.0 | -0.4 |
| **WAT7** | **Susitna Watana** | **6.50** | **359** | | Pn | 21 36 40.3 | +0.8 |
| **O29M** | **Mount Kennedy** | **6.59** | **49** | | Pn | 21 36 40.8 | +0.1 |
| **P29M** | **Windy Craggy** | **6.63** | **56** | Pn | Pn | 21 36 41.3 | +0.2 |
| **L19K** | **White Mountain** | **6.67** | **334** | | Pn | 21 36 40.6 | -1.2 |
| **N16K** | **Nishlik Lake** | **6.76** | **312** | | Pn | 21 36 43.5 | +0.5 |
| **DHY** | **Denali Highway** | **6.77** | **5** | | Pn | 21 36 44.5 | +1.3 |
| **M17K** | **Holitna River** | **6.83** | **321** | | Pn | 21 36 44.2 | +0.3 |
| **S31K** | **Pelican** | **6.91** | **71** | | Pn | 21 36 44.1 | -0.8 |
| **M27K** | **Edge Creek, AK** | **6.92** | **27** | | Pn | 21 36 45.8 | +0.5 |
| **RND** | **Reindeer** | **7.08** | **359** | Pn | Pn | 21 36 47.8 | +0.4 |
| **M16K** | **Timber Creek** | **7.15** | **315** | | Pn | 21 36 48.7 | +0.4 |
| **N15K** | **Kwethluk River** | **7.18** | **307** | | Pn | 21 36 49.9 | +1.3 |
| **L18K** | **Granite Mounta** | **7.20** | **328** | Pn | Pn | 21 36 48.8 | -0.1 |
| **O14K** | **Tigyukauivet M** | **7.38** | **298** | Pn | Pn | 21 36 52.2 | +0.8 |
| **K20K** | **Telida** | **7.55** | **341** | Pn | Pn | 21 36 53.4 | -0.4 |
| **RIDG** | **Independent Ri** | **7.64** | **13** | | Pn | 21 36 56.0 | +0.9 |
| **L16K** | **Owhat River** | **7.77** | **318** | | Pn | 21 36 56.5 | -0.2 |
| **N30M** | **Aishikik Lake** | **7.84** | **45** | Pn | Pn | 21 36 58.2 | +0.4 |
| **M29M** | **Somme Creek** | **7.99** | **36** | Pn | Pn | 21 37 00.1 | +0.3 |
| **K17K** | **Iditarod** | **8.07** | **326** | | Pn | 21 36 60.0 | -0.8 |
| **M14K** | **Bethel** | **8.27** | **308** | | Pn | 21 37 03.7 | +0.2 |
| **WHY** | **Whitehorse** | **8.36** | **53** | Pn | Pn | 21 37 05.2 | +0.2 |
| **J19K** | **Poorman** | **8.43** | **338** | Pn | Pn | 21 37 04.7 | -1.0 |
| **J26L** | **Joseph Creek** | **8.54** | **15** | | Pn | 21 37 07.8 | +0.4 |
| **J17K** | **VABM Dome** | **8.81** | **328** | Pn | Pn | 21 37 10.5 | -0.5 |
| **L14K** | **Kuka Creek** | **8.85** | **310** | | Pn | 21 37 11.8 | +0.3 |
| **Q32M** | **Nakina River** | **9.12** | **67** | Pn | Pn | 21 37 15.8 | +0.4 |
| **P33M** | **Teslin, Yukon** | **9.15** | **58** | Pn | Pn | 21 37 15.9 | +0.1 |

*IDC* ***21*** *21:48:04.7±5.2,17.°99S×178.°49W,h588*$^{km}$*±60km, mb3.8/9, mbtmp4.7/9,Error ellipse: s-maj=38.8km s-min=24.9km az=146.0*

**ISC 21 21:48:03.8±0.8,18.°0S±0.°2×178.°5W±0.°2,h579**$^{km}$**,n16, σ0.°38/16,mb4.3/9,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **33.38** | **261** | P | **P** | **21 53 55.7** | **+0.2** |
| | 8.3nm,1.0s,baz=90,slow=4.0,SNR=1.0 | | | | | | |
| | 8.3nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **38.56** | **241** | P | **P** | **21 54 38.5** | **+0.6** |
| | 71nm,0.8s,baz=100,slow=4.3,SNR=1.6 | | | | | | |
| | 71nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **260** | P | **P** | **21 55 25.2** | **-0.2** |
| | 15nm,0.8s,baz=92,slow=7.6,SNR=1.3 | | | | | | |
| | 15nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **44.72** | **254** | P | **P** | **21 55 26.7** | **0.0** |
| | 13nm,0.4s,baz=88,slow=8.1,SNR=6.2 | | | | | | |
| | 13nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.11** | **180** | P | **P** | **21 58 29.8** | **-0.3** |
| | 17nm,1.0s,baz=47,slow=11,SNR=1.8 | | | | | | |
| | 17nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.50** | **44** | P | **P** | **21 59 11.9** | **+0.4** |
| | 3.2nm,0.7s,baz=229,slow=9.0,SNR=6.6 | | | | | | |
| | 3.2nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.94** | **13** | P | **P** | **21 59 42.4** | **-0.4** |
| | 0.6nm,0.4s,baz=218,slow=5.7,SNR=5.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.07** | **58** | P | **P** | **21 59 45.0** | **+0.6** |
| | 2.5nm,0.7s,baz=216,slow=9.0,SNR=7.9 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.42** | **43** | P | **P** | **21 59 50.7** | **+0.1** |
| | 1.9nm,0.7s,baz=234,slow=3.1,SNR=3.7 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **116.83** | **321** | PKP | **PKPdf** | **22 05 42.7** | **-0.3** |
| | 11nm,0.9s,baz=108,slow=3.2,SNR=2.4 | | | | | | |
| **AKTO** | **Aktyubinsk** | **124.86** | **319** | PKP | **PKPdf** | **22 05 58.2** | **-0.2** |
| | 4.7nm,0.8s,baz=89,slow=3.9,SNR=1.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.34** | **350** | PKP | **PKPdf** | **22 06 00.3** | **-0.4** |
| | 5.9nm,0.9s,baz=22,slow=1.0,SNR=2.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.76** | **315** | PKP | **PKPdf** | **22 06 35.3** | **-0.5** |
| | 1.3nm,0.7s,baz=81,slow=2.9,SNR=1.1 | | | | | | |
| **GERES** | **GERESS Array B** | **147.63** | **345** | PKPbc | **PKPbc** | **22 06 44.0** | **+0.2** |
| | 1.2nm,0.7s,baz=333,slow=0.4,SNR=2.2 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.43** | **348** | PKPbc | **PKPbc** | **22 06 50.9** | **+0.1** |
| | 1.6nm,0.4s,baz=37,slow=5.1,SNR=2.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.23** | **182** | PKP | **PKPdf** | **22 07 08.3** | **-0.4** |
| | 5.8nm,1.4s,baz=159,slow=1.0,SNR=1.7 | | | | | | |

**TRN 21 21:59:47.5,10.°65N×62.°36W,h70**$^{km}$**,MD3.5,Paria peninsula.,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | 

*-0.1960, Plg1.0000°, Azm178.0000°; P -0.7910, Plg5.0000°, Azm88.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 21 22:32:26.9**±0.5, **15.99S**±0.03×**168.17E**±0.04, **h17**km,▱2km, **h17**km:**pP-P, n1687,** σ1.3 **83**/1613, **mb6.4**/229, **MS6.2**/212, **107C-42D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **1.73** | **179** | P | **Pn** | **22 32 56.6** | **+0.3** |
| **RTV** | **Rentapao** | **1.81** | **172** | P | **Pn** | **22 32 56.9** | **-0.5** |
| **LIFNC** | **LIFOU** | **4.85** | **190** | P | **Pn** | **22 33 39.1** | **-0.1** |
| **LIFNC** | **LIFOU** | **4.85** | **190** | Pn | **Pn** | **22 33 36.5** | **-2.6** |
| **MARNC** | **Mare, Loyalty** | **5.47** | **181** | P | **Pn** | **22 33 48.4** | **+0.7** |
| **KOUNC** | **Koumac, New Ca** | **5.85** | **219** | P | **Pn** | **22 33 53.9** | **+0.9** |
| **KOUNC** | **Koumac, New Ca** | **5.85** | **219** | Pn | **Pn** | **22 33 53.2** | **+0.2** |
| **YATNC** | **Mamie plateau,** | **6.16** | **191** | P | **Pn** | **22 33 56.3** | **-1.0** |
| **DZM** | **Mont Dzumac** | **6.27** | **195** | P | **Pn** | **22 33 59.5** | **+0.7** |
| **DZM** | **Mont Dzumac** | **6.27** | **195** | Pn | **Pn** | **22 33 59.1** | **+0.3** |
| **DZM** | **Mont Dzumac** | **6.27** | **195** | Pn | **Pn** | **22 33 58.2** | **-0.7** |
| | 183nm,0.3s,baz=44,slow=17,SNR=214 | | | | | | |
| DZM | | | | Sn | **Sn** | **22 35 09.5** | **-0.6** |
| | 107nm,0.3s,baz=320,slow=23,SNR=7.5 | | | | | | |
| | 660nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **6.33** | **196** | P | **Pn** | **22 34 00.6** | **+1.0** |
| **PINNC** | **Pines Island,** | **6.63** | **186** | P | **Pn** | **22 34 04.8** | **+1.1** |
| **PINNC** | **Pines Island,** | **6.63** | **186** | Pn | **Pn** | **22 34 04.4** | **+0.8** |
| **MSVF** | **Nonsavu** | **9.62** | **102** | P | **Pn** | **22 34 48.9** | **+4.1** |
| **MSVF** | **Nonsavu** | **9.62** | **102** | Pn | **Pn** | **22 34 47.6** | **+2.8** |
| **MSVF** | **Nonsavu** | **9.62** | **102** | P | **Pn** | **22 34 47.6** | **+2.8** |
| **HNR** | **Honiara** | **10.33** | **308** | P | **Pn** | **22 34 57.5** | **+3.0** |
| **HNR** | **Honiara** | **10.33** | **308** | Pn | **Pn** | **22 34 56.0** | **+1.5** |
| **HNR** | **Honiara** | **10.33** | **308** | LR | LR | 22 38 17.1 | |
| | comp=Z,1300μm,20.8s,baz=114,slow=34 | | | | | | |
| **HNR** | **Honiara** | **10.33** | **308** | P | **Pn** | **22 34 56.0** | **+1.5** |
| **FUNA** | **Funafuti** | **13.07** | **57** | P | **Pn** | **22 35 33.4** | **+1.3** |
| **FUNA** | **Funafuti** | **13.07** | **57** | Pn | **Pn** | **22 35 32.1** | **0.0** |
| **LHI** | **Lord Howe Isla** | **17.55** | **207** | P | **Pn** | **22 36 30.6** | **-0.3** |
| **GD1S** | **Gladstone Soft** | **17.78** | **241** | P | **P** | **22 36 38.0** | **+3.5** |
| **TARA** | **Tarawa** | **17.86** | **16** | P | **Pn** | **22 36 35.1** | **+0.3** |
| **GC1S** | **Gold Coast 1 S** | **18.18** | **226** | P | **P** | **22 36 41.6** | **+2.7** |
| **RK1H** | **Rockhampton Ha** | **18.19** | **243** | P | **P** | **22 36 42.8** | **+3.8** |
| **RAO** | **Raoul Island** | **18.39** | **138** | P | **Pn** | **22 36 41.5** | **+0.2** |
| RAO | | | | lAmb | lAmb | 22 36 50.3 | |
| | comp=Z,7μm,1.4s | | | | | | |
| **RAO** | **Raoul Island** | **18.39** | **138** | Pn | **Pn** | **22 36 44.7** | **+3.4** |
| | baz=346,slow=1.6 | | | | | | |
| RAO | | | | LR | LR | 22 42 49.6 | |
| | comp=Z,35μm,18.2s,baz=312,slow=34 | | | | | | |
| **RAO** | **Raoul Island** | **18.39** | **138** | P | **Pn** | **22 36 41.5** | **+0.2** |
| RAO | | | | pmax | pmax | | |
| | comp=Z,7μm,1.5s | | | | | | |
| **EIDS** | **Eidsvold** | **18.50** | **237** | P | **Pn** | **22 36 45.2** | **+2.6** |
| **EIDS** | **Eidsvold** | **18.50** | **237** | P | **Pn** | **22 36 42.8** | **+0.2** |
| **EIDS** | **Eidsvold** | **18.50** | **237** | P | **Pn** | **22 36 44.9** | **+2.3** |
| | comp=Z,61μmcomp=Z,784nm,1.5s | | | | | | |
| **AFI** | **Afiamalu** | **19.49** | **87** | | **P** | **22 36 53.1** | **-0.3** |
| **AFI** | **Afiamalu** | **19.49** | **87** | P | **P** | **22 36 53.1** | **-0.3** |
| AFI | | | | pmax | pmax | | |
| | comp=Z,705nm,1.3s | | | | | | |
| **RABL** | **Rabaul** | **19.62** | **305** | P | **P** | **22 36 55.0** | **+0.2** |
| **AUAYR** | **Ayr State High** | **20.09** | **257** | P | Pn | 22 37 04.1 | +2.4 |
| **BULU** | **Kimbe** | **20.36** | **299** | P | Pn | 22 37 07.2 | +2.2 |
| **TV1H** | **Townsville Har** | **20.63** | **258** | P | Pn | 22 37 08.3 | +0.2 |
| **RMQ** | **Roma** | **20.86** | **237** | P | Pn | 22 37 11.8 | +1.0 |
| **RMQ** | **Roma** | **20.86** | **237** | P | Pn | 22 37 11.2 | +0.4 |
| | comp=Z,696nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **20.88** | **224** | P | Pn | 22 37 10.0 | -1.0 |
| **ARMA** | **Armidale** | **20.88** | **224** | | **P** | **22 37 08.1** | **-0.4** |
| **ARMA** | **Armidale** | **20.88** | **224** | P | Pn | 22 37 10.3 | -0.7 |
| | comp=Z,797nm,2.2s | | | | | | |
| **NIUE** | **Niue** | **21.11** | **102** | P | **P** | **22 37 12.1** | **+1.1** |
| **NIUE** | **Niue** | **21.11** | **102** | P | **P** | **22 37 09.9** | **-1.0** |
| **NIUE** | **Niue** | **21.11** | **102** | P | **P** | **22 37 10.8** | **-0.2** |
| | comp=Z,723nm,2.3s | | | | | | |
| **CTA** | **Charters Tower** | **21.23** | **256** | P | **P** | **22 37 13.8** | **+1.5** |
| | comp=Z,21nm,1.1s,baz=80,slow=11,SNR=65 | | | | | | |
| CTA | | | | PcP | **PcP** | **22 41 18.4** | **+1.0** |
| | comp=Z,1.6nm,0.9s,baz=225,slow=1.4,SNR=2.5 | | | | | | |
| **CTAO** | **Charters Tower** | **21.23** | **256** | P | **P** | **22 37 13.7** | **+1.5** |
| **CTAO** | **Charters Tower** | **21.23** | **256** | P | **P** | **22 37 13.4** | **+1.1** |
| **CTAO** | **Charters Tower** | **21.23** | **256** | P | **P** | **22 37 13.4** | **+1.1** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,928nm,1.4s | | | | | | |
| **PMG** | **Port Moresby** | **21.50** | **285** | P | **P** | **22 37 16.5** | **+1.3** |
| **PMG** | **Port Moresby** | **21.50** | **285** | P | **P** | **22 37 16.8** | **+1.6** |
| **PMG** | **Port Moresby** | **21.50** | **285** | P | **P** | **22 37 16.3** | **+1.1** |
| **PMG** | **Port Moresby** | **21.50** | **285** | P | **P** | **22 37 17.4** | **+2.2** |
| | comp=Z,106nm,0.9s,baz=87,slow=10,SNR=26 | | | | | | |
| PMG | | | | S | Sn | 22 41 18.8 | -2.8 |
| | comp=Z,3.9nm,0.3s,baz=313,slow=20,SNR=1.0 | | | | | | |
| | comp=Z,106nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **21.50** | **285** *c i* | P | **P** | **22 37 15.9** | **+0.7** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,725nm,1.6s | | | | | | |
| PMG | | | | MLR | MLR | | |
| | comp=Z,103μm,15.0s | | | | | | |
| **MBAZ** | **Motutapu North** | **21.55** | **165** | P | **P** | **22 37 18.3** | **+2.8** |
| **KAVG** | **Kavieng** | **21.67** | **306** | P | **P** | **22 37 17.3** | **+0.3** |
| **KUZ** | **Kuaotunu** | **21.74** | **163** | P | **P** | **22 37 19.1** | **+1.6** |
| **AUPHS** | **Peel High Scho** | **21.80** | **223** | P | **P** | **22 37 19.7** | **+1.4** |
| **NTLH** | **Newcastle Hard** | **22.49** | **219** | P | **P** | **22 37 27.9** | **+2.2** |
| **AULRC** | **Lightning Ridg** | **22.88** | **231** | P | **P** | **22 37 30.2** | **+0.3** |
| **MTSU** | **Mount Surprise** | **22.90** | **261** | P | **P** | **22 37 31.8** | **+1.6** |
| **MXZ** | **Matakaoa Point** | **23.29** | **159** | P | **P** | **22 37 35.5** | **+1.6** |
| **MXZ** | **Matakaoa Point** | **23.29** | **159** | P | **P** | **22 37 33.2** | **-0.7** |
| MXZ | | | | lAmb | lAmb | 22 37 42.4 | |
| | comp=Z,3μm,2.0s | | | | | | |
| **RIV** | **Riverview** | **23.47** | **218** | P | **P** | **22 37 37.7** | **+1.9** |
| **RIV** | **Riverview** | **23.47** | **218** | P | **P** | **22 37 37.2** | **+1.5** |
| | comp=Z,3μm,1.6s | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **23.67** | **218** | P | **P** | **22 37 39.7** | **+2.0** |
| **MWZ** | **Matawai** | **23.74** | **161** | P | **P** | **22 37 40.3** | **+1.9** |
| **AUDCS** | **Dubbo College** | **24.01** | **224** | P | **P** | **22 37 42.0** | **+1.0** |
| **WOLH** | **Wollongong Har** | **24.05** | **217** | P | **P** | **22 37 43.0** | **+1.7** |
| **BKZ** | **Black Stump Fm** | **24.22** | **164** | P | **P** | **22 37 43.4** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **24.22** | **164** | P | **P** | **22 37 42.7** | **-0.3** |
| **COEN** | **Coen** | **24.23** | **271** | P | **P** | **22 37 44.2** | **+1.0** |
| **COEN** | **Coen** | **24.23** | **271** | P | **P** | **22 37 42.6** | **-0.5** |
| **COEN** | **Coen** | **24.23** | **271** | P | **P** | **22 37 43.5** | **+0.3** |
| **MOVZ** | **Moawhango** | **24.26** | **166** | P | **P** | **22 37 45.5** | **+2.2** |
| **KNZ** | **Kokohu** | **24.42** | **162** | P | **P** | **22 37 45.8** | **+1.1** |
| **ARHZ** | **Aropaoanui** | **24.45** | **163** | P | **P** | **22 37 47.0** | **+2.1** |
| **MCHZ** | **McNeill Hill** | **24.53** | **164** | P | **P** | **22 37 48.3** | **+2.5** |
| **KRHZ** | **Kereru** | **24.64** | **165** | P | **P** | **22 37 46.6** | **-0.1** |
| **PATS** | **Pohnpei** | **24.69** | **336** | P | **P** | **22 37 47.1** | **+0.7** |
| **PATS** | **Pohnpei** | **24.69** | **336** | P | **P** | **22 37 46.5** | **-0.8** |
| **PATS** | **Pohnpei** | **24.69** | **336** | P | **P** | **22 37 47.7** | **+0.4** |
| | comp=Z,2μm,1.9s | | | | | | |
| **MANU** | **Manus Island** | **24.74** | **302** | P | **P** | **22 37 47.8** | **0.0** |
| MANU | | | | lAmb | lAmb | 22 38 03.0 | |
| | comp=Z,2μm,1.6s | | | | | | |
| **CKHZ** | **Cape Kidnapper** | **24.84** | **163** | P | **P** | **22 37 49.7** | **+1.2** |
| **KAHZ** | **Kahuranaki** | **24.91** | **164** | P | **P** | **22 37 51.1** | **+1.9** |
| **AUUHS** | **Ulladulla High** | **24.96** | **216** | P | **P** | **22 37 50.9** | **+1.3** |
| **DVHZ** | **Dannevirke** | **25.21** | **166** | P | **P** | **22 37 53.2** | **+1.4** |
| **PRHZ** | **Porangahau** | **25.29** | **165** | P | **P** | **22 37 54.1** | **+1.5** |
| **MRZ** | **Mangatainoka R** | **25.41** | **167** | P | **P** | **22 37 52.3** | **-1.4** |
| MRZ | | | | IAMs_20 | IAMs_20 | 22 48 35.5 | |
| | comp=Z,85μm,18.0s | | | | | | |
| **ANWZ** | **Angora Road** | **25.43** | **165** | P | **P** | **22 37 55.3** | **+1.5** |
| **YNG** | **Young** | **25.47** | **221** | P | **P** | **22 37 55.8** | **+1.5** |
| **YNG** | **Young** | **25.47** | **221** | P | **P** | **22 37 55.5** | **+1.2** |
| | comp=Z,3μm,1.3s | | | | | | |
| **CNB** | **Canberra Magne** | **25.57** | **218** | P | **P** | **22 37 56.6** | **+1.4** |
| **CNB** | **Canberra Magne** | **25.57** | **218** | P | **P** | **22 37 56.5** | **+1.3** |
| | comp=Z,1μm,1.1s | | | | | | |
| **BFZ** | **Birch Farm** | **25.59** | **166** | P | **P** | **22 37 55.4** | **+0.1** |
| **BFZ** | **Birch Farm** | **25.59** | **166** | IAMs_20 | IAMs_20 | 22 48 35.0 | |
| | comp=Z,67μm,18.0s | | | | | | |
| **BFZ** | **Birch Farm** | **25.59** | **166** | P | **P** | **22 37 56.5** | **+1.2** |
| **CMSA** | **Cobar Meteorol** | **25.67** | **229** | P | **P** | **22 37 57.0** | **+0.9** |
| **CMSA** | **Cobar Meteorol** | **25.67** | **229** | P | **P** | **22 37 56.5** | **+0.4** |
| | comp=Z,659nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **25.78** | **218** | P | **P** | **22 37 58.6** | **+1.4** |
| **CAN** | **Canberra** | **25.78** | **218** | P | **P** | **22 37 56.6** | **-0.6** |
| CAN | | | | lAmb | lAmb | 22 38 03.2 | |
| | comp=Z,883nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **25.78** | **218** | P | **P** | **22 37 58.0** | **+0.8** |
| | comp=Z,769nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **25.78** | **218** | P | **P** | **22 37 56.6** | **-0.6** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,883nm,1.1s | | | | | | |
| **SNZO** | **South Karori** | **25.86** | **169** | P | **P** | **22 37 56.8** | **-0.9** |
| **SNZO** | **South Karori** | **25.86** | **169** | IAMs_20 | IAMs_20 | 22 47 10.2 | |
| | comp=Z,70μm,19.0s | | | | | | |
| **THZ** | **Tophouse** | **26.01** | **172** | P | **P** | **22 37 58.7** | **-0.4** |
| **MILA** | **Mila** | **26.91** | **215** | P | **P** | **22 38 08.6** | **+1.2** |
| **MILA** | **Mila** | **26.91** | **215** | P | **P** | **22 38 08.5** | **+1.2** |
| | comp=Z,345nm,1.1s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.94** | **173** | IAMs_20 | IAMs_20 | 22 48 29.7 | |
| | comp=Z,75nm,18.0s | | | | | | |
| **QIS** | **Mount Isa** | **27.48** | **256** | P | **P** | **22 38 13.2** | **+0.6** |
| **QIS** | **Mount Isa** | **27.48** | **256** | P | **P** | **22 38 13.0** | **+0.4** |
| | comp=Z,234nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.75** | **176** | IAMs_20 | IAMs_20 | 22 48 53.1 | |
| | comp=Z,64μm,18.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.75** | **176** | LR | LR | 22 48 46.0 | |
| | comp=Z,37μm,19.8s,baz=13,slow=36 | | | | | | |
| **MQZ** | **McQueen's Vall** | **27.89** | **173** | IAMs_20 | IAMs_20 | 22 49 01.0 | |
| | comp=Z,52μm,18.0s | | | | | | |
| **INKA** | **Innaminka** | **27.94** | **241** | P | **P** | **22 38 17.6** | **+1.0** |
| **JCZ** | **Jackson Bay** | **28.00** | **179** | P | **P** | **22 38 18.6** | **+1.5** |
| **WACZ** | **Wakanui South** | **28.04** | **174** | P | **P** | **22 38 19.5** | **+2.2** |
| **TABU** | **Tabubil** | **28.50** | **289** | P | **P** | **22 38 24.0** | **+2.2** |
| **AUSSC** | **Sale College,** | **28.82** | **216** | P | **P** | **22 38 27.2** | **+2.9** |
| **STKA** | **Stephens Creek** | **28.88** | **232** | P | **P** | **22 38 25.3** | **+0.3** |
| **STKA** | **Stephens Creek** | **28.88** | **232** | P | **P** | **22 38 24.1** | **-0.8** |
| **STKA** | **Stephens Creek** | **28.88** | **232** | P | **P** | **22 38 25.2** | **+0.3** |
| | comp=Z,112nm,2.0s | | | | | | |
| **STKA** | **Stephens Creek** | **28.88** | **232** | P | **P** | **22 38 25.5** | **+0.5** |
| | comp=Z,195nm,0.9s,baz=56,slow=7.7,SNR=100 | | | | | | |
| STKA | | | | PcP | **PcP** | **22 41 34.4** | **+0.2** |
| | comp=Z,36nm,1.1s,baz=328,slow=4.6,SNR=2.3 | | | | | | |
| STKA | | | | S | **S** | **22 43 18.4** | **+3.8** |
| | comp=Z,14nm,1.1s,baz=60,slow=20,SNR=1.5 | | | | | | |
| STKA | | | | P3KPbc | | 23 10 38.8 | |
| | comp=Z,5.8nm,1.1s,baz=264,slow=3.9,SNR=5.3 | | | | | | |
| | comp=Z,195nm,0.9s | | | | | | |
| **AUMAG** | **Moama Anglican** | **28.92** | **222** | P | **P** | **22 38 27.2** | **+2.0** |
| **ODZ** | **Otahua Downs** | **29.04** | **176** | P | **P** | **22 38 27.2** | **+1.0** |
| **MLZ** | **Mavora Lakes** | **29.29** | **180** | IAMs_20 | IAMs_20 | 22 49 49.9 | |
| | comp=Z,62μm,19.0s | | | | | | |
| **TOO** | **Toolangi** | **29.39** | **219** | P | **P** | **22 38 30.6** | **+1.1** |
| **TOO** | **Toolangi** | **29.39** | **219** | P | **P** | **22 38 29.0** | **-0.5** |
| TOO | | | | lAmb | lAmb | 22 38 33.8 | |
| | comp=Z,952nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **29.39** | **219** | P | **P** | **22 38 30.3** | **+0.8** |
| | comp=Z,562nm,1.8s | | | | | | |
| **TOO** | **Toolangi** | **29.39** | **219** | P | **P** | **22 38 29.0** | **-0.5** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,953nm,1.5s | | | | | | |
| **DCZ** | **Deep Cove** | **29.40** | **181** | P | **P** | **22 38 28.1** | **-1.3** |
| **WHZ** | **Wether Hill Ro** | **29.82** | **180** | IAMs_20 | IAMs_20 | 22 50 15.8 | |
| | comp=Z,61μm,19.0s | | | | | | |
| **MLBS** | **Spotswood, Mel** | **29.91** | **219** | P | **P** | **22 38 36.9** | **+2.9** |
| **BRAT** | **Ballarat** | **30.33** | **220** | P | **P** | **22 38 39.3** | **+1.6** |
| **GLAD** | **Gladstone** | **30.42** | **211** | P | **P** | **22 38 39.5** | **+1.0** |
| **SYZ** | **Scrubby Hill** | **30.47** | **179** | P | **P** | **22 38 39.1** | **+0.3** |
| **GEXS** | **Deakin Univers** | **30.52** | **219** | P | **P** | **22 38 41.1** | **+1.7** |
| **CTZ** | **Chatham Island** | **30.54** | **158** | P | **P** | **22 38 41.4** | **+1.9** |
| **GENI** | **Genyem** | **30.61** | **293** | P | **P** | **22 38 40.9** | **+0.5** |
| **RAR** | **Rarotonga** | **30.79** | **105** | P | **P** | **22 38 42.6** | **+0.6** |
| **RAR** | **Rarotonga** | **30.79** | **105** | P | **P** | **22 38 41.2** | **-0.8** |
| **RAR** | **Rarotonga** | **30.79** | **105** | P | **P** | **22 38 46.5** | **+4.6** |
| | comp=Z,70nm,1.1s,baz=294,slow=8.7,SNR=3.9 | | | | | | |
| RAR | | | | LR | LR | 22 50 27.0 | |
| | comp=Z,7μm,19.6s,baz=270,slow=35 | | | | | | |
| **RAR** | **Rarotonga** | **30.79** | **105** | P | **P** | **22 38 41.2** | **-0.8** |
| RAR | | | | pmax | pmax | | |
| | comp=Z,831nm,1.9s | | | | | | |
| **LCRK** | **Leigh Creek** | **30.95** | **237** | P | **P** | **22 38 43.9** | **+0.6** |
| **CORO** | **Coronation Par** | **31.20** | **211** | P | **P** | **22 38 47.1** | **+1.8** |
| **ARPS** | **Mount Arapiles** | **31.21** | **223** | P | **P** | **22 38 46.6** | **+1.1** |
| **ARPS** | **Mount Arapiles** | **31.21** | **223** | P | **P** | **22 38 47.0** | **+1.5** |
| | comp=Z,436nm,1.2s | | | | | | |
| **HTT** | **Hallett** | **31.59** | **231** | P | **P** | **22 38 49.6** | **+0.6** |
| **HTT** | **Hallett** | **31.59** | **231** | P | **P** | **22 38 49.4** | **+0.5** |
| | comp=Z,301nm,2.3s | | | | | | |
| **AUHPC** | **Hawkesdale P12** | **31.68** | **221** | P | **P** | **22 38 53.1** | **+3.5** |
| | comp=Z,2μm,1.6s | | | | | | |
| **MOO** | **Moorlands** | **31.92** | **210** | P | **P** | **22 38 53.2** | **+1.5** |
| **MOO** | **Moorlands** | **31.92** | **210** | P | **P** | **22 38 52.6** | **+0.8** |
| | comp=Z,630nm,1.6s | | | | | | |
| **PTPS** | **Port Pirie** | **32.18** | **232** | P | **P** | **22 38 55.7** | **+1.7** |
| **TAU** | **Tasmania Unive** | **32.22** | **209** | P | **P** | **22 38 56.0** | **+1.7** |
| **TAU** | **Tasmania Unive** | **32.22** | **209** | P | **P** | **22 38 53.9** | **-0.4** |
| TAU | | | | lAmb | lAmb | 22 38 58.3 | |
| | comp=Z,947nm,1.7s | | | | | | |
| **TAU** | **Tasmania Unive** | **32.22** | **209** | P | **P** | **22 38 53.9** | **-0.4** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,947nm,1.7s | | | | | | |
| **AUTAR** | **Taroona High S** | **32.22** | **209** | P | **P** | **22 38 55.8** | **+1.5** |
| **OOD** | **Oodnadatta** | **32.25** | **243** | P | **P** | **22 38 55.7** | **+0.9** |
| **WRAB** | **Tennant Creek** | **32.38** | **258** | P | **P** | **22 38 54.4** | **-1.6** |
| **WRAB** | **Tennant Creek** | **32.38** | **258** *c i* | P | **P** | **22 38 54.7** | **-1.3** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,351nm,1.5s | | | | | | |
| WRAB | | | | MLR | MLR | | |
| | comp=Z,34μm,15.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.39** | **258** | P | **P** | **22 38 54.4** | **-1.7** |
| **WRA** | **Warramunga Arr** | **32.39** | **258** | P | **P** | **22 38 54.5** | **-1.7** |
| | comp=Z,23nm,0.7s,baz=88,slow=9.1,SNR=125 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 41 44.1** | **+0.4** |
| | comp=Z,72nm,1.0s,baz=82,slow=2.2,SNR=11 | | | | | | |
| WRA | | | | ScP | **ScP** | **22 45 28.6** | **+1.7** |
| | comp=Z,9.1nm,1.1s,baz=80,slow=2.8,SNR=4.9 | | | | | | |
| WRA | | | | PKiKP | **PKiKP** | **22 49 12.1** | **+0.7** |
| | comp=Z,2.8nm,0.9s,baz=13,slow=0.3,SNR=12 | | | | | | |
| WRA | | | | LR | LR | 22 52 24.5 | |
| | comp=Z,28μm,18.1s,baz=88,slow=37 | | | | | | |
| WRA | | | | P3KPbc | | 23 10 23.5 | |
| | comp=Z,7.3nm,1.1s,baz=274,slow=2.9,SNR=26 | | | | | | |
| | comp=Z,23nm,0.7s | | | | | | |
| **WHYH** | **Whyalla** | **32.44** | **233** | P | **P** | **22 38 57.3** | **+0.9** |
| **AS01** | **Alice Springs** | **33.02** | **251** | P | **P** | **22 39 01.4** | **-0.3** |
| **AS31** | **Alice Springs** | **33.06** | **251** | P | **P** | **22 39 01.2** | **-0.8** |
| **AS31** | **Alice Springs** | **33.06** | **251** | P | **P** | **22 39 01.4** | **-0.6** |
| | comp=Z,199nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **33.06** | **251** | P | **P** | **22 39 01.2** | **-0.8** |
| | comp=Z,488nm,0.9s,baz=81,slow=8.5,SNR=293 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 41 45.2** | **-0.3** |
| | comp=Z,58nm,1.0s,baz=95,slow=2.7,SNR=7.1 | | | | | | |
| ASAR | | | | ScP | **ScP** | **22 45 31.8** | **+2.6** |
| | comp=Z,6.4nm,1.1s,baz=95,slow=4.6,SNR=4.2 | | | | | | |
| ASAR | | | | LR | LR | 22 52 00.9 | |
| | comp=Z,27μm,19.1s,baz=112,slow=36 | | | | | | |
| ASAR | | | | P3KPbc | | 23 10 19.6 | |
| | comp=Z,5.9nm,1.0s,baz=266,slow=4.0,SNR=20 | | | | | | |
| | comp=Z,488nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **33.52** | **234** | P | **P** | **22 39 06.4** | **+0.5** |
| **BBOO** | **Buckleboo** | **33.52** | **234** | P | **P** | **22 39 05.4** | **-0.5** |
| BBOO | | | | lAmb | lAmb | 22 39 08.8 | |
| | comp=Z,652nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **33.52** | **234** | P | **P** | **22 39 05.7** | **-0.1** |
| | comp=Z,355nm,2.4s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.29** | **358** | T | T | 23 15 16.9 | |
| | baz=175 | | | | | | |
| **MULG** | **Mulgathing** | **34.29** | **239** | P | **P** | **22 39 12.5** | **-0.1** |
| **H11S3** | **WAKE ISLAND Hy** | **34.29** | **358** | T | T | 23 15 57.1 | |
| | baz=175 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.31** | **358** | T | T | 23 15 40.1 | |
| | baz=175 | | | | | | |
| **KDU** | **Kakadu** | **34.71** | **271** | P | **P** | **22 39 16.1** | **-0.3** |
| **KDU** | **Kakadu** | **34.71** | **271** | P | **P** | **22 39 14.7** | **-1.7** |
| | comp=Z,190nm,1.5s | | | | | | |
| **WAKE** | **Wake Island** | **35.08** | **358** | P | **P** | **22 39 18.8** | **-0.6** |
| WAKE | | | | lAmb | lAmb | 22 39 21.6 | |
| | comp=Z,1μm,1.6s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.50** | **358** | T | T | 23 17 08.7 | |
| | baz=171,slow=76,SNR=7.1 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.50** | **358** | T | T | 23 17 04.5 | |
| | baz=171,slow=76,SNR=7.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.52** | **358** | T | T | 23 16 59.2 | |
| | baz=171,slow=76,SNR=8.2 | | | | | | |
| **MTN** | **Manton Dam** | **35.98** | **270** | P | **P** | **22 39 27.1** | **-0.2** |
| **MTN** | **Manton Dam** | **35.98** | **270** | P | **P** | **22 39 26.3** | **-1.0** |
| **MTN** | **Manton Dam** | **35.98** | **270** | P | **P** | **22 39 26.5** | **-0.8** |
| | comp=Z,213nm,1.9s | | | | | | |
| **DRS** | **Darwin Rock St** | **36.27** | **271** | P | **P** | **22 39 30.1** | **+0.3** |
| **SAUI** | **Saumlaki** | **36.88** | **278** | P | **P** | **22 39 34.7** | **-0.3** |
| SAUI | | | | lAmb | lAmb | 22 39 43.0 | |
| | comp=Z,2μm,1.7s | | | | | | |
| **GUMO** | **Guam** | **37.34** | **321** | P | **P** | **22 39 38.3** | **-0.5** |
| GUMO | | | | lAmb | lAmb | 22 39 45.0 | |
| | comp=Z,2μm,1.9s | | | | | | |
| **GUMO** | **Guam** | **37.34** | **321** | LR | LR | 22 56 10.2 | |
| | comp=Z,29μm,18.0s,baz=128,slow=38 | | | | | | |
| **GUMO** | **Guam** | **37.34** | **321** | P | **P** | **22 39 38.3** | **-0.5** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,2μm,1.9s | | | | | | |
| **FAKI** | **Fak Fak** | **37.65** | **286** | P | **P** | **22 39 42.5** | **+1.0** |
| **FAKI** | **Fak Fak** | **37.65** | **286** | P | **P** | **22 39 40.8** | **-0.7** |
| FAKI | | | | lAmb | lAmb | 22 39 45.2 | |
| | comp=Z,1μm,1.5s | | | | | | |
| **KNRA** | **Kununurra** | **37.87** | **265** | P | **P** | **22 39 41.8** | **-1.6** |
| **KNRA** | **Kununurra** | **37.87** | **265** | P | **P** | **22 39 42.3** | **-1.1** |
| | comp=Z,400nm,1.5s | | | | | | |
| **WRKA** | **Warakurna** | **38.30** | **250** | P | **P** | **22 39 46.4** | **-0.6** |
| **WRKA** | **Warakurna** | **38.30** | **250** | P | **P** | **22 39 46.1** | **-0.8** |
| | comp=Z,558nm,1.3s | | | | | | |
| **MCQ** | **Macquarie Isla** | **39.09** | **189** | P | **P** | **22 39 55.5** | **+2.4** |
| **MCQ** | **Macquarie Isla** | **39.09** | **189** | P | **P** | **22 39 52.9** | **-0.2** |
| **MCQ** | **Macquarie Isla** | **39.09** | **189** | P | **P** | **22 39 55.2** | **+2.0** |
| **MCQ** | **Macquarie Isla** | **39.09** | **189** | P | **P** | **22 39 52.9** | **-0.2** |
| MCQ | | | | pmax | pmax | | |
| | comp=Z,744nm,1.6s | | | | | | |
| **JOHN** | **Johnston Islan** | **39.25** | **35** | P | **P** | **22 39 55.2** | **+0.3** |
| JOHN | | | | lAmb | lAmb | 22 40 01.1 | |
| | comp=Z,2μm,1.9s | | | | | | |
| **BNDI** | **Bandanaira** | **39.26** | **283** | P | **P** | **22 39 56.5** | **+1.4** |
| **FORT** | **Forrest** | **39.42** | **241** | P | **P** | **22 39 56.7** | **+0.4** |
| **FORT** | **Forrest** | **39.42** | **241** | P | **P** | **22 39 55.8** | **-0.5** |
| FORT | | | | lAmb | lAmb | 22 39 59.8 | |
| | comp=Z,1μm,1.1s | | | | | | |
| **FORT** | **Forrest** | **39.42** | **241** | P | **P** | **22 39 56.2** | **-0.1** |
| | comp=Z,1μm,1.1s | | | | | | |
| **PPT** | **Papeete** | **40.43** | **98** | P | **P** | **22 40 06.1** | **+1.3** |
| | comp=Z,344nm,1.0s,baz=327,slow=9.0,SNR=12 | | | | | | |
| PPT | | | | LR | LR | 22 52 57.5 | |
| | comp=Z,13μm,19.2s,baz=266,slow=31 | | | | | | |
| | comp=Z,344nm,1.0s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **40.44** | **98** | P | **P** | **22 40 07.0** | **+2.1** |
| **PPTF** | **Pamatai, Papee** | **40.44** | **98** | P | **P** | **22 40 05.0** | **+0.1** |
| **SOEI** | **Soe** | **43.18** | **273** | P | **P** | **22 40 28.7** | **+1.2** |
| **SOEI** | **Soe** | **43.18** | **273** | P | **P** | **22 40 27.4** | **-0.1** |
| SOEI | | | | lAmb | lAmb | 22 40 53.4 | |
| | comp=Z,2μm,1.8s | | | | | | |
| SOEI | | | | IAMs_20 | IAMs_20 | 22 59 55.9 | |
| | comp=Z,29μm,21.0s | | | | | | |
| **TNTI** | **Ternate** | **43.59** | **289** | P | **P** | **22 40 31.8** | **+1.2** |
| **TNTI** | **Ternate** | **43.59** | **289** | P | **P** | **22 40 30.3** | **-0.3** |
| **SANI** | **Sanana** | **43.78** | **284** | P | **P** | **22 40 32.5** | **+0.3** |
| **KMBL** | **Kambalda** | **44.74** | **241** | P | **P** | **22 40 39.5** | **-0.2** |
| **KMBL** | **Kambalda** | **44.74** | **241** | P | **P** | **22 40 39.4** | **-0.3** |
| | comp=Z,915nm,1.3s | | | | | | |
| **MMRI** | **Maumere** | **45.39** | **274** | P | **P** | **22 40 44.7** | **-0.3** |
| **MMRI** | **Maumere** | **45.39** | **274** | P | **P** | **22 40 43.8** | **-1.2** |
| MMRI | | | | lAmb | lAmb | 22 42 27.4 | |
| | comp=Z,1μm,1.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **45.95** | **255** | P | **P** | **22 40 49.7** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **45.95** | **255** | P | **P** | **22 40 49.0** | **-0.4** |
| PSA00 | | | | lAmb | lAmb | 22 40 53.1 | |
| | comp=Z,618nm,1.2s | | | | | | |
| **PSA00** | **P

**SBUM Sibu** 58.23 283 P **P** 22 42 21.0 0.0
**JYT Yasato** 58.28 334 P **P** 22 42 21.1 +0.4
**JIE Ise** 58.36 330 P **P** 22 42 21.9 +0.5
**JRY Ryogami san** 58.67 332 P **P** 22 42 23.0 -0.6
**INU Inuyama** 58.99 330 P **P** 22 42 25.9 +0.1
**INU Inuyama** 58.99 330 P **P** 22 42 25.5 -0.2
INU IAmb IAmb 22 42 33.3
comp=Z,514nm,1.4s
**JGF Kuroka** 59.03 331 P **P** 22 42 26.4 +0.3
**JGF Kuroka** 59.03 331 P **P** 22 42 25.6 -0.6
**JGF Kuroka** 59.03 331 P **P** 22 42 25.8 -0.3
**JMN Monobe** 59.27 327 P **P** 22 42 29.2 +1.4
**JMN Monobe** 59.27 327 P **P** 22 42 28.1 +0.2
JMN IAmb IAmb 22 42 30.7
comp=Z,677nm,1.2s
**JMN Monobe** 59.27 327 P **P** 22 42 28.4 +0.6
**MJAR Matsushiro Arr** 59.41 332 P **P** 22 42 28.0 -0.7
comp=Z,176nm,0.9s,baz=153,slow=7.1,SNR=124
MJAR PKPPKP **P'P'df** 23 11 59.0 +3.4
comp=Z,0.7nm,0.3s,baz=13,slow=3.9,SNR=4.5
comp=Z,176nm,0.9s
**MJAR Matsushiro Arr** 59.41 332 P **P** 22 42 28.0 -0.7
**MAJO Matsushiro** 59.42 332 P **P** 22 42 28.3 -0.4
**MAJO Matsushiro** 59.42 332 P **P** 22 42 27.8 -1.0
MAJO IAmb IAmb 22 42 30.6
comp=Z,331nm,1.1s
**MAJO Matsushiro** 59.42 332*c* *i*P **P** 22 42 28.0 -0.7
MAJO pmax pmax
comp=Z,372nm,1.1s
MAJO MLR MLR
comp=Z,6µm,18.0s
**MAT Matsushiro** 59.42 332 P **P** 22 42 28.4 -0.3
**MJB9 Matsu-Tunnel** 59.42 332 P **P** 22 42 29.4 +0.6
MJB9 IAmb IAmb 22 42 32.0
comp=Z,321nm,1.1s
**JMM Marumori** 59.42 335 P **P** 22 42 29.7 +1.0
**JMM Marumori** 59.42 335 P **P** 22 42 28.6 -0.2
JMM IAmb IAmb 22 42 31.5
comp=Z,739nm,1.3s
**JMM Marumori** 59.42 335 P **P** 22 42 29.1 +0.4
**JSU Suzuyama** 59.50 323 P **P** 22 42 30.2 +0.8
**JGN Niukaw** 59.56 331 P **P** 22 42 29.4 -0.4
**YOJ Yonaguni jima** 59.65 312 P **P** 22 42 31.7 +1.2
**YOJ Yonaguni jima** 59.65 312 P **P** 22 42 30.0 -0.5
**YOJ Yonaguni jima** 59.65 312 P **P** 22 42 30.0 -0.5
YOJ pmax pmax
comp=Z,1µm,1.7s
**YOJ Yonaguni jima** 59.65 312 P **P** 22 42 30.7 +0.2
**BBJI Bungbulang** 59.69 271 P **P** 22 42 30.4 -0.8
**KSM Kuching** 59.70 281 P **P** 22 42 31.3 +0.1
**KSM Kuching** 59.70 281 P **P** 22 42 30.5 -0.7
KSM IAmb IAmb 22 42 34.5
comp=Z,813nm,1.4s
**JWT Wachi** 59.71 329 P **P** 22 42 31.1 +0.3
**JAD Aida** 60.06 328 P **P** 22 42 33.5 +0.3
**TWGBT Beinan** 60.09 309 P **P** 22 42 34.3 +0.7
**TWG Pinlang** 60.09 309 P **P** 22 42 33.2 -0.5
TWG IAmb IAmb 22 42 43.2
comp=Z,591nm,1.8s
**YULB Yu-li** 60.26 309 P **P** 22 42 36.0 +1.2
**JNU Nakatsue** 60.44 324 P **P** 22 42 36.2 +0.3
**JNU Nakatsue** 60.44 324 LR LR 23 04 54.2
comp=Z,5µm,20.8s,baz=138,slow=32
**JNU Nakatsue** 60.44 324 P **P** 22 42 36.0 +0.1
**JYA Atsumi** 60.49 335 P **P** 22 42 36.9 +0.9
**NACB Ninganchiao** 60.50 310 P **P** 22 42 36.3 -0.1
**NACB Ninganchiao** 60.50 310 P **P** 22 42 35.5 -0.9
NACB IAmb IAmb 22 42 39.3
comp=Z,898nm,1.5s
**JOM Ohasama** 60.61 336 P **P** 22 42 37.1 +0.3
**JSD Sado** 60.63 333 P **P** 22 42 37.6 +0.6
**JSD Sado** 60.63 333 P **P** 22 42 36.8 -0.3
**JSD Sado** 60.63 333 P **P** 22 42 36.9 -0.1
**JHS Saijyo** 60.65 327 P **P** 22 42 37.5 +0.2
**TPUB Ta-pu** 60.70 309 P **P** 22 42 37.4 -0.5
**TPUB Ta-pu** 60.70 309 P **P** 22 42 36.7 -1.2
TPUB IAmb IAmb 22 42 39.3
comp=Z,396nm,1.1s
**SSLB Suanglung** 60.74 310 P **P** 22 42 37.7 -0.4
**SSLB Suanglung** 60.74 310 P **P** 22 42 36.9 -1.3
**XMI Christmas Isla** 60.89 267 P **P** 22 42 40.2 +0.8
**XMIS Christmas Isla** 60.92 267 P **P** 22 42 40.4 +0.8
**XMIS Christmas Isla** 60.92 267 P **P** 22 42 38.6 -1.0
XMIS IAmb IAmb 22 42 43.1
comp=Z,808nm,1.2s
**YHNB Yeheng** 60.95 311 P **P** 22 42 39.6 0.0
**TATO Taipei** 61.06 311 P **P** 22 42 40.4 +0.2
**TATO Taipei** 61.06 311 P **P** 22 42 38.9 -1.3
**JTM Tenmabayashi** 61.83 337 P **P** 22 42 45.5 +0.4
**JTM Tenmabayashi** 61.83 337 P **P** 22 42 44.8 -0.3
JTM IAmb IAmb 22 42 48.2
comp=Z,543nm,1.1s
**JTM Tenmabayashi** 61.83 337 P **P** 22 42 44.7 -0.4
**SBA Scott Base** 61.89 180 P **P** 22 42 45.8 +0.8
**SBA Scott Base** 61.89 180 P **P** 22 42 45.8 +0.8
SBA pmax pmax
comp=Z,1µm,1.6s
SBA MLR MLR
comp=Z,11µm,18.0s
**ERM Erimo** 62.16 339 P **P** 22 42 48.7 +1.5
**ERM Erimo** 62.16 339 P **P** 22 42 47.2 -0.1
ERM IAmb IAmb 22 42 50.3
comp=Z,663nm,1.9s
**ERM Erimo** 62.16 339*ce*P **P** 22 42 47.9 +0.7
ERM pmax pmax
comp=Z,308nm,1.9s
**JEM Erimo** 62.16 339 P **P** 22 42 48.7 +1.5
**JEM Erimo** 62.16 339 P **P** 22 42 47.7 +0.4
**JTU Tsushima** 62.31 324 P **P** 22 42 47.9 -0.5
**JOT Ohata** 62.36 337 P **P** 22 42 48.9 +0.3
**CASY Casey** 62.70 203 P **P** 22 42 50.0 -0.6
CASY IAmb IAmb 22 42 53.3
comp=Z,378nm,1.2s
**KNMB Chin-men Tao** 63.05 309 P **P** 22 42 53.7 +0.2
**YUK Yuzh-Kuril'sk** 63.11 342*d* *i*P **P** 22 42 52.8 -0.8
YUK *e* 22 45 07.5
YUK *i*S **S** 22 51 23.1 -0.7
YUK pmax pmax
comp=Z,524nm,1.1s
YUK pmax pmax
comp=E,249nm,0.9s
YUK pmax pmax
comp=Z,1µm,2.5s
**QZH Quanzhou** 63.17 309⇑ *i*P **P** 22 42 54.8 +0.4
QZH *e*S **S** 22 51 25.6 +0.3
QZH pmax pmax
comp=Z,360nm,1.5s
QZH pmax pmax
comp=Z,15µm,8.6s
QZH LR LR
comp=Z,15µm,19.6s
QZH LR LR
comp=Z,7µm,17.9s
QZH LR LR
comp=Z,18µm,17.5s
**PMBI Palembang** 63.64 275 P **P** 22 42 58.8 +1.0
**PMBI Palembang** 63.64 275 P **P** 22 42 57.5 -0.2
**KUR Kuril'sk** 63.66 344*c* *i*P **P** 22 42 58.0 +0.9
KUR *e* 22 43 33.9
KUR S **S** 22 51 32.9 +2.3
KUR pmax pmax
comp=Z,951nm,1.5s
KUR pmax pmax
comp=N,212nm,1.6s
KUR MLR MLR
comp=Z,14µm,20.0s
**JSH Shimam** 63.82 337 P **P** 22 42 58.1 -0.2
**JMP Maruseppu** 63.86 340 P **P** 22 42 59.3 +0.7
**JKA Kamikawa-asahi** 64.21 340 P **P** 22 43 01.3 +0.4
JKA IAmb IAmb 22 43 04.4
comp=Z,947nm,1.5s
**ASAJ Asahikawa** 64.21 340 LR LR 23 06 45.7
comp=Z,14µm,20.7s,baz=174,slow=32
**ASAJ Asahikawa** 64.21 340 P **P** 22 43 01.3 +0.4
ASAJ pmax pmax
comp=Z,947nm,1.5s
**ASAJ Asahikawa** 64.21 340 P **P** 22 43 01.9 +1.1
**TJN Taejon** 64.79 324 P **P** 22 43 05.2 +0.4
**TJN Taejon** 64.79 324 P **P** 22 43 05.0 +0.2
**TJN Taejon** 64.79 324*ce*P **P** 22 43 04.8 0.0
**SSE Sheshan** 65.02 316 P **P** 22 43 06.4 0.0
SSE pP **pP** 22 43 11.4 -0.2
SSE pmax pmax
comp=Z,100nm,1.9s
**HKC Hong Kong Obse** 65.14 304⇑ P **P** 22 43 09.0 +1.6
**HKPS Hong Kong Po S** 65.16 304 P **P** 22 43 08.8 +1.3
**HKPS Hong Kong Po S** 65.16 304 P **P** 22 43 07.5 0.0
HKPS IAmb IAmb 22 43 10.9
comp=Z,549nm,1.3s
**KSRS Korea Array** 65.26 326 P **P** 22 43 08.2 +0.3
comp=Z,49nm,0.9s,baz=143,slow=6.9,SNR=88
KSRS PKPPKP **P'P'df** 23 11 49.4 +2.5
comp=Z,2.5nm,1.0s,baz=287,slow=2.7,SNR=7.7
comp=Z,49nm,0.9s
**KSAR Wonju Array Be** 65.27 325 P **P** 22 43 07.7 -0.2
**KSAR Wonju Array Be** 65.27 325 P **P** 22 43 07.7 -0.2
**KS19 Wonju Array Si** 65.33 326 P **P** 22 43 08.3 0.0
**BTDF Bukit Timah Da** 65.85 279 P **P** 22 43 12.6 +0.4
**INCN Inchon** 65.99 325 P **P** 22 43 13.9 +1.3
**INCN Inchon** 65.99 325 P **P** 22 43 12.6 0.0
INCN IAmb IAmb 22 43 15.2
comp=Z,1µm,1.6s
**INCN Inchon** 65.99 325 P **P** 22 43 12.6 0.0
INCN pmax pmax
comp=Z,1µm,1.7s
**YSS Yuzh-Sakhalins** 66.69 341 P **P** 22 43 18.1 +1.2
**YSS Yuzh-Sakhalins** 66.69 341 P **P** 22 43 17.3 +0.5
YSS IAmb IAmb 22 43 20.2
comp=Z,805nm,1.6s
**YSS Yuzh-Sakhalins** 66.69 341⇑ *e*P **P** 22 43 18.0 +1.2
YSS *e*S **S** 22 52 08.3 +0.6
YSS pmax pmax
comp=Z,250nm,1.7s
YSS MLR MLR
comp=Z,11µm,18.0s
**QIZ Qiongzhong** 67.10 299 P **P** 22 43 21.4 +1.3
QIZ S **S** 22 52 16.8 +2.9
QIZ pmax pmax
comp=Z,220nm,1.9s
QIZ pmax pmax
comp=Z,9µm,8.7s
QIZ LR LR
comp=Z,9µm,19.1s
QIZ LR LR
comp=Z,7µm,23.1s
QIZ LR LR
comp=Z,17µm,28.6s
**QIZ Qiongzhong** 67.10 299 P **P** 22 43 20.2 +0.2
QIZ IAmb IAmb 22 43 23.4
comp=Z,619nm,1.6s
**TEY Ternei** 67.17 336⇑ *e*P **P** 22 43 20.1 +0.2
TEY pmax pmax
comp=N,20nm,1.7s
TEY pmax pmax
comp=Z,60nm,1.7s
TEY pmax pmax
comp=E,10.0nm,1.7s
**NJ2 Nanjing** 67.18 316⇑ *i*P **P** 22 43 20.9 +0.6
NJ2 pP **sP** 22 43 30.3 +3.1
NJ2 pmax pmax
comp=E,290nm,1.5s
NJ2 pmax pmax
comp=E,7µm,9.0s
**SKR Severo-Kuril's** 67.22 352⇓ *e*P **P** 22 43 17.4 -2.7
**PSTR Posyet** 67.72 331*ce*P **P** 22 43 24.2 +0.8
**BKNI Bangkinang** 68.14 277 P **P** 22 43 27.1 +0.3
**BKNI Bangkinang** 68.14 277 P **P** 22 43 26.1 -0.7
**USA0B Ussuriysk Arra** 68.39 333 P **P** 22 43 28.4 +0.8
**USA0B Ussuriysk Arra** 68.39 333*c* *i*P **P** 22 43 27.9 +0.2
**USRK Ussuriysk Ar.** 68.39 333 P **P** 22 43 28.1 +0.4
**USRK Ussuriysk Ar.** 68.39 333 P **P** 22 43 28.4 +0.8
comp=E,221nm,1.0s,baz=149,slow=5.0,SNR=129
USRK PKPPKP **P'P'df** 23 11 42.2 +1.1
comp=E,2.9nm,1.0s,baz=294,slow=1.4,SNR=8.9
comp=E,221nm,1.0s
**SHEM Shemya Is, Ala** 68.62 4 LR LR 23 08 56.1
comp=E,15µm,20.2s,baz=196,slow=32
**KIWB Kanaga Island** 68.75 10 P **P** 22 43 30.3 +0.6
**UGL Uglegorsk** 68.79 342 *e*P **P** 22 43 29.8 -0.2
**COCO West Island** 69.00 263 P **P** 22 43 35.6 +3.5
**COCO West Island** 69.00 263 P **P** 22 43 32.4 +0.3
**COCO West Island** 69.00 263 P **P** 22 43 32.4 +0.3
COCO pmax pmax
comp=Z,2µm,1.6s
**GSTR Great Sitkin T** 69.17 10 P **P** 22 43 32.7 +0.4
**CNSH ChangSha** 69.17 309 P **P** 22 43 32.4 -0.5
CNSH S **S** 22 52 36.1 -2.2
CNSH pmax pmax
comp=Z,170nm,2.0s
CNSH LR LR
comp=Z,13µm,20.1s
CNSH LR LR
comp=Z,11µm,20.0s
CNSH LR LR
comp=Z,21µm,20.0s
**PET Petropavlovsk** 69.21 354 P **P** 22 43 33.3 +0.8
**PET Petropavlovsk** 69.21 354 P **P** 22 43 32.5 0.0
PET IAmb IAmb 22 43 39.3
comp=Z,558nm,1.5s
**PET Petropavlovsk** 69.21 354*ce*P **P** 22 43 32.4 -0.1
PET pmax pmax
comp=Z,431nm,1.5s
**PET Petropavlovsk** 69.21 354 P **P** 22 43 32.8 +0.3
comp=Z,202nm,2.5s
**UBPT Khong Chiam** 69.26 294 P **P** 22 43 34.6 +0.9
**UBPT Khong Chiam** 69.26 294 P **P** 22 43 33.6 -0.1
UBPT IAmb IAmb 22 43 36.9
comp=Z,362nm,1.2s
**PEA0B Petropavlovsk-** 69.40 353 P **P** 22 43 34.4 +0.6
PEA0B IAmb IAmb 22 43 41.8
comp=Z,1µm,1.5s
**PEA0B Petropavlovsk-** 69.40 353*c* *i*P **P** 22 43 34.1 +0.4
**PETK Petropavlovsk-** 69.40 353 P **P** 22 43 33.9 +0.2
**PETK Petropavlovsk-** 69.40 353 P **P** 22 43 34.2 +0.4
comp=Z,112nm,0.9s,baz=146,slow=6.6,SNR=69
PETK LR LR 23 10 14.2
comp=Z,11µm,20.0s,baz=166,slow=33
PETK PKP2bc 23 11 39.9
comp=Z,11nm,1.1s,baz=45,slow=2.2,SNR=7.3
comp=Z,112nm,0.9s
**WHN Wuhan** 69.42 312⇑ P **P** 22 43 34.5 +0.1
WHN pmax pmax
comp=Z,2µm,1.3s
**IPM Ipoh** 69.44 281 P **P** 22 43 35.0 +0.1
**IPM Ipoh** 69.44 281 P **P** 22 43 34.5 -0.4
IPM IAmb IAmb 22 43 38.0
comp=Z,561nm,1.4s
**MDJ Mudanjiang** 69.79 332 P **P** 22 43 37.3 +0.9
MDJ pmax pmax
comp=Z,650nm,2.3s
MDJ pmax pmax
comp=Z,18µm,8.3s
**MDJ Mudanjiang** 69.79 332 P **P** 22 43 36.7 +0.4
MDJ IAmb IAmb 22 43 39.5
comp=Z,919nm,1.3s
**DL2 Dalian** 69.82 323 P **P** 22 43 37.0 +0.4
DL2 S **S** 22 52 48.9 +3.5
DL2 pmax pmax
comp=Z,590nm,1.1s
DL2 pmax pmax
comp=Z,12µm,8.2s
DL2 LR LR
comp=Z,9µm,17.1s
DL2 LR LR
comp=Z,5µm,16.1s
DL2 LR LR
comp=Z,9µm,20.8s
**KULM Kulim** 70.05 282 P **P** 22 43 38.2 -0.4
KULM IAmb IAmb 22 43 41.8
comp=Z,518nm,1.4s
**TIA Tai'an** 70.85 318 P **P** 22 43 43.0 0.0
TIA pmax pmax
comp=Z,290nm,1.8s
TIA LR LR
comp=Z,9µm,16.7s
TIA LR LR
comp=Z,6µm,16.7s
TIA LR LR
comp=Z,17µm,19.1s
**RPSI Rantau Prapat** 70.87 279 P **P** 22 43 41.9 -1.7
RPSI IAmb IAmb 22 43 46.0
comp=Z,621nm,1.4s
**PSI Prapat** 70.90 279 P **P** 22 43 42.8 -1.2
**PSI Prapat** 70.90 279 P **P** 22 43 41.9 -2.1
PSI pmax pmax
comp=Z,621nm,1.4s
**NIKH Nikolski High** 71.48 14 P **P** 22 43 47.0 +0.5
**NIKH Nikolski High** 71.48 14 P **P** 22 43 46.3 -0.2
baz=203
**BNX BinXian** 71.65 331⇑ P **P** 22 43 47.4 -0.2
BNX pmax pmax
comp=E,410nm,1.8s
**GSI Gunungsitoli** 71.74 277 P **P** 22 43 49.2 +0.3
**GSI Gunungsitoli** 71.74 277 P **P** 22 43 48.3 -0.6
**GRNR Gornyy** 72.06 339⇑ *i*P **P** 22 43 51.4 +1.3
GRNR pmax pmax
comp=N,40nm,1.0s
GRNR pmax pmax
comp=Z,170nm,1.2s
GRNR MLR MLR
comp=E,3µm,20.0s
**SRIT Nakonsritamara** 72.13 285 P **P** 22 43 52.0 +0.8
**SRIT Nakonsritamara** 72.13 285 P **P** 22 43 51.4 +0.2
SRIT IAmb IAmb 22 43 55.4
comp=Z,683nm,1.4s
**SURA Surathani** 72.29 285 P **P** 22 43 53.4 +1.2
**KLR Kul'dur** 72.50 336 P **P** 22 43 53.2 +0.6
comp=Z,144nm,1.1s,baz=144,slow=5.6,SNR=125
KLR LR LR 23 10 28.6
comp=Z,7µm,22.0s,baz=140,slow=32
comp=Z,144nm,1.1s
**KLR Kul'dur** 72.50 336*c* *i*P **P** 22 43 53.6 +0.9
KLR pmax pmax
comp=Z,782nm,1.6s
KLR MLR MLR
comp=Z,7µm,18.0s
**ENH Enshi** 72.83 309 P **P** 22 43 54.8 -0.4
**UNV Unalaska Valle** 72.86 15 P **P** 22 43 54.6 -0.1
**UNV Unalaska Valle** 72.86 15 P **P** 22 43 54.1 -0.5
baz=206
**LYN LuoYang** 72.97 315⇑ P **P** 22 43 56.5 +0.7
LYN pP sP 22 44 02.0 -0.8
LYN sS sS 22 53 34.5 +3.7
LYN pmax pmax
comp=Z,710nm,1.2s
LYN pmax pmax
comp=Z,12µm,8.2s
LYN LR LR
comp=Z,8µm,17.5s
LYN LR LR
comp=Z,8µm,14.8s
LYN LR LR
comp=Z,9µm,19.2s
**HNS HongShan** 73.11 318⇑ P **P** 22 43 57.5 +1.0
HNS *e*S **SKiKP** 22 53 26.5 -2.0
HNS pmax pmax
comp=Z,510nm,1.7s
HNS LR LR
comp=Z,8µm,18.2s
HNS LR LR
comp=Z,13µm,20.0s
**SLVN Son La** 73.12 299 P **P** 22 43 56.9 -0.1
SLVN IAmb IAmb 22 44 04.9
comp=Z,851nm,1.9s
**GYA Guiyang** 73.14 305⇑ P **P** 22 43 57.8 +0.7
GYA pP pP 22 44 02.1 -0.2
GYA PP **PP** 22 46 41.6 +1.3
GYA S **SKiKP** 22 53 27.3 -1.8
GYA pmax pmax
comp=Z,300nm,1.9s
GYA pmax pmax
comp=Z,8µm,8.8s
GYA LR LR
comp=Z,3µm,25.1s
GYA LR LR
comp=Z,5µm,15.8s
GYA LR LR
comp=Z,16µm,18.0s
**LVA Lava Point** 73.27 16 P **P** 22 43 55.8 -1.4
**LHMI Lhok Sumawe** 73.53 281 P **P** 22 43 58.6 -0.9
**BJT Baijiatuao** 73.77 321 P **P** 22 44 00.4 0.0
BJT IAmb IAmb 22 44 03.4
comp=Z,812nm,1.5s
**BJT Baijiatuao** 73.77 321 P **P** 22 44 00.4 0.0
BJT pmax pmax
comp=Z,812nm,1.5s
**BJI Beijing** 73.78 321 P **P** 22 44 01.1 +0.7
BJI pmax pmax
comp=Z,170nm,1.9s
**QSPA South Pole Qui** 74.05 180 P **P** 22 44 01.5 -0.4
**QSPA South Pole Qui** 74.05 180 P **P** 22 44 01.3 -0.6
comp=Z,476nm,1.1s,baz=15,slow=1.8,SNR=173
QSPA S **S** 22 53 33.9 +0.2
comp=Z,3.6nm,1.1s,baz=86,slow=19,SNR=7.2
QSPA PKPPKP **P'P'df** 23 11 37.3 -0.8
comp=Z,1.9nm,1.0s,baz=143,slow=1.5,SNR=3.4
comp=Z,476nm,1.1s
**SRDT SRDT** 74.58 290 P **P** 22 44 06.9 +1.3
**FALS False Pass** 74.58 17 P **P** 22 44 04.3 -0.5
**FALS False Pass** 74.58 17 P **P** 22 44 04.3 -0.5
baz=208
**P08K Saint George I** 74.68 13 P **P** 22 44 05.3 0.0
baz=202
**TIY Taiyuan** 74.77 317 *e*P **P** 22 44 07.4 +1.0
TIY pmax pmax
comp=Z,310nm,2.5s
**HEH HeiHe** 75.06 334 *e*P **P** 22 44 07.3 -0.3
HEH pP **sP** 22 44 13.3 -1.3
HEH S **S** 22 53 44.3 -0.6
HEH pmax pmax
comp=Z,280nm,2.0s
HEH pmax pmax
comp=Z,14µm,7.9s
HEH LR LR
comp=Z,3µm,22.3s
HEH LR LR
comp=Z,8µm,22.0s
HEH LR LR
comp=Z,11µm,21.0s
**SPIA Saint Paul Isl** 75.07 12 P **P** 22 44 08.8 +1.3
**SPIA Saint Paul Isl** 75.07 12 P **P** 22 44 07.2 -0.3
baz=201,SNR=6.4
**PHRA Phrae** 75.14 295 P **P** 22 44 08.9 +0.1
**XAN Xi'an** 75.17 312⇑ P **P** 22 44 08.5 -0.3
XAN pP sP 22 44 14.8 -1.0
XAN pmax pmax
comp=Z,430nm,1.8s
**CNBA Chernabura Isl** 75.66 19 P **P** 22 44 10.3 -0.7
CNBA IAmb IAmb 22 44 12.6
comp=Z,756nm,1.5s
**CHNA Chernabura Isl** 75.67 19 P **P** 22 44 10.6 -0.4
baz=212
**CRAI Chiangrai** 75.69 296 P **P** 22 44 12.3 +0.3
CRAI IAmb IAmb 22 44 15.2
comp=Z,392nm,1.2s
**KMI Kunming** 75.70 302⇑ P **P** 22 44 13.6 +1.4
KMI pP sP 22 44 18.9 -0.3
KMI pmax pmax
comp=Z,280nm,1.7s
KMI LR LR
comp=Z,5µm,17.6s
KMI LR LR
comp=Z,6µm,20.2s
KMI LR LR
comp=Z,11µm,39.4s
**S12K Black Hills** 75.70 17 P **P** 22 44 10.4 -0.8
S12K IAmb IAmb 22 44 12.7
comp=Z,513nm,1.2s
**S12K Black Hills** 75.70 17 P **P** 22 44 10.6 -0.7
baz=210
**SDPT Sand Point** 75.85 18 P **P** 22 44 11.7 -0.3
**SDPT Sand Point** 75.85 18 P **P** 22 44 11.4 -0.6
baz=211
**XLT XiLinHaoTe** 76.23 324⇑ *i*P **P** 22 44 15.1 +0.5
XLT pP sP 22 44 20.5 -1.1
XLT pmax pmax
comp=Z,480nm,2.0s
**CM31 Chiang Mai Arr** 76.25 294 P **P** 22 44 15.6 +0.4
CM31 IAmb IAmb 22 44 18.8
comp=Z,461nm,1.4s
**CMAR Chiang Mai Arr** 76.25 294 P **P** 22 44 15.5 +0.3
**CMAR Chiang Mai Arr** 76.25 294 P **P** 22 44 16.1 +1.0
comp=Z,48nm,0.9s,baz=126,slow=4.2,SNR=123
CMAR PP **PP** 22 47 03.4 -3.3
comp=Z,2.9nm,0.7s,baz=105,slow=6.6,SNR=2.1
CMAR PKPPKP **P'P'df** 23 11 34.3 +2.8
comp=Z,1.0nm,0.3s,baz=297,slow=3.9,SNR=5.2
comp=Z,48nm,0.9s
**CMAR Chiang Mai Arr** 76.25 294 P **P** 22 44 15.5 +0.3
**RPN Rapa Nui** 76.35 115 LR LR 23 13 39.4
comp=Z,3µm,18.0s,baz=270,slow=32
**MA2 Magadan** 76.61 351 P **P** 22 44 16.0 -0.3
**MA2 Magadan** 76.61 351 P **P** 22 44 15.3 -1.0
**MA2 Magadan** 76.61 351*ce*P **P** 22 44 15.8 -0.5

MA2 pmax pmax
comp=Z,434nm,2.5s
**MA2 Magadan 76.61 351** P **P** **22 44 16.1 -0.3**
comp=Z,157nm,2.3s,comp=Z,10µm
**S14K Fog Glacier 76.92 18** P **P** **22 44 18.2 0.0**
baz=212
**HHC Hu-ho-hao-te 77.10 319**⇑ *i*P **P** **22 44 20.8 +1.1**
HHC pP sP 22 44 26.3 -0.4
HHC S **S** **22 54 09.5 +1.4**
HHC pmax pmax
comp=Z,270nm,1.4s
HHC pmax pmax
comp=Z,11µm,8.7s
HHC LR LR
comp=Z,5µm,18.0s
HHC LR LR
comp=Z,7µm,19.2s
HHC LR LR
comp=Z,12µm,19.6s
**PZH PanZhiHua 77.10 303** P **P** **22 44 20.3 +0.3**
PZH pmax pmax
comp=Z,120nm,1.9s
**CHGN Chignik 77.28 18** P **P** **22 44 19.4 -0.7**
baz=213
**CD2 Chengdu 77.46 307** P **P** **22 44 22.5 +0.7**
CD2 pP sP 22 44 27.8 -1.0
CD2 sP PcP 22 44 30.3 -1.9
CD2 S **S** **22 54 16.3 +4.0**
CD2 pmax pmax
comp=Z,220nm,1.1s
**CHIR Chirikof Islan 77.76 20** P **P** **22 44 22.9 +0.1**
**CHIR Chirikof Islan 77.76 20** P **P** **22 44 23.1 +0.3**
baz=216
**ZEA Zeya 77.78 337** *e*P **P** **22 44 23.9 +0.9**
ZEA pmax pmax
comp=E,50nm,1.9s
ZEA pmax pmax
comp=N,100nm,2.1s
ZEA pmax pmax
comp=Z,180nm,1.5s
**HIA Hailar 77.80 330** P **P** **22 44 23.1 -0.2**
HIA IAmb IAmb 22 44 25.8
comp=Z,640nm,1.7s
**HIA Hailar 77.80 330** P **P** **22 44 23.1 -0.2**
HIA pmax pmax
comp=Z,640nm,1.7s
**BTO Baotou 77.94 319** *e*P **P** **22 44 26.3 +2.0**
BTO pP **sP** **22 44 30.5 -0.8**
BTO sP **PcP** **22 44 35.0 +0.9**
BTO PP **PP** **22 47 18.9 -1.7**
BTO S **S** **22 54 21.1 +3.9**
BTO pmax pmax
comp=Z,520nm,2.0s
BTO pmax pmax
comp=Z,7µm,7.5s
BTO LR LR
comp=Z,15µm,17.8s
BTO LR LR
comp=Z,11µm,15.5s
BTO LR LR
comp=Z,13µm,17.0s
**R16K Pilot Point 78.59 18** P **P** **22 44 27.8 +0.4**
baz=214
**SII Sitkinak Islan 78.83 20** P **P** **22 44 29.8 +1.0**
**SII Sitkinak Islan 78.83 20** P **P** **22 44 28.8 0.0**
**SII Sitkinak Islan 78.83 20** P **P** **22 44 29.2 +0.4**
baz=217,SNR=19
**M11K Mekoryuk 78.86 13** P **P** **22 44 29.8 +1.0**
baz=205,SNR=24
**O14K Tigyukauivet M 79.01 15** P **P** **22 44 29.8 +0.1**
baz=210,SNR=47
**R17L Mt. Peulik Vol 79.01 19** P **P** **22 44 30.0 +0.2**
baz=215,SNR=46
**PLK4 Peulik 4 79.01 19** P **P** **22 44 29.5 -0.3**
PLK4 IAmb IAmb 22 44 32.1
comp=Z,724nm,1.2s
PLK4 IAMs_20 IAMs_20 23 13 30.6
comp=Z,10µm,20.0s
**TNCH TengChong 79.15 300**⇑ *i*P **P** **22 44 32.3 +0.8**
TNCH pP sP 22 44 37.3 -1.2
TNCH sP PcP 22 44 39.8 0.0
TNCH PP **PP** **22 47 32.9 +1.7**
TNCH S **S** **22 54 28.8 -2.1**
TNCH SKS **SKSac** **22 54 43.6 -3.7**
TNCH pmax pmax
comp=Z,310nm,2.1s
TNCH pmax pmax
comp=Z,6µm,5.7s
TNCH LR LR
comp=Z,2µm,18.6s
TNCH LR LR
comp=Z,3µm,16.6s
TNCH LR LR
comp=Z,12µm,47.2s
**O15K Ungalikthiuk R 79.32 16** P **P** **22 44 31.4 0.0**
baz=211,SNR=39
**N14K Kuskokwak Cree 79.48 15** P **P** **22 44 32.7 +0.5**
baz=209,SNR=37
**PBA Port Blair 79.50 285** P **P** **22 44 32.6 -0.8**
PBA IAmb IAmb 22 44 36.5
comp=Z,1µm,2.0s
**M13K Dall Lake 79.52 14** P **P** **22 44 33.4 +1.0**
baz=208,SNR=31
**R18K Karluk 79.55 19** P **P** **22 44 33.0 +0.3**
baz=216
**SEY Seymchan 79.63 353** PKPPKP 23 11 25.2
comp=Z,0.7nm,0.4s,baz=17,slow=2.5,SNR=4.5
SEY LR LR 23 16 18.8
comp=Z,16µm,20.5s,baz=165,slow=33
**SEY Seymchan 79.63 353** *ce*P **P** **22 44 32.0 -1.0**
SEY pmax pmax
comp=Z,385nm,2.5s
**OHAK Old Harbor 79.66 20** P **P** **22 44 34.3 +1.1**
**OHAK Old Harbor 79.66 20** P **P** **22 44 33.1 -0.1**
OHAK IAmb IAmb 22 44 36.7
comp=Z,1µm,1.4s
**OHAK Old Harbor 79.66 20** P **P** **22 44 34.0 +0.8**
baz=218,SNR=69
**Q17K Contact Creek 79.67 18** P **P** **22 44 33.4 -0.1**
baz=215,SNR=146
**P16K Nushagak River 79.70 17** P **P** **22 44 33.4 0.0**
baz=213,SNR=16
**Q16K King Salmon 79.78 18** P **P** **22 44 33.8 -0.1**
baz=214,SNR=27
**LZH Lanzhou 79.80 312**⇑ *i*P **P** **22 44 36.3 +1.5**
LZH pP sP 22 44 40.8 -1.0
LZH sP PcP 22 44 44.9 +2.5
LZH pmax pmax
comp=Z,340nm,1.9s
LZH LR LR
comp=Z,6µm,16.3s
LZH LR LR
comp=Z,5µm,17.5s
LZH LR LR
comp=Z,16µm,18.9s
**N15K Kwethluk River 80.10 15** P **P** **22 44 36.8 +1.2**
baz=211,SNR=162
**O16K Kokwok River B 80.14 17** IAMs_20 IAMs_20 23 16 52.5
comp=Z,11µm,21.0s
**O16K Kokwok River B 80.14 17** P **P** **22 44 35.3 -0.5**
baz=213,SNR=38
**M14K Bethel 80.14 14** IAMs_20 IAMs_20 23 15 44.5
comp=Z,10µm,20.0s
**M14K Bethel 80.14 14** P **P** **22 44 36.5 +0.7**
baz=209,SNR=68
**Q18K Katmai Hardscr 80.25 19** P **P** **22 44 36.7 +0.1**
baz=216,SNR=150
**P17K Kvichak River 80.28 18** P **P** **22 44 36.4 -0.2**
baz=214,SNR=43
**KDAK Kodiak Island 80.33 20** P **P** **22 44 36.9 0.0**
KDAK IAmb IAmb 22 44 39.7
comp=Z,522nm,1.2s
**KDAK Kodiak Island 80.33 20** P **P** **22 44 37.3 +0.4**
comp=Z,172nm,1.0s,baz=220,slow=1.7,SNR=47
KDAK LR LR 23 14 54.1
comp=Z,10µm,20.6s,baz=218,slow=32
comp=Z,172nm,1.0s
**KDAK Kodiak Island 80.33 20** P **P** **22 44 37.4 +0.5**
baz=218
**KDAK Kodiak Island 80.33 20** *c i*P **P** **22 44 37.2 +0.3**
KDAK pmax pmax
comp=Z,1µm,1.9s
**M15K Kasigluk River 80.40 15** P **P** **22 44 37.7 +0.5**
baz=210,SNR=96
**L14K Kuka Creek 80.49 14** IAMs_20 IAMs_20 23 14 25.7
comp=Z,12µm,20.0s
**L14K Kuka Creek 80.49 14** P **P** **22 44 38.4 +0.8**
baz=208,SNR=90
**O17K Koliganek Bris 80.57 17** P **P** **22 44 37.7 -0.4**
baz=214,SNR=51
**N16K Nishlik Lake 80.70 16** P **P** **22 44 40.1 +1.2**
baz=212,SNR=155
**P18K Big Mountain, 80.80 18** P **P** **22 44 39.2 -0.2**
baz=216,SNR=124
**Q19K Cape Douglas, 80.90 19** P **P** **22 44 40.1 +0.2**
baz=217,SNR=28
**GAMB Gambell 81.02 9** P **P** **22 44 40.7 +0.3**
baz=200,SNR=9.0
**Q20K Shuyak Island 81.05 20** P **P** **22 44 41.3 +0.6**
baz=218,SNR=12
**MAW Mawson 81.05 202** P **P** **22 44 41.4 +0.6**
comp=Z,116nm,1.0s,baz=104,slow=6.6,SNR=77
comp=Z,116nm,1.0s
**L15K Ungalak Mounta 81.07 14** P **P** **22 44 41.0 +0.2**
baz=209,SNR=77
**M16K Timber Creek 81.12 16** P **P** **22 44 42.2 +1.2**
baz=212,SNR=97
**N17K Nushagak Hills 81.17 17** IAMs_20 IAMs_20 23 16 46.8
comp=Z,12µm,20.0s
**N17K Nushagak Hills 81.17 17** P **P** **22 44 42.0 +0.6**
baz=214,SNR=95
**O18K Koktuh Hills 81.18 18** IAMs_20 IAMs_20 23 16 31.9
comp=Z,10µm,20.0s
**O18K Koktuh Hills 81.18 18** P **P** **22 44 41.3 -0.1**
baz=215,SNR=45
**J14K Nanvaranak Lak 81.55 13** P **P** **22 44 44.2 +1.0**
baz=207,SNR=59
**L16K Owhat River 81.58 15** P **P** **22 44 44.2 +0.7**
baz=211,SNR=69
**K15K Wolf Creek Mou 81.59 14** IAMs_20 IAMs_20 23 14 48.8
comp=Z,11µm,20.0s
**K15K Wolf Creek Mou 81.59 14** P **P** **22 44 44.6 +1.1**
baz=209,SNR=121
**P19K Oil Pt 81.61 19** P **P** **22 44 44.0 +0.3**
baz=217,SNR=19
**N18K Kilae Creek 81.66 17** P **P** **22 44 44.4 +0.5**
baz=215,SNR=30
**O19K Port Alsworth 81.72 18** P **P** **22 44 44.4 +0.2**
baz=216
**M17K Holitna River 81.84 16** P **P** **22 44 46.2 +1.4**
baz=213,SNR=53
**HOM Homer 82.11 19** P **P** **22 44 47.1 +0.8**
baz=219,SNR=12
**O20K Slope Mountain 82.14 19** P **P** **22 44 46.9 +0.3**
baz=218,SNR=34
**CNPM China Poot 82.14 20** P **P** **22 44 47.3 +0.8**
CNPM IAMs_20 IAMs_20 23 14 00.3
comp=Z,11µm,21.0s
**N19K Bonanza Creek 82.17 17** P **P** **22 44 46.6 -0.1**
baz=216,SNR=40
**L17K Donlin 82.23 15** P **P** **22 44 48.5 +1.6**
baz=212,SNR=126
**LKP Lekhapani 82.25 301** *e*P **P** **22 44 47.0 -0.9**
**M18K Stony River 82.35 17** P **P** **22 44 48.9 +1.4**
baz=215,SNR=240
**BRSE Bradley Lake S 82.47 20** P **P** **22 44 48.9 +0.7**
baz=220,SNR=92
**CIT Chita 82.59 329** *e*P **P** **22 44 49.2 +0.1**
CIT *e* 22 47 56.1
CIT *e*S **S** **22 55 01.6 -3.9**
CIT *e* 22 56 01.4
CIT pmax pmax
comp=Z,2µm,2.5s
**J16K Anvik River 82.67 14** IAMs_20 IAMs_20 23 15 21.2
comp=Z,11µm,20.0s
**J16K Anvik River 82.67 14** P **P** **22 44 50.4 +1.2**
baz=210,SNR=120
**L18K Granite Mounta 82.72 16** P **P** **22 44 50.7 +1.3**
baz=214,SNR=121
**K17K Iditarod 82.73 15** P **P** **22 44 50.6 +1.1**
baz=212,SNR=119
**ANM Nome 82.82 11** P **P** **22 44 50.8 +0.9**
baz=206,SNR=21
**IMP Imphal 82.92 298** *e*P **P** **22 44 50.9 -0.5**
IMP IAmb IAmb 22 44 52.9
comp=Z,665nm,1.5s
**M19K Big River Lodg 83.08 17** IAMs_20 IAMs_20 23 18 03.2
comp=Z,13µm,20.0s
**M19K Big River Lodg 83.08 17** P **P** **22 44 52.3 +0.9**
baz=216,SNR=272
**KOHI KOHIMA 83.10 299** *e*P **P** **22 44 51.7 -0.8**
KOHI IAmb IAmb 22 45 02.0
comp=Z,441nm,1.4s
**PAF Port-aux-Franc 83.11 221** P **P** **22 44 51.6 -0.3**
**PAF Port-aux-Franc 83.11 221** P **P** **22 44 51.6 -0.3**
PAF pmax pmax
comp=Z,845nm,1.0s
**J17K VABM Dome 83.12 14** IAMs_20 IAMs_20 23 17 07.1
comp=Z,11µm,20.0s
**J17K VABM Dome 83.12 14** P **P** **22 44 52.7 +1.2**
baz=212,SNR=69
**CAPN Captain Cook N 83.13 19** P **P** **22 44 53.1 +1.5**
baz=219,SNR=12
**N20K Mount Spurr 83.15 18** P **P** **22 44 51.6 -0.2**
baz=218,SNR=73
**SPCR Spurr Chakacha 83.15 18** P **P** **22 44 51.5 -0.3**
baz=218,SNR=46
**SEW Seward 83.16 20** P **P** **22 44 52.5 +0.7**
baz=221,SNR=60
**I17K Unalakleet 83.17 13** IAMs_20 IAMs_20 23 15 28.5
comp=Z,10µm,20.0s
**I17K Unalakleet 83.17 13** P **P** **22 44 53.1 +1.4**
baz=210,SNR=37
**L19K White Mountain 83.18 17** P **P** **22 44 52.9 +1.0**
baz=216,SNR=336
**TNA Tin City 83.28 10** P **P** **22 44 53.1 +0.8**
baz=203,SNR=32
**O22K Cooper Landing 83.36 20** P **P** **22 44 53.5 +0.7**
baz=220,SNR=38
**M20K Styx River 83.42 17** IAMs_20 IAMs_20 23 21 01.2
comp=Z,12µm,19.0s
**M20K Styx River 83.42 17** P **P** **22 44 53.2 0.0**
baz=217,SNR=132
**G15K Niukluk 83.46 12** P **P** **22 44 54.5 +1.3**
baz=207,SNR=62
**F14K Arctic Creek 83.47 10** P **P** **22 44 54.3 +1.0**
baz=205,SNR=49
**YAK Yakutsk 83.48 343** P **P** **22 44 52.9 -0.5**
**YAK Yakutsk 83.48 343** P **P** **22 44 53.1 -0.2**
comp=Z,28nm,0.4s,baz=132,slow=6.1,SNR=58
comp=Z,28nm,0.4s
**YAK Yakutsk 83.48 343** *c i*P **P** **22 44 53.2 -0.1**
YAK *e**PP **pP** **22 44 58.0 -0.5**
YAK *e*S **SKSac** **22 55 16.9 +2.2**
YAK pmax pmax
comp=Z,179nm,1.4s
YAK pmax pmax
comp=E,40nm,1.5s
YAK pmax pmax
comp=N,84nm,1.7s
YAK smax smax
comp=E,2µm,9.6s
YAK smax smax
comp=N,667nm,5.1s
**H16K Elim 83.50 12** P **P** **22 44 54.2 +0.8**
baz=208,SNR=18
**ULN Ulaanbaatar 83.66 324** P **P** **22 44 54.6 -0.2**
**ULN Ulaanbaatar 83.66 324** *ce*P **P** **22 44 55.1 +0.3**
ULN pmax pmax
comp=Z,579nm,1.5s
**L20K Farewell, AK 83.69 17** P **P** **22 44 55.7 +1.2**
baz=216,SNR=740
**FIS Fire Island 83.71 19** P **P** **22 44 55.6 +1.1**
**Q23K Middleton Isla 83.72 22** P **P** **22 44 55.7 +1.1**
baz=224,SNR=8.0
**MID Middleton Isla 83.72 22** P **P** **22 44 56.4 +1.8**
**J18K Innoko River 83.75 15** P **P** **22 44 55.7 +0.9**
baz=214,SNR=171
**P23K Montague Islan 83.77 21** P **P** **22 44 55.1 +0.2**
baz=223,SNR=20
**SUA Susitna One 83.80 19** P **P** **22 44 55.4 +0.2**
baz=219,SNR=193
**BILL Bilibino 83.80 359** P **P** **22 44 54.8 -0.1**
BILL IAmb IAmb 22 45 02.6
comp=Z,477nm,1.4s
**BILL Bilibino 83.80 359** *c i*P **P** **22 44 54.7 -0.2**
BILL *e* 22 45 01.6
BILL *e* 22 48 06.1
BILL *e*PPP PPP 22 50 05.2
BILL *e*SS SS 23 00 40.6 -4.3
BILL pmax pmax
comp=Z,434nm,1.6s
BILL MLR MLR
comp=Z,4µm,19.0s
**RC01 Rabbit Creek A 83.82 19** IAMs_20 IAMs_20 23 16 52.8
comp=Z,10µm,20.0s
**RC01 Rabbit Creek A 83.82 19** P **P** **22 44 55.7 +0.5**
baz=220,SNR=188
**SKT Skwentna 83.96 18** P **P** **22 44 54.5 -1.4**
SKT IAmb IAmb 22 45 01.7
comp=Z,887nm,1.7s
**SKT Skwentna 83.96 18** P **P** **22 44 54.9 -1.0**
baz=219,SNR=62
**ZIRO ZIRO 83.97 301** *e*P **P** **22 44 57.0 +0.1**
ZIRO IAmb IAmb 22 45 04.6
comp=Z,1µm,1.8s
**F15K North Star Dit 83.98 11** IAMs_20 IAMs_20 23 18 24.0
comp=Z,11µm,20.0s
**F15K North Star Dit 83.98 11** P **P** **22 44 56.7 +0.8**
baz=206,SNR=60
**SONM Songino Array 84.02 323** P **P** **22 44 56.0 -0.6**
**SONM Songino Array 84.02 323** P **P** **22 44 56.8 +0.1**
comp=Z,82nm,1.1s,baz=144,slow=3.1,SNR=114
SONM S **S** **22 55 22.2 +1.9**
comp=Z,0.2nm,0.3s,baz=160,slow=4.6,SNR=1.5
SONM PKKPbc **PKKPbc** **23 03 12.1 -1.4**
comp=Z,2.5nm,1.1s,baz=240,slow=4.8,SNR=4.9
SONM PKPPKP **P'P'df** **23 11 16.5 +1.9**
comp=Z,1.3nm,1.0s,baz=27,slow=0.6,SNR=6.1
SONM LR LR 23 19 12.3
comp=Z,5µm,21.4s,baz=130,slow=33
comp=Z,82nm,1.1s
**MCCM Marconi Confer 84.03 48** P **P** **22 44 58.4 +1.7**
MCCM IAmb IAmb 22 45 06.0
comp=Z,610nm,1.2s
MCCM IAMs_20 IAMs_20 23 14 01.3
comp=Z,11µm,20.0s
**PWL Port Wells 84.10 20** P **P** **22 44 56.9 +0.2**
**PWL Port Wells 84.10 20** P **P** **22 44 57.0 +0.4**
baz=222,SNR=91
**G16K Koyuk River 84.14 12** IAMs_20 IAMs_20 23 18 02.2
comp=Z,10µm,20.0s
**G16K Koyuk River 84.14 12** P **P** **22 44 57.8 +1.1**
baz=208,SNR=68
**GTA Gaotai 84.16 314**⇑ P **P** **22 44 58.3 +0.7**
GTA pP pP 22 45 02.9 +0.1
GTA PP **PP** **22 48 12.3 +0.1**
GTA S **S** **22 55 25.5 +3.4**
GTA sS sS 22 55 32.1 +1.3
GTA pmax pmax
comp=Z,190nm,2.0s
GTA pmax pmax
comp=Z,8µm,6.5s
GTA LR LR
comp=Z,6µm,19.3s
GTA LR LR
comp=Z,8µm,20.0s
GTA LR LR
comp=Z,9µm,23.3s
**KMPM Mount Pierce 84.16 45** P **P** **22 44 58.9 +1.4**
**M22K Willow 84.21 19** IAMs_20 IAMs_20 23 17 30.1
comp=Z,10µm,20.0s
**M22K Willow 84.21 19** P **P** **22 44 57.6 +0.5**
baz=220,SNR=64
**H17K Granite Mounta 84.25 13** IAMs_20 IAMs_20 23 16 53.1
comp=Z,10µm,20.0s
**H17K Granite Mounta 84.25 13** P **P** **22 44 58.0 +0.8**
baz=211,SNR=111
**K20K Telida 84.35 16** IAMs_20 IAMs_20 23 20 47.6
comp=Z,12µm,20.0s
**K20K Telida 84.35 16** P **P** **22 44 58.7 +0.9**
baz=216,SNR=455
**HIN Hinchinbrook I 84.37 21** P **P** **22 44 58.3 +0.3**
HIN IAMs_20 IAMs_20 23 17 39.3
comp=Z,9µm,19.0s
**PMR Palmer 84.39 19** P **P** **22 44 58.3 +0.3**
**PMR Palmer 84.39 19** P **P** **22 44 58.4 +0.4**
baz=221,SNR=92
**J19K Poorman 84.46 15** IAMs_20 IAMs_20 23 15 17.7
comp=Z,10µm,21.0s
**J19K Poorman 84.46 15** P **P** **22 44 59.6 +1.2**
baz=215,SNR=294
**KNK Knik Glacier 84.47 19** P **P** **22 44 59.2 +0.7**
baz=222,SNR=53
**SAO San Andreas Ge 84.48 49** P **P** **22 44 59.7 +0.6**
SAO IAmb IAmb 22 45 08.8
comp=Z,643nm,1.4s
**SAO San Andreas Ge 84.48 49** P **P** **22 44 59.7 +0.6**
SAO pmax pmax
comp=Z,643nm,1.4s
SAO MLR MLR
comp=Z,9µm,21.0s
**SNCC San Nicolas Is 84.51 53** P **P** **22 45 00.6 +1.3**
**GLI Glacier Island 84.52 20** P **P** **22 44 59.1 +0.4**
GLI IAMs_20 IAMs_20 23 17 00.3
comp=Z,9µm,20.0s
**GLI Glacier Island 84.52 20** P **P** **22 44 58.7 0.0**
baz=223,SNR=44
**G17K Kiwalik Mounta 84.58 13** P **P** **22 44 59.8 +0.8**
baz=210,SNR=110
**GHO Glory Hole Cre 84.60 19** IAMs_20 IAMs_20 23 17 18.3
comp=Z,9µm,21.0s
**KHMM Horse Mountain 84.63 45** P **P** **22 45 00.7 +0.7**
KHMM IAmb IAmb 22 45 13.1
comp=Z,502nm,1.4s
**CUT Chulitna 84.67 18** P **P** **22 44 59.2 -0.2**
baz=220,SNR=14
**EYAK Cordova Ski Ar 84.73 21** P **P** **22 45 01.0 +1.2**
**EYAK Cordova Ski Ar 84.73 21** P **P** **22 44 59.8 0.0**
baz=224,SNR=18
**KAIM Kayak Island 84.76 22** P **P** **22 45 00.9 +1.0**
baz=225,SNR=7.2
**GCSA Galena City Sc 84.78 14** P **P** **22 45 00.7 +0.7**
baz=214,SNR=28
**H18K Honhosa River 84.78 14** IAMs_20 IAMs_20 23 16 59.1
comp=Z,11µm,20.0s
**H18K Honhosa River 84.78 14** P **P** **22 45 00.3 +0.3**
baz=212,SNR=50
**SML Sawmill 84.81 19** P **P** **22 45 00.6 +0.4**
baz=222,SNR=53
**AGT Agartala 84.89 296** *e*P **P** **22 45 02.6 +1.2**
**SHL Shillong 84.92 298** P **P** **22 45 01.5 -0.3**
**SHL Shillong 84.92 298** *e*P **P** **22 45 01.9 +0.1**
SHL IAmb IAmb 22 45 09.0
comp=Z,2µm,2.2s
**SHL Shillong 84.92 298** P **P** **22 45 01.5 -0.3**
SHL pmax pmax
comp=Z,826nm,1.4s
**O02D Mt. Diablo Mer 84.97 46** IAMs_20 IAMs_20 23 15 24.1
comp=Z,12µm,20.0s
**J20K Nowinta River 84.99 16** IAMs_20 IAMs_20 23 16 25.6
comp=Z,10µm,20.0s
**J20K Nowinta River 84.99 16** P **P** **22 45 01.9 +0.9**
baz=216,SNR=277
**M23K Glacier View 84.99 19** P **P** **22 45 00.9 -0.2**
baz=222,SNR=26
**RAGM Ragged Mountai 84.99 21** P **P** **22 45 02.0 +0.8**
**SCM Sheep Creek Mo 85.15 20** P **P** **22 45 02.8 +0.8**
**SCM Sheep Creek Mo 85.15 20** P **P** **22 45 02.0 0.0**
baz=222,SNR=44
**SCM Sheep Creek Mo 85.15 20** P **P** **22 45 02.8 +0.8**
**F17K Baldwin Pennin 85.28 12** IAMs_20 IAMs_20 23 18 35.3
comp=Z,10µm,20.0s
**F17K Baldwin Pennin 85.28 12** P **P** **22 45 03.6 +1.2**
baz=209,SNR=108
**L02F Cave Junction 85.29 44** P **P** **22 45 03.8 +0.8**
L02F IAmb IAmb 22 45 07.2
comp=Z,707nm,1.8s
**BGLC Bering Glacier 85.30 22** P **P** **22 45 04.0 +1.4**
baz=226
**G18K Tagagawik 85.35 13** P **P** **22 45 03.4 +0.5**
baz=212,SNR=172
**KLU Klutina 85.36 20** P **P** **22 45 03.5 +0.4**
baz=224,SNR=29
**BELA Belgrano 2 85.41 175** P **P** **22 45 01.8 -1.4**
**I20K Naaghedeneel 85.41 15** P **P** **22 45 04.6 +1.5**
baz=216,SNR=197
**BMRM Bremner River 85.43 21** P **P** **22 45 03.6 +0.2**
baz=225,SNR=30
**SNH Sunshine Point 85.50 22** IAMs_20 IAMs_20 23 24 43.4
comp=Z,12µm,19.0s
**WAT1 Susitna Watana 85.51 18** P **P** **22 45 03.8 +0.1**
baz=221
**H19K Roundabout Mou 85.53 14** IAMs_20 IAMs_20 23 19 02.0
comp=Z,12µm,21.0s
**H19K Roundabout Mou 85.53 14** P **P** **22 45 04.7 +1.0**
baz=214,SNR=208
**WAT6 Susitna Watana 85.57 19** P **P** **22 45 04.2 0.0**
baz=222,SNR=78
**ORV Oroville 85.60 47** IAMs_20 IAMs_20 23 16 31.9

comp=Z,10µm,20.0s
**DIB Dawson Inlet, 85.62 31 P P 22 45 05.1 +0.7**
**H02S1 DAWSON INLET T 85.62 31 T T 00 20 05.1**
**YBH Yreka Blue Hor 85.69 45 P P 22 45 05.9 +0.7**
comp=Z,81nm,1.2s,baz=189,slow=2.9,SNR=77
YBH S **SKSac 22 55 27.6 -2.6**
comp=Z,0.4nm,0.3s,baz=208,slow=12,SNR=1.3
YBH LR LR 23 16 53.4
comp=Z,3µm,19.1s,baz=252,slow=31
comp=Z,81nm,1.2s
**M24K Tolsona, Glenn 85.72 20 P P 22 45 05.6 +0.8**
baz=224,SNR=29
**E17K Hotham Inlet 85.73 11 P P 22 45 05.8 +1.2**
baz=209,SNR=196
**F18K Selawik 85.74 12 P P 22 45 05.3 +0.6**
baz=211,SNR=105
**CMB Columbia Colle 85.77 49 IAMs_20 IAMs_20 23 23 08.4**
comp=Z,9µm,20.0s
**HG4B Hotspring 85.77 32 P P 22 45 06.2 +1.0**
HG4B IAmb IAmb 22 45 14.2
comp=Z,817nm,1.5s
**BPAW Bear Paw Mtn. 85.78 17 P P 22 45 04.5 -0.5**
BPAW IAmb IAmb 22 45 11.9
comp=Z,1µm,1.6s
BPAW IAMs_20 IAMs_20 23 22 37.4
comp=Z,12µm,19.0s
**BPAW Bear Paw Mtn. 85.78 17 P P 22 45 04.2 -0.8**
baz=219,SNR=100
**CRQE Cirque 85.81 22 P P 22 45 05.5 +0.1**
baz=226,SNR=25
**MESA MESA 85.83 23 P P 22 45 06.1 +0.6**
baz=228,SNR=11
**RND Reindeer 85.85 18 IAMs_20 IAMs_20 23 19 22.5**
comp=Z,9µm,19.0s
**H20K Anotleneega Mo 85.88 15 P P 22 45 06.4 +1.0**
baz=215,SNR=310
**N25K Chitina, Valde 85.88 21 IAMs_20 IAMs_20 23 16 04.4**
comp=Z,9µm,19.0s
**N25K Chitina, Valde 85.88 21 P P 22 45 05.5 -0.2**
baz=225,SNR=59
**G19K Purcell Mounta 85.90 13 IAMs_20 IAMs_20 23 17 01.7**
comp=Z,10µm,21.0s
**G19K Purcell Mounta 85.90 13 P P 22 45 06.5 +1.0**
baz=213,SNR=451
**BOD Bodaibo 85.98 334** *e*P P **22 45 05.1 -1.0**
BOD pmax pmax
comp=Z,2µm,2.0s
**GLB Gilahina Butte 86.04 21 P P 22 45 07.0 +0.6**
GLB IAmb IAmb 22 45 14.2
comp=Z,763nm,1.5s
**D17K Noatak River 86.05 11 P P 22 45 07.4 +1.2**
baz=208,SNR=89
**DHY Denali Highway 86.05 19 IAMs_20 IAMs_20 23 18 24.8**
comp=Z,11µm,21.0s
**DHY Denali Highway 86.05 19 P P 22 45 06.3 -0.2**
baz=222,SNR=75
**MCK McKinley 86.08 18 P P 22 45 06.1 -0.4**
baz=221,SNR=119
**TJX Tijuana 86.16 55 P P 22 45 07.9 +0.3**
**C16K Lisburne Hills 86.19 10 P P 22 45 07.4 +0.5**
baz=205,SNR=43
**BWN Browne 86.26 17 IAMs_20 IAMs_20 23 21 30.5**
comp=Z,10µm,19.0s
**HARP HAARP 86.26 20 P P 22 45 07.4 -0.1**
baz=224,SNR=18
**E18K Tukpahlearik C 86.27 12 P P 22 45 08.3 +1.0**
baz=210,SNR=78
**MCARA McCarthy VSAT 86.27 21 P P 22 45 08.1 +0.6**
MCARA IAmb IAmb 22 45 15.6
comp=Z,370nm,1.3s
**MCARA McCarthy VSAT 86.27 21 P P 22 45 07.7 +0.3**
baz=226,SNR=23
**GRNC Granite Creek 86.28 22 P P 22 45 08.0 +0.2**
GRNC IAmb IAmb 22 45 11.1
comp=Z,319nm,1.2s
**F19K Shaleruckik Mo 86.33 13 P P 22 45 08.5 +0.9**
baz=213,SNR=231
**RDOG Red Dog Mine 86.40 10 P P 22 45 09.0 +1.0**
baz=208,SNR=32
**GOMU GeErMu 86.45 309 P P 22 45 09.3 -0.1**
GOMU pmax pmax
comp=Z,80nm,2.5s
**PNL Peninsula 86.46 24 P P 22 45 09.3 +0.9**
**PNL Peninsula 86.46 24 P P 22 45 08.5 +0.1**
baz=230
**SIT Sitka 86.52 27 P P 22 45 10.4 +1.7**
**SIT Sitka 86.52 27 P P 22 45 09.4 +0.7**
baz=233
**H21K Melozitna Rive 86.52 15 IAMs_20 IAMs_20 23 17 15.1**
comp=Z,11µm,20.0s
**H21K Melozitna Rive 86.52 15 P P 22 45 09.4 +0.8**
baz=217,SNR=179
**COR Corvallis 86.55 42 P P 22 45 10.6 +1.4**
**COR Corvallis 86.55 42 P P 22 45 10.6 +1.4**
COR pmax pmax
comp=Z,2µm,2.0s
**MLY Manley 86.57 16 P P 22 45 08.6 -0.3**
baz=219,SNR=134
**PAX Paxson 86.57 19 P P 22 45 09.1 +0.1**
baz=224,SNR=28
**CTG Chitna Glacier 86.58 22 P P 22 45 09.4 +0.2**
baz=228,SNR=29
**CRAG Craig 86.59 29 P P 22 45 10.9 +1.8**
**CRAG Craig 86.59 29 P P 22 45 10.2 +1.1**
baz=235,SNR=11
**LOGN Logan Glacier 86.61 22 P P 22 45 09.8 +0.5**
LOGN IAmb IAmb 22 45 19.0
comp=Z,400nm,1.2s
**S31K Pelican 86.67 26 P P 22 45 10.1 +0.7**
baz=233,SNR=13
**NEA2 Nenana 86.69 17 IAMs_20 IAMs_20 23 19 56.6**
comp=Z,11µm,20.0s
**NEA2 Nenana 86.69 17 P P 22 45 08.9 -0.6**
baz=221,SNR=81
**C17K DeLong Mountai 86.73 10 P P 22 45 10.6 +1.0**
baz=208,SNR=34
**O28M Mount Upton 86.88 23 P P 22 45 10.8 0.0**
baz=229,SNR=28
**U33K Whale Pass 86.96 29 IAMs_20 IAMs_20 23 18 33.1**
comp=Z,12µm,20.0s
**U33K Whale Pass 86.96 29 P P 22 45 11.8 +0.9**
baz=235,SNR=17
**LSA Lhasa 86.96 302 P P 22 45 12.8 +0.6**
LSA S **S 22 55 53.8 +3.0**
LSA pmax pmax
comp=Z,120nm,2.4s
LSA LR LR
comp=Z,5µm,20.8s
LSA LR LR
comp=Z,9µm,20.2s
LSA LR LR
comp=Z,7µm,17.5s
**LSA Lhasa 86.96 302 P P 22 45 12.2 0.0**
LSA IAmb IAmb 22 45 19.6
comp=Z,510nm,1.8s
**LSA Lhasa 86.96 302 P P 22 45 12.2 0.0**
LSA pmax pmax
comp=Z,510nm,1.8s
**F20K Avaraart Lake 86.96 13 IAMs_20 IAMs_20 23 18 15.7**
comp=Z,11µm,21.0s
**F20K Avaraart Lake 86.96 13 P P 22 45 11.7 +1.0**
baz=215,SNR=246
**E19K Redstone River 86.98 13 IAMs_20 IAMs_20 23 17 59.1**
comp=Z,10µm,21.0s
**E19K Redstone River 86.98 13 P P 22 45 11.9 +1.1**
baz=213,SNR=170
**M26K Nabesna, AK 86.98 21 P P 22 45 11.3 +0.3**
baz=226,SNR=79
**PFO Pinyon Flats O 87.02 54 P P 22 45 12.4 +0.4**
PFO IAmb IAmb 22 45 22.8
comp=Z,520nm,1.6s
**PFO Pinyon Flats O 87.02 54** LR LR 23 15 36.1
comp=Z,13µm,21.7s,baz=258,slow=30
**PFO Pinyon Flats O 87.02 54***ce*P P **22 45 12.6 +0.6**
PFO pmax pmax
comp=Z,1µm,2.5s
**TPFO Pinon Flats 87.03 54 P P 22 45 13.5 +1.5**
baz=249,SNR=66
**I23K Minto, Yukon-K 87.03 17 P P 22 45 10.4 -0.6**
baz=220,SNR=44
**G21K Allakaket 87.04 14 IAMs_20 IAMs_20 23 19 59.8**
comp=Z,9µm,20.0s
**G21K Allakaket 87.04 14 P P 22 45 12.2 +1.0**
baz=217,SNR=153
**RADR Rader Ridge 87.06 40 P P 22 45 12.6 +0.9**
**ZAK Zakamensk 87.07 325** *e*P P **22 45 11.5 -0.3**
ZAK *e* 22 55 45.9

ZAK pmax pmax
comp=Z,213nm,1.8s
**H22K Ishtalitna Cre 87.07 15 P P 22 45 11.6 +0.3**
baz=219,SNR=164
**K24K Donnelly Dome 87.08 19 P P 22 45 11.1 -0.3**
baz=224,SNR=17
**P29M Windy Craggy 87.08 24 P P 22 45 11.5 0.0**
baz=231,SNR=24
**S32K Killisnoo 87.09 27 IAMs_20 IAMs_20 23 21 48.5**
comp=Z,10µm,18.0s
**S32K Killisnoo 87.09 27 P P 22 45 11.6 +0.2**
baz=234
**R31K City Hall, Gus 87.15 26 P P 22 45 11.8 +0.1**
baz=233
**HDA Harding Lake 87.17 18 IAMs_20 IAMs_20 23 19 44.2**
comp=Z,12µm,20.0s
**HDA Harding Lake 87.17 18 P P 22 45 11.2 -0.6**
baz=223,SNR=157
**O29M Mount Kennedy 87.18 24 IAMs_20 IAMs_20 23 24 49.8**
comp=Z,10µm,19.0s
**O29M Mount Kennedy 87.18 24 P P 22 45 12.0 -0.1**
baz=230,SNR=16
**SMAI San Martin Ant 87.22 162 P P 22 45 11.7 -0.5**
**V35K Ketchikan 87.22 30 IAMs_20 IAMs_20 23 18 52.2**
comp=Z,9µm,19.0s
**V35K Ketchikan 87.22 30 P P 22 45 12.8 +0.6**
baz=237,SNR=18
**C18K Utukok River 87.23 11 P P 22 45 12.7 +0.6**
baz=209,SNR=44
**COLA College 87.25 17 P P 22 45 11.1 -1.0**
**COLA College 87.25 17 P P 22 45 11.1 -1.0**
COLA IAmb IAmb 22 45 19.4
comp=Z,802nm,1.6s
**COLA College 87.25 17 IAMs_20 IAMs_20 23 23 31.3**
comp=Z,10µm,20.0s
**COLA College 87.25 17 P P 22 45 11.4 -0.7**
baz=222
**COLA College 87.25 17***c i*P P **22 45 11.4 -0.7**
COLA pmax pmax
comp=Z,567nm,1.6s
COLA MLR MLR
comp=Z,9µm,19.0s
**E03A Lebam 87.26 40 P P 22 45 12.9 +0.3**
**DSP Deep Springs 87.27 50 P P 22 45 12.8 -0.1**
**L26K Log Cabin Wild 87.30 20 P P 22 45 12.4 -0.1**
baz=226,SNR=48
**RIDG Independent Ri 87.32 19 P P 22 45 12.2 -0.4**
RIDG IAmb IAmb 22 45 20.6
comp=Z,437nm,1.3s
**RIDG Independent Ri 87.32 19 P P 22 45 12.2 -0.4**
baz=225,SNR=55
**BBB Bella Bella 87.33 34 P P 22 45 14.7 +1.9**
comp=Z,69nm,1.0s,baz=240,slow=5.4,SNR=25
BBB LR LR 23 17 12.0
comp=Z,6µm,20.5s,baz=226,slow=31
comp=Z,69nm,1.0s
**M27K Edge Creek, AK 87.33 21 P P 22 45 12.6 -0.2**
baz=227
**YUK8 Steele Glacier 87.37 22 P P 22 45 13.5 +0.3**
baz=229,SNR=28
**GSC Goldstone, Bar 87.37 52 P P 22 45 14.1 +0.5**
**GSC Goldstone, Bar 87.37 52 P P 22 45 14.1 +0.5**
GSC pmax pmax
comp=Z,2µm,2.0s
**F04D Rainier, OR 87.40 41 P P 22 45 14.8 +1.4**
**NVAR Mina Array Bea 87.43 49 P P 22 45 14.4 +0.4**
**NVAR Mina Array Bea 87.43 49 P P 22 45 14.0 0.0**
comp=Z,137nm,1.2s,baz=231,slow=5.7,SNR=101
NVAR S **SKSac 22 55 43.1 +1.8**
comp=Z,0.2nm,0.5s,baz=90,slow=1.0,SNR=1.4
NVAR PKKPbc **PKKPbc 23 03 05.1 +0.2**
comp=Z,1.0nm,0.7s,baz=89,slow=3.9,SNR=4.8
NVAR PKPPKP **P'P'df 23 11 09.4 -0.3**
comp=Z,1.8nm,0.9s,baz=93,slow=4.5,SNR=6.0
NVAR LR LR 23 16 37.3
comp=Z,9µm,21.0s,baz=263,slow=30
comp=Z,137nm,1.2s
**T33K Petersburg 87.43 28 P P 22 45 13.5 +0.3**
baz=235
**YUK3 Moose Creek 87.44 22 P P 22 45 13.5 0.0**
baz=229,SNR=41
**ILAR Eielson Array 87.45 18 P P 22 45 12.0 -1.1**
**ILAR Eielson Array 87.45 18 P P 22 45 11.7 -1.4**
comp=Z,98nm,0.9s,baz=236,slow=5.2,SNR=166
ILAR S **S 22 55 51.6 -1.5**
comp=Z,0.4nm,0.9s,baz=209,slow=7.2,SNR=1.7
ILAR PKKPbc **PKKPdf 23 03 01.7 +1.5**
comp=Z,2.1nm,1.1s,baz=258,slow=1.8,SNR=5.7
ILAR PKPPKP **P'P'df 23 11 08.5 +1.8**
comp=Z,4.3nm,1.3s,baz=359,slow=1.7,SNR=7.4
ILAR LR LR 23 22 36.0
comp=Z,11µm,18.3s,baz=222,slow=34
comp=Z,98nm,0.9s
**ILAR Eielson Array 87.45 18 P P 22 45 12.0 -1.1**
**IRK Irkutsk 87.46 326** *e*P P **22 45 11.6 -1.9**
IRK *e*S S **22 55 58.0 +4.3**
IRK pmax pmax
comp=Z,541nm,2.4s
**WRAK Wrangell Islan 87.49 29 P P 22 45 14.1 +0.6**
WRAK IAmb IAmb 22 45 22.1
comp=Z,747nm,1.9s
**WRAK Wrangell Islan 87.49 29 IAMs_20 IAMs_20 23 18 49.1**
comp=Z,10µm,21.0s
**WRAK Wrangell Islan 87.49 29 P P 22 45 13.8 +0.3**
baz=236
**H23K Yukon River 87.50 16 IAMs_20 IAMs_20 23 23 23.0**
comp=Z,9µm,19.0s
**H23K Yukon River 87.50 16 P P 22 45 13.7 +0.3**
baz=220,SNR=33
**PLBC Pleasant Camp 87.53 25 P P 22 45 13.3 -0.3**
baz=232,SNR=21
**POKR Poker Plat Res 87.55 17 IAMs_20 IAMs_20 23 22 19.3**
comp=Z,10µm,19.0s
**POKR Poker Plat Res 87.55 17 P P 22 45 12.5 -1.1**
baz=220,SNR=20
**R32K Eaglecrest 87.59 26 IAMs_20 IAMs_20 23 19 20.6**
comp=Z,10µm,19.0s
**R32K Eaglecrest 87.59 26 P P 22 45 14.6 +0.7**
baz=234,SNR=10
**F21K Alatna River 87.61 14 IAMs_20 IAMs_20 23 18 16.0**
comp=Z,9µm,20.0s
**F21K Alatna River 87.61 14 P P 22 45 14.7 +0.8**
baz=217,SNR=81
**JIS Juneau Island 87.64 26 P P 22 45 15.6 +1.4**
**YUK6 Ghost Mounta 87.67 23 P P 22 45 14.6 0.0**
baz=231,SNR=19
**D19K Kuna River 87.67 12 P P 22 45 15.2 +1.0**
baz=212,SNR=67
**P30M Million Dollar 87.70 24 P P 22 45 14.3 -0.2**
baz=232
**B18K Kokolik River 87.75 10 P P 22 45 15.6 +1.1**
baz=209,SNR=28
**SCRK Sand Creek 87.76 19 P P 22 45 14.5 -0.3**
baz=226,SNR=78
**J25K Salcha River, 87.78 18 IAMs_20 IAMs_20 23 20 00.6**
comp=Z,13µm,21.0s
**J25K Salcha River, 87.78 18 P P 22 45 14.3 -0.6**
baz=224,SNR=122
**YUK4 Talbot Arm 87.82 23 P P 22 45 15.7 +0.5**
baz=230
**L27K Beaver Creek, 87.83 20 P P 22 45 15.1 0.0**
baz=228,SNR=28
**BCAR Beaver Creek A 87.84 20 P P 22 45 14.0 -1.1**
**E20K Nagu River 87.86 13 P P 22 45 16.3 +1.2**
baz=214,SNR=74
**C19K Lookout Ridge 87.92 11 P P 22 45 16.2 +0.9**
baz=211,SNR=42
**SKAG Skagway 87.95 25 P P 22 45 17.4 +1.8**
**SKAG Skagway 87.95 25 P P 22 45 16.0 +0.4**
baz=233,SNR=8.8
**H24K Noodor Dome 87.96 17 IAMs_20 IAMs_20 23 23 08.2**
comp=Z,11µm,20.0s
**H24K Noodor Dome 87.96 17 P P 22 45 14.9 -0.7**
baz=222,SNR=9.1
**G23K Bananza Creek 88.06 15 P P 22 45 16.6 +0.5**
baz=220,SNR=74
**TPH Tonopah 88.09 50 P P 22 45 17.6 +0.5**
**TPH Tonopah 88.09 50 P P 22 45 17.6 +0.5**
TPH pmax pmax
comp=Z,9µm,1.8s
**F22K John River 88.15 14 P P 22 45 17.4 +1.0**
baz=218
**D20K Ettivluk River 88.16 12 P P 22 45 17.6 +1.1**
baz=214,SNR=84
**J26L Joseph Creek 88.26 19 P P 22 45 17.7 +0.6**
baz=226,SNR=70
**GTK Tadong 88.28 299** *e*P P **22 45 18.8 +0.6**

GTK IAmb IAmb 22 45 25.6
comp=Z,2µm,2.4s
**SRIG Santa Rosalia 88.30 61 P P 22 45 18.5 +0.5**
**U35K Hyder 88.30 30 IAMs_20 IAMs_20 23 18 27.6**
comp=Z,12µm,20.0s
**U35K Hyder 88.30 30 P P 22 45 17.6 +0.2**
baz=238
**PRP Porcupine Dome 88.39 18 P P 22 45 16.9 -0.8**
baz=224,SNR=17
**K27K Chicken 88.40 20 IAMs_20 IAMs_20 23 28 06.0**
comp=Z,8µm,19.0s
**K27K Chicken 88.40 20 P P 22 45 17.7 0.0**
baz=227
**COLD Coldfoot 88.41 15 P P 22 45 18.7 +1.1**
baz=220,SNR=42
**O30N Mendenhall 88.44 24 IAMs_20 IAMs_20 23 25 38.0**
comp=Z,9µm,20.0s
**O30N Mendenhall 88.44 24 P P 22 45 17.7 -0.3**
baz=233,SNR=19
**N30M Aishikik Lake 88.48 23 IAMs_20 IAMs_20 23 17 56.0**
comp=Z,11µm,20.0s
**N30M Aishikik Lake 88.48 23 P P 22 45 18.1 -0.1**
baz=232,SNR=13
**E21K Killik River 88.49 13 IAMs_20 IAMs_20 23 20 08.4**
comp=Z,10µm,21.0s
**E21K Killik River 88.49 13 P P 22 45 19.0 +1.0**
baz=216
**M29M Somme Creek 88.59 22 P P 22 45 18.5 -0.2**
baz=230,SNR=24
**A19K Wainwright 88.61 10 P P 22 45 19.5 +1.0**
baz=210
**P32M Atlin 88.69 26 P P 22 45 19.3 +0.1**
baz=235,SNR=14
**G24K Hadweenzic Riv 88.71 16 P P 22 45 18.8 -0.3**
baz=222,SNR=41
**E22K Anaktuvuk Pass 88.73 14 P P 22 45 19.9 +0.7**
baz=218,SNR=45
**T35M Bob Quinn 88.76 29 IAMs_20 IAMs_20 23 19 39.8**
comp=Z,10µm,21.0s
**T35M Bob Quinn 88.76 29 P P 22 45 20.3 +0.7**
baz=238
**WHY Whitehorse 88.84 24 P P 22 45 19.0 -1.0**
baz=234,SNR=17
**H25L Birch Creek 88.85 17 P P 22 45 18.1 -1.6**
baz=224
**S34M Telegraph Cree 88.86 28 P P 22 45 20.6 +0.6**
baz=237,SNR=25
**C21K Knifeblade Rid 88.90 12 P P 22 45 21.1 +1.1**
baz=215,SNR=42
**I26K Coal Creek Min 88.94 18 IAMs_20 IAMs_20 23 20 06.2**
comp=Z,9µm,20.0s
**I26K Coal Creek Min 88.94 18 P P 22 45 20.3 +0.1**
baz=226
**LPIG La Paz 88.94 65** LR LR 23 18 52.9
comp=Z,10µm,18.3s,baz=260,slow=31
**Q32M Nakina River 88.94 27 IAMs_20 IAMs_20 23 20 50.6**
comp=Z,9µm,18.0s
**Q32M Nakina River 88.94 27 P P 22 45 20.8 +0.2**
baz=236,SNR=23
**MOY Mondy 88.95 325** *e*P P **22 45 19.9 -0.8**
MOY pmax pmax
comp=Z,427nm,2.8s
**BMN Battle Mountai 88.97 47 P P 22 45 22.1 +1.0**
**BMN Battle Mountai 88.97 47 P P 22 45 22.1 +1.0**
BMN pmax pmax
comp=Z,2µm,1.7s
**N31M Braeburn, Yuko 88.99 23 IAMs_20 IAMs_20 23 24 30.6**
comp=Z,8µm,20.0s
**N31M Braeburn, Yuko 88.99 23 P P 22 45 20.1 -0.5**
baz=233,SNR=26
**V12A Nelson 89.01 52 IAMs_20 IAMs_20 23 17 12.4**
comp=Z,11µm,20.0s
**D22K Ayikyak River 89.12 13 IAMs_20 IAMs_20 23 18 57.9**
comp=Z,11µm,22.0s
**D22K Ayikyak River 89.12 13 P P 22 45 22.1 +1.1**
baz=217
**G25K Bearman Lake 89.13 17 P P 22 45 20.9 -0.2**
baz=224,SNR=11
**SLBS Sierra La Lagu 89.13 65 P P 22 45 23.1 +0.9**
**B20K Meade River 89.14 11 P P 22 45 21.6 +0.6**
baz=213
**ELIB Princess Elisa 89.14 190** *d*P P **22 45 20.0 -1.4**
comp=Z,84nm,1.2s
ELIB *d*SKS **SKSac 22 55 49.8 -0.7**
ELIB *d*S S **22 56 07.5 -2.0**
**E23K Chandalar 89.19 15 IAMs_20 IAMs_20 23 23 31.7**
comp=Z,9µm,20.0s
**E23K Chandalar 89.19 15 P P 22 45 22.0 +0.5**
baz=220,SNR=68
**EGAK Eagle 89.20 19 P P 22 45 21.1 -0.4**
baz=228,SNR=62
**F24K Squaw Lake 89.22 15 IAMs_20 IAMs_20 23 18 25.3**
comp=Z,9µm,22.0s
**F24K Squaw Lake 89.22 15 P P 22 45 22.2 +0.7**
baz=222,SNR=51
**FYU Fort Yukon 89.23 17 IAMs_20 IAMs_20 23 24 24.7**
comp=Z,11µm,20.0s
**DAWY Dawson 89.31 20 P P 22 45 21.7 -0.4**
baz=230,SNR=22
**B21K Ikpikpuk River 89.31 12 IAMs_20 IAMs_20 23 23 06.9**
comp=Z,11µm,19.0s
**B21K Ikpikpuk River 89.31 12 P P 22 45 22.9 +1.0**
baz=216,SNR=15
**214A Organ Pipe Nat 89.34 57 P P 22 45 24.9 +2.0**
baz=251,SNR=89
**R11B Troy Canyon, C 89.39 50 P P 22 45 24.4 +1.2**
baz=249,SNR=236
**P33M Teslin, Yukon 89.42 25 P P 22 45 22.5 -0.2**
baz=236,SNR=18
**E24K Your Creek 89.48 15 IAMs_20 IAMs_20 23 19 30.3**
comp=Z,9µm,22.0s
**E24K Your Creek 89.48 15 P P 22 45 23.3 +0.5**
baz=221,SNR=17
**BOK Bokaro 89.51 295** *e*P P **22 45 23.9 0.0**
BOK IAmb IAmb 22 45 25.7
comp=Z,155nm,1.4s
**PALK Pallekele 89.56 278** P P **22 45 23.9 -0.4**
**PALK Pallekele 89.56 278** LR LR 23 25 57.2
comp=Z,4µm,20.0s,baz=182,slow=36
**PALK Pallekele 89.56 278***de*P P **22 45 23.8 -0.5**
PALK pmax pmax
comp=Z,308nm,2.0s
**I27K Kandik River 89.62 19 P P 22 45 22.8 -0.7**
baz=228,SNR=48
**DLBC Dease Lake 89.64 28 P P 22 45 23.5 -0.2**
comp=Z,74nm,1.2s,baz=233,slow=4.8,SNR=27
DLBC PP **PP 22 49 00.2 +4.3**
comp=Z,17nm,1.3s,baz=249,slow=6.0,SNR=3.0
DLBC LR LR 23 17 30.1
comp=Z,10µm,21.8s,baz=242,slow=30
comp=Z,74nm,1.2s
**DLBC Dease Lake 89.64 28 P P 22 45 23.7 0.0**
baz=238,SNR=31
**D23K Nanushuk River 89.64 14 P P 22 45 24.6 +1.1**
baz=219,SNR=66
**TOLK Toolik Lake Re 89.65 14 P P 22 45 24.3 +0.8**
baz=220,SNR=17
**R33M Jennings River 89.74 27 P P 22 45 24.6 +0.3**
baz=237,SNR=61
**K29M Barlow Dome 89.81 21 P P 22 45 24.0 -0.5**
baz=231,SNR=31
**Y14A Wickenburg 89.84 55 P P 22 45 25.4 +0.2**
Y14A IAmb IAmb 22 45 29.1
comp=Z,601nm,1.8s
**N32M Quiet Lake 89.85 24 IAMs_20 IAMs_20 23 25 03.3**
comp=Z,11µm,18.0s
**N32M Quiet Lake 89.85 24 P P 22 45 24.4 -0.2**
baz=235
**F25K Christian Rive 89.86 16 IAMs_20 IAMs_20 23 26 07.3**
comp=Z,9µm,19.0s
**F25K Christian Rive 89.86 16 P P 22 45 25.5 +1.0**
baz=224,SNR=76
**G26K Porcupine Rive 89.91 17 P P 22 45 25.0 +0.4**
baz=226,SNR=52
**M31M Drury Creek, Y 89.95 23 IAMs_20 IAMs_20 23 18 20.9**
comp=Z,10µm,20.0s
**M31M Drury Creek, Y 89.95 23 P P 22 45 24.3 -0.7**
baz=234,SNR=19
**J29N Klondike Camp 89.95 20 P P 22 45 25.5 +0.4**
baz=231,SNR=8.1
**BMAR Burnt Mountain 90.03 16 P P 22 45 25.5 +0.2**
**I28M Miner Creek 90.04 19 P P 22 45 24.7 -0.7**
baz=229,SNR=36
**H27K Steamboat Moun 90.07 18 P P 22 45 25.7 +0.1**
baz=228,SNR=39
**B22K Teshekpuk Lake 90.14 12 P P 22 45 26.7 +1.0**
baz=217
**D24K Happy Valley 90.22 14 P P 22 45 27.3 +1.2**

baz=221,SNR=14
**PMSA Palmer Station 90.30 160** P **P** 22 45 26.5 -0.2
PMSA IAmb IAmb 22 45 40.0
comp=Z,936nm,1.8s
**PMSA Palmer Station 90.30 160** IAMs_20 IAMs_20 23 22 26.0
comp=Z,12µm,21.0s
**PMSA Palmer Station 90.30 160** *e*P **P** 22 45 26.9 +0.2
**F26K Sheenjek River 90.33 16** IAMs_20 IAMs_20 23 24 51.8
comp=Z,8µm,18.0s
**F26K Sheenjek River 90.33 16** P **P** 22 45 27.5 +0.7
baz=225,SNR=38
**C23K Itkillik River 90.33 13** P **P** 22 45 27.8 +1.2
baz=219,SNR=15
**A21K Barrow 90.34 11** P **P** 22 45 27.3 +0.7
baz=214
**FARO Faro, Yukon 90.36 24** P **P** 22 45 26.3 -0.7
baz=235,SNR=17
**A22K Sinclair Lake 90.38 11** P **P** 22 45 27.6 +0.8
baz=215
**G27K Doyon Strip 90.42 18** P **P** 22 45 27.4 +0.3
baz=228,SNR=49
**KNGR Kungurtug, Tuv 90.45 323** *de*P **P** 22 45 28.0 +0.2
KNGR pmax pmax
comp=Z,132nm,1.6s
KNGR MLR MLR
comp=Z,3µm,16.0s
**ELK Elko 90.49 48** P **P** 22 45 28.9 +0.5
ELK IAmb IAmb 22 45 37.7
comp=Z,674nm,1.5s
ELK IAMs_20 IAMs_20 23 18 37.2
comp=Z,9µm,22.0s
**ELK Elko 90.49 48** P **P** 22 45 29.4 +1.0
comp=Z,101nm,1.1s,baz=234,slow=3.8,SNR=129
ELK S **SKSac** 22 56 01.9 +2.5
comp=Z,0.3nm,0.5s,baz=92,slow=21,SNR=6.5
ELK LR LR 23 19 09.0
comp=Z,6µm,20.8s,baz=236,slow=31
comp=Z,101nm,1.1s
**I29M Ogilvie Camp, 90.50 20** P **P** 22 45 26.9 -0.7
baz=231,SNR=44
**J30M Hart River 90.67 21** P **P** 22 45 28.3 -0.2
baz=232,SNR=23
**C24K Franklin Bluff 90.67 14** IAMs_20 IAMs_20 23 20 15.8
comp=Z,11µm,21.0s
**C24K Franklin Bluff 90.67 14** P **P** 22 45 29.2 +1.0
baz=221
**JHSG JHARSUGUGA 90.78 292** *e*P **P** 22 45 29.8 0.0
**D25K Kavik River 90.93 15** IAMs_20 IAMs_20 23 22 04.6
comp=Z,9µm,21.0s
**D25K Kavik River 90.93 15** P **P** 22 45 29.4 -0.1
baz=223,SNR=35
**H29M Whitestone 91.03 19** IAMs_20 IAMs_20 23 27 39.4
comp=Z,11µm,19.0s
**H29M Whitestone 91.03 19** P **P** 22 45 30.2 +0.2
baz=231,SNR=19
**I30M Mount Dempster 91.05 20** P **P** 22 45 29.4 -0.8
baz=232,SNR=31
**WTLY Watson Lake, Y 91.06 27** P **P** 22 45 30.2 -0.1
baz=239
**TUC Tucson 91.08 57** P **P** 22 45 31.8 +0.7
TUC IAmb IAmb 22 45 41.0
comp=Z,718nm,1.6s
**TUC Tucson 91.08 57** P **P** 22 45 31.8 +0.7
TUC pmax pmax
comp=Z,718nm,1.6s
**TIXI Tiksi 91.37 348** P **P** 22 45 31.2 -0.2
comp=Z,16nm,1.0s,baz=152,slow=5.4,SNR=14
TIXI PP **PP** 22 49 06.9 -2.3
comp=Z,8.7nm,0.9s,baz=161,slow=10,SNR=3.5
comp=Z,16nm,1.0s
**E27K Coleen River 91.37 17** IAMs_20 IAMs_20 23 26 37.3
comp=Z,9µm,19.0s
**E27K Coleen River 91.37 17** P **P** 22 45 31.9 +0.3
baz=228,SNR=86
**MMPY Sheldon Lake, 91.38 24** P **P** 22 45 31.6 -0.2
baz=237,SNR=25
**F28M Old Crow 91.48 18** P **P** 22 45 32.3 +0.3
baz=229,SNR=30
**G29M Pine Creek 91.58 19** P **P** 22 45 32.2 -0.3
baz=231,SNR=16
**WUAZ Wupatki 91.62 54** P **P** 22 45 34.6 +1.0
WUAZ IAmb IAmb 22 45 37.7
comp=Z,523nm,1.5s
WUAZ IAMs_20 IAMs_20 23 17 38.4
comp=Z,11µm,22.0s
**EPYK Eagle Plains 91.64 19** P **P** 22 45 32.1 -0.7
baz=232,SNR=23
**TROLL Troll, Antarti 91.69 184** ⇑P **P** 22 45 33.2 -0.1
comp=Z,14µm,0.9s
TROLL ⇓S **S** 22 56 28.7 -4.3
comp=Z,3.3nm,0.1s
**C26K Camden Bay 91.71 15** P **P** 22 45 33.7 +0.7
baz=225
**C27K Jago River 91.80 15** P **P** 22 45 34.0 +0.5
baz=226,SNR=86
**LIRD Liard River Hi 91.89 28** P **P** 22 45 33.6 -0.5
baz=241,SNR=16
**NVL N'lazarevskaya 91.93 188** *e*P **P** 22 45 33.6 -0.6
NVL *e*S **SKSac** 22 56 03.3 -3.0
NVL *e*SS **SS** 23 02 46.6 +4.6
NVL pmax pmax
comp=Z,374nm,1.4s
**NEW Newport 91.95 40** P **P** 22 45 35.1 +0.4
comp=Z,55nm,1.0s,baz=237,slow=4.9,SNR=75
comp=Z,55nm,1.0s
**TGTN Hyland Airport 92.00 25** P **P** 22 45 34.4 -0.2
baz=240,SNR=11
**TOAD Toad River Com 92.02 29** P **P** 22 45 34.5 -0.2
baz=242,SNR=47
**HLID Hailey 92.04 45** IAMs_20 IAMs_20 23 21 47.3
comp=Z,8µm,19.0s
**G30M tAoh Zrail Nji 92.18 19** IAMs_20 IAMs_20 23 30 40.7
comp=Z,9µm,19.0s
**G30M tAoh Zraii Nji 92.18 19** P **P** 22 45 34.5 -0.8
baz=233,SNR=11
**E28M Babbage River 92.22 17** IAMs_20 IAMs_20 23 27 58.8
comp=Z,9µm,19.0s
**E28M Babbage River 92.22 17** P **P** 22 45 35.5 0.0
baz=230,SNR=45
**D27M Malcolm River 92.25 16** P **P** 22 45 36.0 +0.3
baz=228,SNR=28
**SNAA Sanae 92.35 183** P **P** 22 45 35.4 -0.8
**SNAA Sanae 92.35 183** ⇑P **P** 22 45 35.3 -0.8
comp=Z,3µm,1.1s
SNAA ⇑S **S** 22 56 37.4 -1.3
comp=Z,63µm,9.2s
**SNAA Sanae 92.35 183** P **P** 22 45 34.9 -1.4
comp=Z,195nm,1.1s,baz=183,slow=4.3,SNR=100
comp=Z,195nm,1.1s
**SNAA Sanae 92.35 183** *c i*P **P** 22 45 35.5 -0.8
SNAA pmax pmax
comp=Z,487nm,1.3s
SNAA MLR MLR
comp=Z,9µm,17.0s
**E29M Blow River 92.55 17** P **P** 22 45 36.9 0.0
baz=231,SNR=9.6
**F30M Barrier River 92.69 19** P **P** 22 45 36.8 -0.8
baz=233,SNR=13
**G31M Satah River 92.76 19** P **P** 22 45 37.4 -0.5
baz=234,SNR=14
**W18A Petrified Fore 92.77 54** P **P** 22 45 40.3 +1.3
baz=252,SNR=21
**D28M Stokes Point 92.91 17** P **P** 22 45 38.4 -0.1
baz=230,SNR=19
**VNA3 Neumayer Olymp 92.98 181** ⇑P **P** 22 45 38.4 -0.7
comp=Z,92nm,0.6s
VNA3 ⇑S **S** 22 56 41.5 -2.7
comp=Z,268µm,0.0s
**SALM Salem 93.12 281** *e*P **P** 22 45 41.8 +1.0
SALM IAmb IAmb 22 45 49.0
comp=Z,407nm,1.8s
**KOTAN Kotaneelee Air 93.14 28** P **P** 22 45 39.4 -0.5
baz=243,SNR=12
**F31M Tsiigehtchic 93.23 19** P **P** 22 45 39.6 -0.4
baz=235
**VNA2 Neumayer--Watz 93.26 181** ⇑P **P** 22 45 39.9 -0.5
comp=Z,110nm,0.7s,baz=194,slow=5.3
VNA2 ⇓S **S** 22 56 44.2 -2.5
comp=Z,0.1nm,0.1s,baz=30,slow=2.8
**KOD Kodaikanal 93.44 280** *e*P **P** 22 45 43.0 +0.4
**MSO Missoula 93.47 42** P **P** 22 45 42.1 +0.2
**VNA1 Neumayer--Stat 93.55 181** ⇑P **P** 22 45 41.3 -0.4
comp=Z,152nm,1.1s
**121A Cookes Peak, D 93.57 57** P **P** 22 45 44.5 +1.8
baz=253,SNR=41
**HPIG 93.78 63** P **P** 22 45 43.9 +0.1
**INK Inuvik 93.80 18** P **P** 22 45 41.1 -1.5
comp=Z,3.5nm,0.6s,baz=238,slow=6.6,SNR=23

INK PP **PP** 22 49 23.1 -5.2
comp=Z,1.3nm,0.2s,baz=235,slow=11,SNR=5.5
INK PKPPKP **P'P'df** 23 10 56.9 +1.9
comp=Z,1.0nm,0.3s,baz=52,slow=3.6,SNR=8.2
comp=Z,3.5nm,0.6s
**INK Inuvik 93.80 18** P **P** 22 45 42.1 -0.6
baz=235,SNR=11
**BRLDA Berland Lookou 93.96 35** P **P** 22 45 44.1 +0.2
**AHID Auburn Hatcher 94.08 47** IAMs_20 IAMs_20 23 21 03.2
comp=Z,9µm,22.0s
**OVMT Ovando 94.15 42** P **P** 22 45 45.3 +0.3
**WMQ Urumqi 94.22 314** ⇑P **P** 22 45 45.6 +0.3
WMQ PP **PP** 22 49 33.3 +0.9
WMQ pmax pmax
comp=Z,160nm,2.1s
WMQ pmax pmax
comp=Z,3µm,5.3s
**HYB Hyderabad 94.32 287** *e*P **P** 22 45 46.0 -0.3
HYB *e*PP **PP** 22 49 31.5 -2.2
HYB *e*SKsac **SKSac** 22 56 22.8 +1.5
**MG03 Isla Dawson 94.37 150** P **P** 22 45 46.2 +0.4
**FXWY Fox Creek 94.39 46** P **P** 22 45 45.4 -1.0
FXWY IAMs_20 IAMs_20 23 22 15.6
comp=Z,9µm,19.0s
**EPT El Paso 94.39 58** P **P** 22 45 46.4 -0.1
EPT IAmb IAmb 22 45 54.5
comp=Z,420nm,1.9s
**TPAW Teton Pass 94.40 46** IAMs_20 IAMs_20 23 28 02.7
comp=Z,9µm,19.0s
**MG05 Puerto Natales 94.54 147** P **P** 22 45 47.2 +0.6
**YHL Hebgen Lake 94.66 45** P **P** 22 45 47.8 +0.2
**LOHW Long Hollow 94.68 46** IAMs_20 IAMs_20 23 22 44.1
comp=Z,9µm,20.0s
**Y22D IRIS PASSCAL I 94.69 56** P **P** 22 45 49.6 +1.8
baz=254
**FLWY Flagg Ranch 94.75 46** IAMs_20 IAMs_20 23 21 20.1
comp=Z,10µm,21.0s
**WRGLY Wrigley 94.79 25** P **P** 22 45 47.2 -0.1
**WRGLY Wrigley 94.79 25** P **P** 22 45 47.1 -0.1
baz=244
**NGP Nagpur 94.84 290** *e*P **P** 22 45 47.7 -0.9
NGP IAmb IAmb 22 45 54.9
comp=Z,937nm,2.1s
**GO09 Cerro Castillo 94.85 147** P **P** 22 45 48.0 -0.1
GO09 IAmb IAmb 22 45 55.9
comp=Z,282nm,1.7s
**H17A Grant Village 94.93 45** P **P** 22 45 50.5 +1.7
baz=252
**YNR Norris Junctio 94.96 45** P **P** 22 45 49.8 +0.9
**KAAM Kaadhehdhoo 95.11 269** P **P** 22 45 48.9 -1.1
KAAM IAmb IAmb 22 45 52.8
comp=Z,198nm,1.2s
**PDAR Pinedale Array 95.16 47** P **P** 22 45 49.5 -0.3
comp=Z,9.6nm,1.0s,baz=321,slow=1.3,SNR=49
PDAR PP PP 22 49 32.1 -7.9
comp=Z,1.8nm,1.0s,baz=258,slow=4.2,SNR=3.6
PDAR PKKPbc **PKKPbc** 23 02 41.7 -3.6
comp=Z,2.9nm,1.1s,baz=111,slow=4.9,SNR=8.0
PDAR PKPPKP **P'P'df** 23 10 54.1 -1.1
comp=Z,0.2nm,0.7s,baz=54,slow=8.0,SNR=2.0
PDAR LR LR 23 25 51.7
comp=Z,2µm,18.2s,baz=230,slow=34
comp=Z,9.6nm,1.0s
**ANMO Albuquerque 95.30 55** P **P** 22 45 50.5 -0.1
ANMO IAMs_20 IAMs_20 23 32 13.9
comp=Z,8µm,18.0s
**ANMO Albuquerque 95.30 55** P **P** 22 45 51.1 +0.4
comp=Z,28nm,1.2s,baz=342,slow=4.0,SNR=50
ANMO LR LR 23 23 10.4
comp=Z,4µm,18.8s,baz=334,slow=32
comp=Z,28nm,1.2s
**ANMO Albuquerque 95.30 55** *c i*P **P** 22 45 51.0 +0.4
ANMO pmax pmax
comp=Z,93nm,2.0s
ANMO MLR MLR
comp=Z,3µm,17.0s
**VHRN Van Horn 95.39 60** P **P** 22 45 51.4 +0.4
VHRN IAmb IAmb 22 46 01.3
comp=Z,594nm,1.9s
**ZAIG Zacatecas 95.39 68** P **P** 22 45 51.9 +0.5
ZAIG IAmb IAmb 22 46 00.7
comp=Z,390nm,1.9s
**S22A 4UR Ranch, Cre 95.76 53** P **P** 22 45 53.9 +1.1
baz=254
**MOIG Morelia 95.84 71** P **P** 22 45 53.9 +0.4
MOIG IAmb IAmb 22 45 57.2
comp=Z,375nm,1.6s
**LGTI Lohaghat 95.94 299** *e*P **P** 22 45 52.7 -0.7
**SMCO Snowmass 96.04 51** IAMs_20 IAMs_20 23 21 54.3
comp=Z,11µm,22.0s
**TXAR Lajitas Array 96.11 61** P **P** 22 45 54.7 +0.4
**TXAR Lajitas Array 96.11 61** P **P** 22 45 55.5 +1.2
comp=Z,22nm,1.1s,baz=224,slow=3.8,SNR=76
TXAR PP **PP** 22 49 48.0 +0.5
comp=Z,3.4nm,1.1s,baz=250,slow=7.3,SNR=3.5
TXAR PKKPbc **PKKPbc** 23 02 42.0 -0.1
comp=Z,0.3nm,0.5s,baz=73,slow=3.1,SNR=4.6
TXAR PKPPKP **P'P'df** 23 10 50.2 -4.5
comp=Z,0.6nm,1.0s,baz=100,slow=1.1,SNR=3.8
TXAR LR LR 23 24 29.9
comp=Z,3µm,18.1s,baz=284,slow=32
comp=Z,22nm,1.1s
**TXAR Lajitas Array 96.11 61** P **P** 22 45 54.7 +0.4
**DGZ Jazzator, Alta 96.18 320** *ce*P **P** 22 45 53.4 -0.8
DGZ pmax pmax
comp=Z,130nm,1.9s
DGZ MLR MLR
comp=Z,5µm,19.0s
**GO08 Villa O'Higgin 96.25 144** P **P** 22 45 54.3 -0.2
GO08 IAmb IAmb 22 46 15.4
comp=Z,238nm,2.0s
**JHNI Jhansi 96.40 295** *e*P **P** 22 45 53.3 -2.3
**JRQG Juriquilla Cam 96.77 70** P **P** 22 45 58.2 +0.5
**SDCO Great Sand Dun 96.78 53** P **P** 22 45 57.1 -0.3
SDCO IAMs_20 IAMs_20 23 22 12.0
comp=Z,8µm,20.0s
**BHPL Bhopal 96.83 292** *e*P **P** 22 45 56.8 -0.8
BHPL IAmb IAmb 22 46 04.0
comp=Z,320nm,1.8s
**AY03 Cochrane 96.87 143** P **P** 22 45 57.5 +0.1
**ZSN Zaisan 97.17 317** *e*P **P** 22 45 58.2 -0.5
comp=Z,114nm,1.4s,baz=317
ZSN *e*S **SKSac** 22 56 35.5 +0.3
baz=317
**ZSN Zaisan 97.17 317** *e*P **P** 22 45 58.1 -0.5
ZSN *e*S **SKSac** 22 56 35.4 +0.3
ZSN pmax pmax
comp=Z,114nm,1.4s
**ISCO Idaho Springs 97.22 51** IAMs_20 IAMs_20 23 22 33.5
comp=Z,9µm,20.0s
**N23A Red Feather La 97.25 50** P Pdif 22 46 00.6 +1.0
baz=255
**GUNA GUNA 97.26 293** *e*P **P** 22 45 58.3 -1.2
GUNA IAmb IAmb 22 46 05.6
comp=Z,353nm,1.7s
**C36M Paulatuk 97.28 19** P **P** 22 45 58.3 -0.2
baz=244
**Q24A Divide 97.35 52** P Pdif 22 46 00.8 +0.7
baz=255
**T25A Trinidad 97.47 54** P Pdif 22 46 01.1 +0.6
baz=256
**UNM Universidad Na 97.59 72** IAMs_20 IAMs_20 23 20 08.1
comp=Z,9µm,21.0s
**TLIG Tlapa 97.72 74** P **P** 22 46 01.8 -0.1
**HNLY HANLEY 97.82 302** *e*P **P** 22 46 02.3 -0.2
**COYC Coyhaique 98.07 142** P **P** 22 46 01.8 -1.0
COYC IAmb IAmb 22 46 09.7
comp=Z,207nm,1.9s
**A36M Sachs Harbour 98.12 17** P **P** 22 46 02.3 0.0
baz=243
**YKA Yellowknife Ar 98.26 27** P **P** 22 46 03.0 0.0
comp=Z,49nm,1.0s,baz=260,slow=4.6,SNR=135
YKA PP **PP** 22 50 00.2 -2.8
comp=Z,2.0nm,1.0s,baz=259,slow=6.2,SNR=3.5
YKA PKKPbc **PKKPbc** 23 02 33.8 -3.5
comp=Z,3.5nm,1.1s,baz=64,slow=2.5,SNR=9.6
YKA LR LR 23 27 31.5
comp=Z,5µm,18.1s,baz=248,slow=34
comp=Z,49nm,1.0s
**BRIGG Briggsdale 98.37 50** P Pdif 22 46 04.5 +0.1
BRIGG IAmb IAmb 22 46 12.2
comp=Z,329nm,2.0s
**LAO LASA Array 98.50 44** P **P** 22 46 04.8 +0.1
LAO IAmb IAmb 22 46 13.1
comp=Z,285nm,1.9s
**MK31 Makanchi Array 98.71 316** P **P** 22 46 04.9 -0.6

MK31 IAmb IAmb 22 46 12.2
comp=Z,203nm,1.8s
**MK31 Makanchi Array 98.71 316** *c i*P **P** 22 46 04.9 -0.6
**MKAR Makanchi Array 98.71 316** P **P** 22 46 04.9 -0.7
**MKAR Makanchi Array 98.71 316** P **P** 22 46 05.1 -0.4
comp=Z,13nm,1.1s,baz=104,slow=5.1,SNR=41
MKAR PP **PP** 22 50 08.6 +1.7
comp=Z,5.6nm,1.0s,baz=93,slow=5.1,SNR=4.2
MKAR PKKPbc **PKKPbc** 23 02 33.4 -2.1
comp=Z,1.6nm,0.8s,baz=274,slow=3.9,SNR=7.2
MKAR PKPPKP **P'P'df** 23 10 53.1 +5.1
comp=Z,0.8nm,1.0s,baz=318,slow=1.9,SNR=3.8
comp=Z,13nm,1.1s
**MKAR Makanchi Array 98.71 316** *i* P **P** 22 46 05.0 -0.5
MKAR pmax pmax
comp=Z,14nm,1.0s
**KUDL Kundal 98.82 297** *e*P **P** 22 46 05.8 -0.6
**ZAA0 Zalesovo Array 98.91 324** P **P** 22 46 05.0 -1.2
ZAA0 IAmb IAmb 22 46 11.8
comp=Z,159nm,1.7s
**ZALV Zalesovo Beam 98.91 324** P **P** 22 46 04.8 -1.5
**ZALV Zalesovo Beam 98.91 324** P **P** 22 46 06.3 +0.1
comp=Z,5.7nm,0.7s,baz=108,slow=4.8,SNR=24
ZALV PP PP 22 50 00.2 -8.0
comp=Z,5.1nm,1.0s,baz=90,slow=4.3,SNR=3.5
ZALV LR LR 23 27 44.1
comp=Z,4µm,21.5s,baz=114,slow=34
comp=Z,5.7nm,0.7s
**ZALV Zalesovo Beam 98.91 324** *i* P **P** 22 46 05.6 -0.6
ZALV pmax pmax
comp=Z,6.0nm,0.7s
**MAKZ Makanchi 98.92 316** P **P** 22 46 05.9 -0.6
MAKZ IAmb IAmb 22 46 13.1
comp=Z,222nm,1.8s
**MAKZ Makanchi 98.92 316** P Pdif 22 46 06.7 +0.2
**SMLA Simla 98.93 300** *e*P **P** 22 46 05.6 -1.2
SMLA IAmb IAmb 22 46 15.6
comp=Z,56nm,1.3s
**H03S2 Juan Fernandez 99.20 129** T T 00 36 31.0
baz=241,slow=74,SNR=257
**H03S1 Juan Fernandez 99.21 129** T T 00 36 30.1
baz=241,slow=74,SNR=266
**H03S3 Juan Fernandez 99.22 129** T T 00 36 31.7
baz=241,slow=74,SNR=186
**KSCO Kaye Shedlock' 99.27 52** IAMs_20 IAMs_20 23 22 54.1
comp=Z,9µm,21.0s
**H03N2 Juan Fernandez 99.37 129** T T 00 36 40.7
baz=237,slow=76,SNR=27
**H03N3 Juan Fernandez 99.37 129** T T 00 36 45.5
baz=237,slow=76,SNR=33
**H03N1 Juan Fernandez 99.39 129** T T 00 36 39.1
baz=237,slow=76,SNR=33
**RSSD Black Hills 99.39 47** P **Pdif** 22 46 08.2 -0.8
**RSSD Black Hills 99.39 47** IAMs_20 IAMs_20 23 29 19.9
comp=Z,8µm,20.0s
**RSSD Black Hills 99.39 47** P **Pdif** 22 46 08.2 -0.8
RSSD pmax pmax
comp=Z,94nm,1.6s
RSSD MLR MLR
comp=Z,8µm,20.0s
**LL02 Futaleuf 99.49 140** P **Pdif** 22 46 07.9 -1.3
**833A Chaparral WMA, 99.51 63** P **Pdif** 22 46 08.6 -1.0
833A IAmb IAmb 22 46 13.1
comp=Z,274nm,1.9s
**833A Chaparral WMA, 99.51 63** P **Pdif** 22 46 10.1 +0.5
baz=257
**LL01 San Ignacio de 99.57 139** P **Pdif** 22 46 09.2 -0.3
**UZB Uzynbulak 100.14 312** *e*P **Pdif** 22 46 11.4 -0.8
baz=312
UZB *e*S **SKSac** 22 56 50.4 -0.2
baz=312
**UZB Uzynbulak 100.14 312** *e*P **Pdif** 22 46 11.4 -0.8
UZB *e*S **SKSac** 22 56 50.3 -0.2
**KPKS Kokpek 100.45 312** *e*P **Pdif** 22 46 12.9 -0.6
baz=312
KPKS *e*S **SKSac** 22 56 52.0 0.0
baz=312
**KPKS Kokpek 100.45 312** *e*P **Pdif** 22 46 12.9 -0.6
KPKS *e*S **SKSac** 22 56 51.9 0.0
**SATY Saty 100.56 312** *e*P **Pdif** 22 46 13.3 -0.7
baz=312
**SATY Saty 100.56 312** *e*P **Pdif** 22 46 13.3 -0.7
**SEM Semipalatinsk 100.83 319** *e*P **Pdif** 22 46 14.7 -0.5
baz=319
SEM LR LR 23 32 20.8
comp=Z,2µm,17.4s,baz=319
**SEM Semipalatinsk 100.83 319** *e*P **Pdif** 22 46 14.6 -0.5
**TDK Taldyqorghan 100.96 314** *e*P **Pdif** 22 46 15.1 -0.6
baz=314
TDK LR LR 23 32 16.7
comp=Z,3µm,18.8s,baz=314
**TDK Taldyqorghan 100.96 314** *e*P **Pdif** 22 46 15.0 -0.6
**MDOK Medeo 101.56 312** *e*P **Pdif** 22 46 17.5 -1.0
baz=312
**MDOK Medeo 101.56 312** *e*P **Pdif** 22 46 17.4 -1.0
**435B Jarrell 101.58 61** P **Pdif** 22 46 19.2 +0.6
baz=258
**TNSS Tian-Shan 101.60 312** *e*P **Pdif** 22 46 17.9 -1.1
baz=312
**TNSS Tian-Shan 101.60 312** *e*P **Pdif** 22 46 17.9 -1.1
**PLCA Paso Flores 101.63 138** P **Pdif** 22 46 19.1 +0.1
comp=Z,1.8nm,0.7s,baz=250,slow=6.2,SNR=5.0
PLCA PP **PP** 22 50 25.6 -3.0
comp=Z,7.8nm,1.2s,baz=253,slow=8.6,SNR=4.2
**PLCA Paso Flores 101.63 138** *e*P **Pdif** 22 46 18.9 0.0
**KSH Kashi 101.65 308** P **Pdif** 22 46 20.9 +1.9
KSH pP sPdif 22 46 26.8 +0.8
KSH PP **PP** 22 50 30.5 +0.9
KSH pmax pmax
comp=Z,15nm,1.9s
KSH LR LR
comp=Z,4µm,19.9s
KSH LR LR
comp=Z,5µm,22.3s
KSH LR LR
comp=Z,10µm,26.8s
**KURK Kurchatov 101.91 319** ⇑*e*P **Pdif** 22 46 18.5 -1.2
**KURBB Kurchatov Arra 101.95 319** P **Pdif** 22 46 19.0 -0.8
comp=Z,1.1nm,0.8s,baz=99,slow=3.0,SNR=20
KURBB PP **PP** 22 50 28.7 -2.6
comp=Z,6.5nm,1.1s,baz=107,slow=5.9,SNR=8.3
KURBB PKKPbc **PKKPbc** 23 02 25.0 -1.2
comp=Z,1.8nm,0.3s,baz=278,slow=3.4,SNR=6.3
KURBB PKPPKP **P'P'df** 23 10 42.5 +1.0
comp=Z,0.5nm,0.2s,baz=330,slow=5.4,SNR=4.5
**E28A Huff 102.20 45** IAMs_20 IAMs_20 23 26 27.0
comp=Z,8µm,20.0s
**OK048 Pawnee Station 103.17 56** IAMs_20 IAMs_20 23 36 55.4
comp=Z,6µm,18.0s
**OK031 S. Brethren Rd 103.17 56** IAMs_20 IAMs_20 23 27 50.4
comp=Z,8µm,22.0s
**OK052 Battle Ridge R 103.21 56** IAMs_20 IAMs_20 23 28 00.4
comp=Z,7µm,21.0s
**OK051 E0350 and S346 103.27 56** IAMs_20 IAMs_20 23 37 38.1
comp=Z,7µm,18.0s
**SGDS Sogindy 103.34 312** *e*Pdif **Pdif** 22 46 25.6 -0.8
baz=312
**SGDS Sogindy 103.34 312** *i* P **Pdif** 22 46 25.5 -0.8
**BTLS Baital 104.01 313** *e*Pdif **Pdif** 22 46 28.5 -0.6
baz=313
**BTLS Baital 104.01 313** *e*P **Pdif** 22 46 28.5 -0.6
**ECSD EROS Data Cent 104.59 48** IAMs_20 IAMs_20 23 29 05.6
comp=Z,9µm,21.0s
**ULM Lac du Bonnet 105.90 42** Pdiff **Pdif** 22 46 38.4 +1.0
comp=Z,3.6nm,1.1s,baz=155,slow=4.2,SNR=2.0
ULM PP **PP** 22 51 00.7 -0.1
comp=Z,3.5nm,0.8s,baz=260,slow=9.2,SNR=3.5
**P38A Dawn 106.32 53** IAMs_20 IAMs_20 23 29 36.7
comp=Z,9µm,20.0s
**BVAR Borovoye Array 107.26 321** Pdiff **Pdif** 22 46 43.3 -0.1
comp=Z,0.8nm,0.5s,baz=245,slow=39,SNR=1.6
BVAR PKiKP **PKiKP** 22 50 53.6 +1.3
comp=Z,4.9nm,1.0s,baz=88,slow=3.3,SNR=5.3
BVAR PP **PP** 22 51 04.5 -6.2
comp=Z,5.3nm,0.8s,baz=72,slow=4.7,SNR=6.9
BVAR PKKPbc **PKKPbc** 23 02 08.0 -2.2
comp=Z,1.4nm,0.8s,baz=235,slow=6.8,SNR=4.3
**I40A Norwalk 108.92 49** IAMs_20 IAMs_20 23 31 30.2
comp=Z,7µm,20.0s
**PLAL Pickwick Lake 110.12 58** IAMs_20 IAMs_20 23 39 26.5
comp=Z,6µm,18.0s
**L44A Lake County Fo 110.80 51** IAMs_20 IAMs_20 23 30 10.9
comp=Z,6µm,20.0s
**VOI Vohitsoka 111.32 238** IAMs_20 IAMs_20 23 34 08.3
comp=Z,7µm,19.0s
**W50A Signal Mountai 112.40 58** IAMs_20 IAMs_20 23 40 27.8
comp=Z,6µm,20.0s

OPO **Ambohidratompo** 112.52 242 PKiKP **PKiKP** 22 51 05.1 +1.7
comp=Z,6.0nm,0.9s,baz=72,slow=2.6,SNR=5.2
SVE **Sverdlovsk** 112.82 325 *e*PKiKP **PKiKP** 22 51 06.0 +3.4
SVE pmax pmax
comp=Z,53nm,2.0s
TULEG **Thule** 112.88 12 *i* P **PKiKP** 22 51 08.5 +6.2
R50A **Paris** 113.36 55 IAMs_20 IAMs_20 23 34 00.1
comp=Z,7μm,21.0s
ARU **Arti** 114.01 325 *i* PKiKP **PKiKP** 22 51 08.3 +3.4
ARU 22 58 20.6
ACSO **Alum Creek Sta** 114.45 53 IAMs_20 IAMs_20 23 36 08.9
comp=Z,6μm,20.0s
NEEM **North Greenlan** 115.47 9 *i* P **PKPdf** 22 51 09.2 +1.6
P53A **Whipple** 115.68 54 IAMs_20 IAMs_20 23 41 21.3
comp=Z,7μm,19.0s
SOHO **SOHO** 115.80 289 *i* PKiKP **PKiKP** 22 51 10.2 +0.9
SNR=10
LPAZ **La Paz** 115.86 117 PKP **PKiKP** 22 51 12.5 +2.0
comp=Z,1.9nm,0.8s,baz=136,slow=0.8,SNR=5.0
LPAZ PKKPbc **PKKPbc** 23 01 40.6 -0.9
comp=Z,4.0nm,0.9s,baz=42,slow=5.8,SNR=8.8
Q54A **Coxs Mills** 116.11 54 IAMs_20 IAMs_20 23 41 06.8
comp=Z,7μm,20.0s
MDH **Madha** 116.14 291 PKiKP **PKiKP** 22 51 10.8 +0.8
UOSS **Minazif** 116.19 290 PKiKP **PKiKP** 22 51 10.9 +0.8
HATD **Hatta, Dubai** 116.24 290 PKiKP **PKiKP** 22 51 10.9 +0.7
SPITS **Spitsbergen Ar** 116.27 354 PKP **PKPdf** 22 51 09.4 +0.6
comp=Z,3.9nm,0.6s,baz=102,slow=13,SNR=8.2
SPITS PKKPbc **PKKPbc** 23 01 40.1 -0.7
comp=Z,8.5nm,0.8s,baz=86,slow=7.9,SNR=2.5
MSFE **Esma-Masafi** 116.28 291 PKPdf **PKiKP** 22 51 10.8 +0.5
ASHO **Ashiyiah** 116.30 290 PKPdf **PKiKP** 22 51 10.5 +0.1
SHME **Shamm** 116.36 291 PKPdf **PKPdf** 22 51 10.0 -0.4
KULLO **Kullorsuaq** 116.39 12 *i* P **PKiKP** 22 51 11.0 +2.0
ALNE **Al Ain** 116.50 289 *i* PKPdf **PKPdf** 22 51 09.9 -0.8
SNR=5.8
ERPA **Erie** 116.69 51 IAMs_20 IAMs_20 23 43 03.8
comp=Z,6μm,22.0s
NAZ **Nazwa, Dubai** 116.69 290 PKiKP **PKiKP** 22 51 11.9 +0.9
FAQ **Al Faqa, Dubai** 116.72 290 PKPdf **PKiKP** 22 51 11.5 +0.4
W57A **Gilead** 116.75 58 **PKPdf** 22 51 10.3 -0.6
ASUD **Al Ashush, Dub** 116.95 290 PKiKP **PKiKP** 22 51 12.9 +1.3
SADO **Sadowa** 117.15 48 PKiKP **PKiKP** 22 51 13.2 +1.9
comp=Z,13nm,1.0s,baz=328,slow=6.8,SNR=3.1
AJN **Ajban** 117.25 290 PKiKP **PKiKP** 22 51 14.2 +2.1
V58A **Windy Hill, Pi** 117.47 58 IAMs_20 IAMs_20 23 38 05.1
comp=Z,6μm,20.0s
ROSC **El Rosal** 117.75 93 PKPdf **PKPdf** 22 51 13.3 -0.6
ROSC **El Rosal** 117.75 93 PKiKP **PKPdf** 22 51 13.3 -0.6
P57A **Homestead Farm** 118.29 54 IAMs_20 IAMs_20 23 34 33.4
comp=Z,6μm,22.0s
SSPA **Standing Stone** 118.33 52 IAMs_20 IAMs_20 23 34 42.5
comp=Z,6μm,20.0s
MZR **Muzera** 118.46 288 *i* PKiKP **PKiKP** 22 51 16.2 +1.6
SNR=11
CBN **Corbin Frederi** 118.83 55 IAMs_20 IAMs_20 23 43 29.0
comp=Z,7μm,20.0s
CPUP **Villa Florida** 118.97 133 **PKPdf** 22 51 14.8 -0.7
CPUP **Villa Florida** 118.97 133 PKP **PKPdf** 22 51 15.3 -0.2
comp=Z,5.4nm,1.0s,baz=234,slow=2.5,SNR=6.6
CPUP PKKPbc **PKKPbc** 23 01 31.0 +1.0
comp=Z,3.4nm,0.9s,baz=331,slow=0.9,SNR=4.8
CPUP **Villa Florida** 118.97 133 PKiKP **PKPdf** 22 51 14.8 -0.7
RUSC **La Rusia** 119.22 92 PKPdf **PKPdf** 22 51 14.8 -2.0
POGA **Pongola** 119.68 225 PKPdf **PKPdf** 22 51 15.4 -1.4
SOE **Somerset East** 119.80 216 PKPdf **PKPdf** 22 51 17.1 +0.1
APA **Apatity** 120.84 341 ⇓ *i* PKiKP **PKiKP** 22 51 19.9 +2.0
APA *i* 22 52 46.0
APA pmax pmax
comp=Z,13nm,1.2s
APA MLR MLR
comp=Z,10μm,23.0s
KEV **Kevo** 121.15 345 PKPdf **PKiKP** 22 51 19.2 +0.8
KEV **Kevo** 121.15 345 PKiKP **PKiKP** 22 51 19.2 +0.8
KEV MLR MLR
comp=Z,4μm,20.0s
SUMG **Summit** 121.33 9 **PKiKP** 22 51 19.6 +0.3
SUMG **Summit** 121.33 9 PKiKP **PKiKP** 22 51 19.6 +0.3
ARCES **ARCESS Array B** 121.68 345 PKPdf **PKiKP** 22 51 19.8 +0.3
ARCES **ARCESS Array B** 121.68 345 PKP **PKiKP** 22 51 20.0 +0.5
comp=Z,3.6nm,0.5s,baz=65,slow=1.9,SNR=31
ARCES PKKPbc **PKKPab** 23 01 18.4 +0.2
comp=Z,4.1nm,0.8s,baz=230,slow=2.9,SNR=7.9
ARCES **ARCESS Array B** 121.68 345 PKiKP **PKiKP** 22 51 19.8 +0.3
ITAB **Concordia** 121.91 137 PKPdf **PKPdf** 22 51 20.3 -0.8
SUR **Sutherland** 122.64 213 PKPdf **PKiKP** 22 51 24.4 +1.6
SUR **Sutherland** 122.64 213 PKP **PKiKP** 22 51 23.8 +1.0
comp=Z,13nm,0.8s,baz=280,slow=1.5,SNR=8.6
SCHQ **Schefferville** 122.85 34 PKP **PKiKP** 22 51 23.0 +0.8
comp=Z,4.1nm,0.8s,baz=291,slow=5.8,SNR=3.9
SCHQ PKKPab **PKKPbc** 23 01 15.0 -1.0
comp=Z,4.6nm,0.8s,baz=68,slow=6.6,SNR=4.5
BOSA **Boshof** 122.97 219 **PKPdf** 22 51 22.5 -0.8
BOSA **Boshof** 122.97 219 PKP **PKPdf** 22 51 22.8 -0.5
comp=Z,17nm,0.9s,baz=134,slow=0.8,SNR=14
BOSA **Boshof** 122.97 219 PKiKP **PKPdf** 22 51 22.5 -0.8
MAK **Makhachkala** 123.09 311 *e*P **Pdif** 22 47 46.7 -7.3
MAK *i* 22 51 20.1
MAK *e*PPP PPP 22 55 38.0
MAK *e* 22 58 16.5
MAK *e*SS SS 23 09 42.9 -3.7
MAK pmax pmax
comp=Z,346nm,1.8s
SAML **Samuel** 123.45 112 **PKPdf** 22 51 22.2 -2.2
SAML **Samuel** 123.45 112 PKiKP **PKPdf** 22 51 22.2 -2.2
AQDB **Aquidauana** 123.71 129 **PKPdf** 22 51 23.0 -1.7
PTLB **Pontes e Lacer** 123.81 121 **PKPdf** 22 51 23.7 -1.3
PKME **Peaks-Kenny Pk** 124.00 46 **PKPdf** 22 51 24.3 -0.2
SC01 **Santiago de lo** 124.01 77 PKPdf **PKPdf** 22 51 25.0 -0.2
ICESG **Greenland Ices** 124.11 12 *i* P **PKPdf** 22 51 22.4 -2.1
VILB **Vilhena** 124.19 118 PKPdf **PKPdf** 22 51 25.2 -0.6
JOF **Joensuu** 124.37 338 *e*P **PKPdf** 22 51 24.3 -0.3
TRCB **Terra Rica** 124.50 133 PKPdf **PKPdf** 22 51 26.0 -0.3
DY2G **Dye2** 124.69 16 *i* P **PKPdf** 22 51 23.8 -1.7
BAUV **El Baul** 124.80 90 **PKPdf** 22 51 25.6 -1.4
VRH **Novokhopyorsk** 124.91 322 *e*PKiKP **PKPdf** 22 51 25.1 -0.9
VRH *e* 22 53 10.1
VRH pmax pmax
comp=Z,30nm,0.9s
LBTB **Lobatse** 125.30 223 **PKPdf** 22 51 26.9 -0.9
LBTB **Lobatse** 125.30 223 PKiKP **PKPdf** 22 51 26.9 -0.9
MOS **Moscow** 125.40 328 *i* PKiKP **PKPdf** 22 51 23.7 -3.1
MOS pmax pmax
comp=Z,91nm,2.0s
GNI **Garni** 125.58 308 PKPdf **PKPdf** 22 51 27.2 -0.7
GNI **Garni** 125.58 308 PKiKP **PKPdf** 22 51 27.2 -0.7
RAYN **Ar Rayn** 125.81 288 **PKPdf** 22 51 28.2 -0.5
RAYN **Ar Rayn** 125.81 288 *i* PKiKP **PKiKP** 22 51 29.8 +0.7
SNR=26
RAYN **Ar Rayn** 125.81 288 PKiKP **PKPdf** 22 51 28.2 -0.5
GOF **Gofitskoye** 125.83 314 *ce*PKiKP **PKPdf** 22 51 27.6 -0.4
LPSR **Galich'ya Gora** 126.01 324 *e*PKiKP **PKPdf** 22 51 27.6 -0.5
LPSR pmax pmax
comp=Z,50nm,1.1s
VORR **Voronezh** 126.21 323 *e*PKiKP **PKPdf** 22 51 27.8 -0.7
VORR pmax pmax
comp=Z,40nm,0.5s
OBN **Obninsk** 126.22 328 PKPdf **PKPdf** 22 51 27.8 -0.6
OBN **Obninsk** 126.22 328 *c i* PKiKP **PKPdf** 22 51 27.4 -1.0
OBN *e* 22 53 21.0
OBN *e*PPP PPP 22 56 03.5
OBN *e*SS SS 23 10 53.0 +28
OBN pmax pmax
comp=Z,80nm,1.5s
OBN MLR MLR
comp=Z,4μm,21.0s
KBZ **Khabaz** 126.24 313 PKP **PKPdf** 22 51 27.9 -0.9
comp=Z,3.4nm,0.8s,baz=76,slow=4.2,SNR=11
KBZ PP **PP** 22 53 24.1 +0.7
comp=Z,7.4nm,1.1s,baz=57,slow=7.8,SNR=6.7
KBZ **Khabaz** 126.24 313 *c i* PKiKP **PKPdf** 22 51 27.6 -1.2
KIV **Kislovodsk** 126.33 313 **PKPdf** 22 51 29.0 -0.2
KIV **Kislovodsk** 126.33 313 *i* PKPdf **PKiKP** 22 51 30.0 +0.4
SNR=12
KIV **Kislovodsk** 126.33 313 ⇓ P **PKiKP** 22 51 31.2 +1.6
KIV **Kislovodsk** 126.33 313 *i* PKiKP **PKPdf** 22 51 29.1 0.0
KIV *e*PS **PS** 23 03 25.9 -1.9
KIV *e*SS SS 23 10 19.5 -8.1
KIV *e*SSS SSS 23 15 14.8
KIV pmax pmax
comp=Z,28nm,1.0s
MATP **Matopo** 126.35 229 PKP **PKPdf** 22 51 30.1 +0.1
comp=Z,19nm,1.1s,baz=115,slow=2.1,SNR=20
VSR **Storozhevoye** 126.41 323 *e*PKiKP **PKPdf** 22 51 27.8 -1.1
VSR pmax pmax
comp=Z,30nm,1.2s
SHA1 **Shidzhatmaz** 126.41 313 *d i* PKiKP **PKPdf** 22 51 29.5 0.0
VORD **Divnogorie** 126.42 322 *e*PKiKP **PKPdf** 22 51 27.8 -1.1
VORD pmax pmax
comp=Z,10.0nm,0.5s
KEF **Keuruu** 127.13 339 *e*P **PKPdf** 22 51 29.4 -0.5
FIA1 **FINESS Array S** 127.20 338 **PKPdf** 22 51 28.6 -1.5
FINES **FINESS Array B** 127.20 338 **PKPdf** 22 51 29.2 -0.9
FINES **FINESS Array B** 127.20 338 PKP **PKPdf** 22 51 30.4 +0.2
comp=Z,6.0nm,0.8s,baz=98,slow=3.9,SNR=17
FINES **FINESS Array B** 127.20 338 PKiKP **PKPdf** 22 51 29.2 -0.9
VAF **Ylistaro** 127.22 341 *e*P **PKiKP** 22 51 31.9 +1.3
ERBR **Yeremizino-Bor** 127.39 316 *i* PKiKP **PKiKP** 22 51 31.6 +0.1
ERBR *e* 22 53 29.2
ERBR *e* 22 58 35.5
ERBR *e*SS SS 23 10 39.8 -0.6
ERBR pmax pmax
comp=Z,115nm,1.4s
KIBK **Kibwezi** 127.46 254 PKPdf **PKiKP** 22 51 32.7 0.0
KIBK IAMs_20 IAMs_20 23 40 05.6
comp=Z,5μm,20.0s
SPB **Sao Paulo** 127.48 138 IAMs_20 IAMs_20 23 39 06.3
comp=Z,6μm,20.0s
LABN **Labinsk** 127.53 314 *i* PKiKP **PKiKP** 22 51 32.2 +0.4
LABN *e* 22 53 30.9
LABN *e* 22 58 36.6
LABN *e*SS SS 23 10 41.5 -0.7
UUPR **Utuado, UPR, P** 127.66 79 **PKPdf** 22 51 30.1 -2.2
BCA **Borcka** 127.67 310 ⇑ P **PKiKP** 22 51 32.9 +0.7
OBIP **Obispado Ponce** 127.74 79 **PKPdf** 22 51 29.9 -2.5
GURO **Guroymak-BITLI** 127.92 307 **PKPdf** 22 51 31.6 -0.8
MACA **Manacapuru-AM** 128.09 107 PKPdf **PKPdf** 22 51 31.8 -1.5
VAO **Valinhos** 128.20 138 PKPdf **PKPdf** 22 51 32.7 -0.7
IGPR **InterUniversit** 128.20 80 **PKPdf** 22 51 32.0 -1.3
PDPR **Patillas Dam,** 128.29 79 **PKPdf** 22 51 33.0 -0.5
SOC **Sochi** 128.51 313 *e*PKiKP **PKPdf** 22 51 30.7 -2.5
SOC *e* 22 53 35.7
SOC *e*PPP PPP 22 56 20.8
SOC *e* 22 58 38.1
SOC *e*PS **PS** 23 03 42.4 -4.2
SOC pmax pmax
comp=Z,18nm,1.0s
SOC MLR MLR
comp=Z,3μm,21.0s
ARBE **Arbavere** 128.57 336 *e*P **PKiKP** 22 51 36.2 +2.8
KMBO **Kilima Mbogo** 128.65 255 PKPdf **PKiKP** 22 51 35.3 0.0
KMBO **Kilima Mbogo** 128.65 255 IAMs_20 IAMs_20 23 39 48.1
comp=Z,6μm,20.0s
KMBO **Kilima Mbogo** 128.65 255 PKP **PKPdf** 22 51 34.9 +0.2
comp=Z,6.9nm,1.0s,baz=102,slow=2.5,SNR=26
KOPT **Kop Dagi** 128.81 309 PKPdf **PKiKP** 22 51 34.8 -0.1
VSU **Vasula** 128.91 335 *de*PKiKP **PKPdf** 22 51 33.6 +0.2
GBN **Guysborough** 129.25 44 **PKPdf** 22 51 34.9 +0.4
BBSR **BB Station** 129.58 61 **PKPdf** 22 51 34.6 -0.9
ANN **Anapa** 129.72 315 *i* PKiKP **PKiKP** 22 51 36.3 +0.1
ANN *e* 22 53 44.2
ANN *e* 22 58 41.7
ANN *e*SS SS 23 11 09.3 +0.1
ANN pmax pmax
comp=Z,44nm,1.3s
LSZ **Lusaka** 129.74 234 **PKPdf** 22 51 35.7 -0.8
LSZ IAMs_20 IAMs_20 23 46 45.7
comp=Z,6μm,19.0s
LSZ **Lusaka** 129.74 234 PKiKP **PKPdf** 22 51 35.7 -0.8
LSZ MLR MLR
comp=Z,6μm,19.0s
BOAV **Boa Vista** 130.22 101 **PKPdf** 22 51 35.7 -1.7
FURI **Furi** 130.28 268 PKPdf **PKPdf** 22 51 37.2 -0.6
ARPR **Arapgir-MALATY** 130.64 308 PKPdf **PKiKP** 22 51 38.4 0.0
MNK **Minsk** 130.83 330 *i* PKiKP **PKiKP** 22 51 39.5 +1.4
comp=E,5.0nm,0.9s
MNK *i* PKiKP **PKiKP** 22 51 39.5 +1.4
comp=N,8.0nm,0.8s
MNK *i* PKiKP **PKiKP** 22 51 39.5 +1.4
comp=Z,13nm,0.7s,baz=55
MNK *i* PP **PP** 22 53 55.0 +2.0
MNK *i* SKP 22 55 00.5
MNK *i* PKS **PKSdf** 22 55 14.8 +1.4
MNK *i* PPP PPP 22 56 43.9
MNK *i* SKS SKSdf 22 59 28.9 +41
MNK *i* SKKS 23 02 03.4
MNK *i* SP SP 23 03 00.4 -62
MNK *i* PS PS 23 03 37.7 -28
MNK *i* SS **SS** 23 11 27.0 +5.1
MNK *i* LQ LQ 23 41 46.5
MNK *i* LR LR 23 45 03.4
MNK *i* LRM MLR 23 49 00.7
comp=E,4μm,19.2s
MNK *i* LRM MLR 23 49 18.1
comp=Z,6μm,19.1s
MNK *i* LRM MLR 23 49 23.6
comp=N,5μm,19.3s
MNK **Minsk** 130.83 330 *i* PKiKP **PKiKP** 22 51 39.5 +1.4
MNK *i* 22 53 54.9
MNK *i* PPP PPP 22 56 43.8
MNK *i* SS SS 23 11 26.9 +5.0
MNK pmax pmax
comp=Z,13nm,0.7s
MNK pmax pmax
comp=N,8.0nm,0.8s
MNK pmax pmax
comp=E,5.0nm,0.9s
MNK MLR MLR
comp=E,4μm,19.0s
MNK MLR MLR
comp=Z,6μm,19.0s
MNK MLR MLR
comp=N,5μm,19.0s
IIGN **Ignalina** 131.09 332 *e*P **PKPdf** 22 51 36.4 -1.3
SIM **Simferopol'** 131.88 317 *K i* PKiKP **PKiKP** 22 51 40.7 +0.1
SIM *e* 22 54 04.7
SIM pmax pmax
comp=Z,110nm,2.0s
SIM pmax pmax
comp=Z,1μm,7.4s
SIM pmax pmax
comp=Z,660nm,6.3s
GAZ **Gaziantep** 131.93 306 **PKPdf** 22 51 39.8 -0.2
LODK **Lodwar** 131.96 260 PKPdf **PKPdf** 22 51 40.8 +0.1
NB2 **NORSAR Subarra** 132.05 345 PKPdf **PKPdf** 22 51 38.6 -0.8
comp=Z,668nm,3.3s,baz=31,slow=1.9
NB2 PP **PP** 22 53 55.5 -5.0
comp=Z,497nm,2.5s,baz=43,slow=6.9
NB2 PKP 22 55 11.6
comp=Z,936nm,3.3s,baz=26,slow=4.3
NB2 **NORSAR Subarra** 132.05 345 PKPdf **PKPdf** 22 51 38.6 -0.8
baz=31,slow=1.9
NOA **NORSAR Array B** 132.05 345 PKP **PKiKP** 22 51 40.5 +0.1
comp=Z,1.5nm,0.8s,baz=30,slow=2.7,SNR=7.7
NOA PP **PP** 22 54 02.3 +1.8
comp=Z,4.0nm,1.1s,baz=38,slow=6.8,SNR=4.1
NOA SKP 22 55 10.2
comp=Z,5.9nm,1.2s,baz=29,slow=3.5,SNR=4.0
HFS **Hagfors** 132.17 343 PKP **PKiKP** 22 51 40.4 -0.3
comp=Z,2.1nm,0.7s,baz=17,slow=1.5,SNR=7.4
AK03 **Malin Array Si** 132.24 326 PKP **PKPdf** 22 51 40.0 0.0
AKASG **Malin Array Be** 132.25 326 **PKPdf** 22 51 38.9 -1.1
AKASG **Malin Array Be** 132.25 326 PKP **PKPdf** 22 51 39.3 -0.7
comp=Z,7.2nm,1.0s,baz=63,slow=2.3,SNR=16
AKASG PP **PP** 22 53 57.6 -4.6
comp=Z,4.2nm,0.9s,baz=53,slow=5.2,SNR=8.3
AKASG SKP 22 55 18.1
comp=Z,2.1nm,0.7s,baz=45,slow=4.0,SNR=4.1
AKASG SKKPbc SKKPbc 23 04 27.6 -6.0
comp=Z,0.2nm,0.3s,baz=234,slow=4.2,SNR=4.4
AKBB **Malin Array Si** 132.25 326 **PKPdf** 22 51 38.7 -1.4
AKBB **Malin Array Si** 132.25 326 *de*PKiKP **PKPdf** 22 51 39.6 -0.4
AKBB **Malin Array Si** 132.25 326 PKP **PKPdf** 22 51 40.1 +0.1
KIEV **Kiev** 132.27 326 *i* PKPdf **PKPdf** 22 51 40.5 +0.5
SNR=11
KIEV **Kiev** 132.27 326 ⇑ P **PKiKP** 22 51 40.8 -0.4
KIEV **Kiev** 132.27 326 PKiKP **PKiKP** 22 51 40.7 -0.4
AK05 **Malin Array Si** 132.31 326 PKP **PKPdf** 22 51 40.2 +0.1
AK19 **Malin Array Si** 132.36 326 PKP **PKPdf** 22 51 40.3 +0.1
AK13 **Malin Array Si** 132.39 326 PKP **PKPdf** 22 51 40.3 0.0
BDFB **Brasilia** 132.42 130 **PKPdf** 22 51 39.9 -1.7
BDFB **Brasilia** 132.42 130 PKP **PKPdf** 22 51 40.5 -1.0
comp=Z,11nm,1.0s,baz=243,slow=1.5,SNR=6.9
BNN **Bunyan** 132.58 308 **PKPdf** 22 51 40.3 -0.9
MI30 **MI30,Zelenitsa** 132.79 326 PKP **PKPdf** 22 51 40.8 -0.2
MI28 **MI28,Pidlybu** 132.97 327 PKP **PKPdf** 22 51 41.1 -0.3
MI29 **MI29, Kamyanyy** 133.15 326 PKP **PKPdf** 22 51 41.6 -0.1
SUW **Suwalki** 133.30 332 *e*PKPdf **PKPdf** 22 51 41.7 -0.2
SUW *e*PP **PP** 22 54 10.6 +1.9
LUBAR **Lubar, Ukraine** 133.47 325 PKP **PKPdf** 22 51 42.0 -0.4
RNPP9 **Sopachiv** 133.62 328 PKP **PKPdf** 22 51 42.4 -0.2
RNPP8 **Varash** 133.68 328 PKP **PKPdf** 22 51 42.5 -0.2
KIRS **Kirsehir-Merke** 133.95 309 ⇑ P **PKiKP** 22 51 45.5 +0.4
BR131 **Keskin Array S** 133.98 310 ⇑ *e*PKiKP **PKPdf** 22 51 41.2 -2.7
BRTR **Keskin Array B** 133.98 310 **PKPdf** 22 51 44.0 +0.1
BRTR **Keskin Array B** 133.98 310 PKhKP PKPpre 22 51 33.8
comp=Z,0.8nm,0.8s,baz=122,slow=3.4,SNR=4.2
BRTR PKP **PKiKP** 22 51 46.1 +0.9
comp=Z,8.3nm,1.0s,baz=322,slow=0.7,SNR=14
BRTR PP **PP** 22 54 12.8 -1.3
comp=Z,17nm,1.3s,baz=0.0,slow=0.0,SNR=7.7
BRTR SKKPbc SKKPbc 23 04 24.9 -1.9
comp=Z,1.4nm,1.0s,baz=253,slow=3.5,SNR=3.6
BRTR **Keskin Array B** 133.98 310 PKiKP **PKPdf** 22 51 44.0 +0.1
SORM **Soroca** 134.06 323 ⇓ P **PKiKP** 22 51 45.0 +0.1
SORM **Soroca** 134.06 323 PKiKP **PKiKP** 22 51 44.9 +0.1
MMAI **Mount Meron Ar** 134.20 301 PKhKP PKPpre 22 51 34.5
comp=Z,5.3nm,1.1s,baz=29,slow=3.8,SNR=8.4
MMAI PKP **PKiKP** 22 51 46.5 +0.8
comp=Z,12nm,0.8s,baz=207,slow=1.6,SNR=6.5
MMAI PP **PP** 22 54 17.8 +2.1
comp=Z,6.9nm,1.1s,baz=197,slow=1.5,SNR=3.1
GHAJ **Ghor Haditha** 134.33 298 PKPdf **PKPdf** 22 51 44.3 -0.2
MAL2 **Monte Alegre,** 134.49 109 PKPdf **PKPdf** 22 51 44.3 -1.1
ANTO **Ankara** 134.56 311 ⇑ P **PKiKP** 22 51 46.1 -0.1
ANTO **Ankara** 134.56 311 PKiKP **PKiKP** 22 51 46.1 -0.1
TSUM **Tsumeb** 134.61 221 PKPdf **PKPdf** 22 51 43.9 -1.7
TSUM **Tsumeb** 134.61 221 PKP **PKPdf** 22 51 44.2 -1.4
comp=Z,2.6nm,0.4s,baz=154,slow=1.2,SNR=9.5
KMPD **K-Podol'skiy** 134.91 324 PKP **PKPdf** 22 51 44.7 -0.4
DEL **Delary** 135.12 340 *e*P **PKiKP** 22 51 48.8 +2.1
CSS **Mathiatis** 135.49 304 PKPdf **PKPdf** 22 51 45.8 -0.8
LVV **L'vov** 135.51 327 *e*PKiKP **PKPdf** 22 51 40.1 -6.1
LVV *e* 22 54 21.8
LVV MLR MLR
comp=N,2μm,20.0s
LVV MLR MLR
comp=E,3μm,20.0s
LVV MLR MLR
comp=Z,5μm,21.0s
TPGR **Topolog** 135.60 319 ⇑ P **PKiKP** 22 51 47.7 -0.5
CFR **Carcaliu** 135.63 319 ⇑ P **PKiKP** 22 51 48.9 +0.8
CFR **Carcaliu** 135.63 319 PKiKP **PKiKP** 22 51 48.9 +0.8
BEL **Belsk** 135.83 331 *e*PKPdf **PKPdf** 22 51 46.4 -0.3
BEL *e*PP **PP** 22 54 24.9 0.0
TESR **Tescani** 135.88 322 ⇓ P **PKPdf** 22 51 47.6 +0.6
HARR **Harsova** 135.99 319 ⇑ P **PKiKP** 22 51 49.5 +0.7
HARR **Harsova** 135.99 319 PKiKP **PKiKP** 22 51 49.5 +0.7
BUR08 **Bucovina Ar. S** 136.12 324 **PKPdf** 22 51 46.2 -1.4
BURAR **Bucovina Array** 136.13 324 **PKPdf** 22 51 47.5 0.0
BURAR **Bucovina Array** 136.13 324 ⇑ P **PKiKP** 22 51 49.6 +0.3
BURAR **Bucovina Array** 136.13 324 PKiKP **PKiKP** 22 51 49.5 +0.3
PLOR **Plostina** 136.22 321 ⇑ P **PKiKP** 22 51 49.3 -0.1
PLOR **Plostina** 136.22 321 PKiKP **PKiKP** 22 51 49.3 -0.1
KWP **Kalwaria Pacla** 136.31 328 *e*PKPdf **PKPdf** 22 51 46.4 -1.4
KWP *e*PP **PP** 22 54 23.9 -4.0
GKP **Gorka Klasztor** 136.37 335 *e*PKPdf **PKPdf** 22 51 48.1 +0.5
GKP *e*PP **PP** 22 54 26.5 -1.6
COVR **Voineasa-Covas** 136.49 321 ⇓ P **PKPdf** 22 51 48.8 +0.6
TURR **Turia** 136.50 322 ⇑ P **PKiKP** 22 51 49.3 -0.6
NEHR **Nehoiu** 136.65 321 ⇓ P **PKiKP** 22 51 49.9 -0.4
ISK **Istanbul-Kandi** 136.79 314 P **PKiKP** 22 51 46.8 -2.0
MLR **Muntele Rosu** 136.83 321 ⇑ P **PKiKP** 22 51 50.2 -0.6
MLR **Muntele Rosu** 136.83 321 PKiKP **PKiKP** 22 51 50.1 -0.6
DOPR **Dopca** 136.91 322 ⇓ P **PKiKP** 22 51 50.9 +0.1
KOLS **Kolonicke sedl** 136.96 327 *e*PKiKP **PKPdf** 22 51 49.7 +0.7
KOLS **Kolonicke sedl** 136.96 327 *e*PP PP 22 54 35.2 +3.1
BMR **Baia Mare** 137.06 325 ⇓ P **PKiKP** 22 51 51.3 +0.3
BMR **Baia Mare** 137.06 325 PKiKP **PKiKP** 22 51 51.3 +0.3
OJC **Ojcow** 137.38 330 *e*PKPdf **PKPdf** 22 51 48.7 -1.0
OJC *e*PP **PP** 22 54 31.6 -2.9
OJC **Ojcow** 137.38 330 PKPdf **PKPdf** 22 51 49.1 -0.6
OJC **Ojcow** 137.38 330 PKiKP **PKPdf** 22 51 49.1 -0.6
VOIR 137.39 321 ⇑ P **PKiKP** 22 51 51.7 -0.1
VOIR 137.39 321 PKiKP **PKiKP** 22 51 51.7 -0.1
CRVS **Cervenica-Dubn** 137.40 328 *e*PP PP 22 54 36.8 +2.0
NIE **Niedzica** 137.66 329 *e*PKPdf **PKPdf** 22 51 50.3 0.0
NIE *e*PP **PP** 22 54 36.2 -0.2
MESR **Meseseni** 137.66 325 ⇑ P **PKiKP** 22 51 51.8 -0.4
MARR **Marisel-Cluj** 137.84 324 ⇑ P **PKPdf** 22 51 51.5 +0.7
DRGR 138.00 324 ⇓ P **PKiKP** 22 51 52.4 -0.6
DRGR 138.00 324 PKiKP **PKiKP** 22 51 52.4 -0.6
EDRB **Edirne** 138.05 316 P **PKPdf** 22 51 50.0 -1.1
ELND **Elena** 138.13 318 ⇓ P **PKiKP** 22 51 53.2 -0.1
LANS **Liptovska Anna** 138.25 329 *e*PKiKP **PKPdf** 22 51 51.5 +0.1
LANS **Liptovska Anna** 138.25 329 *e*PP PP 22 54 41.6 +1.5
OKC **Ostrava-Krasne** 138.42 331 *e*PKPDF **PKPdf** 22 51 52.1 +0.5
OKC *e*PP **PP** 22 54 41.7 +0.7
OKC AMS AMS 23 50 20.0
comp=Z,3μm,19.4s
OKC **Ostrava-Krasne** 138.42 331 *e*PKiKP **PKPdf** 22 51 52.1 +0.5
OKC *e* 22 54 41.7
OKC MLR MLR
comp=Z,3μm,19.4s
KSP **Ksiaz** 138.54 333 *e*PKPdf **PKPdf** 22 51 45.3 -6.5
KSP *e*PP **PP** 22 54 38.3 -3.4
MORC **Moravsky Berou** 138.74 331 *e*PKP **PKPdf** 22 51 46.6 -5.7
MORC *e*PP **PP** 22 54 44.0 +0.9
MORC **Moravsky Berou** 138.74 331 ⇓ P **PKPdf** 22 51 53.4 +1.1
MORC **Moravsky Berou** 138.74 331 PKiKP **PKPdf** 22 51 53.3 +1.1
OSTC **Ostas** 138.78 333 *e*PKPDF **PKPdf** 22 51 52.0 -0.3
OSTC *e*PP **PP** 22 54 42.6 -0.6
OSTC AMS AMS 23 58 40.0
comp=Z,5μm,19.2s
OSTC **Ostas** 138.78 333 *e*PKiKP **PKPdf** 22 51 52.0 -0.3
OSTC *e* 22 54 42.6
OSTC MLR MLR
comp=Z,5μm,19.2s
YER **Yerkesik** 138.79 309 P **PKPdf** 22 51 52.1 -0.7
CHVC **Chvalec** 138.83 333 *e*PKPDF **PKPdf** 22 51 52.2 -0.2
CHVC *e*PP **PP** 22 54 42.5 -1.0
CHVC AMS AMS 23 59 20.0
comp=Z,4μm,19.1s
CHVC **Chvalec** 138.83 333 *e*PKiKP **PKPdf** 22 51 52.2 -0.2
CHVC *e* 22 54 42.5
CHVC MLR MLR
comp=Z,4μm,19.1s
PSZ **Piszkesteto** 138.84 327 **PKPdf** 22 51 52.0 -0.5
PSZ **Piszkesteto** 138.84 327 ⇑ P **PKPdf** 22 51 53.7 +1.2
PSZ **Piszkesteto** 138.84 327 PKiKP **PKPdf** 22 51 52.0 -0.5
KRLC **Kraliky** 138.88 332 *e*PKPDF **PKPdf** 22 51 51.9 -0.6
KRLC *e*PP **PP** 22 54 43.3 -0.6
KRLC AMS AMS 23 52 40.0
comp=Z,6μm,20.8s
KRLC **Kraliky** 138.88 332 *e*PKiKP **PKPdf** 22 51 51.9 -0.6
KRLC *e* 22 54 43.3
KRLC MLR MLR
comp=Z,6μm,20.8s
DPC **Dobruska-Polom** 138.89 333 *e*PKPDF **PKiKP** 22 51 53.7 -1.0
DPC *e*PP **PP** 22 54 43.5 -0.4
DPC AMS AMS 23 58 30.0
comp=Z,4μm,17.6s
DPC **Dobruska-Polom** 138.89 333 *e*PKiKP **PKiKP** 22 51 53.7 -1.0
DPC *e* 22 54 43.5
DPC MLR MLR
comp=Z,4μm,17.6s
SIRR **Siria** 138.90 324 ⇑ P **PKPdf** 22 51 53.7 +1.1
UPC **Upice** 138.91 333 *e*PKPDF **PKPdf** 22 51 50.4 -2.1
UPC *e*PP **PP** 22 54 42.8 -1.2
UPC AMS AMS 23 59 00.0
comp=Z,5μm,18.9s
UPC **Upice** 138.91 333 *e*PKiKP **PKPdf** 22 51 50.4 -2.1
UPC *e* 22 54 42.8
UPC MLR MLR
comp=Z,5μm,18.9s
ENEZ **Enez** 138.94 315 P **PKPdf** 22 51 52.1 -0.7
SURR **Surduc** 138.94 323 ⇑ P **PKPdf** 22 51 53.5 +0.8
ALN **Alexandroupoli** 138.94 315 P **PKiKP** 22 51 51.0 -1.8
VYHS **Vyhne** 139.00 329 *e*PKiKP **PKPdf** 22 51 51.9 -0.8
INVG **Invergeldie, C** 139.20 353 *e*P **PKPdf** 22 51 51.6 -1.2
EZN **Ezine** 139.20 313 P **PKPdf** 22 51 51.8 -1.5
HERR **Herculane** 139.26 322 ⇓ P **PKiKP** 22 51 55.3 -0.2
BZS **Buzias** 139.31 324 ⇓ P **PKPdf** 22 51 53.8 +0.5
BZS **Buzias** 139.31 324 PKiKP **PKPdf** 22 51 53.8 +0.5
JAVC **Velka Javorina** 139.32 330 *e*PKP **PKPdf** 22 51 48.3 -5.1
DAT **Datca** 139.46 308 P **PKPdf** 22 51 54.4 +0.3
PRK **Paraskevi** 139.48 312 P **PKPdf** 22 51 53.2 -0.6
SMTH **Samothraki Isl** 139.48 315 P **PKPdf** 22 51 53.8 0.0
BRG **Berggiesshubel** 139.51 335 *e*PKP **PKPdf** 22 51 47.5 -6.1
BRG Amp 22 51 50.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,3.5nm,1.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **139.51 335** | P | **PKPdf** | **22 51 54.2** | **+0.7** |
| BRG | | | Amp | | 22 51 55.5 | | |
| | comp=Z,37nm,1.4s | | | | | | |
| **PVCC** | **Panska Ves** | **139.51 334** | *e*PKPpre | PKPpre | 22 51 45.9 | | |
| PVCC | | | *e*PP | **PP** | **22 54 52.4** | **+4.7** |
| PVCC | | | AMS | AMS | 23 57 20.0 | | |
| | comp=Z,7µm,20.4s | | | | | | |
| **PVCC** | **Panska Ves** | **139.51 334** | *e*PKHKP | PKPpre | 22 51 45.9 | | |
| PVCC | | | *e* | | 22 54 52.4 | | |
| PVCC | | | MLR | MLR | | | |
| | comp=Z,7µm,20.4s | | | | | | |
| **VRAC** | **Vranov** | **139.51 331** | *e*PKP | **PKPdf** | **22 51 49.2** | **-4.4** |
| VRAC | | | *e*PP | **PP** | **22 54 48.0** | **+0.2** |
| **VRAC** | **Vranov** | **139.51 331** | ⇑P | **PKiKP** | **22 51 55.2** | **-0.8** |
| **VRAC** | **Vranov** | **139.51 331** | PKIKP | **PKiKP** | **22 51 55.1** | **-0.8** |
| **CLL** | **Collm** | **139.55 336** | *e*PKHKP | PKPpre | 22 51 46.0 | | |
| CLL | | | *i* | | 22 51 53.3 | | |
| CLL | | | *i* | | 22 54 48.1 | | |
| CLL | | | pmax | pmax | | | |
| | comp=Z,630nm,3.5s | | | | | | |
| CLL | | | pmax | pmax | | | |
| | comp=Z,207nm,2.0s | | | | | | |
| **BODT** | **Bodrum** | **139.55 309** | P | **PKPdf** | **22 51 54.2** | **+0.1** |
| **RICC** | **Richard** | **139.70 334** | *e*PKPDF | **PKPdf** | **22 51 53.5** | **-0.4** |
| RICC | | | *e*PP | **PP** | **22 54 44.5** | **-4.3** |
| RICC | | | AMS | AMS | 23 58 00.0 | | |
| | comp=Z,5µm,18.8s | | | | | | |
| **MDVR** | **Moldovita** | **139.73 322** | ⇓P | **PKiKP** | **22 51 55.7** | **-0.9** |
| **KRUC** | **Moravsky** | **139.78 331** | *e*PKP | **PKPdf** | **22 51 48.1** | **-6.0** |
| KRUC | | | *e*PP | **PP** | **22 54 49.9** | **+0.5** |
| **SIGR** | **SIGRI** | **139.79 313** | P | **PKPdf** | **22 51 54.7** | **+0.3** |
| **GOPC** | **GO Pecny, Ondr** | **139.88 333** | *e*PKPpre | PKPpre | 22 51 46.8 | | |
| GOPC | | | *e*PP | **PP** | **22 54 49.4** | **-0.6** |
| GOPC | | | AMS | AMS | 23 56 20.0 | | |
| | comp=Z,5µm,18.9s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **139.88 333** | *e*PKHKP | PKPpre | 22 51 46.8 | | |
| GOPC | | | *e* | | 22 54 49.4 | | |
| GOPC | | | MLR | MLR | | | |
| | comp=Z,5µm,18.9s | | | | | | |
| **PRA** | **Prague** | **139.91 334** | *e*PKPpre | PKPpre | 22 51 47.5 | | |
| PRA | | | *e*PP | **PP** | **22 54 49.5** | **-0.6** |
| PRA | | | AMS | AMS | 23 57 50.0 | | |
| | comp=Z,6µm,20.1s | | | | | | |
| **PRA** | **Prague** | **139.91 334** | *e*PKHKP | PKPpre | 22 51 47.5 | | |
| PRA | | | *e* | | 22 54 49.5 | | |
| PRA | | | MLR | MLR | | | |
| | comp=Z,6µm,20.1s | | | | | | |
| **HSKC** | **Hora Svate Kat** | **139.92 335** | *e*PKPpre | PKPpre | 22 51 47.7 | | |
| HSKC | | | *e*PP | **PP** | **22 54 44.9** | **-5.3** |
| HSKC | | | AMS | AMS | 23 56 20.0 | | |
| | comp=Z,5µm,19.5s | | | | | | |
| **KAVA** | **Kavala** | **139.93 316** | P | **PKPdf** | **22 51 49.0** | **-5.6** |
| **PRU** | **Pruhonice** | **139.93 334** | *e*PKPpre | PKPpre | 22 51 48.7 | | |
| PRU | | | *e*PP | **PP** | **22 54 49.4** | **-0.8** |
| PRU | | | AMS | AMS | 23 57 50.0 | | |
| | comp=Z,6µm,19.9s | | | | | | |
| **PRU** | **Pruhonice** | **139.93 334** | *e*PKIKP | **PKPdf** | **22 51 48.7** | **-5.6** |
| PRU | | | *e* | | 22 54 49.4 | | |
| PRU | | | MLR | MLR | | | |
| | comp=Z,6µm,19.9s | | | | | | |
| **LIA** | **Limnos Island** | **139.97 314** | P | **PKPdf** | **22 51 53.5** | **-1.2** |
| **THAS** | **Thassos island** | **139.97 315** | P | PKPdf | 22 51 44.2 | -10 |
| **CHOS** | **Chios island** | **139.98 311** | P | **PKPdf** | **22 51 50.3** | **-4.6** |
| **TREC** | **Trest** | **140.03 332** | *e*PKPDF | **PKPdf** | **22 51 53.7** | **-0.9** |
| TREC | | | *e*PP | **PP** | **22 54 51.9** | **+1.0** |
| TREC | | | AMS | AMS | 23 58 30.0 | | |
| | comp=Z,6µm,21.0s | | | | | | |
| **TREC** | **Trest** | **140.03 332** | *e*PKIKP | **PKPdf** | **22 51 53.7** | **-0.9** |
| TREC | | | *e* | | 22 54 51.9 | | |
| TREC | | | MLR | MLR | | | |
| | comp=Z,6µm,21.0s | | | | | | |
| **ZST** | **Bratislava** | **140.05 330** | *e*PKIKP | **PKPdf** | **22 51 55.7** | **+1.1** |
| **ZST** | **Bratislava** | **140.05 330** | *e*PP | PP | 22 54 52.3 | +1.2 |
| **EKA** | **Eskdalemuir Ar** | **140.16 352** | PKP | **PKPdf** | **22 51 52.7** | **-1.9** |
| | comp=Z,1.5nm,0.6s,baz=350,slow=2.2,SNR=4.8 | | | | | | |
| **KARP** | **Karpathos** | **140.18 307** | P | **PKPdf** | **22 51 50.2** | **-5.1** |
| **NVR** | **Nevrokopi** | **140.20 317** | P | **PKPdf** | **22 51 54.5** | **-0.7** |
| **KOKK** | **Kokkinochori,** | **140.36 316** | P | **PKPdf** | **22 51 50.8** | **-4.6** |
| **BOVS** | **Bovan** | **140.38 321** | ⇑P | **PKPdf** | **22 51 55.7** | **+0.4** |
| **SRS** | **Serrai** | **140.49 317** | P | **PKPdf** | **22 51 53.6** | **-2.1** |
| **ZVC** | **Zvikov** | **140.49 333** | *e*PKPDF | **PKPdf** | **22 51 51.6** | **-3.8** |
| ZVC | | | *e*PP | **PP** | **22 54 53.2** | **-0.5** |
| ZVC | | | AMS | AMS | 23 56 50.0 | | |
| | comp=Z,6µm,21.0s | | | | | | |
| **MORH** | **Mrgy, Hungar** | **140.58 326** | ⇑P | **PKPdf** | **22 51 56.7** | **+1.1** |
| **OUR** | **Ouranopolis** | **140.59 315** | P | PKPdf | 22 51 46.8 | -9.0 |
| **FRGS** | **Fruska Gora** | **140.60 324** | ⇑*i*P | **PKPdf** | **22 51 53.0** | **-2.8** |
| **GDLE** | **Glaisdale, N Y** | **140.70 350** | *e*P | **PKPdf** | **22 51 54.6** | **-1.0** |
| **RONA** | **Rosalia, Austr** | **140.78 330** | *e*PP | **PP** | **22 54 52.6** | **-3.0** |
| | comp=Z,115nm,2.1s,SNR=12 | | | | | | |
| **SOH** | **Sokhos** | **140.79 316** | P | PKPdf | 22 51 47.9 | -8.4 |
| **GAL1** | **Galloway** | **140.81 353** | *e*P | **PKPdf** | **22 51 52.5** | **-3.2** |
| **CONA** | **Conrad Observa** | **140.83 330** | *e*PKP | **PKPdf** | **22 51 49.6** | **-6.5** |
| | comp=Z,15nm,1.6s,SNR=13 | | | | | | |
| CONA | | | *e*PP | **PP** | **22 54 52.1** | **-3.9** |
| | comp=Z,58nm,1.8s | | | | | | |
| **IDGL** | **Inch Island, C** | **140.85 356** | PKPdif | **PKPdf** | **22 51 56.4** | **+0.6** |
| **APE** | **Apeiranthos** | **140.87 310** | P | **PKPdf** | **22 51 53.7** | **-2.8** |
| **KESW** | **Keswick, Cumbr** | **140.88 352** | *e*P | **PKPdf** | **22 51 51.7** | **-4.2** |
| **CKRC** | **Cesky Krumlov** | **140.90 333** | *e*PKPDF | **PKPdf** | **22 51 51.3** | **-4.9** |
| CKRC | | | *e*PP | **PP** | **22 54 57.4** | **+1.1** |
| CKRC | | | AMS | AMS | 23 58 00.0 | | |
| | comp=Z,5µm,20.6s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **140.90 333** | *e*PKIKP | **PKPdf** | **22 51 51.3** | **-4.9** |
| CKRC | | | *e* | | 22 54 57.4 | | |
| CKRC | | | MLR | MLR | | | |
| | comp=Z,5µm,20.6s | | | | | | |
| **KNT** | **Kendrikon** | **140.92 317** | P | **PKPdf** | **22 51 52.7** | **-3.7** |
| **KHC** | **Kasperske Hory** | **140.99 333** | *e*PKPpre | PKPpre | 22 51 51.3 | | |
| KHC | | | pPKP | sPKPdf | 22 52 02.0 | -1.4 |
| KHC | | | *e*PP | **PP** | **22 54 57.8** | **+1.0** |
| KHC | | | AMS | AMS | 23 58 20.0 | | |
| | comp=Z,6µm,20.1s | | | | | | |
| **KHC** | **Kasperske Hory** | **140.99 333** | *e*PKIKP | **PKPdf** | **22 51 51.3** | **-5.0** |
| KHC | | | *e* | | 22 54 57.8 | | |
| KHC | | | MLR | MLR | | | |
| | comp=Z,6µm,20.1s | | | | | | |
| **PAIG** | **Paliouri** | **140.99 315** | P | PKPdf | 22 51 48.5 | -8.1 |
| **ZKR** | **Zakros** | **141.05 307** | P | **PKPdf** | **22 51 54.7** | **-2.1** |
| **VAY** | **Valandovo** | **141.06 317** | *i* P | **PKiKP** | **22 51 59.9** | **+0.5** |
| **HORT** | **Hortiatis** | **141.06 316** | P | **PKPdf** | **22 51 53.0** | **-3.8** |
| **TEKS** | **Tekeris** | **141.13 324** | ⇑*i*P | **PKPdf** | **22 51 52.3** | **-4.4** |
| **THE** | **Thessaloniki** | **141.14 316** | P | **PKPdf** | **22 51 52.9** | **-3.9** |
| **GERES** | **GERESS Array B** | **141.15 333** | PKhKP | PKPpre | 22 51 51.8 | | |
| | comp=Z,1.4nm,0.7s,baz=214,slow=1.1,SNR=8.6 | | | | | | |
| GERES | | | PP | **PP** | **22 54 58.6** | **+0.7** |
| | comp=Z,0.4nm,0.3s,baz=342,slow=6.2,SNR=5.9 | | | | | | |
| **SANT** | **Santorini** | **141.19 309** | P | **PKPdf** | **22 51 50.3** | **-6.8** |
| **KYMI** | **Kymi, Euboea I** | **141.27 313** | P | PKPdf | 22 51 49.2 | -7.9 |
| **HPK** | **Haverah Park** | **141.28 350** | *e*P | **PKPdf** | **22 51 55.8** | **-0.8** |
| **ARSA** | **Arzberg** | **141.47 330** | *e*PKP | **PKPdf** | **22 51 51.3** | **-6.0** |
| | comp=Z,28nm,2.3s,SNR=19 | | | | | | |
| ARSA | | | *e*PP | **PP** | **22 54 54.3** | **-5.5** |
| | comp=Z,55nm,2.1s | | | | | | |
| **GRF** | **Grafenberg Arr** | **141.52 336** | *e*PKP | **PKPdf** | **22 51 50.4** | **-6.9** |
| | baz=37,slow=2.0 | | | | | | |
| GRF | | | *e*PP | PP | 22 54 45.6 | -14 |
| | baz=30,slow=5.1 | | | | | | |
| **LMK** | **Market Rasen** | **141.53 349** | *e*P | **PKPdf** | **22 51 55.5** | **-1.6** |
| **BBLS** | **Lazi&#263i** | **141.61 323** | ⇑*i*P | PKPdf | 22 51 49.8 | -7.9 |
| **DION** | **Dionisos Attik** | **141.63 312** | P | **PKPdf** | **22 51 54.9** | **-2.9** |
| **SJES** | **Sjenica** | **141.63 322** | ⇑*i*P | **PKPdf** | **22 51 57.4** | **-0.4** |
| **MOA** | **Molln** | **141.64 331** | *e*PKP | **PKPdf** | **22 51 52.5** | **-5.0** |
| | comp=Z,24nm,1.6s,SNR=9.6 | | | | | | |
| MOA | | | *e*PP | **PP** | **22 54 55.6** | **-5.2** |
| | comp=Z,41nm,1.8s | | | | | | |
| **HAPS** | **Han Pijesak,BI** | **141.74 323** | ⇑*i*P | PKPdf | 22 51 49.2 | -8.8 |
| **RUDO** | **Rudo** | **141.78 323** | *e*P | **PKPdf** | **22 51 53.8** | **-4.1** |
| **ATHU** | **Athens Univers** | **141.78 312** | P | **PKPdf** | **22 51 55.8** | **-2.3** |
| **ILTH** | **Belurgan, Co L** | **141.80 355** | PKPdif | **PKPdf** | **22 51 58.3** | **+0.8** |
| **ATH** | **Athens Observa** | **141.83 312** | P | **PKPdf** | **22 51 51.6** | **-6.5** |
| **LBWR** | **Ladybower, Pea** | **141.83 350** | *e*P | **PKPdf** | **22 51 55.1** | **-2.5** |
| **KSTL** | **Kastelli Herak** | **141.86 307** | P | **PKPdf** | **22 51 53.8** | **-4.5** |
| **IVA** | **Berane** | **141.90 321** | ⇑*i*PKP | **PKPdf** | **22 51 52.4** | **-5.8** |
| **PLE** | **Pljevlja** | **141.94 322** | ⇑*i*PKP | **PKPdf** | **22 51 52.9** | **-5.4** |
| **IDI** | **Anoyia** | **142.01 307** | P | **PKPdf** | **22 51 52.0** | **-6.6** |
| **VILL** | **Villia** | **142.03 312** | P | **PKPdf** | **22 51 55.4** | **-3.2** |
| **BIOA** | **Bad Ischl, Aus** | **142.04 332** | *e*PKP | **PKPdf** | **22 51 52.9** | **-5.3** |
| | comp=Z,22nm,1.4s,SNR=10 | | | | | | |
| BIOA | | | *e*PP | **PP** | **22 54 57.1** | **-6.1** |
| | comp=Z,30nm,1.7s | | | | | | |
| **WACR** | **West Acre** | **142.04 348** | *e*P | PKPdf | 22 51 48.1 | -10 |
| **TYRN** | **Tyrnavos** | **142.07 315** | P | **PKPdf** | **22 51 51.9** | **-6.6** |
| **FNA** | **Florina** | **142.11 317** | P | **PKPdf** | **22 51 52.9** | **-5.7** |
| **SOKA** | **Soboth** | **142.12 330** | *e*PKP | **PKPdf** | **22 51 53.2** | **-5.3** |
| | comp=Z,23nm,1.3s,SNR=12 | | | | | | |
| SOKA | | | *e*PP | **PP** | **22 54 58.4** | **-5.4** |
| | comp=Z,92nm,1.9s,SNR=9.2 | | | | | | |
| **KOME** | **Kolasin** | **142.14 321** | ⇑*i*PKP | **PKPdf** | **22 51 51.8** | **-6.9** |
| **AXAR** | **Agios Charalam** | **142.22 314** | P | **PKPdf** | **22 51 52.7** | **-6.2** |
| **A051A** | **Mrakovica** | **142.29 326** | ⇑*i*P | **PKPdf** | **22 51 51.8** | **-7.0** |
| **UPM** | **Unac-Piva** | **142.30 322** | ⇑*i*PKP | **PKPdf** | **22 51 52.9** | **-6.2** |
| **OHR** | **Ohrid** | **142.31 318** | *i* P | **PKPdf** | **22 51 54.9** | **-4.0** |
| **BLY** | **Banja Luka** | **142.31 326** | ⇑*i*P | **PKPdf** | **22 51 52.7** | **-6.1** |
| **WLF1** | **Llynfaes** | **142.32 353** | *e*P | PKPdf | 22 51 50.0 | -8.5 |
| **LOUT** | **Loutraki** | **142.35 312** | P | **PKPdf** | **22 51 52.6** | **-6.5** |
| **CWF** | **Charnwood Fore** | **142.40 350** | *e*P | **PKPdf** | **22 51 52.5** | **-6.2** |
| **OBKA** | **Obir** | **142.47 330** | *e*PKP | **PKPdf** | **22 51 54.3** | **-4.8** |
| | comp=Z,20nm,1.2s,SNR=9.7 | | | | | | |
| OBKA | | | *e*PP | **PP** | **22 55 02.1** | **-3.9** |
| | comp=Z,27nm,1.4s,SNR=5.3 | | | | | | |
| **OBKA** | **Obir** | **142.47 330** | ⇑*i*P | **PKPdf** | **22 51 53.7** | **-5.5** |
| **MAKR** | **Makrakomi, Fth** | **142.47 314** | P | **PKPdf** | **22 51 53.7** | **-5.6** |
| **KRND** | **KRANIDI** | **142.49 311** | P | **PKPdf** | **22 51 52.3** | **-7.0** |
| **NEST** | **Nestorio** | **142.51 317** | P | **PKPdf** | **22 51 53.5** | **-5.9** |
| **NKME** | **Niksic** | **142.53 322** | ⇑*i*PKP | **PKPdf** | **22 51 54.0** | **-5.3** |
| **PDG** | **Podgorica** | **142.54 321** | ⇑*i*P | **PKPdf** | **22 51 53.6** | **-5.6** |
| **PDG** | **Podgorica** | **142.54 321** | ⇓P | **PKPdf** | **22 51 59.7** | **+0.5** |
| **PDG** | **Podgorica** | **142.54 321** | ⇑*i*PKP | **PKPdf** | **22 51 53.7** | **-5.5** |
| **ELMS** | **Elmsett, Ipswi** | **142.56 347** | *e*P | PKPdf | 22 51 50.3 | -8.7 |
| **BTNL** | **Ternell** | **142.57 341** | *d*PKPdf | **PKPdf** | **22 51 59.6** | **+0.5** |
| **KBN** | **Korca** | **142.57 318** | P | **PKPdf** | **22 51 53.6** | **-5.9** |
| **DSB** | **Dublin** | **142.57 355** | PKPdif | **PKPdf** | **22 51 55.3** | **-3.7** |
| **MEM** | **Membach** | **142.59 341** | *d*PKiKP | **PKiKP** | **22 52 01.1** | **-1.0** |
| **IGLA** | **Glengowla, Co** | **142.60 358** | PKPdif | **PKPdf** | **22 51 53.9** | **-5.1** |
| **KBA** | **Koelnbreinsper** | **142.63 331** | *e*PKP | **PKPdf** | **22 51 54.8** | **-4.7** |
| | comp=Z,45nm,1.6s,SNR=21 | | | | | | |
| KBA | | | *e*PP | PP | 22 54 59.0 | -8.0 |
| | comp=Z,49nm,1.6s,SNR=5.6 | | | | | | |
| **IMMV** | **Iera Moni Meta** | **142.64 308** | P | **PKPdf** | **22 51 54.9** | **-4.8** |
| **LESA** | **Schwarzleotal** | **142.67 332** | *e*PKP | **PKPdf** | **22 51 55.4** | **-4.1** |
| | comp=Z,91nm,2.2s | | | | | | |
| LESA | | | PP | PP | 22 54 59.0 | -8.2 |
| | comp=Z,36nm,2.1s | | | | | | |
| **CEME** | **Cevo** | **142.68 321** | ⇑*i*PKP | **PKPdf** | **22 51 53.6** | **-6.0** |
| **BRY** | **Bratogost** | **142.69 322** | *e*P | **PKPdf** | **22 51 52.9** | **-6.8** |
| **BRY** | **Bratogost** | **142.69 322** | ⇑*i*PKP | **PKPdf** | **22 51 54.0** | **-5.7** |
| **DRME** | **Dracevica, Mon** | **142.72 321** | ⇑*i*P | **PKPdf** | **22 51 54.0** | **-5.6** |
| **DRME** | **Dracevica, Mon** | **142.72 321** | ⇑*i*PKP | **PKPdf** | **22 51 53.6** | **-6.0** |
| **EVR** | **Evrytania** | **142.74 314** | P | **PKPdf** | **22 51 55.3** | **-4.6** |
| **BSTI** | **Sart Tilman** | **142.75 342** | *d*PKP | **PKPdf** | **22 51 55.3** | **-4.0** |
| **RODP** | **Rodopos** | **142.77 308** | P | **PKPdf** | **22 51 56.2** | **-3.7** |
| **TIR** | **Tirane** | **142.78 319** | P | **PKPdf** | **22 51 52.8** | **-6.9** |
| **GVD** | **Gavdhos** | **142.78 307** | P | **PKPdf** | **22 51 55.0** | **-4.9** |
| **LJU** | **Ljubljana** | **142.81 329** | *e*PKPdf | **PKPdf** | **22 51 54.3** | **-5.3** |
| LJU | | | *i* PP | **PP** | **22 55 08.8** | **+0.8** |
| LJU | | | *e* | | 23 03 32.5 | | |
| **BHOU** | **Houvegnez** | **142.81 341** | *d*PKPdf | **PKPdf** | **22 51 58.9** | **-0.7** |
| **ANX** | **Ano Chora** | **142.82 314** | P | **PKPdf** | **22 51 54.4** | **-5.6** |
| **MYKA** | **Terra Mystica** | **142.82 331** | *e*PKP | **PKPdf** | **22 51 55.4** | **-4.4** |
| | comp=Z,31nm,1.5s,SNR=14 | | | | | | |
| MYKA | | | *e*PP | **PP** | **22 55 02.6** | **-5.5** |
| | comp=Z,19nm,1.3s | | | | | | |
| **GUR** | **Goura** | **142.82 313** | P | **PKPdf** | **22 51 53.0** | **-7.1** |
| **BOJS** | **Bojanci** | **142.83 328** | ⇑*i*P | **PKPdf** | **22 51 52.5** | **-7.2** |
| **BUM** | **Brajici-Budva** | **142.84 321** | ⇓*i*PKP | **PKPdf** | **22 51 54.6** | **-5.3** |
| **A050A** | **Klekovaca** | **142.84 326** | ⇑*i*P | **PKPdf** | **22 51 54.0** | **-5.9** |
| **HLM1** | **Long Mynd** | **142.87 357** | *e*P | **PKPdf** | **22 51 52.5** | **-7.1** |
| **EFP** | **Efpalio** | **142.90 314** | P | **PKPdf** | **22 51 55.3** | **-4.7** |
| **KLV** | **Kalavryta, Ach** | **142.91 313** | P | **PKPdf** | **22 51 54.4** | **-5.8** |
| **VLI** | **Veliai** | **142.92 311** | P | **PKPdf** | **22 51 53.3** | **-6.8** |
| **BCLA** | **Clavier** | **142.97 342** | *d*PKPdf | **PKPdf** | **22 51 59.7** | **-0.1** |
| **ANKY** | **Antikythira Is** | **142.99 309** | P | **PKPdf** | **22 51 55.3** | **-5.0** |
| **KTHA** | **Kythira Island** | **143.01 310** | P | PKPab | 22 51 53.2 | -2.4 |
| **CADS** | **Cadrg** | **143.06 330** | *i* PKPdf | PKPab | 22 51 54.5 | -0.9 |
| CADS | | | *i* PP | **PP** | **22 55 09.3** | **-0.2** |
| CADS | | | *e* | | 22 55 42.5 | | |
| **BGES** | **Gesves** | **143.07 342** | *d*PKP | PKPab | 22 51 55.6 | +0.4 |
| **CEY** | **Cerknica** | **143.08 329** | ⇑*i*P | PKPab | 22 51 55.0 | -0.5 |
| **PVO** | **Paravola** | **143.08 314** | P | PKPab | 22 51 56.0 | +0.3 |
| **STON** | **Ston** | **143.20 323** | ⇑*i*P | PKPab | 22 51 55.2 | -0.8 |
| **WATA** | **Walderalm** | **143.22 333** | *e*PKP | PKPbc | 22 51 57.1 | -0.4 |
| | comp=Z,47nm,1.6s,SNR=28 | | | | | | |
| WATA | | | *e*PP | **PP** | **22 55 03.5** | **-7.0** |
| | comp=Z,66nm,2.1s,SNR=7.0 | | | | | | |
| **RCHB** | **Rochefort** | **143.23 342** | *d*PKP | PKPab | 22 51 56.4 | +0.5 |
| **BMRD** | **Maredsous** | **143.23 342** | *d*PKPdf | **PKPdf** | **22 52 00.7** | **+0.5** |
| **WTTA** | **Wattenberg** | **143.25 333** | *e*PKP | PKPbc | 22 51 57.5 | -0.1 |
| | comp=Z,81nm,1.8s,SNR=34 | | | | | | |
| WTTA | | | *e*PP | PP | 22 55 02.8 | -8.0 |
| | comp=Z,56nm,2.0s | | | | | | |
| **ABTA** | **Abfaltersbach** | **143.25 332** | *e*PKP | PKPab | 22 51 56.7 | +0.4 |
| | comp=Z,83nm,1.5s,SNR=39 | | | | | | |
| ABTA | | | *e*PP | **PP** | **22 55 04.4** | **-6.2** |
| | comp=Z,53nm,2.3s | | | | | | |
| **WLF** | **Walferdange** | **143.37 340** | *d*PKP | PKPab | 22 51 56.2 | -0.3 |
| **MCH1** | **Michaelchurch** | **143.39 351** | *e*P | PKPab | 22 51 54.9 | -1.6 |
| **KLMT** | **Kalamata** | **143.41 312** | P | **PKiKP** | **22 52 07.3** | **+3.0** |
| **ELSH** | **Elham, Standar** | **143.41 346** | *e*P | PKPab | 22 51 56.9 | +0.3 |
| **SKDS** | **Skadanscina** | **143.42 329** | ⇑*i*P | PKPab | 22 51 55.6 | -1.3 |
| **MOTA** | **Moosalm** | **143.42 334** | *e*PKP | PKPbc | 22 51 57.9 | -0.1 |
| | comp=Z,51nm,1.1s | | | | | | |
| MOTA | | | *e*PP | PP | 22 55 03.7 | -8.0 |
| | comp=Z,62nm,1.9s | | | | | | |
| **IGT** | **Igoumenitsa** | **143.44 316** | P | PKPab | 22 51 56.5 | -0.6 |
| **RETA** | **Reutte** | **143.45 334** | *e*PKP | PKPbc | 22 51 58.1 | +0.1 |
| | comp=Z,42nm,1.4s,SNR=38 | | | | | | |
| RETA | | | *e*PP | **PP** | **22 55 05.9** | **-5.8** |
| | comp=Z,34nm,1.5s | | | | | | |
| **DOU** | **Dourbes** | **143.47 342** | *d*PKPdf | PKPab | 22 51 57.1 | +0.3 |
| **STRD** | **Stroud** | **143.47 350** | *e*P | PKPab | 22 51 56.6 | -0.2 |
| **SQTA** | **Sankt Quirin** | **143.47 333** | *e*PKP | PKPbc | 22 51 58.2 | +0.1 |
| | comp=Z,62nm,1.3s,SNR=34 | | | | | | |
| SQTA | | | *e*PP | **PP** | **22 55 04.6** | **-7.4** |
| | comp=Z,53nm,1.9s | | | | | | |
| **IWEX** | **Carrickbyrne,** | **143.47 355** | PKPdif | PKPbc | 22 51 58.1 | +0.3 |
| **SRN** | **Sarande** | **143.47 317** | P | PKPbc | 22 51 57.2 | 0.0 |
| **VLO** | **Vlora** | **143.49 318** | P | PKPbc | 22 51 58.9 | +0.7 |
| **VLO** | **Vlora** | **143.49 318** | P | PKPbc | 22 51 57.9 | -0.3 |
| **VLO** | **Vlora** | **143.49 318** | PKIKP | PKPbc | 22 51 58.9 | +0.7 |
| **MONM** | **Monmouth** | **143.51 351** | *e*P | PKPab | 22 51 54.6 | -2.3 |
| **STAL** | **STALIGIAL** | **143.53 331** | | PKPbc | 22 51 58.1 | -0.1 |
| **TSLK** | **Tsoukalades, L** | **143.57 315** | P | PKPbc | 22 51 58.4 | -0.1 |
| **LKD2** | **Lefkada island** | **143.59 315** | P | PKPab | 22 51 57.6 | -0.2 |
| **NYDR** | **Nydri-Lefkada** | **143.60 315** | P | PKPbc | 22 51 58.4 | -0.2 |
| **OLDB** | **Oldbury-Upon-S** | **143.65 350** | *e*P | PKPab | 22 51 56.4 | -1.0 |
| **BUW** | **Bucklebury Wes** | **143.66 349** | *e*P | PKPab | 22 51 56.4 | -1.1 |
| **SWN1** | **Swindon** | **143.66 349** | *e*P | PKPab | 22 51 55.9 | -1.7 |
| **EVGI** | **Lefkada island** | **143.67 315** | P | PKPab | 22 51 57.5 | -0.6 |
| **RSBS** | **Rosebush, Pemb** | **143.68 353** | *e*P | PKPab | 22 51 57.0 | -0.6 |
| **KEK** | **Kerkira** | **143.69 317** | | PKPbc | 22 51 58.9 | 0.0 |
| **KEK** | **Kerkira** | **143.69 317** | P | PKPab | 22 51 57.6 | -0.5 |
| **PYL** | **PYLOS** | **143.71 311** | P | PKPab | 22 51 57.4 | -0.9 |
| **BFO** | **Black Forest** | **143.74 337** | | PKPab | 22 51 58.9 | +0.1 |
| **BFO** | **Black Forest** | **143.74 337** | PKIKP | PKPbc | 22 51 58.9 | +0.1 |
| **WOL** | **Wolverton** | **143.75 349** | *e*P | PKPab | 22 51 57.0 | -0.9 |
| **FSK** | **Fiskardo** | **143.82 315** | P | PKPab | 22 51 57.5 | -1.1 |
| **FETA** | **Feichten** | **143.83 334** | *e*PKP | PKPab | 22 51 58.8 | +0.2 |
| | comp=Z,57nm,1.0s,SNR=42 | | | | | | |
| FETA | | | *e*PP | **PP** | **22 55 07.3** | **-6.9** |
| | comp=Z,15nm,1.3s | | | | | | |
| **HMNX** | **Herstmonceux** | **143.85 347** | *e*P | PKPab | 22 51 56.6 | -1.7 |
| **RTZ** | **Ratzakli, Kefa** | **143.86 314** | P | PKPab | 22 51 58.4 | -0.4 |
| **PSDA** | **Pessada-Kefalo** | **143.97 314** | P | PKPab | 22 51 58.5 | -0.7 |
| **DAVA** | **Damuels** | **143.98 335** | *e*PKP | PKPab | 22 51 58.7 | -0.5 |
| | comp=Z,93nm,1.3s,SNR=39 | | | | | | |
| DAVA | | | PP | **PP** | **22 55 09.8** | **-5.2** |
| | comp=Z,49nm,1.7s | | | | | | |
| **LTHK** | **Lithakia** | **143.98 313** | P | PKPab | 22 51 58.6 | -0.6 |
| **DMLN** | **Damoulianata-K** | **144.05 314** | P | **PKPab** | **22 51 59.1** | **-0.4** |
| **VAL** | **Valentia** | **144.11 358** | PKPdif | PKPbc | 22 52 00.2 | +0.5 |
| **ECH** | **Echery** | **144.27 338** | | PKPbc | 22 52 00.7 | +0.4 |
| **ECH** | **Echery** | **144.27 338** | PKIKP | PKPbc | 22 52 00.7 | +0.3 |
| **FUORN** | **Ofenpass-Fuorn** | **144.35 334** | | PKPbc | 22 52 01.0 | 0.0 |
| **HTL** | **Hartland** | **144.58 352** | *e*P | **PKPab** | **22 52 00.4** | **-0.6** |
| **SBD** | **Saint Breward** | **145.03 352** | *e*P | **PKPbc** | **22 52 00.9** | **-1.7** |
| **DYA** | **Yadsworthy** | **145.05 351** | *e*P | **PKPbc** | **22 52 00.0** | **-2.7** |
| **MATE** | **Matera** | **145.14 321** | ⇑P | **PKPdf** | **22 52 04.6** | **+0.8** |
| **CCA1** | **Carnmenellis** | **145.47 353** | *e*P | **PKPbc** | **22 52 02.2** | **-1.9** |
| **SENIN** | **Lac Senin/Sane** | **145.76 336** | | **PKPdf** | **22 52 04.7** | **-0.4** |
| **TIP** | **Timpagrande** | **145.96 318** | | **PKPdf** | **22 52 04.7** | **-0.8** |
| **TIP** | **Timpagrande** | **145.96 318** | ⇑P | **PKPdf** | **22 52 05.8** | **+0.4** |
| **JSA** | **Saint Aubin** | **145.96 349** | *e*P | **PKPdf** | **22 52 04.0** | **-0.9** |
| **CLF** | **Chambon-Foret** | **146.00 343** | | **PKPdf** | **22 52 04.0** | **-1.1** |
| **PAOL** | **Paolisi** | **146.18 323** | | **PKPdf** | **22 52 04.7** | **-1.1** |
| **CASP** | **Castiglione de** | **146.97 329** | | **PKPdf** | **22 52 05.3** | **-1.7** |
| **BNI** | **Bardonecchia** | **147.09 336** | | **PKPdf** | **22 52 06.7** | **-0.6** |
| **BNI** | **Bardonecchia** | **147.09 336** | PKIKP | **PKPdf** | **22 52 06.7** | **-0.6** |
| **SHEL** | **Horse Pasture** | **147.70 191** | PKPbc | **PKPbc** | **22 52 11.9** | **+0.2** |
| **SHEL** | **Horse Pasture** | **147.70 191** | PKP2 | **PKPbc** | **22 52 11.9** | **+0.2** |
| **SSB** | **Saint Sauveur** | **147.71 338** | | **PKPdf** | **22 52 06.8** | **-1.4** |
| **SSB** | **Saint Sauveur** | **147.71 338** | PKIKP | **PKPdf** | **22 52 06.8** | **-1.4** |
| **RCBR** | **Riachuelo** | **147.79 130** | | **PKPdf** | **22 52 08.3** | **-0.9** |
| **RCBR** | **Riachuelo** | **147.79 130** | PKIKP | **PKPdf** | **22 52 08.3** | **-0.9** |
| **VSL** | **Villasalto** | **150.13 326** | IAMs_20 | IAMs_20 | 00 15 19.7 | | |
| | comp=Z,4µm,18.0s | | | | | | |
| **CEST** | **Esterri de Car** | **151.20 340** | PKPdf | **PKPdf** | **22 52 12.8** | **-1.2** |
| **KEST** | **Kesra** | **152.73 320** | | **PKPdf** | **22 52 16.6** | **+0.3** |
| **KEST** | **Kesra** | **152.73 320** | PKPbc | **PKPbc** | **22 52 20.2** | **-3.3** |
| | comp=Z,13nm,1.1s,baz=18,slow=1.5,SNR=4.4 | | | | | | |
| **PCED** | **Cedros** | **153.01 30** | *e*PKP | **PKPdf** | **22 52 17.4** | **+0.8** |
| **CALA** | **Caldeira** | **153.04 30** | *e*PKP | **PKPdf** | **22 52 16.5** | **-0.2** |
| **HOR** | **Horta** | **153.12 30** | *e*PKP | **PKPdf** | **22 52 16.1** | **-0.6** |
| **ROSA** | **Rosais** | **153.16 29** | *e*PKP | **PKPdf** | **22 52 13.1** | **-3.7** |
| **PCAN** | **Candelaria** | **153.24 30** | *e*PKP | **PKPdf** | **22 52 19.8** | **+2.9** |
| **PICO** | **Pico** | **153.24 30** | *e*PKP | **PKPdf** | **22 52 18.6** | **+1.6** |
| **PMAN** | **Manadas** | **153.30 29** | *e*PKP | **PKPdf** | **22 52 12.0** | **-5.0** |
| **PPNO** | **Prainha do Nor** | **153.34 30** | *e*PKP | **PKPdf** | **22 52 15.1** | **-2.0** |
| **PID** | **Ribeirinha** | **153.43 30** | *e*PKP | **PKPdf** | **22 52 15.8** | **-1.4** |
| **PSBA** | **Serra de Santa** | **153.54 28** | *e*PKP | **PKPdf** | **22 52 14.0** | **-3.4** |
| **PAGU** | **Agualva, Azore** | **153.60 28** | *e*PKP | **PKPdf** | **22 52 17.1** | **-0.3** |
| **PSCM** | **Serra do

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,1.1s,baz=1.7,slow=0.3,SNR=38 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **22 53 34.6** | **-0.4** |
| | comp=Z,22nm,0.9s,baz=52,slow=0.6,SNR=13 | | | | | | | |
| TORD | | | | PP | **PP** | **22 57 19.8** | **-3.2** |
| | comp=Z,22nm,1.2s,baz=59,slow=3.5,SNR=8.3 | | | | | | | |
| **KIC** | **Kosan Boka** | **168.18 217** | ⫛ | *e*PKP1 | **PKPdf** | **22 52 33.4** | **-0.4** |
| | comp=Z,54nm,1.1s | | | | | | | |
| **KIC** | **Kosan Boka** | **168.18 217** | ⫛ | *e*PKP2 | **PKPab** | **22 53 42.1** | **+0.4** |
| | comp=Z,80nm,1.1s | | | | | | | |
| **LIC** | **Lamto** | **168.23 215** | ⫛ | *e*PKP1 | **PKPdf** | **22 52 33.2** | **-0.6** |
| | comp=Z,64nm,1.2s | | | | | | | |
| **LIC** | **Lamto** | **168.23 215** | ⫛ | *e*PKP2 | **PKPab** | **22 53 42.3** | **+0.4** |
| | comp=Z,96nm,1.2s | | | | | | | |
| **DBIC** | **Dimbokro** | **168.49 217** | | | **PKPdf** | **22 52 31.6** | **-2.4** |
| **DBIC** | **Dimbokro** | **168.49 217** | | PKP | **PKPdf** | **22 52 32.0** | **-1.9** |
| | comp=Z,44nm,1.0s,baz=125,slow=0.6,SNR=17 | | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **22 53 43.2** | **+0.2** |
| | comp=Z,36nm,1.0s,baz=131,slow=6.7,SNR=8.7 | | | | | | | |
| **TIC** | **Toumodi** | **168.57 216** | ⫝̸ | *e*PKP1 | **PKPdf** | **22 52 34.2** | **+0.2** |
| | comp=Z,82nm,1.0s | | | | | | | |
| **TIC** | **Toumodi** | **168.57 216** | ⫛ | *e*PKP2 | **PKPab** | **22 53 43.7** | **+0.3** |
| | comp=Z,130nm,1.0s | | | | | | | |

*ANF* ***21*** *22:47:33.4±0.5, 64˚.44N×172˚.69W, h0km, ML4.7/12, Error ellipse: s-maj=5.7km s-min=2.0km az=83.0*
*NEIC* ***21*** *22:47:34.0±1.2, 64˚.43N±0˚.04×172˚.6W±0˚.1, h10km±2km, mb_Lg3.8/7, ML4.2(AEIC), Error ellipse: s-maj=10.1km s-min=5.7km az=258.0*
*AEIC* ***21*** *22:47:34.9±1.9, 64˚.49N±0˚.04×172˚.0W±0˚.2, h10km±7km, Error ellipse: s-maj=10.3km s-min=6.1km az=92.0*
*NERS* ***21*** *22:47:42.1, 64˚.45N×173˚.68W, h24km*

**ISC 21 22:47:35.0±0.9, 64˚44N±0˚05×172˚59W±0˚04, h10km, n126, σ1§15/138, 1D, Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PVDR** | **Provideniya** | **0.27** | **268** | ⫝̸ *i*Pg | Pg | 22 47 48.1 | +7.6 |
| PVDR | | | | Pgmax | | 22 47 49.8 | |
| | 34μm,0.6s | | | | | | |
| PVDR | | | | *e*Sg | **Sg** | **22 47 50.7** | **+6.6** |
| PVDR | | | | Sgmax | | 22 47 51.2 | |
| | 3μm,0.8s | | | | | | |
| **GAMB** | **Gambell** | **0.77** | **149** | | **Pg** | **22 47 47.9** | **-2.0** |
| GAMB | | | | Sg | **Sg** | **22 47 59.3** | **-0.6** |
| **GAMB** | **Gambell** | **0.77** | **149** | P | **Pg** | **22 47 47.9** | **-2.0** |
| | baz=327,SNR=94 | | | | | | |
| GAMB | | | | S | **Sg** | **22 47 59.7** | **-0.3** |
| | baz=327 | | | | | | |
| **TNA** | **Tin City** | **2.28** | **58** | | **Sn** | **22 48 39.9** | **-0.8** |
| **TNA** | **Tin City** | **2.28** | **58** | | **Pn** | **22 48 10.8** | **-1.8** |
| **TNA** | **Tin City** | **2.28** | **58** | P | **Pn** | **22 48 12.0** | **-0.7** |
| | baz=243,SNR=29 | | | | | | |
| TNA | | | | S | **Sn** | **22 48 41.6** | **+0.9** |
| | baz=243 | | | | | | |
| **F14K** | **Arctic Creek** | **2.86** | **66** | | **Pn** | **22 48 19.2** | **-1.4** |
| **F14K** | **Arctic Creek** | **2.86** | **66** | P | **Pn** | **22 48 20.3** | **-0.3** |
| | baz=252 | | | | | | |
| F14K | | | | Sb | **Sb** | **22 49 04.3** | **+3.2** |
| | baz=252 | | | | | | |
| **ANM** | **Nome** | **3.13** | **84** | Pn | **Pn** | **22 48 23.1** | **-1.2** |
| ANM | | | | Sn | **Sn** | **22 49 00.8** | **-0.9** |
| ANM | | | | IAmb_Lg | | 22 49 22.1 | |
| | comp=Z,760nm,1.0s | | | | | | |
| **ANM** | **Nome** | **3.13** | **84** | P | **Pn** | **22 48 23.3** | **-1.0** |
| | baz=271,SNR=10.0 | | | | | | |
| ANM | | | | Sb | **Sb** | **22 49 12.0** | **+3.3** |
| | baz=271 | | | | | | |
| **F15K** | **North Star Dit** | **3.60** | **66** | Pn | **Pn** | **22 48 29.7** | **-1.0** |
| **F15K** | **North Star Dit** | **3.60** | **66** | P | **Pn** | **22 48 30.2** | **-0.5** |
| | baz=253,SNR=11 | | | | | | |
| **G15K** | **Niukluk** | **3.71** | **78** | | **Pn** | **22 48 31.6** | **-0.7** |
| **G15K** | **Niukluk** | **3.71** | **78** | P | **Pn** | **22 48 32.0** | **-0.3** |
| | baz=265 | | | | | | |
| **ANDR** | **Anadyr'** | **4.28** | **278** | *e*P | **Pn** | **22 48 40.3** | **+0.2** |
| ANDR | | | | *e* | | 22 48 42.5 | |
| ANDR | | | | *e*Pg | **Pg** | **22 48 53.3** | **-3.7** |
| ANDR | | | | Pgmax | | 22 48 57.3 | |
| ANDR | | | | *e*Sg | **Sb** | **22 49 42.6** | **+0.7** |
| ANDR | | | | Sgmax | | 22 49 59.1 | |
| | comp=Z,1μm,0.8s | | | | | | |
| ANDR | | | | Sgmax | | 22 49 59.1 | |
| | comp=Z,380nm,0.7s | | | | | | |
| **J14K** | **Nanvaranak Lak** | **4.38** | **109** | Pn | **Pn** | **22 48 40.2** | **-1.2** |
| J14K | | | | Sn | **Sn** | **22 49 31.4** | **-1.0** |
| J14K | | | | IAmb_Lg | | 22 50 05.3 | |
| | comp=Z,267nm,1.1s | | | | | | |
| **J14K** | **Nanvaranak Lak** | **4.38** | **109** | P | **Pn** | **22 48 40.7** | **-0.8** |
| | baz=297 | | | | | | |
| **G16K** | **Koyuk River** | **4.46** | **73** | | **Pn** | **22 48 40.3** | **-2.3** |
| **G16K** | **Koyuk River** | **4.46** | **73** | P | **Pn** | **22 48 42.0** | **-0.6** |
| | baz=262,SNR=16 | | | | | | |
| **C16K** | **Lisburne Hills** | **4.83** | **34** | | **Pn** | **22 48 45.5** | **-2.1** |
| C16K | | | | IAmb_Lg | | 22 50 17.5 | |
| | comp=Z,88nm,0.8s | | | | | | |
| **C16K** | **Lisburne Hills** | **4.83** | **34** | P | **Pn** | **22 48 45.7** | **-1.9** |
| | baz=221 | | | | | | |
| **M11K** | **Mekoryuk** | **5.04** | **141** | | **Pn** | **22 48 49.9** | **-0.6** |
| **M11K** | **Mekoryuk** | **5.04** | **141** | P | **Pn** | **22 48 50.0** | **-0.5** |
| | baz=326,SNR=5.2 | | | | | | |
| **D17K** | **Noatak River** | **5.07** | **46** | | **Pn** | **22 48 48.9** | **-2.0** |
| **D17K** | **Noatak River** | **5.07** | **46** | P | **Pn** | **22 48 49.8** | **-1.1** |
| | baz=235,SNR=10 | | | | | | |
| **F17K** | **Baldwin Pennin** | **5.14** | **62** | | **Pn** | **22 48 48.7** | **-3.2** |
| **E17K** | **Hotham Inlet** | **5.17** | **54** | | **Pn** | **22 48 51.6** | **-0.6** |
| **G17K** | **Kiwalik Mounta** | **5.18** | **73** | | **Pn** | **22 48 51.2** | **-1.3** |
| **I17K** | **Unalakleet** | **5.24** | **91** | | **Pn** | **22 48 52.1** | **-1.1** |
| **I17K** | **Unalakleet** | **5.24** | **91** | P | **Pn** | **22 48 52.7** | **-0.5** |
| | baz=281 | | | | | | |
| **RDOG** | **Red Dog Mine** | **5.33** | **43** | Pn | **Pn** | **22 48 53.5** | **-1.1** |
| RDOG | | | | IAmb_Lg | | 22 50 30.6 | |
| | comp=Z,134nm,1.2s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **5.42** | **108** | Pn | **Pn** | **22 48 55.3** | **-0.5** |
| **K15K** | **Wolf Creek Mou** | **5.42** | **108** | P | **Pn** | **22 48 55.3** | **-0.5** |
| | baz=298 | | | | | | |
| **J16K** | **Anvik River** | **5.43** | **97** | Pn | **Pn** | **22 48 54.7** | **-1.2** |
| **J16K** | **Anvik River** | **5.43** | **97** | P | **Pn** | **22 48 55.4** | **-0.5** |
| | baz=288 | | | | | | |
| **H17K** | **Granite Mounta** | **5.46** | **79** | Pn | **Pn** | **22 48 55.9** | **-0.5** |
| **H17K** | **Granite Mounta** | **5.46** | **79** | P | **Pn** | **22 48 55.9** | **-0.5** |
| | baz=271 | | | | | | |
| **L14K** | **Kuka Creek** | **5.49** | **120** | Pn | **Pn** | **22 48 56.4** | **-0.3** |
| **L14K** | **Kuka Creek** | **5.49** | **120** | P | **Pn** | **22 48 56.3** | **-0.4** |
| | baz=309,SNR=12 | | | | | | |
| **C17K** | **DeLong Mountai** | **5.53** | **39** | | **Pn** | **22 48 55.5** | **-1.8** |
| **C17K** | **DeLong Mountai** | **5.53** | **39** | P | **Pn** | **22 48 56.4** | **-0.9** |
| | baz=228 | | | | | | |
| **E18K** | **Tukpahlearik C** | **5.74** | **53** | Pn | **Pn** | **22 48 59.6** | **-0.5** |
| **E18K** | **Tukpahlearik C** | **5.74** | **53** | P | **Pn** | **22 49 00.1** | **-0.1** |
| | baz=244,SNR=5.8 | | | | | | |
| **L15K** | **Ungalak Mounta** | **5.76** | **114** | P | **Pn** | **22 48 59.8** | **-0.6** |
| | baz=304 | | | | | | |
| **M13K** | **Dall Lake** | **5.89** | **129** | | **Pn** | **22 49 01.7** | **-0.5** |
| M13K | | | | IAmb_Lg | | 22 50 54.5 | |
| | comp=Z,126nm,1.2s | | | | | | |
| **M13K** | **Dall Lake** | **5.89** | **129** | P | **Pn** | **22 49 01.9** | **-0.3** |
| | baz=317 | | | | | | |
| **G18K** | **Tagagawik** | **6.05** | **70** | Pn | **Pn** | **22 49 03.6** | **-0.8** |
| **J17K** | **VABM Dome** | **6.05** | **94** | Pn | **Pn** | **22 49 04.0** | **-0.5** |
| **J17K** | **VABM Dome** | **6.05** | **94** | P | **Pn** | **22 49 04.2** | **-0.3** |
| | baz=286 | | | | | | |
| **H18K** | **Honhosa River** | **6.12** | **77** | Pn | **Pn** | **22 49 05.0** | **-0.3** |
| **H18K** | **Honhosa River** | **6.12** | **77** | P | **Pn** | **22 49 05.1** | **-0.3** |
| | baz=270 | | | | | | |
| **M14K** | **Bethel** | **6.14** | **122** | Pn | **Pn** | **22 49 04.9** | **-0.8** |
| **M14K** | **Bethel** | **6.14** | **122** | P | **Pn** | **22 49 05.4** | **-0.3** |
| | baz=311,SNR=6.9 | | | | | | |
| M14K | | | | S | **Sn** | **22 50 17.3** | **+1.4** |
| | baz=311 | | | | | | |
| **C18K** | **Utukok River** | **6.20** | **42** | Pn | **Pn** | **22 49 05.4** | **-1.2** |
| **C18K** | **Utukok River** | **6.20** | **42** | P | **Pn** | **22 49 06.2** | **-0.3** |
| | baz=233 | | | | | | |
| **L16K** | **Owhat River** | **6.55** | **109** | Pn | **Pn** | **22 49 10.9** | **-0.4** |
| **L16K** | **Owhat River** | **6.55** | **109** | P | **Pn** | **22 49 11.1** | **-0.3** |
| | baz=300,SNR=9.5 | | | | | | |
| L16K | | | | S | **Sn** | **22 50 26.7** | **+0.7** |
| | baz=300 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **6.58** | **62** | Pn | **Pn** | **22 49 09.8** | **-1.9** |
| **K17K** | **Iditarod** | **6.61** | **99** | Pn | **Pn** | **22 49 11.4** | **-0.7** |
| **K17K** | **Iditarod** | **6.61** | **99** | P | **Pn** | **22 49 12.4** | **+0.3** |
| | baz=291 | | | | | | |
| **M15K** | **Kasigluk River** | **6.66** | **119** | P | **Pn** | **22 49 12.1** | **-0.6** |
| | baz=309 | | | | | | |
| M15K | | | | S | **Sn** | **22 50 29.5** | **+1.0** |
| | baz=309 | | | | | | |
| **G19K** | **Purcell Mounta** | **6.72** | **68** | Pn | **Pn** | **22 49 11.9** | **-1.6** |
| **GCSA** | **Galena City Sc** | **6.77** | **80** | P | **Pn** | **22 49 14.1** | **-0.1** |
| | baz=275 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **6.82** | **127** | | **Pn** | **22 49 14.3** | **-0.7** |
| **N14K** | **Kuskokwak Cree** | **6.82** | **127** | P | **Pn** | **22 49 14.6** | **-0.3** |
| | baz=316 | | | | | | |
| **L17K** | **Donlin** | **6.84** | **103** | | **Pn** | **22 49 15.4** | **+0.1** |
| **L17K** | **Donlin** | **6.84** | **103** | P | **Pn** | **22 49 14.7** | **-0.6** |
| | baz=296 | | | | | | |
| **H19K** | **Roundabout Mou** | **6.93** | **74** | Pn | **Pn** | **22 49 15.1** | **-1.4** |
| **H19K** | **Roundabout Mou** | **6.93** | **74** | P | **Pn** | **22 49 16.2** | **-0.3** |
| | baz=268 | | | | | | |
| **C19K** | **Lookout Ridge** | **6.94** | **42** | Pn | **Pn** | **22 49 15.7** | **-1.0** |
| **C19K** | **Lookout Ridge** | **6.94** | **42** | P | **Pn** | **22 49 16.0** | **-0.7** |
| | baz=234 | | | | | | |
| **E19K** | **Redstone River** | **6.96** | **57** | Pn | **Pn** | **22 49 16.3** | **-0.6** |
| **E19K** | **Redstone River** | **6.96** | **57** | P | **Pn** | **22 49 16.6** | **-0.3** |
| | baz=252 | | | | | | |
| **J18K** | **Innoko River** | **7.06** | **91** | Pn | **Pn** | **22 49 18.1** | **-0.2** |
| **J18K** | **Innoko River** | **7.06** | **91** | P | **Pn** | **22 49 18.3** | **0.0** |
| | baz=285 | | | | | | |
| **D19K** | **Kuna River** | **7.07** | **48** | Pn | **Pn** | **22 49 17.3** | **-1.1** |
| **D19K** | **Kuna River** | **7.07** | **48** | P | **Pn** | **22 49 18.0** | **-0.5** |
| | baz=242 | | | | | | |
| **M16K** | **Timber Creek** | **7.13** | **112** | Pn | **Pn** | **22 49 19.4** | **0.0** |
| **M16K** | **Timber Creek** | **7.13** | **112** | P | **Pn** | **22 49 19.3** | **0.0** |
| | baz=304 | | | | | | |
| **N15K** | **Kwethluk River** | **7.22** | **121** | Pn | **Pn** | **22 49 20.3** | **-0.2** |
| **N15K** | **Kwethluk River** | **7.22** | **121** | P | **Pn** | **22 49 20.1** | **-0.4** |
| | baz=312 | | | | | | |
| N15K | | | | S | **Sn** | **22 50 43.9** | **+1.3** |
| | baz=312 | | | | | | |
| **SPIA** | **Saint Paul Isl** | **7.38** | **170** | Pn | **Pn** | **22 49 21.4** | **-1.2** |
| **SPIA** | **Saint Paul Isl** | **7.38** | **170** | P | **Pn** | **22 49 22.5** | **-0.1** |
| | baz=352 | | | | | | |
| **J19K** | **Poorman** | **7.41** | **86** | Pn | **Pn** | **22 49 22.5** | **-0.7** |
| **J19K** | **Poorman** | **7.41** | **86** | P | **Pn** | **22 49 22.8** | **-0.3** |
| | baz=281 | | | | | | |
| **F20K** | **Avaraart Lake** | **7.42** | **62** | P | **Pn** | **22 49 22.8** | **-0.3** |
| | baz=257 | | | | | | |
| **O14K** | **Tigyukauivet M** | **7.46** | **129** | Pn | **Pn** | **22 49 23.2** | **-0.6** |
| **O14K** | **Tigyukauivet M** | **7.46** | **129** | P | **Pn** | **22 49 23.5** | **-0.3** |
| | baz=319 | | | | | | |
| **L18K** | **Granite Mounta** | **7.49** | **100** | | **Pn** | **22 49 24.6** | **+0.5** |
| **L18K** | **Granite Mounta** | **7.49** | **100** | P | **Pn** | **22 49 24.2** | **0.0** |
| | baz=294 | | | | | | |
| **N16K** | **Nishlik Lake** | **7.54** | **116** | | **Pn** | **22 49 24.8** | **-0.1** |
| **N16K** | **Nishlik Lake** | **7.54** | **116** | P | **Pn** | **22 49 24.7** | **-0.1** |
| | baz=308 | | | | | | |
| **M17K** | **Holitna River** | **7.55** | **107** | | **Pn** | **22 49 24.6** | **-0.4** |
| **M17K** | **Holitna River** | **7.55** | **107** | P | **Pn** | **22 49 25.1** | **0.0** |
| | baz=300 | | | | | | |
| **I20K** | **Naaghedeneel** | **7.79** | **79** | Pn | **Pn** | **22 49 28.6** | **+0.4** |
| **O15K** | **Ungalikthiuk R** | **8.02** | **125** | | **Pn** | **22 49 30.6** | **-0.7** |
| **O15K** | **Ungalikthiuk R** | **8.02** | **125** | P | **Pn** | **22 49 31.5** | **+0.2** |
| | baz=316 | | | | | | |
| **N17K** | **Nushagak Hills** | **8.13** | **112** | | **Pn** | **22 49 32.3** | **-0.7** |
| **B20K** | **Meade River** | **8.17** | **40** | P | **Pn** | **22 49 33.7** | **+0.4** |
| | baz=235 | | | | | | |
| **M18K** | **Stony River** | **8.18** | **104** | | **Pn** | **22 49 33.9** | **+0.2** |
| **M18K** | **Stony River** | **8.18** | **104** | P | **Pn** | **22 49 34.3** | **+0.6** |
| | baz=298 | | | | | | |
| **K20K** | **Telida** | **8.23** | **89** | | **Pn** | **22 49 34.2** | **-0.2** |
| **L19K** | **White Mountain** | **8.29** | **98** | | **Pn** | **22 49 35.5** | **+0.3** |
| **L19K** | **White Mountain** | **8.29** | **98** | P | **Pn** | **22 49 35.5** | **+0.3** |
| | baz=294 | | | | | | |
| **C21K** | **Knifeblade Rid** | **8.45** | **48** | P | **Pn** | **22 49 37.7** | **+0.4** |
| | baz=245 | | | | | | |
| **N18K** | **Kilae Creek** | **8.57** | **108** | | **Pn** | **22 49 39.0** | **0.0** |
| **N18K** | **Kilae Creek** | **8.57** | **108** | P | **Pn** | **22 49 39.5** | **+0.4** |
| | baz=303 | | | | | | |
| **L20K** | **Farewell, AK** | **8.60** | **95** | P | **Pn** | **22 49 39.8** | **+0.4** |
| | baz=291 | | | | | | |
| **M19K** | **Big River Lodg** | **8.61** | **99** | Pn | **Pn** | **22 49 39.3** | **-0.2** |
| **M19K** | **Big River Lodg** | **8.61** | **99** | P | **Pn** | **22 49 40.4** | **+0.9** |
| | baz=295 | | | | | | |
| **O17K** | **Koliganek Bris** | **8.63** | **116** | | **Pn** | **22 49 39.9** | **+0.2** |
| **P16K** | **Nushagak River** | **8.78** | **121** | P | **Pn** | **22 49 41.0** | **-0.9** |
| | baz=314 | | | | | | |
| **D22K** | **Ayikyak River** | **9.04** | **52** | P | **Pn** | **22 49 45.5** | **0.0** |
| | baz=250 | | | | | | |
| **N19K** | **Bonanza Creek** | **9.09** | **105** | Pn | **Pn** | **22 49 46.2** | **0.0** |
| **N19K** | **Bonanza Creek** | **9.09** | **105** | P | **Pn** | **22 49 46.8** | **+0.7** |
| | baz=301 | | | | | | |
| **M20K** | **Styx River** | **9.16** | **97** | Pn | **Pn** | **22 49 47.1** | **0.0** |
| **M20K** | **Styx River** | **9.16** | **97** | P | **Pn** | **22 49 47.4** | **+0.3** |
| | baz=295 | | | | | | |
| **BILL** | **Bilibino** | **9.24** | **302** | *e*P | Pn | 22 49 56.1 | +8.0 |
| BILL | | | | *e*Sg | Sn | 22 52 20.3 | +48 |
| BILL | | | | Sgmax | | 22 52 27.1 | |
| | comp=Z,140nm,0.4s | | | | | | |
| BILL | | | | Sgmax | | 22 52 27.1 | |
| | comp=Z,20nm,0.4s | | | | | | |
| **P17K** | **Kvichak River** | **9.26** | **117** | P | **Pn** | **22 49 47.8** | **-0.6** |
| | baz=311 | | | | | | |
| **O18K** | **Koktuh Hills** | **9.33** | **112** | Pn | **Pn** | **22 49 48.8** | **-0.6** |
| **O18K** | **Koktuh Hills** | **9.33** | **112** | P | **Pn** | **22 49 50.0** | **+0.6** |
| | baz=307 | | | | | | |
| **TRF** | **Thorofare Moun** | **9.85** | **86** | P | **Pn** | **22 49 57.3** | **+0.7** |
| | baz=286 | | | | | | |
| **N20K** | **Mount Spurr** | **9.86** | **100** | P | **Pn** | **22 49 57.4** | **+0.8** |
| | baz=298 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **9.86** | **100** | P | **Pn** | **22 49 57.7** | **+1.0** |
| | baz=298 | | | | | | |
| **Q17K** | **Contact Creek** | **10.11** | **120** | P | **Pn** | **22 50 00.7** | **+0.5** |
| | baz=315 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **10.18** | **117** | P | **Pn** | **22 50 01.6** | **+0.5** |
| | baz=312 | | | | | | |

*TEH* ***21*** *23:06:08.4, 26˚.52N×57˚.41E, h11km, ML2.9*
*DSN* ***21*** *23:06:10.9±2.5, 26˚.18N×57˚.30E, h10km, ML2.5/11, Error ellipse: s-maj=31.2km s-min=7.5km az=11.0*
*OMAN* ***21*** *23:06:15.4±1.6, 25˚.91N×57˚.12E, h6km±7km, ml2.4/15, Error ellipse: s-maj=11.3km s-min=6.7km az=20.0*

**ISC 21 23:06:06.5±1.6, 26˚31N±0˚04×57˚32E±0˚04, h3km±11km, n38, σ1§50/57, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JASK** | **Jask - Hormozg** | **0.66** | **132** | Pg | **Pn** | **23 06 23.4** | **+0.7** |
| JASK | | | | Sg | **Sn** | **23 06 34.7** | **+1.1** |
| **BANOM** | **Banah** | **0.99** | **247** | *e*P | **Pn** | **23 06 27.8** | **+0.4** |
| | SNR=34 | | | | | | |
| BANOM | | | | S | **Sn** | **23 06 42.6** | **+0.7** |
| **BANOM** | **Banah** | **0.99** | **247** | P | **Pn** | **23 06 28.1** | **+0.7** |
| BANOM | | | | S | **Sn** | **23 06 43.2** | **+1.3** |
| **SHME** | **Shamm** | **1.09** | **256** | *e*P | **Pn** | **23 06 29.6** | **+0.9** |
| | SNR=55 | | | | | | |
| SHME | | | | S | **Sn** | **23 06 45.2** | **+1.0** |
| **SHME** | **Shamm** | **1.09** | **256** | P | **Pn** | **23 06 29.6** | **+0.9** |
| | SNR=55 | | | | | | |
| SHME | | | | S | **Sn** | **23 06 45.5** | **+1.3** |
| **IBND** | **Bandar-abas** | **1.33** | **329** | Pg | **Pn** | **23 06 31.8** | **-0.1** |
| **MDH** | **Madha** | **1.36** | **223** | *e*P | **Pb** | **23 06 33.1** | **+0.5** |
| | SNR=57 | | | | | | |
| **MDH** | **Madha** | **1.36** | **223** | P | **Pb** | **23 06 33.1** | **+0.5** |
| | SNR=57 | | | | | | |
| **MASF** | **Masafi** | **1.40** | **228** | P | **Pg** | **23 06 33.9** | **+0.5** |
| | SNR=15 | | | | | | |
| MASF | | | | S | **Sg** | **23 06 47.6** | **-4.0** |
| **MSFE** | **Esma-Masafi** | **1.41** | **228** | *e*P | **Pb** | **23 06 33.7** | **+0.2** |
| | SNR=15 | | | | | | |
| **GENO** | **Geno** | **1.49** | **317** | Pg | **Pn** | **23 06 35.1** | **+0.7** |
| **KHNJ** | **Kahnooj** | **1.67** | **12** | Pg | **Pn** | **23 06 35.2** | **-1.4** |
| **UMQ** | **Umm Al-Quwin** | **1.69** | **243** | P | **Pg** | **23 06 40.8** | **+1.9** |
| **UMQ** | **Umm Al-Quwin** | **1.69** | **243** | P | **Pg** | **23 06 42.3** | **+3.4** |
| UMQ | | | | S | **Sg** | **23 07 01.4** | **+0.7** |
| **UOSS** | **Minazif** | **1.69** | **217** | *e*P | **Pb** | **23 06 38.1** | **-0.2** |
| | SNR=5.6 | | | | | | |
| **UOSS** | **Minazif** | **1.69** | **217** | P | **Pb** | **23 06 37.8** | **-0.4** |
| UOSS | | | | S | **Sb** | **23 06 59.6** | **-0.3** |
| **HATD** | **Hatta, Dubai** | **1.83** | **216** | P | **Pb** | **23 06 39.8** | **-0.7** |
| **HATD** | **Hatta, Dubai** | **1.83** | **216** | P | **Pb** | **23 06 40.2** | **-0.3** |
| HATD | | | | S | **Sn** | **23 06 59.7** | **-2.7** |
| **ASHO** | **Ashiyiah** | **1.98** | **215** | *e*P | **Pg** | **23 06 44.1** | **-0.4** |
| | SNR=17 | | | | | | |
| **ASHO** | **Ashiyiah** | **1.98** | **215** | P | **Pb** | **23 06 43.6** | **+0.4** |
| | SNR=15 | | | | | | |
| ASHO | | | | S | **Sn** | **23 07 02.5** | **-3.7** |
| **NAZ** | **Nazwa, Dubai** | **1.99** | **229** | P | **Pg** | **23 06 44.5** | **-0.2** |
| **NAZ** | **Nazwa, Dubai** | **1.99** | **229** | P | **Pg** | **23 06 45.4** | **+0.6** |
| | SNR=5.4 | | | | | | |
| NAZ | | | | S | **Sn** | **23 07 06.2** | **-0.3** |
| **FAQ** | **Al Faqa, Dubai** | **2.21** | **225** | P | **Pb** | **23 06 47.3** | **+0.3** |
| **FAQ** | **Al Faqa, Dubai** | **2.21** | **225** | P | **Pb** | **23 06 48.0** | **+0.9** |
| FAQ | | | | S | **Sn** | **23 07 10.7** | **-1.1** |
| **SOHO** | **SOHO** | **2.28** | **198** | P | **Pn** | **23 06 45.8** | **+0.7** |
| **SOHO** | **SOHO** | **2.28** | **198** | P | **Pn** | **23 06 45.4** | **+0.4** |
| SOHO | | | | S | **Sn** | **23 07 13.3** | **-0.3** |
| **ASUD** | **Al Ashush, Dub** | **2.46** | **227** | *e*P | **Pb** | **23 06 51.8** | **+0.4** |
| | SNR=18 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.46** | **227** | P | **Pb** | **23 06 51.8** | **+0.4** |
| | SNR=18 | | | | | | |
| ASUD | | | | S | **Sn** | **23 07 17.3** | **-0.7** |
| **ALNE** | **Al Ain** | **2.66** | **213** | *e*P | **Pb** | **23 06 53.7** | **-1.1** |
| | SNR=5.7 | | | | | | |
| **ALNE** | **Al Ain** | **2.66** | **213** | P | **Pb** | **23 06 54.4** | **-0.3** |
| | SNR=7.0 | | | | | | |
| ALNE | | | | S | **Sn** | **23 07 21.3** | **-1.6** |
| **HOQ** | **Hoqain** | **2.72** | **180** | P | **Pn** | **23 06 51.4** | **+0.4** |
| | SNR=12 | | | | | | |
| HOQ | | | | S | **Sb** | **23 07 26.4** | **-3.0** |
| **AJN** | **Ajban** | **2.73** | **231** | P | **Pb** | **23 06 55.3** | **-0.7** |
| AJN | | | | S | **Sn** | **23 07 24.6** | **-0.2** |
| **KBAM** | **BAM** | **2.99** | **19** | Pn | **Pn** | **23 06 55.3** | **+0.5** |
| **ARQ** | **Araqi** | **3.05** | **194** | P | **Pb** | **23 06 59.7** | **-1.7** |
| | SNR=25 | | | | | | |
| **SMDO** | **Samad** | **3.31** | **168** | P | **Pn** | **23 07 01.7** | **+2.5** |
| | SNR=14 | | | | | | |
| SMDO | | | | S | **Sn** | **23 07 40.3** | **+1.2** |
| **NGRK** | **Negar Kerman** | **3.36** | **351** | Pn | **Pn** | **23 07 00.8** | **+0.6** |
| **BSY** | **Bisya** | **3.55** | **182** | P | **Pn** | **23 07 05.9** | **+3.3** |
| BSY | | | | S | **Sn** | **23 07 48.0** | **+2.9** |
| **WBK** | **Wadi Bani Khal** | **3.98** | **157** | P | **Pn** | **23 07 10.4** | **+1.9** |
| | SNR=13 | | | | | | |

*AEIC* ***21*** *23:34:32.0±1.3, 69˚.57N±0˚.06×145˚.0W±0˚.1, h13km±6km, ML3.4, ML3.6/116(NEIC), Error ellipse: s-maj=8.5km s-min=6.0km az=192.0*
*NEIC* ***21*** *23:34:32.8±1.2, 69˚.64N±0˚.05×145˚.1W±0˚.1, h10km±7km, Error ellipse: s-maj=8.4km s-min=3.6km az=212.0*
*IDC* ***21*** *23:34:34.1±3.8, 69˚.48N×144˚.89W, h0km, mb3.4/1, mbtmp3.5/4, ML3.6/3, Error ellipse: s-maj=44.8km s-min=21.1km az=142.0*

**ISC 21 23:34:32.3±0.8, 69˚59N±0˚.04×145˚05W±0˚.03, h10km, n126, σ1§21/131, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C26K** | **Camden Bay** | **0.33** | **8** | | **Pg** | **23 34 39.7** | **+0.9** |
| C26K | | | | | **Sg** | **23 34 44.6** | **+1.4** |
| C26K | | | | IAML | | 23 34 45.5 | |
| | comp=N,6μm,0.4s | | | | | | |
| C26K | | | | IAML | | 23 34 45.9 | |
| | comp=E,7μm,0.5s | | | | | | |
| **C27K** | **Jago River** | **0.47** | **85** | Pg | **Pg** | **23 34 41.6** | **+0.2** |
| C27K | | | | Sg | **Sg** | **23 34 48.1** | **+0.4** |
| C27K | | | | IAML | | 23 34 51.2 | |
| | comp=E,4μm,0.3s | | | | | | |
| C27K | | | | IAML | | 23 34 51.5 | |
| | comp=N,5μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.54** | **240** | Pg | **Pg** | **23 34 42.4** | **-0.4** |
| D25K | | | | Sg | **Sg** | **23 34 49.7** | **-0.2** |
| **C24K** | **Franklin Bluff** | **1.28** | **277** | Pn | **Pn** | **23 34 56.6** | **+0.5** |
| C24K | | | | IAML | | 23 35 16.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.41** | **254** | | **Pg** | **23 34 59.4** | **+0.2** |
| D24K | | | | IAML | | 23 35 20.5 | |
| | comp=E,1μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.49** | **102** | Pn | **Pn** | **23 34 59.2** | **+0.1** |
| D27M | | | | IAML | | 23 35 23.0 | |
| | comp=N,836nm,0.4s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.88** | **242** | Pn | **Pn** | **23 35 05.1** | **+0.6** |
| TOLK | | | | IAML | | 23 35 35.1 | |
| | comp=E,442nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 23 35 42.9 | |
| | comp=N,469nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.89** | **137** | Pn | **Pn** | **23 35 05.6** | **+1.0** |
| E27K | | | | IAML | | 23 35 37.7 | |
| | comp=E,396nm,0.7s | | | | | | |
| **F26K** | **Sheenjek River** | **1.94** | **170** | Pn | **Pn** | **23 35 06.3** | **+1.1** |
| F26K | | | | IAML | | 23 35 37.9 | |
| | comp=E,490nm,0.5s | | | | | | |
| F26K | | | | IAML | | 23 35 38.3 | |
| | comp=N,388nm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **1.95** | **280** | Pn | **Pn** | **23 35 06.3** | **+0.9** |
| **E24K** | **Your Creek** | **1.97** | **221** | Pn | **Pn** | **23 35 06.4** | **+0.7** |
| **F25K** | **Christian Rive** | **2.02** | **186** | Pn | **Pn** | **23 35 07.6** | **+1.2** |
| **D23K** | **Nanushuk River** | **2.10** | **255** | Pn | **Pn** | **23 35 08.3** | **+0.9** |
| D23K | | | | IAML | | 23 35 45.6 | |
| | comp=N,356nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.18** | **175** | Pn | **Pn** | **23 35 08.9** | **+0.3** |
| **E28M** | **Babbage River** | **2.21** | **114** | Pn | **Pn** | **23 35 10.4** | **+1.4** |
| E28M | | | | IAML | | 23 35 44.9 | |
| | comp=N,343nm,0.7s | | | | | | |
| **D28M** | **Stokes Point** | **2.24** | **94** | Pn | **Pn** | **23 35 11.0** | **+1.6** |
| **E23K** | **Chandalar** | **2.26** | **229** | Pn | **Pn** | **23 35 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,3.5nm,0.3s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.37** | **169** | Pn | **Pn** | **23 35 39.1** | **+0.5** |
| I26K | | | | IAML | | 23 37 02.1 | |
| | comp=E,72nm,0.8s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.42** | **216** | | **Pn** | **23 35 40.2** | **+0.9** |
| **G21K** | **Allakaket** | **4.43** | **230** | Pn | **Pn** | **23 35 39.7** | **+0.3** |
| G21K | | | | IAML | | 23 36 58.1 | |
| | comp=E,60nm,1.4s | | | | | | |
| G21K | | | | IAML | | 23 37 00.4 | |
| | comp=N,63nm,1.2s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.50** | **132** | Pn | **Pn** | **23 35 41.4** | **+0.9** |
| **POKR** | **Poker Plat Res** | **4.59** | **193** | Pn | **Pn** | **23 35 42.7** | **+1.1** |
| POKR | | | | IAML | | 23 37 04.5 | |
| | comp=E,56nm,1.0s | | | | | | |
| POKR | | | | IAML | | 23 37 10.0 | |
| | comp=N,38nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.60** | **152** | Pn | **Pn** | **23 35 43.4** | **+1.6** |
| I28M | | | | IAML | | 23 37 08.2 | |
| | comp=E,43nm,1.2s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.68** | **112** | Pn | **Pn** | **23 35 45.0** | **+2.1** |
| F31M | | | | IAML | | 23 37 08.8 | |
| | comp=E,50nm,1.3s | | | | | | |
| F31M | | | | IAML | | 23 37 10.9 | |
| | comp=N,43nm,1.3s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.71** | **242** | Pn | **Pn** | **23 35 43.8** | **+0.6** |
| **I23K** | **Minto, Yukon-K** | **4.76** | **202** | Pn | **Pn** | **23 35 45.0** | **+1.0** |
| I23K | | | | IAML | | 23 37 12.4 | |
| | comp=E,47nm,0.9s | | | | | | |
| I23K | | | | IAML | | 23 37 18.5 | |
| | comp=N,43nm,1.0s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **196** | Pn | **Pn** | **23 35 45.8** | **+1.1** |
| MDM | | | | IAML | | 23 37 08.6 | |
| | comp=E,41nm,1.3s | | | | | | |
| **D19K** | **Kuna River** | **4.82** | **263** | Pn | **Pn** | **23 35 45.9** | **+1.2** |
| **G31M** | **Satah River** | **4.82** | **119** | Pn | **Pn** | **23 35 46.7** | **+1.9** |
| **IL31** | | **4.89** | **189** | Pn | **Pn** | **23 35 46.0** | **+0.2** |
| **ILAR** | **Eielson Array** | **4.89** | **189** | Pn | **Pn** | **23 35 46.5** | **+0.6** |
| **ILAR** | **Eielson Array** | **4.89** | **189** | Pn | **Pn** | **23 35 46.8** | **+1.0** |
| | comp=E,1.9nm,0.3s,baz=2.1,slow=15,SNR=58 | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 36 43.0** | **+0.5** |
| | comp=E,3.8nm,0.3s,baz=4.0,slow=27,SNR=7.6 | | | | | | |
| ILAR | | | | Lg | Lg | 23 37 03.4 | |
| | comp=E,2.9nm,0.3s,baz=10,slow=33,SNR=4.3 | | | | | | |
| | comp=E,4.3nm,0.5s | | | | | | |
| **H21K** | **Melozitna Rive** | **4.94** | **221** | Pn | **Pn** | **23 35 47.2** | **+0.9** |
| H21K | | | | IAML | | 23 37 15.8 | |
| | comp=E,39nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **4.96** | **250** | Pn | **Pn** | **23 35 47.3** | **+0.6** |
| E19K | | | | IAML | | 23 37 19.4 | |
| | comp=N,43nm,0.8s | | | | | | |
| E19K | | | | IAML | | 23 37 25.7 | |
| | comp=E,31nm,0.7s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.98** | **145** | Pn | **Pn** | **23 35 47.5** | **+0.6** |
| I29M | | | | IAML | | 23 36 51.5 | |
| | comp=N,46nm,0.5s | | | | | | |
| I29M | | | | IAML | | 23 37 09.5 | |
| | comp=E,38nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **5.00** | **182** | Pn | **Pn** | **23 35 48.4** | **+1.0** |
| J25K | | | | IAML | | 23 37 16.4 | |
| | comp=E,44nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **5.07** | **161** | Pn | **Pn** | **23 35 49.3** | **+1.1** |
| EGAK | | | | IAML | | 23 36 51.2 | |
| | comp=E,36nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 23 37 22.9 | |
| | comp=E,29nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.08** | **208** | Pn | **Pn** | **23 35 49.4** | **+0.9** |
| **CCB** | **Clear Creek Bu** | **5.08** | **194** | Pn | **Pn** | **23 35 48.4** | **+0.1** |
| CCB | | | | IAML | | 23 37 19.6 | |
| | comp=E,29nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.15** | **173** | Pn | **Pn** | **23 35 50.5** | **+1.1** |
| J26L | | | | IAML | | 23 37 01.6 | |
| | comp=N,25nm,0.6s | | | | | | |
| J26L | | | | IAML | | 23 37 17.8 | |
| | comp=E,39nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.17** | **271** | Pn | **Pn** | **23 35 50.5** | **+0.9** |
| C19K | | | | IAML | | 23 37 38.9 | |
| | comp=N,35nm,1.2s | | | | | | |
| **NEA2** | **Nenana** | **5.26** | **199** | Pn | **Pn** | **23 35 51.3** | **+0.5** |
| **WRH** | **Wood River Hil** | **5.28** | **194** | Pn | **Pn** | **23 35 51.8** | **+0.7** |
| WRH | | | | IAML | | 23 37 24.2 | |
| | comp=E,29nm,1.0s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.48** | **246** | Pn | **Pn** | **23 35 54.6** | **+0.8** |
| **I30M** | **Mount Dempster** | **5.51** | **139** | Pn | **Pn** | **23 35 55.2** | **+0.8** |
| **SCRK** | **Sand Creek** | **5.66** | **175** | Pn | **Pn** | **23 35 57.7** | **+1.3** |
| **K27K** | **Chicken** | **5.71** | **167** | Pn | **Pn** | **23 35 58.0** | **+1.0** |
| **G19K** | **Purcell Mounta** | **5.71** | **238** | Pn | **Pn** | **23 35 57.7** | **+0.7** |
| **BWN** | **Browne** | **5.71** | **200** | Pn | **Pn** | **23 35 57.6** | **+0.5** |
| **C18K** | **Utukok River** | **5.85** | **268** | Pn | **Pn** | **23 35 59.2** | **+0.3** |
| **RIDG** | **Independent Ri** | **5.88** | **179** | Pn | **Pn** | **23 36 01.1** | **+1.8** |
| **H19K** | **Roundabout Mou** | **5.97** | **232** | Pn | **Pn** | **23 36 01.4** | **+0.9** |
| **DAWY** | **Dawson** | **5.98** | **155** | Pn | **Pn** | **23 36 02.3** | **+1.5** |
| **BPAW** | **Bear Paw Mtn.** | **5.99** | **206** | Pn | **Pn** | **23 36 02.0** | **+1.2** |
| **I20K** | **Naaghedeneel** | **6.05** | **222** | Pn | **Pn** | **23 36 02.3** | **+0.7** |
| **J30M** | **Hart River** | **6.08** | **142** | Pn | **Pn** | **23 36 03.2** | **+1.0** |
| **E18K** | **Tukpahlearik C** | **6.11** | **257** | Pn | **Pn** | **23 36 03.3** | **+0.8** |
| **G18K** | **Tagagawik** | **6.35** | **241** | Pn | **Pn** | **23 36 07.2** | **+1.4** |
| **RND** | **Reindeer** | **6.39** | **196** | Pn | **Pn** | **23 36 07.9** | **+1.5** |
| **K29M** | **Barlow Dome** | **6.49** | **149** | Pn | **Pn** | **23 36 09.3** | **+1.4** |
| **J20K** | **Nowinta River** | **6.50** | **218** | Pn | **Pn** | **23 36 08.8** | **+1.0** |
| **DHY** | **Denali Highway** | **6.61** | **189** | Pn | **Pn** | **23 36 12.1** | **+2.6** |
| **RDOG** | **Red Dog Mine** | **6.64** | **265** | Pn | **Pn** | **23 36 09.8** | **0.0** |
| **BCAR** | **Beaver Creek A** | **6.69** | **167** | Pn | **Pn** | **23 36 11.9** | **+1.4** |
| **L27K** | **Beaver Creek,** | **6.69** | **167** | Pn | **Pn** | **23 36 11.9** | **+1.5** |
| **H18K** | **Honhosa River** | **6.79** | **235** | Pn | **Pn** | **23 36 12.3** | **+0.5** |
| **F17K** | **Baldwin Pennin** | **6.84** | **250** | Pn | **Pn** | **23 36 13.1** | **+0.7** |
| **A36M** | **Sachs Harbour** | **6.95** | **61** | Pn | **Pn** | **23 36 13.7** | **-0.1** |
| **J19K** | **Poorman** | **6.99** | **222** | Pn | **Pn** | **23 36 15.4** | **+0.8** |
| **K20K** | **Telida** | **7.22** | **214** | Pn | **Pn** | **23 36 19.2** | **+1.5** |
| **M26K** | **Nabesna, AK** | **7.27** | **172** | Pn | **Pn** | **23 36 19.5** | **+1.0** |
| **C36M** | **Paulatuk** | **7.37** | **82** | Pn | **Pn** | **23 36 19.0** | **-0.7** |
| **M27K** | **Edge Creek, AK** | **7.38** | **168** | Pn | **Pn** | **23 36 21.8** | **+1.7** |
| **H17K** | **Granite Mounta** | **7.40** | **238** | Pn | **Pn** | **23 36 21.0** | **+0.8** |
| **C16K** | **Lisburne Hills** | **7.42** | **269** | Pn | **Pn** | **23 36 20.1** | **-0.2** |
| **M29M** | **Somme Creek** | **7.66** | **156** | Pn | **Pn** | **23 36 24.8** | **+1.0** |
| **J18K** | **Innoko River** | **7.70** | **223** | Pn | **Pn** | **23 36 25.6** | **+1.3** |
| **G16K** | **Koyuk River** | **7.84** | **246** | Pn | **Pn** | **23 36 26.1** | **-0.1** |
| **SKT** | **Skwentna** | **8.09** | **202** | Pn | **Pn** | **23 36 29.6** | **-0.1** |
| **J17K** | **VABM Dome** | **8.35** | **229** | Pn | **Pn** | **23 36 32.8** | **-0.4** |
| **F15K** | **North Star Dit** | **8.41** | **252** | Pn | **Pn** | **23 36 32.8** | **-1.1** |
| **I17K** | **Unalakleet** | **8.41** | **235** | Pn | **Pn** | **23 36 35.2** | **+1.2** |
| **L19K** | **White Mountain** | **8.44** | **213** | Pn | **Pn** | **23 36 36.0** | **+1.6** |
| **M19K** | **Big River Lodg** | **8.61** | **211** | Pn | **Pn** | **23 36 38.5** | **+1.8** |
| **K17K** | **Iditarod** | **8.72** | **224** | Pn | **Pn** | **23 36 38.3** | **0.0** |
| **L18K** | **Granite Mounta** | **8.78** | **218** | Pn | **Pn** | **23 36 40.5** | **+1.4** |
| **J16K** | **Anvik River** | **8.85** | **232** | Pn | **Pn** | **23 36 40.4** | **+0.3** |
| **MMPY** | **Sheldon Lake,** | **8.94** | **135** | Pn | **Pn** | **23 36 42.4** | **+1.2** |
| **N31M** | **Braeburn, Yuko** | **8.99** | **150** | Pn | **Pn** | **23 36 44.3** | **+2.4** |
| **O30N** | **Mendenhall** | **9.61** | **153** | Pn | **Pn** | **23 36 52.7** | **+2.2** |
| **M17K** | **Holitna River** | **9.67** | **218** | Pn | **Pn** | **23 36 53.1** | **+1.8** |
| **K15K** | **Wolf Creek Mou** | **9.91** | **230** | Pn | **Pn** | **23 36 55.4** | **+0.9** |
| **WHY** | **Whitehorse** | **9.92** | **150** | Pn | **Pn** | **23 36 56.8** | **+2.1** |
| **J14K** | **Nanvaranak Lak** | **10.11** | **236** | Pn | **Pn** | **23 36 57.8** | **+0.6** |
| **M16K** | **Timber Creek** | **10.35** | **221** | Pn | **Pn** | **23 37 01.8** | **+1.3** |
| **N17K** | **Nushagak Hills** | **10.41** | **215** | Pn | **Pn** | **23 37 03.0** | **+1.5** |
| **YKA** | **Yellowknife Ar** | **14.12** | **105** | Pn | **Pn** | **23 37 49.0** | **-2.9** |
| | comp=E,0.4nm,0.3s,baz=318,slow=14,SNR=7.9 | | | | | | |
| YKA | | | | Sn | Sn | 23 40 15.6 | -13 |
| | comp=E,0.5nm,0.3s,baz=330,slow=18,SNR=8.5 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **RES** | **Resolute Bay** | **15.74** | **49** | Pn | **Pn** | **23 38 10.0** | **-3.6** |
| | comp=E,0.4nm,0.3s,baz=264,slow=13,SNR=14 | | | | | | |
| RES | | | | Sn | Sn | 23 40 54.7 | -13 |
| | comp=E,0.5nm,0.3s,baz=162,slow=21,SNR=6.0 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.45** | **127** | P | **P** | **23 41 04.8** | **+2.3** |
| | comp=E,0.4nm,0.6s,baz=10,slow=5.7,SNR=4.1 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |

*FUNV **21** 23:35:28.0, 10°.46N×63°.04W, h8km, MW3.2*
**ISC 21 23:35:25.0±1.0, 9°.87N±0°.06×62°.99W±0°.05, h10km, n6, σ1§19/12, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCRV** | **Puerto La Cruz** | **1.65** | **281** | *eP* | | **Pg** | **23 35 56.7** | **+0.1** |
| PCRV | | | | *eS* | | **Sb** | 23 36 16.5 | **+0.1** |
| **TRN** | **Trinidad (W)** | **1.75** | **64** | *eP* | | **Pb** | **23 35 56.5** | **-0.7** |
| TRN | | | | *eS* | | **Sn** | 23 36 17.2 | **-0.5** |
| **TACV** | **Tcata** | **3.98** | **274** | *eP* | | **Pn** | **23 36 27.0** | **+0.8** |
| TACV | | | | *eS* | | **Sn** | 23 37 11.7 | **-1.4** |
| **CACV** | **CAICARA DEL OR** | **4.19** | **237** | *eP* | | **Pn** | **23 36 30.4** | **+1.5** |
| CACV | | | | *eS* | | **Sn** | 23 37 16.3 | **-1.7** |
| **LUEV** | **Luepa** | **4.28** | **159** | *eP* | | **Pb** | **23 36 39.5** | **-0.9** |
| LUEV | | | | *eS* | | **Sb** | **23 37 33.0** | **+0.7** |
| **BAUV** | **El Baul** | **5.07** | **260** | *eP* | | **Pn** | **23 36 42.8** | **+1.7** |
| BAUV | | | | *eS* | | **Sn** | **23 37 39.0** | **-0.7** |

**IDC 21 23:45:48.2±1.2, 15°.84S×168°.25E, h0km, mb3.8/5, mbtmp3.8/5, Error ellipse: s-maj=53.1km s-min=29.2km az=146.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **32.49** | **258** | P | | P | 23 52 20.6 | -0.3 |
| | 0.3nm,0.9s,baz=79,slow=5.8,SNR=1.4 | | | | | | | |
| | 0.3nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.19** | **251** | P | | P | 23 52 27.0 | +0.1 |
| | 1.1nm,0.6s,baz=80,slow=9.0,SNR=8.5 | | | | | | | |
| | 1.1nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.20** | **180** | P | | P | 23 57 26.8 | +0.1 |
| | 2.0nm,1.1s,baz=257,slow=1.1,SNR=3.6 | | | | | | | |
| | 2.0nm,1.1s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.28** | **49** | P | | P | 23 58 36.9 | -0.4 |
| | 0.4nm,0.4s,baz=209,slow=7.2,SNR=3.9 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **87.29** | **18** | P | | P | 23 58 36.7 | +0.3 |
| | 0.6nm,0.9s,baz=232,slow=6.8,SNR=6.0 | | | | | | | |
| | 0.6nm,0.9s | | | | | | | |

*UPA **21** 23:52:16.9±0.4, 9°.80N×84°.09W, h8km±44km, MW2.6*
*UCR **21** 23:52:17.4±1.2, 9°.76N×83°.96W, h7km±2km, MW3.7, Fault plane solution: NP1: φ=235.88000°, δ=70.08000°, λ=-1.82000°.*
*CATAC **21** 23:52:17.0±0.3, 9°.74N×83°.95W, h5km±1km, ML3.7*
**ISC 21 23:52:17.6±0.8, 9°.72N±0°.02×83°.97W±0°.02, h8km±4km, n76, σ0§56/115, 16C-17D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LCR2** | **La Lucha 2** | **0.04** | **299** | *i* P | | **Pg** | **23 52 19.1** | **-0.4** |
| LCR2 | | | | *i* S | | **Sg** | **23 52 20.2** | **-0.7** |
| LCR2 | | | | IAML | | | 23 52 20.4 | |
| | comp=Z,110μm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **0.04** | **299** | *eP* | | **Pg** | **23 52 19.1** | **-0.4** |
| LCR2 | | | | *eS* | | **Sg** | **23 52 20.2** | **-0.7** |
| **RAZU** | **San Marcos de** | **0.08** | **221** | *eP* | | **Pg** | **23 52 20.1** | **+0.3** |
| RAZU | | | | *eS* | | **Sg** | **23 52 22.2** | **+0.7** |
| **ABE2** | **San Pablo** | **0.09** | **259** | *eP* | | **Pg** | **23 52 20.1** | **+0.1** |
| ABE2 | | | | *eS* | | **Sg** | **23 52 22.1** | **+0.3** |
| **REPA** | **Paraso** | **0.14** | **43** | *eP* | | **Pg** | **23 52 21.3** | **+0.5** |
| REPA | | | | *eS* | | **Sg** | **23 52 23.4** | **+0.4** |
| **TAGO** | **Cartago** | **0.15** | **17** | *eP* | | **Pg** | **23 52 20.5** | **-0.5** |
| TAGO | | | | *eS* | | **Sg** | **23 52 22.9** | **-0.4** |
| **TRIO** | **Tres Rios** | **0.18** | **352** | *eP* | | **Pg** | **23 52 20.9** | **-0.5** |
| TRIO | | | | *eS* | | **Sg** | **23 52 23.6** | **-0.6** |
| **AMPA** | **Desamparados** | **0.20** | **332** | *eP* | | **Pg** | **23 52 22.3** | **+0.6** |
| AMPA | | | | *eS* | | **Sg** | **23 52 25.1** | **+0.6** |
| **ACOS** | **Acosta** | **0.21** | **291** | *eP* | | **Pg** | **23 52 22.1** | **+0.2** |
| ACOS | | | | *eS* | | **Sg** | **23 52 25.5** | **+0.7** |
| **LUJA** | **Lujan** | **0.23** | **333** | *eP* | | **Pg** | **23 52 23.1** | **+0.9** |
| **SJS3** | **Mercedes San J** | **0.23** | **339** | *eP* | | **Pg** | **23 52 22.3** | **0.0** |
| SJS3 | | | | *eS* | | **Sg** | **23 52 25.7** | **+0.2** |
| **SJS** | **Escuela Geolog** | **0.23** | **339** | *eP* | | **Pg** | **23 52 22.1** | **-0.2** |
| SJS | | | | *eS* | | **Sg** | **23 52 25.6** | **0.0** |
| **CENT** | **San Jose** | **0.23** | **332** | *eP* | | **Pg** | **23 52 23.2** | **+0.8** |
| CENT | | | | *eS* | | **Sg** | **23 52 26.6** | **+0.9** |
| **LUPE** | **Guadalupe** | **0.24** | **339** | *eP* | | **Pg** | **23 52 22.4** | **-0.1** |
| LUPE | | | | *eS* | | **Sg** | **23 52 26.1** | **+0.2** |
| **MEXI** | **Barrio Mexico** | **0.25** | **332** | *eP* | | **Pg** | **23 52 22.5** | **-0.1** |
| MEXI | | | | *eS* | | **Sg** | **23 52 26.2** | **+0.2** |
| **PCAYA** | **Pacayas** | **0.25** | **39** | *eP* | | **Pg** | **23 52 22.4** | **-0.3** |
| PCAYA | | | | *eS* | | **Sg** | **23 52 26.2** | **+0.1** |
| **CORON** | **Coronado** | **0.25** | **352** | *eP* | | **Pg** | **23 52 22.8** | **0.0** |
| CORON | | | | *eS* | | **Sg** | **23 52 26.9** | **+0.7** |
| **BUS1** | **Rivas** | **0.27** | **127** | *eP* | | **Pg** | **23 52 23.3** | **+0.1** |
| BUS1 | | | | *eS* | | **Sg** | **23 52 27.7** | **+0.8** |
| **LLNJ** | **Naranjito** | **0.28** | **208** | *eP* | | **Pb** | **23 52 24.5** | **-0.3** |
| **VINA** | **Juan Vinas** | **0.28** | **52** | *eP* | | **Pg** | **23 52 23.1** | **-0.1** |
| VINA | | | | *eS* | | **Sg** | **23 52 27.1** | **+0.1** |
| **RAFA** | **San Farael, Vo** | **0.28** | **33** | *i* P | | **Pg** | **23 52 23.1** | **-0.2** |
| RAFA | | | | *i* S | | **Sg** | **23 52 27.1** | **-0.1** |
| RAFA | | | | IAML | | | 23 52 27.6 | |
| | comp=Z,55μm,1.0s | | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.28** | **33** | *eP* | | **Pg** | **23 52 23.1** | **-0.2** |
| RAFA | | | | *eS* | | **Sg** | **23 52 27.1** | **-0.1** |
| **VICA** | **Volcano Irazu** | **0.29** | **25** | *eP* | | **Pg** | **23 52 23.1** | **-0.4** |
| **SANTA** | **Santa Ana** | **0.30** | **315** | *eP* | | **Pg** | **23 52 23.3** | **-0.2** |
| SANTA | | | | *eS* | | **Sg** | **23 52 27.6** | **0.0** |
| **CVIMO** | **Finca Echandi** | **0.30** | **5** | *eP* | | **Pg** | **23 52 23.4** | **-0.3** |
| **HDC** | **Heredia** | **0.31** | **333** | *eP* | | **Pg** | **23 52 23.9** | **0.0** |
| HDC | | | | *eS* | | **Sg** | **23 52 28.5** | **+0.5** |
| **HDC3** | **Heredia 3** | **0.31** | **333** | *i* P | | **Pg** | **23 52 23.7** | **-0.1** |
| HDC3 | | | | *i* S | | **Sg** | **23 52 28.3** | **+0.3** |
| HDC3 | | | | IAML | | | 23 52 32.2 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **BELE** | **Belen** | **0.33** | **320** | *eP* | | **Pg** | **23 52 23.9** | **-0.3** |
| BELE | | | | *eS* | | **Sg** | **23 52 28.6** | **0.0** |
| **VTLA** | **Turrialba Volc** | **0.34** | **34** | *eP* | | **Pg** | **23 52 24.1** | **-0.3** |
| **CVTQ** | **Turrialba Volc** | **0.34** | **35** | *eP* | | **Pg** | **23 52 24.3** | **-0.3** |
| **SVQ2** | **Quepos** | **0.35** | **214** | *eP* | | **Pb** | **23 52 25.6** | **-0.4** |
| **VERB** | **Verbena** | **0.35** | **50** | *eP* | | **Pg** | **23 52 24.5** | **-0.1** |
| VERB | | | | *eS* | | **Sg** | **23 52 29.6** | **+0.4** |
| **VTCV** | **VTCV, Calle Va** | **0.35** | **42** | *eP* | | **Pg** | **23 52 24.4** | **-0.2** |
| VTCV | | | | *eS* | | **Sg** | **23 52 29.6** | **+0.3** |
| **CVTV** | **Tajo** | **0.35** | **38** | *eP* | | **Pg** | **23 52 24.5** | **-0.2** |
| **VTR0** | **Volcan Turrial** | **0.36** | **35** | *eP* | | **Pg** | **23 52 24.6** | **-0.2** |
| **CVTR** | **Volcan Turrial** | **0.36** | **35** | *eP* | | **Pg** | **23 52 24.6** | **-0.3** |
| **RVSTA** | **Santa Teresita** | **0.41** | **51** | *eP* | | **Pg** | **23 52 25.5** | **-0.1** |
| RVSTA | | | | *eS* | | **Sg** | **23 52 31.4** | **+0.5** |
| **RITA** | **Parrita** | **0.41** | **241** | *eP* | | **Pb** | **23 52 27.2** | **+0.2** |
| RITA | | | | *eS* | | **Sb** | **23 52 35.0** | **+1.6** |
| **TCS1** | **Tacares** | **0.46** | **314** | *i* P | | **Pg** | **23 52 26.6** | **+0.1** |
| TCS1 | | | | IAML | | | 23 52 42.7 | |
| | comp=Z,15μm,1.0s | | | | | | | |
| **TCS1** | **Tacares** | **0.46** | **314** | *eP* | | **Pg** | **23 52 26.6** | **+0.1** |
| **TRB2** | **Turrubares** | **0.51** | **292** | *eP* | | **Pg** | **23 52 27.2** | **-0.3** |
| **SARCI** | **Sarchi** | **0.52** | **315** | *eP* | | **Pg** | **23 52 27.9** | **+0.1** |
| **RVLA** | **Villa Bonita** | **0.54** | **44** | *eP* | | **Pg** | **23 52 27.9** | **-0.1** |
| **LCOCO** | **El Coco** | **0.54** | **48** | *eP* | | **Pg** | **23 52 27.9** | **-0.2** |
| LCOCO | | | | *eS* | | **Sg** | **23 52 36.0** | **+0.8** |
| **SRA1** | **San Ramn** | **0.62** | **306** | *eP* | | **Pg** | **23 52 29.0** | **-0.6** |
| **OCHAL** | **Ojochal** | **0.70** | **153** | *i* P | | **Pb** | **23 52 31.6** | **-0.4** |
| OCHAL | | | | IAML | | | 23 52 46.2 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **ARZA** | **Esparza** | **0.74** | **291** | *eP* | | **Pg** | **23 52 31.2** | **-0.6** |
| ARZA | | | | *eS* | | **Sg** | **23 52 41.5** | **0.0** |
| **DRK0** | **Durika** | **0.85** | **122** | *i* P | | **Pg** | **23 52 32.7** | **-1.2** |
| DRK0 | | | | *i* S | | **Sg** | **23 52 44.2** | **-0.8** |
| DRK0 | | | | IAML | | | 23 52 44.6 | |
| | comp=Z,12μm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **0.85** | **122** | *eP* | | **Pg** | **23 52 32.9** | **-1.0** |
| **DRK0** | **Durika** | **0.85** | **122** | *eP* | | **Pg** | **23 52 32.7** | **-1.2** |
| **SOCE** | **Pocosol** | **0.92** | **316** | *i* P | | **Pg** | **23 52 34.7** | **-0.5** |
| SOCE | | | | *i* S | | **Sg** | **23 52 47.1** | **-0.1** |
| SOCE | | | | IAML | | | 23 52 49.1 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **SOCE** | **Pocosol** | **0.92** | **316** | *eP* | | **Pg** | **23 52 34.6** | **-0.7** |
| **VACR** | **Volcan Arenal** | **1.02** | **317** | *eP* | | **Pg** | **23 52 36.4** | **-0.9** |
| **MTEVE** | **Monteverde** | **1.03** | **305** | *eP* | | **Pg** | **23 52 37.3** | **-0.2** |
| **ARE1** | **Arenal 1** | **1.04** | **315** | *eP* | | **Pg** | **23 52 36.7** | **-0.9** |
| **CEDE** | **Laguna Cedeo** | **1.05** | **316** | *eP* | | **Pg** | **23 52 36.9** | **-0.8** |
| **COVE** | **Coope Vega, Sa** | **1.08** | **337** | *i* P | | **Pg** | **23 52 37.0** | **-1.3** |
| COVE | | | | IAML | | | 23 52 55.4 | |
| | comp=Z,690nm,1.0s | | | | | | | |
| **CBL1** | **Cabuya** | **1.11** | **263** | *eP* | | **Pg** | **23 52 38.3** | **-0.7** |
| **JTS** | **Las Juntas de** | **1.12** | **300** | *eP* | | **Pg** | **23 52 38.1** | **-1.0** |
| **JTS** | **Las Juntas de** | **1.12** | **300** | *eP* | | **Pg** | **23 52 37.7** | **-1.5** |
| **JUNT** | **Juntas** | **1.12** | **300** | *eP* | | **Pg** | **23 52 38.1** | **-1.1** |
| **MLIR3** | **Monte Lirio, C** | **1.46** | **129** | *eP* | | **Pb** | **23 52 44.8** | **-0.2** |
| **CUI** | **Cuipilapa** | **1.50** | **308** | *eP* | | **Pn** | **23 52 44.3** | **-0.5** |
| **CNI2** | **El Empalme, Bo** | **1.51** | **101** | *eP* | | **Pn** | **23 52 44.3** | **-0.5** |
| CNI2 | | | | *eS* | | **Sb** | **23 53 05.1** | **+0.1** |
| **INDI** | **Punta indio, G** | **1.52** | **276** | *i* P | | **Pn** | **23 52 44.3** | **-0.7** |
| INDI | | | | IAML | | | 23 52 46.1 | |
| | comp=Z,200nm,1.0s | | | | | | | |
| INDI | | | | *i* S | | **Sg** | **23 53 06.1** | **-0.4** |
| **COLC** | **Colonia** | **1.54** | **308** | *eP* | | **Pn** | **23 52 45.0** | **-0.3** |
| **BRU2** | **Volcan** | **1.56** | **126** | *eP* | | **Pb** | **23 52 46.5** | **-0.3** |
| BRU2 | | | | *eS* | | **Sg** | **23 53 08.9** | **+1.0** |
| **BRU2** | **Volcan** | **1.56** | **126** | *eP* | | **Pn** | **23 52 45.9** | **+0.1** |
| **GPS2** | **Hotel Rincn d** | **1.70** | **307** | *eP* | | **Pn** | **23 52 48.0** | **+0.4** |
| **BCO2** | **Palmira** | **1.74** | **125** | *eP* | | **Pb** | **23 52 49.1** | **-0.7** |
| BCO2 | | | | *eS* | | **Sg** | **23 53 13.8** | **+0.3** |
| **LNBQ3** | **Los Naranjos,** | **1.77** | **121** | *eP* | | **Pn** | **23 52 48.9** | **+0.3** |
| **PTPM** | **Petroterminale** | **1.85** | **144** | *eP* | | **Pn** | **23 52 50.2** | **+0.6** |
| **CHGR2** | **Aguacate** | **1.96** | **113** | *eP* | | **Pn** | **23 52 51.9** | **+0.8** |
| CHGR2 | | | | *eS* | | **Sb** | **23 53 18.2** | **0.0** |
| **BLUN** | **Bluefields** | **2.28** | **5** | *i* P | | **Pn** | **23 52 55.0** | **-0.5** |
| BLUN | | | | IAML | | | 23 53 29.1 | |
| | comp=Z,350nm,1.0s | | | | | | | |
| **ACON** | **Acoyapa** | **2.53** | **332** | *i* P | | **Pn** | **23 52 59.0** | **+0.1** |
| ACON | | | | *i* S | | **Sn** | **23 53 30.0** | **+0.1** |
| ACON | | | | IAML | | | 23 53 37.4 | |
| | comp=Z,130nm,1.0s | | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **3.18** | **329** | *i* P | | **Pn** | **23 53 07.9** | **0.0** |
| BOAB | | | | *i* S | | **Sn** | **23 53 47.5** | **+1.4** |

**IDC 21 23:53:18.3±2.1, 2°.34S×127°.45E, h0km, mb3.1/2, mbtmp3.3/3, ML3.4/1, MS4.0/1, Error ellipse: s-maj=145.8km s-min=28.7km az=66.0, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.75** | **159** | P | | P | 23 57 38.6 | -0.4 |
| | 0.1nm,0.3s,baz=338,slow=12,SNR=7.7 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.11** | **164** | P | | P | 23 58 15.6 | +0.1 |
| | 0.4nm,0.5s,baz=339,slow=11,SNR=4.6 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **JNU** | **Nakatsue** | **35.41** | **5** | LR | | LR | 00 16 33.1 | |
| | comp=Z,202nm,18.0s,baz=191,slow=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.96** | **327** | P | | P | 00 03 46.8 | 0.0 |
| | 0.2nm,0.5s,baz=123,slow=10,SNR=1.9 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |

**NAM 21 23:54:38.0±4.3, 19°.73S×14°.47E, h21km±15km, ML0.3, 6C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.03** | **121** | *i* P | | Pb | 23 54 43.5 | +1.7 |
| ST3N | | | | *i* S | | Sb | 23 54 45.0 | +0.5 |
| ST3N | | | | IAML | | | 23 54 45.1 | |
| | comp=Z,3.3nm,0.0s | | | | | | | |
| **ST3N** | **ST3** | **0.03** | **121** | *i* P | | Pb | 23 54 43.5 | +1.7 |
| ST3N | | | | *i* S | | Sb | 23 54 45.0 | +0.5 |
| ST3N | | | | IAML | | | 23 54 45.7 | |
| | comp=Z,2.3nm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.10** | **137** | *i* P | | Pb | 23 54 42.5 | +0.2 |
| ST9N | | | | *i* S | | Sb | 23 54 43.2 | -1.9 |
| ST9N | | | | IAML | | | 23 54 43.5 | |
| | comp=Z,127nm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.10** | **137** | *i* P | | Pb | 23 54 42.4 | +0.2 |
| ST9N | | | | *i* S | | Sb | 23 54 43.3 | -1.9 |
| ST9N | | | | IAML | | | 23 54 43.5 | |
| | comp=Z,160nm,0.5s | | | | | | | |
| **ST6N** | **ST6** | **0.10** | **225** | *i* P | | Pb | 23 54 44.7 | -0.2 |
| ST6N | | | | *i* S | | Sb | 23 54 46.7 | -3.1 |
| ST6N | | | | IAML | | | 23 54 47.6 | |
| | comp=Z,2.6nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.13** | **94** | *i* P | | Pb | 23 54 43.2 | -1.2 |
| ST1N | | | | *i* S | | Sb | 23 54 44.5 | -4.

| | | | | | | |
|---|---|---|---|---|---|---|
| E29M | | | IAML | | | 00 10 06.0 |
| | comp=E,134nm,0.7s | | | | | |
| **D22K** | **Ayikyak River** | **2.85 258** | Pn | **Pn** | **00 09 12.2** | **+0.9** |
| D22K | | | IAML | | 00 10 05.4 | |
| | comp=E,161nm,1.3s | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.91 242** | Pn | **Pn** | **00 09 12.5** | **+0.4** |
| **G25K** | **Bearman Lake** | **2.93 189** | | **Pn** | **00 09 13.2** | **+0.8** |
| **B22K** | **Teshekpuk Lake** | **2.99 287** | Pn | **Pb** | **00 09 16.1** | **-2.6** |
| **FYU** | **Fort Yukon** | **3.10 182** | Pn | **Pn** | **00 09 15.5** | **+0.9** |
| FYU | | | IAML | | 00 10 18.6 | |
| | comp=E,124nm,1.1s | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.11 199** | Pn | **Pn** | **00 09 14.9** | **+0.1** |
| **G27K** | **Doyon Strip** | **3.11 155** | Pn | **Pn** | **00 09 14.6** | **-0.3** |
| **B21K** | **Ikpikpuk River** | **3.37 274** | Pn | **Pn** | **00 09 20.1** | **+1.8** |
| B21K | | | IAML | | 00 10 30.7 | |
| | comp=N,111nm,1.2s | | | | | |
| B21K | | | IAML | | 00 10 34.3 | |
| | comp=E,112nm,1.0s | | | | | |
| **H25L** | **Birch Creek** | **3.42 186** | | **Pn** | **00 09 19.9** | **+1.0** |
| **E21K** | **Killik River** | **3.46 254** | Pn | **Pn** | **00 09 19.4** | **-0.2** |
| E21K | | | IAML | | 00 10 18.7 | |
| | comp=E,74nm,0.9s | | | | | |
| **C21K** | **Knifeblade Rid** | **3.50 266** | | **Pn** | **00 09 21.6** | **+1.4** |
| **G23K** | **Bananza Creek** | **3.51 215** | Pn | **Pn** | **00 09 21.7** | **+1.4** |
| G23K | | | IAML | | 00 10 21.1 | |
| | comp=N,73nm,0.8s | | | | | |
| **G29M** | **Pine Creek** | **3.77 134** | Pn | **Pn** | **00 09 24.3** | **+0.4** |
| G29M | | | IAML | | 00 10 31.4 | |
| | comp=N,79nm,1.2s | | | | | |
| **F30M** | **Barrier River** | **3.94 117** | | **Pn** | **00 09 28.2** | **+2.0** |
| **F21K** | **Alatna River** | **3.98 236** | Pn | **Pn** | **00 09 27.5** | **+0.8** |
| F21K | | | IAML | | 00 10 36.1 | |
| | comp=N,56nm,0.7s | | | | | |
| F21K | | | IAML | | 00 10 38.4 | |
| | comp=E,50nm,0.9s | | | | | |
| **H24K** | **Noodor Dome** | **3.99 197** | Pn | **Pn** | **00 09 27.4** | **+0.5** |
| H24K | | | IAML | | 00 10 17.2 | |
| | comp=N,45nm,0.6s | | | | | |
| H24K | | | IAML | | 00 10 37.5 | |
| | comp=E,54nm,1.1s | | | | | |
| **PRP** | **Porcupine Dome** | **4.16 183** | Pn | **Pn** | **00 09 29.7** | **+0.3** |
| PRP | | | IAML | | 00 10 42.6 | |
| | comp=N,46nm,0.7s | | | | | |
| **H23K** | **Yukon River** | **4.22 206** | Pn | **Pn** | **00 09 27.2** | **-2.9** |
| H23K | | | IAML | | 00 10 41.3 | |
| | comp=N,40nm,0.8s | | | | | |
| H23K | | | IAML | | 00 10 51.7 | |
| | comp=E,56nm,1.1s | | | | | |
| **B20K** | **Meade River** | **4.24 281** | Pn | **Pn** | **00 09 32.1** | **+1.9** |
| **H29M** | **Whitestone** | **4.25 141** | Pn | **Pn** | **00 09 31.0** | **+0.5** |
| H29M | | | IAML | | 00 10 53.5 | |
| | comp=N,55nm,0.9s | | | | | |
| **I27K** | **Kandik River** | **4.26 161** | | **Pn** | **00 09 32.0** | **+1.3** |
| **E20K** | **Nigu River** | **4.28 256** | | **Pn** | **00 09 33.1** | **+2.2** |
| **I26K** | **Coal Creek Min** | **4.42 170** | Pn | **Pn** | **00 09 32.5** | **-0.3** |
| I26K | | | IAML | | 00 10 54.3 | |
| | comp=E,53nm,0.8s | | | | | |
| **G21K** | **Allakaket** | **4.49 229** | Pn | **Pn** | **00 09 33.9** | **+0.2** |
| G21K | | | IAML | | 00 10 53.6 | |
| | comp=N,48nm,0.9s | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.49 216** | | **Pn** | **00 09 35.4** | **+1.7** |
| **EPYK** | **Eagle Plains** | **4.53 133** | Pn | **Pn** | **00 09 34.8** | **+0.5** |
| **I28M** | **Miner Creek** | **4.64 153** | Pn | **Pn** | **00 09 36.1** | **+0.2** |
| I28M | | | IAML | | 00 10 33.5 | |
| | comp=N,39nm,0.6s | | | | | |
| I28M | | | IAML | | 00 11 11.7 | |
| | comp=E,32nm,1.4s | | | | | |
| **POKR** | **Poker Plat Res** | **4.66 193** | Pn | **Pn** | **00 09 36.2** | **+0.2** |
| POKR | | | IAML | | 00 10 57.8 | |
| | comp=N,28nm,0.7s | | | | | |
| POKR | | | IAML | | 00 11 01.2 | |
| | comp=E,40nm,1.1s | | | | | |
| **F20K** | **Avaraart Lake** | **4.76 242** | Pn | **Pn** | **00 09 39.1** | **+1.7** |
| F20K | | | IAML | | 00 11 02.5 | |
| | comp=E,26nm,0.8s | | | | | |
| F20K | | | IAML | | 00 11 15.3 | |
| | comp=N,30nm,0.8s | | | | | |
| **G31M** | **Satah River** | **4.83 120** | Pn | **Pn** | **00 09 39.7** | **+1.4** |
| **I23K** | **Minto, Yukon-K** | **4.83 203** | Pn | **Pn** | **00 09 39.3** | **+0.9** |
| I23K | | | IAML | | 00 11 16.1 | |
| | comp=N,38nm,1.0s | | | | | |
| **D19K** | **Kuna River** | **4.85 262** | Pn | **Pn** | **00 09 39.7** | **+0.9** |
| D19K | | | IAML | | 00 11 22.0 | |
| | comp=E,37nm,1.3s | | | | | |
| **MDM** | **Murphy Dome** | **4.88 197** | Pn | **Pn** | **00 09 39.3** | **+0.2** |
| MDM | | | IAML | | 00 10 59.8 | |
| | comp=E,34nm,0.8s | | | | | |
| MDM | | | IAML | | 00 11 05.9 | |
| | comp=N,28nm,0.7s | | | | | |
| **IL31** | | **4.96 190** | Pn | **Pn** | **00 09 40.8** | **+0.6** |
| **ILAR** | **Eielson Array** | **4.96 190** | Pn | **Pn** | **00 09 41.0** | **+0.7** |
| | comp=N,0.9nm,0.3s,baz=5.4,slow=14,SNR=31 | | | | | |
| ILAR | | | Sn | **Sn** | **00 10 36.6** | **-1.2** |
| | comp=N,2.5nm,0.3s,baz=0.9,slow=24,SNR=4.8 | | | | | |
| ILAR | | | Lg | Lg | 00 11 02.1 | |
| | comp=N,2.2nm,0.3s,baz=6.4,slow=32,SNR=6.6 | | | | | |
| | comp=N,2.9nm,0.6s | | | | | |
| **H21K** | **Melozitna Rive** | **5.00 220** | Pn | **Pn** | **00 09 41.7** | **+0.9** |
| H21K | | | IAML | | 00 11 15.4 | |
| | comp=E,28nm,0.9s | | | | | |
| **E19K** | **Redstone River** | **5.01 250** | Pn | **Pn** | **00 09 41.2** | **+0.3** |
| E19K | | | IAML | | 00 11 24.8 | |
| | comp=E,31nm,0.9s | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.01 146** | Pn | **Pn** | **00 09 41.0** | **+0.1** |
| I29M | | | IAML | | 00 10 41.6 | |
| | comp=E,24nm,0.7s | | | | | |
| I29M | | | IAML | | 00 10 56.7 | |
| | comp=N,29nm,1.1s | | | | | |
| **J25K** | **Salcha River,** | **5.07 182** | Pn | **Pn** | **00 09 41.8** | **0.0** |
| J25K | | | IAML | | 00 11 12.3 | |
| | comp=E,24nm,0.8s | | | | | |
| **EGAK** | **Eagle** | **5.12 161** | Pn | **Pn** | **00 09 42.6** | **+0.3** |
| EGAK | | | IAML | | 00 10 44.4 | |
| | comp=E,23nm,0.9s | | | | | |
| EGAK | | | IAML | | 00 11 18.7 | |
| | comp=E,23nm,0.9s | | | | | |
| **CCB** | **Clear Creek Bu** | **5.15 194** | Pn | **Pn** | **00 09 43.1** | **+0.4** |
| **MLY** | **Manley** | **5.15 208** | Pn | **Pn** | **00 09 43.5** | **+0.6** |
| **C19K** | **Lookout Ridge** | **5.20 271** | Pn | **Pn** | **00 09 44.3** | **+0.9** |
| C19K | | | IAML | | 00 11 38.7 | |
| | comp=N,30nm,1.3s | | | | | |
| C19K | | | IAML | | 00 11 45.6 | |
| | comp=E,19nm,1.2s | | | | | |
| **J26L** | **Joseph Creek** | **5.21 173** | Pn | **Pn** | **00 09 44.1** | **+0.5** |
| J26L | | | IAML | | 00 10 48.2 | |
| | comp=E,20nm,0.6s | | | | | |
| J26L | | | IAML | | 00 10 51.8 | |
| | comp=N,20nm,0.7s | | | | | |
| **HDA** | **Harding Lake** | **5.33 189** | Pn | **Pn** | **00 09 45.9** | **+0.7** |
| HDA | | | IAML | | 00 11 21.6 | |
| | comp=N,20nm,0.9s | | | | | |
| **NEA2** | **Nenana** | **5.33 199** | Pn | **Pn** | **00 09 45.0** | **-0.3** |
| NEA2 | | | IAML | | 00 10 49.5 | |
| | comp=N,18nm,0.5s | | | | | |
| **WRH** | **Wood River Hil** | **5.35 195** | Pn | **Pn** | **00 09 46.3** | **+0.8** |
| WRH | | | IAML | | 00 11 17.8 | |
| | comp=N,20nm,1.1s | | | | | |
| WRH | | | IAML | | 00 11 18.0 | |
| | comp=E,19nm,1.0s | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.54 245** | Pn | **Pn** | **00 09 49.2** | **+1.1** |
| **I30M** | **Mount Dempster** | **5.54 139** | Pn | **Pn** | **00 09 49.3** | **+1.0** |
| **SCRK** | **Sand Creek** | **5.72 176** | Pn | **Pn** | **00 09 51.9** | **+1.2** |
| **K27K** | **Chicken** | **5.76 167** | Pn | **Pn** | **00 09 51.5** | **+0.2** |
| **G19K** | **Purcell Mounta** | **5.77 238** | Pn | **Pn** | **00 09 51.6** | **+0.3** |
| **BWN** | **Browne** | **5.78 200** | Pn | **Pn** | **00 09 50.1** | **-1.4** |
| **J29N** | **Klondike Camp** | **5.85 150** | Pn | **Pn** | **00 09 54.1** | **+1.6** |
| **C18K** | **Utukok River** | **5.88 268** | Pn | **Pn** | **00 09 53.4** | **+0.6** |
| **RIDG** | **Independent Ri** | **5.94 179** | Pn | **Pn** | **00 09 54.8** | **+1.0** |
| **DAWY** | **Dawson** | **6.03 156** | Pn | **Pn** | **00 09 55.3** | **+0.5** |
| **H19K** | **Roundabout Mou** | **6.03 232** | Pn | **Pn** | **00 09 55.7** | **+0.8** |
| **DOT** | **Dot Lake** | **6.04 176** | | **Pn** | **00 09 56.3** | **+1.2** |
| **BPAW** | **Bear Paw Mtn.** | **6.06 206** | Pn | **Pn** | **00 09 55.5** | **+0.3** |
| **J30M** | **Hart River** | **6.11 142** | Pn | **Pn** | **00 09 56.5** | **+0.4** |
| **I20K** | **Naaghedeneel** | **6.11 222** | Pn | **Pn** | **00 09 57.5** | **+1.5** |
| **MCK** | **McKinley** | **6.15 197** | | **Pn** | **00 09 57.7** | **+1.1** |
| **E18K** | **Tukpahlearik C** | **6.15 256** | Pn | **Pn** | **00 09 57.5** | **+1.0** |
| **F18K** | **Selawik** | **6.28 248** | | **Pn** | **00 09 59.5** | **+1.3** |
| **G18K** | **Tagagawik** | **6.41 241** | Pn | **Pn** | **00 10 01.3** | **+1.2** |
| **RND** | **Reindeer** | **6.46 196** | Pn | **Pn** | **00 10 02.9** | **+2.0** |
| **K29M** | **Barlow Dome** | **6.53 150** | Pn | **Pn** | **00 10 02.8** | **+0.9** |
| **J20K** | **Nowinta River** | **6.57 218** | Pn | **Pn** | **00 10 02.5** | **+0.2** |
| **C17K** | **DeLong Mountai** | **6.62 268** | | **Pn** | **00 10 03.2** | **+0.1** |
| **DHY** | **Denali Highway** | **6.68 189** | Pn | **Pn** | **00 10 05.6** | **+1.7** |
| **RDOG** | **Red Dog Mine** | **6.68 265** | Pn | **Pn** | **00 10 03.8** | **+0.1** |
| **PAX** | **Paxson** | **6.72 182** | | **Pn** | **00 10 06.2** | **+1.8** |
| **E17K** | **Hotham Inlet** | **6.74 256** | | **Pn** | **00 10 04.9** | **+0.4** |
| **BCAR** | **Beaver Creek A** | **6.74 168** | Pn | **Pn** | **00 10 05.1** | **+0.5** |
| **L27K** | **Beaver Creek,** | **6.74 168** | Pn | **Pn** | **00 10 06.1** | **+1.5** |
| **H18K** | **Honhosa River** | **6.85 235** | Pn | **Pn** | **00 10 06.3** | **+0.3** |
| **D17K** | **Noatak River** | **6.88 262** | | **Pn** | **00 10 06.6** | **+0.1** |
| **A36M** | **Sachs Harbour** | **6.89 61** | Pn | **Pn** | **00 10 06.7** | **+0.1** |
| **F17K** | **Baldwin Pennin** | **6.89 250** | Pn | **Pn** | **00 10 07.4** | **+0.8** |
| **WAT1** | **Susitna Watana** | **7.00 194** | | **Pn** | **00 10 10.0** | **+1.7** |
| **WAT7** | **Susitna Watana** | **7.03 195** | | **Pn** | **00 10 10.1** | **+1.4** |
| **J19K** | **Poorman** | **7.06 222** | Pn | **Pn** | **00 10 09.2** | **+0.3** |
| **K20K** | **Telida** | **7.29 214** | Pn | **Pn** | **00 10 13.5** | **+1.4** |
| **G17K** | **Kiwalik Mounta** | **7.29 243** | | **Pn** | **00 10 13.1** | **+1.0** |
| **M27K** | **Edge Creek, AK** | **7.43 169** | Pn | **Pn** | **00 10 15.8** | **+1.5** |
| **C16K** | **Lisburne Hills** | **7.45 269** | Pn | **Pn** | **00 10 14.2** | **-0.1** |
| **H17K** | **Granite Mounta** | **7.46 238** | Pn | **Pn** | **00 10 14.9** | **+0.5** |
| **M29M** | **Somme Creek** | **7.70 157** | Pn | **Pn** | **00 10 18.5** | **+0.6** |
| **J18K** | **Innoko River** | **7.76 223** | Pn | **Pn** | **00 10 18.4** | **-0.3** |
| **G16K** | **Koyuk River** | **7.89 246** | | **Pn** | **00 10 21.1** | **+0.7** |
| **SCM** | **Sheep Creek Mo** | **7.91 188** | Pn | **Pn** | **00 10 22.1** | **+1.4** |
| **SML** | **Sawmill** | **8.00 192** | Pn | **Pn** | **00 10 23.2** | **+1.3** |
| **YUK2** | **White River** | **8.08 166** | | **Pn** | **00 10 25.6** | **+2.6** |
| **J17K** | **VABM Dome** | **8.41 229** | Pn | **Pn** | **00 10 27.4** | **-0.1** |
| **F15K** | **North Star Dit** | **8.45 252** | Pn | **Pn** | **00 10 26.6** | **-1.4** |
| **I17K** | **Unalakleet** | **8.47 235** | Pn | **Pn** | **00 10 28.9** | **+0.7** |
| **M20K** | **Styx River** | **8.48 207** | Pn | **Pn** | **00 10 29.6** | **+1.0** |
| **M19K** | **Big River Lodg** | **8.68 211** | Pn | **Pn** | **00 10 33.9** | **+2.7** |
| **FARO** | **Faro, Yukon** | **8.82 142** | Pn | **Pn** | **00 10 33.8** | **+0.7** |
| **N30M** | **Aishikik Lake** | **8.84 155** | Pn | **Pn** | **00 10 35.5** | **+2.0** |
| **L18K** | **Granite Mounta** | **8.85 218** | Pn | **Pn** | **00 10 35.1** | **+1.6** |
| **J16K** | **Anvik River** | **8.91 232** | Pn | **Pn** | **00 10 34.8** | **+0.5** |
| **MMPY** | **Sheldon Lake,** | **8.96 135** | Pn | **Pn** | **00 10 36.8** | **+1.7** |
| **O30N** | **Meenhahl** | **9.65 153** | Pn | **Pn** | **00 10 44.8** | **+0.2** |
| **M17K** | **Holitna River** | **9.74 218** | Pn | **Pn** | **00 10 48.0** | **+2.3** |
| **K15K** | **Wolf Creek Mou** | **9.97 230** | Pn | **Pn** | **00 10 50.1** | **+1.3** |
| **J14K** | **Nanvaranak Lak** | **10.17 236** | Pn | **Pn** | **00 10 52.9** | **+1.4** |
| **YKA** | **Yellowknife Ar** | **14.10 106** | Pn | **Pn** | **00 11 42.0** | **-3.3** |
| **YKA** | **Yellowknife Ar** | **14.10 106** | Pn | **Pn** | **00 11 42.6** | **-2.7** |
| | comp=E,0.2nm,0.3s,baz=316,slow=13,SNR=4.9 | | | | | |
| YKA | | | Sn | Sn | 00 14 10.5 | -11 |
| | comp=E,0.2nm,0.3s,baz=188,slow=18,SNR=6.2 | | | | | |
| | comp=E,0.6nm,0.6s | | | | | |
| **ULM** | **Lac du Bonnet** | **30.08 105** | P | **P** | **00 14 34.9** | **0.0** |
| | comp=E,0.8nm,0.5s,baz=349,slow=5.2,SNR=1.8 | | | | | |
| | comp=E,0.8nm,0.5s | | | | | |
| **PDAR** | **Pinedale Array** | **32.46 127** | P | **P** | **00 14 58.1** | **+1.9** |
| | comp=E,0.6nm,0.7s,baz=6.8,slow=5.2,SNR=6.6 | | | | | |
| | comp=E,0.6nm,0.7s | | | | | |

*NEIC **22** 00:08:33.3±3.0, 19°.5S±0°.2×175°.7W±0°.1, h208km±9km, mb4.5/23, Error ellipse: s-maj=23.0km s-min=15.8km az=175.0*
*NOU **22** 00:08:35.2, 19°.96S×175°.50W, h214km, mb4.5/11, Tonga Islands*
*IDC **22** 00:08:55.9±11.0, 20°.23S×176°.68W, h385km±97km, mb3.7/7, mbtmp4.5/8, Error ellipse: s-maj=71.9km s-min=22.0km az=51.0*

**ISC 22 00:08:32.4±0.7, 19°.6S±0°.1×175°.7W±0°.09, h200km, n52, σ1s52/53, mb4.3/16, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **5.54** | **86** | P | **Pn** | **00 09 54.1** | **+0.3** |
| **NIUE** | **Niue** | **5.54** | **86** | Pn | **Pn** | **00 09 54.1** | **+0.3** |
| **MSVF** | **Nonsavu** | **6.13** | **286** | P | Pn | 00 10 09.4 | +8.0 |
| **AFI** | **Afiamalu** | **6.79** | **35** | Pn | **Pn** | **00 10 08.4** | **-1.7** |
| **PINNC** | **Pines Island,** | **15.95** | **256** | | **Pn** | **00 12 09.1** | **+2.9** |
| PINNC | | | | IAmb | IAmb | 00 12 11.0 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **LIFNC** | **LIFOU** | **16.00** | **263** | P | **P** | **00 12 08.0** | **+1.6** |
| LIFNC | | | | IAmb | IAmb | 00 12 23.6 | |
| | comp=Z,47nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.81** | **258** | P | **Pn** | **00 12 18.9** | **+2.3** |
| **DZM** | **Mont Dzumac** | **16.81** | **258** | P | **Pn** | **00 12 19.0** | **+2.4** |
| **DZM** | **Mont Dzumac** | **16.81** | **258** | P | **Pn** | **00 12 18.7** | **+2.0** |
| | comp=Z,48nm,0.7s,baz=81,slow=18,SNR=35 | | | | | | |
| **NOUC** | **Port Laguerre** | **16.95** | **258** | P | **Pn** | **00 12 20.2** | **+2.1** |
| **KUZ** | **Kuaotunu** | **18.68** | **202** | P | **P** | **00 12 34.2** | **-1.3** |
| **URZ** | **Urewera** | **19.64** | **197** | P | **P** | **00 12 43.6** | **-2.2** |
| **URZ** | **Urewera** | **19.64** | **197** | P | **P** | **00 12 43.2** | **-2.6** |
| | comp=Z,11nm,0.4s,baz=356,slow=4.0,SNR=20 | | | | | | |
| URZ | | | | S | S | 00 16 04.3 | -12 |
| | comp=Z,11nm,0.9s,baz=56,slow=22,SNR=1.8 | | | | | | |
| **TOZ** | **Tahuroa Road** | **19.65** | **201** | P | **P** | **00 12 45.3** | **-0.6** |
| TOZ | | | | IAmb | IAmb | 00 12 53.8 | |
| | comp=Z,63nm,1.5s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.01** | **197** | P | **P** | **00 12 47.5** | **-2.4** |
| **BKZ** | **Black Stump Fm** | **20.66** | **197** | P | **P** | **00 12 55.8** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **20.66** | **197** | P | **P** | **00 12 53.0** | **-3.8** |
| BKZ | | | | IAmb | IAmb | 00 13 14.2 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **QRZ** | **Quartz Range** | **23.45** | **203** | P | **P** | **00 13 23.5** | **-0.2** |
| **QRZ** | **Quartz Range** | **23.45** | **203** | P | **P** | **00 13 22.8** | **-0.9** |
| **KHZ** | **Kahutara** | **24.52** | **199** | P | **P** | **00 13 32.3** | **-1.1** |
| **RPZ** | **Rata Peaks** | **26.51** | **202** | P | **P** | **00 13 51.1** | **-0.2** |
| **RPZ** | **Rata Peaks** | **26.51** | **202** | P | **P** | **00 13 52.3** | **+1.0** |
| **RPZ** | **Rata Peaks** | **26.51** | **202** | P | **P** | **00 13 52.3** | **+1.0** |
| | comp=Z,15nm,0.7s,baz=1.9,slow=2.2,SNR=9.2 | | | | | | |
| | comp=Z,15nm,0.7s | | | | | | |
| **JCZ** | **Jackson Bay** | **27.65** | **204** | P | **P** | **00 14 00.3** | **-1.3** |
| **EIDS** | **Eidsvold** | **31.12** | **253** | P | **P** | **00 14 31.8** | **-0.6** |
| EIDS | | | | IAmb | IAmb | 00 14 54.5 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **COEN** | **Coen** | **39.63** | **272** | P | **P** | **00 15 45.4** | **+0.5** |
| COEN | | | | IAmb | IAmb | 00 15 46.1 | |
| | comp=Z,9.4nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **40.08** | **243** | P | **P** | **00 15 46.1** | **-2.4** |
| | comp=Z,1.9nm,0.7s,baz=114,slow=21,SNR=2.3 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **44.84** | **243** | P | **P** | **00 16 24.9** | **-1.9** |
| BBOO | | | | IAmb | IAmb | 00 16 32.8 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **46.62** | **261** | P | **P** | **00 16 39.4** | **-1.5** |
| **AS31** | **Alice Springs** | **46.78** | **256** | P | **P** | **00 16 42.3** | **+0.1** |
| **ASAR** | **Alice Springs** | **46.78** | **256** | P | **P** | **00 16 41.4** | **-0.7** |
| | comp=Z,5.9nm,0.6s,baz=96,slow=8.2,SNR=48 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 18 11.9** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=108,slow=4.3,SNR=4.8 | | | | | | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **46.80** | **261** | P | **P** | **00 16 40.7** | **-1.7** |
| WB2 | | | | IAmb | IAmb | 00 16 43.8 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **46.80** | **261** | P | **P** | **00 16 39.9** | **-2.5** |
| WRAB | | | | IAmb | IAmb | 00 16 43.1 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.81** | **261** | P | **P** | **00 16 41.3** | **-1.1** |
| **WRA** | **Warramunga Arr** | **46.81** | **261** | P | **P** | **00 16 41.2** | **-1.3** |
| | comp=Z,4.8nm,0.5s,baz=98,slow=7.7,SNR=112 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 18 12.2** | **-0.1** |
| | comp=Z,0.4nm,0.6s,baz=98,slow=5.5,SNR=1.8 | | | | | | |
| | comp=Z,4.8nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **51.26** | **269** | P | **P** | **00 17 15.3** | **-0.9** |
| MTN | | | | IAmb | IAmb | 00 17 17.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **52.82** | **265** | P | **P** | **00 17 27.2** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 00 17 29.3 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.23** | **261** | P | **P** | **00 17 44.9** | **-0.2** |
| **SBA** | **Scott Base** | **58.96** | **184** | P | **P** | **00 18 12.0** | **+1.7** |
| **PSA00** | **Pilbara Seismi** | **59.92** | **256** | P | **P** | **00 18 16.3** | **-1.5** |
| PSA00 | | | | IAmb | IAmb | 00 18 28.5 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **MBWA** | **Marble Bar** | **60.11** | **256** | P | **P** | **00 18 17.5** | **-1.6** |
| MBWA | | | | IAmb | IAmb | 00 18 18.7 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.52** | **180** | P | **P** | **00 19 25.5** | **+0.3** |
| **QSPA** | **South Pole Qui** | **70.52** | **180** | P | **P** | **00 19 25.5** | **+0.3** |
| | comp=Z,0.9nm,0.7s,baz=83,slow=0.6,SNR=9.4 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | | **88.89** | **178** | P | **P** | **00 21 03.5** | **-0.2** |
| | comp=Z,0.7nm,0.6s,baz=305,slow=9.7,SNR=2.1 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.78** | **289** | P | **P** | **00 21 18.9** | **+1.0** |
| | comp=Z,0.8nm,0.3s,baz=118,slow=3.5,SNR=6.1 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **BR131** | **Keskin Array S** | **147.70** | **315** | | **PKPbc** | **00 27 54.8** | **+1.0** |
| **BRTR** | **Keskin Array B** | **147.70** | **315** | PKPbc | **PKPbc** | **00 27 54.4** | **+0.6** |
| **BRTR** | **Keskin Array B** | **147.70** | **315** | PKPbc | **PKPbc** | **00 27 54.7** | **+1.0** |
| | comp=Z,0.8nm,0.5s,baz=136,slow=4.2,SNR=9.5 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **149.12** | **302** | PKPbc | **PKPbc** | **00 27 59.0** | **+1.4** |
| | comp=Z,3.6nm,0.5s,baz=73,slow=7.1,SNR=29 | | | | | | |
| **CSS** | **Mathiatis** | **150.06** | **307** | PKPbc | **PKPbc** | **00 28 00.5** | **+0.9** |
| **ELL** | **Elmali** | **151.74** | **313** | PKPbc | **PKPbc** | **00 28 04.2** | **+0.6** |
| **FUORN** | **Ofenpass-Fuorn** | **152.55** | **351** | PKPbc | **PKiKP** | **00 28 06.7** | **+1.1** |

*IDC **22** 00:46:13.0±1.8, 9°.81S×112°.47E, h0km, mb3.6/4, mbtmp3.7/5, ML3.7/1, Error ellipse: s-maj=58.4km s-min=22.9km az=48.0*
*DJA **22** 00:46:21.3±1.7, 10°S±9°×11°3E±°, h30km±24km, M4.0/11, MLv4.0/11*

**ISC 22 00:46:19.2±1.4, 9°.7S±0°.1×112°.71E±0°.08, h35km, n18, σ1s11/13, mb3.7/4, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAGI** | **Jajag, Banyuwa** | **1.90** | **49** | P | **Pn** | **00 46 48.5** | **-0.7** |
| JAGI | | | | S | **Sn** | **00 47 11.6** | **-0.3** |
| **PWJI** | **Pagerwojo** | **1.92** | **332** | P | **Pn** | **00 46 50.4** | **+0.9** |
| PWJI | | | | S | **Sn** | **00 47 13.4** | **+0.9** |
| **NGJI** | **Ngawi** | **2.66** | **332** | P | Pn | 00 47 02.4 | +2.8 |
| **DNP** | **Denpasar** | **2.68** | **67** | P | **Pn** | **00 47 01.2** | **+1.3** |
| **GRJI** | **Gresik** | **2.81** | **355** | P | **Pn** | **00 47 02.8** | **+1.1** |
| **UGM** | **Wanagama** | **2.82** | **310** | P | Pn | 00 47 03.7 | +1.8 |
| **SRBI** | **Singaraja** | **2.97** | **57** | P | **Pn** | **00 47 05.0** | **+1.2** |
| **SMRI** | **Semarang** | **3.49** | **320** | P | Pn | 00 47 13.4 | +2.4 |
| **TWSI** | **Taliwang, Sumb** | **4.24** | **77** | P | **Pn** | **00 47 22.6** | **+1.3** |
| **CMJI** | **Cimerak** | **4.64** | **294** | P | Pn | 00 47 28.9 | +2.1 |
| **KAPI** | **Kappang** | **8.41** | **57** | Pn | **Pn** | **00 48 19.9** | **+1.2** |
| | 0.9nm,0.3s,baz=174,slow=8.7,SNR=1.9 | | | | | | |
| | 2.1nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.21** | **118** | P | **P** | **00 51 23.3** | **0.0** |
| | 0.2nm,0.4s,baz=291,slow=11,SNR=7.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **24.53** | **127** | P | **P** | **00 51 36.0** | **+0.3** |
| | 1.1nm,0.7s,baz=303,slow=9.3,SNR=9.9 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **H08S2** | **Diego Garcia H** | **39.79** | **270** | T | T | 01 36 50.2 | |
| | baz=95 | | | | | | |
| **H08S3** | **Diego Garcia H** | **39.80** | **270** | T | T | 01 36 42.6 | |
| | baz=95 | | | | | | |
| **H08S1** | **Diego Garcia H** | **39.81** | **270** | T | T | 01 36 42.4 | |
| | baz=95 | | | | | | |
| **SONM** | **Songino Array** | **57.59** | **355** | P | **P** | **00 56 04.1** | **-1.5** |
| | 0.6nm,0.5s,baz=170,slow=7.9,SNR=3.1 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.48** | **337** | P | **P** | **00 56 38.6** | **-0.5** |
| | 0.7nm,0.4s,baz=147,slow=7.7,SNR=11 | | | | | | |
| | 0.7nm,0.4s | | | | | | |

*IDC **22** 00:46:49.0±3.5, 17°.98S×178°.18W, h484km±37km, mb3.5/10, mbtmp4.3/11, Error ellipse: s-maj=19.5km s-min=17.9km az=152.0*
*NEIC **22** 00:46:51.4±1.6, 17°.9S±0°.1×178°.2W±0°.1, h512km±4km, mb4.2/45, Error ellipse: s-maj=16.6km s-min=15.3km az=113.0*

**ISC 22 00:46:50.4±0.4, 17°.94S±0°.09×178°.27W±0°.08, h500km, n84, σ0s97/87, mb4.2/33, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.51** | **273** | P | P | 00 48 10.4 | +5.3 |
| **AFI** | **Afiamalu** | **7.42** | **58** | P | **P** | **00 48 40.1** | **-0.9** |
| **NIUE** | **Niue** | **8.00** | **99** | P | **P** | **00 48 46.7** | **-0.1** |
| **FUNA** | **Funafuti** | **9.68** | **345** | P | **P** | **00 49 06.2** | **+1.8** |
| **PINNC** | **Pines Island,** | **14.19** | **248** | P | **P** | **00 49 53.9** | **+1.9** |
| **DZM** | **Mont Dzumac** | **14.94** | **252** | P | **P** | **00 49 59.6** | **-0.5** |
| | 4.3nm,0.8s,baz=283,slow=15,SNR=1.8 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.68** | **258** | P | **P** | **00 50 18.3** | **+0.2** |
| **URZ** | **Urewera** | **20.65** | **190** | P | **P** | **00 50 53.1** | **-1.6** |
| | 5.4nm,0.4s,baz=357,slow=2.4,SNR=6.9 | | | | | | |
| | 5.4nm,0.4s | | | | | | |
| **LBZ** | **Lake Benmore** | **28.10** | **198** | P | **P** | **00 51 59.9** | **-1.1** |
| **EIDS** | **Eidsvold** | **29.38** | **250** | P | **P** | **00 52 12.6** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 00 52 14.5 | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **30.04** | **240** | P | **P** | **00 52 19.1** | **+0.9** |
| **CTAO** | **Charters Tower** | **33.57** | **261** | P | **P** | **00 52 49.0** | **+0.6** |
| **COEN** | **Coen** | **37.24** | **270** | P | **P** | **00 53 20.0** | **+0.9** |
| COEN | | | | IAmb | IAmb | 00 53 21.2 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.25**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **J16K** | **Anvik River** | **82.13** | **8** | P | **P** | **00 58 17.1** | **-0.6** |
| J16K | | | | IAmb | IAmb | 00 58 32.2 | | |
| | comp=Z,9.9nm,1.4s | | | | | | | |
| **SUA** | **Susitna One** | **82.13** | **13** | P | **P** | **00 58 16.8** | **-1.1** |
| SUA | | | | IAmb | IAmb | 00 58 48.2 | | |
| | comp=Z,16nm,1.5s | | | | | | | |
| **J17K** | **VABM Dome** | **82.45** | **9** | P | **P** | **00 58 19.0** | **-0.3** |
| J17K | | | | IAmb | IAmb | 00 58 25.5 | | |
| | comp=Z,8.1nm,1.4s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.81** | **14** | P | **P** | **00 58 20.4** | **-1.0** |
| GHO | | | | IAmb | IAmb | 00 59 01.7 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **J18K** | **Innoko River** | **82.87** | **10** | P | **P** | **00 58 21.1** | **-0.4** |
| **K20K** | **Telida** | **83.21** | **11** | P | **P** | **00 58 22.4** | **-0.8** |
| **SCM** | **Sheep Creek Mo** | **83.22** | **14** | P | **P** | **00 58 22.3** | **-1.1** |
| **J19K** | **Poorman** | **83.54** | **10** | P | **P** | **00 58 24.8** | **-0.1** |
| **N25K** | **Chitina, Valde** | **83.69** | **15** | P | **P** | **00 58 24.5** | **-1.3** |
| **RND** | **Reindeer** | **84.27** | **13** | P | **P** | **00 58 28.2** | **-0.4** |
| RND | | | | IAmb | IAmb | 00 58 28.6 | | |
| | comp=Z,4.1nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.89** | **13** | P | **P** | **00 58 35.0** | **-1.4** |
| | comp=Z,0.5nm,0.4s,baz=220,slow=5.2,SNR=12 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **58** | P | **P** | **00 58 38.1** | **+0.8** |
| | comp=Z,1.5nm,0.8s,baz=219,slow=6.4,SNR=14 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.28** | **43** | P | **P** | **00 58 43.5** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=230,slow=3.7,SNR=5.5 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.02** | **290** | P | **P** | **00 58 53.0** | **+0.9** |
| | comp=Z,0.6nm,0.3s,baz=124,slow=2.8,SNR=5.6 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **SNAA** | **Sanae** | **90.56** | **179** | P | **P** | **00 58 57.7** | **-0.6** |
| | comp=Z,1.0nm,0.7s,baz=192,slow=8.2,SNR=2.5 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.25** | **314** | PKiKP | **PKiKP** | **01 04 22.3** | **-0.9** |
| | comp=Z,0.2nm,0.5s,baz=119,slow=0.6,SNR=2.8 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **111.99** | **318** | PKiKP | **PKiKP** | **01 04 27.3** | **-0.9** |
| | comp=Z,0.2nm,0.2s,baz=116,slow=2.2,SNR=1.8 | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.95** | **321** | PKP | **PKPdf** | **01 04 37.2** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=107,slow=1.6,SNR=2.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.37** | **350** | PKP | **PKPdf** | **01 04 54.5** | **-0.9** |
| | comp=Z,5.5nm,1.0s,baz=2.7,slow=1.9,SNR=4.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **133.25** | **344** | PKhKP | PKPpre | 01 05 00.5 | | |
| | comp=Z,1.8nm,0.9s,baz=46,slow=6.0,SNR=1.6 | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **144.69** | **332** | | **PKPdf** | **01 05 30.4** | **+0.5** |
| **BR131** | **Keskin Array S** | **144.90** | **315** | PKPdf | **PKPdf** | **01 05 30.9** | **+0.3** |
| **BRTR** | **Keskin Array B** | **144.91** | **315** | PKPdf | **PKPdf** | **01 05 31.0** | **+0.5** |
| | comp=Z,1.3nm,0.5s,baz=122,slow=4.5,SNR=16 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.27** | **303** | PKPbc | **PKPbc** | **01 05 35.7** | **+0.6** |
| | comp=Z,3.5nm,0.4s,baz=70,slow=7.2,SNR=32 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.68** | **345** | PKPbc | **PKPbc** | **01 05 38.2** | **-0.1** |
| | comp=Z,0.9nm,0.5s,baz=204,slow=2.9,SNR=6.4 | | | | | | | |
| **CONA** | **Conrad Observa** | **147.93** | **342** | *i* PKiKP | **PKPbc** | **01 05 39.1** | **+0.1** |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.01** | **341** | *i* PKiKP | **PKPbc** | **01 05 39.4** | **+0.2** |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **MOA** | **Molln** | **148.45** | **344** | *i* PKP | **PKPbc** | **01 05 39.9** | **-0.4** |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.25** | **345** | *i* PKP | **PKPbc** | **01 05 41.7** | **-0.6** |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **SOKA** | **Soboth** | **149.30** | **342** | *e*PKP | **PKPbc** | **01 05 41.4** | **-1.1** |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.40** | **344** | *e*PKP | **PKPbc** | **01 05 41.7** | **-1.1** |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.64** | **347** | *i* PKiKP | **PKPbc** | **01 05 43.1** | **-0.3** |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **149.68** | **347** | *e*PKP | **PKPbc** | **01 05 42.6** | **-0.8** |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.92** | **345** | *e*PKP | **PKPbc** | **01 05 43.0** | **-0.9** |
| | comp=Z,0.4nm,0.1s | | | | | | | |
| **DAVA** | **Damuels** | **149.97** | **349** | *i* PKiKP | **PKPbc** | **01 05 44.2** | **+0.1** |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.24** | **180** | PKP | **PKPdf** | **01 06 02.2** | **-1.2** |
| | comp=Z,0.8nm,1.0s,baz=127,slow=1.5,SNR=3.1 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **01 07 42.3** | **-0.4** |
| | comp=Z,0.4nm,1.0s,baz=206,slow=0.6,SNR=2.3 | | | | | | | |

**IDC 22 01:27:33.2±8.9, 19°.42S×176°.17W, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=387.3km s-min=42.7km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **46.45** | **255** | P | P | 01 36 02.3 | +0.1 |
| | 0.6nm,0.6s,baz=93,slow=8.7,SNR=6.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.46** | **261** | P | P | 01 36 02.0 | -0.4 |
| | 0.3nm,0.8s,baz=98,slow=6.9,SNR=7.2 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **86.90** | **12** | P | P | 01 40 19.5 | 0.0 |
| | 0.3nm,0.6s,baz=198,slow=5.7,SNR=2.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*IDC 22 01:45:26.1±1.3, 15°.73S×168°.23E, h0km, mb4.1/5, mbtmp4.1/6, ML3.9/1, Error ellipse: s-maj=34.2km s-min=27.4km az=122.0*
*NOU 22 01:45:29.8, 15°.92S×168°.22E, h8km, MLv4.6/9, Vanuatu Islands*
**ISC 22 01:45:27.5±1.1, 15°.81S±0°.09×168°.3E±0°.2, h10km, n13, σ0s74/14, mb4.1/6, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **1.91** | **183** | P | **Pb** | **01 46 01.8** | **-0.7** |
| **RTV** | **Rentapao** | **1.98** | **176** | P | **Pn** | **01 46 01.3** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **6.06** | **218** | P | **Pn** | **01 46 57.9** | **+0.7** |
| **YATNC** | **Mamie plateau,** | **6.36** | **192** | P | **Pn** | **01 47 02.1** | **+0.8** |
| **DZM** | **Mont Dzumac** | **6.47** | **195** | P | **Pn** | **01 47 03.0** | **0.0** |
| **DZM** | **Mont Dzumac** | **6.47** | **195** | Pn | **Pn** | **01 47 02.8** | **-0.1** |
| | 2.3nm,0.3s,baz=98,slow=19,SNR=14 | | | | | | |
| DZM | | | | Sn | **Sn** | **01 48 16.6** | **-0.3** |
| | baz=334,slow=18 | | | | | | |
| | 9.0nm,0.5s | | | | | | |
| **NOUC** | **Port Laguerre** | **6.54** | **196** | P | **Pn** | **01 47 05.4** | **+1.6** |
| **CTA** | **Charters Tower** | **21.38** | **255** | P | **P** | **01 50 14.6** | **-0.8** |
| | 0.3nm,0.8s,baz=81,slow=10,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.53** | **258** | P | **P** | **01 51 58.6** | **-0.3** |
| | 0.6nm,0.8s,baz=89,slow=8.6,SNR=8.2 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **33.22** | **251** | P | **P** | **01 52 05.5** | **+0.5** |
| | 2.5nm,0.7s,baz=77,slow=9.3,SNR=19 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.23** | **180** | P | **P** | **01 57 05.4** | **+0.8** |
| | 3.6nm,0.8s,baz=0.0,slow=19,SNR=12 | | | | | | |
| | 3.6nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **83.94** | **323** | P | **P** | **01 57 57.6** | **-0.3** |
| | 0.6nm,0.5s,baz=138,slow=3.8,SNR=2.0 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **87.25** | **18** | P | **P** | **01 58 13.8** | **0.0** |
| | 1.6nm,1.0s,baz=234,slow=5.8,SNR=9.0 | | | | | | |
| | 1.6nm,1.0s | | | | | | |

**IDC 22 01:53:34.1±36.0, 18°.79S×177°.33W, h405km±312km, mb3.4/2, mbtmp4.1/2, Error ellipse: s-maj=265.3km s-min=115.4km az=120.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.49** | **260** | P | P | 02 01 14.7 | -0.7 |
| | 0.7nm,0.4s,baz=97,slow=6.8,SNR=19 | | | | | | |
| WRA | | | | PcP | PcP | 02 02 45.5 | -1.0 |
| | 0.1nm,0.3s,baz=95,slow=3.6,SNR=1.4 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.55** | **255** | P | P | 02 01 16.3 | +0.4 |
| | 3.8nm,0.6s,baz=88,slow=8.5,SNR=42 | | | | | | |
| | 3.8nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **146.13** | **315** | PKPbc | PKPbc | 02 12 28.1 | +0.1 |
| | 0.3nm,0.6s,baz=79,slow=3.0,SNR=4.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.48** | **302** | PKPbc | PKPbc | 02 12 31.0 | -0.8 |
| | 0.3nm,0.3s,baz=64,slow=9.8,SNR=2.3 | | | | | | |
| **GERES** | **GERESS Array B** | **148.72** | **346** | PKPbc | PKPbc | 02 12 33.5 | -1.0 |
| | 0.2nm,0.3s,baz=358,slow=8.8,SNR=2.1 | | | | | | |

**IDC 22 01:53:51.6±7.2, 4°.74S×145°.70E, h108km±75km, mb3.3/3, mbtmp3.7/5, ML3.8/1, Error ellipse: s-maj=57.6km s-min=31.7km az=142.0, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.86** | **163** | P | Pn | 01 55 02.3 | -0.2 |
| | 13nm,0.8s,baz=310,slow=13,SNR=1.9 | | | | | | |
| PMG | | | | S | Sn | 01 55 58.6 | +0.9 |
| | 10nm,0.4s,baz=345,slow=20,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.73** | **215** | P | P | 01 58 02.4 | +0.3 |
| | 0.3nm,0.3s,baz=35,slow=11,SNR=30 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **21.99** | **210** | P | P | 01 58 36.5 | -0.7 |
| | 0.7nm,0.4s,baz=40,slow=11,SNR=6.6 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **75.71** | **321** | P | P | 02 05 26.5 | +1.2 |
| | 0.2nm,0.4s,baz=101,slow=7.6,SNR=1.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **84.84** | **23** | P | P | 02 06 13.3 | -0.5 |
| | 1.1nm,0.8s,baz=248,slow=5.2,SNR=12 | | | | | | |
| | 1.1nm,0.8s | | | | | | |

*IDC 22 01:57:40.0±1.0, 15°.87S×168°.20E, h0km, mb4.1/7, mbtmp4.1/8, ML3.9/1, Error ellipse: s-maj=33.9km s-min=22.0km az=119.0*
**ISC 22 01:57:41.7±1.0, 15°.9S±0°.1×168°.3E±0°.2, h10km, n9, σ1s16/9, mb4.1/7, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **6.38** | **196** | Pn | **Pn** | **01 59 16.1** | **+0.3** |
| | 2.7nm,0.3s,baz=16,slow=14,SNR=12 | | | | | | |
| DZM | | | | Sn | **Sn** | **02 00 27.8** | **-0.9** |
| | baz=316,slow=22 | | | | | | |
| | 8.6nm,0.4s | | | | | | |
| **CTA** | **Charters Tower** | **21.37** | **256** | P | **P** | **02 02 31.5** | **+2.0** |
| | 0.2nm,0.6s,baz=60,slow=9.8,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.53** | **258** | P | **P** | **02 04 11.7** | **-1.3** |
| | 0.6nm,0.7s,baz=87,slow=8.9,SNR=7.2 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **33.21** | **251** | P | **P** | **02 04 18.8** | **-0.3** |
| | 2.9nm,0.9s,baz=80,slow=9.3,SNR=14 | | | | | | |
| | 2.9nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.12** | **180** | P | **P** | **02 09 18.5** | **+0.4** |
| | 3.9nm,0.8s,baz=7.5,slow=1.4,SNR=18 | | | | | | |
| | 3.9nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **84.03** | **323** | P | **P** | **02 10 12.0** | **-0.6** |
| | 0.3nm,0.3s,baz=138,slow=6.7,SNR=4.0 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.29** | **49** | P | **P** | **02 10 29.7** | **+0.6** |
| | 0.5nm,0.4s,baz=226,slow=7.5,SNR=1.0 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **87.34** | **18** | P | **P** | **02 10 27.9** | **-0.6** |
| | 1.7nm,0.9s,baz=238,slow=6.0,SNR=8.2 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.14** | **27** | P | Pdif | 02 11 18.6 | +0.2 |
| | 0.6nm,0.9s,baz=254,slow=4.5,SNR=3.4 | | | | | | |
| | 0.6nm,0.9s | | | | | | |

*JMA 22 01:59:03.4±0.1, 39°.5N±0°.3×141°.1E±0°.4, h99km, MV3.3/34, SOUTHERN IWATE PREF*
*IDC 22 01:59:06.2±2.8, 39°.53N×140°.96E, h130km±25km, mb3.4/7, mbtmp3.7/10, Error ellipse: s-maj=27.6km s-min=16.6km az=79.0*
**ISC 22 01:59:03.3±0.8, 39°.54N±0°.04×141°.14E±0°.08, h102km±6km, n27, σ0s91/31, mb3.8/7, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOM** | **Ohasama** | **0.14** | **120** | P | **Pn** | **01 59 17.3** | **-0.2** |
| JOM | | | | S | **Sn** | **01 59 27.9** | **-0.3** |
| **JSZI** | **Iwateshizukuis** | **0.25** | **324** | *i* P | **Pn** | **01 59 17.7** | **-0.2** |
| JSZI | | | | *e*S | **Sn** | **01 59 28.5** | **-0.4** |
| **JRG** | **Rokugo** | **0.42** | **250** | P | **Pn** | **01 59 18.3** | **-0.5** |
| JRG | | | | S | **Sn** | **01 59 29.6** | **-0.7** |
| **JMK** | **Ichinoseki** | **0.59** | **174** | *i* P | **Pn** | **01 59 19.8** | **-0.2** |
| JMK | | | | S | **Sn** | **01 59 32.1** | **-0.4** |
| **JAH** | **Hinai** | **0.76** | **329** | *i* P | **Pn** | **01 59 21.1** | **-0.3** |
| **JYK** | **Kaneyama** | **0.87** | **225** | *i* P | **Pn** | **01 59 22.3** | **-0.2** |
| JYK | | | | S | **Sn** | **01 59 36.4** | **-0.6** |
| **JANG** | **Nango** | **0.88** | **19** | *i* P | **Pn** | **01 59 22.7** | **0.0** |
| JANG | | | | S | **Sn** | **01 59 36.8** | **-0.3** |
| **JIO** | **Ouri** | **1.10** | **171** | *i* P | **Pn** | **01 59 25.0** | **0.0** |
| JIO | | | | S | **Sn** | **01 59 41.0** | **-0.2** |
| **JOU** | **Okura** | **1.23** | **198** | *i* P | **Pn** | **01 59 27.0** | **+0.5** |
| JOU | | | | S | **Sn** | **01 59 44.9** | **+0.9** |
| **JTM** | **Tenmabayashi** | **1.25** | **357** | P | **Pn** | **01 59 26.7** | **+0.1** |
| JTM | | | | S | **Sn** | **01 59 44.6** | **+0.4** |
| **JIW** | **Iwasaki** | **1.36** | **321** | *i* P | **Pn** | **01 59 27.8** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **3.78** | **219** | P | **Pn** | **02 00 00.9** | **+1.3** |
| | 3.3nm,0.4s,baz=25,slow=14,SNR=21 | | | | | | |
| MJAR | | | | S | **Sn** | **02 00 41.2** | **-2.0** |
| | 1.1nm,0.3s,baz=17,slow=29,SNR=1.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.26** | **307** | P | **Pn** | **02 01 01.7** | **+1.4** |
| | 2.3nm,0.6s,baz=114,slow=14,SNR=4.6 | | | | | | |
| **KSRS** | **Korea Array** | **10.57** | **263** | P | **Pn** | **02 01 34.3** | **+2.7** |
| | 1.6nm,1.0s,baz=81,slow=15,SNR=4.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.67** | **124** | T | T | 02 35 49.0 | |
| | baz=317,slow=75,SNR=84 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.68** | **124** | T | T | 02 35 49.7 | |
| | baz=317,slow=75,SNR=128 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.69** | **124** | T | T | 02 35 50.6 | |
| | baz=317,slow=75,SNR=69 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.45** | **126** | T | T | 02 36 45.7 | |
| | baz=318,slow=76,SNR=21 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.46** | **126** | T | T | 02 36 40.2 | |
| | baz=318,slow=76,SNR=42 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.47** | **126** | T | T | 02 36 37.5 | |
| | baz=318,slow=76,SNR=23 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.10** | **310** | P | **P** | **02 06 27.7** | **-0.9** |
| | 0.9nm,0.4s,baz=79,slow=7.9,SNR=3.9 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.65** | **300** | P | **P** | **02 06 48.6** | **-0.9** |
| | 0.4nm,0.5s,baz=82,slow=11,SNR=5.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.32** | **306** | P | **P** | **02 07 02.0** | **-0.9** |
| | 1.5nm,0.5s,baz=82,slow=8.5,SNR=8.7 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **47.51** | **34** | P | **P** | **02 07 28.6** | **+0.9** |
| | 0.8nm,0.7s,baz=270,slow=5.4,SNR=10 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **59.51** | **187** | P | **P** | **02 08 55.3** | **-0.5** |
| | 0.6nm,0.6s,baz=5.8,slow=7.1,SNR=10 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **63.24** | **187** | P | **P** | **02 09 21.1** | **+0.2** |
| | 0.3nm,0.4s,baz=13,slow=13,SNR=4.4 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **71.72** | **335** | P | **P** | **02 10 12.8** | **-1.1** |
| | 1.7nm,1.0s,baz=59,slow=9.0,SNR=5.4 | | | | | | |
| | 1.7nm,1.0s | | | | | | |

*IDC 22 02:04:46.8±1.0, 27°.38N×75°.36E, h0km, mb3.5/7, mbtmp3.6/7, Error ellipse: s-maj=35.0km s-min=22.5km az=42.0*
**ISC 22 02:04:52.2±1.1, 27°.5N±0°.2×75°.4E±0°.2, h35km, n7, σ0s57/7, mb3.6/6, Northern India**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **19.98** | **14** | P | **Pn** | **02 09 22.8** | **-0.6** |
| | 0.2nm,0.5s,baz=186,slow=10,SNR=2.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.19** | **5** | P | **P** | **02 09 56.5** | **+0.8** |
| | 0.7nm,0.6s,baz=190,slow=10,SNR=5.3 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.41** | **108** | P | **P** | **02 09 58.3** | **+0.1** |
| | 1.6nm,0.3s,baz=292,slow=9.6,SNR=1.9 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **65.27** | **303** | P | **P** | **02 15 30.3** | **-0.3** |
| | 0.2nm,0.7s,baz=71,slow=7.6,SNR=2.5 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.75** | **275** | P | **P** | **02 15 59.4** | **+0.2** |
| | 0.3nm,0.6s,baz=69,slow=5.9,SNR=4.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **74.00** | **123** | P | **P** | **02 16 24.2** | **-0.3** |
| | 0.7nm,0.6s,baz=320,slow=5.6,SNR=20 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **75.97** | **126** | P | **P** | **02 16 36.1** | **+0.2** |
| | 0.4nm,0.5s,baz=303,slow=6.6,SNR=4.6 | | | | | | |
| | 0.4nm,0.5s | | | | | | |

*IDC 22 02:22:06.0±1.0, 23°.66N×143°.96E, h0km, mb4.0/10, mbtmp3.9/11, ML3.6/1, Error ellipse: s-maj=28.6km s-min=25.4km az=70.0*
**ISC 22 02:22:10.3±1.0, 23°.7N±0°.2×143°.9E±0°.2, h28km, n11, σ0s68/11, mb3.9/10, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **19.44** | **319** | P | **P** | **02 26 34.8** | **+0.2** |
| | 0.2nm,0.3s,baz=133,slow=11,SNR=4.7 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.33** | **193** | P | **P** | **02 30 17.8** | **-0.3** |
| | 1.2nm,0.7s,baz=17,slow=8.6,SNR=10 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.13** | **321** | P | **P** | **02 31 24.3** | **-1.1** |
| | 1.0nm,0.5s,baz=163,slow=5.6,SNR=4.0 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.91** | **312** | P | **P** | **02 31 31.1** | **-0.2** |
| | 0.6nm,0.5s,baz=90,slow=9.6,SNR=6.5 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.59** | **316** | P | **P** | **02 31 50.7** | **+0.2** |
| | 2.8nm,0.6s,baz=94,slow=7.8,SNR=33 | | | | | | |
| | 2.8nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **59.99** | **28** | P | **P** | **02 32 13.8** | **-0.3** |
| | 0.7nm,0.7s,baz=245,slow=5.7,SNR=7.6 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.65** | **319** | P | **P** | **02 32 26.0** | **+0.4** |
| | 3.7nm,0.6s,baz=88,slow=7.4,SNR=17 | | | | | | |
| | 3.7nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.42** | **28** | P | **P** | **02 33 44.7** | **-0.8** |
| | 0.4nm,0.7s,baz=304,slow=4.7,SNR=5.1 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.40** | **52** | P | **P** | **02 34 26.1** | **+1.0** |
| | 0.5nm,0.8s,baz=297,slow=4.0,SNR=3.7 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **81.52** | **314** | P | **P** | **02 34 25.9** | **+0.6** |
| | 1.7nm,0.8s,baz=125,slow=5.5,SNR=3.7 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **81.72** | **335** | P | **P** | **02 34 26.1** | **0.0** |
| | 1.6nm,0.9s,baz=96,slow=5.7,SNR=5.4 | | | | | | |
| | 1.6nm,0.9s | | | | | | |

**ISC 22 02:22:43.7±1.4, 46°.48N±0°.04×13°.14E±0°.03, h9km±10km, n13, σ0s40/23, 1C-1D, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLRO** | **Paularo** | **0.07** | **3** | *e*Pg | **Pg** | **02 22 45.8** | **-0.1** |
| PLRO | | | | *e*Sg | **Sg** | **02 22 47.4** | **-0.2** |
| **FUSE** | **Fusea** | **0.12** | **236** | *e*Pg | **Pg** | **02 22 46.5** | **0.0** |
| FUSE | | | | *e*Sg | **Sg** | **02 22 48.3** | **-0.1** |
| **ZOU** | **Zoufplan** | **0.14** | **303** | *e*Pg | **Pg** | **02 22 47.0** | **+0.1** |
| ZOU | | | | *e*Sg | **Sg** | **02 22 49.4** | **+0.2** |
| **BOO** | **Bordano** | **0.16** | **190** | *e*Pg | **Pg** | **02 22 47.1** | **-0.1** |
| BOO | | | | *e*Sg | **Sg** | **02 22 49.8** | **+0.2** |
| **CLUD** | **Cludinico** | **0.18** | **263** | *e*Pg | **Pg** | **02 22 47.6** | **+0.1** |
| CLUD | | | | *e*Sg | **Sg** | **02 22 50.5** | **+0.3** |
| **VINO** | **Villanova** | **0.24** | **157** | *e*Pg | **Pg** | **02 22 48.4** | **-0.2** |
| VINO | | | | *e*Sg | **Sg** | **02 22 52.4** | **+0.4** |
| **ACOM** | **Acomizza, Ital** | **0.27** | **75** | *e*Pg | **Pg** | **02 22 49.2** | **+0.1** |
| ACOM | | | | *e*Sg | **Sg** | **02 22 53.6** | **+0.9** |
| **LSR** | **Lussari** | **0.27** | **91** | *e*Pg | **Pg** | **02 22 48.9** | **-0.3** |
| **PRED** | **Cave del Predi** | **0.29** | **97** | *e*Pg | **Pg** | **02 22 49.5** | **-0.1** |
| PRED | | | | *e*Sg | **Sg** | **02 22 54.0** | **+0.4** |
| **CSMI** | **Casera Mimoias** | **0.34** | **276** | *e*Pg | **Pg** | **02 22 50.4** | **-0.1** |
| **ROBS** | **Robic** | **0.35** | **133** | *i* Pg | **Pg** | **02 22 50.1** | **-0.4** |
| ROBS | | | | *i* Sg | **Sg** | **02 22 55.4** | **+0.3** |
| ROBS | | | | IAML | | 02 22 56.0 | |
| | comp=Z,0.5nm,0.1s | | | | | | |
| **COLI** | **Coloredo** | **0.38** | **155** | *e*Pg | **Pg** | **02 22 51.3** | **+0.1** |
| COLI | | | | *e*Sg | **Sg** | **02 22 57.1** | **+0.8** |
| **CADS** | **Cadrg** | **0.48** | **121** | *i* Sg | **Sb** | **02 23 01.0** | **-0.7** |

*IDC 22 02:22:58.5±4.5, 18°.07S×177°.92W, h525km±45km, mb3.6/12, mbtmp4.4/13, Error ellipse: s-maj=29.1km s-min=16.8km az=71.0*
*NEIC 22 02:23:02.8±1.4, 18°.2S±0°.2×178°.0W±0°.1, h576km±14km, mb4.5/26, Error ellipse: s-maj=24.6km s-min=17.6km az=148.0*
**ISC 22 02:23:03.9±0.6, 18°.1S±0°.1×178°.1W±0°.1, h590km, n67, σ0s86/70, mb4.3/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.65** | **275** | P | **P** | **02 24 24.6** | **-1.7** |
| **LIFNC** | **LIFOU** | **14.04** | **257** | P | **P** | **02 26 00.6** | **-2.7** |
| **DZM** | **Mont Dzumac** | **15.01** | **252** | P | **P** | **02 26 13.1** | **+0.6** |
| DZM | | | | IAmb | IAmb | 02 26 47.0 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.01** | **252** | P | **P** | **02 26 11.4** | **-1.1** |
| | comp=Z,7.2nm,0.5s,baz=106,slow=22,SNR=9.1 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.76** | **259** | P | **P** | **02 26 30.2** | **+1.5** |
| KOUNC | | | | IAmb | IAmb | 02 27 00.3 | |
| | comp=Z,37nm,1.3s | | | | | | |
| **URZ** | **Urewera** | **20.50** | **191** | P | **P** | **02 26 59.7** | **-2.6** |
| | comp=Z,45nn,1.3s,baz=226,slow=12,SNR=2.2 | | | | | | |
| | comp=Z,45nn,1.3s | | | | | | |
| **PLWZ** | **Palliser** | **24.05** | **192** | P | **P** | **02 27 32.1** | **-1.9** |
| **THZ** | **Tophouse** | **24.78** | **196** | P | **P** | **02 27 39.4** | **-1.1** |
| THZ | | | | IAmb | IAmb | 02 27 48.6 | |
| | comp=Z,37nm,1.4s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.31** | **199** | P | **P** | **02 28 01.7** | **-0.8** |
| **WHZ** | **Wether Hill Ro** | **30.01** | **200** | P | **P** | **02 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAW** | **Mawson** | **83.75** | **200** | P | | **P** | **02 34 32.1** | **+0.7** |
| | comp=Z,0.8nm,0.4s,baz=168,slow=8.3,SNR=2.6 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.03** | **13** | P | | **P** | **02 34 41.6** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=219,slow=4.9,SNR=6.2 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.19** | **290** | P | | **P** | **02 34 59.5** | **+1.3** |
| | comp=Z,0.9nm,0.3s,baz=126,slow=4.6,SNR=5.6 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **SNAA** | **Sanae** | **90.39** | **179** | P | | **P** | **02 35 02.5** | **-0.3** |
| | comp=Z,0.8nm,0.5s,baz=195,slow=16,SNR=2.4 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.46** | **314** | PKiKP | | **PKiKP** | **02 40 27.8** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=187,slow=1.9,SNR=4.4 | | | | | | | |
| KURBB | **Kurchatov Arra** | **112.20** | **318** | PKiKP | | **PKiKP** | **02 40 32.6** | **-0.5** |
| | comp=Z,0.6nm,0.7s,baz=76,slow=1.5,SNR=5.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.17** | **321** | PKP | | **PKiKP** | **02 40 42.5** | **-0.1** |
| | comp=Z,0.9nm,0.4s,baz=87,slow=2.4,SNR=4.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.56** | **350** | PKP | | **PKiKP** | **02 41 00.6** | **-0.1** |
| | comp=Z,4.3nm,1.0s,baz=56,slow=2.3,SNR=3.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.11** | **315** | PKPbc | | **PKPab** | **02 41 37.1** | **-0.4** |
| | comp=Z,2.2nm,0.7s,baz=130,slow=4.2,SNR=19 | | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.82** | **343** | *e*PKP | | **PKPab** | **02 41 39.3** | **-0.5** |
| **MMAI** | **Mount Meron Ar** | **146.47** | **303** | PKPbc | | **PKiKP** | **02 41 41.7** | **-0.7** |
| | comp=Z,5nm,0.5s,baz=64,slow=5.7,SNR=14 | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.64** | **346** | *e*PKP | | **PKiKP** | **02 41 43.7** | **-0.6** |
| **CKRC** | **Cesky Krumlov** | **147.75** | **345** | *e*PKP | | **PKiKP** | **02 41 43.7** | **-0.8** |
| **GERES** | **GERESS Array B** | **147.88** | **345** | PKPbc | | **PKiKP** | **02 41 44.2** | **-0.6** |
| | comp=Z,1.5nm,0.6s,baz=276,slow=1.2,SNR=10 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.14** | **342** | *i* PKP | | **PKiKP** | **02 41 45.5** | **+0.1** |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.21** | **341** | *i* PKP | | **PKiKP** | **02 41 45.5** | **0.0** |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.45** | **345** | *e*PKP | | **PKiKP** | **02 41 48.0** | **-0.1** |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **SOKA** | **Soboth** | **149.51** | **342** | *i* PKP | | **PKiKP** | **02 41 48.1** | **-0.2** |
| | comp=Z,0.2nm,0.2s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.61** | **344** | *i* PKP | | **PKiKP** | **02 41 48.0** | **-0.6** |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **WATA** | **Walderalm** | **149.78** | **347** | *i* PKP | | **PKiKP** | **02 41 48.8** | **-0.1** |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **RETA** | **Reutte** | **149.81** | **348** | *i* PKP | | **PKiKP** | **02 41 48.9** | **0.0** |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.84** | **347** | *i* PKP | | **PKiKP** | **02 41 49.1** | **0.0** |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **149.88** | **347** | *i* PKP | | **PKiKP** | **02 41 49.1** | **0.0** |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.94** | **344** | *i* PKP | | **PKPbc** | **02 41 48.5** | **-0.1** |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.97** | **347** | *i* PKP | | **PKiKP** | **02 41 49.5** | **+0.2** |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.12** | **345** | *e*PKP | | **PKiKP** | **02 41 49.1** | **-0.4** |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| **FETA** | **Feichten** | **150.26** | **348** | *i* PKP | | **PKiKP** | **02 41 50.2** | **+0.3** |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **FNA** | **Florina** | **151.86** | **327** | PKPbc | | **PKiKP** | **02 41 52.9** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **175.06** | **178** | PKPab | | **PKPab** | **02 43 47.5** | **+0.3** |
| | comp=Z,0.2nm,0.7s,baz=165,slow=4.1,SNR=1.4 | | | | | | | |

**IDC 22 02:23:29.5±2.9, 0.89S×133.46E, h0km, mb3.0/2, mbtmp3.0/3, ML3.0/1, MS3.2/1, Error ellipse: s-maj=130.4km s-min=30.8km az=75.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **18.95** | **177** | P | | P | 02 27 51.1 | -1.3 |
| | 0.1nm,0.3s,baz=358,slow=11,SNR=1.3 | | | | | | | |
| | 0.1nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.64** | **179** | P | | P | 02 28 33.3 | +0.9 |
| | 0.2nm,0.7s,baz=8.9,slow=15,SNR=1.5 | | | | | | | |
| | 0.2nm,0.7s | | | | | | | |
| **JNU** | **Nakatsue** | **33.92** | **356** | LR | | LR | 02 43 23.4 | |
| | comp=Z,42nm,19.1s,baz=144,slow=35 | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.20** | **324** | P | | P | 02 34 12.7 | 0.0 |
| | 0.2nm,0.3s,baz=133,slow=7.6,SNR=2.3 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |

**PRE 22 02:24:33.3±1.6, 33.35S×26.12E, h5km, ML1.5, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **GRHM** | **Grahamstown, E** | **0.22** | **72** | *e*P | | Pg | 02 24 37.1 | -0.5 |
| GRHM | | | | *e*S | | Sg | 02 24 41.3 | +0.7 |
| GRHM | | | | IAML | | | 02 24 41.8 | |
| | comp=Z,36nm,0.3s | | | | | | | |
| **NMMU** | **Nelson Mandela** | **0.76** | **210** | *e*P | | Pg | 02 24 47.5 | -0.3 |
| NMMU | | | | *e*S | | Sb | 02 24 59.4 | -0.2 |
| **SOE** | **Somerset East** | **0.79** | **323** | *e*P | | Pg | 02 24 48.6 | +0.2 |
| SOE | | | | *e*S | | Sb | 02 25 00.0 | -0.5 |
| SOE | | | | IAML | | | 02 25 04.5 | |
| | comp=Z,22nm,0.4s | | | | | | | |
| **BUFB** | **Buffelsbos** | **1.40** | **235** | *e*P | | Pn | 02 24 59.1 | -0.4 |
| BUFB | | | | *e*S | | Sn | 02 25 19.7 | +1.2 |
| BUFB | | | | IAML | | | 02 25 25.5 | |
| | comp=Z,6.2nm,0.5s | | | | | | | |
| **GRAF** | **Camdeboo Natio** | **1.74** | **307** | *e*P | | Pb | 02 25 05.4 | -0.4 |
| GRAF | | | | *e*S | | Sn | 02 25 26.8 | 0.0 |
| GRAF | | | | IAML | | | 02 25 36.2 | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| **ROOI** | **Rooidraai Farm** | **2.32** | **291** | *e*P | | Pn | 02 25 13.9 | +1.7 |
| ROOI | | | | *e*S | | Sn | 02 25 42.5 | +1.3 |
| **BRAK** | **Brakfontein** | **3.14** | **299** | *e*S | | Sn | 02 26 01.0 | -0.4 |
| BRAK | | | | IAML | | | 02 26 17.6 | |
| | comp=Z,3.6nm,0.2s | | | | | | | |
| **GRAN** | **Grantham** | **3.49** | **286** | *e*S | | Sn | 02 26 10.6 | +0.6 |
| GRAN | | | | IAML | | | 02 26 23.9 | |
| | comp=Z,4.0nm,0.4s | | | | | | | |
| **FRAZ** | **Fraserburg** | **4.22** | **288** | *e*S | | Sn | 02 26 26.4 | -1.8 |
| FRAZ | | | | IAML | | | 02 26 45.8 | |
| | comp=Z,4.2nm,0.7s | | | | | | | |

*IDC 22 02:36:28.4±0.8, 8.22S×116.64E, h0km, mb4.0/8, mbtmp4.1/9, ML4.3/1, Error ellipse: s-maj=21.0km s-min=18.5km az=79.0*
*DJA 22 02:36:32.9±0.2, 8.°S±3.°×111.°7E±.°, h10km, M4.5/14, mb4.6/4, mB4.8/1, MLv4.4/14, Mw(mB)4.1/1*
*NEIC 22 02:36:32.4±1.6, 8.34S±0.09×116.88E±0.05, h10km±1km, mb4.4/10, Error ellipse: s-maj=16.6km s-min=6.3km az=160.0*
**ISC 22 02:36:30.8±0.5, 8.29S±0.05×116.90E±0.04, h10km, n46, σ1§65/48, mb4.2/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.45** | **182** | P | | **Pb** | **02 36 41.2** | **+0.3** |
| **PLAI** | **Plampang** | **1.02** | **122** | P | | **Pg** | **02 36 51.9** | **+1.4** |
| PLAI | | | | S | | **Sn** | **02 37 06.3** | **+0.6** |
| **SRBI** | **Singaraja** | **1.68** | **277** | P | | **Pn** | **02 37 02.5** | **+2.2** |
| SRBI | | | | S | | **Sb** | **02 37 25.0** | **+1.9** |
| **DNP** | **Denpasar** | **1.71** | **257** | P | | **Pb** | **02 37 03.5** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.72** | **266** | Pn | | **Pn** | **02 37 15.9** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.72** | **266** | P | | **Pn** | **02 37 16.0** | **+1.3** |
| **WBSI** | **Waikabubak, Su** | **2.81** | **119** | P | | **Pn** | **02 37 17.8** | **+1.9** |
| **BASI** | **Baing, Sumba** | **4.11** | **118** | P | | **Pn** | **02 37 36.8** | **+3.1** |
| **BSSI** | **Bau Bau, Buton** | **4.15** | **59** | P | | **Pn** | **02 37 36.3** | **+2.0** |
| **KAPI** | **Kappang** | **4.31** | **41** | Pn | | **Pn** | **02 37 38.8** | **+2.3** |
| | 16nm,0.3s,baz=214,slow=4.0,SNR=90 | | | | | | | |
| KAPI | | | | | | Sn | **02 38 27.7** | **+0.8** |
| | 15nm,0.3s,baz=68,slow=20,SNR=13 | | | | | | | |
| KAPI | | | | | | Lg | 02 38 49.8 | |
| | 17nm,0.3s,baz=194,slow=18,SNR=4.5 | | | | | | | |
| | 39nm,0.2s | | | | | | | |
| **GRJI** | **Gresik** | **4.59** | **287** | P | | **Pn** | **02 37 41.7** | **+1.4** |
| **BNSI** | **Bone** | **5.01** | **40** | P | | **Pn** | **02 37 48.7** | **+2.6** |
| | 46nm,0.6s,1μm0.5nm | | | | | | | |
| **PWJI** | **Pagerwojo** | **5.05** | **273** | P | | **Pn** | **02 37 48.3** | **+1.6** |
| | 53nm,1.0s,0.3nm | | | | | | | |
| **MMRI** | **Maumere** | **5.29** | **94** | Pn | | Pn | 02 37 57.7 | +7.7 |
| **MMRI** | **Maumere** | **5.29** | **94** | P | | Pb | 02 37 59.5 | -4.0 |
| **UGM** | **Wanagama** | **6.32** | **273** | Pn | | **Pn** | **02 38 06.4** | **+2.2** |
| **UGM** | **Wanagama** | **6.32** | **273** | P | | **Pn** | **02 38 06.5** | **+2.2** |
| **FITZ** | **Fitzroy Crossi** | **12.94** | **140** | Pn | | **Pn** | **02 39 35.2** | **+0.3** |
| **MBWA** | **Marble Bar** | **13.09** | **168** | Pn | | **Pn** | **02 39 36.0** | **-0.9** |
| **PSA00** | **Pilbara Seismi** | **13.51** | **168** | Pn | | **Pn** | **02 39 43.1** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **13.51** | **168** | Pn | | **Pn** | **02 39 41.7** | **-1.0** |
| **KNRA** | **Kununurra** | **13.73** | **123** | Pn | | **Pn** | **02 39 46.1** | **+0.3** |
| **GIRL** | **Giralia** | **14.50** | **190** | Pn | | **Pn** | **02 39 55.5** | **-0.8** |
| **MTN** | **Manton Dam** | **14.71** | **109** | Pn | | **Pn** | **02 39 58.6** | **-0.5** |
| **FAKI** | **Fak Fak** | **16.18** | **72** | | | **P** | **02 40 22.6** | **+0.9** |
| FAKI | | | | IAmb | | IAmb | 02 40 30.5 | |
| | comp=Z,48nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.43** | **126** | P | | **P** | **02 41 09.3** | **+0.8** |
| WB0 | | | | IAmb | | IAmb | 02 41 17.6 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.48** | **126** | P | | **P** | **02 41 10.1** | **+1.0** |
| | comp=Z,6.1nm,0.6s,baz=301,slow=12,SNR=47 | | | | | | | |
| WRA | | | | S | | **S** | **02 44 53.4** | **-5.0** |
| | comp=Z,0.6nm,0.7s,baz=291,slow=26,SNR=3.7 | | | | | | | |
| | comp=Z,6.1nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.48** | **126** | P | | **P** | **02 41 10.1** | **+1.1** |
| WRAB | | | | IAmb | | IAmb | 02 41 11.4 | |
| | comp=Z,9.8nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.49** | **126** | P | | **P** | **02 41 10.2** | **+1.1** |
| WB2 | | | | IAmb | | IAmb | 02 41 18.3 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.65** | **126** | P | | **P** | **02 41 11.7** | **+0.8** |
| WR0 | | | | IAmb | | IAmb | 02 41 12.9 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **22.35** | **135** | P | | **P** | **02 41 29.6** | **+0.4** |
| **ASAR** | **Alice Springs** | **22.35** | **135** | P | | **P** | **02 41 29.9** | **+0.7** |
| **ASAR** | **Alice Springs** | **22.35** | **135** | P | | **P** | **02 41 30.4** | **+1.3** |
| | comp=Z,2.9nm,0.8s,baz=312,slow=9.1,SNR=23 | | | | | | | |
| ASAR | | | | S | | **S** | **02 45 34.1** | **-0.9** |
| | comp=Z,0.4nm,0.8s,baz=309,slow=22,SNR=2.4 | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **24.69** | **156** | P | | **P** | **02 41 54.0** | **+1.9** |
| **COEN** | **Coen** | **26.38** | **105** | P | | **P** | **02 42 06.7** | **-0.9** |
| COEN | | | | IAmb | | IAmb | 02 42 48.1 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **BBOO** | **Buckleboo** | **30.18** | **147** | P | | **P** | **02 42 41.1** | **-0.3** |
| **STKA** | **Stephens Creek** | **32.84** | **139** | P | | **P** | **02 43 06.5** | **+1.7** |
| | comp=Z,5.4nm,0.8s,baz=326,slow=11,SNR=1.9 | | | | | | | |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **46.64** | **12** | P | | **P** | **02 44 59.0** | **-0.4** |
| **SONM** | **Songino Array** | **56.64** | **352** | P | | P | 02 46 11.3 | -3.0 |
| | comp=Z,0.3nm,0.4s,baz=164,slow=7.9,SNR=1.6 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.89** | **334** | P | | **P** | **02 46 55.9** | **-1.4** |
| | comp=Z,1.0nm,0.7s,baz=144,slow=8.4,SNR=7.9 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **MAW** | **Mawson** | **69.21** | **199** | P | | **P** | **02 47 37.4** | **-0.1** |
| | comp=Z,1.1nm,0.6s,baz=320,slow=21,SNR=2.1 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| ABKAR | **Akbulak array** | **75.79** | **325** | P | | **P** | **02 48 16.7** | **-0.3** |
| **KMBO** | **Kilima Mbogo** | **79.59** | **270** | P | | **P** | **02 48 37.6** | **-1.7** |
| | comp=Z,5.2nm,0.4s,baz=249,slow=17,SNR=13 | | | | | | | |
| | comp=Z,5.2nm,0.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.70** | **180** | P | | **P** | **02 48 48.5** | **-1.0** |
| | comp=Z,0.5nm,0.8s,baz=295,slow=6.2,SNR=1.2 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.29** | **281** | PKP | | **PKPdf** | **02 55 12.2** | **-3.5** |
| | comp=Z,0.1nm,0.5s,baz=64,slow=3.4,SNR=1.0 | | | | | | | |
| **CPUP** | **Villa Florida** | **145.14** | **189** | PKPbc | | **PKPbc** | **02 56 07.8** | **-1.1** |
| | comp=Z,1.6nm,0.6s,baz=93,slow=3.0,SNR=5.3 | | | | | | | |

*IDC 22 02:44:23.8±1.1, 23.60N×143.92E, h0km, mb3.7/8, mbtmp3.7/8, Error ellipse: s-maj=38.5km s-min=21.5km az=87.0*
**ISC 22 02:44:28.1±1.1, 23.6N±0.2×143.9E±0.3, h28km, n8, σ0§52/8, mb3.7/8, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.26** | **193** | P | | **P** | **02 52 35.0** | **-0.3** |
| | 1.0nm,0.8s,baz=18,slow=8.6,SNR=8.4 | | | | | | | |
| | 1.0nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.96** | **192** | P | | **P** | **02 53 04.8** | **+0.3** |
| | 0.4nm,0.6s,baz=15,slow=9.7,SNR=6.0 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.19** | **321** | P | | **P** | **02 53 42.7** | **-0.9** |
| | 0.8nm,0.5s,baz=98,slow=7.9,SNR=1.9 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.96** | **312** | P | | **P** | **02 53 49.5** | **+0.1** |
| | 0.3nm,0.5s,baz=106,slow=9.2,SNR=3.3 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| KURBB | **Kurchatov Arra** | **56.64** | **316** | P | | **P** | **02 54 08.5** | **-0.1** |
| | 1.4nm,0.6s,baz=94,slow=8.1,SNR=14 | | | | | | | |
| | 1.4nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **60.06** | **28** | P | | **P** | **02 54 32.7** | **+0.4** |
| | 0.3nm,0.6s,baz=262,slow=6.3,SNR=4.3 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.71** | **319** | P | | **P** | **02 54 43.8** | **+0.1** |
| | 2.0nm,0.7s,baz=86,slow=7.9,SNR=5.9 | | | | | | | |
| | 2.0nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **74.48** | **28** | P | | **P** | **02 56 03.3** | **-0.4** |
| | 0.4nm,0.8s,baz=293,slow=7.1,SNR=2.0 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |

*FUNV 22 02:44:32.8, 10.48N×62.87W, h18km, MW3.4*
*TRN 22 02:44:33.2, 10.69N×62.86W, h84km, MD3.3, Paria peninsula. Felt in Trinidad, MMI III.*
**ISC 22 02:44:29.1±1.6, 10.57N±0.06×62.84W±0.04, h131km±19km, n13, σ1§97/24, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TRN** | **Trinidad (W)** | **1.41** | **87** | *e*P | | **Pn** | **02 44 58.1** | **+1.9** |
| TRN | | | | *e*S | | **Sn** | **02 45 16.3** | **-0.6** |
| **PCRV** | **Puerto La Cruz** | **1.81** | **258** | *e*P | | **Pn** | **02 45 02.3** | **+1.4** |
| PCRV | | | | *e*S | | **Sn** | **02 45 23.4** | **-1.8** |
| **PCRV** | **Puerto La Cruz** | **1.81** | **258** | *e*P | | **Pn** | **02 45 02.9** | **+2.0** |
| PCRV | | | | *e*S | | **Sn** | **02 45 25.1** | **-0.1** |
| **GRFF** | **Grenada Fort F** | **1.83** | **36** | *e*P | | **Pn** | **02 45 01.7** | **+0.6** |
| GRFF | | | | *e*S | | **Sn** | **02 45 23.3** | **-2.2** |
| **GRGR** | **Grenville** | **1.94** | **37** | *e*P | | **Pn** | **02 45 03.1** | **+0.7** |
| GRGR | | | | *e*S | | **Sn** | **02 45 25.8** | **-2.1** |
| **GRHS** | **Sauteurs** | **2.02** | **35** | *e*P | | **Pn** | **02 45 04.8** | **+1.5** |
| GRHS | | | | *e*S | | **Sn** | **02 45 27.9** | **-1.7** |
| **GRSS** | **Sisters** | **2.10** | **35** | *e*P | | **Pn** | **02 45 05.5** | **+1.2** |
| GRSS | | | | *e*S | | **Sn** | **02 45 29.6** | **-1.8** |
| **GCMP** | **Grenada, Carri** | **2.36** | **36** | *e*P | | **Pn** | **02 45 09.6** | **+2.1** |
| GCMP | | | | *e*S | | **Sn** | **02 45 35.2** | **-1.8** |
| **CACV** | **CAICARA DEL OR** | **4.72** | **231** | *e*P | | **Pn** | **02 45 35.6** | **-2.8** |
| CACV | | | | *e*S | | Sn | 02 46 22.3 | -10 |
| **BENV** | **Beln** | **4.72** | **263** | *e*P | | **Pn** | **02 45 41.4** | **+2.9** |
| BENV | | | | *e*S | | **Sn** | **02 46 32.1** | **-0.6** |
| **LUEV** | **Luepa** | **4.89** | **164** | *e*P | | **Pn** | **02 45 42.7** | **+1.9** |
| LUEV | | | | *e*S | | **Sn** | **02 46 35.5** | **-1.2** |
| **BAUV** | **El Baul** | **5.38** | **253** | *e*P | | **Pn** | **02 45 49.6** | **+2.4** |
| BAUV | | | | *e*S | | **Sn** | **02 46 45.7** | **-2.5** |
| **BAUV** | **El Baul** | **5.38** | **253** | *e*P | | Pn | 02 45 51.8 | +4.6 |
| BAUV | | | | *e*S | | **Sn** | **02 46 46.2** | **-2.0** |

*NEIC 22 02:48:23.3±1.0, 38.142N±0.010×112.57W±0.01, h5km±1km, Error ellipse: s-maj=2.8km s-min=1.8km az=121.0*
**UUSS 22 02:48:23.8±1.0, 38.154N±0.010×112.57W±0.01, h6km±4km, ML2.7/10, ML2.5/86(NEIC), Error ellipse: s-maj=1.5km s-min=1.4km az=87.0, Utah**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MTPU** | **Mount Pierson** | **0.32** | **110** | Pg | | Pg | 02 48 29.9 | -0.4 |
| MTPU | | | | Sg | | Sg | 02 48 34.7 | +0.1 |
| **DWU** | **Dry Willow Pea** | **0.34** | **262** | | | Pg | 02 48 30.9 | +0.3 |
| **NMUT** | **North Mineral** | **0.42** | **329** | | | Pg | 02 48 32.3 | +0.2 |
| **MVU** | **Marysvale** | **0.45** | **39** | Pg | | Pg | 02 48 32.4 | -0.1 |
| MVU | | | | Sg | | Sg | 02 48 38.9 | +0.5 |
| **TCRU** | **Three Creeks R** | **0.47** | **12** | Pg | | Pg | 02 48 32.9 | 0.0 |
| TCRU | | | | Sg | | Sg | 02 48 39.5 | +0.5 |
| TCRU | | | | IAML | | | 02 48 40.0 | |
| | comp=E,520nm,0.5s | | | | | | | |
| TCRU | | | | IAML | | | 02 48 40.3 | |
| | comp=N,638nm,0.3s | | | | | | | |
| **MSU** | **Marysvale** | **0.47** | **41** | Pg | | Pg | 02 48 32.7 | -0.3 |
| **IMU** | **Iron Mountain** | **0.67** | **316** | | | Pg | 02 48 37.0 | +0.3 |
| **BTU** | **Barney Top** | **0.68** | **126** | | | Pg | 02 48 37.1 | +0.2 |
| **PKCU** | **Pink Cliffs** | **0.74** | **164** | Pg | | Pg | 02 48 37.7 | -0.4 |
| PKCU | | | | | | Sg | 02 48 47.2 | -0.4 |
| PKCU | | | | IAML | | | 02 48 51.7 | |
| | comp=N,354nm,0.5s | | | | | | | |
| **ARUT** | **Antelope Range** | **0.78** | **242** | | | Pg | 02 48 38.9 | +0.1 |
| **CCUT** | **Cedar City** | **0.87** | **226** | Pg | | Pg | 02 48 40.1 | -0.4 |
| CCUT | | | | Sg | | Sg | 02 48 51.5 | -0.4 |
| CCUT | | | | IAML | | | 02 48 52.2 | |
| | comp=E,98nm,0.6s | | | | | | | |
| **WCU** | **Willow Creek** | **0.89** | **25** | | | Pg | 02 48 41.1 | +0.2 |
| **ZNPU** | **Zion National** | **0.91** | **209** | | | Pg | 02 48 40.9 | -0.4 |
| **EKU** | **East Kanab** | **1.08** | **177** | | | Pg | 02 48 43.8 | -0.7 |
| **PSUT** | **Pine Spring** | **1.08** | **291** | Pg | | Pg | 02 48 44.0 | -0.5 |
| PSUT | | | | Sg | | Sg | 02 48 58.1 | -0.5 |
| PSUT | | | | IAML | | | 02 49 06.1 | |
| | comp=E,52nm,0.7s | | | | | | | |
| **OWUT** | **Old Woman Plat** | **1.09** | **55** | | | Pg | 02 48 44.5 | -0.3 |
| **KNB** | **Kanab** | **1.15** | **190** | Pg | | Pg | 02 48 44.7 | -1.2 |
| KNB | | | | Sg | | Sg | 02 48 59.3 | -1.6 |
| KNB | | | | IAML | | | 02 49 00.3 | |
| | comp=E,58nm,0.4s | | | | | | | |
| **SGU** | **Sterling** | **1.26** | **35** | | | Pn | 02 48 48.2 | +0.1 |
| **LCMT** | **Little Creek M** | **1.26** | **205** | Pg | | Pg | 02 48 46.7 | -1.2 |
| LCMT | | | | Sg | | Sg | 02 49 03.3 | -1.0 |
| LCMT | | | | IAML | | | 02 49 06.5 | |
| | comp=N,150nm,0.2s | | | | | | | |
| **FLU** | **Fool Peak** | **1.26** | **14** | | | Pg | 02 48 47.9 | -0.1 |
| **Q16A** | **Castle Valley** | **1.33** | **55** | Pg | | Pn | 02 48 47.9 | -1.3 |
| Q16A | | | | Sg | | Sg | 02 49 05.8 | -1.0 |
| Q16A | | | | IAML | | | 02 49 06.4 | |
| | comp=N,51nm,0.5s | | | | | | | |
| Q16A | | | | IAML | | | 02 49 06.7 | |
| | comp=E,70nm,0.5s | | | | | | | |
| **HMU** | **Henry Mountain** | **1.46** | **98** | | | Pn | 02 48 50.2 | -0.7 |
| HMU | | | | IAML | | | 02 49 13.7 | |
| | comp=E,96nm,0.8s | | | | | | | |
| HMU | | | | IAML | | | 02 49 22.3 | |
| | comp=N,87nm,0.8s | | | | | | | |
| **TMUT** | **Trail Mountain** | **1.56** | **43** | | | Pn | 02 48 52.0 | -0.4 |
| TMUT | | | | IAML | | | 02 49 19.0 | |
| | comp=E,103nm,0.5s | | | | | | | |
| **SPR3** | **Spring Creek 3** | **1.62** | **302** | | | Pn | 02 48 52.1 | -1.1 |
| SPR3 | | | | IAML | | | 02 49 16.4 | |
| | comp=E,52nm,0.7s | | | | | | | |
| SPR3 | | | | IAML | | | 02 49 16.9 | |
| | comp=N,78nm,0.6s | | | | | | | |
| **U15A** | **North Rim** | **1.74** | **173** | Pn | | Pn | 02 48 54.5 | -0.2 |
| U15A | | | | IAML | | | 02 49 17.3 | |
| | comp=N,41nm,0.3s | | | | | | | |
| U15A | | | | IAML | | | 02 49 18.6 | |
| | comp=E,45nm,0.5s | | | | | | | |
| **NLU** | **North Lily Min** | **1.84** | **12** | Pn | | Pn | 02 48 56.6 | +0.5 |
| **SRU** | **San Rafael Swe** | **1.86** | **59** | Pn | | Pn | 02 48 57.0 | +0.6 |
| SRU | | | | IAML | | | 02 49 22.6 | |
| | comp=N,44nm,0.7s | | | | | | | |
| SRU | | | | IAML | | | 02 49 25.2 | |
| | comp=E,75nm,0.5s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **1.94** | **47** | Pn | | Pn | 02 48 58.2 | +0.7 |
| **Q12A** | **Willow Creek R** | **1.98** | **297** | Pn | | Pn | 02 48 57.7 | -0.3 |
| **MPU** | **Maple Canyon** | **2.00** | **21** | Pn | | Pn | 02 48 58.4 | +0.2 |
| **DUG** | **Dugway, Tooele** | **2.05** | **355** | Pn | | Pn | 02 48 59.1 | +0.1 |
| **P18A** | **Preston Nutter** | **2.33** | **50** | Pn | | Pn | 02 49 03.6 | +0.6 |
| P18A | | | | IAML | | | 02 49 39.8 | |
| | comp=N,28nm,0.5s | | | | | | | |
| **R11B** | **Troy Canyon, C** | **2.38** | **276** | Pn | | Pn | 02 49 02.9 | -0.7 |
| **S11A** | **Rachel** | **2.57** | **260** | Pn | | Pn | 02 49 05.8 | -0.3 |
| **JLU** | **Jordanelle** | **2.59** | **19** | Pn | | Pn | 02 49 06.7 | +0.1 |
| JLU | | | | IAML | | | 02 49 48.8 | |
| | comp=N,10.0nm,0.6s | | | | | | | |
| JLU | | | | IAML | | | 02 49 51.0 | |
| | comp=E,9.8nm,0.6s | | | | | | | |
| **SHPR** | **Sheep Range** | **2.64** | **232** | Pn | | Pn | 02 49 07.0 | -0.1 |
| **BGU** | **Big Grassy Mou** | **2.79** | **353** | Pn | | Pn | 02 49 07.9 | -1.3 |
| **WUAZ** | **Wupatki** | **2.80** | **160** | Pn | | Pn | 02 49 08.3 | -1.0 |
| **SPUT** | **South Promonto** | **3.15** | **2** | Pn | | Pn | 02 49 14.2 | +0.1 |
| **W13A** | **Hualapai Mount** | **3.23** | **200** | Pn | | Pn | 02 49 14.4 | -0.8 |
| W13A | | | | IAML | | | 02 50 05.8 | |
| | comp=E,8.0nm,0.5s | | | | | | | |
| W13A | | | | IAML | | | 02 50 12.6 | |
| | comp=N,9.1nm,0.6s | | | | | | | |
| **ELK** | **Elko** | **3.31** | **322** | Pn | | Pn | 02 49 17.3 | +0.9 |
| **GWY** | **Greenwater Val** | **3.82** | **240** | Pn | | Pn | 02 49 23.8 | +0.5 |
| GWY | | | | IAML | | | 02 50 30.4 | |
| | comp=N,7.5nm,1.0s | | | | | | | |
| GWY | | | | IAML | | | 02 50 36.7 | |
| | comp=E,8.5nm,0.9s | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **3.84** | **166** | Pn | | Pn | 02 49 22.4 | -1.1 |
| X16A | | | | IAML | | | 02 50 31.4 | |
| | comp=N,7.7nm,0.4s | | | | | | | |
| X16A | | | | IAML | | | 02 50 33.8 | |
| | comp=E,6.4nm,0.8s | | | | | | | |
| **O20A** | **White River Ci** | **3.90** | **58** | Pn | | Pn | 02 49 26.1 | +1.6 |
| **DSP** | **Deep Springs** | **4.35** | **261** | Pn | | Pn | 02 49 30.1 | -0.3 |
| DSP | | | | IAML | | | 02 50 00.7 | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DOU | **Dourbes** | 21.89 | 79 | *d*P | | P | 03 01 09.6 | -0.3 |
| BMRD | **Maredsous** | 21.94 | 78 | *d*P | | P | 03 01 10.3 | -0.1 |
| BGES | **Gesves** | 22.12 | 78 | *d*P | | P | 03 01 12.0 | -0.3 |
| BCLA | **Clavier** | 22.24 | 78 | *d*P | | P | 03 01 13.5 | -0.1 |
| RCHB | **Rochefort** | 22.27 | 78 | *d*P | | P | 03 01 13.7 | -0.2 |
| SCHQ | **Schefferville** | 22.35 | 294 | P | | P | 03 01 14.9 | 0.0 |
| | comp=Z,3.7nm,0.7s,baz=90,slow=6.1,SNR=9.7 | | | | | | | |
| SCHQ | | | | LR | LR | | 03 08 17.8 | |
| | comp=Z,84nm,21.8s,baz=234,slow=32 | | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| BSTI | **Sart Tilman** | 22.36 | 77 | *d*P | | P | 03 01 17.1 | +2.2 |
| MEM | **Membach** | 22.63 | 77 | *d*P | | P | 03 01 18.6 | +0.8 |
| BTNL | **Ternell** | 22.71 | 77 | *d*P | | P | 03 01 19.6 | +1.0 |
| CEST | **Esterri de Car** | 22.86 | 99 | P | | P | 03 01 20.6 | +0.1 |
| CEST | | | | IAmb | IAmb | | 03 01 27.6 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| WLF | **Walferdange** | 22.98 | 79 | P | | P | 03 01 20.4 | -1.1 |
| WLF | | | | IAmb | IAmb | | 03 01 31.5 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| WLF | **Walferdange** | 22.98 | 79 | *d*P | | P | 03 01 20.2 | -1.3 |
| SSB | **Saint Sauveur** | 23.61 | 90 | P | | P | 03 01 27.8 | -0.1 |
| ECH | **Echery** | 24.08 | 82 | P | | P | 03 01 32.6 | +0.2 |
| NOA | **NORSAR Array B** | 24.71 | 50 | P | | P | 03 01 38.9 | +0.9 |
| | comp=Z,1.2nm,0.9s,baz=265,slow=9.6,SNR=4.0 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| BFO | **Black Forest** | 24.77 | 81 | P | | P | 03 01 37.0 | -1.7 |
| BFO | | | | IAmb | IAmb | | 03 01 41.6 | |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| SENIN | **Lac Senin/Sane** | 24.88 | 86 | P | | P | 03 01 40.4 | +0.5 |
| STU | **Stuttgart** | 25.16 | 80 | P | | P | 03 01 42.3 | +0.2 |
| STU | | | | IAmb | IAmb | | 03 01 56.7 | |
| | comp=Z,11nm,0.6s | | | | | | | |
| PQI | **Presque Isle** | 25.19 | 275 | P | | P | 03 01 43.2 | +0.8 |
| PQI | | | | IAmb | IAmb | | 03 01 51.2 | |
| | comp=Z,16nm,1.2s | | | | | | | |
| GRF | **Grafenberg Arr** | 26.10 | 77 | *e*P | | P | 03 01 50.6 | -0.1 |
| | comp=Z,6.7nm,1.0s,baz=289,slow=8.6 | | | | | | | |
| GRFO | **Grafenberg** | 26.10 | 77 | P | | P | 03 01 50.5 | -0.1 |
| GRFO | | | | IAmb | IAmb | | 03 01 56.9 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| DAVA | **Damuels** | 26.13 | 82 | *e*P | | P | 03 01 52.5 | +1.4 |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| DAVOX | **Davos/Dischmat** | 26.33 | 84 | LR | | LR | 03 12 15.9 | |
| | comp=Z,96nm,18.8s,baz=241,slow=37 | | | | | | | |
| RETA | **Reutte** | 26.60 | 82 | *e*pP | | P | 03 01 56.9 | +1.6 |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| CLL | **Collm** | 26.70 | 72 | *i* P | | P | 03 01 56.7 | +0.7 |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| CLL | | | | *i* x | | x | 03 02 01.2 | |
| FETA | **Feichten** | 26.77 | 82 | *e*pP | | P | 03 01 58.1 | +1.2 |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| MOTA | **Moosalm** | 26.87 | 82 | *e*P | | P | 03 01 58.9 | +1.1 |
| | comp=Z,8.2nm,1.3s | | | | | | | |
| SQTA | **Sankt Quirin** | 26.99 | 82 | *e*pP | | P | 03 02 00.2 | +1.4 |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| WATA | **Walderalm** | 27.17 | 81 | *e*P | | P | 03 02 01.7 | +1.2 |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| WTTA | **Wattenberg** | 27.24 | 81 | *e*pP | | P | 03 02 02.4 | +1.3 |
| | comp=Z,4.4nm,1.0s | | | | | | | |
| BRG | **Berggiesshubel** | 27.39 | 73 | *e*P | | P | 03 02 03.5 | +1.3 |
| BRG | | | | Amp | | | 03 02 04.5 | |
| | comp=Z,3.2nm,1.0s | | | | | | | |
| KHC | **Kasperske Hory** | 27.74 | 77 | P | | P | 03 02 05.2 | -0.3 |
| CTI | **Castel Tesino** | 27.75 | 84 | P | | P | 03 02 04.8 | -0.9 |
| GEC2 | **GERESS Array S** | 27.92 | 77 | P | | P | 03 02 07.6 | +0.4 |
| GERES | **GERESS Array B** | 27.92 | 77 | P | | P | 03 02 07.4 | +0.3 |
| GERES | **GERESS Array B** | 27.92 | 77 | P | | P | 03 02 05.5 | -1.7 |
| | comp=Z,1.2nm,0.8s,baz=271,slow=12,SNR=7.7 | | | | | | | |
| GERES | | | | LR | | LR | 03 13 08.2 | |
| | comp=Z,138nm,19.3s,baz=346,slow=36 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| BIOA | **Bad Ischl, Aus** | 28.32 | 79 | *e*P | | P | 03 02 11.4 | +0.8 |
| | comp=Z,6.8nm,1.5s | | | | | | | |
| KBA | **Koelnbreinsper** | 28.38 | 81 | *e*P | | P | 03 02 10.8 | -0.6 |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| MOA | **Molln** | 28.64 | 79 | *e*P | | P | 03 02 12.5 | -1.0 |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| MYKA | **Terra Mystica** | 28.75 | 81 | *e*P | | P | 03 02 15.6 | +1.0 |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| OBKA | **Obir** | 29.37 | 81 | *e*P | | P | 03 02 20.7 | +0.6 |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| CONA | **Conrad Observa** | 29.60 | 78 | *e*pP | | pP | 03 02 24.0 | -1.3 |
| | comp=Z,2.7nm,1.2s | | | | | | | |
| SOKA | **Soboth** | 29.60 | 81 | *e*P | | P | 03 02 21.9 | -0.1 |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| RONA | **Rosalia, Austr** | 29.96 | 78 | *e*P | | P | 03 02 26.3 | +1.1 |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| LANS | **Liptovska Anna** | 31.33 | 74 | *e*P | | P | 03 02 39.6 | +2.3 |
| FINES | **FINESS Array B** | 31.87 | 49 | P | | P | 03 02 41.9 | 0.0 |
| FINES | **FINESS Array B** | 31.87 | 49 | P | | P | 03 02 40.6 | -1.2 |
| | comp=Z,2.3nm,0.8s,baz=286,slow=11,SNR=4.6 | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| FIA1 | **FINESS Array S** | 31.88 | 49 | P | | P | 03 02 42.4 | +0.6 |
| KEST | **Kesra** | 31.99 | 103 | P | | P | 03 02 40.1 | -3.2 |
| | comp=Z,4.7nm,1.0s,baz=323,slow=22,SNR=3.9 | | | | | | | |
| | comp=Z,4.7nm,1.0s | | | | | | | |
| PSZ | **Piszkesteto** | 32.08 | 76 | P | | P | 03 02 45.0 | +1.0 |
| PSZ | | | | IAmb | IAmb | | 03 02 47.4 | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| BUR08 | **Bucovina Ar. S** | 35.43 | 73 | P | | P | 03 03 13.3 | +0.2 |
| BUR08 | | | | IAmb | IAmb | | 03 03 16.3 | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| BURAR | **Bucovina Array** | 35.45 | 73 | P | | P | 03 03 13.7 | +0.5 |
| BURAR | | | | IAmb | IAmb | | 03 03 16.2 | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| AKASG | **Malin Array Be** | 36.51 | 67 | P | | P | 03 03 20.0 | -2.1 |
| | comp=Z,0.3nm,0.3s,baz=288,slow=8.7,SNR=4.2 | | | | | | | |
| AKASG | | | | LR | | LR | 03 18 37.5 | |
| | comp=Z,118nm,20.5s,baz=300,slow=37 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| ULM | **Lac du Bonnet** | 40.52 | 296 | P | | P | 03 03 55.5 | -0.3 |
| | comp=Z,1.8nm,0.6s,baz=60,slow=5.9,SNR=4.4 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| YKA | **Yellowknife Ar** | 44.42 | 319 | P | | P | 03 04 28.4 | +1.0 |
| YKA | **Yellowknife Ar** | 44.42 | 319 | P | | P | 03 04 28.0 | +0.6 |
| | comp=Z,0.9nm,0.7s,baz=59,slow=8.5,SNR=5.2 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| BR131 | **Keskin Array S** | 44.79 | 79 | P | | P | 03 04 30.7 | -0.1 |
| BR131 | | | | IAmb | IAmb | | 03 04 33.4 | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| BRTR | **Keskin Array B** | 44.79 | 79 | P | | P | 03 04 31.7 | +0.9 |
| BRTR | **Keskin Array B** | 44.79 | 79 | P | | P | 03 04 29.8 | -1.0 |
| | comp=Z,2.6nm,0.9s,baz=299,slow=7.0,SNR=14 | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| TORD | **Torodi Ar. Bea** | 45.68 | 134 | P | | P | 03 04 36.2 | -1.7 |
| | comp=Z,1.5nm,0.8s,baz=335,slow=5.7,SNR=9.9 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| BNN | **Bunyan** | 46.68 | 78 | P | | P | 03 04 45.1 | -0.6 |
| KBZ | **Khabaz** | 48.04 | 69 | P | | P | 03 04 55.6 | -0.5 |
| | comp=Z,1.6nm,0.8s,baz=304,slow=6.3,SNR=3.3 | | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | | |
| DBIC | **Dimbokro** | 48.90 | 146 | LR | | LR | 03 24 09.2 | |
| | comp=Z,77nm,21.0s,baz=144,slow=34 | | | | | | | |
| KARS | **Kars** | 50.01 | 72 | P | | P | 03 05 13.2 | +1.7 |
| E27K | **Coleen River** | 50.79 | 333 | P | | P | 03 05 17.0 | +0.2 |
| E27K | | | | IAmb | IAmb | | 03 05 19.3 | |
| | comp=Z,4.8nm,0.9s | | | | | | | |
| J30M | **Hart River** | 51.49 | 328 | P | | P | 03 05 23.2 | +1.0 |
| J30M | | | | IAmb | IAmb | | 03 05 24.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| N23A | **Red Feather La** | 51.54 | 290 | P | | P | 03 05 23.8 | +0.7 |
| N23A | | | | IAmb | IAmb | | 03 05 32.2 | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| BPMT | **Black Pine Rid** | 52.42 | 300 | P | | P | 03 05 30.5 | +1.0 |
| PDAR | **Pinedale Array** | 52.49 | 294 | P | | P | 03 05 29.4 | -0.7 |
| | comp=Z,0.5nm,0.5s,baz=55,slow=7.8,SNR=5.7 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| DAWY | **Dawson** | 52.84 | 329 | P | | P | 03 05 33.8 | +1.7 |
| DAWY | | | | IAmb | IAmb | | 03 05 34.5 | |
| | comp=Z,7.7nm,1.2s | | | | | | | |
| BRDY | **Brady** | 53.52 | 276 | P | | P | 03 05 36.0 | -1.6 |
| BRDY | | | | IAmb | IAmb | | 03 05 44.4 | |
| | comp=Z,4.4nm,1.2s | | | | | | | |
| ABKAR | **Akbulak array** | 54.13 | 54 | P | | P | 03 05 40.3 | -1.4 |
| SCRK | **Sand Creek** | 54.37 | 330 | P | | P | 03 05 45.2 | +1.7 |
| SCRK | | | | IAmb | IAmb | | 03 05 53.0 | |
| | comp=Z,6.8nm,1.2s | | | | | | | |
| HWUT | **Hardware Ranch** | 54.38 | 294 | P | | P | 03 05 43.9 | -0.1 |
| HWUT | | | | IAmb | IAmb | | 03 05 52.8 | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| ILAR | **Eielson Array** | 54.69 | 332 | P | | P | 03 05 47.0 | +1.4 |
| | comp=Z,0.8nm,0.8s,baz=45,slow=6.0,SNR=10 | | | | | | | |
| ILAR | | | | PcP | | PcP | 03 06 48.5 | +0.3 |
| | comp=Z,0.6nm,0.7s,baz=9.5,slow=3.1,SNR=7.1 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| E19K | **Redstone River** | 55.39 | 338 | P | | P | 03 05 51.5 | +0.8 |
| E19K | | | | IAmb | IAmb | | 03 05 53.0 | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| BVAR | **Borovoye Array** | 56.70 | 45 | P | | P | 03 05 59.9 | -0.4 |
| | comp=Z,2.3nm,0.7s,baz=319,slow=5.9,SNR=9.9 | | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| TXAR | **Lajitas Array** | 57.79 | 278 | P | | P | 03 06 08.8 | +0.5 |
| | comp=Z,0.2nm,0.7s,baz=58,slow=7.5,SNR=4.5 | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | |
| KVN | **Kaiserville** | 59.81 | 296 | P | | P | 03 06 23.3 | +0.9 |
| KVN | | | | IAmb | IAmb | | 03 06 24.0 | |
| | comp=Z,2.8nm,1.0s | | | | | | | |
| N19K | **Bonanza Creek** | 59.97 | 332 | P | | P | 03 06 22.8 | -0.3 |
| N19K | | | | IAmb | IAmb | | 03 06 25.3 | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| CCIG | **Comitan** | 60.02 | 259 | P | | P | 03 06 24.2 | +0.1 |
| CCIG | | | | IAmb | IAmb | | 03 06 51.5 | |
| | comp=Z,5.7nm,0.8s | | | | | | | |
| NVAR | **Mina Array Bea** | 60.35 | 295 | P | | P | 03 06 26.5 | +0.3 |
| | comp=Z,0.2nm,0.5s,baz=32,slow=7.5,SNR=1.4 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| N18K | **Kilae Creek** | 60.49 | 333 | P | | P | 03 06 26.7 | +0.2 |
| K15K | **Wolf Creek Mou** | 60.68 | 336 | P | | P | 03 06 27.7 | -0.1 |
| K15K | | | | IAmb | IAmb | | 03 06 42.2 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| O18K | **Koktuh Hills** | 60.96 | 332 | P | | P | 03 06 29.8 | +0.1 |
| M16K | **Timber Creek** | 61.07 | 334 | P | | P | 03 06 31.8 | +1.4 |
| M16K | | | | IAmb | IAmb | | 03 06 54.9 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| L14K | **Kuka Creek** | 61.78 | 336 | P | | P | 03 06 37.2 | +2.0 |
| KURBB | **Kurchatov Arra** | 61.99 | 43 | P | | P | 03 06 35.4 | -1.3 |
| | comp=Z,1.1nm,0.7s,baz=319,slow=7.3,SNR=9.4 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| O16K | **Kokwok River B** | 62.01 | 333 | P | | P | 03 06 37.7 | +1.0 |
| ZALV | **Zalesovo Beam** | 62.06 | 37 | P | | P | 03 06 37.8 | +0.5 |
| | comp=Z,0.8nm,0.4s,baz=305,slow=5.1,SNR=1.8 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| M14K | **Bethel** | 62.10 | 336 | P | | P | 03 06 39.4 | +2.1 |
| O14K | **Tigyukauivet M** | 63.19 | 334 | P | | P | 03 06 45.4 | +0.8 |
| LPIG | **La Paz** | 65.66 | 279 | LR | | LR | 03 35 28.5 | |
| | comp=Z,68nm,19.7s,baz=34,slow=36 | | | | | | | |
| SDPT | **Sand Point** | 66.28 | 332 | P | | P | 03 07 04.9 | 0.0 |
| MK31 | **Makanchi Array** | 66.51 | 44 | P | | P | 03 07 07.2 | +0.7 |
| MKAR | **Makanchi Array** | 66.51 | 44 | P | | P | 03 07 06.4 | -0.1 |
| MKAR | **Makanchi Array** | 66.51 | 44 | P | | P | 03 07 06.5 | 0.0 |
| | comp=Z,0.4nm,0.5s,baz=318,slow=5.1,SNR=5.6 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| UOSS | **Minazif** | 68.72 | 76 | P | | P | 03 07 19.9 | -0.9 |
| KSH | **Kashi** | 69.10 | 53 | P | | P | 03 07 25.9 | +2.8 |
| KSH | | | | sP | pwP | | 03 07 32.3 | +1.2 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| SONM | **Songino Array** | 74.65 | 29 | P | | P | 03 07 56.6 | +0.3 |
| | comp=Z,0.7nm,0.6s,baz=324,slow=5.4,SNR=3.9 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| KLR | **Kul'dur** | 78.92 | 12 | P | | P | 03 08 20.3 | +0.1 |
| | comp=Z,0.9nm,0.7s,baz=314,slow=19,SNR=2.1 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| CPUP | **Villa Florida** | 80.70 | 205 | P | | P | 03 08 28.7 | -1.2 |
| | comp=Z,0.6nm,0.5s,baz=337,slow=4.2,SNR=2.9 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| HHC | **Hu-ho-hao-te** | 82.55 | 28 | *e*P | | P | 03 08 38.9 | -1.0 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,140nm,5.4s | | | | | | | |
| LZH | **Lanzhou** | 84.25 | 36 | *e*P | | P | 03 08 48.4 | -0.4 |
| LZH | | | | sP | pwP | | 03 08 56.4 | -0.5 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.1s | | | | | | | |
| PZH | **PanZhiHua** | 91.88 | 42 | P | | P | 03 09 26.0 | +0.5 |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.5s | | | | | | | |
| QSPA | **South Pole Qui** | 140.90 | 180 | PKhKP | PKPpre | | 03 15 37.9 | |
| | comp=Z,0.9nm,0.8s,baz=308,slow=6.5,SNR=1.7 | | | | | | | |
| QSPA | | | | PKP | | **PKPdf** | 03 15 45.3 | -0.4 |
| | comp=Z,0.9nm,0.8s,baz=103,slow=22,SNR=2.0 | | | | | | | |
| WRA | **Warramunga Arr** | 146.62 | 27 | PKPbc | | **PKPdf** | 03 15 58.1 | +1.0 |
| | comp=Z,2.9nm,0.7s,baz=344,slow=3.1,SNR=29 | | | | | | | |
| ASAR | **Alice Springs** | 149.99 | 31 | PKPbc | | **PKPbc** | 03 16 06.8 | -0.7 |
| | comp=Z,3.7nm,0.6s,baz=349,slow=2.2,SNR=43 | | | | | | | |
| ASAR | | | | PKPab | | **sPKPbc** | 03 16 12.6 | 0.0 |
| | comp=Z,1.3nm,0.6s,baz=345,slow=2.6,SNR=8.0 | | | | | | | |

**DJA 22 03:35:13.1±0.7, 8°S±8˚, 11°7E±˚, h10km±6km, M3.7/8, mb3.8/1, MLv3.7/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWSI | **Taliwang, Sumb** | 0.46 | 180 | P | Pg | 03 35 22.2 | +0.2 |
| PLAI | **Plampang** | 1.04 | 122 | P | Pg | 03 35 32.8 | -0.3 |
| PLAI | | | | S | Sb | 03 35 47.0 | +0.1 |
| SRBI | **Singaraja** | 1.66 | 277 | P | Pn | 03 35 42.6 | +0.3 |
| SRBI | | | | S | Sb | 03 36 04.7 | -0.1 |
| JAGI | **Jajag, Banyuwa** | 2.71 | 266 | P | Pn | 03 35 56.4 | -0.3 |
| WBSI | **Waikabubak, Su** | 2.83 | 119 | P | Pn | 03 35 58.4 | 0.0 |
| BSSI | **Bau Bau, Buton** | 4.16 | 60 | P | Pn | 03 36 15.8 | -1.0 |
| GRJI | **Gresik** | 4.57 | 287 | P | Pn | 03 36 22.0 | -0.3 |
| PWJI | **Pagerwojo** | 5.03 | 273 | P | Pn | 03 36 27.6 | -1.1 |

*SOME **22** 03:49:28.4, 39˚.45N×73˚.65E, h20km*
*IDC **22** 03:49:33.8±0.7, 39˚.45N×73˚.77E, h0km, mb3.9/17, mbtmp4.0/24, ML3.5/6, Error ellipse: s-maj=13.2km s-min=10.6km az=120.0*
*KRNET **22** 03:49:34.2±0.1, 39˚.60N×73˚.88E, h15km, mb4.2*
*MOS **22** 03:49:39.4±1.1, 39˚.63N×73˚.65E, h49km, mb4.4/20, Error ellipse: s-maj=5.9km s-min=3.9km az=94.2*
*NEIC **22** 03:49:42.0±1.7, 39˚.62N±0˚.06×73˚.60E±0˚.07, h54km±7km, mb4.4/51, Error ellipse: s-maj=8.5km s-min=7.8km az=130.0*
*NNC **22** 03:49:44.4±2.6, 40˚.06N×73˚.90E, h0km, mb4.5, mpv4.2, Error ellipse: s-maj=24.5km s-min=17.1km az=163.0*
**ISC 22 03:49:36.4±1.1, 39˚.61N±0˚.03×73˚.81E±0˚.02, h15km±6km, n280, σ1°88/323, mb4.4/53, 48C-26D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SFK | **Sufi-Kurgan** | 0.47 | 330 | ⇑*i* P | | **Pg** | 03 49 44.0 | -1.8 |
| | baz=25 | | | | | | | |
| SFK | | | | ⇑*e* S | | **Sg** | 03 49 51.4 | -0.8 |
| | baz=25 | | | | | | | |
| SFK | **Sufi-Kurgan** | 0.47 | 330 | *i* P | | **Pg** | 03 49 44.0 | -1.8 |
| SFK | | | | *e* S | | **Sg** | 03 49 51.4 | -0.8 |
| OHH | **Osh** | 1.20 | 320 | ⇓*e* P | | **Pn** | 03 49 57.6 | -1.2 |
| | baz=18 | | | | | | | |
| OHH | | | | ⇓*e* S | | **Sg** | 03 50 14.5 | -0.9 |
| | baz=18 | | | | | | | |
| OHH | **Osh** | 1.20 | 320 | *i* P | | **Pn** | 03 49 57.6 | -1.2 |
| OHH | | | | *e* S | | **Sg** | 03 50 14.5 | -0.9 |
| DRK | **Karamyk** | 1.56 | 266 | | | **Pn** | 03 50 03.0 | -0.9 |
| DRK | | | | Sn | | **Sn** | 03 50 23.5 | -0.4 |
| DRK | **Karamyk** | 1.56 | 266 | ⇓*e* P | | **Pn** | 03 50 04.0 | +0.2 |
| | baz=67 | | | | | | | |
| DRK | | | | ⇓*e* S | | **Sg** | 03 50 25.8 | -0.8 |
| | baz=67 | | | | | | | |
| DRK | **Karamyk** | 1.56 | 266 | *i* P | | **Pn** | 03 50 04.0 | +0.2 |
| DRK | | | | *e* S | | **Sg** | 03 50 25.8 | -0.8 |
| KSH | **Kashi** | 1.68 | 92 | Pg | | **Pn** | 03 50 03.0 | -2.4 |
| KSH | | | | Sg | | **Sn** | 03 50 23.8 | -2.9 |
| KSH | | | | smax | smax | | | |
| | comp=N,930nm,0.6s | | | | | | | |
| KSH | | | | smax | smax | | | |
| | comp=E,820nm,0.7s | | | | | | | |
| ARSB | **Arslanbob** | 1.82 | 340 | | | **Pb** | 03 50 09.7 | +0.1 |
| ARSB | **Arslanbob** | 1.82 | 340 | ⇑*e* P | | **Pn** | 03 50 08.2 | +0.8 |
| | baz=39 | | | | | | | |
| ARSB | | | | ⇑*e* S | | **Sb** | 03 50 33.2 | +0.9 |
| | baz=39 | | | | | | | |
| ARSB | **Arslanbob** | 1.82 | 340 | PN | | **Pb** | 03 50 09.7 | +0.1 |
| BTK | **Batken** | 2.34 | 282 | | | **Pn** | 03 50 15.9 | +1.4 |
| BTK | **Batken** | 2.34 | 282 | ⇓*e* P | | **Pn** | 03 50 15.9 | +1.4 |
| | baz=82 | | | | | | | |
| BTK | | | | ⇓*i* S | | **Sb** | 03 50 46.2 | -1.0 |
| | baz=82 | | | | | | | |
| BTK | **Batken** | 2.34 | 282 | PN | | **Pn** | 03 50 15.9 | +1.4 |
| AML | **Almayashu** | 2.52 | 358 | P | | **Pb** | 03 50 20.6 | -1.0 |
| | SNR=38 | | | | | | | |
| AML | **Almayashu** | 2.52 | 358 | ⇓*e* P | | **Pn** | 03 50 18.0 | +0.8 |
| | baz=57 | | | | | | | |
| AML | | | | ⇓*e* S | | **Sn** | 03 50 49.9 | +2.0 |
| | baz=57 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AML | **Almayashu** | 2.52 | 358 | *e*PN | | **Pn** | 03 50 19.0 | +1.8 |
| ARK | **Arkit** | 2.60 | 328 | ⇑*e* P | | **Pn** | 03 50 19.3 | +1.3 |
| | baz=27 | | | | | | | |
| ARK | | | | ⇑*e* S | | **Sn** | 03 50 51.8 | +2.5 |
| | baz=27 | | | | | | | |
| UCH | **Uchtor** | 2.67 | 11 | P | | **Pb** | 03 50 23.9 | -0.4 |
| | SNR=29 | | | | | | | |
| GAR | **Garm** | 2.77 | 258 | Pn | | **Pn** | 03 50 21.3 | +0.9 |
| GAR | **Garm** | 2.77 | 258 | ⇑*e* P | | **Pn** | 03 50 21.7 | +1.3 |
| | baz=59 | | | | | | | |
| GAR | | | | ⇑*e* S | | **Sn** | 03 50 56.5 | +2.8 |
| | baz=59 | | | | | | | |
| GAR | **Garm** | 2.77 | 258 | *e*PN | | **Pn** | 03 50 21.7 | +1.3 |
| TRKS | **Terek-Say** | 2.79 | 314 | ⇓*e* P | | **Pn** | 03 50 21.1 | +0.4 |
| | baz=13 | | | | | | | |
| TRKS | | | | ⇓*i* S | | **Sn** | 03 50 55.4 | +1.2 |
| | baz=13 | | | | | | | |
| TRKS | **Terek-Say** | 2.79 | 314 | *i* PN | | **Pn** | 03 50 21.1 | +0.4 |
| MNAS | **Manas** | 3.04 | 342 | ⇑*e* P | | **Pn** | 03 50 25.2 | +1.1 |
| | baz=41 | | | | | | | |
| MNAS | | | | ⇑*e* S | | **Sn** | 03 51 02.5 | +2.2 |
| | baz=41 | | | | | | | |
| MNAS | **Manas** | 3.04 | 342 | *e*PN | | **Pn** | 03 50 25.2 | +1.1 |
| MNAS | | | | *e* S | | **Sn** | 03 51 02.5 | +2.2 |
| EKS2 | **Erkin-Say** | 3.05 | 360 | P | | **Pb** | 03 50 28.4 | -2.0 |
| | SNR=14 | | | | | | | |
| EKS2 | **Erkin-Say** | 3.05 | 360 | ⇑*e* P | | **Pn** | 03 50 25.1 | +0.9 |
| | baz=59 | | | | | | | |
| EKS2 | | | | ⇑*e* S | | **Sn** | 03 51 02.2 | +1.7 |
| | baz=59 | | | | | | | |
| EKS2 | **Erkin-Say** | 3.05 | 360 | *e*PN | | **Pn** | 03 50 25.1 | +0.9 |
| AAK | **Ala-Archa** | 3.07 | 10 | P | | **Pb** | 03 50 29.3 | -1.5 |
| | SNR=61 | | | | | | | |
| AAK | **Ala-Archa** | 3.07 | 10 | Pn | | **Pb** | 03 50 28.8 | -2.0 |
| AAK | **Ala-Archa** | 3.07 | 10 | Pn | | **Pb** | 03 50 29.3 | -1.5 |
| | comp=E,31nm,0.3s,baz=172,slow=6.3,SNR=83 | | | | | | | |
| AAK | | | | Sn | | **Sb** | 03 51 09.4 | +1.2 |
| | comp=E,20nm,0.3s,baz=56,slow=14,SNR=5.1 | | | | | | | |
| AAK | | | | Lg | | Lg | 03 51 15.2 | |
| | comp=E,24nm,0.3s,baz=297,slow=21,SNR=13 | | | | | | | |
| | comp=E,73nm,0.4s | | | | | | | |
| AAK | **Ala-Archa** | 3.07 | 10 | Pn | | **Pb** | 03 50 28.1 | -2.8 |
| | comp=E,60nm,0.5s | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 03 51 08.2 | |
| | comp=E,342nm,0.7s | | | | | | | |
| AAK | **Ala-Archa** | 3.07 | 10 | ⇓*e* P | | **Pn** | 03 50 25.2 | +0.7 |
| | baz=8.0 | | | | | | | |
| AAK | | | | ⇓*i* S | | **Sn** | 03 51 02.5 | +1.4 |
| | baz=8.0 | | | | | | | |
| AAK | **Ala-Archa** | 3.07 | 10 | PN | | **Pb** | 03 50 28.8 | -2.0 |
| MRKS | **Merke** | 3.16 | 352 | *e*P | | **Pb** | 03 50 29.5 | -2.9 |
| | comp=E,39nm,0.4s | | | | | | | |
| MRKS | | | | *e* S | | **Sb** | 03 51 10.3 | -0.5 |
| | comp=E,525nm,0.5s | | | | | | | |
| MRKS | **Merke** | 3.16 | 352 | Lg | | Lg | 03 51 15.5 | |
| | comp=E,192nm,0.5s | | | | | | | |
| KBK | **Karagaybulak** | 3.16 | 15 | P | | **Pb** | 03 50 31.2 | -1.3 |
| | SNR=16 | | | | | | | |
| KBK | **Karagaybulak** | 3.16 | 15 | ⇑*e* P | | **Pn** | 03 50 26.5 | +0.6 |
| | baz=14 | | | | | | | |
| KBK | | | | ⇑*i* S | | **Sn** | 03 51 04.6 | +1.2 |
| | baz=14 | | | | | | | |
| KBK | **Karagaybulak** | 3.16 | 15 | *e*PN | | **Pn** | 03 50 26.5 | +0.6 |
| ULHL | **Ulahol** | 3.22 | 34 | P | | **Pg** | 03 50 36.1 | -2.0 |
| | SNR=13 | | | | | | | |
| ULHL | **Ulahol** | 3.22 | 34 | ⇑*e* P | | **Pn** | 03 50 26.9 | +0.3 |
| | baz=33 | | | | | | | |
| ULHL | | | | ⇑*e* S | | **Sn** | 03 51 05.3 | +0.5 |
| | baz=33 | | | | | | | |
| ULHL | **Ulahol** | 3.22 | 34 | *e*PN | | **Pn** | 03 50 26.9 | +0.3 |
| FRU1 | **Bishkek** | 3.26 | 11 | | | **Pb** | 03 50 32.2 | -1.8 |
| FRU1 | **Bishkek** | 3.26 | 11 | ⇑*e* P | | **Pn** | 03 50 28.0 | +1.0 |
| | baz=10.0 | | | | | | | |
| FRU1 | | | | ⇑*e* S | | **Sn** | 03 51 07.3 | +1.7 |
| | baz=10.0 | | | | | | | |
| FRU1 | **Bishkek** | 3.26 | 11 | PN | | **Pb** | 03 50 32.2 | -1.8 |
| BOOM | **Boomskoye usch** | 3.30 | 29 | | | **Pb** | 03 50 32.6 | -2.2 |
| BOOM | **Boomskoye usch** | 3.30 | 29 | ⇓*e* P | | **Pn** | 03 50 28.1 | +0.4 |
| | baz=28 | | | | | | | |
| BOOM | | | | ⇓*e* S | | **Sn** | 03 51 07.5 | +0.7 |
| | baz=28 | | | | | | | |
| BOOM | **Boomskoye usch** | 3.30 | 29 | PN | | **Pb** | 03 50 32.6 | -2.2 |
| CHMS | **Chumysh** | 3.46 | 12 | P | | **Pb** | 03 50 34.4 | -3.0 |
| | SNR=29 | | | | | | | |
| CHMS | **Chumysh** | 3.46 | 12 | ⇓Pn | | **Pn** | 03 50 33.4 | +3.6 |
| | comp=E,34nm,0.5s | | | | | | | |
| CHMS | | | | ⇑Lg | | Lg | 03 51 22.9 | |
| | comp=E,304nm,0.8s | | | | | | | |
| CHMS | **Chumysh** | 3.46 | 12 | ⇑*e* P | | **Pn** | 03 50 30.5 | +0.7 |
| | baz=11 | | | | | | | |
| CHMS | | | | ⇑*i* S | | **Sn** | 03 51 11.5 | +1.0 |
| | baz=11 | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KKAR | **Karatay Array** | **4.28** | **326** | ⇑*i* | P | | **Pn** | **03 50 42.5** | **+1.4** |
| | baz=25 | | | | | | | | | |
| KKAR | | | | ⇑*i* | S | | **Sn** | **03 51 32.3** | **+1.6** |
| | baz=25 | | | | | | | | | |
| **KKAR** | **Karatay Array** | **4.28** | **326** | | PN | | **Pn** | **03 50 43.4** | **+2.4** |
| **MDOK** | **Medeo** | **4.31** | **33** | *e* | P | | **Pb** | **03 50 51.5** | **-0.5** |
| | comp=E,16nm,0.4s | | | | | | | | | |
| MDOK | | | | *e* | S | | **Sg** | **03 51 53.1** | **-1.6** |
| | comp=E,64nm,1.0s | | | | | | | | | |
| **MDOK** | **Medeo** | **4.31** | **33** | ⇓ | Pn | | Pb | 03 50 47.0 | -4.9 |
| | comp=E,52nm,0.6s | | | | | | | | | |
| MDOK | | | | | Pg | | Pg | 03 50 51.5 | -7.5 |
| | comp=E,59nm,0.7s | | | | | | | | | |
| MDOK | | | | ⇑ | Lg | | Lg | 03 51 49.4 | | |
| | comp=E,172nm,1.5s | | | | | | | | | |
| MDOK | | | | | Lg | | Lg | 03 51 53.1 | | |
| | comp=E,64nm,1.0s | | | | | | | | | |
| **MDOK** | **Medeo** | **4.31** | **33** | | PN | | **Pn** | **03 50 46.0** | **+4.5** |
| **KRBS** | **Karabastau** | **4.32** | **18** | *e* | P | | **Pb** | **03 50 52.3** | **+0.2** |
| | comp=E,38nm,0.4s | | | | | | | | | |
| KRBS | | | | *e* | S | | **Sg** | **03 51 54.6** | **-0.4** |
| | comp=E,103nm,0.8s | | | | | | | | | |
| **KRBS** | **Karabastau** | **4.32** | **18** | | Pg | | **Pb** | **03 50 52.3** | **+0.2** |
| | comp=E,42nm,0.4s | | | | | | | | | |
| KRBS | | | | | Lg | | Lg | 03 51 54.6 | | |
| | comp=E,103nm,0.8s | | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.39** | **33** | *e* | P | | **Pb** | **03 50 53.5** | **+0.1** |
| | comp=E,16nm,0.5s | | | | | | | | | |
| KOTS | | | | *e* | S | | **Sg** | **03 51 56.5** | **-1.0** |
| | comp=E,229nm,0.7s | | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.39** | **33** | | Pg | | **Pb** | **03 50 53.5** | **+0.1** |
| | comp=E,61nm,0.4s | | | | | | | | | |
| KOTS | | | | | Lg | | Lg | 03 51 56.5 | | |
| | comp=E,229nm,0.7s | | | | | | | | | |
| **PRZ** | **Przheval'sk** | **4.51** | **49** | | PN | | Pb | 03 50 50.2 | -5.2 |
| **KTBS** | **Karatobe** | **4.63** | **27** | *e* | P | | **Pb** | **03 50 57.9** | **+0.5** |
| | comp=E,25nm,0.5s | | | | | | | | | |
| KTBS | | | | *e* | S | | **Sg** | **03 52 04.0** | **-1.1** |
| | comp=E,178nm,0.7s | | | | | | | | | |
| **KTBS** | **Karatobe** | **4.63** | **27** | | Pg | | **Pb** | **03 50 57.9** | **+0.5** |
| | comp=E,33nm,0.6s | | | | | | | | | |
| KTBS | | | | | Lg | | Lg | 03 52 04.0 | | |
| | comp=E,178nm,0.7s | | | | | | | | | |
| **KUU** | **Kurty** | **4.68** | **23** | | Pg | | **Pb** | **03 50 58.4** | **+0.2** |
| | comp=E,5.1nm,0.1s | | | | | | | | | |
| KUU | | | | | Lg | | Lg | 03 52 04.8 | | |
| | comp=E,91nm,0.8s | | | | | | | | | |
| **CHKK** | **Chushkaly** | **4.86** | **28** | *e* | P | | **Pb** | **03 51 01.9** | **+0.6** |
| | comp=E,5.0nm,0.3s | | | | | | | | | |
| CHKK | | | | *e* | S | | **Sg** | **03 52 10.9** | **-1.6** |
| | comp=E,92nm,0.7s | | | | | | | | | |
| **CHKK** | **Chushkaly** | **4.86** | **28** | | Pg | | **Pb** | **03 51 02.2** | **+0.8** |
| | comp=E,30nm,0.6s | | | | | | | | | |
| CHKK | | | | | Lg | | Lg | 03 52 11.2 | | |
| | comp=E,92nm,0.7s | | | | | | | | | |
| **SATY** | **Saty** | **4.89** | **44** | *e* | P | | **Pb** | **03 51 01.9** | **+0.2** |
| | comp=E,38nm,1.0s | | | | | | | | | |
| SATY | | | | *e* | S | | **Sg** | **03 52 11.2** | **-2.1** |
| | comp=E,88nm,1.0s | | | | | | | | | |
| **SATY** | **Saty** | **4.89** | **44** | | Pg | | **Pb** | **03 51 01.9** | **+0.2** |
| | comp=E,38nm,1.0s | | | | | | | | | |
| SATY | | | | | Lg | | Lg | 03 52 11.2 | | |
| | comp=E,88nm,1.0s | | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.98** | **43** | *e* | P | | **Pb** | **03 51 04.3** | **+1.0** |
| | comp=E,9.0nm,0.2s | | | | | | | | | |
| ZHN | | | | *e* | S | | **Sg** | **03 52 15.0** | **-1.2** |
| | comp=E,49nm,0.7s | | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.98** | **43** | | Pg | | **Pb** | **03 51 04.3** | **+1.0** |
| | comp=E,9.0nm,0.2s | | | | | | | | | |
| ZHN | | | | | Lg | | Lg | 03 52 15.0 | | |
| | comp=E,50nm,0.7s | | | | | | | | | |
| **KURS** | **Kuram** | **5.07** | **39** | *e* | P | | **Pb** | **03 51 05.8** | **+0.8** |
| | comp=E,23nm,0.9s | | | | | | | | | |
| KURS | | | | *e* | S | | **Sg** | **03 52 17.8** | **-1.5** |
| | comp=E,54nm,1.1s | | | | | | | | | |
| **KURS** | **Kuram** | **5.07** | **39** | | Pg | | **Pb** | **03 51 05.8** | **+0.8** |
| | comp=E,23nm,0.9s | | | | | | | | | |
| KURS | | | | | Lg | | Lg | 03 52 17.8 | | |
| | comp=E,54nm,1.1s | | | | | | | | | |
| **UZB** | **Uzynbulak** | **5.28** | **46** | *e* | P | | **Pb** | **03 51 09.9** | **+1.4** |
| | comp=E,8.3nm,0.5s | | | | | | | | | |
| UZB | | | | *e* | S | | **Sg** | **03 52 24.4** | **-1.5** |
| | comp=E,20nm,0.7s | | | | | | | | | |
| **KPKS** | **Kokpek** | **5.32** | **42** | *e* | P | | **Pb** | **03 51 09.9** | **+0.8** |
| | comp=E,17nm,0.4s | | | | | | | | | |
| KPKS | | | | *e* | S | | **Sg** | **03 52 24.9** | **-2.1** |
| | comp=E,56nm,0.7s | | | | | | | | | |
| **KPKS** | **Kokpek** | **5.32** | **42** | | Pg | | **Pb** | **03 51 09.9** | **+0.8** |
| | comp=E,17nm,0.4s | | | | | | | | | |
| KPKS | | | | | Lg | | Lg | 03 52 24.9 | | |
| | comp=E,56nm,0.7s | | | | | | | | | |
| **BTLS** | **Baital** | **5.43** | **2** | *e* | P | | **Pb** | **03 51 12.5** | **+1.5** |
| | comp=E,9.7nm,0.5s | | | | | | | | | |
| BTLS | | | | *e* | S | | **Sg** | **03 52 28.9** | **-1.9** |
| | comp=E,8.8nm,0.6s | | | | | | | | | |
| **BTLS** | **Baital** | **5.43** | **2** | | Pg | | **Pb** | **03 51 12.5** | **+1.5** |
| | comp=E,9.7nm,0.5s | | | | | | | | | |
| BTLS | | | | | Lg | | Lg | 03 52 28.9 | | |
| | comp=E,8.8nm,0.6s | | | | | | | | | |
| **ARXS** | **Arharly** | **5.49** | **32** | *e* | P | | **Pb** | **03 51 13.8** | **+1.8** |
| | comp=E,39nm,0.4s | | | | | | | | | |
| ARXS | | | | *e* | S | | **Sg** | **03 52 31.5** | **-1.1** |
| | comp=E,107nm,0.7s | | | | | | | | | |
| **ARXS** | **Arharly** | **5.49** | **32** | | Pg | | **Pb** | **03 51 13.8** | **+1.8** |
| | comp=E,39nm,0.4s | | | | | | | | | |
| ARXS | | | | | Lg | | Lg | 03 52 31.5 | | |
| | comp=E,74nm,0.8s | | | | | | | | | |
| **SHLS** | **Shalkode** | **5.54** | **48** | *e* | P | | **Pg** | **03 51 18.8** | **-3.7** |
| | comp=E,19nm,0.4s | | | | | | | | | |
| SHLS | | | | *e* | S | | **Sg** | **03 52 40.1** | **+5.9** |
| | comp=E,42nm,0.5s | | | | | | | | | |
| **SHLS** | **Shalkode** | **5.54** | **48** | | Pg | | **Pg** | **03 51 18.8** | **-3.7** |
| | comp=E,24nm,0.5s | | | | | | | | | |
| SHLS | | | | | Lg | | Lg | 03 52 40.1 | | |
| | comp=E,43nm,0.6s | | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.66** | **47** | ⇓ | Pn | | **Pn** | **03 51 04.4** | **+4.3** |
| | comp=E,11nm,0.8s | | | | | | | | | |
| PDGK | | | | ⇑ | Pg | | **Pg** | **03 51 21.1** | **-3.7** |
| | comp=E,12nm,0.6s | | | | | | | | | |
| PDGK | | | | ⇑ | Lg | | Lg | 03 52 34.9 | | |
| | comp=E,97nm,1.1s | | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.66** | **47** | | PN | | **Pn** | **03 51 04.4** | **+4.3** |
| **BLB** | **Baldybastay** | **5.68** | **36** | | Pg | | **Pb** | **03 51 17.2** | **+1.9** |
| | comp=E,100nm,0.7s | | | | | | | | | |
| BLB | | | | | Lg | | Lg | 03 52 37.2 | | |
| | comp=E,74nm,0.7s | | | | | | | | | |
| **NIL** | **Nilore** | **5.96** | **184** | | Pn | | **Pn** | **03 51 08.3** | **+4.1** |
| **NIL** | **Nilore** | **5.96** | **184** | | PN | | **Pn** | **03 51 08.3** | **+4.1** |
| **KNOS** | **Konyrlen** | **6.21** | **38** | | Pg | | **Pb** | **03 51 28.1** | **+3.8** |
| | comp=E,12nm,0.8s | | | | | | | | | |
| **KTMS** | **Ketmen** | **6.23** | **50** | *e* | P | | **Pb** | **03 51 26.7** | **+2.0** |
| | comp=E,5.1nm,0.6s | | | | | | | | | |
| KTMS | | | | *e* | S | | **Sg** | **03 52 53.4** | **-2.9** |
| | comp=E,10nm,0.8s | | | | | | | | | |
| **KTMS** | **Ketmen** | **6.23** | **50** | | Lg | | Lg | 03 52 53.7 | | |
| | comp=E,11nm,0.4s | | | | | | | | | |
| **KBL** | **Kabul** | **6.33** | **218** | | Pn | | **Pn** | **03 51 11.7** | **+2.3** |
| **KBL** | **Kabul** | **6.33** | **218** | | P | | **Pn** | **03 51 12.8** | **+3.4** |
| | SNR=11 | | | | | | | | | |
| **KBL** | **Kabul** | **6.33** | **218** | | PN | | **Pn** | **03 51 11.7** | **+2.3** |
| **KBL** | **Kabul** | **6.33** | **218** | | S | | Sn | 03 52 05.8 | -16 |
| **TDK** | **Taldyqorghan** | **6.38** | **31** | *e* | P | | **Pb** | **03 51 31.5** | **+4.4** |
| | comp=E,73nm,0.2s | | | | | | | | | |
| TDK | | | | *e* | S | | **Sg** | **03 53 01.8** | **+0.8** |
| | comp=E,172nm,0.6s | | | | | | | | | |
| **TDK** | **Taldyqorghan** | **6.38** | **31** | | Pg | | **Pb** | **03 51 31.5** | **+4.4** |
| | comp=E,73nm,0.2s | | | | | | | | | |
| **DJR** | **Jarkent** | **6.49** | **41** | *e* | P | | **Pb** | **03 51 32.7** | **+3.6** |
| | comp=E,1.9nm,0.3s | | | | | | | | | |
| DJR | | | | *e* | S | | **Sg** | **03 53 03.9** | **-0.8** |
| | comp=E,15nm,0.5s | | | | | | | | | |
| **DJR** | **Jarkent** | **6.49** | **41** | | Pg | | **Pb** | **03 51 32.9** | **+3.8** |
| | comp=E,7.0nm,0.5s | | | | | | | | | |
| **OTUK** | **Ortayu** | **8.70** | **354** | ⇓ | Pn | | **Pn** | **03 51 44.1** | **+2.5** |
| | comp=E,9.6nm,1.6s | | | | | | | | | |
| OTUK | | | | ⇑ | Lg | | Lg | 03 54 07.6 | | |
| | comp=E,41nm,0.8s | | | | | | | | | |
| **OTUK** | **Ortayu** | **8.70** | **354** | | P | | **Pn** | **03 51 41.2** | **-0.5** |
| **MK31** | **Makanchi Array** | **9.48** | **38** | | | | Pn | 03 51 58.5 | +6.1 |
| **MK31** | **Makanchi Array** | **9.48** | **38** | ⇓ | Pn | | **Pn** | **03 51 56.8** | **+4.4** |
| | comp=E,21nm,0.8s,baz=217,slow=14,SNR=5.3 | | | | | | | | | |
| MK31 | | | | ⇓ | Lg | | Lg | 03 54 34.1 | | |
| | comp=E,26nm,1.6s,baz=222,slow=22 | | | | | | | | | |
| **MK31** | **Makanchi Array** | **9.48** | **38** | *de* | P | | **Pn** | **03 51 57.0** | **+4.6** |
| MK31 | | | | | pmax | | pmax | | | |
| | comp=E,2.0nm,0.6s | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.48** | **38** | | Pn | | **Pn** | **03 51 56.5** | **+4.1** |
| **MKAR** | **Makanchi Array** | **9.48** | **38** | | Pn | | **Pn** | **03 51 55.4** | **+3.0** |
| | comp=Z,0.1nm,0.3s,baz=224,slow=13,SNR=5.5 | | | | | | | | | |
| MKAR | | | | | Lg | | Lg | 03 54 37.5 | | |
| | comp=Z,0.2nm,0.3s,baz=223,slow=30,SNR=2.7 | | | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | | | |
| **WMQ** | **Urumqi** | **11.20** | **63** | *eP* | | | Pn | 03 52 24.8 | +8.8 |
| **KURBB** | **Kurchatov Arra** | **11.50** | **15** | | Pn | | **Pn** | **03 52 22.0** | **+2.0** |
| | comp=Z,1.2nm,0.8s,baz=204,slow=12,SNR=1.6 | | | | | | | | | |
| KURBB | | | | | Lg | | Lg | 03 55 39.5 | | |
| | comp=Z,0.1nm,0.3s,baz=201,slow=30,SNR=12 | | | | | | | | | |
| **KURK** | **Kurchatov** | **11.61** | **15** | ⇑ | *eP* | | **Pn** | **03 52 24.7** | **+3.2** |
| KURK | | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **13.62** | **351** | | Pn | | **Pn** | **03 52 49.0** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=164,slow=13,SNR=21 | | | | | | | | | |
| BVAR | | | | | Lg | | Lg | 03 56 48.1 | | |
| | baz=161,slow=27,SNR=2.3 | | | | | | | | | |
| | comp=Z,4.5nm,0.6s | | | | | | | | | |
| **BRVK** | **Borovoye** | **13.67** | **351** | | | | **Pn** | **03 52 49.5** | **-0.1** |
| **BRVK** | **Borovoye** | **13.67** | **351** | | P | | **Pn** | **03 52 49.5** | **-0.1** |
| **AB31** | **Akbulak array** | **13.80** | **319** | | P | | **Pn** | **03 52 55.4** | **+4.0** |
| | comp=Z,3.7nm,0.8s,baz=140,slow=12,SNR=47 | | | | | | | | | |
| **AB31** | **Akbulak array** | **13.80** | **319** | | P | | **Pn** | **03 52 55.4** | **+4.0** |
| **ABKAR** | **Akbulak array** | **13.80** | **319** | | Pn | | **Pn** | **03 52 50.1** | **-1.3** |
| **ABKAR** | **Akbulak array** | **13.80** | **319** | | Pn | | **Pn** | **03 52 51.0** | **-0.4** |
| **DGZ** | **Jazzator, Alta** | **13.97** | **39** | ⇑ | *eP* | | **Pn** | **03 52 57.7** | **+3.8** |
| DGZ | | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.51** | **319** | | Pn | | **Pn** | **03 53 13.7** | **-0.8** |
| | comp=Z,0.7nm,0.3s,baz=125,slow=13,SNR=14 | | | | | | | | | |
| AKTO | | | | | Sn | | **Sn** | **03 56 00.9** | **-5.1** |
| | comp=Z,0.2nm,0.3s,baz=349,slow=12,SNR=2.0 | | | | | | | | | |
| AKTO | | | | | Lg | | Lg | 03 57 47.9 | | |
| | comp=Z,0.1nm,0.3s,baz=137,slow=9.6,SNR=1.7 | | | | | | | | | |
| | comp=Z,6.3nm,0.7s | | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **16.18** | **24** | | | | **Pn** | **03 53 24.0** | **+1.0** |
| **ZALV** | **Zalesovo Beam** | **16.18** | **24** | | Pn | | **P** | **03 53 25.5** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **16.18** | **24** | | Pn | | **Pn** | **03 53 23.0** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=200,slow=13,SNR=9.2 | | | | | | | | | |
| ZALV | | | | | Lg | | Lg | 03 58 10.6 | | |
| | comp=Z,0.2nm,0.3s,baz=225,slow=35,SNR=1.4 | | | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.18** | **24** | *e* | P | | **P** | **03 53 25.7** | **-0.4** |
| ZALV | | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | | |
| **ARU** | **Arti** | **19.60** | **334** | | P | | **P** | **03 54 04.5** | **+0.6** |
| | baz=138,slow=20,SNR=1.7 | | | | | | | | | |
| | comp=Z,3.6nm,0.3s | | | | | | | | | |
| **ARU** | **Arti** | **19.60** | **334** | *c i* | P | | **Pn** | **03 54 06.6** | **+1.4** |
| ARU | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **19.93** | **49** | ⇑ | *eP* | | **Pn** | **03 54 10.9** | **+1.5** |
| KNGR | | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | | |
| **SHL** | **Shillong** | **20.64** | **127** | | P | | **P** | **03 54 15.2** | **-0.4** |
| **SHL** | **Shillong** | **20.64** | **127** | | P | | **P** | **03 54 15.2** | **-0.4** |
| SHL | | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | | |
| **UOSS** | **Minazif** | **20.81** | **231** | | P | | **P** | **03 54 16.9** | **-0.3** |
| UOSS | | | | | IAmb | | IAmb | 03 54 35.8 | | |
| | comp=Z,9.9nm,0.6s | | | | | | | | | |
| **BIDO** | **Bidbid** | **20.82** | **224** | | P | | Pn | 03 54 21.8 | +2.0 |
| **WBK** | **Wadi Bani Khal** | **21.13** | **221** | | S | | S | 03 58 04.8 | -11 |
| **WBK** | **Wadi Bani Khal** | **21.13** | **221** | | P | | **P** | **03 54 24.0** | **+3.2** |
| | SNR=20 | | | | | | | | | |
| **SOHO** | **SOHO** | **21.23** | **229** | | P | | **P** | **03 54 25.4** | **+3.6** |
| **SMDO** | **Samad** | **21.24** | **224** | | S | | **S** | **03 58 08.4** | **-9.2** |
| **JLN** | **Jalan Bani Buh** | **21.29** | **219** | | P | | P | 03 54 30.6 | +8.2 |
| **JLN** | **Jalan Bani Buh** | **21.29** | **219** | | S | | **S** | **03 58 12.1** | **-6.5** |
| **BSY** | **Bisya** | **21.95** | **225** | | P | | **P** | **03 54 31.2** | **+1.6** |
| **BELG** | **Belogornoye** | **22.08** | **314** | ⇓ | *eP* | | **P** | **03 54 30.4** | **-0.3** |
| BELG | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | | |
| **GNI** | **Garni** | **22.27** | **281** | | P | | **P** | **03 54 33.7** | **+0.6** |
| GNI | | | | | IAmb | | IAmb | 03 54 44.8 | | |
| | comp=Z,31nm,1.4s | | | | | | | | | |
| **GNI** | **Garni** | **22.27** | **281** | ⇑ | *eP* | | **P** | **03 54 28.6** | **-4.5** |
| GNI | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | |
| **UMZA** | **Um Al Zommool** | **23.12** | **229** | | P | | **P** | **03 54 45.9** | **+3.9** |
| **KBZ** | **Khabaz** | **23.38** | **290** | | P | | **P** | **03 54 42.9** | **-1.5** |
| | comp=Z,0.6nm,0.5s,baz=113,slow=18,SNR=1.6 | | | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | | | |
| **KBZ** | **Khabaz** | **23.38** | **290** | ⇑ | *eP* | | **P** | **03 54 40.6** | **-3.8** |
| KBZ | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | | |
| **KARS** | **Kars** | **23.46** | **282** | | P | | **P** | **03 54 43.2** | **-2.2** |
| **KARS** | **Kars** | **23.46** | **282** | | P | | **P** | **03 54 43.2** | **-2.2** |
| KARS | | | | | pmax | | pmax | | | |
| | comp=Z,27nm,0.9s | | | | | | | | | |
| **KIV** | **Kislovodsk** | **23.53** | **291** | *e* | P | | **P** | **03 54 43.9** | **-2.1** |
| KIV | | | | *e* | S | | **S** | **03 58 58.1** | **-1.3** |
| KIV | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | | |
| **KIRV** | **Kirov** | **24.57** | **329** | ⇑ | *eP* | | **P** | **03 54 54.1** | **-1.3** |
| **SONM** | **Songino Array** | **24.80** | **60** | | P | | **P** | **03 55 00.2** | **+2.3** |
| **SONM** | **Songino Array** | **24.80** | **60** | | P | | **P** | **03 54 57.8** | **-0.1** |
| | comp=Z,0.3nm,0.4s,baz=266,slow=9.4,SNR=1.8 | | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | | |
| **OBN** | **Obninsk** | **29.18** | **315** | | *eP* | | **P** | **03 55 40.8** | **+3.9** |
| OBN | | | | | *e* | | | 03 56 34.4 | | |
| OBN | | | | | *e*PPP | | PPP | 03 56 41.6 | | |
| OBN | | | | | *e* | | | 03 58 48.5 | | |
| OBN | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | | |
| **BR131** | **Keskin Array S** | **30.74** | **283** | | P | | **P** | **03 55 49.1** | **-2.0** |
| **BR131** | **Keskin Array S** | **30.74** | **283** | ⇑ | *eP* | | **P** | **03 55 48.9** | **-2.2** |
| **BRTR** | **Keskin Array B** | **30.74** | **283** | | P | | **P** | **03 55 49.6** | **-1.5** |
| **BRTR** | **Keskin Array B** | **30.74** | **283** | | P | | **P** | **03 55 50.6** | **-0.5** |
| | comp=Z,2.2nm,0.9s,baz=91,slow=7.9,SNR=12 | | | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **30.74** | **283** | | P | | **P** | **03 55 49.6** | **-1.5** |
| **AKASG** | **Malin Array Be** | **32.86** | **305** | | P | | **P** | **03 56 09.8** | **+0.3** |
| | comp=Z,0.4nm,0.3s,baz=82,slow=7.5,SNR=6.5 | | | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **32.86** | **305** | *e* | P | | **P** | **03 56 09.7** | **+0.3** |
| AKASG | | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **32.86** | **305** | | P | | **P** | **03 56 08.2** | **-1.2** |
| AKBB | | | | | IAmb | | IAmb | 03 56 11.1 | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | | |
| **AKBB** | **Malin Array Si** | **32.86** | **305** | | P | | **P** | **03 56 08.2** | **-1.2** |
| AKBB | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | | |
| **KIEV** | **Kiev** | **32.87** | **305** | | P | | **P** | **03 56 08.0** | **-1.5** |
| **KIEV** | **Kiev** | **32.87** | **305** | | P | | **P** | **03 56 08.0** | **-1.5** |
| KIEV | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | | |
| **NACGM** | **Naroch** | **34.66** | **312** | *e* | P | | **P** | **03 56 25.1** | **+0.1** |
| | comp=Z,353nm,0.9s,baz=96 | | | | | | | | | |
| **MLR** | **Muntele Rosu** | **35.32** | **296** | | P | | **P** | **03 56 30.0** | **-1.0** |
| MLR | | | | | IAmb | | IAmb | 03 56 35.9 | | |
| | comp=Z,5.5nm,0.8s | | | | | | | | | |
| **MLR** | **Muntele Rosu** | **35.32** | **296** | | P | | **P** | **03 56 30.0** | **-1.0** |
| MLR | | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | | |
| **BURAR** | **Bucovina Array** | **35.58** | **299** | | P | | **P** | **03 56 32.8** | **-0.3** |
| **FIA1** | **FINESS Array S** | **36.24** | **323** | | P | | **P** | **03 56 38.5** | **+0.1** |
| **FINES** | **FINESS Array B** | **36.24** | **323** | | P | | **P** | **03 56 38.8** | **+0.3** |
| **FINES** | **FINESS Array B** | **36.24** | **323** | | P | | **P** | **03 56 39.4** | **+0.9** |
| | comp=Z,2.6nm,0.4s,baz=110,slow=9.6,SNR=31 | | | | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.18** | **335** | | P | | **P** | **03 57 04.8** | **+1.5** |
| | comp=Z,3.4nm,0.4s,baz=109,slow=8.3,SNR=33 | | | | | | | | | |
| | comp=Z,3.4nm,0.4s | | | | | | | | | |
| **VYHS** | **Vyhne** | **39.73** | **302** | *eP* | | | **P** | **03 57 10.1** | **+2.0** |
| **VYHS** | **Vyhne** | **39.73** | **302** | *eP* | | | **P** | **03 57 10.1** | **+2.0** |
| **YAK** | **Yakutsk** | **40.15** | **37** | ⇓ | *eP* | | **P** | **03 57 12.5** | **+1.1** |
| YAK | | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | | |
| **HFS** | **Hagfors** | **42.06** | **320** | | P | | **P** | **03 57 27.7** | **+0.6** |
| | comp=Z,3.9nm,0.6s,baz=108,slow=9.5,SNR=19 | | | | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | | | | |
| **GERES** | **GERESS Array B** | **43.02** | **303** | | P | | **P** | **03 57 35.9** | **+0.7** |
| **GERES** | **GERESS Array B** | **43.02** | **303** | | P | | **P** | **03 57 35.5** | **+0.2** |
| | comp=Z,0.8nm,0.6s,baz=79,slow=7.1,SNR=4.2 | | | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | | | |
| **CLL** | **Collm** | **43.04** | **307** | *eP* | | | **P** | **03 57 36.0** | **+0.7** |
| **CLL** | **Collm** | **43.04** | **307** | *eP* | | | **P** | **03 57 36.0** | **+0.7** |
| **KHC** | **Kasperske Hory** | **43.05** | **303** | ⇑ | *eP* | | **P** | **03 57 32.2** | **-3.2** |
| KHC | | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | | |
| **NB201** | **NORSAR Array S** | **43.26** | **321** | | P | | **P** | **03 57 37.0** | **+0.1** |
| **NB2** | **NORSAR Subarra** | **43.30** | **321** | | P | | **P** | **03 57 37.3** | **0.0** |
| | comp=Z,1.9nm,0.6s,baz=91,slow=7.9 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **43.30** | **321** | | P | | **P** | **03 57 37.7** | **+0.4** |
| | comp=Z,2.4nm,0.7s,baz=91,slow=7.9,SNR=17 | | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **43.30** | **321** | *e* | P | | **P** | **03 57 37.6** | **+0.4** |
| NOA | | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | | |
| **SGRT** | **San Giovanni R** | **43.36** | **292** | | P | | **P** | **03 57 38.7** | **+0.6** |
| SGRT | | | | | IAmb | | IAmb | 03 57 44.8 | | |
| | comp=Z,9.7nm,1.1s | | | | | | | | | |
| **NA001** | **NORSAR Array S** | **43.46** | **321** | | P | | **P** | **03 57 38.0** | **-0.5** |
| **NC204** | **NORSAR Array S** | **43.52** | **321** | | P | | **P** | **03 57 39.7** | **+0.7** |
| NC204 | | | | | IAmb | | IAmb | 03 57 59.6 | | |
| | comp=Z,4.5nm,0.8s | | | | | | | | | |
| **KONO** | **Kongsberg** | **44.13** | **319** | | P | | **P** | **03 57 44.4** | **+0.5** |
| KONO | | | | | IAmb | | IAmb | 03 58 00.6 | | |
| | comp=Z,9.7nm,1.1s | | | | | | | | | |
| **KONO** | **Kongsberg** | **44.13** | **319** | | P | | **P** | **03 57 44.4** | **+0.5** |
| KONO | | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | | |
| **NRCA** | **Norcia** | **44.90** | **295** | | P | | **P** | **03 57 51.1** | **+0.7** |
| NRCA | | | | | IAmb | | IAmb | 03 58 06.5 | | |
| | comp=Z,4.9nm,1.0s | | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **45.79** | **301** | | P | | **P** | **03 57 57.9** | **+0.3** |
| **CDF** | **Champ du Feu** | **47.27** | **304** | | P | | **P** | **03 58 09.1** | **+0.1** |
| **SENIN** | **Lac Senin/Sane** | **47.83** | **301** | | P | | **P** | **03 58 14.1** | **+0.6** |
| **HAU** | **Haudompre** | **47.98** | **303** | *eP* | | | **P** | **03 58 14.4** | **-0.1** |
| **GIVF** | **Givet** | **48.38** | **306** | *eP* | | | **P** | **03 58 18.1** | **+0.7** |
| **LPG** | **La Plagne** | **48.45** | **300** | *eP* | | | **P** | **03 58 19.6** | **+1.1** |
| **LPL** | **La Plagne** | **48.46** | **300** | *eP* | | | **P** | **03 58 18.9** | **+0.5** |
| **BAIF** | **Baives** | **48.77** | **307** | *eP* | | | **P** | **03 58 21.2** | **+0.7** |
| **LOR** | **Lormes** | **49.80** | **303** | *eP* | | | **P** | **03 58 29.2** | **+0.7** |
| **MAJO** | **Matsushiro** | **49.82** | **72** | ⇓ | *eP* | | **P** | **03 58 29.1** | **+0.4** |
| MAJO | | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.7s | | | | | | | | | |
| **SMF** | **Signal de Mont** | **50.01** | **302** | *eP* | | | **P** | **03 58 29.7** | **-0.4** |
| **VIVF** | **Saint-Julien-l** | **50.05** | **300** | *eP* | | | **P** | **03 58 30.4** | **0.0** |
| **SSF** | **Saint Saulge** | **50.10** | **303** | *eP* | | | **P** | **03 58 30.2** | **-0.5** |
| **KEST** | **Kesra** | **50.19** | **287** | | P | | **P** | **03 58 32.7** | **+1.1** |
| KEST | | | | | IAmb | | IAmb | 03 58 49.9 | | |
| | comp=Z,6.5nm,1.1s | | | | | | | | | |
| **KEST** | **Kesra** | **50.19** | **287** | | P | | **P** | **03 58 32.6** | **+1.0** |
| | comp=Z,1.9nm,0.8s,baz=327,slow=23,SNR=2.0 | | | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | | | |
| **AVF** | **Avril sur Loir** | **50.28** | **303** | *eP* | | | **P** | **03 58 31.9** | **-0.2** |
| **CLF** | **Chambon-Foret** | **50.59** | **305** | | P | | **P** | **03 58 34.2** | **-0.2** |
| **BGF** | **Bois d'Agland** | **50.69** | **303** | *eP* | | | **P** | **03 58 34.9** | **-0.3** |
| **TCF** | **Toulx Ste Croi** | **51.20** | **302** | *eP* | | | **P** | **03 58 39.1** | **+0.1** |
| **EKA** | **Eskdalemuir Ar** | **51.63** | **315** | | P | | **P** | **03 58 42.2** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=94,slow=7.8,SNR=5.6 | | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | | |
| **LDF** | **La Druitiere** | **51.91** | **306** | *eP* | | | **P** | **03 58 43.9** | **-0.4** |
| **GRR** | **Gorron** | **52.44** | **306** | *eP* | | | **P** | **03 58 47.8** | **-0.4** |
| **CEST** | **Esterri de Car** | **53.18** | **298** | | P | | **P** | **03 58 53.0** | **-0.9** |
| CEST | | | | | IAmb | | IAmb | 03 58 54.9 | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | | |
| **ROSF** | **Rostrenen** | **53.97** | **306** | *eP* | | | **P** | **03 58 59.2** | **-0.2** |
| **QUIF** | **Quistinic** | **54.05** | **306** | *eP* | | | **P** | **03 58 59.7** | **-0.4** |
| **BILL** | **Bilibino** | **54.84** | **27** | *eP* | |

*TEH* ***22*** *03:53:28.2,28°.44N×56°.99E, h8km±52km, ML3.5*
**ISC 22 03:53:27.5±0.7, 28°.39N±0°.03×56°.97E±0°.05, h10km, n49, σ2ˢ21/51, mb3.7/6, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KHNJ** | **Kahnooj** | **0.79** | **124** | Pg | | **Pb** | **03 53 44.3** | **+1.1** |
| **IBND** | **Bandar-abas** | **1.02** | **202** | Pg | | **Pn** | **03 53 49.2** | **+1.5** |
| **GENO** | **Geno** | **1.22** | **216** | Pg | | **Pg** | **03 53 52.8** | **+1.9** |
| **NGRK** | **Negar Kerman** | **1.26** | **350** | Pg | | **Pb** | **03 53 51.2** | **-0.4** |
| **KBAM** | **BAM** | **1.49** | **60** | Pg | | **Pb** | **03 53 55.7** | **+0.3** |
| **CHMN** | **Cheshme madani** | **1.54** | **19** | Pg | | **Pg** | **03 53 56.8** | **-0.3** |
| **TVBK** | **TV Kerman** | **1.60** | **353** | Pg | | **Pb** | **03 53 57.3** | **0.0** |
| **KHGB** | **Koh Gabri** | **2.02** | **348** | Pn | | **Pb** | **03 54 04.3** | **-0.2** |
| **KRM1** | **Kerman Provinc** | **2.12** | **7** | Pn | | **Pb** | **03 54 06.0** | **-0.1** |
| **SHME** | **Shamm** SNR=10 | **2.45** | **198** | *eP* | | **Pn** | **03 54 09.1** | **+1.6** |
| SHME | | | | S | | **Sb** | **03 54 43.5** | **+1.6** |
| **SHME** | **Shamm** SNR=10 | **2.45** | **198** | P | | **Pn** | **03 54 09.1** | **+1.6** |
| **BANOM** | **Banah** | **2.53** | **194** | P | | **Pn** | **03 54 10.8** | **+2.1** |
| **JASK** | **Jask - Hormozg** | **2.64** | **162** | Pn | | **Pn** | **03 54 12.4** | **+2.3** |
| **UMQ** | **Umm Al-Quwin** | **3.09** | **203** | P | | **Pn** | **03 54 18.9** | **+2.6** |
| **UMQ** | **Umm Al-Quwin** | **3.09** | **203** | P | | **Pn** | **03 54 19.8** | **+3.6** |
| **MASF** | **Masafi** SNR=8.0 | **3.10** | **194** | P | | **Pn** | **03 54 19.0** | **+2.5** |
| **MSFE** | **Esma-Masafi** SNR=7.7 | **3.11** | **194** | *i* P | | **Pn** | **03 54 18.1** | **+1.5** |
| **MDH** | **Madha** | **3.14** | **191** | P | | **Pn** | **03 54 19.4** | **+2.4** |
| **MDH** | **Madha** | **3.14** | **191** | P | | **Pn** | **03 54 19.9** | **+2.9** |
| **IBAF** | **Bafgh** | **3.41** | **339** | Pn | | **Pn** | **03 54 24.5** | **+3.6** |
| **UOSS** | **Minazif** | **3.50** | **191** | P | | **Pn** | **03 54 20.4** | **-1.6** |
| **ZHDN** | **Zahedan** | **3.51** | **73** | Pn | | **Pn** | **03 54 25.7** | **+3.5** |
| **NAZ** | **Nazwa, Dubai** SNR=30 | **3.59** | **199** | *i* P | | **Pn** | **03 54 25.3** | **+2.1** |
| **NAZ** | **Nazwa, Dubai** SNR=30 | **3.59** | **199** | P | | **Pn** | **03 54 26.0** | **+2.8** |
| **IMEH** | **Mehriz** | **3.62** | **326** | Pn | | **Pn** | **03 54 27.1** | **+3.3** |
| **HATD** | **Hatta, Dubai** | **3.63** | **192** | P | | **Pn** | **03 54 26.6** | **+2.8** |
| **HATD** | **Hatta, Dubai** | **3.63** | **192** | P | | **Pn** | **03 54 21.3** | **-2.5** |
| **ASHO** | **Ashiyiah** | **3.79** | **193** | P | | **Pn** | **03 54 27.5** | **+1.6** |
| **ASHO** | **Ashiyiah** | **3.79** | **193** | P | | **Pn** | **03 54 23.4** | **-2.5** |
| **FAQ** | **Al Faqa, Dubai** SNR=34 | **3.84** | **199** | *i* P | | **Pn** | **03 54 28.7** | **+2.1** |
| **FAQ** | **Al Faqa, Dubai** SNR=34 | **3.84** | **199** | P | | **Pn** | **03 54 29.0** | **+2.3** |
| **NHDN** | **Nehbandan** | **4.01** | **41** | Pn | | **Pn** | **03 54 32.1** | **+3.0** |
| **ASUD** | **Al Ashush, Dub** SNR=16 | **4.03** | **202** | *i* P | | **Pn** | **03 54 31.9** | **+2.6** |
| **ASUD** | **Al Ashush, Dub** SNR=16 | **4.03** | **202** | P | | **Pn** | **03 54 32.1** | **+2.8** |
| **AJN** | **Ajban** SNR=12 | **4.21** | **205** | *i* P | | **Pn** | **03 54 33.8** | **+2.1** |
| **AJN** | **Ajban** SNR=12 | **4.21** | **205** | P | | **Pn** | **03 54 34.1** | **+2.4** |
| **SOHO** | **SOHO** | **4.26** | **185** | P | | **Pn** | **03 54 33.4** | **+1.0** |
| **ISAD** | **Sadrabad** | **4.52** | **322** | Pn | | **Pn** | **03 54 39.6** | **+3.4** |
| **JRN** | **Qarnain Island** | **5.04** | **228** | P | | **Pn** | **03 54 45.3** | **+2.1** |
| **IRAM** | **Ramesheh** | **5.24** | **312** | Pn | | **Pn** | **03 54 48.7** | **+2.7** |
| **WSAR** | **Wadi Sarin** 3.6nm,0.3s,baz=338,slow=8.2,SNR=69 | **5.35** | **163** | Pn | | **Pn** | **03 54 48.7** | **+1.3** |
| WSAR | 3.6nm,0.3s,baz=251,slow=21,SNR=12 9.0nm,0.3s | | | Sn | | **Sn** | **03 55 47.0** | **-2.1** |
| **KLNJ** | **Kolanjah** | **5.36** | **300** | Pn | | **Pn** | **03 54 50.7** | **+2.9** |
| **GHWR** | **Ruwais** | **5.75** | **221** | P | | **Pn** | **03 54 53.4** | **+0.6** |
| **BRTR** | **Keskin Array B** 1.3nm,0.8s,baz=122,slow=12,SNR=8.6 1.3nm,0.8s | **22.33** | **306** | P | | **P** | **03 58 24.0** | **-1.5** |
| **BVAR** | **Borovoye Array** 1.1nm,0.6s,baz=210,slow=8.3,SNR=3.2 1.1nm,0.6s | **26.53** | **18** | P | | **P** | **03 59 03.4** | **-1.8** |
| **ZALV** | **Zalesovo Beam** 0.9nm,0.4s,baz=249,slow=11,SNR=2.6 0.9nm,0.4s | **32.64** | **31** | P | | **P** | **03 59 58.5** | **-0.9** |
| **FINES** | **FINESS Array B** 2.6nm,0.9s,baz=126,slow=7.1,SNR=3.7 2.6nm,0.9s | **38.91** | **337** | P | | **P** | **04 00 51.3** | **-1.7** |
| **TORD** | **Torodi Ar. Bea** 0.4nm,0.5s,baz=62,slow=7.7,SNR=7.5 0.4nm,0.5s | **53.43** | **265** | P | | **P** | **04 02 46.3** | **-1.7** |
| **WRA** | **Warramunga Arr** 0.2nm,0.7s,baz=309,slow=4.1,SNR=1.3 0.2nm,0.7s | **88.80** | **113** | P | | **P** | **04 06 22.2** | **+0.2** |

*SCB* ***22*** *03:54:16.8±1.2,21°.12S×67°.19W, h195km±15km, ML2.9/2, MW3.1, Error ellipse: s-maj=5.3km s-min=4.5km az=0.0*
*SJA* ***22*** *03:54:16.3±0.7,21°.12S×67°.31W, h192km±9km, ML3.4, MW3.5*
*GUC* ***22*** *03:54:18.8±0.5,21°.18S×67°.73W, h204km±6km, ML3.3*
**ISC 22 03:54:14.7±1.9, 21°.17S±0°.04×67°.30W±0°.04, h215km±16km, n27, σ1ᵍ61/39, 2C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MOCB** | **Mochara** | **1.55** | **93** | Pg | | **Pn** | **03 54 51.3** | **+0.5** |
| **YJA** | **Yavi** | **1.94** | **121** | *eP* | | **Pn** | **03 54 55.4** | **+1.1** |
| YJA | | | | *eS* | | **S** | **03 55 24.6** | **-0.3** |
| **AF01** | **San Pedro de A** | **1.95** | **204** | Pg | | **Pn** | **03 54 55.8** | **+1.5** |
| **LVC** | **Limon Verde** | **2.07** | **226** | *eP* | | **Pn** | **03 54 56.4** | **+0.9** |
| LVC | | | | *eS* | | **S** | **03 55 28.5** | **+1.4** |
| **LVC** | **Limon Verde** | **2.07** | **226** | ⇑*iP* | | **Pn** | **03 54 56.4** | **+0.9** |
| LVC | | | | *i* S | | **S** | **03 55 26.4** | **-0.7** |
| LVC | 95nm,0.2s | | | IAML | | | 03 55 35.0 | |
| **GO01** | **Chusmiza** | **2.32** | **310** | *eP* | | **Pn** | **03 54 59.4** | **+1.1** |
| GO01 | | | | *eS* | | **S** | **03 55 34.2** | **+2.4** |
| **GO01** | **Chusmiza** | **2.32** | **310** | *eP* | | **Pn** | **03 55 00.1** | **+1.9** |
| GO01 | | | | *i* S | | **S** | **03 55 31.0** | **-0.7** |
| GO01 | comp=E,154nm,0.2s | | | IAML | | | 03 55 37.9 | |
| **GO01** | **Chusmiza** | **2.32** | **310** | Pg | | **Pn** | **03 54 59.7** | **+1.5** |
| GO01 | | | | Sg | | **S** | **03 55 32.5** | **+0.7** |
| GO01 | comp=E,27nm,0.2s | | | IAML | | | 03 55 41.1 | |
| **AOVT** | **TarijaAcel** | **2.45** | **99** | Pg | | **Pn** | **03 54 59.7** | **+0.5** |
| **HMBC** | **Humberstone** | **2.58** | **290** | *eP* | | Pn | 03 54 45.5 | -15 |
| HMBC | | | | *eS* | | **S** | **03 55 34.3** | **-1.8** |
| HMBC | comp=Z,86nm,0.1s | | | IAML | | | 03 55 35.8 | |
| **HMBC** | **Humberstone** | **2.58** | **290** | ⇑*eP* | | **Pn** | **03 55 00.5** | **-0.1** |
| HMBC | | | | *eS* | | **S** | **03 55 33.4** | **-2.7** |
| HMBC | comp=N,155nm,0.1s | | | IAML | | | 03 55 35.2 | |
| **SOEO** | **Opoqueri** | **2.65** | **348** | Pg | | **Pn** | **03 55 03.1** | **+1.3** |
| **TA01** | **Diego Aracena** | **2.76** | **282** | *eP* | | Pn | 03 54 46.0 | -16 |
| **TA01** | **Diego Aracena** | **2.76** | **282** | *eP* | | **Pn** | **03 55 02.7** | **+0.2** |
| TA01 | | | | *i* S | | **S** | **03 55 36.2** | **-3.2** |
| TA01 | comp=E,112nm,0.5s | | | IAML | | | 03 55 37.4 | |
| **TA02** | **Huaiquique** | **2.80** | **288** | *eP* | | **Pn** | **03 55 04.5** | **+1.6** |
| TA02 | | | | *eS* | | **S** | **03 55 37.6** | **-2.6** |
| TA02 | comp=Z,126nm,0.1s | | | IAML | | | 03 55 39.9 | |
| **TA02** | **Huaiquique** | **2.80** | **288** | *eS* | | **S** | **03 55 37.3** | **-2.8** |
| TA02 | comp=N,95nm,0.1s | | | IAML | | | 03 55 39.9 | |
| **PB04** | **IPOC Station P** | **2.89** | **246** | *eP* | | **Pn** | **03 55 04.7** | **+0.6** |
| PB04 | | | | *eS* | | **S** | **03 55 41.0** | **-1.4** |
| PB04 | comp=Z,77nm,0.2s | | | IAML | | | 03 55 43.9 | |
| **PB04** | **IPOC Station P** | **2.89** | **246** | *eP* | | **Pn** | **03 55 04.8** | **+0.6** |
| PB04 | | | | *i* S | | **S** | **03 55 40.5** | **-2.0** |
| PB04 | comp=N,71nm,0.2s | | | IAML | | | 03 55 44.2 | |
| **SOET** | **ToroToro** | **3.34** | **25** | Pg | | **Pn** | **03 55 09.8** | **+0.2** |
| **AOEA** | **Aiquile** | **3.55** | **34** | Pg | | **Pn** | **03 55 12.1** | **+0.1** |
| AOEA | | | | Sg | | **S** | **03 55 54.2** | **-2.5** |
| AOEA | comp=N,27nm,0.6s | | | IAML | | | 03 55 58.9 | |
| **SOTI** | **Planta Incahua** | **3.67** | **69** | Pg | | **Pn** | **03 55 13.4** | **+0.2** |
| **SOEJ** | **Jacaque** | **4.25** | **348** | Pg | | **Pn** | **03 55 23.0** | **+2.2** |
| **BBOE** | **La Paz, Chanca** | **4.38** | **351** | Pg | | **Pn** | **03 55 24.3** | **+1.9** |
| **GO02** | **Mina Guanaco** | **4.50** | **207** | *eP* | | **Pn** | **03 55 24.1** | **+0.5** |
| GO02 | | | | *eS* | | **S** | **03 56 17.4** | **-0.2** |
| **BBOD** | **La Paz, Gloria** | **4.67** | **345** | Pg | | **Pn** | **03 55 28.1** | **+2.1** |
| **LPAZ** | **La Paz** | **4.92** | **351** | *eP* | | **Pn** | **03 55 30.4** | **+1.2** |
| **LPAZ** | **La Paz** | **4.92** | **351** | Pg | | **Pn** | **03 55 30.2** | **+1.1** |

**IDC 22 03:57:14.4±1.6, 15°.80S×168°.45E, h0km, mb3.8/4,**
**mbtmp3.8/5, ML3.5/1, Error ellipse: s-maj=43.9km s-min=34.0km az=125.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** 1.1nm,0.3s,baz=111,slow=17,SNR=1.8 | **6.52** | **197** | P | | Pn | 03 58 52.2 | +0.5 |
| DZM | 0.4nm,0.3s,baz=320,slow=22,SNR=1.1 2.7nm,0.3s | | | Sn | | Sn | 04 00 03.3 | -3.6 |
| **WRA** | **Warramunga Arr** 0.5nm,0.9s,baz=85,slow=7.4,SNR=3.1 0.5nm,0.9s | **32.69** | **258** | P | | P | 04 03 48.3 | -0.5 |
| **ASAR** | **Alice Springs** 0.9nm,0.8s,baz=88,slow=9.3,SNR=7.2 0.9nm,0.8s | **33.38** | **251** | P | | P | 04 03 55.0 | +0.2 |
| **QSPA** | **South Pole Qui** 1.9nm,0.9s,baz=355,slow=3.9,SNR=5.5 1.9nm,0.9s | **74.23** | **180** | P | | P | 04 08 53.1 | -0.1 |
| **ILAR** | **Eielson Array** 0.7nm,0.9s,baz=232,slow=5.4,SNR=4.8 0.7nm,0.9s | **87.20** | **18** | P | | P | 04 10 02.3 | +0.1 |

*UPA* ***22*** *04:12:02.8±0.8,8°.70N×82°.77W, h18km±1km, MD3.3, ML3.2*
*CATAC* ***22*** *04:12:03.5±0.4,8°.72N×82°.86W, h4km±2km, ML3.2*
**ISC 22 04:12:01.9±0.9, 8°.69N±0°.03×82°.79W±0°.03, h28km±5km, n21, σ0ᵍ87/37, 2C-2D, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MLIR3** | **Monte Lirio, C** | **0.10** | **343** | ⇑*eP* | | **Pb** | **04 12 07.1** | **0.0** |
| MLIR3 | comp=Z,6μm,0.1s | | | AMP | | | 04 12 07.3 | |
| MLIR3 | | | | *eS* | | **Sb** | **04 12 12.9** | **+2.3** |
| **BRU2** | **Volcan** | **0.14** | **45** | *i* P | | **Pb** | **04 12 07.3** | **-0.1** |
| BRU2 | | | | *i* S | | **Sb** | **04 12 10.6** | **-0.6** |
| BRU2 | comp=Z,3μm,1.0s | | | IAML | | | 04 12 13.4 | |
| **BRU2** | **Volcan** | **0.14** | **45** | ⇓*iP* | | **Pb** | **04 12 07.3** | **-0.1** |
| BRU2 | | | | *eS* | | **Sb** | **04 12 11.0** | **-0.2** |
| **CDITO** | **Canoas** | **0.14** | **214** | *i* P | | **Pb** | **04 12 06.5** | **-0.8** |
| CDITO | | | | *i* S | | **Sb** | **04 12 09.9** | **-1.0** |
| CDITO | comp=Z,4μm,1.0s | | | IAML | | | 04 12 12.7 | |
| **BCO2** | **Palmira** | **0.26** | **84** | ⇓*iP* | | **Pb** | **04 12 09.1** | **+0.3** |
| BCO2 | | | | *eS* | | **Sb** | **04 12 13.9** | **+0.4** |
| **LNBQ3** | **Los Naranjos,** | **0.36** | **74** | *eP* | | **Pb** | **04 12 10.2** | **0.0** |
| LNBQ3 | | | | *eS* | | **Sn** | **04 12 18.2** | **+0.5** |
| **LOCO3** | **Loma Colorada,** | **0.47** | **127** | *eP* | | **Pb** | **04 12 11.9** | **+0.2** |
| LOCO3 | | | | *eS* | | **Sn** | **04 12 20.2** | **+0.1** |
| **PEDE3** | **Pedregal, Chir** | **0.48** | **130** | *eP* | | **Pb** | **04 12 12.2** | **+0.3** |
| PEDE3 | | | | *eS* | | **Sn** | **04 12 19.9** | **-0.6** |
| **PTPM** | **Petroterminale** | **0.49** | **190** | *eP* | | **Pb** | **04 12 12.5** | **+0.4** |
| PTPM | | | | *eS* | | **Sn** | **04 12 20.8** | **0.0** |
| **LIMO3** | **Limones** | **0.59** | **187** | *eP* | | **Pn** | **04 12 14.2** | **-0.3** |
| LIMO3 | | | | *eS* | | **Sn** | **04 12 24.2** | **+1.0** |
| **CHGR2** | **Aguacate** | **0.69** | **69** | *eP* | | **Pn** | **04 12 15.3** | **-0.5** |
| CHGR2 | | | | *eS* | | **Sn** | **04 12 25.1** | **+0.6** |
| **DRK0** | **Durika** | **0.72** | **322** | *i* P | | **Pb** | **04 12 16.7** | **+0.2** |
| DRK0 | | | | *i* S | | **Sb** | **04 12 25.6** | **-0.1** |
| DRK0 | comp=Z,4μm,1.0s | | | IAML | | | 04 12 30.1 | |
| **DRK0** | **Durika** | **0.72** | **322** | ⇑*iP* | | **Pn** | **04 12 16.7** | **+0.2** |
| DRK0 | | | | *eS* | | **Sn** | **04 12 27.6** | **+0.9** |
| **OCHAL** | **Ojochal** | **0.93** | **296** | *i* P | | **Pb** | **04 12 19.5** | **0.0** |
| OCHAL | | | | *i* S | | **Sb** | **04 12 32.2** | **+0.7** |
| OCHAL | comp=Z,190nm,1.0s | | | IAML | | | 04 12 39.3 | |
| **LCR2** | **La Lucha 2** | **1.59** | **311** | *i* P | | **Pb** | **04 12 30.0** | **-0.7** |
| LCR2 | | | | *i* S | | **Sb** | **04 12 50.5** | **0.0** |
| LCR2 | comp=Z,110nm,1.0s | | | IAML | | | 04 12 53.5 | |
| **RAFA** | **San Farael, Vo** | **1.61** | **321** | *i* P | | **Pb** | **04 12 32.0** | **+0.8** |
| RAFA | | | | *i* S | | **Sb** | **04 12 53.1** | **+1.9** |
| RAFA | comp=Z,2μm,1.0s | | | IAML | | | 04 12 54.7 | |
| **HDC3** | **Heredia 3** | **1.84** | **315** | *i* P | | **Pb** | **04 12 34.8** | **-0.2** |
| HDC3 | comp=Z,160nm,1.0s | | | IAML | | | 04 12 40.6 | |
| **HDC** | **Heredia** | **1.84** | **315** | *i* P | | **Pb** | **04 12 34.7** | **-0.3** |
| HDC | comp=Z,150nm,1.0s | | | IAML | | | 04 12 40.6 | |
| **TCS1** | **Tacares** | **2.00** | **312** | *i* P | | **Pb** | **04 12 37.7** | **0.0** |
| TCS1 | comp=Z,900nm,1.0s | | | IAML | | | 04 12 42.7 | |
| **SOCE** | **Pocosol** | **2.46** | **313** | *i* P | | **Pb** | **04 12 43.9** | **-1.6** |
| SOCE | comp=Z,91nm,1.0s | | | IAML | | | 04 12 49.3 | |
| **COVE** | **Coope Vega, Sa** | **2.56** | **322** | *i* P | | **Pb** | **04 12 44.8** | **-2.5** |
| COVE | comp=Z,62nm,1.0s | | | IAML | | | 04 13 36.9 | |

**IDC 22 04:12:37.8±1.9, 7°.82S×127°.43E, h0km, mb3.7/2, mbtmp3.7/4, ML4.0/2, Error ellipse: s-maj=271.2km s-min=30.2km az=63.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** 1.0nm,0.3s,baz=328,slow=14,SNR=70 | **13.78** | **152** | Pn | | Pn | 04 15 53.6 | -1.1 |
| WRA | 0.5nm,0.3s,baz=331,slow=23,SNR=6.5 1.4nm,0.3s | | | Sn | | Sn | 04 18 17.4 | -11 |
| **ASAR** | **Alice Springs** 0.2nm,0.3s,baz=341,slow=10.0,SNR=14 | **16.93** | **159** | Pn | | Pn | 04 16 37.3 | +0.9 |
| ASAR | 0.2nm,0.3s,baz=337,slow=25,SNR=1.8 0.6nm,0.5s | | | Sn | | Sn | 04 19 36.7 | -8.6 |
| **MKAR** | **Makanchi Array** 0.5nm,0.5s,baz=121,slow=8.2,SNR=7.4 0.5nm,0.5s | **67.55** | **328** | P | | P | 04 23 36.0 | -0.1 |
| **KURBB** | **Kurchatov Arra** 0.3nm,0.4s,baz=116,slow=6.3,SNR=1.6 0.3nm,0.4s | **71.90** | **330** | P | | P | 04 24 02.9 | +0.2 |

*UCR* ***22*** *04:22:39.2±0.8, 8°.53N×83°.21W, h15km±3km, MW3.8*
**UPA 22 04:22:41.0±2.5, 8°.55N×83°.13W, h19km±10km, ML3.2, 2D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.08** | **340** | *eP* | | Pg | 04 22 42.1 | -2.5 |
| FITO | | | | *eS* | | Sg | 04 22 44.6 | -2.4 |
| **EDAD** | **Golfito** | **0.11** | **339** | *eP* | | Pb | 04 22 42.3 | +0.2 |
| **JIME** | **Puerto Jimenez** | **0.20** | **266** | *eP* | | Pb | 04 22 42.5 | -2.8 |
| JIME | | | | *eS* | | Sb | 04 22 46.0 | -2.0 |
| **NELY** | **Ciudad Neily** | **0.20** | **62** | *eP* | | Pb | 04 22 45.5 | -0.1 |
| NELY | | | | *eS* | | Sg | 04 22 50.8 | +1.2 |
| **VITO** | **San Vito** | **0.31** | **30** | *eP* | | Pg | 04 22 47.1 | -0.7 |
| **MLIR3** | **Monte Lirio, C** | **0.38** | **51** | ⇓*eP* | | Pg | 04 22 48.7 | -0.5 |
| MLIR3 | comp=Z,3μm,0.3s | | | AMP | | | 04 22 48.9 | |
| MLIR3 | | | | *eS* | | Sn | 04 22 57.8 | -0.8 |
| **PTPM** | **Petroterminale** | **0.42** | **144** | *eP* | | Pg | 04 22 49.3 | -0.5 |
| PTPM | | | | *eS* | | Sn | 04 22 58.8 | -0.7 |
| **EDP2** | **Potrero Grande** | **0.46** | **354** | *eP* | | Pg | 04 22 48.8 | -1.7 |
| **BRU2** | **Volcan** | **0.49** | **61** | ⇓*eP* | | Pg | 04 22 50.3 | -0.8 |
| BRU2 | comp=Z,2μm,0.2s | | | AMP | | | 04 22 50.6 | |
| BRU2 | | | | *eS* | | Sn | 04 23 01.4 | 0.0 |
| **BRU2** | **Volcan** | **0.49** | **61** | *eP* | | Pg | 04 22 50.3 | -0.8 |
| **EDPN** | **Palmar Norte** | **0.52** | **321** | *eP* | | Pg | 04 22 48.3 | -3.3 |
| EDPN | | | | *eS* | | Sg | 04 22 55.9 | -2.7 |
| **BCO2** | **Palmira** | **0.61** | **74** | *eP* | | Pb | 04 22 52.3 | -0.9 |
| BCO2 | | | | *eS* | | Sg | 04 23 02.7 | +1.0 |
| **EDBA** | **Buenos Aires** | **0.62** | **347** | *eP* | | Pb | 04 22 51.3 | -2.0 |
| **BURE** | **Buenos Aires** | **0.65** | **341** | *eP* | | Pb | 04 22 51.6 | -2.2 |
| BURE | | | | *eS* | | Sb | 04 23 01.0 | -1.4 |
| **DRK0** | **Durika** | **0.72** | **351** | *eP* | | Pb | 04 22 52.5 | -2.5 |
| **LOCO3** | **Loma Colorada,** | **0.72** | **101** | *eP* | | Pb | 04 22 53.7 | -1.2 |
| **PEDE3** | **Pedregal, Chir** | **0.72** | **103** | *eP* | | Pb | 04 22 54.8 | -0.1 |
| PEDE3 | | | | *eS* | | Sb | 04 23 04.0 | -0.4 |
| **LNBQ3** | **Los Naranjos,** | **0.72** | **71** | *eP* | | Pb | 04 22 55.1 | +0.1 |
| **CHGR2** | **Aguacate** | **1.04** | **68** | *eP* | | Pb | 04 22 59.3 | -1.2 |
| CHGR2 | | | | *eS* | | Sb | 04 23 12.7 | -1.2 |
| **BUS1** | **Rivas** | **1.17** | **328** | *eP* | | Pn | 04 22 59.8 | -3.0 |
| **LCR2** | **La Lucha 2** | **1.47** | **324** | *eP* | | Pn | 04 23 04.2 | -2.5 |
| **RVSTA** | **Santa Teresita** | **1.50** | **340** | *eP* | | Pn | 04 23 05.6 | -1.5 |
| **VTCV** | **VTCV, Calle Va** | **1.54** | **337** | *eP* | | Pn | 04 23 06.0 | -1.7 |
| **IRES** | **Siquirres** | **1.58** | **346** | *eP* | | Pn | 04 23 07.4 | -0.6 |
| **JTS** | **Las Juntas de** | **2.50** | **314** | *eP* | | Pn | 04 23 20.7 | 0.0 |

*TAP* ***22*** *04:23:04.0,24°.90N×122°.06E, h15km, ML3.9, C*
*JMA* ***22*** *04:23:04.8±0.1,24°.9N±0°.9×122°.0E±0°.5, h33km, MV3.4/12, TAIWAN REGION*
*IDC* ***22*** *04:23:14.7±6.5,24°.87N×122°.05E, h94km±63km, mb3.6/12, mbtmp4.0/13, ML3.3/1, MS3.2/2, Error ellipse: s-maj=36.6km s-min=14.5km az=63.0*
**ISC 22 04:23:04.5±0.7, 24°.90N±0°.02×122°.07E±0°.02, h13km±4km, n115, σ0ᵍ92/133, mb4.0/11, 6C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** baz=323 | **0.13** | **325** | ⇑*iP* | | **Pg** | **04 23 07.5** | **-0.5** |
| TWB1 | | | | *eS* | | **Sg** | **04 23 09.8** | **-0.6** |
| **EGS** | baz=323 | **0.14** | **247** | P | | **Pb** | **04 23 07.9** | **-1.0** |
| EGS | baz=251 | | | *eS* | | **Sb** | **04 23 10.7** | **-1.1** |
| **NTC** | **Toucheng** baz=265 | **0.23** | **259** | P | | **Pb** | **04 23 09.5** | **-0.9** |
| NTC | baz=265 | | | *eS* | | **Sb** | **04 23 13.5** | **-0.8** |
| **TIPB** | **Shuangxi** baz=285 | **0.24** | **288** | ⇑P | | **Pb** | **04 23 09.6** | **-1.0** |
| TIPB | baz=285 | | | *eS* | | **Sb** | **04 23 13.1** | **-1.6** |
| **SXI1** | **Grass Mountain** baz=319 | **0.26** | **317** | ⇑*iP* | | **Pb** | **04 23 10.3** | **-0.8** |
| SXI1 | baz=319 | | | *eS* | | **Sb** | **04 23 14.7** | **-0.9** |
| **NWF** | **Wu-fen Shan** baz=304 | **0.32** | **303** | P | | **Pb** | **04 23 11.3** | **-0.7** |
| NWF | baz=304 | | | *eS* | | **Sb** | **04 23 16.2** | **-0.9** |
| **WFSB** | **Wu-fen Shan** baz=304 | **0.32** | **303** | ⇑P | | **Pb** | **04 23 11.3** | **-0.7** |
| WFSB | baz=304 | | | S | | **Sb** | **04 23 15.9** | **-1.1** |
| **ILA** | **Ilan** baz=236 | **0.32** | **246** | *eP* | | **Pb** | **04 23 12.6** | **+0.6** |
| **TWC** | **Suao** baz=223 | **0.35** | **215** | P | | **Pg** | **04 23 11.3** | **-0.3** |
| TWC | baz=223 | | | *eS* | | **Sb** | **04 23 18.0** | **-0.1** |
| **TNOU** | **National Taiwa** baz=313 | **0.37** | **313** | P | | **Pb** | **04 23 12.2** | **-0.7** |
| **ESAO** | **Su ao** baz=222 | **0.38** | **213** | *eP* | | **Pb** | **04 23 12.9** | **-0.2** |
| ESAO | baz=222 | | | *eS* | | **Sb** | **04 23 18.8** | **-0.2** |
| **TWE** | **Neicheng** baz=236 | **0.41** | **244** | ⇑P | | **Pb** | **04 23 12.4** | **-1.1** |
| **NDS** | **Dongshan** baz=231 | **0.42** | **231** | *eP* | | **Pb** | **04 23 12.7** | **-1.0** |
| **TWA** | **Mucha** baz=282 | **0.45** | **280** | P | | **Pb** | **04 23 13.6** | **-0.7** |
| TWA | baz=282 | | | *eS* | | **Sb** | **04 23 20.3** | **-0.6** |
| **FUSB** | **Fushanzhiwuyua** baz=255 | **0.46** | **253** | P | | **Pb** | **04 23 13.4** | **-1.1** |
| FUSB | baz=255 | | | *eS* | | **Sg** | **04 23 18.5** | **-1.4** |
| **NHY** | **Taipei** baz=287 | **0.48** | **287** | *eP* | | **Pb** | **04 23 14.4** | **-0.4** |
| **EOS2** | **EOS2** baz=163 | **0.50** | **163** | *eP* | | **Pb** | **04 23 14.8** | **-0.2** |
| **YM01** | **YM01** baz=299 | **0.52** | **299** | ⇑P | | **Pb** | **04 23 15.4** | **0.0** |
| YM01 | baz=299 | | | *eS* | | **Sb** | **04 23 21.3** | **-1.5** |
| **YM08** | **YM08** baz=304 | **0.52** | **303** | P | | **Pb** | **04 23 15.2** | **-0.4** |
| **EWUT** | **Wuta** baz=217 | **0.53** | **211** | *eP* | | **Pg** | **04 23 14.3** | **-0.5** |
| **ENTT** | **Nioudou** baz=241 | **0.53** | **241** | P | | **Pb** | **04 23 14.8** | **-0.8** |
| **NWLT** | **Wulai** baz=258 | **0.53** | **257** | P | | **Pb** | **04 23 14.8** | **-0.9** |
| **ENA** | **Nanau** baz=219 | **0.56** | **213** | *eP* | | **Pg** | **04 23 15.1** | **-0.3** |
| **TWY** | **Chenhua** baz=312 | **0.57** | **311** | P | | **Pb** | **04 23 16.4** | **+0.1** |
| **ANP** | **Anpu** baz=300 | **0.58** | **300** | *eP* | | **Pb** | **04 23 16.1** | **-0.4** |
| **NDT** | **Datong Townshi** baz=235 | **0.59** | **240** | P | | **Pb** | **04 23 15.7** | **-1.0** |
| **LATG** | **Datong** baz=234 | **0.61** | **234** | *eP* | | **Pb** | **04 23 16.3** | **-0.9** |
| **NTST** | **Danshui** baz=295 | **0.62** | **295** | *eP* | | **Pn** | **04 23 17.7** | **-1.3** |
| **TWS1** | **Kuangyinshan** baz=299 | **0.63** | **289** | P | | **Pb** | **04 23 16.6** | **-0.7** |
| TWS1 | baz=299 | | | *eS* | | **Sn** | **04 23 26.9** | **-2.0** |
| **EAHA** | **Aohua** baz=204 | **0.64** | **208** | *eP* | | **Pb** | **04 23 17.3** | **-0.3** |
| **EOS3** | **EOS3** baz=158 | **0.65** | **160** | *eP* | | **Pb** | **04 23 17.5** | **0.0** |
| **YHNB** | **Yeheng** baz=251 | **0.67** | **250** | P | | **Pg** | **04 23 17.1** | **-0.5** |
| **YHNB** | **Yeheng** baz=251 | **0.67** | **250** | P | | **Pg** | **04 23 17.2** | **-0.5** |
| **NSK** | **Sanguang** baz=258 | **0.69** | **251** | *eP* | | **Pg** | **04 23 17.1** | **-0.8** |
| **PCYT** | **Pengchaiyu** baz=5.0 | **0.73** | **360** | *eP* | | **Pn** | **04 23 19.3** | **-1.2** |
| **NNS** | **Nan Shan** baz=246 | **0.78** | **234** | *eP* | | **Pb** | **04 23 19.7** | **-0.3** |
| **NNSB** | **Datong** baz=245 | **0.78** | **233** | *eP* | | **Pb** | **04 23 19.8** | **-0.2** |
| **EOS4** | **EOS4** baz=150 | **0.81** | **164** | P | | **Pn** | **04 23 20.2** | **-0.9** |
| **NCUH** | **Zhongli** baz=277 | **0.81** | **275** | *eP* | | **Pn** | **04 23 21.3** | **-0.3** |
| NCUH | baz=277 | | | *eS* | | **Sn** | **04 23 33.5** | **+0.1** |
| **ETL** | **Fush Village** baz=213 | **0.84** | **209** | *eP* | | **Pb** | **04 23 20.4** | **-0.6** |
| ETL | baz=213 | | | *eS* | | **Sb** | **04 23 31.8** | **-0.4** |
| **NACB** | **Ninganchiao** baz=212 | **0.84** | **211** | P | | **Pn** | **04 23 20.8** | **-1.2** |
| **NACB** | **Ninganchiao** baz=212 | **0.84** | **211** | P | | **Pb** | **04 23 20.4** | **-0.6** |
| **ETLH** | **Xiulin Townshi** baz=219 | **0.87** | **218** | *eP* | | **Pg** | **04 23 21.2** | **-0.2** |
| **NFF** | **Wufeng Townshi** baz=247 | **0.91** | **253** | *eP* | | **Pn** | **04 23 21.9** | **-1.1** |
| **TWD** | **Chiawan** baz=220 | **0.92** | **208** | P | | **Pg** | **04 23 22.0** | **-0.3** |
| **YOJ** | **Yonaguni jima** baz=115 | **0.96** | **117** | P | | **Pb** | **04 23 22.4** | **-0.5** |
| **YOJ** | **Yonaguni jima** baz=115 | **0.96** | **117** | *eP* | | **Pb** | **04 23 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OWD** | **Renai** baz=223 | **1.25** | **221** | *e*P | **Pg** | **04** | **23** | **28.1 -0.5** |
| **WUSB** | **Renai** baz=218 | **1.25** | **224** | *e*P | **Pg** | **04** | **23** | **27.9 -0.8** |
| **NSY** | **Sanyi** baz=266 | **1.29** | **248** | *e*P | **Pg** | **04** | **23** | **30.1 +0.9** |
| **TWQ1** | **Liyutan** baz=264 | **1.30** | **245** | *e*P | **Pg** | **04** | **23** | **29.4 -0.2** |
| **WARBT** | **Fenglin Townsh** baz=218 | **1.33** | **208** | P | **Pb** | **04** | **23** | **28.8 -0.6** |
| **WCS** | **Beigang Elemen** baz=241 | **1.35** | **232** | *e*P | **Pg** | **04** | **23** | **31.1 +0.6** |
| **VWDT** | **VWDT** baz=227 | **1.42** | **217** | *e*P | **Pg** | **04** | **23** | **30.8 -1.1** |
| **TYC** | **Yuchr** baz=223 | **1.49** | **228** | *e*P | **Pg** | **04** | **23** | **32.2 -0.9** |
| **SSLB** | **Suanglung** | **1.50** | **223** | P | **Pg** | **04** | **23** | **32.4 -1.0** |
| **SSLB** | **Suanglung** baz=225 | **1.50** | **223** | *e*P | **Pg** | **04** | **23** | **32.4 -1.0** |
| **HGSD** | **Ruisui** baz=222 | **1.52** | **203** | P | **Pg** | **04** | **23** | **32.7 -1.0** |
| **EHY** | **Hungye** baz=209 | **1.55** | **206** | *e*P | **Pb** | **04** | **23** | **32.6 -0.4** |
| **IRIF** | **Iriomote-Funau** | **1.61** | **110** | P | **Pn** | **04** | **23** | **31.1 -1.4** |
| IRIF | | | | *e*S | **Sn** | **04** | **23** | **50.0 -3.1** |
| **WNT** | **Mingjian** baz=234 | **1.62** | **232** | *e*P | **Pg** | **04** | **23** | **37.0 +1.3** |
| **WHYT** | **Xinyi Township** baz=226 | **1.63** | **223** | *e*P | **Pg** | **04** | **23** | **36.9 +1.0** |
| **YULB** | **Yu-li** | **1.66** | **205** | P | **Pb** | **04** | **23** | **34.5 -0.4** |
| **YULB** | **Yu-li** baz=208 | **1.66** | **205** | *e*P | **Pb** | **04** | **23** | **34.0 -0.9** |
| **TWF1** | **Yuli** baz=220 | **1.69** | **205** | *e*P | **Pb** | **04** | **23** | **35.1 -0.4** |
| **HATJ** | **Hateruma jima** | **1.79** | **118** | *e*P | **Pn** | **04** | **23** | **34.7 -0.3** |
| HATJ | | | | S | **Sn** | **04** | **23** | **55.0 -2.6** |
| **FULB** | **Fuli** baz=219 | **1.84** | **203** | *e*P | **Pb** | **04** | **23** | **37.4 -0.5** |
| **JKRS** | **Kuro-shima** | **1.88** | **110** | P | **Pn** | **04** | **23** | **36.6 +0.3** |
| JKRS | | | | *e*S | **Sn** | **04** | **24** | **00.0 +0.1** |
| **ELDTW** | **Lidau** baz=198 | **1.96** | **210** | *e*P | **Pb** | **04** | **23** | **39.7 -0.3** |
| **JIJ** | **Ishigaki jima** | **1.96** | **105** | *e*P | **Pn** | **04** | **23** | **37.0 -0.3** |
| **WCKO** | **Fanlu** baz=226 | **1.98** | **223** | *e*P | **Pg** | **04** | **23** | **41.7 -0.7** |
| **EDH** | **Donghe** baz=180 | **2.04** | **200** | *e*P | **Pn** | **04** | **23** | **39.1 +0.6** |
| **JISG** | **Ishigakijimahi** | **2.06** | **98** | *e*P | **Pn** | **04** | **23** | **39.7 +1.0** |
| **TPUB** | **Ta-pu** baz=224 | **2.07** | **220** | P | **Pg** | **04** | **23** | **42.6 -1.5** |
| **STYH** | **Taoyuan** baz=219 | **2.09** | **215** | *e*P | **Pg** | **04** | **23** | **42.9 -1.7** |
| **WTP** | **Ta-pu** baz=223 | **2.12** | **219** | *e*P | **Pg** | **04** | **23** | **43.6 -1.5** |
| **TWK** | **Hsinying** baz=226 | **2.18** | **222** | *e*P | **Pg** | **04** | **23** | **44.8 -1.5** |
| **CHN1** | **Nanshi** baz=224 | **2.21** | **220** | *e*P | **Pb** | **04** | **23** | **44.7 +0.3** |
| **TWGBT** | **Beinan** | **2.26** | **204** | P | **Pb** | **04** | **23** | **43.0 -2.2** |
| **SGST** | **Jiashian** baz=207 | **2.26** | **217** | *e*P | **Pb** | **04** | **23** | **44.7 -0.6** |
| **MATB** | **Ma-tsu** baz=303 | **2.29** | **303** | *e*P | **Pn** | **04** | **23** | **41.4 -0.6** |
| **VWUC** | **VWUC** baz=274 | **2.38** | **273** | P | **Pn** | **04** | **23** | **42.9 -0.3** |
| **MASBT** | **Mashibuluo** baz=215 | **2.63** | **210** | *e*P | **Pb** | **04** | **23** | **50.6 -0.9** |
| **LYJJ** | **Jianjiangzhen** baz=308 | **2.66** | **309** | *e*P | **Pn** | **04** | **23** | **46.1 -0.8** |
| **PTMZ** | **Houxiangcun** baz=274 | **2.68** | **274** | *e*P | **Pn** | **04** | **23** | **46.9 -0.4** |
| **KSRS** | **Korea Array** 0.2nm,0.3s,baz=196,slow=12,SNR=2.3 0.8nm,0.5s | **13.47** | **20** | P | **P** | **04** | **26** | **23.6 -1.0** |
| **USRK** | **Ussuriysk Ar.** 3.4nm,0.8s,baz=203,slow=9.2,SNR=5.7 3.4nm,0.8s | **20.89** | **20** | P | Pn | 04 | 27 | 49.1 +0.3 |
| **CMAR** | **Chiang Mai Arr** comp=Z,56nm,19.5s,baz=185,slow=39 | **22.41** | **258** | LR | LR | 04 | 37 | 45.7 |
| **SONM** | **Songino Array** 4.3nm,1.0s,baz=157,slow=8.9,SNR=18 | **26.04** | **335** | P | **P** | **04** | **28** | **39.6 +2.2** |
| SONM | comp=Z,65nm,20.2s,baz=86,slow=40 4.3nm,1.0s | | | LR | LR | 04 | 40 | 40.1 |
| **MKAR** | **Makanchi Array** 1.3nm,0.9s,baz=102,slow=11,SNR=9.2 1.3nm,0.9s | **38.40** | **315** | P | **P** | **04** | **30** | **26.8 +1.3** |
| **ZALV** | **Zalesovo Beam** 1.5nm,0.4s,baz=123,slow=7.6,SNR=8.7 1.5nm,0.4s | **40.09** | **326** | P | **P** | **04** | **30** | **39.9 +0.3** |
| **KURBB** | **Kurchatov Arra** 0.9nm,0.7s,baz=114,slow=8.8,SNR=5.0 0.9nm,0.7s | **42.09** | **319** | P | **P** | **04** | **30** | **56.8 +0.8** |
| **WRA** | **Warramunga Arr** 3.1nm,0.4s,baz=347,slow=8.8,SNR=6.0 3.1nm,0.4s | **46.14** | **164** | P | **P** | **04** | **31** | **29.0 +0.2** |
| **BVAR** | **Borovoye Array** 1.1nm,0.7s,baz=103,slow=13,SNR=4.5 1.1nm,0.7s | **47.64** | **320** | P | **P** | **04** | **31** | **41.2 +1.0** |
| **ASAR** | **Alice Springs** 1.2nm,0.7s,baz=345,slow=7.3,SNR=6.3 1.2nm,0.7s | **49.62** | **166** | P | **P** | **04** | **31** | **57.5 +1.7** |
| **STKA** | **Stephens Creek** 1.8nm,0.8s,baz=311,slow=13,SNR=4.1 1.8nm,0.8s | **59.46** | **161** | P | **P** | **04** | **33** | **07.2 +0.1** |
| **FINES** | **FINESS Array B** 1.2nm,0.7s,baz=94,slow=13,SNR=1.3 1.2nm,0.7s | **71.24** | **330** | P | **P** | **04** | **34** | **24.5 +1.4** |
| **BRTR** | **Keskin Array B** 1.0nm,0.9s,baz=102,slow=5.2,SNR=6.4 1.0nm,0.9s | **73.40** | **306** | P | **P** | **04** | **34** | **37.5 +0.9** |
| **YKA** | **Yellowknife Ar** 0.6nm,0.8s,baz=36,slow=4.9,SNR=5.0 0.6nm,0.8s | **82.00** | **23** | P | **P** | **04** | **35** | **24.0 +0.1** |

*IDC **22** 04:25:26.9±2.1,6.78S×128.85E,h0km,mb3.5/1, mbtmp3.8/3,ML4.0/2,Error ellipse: s-maj=116.2km s-min=31.7km az=67.0*

**ISC 22 04:25:29.2±1.5,7.0S±0.1×128.9E±0.1,h10km,n12, σ3s30/10,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.57** | **112** | P | | **Pg** | | **04 26 18.8** | **+0.3** |
| **DRS** | **Darwin Rock St** | **5.73** | **160** | P | | Pb | | 04 27 03.9 | -5.4 |
| **MTN** | **Manton Dam** | **6.20** | **159** | P | | Pn | | 04 27 08.9 | +8.1 |
| **KDU** | **Kakadu** | **6.65** | **148** | P | | Pn | | 04 27 12.9 | +6.0 |
| **WRA** | **Warramunga Arr** 0.7nm,0.3s,baz=337,slow=14,SNR=16 | **13.89** | **158** | Pn | | **Pn** | | **04 28 47.1** | **+0.8** |
| WRA | 0.9nm,0.3s,baz=332,slow=22,SNR=7.0 0.8nm,0.3s | | | Sn | | Sn | | 04 31 11.8 | -9.0 |
| **COEN** | **Coen** | **15.64** | **117** | P | | **Pn** | | **04 29 10.0** | **+0.1** |
| **QIS** | **Mount Isa** | **17.00** | **143** | P | | **Pn** | | **04 29 28.4** | **+1.2** |
| **ASAR** | **Alice Springs** 0.5nm,0.3s,baz=348,slow=11,SNR=24 | **17.24** | **164** | P | | **P** | | **04 29 33.2** | **+1.5** |
| ASAR | 0.6nm,0.5s,baz=344,slow=25,SNR=4.8 2.3nm,0.6s | | | S | | **Sn** | | **04 32 35.6** | **-6.6** |
| **AS01** | **Alice Springs** | **17.25** | **164** | P | | **P** | | **04 29 33.7** | **+1.8** |
| **WRKA** | **Warakurna** | **17.93** | **182** | P | | **P** | | **04 29 43.9** | **+4.6** |
| **OOD** | **Oodnadatta** | **21.64** | **163** | P | | **P** | | **04 30 20.5** | **+0.7** |
| **MKAR** | **Makanchi Array** 0.2nm,0.3s,baz=111,slow=7.9,SNR=4.9 0.2nm,0.3s | **67.64** | **327** | P | | **P** | | **04 36 24.4** | **-2.0** |

**IDC 22 04:27:17.9±4.8,18.34S×175.26W,h0km,mb4.1/2, mbtmp4.1/2,Error ellipse: s-maj=246.1km s-min=64.3km az=149.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** 0.8nm,0.5s,baz=96,slow=7.2,SNR=10 | **47.49** | **259** | P | | P | | 04 35 54.5 | -0.6 |
| WRA | 1.5nm,1.3s,baz=92,slow=3.3,SNR=1.2 0.8nm,0.5s | | | PcP | | PcP | | 04 37 23.6 | -1.9 |
| **ASAR** | **Alice Springs** 2.8nm,0.6s,baz=86,slow=8.7,SNR=19 2.8nm,0.6s | **47.55** | **254** | P | | P | | 04 35 56.2 | +0.7 |
| **BRTR** | **Keskin Array B** 0.3nm,0.5s,baz=81,slow=4.6,SNR=1.9 | **147.18** | **317** | PKPbc | | PKPbc | | 04 47 03.7 | +0.2 |

*IDC **22** 04:35:39.9±1.3,8.37S×117.13E,h0km,mb3.5/4, mbtmp3.6/5,ML3.4/1,Error ellipse: s-maj=29.9km s-min=21.7km az=86.0*

*DJA **22** 04:35:41.1±0.7,8.3S±9.1×117.7E±1.1,h12km±7km,M3.9/9, mb4.0/1,MLv3.9/9*

**ISC 22 04:35:41.0±0.8,8.34S±0.07×117.16E±0.04,h10km,n15, σ0s94/16,mb3.6/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.48** | **215** | P | | **Pg** | | **04 35 50.2** | **-0.1** |
| **PLAI** | **Plampang** | **0.78** | **128** | P | | **Pg** | | **04 35 56.7** | **+0.7** |
| **SRBI** | **Singaraja** | **1.94** | **277** | P | | **Pn** | | **04 36 14.6** | **+0.5** |
| **DNP** | **Denpasar** | **1.96** | **260** | P | | **Pn** | | **04 36 14.1** | **-0.1** |
| **WBSI** | **Waikabubak, Su** | **2.55** | **120** | P | | **Pn** | | **04 36 21.9** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.98** | **267** | P | | **Pn** | | **04 36 28.2** | **-0.1** |
| **BSSI** | **Bau Bau, Buton** | **3.96** | **57** | P | | **Pn** | | **04 36 40.5** | **-1.4** |
| **KAPI** | **Kappang** 2.2nm,0.3s,baz=230,slow=7.9,SNR=1.6 | **4.19** | **38** | Pn | | **Pn** | | **04 36 46.3** | **+1.3** |
| KAPI | 3.8nm,0.3s,baz=208,slow=23,SNR=14 | | | Sn | | **Sn** | | **04 37 32.0** | **-2.1** |
| KAPI | 1.7nm,0.3s,baz=194,slow=18,SNR=4.9 5.5nm,0.2s | | | Lg | | Lg | | 04 37 54.0 | |
| **GRJI** | **Gresik** | **4.85** | **287** | P | | **Pn** | | **04 36 53.2** | **-0.9** |
| **PWJI** | **Pagerwojo** | **5.31** | **273** | P | | **Pn** | | **04 36 59.9** | **-0.5** |
| **WRA** | **Warramunga Arr** 2.5nm,0.6s,baz=300,slow=12,SNR=39 2.5nm,0.6s | **20.23** | **127** | P | | **P** | | **04 40 16.8** | **+0.3** |
| **ASAR** | **Alice Springs** 0.9nm,0.7s,baz=314,slow=9.5,SNR=9.3 0.9nm,0.7s | **22.12** | **135** | P | | **P** | | **04 40 37.0** | **+0.2** |
| **SONM** | **Songino Array** 0.3nm,0.4s,baz=168,slow=8.5,SNR=2.0 0.3nm,0.4s | **56.74** | **351** | P | | **P** | | **04 45 26.2** | **+1.1** |
| **MKAR** | **Makanchi Array** 0.3nm,0.7s,baz=122,slow=7.1,SNR=2.9 0.3nm,0.7s | **63.06** | **334** | P | | **P** | | **04 46 08.4** | **-0.1** |
| **CPUP** | **Villa Florida** 1.0nm,0.7s,baz=153,slow=2.3,SNR=4.6 | **145.12** | **189** | PKPbc | | **PKPbc** | | **04 55 18.9** | **-0.1** |

*IDC **22** 05:30:33.1±0.6,4.76S×34.93E,h0km,mb4.2/18, mbtmp4.2/21,ML3.8/3,MS3.6/22,Error ellipse: s-maj=17.8km s-min=10.7km az=70.0*

*NEIC **22** 05:30:34.7±2.1,4.78S±0.08×34.89E±0.08,h10km±1km, mb4.6/29,Error ellipse: s-maj=15.4km s-min=12.1km az=131.0*

*LSZ **22** 05:30:35.4±0.3,3.78S×30.68E,h10km,MD5.1*

**ISC 22 05:30:34.5±0.4,4.75S±0.04×34.82E±0.05,h10km,n121, σ1s63/112,mb4.5/48,MS3.6/21,1D,Tanzania**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DODT** | **Dodoma, Tanzan** | **1.71** | **147** | *i* P | | **Pn** | | **05 31 04.9** | **+0.4** |
| DODT | | | | *i* S | | **Sn** | | **05 31 24.2** | **-2.2** |
| **KIBK** | **Kibwezi** | **4.01** | **54** | Pn | | **Pn** | | **05 31 34.5** | **-1.7** |
| **I32KE** | **NAIROBI INFRAS** baz=184,slow=23 | **4.02** | **30** | Pg | | **Pb** | | **05 31 45.0** | **-0.6** |
| I32KE | baz=184,slow=15 | | | Lg | | Lg | | 05 32 34.5 | |
| I32KE | baz=212,slow=329,SNR=1.0 | | | I | | I | | 05 44 50.0 | |
| **KMBO** | **Kilima Mbogo** | **4.34** | **34** | Pn | | **Pn** | | **05 31 40.9** | **+0.1** |
| **KMBO** | **Kilima Mbogo** 7.4nm,0.3s,baz=179,slow=15,SNR=64 | **4.34** | **34** | Pn | | **Pn** | | **05 31 38.4** | **-2.4** |
| KMBO | 59nm,0.3s,baz=209,slow=17,SNR=40 | | | Pg | | **Pb** | | **05 31 51.3** | **+0.2** |
| KMBO | 161nm,0.3s,baz=302,slow=19,SNR=9.0 | | | Sn | | **Sn** | | **05 32 27.1** | **-4.5** |
| KMBO | 321nm,0.3s,baz=308,slow=21,SNR=9.0 29nm,0.3s | | | Lg | | Lg | | 05 32 43.9 | |
| **PDHT** | **Panda Hill** | **4.49** | **200** | *i* P | | **Pn** | | **05 31 43.4** | **+0.7** |
| PDHT | | | | *i* S | | **Sn** | | **05 32 32.6** | **-2.6** |
| **MBAR** | **Mbarara** | **5.79** | **315** | Pn | | **Pn** | | **05 32 01.4** | **+0.7** |
| **MBAR** | **Mbarara** | **5.79** | **315** | *e*P | | **Pn** | | **05 31 58.8** | **-1.9** |
| MBAR | | | | *e*S | | **Sn** | | **05 33 04.5** | **-2.8** |
| MBAR | comp=Z,962nm,0.3s | | | IAML | | | | 05 33 41.3 | |
| **KSMZ** | **Kasama** | **6.46** | **213** | *i* P | | **Pn** | | **05 32 09.2** | **-0.7** |
| KSMZ | baz=355,slow=16 | | | *i* | | | | 05 32 09.2 | |
| KSMZ | | | | *i* S | | **Sn** | | **05 33 17.6** | **-6.2** |
| **LODK** | **Lodwar** | **8.13** | **4** | Pn | | **Pn** | | **05 32 30.5** | **-2.3** |
| **LSZ** | **Lusaka** | **12.33** | **211** | Pn | | **Pn** | | **05 33 29.4** | **-0.9** |
| **LSZ** | **Lusaka** | **12.33** | **211** | *e*P | | **Pn** | | **05 33 29.3** | **-1.0** |
| **KRI** | **Karoi** | **13.05** | **203** | *e*P | | **Pn** | | **05 33 37.8** | **-2.4** |
| **CHIPN** | **CHIPINGE** | **15.54** | **188** | *e*P | | **Pn** | | **05 34 13.7** | **-0.2** |
| **MATP** | **Matopo** comp=Z,0.3nm,0.3s,baz=24,slow=12,SNR=8.1 | **16.75** | **201** | Pn | | **Pn** | | **05 34 27.8** | **-1.8** |
| MATP | comp=Z,0.3nm,0.3s,baz=289,slow=24,SNR=8.5 comp=Z,1.7nm,0.8s | | | Lg | | Lg | | 05 39 18.9 | |
| **ATD** | **Arta Tunnel** comp=Z,0.1nm,0.3s,baz=226,slow=21,SNR=1.7 | **18.04** | **26** | Lg | | Lg | | 05 39 55.7 | |
| **MUSN** | **Musina, Limpop** | **18.09** | **195** | *e*P | | **Pn** | | **05 34 45.3** | **-0.7** |
| **OPO** | **Ambohidratompo** baz=311,slow=12,SNR=8.6 | **18.30** | **140** | P | | **Pn** | | **05 34 47.6** | **-1.2** |
| OPO | comp=Z,2.2nm,0.8s,baz=257,slow=18,SNR=1.2 | | | S | | **Sn** | | **05 38 13.7** | **+0.2** |
| OPO | comp=Z,221nm,19.3s,baz=190,slow=38 comp=Z,11nm,0.9s | | | LR | | LR | | 05 41 56.5 | |
| **MPHEP** | **Siloam, Limpop** | **18.60** | **194** | *e*P | | **Pn** | | **05 34 54.0** | **+1.6** |
| **ABPO** | **Ambohimpanom** | **18.65** | **141** | P | | **P** | | **05 34 49.5** | **-3.3** |
| **ABPO** | **Ambohimpanom** | **18.65** | **141** | *e*P | | **Pn** | | **05 34 55.8** | **+2.7** |
| **MOPA** | **Mopani** | **18.95** | **190** | *e*P | | Pn | | 05 35 04.3 | +7.7 |
| **HOED** | **Hoedspruit, Li** | **19.91** | **190** | *e*P | | **Pn** | | **05 35 08.3** | **+0.3** |
| **MTLB** | **Matlabas, Limp** | **20.38** | **201** | *e*P | | Pn | | 05 35 12.9 | -0.8 |
| MTLB | comp=Z,38nm,0.9s | | | IAmb | | IAmb | | 05 35 17.1 | |
| **PILG** | **Pilgrimsrest,** | **20.45** | **191** | *e*P | | Pn | | 05 35 14.3 | -0.4 |
| PILG | comp=Z,49nm,1.3s | | | IAmb | | IAmb | | 05 35 20.2 | |
| **VOI** | **Vohitsoka** | **20.63** | **147** | P | | **P** | | **05 35 12.5** | **-1.9** |
| VOI | comp=Z,24nm,1.2s | | | IAmb | | IAmb | | 05 35 21.2 | |
| **DULL** | **Dullstroom, Mp** | **20.98** | **192** | *e*P | | **P** | | **05 35 17.4** | **-0.8** |
| **RUST** | **Rust De Winter** | **21.25** | **196** | *e*P | | **P** | | **05 35 20.8** | **-0.2** |
| RUST | comp=Z,94nm,2.1s | | | IAmb | | IAmb | | 05 36 05.0 | |
| **NHAM** | **Northam, North** | **21.31** | **199** | *e*P | | **P** | | **05 35 17.0** | **-4.7** |
| **TSWA** | **Tswaing Meteor** | **21.55** | **197** | *e*P | | **P** | | **05 35 25.6** | **+1.4** |
| TSWA | comp=Z,47nm,1.1s | | | IAmb | | IAmb | | 05 35 29.5 | |
| **NYAT** | **Nyati, Northwe** | **21.65** | **198** | *e*P | | **P** | | **05 35 28.2** | **+2.9** |
| **LBTB** | **Lobatse** | **22.01** | **203** | P | | **P** | | **05 35 28.8** | **-0.5** |
| LBTB | comp=Z,54nm,1.4s | | | IAmb | | IAmb | | 05 35 32.9 | |
| **LBTB** | **Lobatse** | **22.01** | **203** | *e*P | | **P** | | **05 35 28.2** | **-1.0** |
| LBTB | comp=Z,64nm,1.4s | | | IAmb | | IAmb | | 05 35 32.4 | |
| **LBTB** | **Lobatse** comp=Z,141nm,22.0s,baz=27,slow=35 | **22.01** | **203** | LR | | LR | | 05 43 33.0 | |
| **HRAO** | **HartRAO** | **22.11** | **197** | *e*P | | **P** | | **05 35 33.4** | **+3.1** |
| **TSUM** | **Tsumeb** | **22.11** | **228** | P | | **P** | | **05 35 30.0** | **-0.4** |
| TSUM | comp=Z,17nm,1.2s | | | IAmb | | IAmb | | 05 35 35.4 | |
| **TSUM** | **Tsumeb** | **22.11** | **228** | *e*P | | **P** | | **05 35 30.9** | **+0.5** |
| TSUM | comp=Z,95nm,2.2s | | | IAmb | | IAmb | | 05 35 48.2 | |
| **POGA** | **Pongola** | **22.67** | **187** | P | | **P** | | **05 35 36.1** | **0.0** |
| POGA | comp=Z,22nm,0.9s | | | IAmb | | IAmb | | 05 35 43.0 | |
| **PRYS** | **Parys** | **23.18** | **197** | *e*P | | **P** | | **05 35 42.7** | **+1.1** |
| PRYS | comp=Z,56nm,1.5s | | | IAmb | | IAmb | | 05 35 43.6 | |
| **SWZ** | **Schweizer** | **24.08** | **201** | *e*P | | **P** | | **05 35 50.1** | **-0.3** |
| SWZ | comp=Z,33nm,1.0s | | | IAmb | | IAmb | | 05 36 00.7 | |
| **SNKL** | **Senekal, Frees** | **24.34** | **195** | *e*P | | **P** | | **05 35 53.0** | **+0.2** |
| SNKL | comp=Z,51nm,1.3s | | | IAmb | | IAmb | | 05 35 57.5 | |
| **BOSA** | **Boshof** | **25.41** | **200** | P | | **P** | | **05 36 02.7** | **+0.2** |
| BOSA | comp=Z,20nm,1.1s | | | IAmb | | IAmb | | 05 36 16.8 | |
| **BOSA** | **Boshof** | **25.41** | **200** | *e*P | | **P** | | **05 36 03.5** | **+1.0** |
| BOSA | comp=Z,25nm,1.1s | | | IAmb | | IAmb | | 05 36 16.5 | |
| **BOSA** | **Boshof** comp=Z,9.5nm,1.0s,baz=27,slow=11,SNR=6.9 | **25.41** | **200** | P | | **P** | | **05 36 02.7** | **+0.2** |
| BOSA | comp=Z,146nm,19.7s,baz=26,slow=35 comp=Z,9.5nm,1.0s | | | LR | | LR | | 05 45 33.8 | |
| **SUR** | **Sutherland** | **30.46** | **204** | LR | | LR | | 05 49 17.9 | |
| | comp=Z,332nm,18.5s,baz=28,slow=37 | | | | | | | | |
| **EIL** | **Elat** comp=Z,54nm,18.1s,baz=78,slow=34 | **34.22** | **0** | LR | | LR | | 05 50 11.0 | |
| **WSAR** | **Wadi Sarin** comp=Z,76nm,20.7s,baz=223,slow=35 | **36.25** | **39** | LR | | LR | | 05 51 45.6 | |
| **TORD** | **Torodi Ar. Bea** | **37.39** | **299** | P | | **P** | | **05 37 48.3** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** comp=Z,3.5nm,0.9s,baz=109,slow=8.4,SNR=16 | **37.39** | **299** | P | | **P** | | **05 37 48.2** | **+0.2** |
| TORD | comp=Z,119nm,21.2s,baz=118,slow=35 comp=Z,3.5nm,0.9s | | | LR | | LR | | 05 52 18.7 | |
| **MMAI** | **Mount Meron Ar** comp=Z,0.3nm,0.2s,baz=195,slow=10,SNR=1.8 comp=Z,0.3nm,0.2s | **37.56** | **1** | P | | **P** | | **05 37 50.5** | **+1.3** |
| **TAM** | **Tamanrasset** | **39.60** | **315** | P | | **P** | | **05 38 07.2** | **+0.5** |
| **DBIC** | **Dimbokro** comp=Z,68nm,18.1s,baz=49,slow=38 | **41.19** | **286** | LR | | LR | | 05 56 44.3 | |
| **ARPR** | **Arapgir-MALATY** | **43.74** | **4** | P | | **P** | | **05 38 41.5** | **+1.2** |
| **BR104** | **Keskin Array S** | **44.25** | **359** | P | | **P** | | **05 38 45.4** | **+1.1** |
| **BR105** | **Keskin Array S** comp=Z,5.2nm,0.8s,comp=Z,40nm | **44.26** | **359** | P | | **P** | | **05 38 46.1** | **+1.7** |
| **BR131** | **Keskin Array S** | **44.27** | **359** | P | | **P** | | **05 38 43.3** | **-1.2** |
| BR131 | comp=Z,4.7nm,0.8s | | | IAmb | | IAmb | | 05 38 48.5 | |
| **BRTR** | **Keskin Array B** | **44.27** | **359** | P | | **P** | | **05 38 43.3** | **-1.2** |
| **BRTR** | **Keskin Array B** comp=Z,3.6nm,0.8s,baz=177,slow=10,SNR=26 | **44.27** | **359** | P | | **P** | | **05 38 45.1** | **+0.7** |
| BRTR | comp=Z,45nm,18.4s,baz=187,slow=38 comp=Z,3.6nm,0.8s | | | LR | | LR | | 05 58 52.2 | |
| **VAE** | **Valguarnera** comp=Z,195nm,21.8s,baz=135,slow=39 | **46.11** | **337** | LR | | LR | | 06 00 51.7 | |
| **KEST** | **Kesra** comp=Z,4.2nm,0.9s,baz=128,slow=10,SNR=5.8 | **46.82** | **331** | P | | **P** | | **05 39 05.3** | **+0.6** |
| KEST | comp=Z,84nm,18.6s,baz=322,slow=39 comp=Z,4.2nm,0.9s | | | LR | | LR | | 06 01 02.1 | |
| **PALK** | **Pallekele** comp=Z,100nm,20.4s,baz=351,slow=32 | **47.32** | **76** | LR | | LR | | 05 55 40.0 | |
| **PUK** | **Puka** comp=Z,9.7nm,0.8s | **48.51** | **345** | P | | **P** | | **05 39 17.0** | **-0.7** |
| PUK | | | | IAmb | | IAmb | | 05 39 22.3 | |
| **KBZ** | **Khabaz** comp=Z,52nm,20.9s,baz=138,slow=38 | **48.80** | **8** | LR | | LR | | 06 01 11.0 | |
| **PDG** | **Podgorica** comp=Z,9.5nm,0.9s | **49.04** | **345** | P | | **P** | | **05 39 20.8** | **-0.9** |
| PDG | | | | IAmb | | IAmb | | 05 39 26.2 | |
| **VOIR** | comp=Z,3.4nm,1.2s | **50.72** | **351** | P | | **P** | | **05 39 35.9** | **+1.4** |
| **PLOR5** | **Plostina Array** comp=Z,4.2nm,0.9s | **50.89** | **353** | P | | **P** | | **05 39 37.3** | **+1.6** |
| PLOR5 | | | | pP | | **sP** | | **05 39 40.8** | **0.0** |
| **PLOR3** | **Plostina Array** comp=Z,3.3nm,1.4s | **50.90** | **353** | P | | **P** | | **05 39 38.1** | **+2.3** |
| **MORH** | **Mrgy, Hungar** comp=Z,4.3nm,0.8s | **52.74** | **346** | P | | **P** | | **05 39 52.2** | **+2.8** |
| **BURAR** | **Bucovina Array** | **52.82** | **352** | P | | **P** | | **05 39 49.6** | **-0.6** |
| **BUR08** | **Bucovina Ar. S** | **52.85** | **352** | P | | **P** | | **05 39 50.4** | **-0.1** |
| BUR08 | comp=Z,10.0nm,1.4s | | | IAmb | | IAmb | | 05 39 55.2 | |
| **SORM** | **Soroca** comp=Z,8.2nm,0.9s,comp=Z,820nm | **52.96** | **355** | P | | **P** | | **05 39 51.9** | **+0.8** |
| **SIMJ** | **Simiganj** | **53.54** | **33** | P | | **P** | | **05 39 56.0** | **+0.2** |
| SIMJ | comp=Z,11nm,1.1s | | | IAmb | | IAmb | | 05 39 59.9 | |
| **KMPD** | **K-Podol'skiy** | **53.59** | **353** | P | | **P** | | **05 39 56.1** | **+0.4** |
| KMPD | | | | P | | **pP** | | **05 39 56.7** | **-2.7** |
| **CHGR** | **Chuyangaron** | **53.62** | **33** | P | | **P** | | **05 39 56.0** | **-0.3** |
| **BBTS** | **Babate** comp=Z,83nm,18.9s,baz=340,slow=35 | **54.42** | **292** | LR | | LR | | 06 02 33.8 | |
| **MORS** | **Morshin** | **54.50** | **351** | P | | **P** | | **05 40 03.1** | **+0.8** |
| **GAR** | **Garm** | **54.50** | **34** | P | | **P** | | **05 40 03.7** | **+0.9** |
| **AK07** | **Malin Array Si** | **55.29** | **356** | P | | **P** | | **05 40 08.4** | **+0.4** |
| **AK10** | **Malin Array Si** | **55.33** | **356** | P | | **P** | | **05 40 08.9** | **+0.6** |
| **KIEV** | **Kiev** | **55.43** | **356** | P | | **P** | | **05 40 10.3** | **+1.2** |
| KIEV | comp=Z,5.5nm,1.0s | | | IAmb | | IAmb | | 05 40 13.5 | |
| **KIEV** | **Kiev** comp=Z,24nm,0.9s | **55.43** | **356** | P | | **P** | | **05 40 10.7** | **+1.7** |
| **AKASG** | **Malin Array Be** comp=Z,2.4nm,0.7s,baz=178,slow=6.3,SNR=9.2 | **55.44** | **356** | P | | **P** | | **05 40 09.2** | **+0.1** |
| AKASG | comp=Z,14nm,18.7s,baz=281,slow=41 comp=Z,2.4nm,0.7s | | | LR | | LR | | 06 08 04.2 | |
| **AKBB** | **Malin Array Si** comp=Z,6.7nm,1.1s | **55.44** | **356** | IAmb | | IAmb | | 05 40 13.5 | |
| **AKBB** | **Malin Array Si** | **55.44** | **356** | P | | **P** | | **05 40 09.5** | **+0.4** |
| **MI30** | **MI30,Zelenitsa** | **55.57** | **355** | P | | **P** | | **05 40 10.7** | **+0.7** |
| **MI28** | **Mi28,Pidlybu** | **55.80** | **355** | P | | **P** | | **05 40 12.5** | **+0.8** |
| **RNPP8** | **Varash** | **56.39** | **353** | P | | **P** | | **05 40 17.5** | **+1.6** |
| **GERES** | **GERESS Array B** | **56.47** | **343** | P | | **P** | | **05 40 16.7** | **+0.1** |
| **GERES** | **GERESS Array B** comp=Z,1.1nm,0.6s,baz=177,slow=13,SNR=2.3 | **56.47** | **343** | P | | **P** | | **05 40 16.1** | **-0.5** |
| **KHC** | **Kasperske Hory** comp=Z,5.3nm,1.2s | **56.76** | **343** | IAmb | | IAmb | | 05 40 21.8 | |
| **KHC** | **Kasperske Hory** | **56.76** | **343** | *e*P | | **P** | | **05 40 20.5** | **+1.9** |
| **KHC** | **Kasperske Hory** comp=Z,5.0nm,1.0s | **56.76** | **343** | P | | **P** | | **05 40 19.9** | **+1.3** |
| **ESDC** | **Sonseca Array** | **56.81** | **325** | P | | **P** | | **05 40 20.4** | **+1.1** |
| **ESDC** | **Sonseca Array** comp=Z,2.3nm,0.9s,baz=130,slow=8.0,SNR=18 comp=Z,2.3nm,0.9s | **56.81** | **325** | P | | **P** | | **05 40 20.3** | **+1.1** |
| ESDC | comp=Z,123nm,18.4s,baz=122,slow=39 comp=Z,2.3nm,0.9s | | | LR | | LR | | 06 07 31.8 | |
| **KK31** | **Karatay Array** | **57.53** | **30** | P | | **P** | | **05 40 23.5** | **-0.7** |
| **KKAR** | **Karatay Array** | **57.53** | **30** | P | | **P** | | **05 40 23.5** | **-0.7** |
| **BELG** | **Belogornoye** comp=Z,13nm,0.8s,baz=132,slow=2.1,SNR=3.8 | **57.96** | **9** | P | | **P** | | **05 40 27.5** | **+0.6** |
| BELG | comp=Z,40nm,18.3s,baz=100,slow=39 comp=Z,13nm,0.8s | | | LR | | LR | | 06 08 28.9 | |
| **ABKAR** | **Akbulak array** | **58.06** | **19** | P | | **P** | | **05 40 29.1** | **+1.4** |
| **KSH** | **Kashi** | **58.11** | **37** | P | | **P** | | **05 40 23.8** | **-4.7** |
| KSH | comp=Z,2.0nm,1.4s | | | pmax | | pmax | | | |
| **AKTO** | **Aktyubinsk** comp=Z,2.2nm,0.9s,baz=199,slow=5.7,SNR=7.7 | **58.49** | **17** | P | | **P** | | **05 40 31.1** | **+0.3** |
| AKTO | comp=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,1.1s | | | | | | | | |
| **SONM** | **Songino Array** | **81.29** | **40** | P | | **P** | | **05 42 51.9** | **+0.6** |
| | comp=Z,2.6nm,0.9s,baz=184,slow=4.0,SNR=6.7 | | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **83.12** | **48** | *eP* | | **P** | | **05 43 01.0** | **0.0** |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=Z,140nm,4.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **85.31** | **180** | P | | **P** | | **05 43 11.8** | **+0.1** |
| | comp=Z,2.3nm,1.1s,baz=279,slow=8.0,SNR=3.5 | | | | | | | | |
| | comp=Z,2.3nm,1.1s | | | | | | | | |
| **NJ2** | **Nanjing** | **87.45** | **58** | *eP* | | **P** | | **05 43 22.3** | **-0.4** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |

**WEL 22 05:39:10.1±1.1, 34°S±18″×177°9W±4″1, h362km±19km, M4.4/6, MLv4.4/6, Error ellipse: s-maj=0.1km s-min=0.0km az=112.3, confirmed, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **4.65** | **218** | P | Pn | 05 40 25.6 | -0.8 |
| HAZ | | | | S | S | 05 41 27.6 | -0.6 |
| **PUZ** | **Puketiti** | **4.68** | **212** | P | Pn | 05 40 24.4 | -2.3 |
| PUZ | | | | S | S | 05 41 28.8 | +0.1 |
| **RUGZ** | **Raukumara Rang** | **4.87** | **217** | P | Pn | 05 40 25.6 | -3.2 |
| RUGZ | | | | S | S | 05 41 30.3 | -2.3 |
| **TWGZ** | **Tauwhareparae** | **4.89** | **213** | S | S | 05 41 35.8 | +2.9 |
| **GLKZ** | **Green Lake** | **4.89** | **7** | S | S | 05 41 35.7 | +2.6 |
| **MWZ** | **Matawai** | **5.23** | **216** | P | Pn | 05 40 33.6 | +1.0 |
| MWZ | | | | S | S | 05 41 39.4 | -0.2 |
| **URZ** | **Urewera** | **5.38** | **219** | P | Pn | 05 40 31.8 | -2.4 |
| URZ | | | | S | S | 05 41 41.4 | -1.2 |
| **RIGZ** | **Rimuhau** | **5.42** | **212** | P | Pn | 05 40 34.3 | -0.5 |
| RIGZ | | | | S | S | 05 41 45.3 | +1.8 |
| **ARHZ** | **Aropaoanui** | **6.22** | **213** | P | Pn | 05 40 44.6 | +1.0 |
| ARHZ | | | | S | S | 05 42 04.5 | +4.7 |
| **BKZ** | **Black Stump Fm** | **6.38** | **217** | P | Pn | 05 40 45.7 | +0.1 |
| BKZ | | | | S | S | 05 42 04.6 | +1.4 |
| **KRHZ** | **Kereru** | **6.81** | **215** | P | Pn | 05 40 50.7 | +0.2 |
| **MOVZ** | **Moawhango** | **6.94** | **219** | P | Pn | 05 40 50.8 | -1.2 |
| **PNHZ** | **Pukenui** | **7.11** | **214** | P | Pn | 05 40 54.2 | +0.3 |
| **BFZ** | **Birch Farm** | **7.71** | **211** | P | P | 05 41 02.3 | +0.3 |
| BFZ | | | | S | S | 05 42 34.2 | +2.8 |

*FUNV 22 05:39:37.3, 10°.48N×62°.79W, h5km, MW3.1*
**ISC 22 05:39:36.4±0.9, 10°.41N±0°.07×62°.82W±0°.04, h9km, n8, σ1°35/14, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.42** | **80** | *eP* | **Pn** | **05 40 03.0** | **+0.6** |
| TRN | | | | *eS* | **Sn** | **05 40 30.0** | **-1.1** |
| **PCRV** | **Puerto La Cruz** | **1.80** | **263** | *eP* | **Pn** | **05 40 08.2** | **+0.5** |
| PCRV | | | | *eS* | **Sb** | **05 40 32.3** | **-0.1** |
| **PCRV** | **Puerto La Cruz** | **1.80** | **263** | *eP* | **Pg** | **05 40 12.0** | **+1.0** |
| PCRV | | | | *eS* | **Sn** | **05 40 31.8** | **+1.1** |
| **GRGR** | **Grenville** | **2.06** | **34** | *eP* | **Pb** | **05 40 14.3** | **+0.2** |
| GRGR | | | | *eS* | **Sb** | **05 40 39.1** | **-0.8** |
| **CACV** | **CAICARA DEL OR** | **4.63** | **233** | *eP* | Pn | 05 40 42.3 | -4.4 |
| CACV | | | | *eS* | Sn | 05 41 30.4 | -10 |
| **BENV** | **Beln** | **4.72** | **265** | *eP* | **Pn** | **05 40 48.3** | **+0.3** |
| BENV | | | | *eS* | **Sn** | **05 41 41.1** | **-1.9** |
| **LUEV** | **Luepa** | **4.73** | **163** | *eP* | **Pn** | **05 40 49.0** | **+0.8** |
| LUEV | | | | *eS* | **Sn** | **05 41 41.9** | **-1.4** |
| **BAUV** | **El Baul** | **5.35** | **255** | *eP* | **Pn** | **05 40 56.7** | **+0.2** |
| BAUV | | | | *eS* | **Sn** | **05 41 55.3** | **-3.0** |

**IDC 22 05:40:09.1±1.7, 17°.89S×177°.28W, h0km, mb3.9/4, mbtmp3.8/4, Error ellipse: s-maj=50.0km s-min=39.7km az=175.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.69** | **259** | P | P | 05 48 31.6 | -0.5 |
| | 0.3nm,0.7s,baz=97,slow=6.9,SNR=7.8 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.83** | **254** | P | P | 05 48 33.4 | +0.1 |
| | 2.5nm,0.5s,baz=88,slow=8.4,SNR=33 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.17** | **180** | P | P | 05 51 35.7 | +0.1 |
| | 0.7nm,0.7s,baz=28,slow=3.8,SNR=6.9 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.87** | **24** | P | P | 05 53 27.9 | -0.1 |
| | 0.5nm,0.8s,baz=238,slow=4.2,SNR=3.1 | | | | | | |
| | 0.5nm,0.8s | | | | | | |

*IDC 22 05:42:08.6±0.8, 15°.90S×168°.37E, h0km, mb4.2/11, mbtmp4.2/12, ML4.3/1, MS3.7/3, Error ellipse: s-maj=27.2km s-min=18.2km az=118.0*
*NOU 22 05:42:09.7, 15°.88S×168°.44E, h6km, MLv4.7/8, Vanuatu Islands*
*NEIC 22 05:42:11.3±1.5, 15°.9S±0°.1×168°.24E±0°.10, h10km±1km, mb4.6/30, Error ellipse: s-maj=18.0km s-min=15.2km az=341.0*
**ISC 22 05:42:10.5±0.6, 15°.91S±0°.07×168°.29E±0°.09, h10km, n51, σ1°05/45, mb4.5/24, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **1.81** | **183** | P | **Pn** | **05 42 41.9** | **+0.2** |
| **RTV** | **Rentapao** | **1.88** | **176** | P | **Pn** | **05 42 41.7** | **-1.0** |
| **KOUNC** | **Koumac, New Ca** | **5.98** | **219** | P | **Pn** | **05 43 39.7** | **+0.5** |
| **KOUNC** | **Koumac, New Ca** | **5.98** | **219** | Pn | **Pn** | **05 43 39.4** | **+0.2** |
| **YATNC** | **Mamie plateau,** | **6.26** | **192** | P | **Pn** | **05 43 43.4** | **+0.4** |
| **DZM** | **Mont Dzumac** | **6.37** | **196** | Pn | **Pn** | **05 43 44.8** | **+0.2** |
| **DZM** | **Mont Dzumac** | **6.37** | **196** | Pn | **Pn** | **05 43 45.2** | **+0.6** |
| | 6.2nm,0.3s,baz=34,slow=15,SNR=26 | | | | | | |
| DZM | | | | Sn | **Sn** | **05 44 57.4** | **-0.1** |
| | 1.2nm,0.3s,baz=324,slow=21,SNR=1.6 | | | | | | |
| | 22nm,0.4s | | | | | | |
| **NOUC** | **Port Laguerre** | **6.44** | **197** | P | **Pn** | **05 43 46.9** | **+1.5** |
| **PINNC** | **Pines Island,** | **6.71** | **187** | Pn | **Pn** | **05 43 47.9** | **-1.3** |
| **MSVF** | **Nonsavu** | **9.52** | **102** | Pn | **Pn** | **05 44 28.4** | **+0.6** |
| **HNR** | **Honiara** | **10.38** | **307** | LR | LR | 05 48 04.5 | |
| | comp=Z,2μm,21.2s,baz=168,slow=34 | | | | | | |
| **EIDS** | **Eidsvold** | **18.64** | **237** | P | **P** | **05 46 27.7** | **-0.8** |
| **CTA** | **Charters Tower** | **21.36** | **256** | P | **P** | **05 47 00.3** | **+2.1** |
| | 0.2nm,0.2s,baz=71,slow=13,SNR=8.9 | | | | | | |
| **CTAO** | **Charters Tower** | **21.36** | **256** | P | **P** | **05 46 58.2** | **-0.1** |
| **PMG** | **Port Moresby** | **21.60** | **285** | LR | LR | 05 54 01.0 | |
| | comp=Z,116nm,19.0s,baz=178,slow=33 | | | | | | |
| **BKZ** | **Black Stump Fm** | **24.26** | **164** | P | **P** | **05 47 28.6** | **+0.7** |
| BKZ | | | | IAmb | IAmb | 05 47 52.9 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **COEN** | **Coen** | **24.34** | **271** | P | **P** | **05 47 27.6** | **-1.2** |
| **WB0** | **Warramunga Arr** | **32.46** | **258** | P | **P** | **05 48 40.2** | **-1.2** |
| **WB2** | **Warramunga Arr** | **32.51** | **258** | P | **P** | **05 48 40.7** | **-1.1** |
| **WRAB** | **Tennant Creek** | **32.51** | **258** | P | **P** | **05 48 41.1** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 05 49 12.2 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.52** | **258** | P | **P** | **05 48 40.7** | **-1.1** |
| | comp=Z,0.7nm,0.7s,baz=82,slow=6.6,SNR=8.0 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **33.20** | **251** | P | **P** | **05 48 47.2** | **-0.7** |
| **ASAR** | **Alice Springs** | **33.20** | **251** | P | **P** | **05 48 47.5** | **-0.3** |
| | comp=Z,3.5nm,0.9s,baz=80,slow=9.3,SNR=15 | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **33.66** | **234** | P | **P** | **05 48 51.7** | **0.0** |
| **GUMO** | **Guam** | **37.36** | **320** | LR | LR | 06 06 51.9 | |
| | comp=Z,40nm,18.2s,baz=66,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.78** | **261** | P | **P** | **05 49 51.7** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **59.40** | **332** | P | **P** | **05 52 12.1** | **-1.3** |
| | comp=Z,1.9nm,0.8s,baz=152,slow=5.5,SNR=2.8 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **68.38** | **333** | P | **P** | **05 53 11.8** | **-0.5** |
| | comp=Z,1.4nm,0.7s,baz=143,slow=17,SNR=2.8 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **69.34** | **353** | P | **P** | **05 53 19.3** | **+1.2** |
| | comp=Z,1.2nm,0.6s,baz=177,slow=4.5,SNR=2.2 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.12** | **180** | P | **P** | **05 53 47.6** | **+0.7** |
| QSPA | | | | IAmb | IAmb | 05 53 49.9 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.12** | **180** | P | **P** | **05 53 47.0** | **+0.1** |
| | comp=Z,4.4nm,0.8s,baz=38,slow=1.1,SNR=15 | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.33** | **294** | P | **P** | **05 54 01.7** | **+1.3** |
| | comp=Z,1.2nm,0.3s,baz=143,slow=4.7,SNR=4.1 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **84.03** | **323** | P | **P** | **05 54 41.7** | **+0.3** |
| | comp=Z,1.2nm,0.8s,baz=142,slow=5.4,SNR=5.3 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **K20K** | **Telida** | **84.24** | **16** | P | **P** | **05 54 42.0** | **0.0** |
| **J19K** | **Poorman** | **84.36** | **15** | P | **P** | **05 54 44.1** | **+1.5** |
| J19K | | | | IAmb | IAmb | 05 54 47.8 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **J20K** | **Nowinta River** | **84.89** | **16** | P | **P** | **05 54 46.1** | **+1.0** |
| J20K | | | | IAmb | IAmb | 05 54 47.2 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **G18K** | **Tagagawik** | **85.25** | **13** | P | **P** | **05 54 48.6** | **+1.6** |
| G18K | | | | IAmb | IAmb | 05 54 49.3 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| **I20K** | **Naaghedeneel** | **85.31** | **15** | P | **P** | **05 54 48.0** | **+0.8** |
| **H19K** | **Roundabout Mou** | **85.43** | **14** | P | **P** | **05 54 48.8** | **+1.0** |
| **AFDM** | **Forest Hills D** | **85.58** | **48** | P | **P** | **05 54 47.8** | **-1.5** |
| AFDM | | | | IAmb | IAmb | 05 54 52.9 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **G19K** | **Purcell Mounta** | **85.81** | **13** | P | **P** | **05 54 50.6** | **+0.9** |
| **F19K** | **Shaleruckik Mo** | **86.24** | **13** | P | **P** | **05 54 53.0** | **+1.2** |
| F19K | | | | IAmb | IAmb | 05 54 54.3 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **86.42** | **15** | IAmb | IAmb | 05 54 55.6 | |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **WAKR** | **Walker** | **86.50** | **48** | IAmb | IAmb | 05 54 58.1 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.30** | **49** | P | **P** | **05 54 57.6** | **-0.4** |
| | comp=Z,1.8nm,1.0s,baz=237,slow=8.0,SNR=6.8 | | | | | | |
| | comp=Z,1.8nm,1.0s | | | | | | |
| **IL31** | | **87.34** | **18** | IAmb | IAmb | 05 54 58.7 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **87.34** | **18** | P | **P** | **05 54 55.4** | **-1.9** |
| **ILAR** | **Eielson Array** | **87.34** | **18** | P | **P** | **05 54 56.5** | **-0.8** |
| | comp=Z,2.9nm,0.9s,baz=234,slow=5.6,SNR=24 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **87.68** | **18** | IAmb | IAmb | 05 55 02.1 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **WCT** | **Wildcat Mounta** | **87.92** | **51** | P | **P** | **05 55 02.8** | **+2.0** |
| WCT | | | | IAmb | IAmb | 05 55 04.7 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.14** | **27** | P | **P** | **05 55 45.9** | **-1.4** |
| | comp=Z,1.5nm,1.0s,baz=264,slow=4.4,SNR=6.2 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |

*IDC 22 05:43:02.0±1.1, 60°.33N×147°.57W, h0km, mb3.6/6, mbtmp3.6/10, ML3.1/4, MS3.5/6, Error ellipse: s-maj=20.8km s-min=11.7km az=66.0*
*NEIC 22 05:43:04.3±2.0, 60°.42N±0°.02×147°.38W±0°.03, h5km±2km, Error ellipse: s-maj=3.7km s-min=3.0km az=0.0*
*AEIC 22 05:43:06.2±2.0, 60°.43N±0°.02×147°.36W±0°.03, h7km±7km, ML3.8, ML4.0/192(NEIC), Error ellipse: s-maj=3.0km s-min=2.3km az=199.0*
**ISC 22 05:43:04.3±1.2, 60°.43N±0°.03×147°.39W±0°.02, h11km±9km, n157, σ1°07/130, mb3.5/7, MS4.0/3, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **P23K** | **Montague Islan** | **0.44** | **181** | | **Pn** | **05 43 15.7** | **-0.9** |
| P23K | | | | | **Sb** | **05 43 22.7** | **+2.1** |
| **HIN** | **Hinchinbrook I** | **0.44** | **94** | Pg | **Pb** | **05 43 15.2** | **+1.1** |
| HIN | | | | IAML | | 05 43 24.0 | |
| | comp=N,13μm,0.7s | | | | | | |
| HIN | | | | IAML | | 05 43 23.0 | |
| | comp=E,14μm,0.8s | | | | | | |
| **HIN** | **Hinchinbrook I** | **0.44** | **94** | | **Sb** | **05 43 22.0** | **+1.1** |
| **GLI** | **Glacier Island** | **0.47** | **18** | | **Pb** | **05 43 14.9** | **+0.2** |
| GLI | | | | IAML | | 05 43 22.2 | |
| | comp=E,10μm,0.6s | | | | | | |
| **GLI** | **Glacier Island** | **0.47** | **18** | | **Sb** | **05 43 21.8** | **+0.1** |
| **PWL** | **Port Wells** | **0.63** | **313** | | **Pb** | **05 43 17.9** | **+0.5** |
| PWL | | | | IAML | | 05 43 27.1 | |
| | comp=N,8μm,1.0s | | | | | | |
| PWL | | | | IAML | | 05 43 27.2 | |
| | comp=E,10μm,0.7s | | | | | | |
| **PWL** | **Port Wells** | **0.63** | **313** | | **Sb** | **05 43 26.7** | **+0.4** |
| **EYAK** | **Cordova Ski Ar** | **0.82** | **81** | P | **Pb** | **05 43 21.0** | **+0.4** |
| **EYAK** | **Cordova Ski Ar** | **0.82** | **81** | | **Pb** | **05 43 20.8** | **+0.2** |
| EYAK | | | | | **Sb** | **05 43 32.1** | **+0.5** |
| **DIV** | **Divide** | **1.06** | **48** | | **Pg** | **05 43 24.5** | **-0.1** |
| DIV | | | | | **Sg** | **05 43 37.7** | **-0.6** |
| **SEW** | **Seward** | **1.08** | **253** | | **Pn** | **05 43 25.6** | **+0.2** |
| SEW | | | | | **Sb** | **05 43 39.8** | **+0.7** |
| **KNK** | **Knik Glacier** | **1.11** | **332** | | **Pg** | **05 43 25.7** | **0.0** |
| KNK | | | | IAML | | 05 43 42.5 | |
| | comp=N,3μm,0.5s | | | | | | |
| KNK | | | | IAML | | 05 43 43.9 | |
| | comp=E,4μm,0.5s | | | | | | |
| **KNK** | **Knik Glacier** | **1.11** | **332** | | **Sg** | **05 43 40.4** | **+0.3** |
| **Q23K** | **Middleton Isla** | **1.14** | **152** | | **Pn** | **05 43 26.6** | **+0.5** |
| **MID** | **Middleton Isla** | **1.14** | **152** | P | **Pn** | **05 43 26.7** | **+0.5** |
| **MID** | **Middleton Isla** | **1.14** | **152** | | **Pn** | **05 43 26.7** | **+0.5** |
| MID | | | | | **Sn** | **05 43 42.9** | **+1.1** |
| **MID** | **Middleton Isla** | **1.14** | **152** | IAML | | 05 43 47.1 | |
| | comp=E,5μm,0.7s | | | | | | |
| **O22K** | **Cooper Landing** | **1.16** | **273** | | **Pn** | **05 43 27.1** | **+0.6** |
| **KLU** | **Klutina** | **1.28** | **33** | | **Pg** | **05 43 28.1** | **-0.8** |
| KLU | | | | IAML | | 05 43 48.4 | |
| | comp=E,3μm,0.5s | | | | | | |
| KLU | | | | IAML | | 05 43 48.5 | |
| | comp=N,4μm,0.6s | | | | | | |
| **GOAT** | **Goat Mountain** | **1.33** | **82** | | **Sg** | **05 43 46.4** | **-0.5** |
| **RC01** | **Rabbit Creek A** | **1.33** | **301** | | **Pg** | **05 43 29.4** | **-0.4** |
| RC01 | | | | IAML | | 05 43 50.2 | |
| | comp=E,3μm,0.6s | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.33** | **301** | | **Sg** | **05 43 47.0** | **0.0** |
| **RAGM** | **Ragged Mountai** | **1.35** | **91** | | **Pg** | **05 43 28.9** | **-1.2** |
| RAGM | | | | IAML | | 05 43 49.6 | |
| | comp=E,4μm,0.6s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **1.41** | **1** | | **Pn** | **05 43 30.3** | **+0.3** |
| SCM | | | | IAML | | 05 44 00.3 | |
| | comp=E,2μm,0.8s | | | | | | |
| **PMR** | **Palmer** | **1.44** | **325** | P | **Pn** | **05 43 31.1** | **+0.8** |
| **PMR** | **Palmer** | **1.44** | **325** | Pn | **Pn** | **05 43 30.9** | **+0.5** |
| PMR | | | | IAML | | 05 43 56.4 | |
| | comp=E,2μm,0.8s | | | | | | |
| **SML** | **Sawmill** | **1.45** | **342** | | **Pn** | **05 43 31.5** | **+0.8** |
| **BMRM** | **Bremner River** | **1.47** | **67** | | **Pn** | **05 43 30.9** | **0.0** |
| **GHO** | **Glory Hole Cre** | **1.54** | **332** | | **Pb** | **05 43 33.1** | **+0.3** |
| **HMT** | **Hamilton** | **1.56** | **92** | | **Pn** | **05 43 31.6** | **-0.4** |
| **FIS** | **Fire Island** | **1.56** | **298** | | **Pb** | **05 43 33.3** | **+0.1** |
| **KAIM** | **Kayak Island** | **1.57** | **108** | Pn | **Pn** | **05 43 33.0** | **+0.8** |
| KAIM | | | | IAML | | 05 43 58.5 | |
| | comp=N,3μm,0.9s | | | | | | |
| KAIM | | | | IAML | | 05 43 59.8 | |
| | comp=E,3μm,0.7s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **1.78** | **19** | IAML | | 05 44 02.1 | |
| | comp=N,2μm,1.2s | | | | | | |
| M24K | | | | IAML | | 05 44 23.8 | |
| | comp=E,2μm,1.0s | | | | | | |
| **N25K** | **Chitina, Valde** | **1.80** | **48** | | **Pn** | **05 43 36.0** | **+0.7** |
| **N25K** | **Chitina, Valde** | **1.80** | **48** | IAML | | 05 43 59.7 | |
| | comp=E,2μm,1.0s | | | | | | |
| N25K | | | | IAML | | 05 44 00.2 | |
| | comp=N,2μm,0.8s | | | | | | |
| **SUCK** | **Suckling Hills** | **1.84** | **100** | | **Pn** | **05 43 36.0** | **+0.1** |
| **SUCK** | **Suckling Hills** | **1.84** | **100** | IAML | | 05 44 06.8 | |
| | comp=N,1μm,0.5s | | | | | | |
| **BRLK** | **Bradley Lake** | **1.88** | **251** | | **Pn** | **05 43 37.0** | **+0.6** |
| BRLK | | | | IAML | | 05 44 01.4 | |
| | comp=E,2μm,0.8s | | | | | | |
| BRLK | | | | IAML | | 05 44 11.4 | |
| | comp=N,1μm,0.6s | | | | | | |
| **CAPN** | **Captain Cook N** | **1.89** | **282** | | **Pn** | **05 43 37.9** | **+1.4** |
| **SUA** | **Susitna One** | **1.94** | **304** | IAML | | 05 44 12.2 | |
| | comp=E,928nm,0.7s | | | | | | |
| SUA | | | | IAML | | 05 44 15.0 | |
| | comp=N,1μm,0.6s | | | | | | |
| **GLB** | **Gilahina Butte** | **2.02** | **58** | | **Pn** | **05 43 38.8** | **+0.4** |
| GLB | | | | IAML | | 05 44 05.5 | |
| | comp=E,858nm,0.7s | | | | | | |
| GLB | | | | IAML | | 05 44 06.6 | |
| | comp=N,1μm,0.6s | | | | | | |
| **VRDI** | **Verde Repeater** | **2.09** | **66** | Pn | **Pn** | **05 43 39.7** | **+0.3** |
| VRDI | | | | IAML | | 05 44 08.5 | |
| | comp=N,959nm,0.6s | | | | | | |
| **CRQM** | **Cirque** | **2.12** | **79** | | **Pn** | **05 43 40.0** | **+0.1** |
| CRQM | | | | IAML | | 05 44 09.9 | |
| | comp=E,2μm,0.8s | | | | | | |
| CRQM | | | | IAML | | 05 44 10.5 | |
| | comp=N,1μm,1.1s | | | | | | |
| **CNPM** | **China Poot** | **2.14** | **246** | Pn | **Pn** | **05 43 40.5** | **+0.5** |
| CNPM | | | | IAML | | 05 44 17.1 | |
| | comp=N,1μm,0.5s | | | | | | |
| **WASW** | **Wrangell South** | **2.16** | **45** | | **Pn** | **05 43 41.7** | **+1.2** |
| **WAX** | **Waxell Ridge** | **2.25** | **88** | | **Pn** | **05 43 41.2** | **-0.4** |
| WAX | | | | IAML | | 05 44 09.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **HOM** | **Homer** | **2.27** | **252** | | **Pn** | **05 43 43.3** | **+1.6** |
| **WAZA** | **Wrangell Mount** | **2.27** | **42** | | **Pn** | **05 43 43.2** | **+1.1** |
| **TGL** | **Tana Glacier** | **2.27** | **80** | IAML | | 05 44 16.1 | |
| | comp=N,876nm,0.7s | | | | | | |
| **SNH** | **Sunshine Point** | **2.28** | **94** | Pn | **Pn** | **05 43 41.2** | **-0.7** |
| SNH | | | | IAML | | 05 44 17.9 | |
| | comp=E,728nm,0.7s | | | | | | |
| SNH | | | | IAML | | 05 44 30.7 | |
| | comp=N,738nm,0.9s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **2.34** | **64** | | **Pn** | **05 43 43.1** | **+0.5** |
| MCARA | | | | IAML | | 05 44 22.3 | |
| | comp=E,1μm,0.7s | | | | | | |
| **SPU** | **Mount Spurr** | **2.41** | **290** | | **Pn** | **05 43 43.7** | **0.0** |
| **ISLE** | **Juniper Island** | **2.50** | **84** | IAML | | 05 44 28.9 | |
| | comp=E,719nm,0.7s | | | | | | |
| ISLE | | | | IAML | | 05 44 29.7 | |
| | comp=N,883nm,1.0s | | | | | | |
| **SKT** | **Skwentna** | **2.54** | **310** | Pn | **Pn** | **05 43 45.7** | **+0.2** |
| SKT | | | | IAML | | 05 44 28.8 | |
| | comp=E,902nm,1.2s | | | | | | |
| SKT | | | | IAML | | 05 44 29.0 | |
| | comp=N,956nm,1.6s | | | | | | |
| **DHY** | **Denali Highway** | **2.65** | **0** | Pn | **Pn** | **05 43 48.8** | **+1.6** |
| DHY | | | | IAML | | 05 44 24.6 | |
| | comp=E,886nm,0.7s | | | | | | |
| DHY | | | | IAML | | 05 44 25.7 | |
| | comp=N,787nm,0.8s | | | | | | |
| **RDSO** | **Redoubt South** | **2.65** | **273** | | **Pn** | **05 43 47.2** | **0.0** |
| **RSO** | **Redoubt South** | **2.66** | **273** | | **Pn** | **05 43 47.3** | **0.0** |
| **MESA** | **MESA** | **2.72** | **93** | | **Pn** | **05 43 48.3** | **+0.2** |
| MESA | | | | IAML | | 05 44 37.7 | |
| | comp=N,597nm,0.7s | | | | | | |
| MESA | | | | IAML | | 05 44 44.6 | |
| | comp=E,457nm,0.7s | | | | | | |
| **GRNC** | **Granite Creek** | **2.80** | **81** | | **Pn** | **05 43 49.2** | **-0.1** |
| GRNC | | | | IAML | | 05 44 40.2 | |
| | comp=N,462nm,0.8s | | | | | | |
| **M26K** | **Nabesna, AK** | **2.89** | **45** | IAML | | 05 44 36.3 | |
| | comp=N,402nm,0.7s | | | | | | |
| **P19K** | **Oil Pt** | **3.03** | **258** | IAML | | 05 44 47.9 | |
| | comp=N,567nm,0.7s | | | | | | |
| **RND** | **Reindeer** | **3.06** | **348** | | **Pn** | **05 43 54.5** | **+1.7** |
| RND | | | | IAML | | 05 44 41.9 | |
| | comp=N,461nm,1.0s | | | | | | |
| RND | | | | IAML | | 05 44 47.4 | |
| | comp=E,568nm,0.9s | | | | | | |
| **TABL** | **Table Mountain** | **3.10** | **87** | | **Pn** | **05 43 53.2** | **-0.1** |
| TABL | | | | IAML | | 05 44 48.6 | |
| | comp=N,413nm,0.8s | | | | | | |
| **SYI** | **Shuyak Island** | **3.14** | **237** | | **Pn** | **05 43 55.5** | **+1.8** |
| **M20K** | **Styx River** | **3.14** | **300** | | **Pn** | **05 43 54.3** | **+0.5** |
| **M20K** | **Styx River** | **3.14** | **300** | IAML | | 05 44 44.9 | |
| | comp=N,406nm,1.0s | | | | | | |
| M20K | | | | IAML | | 05 44 45.9 | |
| | comp=E,321nm,1.1s | | | | | | |
| **AUJK** | **Augustine Iueg** | **3.22** | **253** | | **Pn** | **05 43 56.0** | **+1.2** |
| **L26K** | **Log Cabin Wild** | **3.23** | **35** | IAML | | 05 44 47.0 | |
| | comp=N,318nm,0.8s | | | | | | |
| **M27K** | **Edge Creek, AK** | **3.28** | **52** | IAML | | 05 44 57.0 | |
| | comp=N,294nm,1.0s | | | | | | |
| **MCK** | **McKinley** | **3.39** | **348** | | **Pn** | **05 43 59.0** | **+1.8** |
| **O19K** | **Port Alsworth** | **3.46** | **269** | | **Pn** | **05 43 58.5** | **+0.5** |
| **O19K** | **Port Alsworth** | **3.46** | **269** | IAML | | 05 44 59.1 | |
| | comp=N,433nm,0.5s | | | | | | |
| **Q19K** | **Cape Douglas,** | **3.51** | **247** | | **Pn** | **05 43 59.5** | **+0.6** |
| **RIDG** | **Independent Ri** | **3.53** | **19** | | **Pn** | **05 44 00.8** | **+1.7** |
| RIDG | | | | IAML | | 05 45 00.2 | |
| | comp=E,328nm,0.8s | | | | | | |
| RIDG | | | | IAML | | 05 45 04.2 | |
| | comp=N,318nm,0.8s | | | | | | |
| **DOT** | **Dot Lake** | **3.59** | **24** | | **Pn** | **05 44 00.7** | **+0.8** |
| **BCAR** | **Beaver Creek A** | **3.75** | **43** | | **Pn** | **05 44 03.6** | **+1.4** |
| **KDAK** | **Kodiak Island** | **3.77** | **227** | | **Pn** | **05 44 02.8** | **+0.4** |
| KDAK | | | | IAML | | 05 44 44.7 | |
| | comp=N,178nm,0.9s | | | | | | |
| **KDAK** | **Kodiak Island** | **3.77** | **227** | Pn | **Pn** | **05 44 02.7** | **+0.4** |
| | comp=N,4.3nm,0.3s,baz=70,slow=6.7,SNR=324 | | | | | | |
| KDAK | | | | Sn | **Sn** | **05 44 42.5** | **-4.3** |
| | comp=N,11nm,0.3s,baz=0.0,slow=20,SNR=21 | | | | | | |
| **YUK8** | **Steele Glacier** | **3.83** | **74** | | **Pn** | **05 44 04.8** | **+1.4** |
| **BWN** | **Browne** | **3.88** | **346** | | **Pn** | **05 44 05.0** | **+1.2** |
| **BCPM** | **Bancas Point** | **3.90** | **94** | Pn | **Pn** | **05 44 04.5** | **+0.4** |
| BCPM | | | | IAML | | 05 45 02.5 | |
| | comp=N,214nm,0.8s | | | | | | |
| BCPM | | | | IAML | | 05 45 13.6 | |
| | comp=E,171nm,0.6s | | | | | | |
| **O18K** | **Koktuh Hills** | **3.95** | **265** | | **Pn** | **05 44 05.7** | **+0.8** |
| **O18K** | **Koktuh Hills** | **3.95** | **265** | IAML | | 05 45 17.0 | |
| | comp=N,181nm,0.9s | | | | | | |
| **HDA** | **Harding Lake** | **4.00** | **3** | | **Pn** | **05 44 07.3** | **+1.8** |
| HDA | | | | IAML | | 05 45 10.8 | |
| | comp=E,321nm,1.4s | | | | | | |
| HDA | | | | IAML | | 05 45 15.3 | |
| | comp=N,252nm,1.1s | | | | | | |
| **L19K** | **White Mountain** | **4.00** | **299** | IAML | | 05 45 21.4 | |
| | comp=N,192nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **4.07** | **356** | | **Pn** | **05 44 08.0** | **+1.5** |
| WRH | | | | IAML | | 05 45 14.5 | |
| | comp=N,279nm,0.8s | | | | | | |
| WRH | | | | IAML | | 05 45 20.5 | |
| | comp=E,255nm,1.1s | | | | | | |
| **PNL** | **Peninsula** | **4.08** | **97** | P | **Pn** | **05 44 06.6** | **-0.1** |
| **KAHG** | **Katmai Hook Gl** | **4.14** | **245** | | **Pn** | **05 44 08.5** | **+1.0** |
| **CCB** | **Clear Creek Bu** | **4.23** | **358** | IAML | | 05 45 15.5 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MLY** | **Manley** | **4.87** | **343** | | | **Pn** | **05 44 18.9 +1.5** |
| **MLY** | **Manley** | **4.87** | **343** | IAML | | | 05 45 24.1 |
| | comp=E,98nm,0.8s | | | | | | |
| MLY | | | | IAML | | | 05 45 43.8 |
| | comp=N,128nm,1.4s | | | | | | |
| **P29M** | **Windy Craggy** | **4.91** | **95** | | | **Pn** | **05 44 18.4 +0.4** |
| P29M | | | | IAML | | | 05 45 35.1 |
| | comp=E,79nm,0.6s | | | | | | |
| P29M | | | | IAML | | | 05 45 51.9 |
| | comp=N,104nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **5.17** | **9** | | | **Pn** | **05 44 23.5 +1.7** |
| PRP | | | | IAML | | | 05 45 49.8 |
| | comp=N,138nm,0.9s | | | | | | |
| PRP | | | | IAML | | | 05 45 51.5 |
| | comp=E,140nm,1.0s | | | | | | |
| **I21K** | **Tanana** | **5.21** | **338** | | | **Pn** | **05 44 23.4 +1.3** |
| **EGAK** | **Eagle** | **5.22** | **31** | | | **Pn** | **05 44 24.1 +1.8** |
| EGAK | | | | IAML | | | 05 45 49.8 |
| | comp=E,90nm,1.0s | | | | | | |
| **J19K** | **Poorman** | **5.25** | **316** | IAML | | | 05 45 52.5 |
| | comp=N,111nm,1.6s | | | | | | |
| J19K | | | | IAML | | | 05 45 53.6 |
| | comp=E,120nm,1.8s | | | | | | |
| **SII** | **Sitkinak Islan** | **5.27** | **225** | P | | **Pn** | **05 44 22.6 -0.4** |
| **SII** | **Sitkinak Islan** | **5.27** | **225** | Pn | | **Pn** | **05 44 22.3 -0.7** |
| SII | | | | IAML | | | 05 46 02.8 |
| | comp=E,125nm,1.3s | | | | | | |
| **J18K** | **Innoko River** | **5.35** | **309** | IAML | | | 05 46 06.0 |
| | comp=N,69nm,1.2s | | | | | | |
| J18K | | | | IAML | | | 05 46 13.5 |
| | comp=E,72nm,1.4s | | | | | | |
| **H24K** | **Noodor Dome** | **5.43** | **358** | | | **Pn** | **05 44 26.6 +1.4** |
| **O16K** | **Kokwok River B** | **5.44** | **266** | | | **Pn** | **05 44 24.8 -0.4** |
| **H23K** | **Yukon River** | **5.50** | **351** | | | **Pn** | **05 44 26.6 +0.5** |
| **H22K** | **Ishtalitna Cre** | **5.77** | **343** | | | **Pn** | **05 44 31.6 +1.8** |
| **I27K** | **Kandik River** | **5.81** | **24** | | | **Pn** | **05 44 31.7 +1.2** |
| **I28M** | **Miner Creek** | **6.07** | **31** | | | **Pn** | **05 44 35.1 +1.0** |
| **WHY** | **Whitehorse** | **6.18** | **82** | | | **Pn** | **05 44 36.2 +0.7** |
| **G25K** | **Bearman Lake** | **6.38** | **5** | | | **Pn** | **05 44 37.9 -0.3** |
| **J30M** | **Hart River** | **6.59** | **46** | | | **Pn** | **05 44 41.8 +0.6** |
| **F24K** | **Squaw Lake** | **7.12** | **358** | | | **Pn** | **05 44 44.6 -3.7** |
| **SIT** | **Sitka** | **7.13** | **113** | P | | **Pn** | **05 44 48.4 0.0** |
| **BMAR** | **Burnt Mountain** | **7.13** | **9** | | | **Pn** | **05 44 50.7 +2.2** |
| **F25K** | **Christian Rive** | **7.23** | **5** | | | **Pn** | **05 44 50.9 +1.1** |
| **P33M** | **Teslin, Yukon** | **7.24** | **85** | | | **Pn** | **05 44 49.1 -0.9** |
| **F26K** | **Sheenjek River** | **7.43** | **10** | | | **Pn** | **05 44 53.9 +1.3** |
| **L14K** | **Kuka Creek** | **7.52** | **284** | | | **Pn** | **05 44 53.7 0.0** |
| **F19K** | **Shaleruckik Mo** | **7.90** | **329** | | | **Pn** | **05 44 58.7 -0.3** |
| **E19K** | **Redstone River** | **8.26** | **333** | | | **Pn** | **05 45 03.0 -1.0** |
| **DLBC** | **Dease Lake** | **9.07** | **95** | Pn | | **Pn** | **05 45 15.0 -0.1** |
| | comp=E,0.2nm,0.3s,baz=275,slow=13,SNR=2.2 | | | | | | |
| DLBC | | | | LR | | LR | 05 49 14.6 |
| | comp=E,175nm,18.9s,baz=278,slow=41 | | | | | | |
| | comp=E,2.6nm,0.9s | | | | | | |
| **E18K** | **Tukpahlearik C** | **9.09** | **326** | | | **Pn** | **05 45 15.1 -0.2** |
| **C27K** | **Jago River** | **9.36** | **8** | | | **Pn** | **05 45 19.6 +0.7** |
| **INK** | **Inuvik** | **9.89** | **31** | Pn | | **Pn** | **05 45 26.7 +0.4** |
| | comp=E,0.1nm,0.3s,baz=280,slow=6.1,SNR=1.7 | | | | | | |
| | comp=E,1.4nm,0.7s | | | | | | |
| **UNV** | **Unalaska Valle** | **12.27** | **246** | P | | **Pn** | **05 46 00.4 +1.6** |
| **BBB** | **Bella Bella** | **13.47** | **119** | LR | | LR | 05 51 35.6 |
| | comp=E,71nm,19.3s,baz=306,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **15.70** | **68** | Pn | | **Pn** | **05 46 44.8 -0.4** |
| | baz=284,slow=13,SNR=4.7 | | | | | | |
| | comp=E,0.7nm,0.8s | | | | | | |
| **NEW** | **Newport** | **21.21** | **111** | P | | **P** | **05 47 50.2 +0.3** |
| | comp=E,1.3nm,0.7s,baz=307,slow=9.3,SNR=4.1 | | | | | | |
| | comp=E,1.3nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **28.61** | **127** | P | | **P** | **05 49 00.1 -0.5** |
| | comp=E,0.5nm,0.7s,baz=328,slow=8.5,SNR=5.8 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **42.59** | **117** | P | | **P** | **05 51 00.3 0.0** |
| | comp=E,0.4nm,0.9s,baz=343,slow=3.9,SNR=4.6 | | | | | | |
| | comp=E,0.4nm,0.9s | | | | | | |
| **TKL** | **Tuckaleechee C** | **46.89** | **92** | LR | | LR | 06 11 47.8 |
| | comp=E,45nm,18.1s,baz=342,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **56.74** | **309** | P | | **P** | **05 52 46.9 -1.0** |
| | comp=E,2.5nm,0.9s,baz=42,slow=7.3,SNR=13 | | | | | | |
| | comp=E,2.5nm,0.9s | | | | | | |
| **JCJ** | **Chichijima** | **57.21** | **268** | LR | | LR | 06 16 48.2 |
| | comp=E,130nm,19.8s,baz=122,slow=36 | | | | | | |
| **FINES** | **FINESS Array B** | **58.35** | **4** | P | | **P** | **05 53 00.6 +1.7** |
| | comp=E,0.9nm,0.6s,baz=2.9,slow=8.4,SNR=3.3 | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.77** | **325** | P | | **P** | **05 53 47.5 -1.4** |
| | comp=E,0.2nm,0.6s,baz=48,slow=6.3,SNR=3.5 | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **75.83** | **28** | P | | P | 05 54 57.9 +7.6 |
| | comp=E,0.4nm,0.6s,baz=341,slow=5.5,SNR=6.3 | | | | | | |
| **DZM** | **Mont Dzumac** | **90.33** | **222** | LR | | LR | 06 26 48.1 |
| | comp=E,96nm,21.0s,baz=119,slow=29 | | | | | | |

*IDC **22** 05:45:46.2±1.8,4°.17N×124°.58E,h0km,mb3.6/4, mbtmp3.6/4,Error ellipse: s-maj=202.0km s-min=23.5km az=64.0*

**ISC 22 05:45:44.0**±1.4,**5°.6N**±0°.1×**127°.8E**±0°.2,**h10**km,**n6**,σ1§**58**/8, **mb3.5**/4,**2C**,**Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **2.90** | **332** | ↑*iP* | **Pg** | **05 46 40.8** | **+1.2** |
| BIPH | | | | *i* S | **Sg** | **05 47 15.9** | **-1.3** |
| **KCP** | **Kidapawan** | **2.99** | **298** | ↑*eP* | **Pb** | **05 46 37.8** | **+0.4** |
| KCP | | | | *i* S | **Sn** | **05 47 07.1** | **-0.3** |
| **WRA** | **Warramunga Arr** | **26.21** | **166** | P | **P** | **05 51 18.0** | **-1.2** |
| | 0.4nm,0.6s,baz=335,slow=11,SNR=8.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **29.72** | **169** | P | **P** | **05 51 51.0** | **+0.4** |
| | 0.2nm,0.5s,baz=347,slow=7.5,SNR=2.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.62** | **324** | P | **P** | **05 55 24.9** | **-2.3** |
| | 0.3nm,0.4s,baz=116,slow=8.0,SNR=2.0 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.72** | **326** | P | **P** | **05 55 57.2** | **+1.5** |
| | 0.6nm,0.5s,baz=126,slow=6.1,SNR=4.5 | | | | | | |
| | 0.6nm,0.5s | | | | | | |

*DJA **22** 05:48:32.0±1.3,8°.5S±15°.×11°.7E±°,h16km±10km, M3.7/6, MLv3.7/6*

*IDC **22** 05:48:34.5±1.7,8°.38S×117°.73E,h0km,mb3.4/3, mbtmp3.6/5,ML3.8/2,Error ellipse: s-maj=45.2km s-min=23.2km az=65.0*

**ISC 22 05:48:30.0**±1.1,**8°.29S**±0°.07×**117°.02E**±0°.05,**h10**km,**n12**, σ1§**00**/12,**mb3.6**/3,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.47** | **196** | P | **Pb** | **05 48 39.6** | **-0.7** |
| **PLAI** | **Plampang** | **0.93** | **126** | P | **Pg** | **05 48 48.6** | **+0.8** |
| PLAI | | | | S | **Sb** | **05 49 01.0** | **+0.5** |
| **SRBI** | **Singaraja** | **1.79** | **276** | P | **Pn** | **05 49 01.3** | **+0.3** |
| **DNP** | **Denpasar** | **1.83** | **258** | P | **Pn** | **05 49 02.3** | **+0.8** |
| **IGBI** | **Denpasar** | **1.92** | **254** | P | **Pn** | **05 49 04.1** | **+1.3** |
| **WBSI** | **Waikabubak, Su** | **2.71** | **120** | P | **Pn** | **05 49 13.6** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.84** | **266** | P | **Pn** | **05 49 15.3** | **-0.1** |
| **KAPI** | **Kappang** | **4.24** | **40** | Pn | **Pn** | **05 49 35.9** | **+1.3** |
| | 3.6nm,0.3s,baz=209,slow=6.1,SNR=16 | | | | | | |
| KAPI | | | | Sn | **Sn** | **05 50 22.6** | **-1.6** |
| | 5.1nm,0.3s,baz=240,slow=20,SNR=9.3 | | | | | | |
| | 8.3nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.38** | **126** | P | **P** | **05 53 06.2** | **-0.9** |
| | 0.4nm,0.3s,baz=301,slow=12,SNR=28 | | | | | | |
| | 2.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.26** | **135** | P | **P** | **05 53 27.6** | **+0.2** |
| | 1.0nm,0.7s,baz=313,slow=8.8,SNR=12 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.66** | **351** | P | P | 05 58 21.5 | +7.9 |
| | 0.4nm,0.4s,baz=160,slow=9.0,SNR=3.7 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.95** | **334** | P | P | 05 59 05.0 | +8.3 |
| | 0.3nm,0.7s,baz=131,slow=7.9,SNR=2.8 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*IDC **22** 06:05:17.7±0.7, 15°.12S×173°.63W, h0km, mb4.2/8, mbtmp4.2/9, ML3.5/1, MS3.8/33, Error ellipse: s-maj=32.0km s-min=19.2km az=140.0*

*NEIC **22** 06:05:21.9±3.0, 15°.08S±0°.08×173°.46W±0°.07, h19km±4km, mb4.6/65, Error ellipse: s-maj=12.8km s-min=9.1km az=147.0*

**ISC 22 06:05:19.9**±0.5,**15°.13S**±0°.08×**173°.45W**±0°.08,**h10**km,**n99**, σ1§**51**/52,**mb4.6**/34,**MS4.0**/32,**Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.02** | **53** | Pn | **Pn** | **06 05 53.3** | **-0.8** |
| **NIUE** | **Niue** | **5.17** | **140** | | **Pn** | **06 06 37.5** | **+0.2** |
| **MSVF** | **Nonsavu** | **8.56** | **251** | Pn | **Pn** | **06 07 25.8** | **+1.8** |
| **FUNA** | **Funafuti** | **9.74** | **312** | Pn | **Pn** | **06 07 39.4** | **-0.8** |
| **RAR** | **Rarotonga** | **14.33** | **117** | Pn | **Pn** | **06 08 41.8** | **-1.2** |
| **RAR** | **Rarotonga** | **14.33** | **117** | Pn | **Pn** | **06 08 43.2** | **+0.2** |
| | 1.9nm,0.3s,baz=266,slow=19,SNR=1.4 | | | | | | |
| RAR | | | | LR | LR | 06 12 41.2 | |
| | comp=Z,126nm,20.3s,baz=306,slow=31 | | | | | | |
| | 6.8nm,0.4s | | | | | | |
| **PINNC** | **Pines Island,** | **19.54** | **245** | P | **P** | **06 09 48.9** | **+1.1** |
| **PPT** | **Papeete** | **23.03** | **99** | LR | LR | 06 17 36.2 | |
| | comp=Z,36nm,21.0s,baz=358,slow=32 | | | | | | |
| **URZ** | **Urewera** | **24.50** | **198** | LR | LR | 06 18 58.6 | |
| | comp=Z,460nm,18.2s,baz=112,slow=34 | | | | | | |
| **HNR** | **Honiara** | **26.59** | **279** | LR | LR | 06 18 42.5 | |
| | comp=Z,381nm,21.9s,baz=104,slow=30 | | | | | | |
| **QRZ** | **Quartz Range** | **28.36** | **203** | P | **P** | **06 11 13.9** | **-0.3** |
| **WHZ** | **Wather Hill Ro** | **34.42** | **203** | P | **P** | **06 12 08.1** | **+0.6** |
| **H11S2** | **WAKE ISLAND Hy** | **38.71** | **329** | T | T | 06 53 41.5 | |
| | baz=147,slow=76,SNR=6.3 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.72** | **329** | T | T | 06 53 26.0 | |
| | baz=147,slow=76,SNR=6.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.73** | **329** | T | T | 06 53 33.3 | |
| | baz=147,slow=76,SNR=5.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.66** | **330** | T | T | 06 54 57.8 | |
| | baz=149,slow=76,SNR=35 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.66** | **330** | T | T | 06 55 14.5 | |
| | baz=149,slow=76,SNR=9.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.67** | **330** | T | T | 06 55 02.3 | |
| | baz=149,slow=76,SNR=4.4 | | | | | | |
| **STKA** | **Stephens Creek** | **44.13** | **240** | LR | LR | 06 31 18.6 | |
| | comp=Z,91nm,18.1s,baz=40,slow=36 | | | | | | |
| **BBOO** | **Buckleboo** | **48.91** | **240** | P | **P** | **06 14 05.0** | **-1.3** |
| **WR0** | **Warramunga Arr** | **49.67** | **257** | P | **P** | **06 14 10.8** | **-1.6** |
| **WB0** | **Warramunga Arr** | **49.82** | **257** | P | **P** | **06 14 11.7** | **-1.8** |
| **WB2** | **Warramunga Arr** | **49.85** | **257** | P | **P** | **06 14 11.0** | **-2.7** |
| WB2 | | | | IAmb | IAmb | 06 14 26.9 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.86** | **257** | P | **P** | **06 14 11.7** | **-2.1** |
| **WRA** | **Warramunga Arr** | **49.86** | **257** | P | **P** | **06 14 11.5** | **-2.3** |
| | comp=Z,0.5nm,0.3s,baz=91,slow=7.5,SNR=23 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **50.15** | **252** | P | **P** | **06 14 14.7** | **-1.3** |
| **ASAR** | **Alice Springs** | **50.15** | **252** | P | **P** | **06 14 13.3** | **-2.6** |
| **ASAR** | **Alice Springs** | **50.15** | **252** | P | **P** | **06 14 14.1** | **-1.9** |
| | comp=Z,3.6nm,0.5s,baz=86,slow=8.1,SNR=36 | | | | | | |
| ASAR | | | | LR | LR | 06 33 54.0 | |
| | comp=Z,140nm,20.3s,baz=116,slow=34 | | | | | | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **68.43** | **352** | LR | LR | 06 40 05.4 | |
| | comp=Z,125nm,21.1s,baz=156,slow=30 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.70** | **320** | LR | LR | 06 40 34.0 | |
| | comp=Z,116nm,20.1s,baz=154,slow=31 | | | | | | |
| **ASAJ** | **Asahikawa** | **71.29** | **328** | LR | LR | 06 40 20.5 | |
| | comp=Z,35nm,21.8s,baz=109,slow=30 | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.36** | **342** | LR | LR | 06 48 10.6 | |
| | comp=Z,11nm,19.0s,baz=148,slow=36 | | | | | | |
| **CMB** | **Columbia Colle** | **72.59** | **41** | P | **P** | **06 16 49.1** | **+1.5** |
| CMB | | | | IAmb | IAmb | 06 16 50.6 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **PFO** | **Pinyon Flats O** | **72.77** | **47** | P | **P** | **06 16 49.9** | **+1.0** |
| **PFO** | **Pinyon Flats O** | **72.77** | **47** | LR | LR | 06 42 21.2 | |
| | comp=Z,106nm,18.9s,baz=248,slow=30 | | | | | | |
| **LPIG** | **La Paz** | **72.94** | **59** | LR | LR | 06 39 45.2 | |
| | comp=Z,71nm,20.9s,baz=176,slow=28 | | | | | | |
| **MDPB** | **Devils Postpil** | **73.20** | **42** | P | **P** | **06 16 52.2** | **+0.6** |
| **OMMB** | **Old Mammoth Mi** | **73.25** | **42** | P | **P** | **06 16 53.0** | **+1.1** |
| **YBH** | **Yreka Blue Hor** | **73.42** | **37** | LR | LR | 06 40 51.8 | |
| | comp=Z,112nm,21.9s,baz=220,slow=29 | | | | | | |
| **WAKR** | **Walker** | **73.48** | **41** | P | **P** | **06 16 52.6** | **-0.5** |
| WAKR | | | | IAmb | IAmb | 06 16 57.6 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **MPK** | **Martis Peak** | **73.56** | **41** | P | **P** | **06 16 54.0** | **+0.3** |
| MPK | | | | IAmb | IAmb | 06 16 57.5 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.16** | **42** | P | **P** | **06 16 57.0** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **74.16** | **42** | P | **P** | **06 16 56.3** | **-0.8** |
| | comp=Z,3.0nm,1.1s,baz=230,slow=8.4,SNR=15 | | | | | | |
| NVAR | | | | LR | LR | 06 42 35.2 | |
| | comp=Z,84nm,21.6s,baz=272,slow=30 | | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **NV11** | **Mina Array Sit** | **74.26** | **42** | P | **P** | **06 16 58.2** | **+0.7** |
| **KVN** | **Kaiserville** | **74.64** | **42** | IAmb | IAmb | 06 17 03.5 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **KDAK** | **Kodiak Island** | **74.67** | **11** | LR | LR | 06 41 57.5 | |
| | comp=Z,104nm,21.4s,baz=217,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **74.91** | **180** | P | **P** | **06 17 01.0** | **0.0** |
| QSPA | | | | IAmb | IAmb | 06 17 18.8 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.91** | **180** | P | **P** | **06 17 00.8** | **-0.1** |
| | comp=Z,4.9nm,1.0s,baz=324,slow=1.0,SNR=16 | | | | | | |
| QSPA | | | | LR | LR | 06 43 16.0 | |
| | comp=Z,46nm,20.4s,baz=38,slow=30 | | | | | | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **J05D** | **Fort Rock, OR** | **75.23** | **37** | P | **P** | **06 17 02.4** | **-0.7** |
| **W13A** | **Hualapai Mount** | **75.36** | **47** | P | **P** | **06 17 02.3** | **-1.8** |
| W13A | | | | IAmb | IAmb | 06 17 07.3 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| **PINE** | **Pine Mountain** | **75.71** | **36** | P | **P** | **06 17 06.6** | **+0.6** |
| **KSRS** | **Korea Array** | **75.94** | **316** | LR | LR | 06 43 52.1 | |
| | comp=Z,29nm,20.4s,baz=125,slow=30 | | | | | | |
| **WVOR** | **Wild Horse Val** | **76.25** | **39** | IAmb | IAmb | 06 17 12.7 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **TUC** | **Tucson** | **76.26** | **51** | | **P** | **06 17 09.1** | **0.0** |
| TUC | | | | IAmb | IAmb | 06 17 13.3 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **I07A** | **Izee** | **76.71** | **37** | IAmb | IAmb | 06 17 14.8 | |
| | comp=Z,5.3nm,1.2s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **76.78** | **49** | P | **P** | **06 17 12.3** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** | **77.14** | **323** | LR | LR | 06 44 21.3 | |
| | comp=Z,72nm,21.6s,baz=99,slow=30 | | | | | | |
| **U15A** | **North Rim** | **77.15** | **46** | IAmb | IAmb | 06 17 18.1 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **WUAZ** | **Wupatki** | **77.35** | **48** | IAmb | IAmb | 06 17 19.0 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **DUN6** | **Lazy B Ranch** | **77.64** | **51** | P | **P** | **06 17 15.6** | **-1.4** |
| **PKCU** | **Pink Cliffs** | **77.64** | **46** | | **P** | **06 17 15.8** | **-1.4** |
| **BBB** | **Bella Bella** | **77.67** | **27** | LR | LR | 06 43 32.2 | |
| | comp=Z,70nm,20.1s,baz=184,slow=30 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **77.74** | **6** | P | **P** | **06 17 19.0** | **+2.3** |
| **G08A** | **Pilot Rock** | **77.75** | **36** | IAmb | IAmb | 06 17 20.4 | |
| | comp=Z,9.6nm,1.3s | | | | | | |
| **MFID** | **Camas Ranch** | **78.51** | **39** | IAmb | IAmb | 06 17 25.0 | |
| | comp=Z,7.2nm,1.2s | | | | | | |
| **DUG** | **Dugway, Tooele** | **78.70** | **43** | IAmb | IAmb | 06 17 24.9 | |
| | comp=Z,5.3nm,1.2s | | | | | | |
| **HLID** | **Hailey** | **79.45** | **39** | IAmb | IAmb | 06 17 30.7 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **HVU** | **Hansel Valley** | **79.54** | **42** | IAmb | IAmb | 06 17 30.2 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **SRU** | **San Rafael Swe** | **79.69** | **45** | | **P** | **06 17 28.4** | **+0.2** |
| SRU | | | | IAmb | IAmb | 06 17 31.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **P17A** | **Butcher Ranch,** | **79.72** | **44** | P | **P** | **06 17 27.5** | **-0.9** |
| P17A | | | | IAmb | IAmb | 06 17 31.9 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **MA2** | **Magadan** | **79.90** | **342** | LR | LR | 06 47 17.6 | |
| | comp=Z,28nm,20.1s,baz=119,slow=32 | | | | | | |
| **KLR** | **Kul'dur** | **80.27** | **327** | LR | LR | 06 47 30.7 | |
| | comp=Z,42nm,21.9s,baz=174,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **80.50** | **56** | P | **P** | **06 17 34.1** | **+1.4** |
| **TXAR** | **Lajitas Array** | **80.50** | **56** | P | **P** | **06 17 33.4** | **+0.6** |
| | comp=Z,2.5nm,1.1s,baz=218,slow=5.9,SNR=15 | | | | | | |
| TXAR | | | | LR | LR | 06 46 30.7 | |
| | comp=Z,48nm,19.9s,baz=270,slow=31 | | | | | | |
| | comp=Z,2.5nm,1.1s | | | | | | |
| **NEW** | **Newport** | **80.51** | **34** | LR | LR | 06 44 59.7 | |
| | comp=Z,74nm,21.0s,baz=216,slow=30 | | | | | | |
| **ANMO** | **Albuquerque** | **80.67** | **50** | P | **P** | **06 17 34.9** | **+1.4** |
| **ANMO** | **Albuquerque** | **80.67** | **50** | LR | LR | 06 47 00.9 | |
| | comp=Z,95nm,19.4s,baz=306,slow=31 | | | | | | |
| **DLBC** | **Dease Lake** | **81.47** | **21** | LR | LR | 06 48 54.3 | |
| | comp=Z,58nm,18.4s,baz=275,slow=32 | | | | | | |
| **MSO** | **Missoula** | **81.50** | **37** | IAmb | IAmb | 06 17 39.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **DLMT** | **Dillon** | **81.51** | **39** | IAmb | IAmb | 06 17 40.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **TPAW** | **Teton Pass** | **81.57** | **41** | P | **P** | **06 17 38.3** | **0.0** |
| TPAW | | | | IAmb | IAmb | 06 17 40.4 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **FXWY** | **Fox Creek** | **81.59** | **41** | IAmb | IAmb | 06 17 42.2 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **IMW** | **Indian Meadow** | **81.78** | **40** | IAmb | IAmb | 06 17 42.6 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **LOHW** | **Long Hollow** | **81.84** | **41** | IAmb | IAmb | 06 17 42.8 | |
| | comp=Z,6.9nm,1.3s | | | | | | |
| **CCB** | **Clear Creek Bu** | **81.91** | **11** | P | **P** | **06 17 40.0** | **+0.8** |
| CCB | | | | IAmb | IAmb | 06 17 57.2 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **PDAR** | **Pinedale Array** | **82.10** | **42** | P | **P** | **06 17 41.9** | **+0.8** |
| | comp=Z,1.3nm,0.9s,baz=222,slow=2.0,SNR=10.0 | | | | | | |
| PDAR | | | | LR | LR | 06 47 35.3 | |
| | comp=Z,57nm,21.1s,baz=215,slow=31 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **YHL** | **Hebgen Lake** | **82.11** | **39** | P | **P** | **06 17 42.2** | **+1.1** |
| **ILAR** | **Eielson Array** | **82.19** | **11** | P | **P** | **06 17 40.5** | **-0.2** |
| | comp=Z,0.3nm,0.6s,baz=224,slow=6.9,SNR=6.8 | | | | | | |
| ILAR | | | | LR | LR | 06 47 24.2 | |
| | comp=Z,57nm,20.4s,baz=240,slow=31 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **DRIO** | **Del Rio** | **83.00** | **57** | IAmb | IAmb | 06 17 48.0 | |
| | comp=Z,8.2nm,1.5s | | | | | | |
| **PLPT** | **Palo Pinto** | **86.06** | **55** | P | **P** | **06 18 01.4** | **+0.2** |
| **INK** | **Inuvik** | **88.02** | **14** | LR | LR | 06 49 49.9 | |
| | comp=Z,57nm,21.9s,baz=236,slow=30 | | | | | | |
| **MAW** | **Mawson** | **88.03** | **199** | P | **P** | **06 18 09.1** | **-1.0** |
| | comp=Z,1.5nm,0.6s,baz=154,slow=5.9,SNR=7.5 | | | | | | |
| MAW | | | | LR | LR | 06 55 00.9 | |
| | comp=Z,107nm,20.2s,baz=106,slow=34 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **89.87** | **23** | LR | LR | 06 53 14.0 | |
| | comp=Z,64nm,18.4s,baz=248,slow=32 | | | | | | |
| **ULM** | **Lac du Bonnet** | **93.75** | **39** | LR | LR | 06 56 12.0 | |
| | comp=Z,92nm,18.9s,baz=264,slow=32 | | | | | | |
| **SONM** | **Songino Array** | **94.61** | **318** | LR | LR | 06 55 38.1 | |
| | comp=Z,40nm,21.8s,baz=108,slow=32 | | | | | | |
| **TIXI** | **Tiksi** | **94.73** | **344** | LR | LR | 06 57 29.1 | |
| | comp=Z,37nm,20.4s,baz=142,slow=33 | | | | | | |
| **KHC** | **Kasperske Hory** | **145.61** | **352** | *e*PKP | **PKiKP** | **06 25 08.5** | **+5.9** |
| **GERES** | **GERESS Array B** | **145.87** | **352** | PKPbc | **PKPdf** | **06 24 57.2** | **-2.0** |
| | comp=Z,1.6nm,0.4s,baz=32,slow=9.3,SNR=1.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.92** | **321** | PKPbc | **PKPdf** | **06 24 59.4** | **-0.2** |
| | comp=Z,1.1nm,0.6s,baz=72,slow=2.0,SNR=8.7 | | | | | | |

*ATH **22** 06:14:46.2,34°.99N×23°.76E,h20km±3km, ML3.1/5, Error ellipse: s-maj=4.4km s-min=1.4km az=296.0*

*THE **22** 06:14:47.0,35°.39N×23°.36E,h2km±1km, ML2.7/7, Error ellipse: s-maj=2.1km s-min=0.8km az=217.0*

**ISC 22 06:14:46.2**±1.4,**35°.31N**±0°.05×**23°.39E**±0°.05,**h11**km±9km, **n20**,σ1§**42**/31,**Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNDR** | **Palaiochora Ch** | **0.25** | **108** | P | **Pb** | **06 14 52.4** | **-0.3** |
| KNDR | | | | S | **Sg** | **06 14 56.5** | **+1.6** |
| KNDR | | | | AML | AML | 06 14 57.6 | |
| | comp=E,65407μm,0.3s | | | | | | |
| KNDR | | | | AML | AML | 06 14 58.3 | |
| | comp=N,33296μm,0.3s | | | | | | |
| **RODP** | **Rodopos** | **0.39** | **50** | P | **Pg** | **06 14 54.3** | **+0.4** |
| RODP | | | | S | **Sg** | **06 14 59.4** | **+0.3** |
| | comp=N,1μm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **0.51** | **73** | P | **Pb** | **06 14 56.3** | **-0.8** |
| IMMV | | | | S | **Sb** | **06 15 04.3** | **-0.1** |
| | comp=N,2μm,0.3s | | | | | | |
| **ANKY** | **Antikythira Is** | **0.56** | **353** | P | **Pg** | **06 14 56.4** | **-0.7** |
| ANKY | | | | S | **Sg** | **06 15 03.2** | **-1.3** |
| | comp=N,950nm,0.4s | | | | | | |
| **CHAN** | **Chania** | **0.57** | **68** | P | **Pb** | **06 14 57.4** | **-0.7** |
| CHAN | | | | S | **Sb** | **06 15 05.8** | **-0.5** |
| CHAN | | | | AML | AML | 06 15 11.1 | |
| | comp=E,4168μm,0.3s | | | | | | |
| CHAN | | | | AML | AML | 06 15 12.9 | |
| | comp=N,3491μm,0.5s | | | | | | |
| **GVD** | **Gavdhos** | **0.74** | **129** | P | **Pn** | **06 15 02.3** | **-0.2** |
| GVD | | | | S | **Sn** | **06 15 13.7** | **-0.1** |
| | comp=N,1μm,0.2s | | | | | | |
| **KTHA** | **Kythira Island** | **0.98** | **344** | P | **Pb** | **06 15 04.0** | **-1.2** |
| KTHA | | | | S | **Sb** | **06 15 16.7** | **-1.4** |
| | comp=N,388nm,0.4s | | | | | | |
| **IDI** | **Anoyia** | **1.23** | **91** | P | **Pn** | **06 15 09.3** | **0.0** |
| IDI | | | | S | **Sn** | **06 15 28.2** | **+2.3** |
| | comp=N,195nm,0.4s | | | | | | |
| **KSTL** | **Kastelli Herak** | **1.37** | **90** | P | Pg | 06 15 16.8 | +4.2 |
| KSTL | | | | S | Sn | 06 15 39.0 | +10 |
| **KSTL** | **Kastelli Herak** | **1.37** | **90** | P | **Pn** | **06 15 08.7** | **-2.5** |
| KSTL | | | | AML | AML | 06 15 41.6 | |
| | comp=N,443μm,0.3s | | | | | | |
| KSTL | | | | AML | AML | 06 

**MYLDM Lahad Datu 22.46 82** P **P** **06 58 36.8 +0.2**
MYLDM IAmb IAmb 06 59 01.6
comp=Z,19nm,1.1s
**SHL Shillong 23.50 350** P **P** **06 58 46.9 -0.5**
SHL IAmb IAmb 06 58 47.9
comp=Z,13nm,0.6s
**TOLI2 Tolitoli 24.62 92** P **P** **06 58 55.9 -1.9**
**H08S2 Diego Garcia H 25.61 247** T T 07 25 41.2
baz=67,slow=76,SNR=3097
**H08S3 Diego Garcia H 25.61 247** T T 07 25 41.4
baz=67,slow=76,SNR=6611
**H08S1 Diego Garcia H 25.62 247** T T 07 25 37.9
baz=67,slow=76,SNR=881
**MBWA Marble Bar 32.79 136** P **P** **07 00 10.7 +0.2**
MBWA IAmb IAmb 07 00 14.0
comp=Z,11nm,1.1s
**FITZ Fitzroy Crossi 35.40 126** P **P** **07 00 33.0 -0.2**
**MTN Manton Dam 37.83 114** P **P** **07 00 53.2 -0.7**
MTN IAmb IAmb 07 01 09.0
comp=Z,13nm,1.3s
**NIL Nilore 37.85 328** P **P** **07 00 53.5 -0.4**
NIL IAmb IAmb 07 00 54.7
comp=Z,5.7nm,0.8s
**H01W3 Cape Leeuwin H 40.65 157** T T 07 44 30.3
baz=333,slow=76,SNR=524
**H01W2 Cape Leeuwin H 40.66 157** T T 07 44 28.7
baz=333,slow=76,SNR=442
**H01W1 Cape Leeuwin H 40.66 157** T T 07 44 30.6
baz=333,slow=76,SNR=348
**DRK Karamyk 43.14 332** P **P** **07 01 38.8 +0.8**
**WB0 Warramunga Arr 43.45 122** P **P** **07 01 40.1 -0.4**
WB0 IAmb IAmb 07 02 09.5
comp=Z,12nm,1.5s
**WRA Warramunga Arr 43.48 122** P **P** **07 01 39.9 -0.8**
**WRA Warramunga Arr 43.48 122** P **P** **07 01 40.5 -0.2**
comp=Z,1.9nm,0.9s,baz=302,slow=9.0,SNR=14
comp=Z,1.9nm,0.9s
**WRAB Tennant Creek 43.49 122** P **P** **07 01 41.4 +0.7**
WRAB IAmb IAmb 07 02 24.1
comp=Z,14nm,1.4s
**WB2 Warramunga Arr 43.49 122** P **P** **07 01 41.1 +0.3**
**WR0 Warramunga Arr 43.66 122** P **P** **07 01 41.9 -0.2**
**CHGR Chuyangaron 43.80 329** P **P** **07 01 43.7 +0.7**
CHGR IAmb IAmb 07 01 43.7
comp=Z,10.0nm,0.8s
**SIMJ Simiganj 43.88 329** P **P** **07 01 44.1 +0.3**
SIMJ IAmb IAmb 07 01 44.5
comp=Z,4.3nm,0.6s
**FORT Forrest 44.77 140** P **P** **07 01 52.6 +1.8**
**ASAR Alice Springs 44.87 127** P **P** **07 01 52.0 +0.1**
comp=Z,1.0nm,0.5s,baz=301,slow=8.0,SNR=14
comp=Z,1.0nm,0.5s
**MK31 Makanchi Array 45.94 347** P **P** **07 01 59.9 +0.1**
MK31 IAmb IAmb 07 02 00.7
comp=Z,3.6nm,0.7s
**MKAR Makanchi Array 45.94 347** P **P** **07 02 00.2 +0.4**
**MKAR Makanchi Array 45.94 347** P **P** **07 01 59.9 0.0**
comp=Z,5.5nm,0.7s,baz=163,slow=8.1,SNR=46
comp=Z,5.5nm,0.7s
**MAKZ Makanchi 46.02 346** P **P** **07 02 00.7 +0.2**
MAKZ IAmb IAmb 07 02 01.2
comp=Z,5.0nm,0.6s
**SONM Songino Array 46.21 10** P **P** **07 02 02.2 +0.1**
**SONM Songino Array 46.21 10** P **P** **07 02 01.9 -0.3**
comp=Z,1.8nm,0.5s,baz=192,slow=8.9,SNR=7.3
SONM PcP **PcP** **07 03 38.1 +0.5**
comp=Z,0.5nm,0.5s,baz=174,slow=1.4,SNR=3.6
comp=Z,1.8nm,0.5s
**KKAR Karatay Array 46.62 334** P **P** **07 02 06.1 +0.7**
**COEN Coen 49.30 111** P **P** **07 02 25.6 -0.9**
**KURBB Kurchatov Arra 50.41 345** P **P** **07 02 32.7 -1.6**
comp=Z,1.4nm,0.7s,baz=167,slow=6.9,SNR=11
comp=Z,1.4nm,0.7s
**KURK Kurchatov 50.48 346** P **P** **07 02 35.2 +0.4**
**ZALV Zalesovo Beam 52.32 352** P **P** **07 02 48.8 +0.2**
comp=Z,5.9nm,0.4s,baz=169,slow=7.6,SNR=9.2
comp=Z,5.9nm,0.4s
**STKA Stephens Creek 54.85 132** P **P** **07 03 08.7 +1.2**
comp=Z,3.0nm,0.8s,baz=284,slow=4.9,SNR=3.1
comp=Z,3.0nm,0.8s
**BVAR Borovoye Array 54.88 341** P **P** **07 03 06.3 -1.1**
comp=Z,2.3nm,0.4s,baz=157,slow=8.0,SNR=6.2
comp=Z,2.3nm,0.4s
**ABKAR Akbulak array 56.07 332** P **P** **07 03 16.1 +0.2**
**H04N2 CROZET ISLANDS 62.11 213** T T 08 11 23.1
baz=52,slow=75,SNR=5316
**H04N1 CROZET ISLANDS 62.12 213** T T 08 11 23.6
baz=52,slow=75,SNR=4684
**H04N3 CROZET ISLANDS 62.13 213** T T 08 11 22.3
baz=52,slow=75,SNR=5461
**H04S1 CROZET ISLANDS 62.47 213** T T 08 11 48.6
baz=52,slow=75,SNR=1407
**H04S3 CROZET ISLANDS 62.48 213** T T 08 11 48.4
baz=52,slow=75,SNR=2173
**H04S2 CROZET ISLANDS 62.49 213** T T 08 11 49.6
baz=52,slow=75,SNR=1180
**CASY Casey 69.20 174** P **P** **07 04 45.1 +1.8**
**FINES FINESS Array B 78.56 333** P **P** **07 05 38.4 +0.2**
**FINES FINESS Array B 78.56 333** P **P** **07 05 38.0 -0.2**
comp=Z,2.2nm,0.9s,baz=95,slow=6.5,SNR=3.6
comp=Z,2.2nm,0.9s
**ARCES ARCESS Array B 81.16 340** P **P** **07 05 52.0 -0.2**
**ARCES ARCESS Array B 81.16 340** P **P** **07 05 51.8 -0.3**
comp=Z,0.7nm,0.4s,baz=103,slow=5.5,SNR=6.3
comp=Z,0.7nm,0.4s
**F20K Avaraart Lake 94.88 22** P **P** **07 06 58.2 -0.5**
F20K IAmb IAmb 07 07 00.4
comp=Z,2.6nm,0.8s
**H19K Roundabout Mou 95.05 24** P **P** **07 06 59.8 +0.3**
**TXAR Lajitas Array 143.25 30** PKP PKPbc 07 13 09.1 +0.1
comp=Z,0.3nm,0.8s,baz=317,slow=2.1,SNR=4.3

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**IDC 22 06:54:52.9±1.8, 4.73S×105.76W, h0km, mb4.0/4, mbtmp4.0/4, MS3.2/4, Error ellipse: s-maj=223.4km s-min=31.4km az=85.0, Central East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **APG** | **El Apazote** | **24.78** | **37** | LR | LR | 07 07 51.8 | |
| | comp=Z,11nm,18.4s,baz=244,slow=31 | | | | | | |
| **JTS** | **Las Juntas de** | **25.53** | **54** | LR | LR | 07 07 52.8 | |
| | comp=Z,102nm,19.2s,baz=290,slow=30 | | | | | | |
| **SDV** | **Santo Domingo** | **37.54** | **69** | LR | LR | 07 15 00.6 | |
| | comp=Z,53nm,19.0s,baz=52,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **44.49** | **346** | P | P | 07 03 07.9 | +1.5 |
| | 0.5nm,0.8s,baz=157,slow=8.0,SNR=4.3 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.37** | **356** | P | P | 07 05 49.1 | -0.6 |
| | 3.3nm,1.1s,baz=169,slow=5.6,SNR=6.4 | | | | | | |
| | 3.3nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **75.66** | **343** | P | P | 07 06 39.4 | -0.3 |
| | 1.9nm,1.0s,baz=161,slow=5.3,SNR=14 | | | | | | |
| | 1.9nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **85.33** | **180** | P | P | 07 07 32.6 | +0.7 |
| | 2.9nm,1.0s,baz=115,slow=3.8,SNR=5.5 | | | | | | |
| | 2.9nm,1.0s | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **89.07** | **290** | T | T | 08 46 29.5 | |
| | baz=96,slow=74,SNR=49 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **89.08** | **290** | T | T | 08 46 29.5 | |
| | baz=96,slow=74,SNR=23 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **89.09** | **290** | T | T | 08 46 29.5 | |
| | baz=96,slow=74,SNR=18 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **89.15** | **289** | T | T | 08 46 39.2 | |
| | baz=94,slow=75,SNR=14 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **89.16** | **289** | T | T | 08 46 35.0 | |
| | baz=94,slow=75,SNR=11 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **89.17** | **289** | T | T | 08 46 40.2 | |
| | baz=94,slow=75,SNR=14 | | | | | | |
| **BORG** | **Borgarnes** | **91.86** | **25** | LR | LR | 07 49 01.7 | |
| | comp=Z,13nm,18.1s,baz=302,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **116.08** | **245** | PKP | PKPdf | 07 13 37.9 | -1.1 |
| | 0.2nm,0.7s,baz=98,slow=2.8,SNR=5.0 | | | | | | |

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*IDC **22** 07:01:23.8±1.6, 15.27N×146.97E, h0km, mb3.8/8, mbtmp3.8/9, ML3.5/1, MS2.9/1, Error ellipse: s-maj=43.2km s-min=21.2km az=107.0*

**ISC 22 07:01:28.7±1.4, 15.3N±0.1×147.0E±0.2, h33km, n9, σ0.970/10, mb3.8/8, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **2.65** | **231** | Pn | **Pn** | **07 02 09.6** | **+0.4** |
| | 8.4nm,0.3s,baz=57,slow=19,SNR=1.8 | | | | | | |
| GUMO | | | | Sn | **Sn** | **07 02 40.5** | **+0.2** |
| | 23nm,0.3s,baz=0.7,slow=22,SNR=4.5 | | | | | | |
| GUMO | | | | LR | LR | 07 03 19.5 | |
| | comp=Z,226nm,18.4s,baz=102,slow=44 | | | | | | |
| | 20nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.59** | **341** | P | **P** | **07 06 27.2** | **+0.8** |
| | 0.7nm,0.4s,baz=171,slow=8.6,SNR=2.1 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.14** | **200** | P | **P** | **07 08 36.4** | **-0.3** |
| | 0.4nm,0.7s,baz=23,slow=9.7,SNR=5.5 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **46.60** | **323** | P | **P** | **07 09 53.5** | **-0.3** |
| | 0.3nm,0.4s,baz=126,slow=7.3,SNR=0.8 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.74** | **315** | P | **P** | **07 11 44.1** | **0.0** |
| | 0.6nm,0.4s,baz=90,slow=8.0,SNR=9.9 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.70** | **319** | P | **P** | **07 12 03.2** | **-0.3** |
| | 3.4nm,0.9s,baz=99,slow=6.7,SNR=23 | | | | | | |
| | 3.4nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **66.18** | **25** | P | **P** | **07 12 13.8** | **+1.0** |
| | 0.2nm,0.4s,baz=252,slow=5.9,SNR=1.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.90** | **321** | P | **P** | **07 12 36.4** | **-0.1** |
| | 0.8nm,0.5s,baz=112,slow=6.8,SNR=2.7 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **90.50** | **336** | P | **P** | **07 14 25.9** | **-1.2** |
| | 1.7nm,1.0s,baz=61,slow=6.8,SNR=1.2 | | | | | | |
| | 1.7nm,1.0s | | | | | | |

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*IDC **22** 07:19:39.6±3.2, 53.70N×88.42E, h0km, mbtmp2.9/3, ML2.5/3, Error ellipse: s-maj=29.2km s-min=20.2km az=84.0*

**ISC 22 07:19:44.3±4.2, 53.7N±0.1×88.5E±0.2, h35km, n6, σ1.938/9, 2C, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **2.17** | **278** | I | I | 07 32 30.0 | |
| | 0.2nm,0.8s,baz=91,slow=326,SNR=6.5 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **2.17** | **278** | ⇑Pn | **Pn** | **07 20 18.7** | **+0.8** |
| | 1.0nm,0.7s,baz=94,slow=9.6 | | | | | | |
| ZAA0 | | | | ⇑Sn | **Sn** | **07 20 44.2** | **+0.6** |
| | 0.9nm,0.4s,baz=104,slow=27 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.17** | **278** | Pn | **Pn** | **07 20 16.4** | **-1.5** |
| | 2.2nm,0.3s,baz=95,slow=10,SNR=14 | | | | | | |
| ZALV | | | | Sn | **Sn** | **07 20 44.1** | **+0.6** |
| | 4.0nm,0.3s,baz=98,slow=25,SNR=6.8 | | | | | | |
| | 3.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.85** | **247** | Pn | **Pn** | **07 21 20.7** | **-1.4** |
| | 0.2nm,0.3s,baz=62,slow=14,SNR=8.3 | | | | | | |
| KURBB | | | | Sn | **Sn** | **07 22 40.0** | **+1.3** |
| | baz=63,slow=37,SNR=1.7 | | | | | | |
| KURBB | | | | Lg | Lg | 07 23 14.7 | |
| | 0.1nm,0.3s,baz=64,slow=33,SNR=3.0 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **7.97** | **212** | P | **Pn** | **07 21 38.7** | **+1.1** |
| | 0.1nm,0.4s,baz=29,slow=12,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.97** | **212** | Pn | **Pn** | **07 21 38.2** | **+0.6** |
| | 0.1nm,0.3s,baz=25,slow=12,SNR=5.3 | | | | | | |
| MKAR | | | | Sn | **Sn** | **07 23 04.9** | **-1.6** |
| | baz=36,slow=20,SNR=1.9 | | | | | | |
| MKAR | | | | Lg | Lg | 07 23 52.0 | |
| | baz=27,slow=32,SNR=1.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

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*SJA **22** 07:22:26.5±0.8, 30.65S×71.77W, h9km±2km, ML3.6, MW3.4*
*GUC **22** 07:22:32.4±0.7, 30.71S×71.39W, h49km±1km, ML4.0*
*NEIC **22** 07:22:32.8±2.4, 30.69S±0.04×71.54W±0.09, h42km±12km, mb4.0/2, ML4.0(GUC), Error ellipse: s-maj=11.4km s-min=6.4km az=95.0*
*IDC **22** 07:22:35.3±7.6, 30.59S×71.29W, h65km±54km, mb3.6/4, mbtmp3.7/8, ML3.4/4, MS2.9/1, Error ellipse: s-maj=60.4km s-min=31.2km az=33.0*

**ISC 22 07:22:32.0±0.7, 30.71S±0.03×71.64W±0.04, h47km±6km, n115, σ2.906/152, mb3.8/4, 6C-5D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.03** | **0** | | **Pn** | **07 22 40.1** | **+0.8** |
| **CO06** | **Fray Jorge** | **0.03** | **0** | ⇑P | **Pn** | **07 22 40.3** | **+1.0** |
| CO06 | | | | *i* S | **Sn** | **07 22 46.1** | **+1.7** |
| CO06 | | | | IAML | | 07 22 47.5 | |
| | comp=E,16μm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **0.74** | **132** | | **Pn** | **07 22 44.9** | **-1.3** |
| **CO02** | **Combarbal** | **0.74** | **132** | ⇓*i* P | **Pn** | **07 22 45.0** | **-1.3** |
| CO02 | | | | *i* S | **Sn** | **07 22 53.9** | **-2.7** |
| **CO03** | **El Pedregal** | **0.82** | **100** | | **Pn** | **07 22 45.3** | **-2.2** |
| **CO03** | **El Pedregal** | **0.82** | **100** | *i* P | **Pn** | **07 22 45.2** | **-2.2** |
| CO03 | | | | *i* S | **Sn** | **07 22 58.4** | **-0.3** |
| CO03 | | | | IAML | | 07 22 59.3 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **CO03** | **El Pedregal** | **0.82** | **100** | ⇓*i* P | **Pn** | **07 22 45.4** | **-2.0** |
| CO03 | | | | *i* S | **Sn** | **07 22 54.6** | **-4.0** |
| CO03 | | | | IAML | | 07 22 55.0 | |
| | comp=E,7μm,0.3s | | | | | | |
| **CO05** | **La Serena** | **0.86** | **24** | | **Pn** | **07 22 47.6** | **-0.1** |
| **CO05** | **La Serena** | **0.86** | **24** | ⇓*i* P | **Pn** | **07 22 47.7** | **-0.1** |
| CO05 | | | | *i* S | **Sn** | **07 22 59.0** | **-0.2** |
| **GO04** | **Tololo Observa** | **0.90** | **54** | | **Pn** | **07 22 47.5** | **-1.0** |
| **GO04** | **Tololo Observa** | **0.90** | **54** | ⇑*e*P | **Pn** | **07 22 47.0** | **-1.5** |
| GO04 | | | | *i* S | **Sn** | **07 22 57.7** | **-2.8** |
| **CO04** | **Los Peladeros** | **1.45** | **157** | *e*P | **Pn** | **07 22 55.9** | **-0.2** |
| CO04 | | | | *i* S | **Sn** | **07 23 13.1** | **-0.9** |
| CO04 | | | | IAML | | 07 23 17.2 | |
| | comp=N,4μm,0.3s | | | | | | |
| **CO01** | **Juntas del Tor** | **1.52** | **62** | | **Pn** | **07 22 56.3** | **-0.7** |
| **CO01** | **Juntas del Tor** | **1.52** | **62** | *i* P | **Pn** | **07 22 56.5** | **-0.5** |
| CO01 | | | | *i* S | **Sn** | **07 23 20.0** | **+4.3** |
| CO01 | | | | IAML | | 07 23 22.2 | |
| | comp=Z,336nm,0.1s | | | | | | |
| **CO01** | **Juntas del Tor** | **1.52** | **62** | ⇓*i* P | **Pn** | **07 22 56.3** | **-0.7** |
| CO01 | | | | *i* S | **Sn** | **07 23 13.3** | **-2.4** |
| **VA06** | **Catapilco** | **1.87** | **171** | Pn | **Pn** | **07 23 02.3** | **+0.7** |
| **LCO** | **Las Campanas** | **1.87** | **26** | | **Pn** | **07 23 01.9** | **0.0** |
| **LCO** | **Las Campanas** | **1.87** | **26** | *i* P | **Pn** | **07 23 02.1** | **+0.1** |
| LCO | | | | IAML | | 07 23 31.0 | |
| | comp=Z,956nm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.87** | **26** | *e*P | **Pn** | **07 23 02.0** | **+0.1** |
| LCO | | | | *i* S | **Sn** | **07 23 24.4** | **0.0** |
| LCO | | | | IAML | | 07 23 28.9 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **AROD** | **Rodeo** | **1.94** | **75** | *i* P | **Pn** | **07 23 03.8** | **+0.9** |
| AROD | | | | *i* S | Sn | 07 23 31.7 | +5.4 |
| **AC05** | **El Transito** | **2.21** | **33** | | **Pn** | **07 23 07.1** | **+0.7** |
| **AC05** | **El Transito** | **2.21** | **33** | *i* P | **Pn** | **07 23 06.7** | **+0.3** |
| AC05 | | | | *i* S | **Sn** | **07 23 35.2** | **+2.7** |
| AC05 | | | | IAML | | 07 23 47.9 | |
| | comp=Z,268nm,0.8s | | | | | | |
| **AC05** | **El Transito** | **2.21** | **33** | ⇑*e*P | **Pn** | **07 23 07.1** | **+0.7** |
| AC05 | | | | *i* S | **Sn** | **07 23 32.8** | **+0.3** |
| AC05 | | | | IAML | | 07 23 36.2 | |
| | comp=N,624nm,0.4s | | | | | | |
| **DOCA** | **Reserva Natura** | **2.21** | **97** | *i* P | **Pn** | **07 23 07.5** | **+0.9** |
| DOCA | | | | *i* S | Sn | 07 23 38.5 | +5.6 |
| **ACCO** | **Cerro Coronel** | **2.22** | **88** | *i* P | **Pn** | **07 23 07.9** | **+1.2** |
| ACCO | | | | *i* S | Sn | 07 23 39.0 | +6.0 |
| ACCO | | | | IAML | | 07 23 47.5 | |
| | comp=Z,235nm,0.4s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.24** | **77** | *i* P | **Pn** | **07 23 08.0** | **+1.3** |
| ACDV | | | | *i* S | Sn | 07 23 38.3 | +5.1 |
| ACDV | | | | IAML | | 07 23 44.2 | |
| | comp=Z,158nm,0.6s | | | | | | |
| **VA03** | **San Esteban** | **2.25** | **156** | | **Pn** | **07 23 07.6** | **+0.7** |
| **VA03** | **San Esteban** | **2.25** | **156** | *i* P | **Pn** | **07 23 07.6** | **+0.7** |
| VA03 | | | | *i* S | **Sn** | **07 23 38.3** | **+4.8** |
| VA03 | | | | IAML | | 07 23 40.4 | |
| | comp=Z,547nm,0.2s | | | | | | |
| **VA03** | **San Esteban** | **2.25** | **156** | *e*P | **Pn** | **07 23 07.6** | **+0.7** |
| VA03 | | | | *i* S | **Sn** | **07 23 33.7** | **+0.2** |
| VA03 | | | | IAML | | 07 23 38.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **RTLS** | **Leoncito** | **2.28** | **119** | *i* P | **Pn** | **07 23 08.9** | **+1.4** |
| RTLS | | | | *i* S | **Sn** | **07 23 40.6** | **+6.1** |
| **VA01** | **Torpederas** | **2.31** | **180** | | **Pn** | **07 23 07.8** | **+0.2** |
| **VA01** | **Torpederas** | **2.31** | **180** | *i* P | **Pn** | **07 23 07.7** | **+0.1** |
| VA01 | | | | *i* S | **Sn** | **07 23 38.4** | **+3.6** |
| VA01 | | | | IAML | | 07 23 43.6 | |
| | comp=Z,226nm,0.5s | | | | | | |
| **VA01** | **Torpederas** | **2.31** | **180** | *e*P | **Pn** | **07 23 07.8** | **+0.2** |
| **ROCH** | **El Roble** | **2.32** | **167** | *e*P | **Pn** | **07 23 09.0** | **+1.0** |
| ROCH | | | | *i* S | **Sn** | **07 23 36.8** | **+1.3** |
| **AC04** | **Llanos de Chal** | **2.54** | **11** | | **Pn** | **07 23 11.9** | **+1.1** |
| **AC04** | **Llanos de Chal** | **2.54** | **11** | *i* P | **Pn** | **07 23 11.8** | **+0.9** |
| AC04 | | | | *i* S | **Sn** | **07 23 41.8** | **+1.3** |
| AC04 | | | | IAML | | 07 23 52.1 | |
| | comp=Z,264nm,0.5s | | | | | | |
| **AC04** | **Llanos de Chal** | **2.54** | **11** | *e*P | **Pn** | **07 23 11.7** | **+0.9** |
| AC04 | | | | IAML | | 07 23 55.5 | |
| | comp=N,354nm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **2.56** | **162** | Pn | **Pn** | **07 23 12.1** | **+1.0** |
| **PEL** | **Peldehue** | **2.56** | **162** | *e*P | **Pn** | **07 23 12.0** | **+0.9** |
| PEL | | | | *i* S | **Sn** | **07 23 41.8** | **+0.7** |
| PEL | | | | IAML | | 07 23 53.8 | |
| | comp=N,449nm,0.3s | | | | | | |
| **MT02** | **Curacav** | **2.58** | **171** | Pn | **Pn** | **07 23 13.2** | **+1.8** |
| **MT02** | **Curacav** | **2.58** | **171** | ⇓*i* P | **Pn** | **07 23 12.0** | **+0.7** |
| MT02 | | | | *i* S | **Sn** | **07 23 45.7** | **+4.1** |
| MT02 | | | | IAML | | 07 23 53.4 | |
| | comp=Z,295nm,0.3s | | | | | | |
| **MT02** | **Curacav** | **2.58** | **171** | *e*P | **Pn** | **07 23 11.7** | **+0.4** |
| MT02 | | | | *i* S | **Sn** | **07 23 42.9** | **+1.3** |
| MT02 | | | | IAML | | 07 23 56.9 | |
| | comp=E,341nm,0.2s | | | | | | |
| **ZON** | **Zonda** | **2.67** | **109** | Pn | **Pn** | **07 23 13.4** | **+0.8** |
| **ZON** | **Zonda** | **2.67** | **109** | *i* P | **Pn** | **07 23 13.8** | **+1.2** |
| ZON | | | | *i* S | **Sn** | **07 23 49.0** | **+5.2** |
| ZON | | | | IAML | | 07 24 01.7 | |
| | comp=Z,250nm,0.8s | | | | | | |
| **MT10** | **Hacienda Santa** | **2.73** | **160** | ⇑*e*P | **Pn** | **07 23 14.2** | **+0.7** |
| MT10 | | | | *i* S | **Sn** | **07 23 45.4** | **+0.2** |
| MT10 | | | | IAML | | 07 23 60.0 | |
| | comp=N,2μm,0.7s | | | | | | |
| **SJA** | **San Juan** | **2.76** | **108** | *i* P | **Pn** | **07 23 14.8** | **+1.0** |
| SJA | | | | *i* S | Sn | 07 23 51.5 | +5.5 |
| SJA | | | | IAML | | 07 24 05.8 | |
| | comp=Z,270nm,0.7s | | | | | | |
| **MT05** | **Renca** | **2.79** | **164** | *i* P | **Pn** | **07 23 15.5** | **+1.3** |
| MT05 | | | | *i* S | **Sn** | **07 23 50.9** | **+4.3** |
| MT05 | | | | IAML | | 07 24 07.1 | |
| | comp=Z,404nm,0.3s | | | | | | |
| **MT05** | **Renca** | **2.79** | **164** | *e*P | **Pn** | **07 23 16.7** | **+2.5** |
| **MT14** | **Cerro Cal¡n** | **2.84** | **161** | *e*P | **Pn** | **07 23 16.1** | **+1.1** |
| MT14 | | | | *i* S | **Sn** | **07 23 48.4** | **+0.4** |
| MT14 | | | | IAML | | 07 24 00.3 | |
| | comp=E,1μm,0.9s | | | | | | |
| **FCH** | **Farellones** | **2.85** | **157** | *e*P | **Pn** | **07 23 16.8** | **+1.4** |
| FCH | | | | *i* S | **Sn** | **07 23 49.9** | **+1.2** |
| FCH | | | | IAML | | 07 24 00.1 | |
| | comp=E,358nm,0.2s | | | | | | |
| **MT16** | **CCHEN** | **2.87** | **161** | | **Pn** | **07 23 17.0** | **+1.6** |
| **MT16** | **CCHEN** | **2.87** | **161** | ⇑*e*P | **Pn** | **07 23 16.2** | **+0.8** |
| MT16 | | | | *i* S | **Sn** | **07 23 48.9** | **+0.1** |
| MT16 | | | | IAML | | 07 24 04.6 | |
| | comp=N,265nm,0.6s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **2.89** | **114** | *i* P | **Pn** | **07 23 17.1** | **+1.5** |
| RTCV | | | | *i* S | **Sn** | **07 23 54.7** | **+5.5** |
| **MT03** | **Universidad Ad** | **2.94** | **161** | | **Pn** | **07 23 17.6** | **+1.3** |
| **MT03** | **Universidad Ad** | **2.94** | **161** | *i* P | **Pn** | **07 23 17.5** | **+1.1** |
| MT03 | | | | *i* S | **Sn** | **07 23 55.0** | **+4.5** |
| MT03 | | | | IAML | | 07 24 02.2 | |
| | comp=Z,337nm,0.3s | | | | | | |
| **MT03** | **Universidad Ad** | **2.94** | **161** | *e*P | **Pn** | **07 23 17.1** | **+0.7** |
| MT03 | | | | *i* S | **Sn** | **07 23 50.9** | **+0.4** |
| MT03 | | | | IAML | | 07 24 04.7 | |
| | comp=N,759nm,0.4s | | | | | | |
| **VA05** | **Santo Domingo** | **2.94** | **180** | | **Pn** | **07 23 16.4** | **+0.1** |
| **VA05** | **Santo Domingo** | **2.94** | **180** | *e*P | **Pn** | **07 23 16.1** | **-0.2** |
| VA05 | | | | IAML | | 07 24 15.0 | |
| | comp=E,624nm,0.4s | | | | | | |
| **MT04** | **Ro Olivares** | **2.98** | **155** | *i* P | **Pn** | **07 23 19.0** | **+2.0** |
| MT04 | | | | IAML | | 07 24 04.1 | |
| | comp=Z,205nm,0.5s | | | | | | |
| **MT04** | **Ro Olivares** | **2.98** | **155** | *e*P | **Pn** | **07 23 18.9** | **+1.9** |
| MT04 | | | | *i* S | **Sn** | **07 23 52.7** | **+1.1** |
| MT04 | | | | IAML | | 07 24 00.9 | |
| | comp=N,339nm,0.6s | | | | | | |
| **ASAL** | **Salagasta** | **3.04** | **129** | *i* P | **Pn** | **07 23 19.6** | **+1.9** |
| ASAL | | | | *i* S | **Sn** | **07 23 59.0** | **+6.1** |
| ASAL | | | | IAML | | 07 24 16.3 | |
| | comp=Z,160nm,0.5s | | | | | | |
| **MT15** | **Las Vizcachas** | **3.04** | **162** | *e*P | **Pn** | **07 23 18.2** | **+0.5** |
| MT15 | | | | *i* S | **Sn** | **07 23 53.5** | **+0.6** |
| MT15 | | | | IAML | | 07 24 02.4 | |
| | comp=E,775nm,0.6s | | | | | | |
| **MT08** | **Bocatoma Ro** | **3.06** | **154** | Pn | **Pn** | **07 23 20.5** | **+2.4** |
| **MT08** | **Bocatoma Ro** | **3.06** | **154** | *i* P | **Pn** | **07 23 19.4** | **+1.3** |
| MT08 | | | | *i* S | **Sn** | **07 23 58.9** | **+5.3** |
| MT08 | | | | IAML | | 07 24 10.3 | |
| | comp=Z,152nm,0.4s | | | | | | |
| **MT08** | **Bocatoma Ro** | **3.06** | **154** | *e*P | **Pn** | **07 23 20.8** | **+2.7** |
| MT08 | | | | *i* S | **Sn** | **07 23 56.7** | **+3.2** |
| MT08 | | | | IAML | | 07 24 06.1 | |
| | comp=E,279nm,0.4s | | | | | | |
| **MT09** | **Talagante** | **3.11** | **170** | *e*P | **Pn** | **07 23 19.7** | **+1.0** |
| MT09 | | | | *i* S | **Sn** | **07 23 55.1** | **+0.3** |
| MT09 | | | | IAML | | 07 24 04.2 | |
| | comp=E,584nm,0.1s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.14** | **133** | *i* P | **Pn** | **07 23 20.6** | **+1.5** |
| ARCO | | | | *i* S | **Sn** | **07 24 01.3** | **+5.9** |
| ARCO | | | | IAML | | 07 24 08.9 | |
| | comp=Z,280nm,0.6s | | | | | | |
| **MT01** | **Popeta** | **3.17** | **174** | *i* P | **Pn** | **07 23 20.0** | **+0.7** |
| MT01 | | | | *i* S | **Sn** | **07 24 00.3** | **+4.3** |
| MT01 | | | | IAML | | 07 24 14.8 | |
| | comp=Z,190nm,0.5s | | | | | | |
| **MT01** | **Popeta** | **3.17** | **174** | *e*P | **Pn** | **07 23 19.8** | **+0.4** |
| MT01 | | | | IAML | | 07 24 08.7 | |
| | comp=E,351nm,0.2s | | | | | | |
| **MT13** | **San Alfonso** | **3.24** | **160** | | **Pn** | **07 23 22.3** | **+1.8** |
| **MT13** | **San Alfonso** | **3.24** | **160** | *i* P | **Pn** | **07 23 21.8** | **+1.3** |
| MT13 | | | | *i* S | **Sn** | **07 24 03.0** | **+5.1** |
| MT13 | | | | IAML | | 07 24 08.2 | |
| | comp=Z,300nm,0.6s | | | | | | |
| **MT13** | **San Alfonso** | **3.24** | **160** | *e*P | **Pn** | **07 23 22.3** | **+1.8** |
| MT13 | | | | *i* S | **Sn** | **07 23 59.5** | **+1.6** |
| MT13 | | | | IAML | | 07 24 08.7 | |
| | comp=E,466nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **3.33** | **22** | Pn | **Pn** | **07 23 22.4** | **+0.7** |
| **GO03** | **Copiap** | **3.33** | **22** | *i* P | **Pn** | **07 23 22.2** | **+0.4** |
| GO03 | | | | *i* S | **Sn** | **07 24 02.0** | **+1.9** |
| **GO03** | **Copiap** | **3.33** | **22** | *e*P | **Pn** | **07 23 22.5** | **+0.7** |
| **LMEL** | **Las Melosas** | **3.36** | **159** | | **Pn** | **07 23 24.1** | **+1.9** |
| **LMEL** | **Las Melosas** | **3.36** | **159** | *i* P | **Pn** | **07 23 23.8** | **+1.6** |
| LMEL | | | | *i* S | **Sn** | **07 24 06.0** | **+5.1** |
| **LMEL** | **Las Melosas** | **3.36** | **159** | *e*P | **Pn** | **07 23 24.0** | **+1.9** |
| LMEL | | | | *i* S | **Sn** | **07 24 03.7** | **+2.8** |
| LMEL | | | | IAML | | 07 24 10.9 | |
| | comp=N,414nm,0.3s | | | | | | |
| **AAGR** | **Agrelo** | **3.37** | **136** | *i* P

comp=E,0.1nm,0.3s,baz=259,slow=13,SNR=3.7
CPUP LR LR 07 31 35.9
comp=E,48nm,18.5s,baz=135,slow=42
comp=E,0.5nm,0.4s
**LPAZ La Paz 14.71 13** Pn **Pn 07 25 58.5 +0.7**
**LPAZ La Paz 14.71 13** P **Pn 07 25 58.2 +0.4**
baz=200,slow=8.2,SNR=1.9
comp=E,1.3nm,0.9s
**SIV San Ignacio 17.55 36** P **P 07 26 32.5 -1.5**
baz=229,slow=9.8,SNR=6.3
comp=E,1.6nm,0.7s
**BDFB Brasilia 26.31 61** P **P 07 28 02.4 -1.2**
BDFB IAmb IAmb 07 28 03.9
comp=Z,4.2nm,1.0s
**BDFB Brasilia 26.31 61** P **P 07 28 01.8 -1.8**
comp=Z,1.8nm,0.5s,baz=291,slow=8.1,SNR=4.2
comp=Z,1.8nm,0.5s
**QSPA South Pole Qui 59.52 180** P **P 07 32 31.2 +0.8**
**TXAR Lajitas Array 67.05 330** P **P 07 33 22.5 +1.9**
comp=Z,0.2nm,0.6s,baz=152,slow=8.6,SNR=4.2
comp=Z,0.2nm,0.6s
**DBIC Dimbokro 73.82 72** P **P 07 34 01.5 -0.6**
comp=Z,1.6nm,0.4s,baz=215,slow=3.8,SNR=6.2
comp=Z,1.6nm,0.4s
**TORD Torodi Ar. Bea 82.77 70** P **P 07 34 51.2 -0.4**
comp=Z,0.4nm,0.5s,baz=283,slow=6.4,SNR=13
comp=Z,0.4nm,0.5s
**H11S2 WAKE ISLAND Hyl 26.10 271** T T 10 00 19.5
baz=115,slow=75,SNR=47
**H11S1 WAKE ISLAND Hyl 26.11 271** T T 10 00 16.4
baz=115,slow=75,SNR=68
**H11S3 WAKE ISLAND Hyl 26.12 271** T T 10 00 16.3
baz=115,slow=75,SNR=50
**H11N3 WAKE ISLAND Hyl 26.43 273** T T 10 00 43.3
baz=116,slow=74
**H11N1 WAKE ISLAND Hyl 26.44 273** T T 10 00 47.7
baz=116
**H11N2 WAKE ISLAND Hyl 26.45 273** T T 10 00 44.9
baz=116,slow=74
**ZALV Zalesovo Beam 151.23 29** PKPbc **PKPbc 07 42 19.4 -0.4**
comp=Z,1.8nm,0.5s,baz=306,slow=4.3,SNR=5.9

**IDC 22 07:31:56.5±2.2, 0°.96N×125°.92E, h0km, mb3.2/3, mbtmp3.2/3, Error ellipse: s-maj=192.6km s-min=27.6km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.36** | **159** | P | P | 07 36 54.7 | -1.7 |
| | 0.2nm,0.6s,baz=336,slow=11,SNR=5.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **25.68** | **163** | P | P | 07 37 29.7 | +1.2 |
| | 0.3nm,0.5s,baz=347,slow=13,SNR=9.2 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.38** | **327** | P | P | 07 42 00.6 | -0.2 |
| | 0.2nm,0.5s,baz=120,slow=8.5,SNR=3.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **22** 07:32:51.5±1.2,0°.72N×125°.78E,h0km,mb3.7/4, mbtmp3.7/5,ML3.2/1,MS3.5/2,Error ellipse: s-maj=55.8km s-min=20.4km az=68.0*
*DJA **22** 07:32:58.7±1.6,0°.N±5°×12°.5E±°,h11km±15km,M3.8/9, MLv3.8/9*

**ISC 22 07:32:53.4±1.1, 0°.7N±0°.1×125°.66E±0°.09, h10km, n12, σ0s52/12, mb3.8/4, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **1.68** | **267** | P | **Pb** | **07 33 24.1** | **-0.2** |
| **TNTI** | **Ternate** | **1.72** | **86** | P | Pg | 07 33 33.6 | +7.3 |
| **LBMI** | **Labuha** | **2.25** | **125** | P | **Pg** | **07 33 36.9** | **+0.4** |
| **GTOI** | **Gorontalo** | **2.65** | **270** | P | **Pb** | **07 33 41.2** | **+0.3** |
| **SANI** | **Sanana** | **2.70** | **173** | P | **Pn** | **07 33 37.1** | **+0.2** |
| **LUWI** | **Luwuk** | **3.34** | **240** | P | **Pn** | **07 33 45.3** | **-0.4** |
| **MRSI** | **Marisa** | **3.72** | **267** | P | **Pn** | **07 33 51.5** | **+0.6** |
| **KAPI** | **Kappang** | **8.15** | **226** | Pn | **Pn** | **07 34 52.2** | **+0.4** |
| | 0.3nm,0.3s,baz=338,slow=19,SNR=1.3 | | | | | | |
| | 2.5nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.17** | **158** | P | **P** | **07 37 48.9** | **-0.8** |
| | 1.0nm,0.4s,baz=338,slow=10.0,SNR=26 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **25.47** | **162** | P | **P** | **07 38 21.9** | **+0.1** |
| | 0.6nm,0.4s,baz=342,slow=8.2,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 41 53.8** | **-0.1** |
| | 0.2nm,0.5s,baz=339,slow=3.8,SNR=1.5 | | | | | | |
| ASAR | | | | LR | LR | 07 50 24.5 | |
| | comp=Z,68nm,18.2s,baz=244,slow=41 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.49** | **327** | P | **P** | **07 42 57.0** | **+0.2** |
| | 0.4nm,0.4s,baz=123,slow=8.0,SNR=9.1 | | | | | | |
| MKAR | | | | LR | LR | 08 08 27.1 | |
| | comp=Z,60nm,21.8s,baz=224,slow=36 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.76** | **329** | P | **P** | **07 43 24.6** | **-0.8** |
| | 0.3nm,0.3s,baz=129,slow=5.9,SNR=5.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*IDC **22** 07:44:03.9±4.5,69°.85N×144°.61W,h0km,mb3.0/2, mbtmp2.8/4,ML2.1/2,Error ellipse: s-maj=65.3km s-min=29.8km az=146.0*
*AEIC **22** 07:44:05.7±2.0,69°.55N±0°.02×144°.43W±0°.09,h7km±6km, ML2.3,ML2.4/68(NEIC),Error ellipse: s-maj=5.0km s-min=2.3km az=68.0*
*NEIC **22** 07:44:07.5±1.5,69°.64N±0°.05×144°.31W±0°.06,h10km±2km, Error ellipse: s-maj=9.1km s-min=3.1km az=349.0*

**ISC 22 07:44:07.3±0.7, 69°.60N±0°.04×144°.38W±0°.02, h14km, n56, σ18s16/53, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **83** | | **Pg** | **07 44 10.7** | **-1.7** |
| C27K | | | | IAML | | 07 44 16.4 | |
| | comp=N,524nm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.37** | **330** | | **Pg** | **07 44 14.3** | **-0.4** |
| C26K | | | | | **Sb** | **07 44 20.4** | **-0.8** |
| **D25K** | **Kavik River** | **0.76** | **249** | Pg | **Pg** | **07 44 19.4** | **-2.5** |
| **D25K** | **Kavik River** | **0.76** | **249** | | **Sg** | **07 44 30.6** | **-1.3** |
| **D27M** | **Malcolm River** | **1.26** | **105** | | **Pn** | **07 44 29.8** | **-0.7** |
| **D27M** | **Malcolm River** | **1.26** | **105** | | **Sb** | **07 44 47.4** | **+0.5** |
| **D27M** | **Malcolm River** | **1.26** | **105** | IAML | | 07 44 55.3 | |
| | comp=N,36nm,0.6s | | | | | | |
| D27M | | | | IAML | | 07 44 57.2 | |
| | comp=E,32nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.52** | **277** | Pn | **Pb** | **07 44 34.8** | **-0.3** |
| C24K | | | | IAML | | 07 44 58.1 | |
| | comp=N,71nm,1.0s | | | | | | |
| C24K | | | | IAML | | 07 45 00.7 | |
| | comp=E,58nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.64** | **256** | | **Pb** | **07 44 36.5** | **-0.7** |
| **D24K** | **Happy Valley** | **1.64** | **256** | | **Sg** | **07 44 59.5** | **-0.3** |
| **D24K** | **Happy Valley** | **1.64** | **256** | IAML | | 07 45 00.3 | |
| | comp=E,85nm,0.5s | | | | | | |
| D24K | | | | IAML | | 07 45 01.4 | |
| | comp=N,120nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.74** | **143** | | **Pn** | **07 44 38.0** | **+0.9** |
| **E27K** | **Coleen River** | **1.74** | **143** | | **Sn** | **07 45 00.5** | **+1.4** |
| **F26K** | **Sheenjek River** | **1.92** | **177** | | **Pn** | **07 44 39.8** | **+0.4** |
| F26K | | | | IAML | | 07 45 07.3 | |
| | comp=N,36nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.92** | **177** | | **Sn** | **07 45 04.8** | **+1.4** |
| **E28M** | **Babbage River** | **2.01** | **118** | Pn | **Pn** | **07 44 42.1** | **+1.5** |
| **D28M** | **Stokes Point** | **2.01** | **95** | | **Pb** | **07 44 42.8** | **-0.7** |
| **D28M** | **Stokes Point** | **2.01** | **95** | IAML | | 07 45 15.0 | |
| | comp=E,39nm,0.6s | | | | | | |
| D28M | | | | IAML | | 07 45 20.7 | |
| | comp=N,26nm,0.9s | | | | | | |
| **F25K** | **Christian Rive** | **2.07** | **194** | | **Pn** | **07 44 42.1** | **+0.5** |
| F25K | | | | IAML | | 07 45 17.9 | |
| | comp=E,25nm,1.2s | | | | | | |
| F25K | | | | IAML | | 07 45 18.2 | |
| | comp=N,23nm,0.8s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.10** | **245** | | **Pb** | **07 44 43.7** | **-1.3** |
| **TOLK** | **Toolik Lake Re** | **2.10** | **245** | | **Sb** | **07 45 12.3** | **+1.5** |
| **TOLK** | **Toolik Lake Re** | **2.10** | **245** | IAML | | 07 45 16.3 | |
| | comp=E,36nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 07 45 20.3 | |
| | comp=N,33nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **2.14** | **226** | | **Pn** | **07 44 44.0** | **+1.5** |
| E24K | | | | IAML | | 07 45 18.9 | |
| | comp=E,20nm,0.9s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.18** | **182** | | **Pn** | **07 44 44.1** | **+1.0** |
| **C23K** | **Itkillik River** | **2.18** | **279** | Pn | **Pn** | **07 44 44.3** | **+1.2** |
| C23K | | | | IAML | | 07 45 18.3 | |
| | comp=E,36nm,0.5s | | | | | | |
| C23K | | | | IAML | | 07 45 20.4 | |
| | comp=N,35nm,0.6s | | | | | | |
| **D23K** | **Nanushuk River** | **2.33** | **257** | Pn | **Pb** | **07 44 48.2** | **-0.7** |
| D23K | | | | IAML | | 07 45 26.4 | |
| | comp=N,20nm,1.0s | | | | | | |
| D23K | | | | IAML | | 07 45 28.2 | |
| | comp=E,22nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **2.45** | **233** | Pn | **Pn** | **07 44 48.6** | **+1.8** |
| E23K | | | | IAML | | 07 45 30.4 | |
| | comp=E,16nm,0.9s | | | | | | |
| E23K | | | | IAML | | 07 45 33.6 | |
| | comp=N,16nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **2.46** | **213** | Pn | **Pn** | **07 44 46.6** | **-0.3** |
| F24K | | | | IAML | | 07 45 25.9 | |
| | comp=N,16nm,0.7s | | | | | | |
| F24K | | | | IAML | | 07 45 31.1 | |
| | comp=E,13nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.59** | **138** | | **Pn** | **07 44 49.1** | **+0.4** |
| **E29M** | **Blow River** | **2.63** | **114** | Pn | **Pn** | **07 44 50.6** | **+1.3** |
| E29M | | | | IAML | | 07 45 36.5 | |
| | comp=N,12nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.67** | **175** | | **Pn** | **07 44 50.5** | **+0.7** |
| **G25K** | **Bearman Lake** | **2.92** | **194** | | **Pn** | **07 44 53.5** | **+0.3** |
| **G27K** | **Doyon Strip** | **2.98** | **159** | Pn | **Pn** | **07 44 55.8** | **+1.7** |
| **D22K** | **Ayikyak River** | **3.04** | **260** | | **Pn** | **07 44 55.9** | **+1.0** |
| **D22K** | **Ayikyak River** | **3.04** | **260** | IAML | | 07 45 45.9 | |
| | comp=E,15nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **245** | Pn | **Pn** | **07 44 57.9** | **+2.6** |
| E22K | | | | IAML | | 07 45 45.7 | |
| | comp=N,9.2nm,0.7s | | | | | | |
| E22K | | | | IAML | | 07 45 49.2 | |
| | comp=E,9.1nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **3.13** | **203** | Pn | **Pn** | **07 44 56.8** | **+0.7** |
| G24K | | | | IAML | | 07 45 49.1 | |
| | comp=E,15nm,1.9s | | | | | | |
| G24K | | | | IAML | | 07 45 52.2 | |
| | comp=N,13nm,0.9s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.20** | **288** | | **Pn** | **07 44 57.9** | **+0.9** |
| **B21K** | **Ikpikpuk River** | **3.58** | **275** | | **Pn** | **07 45 03.1** | **+0.9** |
| **H24K** | **Noodor Dome** | **4.01** | **201** | | **Pn** | **07 45 08.2** | **0.0** |
| **H24K** | **Noodor Dome** | **4.01** | **201** | IAML | | 07 46 19.9 | |
| | comp=E,6.1nm,1.3s | | | | | | |
| H24K | | | | IAML | | 07 46 39.3 | |
| | comp=N,6.3nm,3.2s | | | | | | |
| **H29M** | **Whitestone** | **4.08** | **143** | Pn | **Pn** | **07 45 10.8** | **+1.6** |
| H29M | | | | IAML | | 07 47 23.3 | |
| | comp=E,7.7nm,3.1s | | | | | | |
| **F21K** | **Alatna River** | **4.12** | **239** | Pn | **Pn** | **07 45 11.0** | **+1.3** |
| F21K | | | | IAML | | 07 46 12.7 | |
| | comp=N,4.6nm,2.8s | | | | | | |
| F21K | | | | IAML | | 07 46 19.1 | |
| | comp=E,5.9nm,1.5s | | | | | | |
| **INK** | **Inuvik** | **4.12** | **103** | Pn | **Pn** | **07 45 11.3** | **+1.6** |
| | comp=E,0.1nm,0.3s,baz=306,slow=12,SNR=5.8 | | | | | | |
| INK | | | | Sn | **Sn** | **07 45 57.5** | **-0.2** |
| | comp=E,0.2nm,0.3s,baz=252,slow=32,SNR=6.1 | | | | | | |
| | comp=E,1.3nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.13** | **187** | | **Pn** | **07 45 10.4** | **+0.5** |
| **I27K** | **Kandik River** | **4.15** | **164** | | **Pn** | **07 45 10.3** | **+0.1** |
| **H23K** | **Yukon River** | **4.27** | **210** | Pn | **Pn** | **07 45 12.5** | **+0.7** |
| H23K | | | | IAML | | 07 46 25.4 | |
| | comp=N,5.8nm,1.0s | | | | | | |
| H23K | | | | IAML | | 07 46 28.1 | |
| | comp=E,5.7nm,1.7s | | | | | | |
| **I28M** | **Miner Creek** | **4.51** | **156** | Pn | **Pn** | **07 45 16.3** | **+1.2** |
| I28M | | | | IAML | | 07 46 42.1 | |
| | comp=E,5.7nm,3.2s | | | | | | |
| I28M | | | | IAML | | 07 47 10.0 | |
| | comp=N,5.2nm,3.1s | | | | | | |
| **ILAR** | **Eielson Array** | **4.95** | **193** | Pn | **Pn** | **07 45 22.4** | **+1.4** |
| **ILAR** | **Eielson Array** | **4.95** | **193** | Pn | **Pn** | **07 45 21.3** | **+0.2** |
| | comp=N,0.1nm,0.3s,baz=4.6,slow=11,SNR=6.5 | | | | | | |
| ILAR | | | | Sn | **Sn** | **07 46 19.2** | **+1.3** |
| | comp=N,0.2nm,0.3s,baz=8.4,slow=24,SNR=10 | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **5.00** | **164** | Pn | **Pn** | **07 45 22.2** | **+0.4** |
| **D19K** | **Kuna River** | **5.05** | **264** | | **Pn** | **07 45 23.1** | **+0.6** |
| **RIDG** | **Independent Ri** | **5.89** | **182** | Pn | **Pn** | **07 45 35.6** | **+1.5** |
| **DAWY** | **Dawson** | **5.90** | **158** | Pn | **Pn** | **07 45 35.5** | **+1.4** |
| **PDAR** | **Pinedale Array** | **32.27** | **128** | P | **P** | **07 50 34.6** | **-0.7** |
| | comp=N,0.1nm,0.5s,baz=0.0,slow=8.1,SNR=1.6 | | | | | | |
| | comp=N,0.1nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.49** | **128** | P | **P** | **07 52 35.0** | **+1.3** |
| | baz=346,slow=6.5,SNR=1.8 | | | | | | |

**NOU 22 07:45:17.8, 30°.57S×121°.51E, h0km, MLv4.4/10, Western Australia, Western Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMBL** | **Kambalda** | **0.86** | **158** | P | Pg | 07 45 33.9 | -0.3 |
| **KLBR** | **Kellerberrin** | **3.38** | **252** | P | Pn | 07 46 12.4 | +0.6 |
| **BLDU** | **Ballidu** | **4.14** | **268** | P | Pn | 07 46 21.4 | -0.9 |
| **NWAO** | **Narrogin (SRO)** | **4.33** | **236** | P | Pn | 07 46 24.6 | -0.4 |
| **MEEK** | **Meekatharra** | **4.67** | **326** | P | Pn | 07 46 29.4 | -0.3 |
| **MUN** | **Mundaring** | **4.75** | **251** | P | Pn | 07 46 30.8 | +0.1 |
| **MORW** | **Morawa** | **4.98** | **286** | P | Pn | 07 46 33.6 | -0.3 |
| **RKGY** | **Rocky Gully** | **5.55** | **222** | P | Pn | 07 46 41.9 | +0.2 |
| **FORT** | **Forrest** | **5.65** | **94** | P | Pn | 07 46 43.0 | 0.0 |
| **WRKA** | **Warakurna** | **8.15** | **49** | P | Pn | 07 47 17.4 | -0.1 |

*IDC **22** 07:48:24.9±1.4,6°.81N×125°.96E,h0km,mb4.2/6, mbtmp4.2/6,Error ellipse: s-maj=87.7km s-min=18.5km az=64.0*

**ISC 22 07:48:31.6±1.8, 6°.8N±0°.3×126°.1E±0°.5, h53km, n6, σ0s54/6, mb4.0/6, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **27.81** | **163** | P | **P** | **07 54 16.7** | **+0.7** |
| | 1.3nm,0.3s,baz=340,slow=9.2,SNR=12 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.85** | **296** | P | **P** | **07 54 25.5** | **+0.1** |
| | 1.2nm,0.3s,baz=109,slow=9.7,SNR=2.3 | | | | | | |
| | 1.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **31.25** | **166** | P | **P** | **07 54 46.1** | **-0.4** |
| | 1.5nm,0.5s,baz=342,slow=7.2,SNR=20 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.67** | **324** | P | **P** | **07 57 55.3** | **0.0** |
| | 1.2nm,0.4s,baz=121,slow=7.9,SNR=20 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.56** | **332** | P | **P** | **07 58 15.9** | **+0.2** |
| | 0.8nm,0.5s,baz=111,slow=7.9,SNR=1.8 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.81** | **327** | P | **P** | **07 58 24.1** | **-0.5** |
| | 1.4nm,0.5s,baz=130,slow=6.5,SNR=15 | | | | | | |
| | 1.4nm,0.5s | | | | | | |

**IDC 22 07:49:37.9±4.0, 53°.57N×87°.91E, h0km, mbtmp2.6/2, ML2.3/2, Error ellipse: s-maj=38.5km s-min=19.6km az=52.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.87** | **283** | I | I | 08 00 50.0 | |
| | baz=99,slow=324,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.87** | **283** | Pg | Pb | 07 50 12.7 | -0.3 |
| | 0.1nm,0.3s,baz=102,slow=14,SNR=1.6 | | | | | | |
| ZALV | | | | Lg | Lg | 07 50 36.7 | |
| | 0.4nm,0.3s,baz=100,slow=25,SNR=1.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.49** | **247** | Pn | Pn | 07 51 15.4 | +0.8 |
| | baz=64,slow=15,SNR=1.9 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.69** | **210** | Pn | Pn | 07 51 31.8 | +0.7 |
| | 0.1nm,0.3s,baz=30,slow=14,SNR=1.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**TRN 22 07:50:02.5, 16°.91N×61°.18W, h24km, MD4.1, South-east of Antigua., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABD** | **La Joyeuse, An** | **0.52** | **214** | *e*P | Pn | 07 50 15.3 | +0.9 |
| **ANBD** | **Bethesda, Anti** | **0.57** | **284** | *e*P | Pn | 07 50 16.2 | +1.1 |
| ANBD | | | | *e*S | Sn | 07 50 25.0 | +1.1 |
| **CBE** | **Ff, Capester** | **0.93** | **206** | *e*P | Pn | 07 50 21.6 | +1.5 |
| **ANWB** | **Willy Bob** | **0.95** | **323** | *e*P | Pn | 07 50 21.2 | +0.9 |
| ANWB | | | | *e*S | Sn | 07 50 34.5 | +1.4 |
| **MAGL** | **Barre de l'ile** | **0.96** | **186** | *e*P | Pb | 07 50 21.8 | +1.3 |
| **MBWH** | | **0.98** | **260** | *e*P | Pb | 07 50 22.8 | +1.9 |
| MBWH | | | | *e*S | Sn | 07 50 37.3 | +3.4 |
| **MLYT** | **Lee's Yard** | **0.98** | **259** | *e*P | Pb | 07 50 22.8 | +1.8 |
| MLYT | | | | *e*S | Sn | 07 50 37.4 | +3.3 |
| **MBFL** | **Flemmings, Mon** | **1.00** | **261** | *e*P | Pb | 07 50 23.3 | +2.1 |
| MBFL | | | | *e*S | Sn | 07 50 37.3 | +2.9 |
| **TBG** | **Guadaloupe-3** | **1.14** | **203** | *e*P | Pb | 07 50 25.1 | +1.4 |
| TBG | | | | *e*S | Sb | 07 50 40.3 | +2.2 |
| **TDBA** | **Terre de Bas,** | **1.14** | **202** | *e*P | Pb | 07 50 25.0 | +1.3 |
| **SKOC** | **St. Kitts, UWI** | **1.53** | **285** | *e*P | Pb | 07 50 30.3 | +0.1 |
| SKOC | | | | *e*S | Sb | 07 50 50.6 | +1.4 |
| **SKI** | **Saint Kitts** | **1.54** | **286** | *e*P | Pb | 07 50 31.3 | +0.8 |
| SKI | | | | *e*S | Sb | 07 50 50.9 | +1.2 |
| **SVN** | **Savane Anatole** | **2.06** | **180** | *e*P | Pb | 07 50 38.4 | -0.9 |
| SVN | | | | *e*S | Sn | 07 51 01.9 | +1.3 |
| **PCM** | **Pelee Case Pet** | **2.08** | **181** | *e*P | Pb | 07 50 38.2 | -1.5 |
| **GBMF** | **Grand Be** | **2.10** | **180** | *e*P | Pb | 07 50 38.3 | -1.7 |
| **PML** | **Morne Lenard** | **2.12** | **180** | *e*P | Pb | 07 50 38.5 | -1.7 |
| **ILAM** | **Ilet Lapin Mar** | **2.15** | **172** | *e*P | Pn | 07 50 37.8 | +1.0 |
| ILAM | | | | *e*S | Sb | 07 51 05.8 | -1.1 |
| **FDF** | **Fort de France** | **2.17** | **179** | *e*P | Pn | 07 50 38.5 | +1.3 |
| **LPMF** | **Morne Lapointe** | **2.33** | **175** | *e*P | Pn | 07 50 40.4 | +1.0 |
| **BIM** | **Bigot** | **2.38** | **177** | *e*P | Pb | 07 50 42.9 | -1.9 |
| BIM | | | | *e*S | Sb | 07 51 11.6 | -2.2 |
| **MPOM** | **Morne Pois Mar** | **2.47** | **173** | *e*P | Pn | 07 50 43.1 | +1.7 |
| **SLBI** | **Saint Lucia, B** | **2.88** | **176** | *e*P | Pn | 07 50 49.3 | +2.4 |
| SLBI | | | | *e*S | Sn | 07 51 22.2 | +1.4 |
| **SLAC** | **Saint Lucia, A** | **3.01** | **175** | *e*P | Pn | 07 50 51.3 | +2.6 |
| SLAC | | | | *e*S | Sn | 07 51 25.9 | +1.8 |
| **SLB** | **Belfond** | **3.07** | **177** | *e*P | Pn | 07 50 52.6 | +3.0 |
| SLB | | | | *e*S | Sn | 07 51 28.1 | +2.5 |
| **SVB** | **Belmont** | **3.62** | **181** | *e*P | Pn | 07 50 59.3 | +2.2 |
| **SVT** | **Saint Vincent** | **3.72** | **181** | *e*P | Pn | 07 50 59.9 | +1.3 |
| **SVOC** | **Richmond Hill,** | **3.74** | **181** | *e*P | Pn | 07 50 59.9 | +1.1 |
| **GRGR** | **Grenville** | **4.77** | **186** | *e*P | Pn | 07 51 15.1 | +2.1 |
| **AOPR** | **Arecibo Observ** | **5.50** | **286** | *e*P | Pn | 07 51 25.2 | +2.2 |

*SOME **22** 08:00:18.4,39°.20N×73°.90E,h10km,MS3.9*
*IDC **22** 08:00:19.5±0.7,39°.09N×73°.96E,h0km,mb4.1/20, mbtmp4.1/26,ML3.4/6,MS3.2/9,Error ellipse: s-maj=14.1km s-min=11.0km az=130.0*
*KRNET **22** 08:00:22.0±0.1,39°.46N×74°.18E,h14km,mb4.3*
*NNC **22** 08:00:24.0±1.8,39°.34N×74°.01E,h0km,mb4.9,mpv4.5, Error ellipse: s-maj=14.7km s-min=9.8km az=168.0*
*MOS **22** 08:00:25.9±1.2,39°.34N×73°.97E,h58km,mb4.2/10,Error ellipse: s-maj=7.1km s-min=3.8km az=90.8*
*NEIC **22** 08:00:28.4±2.7,39°.33N±0°.06×73°.93E±0°.08,h62km±11km, mb4.4/10,Error ellipse: s-maj=9.5km s-min=8.3km az=69.0*

**ISC 22 08:00:22.0±1.2, 39°.40N±0°.03×74°.14E±0°.02, h13km±8km, n215, σ2s57/253, mb4.1/26, MS3.3/9, 38C-27D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.79** | **322** | ⇓*i*P | **Pg** | **08 00 36.7** | **-0.6** |
| | baz=17 | | | | | | |
| SFK | | | | ⇓*e*S | **Sb** | **08 00 47.7** | **-0.6** |
| | baz=17 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.79** | **322** | *e*P | **Pg** | **08 00 36.7** | **-0.6** |
| SFK | | | | *e*S | **Sb** | **08 00 47.7** | **-0.6** |
| **KSH** | **Kashi** | **1.43** | **85** | Pg | **Pn** | **08 00 43.0** | **-4.7** |
| KSH | | | | Sg | **Sn** | **08 00 58.3** | **-8.0** |
| KSH | | | | smax | smax | | |
| | comp=N,2μm,0.9s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,2μm,0.9s | | | | | | |
| **OHH** | **Osh** | **1.53** | **318** | ⇑*e*P | **Pb** | **08 00 50.4** | **+0.1** |
| | baz=15 | | | | | | |
| OHH | | | | ⇑*e*S | **Sg** | **08 01 11.1** | **-0.3** |
| | baz=15 | | | | | | |
| **OHH** | **Osh** | **1.53** | **318** | *e*P | **Pb** | **08 00 50.4** | **+0.1** |
| OHH | | | | *e*S | **Sg** | **08 01 11.1** | **-0.3** |
| **DRK** | **Karamyk** | **1.81** | **273** | | **Pb** | **08 00 55.7** | **-0.5** |
| **DRK** | **Karamyk** | **1.81** | **273** | ⇑*e*P | **Pb** | **08 00 56.3** | **+1.1** |
| | baz=72 | | | | | | |
| DRK | | | | ⇑*e*S | **Sg** | **08 01 21.3** | **+0.9** |
| | baz=72 | | | | | | |
| **DRK** | **Karamyk** | **1.81** | **273** | PN | **Pb** | **08 00 55.7** | **+0.5** |
| **ARSB** | **Arslanbob** | **2.12** | **336** | Pn | **Pg** | **08 01 01.6** | **-1.0** |
| **ARSB** | **Arslanbob** | **2.12** | **336** | ⇑*e*P | **Pb** | **08 01 00.0** | **-0.3** |
| | baz=34 | | | | | | |
| ARSB | | | | ⇑*e*S | **Sg** | **08 01 27.9** | **-2.2** |
| | baz=34 | | | | | | |
| **ARSB** | **Arslanbob** | **2.12** | **336** | PN | **Pg** | **08 01 01.6** | **-1.0** |
| **ARLS** | **Aral** | **2.46** | **3** | ⇓*i*P | **Pb** | **08 01 04.6** | **-1.6** |
| | baz=3.0 | | | | | | |
| ARLS | | | | ⇓*e*S | **Sb** | **08 01 35.7** | **-0.8** |
| | baz=3.0 | | | | | | |
| **ARLS** | **Aral** | **2.46** | **3** | *e*PN | **Pb** | **08 01 04.6** | **-1.6** |
| ARLS | | | | *e*S | **Sb** | **08 01 35.7** | **-0.8** |
| **NRN** | **Naryn** | **2.48** | **34** | Pn | **Pg** | **08 01 07.9** | **-1.7** |
| **NRN** | **Naryn** | **2.48** | **34** | ⇑*e*P | **Pb** | **08 01 04.6** | **-2.0** |
| | baz=34 | | | | | | |
| NRN | | | | ⇑*e*S | **Sb** | **08 01 35.7** | **-1.5** |
| | baz=34 | | | | | | |
| **NRN** | **Naryn** | **2.48** | **34** | PN | **Pg** | **08 01 07.9** | **-1.7** |
| **BTK** | **Batken** | **2.64** | **285** | | **Pb** | **08 01 08.2** | **-1.0** |
| **BTK** | **Batken** | **2.64** | **285** | ⇑*i*P | **Pb** | **08 01 08.1** | **-1.1** |
| | baz=84 | | | | | | |
| BTK | | | | ⇑*e*S | **Sb** | **08 01 41.8** | **+0.2** |
| | baz=84 | | | | | | |
| **BTK** | **Batken** | **2.64** | **285** | PN | **Pb** | **08 01 08.2** | **-1.0** |
| **AML** | **Almayashu** | **2.75** | **353** | P | **Pg** | **08 01 12.1** | **-2.7** |
| | SNR=29 | | | | | | |
| **AML** | **Almayashu** | **2.75** | **353** | ⇑*i*P | **Pb** | **08 01 08.9** | **-2.4** |
| | baz=52 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **08 01 43.2** | **-1.8** |
| | baz=52 | | | | | | |
| **AML** | **Almayashu** | **2.75** | **353** | *e*PN | **Pb** | **08 01 08.9** | **-2.4** |
| AML | | | | *e*S | **Sb** | **08 01 43.2** | **-1.8** |
| **UCH** | **Uchtor** | **2.84** | **6** | P | **Pg** | **08 01 14.1** | **-2.4** |
| | SNR=59 | | | | | | |
| **ARK** | **Arkit** | **2.91** | **326** | ⇑*e*P | **Pb** | **08 01 11.3** | **-2.6** |
| | baz=25 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **08 01 47.3** | **-2.1** |
| | baz=25 | | | | | | |
| **ARK** | **Arkit** | **2.91** | **326** | *e*PN | **Pb** | **08 01 11.3** | **-2.6** |
| ARK | | | | *e*S | **Sb** | **08 01 47.3** | **-2.1** |
| **TRKS** | **Terek-Say** | **3.13** | **314** | ⇓*i*P | **Pn** | **08 01 13.5** | **+2.4** |
| | baz=12 | | | | | | |
| TRKS | | | | ⇓*e*S | **Sn** | **08 01 51.2** | **+2.9** |
| | baz=12 | | | | | | |
| **TRKS** | **Terek-Say** | **3.13** | **314** | *i* PN | **Pn** | **08 01 13.5** | **+2.4** |
| TRKS | | | | *e*S | **Sn** | **08 01 51.2** | **+2.9** |
| **AAK** | **Ala-Archa** | **3.25** | **5

baz=38
**MNAS Manas 3.33 339** *e*PN **Pb 08 01 16.8 -4.1**
MNAS *e*S **Sb 08 01 56.9 -4.4**
**BOOM Boomskoye usch 3.38 23**⇑*e*P **Pb 08 01 17.2 -4.6**
baz=23
BOOM ⇑*e*S **Sb 08 01 57.5 -5.3**
baz=23
**MRKS Merke 3.42 349** *e*P **Pb 08 01 23.7 +1.3**
comp=E,35nm,0.5s
MRKS *e*S **Sg 08 02 10.7 -0.9**
comp=E,455nm,0.9s
**MRKS Merke 3.42 349** Lg Lg 08 02 10.7
comp=E,455nm,0.9s
**FRU1 Bishkek 3.43 6** P **Pb 08 01 21.2 -1.4**
**FRU1 Bishkek 3.43 6**⇑*e*P **Pb 08 01 18.3 -4.3**
baz=6.0
FRU1 ⇑*i*S **Sb 08 01 59.3 -4.9**
baz=6.0
**FRU1 Bishkek 3.43 6** PN **Pb 08 01 21.2 -1.4**
**KDJ Kajisay 3.58 39**⇓*e*P **Pn 08 01 20.1 +2.8**
baz=40
KDJ ⇓*e*S **Sb 08 02 02.6 -5.9**
baz=40
**KDJ Kajisay 3.58 39** *e*PN **Pn 08 01 20.1 +2.8**
**CHMS Chumysh 3.63 7** P **Pb 08 01 25.0 -0.9**
SNR=15
**CHMS Chumysh 3.63 7** Pn **Pb 08 01 23.8 -2.2**
CHMS Lg Lg 08 02 25.7
**CHMS Chumysh 3.63 7**⇓*e*P **Pn 08 01 20.7 +2.8**
baz=7.0
CHMS ⇓*e*S **Sb 08 02 03.5 -6.4**
baz=7.0
**CHMS Chumysh 3.63 7** *e*PN **Pn 08 01 20.7 +2.8**
**TKM2 Tokmak 2 3.69 17** P **Pb 08 01 25.8 -1.3**
SNR=13
**TKM2 Tokmak 2 3.69 17** ⇓Pn **Pb 08 01 24.6 -2.5**
comp=E,187nm,1.1s
TKM2 ⇑Lg Lg 08 02 27.9
comp=E,137nm,0.7s
**TKM2 Tokmak 2 3.69 17**⇑*e*P **Pn 08 01 21.6 +2.7**
baz=17
TKM2 ⇑*e*S **Sn 08 02 05.2 +2.9**
baz=17
**TKM2 Tokmak 2 3.69 17** PN **Pb 08 01 24.6 -2.5**
**USP Ospenovka 3.88 4** P **Pb 08 01 28.3 -1.9**
SNR=19
**USP Ospenovka 3.88 4**⇑*e*P **Pn 08 01 24.1 +2.8**
baz=4.0
USP ⇑*e*S **Sn 08 02 09.6 +3.0**
baz=4.0
**USP Ospenovka 3.88 4** *e*PN **Pn 08 01 24.1 +2.8**
**KST Kastek 3.89 20** *e*P **Pg 08 01 34.7 -1.9**
comp=E,116nm,1.1s
KST *e*S **Sg 08 02 29.8 +2.8**
comp=E,281nm,0.8s
**KST Kastek 3.89 20** Pg **Pg 08 01 34.7 -1.9**
comp=E,116nm,1.1s
KST Lg Lg 08 02 29.8
comp=E,281nm,0.8s
**DGS Degeres 4.03 17** *e*P **Pg 08 01 37.5 -1.7**
comp=E,129nm,1.1s
DGS *e*S **Sg 08 02 34.7 +3.2**
comp=E,138nm,0.7s
**DGS Degeres 4.03 17** Pg **Pg 08 01 37.5 -1.7**
comp=E,129nm,1.1s
DGS Lg Lg 08 02 34.7
comp=E,138nm,0.7s
**SIMJ Simiganj 4.06 261** Pn **Pn 08 01 25.2 +1.3**
**SGDS Sogindy 4.07 5** Lg Lg 08 02 35.6
comp=E,162nm,0.9s
**MTBS Maitube 4.11 24** *e*P **Pg 08 01 38.8 -1.9**
comp=E,44nm,0.5s
MTBS *e*S **Sg 08 02 36.8 +2.9**
comp=E,54nm,0.7s
**MTBS Maitube 4.11 24** Pg **Pg 08 01 38.8 -1.9**
comp=E,44nm,0.5s
MTBS Lg Lg 08 02 36.8
comp=E,54nm,0.7s
**TNSS Tian-Shan 4.21 29** *e*P **Pg 08 01 41.6 -1.0**
comp=E,74nm,0.5s
TNSS *e*S **Sg 08 02 41.6 +4.5**
comp=E,76nm,0.6s
**TNSS Tian-Shan 4.21 29** Pg **Pg 08 01 41.6 -1.0**
comp=E,74nm,0.5s
TNSS Lg Lg 08 02 41.6
comp=E,76nm,0.6s
**AAA Alma-Ata 4.34 28** *e*P **Pg 08 01 44.2 -1.0**
comp=E,193nm,0.3s
AAA *e*S **Sg 08 02 46.0 +4.6**
comp=E,403nm,0.9s
**AAA Alma-Ata 4.34 28** Pg **Pg 08 01 44.2 -1.0**
comp=E,193nm,0.3s
AAA Lg Lg 08 02 46.0
comp=E,403nm,0.9s
**MDOK Medeo 4.35 29** *e*P **Pg 08 01 43.6 -1.8**
comp=E,90nm,0.9s
MDOK *e*S **Sg 08 02 45.2 +3.4**
**MDOK Medeo 4.35 29** ⇓Pn **Pb 08 01 34.8 -3.7**
comp=E,17nm,0.8s
MDOK Pg **Pg 08 01 43.6 -1.8**
comp=E,90nm,0.9s
MDOK ⇓Pg **Pg 08 01 46.2 +0.8**
comp=E,134nm,0.9s
MDOK Lg Lg 08 02 45.2
comp=E,187nm,1.7s
MDOK ⇑Lg Lg 08 02 50.0
comp=E,237nm,0.8s
**MDOK Medeo 4.35 29** PN **Pb 08 01 34.7 -3.7**
**KNDC Almaty 4.37 28** ⇑Pg **Pg 08 01 46.8 +1.1**
comp=E,386nm,0.8s
KNDC ⇑Lg Lg 08 02 50.3
comp=E,1μm,1.1s
**KNDC Almaty 4.37 28** PN **Pg 08 01 44.8 -0.9**
**KOTS Kotyrbulak 4.44 29** *e*P **Pg 08 01 45.6 -1.4**
comp=E,109nm,0.6s
KOTS *e*S **Sg 08 02 48.6 +4.1**
comp=E,345nm,1.1s
**KOTS Kotyrbulak 4.44 29** Pg **Pg 08 01 45.6 -1.4**
comp=E,109nm,0.6s
KOTS Lg Lg 08 02 48.6
comp=E,345nm,1.1s
**KRBS Karabastau 4.45 15** *e*P **Pg 08 01 44.8 -2.4**
comp=E,32nm,0.5s
KRBS *e*S **Sg 08 02 47.1 +2.4**
comp=E,91nm,0.7s
**KRBS Karabastau 4.45 15** Pg **Pg 08 01 44.8 -2.4**
comp=E,32nm,0.5s
KRBS Lg Lg 08 02 47.1
comp=E,91nm,0.7s
**PRZ Przheval'sk 4.46 45**⇓*e*P **Pn 08 01 32.6 +3.1**
baz=45
PRZ ⇓*e*S **Sn 08 02 24.3 +3.0**
baz=45
**KK31 Karatay Array 4.60 325** Pn Pn 08 01 35.9 +4.6
**KK31 Karatay Array 4.60 325** ⇑Pn Pn 08 01 36.0 +4.8
comp=E,7.8nm,0.3s,baz=147,slow=15,SNR=168
KK31 ⇑Sn **Sb 08 02 31.0 -6.8**
comp=E,50nm,0.5s,baz=156,slow=25
KK31 ⇑Lg Lg 08 02 51.1
comp=E,124nm,0.8s,baz=144,slow=29
**KK31 Karatay Array 4.60 325** *i* PN **Pn 08 01 34.6 +3.4**
KK31 08 02 30.4
**KKAR Karatay Array 4.60 325** Pn Pn 08 01 36.0 +4.7
**KKAR Karatay Array 4.60 325** Pn 08 01 36.1 +4.8
**KKAR Karatay Array 4.60 325**⇑*e*P **Pn 08 01 34.6 +3.4**
baz=24
KKAR ⇑*e*S **Sn 08 02 27.7 +3.2**
baz=24
**KKAR Karatay Array 4.60 325** PN Pn 08 01 36.0 +4.8
**KTBS Karatobe 4.71 23** *e*P **Pg 08 01 50.5 -1.8**
comp=E,72nm,0.5s
KTBS *e*S **Sg 08 02 56.8 +3.4**
comp=E,216nm,0.8s
**KTBS Karatobe 4.71 23** Pg **Pg 08 01 50.4 -1.8**
comp=E,72nm,0.5s
KTBS Lg Lg 08 02 56.8
comp=E,216nm,0.8s
**KUU Kurty 4.78 19** *e*P **Pg 08 01 51.3 -2.3**
KUU *e*S **Sg 08 02 58.1 +2.5**
comp=E,246nm,0.9s
**KUU Kurty 4.78 19** Pg **Pg 08 01 51.3 -2.3**
KUU Lg Lg 08 02 58.1
comp=E,246nm,0.9s
**SATY Saty 4.87 40** *e*P **Pg 08 01 53.0 -2.2**
comp=E,77nm,0.7s
SATY *e*S **Sg 08 03 01.0 +2.7**
comp=E,190nm,1.7s
**SATY Saty 4.87 40** Pg **Pg 08 01 53.0 -2.2**
comp=E,77nm,0.7s
SATY Lg Lg 08 03 01.0
comp=E,190nm,1.7s
**CHKK Chushkaly 4.94 25** *e*P **Pg 08 01 54.6 -2.0**
comp=E,41nm,0.9s
CHKK *e*S **Sg 08 03 04.0 +3.5**
comp=E,98nm,0.7s
**CHKK Chushkaly 4.94 25** Pg **Pg 08 01 54.6 -2.0**
comp=E,41nm,0.9s
CHKK Lg Lg 08 03 04.0
comp=E,98nm,0.7s
**ZHN Zhinishke 4.97 39** *e*P **Pg 08 01 54.3 -2.8**
comp=E,41nm,0.8s
ZHN *e*S **Sg 08 03 03.2 +1.8**
comp=E,104nm,1.1s
**KURS Kuram 5.09 35** *e*P **Pg 08 01 58.0 -1.4**
comp=E,42nm,0.9s
KURS *e*S **Sg 08 03 09.5 +4.2**
comp=E,101nm,1.3s
**KURS Kuram 5.09 35** Pg **Pg 08 01 58.0 -1.4**
comp=E,42nm,0.9s
KURS Lg Lg 08 03 09.5
comp=E,101nm,1.3s
**UZB Uzynbulak 5.25 43** *e*P **Pg 08 02 00.4 -2.1**
comp=E,39nm,0.7s
UZB *e*S **Sg 08 03 14.0 +3.5**
comp=E,61nm,1.1s
**UZB Uzynbulak 5.25 43** Pg **Pg 08 02 00.4 -2.1**
comp=E,39nm,0.7s
UZB Lg Lg 08 03 14.0
comp=E,61nm,1.1s
**KPKS Kokpek 5.31 39** *e*P **Pg 08 02 00.3 -3.3**
comp=E,34nm,0.5s
KPKS *e*S **Sg 08 03 13.7 +1.3**
comp=E,81nm,0.8s
**KPKS Kokpek 5.31 39** Lg Lg 08 03 13.7
comp=E,81nm,0.8s
**SHLS Shalkode 5.49 45** *e*P **Pg 08 02 09.8 +2.6**
comp=E,53nm,0.5s
SHLS *e*S Sg 08 03 29.8 +11
comp=E,120nm,1.2s
**SHLS Shalkode 5.49 45** Pg **Pg 08 02 09.8 +2.6**
comp=E,53nm,0.5s
SHLS Lg Lg 08 03 29.8
comp=E,120nm,1.2s
**ARXS Arharly 5.54 29** *e*P **Pg 08 02 06.4 -1.7**
comp=E,44nm,0.6s
ARXS *e*S **Sg 08 03 24.1 +4.2**
comp=E,92nm,0.8s
**ARXS Arharly 5.54 29** Pg **Pg 08 02 06.4 -1.7**
comp=E,44nm,0.6s
ARXS Lg Lg 08 03 24.2
comp=E,92nm,0.8s
**PDGK Podgornoye 5.62 44** ⇑Pn Pn 08 01 51.1 +5.8
comp=E,5.9nm,0.6s
PDGK ⇓Pg **Pg 08 02 09.8 +0.1**
comp=E,40nm,0.7s
PDGK ⇑Lg Lg 08 03 30.0
comp=E,202nm,1.1s
**PDGK Podgornoye 5.62 44** PN Pn 08 01 50.1 +4.7
**BTLS Baital 5.64 359** *e*P **Pg 08 02 06.8 -3.2**
comp=E,17nm,0.8s
BTLS *e*S **Sg 08 03 24.8 +1.8**
comp=E,48nm,1.3s
**BTLS Baital 5.64 359** Pg **Pg 08 02 06.8 -3.2**
comp=E,17nm,0.8s
BTLS Lg Lg 08 03 24.8
comp=E,48nm,1.3s
**BLB Baldybastay 5.71 33** Pg **Pg 08 02 09.8 -1.4**
comp=E,161nm,0.8s
BLB Lg Lg 08 03 30.0
comp=E,133nm,1.1s
**NIL Nilore 5.78 187** Pn **Pn 08 01 49.9 +2.4**
**NIL Nilore 5.78 187** PN **Pn 08 01 49.9 +2.4**
**KNOS Konyrlen 6.22 36** Pg **Pg 08 02 20.1 -1.0**
comp=E,17nm,0.9s
**KBL Kabul 6.33 222** Pn **Pn 08 01 56.3 +1.1**
**KBL Kabul 6.33 222** PN **Pn 08 01 56.3 +1.1**
**TDK Taldyqorghan 6.43 28** *e*P **Pg 08 02 23.1 -2.0**
comp=E,124nm,0.8s
TDK *e*S **Sg 08 03 52.6 +4.2**
comp=E,194nm,1.1s
**TDK Taldyqorghan 6.43 28** Pg **Pg 08 02 23.1 -2.0**
comp=E,124nm,0.8s
TDK Lg Lg 08 03 52.6
comp=E,194nm,1.1s
**DJR Jarkent 6.49 39** *e*P **Pg 08 02 25.1 -1.0**
comp=E,16nm,0.8s
DJR *e*S **Sg 08 03 56.3 +6.2**
comp=E,43nm,1.0s
**DJR Jarkent 6.49 39** Pg **Pg 08 02 25.2 -1.0**
comp=E,16nm,0.8s
**THN Thein Dam 7.07 169** *e*P **Pn 08 02 08.2 +3.1**
THN *e*S **Sn 08 03 24.1 -1.1**
THN IAML 08 03 30.0
comp=E,154nm,0.5s
THN IAML 08 03 34.2
comp=N,228nm,1.0s
**HNLY HANLEY 7.68 148** *e*P **Pn 08 02 15.2 +1.2**
HNLY *e*S **Sn 08 03 37.6 -3.4**
**BHK Bhakra 8.18 166** *e*P **Pn 08 02 22.2 +1.9**
BHK *e*S **Sn 08 03 49.2 -3.4**
BHK *e*S **Sn 08 03 50.0 -2.6**
BHK IAML 08 04 01.3
comp=N,109nm,0.4s
BHK IAML 08 04 01.7
comp=E,94nm,0.9s
**KLP Kalpa 8.53 156** *e*P **Pn 08 02 26.6 +1.1**
KLP *e*S **Sn 08 04 00.2 -1.6**
KLP IAML 08 04 06.4
comp=N,92nm,0.8s
KLP IAML 08 04 07.2
comp=E,133nm,0.9s
**OTUK Ortayu 8.94 352** ⇑Pn **Pn 08 02 34.6 +3.8**
comp=E,6.1nm,0.8s
OTUK ⇓Lg Lg 08 05 13.0
comp=E,46nm,0.8s
**OTUK Ortayu 8.94 352** P **Pn 08 02 32.9 +2.2**
**MAKZ Makanchi 9.36 35** Pn 08 02 42.1 +5.6
**MAKZ Makanchi 9.36 35** P Pn 08 02 42.1 +5.6
**MK31 Makanchi Array 9.49 36** Pn Pn 08 02 44.1 +5.7
**MK31 Makanchi Array 9.49 36** ⇓Pn Pn 08 02 44.0 +5.7
comp=E,3.2nm,0.7s,baz=215,slow=14,SNR=17
**MK31 Makanchi Array 9.49 36** *i* P Pn 08 02 45.0 +6.7
**MKAR Makanchi Array 9.49 36** Pn Pn 08 02 44.1 +5.7
**MKAR Makanchi Array 9.49 36** Pn Pn 08 02 44.5 +6.2
comp=E,0.2nm,0.3s,baz=214,slow=13,SNR=13
MKAR Sn Sn 08 04 33.5 +8.6
comp=E,0.3nm,0.3s,baz=219,slow=14,SNR=1.8
MKAR Lg Lg 08 05 22.9
comp=E,0.1nm,0.3s,baz=214,slow=13,SNR=2.3
comp=E,2.2nm,0.8s
**MKAR Makanchi Array 9.49 36** P Pn 08 02 44.1 +5.8
**HRA Herat 10.76 246** Pn **Pn 08 02 54.7 -1.2**
**PTH Pithoragarh 11.03 151** *e*P **Pn 08 02 59.6 +0.1**
PTH *e*S **Sn 08 04 55.1 -7.7**
**WMQ Urumqi 11.07 62** *e*P Pn 08 03 06.5 +6.5
**KUDL Kundal 11.39 169** *e*P **Pn 08 03 03.0 -1.4**
KUDL IAML 08 04 30.3
comp=N,13nm,0.6s
KUDL IAML 08 04 32.2
comp=E,12nm,0.8s
**KURBB Kurchatov Arra 11.64 14** Pn **Pn 08 03 11.3 +3.6**
comp=E,0.1nm,0.3s,baz=204,slow=13,SNR=2.0
KURBB Lg Lg 08 06 31.7
comp=E,0.1nm,0.3s,baz=206,slow=30,SNR=7.6
comp=E,0.4nm,0.6s
**KURK Kurchatov 11.75 14** Pn Pn 08 03 13.8 +4.7
**KURK Kurchatov 11.75 14** *i* P Pn 08 03 13.4 +4.3
**BVAR Borovoye Array 13.87 351** Pn **Pn 08 03 39.8 +1.7**
comp=E,0.1nm,0.3s,baz=166,slow=13,SNR=28
comp=E,6.3nm,0.8s
**BRVK Borovoye 13.92 350** **Pn 08 03 40.4 +1.6**
**BRVK Borovoye 13.92 350** P **Pn 08 03 40.4 +1.6**
**DGZ Jazzator, Alta 13.97 38** *i* P **Pn 08 03 41.8 +2.1**
**AB31 Akbulak array 14.13 319** P **Pn 08 03 43.9 +2.2**
**ABKAR Akbulak array 14.13 319** Pn **Pn 08 03 41.4 -0.3**
**ABKAR Akbulak array 14.13 319** Pn **Pn 08 03 40.6 -1.1**
**JHNI Jhansi 14.38 164** *e*P **Pn 08 03 43.5 -1.7**
**AKTO Aktyubinsk 15.84 319** Pn **Pn 08 04 04.7 +0.2**
comp=E,0.4nm,0.3s,baz=129,slow=13,SNR=8.0
comp=E,4.8nm,0.7s
**ZAA0 Zalesovo Array 16.27 23** **P 08 04 15.2 +2.3**
**ZALV Zalesovo Beam 16.27 23** **P 08 04 14.6 +1.6**
**ZALV Zalesovo Beam 16.27 23** Pn **P 08 04 12.9 0.0**
comp=E,0.4nm,0.3s,baz=201,slow=11,SNR=12
comp=E,2.0nm,0.4s
**ZALV Zalesovo Beam 16.27 23** *i* P **P 08 04 15.6 +2.6**
ZALV pmax pmax
comp=E,6.0nm,0.8s
**GTA Gaotai 19.82 82** *e*P **Pn 08 04 55.8 +1.8**
GTA sP sP 08 05 08.1 +8.4
GTA pmax pmax
comp=E,5.0nm,1.1s
**KNGR Kungurtug, Tuv 19.88 48** *i* P **Pn 08 04 54.5 -0.1**
KNGR pmax pmax
comp=E,6.0nm,1.0s
**ARU Arti 19.90 334** P **Pn 08 04 55.5 +0.9**
ARU IAmb IAmb 08 05 03.7
comp=E,13nm,1.0s
**ARU Arti 19.90 334** P **Pn 08 04 54.8 +0.2**
comp=E,3.2nm,0.4s,baz=150,slow=9.4,SNR=9.1
comp=E,3.2nm,0.4s
**ARU Arti 19.90 334***c* *i* P **Pn 08 04 57.7 +3.1**
ARU pmax pmax
comp=E,13nm,1.0s
**SHL Shillong 20.30 128** P **P 08 04 56.8 -1.0**
**SHL Shillong 20.30 128** P **P 08 04 56.8 -1.0**
SHL pmax pmax
comp=E,42nm,1.5s
**WSAR Wadi Sarin 20.81 224** P **P 08 04 59.8 -3.3**
comp=E,7.0nm,0.7s,baz=82,slow=8.3,SNR=5.7
comp=E,7.0nm,0.7s
**BELG Belogornoye 22.42 314** P **P 08 05 21.4 +1.3**
comp=E,11nm,0.8s,baz=78,slow=5.6,SNR=3.8
BELG LR LR 08 15 43.0
comp=E,39nm,19.0s,baz=72,slow=41
comp=E,11nm,0.8s
**BELG Belogornoye 22.42 314** *i* P **P 08 05 19.6 -0.5**
BELG pmax pmax
comp=E,3.0nm,0.9s
**GNI Garni 22.57 281** P **P 08 05 22.4 +0.4**
GNI IAmb IAmb 08 05 29.1
comp=E,16nm,0.9s
**GNI Garni 22.57 281** P **P 08 05 22.2 +0.1**
comp=E,5.4nm,0.5s,baz=242,slow=7.4,SNR=1.6
comp=E,5.4nm,0.5s
**GNI Garni 22.57 281** *i* P **P 08 05 20.1 -1.9**
GNI pmax pmax
comp=E,16nm,0.8s
**KBZ Khabaz 23.70 291** P **P 08 05 33.1 -0.2**
comp=E,2.5nm,0.9s,baz=111,slow=1.4,SNR=2.7
comp=E,2.5nm,0.9s
**KBZ Khabaz 23.70 291** *i* P **P 08 05 31.4 -1.9**
KBZ pmax pmax
comp=E,2.0nm,0.9s
**KIV Kislovodsk 23.85 291** *e*P **P 08 05 33.3 -1.6**
KIV pmax pmax
comp=E,5.0nm,1.0s
**SHA1 Shidzhatmaz 23.87 291** *i* P **P 08 05 33.3 -2.0**
**SONM Songino Array 24.68 59** P **P 08 05 46.1 +3.5**
comp=E,0.8nm,0.5s,baz=254,slow=10,SNR=5.6
comp=E,0.8nm,0.5s
**KIRV Kirov 24.89 329** *i* P **P 08 05 44.5 +0.4**
**ULN Ulaanbaatar 25.13 60** *i* P **P 08 05 50.0 +3.3**
ULN pmax pmax
comp=E,2.0nm,1.0s
**RAYN Ar Rayn 28.94 245** P **P 08 06 20.2 -0.8**
RAYN IAmb IAmb 08 06 21.8
comp=E,7.9nm,0.7s
**RAYN Ar Rayn 28.94 245** P **P 08 06 20.3 -0.8**
RAYN pmax pmax
comp=E,8.0nm,0.7s
**OBN Obninsk 29.51 315** *e*P **P 08 06 28.6 +2.9**
OBN *e* 08 07 20.8
OBN *e* 08 09 28.6
OBN pmax pmax
comp=E,4.0nm,0.9s
**CMAR Chiang Mai Arr 29.94 127** LR LR 08 20 34.5
comp=E,6.3nm,20.1s,baz=200,slow=41
**BR131 Keskin Array S 31.04 284** P **P 08 06 39.6 +0.1**
**BR131 Keskin Array S 31.04 284** *i* P **P 08 06 38.4 -1.2**
**BRTR Keskin Array B 31.04 284** P **P 08 06 38.8 -0.8**
**BRTR Keskin Array B 31.04 284** P **P 08 06 40.1 +0.5**
comp=E,1.8nm,0.9s,baz=90,slow=8.4,SNR=8.9
comp=E,1.8nm,0.9s
**BRTR Keskin Array B 31.04 284** P **P 08 06 38.8 -0.8**
**PALK Pallekele 32.52 168** LR LR 08 21 42.9
comp=E,90nm,18.3s,baz=117,slow=40
**AKASG Malin Array Be 33.20 305** P **P 08 06 58.8 +0.6**
comp=E,0.5nm,0.4s,baz=76,slow=6.5,SNR=2.1
AKASG LR LR 08 22 02.3
comp=E,58nm,18.4s,baz=66,slow=39
comp=E,0.5nm,0.4s
**AKBB Malin Array Si 33.20 305** *i* P **P 08 06 58.4 +0.2**
AKBB pmax pmax
comp=E,3.0nm,0.9s
**NACGM Naroch 34.99 312** *e*P **P 08 07 17.0 +3.2**
comp=E,377nm,0.8s,baz=96
**MLR Muntele Rosu 35.64 296** P **P 08 07 18.8 -0.8**
comp=E,1.5nm,0.6s,baz=129,slow=15,SNR=1.8
comp=E,1.5nm,0.6s
**FINES FINESS Array B 36.56 323** P **P 08 07 27.8 +0.7**
comp=E,1.9nm,0.4s,baz=122,slow=14,SNR=17
comp=E,1.9nm,0.4s
**ARCES ARCESS Array B 39.48 335** P **P 08 07 52.0 +0.4**
**ARCES ARCESS Array B 39.48 335** P **P 08 07 51.1 -0.5**
comp=E,3.4nm,0.9s,baz=98,slow=6.6,SNR=2.0
comp=E,3.4nm,0.9s
**VYHS Vyhne 40.06 302** *e*P **P 08 07 55.8 -0.9**
**VYHS Vyhne 40.06 302** *e*P **P 08 07 55.8 -0.9**
**VRAC Vranov 41.40 303** LR LR 08 28 49.0
comp=E,22nm,18.2s,baz=80,slow=41
**HFS Hagfors 42.39 320** P **P 08 08 16.2 +0.5**
comp=E,2.7nm,0.7s,baz=92,slow=16,SNR=6.0
comp=E,2.7nm,0.7s
**NB2 NORSAR Subarra 43.62 321** P **P 08 08 26.3 +0.6**
comp=E,4.1nm,0.9s,baz=92,slow=8.6
**NOA NORSAR Array B 43.62 321** P **P 08 08 26.1 +0.4**
comp=E,1.6nm,0.7s,baz=92,slow=7.8,SNR=5.4
comp=E,1.6nm,0.7s
**DAVOX Davos/Dischmat 46.33 301** LR LR 08 30 43.8
comp=E,25nm,19.1s,baz=79,slow=39
**BILL Bilibino 54.91 27** *e*P **P 08 09 55.5 +3.7**
BILL *e* 08 10 56.1
BILL *e* 08 11 59.7
BILL *e*PPP PPP 08 13 10.6
BILL pmax pmax
comp=E,2.0nm,1.0s
**ESDC Sonseca Array 58.31 297** P **P 08 10 15.8 -0.8**
comp=E,0.4nm,0.6s,baz=57,slow=7.4,SNR=5.8
comp=E,0.4nm,0.6s
**TORD Torodi Ar. Bea 68.25 269** P **P 08 11 21.8 -0.9**
comp=E,3.0nm,0.6s,baz=47,slow=5.8,SNR=28
TORD LR LR 08 47 11.6
comp=E,20nm,18.7s,baz=176,slow=41
comp=E,3.0nm,0.6s
**IL31 71.30 17** P **P 08 11 43.2 +2.6**
IL31 IAmb IAmb 08 11 47.5
comp=E,3.1nm,0.9s
**ILAR Eielson Array 71.30 17** P **P 08 11 41.7 +1.0**
**ILAR Eielson Array 71.30 17** P **P 08 11 41.0 +0.3**
comp=E,0.9nm,0.8s,baz=316,slow=4.4,SNR=9.8
comp=E,0.9nm,0.8s
**ILAR Eielson Array 71.30 17** P **P 08 11 41.7 +1.0**
**DBIC Dimbokro 77.30 268** P **P 08 12 14.6 -1.8**
comp=E,3.4nm,0.7s,baz=41,slow=6.8,SNR=5.4
comp=E,3.4nm,0.7s
**YKA Yellowknife Ar 78.21 4** P **P 08 12 20.9 +0.1**
comp=E,0.5nm,0.6s,baz=349,slow=6.3,SNR=2.5
comp=E,0.5nm,0.6s
**WRA Warramunga Arr 81.49 124** P **P 08 12 38.5 -0.7**
comp=E,1.5nm,0.7s,baz=325,slow=5.1,SNR=23
comp=E,1.5nm,0.7s
**ASAR Alice Springs 83.95 127** P **P 08 12 51.2 -0.6**
comp=E,1.3nm,0.8s,baz=311,slow=5.1,SNR=12
ASAR LR LR 08 55 20.4
comp=E,49nm,18.3s,baz=347,slow=39
comp=E,1.3nm,0.8s
**PDAR Pinedale Array 98.15 3** LR LR 09 03 36.6
comp=E,12nm,18.2s,baz=308,slow=39

*IDC* ***22*** *08:01:41.8±0.8,39.˚10N×74.˚04E,h0km,mb3.9/16, mbtmp3.9/21,ML3.4/5,MS3.1/1, Error ellipse: s-maj=16.5km s-min=14.6km az=102.0*
*KRNET* ***22*** *08:01:45.1±0.1,39.˚47N×74.˚16E,h14km,mb4.3*
*SOME* ***22*** *08:01:45.5,39.˚40N×73.˚83E,h5km,MS3.7*
**ISC 22 08:01:44.3±1.4,39.˚33N±0.˚04×74.˚07E±0.˚03,h10km±8km, n62,σ1§40/100,mb3.8/14,28C-16D,Southern Xinjiang**

Code Station Name Δ° AZ° Phase ID Time Res
Op ISC h m s ISC

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.81** | **327** | ⇑ | *e* | P | **Pg** | 08 01 59.3 | **-0.6** |
| | baz=17 | | | | | | | | |
| SFK | | | | ⇑ | *i* | S | **Sg** | 08 02 09.7 | **-0.7** |
| | baz=17 | | | | | | | | |
| **OHH** | **Osh** | **1.54** | **321** | ⇑ | *e* | P | **Pb** | 08 02 12.8 | **-0.2** |
| | baz=15 | | | | | | | | |
| OHH | | | | ⇑ | *i* | S | **Sg** | 08 02 33.1 | **-0.9** |
| | baz=15 | | | | | | | | |
| **DRK** | **Karamyk** | **1.76** | **275** | ⇑ | *e* | P | **Pg** | 08 02 18.9 | **+0.8** |
| | baz=71 | | | | | | | | |
| DRK | | | | ⇑ | *i* | S | **Sg** | 08 02 43.5 | **+2.5** |
| | baz=71 | | | | | | | | |
| **ARSB** | **Arslanbob** | **2.15** | **338** | ⇑ | *e* | P | **Pb** | 08 02 22.4 | **-1.0** |
| | baz=34 | | | | | | | | |
| ARSB | | | | ⇑ | *i* | S | **Sb** | 08 02 49.7 | **-0.6** |
| | baz=34 | | | | | | | | |
| **ARLS** | **Aral** | **2.53** | **4** | ⇓ | *e* | P | **Pn** | 08 02 26.9 | **+1.4** |
| | baz=3.0 | | | | | | | | |
| ARLS | | | | ⇓ | *i* | S | **Sn** | 08 02 57.5 | **+1.0** |
| | baz=3.0 | | | | | | | | |
| **NRN** | **Naryn** | **2.56** | **35** | ⇑ | *e* | P | **Pn** | 08 02 27.0 | **+0.9** |
| | baz=35 | | | | | | | | |
| NRN | | | | ⇑ | *i* | S | **Sn** | 08 02 57.7 | **+0.2** |
| | baz=35 | | | | | | | | |
| **BTK** | **Batken** | **2.61** | **287** | ⇓ | *e* | P | **Pb** | 08 02 30.6 | **-0.5** |
| | baz=84 | | | | | | | | |
| BTK | | | | ⇓ | *i* | S | **Sb** | 08 03 03.7 | **+0.4** |
| | baz=84 | | | | | | | | |
| **AML** | **Almayashu** | **2.81** | **354** | ⇑ | *i* | P | **Pn** | 08 02 31.3 | **+1.7** |
| | baz=53 | | | | | | | | |
| AML | | | | ⇑ | *e* | S | **Sn** | 08 03 05.1 | **+1.4** |
| | baz=53 | | | | | | | | |
| **GAR** | **Garm** | **2.94** | **265** | ⇑ | *e* | P | **Pb** | 08 02 35.8 | **-0.9** |
| | baz=62 | | | | | | | | |
| GAR | | | | ⇑ | *e* | S | **Sb** | 08 03 13.0 | **+0.3** |
| | baz=62 | | | | | | | | |
| **ARK** | **Arkit** | **2.94** | **328** | ⇓ | *e* | P | **Pn** | 08 02 33.6 | **+2.5** |
| | baz=25 | | | | | | | | |
| ARK | | | | ⇓ | *i* | S | **Sn** | 08 03 09.1 | **+2.6** |
| | baz=25 | | | | | | | | |
| **TRKS** | **Terek-Say** | **3.13** | **315** | ⇑ | *e* | P | **Pn** | 08 02 35.8 | **+2.0** |
| | baz=12 | | | | | | | | |
| TRKS | | | | ⇑ | *e* | S | **Sn** | 08 03 13.0 | **+1.7** |
| | baz=12 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.32** | **5** | | | Pn | **Pb** | 08 02 42.1 | **-1.1** |
| | 16nm,0.3s,baz=177,slow=13,SNR=1.1 | | | | | | | | |
| AAK | | | | | | Sn | **Sb** | 08 03 26.1 | **+2.4** |
| | 6.5nm,0.3s,baz=350,slow=14,SNR=1.7 76nm,0.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.32** | **5** | ⇑ | *e* | P | **Pn** | 08 02 38.0 | **+1.7** |
| | baz=4.0 | | | | | | | | |
| AAK | | | | ⇑ | *e* | S | **Sn** | 08 03 16.6 | **+0.7** |
| | baz=4.0 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.33** | **356** | ⇓ | *e* | P | **Pn** | 08 02 38.3 | **+1.8** |
| | baz=55 | | | | | | | | |
| EKS2 | | | | ⇓ | *e* | S | **Sn** | 08 03 17.2 | **+1.0** |
| | baz=55 | | | | | | | | |
| **ULHL** | **Ulahol** | **3.34** | **29** | ⇑ | *i* | P | **Pn** | 08 02 38.2 | **+1.4** |
| | baz=29 | | | | | | | | |
| ULHL | | | | ⇑ | *i* | S | **Sn** | 08 03 17.0 | **+0.4** |
| | baz=29 | | | | | | | | |
| **MNAS** | **Manas** | **3.37** | **340** | ⇑ | *e* | P | **Pn** | 08 02 39.2 | **+2.2** |
| | baz=38 | | | | | | | | |
| MNAS | | | | ⇑ | *e* | S | **Sn** | 08 03 18.7 | **+1.6** |
| | baz=38 | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.39** | **11** | ⇑ | *e* | P | **Pn** | 08 02 38.8 | **+1.5** |
| | baz=10.0 | | | | | | | | |
| KBK | | | | ⇑ | *e* | S | **Sn** | 08 03 18.1 | **+0.5** |
| | baz=10.0 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.46** | **24** | ⇓ | *e* | P | **Pn** | 08 02 39.6 | **+1.3** |
| | baz=23 | | | | | | | | |
| BOOM | | | | ⇓ | *e* | S | **Sn** | 08 03 19.8 | **+0.4** |
| | baz=23 | | | | | | | | |
| **MRKS** | **Merke** | **3.47** | **350** | | *e* | P | **Pg** | 08 02 48.5 | **-2.2** |
| | 49nm,0.5s | | | | | | | | |
| MRKS | | | | | *e* | S | **Sg** | 08 03 33.5 | **-2.1** |
| | 187nm,0.7s | | | | | | | | |
| **FRU1** | **Bishkek** | **3.50** | **7** | ⇓ | *e* | P | **Pn** | 08 02 40.7 | **+2.0** |
| | baz=6.0 | | | | | | | | |
| FRU1 | | | | ⇓ | *e* | S | **Sn** | 08 03 21.2 | **+1.0** |
| | baz=6.0 | | | | | | | | |
| **KDJ** | **Kajisay** | **3.66** | **39** | ⇑ | *e* | P | **Pn** | 08 02 42.6 | **+1.5** |
| | baz=40 | | | | | | | | |
| KDJ | | | | ⇑ | *e* | S | **Sn** | 08 03 24.7 | **+0.3** |
| | baz=40 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.77** | **17** | ⇓ | *e* | P | **Pn** | 08 02 44.1 | **+1.6** |
| | baz=17 | | | | | | | | |
| TKM2 | | | | ⇓ | *e* | S | **Sn** | 08 03 27.1 | **+0.1** |
| | baz=17 | | | | | | | | |
| **KST** | **Kastek** | **3.97** | **20** | | *e* | P | **Pg** | 08 02 59.7 | **-0.7** |
| | 82nm,0.7s | | | | | | | | |
| KST | | | | | *e* | S | **Sg** | 08 03 52.7 | **+0.9** |
| | 239nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **4.11** | **18** | | *e* | P | **Pg** | 08 03 02.1 | **-0.9** |
| | 122nm,0.7s | | | | | | | | |
| DGS | | | | | *e* | S | **Sg** | 08 03 56.7 | **+0.5** |
| | 121nm,0.6s | | | | | | | | |
| **MTBS** | **Maitube** | **4.19** | **24** | | *e* | P | **Pg** | 08 03 04.0 | **-0.5** |
| | 60nm,0.6s | | | | | | | | |
| MTBS | | | | | *e* | S | **Sg** | 08 04 00.0 | **+1.2** |
| | 71nm,0.5s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.29** | **29** | | *e* | P | **Pg** | 08 03 06.0 | **-0.5** |
| | 102nm,0.6s | | | | | | | | |
| TNSS | | | | | *e* | S | **Sg** | 08 04 03.1 | **+1.1** |
| | 74nm,0.7s | | | | | | | | |
| **MDOK** | **Medeo** | **4.44** | **29** | | *e* | P | **Pg** | 08 03 08.2 | **-1.0** |
| | 69nm,0.7s | | | | | | | | |
| MDOK | | | | | *e* | S | **Sg** | 08 04 07.5 | **+0.8** |
| | 157nm,1.2s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.52** | **29** | | *e* | P | **Pg** | 08 03 10.2 | **-0.7** |
| | 105nm,0.9s | | | | | | | | |
| KOTS | | | | | *e* | S | **Sg** | 08 04 10.6 | **+1.1** |
| | 186nm,0.7s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.52** | **15** | | *e* | P | **Pg** | 08 03 09.3 | **-1.5** |
| | 64nm,0.6s | | | | | | | | |
| KRBS | | | | | *e* | S | **Sg** | 08 04 09.2 | **-0.3** |
| | 82nm,0.7s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **4.55** | **45** | ⇓ | *e* | P | **Pn** | 08 02 55.4 | **+2.2** |
| | baz=45 | | | | | | | | |
| PRZ | | | | ⇓ | *e* | S | **Sn** | 08 03 45.8 | **-0.4** |
| | baz=45 | | | | | | | | |
| **KKAR** | **Karatay Array** | **4.62** | **326** | ⇑ | *e* | P | **Pn** | 08 02 56.9 | **+2.8** |
| | baz=24 | | | | | | | | |
| KKAR | | | | ⇑ | *e* | S | **Sn** | 08 03 49.4 | **+1.5** |
| | baz=24 | | | | | | | | |
| **KTBS** | **Karatobe** | **4.79** | **23** | | *e* | P | **Pg** | 08 03 14.5 | **-1.6** |
| | 84nm,1.1s | | | | | | | | |
| KTBS | | | | | *e* | S | **Sg** | 08 04 18.4 | **+0.2** |
| | 112nm,1.0s | | | | | | | | |
| **KUU** | **Kurty** | **4.86** | **20** | | *e* | P | **Pg** | 08 03 15.8 | **-1.6** |
| | 86nm,0.7s | | | | | | | | |
| KUU | | | | | *e* | S | **Sg** | 08 04 20.3 | **-0.1** |
| | 180nm,0.7s | | | | | | | | |
| **SATY** | **Saty** | **4.96** | **40** | | *e* | P | **Pg** | 08 03 18.8 | **-0.4** |
| | 121nm,0.9s | | | | | | | | |
| SATY | | | | | *e* | S | **Sg** | 08 04 25.5 | **+2.2** |
| | 112nm,0.8s | | | | | | | | |
| **CHKK** | **Chushkaly** | **5.02** | **25** | | *e* | P | **Pg** | 08 03 18.8 | **-1.6** |
| | 48nm,0.7s | | | | | | | | |
| CHKK | | | | | *e* | S | **Sg** | 08 04 25.3 | **0.0** |
| | 108nm,0.6s | | | | | | | | |
| **ZHN** | **Zhinishke** | **5.05** | **39** | | *e* | P | **Pg** | 08 03 20.4 | **-0.6** |
| | 54nm,0.8s | | | | | | | | |
| ZHN | | | | | *e* | S | **Sg** | 08 04 28.1 | **+1.7** |
| | 64nm,0.7s | | | | | | | | |
| **UZB** | **Uzynbulak** | **5.33** | **43** | | *e* | P | **Pg** | 08 03 26.4 | **0.0** |
| | 48nm,0.6s | | | | | | | | |
| UZB | | | | | *e* | S | **Sg** | 08 04 38.6 | **+3.1** |
| | 46nm,1.1s | | | | | | | | |
| **KPKS** | **Kokpek** | **5.39** | **39** | | *e* | P | **Pg** | 08 03 26.6 | **-1.0** |
| | 73nm,1.0s | | | | | | | | |
| KPKS | | | | | *e* | S | **Sg** | 08 04 38.8 | **+1.5** |
| | 69nm,0.7s | | | | | | | | |
| **SHLS** | **Shalkode** | **5.58** | **45** | | *e* | P | Pg | 08 03 35.6 | +4.5 |
| | 84nm,0.4s | | | | | | | | |
| SHLS | | | | | *e* | S | Sg | 08 04 54.3 | +11 |
| | 95nm,0.8s | | | | | | | | |
| **ARXS** | **Arharly** | **5.63** | **29** | | *e* | P | **Pg** | 08 03 31.5 | **-0.5** |
| | 73nm,0.7s | | | | | | | | |
| ARXS | | | | | *e* | S | **Sg** | 08 04 47.1 | **+2.3** |
| | 81nm,0.7s | | | | | | | | |
| **BTLS** | **Baital** | **5.70** | **360** | | *e* | P | **Pg** | 08 03 31.8 | **-1.7** |
| | 48nm,1.3s | | | | | | | | |
| BTLS | | | | | *e* | S | **Sg** | 08 04 47.6 | **+0.3** |
| | 36nm,1.0s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.58** | **36** | | | Pn | **Pn** | 08 04 05.9 | **+3.8** |
| | 0.2nm,0.3s,baz=221,slow=15,SNR=2.3 | | | | | | | | |
| MKAR | | | | | | Lg | Lg | 08 06 46.9 | |
| | 0.1nm,0.3s,baz=96,slow=23,SNR=1.3 2.9nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **11.72** | **14** | | | Lg | Lg | 08 07 52.0 | |
| | 0.1nm,0.3s,baz=58,slow=38,SNR=1.1 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **13.93** | **351** | | | Pn | **Pn** | **08 05 01.7** | **+0.2** |
| | 0.1nm,0.3s,baz=156,slow=12,SNR=1.9 3.4nm,0.5s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.86** | **320** | | | Pn | **Pn** | **08 05 25.9** | **-1.4** |
| | 0.4nm,0.3s,baz=126,slow=12,SNR=4.7 7.7nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.35** | **23** | | | Pn | **Pn** | **08 05 33.5** | **-0.1** |
| | 0.2nm,0.3s,baz=208,slow=14,SNR=1.3 | | | | | | | | |
| ZALV | | | | | | LR | LR | 08 12 06.9 | |
| | comp=Z,76nm,20.9s,baz=322,slow=38 1.0nm,0.4s | | | | | | | | |
| **ARU** | **Arti** | **19.94** | **334** | | | P | **Pn** | **08 06 18.7** | **+1.0** |
| | 3.3nm,0.3s,baz=87,slow=6.6,SNR=5.0 3.3nm,0.3s | | | | | | | | |
| **WSAR** | **Wadi Sarin** | **20.72** | **224** | | | P | **P** | **08 06 23.6** | **-1.2** |
| | 5.0nm,1.0s,baz=142,slow=16,SNR=1.8 5.0nm,1.0s | | | | | | | | |
| **BELG** | **Belogornoye** | **22.42** | **314** | | | P | **P** | **08 06 45.3** | **+2.5** |
| | 6.8nm,0.6s,baz=129,slow=3.7,SNR=1.8 6.8nm,0.6s | | | | | | | | |
| **SONM** | **Songino Array** | **24.77** | **59** | | | P | **P** | **08 07 06.6** | **+0.6** |
| | 1.0nm,0.6s,baz=267,slow=10,SNR=2.3 1.0nm,0.6s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **31.00** | **284** | | | P | **P** | **08 08 01.7** | **-0.3** |
| | 0.4nm,0.7s,baz=76,slow=7.6,SNR=1.9 0.4nm,0.7s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.19** | **305** | | | P | **P** | **08 08 20.6** | **-0.2** |
| | 0.4nm,0.4s,baz=81,slow=7.3,SNR=1.9 0.4nm,0.4s | | | | | | | | |
| **FINES** | **FINESS Array B** | **36.58** | **323** | | | P | **P** | **08 08 49.9** | **0.0** |
| | 1.2nm,0.4s,baz=112,slow=8.5,SNR=7.2 1.2nm,0.4s | | | | | | | | |
| **HFS** | **Hagfors** | **42.40** | **320** | | | P | **P** | **08 09 39.5** | **+1.0** |
| | 1.7nm,0.6s,baz=104,slow=12,SNR=1.8 1.7nm,0.6s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **43.64** | **321** | | | P | **P** | **08 09 48.9** | **+0.3** |
| | 1.2nm,0.7s,baz=90,slow=7.7,SNR=2.6 1.2nm,0.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **58.30** | **297** | | | P | **P** | **08 11 39.1** | **-0.1** |
| | 0.2nm,0.3s,baz=57,slow=9.4,SNR=1.3 0.2nm,0.3s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.19** | **269** | | | P | **P** | **08 12 43.9** | **-1.2** |
| | 0.5nm,0.4s,baz=51,slow=5.2,SNR=5.6 0.5nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **71.38** | **17** | | | P | **P** | **08 13 03.6** | **-0.3** |
| | 0.7nm,0.7s,baz=321,slow=4.8,SNR=4.7 0.7nm,0.7s | | | | | | | | |
| **DBIC** | **Dimbokro** | **77.24** | **268** | | | P | **P** | **08 13 36.5** | **-2.4** |
| | 1.1nm,0.5s,baz=0.0,slow=9.1,SNR=1.2 1.1nm,0.5s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.28** | **4** | | | P | **P** | **08 13 43.4** | **-0.4** |
| | 0.6nm,0.7s,baz=0.6,slow=6.2,SNR=1.2 0.6nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.50** | **124** | | | P | **P** | **08 14 01.3** | **-0.6** |
| | 0.8nm,0.6s,baz=325,slow=5.1,SNR=8.5 0.8nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **83.95** | **127** | | | P | **P** | **08 14 13.4** | **-1.2** |
| | 0.3nm,0.5s,baz=318,slow=5.3,SNR=6.9 0.3nm,0.5s | | | | | | | | |

*IDC **22** 08:10:23.5±2.9, 53.°60N×87.°79E, h0km, mbtmp3.5/2, ML2.9/2, Error ellipse: s-maj=23.9km s-min=14.8km az=60.0*

**ISC 22 08:10:25.0**±3.4, **53.°7N**±0.°1×**87.°7E**±0.°2, **h10**km, **n6**, σ1$**18**/7, **1C-1D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.73** | **281** | | | I | I | 08 22 20.0 | |
| | 0.1nm,0.8s,baz=97,slow=325,SNR=7.2 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.73** | **281** | ⇓ | Pn | | **Pn** | **08 10 55.4** | **+0.4** |
| | 0.7nm,0.3s,baz=90,slow=15 | | | | | | | | |
| ZAA0 | | | | ⇑ | Sn | | **Sg** | **08 11 21.4** | **+1.0** |
| | 8.5nm,0.7s,baz=80,slow=23 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.73** | **281** | | Pg | | **Pb** | **08 10 55.8** | **-0.9** |
| | 3.4nm,0.3s,baz=98,slow=16,SNR=22 | | | | | | | | |
| ZALV | | | | | Lg | | Lg | 08 11 21.0 | |
| | 4.8nm,0.3s,baz=102,slow=34,SNR=16 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.40** | **245** | | Pn | | **Pn** | **08 12 00.1** | **+0.9** |
| | 0.2nm,0.3s,baz=59,slow=14,SNR=4.0 | | | | | | | | |
| KURBB | | | | | Sn | | **Sn** | **08 13 11.8** | **-0.6** |
| | baz=50,slow=22,SNR=1.0 | | | | | | | | |
| KURBB | | | | | Lg | | Lg | 08 13 48.0 | |
| | baz=62,slow=31 2.9nm,0.2s | | | | | | | | |
| **MK31** | **Makanchi Array** | **7.69** | **209** | | P | | Pn | 08 12 20.2 | +3.2 |
| | 1.1nm,0.8s,baz=28,slow=13,SNR=7.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.69** | **209** | | Pn | | **Pn** | **08 12 18.0** | **+1.0** |
| | 0.2nm,0.3s,baz=24,slow=12,SNR=6.9 | | | | | | | | |
| MKAR | | | | | Sn | | **Sn** | **08 13 43.0** | **-1.2** |
| | baz=30,slow=23,SNR=4.4 | | | | | | | | |
| MKAR | | | | | Lg | | Lg | 08 14 28.2 | |
| | 0.1nm,0.3s,baz=32,slow=30,SNR=6.9 0.6nm,0.5s | | | | | | | | |

*IDC **22** 08:24:15.8±1.1, 34.°51N×105.°64E, h0km, mb3.6/6, mbtmp3.7/6, Error ellipse: s-maj=43.2km s-min=21.5km az=48.0*

**ISC 22 08:24:20.8**±1.1, **34.°5N**±0.°2×**105.°6E**±0.°2, **h35**km, **n6**, σ0$**82**/6, **mb3.6**/6, **Gansu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **21.42** | **312** | | | P | **P** | **08 29 05.2** | **-0.4** |
| | 1.1nm,0.8s,baz=112,slow=13,SNR=9.2 1.1nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **25.41** | **318** | | | P | **P** | **08 29 46.1** | **+1.2** |
| | 1.7nm,0.5s,baz=124,slow=11,SNR=4.5 1.7nm,0.5s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **40.89** | **47** | | | P | **P** | **08 31 59.2** | **-0.2** |
| | 2.1nm,0.9s,baz=264,slow=12,SNR=3.6 2.1nm,0.9s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **56.20** | **298** | | | P | **P** | **08 33 57.2** | **-0.3** |
| | 0.3nm,0.6s,baz=62,slow=10,SNR=1.8 0.3nm,0.6s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.68** | **149** | | | P | **P** | **08 34 28.9** | **+0.3** |
| | 0.4nm,0.6s,baz=340,slow=7.2,SNR=7.8 0.4nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **63.81** | **151** | | | P | **P** | **08 34 49.4** | **-0.2** |
| | 0.2nm,0.4s,baz=336,slow=6.8,SNR=2.4 0.2nm,0.4s | | | | | | | | |

**IDC 22 08:27:38.5**±999.0, **54.°63N**×**40.°93E, h0**km, **Error ellipse: s-maj=415.5km s-min=62.2km az=136.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **2.97** | **317** | | | I | I | 08 44 00.0 | |
| | 0.1nm,0.4s,baz=134,slow=331,SNR=3.7 | | | | | | | | |
| **I37NO** | **I37NO** | **17.73** | **333** | | | I | I | 10 15 20.0 | |
| | baz=134,slow=324,SNR=1.3 | | | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **17.75** | **262** | | | I | I | 10 20 20.0 | |
| | baz=65,slow=308,SNR=0.3 | | | | | | | | |

*DJA **22** 08:37:59.5±0.3, 3.°3S±4.°×13.°9E±.°, h69km±8km, M4.8/12, mB5.2/6, mb4.9/12, MLv5.0/5, Mw(mB)4.5/6*

*IDC **22** 08:38:00.1±0.5, 3.°19S×139.°13E, h66km±4km, mb4.1/15, mbtmp4.4/16, MS3.2/9, Error ellipse: s-maj=23.9km s-min=11.1km az=77.0*

*NEIC **22** 08:38:01.9±2.1, 3.°38S±0.°09×139.°02E±0.°02, h75km±7km, mb4.7/69, Error ellipse: s-maj=13.4km s-min=2.8km az=177.0*

**ISC 22 08:38:00.7**±0.3, **3.°34S**±0.°05×**139.°08E**±0.°05, **h73**km, **n133**, σ1$**86**/117, **mb4.7**/49, **1C-3D, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GENI** | **Genyem** | **1.31** | **56** | P | | P | **Pn** | **08 38 21.1** | **-2.3** |
| GENI | | | | S | | S | **Sn** | **08 38 37.4** | **-3.0** |
| **JAY** | **Jayapura** | **1.82** | **63** | P | | P | **Pn** | **08 38 26.9** | **-3.1** |
| JAY | | | | S | | S | **Sn** | **08 38 49.3** | **-3.0** |
| **TABU** | **Tabubil** | **2.87** | **132** | P | | P | **Pn** | **08 38 47.4** | **+3.1** |
| **MMPI** | **Merauke** | **5.26** | **166** | P | | P | **Pn** | **08 39 17.7** | **+0.9** |
| **FAKI** | **Fak Fak** | **6.83** | **273** | Pn | | Pn | **Pn** | **08 39 38.9** | **+0.5** |
| **FAKI** | **Fak Fak** | **6.83** | **273** | P | | P | **Pn** | **08 39 38.0** | **-0.3** |
| | 39nm,0.7s,1μm0.4nm | | | | | | | | |
| **SWI** | **Sorong** | **8.19** | **287** | P | | P | **Pn** | **08 39 57.3** | **+0.4** |
| **PMG** | **Port Moresby** | **10.04** | **127** | P | | P | **Pn** | **08 40 25.5** | **+3.4** |
| **PMG** | **Port Moresby** | **10.04** | **127** | P | | P | **Pn** | **08 40 25.6** | **+3.4** |
| **PMG** | **Port Moresby** | **10.04** | **127** | Pn | | Pn | **Pn** | **08 40 23.4** | **+1.2** |
| **PMG** | **Port Moresby** | **10.04** | **127** | P | | P | **Pn** | **08 40 23.6** | **+1.4** |
| | 38nm,0.7s,baz=68,slow=2.7,SNR=8.0 | | | | | | | | |
| PMG | | | | | | LR | LR | 08 44 48.4 | |
| | comp=Z,72nm,21.6s,baz=254,slow=40 | | | | | | | | |
| **COEN** | **Coen** | **11.30** | **159** | | | Pn | **Pn** | **08 40 39.7** | **+0.3** |
| **KDU** | **Kakadu** | **11.36** | **215** | | | P | **Pn** | **08 40 39.9** | **-0.2** |
| **DRS** | **Darwin Rock St** | **12.13** | **221** | | | P | **Pn** | **08 40 50.9** | **+0.2** |
| **MTN** | **Manton Dam** | **12.29** | **219** | | | P | **Pn** | **08 40 52.8** | **0.0** |
| **MTN** | **Manton Dam** | **12.29** | **219** | | | Pn | **Pn** | **08 40 52.6** | **-0.2** |
| **MTSU** | **Mount Surprise** | **15.58** | **161** | | | P | **P** | **08 41 38.4** | **-0.5** |
| | 41nm,0.8s | | | | | | | | |
| **KNRA** | **Kununurra** | **15.92** | **219** | | | Pn | **Pn** | **08 41 40.5** | **+0.1** |
| KNRA | | | | | | IAmb | IAmb | 08 41 43.6 | |
| | comp=Z,38nm,0.8s | | | | | | | | |
| **SOEI** | **Soe** | **16.03** | **246** | | | | **Pn** | **08 41 42.9** | **+1.0** |
| SOEI | | | | | | IAmb | IAmb | 08 42 13.6 | |
| | comp=Z,72nm,0.9s | | | | | | | | |
| **SOEI** | **Soe** | **16.03** | **246** | | | P | **Pn** | **08 41 43.2** | **+1.2** |
| | comp=Z,54nm,1.1s | | | | | | | | |
| **LUWI** | **Luwuk** | **16.45** | **278** | | | | **Pn** | **08 41 47.3** | **+0.2** |
| **WB0** | **Warramunga Arr** | **16.96** | **195** | | | Pn | **Pn** | **08 41 51.7** | **-1.6** |
| WB0 | | | | | | IAmb | IAmb | 08 42 16.2 | |
| | comp=Z,43nm,0.7s | | | | | | | | |
| **DAV** | **Davao City (W)** | **16.98** | **308** | | | LR | LR | 08 48 01.2 | |
| | comp=Z,82nm,18.3s,baz=176,slow=36 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **17.11** | **195** | | | P | **Pn** | **08 41 54.1** | **-1.0** |
| WR0 | | | | | | IAmb | IAmb | 08 42 13.0 | |
| | comp=Z,39nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **17.13** | **195** | | | P | **Pn** | **08 41 53.7** | **-1.7** |
| **WB2** | **Warramunga Arr** | **17.14** | **195** | | | Pn | **Pn** | **08 41 54.5** | **-1.1** |
| **WRA** | **Warramunga Arr** | **17.14** | **195** | | | P | **Pn** | **08 41 53.5** | **-2.2** |
| **WRA** | **Warramunga Arr** | **17.14** | **195** | | | P | **Pn** | **08 41 54.4** | **-1.2** |
| | comp=Z,15nm,0.6s,baz=17,slow=13,SNR=49 | | | | | | | | |
| WRA | | | | | | S | **Sn** | **08 44 56.7** | **-9.1** |
| | comp=Z,13nm,0.8s,baz=9.7,slow=22,SNR=6.4 | | | | | | | | |
| WRA | | | | | | LR | LR | 08 49 14.1 | |
| | comp=Z,258nm,20.5s,baz=20,slow=39 | | | | | | | | |
| **GUMO** | **Guam** | **17.77** | **19** | | | LR | LR | 08 47 09.6 | |
| | comp=Z,148nm,20.4s,baz=210,slow=31 | | | | | | | | |
| **CTA** | **Charters Tower** | **18.06** | **158** | | | P | **P** | **08 42 06.5** | **+0.2** |
| | comp=Z,0.8nm,0.8s,baz=335,slow=11,SNR=12 | | | | | | | | |
| **CTAO** | **Charters Tower** | **18.06** | **158** | | | P | **Pn** | **08 42 09.7** | **+2.9** |
| **CTAO** | **Charters Tower** | **18.06** | **158** | | | P | **P** | **08 42 06.6** | **+0.2** |
| **TOLI2** | **Tolitoli** | **18.82** | **283** | | | P | **P** | **08 42 15.1** | **+0.4** |
| **TOLI2** | **Tolitoli** | **18.82** | **283** | | | P | **P** | **08 42 15.5** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **19.71** | **221** | | | P | **P** | **08 42 25.2** | **+0.8** |
| | comp=Z,35nm,0.6s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.71** | **221** | | | P | **P** | **08 42 24.7** | **+0.3** |
| **AS01** | **Alice Springs** | **20.81** | **193** | | | P | **P** | **08 42 38.0** | **+1.7** |
| **AS31** | **Alice Springs** | **20.82** | **193** | | | P | **P** | **08 42 36.8** | **+0.4** |
| AS31 | | | | | | IAmb | IAmb | 08 42 40.4 | |
| | comp=Z,28nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **20.82** | **193** | | | P | **P** | **08 42 37.3** | **+0.8** |
| **ASAR** | **Alice Springs** | **20.82** | **193** | | | P | **P** | **08 42 37.5** | **+1.0** |
| | comp=Z,39nm,0.5s,baz=24,slow=9.2,SNR=258 | | | | | | | | |
| ASAR | | | | | | pP | **pP** | **08 42 53.6** | **+1.6** |
| | comp=Z,24nm,0.6s,baz=24,slow=9.5,SNR=7.4 | | | | | | | | |
| ASAR | | | | | | S | **S** | **08 46 19.1** | **-5.7** |
| | comp=Z,2.3nm,0.7s,baz=17,slow=36,SNR=2.2 comp=Z,39nm,0.5s | | | | | | | | |
| **HNR** | **Honiara** | **21.60** | **107** | | | P | **P** | **08 42 46.5** | **+1.8** |
| **MYLDM** | **Lahad Datu** | **22.23** | **292** | | | P | **P** | **08 42 53.1** | **+1.5** |
| **INKA** | **Innaminka** | **24.32** | **176** | | | P | **P** | **08 43 14.4** | **+2.8** |
| **OOD** | **Oodnadatta** | **24.54** | **187** | | | P | **P** | **08 43 16.2** | **+2.6** |
| **KKM** | **Kota Kinabalu** | **24.66** | **292** | | | P | **P** | **08 43 16.2** | **+1.2** |
| **EIDS** | **Eidsvold** | **24.76** | **153** | | | P | **P** | **08 43 15.8** | **+0.1** |
| **MBWA** | **Marble Bar** | **25.85** | **225** | | | P | **P** | **08 43 27.4** | **+1.8** |
| **MBWA** | **Marble Bar** | **25.85** | **225** | | | P | **P** | **08 43 25.5** | **-0.1** |
| MBWA | | | | | | IAmb | IAmb | 08 43 29.5 | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **26.04** | **224** | | | P | **P** | **08 43 28.8** | **+1.5** |
| **PSA00** | **Pilbara Seismi** | **26.04** | **224** | | | P | **P** | **08 43 28.4** | **+1.1** |
| PSA00 | | | | | | IAmb | IAmb | 08 43 31.2 | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| **LCRK** | **Leigh Creek** | **26.98** | **182** | | | P | **P** | **08 43 38.4** | **+2.8** |
| **STKA** | **Stephens Creek** | **28.49** | **176** | | | P | **P** | **08 43 51.6** | **+2.5** |
| **STKA** | **Stephens Creek** | **28.49** | **176** | | | P | **P** | **08 43 49.6** | **+0.5** |
| **STKA** | **Stephens Creek** | **28.49** | **176** | | | P | **P** | **08 43 49.2** | **0.0** |
| | comp=Z,1.1nm,0.3s,baz=327,slow=9.1,SNR=7.6 comp=Z,1.1nm,0.3s | | | | | | | | |
| **FORT** | **Forrest** | **29.21** | **200** | | | P | **P** | **08 43 58.5** | **+2.9** |
| **FORT** | **Forrest** | **29.21** | **200** | | | P | **P** | **08 43 54.7** | **-0.9** |
| **BBOO** | **Buckleboo** | **29.46** | **185** | | | P | **P** | **08 43 58.8** | **+1.1** |
| **BBOO** | **Buckleboo** | **29.46** | **185** | | | P | **P** | **08 43 58.6** | **+0.9** |
| **GIRL** | **Giralia** | **30.79** | **229** | | | P | **P** | **08 44 12.1** | **+2.5** |
| **DZM** | **Mont Dzumac** | **32.43** | **127** | | | LR | LR | 08 55 48.6 | |
| | comp=Z,67nm,20.7s,baz=32,slow=33 | | | | | | | | |
| **BLDU** | **Ballidu** | **34.39** | **216** | | | P | **P** | **08 44 42.4** | **+1.4** |
| **JNU** | **Nakatsue** | **37.08** | **349** | | | LR | LR | 09 01 20.8 | |
| | comp=Z,48nm,18.7s,baz=146,slow=38 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.68** | **359** | | | P | **P** | **08 45 23.8** | **-1.9** |
| | comp=Z,1.8nm,0.6s,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SIMJ | | | | | IAmb | IAmb | 08 49 45.5 | | |
| | comp=Z,5.9nm,0.7s | | | | | | | | |
| **M14K** | **Bethel** | **78.32** | **25** | | IAmb | IAmb | 08 49 53.9 | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **80.03** | **325** | | P | **P** | **08 50 02.2** | **-0.1** | |
| | comp=Z,4.8nm,0.6s,baz=114,slow=7.6,SNR=25 | | | | | | | | |
| BVAR | | | | | pP | **pP** | **08 50 20.5** | **-1.5** | |
| | comp=Z,5.4nm,0.7s,baz=114,slow=6.8,SNR=7.5 | | | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | | | |
| **J16K** | **Anvik River** | **80.10** | **23** | | P | **P** | **08 50 02.9** | **+0.5** | |
| **SII** | **Sitkinak Islan** | **80.20** | **31** | | P | **P** | **08 50 02.8** | **-0.4** | |
| **M17K** | **Holitna River** | **80.57** | **26** | | P | **P** | **08 50 05.9** | **+0.9** | |
| M17K | | | | | IAmb | IAmb | 08 50 06.7 | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **J17K** | **VABM Dome** | **80.77** | **24** | | IAmb | IAmb | 08 50 07.5 | | |
| | comp=Z,7.2nm,0.8s | | | | | | | | |
| **K17K** | **Iditarod** | **80.78** | **24** | | P | **P** | **08 50 06.2** | **+0.1** | |
| K17K | | | | | IAmb | IAmb | 08 50 07.6 | | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **OHAK** | **Old Harbor** | **80.90** | **31** | | P | **P** | **08 50 06.1** | **-0.7** | |
| **L18K** | **Granite Mounta** | **81.24** | **25** | | IAmb | IAmb | 08 50 09.9 | | |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **MAW** | **Mawson** | **81.69** | **202** | | P | **P** | **08 50 11.6** | **+0.9** | |
| | comp=Z,0.7nm,0.5s,baz=270,slow=14,SNR=2.1 | | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | | |
| **L19K** | **White Mountain** | **82.01** | **26** | | IAmb | IAmb | 08 50 13.8 | | |
| | comp=Z,7.2nm,0.8s | | | | | | | | |
| **M20K** | **Styx River** | **82.65** | **26** | | IAmb | IAmb | 08 50 17.1 | | |
| | comp=Z,6.3nm,0.8s | | | | | | | | |
| **H19K** | **Roundabout Mou** | **82.72** | **22** | | IAmb | IAmb | 08 50 17.6 | | |
| | comp=Z,9.0nm,1.4s | | | | | | | | |
| **J20K** | **Nowinta River** | **83.08** | **24** | | IAmb | IAmb | 08 50 19.5 | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| **I20K** | **Naaghedeneel** | **83.19** | **23** | | IAmb | IAmb | 08 50 20.0 | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **E19K** | **Redstone River** | **83.27** | **20** | | IAmb | IAmb | 08 50 20.1 | | |
| | comp=Z,4.7nm,0.7s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **84.17** | **23** | | IAmb | IAmb | 08 50 25.3 | | |
| | comp=Z,8.5nm,1.4s | | | | | | | | |
| **MLY** | **Manley** | **84.76** | **24** | | P | **P** | **08 50 26.3** | **-0.4** | |
| MLY | | | | | IAmb | IAmb | 08 50 28.7 | | |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **85.43** | **320** | | P | **P** | **08 50 29.1** | **-1.2** | |
| **DHY** | **Denali Highway** | **85.57** | **26** | | IAmb | IAmb | 08 50 31.3 | | |
| | comp=Z,8.8nm,0.9s | | | | | | | | |
| **WRH** | **Wood River Hil** | **85.67** | **25** | | IAmb | IAmb | 08 50 31.2 | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.83** | **24** | | IAmb | IAmb | 08 50 31.3 | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **E23K** | **Chandalar** | **86.18** | **21** | | IAmb | IAmb | 08 50 34.8 | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **IL31** | | **86.25** | **24** | | P | **P** | **08 50 32.4** | **-1.5** | |
| IL31 | | | | | IAmb | IAmb | 08 50 32.9 | | |
| | comp=Z,4.2nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.25** | **24** | | P | **P** | **08 50 32.4** | **-1.6** | |
| **ILAR** | **Eielson Array** | **86.25** | **24** | | P | **P** | **08 50 32.3** | **-1.7** | |
| | comp=Z,4.5nm,0.7s,baz=263,slow=4.4,SNR=62 | | | | | | | | |
| ILAR | | | | | pP | **pP** | **08 50 51.5** | **-2.6** | |
| | comp=Z,1.8nm,0.8s,baz=262,slow=4.8,SNR=5.9 | | | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **86.61** | **180** | | P | **P** | **08 50 36.9** | **+0.9** | |
| **QSPA** | **South Pole Qui** | **86.61** | **180** | | P | **P** | **08 50 37.1** | **+1.1** | |
| | comp=Z,3.1nm,0.9s,baz=294,slow=1.3,SNR=20 | | | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | | | |
| **F24K** | **Squaw Lake** | **86.64** | **22** | | IAmb | IAmb | 08 50 37.1 | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **D24K** | **Happy Valley** | **86.80** | **20** | | IAmb | IAmb | 08 50 38.2 | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **J26L** | **Joseph Creek** | **87.57** | **25** | | IAmb | IAmb | 08 50 42.0 | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **87.84** | **22** | | P | **P** | **08 50 42.9** | **+1.1** | |
| **M27K** | **Edge Creek, AK** | **87.86** | **27** | | IAmb | IAmb | 08 50 43.2 | | |
| | comp=Z,6.7nm,1.0s | | | | | | | | |
| **L27K** | **Beaver Creek,** | **88.02** | **27** | | IAmb | IAmb | 08 50 43.8 | | |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| **F26K** | **Sheenjek River** | **88.07** | **22** | | IAmb | IAmb | 08 50 44.8 | | |
| | comp=Z,7.3nm,1.1s | | | | | | | | |
| **K27K** | **Chicken** | **88.10** | **26** | | P | **P** | **08 50 44.1** | **+1.1** | |
| K27K | | | | | IAmb | IAmb | 08 50 44.7 | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **136.78** | **286** | | PKP | **PKPdf** | **08 57 15.9** | **0.0** | |
| | comp=Z,1.5nm,0.7s,baz=43,slow=3.4,SNR=9.6 | | | | | | | | |
| TORD | | | | | pPKP | **pPKPdf** | **08 57 33.8** | **-3.0** | |
| | comp=Z,0.7nm,0.7s,baz=100,slow=2.1,SNR=2.6 | | | | | | | | |
| **KIC** | **Kosan Beka** | **143.83** | **276** | ⇑ | *i*PKIKP | **PKPdf** | **08 57 27.7** | **-1.0** | |
| | comp=Z,9.2nm,0.7s | | | | | | | | |
| **DBIC** | **Dimbokro** | **143.93** | **277** | | PKP | PKPbc | 08 57 27.4 | +0.6 | |
| | comp=Z,7.8nm,0.6s,baz=83,slow=4.4,SNR=13 | | | | | | | | |
| DBIC | | | | | pPKP | pPKPdf | 08 57 47.3 | -2.4 | |
| | comp=Z,4.8nm,0.8s,baz=8.9,slow=2.9,SNR=2.9 | | | | | | | | |
| **TIC** | **Toumodi** | **144.09** | **277** | ⇓ | *i*PKIKP | PKPbc | 08 57 28.1 | +0.7 | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **LIC** | **Lamto** | **144.12** | **276** | ⇓ | *i*PKIKP | **PKPdf** | **08 57 28.3** | **-0.9** | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| **CPUP** | **Villa Florida** | **146.50** | **153** | | PKPbc | **PKPbc** | **08 57 34.7** | **+0.2** | |
| | comp=Z,2.5nm,0.6s,baz=246,slow=1.5,SNR=9.6 | | | | | | | | |
| **LPAZ** | **La Paz** | **146.78** | **127** | | PKPbc | **PKPab** | **08 57 36.8** | **-0.8** | |
| | comp=Z,1.6nm,0.8s,baz=353,slow=1.3,SNR=5.7 | | | | | | | | |
| LPAZ | | | | | pPKPbc | pPKPbc | 08 57 55.9 | -1.0 | |
| | comp=Z,2.9nm,0.9s,baz=252,slow=3.2,SNR=4.5 | | | | | | | | |

*IDC* ***22*** *09:02:12.7±2.0,8.°19S×116.°69E, h0km, mb3.2/3, mbtmp3.3/4, ML3.4/1, Error ellipse: s-maj=42.2km s-min=26.9km az=65.0*

*DJA* ***22*** *09:02:15.9±0.7, 8.°5S±7.°×11.°7E±.°, h17km±6km, M3.8/7, MLv3.8/7*

**ISC 22 09:02:14.8±0.8, 8.°18S±0.°07×116.°75E±0.°04, h10km, n11, σ0°75/15, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.57** | **167** | P | | **Pg** | | **09 02 26.4** | **+0.5** |
| **PLAI** | **Plampang** | **1.20** | **122** | P | | **Pb** | | **09 02 37.7** | **+0.1** |
| PLAI | | | | S | | **Sb** | | **09 02 53.5** | **+0.3** |
| **SRBI** | **Singaraja** | **1.53** | **274** | P | | **Pn** | | **09 02 43.3** | **+1.1** |
| SRBI | | | | S | | **Sb** | | **09 03 03.7** | **+1.0** |
| **DNP** | **Denpasar** | **1.60** | **252** | P | | **Pn** | | **09 02 43.4** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.59** | **263** | P | | **Pn** | | **09 02 56.5** | **-0.3** |
| JAGI | | | | S | | **Sn** | | **09 03 26.8** | **-1.6** |
| **WBSI** | **Waikabubak, Su** | **2.98** | **119** | P | | **Pn** | | **09 03 02.4** | **+0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.23** | **62** | P | | **Pn** | | **09 03 18.8** | **-0.5** |
| **KAPI** | **Kappang** | **4.33** | **44** | Pn | | **Pn** | | **09 03 21.0** | **+0.2** |
| | 2.2nm,0.3s,baz=200,slow=6.5,SNR=12 | | | | | | | | |
| KAPI | | | | Sn | | **Sn** | | **09 04 12.2** | **+0.8** |
| | 2.3nm,0.3s,baz=36,slow=19,SNR=3.8 | | | | | | | | |
| | 4.1nm,0.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.65** | **126** | P | | **P** | | **09 06 54.7** | **-0.2** |
| | 0.4nm,0.3s,baz=299,slow=12,SNR=28 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.52** | **135** | P | | **P** | | **09 07 14.8** | **-0.2** |
| | 0.3nm,0.5s,baz=309,slow=9.7,SNR=8.0 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.74** | **334** | P | | **P** | | **09 12 39.5** | **-0.7** |
| | 0.2nm,0.6s,baz=148,slow=8.5,SNR=2.3 | | | | | | | | |
| | 0.2nm,0.6s | | | | | | | | |

*IDC* ***22*** *09:04:45.5±7.3, 18.°46S×178.°02W, h596km±93km, mb2.8/8, mbtmp3.7/8, Error ellipse: s-maj=33.3km s-min=28.3km az=28.0*

**ISC 22 09:04:42.2±0.9, 18.°4S±0.°2×178.°0W±0.°2, h557km, n8, σ0°88/8, mb3.2/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **20.29** | **191** | P | | **P** | | **09 08 40.5** | **+0.1** |
| | 11nm,0.9s,baz=358,slow=6.3,SNR=1.8 | | | | | | | | |
| | 11nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.94** | **260** | P | | **P** | | **09 12 08.6** | **+0.3** |
| | 0.2nm,0.4s,baz=97,slow=6.8,SNR=7.8 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **255** | P | | **P** | | **09 12 09.6** | **+0.5** |
| | 0.4nm,0.5s,baz=88,slow=8.0,SNR=6.2 | | | | | | | | |
| | 0.4nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.70** | **180** | P | | **P** | | **09 15 07.4** | **-0.6** |
| | 0.6nm,0.7s,baz=156,slow=1.4,SNR=5.6 | | | | | | | | |
| | 0.6nm,0.7s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.47** | **44** | P | | **P** | | **09 15 52.4** | **+0.7** |
| | 0.3nm,0.6s,baz=229,slow=8.2,SNR=3.9 | | | | | | | | |
| | 0.3nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **57** | P | | **P** | | **09 16 25.0** | **+1.0** |
| | 0.6nm,0.7s,baz=225,slow=6.2,SNR=10 | | | | | | | | |
| | 0.6nm,0.7s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.23** | **13** | P | | **P** | | **09 16 23.4** | **-1.2** |
| | 0.3nm,0.7s,baz=231,slow=5.7,SNR=2.7 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.41** | **43** | P | | **P** | | **09 16 30.6** | **-0.3** |
| | 0.4nm,0.7s,baz=201,slow=6.2,SNR=3.8 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |

**IDC 22 09:05:42.2±4.0, 55.°59N×85.°93E, h0km, mbtmp2.7/2, ML2.2/2, Error ellipse: s-maj=32.7km s-min=26.9km az=41.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.77** | **202** | I | | I | | 09 18 00.0 | |
| | baz=21,slow=331,SNR=2.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.77** | **202** | Pg | | Pn | | 09 06 13.5 | -0.6 |
| | 1.1nm,0.3s,baz=23,slow=18,SNR=11 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 09 06 38.4 | |
| | 0.5nm,0.3s,baz=23,slow=24,SNR=1.6 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.68** | **225** | Pn | | Pn | | 09 07 20.8 | -0.6 |
| | baz=30,slow=9.2,SNR=1.7 | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.10** | **196** | Pn | | Pn | | 09 07 55.5 | +0.8 |
| | baz=13,slow=14,SNR=1.7 | | | | | | | | |
| | 0.2nm,0.7s | | | | | | | | |

*IDC* ***22*** *09:23:35.6±0.9, 32.°60N×130.°75E, h0km, mb4.0/16, mbtmp4.0/18, ML3.2/2, MS3.0/3, Error ellipse: s-maj=23.1km s-min=8.2km az=106.0*

*NIED* ***22*** *09:23:38.4, 32.°72N×130.°66E, h12km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale 10^15Nm; Mrr~1.91; Mθθ1.84; Mφφ0.07; Mrθ0.43; Mθφ-0.30; Mφr0.40; Fault plane solution: M0 1.99000×10^15 NP1: φs267.00000°, δ52.00000°, λ-106.00000°. NP2: φs112.00000°, δ41.00000°, λ-71.00000°.*

*JMA* ***22*** *09:23:38.4±0.0, 32.°7N±0.°1×130.°7E±0.°1, h12km, MD4.1/20, MV4.1/20, NW KUMAMOTO PREF*

*JMA Felt IV J1 at NW KUMAMOTO PREF .*

*NEIC* ***22*** *09:23:39.0±1.1, 32.°75N±0.°05×130.°65E±0.°08, h10km±1km, mb4.5/17, Error ellipse: s-maj=12.6km s-min=5.5km az=119.0*

*BJI* ***22*** *09:23:39.6±0.0, 32.°60N×130.°41E, h10km, mb4.2/20, mB4.8/2, Ms4.4/4, Ms7 3.9/2*

**ISC 22 09:23:38.7±0.5, 32.°71N±0.°03×130.°66E±0.°05, h11km, n90, σ1°22/67, mb4.3/25, 1C, Kyushu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JIU3** | **Izumi3** | **0.20** | **141** | *i* P | | **Pg** | | **09 23 42.9** | **0.0** |
| JIU3 | | | | S | | **Sg** | | **09 23 46.2** | **+0.3** |
| **JIU3** | **Izumi3** | **0.20** | **141** | A | | A | | 09 23 42.9 | |
| | comp=E,41nm,4.8s,comp=N,41nm,1.0s | | | | | | | | |
| **JTA** | **Tamana** | **0.28** | **337** | *i* P | | **Pg** | | **09 23 44.1** | **-0.3** |
| JTA | | | | S | | **Sg** | | **09 23 48.0** | **-0.2** |
| **JTA** | **Tamana** | **0.28** | **337** | A | | A | | 09 23 44.1 | |
| | comp=E,33nm,1.1s,comp=N,36nm,0.4s | | | | | | | | |
| **JNU** | **Nakatsue** | **0.45** | **24** | | | **Pg** | | **09 23 47.3** | **-0.3** |
| JNU | | | | | | Sg | | **09 23 53.2** | **-0.4** |
| **JNU** | **Nakatsue** | **0.45** | **24** | Pg | | **Pg** | | **09 23 47.0** | **-0.6** |
| | comp=N,1μm,0.3s,baz=195,slow=8.7 | | | | | | | | |
| JNU | | | | Lg | | Lg | | 09 23 52.5 | |
| | comp=N,3μm,0.3s,baz=75,slow=14,SNR=28 | | | | | | | | |
| **JNU** | **Nakatsue** | **0.45** | **24** | A | | A | | 09 23 47.2 | |
| | comp=E,14nm,1.2s,comp=N,20nm,1.7s | | | | | | | | |
| **JHD** | **Hondo** | **0.50** | **242** | A | | A | | 09 23 48.3 | |
| | comp=E,33nm,0.4s,comp=N,79nm,0.6s | | | | | | | | |
| **JZO** | **Okuchi** | **0.56** | **185** | A | | A | | 09 23 49.5 | |
| | comp=E,15nm,0.3s,comp=N,19nm,0.9s | | | | | | | | |
| **JKIT** | **Kitakata** | **0.67** | **97** | A | | A | | 09 23 51.3 | |
| | comp=E,9.0nm,0.4s,comp=N,11nm,0.3s | | | | | | | | |
| **JUR** | **Ureshino** | **0.71** | **303** | A | | A | | 09 23 52.0 | |
| | comp=E,13nm,5.3s,comp=N,9.0nm,0.8s | | | | | | | | |
| **NGSJ** | **Nagasakinomoza** | **0.73** | **265** | A | | A | | 09 23 52.4 | |
| | comp=E,9.0nm,5.1s,comp=N,8.0nm,3.2s | | | | | | | | |
| **JFI** | **Itaya** | **0.76** | **342** | A | | A | | 09 23 52.7 | |
| | comp=E,12nm,0.3s,comp=N,13nm,5.2s | | | | | | | | |
| **JTSN** | **Tsuno** | **0.85** | **122** | A | | A | | 09 23 54.5 | |
| | comp=E,8.0nm,1.5s,comp=N,16nm,0.5s | | | | | | | | |
| **JHHC** | **Hyugahichiya** | **0.86** | **107** | A | | A | | 09 23 54.8 | |
| | comp=E,5.0nm,3.7s,comp=N,7.0nm,1.3s | | | | | | | | |
| **JTZ** | **Takazaki** | **0.88** | **156** | *i* P | | **Pg** | | **09 23 55.7** | **+0.1** |
| JTZ | | | | S | | **Sg** | | **09 24 07.8** | **+0.7** |
| **JTZ** | **Takazaki** | **0.88** | **156** | A | | A | | 09 23 55.7 | |
| | comp=E,13nm,0.5s,comp=N,15nm,0.6s | | | | | | | | |
| **JBEP** | **Beppuamama** | **0.89** | **45** | A | | A | | 09 23 55.0 | |
| | comp=E,13nm,2.3s,comp=N,14nm,4.0s | | | | | | | | |
| **JUS** | **Usuki** | **0.98** | **68** | A | | A | | 09 23 56.8 | |
| | comp=E,8.0nm,0.4s,comp=N,9.0nm,1.1s | | | | | | | | |
| **JFA** | **Akaike** | **1.01** | **6** | A | | A | | 09 23 57.2 | |
| | comp=E,6.0nm,1.3s,comp=N,9.0nm,0.9s | | | | | | | | |
| **JKI** | **Kunimi** | **1.20** | **39** | A | | A | | 09 24 00.4 | |
| | comp=E,13nm,1.1s,comp=N,10.0nm,1.1s | | | | | | | | |
| **JNKG** | **Nichinankitago** | **1.20** | **150** | A | | A | | 09 24 00.7 | |
| | comp=E,9.0nm,0.9s,comp=N,12nm,2.7s | | | | | | | | |
| **JNAR** | **Kushima--Naru** | **1.28** | **156** | A | | A | | 09 24 02.0 | |
| | comp=E,10.0nm,1.0s,comp=N,13nm,2.0s | | | | | | | | |
| **JSJ** | **Shimokoshiki** | **1.30** | **218** | A | | A | | 09 24 02.3 | |
| | comp=E,7.0nm,1.2s,comp=N,7.0nm,2.3s | | | | | | | | |
| **JII** | **Iki** | **1.34** | **325** | A | | A | | 09 24 02.7 | |
| | comp=E,15nm,2.0s,comp=N,13nm,4.3s | | | | | | | | |
| **JTY** | **Toyota** | **1.59** | **12** | A | | A | | 09 24 06.6 | |
| | comp=E,3.0nm,1.3s,comp=N,4.0nm,2.1s | | | | | | | | |
| **UWA2** | **Uwa jima 2** | **1.73** | **72** | A | | A | | 09 24 08.7 | |
| | comp=E,2.0nm,2.5s,comp=N,3.0nm,6.1s | | | | | | | | |
| **JTO** | **Tosashimizu** | **1.81** | **85** | A | | A | | 09 24 09.9 | |
| | comp=E,5.0nm,3.2s,comp=N,4.0nm,1.3s | | | | | | | | |
| **JTSM** | **Tsushimamitsus** | **1.95** | **327** | A | | A | | 09 24 11.9 | |
| | comp=E,4.0nm,5.0s,comp=N,4.0nm,5.9s | | | | | | | | |
| **JHGM** | **Hagimishima** | **2.11** | **11** | A | | A | | 09 24 14.2 | |
| | comp=E,6.0nm,2.0s,comp=N,12nm,1.9s | | | | | | | | |
| **JMN** | **Monobe** | **2.88** | **68** | | | **Pn** | | **09 24 26.2** | **+1.6** |
| **TJN** | **Taejon** | **4.56** | **324** | | | **Pn** | | **09 24 48.1** | **+0.5** |
| **KSRS** | **Korea Array** | **5.24** | **335** | Pn | | **Pn** | | **09 24 57.6** | **+0.7** |
| | comp=N,0.7nm,0.3s,baz=151,slow=13,SNR=8.2 | | | | | | | | |
| KSRS | | | | Lg | | Lg | | 09 26 20.3 | |
| | comp=N,4.0nm,0.3s,baz=161,slow=31,SNR=2.1 | | | | | | | | |
| KSRS | | | | LR | | LR | | 09 27 18.6 | |
| | comp=N,171nm,19.3s,baz=160,slow=42 | | | | | | | | |
| | comp=N,1.6nm,0.4s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **5.25** | **335** | Pn | | **Pn** | | **09 24 58.2** | **+1.2** |
| **KS19** | **Wonju Array Si** | **5.31** | **335** | Pn | | **Pn** | | **09 24 58.3** | **+0.5** |
| **INU** | **Inuyama** | **5.90** | **62** | | | **Pn** | | **09 25 07.1** | **+1.1** |
| **JOW** | **Kunigami** | **6.21** | **200** | Pn | | **Pn** | | **09 25 08.7** | **-1.6** |
| | comp=N,1.3nm,0.3s,baz=16,slow=7.4,SNR=1.6 | | | | | | | | |
| | comp=N,11nm,0.5s | | | | | | | | |
| **JGF** | **Kuroka** | **6.26** | **61** | Pn | | **Pn** | | **09 25 11.8** | **+0.9** |
| **MJB9** | **Matsu-Tunnel** | **7.30** | **56** | Pn | | **Pn** | | **09 25 25.8** | **+0.5** |
| **MAJO** | **Matsushiro** | **7.30** | **56** | Pn | | **Pn** | | **09 25 25.4** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **7.30** | **56** | Pn | | **Pn** | | **09 25 27.7** | **+2.4** |
| | comp=N,0.3nm,0.3s,baz=242,slow=13,SNR=9.1 | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **7.68** | **84** | Pn | | **Pn** | | **09 25 31.3** | **+0.8** |
| | comp=N,25nm,0.3s,baz=42,slow=14,SNR=1.8 | | | | | | | | |
| **JHJ2** | **Mitsune** | **7.71** | **85** | Pn | | **Pn** | | **09 25 30.8** | **0.0** |
| **NJ2** | **Nanjing** | **10.01** | **269** | *eP* | | **Pn** | | **09 26 02.3** | **-0.1** |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=N,11nm,0.6s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.52** | **5** | Pn | | **Pn** | | **09 26 21.6** | **-1.4** |
| **USRK** | **Ussuriysk Ar.** | **11.52** | **5** | Pn | | **Pn** | | **09 26 26.8** | **+3.8** |
| | comp=N,0.1nm,0.3s,baz=172,slow=15,SNR=5.4 | | | | | | | | |
| USRK | | | | LR | | LR | | 09 30 21.4 | |
| | comp=N,79nm,21.0s,baz=165,slow=35 | | | | | | | | |
| **KLR** | **Kul'dur** | **16.53** | **3** | Pn | | **P** | | **09 27 36.4** | **+3.4** |
| | comp=N,0.4nm,0.3s,baz=151,slow=5.4,SNR=13 | | | | | | | | |
| KLR | | | | LR | | LR | | 09 33 19.0 | |
| | comp=N,39nm,21.4s,baz=176,slow=35 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **17.30** | **303** | *eP* | | **Pn** | | **09 27 40.8** | **+0.5** |
| HHC | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,0.6s | | | | | | | | |
| HHC | | | | pmax | | pmax | | | |
| | comp=N,240nm,4.1s | | | | | | | | |
| **XAN** | **Xi'an** | **18.21** | **280** | ⇑P | | **P** | | **09 27 56.0** | **+4.3** |
| XAN | | | | pP | | sP | | 09 28 00.1 | +3.9 |
| XAN | | | | pmax | | pmax | | | |
| | comp=N,4.0nm,0.8s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **23.40** | **317** | P | | **P** | | **09 28 47.7** | **+0.1** |
| **SONM** | **Songino Array** | **23.76** | **317** | P | | **P** | | **09 28 50.6** | **-0.6** |
| **SONM** | **Songino Array** | **23.76** | **317** | P | | **P** | | **09 28 51.5** | **+0.4** |
| | comp=N,1.5nm,0.7s,baz=128,slow=9.6,SNR=6.3 | | | | | | | | |
| | comp=N,1.5nm,0.7s | | | | | | | | |
| **GTA** | **Gaotai** | **25.74** | **294** | *eP* | | **P** | | **09 29 10.4** | **+1.1** |
| GTA | | | | pP | | sP | | 09 29 14.0 | -0.1 |
| GTA | | | | pmax | | pmax | | | |
| | comp=N,7.0nm,1.1s | | | | | | | | |
| **PZH** | **PanZhiHua** | **25.84** | **264** | P | | **P** | | **09 29 11.6** | **+1.2** |
| **ZALV** | **Zalesovo Beam** | **38.66** | **317** | P | | **P** | | **09 31 01.4** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **38.66** | **317** | P | | **P** | | **09 31 01.9** | **-0.1** |
| | comp=N,0.3nm,0.3s,baz=128,slow=6.1,SNR=1.7 | | | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | | | |
| **MK31** | **Makanchi Array** | **39.15** | **306** | P | | **P** | | **09 31 04.7** | **-1.6** |
| **MKAR** | **Makanchi Array** | **39.15** | **306** | P | | **P** | | **09 31 05.4** | **-0.9** |
| **MKAR** | **Makanchi Array** | **39.15** | **306** | P | | **P** | | **09 31 06.0** | **-0.3** |
| | comp=N,1.0nm,0.8s,baz=97,slow=10,SNR=8.0 | | | | | | | | |
| | comp=N,1.0nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **41.86** | **311** | P | | **P** | | **09 31 28.3** | **-0.3** |
| KURK | | | | IAmb | | IAmb | | 09 31 32.1 | |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.91** | **311** | P | | **P** | | **09 31 28.2** | **-0.8** |
| | comp=Z,3.0nm,1.0s,baz=97,slow=8.8,SNR=13 | | | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **47.07** | **314** | P | | **P** | | **09 32 10.2** | **-0.1** |
| | comp=Z,4.3nm,0.6s,baz=94,slow=11,SNR=12 | | | | | | | | |
| | comp=Z,4.3nm,0.6s | | | | | | | | |
| **KK31** | **Karatay Array** | **47.66** | **301** | P | | **P** | | **09 32 15.0** | **0.0** |
| KK31 | | | | IAmb | | IAmb | | 09 32 19.0 | |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| **KKAR** | **Karatay Array** | **47.66** | **301** | P | | **P** | | **09 32 14.7** | **-0.3** |
| **BTK** | **Batken** | **47.95** | **297** | P | | **P** | | **09 32 16.4** | **-1.0** |
| BTK | | | | IAmb | | IAmb | | 09 32 22.8 | |
| | comp=Z,4.3nm,1.1s | | | | | | | | |
| **CHGR** | **Chuyangaron** | **49.50** | **295** | P | | **P** | | **09 32 29.3** | **0.0** |
| **RDOG** | **Red Dog Mine** | **51.32** | **26** | P | | **P** | | **09 32 42.7** | **+0.2** |
| **WRA** | **Warramunga Arr** | **52.47** | **176** | P | | **P** | | **09 32 49.3** | **-2.3** |
| | comp=Z,0.8nm,0.8s,baz=346,slow=7.8,SNR=5.5 | | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **53.94** | **310** | P | | **P** | | **09 33 01.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **56.14** | **176** | P | | **P** | | **09 33 15.7** | **-2.7** |
| | comp=Z,0.9nm,0.9s,baz=12,slow=7.4,SNR=6.0 | | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | | |
| **H23K** | **Yukon River** | **56.53** | **29** | P | | **P** | | **09 33 21.3** | **+0.7** |
| H23K | | | | IAmb | | IAmb | | 09 33 23.1 | |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| **MDM** | **Murphy Dome** | **57.17** | **30** | P | | **P** | | **09 33 26.0** | **+0.8** |
| MDM | | | | IAmb | | IAmb | | 09 33 30.1 | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **ILAR** | **Eielson Array** | **57.77** | **30** | P | | **P** | | **09 33 28.9** | **-0.6** |
| | comp=Z,0.7nm,0.8s,baz=278,slow=6.8,SNR=11 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| **I30M** | **Mount Dempster** | **62.01** | **28** | P | | **P** | | **09 33 58.9** | **+0.1** |
| I30M | | | | IAmb | | IAmb | | 09 34 00.5 | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **62.96** | **348** | P | | **P** | | **09 34 04.8** | **+0.1** |
| | comp=Z,3.7nm,0.8s,baz=98,slow=6.0,SNR=1.7 | | | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **66.78** | **308** | P | | **P** | | **09 34 30.7** | **+0.6** |
| | comp=Z,3.0nm,0.8s,baz=110,slow=0.7,SNR=6.4 | | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **68.31** | **330** | P | | **P** | | **09 34 38.4** | **-1.1** |
| | comp=Z,1.8nm,0.5s,baz=71,slow=5.9,SNR=12 | | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.02** | **319** | P | | **P** | | **09 35 01.3** | **-1.1** |
| | comp=Z,2.0nm,0.5s,baz=56,slow=6.5,SNR=6.5 | | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| **HFS** | **Hagfors** | **74.09** | **332** | P | | **P** | | **09 35 12.8** | **-1.7** |
| | comp=Z,2.4nm,0.7s,baz=145,slow=5.4,SNR=5.2 | | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.45** | **334** | P | | **P** | | **09 35 15.5** | **-1.2** |
| | comp=Z,1.3nm,0.9s,baz=49,slow=5.6,SNR=2.5 | | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | | |
| **SUMG** | **Summit** | **74.73** | **357** | P | | **P** | | **09 35 18.0** | **-0.6** |
| SUMG | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| L02F | Cave Junction | 3.39 | 112 | | | Pn | | Pn | 09 32 37.3 | -1.4 |
| COR | Corvallis | 3.43 | 69 | | | Pn | | Pn | 09 32 36.7 | -2.4 |
| COR | comp=N,7µm,1.8s | | | | IAML | | | | 09 33 03.1 | |
| COR | comp=N,6µm,1.4s | | | | IAML | | | | 09 33 23.0 | |
| COR | Corvallis | 3.43 | 69 | ⇑P | | Pn | | Pn | 09 32 36.7 | -2.4 |
| COR | Corvallis | 3.43 | 69 | P | | Pn | | Pn | 09 32 36.7 | -2.4 |
| KRMB | Red Mountain | 3.47 | 123 | | | Pn | | Pn | 09 32 38.0 | -1.9 |
| BUCK | Buck Mountain | 3.56 | 77 | | | Pn | | Pn | 09 32 39.1 | -1.9 |
| BUCK | comp=N,5µm,1.8s | | | | IAML | | | | 09 33 03.1 | |
| BUCK | comp=E,8µm,2.1s | | | | IAML | | | | 09 33 07.0 | |
| KRPM | Rodgers | 3.63 | 128 | | | Pn | | Pn | 09 32 41.1 | -0.8 |
| KRPM | comp=E,3µm,1.1s | | | | IAML | | | | 09 33 06.7 | |
| HUMO | Hull Mountain | 3.65 | 102 | | | Pn | | Pn | 09 32 40.2 | -2.0 |
| HUMO | Hull Mountain | 3.65 | 102 | ⇑P | | Pn | | Pn | 09 32 39.8 | -2.5 |
| G03D | McMinnville, O | 3.69 | 60 | | | Pn | | Pn | 09 32 40.2 | -2.6 |
| H04D | Lebanon | 3.80 | 72 | | | Pn | | Pn | 09 32 42.5 | -1.7 |
| H04D | comp=N,7µm,0.9s | | | | IAML | | | | 09 33 11.1 | |
| H04D | comp=E,7µm,2.1s | | | | IAML | | | | 09 33 23.7 | |
| JCC | Jacoby Creek, | 3.85 | 132 | | | Pn | | Pn | 09 32 43.6 | -1.4 |
| F03A | Seaside | 3.90 | 49 | | | Pn | | Pn | 09 32 43.4 | -2.2 |
| I04A | Tendick Farm, | 3.92 | 83 | | | Pn | | Pn | 09 32 44.4 | -1.6 |
| I04A | comp=E,5µm,1.9s | | | | IAML | | | | 09 33 18.1 | |
| I04A | comp=N,3µm,1.2s | | | | IAML | | | | 09 33 35.6 | |
| KHMM | Horse Mountain | 3.98 | 129 | | | Pn | | Pn | 09 32 46.3 | -0.6 |
| KHMM | comp=N,2µm,1.4s | | | | IAML | | | | 09 33 17.9 | |
| KHMM | comp=E,2µm,1.8s | | | | IAML | | | | 09 33 18.4 | |
| RADR | Rader Ridge | 4.09 | 42 | | | Pn | | Pn | 09 32 45.5 | -2.9 |
| RADR | comp=E,5µm,0.8s | | | | IAML | | | | 09 33 44.2 | |
| RADR | comp=N,6µm,1.7s | | | | IAML | | | | 09 33 50.9 | |
| KMPM | Mount Pierce | 4.10 | 137 | | | Pn | | Pn | 09 32 47.6 | -0.9 |
| YBH | Yreka Blue Hor | 4.13 | 113 | | | Pn | | Pn | 09 32 48.1 | -0.8 |
| YBH | Yreka Blue Hor | 4.13 | 113 | Pn | | Pn | | Pn | 09 32 48.8 | -0.2 |
| YBH | comp=N,204nm,0.3s,baz=306,slow=10,SNR=2456 | | | | Sn | | | Sn | 09 33 38.0 | +0.4 |
| YBH | comp=N,22nm,0.3s,baz=101,slow=6.6,SNR=4.3 | | | | LR | | | LR | 09 34 23.3 | |
| H04A | comp=N,116µm,18.3s,baz=301,slow=37 comp=N,687nm,0.4s Detroit Lake | 4.22 | 71 | | | Pn | | Pn | 09 32 48.3 | -1.8 |
| H04A | comp=E,3µm,0.8s | | | | IAML | | | | 09 33 19.8 | |
| H04A | comp=N,4µm,0.5s | | | | IAML | | | | 09 33 48.4 | |
| L04D | Klamath Falls | 4.22 | 105 | | IAML | | | | 09 33 42.4 | |
| L04D | comp=E,4µm,2.4s comp=N,4µm,1.0s | | | | IAML | | | | 09 33 43.1 | |
| F04D | Rainier, OR | 4.29 | 51 | | | Pn | | Pn | 09 32 49.0 | -2.1 |
| E03A | Lebam | 4.30 | 43 | | | Pn | | Pn | 09 32 48.5 | -2.6 |
| KMRM | Mail Ridge | 4.45 | 135 | | | Pn | | Pn | 09 32 53.0 | -0.3 |
| KMRM | comp=E,2µm,0.8s | | | | IAML | | | | 09 33 25.7 | |
| K04D | Chiloquin, OR | 4.51 | 99 | | | Pn | | Pn | 09 32 53.5 | -0.7 |
| F04A | Amboy | 4.56 | 55 | | | Pn | | Pn | 09 32 52.8 | -1.9 |
| WISH | Wishkah | 4.62 | 36 | | | Pn | | Pn | 09 32 53.5 | -2.1 |
| I05D | Terrebonne, OR | 4.75 | 77 | | | Pn | | Pn | 09 32 55.6 | -1.7 |
| I05D | comp=E,4µm,1.9s | | | | IAML | | | | 09 33 28.5 | |
| I05D | comp=N,3µm,1.1s | | | | IAML | | | | 09 33 34.0 | |
| HOOD | Mount Hood Mea | 4.78 | 65 | | | Pn | | Pn | 09 32 56.4 | -1.5 |
| J05D | Fort Rock, OR | 4.79 | 90 | | | Pn | | Pn | 09 32 56.7 | -1.3 |
| J05D | comp=N,2µm,2.0s | | | | IAML | | | | 09 33 56.7 | |
| J05D | comp=E,2µm,2.4s | | | | IAML | | | | 09 34 06.8 | |
| NLWA | Neilton Lookou | 4.80 | 34 | | | Pn | | Pn | 09 32 55.6 | -2.4 |
| NLWA | comp=E,3µm,0.7s | | | | IAML | | | | 09 33 52.9 | |
| NLWA | comp=E,4µm,1.5s | | | | IAML | | | | 09 33 55.4 | |
| NLWA | Neilton Lookou | 4.80 | 34 | ⇑P | | Pn | | Pn | 09 32 55.2 | -2.9 |
| KCPM | Cahto Peak | 4.92 | 139 | | | Pn | | Pn | 09 32 59.0 | -0.8 |
| KCPM | comp=E,992nm,4.3s | | | | IAML | | | | 09 34 41.0 | |
| G05A | Wamic | 4.97 | 67 | | | Pn | | Pn | 09 32 59.4 | -1.1 |
| O02D | Mt. Diablo Mer | 4.98 | 130 | Pn | | Pn | | Pn | 09 33 00.8 | +0.2 |
| PINE | Pine Mountain | 4.99 | 84 | Pn | | Pn | | Pn | 09 32 59.3 | -1.5 |
| PINE | comp=E,2µm,1.6s | | | | IAML | | | | 09 34 06.5 | |
| PINE | comp=N,2µm,2.4s | | | | IAML | | | | 09 34 29.7 | |
| C03A | Quillayute Air | 5.02 | 26 | | | Pn | | Pn | 09 32 58.9 | -2.1 |
| C03A | comp=N,2µm,0.6s | | | | IAML | | | | 09 33 58.9 | |
| C03A | comp=E,2µm,2.1s | | | | IAML | | | | 09 34 04.6 | |
| LON | Longmire | 5.36 | 50 | | | Pn | | Pn | 09 33 04.1 | -1.7 |
| LON | comp=E,3µm,0.9s | | | | IAML | | | | 09 34 11.0 | |
| LON | Longmire | 5.36 | 50 | P | | Pn | | Pn | 09 33 04.1 | -1.7 |
| GNW | Green Mountain | 5.38 | 39 | | | Pn | | Pn | 09 33 03.5 | -2.5 |
| GNW | comp=E,2µm,0.8s | | | | IAML | | | | 09 34 06.5 | |
| HATC | Hat Creek Radi | 5.40 | 117 | Pn | | Pn | | Pn | 09 33 06.6 | +0.2 |
| G06A | Carlson Farm, | 5.43 | 69 | | | Pn | | Pn | 09 33 05.0 | -1.7 |
| G06A | comp=E,2µm,2.0s | | | | IAML | | | | 09 33 48.2 | |
| G06A | comp=N,1µm,1.9s | | | | IAML | | | | 09 33 54.6 | |
| B04A | Port Angeles | 5.48 | 32 | | | Pn | | Pn | 09 33 06.1 | -1.3 |
| B04A | comp=N,2µm,0.4s | | | | IAML | | | | 09 34 10.8 | |
| B04A | comp=E,1µm,1.9s | | | | IAML | | | | 09 34 24.9 | |
| D05A | Enumclaw | 5.53 | 46 | | | Pn | | Pn | 09 33 06.6 | -1.4 |
| LRDM | Redding Peak | 5.59 | 120 | | | Pn | | Pn | 09 33 09.9 | +0.9 |
| HOPS | Hopland Field | 5.71 | 140 | | | Pn | | Pn | 09 33 09.7 | -0.9 |
| OZB | Mount Ozzard | 5.72 | 15 | Pn | | Pn | | Pn | 09 33 09.4 | -1.4 |
| CLRS | Cowichan Lake | 5.93 | 24 | | | Pn | | Pn | 09 33 11.1 | -2.4 |
| GDXM | Geysers | 5.99 | 139 | | | Pn | | Pn | 09 33 14.5 | 0.0 |
| PGC | Sidney | 6.00 | 29 | | | Pn | | Pn | 09 33 11.9 | -2.6 |
| I07A | Izee | 6.03 | 81 | | | Pn | | Pn | 09 33 13.7 | -1.4 |
| F07A | Phinny Hill Vi | 6.11 | 64 | | | Pn | | Pn | 09 33 14.7 | -1.4 |
| ORV | Oroville | 6.13 | 127 | | | Pn | | Pn | 09 33 16.8 | +0.5 |
| ORV | Oroville | 6.13 | 127 | P | | Pn | | Pn | 09 33 16.8 | +0.5 |
| MXC | Moxie City | 6.16 | 57 | | | Pn | | Pn | 09 33 15.8 | -0.9 |
| LTY | Liberty | 6.29 | 50 | | | Pn | | Pn | 09 33 17.0 | -1.6 |
| E07A | Sunnyside | 6.42 | 58 | | | Pn | | Pn | 09 33 19.3 | -1.0 |
| MCCM | Marconi Confer | 6.49 | 143 | | | Pn | | Pn | 09 33 19.9 | -1.3 |
| HAWA | Hanford | 6.55 | 61 | | | Pn | | Pn | 09 33 20.8 | -1.4 |
| HAWA | Hanford | 6.55 | 61 | ⇑P | | Pn | | Pn | 09 33 20.7 | -1.4 |
| G08A | Pilot Rock | 6.59 | 71 | | | Pn | | Pn | 09 33 20.8 | -1.9 |
| CBB | Campbell River | 6.78 | 13 | | | Pn | | Pn | 09 33 24.3 | -0.8 |
| J08A | Circle Bar Ran | 6.79 | 88 | Pn | | Pn | | Pn | 09 33 23.9 | -1.6 |
| WVOR | Wild Horse Val | 6.80 | 96 | | | Pn | | Pn | 09 33 24.3 | -1.3 |
| WVOR | Wild Horse Val | 6.80 | 96 | ⇑P | | Pn | | Pn | 09 33 23.9 | -1.7 |
| WVOR | Wild Horse Val | 6.80 | 96 | P | | Pn | | Pn | 09 33 24.3 | -1.3 |
| AFDM | Forest Hills D | 6.84 | 129 | Pn | | Pn | | Pn | 09 33 26.7 | +0.5 |
| E08A | Dider Farm, El | 6.89 | 61 | | | Pn | | Pn | 09 33 25.1 | -1.7 |
| HOLB | Holberg | 7.18 | 358 | Pn | | Pn | | Pn | 09 33 29.6 | -1.2 |
| D08A | Wollman Farm, | 7.22 | 57 | Pn | | Pn | | Pn | 09 33 29.9 | -1.3 |
| EMB | Emerald Bay | 7.33 | 125 | | | Pn | | Pn | 09 33 35.0 | +2.0 |
| PAHR | Pah Rah Range | 7.34 | 118 | | | Pn | | Pn | 09 33 34.3 | +1.3 |
| E09A | Wood Farm, Sta | 7.49 | 63 | Pn | | Pn | | Pn | 09 33 33.1 | -1.8 |
| B08A | Colville Reser | 7.66 | 47 | Pn | | Pn | | Pn | 09 33 34.8 | -2.6 |
| BMO | Blue Mountains | 7.67 | 76 | Pn | | Pn | | Pn | 09 33 35.3 | -2.2 |
| BMO | Blue Mountains | 7.67 | 76 | ⇑P | | Pn | | Pn | 09 33 34.9 | -2.7 |
| BMO | Blue Mountains | 7.67 | 76 | P | | Pn | | Pn | 09 33 35.3 | -2.2 |
| CMB | Columbia Colle | 7.81 | 131 | Pn | | Pn | | Pn | 09 33 40.9 | +1.4 |
| CMB | Columbia Colle | 7.81 | 131 | P | | Pn | | Pn | 09 33 40.9 | +1.4 |
| F10A | Beach Ranch, E | 7.93 | 68 | Pn | | Pn | | Pn | 09 33 39.2 | -1.9 |
| F10A | Beach Ranch, E | 7.93 | 68 | ⇓P | | Pn | | Pn | 09 33 39.3 | -1.8 |
| C09A | Chrisman Ranch | 7.95 | 54 | Pn | | Pn | | Pn | 09 33 39.5 | -1.9 |
| SAO | San Andreas Ge | 8.27 | 142 | Pn | | Pn | | Pn | 09 33 44.7 | -1.0 |
| SAO | San Andreas Ge | 8.27 | 142 | ⇓P | | Pn | | Pn | 09 33 44.9 | -0.8 |
| SAO | San Andreas Ge | 8.27 | 142 | P | | Pn | | Pn | 09 33 44.7 | -1.0 |
| BMN | Battle Mountai | 8.44 | 107 | Pn | | Pn | | Pn | 09 33 48.4 | +0.2 |
| BMN | Battle Mountai | 8.44 | 107 | P | | Pn | | Pn | 09 33 48.4 | +0.2 |
| BBGB | Big Mountain B | 8.61 | 141 | | | Pn | | Pn | 09 33 50.1 | -0.4 |
| MFID | Camas Ranch | 8.71 | 86 | | | Pn | | Pn | 09 33 50.4 | -1.4 |
| BBB | Bella Bella | 8.72 | 359 | | | Pn | | Pn | 09 33 50.7 | -1.1 |
| BBB | Bella Bella | 8.72 | 359 | ⇑P | | Pn | | Pn | 09 33 51.5 | -0.3 |
| BBB | Bella Bella | 8.72 | 359 | Pn | | Pn | | Pn | 09 33 52.0 | +0.2 |
| BBB | comp=E,32nm,0.3s,baz=196,slow=11,SNR=141 | | | | Sn | | | Sn | 09 35 25.4 | -4.9 |
| BBB | comp=E,12nm,0.3s,baz=38,slow=20,SNR=4.6 | | | | LR | | | LR | 09 36 34.8 | |
| NVAR | comp=E,72µm,18.8s,baz=180,slow=33 comp=E,514nm,0.9s Mina Array Bea | 8.77 | 122 | | | Pn | | Pn | 09 33 52.8 | +0.1 |
| NVAR | Mina Array Bea | 8.77 | 122 | Pn | | Pn | | Pn | 09 33 54.7 | +2.0 |
| NVAR | comp=E,12nm,0.3s,baz=296,slow=12,SNR=391 | | | | Sn | | | Sn | 09 35 32.9 | +1.1 |
| NVAR | baz=355,slow=34 | | | | LR | | | LR | 09 37 17.2 | |
| NEW | comp=E,66µm,19.0s,baz=306,slow=37 comp=E,300nm,0.8s Newport | 8.86 | 54 | Pn | | Pn | | Pn | 09 33 51.3 | -2.4 |
| NEW | Newport | 8.86 | 54 | ⇑P | | Pn | | Pn | 09 33 51.8 | -1.9 |
| NEW | Newport | 8.86 | 54 | Pn | | Pn | | Pn | 09 33 52.8 | -0.9 |
| NEW | comp=E,21nm,0.3s,baz=233,slow=12,SNR=392 | | | | Sn | | | Sn | 09 35 36.0 | +2.3 |
| NEW | comp=E,8.1nm,0.3s,baz=248,slow=18,SNR=1.6 | | | | LR | | | LR | 09 37 14.4 | |
| NEW | comp=E,135µm,20.2s,baz=245,slow=37 Newport | 8.86 | 54 | P | | Pn | | Pn | 09 33 51.3 | -2.4 |
| PMPB | Monarch Peak | 9.02 | 141 | Pn | | Pn | | Pn | 09 33 55.9 | -0.1 |
| HG4B | Hotspring | 9.12 | 347 | Pn | | Pn | | Pn | 09 33 57.3 | 0.0 |
| ELK | Elko | 9.72 | 102 | ⇑P | | Pn | | Pn | 09 34 06.9 | +1.1 |
| ELK | Elko | 9.72 | 102 | Pn | | Pn | | Pn | 09 34 08.3 | +2.5 |
| ELK | comp=E,183nm,0.8s,baz=293,slow=16 | | | | Sn | | | Sn | 09 35 57.8 | +2.6 |
| ELK | comp=E,0.1nm,0.3s,baz=173,slow=19,SNR=0.9 | | | | LR | | | LR | 09 37 50.3 | |
| HLID | comp=E,20µm,20.8s,baz=285,slow=37 Hailey | 9.72 | 85 | Pn | | Pn | | Pn | 09 34 04.3 | -1.5 |
| HLID | Hailey | 9.72 | 85 | ⇑P | | Pn | | Pn | 09 34 04.7 | -1.1 |
| DIB | Dawson Inlet, | 10.22 | 344 | Pn | | Pn | | Pn | 09 34 11.6 | -0.8 |
| H02S1 | DAWSON INLET T SNR=34 | 10.23 | 344 | T | | T | | T | 09 44 48.2 | |
| MSO | Missoula | 10.35 | 66 | Pn | | Pn | | Pn | 09 34 12.4 | -1.9 |
| MSO | Missoula | 10.35 | 66 | ⇑P | | Pn | | Pn | 09 34 12.3 | -1.9 |
| GRNB | Grenville Isla | 10.48 | 353 | Pn | | Pn | | Pn | 09 34 16.6 | +0.6 |
| R11B | Troy Canyon, C | 10.56 | 115 | Pn | | Pn | | Pn | 09 34 19.1 | +1.8 |
| R11B | Troy Canyon, C | 10.56 | 115 | P | | Pn | | Pn | 09 34 19.4 | +2.2 |
| R11B | baz=304,SNR=361 | | | | S | | | Sn | 09 36 19.8 | +4.1 |
| BPMT | baz=304 Black Pine Rid | 10.60 | 69 | | | Pn | | Pn | 09 34 16.0 | -1.8 |
| ISA | Isabella, Lake | 10.60 | 134 | Pn | | Pn | | Pn | 09 34 20.6 | +2.9 |
| ISA | Isabella, Lake | 10.60 | 134 | P | | Pn | | Pn | 09 34 20.6 | +2.9 |
| MCMT | McKenzie Canyo | 10.83 | 78 | Pn | | Pn | | Pn | 09 34 20.4 | -0.5 |
| RUBB | Prince Rupert | 10.99 | 352 | Pn | | Pn | | Pn | 09 34 23.0 | +0.2 |
| OVMT | Ovando | 11.03 | 66 | Pn | | Pn | | Pn | 09 34 21.9 | -1.7 |
| DLMT | Dillon | 11.04 | 75 | | | Pn | | Pn | 09 34 22.3 | -1.4 |
| LRM | Limekiln Ridge | 11.18 | 73 | Pn | | Pn | | Pn | 09 34 25.3 | -0.5 |
| HVU | Hansel Valley | 11.20 | 94 | Pn | | Pn | | Pn | 09 34 25.7 | -0.2 |
| HVU | Hansel Valley | 11.20 | 94 | P | | Pn | | Pn | 09 34 25.7 | -0.2 |
| LYMT | Lyon Mountain | 11.48 | 67 | | | Pn | | Pn | 09 34 28.1 | -1.8 |
| DUG | Dugway, Tooele | 11.64 | 101 | Pn | | Pn | | Pn | 09 34 33.1 | +1.0 |
| DUG | Dugway, Tooele | 11.64 | 101 | ⇑P | | Pn | | Pn | 09 34 32.7 | +0.6 |
| DUG | Dugway, Tooele | 11.64 | 101 | P | | Pn | | Pn | 09 34 33.1 | +1.0 |
| BOZ | Bozeman (W) | 11.73 | 74 | ⇑P | | Pn | | Pn | 09 34 32.2 | -1.0 |
| HWUT | Hardware Ranch | 12.12 | 93 | ⇑P | | Pn | | Pn | 09 34 39.2 | +0.6 |
| V35K | Ketchikan | 12.13 | 350 | P | | Pn | | Pn | 09 34 40.4 | +2.0 |
| V35K | baz=166,SNR=218 | | | | S | | | Sn | 09 36 52.5 | -1.2 |
| V35K | baz=166 | | | | S | | | Sn | 09 36 52.5 | -1.2 |
| AHID | baz=166 Auburn Hatcher | 12.22 | 88 | ⇑P | | Pn | | Pn | 09 34 41.0 | +1.0 |
| H17A | Grant Village | 12.45 | 80 | P | | Pn | | Pn | 09 34 45.8 | +2.6 |
| H17A | baz=272,SNR=683 | | | | S | | | Sn | 09 37 04.0 | +1.8 |
| CRAG | baz=272 Craig | 12.50 | 346 | P | | Pn | | Pn | 09 34 44.9 | +1.5 |
| CRAG | Craig | 12.50 | 346 | ⇑P | | Pn | | Pn | 09 34 44.6 | +1.2 |
| CRAG | Craig | 12.50 | 346 | P | | Pn | | Pn | 09 34 45.2 | +1.8 |
| CRAG | baz=161,SNR=84 | | | | S | | | Sn | 09 37 05.4 | +2.6 |
| U35K | baz=161 Hyder | 12.54 | 354 | P | | Pn | | Pn | 09 34 46.0 | +1.9 |
| U35K | baz=172 | | | | S | | | Sn | 09 37 03.9 | 0.0 |
| LKWY | baz=172 Lake | 12.57 | 79 | ⇑P | | Pn | | Pn | 09 34 46.4 | +1.6 |
| U33K | Whale Pass | 13.11 | 347 | P | | Pn | | Pn | 09 34 52.8 | +0.9 |
| U33K | baz=162,SNR=49 | | | | S | | | Sn | 09 37 20.9 | +3.1 |
| U33K | baz=162 | | | | S | | | Sn | 09 37 20.9 | +3.1 |
| PFO | baz=162 Pinyon Flats O | 13.24 | 134 | | | Pn | | Pn | 09 34 54.3 | +0.5 |
| PFO | Pinyon Flats O | 13.24 | 134 | Pn | | Pn | | Pn | 09 34 56.4 | +2.6 |
| PFO | comp=E,1.2nm,0.3s,baz=310,slow=8.6,SNR=79 | | | | Sn | | | Sn | 09 37 22.2 | +1.0 |
| PFO | baz=252,slow=13 | | | | LR | | | LR | 09 39 50.5 | |
| PFO | comp=E,64µm,19.5s,baz=312,slow=36 comp=E,141nm,1.0s Pinyon Flats O | 13.24 | 134 | *d* iP | | Pn | | Pn | 09 34 55.5 | +1.7 |
| TPFO | Pinon Flats | 13.24 | 134 | P | | Pn | | Pn | 09 34 57.0 | +3.1 |
| TPFO | baz=322,SNR=227 | | | | S | | | Sn | 09 37 28.1 | +6.7 |
| WRAK | baz=322 Wrangell Islan | 13.29 | 349 | P | | Pn | | Pn | 09 34 55.9 | +1.7 |
| WRAK | baz=165 | | | | S | | | Sn | 09 37 24.4 | +2.3 |
| BW06 | baz=165 Boulder Array | 13.35 | 87 | ⇑P | | Pn | | Pn | 09 34 56.0 | +0.6 |
| PDAR | Pinedale Array | 13.35 | 87 | Pn | | Pn | | Pn | 09 34 55.6 | +0.3 |
| PDAR | Pinedale Array | 13.35 | 87 | Pn | | Pn | | Pn | 09 34 56.6 | +1.3 |
| PDAR | comp=E,4.5nm,0.3s,baz=272,slow=10,SNR=633 | | | | LR | | | LR | 09 40 21.6 | |
| RLMT | comp=E,58µm,18.8s,baz=269,slow=38 Red Lodge | 13.38 | 76 | ⇑P | | Pn | | Pn | 09 34 55.5 | -0.3 |
| EGMT | Eagleton | 13.39 | 64 | ⇑P | | Pn | | Pn | 09 34 53.9 | -1.9 |
| T35M | Bob Quinn | 13.62 | 354 | P | | Pn | | Pn | 09 35 01.2 | +2.4 |
| T35M | baz=172,SNR=60 | | | | S | | | Sn | 09 37 31.7 | +1.5 |
| T33K | baz=172 Petersburg | 13.76 | 348 | P | | Pn | | Pn | 09 35 01.9 | +1.2 |
| T33K | baz=163,SNR=26 | | | | S | | | Sn | 09 37 35.6 | +2.1 |
| CBX | baz=163 Cerro Bola | 14.17 | 138 | Pn | | Pn | | Pn | 09 35 07.5 | +0.9 |
| SIT | Sitka | 14.42 | 343 | P | | Pn | | Pn | 09 35 10.3 | +0.7 |
| SIT | Sitka | 14.42 | 343 | | | Pn | | Pn | 09 35 08.4 | -1.3 |
| SIT | Sitka | 14.42 | 343 | P | | Pn | | Pn | 09 35 09.3 | -0.3 |
| SIT | baz=157,SNR=12 | | | | S | | | Sn | 09 37 54.3 | +4.7 |
| SIT | baz=157 Sitka | 14.42 | 343 | P | | Pn | | Pn | 09 35 08.4 | -1.3 |
| S34M | Telegraph Cree | 14.61 | 353 | P | | Pn | | Pn | 09 35 14.5 | +2.1 |
| S34M | baz=170,SNR=114 | | | | S | | | Sn | 09 37 59.6 | +5.2 |
| S32K | baz=170 Killisnoo | 14.66 | 345 | P | | Pn | | Pn | 09 35 13.2 | +0.4 |
| S32K | baz=160,SNR=77 | | | | S | | | Sn | 09 38 00.5 | +5.1 |
| S32K | baz=160 | | | | S | | | Sn | 09 38 00.5 | +5.1 |
| WUAZ | baz=160 Wupatki | 14.94 | 117 | ⇑P | | Pn | | Pn | 09 35 18.8 | +1.7 |
| GUVIX | Guadalupe Vict | 14.98 | 134 | IAmb | | IAmb | | IAmb | 09 35 25.6 | |
| DLBC | comp=E,969nm,1.6s Dease Lake | 15.05 | 355 | Pn | | Pn | | Pn | 09 35 19.8 | +1.4 |
| DLBC | comp=E,0.5nm,0.3s,baz=174,slow=14,SNR=63 | | | | LR | | | LR | 09 40 17.0 | |
| DLBC | comp=Z,44µm,19.8s,baz=176,slow=34 comp=Z,72nm,1.0s Dease Lake | 15.05 | 355 | P | | Pn | | Pn | 09 35 19.9 | +1.5 |
| DLBC | baz=173,SNR=76 | | | | S | | | Sn | 09 38 09.7 | +4.4 |
| RWWY | baz=173 Rawlins | 15.27 | 90 | IAmb | | IAmb | | IAmb | 09 35 21.7 | |
| VTX | comp=Z,501nm,0.9s Valle De La Tr | 15.35 | 138 | IAmb | | IAmb | | IAmb | 09 35 28.8 | |
| JIS | comp=Z,1µm,1.6s Juneau Island | 15.39 | 347 | P | | Pn | | Pn | 09 35 23.4 | +0.7 |
| R32K | Eaglecrest | 15.41 | 347 | P | | Pn | | Pn | 09 35 23.1 | +0.1 |
| R32K | baz=161,SNR=54 | | | | S | | | Sn | 09 38 20.7 | +7.0 |
| R32K | baz=161 | | | | S | | | Sn | 09 38 20.7 | +7.0 |
| S31K | baz=161 Pelican | 15.44 | 343 | P | | Pn | | Pn | 09 35 22.5 | -0.9 |
| S31K | baz=156 | | | | S | | | Sn | 09 38 21.9 | +7.4 |
| S31K | baz=156 | | | | S | | | Sn | 09 38 21.9 | +7.4 |
| TOAD | baz=156 Toad River Com | 15.48 | 5 | P | | Pn | | Pn | 09 35 24.3 | +0.3 |
| TOAD | baz=186,SNR=100 | | | | S | | | Sn | 09 38 19.3 | +3.7 |
| LAO | baz=186 LASA Array | 15.57 | 71 | IAmb | | IAmb | | IAmb | 09 35 27.7 | |
| LAO | comp=Z,1µm,1.3s LASA Array | 15.57 | 71 | ⇑P | | Pn | | Pn | 09 35 23.6 | -1.6 |
| X16A | Lo Mia Camp, P | 15.58 | 120 | IAmb | | IAmb | | IAmb | 09 35 32.3 | |
| Q32M | comp=Z,670nm,1.2s Nakina River | 15.76 | 351 | IAmb | | IAmb | | IAmb | 09 35 33.7 | |
| Q32M | comp=Z,766nm,1.2s Nakina River | 15.76 | 351 | P | | Pn | | Pn | 09 35 29.5 | +1.7 |
| Q32M | baz=167,SNR=133 | | | | S | | | Sn | 09 38 28.7 | +6.1 |
| R31K | baz=167 City Hall, Gus | 15.76 | 344 | P | | Pn | | Pn | 09 35 27.2 | -0.3 |
| R31K | baz=158,SNR=16 | | | | S | | | Sn | 09 38 29.6 | +7.3 |
| MVCO | baz=158 Mesa Verde | 15.97 | 106 | ⇑P | | Pn | | Pn | 09 35 31.4 | +0.7 |
| LIRD | Liard River Hi | 16.00 | 3 | P | | Pn | | Pn | 09 35 31.2 | +0.5 |
| LIRD | baz=184,SNR=49 | | | | S | | | Sn | 09 38 33.8 | +5.7 |
| R33M | baz=184 Jennings River | 16.07 | 354 | P | | P | | P | 09 35 33.6 | -1.5 |
| R33M | baz=171,SNR=177 | | | | S | | | S | 09 38 38.6 | -5.2 |
| SMCO | baz=171 Snowmass | 16.21 | 98 | ⇑P | | Pn | | Pn | 09 35 31.5 | -2.3 |
| W18A | Petrified Fore | 16.25 | 115 | P | | P | | P | 09 35 37.1 | -0.3 |
| W18A | baz=307,SNR=82 | | | | S | | | S | 09 38 43.0 | -4.9 |
| N23A | baz=307 Red Feather La | 16.39 | 92 | IAmb | | IAmb | | IAmb | 09 35 39.1 | |
| N23A | comp=Z,2µm,1.3s Red Feather La | 16.39 | 92 | P | | Pn | | Pn | 09 35 35.1 | -1.0 |
| N23A | baz=287,SNR=543 | | | | S | | | Sn | 09 38 41.6 | +3.3 |
| 214A | baz=287 Organ Pipe Nat | 16.48 | 129 | IAmb | | IAmb | | IAmb | 09 35 44.8 | |
| 214A | comp=Z,3µm,2.0s Organ Pipe Nat | 16.48 | 129 | P | | P | | P | 09 35 39.8 | 0.0 |
| 214A | baz=319,SNR=200 | | | | S | | | S | 09 38 49.8 | -2.5 |
| P32M | baz=319 Atlin | 16.55 | 349 | IAmb | | IAmb | | IAmb | 09 35 44.4 | |
| P32M | comp=Z,995nm,1.4s Atlin | 16.55 | 349 | P | | Pn | | Pn | 09 35 38.5 | +0.8 |
| P32M | baz=164,SNR=90 | | | | S | | | S | 09 38 49.1 | -4.3 |
| PHWY | baz=164 Pilot Hill | 16.64 | 90 | IAmb | | IAmb | | IAmb | 09 35 39.3 | |
| SKAG | comp=Z,2µm,1.8s Skagway | 16.67 | 347 | P | | Pn | | Pn | 09 35 40.2 | +1.0 |
| SKAG | Skagway | 16.67 | 347 | IAmb | | IAmb | | IAmb | 09 35 45.6 | |
| SKAG | comp=Z,833nm,1.2s Skagway | 16.67 | 347 | ⇓P | | Pn | | Pn | 09 35 39.5 | +0.3 |
| SKAG | Skagway | 16.67 | 347 | P | | Pn | | Pn | 09 35 39.5 | +0.3 |
| SKAG | baz=160,SNR=86 | | | | S | | | S | 09 38 54.3 | -1.4 |
| WTLY | baz=160 Watson Lake, Y | 16.68 | 358 | P | | Pn | | Pn | 09 35 40.4 | +1.0 |
| WTLY | baz=177,SNR=12 | | | | S | | | S | 09 38 51.7 | -4.4 |
| KOTAN | baz=177 Kotaneelee Air | 16.84 | 6 | P | | Pn | | Pn | 09 35 41.0 | -0.4 |
| KOTAN | baz=189,SNR=38 | | | | S | | | Sn | 09 38 52.3 | +3.7 |
| PLBC | baz=189 Pleasant Camp | 16.85 | 345 | P | | Pn | | Pn | 09 35 41.5 | 0.0 |
| PLBC | baz=157,SNR=44 | | | | S | | | S | 09 38 59.0 | -0.5 |
| S22A | baz=157 4UR Ranch, Cre | 16.90 | 103 | IAmb | | IAmb | | IAmb | 09 35 49.4 | |
| S22A | comp=Z,1µm,1.6s 4UR Ranch, Cre | 16.90 | 103 | P | | Pn | | Pn | 09 35 43.4 | +0.8 |
| S22A | baz=297,SNR=574 | | | | S | | | S | 09 38 59.4 | -1.9 |
| ISCO | baz=297 Idaho Springs | 16.97 | 95 | IAmb | | IAmb | | IAmb | 09 35 49.7 | |
| P33M | comp=Z,2µm,1.4s Teslin, Yukon | 17.05 | 351 | P | | Pn | | Pn | 09 35 44.7 | +0.7 |
| P33M | baz=167,SNR=175 | | | | S | | | S | 09 39 04.8 | +1.2 |
| DGMT | baz=167 Dagmar | 17.12 | 65 | ⇑P | | Pn | | Pn | 09 35 43.3 | -1.8 |
| RSSD | Black Hills | 17.16 | 80 | | | Pn | | Pn | 09 35 43.9 | -1.8 |
| RSSD | comp=Z,2µm,1.4s | | | | IAmb | IAmb | | IAmb | 09 35 50.5 | |
| RSSD | Black Hills | 17.16 | 80 | ⇑P | | Pn | | Pn | 09 35 43.3 | -2.4 |
| RSSD | Black Hills | 17.16 | 80 | P | | Pn | | Pn | 09 35 43.9 | -1.8 |
| P29M | comp=Z,2µm,1.4s Windy Craggy | 17.29 | 343 | P | | Pn | | Pn | 09 35 45.9 | -1.2 |
| P29M | Windy Craggy | 17.29 | 343 | P | | Pn | | Pn | 09 35 47.0 | -0.1 |
| P29M | baz=154,SNR=62 | | | | S | | | S | 09 39 11.2 | +2.7 |
| TUC | baz=154 Tucson | 17.41 | 124 | P | | Pn | | Pn | 09 35 49.1 | +0.3 |
| TUC | comp=Z,2µm,1.9s | | | IAmb | | IAmb | | IAmb | 09 35 57.0 | |
| TUC | Tucson | 17.41 | 124 | ⇑P | | P | | P | 09 35 52.0 | +1.9 |
| TUC | Tucson | 17.41 | 124 | P | | Pn | | Pn | 09 35 49.1 | +0.3 |
| P30M | comp=Z,2µm,1.9s Million Dollar | 17.59 | 345 | P | | Pn | | Pn | 09 35 50.8 | +0.1 |
| P30M | baz=157 | | | | S | | | S | 09 39 16.0 | +1.4 |
| Q24A | baz=157 Divide | 17.61 | 97 | P | | Pn | | Pn | 09 35 51.5 | 0.0 |
| Q24A | baz=293,SNR=557 | | | | S | | | S | 09 39 12.7 | -3.0 |
| PNL | baz=293 Peninsula | 17.71 | 340 | P | | Pn | | Pn | 09 35 52.2 | 0.0 |
| PNL | Peninsula | 17.71 | 340 | P | | Pn | | Pn | 09 35 51.6 | -0.7 |
| PNL | baz=151,SNR=21 | | | | S | | | S | 09 39 19.4 | +2.5 |
| WHY | baz=151 Whitehorse | 17.74 | 348 | P | | Pn | | Pn | 09 35 52.2 | -0.5 |
| WHY | Whitehorse | 17.74 | 348 | P | | P | | P | 09 35 53.2 | -0.4 |
| WHY | baz=162,SNR=54 | | | | S | | | S | 09 39 17.8 | 0.0 |
| SDCO | baz=162 Great Sand Dun | 17.84 | 101 | IAmb | | IAmb | | IAmb | 09 35 57.3 | |
| SDCO | comp=Z,1µm,1.0s Great Sand Dun | 17.84 | 101 | ⇑P | | Pn | | Pn | 09 35 54.5 | +0.2 |
| N32M | Quiet Lake | 17.99 | 352 | P | | P | | P | 09 35 56.6 | +0.3 |
| N32M | baz=167

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Y22D** | **IRIS PASSCAL I** | **18.74** | **113** | P | **Pn** | **09 36 06.4** | **+1.2** |
| | baz=307,SNR=84 | | | | | | |
| Y22D | | | | S | **S** | **09 39 43.4** | **+4.9** |
| | baz=307 | | | | | | |
| **MESA** | **MESA** | **18.81** | **338** | P | **Pn** | **09 36 05.9** | **0.0** |
| | baz=146,SNR=19 | | | | | | |
| MESA | | | | S | **S** | **09 39 48.2** | **+8.6** |
| | baz=146 | | | | | | |
| **TABL** | **Table Mountain** | **18.82** | **339** | IAmb | IAmb | 09 36 13.2 | |
| | comp=Z,919nm,1.6s | | | | | | |
| **N30M** | **Aishikik Lake** | **18.85** | **346** | P | **Pn** | **09 36 06.2** | **-0.1** |
| | baz=158,SNR=164 | | | | | | |
| N30M | | | | S | **S** | **09 39 45.5** | **+5.2** |
| | baz=158 | | | | | | |
| **O28M** | **Mount Upton** | **18.87** | **341** | P | **P** | **09 36 06.3** | **+0.1** |
| | baz=151,SNR=46 | | | | | | |
| O28M | | | | S | **S** | **09 39 46.4** | **+5.5** |
| | baz=151 | | | | | | |
| **T25A** | **Trinidad** | **18.89** | **102** | IAmb | IAmb | 09 36 12.7 | |
| | comp=Z,1µm,1.5s | | | | | | |
| **T25A** | **Trinidad** | **18.89** | **102** | P | **Pn** | **09 36 08.2** | **+1.1** |
| | baz=298,SNR=394 | | | | | | |
| T25A | | | | S | **S** | **09 39 46.8** | **+5.2** |
| | baz=298 | | | | | | |
| **319A** | **Douglas** | **18.97** | **123** | IAmb | IAmb | 09 36 19.6 | |
| | comp=Z,1µm,1.1s | | | | | | |
| **YUK4** | **Talbot Arm** | **19.04** | **344** | P | **Pn** | **09 36 09.0** | **+0.3** |
| | baz=155 | | | | | | |
| YUK4 | | | | S | **S** | **09 39 51.2** | **+7.0** |
| | baz=155 | | | | | | |
| **FARO** | **Faro, Yukon** | **19.08** | **352** | P | **Pn** | **09 36 08.8** | **-0.2** |
| | baz=167,SNR=101 | | | | | | |
| FARO | | | | S | **S** | **09 39 50.1** | **+5.5** |
| | baz=167 | | | | | | |
| **LOGN** | **Logan Glacier** | **19.11** | **340** | IAmb | IAmb | 09 36 17.6 | |
| | comp=Z,732nm,1.4s | | | | | | |
| **121A** | **Cookes Peak, D** | **19.13** | **118** | P | **Pn** | **09 36 11.6** | **+1.7** |
| | baz=311,SNR=282 | | | | | | |
| 121A | | | | S | **S** | **09 39 54.5** | **+8.2** |
| | baz=311 | | | | | | |
| **BGLC** | **Bering Glacier** | **19.15** | **336** | P | **Pn** | **09 36 09.7** | **0.0** |
| | baz=143 | | | | | | |
| **M31M** | **Drury Creek, Y** | **19.17** | **351** | P | **Pn** | **09 36 09.6** | **-0.4** |
| | baz=165,SNR=98 | | | | | | |
| M31M | | | | S | **S** | **09 39 53.5** | **+7.1** |
| | baz=165 | | | | | | |
| **YUK8** | **Steele Glacier** | **19.23** | **342** | P | **Pn** | **09 36 10.6** | **-0.4** |
| | baz=152,SNR=61 | | | | | | |
| YUK8 | | | | S | **S** | **09 39 55.6** | **+7.6** |
| | baz=152 | | | | | | |
| **OGNE** | **Ogallala** | **19.23** | **89** | IAmb | IAmb | 09 36 13.4 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **OGNE** | **Ogallala** | **19.23** | **89** | ⇑P | **P** | **09 36 09.1** | **-1.0** |
| **ISLE** | **Juniper Island** | **19.27** | **338** | IAmb | IAmb | 09 36 22.5 | |
| | comp=Z,952nm,1.3s | | | | | | |
| **WAX** | **Waxell Ridge** | **19.29** | **337** | IAmb | IAmb | 09 36 14.6 | |
| | comp=Z,1µm,1.1s | | | | | | |
| **CTGM** | **Chitina Glacie** | **19.32** | **340** | IAmb | IAmb | 09 36 20.0 | |
| | comp=Z,910nm,1.3s | | | | | | |
| **CTG** | **Chitna Glacier** | **19.32** | **340** | P | **P** | **09 36 11.2** | **+0.3** |
| | baz=148,SNR=45 | | | | | | |
| CTG | | | | S | **S** | **09 39 53.7** | **+4.0** |
| | baz=148 | | | | | | |
| **KAIM** | **Kayak Island** | **19.34** | **334** | IAmb | IAmb | 09 36 20.5 | |
| | comp=Z,920nm,1.4s | | | | | | |
| **KAIM** | **Kayak Island** | **19.34** | **334** | P | **Pn** | **09 36 11.6** | **-0.4** |
| | baz=140 | | | | | | |
| KAIM | | | | S | **S** | **09 39 59.5** | **+10** |
| | baz=140 | | | | | | |
| **CRQE** | **Cirque** | **19.61** | **337** | P | **Pn** | **09 36 14.9** | **-0.5** |
| | baz=144,SNR=85 | | | | | | |
| CRQE | | | | S | **Sn** | **09 39 56.9** | **+1.4** |
| | baz=144 | | | | | | |
| **Q23K** | **Middleton Isla** | **19.61** | **331** | P | **P** | **09 36 14.1** | **+0.1** |
| | baz=136 | | | | | | |
| Q23K | | | | S | **Sn** | **09 40 00.7** | **+5.3** |
| | baz=136 | | | | | | |
| Q23K | | | | S | **Sn** | **09 40 00.7** | **+5.3** |
| | baz=136 | | | | | | |
| **HMT** | **Hamilton** | **19.61** | **335** | IAmb | IAmb | 09 36 25.3 | |
| | comp=Z,1µm,1.6s | | | | | | |
| **CRQM** | **Cirque** | **19.62** | **337** | IAmb | IAmb | 09 36 19.3 | |
| | comp=Z,1µm,1.3s | | | | | | |
| **RAGM** | **Ragged Mountai** | **19.78** | **335** | IAmb | IAmb | 09 36 28.6 | |
| | comp=Z,2µm,1.9s | | | | | | |
| **YUK3** | **Moose Creek** | **19.82** | **342** | P | **P** | **09 36 16.7** | **+0.2** |
| | baz=151,SNR=22 | | | | | | |
| YUK3 | | | | S | **Sn** | **09 40 05.0** | **+4.4** |
| | baz=151 | | | | | | |
| **WRGLY** | **Wrigley** | **19.96** | **6** | P | **P** | **09 36 17.3** | **-0.5** |
| WRGLY | | | | IAmb | IAmb | 09 36 25.4 | |
| | comp=Z,2µm,1.5s | | | | | | |
| **WRGLY** | **Wrigley** | **19.96** | **6** | P | **P** | **09 36 17.9** | **+0.2** |
| | baz=189,SNR=52 | | | | | | |
| WRGLY | | | | S | **S** | **09 40 01.1** | **-1.0** |
| | baz=189 | | | | | | |
| **M29M** | **Somme Creek** | **20.01** | **345** | P | **P** | **09 36 18.7** | **+0.2** |
| | baz=156,SNR=168 | | | | | | |
| M29M | | | | S | Sn | 09 40 09.5 | +4.2 |
| | baz=156 | | | | | | |
| **VRDI** | **Verde Repeater** | **20.10** | **338** | IAmb | IAmb | 09 36 24.8 | |
| | comp=Z,817nm,1.6s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **20.11** | **338** | P | **P** | **09 36 19.1** | **-0.3** |
| MCARA | | | | IAmb | IAmb | 09 36 31.4 | |
| | comp=Z,1µm,1.2s | | | | | | |
| MCARA | | | | IAMs_20 | IAMs_20 | 09 42 10.8 | |
| | comp=Z,39µm,20.0s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **20.11** | **338** | P | **P** | **09 36 19.7** | **+0.2** |
| | baz=146,SNR=83 | | | | | | |
| MCARA | | | | S | Sn | 09 40 10.7 | +3.3 |
| | baz=146 | | | | | | |
| **MDND** | **Maddock** | **20.13** | **68** | IAMs_20 | IAMs_20 | 09 43 55.0 | |
| | comp=Z,66µm,21.0s | | | | | | |
| **FFC** | **Flin Flon** | **20.19** | **47** | P | **P** | **09 36 19.4** | **-0.9** |
| **FFC** | **Flin Flon** | **20.19** | **47** | IAMs_20 | IAMs_20 | 09 43 57.9 | |
| | comp=Z,41µm,19.0s | | | | | | |
| **FFC** | **Flin Flon** | **20.19** | **47** | ⇑P | **P** | **09 36 19.8** | **-0.5** |
| **FFC** | **Flin Flon** | **20.19** | **47** | P | **P** | **09 36 19.4** | **-0.9** |
| FFC | | | | pmax | pmax | | |
| | comp=Z,9µm,1.8s | | | | | | |
| FFC | | | | MLR | MLR | | |
| | comp=Z,41µm,19.0s | | | | | | |
| **BMRM** | **Bremner River** | **20.22** | **336** | P | **P** | **09 36 20.9** | **+0.2** |
| | baz=142,SNR=29 | | | | | | |
| BMRM | | | | S | Sn | 09 40 15.0 | +4.8 |
| | baz=142 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **20.24** | **334** | P | Pn | 09 36 23.4 | +0.6 |
| **EYAK** | **Cordova Ski Ar** | **20.24** | **334** | P | **P** | **09 36 21.2** | **+0.3** |
| | baz=139,SNR=30 | | | | | | |
| EYAK | | | | S | Sn | 09 40 14.1 | +3.5 |
| | baz=139 | | | | | | |
| **GLB** | **Gilahina Butte** | **20.37** | **338** | IAmb | IAmb | 09 36 34.3 | |
| | comp=Z,562nm,1.3s | | | | | | |
| **HIN** | **Hinchinbrook I** | **20.38** | **333** | P | **P** | **09 36 21.6** | **-0.8** |
| HIN | | | | IAMs_20 | IAMs_20 | 09 41 55.5 | |
| | comp=Z,56µm,22.0s | | | | | | |
| **P23K** | **Montague Islan** | **20.39** | **331** | P | Pn | 09 36 24.1 | -0.5 |
| | baz=135,SNR=25 | | | | | | |
| P23K | | | | S | Sn | 09 40 17.6 | +3.4 |
| | baz=135 | | | | | | |
| P23K | | | | S | Sn | 09 40 17.6 | +3.4 |
| | baz=135 | | | | | | |
| **RTBA** | **Rita Blanca** | **20.41** | **102** | IAmb | IAmb | 09 36 37.2 | |
| | comp=Z,1µm,1.5s | | | | | | |
| **SRIG** | **Santa Rosalia** | **20.45** | **137** | P | **P** | **09 36 23.3** | **0.0** |
| SRIG | | | | IAmb | IAmb | 09 36 30.7 | |
| | comp=Z,1µm,1.5s | | | | | | |
| **SRIG** | **Santa Rosalia** | **20.45** | **137** | ⇑P | Pn | 09 36 25.1 | -0.4 |
| **EPT** | **El Paso** | **20.45** | **118** | IAmb | IAmb | 09 36 34.1 | |
| | comp=Z,803nm,1.0s | | | | | | |
| EPT | | | | IAMs_20 | IAMs_20 | 09 44 47.3 | |
| | comp=Z,40µm,19.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.57** | **18** | P | **P** | **09 36 23.1** | **-1.2** |
| **YKA** | **Yellowknife Ar** | **20.57** | **18** | P | **P** | **09 36 23.6** | **-0.7** |
| | comp=Z,40nm,0.8s,baz=211,slow=11,SNR=30 | | | | | | |
| YKA | | | | S | **S** | **09 40 07.7** | **-6.7** |
| | comp=Z,2.9nm,0.7s,baz=210,slow=20,SNR=1.5 | | | | | | |
| YKA | | | | PcP | **PcP** | **09 40 35.1** | **+0.1** |
| | comp=Z,2.4nm,0.6s,baz=224,slow=2.0,SNR=4.0 | | | | | | |
| YKA | | | | LR | LR | 09 43 37.0 | |
| | comp=Z,9µm,18.1s,baz=206,slow=35 | | | | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| **M27K** | **Edge Creek, AK** | **20.65** | **341** | IAmb | IAmb | 09 36 37.2 | |
| | comp=Z,2µm,1.9s | | | | | | |
| M27K | | | | IAMs_20 | IAMs_20 | 09 42 44.8 | |
| | comp=Z,43µm,19.0s | | | | | | |
| **M27K** | **Edge Creek, AK** | **20.65** | **341** | P | **P** | **09 36 25.3** | **-0.1** |
| | baz=149,SNR=62 | | | | | | |
| M27K | | | | S | Sn | 09 40 22.5 | +1.8 |
| | baz=149 | | | | | | |
| M27K | | | | S | Sn | 09 40 22.5 | +1.8 |
| | baz=149 | | | | | | |
| **N25K** | **Chitina, Valde** | **20.73** | **337** | IAmb | IAmb | 09 36 39.7 | |
| | comp=Z,787nm,1.2s | | | | | | |
| **N25K** | **Chitina, Valde** | **20.73** | **337** | P | **P** | **09 36 26.3** | **+0.1** |
| | baz=143,SNR=48 | | | | | | |
| N25K | | | | S | Sn | 09 40 24.0 | +1.6 |
| | baz=143 | | | | | | |
| **SUSD** | **Miller** | **20.74** | **77** | IAMs_20 | IAMs_20 | 09 44 26.5 | |
| | comp=Z,41µm,19.0s | | | | | | |
| **GLI** | **Glacier Island** | **20.93** | **333** | IAmb | IAmb | 09 36 34.4 | |
| | comp=Z,551nm,1.0s | | | | | | |
| **GLI** | **Glacier Island** | **20.93** | **333** | P | **P** | **09 36 27.9** | **-0.4** |
| | baz=137,SNR=36 | | | | | | |
| GLI | | | | S | Sn | 09 40 30.5 | +3.3 |
| | baz=137 | | | | | | |
| **M26K** | **Nabesna, AK** | **20.96** | **340** | IAmb | IAmb | 09 36 38.4 | |
| | comp=Z,626nm,1.6s | | | | | | |
| **M26K** | **Nabesna, AK** | **20.96** | **340** | P | **P** | **09 36 28.5** | **-0.2** |
| | baz=147,SNR=76 | | | | | | |
| M26K | | | | S | Sn | 09 40 26.4 | -1.5 |
| | baz=147 | | | | | | |
| M26K | | | | S | Sn | 09 40 26.4 | -1.5 |
| | baz=147 | | | | | | |
| **KLU** | **Klutina** | **21.03** | **335** | IAmb | IAmb | 09 36 42.7 | |
| | comp=Z,857nm,1.4s | | | | | | |
| **KLU** | **Klutina** | **21.03** | **335** | P | **P** | **09 36 29.9** | **+0.4** |
| | baz=140,SNR=87 | | | | | | |
| KLU | | | | S | Sn | 09 40 26.7 | -2.9 |
| | baz=140 | | | | | | |
| **KDAK** | **Kodiak Island** | **21.10** | **321** | P | **P** | **09 36 26.2** | **-3.9** |
| KDAK | | | | IAmb | IAmb | 09 36 33.6 | |
| | comp=Z,638nm,0.9s | | | | | | |
| **KDAK** | **Kodiak Island** | **21.10** | **321** | P | **P** | **09 36 30.1** | **-0.1** |
| | comp=Z,505nm,1.0s,baz=144,slow=5.4,SNR=77 | | | | | | |
| KDAK | | | | S | **S** | **09 40 22.7** | **-2.3** |
| | comp=Z,14nm,1.1s,baz=252,slow=12,SNR=2.1 | | | | | | |
| KDAK | | | | LR | LR | 09 42 33.2 | |
| | comp=Z,38µm,21.7s,baz=140,slow=31 | | | | | | |
| | comp=Z,505nm,1.0s | | | | | | |
| **KDAK** | **Kodiak Island** | **21.10** | **321** | P | **P** | **09 36 29.8** | **-0.4** |
| | baz=122 | | | | | | |
| KDAK | | | | S | Sn | 09 40 30.4 | -1.0 |
| | baz=122 | | | | | | |
| **KDAK** | **Kodiak Island** | **21.10** | **321** | *i* P | **P** | **09 36 29.4** | **-0.8** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,1µm,1.0s | | | | | | |
| **OHAK** | **Old Harbor** | **21.14** | **320** | P | **P** | **09 36 30.3** | **-0.3** |
| **OHAK** | **Old Harbor** | **21.14** | **320** | P | **P** | **09 36 30.0** | **-0.6** |
| OHAK | | | | IAmb | IAmb | 09 36 33.9 | |
| | comp=Z,551nm,1.1s | | | | | | |
| **OHAK** | **Old Harbor** | **21.14** | **320** | P | **P** | **09 36 30.4** | **-0.2** |
| | baz=119,SNR=72 | | | | | | |
| OHAK | | | | S | Sn | 09 40 30.9 | -1.4 |
| | baz=119 | | | | | | |
| **K29M** | **Barlow Dome** | **21.16** | **348** | IAMs_20 | IAMs_20 | 09 43 36.9 | |
| | comp=Z,46µm,18.0s | | | | | | |
| **K29M** | **Barlow Dome** | **21.16** | **348** | P | **P** | **09 36 31.1** | **+0.1** |
| | baz=160,SNR=94 | | | | | | |
| K29M | | | | S | Sn | 09 40 30.2 | -2.7 |
| | baz=160 | | | | | | |
| **SEW** | **Seward** | **21.21** | **329** | P | **P** | **09 36 30.8** | **-0.5** |
| | baz=132,SNR=71 | | | | | | |
| SEW | | | | S | Sn | 09 40 31.3 | -2.6 |
| | baz=132 | | | | | | |
| **MNTX** | **Cornudas Mount** | **21.22** | **116** | ⇓P | **P** | **09 36 33.6** | **+1.9** |
| **BCAR** | **Beaver Creek A** | **21.25** | **342** | P | **P** | **09 36 31.5** | **-0.3** |
| **L27K** | **Beaver Creek,** | **21.25** | **342** | IAmb | IAmb | 09 36 46.4 | |
| | comp=Z,812nm,1.5s | | | | | | |
| L27K | | | | IAMs_20 | IAMs_20 | 09 43 03.7 | |
| | comp=Z,44µm,21.0s | | | | | | |
| **L27K** | **Beaver Creek,** | **21.25** | **342** | P | **P** | **09 36 31.8** | **-0.1** |
| | baz=150,SNR=178 | | | | | | |
| L27K | | | | S | Sn | 09 40 32.5 | -2.5 |
| | baz=150 | | | | | | |
| **SII** | **Sitkinak Islan** | **21.26** | **317** | P | **P** | **09 36 32.0** | **+0.1** |
| **SII** | **Sitkinak Islan** | **21.26** | **317** | P | **P** | **09 36 31.3** | **-0.6** |
| SII | | | | IAmb | IAmb | 09 36 35.1 | |
| | comp=Z,763nm,1.1s | | | | | | |
| **SII** | **Sitkinak Islan** | **21.26** | **317** | P | **P** | **09 36 31.3** | **-0.6** |
| | baz=116,SNR=31 | | | | | | |
| SII | | | | S | Sn | 09 40 34.6 | -0.6 |
| | baz=116 | | | | | | |
| **PWL** | **Port Wells** | **21.33** | **332** | IAMs_20 | IAMs_20 | 09 42 34.8 | |
| | comp=Z,32µm,18.0s | | | | | | |
| **PWL** | **Port Wells** | **21.33** | **332** | P | **P** | **09 36 32.0** | **-0.6** |
| | baz=135,SNR=82 | | | | | | |
| PWL | | | | S | Sn | 09 40 35.5 | -1.4 |
| | baz=135 | | | | | | |
| **BRSE** | **Bradley Lake S** | **21.47** | **327** | P | **P** | **09 36 34.4** | **+0.3** |
| | baz=129,SNR=108 | | | | | | |
| BRSE | | | | S | Sn | 09 40 37.1 | -3.0 |
| | baz=129 | | | | | | |
| **SYI** | **Shuyak Island** | **21.47** | **323** | IAmb | IAmb | 09 36 37.3 | |
| | comp=Z,766nm,0.9s | | | | | | |
| **Q20K** | **Shuyak Island** | **21.47** | **323** | P | **P** | **09 36 34.4** | **+0.3** |
| | baz=124,SNR=51 | | | | | | |
| Q20K | | | | S | Sn | 09 40 38.5 | -1.7 |
| | baz=124 | | | | | | |
| **HARP** | **HAARP** | **21.52** | **338** | P | **P** | **09 36 35.3** | **+0.6** |
| | baz=143,SNR=32 | | | | | | |
| HARP | | | | S | Sn | 09 40 39.1 | -2.3 |
| | baz=143 | | | | | | |
| **CNPM** | **China Poot** | **21.53** | **326** | IAmb | IAmb | 09 36 45.5 | |
| | comp=Z,860nm,1.2s | | | | | | |
| CNPM | | | | IAMs_20 | IAMs_20 | 09 42 37.7 | |
| | comp=Z,48µm,21.0s | | | | | | |
| **BRLK** | **Bradley Lake** | **21.54** | **327** | IAmb | IAmb | 09 36 38.2 | |
| | comp=Z,657nm,0.9s | | | | | | |
| BRLK | | | | IAMs_20 | IAMs_20 | 09 42 37.9 | |
| | comp=Z,46µm,20.0s | | | | | | |
| **O22K** | **Cooper Landing** | **21.56** | **330** | IAmb | IAmb | 09 36 53.7 | |
| | comp=Z,849nm,1.0s | | | | | | |
| O22K | | | | IAMs_20 | IAMs_20 | 09 42 40.1 | |
| | comp=Z,37µm,18.0s | | | | | | |
| **O22K** | **Cooper Landing** | **21.56** | **330** | P | **P** | **09 36 35.2** | **+0.1** |
| | baz=132,SNR=35 | | | | | | |
| O22K | | | | S | **S** | **09 40 36.2** | **+2.2** |
| | baz=132 | | | | | | |
| **L26K** | **Log Cabin Wild** | **21.58** | **341** | IAMs_20 | IAMs_20 | 09 43 13.4 | |
| | comp=Z,42µm,20.0s | | | | | | |
| **L26K** | **Log Cabin Wild** | **21.58** | **341** | P | **P** | **09 36 35.7** | **+0.5** |
| | baz=147,SNR=88 | | | | | | |
| L26K | | | | S | **S** | **09 40 37.8** | **+3.5** |
| | baz=147 | | | | | | |
| L26K | | | | S | **S** | **09 40 37.8** | **+3.5** |
| | baz=147 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **21.58** | **336** | IAmb | IAmb | 09 36 51.6 | |
| | comp=Z,637nm,1.1s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **21.58** | **336** | P | **P** | **09 36 35.6** | **+0.2** |
| | baz=141,SNR=34 | | | | | | |
| M24K | | | | S | **S** | **09 40 38.6** | **+4.1** |
| | baz=141 | | | | | | |
| **CBKS** | **Cedar Bluff** | **21.59** | **93** | IAmb | IAmb | 09 36 41.3 | |
| | comp=Z,804nm,1.1s | | | | | | |
| CBKS | | | | IAMs_20 | IAMs_20 | 09 45 05.9 | |
| | comp=Z,48µm,22.0s | | | | | | |
| **CBKS** | **Cedar Bluff** | **21.59** | **93** | ⇑P | **P** | **09 36 35.1** | **-0.5** |
| **MSTX** | **Muleshoe** | **21.64** | **108** | IAmb | IAmb | 09 36 44.1 | |
| | comp=Z,429nm,1.1s | | | | | | |
| **DAWY** | **Dawson** | **21.68** | **346** | IAmb | IAmb | 09 36 42.0 | |
| | comp=Z,544nm,1.1s | | | | | | |
| DAWY | | | | IAMs_20 | IAMs_20 | 09 43 40.6 | |
| | comp=Z,41µm,20.0s | | | | | | |
| **DAWY** | **Dawson** | **21.68** | **346** | P | **P** | **09 36 36.2** | **-0.2** |
| | baz=156,SNR=371 | | | | | | |
| DAWY | | | | S | Sn | 09 40 41.1 | -4.0 |
| | baz=156 | | | | | | |
| **CHIR** | **Chirikof Islan** | **21.68** | **315** | IAmb | IAmb | 09 36 41.6 | |
| | comp=Z,968nm,1.4s | | | | | | |
| CHIR | | | | IAMs_20 | IAMs_20 | 09 42 24.5 | |
| | comp=Z,39µm,21.0s | | | | | | |
| **CHIR** | **Chirikof Islan** | **21.68** | **315** | P | **P** | **09 36 36.2** | **-0.1** |
| | baz=112,SNR=9.1 | | | | | | |
| CHIR | | | | S | **S** | **09 40 40.4** | **+4.0** |
| | baz=112 | | | | | | |
| **J30M** | **Hart River** | **21.70** | **350** | IAmb | IAmb | 09 36 44.5 | |
| | comp=Z,396nm,1.1s | | | | | | |
| J30M | | | | IAMs_20 | IAMs_20 | 09 43 57.8 | |
| | comp=Z,42µm,19.0s | | | | | | |
| **J30M** | **Hart River** | **21.70** | **350** | P | **P** | **09 36 37.3** | **+0.7** |
| | baz=163,SNR=322 | | | | | | |
| J30M | | | | S | **S** | **09 40 40.0** | **+3.2** |
| | baz=163 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.72** | **335** | IAmb | IAmb | 09 36 43.8 | |
| | comp=Z,759nm,1.1s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.72** | **335** | P | **P** | **09 36 37.1** | **+0.2** |
| | baz=138,SNR=78 | | | | | | |
| SCM | | | | S | **S** | **09 40 39.5** | **+2.3** |
| | baz=138 | | | | | | |
| **HOM** | **Homer** | **21.77** | **326** | IAMs_20 | IAMs_20 | 09 42 56.2 | |
| | comp=Z,39µm,20.0s | | | | | | |
| **HOM** | **Homer** | **21.77** | **326** | P | **P** | **09 36 37.7** | **+0.3** |
| | baz=127,SNR=21 | | | | | | |
| HOM | | | | S | Sn | 09 40 44.0 | -3.4 |
| | baz=127 | | | | | | |
| **KNK** | **Knik Glacier** | **21.77** | **333** | IAmb | IAmb | 09 36 48.9 | |
| | comp=Z,1µm,1.3s | | | | | | |
| **KNK** | **Knik Glacier** | **21.77** | **333** | P | **P** | **09 36 37.5** | **+0.1** |
| | baz=136,SNR=89 | | | | | | |
| KNK | | | | S | **S** | **09 40 42.0** | **+3.8** |
| | baz=136 | | | | | | |
| **M23K** | **Glacier View** | **21.82** | **334** | P | **P** | **09 36 37.7** | **-0.1** |
| | baz=138,SNR=149 | | | | | | |
| M23K | | | | S | **S** | **09 40 42.4** | **+3.4** |
| | baz=138 | | | | | | |
| **J29N** | **Klondike Camp** | **21.84** | **348** | IAmb | IAmb | 09 36 54.0 | |
| | comp=Z,339nm,0.9s | | | | | | |
| J29N | | | | IAMs_20 | IAMs_20 | 09 43 58.8 | |
| | comp=Z,49µm,19.0s | | | | | | |
| **J29N** | **Klondike Camp** | **21.84** | **348** | P | **P** | **09 36 38.5** | **+0.3** |
| | baz=159,SNR=25 | | | | | | |
| J29N | | | | S | **S** | **09 40 44.1** | **+4.4** |
| | baz=159 | | | | | | |
| **R18K** | **Karluk** | **21.86** | **320** | P | **P** | **09 36 38.1** | **-0.2** |
| | baz=118,SNR=37 | | | | | | |
| R18K | | | | S | **S** | **09 40 43.3** | **+3.5** |
| | baz=118 | | | | | | |
| R18K | | | | S | **S** | **09 40 43.3** | **+3.5** |
| | baz=118 | | | | | | |
| **AMTX** | **Amarillo** | **21.92** | **104** | ⇓P | **P** | **09 36 40.7** | **+1.5** |
| **BGNE** | **Belgrade** | **21.93** | **85** | IAmb | IAmb | 09 36 50.5 | |
| | comp=Z,986nm,1.1s | | | | | | |
| BGNE | | | | IAMs_20 | IAMs_20 | 09 45 26.2 | |
| | comp=Z,61µm,20.0s | | | | | | |
| **RC01** | **Rabbit Creek A** | **21.98** | **331** | IAMs_20 | IAMs_20 | 09 42 55.1 | |
| | comp=Z,35µm,20.0s | | | | | | |
| **RC01** | **Rabbit Creek A** | **21.98** | **331** | P | **P** | **09 36 39.5** | **-0.1** |
| | baz=133,SNR=38 | | | | | | |
| RC01 | | | | S | **S** | **09 40 46.1** | **+3.8** |
| | baz=133 | | | | | | |
| **SML** | **Sawmill** | **22.02** | **334** | IAmb | IAmb | 09 36 59.4 | |
| | comp=Z,926nm,1.2s | | | | | | |
| **SML** | **Sawmill** | **22.02** | **334** | P | **P** | **09 36 39.8** | **-0.3** |
| | baz=137,SNR=75 | | | | | | |
| SML | | | | S | **S** | **09 40 45.2** | **+2.1** |
| | baz=137 | | | | | | |
| **PAX** | **Paxson** | **22.07** | **338** | P | **P** | **09 36 40.7** | **0.0** |
| | baz=144,SNR=41 | | | | | | |
| PAX | | | | S | **S** | **09 40 47.4** | **+3.3** |
| | baz=144 | | | | | | |
| **PMR** | **Palmer** | **22.13** | **332** | P | **P** | **09 36 41.3** | **+0.2** |
| **PMR** | **Palmer** | **22.13** | **332** | IAmb | IAmb | 09 36 51.6 | |
| | comp=Z,812nm,1.5s | | | | | | |
| **PMR** | **Palmer** | **22.13** | **332** | P | **P** | **09 36 41.0** | **-0.2** |
| | baz=135,SNR=84 | | | | | | |
| PMR | | | | S | **S** | **09 40 48.1** | **+3.2** |
| | baz=135 | | | | | | |
| **K27K** | **Chicken** | **22.16** | **343** | IAMs_20 | IAMs_20 | 09 43 32.6 | |
| | comp=Z,40µm,22.0s | | | | | | |
| **K27K** | **Chicken** | **22.16** | **343** | P | **P** | **09 36 41.7** | **+0.2** |
| | baz=151 | | | | | | |
| K27K | | | | S | **S** | **09 40 48.7** | **+3.2** |
| | baz=151 | | | | | | |
| K27K | | | | S | **S** | **09 40 48.7** | **+3.2** |
| | baz=151 | | | | | | |
| **GHO** | **Glory Hole Cre** | **22.19** | **333** | IAmb | IAmb | 09 36 50.7 | |
| | comp=Z,349nm,0.9s | | | | | | |
| **FIS** | **Fire Island** | **22.19** | **331** | IAMs_20 | IAMs_20 | 09 43 01.6 | |
| | comp=Z,37µm,21.0s | | | | | | |
| **Q19K** | **Cape Douglas,** | **22.19** | **323** | IAMs_20 | IAMs_20 | 09 42 58.5 | |
| | comp=Z,33µm,20.0s | | | | | | |
| **Q19K** | **Cape Douglas,** | **22.19** | **323** | P | **P** | **09 36 41.6** | **-0.3** |
| | baz=122,SNR=33 | | | | | | |
| Q19K | | | | S | **S** | **09 40 50.9** | **+4.6** |
| | baz=122 | | | | | | |
| Q19K | | | | S | **S** | **09 40 50.9** | **+4.6** |
| | baz=122 | | | | | | |
| **CAPN** | **Captain Cook N** | **22.28** | **329** | P | **P** | **09 36 43.5** | **+0.7** |
| | baz=130 | | | | | | |
| CAPN | | | | S | **S** | **09 40 51.7** | **+3.8** |
| | baz=130 | | | | | | |
| **I30M** | **Mount Dempster** | **22.32** | **350** | IAmb | IAmb | 09 36 54.7 | |
| | comp=Z,385nm,1.0s | | | | | | |
| I30M | | | | IAMs_20 | IAMs_20 | 09 44 18.3 | |
| | comp=Z,40µm,21.0s | | | | | | |
| **I30M** | **Mount Dempster** | **22.32** | **350** | P | **P** | **09 36 43.1** | **-0.3** |
| | baz=163,SNR=145 | | | | | | |
| I30M | | | | S | **S** | **09 40 50.9** | **+2.0** |
| | baz=163 | | | | | | |
| **WAT6** | **Susitna Watana** | **22.41** | **336** | P | **P** | **09 36 43.9** | **-0.5** |
| | baz=139,SNR=48 | | | | | | |
| WAT6 | | | | S | **S** | **09 40 50.5** | **-0.2** |
| | baz=139 | | | | | | |
| **P19K** | **Oil Pt** | **22.42** | **325** | IAMs_20 | IAMs_20 | 09 43 17.4 | |
| | comp=Z,31µm,18.0s | | | | | | |
| **P19K** | **Oil Pt** | **22.42** | **325** | P | **P** | **09 36 44.2** | **-0.1** |
| | baz=124,SNR=10.0 | | | | | | |
| P19K | | | | S | **S** | **09 40 55.1** | **+4.4** |
| | baz=124 | | | | | | |
| **O20K** | **Slope Mountain** | **22.42** | **327** | P | **P** | **09 36 44.6** | **+0.1** |
| | baz=126,SNR=31 | | | | | | |
| O20K | | | | S | **S** | **09 40 53.3** | **+2.5** |
| | baz=126 | | | | | | |
| O20K | | | | S | **S** | **09 40 53.3** | **+2.5** |
| | baz=126 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **22.46** | **73** | IAMs_20 | IAMs_20 | 09 45 28.9 | |
| | comp=Z,44µm,22.0s | | | | | | |
| **R32A** | **Long Quarter,** | **22.48** | **93** | IAMs_20 | IAMs_20 | 09 46 03.2 | |
| | comp=Z,39µm,19.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **22.52** | **78** | P | **P** | **09 36 44.1** | **-1.5** |
| **ECSD** | **EROS Data Cent** | **22.52** | **78** | ⇑P | **P** | **09 36 44.9** | **-0.6** |
| **SCRK** | **Sand Creek** | **22.54** | **341** | IAMs_20 | IAMs_20 | 09 43 42.8 | |
| | comp=Z,48µm,21.0s | | | | | | |
| **SCRK** | **Sand Creek** | **22.54** | **341** | P | **P** | **09 36 45.1** | **-0.6** |
| | baz=148,SNR=63 | | | | | | |
| SCRK | | | | S | **S** | **09 40 55.2** | **+2.3** |
| | baz=148 | | | | | | |
| **RIDG** | **Independent Ri** | **22.55** | **340** | IAmb | IAmb | 09 36 55.1 | |
| | comp=Z,416nm,1.1s | | | | | | |
| RIDG | | | | IAMs_20 | IAMs_20 | 09 43 42.0 | |
| | comp=Z,52µm,21.0s | | | | | | |
| **RIDG** | **Independent Ri** | **22.55** | **340** | P | **P** | **09 36 45.5** | **-0.2** |
| | baz=146,SNR=59 | | | | | | |
| RIDG | | | | S | **S** | **09 40 54.1** | **+1.2** |
| | baz=146 | | | | | | |
| **ILSW** | **Iliamna Southw** | **22.58** | **326** | IAMs_20 | IAMs_20 | 09 43 23.5 | |
| | comp=Z,37µm,19.0s | | | | | | |
| **M22K** | **Willow** | **22.58** | **332** | IAmb | IAmb | 09 36 54.0 | |
| | comp=Z,941nm,1.1s | | | | | | |
| **M22K** | **Willow** | **22.58** | **332** | P | **P** | **09 36 45.4** | **-0.5** |
| | baz=133,SNR=22 | | | | | | |
| M22K | | | | S | **S** | **09 40 55.9** | **+2.5** |
| | baz=133 | | | | | | |
| **SUA** | **Susitna One** | **22.60** | **331** | IAmb | IAmb | 09 36 53.9 | |
| | comp=Z,667nm,1.2s | | | | | | |
| **SUA** | **Susitna One** | **22.60** | **331** | P | **P** | **09 36 45.8** | **-0.5** |
| | baz=132,SNR=59 | | | | | | |
| SUA | | | | S | **S** | **09 40 53.8** | **-0.3** |
| | baz=132 | | | | | | |
| **EGAK** | **Eagle** | **22.64** | **345** | IAMs_20 | IAMs_20 | 09 43 59.3 | |
| | comp=Z,37µm,21.0s | | | | | | |
| **EGAK** | **Eagle** | **22.64** | **345** | ⇓P | **P** | **09 36 46.1** | **-0.6** |
| **EGAK** | **Eagle** | **22.64** | **345** | P | **P** | **09 36 46.0** | **-0.6** |
| | baz=154,SNR=118 | | | | | | |
| EGAK | | | | S | **S** | **09 40 55.0** | **+0.4** |
| | baz=154 | | | | | | |
| **AGMN** | **Agassiz

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| I29M | | | | S | S | 09 40 57.4 | +1.5 | | |
| | baz=159 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.73** | **61** | IAmb | IAmb | 09 36 56.4 | | | |
| | comp=Z,625nm,0.9s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.73** | **61** | ⇑P | **P** | **09 36 46.2** | **-1.5** | | |
| **ULM** | **Lac du Bonnet** | **22.73** | **61** | P | **P** | **09 36 47.0** | **-0.8** | | |
| | comp=Z,154nm,0.8s,baz=271,slow=10,SNR=90 | | | | | | | | |
| ULM | | | | S | **S** | **09 40 54.0** | **-2.4** | | |
| | comp=Z,17nm,0.8s,baz=211,slow=17,SNR=1.8 | | | | | | | | |
| ULM | | | | LR | LR | 09 45 48.8 | | | |
| | comp=Z,59µm,20.4s,baz=265,slow=37 | | | | | | | | |
| | comp=Z,154nm,0.8s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.73** | **61** | *i* P | **P** | **09 36 45.9** | **-1.8** | | |
| **R17L** | **Mt. Peulik Vol** | **22.80** | **318** | P | **P** | **09 36 48.3** | **-0.2** | | |
| | baz=116,SNR=20 | | | | | | | | |
| R17L | | | | S | **S** | **09 41 01.7** | **+4.1** | | |
| | baz=116 | | | | | | | | |
| **K24K** | **Donnelly Dome** | **22.83** | **339** | P | **P** | **09 36 48.6** | **-0.1** | | |
| | baz=144,SNR=47 | | | | | | | | |
| K24K | | | | S | **S** | **09 41 02.0** | **+3.9** | | |
| | baz=144 | | | | | | | | |
| K24K | | | | S | **S** | **09 41 02.0** | **+3.9** | | |
| | baz=144 | | | | | | | | |
| **WAT1** | **Susitna Watana** | **22.85** | **335** | P | **P** | **09 36 48.1** | **-0.8** | | |
| | baz=138 | | | | | | | | |
| WAT1 | | | | S | **S** | **09 41 02.3** | **+3.9** | | |
| | baz=138 | | | | | | | | |
| **ODSA** | **Odessa** | **22.85** | **111** | IAmb | IAmb | 09 37 06.3 | | | |
| | comp=Z,770nm,1.0s | | | | | | | | |
| **Q17K** | **Contact Creek** | **22.87** | **320** | P | **P** | **09 36 48.2** | **-1.0** | | |
| | baz=118,SNR=76 | | | | | | | | |
| Q17K | | | | S | **S** | **09 41 01.2** | **+2.2** | | |
| | baz=118 | | | | | | | | |
| **SPU** | **Mount Spurr** | **22.89** | **329** | IAmb | IAmb | 09 37 01.6 | | | |
| | comp=Z,521nm,1.5s | | | | | | | | |
| **J26L** | **Joseph Creek** | **22.89** | **342** | IAMs_20 | IAMs_20 | 09 44 06.0 | | | |
| | comp=Z,39µm,20.0s | | | | | | | | |
| **J26L** | **Joseph Creek** | **22.89** | **342** | P | **P** | **09 36 49.1** | **-0.3** | | |
| | baz=149,SNR=95 | | | | | | | | |
| J26L | | | | S | **S** | **09 41 01.3** | **+2.1** | | |
| | baz=149 | | | | | | | | |
| J26L | | | | S | **S** | **09 41 01.3** | **+2.1** | | |
| | baz=149 | | | | | | | | |
| **ELIS** | **Ellis County** | **22.96** | **99** | IAmb | IAmb | 09 36 58.2 | | | |
| | comp=Z,687nm,1.0s | | | | | | | | |
| ELIS | | | | IAMs_20 | IAMs_20 | 09 46 13.1 | | | |
| | comp=Z,33µm,19.0s | | | | | | | | |
| **N20K** | **Mount Spurr** | **22.96** | **329** | P | **P** | **09 36 49.4** | **-0.7** | | |
| | baz=129,SNR=31 | | | | | | | | |
| N20K | | | | S | **S** | **09 41 01.8** | **+1.4** | | |
| | baz=129 | | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **22.96** | **329** | P | **P** | **09 36 49.2** | **-0.9** | | |
| | baz=129,SNR=20 | | | | | | | | |
| SPCR | | | | S | **S** | **09 41 03.0** | **+2.6** | | |
| | baz=129 | | | | | | | | |
| **I28M** | **Miner Creek** | **23.04** | **347** | IAMs_20 | IAMs_20 | 09 44 35.6 | | | |
| | comp=Z,46µm,20.0s | | | | | | | | |
| **I28M** | **Miner Creek** | **23.04** | **347** | P | **P** | **09 36 50.1** | **-0.8** | | |
| | baz=157,SNR=278 | | | | | | | | |
| I28M | | | | S | **S** | **09 41 05.2** | **+3.3** | | |
| | baz=157 | | | | | | | | |
| **L34A** | **Svendsen Farm,** | **23.07** | **83** | IAmb | IAmb | 09 36 59.0 | | | |
| | comp=Z,651nm,0.9s | | | | | | | | |
| **CUT** | **Chulitna** | **23.08** | **333** | IAmb | IAmb | 09 37 13.3 | | | |
| | comp=Z,749nm,1.2s | | | | | | | | |
| **CUT** | **Chulitna** | **23.08** | **333** | P | **P** | **09 36 50.4** | **-0.9** | | |
| | baz=134,SNR=29 | | | | | | | | |
| CUT | | | | S | **S** | **09 41 07.2** | **+4.8** | | |
| | baz=134 | | | | | | | | |
| **DKNS** | **Dickens** | **23.09** | **106** | IAmb | IAmb | 09 37 01.4 | | | |
| | comp=Z,967nm,1.4s | | | | | | | | |
| **P18K** | **Big Mountain,** | **23.13** | **323** | IAmb | IAmb | 09 37 05.0 | | | |
| | comp=Z,886nm,1.5s | | | | | | | | |
| **P18K** | **Big Mountain,** | **23.13** | **323** | P | **P** | **09 36 50.5** | **-1.3** | | |
| | baz=121,SNR=19 | | | | | | | | |
| P18K | | | | S | **S** | **09 41 05.6** | **+2.3** | | |
| | baz=121 | | | | | | | | |
| **O19K** | **Port Alsworth** | **23.18** | **325** | IAmb | IAmb | 09 37 06.0 | | | |
| | comp=Z,1µm,1.6s | | | | | | | | |
| O19K | | | | IAMs_20 | IAMs_20 | 09 43 51.5 | | | |
| | comp=Z,39µm,19.0s | | | | | | | | |
| **O19K** | **Port Alsworth** | **23.18** | **325** | P | **P** | **09 36 51.6** | **-0.7** | | |
| | baz=124,SNR=42 | | | | | | | | |
| O19K | | | | S | **S** | **09 41 06.1** | **+2.1** | | |
| | baz=124 | | | | | | | | |
| O19K | | | | S | **S** | **09 41 06.1** | **+2.1** | | |
| | baz=124 | | | | | | | | |
| **ALPN** | **Alpine** | **23.22** | **116** | IAmb | IAmb | 09 36 59.9 | | | |
| | comp=Z,342nm,0.9s | | | | | | | | |
| **SKT** | **Skwentna** | **23.22** | **331** | IAmb | IAmb | 09 37 15.9 | | | |
| | comp=Z,364nm,1.4s | | | | | | | | |
| SKT | | | | IAMs_20 | IAMs_20 | 09 43 52.8 | | | |
| | comp=Z,33µm,19.0s | | | | | | | | |
| **SKT** | **Skwentna** | **23.22** | **331** | P | **P** | **09 36 52.0** | **-0.7** | | |
| | baz=132,SNR=54 | | | | | | | | |
| SKT | | | | S | **S** | **09 41 05.7** | **+1.0** | | |
| | baz=132 | | | | | | | | |
| **CHGN** | **Chignik** | **23.31** | **314** | IAmb | IAmb | 09 37 07.0 | | | |
| | comp=Z,410nm,1.2s | | | | | | | | |
| **CHGN** | **Chignik** | **23.31** | **314** | P | **P** | **09 36 53.1** | **-0.5** | | |
| | baz=110,SNR=26 | | | | | | | | |
| CHGN | | | | S | **S** | **09 41 09.0** | **+2.8** | | |
| | baz=110 | | | | | | | | |
| **O18K** | **Koktuh Hills** | **23.37** | **324** | IAmb | IAmb | 09 37 07.8 | | | |
| | comp=Z,366nm,1.1s | | | | | | | | |
| **O18K** | **Koktuh Hills** | **23.37** | **324** | P | **P** | **09 36 53.7** | **-0.5** | | |
| | baz=122,SNR=24 | | | | | | | | |
| O18K | | | | S | **S** | **09 41 09.3** | **+2.1** | | |
| | baz=122 | | | | | | | | |
| O18K | | | | S | **S** | **09 41 09.3** | **+2.1** | | |
| | baz=122 | | | | | | | | |
| **R16K** | **Pilot Point** | **23.37** | **318** | P | **P** | **09 36 53.7** | **-0.5** | | |
| | baz=114 | | | | | | | | |
| R16K | | | | S | **S** | **09 41 10.7** | **+3.6** | | |
| | baz=114 | | | | | | | | |
| R16K | | | | S | **S** | **09 41 10.7** | **+3.6** | | |
| | baz=114 | | | | | | | | |
| **RND** | **Reindeer** | **23.37** | **336** | IAmb | IAmb | 09 37 18.1 | | | |
| | comp=Z,320nm,1.2s | | | | | | | | |
| RND | | | | IAMs_20 | IAMs_20 | 09 44 06.3 | | | |
| | comp=Z,31µm,19.0s | | | | | | | | |
| **J25K** | **Salcha River,** | **23.40** | **341** | IAMs_20 | IAMs_20 | 09 44 18.6 | | | |
| | comp=Z,41µm,20.0s | | | | | | | | |
| **J25K** | **Salcha River,** | **23.40** | **341** | P | **P** | **09 36 54.2** | **-0.4** | | |
| | baz=146,SNR=124 | | | | | | | | |
| J25K | | | | S | **S** | **09 41 09.7** | **+1.9** | | |
| | baz=146 | | | | | | | | |
| J25K | | | | S | **S** | **09 41 09.7** | **+1.9** | | |
| | baz=146 | | | | | | | | |
| **Q16K** | **King Salmon** | **23.42** | **321** | P | **P** | **09 36 54.4** | **-0.2** | | |
| | baz=117,SNR=7.4 | | | | | | | | |
| Q16K | | | | S | **S** | **09 41 09.9** | **+2.0** | | |
| | baz=117 | | | | | | | | |
| **SN07** | **Snyder 07** | **23.43** | **107** | IAmb | IAmb | 09 37 04.7 | | | |
| | comp=Z,574nm,1.0s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **23.47** | **351** | IAMs_20 | IAMs_20 | 09 45 29.6 | | | |
| | comp=Z,40µm,18.0s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **23.47** | **351** | P | **P** | **09 36 54.8** | **-0.4** | | |
| | baz=163,SNR=166 | | | | | | | | |
| EPYK | | | | S | **S** | **09 41 11.3** | **+2.5** | | |
| | baz=163 | | | | | | | | |
| **I27K** | **Kandik River** | **23.48** | **346** | P | **P** | **09 36 54.7** | **-0.6** | | |
| | baz=154,SNR=213 | | | | | | | | |
| I27K | | | | S | **S** | **09 41 09.8** | **+0.8** | | |
| | baz=154 | | | | | | | | |
| I27K | | | | S | **S** | **09 41 09.8** | **+0.8** | | |
| | baz=154 | | | | | | | | |
| **CNBA** | **Chernabura Isl** | **23.48** | **310** | P | **P** | **09 36 54.5** | **-0.9** | | |
| **CHNA** | **Chernabura Isl** | **23.49** | **310** | P | **P** | **09 36 56.1** | **+0.7** | | |
| | baz=105,SNR=13 | | | | | | | | |
| CHNA | | | | S | **S** | **09 41 10.4** | **+1.3** | | |
| | baz=105 | | | | | | | | |
| **I26K** | **Coal Creek Min** | **23.51** | **344** | IAMs_20 | IAMs_20 | 09 44 36.3 | | | |
| | comp=Z,33µm,20.0s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **23.51** | **344** | P | **P** | **09 36 55.5** | **0.0** | | |
| | baz=151 | | | | | | | | |
| I26K | | | | S | **S** | **09 41 11.3** | **+2.0** | | |
| | baz=151 | | | | | | | | |
| I26K | | | | S | **S** | **09 41 11.3** | **+2.0** | | |
| | baz=151 | | | | | | | | |
| **H29M** | **Whitestone** | **23.53** | **349** | IAmb | IAmb | 09 36 58.9 | | | |
| | comp=Z,481nm,0.9s | | | | | | | | |
| H29M | | | | IAMs_20 | IAMs_20 | 09 45 11.3 | | | |
| | comp=Z,42µm,18.0s | | | | | | | | |
| **H29M** | **Whitestone** | **23.53** | **349** | P | **P** | **09 36 55.5** | **-0.3** | | |
| | baz=160,SNR=241 | | | | | | | | |
| H29M | | | | S | **S** | **09 41 12.0** | **+2.3** | | |
| | baz=160 | | | | | | | | |
| **SN05** | **Snyder 5** | **23.55** | **108** | IAmb | IAmb | 09 37 06.3 | | | |
| | comp=Z,307nm,0.9s | | | | | | | | |
| **P17K** | **Kvichak River** | **23.57** | **322** | P | **P** | **09 36 55.4** | **-0.8** | | |
| | baz=119,SNR=22 | | | | | | | | |
| P17K | | | | S | **S** | **09 41 10.3** | **-0.1** | | |
| | baz=119 | | | | | | | | |
| P17K | | | | S | **S** | **09 41 10.3** | **-0.1** | | |
| | baz=119 | | | | | | | | |
| **N19K** | **Bonanza Creek** | **23.60** | **327** | IAmb | IAmb | 09 37 05.7 | | | |
| | comp=Z,992nm,1.6s | | | | | | | | |
| N19K | | | | IAMs_20 | IAMs_20 | 09 44 04.5 | | | |
| | comp=Z,39µm,19.0s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **23.60** | **327** | P | **P** | **09 36 55.7** | **-0.9** | | |
| | baz=125,SNR=104 | | | | | | | | |
| N19K | | | | S | **S** | **09 41 11.6** | **+0.5** | | |
| | baz=125 | | | | | | | | |
| N19K | | | | S | **S** | **09 41 11.6** | **+0.5** | | |
| | baz=125 | | | | | | | | |
| **HDA** | **Harding Lake** | **23.63** | **339** | P | **P** | **09 36 55.6** | **-1.2** | | |
| | baz=143,SNR=61 | | | | | | | | |
| HDA | | | | S | **S** | **09 41 12.7** | **+1.4** | | |
| | baz=143 | | | | | | | | |
| **MCK** | **McKinley** | **23.64** | **336** | P | **P** | **09 36 56.3** | **-0.6** | | |
| | baz=139,SNR=62 | | | | | | | | |
| MCK | | | | S | **S** | **09 41 12.4** | **+0.8** | | |
| | baz=139 | | | | | | | | |
| **KAN01** | **Argonia South** | **23.68** | **95** | IAmb | IAmb | 09 37 07.8 | | | |
| | comp=Z,590nm,1.1s | | | | | | | | |
| **M20K** | **Styx River** | **23.73** | **330** | IAmb | IAmb | 09 37 01.5 | | | |
| | comp=Z,170nm,0.7s | | | | | | | | |
| M20K | | | | IAMs_20 | IAMs_20 | 09 44 00.4 | | | |
| | comp=Z,33µm,20.0s | | | | | | | | |
| **M20K** | **Styx River** | **23.73** | **330** | P | **P** | **09 36 57.2** | **-0.6** | | |
| | baz=129,SNR=135 | | | | | | | | |
| M20K | | | | S | **S** | **09 41 12.8** | **-0.3** | | |
| | baz=129 | | | | | | | | |
| M20K | | | | S | **S** | **09 41 12.8** | **-0.3** | | |
| | baz=129 | | | | | | | | |
| **KSU1** | **Kansas State U** | **23.76** | **90** | IAMs_20 | IAMs_20 | 09 46 43.9 | | | |
| | comp=Z,49µm,18.0s | | | | | | | | |
| **KSU1** | **Kansas State U** | **23.76** | **90** | ⇑P | **P** | **09 36 58.0** | **-0.2** | | |
| **G31M** | **Satah River** | **23.77** | **354** | IAmb | IAmb | 09 37 01.4 | | | |
| | comp=Z,1µm,1.9s | | | | | | | | |
| G31M | | | | IAMs_20 | IAMs_20 | 09 45 27.3 | | | |
| | comp=Z,46µm,18.0s | | | | | | | | |
| **G31M** | **Satah River** | **23.77** | **354** | P | **P** | **09 36 57.0** | **-1.1** | | |
| | baz=168,SNR=105 | | | | | | | | |
| G31M | | | | S | **S** | **09 41 15.6** | **+2.2** | | |
| | baz=168 | | | | | | | | |
| **APMT** | **Aspermont** | **23.84** | **106** | IAmb | IAmb | 09 37 04.3 | | | |
| | comp=Z,419nm,1.2s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **23.89** | **118** | IAmb | IAmb | 09 37 24.6 | | | |
| | comp=Z,336nm,1.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **23.89** | **118** | P | **P** | **09 36 59.6** | **-0.1** | | |
| **TXAR** | **Lajitas Array** | **23.89** | **118** | P | **P** | **09 37 01.5** | **+1.8** | | |
| | comp=Z,73nm,0.8s,baz=300,slow=7.0,SNR=343 | | | | | | | | |
| TXAR | | | | PcP | **PcP** | **09 40 42.0** | **-0.4** | | |
| | comp=Z,4.2nm,0.6s,baz=210,slow=2.0,SNR=10 | | | | | | | | |
| TXAR | | | | S | **S** | **09 41 18.9** | **+2.7** | | |
| | comp=Z,0.7nm,0.5s,baz=215,slow=1.5,SNR=1.5 | | | | | | | | |
| TXAR | | | | LR | LR | 09 46 27.4 | | | |
| | comp=Z,10µm,21.8s,baz=300,slow=37 | | | | | | | | |
| | comp=Z,73nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **23.89** | **118** | P | **P** | **09 36 59.6** | **-0.1** | | |
| **ILAR** | **Eielson Array** | **23.90** | **340** | P | **P** | **09 36 58.0** | **-1.4** | | |
| **ILAR** | **Eielson Array** | **23.90** | **340** | P | **P** | **09 36 58.5** | **-1.0** | | |
| | comp=Z,63nm,0.9s,baz=153,slow=7.9,SNR=182 | | | | | | | | |
| ILAR | | | | PcP | **PcP** | **09 40 41.0** | **-0.7** | | |
| | comp=Z,12nm,0.7s,baz=175,slow=2.1,SNR=14 | | | | | | | | |
| ILAR | | | | LR | LR | 09 44 54.0 | | | |
| | comp=Z,21µm,19.5s,baz=140,slow=33 | | | | | | | | |
| | comp=Z,63nm,0.9s | | | | | | | | |
| **ILAR** | **Eielson Array** | **23.90** | **340** | P | **P** | **09 36 58.0** | **-1.4** | | |
| **SGCY** | **Sterling City** | **23.94** | **110** | IAmb | IAmb | 09 37 10.7 | | | |
| | comp=Z,601nm,1.0s | | | | | | | | |
| **WRH** | **Wood River Hil** | **23.98** | **338** | IAmb | IAmb | 09 37 05.3 | | | |
| | comp=Z,443nm,1.3s | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **24.01** | **352** | P | **P** | **09 36 59.3** | **-1.1** | | |
| | baz=164,SNR=13 | | | | | | | | |
| G30M | | | | S | **S** | **09 41 16.6** | **-0.8** | | |
| | baz=164 | | | | | | | | |
| **H27K** | **Steamboat Moun** | **24.03** | **346** | P | **P** | **09 37 00.2** | **-0.4** | | |
| | baz=154,SNR=64 | | | | | | | | |
| H27K | | | | S | **S** | **09 41 18.1** | **+0.4** | | |
| | baz=154 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **24.04** | **339** | IAmb | IAmb | 09 37 05.7 | | | |
| | comp=Z,415nm,1.5s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **24.05** | **101** | ⇑P | **P** | **09 37 01.4** | **+0.4** | | |
| **LPIG** | **La Paz** | **24.08** | **138** | LR | LR | 09 45 31.9 | | | |
| | comp=Z,27µm,20.1s,baz=324,slow=34 | | | | | | | | |
| **N18K** | **Kilae Creek** | **24.10** | **325** | IAmb | IAmb | 09 37 05.0 | | | |
| | comp=Z,229nm,0.8s | | | | | | | | |
| N18K | | | | IAMs_20 | IAMs_20 | 09 44 19.7 | | | |
| | comp=Z,38µm,19.0s | | | | | | | | |
| **N18K** | **Kilae Creek** | **24.10** | **325** | P | **P** | **09 37 00.6** | **-0.7** | | |
| | baz=122,SNR=87 | | | | | | | | |
| N18K | | | | S | **S** | **09 41 20.5** | **+1.6** | | |
| | baz=122 | | | | | | | | |
| N18K | | | | S | **S** | **09 41 20.5** | **+1.6** | | |
| | baz=122 | | | | | | | | |
| **SDPT** | **Sand Point** | **24.12** | **311** | P | **P** | **09 37 02.6** | **+1.1** | | |
| **SDPT** | **Sand Point** | **24.12** | **311** | IAmb | IAmb | 09 37 19.6 | | | |
| | comp=Z,678nm,1.4s | | | | | | | | |
| **SDPT** | **Sand Point** | **24.12** | **311** | P | **P** | **09 37 01.0** | **-0.5** | | |
| | baz=105,SNR=7.8 | | | | | | | | |
| SDPT | | | | S | **S** | **09 41 21.7** | **+2.5** | | |
| | baz=105 | | | | | | | | |
| **O17K** | **Koliganek Bris** | **24.14** | **323** | P | **P** | **09 37 01.0** | **-0.7** | | |
| | baz=119,SNR=99 | | | | | | | | |
| O17K | | | | S | **S** | **09 41 19.8** | **+0.3** | | |
| | baz=119 | | | | | | | | |
| **G29M** | **Pine Creek** | **24.14** | **350** | IAmb | IAmb | 09 37 11.0 | | | |
| | comp=Z,546nm,0.9s | | | | | | | | |
| G29M | | | | IAMs_20 | IAMs_20 | 09 45 33.5 | | | |
| | comp=Z,40µm,19.0s | | | | | | | | |
| **G29M** | **Pine Creek** | **24.14** | **350** | P | **P** | **09 37 00.9** | **-0.7** | | |
| | baz=161,SNR=292 | | | | | | | | |
| G29M | | | | S | **S** | **09 41 20.2** | **+0.7** | | |
| | baz=161 | | | | | | | | |
| **P16K** | **Nushagak River** | **24.20** | **321** | P | **P** | **09 37 02.1** | **-0.1** | | |
| | baz=116,SNR=9.8 | | | | | | | | |
| P16K | | | | S | **S** | **09 41 20.9** | **+0.6** | | |
| | baz=116 | | | | | | | | |
| P16K | | | | S | **S** | **09 41 20.9** | **+0.6** | | |
| | baz=116 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **24.20** | **342** | IAMs_20 | IAMs_20 | 09 44 45.6 | | | |
| | comp=Z,46µm,22.0s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **24.20** | **342** | P | **P** | **09 37 01.7** | **-0.6** | | |
| | baz=147,SNR=47 | | | | | | | | |
| PRP | | | | S | **S** | **09 41 20.9** | **+0.3** | | |
| | baz=147 | | | | | | | | |
| **M19K** | **Big River Lodg** | **24.21** | **329** | IAMs_20 | IAMs_20 | 09 44 15.6 | | | |
| | comp=Z,33µm,20.0s | | | | | | | | |
| **M19K** | **Big River Lodg** | **24.21** | **329** | P | **P** | **09 37 02.2** | **-0.1** | | |
| | baz=127 | | | | | | | | |
| M19K | | | | S | **S** | **09 41 20.2** | **-0.4** | | |
| | baz=127 | | | | | | | | |
| M19K | | | | S | **S** | **09 41 20.2** | **-0.4** | | |
| | baz=127 | | | | | | | | |
| **COLA** | **College** | **24.23** | **339** | P | **P** | **09 37 01.8** | **-0.6** | | |
| **COLA** | **College** | **24.23** | **339** | P | **P** | **09 37 01.5** | **-1.0** | | |
| **COLA** | **College** | **24.23** | **339** | ⇓P | **P** | **09 37 01.4** | **-1.0** | | |
| **COLA** | **College** | **24.23** | **339** | P | **P** | **09 37 01.3** | **-1.1** | | |
| | baz=142 | | | | | | | | |
| COLA | | | | S | **S** | **09 41 20.8** | **-0.1** | | |
| | baz=142 | | | | | | | | |
| **COLA** | **College** | **24.23** | **339** | *d i* P | **P** | **09 37 00.6** | **-1.8** | | |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,190nm,1.0s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **24.24** | **354** | IAmb | IAmb | 09 37 13.4 | | | |
| | comp=Z,366nm,1.2s | | | | | | | | |
| F31M | | | | IAMs_20 | IAMs_20 | 09 45 43.7 | | | |
| | comp=Z,33µm,21.0s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **24.24** | **354** | P | **P** | **09 37 01.7** | **-0.8** | | |
| | baz=169,SNR=44 | | | | | | | | |
| F31M | | | | S | **S** | **09 41 22.8** | **+1.9** | | |
| | baz=169 | | | | | | | | |
| **POKR** | **Poker Plat Res** | **24.32** | **340** | P | **P** | **09 37 02.4** | **-0.9** | | |
| POKR | | | | IAMs_20 | IAMs_20 | 09 44 46.0 | | | |
| | comp=Z,32µm,22.0s | | | | | | | | |
| **POKR** | **Poker Plat Res** | **24.32** | **340** | P | **P** | **09 37 02.7** | **-0.6** | | |
| | baz=143,SNR=56 | | | | | | | | |
| POKR | | | | S | **S** | **09 41 22.7** | **+0.4** | | |
| | baz=143 | | | | | | | | |
| **NEA2** | **Nenana** | **24.34** | **338** | IAmb | IAmb | 09 37 13.9 | | | |
| | comp=Z,370nm,1.1s | | | | | | | | |
| **NEA2** | **Nenana** | **24.34** | **338** | P | **P** | **09 37 02.7** | **-0.8** | | |
| | baz=140,SNR=110 | | | | | | | | |
| NEA2 | | | | S | **S** | **09 41 21.7** | **-0.9** | | |
| | baz=140 | | | | | | | | |
| **HPIG** | | **24.36** | **125** | P | **P** | **09 37 03.9** | **-0.3** | | |
| HPIG | | | | IAmb | IAmb | 09 37 12.2 | | | |
| | comp=Z,197nm,0.9s | | | | | | | | |
| **HPIG** | | **24.36** | **125** | ⇑P | **P** | **09 37 05.2** | **+1.0** | | |
| **L20K** | **Farewell, AK** | **24.38** | **330** | P | **P** | **09 37 03.3** | **-0.7** | | |
| | baz=129,SNR=87 | | | | | | | | |
| L20K | | | | S | **S** | **09 41 23.5** | **+0.1** | | |
| | baz=129 | | | | | | | | |
| L20K | | | | S | **S** | **09 41 23.5** | **+0.1** | | |
| | baz=129 | | | | | | | | |
| **MDM** | **Murphy Dome** | **24.40** | **339** | IAmb | IAmb | 09 37 09.5 | | | |
| | comp=Z,706nm,2.0s | | | | | | | | |
| **SAND** | **Sanderson** | **24.49** | **115** | IAmb | IAmb | 09 37 13.1 | | | |
| | comp=Z,378nm,0.9s | | | | | | | | |
| **O16K** | **Kokwok River B** | **24.50** | **322** | IAmb | IAmb | 09 37 16.0 | | | |
| | comp=Z,474nm,1.1s | | | | | | | | |
| **O16K** | **Kokwok River B** | **24.50** | **322** | P | **P** | **09 37 04.5** | **-0.5** | | |
| | baz=117,SNR=87 | | | | | | | | |
| O16K | | | | S | **S** | **09 41 27.2** | **+2.0** | | |
| | baz=117 | | | | | | | | |
| **M18K** | **Stony River** | **24.52** | **327** | P | **P** | **09 37 04.2** | **-1.0** | | |
| | baz=124,SNR=121 | | | | | | | | |
| M18K | | | | S | **S** | **09 41 25.5** | **-0.1** | | |
| | baz=124 | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **24.53** | **335** | IAmb | IAmb | 09 37 07.2 | | | |
| | comp=Z,172nm,0.8s | | | | | | | | |
| BPAW | | | | IAMs_20 | IAMs_20 | 09 45 16.9 | | | |
| | comp=Z,27µm,19.0s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **24.53** | **335** | P | **P** | **09 37 04.3** | **-0.9** | | |
| | baz=136,SNR=198 | | | | | | | | |
| BPAW | | | | S | **S** | **09 41 24.7** | **-1.0** | | |
| | baz=136 | | | | | | | | |
| **OZNA** | **Ozona** | **24.54** | **112** | IAmb | IAmb | 09 37 13.9 | | | |
| | comp=Z,313nm,0.9s | | | | | | | | |
| **L19K** | **White Mountain** | **24.56** | **329** | IAmb | IAmb | 09 37 08.5 | | | |
| | comp=Z,242nm,0.8s | | | | | | | | |
| L19K | | | | IAMs_20 | IAMs_20 | 09 44 36.3 | | | |
| | comp=Z,34µm,19.0s | | | | | | | | |
| **L19K** | **White Mountain** | **24.56** | **329** | P | **P** | **09 37 05.1** | **-0.4** | | |
| | baz=127,SNR=219 | | | | | | | | |
| L19K | | | | S | **S** | **09 41 27.5** | **+1.3** | | |
| | baz=127 | | | | | | | | |
| L19K | | | | S | **S** | **09 41 27.5** | **+1.3** | | |
| | baz=127 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **24.56** | **107** | IAMs_20 | IAMs_20 | 09 47 12.2 | | | |
| | comp=Z,37µm,19.0s | | | | | | | | |
| **N17K** | **Nushagak Hills** | **24.56** | **324** | IAmb | IAmb | 09 37 16.0 | | | |
| | comp=Z,820nm,1.6s | | | | | | | | |
| **N17K** | **Nushagak Hills** | **24.56** | **324** | P | **P** | **09 37 05.4** | **-0.1** | | |
| | baz=120,SNR=93 | | | | | | | | |
| N17K | | | | S | **S** | **09 41 27.1** | **+0.8** | | |
| | baz=120 | | | | | | | | |
| **F30M** | **Barrier River** | **24.57** | **353** | P | **P** | **09 37 04.5** | **-1.0** | | |
| | baz=166,SNR=48 | | | | | | | | |
| F30M | | | | S | **S** | **09 41 25.9** | **-0.5** | | |
| | baz=166 | | | | | | | | |
| **G27K** | **Doyon Strip** | **24.58** | **347** | IAMs_20 | IAMs_20 | 09 45 22.2 | | | |
| | comp=Z,37µm,21.0s | | | | | | | | |
| **G27K** | **Doyon Strip** | **24.58** | **347** | P | **P** | **09 37 05.3** | **-0.4** | | |
| | baz=155,SNR=111 | | | | | | | | |
| G27K | | | | S | **S** | **09 41 27.8** | **+1.3** | | |
| | baz=155 | | | | | | | | |
| **OK048** | **Pawnee Station** | **24.58** | **96** | IAMs_20 | IAMs_20 | 09 47 14.0 | | | |
| | comp=Z,27µm,18.0s | | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **24.61** | **138** | P | **P** | **09 37 06.2** | **-0.1** | | |
| SLBS | | | | IAmb | IAmb | 09 37 21.7 | | | |
| | comp=Z,298nm,1.2s | | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **24.61** | **138** | IAMs_20 | IAMs_20 | 09 45 36.5 | | | |
| | comp=Z,32µm,20.0s | | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **24.61** | **138** | ⇑P | **P** | **09 37 07.6** | **+1.3** | | |
| **OK051** | **E0350 and S346** | **24.62** | **96** | IAMs_20 | IAMs_20 | 09 47 15.1 | | | |
| | comp=Z,35µm,18.0s | | | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **24.69** | **99** | IAMs_20 | IAMs_20 | 09 46 49.9 | | | |
| | comp=Z,38µm,18.0s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **24.85** | **338** | IAmb | IAmb | 09 37 22.9 | | | |
| | comp=Z,316nm,1.1s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **24.85** | **338** | P | **P** | **09 37 07.5** | **-0.5** | | |
| | baz=140,SNR=124 | | | | | | | | |
| I23K | | | | S | **S** | **09 41 32.9** | **+2.1** | | |
| | baz=140 | | | | | | | | |
| I23K | | | | S | **S** | **09 41 32.9** | **+2.1** | | |
| | baz=140 | | | | | | | | |
| **H25L** | **Birch Creek** | **24.90** | **343** | P | **P** | **09 37 08.4** | **0.0** | | |
| | baz=147 | | | | | | | | |
| H25L | | | | S | **S** | **09 41 32.6** | **+1.1** | | |
| | baz=147 | | | | | | | | |
| **K20K** | **Telida** | **25.01** | **332** | IAmb | IAmb | 09 37 12.9 | | | |
| | comp=Z,196nm,0.9s | | | | | | | | |
| **K20K** | **Telida** | **25.01** | **332** | P | **P** | **09 37 08.8** | **-0.7** | | |
| | baz=130,SNR=192 | | | | | | | | |
| K20K | | | | S | **S** | **09 41 31.6** | **-2.0** | | |
| | baz=130 | | | | | | | | |
| K20K | | | | S | **S** | **09 41 31.6** | **-2.0** | | |
| | baz=130 | | | | | | | | |
| **H24K** | **Noodor Dome** | **25.01** | **340** | IAmb | IAmb | 09 37 20.3 | | | |
| | comp=Z,403nm,1.4s | | | | | | | | |
| H24K | | | | IAMs_20 | IAMs_20 | 09 45 09.3 | | | |
| | comp=Z,37µm,21.0s | | | | | | | | |
| **H24K** | **Noodor Dome** | **25.01** | **340** | P | **P** | **09 37 09.2** | **-0.4** | | |
| | baz=143,SNR=177 | | | | | | | | |
| H24K | | | | S | **S** | **09 41 33.8** | **+0.2** | | |
| | baz=143 | | | | | | | | |
| H24K | | | | S | **S** | **09 41 33.8** | **+0.2** | | |
| | baz=143 | | | | | | | | |
| **FYU** | **Fort Yukon** | **25.03** | **344** | IAmb | IAmb | 09 37 13.7 | | | |
| | comp=Z,586nm,1.2s | | | | | | | | |
| FYU | | | | IAMs_20 | IAMs_20 | 09 45 23.4 | | | |
| | comp=Z,36µm,21.0s | | | | | | | | |
| **F28M** | **Old Crow** | **25.05** | **349** | IAMs_20 | IAMs_20 | 09 46 00.5 | | | |
| | comp=Z,40µm,19.0s | | | | | | | | |
| **F28M** | **Old Crow** | **25.05** | **349** | P | **P** | **09 37 09.2** | **-0.7** | | |
| | baz=158,SNR=131 | | | | | | | | |
| F28M | | | | S | **S** | **09 41 35.7** | **+1.6** | | |
| | baz=158 | | | | | | | | |
| **G26K** | **Porcupine Rive** | **25.08** | **345** | P | **P** | **09 37 10.0** | **-0.1** | | |
| | baz=151,SNR=44 | | | | | | | | |
| G26K | | | | S | **S** | **09 41 34.8** | **+0.4** | | |
| | baz=151 | | | | | | | | |
| **INK** | **Inuvik** | **25.08** | **355** | IAmb | IAmb | 09 37 33.9 | | | |
| | comp=Z,462nm,1.4s | | | | | | | | |
| INK | | | | IAMs_20 | IAMs_20 | 09 46 19.9 | | | |
| | comp=Z,41µm,19.0s | | | | | | | | |
| **INK** | **Inuvik** | **25.08** | **355** | ⇑P | **P** | **09 37 08.8** | **-1.3** | | |
| **INK** | **Inuvik** | **25.08** | **355** | P | **P** | **09 37 08.8** | **-1.3** | | |
| | comp=Z,93nm,0.8s,baz=173,slow=11,SNR=57 | | | | | | | | |
| INK | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **L18K** | **Granite Mounta** | **25.27** | **328** | P | **P** | **09 37 11.7** | **-0.3** |
| | baz=124,SNR=194 | | | | | | | |
| L18K | | | | S | **S** | **09 41 38.9** | **+1.2** |
| | baz=124 | | | | | | | |
| L18K | | | | S | **S** | **09 41 38.9** | **+1.2** |
| | baz=124 | | | | | | | |
| **SCIA** | **State Center** | **25.36** | **82** | IAms_20 | IAms_20 | 09 47 29.9 | | |
| | comp=Z,49µm,20.0s | | | | | | | |
| **SCIA** | **State Center** | **25.36** | **82** | ⇑P | **P** | **09 37 13.7** | **+0.7** |
| **G25K** | **Bearman Lake** | **25.38** | **343** | P | **P** | **09 37 12.9** | **+0.1** |
| | baz=147,SNR=54 | | | | | | | |
| G25K | | | | S | **S** | **09 41 39.4** | **+0.2** |
| | baz=147 | | | | | | | |
| **H23K** | **Yukon River** | **25.42** | **339** | P | **P** | **09 37 13.1** | **-0.1** |
| | baz=141,SNR=118 | | | | | | | |
| H23K | | | | S | **S** | **09 41 39.3** | **-0.8** |
| | baz=141 | | | | | | | |
| H23K | | | | S | **S** | **09 41 39.3** | **-0.8** |
| | baz=141 | | | | | | | |
| **E29M** | **Blow River** | **25.54** | **351** | IAmb | IAmb | 09 37 26.7 | | |
| | comp=Z,306nm,1.1s | | | | | | | |
| E29M | | | | IAMs_20 | IAMs_20 | 09 46 30.3 | | |
| | comp=Z,42µm,18.0s | | | | | | | |
| **E29M** | **Blow River** | **25.54** | **351** | P | **P** | **09 37 13.8** | **-0.5** |
| | baz=162,SNR=105 | | | | | | | |
| E29M | | | | S | **S** | **09 41 40.1** | **-1.8** |
| | baz=162 | | | | | | | |
| **M16K** | **Timber Creek** | **25.56** | **324** | P | **P** | **09 37 14.6** | **0.0** |
| | baz=119,SNR=101 | | | | | | | |
| M16K | | | | S | **S** | **09 41 44.5** | **+2.2** |
| | baz=119 | | | | | | | |
| **LOOK** | **Love County** | **25.57** | **101** | P | **P** | **09 37 12.3** | **-2.5** |
| **J20K** | **Nowinta River** | **25.58** | **333** | P | **P** | **09 37 13.8** | **-0.8** |
| J20K | | | | IAmb | IAmb | 09 37 30.0 | | |
| | comp=Z,305nm,1.3s | | | | | | | |
| **J20K** | **Nowinta River** | **25.58** | **333** | P | **P** | **09 37 13.8** | **-0.8** |
| | baz=131,SNR=92 | | | | | | | |
| J20K | | | | S | **S** | **09 41 40.2** | **-2.2** |
| | baz=131 | | | | | | | |
| J20K | | | | S | **S** | **09 41 40.2** | **-2.2** |
| | baz=131 | | | | | | | |
| **EYMN** | **Ely** | **25.58** | **67** | P | **P** | **09 37 14.0** | **-0.9** |
| **EYMN** | **Ely** | **25.58** | **67** | ⇑P | **P** | **09 37 14.2** | **-0.7** |
| **I21K** | **Tanana** | **25.61** | **336** | IAMs_20 | IAMs_20 | 09 45 36.1 | | |
| | comp=Z,26µm,19.0s | | | | | | | |
| **I21K** | **Tanana** | **25.61** | **336** | P | **P** | **09 37 14.3** | **-0.6** |
| | baz=136 | | | | | | | |
| I21K | | | | S | **S** | **09 41 42.2** | **-0.7** |
| | baz=136 | | | | | | | |
| I21K | | | | S | **S** | **09 41 42.2** | **-0.7** |
| | baz=136 | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **25.63** | **342** | IAmb | IAmb | 09 37 18.4 | | |
| | comp=Z,263nm,0.9s | | | | | | | |
| G24K | | | | IAMs_20 | IAMs_20 | 09 45 40.3 | | |
| | comp=Z,37µm,21.0s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **25.63** | **342** | P | **P** | **09 37 15.1** | **0.0** |
| | baz=145,SNR=214 | | | | | | | |
| G24K | | | | S | **S** | **09 41 45.8** | **+2.6** |
| | baz=145 | | | | | | | |
| **TUL3** | **Leonard** | **25.64** | **96** | IAMs_20 | IAMs_20 | 09 47 47.1 | | |
| | comp=Z,33µm,21.0s | | | | | | | |
| **FALS** | **False Pass** | **25.64** | **309** | P | **P** | **09 37 18.5** | **+3.2** |
| **FALS** | **False Pass** | **25.64** | **309** | P | **P** | **09 37 15.8** | **+0.5** |
| | baz=101 | | | | | | | |
| **BMAR** | **Burnt Mountain** | **25.65** | **345** | P | **P** | **09 37 14.6** | **-0.8** |
| **N15K** | **Kwethluk River** | **25.66** | **322** | P | **P** | **09 37 14.9** | **-0.6** |
| N15K | | | | IAMs_20 | IAMs_20 | 09 45 09.3 | | |
| | comp=Z,25µm,19.0s | | | | | | | |
| **N15K** | **Kwethluk River** | **25.66** | **322** | P | **P** | **09 37 15.8** | **+0.3** |
| | baz=116,SNR=38 | | | | | | | |
| N15K | | | | S | **S** | **09 41 45.5** | **+1.6** |
| | baz=116 | | | | | | | |
| **JCT** | **Junction City** | **25.71** | **111** | IAmb | IAmb | 09 37 38.1 | | |
| | comp=Z,548nm,1.4s | | | | | | | |
| JCT | | | | IAMs_20 | IAMs_20 | 09 48 21.1 | | |
| | comp=Z,39µm,20.0s | | | | | | | |
| **JCT** | **Junction City** | **25.71** | **111** | ⇑P | **P** | **09 37 17.4** | **+1.2** |
| **FCC** | **Fort Churchill** | **25.75** | **42** | P | **P** | **09 37 15.6** | **-0.6** |
| FCC | | | | IAmb | IAmb | 09 37 28.6 | | |
| | comp=Z,512nm,1.1s | | | | | | | |
| FCC | | | | IAMs_20 | IAMs_20 | 09 47 29.0 | | |
| | comp=Z,33µm,19.0s | | | | | | | |
| **FCC** | **Fort Churchill** | **25.75** | **42** | P | **P** | **09 37 15.6** | **-0.6** |
| FCC | | | | pmax | pmax | | | |
| | comp=Z,512nm,1.1s | | | | | | | |
| FCC | | | | MLR | MLR | | | |
| | comp=Z,33µm,19.0s | | | | | | | |
| **BRDY** | **Brady** | **25.78** | **109** | IAmb | IAmb | 09 37 25.9 | | |
| | comp=Z,337nm,1.0s | | | | | | | |
| **F26K** | **Sheenjek River** | **25.80** | **346** | IAMs_20 | IAMs_20 | 09 46 11.7 | | |
| | comp=Z,29µm,20.0s | | | | | | | |
| **F26K** | **Sheenjek River** | **25.80** | **346** | P | **P** | **09 37 17.2** | **+0.5** |
| | baz=152,SNR=72 | | | | | | | |
| F26K | | | | S | **S** | **09 41 51.5** | **+5.4** |
| | baz=152 | | | | | | | |
| **O14K** | **Tigyukauivet M** | **25.82** | **319** | IAmb | IAmb | 09 37 28.1 | | |
| | comp=Z,285nm,1.0s | | | | | | | |
| O14K | | | | IAMs_20 | IAMs_20 | 09 44 59.9 | | |
| | comp=Z,28µm,20.0s | | | | | | | |
| **O14K** | **Tigyukauivet M** | **25.82** | **319** | P | **P** | **09 37 15.9** | **-1.0** |
| | baz=112,SNR=34 | | | | | | | |
| O14K | | | | S | **S** | **09 41 50.0** | **+3.6** |
| | baz=112 | | | | | | | |
| **E27K** | **Coleen River** | **25.83** | **348** | IAmb | IAmb | 09 37 20.5 | | |
| | comp=Z,326nm,1.0s | | | | | | | |
| E27K | | | | IAMs_20 | IAMs_20 | 09 46 24.2 | | |
| | comp=Z,33µm,19.0s | | | | | | | |
| **E27K** | **Coleen River** | **25.83** | **348** | P | **P** | **09 37 17.2** | **+0.2** |
| | baz=156,SNR=125 | | | | | | | |
| E27K | | | | S | **S** | **09 41 46.9** | **+0.4** |
| | baz=156 | | | | | | | |
| **L17K** | **Donlin** | **25.86** | **327** | P | **P** | **09 37 16.8** | **-0.4** |
| | baz=122,SNR=200 | | | | | | | |
| L17K | | | | S | **S** | **09 41 49.5** | **+2.6** |
| | baz=122 | | | | | | | |
| **E28M** | **Babbage River** | **25.94** | **350** | IAmb | IAmb | 09 37 22.7 | | |
| | comp=Z,245nm,0.9s | | | | | | | |
| E28M | | | | IAMs_20 | IAMs_20 | 09 46 48.9 | | |
| | comp=Z,36µm,19.0s | | | | | | | |
| **E28M** | **Babbage River** | **25.94** | **350** | P | **P** | **09 37 17.3** | **-0.6** |
| | baz=160,SNR=142 | | | | | | | |
| E28M | | | | S | **S** | **09 41 50.2** | **+2.1** |
| | baz=160 | | | | | | | |
| **J19K** | **Poorman** | **25.95** | **332** | IAmb | IAmb | 09 37 20.8 | | |
| | comp=Z,367nm,0.9s | | | | | | | |
| J19K | | | | IAMs_20 | IAMs_20 | 09 45 22.9 | | |
| | comp=Z,24µm,19.0s | | | | | | | |
| **J19K** | **Poorman** | **25.95** | **332** | P | **P** | **09 37 17.7** | **-0.4** |
| | baz=129,SNR=325 | | | | | | | |
| J19K | | | | S | **S** | **09 41 48.5** | **0.0** |
| | baz=129 | | | | | | | |
| J19K | | | | S | **S** | **09 41 48.5** | **0.0** |
| | baz=129 | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **25.96** | **338** | P | **P** | **09 37 17.9** | **-0.2** |
| | baz=138,SNR=192 | | | | | | | |
| H22K | | | | S | **S** | **09 41 50.8** | **+2.2** |
| | baz=138 | | | | | | | |
| H22K | | | | S | **S** | **09 41 50.8** | **+2.2** |
| | baz=138 | | | | | | | |
| **F25K** | **Christian Rive** | **26.00** | **344** | IAmb | IAmb | 09 37 24.4 | | |
| | comp=Z,242nm,1.3s | | | | | | | |
| F25K | | | | IAMs_20 | IAMs_20 | 09 45 55.9 | | |
| | comp=Z,37µm,22.0s | | | | | | | |
| **F25K** | **Christian Rive** | **26.00** | **344** | P | **P** | **09 37 17.2** | **-1.3** |
| | baz=149,SNR=69 | | | | | | | |
| F25K | | | | S | **S** | **09 41 52.7** | **+3.5** |
| | baz=149 | | | | | | | |
| **J18K** | **Innoko River** | **26.01** | **330** | IAmb | IAmb | 09 37 21.4 | | |
| | comp=Z,221nm,0.8s | | | | | | | |
| J18K | | | | IAMs_20 | IAMs_20 | 09 45 32.6 | | |
| | comp=Z,31µm,18.0s | | | | | | | |
| **J18K** | **Innoko River** | **26.01** | **330** | P | **P** | **09 37 18.2** | **-0.4** |
| | baz=126,SNR=232 | | | | | | | |
| J18K | | | | S | **S** | **09 41 52.0** | **+2.6** |
| | baz=126 | | | | | | | |
| **C36M** | **Paulatuk** | **26.02** | **3** | P | **P** | **09 37 16.6** | **-1.9** |
| **C36M** | **Paulatuk** | **26.02** | **3** | P | **P** | **09 37 17.1** | **-1.4** |
| | baz=186,SNR=24 | | | | | | | |
| C36M | | | | S | **S** | **09 41 49.4** | **+0.2** |
| | baz=186 | | | | | | | |
| **RLO** | **Rose Lookout** | **26.09** | **95** | IAmb | IAmb | 09 37 27.9 | | |
| | comp=Z,757nm,1.2s | | | | | | | |
| RLO | | | | IAMs_20 | IAMs_20 | 09 48 07.7 | | |
| | comp=Z,43µm,18.0s | | | | | | | |
| **I20K** | **Naaghedeneel** | **26.10** | **334** | P | **P** | **09 37 18.7** | **-0.6** |
| | baz=132,SNR=187 | | | | | | | |
| I20K | | | | S | **S** | **09 41 51.5** | **+0.9** |
| | baz=132 | | | | | | | |
| **L16K** | **Owhat River** | **26.12** | **325** | IAmb | IAmb | 09 37 23.0 | | |
| | comp=Z,389nm,0.9s | | | | | | | |
| L16K | | | | IAMs_20 | IAMs_20 | 09 45 34.2 | | |
| | comp=Z,27µm,19.0s | | | | | | | |
| **L16K** | **Owhat River** | **26.12** | **325** | P | **P** | **09 37 19.5** | **-0.1** |
| | baz=119,SNR=277 | | | | | | | |
| L16K | | | | S | **S** | **09 41 54.9** | **+3.9** |
| | baz=119 | | | | | | | |
| **M15K** | **Kasigluk River** | **26.16** | **323** | P | **P** | **09 37 19.8** | **-0.2** |
| | baz=116,SNR=38 | | | | | | | |
| M15K | | | | S | **S** | **09 41 53.0** | **+1.3** |
| | baz=116 | | | | | | | |
| **K17K** | **Iditarod** | **26.18** | **328** | IAmb | IAmb | 09 37 34.4 | | |
| | comp=Z,555nm,1.1s | | | | | | | |
| **K17K** | **Iditarod** | **26.18** | **328** | P | **P** | **09 37 19.7** | **-0.4** |
| | baz=123,SNR=123 | | | | | | | |
| K17K | | | | S | **S** | **09 41 52.4** | **+0.4** |
| | baz=123 | | | | | | | |
| **H21K** | **Melozitna Rive** | **26.19** | **337** | IAmb | IAmb | 09 37 23.2 | | |
| | comp=Z,224nm,0.9s | | | | | | | |
| **H21K** | **Melozitna Rive** | **26.19** | **337** | P | **P** | **09 37 19.8** | **-0.4** |
| | baz=135,SNR=275 | | | | | | | |
| H21K | | | | S | **S** | **09 41 52.9** | **+0.7** |
| | baz=135 | | | | | | | |
| H21K | | | | S | **S** | **09 41 52.9** | **+0.7** |
| | baz=135 | | | | | | | |
| **G23K** | **Bananza Creek** | **26.24** | **340** | IAmb | IAmb | 09 37 26.5 | | |
| | comp=Z,358nm,1.3s | | | | | | | |
| G23K | | | | IAMs_20 | IAMs_20 | 09 45 45.7 | | |
| | comp=Z,31µm,22.0s | | | | | | | |
| **G23K** | **Bananza Creek** | **26.24** | **340** | P | **P** | **09 37 20.6** | **-0.1** |
| | baz=141,SNR=120 | | | | | | | |
| G23K | | | | S | **S** | **09 41 53.8** | **+0.8** |
| | baz=141 | | | | | | | |
| **FW13** | **Cleburne** | **26.26** | **105** | IAmb | IAmb | 09 37 27.3 | | |
| | comp=Z,557nm,1.2s | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **26.28** | **321** | P | **P** | **09 37 19.9** | **-1.1** |
| | baz=113,SNR=39 | | | | | | | |
| N14K | | | | S | **S** | **09 41 53.5** | **-0.1** |
| | baz=113 | | | | | | | |
| **F24K** | **Squaw Lake** | **26.40** | **343** | IAMs_20 | IAMs_20 | 09 46 16.6 | | |
| | comp=Z,40µm,20.0s | | | | | | | |
| **F24K** | **Squaw Lake** | **26.40** | **343** | P | **P** | **09 37 22.3** | **+0.2** |
| | baz=145,SNR=48 | | | | | | | |
| F24K | | | | S | **S** | **09 41 56.9** | **+1.5** |
| | baz=145 | | | | | | | |
| **U38A** | **Gravette** | **26.43** | **94** | IAMs_20 | IAMs_20 | 09 48 27.8 | | |
| | comp=Z,43µm,18.0s | | | | | | | |
| **WHTX** | **Lake Whitney,** | **26.45** | **105** | IAMs_20 | IAMs_20 | 09 49 07.0 | | |
| | comp=Z,36µm,19.0s | | | | | | | |
| **D28M** | **Stokes Point** | **26.54** | **351** | P | **P** | **09 37 22.6** | **-0.6** |
| | baz=162 | | | | | | | |
| D28M | | | | S | **S** | **09 41 59.2** | **+1.7** |
| | baz=162 | | | | | | | |
| **X37A** | **Clayton** | **26.57** | **98** | IAMs_20 | IAMs_20 | 09 48 07.7 | | |
| | comp=Z,27µm,18.0s | | | | | | | |
| **COLD** | **Coldfoot** | **26.69** | **341** | P | **P** | **09 37 24.7** | **+0.1** |
| | baz=141,SNR=34 | | | | | | | |
| COLD | | | | S | **S** | **09 42 00.2** | **+0.2** |
| | baz=141 | | | | | | | |
| **H20K** | **Anotleneega Mo** | **26.70** | **335** | P | **P** | **09 37 24.1** | **-0.6** |
| | baz=132,SNR=164 | | | | | | | |
| H20K | | | | S | **S** | **09 42 01.6** | **+1.5** |
| | baz=132 | | | | | | | |
| **D27M** | **Malcolm River** | **26.72** | **350** | IAMs_20 | IAMs_20 | 09 47 13.7 | | |
| | comp=Z,33µm,18.0s | | | | | | | |
| **D27M** | **Malcolm River** | **26.72** | **350** | P | **P** | **09 37 25.0** | **0.0** |
| | baz=158,SNR=24 | | | | | | | |
| D27M | | | | S | **S** | **09 42 00.9** | **+0.3** |
| | baz=158 | | | | | | | |
| **I40A** | **Norwalk** | **26.75** | **76** | IAMs_20 | IAMs_20 | 09 48 12.4 | | |
| | comp=Z,28µm,19.0s | | | | | | | |
| **M14K** | **Bethel** | **26.75** | **322** | IAmb | IAmb | 09 37 34.3 | | |
| | comp=Z,441nm,1.1s | | | | | | | |
| M14K | | | | IAMs_20 | IAMs_20 | 09 45 43.0 | | |
| | comp=Z,28µm,21.0s | | | | | | | |
| **M14K** | **Bethel** | **26.75** | **322** | P | **P** | **09 37 24.6** | **-0.6** |
| | baz=114,SNR=23 | | | | | | | |
| M14K | | | | S | **S** | **09 42 04.2** | **+3.3** |
| | baz=114 | | | | | | | |
| **G22K** | **Bettles** | **26.78** | **339** | P | **P** | **09 37 25.2** | **-0.2** |
| | baz=139 | | | | | | | |
| G22K | | | | S | **S** | **09 42 02.2** | **+0.9** |
| | baz=139 | | | | | | | |
| **HHAR** | **Hobbs** | **26.82** | **94** | IAmb | IAmb | 09 37 35.5 | | |
| | comp=Z,243nm,0.9s | | | | | | | |
| HHAR | | | | IAMs_20 | IAMs_20 | 09 48 40.2 | | |
| | comp=Z,41µm,18.0s | | | | | | | |
| **J17K** | **VABM Dome** | **26.84** | **329** | IAMs_20 | IAMs_20 | 09 46 09.2 | | |
| | comp=Z,25µm,19.0s | | | | | | | |
| **J17K** | **VABM Dome** | **26.84** | **329** | P | **P** | **09 37 25.1** | **-1.0** |
| | baz=123 | | | | | | | |
| J17K | | | | S | **S** | **09 42 04.3** | **+1.8** |
| | baz=123 | | | | | | | |
| J17K | | | | S | **S** | **09 42 04.3** | **+1.8** |
| | baz=123 | | | | | | | |
| **GCSA** | **Galena City Sc** | **26.85** | **333** | P | **P** | **09 37 25.7** | **-0.4** |
| | baz=128 | | | | | | | |
| GCSA | | | | S | **S** | **09 42 05.5** | **+3.0** |
| | baz=128 | | | | | | | |
| **L15K** | **Ungalak Mounta** | **26.95** | **324** | P | **P** | **09 37 26.6** | **-0.4** |
| | baz=116,SNR=32 | | | | | | | |
| L15K | | | | S | **S** | **09 42 06.6** | **+2.5** |
| | baz=116 | | | | | | | |
| **E24K** | **Your Creek** | **26.99** | **343** | IAMs_20 | IAMs_20 | 09 46 36.2 | | |
| | comp=Z,41µm,20.0s | | | | | | | |
| **E24K** | **Your Creek** | **26.99** | **343** | P | **P** | **09 37 27.6** | **+0.1** |
| | baz=145,SNR=64 | | | | | | | |
| E24K | | | | S | **S** | **09 42 07.6** | **+2.8** |
| | baz=145 | | | | | | | |
| **G21K** | **Allakaket** | **27.01** | **337** | IAmb | IAmb | 09 37 36.3 | | |
| | comp=Z,322nm,1.4s | | | | | | | |
| **G21K** | **Allakaket** | **27.01** | **337** | P | **P** | **09 37 27.2** | **-0.3** |
| | baz=136 | | | | | | | |
| G21K | | | | S | **S** | **09 42 05.0** | **-0.1** |
| | baz=136 | | | | | | | |
| **435B** | **Jarrell** | **27.05** | **108** | IAmb | IAmb | 09 37 40.9 | | |
| | comp=Z,340nm,1.1s | | | | | | | |
| 435B | | | | IAMs_20 | IAMs_20 | 09 49 07.3 | | |
| | comp=Z,40µm,20.0s | | | | | | | |
| **435B** | **Jarrell** | **27.05** | **108** | P | **P** | **09 37 29.5** | **+1.2** |
| | baz=307 | | | | | | | |
| 435B | | | | S | **S** | **09 42 07.8** | **+1.4** |
| | baz=307 | | | | | | | |
| **H19K** | **Roundabout Mou** | **27.21** | **334** | IAmb | IAmb | 09 37 32.1 | | |
| | comp=Z,226nm,0.8s | | | | | | | |
| **H19K** | **Roundabout Mou** | **27.21** | **334** | P | **P** | **09 37 28.8** | **-0.6** |
| | baz=130,SNR=186 | | | | | | | |
| H19K | | | | S | **S** | **09 42 11.0** | **+2.9** |
| | baz=130 | | | | | | | |
| **R40A** | **Maddies Statio** | **27.22** | **89** | IAmb | IAmb | 09 37 38.3 | | |
| | comp=Z,230nm,0.9s | | | | | | | |
| R40A | | | | IAMs_20 | IAMs_20 | 09 48 51.4 | | |
| | comp=Z,30µm,19.0s | | | | | | | |
| **E23K** | **Chandalar** | **27.22** | **342** | IAmb | IAmb | 09 37 33.1 | | |
| | comp=Z,170nm,0.8s | | | | | | | |
| E23K | | | | IAMs_20 | IAMs_20 | 09 46 42.4 | | |
| | comp=Z,36µm,21.0s | | | | | | | |
| **E23K** | **Chandalar** | **27.22** | **342** | P | **P** | **09 37 29.9** | **+0.3** |
| | baz=143,SNR=138 | | | | | | | |
| E23K | | | | S | **S** | **09 42 09.7** | **+1.2** |
| | baz=143 | | | | | | | |
| **JFWS** | **Jewell Farm** | **27.23** | **78** | ⇑P | **P** | **09 37 29.8** | **0.0** |
| **M13K** | **Dall Lake** | **27.24** | **321** | P | **P** | **09 37 28.9** | **-0.8** |
| | baz=112,SNR=35 | | | | | | | |
| M13K | | | | S | **S** | **09 42 10.5** | **+1.8** |
| | baz=112 | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **27.25** | **325** | IAMs_20 | IAMs_20 | 09 46 20.1 | | |
| | comp=Z,24µm,19.0s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **27.25** | **325** | P | **P** | **09 37 29.3** | **-0.5** |
| | baz=118,SNR=26 | | | | | | | |
| K15K | | | | S | **S** | **09 42 12.2** | **+3.3** |
| | baz=118 | | | | | | | |
| **UNV** | **Unalaska Valle** | **27.27** | **306** | P | **P** | **09 37 29.4** | **-0.6** |
| **UNV** | **Unalaska Valle** | **27.27** | **306** | P | **P** | **09 37 28.4** | **-1.7** |
| | baz=96,SNR=17 | | | | | | | |
| UNV | | | | S | **S** | **09 42 13.0** | **+3.7** |
| | baz=96 | | | | | | | |
| **L14K** | **Kuka Creek** | **27.32** | **323** | IAmb | IAmb | 09 37 50.2 | | |
| | comp=Z,201nm,1.1s | | | | | | | |
| L14K | | | | IAMs_20 | IAMs_20 | 09 46 01.0 | | |
| | comp=Z,26µm,22.0s | | | | | | | |
| **L14K** | **Kuka Creek** | **27.32** | **323** | P | **P** | **09 37 29.7** | **-0.6** |
| | baz=114,SNR=39 | | | | | | | |
| L14K | | | | S | **S** | **09 42 11.7** | **+1.8** |
| | baz=114 | | | | | | | |
| **833A** | **Chaparral WMA,** | **27.36** | **114** | IAmb | IAmb | 09 37 42.5 | | |
| | comp=Z,364nm,1.2s | | | | | | | |
| 833A | | | | IAMs_20 | IAMs_20 | 09 49 03.9 | | |
| | comp=Z,32µm,19.0s | | | | | | | |
| **833A** | **Chaparral WMA,** | **27.36** | **114** | P | **P** | **09 37 33.3** | **+2.2** |
| | baz=312,SNR=19 | | | | | | | |
| 833A | | | | S | **S** | **09 42 12.6** | **+1.5** |
| | baz=312 | | | | | | | |
| **J16K** | **Anvik River** | **27.37** | **328** | P | **P** | **09 37 30.5** | **-0.3** |
| | baz=120,SNR=60 | | | | | | | |
| J16K | | | | S | **S** | **09 42 12.6** | **+1.9** |
| | baz=120 | | | | | | | |
| **COWI** | **Conover** | **27.38** | **71** | IAmb | IAmb | 09 37 42.9 | | |
| | comp=Z,272nm,0.8s | | | | | | | |
| **COWI** | **Conover** | **27.38** | **71** | ⇑P | **P** | **09 37 31.4** | **+0.2** |
| **F22K** | **John River** | **27.39** | **340** | P | **P** | **09 37 31.1** | **0.0** |
| | baz=139 | | | | | | | |
| F22K | | | | S | **S** | **09 42 12.5** | **+1.4** |
| | baz=139 | | | | | | | |
| **C27K** | **Jago River** | **27.46** | **348** | IAMs_20 | IAMs_20 | 09 47 27.4 | | |
| | comp=Z,39µm,20.0s | | | | | | | |
| **C27K** | **Jago River** | **27.46** | **348** | P | **P** | **09 37 32.0** | **+0.3** |
| | baz=154,SNR=42 | | | | | | | |
| C27K | | | | S | **S** | **09 42 13.5** | **+1.4** |
| | baz=154 | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **27.51** | **101** | IAMs_20 | IAMs_20 | 09 48 47.8 | | |
| | comp=Z,25µm,18.0s | | | | | | | |
| **F21K** | **Alatna River** | **27.52** | **339** | IAMs_20 | IAMs_20 | 09 46 22.6 | | |
| | comp=Z,28µm,22.0s | | | | | | | |
| **F21K** | **Alatna River** | **27.52** | **339** | P | **P** | **09 37 32.1** | **-0.1** |
| | baz=136,SNR=50 | | | | | | | |
| F21K | | | | S | **S** | **09 42 13.1** | **0.0** |
| | baz=136 | | | | | | | |
| **237A** | **Washetta, Mont** | **27.60** | **104** | IAMs_20 | IAMs_20 | 09 49 45.3 | | |
| | comp=Z,27µm,18.0s | | | | | | | |
| **H18K** | **Honhosa River** | **27.60** | **332** | P | **P** | **09 37 32.3** | **-0.6** |
| | baz=126 | | | | | | | |
| H18K | | | | S | **S** | **09 42 17.6** | **+3.1** |
| | baz=126 | | | | | | | |
| **D25K** | **Kavik River** | **27.63** | **346** | IAmb | IAmb | 09 37 45.4 | | |
| | comp=Z,168nm,1.0s | | | | | | | |
| D25K | | | | IAMs_20 | IAMs_20 | 09 47 23.0 | | |
| | comp=Z,33µm,21.0s | | | | | | | |
| **D25K** | **Kavik River** | **27.63** | **346** | P | **P** | **09 37 33.4** | **+0.2** |
| | baz=150,SNR=68 | | | | | | | |
| D25K | | | | S | **S** | **09 42 13.9** | **-1.0** |
| | baz=150 | | | | | | | |
| **MGMO** | **Mountain Grove** | **27.67** | **91** | IAmb | IAmb | 09 37 49.2 | | |
| | comp=Z,463nm,1.3s | | | | | | | |
| MGMO | | | | IAMs_20 | IAMs_20 | 09 49 04.4 | | |
| | comp=Z,34µm,20.0s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **27.68** | **343** | IAmb | IAmb | 09 37 37.5 | | |
| | comp=Z,283nm,1.2s | | | | | | | |
| TOLK | | | | IAMs_20 | IAMs_20 | 09 47 09.6 | | |
| | comp=Z,39µm,20.0s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **27.68** | **343** | P | **P** | **09 37 34.0** | **+0.4** |
| | baz=144,SNR=74 | | | | | | | |
| TOLK | | | | S | **S** | **09 42 18.6** | **+2.9** |
| | baz=144 | | | | | | | |
| **I17K** | **Unalakleet** | **27.72** | **329** | IAMs_20 | IAMs_20 | 09 46 36.9 | | |
| | comp=Z,26µm,21.0s | | | | | | | |
| **I17K** | **Unalakleet** | **27.72** | **329** | P | **P** | **09 37 33.8** | **-0.1** |
| | baz=121,SNR=38 | | | | | | | |
| I17K | | | | S | **S** | **09 42 19.3** | **+3.1** |
| | baz=121 | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **27.79** | **341** | IAMs_20 | IAMs_20 | 09 46 58.5 | | |
| | comp=Z,34µm,22.0s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **27.79** | **341** | P | **P** | **09 37 34.5** | **0.0** |
| | baz=140,SNR=83 | | | | | | | |
| E22K | | | | S | **S** | **09 42 18.4** | **+1.0** |
| | baz=140 | | | | | | | |
| **G19K** | **Purcell Mounta** | **27.81** | **335** | IAmb | IAmb | 09 37 51.3 | | |
| | comp=Z,323nm,1.3s | | | | | | | |
| **G19K** | **Purcell Mounta** | **27.81** | **335** | P | **P** | **09 37 34.2** | **-0.5** |
| | baz=130,SNR=103 | | | | | | | |
| G19K | | | | S | **S** | **09 42 18.2** | **+0.5** |
| | baz=130 | | | | | | | |
| **MIAR** | **Mount Ida** | **27.88** | **97** | IAMs_20 | IAMs_20 | 09 49 18.4 | | |
| | comp=Z,28µm,18.0s | | | | | | | |
| **MIAR** | **Mount Ida** | **27.88** | **97** | ⇑P | **P** | **09 37 36.7** | **+1.0** |
| **C26K** | **Camden Bay** | **27.91** | **347** | P | **P** | **09 37 36.3** | **+0.7** |
| | baz=152 | | | | | | | |
| C26K | | | | S | **S** | **09 42 18.8** | **-0.4** |
| | baz=152 | | | | | | | |
| **I42A** | **Draeger Farm,** | **27.95** | **76** | IAmb | IAmb | 09 37 46.7 | | |
| | comp=Z,294nm,1.0s | | | | | | | |
| **D24K** | **Happy Valley** | **27.95** | **344** | IAMs_20 | IAMs_20 | 09 47 29.6 | | |
| | comp=Z,38µm,20.0s | | | | | | | |
| **D24K** | **Happy Valley** | **27.95** | **344** | P | **P** | **09 37 36.2** | **+0.2** |
| | baz=146,SNR=18 | | | | | | | |
| D24K | | | | S | **S** | **09 42 20.4** | **+0.6** |
| | baz=146 | | | | | | | |
| **H17K** | **Granite Mounta** | **28.01** | **331** | IAMs_20 | IAMs_20 | 09 46 56.3 | | |
| | comp=Z,24µm,19.0s | | | | | | | |
| **H17K** | **Granite Mounta** | **28.01** | **331** | P | **P** | **09 37 35.7** | **-0.9** |
| | baz=124,SNR=32 | | | | | | | |
| H17K | | | | S | **S** | **09 42 21.8** | **+1.0** |
| | baz=124 | | | | | | | |
| **F20K** | **Avaraart Lake** | **28.01** | **337** | P | **P** | **09 37 36.2** | **-0.3** |
| | baz=133,SNR=42 | | | | | | | |
| F20K | | | | S | **S** | **09 42 21.7** | **+0.9** |
| | baz=133 | | | | | | | |
| **CCM** | **Cathedral Cave** | **28.05** | **89** | P | **P** | **09 37 36.8** | **-0.4** |
| **CCM** | **Cathedral Cave** | **28.05** | **89** | IAMs_20 | IAMs_20 | 09 49 19.5 | | |
| | comp=Z,28µm,20.0s | | | | | | | |
| **CCM** | **Cathedral Cave** | **28.05** | **89** | P | **P** | **09 37 36.8** | **-0.4** |
| CCM | | | | pmax | pmax | | | |
| | comp=Z,525nm,1.0s | | | | | | | |
| CCM | | | | MLR | MLR | | | |
| | comp=Z,28µm,20.0s | | | | | | | |
| **735A** | **Kenedy** | **28.08** | **111** | IAmb | IAmb | 09 37 55.5 | | |
| | comp=Z,444nm,1.2s | | | | | | | |
| **G18K** | **Tagagawik** | **28.15** | **333** | P | **P** | **09 37 37.1** | **-0.7** |
| | baz=127,SNR=41 | | | | | | | |
| G18K | | | | S | **S** | **09 42 26.0** | **+2.9** |
| | baz=127 | | | | | | | |
| **D23K** | **Nanushuk River** | **28.18** | **343** | IAmb | IAmb | 09 37 42.1 | | |
| | comp=Z,182nm,1.1s | | | | | | | |
| D23K | | | | IAMs_20 | IAMs_20 | 09 47 25.7 | | |
| | comp=Z,37µm,21.0s | | | | | | | |
| **D23K** | **Nanushuk River** | **28.18** | **343** | P | **P** | **09 37 38.3** | **+0.2** |
| | baz=143,SNR=45 | | | | | | | |
| D23K | | | | S | **S** | **09 42 26.1** | **+2.5** |
| | baz=143 | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **28.30** | **325** | IAmb | IAmb | 09 38 26.2 | | |
| | comp=Z,288nm,1.6s | | | | | | | |
| J14K | | | | IAMs_20 | IAMs_20 | 09 47 02.7 | | |
| | comp=Z,24µm,19.0s | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **28.30** | **325** | P | **P** | **09 37 38.6** | **-0.5** |
| | baz=116,SNR=18 | | | | | | | |
| J14K | | | | S | **S** | **09 42 29.3** | **+4.0** |
| | baz=116 | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **28.31** | **93** | IAmb | IAmb | 09 37 52.4 | | |
| | comp=Z,432nm,1.5s | | | | | | | |
| FCAR | | | | IAMs_20 | IAMs_20 | 09 49 03.6 | | |
| | comp=Z,30µm,19.0s | | | | | | | |
| **C24K** | **Franklin Bluff** | **28.40** | **345** | IAMs_20 | IAMs_20 | 09 47 45.6 | | |
| | comp=Z,32µm,20.0s | | | | | | | |
| **C24K** | **Franklin Bluff** | **28.40** | **345** | P | **P** | **09 37 39.9** | **0.0** |
| | baz=146 | | | | | | | |
| C24K | | | | S | **S** | **09 42 28.5** | **+1.7** |
| | baz=146 | | | | | | | |
| **K13K** | **Kusilvak Mount** | **28.42** | **323** | IAMs_20 | IAMs_20 | 09 46 45.1 | | |
| | comp=Z,26µm,21.0s | | | | | | | |
| **K13K** | **Kusilvak Mount** | **28.42** | **323** | P | **P** | **09 37 39.3** | **-0.9** |
| | baz=113 | | | | | | | |
| K13K | | | | S | **S** | **09 42 28.7** | **+1.4** |
| | baz=113 | | | | | | | |
| **X40A** | **Basin Creek Fa** | **28.45** | **96** | IAmb | IAmb | 09 37 51.6 | | |
| | comp=Z,238nm,1.5s | | | | | | | |
| X40A | | | | IAMs_20 | IAMs_20 | 09 49 34.4 | | |
| | comp=Z,25µm,21.0s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **28.46** | **95** | IAmb | IAmb | 09 37 51.5 | | |
| | comp=Z,354nm,1.0

baz=108
M11K S **S** **09 42 33.6 +4.2**
baz=108
**D22K** **Ayikyak River** **28.57 341** IAMs_20 IAMs_20 09 47 24.1
comp=Z,34µm,22.0s
**D22K** **Ayikyak River** **28.57 341** P **P** **09 37 41.2 -0.3**
baz=140,SNR=25
D22K S **S** **09 42 33.7 +4.1**
baz=140
**T42A** **Van Buren** **28.57 90** IAmb IAmb 09 37 52.0
comp=Z,341nm,1.1s
T42A IAMs_20 IAMs_20 09 49 42.4
comp=Z,31µm,20.0s
**G17K** **Kiwalik Mounta** **28.59 332** P **P** **09 37 40.7 -1.0**
baz=124,SNR=28
G17K S **S** **09 42 33.5 +3.6**
baz=124
**NIKH** **Nikolski High** **28.61 304** P **P** **09 37 42.2 +0.3**
baz=92
NIKH S **S** **09 42 33.3 +2.9**
baz=92
**A36M** **Sachs Harbour** **28.62 2** P **P** **09 37 40.8 -1.1**
A36M IAmb IAmb 09 37 51.1
comp=Z,224nm,1.0s
**A36M** **Sachs Harbour** **28.62 2** P **P** **09 37 41.2 -0.8**
baz=184,SNR=12
A36M S **S** **09 42 31.3 +1.0**
baz=184
**WLAR** **White Oak Lake** **28.64 98** IAMs_20 IAMs_20 09 49 23.5
comp=Z,32µm,18.0s
**UALR** **University of** **28.67 96** IAmb IAmb 09 38 11.5
comp=Z,179nm,1.2s
UALR IAMs_20 IAMs_20 09 49 39.1
comp=Z,40µm,20.0s
**FVM** **French Village** **28.68 88** IAmb IAmb 09 37 51.2
comp=Z,335nm,0.8s
FVM IAMs_20 IAMs_20 09 49 39.0
comp=Z,34µm,21.0s
**H16K** **Elim** **28.69 330** P **P** **09 37 42.2 -0.4**
baz=120,SNR=16
H16K S **S** **09 42 32.6 +1.2**
baz=120
**E19K** **Redstone River** **28.72 337** P **P** **09 37 42.4 -0.5**
baz=132
E19K S **S** **09 42 32.7 +0.8**
baz=132
**HKT** **Hockley** **28.76 107** ⇑P **P** **09 37 45.6 +2.1**
**HKT** **Hockley** **28.76 107** *c i* P **P** **09 37 45.7 +2.2**
HKT pmax pmax
comp=Z,477nm,1.5s
**KVTX** **Kingsville** **28.87 114** ⇑P **P** **09 37 48.0 +3.5**
**C23K** **Itkillik River** **28.88 344** IAmb IAmb 09 37 54.9
comp=Z,150nm,0.9s
C23K IAMs_20 IAMs_20 09 48 00.0
comp=Z,38µm,20.0s
**C23K** **Itkillik River** **28.88 344** P **P** **09 37 44.4 +0.2**
baz=144,SNR=27
C23K S **S** **09 42 36.9 +2.6**
baz=144
**F18K** **Selawik** **28.90 334** P **P** **09 37 44.0 -0.5**
baz=127,SNR=33
F18K S **S** **09 42 38.6 +3.9**
baz=127
**LCAR** **Lake Charles** **28.94 92** IAmb IAmb 09 37 55.3
comp=Z,222nm,1.0s
LCAR IAMs_20 IAMs_20 09 49 47.1
comp=Z,29µm,22.0s
**E20K** **Nigu River** **28.98 339** P **P** **09 37 45.1 -0.1**
baz=134
E20K S **S** **09 42 38.0 +1.8**
baz=134
**L44A** **Lake County Fo** **29.09 79** P **P** **09 37 44.2 -2.2**
baz=287
L44A S **S** **09 42 39.0 +0.8**
baz=287
**G16K** **Koyuk River** **29.12 331** IAMs_20 IAMs_20 09 47 41.8
comp=Z,23µm,20.0s
**G16K** **Koyuk River** **29.12 331** P **P** **09 37 45.9 -0.5**
baz=122,SNR=16
G16K S **S** **09 42 43.1 +4.8**
baz=122
**PBMO** **Poplar Bluff** **29.16 90** IAmb IAmb 09 37 55.8
comp=Z,512nm,1.4s
PBMO IAMs_20 IAMs_20 09 49 59.9
comp=Z,29µm,19.0s
**C21K** **Knifeblade Rid** **29.27 341** P **P** **09 37 47.6 -0.1**
baz=137,SNR=33
C21K S **S** **09 42 44.1 +3.5**
baz=137
**F17K** **Baldwin Pennin** **29.33 333** IAmb IAmb 09 37 51.5
comp=Z,114nm,0.8s
F17K IAMs_20 IAMs_20 09 48 07.9
comp=Z,19µm,18.0s
**F17K** **Baldwin Pennin** **29.33 333** P **P** **09 37 47.7 -0.5**
baz=125,SNR=23
F17K S **S** **09 42 46.0 +4.6**
baz=125
**ZAIG** **Zacatecas** **29.34 127** IAMs_20 IAMs_20 09 48 25.7
comp=Z,28µm,22.0s
**ZAIG** **Zacatecas** **29.34 127** ⇓P **P** **09 37 51.1 +2.0**
**Q44A** **Meyer Farm, Va** **29.35 86** IAmb IAmb 09 38 00.5
comp=Z,205nm,0.9s
**P08K** **Saint George I** **29.36 311** P **P** **09 37 49.2 +0.5**
baz=98
**D20K** **Etivluk River** **29.41 339** P **P** **09 37 48.8 -0.2**
baz=134
D20K S **S** **09 42 44.8 +1.9**
baz=134
**CCAR** **Cane Creek** **29.49 97** IAMs_20 IAMs_20 09 50 18.1
comp=Z,31µm,20.0s
**CGM3** **Cape Girardeau** **29.51 89** IAmb IAmb 09 38 01.1
comp=Z,443nm,1.2s
CGM3 IAMs_20 IAMs_20 09 49 40.0
comp=Z,24µm,22.0s
**HBAR** **Harrisburg** **29.53 93** IAmb IAmb 09 38 01.1
comp=Z,213nm,1.1s
HBAR IAMs_20 IAMs_20 09 49 40.8
comp=Z,25µm,22.0s
**G15K** **Niukluk** **29.53 329** P **P** **09 37 49.4 -0.6**
baz=119,SNR=13
G15K S **S** **09 42 49.7 +5.0**
baz=119
**B21K** **Ikpikpuk River** **29.58 341** IAMs_20 IAMs_20 09 48 18.8
comp=Z,23µm,20.0s
**B21K** **Ikpikpuk River** **29.58 341** P **P** **09 37 50.1 -0.3**
baz=138,SNR=21
B21K S **S** **09 42 48.6 +3.2**
baz=138
**D19K** **Kuna River** **29.66 338** P **P** **09 37 50.5 -0.8**
baz=132
D19K S **S** **09 42 48.8 +2.0**
baz=132
**E18K** **Tukpahlearik C** **29.70 335** IAMs_20 IAMs_20 09 48 30.3
comp=Z,22µm,18.0s
**E18K** **Tukpahlearik C** **29.70 335** P **P** **09 37 50.7 -0.8**
baz=127,SNR=40
E18K S **S** **09 42 50.4 +3.1**
baz=127
**PARMO** **Parma** **29.70 90** IAMs_20 IAMs_20 09 50 16.3
comp=Z,19µm,19.0s
**GNAR** **Gosnell** **29.81 92** IAmb IAmb 09 38 03.1
comp=Z,291nm,1.1s
GNAR IAMs_20 IAMs_20 09 50 22.2
comp=Z,32µm,20.0s
**SPIA** **Saint Paul Isl** **29.83 312** P **P** **09 37 53.1 +0.4**
baz=98
SPIA S **S** **09 42 55.2 +5.7**
baz=98
**ANM** **Nome** **29.83 328** IAMs_20 IAMs_20 09 48 03.9
comp=Z,20µm,19.0s
**ANM** **Nome** **29.83 328** P **P** **09 37 52.9 +0.2**
baz=116,SNR=6.2
ANM S **S** **09 42 54.8 +5.3**
baz=116
**PVMO** **Portageville** **29.85 91** IAMs_20 IAMs_20 09 50 31.1
comp=Z,33µm,19.0s
**B22K** **Teshekpuk Lake** **29.86 343** IAmb IAmb 09 37 55.9
comp=Z,218nm,0.9s
B22K IAMs_20 IAMs_20 09 48 41.3
comp=Z,31µm,20.0s
**B22K** **Teshekpuk Lake** **29.86 343** P **P** **09 37 52.6 -0.3**
baz=140,SNR=6.6
B22K S **S** **09 42 54.0 +4.3**
baz=140
**E17K** **Hotham Inlet** **29.88 334** P **P** **09 37 52.6 -0.5**
baz=125,SNR=10.0
E17K S **S** **09 42 53.2 +3.1**
baz=125
**F15K** **North Star Dit** **30.11 330** IAMs_20 IAMs_20 09 48 12.8
comp=Z,24µm,19.0s
**F15K** **North Star Dit** **30.11 330** P **P** **09 37 54.8 -0.4**
baz=119,SNR=37
F15K S **S** **09 42 57.1 +3.4**
baz=119
**LNXT** **Lenox** **30.14 91** IAMs_20 IAMs_20 09 50 39.8
comp=Z,37µm,19.0s
**HICK** **Hickman** **30.14 90** IAMs_20 IAMs_20 09 50 39.7
comp=Z,21µm,19.0s
**HDBT** **Hernando Brdge** **30.15 93** IAMs_20 IAMs_20 09 50 00.2
comp=Z,23µm,21.0s
**441A** **DeRidder** **30.16 103** IAMs_20 IAMs_20 09 51 23.9
comp=Z,21µm,18.0s
**GLAT** **Glass** **30.21 91** IAMs_20 IAMs_20 09 50 42.7
comp=Z,27µm,19.0s
**SFIN** **Lafayette** **30.23 82** IAmb IAmb 09 38 07.8
comp=Z,163nm,0.8s
SFIN IAMs_20 IAMs_20 09 50 21.7
comp=Z,32µm,19.0s
**MET** **Memphis--Engin** **30.25 93** IAMs_20 IAMs_20 09 50 13.0
comp=Z,28µm,20.0s
**HALT** **Halls** **30.33 91** IAMs_20 IAMs_20 09 49 51.9
comp=Z,26µm,20.0s
**T45A** **Paducah** **30.36 89** IAMs_20 IAMs_20 09 50 40.6
comp=Z,22µm,19.0s
**143A** **Socs Landing,** **30.37 98** IAmb IAmb 09 38 07.9
comp=Z,427nm,1.6s
143A IAMs_20 IAMs_20 09 50 37.4
comp=Z,32µm,19.0s
**P46A** **Rosedale** **30.41 83** IAmb IAmb 09 38 13.9
comp=Z,270nm,1.0s
**B20K** **Meade River** **30.47 341** IAMs_20 IAMs_20 09 48 34.4
comp=Z,30µm,22.0s
**B20K** **Meade River** **30.47 341** P **P** **09 37 58.2 -0.1**
baz=135,SNR=15
B20K S **S** **09 43 01.2 +1.9**
baz=135
**C19K** **Lookout Ridge** **30.47 338** IAMs_20 IAMs_20 09 48 58.7
comp=Z,21µm,18.0s
**C19K** **Lookout Ridge** **30.47 338** P **P** **09 37 58.0 -0.4**
baz=130,SNR=17
C19K S **S** **09 43 00.1 +0.6**
baz=130
**UTMT** **University of** **30.49 90** IAMs_20 IAMs_20 09 50 50.9
comp=Z,22µm,21.0s
**F14K** **Arctic Creek** **30.61 329** P **P** **09 37 59.6 0.0**
baz=117,SNR=23
F14K S **S** **09 43 04.5 +2.9**
baz=117
**C18K** **Utukok River** **30.63 337** IAMs_20 IAMs_20 09 48 30.0
comp=Z,19µm,20.0s
**C18K** **Utukok River** **30.63 337** P **P** **09 37 59.0 -0.8**
baz=128,SNR=12
C18K S **S** **09 43 02.7 +0.7**
baz=128
**D17K** **Noatak River** **30.64 334** P **P** **09 37 59.3 -0.4**
baz=124,SNR=19
D17K S **S** **09 43 02.8 +0.9**
baz=124
**A22K** **Sinclair Lake** **30.71 343** P **P** **09 38 00.1 -0.3**
baz=139
A22K S **S** **09 43 04.4 +1.5**
baz=139
**GLMI** **Grayling** **30.75 72** ⇑P **P** **09 38 01.4 +0.3**
**RDOG** **Red Dog Mine** **30.78 335** IAMs_20 IAMs_20 09 48 50.3
comp=Z,18µm,19.0s
**RDOG** **Red Dog Mine** **30.78 335** P **P** **09 38 00.7 -0.4**
baz=125,SNR=6.7
RDOG S **S** **09 43 04.7 +0.4**
baz=125
**OXF** **Oxford** **30.92 94** IAMs_20 IAMs_20 09 50 33.7
comp=Z,29µm,19.0s
**OXF** **Oxford** **30.92 94** ⇑P **P** **09 38 02.5 -0.1**
**N47A** **Urbana** **31.07 80** IAmb IAmb 09 38 15.0
comp=Z,194nm,0.9s
**C17K** **DeLong Mountai** **31.11 336** P **P** **09 38 03.3 -0.7**
baz=125,SNR=9.6
C17K S **S** **09 43 09.4 -0.1**
baz=125
**Y45A** **Yeager Farm, C** **31.13 95** IAmb IAmb 09 38 14.2
comp=Z,245nm,1.0s
**TNA** **Tin City** **31.25 329** ⇓P **P** **09 38 04.8 -0.3**
**TNA** **Tin City** **31.25 329** P **P** **09 38 04.8 -0.3**
baz=115
TNA S **S** **09 43 17.9 +6.4**
baz=115
**B18K** **Kokolik River** **31.25 338** P **P** **09 38 05.1 -0.1**
baz=128
B18K S **S** **09 43 14.1 +2.6**
baz=128
**VBMS** **Vicksburg** **31.26 98** IAMs_20 IAMs_20 09 51 16.0
comp=Z,30µm,20.0s
**VBMS** **Vicksburg** **31.26 98** ⇑P **P** **09 38 07.4 +1.7**
**A21K** **Barrow** **31.30 343** P **P** **09 38 05.3 -0.3**
baz=137
A21K S **S** **09 43 13.2 +1.0**
baz=137
**WVT** **Waverly** **31.33 90** P **P** **09 38 06.1 -0.2**
**WVT** **Waverly** **31.33 90** IAMs_20 IAMs_20 09 50 34.4
comp=Z,27µm,20.0s
**WVT** **Waverly** **31.33 90** ⇑P **P** **09 38 06.3 +0.1**
**WVT** **Waverly** **31.33 90** P **P** **09 38 06.1 -0.2**
WVT pmax pmax
comp=Z,862nm,2.0s
WVT MLR MLR
comp=Z,27µm,20.0s
**T47A** **Sharon Grove** **31.49 88** IAmb IAmb 09 38 16.9
comp=Z,103nm,0.8s
**WCI** **Wyandotte Cave** **31.58 85** P **P** **09 38 07.2 -1.3**
WCI IAmb IAmb 09 38 18.0
comp=Z,177nm,0.9s
**WCI** **Wyandotte Cave** **31.58 85** ⇑P **P** **09 38 08.4 -0.1**
**WCI** **Wyandotte Cave** **31.58 85** P **P** **09 38 07.2 -1.3**
WCI pmax pmax
comp=Z,177nm,0.9s
WCI MLR MLR
comp=Z,82µm,19.0s
**A19K** **Wainwright** **31.59 339** P **P** **09 38 08.0 -0.1**
baz=130
A19K S **S** **09 43 18.2 +1.5**
baz=130
**C16K** **Lisburne Hills** **31.66 334** IAmb IAmb 09 38 11.8
comp=Z,180nm,0.8s
C16K IAMs_20 IAMs_20 09 49 17.6
comp=Z,20µm,20.0s
**C16K** **Lisburne Hills** **31.66 334** P **P** **09 38 08.8 0.0**
baz=122,SNR=24
C16K S **S** **09 43 19.0 +1.0**
baz=122
**PLAL** **Pickwick Lake** **31.67 92** IAmb IAmb 09 38 25.8
comp=Z,202nm,1.1s
PLAL IAMs_20 IAMs_20 09 51 28.4
comp=Z,36µm,22.0s
**P48A** **Milroy** **31.75 82** IAmb IAmb 09 38 19.5
comp=Z,204nm,0.9s
**AAM** **Ann Arbor** **32.08 77** IAmb IAmb 09 38 56.3
comp=Z,430nm,1.7s
AAM IAMs_20 IAMs_20 09 51 48.5
comp=Z,23µm,18.0s
**GAMB** **Gambell** **32.09 325** ⇑P **P** **09 38 12.9 +0.3**
**GAMB** **Gambell** **32.09 325** P **P** **09 38 12.5 -0.1**
baz=108,SNR=6.4
GAMB S **S** **09 43 27.8 +3.1**
baz=108
**146A** **Union** **32.10 97** IAMs_20 IAMs_20 09 52 09.1
comp=Z,28µm,19.0s
**N49A** **Columbus Grove** **32.14 79** IAmb IAmb 09 38 24.9
comp=Z,285nm,1.0s
**P49A** **Miami Univ. Ec** **32.23 82** IAmb IAmb 09 38 24.2
comp=Z,213nm,0.9s
**P49A** **Miami Univ. Ec** **32.23 82** P **P** **09 38 13.6 -0.6**
baz=292,SNR=15
P49A S **S** **09 43 26.5 -1.0**
baz=292
**O49A** **Covington** **32.28 81** IAmb IAmb 09 38 30.0
comp=Z,156nm,1.1s
**R49A** **Shelbyville** **32.37 84** IAmb IAmb 09 38 33.7
comp=Z,230nm,1.4s
**CLTN** **Cedars of Leba** **32.44 89** IAmb IAmb 09 38 32.3
comp=Z,149nm,1.1s
CLTN IAMs_20 IAMs_20 09 51 54.7
comp=Z,22µm,18.0s
**346A** **Big Creek Wild** **32.46 99** IAMs_20 IAMs_20 09 52 14.9
comp=Z,27µm,19.0s
**Z47A** **Carrollton** **32.53 95** IAmb IAmb 09 38 27.5
comp=Z,282nm,1.0s
Z47A IAMs_20 IAMs_20 09 52 07.4
comp=Z,26µm,19.0s
**MOIG** **Morelia** **32.55 128** IAmb IAmb 09 38 28.7
comp=Z,181nm,1.0s
**MOIG** **Morelia** **32.55 128** ⇓P **P** **09 38 19.6 +2.2**
**U49A** **Red Boiling Sp** **32.66 88** IAmb IAmb 09 38 34.3
comp=Z,329nm,1.3s
**X48A** **Hartselle** **32.67 92** IAmb IAmb 09 38 34.4
comp=Z,221nm,1.3s
**K50A** **Casco** **32.67 75** IAmb IAmb 09 38 29.5
comp=Z,271nm,1.1s
**HLK** **Haleakala** **32.80 235** IAMs_20 IAMs_20 09 47 18.6
comp=Z,28µm,20.0s
**M50A** **Fremont** **32.80 78** IAmb IAmb 09 38 30.3
comp=Z,106nm,0.8s
**KHLH** **Kahului Airpor** **32.80 236** IAMs_20 IAMs_20 09 47 34.7
comp=Z,27µm,20.0s
**R50A** **Paris** **32.99 84** IAmb IAmb 09 39 16.6
comp=Z,151nm,1.4s
**HPAH** **Hawaii Prepara** **33.03 234** IAMs_20 IAMs_20 09 48 02.9
comp=Z,18µm,19.0s
**SWET** **Sewanee** **33.12 90** IAmb IAmb 09 38 37.8
comp=Z,259nm,1.2s
SWET IAMs_20 IAMs_20 09 51 39.8
comp=Z,20µm,19.0s
**T50A** **Nancy** **33.13 86** IAmb IAmb 09 38 37.6
comp=Z,216nm,1.8s
**POHA** **Pohakuloa** **33.15 233** IAMs_20 IAMs_20 09 47 28.0
comp=Z,25µm,21.0s
**STCH** **Steam Cracks** **33.20 232** IAMs_20 IAMs_20 09 47 48.5
comp=Z,21µm,20.0s
**ACSO** **Alum Creek Sta** **33.23 80** IAmb IAmb 09 38 34.2
comp=Z,154nm,0.9s
**ACSO** **Alum Creek Sta** **33.23 80** ⇑P **P** **09 38 22.4 -0.5**
**HMH** **Humu'ula Sheep** **33.24 233** IAMs_20 IAMs_20 09 47 40.4
comp=Z,21µm,18.0s
**BYL** **Byron's Ledge** **33.26 233** IAMs_20 IAMs_20 09 47 48.9
comp=Z,20µm,22.0s
**MLH** **Mauna Loa** **33.27 233** IAMs_20 IAMs_20 09 47 29.2
comp=Z,19µm,21.0s
**KIP** **Kipapa** **33.37 238** IAMs_20 IAMs_20 09 47 28.8
comp=Z,25µm,19.0s
**HUH** **Hualalai** **33.38 234** IAMs_20 IAMs_20 09 47 55.1
comp=Z,23µm,18.0s
**LRAL** **Lakeview Retre** **33.39 94** IAmb IAmb 09 38 34.8
comp=Z,223nm,1.4s
LRAL IAMs_20 IAMs_20 09 51 49.9
comp=Z,28µm,20.0s
**Y49A** **Blount Mountai** **33.41 93** IAmb IAmb 09 38 34.8
comp=Z,147nm,1.0s
**N51A** **Ashland** **33.43 78** IAmb IAmb 09 39 11.9
comp=Z,184nm,1.1s
**P51A** **Williamsport** **33.45 81** IAmb IAmb 09 38 35.8
comp=Z,211nm,0.9s
P51A IAMs_20 IAMs_20 09 52 20.9
comp=Z,19µm,22.0s
**W50A** **Signal Mountai** **33.58 90** IAmb IAmb 09 38 42.1
comp=Z,271nm,0.9s
**SSFO** **Shawnee State** **33.65 83** IAmb IAmb 09 39 26.8
comp=Z,166nm,1.2s
**FPAL** **Fort Paine** **33.67 91** IAmb IAmb 09 38 37.1
comp=Z,256nm,1.0s
FPAL IAMs_20 IAMs_20 09 51 45.3
comp=Z,20µm,20.0s
**M52A** **Chesterland** **33.95 77** IAMs_20 IAMs_20 09 52 54.0
comp=Z,26µm,19.0s
**KEKH** **Kekaha** **34.03 241** IAMs_20 IAMs_20 09 47 47.2
comp=Z,20µm,19.0s
**CPCT** **Cooper Cave** **34.04 89** IAmb IAmb 09 38 39.9
comp=Z,183nm,0.8s
CPCT IAMs_20 IAMs_20 09 52 35.1
comp=Z,22µm,22.0s
**P52A** **Corning** **34.06 80** IAmb IAmb 09 39 35.2
comp=Z,138nm,1.1s
P52A IAMs_20 IAMs_20 09 53 34.1
comp=Z,18µm,20.0s
**P52A** **Corning** **34.06 80** P **P** **09 38 29.6 -0.5**
baz=292,SNR=7.3
P52A S **S** **09 43 54.3 -1.6**
baz=292
**X51A** **Calhoun** **34.21 90** IAMs_20 IAMs_20 09 52 12.5
comp=Z,20µm,21.0s
**Q52A** **Bidwell** **34.21 82** IAmb IAmb 09 38 42.7
comp=Z,130nm,0.9s
Q52A IAMs_20 IAMs_20 09 52 54.2
comp=Z,27µm,18.0s
**TZTN** **Tazewell** **34.27 86** IAmb IAmb 09 38 48.0
comp=Z,149nm,1.3s
**TZTN** **Tazewell** **34.27 86** ⇑P **P** **09 38 31.8 -0.2**
**BRAL** **Brewton** **34.32 97** IAmb IAmb 09 38 39.2
comp=Z,255nm,0.9s
BRAL IAMs_20 IAMs_20 09 53 48.0
comp=Z,26µm,19.0s
**BRAL** **Brewton** **34.32 97** ⇑P **P** **09 38 34.1 +1.6**
**250A** **Grady** **34.46 95** IAMs_20 IAMs_20 09 53 28.5
comp=Z,28µm,18.0s
**M53A** **WI Miller and** **34.47 77** IAmb IAmb 09 38 44.7
comp=Z,117nm,0.8s
**M53A** **WI Miller and** **34.47 77** P **P** **09 38 33.5 -0.2**
baz=290
M53A S **S** **09 44 03.1 +0.9**
baz=290
**TKL** **Tuckaleechee C** **34.49 88** LR LR 09 53 19.4
comp=Z,50nm,18.9s,baz=298,slow=37
**O53A** **New Philadelph** **34.49 79** IAmb IAmb 09 38 44.9
comp=Z,120nm,0.8s
O53A IAMs_20 IAMs_20 09 53 30.5
comp=Z,14µm,18.0s
**O53A** **New Philadelph** **34.49 79** P **P** **09 38 33.9 0.0**
baz=291,SNR=15
O53A S **S** **09 44 02.8 +0.2**
baz=291
**SADO** **Sadowa** **34.54 71** IAmb IAmb 09 38 46.9
comp=Z,111nm,0.9s
**SADO** **Sadowa** **34.54 71** ⇑P **P** **09 38 33.9 -0.3**
**SADO** **Sadowa** **34.54 71** LR LR 09 52 49.8
comp=Z,38µm,19.9s,baz=304,slow=36
**N53A** **Lisbon** **34.56 78** IAmb IAmb 09 38 45.4
comp=Z,130nm,0.8s
**W52A** **Murphy** **34.64 89** IAmb IAmb 09 38 51.4
comp=Z,230nm,0.9s
W52A IAMs_20 IAMs_20 09 53 04.8
comp=Z,18µm,22.0s
**P53A** **Whipple** **34.65 80** IAmb IAmb 09 39 19.4
comp=Z,119nm,1.1s
P53A IAMs_20 IAMs_20 09 53 39.6
comp=Z,16µm,19.0s
**ERPA** **Erie** **34.73 75** IAMs_20 IAMs_20 09 52 50.5
comp=Z,22µm,18.0s
**ALLY** **Alegheny Colle** **34.77 76** IAMs_20 IAMs_20 09 53 17.7
comp=Z,30µm,20.0s
**VLDQ** **Val d'Or** **34.90 64** IAMs_20 IAMs_20 09 52 21.8
comp=Z,27µm,21.0s
**O54A** **Avella** **35.12 79** IAmb IAmb 09 39 08.1
comp=Z,316nm,1.6s
O54A IAMs_20 IAMs_20 09 53 50.9
comp=Z,15µm,18.0s
**V53A** **Saluda** **35.19 87** IAmb IAmb 09 38 50.9
comp=Z,101nm,0.8s
**152A** **Waverly Hall** **35.23 93** IAmb IAmb 09 38 51.0
comp=Z,136nm,0.9s
152A IAMs_20 IAMs_20 09 53 05.8
comp=Z,19µm,18.0s
**Q54A** **Coxs Mills** **35.24 81** IAmb IAmb 09 38 52.1
comp=Z,127nm,1.0s
Q54A IAMs_20 IAMs_20 09 53 02.3
comp=Z,15µm,19.0s
**S54A** **Dingess, Becki** **35.36 83** IAMs_20 IAMs_20 09 53 21.7
comp=Z,31µm,21.0s
**BG3** **Lake Jocassee** **35.41 88** IAmb IAmb 09 38 52.2
comp=Z,192nm,1.1s
**U54A** **Nelsons Funny** **35.53 85** IAmb IAmb 09 38 57.4
comp=Z,123nm,0.9s
**451A** **Vernon** **35.56 97** IAmb IAmb 09 38 53.8
comp=Z,199nm,0.8s
451A IAMs_20 IAMs_20 09 54 37.8
comp=Z,24µm,18.0s
**WVNY** **West Valley, N** **35.61 74** IAmb IAmb 09 38 56.2
comp=Z,130nm,1.1s
**DELO** **Deloro Mine** **35.65 70** IAmb IAmb 09 39 59.6
comp=Z,207nm,1.5s
**MCWV** **Mont Chateau** **35.69 79** IAmb IAmb 09 38 55.3
comp=Z,116nm,0.9s
MCWV IAMs_20 IAMs_20 09 53 31.1
comp=Z,14µm,18.0s
**MCWV** **Mont Chateau** **35.69 79** ⇑P **P** **09 38 44.4 +0.2**
**352A** **Blakely** **35.70 95** IAmb IAmb 09 38 52.7
comp=Z,293nm,0.9s
**TLIG** **Tlapa** **35.74 127** ⇓P **P** **09 38 46.4 +1.5**

GOGA **Godfrey** **35.77** **91** IAmb IAmb 09 38 55.7
comp=Z,276nm,0.9s
GOGA **Godfrey** **35.77** **91** IAMs_20 IAMs_20 09 53 56.0
comp=Z,23µm,21.0s
GOGA **Godfrey** **35.77** **91** ⇑P **P** **09 38 45.1 +0.2**
J55A **Hilton** **35.89** **73** IAmb IAmb 09 38 58.5
comp=Z,112nm,0.8s
MMNY **Mt. Morris Dam** **35.99** **74** IAMs_20 IAMs_20 09 53 37.9
comp=Z,15µm,18.0s
BLA **Blacksburg** **36.25** **83** IAmb IAmb 09 39 00.0
comp=Z,127nm,0.8s
BLA **Blacksburg** **36.25** **83** ⇑P **P** **09 38 49.6 +0.5**
PECO **Prince Edward** **36.25** **71** IAmb IAmb 09 38 54.5
comp=Z,262nm,1.6s
HODGE **Hodges** **36.26** **89** IAmb IAmb 09 38 59.4
comp=Z,191nm,0.9s
HODGE IAMs_20 IAMs_20 09 54 04.7
comp=Z,22µm,21.0s
Q56A **Snyder Ridge,** **36.40** **80** IAmb IAmb 09 39 04.4
comp=Z,139nm,0.9s
154A **Montrose** **36.43** **92** IAmb IAmb 09 39 01.1
comp=Z,303nm,0.9s
KMSC **Kings Mountain** **36.50** **87** IAmb IAmb 09 39 01.7
comp=Z,204nm,1.0s
U56A **King** **36.65** **85** IAmb IAmb 09 39 03.5
comp=Z,144nm,0.8s
TIGA **Tifton** **36.69** **94** IAMs_20 IAMs_20 09 53 50.4
comp=Z,21µm,20.0s
SSPA **Standing Stone** **36.72** **77** P **P** **09 38 52.0 -1.0**
SSPA **Standing Stone** **36.72** **77** ⇑P **P** **09 38 52.6 -0.4**
553A **Crawfordville** **36.75** **96** IAmb IAmb 09 39 02.8
comp=Z,354nm,1.1s
553A IAMs_20 IAMs_20 09 54 22.1
comp=Z,23µm,21.0s
M57A **Sunshine Farm,** **37.01** **75** IAmb IAmb 09 39 08.5
comp=Z,184nm,1.0s
P57A **Homestead Farm** **37.06** **79** IAmb IAmb 09 39 08.0
comp=Z,188nm,0.9s
P57A IAMs_20 IAMs_20 09 55 00.5
comp=Z,16µm,19.0s
S57A **Dark Hollow, R** **37.08** **82** IAmb IAmb 09 39 07.5
comp=Z,369nm,1.8s
S57A IAMs_20 IAMs_20 09 54 43.1
comp=Z,20µm,18.0s
255A **Hazlehurst** **37.24** **93** IAmb IAmb 09 39 08.8
comp=Z,364nm,1.5s
255A IAMs_20 IAMs_20 09 54 52.0
comp=Z,25µm,18.0s
TRQ **Mont Tremblant** **37.26** **67** IAMs_20 IAMs_20 09 53 54.3
comp=Z,20µm,21.0s
BIRD **Birdtown, Kers** **37.37** **87** IAmb IAmb 09 39 09.2
comp=Z,214nm,0.9s
N58A **Sunbury** **37.48** **76** IAmb IAmb 09 39 21.6
comp=Z,467nm,1.6s
N58A IAMs_20 IAMs_20 09 54 36.3
comp=Z,20µm,19.0s
BINY **Binghamton** **37.51** **74** IAmb IAmb 09 40 08.1
comp=Z,354nm,1.9s
BINY **Binghamton** **37.51** **74** ⇑P **P** **09 38 59.4 -0.3**
LONY **Lake Ozonia** **37.70** **69** ⇑P **P** **09 39 00.7 -0.6**
Y57A **Sumter** **37.72** **88** IAmb IAmb 09 39 11.6
comp=Z,150nm,0.8s
R58B **Mineral** **37.77** **81** IAmb IAmb 09 39 20.2
comp=Z,420nm,1.9s
V58A **Windy Hill, Pi** **37.82** **85** IAmb IAmb 09 39 13.6
comp=Z,255nm,0.8s
KSPA **Keystone Colle** **37.89** **74** P **P** **09 39 01.8 -1.1**
SDMD **Soldier's Deli** **37.93** **78** IAMs_20 IAMs_20 09 55 02.4
comp=Z,13µm,18.0s
CBN **Corbin Frederi** **38.03** **80** IAmb IAmb 09 39 16.6
comp=Z,221nm,0.8s
CBN IAMs_20 IAMs_20 09 54 36.2
comp=Z,15µm,18.0s
CBN **Corbin Frederi** **38.03** **80** ⇑P **P** **09 39 04.8 +0.7**
MVL **Millersville** **38.05** **77** IAMs_20 IAMs_20 09 55 04.6
comp=Z,25µm,20.0s
MNTQ **Montreal, Queb** **38.09** **68** IAMs_20 IAMs_20 09 54 44.1
comp=Z,29µm,22.0s
J59A **Piesco** **38.12** **71** P **P** **09 39 04.0 -0.9**
X58A **Rowland** **38.23** **87** IAmb IAmb 09 39 22.2
comp=Z,175nm,0.8s
257A **Skidaway Islan** **38.27** **91** IAmb IAmb 09 39 17.2
comp=Z,343nm,0.8s
CMIG **Matias Romero** **38.30** **123** LR LR 09 54 47.0
comp=Z,10µm,22.0s,baz=316,slow=36
NHSC **New Hope** **38.32** **89** IAMs_20 IAMs_20 09 55 17.3
comp=Z,17µm,20.0s
NHSC **New Hope** **38.32** **89** ⇑P **P** **09 39 06.7 +0.1**
T59A **Double "B" Far** **38.42** **82** IAMs_20 IAMs_20 09 55 35.7
comp=Z,21µm,18.0s
W59A **Clinton** **38.59** **85** IAmb IAmb 09 39 20.6
comp=Z,243nm,0.8s
WUPA **West Chester U** **38.60** **77** IAMs_20 IAMs_20 09 55 37.2
comp=Z,13µm,19.0s
ACCN **Adirondack Com** **38.72** **71** IAmb IAmb 09 39 23.9
comp=Z,357nm,1.8s
FRB **Frobisher Bay** **38.78** **38** ⇑P **P** **09 39 10.9 +0.8**
FRB **Frobisher Bay** **38.78** **38** P **P** **09 39 10.9 +0.8**
comp=Z,73nm,0.9s,baz=274,slow=9.5,SNR=22
FRB PP **PP** **09 40 39.6 +1.0**
comp=Z,59nm,1.0s,baz=255,slow=13,SNR=1.7
FRB S **S** **09 45 07.1 -0.3**
comp=Z,4.7nm,0.6s,baz=259,slow=17,SNR=1.1
FRB LR LR 09 55 33.6
comp=Z,23µm,18.9s,baz=270,slow=37
comp=Z,73nm,0.9s
SHEM **Shemya Is, Ala** **38.91** **305** LR LR 09 52 27.5
comp=Z,5µm,18.6s,baz=83,slow=32
CNNC **Cliffs of the** **38.96** **85** IAmb IAmb 09 39 23.9
comp=Z,265nm,0.9s
CNNC **Cliffs of the** **38.96** **85** ⇑P **P** **09 39 12.3 +0.3**
LDAQ **Lac Daran** **38.98** **63** P **P** **09 39 11.2 -0.9**
TRNY **Table Rock, Ra** **39.12** **74** P **P** **09 39 12.2 -1.1**
TRNY IAMs_20 IAMs_20 09 54 55.7
comp=Z,19µm,18.0s
P61A **Hammonton** **39.28** **77** IAMs_20 IAMs_20 09 56 09.1
comp=Z,21µm,18.0s
Y60A **Bolivia** **39.30** **87** IAmb IAmb 09 39 26.4
comp=Z,449nm,0.8s
KSCT **Kent School, K** **39.42** **73** IAmb IAmb 09 39 28.7
comp=Z,217nm,0.8s
CPNY **Central Park** **39.44** **75** IAmb IAmb 09 39 20.2
comp=Z,499nm,2.0s
R61A **Willards** **39.44** **79** IAMs_20 IAMs_20 09 56 31.4
comp=Z,17µm,18.0s
LBNH **Lisbon** **39.63** **69** ⇑P **P** **09 39 17.9 +0.5**
EUNU **Eureka** **39.64** **10** ⇑P **P** **09 39 20.0 +2.8**
L61B **Northampton** **39.72** **72** P **P** **09 39 18.3 +0.1**
baz=291,SNR=8.2
L61B S **S** **09 45 19.7 -2.3**
baz=291
N62A **Caumsett State** **39.73** **74** IAMs_20 IAMs_20 09 55 01.8
comp=Z,15µm,20.0s
DWPF **Disney Wildern** **40.08** **97** P **P** **09 39 22.3 +0.9**
DWPF IAmb IAmb 09 39 30.2
comp=Z,690nm,1.4s
DWPF **Disney Wildern** **40.08** **97** IAMs_20 IAMs_20 09 57 30.4
comp=Z,17µm,18.0s
DWPF **Disney Wildern** **40.08** **97** ⇑P **P** **09 39 22.2 +0.8**
SCHQ **Schefferville** **40.22** **52** P **P** **09 39 21.6 -0.7**
comp=Z,49nm,0.9s,baz=284,slow=8.1,SNR=37
SCHQ PP **PP** **09 40 53.5 -1.0**
comp=Z,38nm,0.9s,baz=288,slow=10,SNR=7.1
SCHQ S **S** **09 45 30.1 +0.8**
comp=Z,3.8nm,0.7s,baz=237,slow=19,SNR=1.1
SCHQ LR LR 09 56 02.9
comp=Z,37µm,18.4s,baz=284,slow=36
comp=Z,49nm,0.9s
G62A **West of Eustis** **40.25** **67** IAMs_20 IAMs_20 09 55 36.3
comp=Z,23µm,21.0s
UCCT **U. Connecticut** **40.27** **73** IAmb IAmb 09 39 37.2
comp=Z,464nm,1.5s
HRV **Adam Dziewonsk** **40.47** **71** P **P** **09 39 23.8 -0.7**
HRV **Adam Dziewonsk** **40.47** **71** ⇑P **P** **09 39 24.7 +0.2**
HRV **Adam Dziewonsk** **40.47** **71** P **P** **09 39 23.8 -0.7**
HRV pmax pmax
comp=Z,288nm,1.9s
HRV MLR MLR
comp=Z,54µm,18.0s
CCIG **Comitan** **40.61** **121** IAmb IAmb 09 39 32.3
comp=Z,772nm,2.0s
CCIG IAMs_20 IAMs_20 09 54 55.7
comp=Z,18µm,22.0s
CCIG **Comitan** **40.61** **121** ⇓P **P** **09 39 28.1 +2.1**
TULEG **Thule** **41.03** **18** IAMs_20 IAMs_20 09 54 11.9
comp=Z,20µm,19.0s
TULEG **Thule** **41.03** **18** *i* P **P** **09 39 29.8 +1.1**
comp=Z,67nm,0.9s
IAmb IAmb 09 39 45.4
F63A **Nahmakanta, Br** **41.05** **66** IAMs_20 IAMs_20 09 56 28.3
comp=Z,21µm,20.0s
PKME **Peaks-Kenny Pk** **41.06** **66** ⇑P **P** **09 39 29.3 0.0**
M65A **Busby, Falmout** **41.46** **72** P **P** **09 39 32.8 +0.2**
baz=293
M65A S **S** **09 45 49.0 +1.1**
baz=293
060A **Indiantown** **41.48** **97** IAMs_20 IAMs_20 09 58 00.4
comp=Z,18µm,18.0s
PETF **Flores** **41.58** **118** IAmb IAmb 09 39 45.3
comp=Z,244nm,1.4s
BILL **Bilibino** **41.68** **329** *de*P **P** **09 39 32.3 -1.8**
BILL *e**PP **pP** **09 39 34.7 -0.9**
BILL *e* 09 39 40.0
BILL *e* 09 41 07.2
BILL *i* 09 41 29.2
BILL *e*S **S** **09 45 46.8 -3.9**
BILL *e*SS **SS** **09 48 51.6 -4.0**
BILL pmax pmax
comp=Z,75nm,0.8s
BILL MLR MLR
comp=Z,11µm,17.0s
HUEH **Huehuetenango** **41.74** **121** IAmb IAmb 09 39 50.5
comp=Z,181nm,0.9s
RTAL **Retalhuleu** **42.22** **122** IAmb IAmb 09 39 44.6
comp=Z,651nm,1.8s
G65A **Princeton** **42.24** **66** IAMs_20 IAMs_20 09 57 06.8
comp=Z,23µm,22.0s
MIDW **Midway** **42.35** **266** IAMs_20 IAMs_20 09 52 05.4
comp=Z,16µm,21.0s
EMMW **East Machias** **42.48** **67** IAMs_20 IAMs_20 09 56 40.2
comp=Z,12µm,22.0s
APG **El Apazote** **42.62** **120** LR LR 09 59 17.2
comp=Z,886nm,18.3s,baz=300,slow=39
CAMR **Camarioca** **43.18** **103** IAmb IAmb 09 39 56.8
comp=Z,411nm,1.3s
CAMR IAMs_20 IAMs_20 09 58 30.9
comp=Z,14µm,21.0s
KULLO **Kullorsuaq** **43.51** **22** *i* P **P** **09 39 49.2 +0.3**
KULLO IAmb IAmb 09 39 58.8
comp=Z,153nm,1.1s
UPNV **Upernavik** **43.73** **24** *i* P **P** **09 39 50.0 -0.6**
UPNV IAmb IAmb 09 40 15.9
comp=Z,184nm,1.2s
MTO3 **Montecristo** **43.78** **119** IAMs_20 IAMs_20 10 00 11.5
comp=Z,11µm,20.0s
LMN **Caledonia Moun** **43.83** **64** P **P** **09 39 50.5 -1.3**
LMN IAmb IAmb 09 40 01.1
comp=Z,149nm,1.1s
JOHN **Johnston Islan** **44.21** **246** IAMs_20 IAMs_20 09 52 30.8
comp=Z,15µm,22.0s
SNET **Serv Nac Est T** **44.40** **120** IAMs_20 IAMs_20 10 00 14.9
comp=Z,12µm,18.0s
NUUG **Nuugaatsiaq** **44.65** **26** *i* P **P** **09 39 58.3 +0.3**
NUUG IAmb IAmb 09 40 24.0
comp=Z,1µm,2.7s
UMMG **Uummannaq** **45.06** **27** *i* P **P** **09 40 02.1 +0.8**
UMMG IAmb IAmb 09 40 11.4
comp=Z,223nm,1.0s
HAL **Halifax** **45.07** **65** IAmb IAmb 09 40 02.8
comp=Z,116nm,0.9s
NEEM **North Greenlan** **45.13** **17** *i* P **P** **09 40 02.4 +0.2**
NEEM IAmb IAmb 09 40 11.7
comp=Z,234nm,1.0s
TGUH **Tegucigalpa,Un** **45.37** **118** IAmb IAmb 09 40 11.4
comp=Z,241nm,0.9s
TGUH **Tegucigalpa,Un** **45.37** **118** ⇓P **P** **09 40 05.6 +1.0**
FSCY **Frank Sound, G** **45.76** **107** IAMs_20 IAMs_20 09 59 37.8
comp=Z,18µm,22.0s
SFJD **Kangerlussuaq** **46.06** **32** P **P** **09 40 08.0 -1.3**
SFJD IAmb IAmb 09 40 19.5
comp=Z,154nm,0.9s
SFJD **Kangerlussuaq** **46.06** **32** ⇓P **P** **09 40 10.5 +1.2**
SFJD **Kangerlussuaq** **46.06** **32** P **P** **09 40 10.5 +1.2**
comp=Z,52nm,0.9s,baz=283,slow=8.2,SNR=16
SFJD LR LR 09 59 32.7
comp=Z,6µm,19.2s,baz=280,slow=36
comp=Z,52nm,0.9s
SFJD **Kangerlussuaq** **46.06** **32** *i* P **P** **09 40 09.9 +0.6**
SFJD IAmb IAmb 09 40 19.3
comp=Z,160nm,0.9s
NUUK **Nuuk** **46.13** **36** ⇑P **P** **09 40 11.6 +1.7**
NUUK **Nuuk** **46.13** **36** *i* P **P** **09 40 12.0 +2.1**
NUUK IAmb IAmb 09 40 19.9
comp=Z,96nm,0.9s
GBN **Guysborough** **46.14** **63** IAmb IAmb 09 40 14.7
comp=Z,224nm,1.0s
CRIN **San Cristobal** **46.53** **119** IAMs_20 IAMs_20 10 01 25.1
comp=Z,11µm,20.0s
CRIN **San Cristobal** **46.53** **119** *e*P **P** **09 40 15.2 +1.5**
CNGN **Cerro Negro** **46.90** **118** IAmb IAmb 09 40 36.0
comp=Z,169nm,1.1s
CNGN **Cerro Negro** **46.90** **118** *e*P **P** **09 40 17.2 +0.6**
DY2G **Dye2** **47.86** **32** *i* P **P** **09 40 24.3 +0.6**
DY2G IAmb IAmb 09 40 33.3
comp=Z,262nm,0.8s
PET **Petropavlovsk** **47.87** **309** P **P** **09 40 22.6 -1.0**
PET **Petropavlovsk** **47.87** **309** P **P** **09 40 22.0 -1.6**
PET IAmb IAmb 09 40 31.9
comp=Z,200nm,1.1s
PET **Petropavlovsk** **47.87** **309** ⇑P **P** **09 40 22.5 -1.1**
PET **Petropavlovsk** **47.87** **309** *ce*P **P** **09 40 22.9 -0.7**
PET pmax pmax
comp=Z,113nm,1.0s
SEY **Seymchan** **48.05** **323** LR LR 09 59 21.9
comp=Z,10µm,20.5s,baz=82,slow=35
SEY **Seymchan** **48.05** **323** *ce*P **P** **09 40 23.2 -1.7**
SEY pmax pmax
comp=Z,113nm,1.0s
ACON **Acoyapa** **48.28** **117** IAmb IAmb 09 40 31.0
comp=Z,369nm,2.0s
PEA0B **Petropavlovsk-** **48.38** **309** P **P** **09 40 26.2 -1.4**
PEA0B IAmb IAmb 09 40 36.0
comp=Z,228nm,1.1s
PEA0B **Petropavlovsk-** **48.38** **309** *ce*P **P** **09 40 26.7 -0.9**
PETK **Petropavlovsk-** **48.38** **309** P **P** **09 40 25.1 -2.5**
PETK **Petropavlovsk-** **48.38** **309** P **P** **09 40 25.4 -2.2**
comp=Z,67nm,1.0s,baz=83,slow=10,SNR=32
PETK PcP **PcP** **09 41 52.2 -1.8**
comp=Z,15nm,0.9s,baz=85,slow=3.4,SNR=2.1
PETK S **S** **09 47 24.1 -3.9**
comp=Z,1.2nm,0.7s,baz=188,slow=8.4,SNR=1.7
comp=Z,67nm,1.0s
IVI **Ivigtut** **48.45** **40** ⇑P **P** **09 40 28.6 +0.7**
IVI **Ivigtut** **48.45** **40** *i* P **P** **09 40 27.6 -0.3**
IVI IAmb IAmb 09 40 37.8
comp=Z,315nm,1.1s
ESPN **Las Esperanzas** **48.68** **116** *e*P **P** **09 40 31.0 +0.7**
CHIV **Chivirico** **48.68** **102** IAmb IAmb 09 40 36.4
comp=Z,310nm,1.0s
CHIV IAMs_20 IAMs_20 10 00 35.7
comp=Z,12µm,20.0s
SUMG **Summit** **48.99** **24** IAMs_20 IAMs_20 09 59 40.4
comp=Z,8µm,18.0s
SUMG **Summit** **48.99** **24** *i* P **P** **09 40 32.0 -0.5**
SUMG IAmb IAmb 09 40 42.0
comp=Z,316nm,0.9s
MTDJ **Mount Denham** **49.04** **105** P **P** **09 40 32.1 -1.0**
MTDJ IAmb IAmb 09 41 15.9
comp=Z,172nm,1.1s
MTDJ **Mount Denham** **49.04** **105** ⇑*i*P **P** **09 40 34.7 +1.5**
COLC **Colonia** **49.24** **119** *e*P **P** **09 40 33.9 -0.7**
CUI **Cuipilapa** **49.27** **119** *e*P **P** **09 40 34.2 -0.7**
NMDO **Nuevo Mundo** **49.33** **100** IAmb IAmb 09 40 44.9
comp=Z,355nm,1.2s
NMDO IAMs_20 IAMs_20 10 02 51.7
comp=Z,17µm,21.0s
NICO **Nicoya** **49.48** **119** *e*P **P** **09 40 37.0 +0.6**
ICESG **Greenland Ices** **49.59** **28** ⇓P **P** **09 40 37.1 +0.1**
ICESG **Greenland Ices** **49.59** **28** *i* P **P** **09 40 37.5 +0.4**
ICESG IAmb IAmb 09 40 46.4
comp=Z,499nm,0.8s
GTBY **Guantanamo Bay** **49.65** **101** IAmb IAmb 09 40 46.6
comp=Z,202nm,1.1s
GTBY **Guantanamo Bay** **49.65** **101** ⇑*i*P **P** **09 40 39.1 +1.5**
GTBY **Guantanamo Bay** **49.65** **101** ⇑P **P** **09 40 38.8 +1.1**
STH **Stony Hill** **49.65** **104** ⇑*i*P **P** **09 40 38.9 +1.1**
JTS **Las Juntas de** **49.68** **119** P **P** **09 40 36.9 -1.1**
JTS **Las Juntas de** **49.68** **119** LR LR 10 04 43.8
comp=Z,5µm,20.3s,baz=305,slow=40
JTS **Las Juntas de** **49.68** **119** P **P** **09 40 36.9 -1.1**
JTS pmax pmax
comp=Z,35nm,0.7s
JTS MLR MLR
comp=Z,5µm,21.0s
JTS **Las Juntas de** **49.68** **119** *e*P **P** **09 40 37.2 -0.8**
MA2 **Magadan** **49.81** **319** P **P** **09 40 38.0 -0.5**
MA2 **Magadan** **49.81** **319** P **P** **09 40 37.9 -0.5**
MA2 IAmb IAmb 09 40 47.4
comp=Z,174nm,1.1s
MA2 IAMs_20 IAMs_20 10 00 07.9
comp=Z,10µm,19.0s
MA2 **Magadan** **49.81** **319** ⇑P **P** **09 40 37.8 -0.6**
MA2 **Magadan** **49.81** **319** LR LR 10 00 18.5
comp=Z,8µm,19.2s,baz=78,slow=34
MA2 **Magadan** **49.81** **319** *ce*P **P** **09 40 36.8 -1.7**
MA2 pmax pmax
comp=Z,95nm,1.0s
MA2 **Magadan** **49.81** **319** P **P** **09 40 37.3 -1.2**
comp=Z,152nm,1.2s,comp=Z,3µm
BBSR **BB Station** **49.91** **81** P **P** **09 40 38.8 -0.7**
BBSR IAmb IAmb 09 40 46.6
comp=Z,138nm,1.2s
BBSR **BB Station** **49.91** **81** ⇑P **P** **09 40 39.4 -0.1**
SKR **Severo-Kuril's** **50.19** **306** *e*P **P** **09 40 39.6 -1.8**
SKR *e* 09 42 42.3
SKR *e*S **S** **09 47 53.3 0.0**
SKR pmax pmax
comp=Z,1µm,5.4s
SKR MLR MLR
comp=Z,1µm,19.0s
NOR **Nord** **50.25** **10** *i* P **P** **09 40 42.6 +1.1**
NOR IAmb IAmb 09 41 01.5
comp=Z,140nm,1.5s
LCR2 **La Lucha 2** **50.70** **118** *e*P **P** **09 40 45.7 -0.3**
ISOG **Isortoq, Green** **50.98** **32** *i* P **P** **09 40 46.4 -0.8**
ISOG IAmb IAmb 09 40 56.0
comp=Z,204nm,1.0s
ANGG **Ammassalik, Gr** **51.48** **32** IAmb IAmb 09 41 00.5
comp=Z,140nm,1.0s
ANGG IAMs_20 IAMs_20 10 00 53.1
comp=Z,14µm,20.0s
ANGG **Ammassalik, Gr** **51.48** **32** ⇑P **P** **09 40 51.5 +0.7**
ANGG **Ammassalik, Gr** **51.48** **32** *i* P **P** **09 40 48.0 -2.9**
ANGG IAmb IAmb 09 40 59.7
comp=Z,131nm,1.0s
GRTK **Grand Turk** **51.50** **96** IAMs_20 IAMs_20 10 02 22.9
comp=Z,13µm,21.0s
EDP2 **Potrero Grande** **51.78** **118** *e*P **P** **09 40 54.0 +0.1**
DAG **Danmarks Havn** **52.26** **16** ⇓P **P** **09 40 56.5 -0.1**
DAG **Danmarks Havn** **52.26** **16** *i* P **P** **09 40 55.0 -1.6**
DAG IAmb IAmb 09 41 05.4
comp=Z,96nm,1.1s
BRU2 **Volcan** **52.26** **118** *e*P **P** **09 40 57.1 -0.5**
SOEG **Soedalen** **52.73** **28** ⇑P **P** **09 41 00.9 +0.7**
SOEG **Soedalen** **52.73** **28** *i* P **P** **09 41 00.4 +0.2**
SOEG IAmb IAmb 09 41 09.2
comp=Z,165nm,1.0s
SDDR **Presa de Saban** **53.00** **99** IAmb IAmb 09 41 18.7
comp=Z,148nm,0.8s
SDDR IAMs_20 IAMs_20 10 03 36.8
comp=Z,13µm,19.0s
SDDR **Presa de Saban** **53.00** **99** ⇑*i*P **P** **09 41 03.5 +0.6**
SDDR **Presa de Saban** **53.00** **99** ⇑P **P** **09 41 03.6 +0.8**
DBG **Daneborg** **53.15** **19** *i* P **P** **09 41 02.6 -0.6**
DBG IAmb IAmb 09 41 12.7
comp=Z,224nm,1.0s
TAOE **Nuku Hiva Isla** **53.27** **195** P **P** **09 41 08.6 +3.7**
TAOE **Nuku Hiva Isla** **53.27** **195** *e*P **P** **09 41 05.6 +0.7**
comp=Z,585nm,1.3s
TAOE **Nuku Hiva Isla** **53.27** **195** *e*PP **PP** **09 43 10.2 +5.0**
comp=Z,85nm,22.2s
TAOE *e*S **S** **09 48 38.1 +1.5**
comp=Z,2µm,27.0s
TAOE *e*SS **SKiKP** **09 52 21.1 -1.6**
comp=Z,1µm,27.3s
TAOE *e*LQ LQ 09 54 14.8
comp=Z,6µm,29.7s
TAOE *e*LR LR 09 56 32.1
comp=Z,5µm,22.2s
TAOE **Nuku Hiva Isla** **53.27** **195** IAmb IAmb 09 41 13.5
comp=Z,281nm,1.2s
TIXI **Tiksi** **53.34** **337** LR LR 10 04 21.5
comp=Z,11µm,20.1s,baz=90,slow=37
BCIP **Isla Barro Col** **53.85** **115** ⇑P **P** **09 41 09.8 +0.7**
GMAL **Guarumal, Vera** **53.98** **117** *e*P **P** **09 41 09.8 -0.3**
SCO **Scoresbysund** **54.63** **23** IAmb IAmb 09 41 24.6
comp=Z,157nm,1.1s
SCO IAMs_20 IAMs_20 10 02 54.6
comp=Z,9µm,18.0s
SCO **Scoresbysund** **54.63** **23** ⇑P **P** **09 41 15.7 +1.6**
SCO ⇑P **sP** **09 41 17.0 +0.9**
SCO **Scoresbysund** **54.63** **23** *i* P **P** **09 41 15.0 +0.9**
SCO IAmb IAmb 09 41 24.2
comp=Z,149nm,1.1s
PAYG **Puerto Ayora** **55.28** **132** P **P** **09 41 18.2 -1.3**
PAYG IAmb IAmb 09 41 31.8
comp=Z,193nm,1.2s
PCDR **Punta Cana, DR** **55.40** **97** IAMs_20 IAMs_20 10 05 44.4
comp=Z,10µm,21.0s
KBS **Kingsbay** **55.59** **9** P **P** **09 41 20.2 -0.7**
KBS IAmb IAmb 09 41 37.5
comp=Z,86nm,0.9s
KBS **Kingsbay** **55.59** **9** *e*P **P** **09 41 21.5 +0.6**
KBS IVmBBB 09 41 25.5
comp=Z,2µm,2.0s
KBS *e*S **S** **09 49 10.1 +3.7**
KBS *e*SS **SS** **09 52 54.1 +3.6**
KBS IVMs_BB IVMs_BB 10 08 22.7
comp=Z,4µm,13.0s
KBS **Kingsbay** **55.59** **9** ⇓P **P** **09 41 22.0 +1.1**
KBS **Kingsbay** **55.59** **9** *ce*P **P** **09 41 19.1 -1.8**
KBS pmax pmax
comp=Z,139nm,1.7s
KBS **Kingsbay** **55.59** **9** *i* P **P** **09 41 23.4 +2.5**
CRPR **Cabo Rojo, PR** **56.64** **97** IAmb IAmb 09 41 46.5
comp=Z,271nm,1.6s
SPA0 **Spitsbergen Ar** **56.70** **8** *e*P **P** **09 41 28.9 +0.1**
SPA0 IVmB_BB 09 41 31.5
comp=Z,2µm,2.4s
SPA0 *e*S **S** **09 49 20.3 -0.8**
SPITS **Spitsbergen Ar** **56.70** **8** P **P** **09 41 28.4 -0.5**
comp=Z,42nm,0.8s,baz=86,slow=2.7,SNR=16
SPITS LR LR 10 07 12.5
comp=Z,5µm,20.6s,baz=294,slow=38
comp=Z,42nm,0.8s
SPB2 **Spitsbergen Ar** **56.70** **8** P **P** **09 41 28.0 -0.9**
SPB2 IAmb IAmb 09 41 44.2
comp=Z,194nm,1.1s
MLPR **Magueyes Islan** **56.71** **97** IAmb IAmb 09 41 37.9
comp=Z,236nm,1.4s
UUPR **Utuado, UPR, P** **56.77** **96** IAmb IAmb 09 41 49.1
comp=Z,136nm,0.8s
UUPR IAMs_20 IAMs_20 10 05 22.6
comp=Z,7µm,19.0s
CELP **Cerrillos** **56.98** **96** IAMs_20 IAMs_20 10 05 27.4
comp=Z,8µm,19.0s
OBIP **Obispado Ponce** **56.98** **96** IAMs_20 IAMs_20 10 05 26.5
comp=Z,9µm,19.0s
IGPR **InterUniversit** **57.40** **96** IAMs_20 IAMs_20 10 05 51.4
comp=Z,8µm,21.0s
PDPR **Patillas Dam,** **57.42** **96** IAmb IAmb 09 41 38.1
comp=Z,165nm,1.9s
HUMP **Col San Antoni** **57.47** **96** IAmb IAmb 09 41 46.5
comp=Z,89nm,0.8s
NKL **Nikolayevsk** **57.62** **315** *e*P **P** **09 41 33.8 -1.9**
NKL *e* 09 43 43.8
NKL *e*S **S** **09 49 29.3 -4.5**
NKL pmax pmax
comp=N,178nm,1.0s
NKL pmax pmax
comp=E,96nm,1.0s
NKL pmax pmax
comp=Z,480nm,1.0s
NKL smax smax
comp=E,232nm,4.4s
NKL smax smax
comp=N,395nm,6.1s
NKL MLR MLR
comp=N,13µm,15.0s
NKL MLR MLR
comp=E,11µm,15.0s
NKL MLR MLR
comp=Z,9µm,14.0s
HSPB **Hornsund (broa** **57.62** **9** *e*P **P** **09 41 31.9 -3.5**
HSPB *e*S **S** **09 49 36.1 +2.9**
HSPB *e*SS **SS** **09 53 29.4 +7.0**
HSPB *e*L L 10 00 20.1
TYV **Tymovskoe** **57.73** **311** *e*P **P** **09 41 36.6 +0.1**
TYV *e*S **S** **09 49 36.9 +1.6**

TYV pmax pmax
comp=Z,700nm,3.0s
TYV pmax pmax
comp=Z,85nm,1.1s
TYV smax smax
comp=N,1μm,10.8s
TYV smax smax
comp=E,600nm,10.8s
**JMI Jan Mayen 57.92 20** *e*P **P 09 41 37.6 +0.1**
JMI IVmB_BB 09 41 53.1
comp=Z,5μm,3.5s
JMI *e*S **S 09 49 40.0 +2.8**
**JMIC Jan Mayen 57.93 20** *e*P **P 09 41 38.2 +0.5**
JMIC *e*S **S 09 49 42.6 +5.1**
**BORG Borgarnes 57.95 29** P **P 09 41 37.3 -0.5**
BORG IAmb IAmb 09 41 48.3
comp=Z,178nm,0.8s
**BORG Borgarnes 57.95 29** IAMs_20 IAMs_20 10 07 02.4
comp=Z,11μm,18.0s
**BORG Borgarnes 57.95 29** LR LR 10 05 28.6
comp=Z,5μm,21.4s,baz=305,slow=35
**BORG Borgarnes 57.95 29** P **P 09 41 37.3 -0.5**
BORG pmax pmax
comp=Z,178nm,0.9s
BORG MLR MLR
comp=Z,11μm,18.0s
**YAK Yakutsk 57.99 327** P **P 09 41 36.7 -1.4**
YAK IAmb IAmb 09 41 47.4
comp=Z,126nm,1.1s
**YAK Yakutsk 57.99 327** IAMs_20 IAMs_20 10 04 28.3
comp=Z,9μm,21.0s
**YAK Yakutsk 57.99 327** LR LR 10 04 45.9
comp=Z,9μm,20.9s,baz=66,slow=34
**YAK Yakutsk 57.99 327** *e*P **P 09 41 36.3 -1.8**
YAK *e**PP **pwP 09 41 41.7 -1.5**
YAK *e* 09 42 28.0
YAK *e* 09 43 42.9
YAK *e*S **S 09 49 37.2 -1.2**
YAK *e* 09 51 26.6
YAK *e*SS **SS 09 53 28.1 -0.5**
YAK *e*SSS SSS 09 55 54.7
YAK pmax pmax
comp=Z,134nm,1.3s
YAK pmax pmax
comp=N,32nm,1.5s
YAK pmax pmax
comp=E,59nm,1.5s
YAK pmax pmax
comp=Z,657nm,5.3s
YAK pmax pmax
comp=N,267nm,6.7s
YAK pmax pmax
comp=E,279nm,5.2s
YAK smax smax
comp=E,3μm,15.4s
YAK smax smax
comp=N,2μm,18.8s
YAK MLR MLR
comp=Z,4μm,14.0s
YAK MLR MLR
comp=N,3μm,29.0s
YAK MLR MLR
comp=E,3μm,14.0s
**H11N3 WAKE ISLAND Hy 58.90 268** T T 10 45 48.7
baz=50,slow=75
**H11N2 WAKE ISLAND Hy 58.90 268** T T 10 45 40.7
baz=50,slow=75
**H11N1 WAKE ISLAND Hy 58.91 268** T T 10 45 47.8
baz=50,slow=75
**UGL Uglegorsk 58.98 310** *e*P **P 09 41 43.3 -2.0**
UGL *e*S **S 09 49 53.1 +1.4**
UGL pmax pmax
comp=Z,2μm,4.3s
UGL pmax pmax
comp=Z,200nm,1.0s
UGL smax smax
comp=E,3μm,10.0s
UGL smax smax
comp=N,2μm,16.0s
UGL MLR MLR
comp=E,3μm,15.0s
UGL MLR MLR
comp=N,1μm,11.0s
UGL MLR MLR
comp=Z,3μm,14.0s
**HOPEN Hopen 59.05 7** *e*P **P 09 41 46.1 +0.8**
HOPEN IVmB_BB 09 41 47.9
comp=Z,2μm,2.7s
HOPEN *e*S **S 09 49 52.0 +0.1**
HOPEN *e*SS **SS 09 53 43.6 -1.2**
HOPEN IVMs_BB IVMs_BB 10 07 20.0
comp=Z,5μm,17.4s
**HATO Hato, Curacao 59.20 103** IAMs_20 IAMs_20 10 08 54.7
comp=Z,8μm,19.0s
**WAKE Wake Island 59.36 268** IAMs_20 IAMs_20 09 59 46.9
comp=Z,7μm,20.0s
**YUK Yuzh-Kuril'sk 59.45 303** *i* P **P 09 41 47.2 -1.4**
**SMRT St. Maarten 59.54 94** IAMs_20 IAMs_20 10 08 00.0
comp=Z,7μm,19.0s
**SABA Saba 59.70 94** IAMs_20 IAMs_20 10 05 56.2
comp=Z,7μm,18.0s
**YSS Yuzh-Sakhalins 59.72 308** P **P 09 41 51.3 +0.9**
**YSS Yuzh-Sakhalins 59.72 308** P **P 09 41 49.9 -0.6**
YSS IAmb IAmb 09 41 59.0
comp=Z,131nm,1.0s
**YSS Yuzh-Sakhalins 59.72 308** *e*P **P 09 41 49.0 -1.4**
YSS *e* 09 44 00.1
YSS *e*S **S 09 49 56.9 -4.4**
YSS pmax pmax
comp=Z,1μm,5.0s
YSS pmax pmax
comp=Z,120nm,1.0s
YSS smax smax
comp=N,1μm,9.4s
YSS smax smax
comp=E,1μm,8.2s
YSS MLR MLR
comp=Z,2μm,19.0s
**H11S1 WAKE ISLAND Hy 59.82 267** T T 10 46 46.9
baz=50,slow=75
**H11S2 WAKE ISLAND Hy 59.83 267** T T 10 46 52.4
baz=50,slow=75
**H11S3 WAKE ISLAND Hy 59.84 267** T T 10 46 56.1
baz=50,slow=75
**SEUS St. Eustatius 59.97 94** IAMs_20 IAMs_20 10 09 20.4
comp=Z,9μm,20.0s
**BJO1 Bjornoya 60.23 10** *e*P **P 09 41 54.9 +1.4**
BJO1 IVmB_BB 09 42 08.5
comp=Z,2μm,3.3s
BJO1 *e*S **S 09 50 08.1 +0.9**
BJO1 IVMs_BB IVMs_BB 10 05 33.2
comp=Z,2μm,3.6s
**SDV Santo Domingo 60.31 107** P **P 09 41 56.4 +1.3**
SDV IAmb IAmb 09 42 07.1
comp=Z,98nm,0.8s
**SDV Santo Domingo 60.31 107** LR LR 10 09 57.2
comp=Z,5μm,21.0s,baz=326,slow=38
**SDV Santo Domingo 60.31 107** *e*P **P 09 41 56.0 +0.9**
**ROSC El Rosal 60.71 113** P **P 09 41 59.7 +1.6**
comp=Z,99nm,0.9s,baz=350,slow=4.4,SNR=22
ROSC S **S 09 50 19.1 +3.6**
comp=Z,5.2nm,0.3s,baz=103,slow=23,SNR=1.2
ROSC LR LR 10 13 48.4
comp=Z,3μm,18.2s,baz=336,slow=42
comp=Z,99nm,0.9s
**PMOR Pomariorio Ree 61.03 202** *e*P P 09 42 05.3 +5.7
comp=Z,246nm,1.4s
PMOR *e*S **S 09 50 12.9 -5.6**
comp=Z,2μm,24.3s
PMOR *e*LQ LQ 09 57 33.9
comp=Z,6μm,29.1s
PMOR *e*LR LR 10 00 01.7
comp=Z,4μm,23.5s
**GRNR Gornyy 61.12 314** ⇑ *i*P **P 09 41 58.1 -1.9**
GRNR pmax pmax
comp=Z,20nm,1.1s
**VAH Vaihoa 61.18 202** *e*P **P 09 42 05.3 +4.7**
comp=Z,311nm,1.3s
**VAH Vaihoa 61.18 202** *e*LQ LQ 09 57 40.8
comp=Z,2μm,24.8s
VAH *e*LR LR 10 00 13.2
comp=Z,3μm,22.5s
**JKA Kamikawa-asahi 61.37 305** P **P 09 42 00.5 -1.3**
JKA IAmb IAmb 09 42 10.3
comp=Z,121nm,1.1s
**ASAJ Asahikawa 61.37 305** P **P 09 42 00.5 -1.2**
ASAJ pmax pmax
comp=Z,121nm,1.1s
**ASAJ Asahikawa 61.37 305** P **P 09 42 02.0 +0.2**
**PULU Pululahua 61.63 121** IAMs_20 IAMs_20 10 09 17.7
comp=Z,8μm,20.0s
**GDHS Morne Mazeau, 61.64 94** IAmb IAmb 09 42 22.3
comp=Z,138nm,0.9s
GDHS IAMs_20 IAMs_20 10 11 34.4
comp=Z,6μm,20.0s
**BAUV El Baul 62.08 105** P **P 09 42 05.7 -1.2**
**GDSD La Dsirade Is 62.12 94** IAMs_20 IAMs_20 10 09 48.4
comp=Z,7μm,20.0s
**ERM Erimo 62.22 303** P **P 09 42 06.7 -0.8**
**ERM Erimo 62.22 303** P **P 09 42 06.6 -0.8**
ERM IAmb IAmb 09 42 16.6
comp=Z,154nm,1.1s
**ERM Erimo 62.22 303** *i* P **P 09 42 06.1 -1.3**
ERM pmax pmax
comp=Z,164nm,1.0s
**JEM Erimo 62.22 303** P **P 09 42 07.5 +0.1**
**JEM Erimo 62.22 303** P **P 09 42 06.5 -0.9**
**FDF Fort de France 63.09 95** IAMs_20 IAMs_20 10 08 16.4
comp=Z,7μm,20.0s
**ILAM Ilet Lapin Mar 63.27 95** IAMs_20 IAMs_20 10 12 35.9
comp=Z,8μm,19.0s
**BIM Bigot 63.30 95** IAMs_20 IAMs_20 10 10 05.7
comp=Z,7μm,22.0s
**MPOM Morne Pois Mar 63.50 95** IAMs_20 IAMs_20 10 11 18.9
comp=Z,7μm,19.0s
**PCRV Puerto La Cruz 63.64 101** LR LR 10 12 31.4
comp=Z,5μm,19.6s,slow=38
**ZEA Zeya 63.91 320** *e*P **P 09 42 16.8 -1.7**
ZEA *e* 09 44 40.9
ZEA *e*S **S 09 50 53.0 -1.1**
ZEA pmax pmax
comp=E,10.0nm,0.9s
ZEA pmax pmax
comp=N,10.0nm,0.6s
ZEA pmax pmax
comp=Z,40nm,1.0s
ZEA pmax pmax
comp=E,300nm,4.7s
ZEA pmax pmax
comp=N,200nm,3.6s
ZEA pmax pmax
comp=Z,500nm,4.2s
ZEA smax smax
comp=E,700nm,16.4s
ZEA smax smax
comp=N,2μm,12.7s
**PPT Papeete 63.94 203** P **P 09 42 19.1 0.0**
comp=N,53nm,1.0s,baz=79,slow=21,SNR=2.3
PPT LR LR 10 00 55.7
comp=N,428nm,20.4s,baz=16,slow=27
comp=N,53nm,1.0s
**PPTF Pamatai, Papee 63.96 203** P P 09 42 25.1 +5.9
**PPT2 Papeete2 63.96 203** *e*P **P 09 42 20.1 +0.9**
comp=N,135nm,1.3s
**PPT2 Papeete2 63.96 203** *e*P **P 09 42 22.2 +3.0**
comp=N,151nm,23.0s
PPT2 *e*S **S 09 50 55.0 -0.5**
comp=N,463nm,24.0s
PPT2 *e*SS **SS 09 55 01.2 -3.4**
comp=N,2μm,42.0s
PPT2 *e*LQ LQ 09 58 35.2
comp=N,11μm,27.8s
PPT2 *e*LQ LQ 09 58 42.7
comp=N,453nm,21.2s
PPT2 *e*LR LR 10 01 11.4
comp=N,4μm,27.8s
PPT2 *e*LR LR 10 01 20.3
comp=N,1μm,25.2s
PPT2 *e*LR LR 10 01 23.9
comp=N,5μm,26.2s
**PAE Paea 64.03 203** *e*P **P 09 42 22.6 +3.0**
comp=N,71nm,1.2s
PAE *e*S **S 09 51 02.7 +6.5**
comp=N,230nm,26.3s
PAE *e*LQ LQ 09 58 44.9
comp=N,346nm,22.8s
PAE *e*LR LR 10 01 21.4
comp=N,664nm,25.0s
**TVO Taravao 64.05 203** *e*P **P 09 42 23.7 +3.9**
comp=N,55nm,0.9s
**JTM Tenmabayashi 64.21 303** P **P 09 42 23.5 +2.8**
**TEY Ternei 64.34 308** ⇓ *e*P **P 09 42 18.8 -2.7**
TEY *e* 09 50 55.0
TEY pmax pmax
comp=Z,200nm,3.8s
**HAMF Hammerfest 64.34 10** *e*P **P 09 42 21.8 +0.7**
HAMF IVmBBB 09 42 29.7
comp=Z,2μm,1.3s
HAMF *e*S **S 09 50 59.3 +0.2**
HAMF *e*SKSac **SKSac 09 52 14.3 -0.7**
HAMF *e*SS **SS 09 55 08.7 +1.0**
HAMF IVMs_BB IVMs_BB 10 08 05.8
comp=Z,3μm,22.3s
**GRGR Grenville 64.46 98** IAMs_20 IAMs_20 10 09 31.7
comp=Z,7μm,22.0s
**KLR Kul'dur 64.47 314** LR LR 10 08 03.8
comp=Z,3μm,21.3s,baz=52,slow=34
**KLR Kul'dur 64.47 314** *i* P **P 09 42 19.9 -2.4**
KLR pmax pmax
comp=Z,65nm,1.3s
**TRO Tromso 64.59 12** *e*P **P 09 42 23.8 +1.0**
TRO IVmB_BB 09 42 25.9
comp=Z,2μm,2.2s
TRO *e*S **S 09 51 03.5 +1.4**
TRO *e*SS **SS 09 55 12.1 +0.5**
TRO IVMs_BB IVMs_BB 10 05 11.4
comp=Z,2μm,4.0s
**JOM Ohasama 64.85 301** P **P 09 42 23.3 -1.6**
**LOF Lofoten 65.00 15** *e*P **P 09 42 26.7 +1.3**
LOF IVmB_BB 09 42 33.7
comp=Z,2μm,1.2s
LOF *e*S **S 09 51 08.1 +0.9**
LOF *e*ScS **ScS 09 52 20.6 +0.5**
LOF IVMs_BB IVMs_BB 10 07 25.4
comp=Z,2μm,24.0s
**STEI Steigen 65.49 14** *e*P **P 09 42 30.6 +2.0**
STEI IVmB_BB 09 42 42.3
comp=Z,2μm,3.8s
STEI *e*S **S 09 51 14.7 +1.5**
STEI IVMs_BB IVMs_BB 10 07 54.8
comp=Z,3μm,19.6s
**VADS Vadso 65.50 8** *e*P **P 09 42 28.9 +0.2**
VADS IVmB_BB 09 42 36.5
comp=Z,2μm,1.7s
VADS *e*S **S 09 51 11.6 -1.7**
VADS *e*SS **SS 09 55 28.2 +2.5**
VADS IVMs_BB IVMs_BB 10 13 21.9
comp=Z,2μm,21.1s
**KEV Kevo 65.59 9** P **P 09 42 27.5 -1.7**
KEV IAmb IAmb 09 42 38.6
comp=Z,159nm,1.3s
**KEV Kevo 65.59 9** P **P 09 42 27.5 -1.7**
KEV pmax pmax
comp=Z,159nm,1.3s
**ARA0 ARCESS Array S 65.61 10** *e*P **P 09 42 29.8 +0.4**
ARA0 *e*S **S 09 51 14.2 -0.5**
**ARCES ARCESS Array B 65.61 10** P **P 09 42 28.3 -1.1**
ARCES IAmb IAmb 09 42 38.1
comp=Z,81nm,1.2s
**ARCES ARCESS Array B 65.61 10** P **P 09 42 27.7 -1.7**
comp=Z,11nm,0.9s,baz=356,slow=4.5,SNR=9.9
ARCES LR LR 10 12 14.7
comp=Z,4μm,18.5s,baz=336,slow=37
comp=Z,11nm,0.9s
**ARCES ARCESS Array B 65.61 10** P **P 09 42 28.3 -1.1**
ARCES pmax pmax
comp=Z,81nm,1.3s
**KTK1 Kautokeino 65.80 11** *e*P **P 09 42 30.8 +0.2**
KTK1 *e*S **S 09 51 16.5 -0.5**
KTK1 IVMs_BB IVMs_BB 10 12 08.7
comp=Z,2μm,13.7s
**FAUS Fauske 65.98 15** *e*P **P 09 42 33.0 +1.3**
FAUS IVmB_BB 09 42 53.8
comp=Z,937nm,3.5s
FAUS *e*S **S 09 51 18.5 -0.7**
FAUS *i* 09 58 21.3
FAUS IVMs_BB IVMs_BB 10 08 17.8
comp=Z,3μm,24.5s
**HEH HeiHe 66.03 317** *e*P **P 09 42 29.8 -2.6**
HEH S **S 09 51 18.6 -1.7**
HEH SS **SS 09 55 35.3 +0.6**
HEH pmax pmax
comp=Z,93nm,1.4s
HEH pmax pmax
comp=Z,1μm,4.8s
HEH LR LR
comp=Z,1μm,19.9s
HEH LR LR
comp=Z,5μm,21.5s
HEH LR LR
comp=Z,6μm,19.4s
**JMM Marumori 66.12 300** P **P 09 42 34.8 +1.6**
**KONS Konsvik 66.34 16** *e*P **P 09 42 34.7 +0.7**
**JYA Atsumi 66.36 301** P **P 09 42 32.2 -2.5**
**STOK Stokkvaagen 66.46 16** *e*P **P 09 42 37.2 +2.4**
STOK IVmB_BB 09 43 05.7
comp=Z,3μm,4.2s
STOK *e*S **S 09 51 26.8 +1.8**
STOK IVMs_BB IVMs_BB 10 11 56.5
comp=Z,2μm,13.4s
**RKT Rikitea 66.58 187** *e*P **P 09 42 38.7 +2.6**
comp=Z,2μm,36.8s
**RKT Rikitea 66.58 187** *e*P P 09 42 42.4 +6.3
comp=Z,5μm,25.8s
RKT *e*S **S 09 51 26.9 -0.5**
comp=Z,6μm,24.2s
RKT *e*SS **SS 09 55 46.0 +0.8**
comp=Z,8μm,39.5s
RKT *e*LQ LQ 09 59 44.2
comp=Z,13μm,25.5s
RKT *e*LQ LQ 09 59 55.8
comp=Z,4μm,25.8s
RKT *e*LR LR 10 02 39.9
comp=Z,46μm,27.5s
RKT *e*LR LR 10 02 42.0
comp=Z,7μm,22.9s
**BOD Bodaibo 66.74 329** *e*P **P 09 42 34.4 -2.4**
BOD pmax pmax
comp=Z,81nm,1.3s
**MOR8 Moi Rana 66.89 16** *e*P **P 09 42 36.7 -0.9**
MOR8 IVmB_BB 09 42 45.5
comp=Z,2μm,1.8s
MOR8 *e*S **S 09 51 31.8 +1.5**
MOR8 *e*SS **SS 09 55 48.2 +0.9**
MOR8 *i* 09 58 37.7
MOR8 IVMs_BB IVMs_BB 10 08 22.2
comp=Z,3μm,21.1s
**USA0B Ussuriysk Arra 67.46 310** P **P 09 42 39.9 -1.7**
USA0B IAmb IAmb 09 42 50.0
comp=Z,112nm,1.1s
**USA0B Ussuriysk Arra 67.46 310** *i* P **P 09 42 39.9 -1.7**
**USRK Ussuriysk Ar. 67.46 310** P **P 09 42 39.9 -1.7**
comp=Z,39nm,1.1s,baz=62,slow=5.0,SNR=26
USRK S **S 09 51 37.0 -0.8**
comp=Z,1.3nm,0.6s,baz=149,slow=40,SNR=1.4
USRK LR LR 10 10 43.3
comp=Z,3μm,20.5s,baz=43,slow=35
comp=Z,39nm,1.1s
**LEWI Lewis, Hebride 67.50 30** *e*P **P 09 42 41.7 +0.1**
LEWI IAmb IAmb 09 42 45.7
comp=Z,91nm,1.0s
**JSD Sado 67.60 302** P **P 09 42 44.5 +1.9**
**NSS Namsos 67.80 18** *e*P **P 09 42 44.0 +0.6**
NSS IVmB_BB 09 42 57.4
comp=Z,2μm,4.1s
NSS *e*S **S 09 51 41.9 +0.6**
NSS *i* 09 59 11.1
NSS IVMs_BB IVMs_BB 10 15 26.2
comp=Z,2μm,14.2s
**LVZ Lovozero 68.17 7** P **P 09 42 44.8 -0.9**
LVZ IAMs_20 IAMs_20 10 13 20.6
comp=Z,6μm,18.0s
**LVZ Lovozero 68.17 7** *ce*P **P 09 42 45.4 -0.3**
LVZ pmax pmax
comp=Z,203nm,1.0s
**APA Apatity 68.38 8** ⇓ *i*P **P 09 42 46.6 -0.4**
APA *i* 09 45 21.4
APA *i*S **S 09 51 46.0 -2.0**
APA *i* 09 52 46.0
APA *i*SS **SS 09 56 12.0 +1.8**
APA *i*SSS SSS 09 59 14.0
APA pmax pmax
comp=Z,43nm,0.9s
**MOL Molde 68.42 20** *e*P **P 09 42 47.9 +0.6**
MOL *e*S **S 09 51 49.3 +0.6**
MOL *i* 09 59 25.6
**JRY Ryogami san 68.45 300** P **P 09 42 46.3 -1.8**
**MDJ Mudanjiang 68.51 311** P **P 09 42 50.1 +1.9**
**MDJ Mudanjiang 68.51 311** P **P 09 42 46.6 -1.6**
MDJ S **S 09 51 51.8 +1.4**
MDJ pmax pmax
comp=Z,12nm,1.0s
MDJ pmax pmax
comp=Z,670nm,6.1s
MDJ LR LR
comp=Z,5μm,22.0s
MDJ LR LR
comp=Z,5μm,22.7s
MDJ LR LR
comp=Z,4μm,22.1s
**TBLU Trondheim 68.51 19** *e*P **P 09 42 45.3 -2.6**
TBLU IVmB_BB 09 42 56.7
comp=Z,1μm,2.2s
TBLU *e*S **S 09 51 51.2 +1.4**
TBLU *i* 09 59 22.8
**MJAR Matsushiro Arr 68.56 300** P **P 09 42 46.3 -2.4**
comp=Z,8.3nm,0.9s,baz=42,slow=5.2,SNR=14
MJAR PP **PP 09 45 17.3 -2.3**
comp=Z,1.1nm,0.7s,baz=54,slow=6.2,SNR=1.5
comp=Z,8.3nm,0.9s
**MAJO Matsushiro 68.56 300** P **P 09 42 46.7 -2.0**
**MAJO Matsushiro 68.56 300** P **P 09 42 46.4 -2.3**
MAJO IAmb IAmb 09 42 57.1
comp=Z,76nm,0.9s
**MAJO Matsushiro 68.56 300** *i* P **P 09 42 46.4 -2.3**
MAJO pmax pmax
comp=Z,96nm,1.0s
**MAT Matsushiro 68.56 300** P **P 09 42 46.4 -2.3**
**MJB9 Matsu-Tunnel 68.56 300** IAmb IAmb 09 42 58.5
comp=Z,71nm,0.9s
**FOO Floro 68.57 22** *e*P **P 09 42 48.3 +0.1**
FOO *e*S **S 09 51 50.6 +0.1**
**SUE Sulen 68.94 23** *e*P **P 09 42 51.0 +0.5**
SUE *e*S **S 09 51 53.7 -1.1**
SUE *i* 09 59 45.2
**BNX BinXian 68.96 313** ⇓ P **P 09 42 49.3 -1.7**
BNX sP **pwP 09 42 58.4 +2.3**
BNX S **S 09 51 56.6 +1.0**
BNX pmax pmax
comp=Z,31nm,1.1s
BNX pmax pmax
comp=Z,870nm,4.2s
BNX LR LR
comp=Z,3μm,20.5s
BNX LR LR
comp=Z,4μm,20.6s
BNX LR LR
comp=Z,3μm,17.0s
**PSTR Posyet 69.11 309** *i* P **P 09 42 50.0 -1.9**
**MCD Coleburn Disti 69.19 28** *e*P **P 09 42 52.9 +0.7**
MCD IAmb IAmb 09 42 56.5
comp=Z,123nm,0.8s
**HYA Hoyanger 69.24 22** *e*P **P 09 42 52.7 +0.3**
HYA IVmB_BB 09 43 11.3
comp=Z,3μm,4.4s
HYA *e*S **S 09 52 00.3 +1.9**
HYA *e*SS **SS 09 56 26.3 +2.6**
HYA *i* 09 59 46.5
HYA IVMs_BB IVMs_BB 10 12 03.0
comp=Z,3μm,4.7s
**DOMB Dombas 69.25 20** *e*P **P 09 42 52.4 -0.2**
DOMB IVmB_BB 09 43 05.4
comp=Z,2μm,3.4s
DOMB *e*S **S 09 52 01.3 +2.6**
DOMB *e*SS **SS 09 56 17.6 -6.4**
DOMB *i* 09 59 46.5
DOMB IVMs_BB IVMs_BB 10 13 17.9
comp=Z,2μm,4.4s
**JGN Niukaw 69.32 301** P **P 09 42 53.0 -0.5**
**TBI Tubuai 69.41 201** *e*P **P 09 42 53.9 +0.1**
comp=Z,839nm,28.0s
**TBI Tubuai 69.41 201** *e*P **P 09 42 55.2 +1.4**
comp=Z,4μm,28.2s
TBI *e*S **S 09 52 03.3 +2.2**
comp=Z,3μm,29.6s
TBI *e*S **S 09 52 06.3 +5.2**
comp=Z,4μm,27.2s
TBI *e*SS **SS 09 56 31.2 +2.3**

TBI comp=Z,3µm,26.4s eSS SS 09 56 34.3 +5.4
TBI comp=Z,3µm,24.8s eLQ LQ 10 00 41.9
TBI comp=Z,14µm,32.2s eLR LR 10 03 51.4
TBI comp=Z,3µm,22.8s eLR LR 10 03 55.0
TBI comp=Z,13µm,27.8s eLR LR 10 03 56.3
**LAWE Loch Awe, Argy 69.44 30** *e*P **P 09 42 54.1 +0.3**
LAWE IAmb IAmb 09 42 57.7
LAWE comp=Z,94nm,0.8s IAMs_20 IAMs_20 10 11 16.5
comp=Z,9µm,20.2s
**ASK Askoy 69.53 23** *e*P **P 09 42 54.7 +0.5**
**IDGL Inch Island, C 69.53 32** P **P 09 42 54.1 -0.3**
**BER Bergen 69.65 23** *e*P **P 09 42 55.6 +0.7**
BER *e*S **S 09 52 05.2 +1.9**
BER *i* 09 59 38.8
**JGF Kuroka 69.69 300** P **P 09 42 57.4 +1.7**
**INVG Invergeldie, C 69.80 29** *e*P **P 09 42 56.7 +0.7**
INVG IAmb IAmb 09 43 00.3
comp=Z,56nm,0.8s
**DRUM Mains of Drumt 69.98 28** *e*P **P 09 42 57.3 +0.2**
DRUM IAmb IAmb 09 43 01.4
comp=Z,154nm,0.8s
**IGLA Glengowla, Co 70.02 34** P **P 09 42 55.6 -1.7**
**INU Inuyama 70.06 300** P **P 09 42 57.9 -0.1**
**INU Inuyama 70.06 300** P **P 09 42 56.7 -1.2**
**CLGH Cloghs, Cushen 70.06 31** *e*P **P 09 42 57.7 +0.1**
CLGH IAmb IAmb 09 43 01.6
comp=Z,84nm,1.0s
CLGH IAMs_20 IAMs_20 10 11 49.9
comp=Z,7µm,19.3s
**PGBU Glenifferbraes 70.11 30** *e*P **P 09 42 58.5 +0.6**
PGBU IAmb IAmb 09 43 02.0
comp=Z,146nm,0.9s
PGBU IAMs_20 IAMs_20 10 11 35.8
comp=Z,9µm,19.2s
**NC204 NORSAR Array S 70.33 20** IAmb IAmb 09 43 08.2
comp=Z,72nm,0.9s
**TBTG Tabatinga, AM 70.35 116** *e*P **P 09 43 00.1 +0.2**
**HIA Hailar 70.38 320** P **P 09 43 00.1 +0.3**
**HIA Hailar 70.38 320** P **P 09 42 58.4 -1.4**
HIA IAmb IAmb 09 43 04.3
comp=Z,170nm,1.9s
**HIA Hailar 70.38 320** IAMs_20 IAMs_20 10 14 07.7
comp=Z,5µm,19.0s
**HIA Hailar 70.38 320** P **P 09 42 58.4 -1.4**
HIA pmax pmax
comp=Z,170nm,1.9s
**CALA Caldeira 70.39 55** eLQ LQ 10 00 22.9
CALA eLR LR 10 08 43.7
comp=Z,5µm,17.1s
**ODD1 Odda 70.41 22** IVmB_BB 09 42 56.8
comp=Z,2µm,4.1s
ODD1 *e*P **P 09 43 00.3 +0.6**
ODD1 *e*S **S 09 52 12.4 +0.1**
ODD1 *i* 10 00 17.7
ODD1 IVMs_BB IVMs_BB 10 12 21.3
comp=Z,3µm,19.4s
**EDI Edinburgh 70.50 29** *e*P **P 09 43 00.9 +0.6**
EDI IAMs_20 IAMs_20 10 11 13.9
comp=Z,8µm,21.3s
**PGRA Graciosa 70.53 54** *e*P **P 09 42 58.7 -2.1**
comp=Z,344nm,1.6s
**PGRA Graciosa 70.53 54** eLR LR 10 07 08.4
comp=Z,10µm,16.6s
**NBO00 NORSAR Array S 70.55 20** IAmb IAmb 09 43 10.0
comp=Z,122nm,0.9s
**ROSA Rosais 70.58 55** *e*P **P 09 42 59.0 -2.1**
comp=Z,246nm,1.3s
**ROSA Rosais 70.58 55** eLQ LQ 10 00 46.0
ROSA eLR LR 10 05 24.5
comp=Z,3µm,16.1s
**KMY Karmoy 70.60 23** *e*P **P 09 43 01.3 +0.5**
KMY IVmB_BB 09 43 02.3
comp=Z,2µm,4.3s
KMY *e*S **S 09 52 15.1 +0.7**
KMY *e*SS **SS 09 56 44.4 -0.3**
KMY IVMs_BB IVMs_BB 10 16 31.8
comp=Z,4µm,11.9s
**PICO Pico 70.61 55** *e*P **P 09 42 59.1 -2.3**
comp=Z,316nm,1.3s
**PICO Pico 70.61 55** eLQ LQ 10 00 38.8
PICO eLR LR 10 07 25.7
comp=Z,5µm,13.5s
**NB2 NORSAR Subarra 70.65 20** P **P 09 43 02.0 +0.8**
comp=Z,121nm,0.9s,baz=331,slow=6.2
**NB2 NORSAR Subarra 70.65 20** P **P 09 43 02.0 +0.8**
baz=331,slow=6.2
**NOA NORSAR Array B 70.65 20** P **P 09 43 01.2 0.0**
comp=Z,36nm,0.9s,baz=331,slow=6.0,SNR=40
NOA LR LR 10 11 50.3
comp=Z,3µm,21.6s,baz=335,slow=34
comp=Z,36nm,0.9s
**NB201 NORSAR Array S 70.66 20** IAmb IAmb 09 43 11.4
comp=Z,89nm,1.1s
**NC405 NORSAR Array S 70.71 20** IAmb IAmb 09 43 10.8
comp=Z,66nm,0.9s
**VAL Valentia 70.74 36** P **P 09 43 01.2 -0.6**
**NEWG New Galloway 70.74 30** *e*P **P 09 43 02.2 +0.4**
NEWG IAmb IAmb 09 43 05.8
comp=Z,87nm,0.9s
NEWG IAMs_20 IAMs_20 10 13 53.2
comp=Z,7µm,16.3s
**RAR Rarotonga 70.75 212** IAMs_20 IAMs_20 10 06 03.9
comp=Z,5µm,20.0s
**RAR Rarotonga 70.75 212** LR LR 10 08 33.0
comp=Z,3µm,18.6s,baz=18,slow=31
**BLS5 Blasjo 70.77 23** *e*P **P 09 43 03.6 +1.7**
BLS5 *e*S **S 09 52 17.3 +0.8**
BLS5 IVMs_BB IVMs_BB 10 16 59.5
comp=Z,4µm,13.4s
**ILTH Belurgan, Co L 70.77 32** P **P 09 43 01.9 0.0**
**ESK Eskdalemuir 70.96 30** IAMs_20 IAMs_20 10 12 03.9
comp=Z,8µm,20.0s
**EKA Eskdalemuir Ar 70.97 30** P **P 09 43 03.0 -0.1**
comp=Z,14nm,0.8s,baz=322,slow=5.7,SNR=14
EKA PP **PP 09 45 40.1 +0.3**
comp=Z,3.3nm,0.9s,baz=308,slow=6.9,SNR=2.6
comp=Z,14nm,0.8s
**NC602 NORSAR Array S 70.99 20** *e*P **P 09 43 03.8 +0.6**
NC602 *e*S **S 09 52 18.7 -0.3**
NC602 *i* 10 00 44.5
NC602 IVMs_BB IVMs_BB 10 14 26.4
comp=Z,2µm,21.0s
**CIT Chita 71.14 325** *e*P **P 09 43 03.3 -1.1**
CIT *e* 09 43 22.9
CIT *e* 09 45 42.7
CIT pmax pmax
comp=Z,245nm,3.1s
**PAGU Agualva, Azore 71.17 54** *e*P **P 09 43 03.0 -1.7**
comp=Z,231nm,1.2s
**PAGU Agualva, Azore 71.17 54** eLR LR 10 07 22.9
comp=Z,3µm,10.8s
**VAF Ylistaro 71.25 14** *e*P **P 09 43 06.2 +1.5**
**CZSB Cruzeiro do Su 71.26 121** P **P 09 43 04.4 -1.1**
CZSB IAmb IAmb 09 43 10.7
comp=Z,220nm,1.2s
**CN2 Changchun 71.29 313** *e*P **P 09 43 05.8 +0.5**
CN2 *e*S **S 09 52 24.1 +1.1**
CN2 pmax pmax
comp=Z,20nm,1.2s
CN2 pmax pmax
comp=Z,700nm,3.3s
CN2 LR LR
comp=Z,2µm,21.0s
CN2 LR LR
comp=Z,5µm,21.0s
CN2 LR LR
comp=Z,2µm,21.0s
**DSB Dublin 71.35 33** P **P 09 43 05.9 +0.4**
**KONO Kongsberg 71.43 21** P **P 09 43 04.2 -1.7**
KONO IAmb IAmb 09 43 15.5
comp=Z,89nm,0.9s
**KONO Kongsberg 71.43 21** *e*P **P 09 43 07.9 +2.0**
KONO IVmBBB 09 43 24.3
comp=Z,1µm,2.6s
KONO *e*S **S 09 52 25.0 +0.8**
KONO IVMs_BB IVMs_BB 10 14 10.6
comp=Z,2µm,4.0s
**KONO Kongsberg 71.43 21***ce*P **P 09 43 06.5 +0.6**
KONO pmax pmax
comp=Z,113nm,1.7s
**OSL Oslo 71.48 21** *e*P **P 09 43 07.0 +0.8**
OSL *e*S **S 09 52 26.4 +1.8**
OSL *i* 10 00 17.9
**EDMD Edmundbyers 71.79 30** *e*P **P 09 43 08.8 +0.7**
EDMD IAmb IAmb 09 43 12.5
comp=Z,77nm,0.8s
**IWEX Carrickbyrne, 71.85 34** P **P 09 43 08.7 +0.2**
**SNART Snartemo 71.89 23** *e*P **P 09 43 09.2 +0.5**
SNART IVmB_BB 09 43 22.7
comp=Z,3µm,2.7s
SNART *e*S **S 09 52 30.8 +1.4**
SNART *i* 10 00 51.1
**JCJ Chichijima 71.92 290** LR LR 10 09 44.4
comp=Z,2µm,20.6s,baz=63,slow=32
**WPS Cemaes, Angles 71.96 32** *e*P **P 09 43 09.7 +0.6**
WPS IAmb IAmb 09 43 13.3
comp=Z,87nm,0.9s
**BOAV Boa Vista 71.97 104** *e*P **P 09 43 09.9 +0.1**
**HFS Hagfors 72.04 19** P **P 09 43 10.5 +0.9**
comp=Z,58nm,0.9s,baz=2.5,slow=3.4,SNR=24
HFS LR LR 10 13 03.3
comp=Z,4µm,19.7s,baz=329,slow=34
comp=Z,58nm,0.9s
**WLF1 Llynfaes 72.08 32** *e*P **P 09 43 08.8 -1.1**
WLF1 IAmb IAmb 09 43 14.0
comp=Z,111nm,0.9s
**NNA Nana 72.10 127** P **P 09 43 10.0 -0.5**
**NNA Nana 72.10 127** LR LR 10 12 02.0
comp=Z,2µm,21.2s,baz=316,slow=34
**NNA Nana 72.10 127** *e*P **P 09 43 10.6 +0.1**
NNA pmax pmax
comp=Z,343nm,1.9s
**RPN Rapa Nui 72.27 163** LR LR 10 07 45.9
comp=Z,3µm,19.2s,baz=346,slow=30
**HOMB Homborsund 72.31 23** *e*P **P 09 43 10.9 -0.3**
HOMB IVmB_BB 09 43 42.0
comp=Z,2µm,6.4s
HOMB *e*S **S 09 52 31.7 -2.6**
HOMB *e*SS **SS 09 57 12.6 +1.6**
HOMB *i* 10 00 55.4
HOMB IVMs_BB IVMs_BB 10 17 46.5
comp=Z,2µm,12.3s
**ADZR Andozero 72.38 6** *e*P **P 09 43 12.1 +0.6**
ADZR pmax pmax
comp=Z,153nm,0.9s
**KEF Keuruu 72.44 13** *e*P **P 09 43 12.8 +0.9**
**GDLE Glaisdale, N Y 72.52 29** *e*P **P 09 43 13.4 +0.9**
GDLE IAmb IAmb 09 43 17.0
comp=Z,101nm,0.8s
GDLE IAMs_20 IAMs_20 10 12 36.1
comp=Z,9µm,20.4s
**JOF Joensuu 72.65 10** *e*P **P 09 43 15.5 +2.4**
**PSET Sete Cidades 72.66 54** eLR LR 10 06 30.9
comp=Z,2µm,14.7s
**JHS Saijyo 72.72 302** P **P 09 43 12.1 -2.0**
**CMLA Cha da Macela 72.82 54** *e*P **P 09 43 12.6 -2.0**
comp=Z,286nm,1.0s
**FOEL Foel Wylfa 72.85 31** *e*P **P 09 43 15.0 +0.5**
FOEL IAmb IAmb 09 43 18.9
comp=Z,80nm,1.0s
FOEL IAMs_20 IAMs_20 10 14 23.6
comp=Z,7µm,16.9s
**RSBS Rosebush, Pemb 72.98 33** *e*P **P 09 43 13.9 -1.4**
RSBS IAmb IAmb 09 43 20.1
comp=Z,46nm,0.9s
RSBS IAMs_20 IAMs_20 10 14 55.8
comp=Z,9µm,17.4s
**LBWR Ladybower, Pea 73.00 30** *e*P **P 09 43 16.2 +0.8**
LBWR IAmb IAmb 09 43 19.9
comp=Z,121nm,0.9s
LBWR IAMs_20 IAMs_20 10 17 01.4
comp=Z,7µm,14.7s
**BART Pico Bartolome 73.02 54** *e*P **P 09 43 13.4 -2.5**
comp=Z,284nm,1.5s
**BART Pico Bartolome 73.02 54** eLR LR 10 09 15.4
comp=Z,2µm,12.9s
**JMN Monobe 73.08 300** P **P 09 43 19.9 +3.6**
**UPP Uppsala 73.19 17** *e*P **P 09 43 17.4 +1.1**
**HLM1 Long Mynd 73.26 32** *e*P **P 09 43 17.0 0.0**
HLM1 IAmb IAmb 09 43 21.2
comp=Z,48nm,0.9s
HLM1 IAMs_20 IAMs_20 10 15 20.3
comp=Z,7µm,17.1s
**NIUE Niue 73.27 221** IAMs_20 IAMs_20 10 10 31.4
comp=Z,6µm,21.0s
**FINES FINESS Array B 73.32 13** P **P 09 43 16.2 -0.9**
**FINES FINESS Array B 73.32 13** P **P 09 43 16.4 -0.7**
comp=Z,29nm,0.9s,baz=7.8,slow=4.2,SNR=27
FINES PP **PP 09 45 59.4 -0.3**
comp=Z,5.2nm,0.9s,baz=335,slow=9.2,SNR=2.1
FINES LR LR 10 13 34.1
comp=Z,5µm,20.5s,baz=344,slow=34
comp=Z,29nm,0.9s
**FINES FINESS Array B 73.32 13** *i* P **P 09 43 19.1 +2.0**
FINES pmax pmax
comp=Z,29nm,0.9s
**TEFE Tefe 73.36 112** *e*P **P 09 43 18.6 +0.6**
**AAL Aland 73.39 16** *e*P **P 09 43 19.0 +1.5**
**PSMN Pico do Norte, 73.60 54** *e*P **P 09 43 18.8 -0.4**
comp=Z,168nm,1.2s
**PSMN Pico do Norte, 73.60 54** eLR LR 10 06 58.3
comp=Z,1µm,17.1s
**MCH1 Michaelchurch 73.63 32** *e*P **P 09 43 19.4 +0.3**
MCH1 IAmb IAmb 09 43 23.3
comp=Z,30nm,0.9s
**CWF Charnwood Fore 73.68 31** *e*P **P 09 43 20.3 +0.9**
CWF IAmb IAmb 09 43 23.9
comp=Z,71nm,0.9s
**HTL Hartland 73.82 33** *e*P **P 09 43 20.9 +0.6**
HTL IAmb IAmb 09 43 24.6
comp=Z,61nm,0.8s
**MONM Monmouth 73.82 32** *e*P **P 09 43 20.9 +0.6**
MONM IAmb IAmb 09 43 24.0
comp=Z,40nm,0.9s
MONM IAMs_20 IAMs_20 10 12 53.1
comp=Z,7µm,19.9s
**MUD Monsted U'grnd 74.06 23** *i* P **P 09 43 24.1 +2.6**
MUD IAmb IAmb 09 43 28.5
comp=Z,163nm,1.4s
**SBD Saint Breward 74.08 34** *e*P **P 09 43 22.4 +0.6**
**VALR Valaam 74.10 10** *i* P **P 09 43 22.4 +0.7**
VALR pmax pmax
comp=Z,245nm,1.2s
**CCA1 Carnmenellis 74.15 34** *e*P **P 09 43 22.4 +0.2**
CCA1 IAmb IAmb 09 43 26.9
comp=Z,43nm,0.7s
CCA1 IAMs_20 IAMs_20 10 14 09.4
comp=Z,8µm,21.3s
**MEF Metsahovi 74.19 14** *e*P **P 09 43 24.3 +2.1**
**KS19 Wonju Array Si 74.21 307** P **P 09 43 21.8 -1.0**
KS19 IAmb IAmb 09 43 28.0
comp=Z,256nm,1.9s
**KSRS Korea Array 74.21 307** P **P 09 43 21.4 -1.4**
comp=Z,15nm,0.9s,baz=51,slow=5.6,SNR=17
KSRS PP **PP 09 46 06.7 -1.1**
comp=Z,3.9nm,1.2s,baz=46,slow=8.7,SNR=3.0
comp=Z,15nm,0.9s
**KSAR Wonju Array Be 74.24 307** P **P 09 43 21.2 -1.7**
**KSAR Wonju Array Be 74.24 307** P **P 09 43 21.2 -1.7**
**WACR West Acre 74.40 30** *e*P **P 09 43 22.0 -1.6**
WACR IAmb IAmb 09 43 27.7
comp=Z,101nm,0.9s
**DYA Yadsworthy 74.48 33** *e*P **P 09 43 24.6 +0.5**
DYA IAmb IAmb 09 43 25.8
comp=Z,40nm,1.0s
DYA IAMs_20 IAMs_20 10 14 50.9
comp=Z,9µm,17.9s
**IRK Irkutsk 74.61 330** *e*P **P 09 43 23.9 -1.0**
IRK pmax pmax
comp=Z,236nm,3.1s
**INCN Inchon 74.94 307** P **P 09 43 27.2 +0.2**
**SSRD Sdr. Stenderup 75.03 23** *i* P P 09 43 33.6 +6.4
SSRD IAmb IAmb 09 43 51.9
comp=Z,161nm,1.0s
**ELMS Elmsett, Ipswi 75.04 30** *e*P **P 09 43 28.2 +0.9**
ELMS IAmb IAmb 09 43 31.6
comp=Z,147nm,0.8s
ELMS IAMs_20 IAMs_20 10 15 44.4
comp=Z,6µm,17.4s
**ARBE Arbavere 75.20 14** *e*P **P 09 43 29.2 +1.1**
**TJN Taejon 75.27 306** P **P 09 43 30.6 +1.7**
**TJN Taejon 75.27 306***ce*P **P 09 43 26.9 -2.0**
**DEL Delary 75.33 21** *e*P **P 09 43 29.7 +0.8**
**JNU Nakatsue 75.36 302** P **P 09 43 31.3 +1.8**
**JNU Nakatsue 75.36 302** IAmb IAmb 09 43 49.5
comp=Z,117nm,1.2s
**MTSE Matsula 75.49 15** *e*P **P 09 43 32.1 +2.3**
**PUL Pulkovo 75.55 11** *i* P **P 09 43 29.8 -0.3**
PUL pmax pmax
comp=Z,115nm,0.5s
**COP Copenhagen 75.64 22** *i* P P 09 43 37.0 +6.4
COP IAmb IAmb 09 43 40.0
comp=Z,162nm,1.1s
**MDP Montagnes des 75.74 97** LR LR 10 20 08.2
comp=Z,5µm,19.2s,baz=313,slow=38
**MACA Manacapuru-AM 75.81 108** *e*P **P 09 43 31.8 -0.5**
**XLT XiLinHaoTe 76.00 318** *e*P **P 09 43 33.8 +0.7**
XLT S **S 09 53 11.8 -4.6**
XLT pmax pmax
comp=Z,39nm,1.2s
XLT pmax pmax
comp=Z,970nm,4.9s
XLT LR LR
comp=Z,5µm,17.0s
XLT LR LR
comp=Z,1µm,20.3s
**JSA Saint Aubin 76.17 33** *e*P **P 09 43 33.4 -0.4**
JSA IAMs_20 IAMs_20 10 19 07.7
comp=Z,7µm,14.0s
**SLIT Slitere, Latvi 76.21 16** *e*P **P 09 43 35.4 +1.5**
**VSU Vasula 76.25 13***ce*P **P 09 43 33.0 -1.1**
VSU pmax pmax
comp=Z,96nm,1.7s
**MOY Mondy 76.26 331** *e*P **P 09 43 34.2 -0.3**
MOY pmax pmax
comp=Z,118nm,3.1s
**ZAK Zakamensk 76.48 329** *e*P **P 09 43 34.6 -1.2**
ZAK pmax pmax
comp=Z,32nm,1.4s
**DL2 Dalian 76.75 311** P **P 09 43 37.5 +0.2**
DL2 S **S 09 53 23.5 -1.1**
DL2 pmax pmax
comp=Z,72nm,1.4s
DL2 pmax pmax
comp=Z,1µm,5.0s
DL2 LR LR
comp=Z,4µm,21.9s
DL2 LR LR
comp=Z,4µm,18.9s
DL2 LR LR
comp=Z,4µm,25.0s
**BSD Bornholm Skovb 76.80 21** *e*P **P 09 43 35.9 -1.4**
**BSD Bornholm Skovb 76.80 21** *i* P **P 09 43 39.6 +2.3**
BSD IAmb IAmb 09 43 47.0
comp=Z,656nm,2.4s
**RGN Rugen 76.88 22** IAMs_20 IAMs_20 10 16 25.2
comp=Z,7µm,20.0s
**ETMB Extrema 76.97 117** IAmb IAmb 09 43 46.6
comp=Z,247nm,1.3s
**ETMB Extrema 76.97 117** *e*P **P 09 43 37.4 -1.4**
**ULN Ulaanbaatar 77.02 326** P **P 09 43 38.2 -0.8**
**ULN Ulaanbaatar 77.02 326***ce*P **P 09 43 36.2 -2.7**
ULN pmax pmax
comp=Z,37nm,1.3s
**SONM Songino Array 77.32 326** P **P 09 43 39.7 -0.9**
SONM IAmb IAmb 09 43 54.2
comp=Z,99nm,1.1s
**SONM Songino Array 77.32 326** P **P 09 43 39.4 -1.1**
comp=Z,34nm,1.0s,baz=14,slow=3.3,SNR=81
SONM LR LR 10 17 44.5
comp=Z,6µm,18.2s,baz=37,slow=36
comp=Z,34nm,1.0s
**BMRD Maredsous 77.87 29** *d*P **P 09 43 43.9 +0.5**
**BGES Gesves 77.91 29** *d*P **P 09 43 44.5 +0.9**
comp=Z,54nm,0.9s
**BSTI Sart Tilman 77.91 28** *d*P **P 09 43 45.3 +1.7**
**BCLA Clavier 77.95 29** *d*P **P 09 43 45.0 +1.1**
comp=Z,51nm,0.9s
**DOU Dourbes 77.98 29** *d*P **P 09 43 44.9 +0.9**
**MEM Membach 78.04 28** *d*P **P 09 43 45.4 +1.1**
**BTNL Ternell 78.10 28** *d*P **P 09 43 45.4 +0.7**
comp=Z,25nm,1.4s
**RCHB Rochefort 78.15 29** *d*P **P 09 43 45.0 +0.1**
**KIRV Kirov 78.28 1** LR LR 10 19 47.9
comp=Z,2µm,22.0s,baz=359,slow=37
**KIRV Kirov 78.28 1***ce*P **P 09 43 44.0 -1.5**
**SAML Samuel 78.32 114** P **P 09 43 45.4 -0.9**
SAML IAmb IAmb 09 43 49.7
comp=Z,380nm,2.0s
SAML IAMs_20 IAMs_20 10 20 46.9
comp=Z,4µm,18.0s
**SAML Samuel 78.32 114** P **P 09 43 45.4 -0.9**
SAML pmax pmax
comp=Z,380nm,2.0s
SAML MLR MLR
comp=Z,4µm,18.0s
**SAML Samuel 78.32 114** *e*P **P 09 43 44.6 -1.7**
**KNGR Kunguug, Tuv 78.34 332** *i* P **P 09 43 45.8 -0.4**
**PABE Paberze 78.53 16** *e*P **P 09 43 47.8 +0.9**
**MSVF Nonsavu 78.53 232** P P 09 43 53.5 +6.0
**MSVF Nonsavu 78.53 232** IAMs_20 IAMs_20 10 12 09.0
comp=Z,6µm,20.0s
**MSVF Nonsavu 78.53 232** *i* P **P 09 43 51.6 +4.1**
MSVF pmax pmax
comp=Z,96nm,3.0s
**BJI Beijing 78.81 315** P **P 09 43 50.0 +1.2**
BJI S **S 09 53 48.3 +1.4**
BJI SS **SS 09 58 52.4 +2.0**
BJI pmax pmax
comp=Z,9.0nm,1.7s
BJI pmax pmax
comp=Z,350nm,5.2s
BJI LR LR
comp=Z,1µm,17.3s
BJI LR LR
comp=Z,750nm,13.8s
BJI LR LR
comp=Z,2µm,18.2s
**BJT Baijiatuan 78.83 315** P **P 09 43 50.8 +1.9**
**CLF Chambon-Foret 78.84 32** IAmb IAmb 09 44 05.4
comp=Z,270nm,1.4s
**GUMO Guam 78.88 278** IAMs_20 IAMs_20 10 10 32.1
comp=Z,6µm,21.0s
**GUMO Guam 78.88 278** LR LR 10 11 06.5
comp=Z,5µm,22.0s,baz=60,slow=30
**ISAL Salakas 78.88 15** *e*P **P 09 43 48.3 -0.6**
**WLF Walferdange 78.89 28** IAMs_20 IAMs_20 10 17 51.5
comp=Z,7µm,20.0s
**WLF Walferdange 78.89 28** *d*P **P 09 43 50.4 +1.4**
**ZAA0 Zalesovo Array 79.02 341** P **P 09 43 49.0 -0.7**
ZAA0 IAmb IAmb 09 44 02.9
comp=Z,109nm,1.3s
**ZALV Zalesovo Beam 79.02 341** P **P 09 43 47.9 -1.8**
**ZALV Zalesovo Beam 79.02 341** P **P 09 43 48.4 -1.3**
comp=Z,11nm,0.7s,baz=15,slow=4.5,SNR=34
ZALV PP **PP 09 46 47.1 -0.7**
comp=Z,4.8nm,0.9s,baz=359,slow=9.2,SNR=3.3
ZALV LR LR 10 21 06.7
comp=Z,3µm,18.2s,baz=32,slow=38
comp=Z,11nm,0.7s
**ZALV Zalesovo Beam 79.02 341** *i* P **P 09 43 48.7 -1.0**
ZALV pmax pmax
comp=Z,11nm,0.7s
**GKP Gorka Klasztor 79.06 21** *e*P **P 09 43 51.4 +1.5**
**PGAV Gavieira, Arco 79.10 41** *e*P **P 09 43 50.9 +0.4**
comp=Z,48nm,1.3s
**PGAV Gavieira, Arco 79.10 41** *e*PP **PP 09 46 49.7 +0.7**
PGAV *e*S **S 09 53 51.1 +1.0**
PGAV eLQ LQ 10 03 49.1
PGAV eLR LR 10 09 21.6
comp=Z,6µm,20.0s
**IIGN Ignalina 79.11 15** *e*P **P 09 43 49.7 -0.5**
**PCAB Cabril 79.41 41** *e*P **P 09 43 52.7 +0.6**
comp=Z,109nm,1.6s
**CLL Collm 79.66 24** IAmb IAmb 09 44 00.1
comp=Z,243nm,1.7s
**CLL Collm 79.66 24** *i* P **P 09 43 53.8 +0.6**
comp=Z,39nm,1.1s
CLL *i* Pmax 09 43 56.8
comp=Z,161nm,1.5s
CLL *e*Pmax 09 43 58.0
CLL *i* PcP **PcP 09 44 01.0 0.0**
CLL *e*PP **PP 09 46 54.0 +0.8**
CLL *e*PPPP 09 49 54.0
CLL *e*S **S 09 53 55.0 -0.5**
comp=N,900nm,23.0s
CLL *e*S **S 09 53 55.0 -0.5**
comp=E,2µm,25.4s
CLL *e*PS **PnS 09 54 44.0 +5.9**
CLL *e*SS **SS 09 59 01.0 -1.3**

CLL AMS AMS 10 19 00.0
comp=Z,5μm,20.6s
CLL AMS AMS 10 22 00.0
**CLL Collm 79.66 24** *i* P **P 09 43 53.8 +0.6**
CLL *e*S **S 09 53 55.0 -0.5**
CLL pmax pmax
comp=Z,161nm,1.5s
CLL MLR MLR
comp=Z,5μm,20.6s
**CLL Collm 79.66 24** P **P 09 43 53.1 -0.1**
comp=Z,74nm,0.9s,comp=Z,1μm
**SUW Suwalki 79.77 17** *e*P **P 09 43 53.1 -0.7**
SUW *e*S **S 09 53 51.5 -5.0**
SUW *e*L L 10 12 55.7
comp=Z,4μm,28.6s
**SUW Suwalki 79.77 17** IAMs_20 IAMs_20 10 18 04.4
comp=Z,5μm,22.0s
**SUW Suwalki 79.77 17** *e*P **P 09 43 54.4 +0.6**
**POLO Lamas de Olo 79.78 41** *e*P **P 09 43 54.4 +0.2**
comp=Z,81nm,1.6s
**POLO Lamas de Olo 79.78 41** *e*PP **PP 09 46 54.3 -0.4**
**SVE Sverdlovsk 79.82 355** *ce*P **P 09 43 55.8 +1.8**
SVE *e* 09 46 52.8
SVE *e*S **S 09 53 56.4 -0.6**
SVE pmax pmax
comp=Z,221nm,1.4s
SVE MLR MLR
comp=Z,3μm,18.0s
**MOX Moxa 79.83 25** *e*L L 10 20 44.9
comp=Z,5μm,18.3s
**PVRL Vila Real 79.89 41** *e*P **P 09 43 56.0 +1.2**
comp=Z,165nm,1.5s
**MCPB Macapa, AP 79.92 100** *e*P **P 09 43 54.6 -0.5**
**PBRG Braganca 79.95 41** *e*P **P 09 43 55.4 +0.3**
comp=Z,82nm,1.6s
**PBRG Braganca 79.95 41** *e*PP **PP 09 46 55.1 -0.9**
**MNK Minsk 80.22 14** *i* P **P 09 43 53.1 -3.1**
MNK *i* 09 46 54.6
MNK *i* S **S 09 53 57.7 -3.6**
MNK *i* SS **SS 09 59 08.6 -1.9**
MNK pmax pmax
comp=E,47nm,0.9s
MNK pmax pmax
comp=N,24nm,0.9s
MNK pmax pmax
comp=Z,158nm,0.9s
MNK MLR MLR
comp=N,3μm,18.0s
MNK MLR MLR
comp=Z,4μm,19.0s
MNK MLR MLR
comp=E,3μm,16.0s
**PVIS Viseu 80.24 42** *e*P **P 09 43 57.1 +0.5**
comp=E,133nm,1.5s
**MVO Moncorvo 80.31 41** *e*P **P 09 43 57.7 +0.7**
comp=E,117nm,1.2s
**MVO Moncorvo 80.31 41** *e*PP **PP 09 46 58.8 -0.2**
MVO *e*S **S 09 54 02.5 -0.4**
**MVO Moncorvo 80.31 41** *e*LQ LQ 10 04 28.1
MVO *e*LR LR 10 10 05.7
comp=E,6μm,20.0s
**BRG Berggiesshubel 80.32 23** *i* P **P 09 43 57.7 +0.9**
BRG Amp 09 43 59.3
comp=Z,37nm,1.0s
**BRG Berggiesshubel 80.32 23** P **P 09 44 01.1 +4.3**
BRG Amp 09 44 02.0
comp=Z,75nm,1.0s
**BRG Berggiesshubel 80.32 23** P P 09 44 04.3 +7.5
BRG Amp 09 44 04.7
comp=Z,91nm,1.0s
**BRG Berggiesshubel 80.32 23** S **S 09 54 07.0 +4.5**
**BRG Berggiesshubel 80.32 23** SS SS 09 59 16.0 +3.8
**ARU Arti 80.33 356** P **P 09 43 55.2 -1.5**
ARU IAmb IAmb 09 44 05.3
comp=Z,101nm,0.9s
**ARU Arti 80.33 356** LR LR 10 20 38.6
comp=Z,2μm,21.4s,baz=359,slow=36
**ARU Arti 80.33 356** *d* i P **P 09 43 55.5 -1.2**
ARU 09 46 55.7
ARU S **S 09 54 01.1 -1.3**
ARU pmax pmax
comp=Z,90nm,0.9s
**ARU Arti 80.33 356** P **P 09 43 56.1 -0.6**
comp=Z,143nm,1.4s,comp=Z,2μm
**COI Coimbra 80.37 43** IAmb IAmb 09 44 07.0
comp=Z,86nm,0.9s
**COI Coimbra 80.37 43** *e*P **P 09 43 58.3 +1.0**
comp=Z,213nm,1.3s
**COI Coimbra 80.37 43** *e*PP **PP 09 47 04.9 +5.4**
**MOS Moscow 80.40 8** *e*P **P 09 43 56.8 -0.3**
MOS *e*S **S 09 53 58.8 -4.3**
MOS pmax pmax
comp=Z,134nm,1.3s
MOS pmax pmax
comp=Z,500nm,2.0s
MOS MLR MLR
comp=Z,4μm,18.0s
**HSKC Hora Svate Kat 80.41 24** *e*P **P 09 43 58.6 +1.3**
HSKC *e*S **S 09 54 04.7 +1.2**
HSKC *e*SS **SS 09 59 15.4 +1.8**
HSKC AMS AMS 10 19 20.0
comp=Z,6μm,18.1s
**PCAS Casmilo, Conde 80.45 43** *e*P **P 09 43 58.4 +0.7**
comp=Z,155nm,1.3s
**PCAS Casmilo, Conde 80.45 43** *e*PP **PP 09 47 06.4 +6.2**
**ECH Echery 80.47 29** IAMs_20 IAMs_20 10 19 11.3
comp=Z,7μm,20.0s
**HHC Hu-ho-hao-te 80.49 319** *e*P **P 09 43 57.4 -0.7**
HHC sP PcP 09 44 06.5 +1.4
HHC PP **PP 09 46 57.4 -3.2**
HHC S **S 09 54 02.5 -2.4**
HHC SS **SS 09 59 14.4 -1.3**
HHC pmax pmax
comp=Z,53nm,1.3s
HHC pmax pmax
comp=Z,800nm,6.5s
HHC LR LR
comp=Z,3μm,19.1s
HHC LR LR
comp=Z,1μm,18.9s
HHC LR LR
comp=Z,6μm,17.6s
**GRA1 Grafenberg Arr 80.54 26** IAmb IAmb 09 44 05.6
comp=Z,339nm,1.9s
GRA1 IAMs_20 IAMs_20 10 20 27.1
comp=Z,5μm,20.0s
**GRF Grafenberg Arr 80.54 26** *e*P **P 09 43 58.3 +0.2**
comp=Z,105nm,1.4s,baz=338,slow=4.9
GRF *e*S **S 09 54 04.6 -0.3**
GRF *e*L L 10 18 49.6
comp=Z,5μm,22.0s
**GRFO Grafenberg 80.54 26** IAmb IAmb 09 44 05.5
comp=Z,382nm,2.0s
GRFO IAMs_20 IAMs_20 10 20 27.1
comp=Z,5μm,20.0s
**MTE Manteigas 80.65 42** P **P 09 43 57.9 -1.0**
**MTE Manteigas 80.65 42** *e*P **P 09 43 59.3 +0.4**
comp=Z,112nm,1.4s
**MTE Manteigas 80.65 42** *e*PP **PP 09 47 03.5 +1.6**
MTE *e*S **S 09 54 07.8 +1.3**
**MTE Manteigas 80.65 42** *e*LQ LQ 10 04 38.5
MTE *e*LR LR 10 10 29.3
comp=Z,7μm,22.0s
**RICC Richard 80.66 24** *e*P **P 09 44 03.0 +4.4**
RICC AMS AMS 10 19 30.0
comp=Z,4μm,20.0s
**LPAZ La Paz 80.67 123** P **P 09 43 59.4 -0.4**
LPAZ IAmb IAmb 09 44 08.2
comp=Z,114nm,0.9s
**LPAZ La Paz 80.67 123** P **P 09 43 58.8 -1.0**
comp=Z,55nm,0.8s,baz=323,slow=3.1,SNR=166
comp=Z,55nm,0.8s
**LPAZ La Paz 80.67 123** *e*P **P 09 43 59.1 -0.7**
**STU Stuttgart 80.69 27** IAMs_20 IAMs_20 10 21 39.0
comp=Z,4μm,18.0s
**PSBE So Bento 80.71 43** *e*P **P 09 43 59.9 +0.7**
comp=Z,194nm,1.7s
**PSBE So Bento 80.71 43** *e*PP **PP 09 46 59.8 -2.6**
**BFO Black Forest 80.78 28** P **P 09 43 58.3 -1.1**
BFO IAmb IAmb 09 44 15.8
comp=Z,172nm,1.5s
BFO IAMs_20 IAMs_20 10 19 52.2
comp=Z,6μm,19.0s
**BFO Black Forest 80.78 28** P **P 09 43 58.3 -1.1**
BFO pmax pmax
comp=Z,173nm,1.5s
BFO MLR MLR
comp=Z,6μm,19.0s
**PVCC Panska Ves 80.81 23** *e*S **S 09 54 09.2 +1.6**
PVCC *e*SS SS 09 59 57.1 +38
PVCC AMS AMS 10 23 10.0
comp=Z,4μm,14.8s
**OBN Obninsk 80.89 9** P **P 09 43 58.7 -1.1**
OBN IAMs_20 IAMs_20 10 21 14.9
comp=Z,4μm,20.0s
**OBN Obninsk 80.89 9** ⇑P **P 09 43 58.1 -1.6**
**OBN Obninsk 80.89 9** ⇑*e*P **P 09 43 58.7 -1.1**
OBN *e**PP **sP 09 44 02.3 +0.5**
OBN *e* 09 44 05.6
OBN *e* 09 47 02.1
OBN *e*PPP PPP 09 48 54.9
OBN *e*S **S 09 54 06.4 -1.9**
OBN *e*SS **SS 09 59 19.6 -0.8**
OBN pmax pmax
comp=Z,293nm,1.7s
OBN MLR MLR
comp=Z,3μm,18.0s
**OBN Obninsk 80.89 9** P **P 09 44 00.0 +0.2**
comp=Z,262nm,1.2s,comp=Z,3μm
**KSP Ksiaz 81.01 22** *e*P **P 09 44 00.5 0.0**
KSP *e*S **S 09 54 07.6 -2.1**
KSP *e*L L 10 16 20.0
comp=Z,5μm,26.0s
**KSP Ksiaz 81.01 22** P **P 09 44 00.5 0.0**
comp=Z,70nm,1.5s,comp=Z,1μm
**PCBR Castelo Branco 81.11 42** *e*P **P 09 44 01.7 +0.4**
comp=Z,65nm,1.6s
**PCBR Castelo Branco 81.11 42** *e*PP **PP 09 47 02.6 -3.0**
**PMOZ Porto Moniz, M 81.13 53** *e*P **P 09 44 03.4 +1.8**
comp=Z,150nm,1.1s
**PMOZ Porto Moniz, M 81.13 53** *e*PP **PP 09 47 07.3 +1.1**
PMOZ *e*S **S 09 54 13.2 +1.4**
**PMOZ Porto Moniz, M 81.13 53** *e*LQ LQ 10 05 29.1
PMOZ *e*LR LR 10 09 55.8
comp=Z,5μm,18.0s
**LIS Lisbon 81.14 44** *e*P **P 09 44 01.6 +0.2**
LIS *e*S **S 09 54 10.8 -0.6**
LIS IAMs_20 IAMs_20 10 17 10.8
comp=N,6μm,18.5s
**LIS Lisbon 81.14 44** *e*P **P 09 44 01.6 +0.2**
LIS *e*S **S 09 54 10.8 -0.6**
**TIA Tai'an 81.16 312** P **P 09 43 59.6 -2.0**
TIA S **S 09 54 12.1 +0.3**
TIA pmax pmax
comp=N,14nm,0.9s
TIA pmax pmax
comp=N,850nm,3.7s
TIA LR LR
comp=N,4μm,16.3s
TIA LR LR
comp=N,5μm,14.9s
TIA LR LR
comp=N,2μm,13.7s
**CHVC Chvalec 81.17 22** *e*P **P 09 44 05.7 +4.3**
CHVC AMS AMS 10 22 00.0
comp=N,4μm,18.3s
**CHVC Chvalec 81.17 22** *e*P **P 09 44 05.7 +4.3**
CHVC MLR MLR
comp=Z,4μm,18.3s
**PRA Prague 81.18 24** *e*S **S 09 54 11.9 +0.4**
PRA *e*SS **SS 09 59 27.7 +2.7**
PRA AMS AMS 10 19 50.0
comp=Z,4μm,19.9s
**UPC Upice 81.23 22** *e*P **P 09 44 06.1 +4.4**
UPC *e*S **S 09 54 11.1 -1.0**
UPC *e*SS **SS 09 59 29.3 +3.4**
UPC AMS AMS 10 22 10.0
comp=Z,5μm,18.6s
**UPC Upice 81.23 22** *e*P **P 09 44 06.1 +4.4**
UPC *e*S **S 09 54 11.1 -1.0**
UPC *e*SS **SS 09 59 29.3 +3.4**
UPC MLR MLR
comp=Z,5μm,18.6s
**OSTC Ostas 81.25 22** *e*P **P 09 44 03.7 +1.9**
OSTC *e*S **S 09 54 12.9 +0.7**
OSTC *e*SS **SS 09 59 29.3 +3.2**
OSTC AMS AMS 10 22 10.0
comp=Z,4μm,19.5s
**OSTC Ostas 81.25 22** *e*P **P 09 44 03.7 +1.9**
OSTC *e*S **S 09 54 12.9 +0.7**
OSTC *e*SS **SS 09 59 29.3 +3.2**
OSTC MLR MLR
comp=Z,4μm,19.5s
**BEL Belsk 81.25 19** *e*P **P 09 44 02.4 +0.7**
BEL *e*S **S 09 54 10.6 -1.6**
BEL *e*L L 10 14 27.2
comp=Z,4μm,29.0s
**PRU Pruhonice 81.28 24** *e*P **P 09 44 06.0 +4.0**
PRU *e*S **S 09 54 14.4 +1.8**
PRU *e*SS **SS 09 59 27.5 +0.9**
PRU AMS AMS 10 19 50.0
comp=Z,4μm,19.2s
**PRU Pruhonice 81.28 24** *e*P **P 09 44 06.0 +4.0**
PRU *e*S **S 09 54 14.4 +1.8**
PRU *e*SS **SS 09 59 27.5 +0.9**
PRU MLR MLR
comp=Z,4μm,19.2s
**JOW Kunigami 81.31 299** P **P 09 44 04.4 +1.9**
**JOW Kunigami 81.31 299** LR LR 10 14 31.1
comp=Z,926nm,21.9s,baz=72,slow=32
**PMTG Montargil 81.34 43** *e*P **P 09 44 02.3 -0.2**
comp=Z,77nm,1.4s
**PMTG Montargil 81.34 43** *e*PP **PP 09 47 07.8 +0.3**
**PMAR Madeira 81.37 53** *e*P **P 09 44 04.3 +1.3**
comp=Z,293nm,1.4s
**PMAR Madeira 81.37 53** *e*PP **PP 09 47 07.3 -0.9**
**GOPC GO Pecny, Ondr 81.42 23** *e*P **P 09 44 04.2 +1.5**
GOPC *e*S **S 09 54 13.7 -0.4**
GOPC *e*SS **SS 09 59 29.3 +0.6**
GOPC AMS AMS 10 20 00.0
comp=Z,4μm,21.0s
**GOPC GO Pecny, Ondr 81.42 23** *e*P **P 09 44 04.2 +1.5**
GOPC *e*S **S 09 54 13.7 -0.4**
GOPC *e*SS **SS 09 59 29.3 +0.6**
GOPC MLR MLR
comp=Z,4μm,21.0s
**BTO Baotou 81.42 319** *e*P **P 09 44 01.1 -1.9**
BTO pP **pwP 09 44 07.5 -0.7**
BTO sP **PcP 09 44 12.5 +3.4**
BTO PP **PP 09 47 13.1 +4.8**
BTO S **S 09 54 08.1 -6.5**
BTO pmax pmax
comp=Z,61nm,1.0s
BTO pmax pmax
comp=Z,600nm,6.4s
BTO LR LR
comp=Z,10μm,15.1s
BTO LR LR
comp=Z,12μm,15.3s
BTO LR LR
comp=Z,9μm,18.6s
**PMPST Porto Santo, M 81.45 52** *e*P **P 09 44 02.4 -0.8**
**DPC Dobruska-Polom 81.46 22** *e*P **P 09 44 04.7 +1.7**
DPC *e*S **S 09 54 15.6 +1.1**
DPC *e*SS SS 09 59 44.9 +16
DPC AMS AMS 10 22 20.0
comp=Z,4μm,16.8s
**DPC Dobruska-Polom 81.46 22** *e*P **P 09 44 04.7 +1.7**
DPC *e*S **S 09 54 15.6 +1.1**
DPC MLR MLR
comp=Z,4μm,16.8s
**DPC Dobruska-Polom 81.46 22** P **P 09 44 03.0 0.0**
comp=Z,6nm,1.1s,comp=Z,1μm
**PMPS Porto Santo 81.46 52** *e*P **P 09 44 04.5 +1.3**
comp=Z,404nm,1.5s
**PMRV Marv??o 81.47 42** *e*P **P 09 44 03.4 +0.2**
comp=Z,106nm,1.3s
**PMRV Marv??o 81.47 42** *e*PP **PP 09 47 12.1 +3.5**
PMRV *e*S **S 09 54 12.9 -2.1**
PMRV *e*LQ LQ 10 03 56.2
PMRV *e*LR LR 10 10 35.4
comp=Z,6μm,18.0s
**HNS HongShan 81.56 314** ⇑P **P 09 44 02.3 -1.3**
HNS S **S 09 54 18.8 +3.0**
HNS SS **SS 09 59 34.1 +2.7**
HNS pmax pmax
comp=Z,37nm,1.3s
HNS pmax pmax
comp=Z,780nm,5.4s
HNS LR LR
comp=Z,2μm,20.4s
HNS LR LR
comp=Z,4μm,17.7s
HNS LR LR
comp=Z,3μm,22.0s
**ZVC Zvikov 81.67 24** *e*S **S 09 54 17.3 +0.7**
ZVC AMS AMS 10 19 50.0
comp=Z,6μm,18.4s
**KHC Kasperske Hory 81.76 24** *e*P **P 09 44 06.2 +1.6**
KHC *e*S **S 09 54 18.1 +0.4**
KHC *e*SS **SS 09 59 36.6 +2.7**
KHC AMS AMS 10 23 00.0
comp=Z,7μm,16.1s
**KHC Kasperske Hory 81.76 24** *e*P **P 09 44 06.2 +1.6**
KHC *e*S **S 09 54 18.1 +0.4**
KHC *e*SS **SS 09 59 36.6 +2.7**
KHC MLR MLR
comp=Z,7μm,16.1s
**KHC Kasperske Hory 81.76 24** P **P 09 44 04.5 -0.1**
comp=Z,46nm,1.1s,comp=Z,1μm
**KRLC Kraliky 81.84 22** *e*P **P 09 44 06.5 +1.5**
KRLC *e*S **SKSac 09 54 21.0 -4.3**
KRLC *e*SS **SS 09 59 36.7 +1.7**
KRLC AMS AMS 10 21 50.0
comp=Z,4μm,15.1s
**KRLC Kraliky 81.84 22** *e*P **P 09 44 06.5 +1.5**
KRLC *e*S **SKSac 09 54 21.0 -4.3**
KRLC *e*SS **SS 09 59 36.7 +1.7**
KRLC MLR MLR
comp=Z,4μm,15.1s
**EVO Evora 81.86 43** *e*P **P 09 44 05.4 +0.2**
comp=Z,111nm,2.0s
**EVO Evora 81.86 43** *e*PP **PP 09 47 15.9 +4.1**
**PNCL Nicolau / Gran 81.92 44** *e*P **P 09 44 06.1 +0.6**
comp=Z,117nm,1.9s
**PNCL Nicolau / Gran 81.92 44** *e*PP **PP 09 47 16.7 +4.4**
**GERES GERESS Array B 82.05 25** P **P 09 44 06.0 -0.3**
**GERES GERESS Array B 82.05 25** P **P 09 44 05.6 -0.6**
comp=Z,14nm,0.8s,baz=336,slow=5.0,SNR=21
GERES PP **PP 09 47 16.6 +3.4**
comp=Z,1.6nm,0.8s,baz=354,slow=8.0,SNR=0.9
GERES PKKPbc **PKKPbc 10 02 34.4 +0.2**
comp=Z,0.3nm,0.3s,baz=116,slow=2.3,SNR=1.3
GERES LR LR 10 20 56.7
comp=Z,5μm,19.2s,baz=337,slow=36
comp=Z,14nm,0.8s
**TREC Trest 82.18 23** *e*S **S 09 54 21.9 0.0**
TREC AMS AMS 10 24 40.0
comp=Z,4μm,15.5s
**DAVA Damuels 82.20 28** *e*pP **P 09 44 07.1 0.0**
comp=Z,37nm,0.9s,SNR=15
**DGZ Jazzator, Alta 82.23 338** *i* P **P 09 44 06.3 -0.9**
DGZ pmax pmax
comp=Z,70nm,0.7s
**PTEO Sao Teotonio 82.25 45** *e*P **P 09 44 07.9 +0.6**
comp=Z,144nm,1.9s
**CKRC Cesky Krumlov 82.26 24** *e*P **P 09 44 08.2 +1.0**
CKRC *e*S **SKSac 09 54 24.5 -3.6**
CKRC *e*SS **SS 09 59 44.5 +3.3**
CKRC AMS AMS 10 23 20.0
comp=Z,5μm,15.5s
**CKRC Cesky Krumlov 82.26 24** *e*P **P 09 44 08.2 +1.0**
CKRC *e*S **SKSac 09 54 24.5 -3.6**
CKRC *e*SS **SS 09 59 44.5 +3.3**
CKRC MLR MLR
comp=Z,5μm,15.5s
**NPGB Novo Progresso 82.27 107** *e*P **P 09 44 06.4 -1.3**
**MESJ Messejana 82.28 44** IAMs_20 IAMs_20 10 18 41.0
comp=Z,5μm,18.0s
**MESJ Messejana 82.28 44** *e*P **P 09 44 08.1 +0.6**
comp=Z,58nm,1.6s
**MESJ Messejana 82.28 44** *e*PP **PP 09 47 14.2 -1.1**
**MESJ Messejana 82.28 44** *e*P **P 09 44 07.6 +0.1**
MESJ *e*S **S 09 54 22.7 -0.7**
MESJ IAMs_20 IAMs_20 10 18 36.4
comp=Z,5μm,17.2s
**MESJ Messejana 82.28 44** *e*P **P 09 44 07.6 +0.1**
MESJ *e*S **S 09 54 22.7 -0.7**
**MORC Moravsky Berou 82.32 22** *e*P **P 09 44 07.1 -0.4**
**MORC Moravsky Berou 82.32 22** *e*S **SKSac 09 54 25.0 -3.5**
**MORC Moravsky Berou 82.32 22** ⇓P **P 09 44 08.5 +1.0**
**MORC Moravsky Berou 82.32 22** ⇓P **P 09 44 08.5 +1.0**
**PBEJ Beja 82.32 44** *e*P **P 09 44 08.3 +0.6**
comp=Z,72nm,1.6s
**PBEJ Beja 82.32 44** *e*PP **PP 09 47 17.2 +1.6**
**RETA Reutte 82.32 27** *e*P **P 09 44 07.6 -0.1**
comp=Z,33nm,1.2s,SNR=9.7
**OKC Ostrava-Krasne 82.42 21** *e*P **P 09 44 10.5 +2.5**
OKC *e*S **S 09 54 24.6 +0.3**
OKC *e*SS **SS 09 59 53.8 +10**
OKC AMS AMS 10 24 30.0
comp=Z,4μm,15.3s
**OKC Ostrava-Krasne 82.42 21** *e*P **P 09 44 10.5 +2.5**
OKC *e*S **S 09 54 24.6 +0.3**
OKC *e*SS **SS 09 59 53.8 +10**
OKC MLR MLR
comp=Z,4μm,15.3s
**MORF Marmelete 82.47 45** IAmb IAmb 09 44 17.9
comp=Z,96nm,0.7s
MORF IAMs_20 IAMs_20 10 23 42.1
comp=Z,4μm,19.0s
**MORF Marmelete 82.47 45** *e*P **P 09 44 09.1 +0.6**
comp=Z,150nm,1.7s
**MORF Marmelete 82.47 45** *e*PP **PP 09 47 21.3 +4.3**
**MORF Marmelete 82.47 45** *e*P **P 09 44 08.6 +0.1**
MORF *e*S **S 09 54 24.8 -0.6**
MORF IAMs_20 IAMs_20 10 14 53.2
comp=E,5μm,22.2s
**MORF Marmelete 82.47 45** *e*P **P 09 44 08.6 +0.1**
MORF *e*S **S 09 54 24.8 -0.6**
**VRAC Vranov 82.48 23** *e*P **P 09 44 07.9 -0.4**
**VRAC Vranov 82.48 23** *e*S **SKSac 09 54 27.4 -2.2**
**VRAC Vranov 82.48 23** LR LR 10 20 18.2
comp=E,4μm,20.3s,baz=330,slow=35
**VRAC Vranov 82.48 23** ⇑P **P 09 44 09.6 +1.3**
**VRAC Vranov 82.48 23** ⇑P **P 09 44 09.6 +1.3**
**TIY Taiyuan 82.48 316** *e*P **P 09 44 10.3 +1.7**
TIY S **SKSac 09 54 27.9 -2.2**
TIY pmax pmax
comp=E,710nm,3.9s
TIY LR LR
comp=E,4μm,16.5s
TIY LR LR
comp=E,5μm,17.9s
TIY LR LR
comp=E,2μm,27.5s
**OJC Ojcow 82.50 20** *e*P **P 09 44 07.8 -0.6**
OJC *e*S **S 09 54 22.7 -2.5**
OJC *e*SS **SS 09 59 43.0 -1.7**
OJC *e*L L 10 15 00.2
comp=E,5μm,30.9s
**OJC Ojcow 82.50 20** IAmb IAmb 09 44 18.0
comp=Z,82nm,1.0s
**OJC Ojcow 82.50 20** P **P 09 44 08.6 +0.2**
comp=Z,98nm,1.1s,comp=Z,1μm
**PFVI Vila Bisbo 82.52 45** IAmb IAmb 09 44 18.2
comp=Z,86nm,0.8s
PFVI IAMs_20 IAMs_20 10 21 28.2
comp=Z,4μm,19.0s
**PFVI Vila Bisbo 82.52 45** *e*P **P 09 44 09.3 +0.6**
comp=Z,165nm,1.4s
**PCVE Castro Verde 82.53 44** *e*P **P 09 44 09.5 +0.7**
comp=Z,122nm,1.7s
**TA02 Huaiquique 82.56 127** IAmb IAmb 09 44 17.7
comp=Z,150nm,1.3s
**MOTA Moosalm 82.56 27** *e*pP **P 09 44 09.1 +0.1**
comp=Z,45nm,1.3s
**BVAR Borovoye Array 82.62 349** P **P 09 44 08.0 -0.9**
comp=Z,38nm,0.8s,baz=15,slow=4.9,SNR=69
BVAR PP **PP 09 47 18.0 +0.5**
comp=Z,5.0nm,0.9s,baz=18,slow=9.6,SNR=2.2
BVAR PKKPbc **PKKPbc 10 02 32.5 -0.5**
comp=Z,0.6nm,0.6s,baz=221,slow=5.7,SNR=1.9
BVAR PKPPKP **P'P'df 10 10 40.9 -5.3**
comp=Z,0.5nm,0.4s,baz=204,slow=3.3,SNR=4.7
comp=Z,38nm,0.8s
**PBAR Barrancos 82.62 43** *e*P **P 09 44 09.6 +0.4**
comp=Z,96nm,2.0s
**PBAR Barrancos 82.62 43** *e*PP **PP 09 47 20.1 +2.1**
**DAVOX Davos/Dischmat 82.64 28** LR LR 10 20 23.0
comp=Z,7μm,19.9s,baz=326,slow=35
**KRUC Moravsky 82.65 23** *e*P **P 09 44 08.6 -0.6**
**KRUC Moravsky 82.65 23** *e*S **SKSac 09 54 27.3 -3.4**
**SQTA Sankt Quirin 82.70 27** *e*pP **P 09 44 10.0 +0.3**
comp=Z,75nm,1.5s,SNR=11

**FETA Feichten** 82.72 27 *e*pP P 09 44 10.2 +0.4
comp=Z,25nm,1.0s,SNR=33
**WATA Walderalm** 82.72 27 *e*pP P 09 44 10.1 +0.3
comp=Z,39nm,1.2s,SNR=16
**TA01 Diego Aracena** 82.76 127 IAmb IAmb 09 44 18.8
comp=Z,184nm,1.2s
**RNPP9 Sopachiv** 82.78 16 P P 09 44 10.0 +0.2
**WTTA Wattenberg** 82.80 27 *e*pP P 09 44 10.4 +0.1
comp=Z,50nm,1.4s,SNR=16
**RNPP8 Varash** 82.84 16 P P 09 44 10.4 +0.3
**PAB San Pablo** 82.85 41 P P 09 44 09.3 -1.2
PAB IAmb IAmb 09 44 26.7
comp=Z,98nm,1.6s
**PAB San Pablo** 82.85 41 IAMs_20 IAMs_20 10 17 42.8
comp=Z,5µm,22.0s
**PAB San Pablo** 82.85 41 ⇑P P 09 44 11.5 +1.0
**PVAQ Vaqueiros** 82.87 44 IAmb IAmb 09 44 15.4
comp=Z,179nm,1.9s
**PVAQ Vaqueiros** 82.87 44 *e*P P 09 44 11.1 +0.5
comp=Z,138nm,1.8s
**PVAQ Vaqueiros** 82.87 44 *e*PP PP 09 47 20.8 +0.6
PVAQ *e*S S 09 54 28.7 -0.7
**PVAQ Vaqueiros** 82.87 44 *e*LQ LQ 10 05 21.3
PVAQ *e*LR LR 10 11 12.5
comp=Z,4µm,20.0s
**PBDV Barranco-do-Ve** 82.89 44 *e*P P 09 44 12.0 +1.3
comp=Z,117nm,1.9s
**PBDV Barranco-do-Ve** 82.89 44 *e*PP PP 09 47 21.5 +1.2
**CEST Esterri de Car** 82.90 35 IAmb IAmb 09 44 20.6
comp=Z,62nm,0.9s
CEST IAMs_20 IAMs_20 10 20 43.7
comp=Z,9µm,19.0s
**FUORN Ofenpass-Fuorn** 82.91 28 IAmb IAmb 09 44 33.3
comp=Z,87nm,1.0s
FUORN IAMs_20 IAMs_20 10 20 11.7
comp=Z,7µm,21.0s
**ESBB Sonseca Array** 82.93 40 P P 09 44 10.1 -0.8
**ESDC Sonseca Array** 82.93 40 P P 09 44 09.9 -1.0
**ESDC Sonseca Array** 82.93 40 P P 09 44 10.8 -0.1
comp=Z,14nm,0.8s,baz=314,slow=4.8,SNR=92
ESDC PP PP 09 47 20.3 -0.3
comp=Z,2.0nm,0.9s,baz=314,slow=8.8,SNR=2.7
ESDC PKKPbc **PKKPbc** 10 02 31.6 -0.3
comp=Z,0.3nm,0.3s,baz=92,slow=3.1,SNR=2.1
ESDC LR LR 10 17 15.9
comp=Z,4µm,21.4s,baz=318,slow=33
comp=Z,14nm,0.8s
**RNPP5 Staryi Chortor** 82.95 16 P P 09 44 10.4 -0.3
**PATCX Punta Patache** 82.97 127 IAmb IAmb 09 44 19.5
comp=Z,128nm,0.9s
**LESA Schwarzleotal** 83.00 26 *e*P P 09 44 10.8 -0.4
comp=Z,33nm,1.2s
**BIOA Bad Ischl, Aus** 83.06 25 *e*P P 09 44 11.3 -0.1
comp=Z,68nm,1.6s,SNR=7.7
**MOA Molln** 83.11 25 *e*P P 09 44 11.4 -0.3
comp=Z,27nm,1.3s,SNR=16
**JAVC Velka Javorina** 83.19 22 *e*P P 09 44 12.7 +0.6
**JAVC Velka Javorina** 83.19 22 *e*S **SKSac** 09 54 35.0 +0.6
**NJ2 Nanjing** 83.28 308 *e*P P 09 44 15.3 +2.6
NJ2 S **SKSac** 09 54 36.6 +1.2
NJ2 pmax pmax
comp=Z,44nm,1.7s
NJ2 pmax pmax
comp=Z,920nm,4.1s
NJ2 LR LR
comp=Z,2µm,18.0s
NJ2 LR LR
comp=Z,5µm,19.4s
NJ2 LR LR
comp=Z,3µm,18.5s
**SEM Semipalatinsk** 83.36 342 *e*P P 09 44 12.8 -0.4
baz=342
SEM LR LR 10 22 12.9
comp=Z,1µm,15.8s,baz=342
**SEM Semipalatinsk** 83.36 342 *e*P P 09 44 12.7 -0.4
SEM MLR MLR
comp=Z,1µm,16.0s
**NIE Niedzica** 83.37 20 *e*P P 09 44 13.3 +0.3
NIE *e*S S 09 54 32.2 -1.9
NIE *e*L L 10 15 13.0
comp=Z,3µm,28.2s
**LANS Liptovska Anna** 83.40 21 *e*P P 09 44 14.8 +1.7
LANS pmax pmax
comp=Z,36nm,1.1s
**LANS Liptovska Anna** 83.40 21 *e*P P 09 44 14.8 +1.7
**KURK Kurchatov** 83.42 343 P P 09 44 12.1 -1.0
KURK IAmb IAmb 09 44 26.9
comp=Z,87nm,0.9s
**KURK Kurchatov** 83.42 343 IAMs_20 IAMs_20 10 21 44.6
comp=Z,6µm,22.0s
**KURK Kurchatov** 83.42 343 *ce*P P 09 44 12.5 -0.6
KURK pmax pmax
comp=Z,113nm,1.3s
**SMOL Smolenice** 83.43 22 *e*P P 09 44 16.3 +3.0
SMOL pmax pmax
comp=Z,54nm,1.2s
**KBA Koelnbreinsper** 83.51 26 *e*P P 09 44 13.8 -0.1
comp=Z,106nm,1.4s,SNR=44
**CONA Conrad Observa** 83.52 24 *e*P P 09 44 13.7 -0.1
comp=Z,42nm,1.1s,SNR=34
**KURBB Kurchatov Arra** 83.52 343 P P 09 44 12.6 -1.0
comp=Z,37nm,0.7s,baz=18,slow=4.8,SNR=95
KURBB PKKPbc **PKKPbc** 10 02 30.8 +0.1
comp=Z,0.3nm,0.2s,baz=199,slow=2.5,SNR=1.6
KURBB PKPPKP **P'P'df** 10 10 42.3 -2.1
comp=Z,0.8nm,0.8s,baz=212,slow=2.4,SNR=4.9
KURBB LR LR 10 23 48.9
comp=Z,3µm,19.5s,baz=31,slow=37
comp=Z,37nm,0.7s
**ABTA Abfaltersbach** 83.54 26 *e*P P 09 44 13.9 -0.1
comp=Z,66nm,1.6s,SNR=29
**MI28 Mi28,Pidlybu** 83.59 15 P P 09 44 13.7 -0.3
**ZST Bratislava** 83.63 23 *e*P P 09 44 15.5 +1.2
**ZST Bratislava** 83.63 23 *e*P P 09 44 15.5 +1.2
**KWP Kalwaria Pacla** 83.76 19 *e*P P 09 44 15.5 +0.6
KWP *e*S S 09 54 34.7 -3.2
KWP *e*L L 10 15 42.5
comp=Z,4µm,31.4s
**KWP Kalwaria Pacla** 83.76 19 IAmb IAmb 09 44 39.9
comp=Z,219nm,1.5s
KWP IAMs_20 IAMs_20 10 22 04.8
comp=Z,5µm,18.0s
**KWP Kalwaria Pacla** 83.76 19 P P 09 44 14.1 -0.8
comp=Z,104nm,1.3s,comp=Z,2µm
**VYHS Vyhne** 83.84 22 *e*P P 09 44 15.1 -0.2
VYHS pmax pmax
comp=Z,58nm,1.3s
**VYHS Vyhne** 83.84 22 *e*P P 09 44 15.1 -0.2
**HNR Honiara** 83.84 251 LR LR 10 13 28.7
comp=Z,100µm,21.9s,baz=62,slow=30
**RONA Rosalia, Austr** 83.85 23 *e*pP P 09 44 15.8 +0.3
comp=Z,87nm,2.0s,SNR=26
**MI30 MI30,Zelenitsa** 83.86 15 P P 09 44 15.1 -0.3
**CTI Castel Tesino** 83.88 27 IAmb IAmb 09 44 32.8
comp=Z,283nm,2.0s
**LVV L'vov** 83.88 18 *e*P P 09 44 16.8 +1.3
LVV *e*PPP PPP 09 49 32.6
LVV *e*S S 09 54 39.5 +0.3
LVV *e*PS PnS 09 55 35.6 +5.2
LVV *e*SS SS 10 00 07.2 +2.1
LVV pmax pmax
comp=Z,150nm,1.2s
LVV MLR MLR
comp=E,1µm,15.0s
LVV MLR MLR
comp=N,1µm,14.0s
LVV MLR MLR
comp=Z,4µm,15.0s
**AK21 Malin Array Si** 83.99 15 P P 09 44 15.1 -1.0
**MYKA Terra Mystica** 84.01 26 *e*P P 09 44 15.0 -1.3
comp=Z,60nm,1.4s,SNR=19
**AK22 Malin Array Si** 84.01 15 P P 09 44 14.8 -1.4
**ARSA Arzberg** 84.03 24 *e*P P 09 44 16.2 -0.1
comp=Z,74nm,1.0s,SNR=28
**STAL STALIGIAL** 84.04 26 IAMs_20 IAMs_20 10 21 16.4
comp=Z,4µm,21.0s
**AKASG Malin Array Be** 84.10 14 IAmb IAmb 09 44 25.7
comp=Z,152nm,1.1s
**AKASG Malin Array Be** 84.10 14 P P 09 44 14.7 -1.9
comp=Z,19nm,0.8s,baz=341,slow=4.5,SNR=44
AKASG PKKPbc **PKKPbc** 10 02 29.3 -0.1
comp=Z,0.3nm,0.3s,baz=166,slow=1.5,SNR=1.3
AKASG LR LR 10 21 15.2
comp=Z,5µm,20.4s,baz=342,slow=35
comp=Z,19nm,0.8s
**AKASG Malin Array Be** 84.10 14 *i* P P 09 44 17.8 +1.2
AKASG pmax pmax
comp=Z,20nm,0.8s
**AKBB Malin Array Si** 84.10 14 IAmb IAmb 09 44 25.7
comp=Z,154nm,1.1s
**AKBB Malin Array Si** 84.10 14 *i* P P 09 44 14.4 -2.2
AKBB pmax pmax
comp=Z,164nm,1.2s
**AKBB Malin Array Si** 84.10 14 P P 09 44 15.7 -0.9
**KIEV Kiev** 84.10 14 P P 09 44 15.4 -1.2
KIEV IAmb IAmb 09 44 25.7
comp=Z,138nm,1.1s
**KIEV Kiev** 84.10 14 IAMs_20 IAMs_20 10 18 52.7
comp=Z,5µm,22.0s
**KIEV Kiev** 84.10 14 ⇑P P 09 44 17.9 +1.3
**KIEV Kiev** 84.10 14 ⇑P P 09 44 17.9 +1.3
**KIEV Kiev** 84.10 14 P P 09 44 15.8 -0.8
comp=Z,484nm,1.1s,comp=Z,5µm
**AK01 Malin Array Si** 84.11 14 P P 09 44 15.8 -0.8
**MI29 MI29, Kamyanyy** 84.11 15 P P 09 44 16.4 -0.3
**CRVS Cervenica-Dubn** 84.14 20 *e*P P 09 44 18.9 +2.0
CRVS pmax pmax
comp=Z,120nm,1.5s
**CRVS Cervenica-Dubn** 84.14 20 *e*P P 09 44 18.9 +2.0
**AK02 Malin Array Si** 84.14 14 P P 09 44 16.0 -0.8
**PRED Cave del Predi** 84.15 26 P P 09 44 16.2 -0.8
PRED IAmb IAmb 09 44 37.1
comp=Z,158nm,1.6s
PRED IAMs_20 IAMs_20 10 22 01.3
comp=Z,7µm,20.0s
**PB04 IPOC Station P** 84.16 128 IAmb IAmb 09 44 21.3
comp=Z,158nm,1.1s
**KECS Kecovo** 84.28 21 *e*P P 09 44 19.5 +1.9
KECS pmax pmax
comp=Z,40nm,0.9s
**KECS Kecovo** 84.28 21 *e*P P 09 44 19.5 +1.9
**SHIU Shidnytsya** 84.29 19 P P 09 44 17.9 +0.2
**KOLS Kolonicke sedl** 84.30 19 *e*P P 09 44 18.7 +1.0
KOLS pmax pmax
comp=Z,29nm,1.1s
**KOLS Kolonicke sedl** 84.30 19 *e*P P 09 44 18.7 +1.0
**ROBS Robic** 84.31 26 *e*SKSac S 09 54 42.9 -0.7
**CADS Cadrg** 84.39 26 *e*P P 09 44 17.9 -0.4
**SOKA Soboth** 84.39 25 *e*P P 09 44 17.4 -0.9
comp=Z,99nm,1.1s,SNR=59
**OBKA Obir** 84.40 25 *e*P P 09 44 17.6 -0.7
comp=Z,94nm,1.0s,SNR=34
**BELG Belogornoye** 84.44 3 LR LR 10 22 55.2
comp=Z,2µm,21.8s,baz=351,slow=36
**TEOL Teolo** 84.49 27 IAmb IAmb 09 44 28.4
comp=Z,92nm,0.9s
**MORS Morshin** 84.50 18 P P 09 44 19.0 +0.3
**PRMA PARMA** 84.55 29 IAMs_20 IAMs_20 10 24 40.0
comp=Z,6µm,18.0s
**SABO M.te Sabotino** 84.57 26 IAmb IAmb 09 44 39.2
comp=Z,152nm,1.1s
SABO IAMs_20 IAMs_20 10 22 14.6
comp=Z,5µm,19.0s
**VORR Voronezh** 84.57 8 *e*P P 09 44 19.0 0.0
VORR pmax pmax
comp=Z,159nm,0.9s
**PDRB Porto dos Gac** 84.58 111 *e*P P 09 44 18.1 -1.4
**PSZ Piszkesteto** 84.64 21 IAmb IAmb 09 44 30.5
comp=Z,160nm,1.1s
**PSZ Piszkesteto** 84.64 21 ⇑P P 09 44 22.0 +2.4
**PSZ Piszkesteto** 84.64 21 ⇑P P 09 44 22.0 +2.4
**MSSA Maissana** 84.66 29 IAmb IAmb 09 44 36.1
comp=Z,169nm,1.4s
**MPLH Magyarpolny** 84.69 23 P P 09 44 19.9 +0.2
comp=Z,214nm,1.6s,comp=Z,4µm
**CLDB Colider** 84.69 110 *e*P P 09 44 19.5 -0.6
**CRNS Crni Vrh** 84.69 25 *e*P P 09 44 19.2 -0.6
CRNS *e*SKSac S 09 54 45.9 -1.5
**HOLU Holmets** 84.71 19 P P 09 44 20.0 +0.3
**JAVS Javornik** 84.80 26 *e*P P 09 44 19.4 -1.0
JAVS *e*SKSac S 09 54 48.4 -0.3
**MUKU Mukachevo** 84.85 19 P P 09 44 20.8 +0.4
**SIV San Ignacio** 84.89 117 LR LR 10 26 12.9
comp=Z,3µm,18.0s,baz=6.5,slow=38
**LYN LuoYang** 84.90 314 *e*P P 09 44 19.9 -1.1
LYN pP PcP 09 44 25.1 +0.8
LYN sP pwP 09 44 30.4 +4.2
LYN S S 09 54 48.8 -1.0
LYN sS ScS 09 54 58.3 -2.5
LYN pmax pmax
comp=Z,28nm,1.1s
LYN pmax pmax
comp=Z,990nm,4.8s
LYN LR LR
comp=Z,4µm,17.2s
LYN LR LR
comp=Z,3µm,16.8s
LYN LR LR
comp=Z,4µm,17.5s
**HORU Horodok** 84.97 17 P P 09 44 21.4 +0.3
**ZSN Zaisan** 84.98 338 *e*P P 09 44 21.0 -0.2
comp=Z,32nm,0.8s,baz=338
ZSN *e*S **SKSac** 09 54 44.5 -1.5
baz=338
**ZSN Zaisan** 84.98 338 *e*P P 09 44 21.0 -0.2
ZSN *e*S **SKSac** 09 54 44.5 -1.5
ZSN pmax pmax
comp=Z,31nm,0.8s
**MEZ Mezhgor'ye** 84.99 19 P P 09 44 21.7 +0.5
**VSR Storozhevoye** 85.02 8 *e*P P 09 44 21.6 +0.4
VSR pmax pmax
comp=Z,110nm,1.1s
**STNU Starunia** 85.03 18 P P 09 44 21.7 +0.3
**BRIU Brid** 85.04 19 P P 09 44 21.7 +0.3
**BERU Beregovo** 85.05 19 P P 09 44 21.0 -0.4
**LVC Limon Verde** 85.09 127 P P 09 44 21.5 -0.8
**LVC Limon Verde** 85.09 127 P P 09 44 21.5 -0.8
LVC pmax pmax
comp=Z,242nm,1.6s
**KORU Korolevo** 85.23 19 P P 09 44 23.0 +0.6
**VRH Novokhopyorsk** 85.27 7 *e*P P 09 44 22.7 +0.2
VRH pmax pmax
comp=Z,70nm,1.0s
**VORD Divnogorie** 85.28 8 *e*P P 09 44 22.5 0.0
VORD pmax pmax
comp=Z,80nm,1.0s
**KAVG Kavieng** 85.52 262 P P 09 44 27.4 +3.1
**KSV Kosov** 85.53 18 P P 09 44 23.0 -0.9
**KMPD K-Podol'skiy** 85.60 17 P P 09 44 23.4 -0.8
KMPD P **pP** 09 44 23.8 -1.9
**RAKU Rahkiv** 85.60 18 P P 09 44 22.6 -1.6
**RABL Rabaul** 85.65 260 IAMs_20 IAMs_20 10 14 32.1
comp=Z,4µm,21.0s
**PTLB Pontes e Lacer** 85.75 116 IAmb IAmb 09 44 30.3
comp=Z,236nm,1.9s
**PTLB Pontes e Lacer** 85.75 116 *e*P P 09 44 25.1 -0.2
**BMR Baia Mare** 85.77 19 ⇑P P 09 44 29.3 +4.2
**BMR Baia Mare** 85.77 19 ⇑P P 09 44 29.3 +4.2
**AF01 San Pedro de A** 85.78 127 IAmb IAmb 09 44 40.9
comp=Z,107nm,0.8s
**MORH Mrgy, Hungar** 85.87 23 ⇑P P 09 44 27.1 +1.5
**MORH Mrgy, Hungar** 85.87 23 P P 09 44 25.2 -0.4
comp=Z,39nm,1.4s,comp=Z,978nm
**DRBR Darabani** 85.97 17 ⇑P P 09 44 26.5 +0.4
**CART Cartagena** 85.99 40 P P 09 44 25.2 -1.1
CART IAmb IAmb 09 44 38.4
comp=Z,192nm,1.8s
CART IAMs_20 IAMs_20 10 19 43.8
comp=Z,4µm,21.0s
**BBSD Serra de San D** 86.07 118 *e*P P 09 44 26.4 -0.4
**AVE Averroes** 86.20 46 IAmb IAmb 09 44 40.3
comp=Z,71nm,0.8s
AVE IAMs_20 IAMs_20 10 23 04.0
comp=Z,5µm,18.0s
**BURAR Bucovina Array** 86.22 18 ⇑P P 09 44 32.0 +4.6
**BURAR Bucovina Array** 86.22 18 ⇑P P 09 44 32.0 +4.6
**MK31 Makanchi Array** 86.26 340 *i* P P 09 44 24.2 -3.4
**MKAR Makanchi Array** 86.26 340 P P 09 44 25.9 -1.7
**MKAR Makanchi Array** 86.26 340 P P 09 44 25.4 -2.2
comp=Z,6.5nm,0.8s,baz=41,slow=3.9,SNR=37
MKAR PP PP 09 47 46.8 -0.5
comp=Z,2.8nm,1.0s,baz=8.1,slow=5.1,SNR=1.8
MKAR PKKPbc **PKKPbc** 10 02 22.9 -1.5
comp=Z,0.1nm,0.5s,baz=207,slow=1.6,SNR=1.2
MKAR PKPPKP **P'P'df** 10 10 35.7 -3.5
comp=Z,0.4nm,0.8s,baz=182,slow=3.2,SNR=3.5
MKAR LR LR 10 25 08.7
comp=Z,5µm,19.5s,baz=30,slow=37
comp=Z,6.5nm,0.8s
**MKAR Makanchi Array** 86.26 340 *i* P P 09 44 25.3 -2.3
MKAR pmax pmax
comp=Z,9.0nm,1.0s
**MAKZ Makanchi** 86.32 340 P P 09 44 26.4 -1.5
MAKZ IAmb IAmb 09 44 40.5
comp=Z,63nm,0.9s
MAKZ IAMs_20 IAMs_20 10 24 39.8
comp=Z,4µm,20.0s
**MAKZ Makanchi** 86.32 340 ⇑P P 09 44 26.7 -1.2
**AKTO Aktyubinsk** 86.34 356 LR LR 10 25 45.4
comp=Z,1µm,18.5s,baz=1.5,slow=38
**SORM Soroca** 86.39 16 ⇑P P 09 44 30.0 +1.9
**SORM Soroca** 86.39 16 ⇑P P 09 44 30.0 +1.9
**SORM Soroca** 86.39 16 P P 09 44 26.9 -1.2
comp=Z,124nm,1.1s,comp=Z,1µm
**DRGR** 86.41 20 ⇑P P 09 44 32.0 +3.6
**DRGR** 86.41 20 ⇑P P 09 44 32.0 +3.6
**CASP Castiglione de** 86.47 29 IAmb IAmb 09 44 39.6
comp=Z,100nm,1.2s
**ARCR ARCALIA** 86.53 19 ⇑P P 09 44 34.2 +5.3
**MARR Marisel-Cluj** 86.62 20 ⇑P P 09 44 30.5 +1.1
**SIRR Siria** 86.63 21 ⇑P P 09 44 30.6 +1.2
**GO02 Mina Guanaco** 86.69 130 IAmb IAmb 09 44 35.7
comp=Z,129nm,0.9s
**GTA Gaotai** 86.95 325 *e*P P 09 44 31.8 +0.6
GTA pP pwP 09 44 39.0 +2.5
GTA sP PcP 09 44 43.3 +10
GTA SKS **SKSac** 09 54 56.6 -2.2
GTA S **SKKSac** 09 55 06.8 -0.6
GTA sS ScS 09 55 21.3 +3.4
GTA SS **SS** 10 00 56.3 +5.2
GTA pmax pmax
comp=Z,14nm,1.4s
GTA pmax pmax
comp=Z,440nm,4.9s
GTA LR LR
comp=Z,4µm,21.4s
GTA LR LR
comp=Z,5µm,20.7s
GTA LR LR
comp=Z,7µm,21.4s
**WHN Wuhan** 86.95 310 P P 09 44 31.3 +0.1
WHN pP **PcP** 09 44 34.8 +1.4
WHN SKS **SKSac** 09 54 56.9 -1.9
WHN S **SKKSac** 09 55 05.8 -1.6
WHN LR LR
comp=Z,8µm,16.2s
WHN LR LR
comp=Z,14µm,24.6s
WHN LR LR
comp=Z,8µm,21.4s
**OTUK Ortayu** 86.97 347 P P 09 44 28.7 -2.3
**FDMO Fiordimonte** 87.02 28 IAmb IAmb 09 44 59.2
comp=Z,178nm,1.3s
FDMO IAMs_20 IAMs_20 10 21 39.4
comp=Z,5µm,22.0s
**GUMA Gualdo di Mace** 87.08 27 IAmb IAmb 09 44 52.2
comp=Z,198nm,1.3s
GUMA IAMs_20 IAMs_20 10 25 26.0
comp=Z,5µm,18.0s
**XAN Xi'an** 87.12 316 ⇑P P 09 44 29.5 -2.6
XAN pP PcP 09 44 35.0 +0.8
XAN PP **PP** 09 47 58.0 +3.1
XAN pmax pmax
comp=Z,40nm,1.3s
XAN pmax pmax
comp=Z,940nm,4.4s
XAN LR LR
comp=Z,3µm,18.6s
XAN LR LR
comp=Z,4µm,22.4s
XAN LR LR
comp=Z,3µm,24.1s
**YHNB Yeheng** 87.19 302 P P 09 44 34.7 +2.1
**NRCA Norcia** 87.21 28 IAmb IAmb 09 44 51.2
comp=Z,57nm,1.0s
**BZS Buzias** 87.22 21 ⇑P P 09 44 31.4 -0.9
**BZS Buzias** 87.22 21 ⇑P P 09 44 31.4 -0.9
**SURR Surduc** 87.23 21 ⇑P P 09 44 33.5 +1.2
**AB31 Akbulak array** 87.41 355 *i* P P 09 44 31.4 -1.7
**ABKAR Akbulak array** 87.41 355 P P 09 44 32.1 -1.0
**NACB Ninganchiao** 87.42 301 P P 09 44 35.8 +2.3
**WMQ Urumqi** 87.48 335 P P 09 44 34.9 +1.3
WMQ PP **PP** 09 47 58.8 +1.4
WMQ SKS **SKSac** 09 54 59.8 -2.0
WMQ pmax pmax
comp=Z,29nm,1.5s
WMQ pmax pmax
comp=Z,650nm,4.7s
WMQ LR LR
comp=Z,5µm,18.5s
WMQ LR LR
comp=Z,4µm,22.3s
WMQ LR LR
comp=Z,5µm,23.9s
**KIS Kishinev** 87.57 16 *e*P P 09 44 35.0 +1.1
KIS *e*S **SKiKP** 09 53 14.0 +2.1
KIS *e*L L 10 16 03.0
KIS LRM MLR 10 24 00.0
comp=Z,1µm,16.0s
**KIS Kishinev** 87.57 16 *e*P P 09 44 35.0 +1.1
KIS pmax pmax
comp=Z,350nm,4.2s
**TESR Tescani** 87.59 17 ⇑P P 09 44 38.9 +4.9
**MILM Milestii Mici** 87.65 16 *e*P P 09 44 35.0 +0.8
comp=Z,220nm,2.4s
MILM *e*SKS **SKSac** 09 55 04.0 +1.5
MILM *e*S S 09 55 16.0 -0.2
**MILM Milestii Mici** 87.65 16 ⇑P P 09 44 36.8 +2.6
**MILM Milestii Mici** 87.65 16 *e*P P 09 44 35.0 +0.8
MILM *e* 09 55 04.0
MILM *e*S S 09 55 16.0 -0.2
MILM pmax pmax
comp=Z,220nm,2.4s
MILM MLR MLR
comp=Z,3µm,18.0s
**ONER Baraj Valea Uz** 87.70 18 ⇑P P 09 44 38.8 +4.3
**GZR Gura Zlata** 87.73 20 ⇑P P 09 44 39.1 +4.3
**GZR Gura Zlata** 87.73 20 ⇑P P 09 44 39.1 +4.3
**BOSR Bodos** 87.78 18 ⇑P P 09 44 40.2 +5.2
**DOPR Dopca** 87.82 18 ⇓P P 09 44 35.1 0.0
**TURR Turia** 87.88 18 ⇑P P 09 44 38.2 +2.7
**LZH Lanzhou** 87.94 321 *e*P P 09 44 35.6 -0.5
LZH pP pwP 09 44 41.0 -0.3
LZH SKS **SKSac** 09 55 05.0 0.0
LZH sS sS 09 55 23.5 +1.2
LZH SS **SS** 10 01 09.3 +3.6
LZH pmax pmax
comp=Z,77nm,1.2s
LZH pmax pmax
comp=Z,800nm,6.6s
LZH LR LR
comp=Z,5µm,20.3s
LZH LR LR
comp=Z,8µm,21.6s
LZH LR LR
comp=Z,9µm,18.2s
**AC06 Mina Casimiro** 87.98 131 IAmb IAmb 09 48 00.0
comp=Z,38nm,0.5s
**MDVR Moldovita** 88.03 21 ⇓P P 09 44 36.0 -0.2
**MDT Midelt** 88.04 45 P P 09 44 36.3 -0.3
comp=Z,12nm,1.0s,baz=340,slow=7.4,SNR=25
MDT PP **PP** 09 48 02.0 -0.4
comp=Z,3.8nm,1.1s,baz=315,slow=7.6,SNR=2.6
MDT LR LR 10 22 37.0
comp=Z,3µm,18.3s,baz=340,slow=35
comp=Z,12nm,1.0s
**SSLB Suanglung** 88.10 301 P P 09 44 37.7 +0.8
**SSLB Suanglung** 88.10 301 IAmb IAmb 09 44 45.0
comp=Z,44nm,0.9s
**HERR Herculane** 88.12 21 ⇑P P 09 44 37.7 +1.1
**COVR Voineasa-Covas** 88.12 18 ⇑P P 09 44 40.4 +3.8
**PLOR3 Plostina Array** 88.21 18 P P 09 44 37.0 0.0
comp=Z,48nm,1.1s,comp=Z,1µm
**PLOR Plostina** 88.21 18 ⇑P P 09 44 42.0 +4.9
**PLOR Plostina** 88.21 18 ⇑P P 09 44 42.0 +5.0
**VRI Vrincioaia** 88.22 18 ⇑P P 09 44 40.1 +3.1
**VRI Vrincioaia** 88.22 18 ⇑P P 09 44 40.1 +3.1
**VRI Vrincioaia** 88.22 18 P P 09 44 36.9 -0.1
comp=Z,41nm,0.9s,comp=Z,329nm
**PLOR5 Plostina Array** 88.22 18 P P 09 44 37.0 -0.1
comp=Z,55nm,1.3s,comp=Z,1µm
**VOIR** 88.24 19 ⇑P P 09 44 39.9 +2.7
**VOIR** 88.24 19 ⇑P P 09 44 39.9 +2.7
**AC04 Llanos de Chal** 88.26 132 IAmb IAmb 09 44 46.9
comp=Z,126nm,1.6s
**PANC Panciu** 88.30 17 ⇑P P 09 44 45.7 +8.3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SPBR | **Spulber** | 88.33 | 18 | ⇑P | | **P** | | **09 44 38.8** | **+1.2** | |
| MLR | **Muntele Rosu** | 88.40 | 18 | IAMs_20 | IAMs_20 | 10 24 03.5 | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| MLR | **Muntele Rosu** | 88.40 | 18 | LR | LR | 10 24 24.2 | | | | |
| | comp=Z,5µm,18.8s,baz=340,slow=36 | | | | | | | | | |
| MLR | **Muntele Rosu** | 88.40 | 18 | ⇑P | | **P** | | **09 44 41.4** | **+3.4** | |
| MLR | **Muntele Rosu** | 88.40 | 18 | ⇑P | | **P** | | **09 44 41.4** | **+3.4** | |
| MLR | **Muntele Rosu** | 88.40 | 18 | P | | **P** | | **09 44 38.5** | **+0.5** | |
| | comp=Z,25nm,1.4s,comp=Z,620nm | | | | | | | | | |
| NEHR | **Nehoiu** | 88.54 | 18 | ⇑P | | P | | 09 44 44.0 | +5.4 | |
| SNDB | **Serra Nova Dou** | 88.57 | 108 | *e*P | | **P** | | **09 44 39.8** | **+0.8** | |
| PINNC | **Pines Island,** | 88.58 | 237 | P | | **P** | | **09 44 41.7** | **+2.9** | |
| SCTR | **Scanteiesti** | 88.67 | 17 | ⇑P | | P | | 09 44 48.0 | +8.9 | |
| QZH | **Quanzhou** | 88.70 | 304 | *e*P | | **P** | | **09 44 43.1** | **+3.5** | |
| QZH | | | | S | | **S** | | **09 55 27.5** | **+0.6** | |
| QZH | | | | SS | | **SS** | | **10 01 22.3** | **+5.1** | |
| QZH | | | | LR | LR | | | | | |
| | comp=Z,4µm,23.4s | | | | | | | | | |
| QZH | | | | LR | LR | | | | | |
| | comp=Z,3µm,23.0s | | | | | | | | | |
| QZH | | | | LR | LR | | | | | |
| | comp=Z,3µm,17.5s | | | | | | | | | |
| NEGRR | **Negrea** | 88.78 | 17 | ⇑P | | P | | 09 44 44.7 | +5.1 | |
| DZM | **Mont Dzumac** | 88.79 | 238 | P | | **P** | | **09 44 43.9** | **+3.9** | |
| DZM | **Mont Dzumac** | 88.79 | 238 | *e*P | | **P** | | **09 44 40.4** | **+0.4** | |
| | comp=Z,224nm,1.4s | | | | | | | | | |
| DZM | **Mont Dzumac** | 88.79 | 238 | *e*PP | | **PP** | | **09 48 04.1** | **-5.3** | |
| | comp=Z,237nm,34.0s | | | | | | | | | |
| DZM | | | | *e*S | | **S** | | **09 55 26.6** | **-1.1** | |
| | comp=Z,2µm,28.5s | | | | | | | | | |
| DZM | | | | *e*SS | | **SS** | | **10 01 15.8** | **-4.3** | |
| | comp=Z,3µm,27.9s | | | | | | | | | |
| DZM | | | | *e*LQ | | LQ | | 10 08 35.9 | | |
| | comp=Z,5µm,38.0s | | | | | | | | | |
| DZM | | | | *e*LR | | LR | | 10 12 47.7 | | |
| | comp=Z,14µm,25.1s | | | | | | | | | |
| DZM | **Mont Dzumac** | 88.79 | 238 | IAMs_20 | IAMs_20 | 10 15 25.3 | | | | |
| | comp=Z,7µm,22.0s | | | | | | | | | |
| DZM | **Mont Dzumac** | 88.79 | 238 | LR | LR | 10 15 36.7 | | | | |
| | comp=Z,6µm,22.0s,baz=28,slow=30 | | | | | | | | | |
| VSL | **Villasalto** | 88.79 | 32 | IAMs_20 | IAMs_20 | 10 22 33.5 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| TDK | **Taldyqorghan** | 88.87 | 342 | *e*P | | **P** | | **09 44 40.3** | **+0.1** | |
| | comp=Z,26nm,0.6s,baz=342 | | | | | | | | | |
| TDK | | | | LR | LR | 10 25 30.4 | | | | |
| | comp=Z,2µm,16.6s,baz=342 | | | | | | | | | |
| TDK | **Taldyqorghan** | 88.87 | 342 | *e*P | | **P** | | **09 44 40.3** | **+0.1** | |
| TDK | | | | pmax | pmax | | | | | |
| | comp=Z,28nm,0.6s | | | | | | | | | |
| TDK | | | | MLR | MLR | | | | | |
| | comp=Z,2µm,17.0s | | | | | | | | | |
| ISR | **Istrita** | 88.89 | 18 | ⇑P | | P | | 09 44 47.8 | +7.5 | |
| ISR | **Istrita** | 88.89 | 18 | ⇑P | | P | | 09 44 47.8 | +7.6 | |
| NOUC | **Port Laguerre** | 88.90 | 238 | P | | P | | 09 44 45.5 | +5.1 | |
| SMTB | **Santa Maria do** | 89.00 | 103 | *e*P | | **P** | | **09 44 41.9** | **+0.8** | |
| SGRT | **San Giovanni R** | 89.05 | 26 | IAmb | IAmb | 09 44 50.0 | | | | |
| | comp=Z,77nm,1.3s | | | | | | | | | |
| BOVS | **Bovan** | 89.09 | 22 | ⇑P | | **P** | | **09 44 42.7** | **+1.5** | |
| LCO | **Las Campanas** | 89.10 | 133 | P | | **P** | | **09 44 40.8** | **-0.8** | |
| LCO | **Las Campanas** | 89.10 | 133 | P | | **P** | | **09 44 40.8** | **-0.8** | |
| LCO | | | | pmax | pmax | | | | | |
| | comp=Z,85nm,0.6s | | | | | | | | | |
| CFR | **Carcaliu** | 89.17 | 17 | ⇑P | | **P** | | **09 44 43.6** | **+2.1** | |
| CFR | **Carcaliu** | 89.17 | 17 | ⇑P | | **P** | | **09 44 43.6** | **+2.1** | |
| AC05 | **El Transito** | 89.19 | 132 | IAmb | IAmb | 09 48 00.6 | | | | |
| | comp=Z,82nm,0.6s | | | | | | | | | |
| PAOL | **Paolisi** | 89.31 | 28 | IAmb | IAmb | 09 45 02.0 | | | | |
| | comp=Z,79nm,1.5s | | | | | | | | | |
| PAOL | | | | IAMs_20 | IAMs_20 | 10 23 26.9 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| PDG | **Podgorica** | 89.51 | 24 | IAMs_20 | IAMs_20 | 10 23 38.3 | | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| TPGR | **Topolog** | 89.54 | 17 | ⇑P | | P | | 09 44 48.6 | +5.3 | |
| CNSH | **ChangSha** | 89.56 | 310 | P | | **P** | | **09 44 40.4** | **-3.2** | |
| CNSH | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,1.3s | | | | | | | | | |
| CNSH | | | | LR | LR | | | | | |
| | comp=Z,2µm,16.0s | | | | | | | | | |
| CNSH | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.2s | | | | | | | | | |
| CNSH | | | | LR | LR | | | | | |
| | comp=Z,2µm,19.1s | | | | | | | | | |
| ARXS | **Arharly** | 89.75 | 342 | *e*P | | **P** | | **09 44 43.3** | **-1.1** | |
| BTLS | **Baital** | 89.75 | 345 | *e*P | | **P** | | **09 44 44.4** | **+0.1** | |
| | baz=345 | | | | | | | | | |
| BTLS | | | | *e*S | | **SKSac** | | **09 55 14.2** | **-0.9** | |
| | baz=345 | | | | | | | | | |
| BTLS | **Baital** | 89.75 | 345 | *e*P | | **P** | | **09 44 44.3** | **0.0** | |
| BTLS | | | | *e*S | | **SKSac** | | **09 55 14.2** | **-0.9** | |
| TLBR | **Topalu** | 89.76 | 17 | ⇑P | | **P** | | **09 44 47.3** | **+3.1** | |
| ENH | **Enshi** | 89.81 | 313 | P | | **P** | | **09 44 43.5** | **-1.3** | |
| ENH | **Enshi** | 89.81 | 313 | IAmb | IAmb | 09 44 54.0 | | | | |
| | comp=Z,66nm,0.8s | | | | | | | | | |
| MPEP | **Malo Peshtene** | 89.88 | 20 | P | | **P** | | **09 44 44.9** | **0.0** | |
| PUK | **Puka** | 90.06 | 23 | IAMs_20 | IAMs_20 | 10 23 56.6 | | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| PDGK | **Podgornoye** | 90.20 | 340 | P | | **P** | | **09 44 45.1** | **-1.4** | |
| KPKS | **Kokpek** | 90.26 | 341 | *e*P | | **P** | | **09 44 46.8** | **0.0** | |
| | baz=341 | | | | | | | | | |
| KPKS | | | | *e*S | | **SKSac** | | **09 55 17.4** | **-1.0** | |
| | baz=341 | | | | | | | | | |
| KPKS | **Kokpek** | 90.26 | 341 | *e*P | | **P** | | **09 44 46.8** | **0.0** | |
| KPKS | | | | *e*S | | **SKSac** | | **09 55 17.4** | **-1.0** | |
| CHKK | **Chushkaly** | 90.28 | 342 | *e*P | | **P** | | **09 44 46.9** | **+0.1** | |
| | baz=342 | | | | | | | | | |
| CHKK | **Chushkaly** | 90.28 | 342 | *e*P | | **P** | | **09 44 46.8** | **+0.1** | |
| MATE | **Matera** | 90.35 | 26 | ⇑P | | **P** | | **09 44 48.5** | **+1.4** | |
| SHLS | **Shalkode** | 90.37 | 340 | *e*P | | **P** | | **09 44 46.8** | **-0.5** | |
| | comp=Z,32nm,0.8s,baz=340 | | | | | | | | | |
| SHLS | **Shalkode** | 90.37 | 340 | *e*P | | **P** | | **09 44 46.8** | **-0.5** | |
| SHLS | | | | pmax | pmax | | | | | |
| | comp=Z,32nm,0.8s | | | | | | | | | |
| VTS | **Vitosha** | 90.44 | 21 | P | | **P** | | **09 44 47.5** | **-0.2** | |
| UZB | **Uzynbulak** | 90.48 | 341 | *e*P | | **P** | | **09 44 47.7** | **-0.2** | |
| | baz=341 | | | | | | | | | |
| UZB | **Uzynbulak** | 90.48 | 341 | *e*P | | **P** | | **09 44 47.7** | **-0.2** | |
| SIM | **Simferopol'** | 90.50 | 13 | *e*P | | **P** | | **09 44 50.2** | **+2.5** | |
| SIM | | | | pmax | pmax | | | | | |
| | comp=Z,92nm,1.4s | | | | | | | | | |
| SIM | | | | MLR | MLR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| SZH | **Strazhitsa** | 90.51 | 19 | P | | **P** | | **09 44 47.5** | **-0.3** | |
| ERBR | **Yeremizino-Bor** | 90.59 | 8 | *e*P | | **P** | | **09 44 49.5** | **+1.4** | |
| ERBR | | | | *e**PP | | **pwP** | | **09 44 52.3** | **-1.1** | |
| ERBR | | | | *e* | | | | 09 48 23.0 | | |
| ERBR | | | | *e* | | | | 09 55 21.4 | | |
| ERBR | | | | *e*SP | | SP | | 09 56 52.8 | +3.2 | |
| ERBR | | | | pmax | pmax | | | | | |
| | comp=Z,128nm,1.2s | | | | | | | | | |
| ERBR | | | | MLR | MLR | | | | | |
| | comp=Z,4µm,16.0s | | | | | | | | | |
| ZHN | **Zhinishke** | 90.60 | 341 | *e*P | | **P** | | **09 44 48.4** | **-0.1** | |
| | baz=341 | | | | | | | | | |
| ZHN | **Zhinishke** | 90.60 | 341 | *e*P | | **P** | | **09 44 48.3** | **-0.1** | |
| TIR | **Tirane** | 90.69 | 24 | IAMs_20 | IAMs_20 | 10 24 49.3 | | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| SATY | **Saty** | 90.71 | 341 | *e*P | | **P** | | **09 44 48.9** | **0.0** | |
| | comp=Z,29nm,1.0s,baz=341 | | | | | | | | | |
| SATY | | | | *e*S | | **SKSac** | | **09 55 19.7** | **-1.4** | |
| | baz=341 | | | | | | | | | |
| SATY | **Saty** | 90.71 | 341 | *e*P | | **P** | | **09 44 48.9** | **0.0** | |
| SATY | | | | *e*S | | **SKSac** | | **09 55 19.6** | **-1.4** | |
| SATY | | | | pmax | pmax | | | | | |
| | comp=Z,29nm,1.0s | | | | | | | | | |
| PGB | **Panagyurishte** | 90.78 | 20 | P | | **P** | | **09 44 48.8** | **-0.3** | |
| ARAG | **Araguaiana, MT** | 90.83 | 111 | *e*P | | **P** | | **09 44 50.2** | **+0.6** | |
| AAA | **Alma-Ata** | 90.91 | 342 | *e*P | | **P** | | **09 44 49.8** | **0.0** | |
| | comp=Z,37nm,0.7s,baz=342 | | | | | | | | | |
| AAA | **Alma-Ata** | 90.91 | 342 | *e*P | | **P** | | **09 44 49.8** | **0.0** | |
| AAA | | | | pmax | pmax | | | | | |
| | comp=Z,37nm,0.7s | | | | | | | | | |
| MDOK | **Medeo** | 90.93 | 342 | *e*P | | **P** | | **09 44 49.9** | **-0.1** | |
| | baz=342 | | | | | | | | | |
| MDOK | | | | LR | LR | 10 26 52.9 | | | | |
| | comp=Z,1µm,18.7s,baz=342 | | | | | | | | | |
| MDOK | **Medeo** | 90.93 | 342 | P | | **P** | | **09 44 47.9** | **-2.1** | |
| PRD | **Provadia** | 90.94 | 18 | P | | **P** | | **09 44 48.4** | **-1.4** | |
| ANN | **Anapa** | 91.14 | 10 | *e*P | | **P** | | **09 44 51.3** | **+0.7** | |
| ANN | | | | *e**PP | | **pwP** | | **09 44 54.7** | **-1.2** | |
| ANN | | | | *e* | | | | 09 48 30.8 | | |
| ANN | | | | *e* | | | | 09 55 23.2 | | |
| ANN | | | | *e* | | | | 09 55 37.4 | | |
| ANN | | | | *e*PS | | **PnS** | | **09 57 02.2** | **+5.2** | |
| ANN | | | | *e*SS | | SS | | 10 01 53.4 | +2.5 | |
| ANN | | | | pmax | pmax | | | | | |
| | comp=Z,46nm,0.9s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| KKB | **Krupnik** | 91.14 | 21 | P | | **P** | | **09 44 49.0** | **-1.8** | |
| SGDS | **Sogindy** | 91.17 | 344 | *e*P | | **P** | | **09 44 51.0** | **+0.1** | |
| | baz=344 | | | | | | | | | |
| SGDS | **Sogindy** | 91.17 | 344 | *e*P | | **P** | | **09 44 51.0** | **+0.1** | |
| OHR | **Ohrid** | 91.18 | 23 | *i* P | | **P** | | **09 44 52.1** | **+1.1** | |
| MURT | **Porto Murtinho** | 91.26 | 119 | *e*P | | **P** | | **09 44 49.1** | **-2.3** | |
| JMB | **Yambol** | 91.37 | 19 | P | | **P** | | **09 44 52.1** | **+0.3** | |
| VLO | **Vlora** | 91.39 | 24 | IAMs_20 | IAMs_20 | 10 27 20.8 | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| SCTE | **Santa Cesarea** | 91.44 | 25 | IAMs_20 | IAMs_20 | 10 26 31.1 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| TKM2 | **Tokmak 2** | 91.47 | 343 | P | | **P** | | **09 44 50.4** | **-2.2** | |
| VAY | **Valandovo** | 91.48 | 22 | *i* P | | **P** | | **09 44 50.9** | **-1.4** | |
| GOF | **Gofitskoye** | 91.48 | 6 | *ce*P | | **P** | | **09 44 54.6** | **+2.3** | |
| MMB | **Musomishta** | 91.58 | 21 | P | | **P** | | **09 44 52.6** | **-0.3** | |
| LABN | **Labinsk** | 91.68 | 8 | *e*P | | P | | 09 44 59.7 | +6.5 | |
| LABN | | | | *e**PP | | pwP | | 09 45 02.8 | +4.3 | |
| LABN | | | | *e* | | | | 09 48 31.4 | | |
| LABN | | | | *e* | | | | 09 55 48.4 | | |
| LABN | | | | *e*SP | | SP | | 09 57 00.8 | -0.9 | |
| LABN | | | | pmax | pmax | | | | | |
| | comp=Z,31nm,0.4s | | | | | | | | | |
| LABN | | | | MLR | MLR | | | | | |
| | comp=N,6µm,15.0s | | | | | | | | | |
| LABN | | | | MLR | MLR | | | | | |
| | comp=Z,3µm,14.0s | | | | | | | | | |
| LABN | | | | MLR | MLR | | | | | |
| | comp=E,6µm,15.0s | | | | | | | | | |
| RZN | **Rozhen** | 91.69 | 20 | P | | **P** | | **09 44 54.1** | **+0.5** | |
| TIP | **Timpagrande** | 91.70 | 27 | IAmb | IAmb | 09 45 24.6 | | | | |
| | comp=Z,50nm,1.2s | | | | | | | | | |
| TIP | | | | IAMs_20 | IAMs_20 | 10 24 07.2 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| TIP | **Timpagrande** | 91.70 | 27 | ⇑P | | **P** | | **09 44 54.4** | **+0.8** | |
| TIP | **Timpagrande** | 91.70 | 27 | P | | **P** | | **09 44 53.2** | **-0.3** | |
| | comp=Z,30nm,1.2s,comp=Z,460nm | | | | | | | | | |
| GOMU | **GeErMu** | 91.74 | 327 | P | | **P** | | **09 44 54.5** | **+0.4** | |
| GOMU | | | | sP | | pwP | | 09 45 02.3 | +2.9 | |
| GOMU | | | | PP | | **PP** | | **09 48 29.4** | **-2.4** | |
| GOMU | | | | pmax | pmax | | | | | |
| | comp=Z,22nm,0.9s | | | | | | | | | |
| GOMU | | | | pmax | pmax | | | | | |
| | comp=Z,790nm,6.8s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,5µm,19.5s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,12µm,19.7s | | | | | | | | | |
| VA01 | **Torpederas** | 91.78 | 136 | IAmb | IAmb | 09 45 03.9 | | | | |
| | comp=Z,61nm,1.2s | | | | | | | | | |
| FRU1 | **Bishkek** | 91.78 | 344 | IAMs_20 | IAMs_20 | 10 28 52.9 | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| KDZ | **Kurdzhali** | 91.90 | 20 | P | | **P** | | **09 44 53.6** | **-0.7** | |
| AAK | **Ala-Archa** | 91.97 | 344 | P | | **P** | | **09 44 53.7** | **-1.1** | |
| AAK | **Ala-Archa** | 91.97 | 344 | IAMs_20 | IAMs_20 | 10 26 58.0 | | | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| AAK | **Ala-Archa** | 91.97 | 344 | LR | LR | 10 29 19.9 | | | | |
| | comp=Z,5µm,19.1s,baz=24,slow=38 | | | | | | | | | |
| AAK | **Ala-Archa** | 91.97 | 344 | *ce*P | | **P** | | **09 44 53.8** | **-1.1** | |
| AAK | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | | |
| KEST | **Kesra** | 92.04 | 34 | IAmb | IAmb | 09 45 05.5 | | | | |
| | comp=Z,99nm,1.6s | | | | | | | | | |
| KEST | **Kesra** | 92.04 | 34 | P | | **P** | | **09 44 53.8** | **-1.4** | |
| | comp=Z,4.6nm,1.1s,baz=228,slow=5.4,SNR=3.9 | | | | | | | | | |
| KEST | | | | PP | | **PP** | | **09 48 34.3** | **+0.4** | |
| | comp=Z,5.3nm,1.0s,baz=327,slow=11,SNR=2.1 | | | | | | | | | |
| KEST | | | | LR | LR | 10 26 43.5 | | | | |
| | comp=Z,3µm,18.0s,baz=285,slow=36 | | | | | | | | | |
| | comp=Z,4.6nm,1.1s | | | | | | | | | |
| VA03 | **San Esteban** | 92.14 | 135 | IAmb | IAmb | 09 45 05.6 | | | | |
| | comp=Z,129nm,1.6s | | | | | | | | | |
| ZON | **Zonda** | 92.17 | 133 | IAmb | IAmb | 09 45 06.1 | | | | |
| | comp=Z,35nm,0.8s | | | | | | | | | |
| KEK | **Kerkira** | 92.17 | 24 | IAMs_20 | IAMs_20 | 10 27 14.6 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| CD2 | **Chengdu** | 92.22 | 318 | P | | **P** | | **09 44 57.3** | **+1.3** | |
| CD2 | | | | pP | | sP | | 09 44 59.1 | +1.0 | |
| CD2 | | | | sP | | pwP | | 09 45 01.0 | -0.3 | |
| CD2 | | | | PP | | **PP** | | **09 48 35.4** | **-0.1** | |
| CD2 | | | | SKS | | **SKSac** | | **09 55 29.3** | **-0.5** | |
| CD2 | | | | S | | **S** | | **09 55 59.0** | **-0.3** | |
| CD2 | | | | SS | | **SS** | | **10 02 07.6** | **-0.1** | |
| CD2 | | | | pmax | pmax | | | | | |
| | comp=Z,30nm,0.6s | | | | | | | | | |
| CD2 | | | | pmax | pmax | | | | | |
| | comp=Z,250nm,6.7s | | | | | | | | | |
| CD2 | | | | LR | LR | | | | | |
| | comp=Z,1µm,11.3s | | | | | | | | | |
| CD2 | | | | LR | LR | | | | | |
| | comp=Z,2µm,15.5s | | | | | | | | | |
| CD2 | | | | LR | LR | | | | | |
| | comp=Z,1µm,15.1s | | | | | | | | | |
| MT02 | **Curacav** | 92.23 | 136 | IAmb | IAmb | 09 45 00.1 | | | | |
| | comp=Z,58nm,1.4s | | | | | | | | | |
| CEL | **Celeste** | 92.24 | 28 | IAMs_20 | IAMs_20 | 10 26 07.6 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| KK31 | **Karatay Array** | 92.27 | 347 | *i* P | | **P** | | **09 44 54.9** | **-1.1** | |
| KKAR | **Karatay Array** | 92.27 | 347 | P | | **P** | | **09 44 54.8** | **-1.2** | |
| KKAR | **Karatay Array** | 92.27 | 347 | P | | **P** | | **09 44 54.8** | **-1.2** | |
| PEL | **Peldehue** | 92.37 | 135 | IAmb | IAmb | 09 45 18.7 | | | | |
| | comp=Z,89nm,1.5s | | | | | | | | | |
| VAE | **Valguarnera** | 92.43 | 29 | LR | LR | 10 27 24.6 | | | | |
| | comp=Z,3µm,18.3s,baz=9.5,slow=36 | | | | | | | | | |
| KIV | **Kislovodsk** | 92.55 | 7 | IAMs_20 | IAMs_20 | 10 32 48.2 | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| KIV | **Kislovodsk** | 92.55 | 7 | *e*P | | **P** | | **09 44 56.6** | **-0.8** | |
| KIV | | | | *e* | | | | 09 55 29.7 | | |
| KIV | | | | *e*SS | | SS | | 10 02 16.1 | +4.7 | |
| KIV | | | | pmax | pmax | | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| KIV | | | | pmax | pmax | | | | | |
| | comp=Z,43nm,4.6s | | | | | | | | | |
| KIV | | | | MLR | MLR | | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| KVAR | **Kislovodsk Arr** | 92.55 | 7 | LR | LR | 10 28 48.1 | | | | |
| | comp=Z,3µm,19.3s,baz=266,slow=37 | | | | | | | | | |
| SOC | **Sochi** | 92.61 | 9 | *i* P | | **P** | | **09 45 00.5** | **+3.0** | |
| SOC | | | | MLR | MLR | | | | | |
| | comp=Z,2µm,16.0s | | | | | | | | | |
| RAFF | **Raffo Rosso** | 92.64 | 29 | IAMs_20 | IAMs_20 | 10 26 26.2 | | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| MT09 | **Talagante** | 92.71 | 136 | IAmb | IAmb | 09 45 12.7 | | | | |
| | comp=Z,55nm,1.2s | | | | | | | | | |
| MT03 | **Universidad Ad** | 92.73 | 135 | IAmb | IAmb | 09 45 19.7 | | | | |
| | comp=Z,62nm,1.0s | | | | | | | | | |
| SHA1 | **Shidzhatmaz** | 92.76 | 7 | P | | **P** | | **09 44 57.4** | **-1.1** | |
| ALN | **Alexandroupoli** | 92.77 | 20 | IAMs_20 | IAMs_20 | 10 31 00.5 | | | | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| VSLR | **Vesyoloye** | 92.77 | 9 | *e*P | | **P** | | **09 44 59.1** | **+0.8** | |
| VSLR | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | | |
| KBZ | **Khabaz** | 92.79 | 7 | P | | **P** | | **09 44 59.3** | **+1.0** | |
| | comp=Z,5.9nm,0.9s,baz=29,slow=3.4,SNR=10 | | | | | | | | | |
| KBZ | | | | PP | | **PP** | | **09 48 41.6** | **+2.3** | |
| | comp=Z,5.1nm,0.8s,baz=0.3,slow=8.8,SNR=4.0 | | | | | | | | | |
| KBZ | | | | LR | LR | 10 29 01.3 | | | | |
| | comp=Z,3µm,19.9s,baz=346,slow=37 | | | | | | | | | |
| | comp=Z,5.9nm,0.9s | | | | | | | | | |
| KBZ | **Khabaz** | 92.79 | 7 | *i* P | | **P** | | **09 44 58.7** | **+0.4** | |
| KBZ | | | | pmax | pmax | | | | | |
| | comp=Z,29nm,1.4s | | | | | | | | | |
| PMG | **Port Moresby** | 92.82 | 260 | IAMs_20 | IAMs_20 | 10 22 49.2 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| PMG | **Port Moresby** | 92.82 | 260 | LR | LR | 10 21 20.2 | | | | |
| | comp=Z,3µm,20.2s,baz=102,slow=32 | | | | | | | | | |
| PMG | **Port Moresby** | 92.82 | 260 | *i* P | | **P** | | **09 45 00.7** | **+1.8** | |
| PMG | | | | pmax | pmax | | | | | |
| | comp=Z,27nm,0.9s | | | | | | | | | |
| MT08 | **Bocatoma Ro** | 92.95 | 135 | IAmb | IAmb | 09 45 11.1 | | | | |
| | comp=Z,80nm,1.1s | | | | | | | | | |
| MT13 | **San Alfonso** | 93.05 | 135 | IAmb | IAmb | 09 45 11.0 | | | | |
| | comp=Z,47nm,1.0s | | | | | | | | | |
| BO04 | **La Punta** | 93.07 | 136 | IAmb | IAmb | 09 45 10.8 | | | | |
| | comp=Z,41nm,1.1s | | | | | | | | | |
| BO01 | **Tunca** | 93.15 | 136 | IAmb | IAmb | 09 45 09.3 | | | | |
| | comp=Z,163nm,1.9s | | | | | | | | | |
| LMEL | **Las Melosas** | 93.17 | 135 | IAmb | IAmb | 09 45 12.2 | | | | |
| | comp=Z,60nm,1.3s | | | | | | | | | |
| CHM | **Chimkent** | 93.18 | 347 | *e*P | | **P** | | **09 45 00.4** | **+0.2** | |
| | baz=347 | | | | | | | | | |
| CHM | **Chimkent** | 93.18 | 347 | *e*P | | **P** | | **09 45 00.4** | **+0.2** | |
| SDBA | **SAO DESIDERIO** | 93.34 | 104 | *e*P | | **P** | | **09 45 00.5** | **-0.8** | |
| BDFB | **Brasilia** | 93.39 | 108 | P | | **P** | | **09 45 02.4** | **+0.8** | |
| | comp=Z,6.0nm,0.9s,baz=352,slow=6.2,SNR=6.3 | | | | | | | | | |
| BDFB | | | | LR | LR | 10 29 56.6 | | | | |
| | comp=Z,4µm,21.4s,baz=315,slow=37 | | | | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | | |
| YLV | **Yalova** | 93.85 | 17 | P | | **P** | | **09 45 02.9** | **-0.5** | |
| | comp=Z,23nm,1.6s,comp=Z,396nm | | | | | | | | | |
| MAK | **Makhachkala** | 93.85 | 3 | *e*P | | **P** | | **09 45 00.2** | **-3.0** | |
| MAK | | | | *e* | | | | 09 48 48.8 | | |
| MAK | | | | *e*PPP | | PPP | | 09 50 50.5 | | |
| MAK | | | | *e* | | | | 09 55 32.0 | | |
| MAK | | | | *e*SS | | SS | | 10 02 25.7 | -4.1 | |
| MAK | | | | *e*SSS | | SSS | | 10 06 14.4 | | |
| MAK | | | | pmax | pmax | | | | | |
| | comp=Z,154nm,1.0s | | | | | | | | | |
| DIKM | **Dikmen** | 93.90 | 13 | ⇓P | | **P** | | **09 45 05.1** | **+1.5** | |
| DIKM | **Dikmen** | 93.90 | 13 | P | | **P** | | **09 45 03.8** | **+0.3** | |
| | comp=Z,76nm,1.1s,comp=Z,980nm | | | | | | | | | |
| WDD | **Wied Dalam** | 93.93 | 30 | IAMs_20 | IAMs_20 | 10 24 13.5 | | | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| TABU | **Tabubil** | 94.30 | 267 | P | | **P** | | **09 45 09.7** | **+3.9** | |
| MXZ | **Matakaoa Point** | 94.31 | 220 | IAMs_20 | IAMs_20 | 10 20 42.9 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| MDUB | **Mudurnu** | 94.32 | 16 | P | | **P** | | **09 45 04.7** | **-0.9** | |
| GYA | **Guiyang** | 94.34 | 313 | P | | **P** | | **09 45 06.6** | **+0.7** | |
| GYA | | | | PP | | **PP** | | **09 48 53.8** | **+1.5** | |
| GYA | | | | SKS | | **SKSac** | | **09 55 40.8** | **-1.0** | |
| GYA | | | | S | | **S** | | **09 56 15.3** | **-3.0** | |
| GYA | | | | SS | | **SS** | | **10 02 38.9** | **+0.5** | |
| GYA | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,1.2s | | | | | | | | | |
| GYA | | | | pmax | pmax | | | | | |
| | comp=Z,530nm,4.8s | | | | | | | | | |
| GYA | | | | LR | LR | | | | | |
| | comp=Z,2µm,20.9s | | | | | | | | | |
| GYA | | | | LR | LR | | | | | |
| | comp=Z,3µm,25.9s | | | | | | | | | |
| GYA | | | | LR | LR | | | | | |
| | comp=Z,4µm,21.2s | | | | | | | | | |
| KSH | **Kashi** | 94.64 | 342 | P | | **P** | | **09 45 08.8** | **+1.7** | |
| KSH | | | | pP | | pwP | | 09 45 12.9 | +0.5 | |
| KSH | | | | PP | | **PP** | | **09 49 01.1** | **+7.0** | |
| KSH | | | | SKS | | **SKSac** | | **09 55 44.3** | **+1.2** | |
| KSH | | | | pmax | pmax | | | | | |
| | comp=Z,14nm,1.1s | | | | | | | | | |
| KSH | | | | pmax | pmax | | | | | |
| | comp=Z,260nm,5.6s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,6µm,19.2s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,10µm,18.9s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,4µm,22.7s | | | | | | | | | |
| OUZ | **Omahuta** | 94.77 | 225 | IAMs_20 | IAMs_20 | 10 19 45.8 | | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| BBTS | **Babate** | 94.77 | 65 | P | | **P** | | **09 45 08.3** | **+0.5** | |
| | comp=Z,28nm,0.8s,baz=206,slow=3.8,SNR=6.4 | | | | | | | | | |
| BBTS | | | | LR | LR | 10 25 34.5 | | | | |
| | comp=Z,8µm,19.6s,baz=188,slow=34 | | | | | | | | | |
| | comp=Z,28nm,0.8s | | | | | | | | | |
| CPUP | **Villa Florida** | 94.81 | 122 | P | | **P** | | **09 45 07.5** | **-0.2** | |
| | comp=Z,7.6nm,1.1s,baz=326,slow=4.4,SNR=6.1 | | | | | | | | | |
| CPUP | | | | LR | LR | 10 29 40.7 | | | | |
| | comp=Z,1µm,20.9s,baz=332,slow=37 | | | | | | | | | |
| | comp=Z,7.6nm,1.1s | | | | | | | | | |
| ANTO | **Ankara** | 95.21 | 15 | IAmb | IAmb | 09 45 19.5 | | | | |
| | comp=Z,54nm,1.1s | | | | | | | | | |
| ANTO | **Ankara** | 95.21 | 15 | IAMs_20 | IAMs_20 | 10 29 16.8 | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| ANTO | **Ankara** | 95.21 | 15 | ⇑P | | **P** | | **09 45 09.9** | **+0.2** | |
| ANTO | **Ankara** | 95.21 | 15 | ⇑P | | **P** | | **09 45 09.9** | **+0.2** | |
| ANTO | **Ankara** | 95.21 | 15 | P | | **P** | | **09 45 09.1** | **-0.6** | |
| | comp=Z,24nm,1.1s,comp=Z,250nm | | | | | | | | | |
| TATN | **Tataouine** | 95.27 | 34 | IAMs_20 | IAMs_20 | 10 28 28.0 | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| RCBR | **Riachuelo** | 95.34 | 93 | IAMs_20 | IAMs_20 | 10 24 50.3 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| RCBR | **Riachuelo** | 95.34 | 93 | LR | LR | 10 26 54.0 | | | | |
| | comp=Z,1µm,21.5s,baz=333,slow=35 | | | | | | | | | |
| URZ | **Urewera** | 95.44 | 220 | LR | LR | 10 20 20.2 | | | | |
| | comp=Z,6µm,20.7s,baz=130,slow=31 | | | | | | | | | |
| BR106 | **Keskin Array S** | 95.49 | 14 | P | | **P** | | **09 45 11.1** | **+0.1** | |
| | comp=Z,13nm,1.1s,comp=Z,106nm | | | | | | | | | |
| BR131 | **Keskin Array S** | 95.50 | 14 | *i* P | | **P** | | **09 45 11.5** | **+0.4** | |
| BRTR | **Keskin Array B** | 95.50 | 14 | P | | **P** | | **09 45 10.1** | **-1.0** | |
| | comp=Z,2.8nm,0.9s,baz=2.7,slow=2.7,SNR=14 | | | | | | | | | |
| BRTR | | | | PP | | **PP** | | **09 49 01.4** | **+0.6** | |
| | comp=Z,7.7nm,1.2s,baz=328,slow=4.4,SNR=6.7 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KMI | | | | LR | LR | | | |
| | comp=Z,3μm,20.1s | | | | | | | |
| **BFZ** | **Birch Farm** | **97.77** | **219** | IAMs_20 | IAMs_20 | 10 23 31.2 | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| **KARP** | **Karpathos** | **98.11** | **20** | IAMs_20 | IAMs_20 | 10 29 49.8 | | |
| | comp=Z,4μm,21.0s | | | | | | | |
| **PLCA** | **Paso Flores** | **98.41** | **140** | IAmb | IAmb | 09 45 33.1 | | |
| | comp=Z,93nm,2.0s | | | | | | | |
| **PLCA** | **Paso Flores** | **98.41** | **140** | P | **P** | **09 45 22.7** | **-1.1** | |
| | comp=Z,5.7nm,1.3s,baz=266,slow=5.2,SNR=2.7 | | | | | | | |
| PLCA | | | | LR | LR | 10 22 03.0 | | |
| | comp=Z,2μm,19.7s,baz=333,slow=31 comp=Z,5.7nm,1.3s | | | | | | | |
| **QIZ** | **Qiongzhong** | **98.42** | **306** | P | **P** | **09 45 24.4** | **0.0** | |
| QIZ | | | | PP | **PP** | **09 49 23.8** | **-0.2** | |
| QIZ | | | | SKS | **SKSac** | **09 56 00.9** | **-2.1** | |
| QIZ | | | | S | **S** | **09 56 51.8** | **-1.6** | |
| QIZ | | | | SS | **SS** | **10 03 35.6** | **-0.8** | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,2μm,30.9s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,1μm,30.4s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,2μm,17.9s | | | | | | | |
| **ITAB** | **Concordia** | **98.72** | **119** | IAMs_20 | IAMs_20 | 10 33 12.5 | | |
| | comp=Z,3μm,22.0s | | | | | | | |
| **BHW** | **Baring Head** | **98.98** | **220** | IAMs_20 | IAMs_20 | 10 24 30.4 | | |
| | comp=Z,4μm,20.0s | | | | | | | |
| **SPB** | **Sao Paulo** | **99.26** | **114** | IAMs_20 | IAMs_20 | 10 32 42.8 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **NNZ** | **Nelson** | **99.53** | **221** | IAMs_20 | IAMs_20 | 10 25 50.0 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **QRZ** | **Quartz Range** | **99.64** | **222** | IAMs_20 | IAMs_20 | 10 22 07.9 | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| **TNCH** | **TengChong** | **99.66** | **318** | P | **Pdif** | **09 45 28.1** | **-2.0** | |
| TNCH | | | | pP | sP | 09 45 32.8 | +0.6 | |
| TNCH | | | | PP | **PP** | **09 49 38.4** | **+5.1** | |
| TNCH | | | | SKS | **SKSac** | **09 56 11.0** | **+1.5** | |
| TNCH | | | | sS | sS | 09 57 06.9 | +0.3 | |
| TNCH | | | | SS | **SS** | **10 03 56.3** | **+2.8** | |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,27nm,0.6s | | | | | | | |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,130nm,5.1s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,1μm,18.4s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,1μm,19.4s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,2μm,25.3s | | | | | | | |
| **LHI** | **Lord Howe Isla** | **100.16** | **236** | IAMs_20 | IAMs_20 | 10 24 59.5 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **DSZ** | **Denniston Nort** | **100.70** | **221** | IAMs_20 | IAMs_20 | 10 23 34.8 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| **EIDS** | **Eidsvold** | **100.98** | **246** | IAMs_20 | IAMs_20 | 10 27 05.0 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **GVZ** | **Greta Valley S** | **101.05** | **220** | IAMs_20 | IAMs_20 | 10 25 04.1 | | |
| | comp=Z,4μm,20.0s | | | | | | | |
| **SHL** | **Shillong** | **102.23** | **324** | IAMs_20 | IAMs_20 | 10 30 25.8 | | |
| | comp=Z,4μm,22.0s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **102.35** | **14** | PP | **PP** | **09 49 53.7** | **+0.7** | |
| | comp=Z,0.3nm,0.3s,baz=15,slow=12,SNR=1.8 | | | | | | | |
| **RPZ** | **Rata Peaks** | **102.55** | **221** | IAMs_20 | IAMs_20 | 10 25 07.9 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **SAUI** | **Saumlaki** | **103.36** | **272** | IAMs_20 | IAMs_20 | 10 31 16.5 | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| **ARMA** | **Armidale** | **104.03** | **241** | IAMs_20 | IAMs_20 | 10 23 40.8 | | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **104.95** | **314** | Pdiff | **Pdif** | **09 45 53.4** | **-0.1** | |
| | comp=Z,0.5nm,0.3s,baz=15,slow=3.7,SNR=0.9 | | | | | | | |
| CMAR | | | | PKiKP | **PKiKP** | **09 50 07.3** | **-1.1** | |
| | comp=Z,1.1nm,0.3s,baz=347,slow=1.9,SNR=2.8 | | | | | | | |
| **MLZ** | **Mavora Lakes** | **105.18** | **221** | IAMs_20 | IAMs_20 | 10 26 01.5 | | |
| | comp=Z,4μm,22.0s | | | | | | | |
| **MG05** | **Puerto Natales** | **106.16** | **148** | IAMs_20 | IAMs_20 | 10 37 48.5 | | |
| | comp=Z,5μm,22.0s | | | | | | | |
| **MTN** | **Manton Dam** | **106.73** | **268** | IAMs_20 | IAMs_20 | 10 26 29.0 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **107.22** | **52** | Pdiff | **Pdif** | **09 46 04.2** | **+0.5** | |
| | comp=Z,0.3nm,0.8s,baz=296,slow=4.5,SNR=1.8 | | | | | | | |
| TORD | | | | PKiKP | **PKiKP** | **09 50 12.4** | **-0.3** | |
| | comp=Z,3.8nm,1.1s,baz=324,slow=4.3,SNR=2.6 | | | | | | | |
| TORD | | | | PKKPbc | **PKKPbc** | **10 01 25.5** | **-1.6** | |
| | comp=Z,1.4nm,1.0s,baz=170,slow=1.8,SNR=2.7 | | | | | | | |
| **DBIC** | **Dimbokro** | **108.31** | **61** | PKKPbc | PKKPbc | 10 01 21.5 | -2.2 | |
| | comp=Z,2.8nm,1.0s,baz=92,slow=12,SNR=2.0 | | | | | | | |
| **CAN** | **Canberra** | **108.91** | **239** | IAMs_20 | IAMs_20 | 10 30 59.3 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **109.04** | **260** | Pdiff | **Pdif** | **09 46 10.6** | **-0.9** | |
| | comp=Z,0.3nm,1.0s,baz=49,slow=5.1,SNR=1.8 | | | | | | | |
| WRA | | | | PKiKP | **PKiKP** | **09 50 14.3** | **-1.6** | |
| | comp=Z,2.2nm,0.9s,baz=33,slow=1.3,SNR=11 | | | | | | | |
| WRA | | | | PKKPbc | **PKKPbc** | **10 01 20.3** | **-1.3** | |
| | comp=Z,0.7nm,0.9s,baz=231,slow=2.8,SNR=2.9 | | | | | | | |
| WRA | | | | PKKPab | **PKKPab** | **10 01 29.9** | **-4.3** | |
| | comp=Z,1.8nm,1.0s,baz=231,slow=2.8,SNR=6.0 | | | | | | | |
| **KNRA** | **Kununurra** | **110.31** | **267** | IAMs_20 | IAMs_20 | 10 28 31.1 | | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **111.52** | **246** | PKiKP | **PKiKP** | **09 50 19.2** | **-1.1** | |
| | comp=Z,2.5nm,0.9s,baz=347,slow=5.9,SNR=3.5 | | | | | | | |
| STKA | | | | PKKPbc | **PKKPbc** | **10 01 12.8** | **-1.0** | |
| | comp=Z,1.7nm,0.9s,baz=304,slow=3.6,SNR=2.1 | | | | | | | |
| STKA | | | | PKKPab | **PKKPab** | **10 01 21.9** | **-0.3** | |
| | comp=Z,2.4nm,0.8s,baz=324,slow=12,SNR=4.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **111.72** | **258** | Pdiff | **Pdif** | **09 46 23.4** | **0.0** | |
| | comp=Z,0.3nm,0.9s,baz=45,slow=4.2,SNR=2.4 | | | | | | | |
| ASAR | | | | PKiKP | **PKiKP** | **09 50 19.8** | **-1.1** | |
| | comp=Z,2.2nm,0.9s,baz=47,slow=1.6,SNR=8.7 | | | | | | | |
| ASAR | | | | PP | **PP** | **09 51 01.8** | **-1.6** | |
| | comp=Z,2.0nm,1.0s,baz=54,slow=6.2,SNR=1.8 | | | | | | | |
| ASAR | | | | PKKPbc | **PKKPbc** | **10 01 14.2** | **+1.2** | |
| | comp=Z,2.1nm,0.8s,baz=231,slow=2.3,SNR=15 | | | | | | | |
| ASAR | | | | PKKPab | **PKKPab** | **10 01 21.4** | **-0.8** | |
| | comp=Z,5.5nm,0.7s,baz=229,slow=2.6,SNR=23 | | | | | | | |
| **ASCN** | **Ascension** | **112.38** | **79** | IAMs_20 | IAMs_20 | 10 31 22.8 | | |
| | comp=Z,5μm,21.0s | | | | | | | |
| **TOO** | **Toolangi** | **112.52** | **239** | IAMs_20 | IAMs_20 | 10 30 36.9 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **RAYN** | **Ar Rayn** | **113.06** | **7** | IAMs_20 | IAMs_20 | 10 48 42.3 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **PBA** | **Port Blair** | **113.86** | **316** | IAMs_20 | IAMs_20 | 10 36 20.4 | | |
| | comp=Z,3μm,22.0s | | | | | | | |
| **MBWA** | **Marble Bar** | **120.38** | **269** | IAMs_20 | IAMs_20 | 10 35 16.9 | | |
| | comp=Z,3μm,22.0s | | | | | | | |
| **FURI** | **Furi** | **126.45** | **17** | IAMs_20 | IAMs_20 | 10 53 07.3 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **SBA** | **Scott Base** | **127.29** | **194** | | **PKiKP** | **09 50 49.6** | **0.0** | |
| **SBA** | **Scott Base** | **127.29** | **194** | PKiKP | **PKiKP** | **09 50 49.6** | **0.0** | |
| **LODK** | **Lodwar** | **130.92** | **23** | IAMs_20 | IAMs_20 | 10 56 35.8 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **MBAR** | **Mbarara** | **133.21** | **30** | IAMs_20 | IAMs_20 | 10 53 21.1 | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **133.27** | **180** | IAMs_20 | IAMs_20 | 10 37 43.7 | | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **133.27** | **180** | PKhKP | PKPpre | 09 50 50.9 | | |
| | comp=Z,2.4nm,1.0s,baz=127,slow=0.9,SNR=6.5 | | | | | | | |
| QSPA | | | | PKP | **PKPdf** | **09 50 58.7** | **-2.1** | |
| | comp=Z,13nm,1.1s,baz=129,slow=0.7,SNR=16 | | | | | | | |
| QSPA | | | | SKPbc | **SKPbc** | **09 54 29.1** | **0.0** | |
| | comp=Z,4.7nm,1.1s,baz=147,slow=22,SNR=2.3 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **135.78** | **22** | PKP | **PKPdf** | **09 51 06.4** | **-1.0** | |
| | comp=Z,6.1nm,0.9s,baz=21,slow=3.2,SNR=8.1 | | | | | | | |
| KMBO | | | | SKPbc | **SKPbc** | **09 54 39.0** | **-0.2** | |
| | baz=270,slow=9.1 | | | | | | | |
| **KIBK** | **Kibwezi** | **137.15** | **21** | IAMs_20 | IAMs_20 | 11 00 04.5 | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **139.44** | **154** | ⇑PKPdf | **PKPdf** | **09 51 09.1** | **-3.0** | |
| | comp=Z,5.8nm,0.7s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **139.99** | **153** | ⇑PKPdf | **PKPdf** | **09 51 07.2** | **-5.9** | |
| | comp=Z,8.4nm,1.2s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **140.22** | **154** | ⇑PKPdf | **PKPdf** | **09 51 09.4** | **-4.1** | |
| | comp=Z,7.8nm,0.7s,baz=336,slow=3.9 | | | | | | | |
| **CASY** | **Casey** | **141.40** | **213** | | **PKPdf** | **09 51 15.4** | **-0.3** | |
| **CASY** | **Casey** | **141.40** | **213** | IAMs_20 | IAMs_20 | 10 42 22.0 | | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **SNAA** | **Sanae** | **141.47** | **155** | | PKPpre | 09 51 10.3 | | |
| SNAA | | | | IAMs_20 | IAMs_20 | 10 43 56.0 | | |
| | comp=Z,3μm,19.0s | | | | | | | |
| **SNAA** | **Sanae** | **141.47** | **155** | ⇑PKPdf | **PKPdf** | **09 51 10.6** | **-5.3** | |
| | comp=Z,108nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **141.47** | **155** | PKP | **PKPdf** | **09 51 13.6** | **-2.2** | |
| | comp=Z,6.6nm,1.0s,baz=248,slow=3.4,SNR=15 | | | | | | | |
| SNAA | | | | SKPbc | **SKPbc** | **09 54 53.5** | **+0.4** | |
| | comp=Z,1.2nm,0.8s,baz=301,slow=16,SNR=0.9 | | | | | | | |
| **TSUM** | **Tsumeb** | **142.22** | **61** | | **PKPdf** | **09 51 16.7** | **-2.2** | |
| **TROLL** | **Troll, Antarti** | **142.94** | **157** | ⇑PKPdf | **PKPdf** | **09 51 19.1** | **+0.5** | |
| | comp=Z,808nm,0.8s | | | | | | | |
| **LSZ** | **Lusaka** | **145.22** | **44** | | **PKPbc** | **09 51 22.7** | **-1.1** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LSZ** | **Lusaka** | **145.22** | **44** | PKIKP | **PKPbc** | **09 51 22.7** | **-1.1** | |
| LSZ | | | | MLR | MLR | | | |
| | comp=Z,5μm,19.0s | | | | | | | |
| **NVL** | **N'lazarevskaya** | **146.16** | **157** | *e*PKP2 | **PKPbc** | **09 51 24.5** | **-0.5** | |
| NVL | | | | *e* | | 09 54 48.5 | | |
| NVL | | | | *e*SS | SS | 10 14 16.9 | +34 | |
| NVL | | | | *e*SSS | SSS | 10 19 16.6 | | |
| **ELIB** | **Princess Elisa** | **148.23** | **163** | *d*PKPdf | **PKPdf** | **09 51 27.2** | **-0.3** | |
| ELIB | | | | *d*PP | **PP** | **09 55 02.1** | **+2.2** | |
| **BOSA** | **Boshof** | **153.79** | **64** | PKP | **PKPdf** | **09 51 36.2** | **-1.3** | |
| | comp=Z,7.7nm,0.8s,baz=220,slow=2.2,SNR=6.4 | | | | | | | |
| BOSA | | | | PKPbc | **PKPbc** | **09 51 44.6** | **-0.7** | |
| | comp=Z,27nm,0.9s,baz=312,slow=1.6,SNR=18 | | | | | | | |
| BOSA | | | | PP | **PP** | **09 55 32.5** | **-0.2** | |
| | comp=Z,4.4nm,1.1s,baz=329,slow=12,SNR=1.6 | | | | | | | |
| **OPO** | **Ambohidratompo** | **154.82** | **11** | PKP | **PKPdf** | **09 51 38.1** | **-1.1** | |
| | comp=Z,2.6nm,0.9s,baz=326,slow=20,SNR=1.7 | | | | | | | |
| OPO | | | | PKPbc | **PKPbc** | **09 51 46.3** | **-1.5** | |
| | comp=Z,7.2nm,0.9s,baz=80,slow=5.5,SNR=4.3 | | | | | | | |
| OPO | | | | PP | **PP** | **09 55 36.7** | **-0.8** | |
| | comp=Z,3.3nm,0.9s,baz=202,slow=20,SNR=2.3 | | | | | | | |
| **MAW** | **Mawson** | **155.14** | **190** | PKP | **PKPdf** | **09 51 36.0** | **-1.8** | |
| | comp=Z,7.3nm,1.1s,baz=292,slow=4.4,SNR=4.7 | | | | | | | |
| MAW | | | | PP | **PP** | **09 55 37.7** | **-1.3** | |
| | comp=Z,1.8nm,0.9s,baz=193,slow=6.1,SNR=1.3 | | | | | | | |

**IDC 22 09:35:06.0±3.1, 53.56N×87.79E, h0km, mbtmp2.8/2, ML2.6/2, Error ellipse: s-maj=26.6km s-min=16.7km az=50.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.80** | **284** | I | I | 09 46 50.0 | |
| | baz=98,slow=327,SNR=6.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.80** | **284** | Pg | Pb | 09 35 39.3 | -0.7 |
| | 1.0nm,0.3s,baz=102,slow=15,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 09 36 03.9 | |
| | 2.0nm,0.3s,baz=110,slow=24,SNR=7.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.42** | **246** | Pn | Pn | 09 36 41.9 | +0.1 |
| | 0.1nm,0.3s,baz=58,slow=14,SNR=4.3 | | | | | | |
| KURBB | | | | Sn | Sn | 09 37 54.3 | -1.4 |
| | baz=33,slow=32,SNR=0.9 | | | | | | |
| KURBB | | | | Lg | Lg | 09 38 29.7 | |
| | baz=61,slow=35,SNR=1.5 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.64** | **210** | Pn | Pn | 09 37 00.1 | +1.6 |
| | 0.1nm,0.3s,baz=29,slow=13,SNR=6.7 | | | | | | |
| MKAR | | | | Lg | Lg | 09 39 07.2 | |
| | 0.1nm,0.3s,baz=40,slow=30,SNR=6.4 0.1nm,0.2s | | | | | | |

*DJA **22** 09:51:12.8±0.3, 8°S×117°E, h10km, M3.9/8, mb4.7/1, MLv3.6/8*
*IDC **22** 09:51:13.5±2.1, 8.30S×117.08E, h0km, mb3.3/3, mbtmp3.4/4, ML2.8/1, Error ellipse: s-maj=43.3km s-min=26.3km az=61.0*
**ISC 22 09:51:13.1±0.8, 8°28S±0.07×116°80E±0.04, h10km, n11, σ1§23/15, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.46** | **169** | P | **Pg** | **09 51 22.5** | **+0.3** |
| **PLAI** | **Plampang** | **1.11** | **119** | P | **Pb** | **09 51 33.7** | **-0.8** |
| PLAI | | | | S | **Sb** | **09 51 48.7** | **-0.3** |
| **SRBI** | **Singaraja** | **1.58** | **277** | P | **Pn** | **09 51 40.8** | **-0.4** |
| SRBI | | | | S | **Sg** | **09 52 02.8** | **-1.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.62** | **266** | P | **Pn** | **09 51 55.0** | **-0.6** |
| JAGI | | | | S | **Sn** | **09 52 26.4** | **-1.1** |
| **WBSI** | **Waikabubak, Su** | **2.90** | **118** | P | **Pn** | **09 51 59.9** | **+0.5** |
| **BSSI** | **Bau Bau, Buton** | **4.24** | **60** | P | **Pn** | **09 52 16.9** | **-0.9** |
| **KAPI** | **Kappang** | **4.38** | **42** | Pn | **Pn** | **09 52 19.0** | **-0.7** |
| | 0.6nm,0.3s,baz=46,slow=13,SNR=1.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | **09 53 10.0** | **-0.8** |
| | 1.3nm,0.3s,baz=61,slow=21,SNR=1.9 4.1nm,0.8s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.95** | **273** | P | **Pn** | **09 52 27.2** | **-0.4** |
| **WRA** | **Warramunga Arr** | **20.56** | **126** | P | **P** | **09 55 51.6** | **-0.6** |
| | 0.4nm,0.5s,baz=300,slow=12,SNR=15 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.42** | **135** | P | **P** | **09 56 11.7** | **-0.6** |
| | 0.3nm,0.7s,baz=312,slow=10,SNR=4.2 0.3nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.88** | **327** | P | **P** | **09 57 42.2** | **+3.3** |
| | 0.7nm,0.3s,baz=142,slow=9.0,SNR=1.1 0.7nm,0.3s | | | | | | |

*NEIC **22** 09:54:33.5±0.5, 0.2N±0.2×121.9E±0.3, h161km±5km, mb4.2/11, Error ellipse: s-maj=49.8km s-min=7.6km az=49.0*
*DJA **22** 09:54:34.3±1.0, 0°N±4°×122°2E±°, h135km±10km, M3.5/6, MLv3.5/6*
*IDC **22** 09:54:35.5±10.0, 0.23N×122.01E, h192km±107km, mb3.3/5, mbtmp3.7/5, MS4.0/1, Error ellipse: s-maj=123.1km s-min=18.7km az=64.0*
**ISC 22 09:54:32.5±0.8, 0.36N±0.07×122.05E±0.06, h158km±7km, n24, σ0§77/29, mb4.1/10, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **0.16** | **316** | P | **Pn** | **09 54 53.7** | **0.0** |
| **GTOI** | **Gorontalo** | **0.99** | **74** | P | **Pn** | **09 54 57.7** | **-0.3** |
| **TOLI2** | **Tolitoli** | **1.47** | **300** | | **Pn** | **09 55 03.1** | **+0.7** |
| TOLI2 | | | | Sn | **Sn** | **09 55 24.1** | **-1.3** |
| **LUWI** | **Luwuk** | **1.57** | **153** | | **Pn** | **09 55 04.4** | **+1.0** |
| LUWI | | | | Sn | **Sn** | **09 55 27.4** | **+0.3** |
| **LUWI** | **Luwuk** | **1.57** | **153** | P | **Pn** | **09 55 04.1** | **+0.7** |
| LUWI | | | | S | **Sn** | **09 55 26.8** | **-0.3** |
| **KMSI** | **Cibinong** | **1.94** | **84** | P | **Pn** | **09 55 08.4** | **+1.0** |
| KMSI | | | | S | **Sn** | **09 55 34.5** | **+0.3** |
| **MPSI** | **Mapaga** | **2.16** | **269** | P | **Pn** | **09 55 11.1** | **+1.2** |
| **MTN** | **Manton Dam** | **15.91** | **146** | | **P** | **09 58 08.3** | **0.0** |
| MTN | | | | IAmb | IAmb | 09 58 28.4 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **17.26** | **158** | P | **Pn** | **09 58 23.7** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 09 58 42.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **SSLB** | **Suanglung** | **23.31** | **357** | P | **P** | **09 59 27.4** | **+1.0** |
| **WB0** | **Warramunga Arr** | **23.38** | **150** | P | **P** | **09 59 25.6** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 09 59 28.3 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.49** | **150** | P | **P** | **09 59 28.1** | **-0.1** |
| **WRA** | **Warramunga Arr** | **23.50** | **150** | P | **P** | **09 59 27.4** | **-0.8** |
| | comp=Z,0.5nm,0.8s,baz=326,slow=11,SNR=7.0 | | | | | | |
| WRA | | | | LR | LR | 10 10 07.6 | |
| | comp=Z,381nm,20.8s,baz=21,slow=40 comp=Z,0.5nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.50** | **150** | P | **P** | **09 59 27.9** | **-0.4** |
| **WR0** | **Warramunga Arr** | **23.61** | **149** | P | **P** | **09 59 29.0** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 09 59 35.2 | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **26.51** | **155** | P | **P** | **09 59 54.6** | **-0.9** |
| | comp=Z,0.4nm,0.9s,baz=342,slow=15,SNR=1.3 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 03 14.7** | **-1.7** |
| | comp=Z,0.4nm,0.9s,baz=351,slow=2.6,SNR=1.5 | | | | | | |
| **SONM** | **Songino Array** | **49.20** | **346** | P | **P** | **10 03 05.2** | **+0.4** |
| | comp=Z,0.7nm,0.5s,baz=167,slow=8.8,SNR=4.5 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **57.81** | **329** | P | **P** | **10 04 07.5** | **+0.1** |
| MK31 | | | | IAmb | IAmb | 10 04 08.3 | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.81** | **329** | P | **P** | **10 04 07.8** | **+0.4** |
| **MKAR** | **Makanchi Array** | **57.81** | **329** | P | **P** | **10 04 07.7** | **+0.3** |
| | comp=Z,2.1nm,0.4s,baz=125,slow=9.0,SNR=27 | | | | | | |
| | comp=Z,2.1nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **57.99** | **329** | P | **P** | **10 04 09.0** | **+0.4** |
| MAKZ | | | | IAmb | IAmb | 10 04 09.1 | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **KBL** | **Kabul** | **59.99** | **310** | P | **P** | **10 04 22.8** | **0.0** |
| KBL | | | | IAmb | IAmb | 10 04 41.0 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.18** | **330** | P | **P** | **10 04 36.8** | **-0.2** |
| | comp=Z,0.6nm,0.3s,baz=123,slow=5.7,SNR=8.1 comp=Z,0.6nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **62.20** | **330** | P | **P** | **10 04 37.1** | **0.0** |

**IDC 22 10:01:08.3±25.0, 18.09S×178.61E, h650km±274km, mb3.1/4, mbtmp4.2/4, Error ellipse: s-maj=207.7km s-min=64.5km az=52.0, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **30.61** | **261** | P | | 10 06 32.9 | 0.0 |
| | 0.1nm,0.4s,baz=80,slow=9.0,SNR=2.7 | | | | | | |
| **STKA** | **Stephens Creek** | **36.06** | **240** | P | P | 10 07 17.9 | -0.2 |
| | 2.0nm,0.6s,baz=95,slow=9.8,SNR=9.2 2.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.80** | **260** | P | P | 10 08 04.3 | +0.1 |
| | 1.1nm,0.5s,baz=92,slow=6.8,SNR=62 1.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **42.00** | **255** | P | P | 10 08 06.0 | +0.2 |
| | 7.9nm,0.5s,baz=89,slow=8.4,SNR=167 7.9nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.96** | **180** | P | P | 10 11 28.3 | +0.3 |
| | 1.3nm,1.1s,baz=51,slow=2.5,SNR=3.4 1.3nm,1.1s | | | | | | |

*TIR **22** 10:06:54.7, 37°71N×21°94E, h21km±1km, Ml4.0*
*IDC **22** 10:07:02.8±1.0, 38°37N×21°79E, h0km, mb3.9/12, mbtmp3.9/15, ML3.8/2, Error ellipse: s-maj=19.2km s-min=17.0km az=156.0*
*THE **22** 10:07:03.9, 38°30N×21°85E, h0km±1km, ML3.9/17, Error ellipse: s-maj=1.4km s-min=0.4km az=242.0*
*ATH **22** 10:07:03.5, 38°30N×21°80E, h4km±2km, ML3.7/21, Error ellipse: s-maj=2.0km s-min=0.7km az=354.0*
*PDG **22** 10:07:03.2±1.6, 38°38N×21°90E, h13km±11km, ML4.3/11, Error ellipse: s-maj=37.0km s-min=6.9km az=90.0*
*UPSL **22** 10:07:03.5, 38°30N×21°80E, h4km, Mw3.9, Moment Tensor Solution. s5 Moment tensor: Mrr=5.76; Mθθ=6.94; Mφφ=1.18; Mrθ=1.72; Mrφ=0.90; Mθφ=3.96; Fault plane solution: NP1:φs=109.00000°, δ=42.00000°, λ=-47.00000°. NP2: φs=237.00000°, δ=61.00000°, λ=-122.00000°.*
*BEO **22** 10:07:04.3±0.8, 38°27N×22°08E, h0km, ML3.5/11*
*NEIC **22** 10:07:05.4±1.9, 38°30N±0°06×21°81E±0°07, h10km±2km, mb4.3/8, Error ellipse: s-maj=11.7km s-min=9.2km az=212.0*
*AFAD **22** 10:07:15.0±0.0, 38°59N×23°08E, h7km±2km, MW4.1*
*NAO **22** 10:07:26.6, 40°12N×20°62E, h33km, mb3.7*
**ISC 22 10:07:03.6±0.8, 38°29N±0°02×21°85E±0°02, h5km±5km, n235, σ1§52/284, mb4.2/17, 12C-9D, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UPR** | **University Cam** | **0.05** | **266** | P | **Pg** | **10 07 04.5** | **-0.5** |
| UPR | | | | S | **Sg** | **10 07 05.7** | **-0.2** |
| **EFP** | **Efpalio** | **0.15** | **17** | P | **Pg** | **10 07 06.7** | **+0.1** |
| EFP | | | | S | **Sg** | **10 07 08.9** | **+0.4** |
| | 142μm,0.5s | | | | | | |
| **EFP** | **Efpalio** | **0.15** | **17** | P | **Pg** | **10 07 06.7** | **+0.1** |
| EFP | | | | S | **Sg** | **10 07 09.5** | **+1.0** |
| EFP | | | | AML | AML | 10 07 09.5 | |
| EFP | | | | AML | AML | 10 07 10.8 | |
| **ANX** | **Ano Chora** | **0.31** | **10** | P | **Pg** | **10 07 09.6** | **-0.1** |
| ANX | | | | S | **Sg** | **10 07 14.1** | **+0.3** |
| | 73μm,0.6s | | | | | | |
| **ANX** | **Ano Chora** | **0.31** | **10** | P | **Pg** | **10 07 09.5** | **-0.1** |
| ANX | | | | S | **Sg** | **10 07 14.5** | **+0.6** |
| ANX | | | | AML | AML | 10 07 15.4 | |
| ANX | | | | AML | AML | 10 07 15.5 | |
| **KLV** | **Kalavryta, Ach** | **0.34** | **136** | P | **Pg** | **10 07 11.0** | **+0.8** |
| KLV | | | | S | **Sg** | **10 07 15.8** | **+1.2** |
| | 11μm,0.4s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **0.34** | **136** | P | **Pg** | **10 07 10.8** | **+0.6** |
| KLV | | | | S | **Sg** | **10 07 15.8** | **+1.2** |
| **PVO** | **Paravola** | **0.42** | **322** | P | **Pg** | **10 07 11.1** | **-0.6** |
| PVO | | | | S | **Sg** | **10 07 18.0** | **+0.9** |
| | 50μm,0.3s | | | | | | |
| **PVO** | **Paravola** | **0.42** | **322** | P | **Pg** | **10 07 10.8** | **-0.8** |
| PVO | | | | S | **Sg** | **10 07 16.3** | **-0.8** |
| **GUR** | **Goura** | **0.52** | **132** | P | **Pg** | **10 07 14.2** | **+0.6** |
| GUR | | | | S | **Sb** | **10 07 22.2** | **-0.9** |
| | 38μm,0.4s | | | | | | |
| **GUR** | **Goura** | **0.52** | **132** | P | **Pg** | **10 07 13.8** | **+0.2** |
| GUR | | | | S | **Sg** | **10 07 21.7** | **+1.3** |
| GUR | | | | AML | AML | 10 07 23.4 | |
| GUR | | | | AML | AML | 10 07 24.2 | |
| | comp=E,46325μm,0.3s | | | | | | |
| **DLFA** | **Delphi** | **0.54** | **69** | P | **Pg** | **10 07 13.9** | **-0.1** |
| **EVR** | **Evrytania** | **0.63** | **357** | P | **Pg** | **10 07 16.1** | **+0.4** |
| EVR | | | | S | **Sg** | **10 07 24.4** | **+0.5** |
| | comp=E,9μm,0.7s | | | | | | |
| **EVR** | **Evrytania** | **0.63** | **357** | P | **Pg** | **10 07 15.8** | **+0.1** |
| EVR | | | | S | **Sg** | **10 07 23.8** | **-0.1** |
| EVR | | | | AML | AML | 10 07 31.6 | |
| | comp=E,20134μm,0.8s | | | | | | |
| EVR | | | | AML | AML | 10 07 34.7 | |
| | comp=N,14752μm,0.7s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.76** | **17** | P | **Pg** | **10 07 17.8** | **-0.3** |
| MAKR | | | | S | **Sb** | **10 07 29.9** | **0.0** |
| | comp=N,14μm,0.6s | | | | |

comp=E,6258µm,0.5s
**PYL PYLOS 1.39 184** P Pn **10 07 29.1 -0.5**
**PYL PYLOS 1.39 184** P Pn **10 07 28.8 -0.8**
PYL AML AML 10 08 01.2
comp=E,3941µm,0.6s
PYL AML AML 10 08 02.8
comp=N,4243µm,1.0s
**TYRN Tyrnavos 1.45 12** P Pn **10 07 30.1 -0.3**
**TYRN Tyrnavos 1.45 12** P Pn **10 07 28.7 -1.8**
TYRN AML AML 10 07 51.7
comp=E,6883µm,0.6s
TYRN AML AML 10 07 54.4
comp=N,3867µm,0.8s
**ATH Athens Observa 1.50 101** P Pn **10 07 31.4 +0.3**
ATH S Sg **10 07 53.4 +1.5**
comp=N,3µm,1.1s
**ATH Athens Observa 1.50 101** P Pn **10 07 31.6 +0.4**
ATH AML AML 10 07 54.0
comp=N,2952µm,0.4s
ATH AML AML 10 08 09.2
comp=E,3619µm,0.9s
**ATHU Athens Univers 1.56 101** P Pn **10 07 32.0 +0.1**
ATHU S Sb **10 07 53.0 +0.2**
**ATHU Athens Univers 1.56 101** P Pn **10 07 32.0 +0.1**
ATHU AML AML 10 07 55.2
comp=N,1806µm,0.4s
ATHU AML AML 10 07 57.7
comp=E,564µm,0.5s
**DION Dionisos Attik 1.65 97** P Pb **10 07 34.7 +0.2**
**DION Dionisos Attik 1.65 97** P Pb **10 07 34.1 -0.4**
DION AML AML 10 07 58.6
comp=N,4932µm,0.5s
DION AML AML 10 07 59.0
comp=E,11683µm,0.5s
**IGT Igoumenitsa 1.72 317** P Pn **10 07 34.4 +0.2**
baz=326
IGT S Sg **10 08 03.8 +5.0**
baz=326
IGT AMP
comp=E,2.6nm,1.1s,baz=326
**IGT Igoumenitsa 1.72 317** P Pb **10 07 35.1 -0.5**
**IGT Igoumenitsa 1.72 317** *e*Pn Pg **10 07 36.6 +0.1**
IGT *e*Sn Sg **10 08 02.9 +4.1**
**IGT Igoumenitsa 1.72 317** P Pn **10 07 31.8 -2.3**
IGT AML AML 10 08 08.7
comp=E,1302µm,1.2s
IGT AML AML 10 08 15.3
comp=N,1369µm,0.9s
**VLI Veliai 1.79 151** P Pn **10 07 35.8 +0.8**
**VLI Veliai 1.79 151** P Pn **10 07 35.4 +0.4**
VLI AML AML 10 08 10.7
comp=N,3410µm,0.7s
VLI AML AML 10 08 13.3
comp=E,2918µm,0.9s
**KYMI Kymi, Euboea I 1.80 78** P Pn **10 07 35.1 -0.1**
**KYMI Kymi, Euboea I 1.80 78** P Pn **10 07 35.0 -0.1**
KYMI AML AML 10 08 16.2
comp=E,1005µm,0.6s
KYMI AML AML 10 08 17.7
comp=N,1746µm,0.8s
**PENT Pentalofos 1.98 344** P Pb **10 07 39.6 -0.6**
**KTI Kastanea 2.11 5** P Pn **10 07 40.7 +1.0**
**KEK Kerkira 2.14 312** Pn Pn **10 07 41.1 +1.2**
**KEK Kerkira 2.14 312** P Pn **10 07 40.8 +0.9**
**KEK Kerkira 2.14 312** P Pn **10 07 39.0 -1.0**
KEK AML AML 10 08 19.1
comp=E,825µm,0.7s
KEK AML AML 10 08 29.1
comp=N,1750µm,0.9s
**SRN Sarande 2.15 318** P Pn **10 07 40.9 +1.0**
baz=326
SRN S Sg **10 08 14.1 +1.6**
baz=326
SRN AMP
comp=E,1.1nm,0.8s,baz=326
**SRN Sarande 2.15 318** P Pn **10 07 41.1 +1.1**
**PAIG Paliouri 2.17 40** P Pn **10 07 39.5 -0.8**
**SKY Skiros Island 2.19 74** P Pn **10 07 41.2 +0.5**
**NEST Nestorio 2.21 344** P Pb **10 07 43.3 -0.8**
**KTHA Kythira Island 2.25 154** P Pn **10 07 43.1 +1.8**
**KTHA Kythira Island 2.25 154** P Pn **10 07 42.1 +0.8**
KTHA AML AML 10 08 24.1
comp=E,2016µm,1.0s
KTHA AML AML 10 08 28.9
comp=N,1583µm,0.7s
**KBN Korca 2.48 341** Pn **10 07 46.1 +1.5**
**KBN Korca 2.48 341** P Pn **10 07 46.4 +1.8**
baz=344
KBN S Sg **10 08 24.7 +1.6**
baz=344
KBN AMP
comp=E,2.2nm,0.8s,baz=344
**THE Thessaloniki 2.50 20** P Pn **10 07 44.3 -0.5**
**HORT Hortiatis 2.50 22** P Pn **10 07 44.0 -1.0**
**HORT Hortiatis 2.50 22** P Pn **10 07 44.3 -0.7**
HORT AML AML 10 08 27.5
comp=E,234µm,0.6s
HORT AML AML 10 08 27.9
comp=N,337µm,0.8s
**FNA Florina 2.52 352** Pn **10 07 46.8 +1.6**
**FNA Florina 2.52 352** P Pn **10 07 47.1 +1.8**
baz=353
FNA S Sg **10 08 24.0 -0.5**
baz=353
FNA AMP
comp=E,0.9nm,0.7s,baz=353
**FNA Florina 2.52 352** P Pn **10 07 46.7 +1.5**
**FNA Florina 2.52 352** *e*Pn Pn **10 07 47.0 +1.8**
FNA *e*Sn Sb **10 08 19.3 -1.3**
**FNA Florina 2.52 352** P Pn **10 07 43.2 -2.0**
FNA AML AML 10 08 28.6
comp=E,1294µm,0.7s
FNA AML AML 10 08 29.0
comp=N,1104µm,0.6s
**MHLO Agia Marina, M 2.58 127** P Pn **10 07 47.0 +1.1**
**OUR Ouranopolis 2.63 38** P Pn **10 07 46.3 -0.3**
**OUR Ouranopolis 2.63 38** P Pn **10 07 45.9 -0.7**
**ANKY Antikythira Is 2.68 154** P Pn **10 07 49.4 +2.1**
**ANKY Antikythira Is 2.68 154** P Pn **10 07 47.7 +0.4**
**SOH Sokhos 2.79 24** P Pn **10 07 48.9 +0.1**
**VLO Vlora 2.84 321** Pn **10 07 50.6 +1.1**
**VLO Vlora 2.84 321** P Pn **10 07 50.6 +1.1**
baz=327
**OHR Ohrid 2.94 344** *i* Pn Pb **10 07 54.3 -2.0**
**KNT Kendrikon 2.98 15** P Pn **10 07 51.7 +0.2**
**KOKK Kokkinochori, 3.02 33** P Pn **10 07 51.3 -0.7**
**LIA Limnos Island 3.05 57** P Pn **10 07 51.9 -0.5**
**VAY Valandovo 3.08 10** *i* Pn Pn **10 07 55.5 +2.7**
**RODP Rodopos 3.12 150** P Pn **10 07 54.6 +1.2**
**SRS Serrai 3.13 25** P Pn **10 07 53.5 0.0**
**SRS Serrai 3.13 25** *e*Pn Pn **10 07 53.7 +0.2**
SRS *e*Sn Sn **10 08 31.8 +0.6**
**APE Apeiranthos 3.16 111** P Pn **10 07 54.5 +0.5**
**APE Apeiranthos 3.16 111** ⇑P Pn **10 07 55.0 +1.0**
**SCTE Santa Cesarea 3.18 305** Pn Pn **10 07 54.3 +0.2**
**SCTE Santa Cesarea 3.18 305** P Pn **10 07 54.4 +0.2**
baz=313
**THAS Thassos island 3.21 43** P Pn **10 07 53.1 -1.5**
**SIGR SIGRI 3.26 72** P Pn **10 07 55.2 -0.1**
**IMMV Iera Moni Meta 3.30 148** P Pn **10 07 58.2 +2.4**
**KAVA Kavala 3.40 36** P Pn **10 07 56.3 -0.9**
**TIR Tirane 3.42 334** Pn **10 07 59.2 +1.7**
**TIR Tirane 3.42 334** P Pn **10 07 59.2 +1.7**
baz=337
**TIR Tirane 3.42 334** ⇓P Pg **10 08 08.0 -1.1**
**NVR Nevrokopi 3.43 26** P Pn **10 07 58.9 +1.3**
**SANT Santorini 3.45 123** Pn Pn **10 08 00.0 +2.0**
**PRK Paraskevi 3.58 73** P Pn **10 07 59.6 -0.1**
**KARB zmir-Karabur 3.60 83** P Pn **10 07 59.7 -0.2**
**ZEYE Izmir, Urla-Ze 3.66 89** P Pn **10 08 01.9 +1.2**
ZEYE S Sn **10 08 40.2 -4.1**
**URLA Izmir 3.73 87** P Pn **10 08 02.4 +0.6**
**IDI Anoyia 3.86 140** Pn Pn **10 08 05.4 +1.8**
**IDI Anoyia 3.86 140** P Pn **10 08 05.0 +1.4**
**IDI Anoyia 3.86 140** Pn Pn **10 08 05.5 +1.9**
comp=N,13nm,0.5s,baz=329,slow=12,SNR=14
IDI Sn Sn **10 08 49.3 -0.1**
comp=N,4.0nm,0.3s,baz=157,slow=20,SNR=3.7
**BAYC CANAKKALE_Bayr 3.93 67** P Pn **10 08 04.2 -0.4**
**PUK Puka 4.04 339** Pn Pn **10 08 07.4 +1.3**
**PUK Puka 4.04 339** P Pn **10 08 08.9 +2.8**
baz=341
PUK AMP
comp=N,0.5nm,0.7s,baz=341

**TIP Timpagrande 4.08 284** Pn Pn **10 08 06.6 -0.1**
**TIP Timpagrande 4.08 284** ⇓P Pn **10 08 07.6 +0.9**
**ALN Alexandroupoli 4.16 50** Pn Pn **10 08 08.8 +1.2**
**BUHA Balikesir, Bur 4.25 72** P Pn **10 08 09.4 +0.4**
**BCI Bajram Curri 4.30 342** P Pn **10 08 12.1 +2.5**
baz=344
**DRME Dracevica, Mon 4.40 333** *e*Pn Pn **10 08 11.6 +0.7**
**DRME Dracevica, Mon 4.40 333** ⇑*i*Pn Pn **10 08 11.0 +0.1**
DRME *i* Sn Sn **10 09 04.9 +2.4**
**NOCI Noci 4.47 306** P Pn **10 08 12.7 +0.8**
baz=311
**BODT Bodrum 4.50 104** P Pn **10 08 13.8 +1.4**
**BARS Barje 4.53 360** *e*Pn Pn **10 08 13.9 +1.2**
BARS *e*Sn Sn **10 09 06.8 +1.2**
**PVY Plav 4.54 342** ⇑*i*Pn Pn **10 08 16.7 +3.7**
PVY *i* Sn Sn **10 09 08.9 +2.7**
**PDG Podgorica 4.59 335** *e*Pn Pn **10 08 18.1 +4.6**
**PDG Podgorica 4.59 335** *e*Pn Pn **10 08 13.6 +0.1**
PDG *i* Sn Sn **10 09 08.4 +1.2**
**BUM Brajici-Budva 4.60 331** ⇑*i*Pn Pn **10 08 12.7 -1.1**
BUM *i* Sn Sn **10 09 08.7 +1.0**
**CEL Celeste 4.69 272** Pn Pn **10 08 16.4 +1.4**
**BALY Balya 4.72 70** P Pn **10 08 15.7 +0.2**
**IZMR zmir-demi 4.81 90** P Pn **10 08 18.0 +1.5**
IZMR S Sn 10 09 00.9 -12
**CEME Cevo 4.81 333** ⇓*i*Pn Pn **10 08 14.7 -1.9**
CEME *i* Sn Sn **10 09 10.3 -2.4**
**DAT Datca 4.81 107** P Pn **10 08 18.5 +1.8**
**IVA Berane 4.82 343** ⇑*i*Pn Pn **10 08 17.1 +0.3**
IVA *i* Sn Sn **10 09 14.7 +1.7**
**KOME Kolasin 4.89 339** ⇑*i*Pn Pn 10 08 23.1 +5.3
KOME *i* Sn Sg **10 09 46.1 +5.4**
**BKES Balkesir-Mer 4.95 71** P Pn **10 08 19.4 +0.9**
**SELS Selova 4.96 354** *e*Pn Pn **10 08 20.0 +1.3**
SELS *e*Sn Sn **10 09 16.5 +0.1**
**NKME Niksic 4.99 335** ⇓*i*Pn Pn **10 08 20.4 +1.3**
NKME *i* Sn Sn **10 09 17.5 +0.3**
**BLKS Balkesir-Sus 5.02 70** P Pn **10 08 20.2 +0.7**
**ZAPS Zavoj 5.02 7** *e*Pn Pn **10 08 21.0 +1.5**
**ESEN Aydn-Nazilli 5.15 93** P Pn **10 08 22.5 +1.2**
ESEN S Sn 10 09 08.5 -13
**KIRA zmir-Kiraz 5.16 89** P Pn **10 08 23.6 +2.1**
**TREB Trebinje 5.17 330** *e*Pn Pn **10 08 20.1 -1.4**
**SJES Sjenica 5.17 345** *e*Pn Pn **10 08 24.6 +3.0**
**SJES Sjenica 5.17 345** *e*Pn Pn **10 08 22.9 +1.3**
**BRY Bratogost 5.25 332** *e*Pn Pn **10 08 22.4 -0.4**
**BRY Bratogost 5.25 332** ⇑*i*Pn Pn **10 08 26.7 +3.9**
BRY *i* Sn Sn **10 09 24.7 +0.9**
**MANT Manisa 5.27 86** P Pn **10 08 24.2 +1.1**
MANT S Sn **10 09 16.0 -8.4**
**DURS Dursunbey 5.33 74** P Pn **10 08 24.8 +1.0**
DURS S Sn 10 09 15.7 -10
**BOVS Bovan 5.34 359** ⇑P Pn **10 08 22.9 -1.1**
**KULA Kula-Manisa 5.35 85** P Pn **10 08 25.6 +1.5**
**PLE Pljevlja 5.37 340** ⇑*i*Pn Pn **10 08 23.8 -0.6**
PLE *i* Sn Sn **10 09 27.9 +1.2**
**UPM Unac-Piva 5.40 336** *e*Pn Pn **10 08 26.5 +1.7**
**UPM Unac-Piva 5.40 336** ⇓*i*Pn Pn **10 08 26.3 +1.5**
UPM *i* Sn Sn **10 09 27.8 +0.4**
**IVAS Ivanjica 5.44 347** *e*Pn Pn **10 08 25.9 +0.6**
IVAS *e*Sn Sn **10 09 28.6 +0.4**
**ZAGS Zajecar 5.53 3** *e*Pn Pn **10 08 26.9 +0.5**
**ELND Elena 5.55 32** ⇓P Pn **10 08 26.9 +0.1**
**STON Ston 5.56 327** *e*Pn Pn **10 08 25.7 -1.5**
**RUDO Rudo 5.65 341** *e*Pn Pn **10 08 26.6 -1.5**
**GRUS Gruza 5.66 352** *e*Pn Pn **10 08 29.8 +1.5**
**SGRT San Giovanni R 5.83 308** Pn Pn **10 08 29.9 -0.7**
**SGRT San Giovanni R 5.83 308** P Pn **10 08 30.7 0.0**
baz=313
**BBLS Lazi&#263i 5.87 342** *e*Pn Pn 10 08 20.9 -10
**DIVS Divibare 5.97 347** *e*Pn Pn **10 08 33.1 +0.5**
DIVS *e*Sn Sn **10 09 40.0 -1.4**
**RAFF Raffo Rosso 6.03 262** Pn Pn **10 08 35.0 +1.6**
**TRUS Trudelj 6.03 350** *e*Pn Pn **10 08 33.8 +0.4**
**HAPS Han Pijesak,BI 6.19 340** *e*Pn Pn **10 08 34.1 -1.6**
**PAOL Paolisi 6.25 298** Pn Pn **10 08 37.1 +0.6**
**TEKS Tekeris 6.50 345** *e*Pn Pn **10 08 39.0 -0.8**
**FRGS Fruska Gora 7.03 348** *e*Pn Pn **10 08 48.7 +1.6**
**INTR Introdacqua 7.13 304** Pn Pn **10 08 49.6 +1.0**
**BLY Banja Luka 7.34 333** *e*Pn Pn **10 08 51.7 +0.3**
**A050A Klekovaca 7.37 329** *e*Pn Pn **10 08 50.0 -1.8**
**VOIR 7.53 17** ⇓P Pn **10 08 55.7 +1.6**
**MDUB Mudurnu 7.56 70** Pn Pn **10 08 55.9 +1.4**
**A051A Mrakovica 7.67 333** *e*Pn Pn **10 08 51.2 -4.7**
**CAMP Campotosto 7.71 306** Pn Pn **10 08 57.1 +0.6**
**MLR Muntele Rosu 7.82 22** Pn Pn **10 08 59.5 +1.5**
**MLR Muntele Rosu 7.82 22** Pn Pn **10 09 00.4 +2.4**
comp=N,0.5nm,0.3s,baz=241,slow=10,SNR=6.7
comp=N,3.8nm,0.5s
**MLR Muntele Rosu 7.82 22** ⇓P Pn **10 09 00.3 +2.3**
**NEHR Nehoiu 7.87 23** ⇑P Pn **10 09 00.8 +2.2**
**NRCA Norcia 8.05 307** Pn Pn **10 09 01.7 +0.5**
**DOPO Dopca 8.11 18** ⇓P Pn 10 09 52.4 -10
**FDMO Fiumicomte 8.18 308** Pn Pn **10 09 03.5 +0.6**
**PLOR Plostina 8.36 24** ⇑P Pn **10 09 08.3 +3.0**
**VRI Vrincioaia 8.39 24** ⇑P Pn **10 09 08.0 +2.2**
**BOJS Bojanci 8.73 328** *e*Pn Pn **10 09 08.8 -1.6**
**CEY Cerknica 9.27 326** *e*Pn Pn **10 09 16.5 -1.3**
**BR131 Keskin Array S 9.29 77** Pn Pn **10 09 19.9 +1.7**
**BRTR Keskin Array B 9.29 77** Pn Pn **10 09 20.3 +2.1**
**BRTR Keskin Array B 9.29 77** Pn Pn **10 09 20.7 +2.5**
comp=N,0.5nm,0.3s,baz=259,slow=13,SNR=19
comp=N,1.9nm,0.5s
**SKDS Skadanscina 9.31 324** *e*Pn Pn **10 09 14.7 -3.7**
**PSZ Piszkesteto 9.73 352** Pn Pn **10 09 27.3 +3.1**
**SOKA Soboth 9.78 331** *e*Pn Pn **10 09 24.1 -0.8**
comp=N,2.2nm,0.6s
**SABO M.te Sabotino 9.83 324** Pn Pn **10 09 24.9 -0.6**
**OBKA Obir 9.83 329** *e*Pn Pn 10 09 20.1 -5.4
**PRED Cave del Predi 10.19 326** Pn Pn **10 09 30.0 -0.5**
**STAL STALIGIAL 10.45 323** Pn Pn **10 09 33.5 -0.5**
**CTI Castel Tesino 10.83 319** Pn Pn **10 09 37.6 -1.7**
**FUORN Ofenpass-Fuorn 11.93 318** Pn Pn **10 09 55.2 +0.7**
**MMAI Mount Meron Ar 12.21 111** Pn Pn **10 10 02.1 +3.9**
comp=N,1.5nm,0.3s,baz=302,slow=16,SNR=2.2
**SENIN Lac Senin/Sane 13.44 312** Pn Pn **10 10 16.2 +1.2**
**NACGM Naroch 16.96 10** *e*P Pn **10 11 02.0 +0.7**
comp=Z,224nm,0.9s,baz=194
**ESDC Sonseca Array 20.10 282** P P **10 11 38.4 +0.3**
comp=Z,3.7nm,0.8s,baz=76,slow=11,SNR=19
comp=Z,3.7nm,0.8s
**PAB San Pablo 20.41 282** P P **10 11 41.4 0.0**
**HFS Hagfors 22.47 349** P P **10 12 01.7 -1.6**
comp=Z,2.4nm,0.4s,baz=159,slow=9.5,SNR=17
comp=Z,2.4nm,0.4s
**FINES FINESS Array B 23.33 5** P P **10 12 10.3 -1.9**
comp=Z,2.7nm,0.8s,baz=167,slow=9.2,SNR=6.5
comp=Z,2.7nm,0.8s
**NC405 NORSAR Array S 23.71 348** P P **10 12 14.6 -1.5**
NC405 lAmb lAmb 10 12 48.2
comp=Z,12nm,1.1s
**NB2 NORSAR Subarra 23.73 347** P P **10 12 14.7 -1.6**
comp=Z,2.8nm,0.7s,baz=160,slow=11
**NOA NORSAR Array B 23.73 347** P P **10 12 14.5 -1.8**
comp=Z,1.6nm,0.8s,baz=156,slow=8.3,SNR=7.5
comp=Z,1.6nm,0.8s
**EKA Eskdalemuir Ar 23.95 323** P P **10 12 17.4 -1.0**
comp=Z,4.3nm,0.6s,baz=122,slow=9.7,SNR=12
comp=Z,4.3nm,0.6s
**ESK Eskdalemuir 23.97 323** P P **10 12 17.8 -0.8**
**EKB Eskdalemuir 23.97 323** P P **10 12 18.3 -0.3**
**TORD Torodi Ar. Bea 30.79 221** P P **10 13 19.7 -0.5**
**TORD Torodi Ar. Bea 30.79 221** P P **10 13 20.4 +0.2**
comp=Z,0.8nm,0.5s,baz=31,slow=9.3,SNR=12
comp=Z,0.8nm,0.5s
**BVAR Borovoye Array 36.24 50** P P **10 14 07.0 -0.4**
comp=Z,0.7nm,0.6s,baz=279,slow=2.8,SNR=3.0
comp=Z,0.7nm,0.6s
**KURBB Kurchatov Arra 41.32 54** P P **10 14 49.8 -0.1**
comp=Z,1.7nm,0.6s,baz=283,slow=8.6,SNR=10
comp=Z,1.7nm,0.6s
**MK31 Makanchi Array 44.35 59** P P **10 15 13.9 -0.6**
MK31 lAmb lAmb 10 15 15.1
comp=Z,2.8nm,0.8s
**MKAR Makanchi Array 44.35 59** P P **10 15 14.2 -0.4**
**MKAR Makanchi Array 44.35 59** P P **10 15 14.5 -0.1**
comp=Z,3.4nm,0.6s,baz=280,slow=6.9,SNR=33
comp=Z,3.4nm,0.6s
**ZAA0 Zalesovo Array 44.84 48** P P **10 15 17.8 -0.5**
ZAA0 lAmb lAmb 10 15 18.4
comp=Z,2.5nm,0.7s
**ZALV Zalesovo Beam 44.84 48** P P **10 15 17.7 -0.7**
**ZALV Zalesovo Beam 44.84 48** P P **10 15 17.8 -0.5**
comp=Z,1.8nm,0.5s,baz=273,slow=8.7,SNR=9.2
comp=Z,1.8nm,0.5s
**SONM Songino Array 59.58 51** P P **10 17 08.0 -0.2**
comp=Z,0.5nm,0.4s,baz=287,slow=8.3,SNR=5.0
comp=Z,0.5nm,0.4s
**LZH Lanzhou 63.22 64** *e*P P **10 17 32.3 -0.7**
LZH pP sP 10 17 39.0 +3.4
LZH pmax pmax
comp=Z,16nm,0.9s
**HHC Hu-ho-hao-te 66.11 56** *e*P P **10 17 52.4 +0.6**
HHC pmax pmax
comp=Z,18nm,0.6s
HHC pmax pmax
comp=Z,460nm,4.4s
**PZH PanZhiHua 66.57 74** P P **10 17 57.3 +2.3**
PZH pmax pmax
comp=Z,10.0nm,0.5s
PZH pmax pmax
comp=Z,100nm,4.8s
**ILAR Eielson Array 76.90 355** P P **10 18 56.5 +0.3**
comp=Z,0.5nm,0.6s,baz=338,slow=3.7,SNR=8.9
comp=Z,0.5nm,0.6s

*NEIC **22** 10:08:08.0±0.4, 35.46N±0.01×97.90W±0.02, h5km±1km, Error ellipse: s-maj=3.0km s-min=2.5km az=202.0*
**TUL 22 10:08:08.1±0.4, 35.46N±0.02×97.91W±0.02, h5km±4km, ML2.1,mb_Lg1.8/4(NEIC),ML2.3/35(NEIC), Error ellipse: s-maj=2.8km s-min=1.2km az=213.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FNO** | **Franklin** | **0.46** | **116** | | Pg | 10 08 17.2 | +0.2 |
| FNO | | | | IAML | | 10 08 32.8 | |
| comp=N,115nm,0.7s | | | | | | | |
| **OK029** | **Liberty Lake** | **0.50** | **48** | | Pg | 10 08 18.5 | +0.8 |
| OK029 | | | | Sg | Sg | 10 08 24.8 | +0.7 |
| OK029 | | | | IAML | | 10 08 28.1 | |
| comp=N,221nm,0.4s | | | | | | | |
| OK029 | | | | IAML | | 10 08 28.1 | |
| comp=N,218nm,0.4s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.86** | **176** | | Pb | 10 08 25.1 | -0.4 |
| **W35A** | **Tecumseh** | **0.90** | **110** | | Pg | 10 08 25.1 | -0.2 |
| W35A | | | | IAML | | 10 08 37.7 | |
| comp=N,74nm,2.4s | | | | | | | |
| W35A | | | | IAML | | 10 08 40.6 | |
| comp=E,58nm,0.3s | | | | | | | |
| **OK031** | **S. Brethren Rd** | **1.00** | **60** | Pg | Pg | 10 08 26.7 | -0.6 |
| OK031 | | | | IAML | | 10 08 43.6 | |
| comp=E,74nm,0.4s | | | | | | | |
| OK031 | | | | IAML | | 10 08 44.3 | |
| comp=E,79nm,0.2s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.02** | **225** | Pg | Pg | 10 08 27.4 | -0.3 |
| **CROK** | **Carrier** | **1.04** | **357** | Pg | Pg | 10 08 27.6 | -0.5 |
| CROK | | | | IAML | | 10 08 49.5 | |
| comp=N,106nm,0.2s | | | | | | | |
| CROK | | | | IAML | | 10 08 50.3 | |
| comp=E,99nm,0.3s | | | | | | | |
| **OK052** | **Battle Ridge R** | **1.04** | **59** | Pg | Pg | 10 08 27.6 | -0.5 |
| OK052 | | | | IAML | | 10 08 45.8 | |
| comp=E,84nm,0.3s | | | | | | | |
| **QUOK** | **Quay** | **1.20** | **54** | Pg | Pg | 10 08 30.6 | -0.6 |
| **DEOK** | **Depew** | **1.21** | **71** | Pg | Pg | 10 08 30.1 | -1.2 |
| **OK038** | **West end E0370** | **1.22** | **326** | Pg | Pg | 10 08 30.8 | -0.7 |
| **OK048** | **Pawnee Station** | **1.23** | **39** | Pg | Pg | 10 08 31.4 | -0.3 |
| OK048 | | | | IAML | | 10 08 51.3 | |
| comp=E,81nm,0.4s | | | | | | | |
| **OK051** | **E0350 and S346** | **1.36** | **39** | Pg | Pn | 10 08 33.4 | -0.3 |
| **OK032** | **Salt Plains WL** | **1.36** | **350** | | Pn | 10 08 33.2 | -0.5 |
| **BLOK** | **Blackwell** | **1.41** | **23** | | Pn | 10 08 34.3 | -0.2 |
| **KAN13** | **South Haven SW** | **1.59** | **12** | | Pn | 10 08 37.2 | +0.3 |
| KAN13 | | | | lAmb_Lg | | 10 08 57.8 | |
| comp=Z,4.0nm,0.8s | | | | | | | |
| **KAN09** | **Caldwell North** | **1.69** | **8** | lAmb_Lg | | 10 09 05.1 | |
| comp=Z,7.0nm,0.8s | | | | | | | |
| **TUL3** | **Leonard** | **1.78** | **75** | Pn | Pn | 10 08 39.0 | -0.5 |

*UCR **22** 10:08:33.4±0.8, 9.00N×84.18W, h2km±14km, MW3.6*
**CATAC 22 10:08:35.1±0.8, 9.06N×84.11W, h8km±4km, ML3.4, 17C-14D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVQ2** | **Quepos** | **0.38** | **352** | ⇓*e*P | Pg | 10 08 42.4 | -0.1 |
| **LLNJ** | **Naranjito** | **0.41** | **2** | ⇓*i*P | Pg | 10 08 43.4 | +0.1 |
| **OCHAL** | **Ojochal** | **0.46** | **85** | *i* P | Pg | 10 08 44.0 | -0.1 |
| OCHAL | | | | *i* S | Sb | 10 08 52.9 | +0.3 |
| OCHAL | | | | IAML | | 10 08 53.5 | |
| comp=Z,610nm,1.0s | | | | | | | |
| **RITA** | **Parrita** | **0.51** | **335** | *e*P | Pg | 10 08 45.6 | +0.6 |
| **ZELE** | **Perez Zeledon** | **0.51** | **52** | ⇓*e*P | Pg | 10 08 45.5 | +0.4 |
| **RAZU** | **San Marcos de** | **0.61** | **8** | *e*P | Pb | 10 08 47.6 | -0.4 |
| **BUS1** | **Rivas** | **0.61** | **36** | ⇓*i*P | Pg | 10 08 46.8 | -0.2 |
| **ABE2** | **San Pablo** | **0.65** | **5** | ⇑*e*P | Pg | 10 08 47.8 | +0.1 |
| **EDPN** | **Palmar Norte** | **0.66** | **98** | *e*P | Pg | 10 08 47.2 | -0.5 |
| **LCR2** | **La Lucha 2** | **0.69** | **9** | *i* P | Pg | 10 08 48.4 | -0.1 |
| LCR2 | | | | IAML | | 10 09 00.6 | |
| comp=Z,650nm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **0.69** | **9** | ⇓*e*P | Pg | 10 08 48.2 | -0.3 |
| **BURE** | **Buenos Aires** | **0.77** | **81** | ⇑*e*P | Pg | 10 08 50.1 | +0.1 |
| **REPA** | **Paraso** | **0.80** | **17** | ⇓*i*P | Pb | 10 08 51.3 | -0.2 |
| **TAGO** | **Cartago** | **0.83** | **13** | *e*P | Pb | 10 08 51.5 | -0.3 |
| **EDBA** | **Buenos Aires** | **0.83** | **83** | ⇓*e*P | Pg | 10 08 50.3 | -0.8 |
| **AMPA** | **Desamparados** | **0.84** | **3** | ⇓*e*P | Pg | 10 08 51.4 | +0.2 |
| **TRIO** | **Tres Rios** | **0.85** | **8** | *e*P | Pg | 10 08 51.4 | -0.2 |
| **LUJA** | **Lujan** | **0.86** | **3** | *e*P | Pg | 10 08 52.0 | +0.3 |
| **CENT** | **San Jose** | **0.87** | **2** | *e*P | Pg | 10 08 52.0 | +0.2 |
| **SANTA** | **Santa Ana** | **0.87** | **355** | *e*P | Pg | 10 08 51.1 | -0.9 |
| **SJS3** | **Mercedes San J** | **0.88** | **4** | *e*P | Pg | 10 08 51.5 | -0.6 |
| **SJS** | **Escuela Geolog** | **0.88** | **4** | *e*P | Pg | 10 08 51.3 | -0.8 |
| **MEXI** | **Barrio Mexico** | **0.88** | **2** | ⇑*i*P | Pg | 10 08 51.4 | -0.7 |
| **DRK0** | **Durika** | **0.88** | **76** | *i* P | Pg | 10 08 51.6 | -0.5 |
| DRK0 | | | | *i* S | Sb | 10 09 05.6 | +0.8 |
| DRK0 | | | | IAML | | 10 09 06.8 | |
| comp=Z,6µm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **0.88** | **76** | ⇑*e*P | Pg | 10 08 51.4 | -0.7 |
| **LUPE** | **Guadalupe** | **0.89** | **4** | ⇓*e*P | Pg | 10 08 51.5 | -0.7 |
| **PCAYA** | **Pacayas** | **0.91** | **19** | ⇑*e*P | Pg | 10 08 52.2 | -0.4 |
| **VINA** | **Juan Vinas** | **0.91** | **23** | *e*P | Pg | 10 08 52.4 | -0.2 |
| **TRB2** | **Turrubares** | **0.91** | **339** | ⇑*e*P | Pg | 10 08 51.4 | -1.3 |
| **BELE** | **Belen** | **0.92** | **355** | ⇑*e*P | Pg | 10 08 51.8 | -1.0 |
| **CORON** | **Coronado** | **0.92** | **7** | *e*P | Pg | 10 08 52.5 | -0.3 |
| **EDP2** | **Potrero Grande** | **0.93** | **92** | *e*P | Pg | 10 08 52.3 | -0.6 |
| **JIME** | **Puerto Jimenez** | **0.93** | **123** | *e*P | Pb | 10 08 53.3 | -0.2 |
| **HDC** | **Heredia** | **0.94** | **360** | ⇓*e*P | Pg | 10 08 52.3 | -0.9 |
| **HDC3** | **Heredia 3** | **0.94** | **0** | *i* P | Pg | 10 08 52.5 | -0.7 |
| HDC3 | | | | IAML | | 10 09 11.2 | |
| comp=Z,830nm,1.0s | | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.94** | **18** | *i* P | Pg | 10 08 52.8 | -0.5 |
| RAFA | | | | IAML | | 10 08 53.8 | |
| comp=Z,4µm,1.0s | | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.94** | **18** | ⇑*e*P | Pg | 10 08 52.9 | -0.4 |
| **TURIB** | **Turrialba** | **0.94** | **26** | *e*P | Pg | 10 08 52.8 | -0.5 |
| **VICA** | **Volcano Irazu** | **0.96** | **16** | ⇑*e*P | Pg | 10 08 53.2 | -0.4 |
| **VERB** | **Verbena** | **0.97** | **25** | ⇑*e*P | Pg | 10 08 53.4 | -0.4 |
| **CVIMO** | **Finca Echandi** | **0.98** | **10** | *e*P | Pg | 10 08 53.4 | -0.5 |
| **TCS1** | **Tacares** | **1.00** | **349** | *i* P | Pg | 10 08 53.4 | -0.9 |
| TCS1 | | | | IAML | | 10 09 14.0 | |
| comp=Z,3µm,1.0s | | | | | | | |
| **TCS1** | **Tacares** | **1.00** | **349** | *e*P | Pg | 10 08 53.4 | -0.9 |
| **VTCV** | **VTCV, Calle Va** | **1.00** | **22** | ⇓*e*P | Pg | 10 08 53.7 | -0.6 |
| **VTLA** | **Turrialba Volc** | **1.00** | **19** | ⇑*e*P | Pg | 10 08 53.9 | -0.4 |
| **CVTQ** | **Turrialba Volc** | **1.00** | **20** | ⇑*e*P | Pg | 10 08 54.0 | -0.4 |
| **CVTV** | **Tajo** | **1.01** | **21** | ⇓*e*P | Pg | 10 08 54.0 | -0.5 |
| **VTR0** | **Volcan Turrial** | **1.02** | **20** | ⇑*e*P | Pg | 10 08 54.4 | -0.3 |
| **EDAD** | **Golfito** | **1.02** | **113** | *e*P | Pg | 10 08 52.8 | -1.9 |
| **CVTR** | **Volcan Turrial** | **1.02** | **20** | *e*P | Pg | 10 08 54.2 | -0.6 |
| **RVSTA** | **Santa Teresita** | **1.02** | **27** | ⇑*i*P | Pg | 10 08 54.3 | -0.5 |
| **FITO** | **Golfito** | **1.04** | **114** | *e*P | Pg | 10 08 52.9 | -2.2 |
| **SARCI** | **Sarchi** | **1.05** | **347** | *e*P | Pg | 10 08 54.6 | -0.8 |
| **RAMO** | **San Ramon** | **1.08** | **341** | *e*P | Pg | 10 08 56.0 | 0.0 |
| **SRA1** | **San Ramn** | **1.08** | **341** | *e*P | Pg | 10 08 54.5 | -1.4 |
| **CBL1** | **Cabuya** | **1.10** | **299** | *e*P | Pg | 10 08 53.0 | -3.3 |
| **VITO** | **San Vito** | **1.15** | **102** | *e*P | Pg | 10 08 56.3 | -1.0 |
| **LCOCO** | **El Coco** | **1.16** | **28** | ⇓*e*P | Pg | 10 08 56.5 | -0.9 |
| **RVLA** | **Vila Bonita** | **1.17** | **26** | ⇓*e*P | Pg | 10 08 56.7 | -0.8 |
| **IRES** | **Siquirres** | **1.20** | **30** | ⇑*e*P | Pb | 10 08 57.6 | -0.5 |
| **NELY** | **Ciudad Neily** | **1.22** | **109** | ⇑*e*P | Pg | 10 08 56.7 | -1.8 |
| **ITAL** | **Pital

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SOCE | | | | *i* S | | Sg | 10 09 20.4 | -0.1 | |
| **SOCE** | **Pocosol** | **1.41** | **339** | *e*P | | Pn | 10 09 00.5 | -0.6 | |
| **BRU2** | **Volcan** | **1.43** | **100** | *i* P | | Pn | 10 09 00.2 | -1.3 | |
| BRU2 | | | | *i* S | | Sb | 10 09 20.0 | -0.5 | |
| BRU2 | | | | IAML | | | 10 09 22.7 | | |
| | comp=Z,300nm,1.0s | | | | | | | | |
| **BRU2** | **Volcan** | **1.43** | **100** | *e*P | | Pn | 10 08 59.9 | -1.6 | |
| **JUNT** | **Juntas** | **1.48** | **326** | *e*P | | Pn | 10 08 59.2 | -2.8 | |
| **VACR** | **Volcan Arenal** | **1.51** | **338** | *e*P | | Pn | 10 09 01.5 | -1.1 | |
| **ARE1** | **Arenal 1** | **1.52** | **337** | *e*P | | Pn | 10 09 02.0 | -0.6 | |
| **CEDE** | **Laguna Cedeo** | **1.54** | **338** | *e*P | | Pn | 10 09 03.0 | +0.1 | |
| **INDI** | **Punta indio, G** | **1.59** | **301** | *i* P | | Pb | 10 09 04.8 | 0.0 | |
| INDI | | | | IAML | | | 10 09 43.8 | | |
| | comp=Z,63nm,1.0s | | | | | | | | |
| **COVE** | **Coope Vega, Sa** | **1.68** | **350** | *i* P | | Pn | 10 09 03.9 | -0.9 | |
| COVE | | | | IAML | | | 10 09 35.2 | | |
| | comp=Z,260nm,1.0s | | | | | | | | |
| **TENO** | **El Achiote** | **1.84** | **333** | *e*P | | Pn | 10 09 07.2 | 0.0 | |
| **CUI** | **Cuipilapa** | **1.90** | **327** | *e*P | | Pn | 10 09 06.5 | -1.4 | |
| **GPS2** | **Hotel Rincn d** | **2.08** | **324** | *e*P | | Pn | 10 09 10.7 | +0.3 | |
| **ACON** | **Acoyapa** | **3.08** | **340** | *e*P | | Pn | 10 09 25.0 | +0.9 | |

**IDC 22 10:16:38.3±8.6, 15°.97S×171°.70W, h0km, mb3.7/2, mbtmp3.7/2, Error ellipse: s-maj=410.4km s-min=67.2km az=142.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **51.31** | **257** | P | P | 10 25 44.4 | -0.4 |
| | 0.3nm,0.7s,baz=94,slow=7.3,SNR=5.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **51.50** | **252** | P | P | 10 25 46.2 | +0.1 |
| | 1.6nm,0.6s,baz=89,slow=8.1,SNR=29 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **147.62** | **322** | PKPbc | PKPbc | 10 36 24.4 | -0.8 |
| | 0.4nm,0.6s,baz=16,slow=5.4,SNR=2.1 | | | | | | |

*IDC 22 10:20:11.1±26.0, 17°.71S×178°.12W, h436km±296km, mb3.0/6, mbtmp3.8/6, Error ellipse: s-maj=83.2km s-min=29.9km az=100.0*

**ISC 22 10:20:12.3±0.9, 17°.7S±0°.3×178°.2W±0°.2, h450km, n8, σ1$ 07/8, mb3.3/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **33.69** | **260** | P | **P** | **10 26 15.2** | **+0.5** |
| | 0.1nm,0.5s,baz=78,slow=14,SNR=2.2 | | | | | | |
| **STKA** | **Stephens Creek** | **38.91** | **241** | P | **P** | **10 26 57.0** | **-0.9** |
| | 3.0nm,0.9s,baz=354,slow=22,SNR=5.2 | | | | | | |
| | 3.0nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.88** | **259** | P | **P** | **10 27 45.5** | **0.0** |
| | 0.7nm,0.5s,baz=97,slow=7.3,SNR=22 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | **P** | **10 27 47.5** | **+0.7** |
| | 11nm,0.5s,baz=89,slow=7.9,SNR=244 | | | | | | |
| **QSPA** | **South Pole Qui** | **72.35** | **180** | P | **P** | **10 30 51.4** | **+0.1** |
| | 0.6nm,0.6s,baz=279,slow=0.1,SNR=8.4 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.13** | **44** | P | **P** | **10 31 29.7** | **+0.2** |
| | 0.6nm,0.8s,baz=221,slow=8.8,SNR=5.3 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.71** | **58** | P | **P** | **10 32 04.0** | **+0.9** |
| | 0.3nm,0.7s,baz=232,slow=6.8,SNR=4.9 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.06** | **43** | P | **P** | **10 32 07.6** | **-1.8** |
| | 0.5nm,0.8s,baz=165,slow=6.2,SNR=4.1 | | | | | | |
| | 0.5nm,0.8s | | | | | | |

**IDC 22 10:21:50.0±1.9, 22°.70N×101°.29E, h0km, mb3.4/2, mbtmp3.4/2, Error ellipse: s-maj=39.7km s-min=23.1km az=101.0, Myanmar-China border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **4.76** | **208** | Pg | Pg | 10 23 18.4 | -2.9 |
| | 1.3nm,0.3s,baz=21,slow=15,SNR=12 | | | | | | |
| CMAR | | | | Lg | Lg | 10 24 19.5 | |
| | 1.6nm,0.3s,baz=43,slow=32,SNR=15 | | | | | | |
| **MKAR** | **Makanchi Array** | **28.52** | **332** | P | P | 10 27 47.1 | -0.1 |
| | 0.4nm,0.6s,baz=133,slow=9.7,SNR=3.8 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.26** | **140** | P | P | 10 31 10.7 | -0.1 |
| | 0.3nm,0.7s,baz=334,slow=8.1,SNR=1.5 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*NEIC 22 10:23:37.4±0.5, 35°.38N±0°.01×98°.11W±0°.02, h5km±2km, Error ellipse: s-maj=3.0km s-min=2.6km az=319.0*

**TUL 22 10:23:37.7±0.5, 35°.38N±0°.01×98°.11W±0°.02, h6km±6km, ML2.6, mb_Lg2.6/41(NEIC), ML2.7/31(NEIC), Error ellipse: s-maj=2.4km s-min=1.4km az=106.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CSTR** | **Hydro, Custer** | **0.54** | **299** | | Pg | 10 23 48.1 | 0.0 |
| **OKCSW** | **OKLAHOMA CITY** | **0.55** | **87** | | Pg | 10 23 48.1 | -0.1 |
| OKCSW | | | | IAML | | 10 23 59.9 | |
| | comp=N,281nm,0.4s | | | | | | |
| OKCSW | | | | IAML | | 10 24 05.5 | |
| | comp=E,343nm,0.6s | | | | | | |
| **FNO** | **Franklin** | **0.59** | **102** | Pg | Pg | 10 23 49.1 | -0.1 |
| FNO | | | | IAML | | 10 24 04.4 | |
| | comp=E,184nm,0.3s | | | | | | |
| **ADOK** | **Arcadia Dam** | **0.66** | **66** | Pg | Pg | 10 23 50.8 | +0.4 |
| **X34A** | **Smith Ranch, M** | **0.81** | **164** | | Pg | 10 23 53.4 | 0.0 |
| X34A | | | | IAML | | 10 24 21.1 | |
| | comp=E,238nm,0.8s | | | | | | |
| X34A | | | | IAML | | 10 24 22.0 | |
| | comp=N,290nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **0.85** | **221** | Pg | Pg | 10 23 53.4 | -0.6 |
| **CROK** | **Carrier** | **1.12** | **5** | | Pg | 10 23 58.7 | -0.6 |
| **OK031** | **S. Brethren Rd** | **1.18** | **61** | | Pg | 10 23 59.5 | -0.8 |
| OK031 | | | | IAML | | 10 24 20.6 | |
| | comp=N,218nm,0.3s | | | | | | |
| OK031 | | | | IAML | | 10 24 21.1 | |
| | comp=N,280nm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **1.21** | **335** | | Pg | 10 24 00.3 | -0.6 |
| **OK052** | **Battle Ridge R** | **1.23** | **60** | | Pg | 10 24 00.3 | -0.9 |
| OK052 | | | | IAML | | 10 24 18.4 | |
| | comp=N,293nm,0.3s | | | | | | |
| **ELIS** | **Ellis County** | **1.26** | **303** | Pg | Pn | 10 24 01.5 | -0.5 |
| ELIS | | | | IAML | | 10 24 24.5 | |
| | comp=N,220nm,0.2s | | | | | | |
| ELIS | | | | IAML | | 10 24 24.7 | |
| | comp=E,239nm,0.3s | | | | | | |
| **QUOK** | **Quay** | **1.39** | **55** | | Pn | 10 24 03.2 | -0.4 |
| **DEOK** | **Depew** | **1.39** | **70** | | Pn | 10 24 03.0 | -0.6 |
| **NOKA** | **Waynoka** | **1.42** | **332** | | Pn | 10 24 03.8 | -0.2 |
| **OK032** | **Salt Plains WL** | **1.42** | **357** | | Pn | 10 24 03.1 | -0.9 |
| **GC02** | **Grant County #** | **1.48** | **8** | | Pn | 10 24 04.4 | -0.5 |
| **OK051** | **E0350 and S346** | **1.52** | **42** | | Pn | 10 24 05.4 | -0.1 |
| **BLOK** | **Blackwell** | **1.55** | **28** | Pg | Pn | 10 24 05.8 | -0.1 |
| **KAN14** | **Manchester OK** | **1.57** | **4** | | Pn | 10 24 06.0 | -0.2 |
| **LOOK** | **Love County** | **1.58** | **151** | | Pn | 10 24 06.2 | -0.1 |
| **WTFS** | **Witchita Falls** | **1.64** | **190** | | Pn | 10 24 07.3 | +0.3 |
| **KAN17** | **Caldwell West** | **1.68** | **9** | | Pn | 10 24 08.0 | +0.3 |
| **KAN13** | **South Haven SW** | **1.71** | **17** | | Pn | 10 24 08.4 | +0.4 |
| KAN13 | | | | IAmb_Lg | | 10 24 31.0 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **SMWD** | **Samnorwood** | **1.77** | **262** | Pn | Pn | 10 24 09.0 | +0.1 |
| **KAN01** | **Argonia South** | **1.79** | **9** | IAmb_Lg | | 10 24 34.9 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **KAN09** | **Caldwell North** | **1.79** | **13** | | Pn | 10 24 09.4 | +0.2 |
| KAN09 | | | | IAmb_Lg | | 10 24 38.8 | |
| | comp=Z,47nm,0.9s | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.91** | **3** | | Pn | 10 24 11.1 | +0.2 |
| KAN12 | | | | IAmb_Lg | | 10 24 41.8 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **TUL3** | **Leonard** | **1.96** | **74** | | Pn | 10 24 12.2 | +0.7 |
| **FW03** | **Perrin-Whitt E** | **2.34** | **179** | IAmb_Lg | | 10 24 55.5 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **X37A** | **Clayton** | **2.38** | **109** | | Pn | 10 24 16.9 | -0.4 |
| X37A | | | | IAmb_Lg | | 10 24 55.9 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **PLPT** | **Palo Pinto** | **2.57** | **184** | | Pn | 10 24 19.3 | -0.6 |
| PLPT | | | | IAmb_Lg | | 10 25 00.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **RLO** | **Rose Lookout** | **2.63** | **72** | | Pn | 10 24 21.1 | +0.4 |
| **AMTX** | **Amarillo** | **2.97** | **261** | IAmb_Lg | | 10 25 14.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **R32A** | **Long Quarter,** | **3.07** | **351** | IAmb_Lg | | 10 25 21.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **3.20** | **70** | IAmb_Lg | | 10 25 21.1 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **3.25** | **226** | IAmb_Lg | | 10 25 23.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **HHAR** | **Hobbs** | **3.50** | **74** | IAmb_Lg | | 10 25 32.5 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.81** | **101** | | Pn | 10 24 38.2 | +1.2 |
| **KSU1** | **Kansas State U** | **3.90** | **17** | IAmb_Lg | | 10 25 47.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **MSTX** | **Muleshoe** | **4.09** | **251** | Pn | Pn | 10 24 41.0 | +0.1 |
| **SGCY** | **Sterling City** | **4.28** | **217** | IAmb_Lg | | 10 25 54.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.42** | **100** | IAmb_Lg | | 10 26 05.6 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **4.49** | **58** | IAmb_Lg | | 10 25 59.3 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.76** | **89** | Pn | Pn | 10 24 50.3 | +0.4 |
| WHAR | | | | IAmb_Lg | | 10 26 19.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.38** | **291** | IAmb_Lg | | 10 26 41.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **BGNE** | **Belgrade** | **6.02** | **360** | IAmb_Lg | | 10 26 48.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.12** | **62** | IAmb_Lg | | 10 26 50.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **K30B** | **Basset** | **7.37** | **351** | IAmb_Lg | | 10 27 52.8 | |
| | comp=Z,8.1nm,0.8s | | | | | | |

*NEIC 22 10:28:59.3±1.0, 8°.66N±0°.07×83°.23W±0°.07, h10km±1km, mb4.6/40, Error ellipse: s-maj=14.8km s-min=7.8km az=226.0*

*IDC 22 10:28:59.1±1.1, 9°.15N×82°.92W, h0km, mb3.8/8, mbtmp3.9/11, MLL3.8/3, Error ellipse: s-maj=37.4km s-min=19.8km az=37.0*

*UCR 22 10:28:59.3±0.8, 8°.62N×83°.24W, h22km±2km, MW4.9, Fault plane solution: NP1:φs95.02000°, δ45.22000°, λ82.95000°.*

*UPA 22 10:28:59.5±2.4, 8°.65N×83°.15W, h2km±8km, MD4.1, MW4.2*

*CATAC 22 10:29:00.1±0.4, 8°.64N×83°.13W, h5km±2km, MB4.7, mb5.0, ML4.6*

**ISC 22 10:28:59.5±0.7, 8°.63N±0°.02×83°.19W±0°.02, h17km±4km, n159, σ1$ 10/182, mb4.5/27, 7C-21D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDAD** | **Golfito** | **0.03** | **54** | *e*P | Pg | **10 29 02.6** | **0.0** |
| **FITO** | **Golfito** | **0.04** | **101** | *e*P | Pg | **10 29 02.5** | **0.0** |
| FITO | | | | *e*S | Sg | **10 29 05.2** | **+0.5** |
| **JIME** | **Puerto Jimenez** | **0.16** | **234** | *e*P | Pg | **10 29 03.6** | **-0.2** |
| JIME | | | | *e*S | Sb | **10 29 07.8** | **+0.7** |
| **NELY** | **Ciudad Neily** | **0.24** | **86** | *e*P | Pb | **10 29 05.8** | **+0.3** |
| NELY | | | | *e*S | Sb | **10 29 11.0** | **+1.5** |
| **VITO** | **San Vito** | **0.29** | **50** | *e*P | Pb | **10 29 06.8** | **+0.4** |
| **CDITO** | **Canoas** | **0.32** | **100** | *i* P | Pg | **10 29 06.4** | **0.0** |
| CDITO | | | | *i* S | Sg | **10 29 09.7** | **-1.4** |
| CDITO | | | | IAML | | 10 29 18.2 | |
| | comp=Z,48μm,1.0s | | | | | | |
| **EDP2** | **Potrero Grande** | **0.38** | **2** | *e*P | Pb | **10 29 07.7** | **-0.2** |
| **MLIR3** | **Monte Lirio, C** | **0.40** | **66** | *e*P | Pb | **10 29 08.6** | **+0.4** |
| MLIR3 | | | | *e*S | Sb | **10 29 14.8** | **+0.7** |
| **EDPN** | **Palmar Norte** | **0.42** | **321** | *e*P | Pg | **10 29 07.5** | **-0.6** |
| **BRU2** | **Volcan** | **0.52** | **72** | | Pb | **10 29 10.3** | **-0.1** |
| **BRU2** | **Volcan** | **0.52** | **72** | *i* P | Pg | **10 29 10.1** | **+0.1** |
| BRU2 | | | | *i* S | Sg | **10 29 16.4** | **-0.7** |
| BRU2 | | | | IAML | | 10 29 23.0 | |
| | comp=Z,26μm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.52** | **72** | *i* P | Pb | **10 29 10.3** | **-0.1** |
| BRU2 | | | | *i* S | Sb | **10 29 18.7** | **+1.0** |
| **BRU2** | **Volcan** | **0.52** | **72** | *e*P | Pb | **10 29 10.2** | **-0.1** |
| BRU2 | | | | *e*S | Sb | **10 29 18.6** | **+1.0** |
| **BRU2** | **Volcan** | **0.52** | **72** | *i* P | Pb | **10 29 10.2** | **-0.1** |
| **BRU2** | **Volcan** | **0.52** | **72** | *e*S | Sb | **10 29 18.6** | **+0.9** |
| **PTPM** | **Petroterminale** | **0.53** | **144** | *e*P | Pb | **10 29 10.3** | **0.0** |
| PTPM | | | | *e*S | Sn | **10 29 21.7** | **+0.9** |
| **EDBA** | **Buenos Aires** | **0.53** | **351** | *e*P | Pg | **10 29 10.0** | **-0.2** |
| **BURE** | **Buenos Aires** | **0.56** | **345** | *e*P | Pg | **10 29 10.3** | **-0.3** |
| BURE | | | | *e*S | Sb | **10 29 18.9** | **+0.4** |
| **LIMO3** | **Limones** | **0.62** | **148** | *e*P | Pb | **10 29 11.9** | **-0.1** |
| LIMO3 | | | | *e*S | Sn | **10 29 21.8** | **-1.3** |
| **DRK0** | **Durika** | **0.63** | **355** | IAML | | 10 29 11.7 | |
| | comp=Z,59μm,1.0s | | | | | | |
| DRK0 | | | | *i* P | Pb | **10 29 12.6** | **+0.4** |
| **DRK0** | **Durika** | **0.63** | **355** | *e*P | Pg | **10 29 11.3** | **-0.8** |
| **DRK0** | **Durika** | **0.63** | **355** | *e*P | Pg | **10 29 11.3** | **-0.8** |
| **OCHAL** | **Ojochal** | **0.64** | **316** | *i* P | Pb | **10 29 13.0** | **+0.7** |
| OCHAL | | | | IAML | | 10 29 24.1 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **BCO2** | **Palmira** | **0.66** | **83** | *e*P | Pg | **10 29 12.5** | **-0.1** |
| BCO2 | | | | *e*S | Sn | **10 29 23.2** | **-1.2** |
| **LNBQ3** | **Los Naranjos,** | **0.76** | **78** | *e*P | Pb | **10 29 13.5** | **-0.9** |
| LNBQ3 | | | | *e*S | Sb | **10 29 24.5** | **-0.1** |
| **LOCO3** | **Loma Colorada,** | **0.80** | **106** | *e*P | Pb | **10 29 14.4** | **-0.6** |
| LOCO3 | | | | *e*S | Sn | **10 29 27.1** | **-0.4** |
| **PEDE3** | **Pedregal, Chir** | **0.80** | **108** | *e*P | Pb | **10 29 14.2** | **-0.8** |
| **LOMA3** | **Las Lomas, Chi** | **0.82** | **104** | *e*P | Pb | **10 29 14.6** | **-0.7** |
| LOMA3 | | | | *e*S | Sb | **10 29 25.9** | **-0.2** |
| **ZELE** | **Perez Zeledon** | **0.89** | **325** | *e*P | Pb | **10 29 15.4** | **-1.3** |
| **CNI2** | **El Empalme, Bo** | **1.06** | **42** | *e*P | Pb | **10 29 18.3** | **-1.1** |
| CNI2 | | | | *e*S | Sg | **10 29 34.6** | **+0.6** |
| **CNI2** | **El Empalme, Bo** | **1.06** | **42** | *e*S | Sb | **10 29 33.4** | **+0.3** |
| **CNI2** | **El Empalme, Bo** | **1.06** | **42** | *i* P | Pb | **10 29 18.3** | **-1.1** |
| **BUS1** | **Rivas** | **1.07** | **329** | *e*P | Pb | **10 29 18.0** | **-1.9** |
| **CHGR2** | **Aguacate** | **1.08** | **74** | *e*P | Pb | **10 29 19.0** | **-0.8** |
| CHGR2 | | | | *e*S | Sb | **10 29 33.2** | **-0.4** |
| **CHGR2** | **Aguacate** | **1.08** | **74** | *e*P | Pb | **10 29 18.6** | **-1.2** |
| **CHGR2** | **Aguacate** | **1.08** | **74** | *e*S | Sb | **10 29 32.6** | **-1.0** |
| **LLNJ** | **Naranjito** | **1.23** | **313** | *e*P | Pn | **10 29 20.0** | **-2.0** |
| **RAZU** | **San Marcos de** | **1.31** | **321** | *e*P | Pn | **10 29 22.1** | **-1.1** |
| **TURIB** | **Turrialba** | **1.36** | **339** | *e*P | Pn | **10 29 22.5** | **-1.3** |
| **ABE2** | **San Pablo** | **1.36** | **321** | *e*P | Pn | **10 29 22.9** | **-1.1** |
| **LCR2** | **La Lucha 2** | **1.36** | **324** | Pn | Pn | **10 29 22.3** | **-1.7** |
| LCR2 | | | | | Pb | **10 29 22.9** | **-1.8** |
| LCR2 | | | | Sn | Sn | **10 29 41.1** | **-0.7** |
| **LCR2** | **La Lucha 2** | **1.36** | **324** | *i* P | Pb | **10 29 25.0** | **+0.2** |
| LCR2 | | | | *i* S | Sg | **10 29 43.6** | **-0.1** |
| LCR2 | | | | IAML | | 10 29 44.8 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **1.36** | **324** | *e*P | Pn | **10 29 22.2** | **-1.7** |
| **VINA** | **Juan Vinas** | **1.37** | **337** | *e*P | Pn | **10 29 22.8** | **-1.2** |
| **VERB** | **Verbena** | **1.40** | **339** | *e*P | Pn | **10 29 23.3** | **-1.1** |
| **RVSTA** | **Santa Teresita** | **1.41** | **341** | *e*P | Pn | **10 29 24.0** | **-0.6** |
| **PCAYA** | **Pacayas** | **1.42** | **334** | *e*P | Pn | **10 29 23.7** | **-1.1** |
| **VTCV** | **VTCV, Calle Va** | **1.44** | **339** | *e*P | Pn | **10 29 24.1** | **-1.0** |
| **TAAN** | **Batan** | **1.45** | **354** | *e*P | Pn | **10 29 25.1** | **0.0** |
| **RAFA** | **San Farael, Vo** | **1.45** | **335** | *i* P | Pb | **10 29 26.7** | **+0.4** |
| RAFA | | | | *i* S | Sg | **10 29 47.1** | **+0.5** |
| RAFA | | | | IAML | | 10 29 53.2 | |
| | comp=Z,20μm,1.0s | | | | | | |
| **CVTV** | **Tajo** | **1.47** | **338** | *e*P | Pn | **10 29 24.7** | **-0.9** |
| **CVTQ** | **Turrialba Volc** | **1.48** | **337** | *e*P | Pn | **10 29 24.8** | **-0.9** |
| **VTLA** | **Turrialba Volc** | **1.48** | **337** | *e*P | Pn | **10 29 24.7** | **-1.1** |
| **LCOCO** | **El Coco** | **1.49** | **346** | *e*P | Pn | **10 29 25.4** | **-0.2** |
| **VTR0** | **Volcan Turrial** | **1.49** | **338** | *e*P | Pn | **10 29 25.0** | **-0.9** |
| **IRES** | **Siquirres** | **1.49** | **348** | *e*P | Pn | **10 29 25.4** | **-0.1** |
| **NANC3** | **Nancito, Chiri** | **1.50** | **105** | *e*P | Pn | **10 29 25.7** | **0.0** |
| **RVLA** | **Villa Bonita** | **1.52** | **345** | *e*P | Pn | **10 29 25.6** | **-0.4** |
| **LUJA** | **Lujan** | **1.55** | **326** | *e*P | Pn | **10 29 26.8** | **+0.2** |
| **LUPE** | **Guadalupe** | **1.56** | **327** | *e*P | Pn | **10 29 25.6** | **-1.0** |
| **HDC3** | **Heredia 3** | **1.64** | **326** | *i* P | Pb | **10 29 30.0** | **+0.6** |
| HDC3 | | | | *i* S | Sg | **10 29 51.7** | **-0.7** |
| HDC3 | | | | IAML | | 10 29 54.3 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **HDC** | **Heredia** | **1.64** | **326** | | Pn | **10 29 27.6** | **-0.1** |
| **HDC** | **Heredia** | **1.64** | **326** | *i* P | Pb | **10 29 29.3** | **-0.1** |
| HDC | | | | *i* S | Sg | **10 29 51.9** | **-0.5** |
| HDC | | | | IAML | | 10 29 54.3 | |
| | comp=Z,7μm,1.0s | | | | | | |
| **HDC** | **Heredia** | **1.64** | **326** | *e*P | Pn | **10 29 26.9** | **-0.8** |
| **TCS1** | **Tacares** | **1.78** | **322** | *i* P | Pb | **10 29 30.9** | **-0.8** |
| TCS1 | | | | IAML | | 10 30 02.4 | |
| | comp=Z,44μm,1.0s | | | | | | |
| **TRB2** | **Turrubares** | **1.78** | **316** | *e*P | Pn | **10 29 28.5** | **-1.1** |
| **MESA3** | **La Mesa, Verag** | **2.04** | **103** | *e*P | Pn | **10 29 33.8** | **+0.6** |
| MESA3 | | | | *e*S | Sb | **10 30 00.5** | **-0.9** |
| **CBL1** | **Cabuya** | **2.10** | **297** | *e*P | Pn | **10 29 32.4** | **-1.6** |
| **RSUS3** | **Rio de Jesus,** | **2.11** | **108** | *e*P | Pn | **10 29 35.1** | **+1.0** |
| **GMAL** | **Guarumal, Vera** | **2.12** | **114** | *e*P | Pn | **10 29 35.0** | **+0.7** |
| **GMAL** | **Guarumal, Vera** | **2.12** | **114** | *e*S | Sn | **10 30 01.8** | **+1.5** |
| **GMAL** | **Guarumal, Vera** | **2.12** | **114** | *e*P | Pn | **10 29 33.5** | **-0.8** |
| **GMAL** | **Guarumal, Vera** | **2.12** | **114** | *e*P | Pn | **10 29 34.5** | **+0.2** |
| **SOCE** | **Pocosol** | **2.24** | **321** | | Pn | **10 29 35.9** | **0.0** |
| **SOCE** | **Pocosol** | **2.24** | **321** | *i* P | Pb | **10 29 37.9** | **-1.7** |
| SOCE | | | | *i* S | Sb | **10 30 07.7** | **+0.7** |
| SOCE | | | | IAML | | 10 30 13.2 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **MARI3** | **Mariato, Verag** | **2.39** | **114** | *e*P | Pn | **10 29 39.7** | **+1.8** |
| **COVE** | **Coope Vega, Sa** | **2.39** | **330** | *i* P | Pn | **10 29 39.9** | **+1.9** |
| COVE | | | | *i* S | Sb | **10 30 11.8** | **+0.4** |
| COVE | | | | IAML | | 10 30 28.0 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **JUNT** | **Juntas** | **2.39** | **313** | *e*P | Pn | **10 29 37.2** | **-0.8** |
| **JTS** | **Las Juntas de** | **2.39** | **314** | | Pn | **10 29 38.1** | **0.0** |
| **JTS** | **Las Juntas de** | **2.39** | **314** | Pn | Pn | **10 29 37.9** | **-0.1** |
| | comp=Z,91nm,0.3s,baz=117,slow=6.8,SNR=143 | | | | | | |
| JTS | | | | Sn | Sn | **10 30 07.3** | **+0.3** |
| | comp=Z,39nm,0.3s,baz=287,slow=19,SNR=3.6 | | | | | | |
| | comp=Z,476nm,0.6s | | | | | | |
| **JTS** | **Las Juntas de** | **2.39** | **314** | *e*P | Pn | **10 29 39.0** | **+1.0** |
| **JTS** | **Las Juntas de** | **2.39** | **314** | *e*P | Pn | **10 29 37.3** | **-0.7** |
| **CRIS3** | **El Cristo, Coc** | **2.58** | **98** | *e*P | Pn | **10 29 42.0** | **+1.5** |
| **INDI** | **Punta indio, G** | **2.59** | **298** | *i* P | Pn | **10 29 43.0** | **+2.3** |
| INDI | | | | *i* S | Sb | **10 30 16.9** | **-0.2** |
| INDI | | | | IAML | | 10 30 28.5 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CACAO** | **El Cacao, Vera** | **2.64** | **119** | *e*P | Pn | **10 29 42.0** | **+0.6** |
| **CHIT3** | **Chitre** | **2.83** | **104** | *e*P | Pb | **10 29 47.5** | **-2.1** |
| **AZU** | **Azuero** | **3.01** | **106** | *e*P | Pn | **10 29 48.5** | **+2.1** |
| **BCIP** | **Isla Barro Col** | **3.36** | **81** | | Pn | **10 29 52.1** | **+0.8** |
| **BCIP** | **Isla Barro Col** | **3.36** | **81** | *i* P | Pn | **10 29 52.0** | **+0.8** |
| BCIP | | | | *i* S | Sn | **10 30 32.7** | **+1.9** |
| BCIP | | | | IAML | | 10 30 49.4 | |
| | comp=Z,750nm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.36** | **81** | *e*P | Pn | **10 29 53.0** | **+1.8** |
| **BCIP** | **Isla Barro Col** | **3.36** | **81** | *e*P | Pn | **10 29 51.9** | **+0.7** |
| **ESPN** | **Las Esperanzas** | **3.70** | **343** | | Pn | **10 29 55.9** | **-0.1** |
| **ESPN** | **Las Esperanzas** | **3.70** | **343** | *i* P | Pn | **10 29 57.9** | **+1.9** |
| ESPN | | | | IAML | | 10 31 10.7 | |
| | comp=Z,610nm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **3.70** | **343** | *e*P | Pn | **10 29 56.0** | **-0.1** |
| **ACON** | **Acoyapa** | **3.84** | **330** | | Pn | **10 29 58.1** | **+0.1** |
| **ACON** | **Acoyapa** | **3.84** | **330** | *i* S | Sn | **10 30 47.3** | **+4.5** |
| **ACON** | **Acoyapa** | **3.84** | **330** | *e*P | Pn | **10 29 58.2** | **+0.2** |
| **SAPS** | **Ciudad Sandino** | **4.73** | **318** | *i* P | Pn | **10 30 13.4** | **+3.3** |
| SAPS | | | | IAML | | 10 30 16.9 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **COPN** | **Copaltepe** | **4.86** | **317** | *i* P | Pn | **10 30 14.6** | **+2.7** |
| COPN | | | | IAML | | 10 31 25.5 | |
| | comp=Z,87nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **5.16** | **318** | | Pn | **10 30 16.2** | **+0.1** |
| **CRIN** | **San Cristobal** | **5.54** | **317** | | Pn | **10 30 21.1** | **-0.2** |
| **TGUH** | **Tegucigalpa,Un** | **6.71** | **324** | | Pn | **10 30 38.0** | **+0.5** |
| **JUCU** | **Jucuarɲn** | **6.76** | **313** | *i* P | Pn | **10 30 40.7** | **+2.5** |
| JUCU | | | | IVmB_BB | | 10 30 44.1 | |
| | comp=Z,740nm,1.0s | | | | | | |
| JUCU | | | | IAML | | 10 30 44.2 | |
| | comp=Z,70nm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **7.41** | **313** | *i* P | Pn | **10 30 49.8** | **+2.8** |
| SCLA | | | | IVmB_BB | | 10 30 50.5 | |
| | comp=Z,440nm,1.0s | | | | | | |
| SCLA | | | | IAmb | IAmb | 10 30 52.5 | |
| | comp=Z,25nm,0.6s | | | | | | |
| SCLA | | | | IAML | | 10 30 56.9 | |
| | comp=Z,43nm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **7.77** | **311** | Pn | Pn | **10 30 51.8** | **-0.2** |
| **JAYA** | **Jayaque - finc** | **7.91** | **310** | *i* P | Pn | **10 30 56.6** | **+2.6** |
| JAYA | | | | IAML | | 10 30 58.2 | |
| | comp=Z,260nm,1.0s | | | | | | |
| JAYA | | | | IAmb | IAmb | 10 30 58.5 | |
| | comp=Z,200nm,0.5s | | | | | | |
| **NUBE** | **Las Nubes** | **8.32** | **310** | *i* P | Pn | **10 31 02.6** | **+3.0** |
| NUBE | | | | IAmb | IAmb | 10 31 06.1 | |
| | comp=Z,47nm,0.7s | | | | | | |
| **MTO3** | **Montecristo** | **8.33** | **314** | | Pn | **10 31 00.4** | **+0.6** |
| **ESQI** | **Esquipulas** | **8.42** | **315** | | Pn | **10 31 00.9** | **-0.1** |
| **APG** | **El Apazote** | **9.53** | **312** | Pn | Pn | **10 31 18.3** | **+2.1** |
| | comp=Z,0.2nm,0.3s,baz=132,slow=5.2,SNR=22 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **TULM** | **Tulcn-Chalpat** | **9.53** | **145** | Pn | Pn | **10 31 16.9** | **+0.4** |
| **IMBA** | **Imbabura, San** | **9.68** | **149

| | | | | | | |
|---|---|---|---|---|---|---|
| **L27K** | **Beaver Creek,** | **68.46** | **335** | P | **P** | **10 40 01.1 +0.5** |
| L27K | | | | IAmb | IAmb | 10 40 02.0 |
| | comp=Z,5.7nm,1.1s | | | | | |
| **SUMG** | **Summit** | **69.28** | **13** | P | **P** | **10 40 04.8 -1.1** |
| **ILAR** | **Eielson Array** | **71.18** | **336** | P | **P** | **10 40 17.2 0.0** |
| | comp=Z,1.7nm,0.7s,baz=116,slow=4.5,SNR=9.5 | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | |
| **ESDC** | **Sonseca Array** | **76.27** | **51** | P | **P** | **10 40 47.8 +0.2** |
| | comp=Z,2.3nm,0.8s,baz=280,slow=6.2,SNR=14 | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.14** | **78** | P | **P** | **10 41 25.5 +0.2** |
| | comp=Z,0.2nm,0.5s,baz=285,slow=5.7,SNR=1.6 | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | |
| **ASAR** | **Alice Springs** | **141.50** | **243** | PKhKP | PKPpre | 10 48 25.5 |
| | comp=Z,0.7nm,0.9s,baz=113,slow=3.4,SNR=4.6 | | | | | |
| **WRA** | **Warramunga Arr** | **142.02** | **249** | PKhKP | PKPpre | 10 48 25.8 |
| | comp=Z,0.3nm,0.7s,baz=98,slow=2.7,SNR=6.7 | | | | | |

*NEIC* ***22*** *10:41:28.5±1.6,66°.31N±0°.02×157°.19W±0°.05,h10km±1km, Error ellipse: s-maj=3.5km s-min=3.2km az=188.0*

**AEIC 22 10:41:27.9±1.6,66°.30N±0°.02×157°.19W±0°.05,h8km±4km, ML3.6,ML3.8/**146(NEIC)**,Error ellipse: s-maj=2.8km s-min=2.4km az=79.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **G19K** | **Purcell Mounta** | **0.16** | **165** | Pg | Pg | 10 41 31.4 | +0.2 |
| G19K | | | | Sg | Sg | 10 41 34.0 | +0.5 |
| **F19K** | **Shaleruckik Mo** | **0.59** | **337** | Pg | Pg | 10 41 38.8 | -0.4 |
| **F19K** | **Shaleruckik Mo** | **0.59** | **337** | | Sg | 10 41 47.0 | +0.1 |
| **G18K** | **Tagagawik** | **0.72** | **237** | Pg | Pg | 10 41 41.8 | 0.0 |
| **G18K** | **Tagagawik** | **0.72** | **237** | | Sb | 10 41 52.1 | -0.6 |
| **H19K** | **Roundabout Mou** | **0.83** | **158** | Pg | Pg | 10 41 43.7 | -0.1 |
| **H19K** | **Roundabout Mou** | **0.83** | **158** | | Sg | 10 41 55.0 | +0.4 |
| **H19K** | **Roundabout Mou** | **0.83** | **158** | IAML | | 10 41 59.6 | |
| | comp=E,3μm,0.6s | | | | | | |
| H19K | | | | IAML | | 10 42 00.6 | |
| | comp=N,2μm,0.2s | | | | | | |
| **F20K** | **Avaraart Lake** | **0.95** | **37** | Pg | Pg | 10 41 45.5 | -0.7 |
| F20K | | | | IAML | | 10 41 59.5 | |
| | comp=N,2μm,0.5s | | | | | | |
| F20K | | | | IAML | | 10 42 02.4 | |
| | comp=E,3μm,0.7s | | | | | | |
| **F20K** | **Avaraart Lake** | **0.95** | **37** | | Sb | 10 41 59.0 | -0.3 |
| **F18K** | **Selawik** | **1.03** | **288** | | Pg | 10 41 47.2 | -0.5 |
| F18K | | | | | Sb | 10 42 01.8 | +0.2 |
| **E19K** | **Redstone River** | **1.17** | **359** | | Pg | 10 41 49.4 | -0.8 |
| E19K | | | | | Sg | 10 42 04.3 | -1.1 |
| **E19K** | **Redstone River** | **1.17** | **359** | IAML | | 10 42 10.7 | |
| | comp=E,1μm,0.4s | | | | | | |
| E19K | | | | IAML | | 10 42 16.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| **H20K** | **Anotleneega Mo** | **1.25** | **129** | | Pn | 10 41 50.8 | -0.7 |
| **H18K** | **Honhosa River** | **1.25** | **203** | | Pn | 10 41 50.8 | -0.8 |
| H18K | | | | | Sb | 10 42 07.6 | -0.2 |
| **G21K** | **Allakaket** | **1.50** | **80** | | Sn | 10 42 14.8 | +0.1 |
| **GCSA** | **Galena City Sc** | **1.56** | **175** | | Pn | 10 41 55.6 | -0.2 |
| GCSA | | | | | Sb | 10 42 17.0 | +0.2 |
| **G17K** | **Kiwalik Mounta** | **1.63** | **242** | | Pn | 10 41 56.3 | -0.5 |
| G17K | | | | | Sb | 10 42 18.6 | -0.2 |
| **F17K** | **Baldwin Pennin** | **1.64** | **277** | Pn | Pn | 10 41 56.6 | -0.4 |
| F17K | | | | IAML | | 10 42 23.9 | |
| | comp=N,781nm,1.0s | | | | | | |
| F17K | | | | IAML | | 10 42 26.2 | |
| | comp=E,1μm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **1.74** | **56** | | Pn | 10 41 58.4 | 0.0 |
| F21K | | | | IAML | | 10 42 25.6 | |
| | comp=E,1μm,0.6s | | | | | | |
| F21K | | | | IAML | | 10 42 25.9 | |
| | comp=N,717nm,0.8s | | | | | | |
| **E18K** | **Tukpahlearik C** | **1.76** | **312** | | Pn | 10 41 59.1 | +0.5 |
| **H17K** | **Granite Mounta** | **1.77** | **221** | Pn | Pn | 10 41 58.6 | -0.2 |
| H17K | | | | IAML | | 10 42 28.5 | |
| | comp=N,732nm,0.6s | | | | | | |
| H17K | | | | IAML | | 10 42 28.6 | |
| | comp=E,824nm,0.8s | | | | | | |
| **I20K** | **Naaghedeneel** | **1.88** | **142** | | Pn | 10 42 00.9 | +0.6 |
| **H21K** | **Melozitna Rive** | **1.91** | **108** | | Pn | 10 42 00.3 | -0.3 |
| H21K | | | | IAML | | 10 42 31.5 | |
| | comp=N,979nm,0.6s | | | | | | |
| **E17K** | **Hotham Inlet** | **2.00** | **295** | | Pn | 10 42 02.0 | 0.0 |
| **E20K** | **Nigu River** | **2.01** | **11** | | Pn | 10 42 03.2 | +1.1 |
| **D19K** | **Kuna River** | **2.24** | **351** | | Pn | 10 42 06.1 | +0.9 |
| **D19K** | **Kuna River** | **2.24** | **351** | IAML | | 10 42 41.7 | |
| | comp=E,567nm,0.7s | | | | | | |
| D19K | | | | IAML | | 10 42 43.9 | |
| | comp=N,438nm,0.8s | | | | | | |
| **G16K** | **Koyuk River** | **2.31** | **249** | | Pn | 10 42 05.3 | -0.9 |
| G16K | | | | IAML | | 10 42 47.5 | |
| | comp=N,485nm,0.9s | | | | | | |
| G16K | | | | IAML | | 10 42 48.3 | |
| | comp=E,378nm,0.6s | | | | | | |
| **F22K** | **John River** | **2.32** | **56** | | Pn | 10 42 06.6 | +0.3 |
| **H22K** | **Ishtalitna Cre** | **2.40** | **97** | | Pn | 10 42 07.6 | +0.1 |
| **J19K** | **Poorman** | **2.41** | **163** | | Pn | 10 42 08.0 | +0.5 |
| J19K | | | | IAML | | 10 42 44.6 | |
| | comp=E,410nm,0.9s | | | | | | |
| **I21K** | **Tanana** | **2.43** | **115** | | Pn | 10 42 07.8 | 0.0 |
| **D20K** | **Etivluk River** | **2.44** | **5** | | Pn | 10 42 08.2 | +0.2 |
| **J20K** | **Nowinta River** | **2.48** | **148** | Pn | Pn | 10 42 09.8 | +1.2 |
| **E21K** | **Killik River** | **2.49** | **29** | | Pn | 10 42 09.2 | +0.6 |
| **E21K** | **Killik River** | **2.49** | **29** | IAML | | 10 42 56.1 | |
| | comp=N,335nm,0.7s | | | | | | |
| **H16K** | **Elim** | **2.69** | **234** | | Pn | 10 42 10.2 | -1.2 |
| **D17K** | **Noatak River** | **2.71** | **304** | | Pn | 10 42 11.9 | +0.3 |
| **E22K** | **Anaktuvuk Pass** | **2.79** | **46** | | Pn | 10 42 14.1 | +1.3 |
| **C18K** | **Utukok River** | **2.82** | **329** | | Pn | 10 42 13.8 | +0.6 |
| **I17K** | **Unalakleet** | **2.84** | **213** | | Pn | 10 42 14.0 | +0.6 |
| I17K | | | | IAML | | 10 43 03.4 | |
| | comp=E,381nm,0.6s | | | | | | |
| **RDOG** | **Red Dog Mine** | **2.84** | **311** | | Pn | 10 42 15.1 | +1.6 |
| **J16K** | **Innoko River** | **2.85** | **176** | Pn | Pn | 10 42 14.0 | +0.4 |
| **G23K** | **Bananza Creek** | **2.90** | **78** | | Pn | 10 42 14.6 | +0.2 |
| G23K | | | | IAML | | 10 43 13.4 | |
| | comp=E,320nm,0.6s | | | | | | |
| **COLD** | **Coldfoot** | **2.92** | **68** | | Pn | 10 42 14.5 | -0.1 |
| **MLY** | **Manley** | **2.96** | **112** | Pn | Pn | 10 42 14.9 | -0.2 |
| MLY | | | | IAML | | 10 43 08.6 | |
| | comp=N,255nm,1.2s | | | | | | |
| MLY | | | | IAML | | 10 43 09.0 | |
| | comp=E,281nm,1.0s | | | | | | |
| **C19K** | **Lookout Ridge** | **2.96** | **343** | Pn | Pb | 10 42 18.6 | -2.3 |
| C19K | | | | IAML | | 10 43 13.4 | |
| | comp=E,253nm,1.1s | | | | | | |
| C19K | | | | IAML | | 10 43 14.4 | |
| | comp=N,252nm,0.9s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.02** | **17** | | Pn | 10 42 15.9 | +0.1 |
| **F15K** | **North Star Dit** | **3.10** | **262** | | Pn | 10 42 17.2 | +0.2 |
| F15K | | | | IAML | | 10 43 10.1 | |
| | comp=N,312nm,0.9s | | | | | | |
| F15K | | | | IAML | | 10 43 12.6 | |
| | comp=E,234nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **3.12** | **32** | | Pn | 10 42 18.2 | +0.9 |
| D22K | | | | IAML | | 10 43 14.3 | |
| | comp=N,232nm,0.8s | | | | | | |
| D22K | | | | IAML | | 10 43 17.4 | |
| | comp=E,291nm,0.9s | | | | | | |
| **G15K** | **Niukluk** | **3.12** | **248** | | Pn | 10 42 16.9 | -0.5 |
| **H23K** | **Yukon River** | **3.15** | **95** | | Pn | 10 42 18.0 | +0.2 |
| **C17K** | **DeLong Mountai** | **3.18** | **316** | | Pn | 10 42 18.5 | +0.3 |
| **K20K** | **Telida** | **3.24** | **154** | | Pn | 10 42 19.8 | +0.8 |
| **J16K** | **Anvik River** | **3.36** | **207** | | Pn | 10 42 21.2 | +0.6 |
| J16K | | | | IAML | | 10 43 18.4 | |
| | comp=N,243nm,0.9s | | | | | | |
| J16K | | | | IAML | | 10 43 18.6 | |
| | comp=E,237nm,0.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **3.42** | **127** | | Pn | 10 42 22.6 | +1.1 |
| **I23K** | **Minto, Yukon-K** | **3.44** | **106** | | Pn | 10 42 21.3 | -0.3 |
| **E23K** | **Chandalar** | **3.44** | **56** | | Pn | 10 42 23.2 | +1.4 |
| E23K | | | | IAML | | 10 43 22.0 | |
| | comp=E,212nm,0.8s | | | | | | |
| E23K | | | | IAML | | 10 43 24.3 | |
| | comp=N,208nm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.48** | **15** | | Pn | 10 42 22.1 | -0.1 |
| B21K | | | | IAML | | 10 43 28.7 | |
| | comp=N,214nm,1.0s | | | | | | |
| B21K | | | | IAML | | 10 43 32.0 | |
| | comp=E,213nm,0.9s | | | | | | |
| **B18K** | **Kokolik River** | **3.54** | **333** | | Pn | 10 42 23.3 | +0.2 |
| **K17K** | **Iditarod** | **3.63** | **188** | | Pn | 10 42 24.4 | +0.1 |
| **K17K** | **Iditarod** | **3.63** | **188** | IAML | | 10 43 33.4 | |
| | comp=N,166nm,1.2s | | | | | | |
| K17K | | | | IAML | | 10 43 40.7 | |
| | comp=E,170nm,1.2s | | | | | | |
| **D23K** | **Nanushuk River** | **3.66** | **40** | | Pn | 10 42 25.7 | +1.1 |
| D23K | | | | IAML | | 10 43 35.0 | |
| | comp=E,185nm,0.6s | | | | | | |
| D23K | | | | IAML | | 10 43 35.2 | |
| | comp=N,201nm,1.0s | | | | | | |
| **B20K** | **Meade River** | **3.73** | **0** | | Pn | 10 42 25.8 | +0.2 |
| **B20K** | **Meade River** | **3.73** | **0** | IAML | | 10 43 35.8 | |
| | comp=E,188nm,1.0s | | | | | | |
| B20K | | | | IAML | | 10 43 39.5 | |
| | comp=N,141nm,0.9s | | | | | | |
| **C16K** | **Lisburne Hills** | **3.73** | **306** | | Pn | 10 42 26.8 | +1.1 |
| **TOLK** | **Toolik Lake Re** | **3.76** | **48** | | Pn | 10 42 27.1 | +1.0 |
| TOLK | | | | IAML | | 10 43 42.8 | |
| | comp=N,159nm,1.0s | | | | | | |
| **NEA2** | **Nenana** | **3.80** | **113** | | Pn | 10 42 26.8 | +0.2 |
| NEA2 | | | | IAML | | 10 43 37.3 | |
| | comp=E,191nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.82** | **93** | | Pn | 10 42 27.3 | +0.3 |
| H24K | | | | IAML | | 10 43 38.1 | |
| | comp=N,186nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **3.83** | **58** | | Pn | 10 42 28.1 | +1.0 |
| E24K | | | | IAML | | 10 43 34.7 | |
| | comp=E,115nm,0.8s | | | | | | |
| E24K | | | | IAML | | 10 43 38.0 | |
| | comp=N,126nm,1.1s | | | | | | |
| **F24K** | **Squaw Lake** | **3.87** | **67** | | Pn | 10 42 28.2 | +0.6 |
| **BWN** | **Browne** | **3.89** | **120** | | Pn | 10 42 28.9 | +1.0 |
| **G24K** | **Hadweenzic Riv** | **3.91** | **80** | | Pn | 10 42 28.0 | -0.2 |
| **MDM** | **Murphy Dome** | **3.95** | **106** | | Pn | 10 42 28.2 | -0.5 |
| MDM | | | | IAML | | 10 43 35.7 | |
| | comp=E,146nm,1.1s | | | | | | |
| **L20K** | **Farewell, AK** | **4.09** | **158** | | Pn | 10 42 31.4 | +0.6 |
| L20K | | | | | Sn | 10 43 20.4 | +1.6 |
| **L18K** | **Granite Mounta** | **4.10** | **177** | | Pn | 10 42 31.9 | +1.1 |
| **COLA** | **College** | **4.13** | **106** | | Pn | 10 42 31.4 | +0.3 |
| **POKR** | **Poker Plat Res** | **4.20** | **102** | | Pn | 10 42 32.3 | +0.1 |
| **L17K** | **Donlin** | **4.21** | **187** | | Pn | 10 42 32.8 | +0.6 |
| **WRH** | **Wood River Hil** | **4.22** | **112** | | Pn | 10 42 31.9 | -0.5 |
| WRH | | | | IAML | | 10 43 43.6 | |
| | comp=E,104nm,0.8s | | | | | | |
| WRH | | | | IAML | | 10 43 48.8 | |
| | comp=N,101nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **4.25** | **109** | | Pn | 10 42 32.5 | -0.2 |
| CCB | | | | IAML | | 10 43 43.8 | |
| | comp=N,85nm,0.9s | | | | | | |
| CCB | | | | IAML | | 10 43 51.6 | |
| | comp=E,109nm,0.7s | | | | | | |
| **L19K** | **White Mountain** | **4.26** | **165** | | Pn | 10 42 34.1 | +1.2 |
| L19K | | | | IAML | | 10 43 27.6 | |
| | comp=N,84nm,0.7s | | | | | | |
| L19K | | | | IAML | | 10 43 56.7 | |
| | comp=E,77nm,0.9s | | | | | | |
| **D24K** | **Happy Valley** | **4.29** | **44** | | Pn | 10 42 34.3 | +1.0 |
| D24K | | | | IAML | | 10 43 57.3 | |
| | comp=N,119nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **4.30** | **17** | Pn | Pn | 10 42 34.7 | +1.4 |
| B22K | | | | IAML | | 10 43 49.7 | |
| | comp=N,102nm,1.1s | | | | | | |
| B22K | | | | IAML | | 10 44 13.8 | |
| | comp=E,112nm,1.2s | | | | | | |
| **C23K** | **Itkillik River** | **4.33** | **32** | | Pn | 10 42 34.4 | +0.6 |
| C23K | | | | IAML | | 10 44 04.1 | |
| | comp=E,109nm,0.7s | | | | | | |
| C23K | | | | IAML | | 10 44 04.7 | |
| | comp=N,92nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **4.35** | **123** | | Pn | 10 42 34.6 | +0.5 |
| **K15K** | **Wolf Creek Mou** | **4.44** | **207** | | Pn | 10 42 36.6 | +1.2 |
| K15K | | | | IAML | | 10 43 58.6 | |
| | comp=N,88nm,1.1s | | | | | | |
| K15K | | | | IAML | | 10 43 59.5 | |
| | comp=E,92nm,0.7s | | | | | | |
| **J14K** | **Nanvaranak Lak** | **4.50** | **221** | | Pn | 10 42 36.8 | +0.7 |
| J14K | | | | IAML | | 10 44 02.7 | |
| | comp=E,110nm,0.8s | | | | | | |
| J14K | | | | IAML | | 10 44 06.7 | |
| | comp=N,107nm,0.9s | | | | | | |
| **IL31** | | **4.55** | **105** | | Pn | 10 42 37.3 | +0.5 |
| **ILAR** | **Eielson Array** | **4.55** | **105** | | Pn | 10 42 37.3 | +0.4 |
| **RND** | **Reindeer** | **4.59** | **125** | | Pn | 10 42 38.2 | +0.6 |
| **HDA** | **Harding Lake** | **4.69** | **109** | | Pn | 10 42 38.4 | -0.4 |
| HDA | | | | IAML | | 10 43 57.3 | |
| | comp=N,96nm,0.7s | | | | | | |
| HDA | | | | IAML | | 10 44 03.1 | |
| | comp=E,76nm,1.2s | | | | | | |
| **C24K** | **Franklin Bluff** | **4.69** | **39** | | Pn | 10 42 39.8 | +1.0 |
| C24K | | | | IAML | | 10 44 18.8 | |
| | comp=N,80nm,1.0s | | | | | | |
| C24K | | | | IAML | | 10 44 18.8 | |
| | comp=E,91nm,0.9s | | | | | | |
| **L16K** | **Owhat River** | **4.71** | **193** | | Pn | 10 42 39.6 | +0.5 |
| **F25K** | **Christian Rive** | **4.72** | **69** | | Pn | 10 42 41.2 | +1.8 |
| F25K | | | | IAML | | 10 44 01.3 | |
| | comp=N,74nm,0.9s | | | | | | |
| F25K | | | | IAML | | 10 44 02.4 | |
| | comp=E,88nm,0.8s | | | | | | |
| **M20K** | **Styx River** | **4.78** | **156** | | Pn | 10 42 41.2 | +1.1 |
| M20K | | | | IAML | | 10 43 41.4 | |
| | comp=E,51nm,1.1s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.85** | **94** | | Pn | 10 42 41.2 | +0.1 |
| **M18K** | **Stony River** | **4.86** | **172** | | Pn | 10 42 42.0 | +0.8 |
| **M17K** | **Holitna River** | **4.92** | **181** | | Pn | 10 42 43.6 | +1.6 |
| **SKT** | **Skwentna** | **4.99** | **148** | | Pn | 10 42 44.2 | +1.3 |
| SKT | | | | IAML | | 10 44 19.4 | |
| | comp=E,50nm,1.2s | | | | | | |
| **L15K** | **Ungalak Mounta** | **5.01** | **204** | | Pn | 10 42 44.4 | +1.2 |
| **WAT1** | **Susitna Watana** | **5.10** | **129** | | Pn | 10 42 45.7 | +1.2 |
| **D25K** | **Kavik River** | **5.10** | **49** | | Pn | 10 42 46.2 | +1.7 |
| D25K | | | | IAML | | 10 44 15.7 | |
| | comp=N,44nm,0.9s | | | | | | |
| D25K | | | | IAML | | 10 44 20.6 | |
| | comp=E,55nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **5.10** | **71** | | Pn | 10 42 48.0 | +3.4 |
| **J25K** | **Salcha River,** | **5.21** | **103** | | Pn | 10 42 46.1 | +0.1 |
| J25K | | | | IAML | | 10 44 16.2 | |
| | comp=E,63nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **5.30** | **69** | | Pn | 10 42 49.7 | +2.4 |
| F26K | | | | IAML | | 10 44 22.7 | |
| | comp=E,52nm,1.1s | | | | | | |
| **DHY** | **Denali Highway** | **5.31** | **123** | | Pn | 10 42 48.3 | +0.8 |
| **SPNN** | **North Nagishla** | **5.33** | **156** | | Pn | 10 42 49.2 | +1.4 |
| **M16K** | **Timber Creek** | **5.35** | **189** | | Pn | 10 42 48.3 | +0.3 |
| M16K | | | | IAML | | 10 44 34.8 | |
| | comp=N,42nm,1.1s | | | | | | |
| **STLK** | **Strandline Lak** | **5.37** | **151** | | Pn | 10 42 49.6 | +1.4 |
| **SPWE** | **Spurr West** | **5.44** | **156** | | Pn | 10 42 51.1 | +1.8 |
| **K13K** | **Kusilvak Mount** | **5.46** | **220** | | Pn | 10 42 49.7 | +0.2 |
| **SPBG** | **Spurr Blockage** | **5.49** | **155** | | Pn | 10 42 51.8 | +1.9 |
| **M22K** | **Willow** | **5.52** | **142** | | Pn | 10 42 50.5 | +0.4 |
| **SPCP** | **Crater Peak Br** | **5.52** | **154** | | Pn | 10 42 52.3 | +1.9 |
| **SPU** | **Mount Spurr** | **5.62** | **154** | | Pn | 10 42 53.4 | +1.8 |
| **SUA** | **Susitna One** | **5.62** | **147** | | Pn | 10 42 53.2 | +1.4 |
| **N19K** | **Bonanza Creek** | **5.64** | **166** | | Pn | 10 42 52.7 | +0.8 |
| **N18K** | **Kilae Creek** | **5.67** | **174** | | Pn | 10 42 53.5 | +1.2 |
| **N17K** | **Nushagak Hills** | **5.79** | **180** | | Pn | 10 42 55.6 | +1.6 |
| **GHO** | **Glory Hole Cre** | **5.81** | **138** | | Pn | 10 42 55.3 | +1.0 |
| **M15K** | **Kasigluk River** | **5.84** | **197** | | Pn | 10 42 55.9 | +1.3 |
| **PMR** | **Palmer** | **5.91** | **139** | | Pn | 10 42 56.8 | +1.3 |
| **SML** | **Sawmill** | **5.95** | **135** | | Pn | 10 42 56.9 | +0.7 |
| **M14K** | **Bethel** | **5.96** | **203** | | Pn | 10 42 57.5 | +1.3 |
| **J26L** | **Joseph Creek** | **5.97** | **101** | | Pn | 10 42 57.6 | +1.1 |
| **SCRK** | **Sand Creek** | **6.04** | **107** | | Pn | 10 42 57.2 | -0.2 |
| **RSO** | **Redoubt South** | **6.19** | **159** | | Pn | 10 43 00.5 | +0.9 |
| **SCM** | **Sheep Creek Mo** | **6.22** | **131** | Pn | Pn | 10 43 00.8 | +0.8 |
| **N15K** | **Kwethluk River** | **6.29** | **193** | | Pn | 10 43 01.8 | +1.0 |
| **E27K** | **Coleen River** | **6.34** | **66** | | Pn | 10 43 02.4 | +1.0 |
| **M24K** | **Tolsona, Glenn** | **6.38** | **126** | | Pn | 10 43 02.6 | +0.4 |
| **O18K** | **Koktuh Hills** | **6.53** | **171** | Pn | Pn | 10 43 04.4 | +0.3 |
| **O17K** | **Koliganek Bris** | **6.55** | **180** | | Pn | 10 43 05.2 | +0.9 |
| **PWL** | **Port Wells** | **6.73** | **140** | Pn | Pn | 10 43 08.3 | +1.4 |
| **O16K** | **Kokwok River B** | **6.74** | **184** | Pn | Pn | 10 43 07.6 | +0.7 |
| **D27M** | **Malcolm River** | **6.82** | **57** | | Pn | 10 43 10.7 | +2.6 |
| **EGAK** | **Eagle** | **6.83** | **95** | | Pn | 10 43 08.5 | +0.3 |
| **I28M** | **Miner Creek** | **7.12** | **89** | | Pn | 10 43 12.2 | -0.1 |
| **N25K** | **Chitina, Valde** | **7.26** | **124** | Pn | Pn | 10 43 14.2 | 0.0 |
| **M26K** | **Nabesna, AK** | **7.29** | **116** | | Pn | 10 43 14.8 | +0.2 |
| **L27K** | **Beaver Creek,** | **7.34** | **109** | | Pn | 10 43 14.4 | -0.8 |
| **BCAR** | **Beaver Creek A** | **7.35** | **109** | Pn | Pn | 10 43 15.3 | -0.1 |
| **Q19K** | **Cape Douglas,** | **7.57** | **166** | Pn | Pn | 10 43 18.6 | +0.2 |
| **H29M** | **Whitestone** | **7.59** | **82** | Pn | Pn | 10 43 19.0 | +0.3 |
| **HIN** | **Hinchinbrook I** | **7.62** | **136** | Pn | Pn | 10 43 19.5 | +0.5 |
| **M27K** | **Edge Creek, AK** | **7.72** | **114** | Pn | Pn | 10 43 20.6 | 0.0 |
| **E29M** | **Blow River** | **7.73** | **66** | Pn | Pn | 10 43 21.1 | +0.6 |
| **DAWY** | **Dawson** | **7.81** | **98** | | Pn | 10 43 21.9 | +0.3 |
| **VRDI** | **Verde Repeater** | **7.92** | **123** | Pn | Pn | 10 43 22.4 | -0.9 |
| **EPYK** | **Eagle Plains** | **8.23** | **80** | Pn | Pn | 10 43 26.2 | -1.2 |
| **I30M** | **Mount Dempster** | **8.62** | **88** | | Pn | 10 43 33.0 | +0.2 |
| **J30M** | **Hart River** | **8.85** | **92** | | Pn | 10 43 36.0 | +0.1 |
| **M29M** | **Somme Creek** | **8.97** | **107** | Pn | Pn | 10 43 37.2 | -0.4 |
| **G31M** | **Satah River** | **9.12** | **76** | Pn | Pn | 10 43 38.3 | -1.2 |
| **N30M** | **Aishikik Lake** | **10.07** | **109** | Pn | Pn | 10 43 53.2 | +0.5 |
| **A36M** | **Sachs Harbour** | **12.58** | **49** | Pn | Pn | 10 44 25.1 | -1.7 |
| **C36M** | **Paulatuk** | **12.77** | **61** | Pn | Pn | 10 44 28.6 | -0.8 |

*NEIC* ***22*** *11:10:11.5±1.2,43°.25N±0°.09×128°.3W±0°.2,h10km±2km, ML3.5/66, Error ellipse: s-maj=20.1km s-min=14.4km az=264.0*

**ISC 22 11:10:12.0±3.0,43°.30N±0°.09×128°.2W±0°.2,h10km,n54, σ0§64/54,Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **J01E** | **Myrtle Point** | **3.11** | **91** | Pn | **Pn** | **11 11 00.0** | **-1.1** |
| J01E | | | | IAML | | 11 11 35.9 | |
| | comp=N,95nm,0.4s | | | | | | |
| J01E | | | | IAML | | 11 11 38.6 | |
| | comp=E,115nm,0.3s | | | | | | |
| **K02D** | **Willamette Mer** | **3.37** | **99** | Pn | **Pn** | **11 11 04.5** | **-0.3** |
| **KSXB** | **Camp Six Broad** | **3.50** | **113** | Pn | **Pn** | **11 11 06.6** | **0.0** |
| **L02F** | **Cave Junction** | **3.59** | **108** | Pn | **Pn** | **11 11 07.1** | **-0.7** |
| **DBO** | **Dodson Butte** | **3.61** | **91** | | **Pn** | **11 11 08.0** | **-0.1** |
| **KRMB** | **Red Mountain** | **3.63** | **118** | Pn | **Pn** | **11 11 08.7** | **+0.3** |
| **HEBO** | **Mount Hebo** | **3.71** | **57** | Pn | **Pn** | **11 11 08.5** | **-1.0** |
| **COR** | **Corvallis** | **3.75** | **68** | Pn | **Pn** | **11 11 09.7** | **-0.2** |
| COR | | | | IAML | | 11 11 51.2 | |
| | comp=E,82nm,2.1s | | | | | | |
| COR | | | | IAML | | 11 13 24.9 | |
| | comp=E,102nm,2.3s | | | | | | |
| **BUCK** | **Buck Mountain** | **3.87** | **75** | Pn | **Pn** | **11 11 11.7** | **0.0** |
| BUCK | | | | IAML | | 11 11 54.5 | |
| | comp=N,66nm,2.3s | | | | | | |
| BUCK | | | | IAML | | 11 13 02.5 | |
| | comp=E,77nm,2.0s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.90** | **98** | Pn | **Pn** | **11 11 12.8** | **+0.8** |
| **G03D** | **McMinnville, O** | **4.01** | **60** | | **Pn** | **11 11 13.2** | **-0.3** |
| G03D | | | | IAML | | 11 11 47.6 | |
| | comp=E,71nm,2.0s | | | | | | |
| G03D | | | | IAML | | 11 12 52.5 | |
| | comp=N,84nm,2.0s | | | | | | |
| **H04D** | **Lebanon** | **4.12** | **71** | Pn | **Pn** | **11 11 15.3** | **+0.3** |
| **F03A** | **Seaside** | **4.22** | **50** | | **Pn** | **11 11 16.4** | **0.0** |
| **I04A** | **Tendick Farm,** | **4.22** | **81** | Pn | **Pn** | **11 11 17.1** | **+0.6** |
| I04A | | | | IAML | | 11 12 04.9 | |
| | comp=E,50nm,0.2s | | | | | | |
| I04A | | | | IAML | | 11 12 05.3 | |
| | comp=N,43nm,0.3s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **4.34** | **109** | Pn | **Pn** | **11 11 19.9** | **+1.8** |
| **RADR** | **Rader Ridge** | **4.41** | **43** | Pn | **Pn** | **11 11 18.6** | **-0.4** |
| RADR | | | | IAML | | 11 12 12.3 | |
| | comp=N,39nm,3.0s | | | | | | |
| RADR | | | | IAML | | 11 14 02.5 | |
| | comp=E,56nm,1.9s | | | | | | |
| **L04D** | **Klamath Falls** | **4.46** | **102** | Pn | **Pn** | **11 11 19.4** | **-0.4** |
| L04D | | | | IAML | | 11 12 45.1 | |
| | comp=E,30nm,2.4s | | | | | | |
| **H04A** | **Detroit Lake** | **4.54** | **70** | Pn | **Pn** | **11 11 21.0** | **+0.2** |
| H04A | | | | IAML | | 11 12 15.4 | |
| | comp=N,28nm,0.4s | | | | | | |
| **E03A** | **Lebam** | **4.61** | **44** | Pn | **Pn** | **11 11 21.4** | **-0.3** |
| **F04D** | **Rainier, OR** | **4.62** | **51** | Pn | **Pn** | **11 11 21.8** | **0.0** |
| **K04D** | **Chiloquin, OR** | **4.76** | **96** | Pn | **Pn** | **11 11 23.2** | **-0.8** |
| K04D | | | | IAML | | 11 12 51.2 | |
| | comp=E,45nm,1.8s | | | | | | |
| **F04A** | **Amboy** | **4.88** | **55** | Pn | **Pn** | **11 11 25.9** | **+0.4** |
| F04A | | | | IAML | | 11 12 21.2 | |
| | comp=N,42nm,0.6s | | | | | | |
| **WISH** | **Wishkah** | **4.92** | **38** | Pn | **Pn** | **11 11 26.3** | **+0.3** |
| WISH | | | | IAML | | 11 12 33.9 | |
| | comp=E,31nm,2.4s | | | | | | |
| WISH | | | | IAML | | 11 13 02.1 | |
| | comp=N,32nm,2.6s | | | | | | |
| **KCPM** | **Cahto Peak** | **5.00** | **135** | Pn | **Pn** | **11 11 26.1** | **-1.1** |
| KCPM | | | | IAML | | 11 13 03.1 | |
| | comp=N,25nm,4.8s | | | | | | |
| KCPM | | | | IAML | | 11 14 39.8 | |
| | comp=E,29nm,3.8s | | | | | | |
| **I05D** | **Terrebonne, OR** | **5.06** | **76** | | **Pn** | **11 11 28.3** | **+0.3** |
| I05D | | | | IAML | | 11 12 58.4 | |
| | comp=E,28nm,2.1s | | | | | | |
| I05D | | | | IAML | | 11 13 29.1 | |
| | comp=N,22nm,3.2s | | | | | | |
| **J05D** | **Fort Rock, OR** | **5.07** | **88** | | **Pn** | **11 11 28.7** | **+0.5** |
| J05D | | | | IAML | | 11 12 52.8 | |
| | comp=E,19nm,2.5s | | | | | | |
| J05D | | | | IAML | | 11 12 53.9 | |
| | comp=N,21nm,2.8s | | | | | | |
| **NLWA** | **Neilton Lookou** | **5.09** | **35** | Pn | **Pn** | **11 11 28.7** | **+0.3** |
| NLWA | | | | IAML | | 11 12 23.5 | |
| | comp=N,20nm,0.5s | | | | | | |
| NLWA | | | | IAML | | 11 12 23.6 | |
| | comp=N,34nm,0.6s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **5.10** | **64** | | **Pn** | **11 11 29.0** | **+0.3** |
| HOOD | | | | IAML | | 11 14 15.3 | |
| | comp=E,31nm,2.3s | | | | | | |
| HOOD | | | | IAML | | 11 14 28.0 | |
| | comp=N,19nm,1.8s | | | | | | |
| **PINE** | **Pine Mountain** | **5.28** | **82** | Pn | **Pn** | **11 11 32.4** | **+1.1** |
| PINE | | | | IAML | | 11 12 18.1 | |
| | comp=N,15nm,4.6s | | | | | | |
| PINE | | | | IAML | | 11 14 00.4 | |
| | comp=E,20nm,2.7s | | | | | | |
| **C03A** | **Quillayute Air** | **5.29** | **27** | Pn | **Pn** | **11 11 31.5** | **+0.4** |
| **G05A** | **Wamic** | **5.30** | **66** | | **Pn** | **11 11 31.4** | **+0.2** |
| G05A | | | | IAML | | 11 13 04.8 | |
| | comp=N,33nm,2.2s | | | | | | |
| G05A | | | | IAML | | 11 13 17.7 | |
| | comp=E,35nm,2.9s | | | | | | |
| **LON** | **Longmire** | **5.68** | **50** | | **Pn** | **11 11 37.2** | **+0.7** |
| **GNW** | **Green Mountain** | **5.69**

0.6nm,0.7s,baz=228,slow=7.7,SNR=6.1
0.6nm,0.7s
**ILAR Eielson Array 85.56 13 P P 11 25 39.1 -1.7**
0.2nm,0.4s,baz=222,slow=5.4,SNR=7.6
0.2nm,0.4s
**TXAR Lajitas Array 85.61 58 P P 11 25 43.2 +1.2**
0.4nm,0.7s,baz=220,slow=5.3,SNR=8.2
0.4nm,0.7s
**PDAR Pinedale Array 86.96 43 P P 11 25 48.0 -0.2**
0.2nm,0.4s,baz=193,slow=2.4,SNR=2.7
0.2nm,0.4s

**NEIC 22 11:24:41.5±1.3, 43°.65N±0°.07×127°.5W±0°.1, h10km±2km, ML3.2/92, Error ellipse: s-maj=18.0km s-min=12.3km az=262.0, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **J01E** | **Myrtle Point** | **2.61** | **100** | Pn | Pn | 11 25 21.0 | -2.7 |
| J01E | | | | IAML | | 11 26 00.3 | |
| | comp=N,71nm,1.5s | | | | | | |
| J01E | | | | IAML | | 11 26 04.2 | |
| | comp=E,96nm,1.9s | | | | | | |
| **KBO** | **Bosley Butte** | **2.77** | **120** | Pn | Pn | 11 25 22.1 | -3.9 |
| **K02D** | **Willamette Mer** | **2.93** | **108** | Pn | Pn | 11 25 26.6 | -1.6 |
| **HEBO** | **Mount Hebo** | **3.07** | **58** | Pn | Pn | 11 25 29.3 | -0.9 |
| **DBO** | **Dodson Butte** | **3.11** | **98** | | Pn | 11 25 29.4 | -1.3 |
| DBO | | | | IAML | | 11 26 11.0 | |
| | comp=E,47nm,2.7s | | | | | | |
| **COR** | **Corvallis** | **3.13** | **71** | Pn | Pn | 11 25 30.5 | -0.3 |
| COR | | | | IAML | | 11 26 06.7 | |
| | comp=E,92nm,2.2s | | | | | | |
| COR | | | | IAML | | 11 26 08.2 | |
| | comp=E,84nm,2.4s | | | | | | |
| **KSXB** | **Camp Six Broad** | **3.20** | **124** | Pn | Pn | 11 25 29.5 | -2.4 |
| **L02F** | **Cave Junction** | **3.23** | **117** | | Pn | 11 25 30.7 | -1.7 |
| **BUCK** | **Buck Mountain** | **3.27** | **79** | | Pn | 11 25 32.8 | -0.1 |
| BUCK | | | | IAML | | 11 26 43.0 | |
| | comp=N,66nm,2.3s | | | | | | |
| BUCK | | | | IAML | | 11 27 18.1 | |
| | comp=E,82nm,2.2s | | | | | | |
| **KRMB** | **Red Mountain** | **3.37** | **128** | Pn | Pn | 11 25 33.9 | -0.5 |
| **G03D** | **McMinnville, O** | **3.38** | **61** | | Pn | 11 25 33.3 | -1.0 |
| G03D | | | | IAML | | 11 26 26.4 | |
| | comp=E,76nm,1.8s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.45** | **106** | | Pn | 11 25 34.0 | -1.3 |
| **H04D** | **Lebanon** | **3.50** | **74** | Pn | Pn | 11 25 35.0 | -1.0 |
| **KRPM** | **Rodgers** | **3.56** | **133** | Pn | Pn | 11 25 36.8 | -0.1 |
| KRPM | | | | IAML | | 11 27 12.2 | |
| | comp=E,46nm,3.7s | | | | | | |
| KRPM | | | | IAML | | 11 27 24.2 | |
| | comp=N,36nm,1.8s | | | | | | |
| **F03A** | **Seaside** | **3.58** | **49** | | Pn | 11 25 36.9 | -0.2 |
| **I04A** | **Tendick Farm,** | **3.65** | **86** | | Pn | 11 25 38.2 | +0.1 |
| **RADR** | **Rader Ridge** | **3.79** | **42** | Pn | Pn | 11 25 39.1 | -0.8 |
| RADR | | | | IAML | | 11 26 29.8 | |
| | comp=N,47nm,2.4s | | | | | | |
| RADR | | | | IAML | | 11 26 59.3 | |
| | comp=E,40nm,2.2s | | | | | | |
| **JCC** | **Jacoby Creek,** | **3.80** | **137** | Pn | Pn | 11 25 39.6 | -0.5 |
| **KHMM** | **Horse Mountain** | **3.91** | **134** | | Pn | 11 25 41.3 | -0.6 |
| **H04A** | **Detroit Lake** | **3.92** | **73** | | Pn | 11 25 41.9 | 0.0 |
| H04A | | | | IAML | | 11 26 14.7 | |
| | comp=N,32nm,0.4s | | | | | | |
| H04A | | | | IAML | | 11 26 31.6 | |
| | comp=E,29nm,2.3s | | | | | | |
| **F04D** | **Rainier, OR** | **3.98** | **51** | | Pn | 11 25 42.7 | +0.1 |
| **YBH** | **Yreka Blue Hor** | **3.98** | **117** | | Pn | 11 25 42.4 | -0.4 |
| **E03A** | **Lebam** | **3.99** | **42** | | Pn | 11 25 42.4 | -0.4 |
| E03A | | | | IAML | | 11 26 32.4 | |
| | comp=E,49nm,0.9s | | | | | | |
| E03A | | | | IAML | | 11 26 37.5 | |
| | comp=N,43nm,0.8s | | | | | | |
| **L04D** | **Klamath Falls** | **4.04** | **109** | Pn | Pn | 11 25 43.5 | 0.0 |
| L04D | | | | IAML | | 11 26 29.2 | |
| | comp=N,26nm,2.5s | | | | | | |
| L04D | | | | IAML | | 11 26 38.8 | |
| | comp=E,28nm,2.5s | | | | | | |
| **KMPM** | **Mount Pierce** | **4.07** | **141** | Pn | Pn | 11 25 43.3 | -0.7 |
| KMPM | | | | IAML | | 11 26 36.7 | |
| | comp=E,24nm,4.0s | | | | | | |
| KMPM | | | | IAML | | 11 28 06.8 | |
| | comp=N,24nm,3.3s | | | | | | |
| **F04A** | **Amboy** | **4.24** | **56** | | Pn | 11 25 46.7 | +0.5 |
| **K04D** | **Chiloquin, OR** | **4.29** | **102** | Pn | Pn | 11 25 47.3 | +0.3 |
| K04D | | | | IAML | | 11 27 57.4 | |
| | comp=E,41nm,2.5s | | | | | | |
| **WISH** | **Wishkah** | **4.32** | **36** | Pn | Pn | 11 25 47.0 | -0.2 |
| WISH | | | | IAML | | 11 26 44.8 | |
| | comp=N,39nm,2.3s | | | | | | |
| **KMRM** | **Mail Ridge** | **4.42** | **140** | | Pn | 11 25 48.0 | -0.7 |
| KMRM | | | | IAML | | 11 26 30.2 | |
| | comp=E,23nm,4.3s | | | | | | |
| KMRM | | | | IAML | | 11 27 57.6 | |
| | comp=N,25nm,4.9s | | | | | | |
| **I05D** | **Terrebonne, OR** | **4.46** | **79** | | Pn | 11 25 49.2 | 0.0 |
| I05D | | | | IAML | | 11 27 05.3 | |
| | comp=N,30nm,4.0s | | | | | | |
| I05D | | | | IAML | | 11 27 21.9 | |
| | comp=E,28nm,3.1s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.47** | **66** | | Pn | 11 25 50.2 | +0.8 |
| HOOD | | | | IAML | | 11 26 23.3 | |
| | comp=N,33nm,1.0s | | | | | | |
| HOOD | | | | IAML | | 11 27 05.6 | |
| | comp=E,35nm,1.7s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.50** | **33** | | Pn | 11 25 49.3 | -0.6 |
| NLWA | | | | IAML | | 11 26 45.0 | |
| | comp=E,18nm,0.5s | | | | | | |
| NLWA | | | | IAML | | 11 26 53.2 | |
| | comp=E,17nm,1.2s | | | | | | |
| **J05D** | **Fort Rock, OR** | **4.54** | **93** | | Pn | 11 25 51.8 | +1.3 |
| J05D | | | | IAML | | 11 26 57.6 | |
| | comp=N,21nm,2.5s | | | | | | |
| J05D | | | | IAML | | 11 27 27.1 | |
| | comp=E,18nm,4.2s | | | | | | |
| **G05A** | **Wamic** | **4.67** | **68** | | Pn | 11 25 52.4 | +0.3 |
| **PINE** | **Pine Mountain** | **4.72** | **86** | | Pn | 11 25 52.9 | 0.0 |
| PINE | | | | IAML | | 11 26 29.8 | |
| | comp=N,17nm,3.6s | | | | | | |
| PINE | | | | IAML | | 11 27 17.9 | |
| | comp=E,14nm,3.5s | | | | | | |
| **C03A** | **Quillayute Air** | **4.74** | **24** | Pn | Pn | 11 25 52.0 | -1.0 |
| **KCPM** | **Cahto Peak** | **4.91** | **143** | Pn | Pn | 11 25 54.3 | -1.1 |
| KCPM | | | | IAML | | 11 27 15.9 | |
| | comp=N,23nm,4.2s | | | | | | |
| KCPM | | | | IAML | | 11 28 15.7 | |
| | comp=E,25nm,3.4s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **4.91** | **133** | Pn | Pn | 11 25 55.0 | -0.5 |
| **LON** | **Longmire** | **5.04** | **50** | | Pn | 11 25 58.0 | +0.7 |
| LON | | | | IAML | | 11 27 03.4 | |
| | comp=N,14nm,0.8s | | | | | | |
| LON | | | | IAML | | 11 27 07.1 | |
| | comp=E,12nm,0.5s | | | | | | |
| **GNW** | **Green Mountain** | **5.08** | **38** | | Pn | 11 25 57.5 | -0.2 |
| GNW | | | | IAML | | 11 26 58.6 | |
| | comp=N,21nm,0.7s | | | | | | |
| GNW | | | | IAML | | 11 27 01.4 | |
| | comp=E,22nm,0.3s | | | | | | |
| **G06A** | **Carlson Farm,** | **5.13** | **70** | | Pn | 11 25 58.6 | +0.2 |
| G06A | | | | IAML | | 11 27 22.7 | |
| | comp=N,9.5nm,2.6s | | | | | | |
| G06A | | | | IAML | | 11 27 27.7 | |
| | comp=E,10nm,2.3s | | | | | | |
| **B04A** | **Port Angeles** | **5.19** | **31** | Pn | Pn | 11 25 59.4 | +0.1 |
| B04A | | | | IAML | | 11 27 19.6 | |
| | comp=N,14nm,2.4s | | | | | | |
| B04A | | | | IAML | | 11 27 39.4 | |
| | comp=E,11nm,3.8s | | | | | | |
| **D05A** | **Enumclaw** | **5.22** | **45** | | Pn | 11 25 59.6 | 0.0 |
| **HATC** | **Hat Creek Radi** | **5.27** | **121** | Pn | Pn | 11 26 00.5 | +0.1 |
| **CLRS** | **Cowichan Lake** | **5.66** | **23** | Pn | Pn | 11 26 04.5 | -1.0 |
| **HOPS** | **Hopland Field** | **5.70** | **143** | | Pn | 11 26 05.9 | -0.3 |
| **PGC** | **Sidney** | **5.71** | **28** | | Pn | 11 26 06.2 | -0.2 |
| **I07A** | **Izee** | **5.76** | **83** | | Pn | 11 26 07.4 | +0.3 |
| **F07A** | **Phinny Hill Vi** | **5.80** | **65** | | Pn | 11 26 08.1 | +0.5 |
| **MXC** | **Moxie City** | **5.84** | **58** | | Pn | 11 26 08.8 | +0.6 |
| **LTY** | **Liberty** | **5.97** | **51** | | Pn | 11 26 11.0 | +0.9 |
| **ORV** | **Oroville** | **6.05** | **131** | | Pn | 11 26 11.8 | +0.7 |
| **E07A** | **Sunnyside** | **6.11** | **59** | Pn | Pn | 11 26 12.3 | +0.4 |
| **HAWA** | **Hanford** | **6.24** | **61** | | Pn | 11 26 13.5 | -0.2 |
| **G08A** | **Pilot Rock** | **6.29** | **72** | | Pn | 11 26 14.4 | -0.1 |
| **J08A** | **Circle Bar Ran** | **6.53** | **90** | Pn | Pn | 11 26 16.3 | -1.5 |
| **WVOR** | **Wild Horse Val** | **6.57** | **98** | Pn | Pn | 11 26 16.9 | -1.4 |
| **AFDM** | **Forest Hills D** | **6.77** | **132** | Pn | Pn | 11 26 21.6 | +0.6 |
| **D08A** | **Wollman Farm,** | **6.90** | **58** | Pn | Pn | 11 26 22.8 | 0.0 |
| **MPK** | **Martis Peak** | **7.07** | **126** | | Pn | 11 26 26.1 | +0.8 |
| **PAHR** | **Pah Rah Range** | **7.21** | **120** | | Pn | 11 26 28.9 | +1.9 |
| **BMO** | **Blue Mountains** | **7.38** | **77** | | Pn | 11 26 29.1 | -0.3 |
| **PNTR** | **Pine Nut** | **7.46** | **125** | Pn | Pn | 11 26 30.8 | +0.2 |
| **F10A** | **Beach Ranch, E** | **7.63** | **69** | Pn | Pn | 11 26 33.0 | +0.2 |
| **C09A** | **Chrisman Ranch** | **7.64** | **54** | Pn | Pn | 11 26 32.8 | -0.1 |
| **CMB** | **Columbia Colle** | **7.75** | **134** | Pn | Pn | 11 26 35.4 | +0.9 |
| **WAKR** | **Walker** | **7.94** | **128** | Pn | Pn | 11 26 38.1 | +0.9 |
| **SAO** | **San Andreas Ge** | **8.27** | **144** | Pn | Pn | 11 26 41.2 | -0.3 |
| **KVN** | **Kaiserville** | **8.40** | **120** | Pn | Pn | 11 26 43.5 | +0.1 |
| **NEW** | **Newport** | **8.54** | **54** | Pn | Pn | 11 26 43.6 | -1.6 |
| **BBGB** | **Big Mountain B** | **8.60** | **143** | Pn | Pn | 11 26 46.7 | +0.6 |
| **LHV** | **Little Huntoon** | **8.65** | **126** | | Pn | 11 26 47.2 | +0.4 |
| **MDPB** | **Devils Postpil** | **8.75** | **131** | | Pn | 11 26 48.0 | -0.4 |
| **OMMB** | **Old Mammoth Mi** | **8.81** | **130** | Pn | Pn | 11 26 49.0 | -0.1 |
| **ISA** | **Isabella, Lake** | **10.55** | **136** | Pn | Pn | 11 27 12.3 | -0.6 |
| **BOZ** | **Bozeman (W)** | **11.44** | **75** | Pn | Pn | 11 27 25.1 | 0.0 |

*TAP* ***22*** *11:29:25.6,22°.41N×122°.10E,h41km,ML3.4,D*
*JMA* ***22*** *11:29:26.7±0.3,23°N±1°×122°.1E±0°.8,h42km,MV3.0/9, TAIWAN REGION*

**ISC 22 11:29:23.5±1.2, 22°.47N±0°.03×122°.13E±0°.03, h11km±9km, n100,₀0⁹99/184, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LDUT** | **Ludao** | **0.64** | **289** | *e*P | **Pb** | **11 29 37.5** | **+0.8** |
| | baz=294 | | | | | | |
| LDUT | | | | *e*S | **Sb** | **11 29 45.9** | **+0.1** |
| | baz=294 | | | | | | |
| **LAY** | **Lan-yu** | **0.69** | **232** | P | **Pb** | **11 29 37.6** | **+0.2** |
| | baz=233 | | | | | | |
| LAY | | | | *e*S | **Sg** | **11 29 44.8** | **-0.9** |
| | baz=233 | | | | | | |
| **LYUB** | **Lan-yu** | **0.69** | **228** | P | **Pg** | **11 29 37.1** | **+0.3** |
| | baz=229 | | | | | | |
| LYUB | | | | *e*S | **Sg** | **11 29 45.7** | **-0.1** |
| | baz=229 | | | | | | |
| **EDH** | **Donghe** | **0.91** | **304** | P | **Pb** | **11 29 41.7** | **+0.4** |
| | baz=301 | | | | | | |
| EDH | | | | *e*S | **Sg** | **11 29 52.2** | **-0.9** |
| | baz=301 | | | | | | |
| **CHKT** | **Chengkung** | **0.94** | **312** | P | **Pb** | **11 29 42.0** | **+0.1** |
| | baz=323 | | | | | | |
| CHKT | | | | S | **Sg** | **11 29 53.1** | **-1.0** |
| | baz=323 | | | | | | |
| **TTN** | **Taitung** | **0.95** | **288** | *e*P | **Pn** | **11 29 42.6** | **-0.1** |
| | baz=297 | | | | | | |
| TTN | | | | S | **Sg** | **11 29 54.1** | **-0.1** |
| | baz=297 | | | | | | |
| **CHKH** | **Chenggong** | **0.99** | **317** | P | **Pb** | **11 29 42.8** | **+0.2** |
| | baz=326 | | | | | | |
| CHKH | | | | *e*S | **Sb** | **11 29 55.1** | **-0.6** |
| | baz=326 | | | | | | |
| **LONT** | **Longtian** | **1.02** | **296** | *e*P | **Pn** | **11 29 44.5** | **+0.7** |
| | baz=299 | | | | | | |
| LONT | | | | *e*S | **Sn** | **11 29 58.1** | **+0.1** |
| | baz=299 | | | | | | |
| **TWGBT** | **Beinan** | **1.03** | **290** | *e*P | **Pg** | **11 29 43.8** | **+0.4** |
| | baz=294 | | | | | | |
| TWGBT | | | | S | **Sg** | **11 29 56.9** | **+0.1** |
| | baz=294 | | | | | | |
| **TWG** | **Pinlang** | **1.04** | **290** | P | **Pb** | **11 29 43.7** | **+0.2** |
| | baz=294 | | | | | | |
| TWG | | | | *e*S | **Sg** | **11 29 57.4** | **+0.3** |
| | baz=294 | | | | | | |
| **ECS** | **Chishang** | **1.05** | **307** | P | **Pn** | **11 29 44.4** | **+0.2** |
| | baz=318 | | | | | | |
| ECS | | | | S | **Sg** | **11 29 57.7** | **+0.4** |
| | baz=318 | | | | | | |
| **ECBN** | **Changbin** | **1.05** | **324** | *e*P | **Pb** | **11 29 44.1** | **+0.4** |
| | baz=327 | | | | | | |
| ECBN | | | | *e*S | **Sb** | **11 29 56.6** | **-0.9** |
| | baz=327 | | | | | | |
| **FULB** | **Fuli** | **1.06** | **314** | *e*P | **Pb** | **11 29 43.8** | **-0.1** |
| | baz=323 | | | | | | |
| FULB | | | | *e*S | **Sb** | **11 29 57.4** | **-0.4** |
| | baz=323 | | | | | | |
| **EHD** | **Haiduan** | **1.09** | **309** | *e*P | **Pg** | **11 29 44.7** | **+0.3** |
| | baz=319 | | | | | | |
| EHD | | | | *e*S | **Sb** | **11 29 58.2** | **-0.4** |
| | baz=319 | | | | | | |
| **ECL** | **Taimali** | **1.09** | **277** | *e*P | **Pg** | **11 29 44.7** | **+0.1** |
| | baz=281 | | | | | | |
| ECL | | | | *e*S | **Sb** | **11 29 58.0** | **-0.7** |
| | baz=281 | | | | | | |
| **TAW** | **Tawu** | **1.15** | **265** | P | **Pn** | **11 29 45.6** | **+0.2** |
| | baz=257 | | | | | | |
| TAW | | | | *e*S | **Sb** | **11 29 59.1** | **-1.0** |
| | baz=257 | | | | | | |
| **EYUL** | **Yuli** | **1.15** | **320** | *e*P | **Pb** | **11 29 45.5** | **+0.1** |
| | baz=326 | | | | | | |
| EYUL | | | | S | **Sn** | **11 30 01.1** | **-0.2** |
| | baz=326 | | | | | | |
| **TAWH** | **Dawu Township** | **1.16** | **264** | *i* P | **Pb** | **11 29 45.2** | **-0.2** |
| | baz=256 | | | | | | |
| TAWH | | | | *e*S | **Sb** | **11 29 58.3** | **-2.2** |
| | baz=256 | | | | | | |
| **TWF1** | **Yuli** | **1.17** | **319** | *e*P | **Pb** | **11 29 45.6** | **-0.1** |
| | baz=326 | | | | | | |
| TWF1 | | | | S | **Sb** | **11 30 00.5** | **-0.4** |
| | baz=326 | | | | | | |
| **EAST** | **Anshuo** | **1.19** | **266** | *e*P | **Pb** | **11 29 46.0** | **0.0** |
| | baz=261 | | | | | | |
| EAST | | | | S | **Sb** | **11 30 00.8** | **-0.6** |
| | baz=261 | | | | | | |
| **YULB** | **Yu-li** | **1.20** | **320** | *e*P | **Pn** | **11 29 46.3** | **+0.1** |
| | baz=330 | | | | | | |
| YULB | | | | S | **Sb** | **11 30 01.0** | **-0.7** |
| | baz=330 | | | | | | |
| **HGSD** | **Ruisui** | **1.21** | **328** | P | **Pn** | **11 29 45.9** | **-0.4** |
| | baz=336 | | | | | | |
| HGSD | | | | *e*S | **Sb** | **11 29 59.8** | **-2.3** |
| | baz=336 | | | | | | |
| **EHYH** | **Wanrong** | **1.25** | **325** | *e*P | **Pg** | **11 29 47.9** | **+0.3** |
| | baz=333 | | | | | | |
| EHYH | | | | *e*S | **Sg** | **11 30 04.1** | **+0.2** |
| | baz=333 | | | | | | |
| **ELDTW** | **Lidau** | **1.25** | **305** | *i* P | **Pn** | **11 29 46.8** | **-0.2** |
| | baz=308 | | | | | | |
| ELDTW | | | | *e*S | **Sb** | **11 30 02.1** | **-1.3** |
| | baz=308 | | | | | | |
| **SLIU** | **Shizi** | **1.26** | **259** | *e*P | **Pn** | **11 29 47.0** | **0.0** |
| | baz=252 | | | | | | |
| SLIU | | | | *e*S | **Sb** | **11 30 01.6** | **-1.8** |
| | baz=252 | | | | | | |
| **EHY** | **Hungye** | **1.27** | **324** | *e*P | **Pn** | **11 29 47.5** | **+0.2** |
| | baz=331 | | | | | | |
| EHY | | | | *e*S | **Sb** | **11 30 02.6** | **-1.3** |
| | baz=331 | | | | | | |
| **SMST** | **Manzhou Townsh** | **1.28** | **250** | *e*S | **Sb** | **11 30 02.1** | **-1.9** |
| | baz=261 | | | | | | |
| **TEGC** | **Jichi Village** | **1.35** | **336** | *e*P | **Pb** | **11 29 49.4** | **+0.6** |
| | baz=338 | | | | | | |
| TEGC | | | | *e*S | **Sb** | **11 30 04.5** | **-1.6** |
| | baz=338 | | | | | | |
| **EGFH** | **Guangfu** | **1.36** | **332** | *e*P | **Pb** | **11 29 49.7** | **+0.7** |
| | baz=340 | | | | | | |
| EGFH | | | | *i* S | **Sb** | **11 30 05.6** | **-0.8** |
| | baz=340 | | | | | | |
| **HEN** | **Hengchun** | **1.37** | **251** | *e*P | **Pg** | **11 29 49.8** | **0.0** |
| | baz=259 | | | | | | |
| HEN | | | | *e*S | **Sb** | **11 30 05.1** | **-1.5** |
| | baz=259 | | | | | | |
| **MASBT** | **Mashibuluo** | **1.39** | **276** | *e*P | **Pb** | **11 29 49.7** | **+0.2** |
| | baz=284 | | | | | | |
| MASBT | | | | *e*S | **Sb** | **11 30 07.3** | **+0.1** |
| | baz=284 | | | | | | |
| **TSMG** | **Majia** | **1.39** | **280** | *e*S | **Sg** | **11 30 07.9** | **-0.5** |
| | baz=288 | | | | | | |
| **SCZT** | **Fangliau** | **1.40** | **266** | *e*P | **Pg** | **11 29 50.4** | **0.0** |
| | baz=258 | | | | | | |
| **SHUL** | **Shoufeng** | **1.41** | **338** | *e*P | **Pn** | **11 29 49.8** | **+0.6** |
| | baz=340 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **11 30 07.0** | **-0.8** |
| | baz=340 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.42** | **331** | P | **Pn** | **11 29 49.7** | **+0.4** |
| | baz=339 | | | | | | |
| WARBT | | | | *e*S | **Sn** | **11 30 06.3** | **-1.7** |
| | baz=339 | | | | | | |
| **STYH** | **Taoyuan** | **1.43** | **300** | *i* P | **Pb** | **11 29 50.4** | **+0.2** |
| | baz=302 | | | | | | |
| STYH | | | | S | **Sn** | **11 30 07.7** | **-0.5** |
| | baz=302 | | | | | | |
| **SLGT** | **Liugui** | **1.47** | **291** | *e*P | **Pg** | **11 29 53.4** | **+1.8** |
| | baz=296 | | | | | | |
| SLGT | | | | *e*S | **Sg** | **11 30 09.8** | **-0.9** |
| | baz=296 | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.48** | **341** | *e*S | **Sn** | **11 30 09.3** | **-0.1** |
| | baz=343 | | | | | | |
| **ESL** | **Shilin** | **1.49** | **335** | P | **Pn** | **11 29 50.6** | **+0.5** |
| | baz=344 | | | | | | |
| ESL | | | | S | **Sn** | **11 30 07.6** | **-1.9** |
| | baz=344 | | | | | | |
| **SGST** | **Jiashian** | **1.55** | **294** | *e*P | **Pb** | **11 29 52.3** | **+0.1** |
| | baz=297 | | | | | | |
| SGST | | | | *e*S | **Sn** | **11 30 11.1** | **-0.2** |
| | baz=297 | | | | | | |
| **SCST** | **Cishan** | **1.57** | **286** | *e*P | **Pg** | **11 29 53.7** | **+0.1** |
| | baz=291 | | | | | | |
| SCST | | | | *e*S | **Sg** | **11 30 15.8** | **+1.9** |
| | baz=291 | | | | | | |
| **VWDT** | **VWDT** | **1.57** | **325** | P | **Pb** | **11 29 52.5** | **-0.1** |
| | baz=332 | | | | | | |
| VWDT | | | | S | **Sn** | **11 30 11.7** | **+0.1** |
| | baz=332 | | | | | | |
| **WTP** | **Ta-pu** | **1.60** | **299** | *e*P | **Pb** | **11 29 53.8** | **+0.7** |
| | baz=302 | | | | | | |
| WTP | | | | S | **Sg** | **11 30 14.6** | **-0.4** |
| | baz=302 | | | | | | |
| **ETM** | **Tongmen** | **1.60** | **339** | *e*P | **Pn** | **11 29 51.7** | **0.0** |
| | baz=347 | | | | | | |
| ETM | | | | *e*S | **Sn** | **11 30 09.9** | **-2.5** |
| | baz=347 | | | | | | |
| **TPUB** | **Ta-pu** | **1.61** | **301** | *e*P | **Pb** | **11 29 54.1** | **+0.8** |
| | baz=311 | | | | | | |
| TPUB | | | | S | **Sg** | **11 30 14.7** | **-0.8** |
| | baz=311 | | | | | | |
| **CHN1** | **Nanshi** | **1.64** | **296** | *e*P | **Pg** | **11 29 54.9** | **-0.1** |
| | baz=299 | | | | | | |
| CHN1 | | | | *i* S | **Sg** | **11 30 15.5** | **-0.8** |
| | baz=299 | | | | | | |
| **EOS4** | **EOS4** | **1.66** | **6** | *e*P | **Pn** | **11 29 52.7** | **+0.6** |
| | baz=6.0 | | | | | | |
| EOS4 | | | | *i* S | **Sn** | **11 30 12.7** | **-0.5** |
| | baz=6.0 | | | | | | |
| **TWD** | **Chiawan** | **1.68** | **343** | *e*P | **Pn** | **11 29 53.6** | **+0.8** |
| | baz=344 | | | | | | |
| TWD | | | | *e*S | **Sn** | **11 30 13.0** | **-1.3** |
| | baz=344 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.68** | **337** | *e*P | **Pn** | **11 29 53.4** | **+0.5** |
| | baz=347 | | | | | | |
| LXIB | | | | *e*S | **Sn** | **11 30 13.5** | **-1.1** |
| | baz=347 | | | | | | |
| **SNST** | **Tainan City** | **1.68** | **297** | *i* P | **Pg** | **11 29 55.4** | **-0.4** |
| | baz=299 | | | | | | |
| SNST | | | | *i* S | **Sg** | **11 30 17.2** | **-0.5** |
| | baz=299 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.70** | **316** | *i* P | **Pb** | **11 29 55.1** | **+0.3** |
| | baz=325 | | | | | | |
| WHYT | | | | S | **Sn** | **11 30 15.3** | **+0.5** |
| | baz=325 | | | | | | |
| **SSLB** | **Suanglung** | **1.70** | **321** | *e*P | **Pb** | **11 29 54.5** | **-0.3** |
| | baz=328 | | | | | | |
| SSLB | | | | *e*S | **Sb** | **11 30 16.1** | **-0.2** |
| | baz=328 | | | | | | |
| **WCKO** | **Fanlu** | **1.71** | **305** | *e*P | **Pg** | **11 29 56.2** | **0.0** |
| | baz=313 | | | | | | |
| WCKO | | | | *i* S | **Sb** | **11 30 16.9** | **+0.6** |
| | baz=313 | | | | | | |
| **TWK** | **Hsinying** | **1.71** | **298** | *e*P | **Pg** | **11 29 56.0** | **-0.4** |
| | baz=308 | | | | | | |
| TWK | | | | *e*S | **Sg** | **11 30 18.0** | **-0.6** |
| | baz=308 | | | | | | |
| **OWD** | **Renai** | **1.72** | **330** | *e*P | **Pn** | **11 29 54.5** | **+1.0** |
| | baz=339 | | | | | | |
| OWD | | | | S | **Sn** | **11 30 14.4** | **-1.1** |
| | baz=339 | | | | | | |
| **CHN5** | **Tsauling** | **1.75** | **310** | P | **Pg** | **11 29 56.8** | **-0.2** |
| | baz=320 | | | | | | |
| CHN5 | | | | *e*S | **Sg** | **11 30 19.1** | **-0.7** |
| | baz=320 | | | | | | |
| **NACB** | **Ninganchiao** | **1.77** | **344** | *e*P | **Pn** | **11 29 52.6** | **-1.5** |
| | baz=352 | | | | | | |
| NACB | | | | *e*S | **Sn** | **11 30 15.0** | **-1.6** |
| | baz=352 | | | | | | |
| **WUSB** | **Renai** | **1.78** | **329** | *i* P | **Pb** | **11 29 55.7** | **-0.5** |
| | baz=338 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **11 30 16.2** | **-0.8** |
| | baz=338 | | | | | | |
| **CHGB** | **Renai** | **1.81** | **331** | *e*P | **Pb** | **11 29 56.6** | **-0.3** |
| | baz=340 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **11 30 18.2** | **+0.3** |
| | baz=340 | | | | | | |
| **EOS3** | **EOS3** | **1.82** | **5** | *e*P | **Pb** | **11 29 56.4** | **-0.3** |
| | baz=353 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **11 30 17.7** | **+0.1** |
| | baz=353 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.83** | **341** | *e*P | **Pn** | **11 29 55.1** | **+0.1** |
| | baz=350 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **11 30 16.9** | **-1.3** |
| | baz=350 | | | | | | |
| **TYC** | **Yuchr** | **1.85** | **321** | *e*P | **Pb** | **11 29 58.0** | **+0.7** |
| | baz=327 | | | | | | |
| TYC | | | | *i* S | **Sb** | **11 30 20.7** | **+0.3** |
| | baz=327 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.85** | **335** | *e*P | **Pn** | **11 29 56.7** | **+1.2** |
| | baz=346 | | | | | | |
| WHF | | | | *e*S | **Sn** | **11 30 20.0** | **+0.9** |
| | baz=346 | | | | | | |
| **CHY** | **Chiayi** | **1.88** | **303** | *e*P | **Pb** | **11 29 57.1** | **-0.7** |
| | baz=305 | | | | | | |
| **EAHA** | **Aohua** | **1.89** | **349** | *e*S | **Sn** | **11 30 19.3** | **-0.2** |
| | baz=350 | | | | | | |
| **WDLH** | **Douliu** | **1.90** | **310** | *e*P | **Pg** | **11 29 59.7** | **-0.4** |
| | baz=312 | | | | | | |
| WDLH | | | | *e*S | **Sg** | **11 30 23.5** | **-1.2** |
| | baz=312 | | | | | | |
| **WNT** | **Mingjian** | **1.93** | **317** | *e*P | **Pb** | **11 29 59.2** | **+0.5** |
| | baz=319 | | | | | | |
| WNT | | | | *e*S | **Sg** | **11 30 24.4** | **-1.4** |
| | baz=319 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.94** | **325** | *e*P | **Pb** | **11 29 59.2** | **+0.4** |
| | baz=331 | | | | | | |
| WCS | | | | *e*S | **Sb** | **11 30 23.6** | **+0.6** |
| | baz=331 | | | | | | |
| **EOS2** | **EOS2** | **1.94** | **3** | *e*P | **Pb** | **11 29 59.0** | **+0.2** |
| EOS2 | | | | *e*S | **Sn** | **11 30 21.4** | **+0.7** |
| **FUSS** | **Fushou** | **1.95** | **336** | *i* P | **Pn** | **11 29 57.8** | **+1.0** |
| | baz=345 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **11 30 21.1** | **-0.3** |
| | baz=345 | | | | | | |
| **CHN8** | **Yiju** | **1.97** | **297** | *e*S | **Sg** | **11 30 26.3** | **-0.7** |
| | baz=285 | | | | | | |
| **EWUT** | **Wuta** | **2.00** | **351** | *e*P | **Pn** | **11 29 58.5** | **+1.4** |
| | baz=351 | | | | | | |
| EWUT | | | | S | **Sn** | **11 30 21.4** | **-0.7** |
| | baz=351 | | | | | | |
| **TSCK** | **Chigu Township** | **2.00** | **290** | *e*S | **Sb** | **11 30 25.0** | **+0.1** |
| | baz=292 | | | | | | |
| **NNSB** | **Datong** | **2.07** | **341** | *e*P | **Pn** | **11 29 60.0** | **+1.7** |
| | baz=342 | | | | | | |
| **NNS** | **Nan Shan** | **2.08** | **341** | *e*S | **Sn** | **11 30 23.9** | **-0.5** |
| | baz=342 | | | | | | |
| **WHP** | **Taichung City** | **2.10** | **329** | *e*P | **Pb** | **11 30 02.7** | **+0.9** |
| | baz=336 | | | | | | |
| WHP | | | | *e*S | **Sb** | **11 30 28.2** | **+0.2** |
| | baz=336 | | | | | | |
| **ESAO** | **Su ao** | **2.12** | **353** | *e*S | **Sn** | **11 30 24.0** | **-1.0** |
| | baz=353 | | | | | | |
| **LATG** | **Datong** | **2.13** | **345** | *e*P | **Pn** | **11 30 01.1** | **+1.9** |
| | baz=336 | | | | | | |
| **TWC** | **Suao** | **2.15** | **353** | *e*P | **Pb** | **11 30 01.5** | **-0.9** |
| | baz=354 | | | | | | |
| TWC | | | | S | **Sn** | **11 30 25.7** | **-0.1** |
| | baz=354 | | | | | | |
| **ENTT** | **Nioudou** | **2.22** | **347** | P | **Pn** | **11 30 02.0** | **+1.7** |
| | baz=348 | | | | | | |
| **YHNB** | **Yeheng** | **2.30** | **343** | *e*P | **Pb** | **11 30 03.9** | **-1.1** |
| | baz=344 | | | | | | |
| **NSK** | **Sanguang** | **2.31** | **342** | *e*P | **Pb** | **11 30 04.1** | **-1.1** |
| | baz=343 | | | | | | |
| NSK | | | | *e*S | **Sn** | **11 30 29.9** | **-0.1** |
| | baz=343 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.34** | **348** | P | **Pn** | **11 30 03.5** | **+1.6** |
| | baz=349 | | | | | | |
| **NFF** | **Wufeng Townshi** | **2.35** | **337** | *e*P | **Pb** | **11 30 05.9** | **+0.1** |
| | baz=338 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NSTT | | | | | *e*S | | **Sb** | **11 30 35.1** | **-0.9** |
| | baz=342 | | | | | | | | |
| **LIOB** | **Emei** | **2.40** | **335** | *e*P | | | **Pb** | **11 30 06.1** | **-0.6** |
| | baz=342 | | | | | | | | |
| LIOB | | | | | *e*S | | **Sn** | **11 30 33.1** | **+1.0** |
| | baz=342 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.47** | **44** | P | | | **Pn** | **11 30 05.6** | **+1.9** |
| JKRS | | | | | *e*S | | **Sn** | **11 30 33.2** | **-0.5** |
| **TIPB** | **Shuangxi** | **2.51** | **354** | *e*P | | | **Pb** | **11 30 07.2** | **-1.4** |
| | baz=2.0 | | | | | | | | |
| TIPB | | | | | *e*S | | **Sn** | **11 30 35.9** | **+1.1** |
| | baz=2.0 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.61** | **353** | *e*P | | | **Pb** | **11 30 09.4** | **-1.0** |
| | baz=343 | | | | | | | | |
| NWF | | | | | S | | **Sn** | **11 30 38.9** | **+1.5** |
| | baz=343 | | | | | | | | |
| **PNG** | **Penghu** | **2.61** | **295** | *e*P | | | **Pn** | **11 30 08.0** | **+2.4** |
| | baz=288 | | | | | | | | |
| PNG | | | | | *e*S | | **Sn** | **11 30 37.4** | **+0.1** |
| | baz=288 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.63** | **355** | *i* P | | | **Pn** | **11 30 08.4** | **+2.6** |
| | baz=3.0 | | | | | | | | |
| SXI1 | | | | | *e*S | | **Sn** | **11 30 40.2** | **+2.4** |
| | baz=3.0 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.64** | **44** | *e*P | | | **Pn** | **11 30 07.3** | **+1.3** |
| JIJ | | | | | *e*S | | **Sn** | **11 30 36.9** | **-1.2** |
| **JISG** | **Ishigakijimahi** | **2.91** | **43** | P | | | **Pn** | **11 30 10.7** | **+1.0** |
| JISG | | | | | *e*S | | **Sn** | **11 30 43.9** | **-0.8** |
| **PTMZ** | **Houxiangcun** | **3.76** | **313** | *e*P | | | **Pn** | **11 30 23.1** | **+1.6** |
| | baz=304 | | | | | | | | |
| PTMZ | | | | | *e*S | | **Sn** | **11 31 04.8** | **-0.9** |
| | baz=304 | | | | | | | | |
| **KNM** | **Kinmen** | **3.91** | **300** | *e*P | | | **Pn** | **11 30 26.4** | **+2.9** |
| | baz=300 | | | | | | | | |
| KNM | | | | | *e*S | | **Sn** | **11 31 11.6** | **+2.2** |
| | baz=300 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.97** | **301** | *e*P | | | **Pn** | **11 30 24.9** | **+0.6** |
| | baz=301 | | | | | | | | |
| KNMB | | | | | *e*S | | **Sn** | **11 31 09.8** | **-1.0** |
| | baz=301 | | | | | | | | |
| **MATB** | **Ma-tsu** | **4.17** | **332** | *e*P | | | **Pn** | **11 30 28.5** | **+1.4** |
| | baz=332 | | | | | | | | |
| MATB | | | | | *e*S | | **Sn** | **11 31 15.4** | **-0.5** |
| | baz=332 | | | | | | | | |
| **ZPLA** | **Ao Xicun** | **4.28** | **291** | *i* P | | | **Pn** | **11 30 30.5** | **+1.9** |
| | baz=280 | | | | | | | | |
| ZPLA | | | | | *e*S | | **Sn** | **11 31 18.1** | **-0.5** |
| | baz=280 | | | | | | | | |
| **MHZQ** | **Yeshan** | **4.59** | **323** | *e*P | | | **Pn** | **11 30 34.0** | **+1.2** |
| | baz=322 | | | | | | | | |
| MHZQ | | | | | *e*S | | **Sn** | **11 31 26.1** | **-0.1** |
| | baz=322 | | | | | | | | |

*IDC **22** 11:29:54.0±2.6, 0.°11N×98.°16E, h0km, mb3.7/6, mbtmp3.7/6, Error ellipse: s-maj=125.6km s-min=21.2km az=58.0*
*DJA **22** 11:29:57.4±0.6, 1.°1N±4.°×9.°8E±.°, h14km±8km, M4.1/7, mb4.1/1, MLv4.1/7*
**ISC 22 11:29:59.3**±0.8, **0.°41N**±0.°08×**98.°2E**±0.°1, **h29**km, **n18,** σ1$**66**/14, **mb3.7/6, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PBSI** | **Pulau Batu** | **0.47** | **175** | P | | **Pb** | **11 30 09.8** | **+0.7** |
| **GSI** | **Gunungsitoli** | **1.11** | **323** | P | | **Pn** | **11 30 17.0** | **-1.8** |
| GSI | | | | S | | **Sn** | **11 30 32.2** | **-0.9** |
| **SISI** | **Saibi** | **1.93** | **154** | P | | **Pn** | **11 30 30.9** | **+0.8** |
| **PDSI** | **Padang** | **2.58** | **121** | P | | **Pn** | **11 30 39.1** | **-0.1** |
| **BKNI** | **Bangkinang** | **2.80** | **92** | P | | **Pn** | **11 30 41.3** | **-0.9** |
| **KCSI** | **Kotacane, Aceh** | **3.12** | **351** | P | | **Pn** | **11 30 48.2** | **+1.6** |
| **H08S2** | **Diego Garcia H** | **26.89** | **252** | T | | T | 12 03 05.0 | |
| | baz=72,slow=75,SNR=47 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.89** | **252** | T | | T | 12 03 03.9 | |
| | baz=72,slow=75,SNR=106 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.91** | **252** | T | | T | 12 03 05.0 | |
| | baz=72,slow=75,SNR=30 | | | | | | | |
| **WRA** | **Warramunga Arr** | **40.74** | **122** | P | | **P** | **11 37 35.2** | **-2.8** |
| | 0.5nm,0.9s,baz=297,slow=9.0,SNR=2.7 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **11 39 39.6** | **+0.4** |
| | 0.3nm,0.5s,baz=315,slow=2.5,SNR=6.9 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **42.10** | **127** | P | | **P** | **11 37 46.8** | **-2.4** |
| | 0.1nm,0.4s,baz=301,slow=7.6,SNR=6.8 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **47.77** | **7** | P | | **P** | **11 38 36.1** | **+2.2** |
| | 0.8nm,0.4s,baz=193,slow=8.3,SNR=4.3 | | | | | | | |
| | 0.8nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.26** | **345** | P | | **P** | **11 38 37.9** | **+0.3** |
| | 0.8nm,0.7s,baz=160,slow=7.5,SNR=4.2 | | | | | | | |
| | 0.8nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **52.76** | **344** | P | | **P** | **11 39 11.3** | **-0.2** |
| | 0.5nm,0.7s,baz=160,slow=6.4,SNR=6.2 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.50** | **350** | P | | **P** | **11 39 26.1** | **+1.8** |
| | 1.3nm,0.4s,baz=160,slow=7.2,SNR=5.0 | | | | | | | |
| | 1.3nm,0.4s | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **61.72** | **215** | T | | T | 12 47 22.4 | |
| | baz=54,slow=75,SNR=20 | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **61.73** | **215** | T | | T | 12 47 22.2 | |
| | baz=54,slow=75,SNR=18 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **61.73** | **215** | T | | T | 12 47 20.8 | |
| | baz=54,slow=75,SNR=21 | | | | | | | |

*CATAC **22** 11:33:04.4±0.6, 8.°58N×83.°23W, h2km±3km, ML3.6*
*UPA **22** 11:33:04.3±2.5, 8.°69N×83.°15W, h3km±8km, MD3.7, ML3.5, MW4.4*
*UCR **22** 11:33:04.8±1.2, 8.°62N×83.°23W, h19km±3km, MW3.8*
**ISC 22 11:33:04.8**±0.8, **8.°66N**±0.°03×**83.°19W**±0.°02, **h17**km±4km, **n60,** σ0$**96**/94, **4C-15D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **EDAD** | **Golfito** | **0.03** | **107** | ⇓*e*P | | **Pg** | **11 33 07.7** | **-0.2** |
| EDAD | | | | *e*S | | **Sg** | **11 33 10.1** | **+0.3** |
| **FITO** | **Golfito** | **0.05** | **132** | ⇓*i*P | | **Pg** | **11 33 07.6** | **-0.3** |
| FITO | | | | *e*S | | **Sg** | **11 33 10.1** | **+0.2** |
| **JIME** | **Puerto Jimenez** | **0.18** | **227** | ⇑*i*P | | **Pg** | **11 33 08.7** | **-0.5** |
| JIME | | | | *e*S | | **Sg** | **11 33 12.8** | **+0.6** |
| **NELY** | **Ciudad Neily** | **0.25** | **92** | ⇓*i*P | | **Pb** | **11 33 10.8** | **0.0** |
| NELY | | | | *e*S | | **Sb** | **11 33 16.1** | **+1.2** |
| **VITO** | **San Vito** | **0.27** | **55** | ⇓*i*P | | **Pb** | **11 33 11.9** | **+0.5** |
| VITO | | | | *e*S | | **Sn** | **11 33 18.0** | **-2.0** |
| **CDITO** | **Canoas** | **0.33** | **105** | *i* P | | **Pg** | **11 33 11.5** | **-0.3** |
| CDITO | | | | *i* S | | **Sg** | **11 33 16.4** | **-0.1** |
| CDITO | | | | IAML | | | 11 33 22.4 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **EDP2** | **Potrero Grande** | **0.35** | **3** | ⇓*e*P | | **Pb** | **11 33 12.9** | **+0.2** |
| EDP2 | | | | *e*S | | **Sb** | **11 33 19.6** | **+1.6** |
| **MLIR3** | **Monte Lirio, C** | **0.39** | **70** | ⇓*i*P | | **Pb** | **11 33 13.6** | **+0.3** |
| MLIR3 | | | | *i* S | | **Sn** | **11 33 21.8** | **-1.2** |
| **EDPN** | **Palmar Norte** | **0.40** | **319** | ⇑*i*P | | **Pg** | **11 33 12.7** | **-0.3** |
| EDPN | | | | *e*S | | **Sg** | **11 33 18.9** | **+0.5** |
| **EDBA** | **Buenos Aires** | **0.51** | **351** | *e*P | | **Pb** | **11 33 15.3** | **0.0** |
| EDBA | | | | *e*S | | **Sb** | **11 33 23.5** | **+1.1** |
| **BRU2** | **Volcan** | **0.52** | **75** | *i* P | | **Pb** | **11 33 15.5** | **0.0** |
| BRU2 | | | | *i* S | | **Sb** | **11 33 23.6** | **+0.8** |
| BRU2 | | | | IAML | | | 11 33 29.4 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **BRU2** | **Volcan** | **0.52** | **75** | ⇓*i*P | | **Pg** | **11 33 15.2** | **+0.1** |
| BRU2 | | | | AMP | | | 11 33 15.4 | |
| | comp=Z,4μm,0.1s | | | | | | | |
| BRU2 | | | | *i* S | | **Sb** | **11 33 24.0** | **+1.2** |
| **BRU2** | **Volcan** | **0.52** | **75** | ⇓*i*P | | **Pg** | **11 33 15.2** | **+0.1** |
| BRU2 | | | | *e*S | | **Sb** | **11 33 23.7** | **+0.9** |
| **BURE** | **Buenos Aires** | **0.53** | **344** | *e*P | | **Pb** | **11 33 15.6** | **-0.2** |
| BURE | | | | *e*S | | **Sb** | **11 33 24.0** | **+0.9** |
| **PTPM** | **Petroterminale** | **0.55** | **145** | ⇓*i*P | | **Pg** | **11 33 15.2** | **-0.5** |
| PTPM | | | | *i* S | | **Sn** | **11 33 25.8** | **-0.9** |
| **DRK0** | **Durika** | **0.60** | **355** | *i* P | | **Pg** | **11 33 16.3** | **-0.4** |
| DRK0 | | | | *i* S | | **Sb** | **11 33 25.7** | **+0.4** |
| DRK0 | | | | IAML | | | 11 33 26.6 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **0.60** | **355** | ⇓*i*P | | **Pg** | **11 33 16.4** | **-0.4** |
| DRK0 | | | | *i* S | | **Sg** | **11 33 24.2** | **-0.6** |
| **DRK0** | **Durika** | **0.60** | **355** | ⇓*e*P | | **Pg** | **11 33 16.4** | **-0.4** |
| DRK0 | | | | *e*S | | **Sb** | **11 33 25.9** | **+0.6** |
| **OCHAL** | **Ojochal** | **0.62** | **314** | *i* P | | **Pg** | **11 33 16.2** | **-0.9** |
| OCHAL | | | | *i* S | | **Sb** | **11 33 25.8** | **0.0** |
| OCHAL | | | | IAML | | | 11 33 29.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **LIMO3** | **Limones** | **0.64** | **150** | *e*P | | **Pg** | **11 33 17.2** | **-0.4** |
| LIMO3 | | | | *i* S | | **Sb** | **11 33 26.7** | **+0.3** |
| **BCO2** | **Palmira** | **0.66** | **85** | ⇓*i*P | | **Pg** | **11 33 17.5** | **-0.4** |
| BCO2 | | | | *i* S | | **Sb** | **11 33 27.2** | **+0.2** |
| **LNBQ3** | **Los Naranjos,** | **0.76** | **80** | *i* P | | **Pg** | **11 33 18.6** | **-1.0** |
| LNBQ3 | | | | *i* S | | **Sg** | **11 33 29.3** | **-0.4** |
| **LOCO3** | **Loma Colorada,** | **0.81** | **108** | *i* P | | **Pb** | **11 33 19.5** | **-1.0** |
| LOCO3 | | | | *i* S | | **Sb** | **11 33 30.6** | **-0.5** |
| **PEDE3** | **Pedregal, Chir** | **0.81** | **110** | ⇓*e*P | | **Pb** | **11 33 19.3** | **-1.2** |
| PEDE3 | | | | *e*S | | **Sg** | **11 33 31.3** | **-0.1** |
| **LOMA3** | **Las Lomas, Chi** | **0.83** | **106** | *e*P | | **Pb** | **11 33 19.8** | **-1.0** |
| **ZELE** | **Perez Zeledon** | **0.87** | **324** | *e*P | | **Pb** | **11 33 21.0** | **-0.6** |
| ZELE | | | | *e*S | | **Sg** | **11 33 33.3** | **0.0** |
| **BUS1** | **Rivas** | **1.04** | **328** | ⇑*e*P | | **Pb** | **11 33 23.6** | **-1.1** |
| **CNI2** | **El Empalme, Bo** | **1.04** | **43** | *e*P | | **Pb** | **11 33 23.6** | **-0.9** |
| CNI2 | | | | *e*S | | **Sb** | **11 33 35.9** | **-2.0** |
| **CHGR2** | **Aguacate** | **1.07** | **75** | *e*P | | **Pb** | **11 33 23.1** | **-1.9** |
| CHGR2 | | | | *i* S | | **Sb** | **11 33 35.9** | **-2.9** |
| **LLNJ** | **Naranjito** | **1.21** | **312** | *e*P | | **Pn** | **11 33 25.4** | **-1.6** |
| **ABE2** | **San Pablo** | **1.34** | **321** | *e*P | | **Pn** | **11 33 28.6** | **-0.4** |
| **LCR2** | **La Lucha 2** | **1.34** | **323** | *i* P | | **Pn** | **11 33 29.3** | **+0.3** |
| LCR2 | | | | *i* S | | **Sg** | **11 33 49.7** | **+1.5** |
| LCR2 | | | | IAML | | | 11 33 49.8 | |
| | comp=Z,590nm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **1.34** | **323** | *e*P | | **Pn** | **11 33 27.6** | **-1.4** |
| **RVSTA** | **Santa Teresita** | **1.38** | **341** | *e*P | | **Pb** | **11 33 30.3** | **0.0** |
| **VTCV** | **VTCV, Calle Va** | **1.42** | **338** | *e*P | | **Pn** | **11 33 29.9** | **-0.1** |
| **RAFA** | **San Farael, Vo** | **1.43** | **335** | *i* P | | **Pb** | **11 33 31.1** | **-0.1** |
| RAFA | | | | IAML | | | 11 33 57.5 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **CVTV** | **Tajo** | **1.44** | **338** | *e*P | | **Pb** | **11 33 31.5** | **0.0** |
| **CVTQ** | **Turrialba Volc** | **1.45** | **337** | *e*P | | **Pb** | **11 33 31.5** | **-0.1** |
| **LCOCO** | **El Coco** | **1.46** | **346** | *e*P | | **Pn** | **11 33 30.7** | **+0.2** |
| **NANC3** | **Nancito, Chiri** | **1.51** | **106** | ⇓*e*P | | **Pn** | **11 33 30.8** | **-0.3** |
| **HDC3** | **Heredia 3** | **1.61** | **326** | *i* P | | **Pn** | **11 33 33.4** | **+0.7** |
| HDC3 | | | | IAML | | | 11 34 00.5 | |
| | comp=Z,630nm,1.0s | | | | | | | |
| **HDC** | **Heredia** | **1.61** | **326** | *i* P | | **Pb** | **11 33 34.6** | **+0.3** |
| HDC | | | | *i* S | | **Sg** | **11 33 57.2** | **+0.3** |
| HDC | | | | IAML | | | 11 34 00.5 | |
| | comp=Z,610nm,1.0s | | | | | | | |
| **HDC** | **Heredia** | **1.61** | **326** | ⇑*i*P | | **Pb** | **11 33 34.4** | **+0.1** |
| **BELE** | **Belen** | **1.63** | **323** | *e*P | | **Pb** | **11 33 34.1** | **-0.6** |
| **RSUS3** | **Rio de Jesus,** | **2.12** | **106** | ⇓*e*P | | **Pn** | **11 33 40.2** | **+0.6** |
| RSUS3 | | | | *e*S | | **Sn** | **11 34 07.1** | **+1.4** |
| **GMAL** | **Guarumal, Vera** | **2.14** | **115** | *e*P | | **Pn** | **11 33 40.5** | **+0.7** |
| GMAL | | | | *e*S | | **Sn** | **11 34 07.5** | **+1.5** |
| **SOCE** | **Pocosol** | **2.21** | **321** | *i* P | | **Pb** | **11 33 43.2** | **-1.3** |
| SOCE | | | | *i* S | | **Sb** | **11 34 12.1** | **+0.4** |
| SOCE | | | | IAML | | | 11 34 18.1 | |
| | comp=Z,520nm,1.0s | | | | | | | |
| **STIA3** | **Santiago, Vera** | **2.27** | **104** | *e*P | | **Pn** | **11 33 40.5** | **-1.1** |
| **VACR** | **Volcan Arenal** | **2.32** | **321** | *e*P | | **Pb** | **11 33 44.9** | **-1.4** |
| **ARE1** | **Arenal 1** | **2.34** | **320** | *e*P | | **Pb** | **11 33 45.6** | **-1.0** |
| **COVE** | **Coope Vega, Sa** | **2.37** | **330** | *i* P | | **Pb** | **11 33 45.7** | **-1.4** |
| COVE | | | | IAML | | | 11 34 34.6 | |
| | comp=Z,220nm,1.0s | | | | | | | |
| **JTS** | **Las Juntas de** | **2.37** | **313** | *i* P | | **Pn** | **11 33 44.6** | **+1.5** |
| **JTS** | **Las Juntas de** | **2.37** | **313** | *e*P | | **Pn** | **11 33 42.9** | **-0.1** |
| **MARI3** | **Mariato, Verag** | **2.40** | **115** | *e*P | | **Pn** | **11 33 44.8** | **+1.4** |
| MARI3 | | | | *e*S | | **Sn** | **11 34 14.7** | **+2.2** |
| **INDI** | **Punta indio, G** | **2.57** | **298** | *i* P | | **Pn** | **11 33 46.9** | **+1.1** |
| INDI | | | | IAML | | | 11 34 34.3 | |
| | comp=Z,58nm,1.0s | | | | | | | |
| **CACAO** | **El Cacao, Vera** | **2.66** | **119** | *e*P | | **Pn** | **11 33 46.9** | **0.0** |
| **CHIT3** | **Chitre** | **2.84** | **104** | *i* P | | **Pn** | **11 33 50.7** | **+1.3** |
| **AZU** | **Azuero** | **3.02** | **106** | *e*P | | **Pn** | **11 33 53.4** | **+1.5** |
| AZU | | | | *e*S | | **Sn** | **11 34 28.8** | **+1.1** |
| **BCIP** | **Isla Barro Col** | **3.35** | **81** | *i* P | | **Pn** | **11 33 57.6** | **+1.1** |
| BCIP | | | | IAML | | | 11 34 52.2 | |
| | comp=Z,99nm,1.0s | | | | | | | |
| **BCIP** | **Isla Barro Col** | **3.35** | **81** | *e*P | | **Pn** | **11 33 58.4** | **+1.8** |

*AZER **22** 11:38:05.7, 41.°19N×46.°26E, h20km, ml2.5*
*DRS **22** 11:38:06.6, 41.°24N×46.°36E, h54km*
**ISC 22 11:38:07.1**±1.1, **41.°23N**±0.°02×**46.°32E**±0.°03, **h4**km±10km, **n27,** σ0$**83**/52, **Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ZKTA** | **Zakatala** | **0.47** | **29** | P | | **Pb** | **11 38 18.1** | **+0.2** |
| ZKTA | | | | S | | **Sb** | **11 38 25.9** | **+0.7** |
| **GANJ** | **Ganja** | **0.58** | **180** | P | | **Pg** | **11 38 19.4** | **-0.4** |
| GANJ | | | | S | | **Sg** | **11 38 26.6** | **+0.8** |
| **GDB** | **GEDABAY** | **0.66** | **220** | P | | **Pg** | **11 38 19.4** | **-0.4** |
| GDB | | | | S | | **Sg** | **11 38 28.2** | **-0.2** |
| **SEKA** | **Sheki** | **0.67** | **91** | P | | **Pb** | **11 38 20.9** | **-0.4** |
| SEKA | | | | S | | **Sb** | **11 38 31.1** | **+0.3** |
| **QZX** | **Qazax, Azerbai** | **0.73** | **257** | P | | **Pg** | **11 38 20.7** | **-0.4** |
| QZX | | | | S | | **Sg** | **11 38 31.1** | **+0.4** |
| **MNGR** | **Mingechevir, A** | **0.74** | **128** | P | | **Pb** | **11 38 22.5** | **+0.1** |
| MNGR | | | | S | | **Sn** | **11 38 35.0** | **-0.8** |
| **KMKR** | **Kumukh** | **1.07** | **33** | *e*Pg | | **Pg** | **11 38 27.6** | **-0.1** |
| | 80nm,0.1s | | | | | | | |
| KMKR | | | | *e*Sg | | **Sb** | **11 38 42.9** | **0.0** |
| | 200nm,0.1s | | | | | | | |
| **AKT** | **Akhty** | **1.09** | **76** | *e*Pg | | **Pg** | **11 38 27.6** | **-0.5** |
| | 200nm,0.0s | | | | | | | |
| AKT | | | | *e*Sg | | **Sb** | **11 38 42.8** | **-0.4** |
| | 400nm,0.2s | | | | | | | |
| **BRDA** | **Brd** | **1.17** | **146** | P | | **Pg** | **11 38 29.2** | **-0.2** |
| BRDA | | | | S | | **Sn** | **11 38 48.4** | **+1.9** |
| **QBL** | **Gabala** | **1.18** | **103** | P | | **Pg** | **11 38 29.4** | **-0.4** |
| QBL | | | | S | | **Sn** | **11 38 46.8** | **-0.2** |
| **GNBR** | **Gunib** | **1.26** | **22** | *e*Pg | | **Pg** | **11 38 30.2** | **-1.0** |
| | 800nm,0.0s | | | | | | | |
| GNBR | | | | *e*Sg | | **Sn** | **11 38 47.8** | **-1.0** |
| | 350nm,0.0s | | | | | | | |
| **AGDM** | **Agdam** | **1.27** | **151** | P | | **Pg** | **11 38 30.6** | **-0.8** |
| AGDM | | | | S | | **Sn** | **11 38 48.8** | **-0.3** |
| **XNZR** | **Khunzakh** | **1.34** | **12** | *e*Pg | | **Pb** | **11 38 33.0** | **+0.1** |
| | 440nm,0.0s | | | | | | | |
| XNZR | | | | *e*Sg | | **Sn** | **11 38 52.4** | **+1.3** |
| | 440nm,0.0s | | | | | | | |
| **URKR** | **Urkarakh** | **1.36** | **46** | *e*Pg | | **Pn** | **11 38 32.5** | **-0.4** |
| | 80nm,0.1s | | | | | | | |
| URKR | | | | *e*Sg | | **Sn** | **11 38 51.6** | **+0.2** |
| | 80nm,0.3s | | | | | | | |
| **XNQ** | **Khinaliq** | **1.38** | **92** | Pn | | **Pn** | **11 38 32.5** | **-0.7** |
| XNQ | | | | Sn | | **Sn** | **11 38 52.0** | **0.0** |
| **ZRD** | **Zardab** | **1.41** | **132** | Pn | | **Pb** | **11 38 33.5** | **-0.3** |
| ZRD | | | | Sn | | **Sn** | **11 38 55.0** | **+2.7** |
| **BTLR** | **Botlikh** | **1.44** | **357** | *e*Pg | | **Pb** | **11 38 34.1** | **-0.3** |
| | 160nm,0.0s | | | | | | | |
| BTLR | | | | *e*Sg | | **Sg** | **11 38 53.9** | **+0.7** |
| | 320nm,0.0s | | | | | | | |
| **ARKR** | **Arakani** | **1.46** | **20** | *e*Pg | | **Pb** | **11 38 34.4** | **-0.5** |
| | 480nm,0.0s | | | | | | | |
| ARKR | | | | *e*Sg | | **Sg** | **11 38 54.7** | **+0.6** |
| | 520nm,0.0s | | | | | | | |
| **QSAR** | **Qusar** | **1.49** | **78** | Pn | | **Pn** | **11 38 33.6** | **-1.1** |
| QSAR | | | | Sn | | **Sg** | **11 38 56.6** | **+1.6** |
| **UNCR** | **Uncukul** | **1.53** | **13** | *e*Pg | | **Pg** | **11 38 35.8** | **-0.5** |
| | 440nm,0.0s | | | | | | | |
| UNCR | | | | *e*Sg | | **Sg** | **11 38 57.2** | **+1.1** |
| | 320nm,0.0s | | | | | | | |
| **QUBA** | **Quba, Azerbaij** | **1.65** | **85** | Pn | | **Pb** | **11 38 37.5** | **-0.5** |
| QUBA | | | | Sn | | **Sg** | **11 39 00.5** | **+0.5** |
| **PQL** | **Pirkuli** | **1.78** | **104** | Pn | | **Pb** | **11 38 39.1** | **-1.2** |
| PQL | | | | Sn | | **Sg** | **11 39 05.3** | **+1.1** |
| **BLQ** | **Beylaqan** | **1.78** | **147** | Sn | | **Sb** | **11 39 02.6** | **-0.3** |
| **SBZ** | **Shahbuz** | **1.92** | **198** | Pn | | **Pn** | **11 38 41.1** | **+0.6** |
| SBZ | | | | Sn | | **Sb** | **11 39 07.4** | **+0.4** |
| **QRD** | **Qoradiz** | **1.93** | **156** | Sn | | **Sn** | **11 39 05.4** | **+0.3** |
| **SIZA** | **Siyzn** | **1.96** | **94** | Pg | | **Pn** | **11 38 41.4** | **+0.4** |
| SIZA | | | | Sg | | **Sg** | **11 39 11.2** | **+1.3** |
| **YRD** | **Yardimli** | **2.74** | **147** | Pg | | **Pb** | **11 38 55.4** | **-1.3** |
| YRD | | | | Sn | | **Sn** | **11 39 24.9** | **-0.7** |

*IDC **22** 12:05:04.7±0.8, 67.°15N×20.°90E, h0km, mbtmp3.5/5, ML3.0/5, Error ellipse: s-maj=13.7km s-min=7.0km az=109.0*
*HEL **22** 12:05:04.7±0.1, 67.°20N×20.°65E, h1km, ML2.4, ML3.1(UPP), Confirmed Induced event*
*DNK **22** 12:05:04.5±0.6, 67.°19N×20.°66E, h0km, ML3.1(UPP), Suspected explosion*
*UPP **22** 12:05:04.3±0.1, 67.°19N×20.°66E, h0km, ML3.1, Confirmed Induced event*
*BER **22** 12:05:07.4±1.4, 67.°35N×20.°54E, h1km, ML2.5, Confirmed Induced event*
**ISC 22 12:05:03.7**±0.7, **67.°19N**±0.°02×**20.°64E**±0.°02, **h0**km, **n65,** σ1$**07**/96, **2D, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DUNU** | **Dundret** | **0.08** | **200** | P | | **Pg** | **12 05 06.0** | **+0.9** |
| DUNU | | | | S | | **Sg** | **12 05 07.2** | **+1.1** |
| **DUNU** | **Dundret** | **0.08** | **200** | P | | **Pg** | **12 05 06.0** | **+0.9** |
| DUNU | | | | S | | **Sg** | **12 05 07.2** | **+1.1** |
| **DUNU** | **Dundret** | **0.08** | **200** | *i* P | | **Pg** | **12 05 06.0** | **+0.9** |
| DUNU | | | | *i* S | | **Sg** | **12 05 07.2** | **+1.1** |
| **MASU** | **Masugnsbyn** | **0.59** | **63** | P | | **Pg** | **12 05 15.5** | **+0.5** |
| MASU | | | | S | | **Sg** | **12 05 23.4** | **+0.7** |
| **MASU** | **Masugnsbyn** | **0.59** | **63** | P | | **Pg** | **12 05 15.5** | **+0.5** |
| MASU | | | | S | | **Sg** | **12 05 23.4** | **+0.7** |
| **MASU** | **Masugnsbyn** | **0.59** | **63** | *i* P | | **Pg** | **12 05 15.5** | **+0.5** |
| MASU | | | | *i* S | | **Sg** | **12 05 23.4** | **+0.7** |
| **SALU** | **Saltoluokta** | **0.85** | **284** | ⇓*i*P | | **Pg** | **12 05 20.3** | **+0.3** |
| SALU | | | | *e*S | | **Sg** | **12 05 31.5** | **+0.5** |
| **SALU** | **Saltoluokta** | **0.85** | **284** | P | | **Pg** | **12 05 20.3** | **+0.3** |
| **SALU** | **Saltoluokta** | **0.85** | **284** | P | | **Pg** | **12 05 20.3** | **+0.3** |
| **SALU** | **Saltoluokta** | **0.85** | **284** | *i* P | | **Pg** | **12 05 20.3** | **+0.3** |
| **PAJU** | **Pajala** | **0.98** | **99** | P | | **Pg** | **12 05 22.2** | **-0.3** |
| **PAJU** | **Pajala** | **0.98** | **99** | P | | **Pg** | **12 05 22.2** | **-0.3** |
| **PAJU** | **Pajala** | **0.98** | **99** | *e*P | | **Pg** | **12 05 22.2** | **-0.3** |
| PAJU | | | | *e*SB | | **Sg** | **12 05 35.8** | **+0.6** |
| **LANU** | **Lannavaara** | **1.00** | **31** | P | | **Pg** | **12 05 22.7** | **-0.2** |
| **LANU** | **Lannavaara** | **1.00** | **31** | P | | **Pg** | **12 05 22.7** | **-0.2** |
| **LANU** | **Lannavaara** | **1.00** | **31** | *e*P | | **Pg** | **12 05 22.2** | **-0.7** |
| LANU | | | | *e*SB | | **Sg** | **12 05 36.3** | **+0.4** |
| **HARU** | **Harads** | **1.04** | **172** | P | | **Pg** | **12 05 23.1** | **-0.6** |
| **HARU** | **Harads** | **1.04** | **172** | P | | **Pg** | **12 05 23.1** | **-0.6** |
| **HARU** | **Harads** | **1.04** | **172** | *e*P | | **Pg** | **12 05 23.1** | **-0.6** |
| **KOVU** | **Salmi** | **1.05** | **350** | P | | **Pg** | **12 05 23.5** | **-0.3** |
| **KOVU** | **Salmi** | **1.05** | **350** | P | | **Pg** | **12 05 23.5** | **-0.3** |
| **KOVU** | **Salmi** | **1.05** | **350** | *e*P | | **Pg** | **12 05 23.5** | **-0.3** |
| **KLF** | **Kolari** | **1.30** | **87** | *e*P | | **Pg** | **12 05 27.4** | **-1.1** |
| KLF | | | | MSG | | | 12 05 43.6 | |
| | comp=Z,26nm,0.2s | | | | | | | |
| KLF | | | | *e*SB | | **Sg** | **12 05 45.3** | **0.0** |
| **HEF** | **Hetta** | **1.68** | **42** | *e*P | | **Pn** | **12 05 34.4** | **+0.1** |
| **HEF** | **Hetta** | **1.68** | **42** | *e*P | | **Pn** | **12 05 33.7** | **-0.6** |
| HEF | | | | MSG | | | 12 05 54.3 | |
| | comp=Z,38nm,0.2s | | | | | | | |
| HEF | | | | *e*SN | | **Sn** | **12 05 56.7** | **+0.2** |
| **KALU** | **Kalix** | **1.73** | **140** | P | | **Pn** | **12 05 35.1** | **+0.2** |
| **KALU** | **Kalix** | **1.73** | **140** | P | | **Pn** | **12 05 35.1** | **+0.2** |
| **KALU** | **Kalix** | **1.73** | **140** | *e*P | | **Pn** | **12 05 34.8** | **-0.1** |
| KALU | | | | *e*SN | | **Sb** | **12 05 58.9** | **+0.5** |
| **TOF** | **Tornio** | **1.85** | **126** | *e*P | | **Pn** | **12 05 36.8** | **+0.2** |
| TOF | | | | MSG | | | 12 05 59.7 | |
| | comp=Z,48nm,0.2s | | | | | | | |
| TOF | | | | *e*SG | | **Sb** | **12 06 02.1** | **+0.3** |
| **KTK1** | **Kautokeino** | **2.07** | **27** | *e*PG | | **Pb** | **12 05 41.5** | **-0.7** |
| **FAUS** | **Fauske** | **2.08** | **278** | ⇓*i*P | | **Pb** | **12 05 41.6** | **-0.7** |
| FAUS | | | | *e*Sg | | **Sg** | **12 06 10.4** | **-0.2** |
| FAUS | | | | IAML | | | 12 06 13.9 | |
| | comp=Z,128nm,0.5s | | | | | | | |
| **STEI** | **Steigen** | **2.20** | **292** | *e*P | | **Pn** | **12 05 42.2** | **+0.8** |
| STEI | | | | *e*Sg | | **Sg** | **12 06 13.7** | **-0.6** |
| STEI | | | | IAML | | | 12 06 20.1 | |
| | comp=Z,54nm,0.5s | | | | | | | |
| **RNF** | **Rovaniemi** | **2.20** | **103** | *e*P | | **Pn** | **12 05 42.4** | **+1.0** |
| RNF | | | | *e*SG | | **Sb** | **12 06 12.7** | **+0.6** |
| **SGF** | **Sodankyl** | **2.30** | **81** | *e*P | | **Pn** | **12 05 42.1** | **-0.7** |
| SGF | | | | *e*S | | **Sn** | **12 06 12.5** | **+0.8** |
| **TRO** | **Tromso** | **2.53** | **346** | *e*PB | | **Pb** | **12 05 49.2** | **-0.8** |
| TRO | | | | *e*SG | | **Sb** | **12 06 22.5** | **+0.9** |
| **MOR8** | **Moi Rana** | **2.67** | **250** | *e*P | | **Pn** | **12 05 48.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KWHZ | | | | S | | Sb | 12 12 03.3 | -0.1 |
| **MCHZ** | **McNeill Hill** | **0.60** | **27** | P | | Pb | 12 11 56.6 | +0.3 |
| MCHZ | | | | S | | Sn | 12 12 06.7 | +0.8 |
| **CKHZ** | **Cape Kidnapper** | **0.64** | **60** | P | | Pb | 12 11 57.4 | +0.4 |
| **BFZ** | **Birch Farm** | **0.71** | **187** | P | | Pb | 12 11 58.0 | -0.2 |
| **MOVZ** | **Moawhango** | **0.73** | **321** | P | | Pn | 12 11 57.4 | -1.6 |
| **BKZ** | **Black Stump Fm** | **0.82** | **8** | P | | Pn | 12 11 59.0 | -1.1 |
| **BKZ** | **Black Stump Fm** | **0.82** | **8** | P | | Pn | 12 11 59.1 | -1.1 |
| BKZ | | | | S | | Sn | 12 12 10.4 | -1.0 |
| **ARHZ** | **Aropaoanui** | **0.87** | **35** | P | | Pn | 12 12 00.3 | -0.6 |
| **WNVZ** | **Wahianoa** | **0.87** | **318** | P | | Pn | 12 12 00.1 | -0.9 |
| **TUVZ** | **Tukino** | **0.89** | **323** | P | | Pn | 12 12 00.6 | -0.6 |
| **MTVZ** | **Mangateitei** | **0.90** | **311** | P | | Pn | 12 12 00.7 | -0.6 |
| **WHVZ** | **Whangaehu Hut** | **0.91** | **319** | P | | Pn | 12 12 00.9 | -0.7 |
| **TRVZ** | **Turoa** | **0.92** | **317** | P | | Pn | 12 12 01.1 | -0.7 |
| **MAVZ** | **Mataroa** | **0.94** | **319** | P | | Pn | 12 12 01.6 | -0.5 |
| **CPWZ** | **Castlepoint** | **0.94** | **187** | P | | Pn | 12 12 01.6 | -0.1 |
| **NMHZ** | **Naumai** | **0.95** | **22** | P | | Pn | 12 12 01.6 | -0.3 |
| **FWVZ** | **Far West T-bar** | **0.95** | **319** | P | | Pn | 12 12 01.5 | -0.7 |
| **SNVZ** | **South Ngauruho** | **0.96** | **325** | P | | Pn | 12 12 01.7 | -0.6 |
| **OTVZ** | **Oturere** | **0.97** | **327** | P | | Pn | 12 12 01.8 | -0.6 |
| **ETVZ** | **East Tongariro** | **0.98** | **329** | P | | Pn | 12 12 02.0 | -0.4 |
| **NGZ** | **Ngauruhoe** | **0.99** | **324** | P | | Pn | 12 12 02.2 | -0.4 |
| **TMVZ** | **Te Maari** | **1.00** | **330** | P | | Pn | 12 12 02.3 | -0.4 |
| **COVZ** | **Chateau Observ** | **1.00** | **321** | P | | Pn | 12 12 02.3 | -0.4 |
| **NNVZ** | **North Ngauruho** | **1.02** | **326** | P | | Pn | 12 12 02.7 | -0.3 |
| **NTVZ** | **North Tongarir** | **1.02** | **329** | P | | Pn | 12 12 02.6 | -0.4 |
| **PKVZ** | **Pokaka** | **1.04** | **311** | P | | Pn | 12 12 02.9 | -0.3 |
| **KRVZ** | **Karewarewa** | **1.04** | **328** | P | | Pn | 12 12 02.9 | -0.3 |
| **WTVZ** | **West Tongariro** | **1.04** | **325** | P | | Pn | 12 12 03.1 | -0.3 |
| **WAZ** | **Wanganui** | **1.08** | **282** | P | | Pn | 12 12 04.4 | +0.8 |
| **HOWZ** | **Holdsworth Sta** | **1.12** | **215** | P | | Pn | 12 12 03.2 | -1.1 |
| **KATZ** | **Kakaramea** | **1.12** | **333** | P | | Pn | 12 12 04.5 | +0.1 |
| **WHHZ** | **Waihua** | **1.13** | **37** | P | | Pn | 12 12 03.8 | -0.6 |
| **MRHZ** | **Matea Rd** | **1.14** | **3** | P | | Pn | 12 12 04.2 | -0.5 |
| **TWVZ** | **Taurewa** | **1.15** | **322** | P | | Pn | 12 12 04.4 | -0.4 |
| **TMWZ** | **Te Maipa** | **1.18** | **197** | P | | Pn | 12 12 04.1 | -1.1 |
| **MTHZ** | **Maungataniwha** | **1.19** | **19** | P | | Pn | 12 12 04.4 | -0.8 |
| **RATZ** | **Rangitukua** | **1.20** | **338** | P | | Pn | 12 12 05.9 | +0.5 |
| **OGWZ** | **Otaki Gorge** | **1.23** | **227** | P | | Pn | 12 12 04.8 | -1.0 |
| **MTW** | **Mount Morrison** | **1.34** | **209** | P | | Pn | 12 12 05.9 | -1.5 |
| **WHTZ** | **Whakaora** | **1.35** | **347** | P | | Pn | 12 12 08.9 | +1.4 |
| **KNZ** | **Kokohu** | **1.40** | **47** | P | | Pn | 12 12 06.5 | -1.6 |
| **KIW** | **Kapiti Island** | **1.41** | **231** | P | | Pn | 12 12 07.4 | -0.9 |
| **ALRZ** | **Allen Road** | **1.41** | **360** | P | | Pn | 12 12 07.8 | -0.6 |
| **SNGZ** | **Shannon Statio** | **1.42** | **33** | P | | Pn | 12 12 07.5 | -0.9 |
| **MHGZ** | **Mahia Peninsul** | **1.46** | **56** | P | | Pn | 12 12 09.4 | +0.5 |
| **CAW** | **Cannon Point** | **1.49** | **221** | P | | Pn | 12 12 07.9 | -1.5 |
| **VRZ** | **Vera Road** | **1.50** | **304** | P | | Pn | 12 12 09.4 | -0.1 |
| **TRWZ** | **Traveller** | **1.51** | **199** | P | | Pn | 12 12 08.1 | -1.5 |
| **KUTZ** | **Kaahu Road** | **1.54** | **344** | P | | Pn | 12 12 09.5 | -0.6 |
| **PAWZ** | **Paruwai Farm** | **1.57** | **206** | P | | Pn | 12 12 08.8 | -1.7 |
| **PRGZ** | **Paritu Road** | **1.59** | **49** | P | | Pn | 12 12 09.3 | -1.4 |
| **HRRZ** | **Handcock Road** | **1.59** | **358** | P | | Pn | 12 12 09.7 | -1.1 |
| **LREZ** | **Lake Rotokare** | **1.59** | **288** | P | | Pn | 12 12 12.1 | +1.3 |
| **MSWZ** | **Moikau Station** | **1.66** | **210** | P | | Pn | 12 12 09.7 | -2.1 |
| **RIGZ** | **Rimuhau** | **1.68** | **41** | P | | Pn | 12 12 10.4 | -1.5 |
| **TARZ** | **Mount Tarawera** | **1.74** | **4** | P | | Pn | 12 12 12.0 | -1.0 |
| **TLZ** | **Tolley Road** | **1.76** | **339** | P | | Pn | 12 12 13.1 | -0.1 |
| **PLWZ** | **Palliser** | **1.79** | **207** | P | | Pn | 12 12 11.3 | -2.3 |
| **PREZ** | **Palmer Road** | **1.81** | **290** | P | | Pn | 12 12 14.9 | +1.1 |
| **URZ** | **Urewera** | **1.81** | **19** | P | | Pn | 12 12 12.0 | -1.8 |
| **BHW** | **Baring Head** | **1.82** | **218** | P | | Pn | 12 12 12.0 | -1.8 |
| **SNZO** | **South Karori** | **1.83** | **223** | P | | Pn | 12 12 11.9 | -2.1 |
| **DREZ** | **Durham Road** | **1.84** | **295** | P | | Pn | 12 12 15.3 | +1.1 |
| **HIZ** | **Hauiti** | **1.87** | **321** | P | | Pn | 12 12 15.9 | +1.3 |
| **HIZ** | **Hauiti** | **1.87** | **321** | P | | Pn | 12 12 16.1 | +1.6 |
| **MWZ** | **Matawai** | **1.88** | **29** | P | | Pn | 12 12 13.0 | -1.7 |
| **NEZ** | **North Egmont** | **1.88** | **291** | P | | Pn | 12 12 16.0 | +1.2 |
| **KHEZ** | **Kahui Hut** | **1.93** | **290** | P | | Pn | 12 12 17.0 | +1.5 |
| **KHEZ** | **Kahui Hut** | **1.93** | **290** | P | | Pn | 12 12 17.0 | +1.5 |
| **PKE** | **Pukeiti** | **1.99** | **292** | P | | Pn | 12 12 17.9 | +1.6 |
| **TCW** | **Tory Channel** | **2.00** | **231** | P | | Pn | 12 12 14.6 | -1.9 |
| **DUWZ** | **D'Urville Isla** | **2.03** | **245** | P | | Pn | 12 12 16.8 | 0.0 |
| **NBEZ** | **Newall Road No** | **2.05** | **289** | P | | Pn | 12 12 18.6 | +1.6 |
| **TUWZ** | **Tuamarina** | **2.34** | **231** | P | | Pn | 12 12 19.4 | -1.5 |
| **TOZ** | **Tahuroa Road** | **2.34** | **343** | P | | Pn | 12 12 20.1 | -0.9 |
| **QRZ** | **Quartz Range** | **3.04** | **253** | P | | Pn | 12 12 28.6 | -2.1 |
| **MRNZ** | **Matariki Terra** | **3.08** | **241** | P | | Pn | 12 12 30.5 | -0.8 |
| **THZ** | **Tophouse** | **3.16** | **235** | P | | Pn | 12 12 30.7 | -1.7 |

**IDC 22 12:15:24.5±2.5, 16°.99S×176°.73W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=68.9km s-min=43.3km az=30.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **46.38** | **258** | P | P | 12 23 52.8 | -0.3 |
| | 0.9nm,0.5s,baz=96,slow=6.9,SNR=42 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.59** | **253** | P | P | 12 23 54.8 | 0.0 |
| | 5.8nm,0.5s,baz=87,slow=9.3,SNR=140 5.8nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.06** | **180** | P | P | 12 26 56.6 | +0.2 |
| | 0.8nm,0.8s,baz=254,slow=1.3,SNR=6.8 0.8nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.24** | **317** | PKPbc | PKPbc | 12 35 03.4 | -1.0 |
| | 0.2nm,0.4s,baz=134,slow=4.2,SNR=3.7 | | | | | | |

*IDC **22** 12:22:56.2±2.0, 19°.22S×168°.96E, h137km±15km, mb4.2/13, mbtmp4.6/14, MS3.4/1, Error ellipse: s-maj=17.0km s-min=16.8km az=35.0*
*NEIC **22** 12:22:56.6±1.4, 19°.23S±0°.09×169°.0E±0°.1, h134km±7km, mb4.7/70, Error ellipse: s-maj=18.1km s-min=11.7km az=112.0*
*NOU **22** 12:22:57.3, 19°.20S×168°.90E, h118km, mb4.7/27, Vanuatu Islands*
**ISC 22 12:22:57.6±0.4, 19°.24S±0°.05×168°.97E±0°.07, h147km, n140, σ1§30/133, mb4.7/54, 4C-2D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.52** | **340** | P | **Pn** | **12 23 25.0** | **-2.3** |
| **DVP** | **Devils Point** | **1.68** | **334** | P | **Pn** | **12 23 27.2** | **-1.7** |
| **MARNC** | **Mare, Loyalty** | **2.40** | **201** | P | **Pn** | **12 23 35.6** | **-1.8** |
| **YATNC** | **Mamie plateau,** | **3.41** | **214** | P | **Pn** | **12 23 48.1** | **-2.1** |
| **PINNC** | **Pines Island,** | **3.65** | **203** | P | **Pn** | **12 23 52.3** | **-0.9** |
| **PINNC** | **Pines Island,** | **3.65** | **203** | Pn | **Pn** | **12 23 51.9** | **-1.3** |
| **DZM** | **Mont Dzumac** | **3.68** | **220** | P | **Pn** | **12 23 52.8** | **-0.9** |
| **DZM** | **Mont Dzumac** | **3.68** | **220** | Pn | **Pn** | **12 23 52.7** | **-0.9** |
| **DZM** | **Mont Dzumac** | **3.68** | **220** | P | **Pn** | **12 23 53.2** | **-0.5** |
| | 275nm,0.3s,baz=7.3,slow=4.2,SNR=350 | | | | | | |
| DZM | | | | S | **Sn** | **12 24 34.9** | **-2.3** |
| | 764nm,0.8s,baz=332,slow=21,SNR=21 | | | | | | |
| DZM | | | | LR | LR | 12 25 15.1 | |
| | comp=Z,534nm,20.3s,baz=140,slow=38 | | | | | | |
| **NOUC** | **Port Laguerre** | **3.79** | **221** | P | **Pn** | **12 23 54.6** | **-0.4** |
| **MSVF** | **Nonsavu** | **8.75** | **82** | Pn | **Pn** | **12 25 02.6** | **+1.4** |
| **HNR** | **Honiara** | **13.08** | **317** | | **Pn** | **12 26 00.5** | **+2.3** |
| **OUZ** | **Omahuta** | **16.44** | **166** | P | **P** | **12 26 41.0** | **+1.1** |
| | 52nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **17.63** | **247** | P | **Pn** | **12 26 55.1** | **+0.8** |
| **EIDS** | **Eidsvold** | **17.63** | **247** | P | **P** | **12 26 53.5** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 12 26 58.0 | |
| | comp=Z,47nm,1.1s | | | | | | |
| **KUZ** | **Kuaotunu** | **18.42** | **163** | P | **Pn** | **12 27 05.4** | **+1.9** |
| **ARMA** | **Armidale** | **19.25** | **231** | P | **Pn** | **12 27 12.6** | **-0.8** |
| **ARMA** | **Armidale** | **19.25** | **231** | | **P** | **12 27 10.8** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 12 27 14.1 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **HIZ** | **Hauiti** | **19.88** | **166** | P | **Pn** | **12 27 20.7** | **+0.1** |
| **URZ** | **Urewera** | **20.24** | **161** | P | **P** | **12 27 23.1** | **+1.8** |
| | comp=Z,62nm,1.5s | | | | | | |
| **URZ** | **Urewera** | **20.24** | **161** | P | **P** | **12 27 22.0** | **+0.8** |
| | comp=Z,24nm,0.7s,baz=54,slow=3.4,SNR=9.8 comp=Z,24nm,0.7s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.53** | **162** | P | **P** | **12 27 26.0** | **+1.5** |
| **BKZ** | **Black Stump Fm** | **20.90** | **163** | P | **P** | **12 27 29.6** | **+1.1** |
| **CTA** | **Charters Tower** | **21.40** | **264** | P | **P** | **12 27 34.8** | **+0.8** |
| | comp=Z,1.4nm,0.7s,baz=87,slow=11,SNR=36 | | | | | | |
| **CTAO** | **Charters Tower** | **21.40** | **264** | P | **P** | **12 27 35.5** | **+1.5** |
| **CTAO** | **Charters Tower** | **21.40** | **264** | P | **P** | **12 27 34.9** | **+0.8** |
| CTAO | | | | IAmb | IAmb | 12 27 35.9 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **QRZ** | **Quartz Range** | **21.73** | **173** | P | **P** | **12 27 39.0** | **+1.8** |
| **MRZ** | **Mangatainoka R** | **22.09** | **167** | P | **P** | **12 27 40.3** | **-0.6** |
| MRZ | | | | IAmb | IAmb | 12 27 42.0 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **BFZ** | **Birch Farm** | **22.27** | **165** | P | **P** | **12 27 44.8** | **+2.1** |
| **SNZO** | **South Karori** | **22.54** | **169** | P | **P** | **12 27 48.5** | **+3.3** |
| **THZ** | **Tophouse** | **22.70** | **172** | P | **P** | **12 27 47.6** | **+0.7** |
| THZ | | | | IAmb | IAmb | 12 27 49.4 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **MSWZ** | **Moikau Station** | **22.75** | **168** | P | **P** | **12 27 47.3** | **0.0** |
| **PMG** | **Port Moresby** | **23.25** | **292** | P | **P** | **12 27 52.2** | **+0.1** |
| PMG | | | | IAmb | IAmb | 12 27 54.2 | |
| | comp=Z,42nm,0.9s | | | | | | |
| **KHZ** | **Kahutara** | **23.43** | **171** | P | **P** | **12 27 53.4** | **-0.1** |
| KHZ | | | | IAmb | IAmb | 12 27 54.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **INZ** | **Inchbonnie** | **23.51** | **175** | P | **P** | **12 27 54.8** | **+0.6** |
| **CNB** | **Canberra Magne** | **23.59** | **223** | P | **P** | **12 27 56.8** | **+1.6** |
| **LTZ** | **Lake Taylor** | **23.64** | **174** | P | **P** | **12 27 56.2** | **+0.8** |
| LTZ | | | | IAmb | IAmb | 12 27 58.5 | |
| | comp=Z,49nm,1.2s | | | | | | |
| **YNG** | **Young** | **23.64** | **226** | P | **P** | **12 27 57.0** | **+1.4** |
| **CAN** | **Canberra** | **23.84** | **224** | P | **P** | **12 27 59.9** | **+2.6** |
| **CAN** | **Canberra** | **23.84** | **224** | P | **P** | **12 27 57.8** | **+0.4** |
| CAN | | | | IAmb | IAmb | 12 27 59.9 | |
| | comp=Z,28nm,1.0s | | | | | | |
| **OXZ** | **Oxford** | **24.16** | **175** | IAmb | IAmb | 12 28 02.6 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **COEN** | **Coen** | **25.25** | **278** | P | **P** | **12 28 12.6** | **+2.3** |
| **COEN** | **Coen** | **25.25** | **278** | P | **P** | **12 28 10.8** | **+0.5** |
| COEN | | | | IAmb | IAmb | 12 28 15.3 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **27.44** | **223** | P | **P** | **12 28 29.8** | **-0.1** |
| **STKA** | **Stephens Creek** | **27.63** | **238** | P | **P** | **12 28 32.6** | **+1.1** |
| **STKA** | **Stephens Creek** | **27.63** | **238** | P | **P** | **12 28 32.3** | **+0.8** |
| **STKA** | **Stephens Creek** | **27.63** | **238** | P | **P** | **12 28 31.5** | **0.0** |
| | comp=Z,13nm,0.7s,baz=64,slow=9.0,SNR=19 comp=Z,13nm,0.7s | | | | | | |
| **HTT** | **Hallett** | **30.28** | **236** | P | **P** | **12 28 55.5** | **+0.5** |
| **BBOO** | **Buckleboo** | **32.37** | **239** | P | **P** | **12 29 13.0** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 12 29 13.7 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **32.41** | **263** | P | **P** | **12 29 12.6** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 12 29 12.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.56** | **263** | P | **P** | **12 29 13.7** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 12 29 16.8 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.59** | **263** | P | **P** | **12 29 13.9** | **-1.5** |
| WB2 | | | | IAmb | IAmb | 12 29 14.9 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **32.59** | **263** | P | **P** | **12 29 13.8** | **-1.5** |
| WRAB | | | | IAmb | IAmb | 12 29 14.9 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.60** | **263** | P | **P** | **12 29 13.3** | **-2.1** |
| **WRA** | **Warramunga Arr** | **32.60** | **263** | P | **P** | **12 29 13.9** | **-1.6** |
| | comp=Z,8.0nm,0.8s,baz=89,slow=8.2,SNR=142 comp=Z,8.0nm,0.8s | | | | | | |
| **GENI** | **Genyem** | **32.66** | **297** | P | **P** | **12 29 16.8** | **+0.8** |
| | comp=Z,61nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **32.88** | **256** | P | **P** | **12 29 17.2** | **-0.6** |
| **ASAR** | **Alice Springs** | **32.88** | **256** | P | **P** | **12 29 17.7** | **-0.2** |
| **ASAR** | **Alice Springs** | **32.88** | **256** | P | **P** | **12 29 17.3** | **-0.6** |
| | comp=Z,22nm,0.4s,baz=82,slow=8.6,SNR=630 | | | | | | |
| ASAR | | | | ScP | **ScP** | **12 35 31.2** | **+1.6** |
| | comp=Z,0.6nm,0.7s,baz=92,slow=4.5,SNR=5.1 comp=Z,22nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **36.85** | **274** | P | **P** | **12 29 51.9** | **-0.2** |
| **KNRA** | **Kununurra** | **38.46** | **269** | P | **P** | **12 30 05.0** | **-0.5** |
| **FORT** | **Forrest** | **38.62** | **245** | P | **P** | **12 30 06.2** | **-0.4** |
| **FAKI** | **Fak Fak** | **39.38** | **290** | P | **P** | **12 30 12.1** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **45.95** | **258** | P | **P** | **12 31 06.2** | **+0.1** |
| **MBWA** | **Marble Bar** | **46.10** | **259** | P | **P** | **12 31 06.7** | **-0.7** |
| **KAPI** | **Kappang** | **49.96** | **280** | P | **P** | **12 31 36.8** | **-0.3** |
| | comp=Z,15nm,0.9s,baz=94,slow=9.0,SNR=4.1 comp=Z,15nm,0.9s | | | | | | |
| **GIRL** | **Giralia** | **50.99** | **256** | P | **P** | **12 31 45.7** | **+1.0** |
| **TOLI2** | **Tolitoli** | **51.42** | **288** | P | **P** | **12 31 48.0** | **0.0** |
| TOLI2 | | | | IAmb | IAmb | 12 31 48.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SBA** | **Scott Base** | **58.66** | **181** | P | **P** | **12 32 40.5** | **+1.4** |
| **CASY** | **Casey** | **60.02** | **203** | P | **P** | **12 32 49.0** | **+0.5** |
| **JMBI** | **JAMBI** | **66.20** | **277** | P | **P** | **12 33 39.2** | **+9.1** |
| **NJ2** | **Nanjing** | **70.03** | **316** | *e*P | **P** | **12 33 56.4** | **+2.8** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.82** | **180** | P | **P** | **12 33 57.9** | **-0.1** |
| | comp=Z,21nm,0.9s,baz=16,slow=1.6,SNR=69 comp=Z,21nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.70** | **353** | P | **P** | **12 34 09.3** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **72.70** | **353** | P | **P** | **12 34 08.7** | **-0.5** |
| | comp=Z,4.2nm,1.0s,baz=141,slow=5.7,SNR=6.1 comp=Z,4.2nm,1.0s | | | | | | |
| **GYA** | **Guiyang** | **75.61** | **305** | P | **P** | **12 34 28.8** | **+2.0** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| **XAN** | **Xi'an** | **77.92** | **313** | ⇑P | P | 12 34 45.8 | +6.3 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,12nm,2.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **78.27** | **294** | P | **P** | **12 34 42.5** | **+0.7** |
| | comp=Z,0.7nm,0.3s,baz=135,slow=3.8,SNR=8.1 comp=Z,0.7nm,0.3s | | | | | | |
| **MAW** | **Mawson** | **78.34** | **202** | P | **P** | **12 34 41.8** | **+0.6** |
| | comp=Z,2.6nm,0.7s,baz=117,slow=9.3,SNR=5.5 comp=Z,2.6nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **79.49** | **303** | P | **P** | **12 34 50.1** | **+1.7** |
| **PZH** | **PanZhiHua** | **79.49** | **303** | P | **P** | **12 34 51.1** | **+2.7** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.5s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,3.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **80.05** | **320** | *e*P | **P** | **12 34 51.0** | **-0.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,130nm,6.0s | | | | | | |
| **BELA** | **Belgrano 2** | **82.12** | **175** | P | **P** | **12 35 00.3** | **-1.1** |
| BELA | | | | IAmb | IAmb | 12 35 00.7 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| **LZH** | **Lanzhou** | **82.53** | **312** | *e*P | **P** | **12 35 04.8** | **+0.4** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| **N15K** | **Kwethluk River** | **83.02** | **15** | P | **P** | **12 35 06.1** | **0.0** |
| N15K | | | | IAmb | IAmb | 12 35 13.4 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **O16K** | **Kokwok River B** | **83.03** | **16** | P | **P** | **12 35 05.2** | **-0.9** |
| **Q19K** | **Cape Douglas,** | **83.72** | **18** | P | **P** | **12 35 09.4** | **-0.3** |
| **SMAI** | **San Martin Ant** | **83.91** | **162** | P | **P** | **12 35 10.1** | **-0.5** |
| SMAI | | | | IAmb | IAmb | 12 35 11.5 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **M16K** | **Timber Creek** | **84.04** | **15** | IAmb | IAmb | 12 35 12.6 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **ELIB** | **Princess Elisa** | **86.10** | **190** | *d*P | **P** | **12 35 20.3** | **-1.4** |
| | comp=Z,3.5nm,1.2s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **86.68** | **45** | P | **P** | **12 35 25.6** | **+0.6** |
| O02D | | | | IAmb | IAmb | 12 35 26.6 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **87.06** | **323** | P | **P** | **12 35 26.2** | **-0.5** |
| | comp=Z,1.8nm,1.0s,baz=127,slow=3.9,SNR=4.7 comp=Z,1.8nm,1.0s | | | | | | |
| **ISA** | **Isabella, Lake** | **87.68** | **51** | P | **P** | **12 35 29.0** | **-0.8** |
| **DSP** | **Deep Springs** | **88.78** | **50** | | **P** | **12 35 35.4** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **88.99** | **49** | P | **P** | **12 35 35.7** | **-0.5** |
| **NVAR** | **Mina Array Bea** | **88.99** | **49** | P | **P** | **12 35 35.9** | **-0.3** |
| | comp=Z,1.1nm,0.8s,baz=228,slow=7.3,SNR=10 comp=Z,1.1nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **89.15** | **183** | P | **P** | **12 35 35.5** | **-0.7** |
| **SNAA** | **Sanae** | **89.15** | **183** | ⇓P | **P** | **12 35 34.9** | **-1.3** |
| | comp=Z,91nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **89.15** | **183** | P | **P** | **12 35 34.8** | **-1.5** |
| | comp=Z,2.8nm,0.8s,baz=184,slow=2.9,SNR=9.0 comp=Z,2.8nm,0.8s | | | | | | |
| **J05D** | **Fort Rock, OR** | **89.17** | **43** | | **P** | **12 35 37.1** | **+0.3** |
| J05D | | | | IAmb | IAmb | 12 35 37.5 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **KVN** | **Kaiserville** | **89.40** | **48** | P | **P** | **12 35 37.9** | **-0.2** |
| **TPH** | **Tonopah** | **89.61** | **49** | IAmb | IAmb | 12 35 41.6 | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **89.75** | **180** | ⇑P | **P** | **12 35 37.1** | **-1.8** |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.04** | **181** | ⇑P | **P** | **12 35 38.6** | **-1.7** |
| | comp=Z,3.2nm,0.6s,baz=101,slow=1.9 | | | | | | |
| **GNW** | **Green Mountain** | **90.20** | **39** | IAmb | IAmb | 12 35 42.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.33** | **181** | ⇑P | **P** | **12 35 39.0** | **-2.6** |
| | comp=Z,11nm,1.2s | | | | | | |
| **SHPR** | **Sheep Range** | **90.47** | **51** | | **P** | **12 35 42.9** | **-0.2** |
| **WVOR** | **Wild Horse Val** | **90.50** | **45** | IAmb | IAmb | 12 35 44.1 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **I07A** | **Izee** | **90.65** | **43** | IAmb | IAmb | 12 35 44.7 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **W13A** | **Hualapai Mount** | **90.87** | **53** | IAmb | IAmb | 12 35 46.1 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **J08A** | **Circle Bar Ran** | **91.00** | **44** | IAmb | IAmb | 12 35 46.8 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **G08A** | **Pilot Rock** | **91.53** | **42** | IAmb | IAmb | 12 35 48.5 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **92.47** | **54** | IAmb | IAmb | 12 35 53.8 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **U15A** | **North Rim** | **92.57** | **52** | IAmb | IAmb | 12 35 53.6 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **WUAZ** | **Wupatki** | **92.93** | **53** | IAmb | IAmb | 12 35 56.5 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **96.99** | **61** | P | **P** | **12 36 13.4** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=225,slow=3.4,SNR=4.1 comp=Z,0.3nm,0.7s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **119.57** | **354** | PKiKP | **PKPdf** | **12 41 27.6** | **-1.5** |
| | comp=Z,6.1nm,0.9s,baz=43,slow=3.0,SNR=1.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **125.00** | **345** | PKP | **PKPdf** | **12 41 38.5** | **-1.3** |
| | comp=Z,1.4nm,0.3s,baz=78,slow=1.9,SNR=19 | | | | | | |
| **FINES** | **FINESS Array B** | **130.49** | **338** | PKP | **PKPdf** | **12 41 49.1** | **-1.3** |
| | comp=Z,1.6nm,0.7s,baz=117,slow=2.1,SNR=6.1 | | | | | | |
| FINES | | | | SKPbc | **SKPbc** | **12 44 59.5** | **-0.8** |
| | comp=Z,1.1nm,0.5s,baz=52,slow=3.1,SNR=6.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **143.47** | **352** | PKhKP | PKPpre | 12 42 10.1 | |
| | comp=Z,0.5nm,0.3s,baz=357,slow=3.3,SNR=5.4 | | | | | | |
| **RONA** | **Rosalia, Austr** | **143.95** | **328** | *i* PKP | PKPbc | 12 42 14.4 | +0.5 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| RONA | | | | *e*pPKP | pPKPdf | 12 42 52.0 | -2.4 |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **CONA** | **Conrad Observa** | **144.01** | **329** | *i* PKP | PKPbc | 12 42 15.0 | +0.9 |
| | comp=Z,2.2nm,0.6s | | | | | | |
| CONA | | | | *e*pPKP | pPKPdf | 12 42 52.4 | -2.1 |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **GERES** | **GERESS Array B** | **144.37** | **332** | PKP | **PKPab** | **12 42 14.4** | **-0.4** |
| | comp=Z,1.5nm,0.6s,baz=0.0,slow=2.7,SNR=6.4 | | | | | | |
| **ARSA** | **Arzberg** | **144.64** | **328** | *e*PKP | **PKPab** | **12 42 15.6** | **-0.2** |
| | comp=Z,6.2nm,1.3s | | | | | | |
| ARSA | | | | *i* pPKP | **pPKPdf** | **12 42 52.6** | **-2.9** |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **MOA** | **Molln** | **144.83** | **330** | *i* PKP | **PKPab** | **12 42 16.0** | **-0.5** |
| | comp=Z,6.2nm,0.6s | | | | | | |
| MOA | | | | *e*pPKP | **pPKPdf** | **12 42 54.6** | **-1.3** |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **145.24** | **330** | *e*PKP | **PKPbc** | **12 42 17.0** | **-0.8** |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **SOKA** | **Soboth** | **145.27** | **328** | *i* PKP | **PKPdf** | **12 42 17.2** | **-0.8** |
| | comp=Z,3.7nm,1.0s | | | | | | |
| SOKA | | | | *i* pPKP | pPKPab | 12 42 53.7 | -2.3 |
| | comp=Z,10nm,1.7s | | | | | | |
| **OBKA** | **Obir** | **145.63** | **328** | *i* PKP | **PKPdf** | **12 42 18.6** | **-0.1** |
| | comp=Z,2.5nm,0.6s | | | | | | |
| OBKA | | | | *i* pPKP | pPKPab | 12 42 55.0 | -2.3 |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **KBA** | **Koelnbreinsper** | **145.82** | **330** | *e*PKP | **PKPdf** | **12 42 18.7** | **-0.3** |
| | comp=Z,1.8nm,0.5s | | | | | | |
| KBA | | | | *i* pPKP | **pPKPdf** | **12 42 54.6** | **-3.2** |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **LESA** | **Schwarzleotal** | **145.88** | **331** | *

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** | **28.18** | **247** | T | T | 12 59 54.3 | |
| | baz=68,slow=76,SNR=136 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.18** | **247** | T | T | 12 59 56.9 | |
| | baz=68,slow=76,SNR=251 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.19** | **247** | T | T | 12 59 54.1 | |
| | baz=68,slow=76,SNR=90 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.32** | **125** | P | P | 12 35 42.2 | -0.1 |
| | 1.0nm,1.2s,baz=302,slow=9.1,SNR=2.6 | | | | | | |
| | 1.0nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **44.62** | **8** | P | P | 12 36 00.2 | -0.4 |
| | 2.4nm,0.8s,baz=187,slow=7.1,SNR=8.7 | | | | | | |
| | 2.4nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.26** | **344** | P | P | 12 36 04.4 | -1.3 |
| | 0.6nm,0.4s,baz=158,slow=8.6,SNR=8.6 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.78** | **344** | P | P | 12 36 41.3 | +0.6 |
| | 0.3nm,0.4s,baz=169,slow=6.6,SNR=2.5 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.43** | **350** | P | P | 12 36 54.1 | +1.0 |
| | 1.2nm,0.5s,baz=168,slow=7.3,SNR=5.7 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **64.42** | **214** | T | T | 13 45 18.9 | |
| | baz=53,slow=75,SNR=482 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **64.43** | **214** | T | T | 13 45 19.4 | |
| | baz=53,slow=75,SNR=568 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **64.44** | **214** | T | T | 13 45 18.0 | |
| | baz=53,slow=75,SNR=493 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **64.76** | **213** | T | T | 13 45 40.5 | |
| | baz=52,slow=75,SNR=28 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **64.77** | **213** | T | T | 13 45 42.3 | |
| | baz=52,slow=75,SNR=43 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **64.78** | **213** | T | T | 13 45 41.0 | |
| | baz=52,slow=75,SNR=33 | | | | | | |

**IDC 22 12:31:49.4±999.0, 54.97N×40.90E, h0km, Error ellipse: s-maj=508.4km s-min=65.1km az=131.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **2.72** | **312** | I | I | 12 46 40.0 | |
| | 0.6nm,0.6s,baz=128,slow=321,SNR=2.0 | | | | | | |
| **I37NO** | **I37NO** | **17.42** | **333** | I | I | 14 22 00.0 | |
| | baz=132,slow=324,SNR=1.2 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **17.79** | **261** | I | I | 14 20 20.0 | |
| | baz=63,slow=321,SNR=0.3 | | | | | | |

*SNET **22** 12:32:03.0±0.9, 14.20N×91.30W, h14km±5km, ML3.2*
*GCG **22** 12:32:03.3±0.7, 14.31N×91.47W, h55km±10km, MD4.1*
**ISC 22 12:32:00.9±2.1, 14.0N±0.1×91.43W±0.09, h13km±14km, n12, σ1§17/19, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SULM** | **Suchitepequez,** | **0.31** | **336** | *i* P | **Pn** | **12 32 11.8** | **+0.6** |
| **RTAL** | **Retalhuleu** | **0.56** | **333** | *e*P | **Pg** | **12 32 12.1** | **+0.2** |
| RTAL | | | | *e*S | **Sb** | **12 32 20.6** | **+0.1** |
| **STG3** | **Santiaguito 3,** | **0.69** | **349** | *i* P | **Pg** | **12 32 14.5** | **0.0** |
| STG3 | | | | *i* S | **Sb** | **12 32 23.6** | **-1.1** |
| **FUG** | **Fuego 3** | **0.71** | **54** | *i* P | **Pn** | **12 32 16.8** | **-0.1** |
| **PCG** | **Pacaya** | **0.88** | **65** | *i* P | **Pn** | **12 32 19.8** | **+0.5** |
| PCG | | | | *i* S | **Sn** | **12 32 33.0** | **+0.9** |
| **NBG** | **Las Nubes** | **1.19** | **62** | *i* P | **Pn** | **12 32 24.6** | **+0.9** |
| NBG | | | | *i* S | **Sn** | **12 32 42.6** | **+2.7** |
| **HUEH** | **Huehuetenango** | **1.29** | **357** | *e*S | **Sn** | **12 32 40.1** | **-2.0** |
| **SLOZ** | **Alcaldia de Sa** | **1.60** | **90** | *e*P | **Pn** | **12 32 29.0** | **0.0** |
| SLOZ | | | | *e*S | **Sb** | **12 32 49.3** | **-1.3** |
| **NUBE** | **Las Nubes** | **1.61** | **94** | *e*P | **Pn** | **12 32 29.5** | **+0.3** |
| NUBE | | | | *e*S | **Sb** | **12 32 49.5** | **-1.5** |
| **CEVE** | **Cerro Verde** | **1.77** | **96** | *e*P | **Pn** | **12 32 32.3** | **+0.7** |
| CEVE | | | | *e*S | **Sb** | **12 32 54.7** | **-1.0** |
| CEVE | | | | IAML | | 12 33 05.0 | |
| | comp=Z,535nm,0.3s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.96** | **101** | *e*P | **Pn** | **12 32 34.5** | **+0.4** |
| JAYA | | | | *e*S | **Sn** | **12 32 58.5** | **-0.2** |
| **COEG** | **Centro de Oper** | **2.51** | **99** | IAML | | 12 33 23.2 | |
| | comp=Z,66nm,0.4s | | | | | | |

*IDC **22** 12:49:56.8±0.7, 22.00S×68.45W, h94km±6km, mb3.9/12, mbtmp4.3/14, MS3.3/3, Error ellipse: s-maj=16.6km s-min=15.2km az=81.0*
*NEIC **22** 12:49:57.9±2.6, 22.15S±0.04×68.52W±0.09, h106km±6km, mb4.4/23, ML4.1(GUC), Error ellipse: s-maj=11.9km s-min=4.8km az=76.0*
*VAO **22** 12:49:57.6±0.4, 21.95S×68.16W, h10km, mb4.8*
*SJA **22** 12:49:57.2±0.7, 22.07S×68.57W, h28km±4km, ML4.1, MW4.2*
*GUC **22** 12:49:58.4±0.6, 22.01S×68.54W, h112km±4km, ML4.1*
**ISC 22 12:49:58.0±0.6, 22.06S±0.03×68.51W±0.05, h108km±5km, n108, σ1§69/122, mb4.4/22, 3C-1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **0.67** | **214** | | **Pn** | **12 50 16.0** | **-0.3** |
| LVC | | | | Sn | **Sn** | **12 50 28.4** | **-1.6** |
| **LVC** | **Limon Verde** | **0.67** | **214** | *e*P | Pn | 12 50 10.6 | -5.7 |
| LVC | | | | *e*S | **Sn** | **12 50 29.8** | **-0.3** |
| **LVC** | **Limon Verde** | **0.67** | **214** | P | **Pn** | **12 50 16.1** | **-0.1** |
| | 1µm,0.7s,baz=12,slow=11,SNR=694 | | | | | | |
| LVC | | | | S | **Sn** | **12 50 28.8** | **-1.2** |
| | 1µm,0.3s,baz=205,slow=19,SNR=22 | | | | | | |
| LVC | | | | LR | LR | 12 50 31.6 | |
| | comp=Z,86nm,18.8s,baz=348,slow=46 | | | | | | |
| **LVC** | **Limon Verde** | **0.67** | **214** | *e*P | **Pn** | **12 50 16.2** | **-0.1** |
| LVC | | | | *e*S | **Sn** | **12 50 29.3** | **-0.8** |
| LVC | | | | IAML | | 12 50 31.5 | |
| | comp=Z,9µm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **0.67** | **214** | *e*P | **Pn** | **12 50 16.1** | **-0.3** |
| LVC | | | | *e*S | **Sn** | **12 50 29.4** | **-0.6** |
| **PB09** | **IPOC Station P** | **0.73** | **291** | | **Pn** | **12 50 16.8** | **+0.3** |
| PB09 | | | | Sn | **Sn** | **12 50 30.5** | **0.0** |
| **PB09** | **IPOC Station P** | **0.73** | **291** | *e*P | Pn | 12 50 11.1 | -5.5 |
| PB09 | | | | *e*S | **Sn** | **12 50 32.4** | **+1.8** |
| PB09 | | | | IAML | | 12 50 35.1 | |
| | comp=Z,4µm,0.6s | | | | | | |
| **PB09** | **IPOC Station P** | **0.73** | **291** | ⇓*i*P | **Pn** | **12 50 16.9** | **+0.3** |
| PB09 | | | | *e*S | **Sn** | **12 50 30.9** | **+0.4** |
| PB09 | | | | IAML | | 12 50 32.9 | |
| | comp=E,5µm,0.4s | | | | | | |
| **AF01** | **San Pedro de A** | **0.94** | **161** | | **Pn** | **12 50 19.8** | **+1.0** |
| **AF01** | **San Pedro de A** | **0.94** | **161** | *e*P | **Pn** | **12 50 16.1** | **-2.7** |
| AF01 | | | | *e*S | **Sn** | **12 50 40.3** | **+5.9** |
| AF01 | | | | IAML | | 12 50 59.2 | |
| | comp=Z,5µm,0.7s | | | | | | |
| **AF01** | **San Pedro de A** | **0.94** | **161** | *e*P | **Pn** | **12 50 19.8** | **+1.0** |
| AF01 | | | | *e*S | **Sn** | **12 50 36.7** | **+2.3** |
| AF01 | | | | IAML | | 12 50 56.3 | |
| | comp=N,6µm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **1.54** | **259** | | **Pn** | **12 50 24.6** | **-0.8** |
| **PB04** | **IPOC Station P** | **1.54** | **259** | *e*P | **Pn** | **12 50 24.5** | **-0.8** |
| PB04 | | | | *e*S | **Sn** | **12 50 45.8** | **-0.3** |
| PB04 | | | | IAML | | 12 50 51.5 | |
| | comp=Z,2µm,0.7s | | | | | | |
| **PB04** | **IPOC Station P** | **1.54** | **259** | ⇑*i*P | **Pn** | **12 50 24.7** | **-0.8** |
| PB04 | | | | *e*S | **Sn** | **12 50 45.9** | **-0.3** |
| PB04 | | | | IAML | | 12 50 51.9 | |
| | comp=N,4µm,0.8s | | | | | | |
| **PATCX** | **Punta Patache** | **1.96** | **308** | | **Pn** | **12 50 29.7** | **-0.8** |
| **TA01** | **Diego Aracena** | **2.15** | **313** | | **Pn** | **12 50 32.0** | **-0.8** |
| **TA01** | **Diego Aracena** | **2.15** | **313** | *e*P | **Pn** | **12 50 32.0** | **-0.8** |
| TA01 | | | | *e*S | **Sn** | **12 50 59.8** | **+0.3** |
| TA01 | | | | IAML | | 12 51 04.9 | |
| | comp=Z,987nm,0.6s | | | | | | |
| **TA01** | **Diego Aracena** | **2.15** | **313** | *e*P | **Pn** | **12 50 31.8** | **-0.9** |
| TA01 | | | | *e*S | **Sn** | **12 50 58.6** | **-0.8** |
| TA01 | | | | IAML | | 12 51 06.0 | |
| | comp=N,2µm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **2.19** | **324** | | **Pn** | **12 50 32.7** | **-0.7** |
| **TA02** | **Huaiquique** | **2.33** | **319** | | **Pn** | **12 50 34.2** | **-0.9** |
| **TA02** | **Huaiquique** | **2.33** | **319** | *e*P | **Pn** | **12 50 34.5** | **-0.7** |
| TA02 | | | | IAML | | 12 51 12.2 | |
| | comp=Z,857nm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **2.33** | **319** | *e*P | **Pn** | **12 50 34.4** | **-0.8** |
| **GO01** | **Chusmiza** | **2.46** | **345** | | **Pn** | **12 50 38.5** | **+1.3** |
| **GO01** | **Chusmiza** | **2.46** | **345** | *e*P | **Pn** | **12 50 38.6** | **+1.4** |
| GO01 | | | | *e*S | **Sn** | **12 51 09.9** | **+2.6** |
| GO01 | | | | IAML | | 12 51 15.5 | |
| | comp=Z,914nm,0.8s | | | | | | |
| **GO01** | **Chusmiza** | **2.46** | **345** | *e*P | **Pn** | **12 50 38.6** | **+1.3** |
| GO01 | | | | *e*S | **Sn** | **12 51 09.0** | **+1.6** |
| GO01 | | | | IAML | | 12 51 12.6 | |
| | comp=N,1µm,0.2s | | | | | | |
| **YJA** | **Yavi** | **2.78** | **93** | *e*P | **Pn** | **12 50 44.4** | **+2.9** |
| YJA | | | | *e*S | Sn | 12 50 59.6 | -15 |
| **YJA** | **Yavi** | **2.78** | **93** | *e*P | **Pn** | **12 50 44.4** | **+2.9** |
| **PB14** | **IPOC Station P** | **3.10** | **214** | | **Pn** | **12 50 44.7** | **-0.8** |
| **PB14** | **IPOC Station P** | **3.10** | **214** | *e*P | **Pn** | **12 50 45.6** | **+0.2** |
| PB14 | | | | *e*S | **Sn** | **12 51 21.1** | **-1.0** |
| PB14 | | | | IAML | | 12 51 32.7 | |
| | comp=Z,1µm,0.6s | | | | | | |
| **GO02** | **Mina Guanaco** | **3.25** | **198** | | **Pn** | **12 50 46.0** | **-1.5** |
| **GO02** | **Mina Guanaco** | **3.25** | **198** | *e*P | **Pn** | **12 50 47.5** | **0.0** |
| GO02 | | | | *e*S | Sn | 12 51 42.0 | +16 |
| GO02 | | | | IAML | | 12 51 51.9 | |
| | comp=Z,448nm,0.5s | | | | | | |
| **GO02** | **Mina Guanaco** | **3.25** | **198** | *e*P | **Pn** | **12 50 46.6** | **-0.9** |
| GO02 | | | | *e*S | **Sn** | **12 51 26.3** | **+0.6** |
| GO02 | | | | IAML | | 12 51 34.3 | |
| | comp=N,474nm,0.5s | | | | | | |
| **AC01** | **Pan de Azucar** | **4.50** | **205** | Pn | **Pn** | **12 51 01.7** | **-2.3** |
| **AC01** | **Pan de Azucar** | **4.50** | **205** | *e*P | **Pn** | **12 51 01.6** | **-2.5** |
| AC01 | | | | *e*S | **Sn** | **12 51 51.0** | **-4.4** |
| AC01 | | | | IAML | | 12 52 08.4 | |
| | comp=Z,337nm,1.0s | | | | | | |
| **PB18** | **Visviri** | **4.54** | **348** | | **Pn** | **12 51 07.8** | **+2.8** |
| **FSA** | **Cafayete** | **4.65** | **151** | *e*P | **Pn** | **12 51 08.4** | **+2.2** |
| **AC06** | **Mina Casimiro** | **5.54** | **197** | Pn | **Pn** | **12 51 15.3** | **-2.8** |
| **GO03** | **Copiap** | **5.73** | **196** | | **Pn** | **12 51 17.7** | **-3.0** |
| **LPAZ** | **La Paz** | **5.75** | **4** | P | **Pn** | **12 51 23.1** | **+1.6** |
| | comp=Z,6.1nm,0.4s,baz=191,slow=7.0,SNR=27 | | | | | | |
| **LPAZ** | **La Paz** | **5.75** | **4** | *e*P | **Pn** | **12 51 22.1** | **+0.6** |
| **AC04** | **Llanos de Chal** | **6.55** | **200** | Pn | Pn | 12 51 27.0 | -4.7 |
| **AC05** | **El Transito** | **6.94** | **193** | | **Pn** | **12 51 34.1** | **-3.0** |
| **LCO** | **Las Campanas** | **7.20** | **195** | Pn | **Pn** | **12 51 36.6** | **-4.3** |
| **FDPY** | **Filadelfia** | **7.94** | **93** | *e*P | **Pn** | **12 51 49.8** | **-0.9** |
| **CO01** | **Juntas del Tor** | **8.02** | **190** | | **Pn** | **12 51 50.4** | **-1.5** |
| **BBSD** | **Serra de San D** | **8.88** | **58** | *e*P | **Pn** | **12 52 00.2** | **-3.2** |
| **SIV** | **San Ignacio** | **9.26** | **51** | P | **Pn** | **12 52 06.3** | **-2.4** |
| | comp=Z,46nm,0.5s,baz=236,slow=11,SNR=234 | | | | | | |
| SIV | | | | S | **Sn** | **12 53 43.2** | **-8.0** |
| | comp=Z,4.0nm,0.4s,baz=146,slow=11,SNR=4.7 | | | | | | |
| **PAPY** | **Pozo Azul** | **9.68** | **104** | *e*P | **Pn** | **12 52 14.0** | **-0.3** |
| **PTLB** | **Pontes e Lacer** | **11.04** | **55** | Pn | **Pn** | **12 52 31.3** | **-1.5** |
| **PTLB** | **Pontes e Lacer** | **11.04** | **55** | *e*P | **Pn** | **12 52 31.3** | **-1.5** |
| **CPUP** | **Villa Florida** | **11.06** | **115** | Pn | **Pn** | **12 52 33.0** | **+0.1** |
| **CPUP** | **Villa Florida** | **11.06** | **115** | P | **Pn** | **12 52 32.2** | **-0.7** |
| | comp=Z,1.3nm,0.5s,baz=296,slow=8.7,SNR=4.3 | | | | | | |
| CPUP | | | | LR | LR | 12 57 40.9 | |
| | comp=Z,85nm,21.2s,baz=298,slow=42 | | | | | | |
| **VILB** | **Vilhena** | **12.03** | **43** | Pn | **Pn** | **12 52 44.6** | **-1.3** |
| **AQDB** | **Aquidauana** | **12.05** | **85** | Pn | **Pn** | **12 52 45.5** | **-0.6** |
| **AQDB** | **Aquidauana** | **12.05** | **85** | *e*P | **Pn** | **12 52 45.4** | **-0.8** |
| **ETMB** | **Extrema** | **12.37** | **11** | Pn | **Pn** | **12 52 49.1** | **-1.3** |
| **CRSM** | **Crissiumal (Br** | **14.21** | **115** | *e*P | **Pn** | **12 53 16.4** | **+2.1** |
| **TRCB** | **Terra Rica** | **14.70** | **96** | | **Pn** | **12 53 21.3** | **+0.6** |
| **ITAB** | **Concordia** | **15.76** | **112** | P | **P** | **12 53 35.1** | **-0.5** |
| ITAB | | | | IAmb | IAmb | 12 53 37.0 | |
| | comp=Z,9.2nm,0.6s | | | | | | |
| **CPSB** | **Cacapava Do Su** | **15.86** | **125** | *e*P | **P** | **12 53 36.5** | **-0.2** |
| **PCMB** | **Pacaembu** | **16.02** | **92** | *e*P | **P** | **12 53 38.9** | **+0.4** |
| **LDASE** | **Londrina, Braz** | **16.10** | **98** | *e*P | **P** | **12 53 40.0** | **+0.5** |
| **PLTB** | **Pedras Altas** | **16.42** | **129** | P | **Pn** | **12 53 41.8** | **-0.3** |
| **CLDB** | **Colider** | **16.49** | **50** | *e*P | **P** | **12 53 44.1** | **+0.4** |
| **TRQA** | **Tornquist** | **16.91** | **162** | Pn | **Pn** | **12 53 45.3** | **-2.7** |
| **PLCA** | **Paso Flores** | **18.70** | **185** | P | **Pn** | **12 54 13.2** | **+3.6** |
| | comp=Z,5.5nm,0.8s,baz=356,slow=10,SNR=6.1 | | | | | | |
| **BDFB** | **Brasilia** | **20.41** | **75** | P | **P** | **12 54 26.9** | **+0.2** |
| **BDFB** | **Brasilia** | **20.41** | **75** | P | **P** | **12 54 26.8** | **+0.2** |
| | comp=Z,2.4nm,0.5s,baz=284,slow=4.1,SNR=3.6 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **MAL2** | **Monte Alegre,** | **24.31** | **37** | P | **P** | **12 55 05.3** | **-0.3** |
| **BOAV** | **Boa Vista** | **25.52** | **19** | P | **P** | **12 55 17.0** | **+0.3** |
| **GO08** | **Villa O'Higgin** | **26.55** | **186** | P | **P** | **12 55 27.3** | **+1.7** |
| GO08 | | | | IAmb | IAmb | 12 55 27.6 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **30.82** | **356** | LR | LR | 13 10 22.3 | |
| | comp=Z,79nm,19.5s,baz=259,slow=40 | | | | | | |
| **RPN** | **Rapa Nui** | **37.35** | **254** | LR | LR | 13 08 54.4 | |
| | comp=Z,77nm,21.3s,baz=22,slow=30 | | | | | | |
| **SAND** | **Sanderson** | **60.98** | **327** | P | **P** | **13 00 00.1** | **0.0** |
| SAND | | | | IAmb | IAmb | 13 00 01.3 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **61.29** | **325** | P | **P** | **13 00 02.1** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=154,slow=8.2,SNR=6.8 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **61.64** | **161** | P | **P** | **13 00 03.2** | **-0.8** |
| SNAA | | | | IAmb | IAmb | 13 00 05.0 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **61.64** | **161** | ⇑P | **P** | **13 00 04.0** | **+0.1** |
| | comp=Z,72nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **61.64** | **161** | P | **P** | **13 00 04.4** | **+0.4** |
| | comp=Z,4.1nm,0.6s,baz=281,slow=8.5,SNR=23 | | | | | | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **SN05** | **Snyder 5** | **62.77** | **330** | P | **P** | **13 00 12.0** | **+0.1** |
| **SN07** | **Snyder 07** | **62.95** | **330** | IAmb | IAmb | 13 00 13.6 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **VHRN** | **Van Horn** | **63.14** | **325** | IAmb | IAmb | 13 00 15.7 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **63.35** | **161** | ⇑P | **P** | **13 00 15.7** | **+0.2** |
| | comp=Z,208nm,0.5s | | | | | | |
| **ANMO** | **Albuquerque** | **67.16** | **327** | P | **P** | **13 00 41.2** | **+0.7** |
| ANMO | | | | IAmb | IAmb | 13 00 42.5 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **67.25** | **334** | P | **P** | **13 00 41.2** | **+0.3** |
| **QSPA** | **South Pole Qui** | **68.14** | **180** | P | **P** | **13 00 47.1** | **+0.9** |
| **QSPA** | **South Pole Qui** | **68.14** | **180** | P | **P** | **13 00 47.4** | **+1.1** |
| | comp=Z,5.6nm,0.5s,baz=334,slow=0.7,SNR=118 | | | | | | |
| | comp=Z,5.6nm,0.5s | | | | | | |
| **DBIC** | **Dimbokro** | **68.54** | **73** | P | **P** | **13 00 49.0** | **-0.4** |
| | comp=Z,4.0nm,0.6s,baz=232,slow=7.2,SNR=6.5 | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **69.42** | **323** | P | **P** | **13 00 56.0** | **+1.3** |
| X16A | | | | IAmb | IAmb | 13 00 57.2 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **Q24A** | **Divide** | **69.72** | **330** | P | **P** | **13 00 57.2** | **+0.6** |
| Q24A | | | | IAmb | IAmb | 13 00 58.4 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **MVCO** | **Mesa Verde** | **69.96** | **327** | P | **P** | **13 00 59.2** | **+1.2** |
| MVCO | | | | IAmb | IAmb | 13 00 60.0 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **WUAZ** | **Wupatki** | **70.20** | **324** | P | **P** | **13 01 00.4** | **+1.1** |
| WUAZ | | | | IAmb | IAmb | 13 01 01.9 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **74.77** | **330** | P | **P** | **13 01 26.9** | **+0.5** |
| | comp=Z,0.5nm,0.5s,baz=132,slow=6.6,SNR=6.5 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **ULM** | **Lac du Bonnet** | **75.95** | **342** | P | **P** | **13 01 32.2** | **-0.5** |
| | comp=Z,1.8nm,0.5s,baz=150,slow=8.3,SNR=6.2 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.16** | **322** | P | **P** | **13 01 35.5** | **+1.1** |
| | comp=Z,0.6nm,0.8s,baz=143,slow=5.5,SNR=8.7 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.19** | **70** | P | **P** | **13 01 39.7** | **-0.8** |
| **TORD** | **Torodi Ar. Bea** | **77.19** | **70** | P | **P** | **13 01 39.8** | **-0.8** |
| | comp=Z,1.9nm,0.4s,baz=258,slow=5.3,SNR=20 | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **HLID** | **Hailey** | **77.71** | **328** | P | **P** | **13 01 45.0** | **+2.0** |
| HLID | | | | IAmb | IAmb | 13 01 45.5 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **DLMT** | **Dillon** | **78.17** | **330** | P | **P** | **13 01 46.9** | **+1.4** |
| DLMT | | | | IAmb | IAmb | 13 01 47.1 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **82.86** | **118** | P | **P** | **13 02 11.1** | **0.0** |
| | comp=Z,5.6nm,1.1s,baz=337,slow=3.7,SNR=4.4 | | | | | | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **83.69** | **163** | P | **P** | **13 02 15.1** | **+0.8** |
| | comp=Z,2.6nm,0.5s,baz=252,slow=7.5,SNR=7.6 | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **85.97** | **44** | P | **P** | **13 02 26.6** | **+0.3** |
| | comp=Z,0.8nm,1.0s,baz=231,slow=6.1,SNR=5.3 | | | | | | |
| | comp=Z,0.8nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **129.59** | **207** | PKP | **PKPdf** | **13 08 54.9** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=126,slow=1.7,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **132.66** | **210** | PKP | **PKPdf** | **13 09 00.7** | **-0.2** |
| | comp=Z,0.7nm,0.5s,baz=153,slow=1.7,SNR=13 | | | | | | |
| **BVAR** | **Borovoye Array** | **136.04** | **35** | PKP | **PKPdf** | **13 09 06.5** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=297,slow=7.6,SNR=3.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **141.59** | **34** | PKP | **PKPdf** | **13 09 17.2** | **+0.9** |
| | comp=Z,0.4nm,0.6s,baz=296,slow=2.7,SNR=6.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.29** | **26** | PKP | **PKPdf** | **13 09 18.4** | **+0.9** |
| | comp=Z,2.3nm,0.5s,baz=278,slow=2.2,SNR=7.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.86** | **37** | PKPbc | **PKPdf** | **13 09 24.6** | **+0.7** |
| | comp=Z,3.4nm,0.7s,baz=327,slow=2.9,SNR=18 | | | | | | |
| **SONM** | **Songino Array** | **153.95** | **8** | PKP | **PKPdf** | **13 09 37.7** | **+0.9** |
| | comp=Z,0.5nm,0.4s,baz=270,slow=2.9,SNR=1.6 | | | | | | |
| SONM | | | | PKPbc | **PKPbc** | **13 09 45.4** | **+0.5** |
| | comp=Z,1.1nm,0.7s,baz=298,slow=1.6,SNR=4.1 | | | | | | |

*ROM **22** 13:01:43.0±0.2, 43.54N±0.01×6.63E±0.01, h15km±1km, ML2.7/30, Error ellipse: s-maj=1.2km s-min=0.4km az=169.0*
*LDG **22** 13:01:43.8±0.1, 43.59N×6.63E, h15km, Md1.8/1, Ml2.9/18, Error ellipse: s-maj=1.7km s-min=1.1km az=177.0*
*STR **22** 13:01:44.3±0.5, 44.3°×3.5°, h10km, MLv2.8/30, Error ellipse: s-maj=0.0km s-min=0.0km az=177.0, preliminary*
*GEN **22** 13:01:44.8, 43.56N×6.62E, h14km, Ml2.9*
**ISC 22 13:01:43.2±0.9, 43.57N±0.02×6.62E±0.01, h19km±1km, n93, σ1§22/153, 4C, Near south coast of France**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRIGF** | **Trigance** | **0.24** | **319** | Pg | **Pb** | **13 01 49.8** | **+1.0** |
| TRIGF | | | | Sg | **Sg** | **13 01 53.7** | **+0.9** |
| **LMR** | **La Mourre** | **0.25** | **200** | *e*Pg | **Pb** | **13 01 49.6** | **+0.8** |
| LMR | | | | *e*Sg | **Sb** | **13 01 52.1** | **-0.3** |
| | 905nm,0.2s | | | | | | |
| **CALF** | **Calern** | **0.28** | **49** | Pg | **Pb** | **13 01 50.1** | **+0.4** |
| CALF | | | | Sg | **Sb** | **13 01 54.9** | **+0.9** |
| **SALSA** | **La sagne** | **0.32** | **8** | Pg | **Pb** | **13 01 50.7** | **+0.3** |
| SALSA | | | | Sg | **Sb** | **13 01 55.7** | **+0.5** |
| **EILF** | **Villa Eilenroc** | **0.37** | **93** | Pg | **Pb** | **13 01 51.7** | **+0.6** |
| EILF | | | | Sg | **Sb** | **13 01 56.9** | **+0.3** |
| **EILF** | **Villa Eilenroc** | **0.37** | **93** | P | **Pb** | **13 01 52.3** | **+1.1** |
| EILF | | | | S | **Sb** | **13 01 57.4** | **+0.8** |
| **MVIF** | **Mont Vial** | **0.51** | **49** | Pg | **Pb** | **13 01 54.0** | **+0.4** |
| MVIF | | | | Sg | **Sb** | **13 02 00.9** | **+0.4** |
| **ENAUX** | **Enaux** | **0.55** | **11** | Pg | **Pg** | **13 01 54.6** | **+0.3** |
| ENAUX | | | | Sg | **Sb** | **13 02 02.5** | **+0.6** |
| **BLAF** | **les Blancs** | **0.57** | **313** | Pg | **Pg** | **13 01 55.2** | **+0.7** |
| BLAF | | | | Sg | **Sg** | **13 02 03.3** | **+1.0** |
| **ARTF** | **Artigues** | **0.60** | **272** | Pg | **Pb** | **13 01 55.6** | **+0.7** |
| ARTF | | | | Sg | **Sb** | **13 02 03.9** | **+1.0** |
| **MON** | **Monaco** | **0.60** | **74** | Pg | **Pg** | **13 01 55.4** | **+0.2** |
| MON | | | | Sg | **Sg** | **13 02 04.3** | **+1.0** |
| **MON** | **Monaco** | **0.60** | **74** | P | **Pn** | **13 01 56.3** | **-0.4** |
| MON | | | | S | **Sg** | **13 02 04.5** | **+1.2** |
| **ESCA** | **l'Escarene** | **0.60** | **64** | Pg | **Pg** | **13 01 55.4** | **+0.2** |
| ESCA | | | | Sg | **Sg** | **13 02 04.0** | **+0.6** |
| **ESCA** | **l'Escarene** | **0.60** | **64** | P | **Pg** | **13 01 56.0** | **+0.8** |
| ESCA | | | | S | **Sg** | **13 02 04.5** | **+1.1** |
| **SBF** | **Sospel** | **0.66** | **63** | *e*Pg | **Pb** | **13 01 56.2** | **+0.2** |
| SBF | | | | *e*Sg | **Sb** | **13 02 04.2** | **-0.6** |
| | 266nm,0.2s | | | | | | |
| **SPIF** | **crte de Spivo** | **0.66** | **42** | Pg | **Pb** | **13 01 56.3** | **+0.2** |
| SPIF | | | | Sg | **Sg** | **13 02 05.4** | **+0.3** |
| **MENA** | **Menton** | **0.66** | **71** | P | **Pn** | **13 01 57.5** | **0.0** |
| MENA | | | | S | **Sn** | **13 02 06.7** | **-0.7** |
| **ISO** | **Isola** | **0.69** | **26** | Pg | **Pb** | **13 01 56.9** | **+0.3** |
| ISO | | | | Sg | **Sb** | **13 02 06.0** | **+0.3** |
| **ISO** | **Isola** | **0.69** | **26** | P | **Pg** | **13 01 57.5** | **+0.6** |
| ISO | | | | S | **Sg** | **13 02 06.4** | **+0.3** |
| **TURF** | **col de Turini** | **0.69** | **53** | Pg | **Pg** | **13 01 56.9** | **+0.1** |
| TURF | | | | Sg | **Sg** | **13 02 06.7** | **+0.6** |
| **TURF** | **col de Turini** | **0.69** | **53** | P | **Pg** | **13 01 57.5** | **+0.7** |
| TURF | | | | S | **Sg** | **13 02 07.2** | **+1.1** |
| **BURY** | **Giardini Botan** | **0.71** | **72** | Pg | **Pb** | **13 01 57.1** | **+0.2** |
| **BURY** | **Giardini Botan** | **0.71** | **72** | Sg | **Sg** | **13 02 06.7** | **0.0** |
| **BURY** | **Giardini Botan** | **0.71** | **72** | P | **Pg** | **13 01 57.2** | **0.0** |
| BURY | | | | S | **Sg** | **13 02 07.0** | **+0.4** |
| **MLYF** | **Mely** | **0.75** | **304** | Pg | **Pg** | **13 01 58.5** | **+0.6** |
| MLYF | | | | Sg | **Sg** | **13 02 09.4** | **+1.4** |
| **BSTF** | **la Bastide-des** | **0.78** | **294** | Pg | **Pb** | **13 01 58.4** | **+0.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MBDF** | **Montbardon** | **1.17** | **5** | *e*Pg | | **Pn** | **13 02 05.0** | **+0.4** |
| MBDF | | | | *e*Sg | | **Sb** | **13 02 19.6** | **0.0** |
| | comp=E,198nm,0.5s | | | | | | | |
| **RORO** | **Rocca Rossa** | **1.18** | **62** | P | | **Pn** | **13 02 04.2** | **-0.4** |
| RORO | | | | S | | **Sn** | **13 02 20.4** | **+0.3** |
| RORO | | | | AML | AML | | | |
| | comp=E,534µm,0.1s | | | | | | | |
| RORO | | | | AML | AML | | | |
| | comp=N,566µm,0.1s | | | | | | | |
| RORO | | | | AML | AML | | | |
| | comp=E,535µm,0.1s | | | | | | | |
| RORO | | | | AML | AML | | | |
| | comp=N,565µm,0.1s | | | | | | | |
| **RORO** | **Rocca Rossa** | **1.18** | **62** | Pg | | **Pn** | **13 02 04.4** | **-0.2** |
| **RORO** | **Rocca Rossa** | **1.18** | **62** | P | | **Pn** | **13 02 04.5** | **-0.1** |
| RORO | | | | S | | **Sn** | **13 02 20.4** | **+0.3** |
| **CANO** | **Canova, Maglio** | **1.33** | **61** | P | | **Pn** | **13 02 06.8** | **+0.1** |
| CANO | | | | S | | **Sg** | **13 02 25.2** | **-1.1** |
| CANO | | | | AML | AML | | | |
| | comp=E,450µm,0.4s | | | | | | | |
| CANO | | | | AML | AML | | | |
| | comp=N,656µm,0.4s | | | | | | | |
| CANO | | | | AML | AML | | | |
| | comp=N,656µm,0.4s | | | | | | | |
| CANO | | | | AML | AML | | | |
| | comp=E,363µm,0.2s | | | | | | | |
| CANO | | | | AML | AML | | | |
| | comp=N,656µm,1.6s | | | | | | | |
| **CANO** | **Canova, Maglio** | **1.33** | **61** | Pg | | **Pn** | **13 02 06.6** | **-0.2** |
| **CANO** | **Canova, Maglio** | **1.33** | **61** | P | | **Pn** | **13 02 06.8** | **+0.1** |
| **BHB** | **Bricherasio** | **1.36** | **20** | P | | **Pn** | **13 02 07.6** | **+0.5** |
| BHB | | | | S | | **Sb** | **13 02 25.7** | **+0.7** |
| BHB | | | | AML | AML | | | |
| | comp=E,256µm,0.4s | | | | | | | |
| BHB | | | | AML | AML | | | |
| | comp=N,208µm,0.4s | | | | | | | |
| BHB | | | | AML | AML | | | |
| | comp=N,176µm,0.4s | | | | | | | |
| BHB | | | | AML | AML | | | |
| | comp=E,255µm,0.4s | | | | | | | |
| **BHB** | **Bricherasio** | **1.36** | **20** | Pg | | **Pn** | **13 02 07.5** | **+0.5** |
| **BHB** | **Bricherasio** | **1.36** | **20** | Sg | | **Sb** | **13 02 25.7** | **+0.7** |
| **BHB** | **Bricherasio** | **1.36** | **20** | P | | **Pn** | **13 02 07.7** | **+0.5** |
| **RRL** | **Rocca Remolon** | **1.36** | **5** | P | | **Pb** | **13 02 08.4** | **+0.3** |
| RRL | | | | S | | **Sg** | **13 02 26.7** | **-0.6** |
| RRL | | | | AML | AML | | | |
| | comp=E,283µm,0.5s | | | | | | | |
| RRL | | | | AML | AML | | | |
| | comp=N,210µm,0.2s | | | | | | | |
| RRL | | | | AML | AML | | | |
| | comp=E,283µm,0.5s | | | | | | | |
| RRL | | | | AML | AML | | | |
| | comp=E,283µm,1.5s | | | | | | | |
| RRL | | | | AML | AML | | | |
| | comp=N,210µm,0.2s | | | | | | | |
| **RRL** | **Rocca Remolon** | **1.36** | **5** | Sg | | **Sg** | **13 02 27.5** | **+0.2** |
| **RRL** | **Rocca Remolon** | **1.36** | **5** | Pg | | **Pb** | **13 02 08.5** | **+0.4** |
| **RRL** | **Rocca Remolon** | **1.36** | **5** | P | | **Pb** | **13 02 08.5** | **+0.3** |
| **ORIF** | **Oris-en-Rattie** | **1.45** | **339** | *e*Pg | | **Pb** | **13 02 10.2** | **+0.5** |
| ORIF | | | | *e*Sg | | **Sb** | **13 02 28.9** | **+1.1** |
| | comp=N,31nm,0.2s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.45** | **339** | Pn | | **Pn** | **13 02 09.0** | **+0.5** |
| **QLNO** | **Quiliano** | **1.46** | **58** | P | | **Pn** | **13 02 09.2** | **+0.7** |
| QLNO | | | | S | | **Sb** | **13 02 28.9** | **+1.1** |
| QLNO | | | | AML | AML | | | |
| | comp=E,170µm,0.4s | | | | | | | |
| QLNO | | | | AML | AML | | | |
| | comp=N,248µm,0.2s | | | | | | | |
| QLNO | | | | AML | AML | | | |
| | comp=E,159µm,0.4s | | | | | | | |
| QLNO | | | | AML | AML | | | |
| | comp=N,248µm,0.2s | | | | | | | |
| **QLNO** | **Quiliano** | **1.46** | **58** | P | | **Pb** | **13 02 09.5** | **-0.2** |
| **RSP** | **Reno Superiore** | **1.65** | **16** | P | | **Pn** | **13 02 11.9** | **+0.7** |
| RSP | | | | S | | **Sb** | **13 02 34.5** | **+1.0** |
| RSP | | | | AML | AML | | | |
| | comp=N,133µm,1.3s | | | | | | | |
| RSP | | | | AML | AML | | | |
| | comp=E,120µm,0.6s | | | | | | | |
| RSP | | | | AML | AML | | | |
| | comp=E,130µm,0.4s | | | | | | | |
| RSP | | | | AML | AML | | | |
| | comp=E,115µm,0.4s | | | | | | | |
| RSP | | | | AML | AML | | | |
| | comp=N,112µm,0.3s | | | | | | | |
| RSP | | | | AML | AML | | | |
| | comp=N,110µm,0.3s | | | | | | | |
| **RSP** | **Reno Superiore** | **1.65** | **16** | Pg | | **Pb** | **13 02 13.8** | **+0.8** |
| **RSP** | **Reno Superiore** | **1.65** | **16** | Sn | | **Sb** | **13 02 34.4** | **+1.0** |
| **PCP** | **Piancastagn** | **1.69** | **54** | P | | **Pn** | **13 02 12.3** | **+0.6** |
| PCP | | | | AML | AML | | | |
| | comp=E,140µm,1.2s | | | | | | | |
| PCP | | | | AML | AML | | | |
| | comp=N,113µm,0.4s | | | | | | | |
| PCP | | | | AML | AML | | | |
| | comp=E,112µm,0.3s | | | | | | | |
| PCP | | | | AML | AML | | | |
| | comp=N,101µm,0.4s | | | | | | | |
| **PCP** | **Piancastagn** | **1.69** | **54** | Pn | | **Pn** | **13 02 11.7** | **0.0** |
| **VIVF** | **Saint-Julien-l** | **1.91** | **313** | *e*Pn | | **Pn** | **13 02 13.9** | **-0.8** |
| **VIVF** | **Saint-Julien-l** | **1.91** | **313** | *e*Pg | | **Pb** | **13 02 18.4** | **+1.1** |
| VIVF | | | | *e*Sg | | **Sb** | **13 02 43.3** | **+2.5** |
| | comp=N,10nm,0.2s | | | | | | | |
| **LSD** | **Lago del Serru** | **1.93** | **11** | Pg | | **Pb** | **13 02 18.0** | **+0.2** |
| **LPG** | **La Plagne** | **1.93** | **3** | *e*Pg | | **Pb** | **13 02 19.3** | **+1.3** |
| LPG | | | | *e*Sg | | **Sg** | **13 02 44.2** | **-1.3** |
| | comp=N,40nm,0.5s | | | | | | | |
| **LPL** | **La Plagne** | **1.95** | **2** | *e*Pg | | **Pb** | **13 02 19.4** | **+1.2** |
| LPL | | | | *e*Sg | | **Sb** | **13 02 44.4** | **+2.1** |
| | comp=N,33nm,0.4s | | | | | | | |
| **PGF** | **Pioggiola** | **2.02** | **119** | *e*Pn | | **Pn** | **13 02 15.1** | **-1.1** |
| PGF | | | | *e*Sn | | **Sn** | **13 02 37.9** | **-3.1** |
| | comp=N,29nm,0.2s | | | | | | | |
| **CABF** | **La Chapelle** | **3.07** | **353** | *e*Pg | | **Pb** | **13 02 39.8** | **+2.6** |
| CABF | | | | *e*Sg | | **Sg** | **13 03 19.1** | **-2.7** |
| | comp=N,3.3nm,0.3s | | | | | | | |
| **MTLF** | **Montolieu** | **3.22** | **268** | *e*P | | **Pn** | **13 02 36.5** | **+3.9** |
| MTLF | | | | *e*Sn | | **Sn** | **13 03 08.5** | **-1.9** |
| MTLF | | | | *e*Sg | | **Sg** | **13 03 23.6** | **-2.9** |
| | comp=N,4.0nm,0.3s | | | | | | | |
| **CAF** | **Calviac** | **3.55** | **294** | *e*Pn | | **Pn** | **13 02 37.7** | **+0.5** |
| CAF | | | | *e*Sn | | **Sn** | **13 03 15.6** | **-3.0** |
| CAF | | | | *e*Sg | | **Sg** | **13 03 34.0** | **-3.1** |
| | comp=N,5.0nm,0.4s | | | | | | | |
| **SMF** | **Signal de Mont** | **3.66** | **328** | *e*Pn | | **Pn** | **13 02 38.4** | **-0.3** |
| SMF | | | | *e*Sn | | **Sn** | **13 03 17.7** | **-3.6** |
| | comp=N,2.2nm,0.3s | | | | | | | |
| **AVF** | **Avril sur Loir** | **3.97** | **325** | *e*Sn | | **Sn** | **13 03 25.8** | **-3.1** |
| | comp=N,1.6nm,0.3s | | | | | | | |
| **BGF** | **Bois d'Agland** | **4.01** | **319** | *e*Pg | | **Pb** | **13 02 56.0** | **+2.8** |
| BGF | | | | *e*Sn | | **Sn** | **13 03 25.9** | **-4.2** |
| BGF | | | | *e*Sg | | **Sg** | **13 03 48.0** | **-4.0** |
| | comp=N,3.5nm,0.2s | | | | | | | |
| **SSF** | **Saint Saulge** | **4.13** | **329** | *e*Pn | | **Pn** | **13 02 44.6** | **-0.6** |
| SSF | | | | *e*Sn | | **Sn** | **13 03 28.9** | **-4.0** |
| | comp=N,1.1nm,0.2s | | | | | | | |
| **LOR** | **Lormes** | **4.18** | **333** | *e*Pn | | **Pn** | **13 02 45.1** | **-0.8** |
| LOR | | | | *e*Sn | | **Sn** | **13 03 30.7** | **-3.6** |
| | comp=N,2.3nm,0.3s | | | | | | | |

*IDC **22** 13:02:09.7±0.9, 42˚.40N×138˚.24E, h262km±11km, mb3.5/11, mbtmp4.0/17, Error ellipse: s-maj=16.4km s-min=13.8km az=146.0*
*NEIC **22** 13:02:09.9±1.2, 42˚.36N±0˚.09×138˚.1E±0˚.1, h258km±12km, mb4.2/8, Error ellipse: s-maj=13.2km s-min=11.6km az=153.0*
*JMA **22** 13:02:10.2±0.2, 42˚.3N±0˚.8×13˚8E±˚, h267km±1km, MV3.8/32, EASTERN SEA OF JAPAN*
**ISC 22 13:02:09.9±0.6, 42˚33N±0˚07×138˚23E±0˚06, h267km±7km, n58, σ0°89/69, mb3.9/14, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOSM** | **Okushiri--Mats** | **0.95** | **104** | P | **Pn** | **13 02 46.5** | **0.0** |
| JOSM | | | | S | **S** | **13 03 15.0** | **-0.3** |
| **JHST** | **Hiyamasetana** | **1.22** | **85** | P | **Pn** | **13 02 48.2** | **+0.3** |
| JHST | | | | *e*S | **S** | **13 03 17.5** | **-0.4** |
| **JSH** | **Shimam** | **1.38** | **76** | P | **Pn** | **13 02 49.2** | **+0.3** |
| JSH | | | | *e*S | **S** | **13 03 20.3** | **+0.6** |
| **JOMM** | **Oshimamatsumae** | **1.55** | **121** | P | **Pn** | **13 02 50.6** | **+0.5** |
| JOMM | | | | *e*S | **S** | **13 03 21.6** | **-0.4** |
| **JYM2** | **Yakumo 2** | **1.60** | **97** | *i* P | **Pn** | **13 02 51.3** | **+0.8** |
| JYM2 | | | | *e*S | **S** | **13 03 23.3** | **+0.7** |
| **JNB** | **Noboribetsu** | **2.08** | **85** | P | **Pn** | **13 02 54.6** | **+0.2** |
| JNB | | | | *e*S | **S** | **13 03 29.5** | **-0.2** |
| **JOT** | **Ohata** | **2.30** | **113** | *i* P | **Pn** | **13 02 56.8** | **+0.3** |
| JOT | | | | *e*S | **S** | **13 03 33.1** | **-0.3** |
| **JTM** | **Tenmabayashi** | **2.62** | **125** | | **Pn** | **13 02 59.6** | **0.0** |
| **JHR** | **Hokuryu** | **2.92** | **60** | P | **Pn** | **13 03 03.5** | **+0.9** |
| **JANG** | **Nango** | **3.15** | **127** | P | **Pn** | **13 03 04.5** | **-0.5** |
| **JNBK** | **Urakawa-nobuka** | **3.35** | **89** | P | **Pn** | **13 03 07.1** | **0.0** |
| **JSS** | **Shosan** | **3.36** | **51** | *e*P | **Pn** | **13 03 08.1** | **+1.0** |
| **JKK2** | **Kamakawa 2** | **3.65** | **63** | P | **Pn** | **13 03 11.1** | **+0.7** |
| JKK2 | | | | S | **S** | **13 03 57.4** | **-1.3** |
| **ASAJ** | **Asahikawa** | **3.66** | **59** | P | **Pn** | **13 03 10.8** | **+0.4** |
| | 30nm,0.3s,baz=252,slow=9.4,SNR=102 | | | | | | |
| ASAJ | | | | S | **S** | **13 03 57.1** | **-1.6** |
| | 18nm,0.7s,baz=340,slow=31,SNR=9.4 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **3.66** | **59** | | **Pn** | **13 03 10.5** | **+0.1** |
| **ERM** | **Erimo** | **3.67** | **93** | | **Pn** | **13 03 10.7** | **0.0** |
| **JOM** | **Ohasama** | **3.67** | **140** | P | **Pn** | **13 03 11.0** | **+0.2** |
| **JYK** | **Kaneyama** | **3.77** | **154** | P | **Pn** | **13 03 12.1** | **+0.3** |
| **JCH** | **Churui** | **3.80** | **84** | P | **Pn** | **13 03 12.9** | **+0.8** |
| JCH | | | | S | **S** | **13 03 58.7** | **-3.1** |
| **JWK2** | **Keihoku** | **4.00** | **40** | *e*P | **Pn** | **13 03 15.5** | **+1.2** |
| **JMK** | **Ichinoseki** | **4.06** | **145** | *i* P | **Pn** | **13 03 14.8** | **-0.4** |
| **JAR** | **Ashorobuto** | **4.19** | **75** | P | **Pn** | **13 03 16.2** | **-0.4** |
| JAR | | | | S | **S** | **13 04 06.9** | **-2.8** |
| **JSD** | **Sado** | **4.28** | **180** | Pn | **Pn** | **13 03 19.0** | **+1.2** |
| **JTKR** | **Abashiri--Toko** | **4.46** | **66** | P | **Pn** | **13 03 19.9** | **+0.1** |
| JTKR | | | | S | **S** | **13 04 14.9** | **-0.6** |
| **JMM** | **Marumori** | **4.87** | **155** | | **Pn** | **13 03 23.7** | **-0.9** |
| **USA0B** | **Ussuriysk Arra** | **4.93** | **294** | | **Pn** | **13 03 24.0** | **-1.3** |
| **USRK** | **Ussuriysk Ar.** | **4.93** | **294** | Pn | **Pn** | **13 03 24.0** | **-1.3** |
| **USRK** | **Ussuriysk Ar.** | **4.93** | **294** | P | **Pn** | **13 03 24.6** | **-0.7** |
| | 9.1nm,0.6s,baz=98,slow=12,SNR=20 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.64** | **33** | | **Pn** | **13 03 33.8** | **0.0** |
| **MAJO** | **Matsushiro** | **5.78** | **180** | Pn | **Pn** | **13 03 35.7** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **5.78** | **180** | P | **Pn** | **13 03 36.7** | **+0.9** |
| | 2.8nm,0.4s,baz=4.0,slow=11,SNR=14 | | | | | | |
| **JGF** | **Kuroka** | **6.75** | **186** | Pn | **Pn** | **13 03 48.0** | **+0.3** |
| **KLR** | **Kul'dur** | **8.26** | **329** | P | **Pn** | **13 04 04.6** | **-1.7** |
| | 0.9nm,0.5s,baz=142,slow=16,SNR=3.1 | | | | | | |
| **KSRS** | **Korea Array** | **9.30** | **242** | P | **Pn** | **13 04 19.9** | **+0.5** |
| | 4.5nm,0.8s,baz=60,slow=12,SNR=13 | | | | | | |
| **JNU** | **Nakatsue** | **10.87** | **215** | Pn | **Pn** | **13 04 38.3** | **-0.9** |
| **PETK** | **Petropavlovsk-** | **16.91** | **44** | P | **P** | **13 05 50.2** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **16.91** | **44** | P | **P** | **13 05 49.0** | **-0.4** |
| | 1.4nm,0.8s,baz=230,slow=4.9,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **23.05** | **295** | P | **P** | **13 06 51.3** | **-0.7** |
| | 0.7nm,0.4s,baz=99,slow=8.9,SNR=2.3 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **36.64** | **307** | P | **P** | **13 08 50.4** | **-0.5** |
| ZAA0 | | | | IAmb | IAmb | 13 08 51.2 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **36.64** | **307** | P | **P** | **13 08 50.4** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **36.64** | **307** | P | **P** | **13 08 50.8** | **-0.1** |
| | comp=Z,4.1nm,0.5s,baz=87,slow=7.9,SNR=21 | | | | | | |
| | comp=Z,4.1nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **39.40** | **296** | P | **P** | **13 09 13.9** | **0.0** |
| | comp=Z,1.7nm,0.6s,baz=82,slow=9.3,SNR=10 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **40.86** | **303** | P | **P** | **13 09 25.2** | **-0.5** |
| KURK | | | | IAmb | IAmb | 13 09 26.2 | |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **40.94** | **303** | P | **P** | **13 09 26.2** | **-0.2** |
| | comp=Z,7.8nm,0.6s,baz=80,slow=8.8,SNR=49 | | | | | | |
| | comp=Z,7.8nm,0.6s | | | | | | |
| **C19K** | **Lookout Ridge** | **41.38** | **29** | P | **P** | **13 09 32.2** | **+2.4** |
| **F19K** | **Shaleruckik Mo** | **41.86** | **32** | P | P | 13 09 38.7 | +5.1 |
| **BVAR** | **Borovoye Array** | **45.29** | **308** | P | **P** | **13 10 01.4** | **+0.3** |
| | comp=Z,2.3nm,0.4s,baz=69,slow=8.1,SNR=14 | | | | | | |
| | comp=Z,2.3nm,0.4s | | | | | | |
| **CHGR** | **Chuyangaron** | **51.34** | **291** | P | **P** | **13 10 46.9** | **-0.5** |
| **SIMJ** | **Simiganj** | **51.44** | **291** | P | **P** | **13 10 47.6** | **-0.6** |
| SIMJ | | | | IAmb | IAmb | 13 10 48.8 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **52.74** | **306** | P | **P** | **13 10 57.8** | **+0.5** |
| **ABKAR** | **Akbulak array** | **52.74** | **306** | P | **P** | **13 10 57.3** | **-0.1** |
| **WRA** | **Warramunga Arr** | **62.06** | **184** | P | **P** | **13 12 03.0** | **+0.6** |
| | comp=Z,0.3nm,0.7s,baz=359,slow=7.3,SNR=4.6 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **63.00** | **330** | P | **P** | **13 12 07.7** | **-0.4** |
| **FINES** | **FINESS Array B** | **63.00** | **330** | P | **P** | **13 12 07.8** | **-0.3** |
| | comp=Z,4.0nm,0.8s,baz=38,slow=7.6,SNR=8.4 | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **68.26** | **334** | P | **P** | **13 12 41.7** | **+0.1** |
| | comp=Z,0.7nm,0.3s,baz=22,slow=4.7,SNR=4.1 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **68.36** | **335** | P | **P** | **13 12 42.0** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=33,slow=8.0,SNR=2.1 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **68.65** | **320** | P | **P** | **13 12 43.7** | **-0.5** |
| | comp=Z,1.1nm,0.4s,baz=46,slow=6.5,SNR=6.8 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **73.56** | **309** | P | **P** | **13 13 14.4** | **+0.4** |
| | comp=Z,0.9nm,0.5s,baz=85,slow=4.0,SNR=7.0 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |

*IDC **22** 13:06:17.1±0.8, 6˚.35N×73˚.94W, h0km, mb3.8/9, mbtmp3.8/9, MS3.3/5, Error ellipse: s-maj=30.3km s-min=12.1km az=94.0*
*NEIC **22** 13:06:20.9±2.7, 6˚.28N±0˚.05×74˚.11W±0˚.03, h10km±1km, mb4.5/13, Error ellipse: s-maj=8.4km s-min=4.6km az=338.0*
*RSNC **22** 13:06:24.8±0.0, 6˚.23N×74˚.13W, h20km±2km, M4.2, ML3.9*
**ISC 22 13:06:20.2±1.0, 6˚27N±0˚02×74˚11W±0˚02, h13km±6km, n89, σ1°96/123, mb4.3/14, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTBC** | **PUERTO BERRIO,** | **0.44** | **307** | P | **Pn** | **13 06 33.0** | **+0.8** |
| PTBC | | | | S | **Sb** | **13 06 40.0** | **+3.8** |
| **SPBC** | **San Pablo de B** | **0.62** | **177** | P | **Pb** | **13 06 34.9** | **+2.0** |
| SPBC | | | | S | **Sb** | **13 06 43.1** | **+1.5** |
| **BRJC** | **Barrancabermej** | **0.78** | **27** | P | **Pn** | **13 06 38.7** | **+1.8** |
| BRJC | | | | S | **Sn** | **13 06 50.2** | **+1.6** |
| **BARC** | **Barichara** | **0.97** | **71** | P | **Pn** | **13 06 42.1** | **+2.3** |
| BARC | | | | S | **Sn** | **13 06 55.5** | **+1.9** |
| **NORC** | **Norcasia** | **1.04** | **227** | P | **Pg** | **13 06 40.2** | **0.0** |
| NORC | | | | S | **Sg** | **13 06 52.5** | **-1.2** |
| **RUSC** | **La Rusia** | **1.09** | **110** | Pn | **Pn** | **13 06 42.9** | **+1.4** |
| RUSC | | | | | **Sb** | **13 06 57.3** | **+1.8** |
| **RUSC** | **La Rusia** | **1.09** | **110** | P | **Pn** | **13 06 43.3** | **+1.7** |
| RUSC | | | | S | **Sn** | **13 06 57.8** | **+1.1** |
| **VMM07** | **Puerto Wilches** | **1.11** | **13** | P | **Pn** | **13 06 43.5** | **+2.1** |
| VMM07 | | | | S | **Sn** | **13 07 00.6** | **+4.0** |
| **ZARC** | **Zaragoza, Cauc** | **1.42** | **328** | P | **Pn** | **13 06 46.9** | **+1.1** |
| ZARC | | | | S | **Sn** | **13 07 05.4** | **+1.0** |
| **ROSC** | **El Rosal** | **1.44** | **188** | Pn | **Pn** | **13 06 47.8** | **+1.4** |
| ROSC | | | | Sn | **Sn** | **13 07 06.7** | **+1.3** |
| **ROSC** | **El Rosal** | **1.44** | **188** | Pn | **Pb** | **13 06 48.3** | **+1.2** |
| | 163nm,0.3s,baz=4.3,slow=22,SNR=61 | | | | | | |
| ROSC | | | | Lg | Lg | 13 07 06.3 | |
| | 499nm,0.3s,baz=53,slow=20,SNR=8.8 | | | | | | |
| **ROSC** | **El Rosal** | **1.44** | **188** | P | **Pb** | **13 06 48.4** | **+1.3** |
| ROSC | | | | S | **Sn** | **13 07 05.3** | **0.0** |
| **MEDEC** | **Medelln, Ant** | **1.47** | **270** | P | **Pb** | **13 06 48.1** | **+0.5** |
| MEDEC | | | | S | **Sn** | **13 07 06.0** | **+0.1** |
| **CHIC** | **Chingaza** | **1.68** | **167** | P | **Pb** | **13 06 51.7** | **+0.5** |
| CHIC | | | | S | **Sn** | **13 07 12.7** | **+1.5** |
| **VMM05** | **San Martn** | **1.71** | **19** | P | **Pb** | **13 06 52.3** | **+0.8** |
| **PAMC** | **Pamplona, Colo** | **1.75** | **53** | P | **Pb** | **13 06 53.5** | **+1.0** |
| PAMC | | | | S | **Sg** | **13 07 16.9** | **+0.2** |
| **RECRC** | **Villamaria, Ca** | **1.80** | **224** | P | **Pb** | **13 06 53.6** | **+0.2** |
| RECRC | | | | S | **Sn** | **13 07 15.4** | **+1.0** |
| **NIZA** | **Niza - Manizal** | **1.82** | **228** | P | **Pb** | **13 06 54.6** | **+1.1** |
| NIZA | | | | S | **Sn** | **13 07 16.4** | **+1.9** |
| **CBOC** | **Ciudad Bolivar** | **1.94** | **258** | P | **Pb** | **13 06 55.6** | **+0.1** |
| CBOC | | | | S | **Sb** | **13 07 21.0** | **+1.3** |
| **UREC** | **San Jos de Ur** | **2.04** | **316** | P | **Pb** | **13 06 56.8** | **-0.3** |
| UREC | | | | S | **Sb** | **13 07 22.8** | **+0.4** |
| **OCAC** | **Ocana** | **2.10** | **22** | P | **Pn** | **13 06 56.9** | **+1.6** |
| **VILC** | **Villavicencio,** | **2.19** | **169** | P | **Pn** | **13 06 58.9** | **+2.5** |
| VILC | | | | S | **Sn** | **13 07 26.3** | **+2.9** |
| **ANIL** | **Santa Ana** | **2.19** | **216** | P | **Pn** | **13 06 58.8** | **+2.2** |
| ANIL | | | | S | **Sn** | **13 07 24.8** | **+1.0** |
| **DBBC** | **Dabeiba** | **2.21** | **290** | P | **Pb** | **13 07 00.2** | **0.0** |
| DBBC | | | | S | **Sb** | **13 07 29.1** | **+1.5** |
| **AGCC** | **Aguachica** | **2.28** | **13** | P | **Pn** | **13 06 58.8** | **+1.2** |
| AGCC | | | | S | **Sb** | **13 07 28.9** | **-0.6** |
| **TAMC** | **Tame, Arauca** | **2.31** | **86** | P | **Pb** | **13 07 01.9** | **+0.2** |
| TAMC | | | | S | **Sg** | **13 07 38.2** | **+3.8** |
| **PLMC** | **San Jos del P** | **2.56** | **238** | P | **Pn** | **13 07 04.5** | **+3.1** |
| **ORTC** | **Ortega, Tolima** | **2.61** | **206** | P | **Pn** | **13 07 04.4** | **+2.3** |
| ORTC | | | | S | **Sn** | **13 07 35.4** | **+1.7** |
| **PRAC** | **Prado** | **2.66** | **197** | P | **Pn** | **13 07 04.0** | **+1.2** |
| PRAC | | | | S | **Sn** | **13 07 36.9** | **+1.9** |
| **PTGC** | **Puerto Gaitan,** | **2.85** | **136** | P | **Pb** | **13 07 10.8** | **-0.1** |
| PTGC | | | | S | **Sg** | **13 07 50.7** | **-1.1** |
| **APAC** | **Apartado, Choc** | **2.94** | **303** | P | **Pn** | **13 07 09.4** | **+2.8** |
| APAC | | | | S | **Sn** | **13 07 44.9** | **+3.1** |
| **URMC** | **La Uribe, Meta** | **3.02** | **185** | P | **Pn** | **13 07 10.0** | **+2.2** |
| URMC | | | | S | **Sn** | **13 07 46.0** | **+2.1** |
| **LL8C** | **La Loma 8 Chim** | **3.06** | **6** | P | **Pb** | **13 07 12.5** | **-2.0** |
| **YOTC** | **Yotoco, Valle** | **3.19** | **225** | P | **Pn** | **13 07 11.7** | **+1.6** |
| **LCBC** | **Los crdobas,** | **3.41** | **319** | P | **Pn** | **13 07 15.9** | **+2.8** |
| LCBC | | | | S | **Sn** | **13 07 56.5** | **+3.1** |
| **ARGC** | **Ariguani, Magd** | **3.56** | **358** | P | **Pn** | **13 07 19.0** | **+3.8** |
| ARGC | | | | S | **Sb** | **13 08 07.2** | **+0.9** |
| **SJCC** | **San Jacinto, C** | **3.75** | **344** | P | **Pn** | **13 07 20.7** | **+2.8** |
| SJCC | | | | S | **Sn** | **13 08 03.7** | **+1.7** |
| **PTAC** | **Punta Ardita,** | **3.78** | **283** | P | **Pn** | **13 07 22.9** | **+4.7** |
| **BETC** | **Betania** | **3.81** | **200** | P | **Pn** | **13 07 21.4** | **+2.7** |
| **JAMC** | **Jamundi, Valle** | **3.97** | **220** | P | **Pn** | **13 07 24.4** | **+3.3** |
| **CAPC** | **Capurgana** | **3.98** | **306** | P | **Pn** | **13 07 21.9** | **+0.9** |
| CAPC | | | | S | **Sn** | **13 08 06.7** | **-0.9** |
| **GUVC** | **San Jose del G** | **3.99** | **158** | P | **Pn** | **13 07 22.6** | **+1.5** |
| **GARC** | **Garzon, Huila** | **4.29** | **199** | P | **Pn** | **13 07 26.5** | **+1.1** |
| GARC | | | | S | **Sn** | **13 08 16.2** | **+0.7** |
| **SDV** | **Santo Domingo** | **4.31** | **53** | Pn | **Pn** | **13 07 28.0** | **+2.3** |
| **SDV** | **Santo Domingo** | **4.31** | **53** | Pn | **Pn** | **13 07 29.3** | **+3.6** |
| | 27nm,0.3s,baz=264,slow=10,SNR=12 | | | | | | |
| SDV | | | | Lg | Lg | 13 08 24.2 | |
| | 63nm,0.3s,baz=286,slow=17,SNR=5.5 | | | | | | |
| **SDV** | **Santo Domingo** | **4.31** | **53** | P | **Pn** | **13 07 29.2** | **+3.5** |
| **POPC** | **Popayan, Colom** | **4.51** | **215** | P | **Pn** | **13 07 31.3** | **+2.9** |
| **SMRC** | **Santa Marta, M** | **4.86** | **359** | P | **Pn** | **13 07 36.7** | **+3.6** |
| SMRC | | | | S | **Sn** | **13 08 29.9** | **+0.7** |
| **CRJC** | **Cerrejon, Guaj** | **4.87** | **14** | P | **Pn** | **13 07 36.0** | **+2.7** |
| CRJC | | | | S | **Sn** | **13 08 32.4** | **+2.8** |
| **URIC** | **Uribia, Colomb** | **5.78** | **21** | P | **Pn** | **13 07 46.2** | **+0.4** |
| **BAUV** | **El Baul** | **6.57** | **66** | Pn | **Pn** | **13 07 56.8** | **+0.2** |
| **AUA1** | **Aruba** | **7.39** | **33** | Pn | **Pn** | **13 08 09.7** | **+1.8** |
| **OTAV** | **Otavalo** | **7.40** | **216** | Pn | **Pn** | **13 08 10.3** | **+1.9** |
| **PULU** | **Pululahua** | **7.60** | **215** | Pn | **Pn** | **13 08 14.2** | **+3.0** |
| **PCRV** | **Puerto La Cruz** | **10.14** | **67** | Pn | **Pn** | **13 08 46.9** | **+1.3** |
| | 0.7nm,0.3s,baz=199,slow=2.2,SNR=9.0 | | | | | | |
| PCRV | | | | Sn | **Sn** | **13 10 33.4** | **-6.0** |
| | baz=231,slow=6.5 | | | | | | |
| PCRV | | | | LR | LR | 13 13 38.4 | |
| | comp=Z,144nm,20.4s,slow=44 | | | | | | |
| **JTS** | **Las Juntas de** | **11.45** | **291** | LR | LR | 13 13 35.0 | |
| | comp=Z,128nm,21.6s,baz=144,slow=38 | | | | | | |
| **MTDJ** | **Mount Denham** | **12.34** | **345** | Pn | **Pn** | **13 09 17.8** | **+1.9** |
| **SDDR** | **Presa de Saban** | **12.93** | **12** | Pn | **Pn** | **13 09 25.5** | **+1.7** |
| **GTBY** | **Guantanamo Bay** | **13.61** | **356** | Pn | **Pn** | **13 09 35.0** | **+2.0** |
| **CELP** | **Cerrillos** | **13.84** | **31** | Pn | **Pn** | **13 09 33.9** | **-2.3** |
| **AOPR** | **Arecibo Observ** | **13.98** | **30** | Pn | **Pn** | **13 09 38.0** | **-0.2** |
| **ATAH** | **Atahualpa** | **13.99** | **198** | LR | LR | 13 16 00.7 | |
| | comp=Z,198nm,20.9s,baz=9.1,slow=41 | | | | | | |
| **IGPR** | **InterUniversit** | **14.00** | **33** | Pn | **Pn** | **13 09 36.0** | **-2.4** |
| **BOAV** | **Boa Vista** | **14.08** | **105** | Pn | **Pn** | **13 09 38.2** | **-1.4** |
| **NNA** | **Nana** | **18.34** | **189** | LR | LR | 13 19 11.5 | |
| | comp=Z,126nm,18.1s,baz=344,slow=42 | | | | | | |
| **SAML** | **Samuel** | **18.64** | **144** | | **P** | **13 10 37.0** | **-0.8** |
| SAML | | | | IAmb | IAmb | 13 11 04.3 | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **CMIG** | **Matias Romero** | **22.98** | **300** | LR | LR | 13 20 07.5 | |
| | comp=Z,66nm,21.6s,baz=16,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **23.18** | **165** | P | **P** | **13 11 27.4** | **0.0** |
| **LPAZ** | **La Paz** | **23.18** | **165** | P | **P** | **13 11 27.5** | **0.0** |
| | comp=Z,1.4nm,0.5s,baz=340,slow=10,SNR=6.4 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **WTFS** | **Witchita Falls** | **35.47** | **324** | P | **P** | **13 13 16.5** | **0.0** |
| WTFS | | | | IAmb | IAmb | 13 13 19.3 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **36.10** | **313

*mbtmp4.1/20,ML3.5/6,MS3.6/8,Error ellipse: s-maj=24.5km s-min=10.4km az=37.0*
*NEIC **22** 13:20:03.5±2.2,43°.66N±0°.07×127°.5W±0°.1,h10km±1km, mb4.5/78,ML3.5/82,Error ellipse: s-maj=13.8km s-min=10.8km az=242.0*
**ISC 22 13:20:02.6±0.6,43°.68N±0°.06×127°.64W±0°.07,h15km, n366,σ1§13/354,mb4.4/41,2D,Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **J01E** | **Myrtle Point** | **2.75** | **100** | | **Pn** | **13 20 45.1** | **-1.1** |
| J01E | | | | IAML | | 13 21 30.9 | |
| | comp=E,139nm,1.4s | | | | | | |
| **I02E** | **Swisshome, OR** | **2.78** | **80** | | **Sn** | **13 21 17.8** | **-1.9** |
| **KBO** | **Bosley Butte** | **2.90** | **119** | Pn | **Pn** | **13 20 47.1** | **-1.3** |
| KBO | | | | IAML | | 13 21 44.2 | |
| | comp=N,119nm,1.9s | | | | | | |
| **K02D** | **Willamette Mer** | **3.07** | **107** | Pn | **Pn** | **13 20 48.7** | **-1.9** |
| **HEBO** | **Mount Hebo** | **3.18** | **60** | Pn | **Pn** | **13 20 51.6** | **-0.5** |
| **COR** | **Corvallis** | **3.25** | **72** | | **Pn** | **13 20 52.5** | **-0.5** |
| COR | | | | IAML | | 13 21 35.3 | |
| | comp=N,102nm,2.5s | | | | | | |
| COR | | | | IAML | | 13 21 53.5 | |
| | comp=N,109nm,1.3s | | | | | | |
| **DBO** | **Dodson Butte** | **3.25** | **98** | | **Pn** | **13 20 51.6** | **-1.6** |
| DBO | | | | IAML | | 13 21 35.7 | |
| | comp=E,123nm,1.1s | | | | | | |
| DBO | | | | IAML | | 13 21 40.7 | |
| | comp=N,85nm,1.7s | | | | | | |
| **KSXB** | **Camp Six Broad** | **3.33** | **122** | | **Pn** | **13 20 52.2** | **-2.0** |
| **L02F** | **Cave Junction** | **3.37** | **116** | | **Pn** | **13 20 53.3** | **-1.4** |
| **BUCK** | **Buck Mountain** | **3.40** | **80** | | **Pn** | **13 20 54.9** | **-0.3** |
| BUCK | | | | IAML | | 13 21 48.0 | |
| | comp=N,84nm,1.2s | | | | | | |
| BUCK | | | | IAML | | 13 22 27.2 | |
| | comp=E,93nm,1.9s | | | | | | |
| **B022** | **Seaside** | **3.49** | **48** | | **Pn** | **13 20 56.3** | **+0.1** |
| **G03D** | **McMinnville, O** | **3.49** | **62** | | **Pn** | **13 20 55.6** | **-0.7** |
| **HUMO** | **Hull Mountain** | **3.59** | **106** | | **Pn** | **13 20 57.1** | **-0.6** |
| **H04D** | **Lebanon** | **3.63** | **75** | | **Pn** | **13 20 58.7** | **+0.4** |
| H04D | | | | IAML | | 13 22 07.8 | |
| | comp=N,116nm,1.3s | | | | | | |
| H04D | | | | IAML | | 13 22 09.4 | |
| | comp=E,117nm,2.0s | | | | | | |
| **F03A** | **Seaside** | **3.68** | **51** | | **Pn** | **13 20 58.9** | **0.0** |
| **KRPM** | **Rodgers** | **3.68** | **132** | | **Pn** | **13 20 59.2** | **+0.3** |
| KRPM | | | | IAML | | 13 23 03.2 | |
| | comp=E,84nm,5.0s | | | | | | |
| **I04A** | **Tendick Farm,** | **3.79** | **86** | | **Pn** | **13 21 00.8** | **+0.2** |
| I04A | | | | IAML | | 13 22 02.8 | |
| | comp=E,58nm,1.5s | | | | | | |
| **RADR** | **Rader Ridge** | **3.87** | **43** | | **Pn** | **13 21 01.6** | **+0.1** |
| RADR | | | | IAML | | 13 21 49.5 | |
| | comp=E,75nm,1.5s | | | | | | |
| **KHMM** | **Horse Mountain** | **4.03** | **133** | Pn | **Pn** | **13 21 03.7** | **-0.2** |
| KHMM | | | | IAML | | 13 23 16.7 | |
| | comp=N,48nm,4.8s | | | | | | |
| KHMM | | | | IAML | | 13 23 19.6 | |
| | comp=E,44nm,4.9s | | | | | | |
| **H04A** | **Detroit Lake** | **4.05** | **74** | Pn | **Pn** | **13 21 04.0** | **0.0** |
| H04A | | | | IAML | | 13 21 33.0 | |
| | comp=E,68nm,0.6s | | | | | | |
| H04A | | | | IAML | | 13 21 33.5 | |
| | comp=N,86nm,0.6s | | | | | | |
| **B023** | **Clatskanie** | **4.05** | **52** | | **Pn** | **13 21 04.5** | **+0.5** |
| **E03A** | **Lebam** | **4.07** | **44** | Pn | **Pn** | **13 21 03.4** | **-0.8** |
| E03A | | | | IAML | | 13 21 57.2 | |
| | comp=N,73nm,2.1s | | | | | | |
| **F04D** | **Rainier, OR** | **4.08** | **52** | | **Pn** | **13 21 04.2** | **-0.2** |
| **B019** | **Raymond** | **4.10** | **42** | | **Pn** | **13 21 04.1** | **-0.5** |
| **YBH** | **Yreka Blue Hor** | **4.12** | **116** | Pn | **Pn** | **13 21 04.8** | **-0.3** |
| **YBH** | **Yreka Blue Hor** | **4.12** | **116** | Pn | **Pn** | **13 21 05.2** | **+0.1** |
| | comp=N,1.3nm,0.3s,baz=285,slow=12,SNR=33 | | | | | | |
| YBH | | | | Sn | **Sn** | **13 21 53.4** | **+0.3** |
| | comp=N,0.2nm,0.3s,baz=292,slow=19,SNR=1.2 | | | | | | |
| | comp=N,10nm,0.6s | | | | | | |
| **L04D** | **Klamath Falls** | **4.18** | **109** | | **Pn** | **13 21 05.8** | **-0.2** |
| L04D | | | | IAML | | 13 22 00.1 | |
| | comp=N,59nm,0.9s | | | | | | |
| L04D | | | | IAML | | 13 22 00.6 | |
| | comp=E,79nm,1.1s | | | | | | |
| **KMPM** | **Mount Pierce** | **4.18** | **140** | Pn | **Pn** | **13 21 06.2** | **+0.3** |
| KMPM | | | | IAML | | 13 23 42.0 | |
| | comp=N,78nm,4.7s | | | | | | |
| **F04A** | **Amboy** | **4.35** | **57** | Pn | **Pn** | **13 21 08.7** | **+0.6** |
| **WISH** | **Wishkah** | **4.39** | **37** | Pn | **Pn** | **13 21 08.3** | **-0.3** |
| **MTMW** | **Mount Mitchell** | **4.52** | **57** | | **Pn** | **13 21 11.8** | **+1.2** |
| **FL2** | **Flat Top 2** | **4.52** | **54** | | **Pn** | **13 21 12.1** | **+1.4** |
| **KMRM** | **Mail Ridge** | **4.53** | **138** | Pn | **Pn** | **13 21 10.8** | **+0.2** |
| KMRM | | | | IAML | | 13 21 43.4 | |
| | comp=N,30nm,1.4s | | | | | | |
| KMRM | | | | IAML | | 13 23 21.5 | |
| | comp=E,29nm,4.5s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.56** | **34** | Pn | **Pn** | **13 21 10.6** | **-0.5** |
| NLWA | | | | IAML | | 13 22 09.2 | |
| | comp=E,40nm,1.6s | | | | | | |
| NLWA | | | | IAML | | 13 22 20.0 | |
| | comp=E,36nm,1.8s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.59** | **67** | | **Pn** | **13 21 12.4** | **+0.8** |
| **SWF2** | **Southwest Flan** | **4.59** | **55** | | **Pn** | **13 21 13.0** | **+1.4** |
| **I05D** | **Terrebonne, OR** | **4.59** | **80** | | **Pn** | **13 21 11.6** | **0.0** |
| I05D | | | | IAML | | 13 22 12.6 | |
| | comp=E,40nm,1.4s | | | | | | |
| I05D | | | | IAML | | 13 22 58.6 | |
| | comp=N,46nm,2.7s | | | | | | |
| **SEPW** | **September Lobe** | **4.62** | **55** | | **Pn** | **13 21 13.7** | **+1.7** |
| **BOLM** | **Sugar Bowl** | **4.64** | **55** | | **Pn** | **13 21 14.3** | **+2.0** |
| **SOSW** | **Source of Smit** | **4.67** | **55** | | **Pn** | **13 21 14.6** | **+1.9** |
| **J05D** | **Fort Rock, OR** | **4.68** | **93** | Pn | **Pn** | **13 21 12.8** | **0.0** |
| J05D | | | | IAML | | 13 22 46.6 | |
| | comp=N,27nm,1.6s | | | | | | |
| J05D | | | | IAML | | 13 23 05.3 | |
| | comp=E,33nm,2.0s | | | | | | |
| **TDL** | **Tradedollar La** | **4.68** | **53** | | **Pn** | **13 21 14.0** | **+1.1** |
| **G05A** | **Wamic** | **4.79** | **69** | | **Pn** | **13 21 16.4** | **+2.2** |
| **AWST** | **Adams West** | **4.84** | **57** | | **Pn** | **13 21 16.5** | **+1.5** |
| **PINE** | **Pine Mountain** | **4.86** | **86** | Pn | **Pn** | **13 21 14.6** | **-0.7** |
| PINE | | | | IAML | | 13 23 09.2 | |
| | comp=E,26nm,3.2s | | | | | | |
| PINE | | | | IAML | | 13 23 56.6 | |
| | comp=N,34nm,3.1s | | | | | | |
| **KCPM** | **Cahto Peak** | **5.01** | **141** | | **Pn** | **13 21 16.4** | **-1.0** |
| KCPM | | | | IAML | | 13 22 59.7 | |
| | comp=E,27nm,3.7s | | | | | | |
| KCPM | | | | IAML | | 13 24 29.4 | |
| | comp=N,28nm,5.0s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **5.03** | **132** | Pn | **Pn** | **13 21 18.4** | **+0.8** |
| **HDW** | **Hoodsport** | **5.11** | **37** | | **Pn** | **13 21 19.4** | **+0.8** |
| **LON** | **Longmire** | **5.14** | **51** | | **Pn** | **13 21 20.4** | **+1.4** |
| **LON** | **Longmire** | **5.14** | **51** | | **Pn** | **13 21 19.8** | **+0.7** |
| LON | | | | IAML | | 13 22 30.9 | |
| | comp=N,40nm,0.8s | | | | | | |
| LON | | | | IAML | | 13 22 34.9 | |
| | comp=E,29nm,0.8s | | | | | | |
| **GNW** | **Green Mountain** | **5.15** | **39** | Pn | **Pn** | **13 21 19.2** | **+0.1** |
| GNW | | | | IAML | | 13 22 31.8 | |
| | comp=N,29nm,0.9s | | | | | | |
| GNW | | | | IAML | | 13 22 32.2 | |
| | comp=E,22nm,1.0s | | | | | | |
| **REMR** | **Mount Rainier-** | **5.16** | **50** | | **Pn** | **13 21 20.7** | **+1.3** |
| **RCM** | **Mount Rainier-** | **5.23** | **51** | | **Pn** | **13 21 21.9** | **+1.3** |
| **B04A** | **Port Angeles** | **5.25** | **32** | | **Pn** | **13 21 20.7** | **+0.3** |
| B04A | | | | IAML | | 13 22 37.0 | |
| | comp=N,21nm,2.5s | | | | | | |
| **G06A** | **Carlson Farm,** | **5.25** | **70** | | **Pn** | **13 21 20.7** | **+0.1** |
| G06A | | | | IAML | | 13 22 13.5 | |
| | comp=E,24nm,1.8s | | | | | | |
| **D05A** | **Enumclaw** | **5.30** | **47** | | **Pn** | **13 21 21.1** | **-0.1** |
| **FMW** | **Mount Fremont** | **5.32** | **50** | | **Pn** | **13 21 22.9** | **+1.3** |
| **OZB** | **Mount Ozzard** | **5.49** | **15** | Pn | **Pn** | **13 21 24.4** | **+0.6** |
| **RATT** | **Rattlesnake La** | **5.55** | **46** | | **Pn** | **13 21 25.9** | **+1.2** |
| **CLRS** | **Cowichan Lake** | **5.69** | **24** | Pn | **Pn** | **13 21 26.2** | **-0.3** |
| **PGC** | **Sidney** | **5.76** | **29** | Pn | **Pn** | **13 21 27.2** | **-0.2** |
| **I07A** | **Izee** | **5.89** | **83** | Pn | **Pn** | **13 21 29.6** | **+0.1** |
| **JCW** | **Jim Creek** | **6.02** | **39** | | **Pn** | **13 21 32.4** | **+1.3** |
| **TBM** | **Table Mountain** | **6.06** | **52** | | **Pn** | **13 21 33.6** | **+1.9** |
| **LTY** | **Liberty** | **6.07** | **51** | | **Pn** | **13 21 32.7** | **+0.9** |
| **WRW** | **Wenatchee Ridg** | **6.31** | **46** | | **Pn** | **13 21 37.0** | **+1.9** |
| **HAWA** | **Hanford** | **6.35** | **62** | Pn | **Pn** | **13 21 36.2** | **+0.5** |
| **RPW** | **Rockport** | **6.40** | **40** | | **Pn** | **13 21 37.4** | **+1.1** |
| **G08A** | **Pilot Rock** | **6.42** | **72** | Pn | **Pn** | **13 21 36.3** | **-0.4** |
| **MBW** | **Mount Baker** | **6.47** | **36** | | **Pn** | **13 21 39.2** | **+1.7** |
| **CBB** | **Campbell River** | **6.55** | **13** | Pn | **Pn** | **13 21 40.5** | **+2.2** |
| **AFDM** | **Forest Hills D** | **6.89** | **131** | Pn | **Pn** | **13 21 44.1** | **+1.0** |
| **D08A** | **Wollman Farm,** | **7.01** | **58** | Pn | **Pn** | **13 21 45.7** | **+1.0** |
| **EMB** | **Emerald Bay** | **7.36** | **127** | | **Pn** | **13 21 51.7** | **+1.9** |
| **BMO** | **Blue Mountains** | **7.51** | **77** | Pn | **Pn** | **13 21 51.7** | **0.0** |
| **C09A** | **Chrisman Ranch** | **7.74** | **55** | Pn | **Pn** | **13 21 55.7** | **+1.0** |
| **BBB** | **Bella Bella** | **8.52** | **358** | Pn | **Pn** | **13 22 07.3** | **+2.0** |
| | comp=E,0.8nm,0.3s,baz=194,slow=10.0,SNR=10 | | | | | | |
| BBB | | | | LR | LR | 13 24 49.1 | |
| | comp=E,534nm,18.8s,baz=180,slow=34 | | | | | | |
| **KVN** | **Kaiserville** | **8.53** | **120** | Pn | **Pn** | **13 22 06.7** | **+0.9** |
| **NEW** | **Newport** | **8.64** | **54** | Pn | **Pn** | **13 22 07.9** | **+0.8** |
| **NEW** | **Newport** | **8.64** | **54** | Pn | **Pn** | **13 22 08.1** | **+1.1** |
| | comp=E,0.4nm,0.3s,baz=273,slow=9.6,SNR=6.7 | | | | | | |
| NEW | | | | LR | LR | 13 25 29.9 | |
| | comp=E,170nm,20.8s,baz=244,slow=38 | | | | | | |
| | comp=E,4.1nm,0.7s | | | | | | |
| **LHV** | **Little Huntoon** | **8.78** | **125** | | **Pn** | **13 22 11.4** | **+2.5** |
| **NVAR** | **Mina Array Bea** | **8.79** | **123** | | **Pn** | **13 22 10.9** | **+1.6** |
| **NVAR** | **Mina Array Bea** | **8.79** | **123** | Pn | **Pn** | **13 22 11.4** | **+2.1** |
| | comp=E,0.2nm,0.3s,baz=296,slow=13,SNR=29 | | | | | | |
| NVAR | | | | LR | LR | 13 25 33.9 | |
| | comp=E,124nm,18.1s,baz=302,slow=37 | | | | | | |
| | comp=E,7.1nm,1.0s | | | | | | |
| **NV11** | **Mina Array Sit** | **8.88** | **123** | Pn | **Pn** | **13 22 12.5** | **+2.1** |
| **ELK** | **Elko** | **9.66** | **103** | Pn | **Pn** | **13 22 23.7** | **+2.5** |
| | comp=E,0.2nm,0.3s,baz=302,slow=11,SNR=11 | | | | | | |
| ELK | | | | LR | LR | 13 26 26.9 | |
| | comp=E,254nm,18.4s,baz=294,slow=40 | | | | | | |
| | comp=E,2.8nm,0.8s | | | | | | |
| **R11B** | **Troy Canyon, C** | **10.55** | **116** | P | **Pn** | **13 22 32.8** | **-0.6** |
| | baz=304,SNR=7.1 | | | | | | |
| **V35K** | **Ketchikan** | **11.94** | **349** | P | **Pn** | **13 22 54.2** | **+2.1** |
| | baz=166 | | | | | | |
| **H17A** | **Grant Village** | **12.31** | **81** | P | **Pn** | **13 22 58.4** | **+1.0** |
| | baz=272 | | | | | | |
| **CRAG** | **Craig** | **12.32** | **345** | P | **Pn** | **13 22 58.8** | **+1.5** |
| | baz=161 | | | | | | |
| **U33K** | **Whale Pass** | **12.94** | **346** | P | **Pn** | **13 23 07.4** | **+1.7** |
| | baz=162 | | | | | | |
| **WRAK** | **Wrangell Islan** | **13.10** | **348** | P | **Pn** | **13 23 09.0** | **+1.0** |
| | baz=164 | | | | | | |
| **PDAR** | **Pinedale Array** | **13.22** | **88** | Pn | **Pn** | **13 23 13.7** | **+3.7** |
| | comp=E,0.1nm,0.3s,baz=277,slow=13,SNR=14 | | | | | | |
| PDAR | | | | LR | LR | 13 28 37.1 | |
| | comp=E,219nm,19.4s,baz=263,slow=39 | | | | | | |
| | comp=E,3.5nm,1.0s | | | | | | |
| **PFO** | **Pinyon Flats O** | **13.30** | **135** | LR | LR | 13 27 54.3 | |
| | comp=E,246nm,20.1s,baz=308,slow=36 | | | | | | |
| **TPFO** | **Pinn Flats** | **13.31** | **135** | P | **Pn** | **13 23 12.3** | **+1.2** |
| | baz=323 | | | | | | |
| **T35M** | **Bob Quinn** | **13.42** | **354** | P | **Pn** | **13 23 12.8** | **+0.4** |
| | baz=172 | | | | | | |
| **SIT** | **Sitka** | **14.25** | **343** | P | **Pn** | **13 23 26.4** | **+2.8** |
| | baz=157 | | | | | | |
| **S34M** | **Telegraph Cree** | **14.42** | **353** | P | **Pn** | **13 23 28.8** | **+2.8** |
| | baz=170 | | | | | | |
| **S32K** | **Killisnoo** | **14.48** | **345** | P | **Pn** | **13 23 28.2** | **+1.4** |
| | baz=159 | | | | | | |
| **DLBC** | **Dease Lake** | **14.85** | **355** | Pn | **P** | **13 23 35.9** | **-1.8** |
| | comp=E,0.2nm,0.3s,baz=166,slow=15,SNR=3.7 | | | | | | |
| DLBC | | | | LR | LR | 13 28 30.5 | |
| | comp=E,244nm,22.0s,baz=115,slow=34 | | | | | | |
| **DLBC** | **Dease Lake** | **14.85** | **355** | P | **Pn** | **13 23 33.1** | **+1.1** |
| | baz=173 | | | | | | |
| **R32K** | **Eaglecrest** | **15.23** | **346** | P | **Pn** | **13 23 37.9** | **+1.0** |
| | baz=160 | | | | | | |
| **TOAD** | **Toad River Com** | **15.27** | **5** | P | **Pn** | **13 23 37.6** | **+0.2** |
| | baz=186 | | | | | | |
| **S31K** | **Pelican** | **15.28** | **342** | P | **Pn** | **13 23 37.1** | **-0.4** |
| | baz=156 | | | | | | |
| **LAO** | **LASA Array** | **15.39** | **71** | Pn | **Pn** | **13 23 39.0** | **-0.2** |
| LAO | | | | IAmb | IAmb | 13 23 49.3 | |
| | comp=Z,53nm,1.5s | | | | | | |
| **VTX** | **Valle De La Tr** | **15.43** | **139** | Pn | **P** | **13 23 42.3** | **-2.0** |
| **K22A** | **Casper** | **15.44** | **87** | Pn | **Pn** | **13 23 39.4** | **-0.6** |
| K22A | | | | IAmb | IAmb | 13 23 53.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **Q32M** | **Nakina River** | **15.57** | **351** | P | **Pn** | **13 23 41.1** | **-0.5** |
| | baz=167 | | | | | | |
| **LIRD** | **Liard River Hi** | **15.78** | **3** | P | **Pn** | **13 23 44.8** | **+0.7** |
| | baz=184 | | | | | | |
| **R33M** | **Jennings River** | **15.87** | **354** | Pn | **P** | **13 23 48.8** | **-0.3** |
| **R33M** | **Jennings River** | **15.87** | **354** | P | **Pn** | **13 23 45.6** | **+0.3** |
| | baz=171,SNR=8.5 | | | | | | |
| **MVCO** | **Mesa Verde** | **15.93** | **107** | Pn | **Pn** | **13 23 46.1** | **-0.3** |
| **W18A** | **Petrified Fore** | **16.24** | **116** | P | **Pn** | **13 23 49.3** | **-1.0** |
| | baz=307 | | | | | | |
| **N23A** | **Red Feather La** | **16.29** | **92** | Pn | **Pn** | **13 23 50.1** | **-0.9** |
| N23A | | | | IAmb | IAmb | 13 23 58.9 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **N23A** | **Red Feather La** | **16.29** | **92** | P | **Pn** | **13 23 49.6** | **-1.4** |
| | baz=287 | | | | | | |
| **P32M** | **Atlin** | **16.36** | **349** | P | **Pn** | **13 23 51.5** | **-0.1** |
| | baz=164 | | | | | | |
| **X18A** | **Snowflake** | **16.47** | **118** | P | **P** | **13 23 55.3** | **-0.5** |
| **WTLY** | **Watson Lake, Y** | **16.48** | **358** | P | **Pn** | **13 23 53.3** | **+0.3** |
| | baz=177 | | | | | | |
| **PHWY** | **Pilot Hill** | **16.53** | **91** | P | **Pn** | **13 23 55.0** | **+1.0** |
| **214A** | **Organ Pipe Nat** | **16.53** | **130** | | **Pn** | **13 23 54.9** | **+1.0** |
| **214A** | **Organ Pipe Nat** | **16.53** | **130** | P | **Pn** | **13 23 53.3** | **-0.6** |
| | baz=320 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **16.84** | **104** | | **P** | **13 23 60.0** | **-0.1** |
| **S22A** | **4UR Ranch, Cre** | **16.84** | **104** | P | **Pn** | **13 23 56.5** | **-1.5** |
| | baz=297 | | | | | | |
| **P33M** | **Teslin, Yukon** | **16.85** | **351** | P | **P** | **13 23 59.8** | **-0.1** |
| | baz=167 | | | | | | |
| **DGMT** | **Dagmar** | **16.93** | **65** | P | **P** | **13 24 01.2** | **+0.3** |
| DGMT | | | | IAmb | IAmb | 13 24 06.2 | |
| | comp=Z,83nm,1.4s | | | | | | |
| **RSSD** | **Black Hills** | **17.01** | **80** | P | **P** | **13 24 02.3** | **+0.4** |
| **P29M** | **Windy Craggy** | **17.12** | **342** | P | **P** | **13 24 02.6** | **-0.3** |
| | baz=154 | | | | | | |
| **TUC** | **Tucson** | **17.44** | **125** | | **P** | **13 24 08.4** | **+1.9** |
| **Q24A** | **Divide** | **17.52** | **98** | P | **P** | **13 24 08.0** | **+0.3** |
| Q24A | | | | IAmb | IAmb | 13 24 13.9 | |
| | comp=Z,64nm,1.4s | | | | | | |
| **Q24A** | **Divide** | **17.52** | **98** | P | **Pn** | **13 24 06.6** | **0.0** |
| | baz=293,SNR=7.6 | | | | | | |
| **BRIGG** | **Briggsdale** | **17.56** | **92** | P | **Pn** | **13 24 06.5** | **-0.4** |
| BRIGG | | | | IAmb | IAmb | 13 24 15.0 | |
| | comp=Z,86nm,1.2s | | | | | | |
| **SDCO** | **Great Sand Dun** | **17.78** | **102** | P | **P** | **13 24 11.5** | **+1.1** |
| **N32M** | **Quiet Lake** | **17.80** | **351** | P | **P** | **13 24 10.7** | **+0.3** |
| | baz=167 | | | | | | |
| **O30N** | **Mendenhall** | **17.86** | **346** | P | **P** | **13 24 12.6** | **+1.7** |
| **O30N** | **Mendenhall** | **17.86** | **346** | P | **P** | **13 24 12.6** | **+1.7** |
| | baz=160 | | | | | | |
| **TGTN** | **Hyland Airport** | **17.88** | **359** | P | **P** | **13 24 13.1** | **+1.8** |
| | baz=178 | | | | | | |
| **O29M** | **Mount Kennedy** | **17.92** | **342** | P | **Pn** | **13 24 11.0** | **-0.1** |
| | baz=153 | | | | | | |
| **DUN6** | **Lazy B Ranch** | **18.30** | **121** | P | **P** | **13 24 17.8** | **+1.7** |
| **N31M** | **Braeburn, Yuko** | **18.48** | **348** | P | **Pn** | **13 24 19.6** | **+1.7** |
| **N31M** | **Braeburn, Yuko** | **18.48** | **348** | P | **Pn** | **13 24 20.4** | **+2.4** |
| | baz=161 | | | | | | |
| **ANMO** | **Albuquerque** | **18.53** | **111** | P | **Pn** | **13 24 19.8** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=38,slow=11,SNR=12 | | | | | | |
| | comp=Z,9.1nm,1.3s | | | | | | |
| **N30M** | **Aishikik Lake** | **18.68** | **346** | P | **Pn** | **13 24 22.3** | **+2.0** |
| | baz=158 | | | | | | |
| **T25A** | **Trinidad** | **18.83** | **102** | | **Pn** | **13 24 24.4** | **+1.9** |
| T25A | | | | IAmb | IAmb | 13 24 33.7 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **T25A** | **Trinidad** | **18.83** | **102** | P | **Pn** | **13 24 22.8** | **+0.3** |
| | baz=298 | | | | | | |
| **FARO** | **Faro, Yukon** | **18.89** | **352** | P | **Pn** | **13 24 25.2** | **+2.4** |
| | baz=167 | | | | | | |
| **M31M** | **Drury Creek, Y** | **18.98** | **350** | P | **Pn** | **13 24 24.1** | **+0.1** |
| **M31M** | **Drury Creek, Y** | **18.98** | **350** | P | **Pn** | **13 24 24.9** | **+1.0** |
| | baz=165 | | | | | | |
| **YUK8** | **Steele Glacier** | **19.06** | **342** | P | **Pn** | **13 24 25.6** | **+0.5** |
| | baz=152 | | | | | | |
| **121A** | **Cookes Peak, D** | **19.13** | **119** | P | **Pn** | **13 24 26.5** | **+0.4** |
| 121A | | | | IAmb | IAmb | 13 24 38.7 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **121A** | **Cookes Peak, D** | **19.13** | **119** | P | **Pn** | **13 24 26.4** | **+0.2** |
| | baz=311 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **19.32** | **95** | P | **Pn** | **13 24 27.9** | **-0.5** |
| KSCO | | | | IAmb | IAmb | 13 24 35.2 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **Q23K** | **Middleton Isla** | **19.48** | **331** | P | **P** | **13 24 26.9** | **-1.8** |
| | baz=136 | | | | | | |
| **WRGLY** | **Wrigley** | **19.74** | **6** | P | **Pn** | **13 24 32.9** | **-0.1** |
| | baz=189,SNR=6.3 | | | | | | |
| **M29M** | **Somme Creek** | **19.84** | **345** | P | **Pn** | **13 24 34.0** | **-0.3** |
| | baz=156 | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.33** | **18** | P | **P** | **13 24 37.8** | **-0.1** |
| | comp=Z,2.6nm,0.7s,baz=213,slow=11,SNR=3.7 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **EPT** | **El Paso** | **20.45** | **118** | P | **Pn** | **13 24 40.6** | **-1.1** |
| EPT | | | | IAmb | IAmb | 13 24 47.8 | |
| | comp=Z,38nm,1.2s | | | | | | |
| **M27K** | **Edge Creek, AK** | **20.49** | **341** | P | **Pn** | **13 24 41.4** | **-0.6** |
| | baz=149 | | | | | | |
| **N25K** | **Chitina, Valde** | **20.58** | **337** | P | **Pn** | **13 24 42.8** | **-0.2** |
| | baz=143 | | | | | | |
| **M26K** | **Nabesna, AK** | **20.80** | **340** | P | **Pn** | **13 24 45.0** | **-0.5** |
| | baz=147 | | | | | | |
| **KLU** | **Klutina** | **20.88** | **335** | P | **Pn** | **13 24 45.7** | **-0.8** |
| | baz=140 | | | | | | |
| **K29M** | **Barlow Dome** | **20.98** | **348** | P | **Pn** | **13 24 46.8** | **-0.9** |
| | baz=160 | | | | | | |
| **OHAK** | **Old Harbor** | **21.05** | **319** | P | **P** | **13 24 47.3** | **+1.5** |
| | baz=119 | | | | | | |
| **SEW** | **Seward** | **21.09** | **329** | P | **P** | **13 24 48.3** | **+2.2** |
| | baz=131 | | | | | | |
| **L27K** | **Beaver Creek,** | **21.09** | **342** | P | **P** | **13 24 48.2** | **+2.0** |
| | baz=150 | | | | | | |
| **SII** | **Sitkinak Islan** | **21.18** | **317** | P | **P** | **13 24 48.4** | **+1.2** |
| | baz=116 | | | | | | |
| **PWL** | **Port Wells** | **21.20** | **331** | P | **P** | **13 24 48.1** | **+0.7** |
| | baz=135 | | | | | | |
| **BRSE** | **Bradley Lake S** | **21.35** | **327** | P | **P** | **13 24 49.9** | **+0.9** |
| | baz=128 | | | | | | |
| **Q20K** | **Shuyak Island** | **21.37** | **323** | P | **P** | **13 24 49.2** | **+0.1** |
| | baz=123 | | | | | | |
| **L26K** | **Log Cabin Wild** | **21.41** | **340** | P | **P** | **13 24 51.3** | **+1.6** |
| | baz=147 | | | | | | |
| **DAWY** | **Dawson** | **21.50** | **346** | P | **P** | **13 24 52.1** | **+1.5** |
| DAWY | | | | IAmb | IAmb | 13 24 58.7 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **DAWY** | **Dawson** | **21.50** | **346** | P | **P** | **13 24 52.3** | **+1.7** |
| | baz=156,SNR=9.3 | | | | | | |
| **J30M** | **Hart River** | **21.51** | **350** | P | **P** | **13 24 52.9** | **+2.2** |
| J30M | | | | IAmb | IAmb | 13 24 56.5 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **J30M** | **Hart River** | **21.51** | **350** | P | **P** | **13 24 51.5** | **+0.7** |
| | baz=162,SNR=15 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **21.58** | **334** | P | **P** | **13 24 52.3** | **+0.8** |
| | baz=138 | | | | | | |
| **CHIR** | **Chirikof Islan** | **21.61** | **314** | P | **P** | **13 24 52.5** | **+0.7** |
| | baz=112 | | | | | | |
| **KNK** | **Knik Glacier** | **21.64** | **332** | P | **P** | **13 24 53.4** | **+1.3** |
| | baz=136 | | | | | | |
| **M23K** | **Glacier View** | **21.68** | **334** | P | **P** | **13 24 53.9** | **+1.4** |
| | baz=137 | | | | | | |
| **R18K** | **Karluk** | **21.77** | **319** | P | **P** | **13 24 52.2** | **-1.3** |
| | baz=118 | | | | | | |
| **RC01** | **Rabbit Creek A** | **21.85** | **331** | P | **P** | **13 24 52.8** | **-1.6** |
| | baz=133 | | | | | | |
| **AMTX** | **Amarillo** | **21.86** | **105** | P | **P** | **13 24 55.6** | **+0.9** |
| AMTX | | | | IAmb | IAmb | 13 24 59.3 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **SML** | **Sawmill** | **21.88** | **333** | P | **P** | **13 24 53.0** | **-1.7** |
| | baz=136 | | | | | | |
| **PAX** | **Paxson** | **21.92** | **338** | P | **P** | **13 24 55.0** | **-0.1** |
| | baz=143 | | | | | | |
| **K27K** | **Chicken** | **21.99** | **343** | P | **P** | **13 24 56.7** | **+0.9** |
| **K27K** | **Chicken** | **21.99** | **343** | P | **P** | **13 24 56.4** | **+0.6** |
| | baz=151 | | | | | | |
| **PMR** | **Palmer** | **21.99** | **332** | P | **P** | **13 24 55.4** | **-0.4** |
| | baz=135 | | | | | | |
| **GHO** | **Glory Hole Cre** | **22.05** | **333** | P | **P** | **13 24 57.9** | **+1.3** |
| GHO | | | | IAmb | IAmb | 13 25 00.8 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **VHRN** | **Van Horn** | **22.07** | **118** | P | **P** | **13 24 59.2** | **+2.1** |
| VHRN | | | | IAmb | IAmb | 13 25 02.4 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **I30M** | **Mount Dempster** | **22.14** | **350** | P | **P** | **13 24 59.0** | **+1.5** |
| I30M | | | | IAmb | IAmb | 13 25 17.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **22.14** | **350** | P | **P** | **13 24 58.7** | **+1.2** |
| | baz=163,SNR=9.8 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **22.30** | **73** | P | **P** | **13 25 00.9** | **+1.7** |
| F33A | | | | IAmb | IAmb | 13 25 07.8 | |
| | comp=Z,34nm,1.2s | | | | | | |
| **ECSD** | **EROS Data Cent** | **22.37** | **79** | P | **P** | **13 25 01.4** | **+1.4** |
| ECSD | | | | IAmb | IAmb | 13 25 06.1 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **22.38** | **341** | P | **P** | **13 25 01.7** | **+1.6** |
| | baz=147 | | | | | | |
| **PECS** | **Pecos** | **22.42** | **115** | P | **P** | **13 25 02.9** | **+2.1** |
| PECS | | | | IAmb | IAmb | 13 25 06.2 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **AGMN** | **Agassiz Nation** | **22.46** | **67** | P | **P** | **13 25 03.5** | **+2.4** |
| AGMN | | | | IAmb | IAmb | 13 25 05.8 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **SUA** | **Susitna One** | **22.47** | **330** | P | **P** | **13 25 01.9** | **+0.8** |
| | baz=132 | | | | | | |
| **EGAK** | **Eagle** | **22.47** | **345** | P | **P** | **13 25 01.8** | **+0.8** |
| **EGAK** | **Eagle** | **22.47** | **345** | P | **P** | **13 25 02.3** | **+1.4** |
| | baz=154 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **22.53** | **348** | P | **P** | **13 25 02.4** | **+0.7** |
| I29M | | | | IAmb | IAmb | 13 25 18.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **22.53** | **348** | P | **P** | **13 25 02.3** | **+0.7** |
| | baz=159 | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.53** | **62** | P | **P** | **13 25 02.8** | **+1.0** |
| ULM | | | | IAmb | IAmb | 13 25 07.6 | |
| | comp=Z,14nm,1.

baz=168
KAN01 **Argonia South** 23.59 96 P P 13 25 13.7 +1.1
M20K **Styx River** 23.61 329 P P 13 25 13.0 +0.2
baz=129
KAN17 **Caldwell West** 23.63 96 P P 13 25 14.6 +1.5
KAN09 **Caldwell North** 23.69 96 P P 13 25 15.3 +1.6
CROK **Carrier** 23.71 97 P 13 25 15.3 +1.5
ILAR **Eielson Array** 23.75 339 P P 13 25 14.4 +0.5
comp=Z,1.8nm,0.8s,baz=156,slow=8.3,SNR=20
comp=Z,1.8nm,0.8s
N35A **Tabor** 23.77 86 P P 13 25 16.0 +1.6
G30M **tAoh Zraii Nji** 23.81 352 P P 13 25 13.6 -1.0
baz=164
H27K **Steamboat Moun** 23.85 346 P P 13 25 15.0 0.0
baz=154
TX31 **Lajitas Ar. Si** 23.89 119 P P 13 25 16.6 +0.8
TXAR **Lajitas Array** 23.89 119 P P 13 25 17.0 +1.2
comp=Z,5.6nm,1.0s,baz=302,slow=7.2,SNR=33
comp=Z,5.6nm,1.0s
G29M **Pine Creek** 23.96 350 P P 13 25 16.5 +0.5
G29M **Pine Creek** 23.96 350 P P 13 25 15.7 -0.3
baz=161,SNR=14
WMOK **Wichita Mounta** 23.98 102 P P 13 25 17.6 +1.1
N18K **Kilae Creek** 23.99 325 P P 13 25 16.4 0.0
baz=122
F31M **Tsiigehtchic** 24.04 354 P P 13 25 17.1 +0.4
baz=169
O17K **Koliganek Bris** 24.04 322 P P 13 25 17.0 +0.3
baz=119
SDPT **Sand Point** 24.07 311 P P 13 25 17.5 +0.5
baz=105
M19K **Big River Lodg** 24.09 329 P P 13 25 17.7 +0.5
baz=127
P16K **Nushagak River** 24.11 320 P P 13 25 19.9 +2.6
baz=116
POKR **Poker Plat Res** 24.16 340 P P 13 25 20.8 +2.9
baz=143
NEA2 **Nenana** 24.19 337 P P 13 25 18.2 +0.1
baz=140
MDM **Murphy Dome** 24.24 339 P P 13 25 21.4 +2.8
MDM IAmb IAmb 13 25 44.1
comp=Z,15nm,1.5s
L20K **Farewell, AK** 24.26 330 P P 13 25 19.1 +0.3
baz=129
BPAW **Bear Paw Mtn.** 24.38 335 P P 13 25 20.3 +0.4
baz=136,SNR=5.9
F30M **Barrier River** 24.38 352 P P 13 25 20.2 +0.3
baz=165
HPIG 24.39 126 P P 13 25 21.3 +0.8
HPIG IAmb IAmb 13 25 24.1
comp=Z,15nm,1.0s
G27K **Doyon Strip** 24.40 347 P P 13 25 20.8 +0.8
baz=155,SNR=5.6
O16K **Kokwok River B** 24.41 321 P P 13 25 20.0 -0.1
baz=117
M18K **Stony River** 24.41 327 P P 13 25 20.6 +0.4
baz=124
L19K **White Mountain** 24.43 329 P P 13 25 20.5 +0.1
baz=127,SNR=5.5
N17K **Nushagak Hills** 24.46 324 P P 13 25 20.5 -0.1
baz=120
SAND **Sanderson** 24.48 116 P P 13 25 22.2 +1.1
SAND IAmb IAmb 13 25 25.1
comp=Z,12nm,0.9s
I23K **Minto, Yukon-K** 24.69 338 P P 13 25 22.8 +0.1
baz=140
WTFS **Witchita Falls** 24.71 104 P P 13 25 24.1 +0.9
WTFS IAmb IAmb 13 25 26.8
comp=Z,17nm,0.9s
H25L **Birch Creek** 24.73 342 P P 13 25 22.9 -0.1
baz=147,SNR=8.2
OK052 **Battle Ridge R** 24.79 97 P P 13 25 23.8 0.0
H24K **Noodor Dome** 24.85 340 P P 13 25 27.1 +2.9
H24K IAmb IAmb 13 25 30.1
comp=Z,13nm,1.4s
H24K **Noodor Dome** 24.85 340 P P 13 25 24.6 +0.4
baz=143,SNR=7.1
F28M **Old Crow** 24.87 349 P P 13 25 23.6 -0.7
baz=158
K20K **Telida** 24.88 332 P P 13 25 23.9 -0.6
baz=130,SNR=9.9
INK **Inuvik** 24.88 355 P P 13 25 23.9 -0.4
baz=170
G26K **Porcupine Rive** 24.91 345 P P 13 25 25.2 +0.6
baz=151
MLY **Manley** 24.99 337 P P 13 25 25.3 -0.2
baz=138,SNR=7.9
M17K **Holitna River** 25.01 326 P P 13 25 25.2 -0.4
baz=121
S12K **Black Hills** 25.03 311 P P 13 25 25.6 -0.2
baz=104
DEOK **Depew** 25.08 98 P 13 25 27.3 +0.8
N16K **Nishlik Lake** 25.11 323 P P 13 25 25.8 -0.8
baz=118
L18K **Granite Mounta** 25.16 328 P P 13 25 26.8 -0.1
baz=124,SNR=10
G25K **Bearman Lake** 25.21 343 P P 13 25 27.4 0.0
baz=147
H23K **Yukon River** 25.27 339 P P 13 25 28.8 +0.9
baz=140
E29M **Blow River** 25.35 351 P P 13 25 28.3 -0.3
baz=162
J20K **Nowinta River** 25.44 333 P P 13 25 29.9 +0.5
baz=131,SNR=5.7
M16K **Timber Creek** 25.46 324 P P 13 25 30.3 +0.7
baz=119
I21K **Tanana** 25.46 336 P P 13 25 30.4 +0.8
baz=136
G24K **Hadweenzic Riv** 25.46 342 P P 13 25 30.1 +0.4
baz=145,SNR=9.1
N15K **Kwethluk River** 25.57 322 P P 13 25 31.9 +1.3
baz=116
F26K **Sheenjek River** 25.63 345 P P 13 25 31.8 +0.6
baz=151
E27K **Coleen River** 25.65 348 P P 13 25 31.9 +0.6
baz=156,SNR=7.9
JCT **Junction City** 25.68 112 P P 13 25 33.5 +1.4
BRDY **Brady** 25.74 109 P P 13 25 32.9 +0.3
BRDY IAmb IAmb 13 25 36.0
comp=Z,11nm,1.1s
L17K **Donlin** 25.75 327 P P 13 25 32.5 +0.2
baz=122
E28M **Babbage River** 25.75 350 P P 13 25 32.9 +0.6
baz=160
C36M **Paulatuk** 25.80 3 P P 13 25 33.3 +0.7
baz=186
H22K **Ishtalitna Cre** 25.81 338 P P 13 25 32.6 -0.3
baz=138,SNR=5.9
DRIO **Del Rio** 25.81 114 P P 13 25 33.1 -0.1
DRIO IAmb IAmb 13 25 37.8
comp=Z,12nm,0.8s
J19K **Poorman** 25.82 332 P P 13 25 33.5 +0.6
baz=128,SNR=8.3
F25K **Christian Rive** 25.82 344 P P 13 25 34.0 +1.0
baz=149
I20K **Naaghedeneel** 25.96 334 P P 13 25 34.7 +0.6
baz=131
L16K **Owhat River** 26.01 325 P P 13 25 34.9 +0.2
baz=119,SNR=8.9
H21K **Melozitna Rive** 26.04 336 P P 13 25 35.1 +0.2
baz=135,SNR=6.9
K17K **Iditarod** 26.06 328 P P 13 25 34.8 -0.2
baz=122
M15K **Kasigluk River** 26.06 322 P P 13 25 35.4 +0.3
baz=116
G23K **Bananza Creek** 26.08 340 P P 13 25 35.7 +0.4
baz=141,SNR=6.8
F24K **Squaw Lake** 26.23 342 P P 13 25 37.8 +1.2
baz=145
D27M **Malcolm River** 26.54 349 P P 13 25 40.1 +0.7
baz=158
H20K **Anotleneega Mo** 26.55 335 P P 13 25 40.4 +0.9
baz=132,SNR=7.7
G22K **Bettles** 26.62 339 P P 13 25 40.3 +0.2
baz=139
M14K **Bethel** 26.65 322 P P 13 25 42.5 +2.1
baz=114
GCSA **Galena City Sc** 26.72 332 P P 13 25 42.2 +1.2
baz=128
J17K **VABM Dome** 26.72 329 P P 13 25 41.8 +0.8
baz=123
E24K **Your Creek** 26.82 343 P P 13 25 42.7 +0.8
baz=145
L15K **Ungalak Mounta** 26.84 324 P P 13 25 42.0 -0.1
baz=116
G21K **Allakaket** 26.86 337 P P 13 25 42.1 -0.2
baz=135
E23K **Chandalar** 27.05 342 P P 13 25 44.2 +0.1
baz=143,SNR=7.8
H19K **Roundabout Mou** 27.07 334 P P 13 25 44.2 +0.1
baz=130,SNR=5.7
K15K **Wolf Creek Mou** 27.14 325 P P 13 25 44.3 -0.6
baz=117
M13K **Dall Lake** 27.15 321 P P 13 25 45.8 +0.9
baz=112
L14K **Kuka Creek** 27.22 323 P P 13 25 45.4 -0.1
baz=114
F22K **John River** 27.23 340 P P 13 25 46.7 +1.0
baz=139
J16K **Anvik River** 27.25 328 P P 13 25 46.5 +0.7
baz=120
F21K **Alatna River** 27.36 338 P P 13 25 47.4 +0.6
baz=136
D25K **Kavik River** 27.46 346 P P 13 25 47.4 -0.3
baz=150
H18K **Honhosa River** 27.47 332 P P 13 25 48.6 +0.9
baz=126
TOLK **Toolik Lake Re** 27.52 343 P P 13 25 48.5 +0.3
baz=144,SNR=5.9
E22K **Anaktuvuk Pass** 27.62 341 P P 13 25 49.1 0.0
baz=140,SNR=5.2
H17K **Granite Mounta** 27.88 331 P P 13 25 52.2 +0.7
baz=124
G18K **Tagagawik** 28.01 333 P P 13 25 53.0 +0.4
baz=127
D23K **Nanushuk River** 28.02 342 P P 13 25 52.4 -0.2
baz=143
C24K **Franklin Bluff** 28.23 345 P P 13 25 54.6 +0.2
baz=146
A36M **Sachs Harbour** 28.41 2 P P 13 25 55.7 -0.3
baz=184
C23K **Itkillik River** 28.70 344 P P 13 25 59.3 +0.6
baz=144
E20K **Nigu River** 28.83 338 P P 13 26 00.2 +0.3
baz=134
C21K **Knifeblade Rid** 29.11 340 P P 13 26 02.4 0.0
baz=137
F17K **Baldwin Pennin** 29.19 333 P P 13 26 03.1 +0.1
baz=124
D19K **Kuna River** 29.51 338 P P 13 26 06.0 +0.1
baz=132
E18K **Tukpahlearik C** 29.56 335 P P 13 26 06.7 +0.4
baz=127
ANM **Nome** 29.72 328 P P 13 26 09.9 +2.1
baz=116
B18K **Kokolik River** 31.09 337 P P 13 26 21.3 +1.4
baz=128
X51A **Calhoun** 34.10 91 P P 13 26 47.2 +0.7
O53A **New Philadelph** 34.34 79 P P 13 26 50.0 +1.4
baz=291
Y52A **Lilburn** 35.01 91 P P 13 26 55.0 +0.5
152A **Waverly Hall** 35.13 94 P P 13 26 55.9 +0.4
SUMG **Summit** 48.75 24 P P 13 28 47.9 +1.2
H11N3 **WAKE ISLAND Hy** 59.02 268 T T 14 33 34.6
baz=50,slow=75,SNR=74
H11N2 **WAKE ISLAND Hy** 59.02 268 T T 14 33 37.0
baz=50,slow=75,SNR=51
H11N1 **WAKE ISLAND Hy** 59.03 268 T T 14 33 38.6
baz=50,slow=75,SNR=65
H11S1 **WAKE ISLAND Hy** 59.94 267 T T 14 34 46.9
baz=50,slow=75,SNR=410
H11S2 **WAKE ISLAND Hy** 59.95 267 T T 14 34 45.6
baz=50,slow=75,SNR=367
H11S3 **WAKE ISLAND Hy** 59.96 267 T T 14 34 48.4
baz=50,slow=75,SNR=289
NOA **NORSAR Array B** 70.41 20 P P 13 31 16.3 +0.6
comp=Z,3.9nm,1.0s,baz=332,slow=5.7,SNR=3.7
comp=Z,3.9nm,1.0s
FINES **FINESS Array B** 73.09 13 P P 13 31 29.6 -2.0
comp=Z,4.9nm,0.9s,baz=326,slow=9.2,SNR=7.9
comp=Z,4.9nm,0.9s
SONM **Songino Array** 77.21 326 P P 13 31 55.2 -0.6
comp=Z,2.5nm,1.0s,baz=41,slow=4.7,SNR=9.4
comp=Z,2.5nm,1.0s
ZALV **Zalesovo Beam** 78.86 341 P P 13 32 03.8 -0.9
comp=Z,0.9nm,0.6s,baz=66,slow=7.0,SNR=2.9
comp=Z,0.9nm,0.6s
LPAZ **La Paz** 80.69 123 P P 13 32 14.9 -0.9
comp=Z,3.0nm,0.8s,baz=0.1,slow=5.7,SNR=11
comp=Z,3.0nm,0.8s
GERES **GERESS Array B** 81.82 25 P P 13 32 19.9 -0.9
comp=Z,0.8nm,0.6s,baz=341,slow=5.5,SNR=2.2
comp=Z,0.8nm,0.6s
DAVOX **Davos/Dischmat** 82.41 28 LR LR 14 08 37.9
comp=Z,259nm,20.2s,baz=265,slow=35
BVAR **Borovoye Array** 82.43 349 P P 13 32 23.4 -0.6
comp=Z,2.9nm,0.8s,baz=35,slow=5.4,SNR=8.4
comp=Z,2.9nm,0.8s
ESDC **Sonseca Array** 82.70 40 P P 13 32 26.3 +0.7
comp=Z,1.0nm,0.9s,baz=311,slow=2.7,SNR=3.5
comp=Z,1.0nm,0.9s
KURBB **Kurchatov Arra** 83.35 344 P P 13 32 28.2 -0.5
comp=Z,2.6nm,0.8s,baz=18,slow=4.6,SNR=20
comp=Z,2.6nm,0.8s
AKASG **Malin Array Be** 83.87 15 P P 13 32 27.4 -4.0
comp=Z,2.0nm,0.6s,baz=346,slow=4.2,SNR=5.4
MKAR **Makanchi Array** 86.10 340 P P 13 32 41.3 -1.4
MKAR **Makanchi Array** 86.10 340 P P 13 32 41.5 -1.3
comp=Z,0.3nm,0.5s,baz=20,slow=5.3,SNR=4.2
comp=Z,0.3nm,0.5s
ABKAR **Akbulak array** 87.21 355 P P 13 32 48.1 0.0
ABKAR **Akbulak array** 87.21 355 P P 13 32 47.7 -0.4
ABKAR IAmb IAmb 13 32 49.3
comp=Z,4.9nm,0.9s
ELIB **Princess Elisa** 148.40 163 *d*PKPdf PKPdf 13 39 44.3 +0.6
ELIB *d*PKP sPKPdf 13 39 49.0 -0.3

AVIZ **Vizcacheras** 1.96 178 *e*P Pn 13 21 27.5 +1.0
AVIZ *e*S Sn 13 21 46.7 -4.6
CO01 **Juntas del Tor** 2.00 320 *e*P Pn 13 21 28.6 +1.4
CO01 *e*S Sn 13 21 53.8 +1.3
CO01 IAML 13 21 55.9
comp=Z,195nm,0.4s
VA03 **San Esteban** 2.06 232 *e*P Pn 13 21 28.1 +0.2
VA03 *e*S Sn 13 21 55.5 +1.6
VA03 IAML 13 21 55.9
comp=Z,224nm,0.3s
CO02 **Combarbal** 2.07 278 *e*P Pn 13 21 28.1 +0.2
CO02 *e*S Sn 13 21 55.2 +1.3
CO02 IAML 13 21 55.5
comp=Z,493nm,0.4s
MT08 **Bocatoma Ro** 2.26 211 *e*P Pn 13 21 31.4 +0.8
MT08 IAML 13 22 02.7
comp=Z,144nm,0.6s
MT04 **Ro Olivares** 2.29 214 *e*P Pn 13 21 32.3 +1.5
MT04 *e*S Sn 13 21 58.2 -0.9
MT04 IAML 13 22 07.5
comp=Z,74nm,0.2s
GO04 **Tololo Observa** 2.31 305 *e*P Pn 13 21 31.9 +0.7
GO04 *e*S Sn 13 22 00.3 +0.6
PEL **Peldehue** 2.39 227 *e*P Pn 13 21 32.4 +0.3
PEL *e*S Sn 13 22 02.3 +1.0
ROC1 **El Roble** 2.51 234 *e*P Pn 13 21 33.2 -0.5
ROC1 *e*S Sn 13 22 03.4 -0.8
ACLC **CERRO LA CRUZ** 2.53 35 *e*P Pn 13 21 34.6 +0.7
ACLC *e*S Sn 13 21 52.3 -12
ACLC IAML 13 22 08.2
comp=Z,156nm,0.3s
MT03 **Universidad Ad** 2.54 219 *e*P Pn 13 21 35.0 +0.9
MT03 *e*S Sn 13 22 06.9 +2.0
MT03 IAML 13 22 11.2
comp=Z,151nm,0.4s
MT05 **Renca** 2.60 223 *e*P Pn 13 21 37.2 +2.5
MT05 *e*S Sn 13 22 03.3 -2.7
MT05 IAML 13 22 12.2
comp=Z,165nm,0.3s
MT13 **San Alfonso** 2.63 212 *e*P Pn 13 21 36.8 +1.5
MT13 IAML 13 22 16.3
comp=Z,50nm,0.5s
LMEL **Las Melosas** 2.69 210 *e*P Pn 13 21 36.4 +0.4
MT02 **Curacav** 2.76 230 *e*P Pn 13 21 36.2 -0.6
MT02 *e*S Sn 13 22 09.6 -0.1
MT02 IAML 13 22 14.9
comp=Z,67nm,0.2s
VCA **Vinchina** 2.79 7 *e*P Pn 13 21 38.7 +1.2
VCA *e*S Sn 13 22 13.2 +2.4
VCA IAML 13 22 15.6
comp=Z,388nm,0.2s
VA01 **Torpederas** 2.98 239 *e*P Pn 13 21 38.5 -1.1
VA01 IAML 13 22 17.0
comp=Z,45nm,0.2s
AC05 **El Transito** 3.03 331 *e*P Pn 13 21 41.8 +1.2
AC05 *e*S Sn 13 22 17.2 +0.8
AC05 IAML 13 22 19.4
comp=Z,110nm,0.3s
LCO **Las Campanas** 3.08 324 *e*P Pn 13 21 41.8 +0.4
LCO *e*S Sn 13 22 17.5 -0.3
MT01 **Popeta** 3.23 223 *e*P Pn 13 21 41.7 -1.3
MT01 *e*S Sn 13 22 19.1 -1.9
MT01 IAML 13 22 24.3
comp=Z,60nm,0.2s
RFA **San Rafael** 3.25 178 *e*P Pn 13 21 43.3 -0.1
RFA *e*S Sn 13 22 21.8 +0.3
RFA IAML 13 22 24.1
comp=Z,79nm,0.3s
TCA **Tanti** 3.44 88 *e*P Pn 13 21 46.7 +0.8
TCA *e*S Sn 13 22 26.3 +0.3
TCA IAML 13 22 50.5
comp=Z,88nm,0.6s
BO01 **Tunca** 3.54 215 *e*P Pn 13 21 46.3 -0.9
BO01 *e*S Sn 13 22 28.4 0.0
BO01 IAML 13 22 31.1
comp=Z,32nm,0.2s
BO02 **Sierra Bellavi** 3.74 209 *e*P Pn 13 21 50.3 +0.4
BO02 *e*S Sn 13 22 35.8 +2.5
BO02 IAML 13 22 41.0
comp=Z,52nm,0.2s
CYA **Choya** 3.91 39 *e*P Pn 13 21 52.4 +0.2
CYA *e*S Sn 13 22 37.2 -0.1
CYA IAML 13 23 03.4
comp=Z,37nm,0.8s
AC04 **Llanos de Chal** 3.93 326 *e*P Pn 13 21 51.8 -0.6
AC04 *e*S Sn 13 22 34.9 -2.8
AC04 IAML 13 22 48.7
comp=Z,62nm,0.5s
GO03 **Copiap** 4.16 340 *e*P Pn 13 21 55.6 +0.1
GO03 *e*S Sn 13 22 41.9 -1.3
EDS3 **Malargue** 4.30 189 *e*P Pn 13 21 57.7 +0.3
LVC **Limon Verde** 8.87 358 P Pn 13 22 57.5 -2.2
comp=Z,6.5nm,0.4s,baz=175,slow=10,SNR=17
LVC S Sn 13 24 33.5 -4.6
comp=Z,1.9nm,0.4s,baz=53,slow=20,SNR=1.5
PLCA **Paso Flores** 9.33 189 P Pn 13 23 04.5 -1.0
comp=Z,1.0nm,0.5s,baz=353,slow=17,SNR=1.6
LPAZ **La Paz** 15.16 2 P Pn 13 24 22.2 -0.7
comp=Z,0.9nm,0.5s,baz=176,slow=10,SNR=3.8
TXAR **Lajitas Array** 69.09 328 P P 13 31 49.2 +1.0
comp=Z,0.2nm,0.4s,baz=153,slow=8.8,SNR=2.8
comp=Z,0.2nm,0.4s
TORD **Torodi Ar. Bea** 80.63 68 P P 13 32 55.4 +0.6
comp=Z,0.4nm,0.6s,baz=251,slow=2.6,SNR=6.0
comp=Z,0.4nm,0.6s
WRA **Warramunga Arr** 124.30 206 PKP PKPdf 13 39 39.7 -0.8
comp=Z,0.3nm,0.7s,baz=165,slow=1.8,SNR=4.8

*IDC* ***22*** *13:20:52.1±2.9, 31°.47S×68°.61W, h90km±27km, mb3.2/2, mbtmp3.7/5, Error ellipse: s-maj=50.9km s-min=22.1km az=91.0*
*SJA* ***22*** *13:20:53.5±0.7, 31°.51S×68°.63W, h111km±2km, ML3.4, MW3.5*
**ISC 22 13:20:54.0**±0.8, **31°.51S**±0°.03×**68°.61W**±0°.03, **h110**km±5km, **n49**, σ1**s46**/83, **San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SJA** | **San Juan** | **0.04** | **108** | *e*P | **Pn** | | **13 21 09.5** | **+0.2** |
| SJA | | | | *e*S | **Sn** | | **13 21 22.7** | **+2.0** |
| SJA | | | | IAML | | | 13 21 23.8 | |
| | comp=Z,1μm,0.2s | | | | | | | |
| **ZON** | **Zonda** | **0.07** | **242** | *e*P | **Pn** | | **13 21 09.2** | **-0.1** |
| ZON | | | | IAML | | | 13 21 21.0 | |
| | comp=Z,731nm,0.2s | | | | | | | |
| ZON | | | | *e*S | | **Sn** | **13 21 21.1** | **+0.3** |
| **RTLL** | **Cerro Villicun** | **0.22** | **32** | *e*P | | **Sn** | **13 21 21.6** | **+0.4** |
| **RTCV** | **Cerro Valdivia** | **0.35** | **170** | *e*P | | **Pn** | **13 21 10.3** | **+0.2** |
| **RTLS** | **Leoncito** | **0.65** | **244** | *e*P | | **Pn** | **13 21 12.6** | **+0.3** |
| RTLS | | | | *e*S | | **Sn** | **13 21 23.9** | **-2.3** |
| RTLS | | | | IAML | | | 13 21 27.2 | |
| | comp=Z,2μm,0.2s | | | | | | | |
| **DOCA** | **Reserva Natura** | **0.69** | **324** | *e*P | | **Pn** | **13 21 12.7** | **-0.1** |
| DOCA | | | | *e*S | | **Sn** | **13 21 27.5** | **+0.6** |
| **ACCO** | **Cerro Coronel** | **1.00** | **337** | *e*P | | **Pn** | **13 21 16.1** | **+0.5** |
| ACCO | | | | IAML | | | 13 21 34.0 | |
| | comp=Z,520nm,0.2s | | | | | | | |
| **ASAL** | **Salagasta** | **1.09** | **190** | *e*P | | **Pn** | **13 21 17.1** | **+0.9** |
| ASAL | | | | IAML | | | 13 21 35.3 | |
| | comp=Z,521nm,0.5s | | | | | | | |
| **AVFE** | **Valle Fertil** | **1.31** | **50** | *e*P | | **Pn** | **13 21 19.5** | **+0.8** |
| AVFE | | | | *e*S | | **Sn** | **13 21 38.4** | **+1.1** |
| AVFE | | | | IAML | | | 13 21 40.3 | |
| | comp=Z,466nm,0.3s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **1.35** | **192** | *e*P | | **Pn** | **13 21 19.9** | **+0.7** |
| ARCO | | | | *e*S | | **Sn** | **13 21 37.0** | **-1.4** |
| ARCO | | | | IAML | | | 13 21 41.0 | |
| | comp=Z,895nm,0.3s | | | | | | | |
| **ACDV** | **Cuesta del Vie** | **1.41** | **342** | *e*P | | **Pn** | **13 21 20.5** | **+0.6** |
| ACDV | | | | IAML | | | 13 21 43.4 | |
| | comp=Z,240nm,0.3s | | | | | | | |
| ACDV | | | | *e*S | | **Sn** | **13 21 43.6** | **+4.1** |
| **AROD** | **Rodeo** | **1.53** | **331** | *e*P | | **Pn** | **13 21 22.3** | **+0.8** |
| AROD | | | | *e*S | | **Sn** | **13 21 43.0** | **+0.6** |
| **AAGR** | **Agrelo** | **1.58** | **187** | *e*P | | **Pn** | **13 21 22.6** | **+0.8** |
| AAGR | | | | *e*S | | **Sn** | **13 21 43.3** | **+0.2** |
| AAGR | | | | IAML | | | 13 21 44.8 | |
| | comp=Z,683nm,0.3s | | | | | | | |
| **ACHE** | **Chepes** | **1.70** | **79** | *e*P | | **Pn** | **13 21 24.6** | **+1.2** |
| ACHE | | | | *e*S | | **Sn** | **13 21 42.4** | **-3.4** |
| **CO03** | **El Pedregal** | **1.91** | **290** | *e*P | | **Pn** | **13 21 26.1** | **+0.2** |
| CO03 | | | | *e*S | | **Sn** | **13 21 50.9** | **+0.7** |
| CO03 | | | | IAML | | | 13 21 51.9 | |
| | comp=Z,821nm,0.3s | | | | | | | |

*BGR* ***22*** *13:27:40.4, 10°.62N×62°.63W, h33km, mb6.0, Ms4.5*
*VAO* ***22*** *13:27:43.9±0.7, 10°.78N×62°.89W, h52km±6km, mb5.8*
*NEIC* ***22*** *13:27:47.2, 10°.69N×62°.82W, h110km, Moment Tensor Solution. Duration: 4⁰0 Moment tensor: Scale 10^17Nm; Mrr2.93; Mθθ-0.93; Mφφ-2.00; Mrθ5.03; Mrφ-1.91; Mθφ-0.96; Fault plane solution: M₀5.80000×10^17 NP1:φ₁82.89000°, δ76.72000°, λ113.29000°. NP2:φ₂200.97000°, δ26.63000°, λ30.83000°. Principal axes: T 6.7890, Plg53.0000°, Azm20.0000°; N -1.9797, Plg23.0000°, Azm257.0000°; P -4.8093, Plg28.0000°, Azm154.0000°;*
*NEIC* ***22*** *13:27:47.2, 10°.59N×62°.92W, h110km*
*IPGP* ***22*** *13:27:47.0, 10°.58N×62°.92W, h110km, Mw5.8, Fault plane solution: NP1:φ₁92.00000°, δ73.00000°, λ116.00000°. NP2:φ₂212.00000°, δ31.00000°, λ34.00000°.*
*NEIC* ***22*** *13:27:47.2, 10°.59N×62°.92W, h91km*
*SVSA* ***22*** *13:27:47.0, 10°.66N×62°.93W, h108km, MW5.8(INMG)*
*NEIC* ***22*** *13:27:48.5±1.8, 10°.66N±0°.06×62°.93W±0°.07, h108km±1km, mb5.5/110, Mwb5.8/74, Mww5.8/50, Error ellipse: s-maj=11.4km s-min=10.0km az=127.0, Moment Tensor Solution. Moment tensor: Scale 10^17Nm; Mrr2.48; Mθθ-2.55; Mφφ0.07; Mrθ5.06; Mφθ-1.35; Mφr-0.37; Fault plane solution: M₀5.83000×10^17 NP1:φ₁90.75000°, δ76.90000°, λ104.11000°. NP2:φ₂222.80000°, δ19.17000°, λ43.68000°. Principal axes: T 5.8061, Plg56.0000°, Azm19.0000°; N 0.0395, Plg14.0000°, Azm267.0000°; P -5.8456, Plg31.0000°, Azm169.0000°;*
*MOS* ***22*** *13:27:48.7±1.0, 10°.79N×63°.03W, h123km, mb5.4/41, MS5.0/14 Error ellipse: s-maj=7.6km s-min=4.9km az=61.9*
*FUNV* ***22*** *13:27:49.9, 10°.62N×62°.85W, h82km, MW5.9*
*TRN* ***22*** *13:27:49.9, 10°.64N×62°.88W, h102km, MD6.0, Paria peninsula. Felt widely in Trinidad, Tobago and Grenada MMI IV, V. Felt also in St. Vincent and the Grenadines IV, V; Guayan and Saint Lucia MMI IV.*
*IDC* ***22*** *13:27:51.5±1.0, 10°.80N×63°.02W, h136km±8km, mb5.0/32, mbtmp5.4/33, MS4.6/57, Error ellipse: s-maj=9.1km s-min=8.4km az=102.0*
*GCMT* ***22*** *13:27:53.5±0.1, 10°.78N±0°.01×62°.82W±0°.01, h110km, MW5.8/150, Moment Tensor Solution. s143,c311; s150,c378; Duration: 1⁰9 Moment tensor: Scale 10^17 Nm; Mrr3.01±.05; Mθθ-2.52±.06; Mφφ-0.48±.06; Mrθ4.99±.04; Mrφ-2.24±.06; Mθr-0.81±.04; Best double couple: M₀6.17900×10^17 NP1:φ₁89.00000°, δ75.00000°, λ112.00000°. NP2:φ₂211.00000°, δ27.00000°, λ35.00000°. Principal axes: T 6.4480, Plg54.0000°, Azm27.0000°; N -0.5340, Plg22.0000°, Azm263.0000°; P -5.9100, Plg27.0000°, Azm162.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves,*

*cutoff=50s. Triangular moment-rate function*

**ISC 22 13:27:49.4**s0.2,**10°71.1**N0°03.4**63°00.0**W0°03.3,**h120**km±1km,
**h121**km:**pP-P**,**n1262**,σ1**864**/1553,**mb5.5**/279,**82C-51D**,
**Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.57** | **92** | *eP* | **Pn** | **13 28 15.6** | **-2.0** |
| TRN | | | | *eS* | **Sn** | **13 28 33.9** | **-5.2** |
| **PCRV** | **Puerto La Cruz** | **1.70** | **252** | ⇑*iP* | **Pn** | **13 28 19.7** | **+0.5** |
| **PCRV** | **Puerto La Cruz** | **1.70** | **252** | P | **Pn** | **13 28 19.9** | **+0.6** |
| | 3μm,0.2s,baz=62,slow=4.6,SNR=4653 | | | | | | |
| PCRV | | | | S | **Sn** | **13 28 41.9** | **0.0** |
| | 35μm,0.4s,baz=295,slow=17,SNR=30 | | | | | | |
| PCRV | | | | LR | LR | 13 29 01.0 | |
| | comp=Z,49μm,19.4s,slow=42 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **1.70** | **252** | *eP* | **Pn** | **13 28 19.8** | **+0.6** |
| PCRV | | | | *eS* | **Sn** | **13 28 41.4** | **-0.6** |
| **GRFF** | **Grenada Fort F** | **1.82** | **43** | *eP* | **Pn** | **13 28 19.3** | **-1.4** |
| GRFF | | | | *eS* | **Sn** | **13 28 41.5** | **-3.0** |
| **TBH** | **Brigand Hill** | **1.91** | **96** | *eP* | **Pn** | **13 28 19.9** | **-1.9** |
| **GRGR** | **Grenville** | **1.93** | **43** | | **Pn** | **13 28 20.0** | **-2.1** |
| **GRGR** | **Grenville** | **1.93** | **43** | *eP* | **Pn** | **13 28 20.7** | **-1.4** |
| GRGR | | | | *eS* | **Sn** | **13 28 43.8** | **-3.3** |
| **GRW** | **Mount Saint Ca** | **1.95** | **42** | *eP* | **Pn** | **13 28 21.0** | **-1.4** |
| GRW | | | | *eS* | **Sn** | **13 28 44.3** | **-3.2** |
| **GRHS** | **Sauteurs** | **2.01** | **41** | *eP* | **Pn** | **13 28 21.4** | **-1.6** |
| **GRSS** | **Sisters** | **2.08** | **40** | *eP* | **Pn** | **13 28 22.2** | **-1.7** |
| GRSS | | | | *eS* | **Sn** | **13 28 47.6** | **-2.8** |
| **TPR** | **Prospect** | **2.23** | **77** | *eP* | **Pn** | **13 28 24.2** | **-1.6** |
| **GCMP** | **Grenada, Carri** | **2.34** | **41** | *eP* | **Pn** | **13 28 25.6** | **-1.6** |
| **SVOC** | **Richmond Hill,** | **2.99** | **35** | *eP* | **Pn** | **13 28 34.4** | **-1.2** |
| SVOC | | | | *eS* | **Sn** | **13 29 08.8** | **-2.4** |
| **SVT** | **Saint Vincent** | **2.99** | **35** | *eP* | **Pn** | **13 28 34.1** | **-1.5** |
| **SVB** | **Belmont** | **3.07** | **34** | *eP* | **Pn** | **13 28 35.2** | **-1.4** |
| SVB | | | | *eS* | **Sn** | **13 29 10.0** | **-3.1** |
| **SVV** | **Soufriere Volc** | **3.13** | **34** | *eP* | **Pn** | **13 28 37.5** | **+0.1** |
| **SSV** | **Crater Summit** | **3.15** | **34** | *eP* | **Pn** | **13 28 37.6** | **-0.2** |
| **MERV** | **Las Mercedes** | **3.56** | **246** | ⇑*eP* | **Pn** | **13 28 42.3** | **-0.8** |
| **SLB** | **Belfond** | **3.64** | **31** | *eP* | **Pn** | **13 28 44.6** | **+0.3** |
| **FUNV** | **FUNVISIS** | **3.76** | **267** | *eP* | **Pn** | **13 28 47.2** | **+1.3** |
| **SLAC** | **Saint Lucia, A** | **3.78** | **33** | *eP* | **Pn** | **13 28 45.1** | **-1.0** |
| SLAC | | | | *eS* | **Sn** | **13 29 26.4** | **-3.5** |
| **SLBI** | **Saint Lucia, B** | **3.84** | **31** | *eP* | **Pn** | **13 28 45.9** | **-0.9** |
| SLBI | | | | *eS* | **Sn** | **13 29 28.4** | **-3.0** |
| **SLW** | **Petit Monier** | **3.86** | **31** | *eP* | **Pn** | **13 28 47.7** | **+0.6** |
| **TACV** | **Tcata** | **4.00** | **262** | *eP* | **Pn** | **13 28 49.4** | **+0.3** |
| **BCHC** | **Barbados, Cave** | **4.08** | **53** | *eP* | **Pn** | **13 28 49.0** | **-1.1** |
| **BBGH** | **Gun Hill** | **4.14** | **54** | Pn | **Pn** | **13 28 50.3** | **-0.6** |
| **BBGH** | **Gun Hill** | **4.14** | **54** | *eP* | **Pn** | **13 28 50.7** | **-0.2** |
| BBGH | | | | *eS* | **Sn** | **13 29 33.4** | **-5.3** |
| **BIM** | **Bigot** | **4.23** | **26** | | **Pn** | **13 28 51.0** | **-1.1** |
| **BIM** | **Bigot** | **4.23** | **26** | *eP* | **Pn** | **13 28 50.9** | **-1.1** |
| BIM | | | | *eS* | **Sn** | **13 29 38.3** | **-2.4** |
| **TRMF** | **Trois Ilets** | **4.25** | **26** | *eP* | **Pn** | **13 28 51.9** | **-0.5** |
| **MPOM** | **Morne Pois Mar** | **4.26** | **29** | | **Pn** | **13 28 51.4** | **-1.0** |
| **MPOM** | **Morne Pois Mar** | **4.26** | **29** | *eP* | **Pn** | **13 28 51.8** | **-0.7** |
| **FDF** | **Fort de France** | **4.39** | **24** | Pn | **Pn** | **13 28 53.2** | **-1.1** |
| **FDF** | **Fort de France** | **4.39** | **24** | P | **Pn** | **13 28 53.2** | **-1.1** |
| **FDF** | **Fort de France** | **4.39** | **24** | *eP* | **Pn** | **13 28 53.9** | **-0.4** |
| **PML** | **Morne Lenard** | **4.42** | **23** | *eP* | **Pn** | **13 28 54.1** | **-0.5** |
| **PCM** | **Pelee Case Pet** | **4.44** | **23** | *eP* | **Pn** | **13 28 54.4** | **-0.5** |
| **GBMF** | **Grand Be** | **4.44** | **24** | *eP* | **Pn** | **13 28 54.9** | **-0.1** |
| **CXM** | **Morne La Croix** | **4.45** | **23** | *eP* | **Pn** | **13 28 54.9** | **-0.3** |
| **SVN** | **Savane Anatole** | **4.48** | **23** | | **Pn** | **13 28 54.5** | **-1.0** |
| **SVN** | **Savane Anatole** | **4.48** | **23** | *eP* | **Pn** | **13 28 55.0** | **-0.5** |
| SVN | | | | *eS* | **Sn** | **13 29 42.5** | **-4.3** |
| **ILAM** | **Ilet Lapin Mar** | **4.54** | **27** | | **Pn** | **13 28 55.0** | **-1.3** |
| **ILAM** | **Ilet Lapin Mar** | **4.54** | **27** | *eP* | **Pn** | **13 28 55.5** | **-0.7** |
| ILAM | | | | *eS* | **Sn** | **13 29 44.1** | **-4.1** |
| **BENV** | **Beln** | **4.59** | **261** | *eP* | **Pn** | **13 28 58.0** | **+1.1** |
| **CACV** | **CAICARA DEL OR** | **4.69** | **229** | ⇑*iP* | Pn | 13 28 52.7 | -5.5 |
| **TURV** | **Turiamo** | **4.77** | **267** | ‖*eP* | **Pn** | **13 28 59.5** | **+0.3** |
| **LUEV** | **Luepa** | **5.06** | **162** | ‖*iP* | **Pn** | **13 29 00.5** | **-2.9** |
| **BAUV** | **El Baul** | **5.27** | **251** | Pn | **Pn** | **13 29 05.3** | **-0.8** |
| **BAUV** | **El Baul** | **5.27** | **251** | *eP* | **Pn** | **13 29 05.5** | **-0.6** |
| **BAUV** | **El Baul** | **5.27** | **251** | *eP* | **Pn** | **13 29 06.2** | **+0.1** |
| BAUV | | | | *eS* | **Sn** | **13 30 03.2** | **-2.6** |
| **TDBA** | **Terre de Bas,** | **5.28** | **14** | *eP* | **Pn** | **13 29 06.3** | **+0.1** |
| **TDBA** | **Terre de Bas,** | **5.28** | **14** | *eP* | **Pn** | **13 29 07.3** | **+1.1** |
| TDBA | | | | *eS* | **Sn** | **13 30 04.0** | **-2.0** |
| **MAPV** | **Macapo** | **5.45** | **261** | *eP* | **Pn** | **13 29 08.6** | **+0.2** |
| **MAGL** | **Barre de l'ile** | **5.47** | **18** | | **Pn** | **13 29 08.8** | **0.0** |
| **MAGL** | **Barre de l'ile** | **5.47** | **18** | *eP* | **Pn** | **13 29 09.1** | **+0.3** |
| **CBE** | **Ff, Capester** | **5.50** | **14** | | **Pn** | **13 29 08.7** | **-0.5** |
| **CBE** | **Ff, Capester** | **5.50** | **14** | *eP* | **Pn** | **13 29 10.6** | **+1.5** |
| **GDHS** | **Morne Mazeau,** | **5.66** | **12** | | **Pn** | **13 29 11.1** | **-0.3** |
| **JACV** | **Jacura** | **5.74** | **274** | *eP* | **Pn** | **13 29 13.5** | **+0.8** |
| **GDSD** | **La Desirade Is** | **5.88** | **18** | Pn | **Pn** | **13 29 13.5** | **-0.8** |
| **ABD** | **La Joyeuse, An** | **5.92** | **14** | | **Pn** | **13 29 14.8** | **0.0** |
| **ABD** | **La Joyeuse, An** | **5.92** | **14** | *eP* | **Pn** | **13 29 15.8** | **+1.0** |
| **HATO** | **Hato, Curacao** | **6.03** | **285** | | **Pn** | **13 29 15.4** | **-0.8** |
| **MBWH** | | **6.05** | **7** | *eP* | **Pn** | **13 29 17.3** | **+0.7** |
| **MBFL** | **Flemmings, Mon** | **6.05** | **7** | *eP* | **Pn** | **13 29 17.3** | **+0.6** |
| **TEPV** | **Terepaima** | **6.14** | **264** | *eP* | **Pn** | **13 29 17.8** | **-0.1** |
| **ANBD** | **Bethesda, Anti** | **6.42** | **11** | *eP* | **Pn** | **13 29 22.0** | **+0.5** |
| ANBD | | | | *eS* | **Sn** | **13 30 29.6** | **-3.8** |
| **SKOC** | **St. Kitts, UWI** | **6.55** | **2** | *eP* | **Pn** | **13 29 22.8** | **-0.6** |
| SKOC | | | | *eS* | **Sn** | **13 30 34.4** | **-2.3** |
| **SKI** | **Saint Kitts** | **6.59** | **2** | *eP* | **Pn** | **13 29 25.2** | **+1.3** |
| **SEUS** | **St. Eustatius** | **6.75** | **0** | | **Pn** | **13 29 26.3** | **+0.3** |
| **SABA** | **Saba** | **6.88** | **358** | | **Pn** | **13 29 27.9** | **+0.1** |
| **ANWB** | **Willy Bob** | **7.02** | **9** | | **Pn** | **13 29 29.2** | **-0.4** |
| **ANWB** | **Willy Bob** | **7.02** | **9** | *eP* | **Pn** | **13 29 30.2** | **+0.6** |
| ANWB | | | | *eS* | **Sn** | **13 30 43.4** | **-4.6** |
| **SMRT** | **St. Maarten** | **7.30** | **359** | | **Pn** | **13 29 33.2** | **-0.3** |
| **SDV** | **Santo Domingo** | **7.74** | **257** | Pn | **Pn** | **13 29 38.0** | **-1.6** |
| **SDV** | **Santo Domingo** | **7.74** | **257** | P | **Pn** | **13 29 38.6** | **-1.1** |
| | 230nm,0.7s,baz=80,slow=11,SNR=93 | | | | | | |
| SDV | | | | S | **Sn** | **13 31 00.6** | **-5.3** |
| | 3μm,0.4s,baz=54,slow=23,SNR=29 | | | | | | |
| SDV | | | | LR | LR | 13 33 39.8 | |
| | comp=Z,7μm,19.4s,baz=60,slow=45 | | | | | | |
| **SDV** | **Santo Domingo** | **7.74** | **257** | *eP* | **Pn** | **13 29 38.5** | **-1.1** |
| **IGPR** | **InterUniversit** | **7.82** | **338** | Pn | **Pn** | **13 29 39.4** | **-1.1** |
| **PDPR** | **Patillas Dam,** | **7.84** | **338** | | **Pn** | **13 29 39.7** | **-1.0** |
| **HUMP** | **Col San Antoni** | **7.89** | **340** | Pn | **Pn** | **13 29 40.8** | **-0.6** |
| **OBIP** | **Obispado Ponce** | **8.09** | **335** | | **Pn** | **13 29 43.8** | **-0.3** |
| **CELP** | **Cerrillos** | **8.11** | **335** | | **Pn** | **13 29 43.8** | **-0.5** |
| **SOCV** | **Socops** | **8.12** | **253** | ‖*iP* | **Pn** | **13 29 43.5** | **-1.1** |
| **GCPR** | **Guaynabo City** | **8.13** | **339** | | **Pn** | **13 29 46.0** | **+1.4** |
| **CRPR** | **Cabo Rojo, PR** | **8.28** | **332** | | **Pn** | **13 29 48.4** | **+1.8** |
| **AOPR** | **Arecibo Observ** | **8.42** | **335** | | **Pn** | **13 29 49.0** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **8.42** | **335** | *eP* | **Pn** | **13 29 49.6** | **+1.0** |
| **EMPR** | **Esperanza - Ma** | **8.45** | **337** | | **Pn** | **13 29 50.1** | **+1.2** |
| **PRSN** | **Puerto Rico Se** | **8.48** | **332** | | **Pn** | **13 29 51.0** | **+1.6** |
| **BOAV** | **Boa Vista** | **8.61** | **163** | Pn | **Pn** | **13 29 47.3** | **-3.9** |
| **BOAV** | **Boa Vista** | **8.61** | **163** | *eP* | **Pn** | **13 29 47.1** | **-4.1** |
| **PCDR** | **Punta Cana, DR** | **9.35** | **327** | Pn | **Pn** | **13 30 02.6** | **+1.5** |
| **MCQV** | **Machiques** | **9.41** | **267** | *eP* | **Pn** | **13 30 01.9** | **-0.1** |
| **CAPV** | **Capacho** | **9.62** | **254** | ‖*eP* | **Pn** | **13 30 04.2** | **-0.9** |
| **MDP** | **Montagnes des** | **11.67** | **118** | P | Pn | 13 30 27.1 | -5.2 |
| | 315nm,0.4s,baz=308,slow=15,SNR=236 | | | | | | |
| MDP | | | | S | Sn | 13 32 26.5 | -14 |
| | 5μm,0.7s,baz=51,slow=22,SNR=24 | | | | | | |
| MDP | | | | LR | LR | 13 35 46.9 | |
| | comp=Z,6μm,20.5s,baz=312,slow=40 | | | | | | |
| **ROSC** | **El Rosal** | **12.64** | **243** | | **Pn** | **13 30 44.1** | **-1.3** |
| **ROSC** | **El Rosal** | **12.64** | **243** | P | **Pn** | **13 30 46.1** | **+0.7** |
| | 74nm,0.3s,baz=103,slow=10.0,SNR=18 | | | | | | |
| ROSC | | | | LR | LR | 13 36 03.0 | |
| | comp=Z,9μm,18.1s,baz=72,slow=39 | | | | | | |
| **MACA** | **Manacapuru-AM** | **13.97** | **170** | | **Pn** | **13 30 58.5** | **-3.7** |
| **MACA** | **Manacapuru-AM** | **13.97** | **170** | *eP* | **Pn** | **13 30 58.8** | **-3.4** |
| **TEFE** | **Tefe** | **14.21** | **187** | *eP* | **Pn** | **13 31 02.2** | **-3.1** |
| **GTBY** | **Guantanamo Bay** | **14.84** | **310** | ‖*iP* | **P** | **13 31 15.9** | **-0.1** |
| **NMDO** | **Nuevo Mundo** | **15.13** | **312** | | **Pn** | **13 31 17.7** | **+0.8** |
| **STH** | **Stony Hill** | **15.25** | **300** | *i* P | **P** | **13 31 25.4** | **+4.8** |
| **MAL2** | **Monte Alegre,** | **15.38** | **145** | | **Pn** | **13 31 15.9** | **-4.3** |
| **MCPB** | **Macapa, AP** | **15.46** | **135** | *eP* | **Pn** | **13 31 15.7** | **-5.4** |
| **CHIV** | **Chivirico** | **15.88** | **307** | P | **Pn** | **13 31 26.7** | **+0.5** |
| **MTDJ** | **Mount Denham** | **15.93** | **300** | P | **P** | **13 31 28.8** | **+0.6** |
| **MTDJ** | **Mount Denham** | **15.93** | **300** | ‖*iP* | **P** | **13 31 32.4** | **+4.2** |
| **TBTG** | **Tabatinga, AM** | **16.32** | **205** | Pn | **Pn** | **13 31 29.8** | **-1.8** |
| **TBTG** | **Tabatinga, AM** | **16.32** | **205** | *eP* | **Pn** | **13 31 30.1** | **-1.6** |
| **NPGB** | **Novo Progresso** | **19.20** | **156** | *eP* | **P** | **13 32 04.2** | **+0.2** |
| **BRU2** | **Volcan** | **19.50** | **266** | | **P** | **13 32 08.0** | **+0.5** |
| **SAML** | **Samuel** | **19.53** | **181** | *eP* | **P** | **13 32 08.4** | **+0.8** |
| **TMAB** | **Tom-Au,PA,Br** | **19.71** | **130** | *eP* | **P** | **13 32 10.9** | **+1.3** |
| **ETMB** | **Extrema** | **20.64** | **189** | *eP* | **P** | **13 32 20.4** | **+0.9** |
| **LCR2** | **La Lucha 2** | **20.70** | **269** | P | Pn | 13 32 22.8 | -1.2 |
| **CZSB** | **Cruzeiro do Su** | **20.71** | **208** | P | **P** | **13 32 20.5** | **+0.2** |
| **CZSB** | **Cruzeiro do Su** | **20.71** | **208** | *eP* | **P** | **13 32 21.9** | **+1.6** |
| **PRPB** | **Parauapebas** | **21.29** | **141** | *eP* | **P** | **13 32 27.1** | **+0.5** |
| **CAMR** | **Camarioca** | **21.42** | **307** | P | **P** | **13 32 29.5** | **+1.7** |
| **JTS** | **Las Juntas de** | **21.59** | **271** | P | **P** | **13 32 31.8** | **+1.9** |
| **JTS** | **Las Juntas de** | **21.59** | **271** | P | **P** | **13 32 30.2** | **+0.3** |
| | 3.4nm,0.4s,baz=90,slow=15,SNR=1.6 | | | | | | |
| **JTS** | **Las Juntas de** | **21.59** | **271** | P | **P** | **13 32 31.8** | **+1.9** |
| **ACON** | **Acoyapa** | **21.78** | **275** | P | **P** | **13 32 34.5** | **+2.7** |
| **SOR** | **Soroa** | **22.59** | **305** | P | **P** | **13 32 41.0** | **+1.1** |
| **SOR** | **Soroa** | **22.59** | **305** | P | **P** | **13 32 41.0** | **+1.1** |
| **CLDB** | **Colider** | **22.60** | **161** | *eP* | **P** | **13 32 40.6** | **+0.5** |
| **PDRB** | **Porto dos Gac** | **23.03** | **164** | *eP* | **P** | **13 32 45.2** | **+0.9** |
| **ATAH** | **Atahualpa** | **23.43** | **222** | P | **P** | **13 32 50.6** | **+2.1** |
| | 313nm,0.9s,baz=28,slow=5.0,SNR=158 | | | | | | |
| ATAH | | | | LR | LR | 13 43 36.4 | |
| | comp=Z,4μm,19.2s,baz=45,slow=40 | | | | | | |
| | 313nm,0.9s | | | | | | |
| **CRIN** | **San Cristobal** | **23.64** | **277** | P | **P** | **13 32 49.8** | **-0.2** |
| **TGUH** | **Tegucigalpa,Un** | **23.94** | **280** | P | **P** | **13 32 53.5** | **+0.7** |
| **DWPF** | **Disney Wildern** | **24.48** | **318** | P | **P** | **13 32 58.9** | **+1.6** |
| **SMTB** | **Santa Maria do** | **24.76** | **141** | *eP* | **P** | **13 33 01.1** | **+1.0** |
| **SNDB** | **Serra Nova Dou** | **25.35** | **152** | *eP* | **P** | **13 33 06.9** | **+1.5** |
| **ESQI** | **Esquipulas** | **25.98** | **281** | P | **P** | **13 33 12.4** | **+1.1** |
| ESQI | | | | IAmb | IAmb | 13 33 56.8 | |
| | comp=Z,202nm,1.1s | | | | | | |
| **PTLB** | **Pontes e Lacer** | **26.27** | **172** | P | **P** | **13 33 13.3** | **-0.3** |
| **PTLB** | **Pontes e Lacer** | **26.27** | **172** | *eP* | **P** | **13 33 14.9** | **+1.3** |
| **NNA** | **Nana** | **26.41** | **212** | P | **P** | **13 33 16.0** | **+1.0** |
| NNA | | | | IAmb | IAmb | 13 33 17.6 | |
| | comp=Z,196nm,0.9s | | | | | | |
| **NNA** | **Nana** | **26.41** | **212** | P | **P** | **13 33 16.2** | **+1.2** |
| | comp=Z,146nm,0.8s,baz=17,slow=7.9,SNR=49 | | | | | | |
| NNA | | | | LR | LR | 13 44 59.9 | |
| | comp=Z,2μm,19.6s,baz=20,slow=39 | | | | | | |
| | comp=Z,146nm,0.8s | | | | | | |
| **NNA** | **Nana** | **26.41** | **212** | *ceP* | **P** | **13 33 16.1** | **+1.1** |
| NNA | | | | pmax | pmax | | |
| | comp=Z,418nm,1.0s | | | | | | |
| **SIV** | **San Ignacio** | **26.59** | **176** | LR | LR | 13 44 33.2 | |
| | comp=Z,4μm,21.2s,baz=3.0,slow=38 | | | | | | |
| **PETF** | **Flores** | **26.80** | **286** | P | **P** | **13 33 18.2** | **-0.2** |
| **APG** | **El Apazote** | **27.11** | **282** | P | **P** | **13 33 23.6** | **+2.0** |
| | comp=Z,0.9nm,0.6s,baz=336,slow=17,SNR=11 | | | | | | |
| APG | | | | LR | LR | 13 44 32.8 | |
| | comp=Z,106nm,21.8s,baz=102,slow=37 | | | | | | |
| **LPAZ** | **La Paz** | **27.30** | **191** | P | **P** | **13 33 22.5** | **-1.1** |
| **LPAZ** | **La Paz** | **27.30** | **191** | P | **P** | **13 33 25.1** | **+1.6** |
| | comp=Z,33nm,0.9s,baz=10,slow=9.9,SNR=41 | | | | | | |
| LPAZ | | | | LR | LR | 13 44 55.3 | |
| | comp=Z,4μm,20.1s,baz=357,slow=37 | | | | | | |
| | comp=Z,33nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **27.30** | **191** | *eP* | **P** | **13 33 25.2** | **+1.6** |
| **SALV** | **Santo Antonio** | **27.41** | **165** | *eP* | **P** | **13 33 25.3** | **+1.5** |
| **BBSD** | **Serra de San D** | **27.82** | **175** | *eP* | **P** | **13 33 29.0** | **+1.6** |
| **Y57A** | **Sumter** | **28.14** | **328** | P | **P** | **13 33 31.5** | **+1.2** |
| Y57A | | | | IAmb | IAmb | 13 33 33.1 | |
| | comp=Z,70nm,0.6s | | | | | | |
| **NBPB** | **Pedra_Branca-C** | **28.35** | **124** | *eP* | **P** | **13 33 33.8** | **+1.4** |
| **ARAG** | **Araguaiana, MT** | **28.48** | **157** | *eP* | **P** | **13 33 35.1** | **+1.6** |
| **BIRD** | **Birdtown, Kers** | **28.67** | **329** | P | **P** | **13 33 34.8** | **-0.2** |
| BIRD | | | | IAmb | IAmb | 13 34 21.0 | |
| | comp=Z,110nm,1.3s | | | | | | |
| **PB18** | **Visviri** | **28.84** | **193** | P | **P** | **13 33 37.8** | **+0.7** |
| PB18 | | | | IAmb | IAmb | 13 34 26.4 | |
| | comp=Z,138nm,1.1s | | | | | | |
| **V58A** | **Windy Hill, Pi** | **28.95** | **332** | P | **P** | **13 33 38.3** | **+0.9** |
| V58A | | | | IAmb | IAmb | 13 34 22.4 | |
| | comp=Z,156nm,1.6s | | | | | | |
| **SDBA** | **SAO DESIDERIO** | **29.16** | **141** | *eP* | **P** | **13 33 40.0** | **+0.5** |
| **T59A** | **Double "B" Far** | **29.27** | **336** | P | **P** | **13 33 41.0** | **+0.8** |
| T59A | | | | IAmb | IAmb | 13 33 43.9 | |
| | comp=Z,184nm,1.9s | | | | | | |
| **KMSC** | **Kings Mountain** | **29.50** | **328** | P | **P** | **13 33 42.4** | **+0.1** |
| **U56A** | **King** | **29.99** | **331** | P | **P** | **13 33 47.5** | **+0.9** |
| U56A | | | | IAmb | IAmb | 13 34 31.9 | |
| | comp=Z,134nm,1.5s | | | | | | |
| **BDFB** | **Brasilia** | **30.09** | **150** | P | **P** | **13 33 48.2** | **+0.4** |
| BDFB | | | | IAmb | IAmb | 13 33 52.1 | |
| | comp=Z,70nm,0.8s | | | | | | |
| **BDFB** | **Brasilia** | **30.09** | **150** | P | **P** | **13 33 50.3** | **+2.6** |
| | comp=Z,65nm,0.8s,baz=311,slow=12,SNR=61 | | | | | | |
| BDFB | | | | LR | LR | 13 46 18.1 | |
| | comp=Z,7μm,21.2s,baz=325,slow=37 | | | | | | |
| | comp=Z,65nm,0.8s | | | | | | |
| **250A** | **Grady** | **30.17** | **318** | P | **P** | **13 33 49.5** | **+1.3** |
| 250A | | | | IAmb | IAmb | 13 33 52.6 | |
| | comp=Z,85nm,0.7s | | | | | | |
| **BRAL** | **Brewton** | **30.19** | **316** | P | **P** | **13 33 49.5** | **+1.1** |
| **V53A** | **Saluda** | **30.68** | **327** | P | **P** | **13 33 53.0** | **+0.2** |
| **WUPA** | **West Chester U** | **31.19** | **341** | P | **P** | **13 33 59.1** | **+2.0** |
| **TKL** | **Tuckaleechee C** | **31.19** | **326** | LR | LR | 13 46 44.3 | |
| | comp=Z,799nm,20.6s,baz=113,slow=36 | | | | | | |
| **LRAL** | **Lakeview Retre** | **31.32** | **319** | P | **P** | **13 33 59.3** | **+0.9** |
| LRAL | | | | IAmb | IAmb | 13 34 01.5 | |
| | comp=Z,31nm,0.5s | | | | | | |
| **M65A** | **Busby, Falmout** | **31.46** | **349** | P | **P** | **13 34 00.6** | **+1.1** |
| | baz=165 | | | | | | |
| **Y49A** | **Blount Mountai** | **31.48** | **321** | P | **P** | **13 34 00.9** | **+1.2** |
| **HMBC** | **Humberstone** | **31.53** | **192** | P | **P** | **13 33 59.0** | **-1.4** |
| HMBC | | | | IAmb | IAmb | 13 34 01.0 | |
| | comp=Z,72nm,0.9s | | | | | | |
| **CMIG** | **Matias Romero** | **31.57** | **285** | LR | LR | 13 50 02.3 | |
| | comp=Z,462nm,18.4s,baz=110,slow=42 | | | | | | |
| **RCBR** | **Riachuelo** | **31.58** | **120** | LR | LR | 13 47 47.6 | |
| | comp=Z,585nm,21.8s,baz=332,slow=38 | | | | | | |
| **RCBR** | **Riachuelo** | **31.58** | **120** | *eP* | **P** | **13 34 03.3** | **+2.3** |
| **RCBR** | **Riachuelo** | **31.58** | **120** | P | **P** | **13 34 04.1** | **+3.1** |
| RCBR | | | | pP | **pP** | **13 34 29.9** | **+2.6** |
| RCBR | | | | sP | **sP** | **13 34 42.3** | **+1.2** |
| **JANB** | **Januaria** | **31.59** | **144** | *eP* | **P** | **13 34 01.5** | **+0.6** |
| **AQDB** | **Aquidauana** | **31.81** | **167** | P | **P** | **13 34 03.3** | **+0.6** |
| **AQDB** | **Aquidauana** | **31.81** | **167** | *eP* | **P** | **13 34 04.3** | **+1.6** |
| **IPMB** | **Ipameri, GO** | **32.03** | **153** | *eP* | **P** | **13 34 06.3** | **+1.6** |
| **Q54A** | **Coxs Mills** | **32.35** | **334** | P | **P** | **13 34 09.1** | **+1.7** |
| **HRV** | **Adam Dziewonsk** | **32.55** | **348** | P | **P** | **13 34 09.4** | **+0.4** |
| HRV | | | | pmax | pmax | | |
| | comp=Z,148nm,1.5s | | | | | | |
| **SSPA** | **Standing Stone** | **32.59** | **339** | P | **P** | **13 34 10.7** | **+1.3** |
| **SSPA** | **Standing Stone** | **32.59** | **339** | P | **P** | **13 34 11.4** | **+2.1** |
| SSPA | | | | pP | **pP** | **13 34 37.3** | **+1.5** |
| SSPA | | | | sP | **sP** | **13 34 49.6** | **-0.1** |
| SSPA | | | | PcP | **PcP** | **13 36 51.9** | **-1.1** |
| **ITRB** | **Iturama** | **32.68** | **158** | *eP* | **P** | **13 34 11.6** | **+1.2** |
| **L61B** | **Northampton** | **32.74** | **347** | P | **P** | **13 34 11.6** | **+0.9** |
| | baz=162,SNR=7.8 | | | | | | |
| **NBCA** | **Caruaru-PE** | **32.78** | **124** | *eP* | **P** | **13 34 13.8** | **+2.3** |
| **FDPY** | **Filadelfia** | **32.91** | **175** | *eP* | **P** | **13 34 14.4** | **+2.1** |
| **CLTN** | **Cedars of Leba** | **32.95** | **324** | P | **P** | **13 34 13.2** | **+0.7** |
| **NBLA** | **Lagarto - SE** | **33.05** | **130** | *eP* | **P** | **13 34 14.2** | **+0.5** |
| **PMNB** | **Patos De Minas** | **33.34** | **151** | *eP* | **P** | **13 34 17.6** | **+1.4** |
| **P52A** | **Corning** | **33.46** | **333** | P | **P** | **13 34 18.3** | **+1.3** |
| | baz=144 | | | | | | |
| P52A | | | | S | **S** | **13 39 31.3** | **+1.6** |
| | baz=144 | | | | | | |
| **O53A** | **New Philadelph** | **33.56** | **334** | P | **P** | **13 34 19.4** | **+1.5** |
| | baz=146,SNR=7.3 | | | | | | |
| O53A | | | | S | **S** | **13 39 33.3** | **+2.1** |
| | baz=146 | | | | | | |
| **GDU01** | **Guandu, BA** | **33.60** | **136** | *eP* | **P** | **13 34 18.7** | **+0.3** |
| **LVC** | **Limon Verde** | **33.61** | **190** | P | **P** | **13 34 17.5** | **-1.4** |
| **LVC** | **Limon Verde** | **33.61** | **190** | LR | LR | 13 49 23.5 | |
| | comp=Z,3μm,21.6s,baz=350,slow=38 | | | | | | |
| **LVC** | **Limon Verde** | **33.61** | **190** | P | **P** | **13 34 17.5** | **-1.4** |
| LVC | | | | pmax | pmax | | |
| | comp=Z,36nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **33.61** | **190** | *eP* | **P** | **13 34 19.2** | **+0.4** |
| **LVC** | **Limon Verde** | **33.61** | **190** | P | **P** | **13 34 19.2** | **+0.4** |
| LVC | | | | pP | **pP** | **13 34 45.9** | **+0.5** |
| **WVT** | **Waverly** | **33.86** | **322** | P | **P** | **13 34 20.5** | **0.0** |
| **WVT** | **Waverly** | **33.86** | **322** | P | **P** | **13 34 20.5** | **0.0** |
| WVT | | | | pmax | pmax | | |
| | comp=Z,31nm,0.9s | | | | | | |
| **WVT** | **Waverly** | **33.86** | **322** | P | **P** | **13 34 21.6** | **+1.1** |
| WVT | | | | pP | **pP** | **13 34 47.8** | **+0.8** |
| WVT | | | | sP | **sP** | **13 35 01.1** | **+0.2** |
| WVT | | | | ScP | **ScP** | **13 40 28.9** | **-1.6** |
| **PCMB** | **Pacaembu** | **34.12** | **160** | *eP* | **P** | **13 34 24.8** | **+1.9** |
| **M53A** | **WI Miller and** | **34.34** | **336** | P | **P** | **13 34 26.0** | **+1.4** |
| | baz=148,SNR=12 | | | | | | |
| M53A | | | | S | **S** | **13 39 46.1** | **+2.9** |
| | baz=148 | | | | | | |
| **WCI** | **Wyandotte Cave** | **34.45** | **327** | P | **P** | **13 34 26.4** | **+0.9** |
| WCI | | | | IAmb | IAmb | 13 35 07.5 | |
| | comp=Z,107nm,1.5s | | | | | | |
| **WCI** | **Wyandotte Cave** | **34.45** | **327** | P | **P** | **13 34 26.4** | **+0.9** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,107nm,1.5s | | | | | | |
| **DIAM** | **Diamantina, MG** | **34.56** | **146** | *eP* | **P** | **13 34 27.7** | **+0.8** |
| **P49A** | **Miami Univ. Ec** | **34.60** | **330** | P | **P** | **13 34 28.0** | **+1.1** |
| | baz=140,SNR=18 | | | | | | |
| P49A | | | | S | **S** | **13 39 50.0** | **+2.7** |
| | baz=140 | | | | | | |
| **BB19B** | **Bebedouro** | **34.63** | **156** | *eP* | **P** | **13 34 29.0** | **+1.8** |
| **CMC01** | **Camacan, BA** | **34.81** | **138** | *eP* | **P** | **13 34 30.0** | **+1.1** |
| **PAPY** | **Pozo Azul** | **34.89** | **172** | *eP* | **P** | **13 34 30.8** | **+1.3** |
| **LMN** | **Caledonia Moun** | **35.06** | **358** | P | **P** | **13 34 30.4** | **-0.3** |
| LMN | | | | IAmb | IAmb | 13 34 59.9 | |
| | comp=Z,96nm,1.4s | | | | | | |
| **GUA01** | **Guaratinga, BA** | **35.52** | **139** | *eP* | **P** | **13 34 35.5** | **+0.6** |
| **S44A** | **Carbondale** | **35.75** | **323** | P | **P** | **13 34 37.6** | **+0.9** |
| **LDASE** | **Londrina, Braz** | **35.83** | **161** | *eP* | **P** | **13 34 39.1** | **+1.6** |
| **DELO** | **Deloro Mine** | **35.98** | **342** | P | **P** | **13 34 39.6** | **+1.0** |
| **HKT** | **Hockley** | **36.06** | **307** | *c iP* | **P** | **13 34 40.7** | **+1.3** |
| HKT | | | | pmax | pmax | | |
| | comp=Z,66nm,1.4s | | | | | | |
| **BSCB** | **Bom Sucesso** | **36.24** | **150** | *eP* | **P** | **13 34 42.9** | **+1.7** |
| **NAN01** | **Guarapari, ES** | **36.26** | **141** | *eP* | **P** | **13 34 42.0** | **+0.7** |
| **SJMB** | **Sao Joao De Ma** | **36.29** | **143** | *eP* | **P** | **13 34 42.7** | **+1.2** |
| **FRTB** | **Fartura** | **36.30** | **159** | *eP* | **P** | **13 34 43.4** | **+1.8** |
| **FCAR** | **Ozark Folk Cen** | **36.41** | **318** | P | **P** | **13 34 42.2** | **-0.1** |
| **BATG** | **Bathurst New B** | **36.54** | **356** | P | **P** | **13 34 44.1** | **+0.8** |
| BATG | | | | IAmb | IAmb | 13 34 45.8 | |
| | comp=Z,74nm,1.4s | | | | | | |
| **VAO** | **Valinhos** | **37.00** | **155** | *eP* | **P** | **13 34 49.7** | **+2.2** |
| **CCM** | **Cathedral Cave** | **37.18** | **322**

comp=Z,447nm,1.2s
**PGRON Lagoa das Cont 43.16 45 *e*P P 13 35 40.9 +2.6**
comp=Z,544nm,1.3s
**BART Pico Bartolome 43.30 45 *e*P P 13 35 41.9 +2.4**
comp=Z,414nm,1.1s
**ECSD EROS Data Cent 43.91 325 P P 13 35 43.1 -1.0**
**SCHQ Schefferville 44.12 357 P P 13 35 46.0 +0.3**
comp=Z,34nm,0.5s,baz=184,slow=6.3,SNR=76
SCHQ LR LR 13 54 46.0
comp=Z,1µm,19.1s,baz=173,slow=37
comp=Z,34nm,0.5s
**EYMN Ely 44.17 333 P P 13 35 45.6 -0.5**
EYMN IAmb IAmb 13 35 48.8
comp=Z,51nm,0.7s
**MT16 CCHEN 44.47 189 P P 13 35 48.4 -0.3**
MT16 IAmb IAmb 13 35 50.6
comp=Z,194nm,1.4s
**MT01 Popeta 45.01 190 P P 13 35 52.1 -0.9**
**T25A Trinidad 45.58 312 P P 13 35 57.6 -0.1**
T25A IAmb IAmb 13 36 40.0
comp=Z,135nm,1.4s
**T25A Trinidad 45.58 312 P P 13 35 58.0 +0.3**
baz=115,SNR=39
T25A S S 13 42 31.3 0.0
baz=115
**ANMO Albuquerque 46.27 309 P P 13 36 03.9 +0.7**
**ANMO Albuquerque 46.27 309 P P 13 36 04.3 +1.1**
comp=Z,42nm,0.8s,baz=212,slow=8.3,SNR=57
ANMO LR LR 13 58 47.6
comp=Z,676nm,18.1s,baz=216,slow=40
comp=Z,42nm,0.8s
**ANMO Albuquerque 46.27 309*c i*P P 13 36 04.6 +1.4**
ANMO pmax pmax
comp=Z,22nm,0.8s
**ANMO Albuquerque 46.27 309 P P 13 36 04.3 +1.1**
ANMO pP **pP 13 36 32.7 +1.7**
ANMO sP **sP 13 36 45.1 +0.6**
ANMO ScP **ScP 13 41 15.8 -3.4**
**Y22D IRIS PASSCAL I 46.33 307 P P 13 36 04.9 +1.3**
baz=110
Y22D S S 13 42 46.0 +4.0
baz=110
**SLBS Sierra La Lagu 46.47 292 P P 13 36 06.3 +1.6**
SLBS IAmb IAmb 13 36 08.1
comp=Z,65nm,0.7s
**SLBS Sierra La Lagu 46.47 292 P P 13 36 06.5 +1.7**
SLBS pP **pP 13 36 35.2 +2.7**
SLBS sP **sP 13 36 47.3 +1.2**
**121A Cookes Peak, D 46.53 305 P P 13 36 06.3 +1.1**
baz=108,SNR=38
121A S S 13 42 49.2 +4.2
baz=108
**MACI Morro de la Ar 46.85 61 P P 13 36 08.4 +0.6**
**Q24A Divide 46.87 314 P P 13 36 07.5 -0.5**
baz=116,SNR=11
Q24A S S 13 42 50.1 +0.1
baz=116
**PMOZ Porto Moniz, M 47.43 55 *e*P P 13 36 14.9 +2.8**
comp=Z,575nm,1.9s
**PMOZ Porto Moniz, M 47.43 55 *e*PP PP** 13 38 04.1 -0.4
PMOZ *e*S **S 13 42 59.8 +2.2**
PMOZ A A 13 44 26.3
comp=Z,398nm,18.0s
**S22A 4UR Ranch, Cre 47.58 312 P P 13 36 13.6 +0.1**
baz=113,SNR=19
**FUL Funchal 47.62 55 *e*P P 13 36 14.9 +1.4**
**PMAR Madeira 47.63 55 *e*P P 13 36 16.1 +2.3**
comp=Z,302nm,1.3s
**PMAR Madeira 47.63 55 *e*PP PP** 13 38 06.7 +0.3
**ULM Lac du Bonnet 47.83 332 P P 13 36 14.1 -0.6**
comp=Z,118nm,0.5s,baz=130,slow=7.8,SNR=267
ULM PcP **PcP 13 37 41.1 -0.6**
comp=Z,14nm,0.4s,baz=118,slow=7.6,SNR=1.6
ULM ScP **ScP 13 41 21.2 -3.8**
comp=Z,7.6nm,0.6s,baz=131,slow=3.8,SNR=4.4
ULM LR LR 13 54 40.2
comp=Z,1µm,21.5s,baz=81,slow=34
comp=Z,118nm,0.5s
**PMPS Porto Santo 48.19 55 *e*P P 13 36 18.9 +1.0**
comp=Z,458nm,1.6s
**PMPS Porto Santo 48.19 55 *e*PP PP** 13 38 11.6 +0.3
**PMPST Porto Santo, M 48.20 55 *e*P P 13 36 19.3 +1.4**
comp=Z,439nm,1.5s
**PMPST Porto Santo, M 48.20 55 *e*PP PP** 13 38 11.6 +0.3
**N23A Red Feather La 48.26 316 P P 13 36 18.6 -0.1**
baz=116,SNR=14
N23A S S 13 43 09.8 +0.3
baz=116
**TRQA Tornquist 48.52 179 P P 13 36 19.9 -0.3**
**TRQA Tornquist 48.52 179 P P 13 36 19.9 -0.3**
TRQA pmax pmax
comp=Z,42nm,1.0s
**RSSD Black Hills 48.55 321 P P 13 36 19.6 -1.2**
RSSD IAmb IAmb 13 36 23.6
comp=Z,28nm,0.6s
**RSSD Black Hills 48.55 321 P P 13 36 19.6 -1.2**
RSSD pmax pmax
comp=Z,28nm,0.6s
**RSSD Black Hills 48.55 321 P P 13 36 20.3 -0.4**
**W18A Petrified Fore 48.87 308 P P 13 36 23.7 +0.4**
baz=108
W18A S S 13 43 20.3 +2.3
baz=108
**TUC Tucson 48.90 304 P P 13 36 22.9 -0.5**
**TUC Tucson 48.90 304 P P 13 36 22.9 -0.5**
TUC pmax pmax
comp=Z,28nm,1.2s
**TUC Tucson 48.90 304 P P 13 36 24.5 +1.1**
TUC pP **pP 13 36 53.2 +1.7**
TUC sP **sP 13 37 05.3 +0.3**
**214A Organ Pipe Nat 50.49 303 P P 13 36 36.5 +1.2**
baz=103,SNR=14
**PDAR Pinedale Array 51.50 317 P P 13 36 42.7 -0.4**
comp=Z,55nm,0.5s,baz=113,slow=9.5,SNR=303
PDAR ScP **ScP 13 41 38.1 -3.2**
comp=Z,1.8nm,0.6s,baz=119,slow=6.5,SNR=4.3
PDAR LR LR 13 59 05.1
comp=Z,636nm,20.6s,baz=82,slow=36
comp=Z,55nm,0.5s
**IVI Ivigtut 51.58 9 *i*P P 13 36 43.0 +0.1**
IVI IAmb IAmb 13 36 46.5
comp=Z,76nm,1.2s
**PLCA Paso Flores 51.65 187 P P 13 36 44.8 +0.9**
comp=Z,113nm,0.9s,baz=7.7,slow=8.5,SNR=136
PLCA LR LR 14 02 26.6
comp=Z,1µm,18.4s,baz=12,slow=40
comp=Z,113nm,0.9s
**PLCA Paso Flores 51.65 187 *e*P P 13 36 44.8 +0.9**
**PLCA Paso Flores 51.65 187 P P 13 36 44.6 +0.7**
PLCA pP **pP 13 37 14.2 +2.0**
**CTU Camp Tracy 52.23 314 P P 13 36 48.6 +0.2**
CTU IAmb IAmb 13 36 52.9
comp=Z,50nm,0.9s
**YMP Mirror Lake Pl 52.72 319 P P 13 36 51.7 -0.4**
YMP IAmb IAmb 13 37 06.1
comp=Z,29nm,0.7s
**H17A Grant Village 52.85 318 P P 13 36 53.7 +0.7**
baz=115,SNR=6.7
**FRB Frobisher Bay 53.10 357 LR LR** 14 00 09.7
comp=Z,1µm,18.6s,baz=174,slow=37
**FCC Fort Churchill 53.41 340 P P 13 36 55.8 -0.7**
**FCC Fort Churchill 53.41 340 P P 13 36 55.8 -0.7**
FCC pmax pmax
comp=Z,159nm,0.6s
**FFC Flin Flon 53.59 333 P P 13 36 56.9 -1.1**
FFC IAmb IAmb 13 36 59.0
comp=Z,50nm,0.7s
**FFC Flin Flon 53.59 333 P P 13 36 56.9 -1.1**
FFC pmax pmax
comp=Z,50nm,0.7s
**FFC Flin Flon 53.59 333 P P 13 36 57.2 -0.8**
FFC pP **pP 13 37 26.9 +0.5**
FFC sP **sP 13 37 39.4 -0.4**
FFC ScP **ScP 13 41 47.0 -2.8**
**TPFO Pinon Flats 53.84 304 P P 13 37 01.0 +0.7**
baz=102
TPFO S S 13 44 29.9 +3.6
baz=102
**PFO Pinyon Flats O 53.85 304 *i*P P 13 37 00.1 -0.2**
PFO pmax pmax
comp=Z,41nm,3.2s
**R11B Troy Canyon, C 54.30 310 P P 13 37 04.7 +1.1**
baz=106,SNR=24
R11B S S 13 44 35.9 +3.5
baz=106
**ELK Elko 54.74 313** LR LR 14 02 34.8

comp=Z,2µm,21.4s,baz=106,slow=38
**PFVI Vila Bisbo 55.20 52 *e*P P 13 37 10.8 +0.9**
comp=Z,165nm,1.9s
**PMAFR Mafra 55.31 50 P P 13 37 13.2 +2.5**
**LIS Lisbon 55.35 50 *e*P P 13 37 11.8 +0.9**
comp=Z,245nm,1.5s
**LIS Lisbon 55.35 50 *e*PP PP** 13 39 15.5 -0.4
**LIS Lisbon 55.35 50 *e*P P 13 37 11.3 +0.4**
LIS IAmb IAmb 13 37 14.7
comp=Z,284nm,1.4s
**LIS Lisbon 55.35 50 *e*P P 13 37 11.3 +0.4**
**MORF Marmelete 55.37 52 *e*P P 13 37 11.6 +0.3**
comp=Z,265nm,1.5s
**MORF Marmelete 55.37 52 *e*P P 13 37 11.5 +0.3**
MORF IAmb IAmb 13 37 14.4
comp=Z,246nm,1.2s
MORF *e*S **S 13 44 49.3 +2.8**
**MORF Marmelete 55.37 52 *e*P P 13 37 11.5 +0.3**
MORF *e*S **S 13 44 49.3 +2.8**
**PTEO Sao Teotonio 55.38 52 *e*P P 13 37 12.4 +1.2**
comp=Z,168nm,1.4s
**PNCL Nicolau / Gran 55.67 51 *e*P P 13 37 13.8 +0.6**
comp=Z,181nm,1.7s
**PSBE So Bento 55.83 49 *e*P P 13 37 13.6 -0.8**
comp=Z,215nm,1.6s
**PSBE So Bento 55.83 49 *e*PP PP** 13 39 19.8 -0.4
**MESJ Messejana 55.84 51 *e*P P 13 37 15.1 +0.6**
comp=Z,100nm,1.6s
**MESJ Messejana 55.84 51 *e*P P 13 37 14.8 +0.3**
MESJ IAmb IAmb 13 37 18.5
comp=Z,168nm,1.6s
MESJ *e*S **S 13 44 55.4 +2.8**
**MESJ Messejana 55.84 51 *e*P P 13 37 14.8 +0.3**
MESJ *e*S **S 13 44 55.4 +2.8**
**PBDV Barranco-do-Ve 55.92 52 *e*P P 13 37 17.3 +2.2**
comp=Z,131nm,1.7s
**PCVE Castro Verde 55.93 52 *e*P P 13 37 16.7 +1.6**
comp=Z,165nm,1.5s
**PCVE Castro Verde 55.93 52 *e*PP PP** 13 39 20.8 -0.3
**PVAQ Vaqueiros 56.12 52 *e*P P 13 37 18.6 +2.1**
comp=Z,145nm,1.7s
PVAQ *e*S **S 13 44 56.5 +0.1**
PVAQ *e*LQ LQ 13 51 30.1
PVAQ A A 13 59 01.2
comp=Z,522nm,20.0s
**PMTG Montargil 56.14 50 *e*P P 13 37 17.8 +1.2**
comp=Z,374nm,1.5s
**PMTG Montargil 56.14 50 *e*PP PP** 13 39 22.0 -0.9
**PBEJ Beja 56.15 51 *e*P P 13 37 18.7 +2.0**
comp=Z,162nm,1.7s
**PBEJ Beja 56.15 51 *e*PP PP** 13 39 23.8 +0.7
**EVO Evora 56.16 51 *e*P P 13 37 18.8 +2.0**
comp=Z,238nm,1.7s
**EVO Evora 56.16 51 *e*PP PP** 13 39 22.1 -1.0
**PCAS Casmilo, Conde 56.19 49 *e*P P 13 37 18.3 +1.3**
comp=Z,304nm,1.5s
**PCAS Casmilo, Conde 56.19 49 *e*PP PP** 13 39 23.5 +0.1
**COI Coimbra 56.30 49 *e*P P 13 37 20.4 +2.7**
comp=Z,481nm,1.4s
**NVAR Mina Array Bea 56.39 309 P P 13 37 18.7 +0.1**
**NVAR Mina Array Bea 56.39 309 P P 13 37 19.2 +0.6**
comp=Z,10nm,0.5s,baz=103,slow=7.0,SNR=133
NVAR ScP **ScP 13 41 58.0 -4.7**
comp=Z,1.1nm,0.6s,baz=108,slow=5.1,SNR=3.0
NVAR LR LR 14 04 43.2
comp=Z,636nm,18.4s,baz=102,slow=39
comp=Z,10nm,0.5s
**BCW Bitter Crk WRg 56.51 305 P P 13 37 20.4 +1.0**
BCW IAmb IAmb 13 37 22.9
comp=Z,26nm,0.7s
**COYC Coyhaique 56.61 188 P P 13 37 20.5 +0.8**
COYC pP **pP 13 37 49.4 +0.9**
**PVIS Viseu 56.81 48 *e*P P 13 37 22.3 +0.9**
comp=Z,157nm,1.4s
**PVIS Viseu 56.81 48 *e*PP PP** 13 39 29.7 +0.7
**PBAR Barrancos 56.82 51 *e*P P 13 37 22.8 +1.4**
comp=Z,181nm,1.6s
**SFJD Kangerlussuaq 56.84 6 P P 13 37 21.1 +0.1**
SFJD IAmb IAmb 13 37 22.6
comp=Z,104nm,1.4s
**SFJD Kangerlussuaq 56.84 6 LR LR** 14 00 32.6
comp=Z,498nm,19.9s,baz=195,slow=35
**SFJD Kangerlussuaq 56.84 6 P P 13 37 21.1 +0.1**
SFJD pmax pmax
comp=Z,104nm,1.4s
**SFJD Kangerlussuaq 56.84 6 *i*P P 13 37 21.9 +0.9**
SFJD IAmb IAmb 13 37 22.2
comp=Z,198nm,1.7s
**SFJD Kangerlussuaq 56.84 6 P P 13 37 21.8 +0.8**
**DY2G Dye2 56.85 8 *i*P P 13 37 19.4 -1.9**
DY2G IAmb IAmb 13 37 23.3
comp=Z,861nm,1.7s
**PMRV Marv??o 56.85 50 *e*P P 13 37 23.1 +1.4**
comp=Z,185nm,1.6s
PMRV *e*S **S 13 45 03.8 -2.2**
PMRV A A 13 54 23.2
comp=Z,292nm,20.0s
**PGAV Gavieira, Arco 56.89 47 *e*P P 13 37 23.1 +1.1**
comp=Z,188nm,1.6s
PGAV *e*S **S 13 45 12.6 +6.0**
PGAV A A 13 54 41.5
comp=Z,358nm,20.0s
**PCBR Castelo Branco 56.90 49 *e*P P 13 37 23.1 +1.2**
comp=Z,202nm,1.5s
**MTE Manteigas 56.99 49 *e*P P 13 37 24.3 +1.6**
comp=Z,181nm,1.6s
**MTE Manteigas 56.99 49 *e*PP PP** 13 39 30.2 -0.3
MTE *e*S **S 13 45 10.9 +3.1**
MTE A A 13 54 34.0
comp=Z,347nm,20.0s
**PCAB Cabril 56.99 47 *e*P P 13 37 24.1 +1.5**
comp=Z,144nm,1.9s
**POLO Lamas de Olo 57.07 47 *e*P P 13 37 24.7 +1.5**
comp=Z,104nm,1.8s
**PVRL Vila Real 57.10 48 *e*P P 13 37 24.7 +1.3**
**ISOG Isortoq, Green 57.22 12 *i*P P 13 37 21.7 -2.0**
ISOG IAmb IAmb 13 37 24.8
comp=Z,78nm,0.9s
**TIC Toumodi 57.39 89⇑*e*P P 13 37 26.7 +0.9**
comp=Z,47nm,1.1s
**LIC Lamto 57.44 89⇓*e*P P 13 37 27.8 +1.6**
comp=Z,189nm,1.1s
**BMO Blue Mountains 57.48 317 P P 13 37 25.3 -0.8**
**BMO Blue Mountains 57.48 317 P P 13 37 25.3 -0.8**
BMO pmax pmax
comp=Z,40nm,1.3s
**DBIC Dimbokro 57.55 89 P P 13 37 27.2 +0.3**
**DBIC Dimbokro 57.55 89 P P 13 37 27.6 +0.6**
comp=Z,38nm,0.9s,baz=274,slow=7.2,SNR=35
DBIC LR LR 13 59 15.1
comp=Z,260nm,21.8s,baz=272,slow=33
comp=Z,38nm,0.9s
**DBIC Dimbokro 57.55 89 ⇓P P 13 37 27.1 +0.2**
**DBIC Dimbokro 57.55 89 P P 13 37 27.7 +0.8**
DBIC sP **sP 13 38 10.9 +1.8**
**ANGG Ammassalik, Gr 57.55 12 *i*P P 13 37 24.8 -1.2**
ANGG IAmb IAmb 13 37 26.9
comp=Z,249nm,1.6s
**MVO Moncorvo 57.57 48 *e*P P 13 37 28.1 +1.4**
comp=Z,303nm,1.5s
MVO *e*S **S 13 45 17.4 +2.0**
MVO A A 13 59 48.2
comp=Z,347nm,18.0s
**KIC Kosan Boka 57.70 89⇑*e*P P 13 37 29.1 +1.1**
comp=Z,117nm,1.1s
**MDT Midelt 57.77 58 LR LR** 13 59 01.3
comp=Z,272nm,21.6s,baz=292,slow=32
**PBRG Braganca 57.94 47 *e*P P 13 37 30.6 +1.3**
comp=Z,136nm,1.8s
**NEW Newport 58.52 321 LR LR** 14 02 29.9
comp=Z,881nm,19.3s,baz=108,slow=36
**RPN Rapa Nui 58.60 229 LR LR** 13 59 12.9
comp=Z,527nm,21.6s,baz=57,slow=32
**VAL Valentia 59.12 35 P P 13 37 36.4 -0.8**
**PAB San Pablo 59.17 50 P P 13 37 38.6 +0.6**
**PAB San Pablo 59.17 50 ⇓P P 13 37 39.1 +1.1**
**PAB San Pablo 59.17 50 P P 13 37 39.0 +1.1**
PAB pP **pP 13 38 08.2 +1.3**
PAB PcP **PcP 13 38 24.6 -0.6**
**ESDC Sonseca Array 59.49 50 P P 13 37 40.9 +0.9**
**ESDC Sonseca Array 59.49 50 P P 13 37 41.2 +1.1**
comp=Z,105nm,1.1s,baz=259,slow=6.6,SNR=223
ESDC LR LR 14 00 41.2
comp=Z,326nm,19.3s,baz=257,slow=33
comp=Z,105nm,1.1s
**ESBB Sonseca Array 59.49 50 P P 13 37 40.3 +0.2**

**K04D Chiloquin, OR 59.95 313 P P 13 37 43.9 +0.7**
**IGLA Glengowla, Co 60.21 34 P P 13 37 45.0 +0.4**
**IGLA Glengowla, Co 60.21 34 *e*P P 13 37 44.9 +0.2**
**ICESG Greenland Ices 60.25 9 *i*P P 13 37 43.4 -1.7**
ICESG IAmb IAmb 13 37 46.1
comp=Z,279nm,1.2s
**UMMG Uummannaq 60.31 4 *i*P P 13 37 43.4 -1.6**
UMMG IAmb IAmb 13 37 45.8
comp=Z,133nm,1.4s
**YBH Yreka Blue Hor 60.44 312** LR LR 14 05 47.8
comp=Z,747nm,20.8s,baz=100,slow=38
**H04A Detroit Lake 60.76 315 P P 13 37 48.4 -0.2**
H04A IAmb IAmb 13 37 50.1
comp=Z,23nm,0.6s
**HUMO Hull Mountain 60.81 313 P P 13 37 48.7 -0.3**
**KHMM Horse Mountain 61.01 311 P P 13 37 51.2 +0.6**
**SOEG Soedalen 61.07 13 *i*P P 13 37 50.4 +0.3**
SOEG IAmb IAmb 13 38 01.3
comp=Z,68nm,1.2s
**BORG Borgarnes 61.21 19 P P 13 37 51.3 +0.1**
**BORG Borgarnes 61.21 19 P P 13 37 51.3 +0.1**
BORG pmax pmax
comp=Z,213nm,1.5s
**IWEX Carrickbyrne, 61.26 36 P P 13 37 50.8 -1.0**
**IWEX Carrickbyrne, 61.26 36 *e*P P 13 37 51.8 0.0**
**DSB Dublin 61.80 35 P P 13 37 53.9 -1.5**
**DSB Dublin 61.80 35 P P 13 37 56.2 +0.8**
**SBD Saint Breward 61.87 38 *e*P P 13 37 56.4 +0.5**
**IDGL Inch Island, C 61.88 32 P P 13 37 55.6 -0.3**
**IDGL Inch Island, C 61.88 32 *e*P P 13 37 55.6 -0.3**
**ILTH Belurgan, Co L 62.12 34 P P 13 37 56.6 -0.8**
**ILTH Belurgan, Co L 62.12 34 *e*P P 13 37 57.0 -0.5**
**HTL Hartland 62.13 38 *e*P P 13 37 58.4 +0.7**
HTL IAmb IAmb 13 38 01.0
comp=Z,291nm,1.3s
**EFI East Falkland 62.27 177 *i*P P 13 37 59.7 +1.3**
EFI pmax pmax
comp=Z,46nm,1.5s
**EFI East Falkland 62.27 177 P P 13 38 00.2 +1.8**
**RSBS Rosebush, Pemb 62.29 36 *e*P P 13 37 58.6 0.0**
RSBS IAmb IAmb 13 38 00.7
comp=Z,565nm,1.5s
**NLWA Neilton Lookou 62.58 318 P P 13 38 01.1 +0.3**
**WPS Cemaes, Angles 62.91 35 *e*P P 13 38 01.9 -0.9**
WPS IAmb IAmb 13 38 04.9
comp=Z,154nm,1.1s
**WLF1 Llynfaes 62.93 35 *e*P P 13 38 02.9 0.0**
**WME Myndd Eilian 63.02 35 *e*P P 13 38 04.6 +1.1**
**JSA Saint Aubin 63.02 40 *e*P P 13 38 04.1 +0.5**
JSA IAmb IAmb 13 38 06.0
comp=Z,323nm,1.5s
**WIM Isle of Man 63.07 34 *e*P P 13 38 05.1 +1.2**
**IOMK Kirk Michael 63.17 34 *e*P P 13 38 04.6 +0.2**
**TORD Torodi Ar. Bea 63.19 81 P P 13 38 05.5 +0.1**
comp=Z,12nm,0.4s,baz=290,slow=7.0,SNR=148
TORD PKP2bc **P'P'df 14 07 07.6 +2.4**
comp=Z,0.4nm,0.6s,baz=68,slow=3.6,SNR=3.6
comp=Z,12nm,0.4s
**LLW Llanuwchllyn 63.21 36 *e*P P 13 38 04.7 -0.1**
**GAL1 Galloway 63.30 33 *e*P P 13 38 05.0 -0.3**
**MCH1 Michaelchurch 63.33 37 *e*P P 13 38 05.5 -0.1**
MCH1 IAmb IAmb 13 38 07.4
comp=Z,257nm,1.6s
**MONM Monmouth 63.39 37 *e*P P 13 38 06.5 +0.5**
**LAWE Loch Awe, Argy 63.45 32 *e*P P 13 38 05.6 -0.7**
LAWE IAmb IAmb 13 38 07.9
comp=Z,212nm,1.7s
**YKA Yellowknife Ar 63.46 336 P P 13 38 04.9 -1.3**
comp=Z,45nm,0.6s,baz=174,slow=2.4,SNR=84
YKA LR LR 14 04 39.7
comp=Z,1µm,21.5s,baz=114,slow=35
comp=Z,45nm,0.6s
**FOEL Foel Wylfa 63.48 36 *e*P P 13 38 06.5 -0.1**
FOEL IAmb IAmb 13 38 08.7
comp=Z,182nm,1.2s
**HLM1 Long Mynd 63.55 36 *e*P P 13 38 06.8 -0.3**
HLM1 IAmb IAmb 13 38 09.8
comp=Z,529nm,1.4s
**SUMG Summit 63.56 8 *i*P P 13 38 07.0 -0.2**
SUMG IAmb IAmb 13 38 08.8
comp=Z,170nm,1.1s
**NEWG New Galloway 63.65 33 *e*P P 13 38 07.5 -0.1**
NEWG IAmb IAmb 13 38 09.4
comp=Z,314nm,1.5s
**KPL Plockton 63.73 31 *e*P P 13 38 07.2 -0.8**
**STRD Stroud 63.75 37 *e*P P 13 38 08.2 -0.1**
STRD IAmb IAmb 13 38 11.0
comp=Z,531nm,1.4s
**PGBU Glenifferbraes 63.76 32 *e*P P 13 38 08.1 -0.2**
PGBU IAmb IAmb 13 38 10.0
comp=Z,478nm,1.8s
**SWN1 Swindon 63.90 38 *e*P P 13 38 09.5 +0.2**
SWN1 IAmb IAmb 13 38 12.1
comp=Z,485nm,1.2s
**CEST Esterri de Car 63.91 48 P P 13 38 10.9 +1.1**
CEST IAmb IAmb 13 38 14.3
comp=Z,253nm,1.3s
**KULLO Kullorsuaq 63.93 2 *i*P P 13 38 09.0 -0.1**
KULLO IAmb IAmb 13 38 10.1
comp=Z,37nm,0.7s
**KESW Keswick, Cumbr 64.08 34 *e*P P 13 38 10.4 -0.1**
**STNC Stoke 64.12 36 *e*P P 13 38 10.6 -0.1**
**WOL Wolverton 64.19 38 *e*P P 13 38 11.1 -0.1**
**INVG Invergeldie, C 64.21 32 *e*P P 13 38 10.8 -0.5**
INVG IAmb IAmb 13 38 12.6
comp=Z,124nm,1.9s
**CBB Campbell River 64.22 321 P P 13 38 11.3 -0.1**
CBB IAmb IAmb 13 38 14.4
comp=Z,26nm,0.6s
**ESK Eskdalemuir 64.27 33 P P 13 38 12.0 +0.3**
ESK IAmb IAmb 13 38 14.7
comp=Z,51nm,1.2s
**ESK Eskdalemuir 64.27 33 P P 13 38 12.0 +0.3**
ESK pmax pmax
comp=Z,51nm,1.2s
**EKA Eskdalemuir Ar 64.30 33 P P 13 38 11.4 -0.5**
comp=Z,2.5nm,0.3s,baz=256,slow=5.5,SNR=39
comp=Z,2.5nm,0.3s
**HPK Haverah Park 64.71 35 *e*P P 13 38 14.5 -0.1**
HPK IAmb IAmb 13 38 17.2
comp=Z,441nm,1.6s
**EDMD Edmundbyers 64.79 34 *e*P P 13 38 14.5 -0.6**
**SCO Scoresbysund 64.98 14 *i*P P 13 38 17.2 +1.2**
SCO IAmb IAmb 13 38 17.6
comp=Z,112nm,1.6s
**MCD Coleburn Disti 65.02 31 *e*P P 13 38 15.2 -1.3**
MCD IAmb IAmb 13 38 17.6
comp=Z,210nm,1.4s
**GDLE Glaisdale, N Y 65.30 35 *e*P P 13 38 18.1 -0.2**
**CLF Chambon-Foret 65.61 42 P P 13 38 21.2 +0.7**
**WACR West Acre 65.67 37 *e*P P 13 38 19.4 -1.4**
**TULEG Thule 65.89 359 *i*P P 13 38 21.2 -0.6**
TULEG IAmb IAmb 13 38 22.5
comp=Z,41nm,0.8s
**HOLB Holberg 66.08 321 P P 13 38 23.5 -0.1**
HOLB IAmb IAmb 13 38 57.4
comp=Z,108nm,1.4s
**TAM Tamanrasset 66.22 70 P P 13 38 27.4 +2.3**
TAM pP **pP 13 38 57.2 +2.6**
**BBB Bella Bella 66.42 322** LR LR 14 08 10.0
comp=Z,461nm,18.3s,baz=102,slow=36
**KOTAN Kotaneelee Air 66.56 331 P P 13 38 26.4 +0.1**
baz=110,SNR=15
KOTAN S S 13 47 07.1 -0.4
baz=110
**SSB Saint Sauveur 66.68 45 P P 13 38 26.9 -0.6**
**SSB Saint Sauveur 66.68 45 P P 13 38 26.9 -0.6**
SSB pmax pmax
comp=Z,181nm,1.4s
**SSB Saint Sauveur 66.68 45 P P 13 38 28.4 +1.0**
SSB pP **pP 13 38 57.9 +0.8**
**TOAD Toad River Com 66.69 330 P P 13 38 27.4 +0.1**
baz=109,SNR=25
TOAD S S 13 47 09.7 +0.4
baz=109
**NEEM North Greenlan 67.02 3 *i*P P 13 38 27.0 -2.3**
NEEM IAmb IAmb 13 38 30.5
comp=Z,67nm,0.4s
**CASM Ain Smara 67.23 55 P P 13 38 34.1 +3.0**
**LIRD Liard River Hi 67.30 330 P P 13 38 31.3 +0.3**
baz=108,SNR=16
LIRD S S 13 47 14.7 -1.8
baz=108
**WRGLY Wrigley 67.42 335 P P 13 38 31.4 -0.3**
baz=112,SNR=39

WRGLY S **S** **13 47 16.3 -1.4**
baz=112
**CKFL Kef-Lekhel 67.42 55** P **P** **13 38 35.1 +2.7**
**DOU Dourbes 67.51 40** *d*P **P** **13 38 32.2 -0.4**
**CAEH 'Ain El Ouahch 67.55 55** P **P** **13 38 35.1 +2.0**
**BMRD Maredsous 67.66 40** *d*P **P** **13 38 33.5 +0.1**
comp=Z,47nm,1.3s
**BGES Gesves 67.88 40** *d*P **P** **13 38 35.0 +0.2**
**GRNB Grenville Isla 67.88 324** P **P** **13 38 34.9 +0.1**
GRNB IAmb IAmb 13 39 20.6
comp=Z,105nm,1.4s
**RCHB Rochefort 67.92 40** *d*P **P** **13 38 34.8 -0.3**
**CMAH Djebel Manchou 68.00 55** P **P** **13 38 37.3 +1.3**
**BCLA Clavier 68.02 40** *d*P **P** **13 38 35.8 +0.1**
**ABSA Djebel Ababsia 68.03 55** P **P** **13 38 38.7 +2.5**
**DBG Daneborg 68.04 11** *i*P **P** **13 38 34.6 -0.8**
DBG IAmb IAmb 13 38 37.1
comp=Z,37nm,0.6s
**BNI Bardonecchia 68.15 46** P **P** **13 38 37.1 +0.3**
BNI IAmb IAmb 13 38 40.2
comp=Z,156nm,1.4s
**BNI Bardonecchia 68.15 46** P **P** **13 38 37.1 +0.3**
BNI pmax pmax
comp=Z,156nm,1.5s
**RUBB Prince Rupert 68.15 324** P **P** **13 38 36.9 +0.5**
**BSTI Sart Tilman 68.21 40** *d*P **P** **13 38 37.4 +0.5**
**BEBN Eben Emael 68.32 40** *d*P **P** **13 38 37.6 +0.1**
**U35K Hyder 68.38 326** P **P** **13 38 38.5 +0.7**
baz=103
**WLF Walferdange 68.43 41** *d*P **P** **13 38 38.7 +0.4**
**WLF Walferdange 68.43 41** *e*P **P** **13 38 38.4 +0.1**
comp=Z,450nm,1.8s,baz=265,slow=6.0
WLF *e*S **S** **13 47 28.8 -1.5**
baz=265,slow=11
**MEM Membach 68.49 40** *d*P **P** **13 38 38.9 +0.2**
**BTNL Ternell 68.56 40** *d*P **P** **13 38 40.4 +1.3**
**T35M Bob Quinn 68.75 327** P **P** **13 38 41.5 +1.3**
baz=104,SNR=11
**WTLY Watson Lake, Y 68.81 331** P **P** **13 38 41.1 +0.6**
baz=106,SNR=32
WTLY S **S** **13 47 34.2 -0.3**
baz=106
**JMIC Jan Mayen 68.81 17** LR LR 14 02 10.3
comp=Z,212nm,20.9s,baz=250,slow=30
**ECH Echery 68.88 42** P **P** **13 38 41.1 -0.1**
ECH PcP **PcP** **13 39 04.6 -0.3**
ECH pP **pP** **13 39 10.9 0.0**
**TGTN Hyland Airport 68.96 332** P **P** **13 38 42.1 +0.7**
baz=107,SNR=38
TGTN S **S** **13 47 37.8 +1.4**
baz=107
**DLBC Dease Lake 68.98 329** LR LR 14 09 30.3
comp=Z,494nm,19.1s,baz=92,slow=36
**DLBC Dease Lake 68.98 329** P **P** **13 38 42.6 +1.0**
baz=104,SNR=40
DLBC S **S** **13 47 39.3 +2.6**
baz=104
**V35K Ketchikan 69.13 325** P **P** **13 38 43.6 +1.1**
baz=102
V35K S **S** **13 47 41.1 +2.7**
baz=102
V35K S **S** **13 47 41.1 +2.7**
baz=102
**AHRW Bad Neuenahr-A 69.15 40** *e*P **P** **13 38 43.3 +0.5**
comp=Z,451nm,1.6s,baz=265,slow=6.0
**BUG Bochum--Univer 69.41 39** *e*P **P** **13 38 44.3 0.0**
comp=Z,325nm,1.5s,baz=265,slow=6.0
**S34M Telegraph Cree 69.42 328** P **P** **13 38 44.7 +0.4**
baz=103,SNR=17
**KEST Kesra 69.52 56** P **P** **13 38 46.6 +1.1**
comp=Z,86nm,1.0s,baz=226,slow=3.1,SNR=44
KEST LR LR 14 07 55.4
comp=Z,381nm,19.7s,baz=222,slow=35
comp=Z,86nm,1.0s
**BFO Black Forest 69.67 42** P **P** **13 38 44.8 -1.3**
BFO IAmb IAmb 13 38 48.0
comp=Z,223nm,2.0s
**BFO Black Forest 69.67 42** P **P** **13 38 44.8 -1.3**
BFO pmax pmax
comp=Z,223nm,2.0s
**BFO Black Forest 69.67 42** *e*P **P** **13 38 45.7 -0.4**
comp=Z,72nm,1.4s,baz=265,slow=6.0
BFO *e*PP **PP** **13 41 20.7 -0.8**
baz=265,slow=8.5
BFO *e*S **S** **13 47 42.8 -2.2**
baz=265,slow=11
**R33M Jennings River 69.69 330** P **P** **13 38 47.0 +0.9**
baz=104,SNR=53
**WRAK Wrangell Islan 69.75 326** P **P** **13 38 47.4 +1.1**
baz=101
**IBBN Ibbenbren 69.84 38** *e*P **P** **13 38 47.1 +0.1**
comp=Z,293nm,1.3s,baz=265,slow=6.0
**TNS Taunus Mts 69.98 40** *e*P **P** **13 38 48.0 +0.1**
comp=Z,87nm,0.8s,baz=265,slow=6.0
TNS *e*PP **PP** **13 41 23.0 -1.2**
baz=265,slow=8.5
TNS *e*S **S** **13 47 46.0 -2.7**
baz=265,slow=11
**SUE Sulen 69.99 29** *e*P **P** **13 38 49.7 +2.1**
**CRAG Craig 70.00 325** P **P** **13 38 48.6 +0.7**
baz=100
**DAG Danmarks Havn 70.03 10** *i*P **P** **13 38 46.0 -1.7**
DAG IAmb IAmb 13 38 48.3
comp=Z,124nm,1.6s
**C36M Paulatuk 70.05 341** P **P** **13 38 46.9 -1.0**
baz=114
**KASTN Kahler Asten 70.09 39** *e*P **P** **13 38 48.4 -0.1**
comp=Z,113nm,1.6s,baz=265,slow=6.0
KASTN *e*PP **PP** **13 41 24.5 -0.6**
baz=265,slow=8.5
KASTN *e*S **S** **13 47 48.3 -1.6**
baz=265,slow=11
**BER Bergen 70.10 29** *e*P **P** **13 38 49.1 +0.8**
**U33K Whale Pass 70.12 326** P **P** **13 38 48.4 -0.2**
baz=101
**T33K Petersburg 70.16 327** P **P** **13 38 49.2 +0.4**
baz=101
**HLG Helgoland 70.21 36** *e*P **P** **13 38 49.2 +0.1**
comp=Z,84nm,0.8s,baz=265,slow=6.0
HLG *e*S **S** **13 47 49.6 -1.4**
baz=265,slow=11
**Q32M Nakina River 70.24 329** P **P** **13 38 49.8 +0.2**
Q32M IAmb IAmb 13 38 54.0
comp=Z,82nm,1.1s
**Q32M Nakina River 70.24 329** P **P** **13 38 50.6 +1.1**
baz=102,SNR=23
**FOO Floro 70.25 28** *e*P **P** **13 38 50.0 +0.7**
**STU Stuttgart 70.29 42** *e*P **P** **13 38 49.4 -0.4**
comp=Z,198nm,1.0s,baz=265,slow=6.0
STU *e*PP **PP** **13 41 27.0 +0.2**
baz=265,slow=8.5
**BLS5 Blasjo 70.43 31** *e*P **P** **13 38 51.7 +1.3**
**DAVA Damuels 70.60 44** *i*P **P** **13 38 52.3 +0.4**
comp=Z,184nm,1.2s,SNR=44
**ODD1 Odda 70.62 30** *e*P **P** **13 38 52.0 +0.4**
**HYA Hoyanger 70.69 29** *e*P **P** **13 38 52.6 +0.7**
**P33M Teslin, Yukon 70.78 330** P **P** **13 38 53.2 +0.5**
baz=102,SNR=28
**UBR Ueberruh 70.79 43** *e*P **P** **13 38 53.2 +0.2**
comp=Z,325nm,1.8s,baz=265,slow=6.0
UBR *e*S **S** **13 47 59.0 +0.7**
baz=265,slow=11
**RETH Rethem/Aller, 70.87 38** *e*P **P** **13 38 53.6 +0.5**
comp=Z,668nm,2.2s,baz=265,slow=6.0
**CASP Castiglione de 70.97 48** P **P** **13 38 53.8 -0.3**
**UBBA Unterbreizbach 71.03 40** *e*P **P** **13 38 54.3 +0.2**
comp=Z,197nm,1.8s,baz=265,slow=6.0
UBBA *e*PP **PP** **13 41 32.7 -0.3**
baz=265,slow=8.5
**GTTG Gottingen 71.09 39** *e*P **P** **13 38 54.7 +0.1**
comp=Z,194nm,1.5s,baz=265,slow=6.0
**P32M Atlin 71.10 329** P **P** **13 38 55.1 +0.6**
baz=101,SNR=10
**N32M Quiet Lake 71.11 331** P **P** **13 38 54.7 +0.1**
baz=102
**S32K Killisnoo 71.15 327** P **P** **13 38 56.2 +1.4**
baz=100,SNR=16
**FETA Feichten 71.15 44** *i*P **P** **13 38 55.6 +0.3**
comp=Z,178nm,1.2s,SNR=107
**RETA Reutte 71.21 43** *i*P **P** **13 38 56.0 +0.5**
comp=Z,138nm,1.5s,SNR=37
**R32K Eaglecrest 71.26 328** P **P** **13 38 56.1 +0.6**
baz=100,SNR=6.4
**NRDL Niedersach Rie 71.30 38** *e*P **P** **13 38 56.2 +0.5**
comp=Z,403nm,1.8s,baz=265,slow=6.0
NRDL *e*PP **PP** **13 41 34.6 -0.6**
baz=265,slow=8.5
NRDL *e*S **S** **13 48 00.9 -2.6**
baz=265,slow=11
**CLZ Clausthal 71.38 39** *e*P **P** **13 38 56.5 +0.1**
comp=Z,293nm,1.7s,baz=265,slow=6.0
CLZ *e*S **S** **13 48 02.8 -2.1**
baz=265,slow=11
**MOTA Moosalm 71.43 44** *i*P **P** **13 38 57.1 +0.2**
comp=Z,120nm,1.2s
**FARO Faro, Yukon 71.47 332** P **P** **13 38 57.1 +0.4**
baz=102,SNR=86
**A36M Sachs Harbour 71.47 343** P **P** **13 38 55.0 -1.5**
baz=113,SNR=25
**SIT Sitka 71.48 327** P **P** **13 38 56.6 -0.2**
baz=99
**SQTA Sankt Quirin 71.49 44** *i*P **P** **13 38 57.8 +0.6**
comp=Z,60nm,0.8s,SNR=41
**BSEG Bad Segeberg 71.60 37** *e*P **P** **13 38 57.5 -0.1**
comp=Z,298nm,1.7s,baz=265,slow=6.0
**FUR Furstenfeldbru 71.61 43** *e*P **P** **13 38 58.0 +0.2**
comp=Z,250nm,1.4s,baz=265,slow=6.0
**GRFO Grafenberg 71.70 41** P **P** **13 38 58.1 -0.2**
**GRFO Grafenberg 71.70 41** P **P** **13 38 58.1 -0.2**
GRFO pmax pmax
comp=Z,384nm,1.9s
**GRF Grafenberg Arr 71.70 41** *e*P **P** **13 38 58.3 0.0**
comp=Z,226nm,1.7s,baz=265,slow=6.0
GRF *e*PP **PP** **13 41 38.8 -0.1**
baz=265,slow=8.5
GRF *e*L L 14 03 29.5
comp=Z,321nm,20.8s
**WATA Walderalm 71.75 44** *i*P **P** **13 38 59.3 +0.4**
comp=Z,71nm,0.9s,SNR=25
**WTTA Wattenberg 71.79 44** *i*P **P** **13 38 59.5 +0.4**
comp=Z,137nm,1.3s,SNR=49
**ALE Alert 71.82 0** P **P** **13 38 56.8 -1.6**
**WHY Whitehorse 71.87 330** P **P** **13 38 58.8 -0.4**
baz=101,SNR=9.9
**SKAG Skagway 71.88 329** P **P** **13 38 59.1 0.0**
baz=100,SNR=5.7
**R31K City Hall, Gus 71.92 328** P **P** **13 39 00.5 +1.1**
baz=99
**M31M Drury Creek, Y 71.94 332** P **P** **13 38 59.7 +0.2**
baz=102,SNR=122
**FLTG Flechtingen 71.96 38** *e*P **P** **13 38 59.5 -0.2**
comp=Z,362nm,1.8s,baz=265,slow=6.0
FLTG *e*S **S** **13 48 08.3 -3.1**
baz=265,slow=11
**MOX Moxa 72.04 40** *e*P **P** **13 39 00.4 +0.1**
comp=Z,240nm,2.2s,baz=265,slow=6.0
MOX *e*L L 14 03 38.6
comp=Z,252nm,21.6s
**KONO Kongsberg 72.04 31** P **P** **13 38 59.7 -0.4**
KONO IAmb IAmb 13 39 03.2
comp=Z,127nm,1.4s
**KONO Kongsberg 72.04 31** *c**e*P **P** **13 39 01.2 +1.1**
KONO pmax pmax
comp=Z,80nm,1.7s
**GORT1 Trebel 72.08 38** *e*P **P** **13 39 00.6 +0.2**
comp=Z,478nm,1.9s,baz=265,slow=6.0
**S31K Pelican 72.11 328** P **P** **13 39 01.3 +0.8**
baz=99,SNR=10
**NEUB Neuenburg 72.19 40** *e*P **P** **13 39 01.2 0.0**
comp=Z,480nm,2.0s,baz=265,slow=6.0
NEUB *e*S **S** **13 48 13.1 -0.9**
baz=265,slow=11
**MANZ Manzenberg 72.30 41** *e*P **P** **13 39 02.2 +0.3**
comp=Z,120nm,1.9s,baz=265,slow=6.0
MANZ *e*PP **PP** **13 41 43.2 -0.9**
baz=265,slow=8.5
MANZ *e*S **S** **13 48 14.6 -0.8**
baz=265,slow=11
**ROTZ Rotzenmuhle 72.35 41** *e*P **P** **13 39 02.4 +0.2**
comp=Z,78nm,2.1s,baz=265,slow=6.0
ROTZ *e*S **S** **13 48 12.4 -3.5**
baz=265,slow=11
**ABTA Abfaltersbach 72.36 44** *i*P **P** **13 39 02.3 -0.1**
comp=Z,147nm,1.8s,SNR=52
**PLN Plauen 72.37 40** *e*P **P** **13 39 02.3 0.0**
comp=Z,288nm,2.0s,baz=265,slow=6.0
PLN *e*PP **PP** **13 41 44.5 -0.1**
baz=265,slow=8.5
PLN *e*S **S** **13 48 13.6 -2.5**
baz=265,slow=11
**PLBC Pleasant Camp 72.40 329** P **P** **13 39 03.1 +0.8**
baz=99,SNR=11
**N31M Braeburn, Yuko 72.45 331** P **P** **13 39 02.9 +0.4**
baz=100,SNR=53
**O30N Mendenhall 72.48 330** P **P** **13 39 03.1 +0.3**
baz=100,SNR=32
**LESA Schwarzleotal 72.50 44** *i*P **P** **13 39 03.3 0.0**
comp=Z,47nm,0.5s
**TANN Tannenbergstha 72.56 40** *e*P **P** **13 39 03.6 +0.1**
comp=Z,80nm,1.3s,baz=265,slow=6.0
TANN *e*PP **PP** **13 41 46.2 -0.1**
baz=265,slow=8.5
TANN *e*S **S** **13 48 15.9 -2.5**
baz=265,slow=11
**RJOB Jochberg 72.60 43** *e*P **P** **13 39 03.6 -0.2**
comp=Z,129nm,1.4s,baz=265,slow=6.0
RJOB *e*S **S** **13 48 15.3 -3.8**
baz=265,slow=11
**WET Wettzell 72.74 42** *e*P **P** **13 39 04.6 0.0**
comp=Z,263nm,1.8s,baz=265,slow=6.0
**P30M Million Dollar 72.80 330** P **P** **13 39 05.9 +1.2**
baz=99
P30M S **S** **13 48 21.6 +0.8**
baz=99
**F31M Tsiigehtchic 72.82 338** P **P** **13 39 03.7 -0.9**
baz=104,SNR=18
**G31M Satah River 72.90 337** P **P** **13 39 03.8 -1.3**
baz=103,SNR=113
**KBA Koelnbreinsper 72.94 44** *i*P **P** **13 39 05.9 -0.1**
comp=Z,234nm,1.7s,SNR=86
**INK Inuvik 72.95 338** LR LR 14 12 24.7
comp=Z,721nm,19.1s,baz=88,slow=37
**INK Inuvik 72.95 338** P **P** **13 39 04.5 -0.9**
baz=104,SNR=65
**CLL Collm 72.97 40** *i*P **P** **13 39 05.6 -0.2**
comp=Z,415nm,2.1s
CLL *i*pP **pP** **13 39 36.0 +0.2**
CLL *e*sP **sP** **13 39 47.0 -1.8**
CLL *e*PP **PP** **13 41 46.0 -3.6**
CLL *e*S **S** **13 48 22.0 -0.8**
CLL *e*PS 13 49 12.0
CLL *e*SS **SS** **13 53 00.0 -5.6**
CLL *e*sSS 13 53 52.0
CLL *e*SSS SSS 13 56 48.0
CLL *e*SSSS 13 58 22.0
**CLL Collm 72.97 40** *i*P **P** **13 39 05.6 -0.2**
CLL *e**SP **sP** **13 39 47.0 -1.8**
CLL *e*S **S** **13 48 22.0 -0.8**
CLL pmax pmax
comp=Z,415nm,2.1s
**CLL Collm 72.97 40** P **P** **13 39 05.6 -0.2**
comp=Z,70nm,2.0s,comp=Z,2µm
**CLL Collm 72.97 40** *e*P **P** **13 39 05.8 +0.1**
comp=Z,47nm,1.1s,baz=265,slow=6.0
**ROBS Robic 73.02 45** *e*P **P** **13 39 06.0 -0.2**
**NB2 NORSAR Subarra 73.06 29** P **P** **13 39 06.3 +0.1**
comp=Z,350nm,1.7s,baz=262,slow=6.2
**NB2 NORSAR Subarra 73.06 29** P **P** **13 39 06.3 +0.1**
baz=262,slow=6.2
**NOA NORSAR Array B 73.06 29** P **P** **13 39 06.3 +0.1**
comp=Z,31nm,0.9s,baz=262,slow=5.9,SNR=35
NOA LR LR 14 09 22.7
comp=Z,154nm,18.2s,baz=265,slow=34
comp=Z,31nm,0.9s
**N30M Aishikik Lake 73.07 331** P **P** **13 39 07.0 +0.7**
baz=99,SNR=38
N30M S **S** **13 48 22.9 -0.9**
baz=99
**P29M Windy Craggy 73.12 329** P **P** **13 39 06.9 +0.3**
baz=98,SNR=12
**MYKA Terra Mystica 73.13 44** *i*P **P** **13 39 07.2 +0.3**
comp=Z,60nm,0.9s,SNR=57
**BIOA Bad Ischl, Aus 73.17 43** *i*P **P** **13 39 06.9 -0.2**
comp=Z,202nm,1.6s,SNR=53
**NC602 NORSAR Array S 73.17 30** *e*P **P** **13 39 07.5 +0.8**
**HSKC Hora Svate Kat 73.19 40** *e*P **P** **13 39 07.9 +0.7**
HSKC *e*S **S** **13 48 25.9 +0.4**
HSKC AMS AMS 14 02 40.0
comp=Z,3µm,41.1s
**KHC Kasperske Hory 73.20 42** *e*P **P** **13 39 08.5 +1.2**
KHC *e*pP **pP** **13 39 36.0 -1.3**
KHC *e*PP **PP** **13 41 52.6 +0.9**
KHC *e*S **S** **13 48 25.5 -0.2**
KHC AMS AMS 14 02 10.0
comp=Z,2µm,33.0s
**KHC Kasperske Hory 73.20 42** *e*P **P** **13 39 08.5 +1.2**
KHC *e* 13 39 36.0
KHC *e* 13 41 52.6
KHC *e*S **S** **13 48 25.5 -0.2**
KHC MLR MLR
comp=Z,2µm,33.0s
**J30M Hart River 73.25 334** P **P** **13 39 08.0 +0.6**
baz=100,SNR=116
J30M S **S** **13 48 25.7 -0.2**
baz=100
**GEC2 GERESS Array S 73.27 42** *e*P **P** **13 39 07.6 -0.1**
comp=Z,54nm,0.8s,baz=265,slow=6.0
GEC2 *e*PP **PP** **13 41 51.5 -0.8**
baz=265,slow=8.5
GEC2 *e*S **S** **13 48 23.2 -3.3**
baz=265,slow=11
**GERES GERESS Array B 73.27 42** P **P** **13 39 07.1 -0.7**
**GERES GERESS Array B 73.27 42** P **P** **13 39 07.5 -0.2**
comp=Z,25nm,0.6s,baz=264,slow=4.0,SNR=76
comp=Z,25nm,0.6s
**SKDS Skadanscina 73.35 46** *e*P **P** **13 39 08.1 -0.1**
SKDS *e*S **S** **13 48 25.8 -1.7**
**SKDS Skadanscina 73.35 46** ⇑*i*P **S** **13 39 08.1 -0.1**
**I30M Mount Dempster 73.39 335** P **P** **13 39 08.5 +0.3**
baz=101,SNR=262
I30M S **SKiKP** **13 48 24.8 -2.4**
baz=101
**RGN Rugen 73.41 36** *e*P **P** **13 39 08.7 +0.4**
comp=Z,69nm,0.7s,baz=265,slow=6.0
**RUE Ruedersdorf 73.53 38** *e*P **P** **13 39 09.7 +0.7**
**RUE Ruedersdorf 73.53 38** *e*P **P** **13 39 09.0 0.0**
comp=Z,72nm,0.6s,baz=265,slow=6.0
**BRG Berggiesshubel 73.53 40** *e*P **P** **13 39 09.3 +0.2**
BRG Amp 13 39 10.0
comp=Z,7.2nm,0.8s
**BRG Berggiesshubel 73.53 40** P **P** **13 39 10.7 +1.6**
BRG Amp 13 39 12.4
comp=Z,40nm,1.0s
**BRG Berggiesshubel 73.53 40** P P 13 39 18.5 +9.4
BRG Amp 13 39 20.3
comp=Z,15nm,1.1s
BRG pP pP 13 39 39.2 +0.1
BRG Amp 13 39 43.1
comp=Z,23nm,1.0s
BRG PP **PP** **13 41 55.5 +1.0**
BRG Amp 13 41 57.3
comp=Z,6.0nm,0.9s
**BRG Berggiesshubel 73.53 40** *e*P **P** **13 39 09.3 +0.2**
comp=Z,100nm,1.4s,baz=265,slow=6.0
BRG *e*PP **PP** **13 41 53.2 -1.2**
baz=265,slow=8.5
BRG *e*S **SKiKP** **13 48 26.7 -0.9**
baz=265,slow=11
**MOA Molln 73.60 43** *i*P **P** **13 39 09.4 -0.2**
comp=Z,119nm,1.5s,SNR=51
**NOR Nord 73.60 6** *i*P **P** **13 39 08.0 -1.0**
NOR IAmb IAmb 13 39 09.4
comp=Z,132nm,1.7s
**VAE Valguarnera 73.60 54** LR LR 14 08 34.3
comp=Z,241nm,19.4s,baz=296,slow=33
**YUK6 Outpost Mounta 73.60 331** P **P** **13 39 10.9 +1.3**
baz=98
**RICC Richard 73.61 40** *e*P **P** **13 39 11.5 +1.9**
RICC AMS AMS 14 02 50.0
comp=Z,900nm,31.2s
**ZVC Zvikov 73.62 42** *e*P **P** **13 39 10.4 +0.8**
ZVC *e*PP **PP** **13 41 53.3 -1.9**
ZVC AMS AMS 14 02 50.0
comp=Z,2µm,39.9s
**O29M Mount Kennedy 73.62 330** P **P** **13 39 10.3 +0.6**
baz=97,SNR=25
**F30M Barrier River 73.63 338** P **P** **13 39 08.8 -0.6**
baz=102,SNR=73
**K29M Barlow Dome 73.64 334** P **P** **13 39 10.1 +0.5**
baz=99
K29M S **S** **13 48 30.6 +0.3**
baz=99
**CEY Cerknica 73.64 45** ⇑*i*P **P** **13 39 09.8 -0.1**
**GBAS Gorenja Brezov 73.66 45** *e*P **P** **13 39 10.3 +0.3**
GBAS *e*S **SKiKP** **13 48 28.9 +0.9**
**CKRC Cesky Krumlov 73.67 42** *e*P **P** **13 39 10.4 +0.4**
CKRC *e*S **S** **13 48 30.4 -0.5**
CKRC AMS AMS 14 02 30.0
comp=Z,1µm,27.9s
**CKRC Cesky Krumlov 73.67 42** *e*P **P** **13 39 10.4 +0.4**
CKRC *e*S **S** **13 48 30.4 -0.5**
CKRC MLR MLR
comp=Z,1µm,27.9s
**G30M tAoh Zraii Nji 73.67 337** P **P** **13 39 08.9 -0.7**
baz=101,SNR=23
**EPYK Eagle Plains 73.74 336** P **P** **13 39 09.8 -0.3**
baz=101,SNR=48
**OBKA Obir 73.75 45** *i*P **P** **13 39 10.7 +0.1**
comp=Z,52nm,0.8s,SNR=35
**OBKA Obir 73.75 45** ⇑*i*P **P** **13 39 10.3 -0.3**
**YUK4 Talbot Arm 73.79 331** P **P** **13 39 10.8 +0.1**
baz=98,SNR=17
**PRA Prague 73.80 41** *e*PP **PP** **13 41 55.5 -1.2**
PRA *e*S **S** **13 48 32.3 0.0**
PRA AMS AMS 14 02 50.0
comp=Z,3µm,51.2s
**M29M Somme Creek 73.85 332** P **P** **13 39 11.2 +0.3**
baz=98,SNR=39
**PRU Pruhonice 73.87 41** *e*P **P** **13 39 12.2 +1.1**
PRU *e*PP **PP** **13 41 58.5 +1.2**
PRU *e*S **S** **13 48 34.1 +1.0**
PRU AMS AMS 14 02 50.0
comp=Z,3µm,51.9s
**PRU Pruhonice 73.87 41** *e*P **P** **13 39 12.2 +1.1**
PRU *e* 13 41 58.5
PRU *e*S **S** **13 48 34.1 +1.0**
PRU MLR MLR
comp=Z,3µm,51.9s
**DEL Delary 73.89 34** *e*P **P** **13 39 12.1 +1.0**
**PVCC Panska Ves 73.91 40** *e*P **P** **13 39 12.3 +1.0**
PVCC AMS AMS 14 03 00.0
comp=Z,3µm,44.1s
**PVCC Panska Ves 73.91 40** *e*P **P** **13 39 12.3 +1.0**
PVCC MLR MLR
comp=Z,3µm,44.1s
**PNL Peninsula 73.96 329** P **P** **13 39 12.1 +0.6**
baz=96
**GOPC GO Pecny, Ondr 74.02 41** *e*P **P** **13 39 13.0 +1.0**
GOPC *e*PP **PP** **13 42 00.4 +1.7**
GOPC *e*S **S** **13 48 36.2 +1.3**
GOPC AMS AMS 14 03 00.0
comp=Z,3µm,48.6s
**GOPC GO Pecny, Ondr 74.02 41** *e*P **P** **13 39 13.0 +1.0**
GOPC *e* 13 42 00.4
GOPC *e*S **S** **13 48 36.2 +1.3**
GOPC MLR MLR
comp=Z,3µm,48.6s
**J29N Klondike Camp 74.04 334** P **P** **13 39 12.3 +0.4**
baz=99,SNR=23
**PDKS Podkum 74.05 45** *i*P **P** **13 39 12.6 +0.3**
**SOKA Soboth 74.08 44** *i*P **P** **13 39 12.5 0.0**
comp=Z,19nm,0.7s,SNR=29
**PERS Pernice 74.14 45** *e*P **P** **13 39 12.1 -0.7**
**HFS Hagfors 74.16 30** P **P** **13 39 12.7 +0.1**
comp=Z,17nm,0.6s,baz=222,slow=4.0,SNR=40
HFS LR LR 14 10 24.2
comp=Z,137nm,18.6s,baz=262,slow=34
comp=Z,17nm,0.6s
**I29M Ogilvie Camp, 74.22 335** P **P** **13 39 12.6 -0.3**
baz=99,SNR=91
**BOJS Bojanci 74.22 46** ⇑*i*P **P** **13 39 13.3 +0.1**
**YUK8 Steele Glacier 74.32 331** P **P** **13 39 14.4 +0.6**
baz=96,SNR=9.5
**G29M Pine Creek 74.35 337** P **P** **13 39 12.9 -0.7**
baz=100,SNR=138
**H29M Whitestone 74.38 336** P **P** **13 39 13.5 -0.3**
baz=99,SNR=122
**BSD Bornholm Skovb 74.38 36** *e*P **P** **13 39 16.2 +2.3**
**BSD Bornholm Skovb 74.38 36** *i*P **P** **13 39 12.5 -1.4**
BSD IAmb IAmb 13 39 15.5
comp=Z,234nm,1.7s
**ARSA Arzberg 74.43 44** *i*P **P** **13 39 14.7 +0.2**
comp=Z,28nm,0.7s,SNR=31
**TREC Trest 74.46 42** *e*P **P** **13 39 15.6 +1.0**
TREC *e*PP **PP** **13 42 03.6 +1.2**
TREC AMS AMS 14 03 10.0
comp=Z,2µm,42.7s
**TREC Trest 74.46 42** *e*P **P** **13 39 15.6 +1.0**
TREC *e* 13 42 03.6
TREC MLR MLR

comp=Z,2µm,42.7s
**O28M Mount Upton 74.47 330 P P 13 39 15.4 +0.6**
baz=96,SNR=15
**DAWY Dawson 74.49 334 P P 13 39 14.5 0.0**
baz=98,SNR=130
DAWY S S 13 48 39.8 +0.2
baz=98
**E29M Blow River 74.56 338 P P 13 39 14.1 -0.7**
baz=100,SNR=87
**CONA Conrad Observa 74.67 43 eP P 13 39 15.8 -0.1**
comp=Z,112nm,1.9s,SNR=52
**YUK3 Moose Creek 74.70 331 P P 13 39 16.3 +0.3**
baz=96
**UPC Upice 74.83 40 eP P 13 39 17.7 +1.0**
UPC ePP PP 13 42 06.6 +1.1
UPC eS S 13 48 43.6 -0.2
UPC AMS AMS 14 03 20.0
comp=Z,2µm,41.6s
**UPC Upice 74.83 40 eP P 13 39 17.7 +1.0**
UPC e 13 42 06.6
UPC eS S 13 48 43.6 -0.2
UPC MLR MLR
comp=Z,2µm,41.6s
**CHVC Chvalec 74.86 40 eP P 13 39 17.8 +0.9**
CHVC AMS AMS 14 03 20.0
comp=Z,2µm,38.9s
**CHVC Chvalec 74.86 40 eP P 13 39 17.8 +0.9**
CHVC MLR MLR
comp=Z,2µm,38.9s
**I28M Miner Creek 74.90 335 P P 13 39 16.8 -0.1**
I28M IAmb IAmb 13 39 20.0
comp=Z,67nm,0.8s
**I28M Miner Creek 74.90 335 P P 13 39 16.8 -0.1**
baz=97,SNR=92
I28M S S 13 48 41.0 -3.2
baz=97
**OSTC Ostas 74.96 40 eP P 13 39 18.6 +1.2**
OSTC ePP PP 13 42 08.2 +1.6
OSTC eS S 13 48 43.9 -1.4
OSTC AMS AMS 14 03 30.0
comp=Z,2µm,37.2s
**OSTC Ostas 74.96 40 eP P 13 39 18.6 +1.2**
OSTC e 13 42 08.2
OSTC eS S 13 48 43.9 -1.4
OSTC MLR MLR
comp=Z,2µm,37.2s
**RONA Rosalia, Austr 74.96 43 *i* P P 13 39 17.9 +0.4**
comp=Z,87nm,1.5s,SNR=30
**KSP Ksiaz 75.02 40 eP P 13 39 17.9 +0.2**
KSP eS SKiKP 13 48 37.7 +7.8
KSP eL L 14 03 49.8
comp=Z,3µm,42.3s
**KSP Ksiaz 75.02 40 P P 13 39 17.9 +0.2**
comp=Z,73nm,2.5s,comp=Z,2µm
**D28M Stokes Point 75.02 339 P P 13 39 16.8 -0.5**
baz=100,SNR=24
**DPC Dobruska-Polom 75.02 41 eP P 13 39 18.9 +1.1**
DPC eS S 13 48 45.4 -0.7
DPC AMS AMS 14 03 40.0
comp=Z,3µm,46.7s
**DPC Dobruska-Polom 75.02 41 eP P 13 39 18.9 +1.1**
DPC eS S 13 48 45.4 -0.7
DPC MLR MLR
comp=Z,3µm,46.7s
**KRUC Moravsky 75.05 42 eP P 13 39 18.0 +0.1**
**CTG Chitna Glacier 75.05 330 P P 13 39 18.4 +0.5**
baz=95,SNR=23
**A050A Klekovaca 75.12 47⇑ *i*P P 13 39 18.8 +0.2**
**F28M Old Crow 75.17 337 P P 13 39 17.8 -0.6**
baz=98,SNR=87
F28M S S 13 48 41.1 -5.9
baz=98
**VRAC Vranov 75.18 42 eP P 13 39 18.8 +0.1**
**VRAC Vranov 75.18 42 LR LR 14 09 57.2**
comp=Z,158nm,19.0s,baz=272,slow=34
**VRAC Vranov 75.18 42 ⇑P P 13 39 19.0 +0.3**
**VRAC Vranov 75.18 42 ⇑P P 13 39 19.0 +0.3**
**E28M Babbage River 75.19 338 P P 13 39 17.3 -1.1**
baz=99,SNR=117
E28M S S 13 48 41.2 -5.9
baz=99
**PMSA Palmer Station 75.27 180 P P 13 39 19.3 +0.6**
PMSA IAmb IAmb 13 39 22.6
comp=Z,58nm,0.9s
**PMSA Palmer Station 75.27 180 LR LR 14 14 34.9**
comp=Z,1µm,20.0s,baz=350,slow=37
**PMSA Palmer Station 75.27 180 eP P 13 39 21.3 +2.7**
**MESA MESA 75.29 330 P P 13 39 20.4 +1.1**
baz=94
**KRLC Kraliky 75.31 41 eP P 13 39 20.8 +1.3**
KRLC ePP PP 13 42 11.2 +1.6
KRLC eS S 13 48 53.0 +3.7
KRLC AMS AMS 14 03 30.0
comp=Z,700nm,29.3s
**KRLC Kraliky 75.31 41 eP P 13 39 20.8 +1.3**
KRLC e 13 42 11.2
KRLC eS S 13 48 53.0 +3.7
KRLC MLR MLR
comp=Z,700nm,29.3s
**MATE Matera 75.32 51 ⇓P P 13 39 20.5 +0.9**
**EGAK Eagle 75.34 334 P P 13 39 19.4 +0.1**
baz=96,SNR=186
EGAK S S 13 48 47.6 -1.3
baz=96
**A051A Mrakovica 75.39 46⇑ *i*P P 13 39 20.2 +0.1**
**TIP Timpagrande 75.40 52 ⇑P P 13 39 21.1 +0.8**
**TIP Timpagrande 75.40 52 P P 13 39 20.2 -0.1**
comp=Z,66nm,1.4s,comp=Z,1µm
**M27K Edge Creek, AK 75.42 332 P P 13 39 20.6 +0.6**
baz=95,SNR=63
M27K S S 13 48 51.0 +0.7
baz=95
M27K S S 13 48 51.0 +0.7
baz=95
**BCAR Beaver Creek A 75.44 333 P P 13 39 20.3 +0.3**
**L27K Beaver Creek, 75.46 333 P P 13 39 20.6 +0.5**
baz=95,SNR=92
L27K S S 13 48 50.6 +0.1
baz=95
**ZST Bratislava 75.51 43 eP P 13 39 21.0 +0.4**
ZST pmax pmax
comp=Z,1µm,1.8s
**ZST Bratislava 75.51 43 eP P 13 39 21.0 +0.4**
**BLY Banja Luka 75.58 46⇑ *i*P P 13 39 21.3 +0.2**
**I27K Kandik River 75.61 335 P P 13 39 20.4 -0.6**
baz=96,SNR=134
I27K S S 13 48 49.7 -2.3
baz=96
I27K S S 13 48 49.7 -2.3
baz=96
**H27K Steamboat Moun 75.64 336 P P 13 39 20.5 -0.6**
baz=96,SNR=21
H27K S S 13 48 49.0 -3.3
baz=96
**GKP Gorka Klasztor 75.66 38 eP P 13 39 24.0 +2.7**
**K27K Chicken 75.66 333 P P 13 39 21.3 +0.2**
**K27K Chicken 75.66 333 P P 13 39 21.5 +0.4**
baz=95
K27K S S 13 48 54.3 +1.8
baz=95
K27K S S 13 48 54.3 +1.8
baz=95
**FAUS Fauske 75.68 23 eP P 13 39 21.7 +0.5**
**SMOL Smolenice 75.73 43 eP P 13 39 22.3 +0.5**
SMOL pmax pmax
comp=Z,126nm,2.0s
**G27K Doyon Strip 75.76 336 P P 13 39 21.1 -0.6**
baz=96,SNR=101
G27K S S 13 48 53.4 -0.1
baz=96
**D27M Malcolm River 75.79 339 P P 13 39 21.5 -0.4**
baz=97,SNR=52
D27M S S 13 48 47.8 -6.1
baz=97
**MORC Moravsky Berou 75.80 41 eP P 13 39 22.6 +0.3**
**MORC Moravsky Berou 75.80 41 ⇑P P 13 39 22.2 -0.1**
**MORC Moravsky Berou 75.80 41 ⇑P P 13 39 22.2 -0.1**
**MPLH Magyarpolny 75.81 44 P P 13 39 22.4 +0.1**
comp=Z,340nm,2.0s,comp=Z,8µm
**E27K Coleen River 75.89 338 P P 13 39 21.8 -0.7**
baz=97,SNR=96
E27K S S 13 48 49.3 -5.7
baz=97
**CRQE Cirque 75.89 330 P P 13 39 23.5 +0.8**
baz=93
**MCARA McCarthy VSAT 75.89 331 P P 13 39 23.3 +0.8**
MCARA IAmb IAmb 13 39 27.5
comp=Z,147nm,1.1s
**MCARA McCarthy VSAT 75.89 331 P P 13 39 23.3 +0.8**
baz=94,SNR=26
MCARA S S 13 48 55.6 +0.5
baz=94
**M26K Nabesna, AK 75.95 332 P P 13 39 23.7 +0.8**
baz=94,SNR=23
M26K S S 13 48 55.1 -0.8
baz=94
M26K S S 13 48 55.1 -0.8
baz=94
**STON Ston 76.00 48⇑ *i*P P 13 39 23.3 -0.2**
**UPP Uppsala 76.10 31 eP P 13 39 24.5 +0.8**
**L26K Log Cabin Wild 76.15 332 P P 13 39 24.6 +0.7**
baz=94,SNR=45
L26K S S 13 48 56.2 -1.8
baz=94
L26K S S 13 48 56.2 -1.8
baz=94
**OKC Ostrava-Krasne 76.19 41 eP P 13 39 26.6 +2.2**
OKC ePP PP 13 42 15.4 -1.6
OKC eS S 13 49 01.2 +2.4
OKC AMS AMS 14 04 00.0
comp=Z,700nm,32.5s
**OKC Ostrava-Krasne 76.19 41 eP P 13 39 26.6 +2.2**
OKC e 13 42 15.4
OKC eS S 13 49 01.2 +2.4
OKC MLR MLR
comp=Z,700nm,32.5s
**I26K Coal Creek Min 76.23 335 P P 13 39 23.8 -0.5**
baz=94
I26K S S 13 48 57.8 -0.9
baz=94
I26K S S 13 48 57.8 -0.9
baz=94
**J26L Joseph Creek 76.34 334 P P 13 39 24.7 -0.5**
baz=94,SNR=68
J26L S S 13 48 57.9 -2.3
baz=94
J26L S S 13 48 57.9 -2.3
baz=94
**TREB Trebinje 76.48 49⇑ *i*P P 13 39 26.4 +0.2**
**SCRK Sand Creek 76.50 333 P P 13 39 25.5 -0.5**
baz=93,SNR=70
SCRK S S 13 48 59.6 -2.3
baz=93
**MORH Mrgy, Hungar 76.58 45 ⇓P P 13 39 26.6 -0.1**
**MORH Mrgy, Hungar 76.58 45 P P 13 39 26.8 +0.1**
comp=Z,105nm,1.6s,comp=Z,3µm
**G26K Porcupine Rive 76.61 336 P P 13 39 26.1 -0.3**
baz=94,SNR=47
**BRY Bratogost 76.61 48⇑ *i*P P 13 39 27.4 +0.2**
**BMRM Bremner River 76.64 330 P P 13 39 26.8 0.0**
baz=92,SNR=18
BMRM S S 13 49 05.9 +2.5
baz=92
**N25K Chitina, Valde 76.66 331 P P 13 39 27.1 +0.2**
baz=92,SNR=18
**VYHS Vyhne 76.66 43 eP P 13 39 27.4 +0.2**
VYHS pmax pmax
comp=Z,300nm,2.1s
**VYHS Vyhne 76.66 43 eP P 13 39 27.4 +0.2**
**KBS Kingsbay 76.68 11 ceP P 13 39 26.4 -0.2**
KBS pmax pmax
comp=Z,25nm,1.0s
**KBS Kingsbay 76.68 11 *i* P P 13 39 25.9 -0.7**
**C27K Jago River 76.80 339 P P 13 39 27.0 -0.5**
baz=95,SNR=43
**F26K Sheenjek River 76.80 337 P P 13 39 27.6 0.0**
baz=94,SNR=50
F26K S S 13 49 01.9 -3.1
baz=94
**RIDG Independent Ri 76.86 333 P P 13 39 27.5 -0.6**
baz=92,SNR=7.1
**HAPS Han Pijesak,Bl 76.87 47⇑ *i*P P 13 39 29.2 +0.7**
**UPM Unac-Piva 76.87 48 eP P 13 39 29.2 +0.5**
**BMAR Burnt Mountain 76.95 337 P P 13 39 27.9 -0.6**
**HARP HAARP 76.95 332 P P 13 39 28.7 +0.1**
baz=92
**HSPB Hornsund (broa 77.06 13 eP P 13 39 29.4 +0.7**
HSPB eL L 14 04 31.3
comp=Z,2µm,43.0s
**LANS Liptovska Anna 77.06 42 eP P 13 39 31.9 +2.5**
LANS pmax pmax
comp=Z,32nm,1.5s
**LANS Liptovska Anna 77.06 42 eP P 13 39 31.9 +2.5**
**PAX Paxson 77.12 332 P P 13 39 29.3 -0.2**
baz=92,SNR=11
PAX S S 13 49 06.8 -1.8
baz=92
**DRME Dracevica, Mon 77.12 49⇑ *i*P P 13 39 30.8 +1.0**
**J25K Salcha River, 77.13 334 P P 13 39 29.1 -0.4**
baz=92,SNR=32
J25K S S 13 49 05.7 -2.9
baz=92
J25K S S 13 49 05.7 -2.9
baz=92
**PDG Podgorica 77.16 49⇑ *i*P P 13 39 30.7 +0.7**
**EYAK Cordova Ski Ar 77.19 330 P P 13 39 30.4 +0.6**
baz=91
**BBLS Lazi&#263i 77.20 47⇑ *i*P P 13 39 31.1 +0.7**
**TRO Tromso 77.22 21 eP P 13 39 30.0 +0.2**
**PRP Porcupine Dome 77.23 335 P P 13 39 29.8 -0.3**
baz=92
PRP S S 13 49 07.4 -2.4
baz=92
**C26K Camden Bay 77.24 339 P P 13 39 29.9 0.0**
baz=94
C26K S S 13 49 06.0 -3.4
baz=94
**OJC Ojcow 77.25 41 eP P 13 39 30.0 -0.4**
OJC ePP PP 13 42 24.5 -1.3
OJC eS S 13 49 06.6 -3.8
OJC eL L 14 04 53.7
comp=Z,2µm,42.6s
**OJC Ojcow 77.25 41 P P 13 39 31.0 +0.6**
comp=Z,76nm,1.7s,comp=Z,2µm
**K24K Donnelly Dome 77.28 333 P P 13 39 30.0 -0.3**
baz=92,SNR=22
**KLU Klutina 77.29 331 P P 13 39 30.0 -0.5**
baz=91,SNR=11
**F25K Christian Rive 77.37 337 P P 13 39 30.7 -0.1**
baz=93,SNR=245
F25K S S 13 49 08.5 -2.6
baz=93
**H25L Birch Creek 77.38 336 P P 13 39 31.1 +0.3**
baz=92,SNR=22
H25L S S 13 49 10.0 -1.1
baz=92
**PSZ Piszkesteto 77.39 43 ⇓P P 13 39 31.6 +0.3**
**PSZ Piszkesteto 77.39 43 ⇓P P 13 39 31.6 +0.3**
**SPA0 Spitsbergen Ar 77.41 12 eP P 13 39 30.3 -0.5**
**SPITS Spitsbergen Ar 77.41 12 P P 13 39 30.2 -0.5**
comp=Z,22nm,0.5s,baz=184,slow=3.3,SNR=140
SPITS LR LR 14 13 10.9
comp=Z,135nm,18.8s,baz=239,slow=35
comp=Z,22nm,0.5s
**M24K Tolsona, Glenn 77.42 331 P P 13 39 31.5 +0.3**
baz=91
**FRGS Fruska Gora 77.44 46⇑ *i*P P 13 39 31.8 +0.2**
**Q23K Middleton Isla 77.48 329 P P 13 39 31.0 -0.4**
baz=90
**G25K Bearman Lake 77.51 336 P P 13 39 31.8 +0.3**
baz=92,SNR=78
**NIE Niedzica 77.60 42 eP P 13 39 33.9 +1.5**
NIE ePP PP 13 42 28.6 -0.2
NIE eS S 13 49 24.3 +10
NIE eL L 14 05 08.2
comp=Z,689nm,37.4s
**SJES Sjenica 77.65 48⇑ *i*P P 13 39 33.4 +0.5**
**TIR Tirane 77.68 50 P P 13 39 34.2 +1.3**
**TIR Tirane 77.68 50 ⇑P P 13 39 35.2 +2.2**
**TIR Tirane 77.68 50 ⇑P P 13 39 35.2 +2.2**
**TIR Tirane 77.68 50 P P 13 39 34.3 +1.3**
comp=Z,92nm,2.8s,comp=Z,3µm
**D25K Kavik River 77.72 339 P P 13 39 32.6 -0.1**
baz=92,SNR=98
D25K S S 13 49 09.3 -5.5
baz=92
**KEK Kerkira 77.73 52 P P 13 39 34.2 +0.9**
**KECS Kecovo 77.76 43 eP P 13 39 35.3 +2.0**
**KECS Kecovo 77.76 43 eP P 13 39 35.3 +2.0**
**ILAR Eielson Array 77.78 334 P P 13 39 32.2 -0.9**
**ILAR Eielson Array 77.78 334 P P 13 39 32.0 -1.0**
comp=Z,63nm,0.6s,baz=99,slow=1.6,SNR=81
ILAR LR LR 14 14 01.0
comp=Z,1µm,20.6s,baz=80,slow=36
comp=Z,63nm,0.6s
**ILAR Eielson Array 77.78 334 P P 13 39 32.2 -0.9**
**HDA Harding Lake 77.81 334 P P 13 39 32.4 -0.8**
baz=91,SNR=26
**BEL Belsk 77.83 39 eP P 13 39 34.3 +0.8**
BEL eL L 14 05 15.1
comp=Z,2µm,42.4s
**GLI Glacier Island 77.86 330 P P 13 39 33.9 +0.3**
baz=90
**SCM Sheep Creek Mo 77.97 331 P P 13 39 34.1 -0.1**
baz=90,SNR=13
**DHY Denali Highway 77.99 332 P P 13 39 34.1 -0.3**
baz=90
DHY S S 13 49 15.4 -2.8
baz=90
**RKT Rikitea 78.00 244 eP P 13 39 35.1 +0.1**
comp=Z,1µm,28.5s
RKT eS S 13 49 15.6 -3.7
comp=Z,1µm,28.2s
**RKT Rikitea 78.00 244 eLR LR 14 03 46.6**
comp=Z,8µm,38.0s
**P23K Montague Islan 78.01 329 P P 13 39 35.2 +0.8**
baz=89,SNR=5.4
**POKR Poker Plat Res 78.02 335 P P 13 39 34.0 -0.4**
baz=90,SNR=23
POKR S S 13 49 15.3 -2.9
baz=90
**G24K Hadweenzic Riv 78.06 336 P P 13 39 35.2 +0.7**
baz=91,SNR=12
G24K S S 13 49 15.8 -2.7
baz=91
**IGT Igoumenitsa 78.15 52 P P 13 39 36.7 +1.1**
**M23K Glacier View 78.15 331 P P 13 39 35.2 0.0**
baz=90,SNR=16
**WAT6 Susitna Watana 78.16 332 P P 13 39 35.0 -0.4**
baz=90,SNR=8.5
**COLA College 78.20 334 P P 13 39 34.4 -0.9**
COLA IAmb IAmb 13 39 37.8
comp=Z,84nm,0.8s
**COLA College 78.20 334 P P 13 39 35.0 -0.3**
baz=90
COLA S S 13 49 15.7 -4.2
baz=90
**COLA College 78.20 334 ⇑P P 13 39 35.2 -0.1**
**H24K Noodor Dome 78.21 335 P P 13 39 35.6 +0.1**
baz=90,SNR=28
H24K S S 13 49 17.8 -2.5
baz=90
H24K S S 13 49 17.8 -2.5
baz=90
**F24K Squaw Lake 78.23 337 P P 13 39 35.6 +0.1**
baz=90,SNR=9.5
F24K S S 13 49 15.8 -4.5
baz=90
**CRVS Cervenica-Dubn 78.39 42 eP P 13 39 37.8 +1.1**
CRVS pmax pmax
comp=Z,483nm,2.0s
**CRVS Cervenica-Dubn 78.39 42 eP P 13 39 37.8 +1.1**
**OHR Ohrid 78.39 50 *i* P P 13 39 39.2 +2.2**
**FSK Fiskardo 78.41 53 P P 13 39 37.9 +0.9**
**KBN Korca 78.42 51 P P 13 39 38.8 +1.6**
**SML Sawmill 78.44 331 P P 13 39 36.9 0.0**
baz=89,SNR=14
SML S S 13 49 19.0 -3.8
baz=89
**PSDA Pessada-Kefalo 78.45 53 P P 13 39 38.1 +0.8**
**E24K Your Creek 78.46 338 P P 13 39 36.6 -0.2**
baz=90,SNR=28
E24K S S 13 49 18.2 -4.6
baz=90
**LKD2 Lefkada island 78.46 52 P P 13 39 37.8 +0.4**
**PWL Port Wells 78.46 330 P P 13 39 37.0 +0.1**
baz=89,SNR=15
**KNK Knik Glacier 78.51 331 P P 13 39 37.2 +0.1**
baz=89,SNR=6.7
KNK S S 13 49 21.1 -2.4
baz=89
**WAT1 Susitna Watana 78.53 332 P P 13 39 37.1 -0.1**
baz=89
WAT1 S S 13 49 24.1 +0.4
baz=89
**C24K Franklin Bluff 78.54 339 P P 13 39 37.4 +0.3**
baz=90
C24K S S 13 49 19.9 -3.6
baz=90
**VAF Ylistaro 78.57 28 eP P 13 39 38.7 +1.3**
**D24K Happy Valley 78.58 339 P P 13 39 36.7 -0.7**
baz=90
**NEST Nestorio 78.64 51 P P 13 39 40.1 +1.7**
**SIRR Siria 78.67 45 ⇓P P 13 39 38.6 +0.2**
**MCK McKinley 78.68 333 P P 13 39 37.3 -0.8**
baz=89,SNR=9.0
MCK S S 13 49 22.1 -3.2
baz=89
**BZS Buzias 78.68 45 ⇑P P 13 39 37.6 -0.8**
**BZS Buzias 78.68 45 P P 13 39 39.6 +1.2**
**NEA2 Nenana 78.72 334 P P 13 39 38.1 -0.2**
baz=89,SNR=53
NEA2 S S 13 49 21.1 -4.5
baz=89
**MDVR Moldovita 78.81 46 ⇑P P 13 39 39.3 +0.1**
**PMR Palmer 78.83 331 P P 13 39 39.0 +0.2**
baz=88,SNR=14
**I23K Minto, Yukon-K 78.84 335 P P 13 39 38.6 -0.3**
baz=89,SNR=23
I23K S S 13 49 21.2 -5.6
baz=89
I23K S S 13 49 21.2 -5.6
baz=89
**FNA Florina 78.86 50 P P 13 39 39.3 -0.2**
FNA IAmb IAmb 13 39 43.3
comp=Z,75nm,0.7s
**FNA Florina 78.86 50 P P 13 39 40.2 +0.7**
**FNA Florina 78.86 50 P P 13 39 39.3 -0.2**
FNA pmax pmax
comp=Z,75nm,0.7s
**TOLK Toolik Lake Re 78.86 338 P P 13 39 38.2 -0.8**
baz=89,SNR=11
TOLK S S 13 49 22.7 -4.3
baz=89
**BOVS Bovan 78.88 47 ⇑P P 13 39 39.6 0.0**
**E23K Chandalar 78.88 338 P P 13 39 38.6 -0.6**
baz=89,SNR=12
E23K S S 13 49 23.2 -4.2
baz=89
**H23K Yukon River 78.90 335 P P 13 39 39.3 +0.1**
baz=89,SNR=9.7
H23K S S 13 49 24.7 -2.8
baz=89
H23K S S 13 49 24.7 -2.8
baz=89
**KOLS Kolonicke sedl 78.92 42 eP P 13 39 41.9 +2.3**
KOLS pmax pmax
comp=Z,57nm,1.8s
**KOLS Kolonicke sedl 78.92 42 eP P 13 39 41.9 +2.3**
**HOLU Holmets 79.02 42 P P 13 39 40.8 +0.7**
**SURR Surduc 79.03 45 ⇑P P 13 39 40.3 0.0**
**SEW Seward 79.04 329 P P 13 39 40.2 +0.2**
baz=88,SNR=16
SEW S S 13 49 27.5 -1.6
baz=88
**G23K Bananza Creek 79.07 336 P P 13 39 40.5 +0.3**
baz=88,SNR=16
G23K S S 13 49 27.3 -2.0
baz=88
**COLD Coldfoot 79.13 337 P P 13 39 40.7 +0.3**
baz=88,SNR=8.0
**RC01 Rabbit Creek A 79.14 330 P P 13 39 40.9 +0.4**
baz=88,SNR=10
RC01 S S 13 49 29.5 -0.7
baz=88
**PVO Paravola 79.15 53 P P 13 39 42.4 +1.3**
**O22K Cooper Landing 79.16 330 P P 13 39 41.0 +0.3**
baz=88,SNR=9.3
**KWP Kalwaria Pacla 79.16 41 eP P 13 39 42.1 +1.2**
KWP ePP PP 13 42 40.4 -1.4
KWP eL L 14 05 52.8
comp=Z,2µm,40.1s
**KWP Kalwaria Pacla 79.16 41 P P 13 39 42.4 +1.5**
comp=Z,166nm,2.7s,comp=Z,3µm
**TAOE Nuku Hiva Isla 79.18 259 eP P 13 39 36.5 -5.3**
comp=Z,245nm,26.0s
TAOE eS S 13 49 25.5 -6.9
comp=Z,259nm,23.8s
TAOE eSS SS 13 54 37.6 -3.9

comp=Z,549nm,26.2s
TAOE eLQ LQ 14 01 02.5
comp=Z,797nm,24.8s
TAOE eLR LR 14 04 26.7
comp=Z,764nm,34.4s
**SUW Suwalki 79.18 37** *e*P **P 13 39 41.1 +0.1**
SUW eS S 13 49 29.3 -1.5
SUW eL L 14 06 44.1
comp=Z,1μm,34.8s
**SUW Suwalki 79.18 37** *e*P **P 13 39 42.0 +1.1**
**C23K Itkillik River 79.21 339** P **P 13 39 40.7 -0.1**
baz=88,SNR=30
C23K S **S 13 49 29.2 -1.3**
baz=88
**BERU Beregovo 79.21 43** P **P 13 39 42.0 +0.8**
**MUKU Mukachevo 79.22 43** P **P 13 39 42.3 +1.0**
**D23K Nanushuk River 79.25 338** P **P 13 39 40.9 -0.1**
baz=88,SNR=8.7
D23K S **S 13 49 26.0 -5.1**
baz=88
**M22K Willow 79.29 331** P **P 13 39 41.4 0.0**
baz=87,SNR=20
**HERR Herculane 79.30 46** ⇑P **P 13 39 41.9 +0.2**
**CUT Chulitna 79.33 332** P **P 13 39 41.4 -0.2**
baz=87,SNR=11
**EVR Evrytania 79.34 52** P **P 13 39 45.1 +2.8**
**DRGR 79.36 44** ⇑P **P 13 39 43.3 +1.1**
**DRGR 79.36 44** ⇑P **P 13 39 43.3 +1.1**
**DJES Djerdap 79.39 46** ⇑P **P 13 39 42.2 -0.1**
**MLY Manley 79.42 334** P **P 13 39 41.8 -0.3**
baz=88,SNR=36
MLY S **S 13 49 29.0 -4.2**
baz=88
**BRIU Brid 79.45 43** P **P 13 39 43.2 +0.7**
**ANX Ano Chora 79.46 53** P **P 13 39 44.8 +1.9**
**EFP Efpalio 79.47 53** P **P 13 39 44.2 +1.4**
**PYL PYLOS 79.48 54** P **P 13 39 43.9 +1.0**
**GZR Gura Zlata 79.51 46** ⇑P **P 13 39 43.6 +0.6**
**GZR Gura Zlata 79.51 46** ⇑P **P 13 39 43.6 +0.6**
**ARCES ARCESS Array B 79.53 21** P **P 13 39 41.4 -1.1**
ARCES IAmb IAmb 13 39 43.8
comp=Z,149nm,1.7s
**ARCES ARCESS Array B 79.53 21** P **P 13 39 42.5 -0.1**
comp=Z,14nm,0.6s,baz=280,slow=4.8,SNR=55
comp=Z,14nm,0.6s
**KORU Korolevo 79.54 43** P **P 13 39 43.9 +0.9**
**PABE Paberze 79.55 35** *e*P **P 13 39 44.0 +1.1**
**DEV Deva 79.56 45** ⇑P **P 13 39 44.7 +1.5**
**DEV Deva 79.56 45** ⇑P **P 13 39 44.7 +1.5**
**BPAW Bear Paw Mtn. 79.58 333** P **P 13 39 42.6 -0.3**
baz=87,SNR=24
**SUA Susitna One 79.61 331** P **P 13 39 43.7 +0.5**
baz=87,SNR=28
**SHIU Shidmytsya 79.61 42** P **P 13 39 44.4 +1.0**
**KEF Keuruu 79.62 28** *e*P **P 13 39 44.0 +0.9**
**MARR Marisel-Cluj 79.65 44** ⇑P **P 13 39 44.1 +0.3**
**G22K Bettles 79.65 336** P **P 13 39 43.1 -0.1**
baz=87
**H22K Ishtalitna Cre 79.65 335** P **P 13 39 43.1 -0.2**
baz=87,SNR=9.0
H22K S **S 13 49 31.3 -4.1**
baz=87
H22K S **S 13 49 31.3 -4.1**
baz=87
**KLV Kalavryta, Ach 79.69 53** P **P 13 39 45.4 +1.2**
**BRSE Bradley Lake S 79.70 329** P **P 13 39 43.9 +0.2**
baz=86,SNR=12
BRSE S **S 13 49 34.5 -1.7**
baz=86
**E22K Anaktuvuk Pass 79.70 338** P **P 13 39 43.3 -0.3**
baz=87,SNR=25
E22K S **S 13 49 30.5 -5.5**
baz=87
**MEZ Mezhgor'ye 79.77 42** P **P 13 39 44.8 +0.5**
**CAPN Captain Cook N 79.85 330** P **P 13 39 44.4 0.0**
baz=86
**GUR Goura 79.85 53** P **P 13 39 45.9 +0.8**
**F22K John River 79.88 337** P **P 13 39 44.7 +0.2**
baz=87,SNR=10.0
F22K S **S 13 49 34.3 -3.5**
baz=87
**I21K Tanana 79.94 335** P **P 13 39 44.7 -0.1**
baz=86
**SKT Skwentna 79.95 331** P **P 13 39 45.1 +0.2**
baz=86,SNR=25
**MORS Morshin 79.97 42** P **P 13 39 46.0 +0.7**
**KNT Kendrikon 79.97 50** P **P 13 39 46.7 +1.2**
**CJR Cluj-Napoca 79.97 44** ⇓P **P 13 39 46.6 +1.2**
**CJR Cluj-Napoca 79.97 44** ⇓P **P 13 39 46.6 +1.2**
**D22K Ayikyak River 79.98 338** P **P 13 39 45.1 0.0**
baz=86,SNR=16
**LVV L'vov 80.00 41** *e*P **P 13 39 46.2 +0.7**
**THE Thessaloniki 80.07 50** P **P 13 39 46.5 +0.5**
**KKB Krupnik 80.08 49** P **P 13 39 47.1 +1.0**
**VTS Vitosha 80.08 48** P **P 13 39 46.8 +0.5**
**B22K Teshekpuk Lake 80.14 340** P **P 13 39 46.0 +0.2**
baz=86
**HOM Homer 80.17 329** P **P 13 39 46.9 +0.8**
baz=86
**HORT Hortiatis 80.18 50** P **P 13 39 47.3 +0.6**
**LOT Lotru 80.20 45** ⇓P **P 13 39 47.0 +0.2**
**FINES FINESS Array B 80.24 29** P **P 13 39 45.6 -0.8**
**FINES FINESS Array B 80.24 29** P **P 13 39 46.2 -0.3**
comp=Z,9.7nm,0.3s,baz=269,slow=4.6,SNR=78
FINES LR LR 14 13 44.1
comp=Z,173nm,18.7s,baz=273,slow=34
comp=Z,9.7nm,0.3s
**RAKU Rahkiv 80.24 43** P **P 13 39 46.9 +0.1**
**H21K Melozitna Rive 80.25 335** P **P 13 39 46.5 0.0**
baz=86,SNR=27
H21K S **S 13 49 38.6 -3.1**
baz=86
H21K S **S 13 49 38.6 -3.1**
baz=86
**N20K Mount Spurr 80.33 331** P **P 13 39 47.0 -0.1**
baz=86,SNR=16
**SPCR Spurr Chakacha 80.33 331** P **P 13 39 46.9 -0.2**
baz=86
**SOH Sokhos 80.35 50** P **P 13 39 48.9 +1.3**
**MPEP Malo Peshtene 80.38 48** P **P 13 39 48.0 +0.3**
**F21K Alatna River 80.40 337** P **P 13 39 47.0 -0.4**
baz=85,SNR=6.7
F21K S **S 13 49 38.8 -4.5**
baz=85
**STNU Starunia 80.40 42** P **P 13 39 48.3 +0.6**
**VLI Veliai 80.45 54** P **P 13 39 49.2 +1.0**
**ARCR ARCALIA 80.46 44** ⇓P **P 13 39 49.4 +1.4**
**G21K Allakaket 80.47 336** P **P 13 39 47.8 +0.1**
baz=85
G21K S **S 13 49 40.9 -3.1**
baz=85
**E21K Killik River 80.48 338** P **P 13 39 47.6 -0.2**
baz=85,SNR=11
**SRS Serrai 80.50 50** P **P 13 39 49.2 +0.9**
**KRND KRANIDI 80.55 54** P **P 13 39 49.1 +0.4**
**MMB Musomishta 80.57 49** P **P 13 39 49.5 +0.7**
**KTHA Kythira Island 80.60 55** P **P 13 39 50.4 +1.4**
**B21K Ikpikpuk River 80.61 339** P **P 13 39 48.6 +0.3**
baz=85,SNR=23
**O20K Slope Mountain 80.62 329** P **P 13 39 49.2 +0.5**
baz=85
**Q20K Shuyak Island 80.64 328** P **P 13 39 49.1 +0.5**
baz=85
**NVR Nevrokopi 80.67 50** P **P 13 39 50.9 +1.6**
**PAIG Paliouri 80.69 51** P **P 13 39 50.2 +0.9**
**M20K Styx River 80.71 331** P **P 13 39 49.3 +0.2**
baz=85
M20K S **S 13 49 42.8 -4.0**
baz=85
M20K S **S 13 49 42.8 -4.0**
baz=85
**C21K Knifeblade Rid 80.71 339** P **P 13 39 48.3 -0.6**
baz=84,SNR=16
**PGB Panagyurishte 80.78 48** P **P 13 39 50.2 +0.3**
**KDAK Kodiak Island 80.81 327** P **P 13 39 50.3 +0.8**
KDAK IAmb IAmb 13 39 50.6
comp=Z,108nm,1.6s
**KDAK Kodiak Island 80.81 327** P **P 13 39 50.4 +0.8**
comp=Z,14nm,0.4s,baz=220,slow=0.4,SNR=25
KDAK LR LR 14 15 56.6
comp=Z,302nm,21.9s,baz=89,slow=36
comp=Z,14nm,0.4s
**KDAK Kodiak Island 80.81 327** P **P 13 39 50.0 +0.3**
baz=85
**KDAK Kodiak Island 80.81 327** *i* P **P 13 39 49.4 -0.2**
KDAK pmax pmax
comp=Z,86nm,1.5s
**KSV Kosov 80.82 43** P **P 13 39 49.6 -0.3**
**VADS Vadso 80.82 20** *e*P **P 13 39 49.3 -0.1**
**ARR Arges 80.82 46** ⇑P **P 13 39 50.5 +0.4**
**VSU Vasula 80.83 32** *ce*P **P 13 39 49.5 -0.2**
VSU pmax pmax
comp=Z,140nm,1.7s
**KOKK Kokkinochori, 80.83 50** P **P 13 39 50.7 +0.6**
**ANKY Antikythira Is 80.84 55** P **P 13 39 51.6 +1.4**
**OUR Ouranopolis 80.87 51** P **P 13 39 51.1 +0.8**
**J20K Nowinta River 80.95 334** P **P 13 39 50.4 +0.1**
baz=84,SNR=39
J20K S **S 13 49 43.8 -5.3**
baz=84
J20K S **S 13 49 43.8 -5.3**
baz=84
**P19K Oil Pt 80.97 329** P **P 13 39 50.7 +0.2**
baz=84,SNR=6.7
**BURAR Bucovina Array 80.99 43** P **P 13 39 51.5 +0.5**
BURAR IAmb IAmb 13 39 55.4
comp=Z,59nm,0.8s
**BURAR Bucovina Array 80.99 43** ⇓P **P 13 39 51.8 +0.9**
**BURAR Bucovina Array 80.99 43** ⇓P **P 13 39 51.8 +0.9**
**K20K Telida 81.00 333** P **P 13 39 50.3 -0.2**
baz=84,SNR=41
**L20K Farewell, AK 81.00 332** P **P 13 39 50.5 -0.1**
baz=84,SNR=37
L20K S **S 13 49 44.3 -5.4**
baz=84
L20K S **S 13 49 44.3 -5.4**
baz=84
**RNPP8 Varash 81.02 39** P **P 13 39 51.4 +0.5**
**I20K Naaghedeneel 81.03 334** P **P 13 39 50.4 -0.2**
baz=84,SNR=7.3
**RNPP9 Sopachiv 81.03 39** P **P 13 39 51.3 +0.4**
**DION Dionisos Attik 81.09 53** P **P 13 39 53.1 +1.5**
**A21K Barrow 81.10 341** P **P 13 39 51.3 +0.5**
baz=83
**VOIR 81.10 45** ⇑P **P 13 39 52.5 +0.9**
**VOIR 81.10 45** ⇑P **P 13 39 52.5 +0.9**
**VOIR 81.10 45** P **P 13 39 52.2 +0.6**
comp=Z,54nm,2.4s,comp=Z,2μm
**H20K Anotleneega Mo 81.13 335** P **P 13 39 51.3 +0.1**
baz=84,SNR=27
H20K S **S 13 49 46.1 -4.7**
baz=84
**KAVA Kavala 81.20 50** P **P 13 39 52.5 +0.4**
**NACGM Naroch 81.21 36** *e*P **P 13 39 52.6 +0.8**
comp=E,4μm,1.1s,baz=276
NACGM *e*P **PcP 13 39 53.8 -3.9**
comp=N,3μm,1.2s
NACGM ⇓*i*P **PcP 13 39 53.8 -3.9**
comp=Z,5μm,1.4s
NACGM pP **pP 13 40 19.7 -2.7**
NACGM PP **PP 13 43 00.1 +1.6**
NACGM PPP PPP 13 44 49.6
NACGM S **S 13 49 56.0 +4.1**
NACGM sS **sS 13 50 41.6 -2.8**
NACGM SS **SS 13 55 13.6 +4.1**
NACGM SSS SSS 13 58 42.9
**OHAK Old Harbor 81.25 327** P **P 13 39 52.0 +0.1**
baz=84
**Q19K Cape Douglas, 81.26 328** P **P 13 39 52.0 -0.1**
baz=84
**DOPR Dopca 81.28 45** ⇓P **P 13 39 52.5 +0.1**
**F20K Avaraart Lake 81.29 337** P **P 13 39 52.2 +0.2**
baz=83,SNR=20
F20K S **S 13 49 47.8 -4.6**
baz=83
**RZN Rozhen 81.29 49** P **P 13 39 53.5 +0.7**
**M19K Big River Lodg 81.30 331** P **P 13 39 52.4 +0.2**
baz=84
M19K S **S 13 49 47.9 -4.9**
baz=84
M19K S **S 13 49 47.9 -4.9**
baz=84
**E20K Nigu River 81.32 338** P **P 13 39 52.5 +0.3**
baz=83
**D20K Etivluk River 81.42 338** P **P 13 39 52.7 0.0**
baz=83
**IMMV Iera Moni Meta 81.44 56** P **P 13 39 54.5 +1.1**
**B20K Meade River 81.44 340** P **P 13 39 52.8 +0.1**
baz=82,SNR=18
**O19K Port Alsworth 81.46 330** P **P 13 39 53.0 +0.1**
baz=84,SNR=14
**N19K Bonanza Creek 81.47 330** P **P 13 39 52.7 -0.5**
baz=83,SNR=36
**L19K White Mountain 81.49 332** P **P 13 39 53.0 -0.1**
baz=83,SNR=48
**OZUR 81.54 45** ⇑P **P 13 39 55.0 +1.1**
**GVD Gavdhos 81.60 56** P **P 13 39 55.1 +0.8**
**HORU Horodok 81.61 42** P **P 13 39 54.2 +0.1**
**J19K Poorman 81.62 334** P **P 13 39 53.2 -0.5**
baz=83,SNR=7.2
**TURR Turia 81.70 45** ⇑P **P 13 39 56.9 +2.2**
**KMPD K-Podol'skiy 81.71 42** P **PcP 13 39 54.5 -5.5**
KMPD P **P 13 39 54.3 -0.3**
**MLR Muntele Rosu 81.72 45** ⇓P **P 13 39 55.4 +0.5**
**MLR Muntele Rosu 81.72 45** ⇓P **P 13 39 55.4 +0.5**
**MLR Muntele Rosu 81.72 45** P **P 13 39 55.5 +0.5**
comp=Z,174nm,1.7s,comp=Z,4μm
**KDZ Kurdzhali 81.75 49** P **P 13 39 57.9 +3.0**
**H19K Roundabout Mou 81.77 335** P **P 13 39 54.9 +0.4**
baz=82,SNR=87
**SII Sitkinak Islan 81.81 326** P **P 13 39 54.8 -0.2**
baz=83
**E19K Redstone River 81.82 337** P **P 13 39 55.0 +0.2**
baz=82
**R18K Karluk 81.84 327** P **P 13 39 55.2 +0.2**
baz=83
**COVR Voineasa-Covas 81.86 45** ⇑P **P 13 39 56.7 +1.2**
**MNK Minsk 81.89 36** *i* LRM MLR 14 16 35.9
comp=Z,274nm,17.5s
**MNK Minsk 81.89 36** *di*P **P 13 39 54.1 -1.2**
**MNK Minsk 81.89 36** *i*P **P 13 39 54.2 -1.2**
comp=E,27nm,0.8s
**MNK Minsk 81.89 36** *i*P **P 13 39 54.2 -1.2**
comp=N,48nm,0.9s
**MNK Minsk 81.89 36** *i*P **P 13 39 54.2 -1.2**
comp=Z,275nm,17.5s,baz=277
**MNK Minsk 81.89 36** *i*pP pP 13 40 22.4 -3.6
**MNK Minsk 81.89 36** *i*PP PP 13 43 02.6 -1.5
**MNK Minsk 81.89 36** *i*S **S 13 49 57.7 -1.3**
**MNK Minsk 81.89 36** *i*sS sS 13 50 48.1 -3.4
**MNK Minsk 81.89 36** *i*SS SS 13 55 20.9 +1.4
**MNK Minsk 81.89 36** *i*SSS SSS 13 58 48.6
**MNK Minsk 81.89 36** *i*LQ LQ 14 08 11.6
**MNK Minsk 81.89 36** *i*LR LR 14 13 44.4
**ONER Baraj Valea Uz 81.93 44** ⇓P **P 13 39 57.6 +1.8**
**O18K Koktuh Hills 81.94 329** P **P 13 39 55.4 -0.2**
baz=83,SNR=14
**G19K Purcell Mounta 81.95 336** P **P 13 39 55.8 +0.3**
baz=82,SNR=35
G19K S **S 13 49 54.5 -4.8**
baz=82
**NEHR Nehoiu 81.97 45** ⇑P **P 13 39 55.9 -0.2**
**ELND Elena 81.98 48** ⇓P **P 13 39 56.6 +0.5**
**Q18K Katmai Hardscr 81.99 328** P **P 13 39 56.0 0.0**
baz=83,SNR=12
Q18K S **S 13 49 58.4 -1.8**
baz=83
**D19K Kuna River 82.00 338** P **P 13 39 55.8 +0.1**
baz=81
D19K S **S 13 49 53.8 -6.0**
baz=81
**P18K Big Mountain, 82.01 329** P **P 13 39 56.4 +0.4**
**P18K Big Mountain, 82.01 329** P **P 13 39 55.6 -0.4**
baz=83,SNR=5.6
**SZH Strazhitsa 82.01 48** P **P 13 39 56.7 +0.4**
**M18K Stony River 82.03 331** P **P 13 39 55.5 -0.4**
baz=82,SNR=41
**SMTH Samothraki Isl 82.03 50** P **P 13 39 56.9 +0.4**
**GCSA Galena City Sc 82.06 334** P **P 13 39 55.8 -0.2**
baz=82,SNR=8.3
**TESR Tescani 82.09 44** ⇓P **P 13 39 57.1 +0.5**
**TESR Tescani 82.09 44** P **P 13 39 56.9 +0.3**
comp=Z,83nm,2.0s,comp=Z,3μm
**F19K Shaleruckik Mo 82.12 337** P **P 13 39 56.3 0.0**
baz=81,SNR=50
**PLOR3 Plostina Array 82.17 45** P **P 13 39 57.7 +0.6**
**PLOR Plostina 82.17 45** ⇓P **P 13 39 57.2 +0.1**
**PLOR Plostina 82.17 45** ⇓P **P 13 39 57.2 +0.1**
**N18K Kilae Creek 82.17 330** P **P 13 39 56.8 0.0**
baz=82,SNR=34
**PLOR5 Plostina Array 82.18 45** P **P 13 39 57.5 +0.3**
comp=Z,36nm,1.8s,comp=Z,2μm
**ISR Istrita 82.19 46** ⇓P **P 13 39 57.5 +0.3**
**ISR Istrita 82.19 46** ⇓P **P 13 39 57.5 +0.3**
**ISR Istrita 82.19 46** P **P 13 39 57.5 +0.3**
comp=Z,43nm,0.9s
**IDI Anoyia 82.19 56** P **P 13 39 58.6 +1.1**
**MI28 MI28,Pidlybu 82.20 40** P **P 13 39 57.5 +0.4**
**ACHA Angle Creek He 82.22 328** P **P 13 39 57.6 +0.5**
**VRI Vrincioaia 82.22 45** ⇑P **P 13 39 58.5 +1.2**
**VRI Vrincioaia 82.22 45** ⇑P **P 13 39 58.5 +1.2**
**VRI Vrincioaia 82.22 45** P **P 13 39 57.6 +0.3**
comp=Z,23nm,1.3s,comp=Z,254nm
**L18K Granite Mounta 82.33 332** P **P 13 39 57.9 +0.3**
baz=82,SNR=27
**ALN Alexandroupoli 82.37 50** P **P 13 39 58.4 +0.2**
**MI29 MI29, Kamyanyy 82.38 40** P **P 13 39 58.4 +0.4**
**LUBAR Lubar, Ukraine 82.39 41** P **P 13 39 57.5 -0.6**
**C19K Lookout Ridge 82.43 339** P **P 13 39 58.8 +0.8**
baz=80,SNR=33
**SIGR SIGRI 82.44 52** P **P 13 39 59.3 +0.7**
**ODBI Odobesti 82.46 45** P **P 13 39 58.7 +0.1**
comp=Z,18nm,0.7s,comp=Z,1μm
**Q17K Contact Creek 82.50 328** P **P 13 39 58.3 -0.3**
baz=82,SNR=6.0
**PUL Pulkovo 82.51 31** *i* P **P 13 39 59.8 +1.3**
PUL pmax pmax
comp=Z,97nm,0.5s
**JMB Yambol 82.52 48** P **P 13 39 59.1 +0.2**
**VALR Valaam 82.55 29** *i* P **P 13 39 59.0 +0.4**
VALR pmax pmax
comp=Z,60nm,0.8s
**MI30 MI30,Zelenitsa 82.55 40** P **P 13 39 58.8 -0.1**
**G18K Tagagawik 82.62 336** P **P 13 39 59.5 +0.5**
baz=80,SNR=112
G18K S **S 13 50 03.5 -2.6**
baz=80
**H18K Honhosa River 82.62 335** P **P 13 39 59.7 +0.7**
baz=81
H18K S **S 13 50 03.5 -2.7**
baz=81
**APA Apatity 82.62 23** ⇓*i* P **P 13 39 57.8 -1.1**
APA *i* *PP **pP 13 40 26.8 -2.8**
APA pmax pmax
comp=Z,13nm,1.0s
**P17K Kvichak River 82.65 329** P **P 13 39 59.1 -0.1**
baz=82,SNR=14
**CHIR Chirikof Islan 82.71 325** P **P 13 40 00.1 +0.5**
baz=82
**CHOS Chios island 82.71 52** P **P 13 40 00.8 +0.7**
**EZN Ezine 82.72 51** P **P 13 40 00.2 +0.2**
**EZN Ezine 82.72 51** P **P 13 40 01.0 +1.0**
comp=Z,79nm,2.3s,comp=Z,2μm
**A19K Wainwright 82.73 340** P **P 13 40 00.2 +0.7**
baz=79
**PRK Paraskevi 82.76 52** P **P 13 40 00.6 +0.4**
**M17K Holitna River 82.81 331** P **P 13 40 00.1 +0.1**
baz=81,SNR=12
**N17K Nushagak Hills 82.83 330** P **P 13 39 59.8 -0.4**
baz=81,SNR=7.9
N17K S **S 13 50 03.2 -5.2**
baz=81
**Q16K King Salmon 82.84 328** P **P 13 40 00.4 +0.2**
baz=81
**R17L Mt. Peulik Vol 82.84 327** P **P 13 40 00.1 -0.2**
baz=81,SNR=9.5
R17L S **S 13 50 08.8 +0.1**
baz=81
**F18K Selawik 82.89 336** P **P 13 40 00.8 +0.4**
baz=80,SNR=42
F18K S **S 13 50 05.4 -3.4**
baz=80
**O17K Koliganek Bris 82.90 329** P **P 13 40 00.2 -0.3**
baz=81,SNR=14
O17K S **S 13 50 07.7 -1.4**
baz=81
**K17K Iditarod 83.00 332** P **P 13 40 01.8 +0.8**
baz=80,SNR=103
K17K S **S 13 50 09.6 -0.4**
baz=80
**SORM Soroca 83.02 42** ⇑P **P 13 40 00.8 -0.6**
**SORM Soroca 83.02 42** ⇑P **P 13 40 00.8 -0.6**
**SORM Soroca 83.02 42** P **P 13 40 00.8 -0.6**
comp=Z,112nm,1.2s,comp=Z,2μm
**LVZ Lovozero 83.03 22** ⇑P **P 13 40 00.7 -0.4**
**LVZ Lovozero 83.03 22** P **P 13 40 01.8 +0.7**
comp=Z,66nm,2.3s
**PRD Provadia 83.07 47** P **P 13 40 01.5 -0.2**
**AK20 Malin Array Si 83.07 40** P **P 13 40 02.1 +0.5**
**AK19 Malin Array Si 83.07 40** P **P 13 40 01.7 +0.1**
**C18K Utukok River 83.08 339** P **P 13 40 01.3 -0.1**
baz=78,SNR=12
**AK21 Malin Array Si 83.08 40** P **P 13 40 01.7 0.0**
**L17K Donlin 83.09 332** P **P 13 40 02.4 +0.9**
baz=80,SNR=43
L17K S **S 13 50 08.7 -2.3**
baz=80
**E18K Tukpahlearik C 83.11 337** P **P 13 40 01.8 +0.3**
baz=79,SNR=25
E18K S **S 13 50 11.1 +0.1**
baz=79
**B18K Kokolik River 83.15 339** P **P 13 40 01.7 +0.1**
baz=78
B18K S **S 13 50 10.4 -1.0**
baz=78
**VLDR Vladesti 83.16 45** ⇑P **P 13 40 03.4 +1.3**
**KIEV Kiev 83.20 40** P **P 13 40 01.3 -0.9**
**KIEV Kiev 83.20 40** ⇑P **P 13 40 02.4 +0.1**
**KIEV Kiev 83.20 40** ⇑P **P 13 40 02.4 +0.1**
**AKASG Malin Array Be 83.21 40** P **P 13 40 02.2 -0.1**
**AKASG Malin Array Be 83.21 40** P **P 13 40 02.1 -0.1**
comp=Z,4.8nm,0.5s,baz=273,slow=4.2,SNR=20
comp=Z,4.8nm,0.5s
**AKASG Malin Array Be 83.21 40** *i* P **P 13 40 02.5 +0.2**
AKASG pmax pmax
comp=Z,4.0nm,0.6s
**AKBB Malin Array Si 83.21 40** *ce*P **P 13 40 02.3 0.0**
AKBB pmax pmax
comp=Z,62nm,2.0s
**AKBB Malin Array Si 83.21 40** P **P 13 40 02.5 +0.2**
**ICOR Ion Corvin 83.21 46** ⇑P **P 13 40 03.5 +1.0**
**AK07 Malin Array Si 83.22 40** P **P 13 40 02.5 +0.1**
**HARR Harsova 83.22 46** ⇑P **P 13 40 01.5 -1.0**
**HARR Harsova 83.22 46** ⇑P **P 13 40 01.5 -1.0**
**J17K VABM Dome 83.23 333** P **P 13 40 02.9 +0.8**
baz=80
J17K S **S 13 50 08.9 -3.4**
baz=80
J17K S **S 13 50 08.9 -3.4**
baz=80
**AK10 Malin Array Si 83.24 40** P **P 13 40 02.4 -0.1**
**ZKR Zakros 83.30 56** P **P 13 40 03.7 +0.6**
**CFR Carcaliu 83.30 45** ⇓P **P 13 40 01.8 -1.1**
**CFR Carcaliu 83.30 45** ⇓P **P 13 40 01.8 -1.1**
**H17K Granite Mounta 83.31 335** P **P 13 40 03.4 +0.8**
baz=79,SNR=44
H17K S **S 13 50 13.0 -0.1**
baz=79
**TLBR Topalu 83.33 46** ⇓P **P 13 40 04.3 +1.2**
**O16K Kokwok River B 83.43 329** P **P 13 40 02.8 -0.4**
baz=80,SNR=10
O16K S **S 13 50 14.1 -0.3**
baz=80
**P16K Nushagak River 83.47 329** P **P 13 40 03.2 -0.3**
baz=80
P16K S **S 13 50 12.5 -2.4**
baz=80
P16K S **S 13 50 12.5 -2.4**
baz=80
**KIS Kishinev 83.50 44** ⇓*ce*P **P 13 40 03.0 -0.9**
comp=Z,350nm,4.2s
**KIS Kishinev 83.50 44** *ce*P **P 13 40 00.3 -3.6**
KIS pmax pmax
comp=Z,350nm,4.2s
**R16K Pilot Point 83.50 327** P **P 13 40 03.4 -0.2**
baz=80
R16K S **S 13 50 15.0 -0.2**
baz=80
R16K S **S 13 50 15.0 -0.2**
baz=80
**G17K Kiwalik Mounta 83.50 335** P **P 13 40 04.2 +0.7**
baz=79,SNR=41
G17K S **S 13 50 11.7 -3.3**
baz=79
**MILM Milestii Mici 83.50 44** ⇓*i*P **P 13 40 03.0 -0.9**
comp=Z,850nm,4.5s
**MILM Milestii Mici 83.50 44** *di*P **P 13 40 03.0 -0.9**

MILM pmax pmax
comp=Z,850nm,4.5s
**TPGR Topolog 83.54 46** ⇑P **P 13 40 04.4 +0.2**
**F17K Baldwin Pennin 83.55 336** P **P 13 40 03.7 0.0**
baz=78,SNR=20
F17K S **SKSac 13 50 17.5 +2.6**
baz=78
**M16K Timber Creek 83.60 331** P **P 13 40 05.2 +1.1**
baz=80,SNR=42
M16K S **S 13 50 14.1 -2.1**
baz=80
**N16K Nishlik Lake 83.61 330** P **P 13 40 04.8 +0.6**
baz=80,SNR=7.4
N16K S **S 13 50 16.0 -0.4**
baz=80
**E17K Hotham Inlet 83.64 337** P **P 13 40 04.0 -0.2**
baz=78,SNR=52
E17K S **S 13 50 12.4 -4.0**
baz=78
**L16K Owhat River 83.72 332** P **P 13 40 06.1 +1.5**
baz=79,SNR=40
L16K S **SKSac 13 50 17.9 +1.7**
baz=79
**RDOG Red Dog Mine 83.83 338** P **P 13 40 05.0 -0.2**
baz=77,SNR=14
**C17K DeLong Mountai 83.83 339** P **P 13 40 05.2 0.0**
baz=77,SNR=7.2
**I17K Unalakleet 83.84 334** P **P 13 40 05.8 +0.6**
baz=78,SNR=6.8
**JURR Jurilovca 83.88 46** ⇑P **P 13 40 06.9 +1.1**
**J16K Anvik River 83.92 333** P **P 13 40 06.6 +0.9**
baz=78,SNR=13
J16K S **S 13 50 18.5 -0.9**
baz=78
**CTYL Yalikoy Yolu 83.96 49** P **P 13 40 07.1 +0.8**
comp=Z,63nm,0.8s
**D17K Noatak River 83.98 338** P **P 13 40 05.8 -0.1**
baz=77
D17K S **S 13 50 17.8 -1.9**
baz=77
**KARP Karpathos 83.99 55** P **P 13 40 07.5 +0.8**
comp=Z,211nm,0.8s,comp=Z,3µm
**CHGN Chignik 84.17 326** P **P 13 40 06.6 -0.5**
baz=80,SNR=6.7
**G16K Koyuk River 84.22 335** P **P 13 40 08.1 +0.9**
baz=77,SNR=24
G16K S **S 13 50 20.4 -1.8**
baz=77
**PURM Purcari 84.29 44** P **P 13 40 08.9 +1.0**
comp=Z,156nm,1.6s,comp=Z,5µm
**N15K Kwethluk River 84.31 330** P **P 13 40 08.5 +0.8**
baz=78,SNR=9.2
N15K S **SKSac 13 50 22.8 +2.6**
baz=78
**H16K Elim 84.34 335** P **P 13 40 08.6 +0.8**
baz=77,SNR=8.7
H16K S **S 13 50 20.6 -2.9**
baz=77
**O15K Ungalikthiuk R 84.37 329** S **S 13 50 21.7 -2.3**
baz=79
**M15K Kasigluk River 84.49 331** P **P 13 40 09.5 +0.8**
baz=78,SNR=8.5
M15K S **SKSac 13 50 24.6 +3.4**
baz=78
**K15K Wolf Creek Mou 84.55 332** P **P 13 40 10.6 +1.7**
baz=78,SNR=12
K15K S **S 13 50 28.1 +2.5**
baz=78
**C16K Lisburne Hills 84.66 339** P **P 13 40 09.5 +0.2**
C16K IAmb IAmb 13 40 12.8
comp=Z,70nm,0.9s
**C16K Lisburne Hills 84.66 339** P **P 13 40 09.1 -0.2**
baz=75,SNR=6.1
**L15K Ungalak Mounta 84.66 332** P **P 13 40 10.6 +1.1**
baz=78,SNR=11
L15K S **S 13 50 27.7 +1.0**
baz=78
**TSUM Tsumeb 84.74 111** P **P 13 40 10.6 -0.3**
**TSUM Tsumeb 84.74 111** LR LR 14 13 06.3
comp=Z,298nm,21.2s,baz=324,slow=32
**NE56 Odesa 84.96 44** P **P 13 40 11.7 +0.5**
**G15K Niukluk 85.01 335** P **P 13 40 12.2 +1.0**
baz=76,SNR=18
G15K S **SKSac 13 50 28.5 +4.2**
baz=76
**F15K North Star Dit 85.07 336** P **P 13 40 12.3 +0.9**
baz=75,SNR=16
F15K S **SKSac 13 50 28.8 +4.1**
baz=75
**O14K Tigyukauivet M 85.08 329** P **P 13 40 11.8 +0.2**
baz=78
O14K S **S 13 50 23.4 -7.6**
baz=78
**M14K Bethel 85.09 331** P **P 13 40 12.2 +0.6**
baz=77,SNR=10
M14K S **S 13 50 32.7 +1.7**
baz=77
**CHNA Chernabura Isl 85.11 325** P **P 13 40 11.9 0.0**
baz=78
**N14K Kuskokwak Cree 85.14 330** P **P 13 40 12.5 +0.6**
baz=77
N14K S **S 13 50 33.4 +1.9**
baz=77
**L14K Kuka Creek 85.30 332** P **P 13 40 13.0 +0.4**
baz=76,SNR=6.7
L14K S **S 13 50 34.6 +1.7**
baz=76
**J14K Nanvaranak Lak 85.36 333** P **P 13 40 14.1 +1.2**
baz=76,SNR=16
J14K S **S 13 50 36.3 +2.8**
baz=76
**SDPT Sand Point 85.50 325** P **P 13 40 13.7 -0.1**
baz=78
**ANM Nome 85.67 335** P **P 13 40 14.8 +0.4**
baz=74
ANM S **S 13 50 37.8 +1.2**
baz=74
**F14K Arctic Creek 85.81 336** P **P 13 40 16.0 +1.0**
baz=74,SNR=9.4
F14K S **S 13 50 38.5 +0.6**
baz=74
**M13K Dall Lake 85.84 331** P **P 13 40 16.6 +1.3**
baz=76,SNR=8.7
M13K S **S 13 50 40.0 +1.8**
baz=76
**K13K Kusilvak Mount 86.06 332** P **P 13 40 17.1 +0.7**
baz=75,SNR=9.7
K13K S **S 13 50 41.6 +1.1**
baz=75
**S12K Black Hills 86.30 326** P **P 13 40 17.1 -0.6**
baz=76
S12K S **S 13 50 42.8 -0.3**
baz=76
**TNA Tin City 86.42 336** P **P 13 40 18.9 +0.9**
baz=72,SNR=12
TNA S **S 13 50 43.8 0.0**
baz=72
**OBN Obninsk 86.72 35** P **P 13 40 20.5 +0.7**
OBN IAmb IAmb 13 40 22.4
comp=Z,96nm,1.1s
**OBN Obninsk 86.72 35** *ce*P **P 13 40 18.4 -1.3**
OBN *e**PP **pP 13 40 49.0 -1.7**
OBN *e**SP **sP 13 40 59.7 -3.7**
OBN *e* 13 43 42.0
OBN *e*PPP PPP 13 45 36.4
OBN *e*S **SKSac 13 50 34.2 -1.1**
OBN *e*SS **SS 13 56 25.7 -4.9**
OBN *e*SSS SSS 14 00 01.7
OBN pmax pmax
comp=Z,116nm,1.3s
**OBN Obninsk 86.72 35** P **P 13 40 20.7 +1.0**
comp=Z,52nm,0.9s
**MOS Moscow 87.15 34** *e*P **P 13 40 20.0 -1.8**
MOS *e**PP **pP 13 40 50.7 -2.1**
MOS *e* 13 43 45.3
MOS pmax pmax
comp=Z,62nm,1.3s
**M11K Mekoryuk 87.21 331** P **P 13 40 23.2 +1.2**
baz=73
M11K S **S 13 50 53.2 +1.6**
baz=73
**SIM Simferopol' 87.50 45** *e*P **P 13 40 25.5 +1.7**
SIM *e*S **SKSac 13 50 39.3 -1.4**
SIM pmax pmax
comp=Z,28nm,0.8s
**ANTO Ankara 87.62 50** P **P 13 40 24.6 0.0**
**ANTO Ankara 87.62 50** ⇑P **P 13 40 25.2 +0.6**
**ANTO Ankara 87.62 50** ⇑P **P 13 40 25.2 +0.6**
**ANTO Ankara 87.62 50** P **P 13 40 25.0 +0.4**
comp=Z,30nm,2.0s,comp=Z,641nm
**BR106 Keskin Array S 88.27 50** P **P 13 40 27.5 -0.2**
comp=Z,22nm,0.7s,comp=Z,222nm
**BR105 Keskin Array S 88.27 50** P **P 13 40 27.6 -0.1**
comp=Z,25nm,1.0s,comp=Z,268nm
**BR131 Keskin Array S 88.29 50** *c i*P **P 13 40 26.9 -0.9**
**BRTR Keskin Array B 88.29 50** P **P 13 40 26.9 -0.9**
**BRTR Keskin Array B 88.29 50** P **P 13 40 27.6 -0.3**
comp=Z,11nm,0.6s,baz=262,slow=4.6,SNR=76
comp=Z,11nm,0.6s
**BR104 Keskin Array S 88.29 50** P **P 13 40 28.4 +0.6**
comp=Z,21nm,1.3s,comp=Z,258nm
**GAMB Gambell 88.55 335** P **P 13 40 28.7 +0.4**
baz=69
**KIRS Kirsehir-Merke 88.62 51** ⇑P **P 13 40 28.0 -1.3**
**LPSR Galich'ya Gora 88.72 37** *e*P **P 13 40 28.2 -1.1**
LPSR pmax pmax
comp=Z,90nm,2.1s
**CSS Mathiatis 89.06 55** P **P 13 40 33.0 +1.6**
comp=Z,49nm,1.2s,comp=Z,1000nm
**VNA3 Neumayer Olymp 89.13 165** ⇑P **P 13 40 32.9 +2.2**
comp=Z,10nm,0.9s
**VNA1 Neumayer--Stat 89.13 164** ⇑P **P 13 40 33.0 +2.3**
comp=Z,13nm,0.8s
**VSR Storozhevoye 89.24 38** *e*P **P 13 40 30.2 -1.6**
VSR pmax pmax
comp=Z,60nm,1.8s
**UNV Unalaska Valle 89.28 325** P **P 13 40 32.5 +0.6**
baz=73
**VORD Divnogorie 89.39 38** *e*P **P 13 40 30.8 -1.7**
VORD pmax pmax
comp=Z,10.0nm,1.0s
**ANN Anapa 89.83 44** *e*P **P 13 40 34.2 -0.5**
ANN *e* 13 44 06.3
ANN *e* 13 51 13.9
ANN pmax pmax
comp=Z,97nm,2.1s
**PPT Papeete 89.97 252** LR LR 14 13 06.7
comp=Z,180nm,21.6s,baz=74,slow=30
**PPT2 Papeete2 89.97 252** *e*P P 13 40 29.4 -6.6
comp=Z,229nm,26.2s
**PPT2 Papeete2 89.97 252** *e*PP **PP 13 44 09.1 -1.6**
comp=Z,144nm,26.5s
PPT2 *e*S **S 13 51 14.4 -4.9**
comp=Z,221nm,26.0s
PPT2 *e*SS **SS 13 57 23.9 +3.5**
comp=Z,741nm,27.5s
PPT2 *e*LQ LQ 14 05 10.8
comp=Z,960nm,30.2s
PPT2 *e*LR LR 14 09 24.2
comp=Z,1µm,38.2s
PPT2 *e*LR LR 14 09 29.1
comp=Z,2µm,36.5s
**SUR Sutherland 90.50 123** LR LR 14 16 05.8
comp=Z,265nm,21.8s,baz=286,slow=32
**VRH Novokhopyorsk 90.78 37** *e*P **P 13 40 37.6 -1.4**
VRH pmax pmax
comp=Z,60nm,1.8s
**TBI Tubuai 90.98 247** *e*P **P 13 40 39.9 -0.5**
comp=Z,796nm,27.0s
**TBI Tubuai 90.98 247** *e*PP PP 13 44 03.9 -15
comp=Z,739nm,32.2s
TBI *e*S **S 13 51 22.2 -5.9**
comp=Z,1µm,31.8s
TBI *e*SS **SS 13 57 32.3 -2.2**
comp=Z,2µm,31.5s
TBI *e*LQ LQ 14 06 02.2
comp=Z,4µm,40.2s
TBI *e*LR LR 14 09 54.5
comp=Z,8µm,37.0s
TBI *e*LR LR 14 09 56.8
comp=Z,1µm,37.8s
**SNAA Sanae 91.17 164** ⇑P **P 13 40 41.9 +1.6**
comp=Z,232nm,0.8s
**SNAA Sanae 91.17 164** P **P 13 40 42.1 +1.8**
comp=Z,12nm,0.9s,baz=299,slow=4.4,SNR=29
SNAA LR LR 14 21 17.4
comp=Z,566nm,20.2s,baz=3.5,slow=35
comp=Z,12nm,0.9s
**SNAA Sanae 91.17 164** *ce*P **P 13 40 41.7 +1.4**
SNAA pmax pmax
comp=Z,16nm,0.9s
**MMAI Mount Meron Ar 91.18 56** P **P 13 40 42.7 +1.3**
comp=Z,9.8nm,0.6s,baz=346,slow=1.7,SNR=18
MMAI LR LR 14 23 51.8
comp=Z,76nm,18.6s,baz=228,slow=37
comp=Z,9.8nm,0.6s
**EIL Elat 91.57 60** LR LR 14 21 31.0
comp=Z,179nm,20.8s,baz=254,slow=35
**ERBR Yeremizino-Bor 91.65 43** *e*P **P 13 40 45.0 +1.8**
ERBR pmax pmax
comp=Z,47nm,0.6s
**SOC Sochi 91.74 45** *e*P **P 13 40 42.3 -1.3**
SOC pmax pmax
comp=Z,20nm,0.7s
**VSLR Vesyoloye 92.00 45** *e*P **P 13 40 46.4 +1.6**
VSLR pmax pmax
comp=Z,19nm,0.9s
**LABN Labinsk 92.13 44** *e*P **P 13 40 45.5 +0.1**
LABN *e**PP **pP 13 41 13.1 -3.5**
LABN *e* 13 51 07.4
LABN pmax pmax
comp=Z,32nm,0.5s
**KIRV Kirov 92.24 29** *ce*P **P 13 40 45.0 -0.5**
**TROLL Troll, Antarti 92.80 164** ⇑P **P 13 40 49.5 +1.5**
comp=Z,464nm,0.8s
**LBTB Lobatse 93.19 115** LR LR 14 18 57.9
comp=Z,326nm,21.3s,baz=272,slow=33
**BOSA Boshof 93.53 118** P **P 13 40 53.6 +1.3**
comp=Z,13nm,1.0s,baz=297,slow=4.0,SNR=10
BOSA LR LR 14 20 54.8
comp=Z,277nm,18.3s,baz=279,slow=34
comp=Z,13nm,1.0s
**KIV Kislovodsk 93.68 44** *e*P **P 13 40 51.8 -0.9**
KIV *e* 13 44 37.7
KIV *e* 13 51 15.7
KIV *e*SS SS 13 58 13.0 +1.1
KIV pmax pmax
comp=Z,7.0nm,1.0s
**SHA1 Shidzhatmaz 93.73 44** *i* P **P 13 40 54.7 +1.6**
**BELG Belogornoye 93.80 35** LR LR 14 22 46.7
comp=Z,227nm,18.7s,baz=298,slow=35
**BELG Belogornoye 93.80 35** *i* P **P 13 40 51.5 -1.4**
BELG pmax pmax
comp=Z,9.0nm,1.4s
**KBZ Khabaz 93.90 44** P **P 13 40 54.2 +0.6**
comp=Z,2.2nm,0.7s,baz=79,slow=2.4,SNR=5.8
comp=Z,2.2nm,0.7s
**KBZ Khabaz 93.90 44** *i* P **P 13 40 54.0 +0.5**
KBZ pmax pmax
comp=Z,13nm,2.0s
**BILL Bilibino 94.03 343** *ce*P **P 13 40 52.4 -1.2**
BILL *e**PP **pP 13 41 21.6 -3.2**
BILL *e**SP **sP 13 41 34.6 -2.9**
BILL *e* 13 44 39.4
BILL *e*PPP PPP 13 46 40.5
BILL *e*S **SKSac 13 51 16.5 -0.6**
BILL *e*SS **SS 13 58 15.5 +0.3**
BILL pmax pmax
comp=Z,17nm,1.0s
**MATP Matopo 95.05 110** LR LR 14 23 31.6
comp=Z,88nm,18.1s,baz=242,slow=35
**NVL N'lazarevskaya 95.10 161** *e*P **P 13 40 59.4 +1.1**
NVL *e*S **SKSac 13 51 17.2 -5.2**
NVL pmax pmax
comp=Z,8.0nm,0.7s
NVL MLR MLR
comp=Z,414nm,17.0s
**MAK Makhachkala 97.32 44** *e*P P 13 40 57.6 -12
MAK *e**SS **S 13 52 16.9 -6.1**
MAK *e*SSS SSS 14 02 43.1
MAK pmax pmax
comp=Z,121nm,1.1s
MAK MLR MLR
comp=Z,324nm,17.0s
**TIXI Tiksi 97.45 356** LR LR 14 26 06.9
comp=Z,231nm,19.5s,baz=32,slow=36
**ARU Arti 97.60 29** LR LR 14 21 10.3
comp=Z,187nm,22.0s,baz=304,slow=33
**ELIB Princess Elisa 98.96 162** *e*P Pdif 13 41 17.4 +1.5
**FURI Furi 99.68 79** LR LR 14 29 24.1
comp=Z,220nm,18.3s,baz=316,slow=37
**QSPA South Pole Qui 100.70 180** P **Pdif 13 41 25.9 +2.1**
comp=Z,1.5nm,1.0s,baz=90,slow=7.8,SNR=3.1
**SEY Seymchan 101.68 344** P **Pdif 13 41 27.6 -0.5**
comp=Z,1.4nm,0.6s,baz=50,slow=8.1,SNR=4.2
SEY PP **PP 13 45 37.5 -1.7**
comp=Z,2.8nm,0.6s,baz=75,slow=7.6,SNR=8.1
**BVAR Borovoye Array 105.11 27** PP **PP 13 46 02.7 -2.4**
comp=Z,5.9nm,1.0s,baz=306,slow=5.0,SNR=7.7
**ZALV Zalesovo Beam 110.05 20** PKiKP **PKiKP 13 46 04.9 -1.8**
comp=Z,1.9nm,0.7s,baz=267,slow=1.2,SNR=6.2
ZALV PP **PP 13 46 42.8 +1.9**
comp=Z,2.7nm,0.9s,baz=317,slow=8.3,SNR=4.1
**MKAR Makanchi Array 114.90 26** PKP **PKiKP 13 46 13.8 -2.5**
comp=Z,0.5nm,0.7s,baz=35,slow=5.3,SNR=2.8
**KSH Kashi 117.16 35** PKP **PKPdf 13 46 20.3 -0.7**
KSH PP **PP 13 47 32.9 +1.0**
KSH AMB AMB
comp=Z,280nm,3.8s
**HEH HeiHe 118.62 352** PKP **PKPdf 13 46 22.6 -0.6**
**WMQ Urumqi 119.54 24** PKP **PKiKP 13 46 26.3 +0.9**
WMQ LR LR
comp=Z,600nm,24.0s
**SONM Songino Array 120.96 8** PKP **PKPdf 13 46 27.0 -1.0**
comp=Z,2.6nm,0.7s,baz=310,slow=1.2,SNR=12
SONM PP **PP 13 47 57.4 0.0**
comp=Z,2.4nm,1.0s,baz=324,slow=3.9,SNR=9.0
SONM SKP **SKPdf 13 49 51.9 -0.6**
comp=Z,0.8nm,0.5s,baz=318,slow=1.9,SNR=3.6
**ULN Ulaanbaatar 121.02 8** *i* PKiKP **PKiKP 13 46 28.8 +0.5**
**BNX BinXian 123.04 351** PKP **PKPdf 13 46 30.5 -1.4**
**USRK Ussuriysk Ar. 123.69 347** PKP **PKPdf 13 46 31.9 -1.3**
comp=Z,4.9nm,0.8s,baz=256,slow=1.8,SNR=9.6
USRK PP **PP 13 48 14.0 -1.7**
comp=Z,2.5nm,0.6s,baz=21,slow=5.9,SNR=6.9
**XLT XiLinHaoTe 125.65 1** *e*PKP PKPdf 13 46 16.9 -20
**GTA Gaotai 127.64 17** PKP **PKiKP 13 46 41.5 -0.1**
GTA PP **PP 13 48 42.8 +0.6**
GTA AMB AMB
comp=Z,250nm,8.4s
GTA LR LR
comp=Z,420nm,21.1s
GTA LR LR
comp=Z,320nm,20.4s
GTA LR LR
comp=Z,630nm,21.8s
**HHC Hu-ho-hao-te 128.46 5** *e*PKP **PKPdf 13 46 41.6 -1.0**
HHC SS SS 14 05 52.0 -1.2
HHC AMB AMB
comp=Z,220nm,6.0s
HHC LR LR
comp=Z,250nm,19.9s
HHC LR LR
comp=Z,320nm,19.1s
HHC LR LR
comp=Z,340nm,19.9s
**BTO Baotou 128.54 7** *e*PKP **PKPdf 13 46 41.8 -0.9**
BTO sPKP 13 47 20.9
BTO LR LR
comp=Z,540nm,10.7s
BTO LR LR
comp=Z,410nm,4.6s
BTO LR LR
comp=Z,400nm,5.8s
**GOMU GeErMu 128.87 23** PKP **PKiKP 13 46 44.8 +0.3**
GOMU SS SS 14 06 05.4 +5.9
GOMU AMB AMB
comp=Z,200nm,4.7s
GOMU LR LR
comp=Z,310nm,16.5s
GOMU LR LR
comp=Z,400nm,16.7s
GOMU LR LR
comp=Z,620nm,16.8s
**MJAR Matsushiro Arr 128.94 338** PKP **PKPdf 13 46 42.2 -1.2**
comp=Z,6.7nm,0.7s,baz=60,slow=1.4,SNR=21
MJAR PP **PP 13 48 49.8 -0.9**
comp=Z,3.5nm,1.1s,baz=359,slow=6.6,SNR=5.4
MJAR SKPab SKPab 13 49 51.0
comp=Z,5.6nm,1.0s,baz=13,slow=3.8,SNR=7.1
**BJI Beijing 129.51 1** PKP **PKiKP 13 46 44.8 -0.3**
**KSRS Korea Array 131.01 348** PKP **PKPdf 13 46 46.0 -1.3**
comp=Z,4.4nm,0.8s,baz=300,slow=1.7,SNR=13
KSRS PP **PP 13 49 02.5 -1.4**
comp=Z,2.4nm,1.0s,baz=23,slow=6.8,SNR=5.0
KSRS SKPbc **SKPbc 13 49 57.9 -3.0**
comp=Z,4.1nm,0.7s,baz=360,slow=4.5,SNR=12
**KSRS Korea Array 131.01 348** PKiKP **PKPdf 13 46 46.0 -1.3**
**DZM Mont Dzumac 131.43 250** *e*PP **PP 13 49 06.0 -2.9**
comp=Z,290nm,26.7s
**DZM Mont Dzumac 131.43 250** *e*LR LR 14 28 29.7
comp=Z,339nm,26.6s
**LZH Lanzhou 131.83 14** *e*PKP **PKiKP 13 46 52.5 +2.3**
LZH LR LR
comp=Z,390nm,16.8s
LZH LR LR
comp=Z,470nm,14.4s
LZH LR LR
comp=Z,960nm,19.9s
**HNS HongShan 132.10 2** *e*PKP **PKiKP 13 46 50.0 -0.5**
**LYN LuoYang 134.79 5** *e*PKP **PKiKP 13 46 55.8 -0.2**
LYN LR LR
comp=Z,730nm,15.8s
LYN LR LR
comp=Z,540nm,13.4s
LYN LR LR
comp=Z,570nm,14.8s
**XAN Xi'an 134.84 9** ⇓PKP **PKPdf 13 46 54.3 -0.4**
XAN AMB AMB
comp=Z,710nm,5.6s
**CD2 Chengdu 136.71 17** *e*PKP **PKPdf 13 46 57.1 -1.2**
**NJ2 Nanjing 137.45 358** *e*PKP **PKiKP 13 47 01.5 0.0**
**PZH PanZhiHua 140.15 22** PKP **PKPdf 13 47 04.8 0.0**
**TNCH TengChong 140.17 27** PKP **PKPdf 13 47 03.9 -1.1**
TNCH sPKP 13 47 42.4
TNCH PP **PP 13 50 07.3 +5.2**
TNCH AMB AMB
comp=Z,220nm,5.5s
**GYA Guiyang 141.72 15** PKP **PKPdf 13 47 07.9 +0.3**
GYA PP **PP 13 50 14.3 +3.1**
GYA AMB AMB
comp=Z,590nm,8.1s
**KMI Kunming 141.77 21** ⇑PKP **PKPdf 13 47 08.8 +0.9**
KMI PP **PP 13 50 18.3 +6.5**
KMI SS SS 14 08 36.3 +2.8
KMI AMB AMB
comp=Z,220nm,5.2s
KMI LR LR
comp=Z,250nm,32.0s
KMI LR LR
comp=Z,400nm,25.7s
KMI LR LR
comp=Z,630nm,55.3s
**QZH Quanzhou 144.53 358** PKP **PKPab 13 47 10.8 -0.2**
QZH PP **PP 13 50 34.0 +6.2**
**CMAR Chiang Mai Arr 145.98 32** PKPbc **PKPdf 13 47 14.8 -0.3**
comp=Z,23nm,0.6s,baz=309,slow=4.8,SNR=92
CMAR SKP **SKPdf 13 50 40.6 +2.3**
comp=Z,3.1nm,0.7s,baz=310,slow=3.6,SNR=4.9
**STKA Stephens Creek 149.02 223** PKP **PKPdf 13 47 19.6 -0.1**
comp=Z,6.5nm,0.6s,baz=122,slow=1.1,SNR=7.2
STKA PKPbc **PKPbc 13 47 24.2 +0.2**
comp=Z,8.0nm,0.8s,baz=81,slow=4.4,SNR=8.8
**QIZ Qiongzhong 149.62 13** PKPbc **PKPdf 13 47 20.1 -1.0**
QIZ PP **PP 13 50 59.8 +2.0**
QIZ SS SS 14 10 07.4 +5.4
QIZ AMB AMB
comp=Z,380nm,12.9s
QIZ LR LR
comp=Z,350nm,13.7s
QIZ LR LR
comp=Z,430nm,14.3s
QIZ LR LR
comp=Z,440nm,17.1s
**ASAR Alice Springs 159.37 229** PKP **PKPdf 13 47 33.5 -1.0**
comp=Z,2.5nm,0.8s,baz=105,slow=1.3,SNR=30
**WRA Warramunga Arr 160.94 239** PKP **PKPdf 13 47 35.0 -1.2**
comp=Z,9.6nm,1.1s,baz=100,slow=0.3,SNR=51
**MPSI Mapaga 168.66 345** PKP **PKPdf 13 47 42.6 -0.5**
MPSI PKP **PKPdf 13 47 44.2 +1.1**

*AEIC **22** 13:34:21.1±1.6,51.1°N±0.1°×180.0°W±0.1°, h36km±7km, Error ellipse: s-maj=16.6km s-min=9.8km az=158.0*
*NEIC **22** 13:34:23.2±2.1,51.16°N±0.07°×179.9°W±0.1°, h35km±2km, mb4.2/51, ML4.5(AEIC), Error ellipse: s-maj=16.3km s-min=5.1km az=134.0*
*IDC **22** 13:34:25.6±3.1,51.15°N×179.65°W, h72km±25km, mb3.7/17,*

*mbtmp4.0/20,MS3.8/2,Error ellipse: s-maj=23.3km s-min=15.6km az=169.0*

**ISC 22 13:34:21.8±0.6, 51°00N±0°09×179°74W±0°04, h35km, n109, σ1§32/106, mb4.2/21, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GASW** | **Gareloi Southw** | **0.95** | **35** | | **Pn** | **13 34 38.9** | **+0.2** |
| **GALAA** | **Gareloi Lava P** | **0.97** | **38** | | **Pn** | **13 34 39.3** | **+0.3** |
| **GAEA** | **Gareloi East** | **1.00** | **38** | | **Pn** | **13 34 39.4** | **+0.1** |
| **GANO** | **Gareloi North** | **1.01** | **35** | | **Pn** | **13 34 39.5** | **0.0** |
| **TASE** | **Tanaga Southea** | **1.35** | **51** | | **Pn** | **13 34 45.0** | **+0.8** |
| TASE | | | | | **Sn** | **13 35 02.3** | **+1.3** |
| **TANO** | **Tanaga North** | **1.36** | **47** | | **Pn** | **13 34 45.2** | **+0.8** |
| **TAFP** | **Tanaga Falls P** | **1.42** | **50** | | **Pn** | **13 34 46.0** | **+0.9** |
| TAFP | | | | | **Sn** | **13 35 04.2** | **+1.6** |
| **KIWB** | **Kanaga Island** | **1.83** | **61** | | **Pn** | **13 34 50.9** | **+0.2** |
| **KIWB** | **Kanaga Island** | **1.83** | **61** | | **Sn** | **13 35 14.8** | **+2.2** |
| **KICM** | **Kanaga Island** | **1.84** | **59** | | **Pn** | **13 34 52.2** | **+1.4** |
| **GSCK** | **Great Sitkin C** | **2.45** | **64** | | **Pn** | **13 35 01.0** | **+1.7** |
| GSCK | | | | | **Sn** | **13 35 30.4** | **+2.4** |
| **GSTD** | **Great Sitkin T** | **2.48** | **63** | | **Sn** | **13 35 31.9** | **+3.2** |
| **GSMY** | **Great Sitkin M** | **2.52** | **64** | | **Pn** | **13 35 01.8** | **+1.5** |
| **GSTR** | **Great Sitkin T** | **2.54** | **63** | Pn | **Pn** | **13 35 01.1** | **+0.5** |
| **KOWE** | **Korovin West** | **3.68** | **66** | | **Pn** | **13 35 18.2** | **+2.0** |
| **KOFP** | **Korovin Flat P** | **3.74** | **68** | | **Pn** | **13 35 19.2** | **+2.2** |
| **SHEM** | **Shemya Is, Ala** | **4.19** | **297** | P | **Pn** | **13 35 26.3** | **+3.2** |
| | 69nm,0.4s,baz=104,slow=3.9,SNR=25 | | | | | | |
| SHEM | | | | S | **Sn** | **13 36 15.8** | **+4.9** |
| | 54nm,0.7s,baz=288,slow=20,SNR=1.6 | | | | | | |
| SHEM | | | | LR | LR | 13 37 05.7 | |
| | comp=Z,403nm,19.8s,baz=120,slow=38 | | | | | | |
| **NIKH** | **Nikolski High** | **7.00** | **69** | | **Pn** | **13 36 04.1** | **+2.3** |
| **OKTU** | **Okmok Mt. Tuli** | **7.57** | **67** | | **Pn** | **13 36 11.5** | **+1.9** |
| **MAPS** | **Pakushin South** | **8.31** | **65** | | **Pn** | **13 36 21.8** | **+2.1** |
| **UNV** | **Unalaska Valle** | **8.57** | **65** | | **Pn** | **13 36 25.6** | **+2.3** |
| **S12K** | **Black Hills** | **11.55** | **59** | Pn | **Pn** | **13 37 03.7** | **-0.3** |
| **CNBA** | **Chernabura Isl** | **12.74** | **65** | Pn | **Pn** | **13 37 18.7** | **-1.5** |
| **CHGN** | **Chignik** | **13.69** | **59** | Pn | **Pn** | **13 37 32.5** | **-0.7** |
| **L14K** | **Kuka Creek** | **14.00** | **36** | Pn | **Pn** | **13 37 36.4** | **-1.0** |
| **PEA0B** | **Petropavlovsk-** | **14.03** | **287** | Pn | **Pn** | **13 37 38.7** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **14.03** | **287** | Pn | **Pn** | **13 37 39.8** | **+1.9** |
| **PETK** | **Petropavlovsk-** | **14.03** | **287** | P | **Pn** | **13 37 40.0** | **+2.1** |
| | 2.1nm,0.8s,baz=91,slow=17,SNR=5.0 | | | | | | |
| **PLK4** | **Peulik 4** | **15.12** | **55** | Pn | **Pn** | **13 37 51.8** | **-0.8** |
| PLK4 | | | | IAmb | IAmb | 13 38 07.4 | |
| | comp=Z,34nm,1.5s | | | | | | |
| **M16K** | **Timber Creek** | **15.28** | **41** | P | **P** | **13 37 58.3** | **-0.8** |
| M16K | | | | IAmb | IAmb | 13 38 04.8 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **L16K** | **Owhat River** | **15.45** | **38** | P | **P** | **13 38 00.7** | **-0.2** |
| L16K | | | | IAmb | IAmb | 13 38 19.7 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **N17K** | **Nushagak Hills** | **15.79** | **44** | P | **P** | **13 38 04.3** | **-0.4** |
| N17K | | | | IAmb | IAmb | 13 38 12.4 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **J16K** | **Anvik River** | **16.01** | **32** | P | **P** | **13 38 08.0** | **+0.9** |
| **M17K** | **Holitna River** | **16.10** | **41** | P | **P** | **13 38 07.7** | **-0.5** |
| M17K | | | | IAmb | IAmb | 13 38 17.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **O18K** | **Koktuh Hills** | **16.41** | **48** | P | **P** | **13 38 11.8** | **+0.1** |
| O18K | | | | IAmb | IAmb | 13 38 22.1 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **N18K** | **Kilae Creek** | **16.43** | **45** | P | **Pn** | **13 38 11.0** | **+1.6** |
| N18K | | | | IAmb | IAmb | 13 38 20.3 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **K17K** | **Iditarod** | **16.48** | **36** | P | **Pn** | **13 38 11.3** | **+1.3** |
| **J17K** | **VABM Dome** | **16.61** | **34** | P | **P** | **13 38 14.0** | **+0.2** |
| J17K | | | | IAmb | IAmb | 13 38 20.7 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **L18K** | **Granite Mounta** | **16.83** | **39** | P | **P** | **13 38 17.1** | **+0.9** |
| **N19K** | **Bonanza Creek** | **17.12** | **45** | P | **P** | **13 38 19.8** | **+0.2** |
| N19K | | | | IAmb | IAmb | 13 38 29.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **17.12** | **56** | P | **Pn** | **13 38 14.7** | **-3.4** |
| | comp=Z,2.2nm,0.3s,baz=218,slow=2.0,SNR=25 | | | | | | |
| **L19K** | **White Mountain** | **17.56** | **41** | P | **P** | **13 38 24.8** | **+0.5** |
| **M19K** | **Big River Lodg** | **17.62** | **42** | P | **P** | **13 38 25.9** | **+0.8** |
| M19K | | | | IAmb | IAmb | 13 38 28.4 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **H18K** | **Honhosa River** | **17.99** | **30** | P | **P** | **13 38 30.2** | **+1.2** |
| **J19K** | **Poorman** | **18.20** | **35** | P | **P** | **13 38 31.9** | **+0.5** |
| J19K | | | | IAmb | IAmb | 13 38 38.6 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **SPU** | **Mount Spurr** | **18.35** | **46** | P | **Pn** | **13 38 34.8** | **+1.5** |
| SPU | | | | IAmb | IAmb | 13 38 41.4 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **G18K** | **Tagagawik** | **18.41** | **28** | P | **Pn** | **13 38 34.5** | **+0.6** |
| **K20K** | **Telida** | **18.45** | **38** | | **Pn** | **13 38 35.8** | **+1.4** |
| **C16K** | **Lisburne Hills** | **18.70** | **17** | P | **Pn** | **13 38 37.1** | **-0.2** |
| C16K | | | | IAmb | IAmb | 13 38 50.5 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **H19K** | **Roundabout Mou** | **18.84** | **31** | P | **Pn** | **13 38 39.4** | **+0.4** |
| **J20K** | **Nowinta River** | **18.85** | **36** | P | **P** | **13 38 38.4** | **0.0** |
| **SKT** | **Skwentna** | **18.88** | **44** | P | **P** | **13 38 39.9** | **+1.0** |
| SKT | | | | IAmb | IAmb | 13 38 45.3 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **E18K** | **Tukpahlearik C** | **19.00** | **23** | P | **Pn** | **13 38 41.1** | **0.0** |
| E18K | | | | IAmb | IAmb | 13 38 47.8 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **G19K** | **Purcell Mounta** | **19.05** | **29** | | **P** | **13 38 40.6** | **0.0** |
| **I20K** | **Naaghedeneel** | **19.07** | **34** | P | **Pn** | **13 38 41.8** | **0.0** |
| I20K | | | | IAmb | IAmb | 13 38 57.0 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **19.14** | **319** | P | **Pn** | **13 38 42.2** | **-0.4** |
| | comp=Z,1.1nm,0.9s,baz=177,slow=14,SNR=2.4 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **19.32** | **27** | P | **P** | **13 38 44.1** | **+0.6** |
| F19K | | | | IAmb | IAmb | 13 38 51.0 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **C18K** | **Utukok River** | **19.84** | **20** | P | **P** | **13 38 50.0** | **+0.7** |
| C18K | | | | IAmb | IAmb | 13 38 54.8 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **19.91** | **26** | P | **P** | **13 38 50.6** | **+0.6** |
| E19K | | | | IAmb | IAmb | 13 38 59.6 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **20.06** | **28** | P | **P** | **13 38 51.9** | **+0.3** |
| **H21K** | **Melozitna Rive** | **20.14** | **33** | P | **P** | **13 38 53.2** | **+0.7** |
| H21K | | | | IAmb | IAmb | 13 39 01.2 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **20.43** | **23** | P | **P** | **13 38 56.5** | **+0.8** |
| D19K | | | | IAmb | IAmb | 13 39 04.7 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **BWN** | **Browne** | **20.64** | **39** | P | **P** | **13 38 59.0** | **+1.1** |
| **F21K** | **Alatna River** | **20.84** | **29** | P | **P** | **13 39 00.5** | **+0.4** |
| F21K | | | | IAmb | IAmb | 13 39 07.7 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **DHY** | **Denali Highway** | **21.08** | **43** | | **P** | **13 39 03.1** | **+0.2** |
| DHY | | | | IAmb | IAmb | 13 39 05.4 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **21.31** | **46** | P | **P** | **13 39 06.5** | **+1.3** |
| **H23K** | **Yukon River** | **21.37** | **35** | P | **P** | **13 39 05.9** | **0.0** |
| **ILAR** | **Eielson Array** | **21.91** | **39** | P | **P** | **13 39 09.1** | **-2.5** |
| | comp=Z,0.5nm,0.6s,baz=227,slow=8.4,SNR=9.0 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **GLB** | **Gilahina Butte** | **22.24** | **48** | P | **P** | **13 39 15.1** | **-0.2** |
| **VRDI** | **Verde Repeater** | **22.37** | **49** | P | **P** | **13 39 16.7** | **0.0** |
| **JKA** | **Kamikawa-asahi** | **26.11** | **270** | P | **P** | **13 39 54.5** | **+2.3** |
| **USRK** | **Ussuriysk Ar.** | **32.76** | **277** | P | **P** | **13 40 50.9** | **-0.2** |
| **H11N2** | **WAKE ISLAND Hy** | **32.95** | **204** | T | T | 14 16 08.1 | |
| | baz=18,slow=76,SNR=7.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.95** | **204** | T | T | 14 16 11.4 | |
| | baz=18,slow=76,SNR=7.4 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **32.96** | **204** | T | T | 14 16 09.6 | |
| | baz=18,slow=76,SNR=6.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.17** | **203** | T | T | 14 17 43.4 | |
| | baz=18,SNR=6.5 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.18** | **203** | T | T | 14 17 50.2 | |
| | baz=18,SNR=5.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.18** | **203** | T | T | 14 17 56.0 | |
| | baz=18,SNR=4.3 | | | | | | |
| **POHA** | **Pohakuloa** | **36.56** | **140** | P | **P** | **13 41 24.9** | **+0.5** |
| **SONM** | **Songino Array** | **46.29** | **296** | P | **P** | **13 42 43.9** | **+0.1** |
| | comp=Z,1.2nm,0.8s,baz=47,slow=9.0,SNR=5.3 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **46.99** | **71** | P | **P** | **13 42 50.0** | **+0.6** |
| | comp=Z,1.5nm,0.6s,baz=338,slow=2.5,SNR=6.7 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.71** | **356** | P | **P** | **13 43 16.0** | **-1.3** |
| | comp=Z,1.4nm,0.5s,baz=36,slow=2.7,SNR=4.8 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **58.85** | **313** | P | **P** | **13 44 16.0** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **58.96** | **313** | P | **P** | **13 44 17.1** | **-0.2** |
| | comp=Z,3.8nm,0.5s,baz=43,slow=6.5,SNR=39 | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **59.30** | **80** | P | **P** | **13 44 20.2** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=302,slow=4.1,SNR=2.0 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **59.80** | **308** | P | **P** | **13 44 22.5** | **-0.7** |
| MK31 | | | | IAmb | IAmb | 13 44 23.2 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.80** | **308** | P | **P** | **13 44 22.7** | **-0.6** |
| **MKAR** | **Makanchi Array** | **59.80** | **308** | P | **P** | **13 44 22.8** | **-0.4** |
| | comp=Z,3.5nm,0.8s,baz=54,slow=6.7,SNR=25 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **59.95** | **308** | P | **P** | **13 44 23.3** | **-1.0** |
| **BVAR** | **Borovoye Array** | **60.79** | **319** | P | **P** | **13 44 29.3** | **-0.5** |
| | comp=Z,3.2nm,0.7s,baz=57,slow=6.2,SNR=10 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **66.02** | **347** | P | **P** | **13 45 01.3** | **-2.9** |
| | comp=Z,4.0nm,0.8s,baz=24,slow=11,SNR=3.8 | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.96** | **354** | P | **P** | **13 45 15.5** | **-1.2** |
| | comp=Z,1.0nm,0.6s,baz=7.4,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.96** | **354** | P | **P** | **13 45 15.8** | **-0.9** |
| | comp=Z,3.3nm,0.9s,baz=7.1,slow=6.3,SNR=5.7 | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **68.20** | **312** | | **P** | **13 45 18.6** | **+0.2** |
| KK31 | | | | IAmb | IAmb | 13 45 19.3 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **68.20** | **312** | P | **P** | **13 45 18.4** | **-0.1** |
| **KKAR** | **Karatay Array** | **68.20** | **312** | P | **P** | **13 45 17.8** | **-0.6** |
| KKAR | | | | IAmb | IAmb | 13 45 19.3 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **68.69** | **353** | P | **P** | **13 45 19.4** | **-1.7** |
| | comp=Z,2.1nm,0.6s,baz=35,slow=3.6,SNR=5.3 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **BTK** | **Batken** | **70.40** | **310** | P | **P** | **13 45 32.5** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **70.46** | **275** | P | **P** | **13 45 32.4** | **-0.4** |
| | comp=Z,0.7nm,0.4s,baz=25,slow=6.4,SNR=6.3 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **GAR** | **Garm** | **71.47** | **309** | P | **P** | **13 45 38.9** | **+0.2** |
| **CHGR** | **Chuyangaron** | **72.30** | **310** | P | **P** | **13 45 43.5** | **-0.2** |
| **SIMJ** | **Simiganj** | **72.37** | **310** | P | **P** | **13 45 43.9** | **-0.3** |
| **EKA** | **Eskdalemuir Ar** | **73.99** | **2** | P | **P** | **13 45 52.0** | **-1.2** |
| | comp=Z,1.4nm,0.5s,baz=359,slow=4.6,SNR=7.1 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **75.72** | **341** | P | **P** | **13 46 00.9** | **-2.3** |
| | comp=Z,1.2nm,0.6s,baz=29,slow=6.9,SNR=4.2 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.33** | **223** | P | **P** | **13 46 33.8** | **-0.7** |
| | comp=Z,2.0nm,0.7s,baz=31,slow=6.0,SNR=5.1 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **84.81** | **222** | P | **P** | **13 46 52.0** | **-0.5** |
| | comp=Z,0.4nm,0.8s,baz=26,slow=5.3,SNR=5.6 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **85.04** | **335** | P | **P** | **13 46 53.5** | **-0.3** |
| | comp=Z,0.8nm,0.7s,baz=62,slow=3.0,SNR=4.2 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **WSAR** | **Wadi Sarin** | **90.04** | **308** | LR | LR | 14 32 36.6 | |
| | comp=Z,136nm,18.9s,baz=322,slow=39 | | | | | | |
| **BOSA** | **Boshof** | **150.78** | **310** | PKPbc | **PKPbc** | **13 54 10.8** | **+0.5** |
| | comp=Z,1.3nm,0.8s,baz=17,slow=1.7,SNR=4.9 | | | | | | |

**HEL 22 13:37:03.2±0.1, 61°11N×21°46E, h0km, ML0.6, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAF** | **Rauma** | **0.17** | **121** | *eP* | Pg | 13 37 05.6 | -0.9 |
| RAF | | | | *eS* | Sg | 13 37 08.7 | 0.0 |
| **KPF** | **Kankaanpaa** | **0.78** | **22** | *eP* | Pg | 13 37 16.9 | -1.2 |
| KPF | | | | *eS* | Sg | 13 37 27.0 | -1.2 |
| KPF | | | | MSG | | 13 37 27.8 | |
| | comp=Z,0.3nm,0.1s | | | | | | |
| **AAL** | **Aland** | **1.19** | **218** | *eP* | Pg | 13 37 24.0 | -1.9 |
| AAL | | | | *eSN* | Sn | 13 37 45.0 | +1.3 |
| **MEF** | **Metsahovi** | **1.70** | **121** | *eP* | Pn | 13 37 33.6 | -0.5 |
| MEF | | | | *eS* | Sn | 13 37 55.5 | -1.0 |
| MEF | | | | MSG | | 13 37 56.8 | |
| | comp=Z,0.3nm,0.1s | | | | | | |
| **KEF** | **Keuruu** | **1.94** | **56** | *eSG* | Sn | 13 38 02.6 | +0.1 |
| KEF | | | | MSG | | 13 38 03.3 | |
| | comp=Z,0.3nm,0.1s | | | | | | |
| **NRTU** | **Norrtaelje** | **2.01** | **225** | *eS* | Sn | 13 38 04.4 | +0.2 |
| **VAF** | **Ylistaro** | **2.02** | **16** | *eP* | Pn | 13 37 39.0 | +0.5 |
| VAF | | | | *eSG* | Sb | 13 38 05.8 | -0.5 |
| **ARNU** | **Arnoeviken** | **2.05** | **288** | *eP* | Pn | 13 37 38.3 | -0.6 |
| ARNU | | | | *eS* | Sn | 13 38 04.9 | -0.1 |

**HEL 22 13:37:37.4±0.3, 61°09N×29°93E, h0km, ML1.5, Suspected explosion, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RUF** | **Ruokolahti** | **0.58** | **306** | PG | Pg | 13 37 48.1 | -0.4 |
| RUF | | | | SG | Sg | 13 37 55.0 | -1.1 |
| RUF | | | | MSG | | 13 37 56.1 | |
| | comp=Z,3.7nm,0.2s | | | | | | |
| **VJF** | **Virojoki** | **1.29** | **246** | PG | Pg | 13 38 00.7 | -1.3 |
| | baz=64 | | | | | | |
| VJF | | | | MSG | | 13 38 16.3 | |
| | comp=Z,5.1nm,0.2s | | | | | | |
| VJF | | | | SN | Sn | 13 38 21.7 | +1.2 |
| **FIA0** | **FINESS Array S** | **1.90** | **283** | PG | Pn | 13 38 11.3 | +0.3 |
| | baz=96 | | | | | | |
| FIA0 | | | | MSG | | 13 38 33.9 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| FIA0 | | | | SG | Sb | 13 38 36.9 | -0.1 |
| **JOF** | **Joensuu** | **1.95** | **19** | PG | Pn | 13 38 12.3 | +0.6 |
| | baz=197 | | | | | | |
| JOF | | | | SG | Sn | 13 38 37.5 | +0.6 |
| **KAF** | **Kangasniemi** | **2.02** | **302** | PG | Pb | 13 38 14.0 | -0.9 |
| KAF | | | | MSG | | 13 38 37.3 | |
| | comp=Z,4.0nm,0.2s | | | | | | |
| KAF | | | | SG | Sb | 13 38 40.3 | -0.2 |
| **PVF** | **Pernaja** | **2.07** | **257** | PG | Pn | 13 38 14.1 | +0.8 |
| PVF | | | | MSG | | 13 38 38.8 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| PVF | | | | SG | Sg | 13 38 43.0 | -0.7 |
| **SUF** | **Sumiainen** | **2.43** | **314** | PG | Pb | 13 38 20.9 | -1.0 |
| SUF | | | | MSG | | 13 38 49.2 | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| SUF | | | | SG | Sb | 13 38 52.2 | -0.1 |
| **NIF** | **Nilsia** | **2.52** | **338** | PG | Pb | 13 38 22.9 | -0.5 |
| NIF | | | | SG | Sb | 13 38 53.2 | -1.7 |
| **KEF** | **Keuruu** | **2.65** | **296** | PG | Pb | 13 38 23.8 | -1.9 |
| | baz=115 | | | | | | |
| KEF | | | | MSG | | 13 38 55.4 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| KEF | | | | SG | Sb | 13 38 57.3 | -1.3 |
| **NUR** | **Nurmijrvi** | **2.65** | **260** | PG | Pb | 13 38 24.7 | -1.0 |
| | baz=71 | | | | | | |
| NUR | | | | MSG | | 13 38 55.7 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **VAF** | **Ylistaro** | **3.94** | **303** | SG | Sb | 13 39 37.6 | +1.9 |
| **RAF** | **Rauma** | **3.97** | **273** | SB | Sb | 13 39 35.2 | -1.5 |
| **OUF** | **Merijarvi** | **4.07** | **326** | SG | Sb | 13 39 42.2 | +2.6 |
| **OBF4** | **Vikkela, Lumij** | **4.34** | **332** | SB | Sb | 13 39 42.8 | -4.5 |
| **OUL** | **Oulu** | **4.41** | **337** | SB | Sb | 13 39 45.0 | -4.3 |
| **OBF8** | **Ulkokalla** | **4.42** | **320** | SN | Sn | 13 39 36.6 | -1.0 |

*TRN 22 13:47:59.1, 10°72N×62°80W, h111km, MD3.2, North-west of Trinidad.*

*FUNV 22 13:48:02.5, 10°50N×62°82W, h33km, MW3.8*

**ISC 22 13:47:57.1±1.7, 10°64N±0°06×62°78W±0°04, h125km±20km, n13, σ2§07/22, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.35** | **89** | *eP* | **Pn** | **13 48 24.3** | **+1.2** |
| TRN | | | | *eS* | **Sn** | **13 48 43.4** | **+0.5** |
| **GRFF** | **Grenada Fort F** | **1.73** | **36** | *eP* | **Pn** | **13 48 27.6** | **0.0** |
| GRFF | | | | *eS* | **Sn** | **13 48 49.2** | **-1.7** |
| **GRGR** | **Grenville** | **1.85** | **36** | *eP* | **Pn** | **13 48 29.9** | **+0.9** |
| GRGR | | | | *eS* | **Sn** | **13 48 51.2** | **-2.1** |
| **GRW** | **Mount Saint Ca** | **1.87** | **36** | *eS* | **Sn** | **13 48 53.2** | **-0.6** |
| **PCRV** | **Puerto La Cruz** | **1.89** | **256** | *eP* | **Pn** | **13 48 31.3** | **+1.8** |
| PCRV | | | | *eS* | **Sn** | **13 48 51.0** | **-3.2** |
| **PCRV** | **Puerto La Cruz** | **1.89** | **256** | *eP* | **Pn** | **13 48 30.9** | **+1.5** |
| PCRV | | | | *eS* | **Sn** | **13 48 54.2** | **+0.1** |
| **GRSS** | **Sisters** | **2.01** | **34** | *eP* | **Pn** | **13 48 32.2** | **+1.3** |
| GRSS | | | | *eS* | **Sn** | **13 48 56.0** | **-0.8** |
| **GCMP** | **Grenada, Carri** | **2.27** | **36** | *eP* | **Pn** | **13 48 34.9** | **+0.8** |
| **TACV** | **Tcata** | **4.21** | **264** | *eP* | **Pn** | **13 49 01.5** | **+1.9** |
| TACV | | | | *eS* | **Sn** | **13 49 46.7** | **-1.4** |
| **BENV** | **Beln** | **4.79** | **262** | *eP* | **Pn** | **13 49 10.0** | **+2.6** |
| BENV | | | | *eS* | **Sn** | **13 50 00.2** | **-1.9** |
| **CACV** | **CAICARA DEL OR** | **4.81** | **231** | *eP* | Pn | 13 49 04.7 | -2.8 |
| CACV | | | | *eS* | Sn | 13 49 50.1 | -12 |
| **LUEV** | **Luepa** | **4.94** | **165** | *eP* | **Pn** | **13 49 11.4** | **+1.9** |
| LUEV | | | | *eS* | **Sn** | **13 50 02.2** | **-3.5** |
| **BAUV** | **El Baul** | **5.46** | **253** | *eP* | **Pn** | **13 49 17.9** | **+1.6** |
| BAUV | | | | *eS* | **Sn** | **13 50 14.2** | **-3.7** |

*IDC 22 13:54:26.6±1.3, 4°56S×102°93E, h0km, mb4.0/10, mbtmp4.0/10, MS4.0/2, Error ellipse: s-maj=54.2km s-min=18.4km az=50.0*

*NEIC 22 13:54:33.4±1.2, 4°6S±0°1×102°8E±0°1, h52km±6km, mb4.4/14, Error ellipse: s-maj=23.5km s-min=13.9km az=55.0*

*DJA 22 13:54:38.2±0.4, 5°S±7°×10°3E±°, h126km±9km, M4.3/12, mb4.3/5, mB4.5/1, MLv4.3/12, Mw(mB)3.7/1*

**ISC 22 13:54:37.7±0.7, 4°8S±0°1×102°9E±0°1, h100km, n52, σ1§43/42, mb4.2/18, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LWLI** | **Liwa** | **1.19** | **99** | P | **Pn** | **13 54 59.9** | **-0.5** |
| **KASI** | **Kota Agung** | **1.75** | **113** | P | **Pn** | **13 55 07.8** | **+0.7** |
| **BLSI** | **Bandar Lampung** | **2.42** | **103** | P | **Pn** | **13 55 15.5** | **-0.2** |
| **PPSI** | **Pulau Pagai** | **3.52** | **306** | P | **Pn** | **13 55 34.0** | **+3.5** |
| **PDSI** | **Padang** | **4.58** | **328** | P | **Pn** | **13 55 45.7** | **+0.9** |
| **CNJI** | **Cibinong** | **4.89** | **120** | P | **Pn** | **13 55 48.7** | **-0.3** |
| **SISI** | **Saibi** | **5.14** | **312** | P | **Pn** | **13 55 54.0** | **+1.7** |
| **XMIS** | **Christmas Isla** | **6.25** | **154** | Pn | **Pn** | **13 56 04.2** | **-3.3** |
| **CMJI** | **Cimerak** | **6.27** | **118** | P | **Pn** | **13 56 07.3** | **-0.3** |
| | 63nm,1.3s,0.3nm | | | | | | |
| **KPJI** | **Karang Pucung** | **6.51** | **113** | P | **Pn** | **13 56 12.7** | **+1.7** |
| **UGM** | **Wanagama** | **8.19** | **112** | Pn | **Pn** | **13 56 32.2** | **-1.7** |
| **JAGI** | **Jajag, Banyuwa** | **11.77** | **109** | | **Pn** | **13 57 20.2** | **-2.1** |
| **MBWA** | **Marble Bar** | **23.05** | **136** | P | **P** | **13 59 35.9** | **+1.3** |
| MBWA | | | | IAmb | IAmb | 13 59 54.7 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **PHRA** | **Phrae** | **23.33** | **354** | P | **P** | **13 59 34.4** | **-2.8** |
| **CM31** | **Chiang Mai Arr** | **23.46** | **351** | P | **P** | **13 59 37.1** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **25.87** | **122** | P | **P** | **14 00 00.9** | **+0.6** |
| **KNRA** | **Kununurra** | **27.62** | **115** | P | **P** | **14 00 15.9** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 14 00 18.3 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **31.67** | **162** | T | T | 14 34 21.8 | |
| | baz=337,slow=74,SNR=4.0 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **31.68** | **162** | T | T | 14 34 16.0 | |
| | baz=337 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **31.69** | **162** | T | T | 14 34 22.8 | |
| | baz=337,slow=74,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.10** | **119** | P | **P** | **14 01 13.8** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=296,slow=11,SNR=8.9 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **34.12** | **119** | P | **P** | **14 01 14.2** | **+1.0** |
| WB2 | | | | IAmb | IAmb | 14 01 53.9 | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **34.29** | **119** | P | **P** | **14 01 14.5** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 14 01 52.9 | |
| | comp=Z,4.9nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **35.28** | **125** | P | **P** | **14 01 24.2** | **+1.0** |
| **ASAR** | **Alice Springs** | **35.28** | **125** | P | **P** | **14 01 23.9** | **+0.7** |
| **ASAR** | **Alice Springs** | **35.28** | **125** | P | **P** | **14 01 24.9** | **+1.7** |
| | comp=Z,0.9nm,0.7s,baz=300,slow=7.6,SNR=22 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **45.14** | **131** | P | **P** | **14 02 46.6** | **+2.2** |
| **NIL** | **Nilore** | **47.43** | **326** | P | **P** | **14 03 02.1** | **-0.3** |
| NIL | | | | IAmb | IAmb | 14 03 03.4 | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **52.53** | **3** | P | **P** | **14 03 40.7** | **-0.1** |
| | comp=Z,1.7nm,0.5s,baz=182,slow=8.8,SNR=6.5 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **53.81** | **334** | LR | LR | 14 30 45.9 | |
| | comp=Z,150nm,20.6s,baz=325,slow=41 | | | | | | |
| **MK31** | **Makanchi Array** | **54.54** | **343** | P | **P** | **14 03 54.1** | **-1.2** |
| MK31 | | | | IAmb | IAmb | 14 03 55.2 | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.54** | **343** | P | **P** | **14 03 53.8** | **-1.5** |
| **MKAR** | **Makanchi Array** | **54.54** | **343** | P | **P** | **14 03 54.8** | **-0.6** |
| | comp=Z,1.3nm,0.4s,baz=152,slow=8.5,SNR=22 | | | | | | |
| MKAR | | | | LR | LR | 14

comp=N,938nm,0.4s
E19K IAML 13 57 48.9
comp=E,834nm,0.6s
**H18K Honhosa River 1.25 203** Pb 13 57 31.9 -0.9
H18K Sg 13 57 48.7 -0.3
**H20K Anotleneega Mo 1.25 129** Pn 13 57 31.9 -1.0
H20K Sn 13 57 50.1 +0.1
**G21K Allakaket 1.51 80** Pn 13 57 35.9 -0.6
**G21K Allakaket 1.51 80** Sg 13 57 57.0 -0.3
**G21K Allakaket 1.51 80** IAML 13 57 58.5
comp=N,2µm,0.8s
G21K IAML 13 57 58.5
comp=E,2µm,0.6s
**GCSA Galena City Sc 1.57 175** Pn 13 57 37.5 +0.3
GCSA Sb 13 57 58.5 +0.3
**G17K Kiwalik Mounta 1.62 242** Pn 13 57 37.4 -0.7
G17K Sb 13 58 00.2 +0.2
**F17K Baldwin Pennin 1.64 277** Pn 13 57 37.5 -0.6
F17K IAML 13 58 04.9
comp=N,561nm,1.1s
F17K IAML 13 58 07.2
comp=E,498nm,0.8s
**F21K Alatna River 1.74 56** Pn Pn 13 57 39.0 -0.7
F21K IAML 13 58 06.6
comp=E,534nm,0.6s
F21K IAML 13 58 06.9
comp=N,417nm,0.7s
**E18K Tukpahlearik C 1.75 312** Pn 13 57 39.7 0.0
**H17K Granite Mounta 1.77 221** Pn 13 57 39.6 -0.5
H17K IAML 13 58 05.9
comp=E,471nm,0.6s
H17K IAML 13 58 06.9
comp=N,457nm,0.4s
**I20K Naaghedeneel 1.89 142** Pn 13 57 41.6 0.0
**H21K Melozitna Rive 1.91 108** Pn Pn 13 57 41.4 -0.7
**E17K Hotham Inlet 2.00 295** Pn 13 57 43.2 +0.1
**E20K Nigu River 2.01 11** Pn 13 57 43.8 +0.4
**G16K Koyuk River 2.30 249** Pn 13 57 46.2 -1.2
**F22K John River 2.33 56** Pn 13 57 47.8 +0.2
**G22K Bettles 2.36 72** Pn 13 57 48.1 0.0
**H22K Ishtalitna Cre 2.41 97** Pn 13 57 48.7 -0.1
**J19K Poorman 2.41 163** Pn Pn 13 57 48.8 0.0
J19K IAML 13 58 26.1
comp=E,214nm,0.6s
J19K IAML 13 58 26.9
comp=N,218nm,0.6s
**I21K Tanana 2.43 115** Pn 13 57 49.2 0.0
**D20K Etiviluk River 2.44 5** Pn 13 57 49.2 0.0
**E21K Killik River 2.49 29** Pn 13 57 50.1 +0.2
E21K IAML 13 58 35.5
comp=N,197nm,0.8s
**H16K Elim 2.68 234** Pn 13 57 51.4 -1.2
**D17K Noatak River 2.70 304** Pn 13 57 52.7 -0.1
**E22K Anaktuvuk Pass 2.79 46** Pn Pn 13 57 55.3 +1.2
**C18K Utukok River 2.81 329** Pn 13 57 54.6 +0.2
**RDOG Red Dog Mine 2.83 311** Pn 13 57 55.5 +0.8
**I17K Unalakleet 2.84 213** Pn Pn 13 57 54.8 +0.1
I17K IAML 13 58 43.9
comp=N,230nm,0.7s
I17K IAML 13 58 44.5
comp=E,210nm,0.6s
**G23K Bananza Creek 2.91 79** Pn Pn 13 57 56.2 +0.5
G23K IAML 13 58 54.2
comp=E,159nm,0.6s
**COLD Coldfoot 2.93 68** Pn 13 57 56.8 +0.8
**C19K Lookout Ridge 2.96 343** Pn 13 57 57.3 +0.9
C19K IAML 13 58 54.4
comp=E,119nm,1.1s
**MLY Manley 2.97 112** Pn Pn 13 57 55.3 -1.2
MLY IAML 13 58 48.5
comp=N,150nm,1.3s
MLY IAML 13 58 50.0
comp=E,131nm,0.9s
**C21K Knifeblade Rid 3.01 17** Pn 13 57 57.4 +0.2
**J17K VABM Dome 3.02 196** Pn 13 57 56.8 -0.4
J17K IAML 13 58 52.0
comp=E,192nm,0.7s
**F15K North Star Dit 3.10 262** Pn 13 57 58.9 +0.6
F15K IAML 13 58 51.5
comp=N,174nm,0.6s
F15K IAML 13 58 53.6
comp=E,139nm,0.7s
**D22K Ayikyak River 3.12 32** Pn Pn 13 57 58.9 +0.4
D22K IAML 13 58 55.3
comp=N,132nm,0.8s
**G15K Niukluk 3.12 248** Pn 13 57 58.3 -0.2
**H23K Yukon River 3.16 95** Pn 13 57 59.2 0.0
**C17K DeLong Mountai 3.18 316** Pn 13 57 59.6 +0.2
**K20K Telida 3.25 154** Pn Pn 13 58 00.3 0.0
**J16K Anvik River 3.36 207** Pn 13 58 01.8 0.0
J16K IAML 13 58 59.5
comp=N,131nm,0.8s
J16K IAML 13 58 59.7
comp=E,118nm,0.6s
**BPAW Bear Paw Mtn. 3.43 127** Pn 13 58 03.3 +0.5
**I23K Minto, Yukon-K 3.44 106** Pn 13 58 02.1 -0.9
**E23K Chandalar 3.44 56** Pn Pn 13 58 03.4 +0.3
E23K IAML 13 59 04.9
comp=E,104nm,0.9s
E23K IAML 13 59 08.9
comp=N,117nm,0.7s
**B21K Ikpikpuk River 3.48 15** Pn 13 58 03.0 -0.4
**B21K Ikpikpuk River 3.48 15** IAML 13 59 02.3
comp=E,130nm,1.0s
B21K IAML 13 59 09.7
comp=N,107nm,1.0s
**B18K Kokolik River 3.54 333** Pn 13 58 04.2 0.0
**K17K Iditarod 3.63 188** Pn Pn 13 58 05.6 0.0
K17K IAML 13 59 20.2
comp=N,98nm,1.2s
K17K IAML 13 59 21.8
comp=E,76nm,1.2s
**D23K Nanushuk River 3.66 40** Pn 13 58 06.0 0.0
D23K IAML 13 59 16.5
comp=N,92nm,0.9s
D23K IAML 13 59 18.0
comp=E,97nm,1.1s
**B20K Meade River 3.73 0** Pn Pn 13 58 06.9 0.0
B20K IAML 13 59 20.4
comp=N,69nm,0.9s
B20K IAML 13 59 41.1
comp=E,85nm,1.6s
**C16K Lisburne Hills 3.73 306** Pn Pn 13 58 07.2 +0.3
**TOLK Toolik Lake Re 3.76 48** Pn Pn 13 58 07.7 +0.2
TOLK IAML 13 59 23.9
comp=N,92nm,1.0s
**NEA2 Nenana 3.81 113** Pn 13 58 07.9 -0.1
NEA2 IAML 13 59 14.8
comp=N,85nm,1.2s
NEA2 IAML 13 59 18.3
comp=E,86nm,1.0s
**ANM Nome 3.83 247** Pn 13 58 08.2 -0.1
**ANM Nome 3.83 247** IAML 13 59 17.1
comp=N,67nm,0.7s
ANM IAML 13 59 22.4
comp=E,67nm,0.5s
**H24K Noodor Dome 3.83 93** Pn 13 58 08.0 -0.4
**F14K Arctic Creek 3.83 262** Pn 13 58 08.3 0.0
**E24K Your Creek 3.83 58** Pn 13 58 08.4 0.0
E24K IAML 13 59 18.4
comp=N,71nm,1.0s
**F24K Squaw Lake 3.87 67** Pn 13 58 09.4 +0.5
**G24K Hadweenzic Riv 3.92 80** Pn 13 58 08.6 -0.9
**MDM Murphy Dome 3.96 106** Pn 13 58 10.5 +0.4
**MDM Murphy Dome 3.96 106** IAML 13 59 15.2
comp=N,85nm,1.0s
MDM IAML 13 59 16.8
comp=E,69nm,1.1s
**L20K Farewell, AK 4.10 158** Pn 13 58 12.7 +0.7
**L18K Granite Mounta 4.10 177** Pn Pn 13 58 12.5 +0.4
L18K IAML 13 59 20.5
comp=N,49nm,1.4s
**COLA College 4.14 106** Pn 13 58 12.5 -0.1
**L17K Donlin 4.21 187** Pn 13 58 13.9 +0.4
**POKR Poker Plat Res 4.21 102** Pn 13 58 12.9 -0.6
**WRH Wood River Hil 4.23 111** Pn 13 58 13.1 -0.7
WRH IAML 13 59 24.6
comp=E,53nm,0.7s
WRH IAML 13 59 29.8
comp=N,54nm,1.1s
**CCB Clear Creek Bu 4.26 109** Pn Pn 13 58 13.3 -0.8
CCB IAML 13 59 24.8
comp=N,50nm,0.7s
CCB IAML 13 59 32.3
comp=E,54nm,0.8s
**L19K White Mountain 4.26 165** Pn 13 58 14.8 +0.5
L19K IAML 13 59 08.7
comp=N,48nm,0.7s
L19K IAML 13 59 36.0
comp=E,48nm,1.4s
**D24K Happy Valley 4.29 44** Pn Pn 13 58 14.7 +0.2
D24K IAML 13 59 38.4
comp=N,67nm,0.8s
D24K IAML 13 59 41.7
comp=E,64nm,1.1s
**B22K Teshekpuk Lake 4.29 17** Pn 13 58 15.2 +0.6
**B22K Teshekpuk Lake 4.29 17** IAML 13 59 30.7
comp=N,54nm,1.1s
B22K IAML 13 59 35.8
comp=E,59nm,1.0s
**C23K Itkillik River 4.33 32** Pn 13 58 14.7 -0.4
C23K IAML 13 59 45.0
comp=E,51nm,0.7s
C23K IAML 13 59 47.0
comp=N,56nm,0.9s
**MCK McKinley 4.35 122** Pn 13 58 15.2 -0.3
**K15K Wolf Creek Mou 4.44 207** Pn Pn 13 58 17.0 +0.3
K15K IAML 13 59 40.6
comp=E,41nm,0.7s
K15K IAML 13 59 41.4
comp=N,40nm,0.7s
**TNA Tin City 4.45 265** Pn 13 58 16.8 0.0
**G25K Bearman Lake 4.47 79** Pn 13 58 17.0 0.0
**IL31 4.56 105** Pn 13 58 18.1 -0.1
**ILAR Eielson Array 4.56 105** Pn 13 58 17.9 -0.5
**M19K Big River Lodg 4.58 163** Pn 13 58 19.2 +0.5
M19K IAML 13 59 44.0
comp=E,36nm,1.5s
**RND Reindeer 4.60 125** Pn 13 58 19.5 +0.6
**C24K Franklin Bluff 4.69 39** Pn 13 58 20.1 0.0
**C24K Franklin Bluff 4.69 39** IAML 13 59 55.5
comp=N,43nm,1.2s
C24K IAML 14 00 10.2
comp=E,45nm,1.5s
**HDA Harding Lake 4.70 109** Pn 13 58 19.1 -1.1
HDA IAML 13 59 40.0
comp=E,43nm,0.9s
HDA IAML 13 59 40.3
comp=N,46nm,0.6s
**L16K Owhat River 4.71 193** Pn 13 58 19.1 -1.3
**F25K Christian Rive 4.73 69** Pn 13 58 21.5 +0.8
F25K IAML 13 59 44.9
comp=N,42nm,0.6s
**M18K Stony River 4.87 172** Pn 13 58 23.1 +0.5
**M17K Holitna River 4.92 181** Pn 13 58 24.0 +0.7
**M17K Holitna River 4.92 181** IAML 13 59 58.2
comp=N,44nm,1.0s
**SKT Skwentna 5.00 148** Pn 13 58 25.4 +1.1
**WAT7 Susitna Watana 5.01 130** Pn 13 58 25.5 +0.9
**A21K Barrow 5.05 2** Pn 13 58 24.9 -0.1
**WAT1 Susitna Watana 5.10 129** Pn 13 58 26.8 +0.9
**J25K Salcha River, 5.22 103** Pn 13 58 26.9 -0.5
J25K IAML 13 59 57.2
comp=E,31nm,0.6s
**F26K Sheenjek River 5.31 69** Pn 13 58 29.5 +0.8
F26K IAML 14 00 03.7
comp=E,28nm,1.0s
**DHY Denali Highway 5.32 123** Pn Pn 13 58 29.6 +0.8
**SPNN North Nagishla 5.34 156** Pn 13 58 30.4 +1.2
**M16K Timber Creek 5.36 189** Pn 13 58 29.4 +0.2
**M16K Timber Creek 5.36 189** IAML 14 00 09.1
comp=E,21nm,1.8s
M16K IAML 14 00 09.4
comp=N,24nm,0.9s
**STLK Strandline Lak 5.37 151** Pn 13 58 30.7 +1.2
**SPWE Spurr West 5.45 156** Pn 13 58 32.0 +1.3
**SPCP Crater Peak Br 5.53 154** Pn 13 58 32.9 +1.1
**SUA Susitna One 5.63 147** Pn 13 58 33.6 +0.4
**N19K Bonanza Creek 5.64 166** Pn 13 58 34.0 +0.8
**N18K Kilae Creek 5.67 173** Pn Pn 13 58 33.9 +0.3
**GHO Glory Hole Cre 5.82 137** Pn 13 58 36.7 +1.0
**M15K Kasigluk River 5.84 197** Pn 13 58 36.9 +1.0
**I26K Coal Creek Min 5.87 93** Pn 13 58 35.5 -0.7
**PMR Palmer 5.91 139** Pn Pn 13 58 38.3 +1.4
**SML Sawmill 5.96 135** Pn 13 58 37.5 0.0
**J26L Joseph Creek 5.98 101** Pn 13 58 37.3 -0.5
**K27K Chicken 6.77 103** Pn 13 58 48.3 -0.3
**D27M Malcolm River 6.82 57** Pn Pn 13 58 49.9 +0.4
**EGAK Eagle 6.83 96** Pn 13 58 49.7 +0.1
**I28M Miner Creek 7.13 89** Pn Pn 13 58 53.5 -0.1
**L27K Beaver Creek, 7.34 109** Pn Pn 13 58 56.1 -0.4
**DAWY Dawson 7.82 98** Pn Pn 13 59 02.6 -0.5
**I30M Mount Dempster 8.63 88** Pn Pn 13 59 13.4 -0.8

**IDC 22 14:04:06.0±6.7, 28°51S×23°14E, h0km, Error ellipse: s-maj=38.9km s-min=38.5km az=99.0, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I47ZA** | **BOSHOF INFRASO** | **1.84** | **94** | I | I | 14 15 10.0 | |
| | 0.1nm,0.8s,baz=273,slow=332,SNR=1.7 | | | | | | |
| **BOSA** | **Boshof** | **1.86** | **94** | Pn | Pn | 14 04 39.1 | -0.2 |
| | 0.3nm,0.3s,baz=276,slow=18,SNR=2.7 | | | | | | |
| BOSA | | | | Lg | Lg | 14 05 05.3 | |
| | 1.7nm,0.3s,baz=191,slow=22,SNR=15 | | | | | | |
| **I35NA** | **TSUMEB INFRASO** | **10.58** | **330** | I | I | 15 10 45.0 | |
| | baz=152,slow=316,SNR=6.8 | | | | | | |

*FUNV **22** 14:07:52.8, 10°29N×62°88W, h55km, MW3.4*
**ISC 22 14:07:51.0±1.3, 10°26N±0°07×62°89W±0°04, h50km, n7, σ2s95/11, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.52** | **75** | eP | **Pn** | **14 08 17.3** | **+1.6** |
| TRN | | | | eS | **Sn** | **14 08 37.3** | **+3.0** |
| **PCRV** | **Puerto La Cruz** | **1.72** | **267** | eP | **Pn** | **14 08 20.2** | **+1.8** |
| PCRV | | | | eS | **Sn** | **14 08 38.7** | **-0.6** |
| **PCRV** | **Puerto La Cruz** | **1.72** | **267** | eP | **Pn** | **14 08 20.5** | **+2.0** |
| PCRV | | | | eS | **Sn** | **14 08 43.5** | **+4.1** |
| **SLBI** | **Saint Lucia, B** | **4.18** | **26** | eP | **Pn** | **14 08 49.1** | **-3.2** |
| SLBI | | | | eS | Sn | 14 09 25.2 | -15 |
| **CACV** | **CAICARA DEL OR** | **4.49** | **234** | eP | Pn | 14 08 53.0 | -3.4 |
| CACV | | | | eS | Sn | 14 09 36.0 | -12 |
| **LUEV** | **Luepa** | **4.61** | **162** | eP | **Pn** | **14 08 58.9** | **+0.6** |
| LUEV | | | | eS | **Sn** | **14 09 47.9** | **-2.9** |
| **BAUV** | **El Baul** | **5.24** | **256** | eP | **Pn** | **14 09 06.2** | **-0.6** |
| BAUV | | | | eS | **Sn** | **14 10 02.2** | **-3.8** |

*NEIC **22** 14:12:34.8±1.8, 43°65N±0°06×127°4W±0°1, h10km±2km, mb3.8/6, ML3.2/66, Error ellipse: s-maj=16.9km s-min=10.6km az=269.0*
**ISC 22 14:12:36.0±1.5, 43°66N±0°07×127°3W±0°1, h15km, n53, σ1s00/53, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **J01E** | **Myrtle Point** | **2.48** | **100** | | **Pn** | **14 13 14.4** | **-1.4** |
| J01E | | | | IAML | | 14 13 50.5 | |
| | comp=N,114nm,0.4s | | | | | | |
| J01E | | | | IAML | | 14 13 51.2 | |
| | comp=E,86nm,0.3s | | | | | | |
| **K02D** | **Willamette Mer** | **2.80** | **109** | Pn | **Pn** | **14 13 18.5** | **-1.9** |
| K02D | | | | IAML | | 14 13 58.8 | |
| | comp=E,69nm,0.4s | | | | | | |
| **HEBO** | **Mount Hebo** | **2.96** | **57** | Pn | **Pn** | **14 13 21.8** | **-0.6** |
| HEBO | | | | IAML | | 14 14 04.2 | |
| | comp=N,153nm,1.8s | | | | | | |
| **DBO** | **Dodson Butte** | **2.98** | **99** | | **Pn** | **14 13 21.9** | **-0.9** |
| DBO | | | | IAML | | 14 14 05.4 | |
| | comp=E,48nm,0.7s | | | | | | |
| **COR** | **Corvallis** | **3.00** | **71** | Pn | **Pn** | **14 13 22.6** | **-0.3** |
| COR | | | | IAML | | 14 13 55.8 | |
| | comp=E,63nm,2.2s | | | | | | |
| COR | | | | IAML | | 14 14 46.1 | |
| | comp=E,76nm,2.1s | | | | | | |
| **KSXB** | **Camp Six Broad** | **3.09** | **125** | Pn | **Pn** | **14 13 22.2** | **-2.1** |
| **BUCK** | **Buck Mountain** | **3.14** | **79** | Pn | **Pn** | **14 13 25.2** | **+0.3** |
| BUCK | | | | IAML | | 14 13 48.2 | |
| | comp=E,61nm,2.4s | | | | | | |
| BUCK | | | | IAML | | 14 14 37.6 | |
| | comp=N,55nm,2.8s | | | | | | |
| **G03D** | **McMinnville, O** | **3.26** | **60** | | **Pn** | **14 13 26.3** | **-0.3** |
| G03D | | | | IAML | | 14 14 12.6 | |
| | comp=N,132nm,0.6s | | | | | | |
| G03D | | | | IAML | | 14 14 15.2 | |
| | comp=E,75nm,2.0s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.33** | **107** | Pn | **Pn** | **14 13 26.9** | **-0.5** |
| HUMO | | | | IAML | | 14 14 13.5 | |
| | comp=N,49nm,0.5s | | | | | | |
| **F03A** | **Seaside** | **3.48** | **48** | | **Pn** | **14 13 29.6** | **0.0** |
| **I04A** | **Tendick Farm,** | **3.52** | **86** | Pn | **Pn** | **14 13 30.8** | **+0.6** |
| I04A | | | | IAML | | 14 14 20.6 | |
| | comp=E,37nm,0.7s | | | | | | |
| **RADR** | **Rader Ridge** | **3.70** | **40** | Pn | **Pn** | **14 13 31.4** | **-1.2** |
| RADR | | | | IAML | | 14 14 20.8 | |
| | comp=N,57nm,0.7s | | | | | | |
| RADR | | | | IAML | | 14 14 27.5 | |
| | comp=E,64nm,2.2s | | | | | | |
| **H04A** | **Detroit Lake** | **3.80** | **73** | Pn | **Pn** | **14 13 34.1** | **+0.2** |
| H04A | | | | IAML | | 14 14 33.8 | |
| | comp=N,40nm,0.5s | | | | | | |
| **KHMM** | **Horse Mountain** | **3.82** | **135** | Pn | **Pn** | **14 13 33.9** | **-0.5** |
| **YBH** | **Yreka Blue Hor** | **3.87** | **118** | Pn | **Pn** | **14 13 34.9** | **-0.1** |
| **F04D** | **Rainier, OR** | **3.88** | **50** | | **Pn** | **14 13 35.4** | **+0.4** |
| **E03A** | **Lebam** | **3.90** | **41** | Pn | **Pn** | **14 13 34.5** | **-0.8** |
| **L04D** | **Klamath Falls** | **3.92** | **110** | Pn | **Pn** | **14 13 36.3** | **+0.6** |
| L04D | | | | IAML | | 14 14 30.0 | |
| | comp=N,27nm,0.8s | | | | | | |
| L04D | | | | IAML | | 14 14 33.5 | |
| | comp=E,49nm,0.6s | | | | | | |
| **F04A** | **Amboy** | **4.13** | **55** | Pn | **Pn** | **14 13 38.8** | **+0.3** |
| **I05D** | **Terrebonne, OR** | **4.33** | **79** | | **Pn** | **14 13 41.3** | **0.0** |
| I05D | | | | IAML | | 14 14 22.3 | |
| | comp=N,27nm,3.8s | | | | | | |
| I05D | | | | IAML | | 14 14 29.8 | |
| | comp=E,26nm,2.5s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.35** | **66** | | **Pn** | **14 13 41.5** | **-0.2** |
| HOOD | | | | IAML | | 14 14 41.5 | |
| | comp=N,24nm,0.4s | | | | | | |
| HOOD | | | | IAML | | 14 14 47.4 | |
| | comp=E,28nm,1.3s | | | | | | |
| **J05D** | **Fort Rock, OR** | **4.41** | **93** | Pn | **Pn** | **14 13 41.8** | **-0.6** |
| J05D | | | | IAML | | 14 14 25.1 | |
| | comp=E,16nm,4.2s | | | | | | |
| J05D | | | | IAML | | 14 14 43.6 | |
| | comp=N,16nm,2.8s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.43** | **31** | | **Pn** | **14 13 41.9** | **-0.7** |
| NLWA | | | | IAML | | 14 14 36.7 | |
| | comp=N,38nm,0.4s | | | | | | |
| **G05A** | **Wamic** | **4.55** | **68** | | **Pn** | **14 13 45.4** | **+1.1** |
| G05A | | | | IAML | | 14 14 23.1 | |
| | comp=E,29nm,2.7s | | | | | | |
| G05A | | | | IAML | | 14 15 50.4 | |
| | comp=N,29nm,3.4s | | | | | | |
| **PINE** | **Pine Mountain** | **4.59** | **86** | Pn | **Pn** | **14 13 45.6** | **+0.6** |
| PINE | | | | IAML | | 14 15 23.4 | |
| | comp=E,15nm,4.2s | | | | | | |
| **C03A** | **Quillayute Air** | **4.69** | **23** | Pn | **Pn** | **14 13 45.3** | **-0.8** |
| **O02D** | **Mt. Diablo Mer** | **4.82** | **135** | Pn | **Pn** | **14 13 47.9** | **-0.2** |
| **LON** | **Longmire** | **4.94** | **49** | | **Pn** | **14 13 50.0** | **+0.3** |
| LON | | | | IAML | | 14 14 55.7 | |
| | comp=E,18nm,0.5s | | | | | | |
| LON | | | | IAML | | 14 14 58.3 | |
| | comp=N,18nm,0.4s | | | | | | |
| **GNW** | **Green Mountain** | **5.00** | **37** | Pn | **Pn** | **14 13 50.1** | **-0.3** |
| **G06A** | **Carlson Farm,** | **5.00** | **69** | | **Pn** | **14 13 51.0** | **+0.4** |
| **D05A** | **Enumclaw** | **5.12** | **45** | | **Pn** | **14 13 52.6** | **+0.5** |
| **CLRS** | **Cowichan Lake** | **5.60** | **22** | Pn | **Pn** | **14 13 57.3** | **-1.4** |
| **I07A** | **Izee** | **5.63** | **83** | Pn | **Pn** | **14 14 00.1** | **+1.1** |
| **MXC** | **Moxie City** | **5.73** | **57** | | **Pn** | **14 14 01.4** | **+0.9** |
| **LTY** | **Liberty** | **5.87** | **50** | | **Pn** | **14 14 03.8** | **+1.3** |
| **E07A** | **Sunnyside** | **5.99** | **58** | | **Pn** | **14 14 05.9** | **+1.8** |
| **HAWA** | **Hanford** | **6.13** | **61** | | **Pn** | **14 14 05.3** | **-0.5** |
| **G08A** | **Pilot Rock** | **6.17** | **72** | Pn | **Pn** | **14 14 06.5** | **0.0** |
| **D08A** | **Wollman Farm,** | **6.79** | **57** | Pn | **Pn** | **14 14 15.5** | **+0.5** |
| **BMO** | **Blue Mountains** | **7.25** | **77** | Pn | **Pn** | **14 14 20.8** | **-0.6** |
| **B08A** | **Colville Reser** | **7.25** | **47** | Pn | **Pn** | **14 14 20.7** | **-0.7** |
| **PNTR** | **Pine Nut** | **7.35** | **126** | Pn | **Pn** | **14 14 25.3** | **+2.3** |
| **C09A** | **Chrisman Ranch** | **7.53** | **53** | | **Pn** | **14 14 25.6** | **+0.3** |
| **MDPB** | **Devils Postpil** | **8.65** | **131** | | **Pn** | **14 14 42.9** | **+2.0** |
| **YHL** | **Hebgen Lake** | **11.60** | **79** | Pn | **Pn** | **14 15 22.9** | **+1.7** |
| **HWUT** | **Hardware Ranch** | **11.75** | **95** | Pn | **Pn** | **14 15 24.9** | **+1.7** |
| **YHH** | **Holmes Hill** | **11.84** | **79** | | **Pn** | **14 15 25.8** | **+1.4** |
| **RSSD** | **Black Hills** | **16.75** | **80** | P | **P** | **14 16 31.3** | **-1.0** |
| RSSD | | | | IAmb | IAmb | 14 16 55.8 | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **SDCO** | **Great Sand Dun** | **17.51** | **102** | P | **P** | **14 16 41.5** | **+0.7** |
| **E28A** | **Huff** | **18.95** | **72** | P | **Pn** | **14 16 57.3** | **+0.2** |
| E28A | | | | IAmb | IAmb | 14 17 00.1 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **M31M** | **Drury Creek, Y** | **19.05** | **350** | P | **P** | **14 16 57.4** | **+0.1** |
| M31M | | | | IAmb | IAmb | 14 17 05.1 | |
| | comp=Z,6.8nm,1.5s | | | | | | |
| **WAX** | **Waxell Ridge** | **19.27** | **336** | P | **P** | **14 16 58.4** | **-1.4** |
| **GLB** | **Gilahina Butte** | **20.35** | **337** | P | **P** | **14 17 12.1** | **+0.6** |
| GLB | | | | IAmb | IAmb | 14 17 14.6 | |
| | comp=Z,15nm,1.5s | | | | | | |

*FUNV **22** 14:13:07.1, 10°50N×62°88W, h34km, MW3.5*
**ISC 22 14:13:05.1±1.3, 10°46N±0°07×62°91W±0°04, h35km, n8, σ2s07/13, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.49** | **83** | eP | **Pn** | **14 13 30.6** | **+1.2** |
| TRN | | | | eS | **Sn** | **14 13 48.4** | **+0.7** |
| **PCRV** | **Puerto La Cruz** | **1.72** | **261** | eP | **Pn** | **14 13 34.5** | **+1.9** |
| PCRV | | | | eS | **Sn** | **14 13 54.6** | **+1.2** |
| **GCMP** | **Grenada, Carri** | **2.48** | **36** | eP | Pn | 14 13 39.7 | -3.4 |
| GCMP | | | | eS | **Sn** | **14 14 09.3** | **-2.9** |
| **MERV** | **Las Mercedes** | **3.55** | **251** | eP | **Pn** | **14 13 59.0** | **+1.3** |
| MERV | | | | eS | **Sn** | **14 14 37.5** | **-1.0** |
| **TACV** | **Tcata** | **4.07** | **266** | eP | **Pn** | **14 14 05.6** | **+0.8** |
| TACV | | | | eS | **Sn** | **14 14 49.1** | **-2.2** |
| **CACV** | **CAICARA DEL OR** | **4.60** | **232** | eP | Pn | 14 14 08.0 | -4.1 |
| CACV | | | | eS | Sn | 14 14 53.2 | -11 |
| **LUEV** | **Luepa** | **4.80** | **163** | eP | **Pn** | **14 14 16.2** | **+1.1** |
| LUEV | | | | eS | **Sn** | **14 15 07.1** | **-2.6** |
| **BAUV** | **El Baul** | **5.28** | **254** | eP | **Pn** | **14 14 22.6** | **+1.1** |
| BAUV | | | | eS | **Sn** | **14 15 18.0** | **-3.2** |

*NEIC **22** 14:19:44.8±1.7, 60°44N±0°02×147°43W±0°03, h10km±1km, Error ellipse: s-maj=3.3km s-min=2.9km az=144.0*
*AEIC **22** 14:19:45.9±1.9, 60°45N±0°02×147°36W±0°04, h4km±6km, ML3.3, ML3.5/152(NEIC), Error ellipse: s-maj=3.7km s-min=2.6km az=223.0*
**ISC 22 14:19:46.0±0.9, 60°44N±0°03×147°38W±0°02, h21km, n158, σ0s75/160, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HIN** | **Hinchinbrook I** | **0.44** | **96** | | **Pb** | **14 19 54.7** | **-0.3** |
| HIN | | | | IAML | | 14 20 02.7 | |
| | comp=E,3µm,0.8s | | | | | | |
| HIN | | | | IAML | | 14 20 03.7 | |
| | comp=N,3µm,0.5s | | | | | | |
| **HIN** | **Hinchinbrook I** | **0.44** | **96** | | **Sb** | **14 20 02.0** | **+0.9** |
| **P23K** | **Montague Islan** | **0.45** | **181** | | **Pb** | **14 19 55.6** | **+0.5** |
| P23K | | | | | **Sn** | **14 20 03.4** | **-1.2** |
| **GLI** | **Glacier Island** | **0.46** | **18** | | **Pb** | **14 19 54.3** | **-1.0** |
| GLI | | | | IAML | | 14 20 02.5 | |
| | comp=E,2µm,0.3s | | | | | | |
| **GLI** | **Glacier Island** | **0.46** | **18** | | **Sb** | **14 20 01.5** | **-0.2** |
| **PWL** | **Port Wells** | **0.63** | **312** | | **Pb** | **14 19 57.4** | **-1.0** |
| PWL | | | | IAML | | 14 20 07.3 | |
| | comp=E,3µm,0.3s | | | | | | |
| PWL | | | | IAML | | 14 20 07.3 | |
| | comp=N,2µm,0.5s | | | | | | |
| **PWL** | **Port Wells** | **0.63** | **312** | | **Sb** | **14 20 06.6** | **-0.2** |
| **EYAK** | **Cordova Ski Ar** | **0.81** | **82** | P | **Pb** | **14 20 00.4** | **-1.0** |
| **EYAK** | **Cordova Ski Ar** | **0.81** | **82** | | **Pb** | **14 20 00.6** | **-0.8** |
| **DIV** | **Divide** | **1.05** | **48** | | **Pn** | **14 20 04.5** | **-1.0** |
| **SEW** | **Seward** | **1.09** | **253** | | **Pb** | **14 20 05.5** | **-0.5** |
| **KNK** | **Knik Glacier** | **1.11** | **332** | | **Pn** | **14 20 05.9** | **-0.4** |
| KNK | | | | IAML | | 14 20 22.4 | |
| | comp=N,1µm,0.4s | | | | | | |
| KNK | | | | IAML | | 14 20 22.0 | |
| | comp=E,1µm,0.5s | | | | | | |
| **KNK** | **Knik Glacier** | **1.11** | **332** | | **Sb** | **14 20 20.3** | **-0.1** |
| **Q23K** | **Middleton Isla** | **1.14** | **152** | Pn | **Pn** | **14 20 06.3** | **-0.3** |
| **Q23K** | **Middleton Isla** | **1.14** | **152** | | **Sn** | **14 20 23.4** | **+1.7** |
| **MID** | **Middleton Isla** | **1.15** | **152** | P | **Pn** | **14 20 06.3** | **-0.4** |
| **MID** | **Middleton Isla** | **1.15** | **152** | Pn | **Pn** | **14 20 06.1** | **-0.6** |
| **MID** | **Middleton Isla** | **1.15** | **152** | | **Sn** | **14 20 23.5** | **+1.8** |
| **O22K** | **Cooper Landing** | **1.16** | **273** | | **Pn** | **14 20 06.4** | **-0.5** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KLU | **Klutina** | **1.27** | **33** | | **Pn** | **14 20 07.5** | **-1.1** |
| KLU | | | | IAML | | 14 20 26.0 | |
| | comp=N,776nm,0.4s | | | | | | |
| KLU | | | | IAML | | 14 20 28.1 | |
| | comp=E,956nm,0.5s | | | | | | |
| **GOAT** | **Goat Mountain** | **1.32** | **83** | | **Pn** | **14 20 08.8** | **-0.4** |
| GOAT | | | | | **Sn** | **14 20 26.3** | **0.0** |
| **RC01** | **Rabbit Creek A** | **1.33** | **300** | | **Pn** | **14 20 09.2** | **-0.1** |
| RC01 | | | | IAML | | 14 20 28.1 | |
| | comp=N,983nm,0.5s | | | | | | |
| RC01 | | | | IAML | | 14 20 28.3 | |
| | comp=E,961nm,0.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **1.33** | **300** | | **Sb** | **14 20 27.0** | **+0.3** |
| **RAGM** | **Ragged Mountai** | **1.34** | **91** | Pn | **Pn** | **14 20 08.8** | **-0.8** |
| **M23K** | **Glacier View** | **1.36** | **353** | | **Pn** | **14 20 10.0** | **+0.2** |
| **SCM** | **Sheep Creek Mo** | **1.40** | **1** | | **Pn** | **14 20 09.8** | **-0.5** |
| SCM | | | | IAML | | 14 20 32.1 | |
| | comp=E,846nm,0.9s | | | | | | |
| SCM | | | | IAML | | 14 20 34.2 | |
| | comp=N,520nm,0.4s | | | | | | |
| **SLKM** | **Skilak Lake** | **1.41** | **274** | | **Pn** | **14 20 10.4** | **-0.1** |
| **PMR** | **Palmer** | **1.43** | **324** | P | **Pn** | **14 20 11.0** | **+0.3** |
| **PMR** | **Palmer** | **1.43** | **324** | | **Pn** | **14 20 10.8** | **+0.1** |
| PMR | | | | IAML | | 14 20 31.9 | |
| | comp=N,557nm,0.5s | | | | | | |
| PMR | | | | IAML | | 14 20 36.2 | |
| | comp=E,466nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **1.45** | **342** | | **Pn** | **14 20 11.1** | **+0.1** |
| **BMRM** | **Bremner River** | **1.46** | **68** | | **Pn** | **14 20 10.7** | **-0.5** |
| **GHO** | **Glory Hole Cre** | **1.53** | **331** | | **Pn** | **14 20 12.8** | **+0.6** |
| **HMT** | **Hamilton** | **1.55** | **93** | | **Pn** | **14 20 11.9** | **-0.5** |
| **FIS** | **Fire Island** | **1.56** | **298** | | **Pb** | **14 20 13.8** | **-0.3** |
| **KAIM** | **Kayak Island** | **1.57** | **108** | | **Pn** | **14 20 12.4** | **-0.2** |
| **NICHA** | **Nichawak Mount** | **1.71** | **95** | | **Pn** | **14 20 13.6** | **-1.0** |
| **M24K** | **Tolsona, Glenn** | **1.77** | **19** | | **Pn** | **14 20 15.7** | **+0.3** |
| M24K | | | | IAML | | 14 20 41.8 | |
| | comp=N,498nm,1.1s | | | | | | |
| M24K | | | | IAML | | 14 21 03.6 | |
| | comp=E,393nm,1.1s | | | | | | |
| **N25K** | **Chitina, Valde** | **1.79** | **48** | | **Pn** | **14 20 15.3** | **-0.4** |
| N25K | | | | IAML | | 14 20 39.7 | |
| | comp=E,539nm,0.6s | | | | | | |
| **BRSE** | **Bradley Lake S** | **1.82** | **249** | | **Pn** | **14 20 16.1** | **-0.1** |
| **SUCK** | **Suckling Hills** | **1.83** | **100** | | **Pn** | **14 20 16.7** | **+0.5** |
| SUCK | | | | IAML | | 14 20 46.5 | |
| | comp=N,490nm,0.5s | | | | | | |
| SUCK | | | | IAML | | 14 20 46.8 | |
| | comp=E,295nm,0.4s | | | | | | |
| **M22K** | **Willow** | **1.87** | **316** | | **Pn** | **14 20 16.5** | **-0.2** |
| **BRLK** | **Bradley Lake** | **1.88** | **250** | | **Pn** | **14 20 16.8** | **-0.1** |
| BRLK | | | | IAML | | 14 20 40.9 | |
| | comp=E,415nm,0.8s | | | | | | |
| BRLK | | | | IAML | | 14 20 41.3 | |
| | comp=N,253nm,0.4s | | | | | | |
| **SUA** | **Susitna One** | **1.94** | **303** | | **Pn** | **14 20 17.3** | **-0.5** |
| SUA | | | | IAML | | 14 20 54.9 | |
| | comp=N,256nm,0.6s | | | | | | |
| **GLB** | **Gilahina Butte** | **2.01** | **59** | | **Pn** | **14 20 18.6** | **-0.1** |
| GLB | | | | IAML | | 14 20 45.1 | |
| | comp=E,277nm,0.6s | | | | | | |
| GLB | | | | IAML | | 14 20 46.0 | |
| | comp=N,292nm,0.5s | | | | | | |
| **GRIN** | **Grindle Hills** | **2.02** | **93** | | **Pn** | **14 20 18.0** | **-0.9** |
| **KHIT** | **Khitrov Hills** | **2.05** | **88** | | **Pn** | **14 20 18.2** | **-1.1** |
| **VRDI** | **Verde Repeater** | **2.08** | **66** | | **Pn** | **14 20 19.1** | **-0.7** |
| VRDI | | | | IAML | | 14 20 48.2 | |
| | comp=N,243nm,0.7s | | | | | | |
| **CRQM** | **Cirque** | **2.12** | **80** | | **Pn** | **14 20 19.5** | **-0.8** |
| CRQM | | | | IAML | | 14 20 49.6 | |
| | comp=E,437nm,0.7s | | | | | | |
| CRQM | | | | IAML | | 14 20 54.0 | |
| | comp=N,329nm,0.9s | | | | | | |
| **WACK** | **Wrangell Chich** | **2.14** | **42** | | **Pn** | **14 20 21.2** | **+0.5** |
| **CNPM** | **China Poot** | **2.15** | **246** | Pn | **Pn** | **14 20 20.1** | **-0.4** |
| CNPM | | | | IAML | | 14 20 54.2 | |
| | comp=N,299nm,0.5s | | | | | | |
| **WASW** | **Wrangell South** | **2.15** | **45** | | **Pn** | **14 20 21.5** | **+0.6** |
| **WAT6** | **Susitna Watana** | **2.15** | **356** | | **Pn** | **14 20 21.6** | **+0.8** |
| **HARP** | **HAARP** | **2.23** | **28** | | **Pn** | **14 20 23.2** | **+1.5** |
| **WAX** | **Waxell Ridge** | **2.25** | **88** | | **Pn** | **14 20 20.7** | **-1.3** |
| **TGL** | **Tana Glacier** | **2.27** | **80** | | **Pn** | **14 20 21.5** | **-0.8** |
| TGL | | | | IAML | | 14 20 56.0 | |
| | comp=E,197nm,1.0s | | | | | | |
| TGL | | | | IAML | | 14 20 56.2 | |
| | comp=N,192nm,0.8s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **2.33** | **64** | | **Pn** | **14 20 22.9** | **-0.2** |
| MCARA | | | | IAML | | 14 21 01.9 | |
| | comp=E,359nm,0.7s | | | | | | |
| **SPU** | **Mount Spurr** | **2.41** | **290** | | **Pn** | **14 20 23.5** | **-0.7** |
| **CUT** | **Chulitna** | **2.41** | **326** | | **Pn** | **14 20 24.5** | **+0.4** |
| **STLK** | **Strandline Lak** | **2.42** | **298** | | **Pn** | **14 20 24.1** | **-0.2** |
| **SPCG** | **Spurr Cappas Gl** | **2.42** | **293** | | **Pn** | **14 20 24.0** | **+0.2** |
| **BARK** | **Barkley Ridge** | **2.43** | **89** | | **Pn** | **14 20 23.7** | **-0.7** |
| **WAT1** | **Susitna Watana** | **2.46** | **347** | | **Pn** | **14 20 26.0** | **+1.1** |
| **SPCP** | **Crater Peak Br** | **2.48** | **292** | | **Pn** | **14 20 25.5** | **+0.3** |
| **SPCR** | **Spurr Chakacha** | **2.48** | **290** | | **Pn** | **14 20 25.3** | **+0.1** |
| **RDT** | **Redoubt** | **2.49** | **275** | | **Pn** | **14 20 24.7** | **-0.6** |
| **ISLE** | **Juniper Island** | **2.50** | **84** | | **Pn** | **14 20 24.5** | **-1.0** |
| ISLE | | | | IAML | | 14 21 01.9 | |
| | comp=E,203nm,0.6s | | | | | | |
| ISLE | | | | IAML | | 14 21 02.2 | |
| | comp=N,237nm,0.5s | | | | | | |
| **WAT7** | **Susitna Watana** | **2.50** | **344** | | **Pn** | **14 20 26.5** | **+1.0** |
| **KIAG** | **Kiagna River** | **2.52** | **77** | | **Pn** | **14 20 25.2** | **-0.6** |
| **PTPK** | **Patty Peak** | **2.52** | **71** | | **Pn** | **14 20 25.9** | **0.0** |
| **SKT** | **Skwentna** | **2.53** | **309** | | **Pn** | **14 20 25.4** | **-0.4** |
| SKT | | | | IAML | | 14 21 05.6 | |
| | comp=E,281nm,0.4s | | | | | | |
| **SPBG** | **Spurr Blockage** | **2.58** | **291** | | **Pn** | **14 20 26.5** | **0.0** |
| **BAGL** | **Bagley Icefiel** | **2.62** | **87** | | **Pn** | **14 20 26.6** | **-0.4** |
| **DFR** | **Drift River** | **2.63** | **276** | | **Pn** | **14 20 26.7** | **-0.5** |
| **O20K** | **Slope Mountain** | **2.64** | **264** | | **Pn** | **14 20 27.5** | **+0.2** |
| **RDSO** | **Redoubt South** | **2.66** | **273** | | **Pn** | **14 20 27.2** | **-0.5** |
| **RSO** | **Redoubt South** | **2.66** | **273** | | **Pn** | **14 20 27.3** | **-0.5** |
| **SPWE** | **Spurr West** | **2.67** | **290** | | **Pn** | **14 20 27.8** | **0.0** |
| **RDJH** | **Redoubt Jeurge** | **2.69** | **276** | | **Pn** | **14 20 27.7** | **-0.4** |
| **PAX** | **Paxson** | **2.69** | **19** | | **Pn** | **14 20 29.2** | **+1.0** |
| **RDWB** | **Redoubt West** | **2.70** | **273** | | **Pn** | **14 20 27.6** | **-0.8** |
| **MESA** | **MESA** | **2.72** | **93** | | **Pn** | **14 20 27.7** | **-0.8** |
| MESA | | | | IAML | | 14 21 09.2 | |
| | comp=N,221nm,0.4s | | | | | | |
| **NCT** | **North Crescent** | **2.75** | **275** | | **Pn** | **14 20 28.8** | **-0.1** |
| **SPNN** | **North Nagishla** | **2.76** | **292** | | **Pn** | **14 20 29.1** | **0.0** |
| **GRNC** | **Granite Creek** | **2.79** | **82** | | **Pn** | **14 20 28.9** | **-0.7** |
| GRNC | | | | IAML | | 14 21 12.8 | |
| | comp=N,127nm,0.6s | | | | | | |
| **IVE** | **Iliamna Volcan** | **2.84** | **264** | | **Pn** | **14 20 29.5** | **-0.7** |
| **M26K** | **Nabesna, AK** | **2.88** | **45** | Pn | **Pn** | **14 20 31.0** | **+0.3** |
| **RKAV** | **Rock Avalanche** | **3.00** | **90** | | **Pn** | **14 20 32.1** | **-0.4** |
| **CTGM** | **Chitina Glacie** | **3.02** | **77** | | **Pn** | **14 20 32.4** | **-0.3** |
| **RND** | **Reindeer** | **3.06** | **347** | | **Pn** | **14 20 33.2** | **+0.2** |
| RND | | | | IAML | | 14 21 22.1 | |
| | comp=N,134nm,1.1s | | | | | | |
| RND | | | | IAML | | 14 21 23.8 | |
| | comp=E,180nm,1.2s | | | | | | |
| **TABL** | **Table Mountain** | **3.09** | **87** | | **Pn** | **14 20 32.7** | **-1.0** |
| TABL | | | | IAML | | 14 21 28.2 | |
| | comp=N,125nm,0.8s | | | | | | |
| **M20K** | **Styx River** | **3.14** | **300** | | **Pn** | **14 20 34.4** | **+0.1** |
| M20K | | | | IAML | | 14 21 24.7 | |
| | comp=N,90nm,1.0s | | | | | | |
| M20K | | | | IAML | | 14 21 25.7 | |
| | comp=E,88nm,0.8s | | | | | | |
| **SYI** | **Shuyak Island** | **3.15** | **236** | | **Pn** | **14 20 35.3** | **+1.1** |
| **LOGN** | **Logan Glacier** | **3.17** | **80** | | **Pn** | **14 20 33.8** | **-0.8** |
| **L26K** | **Log Cabin Wild** | **3.23** | **35** | | **Pn** | **14 20 36.0** | **+0.6** |
| L26K | | | | IAML | | 14 21 23.4 | |
| | comp=N,97nm,0.6s | | | | | | |
| L26K | | | | IAML | | 14 21 29.1 | |
| | comp=E,84nm,0.6s | | | | | | |
| **M27K** | **Edge Creek, AK** | **3.27** | **52** | | **Pn** | **14 20 36.7** | **+0.6** |
| **YUK2** | **White River** | **3.45** | **64** | | **Pn** | **14 20 39.4** | **+0.9** |
| **K24K** | **Donnelly Dome** | **3.46** | **12** | | **Pn** | **14 20 40.1** | **+1.6** |
| **O19K** | **Port Alsworth** | **3.46** | **269** | | **Pn** | **14 20 39.0** | **+0.4** |
| **RIDG** | **Independent Ri** | **3.52** | **19** | | **Pn** | **14 20 40.7** | **+1.3** |
| RIDG | | | | IAML | | 14 21 41.0 | |
| | comp=E,89nm,1.1s | | | | | | |
| RIDG | | | | IAML | | 14 21 41.2 | |
| | comp=N,79nm,0.6s | | | | | | |
| **N19K** | **Bonanza Creek** | **3.52** | **279** | Pn | **Pn** | **14 20 39.1** | **-0.3** |
| **O28M** | **Mount Upton** | **3.56** | **82** | | **Pn** | **14 20 40.1** | **-0.1** |
| **M19K** | **Big River Lodg** | **3.70** | **296** | | **Pn** | **14 20 41.7** | **-0.2** |
| **BCAR** | **Beaver Creek A** | **3.74** | **43** | Pn | **Pn** | **14 20 42.6** | **+0.1** |
| **KDAK** | **Kodiak Island** | **3.78** | **227** | | **Pn** | **14 20 42.4** | **-0.6** |
| KDAK | | | | IAML | | 14 21 24.4 | |
| | comp=N,56nm,0.4s | | | | | | |
| KDAK | | | | IAML | | 14 21 24.5 | |
| | comp=N,46nm,0.9s | | | | | | |
| **YUK8** | **Steele Glacier** | **3.82** | **74** | | **Pn** | **14 20 44.7** | **+1.0** |
| **O18K** | **Koktuh Hills** | **3.96** | **265** | | **Pn** | **14 20 44.4** | **-1.0** |
| O18K | | | | IAML | | 14 21 56.4 | |
| | comp=N,42nm,1.1s | | | | | | |
| **HDA** | **Harding Lake** | **3.99** | **3** | | **Pn** | **14 20 46.6** | **+0.8** |
| HDA | | | | IAML | | 14 21 41.6 | |
| | comp=N,76nm,0.6s | | | | | | |
| **L19K** | **White Mountain** | **4.00** | **299** | | **Pn** | **14 20 45.4** | **-0.7** |
| L19K | | | | IAML | | 14 22 01.3 | |
| | comp=N,39nm,1.0s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **4.04** | **337** | | **Pn** | **14 20 47.3** | **+0.7** |
| **WRH** | **Wood River Hil** | **4.06** | **356** | | **Pn** | **14 20 47.6** | **+0.8** |
| WRH | | | | IAML | | 14 21 54.3 | |
| | comp=N,71nm,0.7s | | | | | | |
| WRH | | | | IAML | | 14 22 00.6 | |
| | comp=E,68nm,0.7s | | | | | | |
| **PNL** | **Peninsula** | **4.08** | **98** | P | **Pn** | **14 20 46.5** | **-0.6** |
| **N18K** | **Kilae Creek** | **4.21** | **277** | | **Pn** | **14 20 47.6** | **-1.2** |
| **CCB** | **Clear Creek Bu** | **4.22** | **358** | Pn | **Pn** | **14 20 49.6** | **+0.5** |
| CCB | | | | IAML | | 14 21 55.3 | |
| | comp=E,64nm,1.1s | | | | | | |
| **NEA2** | **Nenana** | **4.24** | **350** | | **Pn** | **14 20 50.0** | **+0.8** |
| NEA2 | | | | IAML | | 14 21 57.5 | |
| | comp=N,52nm,0.8s | | | | | | |
| NEA2 | | | | IAML | | 14 22 00.7 | |
| | comp=E,58nm,1.0s | | | | | | |
| **M18K** | **Stony River** | **4.25** | **288** | | **Pn** | **14 20 48.4** | **-1.0** |
| **J25K** | **Salcha River,** | **4.29** | **12** | | **Pn** | **14 20 49.9** | **-0.1** |
| J25K | | | | IAML | | 14 22 05.0 | |
| | comp=E,42nm,0.7s | | | | | | |
| J25K | | | | IAML | | 14 22 10.8 | |
| | comp=N,36nm,1.0s | | | | | | |
| **K20K** | **Telida** | **4.31** | **316** | Pn | **Pn** | **14 20 49.2** | **-1.0** |
| K20K | | | | IAML | | 14 22 08.2 | |
| | comp=N,42nm,1.1s | | | | | | |
| **IL31** | | **4.35** | **3** | | **Pn** | **14 20 50.8** | **0.0** |
| **K27K** | **Chicken** | **4.37** | **32** | | **Pn** | **14 20 51.4** | **+0.3** |
| **J26L** | **Joseph Creek** | **4.44** | **22** | | **Pn** | **14 20 52.7** | **+0.6** |
| **COLA** | **College** | **4.45** | **357** | P | **Pn** | **14 20 53.4** | **+1.2** |
| **OHAK** | **Old Harbor** | **4.45** | **226** | P | **Pn** | **14 20 51.6** | **-0.6** |
| **MDM** | **Murphy Dome** | **4.55** | **355** | | **Pn** | **14 20 54.0** | **+0.4** |
| MDM | | | | IAML | | 14 22 11.0 | |
| | comp=N,59nm,0.8s | | | | | | |
| MDM | | | | IAML | | 14 22 11.2 | |
| | comp=E,45nm,0.8s | | | | | | |
| **M29M** | **Somme Creek** | **4.73** | **61** | Pn | **Pn** | **14 20 56.2** | **+0.1** |
| M29M | | | | IAML | | 14 21 50.3 | |
| | comp=E,35nm,0.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **350** | | **Pn** | **14 20 57.9** | **+0.8** |
| I23K | | | | IAML | | 14 22 22.0 | |
| | comp=E,35nm,0.9s | | | | | | |
| **L18K** | **Granite Mounta** | **4.82** | **296** | Pn | **Pn** | **14 20 56.6** | **-0.7** |
| L18K | | | | IAML | | 14 22 21.4 | |
| | comp=N,29nm,1.3s | | | | | | |
| L18K | | | | IAML | | 14 22 23.1 | |
| | comp=E,22nm,1.1s | | | | | | |
| **N17K** | **Nushagak Hills** | **4.85** | **275** | | **Pn** | **14 20 56.3** | **-1.4** |
| N17K | | | | IAML | | 14 22 20.1 | |
| | comp=N,22nm,1.2s | | | | | | |
| **MLY** | **Manley** | **4.86** | **343** | Pn | **Pn** | **14 20 59.2** | **+1.4** |
| MLY | | | | IAML | | 14 22 04.0 | |
| | comp=N,36nm,0.6s | | | | | | |
| MLY | | | | IAML | | 14 22 05.6 | |
| | comp=E,27nm,0.8s | | | | | | |
| **J20K** | **Nowinta River** | **4.90** | **323** | Pn | **Pn** | **14 20 57.1** | **-1.2** |
| **P29M** | **Windy Craggy** | **4.90** | **95** | Pn | **Pn** | **14 20 58.2** | **-0.2** |
| P29M | | | | IAML | | 14 22 16.0 | |
| | comp=E,25nm,0.8s | | | | | | |
| P29M | | | | IAML | | 14 22 30.6 | |
| | comp=N,34nm,0.9s | | | | | | |
| **N30M** | **Aishikik Lake** | **5.12** | **74** | Pn | **Pn** | **14 21 00.8** | **-0.6** |
| **I21K** | **Tanana** | **5.20** | **338** | | **Pn** | **14 21 03.4** | **+0.9** |
| **DAWY** | **Dawson** | **5.21** | **42** | Pn | **Pn** | **14 21 01.7** | **-1.0** |
| **EGAK** | **Eagle** | **5.21** | **31** | | **Pn** | **14 21 02.4** | **-0.2** |
| EGAK | | | | IAML | | 14 22 36.6 | |
| | comp=N,35nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 14 22 55.1 | |
| | comp=N,25nm,1.0s | | | | | | |
| **J19K** | **Poorman** | **5.25** | **316** | Pn | **Pn** | **14 21 02.4** | **-0.7** |
| J19K | | | | IAML | | 14 22 31.4 | |
| | comp=N,27nm,1.3s | | | | | | |
| J19K | | | | IAML | | 14 22 40.1 | |
| | comp=E,28nm,0.7s | | | | | | |
| **I26K** | **Coal Creek Min** | **5.25** | **20** | Pn | **Pn** | **14 21 04.5** | **+1.4** |
| I26K | | | | IAML | | 14 22 34.3 | |
| | comp=N,34nm,1.1s | | | | | | |
| I26K | | | | IAML | | 14 22 36.4 | |
| | comp=E,35nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **5.42** | **358** | Pn | **Pn** | **14 21 07.2** | **+1.7** |
| **I20K** | **Naaghedeneel** | **5.46** | **326** | | **Pn** | **14 21 06.0** | **+0.1** |
| **H23K** | **Yukon River** | **5.49** | **351** | | **Pn** | **14 21 07.7** | **+1.2** |
| **K17K** | **Iditarod** | **5.69** | **298** | Pn | **Pn** | **14 21 08.3** | **-0.9** |
| **K29M** | **Barlow Dome** | **5.74** | **49** | Pn | **Pn** | **14 21 12.3** | **+2.3** |
| **N31M** | **Braeburn, Yuko** | **5.75** | **74** | | **Pn** | **14 21 10.0** | **0.0** |
| **H21K** | **Melozitna Rive** | **5.78** | **337** | Pn | **Pn** | **14 21 10.7** | **+0.2** |
| **I28M** | **Miner Creek** | **6.06** | **31** | Pn | **Pn** | **14 21 16.0** | **+1.6** |
| **WHY** | **Whitehorse** | **6.17** | **83** | Pn | **Pn** | **14 21 15.7** | **-0.2** |
| **G24K** | **Hadweenzic Riv** | **6.28** | **360** | | **Pn** | **14 21 17.6** | **+0.3** |
| **G23K** | **Bananza Creek** | **6.40** | **351** | Pn | **Pn** | **14 21 19.4** | **+0.4** |
| **H19K** | **Roundabout Mou** | **6.56** | **325** | Pn | **Pn** | **14 21 20.9** | **-0.2** |
| **J30M** | **Hart River** | **6.58** | **46** | Pn | **Pn** | **14 21 22.2** | **+0.7** |
| **G21K** | **Allakaket** | **6.68** | **338** | | **Pn** | **14 21 23.6** | **+0.8** |
| **K15K** | **Wolf Creek Mou** | **7.05** | **291** | Pn | **Pn** | **14 21 27.2** | **-0.5** |
| **G19K** | **Purcell Mounta** | **7.19** | **327** | Pn | **Pn** | **14 21 29.2** | **-0.6** |
| **P33M** | **Teslin, Yukon** | **7.24** | **86** | | **Pn** | **14 21 29.9** | **-0.5** |
| **F26K** | **Sheenjek River** | **7.42** | **10** | | **Pn** | **14 21 33.2** | **+0.4** |
| **G18K** | **Tagagawik** | **7.47** | **322** | | **Pn** | **14 21 32.4** | **-1.2** |
| **F20K** | **Avaraart Lake** | **7.59** | **334** | Pn | **Pn** | **14 21 35.6** | **+0.5** |
| **E23K** | **Chandalar** | **7.71** | **354** | Pn | **Pn** | **14 21 37.0** | **+0.1** |
| **F19K** | **Shaleruckik Mo** | **7.90** | **329** | | **Pn** | **14 21 39.5** | **+0.2** |

*TEH **22** 14:21:47.2, 28°.17N×57°.24E, h30km, ML3.3*
*DSN **22** 14:21:47.5±1.5, 28°.18N×57°.34E, h10km, ML2.7/6, Error ellipse: s-maj=68.9km s-min=11.7km az=118.0*
*OMAN **22** 14:21:49.1±1.4, 27°.97N×57°.56E, h10km, mb4.0/1, ml3.0/11, Error ellipse: s-maj=10.6km s-min=8.9km az=172.0*

**ISC 22 14:21:46.6**±1.5, **28°.17N**±0°.04×**57°.34E**±0°.05, **h10**km±12km, **n33**, σ1**s53**/53, **Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KHNJ** | **Kahnooj** | **0.39** | **125** | Pg | **Pb** | **14 21 57.0** | **+1.3** |
| **IBND** | **Bandar-abas** | **1.01** | **225** | Pg | **Pg** | **14 22 05.6** | **-0.4** |
| IBND | | | | Sg | **Sg** | **14 22 19.2** | **0.0** |
| **GENO** | **Geno** | **1.29** | **234** | Pg | **Pn** | **14 22 10.0** | **-0.9** |
| GENO | | | | Sg | **Sb** | **14 22 26.9** | **-1.0** |
| **KBAM** | **BAM** | **1.37** | **45** | Pg | **Pb** | **14 22 13.1** | **+0.7** |
| **NGRK** | **Negar Kerman** | **1.56** | **340** | Pg | **Pn** | **14 22 14.3** | **-0.5** |
| **CHMN** | **Cheshme madani** | **1.69** | **6** | Pg | **Pn** | **14 22 16.7** | **+0.2** |
| **KHGB** | **Koh Gabri** | **2.32** | **341** | Pn | **Pn** | **14 22 25.3** | **+0.2** |
| **JASK** | **Jask - Hormozg** | **2.34** | **168** | Pn | **Pn** | **14 22 26.5** | **+1.3** |
| **JASK** | **Jask - Hormozg** SNR=20 | **2.34** | **168** | P | **Pn** | **14 22 27.0** | **+1.8** |
| JASK | | | | S | **Sn** | **14 22 54.4** | **+0.3** |
| **SHME** | **Shamm** | **2.37** | **207** | P | **Pn** | **14 22 25.9** | **+0.4** |
| SHME | | | | S | **Sb** | **14 22 58.0** | **-0.7** |
| **SHME** | **Shamm** SNR=6.5 | **2.37** | **207** | P | **Pn** | **14 22 26.0** | **+0.4** |
| SHME | | | | S | **Sn** | **14 22 56.7** | **+2.0** |
| **BANOM** | **Banah** | **2.43** | **203** | P | **Pn** | **14 22 27.7** | **+1.3** |
| BANOM | | | | S | **Sn** | **14 22 57.1** | **+0.9** |
| **BANOM** | **Banah** | **2.43** | **203** | P | **Pb** | **14 22 29.7** | **-0.7** |
| BANOM | | | | S | **Sn** | **14 22 58.6** | **+2.4** |
| **MASF** | **Masafi** | **2.98** | **201** | P | **Pn** | **14 22 34.6** | **+0.5** |
| MASF | | | | S | **Sn** | **14 23 11.8** | **+1.9** |
| **MSFE** | **Esma-Masafi** | **3.00** | **201** | P | **Pn** | **14 22 35.3** | **+1.1** |
| **UMQ** | **Umm Al-Quwin** | **3.03** | **210** | P | **Pn** | **14 22 35.5** | **+0.8** |
| UMQ | | | | S | **Sn** | **14 23 13.0** | **+1.9** |
| **HATD** | **Hatta, Dubai** | **3.51** | **198** | P | **Pn** | **14 22 42.7** | **+1.5** |
| **HATD** | **Hatta, Dubai** | **3.51** | **198** | P | **Pn** | **14 22 43.7** | **+2.5** |
| HATD | | | | S | **Sn** | **14 23 24.9** | **+2.1** |
| **NAZ** | **Nazwa, Dubai** | **3.51** | **206** | P | **Pn** | **14 22 42.9** | **+1.7** |
| NAZ | | | | S | **Sn** | **14 23 24.3** | **+1.4** |
| **ASHO** | **Ashiyiah** | **3.66** | **199** | P | **Pn** | **14 22 45.1** | **+1.8** |
| **ASHO** | **Ashiyiah** | **3.66** | **199** | P | **Pn** | **14 22 43.8** | **+0.4** |
| ASHO | | | | S | **Sn** | **14 23 28.6** | **+1.9** |
| **FAQ** | **Al Faqa, Dubai** | **3.76** | **205** | P | **Pn** | **14 22 45.1** | **+0.5** |
| **FAQ** | **Al Faqa, Dubai** | **3.76** | **205** | P | **Pn** | **14 22 45.4** | **+0.7** |
| FAQ | | | | S | **Sn** | **14 23 28.6** | **-0.4** |
| **ASUD** | **Al Ashush, Dub** | **3.97** | **208** | P | **Pn** | **14 22 48.1** | **+0.6** |
| ASUD | | | | S | **Sn** | **14 23 32.7** | **-1.4** |
| **NHDN** | **Nehbandan** | **3.98** | **36** | Pn | **Pn** | **14 22 49.6** | **+1.8** |
| **SOHO** | **SOHO** | **4.09** | **190** | P | **Pn** | **14 22 49.6** | **+0.4** |
| SOHO | | | | S | **Sn** | **14 23 37.4** | **+0.3** |
| **AJN** | **Ajban** | **4.17** | **211** | P | **Pn** | **14 22 50.1** | **-0.2** |
| **HOQ** | **Hoqain** | **4.57** | **180** | Pn | **Pn** | **14 22 55.5** | **-0.4** |
| **HOQ** | **Hoqain** | **4.57** | **180** | P | **Pn** | **14 22 55.5** | **-0.4** |
| HOQ | | | | S | **Sn** | **14 23 45.2** | **-3.9** |
| **BIDO** | **Bidbid** | **4.69** | **171** | P | **Pn** | **14 22 57.1** | **-0.3** |
| BIDO | | | | S | **Sn** | **14 23 48.4** | **-3.5** |
| **ARQ** | **Araqi** SNR=9.6 | **4.87** | **189** | P | **Pn** | **14 23 02.0** | **+2.0** |
| ARQ | | | | S | **Sn** | **14 23 56.7** | **+0.1** |
| **JLN** | **Jalan Bani Buh** | **6.28** | **162** | P | **Pn** | **14 23 18.0** | **-1.4** |
| JLN | | | | S | **Sn** | **14 24 28.0** | **-3.2** |
| **MHTO** | **MHTO** | **7.18** | **175** | P | **Pn** | **14 23 33.1** | **+1.4** |
| MHTO | | | | S | **Sn** | **14 24 51.0** | **-2.4** |

*IDC **22** 14:25:10.2±2.0, 25°.32N×90°.34E, h0km, mb3.5/6, mbtmp3.6/6, Error ellipse: s-maj=87.9km s-min=20.0km az=66.0*
*NDI **22** 14:25:27.0±2.9, 25°.84N×92°.20E, h10km, ML4.0, MW3.7*

**ISC 22 14:25:18.9**±0.7, **26°.15N**±0°.05×**91°.92E**±0°.04, **h10**km, **n13**, σ2**s91**/19, **mb3.5/6**, **Northeastern India**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHL** | **Shillong** | **0.58** | **183** | *e*P | **Pn** | **14 25 33.1** | **-0.3** |
| SHL | | | | *e*S | **Sn** | **14 25 42.5** | **-0.5** |
| SHL | | | | IAmb | IAmb | 14 25 43.5 | |
| | comp=E,4μm,0.5s | | | | | | |
| SHL | | | | IAmb | IAmb | 14 25 43.9 | |
| | comp=N,3μm,0.4s | | | | | | |
| **KOHI** | **KOHIMA** | **2.02** | **102** | *e*P | **Pb** | **14 25 56.1** | **+0.4** |
| KOHI | | | | *e*S | **Sn** | **14 26 20.8** | **+2.3** |
| KOHI | | | | *ex* | x | 14 26 22.7 | |
| KOHI | | | | IAML | | 14 26 25.1 | |
| | comp=E,1μm,0.5s | | | | | | |
| KOHI | | | | IAML | | 14 26 31.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| **ZIRO** | **ZIRO** | **2.20** | **51** | *ex* | **Pn** | **14 25 54.5** | **-1.3** |
| ZIRO | | | | *e*S | **Sg** | **14 26 32.3** | **+2.5** |
| ZIRO | | | | IAML | | 14 26 34.2 | |
| | comp=E,8μm,0.6s | | | | | | |
| ZIRO | | | | IAML | | 14 26 39.2 | |
| | comp=E,10μm,0.7s | | | | | | |
| **IMP** | **Imphal** | **2.25** | **125** | *e*P | **Pb** | **14 26 00.2** | **+0.5** |
| IMP | | | | *e*S | **Sn** | **14 26 23.8** | **-0.5** |
| IMP | | | | IAML | | 14 26 26.1 | |
| | comp=E,167nm,0.7s | | | | | | |
| **AGT** | **Agartala** | **2.34** | **195** | *ex* | **Pn** | **14 25 58.4** | **+1.0** |
| AGT | | | | *ex* | **Sg** | **14 26 36.1** | **+2.1** |
| AGT | | | | IAML | | 14 26 44.5 | |
| | comp=E,2μm,0.6s | | | | | | |
| AGT | | | | IAML | | 14 26 51.6 | |
| | comp=E,2μm,0.6s | | | | | | |
| **GTK** | **Tadong** | **3.19** | **292** | *e*P | **Pg** | **14 26 20.8** | **+0.7** |
| GTK | | | | *e*S | **Sg** | **14 27 04.6** | **+3.2** |
| **CMAR** | **Chiang Mai Arr** | **10.04** | **138** | Pn | **Pn** | **14 27 46.0** | **+2.7** |
| | comp=E,0.2nm,0.3s,baz=312,slow=11,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **21.98** | **342** | P | **P** | **14 30 09.8** | **-3.2** |
| | comp=E,1.8nm,0.7s,baz=158,slow=9.7,SNR=20 | | | | | | |
| | comp=E,1.8nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **24.46** | **24** | P | **P** | **14 30 43.7** | **+5.6** |
| | comp=E,0.5nm,0.5s,baz=195,slow=8.0,SNR=2.4 | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **26.51** | **341** | P | **P** | **14 30 53.0** | **-3.4** |
| | comp=E,0.6nm,0.6s,baz=156,slow=9.8,SNR=4.6 | | | | | | |
| | comp=E,0.6nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **28.27** | **351** | P | **P** | **14 31 09.0** | **-3.1** |
| | comp=E,0.5nm,0.5s,baz=152,slow=11,SNR=2.2 | | | | | | |
| | comp=E,0.5nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **61.60** | **134** | P | **P** | **14 35 32.2** | **-4.6** |
| | comp=E,0.4nm,0.9s,baz=321,slow=7.4,SNR=12 | | | | | | |
| | comp=E,0.4nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **64.05** | **137** | P | **P** | **14 35 49.5** | **-3.6** |
| | comp=E,0.3nm,0.9s,baz=315,slow=6.1,SNR=4.4 | | | | | | |
| | comp=E,0.3nm,0.9s | | | | | | |

*IDC **22** 14:32:19.3±1.7, 0°.94S×96°.87E, h0km, mb3.7/7, mbtmp3.7/8, ML3.9/1, Error ellipse: s-maj=76.1km s-min=20.3km az=52.0*
*DJA **22** 14:32:20.0±3.9, 1°.S±7°×9°.7E±1°.0, h15km±32km, M4.3/8, MLv4.3/8*

**ISC 22 14:32:21.1**±1.0, **0°.79S**±0°.09×**97°.13E**±0°.09, **h10**km, **n24**, σ0**s92**/17, **mb3.6/7**, **Southwest of Sumatera**

| Code | Station Name | Δ

| | | | | | | |
|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **1.14 124** | P | **Pb** | **14 50 44.3 +0.3** | |
| PLAI | | | S | **Sn** | **14 51 00.5 +0.6** | |
| **SRBI** | **Singaraja** | **1.59 274** | P | **Pn** | **14 50 49.4 -1.0** | |
| SRBI | | | S | **Sb** | **14 51 11.9 0.0** | |
| **DNP** | **Denpasar** | **1.66 253** | P | **Pb** | **14 50 52.8 -0.1** | |
| **JAGI** | **Jajag, Banyuwa** | **2.65 264** | | **Pn** | **14 51 03.9 -1.1** | |
| **JAGI** | **Jajag, Banyuwa** | **2.65 264** | P | **Pn** | **14 51 04.3 -0.7** | |
| **WBSI** | **Waikabubak, Su** | **2.92 120** | P | **Pn** | **14 51 08.6 -0.2** | |
| **BSSI** | **Bau Bau, Buton** | **4.18 61** | P | **Pn** | **14 51 25.5 -0.6** | |
| **BASI** | **Baing, Sumba** | **4.22 119** | P | **Pn** | **14 51 27.0 +0.3** | |
| **KAPI** | **Kappang** | **4.30 43** | Pn | **Pn** | **14 51 26.3 -1.5** | |
| **KAPI** | **Kappang** | **4.30 43** | Pn | **Pn** | **14 51 27.0 -0.8** | |
| | 5.0nm,0.3s,baz=192,slow=6.8,SNR=14 | | | | | |
| KAPI | | | Sn | **Sn** | **14 52 17.6 -0.4** | |
| | 14nm,0.3s,baz=75,slow=13,SNR=5.5 | | | | | |
| | 20nm,0.2s | | | | | |
| **GRJI** | **Gresik** | **4.48 286** | P | **Pn** | **14 51 29.8 -0.5** | |
| **EDFI** | **Ende, Flores** | **4.85 97** | P | **Pn** | **14 51 35.5 +0.1** | |
| **PWJI** | **Pagerwojo** | **4.97 272** | P | **Pn** | **14 51 37.3 +0.4** | |
| **BNSI** | **Bone** | **4.99 41** | P | **Pn** | **14 51 36.8 -0.4** | |
| **NGJI** | **Ngawi** | **5.37 278** | P | **Pb** | **14 51 57.3 +1.1** | |
| **MMRI** | **Maumere** | **5.38 95** | Pn | **Pn** | **14 51 40.1 -2.5** | |
| **MMRI** | **Maumere** | **5.38 95** | P | Pb | 14 51 51.3 -5.1 | |
| **UGM** | **Wanagama** | **6.24 272** | Pn | **Pn** | **14 51 53.9 -0.5** | |
| **UGM** | **Wanagama** | **6.24 272** | P | **Pn** | **14 51 54.4 0.0** | |
| **BBSI** | **Bau Bau** | **6.32 65** | P | **Pb** | **14 52 11.8 -0.5** | |
| **BATI** | **Baumata** | **7.05 107** | P | **Pn** | **14 52 06.1 +0.5** | |
| | 208nm,0.8s,2μm0.6nm | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.46 345** | P | **Pn** | **14 52 13.0 +1.9** | |
| **SOEI** | **Soe** | **7.52 102** | P | **Pn** | **14 52 12.3 +0.1** | |
| **SOEI** | **Soe** | **7.52 102** | | **Pn** | **14 52 11.4 -0.7** | |
| **SOEI** | **Soe** | **7.52 102** | P | **Pn** | **14 52 12.4 +0.2** | |
| **DBJI** | **Dramaga** | **10.12 279** | P | Pn | 14 52 59.4 +12 | |
| **FITZ** | **Fitzroy Crossi** | **13.06 140** | P | **Pn** | **14 53 28.2 +0.2** | |
| **FITZ** | **Fitzroy Crossi** | **13.06 140** | Pn | **Pn** | **14 53 27.5 -0.5** | |
| **FITZ** | **Fitzroy Crossi** | **13.06 140** | P | **Pn** | **14 53 28.1 +0.2** | |
| | comp=Z,824nm,0.8s | | | | | |
| **MBWA** | **Marble Bar** | **13.19 168** | Pn | **Pn** | **14 53 28.4 -1.3** | |
| **MBWA** | **Marble Bar** | **13.19 168** | P | **Pn** | **14 53 28.5 -1.3** | |
| | comp=Z,2μmcomp=Z,71nm,0.8s | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.62 168** | P | **Pn** | **14 53 37.3 +1.8** | |
| **PSA00** | **Pilbara Seismi** | **13.62 168** | Pn | **Pn** | **14 53 33.8 -1.8** | |
| **PSA00** | **Pilbara Seismi** | **13.62 168** | P | **Pn** | **14 53 32.8 -2.7** | |
| | comp=Z,2μmcomp=Z,60nm,1.0s | | | | | |
| **KNRA** | **Kununurra** | **13.85 124** | Pn | **Pn** | **14 53 36.4 -2.3** | |
| **KNRA** | **Kununurra** | **13.85 124** | P | **Pn** | **14 53 39.0 +0.4** | |
| **GIRL** | **Giralia** | **14.58 190** | Pn | **Pn** | **14 53 46.7 -2.0** | |
| **MTN** | **Manton Dam** | **14.81 109** | P | **Pn** | **14 53 52.1 +0.2** | |
| **MTN** | **Manton Dam** | **14.81 109** | Pn | **Pn** | **14 53 49.5 -2.4** | |
| **MTN** | **Manton Dam** | **14.81 109** | P | **Pn** | **14 53 50.0 -1.9** | |
| | comp=Z,745nmcomp=Z,34nm,0.9s | | | | | |
| **KDU** | **Kakadu** | **16.03 107** | P | **Pn** | **14 54 05.6 -2.3** | |
| **SWI** | **Sorong** | **16.13 64** | P | **P** | **14 54 14.4 +1.9** | |
| **FAKI** | **Fak Fak** | **16.23 72** | P | **Pn** | **14 54 11.5 +1.0** | |
| **FAKI** | **Fak Fak** | **16.23 72** | Pn | **Pn** | **14 54 10.1 -0.4** | |
| **FAKI** | **Fak Fak** | **16.23 72** | P | P | 14 54 21.7 +8.1 | |
| **MEEK** | **Meekatharra** | **18.42 175** | P | **Pn** | **14 54 41.1 +3.2** | |
| **MEEK** | **Meekatharra** | **18.42 175** | P | **P** | **14 54 37.6 -0.2** | |
| | comp=Z,2μmcomp=Z,96nm,0.8s | | | | | |
| **WRKA** | **Warakurna** | **20.01 148** | P | **P** | **14 54 56.3 +1.0** | |
| **WRKA** | **Warakurna** | **20.01 148** | P | **P** | **14 54 55.9 +0.6** | |
| | comp=Z,2μmcomp=Z,107nm,0.9s | | | | | |
| **WB0** | **Warramunga Arr** | **20.55 126** | P | **P** | **14 55 00.0 -1.1** | |
| WB0 | | | IAmb | IAmb | 14 55 12.0 | |
| | comp=Z,41nm,0.7s | | | | | |
| **WRA** | **Warramunga Arr** | **20.59 126** | P | **P** | **14 55 00.2 -1.5** | |
| **WRA** | **Warramunga Arr** | **20.59 126** | P | **P** | **14 55 01.1 -0.5** | |
| | comp=Z,12nm,0.7s,baz=302,slow=12,SNR=148 | | | | | |
| | comp=Z,12nm,0.7s | | | | | |
| **MORW** | **Morawa** | **20.78 182** | P | Pn | 14 55 09.4 +3.5 | |
| **MORW** | **Morawa** | **20.78 182** | P | **P** | **14 55 05.0 +1.4** | |
| | comp=Z,38nm,1.3s | | | | | |
| **BLDU** | **Ballidu** | **22.30 180** | P | **P** | **14 55 24.5 +4.6** | |
| **BLDU** | **Ballidu** | **22.30 180** | P | **P** | **14 55 25.0 +5.0** | |
| **AS31** | **Alice Springs** | **22.47 135** | P | **P** | **14 55 20.9 -0.9** | |
| **AS31** | **Alice Springs** | **22.47 135** | P | **P** | **14 55 21.3 -0.5** | |
| | comp=Z,14nm,0.9s | | | | | |
| **ASAR** | **Alice Springs** | **22.47 135** | P | **P** | **14 55 20.5 -1.3** | |
| **ASAR** | **Alice Springs** | **22.47 135** | P | **P** | **14 55 21.1 -0.7** | |
| | comp=Z,4.7nm,0.8s,baz=312,slow=7.5,SNR=34 | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | |
| **AS01** | **Alice Springs** | **22.50 135** | P | **P** | **14 55 21.8 -0.3** | |
| **KLBR** | **Kellerberrin** | **23.29 178** | P | **P** | **14 55 36.0 +5.7** | |
| **KMBL** | **Kambalda** | **23.53 169** | P | **P** | **14 55 35.9 +3.2** | |
| **KMBL** | **Kambalda** | **23.53 169** | P | **P** | **14 55 36.5 +3.8** | |
| **FORT** | **Forrest** | **24.80 156** | P | **P** | **14 55 46.6 +2.0** | |
| **FORT** | **Forrest** | **24.80 156** | P | **P** | **14 55 44.8 +0.2** | |
| **FORT** | **Forrest** | **24.80 156** | P | **P** | **14 55 43.1 -1.5** | |
| | comp=Z,88nm,1.3s | | | | | |
| **QIS** | **Mount Isa** | **25.22 122** | P | **P** | **14 55 49.5 +1.0** | |
| **QIS** | **Mount Isa** | **25.22 122** | P | **P** | **14 55 47.7 -0.8** | |
| | comp=Z,28nm,0.9s | | | | | |
| **COEN** | **Coen** | **26.48 105** | P | **P** | **14 55 58.4 -1.6** | |
| COEN | | | IAmb | IAmb | 14 56 13.6 | |
| | comp=Z,19nm,0.8s | | | | | |
| **COEN** | **Coen** | **26.48 105** | P | **P** | **14 55 56.6 -3.4** | |
| **CTA** | **Charters Tower** | **30.83 116** | P | **P** | **14 56 37.5 -1.3** | |
| | comp=Z,0.2nm,0.8s,baz=270,slow=12,SNR=4.1 | | | | | |
| CTA | | | LR | LR | 15 11 23.5 | |
| | comp=Z,59nm,18.8s,baz=282,slow=41 | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.82 326** | P | **P** | **14 56 48.3 +0.9** | |
| **CMAR** | **Chiang Mai Arr** | **31.82 326** | P | **P** | **14 56 48.1 +0.8** | |
| | comp=Z,3.0nm,0.9s,baz=158,slow=6.9,SNR=14 | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | |
| **STKA** | **Stephens Creek** | **32.96 139** | P | **P** | **14 56 56.6 -0.6** | |
| **STKA** | **Stephens Creek** | **32.96 139** | P | **P** | **14 56 57.3 +0.1** | |
| | comp=Z,3.5nm,0.7s,baz=308,slow=12,SNR=4.8 | | | | | |
| STKA | | | LR | LR | 15 10 43.3 | |
| | comp=Z,392nm,18.4s,baz=330,slow=37 | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | |
| **KMI** | **Kunming** | **35.84 338** | ⇓P | **P** | **14 57 24.3 +1.8** | |
| KMI | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | |
| KMI | | | LR | LR | | |
| | comp=Z,460nm,10.2s | | | | | |
| KMI | | | LR | LR | | |
| | comp=Z,690nm,13.1s | | | | | |
| KMI | | | LR | LR | | |
| | comp=Z,310nm,13.6s | | | | | |
| **TNCH** | **TengChong** | **37.53 332** | P | **P** | **14 57 38.8 +1.9** | |
| TNCH | | | pP | sP | 14 57 41.0 +0.4 | |
| TNCH | | | sP | pP | 14 57 44.1 +4.5 | |
| TNCH | | | PP | **PnPn** | **14 59 04.3 +0.9** | |
| TNCH | | | S | **S** | **15 03 23.4 -2.8** | |
| TNCH | | | sS | ScP | 15 03 40.5 -2.2 | |
| TNCH | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | |
| TNCH | | | pmax | pmax | | |
| | comp=Z,130nm,5.7s | | | | | |
| TNCH | | | LR | LR | | |
| | comp=Z,450nm,17.5s | | | | | |
| TNCH | | | LR | LR | | |
| | comp=Z,280nm,15.0s | | | | | |
| TNCH | | | LR | LR | | |
| | comp=Z,380nm,17.2s | | | | | |
| **TOO** | **Toolangi** | **39.10 143** | P | **P** | **14 57 51.6 +1.8** | |
| **PALK** | **Pallekele** | **39.15 292** | LR | LR | 15 14 41.1 | |
| | comp=Z,144nm,18.6s,baz=217,slow=37 | | | | | |
| **SHL** | **Shillong** | **41.41 325** | P | **P** | **14 58 09.3 +0.1** | |
| SHL | | | IAmb | IAmb | 14 58 21.5 | |
| | comp=Z,23nm,0.8s | | | | | |
| **LSA** | **Lhasa** | **45.05 328** | P | **P** | **14 58 40.9 +1.9** | |
| LSA | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | |
| **LSA** | **Lhasa** | **45.05 328** | P | **P** | **14 58 39.5 +0.5** | |
| LSA | | | IAmb | IAmb | 14 58 52.4 | |
| | comp=Z,30nm,1.5s | | | | | |
| **LZH** | **Lanzhou** | **45.71 345** | *e*P | P | 14 58 50.3 +6.6 | |
| LZH | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | |
| LZH | | | LR | LR | | |
| | comp=N,340nm,12.4s | | | | | |
| LZH | | | LR | LR | | |
| | comp=E,360nm,12.4s | | | | | |
| LZH | | | LR | LR | | |
| | comp=Z,580nm,15.8s | | | | | |
| **KSRS** | **Korea Array** | **46.59 12** | P | **P** | **14 58 50.9 +0.5** | |
| | comp=Z,2.8nm,0.9s,baz=193,slow=8.1,SNR=6.4 | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | |
| **BJT** | **Baijiatuan** | **47.98 359** | P | **P** | **14 59 01.0 -0.2** | |
| BJT | | | IAmb | IAmb | 14 59 22.9 | |
| | comp=Z,11nm,1.1s | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.83 23** | P | **P** | **14 59 07.3 -0.6** | |
| | comp=Z,3.5nm,0.8s,baz=192,slow=9.9,SNR=4.5 | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **BTO** | **Baotou** | **48.96 353** | *e*P | **P** | **14 59 12.8 +3.9** | |
| BTO | | | pP | **sP** | **14 59 16.3 +3.5** | |
| BTO | | | sP | pP | 14 59 19.8 +8.1 | |
| BTO | | | PP | **PP** | **15 01 04.4 +1.8** | |
| BTO | | | SS | SS | 15 09 40.4 -4.0 | |
| BTO | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | |
| BTO | | | LR | LR | | |
| | comp=Z,450nm,5.8s | | | | | |
| BTO | | | LR | LR | | |
| | comp=Z,500nm,6.0s | | | | | |
| BTO | | | LR | LR | | |
| | comp=Z,2μm,21.4s | | | | | |
| **DZM** | **Mont Dzumac** | **49.63 112** | P | **P** | **14 59 13.4 -1.0** | |
| | comp=Z,9.7nm,1.0s,baz=299,slow=23,SNR=3.6 | | | | | |
| | comp=Z,9.7nm,1.0s | | | | | |
| **GTA** | **Gaotai** | **49.92 343** | P | **P** | **14 59 17.3 +1.0** | |
| GTA | | | pP | sP | 14 59 24.0 +3.8 | |
| GTA | | | sP | pP | 14 59 27.4 +8.3 | |
| GTA | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | |
| GTA | | | LR | LR | | |
| | comp=Z,260nm,17.5s | | | | | |
| GTA | | | LR | LR | | |
| | comp=Z,270nm,18.9s | | | | | |
| GTA | | | LR | LR | | |
| | comp=Z,280nm,17.1s | | | | | |
| **JMM** | **Marumori** | **51.00 24** | P | **PKiKP** | **15 07 23.6 -0.4** | |
| **JMM** | **Marumori** | **51.00 24** | P | **P** | **14 59 24.0 -0.4** | |
| **MDJ** | **Mudanjiang** | **53.82 11** | P | **P** | **14 59 44.9 -0.2** | |
| MDJ | | | IAmb | IAmb | 14 59 53.8 | |
| | comp=Z,9.9nm,0.8s | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.93 13** | P | **P** | **14 59 45.4 -0.6** | |
| **USRK** | **Ussuriysk Ar.** | **53.93 13** | P | **P** | **14 59 46.1 +0.1** | |
| | comp=Z,6.5nm,0.9s,baz=180,slow=7.4,SNR=11 | | | | | |
| | comp=Z,6.5nm,0.9s | | | | | |
| **ULN** | **Ulaanbaatar** | **56.48 352** | P | **P** | **15 00 04.3 -0.2** | |
| **SONM** | **Songino Array** | **56.54 352** | P | **P** | **15 00 04.9 0.0** | |
| **SONM** | **Songino Array** | **56.54 352** | P | **P** | **15 00 04.8 -0.1** | |
| | comp=Z,4.3nm,0.8s,baz=170,slow=8.3,SNR=16 | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | |
| **JKA** | **Kamikawa-asahi** | **57.06 22** | P | **P** | **15 00 08.7 +0.2** | |
| **CASY** | **Casey** | **58.16 183** | P | **P** | **15 00 17.9 +2.0** | |
| CASY | | | IAmb | IAmb | 15 00 26.1 | |
| | comp=Z,14nm,1.0s | | | | | |
| **HEH** | **HeiHe** | **58.93 8** | *e*P | **P** | **15 00 21.0 -0.5** | |
| HEH | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | |
| **KSH** | **Kashi** | **60.69 325** | P | **P** | **15 00 34.0 0.0** | |
| KSH | | | sP | sP | 15 00 40.9 +2.6 | |
| KSH | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | |
| KSH | | | LR | LR | | |
| | comp=Z,810nm,19.2s | | | | | |
| KSH | | | LR | LR | | |
| | comp=Z,470nm,20.6s | | | | | |
| **BKZ** | **Black Stump Fm** | **61.47 130** | P | **P** | **15 00 39.1 -0.2** | |
| **URZ** | **Urewera** | **61.74 129** | LR | LR | 15 28 01.7 | |
| | comp=Z,250nm,18.0s,baz=28,slow=37 | | | | | |
| **MK31** | **Makanchi Array** | **62.78 334** | P | **P** | **15 00 47.1 -0.7** | |
| MK31 | | | IAmb | IAmb | 15 00 48.4 | |
| | comp=Z,5.0nm,0.8s | | | | | |
| **MKAR** | **Makanchi Array** | **62.78 334** | P | **P** | **15 00 46.7 -1.1** | |
| **MKAR** | **Makanchi Array** | **62.78 334** | P | **P** | **15 00 47.5 -0.3** | |
| | comp=Z,7.4nm,0.9s,baz=143,slow=7.6,SNR=47 | | | | | |
| | comp=Z,7.4nm,0.9s | | | | | |
| **MAKZ** | **Makanchi** | **62.92 334** | P | **P** | **15 00 48.1 -0.7** | |
| **GAR** | **Garm** | **63.76 321** | P | **P** | **15 00 55.0 +0.4** | |
| **KURBB** | **Kurchatov Arra** | **67.31 335** | P | **P** | **15 01 16.6 -0.6** | |
| | comp=Z,2.6nm,0.2s,baz=147,slow=5.1,SNR=9.6 | | | | | |
| | comp=Z,2.6nm,0.2s | | | | | |
| **ZAA0** | **Zalesovo Array** | **67.54 340** | P | **P** | **15 01 17.0 -1.6** | |
| ZAA0 | | | IAmb | IAmb | 15 01 25.3 | |
| | comp=Z,4.6nm,0.8s | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.54 340** | P | **P** | **15 01 17.0 -1.6** | |
| **ZALV** | **Zalesovo Beam** | **67.54 340** | P | **P** | **15 01 17.4 -1.2** | |
| | comp=Z,3.3nm,0.6s,baz=151,slow=4.9,SNR=16 | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | |
| **VOI** | **Vohitsoka** | **68.49 250** | P | **P** | **15 01 24.1 -1.3** | |
| VOI | | | IAmb | IAmb | 15 01 41.9 | |
| | comp=Z,21nm,1.3s | | | | | |
| **MAW** | **Mawson** | **69.26 199** | P | **P** | **15 01 29.3 +0.1** | |
| | comp=Z,28nm,0.9s,baz=50,slow=8.6,SNR=16 | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | |
| **PETK** | **Petropavlovsk-** | **70.23 25** | P | **P** | **15 01 35.1 -0.2** | |
| **PETK** | **Petropavlovsk-** | **70.23 25** | P | **P** | **15 01 35.5 +0.1** | |
| | comp=Z,1.2nm,0.7s,baz=201,slow=12,SNR=2.9 | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | |
| **YAK** | **Yakutsk** | **70.73 6** | P | **P** | **15 01 37.3 -0.8** | |
| YAK | | | IAmb | IAmb | 15 01 46.1 | |
| | comp=Z,11nm,0.8s | | | | | |
| **BVAR** | **Borovoye Array** | **72.58 333** | P | **P** | **15 01 47.2 -2.4** | |
| | comp=Z,0.9nm,0.7s,baz=149,slow=6.9,SNR=4.8 | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | |
| **SBA** | **Scott Base** | **74.14 170** | P | **P** | **15 01 59.4 +1.0** | |
| SBA | | | IAmb | IAmb | 15 02 46.2 | |
| | comp=Z,11nm,1.2s | | | | | |
| **ABKAR** | **Akbulak array** | **75.67 326** | P | **P** | **15 02 05.3 -2.4** | |
| **AKTO** | **Aktyubinsk** | **77.35 326** | P | **P** | **15 02 15.4 -1.7** | |
| | comp=Z,1.2nm,0.6s,baz=135,slow=4.3,SNR=2.5 | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | |
| **KMBO** | **Kilima Mbogo** | **79.51 270** | P | **P** | **15 02 29.5 -0.8** | |
| | comp=Z,0.7nm,0.3s,baz=52,slow=9.5,SNR=4.0 | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | |
| **QSPA** | **South Pole Qui** | **81.79 180** | P | **P** | **15 02 41.1 -0.2** | |
| QSPA | | | IAmb | IAmb | 15 02 52.9 | |
| | comp=Z,19nm,1.1s | | | | | |
| **QSPA** | **South Pole Qui** | **81.79 180** | P | **P** | **15 02 41.4 +0.1** | |
| | comp=Z,1.3nm,0.9s,baz=176,slow=0.5,SNR=6.7 | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | |
| **BOSA** | **Boshof** | **87.49 242** | P | **P** | **15 03 10.9 0.0** | |
| **BOSA** | **Boshof** | **87.49 242** | P | **P** | **15 03 11.2 +0.4** | |
| | comp=Z,2.9nm,0.8s,baz=77,slow=3.5,SNR=11 | | | | | |
| BOSA | | | LR | LR | 15 36 27.6 | |
| | comp=Z,53nm,21.6s,baz=100,slow=32 | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | |
| **LBTB** | **Lobatse** | **87.68 245** | P | **P** | **15 03 10.5 -1.4** | |
| **TROLL** | **Troll, Antarti** | **89.54 196** | ⇑P | **P** | **15 03 20.7 +1.0** | |
| | comp=Z,238nm,0.9s | | | | | |
| **BRTR** | **Keskin Array B** | **89.97 310** | P | **P** | **15 03 20.2 -2.1** | |
| | comp=Z,0.2nm,0.4s,baz=90,slow=6.2,SNR=1.8 | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | |
| **SNAA** | **Sanae** | **91.18 196** | P | **P** | **15 03 27.3 0.0** | |
| SNAA | | | IAmb | IAmb | 15 03 45.1 | |
| | comp=Z,13nm,1.2s | | | | | |
| **SNAA** | **Sanae** | **91.18 196** | ⇑P | **P** | **15 03 26.8 -0.5** | |
| | comp=Z,25nm,0.6s | | | | | |
| **SNAA** | **Sanae** | **91.18 196** | P | **P** | **15 03 27.7 +0.5** | |
| | comp=Z,2.0nm,0.6s,baz=151,slow=5.1,SNR=12 | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | |
| **BELA** | **Belgrano 2** | **92.60 186** | P | **P** | **15 03 33.0 -0.7** | |
| BELA | | | IAmb | IAmb | 15 03 47.0 | |
| | comp=Z,6.1nm,0.8s | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.82 196** | ⇑P | **P** | **15 03 36.5 +1.7** | |
| | comp=Z,5.8nm,0.7s,baz=32,slow=3.5 | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.23 195** | ⇑P | **P** | **15 03 36.2 -0.5** | |
| | comp=Z,0.8nm,0.4s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.19 281** | PKP | **PKPdf** | **15 09 04.1 -2.8** | |
| | comp=Z,0.9nm,0.6s,baz=89,slow=2.0,SNR=10 | | | | | |
| **CPUP** | **Villa Florida** | **145.21 189** | PKPbc | **PKPab** | **15 10 00.8 +0.2** | |
| | comp=Z,15nm,1.0s,baz=181,slow=5.9,SNR=8.1 | | | | | |
| **LPAZ** | **La Paz** | **155.19 169** | PKPbc | PKPab | 15 10 31.3 -11 | |
| | comp=Z,2.3nm,1.0s,baz=126,slow=4.6,SNR=2.7 | | | | | |
| LPAZ | | | PKPab | pPKPab | 15 10 41.5 -3.7 | |
| | comp=Z,1.7nm,0.7s,baz=188,slow=6.3,SNR=4.5 | | | | | |

*NAO* ***22*** *14:52:38.4, 45.70N×26.70E, h33km, mb3.5*
*IDC* ***22*** *14:52:43.5±2.6, 45.74N×26.45E, h105km±28km, mb3.6/5, mbtmp3.8/9, Error ellipse: s-maj=25.0km s-min=16.1km az=136.0*
*SIGU* ***22*** *14:52:44.8, 45.77N×26.72E, h132km*
*MOS* ***22*** *14:52:44.5±0.8, 45.72N×26.76E, h130km, mb3.8/5, Error ellipse: s-maj=7.4km s-min=5.0km az=100.8*
*MOLD* ***22*** *14:52:45.7, 45.72N×26.61E, h110km, MB3.8, Mb4.2*
*MCSM* ***22*** *14:52:45.7±0.2, 46.°N±2.°×2.°7E±.°, h116km±3km, mB5.2, mb3.8, MLv3.9, Mw(mB)4.5*
*NEIC* ***22*** *14:52:45.3±1.3, 45.72N±0.04×26.74E±0.06, h133km±4km, mb4.0/5, Mwr4.0/24(BUC), Error ellipse: s-maj=6.8km s-min=5.8km az=138.0*
*BEO* ***22*** *14:52:45.7±1.6, 45.83N×26.72E, h57km±2km, ML3.7/5*
*BUC* ***22*** *14:52:46.1±0.2, 45.70N×26.69E, h122km±1km, ml4.2/69, Error ellipse: s-maj=1.3km s-min=1.0km az=8.0*
*CFUSG* ***22*** *14:52:47.4, 45.66N×26.81E, h122km, mb3.4/4, Romania*

*Magtype MSH 3.4 from 4 stations*
*SOF* ***22*** *14:52:48.1, 45.56N±0.02×26.60E±0.02, h100km±7km, MD4.3/7*
**ISC 22 14:52:44.9±0.6, 45.72N±0.02×26.71E±0.02, h131km±4km, n321, n0s99/423, mb3.8/9, 66C-71D, Romania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPBR** | **Spulber** | **0.04** | **39** | ⇑P | **Pn** | **14 53 03.5** | **+0.8** |
| SPBR | | | | ⇓S | **Sn** | **14 53 15.6** | **-0.7** |
| **PLOR5** | **Plostina Array** | **0.13** | **344** | P | **Pn** | **14 53 02.4** | **-0.4** |
| **PLOR** | **Plostina** | **0.14** | **341** | ⇑P | **Pn** | **14 53 03.2** | **+0.3** |
| PLOR | | | | ⇓S | **Sn** | **14 53 16.4** | **-0.1** |
| **PLOR** | **Plostina** | **0.14** | **341** | P | **Pn** | **14 53 03.1** | **+0.3** |
| **PLOR3** | **Plostina Array** | **0.14** | **341** | P | **Pn** | **14 53 02.5** | **-0.3** |
| **VRI** | **Vrincioaia** | **0.15** | **4** | ⇑P | **Pn** | **14 53 03.3** | **+0.5** |
| VRI | | | | ⇓S | **Sn** | **14 53 16.1** | **-0.3** |
| **VRI** | **Vrincioaia** | **0.15** | **4** | *e*P | **Pn** | **14 53 03.2** | **+0.4** |
| VRI | | | | *e*S | **Sn** | **14 53 14.5** | **-1.9** |
| **VRI** | **Vrincioaia** | **0.15** | **4** | P | **Pn** | **14 53 02.4** | **-0.4** |
| **ODBI** | **Odobesti** | **0.24** | **79** | | **Sn** | **14 53 17.5** | **+0.9** |
| **ODBI** | **Odobesti** | **0.24** | **79** | P | **Pn** | **14 53 02.9** | **-0.1** |
| **PANC** | **Panciu** | **0.34** | **63** | ⇑P | **Pn** | **14 53 04.0** | **+0.7** |
| PANC | | | | ⇑S | **Sn** | **14 53 17.0** | **+0.3** |
| **PANC** | **Panciu** | **0.34** | **63** | | **Pn** | **14 53 04.0** | **+0.7** |
| PANC | | | | | **Sn** | **14 53 17.6** | **+0.3** |
| **COVR** | **Voineasa-Covas** | **0.38** | **290** | ⇑P | **Pn** | **14 53 03.8** | **+0.3** |
| COVR | | | | ⇓S | **Sn** | **14 53 17.1** | **-0.6** |
| **COVR** | **Voineasa-Covas** | **0.38** | **290** | | **Pn** | **14 53 03.8** | **+0.3** |
| **NEHR** | **Nehoiu** | **0.41** | **226** | ⇑P | **Pn** | **14 53 04.5** | **+0.8** |
| NEHR | | | | ⇑S | **Sn** | **14 53 17.1** | **-0.8** |
| **NEHR** | **Nehoiu** | **0.41** | **226** | | **Pn** | **14 53 04.5** | **+0.8** |
| NEHR | | | | | **Sn** | **14 53 17.1** | **-0.8** |
| **MLR** | **Muntele Rosu** | **0.59** | **247** | ⇑P | **Pn** | **14 53 05.5** | **+0.7** |
| MLR | | | | ⇑S | **Sn** | **14 53 20.1** | **+0.2** |
| **MLR** | **Muntele Rosu** | **0.59** | **247** | | **Pn** | **14 53 05.6** | **+0.9** |
| **MLR** | **Muntele Rosu** | **0.59** | **247** | P | **Pn** | **14 53 05.3** | **+0.5** |
| | 380nm,0.3s,baz=143,slow=2.9,SNR=1265 | | | | | | |
| MLR | | | | S | **Sn** | **14 53 18.6** | **-1.2** |
| | 1μm,0.4s,baz=119,slow=19,SNR=23 | | | | | | |
| **MLR** | **Muntele Rosu** | **0.59** | **247** | P | **Pn** | **14 53 04.7** | **-0.1** |
| **TURR** | **Turia** | **0.59** | **305** | ⇑P | **Pn** | **14 53 05.1** | **+0.4** |
| TURR | | | | ⇑S | **Sn** | **14 53 19.4** | **-0.3** |
| **GHRR** | | **0.59** | **54** | ⇑P | **Pn** | **14 53 05.5** | **+0.9** |
| **GHRR** | | **0.59** | **54** | P | **Pn** | **14 53 05.2** | **+0.6** |
| **ISR** | **Istrita** | **0.61** | **191** | ⇓P | **Pn** | **14 53 05.8** | **+1.0** |
| ISR | | | | ⇑S | **Sn** | **14 53 19.3** | **-0.7** |
| **ISR** | **Istrita** | **0.61** | **191** | *e*P | **Pn** | **14 53 05.3** | **+0.4** |
| **ISR** | **Istrita** | **0.61** | **191** | P | **Pn** | **14 53 05.3** | **+0.4** |
| **ONER** | **Baraj Valea Uz** | **0.66** | **340** | ⇑P | **Pn** | **14 53 05.6** | **+0.5** |
| ONER | | | | ⇓S | **Sn** | **14 53 19.8** | **-0.7** |
| **TUDR** | | **0.68** | **100** | ⇑P | **Pn** | **14 53 05.6** | **+0.4** |
| TUDR | | | | ⇓S | **Sn** | **14 53 20.6** | **+0.1** |
| **TUDR** | | **0.68** | **100** | | **Pn** | **14 53 05.6** | **+0.4** |
| TUDR | | | | | **Sn** | **14 53 20.6** | **+0.1** |
| **OZUR** | | **0.75** | **301** | ⇑P | **Pn** | **14 53 05.8** | **0.0** |
| OZUR | | | | ⇑S | **Sn** | **14 53 20.4** | **+1.3** |
| **IZVR** | **Izvoarele** | **0.76** | **103** | ⇓P | **Pn** | **14 53 06.0** | **+0.2** |
| IZVR | | | | ⇓S | **Sn** | **14 53 21.4** | **-0.3** |
| **IZVR** | **Izvoarele** | **0.76** | **103** | | **Pn** | **14 53 06.0** | **+0.2** |
| **TESR** | **Tescani** | **0.80** | **357** | ⇑P | **Pn** | **14 53 06.2** | **+0.1** |
| **TESR** | **Tescani** | **0.80** | **357** | P | **Pn** | **14 53 05.3** | **-0.8** |
| **SCHL** | **Schela** | **0.81** | **105** | ⇓P | **Pn** | **14 53 06.9** | **+0.7** |
| SCHL | | | | ⇑S | **Sn** | **14 53 22.7** | **+0.3** |
| **SCHL** | **Schela** | **0.81** | **105** | | **Pn** | **14 53 06.9** | **+0.7** |
| SCHL | | | | | **Sn** | **14 53 22.7** | **+0.3** |
| **VARL** | **Varlezi** | **0.81** | **77** | ⇓P | **Pn** | **14 53 06.8** | **+0.6** |
| VARL | | | | ⇓S | **Sn** | **14 53 22.4** | **-0.1** |
| **VARL** | **Varlezi** | **0.81** | **77** | | **Pn** | **14 53 06.8** | **+0.6** |
| VARL | | | | | **Sn** | **14 53 22.4** | **-0.1** |
| **BOSR** | **Bodos** | **0.82** | **296** | ⇑P | **Pn** | **14 53 06.5** | **+0.2** |
| BOSR | | | | ⇑S | **Sn** | **14 53 21.9** | **-0.8** |
| **SCHLR** | **Schela** | **0.82** | **107** | ⇓P | **Pn** | **14 53 06.7** | **+0.4** |
| SCHLR | | | | ⇓S | **Sn** | **14 53 22.0** | **+0.5** |
| **SCHLR** | **Schela** | **0.82** | **107** | ⇓P | **Pn** | **14 53 06.7** | **+0.4** |
| **PGOR** | **Pogoanele** | **0.83** | **167** | ⇓P | **Pn** | **14 53 07.5** | **+1.1** |
| **PGOR** | **Pogoanele** | **0.83** | **167** | | **Pn** | **14 53 07.5** | **+1.1** |
| **NEGRR** | **Negrea** | **0.84** | **102** | ⇓P | **Pn** | **14 53 07.2** | **+0.8** |
| NEGRR | | | | ⇓S | **Sn** | **14 53 22.8** | **+0.1** |
| **BIR** | **Birlad** | **0.84** | **49** | ⇑P | **Pn** | **14 53 07.2** | **+0.7** |
| BIR | | | | ⇓S | **Sn** | **14 53 23.2** | **+0.3** |
| **BIR** | **Birlad** | **0.84** | **49** | |

CVDA Sn 14 53 37.5 -0.4
**MDB Medias** 1.68 285 ⇑P Pn 14 53 16.3 +1.1
**MDB Medias** 1.68 285 Pn 14 53 16.2 +1.1
**MDB Medias** 1.68 285 P Pn 14 53 16.2 +1.1
**HUMR Humele** 1.71 227 ⇓P Pn 14 53 15.9 +0.4
HUMR ⇓S Sn 14 53 38.3 -0.5
**TNR Turnu Rosu** 1.71 269 ⇓P Pn 14 53 16.0 +0.5
**TNR Turnu Rosu** 1.71 269 Pn 14 53 16.0 +0.5
**TNR Turnu Rosu** 1.71 269 P Pn 14 53 16.0 +0.5
**ICOR Ion Corvin** 1.78 154 ⇓P Pn 14 53 17.3 +1.0
ICOR ⇓S Sn 14 53 39.7 -0.4
**JURR Jurilovca** 1.80 121 ⇓P Pn 14 53 17.3 +0.8
**MILM Milestii Mici** 1.89 50 ⇑P Pn 14 53 18.2 +0.7
**MILM Milestii Mici** 1.89 50 ⇑*i*P Pn 14 53 18.0 +0.5
24µm,0.2s
MILM *i* S Sn 14 53 41.2 -1.3
50µm,0.1s
**MILM Milestii Mici** 1.89 50 P Pn 14 53 17.8 +0.3
**MILM Milestii Mici** 1.89 50 ⇑*i*P Pn 14 53 18.0 +0.5
MILM *i* S Sn 14 53 41.2 -1.3
MILM pmax pmax
comp=Z,680nm,0.2s
MILM smax smax
comp=E,690nm,0.1s
MILM smax smax
comp=N,1µm,0.1s
**COPA Copeaanca** 1.91 214 ⇓P Pn 14 53 18.2 +0.4
COPA ⇓S Sn 14 53 42.4 -0.5
**KIS Kishinev** 1.94 48 ⇑P Pn 14 53 18.7 +0.6
**KIS Kishinev** 1.94 48 Pn 14 53 18.7 +0.6
KIS Sn 14 53 42.9 -0.7
**KIS Kishinev** 1.94 48 ⇑*i*P Pn 14 53 18.8 +0.6
comp=N,12µm,0.2s
KIS *i* S Sn 14 53 42.9 -0.7
comp=N,33µm,0.4s
**KIS Kishinev** 1.94 48 P Pn 14 53 18.2 +0.1
**KIS Kishinev** 1.94 48 ⇑*i*P Pn 14 53 18.8 +0.6
KIS *i* S Sn 14 53 42.9 -0.7
KIS pmax pmax
comp=Z,470nm,0.3s
KIS smax smax
comp=N,3µm,0.6s
KIS smax smax
comp=N,2µm,0.5s
**KIS Kishinev** 1.94 48 P Pn 14 53 18.2 +0.1
**MFTR Murfatlar** 1.96 141 ⇓P Pn 14 53 19.2 +0.8
**MFTR Murfatlar** 1.96 141 Pn 14 53 19.2 +0.8
MFTR Sn 14 53 43.2 -0.8
**TSCT Constanta Port** 2.08 138 ⇑P Pn 14 53 20.7 +0.8
TSCT ⇑S Sn 14 53 46.6 -0.1
**TSCT Constanta Port** 2.08 138 Pn 14 53 20.7 +0.8
TSCT Sn 14 53 46.6 -0.1
**LOT Lotru** 2.09 264 ⇑P Pn 14 53 21.0 +0.9
LOT ⇓S Sn 14 53 47.3 +0.3
**ARCR ARCALIA** 2.13 311 ⇑P Pn 14 53 21.1 +0.6
**ARCR ARCALIA** 2.13 311 Pn 14 53 21.1 +0.6
**EFOR EFORIE** 2.13 140 ⇓P Pn 14 53 21.2 +0.7
EFOR ⇑S Sn 14 53 47.5 -0.3
**BURAR Bucovina Array** 2.16 332 ⇑P Pn 14 53 22.7 +1.8
**BURAR Bucovina Array** 2.16 332 Pn 14 53 22.1 +1.1
**BURAR Bucovina Array** 2.16 332 P Pn 14 53 22.7 +1.8
**BUR08 Bucovina Ar. S** 2.19 332 Pn 14 53 22.7 +1.4
**ZIMR** 2.27 206 ⇓P Pn 14 53 22.8 +0.5
**ZIMR** 2.27 206 Pn 14 53 22.8 +0.5
**ZIMR** 2.27 206 P Pn 14 53 22.7 +0.5
**PSN Preselentsi** 2.31 154 ⇓*i*P Pn 14 53 23.7 +0.9
**TSMN Mangalia Port-** 2.34 144 ⇓P Pn 14 53 24.0 +0.9
**TSMN Mangalia Port-** 2.34 144 Pn 14 53 24.0 +0.9
**PURM Purcari** 2.34 69 ⇓P Pn 14 53 23.8 +0.8
**PURM Purcari** 2.34 69 Pn 14 53 23.8 +0.8
PURM Sn 14 53 51.8 -0.7
**PURM Purcari** 2.34 69 ⇓*i*P Pn 14 53 23.8 +0.8
comp=N,10µm,0.1s
PURM *i* S Sn 14 53 51.7 -0.7
comp=N,26µm,0.3s
**PURM Purcari** 2.34 69 P Pn 14 53 22.5 -0.6
**VLAD Vladila** 2.38 225 ⇑P Pn 14 53 23.7 +0.1
**DRBR Darabani** 2.49 358 ⇑P Pn 14 53 24.9 -0.1
**DRBR Darabani** 2.49 358 Pn 14 53 24.9 -0.1
**SZH Strazhitsa** 2.51 192 ⇓*i*P Pn 14 53 25.8 +0.6
SZH ⇓S Sn 14 53 54.7 -1.5
**PRD Provadia** 2.60 169 ⇓*i*P Pn 14 53 27.3 +0.8
**CHRU Chernivtsi** 2.64 348 *i* P Pn 14 53 27.3 +0.5
CHRU Pm 14 53 27.8
CHRU *i* S Sn 14 53 59.0 -0.1
CHRU Sm 14 54 00.7
**ROIA ROIAK** 2.67 169 ⇓*i*P Pn 14 53 28.4 +1.1
**MARR Marisel-Cluj** 2.67 292 ⇑P Pn 14 53 28.0 +0.5
**MARR Marisel-Cluj** 2.67 292 Pn 14 53 27.9 +0.5
**AVR AVREN** 2.69 165 *e*P Pn 14 53 28.6 +1.1
**GZR Gura Zlata** 2.79 265 ⇑P Pn 14 53 29.9 +1.0
GZR ⇑S Sn 14 54 02.6 0.0
**PVL Pavlikeni** 2.82 204 ⇓*i*P Pn 14 53 29.8 +0.6
PVL ⇓S Sn 14 54 01.4 -1.9
**KSV Kosov** 2.83 337 *i* P Pn 14 53 29.5 +0.2
KSV Pm 14 53 30.6
KSV *i* S Sn 14 54 03.6 0.0
KSV Sm 14 54 05.3
**KSV Kosov** 2.83 337 P Pn 14 53 29.5 0.0
**KMPD K-Podol'skiy** 2.85 357 ⇑*i*P Pn 14 53 29.5 0.0
KMPD *i* S Sn 14 54 02.3 -1.7
**KMPD K-Podol'skiy** 2.85 357 P Pn 14 53 28.6 -0.9
KMPD P 14 53 28.8
**ELND Elena** 2.85 192 ⇓P Pn 14 53 30.4 +0.7
ELND ⇓S Sn 14 54 04.5 +0.4
**ELND Elena** 2.85 192 Pn 14 53 30.6 +0.9
ELND Sn 14 54 04.5 +0.4
**RAKU Rahkiv** 2.90 324 *e*P Pn 14 53 30.6 +0.5
RAKU Pm 14 53 31.8
RAKU ⇓*i*S Sn 14 54 05.2 +0.1
RAKU Sm 14 54 11.6
**RAKU Rahkiv** 2.90 324 P Pn 14 53 30.8 +0.7
**NDNU Novodnistrovsk** 2.91 9 ⇑*i*P Pn 14 53 30.4 +0.1
NDNU Pm 14 53 30.5
NDNU *i* S Sn 14 53 03.4 -2.0
NDNU Sm 14 54 06.2
**NDNU Novodnistrovsk** 2.91 9 P Pn 14 53 29.6 -0.7
**NSLU Nyzhne Selyshc** 2.92 329 *i* P Pn 14 53 36.8 +6.3
NSLU Pm 14 53 38.5
NSLU *i* S Sn 14 54 16.0 +10
NSLU Sm 14 54 18.9
**DRGR** 2.98 293 ⇓P Pn 14 53 31.5 +0.2
**DRGR** 2.98 293 *e*Pn Pn 14 53 29.6 -1.7
**DRGR** 2.98 293 P Pn 14 53 31.5 +0.2
**PUNG Punghina** 3.04 243 ⇑P Pn 14 53 31.7 -0.3
**NE56 Odesa** 3.06 70 P Pn 14 53 31.3 -0.9
**VALD Valchedram** 3.09 230 P Pn 14 53 33.3 +0.6
**HERR Herculane** 3.15 256 ⇑P Pn 14 53 34.0 +0.6
**MPEP Malo Peshtene** 3.18 223 ⇓*i*P Pn 14 53 34.2 +0.4
**JMB Yambol** 3.23 182 ⇓*i*P Pn 14 53 35.2 +0.7
**JMB Yambol** 3.23 182 *e*P Pn 14 53 34.9 +0.4
**STNU Starunia** 3.35 334 P Pn 14 53 36.9 +0.8
**KORU Korolevo** 3.46 316 P Pn 14 53 37.9 +0.5
**HORU Horodok** 3.50 357 *i* P Pn 14 53 38.3 +0.3
HORU *i* S Sn 14 54 19.6 +0.4
**HORU Horodok** 3.50 357 P Pn 14 53 38.3 +0.3
**HORU Horodok** 3.50 357 P Pn 14 53 38.3 +0.3
**TRSU Trosnyk** 3.50 314 *i* P Pn 14 53 39.6 +1.6
TRSU Pm 14 53 40.6
TRSU *i* S Sn 14 54 19.4 +0.2
TRSU Sm 14 54 46.5
**MEZ Mezhgor'ye** 3.55 323 *i* P Pn 14 53 39.8 +1.1
**MEZ Mezhgor'ye** 3.55 323 P Pn 14 53 38.8 +0.1
**BRIU Brid** 3.64 317 ⇑*i*P Pn 14 53 40.6 +0.8
BRIU Pm 14 53 41.3
BRIU *i* S Sn 14 54 23.2 +0.8
BRIU Sm 14 54 26.6
**BRIU Brid** 3.64 317 P Pn 14 53 39.8 0.0
**MDVR Moldovita** 3.65 257 ⇓P Pn 14 53 40.2 +0.1
**MDVR Moldovita** 3.65 257 *e*Pn Pn 14 53 40.4 +0.3
**ZAGS Zajecar** 3.72 241 *e*Pn Pn 14 53 39.8 -1.1
ZAGS *e*Sn Sn 14 54 19.9 -4.3
**BERU Beregovo** 3.75 314 ⇓*i*P Pn 14 53 41.7 +0.4
BERU Pm 14 53 42.7
BERU *i* S Sn 14 54 26.0 +0.9
BERU Sm 14 54 43.8
**BERU Beregovo** 3.75 314 P Pn 14 53 41.6 +0.3
**KUBS Kucevo** 3.80 252 *e*Pn Pn 14 53 41.0 -1.0
KUBS *e*Sn Sn 14 54 22.0 -4.3
**ZAPS Zavoj** 3.81 232 *e*Pn Pn 14 53 41.8 -0.3

ZAPS *e*Sn Sn 14 54 24.0 -2.5
**PLD Plovdiv** 3.84 202 *e*Pn Pn 14 53 43.3 +0.7
**MUKU Mukachevo** 3.88 316 *i* P Pn 14 53 43.9 +0.9
MUKU *e*S Sn 14 54 29.3 +1.2
**MUKU Mukachevo** 3.88 316 P Pn 14 53 43.1 +0.1
**MORS Morshin** 3.92 332 *e*P Pn 14 53 44.7 +1.2
MORS *i* S Sn 14 54 30.3 +1.4
**MORS Morshin** 3.92 332 P Pn 14 53 44.2 +0.7
**VTS Vitosha** 3.98 220 P Pn 14 53 45.6 +1.0
**VTS Vitosha** 3.98 220 *e*Pn Pn 14 53 45.6 +1.0
**HOLU Holmets** 4.08 315 P Pn 14 53 45.5 -0.1
**TARU Tarkhankut** 4.10 93 *e*P Pn 14 53 46.6 +0.7
TARU Pm 14 53 47.0
comp=Z,62nm,0.4s
TARU *e*S Sn 14 54 33.0 -0.3
TARU Sm 14 54 34.7
comp=N,20nm,0.4s
TARU Sm 14 54 34.7
comp=E,53nm,0.5s
**BOVS Bovan** 4.13 242 ⇑P Pn 14 53 47.0 +0.6
**BOVS Bovan** 4.13 242 Pn 14 53 47.0 +0.6
**BOVS Bovan** 4.13 242 *e*Pn Pn 14 53 46.2 -0.2
BOVS *e*Sn Sn 14 54 30.3 -3.9
**SHIU Shidnytsya** 4.18 328 *i* P Pn 14 53 48.0 +1.0
SHIU *i* S Sn 14 54 36.2 +1.0
**SHIU Shidnytsya** 4.18 328 P Pn 14 53 48.2 +1.2
**KOLS Kolonicke sedl** 4.41 318 *e*P Pn 14 53 51.6 +1.5
**KOLS Kolonicke sedl** 4.41 318 *e*P Pn 14 53 51.6 +1.5
**LVV L'vov** 4.49 337 *e*P Pn 14 53 52.2 +1.2
LVV Pm 14 53 53.9
LVV *i* S Sn 14 54 43.7 +1.3
LVV Sm 14 55 01.9
**BARS Barje** 4.56 232 *e*Pn Pn 14 53 52.7 +0.6
**GRUS Gruza** 4.64 249 *e*Pn Pn 14 53 54.1 +0.9
**KKB Krupnik** 4.66 215 P Pn 14 53 54.5 +1.0
**MMB Musomishta** 4.69 208 P Pn 14 53 54.5 +0.6
**SELS Selova** 4.72 240 *e*Pn Pn 14 53 55.4 +1.2
SELS *e*Sn Sn 14 54 46.1 -2.1
**KWP Kalwaria Pacla** 4.76 327 Pn 14 53 55.9 +1.2
**KWP Kalwaria Pacla** 4.76 327 P Pn 14 53 55.9 +1.2
**KWP Kalwaria Pacla** 4.76 327 P Pn 14 53 56.0 +1.2
**MI29 MI29, Kamyanyy** 4.76 9 P Pn 14 53 54.8 +0.1
**CRVS Cervenica-Dubn** 4.79 314 *e*P Pn 14 53 56.0 +0.9
**CRVS Cervenica-Dubn** 4.79 314 *e*P Pn 14 53 56.0 +0.9
**ALN Alexandroupoli** 4.84 186 Pn 14 53 56.4 +0.5
**ALN Alexandroupoli** 4.84 186 P Pn 14 53 56.4 +0.5
**DIVS Divibare** 5.04 254 *e*Pn Pn 14 53 59.4 +0.8
**SEV Sevastopol'** 5.06 101 *e*P Pn 14 53 58.2 -0.5
SEV Pm 14 53 59.1
comp=Z,34nm,0.3s
SEV *e*S Sn 14 54 53.7 -2.5
SEV *e*S 14 54 55.7
SEV Sm 14 54 59.4
comp=N,43nm,0.4s
SEV Sm 14 54 59.4
comp=E,13nm,0.3s
**SEV Sevastopol'** 5.06 101 *e*P Pn 14 53 58.2 -0.5
SEV Pm 14 53 59.1
SEV *e*S Sn 14 54 55.7 -0.5
SEV Sm 14 54 59.4
**SEV Sevastopol'** 5.06 101 *e*P Pn 14 53 58.2 -0.5
SEV *e*S Sn 14 54 53.7 -2.5
SEV pmax pmax
comp=Z,34nm,0.3s
SEV smax smax
comp=N,43nm,0.4s
SEV smax smax
comp=E,13nm,0.3s
**KECS Kecovo** 5.07 305 *e*P Pn 14 53 59.8 +0.9
**KECS Kecovo** 5.07 305 *e*P Pn 14 53 59.8 +0.9
**AK07 Malin Array Si** 5.12 18 P Pn 14 53 59.1 -0.3
**MI30 MI30,Zelenitsa** 5.13 11 P Pn 14 53 59.8 +0.2
**SRS Serrai** 5.13 207 *e*Pn Pn 14 54 00.7 +1.0
**AK13 Malin Array Si** 5.14 17 P Pn 14 53 59.5 -0.3
**IVAS Ivanjica** 5.15 248 *e*Pn Pn 14 54 00.2 +0.2
**AK14 Malin Array Si** 5.17 17 P Pn 14 53 59.8 -0.3
**AK10 Malin Array Si** 5.17 18 P Pn 14 53 59.8 -0.4
**PSZ Piszkesteto** 5.17 298 Pn Pn 14 54 01.2 +0.9
**PSZ Piszkesteto** 5.17 298 P Pn 14 54 01.2 +0.9
**AK05 Malin Array Si** 5.18 18 Pn Pn 14 54 00.1 -0.2
**AK05 Malin Array Si** 5.18 18 P Pn 14 53 59.8 -0.5
**AK12 Malin Array Si** 5.19 17 P Pn 14 53 59.9 -0.5
**AK09 Malin Array Si** 5.19 18 P Pn 14 53 59.9 -0.6
**AK08 Malin Array Si** 5.20 18 P Pn 14 54 00.1 -0.5
**AK02 Malin Array Si** 5.22 18 P Pn 14 54 00.2 -0.6
**AK11 Malin Array Si** 5.23 17 P Pn 14 54 00.4 -0.5
**AK15 Malin Array Si** 5.24 17 P Pn 14 54 00.5 -0.5
**AK19 Malin Array Si** 5.24 16 P Pn 14 54 00.6 -0.4
**AK01 Malin Array Si** 5.25 18 P Pn 14 54 00.7 -0.5
**AK18 Malin Array Si** 5.25 17 P Pn 14 54 00.7 -0.5
**KIEV Kiev** 5.25 18 Pn 14 54 00.8 -0.3
**KIEV Kiev** 5.25 18 P Pn 14 54 01.0 -0.2
**KIEV Kiev** 5.25 18 P Pn 14 54 00.9 -0.3
comp=E,29nm,0.6s,comp=E,5µmcomp=E,1.0nm
**AK20 Malin Array Si** 5.26 16 P Pn 14 54 00.8 -0.5
**AKASG Malin Array Be** 5.26 18 Pn Pn 14 53 59.8 -1.6
**AKASG Malin Array Be** 5.26 18 P Pn 14 54 01.2 -0.2
comp=E,1.9nm,0.4s,baz=207,slow=11,SNR=14
AKASG S Sn 14 54 56.9 -4.1
comp=E,22nm,0.5s,baz=202,slow=21,SNR=9.5
**AKASG Malin Array Be** 5.26 18 *e*P Pn 14 54 01.1 -0.2
AKASG pmax pmax
comp=Z,5.0nm,0.3s
**AKBB Malin Array Si** 5.26 18 Pn 14 54 01.0 -0.4
**AKBB Malin Array Si** 5.26 18 *i* P Pn 14 54 00.9 -0.4
**AKBB Malin Array Si** 5.26 18 P Pn 14 54 00.9 -0.4
**AK04 Malin Array Si** 5.27 17 P Pn 14 54 01.0 -0.5
**SIM Simferopol'** 5.28 96 P Pn 14 54 19.1 +17
SIM pmax pmax
comp=Z,30nm,1.0s
**AK03 Malin Array Si** 5.28 18 P Pn 14 54 01.5 -0.2
**AK22 Malin Array Si** 5.29 16 P Pn 14 54 01.6 -0.1
**AK21 Malin Array Si** 5.29 16 P Pn 14 54 01.3 -0.5
**AK23 Malin Array Si** 5.30 17 P Pn 14 54 01.3 -0.6
**YAL Yalta** 5.41 100 *e*P Pn 14 54 03.8 +0.4
YAL Pm 14 54 04.9
comp=Z,8.0nm,0.3s
YAL *e*S Sn 14 55 03.4 -1.2
YAL Sm 14 55 04.5
comp=N,7.0nm,0.3s
YAL Sm 14 55 04.5
comp=E,14nm,0.4s
**YAL Yalta** 5.41 100 *e*P Pn 14 54 03.8 +0.4
YAL Pm 14 54 04.9
YAL *e*S Sn 14 55 03.4 -1.2
YAL Sm 14 55 04.5
**YAL Yalta** 5.41 100 *e*P Pn 14 54 03.8 +0.4
YAL *e*S Sn 14 55 03.4 -1.2
YAL pmax pmax
comp=Z,8.0nm,0.4s
YAL smax smax
comp=N,7.0nm,0.3s
YAL smax smax
comp=E,14nm,0.4s
**ALU Alushta** 5.53 98 *e*P Pn 14 54 04.5 -0.5
ALU Pm 14 54 05.5
comp=Z,8.0nm,0.4s
**ALU Alushta** 5.53 98 *e*P Pn 14 54 04.5 -0.5
ALU Pm 14 54 05.5
**ALU Alushta** 5.53 98 *e*P Pn 14 54 04.5 -0.5
ALU pmax pmax
comp=Z,8.0nm,0.4s
**RNPP5 Staryi Chortor** 5.54 355 P Pn 14 54 05.0 -0.1
**RNPP8 Varash** 5.65 355 P Pn 14 54 06.5 -0.1
**RNPP9 Sopachiv** 5.72 355 P Pn 14 54 07.3 -0.3
**EZN Ezine** 5.90 183 P Pn 14 54 10.4 +0.4
comp=Z,12nm,0.8s,comp=Z,0.1nm
**SUDU Sudak** 5.90 95 *e*P Pn 14 54 09.6 -0.4
SUDU Pm 14 54 10.0
comp=Z,21nm,0.4s
SUDU *i* S Sn 14 55 14.6 -1.9
SUDU Sm 14 55 17.8
comp=N,61nm,0.5s
SUDU Sm 14 55 17.8
comp=E,32nm,0.5s
**SUDU Sudak** 5.90 95 *e*P Pn 14 54 09.6 -0.4
SUDU Pm 14 54 10.0
SUDU *i* S Sn 14 55 14.6 -1.9
SUDU Sm 14 55 17.8
**SUDU Sudak** 5.90 95 *e*P Pn 14 54 09.6 -0.4
SUDU *i* S Sn 14 55 14.6 -1.9
SUDU pmax pmax
comp=Z,21nm,0.4s
SUDU smax smax
comp=N,61nm,0.5s
SUDU smax smax
comp=E,32nm,0.5s
**LANS Liptovska Anna** 6.00 308 *e*P Pn 14 54 12.5 +1.2
**LANS Liptovska Anna** 6.00 308 *e*P Pn 14 54 12.5 +1.2
**VYHS Vyhne** 6.05 300 *e*P Pn 14 54 15.0 +3.0
**VYHS Vyhne** 6.05 300 *e*P Pn 14 54 15.0 +3.0
**MDUB Mudurnu** 6.18 146 Pn Pn 14 54 14.9 +0.9
**OJC Ojcow** 6.47 317 P Pn 14 54 17.2 -0.4
comp=E,5.8nm,0.7s,comp=E,0.1nm
**BZK Bozkurt** 6.47 123 Pn 14 54 16.7 -1.0
**BZK Bozkurt** 6.47 123 P Pn 14 54 16.9 -0.8
comp=E,48nm,0.7s,comp=E,0.2nm
**MPLH Magyarpolny** 6.50 286 P Pn 14 54 17.5 -0.6
**BR106 Keskin Array S** 7.84 137 P Pn 14 54 35.8 -0.5
comp=E,2.4nm,0.8s,comp=E,39nmcomp=E,0.0nm
**BR105 Keskin Array S** 7.86 137 P Pn 14 54 36.0 -0.5
comp=E,4.6nm,0.7s,comp=E,46nmcomp=E,0.0nm
**BR131 Keskin Array S** 7.86 137 Pn 14 54 36.0 -0.5
**BR131 Keskin Array S** 7.86 137 *i* P Pn 14 54 36.5 0.0
**BRTR Keskin Array B** 7.86 137 Pn Pn 14 54 36.0 -0.5
**BRTR Keskin Array B** 7.86 137 P Pn 14 54 36.6 0.0
comp=E,1.8nm,0.4s,baz=326,slow=12,SNR=17
**BR104 Keskin Array S** 7.88 137 P Pn 14 54 36.3 -0.5
comp=E,4.0nm,0.8s,comp=E,44nmcomp=E,0.0nm
**DPC Dobruska-Polom** 8.36 307 P Pn 14 54 43.2 +0.1
comp=E,2.9nm,2.8s
**KSP Ksiaz** 8.63 310 P Pn 14 54 47.2 +0.5
comp=E,4.2nm,2.5s
**TOKA Tokat** 8.95 124 Pn Pn 14 54 51.2 +0.1
**GERES GERESS Array B** 9.38 294 P Pn 14 54 59.3 +2.4
comp=E,0.5nm,0.5s,baz=91,slow=16,SNR=4.3
**KHC Kasperske Hory** 9.54 296 *i* P Pn 14 54 56.6 -2.3
KHC pmax pmax
comp=Z,8.0nm,1.1s
**KHC Kasperske Hory** 9.54 296 P Pn 14 54 59.4 +0.5
**BNN Bunyan** 9.63 132 Pn 14 55 00.7 +0.4
**OBN Obninsk** 11.30 30 *e*P Pn 14 55 21.3 -1.0
OBN pmax pmax
comp=Z,6.0nm,1.0s
**KIV Kislovodsk** 11.48 93 *e*P Pn 14 55 22.7 -2.2
KIV pmax pmax
comp=Z,5.0nm,1.0s
**FINES FINESS Array B** 15.76 359 P Pn 14 56 15.1 -4.2
comp=Z,2.7nm,0.6s,baz=168,slow=12,SNR=6.8
**HFS Hagfors** 16.39 336 P Pn 14 56 24.3 -2.6
comp=Z,1.1nm,0.4s,baz=147,slow=17,SNR=1.6
**NC602 NORSAR Array S** 17.50 335 P P 14 56 39.0 -0.7
NC602 IAmb IAmb 14 56 51.0
comp=Z,28nm,1.4s
**NB2 NORSAR Subarra** 17.84 335 P P 14 56 44.5 +1.1
comp=Z,2.1nm,0.7s,baz=142,slow=11
**NOA NORSAR Array B** 17.84 335 P P 14 56 42.8 -0.6
comp=Z,0.9nm,0.6s,baz=140,slow=11,SNR=4.0
**NOA NORSAR Array B** 17.84 335 *e*P P 14 56 44.9 +1.5
**AKTO Aktyubinsk** 21.35 66 P P 14 57 23.5 +2.1
comp=Z,0.9nm,0.5s,baz=262,slow=7.5,SNR=4.4
comp=Z,0.9nm,0.5s
**ARU Arti** 22.49 50 *i* P P 14 57 34.2 +1.1
ARU pmax pmax
comp=Z,3.0nm,1.0s
**ABKAR Akbulak array** 22.63 69 P P 14 57 36.7 +2.2
**ARCES ARCESS Array B** 23.89 359 P P 14 57 46.1 +0.1
ARCES IAmb IAmb 14 58 05.5
comp=Z,6.5nm,1.1s
**ARCES ARCESS Array B** 23.89 359 P P 14 57 46.1 +0.1
ARCES pmax pmax
comp=Z,7.0nm,1.2s
**ZALV Zalesovo Beam** 37.41 56 P P 14 59 47.1 +2.3
comp=Z,0.6nm,0.3s,baz=273,slow=8.2,SNR=2.8
comp=Z,0.6nm,0.3s
**MK31 Makanchi Array** 37.76 68 P P 14 59 49.9 +2.0
MK31 IAmb IAmb 15 00 05.3
comp=Z,1.6nm,1.5s
**MK31 Makanchi Array** 37.76 68 P P 14 59 49.9 +2.0
MK31 pmax pmax
comp=Z,2.0nm,1.5s
**MKAR Makanchi Array** 37.76 68 P P 14 59 49.9 +2.0
**MKAR Makanchi Array** 37.76 68 P P 14 59 50.4 +2.5
comp=Z,0.4nm,0.4s,baz=272,slow=8.4,SNR=11
comp=Z,0.4nm,0.4s
**MKAR Makanchi Array** 37.76 68 *e*P P 14 59 50.4 +2.5
MKAR pmax pmax
comp=Z,1.0nm,0.4s
**TORD Torodi Ar. Bea** 38.77 221 P P 14 59 57.4 +0.8
**TORD Torodi Ar. Bea** 38.77 221 P P 14 59 57.6 +1.0
comp=Z,1.1nm,0.3s,baz=28,slow=8.6,SNR=33
comp=Z,1.1nm,0.3s
**DBIC Dimbokro** 47.53 225 P P 15 01 06.5 -0.4
**DBIC Dimbokro** 47.53 225 P P 15 01 06.5 -0.4
comp=Z,2.5nm,0.4s,baz=24,slow=6.5,SNR=13
comp=Z,2.5nm,0.4s
**BILL Bilibino** 62.57 16 *e*P P 15 02 54.9 +0.6
BILL *e**PP pP 15 03 24.3 -1.6
BILL *e* 15 05 14.7
BILL pmax pmax
comp=Z,2.0nm,1.1s

**IDC 22 14:52:47.0±6.0, 17.86S×176.97W, h0km, mb4.3/2, mbtmp4.3/2, Error ellipse: s-maj=290.4km s-min=54.9km az=146.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.99** | **259** | P | P | 15 01 12.0 | -0.5 |
| | 0.9nm,0.3s,baz=96,slow=7.5,SNR=27 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **46.12** | **254** | P | P | 15 01 13.8 | +0.3 |
| | 2.7nm,0.5s,baz=89,slow=8.6,SNR=17 | | | | | | |
| | 2.7nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **147.90** | **347** | PKPbc | PKPbc | 15 12 33.5 | -0.8 |
| | 0.6nm,0.5s,baz=39,slow=6.3,SNR=1.7 | | | | | | |

*NEIC **22** 14:56:55.1±2.4, 5.54S±0.08×152.4E±0.1, h10km±1km, mb4.7/35, Error ellipse: s-maj=23.6km s-min=11.6km az=105.0*

*IDC **22** 14:56:59.2±5.2, 5.55S×152.06E, h52km±44km, mb3.8/10, mbtmp4.1/11, ML2.3/1, Error ellipse: s-maj=38.8km s-min=21.9km az=104.0*

**ISC 22 14:56:58.5±0.8, 5.58S±0.08×152.2E±0.1, h45km, n54, σ1s25/55, mb4.5/29, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.38** | **358** | Pn | Pn | 14 57 20.9 | -0.5 |
| **MANU** | **Manus Island** | **5.98** | **306** | | Pn | 14 58 27.2 | +2.6 |
| **PMG** | **Port Moresby** | **6.30** | **233** | | Pn | 14 58 30.0 | +1.1 |
| **PMG** | **Port Moresby** | **6.30** | **233** | P | Pn | 14 58 29.5 | +0.6 |
| | 4.2nm,0.3s,baz=67,slow=9.9,SNR=12 | | | | | | |
| PMG | | | | S | Sn | 14 59 37.0 | -2.6 |
| | 27nm,0.5s,baz=174,slow=19,SNR=3.0 | | | | | | |
| | 23nm,0.5s | | | | | | |
| **EIDS** | **Eidsvold** | **19.71** | **183** | P | P | 15 01 24.6 | +0.3 |
| **MTN** | **Manton Dam** | **22.02** | **249** | P | P | 15 01 49.1 | -0.3 |
| MTN | | | | IAmb | IAmb | 15 01 50.9 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.36** | **229** | P | P | 15 01 52.7 | -0.3 |
| **WRA** | **Warramunga Arr** | **22.50** | **229** | P | P | 15 01 55.1 | +0.6 |
| **WRA** | **Warramunga Arr** | **22.50** | **229** | P | P | 15 01 53.4 | -1.1 |
| | comp=Z,1.8nm,0.4s,baz=51,slow=9.8,SNR=10 | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **25.11** | **245** | P | P | 15 02 18.4 | -1.0 |
| **AS31** | **Alice Springs** | **25.19** | **223** | P | P | 15 02 18.8 | -1.3 |
| AS31 | | | | IAmb | IAmb | 15 02 28.4 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **25.19** | **223** | P | P | 15 02 21.0 | +0.9 |
| **ASAR** | **Alice Springs** | **25.19** | **223** | P | P | 15 02 19.8 | -0.3 |
| | comp=Z,6.2nm,0.7s,baz=55,slow=9.5,SNR=18 | | | | | | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.78** | **242** | P | P | 15 02 50.6 | -1.8 |
| **PSA00** | **Pilbara Seismi** | **35.14** | **240** | P | P | 15 03 48.6 | +0.4 |
| PSA00 | | | | IAmb | IAmb | 15 03 58.8 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **MORW** | **Morawa** | **41.41** | **231** | P | P | 15 04 43.0 | +2.2 |
| MORW | | | | IAmb | IAmb | 15 05 07.7 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.69** | **296** | P | P | 15 06 44.3 | -0.8 |
| | comp=Z,0.7nm,0.6s,baz=128,slow=5.7,SNR=5.5 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **58.65** | **4** | P | P | 15 06 50.3 | -0.8 |
| **PETK** | **Petropavlovsk-** | **58.65** | **4** | P | P | 15 06 51.0 | -0.1 |
| **PETK** | **Petropavlovsk-** | **58.65** | **4** | P | P | 15 06 51.4 | +0.3 |

comp=Z,0.6nm,0.4s,baz=161,slow=5.7,SNR=8.1
comp=Z,0.6nm,0.4s
**SONM Songino Array 66.68 328 P P 15 07 44.4 -0.5**
**SONM Songino Array 66.68 328 P P 15 07 44.6 -0.3**
comp=Z,1.6nm,0.6s,baz=135,slow=4.4,SNR=7.9
comp=Z,1.6nm,0.6s
**PLK4 Peulik 4 75.38 26 P P 15 08 38.1 +0.7**
**K15K Wolf Creek Mou 76.33 20 P P 15 08 44.2 +1.6**
K15K IAmb IAmb 15 08 45.6
comp=Z,8.9nm,1.1s
**M16K Timber Creek 76.42 22 P P 15 08 44.7 +1.6**
**Q19K Cape Douglas, 77.30 26 P P 15 08 48.8 +0.7**
**J16K Anvik River 77.31 20 P P 15 08 49.7 +1.6**
J16K IAmb IAmb 15 09 30.1
comp=Z,12nm,1.3s
**J17K VABM Dome 77.91 20 P P 15 08 53.6 +2.2**
J17K IAmb IAmb 15 08 53.9
comp=Z,12nm,1.3s
**L18K Granite Mounta 78.02 22 P P 15 08 53.9 +1.9**
L18K IAmb IAmb 15 08 55.6
comp=Z,10nm,1.2s
**H17K Granite Mounta 78.64 19 P P 15 08 57.3 +1.9**
H17K IAmb IAmb 15 08 58.0
comp=Z,4.9nm,0.9s
**L19K White Mountain 78.69 22 P P 15 08 56.9 +1.1**
L19K IAmb IAmb 15 08 58.4
comp=Z,5.6nm,0.8s
**M20K Styx River 79.18 23 P P 15 08 59.9 +1.3**
M20K IAmb IAmb 15 09 03.2
comp=Z,6.5nm,1.2s
**K20K Telida 79.67 22 P P 15 09 02.8 +1.7**
K20K IAmb IAmb 15 09 09.6
comp=Z,4.8nm,1.1s
**J20K Nowinta River 80.12 21 P P 15 09 05.1 +1.6**
**MKAR Makanchi Array 80.53 319 P P 15 09 05.6 -0.6**
comp=Z,0.7nm,0.7s,baz=103,slow=7.2,SNR=6.0
comp=Z,0.7nm,0.7s
**F19K Shaleruckik Mo 80.54 18 P P 15 09 07.1 +1.4**
**PWL Port Wells 80.59 25 P P 15 09 07.0 +0.8**
**SML Sawmill 81.07 24 P P 15 09 09.9 +1.2**
**ZALV Zalesovo Beam 81.48 327 P P 15 09 09.2 -1.8**
comp=Z,1.2nm,0.5s,baz=119,slow=5.5,SNR=5.2
comp=Z,1.2nm,0.5s
**D19K Kuna River 81.50 17 P P 15 09 11.8 +0.9**
D19K IAmb IAmb 15 09 31.8
comp=Z,17nm,1.4s
**MLY Manley 81.81 21 P P 15 09 13.4 +0.8**
MLY IAmb IAmb 15 09 14.3
comp=Z,2.9nm,0.6s
**H23K Yukon River 82.66 21 P P 15 09 17.9 +0.9**
**IL31 83.09 22 P P 15 09 19.3 +0.1**
IL31 IAmb IAmb 15 09 48.7
comp=Z,8.2nm,1.4s
**ILAR Eielson Array 83.09 22 P P 15 09 18.7 -0.5**
**ILAR Eielson Array 83.09 22 P P 15 09 18.6 -0.7**
comp=Z,1.4nm,0.6s,baz=246,slow=5.3,SNR=24
comp=Z,1.4nm,0.6s
**J25K Salcha River, 83.59 23 P P 15 09 22.7 +0.8**
J25K IAmb IAmb 15 09 23.3
comp=Z,4.0nm,0.7s
**KURBB Kurchatov Arra 84.06 322 P P 15 09 23.6 -0.8**
comp=Z,0.5nm,0.5s,baz=115,slow=4.0,SNR=1.9
**QSPA South Pole Qui 84.39 180 P P 15 09 26.5 +0.5**
QSPA IAmb IAmb 15 09 52.6
comp=Z,4.1nm,1.1s
**QSPA South Pole Qui 84.39 180 P P 15 09 26.2 +0.2**
comp=Z,1.2nm,0.8s,baz=157,slow=0.8,SNR=5.6
comp=Z,1.2nm,0.8s
**I28M Miner Creek 86.04 23 P P 15 09 35.3 +1.1**
**K29M Barlow Dome 86.42 25 P P 15 09 37.9 +1.8**
K29M IAmb IAmb 15 09 39.1
comp=Z,5.5nm,1.1s
**J30M Hart River 87.16 24 P P 15 09 41.2 +1.5**
J30M IAmb IAmb 15 09 50.6
comp=Z,2.9nm,0.8s
**BVAR Borovoye Array 89.52 323 P P 15 09 49.5 -1.5**
comp=Z,1.0nm,0.6s,baz=97,slow=6.1,SNR=4.4
comp=Z,1.0nm,0.6s
**TORD Torodi Ar. Bea 149.99 287 PKPbc PKPbc 15 16 45.0 -0.3**
comp=Z,2.9nm,0.6s,baz=62,slow=3.4,SNR=19

*NEIC **22** 15:02:30.4,39°.25N×99°.01W,h5km*
*NEIC **22** 15:02:32.2±0.8,39°.25N±0°.04×99°.05W±0°.07,h5km±2km, mb_Lg3.9/138,Mwr3.7/22,Error ellipse: s-maj=8.7km s-min=5.8km az=106.0,Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.30; $M_{\theta\theta}$-0.54; $M_{\phi\phi}$1.83; $M_{r\theta}$1.51; $M_{\theta\phi}$-4.44; $M_{\phi r}$1.28; Fault plane solution: $M_o$5.13000×$10^{14}$ NP1:$\phi_s$281.02000°,$\delta$69.93000°, $\lambda$-159.98000°. NP2:$\phi_s$183.89000°,$\delta$71.25000°, $\lambda$-21.25000°. Principal axes: T 5.2472, Plg1.0000°, Azm233.0000°; N -0.2463, Plg62.0000°, Azm324.0000°; P -5.0009, Plg28.0000°, Azm142.0000°;*
*IDC **22** 15:02:34.6±2.5,39°.29N×99°.20W,h25km±20km,mb3.9/3, mbtmp4.0/8,ML3.6/4,MS3.0/2 Error ellipse: s-maj=11.5km s-min=9.1km az=96.0*
**ISC 22 15:02:29.8±0.6,39°.28N±0°.04×99°.11W±0°.04,h10km,n169,** $\sigma$1**s**99/164,**mb4.3/3,Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBKS** | **Cedar Bluff** | **0.67** | **227** | | **Pb** | **15 02 44.1** | **+0.5** |
| CBKS | | | | Sg | **Sg** | **15 02 53.0** | **+1.4** |
| **R32A** | **Long Quarter,** | **0.91** | **160** | | **Pg** | **15 02 47.6** | **+0.3** |
| R32A | | | | Sg | **Sg** | **15 02 58.5** | **-0.6** |
| **KSU1** | **Kansas State U** | **1.95** | **94** | | **Pb** | **15 03 04.4** | **-1.0** |
| **KAN12** | **Harper NE Stat** | **2.16** | **156** | Pn | **Pn** | **15 03 07.7** | **+1.8** |
| **KAN08** | **Anthony NE Sta** | **2.23** | **156** | | **Pn** | **15 03 08.2** | **+1.3** |
| **BGNE** | **Belgrade** | **2.25** | **19** | | **Pb** | **15 03 09.6** | **-1.0** |
| **KS21** | **Milan North St** | **2.29** | **150** | Pn | **Pn** | **15 03 09.7** | **+2.0** |
| **KAN01** | **Argonia South** | **2.37** | **153** | Pn | **Pn** | **15 03 10.7** | **+1.9** |
| KAN01 | | | | IAmb_Lg | | 15 03 46.0 | |
| comp=Z,512nm,0.9s | | | | | | | |
| **KAN09** | **Caldwell North** | **2.44** | **151** | Pn | **Pb** | **15 03 12.0** | **-1.7** |
| **KAN17** | **Caldwell West** | **2.47** | **154** | Pn | **Pn** | **15 03 11.8** | **+1.7** |
| **KAN14** | **Manchester OK** | **2.49** | **158** | Pn | **Pn** | **15 03 12.4** | **+2.1** |
| KAN14 | | | | IAmb_Lg | | 15 03 53.2 | |
| comp=Z,612nm,0.9s | | | | | | | |
| **OK032** | **Salt Plains WL** | **2.57** | **164** | Pn | **Pn** | **15 03 13.2** | **+1.7** |
| **KAN13** | **South Haven SW** | **2.60** | **150** | Pn | **Pn** | **15 03 13.5** | **+1.6** |
| **GC02** | **Grant County #** | **2.61** | **157** | Pn | **Pn** | **15 03 14.0** | **+1.9** |
| **NOKA** | **Waynoka** | **2.64** | **177** | Pn | **Pn** | **15 03 14.7** | **+2.3** |
| **KSCO** | **Kaye Shedlock'** | **2.75** | **266** | | **Pb** | **15 03 17.0** | **-2.0** |
| **OGNE** | **Ogallala** | **2.79** | **308** | | **Pb** | **15 03 18.2** | **-1.6** |
| OGNE | | | | IAmb_Lg | | 15 04 09.8 | |
| comp=Z,387nm,0.7s | | | | | | | |
| **OK038** | **West end E0370** | **2.81** | **174** | Pn | **Pn** | **15 03 17.2** | **+2.5** |
| **CROK** | **Carrier** | **2.91** | **162** | Pn | **Pn** | **15 03 18.1** | **+1.9** |
| **BLOK** | **Blackwell** | **2.92** | **149** | Pn | **Pn** | **15 03 18.6** | **+2.3** |
| **N35A** | **Tabor** | **3.10** | **58** | Pn | **Pn** | **15 03 20.5** | **+1.7** |
| **T35A** | **Sooner Cattle** | **3.12** | **138** | Pn | **Pn** | **15 03 21.3** | **+2.2** |
| T35A | | | | IAmb_Lg | | 15 04 17.7 | |
| comp=Z,282nm,0.9s | | | | | | | |
| **ELIS** | **Ellis County** | **3.21** | **184** | Pn | **Pn** | **15 03 23.2** | **+2.8** |
| **OK051** | **E0350 and S346** | **3.30** | **146** | Pn | **Pn** | **15 03 23.4** | **+1.9** |
| **OK048** | **Pawnee Station** | **3.33** | **148** | Pn | **Pn** | **15 03 23.6** | **+1.6** |
| **L34A** | **Svendsen Farm,** | **3.40** | **37** | | **Pn** | **15 03 24.6** | **+1.7** |
| **QUOK** | **Quay** | **3.64** | **148** | Pn | **Pn** | **15 03 27.6** | **+1.4** |
| **CSTR** | **Hydro, Custer** | **3.64** | **175** | | **Pn** | **15 03 28.1** | **+1.9** |
| **OK029** | **Liberty Lake** | **3.71** | **159** | Pn | **Pn** | **15 03 28.9** | **+1.7** |
| **OK052** | **Battle Ridge R** | **3.75** | **150** | | **Pn** | **15 03 28.9** | **+1.2** |
| **OK031** | **S. Brethren Rd** | **3.77** | **151** | | **Pn** | **15 03 29.1** | **+1.1** |
| **ADOK** | **Arcadia Dam** | **3.87** | **159** | Pn | **Pn** | **15 03 31.0** | **+1.6** |
| **DEOK** | **Depew** | **4.01** | **148** | Pn | **Pn** | **15 03 32.3** | **+1.0** |
| **RTBA** | **Rita Blanca** | **4.03** | **227** | Pn | **Pn** | **15 03 34.8** | **+3.1** |
| RTBA | | | | IAmb_Lg | | 15 04 46.1 | |
| comp=Z,213nm,0.8s | | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **4.09** | **160** | Pn | **Pn** | **15 03 33.9** | **+1.6** |
| OKCSW | | | | IAmb_Lg | | 15 04 47.5 | |
| comp=Z,390nm,0.7s | | | | | | | |
| **BRIGG** | **Briggsdale** | **4.21** | **290** | Pn | **Pn** | **15 03 38.4** | **+4.2** |
| BRIGG | | | | IAmb_Lg | | 15 04 47.2 | |
| comp=Z,300nm,0.9s | | | | | | | |
| **FNO** | **Franklin** | **4.24** | **161** | Pn | **Pn** | **15 03 35.4** | **+1.0** |
| **SMWD** | **Samnorwood** | **4.26** | **193** | Pn | **Pn** | **15 03 36.9** | **+2.1** |
| **TUL3** | **Leonard** | **4.27** | **141** | Pn | **Pn** | **15 03 35.6** | **+0.8** |
| TUL3 | | | | IAmb_Lg | | 15 04 50.0 | |
| comp=Z,328nm,0.8s | | | | | | | |
| **P38A** | **Dawn** | **4.33** | **84** | Pn | **Pn** | **15 03 37.9** | **+2.2** |
| **W35A** | **Tecumseh** | **4.49** | **156** | Pn | **Pn** | **15 03 38.9** | **+1.1** |
| **RLO** | **Rose Lookout** | **4.49** | **133** | Pn | **Pn** | **15 03 38.4** | **+0.5** |
| RLO | | | | IAmb_Lg | | 15 04 51.8 | |
| comp=Z,227nm,0.7s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **4.54** | **177** | Pn | **Pn** | **15 03 39.9** | **+1.4** |
| WMOK | | | | IAmb_Lg | | 15 05 02.1 | |
| comp=Z,229nm,0.9s | | | | | | | |
| **U38A** | **Gravette** | **4.69** | **126** | Pn | **Pn** | **15 03 41.4** | **+0.8** |
| U38A | | | | IAmb_Lg | | 15 05 09.8 | |
| comp=Z,193nm,0.9s | | | | | | | |
| **Q24A** | **Divide** | **4.71** | **268** | Pn | **Pn** | **15 03 42.5** | **+1.4** |
| Q24A | | | | IAmb_Lg | | 15 05 06.3 | |
| comp=Z,242nm,0.8s | | | | | | | |
| **N38A** | **Joes South For** | **4.76** | **70** | Pn | **Pn** | **15 03 42.9** | **+1.3** |
| **X34A** | **Smith Ranch, M** | **4.78** | **167** | Pn | **Pn** | **15 03 43.1** | **+1.2** |
| X34A | | | | IAmb_Lg | | 15 05 15.5 | |
| comp=Z,330nm,0.8s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **4.83** | **22** | Pn | **Pn** | **15 03 44.0** | **+1.4** |
| **AMTX** | **Amarillo** | **4.84** | **206** | Pn | **Pn** | **15 03 45.0** | **+2.2** |
| AMTX | | | | IAmb_Lg | | 15 05 17.1 | |
| comp=Z,296nm,0.8s | | | | | | | |
| **ISCO** | **Idaho Springs** | **5.05** | **278** | Pn | **Pn** | **15 03 49.8** | **+3.8** |
| ISCO | | | | IAmb_Lg | | 15 05 22.6 | |
| comp=Z,169nm,0.9s | | | | | | | |
| **HHAR** | **Hobbs** | **5.07** | **125** | Pn | **Pn** | **15 03 46.9** | **+1.0** |
| HHAR | | | | IAmb_Lg | | 15 05 20.0 | |
| comp=Z,170nm,0.7s | | | | | | | |
| **SUSD** | **Miller** | **5.17** | **1** | Pn | **Pn** | **15 03 48.7** | **+1.6** |
| **SCIA** | **State Center** | **5.20** | **58** | Pn | **Pn** | **15 03 49.1** | **+1.5** |
| SCIA | | | | IAmb_Lg | | 15 05 28.5 | |
| comp=Z,157nm,0.8s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.24** | **255** | Pn | **Pn** | **15 03 51.2** | **+2.8** |
| SDCO | | | | IAmb_Lg | | 15 05 22.2 | |
| comp=Z,188nm,0.8s | | | | | | | |
| **PHWY** | **Pilot Hill** | **5.26** | **295** | Pn | **Pn** | **15 03 51.4** | **+2.7** |
| **R40A** | **Maddies Statio** | **5.44** | **98** | Pn | **Pn** | **15 03 53.5** | **+2.7** |
| **N23A** | **Red Feather La** | **5.49** | **289** | Pn | **Pn** | **15 03 54.1** | **+2.3** |
| **LOOK** | **Love County** | **5.50** | **163** | Pn | **Pn** | **15 03 51.9** | **+0.2** |
| LOOK | | | | IAmb_Lg | | 15 05 27.2 | |
| comp=Z,237nm,0.8s | | | | | | | |
| **WTFS** | **Witchita Falls** | **5.52** | **174** | Pn | **Pn** | **15 03 53.9** | **+1.8** |
| **X37A** | **Clayton** | **5.55** | **146** | Pn | **Pn** | **15 03 52.7** | **+0.2** |
| X37A | | | | IAmb_Lg | | 15 05 29.8 | |
| comp=Z,200nm,0.9s | | | | | | | |
| **DKNS** | **Dickens** | **5.79** | **195** | Pn | **Pn** | **15 03 58.6** | **+2.9** |
| DKNS | | | | IAmb_Lg | | 15 05 46.6 | |
| comp=Z,272nm,0.8s | | | | | | | |
| **MGMO** | **Mountain Grove** | **5.79** | **109** | Pn | **Pn** | **15 03 55.8** | **+0.1** |
| MGMO | | | | IAmb_Lg | | 15 05 38.4 | |
| comp=Z,272nm,0.8s | | | | | | | |
| **APMT** | **Aspermont** | **5.99** | **188** | Pn | **Pn** | **15 04 00.4** | **+1.8** |
| APMT | | | | IAmb_Lg | | 15 05 51.6 | |
| comp=Z,227nm,1.0s | | | | | | | |
| **MSTX** | **Muleshoe** | **6.06** | **210** | Pn | **Pn** | **15 04 01.6** | **+2.1** |
| **RSSD** | **Black Hills** | **6.08** | **324** | Pn | **Pn** | **15 04 03.3** | **+3.4** |
| **SMCO** | **Snowmass** | **6.11** | **272** | Pn | **Pn** | **15 04 04.0** | **+3.5** |
| SMCO | | | | IAmb_Lg | | 15 05 59.0 | |
| comp=Z,173nm,0.9s | | | | | | | |
| **Z35A** | **Perchaven, San** | **6.12** | **165** | Pn | **Pn** | **15 04 01.1** | **+0.8** |
| **S22A** | **4UR Ranch, Cre** | **6.24** | **258** | Pn | **Pn** | **15 04 05.1** | **+2.9** |
| S22A | | | | IAmb_Lg | | 15 05 58.2 | |
| comp=Z,140nm,1.2s | | | | | | | |
| **CCM** | **Cathedral Cave** | **6.28** | **99** | Pn | **Pn** | **15 04 04.0** | **+1.6** |
| CCM | | | | IAmb_Lg | | 15 05 50.8 | |
| comp=Z,253nm,0.9s | | | | | | | |
| **FW03** | **Perrin-Whitt E** | **6.28** | **172** | Pn | **Pn** | **15 04 04.5** | **+2.0** |
| FW03 | | | | IAmb_Lg | | 15 05 49.7 | |
| comp=Z,124nm,0.8s | | | | | | | |
| **SN07** | **Snyder 07** | **6.34** | **194** | Pn | **Pn** | **15 04 05.1** | **+1.8** |
| SN07 | | | | IAmb_Lg | | 15 06 01.0 | |
| comp=Z,196nm,0.8s | | | | | | | |
| **I37A** | **Lemond, Waseca** | **6.38** | **40** | Pn | **Pn** | **15 04 02.9** | **-0.9** |
| I37A | | | | IAmb_Lg | | 15 06 06.4 | |
| comp=Z,208nm,0.9s | | | | | | | |
| **FW06** | **Azle** | **6.41** | **168** | Pn | **Pn** | **15 04 05.3** | **+1.0** |
| FW06 | | | | IAmb_Lg | | 15 06 00.5 | |
| comp=Z,131nm,0.9s | | | | | | | |
| **MIAR** | **Mount Ida** | **6.47** | **135** | Pn | **Pn** | **15 04 05.5** | **+0.4** |
| MIAR | | | | IAmb_Lg | | 15 06 10.5 | |
| comp=Z,183nm,0.8s | | | | | | | |
| **PLPT** | **Palo Pinto** | **6.48** | **174** | Pn | **Pn** | **15 04 07.0** | **+1.8** |
| PLPT | | | | IAmb_Lg | | 15 06 10.4 | |
| comp=Z,127nm,0.7s | | | | | | | |
| **POST** | **Post** | **6.49** | **198** | Pn | **Pn** | **15 04 07.7** | **+2.2** |
| **FCAR** | **Ozark Folk Cen** | **6.50** | **119** | Pn | **Pn** | **15 04 06.4** | **+1.0** |
| FCAR | | | | IAmb_Lg | | 15 06 03.6 | |
| comp=Z,130nm,0.7s | | | | | | | |
| **N41A** | **Harden Midland** | **6.50** | **75** | Pn | **Pn** | **15 04 07.7** | **+2.3** |
| **SN05** | **Snyder 5** | **6.54** | **193** | Pn | **Pn** | **15 04 07.9** | **+1.8** |
| **K22A** | **Casper** | **6.54** | **303** | Pn | **Pn** | **15 04 09.2** | **+3.0** |
| K22A | | | | IAmb_Lg | | 15 06 14.8 | |
| comp=Z,173nm,0.9s | | | | | | | |
| **L40A** | **Anamosa** | **6.61** | **63** | Pn | **Pn** | **15 04 07.4** | **+0.4** |
| L40A | | | | IAmb_Lg | | 15 06 03.6 | |
| comp=Z,139nm,0.8s | | | | | | | |
| **RWWY** | **Rawlins** | **6.63** | **294** | Pn | **Pn** | **15 04 11.2** | **+3.7** |
| RWWY | | | | IAmb_Lg | | 15 06 12.0 | |
| comp=Z,135nm,1.1s | | | | | | | |
| **FW07** | **Weatherford** | **6.65** | **170** | Pn | **Pn** | **15 04 08.7** | **+1.2** |
| FW07 | | | | IAmb_Lg | | 15 06 19.1 | |
| comp=Z,115nm,0.9s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **6.65** | **184** | Pn | **Pn** | **15 04 08.1** | **+0.5** |
| ABTX | | | | IAmb_Lg | | 15 06 03.0 | |
| comp=Z,158nm,0.8s | | | | | | | |
| **T42A** | **Van Buren** | **6.70** | **107** | Pn | **Pn** | **15 04 10.9** | **+2.6** |
| T42A | | | | IAmb_Lg | | 15 06 13.7 | |
| comp=Z,196nm,0.9s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **6.74** | **124** | Pn | **Pn** | **15 04 09.1** | **+0.4** |
| WHAR | | | | IAmb_Lg | | 15 06 10.7 | |
| comp=Z,237nm,0.9s | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **6.87** | **150** | Pn | **Pn** | **15 04 11.2** | **+0.7** |
| Z38A | | | | IAmb_Lg | | 15 06 18.0 | |
| comp=Z,169nm,0.8s | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **6.88** | **17** | Pn | **Pn** | **15 04 11.4** | **+0.7** |
| **X40A** | **Basin Creek Fa** | **6.94** | **132** | Pn | **Pn** | **15 04 11.7** | **+0.2** |
| X40A | | | | IAmb_Lg | | 15 06 12.2 | |
| comp=Z,131nm,0.8s | | | | | | | |
| **SLM** | **Saint Louis** | **6.95** | **92** | Pn | **Pn** | **15 04 13.2** | **+1.6** |
| **TREL** | **Terrell** | **6.97** | **159** | IAmb_Lg | | 15 06 25.0 | |
| comp=Z,129nm,0.8s | | | | | | | |
| **FW16** | **Waxahatchie** | **7.01** | **164** | IAmb_Lg | | 15 06 31.2 | |
| comp=Z,158nm,0.9s | | | | | | | |
| **UALR** | **University of** | **7.03** | **128** | Pn | **Pn** | **15 04 13.6** | **+0.8** |
| **FW14** | **Alvarado** | **7.04** | **167** | Pn | **Pn** | **15 04 13.4** | **+0.5** |
| **FW13** | **Cleburne** | **7.04** | **168** | Pn | **Pn** | **15 04 12.9** | **0.0** |
| **LCAR** | **Lake Charles** | **7.07** | **114** | Pn | **Pn** | **15 04 14.1** | **+0.7** |
| LCAR | | | | IAmb_Lg | | 15 06 15.6 | |
| comp=Z,120nm,0.8s | | | | | | | |
| **ANMO** | **Albuquerque** | **7.29** | **236** | Pn | **Pn** | **15 04 18.7** | **+2.2** |
| **ANMO** | **Albuquerque** | **7.29** | **236** | Pn | **Pn** | **15 04 19.4** | **+3.0** |
| comp=Z,0.3nm,0.3s,baz=26,slow=17,SNR=6.1 | | | | | | | |
| ANMO | | | | Pg | **Pg** | **15 04 45.5** | **-3.8** |
| comp=Z,6.3nm,0.3s,baz=141,slow=18,SNR=29 | | | | | | | |
| ANMO | | | | Lg | Lg | 15 06 16.1 | |
| comp=Z,3.5nm,0.3s,baz=218,slow=23,SNR=2.8 | | | | | | | |
| comp=Z,1.9nm,0.6s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **7.29** | **107** | Pn | **Pn** | **15 04 18.4** | **+2.0** |
| **WLAR** | **White Oak Lake** | **7.38** | **137** | IAmb_Lg | | 15 06 37.1 | |
| comp=Z,105nm,0.7s | | | | | | | |
| **E28A** | **Huff** | **7.39** | **351** | Pn | **Pn** | **15 04 18.7** | **+1.1** |
| E28A | | | | IAmb_Lg | | 15 06 43.3 | |
| comp=Z,188nm,0.9s | | | | | | | |
| **WHTX** | **Lake Whitney,** | **7.39** | **169** | Pn | **Pn** | **15 04 17.9** | **+0.2** |
| **P43A** | **Skaggs, Pawnee** | **7.43** | **84** | Pn | **Pn** | **15 04 20.3** | **+2.1** |
| **SGCY** | **Sterling City** | **7.53** | **193** | Pn | **Pn** | **15 04 21.2** | **+1.6** |
| SGCY | | | | IAmb_Lg | | 15 06 41.7 | |
| comp=Z,165nm,0.8s | | | | | | | |
| **SPMN** | **Marine on St.** | **7.56** | **36** | Pn | **Pn** | **15 04 20.2** | **+0.1** |
| SPMN | | | | IAmb_Lg | | 15 06 30.8 | |
| comp=Z,96nm,0.7s | | | | | | | |
| **JFWS** | **Jewell Farm** | **7.62** | **59** | Pn | **Pn** | **15 04 21.2** | **+0.4** |
| JFWS | | | | IAmb_Lg | | 15 06 41.3 | |
| comp=Z,128nm,0.8s | | | | | | | |
| **ODSA** | **Odessa** | **7.67** | **202** | Pn | **Pn** | **15 04 23.1** | **+1.4** |
| ODSA | | | | IAmb_Lg | | 15 06 42.2 | |
| comp=Z,128nm,1.2s | | | | | | | |
| **MVCO** | **Mesa Verde** | **7.67** | **257** | Pn | **Pn** | **15 04 23.7** | **+2.0** |
| **L42A** | **Oliver, Polo** | **7.68** | **66** | Pn | **Pn** | **15 04 22.7** | **+1.1** |
| L42A | | | | IAmb_Lg | | 15 06 39.7 | |
| comp=Z,137nm,0.9s | | | | | | | |
| **CGM3** | **Cape Girardeau** | **7.69** | **102** | Pn | **Pn** | **15 04 23.6** | **+1.7** |
| CGM3 | | | | IAmb_Lg | | 15 06 32.0 | |
| comp=Z,181nm,0.9s | | | | | | | |
| **237A** | **Washetta, Mont** | **7.74** | **159** | Pn | **Pn** | **15 04 22.2** | **-0.3** |
| 237A | | | | IAmb_Lg | | 15 06 56.9 | |
| comp=Z,94nm,0.8s | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.86** | **90** | Pn | **Pn** | **15 04 24.2** | **+0.1** |
| **S44A** | **Carbondale** | **7.89** | **98** | Pn | **Pn** | **15 04 24.6** | **+0.1** |
| **SIUC** | **Southern Illin** | **7.91** | **98** | Pn | **Pn** | **15 04 24.9** | **+0.1** |
| **CCAR** | **Cane Creek** | **7.96** | **130** | IAmb_Lg | | 15 06 59.4 | |
| comp=Z,129nm,0.8s | | | | | | | |
| **BRDY** | **Brady** | **7.97** | **179** | Pn | **Pn** | **15 04 25.2** | **-0.5** |
| **NATX** | **Nacogdoches** | **8.33** | **153** | IAmb_Lg | | 15 07 09.6 | |
| comp=Z,127nm,0.9s | | | | | | | |
| **MNHN** | **Monahans** | **8.46** | **202** | Pn | **Pn** | **15 04 32.8** | **+0.3** |
| **OZNA** | **Ozona** | **8.50** | **192** | Pn | **Pn** | **15 04 32.3** | **-0.6** |
| **435B** | **Jarrell** | **8.56** | **171** | Pn | **Pn** | **15 04 36.2** | **+2.4** |
| 435B | | | | IAmb_Lg | | 15 07 10.0 | |
| comp=Z,140nm,0.9s | | | | | | | |
| **MDND** | **Maddock** | **8.58** | **358** | IAmb_Lg | | 15 07 05.0 | |
| comp=Z,160nm,0.9s | | | | | | | |
| **OLIL** | **Olney** | **8.59** | **90** | Pn | **Pn** | **15 04 35.0** | **+0.9** |
| **PDAR** | **Pinedale Array** | **8.63** | **297** | Pn | **Pn** | **15 04 37.5** | **+2.6** |
| **PDAR** | **Pinedale Array** | **8.63** | **297** | Pn | **Pn** | **15 04 38.0** | **+3.0** |
| comp=Z,4.3nm,0.4s,baz=118,slow=14,SNR=22 | | | | | | | |
| PDAR | | | | Pg | Pg | 15 05 05.4 | -10 |
| comp=Z,1.2nm,0.3s,baz=107,slow=19,SNR=5.2 | | | | | | | |
| PDAR | | | | Sn | **Sn** | **15 06 12.2** | **-0.3** |
| comp=Z,3.2nm,0.3s,baz=103,slow=29,SNR=5.9 | | | | | | | |
| PDAR | | | | Lg | Lg | 15 07 01.1 | |
| comp=Z,5.2nm,0.3s,baz=126,slow=22,SNR=6.8 | | | | | | | |
| PDAR | | | | LR | LR | 15 08 11.1 | |
| comp=Z,75nm,18.0s,baz=122,slow=39 | | | | | | | |
| **PECS** | **Pecos** | **8.79** | **208** | Pn | **Pn** | **15 04 39.1** | **+2.1** |
| **JCT** | **Junction City** | **8.79** | **184** | Pn | **Pn** | **15 04 36.3** | **-0.7** |
| **SRU** | **San Rafael Swe** | **8.87** | **273** | Pn | **Pn** | **15 04 41.9** | **+3.8** |
| **143A** | **Socs Landing,** | **9.05** | **134** | IAmb_Lg | | 15 07 39.8 | |
| comp=Z,76nm,0.8s | | | | | | | |
| **LAO** | **LASA Array** | **9.05** | **327** | Pn | **Pn** | **15 04 42.1** | **+1.6** |
| **OXF** | **Oxford** | **9.11** | **118** | IAmb_Lg | | 15 07 24.9 | |
| comp=Z,129nm,0.9s | | | | | | | |
| **Y45A** | **Yeager Farm, C** | **9.40** | **122** | IAmb_Lg | | 15 07 52.1 | |
| comp=Z,123nm,0.8s | | | | | | | |
| **WVT** | **Waverly** | **9.47** | **106** | Pn | **Pn** | **15 04 45.7** | **-0.6** |
| **RLMT** | **Red Lodge** | **9.53** | **311** | Pn | **Pn** | **15 04 49.0** | **+1.8** |
| **SAND** | **Sanderson** | **9.62** | **196** | Pn | **Pn** | **15 04 48.8** | **+0.4** |
| **LOHW** | **Long Hollow** | **9.65** | **300** | Pn | **Pn** | **15 04 51.5** | **+2.5** |
| **HNDO** | **Hondo** | **9.72** | **181** | Pn | **Pn** | **15 04 49.1** | **-0.6** |
| **VHRN** | **Van Horn** | **9.74** | **211** | Pn | **Pn** | **15 04 52.4** | **+2.3** |
| **TPAW** | **Teton Pass** | **9.84** | **299** | Pn | **Pn** | **15 04 54.0** | **+2.4** |
| **DGMT** | **Dagmar** | **9.89** | **340** | Pn | **Pn** | **15 04 54.3** | **+2.2** |
| DGMT | | | | IAmb_Lg | | 15 08 03.4 | |
| comp=Z,110nm,1.0s | | | | | | | |
| **DRIO** | **Del Rio** | **9.91** | **188** | Pn | **Pn** | **15 04 52.0** | **-0.2** |
| **H43A** | **Windswept, Lux** | **9.92** | **55** | Pn | **Pn** | **15 04 52.3** | **-0.1** |
| **COWI** | **Conover** | **10.02** | **44** | Pn | **Pn** | **15 04 52.7** | **-1.0** |
| **EYMN** | **Ely** | **10.27** | **30** | Pn | **Pn** | **15 04 57.4** | **+0.2** |
| **SPUT** | **South Promonto** | **10.39** | **286** | Pn | **Pn** | **15 05 02.2** | **+3.3** |
| **TX31** | **Lajitas Ar. Si** | **10.61** | **202** | Pn | **Pn** | **15 05 02.4** | **+0.4** |
| **TXAR** | **Lajitas Array** | **10.61** | **202** | Pn | **Pn** | **15 05 02.4** | **+0.4** |
| **TXAR** | **Lajitas Array** | **10.61** | **202** | Pn | **Pn** | **15 05 03.0** | **+1.0** |
| comp=Z,1.0nm,0.3s,baz=26,slow=11,SNR=39 | | | | | | | |
| TXAR | | | | Pg | | 15 05 43.2 | |
| comp=Z,0.8nm,0.3s,baz=21,slow=18,SNR=3.8 | | | | | | | |
| TXAR | | | | Sn | **Sn** | **15 06 53.8** | **-7.0** |
| comp=Z,0.7nm,0.3s,baz=29,slow=34,SNR=1.7 | | | | | | | |
| TXAR | | | | Lg | Lg | 15 08 02.6 | |
| comp=Z,1.3nm,0.3s,baz=19,slow=25,SNR=2.3 | | | | | | | |
| comp=Z,1.5nm,0.3s | | | | | | | |
| **R49A** | **Shelbyville** | **10.93** | **91** | Pn | **Pn** | **15 05 06.1** | **-0.1** |
| **ULM** | **Lac du Bonnet** | **11.21** | **11** | Pn | **Pn** | **15 05 09.6** | **-0.4** |
| **ULM** | **Lac du Bonnet** | **11.21** | **11** | Pn | **Pn** | **15 05 09.4** | **-0.6** |
| comp=Z,2.1nm,0.3s,baz=188,slow=12,SNR=21 | | | | | | | |
| ULM | | | | Sn | **Sn** | **15 07 06.7** | **-8.6** |
| comp=Z,2.8nm,0.3s,baz=238,slow=17,SNR=4.9 | | | | | | | |
| ULM | | | | Lg | Lg | 15 08 16.8 | |
| comp=Z,1.8nm,0.3s,baz=288,slow=20,SNR=8.8 | | | | | | | |
| comp=Z,4.1nm,0.4s | | | | | | | |
| **SWET** | **Sewanee** | **11.26** | **107** | Pn | **Pn** | **15 05 12.3** | **+1.6** |
| **N49A** | **Columbus Grove** | **11.55** | **77** | Pn | **Pn** | **15 05 13.9** | **-0.8** |
| **R50A** | **Paris** | **11.58** | **90** | Pn | **Pn** | **15 05 15.9** | **+0.7** |
| **EGMT** | **Eagleton** | **11.65** | **322** | Pn | **Pn** | **15 05 18.6** | **+2.6** |
| **CPCT** | **Cooper Cave** | **12.22** | **104** | Pn | **Pn** | **15 05 25.0** | **+1.2** |
| **LYMT** | **Lyon Mountain** | **12.31** | **313** | Pn | **Pn** | **15 05 26.7** | **+1.4** |
| **ELK** | **Elko** | **12.46** | **282** | Lg | Lg | 15 09 02.0 | |
| comp=Z,0.1nm,0.3s,baz=187,slow=23,SNR=1.5 | | | | | | | |
| **TZTN** | **Tazewell** | **12.59** | **98** | Pn | **Pn** | **15 05 29.2** | **+0.3** |
| **TKL** | **Tuckaleechee C** | **12.71** | **102** | Pn | **Pn** | **15 05 29.6** | **-0.9** |
| **TKL** | **Tuckaleechee C** | **12.71** | **102** | Pn | **Pn** | **15 05 31.1** | **+0.6** |
| comp=Z,0.6nm,0.3s,baz=314,slow=4.3,SNR=5.2 | | | | | | | |
| TKL | | | | Lg | Lg | 15 09 02.2 | |
| comp=Z,1.9nm,0.3s,baz=22,slow=22,SNR=4.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,137nm,1.8s,comp=N,64nm,1.3s | | | | | | | | |
| **JARK** | **Aomorirokkasho** | **1.02** | **248** | ⇓P | | **Pn** | **15 06 44.8** | **-0.3** | |
| JARK | | | | ⇓*e*S | | **Sn** | **15 06 58.3** | **0.0** | |
| **JARK** | **Aomorirokkasho** | **1.02** | **248** | A | | A | 15 06 44.8 | | |
| | comp=E,43nm,0.5s,comp=N,68nm,0.6s | | | | | | | | |
| **JTHR** | **Tokachihiroo** | **1.03** | **30** | A | | A | 15 06 45.7 | | |
| | comp=E,43nm,4.2s,comp=N,41nm,0.7s | | | | | | | | |
| **JOT** | **Ohata** | **1.18** | **270** | ⇓P | | **Pn** | **15 06 47.4** | **+0.2** | |
| JOT | | | | ⇓*e*S | | **Sn** | **15 07 03.1** | **+0.9** | |
| **JOT** | **Ohata** | **1.18** | **270** | A | | A | 15 06 47.4 | | |
| | comp=E,34nm,0.5s,comp=N,30nm,0.6s | | | | | | | | |
| **JKB** | **Kayabe** | **1.28** | **293** | ⇓P | | **Pn** | **15 06 48.9** | **+0.2** | |
| **JKB** | **Kayabe** | **1.28** | **293** | A | | A | 15 06 48.9 | | |
| | comp=E,17nm,1.5s,comp=N,15nm,0.9s | | | | | | | | |
| **JTM** | **Tenmabayashi** | **1.32** | **243** | P | | **Pn** | **15 06 49.9** | **+0.7** | |
| **JTM** | **Tenmabayashi** | **1.32** | **243** | Pn | | **Pn** | **15 06 49.5** | **+0.3** | |
| **JTM** | **Tenmabayashi** | **1.32** | **243** | ⇓P | | **Pn** | **15 06 49.6** | **+0.4** | |
| JTM | | | | ⇓*e*S | | **Sn** | **15 07 06.6** | **+1.0** | |
| **JTM** | **Tenmabayashi** | **1.32** | **243** | A | | A | 15 06 49.6 | | |
| | comp=E,50nm,0.7s,comp=N,85nm,0.7s | | | | | | | | |
| **JANG** | **Nango** | **1.32** | **219** | ⇓P | | **Pn** | **15 06 48.1** | **-1.1** | |
| **JANG** | **Nango** | **1.32** | **219** | A | | A | 15 06 48.1 | | |
| | comp=E,27nm,1.6s,comp=N,24nm,2.8s | | | | | | | | |
| **JIAM** | **Iburiatsuma** | **1.33** | **337** | ⇓P | | **Pn** | **15 06 51.7** | **+2.4** | |
| JIAM | | | | ⇓S | | **Sn** | **15 07 11.1** | **+5.3** | |
| **JIAM** | **Iburiatsuma** | **1.33** | **337** | A | | A | 15 06 51.7 | | |
| | comp=E,140nm,0.6s,comp=N,123nm,0.8s | | | | | | | | |
| **JCH** | **Churui** | **1.34** | **24** | P | | **Pn** | **15 06 50.2** | **+0.7** | |
| **JCH** | **Churui** | **1.34** | **24** | A | | A | 15 06 50.2 | | |
| | comp=E,15nm,2.1s,comp=N,12nm,0.9s | | | | | | | | |
| **JKEN** | **Kujiedanarisaw** | **1.38** | **210** | A | | A | 15 06 49.2 | | |
| | comp=E,45nm,1.1s,comp=N,37nm,0.7s | | | | | | | | |
| **JBT2** | **Biratori 2** | **1.39** | **352** | ⇓P | | **Pn** | **15 06 51.4** | **+1.2** | |
| **JBT2** | **Biratori 2** | **1.39** | **352** | A | | A | 15 06 51.4 | | |
| | comp=E,20nm,2.5s,comp=N,21nm,1.4s | | | | | | | | |
| **JTH** | **Tanohata** | **1.57** | **202** | A | | A | 15 06 51.8 | | |
| | comp=E,6.0nm,3.7s,comp=N,6.0nm,0.9s | | | | | | | | |
| **JNB** | **Noboribetsu** | **1.59** | **313** | ⇓P | | **Pn** | **15 06 53.4** | **+0.6** | |
| JNB | | | | ⇓S | | **Sn** | **15 07 13.2** | **+1.0** | |
| **JNB** | **Noboribetsu** | **1.59** | **313** | A | | A | 15 06 53.4 | | |
| | comp=E,18nm,1.3s,comp=N,15nm,1.4s | | | | | | | | |
| **JSR** | **Shiriuchi** | **1.66** | **275** | ⇓P | | **Pn** | **15 06 54.6** | **+0.8** | |
| JSR | | | | ⇓*e*S | | **Sn** | **15 07 15.5** | **+1.7** | |
| **JSR** | **Shiriuchi** | **1.66** | **275** | A | | A | 15 06 54.6 | | |
| | comp=E,21nm,1.1s,comp=N,15nm,2.5s | | | | | | | | |
| **JEW** | **Eniwo** | **1.68** | **329** | ⇓P | | **Pn** | **15 06 55.9** | **+1.7** | |
| **JEW** | **Eniwo** | **1.68** | **329** | A | | A | 15 06 55.9 | | |
| | comp=E,70nm,1.7s,comp=N,68nm,1.2s | | | | | | | | |
| **JSI2** | **Shiura 2** | **1.70** | **259** | A | | A | 15 06 54.9 | | |
| | comp=E,32nm,0.9s,comp=N,28nm,1.3s | | | | | | | | |
| **JKZ** | **Kuzumaki** | **1.72** | **215** | A | | A | 15 06 54.3 | | |
| | comp=E,42nm,1.8s,comp=N,41nm,1.6s | | | | | | | | |
| **JOB** | **Onbets** | **1.76** | **31** | A | | A | 15 06 56.4 | | |
| | comp=E,20nm,2.2s,comp=N,24nm,2.0s | | | | | | | | |
| **JFR** | **Furan** | **1.76** | **360** | A | | A | 15 06 56.9 | | |
| | comp=E,20nm,1.5s,comp=N,17nm,0.7s | | | | | | | | |
| **JYM2** | **Yakumo 2** | **1.82** | **294** | A | | A | 15 06 57.5 | | |
| | comp=E,12nm,2.5s,comp=N,13nm,1.0s | | | | | | | | |
| **JHHS** | **Hirosakihyakuz** | **1.86** | **247** | A | | A | 15 06 57.0 | | |
| | comp=E,54nm,2.7s,comp=N,57nm,1.7s | | | | | | | | |
| **JAH** | **Hinai** | **1.93** | **232** | A | | A | 15 06 57.7 | | |
| | comp=E,21nm,1.3s,comp=N,22nm,1.1s | | | | | | | | |
| **JOMM** | **Oshimamatsumae** | **1.96** | **275** | A | | A | 15 06 59.1 | | |
| | comp=E,10.0nm,0.9s,comp=N,6.0nm,2.4s | | | | | | | | |
| **JISS** | **Ishikarishitsu** | **2.07** | **335** | A | | A | 15 07 01.4 | | |
| | comp=E,26nm,2.8s,comp=N,30nm,1.3s | | | | | | | | |
| **JAR** | **Ashorobuto** | **2.08** | **24** | A | | A | 15 07 01.2 | | |
| | comp=E,10.0nm,0.8s,comp=N,11nm,2.3s | | | | | | | | |
| **JSZI** | **Iwateshizukuis** | **2.08** | **218** | A | | A | 15 06 59.6 | | |
| | comp=E,38nm,2.4s,comp=N,36nm,1.3s | | | | | | | | |
| **JAB** | **Ashibetsu** | **2.12** | **352** | A | | A | 15 07 02.1 | | |
| | comp=E,32nm,1.5s,comp=N,30nm,3.1s | | | | | | | | |
| **JIW** | **Iwasaki** | **2.13** | **249** | A | | A | 15 07 01.0 | | |
| | comp=E,16nm,3.0s,comp=N,21nm,1.7s | | | | | | | | |
| **JOM** | **Ohasama** | **2.17** | **208** | A | | A | 15 07 00.7 | | |
| | comp=E,26nm,1.1s,comp=N,25nm,0.7s | | | | | | | | |
| **JNTW** | **Noshirotokiwa** | **2.17** | **240** | A | | A | 15 07 01.4 | | |
| | comp=E,63nm,1.8s,comp=N,78nm,2.2s | | | | | | | | |
| **JAK** | **Akkeshi** | **2.22** | **43** | A | | A | 15 07 02.9 | | |
| | comp=E,15nm,1.4s,comp=N,14nm,2.1s | | | | | | | | |
| **JHST** | **Hiyamasetana** | **2.28** | **297** | A | | A | 15 07 04.1 | | |
| | comp=E,10.0nm,3.6s,comp=N,11nm,2.9s | | | | | | | | |
| **OFUJ** | **Ofunato** | **2.43** | **198** | A | | A | 15 07 04.2 | | |
| | comp=E,15nm,1.7s,comp=N,6.0nm,2.3s | | | | | | | | |
| **JHR** | **Hokuryu** | **2.43** | **345** | A | | A | 15 07 06.6 | | |
| | comp=E,24nm,1.7s,comp=N,24nm,1.4s | | | | | | | | |
| **JKK2** | **Kamakawa 2** | **2.47** | **2** | A | | A | 15 07 07.1 | | |
| | comp=E,9.0nm,1.8s,comp=N,8.0nm,1.3s | | | | | | | | |
| **JRG** | **Rokugo** | **2.51** | **218** | A | | A | 15 07 05.7 | | |
| | comp=E,17nm,0.8s,comp=N,21nm,2.3s | | | | | | | | |
| **JKHN** | **Kushirohamanak** | **2.53** | **48** | A | | A | 15 07 07.2 | | |
| | comp=E,12nm,2.6s,comp=N,12nm,1.9s | | | | | | | | |
| **JYW** | **Yuwa** | **2.61** | **225** | A | | A | 15 07 07.3 | | |
| | comp=E,19nm,1.5s,comp=N,24nm,2.0s | | | | | | | | |
| **JMK** | **Ichinoseki** | **2.67** | **204** | A | | A | 15 07 07.7 | | |
| | comp=E,10.0nm,2.3s,comp=N,5.0nm,2.7s | | | | | | | | |
| **JNK** | **Nakash** | **2.68** | **35** | A | | A | 15 07 09.6 | | |
| | comp=E,6.0nm,2.2s,comp=N,9.0nm,1.1s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **2.71** | **360** | P | | **Pn** | **15 07 10.8** | **+2.4** | |
| | comp=N,269nm,0.3s,baz=202,slow=13,SNR=259 | | | | | | | | |
| ASAJ | | | | S | | **Sn** | **15 07 46.0** | **+6.0** | |
| | comp=N,1μm,0.7s,baz=332,slow=23,SNR=4.1 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.71** | **360** | | | **Pn** | **15 07 09.8** | **+1.5** | |
| **JNSB** | **Nemuroshibetsu** | **2.96** | **36** | A | | A | 15 07 13.5 | | |
| | comp=E,9.0nm,3.1s,comp=N,11nm,2.3s | | | | | | | | |
| **JYK** | **Kaneyama** | **3.02** | **216** | A | | A | 15 07 13.0 | | |
| | comp=E,10.0nm,1.9s,comp=N,10.0nm,1.9s | | | | | | | | |
| **JOG3** | **Oga3** | **3.07** | **242** | A | | A | 15 07 07.3 | | |
| | comp=E,11nm,1.3s,comp=N,12nm,1.1s | | | | | | | | |
| **JOFO** | **Osakifurukawao** | **3.08** | **206** | A | | A | 15 07 13.7 | | |
| | comp=E,29nm,1.6s,comp=N,27nm,2.3s | | | | | | | | |
| **JYYZ** | **Yamagatayuza** | **3.14** | **222** | A | | A | 15 07 14.8 | | |
| | comp=E,28nm,2.6s,comp=N,23nm,2.0s | | | | | | | | |
| **JOU** | **Okura** | **3.38** | **207** | A | | A | 15 07 17.9 | | |
| | comp=E,8.0nm,1.4s,comp=N,9.0nm,2.0s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.56** | **41** | *d* iP | | **Pn** | **15 07 19.6** | **-0.3** | |
| YUK | | | | *i* S | | **Sn** | **15 07 58.7** | **-2.0** | |
| YUK | | | | | pmax | pmax | | | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| YUK | | | | | pmax | pmax | | | |
| | comp=E,303nm,0.2s | | | | | | | | |
| YUK | | | | | pmax | pmax | | | |
| | comp=Z,1μm,1.3s | | | | | | | | |
| YUK | | | | | smax | smax | | | |
| | comp=N,7μm,0.6s | | | | | | | | |
| YUK | | | | | smax | smax | | | |
| | comp=E,7μm,0.6s | | | | | | | | |
| **JYA** | **Atsumi** | **3.58** | **219** | A | | A | 15 07 20.9 | | |
| | comp=E,11nm,1.6s,comp=N,16nm,1.8s | | | | | | | | |
| **JYS** | **Shirataka** | **3.73** | **213** | A | | A | 15 07 23.0 | | |
| | comp=E,11nm,2.0s,comp=N,15nm,2.9s | | | | | | | | |
| **JMM** | **Marumori** | **3.80** | **202** | | | **Pn** | **15 07 22.9** | **-0.3** | |
| **JMST** | **Minamisoumatoc** | **3.91** | **201** | A | | A | 15 07 25.2 | | |
| | comp=E,6.0nm,1.9s,comp=N,5.0nm,1.4s | | | | | | | | |
| **JYAR** | **Yonezawaarcadi** | **3.97** | **209** | A | | A | 15 07 26.3 | | |
| | comp=E,16nm,1.4s,comp=N,14nm,1.2s | | | | | | | | |
| **SHO** | **Shikotan** | **3.97** | **50** | ⇓*i* P | | **Pn** | **15 07 24.4** | **-1.2** | |
| SHO | | | | *i* S | | **Sn** | **15 08 05.9** | **-4.9** | |
| SHO | | | | | pmax | pmax | | | |
| | comp=Z,153nm,0.3s | | | | | | | | |
| SHO | | | | | pmax | pmax | | | |
| | comp=N,117nm,0.2s | | | | | | | | |
| SHO | | | | | smax | smax | | | |
| | comp=N,2μm,0.3s | | | | | | | | |
| SHO | | | | | smax | smax | | | |
| | comp=E,938nm,0.4s | | | | | | | | |
| **JSD** | **Sado** | **4.75** | **226** | P | | **Pn** | **15 07 38.4** | **+2.1** | |
| **JSD** | **Sado** | **4.75** | **226** | Pn | | **Pn** | **15 07 38.0** | **+1.8** | |
| **KUR** | **Kuril'sk** | **5.42** | **43** | *d* iP | | **Pn** | **15 07 46.0** | **+0.6** | |
| KUR | | | | *i* S | | **Sn** | **15 08 44.4** | **-2.0** | |
| KUR | | | | | pmax | pmax | | | |
| | comp=Z,353nm,1.0s | | | | | | | | |
| KUR | | | | | pmax | pmax | | | |
| | comp=N,107nm,0.4s | | | | | | | | |
| KUR | | | | | pmax | pmax | | | |
| | comp=E,91nm,0.6s | | | | | | | | |
| KUR | | | | | smax | smax | | | |
| | comp=N,474nm,0.4s | | | | | | | | |
| KUR | | | | | smax | smax | | | |
| | comp=E,202nm,0.3s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.55** | **1** | P | | **Pn** | **15 07 49.3** | **+2.0** | |
| **YSS** | **Yuzh-Sakhalins** | **5.55** | **1** | | | **Pn** | **15 07 49.1** | **+1.8** | |
| **YSS** | **Yuzh-Sakhalins** | **5.55** | **1** | *j* eP | | **Pn** | **15 07 49.5** | **+2.2** | |
| YSS | | | | *e*S | | **Sn** | **15 08 48.4** | **-1.3** | |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,3.7s | | | | | | | | |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,180nm,0.9s | | | | | | | | |
| YSS | | | | | smax | smax | | | |
| | comp=N,90nm,0.8s | | | | | | | | |
| YSS | | | | | smax | smax | | | |
| | comp=E,80nm,0.8s | | | | | | | | |
| YSS | | | | | smax | smax | | | |
| | comp=E,500nm,3.7s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=Z,2μm,14.0s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=N,1μm,13.0s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=E,900nm,16.0s | | | | | | | | |
| **TEY** | **Ternei** | **5.70** | **312** | ⇑*e*P | | **Pn** | **15 07 50.0** | **+0.7** | |
| TEY | | | | | pmax | pmax | | | |
| | comp=N,30nm,0.8s | | | | | | | | |
| TEY | | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.8s | | | | | | | | |
| TEY | | | | | pmax | pmax | | | |
| | comp=E,80nm,0.4s | | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **5.94** | **217** | | | **Pn** | **15 07 55.1** | **+2.5** | |
| **MAJO** | **Matsushiro** | **5.94** | **217** | P | | **Pn** | **15 07 54.4** | **+1.7** | |
| **MAJO** | **Matsushiro** | **5.94** | **217** | | | **Pn** | **15 07 54.3** | **+1.6** | |
| **MAJO** | **Matsushiro** | **5.94** | **217** | *i* P | | **Pn** | **15 07 54.1** | **+1.4** | |
| **MJAR** | **Matsushiro Arr** | **5.94** | **217** | P | | **Pn** | **15 07 53.9** | **+1.3** | |
| | comp=E,51nm,0.7s,baz=33,slow=13,SNR=128 | | | | | | | | |
| MJAR | | | | | LR | LR | 15 10 35.7 | | |
| | comp=E,1μm,20.7s,baz=34,slow=42 | | | | | | | | |
| **JGF** | **Kuroka** | **7.11** | **217** | P | | **Pn** | **15 08 10.2** | **+1.5** | |
| **JGF** | **Kuroka** | **7.11** | **217** | | | **Pn** | **15 08 09.9** | **+1.2** | |
| **INU** | **Inuyama** | **7.47** | **218** | P | | **Pn** | **15 08 15.8** | **+2.2** | |
| **INU** | **Inuyama** | **7.47** | **218** | | | **Pn** | **15 08 14.5** | **+0.9** | |
| **USA0B** | **Ussuriysk Arra** | **8.30** | **293** | | | **Pn** | **15 08 25.8** | **+1.0** | |
| **USA0B** | **Ussuriysk Arra** | **8.30** | **293** | *i* P | | **Pn** | **15 08 25.9** | **+1.0** | |
| **USRK** | **Ussuriysk Ar.** | **8.30** | **293** | | | **Pn** | **15 08 25.8** | **+0.9** | |
| **USRK** | **Ussuriysk Ar.** | **8.30** | **293** | P | | **Pn** | **15 08 26.1** | **+1.2** | |
| | comp=E,67nm,0.8s,baz=100,slow=14,SNR=91 | | | | | | | | |
| USRK | | | | S | | **Sn** | **15 09 59.8** | **+2.6** | |
| | comp=E,9.2nm,0.7s,baz=103,slow=25,SNR=1.3 | | | | | | | | |
| USRK | | | | | LR | LR | 15 11 39.7 | | |
| | comp=E,1μm,20.5s,baz=131,slow=38 | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **8.57** | **196** | P | | **Pn** | **15 08 29.2** | **+0.6** | |
| | comp=E,190nm,0.6s,baz=107,slow=20,SNR=2.1 | | | | | | | | |
| JHJ | | | | S | | **Sn** | **15 09 58.7** | **-5.2** | |
| | comp=E,86nm,0.3s,baz=90,slow=20,SNR=1.4 | | | | | | | | |
| **PSTR** | **Posyet** | **8.88** | **282** | *i* P | | **Pn** | **15 08 32.6** | **-0.3** | |
| **TYV** | **Tymovskoe** | **9.47** | **0** | *e*P | | Pn | 15 08 46.4 | +5.6 | |
| TYV | | | | *e*S | | **Sn** | **15 10 30.8** | **+5.0** | |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,32nm,0.9s | | | | | | | | |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,300nm,3.4s | | | | | | | | |
| TYV | | | | | smax | smax | | | |
| | comp=N,300nm,3.2s | | | | | | | | |
| TYV | | | | | smax | smax | | | |
| | comp=E,300nm,3.2s | | | | | | | | |
| TYV | | | | | smax | smax | | | |
| | comp=N,22nm,1.6s | | | | | | | | |
| TYV | | | | | smax | smax | | | |
| | comp=E,15nm,1.6s | | | | | | | | |
| TYV | | | | | MLR | MLR | | | |
| | comp=Z,1μm,15.0s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **10.06** | **293** | P | | **Pn** | **15 08 52.9** | **+3.8** | |
| MDJ | | | | sP | | | 15 09 06.5 | | |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.1s | | | | | | | | |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,380nm,3.7s | | | | | | | | |
| MDJ | | | | | LR | LR | | | |
| | comp=Z,510nm,12.0s | | | | | | | | |
| MDJ | | | | | LR | LR | | | |
| | comp=Z,1μm,16.8s | | | | | | | | |
| MDJ | | | | | LR | LR | | | |
| | comp=Z,2μm,20.8s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **10.06** | **293** | Pn | | **Pn** | **15 08 50.7** | **+1.6** | |
| **GRNR** | **Gornyy** | **10.31** | **337** | ⇓*i* P | | **Pn** | **15 08 54.2** | **+1.8** | |
| GRNR | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| GRNR | | | | | MLR | MLR | | | |
| | comp=N,610nm,21.0s | | | | | | | | |
| GRNR | | | | | MLR | MLR | | | |
| | comp=E,440nm,21.0s | | | | | | | | |
| GRNR | | | | | MLR | MLR | | | |
| | comp=Z,610nm,18.0s | | | | | | | | |
| **JMN** | **Monobe** | **10.32** | **225** | P | | **Pn** | **15 08 54.1** | **+1.4** | |
| **JMN** | **Monobe** | **10.32** | **225** | Pn | | **Pn** | **15 08 54.7** | **+2.0** | |
| **KLR** | **Kul'dur** | **10.94** | **319** | P | | **Pn** | **15 09 03.5** | **+2.5** | |
| | comp=Z,26nm,0.8s,baz=134,slow=13,SNR=25 | | | | | | | | |
| KLR | | | | | LR | LR | 15 13 18.0 | | |
| | comp=Z,1μm,21.9s,baz=141,slow=37 | | | | | | | | |
| **KLR** | **Kul'dur** | **10.94** | **319** | *ce*P | | **Pn** | **15 09 01.0** | **0.0** | |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,33nm,0.8s | | | | | | | | |
| **BNX** | **BinXian** | **11.85** | **297** | ⇓P | | **Pn** | **15 09 15.4** | **+1.9** | |
| BNX | | | | | pmax | pmax | | | |
| | comp=Z,55nm,1.0s | | | | | | | | |
| **KSRS** | **Korea Array** | **12.02** | **256** | P | | **Pn** | **15 09 18.7** | **+2.8** | |
| | comp=Z,16nm,0.6s,baz=65,slow=14,SNR=38 | | | | | | | | |
| KSRS | | | | | LR | LR | 15 13 36.6 | | |
| | comp=Z,961nm,18.2s,baz=70,slow=36 | | | | | | | | |
| **KS19** | **Wonju Array Si** | **12.04** | **256** | Pn | | **Pn** | **15 09 17.1** | **+0.9** | |
| **KSAR** | **Wonju Array Be** | **12.06** | **256** | Pn | | **Pn** | **15 09 20.3** | **+4.0** | |
| **KSAR** | **Wonju Array Be** | **12.06** | **256** | P | | **Pn** | **15 09 20.3** | **+4.0** | |
| **JNU** | **Nakatsue** | **12.47** | **232** | P | | **Pn** | **15 09 23.9** | **+1.9** | |
| **JNU** | **Nakatsue** | **12.47** | **232** | Pn | | **Pn** | **15 09 22.3** | **+0.3** | |
| **JNU** | **Nakatsue** | **12.47** | **232** | P | | **Pn** | **15 09 23.6** | **+1.6** | |
| | comp=Z,21nm,1.1s,baz=74,slow=17,SNR=3.5 | | | | | | | | |
| **CN2** | **Changchun** | **12.88** | **286** | *e*P | | **Pn** | **15 09 28.6** | **+1.1** | |
| CN2 | | | | *e*S | | **Sn** | **15 11 49.8** | **+0.6** | |
| CN2 | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| CN2 | | | | | pmax | pmax | | | |
| | comp=Z,100nm,3.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,600nm,10.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,800nm,10.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,1μm,14.0s | | | | | | | | |
| **TJN** | **Taejon** | **12.89** | **252** | P | | **Pn** | **15 09 30.7** | **+3.0** | |
| **TJN** | **Taejon** | **12.89** | **252** | Pn | | **Pn** | **15 09 30.6** | **+2.9** | |
| **TJN** | **Taejon** | **12.89** | **252** | *i* P | | **Pn** | **15 09 27.8** | **+0.1** | |
| **SKR** | **Severo-Kuril's** | **13.18** | **41** | *e*P | | **Pn** | **15 09 32.8** | **+1.3** | |
| SKR | | | | *e*S | | **Sn** | **15 11 53.6** | **-2.9** | |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,400nm,6.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=Z,500nm,16.0s | | | | | | | | |
| **HEH** | **HeiHe** | **13.79** | **315** | *e*P | | **Pn** | **15 09 39.1** | **-0.8** | |
| HEH | | | | | pmax | pmax | | | |
| | comp=Z,37nm,0.7s | | | | | | | | |
| HEH | | | | | LR | LR | | | |
| | comp=Z,730nm,18.9s | | | | | | | | |
| HEH | | | | | LR | LR | | | |
| | comp=Z,1μm,17.6s | | | | | | | | |
| HEH | | | | | LR | LR | | | |
| | comp=Z,1μm,19.2s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **15.52** | **36** | Pn | | **Pn** | **15 09 58.9** | **-3.9** | |
| **PEA0B** | **Petropavlovsk-** | **15.52** | **36** | *i* P | | **Pn** | **15 09 59.6** | **-3.2** | |
| **PETK** | **Petropavlovsk-** | **15.52** | **36** | P | | **Pn** | **15 09 60.0** | **-2.8** | |
| | comp=Z,1.5nm,0.6s,baz=202,slow=10,SNR=8.2 | | | | | | | | |
| PETK | | | | | LR | LR | 15 16 21.9 | | |
| | comp=Z,375nm,18.6s,baz=211,slow=38 | | | | | | | | |
| **ZEA** | **Zeya** | **16.07** | **325** | *e*P | | **Pn** | **15 10 08.9** | **-0.9** | |
| ZEA | | | | | pmax | pmax | | | |
| | comp=N,40nm,0.9s | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | |
| | comp=E,30nm,0.9s | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | |
| | comp=Z,50nm,0.7s | | | | | | | | |
| ZEA | | | | | MLR | MLR | | | |
| | comp=N,300nm,15.0s | | | | | | | | |
| ZEA | | | | | MLR | MLR | | | |
| | comp=Z,500nm,15.0s | | | | | | | | |
| **HIA** | **Hailar** | **17.85** | **304** | | | **Pn** | **15 10 30.6** | **-1.5** | |
| **HIA** | **Hailar** | **17.85** | **304** | *i* P | | **Pn** | **15 10 29.8** | **-2.3** | |
| HIA | | | | | pmax | pmax | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| **JOW** | **Kunigami** | **18.73** | **224** | LR | | LR | 15 18 36.9 | | |
| | comp=Z,425nm,21.9s,baz=126,slow=39 | | | | | | | | |
| **MA2** | **Magadan** | **18.89** | **13** | P | | **Pn** | **15 10 45.6** | **+1.0** | |
| **MA2** | **Magadan** | **18.89** | **13** | P | | **P** | **15 10 42.2** | **-1.4** | |
| **MA2** | **Magadan** | **18.89** | **13** | P | | **P** | **15 10 42.3** | **-1.4** | |
| | comp=Z,15nm,0.8s,baz=194,slow=11,SNR=11 | | | | | | | | |
| MA2 | | | | | LR | LR | 15 18 59.0 | | |
| | comp=Z,182nm,19.8s,baz=199,slow=40 | | | | | | | | |
| **MA2** | **Magadan** | **18.89** | **13** | P | | **P** | **15 10 42.2** | **-1.4** | |
| MA2 | | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **MA2** | **Magadan** | **18.89** | **13** | P | | **P** | **15 10 42.1** | **-1.5** | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **19.65** | **286** | *e*P | | **P** | **15 10 50.1** | **-2.0** | |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.9s | | | | | | | | |
| XLT | | | | | LR | LR | | | |
| | comp=Z,560nm,17.6s | | | | | | | | |
| XLT | | | | | LR | LR | | | |
| | comp=Z,740nm,17.3s | | | | | | | | |
| **BJI** | **Beijing** | **20.06** | **275** | P | | **P** | **15 10 55.0** | **-1.5** | |
| BJI | | | | | pmax | pmax | | | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| **BJT** | **Baijiatuao** | **20.07** | **275** | P | | **P** | **15 10 54.6** | **-2.0** | |
| BJT | | | | | IAmb | IAmb | 15 10 56.9 | | |
| | comp=Z,48nm,0.9s | | | | | | | | |
| **BJT** | **Baijiatuao** | **20.07** | **275** | P | | **P** | **15 10 54.7** | **-2.0** | |
| BJT | | | | | pmax | pmax | | | |
| | comp=Z,48nm,0.9s | | | | | | | | |
| **TIA** | **Tai'an** | **20.50** | **264** | P | | **P** | **15 10 59.6** | **-1.7** | |
| TIA | | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.9s | | | | | | | | |
| **NJ2** | **Nanjing** | **21.15** | **251** | *e*P | | **P** | **15 11 09.6** | **+1.3** | |
| NJ2 | | | | | pmax | pmax | | | |
| | comp=Z,54nm,0.5s | | | | | | | | |
| **HNS** | **HongShan** | **21.89** | **269** | ⇓P | | **P** | **15 11 13.8** | **-2.4** | |
| HNS | | | | S | | **S** | **15 15 08.5** | **-6.9** | |
| HNS | | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,650nm,12.0s | | | | | | | | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,450nm,15.9s | | | | | | | | |
| **YAK** | **Yakutsk** | **22.08** | **344** | P | | **P** | **15 11 15.9** | **-2.0** | |
| YAK | | | | | IAmb | IAmb | 15 11 32.2 | | |
| | comp=Z,52nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | **22.08** | **344** | LR | | LR | 15 20 19.4 | | |
| | comp=Z,424nm,20.2s,baz=152,slow=38 | | | | | | | | |
| **YAK** | **Yakutsk** | **22.08** | **344** | *e*P | | **P** | **15 11 14.4** | **-3.6** | |
| YAK | | | | *e* | | | 15 11 35.2 | | |
| YAK | | | | *e*PPP | | PPP | 15 11 42.7 | | |
| YAK | | | | *e*S | | **S** | **15 15 15.7** | **-2.7** | |
| YAK | | | | *e**SS | | Sn | 15 15 22.0 | -9.3 | |
| YAK | | | | *e*SS | | **SnSn** | **15 15 38.2** | **-9.0** | |
| YAK | | | | *e*SSS | | SSS | 15 15 55.4 | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,47nm,0.9s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=N,21nm,1.5s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=E,9.0nm,1.4s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,148nm,3.3s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=N,74nm,2.4s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=E,66nm,2.9s | | | | | | | | |
| YAK | | | | | smax | smax | | | |
| | comp=E,64nm,1.6s | | | | | | | | |
| YAK | | | | | smax | smax | | | |
| | comp=N,51nm,1.2s | | | | | | | | |
| YAK | | | | | MLR | MLR | | | |
| | comp=Z,657nm,28.0s | | | | | | | | |
| YAK | | | | | MLR | MLR | | | |
| | comp=N,143nm,19.0s | | | | | | | | |
| YAK | | | | | MLR | MLR | | | |
| | comp=E,157nm,15.0s | | | | | | | | |
| **SEY** | **Seymchan** | **22.33** | **12** | *i* P | | **P** | **15 11 18.0** | **-2.7** | |
| SEY | | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **CIT** | **Chita** | **22.43** | **308** | *e*P | | **P** | **15 11 21.0** | **-1.0** | |
| CIT | | | | *e* | | | 15 11 33.8 | | |
| CIT | | | | *e* | | | 15 12 03.2 | | |
| CIT | | | | *e*S | | **S** | **15 15 27.6** | **+2.4** | |
| CIT | | | | *e* | | | 15 16 13.6 | | |
| CIT | | | | | pmax | pmax | | | |
| | comp=Z,87nm,2.6s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **23.34** | **279** | *e*P | | **P** | **15 11 30.1** | **-1.3** | |
| HHC | | | | S | | **S** | **15 15 33.6** | **-7.2** | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,25nm,0.7s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,160nm,5.5s | | | | | | | | |
| HHC | | | | | LR | LR | | | |
| | comp=Z,200nm,13.8s | | | | | | | | |
| HHC | | | | | LR | LR | | | |
| | comp=Z,460nm,14.1s | | | | | | | | |
| HHC | | | | | LR | LR | | | |
| | comp=Z,670nm,16.1s | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **24.06** | **51** | LR | | LR | 15 22 13.9 | | |
| | comp=Z,72nm,18.7s,baz=234,slow=39 | | | | | | | | |
| **YHNB** | **Yeheng** | **24.30** | **233** | P | | **P** | **15 11 43.3** | **+2.9** | |
| **YHNB** | **Yeheng** | **24.30** | **233** | P | | **P** | **15 11 39.1** | **-1.3** | |
| YHNB | | | | | IAmb | IAmb | 15 11 57.1 | | |
| | comp=Z,36nm,1.0s | | | | | | | | |
| **BOD** | **Bodaibo** | **24.50** | **322** | *e*P | | **P** | **15 11 41.4** | **-0.4** | |
| BOD | | | | | pmax | pmax | | | |
| | comp=Z,70nm,0.9s | | | | | | | | |
| **BTO** | **Baotou** | **24.54** | **279** | *e*P | | **P** | **15 11 41.6** | **-0.9** | |
| BTO | | | | pP | | **pP** | **15 11 53.4** | **-0.9** | |
| BTO | | | | PP | | **PnPn** | **15 12 15.6** | **+0.5** | |
| BTO | | | | S | | **S** | **15 15 59.6** | **-0.4** | |
| BTO | | | | | pmax | pmax | | | |
| | comp=Z,61nm,0.8s | | | | | | | | |
| BTO | | | |

comp=Z,135nm,20.0s
**H11N2 WAKE ISLAND Hy 29.88 129** T T 15 43 49.2
baz=323,slow=75,SNR=395
**H11N1 WAKE ISLAND Hy 29.89 129** T T 15 43 51.9
baz=323,slow=75,SNR=669
**H11N3 WAKE ISLAND Hy 29.90 129** T T 15 43 59.8
baz=323,slow=75,SNR=357
**MOY Mondy 30.04 304** *e*P **P 15 12 32.1 +0.4**
MOY pmax pmax
comp=Z,61nm,1.6s
**LZH Lanzhou 30.52 273** *e*P **P 15 12 36.3 +0.1**
LZH sP pP 15 12 51.8 +3.8
LZH pmax pmax
comp=Z,33nm,1.1s
LZH LR LR
comp=Z,340nm,13.7s
LZH LR LR
comp=Z,560nm,14.4s
LZH LR LR
comp=Z,580nm,14.1s
**H11S1 WAKE ISLAND Hy 30.73 131** T T 15 44 59.3
baz=324,slow=76,SNR=401
**H11S3 WAKE ISLAND Hy 30.73 131** T T 15 45 01.0
baz=324,slow=76,SNR=389
**H11S2 WAKE ISLAND Hy 30.75 131** T T 15 45 01.0
baz=324,slow=76,SNR=403
**TIXI Tiksi 31.09 352** LR LR 15 26 25.6
comp=Z,191nm,20.2s,baz=165,slow=38
**KNGR Kungurtug, Tuv 32.21 302** *i* P **P 15 12 51.4 +0.6**
KNGR pmax pmax
comp=Z,24nm,0.9s
**GTA Gaotai 32.41 281** P **P 15 12 52.9 +0.1**
GTA PcP **PcP 15 15 40.4 +1.1**
GTA pmax pmax
comp=Z,18nm,1.0s
GTA LR LR
comp=Z,330nm,17.1s
GTA LR LR
comp=Z,620nm,18.2s
GTA LR LR
comp=Z,850nm,17.8s
**CD2 Chengdu 32.83 264** P **P 15 12 55.4 -1.0**
CD2 pmax pmax
comp=Z,40nm,0.7s
CD2 pmax pmax
comp=Z,360nm,7.6s
**GYA Guiyang 33.08 255** P **P 15 12 57.8 -0.9**
GYA pmax pmax
comp=Z,41nm,0.8s
GYA LR LR
comp=Z,670nm,25.7s
**KRAR Krasnoyarsk 35.10 312** *i* P **P 15 13 16.0 +0.3**
**PZH PanZhiHua 36.66 259** P **P 15 13 29.5 -0.1**
PZH pmax pmax
comp=Z,50nm,0.6s
PZH pmax pmax
comp=Z,160nm,5.1s
**KMI Kunming 36.72 256** ⇓P **P 15 13 30.8 +0.6**
KMI pmax pmax
comp=Z,22nm,1.1s
KMI pmax pmax
comp=Z,200nm,5.8s
KMI LR LR
comp=Z,310nm,13.3s
KMI LR LR
comp=Z,290nm,20.3s
KMI LR LR
comp=Z,380nm,17.6s
**GOMU GeErMu 37.24 278** P **P 15 13 34.0 -0.7**
GOMU pmax pmax
comp=Z,51nm,0.8s
**F14K Arctic Creek 37.25 32** P **P 15 13 36.4 +2.4**
baz=255
**K13K Kusilvak Mount 37.26 38** P **P 15 13 36.1 +2.0**
baz=262
**DAV Davao City (W) 37.40 209** LR LR 15 30 57.7
comp=Z,56nm,18.8s,baz=191,slow=39
**M13K Dall Lake 37.70 41** P **P 15 13 39.8 +2.0**
baz=265
**J14K Nanvaranak Lak 37.89 37** P **P 15 13 41.5 +2.1**
baz=262
**F15K North Star Dit 37.98 32** P **P 15 13 41.4 +1.2**
F15K IAmb IAmb 15 14 51.1
comp=Z,25nm,1.8s
**F15K North Star Dit 37.98 32** P **P 15 13 42.5 +2.3**
baz=257
**G15K Niukluk 38.07 34** P **P 15 13 42.9 +1.9**
baz=258
**L14K Kuka Creek 38.12 40** P **P 15 13 43.3 +2.0**
baz=264
**SLVN Son La 38.22 250** P **P 15 13 43.1 +0.3**
SLVN IAmb IAmb 15 13 59.3
comp=Z,21nm,1.0s
**C16K Lisburne Hills 38.40 28** P **P 15 13 44.5 +0.9**
**M14K Bethel 38.41 41** P **P 15 13 44.9 +1.1**
baz=266
**L15K Ungalak Mounta 38.72 39** P **P 15 13 48.1 +1.7**
baz=265
**DGZ Jazzator, Alta 38.74 302** *c i* P **P 15 13 47.4 +0.4**
DGZ pmax pmax
comp=Z,58nm,0.8s
**K15K Wolf Creek Mou 38.76 38** P **P 15 13 48.9 +2.1**
**K15K Wolf Creek Mou 38.76 38** P **P 15 13 48.7 +1.9**
baz=264
**H16K Elim 38.76 34** P **P 15 13 48.9 +2.1**
baz=260
**G16K Koyuk River 38.85 33** P **P 15 13 49.6 +2.1**
baz=259
**M15K Kasigluk River 39.03 41** P **P 15 13 50.8 +1.7**
baz=267
**J16K Anvik River 39.29 37** P **P 15 13 52.6 +1.4**
**J16K Anvik River 39.29 37** P **P 15 13 52.9 +1.7**
baz=264
**N15K Kwethluk River 39.30 42** P **P 15 13 52.5 +1.1**
N15K IAmb IAmb 15 13 56.8
comp=Z,20nm,0.9s
**N15K Kwethluk River 39.30 42** P **P 15 13 53.0 +1.6**
baz=268
**I17K Unalakleet 39.32 36** P **P 15 13 52.5 +1.1**
baz=263
**E17K Hotham Inlet 39.39 31** P **P 15 13 53.1 +1.1**
baz=258
**O15K Ungalikthiuk R 39.42 43** P **P 15 13 53.7 +1.4**
baz=269,SNR=5.5
**G17K Kiwalik Mounta 39.57 33** P **P 15 13 54.7 +1.3**
baz=261
**L16K Owhat River 39.68 39** P **P 15 13 55.3 +0.9**
baz=267,SNR=7.4
**CHNA Chernabura Isl 39.71 50** P **P 15 13 56.4 +1.6**
baz=275
**ZAA0 Zalesovo Array 39.79 309** P **P 15 13 55.3 -0.1**
**ZALV Zalesovo Beam 39.79 309** P **P 15 13 55.3 -0.1**
ZALV **PcP 15 16 01.1 +0.3**
**ZALV Zalesovo Beam 39.79 309** P **P 15 13 55.7 +0.3**
comp=Z,47nm,0.7s,baz=89,slow=8.0,SNR=145
ZALV PcP **PcP 15 16 01.0 +0.2**
comp=Z,7.3nm,0.7s,baz=108,slow=4.8,SNR=3.5
comp=Z,47nm,0.7s
**ZALV Zalesovo Beam 39.79 309** *i* P **P 15 13 55.7 +0.3**
ZALV pmax pmax
comp=Z,48nm,0.7s
**H17K Granite Mounta 39.79 34** P **P 15 13 56.2 +0.9**
**H17K Granite Mounta 39.79 34** P **P 15 13 57.0 +1.6**
baz=262,SNR=5.5
**WMQ Urumqi 39.87 292** *e*P **P 15 13 57.3 +1.0**
WMQ pP pP 15 14 09.9 +1.5
WMQ pmax pmax
comp=Z,70nm,0.9s
WMQ pmax pmax
comp=Z,200nm,3.7s
WMQ LR LR
comp=Z,470nm,19.7s
WMQ LR LR
comp=Z,300nm,19.9s
**WMQ Urumqi 39.87 292** P **P 15 13 57.3 +1.0**
WMQ pP **pP 15 14 07.0 -1.4**
**TNCH TengChong 39.88 260** ⇑ *i* P **P 15 13 57.6 +0.8**
TNCH S **S 15 19 53.8 -4.7**
TNCH pmax pmax
comp=Z,120nm,1.1s
TNCH pmax pmax
comp=Z,310nm,4.4s
TNCH LR LR
comp=Z,260nm,4.8s
TNCH LR LR
comp=Z,260nm,7.1s
TNCH LR LR

comp=Z,210nm,16.4s
**M16K Timber Creek 39.89 40** P **P 15 13 58.2 +2.0**
baz=268
**E18K Tukpahlearik C 39.93 30** P **P 15 13 57.8 +1.4**
baz=259
**B18K Kokolik River 39.94 27** P **P 15 13 58.0 +1.6**
baz=255
**N16K Nialik Lake 39.97 41** P **P 15 13 58.5 +1.6**
baz=269,SNR=7.2
**C18K Utukok River 39.97 28** P **P 15 13 57.9 +1.0**
baz=257
**J17K VABM Dome 39.99 37** IAmb IAmb 15 14 00.9
comp=Z,22nm,1.0s
**J17K VABM Dome 39.99 37** P **P 15 13 58.4 +1.5**
baz=265
**F18K Selawik 40.15 32** P **P 15 13 60.0 +1.8**
baz=261
**L17K Donlin 40.26 39** P **P 15 14 01.1 +1.9**
baz=267,SNR=7.0
**K17K Iditarod 40.29 38** IAmb IAmb 15 14 13.2
comp=Z,26nm,1.1s
**K17K Iditarod 40.29 38** P **P 15 14 00.5 +1.0**
baz=266,SNR=8.1
**O16K Kokwok River B 40.30 43** P **P 15 14 00.7 +1.1**
baz=270
**G18K Tagagawik 40.44 33** P **P 15 14 01.5 +0.8**
baz=262,SNR=7.5
**H18K Honhosa River 40.47 34** P **P 15 14 02.1 +1.1**
H18K IAmb IAmb 15 14 06.9
comp=Z,16nm,0.8s
**H18K Honhosa River 40.47 34** P **P 15 14 02.3 +1.3**
baz=264,SNR=10
**M17K Holitna River 40.64 40** IAmb IAmb 15 14 05.7
comp=Z,16nm,0.8s
**M17K Holitna River 40.64 40** P **P 15 14 03.9 +1.5**
baz=269,SNR=8.5
**C19K Lookout Ridge 40.64 28** P **P 15 14 02.9 +0.5**
baz=258
**N17K Nushagak Hills 40.76 41** P **P 15 14 04.4 +1.0**
**N17K Nushagak Hills 40.76 41** P **P 15 14 04.5 +1.2**
baz=270
**O17K Koliganek Bris 40.81 42** P **P 15 14 04.6 +0.8**
baz=271
**ZSN Zaisan 40.86 299** *e*P **P 15 14 04.9 +0.5**
comp=Z,21nm,0.7s,baz=299
**ZSN Zaisan 40.86 299** *e*P **P 15 14 04.9 +0.5**
ZSN pmax pmax
comp=Z,21nm,0.7s
**F19K Shaleruckik Mo 40.92 31** P **P 15 14 06.2 +1.6**
baz=262
**L18K Granite Mounta 41.02 39** P **P 15 14 07.5 +2.0**
baz=269
**D19K Kuna River 41.05 29** IAmb IAmb 15 14 17.2
comp=Z,49nm,1.4s
**D19K Kuna River 41.05 29** P **P 15 14 07.0 +1.2**
baz=260
**GCSA Galena City Sc 41.06 35** P **P 15 14 07.0 +1.3**
baz=266
**G19K Purcell Mounta 41.11 33** P **P 15 14 07.2 +1.0**
baz=264,SNR=8.7
**P17K Kvichak River 41.16 43** P **P 15 14 08.0 +1.3**
baz=272
**E19K Redstone River 41.22 31** P **P 15 14 08.4 +1.3**
baz=262
**UBPT Khong Chiam 41.30 242** P **P 15 14 08.4 +0.1**
**H19K Roundabout Mou 41.31 33** IAmb IAmb 15 14 10.5
comp=Z,23nm,0.9s
**H19K Roundabout Mou 41.31 33** P **P 15 14 09.4 +1.6**
baz=265
**N18K Kilae Creek 41.39 41** P **P 15 14 10.2 +1.5**
**N18K Kilae Creek 41.39 41** P **P 15 14 10.5 +1.9**
baz=271
**M18K Stony River 41.42 40** P **P 15 14 10.2 +1.4**
baz=270
**CRAI Chiangrai 41.45 252** P **P 15 14 09.5 -0.1**
**Q17K Contact Creek 41.50 45** P **P 15 14 10.8 +1.2**
baz=274
**J19K Poorman 41.56 36** IAmb IAmb 15 14 13.1
comp=Z,33nm,0.9s
**J19K Poorman 41.56 36** P **P 15 14 11.2 +1.3**
baz=268,SNR=40
**D20K Etivluk River 41.63 29** P **P 15 14 09.8 -0.7**
baz=261
**B20K Mede River 41.66 27** P **P 15 14 10.7 +0.1**
baz=259
**E20K Nigu River 41.72 29** P **P 15 14 10.7 -0.6**
baz=262
**F20K Avaraart Lake 41.75 31** P **P 15 14 12.4 +1.0**
baz=264
**O18K Koktuh Hills 41.76 42** P **P 15 14 11.5 -0.1**
baz=272
**P18K Big Mountain, 41.77 43** P **P 15 14 12.4 +0.6**
baz=273
**L19K White Mountain 41.88 39** P **P 15 14 14.3 +1.8**
**L19K White Mountain 41.88 39** P **P 15 14 13.7 +1.1**
baz=270
**Q18K Katmai Hardscr 41.93 44** P **P 15 14 13.7 +0.5**
baz=274
**H20K Anotleneega Mo 41.96 34** P **P 15 14 14.1 +0.9**
baz=266
**N19K Bonanza Creek 42.08 41** P **P 15 14 13.0 -1.3**
**N19K Bonanza Creek 42.08 41** P **P 15 14 15.1 +0.8**
baz=272
**I20K Naaghedeneel 42.09 35** IAmb IAmb 15 14 25.3
comp=Z,34nm,1.0s
**I20K Naaghedeneel 42.09 35** P **P 15 14 15.0 +0.8**
baz=268
**M19K Big River Lodg 42.10 39** P **P 15 14 15.5 +1.1**
baz=271
**J20K Nowinta River 42.22 36** IAmb IAmb 15 14 18.8
comp=Z,28nm,0.8s
**J20K Nowinta River 42.22 36** P **P 15 14 16.6 +1.3**
baz=269,SNR=36
**K20K Telida 42.24 37** P **P 15 14 17.0 +1.5**
baz=270,SNR=13
**R18K Karluk 42.32 45** P **P 15 14 17.4 +1.3**
baz=276
**L20K Farewell, AK 42.33 38** P **P 15 14 17.9 +1.7**
baz=271,SNR=5.5
**C21K Knifeblade Rid 42.35 28** P **P 15 14 17.3 +1.0**
baz=262
**B21K Ikpikpuk River 42.47 27** P **P 15 14 18.0 +0.7**
baz=262
**G21K Allakaket 42.58 32** P **P 15 14 18.7 +0.5**
baz=267,SNR=13
**F21K Alatna River 42.64 31** P **P 15 14 19.5 +0.8**
baz=266
**M20K Styx River 42.69 39** P **P 15 14 19.8 +0.6**
baz=272
**MK31 Makanchi Array 42.73 298** P **P 15 14 19.9 +0.2**
MK31 IAmb IAmb 15 14 21.0
comp=Z,34nm,0.8s
**MK31 Makanchi Array 42.73 298** *i* P **P 15 14 19.1 -0.6**
**MKAR Makanchi Array 42.73 298** P **P 15 14 19.8 +0.1**
**MKAR Makanchi Array 42.73 298** P **P 15 14 20.0 +0.3**
comp=Z,31nm,0.7s,baz=84,slow=9.6,SNR=269
MKAR PcP **PcP 15 16 10.2 -0.4**
comp=Z,1.8nm,0.5s,baz=17,slow=3.0,SNR=1.7
MKAR LR LR 15 33 33.3
comp=Z,335nm,19.2s,baz=106,slow=38
comp=Z,31nm,0.7s
**H21K Melozitna River 42.83 33** P **P 15 14 21.1 +0.8**
baz=268,SNR=12
**LSA Lhasa 42.90 271** P **P 15 14 22.0 +0.2**
LSA pmax pmax
comp=Z,20nm,0.7s
**LSA Lhasa 42.90 271** IAmb IAmb 15 14 24.7
comp=Z,17nm,0.6s
**MAKZ Makanchi 42.93 298** P **P 15 14 21.5 +0.2**
MAKZ IAmb IAmb 15 14 22.7
comp=Z,48nm,0.9s
**MAKZ Makanchi 42.93 298** P **P 15 14 21.7 +0.4**
**MAKZ Makanchi 42.93 298** ⇑P **P 15 14 21.7 +0.4**
MAKZ sP **pP 15 14 35.3 +1.8**
MAKZ PcP **PcP 15 16 10.8 -0.5**
**OHAK Old Harbor 42.98 46** P **P 15 14 22.6 +1.0**
**OHAK Old Harbor 42.98 46** P **P 15 14 22.5 +1.0**
baz=277
**O20K Slope Mountain 43.04 42** P **P 15 14 23.2 +1.1**
baz=274
**SEM Semipalatinsk 43.15 304** *e*P **P 15 14 23.0 -0.3**
comp=Z,15nm,0.6s,baz=304
**SEM Semipalatinsk 43.15 304** *e*P **P 15 14 23.0 -0.3**
SEM pmax pmax
comp=Z,15nm,0.6s
**F22K John River 43.16 31** P **P 15 14 23.4 +0.5**
baz=267

**I21K Tanana 43.16 34** P **P 15 14 24.0 +1.1**
baz=270
**N20K Mount Spurr 43.17 40** P **P 15 14 23.8 +0.7**
baz=274
**SPCR Spurr Chakacha 43.17 40** P **P 15 14 23.9 +0.8**
baz=274
**KDAK Kodiak Island 43.29 45** P **P 15 14 24.2 +0.2**
KDAK IAmb IAmb 15 14 55.3
comp=Z,58nm,1.3s
**KDAK Kodiak Island 43.29 45** P **P 15 14 25.5 +1.4**
baz=277
**KDAK Kodiak Island 43.29 45** P **P 15 14 24.2 +0.2**
KDAK pmax pmax
comp=Z,58nm,1.3s
**KDAK Kodiak Island 43.29 45** P **P 15 14 25.2 +1.2**
KDAK PcP **PcP 15 16 13.2 +1.0**
**Q20K Shuyak Island 43.30 44** P **P 15 14 24.1 +0.1**
baz=276
**SYI Shuyak Island 43.30 44** P **P 15 14 24.9 +0.8**
**E22K Anaktuvuk Pass 43.33 30** P **P 15 14 25.1 +0.8**
baz=266
**G22K Bettles 43.39 32** P **P 15 14 25.0 +0.3**
baz=268
**H22K Ishtalitna Cre 43.42 33** P **P 15 14 25.8 +0.8**
baz=269
**SKT Skwentna 43.44 39** P **P 15 14 26.7 +1.4**
**SKT Skwentna 43.44 39** P **P 15 14 26.4 +1.1**
baz=273
**BPAW Bear Paw Mtn. 43.60 36** P **P 15 14 27.8 +1.3**
baz=272,SNR=11
**CM31 Chiang Mai Arr 43.63 252** IAmb IAmb 15 14 44.0
comp=Z,28nm,1.4s
**CMAR Chiang Mai Arr 43.63 252** P **P 15 14 27.6 +0.3**
**CMAR Chiang Mai Arr 43.63 252** P **P 15 14 27.8 +0.6**
comp=Z,4.0nm,0.6s,baz=44,slow=7.5,SNR=33
CMAR LR LR 15 32 30.2
comp=Z,191nm,21.7s,baz=55,slow=36
comp=Z,4.0nm,0.6s
**CMAR Chiang Mai Arr 43.63 252** *i* P **P 15 14 28.1 +0.9**
CMAR pmax pmax
comp=Z,5.0nm,0.7s
**MLY Manley 43.69 34** P **P 15 14 28.3 +1.0**
baz=271,SNR=28
**CNPM China Poot 43.79 42** P **P 15 14 26.8 -1.3**
CNPM IAmb IAmb 15 14 59.6
comp=Z,48nm,1.3s
**SUA Susitna One 43.85 40** P **P 15 14 27.9 -0.8**
SUA IAmb IAmb 15 14 33.2
comp=Z,15nm,0.8s
**SUA Susitna One 43.85 40** P **P 15 14 30.2 +1.5**
baz=274,SNR=6.1
**G23K Bananza Creek 43.98 32** P **P 15 14 30.0 +0.5**
baz=270,SNR=5.6
**CUT Chulitna 44.01 38** P **P 15 14 29.2 -0.6**
CUT IAmb IAmb 15 15 15.1
comp=Z,48nm,1.3s
**BRSE Bradley Lake S 44.02 42** P **P 15 14 31.4 +1.5**
baz=276
**KURK Kurchatov 44.09 305** P **P 15 14 30.6 0.0**
**KURK Kurchatov 44.09 305** *c e* P **P 15 14 30.6 0.0**
KURK pmax pmax
comp=Z,126nm,1.3s
**KURK Kurchatov 44.09 305** P **P 15 14 30.7 +0.2**
KURK sP **pP 15 14 44.9 +2.1**
**KURBB Kurchatov Arra 44.17 305** P **P 15 14 31.5 +0.3**
comp=Z,69nm,0.6s,baz=78,slow=8.6,SNR=173
comp=Z,69nm,0.6s
**KURBB Kurchatov Arra 44.17 305** P **P 15 14 30.8 -0.4**
**H23K Yukon River 44.18 33** P **P 15 14 32.3 +1.2**
baz=271,SNR=13
**I23K Minto, Yukon-K 44.27 34** P **P 15 14 33.2 +1.4**
baz=272,SNR=8.7
**RC01 Rabbit Creek A 44.37 40** P **P 15 14 33.3 +0.6**
RC01 IAmb IAmb 15 14 37.1
comp=Z,14nm,0.9s
**RC01 Rabbit Creek A 44.37 40** P **P 15 14 33.9 +1.2**
baz=276
**NEA2 Nenana 44.42 35** P **P 15 14 34.5 +1.4**
baz=273,SNR=24
**MCK McKinley 44.52 36** P **P 15 14 34.5 +0.6**
baz=274,SNR=7.1
**SHL Shillong 44.53 266** P **P 15 14 34.9 +0.3**
SHL IAmb IAmb 15 14 40.5
comp=Z,21nm,0.9s
**SHL Shillong 44.53 266** P **P 15 14 34.9 +0.3**
SHL pmax pmax
comp=Z,21nm,0.9s
**RND Reindeer 44.58 37** IAmb IAmb 15 14 36.4
comp=Z,17nm,0.9s
**PMR Palmer 44.61 39** P **P 15 14 35.5 +0.9**
baz=276
**SEW Seward 44.62 41** P **P 15 14 35.5 +0.9**
baz=277
**GHO Glory Hole Cre 44.69 39** IAmb IAmb 15 14 37.6
comp=Z,20nm,0.8s
**MDM Murphy Dome 44.76 34** P **P 15 14 37.6 +1.9**
MDM IAmb IAmb 15 14 38.5
comp=Z,25nm,0.8s
**WAT1 Susitna Watana 44.77 37** P **P 15 14 36.7 +0.8**
baz=275
**H24K Noodor Dome 44.86 33** IAmb IAmb 15 14 40.3
comp=Z,25nm,0.8s
**H24K Noodor Dome 44.86 33** P **P 15 14 37.3 +0.7**
baz=272,SNR=12
**COLA College 44.92 35** P **P 15 14 38.1 +1.1**
**COLA College 44.92 35** P **P 15 14 38.1 +1.1**
baz=274
**COLA College 44.92 35** *c i* P **P 15 14 38.3 +1.3**
COLA pmax pmax
comp=Z,44nm,0.9s
**COLA College 44.92 35** P **P 15 14 38.9 +1.9**
**KNK Knik Glacier 44.95 39** P **P 15 14 37.8 +0.5**
baz=276
**SML Sawmill 44.97 39** IAmb IAmb 15 15 02.7
comp=Z,24nm,1.1s
**SML Sawmill 44.97 39** P **P 15 14 38.2 +0.7**
baz=276,SNR=5.6
**G24K Hadweenzic Riv 44.99 32** P **P 15 14 37.0 -0.6**
baz=272
**PWL Port Wells 45.08 40** P **P 15 14 39.2 +0.9**
PWL IAmb IAmb 15 14 42.6
comp=Z,23nm,1.1s
**PWL Port Wells 45.08 40** P **P 15 14 38.0 -0.3**
baz=277
**POKR Poker Plat Res 45.09 34** P **P 15 14 39.1 +0.7**
baz=274,SNR=25
**FAKI Fak Fak 45.11 195** P **P 15 14 40.8 +1.8**
**M23K Glacier View 45.26 39** P **P 15 14 40.4 +0.7**
baz=277
**DHY Denali Highway 45.28 37** IAmb IAmb 15 14 42.2
comp=Z,15nm,0.8s
**DHY Denali Highway 45.28 37** P **P 15 14 40.7 +0.7**
baz=276,SNR=8.0
**ILAR Eielson Array 45.34 35** P **P 15 14 40.5 +0.2**
**ILAR Eielson Array 45.34 35** P **P 15 14 41.4 +1.0**
comp=Z,22nm,0.9s,baz=276,slow=9.0,SNR=64
ILAR PcP **PcP 15 16 18.5 -0.6**
comp=Z,1.3nm,0.8s,baz=290,slow=3.8,SNR=1.1
ILAR LR LR 15 34 51.8
comp=Z,90nm,21.8s,baz=272,slow=38
comp=Z,22nm,0.9s
**HDA Harding Lake 45.35 35** IAmb IAmb 15 14 42.2
comp=Z,12nm,0.8s
**HDA Harding Lake 45.35 35** P **P 15 14 41.1 +0.7**
baz=275,SNR=6.4
**SCM Sheep Creek Mo 45.44 39** IAmb IAmb 15 14 43.7
comp=Z,17nm,0.9s
**SCM Sheep Creek Mo 45.44 39** P **P 15 14 42.0 +0.7**
baz=277
**GLI Glacier Island 45.68 40** P **P 15 14 43.9 +0.8**
baz=278
**H25L Birch Creek 45.68 32** P **P 15 14 43.7 +0.8**
baz=274
**PDGK Podgornoye 45.68 295** P **P 15 14 43.0 -0.5**
**SHLS Shalkode 45.76 294** *e*P **P 15 14 42.0 -2.1**
comp=Z,18nm,0.6s,baz=294
**SHLS Shalkode 45.76 294** *e*P **P 15 14 42.0 -2.1**
SHLS pmax pmax
comp=Z,18nm,0.6s
**TDK Taldyqorghan 45.85 297** *e*P **P 15 14 45.2 +0.5**
comp=Z,19nm,0.6s,baz=297
**TDK Taldyqorghan 45.85 297** *e*P **P 15 14 45.2 +0.5**
TDK pmax pmax
comp=Z,19nm,0.6s
**PRP Porcupine Dome 45.85 33** P **P 15 14 46.0 +1.5**
**PRP Porcupine Dome 45.85 33** P **P 15 14 45.0 +0.5**
baz=275,SNR=12

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| K24K | Donnelly Dome | 45.92 | 36 | P | P | 15 14 45.7 | +0.8 | | |
| | baz=276,SNR=5.5 | | | | | | | | |
| M24K | Tolsona, Glenn | 45.94 | 38 | IAmb | IAmb | 15 14 50.4 | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| M24K | Tolsona, Glenn | 45.94 | 38 | P | P | 15 14 46.3 | +1.1 | | |
| | baz=278 | | | | | | | | |
| J25K | Salcha River, | 46.01 | 35 | P | P | 15 14 45.8 | +0.1 | | |
| | baz=276 | | | | | | | | |
| UZB | Uzynbulak | 46.07 | 294⇑ | *i*P | P | 15 14 46.6 | 0.0 | | |
| | baz=294 | | | | | | | | |
| UZB | Uzynbulak | 46.07 | 294 | *c i*P | P | 15 14 46.5 | 0.0 | | |
| KLU | Klutina | 46.15 | 39 | IAmb | IAmb | 15 14 52.5 | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| KLU | Klutina | 46.15 | 39 | P | P | 15 14 47.5 | +0.6 | | |
| | baz=278,SNR=8.6 | | | | | | | | |
| PAX | Paxson | 46.16 | 37 | P | P | 15 14 46.5 | -0.4 | | |
| | baz=277 | | | | | | | | |
| KPKS | Kokpek | 46.19 | 295 | *e*P | P | 15 14 47.8 | +0.3 | | |
| | comp=Z,16nm,0.7s,baz=295 | | | | | | | | |
| KPKS | Kokpek | 46.19 | 295 | *e*P | P | 15 14 47.7 | +0.3 | | |
| KPKS | | | | pmax | pmax | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| HARP | HAARP | 46.38 | 38 | P | P | 15 14 49.0 | +0.4 | | |
| | baz=278 | | | | | | | | |
| ZHN | Zhinishke | 46.46 | 295 | *e*P | P | 15 14 49.9 | +0.3 | | |
| | comp=Z,13nm,0.7s,baz=295 | | | | | | | | |
| ZHN | Zhinishke | 46.46 | 295 | *e*P | P | 15 14 49.9 | +0.3 | | |
| ZHN | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| ARXS | Arharly | 46.51 | 296 | *e*P | P | 15 14 50.1 | +0.2 | | |
| SATY | Saty | 46.52 | 295 | *e*P | P | 15 14 50.5 | +0.4 | | |
| | comp=Z,15nm,0.7s,baz=294 | | | | | | | | |
| SATY | Saty | 46.52 | 295 | *e*P | P | 15 14 50.5 | +0.4 | | |
| SATY | | | | pmax | pmax | | | | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| WUS | Wushi | 46.64 | 292 | P | P | 15 14 52.0 | +0.9 | | |
| WUS | | | | sP | pP | 15 15 06.1 | +2.7 | | |
| SCRK | Sand Creek | 46.68 | 36 | IAmb | IAmb | 15 14 52.9 | | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| SCRK | Sand Creek | 46.68 | 36 | P | P | 15 14 51.7 | +0.6 | | |
| | baz=278,SNR=11 | | | | | | | | |
| N25K | Chitina, Valde | 46.76 | 39 | P | P | 15 14 53.0 | +1.4 | | |
| | baz=279 | | | | | | | | |
| J26L | Joseph Creek | 46.80 | 35 | P | P | 15 14 52.5 | +0.6 | | |
| | baz=278 | | | | | | | | |
| BMRM | Bremner River | 46.86 | 40 | P | P | 15 14 53.3 | +0.8 | | |
| | baz=280 | | | | | | | | |
| I26K | Coal Creek Min | 46.86 | 34 | IAmb | IAmb | 15 15 22.9 | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| I26K | Coal Creek Min | 46.86 | 34 | P | P | 15 14 52.8 | +0.5 | | |
| | baz=277 | | | | | | | | |
| L26K | Log Cabin Wild | 47.10 | 37 | IAmb | IAmb | 15 14 57.3 | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| L26K | Log Cabin Wild | 47.10 | 37 | P | P | 15 14 55.5 | +1.2 | | |
| | baz=279,SNR=6.3 | | | | | | | | |
| KAIM | Kayak Island | 47.15 | 41 | P | P | 15 14 55.8 | +1.2 | | |
| | baz=281 | | | | | | | | |
| CHKK | Chushkaly | 47.20 | 296 | *e*P | P | 15 14 55.4 | +0.1 | | |
| | baz=296 | | | | | | | | |
| CHKK | Chushkaly | 47.20 | 296 | *e*P | P | 15 14 55.4 | +0.1 | | |
| M26K | Nabesna, AK | 47.37 | 38 | IAmb | IAmb | 15 15 09.4 | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| M26K | Nabesna, AK | 47.37 | 38 | P | P | 15 14 57.5 | +1.2 | | |
| | baz=280,SNR=8.6 | | | | | | | | |
| MDOK | Medeo | 47.41 | 295 | *e*P | P | 15 14 57.5 | +0.4 | | |
| | baz=295 | | | | | | | | |
| MDOK | Medeo | 47.41 | 295 | *e*P | P | 15 14 57.4 | +0.4 | | |
| H27K | Steamboat Moun | 47.41 | 32 | P | P | 15 14 57.8 | +1.2 | | |
| | baz=278,SNR=5.3 | | | | | | | | |
| TARG | Taragay, Kyrgy | 47.42 | 293 | P | P | 15 14 58.1 | +0.6 | | |
| TARG | Taragay, Kyrgy | 47.42 | 293 | P | P | 15 14 58.1 | +0.6 | | |
| TARG | | | | pmax | pmax | | | | |
| | comp=Z,40nm,0.7s | | | | | | | | |
| I27K | Kandik River | 47.46 | 33 | P | P | 15 14 58.7 | +1.7 | | |
| | baz=278 | | | | | | | | |
| AAA | Alma-Ata | 47.48 | 295 | *e*P | P | 15 14 58.0 | +0.4 | | |
| | comp=Z,18nm,0.6s,baz=295 | | | | | | | | |
| AAA | Alma-Ata | 47.48 | 295 | *e*P | P | 15 14 57.9 | +0.4 | | |
| AAA | | | | pmax | pmax | | | | |
| | comp=Z,18nm,0.6s | | | | | | | | |
| K27K | Chicken | 47.51 | 35 | IAmb | IAmb | 15 15 00.2 | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| K27K | Chicken | 47.51 | 35 | P | P | 15 14 58.6 | +1.3 | | |
| | baz=279 | | | | | | | | |
| TNSS | Tian-Shan | 47.52 | 295 | *e*P | P | 15 14 58.4 | +0.1 | | |
| | baz=295 | | | | | | | | |
| TNSS | Tian-Shan | 47.52 | 295 | *e*P | P | 15 14 58.3 | +0.1 | | |
| MCARA | McCarthy VSAT | 47.54 | 39 | P | P | 15 14 58.7 | +1.0 | | |
| MCARA | | | | IAmb | IAmb | 15 15 19.6 | | | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| MCARA | McCarthy VSAT | 47.54 | 39 | P | P | 15 14 59.1 | +1.4 | | |
| | baz=281 | | | | | | | | |
| CRQM | Cirque | 47.61 | 40 | IAmb | IAmb | 15 15 22.0 | | | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| KUU | Kurty | 47.62 | 296 | *e*P | P | 15 14 58.8 | +0.2 | | |
| | comp=Z,23nm,0.9s,baz=296 | | | | | | | | |
| KUU | Kurty | 47.62 | 296 | *e*P | P | 15 14 58.8 | +0.2 | | |
| KUU | | | | pmax | pmax | | | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| CRQE | Cirque | 47.63 | 40 | P | P | 15 14 59.9 | +1.4 | | |
| | baz=281 | | | | | | | | |
| EGAK | Eagle | 47.78 | 34 | IAmb | IAmb | 15 15 01.7 | | | |
| | comp=Z,30nm,1.5s | | | | | | | | |
| EGAK | Eagle | 47.78 | 34 | P | P | 15 15 00.9 | +1.5 | | |
| | baz=279,SNR=7.8 | | | | | | | | |
| L27K | Beaver Creek, | 47.78 | 37 | IAmb | IAmb | 15 15 05.2 | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| L27K | Beaver Creek, | 47.78 | 37 | P | P | 15 15 01.2 | +1.6 | | |
| | baz=280,SNR=16 | | | | | | | | |
| BCAR | Beaver Creek A | 47.80 | 37 | P | P | 15 15 01.3 | +1.6 | | |
| F28M | Old Crow | 47.87 | 30 | P | P | 15 15 01.4 | +1.3 | | |
| | baz=278 | | | | | | | | |
| M27K | Edge Creek, AK | 47.89 | 37 | P | P | 15 15 02.1 | +1.6 | | |
| M27K | | | | IAmb | IAmb | 15 15 06.1 | | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| M27K | Edge Creek, AK | 47.89 | 37 | P | P | 15 15 01.7 | +1.2 | | |
| | baz=281 | | | | | | | | |
| I28M | Miner Creek | 48.18 | 33 | P | P | 15 15 03.9 | +1.3 | | |
| I28M | Miner Creek | 48.18 | 33 | P | P | 15 15 04.1 | +1.5 | | |
| | baz=280,SNR=14 | | | | | | | | |
| ULHL | Ulahol | 48.30 | 294 | P | P | 15 15 08.0 | +3.9 | | |
| | SNR=8.4 | | | | | | | | |
| BVAR | Borovoye Array | 48.41 | 310 | P | P | 15 15 05.0 | +0.5 | | |
| | comp=Z,16nm,0.5s,baz=78,slow=9.2,SNR=52 | | | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| CTG | Chitna Glacier | 48.43 | 39 | P | P | 15 15 05.7 | +1.0 | | |
| | baz=283 | | | | | | | | |
| CTGM | Chitina Glacie | 48.43 | 39 | IAmb | IAmb | 15 15 38.2 | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| BRVK | Borovoye | 48.46 | 310 | P | P | 15 15 04.7 | -0.2 | | |
| BRVK | | | | IAmb | IAmb | 15 15 24.9 | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| BRVK | Borovoye | 48.46 | 310 | P | P | 15 15 04.7 | -0.2 | | |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| BRVK | Borovoye | 48.46 | 310 | P | P | 15 15 05.3 | +0.4 | | |
| TKM2 | Tokmak 2 | 48.49 | 295 | P | P | 15 15 06.5 | +1.1 | | |
| | SNR=56 | | | | | | | | |
| TKM2 | Tokmak 2 | 48.49 | 295 | P | P | 15 15 05.2 | -0.3 | | |
| E29M | Blow River | 48.49 | 29 | P | P | 15 15 06.0 | +1.2 | | |
| | baz=279 | | | | | | | | |
| DAWY | Dawson | 48.66 | 35 | P | P | 15 15 07.7 | +1.4 | | |
| | baz=282 | | | | | | | | |
| H29M | Whitestone | 48.67 | 32 | IAmb | IAmb | 15 15 09.6 | | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| H29M | Whitestone | 48.67 | 32 | P | P | 15 15 06.8 | +0.4 | | |
| | baz=280,SNR=5.4 | | | | | | | | |
| G29M | Pine Creek | 48.69 | 31 | P | P | 15 15 06.9 | +0.4 | | |
| | baz=280 | | | | | | | | |
| OTUK | Ortayu | 48.72 | 303 | P | P | 15 15 06.8 | -0.2 | | |
| BTLS | Baital | 48.74 | 299⇑ | *i*P | P | 15 15 07.1 | 0.0 | | |
| | baz=299 | | | | | | | | |
| BTLS | Baital | 48.74 | 299 | *c i*P | P | 15 15 07.1 | 0.0 | | |
| NRN | Naryn | 48.79 | 293 | IAmb | IAmb | 15 15 56.1 | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| I29M | Ogilvie Camp, | 48.86 | 33 | P | P | 15 15 09.8 | +2.0 | | |
| I29M | | | | IAmb | IAmb | 15 15 10.7 | | | |
| | comp=Z,25nm,1.1s | | | | | | | | |
| I29M | Ogilvie Camp, | 48.86 | 33 | P | P | 15 15 08.6 | +0.8 | | |
| | baz=281,SNR=16 | | | | | | | | |
| SGDS | Sogindy | 48.94 | 296⇑ | *i*P | P | 15 15 09.1 | +0.4 | | |
| | baz=296 | | | | | | | | |
| SGDS | Sogindy | 48.94 | 296 | *c i*P | P | 15 15 09.1 | +0.4 | | |
| O28M | Mount Upton | 49.02 | 39 | P | P | 15 15 09.8 | +0.4 | | |
| | baz=284 | | | | | | | | |
| KBK | Karagaybulak | 49.03 | 295 | P | P | 15 15 10.5 | +0.9 | | |
| | SNR=42 | | | | | | | | |
| USP | Ospenovka | 49.10 | 296 | P | P | 15 15 10.5 | +0.5 | | |
| | SNR=27 | | | | | | | | |
| EPYK | Eagle Plains | 49.30 | 32 | P | P | 15 15 11.9 | +0.7 | | |
| | baz=282,SNR=24 | | | | | | | | |
| AAK | Ala-Archa | 49.34 | 295 | P | P | 15 15 12.5 | +0.5 | | |
| | SNR=11 | | | | | | | | |
| AAK | Ala-Archa | 49.34 | 295 | P | P | 15 15 11.6 | -0.4 | | |
| AAK | Ala-Archa | 49.34 | 295 | LR | LR | 15 37 56.2 | | | |
| | comp=Z,340nm,19.8s,baz=110,slow=38 | | | | | | | | |
| AAK | Ala-Archa | 49.34 | 295 | *ce*P | P | 15 15 12.1 | +0.1 | | |
| AAK | | | | pmax | pmax | | | | |
| | comp=Z,41nm,1.7s | | | | | | | | |
| AAK | Ala-Archa | 49.34 | 295 | P | P | 15 15 12.4 | +0.4 | | |
| G30M | tAoh Zraii Nji | 49.37 | 31 | P | P | 15 15 12.4 | +0.7 | | |
| | baz=282 | | | | | | | | |
| F30M | Barrier River | 49.41 | 30 | P | P | 15 15 13.1 | +1.1 | | |
| | baz=282,SNR=19 | | | | | | | | |
| M29M | Somme Creek | 49.42 | 37 | P | P | 15 15 13.1 | +0.8 | | |
| | baz=284 | | | | | | | | |
| K29M | Barlow Dome | 49.52 | 35 | IAmb | IAmb | 15 15 16.0 | | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| K29M | Barlow Dome | 49.52 | 35 | P | P | 15 15 13.9 | +0.9 | | |
| | baz=283,SNR=9.9 | | | | | | | | |
| KSH | Kashi | 49.59 | 291 | P | P | 15 15 17.8 | +3.9 | | |
| KSH | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=Z,1μm,22.7s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=Z,540nm,22.0s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=Z,410nm,21.0s | | | | | | | | |
| YUK4 | Talbot Arm | 49.61 | 38 | P | P | 15 15 15.2 | +1.5 | | |
| | baz=284 | | | | | | | | |
| I30M | Mount Dempster | 49.69 | 33 | P | P | 15 15 15.3 | +1.1 | | |
| | baz=283,SNR=31 | | | | | | | | |
| EKS2 | Erkin-Say | 49.82 | 296 | P | P | 15 15 16.1 | +0.6 | | |
| | SNR=22 | | | | | | | | |
| J30M | Hart River | 49.85 | 34 | P | P | 15 15 16.7 | +1.2 | | |
| | baz=284 | | | | | | | | |
| AML | Almayashu | 50.09 | 295 | P | P | 15 15 18.9 | +0.9 | | |
| | SNR=19 | | | | | | | | |
| INK | Inuvik | 50.10 | 29 | LR | LR | 15 38 45.3 | | | |
| | comp=Z,124nm,18.7s,baz=248,slow=39 | | | | | | | | |
| INK | Inuvik | 50.10 | 29 | P | P | 15 15 17.8 | +0.7 | | |
| | baz=283,SNR=13 | | | | | | | | |
| G31M | Satah River | 50.13 | 31 | P | P | 15 15 18.3 | +0.9 | | |
| | baz=283,SNR=18 | | | | | | | | |
| F31M | Tsiigehtchic | 50.21 | 30 | P | P | 15 15 18.6 | +0.6 | | |
| | baz=283,SNR=7.8 | | | | | | | | |
| N30M | Aishikik Lake | 50.30 | 38 | P | P | 15 15 19.4 | +0.5 | | |
| | baz=286 | | | | | | | | |
| P29M | Windy Craggy | 50.50 | 40 | IAmb | IAmb | 15 15 24.6 | | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| P29M | Windy Craggy | 50.50 | 40 | P | P | 15 15 20.3 | 0.0 | | |
| | baz=286 | | | | | | | | |
| P30M | Million Dollar | 50.73 | 40 | P | P | 15 15 23.6 | +1.4 | | |
| | baz=287 | | | | | | | | |
| N31M | Braeburn, Yuko | 50.90 | 38 | IAmb | IAmb | 15 15 26.9 | | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| N31M | Braeburn, Yuko | 50.90 | 38 | P | P | 15 15 24.4 | +1.1 | | |
| | baz=286,SNR=6.9 | | | | | | | | |
| ARSB | Arslanbob | 50.91 | 295 | P | P | 15 15 23.9 | +0.1 | | |
| ARSB | | | | IAmb | IAmb | 15 15 25.7 | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| ARSB | Arslanbob | 50.91 | 295 | P | P | 15 15 23.9 | +0.1 | | |
| ARSB | | | | pmax | pmax | | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| O30N | Mendenhall | 50.96 | 39 | P | P | 15 15 25.5 | +1.7 | | |
| | baz=287 | | | | | | | | |
| PLBC | Pleasant Camp | 51.22 | 40 | P | P | 15 15 26.7 | +1.1 | | |
| | baz=288 | | | | | | | | |
| M31M | Drury Creek, Y | 51.32 | 37 | P | P | 15 15 28.1 | +1.6 | | |
| | baz=287,SNR=5.7 | | | | | | | | |
| WHY | Whitehorse | 51.56 | 39 | IAmb | IAmb | 15 15 31.6 | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| WHY | Whitehorse | 51.56 | 39 | P | P | 15 15 29.4 | +1.0 | | |
| | baz=288,SNR=5.5 | | | | | | | | |
| FARO | Faro, Yukon | 51.78 | 36 | P | P | 15 15 31.5 | +1.6 | | |
| | baz=288 | | | | | | | | |
| KK31 | Karatay Array | 51.84 | 298 | *i*P | P | 15 15 30.3 | -0.3 | | |
| KKAR | Karatay Array | 51.84 | 298 | P | P | 15 15 30.0 | -0.6 | | |
| KKAR | Karatay Array | 51.84 | 298 | P | P | 15 15 30.0 | -0.6 | | |
| A36M | Sachs Harbour | 51.88 | 23 | P | P | 15 15 31.1 | +0.7 | | |
| | baz=287,SNR=14 | | | | | | | | |
| KULM | Kulim | 51.88 | 238 | P | P | 15 15 31.5 | +0.4 | | |
| IPM | Ipoh | 52.26 | 237 | P | P | 15 15 35.1 | +1.1 | | |
| IPM | Ipoh | 52.26 | 237 | P | P | 15 15 33.3 | -0.7 | | |
| IPM | | | | IAmb | IAmb | 15 15 35.3 | | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| SVE | Sverdlovsk | 52.55 | 317 | *e*P | P | 15 15 36.0 | +0.4 | | |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,45nm,0.9s | | | | | | | | |
| SVE | | | | MLR | MLR | | | | |
| | comp=Z,465nm,18.0s | | | | | | | | |
| P33M | Teslin, Yukon | 52.67 | 39 | IAmb | IAmb | 15 15 39.9 | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| P33M | Teslin, Yukon | 52.67 | 39 | P | P | 15 15 37.8 | +1.1 | | |
| | baz=290,SNR=7.4 | | | | | | | | |
| S32K | Killisnoo | 52.76 | 42 | P | P | 15 15 38.3 | +1.2 | | |
| | baz=290 | | | | | | | | |
| HNR | Honiara | 53.04 | 158 | LR | LR | 15 36 11.6 | | | |
| | comp=Z,2μm,21.8s,baz=320,slow=34 | | | | | | | | |
| C36M | Paulatuk | 53.09 | 26 | P | P | 15 15 40.0 | +0.6 | | |
| | baz=290,SNR=6.4 | | | | | | | | |
| Q32M | Nakina River | 53.37 | 40 | P | P | 15 15 42.4 | +0.4 | | |
| | baz=291 | | | | | | | | |
| SOEI | Soe | 53.63 | 203 | P | P | 15 15 45.6 | +1.5 | | |
| GAR | Garm | 53.76 | 293 | P | P | 15 15 44.2 | -0.8 | | |
| ARU | Arti | 53.77 | 317 | P | P | 15 15 44.3 | -0.3 | | |
| ARU | | | | IAmb | IAmb | 15 16 03.6 | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| ARU | Arti | 53.77 | 317 | *c i*P | P | 15 15 44.8 | +0.2 | | |
| ARU | | | | *PP | pP | 15 15 57.2 | +0.1 | | |
| ARU | | | | | | 15 16 48.3 | | | |
| ARU | | | | | | 15 17 44.0 | | | |
| ARU | | | | S | S | 15 23 17.1 | +1.7 | | |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.2s | | | | | | | | |
| ARU | | | | MLR | MLR | | | | |
| | comp=Z,445nm,18.0s | | | | | | | | |
| ARU | Arti | 53.77 | 317 | P | P | 15 15 44.0 | -0.6 | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| ARU | Arti | 53.77 | 317 | P | P | 15 15 44.7 | +0.2 | | |
| ARU | | | | PcP | PcP | 15 16 50.3 | +0.3 | | |
| R33M | Jennings River | 53.84 | 39 | P | P | 15 15 45.6 | +0.4 | | |
| | baz=292 | | | | | | | | |
| NIL | Nilore | 54.23 | 286 | P | P | 15 15 48.9 | +0.6 | | |
| NIL | Nilore | 54.23 | 286 | P | P | 15 15 48.9 | +0.6 | | |
| NIL | | | | pmax | pmax | | | | |
| | comp=Z,55nm,0.9s | | | | | | | | |
| NIL | Nilore | 54.23 | 286 | P | P | 15 15 49.5 | +1.1 | | |
| NIL | | | | sP | pP | 15 16 04.3 | +3.4 | | |
| NIL | | | | PcP | PcP | 15 16 52.7 | +0.4 | | |
| TGTN | Hyland Airport | 54.28 | 36 | P | P | 15 15 49.1 | +0.7 | | |
| | baz=292 | | | | | | | | |
| DLBC | Dease Lake | 54.65 | 40 | P | P | 15 15 51.9 | +0.8 | | |
| | baz=293 | | | | | | | | |
| SIMJ | Simiganj | 54.82 | 293 | P | P | 15 15 52.4 | -0.3 | | |
| SIMJ | Simiganj | 54.82 | 293 | P | P | 15 15 52.5 | -0.3 | | |
| PSI | Prapat | 54.88 | 238 | P | P | 15 15 53.8 | +0.5 | | |
| PSI | | | | pmax | pmax | | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| RPSI | Rantau Prapat | 54.96 | 237 | P | P | 15 15 53.8 | +0.1 | | |
| RPSI | | | | IAmb | IAmb | 15 15 54.7 | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| V35K | Ketchikan | 55.09 | 44 | P | P | 15 15 54.5 | +0.4 | | |
| | baz=294 | | | | | | | | |
| T35M | Bob Quinn | 55.12 | 42 | P | P | 15 15 54.7 | +0.3 | | |
| | baz=294 | | | | | | | | |
| ALE | Alert | 55.70 | 4 | P | P | 15 15 59.0 | +0.7 | | |
| AB31 | Akbulak array | 55.90 | 308 | *i*P | P | 15 16 00.0 | -0.1 | | |
| ABKAR | Akbulak array | 55.90 | 308 | P | P | 15 16 00.1 | 0.0 | | |
| ABKAR | | | | IAmb | IAmb | 15 16 01.6 | | | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| HOPEN | Hopen | 56.04 | 345 | *e*P | P | 15 16 01.2 | +0.5 | | |
| SPB2 | Spitsbergen Ar | 56.43 | 348 | P | P | 15 16 04.4 | +0.9 | | |
| SPITS | Spitsbergen Ar | 56.43 | 348 | P | P | 15 16 03.8 | +0.3 | | |
| | comp=Z,9.6nm,0.8s,baz=74,slow=12,SNR=8.9 | | | | | | | | |
| SPITS | | | | LR | LR | 15 42 02.8 | | | |
| | comp=Z,161nm,20.4s,baz=22,slow=38 | | | | | | | | |
| | comp=Z,9.6nm,0.8s | | | | | | | | |
| SPITS | Spitsbergen Ar | 56.43 | 348 | P | P | 15 16 04.1 | +0.6 | | |
| SPITS | | | | pmax | pmax | | | | |
| | comp=Z,50nm,1.4s | | | | | | | | |
| KBS | Kingsbay | 56.52 | 350 | P | P | 15 16 05.1 | +0.9 | | |
| KBS | Kingsbay | 56.52 | 350 | *e*P | P | 15 16 05.5 | +1.4 | | |
| KBS | Kingsbay | 56.52 | 350 | *ce*P | P | 15 16 04.9 | +0.8 | | |
| KBS | | | | pmax | pmax | | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| KBS | Kingsbay | 56.52 | 350 | *i*P | P | 15 16 03.9 | -0.3 | | |
| KBS | Kingsbay | 56.52 | 350 | P | P | 15 16 05.3 | +1.1 | | |
| NOR | Nord | 56.76 | 356 | *i*P | P | 15 16 05.2 | -0.6 | | |
| NOR | | | | IAmb | IAmb | 15 16 06.7 | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| TOAD | Toad River Com | 56.76 | 38 | P | P | 15 16 07.8 | +1.6 | | |
| | baz=296 | | | | | | | | |
| KBL | Kabul | 56.80 | 289 | P | P | 15 16 06.3 | -0.8 | | |
| KBL | | | | IAmb | IAmb | 15 16 07.5 | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| KBL | Kabul | 56.80 | 289 | P | P | 15 16 06.3 | -0.8 | | |
| KBL | | | | pmax | pmax | | | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| KIRV | Kirov | 57.37 | 322 | *ce*P | P | 15 16 10.1 | -0.3 | | |
| HSPB | Hornsund (broa | 57.38 | 348 | *e*P | P | 15 16 11.0 | +0.8 | | |
| KNRA | Kununurra | 58.22 | 196 | P | P | 15 16 16.5 | -0.2 | | |
| KNRA | | | | IAmb | IAmb | 15 16 36.1 | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| KNRA | Kununurra | 58.22 | 196 | P | P | 15 16 17.0 | +0.3 | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| BJO1 | Bjornoya | 58.49 | 345 | *e*P | P | 15 16 16.2 | -1.8 | | |
| VADS | Vadso | 58.84 | 338 | *e*P | P | 15 16 18.5 | -2.0 | | |
| HYB | Hyderabad | 59.33 | 267 | *e*P | P | 15 16 24.4 | -0.2 | | |
| YKA | Yellowknife Ar | 59.59 | 32 | P | P | 15 16 25.7 | -0.1 | | |
| | comp=Z,2.3nm,0.8s,baz=341,slow=7.2,SNR=2.1 | | | | | | | | |
| YKA | | | | LR | LR | 15 44 22.5 | | | |
| | comp=Z,92nm,21.4s,baz=298,slow=38 | | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| KEV | Kevo | 59.71 | 339 | P | P | 15 16 26.5 | 0.0 | | |
| ARCES | ARCESS Array B | 60.25 | 339 | P | P | 15 16 30.4 | +0.1 | | |
| | comp=Z,4.4nm,0.5s,baz=44,slow=7.8,SNR=40 | | | | | | | | |
| ARCES | | | | LR | LR | 15 47 09.4 | | | |
| | comp=Z,196nm,19.2s,baz=59,slow=40 | | | | | | | | |
| | comp=Z,4.4nm,0.5s | | | | | | | | |
| TULEG | Thule | 60.65 | 8 | *i*P | P | 15 16 31.6 | -1.3 | | |
| TULEG | | | | IAmb | IAmb | 15 16 33.4 | | | |
| | comp=Z,44nm,0.8s | | | | | | | | |
| NEEM | North Greenlan | 61.12 | 3 | *i*P | P | 15 16 35.9 | -0.6 | | |
| NEEM | | | | IAmb | IAmb | 15 16 37.2 | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| KTK1 | Kautokeino | 61.21 | 339 | *e*P | P | 15 16 36.6 | -0.1 | | |
| BELG | Belogornoye | 61.28 | 316 | *c i*P | P | 15 16 37.5 | 0.0 | | |
| BELG | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| WB0 | Warramunga Arr | 61.33 | 189 | P | P | 15 16 37.5 | -0.6 | | |
| WB0 | | | | IAmb | IAmb | 15 16 56.6 | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| WRAB | Tennant Creek | 61.50 | 189 | P | P | 15 16 38.2 | -1.0 | | |
| WRAB | | | | IAmb | IAmb | 15 16 57.7 | | | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| WRAB | Tennant Creek | 61.50 | 189 | *i*P | P | 15 16 37.7 | -1.5 | | |
| WRAB | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.7s | | | | | | | | |
| DAG | Danmarks Havn | 61.51 | 355 | *i*P | P | 15 16 38.0 | -0.7 | | |
| DAG | | | | IAmb | IAmb | 15 16 39.4 | | | |
| | comp=Z,32nm,1.1s | | | | | | | | |
| WB2 | Warramunga Arr | 61.51 | 189 | IAmb | IAmb | 15 16 58.3 | | | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| WRA | Warramunga Arr | 61.51 | 189 | P | P | 15 16 38.2 | -1.1 | | |
| WRA | Warramunga Arr | 61.51 | 189 | P | P | 15 16 38.5 | -0.8 | | |
| | comp=Z,4.8nm,0.8s,baz=5.7,slow=6.8,SNR=53 | | | | | | | | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| WRA | Warramunga Arr | 61.51 | 189 | *i*P | P | 15 16 38.5 | -0.8 | | |
| WRA | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| HRA | Herat | 61.68 | 292 | P | P | 15 16 40.9 | +0.2 | | |
| HRA | | | | IAmb | IAmb | 15 16 41.8 | | | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| TRO | Tromso | 61.90 | 341 | *e*P | P | 15 16 40.4 | -1.0 | | |
| JOF | Joensuu | 62.57 | 331 | *e*P | P | 15 16 46.0 | +0.1 | | |
| NLWA | Neilton Lookou | 63.13 | 49 | P | P | 15 16 50.1 | +0.1 | | |
| NLWA | | | | IAmb | IAmb | 15 16 53.1 | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| KULLO | Kullorsuaq | 63.55 | 6 | *i*P | P | 15 16 51.1 | -1.2 | | |
| KULLO | | | | IAmb | IAmb | 15 16 52.0 | | | |
| | comp=Z,45nm,1.3s | | | | | | | | |
| STEI | Steigen | 64.06 | 340 | *e*P | P | 15 16 55.6 | -0.1 | | |
| PALK | Pallekele | 64.26 | 256 | LR | LR | 15 46 27.9 | | | |
| | comp=Z,127nm,20.8s,baz=179,slow=37 | | | | | | | | |
| MOS | Moscow | 64.32 | 323 | *e*P | P | 15 16 56.6 | -1.1 | | |
| MOS | | | | pmax | pmax | | | | |
| | comp=Z,40nm,0.8s | | | | | | | | |
| FAUS | Fauske | 64.46 | 340 | *e*P | P | 15 16 58.5 | +0.2 | | |
| F04A | Amboy | 64.76 | 50 | P | P | 15 17 02.9 | +2.2 | | |
| F04A | | | | IAmb | IAmb | 15 17 03.5 | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| VRH | Novokhopyorsk | 65.00 | 317 | *e*P | P | 15 17 00.8 | -1.3 | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| B08A | Colville Reser | 65.13 | 47 | IAmb | IAmb | 15 17 05.3 | | | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| OBN | Obninsk | 65.18 | 323 | P | P | 15 17 02.9 | -0.4 | | |
| OBN | Obninsk | 65.18 | 323 | *ce*P | P | 15 17 02.0 | -1.2 | | |
| OBN | | | | *e*PP | pP | 15 17 14.9 | -1.2 | | |
| OBN | | | | *e*SP | sP | 15 17 19.8 | -1.4 | | |
| OBN | | | | *e* | | 15 17 32.6 | | | |
| OBN | | | | *e* | | 15 19 23.4 | | | |
| OBN | | | | *e*PPP | PPP | 15 20 58.4 | | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,23nm,0.8s | | | | | | | | |
| OBN | | | | MLR | MLR | | | | |
| | comp=Z,200nm,21.0s | | | | | | | | |
| AS31 | Alice Springs | 65.24 | 189 | P | P | 15 17 02.5 | -1.5 | | |
| AS31 | Alice Springs | 65.24 | 189 | P | P | 15 17 04.0 | 0.0 | | |
| | comp=Z,2.8nm,0.7s | | | | | | | | |
| ASAR | Alice Springs | 65.24 | 189 | P | P | 15 17 03.3 | -0.6 | | |
| ASAR | Alice Springs | 65.24 | 189 | P | P | 15 17 04.1 | +0.2 | | |
| | comp=Z,3.9nm,0.7s,baz=14,slow=6.6,SNR=47 | | | | | | | | |
| ASAR | | | | LR | LR | 15 45 12.5 | | | |
| | comp=Z,109nm,20.2s,baz=349,slow=36 | | | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | | | |
| KEF | Keuruu | 65.33 | 333 | *e*P | P | 15 17 03.7 | -0.4 | | |
| FIA1 | FINESS Array S | 65.40 | 332 | P | P | 15 17 04.1 | -0.4 | | |
| FINES | FINESS Array B | 65.40 | 332 | P | P | 15 17 04.3 | -0.3 | | |
| FINES | FINESS Array B | 65.40 | 332 | P | P | 15 17 04

DZM PcP **PcP** 15 17 45.9 +2.9
**L04D Klamath Falls** 66.95 54 IAmb IAmb 15 17 18.8
comp=Z,22nm,0.9s
**YBH Yreka Blue Hor** 66.98 54 P **P** **15 17 17.0 +1.8**
comp=Z,7.0nm,0.9s,baz=321,slow=3.5,SNR=16
comp=Z,7.0nm,0.9s
**YBH Yreka Blue Hor** 66.98 54 P **P** **15 17 17.0 +1.8**
**VSU Vasula** 67.18 329 *ce*P **P** **15 17 15.9 -0.1**
VSU pmax pmax
comp=Z,69nm,1.0s
**RAF Rauma** 67.20 333 *e*P **P** **15 17 16.3 +0.3**
**NSS Namsos** 67.53 339 *e*P **P** **15 17 17.5 -0.6**
**UMMG Uummannaq** 67.72 5 *i*P **P** **15 17 17.5 -1.8**
UMMG IAmb IAmb 15 17 50.3
comp=Z,23nm,1.1s
**O02D Mt. Diablo Mer** 67.84 56 P **P** **15 17 22.1 +1.4**
O02D IAmb IAmb 15 17 24.3
comp=Z,13nm,1.1s
**SCO Scoresbysund** 67.87 354 *i*P **P** **15 17 19.4 -0.7**
SCO IAmb IAmb 15 17 21.3
comp=Z,11nm,0.9s
**GOF Gofitskoye** 67.91 311 *ce*P **P** **15 17 21.7 +0.8**
**COCO West Island** 67.99 229 P **P** **15 17 25.8 +4.2**
COCO pP **pP** **15 17 36.4 +2.0**
**MTSE Matsula** 68.11 330 *e*P **P** **15 17 22.4 +0.6**
**LRDM Redding Peak** 68.49 55 IAmb IAmb 15 17 29.9
comp=Z,19nm,0.8s
**NCK Nalchik** 68.53 309 *i*P **P** **15 17 24.0 -0.8**
NCK pmax pmax
comp=Z,9.0nm,0.4s
**KIV Kislovodsk** 68.78 310 P **P** **15 17 26.7 +0.3**
**KIV Kislovodsk** 68.78 310 ⇑P **P** **15 17 28.6 +2.1**
**KIV Kislovodsk** 68.78 310 *e*P **P** **15 17 27.4 +1.0**
KIV pmax pmax
comp=Z,50nm,1.1s
**KIV Kislovodsk** 68.78 310 P **P** **15 17 26.4 0.0**
comp=Z,51nm,0.9s,comp=Z,533nm
**KIV Kislovodsk** 68.78 310 P **P** **15 17 28.1 +1.6**
KIV pP **pP** **15 17 37.8 -1.6**
**KBZ Khabaz** 68.79 310 P **P** **15 17 27.3 +1.0**
comp=Z,15nm,0.9s,baz=56,slow=4.3,SNR=27
KBZ LR LR 15 50 02.6
comp=Z,139nm,21.5s,baz=48,slow=38
comp=Z,15nm,0.9s
**KBZ Khabaz** 68.79 310 *ce*P **P** **15 17 26.2 -0.2**
KBZ pmax pmax
comp=Z,20nm,0.9s
**SHA1 Shidzhatmaz** 68.92 310 *ce*P **P** **15 17 28.7 +1.2**
**WVOR Wild Horse Val** 69.01 52 P **P** **15 17 28.2 +0.2**
**WVOR Wild Horse Val** 69.01 52 P **P** **15 17 28.2 +0.2**
WVOR pmax pmax
comp=Z,5.0nm,0.9s
**ISAL Salakas** 69.41 327 *e*P **P** **15 17 30.0 0.0**
**MNK Minsk** 69.42 326 *i*P **P** **15 17 28.5 -1.6**
MNK *i*S **S** **15 26 33.2 -0.3**
MNK pmax pmax
comp=Z,23nm,0.6s
MNK pmax pmax
comp=N,11nm,0.8s
MNK pmax pmax
comp=E,31nm,1.0s
MNK MLR MLR
comp=E,184nm,21.0s
MNK MLR MLR
comp=N,216nm,21.0s
MNK MLR MLR
comp=Z,359nm,22.0s
**FFC Flin Flon** 69.55 34 P **P** **15 17 31.6 +0.7**
FFC IAmb IAmb 15 17 32.6
comp=Z,11nm,0.8s
**FFC Flin Flon** 69.55 34 P **P** **15 17 31.6 +0.7**
FFC pmax pmax
comp=Z,11nm,0.8s
**FFC Flin Flon** 69.55 34 P **P** **15 17 31.6 +0.7**
FFC pP **pP** **15 17 42.4 -1.5**
**ICESG Greenland Ices** 69.82 1 *i*P **P** **15 17 32.6 -0.1**
ICESG IAmb IAmb 15 17 34.5
comp=Z,52nm,0.8s
**GNI Garni** 69.87 306 LR LR 15 51 17.6
comp=Z,88nm,20.9s,baz=70,slow=38
**MPK Martis Peak** 70.07 55 IAmb IAmb 15 17 37.4
comp=Z,21nm,0.7s
**PAHR Pah Rah Range** 70.22 54 IAmb IAmb 15 17 38.4
comp=Z,13nm,0.8s
**EMB Emerald Bay** 70.22 55 IAmb IAmb 15 17 38.2
comp=Z,14nm,0.6s
**DOMB Dombas** 70.32 339 *e*P **P** **15 17 35.1 -0.5**
**PABE Paberze** 70.33 328 *e*P **P** **15 17 36.5 +0.9**
**EGMT Eagleton** 70.41 43 IAmb IAmb 15 17 38.4
comp=Z,12nm,0.9s
**PNTR Pine Nut** 70.47 55 P **P** **15 17 38.3 +1.2**
PNTR IAmb IAmb 15 17 39.9
comp=Z,12nm,0.8s
**HFS Hagfors** 70.50 336 P **P** **15 17 36.8 +0.2**
comp=Z,20nm,0.6s,baz=46,slow=6.4,SNR=88
HFS LR LR 15 52 26.2
comp=Z,179nm,18.9s,baz=40,slow=39
comp=Z,20nm,0.6s
**NB2 NORSAR Subarra** 70.53 337 P **P** **15 17 36.7 -0.1**
comp=Z,18nm,0.7s,baz=36,slow=6.2
**NB2 NORSAR Subarra** 70.53 337 P **P** **15 17 36.7 -0.1**
baz=36,slow=6.2
**NOA NORSAR Array B** 70.53 337 P **P** **15 17 36.9 +0.1**
comp=Z,18nm,0.8s,baz=37,slow=6.1,SNR=39
NOA LR LR 15 51 56.7
comp=Z,153nm,21.6s,baz=35,slow=39
comp=Z,18nm,0.8s
**DLMT Dillon** 70.62 46 IAmb IAmb 15 17 40.7
comp=Z,17nm,1.0s
**SOEG Soedalen** 70.63 358 *i*P **P** **15 17 36.6 -0.6**
SOEG IAmb IAmb 15 17 38.7
comp=Z,25nm,0.7s
**YERR Yerington** 70.75 55 P **P** **15 17 39.5 +0.7**
YERR IAmb IAmb 15 17 41.5
comp=Z,21nm,0.7s
**BOZ Bozeman (W)** 70.99 46 IAmb IAmb 15 17 42.4
comp=Z,12nm,0.8s
**BBGB Big Mountain B** 71.10 58 IAmb IAmb 15 17 46.1
comp=Z,12nm,0.8s
**UOSS Minazif** 71.39 287 P **P** **15 17 42.2 -0.5**
**UOSS Minazif** 71.39 287 P **P** **15 17 42.9 +0.3**
UOSS pP **pP** **15 17 53.3 -2.3**
UOSS sP **PcP** **15 17 58.1 -4.0**
**KVN Kaiserville** 71.41 54 IAmb IAmb 15 17 45.4
comp=Z,18nm,0.7s
**AK03 Malin Array Si** 71.41 322 P **P** **15 17 41.7 -0.6**
**AKASG Malin Array Be** 71.43 322 P **P** **15 17 42.0 -0.4**
AKASG IAmb IAmb 15 17 43.6
comp=Z,12nm,0.9s
**AKASG Malin Array Be** 71.43 322 P **P** **15 17 42.4 0.0**
comp=Z,12nm,0.5s,baz=44,slow=6.1,SNR=53
comp=Z,12nm,0.5s
**AKASG Malin Array Be** 71.43 322 *i*P **P** **15 17 42.4 0.0**
AKASG pmax pmax
comp=Z,13nm,0.5s
**AKBB Malin Array Si** 71.43 322 *i*P **P** **15 17 42.1 -0.3**
AKBB pmax pmax
comp=Z,40nm,0.9s
**AKBB Malin Array Si** 71.43 322 P **P** **15 17 41.8 -0.6**
**AK23 Malin Array Si** 71.43 322 P **P** **15 17 41.9 -0.5**
**KIEV Kiev** 71.44 322 P **P** **15 17 41.9 -0.5**
**KIEV Kiev** 71.44 322 ⇑P **P** **15 17 42.5 +0.1**
**KIEV Kiev** 71.44 322 P **P** **15 17 42.5 +0.1**
**KIEV Kiev** 71.44 322 P **P** **15 17 41.8 -0.7**
comp=Z,141nm,0.9s
**KIEV Kiev** 71.44 322 P **P** **15 17 42.3 -0.1**
KIEV sP **pP** **15 17 57.7 +2.3**
**SFJD Kangerlussuaq** 71.46 5 LR LR 15 50 39.5
comp=Z,153nm,20.6s,baz=348,slow=37
**SFJD Kangerlussuaq** 71.46 5 *i*P **P** **15 17 41.6 -0.7**
SFJD IAmb IAmb 15 17 43.9
comp=Z,33nm,1.2s
**SFJD Kangerlussuaq** 71.46 5 P **P** **15 17 42.6 +0.3**
SFJD pP **pP** **15 17 53.5 -1.8**
SFJD PcP **sP** **15 18 03.1 +2.7**
**AK11 Malin Array Si** 71.47 322 P **P** **15 17 42.6 0.0**
**OSL Oslo** 71.56 337 *e*P **P** **15 17 42.9 -0.1**
**AK13 Malin Array Si** 71.56 322 P **P** **15 17 42.5 -0.7**
**LHV Little Huntoon** 71.66 55 IAmb IAmb 15 17 47.8
comp=Z,22nm,1.0s
**NVAR Mina Array Bea** 71.67 55 P **P** **15 17 45.7 +1.3**
**NVAR Mina Array Bea** 71.67 55 P **P** **15 17 46.1 +1.8**
comp=Z,11nm,0.8s,baz=290,slow=6.2,SNR=62
comp=Z,11nm,0.8s
**YHL Hebgen Lake** 71.72 46 IAmb IAmb 15 17 48.0
comp=Z,10nm,0.9s
**SUW Suwalki** 71.72 327 *e*P **P** **15 17 44.7 +0.6**
**MI30 MI30,Zelenitsa** 71.87 323 P **P** **15 17 43.6 -1.5**
**YHH Holmes Hill** 71.94 46 P **P** **15 17 46.6 +0.6**
**MI28 Mi28,Pidlybu** 71.98 323 P **P** **15 17 44.5 -1.2**
**DY2G Dye2** 72.24 4 *i*P **P** **15 17 46.8 -0.5**
DY2G IAmb IAmb 15 17 48.7
comp=Z,41nm,0.8s
**MI29 MI29, Kamyanyy** 72.25 322 P **P** **15 17 46.4 -1.0**
**H17A Grant Village** 72.34 46 P **P** **15 17 51.1 +2.8**
baz=311
**RNPP9 Sopachiv** 72.44 324 P **P** **15 17 48.0 -0.4**
**IMW Indian Meadow** 72.47 47 IAmb IAmb 15 17 52.2
comp=Z,11nm,0.8s
**RNPP8 Varash** 72.51 324 P **P** **15 17 48.3 -0.6**
**GURO Guroymak-BITLI** 72.51 306 IAmb IAmb 15 17 51.8
comp=Z,9.9nm,0.7s
**DSP Deep Springs** 72.54 55 P **P** **15 17 50.7 +1.4**
**RNPP5 Staryi Chortor** 72.57 324 P **P** **15 17 48.6 -0.6**
**FXWY Fox Creek** 72.59 47 IAmb IAmb 15 17 52.8
comp=Z,8.4nm,0.7s
**LUBAR Lubar, Ukraine** 72.65 322 P **P** **15 17 48.5 -1.2**
**TPAW Teton Pass** 72.73 47 IAmb IAmb 15 17 52.7
comp=Z,6.9nm,0.6s
**LOHW Long Hollow** 72.84 47 P **P** **15 17 52.4 +1.1**
**DGMT Dagmar** 72.87 40 P **P** **15 17 51.4 +0.3**
DGMT IAmb IAmb 15 17 52.8
comp=Z,14nm,0.8s
**SIM Simferopol'** 72.88 315 *e*P **P** **15 17 51.9 +0.7**
SIM pmax pmax
comp=Z,22nm,0.8s
SIM MLR MLR
comp=Z,125nm,18.0s
**STKA Stephens Creek** 72.92 181 P **P** **15 17 51.4 +0.1**
comp=Z,1.2nm,0.7s,baz=348,slow=16,SNR=2.0
comp=Z,1.2nm,0.7s
**GMN Gold Mountain** 73.02 55 P **P** **15 17 53.0 +0.5**
**GRAC Grapevine Rang** 73.15 55 IAmb IAmb 15 17 55.8
comp=Z,11nm,0.7s
**ANGG Ammassalik, Gr** 73.32 0 *i*P **P** **15 17 51.5 -1.9**
ANGG IAmb IAmb 15 17 54.4
comp=Z,23nm,1.1s
**NE56 Odesa** 73.38 318 P **P** **15 17 52.7 -1.4**
**R11B Troy Canyon, C** 73.38 53 P **P** **15 17 54.9 +0.4**
baz=310
**ISOG Isortoq, Green** 73.38 1 *i*P **P** **15 17 52.5 -1.3**
ISOG IAmb IAmb 15 17 55.0
comp=Z,18nm,0.8s
**BORG Borgarnes** 73.44 353 LR LR 15 51 00.3
comp=Z,24nm,19.3s,baz=20,slow=36
**SORM Soroca** 73.62 320 P **P** **15 17 55.0 -0.5**
comp=Z,33nm,1.0s,comp=Z,4μm
**SPR3 Spring Creek 3** 73.71 52 IAmb IAmb 15 18 16.2
comp=Z,22nm,1.8s
**WCT Wildcat Mounta** 73.73 55 P **P** **15 17 57.3 +0.8**
**HORU Horodok** 73.76 322 P **P** **15 17 56.5 +0.2**
**NDNU Novodnistrovsk** 73.76 321 P **P** **15 17 56.5 +0.2**
**PD31 Pinedale Array** 73.97 47 IAmb IAmb 15 17 59.9
comp=Z,9.6nm,0.7s
**PDAR Pinedale Array** 73.97 47 P **P** **15 17 58.5 +0.5**
**PDAR Pinedale Array** 73.97 47 P **P** **15 17 59.0 +1.0**
comp=Z,7.4nm,0.6s,baz=274,slow=2.9,SNR=48
comp=Z,7.4nm,0.6s
**TCUT Toone Canyon** 74.03 49 IAmb IAmb 15 18 16.7
comp=Z,16nm,0.9s
**GWY Greenwater Val** 74.09 56 IAmb IAmb 15 18 17.4
comp=Z,23nm,1.4s
**NUUK Nuuk** 74.15 6 *i*P **P** **15 17 57.7 -0.6**
NUUK IAmb IAmb 15 18 15.8
comp=Z,138nm,1.5s
**KMPD K-Podol'skiy** 74.21 322 P **P** **15 17 58.8 -0.1**
KMPD P **P** **15 17 58.8 -0.1**
**ARPR Arapgir-MALATY** 74.37 308 IAmb IAmb 15 18 03.2
comp=Z,37nm,1.1s
**LVV L'vov** 74.41 324 *e*P **P** **15 18 00.5 +0.4**
**MPU Maple Canyon** 74.63 50 IAmb IAmb 15 18 04.3
comp=Z,9.6nm,0.7s
**MORS Morshin** 74.97 323 P **P** **15 18 03.4 +0.1**
**STNU Starunia** 75.00 323 P **P** **15 18 03.5 -0.1**
**KSV Kosov** 75.03 322 P **P** **15 18 02.9 -0.8**
**KWP Kalwaria Pacla** 75.13 324 *e*P **P** **15 18 05.4 +1.1**
**KWP Kalwaria Pacla** 75.13 324 P **P** **15 18 04.5 +0.2**
comp=Z,69nm,1.1s
**MVU Marysvale** 75.29 52 IAmb IAmb 15 18 08.8
comp=Z,35nm,1.2s
**TMUT Trail Mountain** 75.35 50 P **P** **15 18 06.6 +0.5**
**ULM Lac du Bonnet** 75.36 34 P **P** **15 18 05.9 +0.3**
comp=Z,4.1nm,0.7s,baz=335,slow=8.9,SNR=5.6
comp=Z,4.1nm,0.7s
**RDMU Red Mountain** 75.44 49 P **P** **15 18 06.9 +0.5**
**BUR08 Bucovina Ar. S** 75.45 322 IAmb IAmb 15 18 08.0
comp=Z,19nm,0.8s
**BURAR Bucovina Array** 75.47 322 P **P** **15 18 06.6 +0.2**
BURAR IAmb IAmb 15 18 08.4
comp=Z,25nm,0.8s
**BURAR Bucovina Array** 75.47 322 ⇑P **P** **15 18 07.2 +0.8**
**BURAR Bucovina Array** 75.47 322 P **P** **15 18 07.2 +0.8**
**P17A Butcher Ranch,** 75.50 50 IAmb IAmb 15 18 09.4
comp=Z,9.5nm,0.8s
**TESR Tescani** 75.58 320 ⇓P **P** **15 18 07.8 +0.9**
**TESR Tescani** 75.58 320 P **P** **15 18 07.0 +0.1**
comp=Z,32nm,1.0s
**RAKU Rahkiv** 75.66 322 P **P** **15 18 06.6 -0.7**
**K22A Casper** 75.70 45 IAmb IAmb 15 18 25.5
comp=Z,18nm,1.2s
**CFR Carcaliu** 75.80 318 ⇓P **P** **15 18 08.4 +0.2**
**CFR Carcaliu** 75.80 318 P **P** **15 18 08.3 +0.2**
**KOLS Kolonicke sedl** 75.84 324 *e*P **P** **15 18 09.1 +0.7**
KOLS pmax pmax
comp=Z,21nm,0.9s
**KOLS Kolonicke sedl** 75.84 324 *e*P **P** **15 18 09.1 +0.7**
KOLS *e*PP **PP** **15 20 56.9 -1.3**
**SRU San Rafael Swe** 75.87 50 IAmb IAmb 15 18 11.7
comp=Z,9.1nm,0.7s
**PFO Pinyon Flats O** 75.88 58 *i*P **P** **15 18 09.2 +0.2**
PFO pmax pmax
comp=Z,8.0nm,0.9s
**TPFO Pinon Flats** 75.89 58 P **P** **15 18 09.7 +0.7**
baz=310
**TPGR Topolog** 75.89 318 ⇓P **P** **15 18 09.7 +1.0**
**KNB Kanab** 75.91 53 IAmb IAmb 15 20 22.0
comp=Z,6.8nm,0.6s
**OJC Ojcow** 75.94 326 *e*P **P** **15 18 09.6 +0.7**
**OJC Ojcow** 75.94 326 P **P** **15 18 08.9 0.0**
comp=Z,64nm,0.9s
**BRIU Brid** 75.95 323 P **P** **15 18 08.7 -0.2**
**RSSD Black Hills** 75.98 43 P **P** **15 18 10.1 +0.6**
RSSD IAmb IAmb 15 18 11.1
comp=Z,11nm,1.0s
**RSSD Black Hills** 75.98 43 P **P** **15 18 10.1 +0.6**
RSSD pmax pmax
comp=Z,11nm,1.0s
**RWWY Rawlins** 75.98 46 IAmb IAmb 15 18 11.6
comp=Z,14nm,0.8s
**VRI Vrincioaia** 76.01 320 ⇓P **P** **15 18 10.0 +0.6**
**VRI Vrincioaia** 76.01 320 P **P** **15 18 10.0 +0.6**
**KORU Korolevo** 76.03 323 P **P** **15 18 09.8 +0.4**
**PLOR5 Plostina Array** 76.05 320 P **P** **15 18 10.0 +0.3**
comp=Z,13nm,1.2s
**PLOR3 Plostina Array** 76.06 320 P **P** **15 18 10.0 +0.3**
comp=Z,6.6nm,1.1s,comp=Z,3μm
**UZHM Uzhgorod** 76.06 324 P **P** **15 18 10.0 +0.4**
**HOLU Holmets** 76.09 324 P **P** **15 18 09.5 -0.3**
**BERU Beregovo** 76.19 323 P **P** **15 18 10.1 -0.2**
**CRVS Cervenica-Dubn** 76.22 324 *e*P **P** **15 18 11.4 +0.9**
CRVS pmax pmax
comp=Z,26nm,1.0s
**CRVS Cervenica-Dubn** 76.22 324 *e*P **P** **15 18 11.3 +0.8**
CRVS *e*PP **PP** **15 21 00.3 -1.1**
**OZUR** 76.30 320 ⇑P **P** **15 18 12.7 +1.6**
**GAZ Gaziantep** 76.30 308 IAmb IAmb 15 18 13.4
comp=Z,12nm,1.0s
**NIE Niedzica** 76.33 325 *e*P **P** **15 18 13.0 +1.9**
**NIE Niedzica** 76.33 325 P **P** **15 18 11.3 +0.1**
comp=Z,13nm,1.3s
**O20A White River Ci** 76.48 48 IAmb IAmb 15 18 16.7
comp=Z,15nm,1.2s
**HMU Henry Mountain** 76.53 51 IAmb IAmb 15 18 18.1
comp=Z,10.0nm,0.8s
**ISR Istrita** 76.63 319 ⇓P **P** **15 18 14.7 +1.6**
**ISR Istrita** 76.63 319 P **P** **15 18 14.6 +1.6**
**ISR Istrita** 76.63 319 P **P** **15 18 13.1 +0.1**
comp=Z,47nm,1.0s
**MLR Muntele Rosu** 76.66 320 IAmb IAmb 15 18 15.8
comp=Z,12nm,1.2s
**MLR Muntele Rosu** 76.66 320 ⇑P **P** **15 18 14.0 +0.8**
**MLR Muntele Rosu** 76.66 320 P **P** **15 18 14.0 +0.8**
**BR131 Keskin Array S** 76.66 311 P **P** **15 18 12.7 -0.7**
BR131 IAmb IAmb 15 18 15.2
comp=Z,30nm,1.9s
**BR131 Keskin Array S** 76.66 311 *i*P **P** **15 18 13.3 -0.1**
**BRTR Keskin Array B** 76.66 311 P **P** **15 18 12.6 -0.7**
**BRTR Keskin Array B** 76.66 311 P **P** **15 18 13.7 +0.3**
comp=Z,3.6nm,0.9s,baz=70,slow=3.5,SNR=17
BRTR PP **PP** **15 21 06.3 +0.7**
comp=Z,5.4nm,1.1s,baz=69,slow=6.8,SNR=8.4
comp=Z,3.6nm,0.9s
**BRTR Keskin Array B** 76.66 311 *i*P **P** **15 18 13.8 +0.4**
BRTR pmax pmax
comp=Z,4.0nm,0.9s
**BR106 Keskin Array S** 76.67 311 P **P** **15 18 13.4 0.0**
comp=Z,5.0nm,0.9s,comp=Z,44nm
**BR104 Keskin Array S** 76.67 311 P **P** **15 18 13.4 0.0**
comp=Z,5.5nm,1.1s,comp=Z,52nm
**BR105 Keskin Array S** 76.68 311 P **P** **15 18 13.5 0.0**
comp=Z,7.2nm,1.0s,comp=Z,49nm
**KSP Ksiaz** 76.88 328 *e*P **P** **15 18 14.8 +0.6**
**KSP Ksiaz** 76.88 328 P **P** **15 18 14.4 +0.2**
comp=Z,23nm,1.1s
**LANS Liptovska Anna** 76.89 326 *e*P **P** **15 18 15.8 +1.4**
LANS pmax pmax
comp=Z,9.0nm,0.9s
**LANS Liptovska Anna** 76.89 326 *e*P **P** **15 18 15.8 +1.4**
LANS *e*PP **PP** **15 21 06.0 -1.1**
**KIRS Kirsehir-Merke** 76.91 311 ⇓P **P** **15 18 15.7 +1.0**
**OKC Ostrava-Krasne** 76.92 327 AMS AMS 15 54 40.0
comp=Z,300nm,14.5s
**ANTO Ankara** 77.04 312 P **P** **15 18 16.5 +1.1**
ANTO IAmb IAmb 15 18 17.4
comp=Z,19nm,0.9s
**ANTO Ankara** 77.04 312 ⇓P **P** **15 18 16.8 +1.4**
**ANTO Ankara** 77.04 312 P **P** **15 18 16.8 +1.4**
**ANTO Ankara** 77.04 312 P **P** **15 18 15.5 +0.1**
comp=Z,11nm,1.1s
**BR231 Keskin MP Arra** 77.06 312 P **P** **15 18 16.3 +0.7**
BR231 IAmb IAmb 15 18 17.6
comp=Z,14nm,0.8s
**MARR Marisel-Cluj** 77.13 322 ⇓P **P** **15 18 16.6 +0.7**
**VOIR** 77.13 320 ⇑P **P** **15 18 17.3 +1.5**
**VOIR** 77.13 320 P **P** **15 18 17.3 +1.5**
**VOIR** 77.13 320 P **P** **15 18 15.9 +0.1**
comp=Z,11nm,1.2s
**CHVC Chvalec** 77.17 328 *e*P **P** **15 18 16.1 +0.2**
**CHVC Chvalec** 77.17 328 *e*P **P** **15 18 16.1 +0.2**
**MORC Moravsky Berou** 77.21 327 IAmb IAmb 15 18 18.2
comp=Z,23nm,0.9s
**MORC Moravsky Berou** 77.21 327 *e*P **P** **15 18 16.8 +0.7**
**MORC Moravsky Berou** 77.21 327 ⇓P **P** **15 18 17.5 +1.3**
**MORC Moravsky Berou** 77.21 327 P **P** **15 18 17.4 +1.3**
**N23A Red Feather La** 77.22 46 P **P** **15 18 15.8 -0.9**
baz=314
**DPC Dobruska-Polom** 77.26 328 *e*P **P** **15 18 17.8 +1.4**
**DPC Dobruska-Polom** 77.26 328 *e*P **P** **15 18 17.8 +1.4**
**DPC Dobruska-Polom** 77.26 328 P **P** **15 18 16.5 +0.1**
comp=Z,18nm,1.3s
**KRLC Kraliky** 77.29 328 *e*P **P** **15 18 17.7 +1.1**
**KRLC Kraliky** 77.29 328 *e*P **P** **15 18 17.7 +1.1**
**ARR Arges** 77.38 320 ⇓P **P** **15 18 18.1 +0.9**
**PSZ Piszkesteto** 77.65 325 IAmb IAmb 15 18 20.8
comp=Z,23nm,1.0s
**PSZ Piszkesteto** 77.65 325 ⇑P **P** **15 18 19.9 +1.3**
**PSZ Piszkesteto** 77.65 325 P **P** **15 18 19.9 +1.3**
**VYHS Vyhne** 77.66 326 *e*P **P** **15 18 19.6 +1.0**
VYHS pmax pmax
comp=Z,14nm,1.1s
**VYHS Vyhne** 77.66 326 *e*P **P** **15 18 19.6 +1.0**
VYHS *e*PP **PP** **15 21 11.6 -1.9**
**BRG Berggiesshubel** 77.77 330 *e*P **P** **15 18 19.9 +0.8**
BRG Amp 15 18 20.8
comp=Z,6.5nm,0.9s
BRG PP **PP** **15 21 14.7 +0.4**
BRG Amp 15 21 15.6
comp=Z,4.5nm,0.9s
**CLL Collm** 77.77 330 IAmb IAmb 15 18 20.4
comp=Z,18nm,0.9s
**CLL Collm** 77.77 330 ⇑*i*P **P** **15 18 19.4 +0.2**
comp=Z,20nm,1.0s
CLL *e*pP **pP** **15 18 32.0 -0.3**
CLL *es*P **sP** **15 18 36.0 -1.4**
CLL *e*PP **PP** **15 21 13.0 -1.3**
CLL AMS AMS 15 54 00.0
comp=Z,300nm,21.5s
**CLL Collm** 77.77 330 ⇑*i*P **P** **15 18 19.4 +0.2**
CLL *e**PP **pP** **15 18 32.0 -0.3**
CLL pmax pmax
comp=Z,20nm,1.0s
CLL MLR MLR
comp=Z,300nm,21.5s
**CLL Collm** 77.77 330 P **P** **15 18 19.4 +0.2**
comp=Z,17nm,0.9s
**WUAZ Wupatki** 77.78 53 IAmb IAmb 15 18 22.9
comp=Z,8.1nm,0.8s
**SMCO Snowmass** 77.84 48 P **P** **15 18 20.4 +0.1**
**JAVC Velka Javorina** 77.87 326 *e*P **P** **15 18 21.7 +1.8**
**VRAC Vranov** 77.96 327 *e*P **P** **15 18 21.2 +0.9**
**VRAC Vranov** 77.96 327 LR LR 15 56 13.7
comp=Z,186nm,19.6s,baz=38,slow=38
**VRAC Vranov** 77.96 327 ⇓P **P** **15 18 21.9 +1.5**
**VRAC Vranov** 77.96 327 P **P** **15 18 21.8 +1.5**
**SIRR Siria** 78.11 323 ⇑P **P** **15 18 21.9 +0.7**
**HSKC Hora Svate Kat** 78.18 330 *e*P **P** **15 18 21.8 +0.3**
**GOPC GO Pecny, Ondr** 78.21 329 *e*P **P** **15 18 22.4 +0.7**
**GOPC GO Pecny, Ondr** 78.21 329 *e*P **P** **15 18 22.4 +0.7**
**KRUC Moravsky** 78.24 327 *e*P **P** **15 18 22.8 +1.0**
**GZR Gura Zlata** 78.24 321 ⇓P **P** **15 18 22.9 +0.8**
**GZR Gura Zlata** 78.24 321 P **P** **15 18 22.8 +0.8**
**PRU Pruhonice** 78.24 329 *e*P **P** **15 18 23.0 +1.2**
PRU AMS AMS 15 56 10.0
comp=Z,100nm,19.6s
**PRU Pruhonice** 78.24 329 *e*P **P** **15 18 23.0 +1.2**
PRU MLR MLR
comp=Z,100nm,19.6s
**SUSD Miller** 78.28 40 P **P** **15 18 21.6 -0.6**
**F33A 5 Mile Ranch,** 78.49 38 IAmb IAmb 15 19 18.9
comp=Z,18nm,0.7s
**ELND Elena** 78.55 318 ⇑P **P** **15 18 24.5 +0.8**
**BZS Buzias** 78.62 322 ⇑P **P** **15 18 24.6 +0.6**
**BZS Buzias** 78.62 322 P **P** **15 18 24.6 +0.6**
**HERR Herculane** 78.80 321 ⇑P **P** **15 18 25.5 +0.5**
**S22A 4UR Ranch, Cre** 78.92 49 P **P** **15 18 26.5 +0.4**
baz=314
**EYMN Ely** 78.98 34 IAmb IAmb 15 18 26.9
comp=Z,13nm,0.8s
**Q24A Divide** 79.01 47 P **P** **15 18 27.3 +0.7**
baz=315
**W18A Petrified Fore** 79.03 53 P **P** **15 18 27.4 +0.7**
baz=313
**MDVR Moldovita** 79.20 322 ⇑P **P** **15 18 27.7 +0.4**
**MPLH Magyarpolny** 79.24 325 P **P** **15 18 27.5 +0.1**
comp=Z,53nm,1.0s
**K30B Basset** 79.26 42 P **P** **15 18 27.6 0.0**
**CKRC Cesky Krumlov** 79.27 328 *e*P **P** **15 18 28.0 +0.5**
CKRC AMS AMS 15 57 10.0
comp=Z,100nm,15.8s
**CKRC Cesky Krumlov** 79.27 328 *e*P **P** **15 18 28.0 +0.5**
CKRC MLR MLR
comp=Z,100nm,15.8s
**OGNE Ogallala** 79.28 44 IAmb IAmb 15 18 30.1
comp=Z,18nm,0.7s
**KHC Kasperske Hory** 79.31 329 IAmb IAmb 15 18 29.7
comp=Z,16nm,0.7s
**KHC Kasperske Hory** 79.31 329 *e*P **P** **15 18 28.4 +0.7**
KHC AMS AMS 15 57 40.0
comp=Z,200nm,21.9s
**KHC Kasperske Hory** 79.31 329 *ce*P **P** **15 18 28.7 +1.0**
KHC pmax pmax
comp=Z,58nm,1.3s
**KHC Kasperske Hory** 79.31 329 P **P** **15 18 27.9 +0.2**
comp=Z,26nm,0.9s
**EKA Eskdalemuir Ar** 79.32 341 P **P** **15 18 28.0 +0.4**
comp=Z,4.4nm,0.5s,baz=26,slow=4.7,SNR=16
comp=Z,4.4nm,0.5s
**CONA Conrad Observa** 79.35 327 *e*P **P** **15 18 29.4 +1.4**
comp=Z,11nm,0.8s,SNR=9.2
**RONA Rosalia, Austr** 79.35 326 *i*P **P** **15 18 29.5 +1.5**
comp=Z,21nm,0.8s,SNR=12
**GERES GERESS Array B** 79.49 328 P **P** **15 18 28.8 -0.1**
**GERES GERESS Array B** 79.49 328 P **P** **15 18 29.3 +0.5**
comp=Z,4.3nm,0.7s,baz=28,slow=6.0,SNR=20
GERES LR LR 15 57 04.5

comp=Z,155nm,19.7s,baz=44,slow=38
comp=Z,4.3nm,0.7s
**GRA1 Grafenberg Arr 79.75 330** IAmb IAmb 15 18 32.2
comp=Z,26nm,0.8s
**GRF Grafenberg Arr 79.75 330** *e*P **P** **15 18 30.9 +0.8**
comp=Z,21nm,0.9s,baz=34,slow=4.6
**GRFO Grafenberg 79.75 330** P **P** **15 18 30.0 -0.1**
GRFO IAmb IAmb 15 18 32.1
comp=Z,28nm,0.9s
**GRFO Grafenberg 79.75 330** P **P** **15 18 30.0 -0.1**
**RAYN Ar Rayn 79.86 292** P **P** **15 18 30.4 -0.8**
RAYN IAmb IAmb 15 18 47.8
comp=Z,11nm,0.8s
**RAYN Ar Rayn 79.86 292** P **P** **15 18 31.6 +0.4**
**ECSD EROS Data Cent 79.93 39** IAmb IAmb 15 18 32.5
comp=Z,13nm,0.8s
**ALN Alexandroupoli 79.94 316** IAmb IAmb 15 18 33.0
comp=Z,20nm,1.0s
**ARSA Arzberg 80.03 327** *i* P **P** **15 18 32.6 +0.9**
comp=Z,5.3nm,0.6s
**MOA Molln 80.06 328** *i* P **P** **15 18 33.1 +1.2**
comp=Z,3.9nm,0.6s
**BOVS Bovan 80.07 321** ⇑P **P** **15 18 31.6 -0.3**
**MMAI Mount Meron Ar 80.20 305** P **P** **15 18 33.8 +0.9**
comp=Z,13nm,0.8s,baz=40,slow=6.6,SNR=17
MMAI LR LR 15 57 28.1
comp=Z,152nm,21.1s,baz=353,slow=38
comp=Z,13nm,0.8s
**BIOA Bad Ischl, Aus 80.44 328** *i* P **P** **15 18 34.9 +1.0**
comp=Z,10nm,0.7s,SNR=7.6
**GROS Grobnik 80.66 326** *i* P **P** **15 18 35.5 +0.4**
**SOKA Soboth 80.69 326** *i* P **P** **15 18 36.0 +0.7**
comp=Z,25nm,0.8s,SNR=23
**T25A Trinidad 80.71 48** IAmb IAmb 15 18 37.9
comp=Z,10.0nm,0.9s
**T25A Trinidad 80.71 48** P **P** **15 18 35.6 -0.2**
baz=316
**MEM Membach 80.83 334** *d*P **P** **15 18 35.4 -0.5**
comp=Z,11nm,0.9s
**SCHQ Schefferville 80.89 17** IAmb IAmb 15 18 37.6
comp=Z,12nm,0.9s
**SCHQ Schefferville 80.89 17** P **P** **15 18 36.7 +0.6**
SCHQ LR LR 15 59 33.6
comp=Z,11nm,0.8s,baz=341,slow=5.1,SNR=7.8
comp=Z,50nm,18.2s,baz=358,slow=39
comp=Z,11nm,0.8s
**BGNE Belgrade 80.93 42** P **P** **15 18 36.6 0.0**
**OBKA Obir 81.02 327** *i* P **P** **15 18 37.7 +0.6**
comp=Z,15nm,0.7s,SNR=10
**LESA Schwarzleotal 81.04 328** *i* P **P** **15 18 38.1 +0.9**
comp=Z,27nm,1.2s
**KBA Koelnbreinsper 81.06 328** *i* P **P** **15 18 38.5 +1.1**
comp=Z,10nm,0.6s,SNR=15
**ANMO Albuquerque 81.09 51** P **P** **15 18 38.1 +0.3**
**ANMO Albuquerque 81.09 51** *i* P **P** **15 18 36.2 -1.6**
ANMO pmax pmax
comp=Z,2.0nm,0.9s
**LEGS Legarje 81.15 326** *i* P **P** **15 18 37.9 +0.3**
**CRES Cresnjev 81.19 326** *i* P **P** **15 18 38.1 +0.2**
**BCLA Clavier 81.22 334** *d*P **P** **15 18 38.0 +0.1**
comp=Z,8.0nm,0.9s
**MYKA Terra Mystica 81.30 327** *e*P **P** **15 18 38.5 0.0**
comp=Z,8.0nm,0.6s,SNR=7.3
**BGES Gesves 81.32 334** *d*P **P** **15 18 38.5 0.0**
comp=Z,7.5nm,0.9s
**L34A Svendsen Farm, 81.38 40** IAmb IAmb 15 18 40.0
comp=Z,16nm,0.8s
**RCHB Rochefort 81.47 334** *d*P **P** **15 18 39.2 0.0**
**PRED Cave del Predi 81.48 327** IAmb IAmb 15 18 38.4
comp=Z,13nm,0.8s
**BMRD Maredsous 81.50 334** *d*P **P** **15 18 39.5 +0.1**
comp=Z,14nm,1.0s
**WATA Walderalm 81.55 329** *i* P **P** **15 18 41.0 +1.0**
comp=Z,20nm,1.2s,SNR=6.7
**WTTA Wattenberg 81.58 329** *i* P **P** **15 18 40.9 +0.8**
comp=Z,20nm,0.7s,SNR=8.1
**ABTA Abfaltersbach 81.66 328** *e*P **P** **15 18 40.7 +0.3**
comp=Z,11nm,0.9s,SNR=6.2
**MOTA Moosalm 81.72 329** *i* P **P** **15 18 41.7 +0.8**
comp=Z,36nm,0.9s
**DOU Dourbes 81.73 334** *d*P **P** **15 18 40.2 -0.5**
**RETA Reutte 81.74 329** *i* P **P** **15 18 41.8 +1.0**
comp=Z,36nm,1.1s,SNR=9.9
**SQTA Sankt Quirin 81.78 329** *i* P **P** **15 18 42.0 +0.8**
comp=Z,19nm,0.9s,SNR=5.9
**SABO M.te Sabotino 81.84 327** IAmb IAmb 15 18 41.8
comp=Z,25nm,1.2s
**BFO Black Forest 81.94 331** P **P** **15 18 41.3 -0.5**
BFO IAmb IAmb 15 18 43.4
comp=Z,33nm,1.5s
**BFO Black Forest 81.94 331** P **P** **15 18 41.3 -0.5**
BFO pmax pmax
comp=Z,33nm,1.5s
**STAL STALIGIAL 81.97 327** IAmb IAmb 15 18 42.2
comp=Z,17nm,0.7s
**121A Cookes Peak, D 81.99 53** P **P** **15 18 42.2 -0.3**
baz=314
**RAR Rarotonga 82.01 127** LR LR 15 49 39.5
comp=Z,91nm,20.9s,baz=309,slow=32
**FETA Feichten 82.14 329** *i* P **P** **15 18 43.8 +0.8**
comp=Z,20nm,0.8s,SNR=14
**PUK Puka 82.15 321** IAmb IAmb 15 18 45.5
comp=Z,15nm,0.7s
**PDG Podgorica 82.15 321** ⇑P **P** **15 18 43.2 +0.3**
**DAVA Damuels 82.24 330** *i* P **P** **15 18 44.3 +0.7**
comp=Z,35nm,0.9s,SNR=9.1
**FNA Florina 82.39 319** P **P** **15 18 43.7 -0.7**
FNA IAmb IAmb 15 18 47.0
comp=Z,9.3nm,0.6s
**FNA Florina 82.39 319** P **P** **15 18 43.7 -0.7**
FNA pmax pmax
comp=Z,9.0nm,0.6s
**OHR Ohrid 82.42 320** *i* P **P** **15 18 45.6 +1.0**
**ECH Echery 82.46 332** IAmb IAmb 15 18 45.8
comp=Z,11nm,1.0s
**CTI Castel Tesino 82.57 328** IAmb IAmb 15 18 45.6
comp=Z,16nm,0.7s
**DAVOX Davos/Dischmat 82.66 329** LR LR 15 57 58.0
comp=Z,189nm,21.4s,baz=84,slow=37
**TIR Tirane 82.69 320** P **P** **15 18 46.0 +0.1**
comp=Z,29nm,0.8s
**KEK Kerkira 83.98 319** P **P** **15 18 52.1 -0.4**
**SMWD Samnorwood 84.51 47** IAmb IAmb 15 18 58.0
comp=Z,17nm,0.8s
**P38A Dawn 84.56 40** P **P** **15 18 55.5 +0.1**
**CROK Carrier 84.69 45** IAmb IAmb 15 18 57.9
comp=Z,18nm,0.9s
**MATE Matera 84.73 322** ⇓P **P** **15 18 56.8 +0.5**
**PECS Pecos 85.15 52** IAmb IAmb 15 19 01.8
comp=Z,10nm,0.8s
**DKNS Dickens 85.19 49** IAmb IAmb 15 19 01.8
comp=Z,12nm,0.8s
**URZ Urewera 85.31 153** LR LR 15 53 31.1
comp=Z,85nm,18.9s,baz=32,slow=33
**BNI Bardonecchia 85.32 330** P **P** **15 18 58.7 -0.7**
BNI IAmb IAmb 15 19 00.9
comp=Z,14nm,0.8s
**BNI Bardonecchia 85.32 330** P **P** **15 18 58.7 -0.7**
BNI pmax pmax
comp=Z,14nm,0.9s
**P40A Paris 85.35 39** IAmb IAmb 15 19 00.9
comp=Z,10nm,0.8s
**ODSA Odessa 85.39 51** IAmb IAmb 15 19 01.8
comp=Z,14nm,0.7s
**WMOK Wichita Mounta 85.58 46** IAmb IAmb 15 19 02.3
comp=Z,5.2nm,0.8s
**PPT Papeete 85.79 118** LR LR 15 50 15.8
comp=Z,150nm,21.5s,baz=307,slow=31
**PPT2 Papeete2 85.81 118** *e*S **SKSac** **15 29 27.0 +3.1**
comp=Z,447nm,45.5s
**PPT2 Papeete2 85.81 118** *e*LR LR 15 45 47.2
comp=Z,305nm,23.8s
PPT2 *e*LR LR 15 46 05.3
comp=Z,294nm,22.8s
**TIP Timpagrande 85.87 321** ⇑P **P** **15 19 03.2 +1.1**
**APMT Aspermont 85.89 48** IAmb IAmb 15 19 03.9
comp=Z,7.9nm,0.9s
**SSB Saint Sauveur 85.91 332** IAmb IAmb 15 19 03.7
comp=Z,14nm,0.8s
**S39A Bolivar 86.17 41** IAmb IAmb 15 19 04.2
comp=Z,7.4nm,0.8s
**LPIG La Paz 86.24 61** LR LR 15 51 01.6
comp=Z,27nm,19.6s,baz=260,slow=31
**TAOE Nuku Hiva Isla 86.36 105** *e*LR LR 15 46 18.9
comp=Z,261nm,22.3s
**U38A Gravette 86.61 43** IAmb IAmb 15 19 06.8
comp=Z,6.9nm,0.8s

**LMQ La Malbaie 86.74 22** IAmb IAmb 15 19 07.2
comp=Z,13nm,1.0s
**TX31 Lajitas Ar. Si 86.74 53** IAmb IAmb 15 19 08.7
comp=Z,4.4nm,0.7s
**TXAR Lajitas Array 86.74 53** P **P** **15 19 06.2 -0.4**
**TXAR Lajitas Array 86.74 53** P **P** **15 19 07.8 +1.2**
comp=Z,4.6nm,0.8s,baz=294,slow=3.7,SNR=36
comp=Z,4.6nm,0.8s
**CCM Cathedral Cave 86.90 40** P **P** **15 19 07.0 0.0**
CCM IAmb IAmb 15 19 08.4
comp=Z,13nm,0.8s
**CCM Cathedral Cave 86.90 40** P **P** **15 19 07.1 0.0**
CCM pmax pmax
comp=Z,13nm,0.8s
**HHAR Hobbs 86.95 42** IAmb IAmb 15 19 08.3
comp=Z,5.9nm,0.8s
**CEL Celeste 87.01 321** IAmb IAmb 15 19 08.4
comp=Z,14nm,0.8s
**MGMO Mountain Grove 87.11 41** IAmb IAmb 15 19 09.1
comp=Z,8.9nm,0.9s
**T42A Van Buren 87.78 40** IAmb IAmb 15 19 15.1
comp=Z,15nm,1.4s
**FCAR Ozark Folk Cen 88.18 42** IAmb IAmb 15 19 14.2
comp=Z,8.7nm,0.9s
**PBMO Poplar Bluff 88.30 40** IAmb IAmb 15 19 15.4
comp=Z,14nm,0.9s
**VAE Valguarnera 88.34 321** LR LR 16 02 09.7
comp=Z,148nm,19.5s,baz=115,slow=38
**MIAR Mount Ida 88.49 43** P **P** **15 19 14.8 0.0**
MIAR IAmb IAmb 15 19 16.5
comp=Z,8.1nm,0.8s
**MIAR Mount Ida 88.49 43** P **P** **15 19 14.8 0.0**
MIAR pmax pmax
comp=Z,8.0nm,0.8s
**WHAR Wooly Hollow 88.56 42** IAmb IAmb 15 19 16.4
comp=Z,11nm,0.8s
**P49A Miami Univ. Ec 88.66 35** P **P** **15 19 15.2 -0.3**
**CEST Esterri de Car 89.40 333** IAmb IAmb 15 19 20.9
comp=Z,9.1nm,0.8s
**O53A New Philadelph 89.51 32** P **P** **15 19 19.1 -0.3**
baz=329
**P52A Corning 89.66 33** P **P** **15 19 20.1 -0.1**
baz=328
**TBI Tubuai 89.99 122** *e*S **S** **15 30 08.4 -2.6**
comp=Z,774nm,34.5s
**TBI Tubuai 89.99 122** *e*LR LR 15 48 01.7
comp=Z,913nm,25.8s
**HBVL Hebbronville 91.39 51** IAmb IAmb 15 19 31.5
comp=Z,9.3nm,0.9s
**KEST Kesra 92.09 324** P **P** **15 19 31.0 -0.6**
**KEST Kesra 92.09 324** P **P** **15 19 31.4 -0.2**
comp=Z,6.4nm,0.8s,baz=333,slow=2.8,SNR=9.6
KEST LR LR 16 05 21.2
comp=Z,213nm,20.2s,baz=304,slow=38
comp=Z,6.4nm,0.8s
**TKL Tuckaleechee C 92.31 36** LR LR 16 01 58.1
comp=Z,110nm,21.9s,baz=338,slow=36
**ESDC Sonseca Array 93.77 335** P **P** **15 19 39.2 0.0**
comp=Z,2.4nm,0.9s,baz=15,slow=4.2,SNR=18
ESDC PP **PP** **15 23 21.9 -2.0**
comp=Z,1.4nm,0.9s,baz=28,slow=7.0,SNR=4.7
ESDC LR LR 16 07 55.7
comp=Z,126nm,18.5s,baz=19,slow=39
comp=Z,2.4nm,0.9s
**FURI Furi 94.46 286** LR LR 16 07 55.5
comp=Z,42nm,19.2s,baz=32,slow=39
**RKT Rikitea 99.54 112** *e*LR LR 15 52 35.1
comp=Z,912nm,30.2s
**TORD Torodi Ar. Bea 114.83 317** PKP **PKiKP** **15 25 02.0 -1.2**
comp=Z,1.1nm,0.9s,baz=17,slow=1.1,SNR=4.4
TORD PP **PP** **15 25 58.4 -2.6**
comp=Z,2.4nm,1.0s,baz=16,slow=8.5,SNR=7.5
**DBIC Dimbokro 123.64 320** PKP **PKPdf** **15 25 19.2 -0.9**
comp=Z,4.9nm,0.9s,baz=56,slow=11,SNR=3.2
**MAW Mawson 123.86 207** PKP **PKPdf** **15 25 18.4 -0.4**
comp=Z,1.6nm,0.8s,baz=131,slow=11,SNR=4.6
**QSPA South Pole Qui 131.14 180** PKP **PKPdf** **15 25 32.4 -0.4**
comp=Z,1.5nm,0.9s,baz=308,slow=1.4,SNR=7.5
**LPAZ La Paz 143.57 56** PKPbc 15 25 56.2 +0.9
**LPAZ La Paz 143.57 56** PKP PKPbc 15 25 56.4 +1.0
comp=Z,1.3nm,0.5s,baz=334,slow=2.0,SNR=6.9
**LPAZ La Paz 143.57 56** PKIKP PKPbc 15 25 56.2 +0.8
**TROLL Troll, Antarti 143.66 200** ⇑PKPdf PKPab 15 25 53.2 +0.6
comp=Z,177nm,0.7s
**SNAA Sanae 145.19 198** **PKPbc** **15 25 57.3 -0.9**
**SNAA Sanae 145.19 198** ⇑PKPdf **PKPbc** **15 25 57.7 -0.5**
comp=Z,122nm,0.7s
**SNAA Sanae 145.19 198** PKPbc **PKPbc** **15 25 57.7 -0.5**
comp=Z,5.3nm,0.8s,baz=149,slow=3.6,SNR=30
**H03N2 Juan Fernandez 146.32 90** T T 18 09 23.1
baz=300,slow=76,SNR=7.8
**H03N3 Juan Fernandez 146.33 90** T T 18 09 21.8
baz=300,slow=76,SNR=7.1
**H03N1 Juan Fernandez 146.34 90** T T 18 09 24.0
baz=300,slow=76,SNR=6.3
**VNA2 Neumayer--Watz 146.76 197** ⇑PKPdf **PKPbc** **15 26 02.5 -0.4**
comp=Z,2.7nm,0.4s,baz=169,slow=0.3
**VNA3 Neumayer Olymp 147.02 196** ⇑PKPdf **PKPdf** **15 26 02.6 +1.1**
comp=Z,3.2nm,0.8s
**PTLB Pontes e Lacer 148.02 42** **PKPbc** **15 26 07.6 -0.3**
**BDFB Brasilia 152.73 23** PKPbc **PKPbc** **15 26 19.7 +0.3**
comp=Z,1.5nm,0.4s,baz=315,slow=4.3,SNR=4.6
BDFB PKPab **PKPab** **15 26 30.6 +0.4**
comp=Z,4.4nm,0.7s,baz=324,slow=8.7,SNR=6.7

**ISC 22 15:14:16.6±1.3, 28°.64N±0°.07×112°.82W±0°.07, h13km±13km, n5, σ0°.84/10, 2C-1D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SFQB** | **San Francisqui** | **0.24** | **190** | *e*P | | **Pg** | | **15 14 22.0** | **+0.3** |
| SFQB | | | | *e*S | | **Sg** | | **15 14 25.1** | **0.0** |
| **BKIRB** | **Bahia Kino** | **0.75** | **73** | ⇑*i*P | | **Pn** | | **15 14 32.5** | **-0.3** |
| BKIRB | | | | *e*S | | **Sn** | | **15 14 43.4** | **-0.6** |
| **NE74** | **Guerrero Negro** | **1.23** | **239** | *e*P | | **Pg** | | **15 14 39.4** | **-0.9** |
| NE74 | | | | *e*S | | **Sb** | | **15 14 56.4** | **+0.9** |
| NE74 | | | | IAML | | | | 15 14 56.6 | |
| | comp=E,325nm,0.3s | | | | | | | | |
| NE74 | | | | ⇑*e* | | | | 15 14 56.6 | |
| NE74 | | | | ⇓*e* | | | | 15 15 04.6 | |
| NE74 | | | | IAML | | | | 15 15 04.6 | |
| | comp=N,421nm,0.7s | | | | | | | | |
| **PLIB** | **Puerto Liberta** | **1.27** | **5** | *e*P | | **Pn** | | **15 14 39.3** | **-0.8** |
| PLIB | | | | *e*S | | **Sb** | | **15 14 57.1** | **+0.3** |
| **LAPR** | **La Primavera** | **1.90** | **13** | *e*P | | **Pn** | | **15 14 49.4** | **+0.6** |
| LAPR | | | | *e*S | | **Sn** | | **15 15 13.5** | **+0.9** |

*DJA **22** 15:22:59.1±0.8, 6°.N±6°.×12°.7E±°, h105km±16km, M4.3/11, mb4.3/9, mB4.6/5, MLv4.6/11, Mw(mB)3.8/5*
*IDC **22** 15:23:00.6±1.5, 5°.75N×126°.78E, h105km±11km, mb4.0/18, mbtmp4.3/18, MS3.6/3, Error ellipse: s-maj=24.9km s-min=11.2km az=69.0*
*NEIC **22** 15:23:00.1±1.7, 5°.79N±0°.07×126°.9E±0°.1, h91km±7km, mb4.5/76, Error ellipse: s-maj=15.4km s-min=9.0km az=68.0*

**ISC 22 15:22:59.5±0.9, 5°.73N±0°.04×126°.78E±0°.07, h91km±9km, n132, σ1°.26/146, mb4.5/54, 8C-6D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **1.79** | **318** | | Pn | | **Pn** | **15 23 28.6** | **-0.3** |
| **DAV** | **Davao City (W)** | **1.79** | **318** | | P | | **Pn** | **15 23 28.9** | **0.0** |
| | 717nm,0.3s,baz=144,slow=2.7,SNR=14 | | | | | | | | |
| DAV | | | | | S | | **Sn** | **15 23 53.8** | **+2.4** |
| | 881nm,0.3s,baz=230,slow=16,SNR=12 | | | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.84** | **317** | ⇑*e*P | | | **Pn** | **15 23 29.7** | **0.0** |
| DMPH | | | | *e*S | | | **Sn** | **15 23 51.8** | **-0.9** |
| **GSPH** | **General Santos** | **1.86** | **281** | ⇓*i*P | | | **Pn** | **15 23 26.5** | **-3.4** |
| GSPH | | | | *i* S | | | **Sn** | **15 23 49.0** | **-4.2** |
| **KCP** | **Kidapawan** | **2.10** | **307** | ⇓*i*P | | | **Pn** | **15 23 31.7** | **-1.4** |
| KCP | | | | *e*S | | | **Sn** | **15 23 57.8** | **-1.1** |
| **BIPH** | **Bislig** | **2.47** | **350** | ⇑*e*P | | | **Pn** | **15 23 36.1** | **-1.8** |
| BIPH | | | | *e*S | | | **Sn** | **15 24 06.5** | **-0.9** |
| **CTBH** | **Cotabato--PC H** | **2.92** | **301** | ⇑*e*P | | | **Pn** | **15 23 42.9** | **-1.0** |
| CTBH | | | | *i* S | | | **Sn** | **15 24 18.1** | **-0.2** |
| **CGP** | **Cagayan de Oro** | **3.41** | **323** | ⇓*i*P | | | **Pn** | **15 23 51.3** | **+0.8** |
| CGP | | | | *i* S | | | **Sn** | **15 24 32.0** | **+2.1** |
| **SCPH** | **Surigao** | **4.22** | **342** | ⇑*e*P | | | **Pn** | **15 24 01.3** | **-0.3** |
| SCPH | | | | *e*S | | | **Sn** | **15 24 50.9** | **+1.2** |
| **DCPH** | **Dipolog City** | **4.43** | **310** | ⇑*e*P | | | **Pn** | **15 24 06.2** | **+1.9** |
| **GHBP** | **Garcia Hernand** | **4.58** | **328** | ⇑*e*P | | | **Pn** | **15 24 06.7** | **+0.4** |
| GHBP | | | | *e*S | | | **Sn** | **15 25 00.0** | **+1.6** |

**LSIP Lazi, Siquijor 4.60 317** ⇑*i*P **Pn** **15 24 07.1 +0.4**
LSIP *i* S **Sn** **15 25 03.0 +4.1**
**TBP Tagbilaran 4.88 324** ⇓*e*P **Pn** **15 24 10.2 -0.3**
TBP *i* S **Sn** **15 25 05.7 -0.1**
**TNTI Ternate 4.96 173** Pn **Pn** **15 24 11.8 +0.2**
**TNTI Ternate 4.96 173** P **Pn** **15 24 11.6 0.0**
**SNPH Sibulan 5.02 316** *e*P **Pn** **15 24 13.2 +0.7**
**LLP Lapu-Lapu 5.34 329** ⇓*e*P **Pn** **15 24 17.9 +1.1**
LLP *e*S **Sn** **15 25 19.4 +2.4**
**PLP Palo 5.68 342** ⇓*e*P **Pn** **15 24 23.8 +2.4**
PLP *e*S **Sn** **15 25 29.5 +4.2**
**GTOI Gorontalo 6.31 217** P **Pn** **15 24 30.0 0.0**
22nm,0.7s
**RCP Roxas 7.03 326** ⇑*e*P **Pn** **15 24 39.7 -0.1**
**MRSI Marisa 7.11 223** P **Pn** **15 24 41.8 +0.9**
**TOLI2 Tolitoli 7.54 233** Pn **Pn** **15 24 45.2 -1.6**
**SANI Sanana 7.77 186** P **Pn** **15 24 47.7 -2.2**
**LUWI Luwuk 7.83 211** **Pn** **15 24 53.4 +2.6**
**LUWI Luwuk 7.83 211** P **Pn** **15 24 55.3 +4.6**
**SWI Sorong 7.93 146** P **Pn** **15 24 53.0 +0.9**
16nm,0.8s,727nm0.1nm
**MYLDM Lahad Datu 8.26 267** Pn **Pn** **15 24 57.9 +1.3**
**NLAI Namlea 8.92 178** P **Pn** **15 25 03.6 -1.9**
20nm,0.4s,522nm
**KKM Kota Kinabalu 10.52 272** Pn **Pn** **15 25 30.2 +2.8**
**SBUM Sibu 14.88 258** P **P** **15 26 30.3 +1.6**
**JAGI Jajag, Banyuwa 18.91 222** P **Pn** **15 27 14.1 -0.6**
JAGI IAmb IAmb 15 27 29.4
comp=Z,28nm,1.2s
**MTN Manton Dam 18.95 167** P **P** **15 27 14.2 +0.6**
**GUMO Guam 19.45 65** LR LR 15 35 11.5
comp=Z,82nm,18.4s,baz=226,slow=38
**YHNB Yeheng 19.53 345** P **P** **15 27 17.6 -2.3**
YHNB IAmb IAmb 15 27 31.4
comp=Z,45nm,1.5s
**JOW Kunigami 21.03 4** P **P** **15 27 36.6 +0.7**
**KNRA Kununurra 21.36 175** P **P** **15 27 41.1 +1.5**
KNRA IAmb IAmb 15 28 04.2
comp=Z,18nm,1.1s
**FITZ Fitzroy Crossi 23.71 183** P **P** **15 28 03.5 +0.3**
**COEN Coen 25.45 140** P **P** **15 28 19.3 +0.2**
**IPM Ipoh 25.68 268** P **P** **15 28 21.8 +0.5**
IPM IAmb IAmb 15 29 02.3
comp=Z,22nm,1.2s
**WB0 Warramunga Arr 26.42 164** P **P** **15 28 28.6 +0.8**
WB0 IAmb IAmb 15 28 50.4
comp=Z,14nm,1.2s
**WRAB Tennant Creek 26.57 164** P **P** **15 28 29.4 +0.2**
**WRA Warramunga Arr 26.58 164** P **P** **15 28 29.4 +0.2**
**WRA Warramunga Arr 26.58 164** P **P** **15 28 28.7 -0.5**
comp=Z,0.9nm,0.5s,baz=342,slow=10,SNR=24
WRA PcP **PcP** **15 31 52.1 +0.5**
comp=Z,0.3nm,0.4s,baz=336,slow=2.4,SNR=2.5
comp=Z,0.9nm,0.5s
**WB2 Warramunga Arr 26.58 164** P **P** **15 28 28.8 -0.5**
**WR0 Warramunga Arr 26.65 164** P **P** **15 28 28.9 -0.9**
**PHRA Phrae 28.84 298** P **P** **15 28 50.3 +0.8**
**CRAI Chiangrai 29.42 302** P **P** **15 28 55.9 +1.3**
**CMAR Chiang Mai Arr 29.95 297** P **P** **15 28 58.8 -0.6**
comp=Z,1.0nm,0.5s,baz=117,slow=7.1,SNR=8.9
comp=Z,1.0nm,0.5s
**AS31 Alice Springs 30.04 167** P **P** **15 29 00.8 +0.7**
**ASAR Alice Springs 30.04 167** P **P** **15 29 00.7 +0.7**
**ASAR Alice Springs 30.04 167** P **P** **15 29 00.1 0.0**
comp=Z,0.5nm,0.5s,baz=342,slow=7.2,SNR=24
ASAR PcP **PcP** **15 32 00.3 +0.2**
comp=Z,1.4nm,0.5s,baz=349,slow=2.4,SNR=15
comp=Z,0.5nm,0.5s
**CTAO Charters Tower 32.02 144** P **P** **15 29 18.4 +0.9**
CTAO IAmb IAmb 15 29 37.2
comp=Z,12nm,1.4s
**JSD Sado 33.81 16** P **P** **15 29 35.3 +2.5**
**JMM Marumori 34.44 20** P **P** **15 29 38.5 +0.2**
**FORT Forest 36.33 178** P **P** **15 29 55.0 +0.4**
**USA0B Ussuriysk Arra 38.59 6** P **P** **15 30 13.9 +0.4**
USA0B IAmb IAmb 15 30 22.6
comp=Z,5.4nm,0.9s
**USRK Ussuriysk Ar. 38.59 6** P **P** **15 30 13.9 +0.4**
**USRK Ussuriysk Ar. 38.59 6** P **P** **15 30 13.8 +0.3**
comp=Z,2.2nm,0.5s,baz=177,slow=8.0,SNR=8.1
comp=Z,2.2nm,0.5s
**BBOO Buckleboo 39.33 168** P **P** **15 30 20.1 +0.2**
**NWAO Narrogin (SRO) 39.50 193** P **P** **15 30 21.8 +0.5**
**STKA Stephens Creek 39.98 160** P **P** **15 30 25.4 +0.1**
**STKA Stephens Creek 39.98 160** P **P** **15 30 25.6 +0.4**
comp=Z,2.8nm,0.7s,baz=329,slow=11,SNR=4.0
STKA LR LR 15 49 36.3
comp=Z,121nm,19.8s,baz=352,slow=40
comp=Z,2.8nm,0.7s
**ASAJ Asahikawa 40.68 18** P **P** **15 30 32.0 +1.1**
comp=Z,8.2nm,0.9s,baz=225,slow=12,SNR=4.6
comp=Z,8.2nm,0.9s
**JKA Kamikawa-asahi 40.68 18** P **P** **15 30 32.1 +1.3**
**ARMA Armidale 43.11 148** P **P** **15 30 50.6 -0.4**
**SONM Songino Array 45.43 341** P **P** **15 31 09.7 +0.4**
comp=Z,0.5nm,0.4s,baz=154,slow=9.1,SNR=5.6
comp=Z,0.5nm,0.4s
**PETK Petropavlovsk- 53.57 23** P **P** **15 32 09.3 -1.6**
comp=Z,1.1nm,0.7s,baz=122,slow=1.9,SNR=4.2
comp=Z,1.1nm,0.7s
**MK31 Makanchi Array 55.96 324** P **P** **15 32 28.1 -0.2**
MK31 IAmb IAmb 15 32 28.8
comp=Z,3.8nm,0.7s
**MKAR Makanchi Array 55.96 324** P **P** **15 32 28.0 -0.3**
**MKAR Makanchi Array 55.96 324** P **P** **15 32 28.3 -0.1**
comp=Z,3.5nm,0.5s,baz=124,slow=8.0,SNR=58
MKAR PcP **PcP** **15 33 25.3 -0.6**
comp=Z,3.0nm,0.7s,baz=108,slow=4.2,SNR=11
comp=Z,3.5nm,0.5s
**MAKZ Makanchi 56.15 324** P **P** **15 32 29.4 -0.3**
MAKZ IAmb IAmb 15 32 30.6
comp=Z,6.7nm,1.0s
**MA2 Magadan 56.76 14** P **P** **15 32 33.4 -0.4**
**NIL Nilore 56.76 307** P **P** **15 32 33.8 -0.5**
**ZAA0 Zalesovo Array 58.84 332** P **P** **15 32 47.7 -0.7**
ZAA0 IAmb IAmb 15 32 49.5
comp=Z,2.8nm,0.8s
**ZALV Zalesovo Beam 58.84 332** P **P** **15 32 48.2 -0.2**
**ZALV Zalesovo Beam 58.84 332** P **P** **15 32 47.6 -0.8**
comp=Z,2.6nm,0.4s,baz=124,slow=5.8,SNR=12
comp=Z,2.6nm,0.4s
**ARSB Arslanbob 59.47 315** P **P** **15 32 52.9 -0.4**
**KURK Kurchatov 60.09 327** P **P** **15 32 56.8 -0.3**
**KURBB Kurchatov Arra 60.10 327** P **P** **15 32 56.7 -0.4**
comp=Z,10.0nm,0.6s,baz=125,slow=6.4,SNR=68
comp=Z,10.0nm,0.6s
**GAR Garm 60.62 312** P **P** **15 33 00.7 -0.5**
**KKAR Karatay Array 61.82 316** P **P** **15 33 08.3 -0.7**
**BVAR Borovoye Array 65.68 326** P **P** **15 33 33.9 -0.3**
comp=Z,9.1nm,0.8s,baz=136,slow=8.5,SNR=31
comp=Z,9.1nm,0.8s
**BRVK Borovoye 65.76 326** P **P** **15 33 34.0 -0.6**
BRVK IAmb IAmb 15 33 35.5
comp=Z,8.5nm,0.8s
**ABKAR Akbulak array 70.65 320** P **P** **15 34 04.7 -0.6**
ABKAR IAmb IAmb 15 34 05.9
comp=Z,5.0nm,0.7s
**CASY Casey 72.80 187** P **P** **15 34 18.9 +1.2**
CASY IAmb IAmb 15 34 41.0
comp=Z,7.5nm,1.4s
**ARU Arti 73.28 327** P **P** **15 34 19.8 -1.0**
ARU IAmb IAmb 15 34 20.8
comp=Z,5.8nm,0.6s
**K13K Kusilvak Mount 74.96 27** P **P** **15 34 29.9 -0.7**
K13K IAmb IAmb 15 34 55.0
comp=Z,10.0nm,1.1s
**J16K Anvik River 77.12 26** P **P** **15 34 43.2 +0.5**
J16K IAmb IAmb 15 35 11.7
comp=Z,14nm,1.4s
**L16K Owhat River 77.29 28** P **P** **15 34 43.5 -0.2**
L16K IAmb IAmb 15 34 56.7
comp=Z,12nm,1.4s
**M16K Timber Creek 77.40 29** P **P** **15 34 44.9 +0.6**
M16K IAmb IAmb 15 34 45.7
comp=Z,5.4nm,0.8s
**O16K Kokwok River B 77.56 30** P **P** **15 34 45.3 0.0**
O16K IAmb IAmb 15 35 13.8
comp=Z,5.8nm,1.1s
**H17K Granite Mounta 77.79 25** P **P** **15 34 44.6 -1.9**
H17K IAmb IAmb 15 35 02.5
comp=Z,7.8nm,1.4s
**J17K VABM Dome 77.82 26** P **P** **15 34 47.0 +0.3**
J17K IAmb IAmb 15 35 22.7
comp=Z,11nm,1.4s
**E18K Tukpahlearik C 78.09 22** P **P** **15 34 48.2 +0.1**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| E18K | | | | | IAmb | IAmb | 15 35 17.4 | | |
| | comp=Z,8.5nm,1.2s | | | | | | | | |
| **M17K** | **Holitna River** | **78.19** | **28** | P | | **P** | **15 34 49.8** | **+1.0** | |
| **L18K** | **Granite Mounta** | **78.68** | **28** | P | | **P** | **15 34 52.3** | **+0.9** | |
| L18K | | | | | IAmb | IAmb | 15 35 29.9 | | |
| | comp=Z,8.5nm,1.5s | | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.05** | **30** | P | | **P** | **15 34 54.1** | **+0.6** | |
| **G19K** | **Purcell Mounta** | **79.18** | **24** | P | | **P** | **15 34 54.5** | **+0.4** | |
| **H19K** | **Roundabout Mou** | **79.33** | **24** | P | | **P** | **15 34 55.0** | **+0.1** | |
| **E19K** | **Redstone River** | **79.37** | **22** | P | | **P** | **15 34 55.9** | **+0.8** | |
| E19K | | | | | IAmb | IAmb | 15 34 56.6 | | |
| | comp=Z,5.8nm,1.1s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **79.53** | **29** | P | | **P** | **15 34 55.3** | **-0.9** | |
| N19K | | | | | IAmb | IAmb | 15 35 33.0 | | |
| | comp=Z,8.5nm,1.2s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **79.75** | **293** | P | | **P** | **15 34 57.3** | **-0.9** | |
| RAYN | | | | | IAmb | IAmb | 15 34 58.0 | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **80.18** | **32** | P | | **P** | **15 34 59.5** | **-0.1** | |
| **M20K** | **Styx River** | **80.30** | **28** | P | | **P** | **15 35 00.9** | **+0.6** | |
| M20K | | | | | IAmb | IAmb | 15 35 01.8 | | |
| | comp=Z,3.6nm,0.7s | | | | | | | | |
| **H21K** | **Melozitna River** | **80.85** | **24** | P | | **P** | **15 35 03.9** | **+0.7** | |
| **BPAW** | **Bear Paw Mtn.** | **81.48** | **26** | P | | **P** | **15 35 06.1** | **-0.4** | |
| BPAW | | | | | IAmb | IAmb | 15 35 07.5 | | |
| | comp=Z,3.9nm,0.7s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **81.51** | **22** | P | | **P** | **15 35 06.5** | **-0.1** | |
| E22K | | | | | IAmb | IAmb | 15 35 08.6 | | |
| | comp=Z,10nm,1.5s | | | | | | | | |
| **MLY** | **Manley** | **81.66** | **25** | P | | **P** | **15 35 06.9** | **-0.6** | |
| MLY | | | | | IAmb | IAmb | 15 35 08.3 | | |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| **D23K** | **Nanushuk River** | **82.00** | **21** | P | | **P** | **15 35 10.3** | **+1.2** | |
| D23K | | | | | IAmb | IAmb | 15 35 52.2 | | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **C23K** | **Itkillik River** | **82.10** | **20** | P | | **P** | **15 35 09.3** | **-0.2** | |
| C23K | | | | | IAmb | IAmb | 15 35 11.1 | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **H23K** | **Yukon River** | **82.21** | **24** | P | | **P** | **15 35 10.9** | **+0.6** | |
| H23K | | | | | IAmb | IAmb | 15 35 12.0 | | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **82.25** | **25** | P | | **P** | **15 35 10.1** | **-0.3** | |
| I23K | | | | | IAmb | IAmb | 15 35 49.4 | | |
| | comp=Z,8.3nm,1.5s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **82.38** | **22** | P | | **P** | **15 35 11.5** | **+0.3** | |
| **PWL** | **Port Wells** | **82.53** | **29** | P | | **P** | **15 35 11.7** | **-0.4** | |
| PWL | | | | | IAmb | IAmb | 15 35 43.9 | | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **MDM** | **Murphy Dome** | **82.72** | **25** | P | | **P** | **15 35 12.6** | **-0.4** | |
| **CCB** | **Clear Creek Bu** | **82.89** | **26** | P | | **P** | **15 35 12.7** | **-1.1** | |
| **G24K** | **Hadweenzic Riv** | **83.08** | **24** | P | | **P** | **15 35 15.0** | **+0.2** | |
| **GLI** | **Glacier Island** | **83.14** | **29** | P | | **P** | **15 35 14.5** | **-0.7** | |
| **ILAR** | **Eielson Array** | **83.28** | **26** | P | | **P** | **15 35 13.9** | **-2.0** | |
| | comp=Z,1.1nm,0.6s,baz=252,slow=5.5,SNR=12 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| **KLU** | **Klutina** | **83.71** | **29** | P | | **P** | **15 35 17.7** | **-0.5** | |
| **J25K** | **Salcha River,** | **83.94** | **26** | P | | **P** | **15 35 18.2** | **-1.1** | |
| **F26K** | **Sheenjek River** | **84.38** | **23** | P | | **P** | **15 35 22.5** | **+1.1** | |
| F26K | | | | | IAmb | IAmb | 15 35 25.3 | | |
| | comp=Z,8.1nm,1.5s | | | | | | | | |
| **J26L** | **Joseph Creek** | **84.72** | **26** | P | | **P** | **15 35 22.6** | **-0.7** | |
| **VRDI** | **Verde Repeater** | **84.91** | **29** | P | | **P** | **15 35 24.5** | **+0.1** | |
| VRDI | | | | | IAmb | IAmb | 15 35 46.9 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **I28M** | **Miner Creek** | **86.20** | **25** | P | | **P** | **15 35 30.9** | **+0.3** | |
| I28M | | | | | IAmb | IAmb | 15 35 32.3 | | |
| | comp=Z,3.5nm,0.6s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **88.54** | **349** | P | | **P** | **15 35 41.3** | **-0.2** | |
| | comp=Z,3.2nm,0.8s,baz=102,slow=6.1,SNR=5.6 | | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.60** | **340** | P | | **P** | **15 35 40.1** | **-1.8** | |
| | comp=Z,2.5nm,0.7s,baz=82,slow=6.2,SNR=12 | | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **88.79** | **310** | P | | **P** | **15 35 42.5** | **-1.2** | |
| | comp=Z,1.3nm,0.8s,baz=115,slow=3.7,SNR=8.4 | | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **90.10** | **332** | P | | **P** | **15 35 48.0** | **-1.0** | |
| | comp=Z,5.2nm,1.1s,baz=52,slow=5.4,SNR=10 | | | | | | | | |
| | comp=Z,5.2nm,1.1s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **95.63** | **180** | LR | | LR | 16 20 12.3 | | |
| | comp=Z,50nm,19.9s,baz=12,slow=36 | | | | | | | | |
| **HFS** | **Hagfors** | **96.28** | **332** | P | | **P** | **15 36 15.4** | **-2.1** | |
| | comp=Z,1.5nm,0.7s,baz=88,slow=7.5,SNR=1.6 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.33** | **289** | PKP | | **PKPdf** | **15 41 44.3** | **-0.7** | |
| | comp=Z,1.8nm,0.8s,baz=65,slow=2.0,SNR=14 | | | | | | | | |

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*MOS **22** 15:28:49.2±1.0, 18˚.00S×178˚.08W, h542km, mb5.1/23, Error ellipse: s-maj=9.4km s-min=8.4km az=32.4*
*BGR **22** 15:28:50.3, 18˚.69S×177˚.92W, h560km±7km*
*NEIC **22** 15:28:51.7±2.2, 18˚.04S±0˚.09×178˚.00W±0˚.09, h561km±5km, mb4.8/212, Error ellipse: s-maj=13.5km s-min=12.4km az=208.0*
*NOU **22** 15:28:51.4, 18˚.12S×178˚.02W, h557km, ML4.9/133, Fiji Islands Region*
*IDC **22** 15:28:51.1±0.6, 18˚.10S×178˚.05W, h557km±6km, mb4.3/25, mbtmp5.2/27, Error ellipse: s-maj=10.0km s-min=7.9km az=156.0*
*GCMT **22** 15:28:51.7±0.6, 18˚.03S±0˚.07×178˚.27W±0˚.05, h550km±4km, MW5.3/49, Moment Tensor Solution. s49,c63; Duration: 1ŝ1 Moment tensor: Scale 10^17^Nm; Mrr-0.89±.06; Mθθ 0.31±.12; Mϕϕ 0.57±.10; Mrθ-0.09±.15; Mθϕ 0.40±.11; Mϕr-0.77±.12; Best double couple: M=1.16500×10^17^ NP1:ϕs18.00000°, δ66.00000°, λ-104.00000°. NP2:ϕs230.00000°, δ28.00000°, λ-61.00000°. Principal axes: T 1.1130, Plg20.0000°, Azm119.0000°; N 0.1050, Plg13.0000°, Azm24.0000°; P -1.2180, Plg66.0000°, Azm263.0000°; nsta1 refers to body waves, cutoff=40s. Triangular moment-rate function*
**ISC 22 15:28:51.2±0.3, 18˚.06S±0˚.05×177˚.92W±0˚.04, h565km±3km, h566km±7km; pP-P, n1104, σ1ŝ02/1117, mb5.0/230, 79C-83D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.85** | **274** | P | **P** | **15 30 13.3** | **0.0** |
| **MSVF** | **Nonsavu** | **3.85** | **274** | P | **P** | **15 30 13.5** | **+0.2** |
| MSVF | | | | S | **S** | **15 31 20.8** | **+0.7** |
| **MSVF** | **Nonsavu** | **3.85** | **274** | *c i*P | **P** | **15 30 13.9** | **+0.6** |
| **AFI** | **Afiamalu** | **7.20** | **56** | P | **P** | **15 30 39.6** | **-2.3** |
| **AFI** | **Afiamalu** | **7.20** | **56** | P | **P** | **15 30 39.6** | **-2.3** |
| **NIUE** | **Niue** | **7.64** | **99** | P | **P** | **15 30 46.3** | **+0.3** |
| **NIUE** | **Niue** | **7.64** | **99** | P | **P** | **15 30 45.9** | **-0.1** |
| **NIUE** | **Niue** | **7.64** | **99** | P | **P** | **15 30 46.1** | **+0.1** |
| | comp=Z,4275μmcomp=Z,490nm,0.7s | | | | | | |
| **FUNA** | **Funafuti** | **9.88** | **343** | P | **P** | **15 31 09.6** | **+1.2** |
| **FUNA** | **Funafuti** | **9.88** | **343** | P | **P** | **15 31 06.0** | **-2.3** |
| **MARNC** | **Mare, Loyalty** | **13.66** | **253** | P | **P** | **15 31 45.8** | **-1.1** |
| **LIFNC** | **LIFOU** | **14.26** | **257** | P | **P** | **15 31 50.4** | **-2.7** |
| **LIFNC** | **LIFOU** | **14.26** | **257** | P | **P** | **15 31 49.4** | **-3.7** |
| **PINNC** | **Pines Island,** | **14.45** | **249** | P | **P** | **15 31 53.0** | **-2.0** |
| **PINNC** | **Pines Island,** | **14.45** | **249** | P | **P** | **15 31 52.3** | **-2.7** |
| **YATNC** | **Mamie plateau,** | **14.82** | **252** | P | **P** | **15 31 57.0** | **-1.6** |
| **DZM** | **Mont Dzumac** | **15.22** | **252** | *e*P | **P** | **15 31 58.5** | **-4.3** |
| | comp=Z,35nm,0.6s | | | | | | |
| DZM | | | | *e*S | **S** | **15 34 36.7** | **-3.1** |
| | comp=Z,113nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.22** | **252** | P | **P** | **15 31 59.9** | **-2.9** |
| **DZM** | **Mont Dzumac** | **15.22** | **252** | P | **P** | **15 32 00.6** | **-2.1** |
| | comp=Z,33nm,0.5s,baz=87,slow=18,SNR=19 | | | | | | |
| DZM | | | | S | **S** | **15 34 39.0** | **-0.8** |
| | comp=Z,53nm,1.2s,baz=209,slow=17,SNR=5.5 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.36** | **252** | P | **P** | **15 32 03.1** | **-0.9** |
| **KOUNC** | **Koumac, New Ca** | **16.98** | **259** | P | **P** | **15 32 19.0** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **16.98** | **259** | P | **P** | **15 32 18.6** | **-0.6** |
| **RAR** | **Rarotonga** | **17.38** | **103** | P | **P** | **15 32 24.1** | **+1.4** |
| **RAR** | **Rarotonga** | **17.38** | **103** | P | **P** | **15 32 23.4** | **+0.7** |
| | comp=Z,156nm,0.9s,baz=247,slow=7.5,SNR=18 | | | | | | |
| **URZ** | **Urewera** | **20.59** | **191** | P | **P** | **15 32 50.3** | **-1.4** |
| **URZ** | **Urewera** | **20.59** | **191** | P | **P** | **15 32 48.3** | **-3.4** |
| | comp=Z,36nm,0.3s,baz=9.4,slow=2.0,SNR=68 | | | | | | |
| **TARA** | **Tarawa** | **21.30** | **334** | P | **P** | **15 32 57.4** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **21.59** | **192** | P | **P** | **15 32 57.8** | **-2.9** |
| **ETVZ** | **East Tongariro** | **21.72** | **193** | P | **P** | **15 33 01.6** | **-0.4** |
| **PKE** | **Pukeiti** | **22.20** | **197** | P | **P** | **15 33 08.2** | **+2.0** |
| **NEZ** | **North Egmont** | **22.25** | **197** | P | **P** | **15 33 08.5** | **+1.9** |
| **NBEZ** | **Newall Road No** | **22.31** | **197** | P | **P** | **15 33 08.4** | **+1.3** |
| **NMEZ** | **Namu Road** | **22.44** | **197** | P | **P** | **15 33 10.2** | **+2.0** |
| **PRHZ** | **Porangahau** | **22.62** | **191** | P | **P** | **15 33 08.6** | **-1.4** |
| **DVHZ** | **Dannevirke** | **22.74** | **192** | P | **P** | **15 33 09.5** | **-1.6** |
| **ANWZ** | **Angora Road** | **22.84** | **191** | P | **P** | **15 33 10.4** | **-1.4** |
| **BFZ** | **Birch Farm** | **23.10** | **191** | P | **P** | **15 33 12.0** | **-2.2** |
| **MRZ** | **Mangatainoka R** | **23.21** | **193** | P | **P** | **15 33 12.4** | **-2.8** |
| **MRZ** | **Mangatainoka R** | **23.21** | **193** | P | **P** | **15 33 12.1** | **-3.0** |
| **OGWZ** | **Otaki Gorge** | **23.45** | **193** | P | **P** | **15 33 15.5** | **-1.8** |
| **HOWZ** | **Holdsworth Sta** | **23.45** | **193** | P | **P** | **15 33 15.3** | **-2.0** |
| **KIW** | **Kapiti Island** | **23.55** | **194** | P | **P** | **15 33 16.7** | **-1.5** |
| **TMWZ** | **Te Maipa** | **23.58** | **192** | P | **P** | **15 33 17.1** | **-1.4** |
| **MTW** | **Mount Morrison** | **23.70** | **192** | P | **P** | **15 33 18.5** | **-1.0** |
| **DUWZ** | **D'Urville Isla** | **23.73** | **196** | P | **P** | **15 33 17.8** | **-2.0** |
| **CAW** | **Cannon Point** | **23.75** | **193** | P | **P** | **15 33 18.2** | **-1.7** |
| **TRWZ** | **Traveller** | **23.90** | **192** | P | **P** | **15 33 20.1** | **-1.1** |
| **PAWZ** | **Paruwai Farm** | **23.93** | **192** | P | **P** | **15 33 20.0** | **-1.7** |
| **WEL** | **Wellington** | **23.98** | **194** | P | **P** | **15 33 18.7** | **-3.3** |
| **MSWZ** | **Moikau Station** | **24.00** | **193** | P | **P** | **15 33 19.8** | **-2.4** |
| **MSWZ** | **Moikau Station** | **24.00** | **193** | P | **P** | **15 33 20.1** | **-2.1** |
| **TCW** | **Tory Channel** | **24.03** | **195** | P | **P** | **15 33 21.0** | **-1.4** |
| **BHW** | **Baring Head** | **24.08** | **193** | P | **P** | **15 33 21.0** | **-1.8** |
| **BHW** | **Baring Head** | **24.08** | **193** | P | **P** | **15 33 21.2** | **-1.6** |
| **QRZ** | **Quartz Range** | **24.13** | **198** | P | **P** | **15 33 22.5** | **-0.8** |
| **QRZ** | **Quartz Range** | **24.13** | **198** | P | **P** | **15 33 22.8** | **-0.5** |
| **QRZ** | **Quartz Range** | **24.13** | **198** | P | **P** | **15 33 22.9** | **-0.5** |
| **PLWZ** | **Palliser** | **24.15** | **193** | P | **P** | **15 33 22.0** | **-1.5** |
| **PLWZ** | **Palliser** | **24.15** | **193** | P | **P** | **15 33 21.6** | **-2.0** |
| **TKNZ** | **Takaka Hill** | **24.20** | **197** | P | **P** | **15 33 22.0** | **-1.9** |
| **TKNZ** | **Takaka Hill** | **24.20** | **197** | P | **P** | **15 33 22.5** | **-1.5** |
| **NNZ** | **Nelson** | **24.26** | **196** | P | **P** | **15 33 22.7** | **-1.8** |
| **TUWZ** | **Tuamarina** | **24.32** | **195** | P | **P** | **15 33 23.4** | **-1.5** |
| **TUWZ** | **Tuamarina** | **24.32** | **195** | P | **P** | **15 33 23.4** | **-1.5** |
| **BSWZ** | **Blackbirch Sta** | **24.60** | **195** | P | **P** | **15 33 26.7** | **-0.7** |
| **KHZ** | **Kahutara** | **25.34** | **195** | P | **P** | **15 33 32.1** | **-1.9** |
| **PAE** | **Paea** | **26.96** | **94** | *e*P | **P** | **15 33 49.5** | **+0.9** |
| | comp=Z,57nm,1.2s | | | | | | |
| **PPT2** | **Papeete2** | **26.97** | **93** | *es*S | **sS** | **15 40 29.7** | **-6.3** |
| | comp=Z,443nm,25.8s | | | | | | |
| PPT2 | | | | *es*S | **SS** | **15 40 36.0** | **-15** |
| | comp=Z,203nm,26.5s | | | | | | |
| **PPT** | **Papeete** | **26.98** | **93** | P | **P** | **15 33 49.7** | **+0.9** |
| | comp=Z,88nm,0.6s,baz=67,slow=2.9,SNR=22 | | | | | | |
| | comp=Z,88nm,0.6s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **26.98** | **93** | P | **P** | **15 33 51.3** | **+2.4** |
| **PPTF** | **Pamatai, Papee** | **26.98** | **93** | P | **P** | **15 33 49.9** | **+1.0** |
| **TBI** | **Tubuai** | **27.11** | **106** | *e*P | **P** | **15 33 51.2** | **+1.4** |
| | comp=Z,423nm,1.2s | | | | | | |
| TBI | | | | *es*S | **sS** | **15 40 34.6** | **-3.3** |
| | comp=Z,2μm,28.8s | | | | | | |
| **RPZ** | **Rata Peaks** | **27.22** | **198** | P | **P** | **15 33 50.6** | **+0.1** |
| **TVO** | **Taravao** | **27.27** | **94** | *e*P | **P** | **15 33 51.7** | **+0.4** |
| | comp=Z,32nm,0.8s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.43** | **200** | P | **P** | **15 33 51.0** | **-1.2** |
| **GC1S** | **Gold Coast 1 S** | **28.07** | **244** | P | **P** | **15 33 58.7** | **+0.5** |
| **JCZ** | **Jackson Bay** | **28.25** | **201** | P | **P** | **15 33 58.8** | **-0.8** |
| **ODZ** | **Otahua Downs** | **28.55** | **197** | P | **P** | **15 34 01.1** | **-1.0** |
| **PMOR** | **Pomariorio Ree** | **28.93** | **88** | *e*P | **P** | **15 34 03.9** | **-1.8** |
| | comp=Z,211nm,1.0s | | | | | | |
| **VAH** | **Vaihoa** | **29.14** | **89** | *e*P | **P** | **15 34 07.5** | **-0.1** |
| | comp=Z,262nm,1.2s | | | | | | |
| **GD1S** | **Gladstone Soft** | **29.40** | **253** | P | **P** | **15 34 09.5** | **-0.3** |
| **MLZ** | **Mavora Lakes** | **29.61** | **200** | P | **P** | **15 34 10.8** | **-0.5** |
| **EIDS** | **Eidsvold** | **29.66** | **250** | P | **P** | **15 34 11.3** | **-0.7** |
| **EIDS** | **Eidsvold** | **29.66** | **250** | P | **P** | **15 34 10.7** | **-1.3** |
| **EIDS** | **Eidsvold** | **29.66** | **250** | P | **P** | **15 34 10.9** | **-1.0** |
| | comp=Z,80nm,0.7s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **29.98** | **254** | P | **P** | **15 34 13.8** | **-1.0** |
| **DCZ** | **Deep Cove** | **30.02** | **201** | P | **P** | **15 34 14.2** | **-0.5** |
| DCZ | | | | IAmb | IAmb | 15 34 17.2 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.14** | **200** | P | **P** | **15 34 15.2** | **-0.6** |
| **ARMA** | **Armidale** | **30.27** | **240** | P | **P** | **15 34 17.5** | **+0.1** |
| **ARMA** | **Armidale** | **30.27** | **240** | P | **P** | **15 34 17.5** | **+0.1** |
| **ARMA** | **Armidale** | **30.27** | **240** | P | **P** | **15 34 17.4** | **+0.1** |
| | comp=Z,104nm,0.7s | | | | | | |
| **PYZ** | **Puysegur Point** | **30.80** | **201** | P | **P** | **15 34 21.3** | **-0.2** |
| **AUPHS** | **Peel High Scho** | **31.08** | **239** | P | **P** | **15 34 24.5** | **+0.4** |
| **SYDH** | **Sydney Hard Ro** | **32.08** | **235** | P | **P** | **15 34 32.8** | **+0.3** |
| **AULRC** | **Lighting Ridg** | **33.09** | **244** | P | **P** | **15 34 40.6** | **-0.6** |
| **AUDCS** | **Dubbo College** | **33.25** | **238** | P | **P** | **15 34 42.9** | **+0.4** |
| **TV1H** | **Townsville Har** | **33.42** | **262** | P | **P** | **15 34 43.3** | **-0.8** |
| **CNB** | **Canberra Magne** | **33.71** | **233** | P | **P** | **15 34 46.7** | **+0.3** |
| **CNB** | **Canberra Magne** | **33.71** | **233** | P | **P** | **15 34 46.5** | **+0.1** |
| | comp=Z,186nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **33.88** | **261** | P | **P** | **15 34 47.5** | **-0.6** |
| **CTA** | **Charters Tower** | **33.88** | **261** | P | **P** | **15 34 47.2** | **-0.8** |
| CTA | | | | PcP | **PcP** | **15 37 09.9** | **-0.2** |
| | comp=Z,4.8nm,0.6s,baz=91,slow=9.7,SNR=74 | | | | | | |
| | comp=Z,0.6nm,0.7s,baz=206,slow=2.0,SNR=4.1 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.88** | **261** | P | **P** | **15 34 47.4** | **-0.6** |
| **CTAO** | **Charters Tower** | **33.88** | **261** | P | **P** | **15 34 47.1** | **-0.9** |
| **CTAO** | **Charters Tower** | **33.88** | **261** | P | **P** | **15 34 47.1** | **-0.9** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,74nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **33.88** | **261** | ||P | **P** | **15 34 47.3** | **-0.6** |
| CTAO | | | | PcP | **PcP** | **15 37 10.2** | **+0.1** |
| **CAN** | **Canberra** | **33.98** | **233** | P | **P** | **15 34 49.0** | **+0.3** |
| **CAN** | **Canberra** | **33.98** | **233** | P | **P** | **15 34 48.5** | **-0.2** |
| **CAN** | **Canberra** | **33.98** | **233** | P | **P** | **15 34 48.6** | **-0.1** |
| | comp=Z,112nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.98** | **233** | P | **P** | **15 34 48.5** | **-0.2** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,73nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **33.98** | **233** | P | **P** | **15 34 48.6** | **-0.1** |
| CAN | | | | PcP | **PcP** | **15 37 11.4** | **+1.2** |
| CAN | | | | sP | **sP** | **15 37 28.1** | **+1.4** |
| CAN | | | | ScP | **ScP** | **15 40 01.1** | **-0.7** |
| **YNG** | **Young** | **34.09** | **235** | P | **P** | **15 34 49.3** | **-0.2** |
| **YNG** | **Young** | **34.09** | **235** | P | **P** | **15 34 49.4** | **-0.1** |
| | comp=Z,121nm,1.0s | | | | | | |
| **PATS** | **Pohnpei** | **34.10** | **314** | P | **P** | **15 34 50.1** | **+0.3** |
| **KAVG** | **Kavieng** | **34.30** | **293** | P | **P** | **15 34 52.6** | **+1.0** |
| **MILA** | **Mila** | **34.54** | **230** | P | **P** | **15 34 53.1** | **-0.3** |
| | comp=Z,43nm,1.5s | | | | | | |
| **PMG** | **Port Moresby** | **34.95** | **280** | P | **P** | **15 34 57.3** | **+0.4** |
| **PMG** | **Port Moresby** | **34.95** | **280** | P | **P** | **15 34 56.8** | **-0.2** |
| **PMG** | **Port Moresby** | **34.95** | **280** | *e*P | **P** | **15 34 56.6** | **-0.3** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,108nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **34.95** | **280** | P | **P** | **15 34 57.2** | **+0.2** |
| PMG | | | | PcP | **PcP** | **15 37 13.6** | **+0.3** |
| **CMSA** | **Cobar Meteorol** | **35.48** | **241** | P | **P** | **15 35 00.8** | **-0.4** |
| **CMSA** | **Cobar Meteorol** | **35.48** | **241** | P | **P** | **15 35 00.8** | **-0.4** |
| | comp=Z,173nm,1.0s | | | | | | |
| **MTSU** | **Mount Surprise** | **35.86** | **264** | P | **P** | **15 35 03.8** | **-0.7** |
| **QLP** | **Quilpie** | **35.92** | **249** | P | **P** | **15 35 04.4** | **-0.4** |
| **QLP** | **Quilpie** | **35.92** | **249** | P | **P** | **15 35 04.2** | **-0.7** |
| | comp=Z,339nm,0.6s | | | | | | |
| **AUSSC** | **Sale College,** | **36.47** | **230** | P | **P** | **15 35 09.5** | **+0.3** |
| **GLAD** | **Gladstone** | **37.07** | **225** | P | **P** | **15 35 13.9** | **-0.2** |
| **TOO** | **Toolangi** | **37.44** | **231** | P | **P** | **15 35 17.5** | **+0.3** |
| **TOO** | **Toolangi** | **37.44** | **231** | P | **P** | **15 35 17.5** | **+0.3** |
| **TOO** | **Toolangi** | **37.44** | **231** | P | **P** | **15 35 17.2** | **0.0** |
| | comp=Z,207nm,1.0s | | | | | | |
| **TOO** | **Toolangi** | **37.44** | **231** | P | **P** | **15 35 17.5** | **+0.3** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,146nm,0.7s | | | | | | |
| **AUMAG** | **Moama Anglican** | **37.50** | **234** | P | **P** | **15 35 17.9** | **+0.3** |
| **COEN** | **Coen** | **37.58** | **270** | P | **P** | **15 35 18.7** | **+0.1** |
| **COEN** | **Coen** | **37.58** | **270** | P | **P** | **15 35 18.2** | **-0.4** |
| **COEN** | **Coen** | **37.58** | **270** | P | **P** | **15 35 18.4** | **-0.2** |
| | comp=Z,125nm,1.0s | | | | | | |
| **MANU** | **Manus Island** | **37.59** | **291** | P | **P** | **15 35 18.9** | **+0.1** |
| **TAOE** | **Nuku Hiva Isla** | **37.79** | **81** | P | **P** | **15 35 22.3** | **+1.9** |
| **TAOE** | **Nuku Hiva Isla** | **37.79** | **81** | *e*P | **P** | **15 35 20.8** | **+0.4** |
| | comp=Z,242nm,0.9s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.79** | **81** | P | **P** | **15 35 21.6** | **+1.2** |
| **TAOE** | **Nuku Hiva Isla** | **37.79** | **81** | P | **P** | **15 35 21.9** | **+1.5** |
| **CORO** | **Coronation Par** | **37.87** | **225** | P | **P** | **15 35 20.8** | **+0.3** |
| **MLBS** | **Spotswood, Mel** | **37.97** | **231** | P | **P** | **15 35 21.9** | **+0.5** |
| **MOO** | **Moorlands** | **38.30** | **223** | P | **P** | **15 35 24.4** | **+0.3** |
| **MOO** | **Moorlands** | **38.30** | **223** | P | **P** | **15 35 24.1** | **0.0** |
| | comp=Z,77nm,1.1s | | | | | | |
| **TAU** | **Tasmania Unive** | **38.44** | **222** | P | **P** | **15 35 25.3** | **+0.1** |
| **TAU** | **Tasmania Unive** | **38.44** | **222** | P | **P** | **15 35 24.8** | **-0.4** |
| TAU | | | | IAmb | IAmb | 15 35 26.0 | |
| | comp=Z,35nm,0.9s | | | | | | |
| **TAU** | **Tasmania Unive** | **38.44** | **222** | P | **P** | **15 35 24.8** | **-0.4** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | |
| **TAU** | **Tasmania Unive** | **38.44** | **222** | P | **P** | **15 35 24.9** | **-0.3** |
| TAU | | | | PcP | **PcP** | **15 37 24.8** | **+1.2** |
| **GEXS** | **Deakin Univers** | **38.55** | **231** | P | **P** | **15 35 26.4** | **+0.3** |
| **BRAT** | **Ballarat** | **38.59** | **232** | P | **P** | **15 35 27.1** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **15 35 29.6** | **0.0** |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **15 35 30.1** | **+0.4** |
| STKA | | | | IAmb | IAmb | 15 35 30.8 | |
| | comp=Z,29nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **15 35 29.7** | **+0.1** |
| | comp=Z,42nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **15 35 29.4** | **-0.2** |
| | comp=Z,101nm,0.5s,baz=91,slow=10.0,SNR=227 | | | | | | |
| STKA | | | | PcP | **PcP** | **15 37 26.3** | **+0.7** |
| | comp=Z,13nm,0.7s,baz=11,slow=5.2,SNR=3.0 | | | | | | |
| | comp=Z,101nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **38.97** | **241** | *d i*P | **P** | **15 35 29.6** | **0.0** |
| **INKA** | **Innaminka** | **39.12** | **248** | P | **P** | **15 35 30.6** | **-0.3** |
| **ARPS** | **Mount Arapiles** | **39.94** | **234** | P | **P** | **15 35 37.2** | **-0.1** |
| **ARPS** | **Mount Arapiles** | **39.94** | **234** | P | **P** | **15 35 37.0** | **-0.4** |
| | comp=Z,113nm,1.1s | | | | | | |
| **WAKE** | **Wake Island** | **40.09** | **337** | P | **P** | **15 35 38.2** | **-0.4** |
| **WAKE** | **Wake Island** | **40.09** | **337** | P | **P** | **15 35 38.2** | **-0.4** |
| WAKE | | | | PcP | **PcP** | **15 37 30.6** | **+1.4** |
| **QIS** | **Mount Isa** | **40.09** | **259** | P | **P** | **15 35 37.5** | **-1.3** |
| **QIS** | **Mount Isa** | **40.09** | **259** | P | **P** | **15 35 36.8** | **-2.0** |
| | comp=Z,20nm,0.6s | | | | | | |
| **RKT** | **Rikitea** | **40.41** | **105** | *e*P | **P** | **15 35 42.7** | **+1.4** |
| | comp=Z,119nm,1.1s | | | | | | |
| **HTT** | **Hallett** | **41.47** | **240** | P | **P** | **15 35 49.8** | **+0.1** |
| **HTT** | **Hallett** | **41.47** | **240** | P | **P** | **15 35 49.6** | **-0.1** |
| | comp=Z,179nm,0.7s | | | | | | |
| **MMPI** | **Merauke** | **41.60** | **278** | P | **P** | **15 35 50.8** | **-0.1** |
| | comp=Z,252nm,1.2s | | | | | | |
| **LCRK** | **Leigh Creek** | **41.61** | **244** | P | **P** | **15 35 50.5** | **-0.2** |
| **TABU** | **Tabubil** | **41.87** | **283** | P | **P** | **15 35 52.7** | **-0.4** |
| **GHSS** | **Government Hou** | **42.03** | **238** | P | **P** | **15 35 53.6** | **-0.3** |
| **WHYH** | **Whyalla** | **42.52** | **241** | P | **P** | **15 35 57.4** | **-0.4** |
| **JAY** | **Jayapura** | **43.40** | **286** | P | **P** | **15 36 05.0** | **0.0** |
| | comp=Z,162nm,0.7s,comp=Z,1μm | | | | | | |
| **HMH** | **Humu'ula Sheep** | **43.43** | **32** | P | **P** | **15 36 06.2** | **+0.8** |
| **OOD** | **Oodnadatta** | **43.60** | **248** | P | **P** | **15 36 06.9** | **+0.6** |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | **P** | **15 36 07.1** | **-0.3** |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | **P** | **15 36 06.9** | **-0.5** |
| **BBOO** | **Buckleboo** | **43.74** | **241** | P | **P** | **15 36 07.0** | **-0.3** |
| | comp=Z,229nm,1.0s | | | | | | |
| **GENI** | **Genyem** | **43.86** | **286** | P | **P** | **15 36 09.4** | **+0.9** |
| **GENI** | **Genyem** | **43.86** | **286** | P | **P** | **15 36 08.4** | **-0.1** |
| | comp=Z,227nm,0.6s,comp=Z,3μm | | | | | | |
| **WR0** | **Warramunga Arr** | **44.88** | **260** | IAmb | IAmb | 15 37 46.8 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.06** | **260** | P | **P** | **15 36 16.1** | **-1.6** |
| **WRAB** | **Tennant Creek** | **45.06** | **260** | P | **P** | **15 36 16.1** | **-1.6** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,63nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** |

SBA **Scott Base** 60.30 184 P **P** 15 38 07.1 +1.9
SBA pmax pmax
comp=Z,26nm,1.0s
SBA **Scott Base** 60.30 184 P **P** 15 38 07.4 +2.2
SBA pP **pwP** 15 39 58.4 +0.6
MUN **Mundaring** 60.47 243 P **P** 15 38 07.3 +0.1
MUN **Mundaring** 60.47 243 P **P** 15 38 06.8 -0.4
comp=Z,103nm,0.8s
LUWI **Luwuk** 60.59 279 P **P** 15 38 08.9 +0.6
LUWI **Luwuk** 60.59 279 P **P** 15 38 08.1 -0.2
LUWI **Luwuk** 60.59 279 P **P** 15 38 08.6 +0.3
comp=Z,166nm,1.1s,comp=Z,2µm
MORW **Morawa** 60.85 246 P **P** 15 38 09.4 -0.4
MORW **Morawa** 60.85 246 P **P** 15 38 08.0 -1.7
MORW IAmb IAmb 15 38 09.8
comp=Z,36nm,0.7s
MORW **Morawa** 60.85 246 P **P** 15 38 08.7 -1.1
comp=Z,69nm,0.8s
GTOI **Gorontalo** 60.95 281 P **P** 15 38 11.4 +0.8
comp=Z,39nm,0.7s
WBSI **Waikabubak, Su** 61.21 269 P **P** 15 38 13.6 +1.2
comp=Z,43nm,0.8s
KCP **Kidapawan** 61.51 289⇑ *iP* **P** 15 38 14.3 -0.1
MRSI **Marisa** 61.90 281 P **P** 15 38 16.8 0.0
comp=Z,75nm,0.8s
BNSI **Bone** 62.02 275 P **P** 15 38 17.6 0.0
comp=Z,77nm,1.0s
KAPI **Kappang** 62.17 274 P **P** 15 38 17.6 -1.0
KAPI IAmb IAmb 15 38 18.6
comp=Z,24nm,0.7s
KAPI **Kappang** 62.17 274 P **P** 15 38 17.6 -1.0
KAPI pmax pmax
comp=Z,24nm,0.7s
SCPH **Surigao** 62.34 292⇓ *eP* **P** 15 38 19.2 -0.5
CGP **Cagayan de Oro** 62.47 290⇓ *eP* **P** 15 38 21.6 +1.1
TOLI2 **Tolitoli** 63.20 281 P **P** 15 38 25.5 +0.3
TOLI2 **Tolitoli** 63.20 281 P **P** 15 38 24.4 -0.9
TOLI2 IAmb IAmb 15 38 28.8
comp=Z,31nm,0.7s
GIRL **Giralia** 63.30 253 P **P** 15 38 26.0 +0.3
PLP **Palo** 63.40 293⇓ *eP* **P** 15 38 25.2 -1.2
MPSI **Mapaga** 63.76 280 P **P** 15 38 28.1 -0.7
comp=Z,91nm,1.0s,comp=Z,751nm
TWSI **Taliwang, Sumb** 63.84 269 P **P** 15 38 28.4 -0.9
comp=Z,199nm,1.0s,comp=Z,2µm
CCD **Concordia, Ant** 64.84 194 ⇓P **P** 15 38 35.5 +0.4
CCD PcP **PcP** 15 39 02.8 +0.2
CCD pP **pP** 15 40 30.2 +2.4
RCP **Roxas** 65.54 292⇓ *iP* **P** 15 38 39.1 -0.8
SRBI **Singaraja** 65.60 269 P **P** 15 38 41.7 +1.3
comp=Z,115nm,1.2s
CASY **Casey** 66.19 205 P **P** 15 38 42.7 -0.4
CASY IAmb IAmb 15 38 44.2
comp=Z,49nm,1.1s
CASY **Casey** 66.19 205 P **P** 15 38 43.2 +0.1
CASY PcP **PcP** 15 39 07.8 -0.1
CASY pP **pwP** 15 40 38.4 -0.2
JAGI **Jajag, Banyuwa** 66.50 268 P **P** 15 38 44.5 -1.5
JAGI **Jajag, Banyuwa** 66.50 268 P **P** 15 38 44.2 -1.8
MYLDM **Lahad Datu** 66.80 284 P **P** 15 38 49.5 +1.6
MYLDM IAmb IAmb 15 38 51.5
comp=Z,101nm,1.3s
LQP **Lukban** 67.72 294⇑ *eP* **P** 15 38 53.5 -0.1
JMM **Marumori** 67.83 326 P **P** 15 38 54.6 +1.0
JMM **Marumori** 67.83 326 IAmb IAmb 15 38 54.6
comp=Z,34nm,0.8s
MTKI **Muara Teweh, K** 68.05 276 P **P** 15 38 56.3 +0.8
comp=Z,31nm,0.5s
JGF **Kuroka** 68.15 322 P **P** 15 38 55.9 +0.3
JGF **Kuroka** 68.15 322 IAmb IAmb 15 38 56.4
comp=Z,32nm,0.8s
INU **Inuyama** 68.17 321 P **P** 15 38 56.2 +0.5
INU **Inuyama** 68.17 321 P **P** 15 38 56.1 +0.4
MJAR **Matsushiro Arr** 68.31 323 P **P** 15 38 56.2 -0.4
comp=Z,41nm,0.8s,baz=156,slow=5.7,SNR=92
comp=Z,41nm,0.8s
MAJO **Matsushiro** 68.31 323 P **P** 15 38 56.5 -0.1
MAJO **Matsushiro** 68.31 323 *iP* **P** 15 38 56.2 -0.4
MAJO pmax pmax
comp=Z,63nm,1.0s
MAJO **Matsushiro** 68.31 323 P **P** 15 38 56.3 -0.3
MAJO PcP **PcP** 15 39 18.2 +0.9
PCPS **Palayan City** 68.37 294⇑ *eP* **P** 15 38 59.4 +2.1
JOW **Kunigami** 68.68 309 P **P** 15 38 59.4 +0.4
comp=Z,30nm,0.5s,baz=116,slow=9.7,SNR=4.4
comp=Z,30nm,0.5s
PWJI **Pagerwojo** 68.86 268 P **P** 15 38 59.8 -0.6
comp=Z,91nm,0.6s
JMN **Monobe** 69.02 318 P **P** 15 39 01.8 +0.9
KKM **Kota Kinabalu** 69.23 284 P **P** 15 39 03.5 +0.8
KKM **Kota Kinabalu** 69.23 284 P **P** 15 39 02.3 -0.4
KKM IAmb IAmb 15 39 03.2
comp=Z,44nm,0.6s
JSD **Sado** 69.34 324 P **P** 15 39 03.3 +0.6
JSD **Sado** 69.34 324 IAmb IAmb 15 39 03.9
comp=Z,47nm,0.7s
NGJI **Ngawi** 69.37 269 P **P** 15 39 15.0 +12
KIWB **Kanaga Island** 69.62 1 P **P** 15 39 03.5 -0.5
JTM **Tenmabayashi** 69.85 328 P **P** 15 39 06.6 +1.0
JTM **Tenmabayashi** 69.85 328 IAmb IAmb 15 39 06.8
comp=Z,50nm,1.0s
UGM **Wanagama** 70.11 268 P **P** 15 39 07.5 -0.4
UGM **Wanagama** 70.11 268 P **P** 15 39 07.4 -0.4
SMRI **Semarang** 70.43 269 P **P** 15 39 10.6 +0.9
SMRI **Semarang** 70.43 269 P **P** 15 39 10.4 +0.7
comp=Z,189nm,0.8s
JNU **Nakatsue** 70.57 316 P **P** 15 39 10.9 +0.7
JNU **Nakatsue** 70.57 316 P **P** 15 39 10.2 0.0
NIKH **Nikolski High** 71.17 6 P **P** 15 39 11.8 -1.3
baz=189
YOJ **Yonaguni jima** 71.42 304 P **P** 15 39 15.4 +0.2
YOJ **Yonaguni jima** 71.42 304 P **P** 15 39 15.4 +0.2
YOJ pmax pmax
comp=Z,181nm,0.7s
STKI **Sintang** 71.61 276 P **P** 15 39 17.3 +0.7
comp=Z,138nm,0.8s
JKA **Kamikawa-asahi** 71.63 331 IAmb IAmb 15 39 18.1
comp=Z,33nm,0.7s
ASAJ **Asahikawa** 71.64 331 P **P** 15 39 17.6 +1.5
comp=Z,26nm,0.7s,baz=199,slow=6.6,SNR=23
comp=Z,26nm,0.7s
KPJI **Karang Pucung** 71.79 268 P **P** 15 39 17.1 -0.5
comp=Z,115nm,0.8s
QSPA **South Pole Qui** 72.00 180 P **P** 15 39 19.1 +1.1
QSPA IAmb IAmb 15 39 20.1
comp=Z,38nm,0.9s
QSPA **South Pole Qui** 72.00 180 P **P** 15 39 19.0 +0.9
comp=Z,28nm,0.6s,baz=34,slow=1.7,SNR=255
QSPA pP **pP** 15 41 13.2 -0.6
comp=Z,11nm,1.0s,baz=15,slow=2.8,SNR=5.4
comp=Z,28nm,0.6s
QSPA **South Pole Qui** 72.00 180 ⇓P **P** 15 39 19.2 +1.1
QSPA pP **pP** 15 41 14.5 +0.6
QSPA sP **sP** 15 42 13.7 +1.4
TWGBT **Beinan** 72.14 302 P **P** 15 39 18.3 -1.2
YULB **Yu-li** 72.25 303 P **P** 15 39 19.6 -0.5
YULB **Yu-li** 72.25 303 IAmb IAmb 15 39 20.0
comp=Z,44nm,0.6s
UNV **Unalaska Valle** 72.28 7 P **P** 15 39 18.9 -0.6
baz=192
NACB **Ninganchiao** 72.39 303 P **P** 15 39 21.4 +0.5
NACB **Ninganchiao** 72.39 303 P **P** 15 39 19.9 -1.0
SSLB **Suanglung** 72.71 303 P **P** 15 39 22.2 -0.6
SSLB **Suanglung** 72.71 303 P **P** 15 39 21.7 -1.1
TPUB **Ta-pu** 72.74 302 P **P** 15 39 22.3 -0.6
YHNB **Yeheng** 72.81 304 P **P** 15 39 24.0 +0.6
TATO **Taipei** 72.87 304 P **P** 15 39 24.3 +0.7
TATO **Taipei** 72.87 304 P **P** 15 39 23.1 -0.5
BBJI **Bungbulang** 72.97 268 P **P** 15 39 23.4 -1.2
KSM **Kuching** 73.17 277 P **P** 15 39 26.3 +0.7
PET **Petropavlovsk** 73.64 346 P **P** 15 39 27.5 +0.2
comp=Z,27nm,1.4s
FALS **False Pass** 73.67 9 P **P** 15 39 26.4 -1.1
baz=194
YSS **Yuzh-Sakhalins** 73.76 333 P **P** 15 39 29.4 +1.2
YSS **Yuzh-Sakhalins** 73.76 333 P **P** 15 39 28.8 +0.6
YSS IAmb IAmb 15 39 30.3
comp=Z,57nm,1.1s
YSS **Yuzh-Sakhalins** 73.76 333 *eP* **P** 15 39 27.7 -0.5
YSS pmax pmax
comp=Z,20nm,1.0s
PEA0B **Petropavlovsk-** 73.95 345 IAmb IAmb 15 39 30.3
comp=Z,48nm,0.8s
PEA0B **Petropavlovsk-** 73.95 345 *ceP* **P** 15 39 29.0 -0.1
PETK **Petropavlovsk-** 73.95 345 P **P** 15 39 28.7 -0.5
PETK **Petropavlovsk-** 73.95 345 P **P** 15 39 28.9 -0.2
comp=Z,34nm,0.7s,baz=130,slow=7.4,SNR=68
comp=Z,34nm,0.7s
PETK **Petropavlovsk-** 73.95 345 P **P** 15 39 29.0 -0.2
DBJI **Dramaga** 74.08 268 P **P** 15 39 30.5 -0.3
comp=Z,219nm,1.0s,comp=Z,3µm
SKJI **Sukabumi** 74.14 268 P **P** 15 39 31.4 +0.3
SDPT **Sand Point** 74.61 10 P **P** 15 39 32.2 -0.6
baz=197
KNMB **Chin-men Tao** 75.09 302 P **P** 15 39 36.7 +0.5
KNMB IAmb IAmb 15 39 37.6
comp=Z,61nm,0.8s
KSRS **Korea Array** 75.13 318 P **P** 15 39 37.1 +1.1
comp=Z,13nm,0.7s,baz=131,slow=6.5,SNR=50
comp=Z,13nm,0.7s
KSAR **Wonju Array Be** 75.14 318 P **P** 15 39 36.9 +0.7
KSAR **Wonju Array Be** 75.14 318 P **P** 15 39 36.9 +0.7
QZH **Quanzhou** 75.15 303 P **P** 15 39 37.3 +0.8
QZH pmax pmax
comp=Z,130nm,0.8s
KS19 **Wonju Array Si** 75.19 318 IAmb IAmb 15 39 38.1
comp=Z,20nm,0.8s
CHGN **Chignik** 75.88 11 P **P** 15 39 39.6 -0.2
CHGN IAmb IAmb 15 39 40.4
comp=Z,32nm,1.0s
CHGN **Chignik** 75.88 11 P **P** 15 39 39.5 -0.2
baz=199
INCN **Inchon** 75.97 318 P **P** 15 39 41.7 +0.9
INCN **Inchon** 75.97 318 P **P** 15 39 41.4 +0.6
INCN **Inchon** 75.97 318 P **P** 15 39 41.4 +0.6
INCN pmax pmax
comp=Z,193nm,1.8s
PPBI **Pangkal Pinang** 75.97 272 P **P** 15 39 41.8 +0.4
comp=Z,91nm,0.9s
PMPB **Monarch Peak** 76.32 44 P **P** 15 39 43.6 +0.7
KASI **Kota Agung** 76.53 269 P **P** 15 39 43.3 -1.1
TYV **Tymovskoe** 76.86 336 *eP* **P** 15 39 45.2 -0.1
TYV pmax pmax
comp=Z,23nm,0.8s
TYV pmax pmax
comp=Z,200nm,2.4s
SII **Sitkinak Islan** 76.96 13 P **P** 15 39 45.9 +0.2
SII IAmb IAmb 15 39 47.1
comp=Z,50nm,0.8s
SII **Sitkinak Islan** 76.96 13 P **P** 15 39 46.0 +0.2
baz=203
USRK **Ussuriysk Ar.** 77.00 326 P **P** 15 39 47.4 +1.1
comp=Z,9.8nm,0.7s,baz=139,slow=3.4,SNR=23
comp=Z,9.8nm,0.7s
USA0B **Ussuriysk Arra** 77.00 326 *i* P **P** 15 39 46.7 +0.4
LWLI **Liwa** 77.09 269 P **P** 15 39 46.6 -1.0
comp=Z,170nm,0.7s,comp=Z,2µm
R17L **Mt. Peulik Vol** 77.51 12 P **P** 15 39 48.5 -0.3
baz=201
PLK4 **Peulik 4** 77.52 12 P **P** 15 39 48.5 -0.4
PLK4 IAmb IAmb 15 39 50.0
comp=Z,39nm,0.8s
OHAK **Old Harbor** 77.77 13 P **P** 15 39 49.9 -0.2
OHAK **Old Harbor** 77.77 13 P **P** 15 39 50.1 0.0
baz=204
R18K **Karluk** 77.84 13 P **P** 15 39 50.6 +0.1
baz=203
Q17K **Contact Creek** 78.20 12 P **P** 15 39 52.5 0.0
baz=201
O15K **Ungalikthiuk R** 78.38 9 P **P** 15 39 52.9 -0.5
baz=198
NJ2 **Nanjing** 78.40 309 ⇓P **P** 15 39 55.0 +0.9
NJ2 pmax pmax
comp=Z,55nm,0.6s
KDAK **Kodiak Island** 78.44 14 P **P** 15 39 54.1 +0.5
comp=Z,11nm,0.8s,baz=242,slow=2.0,SNR=7.3
comp=Z,11nm,0.8s
KDAK **Kodiak Island** 78.44 14 P **P** 15 39 53.9 +0.2
baz=205
TPRI **Tanjung Pinang** 78.46 275 P **P** 15 39 55.4 +0.5
comp=Z,83nm,0.7s
P16K **Nushagak River** 78.54 10 P **P** 15 39 52.9 -1.2
baz=199
MDJ **Mudanjiang** 78.58 325 P **P** 15 39 56.1 +1.3
MDJ **Mudanjiang** 78.58 325 P **P** 15 39 55.9 +1.1
MDJ pmax pmax
comp=Z,110nm,1.1s
MDJ **Mudanjiang** 78.58 325 IAmb IAmb 15 39 57.1
comp=Z,81nm,0.9s
Q18K **Katmai Hardscr** 78.73 12 P **P** 15 39 54.8 -0.5
baz=202
PNTR **Pine Nut** 78.73 42 P **P** 15 39 57.1 +1.1
N14K **Kuskokwak Cree** 78.82 8 P **P** 15 39 55.1 -0.5
baz=196
DSP **Deep Springs** 78.85 45 P **P** 15 39 57.6 +1.2
P17K **Kvichak River** 78.97 11 P **P** 15 39 56.4 0.0
baz=201
O16K **Kokwok River B** 79.05 10 P **P** 15 39 56.2 -0.7
baz=199
M13K **Dall Lake** 79.08 7 P **P** 15 39 57.0 0.0
baz=194
NVAR **Mina Array Bea** 79.21 44 P **P** 15 39 58.8 +0.2
NVAR **Mina Array Bea** 79.21 44 P **P** 15 40 00.2 +1.6
comp=Z,2.0nm,0.8s,baz=228,slow=9.2,SNR=13
NVAR pP **pP** 15 41 57.8 +0.3
comp=Z,1.0nm,0.8s,baz=222,slow=7.8,SNR=3.3
comp=Z,2.0nm,0.8s
Q20K **Shuyak Island** 79.23 13 P **P** 15 39 58.1 +0.2
baz=205
SYI **Shuyak Island** 79.23 13 P **P** 15 39 59.2 +1.3
Q19K **Cape Douglas,** 79.26 13 P **P** 15 39 58.1 0.0
baz=204
N15K **Kwethluk River** 79.28 9 P **P** 15 39 59.0 +0.9
N15K **Kwethluk River** 79.28 9 P **P** 15 39 58.1 0.0
baz=197
BTDF **Bukit Timah Da** 79.31 275 P **P** 15 39 59.6 +0.2
P18K **Big Mountain,** 79.38 12 IAmb IAmb 15 39 59.5
comp=Z,28nm,0.8s
P18K **Big Mountain,** 79.38 12 P **P** 15 39 58.7 0.0
baz=202
GRNR **Gornyy** 79.39 332 ⇓ *iP* **P** 15 39 59.9 +1.0
GRNR pmax pmax
comp=Z,40nm,1.0s
GRNR MLR MLR
comp=E,330nm,18.0s
GRNR MLR MLR
comp=N,210nm,15.0s
GRNR MLR MLR
comp=Z,140nm,15.0s
O17K **Koliganek Bris** 79.39 11 P **P** 15 39 58.6 -0.1
baz=200
M14K **Bethel** 79.58 8 P **P** 15 39 59.8 +0.1
baz=196,SNR=6.0
KVN **Kaiserville** 79.68 43 P **P** 15 40 01.7 +0.7
KVN **Kaiserville** 79.68 43 P **P** 15 40 01.7 +0.7
KVN pmax pmax
comp=Z,4.0nm,1.1s
M15K **Kasigluk River** 79.70 9 P **P** 15 40 00.5 +0.2
baz=197,SNR=5.1
N16K **Nishlik Lake** 79.78 10 P **P** 15 40 01.0 +0.3
baz=198,SNR=6.9
O18K **Koktuh Hills** 79.81 11 IAmb IAmb 15 40 02.1
comp=Z,45nm,0.8s
O18K **Koktuh Hills** 79.81 11 P **P** 15 40 00.8 -0.1
baz=202
QIZ **Qiongzhong** 79.94 294 P **P** 15 40 03.6 +1.1
QIZ IAmb IAmb 15 40 19.2
comp=Z,114nm,1.9s
L14K **Kuka Creek** 80.06 7 P **P** 15 40 02.6 +0.5
baz=195
N17K **Nushagak Hills** 80.09 10 P **P** 15 40 02.6 +0.3
N17K **Nushagak Hills** 80.09 10 P **P** 15 40 02.6 +0.3
baz=200
M16K **Timber Creek** 80.27 9 IAmb IAmb 15 40 05.9
comp=Z,53nm,1.1s
M16K **Timber Creek** 80.27 9 P **P** 15 40 04.0 +0.7
baz=198,SNR=16
O19K **Port Alsworth** 80.30 12 P **P** 15 40 03.1 -0.3
baz=203
K13K **Kusilvak Mount** 80.42 6 P **P** 15 40 04.8 +0.8
baz=193
CN2 **Changchun** 80.43 322 *eP* **P** 15 40 04.8 +0.3
CN2 pmax pmax
comp=Z,40nm,0.9s
N18K **Kilae Creek** 80.45 11 P **P** 15 40 03.7 -0.5
N18K **Kilae Creek** 80.45 11 P **P** 15 40 04.2 -0.1
baz=201
KLR **Kul'dur** 80.48 329 *ceP* **P** 15 40 04.0 -0.6
KLR pmax pmax
comp=Z,20nm,1.3s
BNX **BinXian** 80.49 325 ⇓P **P** 15 40 05.1 +0.3
BNX pmax pmax
comp=Z,92nm,0.8s
L15K **Ungalak Mounta** 80.54 8 P **P** 15 40 04.8 +0.2
baz=196,SNR=8.3
BRSE **Bradley Lake S** 80.62 14 P **P** 15 40 05.5 +0.3
baz=206
N19K **Bonanza Creek** 80.84 11 P **P** 15 40 05.8 -0.6
baz=203
SMAI **San Martin Ant** 80.85 159 P **P** 15 40 08.1 +1.8
SMAI IAmb IAmb 15 40 09.1
comp=Z,15nm,0.6s
L16K **Owhat River** 80.85 9 P **P** 15 40 07.2 +0.9
L16K IAmb IAmb 15 40 08.5
comp=Z,32nm,1.1s
L16K **Owhat River** 80.85 9 P **P** 15 40 06.9 +0.6
baz=198,SNR=11
M17K **Holitna River** 80.87 10 IAmb IAmb 15 40 08.9
comp=Z,48nm,0.9s
M17K **Holitna River** 80.87 10 P **P** 15 40 07.7 +1.3
baz=200,SNR=13
R11B **Troy Canyon, C** 80.97 45 P **P** 15 40 07.8 +0.1
baz=238
WHN **Wuhan** 81.07 306 ⇑P **P** 15 40 09.4 +1.3
WHN pmax pmax
comp=Z,110nm,0.9s
K15K **Wolf Creek Mou** 81.13 8 IAmb IAmb 15 40 10.2
comp=Z,69nm,0.9s
K15K **Wolf Creek Mou** 81.13 8 P **P** 15 40 09.1 +1.4
baz=196,SNR=19
CNSH **ChangSha** 81.14 303 P **P** 15 40 08.3 -0.2
CNSH pmax pmax
comp=Z,47nm,1.1s
M18K **Stony River** 81.22 11 P **P** 15 40 09.0 +0.8
baz=201,SNR=5.8
SEW **Seward** 81.24 14 P **P** 15 40 08.9 +0.6
baz=207
J14K **Nanvaranak Lak** 81.33 7 P **P** 15 40 09.3 +0.7
baz=194
L17K **Donlin** 81.43 9 P **P** 15 40 10.6 +1.4
baz=199,SNR=18
MA2 **Magadan** 81.47 344 P **P** 15 40 09.1 -0.4
MA2 **Magadan** 81.47 344 P **P** 15 40 08.7 -0.8
MA2 IAmb IAmb 15 40 10.1
comp=Z,24nm,0.9s
MA2 **Magadan** 81.47 344 P **P** 15 40 08.9 -0.5
comp=Z,19nm,0.9s,baz=143,slow=8.2,SNR=11
comp=Z,19nm,0.9s
MA2 **Magadan** 81.47 344 *ceP* **P** 15 40 07.3 -2.2
MA2 pmax pmax
comp=Z,54nm,2.5s
MA2 **Magadan** 81.47 344 P **P** 15 40 08.7 -0.8
comp=Z,37nm,1.0s,comp=Z,454nm
O22K **Cooper Landing** 81.52 14 P **P** 15 40 10.6 +0.9
O22K IAmb IAmb 15 41 48.4
comp=Z,26nm,1.1s
O22K **Cooper Landing** 81.52 14 P **P** 15 40 09.5 -0.2
baz=207
BKNI **Bangkinang** 81.58 273 P **P** 15 40 11.7 +0.5
BKNI **Bangkinang** 81.58 273 P **P** 15 40 12.2 +1.0
comp=Z,90nm,1.2s
N20K **Mount Spurr** 81.64 12 P **P** 15 40 09.5 -0.9
baz=205
SPCR **Spurr Chakacha** 81.64 12 P **P** 15 40 09.3 -1.1
baz=205
TIA **Tai'an** 81.70 312 P **P** 15 40 11.6 +0.4
TIA pmax pmax
comp=Z,31nm,0.8s
GAMB **Gambell** 81.71 3 P **P** 15 40 11.0 +0.4
baz=186
PDSI **Padang** 81.75 272 P **P** 15 40 11.2 -0.9
comp=Z,74nm,1.1s
L18K **Granite Mounta** 81.76 10 IAmb IAmb 15 40 13.2
comp=Z,58nm,1.5s
L18K **Granite Mounta** 81.76 10 P **P** 15 40 11.5 +0.6
baz=200,SNR=12
J08A **Circle Bar Ran** 81.84 39 P **P** 15 40 13.0 +1.0
M19K **Big River Lodg** 81.86 11 P **P** 15 40 12.1 +0.6
baz=203
BELA **Belgrano 2** 81.95 173 IAmb IAmb 15 40 13.2
comp=Z,35nm,0.8s
K17K **Iditarod** 81.98 9 IAmb IAmb 15 40 14.3
comp=Z,45nm,1.6s
K17K **Iditarod** 81.98 9 P **P** 15 40 12.5 +0.5
baz=199,SNR=5.4
L19K **White Mountain** 82.04 11 P **P** 15 40 12.7 +0.3
baz=203,SNR=7.5
RC01 **Rabbit Creek A** 82.06 13 IAmb IAmb 15 40 13.6
comp=Z,23nm,1.2s
RC01 **Rabbit Creek A** 82.06 13 P **P** 15 40 12.4 0.0
baz=207
M20K **Styx River** 82.08 12 P **P** 15 40 11.8 -0.8
baz=204
PWL **Port Wells** 82.17 14 P **P** 15 40 12.8 -0.2
PWL IAmb IAmb 15 40 13.9
comp=Z,19nm,0.9s
PWL **Port Wells** 82.17 14 P **P** 15 40 12.5 -0.5
baz=208,SNR=5.0
SUA **Susitna One** 82.18 13 IAmb IAmb 15 40 14.0
comp=Z,15nm,0.8s
SUA **Susitna One** 82.18 13 P **P** 15 40 12.8 -0.4
baz=206,SNR=5.8
J16K **Anvik River** 82.20 8 IAmb IAmb 15 40 15.3
comp=Z,26nm,1.0s
J16K **Anvik River** 82.20 8 P **P** 15 40 13.4 +0.2
baz=197,SNR=7.9
KAIM **Kayak Island** 82.34 16 P **P** 15 40 13.8 -0.1
baz=212
ELK **Elko** 82.45 43 P **P** 15 40 15.8 +0.6
ELK **Elko** 82.45 43 P **P** 15 40 15.8 +0.6
ELK pmax pmax
comp=Z,3.0nm,0.9s
GLI **Glacier Island** 82.48 15 IAmb IAmb 15 40 15.4
comp=Z,27nm,0.8s
GLI **Glacier Island** 82.48 15 P **P** 15 40 14.3 -0.3
baz=210
SKT **Skwentna** 82.48 12 P **P** 15 40 13.6 -1.0
baz=205
L20K **Farewell, AK** 82.49 11 P **P** 15 40 14.2 -0.4
baz=203,SNR=7.8
J17K **VABM Dome** 82.52 8 P **P** 15 40 15.3 +0.6
baz=198
EYAK **Cordova Ski Ar** 82.53 15 P **P** 15 40 14.7 -0.1
baz=211
M22K **Willow** 82.57 13 IAmb IAmb 15 40 21.4
comp=Z,53nm,1.1s
M22K **Willow** 82.57 13 P **P** 15 40 15.0 0.0
baz=207
KNK **Knik Glacier** 82.63 14 P **P** 15 40 15.3 -0.1
baz=208
G08A **Pilot Rock** 82.64 38 P **P** 15 40 16.9 +0.9
GHO **Glory Hole Cre** 82.85 13 IAmb IAmb 15 40 17.6
comp=Z,32nm,0.7s
IPM **Ipoh** 82.91 277 P **P** 15 40 18.5 +0.6
U33K **Whale Pass** 82.94 23 P **P** 15 40 16.9 0.0
baz=222
V35K **Ketchikan** 82.95 25 P **P** 15 40 17.1 +0.1
baz=224
SML **Sawmill** 83.01 14 P **P** 15 40 17.6 +0.3
baz=208
BMRM **Bremner River** 83.18 16 P **P** 15 40 18.3 +0.2
baz=212,SNR=5.4
S31K **Pelican** 83.22 21 P **P** 15 40 18.6 +0.2
baz=220
MESA **MESA** 83.23 17 P **P** 15 40 18.4 -0.3
baz=214
SCM **Sheep Creek Mo** 83.26 14 IAmb IAmb 15 40 19.7
comp=Z,25nm,0.7s
SCM **Sheep Creek Mo** 83.26 14 P **P** 15 40 18.7 +0.2
baz=209,SNR=9.0
K20K **Telida** 83.27 11 P **P** 15 40 18.9 +0.3
K20K IAmb IAmb 15 40 19.9
comp=Z,22nm,0.8s
K20K **Telida** 83.27 11 P **P** 15 40 18.2 -0.3
baz=203,SNR=20
HEH **HeiHe** 83.29 328 *eP* **P** 15 40 19.1 +0.2
HEH pmax pmax
comp=Z,26nm,0.8s
KLU **Klutina** 83.30 15 P **P** 15 40 18.8 0.0
baz=210
H16K **Elim** 83.32 7 P **P** 15 40 19.0 +0.3
baz=195
CRQM **Cirque** 83.38 16 IAmb IAmb 15 40 20.9
comp=Z,24nm,1.0s
CRQE **Cirque** 83.39 16 P **P** 15 40 19.4 +0.1
baz=213
WRAK **Wrangell Islan** 83.46 24 P **P** 15 40 19.4 -0.2
baz=223

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| G15K | **Niukluk** | 83.47 | 6 | P | P | 15 40 19.8 | +0.3 | | baz=193,SNR=8.0 | |
| KULM | **Kulim** | 83.52 | 278 | P | P | 15 40 20.9 | 0.0 | | | |
| KULM | comp=Z,26nm,0.8s | | | IAmb | IAmb | 15 40 22.1 | | | | |
| PNL | **Peninsula** | 83.55 | 19 | P | P | 15 40 19.5 | -0.5 | | baz=217 | |
| J19K | **Poorman** | 83.60 | 10 | P | P | 15 40 20.5 | +0.4 | | baz=201,SNR=7.7 | |
| TABL | **Table Mountain** | 83.67 | 17 | P | P | 15 40 21.3 | +0.5 | | | |
| TABL | comp=Z,21nm,0.8s | | | IAmb | IAmb | 15 40 21.9 | | | | |
| VRDI | **Verde Repeater** | 83.70 | 16 | IAmb | IAmb | 15 40 22.3 | | | comp=Z,25nm,1.3s | |
| TNA | **Tin City** | 83.71 | 4 | P | P | 15 40 20.9 | +0.3 | | baz=190 | |
| N25K | **Chitina, Valde** | 83.72 | 15 | IAmb | IAmb | 15 40 22.3 | | | comp=Z,22nm,0.8s | |
| N25K | **Chitina, Valde** | 83.72 | 15 | P | P | 15 40 20.9 | 0.0 | | baz=212,SNR=7.5 | |
| GRNC | **Granite Creek** | 83.74 | 17 | IAmb | IAmb | 15 40 22.2 | | | comp=Z,18nm,0.9s | |
| F14K | **Arctic Creek** | 83.74 | 5 | P | P | 15 40 21.0 | +0.2 | | baz=191 | |
| M24K | **Tolsona, Glenn** | 83.77 | 14 | IAmb | IAmb | 15 40 22.9 | | | comp=Z,26nm,0.8s | |
| M24K | **Tolsona, Glenn** | 83.77 | 14 | P | P | 15 40 21.0 | -0.1 | | baz=210 | |
| GLB | **Gilahina Butte** | 83.78 | 16 | IAmb | IAmb | 15 40 22.4 | | | comp=Z,14nm,0.8s | |
| WAT6 | **Susitna Watana** | 83.82 | 14 | P | P | 15 40 21.2 | -0.3 | | baz=209 | |
| WAT1 | **Susitna Watana** | 83.87 | 13 | P | P | 15 40 21.4 | -0.1 | | baz=208 | |
| MAW | **Mawson** | 83.88 | 200 | P | P | 15 40 21.9 | +0.3 | | comp=Z,8.8nm,0.4s,baz=136,slow=5.3,SNR=41 | |
| | comp=Z,8.8nm,0.4s | | | | | | | | | |
| H17K | **Granite Mounta** | 83.88 | 8 | P | P | 15 40 21.3 | -0.2 | | baz=197 | |
| HNS | **HongShan** | 83.97 | 312 | ⇓P | P | 15 40 23.6 | +1.1 | | | |
| HNS | comp=Z,50nm,1.3s | | | pmax | pmax | | | | | |
| J20K | **Nowinta River** | 84.01 | 10 | IAmb | IAmb | 15 40 23.6 | | | comp=Z,14nm,0.8s | |
| J20K | **Nowinta River** | 84.01 | 10 | P | P | 15 40 22.7 | +0.5 | | baz=203 | |
| LOGN | **Logan Glacier** | 84.03 | 17 | P | P | 15 40 21.9 | -0.6 | | | |
| LOGN | comp=Z,15nm,0.9s | | | IAmb | IAmb | 15 40 23.6 | | | | |
| SEY | **Seymchan** | 84.03 | 347 | P | P | 15 40 22.3 | +0.1 | | comp=Z,38nm,0.9s,baz=144,slow=5.6,SNR=98 | |
| | comp=Z,38nm,0.9s | | | | | | | | | |
| SEY | **Seymchan** | 84.03 | 347 | *ce*P | P | 15 40 22.4 | +0.1 | | | |
| SEY | comp=Z,84nm,1.7s | | | pmax | pmax | | | | | |
| P29M | **Windy Craggy** | 84.03 | 19 | P | P | 15 40 22.7 | +0.2 | | baz=216 | |
| G16K | **Koyuk River** | 84.04 | 6 | P | P | 15 40 22.7 | +0.4 | | baz=195 | |
| CTG | **Chitna Glacier** | 84.05 | 17 | P | P | 15 40 22.8 | +0.2 | | baz=215 | |
| CTGM | **Chitina Glacie** | 84.05 | 17 | IAmb | IAmb | 15 40 23.7 | | | comp=Z,18nm,0.9s | |
| GCSA | **Galena City Sc** | 84.11 | 9 | P | P | 15 40 22.8 | +0.2 | | baz=200 | |
| F15K | **North Star Dit** | 84.12 | 5 | P | P | 15 40 22.8 | +0.2 | | baz=193 | |
| O28M | **Mount Upton** | 84.21 | 18 | P | P | 15 40 24.7 | +1.1 | | baz=216,SNR=5.3 | |
| BJT | **Baijiatuau** | 84.22 | 315 | P | P | 15 40 24.4 | +0.7 | | | |
| BJI | **Beijing** | 84.22 | 315 | P | P | 15 40 24.3 | +0.6 | | | |
| BJI | comp=Z,19nm,1.0s | | | pmax | pmax | | | | | |
| HARP | **HAARP** | 84.26 | 15 | P | P | 15 40 23.7 | +0.2 | | baz=211 | |
| LYN | **LuoYang** | 84.29 | 309 | P | P | 15 40 25.5 | +1.3 | | | |
| LYN | comp=Z,210nm,0.7s | | | pmax | pmax | | | | | |
| LYN | comp=Z,400nm,6.1s | | | pmax | pmax | | | | | |
| H18K | **Honhosa River** | 84.29 | 8 | P | P | 15 40 23.5 | 0.0 | | baz=199 | |
| RND | **Reindeer** | 84.31 | 13 | IAmb | IAmb | 15 40 24.8 | | | comp=Z,40nm,0.9s | |
| G17K | **Kiwalik Mounta** | 84.33 | 7 | P | P | 15 40 23.8 | +0.1 | | baz=197 | |
| PLBC | **Pleasant Camp** | 84.34 | 20 | P | P | 15 40 24.2 | +0.4 | | baz=219,SNR=5.7 | |
| DHY | **Denali Highway** | 84.34 | 13 | P | P | 15 40 23.7 | -0.3 | | baz=209 | |
| PSI | **Prapat** | 84.36 | 275 | P | P | 15 40 24.7 | -0.5 | | | |
| BPAW | **Bear Paw Mtn.** | 84.51 | 12 | IAmb | IAmb | 15 40 25.8 | | | comp=Z,28nm,1.7s | |
| BPAW | **Bear Paw Mtn.** | 84.51 | 12 | P | P | 15 40 23.6 | -1.0 | | baz=206,SNR=6.5 | |
| I20K | **Naaghedeneel** | 84.53 | 10 | P | P | 15 40 25.2 | +0.5 | | baz=202 | |
| MCK | **McKinley** | 84.59 | 13 | P | P | 15 40 24.9 | -0.2 | | baz=208,SNR=8.7 | |
| P30M | **Million Dollar** | 84.67 | 19 | P | P | 15 40 25.9 | +0.4 | | baz=219,SNR=7.5 | |
| PAX | **Paxson** | 84.68 | 14 | P | P | 15 40 25.0 | -0.6 | | baz=211,SNR=5.9 | |
| ENH | **Enshi** | 84.74 | 304 | P | P | 15 40 27.9 | +1.3 | | | |
| YUK8 | **Steele Glacier** | 84.75 | 17 | P | P | 15 40 26.4 | +0.2 | | baz=216,SNR=6.6 | |
| M26K | **Nabesna, AK** | 84.80 | 16 | IAmb | IAmb | 15 40 27.8 | | | comp=Z,24nm,1.1s | |
| M26K | **Nabesna, AK** | 84.80 | 16 | P | P | 15 40 26.7 | +0.6 | | baz=213,SNR=12 | |
| BWN | **Browne** | 84.87 | 12 | IAmb | IAmb | 15 40 27.2 | | | comp=Z,80nm,1.4s | |
| H19K | **Roundabout Mou** | 84.91 | 9 | P | P | 15 40 25.8 | -0.7 | | | |
| H19K | **Roundabout Mou** | 84.91 | 9 | P | P | 15 40 26.9 | +0.4 | | baz=200,SNR=6.8 | |
| G18K | **Tagagawik** | 84.96 | 8 | P | P | 15 40 27.1 | +0.3 | | baz=198 | |
| S34M | **Telegraph Cree** | 85.00 | 23 | IAmb | IAmb | 15 40 29.7 | | | comp=Z,13nm,0.8s | |
| S34M | **Telegraph Cree** | 85.00 | 23 | P | P | 15 40 28.5 | +1.3 | | baz=224,SNR=7.6 | |
| M27K | **Edge Creek, AK** | 85.05 | 16 | IAmb | IAmb | 15 40 29.4 | | | comp=Z,24nm,1.0s | |
| M27K | **Edge Creek, AK** | 85.05 | 16 | P | P | 15 40 28.0 | +0.6 | | baz=214,SNR=12 | |
| H20K | **Anotleneega Mo** | 85.12 | 9 | P | P | 15 40 28.1 | +0.6 | | baz=202,SNR=5.5 | |
| YUK4 | **Talbot Arm** | 85.12 | 18 | P | P | 15 40 28.5 | +0.6 | | baz=217 | |
| GSI | **Gunungsitoli** | 85.18 | 273 | P | P | 15 40 29.5 | +0.5 | | | |
| GSI | **Gunungsitoli** | 85.18 | 273 | P | P | 15 40 30.4 | +1.4 | | | |
| L26K | **Log Cabin Wild** | 85.24 | 15 | P | P | 15 40 29.3 | +1.0 | | baz=213 | |
| I21K | **Tanana** | 85.31 | 11 | P | P | 15 40 28.7 | +0.2 | | baz=205 | |
| P32M | **Atlin** | 85.32 | 21 | P | P | 15 40 28.0 | -0.7 | | baz=222 | |
| NEA2 | **Nenana** | 85.33 | 12 | P | P | 15 40 27.7 | -0.8 | | baz=208 | |
| K24K | **Donnelly Dome** | 85.33 | 14 | P | P | 15 40 28.8 | +0.1 | | baz=211,SNR=8.7 | |
| Q32M | **Nakina River** | 85.35 | 22 | P | P | 15 40 29.2 | +0.2 | | baz=223 | |
| MLY | **Manley** | 85.40 | 11 | P | P | 15 40 28.2 | -0.7 | | baz=206,SNR=11 | |
| G19K | **Purcell Mounta** | 85.40 | 8 | P | P | 15 40 28.9 | 0.0 | | | |
| G19K | **Purcell Mounta** | 85.40 | 8 | P | P | 15 40 28.9 | 0.0 | | baz=200,SNR=5.2 | |
| WRH | **Wood River Hil** | 85.42 | 12 | IAmb | IAmb | 15 40 29.8 | | | comp=Z,50nm,1.3s | |
| O30N | **Mendenhall** | 85.44 | 19 | IAmb | IAmb | 15 40 31.2 | | | comp=Z,12nm,0.9s | |
| O30N | **Mendenhall** | 85.44 | 19 | P | P | 15 40 29.2 | -0.1 | | baz=220,SNR=6.2 | |
| GYA | **Guiyang** | 85.52 | 300 | P | P | 15 40 31.3 | +0.8 | | | |
| GYA | comp=Z,44nm,1.0s | | | pmax | pmax | | | | | |
| ZEA | **Zeya** | 85.55 | 331 | *e*P | P | 15 40 30.6 | +0.8 | | | |
| ZEA | comp=E,10.0nm,0.9s | | | pmax | pmax | | | | | |
| ZEA | comp=N,30nm,0.7s | | | pmax | pmax | | | | | |
| SRIT | **Nakonsritamara** | 85.56 | 280 | P | P | 15 40 32.4 | +1.6 | | comp=Z,60nm,0.8s | |
| HDA | **Harding Lake** | 85.60 | 13 | IAmb | IAmb | 15 40 30.7 | | | comp=Z,13nm,0.8s | |
| HDA | **Harding Lake** | 85.60 | 13 | P | P | 15 40 29.5 | -0.4 | | baz=210,SNR=11 | |
| H21K | **Melozitna Rive** | 85.61 | 10 | P | P | 15 40 29.6 | -0.3 | | baz=204 | |
| CCB | **Clear Creek Bu** | 85.63 | 13 | IAmb | IAmb | 15 40 30.6 | | | comp=Z,24nm,1.1s | |
| L27K | **Beaver Creek,** | 85.65 | 16 | P | P | 15 40 30.1 | -0.1 | | baz=214 | |
| BCAR | **Beaver Creek A** | 85.67 | 16 | P | P | 15 40 30.6 | +0.3 | | | |
| N30M | **Aishikik Lake** | 85.67 | 18 | P | P | 15 40 30.1 | -0.3 | | baz=219 | |
| TXAR | **Lajitas Array** | 85.68 | 57 | P | P | 15 40 33.7 | +2.5 | | | |
| TXAR | **Lajitas Array** | 85.68 | 57 | P | P | 15 40 33.5 | +2.3 | | comp=Z,1.8nm,0.6s,baz=216,slow=5.9,SNR=15 | |
| | comp=Z,1.8nm,0.6s | | | | | | | | | |
| TXAR | **Lajitas Array** | 85.68 | 57 | P | P | 15 40 33.7 | +2.5 | | | |
| SURA | **Surathani** | 85.72 | 281 | P | P | 15 40 33.0 | +1.4 | | | |
| E17K | **Hotham Inlet** | 85.73 | 6 | P | P | 15 40 30.3 | -0.1 | | baz=195 | |
| WHY | **Whitehorse** | 85.74 | 20 | P | P | 15 40 30.6 | -0.2 | | baz=221 | |
| I23K | **Minto, Yukon-K** | 85.76 | 12 | P | P | 15 40 30.2 | -0.3 | | baz=207,SNR=5.4 | |
| DLBC | **Dease Lake** | 85.79 | 23 | P | P | 15 40 30.7 | -0.3 | | baz=225 | |
| MDM | **Murphy Dome** | 85.82 | 12 | IAmb | IAmb | 15 40 31.5 | | | comp=Z,20nm,1.0s | |
| COLA | **College** | 85.82 | 12 | P | P | 15 40 30.7 | -0.2 | | | |
| COLA | **College** | 85.82 | 12 | P | P | 15 40 30.1 | -0.7 | | | |
| COLA | comp=Z,18nm,0.8s | | | IAmb | IAmb | 15 40 31.5 | | | | |
| COLA | **College** | 85.82 | 12 | P | P | 15 40 30.2 | -0.7 | | baz=209 | |
| COLA | **College** | 85.82 | 12 | *d i*P | P | 15 40 29.4 | -1.5 | | | |
| COLA | comp=Z,32nm,1.2s | | | pmax | pmax | | | | | |
| SCRK | **Sand Creek** | 85.89 | 14 | P | P | 15 40 31.0 | -0.5 | | baz=212 | |
| IL31 | comp=Z,14nm,1.0s | 85.93 | 13 | IAmb | IAmb | 15 40 32.2 | | | | |
| ILAR | **Eielson Array** | 85.93 | 13 | P | P | 15 40 31.2 | -0.3 | | | |
| ILAR | **Eielson Array** | 85.93 | 13 | P | P | 15 40 30.9 | -0.5 | | comp=Z,5.4nm,0.7s,baz=229,slow=5.6,SNR=48 | |
| ILAR | comp=Z,1.1nm,0.8s,baz=217,slow=7.0,SNR=4.0 | | | pP | pP | 15 42 32.8 | -0.1 | | | |
| | comp=Z,5.4nm,0.7s | | | | | | | | | |
| ILAR | **Eielson Array** | 85.93 | 13 | P | P | 15 40 31.2 | -0.3 | | | |
| F19K | **Shaleruckik Mo** | 85.97 | 8 | P | P | 15 40 31.1 | -0.5 | | baz=199,SNR=6.3 | |
| SLVN | **Son La** | 85.97 | 294 | IAmb | IAmb | 15 40 35.6 | | | comp=Z,12nm,0.8s | |
| M29M | **Somme Creek** | 86.05 | 17 | IAmb | IAmb | 15 40 34.0 | | | comp=Z,57nm,1.9s | |
| M29M | **Somme Creek** | 86.05 | 17 | P | P | 15 40 32.2 | 0.0 | | baz=217,SNR=7.4 | |
| H22K | **Ishtalitna Cre** | 86.07 | 11 | P | P | 15 40 31.9 | -0.2 | | baz=205,SNR=9.5 | |
| P33M | **Tetlin, Yukon** | 86.08 | 21 | P | P | 15 40 32.3 | 0.0 | | baz=222 | |
| N31M | **Braeburn, Yuko** | 86.09 | 19 | P | P | 15 40 32.4 | 0.0 | | baz=220 | |
| ALPN | **Alpine** | 86.11 | 56 | IAmb | IAmb | 15 43 28.0 | | | comp=Z,4.6nm,0.4s | |
| J25K | **Salcha River,** | 86.12 | 13 | IAmb | IAmb | 15 40 33.7 | | | comp=Z,18nm,1.4s | |
| J25K | **Salcha River,** | 86.12 | 13 | P | P | 15 40 32.2 | -0.3 | | baz=211,SNR=10.0 | |
| POKR | **Poker Plat Res** | 86.12 | 12 | P | P | 15 40 32.3 | -0.1 | | baz=209 | |
| R33M | **Jennings River** | 86.13 | 22 | P | P | 15 40 32.5 | -0.1 | | baz=224 | |
| XLT | **XiLinHaoTe** | 86.17 | 319 | *e*P | P | 15 40 33.4 | +0.2 | | | |
| XLT | comp=Z,57nm,1.0s | | | pmax | pmax | | | | | |
| E18K | **Tukpahlearik C** | 86.19 | 7 | P | P | 15 40 32.3 | -0.3 | | baz=197 | |
| G21K | **Allakaket** | 86.28 | 10 | P | P | 15 40 32.8 | -0.3 | | baz=203,SNR=11 | |
| H23K | **Yukon River** | 86.34 | 11 | P | P | 15 40 33.0 | -0.3 | | baz=207 | |
| K27K | **Chicken** | 86.39 | 15 | P | P | 15 40 33.9 | +0.2 | | baz=214 | |
| J26L | **Joseph Creek** | 86.44 | 14 | IAmb | IAmb | 15 40 36.0 | | | comp=Z,44nm,1.6s | |
| J26L | **Joseph Creek** | 86.44 | 14 | P | P | 15 40 34.2 | +0.2 | | baz=213,SNR=14 | |
| F20K | **Avaraart Lake** | 86.44 | 9 | P | P | 15 40 32.2 | -1.5 | | | |
| F20K | **Avaraart Lake** | 86.44 | 9 | P | P | 15 40 33.7 | -0.1 | | baz=201,SNR=5.4 | |
| E19K | **Redstone River** | 86.63 | 8 | IAmb | IAmb | 15 40 35.9 | | | comp=Z,10.0nm,0.8s | |
| E19K | **Redstone River** | 86.63 | 8 | P | P | 15 40 34.4 | -0.3 | | baz=200 | |
| BILL | **Bilibino** | 86.63 | 354 | *e*P | P | 15 40 33.8 | -0.9 | | | |
| BILL | | | | *e* | | 15 44 06.5 | | | | |
| BILL | | | | *e*PPP | PPP | 15 46 05.1 | | | | |
| BILL | comp=Z,36nm,2.5s | | | pmax | pmax | | | | | |
| XAN | **Xi'an** | 86.72 | 307 | ⇓P | P | 15 40 37.0 | +1.0 | | | |
| XAN | | | | PcP | PcP | 15 40 39.4 | +1.9 | | | |
| XAN | comp=Z,170nm,0.9s | | | pmax | pmax | | | | | |
| HIA | **Hailar** | 86.76 | 324 | P | P | 15 40 37.3 | +1.5 | | | |
| HIA | **Hailar** | 86.76 | 324 | *i* P | P | 15 40 35.1 | -0.7 | | | |
| HIA | comp=Z,22nm,1.4s | | | pmax | pmax | | | | | |
| PRP | **Porcupine Dome** | 86.87 | 13 | P | P | 15 40 35.8 | -0.3 | | baz=211 | |
| F21K | **Alatna River** | 86.94 | 9 | P | P | 15 40 36.0 | -0.2 | | baz=203 | |
| G22K | **Bettles** | 86.98 | 10 | P | P | 15 40 36.2 | -0.2 | | baz=205 | |
| G23K | **Bananza Creek** | 87.04 | 11 | P | P | 15 40 36.6 | -0.1 | | baz=206 | |
| M31M | **Drury Creek, Y** | 87.07 | 19 | P | P | 15 40 36.8 | -0.1 | | baz=221 | |
| DAWY | **Dawson** | 87.10 | 16 | IAmb | IAmb | 15 40 38.8 | | | comp=Z,16nm,1.3s | |
| DAWY | **Dawson** | 87.10 | 16 | P | P | 15 40 37.2 | +0.1 | | baz=216 | |
| PDAR | **Pinedale Array** | 87.14 | 43 | P | P | 15 40 38.0 | 0.0 | | comp=Z,1.0nm,0.6s,baz=224,slow=5.0,SNR=9.5 | |
| PDAR | comp=Z,1.8nm,1.0s,baz=224,slow=4.1,SNR=4.3 | | | pP | pP | 15 42 41.1 | +1.4 | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | | |
| MLSI | **Meulaboh, Aceh** | 87.21 | 275 | P | P | 15 40 39.5 | +0.8 | | | |
| I26K | **Coal Creek Min** | 87.21 | 14 | IAmb | IAmb | 15 40 39.1 | | | comp=Z,22nm,1.4s | |
| I26K | **Coal Creek Min** | 87.21 | 14 | P | P | 15 40 37.1 | -0.3 | | baz=213 | |
| EGAK | **Eagle** | 87.24 | 15 | IAmb | IAmb | 15 40 39.1 | | | comp=Z,14nm,1.1s | |
| EGAK | **Eagle** | 87.24 | 15 | P | P | 15 40 37.6 | 0.0 | | baz=215,SNR=11 | |
| F22K | **John River** | 87.40 | 10 | P | P | 15 40 38.0 | -0.3 | | baz=204,SNR=7.7 | |
| FARO | **Faro, Yukon** | 87.41 | 19 | P | P | 15 40 39.3 | +0.8 | | baz=222 | |
| K29M | **Barlow Dome** | 87.43 | 17 | IAmb | IAmb | 15 40 40.7 | | | comp=Z,15nm,1.2s | |
| K29M | **Barlow Dome** | 87.43 | 17 | P | P | 15 40 39.6 | +1.0 | | baz=218,SNR=6.8 | |
| H25L | **Birch Creek** | 87.45 | 12 | P | P | 15 40 37.9 | -0.6 | | baz=210 | |
| COLD | **Coldfoot** | 87.48 | 10 | P | P | 15 40 38.8 | +0.1 | | baz=206 | |
| D19K | **Kuna River** | 87.50 | 7 | P | P | 15 40 38.5 | -0.3 | | baz=199 | |
| G24K | **Hadweenzic Riv** | 87.50 | 12 | P | P | 15 40 38.3 | -0.6 | | baz=209 | |
| E20K | **Nigu River** | 87.52 | 8 | P | P | 15 40 38.8 | -0.2 | | baz=201,SNR=10 | |
| HHC | **Hu-ho-hao-te** | 87.71 | 314 | *e*P | P | 15 40 42.4 | +1.9 | | | |
| HHC | comp=Z,37nm,0.6s | | | pmax | pmax | | | | | |
| HHC | comp=Z,230nm,5.7s | | | pmax | pmax | | | | | |
| I27K | **Kandik River** | 87.81 | 14 | P | P | 15 40 40.2 | -0.2 | | baz=214 | |
| G25K | **Bearman Lake** | 87.83 | 12 | P | P | 15 40 40.2 | -0.1 | | baz=210 | |
| SRDT | **SRDT** | 87.88 | 286 | P | P | 15 40 42.3 | +0.6 | | | |
| D20K | **Etivluk River** | 87.89 | 8 | P | P | 15 40 40.7 | +0.1 | | baz=200 | |
| TOAD | **Toad River Com** | 87.91 | 24 | P | P | 15 40 41.0 | +0.1 | | baz=229 | |
| C19K | **Lookout Ridge** | 87.92 | 6 | P | P | 15 40 40.4 | -0.4 | | baz=198 | |
| E21K | **Killik River** | 87.99 | 9 | IAmb | IAmb | 15 40 42.1 | | | comp=Z,10nm,0.9s | |
| E21K | **Killik River** | 87.99 | 9 | P | P | 15 40 40.6 | -0.5 | | baz=203 | |
| E22K | **Anaktuvuk Pass** | 88.03 | 9 | IAmb | IAmb | 15 40 42.7 | | | comp=Z,15nm,1.0s | |
| E22K | **Anaktuvuk Pass** | 88.03 | 9 | P | P | 15 40 41.1 | -0.3 | | baz=205,SNR=10.0 | |
| I28M | **Miner Creek** | 88.09 | 15 | P | P | 15 40 41.7 | 0.0 | | baz=216,SNR=7.9 | |
| F24K | **Squaw Lake** | 88.15 | 11 | IAmb | IAmb | 15 40 43.5 | | | comp=Z,8.4nm,0.7s | |
| F24K | **Squaw Lake** | 88.15 | 11 | P | P | 15 40 41.9 | +0.1 | | baz=208 | |
| KMI | **Kunming** | 88.32 | 297 | ⇓P | P | 15 40 45.3 | +1.4 | | | |
| KMI | comp=Z,41nm,1.3s | | | pmax | pmax | | | | | |
| E23K | **Chandalar** | 88.32 | 10 | IAmb | IAmb | 15 40 44.2 | | | comp=Z,11nm,0.9s | |
| E23K | **Chandalar** | 88.32 | 10 | P | P | 15 40 43.0 | +0.2 | | baz=207,SNR=6.8 | |
| J30M | **Hart River** | 88.33 | 17 | IAmb | IAmb | 15 40 44.8 | | | comp=Z,15nm,1.5s | |
| J30M | **Hart River** | 88.33 | 17 | P | P | 15 40 43.0 | +0.1 | | baz=219,SNR=5.6 | |
| H27K | **Steamboat Moun** | 88.35 | 14 | P | P | 15 40 43.1 | +0.3 | | baz=214 | |
| I29M | **Ogilvie Camp,** | 88.42 | 16 | P | P | 15 40 43.6 | +0.5 | | baz=217,SNR=6.8 | |
| G26K | **Porcupine Rive** | 88.46 | 13 | P | P | 15 40 43.7 | +0.5 | | baz=212,SNR=7.0 | |
| E24K | **Your Creek** | 88.53 | 11 | P | P | 15 40 44.0 | +0.4 | | baz=208 | |
| C21K | **Knifeblade Rid** | 88.55 | 8 | P | P | 15 40 44.0 | +0.4 | | baz=202 | |
| TGTN | **Hyland Airport** | 88.58 | 21 | P | P | 15 40 44.6 | +0.6 | | baz=226 | |
| D22K | **Ayikyak River** | 88.58 | 9 | IAmb | IAmb | 15 40 45.5 | | | comp=Z,16nm,0.8s | |
| D22K | **Ayikyak River** | 88.58 | 9 | P | P | 15 40 44.2 | +0.3 | | baz=204 | |
| F25K | **Christian Rive** | 88.64 | 12 | P | P | 15 40 44.5 | +0.4 | | baz=211 | |
| CRAI | **Chiangrai** | 88.69 | 292 | IAmb | IAmb | 15 40 47.6 | | | comp=Z,24nm,1.2s | |
| BMAR | **Burnt Mountain** | 88.71 | 12 | P | P | 15 40 45.1 | +0.7 | | | |
| G27K | **Doyon Strip** | 88.81 | 14 | P | P | 15 40 45.1 | +0.2 | | baz=214 | |
| I30M | **Mount Dempster** | 88.82 | 16 | IAmb | IAmb | 15 40 46.5 | | | comp=Z,9.2nm,0.9s | |
| I30M | **Mount Dempster** | 88.82 | 16 | P | P | 15 40 45.1 | 0.0 | | baz=219,SNR=10.0 | |
| TOLK | **Toolik Lake Re** | 88.85 | 10 | IAmb | IAmb | 15 40 46.0 | | | comp=Z,9.6nm,1.1s | |
| TOLK | **Toolik Lake Re** | 88.85 | 10 | P | P | 15 40 45.0 | -0.2 | | baz=207 | |
| D23K | **Nanushuk River** | 88.97 | 10 | IAmb | IAmb | 15 40 47.4 | | | comp=Z,16nm,1.0s | |
| D23K | **Nanushuk River** | 88.97 | 10 | P | P | 15 40 45.8 | +0.2 | | baz=206 | |
| F26K | **Sheenjek River** | 89.02 | 12 | IAmb | IAmb | 15 40 48.0 | | | comp=Z,7.8nm,1.0s | |
| F26K | **Sheenjek River** | 89.02 | 12 | P | P | 15 40 46.4 | +0.5 | | baz=212,SNR=6.7 | |
| B20K | **Meade River** | 89.05 | 7 | P | P | 15 40 46.2 | +0.3 | | baz=200 | |
| ELIB | **Princess Elisa** | 89.06 | 186 | *d*P | P | 15 40 46.4 | +0.1 | | comp=Z,53nm,0.7s | |
| ELIB | | | | *d*pP | pP | 15 42 50.0 | +1.0 | | | |
| H29M | **Whitestone** | 89.09 | 15 | IAmb | IAmb | 15 40 47.7 | | | comp=Z,19nm,0.9s | |
| H29M | **Whitestone** | 89.09 | 15 | P | P | 15 40 46.3 | +0.1 | | baz=217,SNR=12 | |
| CMAR | **Chiang Mai Arr** | 89.38 | 290 | P | P | 15 40 49.4 | +0.7 | | | |
| CMAR | **Chiang Mai Arr** | 89.38 | 290 | P | P | 15 40 50.0 | +1.3 | | comp=Z,23nm,0.9s,baz=111,slow=2.8,SNR=122 | |
| CMAR | comp=Z,1.2nm,0.4s,baz=118,slow=3.1,SNR=3.8 | | | pP | pP | 15 42 52.0 | +0.7 | | | |
| | comp=Z,23nm,0.9s | | | | | | | | | |
| D24K | **Happy Valley** | 89.44 | 10 | P | P | 15 40 48.0 | +0.2 | | baz=208 | |
| EPYK | **Eagle Plains** | 89.62 | 15 | IAmb | IAmb | 15 40 50.1 | | | comp=Z,16nm,1.0s | |
| EPYK | **Eagle Plains** | 89.62 | 15 | P | P | 15 40 48.3 | -0.5 | | baz=219,SNR=6.9 | |
| PZH | **PanZhiHua** | 89.64 | 298 | P | P | 15 40 51.0 | +1.1 | | | |
| PZH | comp=Z,10.0nm,0.5s | | | pmax | pmax | | | | | |
| PZH | comp=Z,100nm,4.8s | | | pmax | pmax | | | | | |
| G29M | **Pine Creek** | 89.73 | 15 | IAmb | IAmb | 15 40 50.5 | | | comp=Z,16nm,1.1s | |
| G29M | **Pine Creek** | 89.73 | 15 | P | P | 15 40 49.2 | 0.0 | | baz=218 | |
| C23K | **Itkillik River** | 89.77 | 9 | P | P | 15 40 49.7 | +0.5 | | baz=206 | |
| B22K | **Teshekpuk Lake** | 89.83 | 8 | P | P | 15 40 49.3 | -0.2 | | baz=203 | |
| YAK | **Yakutsk** | 89.89 | 338 | P | P | 15 40 49.3 | -0.6 | | comp=Z,21nm,0.5s,baz=78,slow=3.5,SNR=9.9 | |
| | comp=Z,21nm,0.5s | | | | | | | | | |
| YAK | **Yakutsk** | 89.89 | 338 | *ce*P | P | 15 40 48.3 | -1.7 | | | |
| YAK | comp=Z,20nm,0.6s | | | pmax | pmax | | | | | |
| C24K | **Franklin Bluff** | 89.96 | 10 | P | P | 15 40 50.1 | 0.0 | | baz=208 | |
| E27K | **Coleen River** | 89.96 | 13 | P | P | 15 40 50.3 | 0.0 | | baz=214 | |
| TROLL | **Troll, Antarti** | 90.16 | 180 | ⇓P | P | 15 40 51.7 | +0.2 | | comp=Z,969nm,0.5s | |
| G30M | **tAoh Zrali Nji** | 90.23 | 15 | IAmb | IAmb | 15 40 52.8 | | | comp=Z,26nm,0.9s | |
| G30M | **tAoh Zrali Nji** | 90.23 | 15 | P | P | 15 40 51.6 | +0.1 | | baz=219 | |
| SNAA | **Sanae** | 90.43 | 178 | P | P | 15 40 52.5 | 0.0 | | | |
| SNAA | comp=Z,11nm,0.6s | | | IAmb | IAmb | 15 40 53.5 | | | | |
| SNAA | **Sanae** | 90.43 | 178 | ⇓P | P | 15 40 52.6 | 0.0 | | comp=Z,258nm,0.6s | |
| SNAA | **Sanae** | 90.43 | 178 | P | P | 15 40 52.3 | -0.3 | | comp=Z,9.0nm,0.6s,baz=208,slow=6.4,SNR=110 | |
| | comp=Z,9.0nm,0.6s | | | | | | | | | |
| SNAA | **Sanae** | 90.43 | 178 | *i* P | P | 15 40 52.2 | -0.4 | | | |
| SNAA | comp=Z,19nm,1.3s | | | pmax | pmax | | | | | |
| VNA3 | **Neumayer Olymp** | 90.56 | 176 | ⇓P | P | 15 40 53.6 | +0.5 | | comp=Z,38nm,0.6s | |
| G31M | **Satah River** | 90.68 | 16 | P | P | 15 40 53.9 | +0.4 | | baz=221 | |
| E28M | **Babbage River** | 90.75 | 13 | IAmb | IAmb | 15 40 55.4 | | | comp=Z,9.1nm,1.0s | |
| E28M | **Babbage River** | 90.75 | 13 | P | P | 15 40 54.4 | +0.6 | | baz=216 | |
| C27K | **Jago River** | 90.75 | 11 | P | P | 15 40 54.2 | +0.4 | | baz=212 | |
| F30M | **Barrier River** | 90.82 | 15 | P | P | 15 40 55.4 | +1.2 | | baz=220 | |
| PLCA | **Paso Flores** | 90.89 | 134 | P | P | 15 40 56.0 | +0.7 | | comp=Z,3.5nm,0.8s,baz=236,slow=7.3,SNR=4.7 | |
| | comp=Z,3.5nm,0.8s | | | | | | | | | |
| E29M | **Blow River** | 90.94 | 14 | IAmb | IAmb | 15 40 55.9 | | | comp=Z,13nm,1.4s | |
| E29M | **Blow River** | 90.94 | 14 | P | P | 15 40 54.6 | -0.1 | | baz=218 | |
| D27M | **Malcolm River** | 90.97 | 12 | P | P | 15 40 55.6 | +0.6 | | baz=215 | |
| VNA2 | **Neumayer--Watz** | 91.00 | 177 | ⇓P | P | 15 40 56.2 | +1.0 | | comp=Z,23nm,0.6s,baz=190,slow=5.8 | |
| NVL | **N'lazarevskaya** | 91.14 | 183 | ⇑*i*P | P | 15 40 54.8 | -1.0 | | | |
| NVL | comp=Z,22nm,0.8s | | | pmax | pmax | | | | | |
| F31M | **Tsiigehtchic** | 91.20 | 16 | P | P | 15 40 56.1 | +0.2 | | baz=222 | |
| VNA1 | **Neumayer--Stat** | 91.23 | 177 | ⇓P | P | 15 40 57.1 | +0.9 | | comp=Z,34nm,0.9s | |
| LZH | **Lanzhou** | 91.36 | 308 | *e*P | P | 15 40 59.3 | +1.7 | | | |
| LZH | | | | pP | pP | 15 43 01.9 | +0.7 | | | |
| LZH | comp=Z,67nm,1.2s | | | pmax | pmax | | | | | |
| CIT | **Chita** | 91.55 | 325 | *e*P | P | 15 40 58.2 | +0.2 | | | |
| CIT | | | | *e* | | 15 51 02.0 | | | | |
| CIT | comp=Z,42nm,2.2s | | | pmax | pmax | | | | | |
| TNCH | **TengChong** | 91.89 | 296 | ⇓P | P | 15 41 01.3 | +1.0 | | | |
| TNCH | comp=Z,12nm,1.1s | | | pmax | pmax | | | | | |
| TNCH | comp=Z,110nm,4.8s | | | pmax | pmax | | | | | |

**INK** **Inuvik** **91.91 15** P **P** **15 40 59.5 +0.4**
baz=222
**ULN** **Ulaanbaatar** **93.58 319** *ce*P **P** **15 41 07.8 +0.3**
ULN pmax pmax
comp=Z,18nm,0.9s
**SONM** **Songino Array** **93.97 319** P **P** **15 41 09.1 -0.2**
SONM lAmb lAmb 15 41 10.3
comp=Z,8.8nm,1.1s
**SONM** **Songino Array** **93.97 319** P **P** **15 41 09.3 0.0**
comp=Z,3.9nm,0.9s,baz=130,slow=4.7,SNR=18
SONM PP **PP** **15 45 08.2 +2.7**
comp=Z,1.2nm,0.7s,baz=121,slow=8.3,SNR=3.6
comp=Z,3.9nm,0.9s
**GTA** **Gaotai** **95.49 310** P **P** **15 41 17.1 +0.7**
GTA pmax pmax
comp=Z,11nm,1.0s
**ZAK** **Zakamensk** **96.80 321** *e*P **P** **15 41 21.6 -0.3**
ZAK pmax pmax
comp=Z,5.0nm,1.3s
**GOMU** **GeErMu** **98.31 305** P **P** **15 41 30.4 +1.0**
GOMU pP Pdif 15 41 33.6 +4.2
GOMU pmax pmax
comp=Z,11nm,0.7s
**ZSN** **Zaisan** **107.90 315** *e*PKiKP **PKiKP** **15 46 14.2 -0.7**
baz=315
**ZALV** **Zalesovo Beam** **108.64 322** PKiKP **PKiKP** **15 46 15.4 -0.7**
comp=Z,3.0nm,0.6s,baz=186,slow=1.3,SNR=17
ZALV PP **PP** **15 46 55.4 +1.6**
comp=Z,3.1nm,1.0s,baz=103,slow=6.5,SNR=5.6
**MKAR** **Makanchi Array** **109.58 314** Pdiff **Pdif** **15 42 21.3 +2.5**
comp=Z,0.6nm,0.5s,baz=87,slow=5.4,SNR=8.0
MKAR PKiKP **PKiKP** **15 46 17.3 -0.8**
comp=Z,3.9nm,0.5s,baz=195,slow=0.8,SNR=44
MKAR PKKPbc **PKKPbc** **15 57 23.5 -1.7**
comp=Z,0.4nm,0.6s,baz=276,slow=3.5,SNR=4.0
**SEM** **Semipalatinsk** **111.20 318** *e*PKiKP **PKiKP** **15 46 20.5 -0.8**
baz=318
**SEM** **Semipalatinsk** **111.20 318** *i* PKiKP **PKiKP** **15 46 20.5 -0.8**
**SHLS** **Shalkode** **111.23 310** *e*PKiKP **PKiKP** **15 46 20.2 -1.3**
baz=310
**SHLS** **Shalkode** **111.23 310** *i* PKiKP **PKiKP** **15 46 20.2 -1.3**
**UZB** **Uzynbulak** **111.55 310** *e*PKiKP **PKiKP** **15 46 21.2 -1.0**
baz=310
**UZB** **Uzynbulak** **111.55 310** *i* PKiKP **PKiKP** **15 46 21.1 -1.0**
**KPKS** **Kokpek** **111.82 310** *e*PKiKP **PKiKP** **15 46 21.9 -0.7**
baz=310
**KPKS** **Kokpek** **111.82 310** *i* PKiKP **PKiKP** **15 46 21.8 -0.7**
**ZHN** **Zhinishke** **111.98 310** *e*PKiKP **PKiKP** **15 46 22.2 -0.8**
baz=310
**ZHN** **Zhinishke** **111.98 310** *i* PKiKP **PKiKP** **15 46 22.1 -0.8**
**SATY** **Saty** **111.99 310** *e*PKiKP **PKiKP** **15 46 22.4 -0.5**
baz=310
**SATY** **Saty** **111.99 310** *i* PKiKP **PKiKP** **15 46 22.4 -0.5**
**KURK** **Kurchatov** **112.25 318** *i* PKiKP **PKiKP** **15 46 22.4 -0.6**
**KURBB** **Kurchatov Arra** **112.31 318** PKiKP **PKiKP** **15 46 22.4 -0.7**
comp=Z,6.7nm,0.7s,baz=96,slow=1.8,SNR=28
**MDOK** **Medeo** **112.99 310** *e*PKiKP **PKiKP** **15 46 24.2 -0.8**
baz=310
MDOK *e*PP **PP** **15 47 23.4 -1.6**
baz=310
**MDOK** **Medeo** **112.99 310** *i* PKiKP **PKiKP** **15 46 24.1 -0.8**
MDOK *e* 15 47 23.3
**CHKK** **Chushkaly** **113.08 311** *e*PKiKP **PKiKP** **15 46 24.3 -0.6**
baz=311
**CHKK** **Chushkaly** **113.08 311** *i* PKiKP **PKiKP** **15 46 24.2 -0.6**
**AAA** **Alma-Ata** **113.09 310** *e*PKiKP **PKiKP** **15 46 24.4 -0.5**
baz=310
**AAA** **Alma-Ata** **113.09 310** *i* PKiKP **PKiKP** **15 46 24.4 -0.5**
**KSH** **Kashi** **113.55 306** PKP **PKiKP** **15 46 26.9 +0.9**
**TKM2** **Tokmak 2** **114.04 310** P PKPdf 15 46 26.7 -0.3
SNR=6.1
**CHMS** **Chumysh** **114.67 310** P PKPdf 15 46 27.9 -0.1
SNR=5.1
**SGDS** **Sogindy** **114.77 310** *e*PKiKP PKPdf 15 46 27.3 -0.9
baz=310
**SGDS** **Sogindy** **114.77 310** *i* PKiKP PKPdf 15 46 27.3 -0.9
**AAK** **Ala-Archa** **114.84 309** *i* PKiKP PKPdf 15 46 27.1 -1.4
**USP** **Ospenovka** **114.86 310** P PKPdf 15 46 28.2 -0.1
SNR=8.8
**BTLS** **Baital** **115.22 312** *e*PKiKP **PKPdf** **15 46 28.3 -0.6**
baz=312
**BTLS** **Baital** **115.22 312** *i* PKiKP **PKPdf** **15 46 28.3 -0.6**
**EKS2** **Erkin-Say** **115.37 309** P **PKPdf** **15 46 29.4 0.0**
SNR=6.8
**AML** **Almayashu** **115.42 309** P **PKPdf** **15 46 29.8 -0.1**
SNR=6.5
**ARSB** **Arslanbob** **115.92 308** **PKPdf** **15 46 30.2 -0.4**
**ARSB** **Arslanbob** **115.92 308** PKiKP **PKPdf** **15 46 30.2 -0.4**
**BVAR** **Borovoye Array** **117.26 321** PKP **PKPdf** **15 46 32.1 -0.4**
comp=Z,12nm,0.5s,baz=109,slow=1.3,SNR=55
**BRVK** **Borovoye** **117.32 321** PKPdf **PKPdf** **15 46 31.3 -1.4**
**BRVK** **Borovoye** **117.32 321** PKiKP **PKPdf** **15 46 31.3 -1.4**
**KKAR** **Karatay Array** **117.77 310** PKPdf **PKPdf** **15 46 33.4 -0.5**
**KKAR** **Karatay Array** **117.77 310** PKiKP **PKPdf** **15 46 33.4 -0.5**
**KBL** **Kabul** **118.77 300** PKPdf **PKiKP** **15 46 36.4 0.0**
**KBL** **Kabul** **118.77 300** PKiKP **PKiKP** **15 46 36.4 0.0**
**SIMJ** **Simiganj** **118.92 305** PKPdf **PKPdf** **15 46 36.0 -0.4**
**SPITS** **Spitsbergen Ar** **119.45 357** PKP **PKPdf** **15 46 35.8 -0.3**
comp=Z,5.6nm,0.8s,baz=147,slow=8.0,SNR=3.5
**SUMG** **Summit** **120.77 13** PKPdf **PKiKP** **15 46 39.4 0.0**
**SUMG** **Summit** **120.77 13** PKiKP **PKiKP** **15 46 39.4 0.0**
**SVE** **Sverdlovsk** **122.02 326** *e*PKiKP **PKPdf** **15 46 41.4 -0.2**
SVE pmax pmax
comp=Z,23nm,0.8s
**ARU** **Arti** **123.24 326** PKPdf **PKPdf** **15 46 43.2 -0.7**
**ARU** **Arti** **123.24 326** *i* PKiKP **PKPdf** **15 46 44.0 +0.1**
ARU 15 48 35.0
ARU 15 53 01.4
ARU SS SS 16 04 35.6 -0.5
**ARCES** **ARCESS Array B** **126.55 350** PKPdf **PKPdf** **15 46 49.4 -0.5**
**ARCES** **ARCESS Array B** **126.55 350** PKP **PKPdf** **15 46 50.0 0.0**
comp=Z,11nm,0.8s,baz=5.7,slow=1.2,SNR=16
**ARCES** **ARCESS Array B** **126.55 350** PKiKP **PKPdf** **15 46 50.0 0.0**
**KIRV** **Kirov** **126.89 331** PKP **PKiKP** **15 46 51.5 +0.1**
comp=Z,21nm,0.6s,baz=107,slow=0.8,SNR=7.3
**KIRV** **Kirov** **126.89 331** ⇑*e*PKiKP **PKiKP** **15 46 51.1 -0.3**
**BOSA** **Boshof** **128.47 206** PKP **PKiKP** **15 46 55.6 -0.2**
comp=Z,5.2nm,0.8s,baz=153,slow=2.6,SNR=6.9
**BELG** **Belogornoye** **130.68 325** PKP **PKPdf** **15 46 58.2 0.0**
comp=Z,40nm,0.8s,baz=107,slow=1.8,SNR=8.9
BELG SKPbc **SKPab** **15 49 31.5 +1.0**
comp=Z,60nm,1.0s,baz=225,slow=2.8,SNR=12
**FINES** **FINESS Array B** **133.46 344** PKhKP PKPpre 15 46 56.0
comp=Z,2.3nm,0.7s,baz=78,slow=3.2,SNR=8.5
FINES PKP **PKPdf** **15 47 03.1 -0.1**
comp=Z,5.8nm,0.7s,baz=28,slow=4.5,SNR=11
FINES SKPbc **SKPab** **15 49 40.8 -1.4**
comp=Z,5.3nm,0.8s,baz=6.8,slow=8.1,SNR=6.1
**VRH** **Novokhopyorsk** **134.46 326** *e*PKiKP **PKPdf** **15 47 05.5 +0.1**
VRH pmax pmax
comp=Z,14μm,0.4s
**OBN** **Obninsk** **134.65 333** *e*PKiKP **PKPdf** **15 47 04.3 -1.3**
OBN *e* 15 49 46.5
OBN pmax pmax
comp=Z,25nm,1.7s
**VORR** **Voronezh** **135.52 328** *e*PKiKP **PKPdf** **15 47 07.9 +0.6**
VORR pmax pmax
comp=Z,20nm,0.6s
**NB2** **NORSAR Subarra** **136.58 354** PKP **PKPdf** **15 47 02.9 -6.2**
comp=Z,1.7nm,0.7s,baz=18,slow=3.1
**NOA** **NORSAR Array B** **136.58 354** PKhKP PKPpre 15 47 00.3
comp=Z,2.7nm,0.8s,baz=22,slow=3.9,SNR=8.0
NOA PKP **PKPdf** **15 47 09.1 -0.1**
comp=Z,0.7nm,0.7s,baz=10,slow=3.2,SNR=7.3
**HFS** **Hagfors** **137.15 351** PKhKP PKPpre 15 46 58.9
comp=Z,5.0nm,0.6s,baz=46,slow=4.3,SNR=10
HFS PKP **PKPdf** **15 47 10.2 +0.1**
comp=Z,7.3nm,0.7s,baz=45,slow=1.0,SNR=6.5
**GNI** **Garni** **137.24 310** PKP **PKiKP** **15 47 12.6 -0.5**
comp=Z,8.7nm,0.6s,baz=341,slow=9.0,SNR=4.5
**KBZ** **Khabaz** **137.24 316** PKhKP PKPpre 15 47 00.6
comp=Z,1.3nm,0.4s,baz=133,slow=2.9,SNR=4.3
KBZ PKP **PKPdf** **15 47 11.2 +0.5**
comp=Z,4.6nm,0.8s,baz=63,slow=4.5,SNR=7.2
**KBZ** **Khabaz** **137.24 316** ⇑*e*PKiKP **PKPdf** **15 47 10.5 -0.3**
**KIV** **Kislovodsk** **137.29 316** *e*PKiKP **PKiKP** **15 47 12.2 -0.9**
KIV pmax pmax
comp=Z,6.0nm,1.1s
**SHA1** **Shidzhatmaz** **137.40 316** ⇑*e*PKiKP **PKPdf** **15 47 12.4 +1.0**
**RAYN** **Ar Rayn** **139.16 285** PKPpre 15 47 08.2
**RAYN** **Ar Rayn** **139.16 285** PKHKP PKPpre 15 47 08.2
**KIBK** **Kibwezi** **139.19 244** PKPpre PKPpre 15 47 08.6
**GURO** **Guroymak-BITLI** **139.74 309** PKPpre PKPpre 15 47 09.3
**KMBO** **Kilima Mbogo** **140.49 245** PKhKP PKPpre 15 47 12.2
comp=Z,3.9nm,0.8s,baz=41,slow=3.2,SNR=9.7
KMBO PKP **PKiKP** **15 47 19.6 -1.1**
comp=Z,5.8nm,0.8s,baz=84,slow=9.2,SNR=9.5
**SUW** **Suwalki** **140.59 340** *e*PKP PKPpre 15 47 11.4
**AKASG** **Malin Array Be** **140.91 333** PKPpre 15 47 11.7
**AKASG** **Malin Array Be** **140.91 333** PKhKP PKPpre 15 47 11.2
comp=Z,4.2nm,0.6s,baz=44,slow=4.5,SNR=13
AKASG PKP **PKPdf** **15 47 18.6 +1.4**
comp=Z,9.5nm,0.6s,baz=46,slow=3.0,SNR=9.4
**AKASG** **Malin Array Be** **140.91 333** PKHKP PKPpre 15 47 11.7
**KIEV** **Kiev** **140.92 333** PKPpre 15 47 10.9
**KIEV** **Kiev** **140.92 333** ⇓P PKPpre 15 47 11.6
**KIEV** **Kiev** **140.92 333** ⇓PKHKP PKPpre 15 47 11.6
**LAWE** **Loch Awe, Argy** **141.45 7** *e*P PKPpre 15 47 13.5
**SIM** **Simferopol'** **142.15 322** *i* PKiKP **PKPdf** **15 47 17.3 -2.4**
SIM pmax pmax
comp=Z,43nm,0.7s
**ARPR** **Arapgir-MALATY** **142.24 311** **PKPdf** **15 47 17.7 -2.5**
**EKA** **Eskdalemuir Ar** **142.58 5** PKhKP PKPpre 15 47 16.3
comp=Z,3.5nm,0.7s,baz=330,slow=3.7,SNR=8.2
**GAL1** **Galloway** **142.89 7** *e*P **PKPdf** **15 47 18.0 -2.7**
**SORM** **Soroca** **143.15 330** ⇑P PKPbc 15 47 19.5 -0.1
**SORM** **Soroca** **143.15 330** ⇑PKiKP PKPbc 15 47 19.5 -0.1
**BEL** **Belsk** **143.20 341** PKP PKPbc 15 47 19.9 +0.3
**DIKM** **Dikmen** **143.20 317** ⇑P **PKPdf** **15 47 20.9 -0.7**
**WIM** **Isle of Man** **143.61 7** *e*P PKPab 15 47 20.7 0.0
**LVV** **L'vov** **143.74 336** *e*PKiKP PKPbc 15 47 21.2 -0.2
**MILM** **Milestii Mici** **143.78 329** ⇑P PKPab 15 47 21.7 +0.1
**MILM** **Milestii Mici** **143.78 329** ⇑PKiKP PKPab 15 47 21.7 +0.1
**BZK** **Bozkurt** **143.85 318** ⇓P **PKPdf** **15 47 22.9 +0.2**
**HPK** **Haverah Park** **144.06 4** *e*P **PKPdf** **15 47 22.6 0.0**
**BNN** **Bunyan** **144.10 312** PKPdf **PKPdf** **15 47 23.5 0.0**
**LODK** **Lodwar** **144.31 250** PKPbc 15 47 24.3 0.0
**WME** **Myndd Eilian** **144.39 7** *e*P **PKPdf** **15 47 23.3 0.0**
**KWP** **Kalwaria Pacla** **144.40 337** *e*PKP **PKPab** **15 47 23.9 0.0**
**WLF1** **Llynfaes** **144.48 7** *e*P PKPbc 15 47 23.7 +0.2
**YLL** **Llanberis** **144.65 7** *e*P PKPbc 15 47 24.3 +0.3
**VLDR** **Vladesti** **144.89 328** ⇓P **PKPab** **15 47 26.2 +0.3**
**OJC** **Ojcow** **144.91 340** *e*PKP **PKPdf** **15 47 23.2 -1.1**
**TLCR** **144.96 326** ⇑P **PKPab** **15 47 26.2 0.0**
**TLCR** **144.96 326** ⇑PKiKP **PKPab** **15 47 26.2 0.0**
**BURAR** **Bucovina Array** **144.97 332** PKPbc PKPbc 15 47 25.2 -0.1
**BURAR** **Bucovina Array** **144.97 332** ⇑P **PKPab** **15 47 26.4 +0.1**
**BURAR** **Bucovina Array** **144.97 332** ⇑PKiKP **PKPab** **15 47 26.4 +0.1**
**LLW** **Llanuwchllyn** **144.99 6** *e*P PKPbc 15 47 25.2 +0.1
**FOEL** **Foel Wylfa** **145.00 6** *e*P **PKPab** **15 47 25.7 -0.4**
**SCTR** **Scanteiesti** **145.05 328** ⇑P **PKPab** **15 47 26.9 +0.4**
**NRDL** **Niedersach Rie** **145.06 351** *e*PKPbc **PKPab** **15 47 25.9 -0.4**
baz=15,slow=2.6
**GHRR** **145.08 329** ⇓P **PKPab** **15 47 27.1 +0.5**
**TESR** **Tescani** **145.13 330** ⇑P **PKPdf** **15 47 25.0 +0.2**
**KOLS** **Kolonicke sedl** **145.13 337** *e*PKP2 **PKPab** **15 47 26.5 -0.3**
**KOLS** **Kolonicke sedl** **145.13 337** *e*PKP **PKPab** **15 47 26.5 -0.3**
**JURR** **Jurilovca** **145.20 326** ⇑P **PKPab** **15 47 26.9 -0.2**
**BR131** **Keskin Array S** **145.22 315** **PKPdf** **15 47 25.0 -0.4**
**BR131** **Keskin Array S** **145.22 315** PKiKP **PKPdf** **15 47 25.0 -0.3**
**BRTR** **Keskin Array B** **145.22 315** PKPdf **PKPdf** **15 47 25.1 -0.3**
**BRTR** **Keskin Array B** **145.22 315** PKPbc **PKPbc** **15 47 26.3 -0.2**
comp=Z,42nm,0.7s,baz=73,slow=2.1,SNR=223
**BRTR** **Keskin Array B** **145.22 315** PKiKP **PKPdf** **15 47 25.1 -0.3**
**IZVR** **Izvoarele** **145.26 328** ⇑P **PKPab** **15 47 27.5 +0.2**
**KIRS** **Kirsehir-Merke** **145.32 314** ⇓P **PKPdf** **15 47 25.9 +0.5**
**CFR** **Carcaliu** **145.32 327** ⇓P **PKPab** **15 47 26.9 -0.7**
**CFR** **Carcaliu** **145.32 327** ⇓PKP2 **PKPab** **15 47 26.9 -0.7**
**PANC** **Panciu** **145.34 329** ⇑P **PKPbc** **15 47 26.9 +0.6**
**ONER** **Baraj Valea Uz** **145.38 330** ⇓P **PKPbc** **15 47 26.5 0.0**
**KSP** **Ksiaz** **145.38 344** *e*PKP **PKPbc** **15 47 26.3 -0.1**
**TPGR** **Topolog** **145.39 326** ⇑P **PKPab** **15 47 27.7 -0.2**
**WACR** **West Acre** **145.39 2** *e*P **PKPbc** **15 47 25.8 -0.5**
**HLM1** **Long Mynd** **145.39 5** *e*P **PKPbc** **15 47 26.5 +0.1**
**NIE** **Niedzica** **145.44 339** *e*PKP **PKPbc** **15 47 26.1 -0.5**
**CRVS** **Cervenica-Dubn** **145.46 337** *e*PKP2 **PKPbc** **15 47 27.2 +0.5**
**CRVS** **Cervenica-Dubn** **145.46 337** *e*PKP **PKPbc** **15 47 27.2 +0.5**
**ODBI** **Odobesti** **145.46 329** ⇑P **PKPab** **15 47 28.5 +0.4**
**IBBN** **Ibbenburen** **145.54 354** *e*PKPbc **PKPab** **15 47 27.4 -0.7**
baz=15,slow=2.6
**VRI** **Vrincioaia** **145.55 329** ⇑P **PKPbc** **15 47 27.7 +0.7**
**VRI** **Vrincioaia** **145.55 329** ⇑PKP2 **PKPbc** **15 47 27.7 +0.7**
**PLOR** **Plostina** **145.60 329** ⇑P **PKPbc** **15 47 27.2 0.0**
**PLOR** **Plostina** **145.60 329** ⇑PKiKP **PKPbc** **15 47 27.2 0.0**
**BMR** **Baia Mare** **145.66 334** ⇑P **PKPab** **15 47 28.4 -0.5**
**BMR** **Baia Mare** **145.66 334** ⇑PKP2 **PKPab** **15 47 28.4 -0.5**
**CLZ** **Clausthal** **145.66 351** *e*PKPbc **PKPab** **15 47 28.1 -0.7**
baz=15,slow=2.6
**OSTC** **Ostas** **145.67 344** ⇑*e*PKP **PKPab** **15 47 28.0 -0.8**
**OSTC** **Ostas** **145.67 344** *e*PKP2 **PKPab** **15 47 28.0 -0.8**
**CLL** **Collm** **145.71 348** *e*PKPdf **PKPdf** **15 47 26.0 +0.4**
CLL ⇓*i*PKPbc **PKPbc** **15 47 27.7 +0.4**
comp=Z,123nm,0.9s
CLL *e*PKPdf **pPKPdf** **15 49 38.0 +1.1**
**CLL** **Collm** **145.71 348** ⇓*e*PKiKP **PKPdf** **15 47 26.0 +0.4**
CLL *i* 15 47 27.7
CLL pmax pmax
comp=Z,123nm,0.9s
**CLL** **Collm** **145.71 348** *e*PKPbc **PKPab** **15 47 28.1 -0.8**
baz=15,slow=2.6
**ANTO** **Ankara** **145.72 316** PKPdf **PKPdf** **15 47 25.0 -1.1**
**ANTO** **Ankara** **145.72 316** ⇓P **PKPdf** **15 47 26.3 +0.2**
**ANTO** **Ankara** **145.72 316** ⇓PKiKP **PKPdf** **15 47 26.3 +0.2**
**ARCR** **ARCALIA** **145.75 333** ⇑P **PKPab** **15 47 28.9 -0.3**
**HARR** **Harsova** **145.76 326** ⇑P **PKiKP** **15 47 33.1 +2.9**
**HARR** **Harsova** **145.76 326** ⇑PKP2 **PKiKP** **15 47 33.1 +2.9**
**TURR** **Turia** **145.76 330** ⇑P **PKPab** **15 47 28.9 -0.5**
**UPC** **Upice** **145.76 344** ⇑*e*PKP **PKPbc** **15 47 28.0 +0.5**
**UPC** **Upice** **145.76 344** *e*PKP2 **PKPbc** **15 47 28.0 +0.5**
**TLBR** **Topalu** **145.79 326** ⇑P **PKPab** **15 47 28.8 -0.7**
**COVR** **Voineasa-Covas** **145.82 329** ⇓P **PKPab** **15 47 29.9 +0.3**
**DPC** **Dobruska-Polom** **145.83 344** ⇑*e*PKP **PKPbc** **15 47 28.3 +0.6**
**DPC** **Dobruska-Polom** **145.83 344** *e*PKP2 **PKPbc** **15 47 28.3 +0.6**
**OZUR** **145.84 330** ⇓P **PKPbc** **15 47 28.7 +0.9**
**MCH1** **Michaelchurch** **145.90 6** *e*P **PKPbc** **15 47 27.6 -0.1**
**BOSR** **Bodos** **145.91 330** ⇑P **PKPab** **15 47 29.2 -0.8**
**BRG** **Berggiesshubel** **145.92 347** *e*PKP **PKPdf** **15 47 26.8 +0.9**
BRG Amp 15 47 27.7
comp=Z,6.8nm,0.9s
**BRG** **Berggiesshubel** **145.92 347** P **PKPab** **15 47 28.9 -0.9**
BRG Amp 15 47 29.6
comp=Z,47nm,0.8s
**BRG** **Berggiesshubel** **145.92 347** P **PKiKP** **15 47 35.5 +5.1**
BRG Amp 15 47 36.3
comp=Z,18nm,0.9s
**BRG** **Berggiesshubel** **145.92 347** *e*PKPdf **PKPdf** **15 47 26.9 +0.9**
baz=19,slow=1.5
BRG *e*PKPbc **PKPab** **15 47 28.8 -1.0**
baz=15,slow=2.6
**LANS** **Liptovska Anna** **145.95 339** *e*PKP2 **PKPab** **15 47 29.7 -0.3**
**LANS** **Liptovska Anna** **145.95 339** *e*PKP **PKPab** **15 47 29.7 -0.3**
**KRLC** **Kraliky** **145.95 343** ⇑*e*PKP **PKPbc** **15 47 28.7 +0.6**
**KRLC** **Kraliky** **145.95 343** *e*PKP2 **PKPbc** **15 47 28.7 +0.6**
**MORC** **Moravsky Berou** **146.00 342** PKPdf **PKPdf** **15 47 26.6 +0.4**
**MORC** **Moravsky Berou** **146.00 342** *e*PKP **PKPdf** **15 47 27.0 +0.8**
**MORC** **Moravsky Berou** **146.00 342** ⇑P **PKPbc** **15 47 27.3 -0.9**
**MORC** **Moravsky Berou** **146.00 342** ⇑PKiKP **PKPbc** **15 47 27.3 -0.9**
**GTTG** **Gottingen** **146.01 351** *e*PKPdf **PKPdf** **15 47 27.0 +0.9**
baz=19,slow=1.5
GTTG *e*PKPbc **PKPbc** **15 47 28.8 +0.7**
baz=15,slow=2.6
**ELMS** **Elmsett, Ipswi** **146.03 1** *e*P **PKPbc** **15 47 28.4 +0.3**
**NEUB** **Neuenburg** **146.04 349** *e*PKPdf **PKPdf** **15 47 26.9 +0.7**
baz=19,slow=1.5
NEUB *e*PKPbc **PKPbc** **15 47 28.9 +0.7**
baz=15,slow=2.6
**MONM** **Monmouth** **146.07 5** *e*P **PKPbc** **15 47 28.5 +0.3**
**NEHR** **Nehoiu** **146.08 329** ⇑P **PKPbc** **15 47 29.2 +0.7**
**PVCC** **Panska Ves** **146.10 346** ⇑*e*PKP **PKPab** **15 47 29.6 -0.9**
**PVCC** **Panska Ves** **146.10 346** *e*PKP2 **PKPab** **15 47 29.6 -0.9**
**DOPR** **Dopca** **146.12 330** ⇓P **PKPab** **15 47 30.1 -0.7**
**KECS** **Kecovo** **146.16 338** *e*PKP2 **PKPbc** **15 47 29.5 +0.9**
**KECS** **Kecovo** **146.16 338** *e*PKP **PKPbc** **15 47 29.5 +0.9**
**ISR** **Istrita** **146.17 328** ⇑P **PKPbc** **15 47 29.4 +0.5**
**ISR** **Istrita** **146.17 328** ⇑PKP2 **PKPbc** **15 47 29.4 +0.5**
**MLR** **Muntele Rosu** **146.20 329** PKPbc **PKPbc** **15 47 29.1 +0.1**
comp=Z,36nm,0.8s,baz=20,slow=3.5,SNR=34
**MLR** **Muntele Rosu** **146.20 329** ⇑P **PKPbc** **15 47 29.5 +0.5**
**MLR** **Muntele Rosu** **146.20 329** ⇑PKP2 **PKPbc** **15 47 29.5 +0.5**
**MBAR** **Mbarara** **146.26 240** *i* PKHKP PKPpre 15 47 26.5
**MAUC** **Maruska** **146.28 341** ⇑*e*PKP **PKPbc** **15 47 29.8 +0.8**
**HSKC** **Hora Svate Kat** **146.28 347** ⇑*e*PKP **PKPbc** **15 47 29.5 +0.6**
**CBBR** **Cluj-Babes-Bol** **146.34 333** ⇓P **PKPdf** **15 47 26.9 +0.1**
**CJR** **Cluj-Napoca** **146.37 333** ⇓P **PKPbc** **15 47 30.2 +0.9**
**CJR** **Cluj-Napoca** **146.37 333** ⇓PKP2 **PKPbc** **15 47 30.2 +0.9**
**BUG** **Bochum--Univer** **146.44 354** *e*PKPdf **PKPdf** **15 47 27.9 +1.1**
baz=19,slow=1.5
BUG *e*PKPbc **PKPbc** **15 47 29.6 +0.4**
baz=15,slow=2.6
**LTVH** **Ltavrtes, Hu** **146.54 335** ⇑P **PKPbc** **15 47 29.8 +0.2**
**KASTN** **Kahler Asten** **146.55 353** *e*PKPdf **PKPdf** **15 47 27.8 +0.7**
baz=19,slow=1.5
KASTN *e*PKPbc **PKPbc** **15 47 30.3 +0.7**
baz=15,slow=2.6
**MARR** **Marisel-Cluj** **146.60 333** ⇑P **PKPbc** **15 47 30.8 +0.8**
**MOX** **Moxa** **146.61 349** *e*PKPdf **PKPdf** **15 47 27.7 +0.5**
baz=19,slow=1.5
MOX *e*PKPbc **PKPbc** **15 47 30.4 +0.6**
baz=15,slow=2.6
MOX *e*PKPab **PKPab** **15 47 32.6 +0.1**
baz=14,slow=4.2
MOX *e*pPKPbc pPKPbc 15 49 39.4 +0.6
**PRU** **Pruhonice** **146.61 345** ⇑*e*PKP **PKPbc** **15 47 30.5 +0.7**
**PRU** **Pruhonice** **146.61 345** *e*PKP2 **PKPbc** **15 47 30.5 +0.7**
**MMAI** **Mount Meron Ar** **146.62 303** PKPbc **PKPbc** **15 47 31.2 +0.7**
comp=Z,74nm,0.6s,baz=64,slow=5.7,SNR=132
MMAI pPKP **pPKPdf** **15 49 38.0 -1.7**
comp=Z,3.0nm,0.8s,baz=53,slow=2.0,SNR=2.5
**GOPC** **GO Pecny, Ondr** **146.62 345** ⇑*e*PKP **PKPbc** **15 47 30.5 +0.6**
**GOPC** **GO Pecny, Ondr** **146.62 345** *e*PKP2 **PKPbc** **15 47 30.5 +0.6**
**PLN** **Plauen** **146.66 348** *e*PKPdf **PKPdf** **15 47 27.8 +0.5**
baz=19,slow=1.5
PLN *e*PKPbc **PKPbc** **15 47 30.8 +0.9**
baz=15,slow=2.6
PLN *e*pPKPbc pPKPbc 15 49 39.6 +0.6
**TANN** **Tannenbergstha** **146.67 348** *e*PKPdf **PKPdf** **15 47 27.9 +0.6**
baz=19,slow=1.5
TANN *e*PKPbc **PKPbc** **15 47 30.8 +0.8**
baz=15,slow=2.6
TANN *e*pPKPbc pPKPab 15 49 38.9 0.0
**DRGR** **146.68 334** ⇑P **PKPbc** **15 47 31.0 +0.8**
**DRGR** **146.68 334** ⇑PKP2 **PKPbc** **15 47 31.0 +0.8**
**VRAC** **Vranov** **146.70 343** *e*PKP **PKPdf** **15 47 27.9 +0.5**
**VRAC** **Vranov** **146.70 343** ⇑P **PKiKP** **15 47 31.2 -0.9**
**VRAC** **Vranov** **146.70 343** ⇑PKP2 **PKiKP** **15 47 31.2 -0.9**
**UBBA** **Unterbreizbach** **146.71 351** *e*PKPdf **PKPdf** **15 47 27.6 +0.4**
baz=19,slow=1.5
UBBA *e*PKPbc **PKPbc** **15 47 30.5 +0.6**
baz=15,slow=2.6
**WOL** **Wolverton** **146.72 4** *e*P **PKPbc** **15 47 30.3 +0.3**
**VYHS** **Vyhne** **146.72 340** *e*PKP2 **PKPbc** **15 47 30.9 +0.7**
**VYHS** **Vyhne** **146.72 340** *e*PKP **PKPbc** **15 47 30.9 +0.7**
**JAVC** **Velka Javorina** **146.78 341** *e*PKP **PKPbc** **15 47 29.3 -1.1**
**PSZ** **Piszkesteto** **146.85 338** ⇑P **PKiKP** **15 47 31.6 -1.0**
**PSZ** **Piszkesteto** **146.85 338** ⇑PKP2 **PKiKP** **15 47 31.6 -1.0**
**ARR** **Arges** **146.92 330** ⇑P **PKiKP** **15 47 32.5 -0.2**
**KRUC** **Moravsky** **146.97 343** *e*PKP **PKPdf** **15 47 28.2 +0.4**
**ELSH** **Elham, Standar** **146.98 1** *e*P **PKiKP** **15 47 31.6 -0.9**
**TREC** **Trest** **147.01 344** ⇑*e*PKP **PKPbc** **15 47 31.4 +0.5**
**TREC** **Trest** **147.01 344** *e*PKP2 **PKPbc** **15 47 31.4 +0.5**
**MANZ** **Manzenberg** **147.15 348** *e*PKPdf **PKPdf** **15 47 28.7 +0.6**
baz=19,slow=1.5
MANZ *e*PKPbc **PKiKP** **15 47 32.2 -0.9**
baz=15,slow=2.6
MANZ *e*pPKPbc **pPKPdf** **15 49 39.9 +0.5**
**SMOL** **Smolenice** **147.16 341** *e*PKP2 **PKiKP** **15 47 32.9 -0.2**
**ZVC** **Zvikov** **147.21 345** ⇑*e*PKP **PKPbc** **15 47 31.8 +0.4**
**ROTZ** **Rotzenmuhle** **147.34 348** *e*PKPdf **PKPdf** **15 47 28.6 +0.2**
baz=19,slow=1.5
ROTZ *e*PKPbc **PKiKP** **15 47 32.7 -0.7**
baz=15,slow=2.6
ROTZ *e*pPKPbc **pPKPab** **15 49 41.6 +0.4**
**AHRW** **Bad Neuenahr-A** **147.35 354** *e*PKPdf **PKPdf** **15 47 29.1 +0.7**
baz=19,slow=1.5
AHRW *e*PKPbc **PKiKP** **15 47 32.7 -0.6**
baz=15,slow=2.6
AHRW *e*PKPab **PKPab** **15 47 35.4 -0.1**
baz=14,slow=4.2
**HUMR** **Humele** **147.37 329** ⇓P **PKPbc** **15 47 31.0 -1.0**
**MEM** **Membach** **147.38 355** *d*PKP **PKPbc** **15 47 32.2 +0.4**
**BTNL** **Ternell** **147.39 355** *d*PKPdf **PKPdf** **15 47 29.1 +0.6**
BTNL *d*PKP **PKPbc** **15 47 32.0 +0.1**
**BSTI** **Sart Tilman** **147.43 356** *d*PcP **PKPbc** **15 47 32.4 +0.4**
**TNS** **Taunus Mts** **147.51 352** *e*PKPdf **PKPdf** **15 47 29.4 +0.6**
baz=19,slow=1.5
TNS *e*PKPbc **PKPbc** **15 47 32.9 +0.7**
baz=15,slow=2.6
TNS *e*PKPab **PKPab** **15 47 36.6 +0.4**
baz=14,slow=4.2
TNS *e*pPKPbc **pPKPab** **15 49 43.1 +1.1**
**SIRR** **Siria** **147.54 334** ⇑P **PKiKP** **15 47 33.4 -0.5**
**ZST** **Bratislava** **147.54 341** *e*PKP2 **PKiKP** **15 47 33.4 -0.4**
**ZST** **Bratislava** **147.54 341** *e*PKP **PKiKP** **15 47 33.4 -0.4**
**CSS** **Mathiatis** **147.54 307** **PKPbc** **15 47 31.9 -0.9**
**GRF** **Grafenberg Arr** **147.60 349** *e*PKPdf **PKPdf** **15 47 29.0 +0.2**
baz=19,slow=1.5
GRF *e*PKPab **PKPab** **15 47 37.2 +0.6**
baz=14,slow=4.2
GRF *e*pPKPbc **pPKPab** **15 49 43.0 +0.7**
**BCLA** **Clavier** **147.61 356** *d*PKP **PKPbc** **15 47 32.1 -0.3**
**KHC** **Kasperske Hory** **147.64 346** *e*PKPDF **PKPdf** **15 47 29.4 +0.4**
KHC ⇑*e*PKP **PKiKP** **15 47 33.4 -0.7**
**KHC** **Kasperske Hory** **147.64 346** *e*PKiKP **PKPdf** **15 47 29.4 +0.4**
**BGES** **Gesves** **147.66 356** *d*PcP **PKPbc** **15 47 32.1 -0.4**
BGES *d*PKPab **PKPab** **15 47 36.0 -0.8**
**GZR** **Gura Zlata** **147.75 332** ⇓P **PKPbc** **15 47 33.1 +0.1**
**GZR** **Gura Zlata** **147.75 332** ⇓PKHKP PKPpre 15 47 33.1
**CKRC** **Cesky Krumlov** **147.75 345** *e*PKPDF **PKPdf** **15 47 30.0 +0.9**
CKRC ⇑*e*PKP **PKPbc** **15 47 33.3 +0.4**
**CKRC** **Cesky Krumlov** **147.75 345** *e*PKHKP PKPpre 15 47 30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MPEP** | **Malo Peshtene** | **148.84** | **329** | ⇓ | *i* P | **PKiKP** | **15 47 36.3 -0.4** |
| **ARSA** | **Arzberg** | **148.86** | **342** | | *i* PKP | **PKPbc** | **15 47 35.9 +0.2** |
| | comp=Z,20nm,1.4s,SNR=9.8 | | | | | | |
| ARSA | | | | | *ep*PKP | **pPKPab** | **15 49 46.6 -0.5** |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.97** | **345** | | *i* PKP | **PKPbc** | **15 47 36.1 +0.1** |
| | comp=Z,24nm,0.9s,SNR=12 | | | | | | |
| **FUR** | **Furstenfeldbru** | **149.05** | **348** | | *e*PKPdf | **PKPdf** | **15 47 31.6 +0.4** |
| | baz=19,slow=1.5 | | | | | | |
| FUR | | | | | *e*PKPbc | **PKiKP** | **15 47 36.6 -0.4** |
| | baz=15,slow=2.6 | | | | | | |
| FUR | | | | | *e*PKPab | **PKPab** | **15 47 42.9 +0.3** |
| | baz=14,slow=4.2 | | | | | | |
| **RJOB** | **Jochberg** | **149.13** | **346** | | *e*PKPdf | **PKPdf** | **15 47 31.5 +0.1** |
| | baz=19,slow=1.5 | | | | | | |
| RJOB | | | | | *e*PKPbc | **PKPbc** | **15 47 36.7 +0.4** |
| | baz=15,slow=2.6 | | | | | | |
| RJOB | | | | | *e*PKPab | **PKPab** | **15 47 43.9 +0.9** |
| | baz=14,slow=4.2 | | | | | | |
| RJOB | | | | | *ep*PKPbc | **pPKPbc** | **15 49 46.4 0.0** |
| **FRGS** | **Fruska Gora** | **149.19** | **335** | ⇓ | *i* P | **PKPbc** | **15 47 36.7 +0.2** |
| **PGB** | **Panagyurishte** | **149.23** | **327** | ⇓ | *i* P | **PKPbc** | **15 47 37.0 +0.3** |
| **KOGS** | **Kog** | **149.36** | **341** | | *i* PKPbc | **PKPbc** | **15 47 36.9 +0.1** |
| **BFO** | **Black Forest** | **149.38** | **352** | | PKPdf | **PKPdf** | **15 47 30.6 -1.2** |
| BFO | | | | | PKPbc | **PKPbc** | **15 47 36.6 -0.3** |
| BFO | | | | | | **PKPab** | **15 47 43.2 -0.8** |
| **BFO** | **Black Forest** | **149.38** | **352** | | PKiKP | **PKPdf** | **15 47 30.6 -1.2** |
| BFO | | | | | | | 15 47 43.2 |
| **BFO** | **Black Forest** | **149.38** | **352** | | *e*PKPdf | **PKPdf** | **15 47 31.8 0.0** |
| | baz=19,slow=1.5 | | | | | | |
| BFO | | | | | *e*PKPbc | **PKPbc** | **15 47 37.2 +0.3** |
| | baz=15,slow=2.6 | | | | | | |
| BFO | | | | | *ep*PKPbc | **pPKPbc** | **15 49 46.7 -0.3** |
| **LESA** | **Schwarzleotal** | **149.45** | **346** | | *i* PKP | **PKPbc** | **15 47 37.2 0.0** |
| | comp=Z,25nm,0.8s | | | | | | |
| **RZN** | **Rozhen** | **149.51** | **325** | ⇓ | *i* P | **PKPbc** | **15 47 37.6 0.0** |
| **SOKA** | **Soboth** | **149.52** | **342** | | *i* PKP | **PKPbc** | **15 47 37.3 -0.1** |
| | comp=Z,30nm,0.9s,SNR=15 | | | | | | |
| SOKA | | | | | *ep*PKP | **pPKPbc** | **15 49 46.2 -1.2** |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **PERS** | **Pernice** | **149.54** | **342** | | *e*PKPbc | **PKPbc** | **15 47 37.0 -0.3** |
| **BOVS** | **Bovan** | **149.60** | **331** | ⇓ | P | **PKPbc** | **15 47 37.3 -0.2** |
| **KBA** | **Koelnbreinsper** | **149.61** | **345** | | *i* PKP | **PKPbc** | **15 47 37.4 -0.3** |
| | comp=Z,31nm,0.6s,SNR=17 | | | | | | |
| **VTS** | **Vitosha** | **149.63** | **328** | ⇓ | *i* P | **PKiKP** | **15 47 38.2 -0.3** |
| **PLNA** | **Plana** | **149.64** | **328** | ⇓ | *i* P | **PKiKP** | **15 47 38.5 0.0** |
| **UBR** | **Ueberruh** | **149.74** | **349** | | *e*PKPdf | **PKPdf** | **15 47 32.5 +0.1** |
| | baz=19,slow=1.5 | | | | | | |
| UBR | | | | | *e*PKPbc | **PKiKP** | **15 47 38.3 -0.2** |
| | baz=15,slow=2.6 | | | | | | |
| UBR | | | | | *ep*PKPbc | **pPKPbc** | **15 49 48.5 +0.7** |
| **WATA** | **Walderalm** | **149.78** | **347** | | *i* PKiKP | **PKPbc** | **15 47 38.3 +0.3** |
| | comp=Z,30nm,0.7s,SNR=13 | | | | | | |
| WATA | | | | | *ep*PKP | **pPKPbc** | **15 49 47.9 -0.2** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **RETA** | **Reutte** | **149.80** | **348** | | *i* PKiKP | **PKPbc** | **15 47 38.2 +0.3** |
| | comp=Z,28nm,1.2s,SNR=12 | | | | | | |
| RETA | | | | | *ep*PKP | **pPKPbc** | **15 49 49.0 +1.0** |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **OBKA** | **Obir** | **149.82** | **343** | | *i* PKP | **PKPbc** | **15 47 37.9 -0.1** |
| | comp=Z,14nm,0.9s,SNR=7.0 | | | | | | |
| **OBKA** | **Obir** | **149.82** | **343** | ⇓ | *i* P | **PKPbc** | **15 47 37.6 -0.5** |
| **WTTA** | **Wattenberg** | **149.84** | **347** | | *i* PKiKP | **PKiKP** | **15 47 38.5 -0.4** |
| | comp=Z,68nm,0.6s,SNR=20 | | | | | | |
| WTTA | | | | | *i* pPKP | **pPKPbc** | **15 49 48.7 +0.4** |
| | comp=Z,6.4nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **149.87** | **348** | | *i* PKP | **PKPbc** | **15 47 38.2 -0.1** |
| | comp=Z,42nm,0.9s | | | | | | |
| MOTA | | | | | *i* pPKP | **pPKPbc** | **15 49 48.1 -0.2** |
| | comp=Z,5.6nm,1.3s | | | | | | |
| **MYKA** | **Terra Mystica** | **149.95** | **344** | | *i* PKP | **PKPbc** | **15 47 37.9 -0.5** |
| | comp=Z,34nm,0.7s,SNR=17 | | | | | | |
| MYKA | | | | | *ep*PKP | **pPKPbc** | **15 49 48.8 +0.4** |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.97** | **348** | | *i* PKiKP | **PKPbc** | **15 47 38.7 +0.2** |
| | comp=Z,48nm,0.7s,SNR=16 | | | | | | |
| SQTA | | | | | *ep*PKP | **pPKPbc** | **15 49 48.6 +0.1** |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **CLF** | **Chambon-Foret** | **150.11** | **360** | | PKPdf | **PKPdf** | **15 47 32.0 -0.8** |
| CLF | | | | | | **PKiKP** | **15 47 39.2 +0.1** |
| CLF | | | | | | **PKPab** | **15 47 46.4 -0.5** |
| **ABTA** | **Abfaltersbach** | **150.12** | **346** | | *i* PKP | **PKPbc** | **15 47 38.9 +0.1** |
| | comp=Z,67nm,0.7s | | | | | | |
| ABTA | | | | | *i* pPKP | **pPKPbc** | **15 49 48.6 -0.3** |
| | comp=Z,6.4nm,1.3s | | | | | | |
| **MMB** | **Musomishta** | **150.14** | **326** | ⇓ | *i* P | **PKPbc** | **15 47 38.8 -0.1** |
| **DAVA** | **Damuels** | **150.16** | **349** | | *i* PKiKP | **PKiKP** | **15 47 39.4 0.0** |
| | comp=Z,56nm,0.9s,SNR=15 | | | | | | |
| DAVA | | | | | *i* pPKP | **pPKPbc** | **15 49 50.1 +1.1** |
| | comp=Z,9.8nm,1.0s | | | | | | |
| **CRES** | **Cresnjev** | **150.17** | **341** | | *e*PKPbc | **PKPbc** | **15 47 39.0 +0.2** |
| **DOB** | **Doboj** | **150.21** | **337** | | *e*P | **PKPab** | **15 47 46.2 -1.3** |
| **FETA** | **Feichten** | **150.25** | **348** | | *i* PKP | **PKPdf** | **15 47 33.9 +0.5** |
| | comp=Z,13nm,0.8s,SNR=14 | | | | | | |
| FETA | | | | | *i* pPKP | **pPKPbc** | **15 49 50.4 +1.1** |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **KKB** | **Krupnik** | **150.25** | **327** | ⇓ | *i* P | **PKPbc** | **15 47 39.3 +0.2** |
| **A051A** | **Mrakovica** | **150.41** | **338** | ⇓ | *i* P | **PKPbc** | **15 47 39.6 +0.1** |
| **BBLS** | **Lazi&#263i** | **150.42** | **334** | ⇓ | *i* P | **PKiKP** | **15 47 40.0 0.0** |
| **HAPS** | **Han Pijesak,BI** | **150.43** | **335** | ⇓ | *i* P | **PKiKP** | **15 47 40.2 +0.1** |
| **BLY** | **Banja Luka** | **150.54** | **338** | ⇓ | *i* P | **PKiKP** | **15 47 39.9 -0.2** |
| **RUDO** | **Rudo** | **150.64** | **334** | | *e*P | **PKPbc** | **15 47 39.8 -0.2** |
| **DAVOX** | **Davos/Dischmat** | **150.65** | **349** | | PKP | **PKPdf** | **15 47 33.9 -0.1** |
| | comp=Z,8.0nm,0.8s,baz=348,slow=1.2,SNR=19 | | | | | | |
| DAVOX | | | | | PKPbc | **PKiKP** | **15 47 41.0 +0.5** |
| | comp=Z,61nm,0.7s,baz=0.0,slow=7.1,SNR=51 | | | | | | |
| **SJES** | **Sjenica** | **150.67** | **333** | ⇓ | *i* P | **PKiKP** | **15 47 40.6 0.0** |
| **A050A** | **Klekovaca** | **151.00** | **338** | ⇓ | *i* P | **PKPbc** | **15 47 40.7 -0.1** |
| **UPM** | **Unac-Piva** | **151.17** | **334** | | *e*P | **PKPbc** | **15 47 41.0 -0.4** |
| **BRY** | **Bratogost** | **151.57** | **334** | ⇓ | *i* P | **PKPbc** | **15 47 41.8 -0.5** |
| **PDG** | **Podgorica** | **151.65** | **333** | | | **PKPdf** | **15 47 33.8 -1.6** |
| PDG | | | | | PKPbc | **PKPbc** | **15 47 41.7 -0.6** |
| PDG | | | | | | **PKPab** | **15 47 53.5 -0.1** |
| **PDG** | **Podgorica** | **151.65** | **333** | ⇓ | *i* P | **PKPbc** | **15 47 42.1 -0.1** |
| **PDG** | **Podgorica** | **151.65** | **333** | ⇑ | P | **PKiKP** | **15 47 42.5 0.0** |
| **TREB** | **Trebinje** | **151.80** | **334** | | *e*P | **PKPbc** | **15 47 42.1 -0.5** |
| **DRME** | **Dracevica, Mon** | **151.88** | **332** | ⇓ | *i* P | **PKPbc** | **15 47 42.6 -0.2** |
| **OHR** | **Ohrid** | **151.97** | **329** | | *i* P | **PKiKP** | **15 47 43.3 +0.1** |
| **FDMO** | **Fiordimonte** | **153.41** | **342** | | | **PKPab** | **15 48 01.1 -0.1** |
| **IDI** | **Anoyia** | **153.46** | **315** | | PKPbc | **PKiKP** | **15 47 47.3 +0.7** |
| | comp=Z,14nm,0.6s,baz=29,slow=16,SNR=16 | | | | | | |
| **CAMP** | **Campotosto** | **153.77** | **341** | | PKPdf | **PKPdf** | **15 47 38.0 -0.7** |
| CAMP | | | | | | **PKPbc** | **15 47 46.4 -0.6** |
| CAMP | | | | | | **PKPab** | **15 48 02.9 0.0** |
| **PGAV** | **Gavieira, Arco** | **154.59** | **18** | | *e*PKPdf | **PKPdf** | **15 47 40.5 +0.8** |
| **PBRG** | **Braganca** | **155.16** | **16** | | *e*PKPab | **PKPab** | **15 48 08.8 +0.1** |
| **POLO** | **Lamas de Olo** | **155.27** | **18** | | *e*PKPdf | **PKPdf** | **15 47 41.5 +0.8** |
| **POLO** | **Lamas de Olo** | **155.27** | **18** | | *e*PKPab | **PKPab** | **15 48 09.7 +0.4** |
| **MVO** | **Moncorvo** | **155.68** | **17** | | *e*PKPdf | **PKPdf** | **15 47 42.2 +1.0** |
| **MVO** | **Moncorvo** | **155.68** | **17** | | *e*PKPab | **PKPab** | **15 48 11.6 +0.6** |
| **MTE** | **Manteigas** | **156.24** | **18** | | PKPdf | **PKPdf** | **15 47 41.6 -0.3** |
| **MTE** | **Manteigas** | **156.24** | **18** | | *e*PKPdf | **PKPdf** | **15 47 43.1 +1.2** |
| **PCBR** | **Castelo Branco** | **156.77** | **19** | | *e*PKPdf | **PKPdf** | **15 47 43.5 +1.0** |
| **PMRV** | **Marv??o** | **157.17** | **19** | | *e*PKPdf | **PKPdf** | **15 47 44.2 +1.1** |
| **PMRV** | **Marv??o** | **157.17** | **19** | | *e*PKPab | **PKPab** | **15 48 17.5 0.0** |
| **ESDC** | **Sonseca Array** | **157.83** | **12** | | PKPdf | **PKPdf** | **15 47 42.8 -1.2** |
| ESDC | | | | | | **PKPab** | **15 48 20.5 +0.2** |
| **ESDC** | **Sonseca Array** | **157.83** | **12** | | PKP | **PKPdf** | **15 47 44.0 +0.1** |
| | comp=Z,1.8nm,1.0s,baz=356,slow=2.8,SNR=9.9 | | | | | | |
| ESDC | | | | | PKPab | **PKPab** | **15 48 20.8 +0.4** |
| | comp=Z,3.2nm,0.9s,baz=344,slow=4.5,SNR=16 | | | | | | |
| **PAB** | **San Pablo** | **157.88** | **13** | | | **PKPdf** | **15 47 43.9 -0.1** |
| **PAB** | **San Pablo** | **157.88** | **13** | ⇑ | PKiKP | **PKPdf** | **15 47 45.2 +1.2** |
| **PNCL** | **Nicolau / Gran** | **157.97** | **23** | | *e*PKPdf | **PKPdf** | **15 47 45.4 +1.4** |
| **PNCL** | **Nicolau / Gran** | **157.97** | **23** | | *e*PKPab | **PKPab** | **15 48 21.5 +0.6** |
| **PBEJ** | **Beja** | **158.28** | **22** | | *e*PKPdf | **PKPdf** | **15 47 45.8 +1.4** |
| **MESJ** | **Messejana** | **158.32** | **23** | | *e*PKPdf | **PKPdf** | **15 47 45.8 +1.3** |
| **MESJ** | **Messejana** | **158.32** | **23** | | *e*PKPdf | **PKPdf** | **15 47 45.6 +1.1** |
| **PTEO** | **Sao Teotonio** | **158.39** | **24** | | *e*PKPdf | **PKPdf** | **15 47 45.9 +1.3** |
| **PBAR** | **Barrancos** | **158.43** | **20** | | *e*PKPdf | **PKPdf** | **15 47 45.6 +1.0** |
| **PBAR** | **Barrancos** | **158.43** | **20** | | *e*PKPab | **PKPab** | **15 48 23.6 +0.7** |
| **MORF** | **Marmelete** | **158.63** | **24** | | *e*PKPdf | **PKPdf** | **15 47 46.5 +1.6** |
| **MORF** | **Marmelete** | **158.63** | **24** | | *e*PKPdf | **PKPdf** | **15 47 46.0 +1.1** |
| **KEST** | **Kesra** | **161.26** | **341** | | PKPab | **PKPab** | **15 48 35.5 +0.1** |
| **KEST** | **Kesra** | **161.26** | **341** | | PKP | **PKPdf** | **15 47 48.1 +0.2** |
| | comp=Z,3.6nm,0.9s,baz=56,slow=3.6,SNR=5.4 | | | | | | |
| KEST | | | | | PKPab | **PKPab** | **15 48 36.0 +0.5** |
| | comp=Z,15nm,0.9s,baz=72,slow=2.6,SNR=14 | | | | | | |
| **LIC** | **Lamto** | **166.34** | **149** | ⇓ | *e*PKP1 | **PKPdf** | **15 47 52.1 -0.9** |
| | comp=Z,31nm,1.1s | | | | | | |
| **KIC** | **Kosan Boka** | **166.60** | **149** | ⇑ | *i* PKP1 | **PKPdf** | **15 47 53.0 -0.2** |
| | comp=Z,16nm,0.9s | | | | | | |
| **TIC** | **Toumodi** | **166.71** | **148** | ⇑ | *e*PKP1 | **PKPdf** | **15 47 53.1 -0.2** |
| | comp=Z,8.1nm,0.6s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **166.81** | **148** | | PKP | **PKPdf** | **15 47 52.8 -0.6** |
| | comp=Z,6.3nm,1.0s,baz=255,slow=3.4,SNR=4.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.10** | **176** | | | **PKPdf** | **15 47 56.0 -1.5** |
| TORD | | | | | PKPab | **PKPab** | **15 49 36.4 -0.5** |
| **TORD** | **Torodi Ar. Bea** | **175.10** | **176** | | PKP | **PKPdf** | **15 47 56.7 -0.8** |
| | comp=Z,4.6nm,1.0s,baz=149,slow=3.0,SNR=19 | | | | | | |
| TORD | | | | | PKPab | **PKPab** | **15 49 37.2 +0.3** |
| | comp=Z,2.3nm,0.7s,baz=191,slow=2.2,SNR=9.5 | | | | | | |

**JMA 22 15:30:02.9±0.3,25°.0N±0°.6×124°.0E±0°.5,h5km±4km, MV2.3/9,NW OFF ISHIGAKIJIMA IS,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **JISG** | **Ishigakijimahi** | **0.45** | **144** | | *i* | P | | Pg | 15 30 11.9 | +0.2 |
| JISG | | | | | | S | | Sg | 15 30 18.2 | +0.6 |
| **JIJ** | **Ishigaki jima** | **0.60** | **169** | | | P | | Pg | 15 30 14.3 | -0.1 |
| JIJ | | | | | | S | | Sg | 15 30 22.1 | -0.2 |
| **IRIF** | **Iriomote-Funau** | **0.67** | **203** | | | P | | Pg | 15 30 15.8 | 0.0 |
| IRIF | | | | | *e* | S | | Sb | 15 30 25.6 | -1.0 |
| **JTJ** | **Tarama** | **0.69** | **117** | | | P | | Pg | 15 30 16.6 | +0.3 |
| JTJ | | | | | *e* | S | | Sg | 15 30 25.8 | +0.5 |
| **JKRS** | **Kuro-shima** | **0.71** | **181** | | | P | | Pg | 15 30 16.9 | +0.3 |
| JKRS | | | | | | S | | Sb | 15 30 26.9 | -0.9 |
| **HATJ** | **Hateruma jima** | **0.91** | **192** | | | S | | Sb | 15 30 33.1 | -0.6 |
| **JIRB** | **Irabujima** | **1.06** | **97** | | *e* | P | | Pg | 15 30 22.4 | -0.8 |
| JIRB | | | | | | S | | Sg | 15 30 36.9 | 0.0 |
| **JIKM** | **Ikemajima** | **1.12** | **91** | | | P | | Pg | 15 30 24.2 | -0.2 |

**TAP 22 15:30:55.8,24°.81N×122°.16E,h13km,ML2.3,1C,D, Taiwan region**

| Code | Station Name | Δ° | AZ° | | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **EGS** | | **0.21** | **280** | | *i* | P | | Pg | 15 31 00.9 | +0.5 |
| | baz=274 | | | | | | | | | |
| EGS | | | | | | S | | Sb | 15 31 04.5 | -0.7 |
| | baz=274 | | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.25** | **323** | | *i* | P | | Pg | 15 31 01.5 | +0.3 |
| | baz=328 | | | | | | | | | |
| TWB1 | | | | | *i* | S | | Sg | 15 31 05.1 | +0.4 |
| | baz=328 | | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.34** | **298** | | *i* | P | | Pb | 15 31 03.5 | -0.3 |
| | baz=302 | | | | | | | | | |
| TIPB | | | | | | S | | Sb | 15 31 08.7 | -0.4 |
| | baz=302 | | | | | | | | | |
| **TWC** | **Suao** | **0.34** | **234** | ⇑ | *i* | P | | Pg | 15 31 02.7 | -0.1 |
| | baz=233 | | | | | | | | | |
| TWC | | | | | *i* | S | | Sg | 15 31 07.1 | -0.4 |
| | baz=233 | | | | | | | | | |
| **ESAO** | **Su ao** | **0.37** | **231** | | *i* | P | | Pg | 15 31 03.3 | +0.1 |
| | baz=230 | | | | | | | | | |
| ESAO | | | | | | S | | Sg | 15 31 07.9 | -0.3 |
| | baz=230 | | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.38** | **318** | | *i* | P | | Pb | 15 31 04.4 | -0.1 |
| | baz=321 | | | | | | | | | |
| SXI1 | | | | | *e* | S | | Sb | 15 31 10.3 | 0.0 |
| | baz=321 | | | | | | | | | |
| **EOS2** | **EOS2** | **0.40** | **170** | | *i* | P | | Pb | 15 31 04.4 | -0.2 |
| | baz=183 | | | | | | | | | |
| EOS2 | | | | | *i* | S | | Sb | 15 31 11.4 | +0.9 |
| | baz=183 | | | | | | | | | |
| **NDS** | **Dongshan** | **0.44** | **246** | | *i* | P | | Pb | 15 31 05.1 | -0.3 |
| | baz=240 | | | | | | | | | |
| NDS | | | | | | S | | Sg | 15 31 11.0 | +0.6 |
| | baz=240 | | | | | | | | | |
| **TWE** | **Neicheng** | **0.45** | **259** | | *i* | P | | Pg | 15 31 05.0 | +0.2 |
| | baz=252 | | | | | | | | | |
| TWE | | | | | *i* | S | | Sb | 15 31 11.8 | -0.5 |
| | baz=252 | | | | | | | | | |
| **EWUT** | **Wuta** | **0.50** | **223** | | *i* | P | | Pg | 15 31 05.8 | +0.1 |
| | baz=215 | | | | | | | | | |
| EWUT | | | | | *i* | S | | Sg | 15 31 12.5 | +0.1 |
| | baz=215 | | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.52** | **265** | | *i* | P | | Pg | 15 31 06.3 | +0.2 |
| | baz=264 | | | | | | | | | |
| FUSB | | | | | | S | | Sb | 15 31 14.2 | 0.0 |
| | baz=264 | | | | | | | | | |
| **ENA** | **Nanau** | **0.54** | **225** | | *i* | P | | Pg | 15 31 06.3 | 0.0 |
| | baz=216 | | | | | | | | | |
| ENA | | | | | *i* | S | | Sg | 15 31 13.1 | -0.4 |
| | baz=216 | | | | | | | | | |
| **EOS3** | **EOS3** | **0.54** | **164** | | *e* | P | | Pg | 15 31 06.0 | -0.5 |
| | baz=177 | | | | | | | | | |
| EOS3 | | | | | *e* | S | | Sb | 15 31 16.3 | +1.6 |
| | baz=177 | | | | | | | | | |
| **ENTT** | **Nioudou** | **0.56** | **253** | | *i* | P | | Pb | 15 31 07.4 | -0.1 |
| | baz=252 | | | | | | | | | |
| ENTT | | | | | *i* | S | | Sb | 15 31 15.5 | 0.0 |
| | baz=252 | | | | | | | | | |
| **NWLT** | **Wulai** | **0.59** | **267** | | *i* | P | | Pb | 15 31 08.3 | +0.2 |
| | baz=267 | | | | | | | | | |
| NWLT | | | | | | S | | Sb | 15 31 16.9 | +0.5 |
| | baz=267 | | | | | | | | | |
| **EAHA** | **Aohua** | **0.61** | **218** | | *i* | P | | Pg | 15 31 07.7 | -0.1 |
| | baz=218 | | | | | | | | | |
| EAHA | | | | | *i* | S | | Sb | 15 31 16.5 | -0.3 |
| | baz=218 | | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.62** | **251** | | *i* | P | | Pb | 15 31 08.7 | +0.2 |
| | baz=251 | | | | | | | | | |
| NDT | | | | | *e* | S | | Sb | 15 31 18.5 | +1.3 |
| | baz=251 | | | | | | | | | |
| **YM01** | **YM01** | **0.63** | **302** | | *i* | P | | Pb | 15 31 09.1 | +0.4 |
| | baz=302 | | | | | | | | | |
| YM01 | | | | | | S | | Sn | 15 31 19.9 | -0.4 |
| | baz=302 | | | | | | | | | |
| **LATG** | **Datong** | **0.63** | **245** | | *i* | P | | Pg | 15 31 08.5 | +0.2 |
| | baz=244 | | | | | | | | | |
| LATG | | | | | | S | | Sb | 15 31 17.7 | 0.0 |
| | baz=244 | | | | | | | | | |
| **YM08** | **YM08** | **0.64** | **306** | | | P | | Pb | 15 31 09.3 | +0.4 |
| | baz=306 | | | | | | | | | |
| YM08 | | | | | *e* | S | | Sn | 15 31 19.5 | -1.1 |
| | baz=306 | | | | | | | | | |
| **TWY** | **Chenhua** | **0.69** | **313** | | *i* | P | | Pb | 15 31 10.3 | +0.7 |
| | baz=313 | | | | | | | | | |
| TWY | | | | | | S | | Sn | 15 31 21.0 | -0.7 |
| | baz=313 | | | | | | | | | |
| **EOS4** | **EOS4** | **0.70** | **168** | | *e* | P | | Pg | 15 31 09.5 | 0.0 |
| | baz=152 | | | | | | | | | |
| EOS4 | | | | | *e* | S | | Sn | 15 31 21.1 | -0.5 |
| | baz=152 | | | | | | | | | |
| **YHNB** | **Yeheng** | **0.72** | **259** | | *i* | P | | Pb | 15 31 10.4 | +0.1 |
| | baz=255 | | | | | | | | | |
| YHNB | | | | | *e* | S | | Sg | 15 31 19.7 | +0.3 |
| | baz=255 | | | | | | | | | |
| **NSK** | **Sanguang** | **0.74** | **260** | | *i* | P | | Pg | 15 31 10.2 | 0.0 |
| | baz=255 | | | | | | | | | |
| NSK | | | | | | S | | Sn | 15 31 22.0 | -1.1 |
| | baz=255 | | | | | | | | | |
| **NNSB** | **Datong** | **0.80** | **242** | | *i* | P | | Pg | 15 31 11.1 | -0.2 |
| | baz=232 | | | | | | | | | |
| NNSB | | | | | | S | | Sb | 15 31 23.4 | +1.0 |
| | baz=232 | | | | | | | | | |
| **NNS** | **Nan Shan** | **0.80** | **243** | | *i* | P | | Pg | 15 31 11.5 | +0.1 |
| | baz=233 | | | | | | | | | |
| NNS | | | | | *i* | S | | Sb | 15 31 22.6 | +0.1 |
| | baz=233 | | | | | | | | | |
| **ETL** | **Fush Village** | **0.81** | **217** | | *i* | P | | Pg | 15 31 11.1 | -0.4 |
| | baz=216 | | | | | | | | | |
| ETL | | | | | *i* | S | | Sb | 15 31 22.6 | 0.0 |
| | baz=216 | | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.81** | **219** | | *i* | P | | Pg | 15 31 10.7 | -1.0 |
| | baz=209 | | | | | | | | | |
| NACB | | | | | *i* | S | | Sg | 15 31 22.2 | -0.1 |
| | baz=209 | | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.86** | **226** | | *i* | P | | Pg | 15 31 12.3 | -0.2 |
| | baz=218 | | | | | | | | | |
| ETLH | | | | | *i* | S | | Sg | 15 31 23.0 | -0.7 |
| | baz=218 | | | | | | | | | |
| **TWD** | **Chiawan** | **0.89** | **215** | | *i* | P | | Pg | 15 31 12.3 | -0.7 |
| | baz=214 | | | | | | | | | |
| TWD | | | | | *i* | S | | Sb | 15 31 25.2 | +0.4 |
| | baz=214 | | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.96** | **260** | | *i* | P | | Pn | 15 31 15.1 | +0.1 |
| | baz=266 | | | | | | | | | |
| NFF | | | | | *e* | S | | Sg | 15 31 27.3 | +0.3 |
| | baz=266 | | | | | | | | | |
| **FUSS** | **Fushou** | **1.00** | **236** | | *i* | P | | Pg | 15 31 15.4 | +0.1 |
| | baz=236 | | | | | | | | | |
| FUSS | | | | | *i* | S | | Sg | 15 31 28.7 | +0.4 |
| | baz=236 | | | | | | | | | |
| **ETM** | **Tongmen** | **1.03** | **216** | | *e* | P | | Pg | 15 31 15.8 | 0.0 |
| | baz=215 | | | | | | | | | |
| ETM | | | | | *e* | S | | Sn | 15 31 29.9 | -0.4 |
| | baz=215 | | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.04** | **221** | | *i* | P | | Pb | 15 31 14.8 | -0.9 |
| | baz=220 | | | | | | | | | |
| LXIB | | | | | | S | | Sn | 15 31 30.2 | -0.4 |
| | baz=220 | | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.05** | **231** | | *i* | P | | Pb | 15 31 15.5 | -0.5 |
| | baz=230 | | | | | | | | | |
| WHF | | | | | *i* | S | | Sb | 15 31 29.7 | -0.1 |
| | baz=230 | | | | | | | | | |
| **LIOB** | **Emei** | **1.05** | **261** | | *i* | P | | Pn | 15 31 16.9 | +0.7 |
| | baz=261 | | | | | | | | | |
| LIOB | | | | | *e* | S | | Sn | 15 31 31.1 | +0.3 |
| | baz=261 | | | | | | | | | |
| **TWT** | **Tachien** | **1.05** | **238** | | *i* | P | | Pn | 15 31 17.1 | +0.7 |
| | baz=231 | | | | | | | | | |
| TWT | | | | | *i* | S | | Sn | 15 31 31.4 | +0.4 |
| | baz=231 | | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.06** | **261** | | | P | | Pn | 15 31 17.4 | +1.0 |
| | baz=260 | | | | | | | | | |
| NSTT | | | | | *e* | S | | Sn | 15 31 32.0 | +0.9 |
| | baz=260 | | | | | | | | | |
| **TDCB** | **Techi** | **1.06** | **239** | | *e* | P | | Pb | 15 31 16.3 | +0.1 |
| | baz=231 | | | | | | | | | |
| TDCB | | | | | *e* | S | | Sn | 15 31 31.1 | -0.2 |
| | baz=231 | | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.15** | **208** | | *e* | P | | Pg | 15 31 18.8 | +0.7 |
| | baz=207 | | | | | | | | | |
| SHUL | | | | | *e* | S | | Sn | 15 31 34.2 | +1.0 |
| | baz=207 | | | | | | | | | |
| **CHGB** | **Renai** | **1.17** | **230** | | *i* | P | | Pn | 15 31 18.1 | +0.1 |
| | baz=230 | | | | | | | | | |
| CHGB | | | | | | S | | Sn | 15 31 33.7 | -0.1 |
| | baz=230 | | | | | | | | | |
| **WHP** | **Taichung City** | **1.22** | **245** | | *i* | P | | Pg | 15 31 20.0 | +0.6 |
| | baz=244 | | | | | | | | | |
| WHP | | | | | *e* | S | | Sg | 15 31 35.5 | +0.2 |
| | baz=244 | | | | | | | | | |
| **OWD** | **Renai** | **1.23** | **227** | | *i* | P | | Pg | 15 31 19.5 | -0.1 |
| | baz=226 | | | | | | | | | |
| OWD | | | | | *e* | S | | Sg | 15 31 36.0 | +0.3 |
| | baz=226 | | | | | | | | | |
| **WUSB** | **Renai** | **1.25** | **229** | | *i* | P | | Pb | 15 31 19.6 | +0.3 |
| | baz=229 | | | | | | | | | |
| WUSB | | | | | | S | | Sg | 15 31 36.3 | +0.1 |
| | baz=229 | | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.29** | **213** | | *i* | P | | Pb | 15 31 20.2 | +0.2 |
| | baz=218 | | | | | | | | | |
| WARBT | | | | | | S | | Sg | 15 31 37.6 | 0.0 |
| | baz=218 | | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.36** | **237** | | *e* | P | | Pg | 15 31 22.3 | +0.3 |
| | baz=236 | | | | | | | | | |
| WCS | | | | | *e* | S | | Sg | 15 31 39.4 | -0.3 |
| | baz=236 | | | | | | | | | |
| **VWDT** | **VWDT** | **1.40** | **222** | | *i* | P | | Pg | 15 31 22.8 | 0.0 |
| | baz=229 | | | | | | | | | |
| VWDT | | | | | | S | | Sg | 15 31 42.2 | +1.2 |
| | baz=229 | | | | | | | | | |
| **SSLB** | **Suanglung** | **1.50** | **227** | | *e* | P | | Pb | 15 31 23.7 | +0.2 |
| | baz=226 | | | | | | | | | |
| SSLB | | | | | *e* | S | | Sb | 15 31 43.0 | +0.6 |
| | baz=226 | | | | | | | | | |

*IDC **22** 15:48:13.4±1.3,26°.59N×129°.39E,h0km,mb3.6/4, mbtmp3.6/5,ML3.3/1,Error ellipse: s-maj=31.6km s-min=17.8km az=46.0*
*JMA **22** 15:48:15.7±0.1,26°.6N±0°.5×129°.5E±0°.5,h44km,MV3.6/17, NEAR OKINAWAJIMA ISLAND*
**ISC 22 15:48:13.7±1.4,26°.62N±0°.04×129°.52E±0°.03,h12km±9km, n20,σ1§31/33,mb3.6/4,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|---|
| **JYRO** | **Yoronjima** | **1.04** | **293** | | | P | | **Pn** | **15 48 34.2** | **+0.1** |
| JYRO | | | | | | S | | **Sn** | **15 48 47.4** | **-1.2** |
| **JOKE** | **Okinoerabujima** | **1.12** | **311** | | | P | | **Pg** | **15 48 35.6** | **+0.3** |
| JOKE | | | | | | S | | **Sg** | **15 48 49.6** | **-0.3** |
| **JOW** | **Kunigami** | **1.13** | **281** | | | Pn | | **Pg** | **15 48 35.9** | **+0.4** |
| | 383nm,0.3s,baz=116,slow=18,SNR=295 | | | | | | | | | |
| JOW | | | | | | Sn | | **Sg** | **15 48 49.7** | **-0.6** |
| | 443nm,0.3s,baz=312,slow=28,SNR=62 | | | | | | | | | |
| **JOW** | **Kunigami** | **1.13** | **281** | | | P | | **Pg** | **15 48 35.9** | **+0.4** |
| JOW | | | | | | S | | **Sg** | **15 48 49.7** | **-0.6** |
| **JTK** | **Tokunoshima** | **1.26**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2.0nm,0.9s | | | | | | |
| MAKZ | | | | S | Sn | 16 03 00.5 | -0.3 |
| | 1.4nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **9.64** | **5** | P | Pn | 16 01 11.1 | -0.8 |
| | 0.1nm,0.2s,baz=188,slow=13,SNR=21 | | | | | | |
| MK31 | | | | ⇑S | Sn | 16 03 01.8 | +0.8 |
| | 1.2nm,0.5s,baz=188,slow=24 | | | | | | |

*JMA* ***22*** *15:59:27.9±0.3,24.0N±0.3×121.0E±0.8,h2km±3km, MV3.3/15, TAIWAN REGION*
*TAP* ***22*** *15:59:27.9,23.98N×121.00E,h16km,ML3.7,B*
*ASIES* ***22*** *15:59:27.9,23.98N×121.00E,h16km,ML3.7,Mw3.4, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; $M_{rr}$1.46; $M_{\theta\theta}$-0.22; $M_{\phi\phi}$-1.24; $M_{r\theta}$-0.11; $M_{\theta\phi}$0.45; $M_{\phi r}$0.99; Fault plane solution: $M_0$1.74444×$10^{21}$ NP1: $\phi_s$347.14000°,$\delta$62.36000°,$\lambda$96.99000°. NP2: $\phi_s$152.34000°,$\delta$28.44000°,$\lambda$76.92000°. Principal axes: T Plg71.7660°, Azm273.0990°; N Plg6.1870°, Azm163.8870°; P Plg17.0830°, Azm71.9770°;*
**ISC 22 15:59:28.1±0.8,23.98N±0.01×121.00E±0.01,h16km±4km, n142,σ0$72/257,13C-38D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DPDB** | **Guoxing** | **0.08** | **309** | **⇑***i*P | | **Pg** | | **15 59 31.6** | **+0.3** |
| | baz=311 | | | | | | | | |
| DPDB | | | | S | | **Sg** | | **15 59 34.0** | **+0.5** |
| | baz=311 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **314** | **⇑***i*P | | **Pb** | | **15 59 31.9** | **+0.1** |
| | baz=316 | | | | | | | | |
| WCS | | | | *i*S | | **Sb** | | **15 59 34.4** | **+0.1** |
| | baz=316 | | | | | | | | |
| **WUSB** | **Renai** | **0.11** | **85** | **⇑***i*P | | **Pb** | | **15 59 32.0** | **0.0** |
| | baz=84 | | | | | | | | |
| WUSB | | | | S | | **Sg** | | **15 59 34.1** | **0.0** |
| | baz=84 | | | | | | | | |
| **TYC** | **Yuchr** | **0.15** | **238** | **⇑***i*P | | **Pb** | | **15 59 32.2** | **-0.3** |
| | baz=237 | | | | | | | | |
| TYC | | | | S | | **Sb** | | **15 59 34.9** | **-0.5** |
| | baz=237 | | | | | | | | |
| **OWD** | **Renai** | **0.17** | **100** | **⇓***i*P | | **Pb** | | **15 59 32.8** | **-0.1** |
| | baz=98 | | | | | | | | |
| OWD | | | | S | | **Sb** | | **15 59 35.9** | **-0.3** |
| | baz=98 | | | | | | | | |
| **CHGB** | **Renai** | **0.18** | **65** | **⇑***i*P | | **Pb** | | **15 59 33.1** | **-0.2** |
| | baz=70 | | | | | | | | |
| CHGB | | | | S | | **Sb** | | **15 59 36.2** | **-0.5** |
| | baz=70 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.20** | **191** | P | | **Pg** | | **15 59 32.6** | **-0.2** |
| **SSLB** | **Suanglung** | **0.20** | **191** | **⇑***i*P | | **Pg** | | **15 59 32.7** | **-0.1** |
| | baz=186 | | | | | | | | |
| SSLB | | | | S | | **Sg** | | **15 59 35.7** | **-0.2** |
| | baz=186 | | | | | | | | |
| **VWDT** | **VWDT** | **0.26** | **150** | **⇑***i*P | | **Pb** | | **15 59 34.3** | **-0.2** |
| | baz=149 | | | | | | | | |
| VWDT | | | | S | | **Sg** | | **15 59 37.6** | **-0.1** |
| | baz=149 | | | | | | | | |
| **WJS** | **Zhushan** | **0.29** | **237** | **⇓**P | | **Pb** | | **15 59 35.3** | **+0.3** |
| | baz=232 | | | | | | | | |
| WJS | | | | S | | **Sb** | | **15 59 40.9** | **+1.3** |
| | baz=232 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.29** | **57** | **⇓***i*P | | **Pb** | | **15 59 35.3** | **0.0** |
| | baz=65 | | | | | | | | |
| WHF | | | | S | | **Sb** | | **15 59 39.9** | **-0.3** |
| | baz=65 | | | | | | | | |
| **WHP** | **Taichung City** | **0.30** | **351** | **⇑***i*P | | **Pb** | | **15 59 34.8** | **-0.3** |
| | baz=352 | | | | | | | | |
| WHP | | | | S | | **Sb** | | **15 59 40.5** | **+0.6** |
| | baz=352 | | | | | | | | |
| **WNT** | **Mingjian** | **0.30** | **250** | **⇓***i*P | | **Pb** | | **15 59 35.6** | **+0.4** |
| | baz=249 | | | | | | | | |
| WNT | | | | S | | **Sb** | | **15 59 41.1** | **+1.1** |
| | baz=249 | | | | | | | | |
| **TDCB** | **Techi** | **0.31** | **29** | **⇑***i*P | | **Pg** | | **15 59 34.8** | **+0.1** |
| | baz=28 | | | | | | | | |
| TDCB | | | | S | | **Sg** | | **15 59 38.7** | **-0.4** |
| | baz=28 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.31** | **205** | *e*P | | **Pb** | | **15 59 34.9** | **-0.5** |
| | baz=200 | | | | | | | | |
| WHYT | | | | *e*S | | **Sb** | | **15 59 40.2** | **-0.1** |
| | baz=200 | | | | | | | | |
| **TWT** | **Tachien** | **0.32** | **31** | **⇑***i*P | | **Pg** | | **15 59 34.8** | **0.0** |
| | baz=29 | | | | | | | | |
| TWT | | | | S | | **Sg** | | **15 59 38.9** | **-0.5** |
| | baz=29 | | | | | | | | |
| **FUSS** | **Fushou** | **0.35** | **41** | **⇑***i*P | | **Pg** | | **15 59 35.5** | **+0.2** |
| | baz=40 | | | | | | | | |
| FUSS | | | | S | | **Sg** | | **15 59 40.3** | **-0.1** |
| | baz=40 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.38** | **84** | **⇓***i*P | | **Pb** | | **15 59 36.2** | **-0.4** |
| | baz=80 | | | | | | | | |
| LXIB | | | | S | | **Sg** | | **15 59 41.5** | **+0.1** |
| | baz=80 | | | | | | | | |
| **WCHH** | **Zhanghua** | **0.41** | **284** | **⇓***i*P | | **Pb** | | **15 59 37.5** | **+0.5** |
| | baz=283 | | | | | | | | |
| WCHH | | | | *e*S | | **Sb** | | **15 59 44.1** | **+1.1** |
| | baz=283 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.42** | **331** | **⇓***i*P | | **Pb** | | **15 59 37.6** | **+0.5** |
| | baz=343 | | | | | | | | |
| TWQ1 | | | | S | | **Sb** | | **15 59 44.4** | **+1.1** |
| | baz=343 | | | | | | | | |
| **ESL** | **Shilin** | **0.43** | **113** | **⇓***i*P | | **Pb** | | **15 59 37.1** | **-0.3** |
| | baz=106 | | | | | | | | |
| ESL | | | | S | | **Sb** | | **15 59 43.2** | **-0.6** |
| | baz=106 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.45** | **126** | **⇓***i*P | | **Pb** | | **15 59 37.2** | **-0.4** |
| | baz=117 | | | | | | | | |
| WARBT | | | | S | | **Sg** | | **15 59 42.9** | **-0.1** |
| | baz=117 | | | | | | | | |
| **ETM** | **Tongmen** | **0.46** | **92** | **⇓***i*P | | **Pg** | | **15 59 37.3** | **+0.1** |
| | baz=92 | | | | | | | | |
| **CHN5** | **Tsauling** | **0.48** | **217** | **⇓***i*P | | **Pb** | | **15 59 38.3** | **+0.1** |
| | baz=217 | | | | | | | | |
| CHN5 | | | | S | | **Sb** | | **15 59 45.8** | **+0.7** |
| | baz=217 | | | | | | | | |
| **NSY** | **Sanyi** | **0.48** | **334** | **⇓***i*P | | **Pn** | | **15 59 39.3** | **-1.1** |
| | baz=336 | | | | | | | | |
| NSY | | | | S | | **Sn** | | **15 59 47.3** | **-1.3** |
| | baz=336 | | | | | | | | |
| **WDJ** | **Dajia District** | **0.49** | **318** | **⇓***i*P | | **Pn** | | **15 59 39.4** | **-1.1** |
| | baz=320 | | | | | | | | |
| WDJ | | | | S | | **Sn** | | **15 59 47.8** | **-0.9** |
| | baz=320 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.50** | **63** | **⇓***i*P | | **Pg** | | **15 59 38.2** | **+0.1** |
| | baz=60 | | | | | | | | |
| ETLH | | | | S | | **Sg** | | **15 59 44.7** | **0.0** |
| | baz=60 | | | | | | | | |
| **EGFH** | **Guangfu** | **0.50** | **128** | P | | **Pg** | | **15 59 38.1** | **0.0** |
| | baz=123 | | | | | | | | |
| EGFH | | | | S | | **Sg** | | **15 59 44.9** | **0.0** |
| | baz=123 | | | | | | | | |
| **WDLH** | **Douliu** | **0.51** | **235** | **⇓**P | | **Pb** | | **15 59 39.1** | **+0.5** |
| | baz=234 | | | | | | | | |
| WDLH | | | | S | | **Sn** | | **15 59 47.6** | **-1.6** |
| | baz=234 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.56** | **110** | **⇓**P | | **Pb** | | **15 59 39.6** | **+0.2** |
| | baz=105 | | | | | | | | |
| SHUL | | | | *e*S | | **Sb** | | **15 59 47.6** | **+0.4** |
| | baz=105 | | | | | | | | |
| **HWA** | **Hwalien** | **0.56** | **90** | **⇓***i*P | | **Pb** | | **15 59 39.7** | **+0.2** |
| | baz=90 | | | | | | | | |
| HWA | | | | S | | **Sb** | | **15 59 47.3** | **+0.1** |
| | baz=90 | | | | | | | | |
| **TWD** | **Chiawan** | **0.56** | **80** | **⇓***i*P | | **Pg** | | **15 59 39.1** | **0.0** |
| | baz=87 | | | | | | | | |
| TWD | | | | S | | **Sg** | | **15 59 46.4** | **-0.1** |
| | baz=87 | | | | | | | | |
| **EHY** | **Hungye** | **0.56** | **148** | **⇓***i*P | | **Pb** | | **15 59 39.3** | **-0.3** |
| | baz=142 | | | | | | | | |
| EHY | | | | S | | **Sg** | | **15 59 46.4** | **-0.3** |
| | baz=142 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.56** | **102** | P | | **Pb** | | **15 59 39.8** | **+0.2** |
| | baz=98 | | | | | | | | |
| TEYL | | | | S | | **Sb** | | **15 59 47.5** | **+0.1** |
| | baz=98 | | | | | | | | |
| **NNSB** | **Datong** | **0.57** | **38** | **⇓***i*P | | **Pg** | | **15 59 39.0** | **-0.3** |
| | baz=38 | | | | | | | | |
| NNSB | | | | S | | **Sg** | | **15 59 46.0** | **-1.0** |
| | baz=38 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.57** | **119** | P | | **Pb** | | **15 59 39.9** | **+0.3** |
| | baz=113 | | | | | | | | |
| TEGC | | | | S | | **Sb** | | **15 59 48.3** | **+0.7** |
| | baz=113 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.57** | **37** | **⇓***i*P | | **Pg** | | **15 59 39.2** | **-0.2** |
| | baz=37 | | | | | | | | |
| NNS | | | | S | | **Sg** | | **15 59 46.5** | **-0.6** |
| | baz=37 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.57** | **262** | *e*P | | **Pb** | | **15 59 40.0** | **+0.3** |
| | baz=262 | | | | | | | | |
| WRL | | | | S | | **Sb** | | **15 59 48.9** | **+1.3** |
| | baz=262 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.58** | **71** | P | | **Pg** | | **15 59 39.5** | **-0.1** |
| **NACB** | **Ninganchiao** | **0.58** | **71** | **⇓***i*P | | **Pg** | | **15 59 39.4** | **-0.1** |
| | baz=68 | | | | | | | | |
| NACB | | | | S | | **Sg** | | **15 59 47.2** | **-0.1** |
| | baz=68 | | | | | | | | |
| **EHYH** | **Wanrong** | **0.58** | **147** | **⇓**P | | **Pb** | | **15 59 39.6** | **-0.3** |
| | baz=141 | | | | | | | | |
| EHYH | | | | S | | **Sg** | | **15 59 46.9** | **-0.5** |
| | baz=141 | | | | | | | | |
| **NMLH** | **Miaoli** | **0.58** | **341** | P | | **Pn** | | **15 59 41.2** | **-0.5** |
| | baz=342 | | | | | | | | |
| NMLH | | | | S | | **Sn** | | **15 59 50.5** | **-0.6** |
| | baz=342 | | | | | | | | |
| **ETL** | **Fush Village** | **0.60** | **73** | **⇓**P | | **Pg** | | **15 59 39.7** | **-0.2** |
| | baz=83 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.63** | **141** | **⇓**P | | **Pb** | | **15 59 40.8** | **+0.1** |
| | baz=141 | | | | | | | | |
| HGSD | | | | *e*S | | **Sb** | | **15 59 49.1** | **-0.1** |
| | baz=141 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.65** | **0** | **⇓**P | | **Pb** | | **15 59 41.6** | **+0.6** |
| | baz=8.0 | | | | | | | | |
| NSTT | | | | S | | **Sb** | | **15 59 50.3** | **+0.5** |
| | baz=8.0 | | | | | | | | |
| **WCKO** | **Fanlu** | **0.65** | **214** | *e*P | | **Pb** | | **15 59 41.1** | **0.0** |
| | baz=214 | | | | | | | | |
| WCKO | | | | S | | **Sb** | | **15 59 50.6** | **+0.7** |
| | baz=214 | | | | | | | | |
| **YULB** | **Yu-li** | **0.65** | **155** | P | | **Pb** | | **15 59 40.9** | **-0.2** |
| **YULB** | **Yu-li** | **0.65** | **155** | **⇓***i*P | | **Pb** | | **15 59 40.8** | **-0.2** |
| | baz=146 | | | | | | | | |
| YULB | | | | S | | **Sb** | | **15 59 49.7** | **-0.2** |
| | baz=146 | | | | | | | | |
| **CHN2** | **Minshiung** | **0.65** | **227** | *e*P | | **Pb** | | **15 59 41.6** | **+0.5** |
| | baz=226 | | | | | | | | |
| CHN2 | | | | S | | **Sn** | | **15 59 51.6** | **-1.1** |
| | baz=226 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.66** | **10** | *e*P | | **Pb** | | **15 59 41.4** | **+0.2** |
| | baz=18 | | | | | | | | |
| NFF | | | | S | | **Sb** | | **15 59 50.8** | **+0.6** |
| | baz=18 | | | | | | | | |
| **LIOB** | **Emei** | **0.66** | **2** | *e*P | | **Pn** | | **15 59 42.0** | **-0.8** |
| | baz=9.0 | | | | | | | | |
| LIOB | | | | *e*S | | **Sb** | | **15 59 51.1** | **+0.8** |
| | baz=9.0 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.66** | **260** | *e*P | | **Pb** | | **15 59 41.4** | **+0.1** |
| | baz=259 | | | | | | | | |
| WTCT | | | | *e*S | | **Sb** | | **15 59 51.4** | **+1.1** |
| | baz=259 | | | | | | | | |
| **TWF1** | **Yuli** | **0.69** | **156** | **⇓***i*P | | **Pb** | | **15 59 41.6** | **-0.1** |
| | baz=156 | | | | | | | | |
| TWF1 | | | | *e*S | | **Sg** | | **15 59 50.1** | **-0.5** |
| | baz=156 | | | | | | | | |
| **EYUL** | **Yuli** | **0.70** | **155** | **⇓**P | | **Pb** | | **15 59 41.8** | **-0.1** |
| | baz=155 | | | | | | | | |
| EYUL | | | | S | | **Sb** | | **15 59 51.1** | **-0.2** |
| | baz=155 | | | | | | | | |
| **CHY** | **Chiayi** | **0.71** | **227** | *e*P | | **Pb** | | **15 59 42.5** | **+0.3** |
| | baz=226 | | | | | | | | |
| CHY | | | | S | | **Sn** | | **15 59 53.2** | **-0.9** |
| | baz=226 | | | | | | | | |
| **LATG** | **Datong** | **0.73** | **41** | **⇓***i*P | | **Pg** | | **15 59 42.0** | **-0.4** |
| | baz=33 | | | | | | | | |
| LATG | | | | S | | **Sg** | | **15 59 50.9** | **-1.3** |
| | baz=33 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.76** | **206** | P | | **Pb** | | **15 59 43.2** | **+0.3** |
| **TPUB** | **Ta-pu** | **0.76** | **206** | *e*P | | **Pb** | | **15 59 42.9** | **-0.1** |
| | baz=207 | | | | | | | | |
| TPUB | | | | S | | **Sb** | | **15 59 53.6** | **+0.5** |
| | baz=207 | | | | | | | | |
| **EAHA** | **Aohua** | **0.76** | **63** | *e*P | | **Pg** | | **15 59 42.9** | **0.0** |
| | baz=62 | | | | | | | | |
| EAHA | | | | *e*S | | **Sb** | | **15 59 53.8** | **+0.6** |
| | baz=62 | | | | | | | | |
| **NSK** | **Sanguang** | **0.77** | **26** | **⇓**P | | **Pb** | | **15 59 42.9** | **-0.2** |
| | baz=34 | | | | | | | | |
| NSK | | | | *e*S | | **Sg** | | **15 59 51.7** | **-1.5** |
| | baz=34 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.77** | **27** | P | | **Pb** | | **15 59 43.0** | **-0.1** |
| **YHNB** | **Yeheng** | **0.77** | **27** | **⇓**P | | **Pb** | | **15 59 42.9** | **-0.3** |
| | baz=26 | | | | | | | | |
| YHNB | | | | S | | **Sg** | | **15 59 51.7** | **-1.5** |
| | baz=26 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.78** | **37** | *e*P | | **Pb** | | **15 59 43.0** | **-0.2** |
| | baz=38 | | | | | | | | |
| **ECBN** | **Changbin** | **0.78** | **148** | P | | **Pn** | | **15 59 44.6** | **+0.1** |
| | baz=148 | | | | | | | | |
| ECBN | | | | S | | **Sn** | | **15 59 55.3** | **-0.7** |
| | baz=148 | | | | | | | | |
| **WSF** | **Szhu** | **0.79** | **244** | *e*P | | **Pg** | | **15 59 43.3** | **-0.1** |
| | baz=243 | | | | | | | | |
| WSF | | | | S | | **Sn** | | **15 59 55.0** | **-1.0** |
| | baz=243 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.79** | **179** | P | | **Pg** | | **15 59 43.6** | **+0.1** |
| | baz=184 | | | | | | | | |
| ELDTW | | | | S | | **Sn** | | **15 59 55.0** | **-1.3** |
| | baz=184 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.81** | **206** | P | | **Pb** | | **15 59 43.7** | **-0.2** |
| | baz=205 | | | | | | | | |
| WTP | | | | S | | **Sg** | | **15 59 55.2** | **+0.6** |
| | baz=205 | | | | | | | | |
| **ENA** | **Nanau** | **0.81** | **57** | **⇓**P | | **Pb** | | **15 59 43.7** | **-0.2** |
| | baz=57 | | | | | | | | |
| ENA | | | | *e*S | | **Sb** | | **15 59 54.1** | **-0.5** |
| | baz=57 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.82** | **358** | *e*P | | **Pn** | | **15 59 45.2** | **+0.2** |
| | baz=2.0 | | | | | | | | |
| HSN | | | | *e*S | | **Sn** | | **15 59 58.2** | **+1.4** |
| | baz=2.0 | | | | | | | | |
| **FULB** | **Fuli** | **0.83** | **161** | *e*P | | **Pn** | | **15 59 44.9** | **-0.3** |
| | baz=161 | | | | | | | | |
| FULB | | | | *e*S | | **Sn** | | **15 59 56.5** | **-0.6** |
| | baz=161 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.83** | **194** | *e*P | | **Pg** | | **15 59 44.3** | **0.0** |
| | baz=194 | | | | | | | | |
| STYH | | | | S | | **Sg** | | **15 59 55.7** | **+0.4** |
| | baz=194 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.84** | **38** | **⇑**P | | **Pb** | | **15 59 44.1** | **-0.2** |
| | baz=34 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.84** | **237** | *e*P | | **Pg** | | **15 59 44.3** | **-0.1** |
| | baz=236 | | | | | | | | |
| WSL | | | | *e*S | | **Sn** | | **15 59 56.6** | **-0.7** |
| | baz=236 | | | | | | | | |
| **EWUT** | **Wuta** | **0.85** | **57** | **⇓**P | | **Pb** | | **15 59 44.4** | **-0.1** |
| | baz=57 | | | | | | | | |
| EWUT | | | | *e*S | | **Sb** | | **15 59 55.1** | **-0.6** |
| | baz=57 | | | | | | | | |
| **TWK** | **Hsinying** | **0.85** | **213** | P | | **Pg** | | **15 59 44.5** | **-0.1** |
| | baz=212 | | | | | | | | |
| TWK | | | | S | | **Sn** | | **15 59 57.0** | **-0.7** |
| | baz=212 | | | | | | | | |
| **EHD** | **Haiduan** | **0.85** | **167** | *e*P | | **Pg** | | **15 59 44.7** | **0.0** |
| | baz=167 | | | | | | | | |
| EHD | | | | *e*S | | **Sg** | | **15 59 56.2** | **+0.3** |
| | baz=167 | | | | | | | | |
| **CHKH** | **Chenggong** | **0.87** | **155** | *e*P | | **Pn** | | **15 59 45.3** | **-0.4** |
| | baz=155 | | | | | | | | |
| CHKH | | | | *e*S | | **Sn** | | **15 59 58.0** | **0.0** |
| | baz=155 | | | | | | | | |
| **SNST** | **Tainan City** | **0.89** | **211** | *e*P | | **Pg** | | **15 59 45.2** | **-0.1** |
| | baz=211 | | | | | | | | |
| SNST | | | | *e*S | | **Sn** | | **15 59 57.6** | **-0.9** |
| | baz=211 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.90** | **208** | *e*P | | **Pg** | | **15 59 45.5** | **-0.1** |
| | baz=209 | | | | | | | | |
| CHN1 | | | | S | | **Sg** | | **15 59 57.8** | **+0.3** |
| | baz=209 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.90** | **227** | *e*P | | **Pg** | | **15 59 45.5** | **-0.1** |
| | baz=237 | | | | | | | | |
| ICHU | | | | *e*S | | **Sn** | | **15 59 58.9** | **0.0** |
| | baz=237 | | | | | | | | |
| **ECS** | **Chishang** | **0.91** | **167** | P | | **Pn** | | **15 59 46.1** | **-0.1** |
| | baz=166 | | | | | | | | |
| **NWLT** | **Wulai** | **0.92** | **30** | **⇓**P | | **Pb** | | **15 59 45.4** | **-0.2** |
| | baz=38 | | | | | | | | |
| **NDS** | **Dongshan** | **0.92** | **45** | *e*P | | **Pb** | | **15 59 45.8** | **0.0** |
| | baz=45 | | | | | | | | |
| NDS | | | | *e*S | | **Sb** | | **15 59 57.8** | **0.0** |
| | baz=45 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.94** | **159** | *e*P | | **Pn** | | **15 59 46.7** | **0.0** |
| | baz=159 | | | | | | | | |
| CHKT | | | | *e*S | | **Sn** | | **16 00 00.3** | **+0.4** |
| | baz=159 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.94** | **35** | **⇓**P | | **Pb** | | **15 59 45.8** | **-0.4** |
| | baz=28 | | | | | | | | |
| FUSB | | | | *e*S | | **Sg** | | **15 59 59.3** | **+0.5** |
| | baz=28 | | | | | | | | |
| **TWE** | **Neicheng** | **0.96** | **40** | **⇓**P | | **Pb** | | **15 59 46.3** | **0.0** |
| | baz=40 | | | | | | | | |
| TWE | | | | *e*S | | **Sb** | | **15 59 58.1** | **-0.7** |
| | baz=40 | | | | | | | | |
| **CHN8** | **Yiju** | **0.96** | **229** | *e*P | | **Pb** | | **15 59 46.2** | **-0.1** |
| | baz=238 | | | | | | | | |
| CHN8 | | | | *e*S | | **Sn** | | **16 00 00.2** | **0.0** |
| | baz=238 | | | | | | | | |
| **SGST** | **Jiashian** | **0.97** | **203** | P | | **Pb** | | **15 59 46.2** | **-0.4** |
| | baz=213 | | | | | | | | |
| SGST | | | | S | | **Sn** | | **15 59 60.0** | **-0.7** |
| | baz=213 | | | | | | | | |
| **ESAO** | **Su ao** | **0.97** | **53** | **⇓**P | | **Pb** | | **15 59 46.4** | **-0.2** |
| | baz=52 | | | | | | | | |
| ESAO | | | | S | | **Sb** | | **15 59 58.8** | **-0.5** |
| | baz=52 | | | | | | | | |
| **NCUH** | **Zhongli** | **1.00** | **10** | *e*P | | **Pg** | | **15 59 47.4** | **0.0** |
| | baz=11 | | | | | | | | |
| **TWC** | **Suao** | **1.00** | **51** | P | | **Pn** | | **15 59 47.2** | **-0.3** |
| | baz=51 | | | | | | | | |
| TWC | | | | *e*S | | **Sb** | | **16 00 00.1** | **+0.2** |
| | baz=51 | | | | | | | | |
| **SLGT** | **Liugui** | **1.03** | **198** | *e*P | | **Pg** | | **15 59 48.2** | **+0.1** |
| | baz=190 | | | | | | | | |
| SLGT | | | | *e*S | | **Sn** | | **16 00 02.9** | **+0.7** |
| | baz=190 | | | | | | | | |
| **EDH** | **Donghe** | **1.04** | **164** | *e*P | | **Pg** | | **15 59 48.5** | **+0.2** |
| | baz=149 | | | | | | | | |
| EDH | | | | *e*S | | **Sn** | | **16 00 04.8** | **+2.4** |
| | baz=149 | | | | | | | | |
| **SSHA** | **Shanhua** | **1.06** | **218** | *e*P | | **Pg** | | **15 59 48.8** | **+0.1** |
| | baz=217 | | | | | | | | |
| SSHA | | | | *e*S | | **Sn** | | **16 00 04.2** | **+1.4** |
| | baz=217 | | | | | | | | |
| **LONT** | **Longtian** | **1.08** | **173** | *e*P | | **Pg** | | **15 59 49.0** | **+0.1** |
| | baz=174 | | | | | | | | |
| LONT | | | | *e*S | | **Sn** | | **16 00 04.0** | **+0.7** |
| | baz=174 | | | | | | | | |
| **TATO** | **Taipei** | **1.09** | **24** | P | | **Pg** | | **15 59 49.4** | **+0.3** |
| **NHDH** | **Xindian Distri** | **1.09** | **26** | *e*P | | **Pg** | | **15 59 49.1** | **0.0** |
| | baz=29 | | | | | | | | |
| NHDH | | | | *e*S | | **Sg** | | **16 00 05.3** | **+1.9** |
| | baz=29 | | | | | | | | |
| **SCLT** | **Jiali** | **1.09** | **223** | *e*P | | **Pg** | | **15 59 48.9** | **-0.3** |
| | baz=221 | | | | | | | | |
| SCLT | | | | *e*S | | **Sg** | | **16 00 04.6** | **+1.2** |
| | baz=221 | | | | | | | | |
| **TWA** | **Mucha** | **1.13** | **28** | *e*P | | **Pg** | | **15 59 49.8** | **-0.1** |
| | baz=31 | | | | | | | | |
| TWA | | | | *e*S | | **Sg** | | **16 00 06.0** | **+1.3** |
| | baz=31 | | | | | | | | |
| **TWG** | **Pinlang** | **1.16** | **176** | *e*P | | **Pg** | | **15 59 50.1** | **-0.4** |
| | baz=170 | | | | | | | | |
| TWG | | | | *e*S | | **Sg** | | **16 00 05.6** | **0.0** |
| | baz=170 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.16** | **176** | P | | **Pg** | | **15 59 50.1** | **-0.4** |
| **TWGBT** | **Beinan** | **1.16** | **176** | **⇑**P | | **Pg** | | **15 59 50.2** | **-0.4** |
| | baz=170 | | | | | | | | |
| TWGBT | | | | *e*S | | **Sg** | | **16 00 05.7** | **0.0** |
| | baz=170 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.17** | **217** | *e*P | | **Pg** | | **15 59 50.6** | **-0.1** |
| | baz=216 | | | | | | | | |
| TAI1 | | | | *e*S | | **Sg** | | **16 00 07.9** | **+1.9** |
| | baz=216 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.18** | **225** | *e*P | | **Pn** | | **15 59 49.7** | **-0.2** |
| | baz=235 | | | | | | | | |
| TSCK | | | | *e*S | | **Sg** | | **16 00 06.0** | **-0.2** |
| | baz=235 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.18** | **19** | *e*P | | **Pg** | | **15 59 50.6** | **-0.2** |
| | baz=7.0 | | | | | | | | |
| TWS1 | | | | *e*S | | **Sg** | | **16 00 08.0** | **+1.8** |
| | baz=7.0 | | | | | | | | |
| **SCST** | **Cishan** | **1.19** | **203** | *e*P | | **Pg** | | **15 59 51.0** | **0.0** |
| | baz=204 | | | | | | | | |
| SCST | | | | *e*S | | **Sg** | | **16 00 08.7** | **+2.3** |
| | baz=204 | | | | | | | | |
| **EOS2** | **EOS2** | **1.21** | **69** | *e*P | | **Pg** | | **15 59 52.1** | **+0.7** |
| | baz=69 | | | | | | | | |
| **EOS4** | **EOS4** | **1.22** | **83** | *e*P | | **Pg** | | **15 59 51.0** | **-0.5** |
| | baz=100 | | | | | | | | |
| EOS4 | | | | *e*S | | **Sn** | | **16 00 06.3** | **+0.2** |
| | baz=100 | | | | | | | | |
| **TIPB** | **Shuangxi** | **1.24** | **37** | *e*P | | **Pb** | | **15 59 51.4** | **+0.1** |
| | baz=37 | | | | | | | | |
| TIPB | | | | *e*S | | **Sn** | | **16 00 07.6** | **+0.3** |
| | baz=37 | | | | | | | | |
| **EOS3** | **EOS3** | **1.25** | **76** | *e*P | | **Pg** | | **15 59 51.9** | **-0.2** |
| | baz=91 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.27** | **205** | *e*P | | **Pg** | | **15 59 53.8** | **+1.3** |
| | baz=203 | | | | | | | | |
| **YM01** | **YM01** | **1.27** | **24** | *e*P | | **Pb** | | **15 59 51.5** | **-0.3** |
| | baz=23 | | | | | | | | |
| YM01 | | | | *e*S | | **Sg** | | **16 00 10.7** | **+1.5** |
| | baz=23 | | | | | | | | |
| **ANP** | **Anpu** | **1.29** | **22** | *e*P | | **Pg** | | **15 59 53.3** | **+0.3** |
| | baz=35 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.30** | **33** | *e*P | | **Pg** | | **15 59 53.1** | **0.0** |
| | baz=33 | | | | | | | | |
| NWF | | | | *e*S | | **Sg** | | **16 00 11.7** | **+1.6** |
| | baz=33 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.30** | **33** | *e*P | | **Pg** | | **15 59 54.0** | **+0.9** |
| | baz=33 | | | | | | | | |
| WFSB | | | | *e*S | | **Sg** | | **16 00 11.6** | **+1.6** |
| | baz=33 | | | | | | | | |
| **TSMG** | **Majia** | **1.31** | **194** | *e*P | | **Pb** | | **15 59 52.5** | **+0.1** |
| | baz=206 | | | | | | | | |
| TSMG | | | | *e*S | | **Sg** | | **16 00 10.4** | **-0.1** |
| | baz=206 | | | | | | | | |
| **YM08** | **YM08** | **1.32** | **24** | *e*P | | **Pb** | | **15 59 52.4** | **-0.1** |
| | baz=26 | | | | | | | | |
| **TNOU** | **National Taiwa** | **1.36** | **31** | *e*P | | **Pg** | | **15 59 54.1** | **-0.2** |
| | baz=34 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.36** | **41** | *e*P | | **Pg** | | **15 59 54.2** | **-0.2** |
| | baz=44 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **1.37** | **36** | *e*P | | **Pg** | | **15 59 54.1** | **-0.3** |
| | baz=35 | | | | | | | | |
| SXI1 | | | | *e*S | | **Sg** | | **16 00 13.6** | **+1.3** |
| | baz=35 | | | | | | | | |
| **LDUT** | **Ludao** | **1.37** | **161** | *e*P | | **Pn** | | **15 59 52.4** | **-0.2** |
| | baz=149 | | | | | | | | |
| LDUT | | | | *e*S | | **Sb** | | **16 00 11.0** | **+0.2** |
| | baz=149 | | | | | | | | |
| **ECL** | **Taimali** | **1.38** | **182** | *e*P | | **Pb** | | **15 59 53.9** | **+0.3** |
| | baz=182 | | | | | | | | |
| ECL | | | | *e*S | | **Sg** | | **16 00 11.7** | **-0.9** |
| | baz=182 | | | | | | | | |
| **PNG** | **Penghu** | **1.38** | **253** | *e*P | | **Pn** | | **15 59 52.1** | **-0.6** |
| | baz=244 | | | | | | | | |
| PNG | | | | *e*S | | **Sn** | | **16 00 10.0** | **-0.7** |
| | baz=244 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.40** | **194** | *e*P | | **Pb** | | **15 59 53.9** | **-0.1** |
| | baz=195 | | | | | | | | |
| MASBT | | | | *e*S | | **Sg** | | **16 00 13.0** | **-0.4** |
| | baz=195 | | | | | | | | |
| **WDGT** | **Dungji** | **1.42** | **240** | *e*P | | **Pn** | | **15 59 53.3** | **+0.1** |
| | baz=226 | | | | | | | | |
| WDGT | | | | *e*S | | **Sb** | | **16 00 11.7** | **-0.4** |
| | baz=226 | | | | | | | | |
| **EAST** | **Anshuo** | **1.60** | **185** | *e*P | | **Pb** | | **15 59 56.9** | **-0.4** |
| | baz=203 | | | | | | | | |
| **VCHM** | **Qimei** | **1.63** | **242** | P | | **Pn** | | **15 59 55.9** | **-0.2** |
| | baz=230 | | | | | | | | |
| VCHM | | | |

baz=279
**IRIF Iriomote-Funau 2.52 81** *eP* **Pn 16 00 09.7 +1.2**
IRIF *eS* **Sn 16 00 39.4 +0.5**
**HATJ Hateruma jima 2.57 88** *eS* **Sn 16 00 41.9 +1.8**
**MHZQ Yeshan 2.76 320** *eP* **Pn 16 00 11.6 -0.1**
baz=318
**JKRS Kuro-shima 2.77 84** *eP* **Pn 16 00 13.2 +1.4**
JKRS *eS* **Sn 16 00 47.0 +2.2**
**JIJ Ishigaki jima 2.90 82** *eP* **Pn 16 00 14.1 +0.4**
JIJ *eS* **Sn 16 00 48.1 -0.1**
**ZPLA Ao Xicun 2.97 270** *eP* **Pn 16 00 13.8 -0.8**
baz=268
**JISG Ishigakijimahi 3.08 78** P **Pn 16 00 17.2 +1.0**
JISG *eS* **Sn 16 00 52.5 -0.3**
**JTJ Tarama 3.44 78** P **Pn 16 00 23.2 +2.0**

*IDC **22** 16:05:34.4±0.7,8.2°27S×116.82E,h0km,mb3.8/13, mbtmp3.8/14,ML3.7/1,Error ellipse: s-maj=21.9km s-min=14.6km az=77.0*
*NEIC **22** 16:05:36.8±1.9,8.22S±0.10×116.83E±0.07,h10km±2km, mb4.3/11,Error ellipse: s-maj=16.8km s-min=11.0km az=357.0*
*DJA **22** 16:05:37.9±0.2,8°S±3°×11°7E±°,h10km,M4.6/15,mb4.7/5, mB5.3/2,MLv4.5/15,Mw(mB)4.8/2*
**ISC 22 16:05:36.2±0.5,8.25S±0.05×116.85E±0.04,h10km,n74,**
**σ1§55/80,mb4.0/16,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.49** | **177** | P | **Pg** | **16 05 46.8** | **+1.0** |
| **PLAI** | **Plampang** | **1.08** | **122** | P | **Pn** | **16 05 57.8** | **+0.8** |
| **PLAI** | **Plampang** | **1.08** | **122** | P | **Pn** | **16 05 58.4** | **+0.9** |
| PLAI | | | | S | **Sb** | **16 06 12.7** | **+1.5** |
| **SRBI** | **Singaraja** | **1.63** | **276** | P | **Pb** | **16 06 06.1** | **-0.3** |
| SRBI | | | | S | **Sg** | **16 06 28.4** | **-0.3** |
| **DNP** | **Denpasar** | **1.68** | **255** | P | **Pg** | **16 06 08.7** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.68** | **265** | P | **Pn** | **16 06 19.9** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.68** | **265** | | **Pn** | **16 06 19.7** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.68** | **265** | P | **Pn** | **16 06 20.1** | **+0.6** |
| **WBSI** | **Waikabubak, Su** | **2.87** | **119** | P | **Pn** | **16 06 23.6** | **+1.5** |
| **BASI** | **Baing, Sumba** | **4.17** | **118** | P | **Pn** | **16 06 42.4** | **+2.5** |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **60** | P | **Pn** | **16 06 40.8** | **+0.8** |
| **KAPI** | **Kappang** | **4.31** | **42** | Pn | **Pn** | **16 06 41.2** | **-0.7** |
| **KAPI** | **Kappang** | **4.31** | **42** | Pn | **Pn** | **16 06 40.5** | **-1.4** |
| | 4.2nm,0.3s,baz=204,slow=7.9,SNR=27 | | | | | | |
| KAPI | | | | S | **Sn** | **16 07 31.1** | **-1.2** |
| | 19nm,0.3s,baz=226,slow=23,SNR=5.4 | | | | | | |
| KAPI | | | | Lg | Lg | 16 07 51.5 | |
| | 23nm,0.3s,baz=186,slow=13,SNR=7.0 | | | | | | |
| | 15nm,0.2s | | | | | | |
| **GRJI** | **Gresik** | **4.53** | **287** | P | **Pn** | **16 06 47.7** | **+2.8** |
| **EDFI** | **Ende, Flores** | **4.81** | **96** | P | **Pn** | **16 06 50.4** | **+1.5** |
| **PWJI** | **Pagerwojo** | **5.00** | **272** | P | **Pn** | **16 06 52.9** | **+1.5** |
| | 62nm,0.8s,0.4nm | | | | | | |
| **BNSI** | **Bone** | **5.01** | **40** | P | **Pn** | **16 06 55.0** | **+3.5** |
| | 57nm,0.6s,0.6nm | | | | | | |
| **MMRI** | **Maumere** | **5.34** | **95** | P | **Pn** | **16 06 57.3** | **+1.2** |
| **MMRI** | **Maumere** | **5.34** | **95** | Pn | **Pn** | **16 06 57.3** | **+1.2** |
| **MMRI** | **Maumere** | **5.34** | **95** | P | **Pn** | **16 06 57.0** | **+0.9** |
| **UGM** | **Wanagama** | **6.28** | **273** | P | **Pn** | **16 07 10.5** | **+1.6** |
| **UGM** | **Wanagama** | **6.28** | **273** | Pn | **Pn** | **16 07 10.5** | **+1.6** |
| **BATI** | **Baumata** | **7.00** | **107** | P | **Pn** | **16 07 21.4** | **+2.5** |
| **SOEI** | **Soe** | **7.48** | **102** | Pn | **Pn** | **16 07 27.5** | **+1.9** |
| **BBJI** | **Bungbulang** | **9.15** | **274** | P | **Pn** | **16 07 51.1** | **+2.6** |
| **FITZ** | **Fitzroy Crossi** | **13.00** | **140** | P | **Pn** | **16 08 41.5** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **13.00** | **140** | Pn | **Pn** | **16 08 41.1** | **0.0** |
| **MBWA** | **Marble Bar** | **13.13** | **168** | P | **Pn** | **16 08 42.6** | **-0.4** |
| **MBWA** | **Marble Bar** | **13.13** | **168** | Pn | **Pn** | **16 08 42.0** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **13.56** | **168** | P | **Pn** | **16 08 49.1** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **13.56** | **168** | Pn | **Pn** | **16 08 47.5** | **-1.3** |
| **PSA00** | **Pilbara Seismi** | **13.56** | **168** | Pn | **Pn** | **16 08 45.7** | **-3.1** |
| **KNRA** | **Kununurra** | **13.79** | **123** | Pn | **Pn** | **16 08 51.9** | **0.0** |
| **GIRL** | **Giralia** | **14.53** | **190** | P | **Pn** | **16 09 01.5** | **-0.6** |
| **GIRL** | **Giralia** | **14.53** | **190** | Pn | **Pn** | **16 09 00.3** | **-1.8** |
| **MTN** | **Manton Dam** | **14.76** | **109** | P | **Pn** | **16 09 05.3** | **+0.1** |
| **MTN** | **Manton Dam** | **14.76** | **109** | Pn | **Pn** | **16 09 03.3** | **-2.0** |
| **KDU** | **Kakadu** | **15.98** | **107** | P | **Pn** | **16 09 21.9** | **+0.6** |
| | 7.7nm,1.3s | | | | | | |
| **BKNI** | **Bangkinang** | **17.91** | **298** | P | **P** | **16 09 48.2** | **+1.9** |
| **WB0** | **Warramunga Arr** | **20.49** | **126** | P | **P** | **16 10 14.3** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 16 10 25.9 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.54** | **126** | P | **P** | **16 10 15.2** | **+0.2** |
| **WRA** | **Warramunga Arr** | **20.54** | **126** | P | **P** | **16 10 15.2** | **+0.2** |
| | comp=Z,4.7nm,0.6s,baz=300,slow=12,SNR=123 | | | | | | |
| WRA | | | | S | **S** | **16 13 59.1** | **-5.8** |
| | comp=Z,0.3nm,0.3s,baz=303,slow=25,SNR=2.2 | | | | | | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.55** | **126** | P | **P** | **16 10 15.2** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 16 10 16.3 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.71** | **126** | P | **P** | **16 10 17.1** | **+0.2** |
| WR0 | | | | IAmb | IAmb | 16 10 18.3 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.41** | **135** | P | **P** | **16 10 35.8** | **+0.6** |
| **ASAR** | **Alice Springs** | **22.41** | **135** | P | **P** | **16 10 35.6** | **+0.5** |
| | comp=Z,3.0nm,0.8s,baz=309,slow=9.2,SNR=50 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 14 29.9** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=314,slow=1.5,SNR=1.3 | | | | | | |
| ASAR | | | | S | **S** | **16 14 35.1** | **-6.4** |
| | comp=Z,0.2nm,0.7s,baz=314,slow=23,SNR=1.5 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **22.41** | **135** | P | **P** | **16 10 35.8** | **+0.6** |
| **AS01** | **Alice Springs** | **22.44** | **135** | P | **P** | **16 10 35.8** | **+0.3** |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **24.75** | **156** | P | **P** | **16 10 59.1** | **+1.1** |
| **QIS** | **Mount Isa** | **25.16** | **122** | P | **P** | **16 11 03.4** | **+1.4** |
| **OOD** | **Oodnadatta** | **26.36** | **140** | P | **P** | **16 11 13.7** | **+1.0** |
| **COEN** | **Coen** | **26.43** | **105** | P | **P** | **16 11 14.6** | **+1.1** |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **COEN** | **Coen** | **26.43** | **105** | P | **P** | **16 11 13.3** | **-0.3** |
| COEN | | | | IAmb | IAmb | 16 11 56.6 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **MULG** | **Mulgathing** | **27.21** | **146** | P | **P** | **16 11 21.2** | **+0.9** |
| **BBOO** | **Buckleboo** | **30.23** | **147** | P | **P** | **16 11 47.9** | **+0.6** |
| **BBOO** | **Buckleboo** | **30.23** | **147** | P | **P** | **16 11 47.2** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **31.88** | **326** | P | **P** | **16 12 01.8** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=153,slow=6.1,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **STKA** | **Stephens Creek** | **32.90** | **139** | P | **P** | **16 12 11.4** | **+0.7** |
| **STKA** | **Stephens Creek** | **32.90** | **139** | P | **P** | **16 12 10.8** | **+0.1** |
| STKA | | | | IAmb | IAmb | 16 12 28.4 | |
| | comp=Z,2.4nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.90** | **139** | P | **P** | **16 12 10.2** | **-0.5** |
| | comp=Z,1.6nm,0.5s,baz=311,slow=9.6,SNR=7.3 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **CAN** | **Canberra** | **39.88** | **137** | P | **P** | **16 13 11.6** | **+1.1** |
| CAN | | | | IAmb | IAmb | 16 13 28.6 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.97** | **13** | P | **P** | **16 15 01.1** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=179,slow=5.4,SNR=4.1 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **56.60** | **352** | P | **P** | **16 15 20.1** | **+0.7** |
| | comp=Z,1.8nm,1.1s,baz=168,slow=7.6,SNR=4.0 | | | | | | |
| | comp=Z,1.8nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | P | **P** | **16 16 01.9** | **-0.4** |
| **MKAR** | **Makanchi Array** | **62.84** | **334** | P | **P** | **16 16 02.2** | **-0.1** |
| | comp=Z,0.7nm,0.8s,baz=150,slow=7.7,SNR=5.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **62.99** | **334** | P | **P** | **16 16 03.1** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 16 16 10.5 | |
| | comp=Z,3.5nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.37** | **335** | P | **P** | **16 16 31.9** | **+0.4** |
| | comp=Z,0.2nm,0.5s,baz=143,slow=5.5,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.60** | **340** | P | **P** | **16 16 33.3** | **+0.3** |
| | comp=Z,0.5nm,0.4s,baz=132,slow=6.2,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **MAW** | **Mawson** | **69.23** | **199** | P | **P** | **16 16 42.5** | **-0.4** |
| | comp=Z,3.4nm,0.9s,baz=82,slow=10,SNR=5.4 | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **72.65** | **333** | P | **P** | **16 17 03.1** | **-0.9** |
| | comp=Z,0.3nm,0.5s,baz=144,slow=5.2,SNR=1.8 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.74** | **180** | P | **P** | **16 17 55.3** | **+0.2** |
| | comp=Z,0.7nm,0.8s,baz=354,slow=10,SNR=1.6 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **91.14** | **196** | P | **P** | **16 18 40.1** | **-1.0** |
| | comp=Z,0.3nm,0.4s,baz=67,slow=15,SNR=1.3 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.24** | **281** | PKP | **PKPdf** | **16 24 19.0** | **-1.9** |
| | comp=Z,0.4nm,0.9s,baz=83,slow=1.3,SNR=5.4 | | | | | | |
| **CPUP** | **Villa Florida** | **145.17** | **189** | PKPbc | **PKPbc** | **16 25 13.5** | **-0.9** |

comp=Z,1.1nm,0.4s,baz=154,slow=5.3,SNR=4.0

*TRN **22** 16:16:30.6,10.64N×62.91W,h117km,MD3.4,Paria peninsula.*
*FUNV **22** 16:16:32.7,10.49N×62.90W,h20km,MW3.9*
**ISC 22 16:16:28.6±1.5,10.60N±0.05×62.89W±0.04,**
**h136km±17km,n17,σ1§69/31,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.46** | **88** | *eP* | **Pn** | **16 16 58.6** | **+1.9** |
| TRN | | | | *eS* | **Sn** | **16 17 17.0** | **-1.0** |
| **PCRV** | **Puerto La Cruz** | **1.77** | **256** | *eP* | **Pn** | **16 17 01.5** | **+1.3** |
| PCRV | | | | *eS* | **Sn** | **16 17 22.7** | **-1.7** |
| **PCRV** | **Puerto La Cruz** | **1.77** | **256** | *eP* | **Pn** | **16 17 01.4** | **+1.3** |
| PCRV | | | | *eS* | **Sn** | **16 17 23.9** | **-0.5** |
| **GRFF** | **Grenada Fort F** | **1.83** | **38** | *eP* | **Pn** | **16 17 01.6** | **+0.7** |
| GRFF | | | | *eS* | **Sn** | **16 17 23.7** | **-1.9** |
| **GRGR** | **Grenville** | **1.94** | **38** | *eP* | **Pn** | **16 17 03.0** | **+0.7** |
| GRGR | | | | *eS* | **Sn** | **16 17 26.3** | **-1.7** |
| **GRW** | **Mount Saint Ca** | **1.96** | **38** | *eP* | **Pn** | **16 17 03.2** | **+0.6** |
| GRW | | | | *eS* | **Sn** | **16 17 27.6** | **-1.0** |
| **GRHS** | **Sauteurs** | **2.02** | **37** | *eP* | **Pn** | **16 17 04.6** | **+1.4** |
| GRHS | | | | *eS* | **Sn** | **16 17 28.0** | **-1.8** |
| **GRSS** | **Sisters** | **2.10** | **36** | *eP* | **Pn** | **16 17 04.9** | **+0.8** |
| GRSS | | | | *eS* | **Sn** | **16 17 31.0** | **-0.4** |
| **GCMP** | **Grenada, Carri** | **2.36** | **37** | *eP* | **Pn** | **16 17 08.2** | **+0.9** |
| GCMP | | | | *eS* | **Sn** | **16 17 36.4** | **-0.6** |
| **SVB** | **Belmont** | **3.10** | **31** | *eS* | **Sn** | **16 17 52.8** | **-1.2** |
| **MERV** | **Las Mercedes** | **3.62** | **249** | *eP* | **Pn** | **16 17 25.5** | **+2.1** |
| MERV | | | | *eS* | **Sn** | **16 18 05.9** | **0.0** |
| **SLBI** | **Saint Lucia, B** | **3.88** | **29** | *eS* | **Sn** | **16 18 10.6** | **-1.6** |
| **BENV** | **Beln** | **4.68** | **263** | *eP* | **Pn** | **16 17 40.4** | **+2.8** |
| BENV | | | | *eS* | **Sn** | **16 18 31.2** | **-0.1** |
| **CACV** | **CAICARA DEL OR** | **4.70** | **230** | *eP* | **Pn** | **16 17 35.4** | **-2.4** |
| CACV | | | | *eS* | Sn | 16 18 21.4 | -10 |
| **LUEV** | **Luepa** | **4.93** | **163** | *eP* | **Pn** | **16 17 43.5** | **+2.5** |
| LUEV | | | | *eS* | **Sn** | **16 18 35.2** | **-2.3** |
| **BAUV** | **El Baul** | **5.34** | **252** | *eP* | **Pn** | **16 17 47.5** | **+1.1** |
| BAUV | | | | *eS* | **Sn** | **16 18 44.7** | **-2.3** |
| **BAUV** | **El Baul** | **5.34** | **252** | *eP* | **Pn** | **16 17 47.8** | **+1.4** |
| BAUV | | | | *eS* | **Sn** | **16 18 44.2** | **-2.8** |

*IDC **22** 16:23:33.9±0.4,2.92S×75.40W,h136km±3km,mb4.2/19, mbtmp4.7/27,MS3.1/4,Error ellipse: s-maj=13.8km s-min=8.2km az=67.0*
*NEIC **22** 16:23:35.3±1.7,2.95S±0.06×75.44W±0.07,h145km±5km, mb4.9/397,Error ellipse: s-maj=11.1km s-min=7.9km az=70.0*
*RSNC **22** 16:23:35.0±0.4,3°S±3°×7°6W±°,h74km±15km,M5.1,mB5.5, mb5.3,ML5.0,Mw(mB)5.0*
*IGQ **22** 16:23:36.5±1.1,3°S±6°×7°6W±1°3,h135km,M5.9/18*
*VAO **22** 16:23:36.7±0.9,3.09S×75.29W,h155km±5km,mb4.8*
**ISC 22 16:23:34.0±0.3,3.05S±0.04×75.51W±0.05,h140km±3km,**
**h140km:pP-P,n663,σ1§12/536,mb4.9/241,4C-9D,**
**Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TAIS** | **Taisha** | **2.09** | **288** | S | **Sn** | **16 24 35.9** | **-1.1** |
| TAIS | | | | P | **Pn** | **16 24 10.1** | **+0.4** |
| **BOSC** | **San Juan Bosco** | **2.98** | **268** | P | **Pn** | **16 24 19.3** | **-1.6** |
| BOSC | | | | S | **Sn** | **16 24 52.9** | **-4.2** |
| **ARDO** | **Archidona, Ten** | **3.06** | **312** | P | **Pn** | **16 24 21.1** | **-0.7** |
| **PTLC** | **Puerto Leguiza** | **3.27** | **13** | P | **Pn** | **16 24 21.1** | **-3.4** |
| **BPAT** | **Tungurahua Vol** | **3.30** | **298** | P | **Pn** | **16 24 25.2** | **-0.1** |
| **TUYU** | **Q. Yuibug Volc** | **3.34** | **298** | P | **Pn** | **16 24 25.7** | **-0.1** |
| **AZOG** | **Ecuador-Azogue** | **3.34** | **275** | P | **Pn** | **16 24 26.0** | **+0.3** |
| **JUI6** | **Juive** | **3.37** | **299** | P | **Pn** | **16 24 25.5** | **-0.5** |
| **BBIL** | **Ulba Tungurahu** | **3.37** | **298** | P | **Pn** | **16 24 26.2** | **+0.1** |
| **PIAT** | **Ana Tenorio** | **3.42** | **306** | P | **Pn** | **16 24 26.3** | **-0.5** |
| **IGUA** | **Igualata** | **3.49** | **296** | P | **Pn** | **16 24 28.5** | **+0.7** |
| **TAMH** | **Tambohuasha Ch** | **3.59** | **294** | P | **Pn** | **16 24 30.4** | **+1.3** |
| **ANTS** | **Antisana-Sarah** | **3.67** | **314** | | **Pn** | **16 24 29.7** | **-0.5** |
| **ANTS** | **Antisana-Sarah** | **3.67** | **314** | P | **Pn** | **16 24 30.4** | **+0.2** |
| **CHSH** | **Refugio Sur-Vo** | **3.69** | **295** | P | **Pn** | **16 24 31.3** | **+0.8** |
| **JSCH** | **Cashca Tororas** | **3.71** | **291** | P | **Pn** | **16 24 32.2** | **+1.7** |
| **BTAM** | **Cotopaxi Volca** | **3.72** | **309** | P | **Pn** | **16 24 31.4** | **+0.5** |
| **ANTG** | **Antisana-Guama** | **3.73** | **313** | P | **Pn** | **16 24 31.2** | **+0.3** |
| **BVC2** | **Cotopaxi Volca** | **3.75** | **309** | P | **Pn** | **16 24 31.9** | **+0.7** |
| **VC1** | **Cotopaxi 1** | **3.75** | **309** | P | **Pn** | **16 24 32.0** | **+0.8** |
| **BREF** | **Cotopaxi Volca** | **3.76** | **309** | P | **Pn** | **16 24 32.3** | **+0.9** |
| **BNAS** | **Cotopaxi Volca** | **3.79** | **308** | P | **Pn** | **16 24 33.7** | **+2.0** |
| **ALJ1** | **Ecuador-Loja-U** | **3.80** | **256** | P | **Pn** | **16 24 31.1** | **-0.5** |
| **CAMI** | **Rancho Maria** | **3.81** | **308** | P | **Pn** | **16 24 33.2** | **+1.3** |
| **PITA** | **Cotopaxi Volc** | **3.82** | **310** | P | **Pn** | **16 24 32.9** | **+0.8** |
| **ANGU** | **Angureal** | **3.96** | **321** | P | **Pn** | **16 24 34.7** | **+0.7** |
| **PCRA** | **Pucara 2** | **3.99** | **268** | P | **Pn** | **16 24 33.0** | **-1.2** |
| **BONI** | **La Bonita** | **4.02** | **330** | P | **Pn** | **16 24 33.8** | **-0.7** |
| **BONI** | **La Bonita** | **4.02** | **330** | P | **Pn** | **16 24 34.0** | **-0.4** |
| **ZUMB** | **Zumba** | **4.05** | **243** | P | **Pn** | **16 24 33.7** | **-1.1** |
| **GONZ** | **Gonzanam** | **4.05** | **253** | P | **Pn** | **16 24 34.8** | **-0.2** |
| **MILO** | **Milagro-Astudi** | **4.11** | **281** | P | **Pn** | **16 24 35.4** | **-0.1** |
| **JUA2** | **San Juan 2** | **4.18** | **312** | P | **Pn** | **16 24 38.7** | **+1.9** |
| **TERV** | **Terraza Guagua** | **4.21** | **313** | P | **Pn** | **16 24 39.1** | **+1.9** |
| **PINO** | **Pino** | **4.22** | **313** | P | **Pn** | **16 24 39.3** | **+1.8** |
| **YAHU** | **Yahuarcocha** | **4.25** | **323** | P | **Pn** | **16 24 39.4** | **+1.7** |
| **IMBA** | **Imbabura, San** | **4.25** | **321** | Pn | **Pn** | **16 24 37.1** | **-0.7** |
| **PULU** | **Pululahua** | **4.27** | **315** | Pn | **Pn** | **16 24 38.2** | **+0.2** |
| **ACH2** | **Ecuador-Machal** | **4.30** | **267** | P | **Pn** | **16 24 36.0** | **-2.0** |
| **TULM** | **Tulcn-Chalpat** | **4.37** | **329** | Pn | **Pn** | **16 24 39.1** | **-0.3** |
| **TULM** | **Tulcn-Chalpat** | **4.37** | **329** | P | **Pn** | **16 24 39.5** | **+0.1** |
| **OTAV** | **Otavalo** | **4.39** | **318** | Pn | **Pn** | **16 24 40.2** | **+0.6** |
| **ARNL** | **Arenillas** | **4.58** | **264** | Pn | Pn | 16 24 38.5 | -3.1 |
| **ARNL** | **Arenillas** | **4.58** | **264** | P | **Pn** | **16 24 39.0** | **-2.6** |
| **FLOC** | **Florencia** | **4.60** | **358** | P | **Pn** | **16 24 42.0** | **0.0** |
| **FLOC** | **Florencia** | **4.60** | **358** | P | **Pn** | **16 24 41.9** | **-0.1** |
| **AMCR** | **Ecuador-Macara** | **4.62** | **253** | P | **Pn** | **16 24 40.2** | **-2.1** |
| **MCRA** | **Macar, Loja** | **4.62** | **253** | P | **Pn** | **16 24 39.6** | **-2.7** |
| **MCRA** | **Macar, Loja** | **4.62** | **253** | P | **Pn** | **16 24 39.9** | **-2.4** |
| **PAC1** | **Pacto, Paraso** | **4.64** | **315** | P | **Pn** | **16 24 43.6** | **+0.9** |
| **ISPG** | **Isla Puna-Puer** | **4.65** | **271** | P | **Pn** | **16 24 41.7** | **-1.0** |
| **CRUC** | **La Cruz** | **4.80** | **343** | P | **Pn** | **16 24 45.6** | **+0.6** |
| **MORR** | **Playas El Morr** | **4.84** | **275** | P | **Pn** | **16 24 43.6** | **-1.5** |
| **ATAH** | **Atahualpa** | **4.97** | **215** | P | **Pn** | **16 24 48.8** | **+1.5** |
| | 308nm,0.5s,baz=24,slow=9.4,SNR=288 | | | | | | |
| ATAH | | | | S | **Sn** | **16 25 41.9** | **-2.5** |
| | 397nm,0.4s,baz=72,slow=24,SNR=17 | | | | | | |
| **PECV** | **Mancha de Ca P** | **5.06** | **296** | P | **Pn** | **16 24 51.1** | **+2.9** |
| **GARC** | **Garzon, Huila** | **5.20** | **0** | P | **Pn** | **16 24 50.3** | **+0.2** |
| | 802nm,0.9s,24µm | | | | | | |
| **BBAC** | **Balboa, Cauca** | **5.32** | **341** | P | **Pn** | **16 24 52.6** | **+0.8** |
| | 1µm,0.8s,11µm | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **5.43** | **149** | Pn | **Pn** | **16 24 53.9** | **+0.9** |
| **CZSB** | **Cruzeiro do Su** | **5.43** | **149** | P | **Pn** | **16 24 54.7** | **+1.7** |
| | 570nm,0.8s,10µm | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **5.43** | **149** | *eP* | **Pn** | **16 24 54.0** | **+1.0** |
| **PPLP** | **Puerto Lpez** | **5.47** | **286** | P | **Pn** | **16 24 50.9** | **-2.6** |
| | 229nm,0.6s,4µm | | | | | | |
| **PPLP** | **Puerto Lpez** | **5.47** | **286** | P | **Pn** | **16 24 51.6** | **-1.9** |
| **SALI** | **Salina** | **5.54** | **279** | P | **Pn** | **16 24 53.1** | **-1.4** |
| **RVRD** | **Rio Verde** | **5.63** | **316** | P | **Pn** | **16 24 58.1** | **+2.4** |
| **POPC** | **Popayan, Colom** | **5.67** | **348** | P | **Pn** | **16 24 57.3** | **+0.9** |
| | 186nm,0.8s,6µm | | | | | | |
| **BETC** | **Betania** | **5.69** | **1** | P | **Pn** | **16 24 58.5** | **+2.0** |
| **TBTG** | **Tabatinga, AM** | **5.71** | **102** | Pn | **Pn** | **16 24 57.4** | **+0.7** |
| **TBTG** | **Tabatinga, AM** | **5.71** | **102** | P | **Pn** | **16 24 58.0** | **+1.3** |
| | 918nm,0.8s,12µm | | | | | | |
| **TBTG** | **Tabatinga, AM** | **5.71** | **102** | *eP* | **Pn** | **16 24 57.0** | **+0.4** |
| **TUMC** | **Tumaco** | **5.81** | **326** | P | Pn | 16 25 03.4 | +5.3 |
| | 413nm,0.9s | | | | | | |
| **JAMC** | **Jamundi, Valle** | **6.33** | **349** | P | **Pn** | **16 25 06.4** | **+1.2** |
| | 207nm,1.1s,4µm | | | | | | |
| **URMC** | **La Uribe, Meta** | **6.35** | **10** | P | **Pn** | **16 25 08.0** | **+2.6** |
| | 411nm,0.8s,7µm | | | | | | |
| **GR1C** | **Gorgona, Isla** | **6.57** | **336** | P | **Pn** | **16 25 11.2** | **+2.9** |
| **PRAC** | **Prado** | **6.74** | **5** | P | **Pn** | **16 25 11.8** | **+1.1** |
| | 216nm,0.6s,3µm | | | | | | |
| **ORTC** | **Ortega, Tolima** | **6.91** | **2** | P | **Pn** | **16 25 14.4** | **+1.5** |
| | 263nm,1.0s,3µm | | | | | | |
| **YOTC** | **Yotoco, Valle** | **7.03** | **353** | P | **Pn** | **16 25 15.6** | **+1.0** |
| | 84nm,0.7s,2µm | | | | | | |
| **VILC** | **Villavicencio,** | **7.34** | **14** | P | **Pn** | **16 25 20.4** | **+1.7** |
| **ROSC** | **El Rosal** | **7.92** | **9** | Pn | **Pn** | **16 25 28.3** | **+1.5** |
| **ROSC** | **El Rosal** | **7.92** | **9** | P | **Pn** | **16 25 25.2** | **-1.6** |
| | 9.9nm,0.4s,baz=198,slow=20,SNR=1.4 | | | | | | |
| ROSC | | | | LR | LR | 16 29 18.2 | |
| | comp=Z,79nm,18.9s,baz=103,slow=44 | | | | | | |
| **PLMC** | **San Jos del P** | **7.94** | **354** | P | **Pn** | **16 25 27.8** | **+1.1** |
| | 153nm,1.3s,2µm | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **8.86** | **357** | P | **Pn** | **16 25 39.6** | **+0.4** |
| | 46nm,0.8s,1µm | | | | | | |
| **NNA** | **Nana** | **8.98** | **188** | Pn | **Pn** | **16 25 42.2** | **+1.5** |
| **NNA** | **Nana** | **8.98** | **188** | P | **Pn** | **16 25 41.9** | **+1.3** |
| | 86nm,0.3s,baz=296,slow=6.7,SNR=41 | | | | | | |
| NNA | | | | S | **Sn** | **16 27 14.2** | **-6.1** |
| | 213nm,0.5s,baz=278,slow=23,SNR=10.0 | | | | | | |
| **RUSC** | **La Rusia** | **9.20** | **15** | Pn | **Pn** | **16 25 44.8** | **+0.8** |
| **RUSC** | **La Rusia** | **9.20** | **15** | P | **Pn** | **16 25 46.0** | **+2.0** |
| | 79nm,0.8s,1µm | | | | | | |
| **DBBC** | **Dabeiba** | **10.02** | **356** | P | **Pn** | **16 25 58.4** | **+3.8** |
| **TAMC** | **Tame, Arauca** | **10.12** | **22** | P | **Pn** | **16 25 55.2** | **-0.7** |
| | 94nm,1.0s,1µm | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **10.49** | **4** | P | Pn | 16 26 13.4 | +13 |
| **PAMC** | **Pamplona, Colo** | **10.69** | **15** | P | Pn | 16 26 15.4 | +12 |
| **TEFE** | **Tefe** | **10.87** | **93** | *eP* | **Pn** | **16 26 04.9** | **-0.9** |
| **APAC** | **Apartado, Choc** | **10.93** | **354** | P | Pn | 16 26 11.6 | +5.1 |
| | 76nm,0.8s | | | | | | |
| **OCAC** | **Ocana** | **11.42** | **11** | P | **P** | **16 26 22.4** | **+1.0** |
| | 256nm,0.6s,2µm | | | | | | |
| **ETMB** | **Extrema** | **11.43** | **127** | Pn | **Pn** | **16 26 11.2** | **-2.0** |
| **ETMB** | **Extrema** | **11.43** | **127** | *eP* | **Pn** | **16 26 11.2** | **-2.0** |
| **CACAO** | **El Cacao, Vera** | **11.62** | **333** | P | **Pn** | **16 26 19.8** | **+4.1** |
| | 61nm,1.0s | | | | | | |
| **AZU** | **Azuero** | **11.77** | **336** | P | **Pn** | **16 26 18.2** | **+0.6** |
| | 88nm,1.4s,1µm | | | | | | |
| **GMAL** | **Guarumal, Vera** | **12.16** | **332** | P | **Pn** | **16 26 24.3** | **+1.5** |
| | 44nm,1.4s | | | | | | |
| **SDV** | **Santo Domingo** | **12.81** | **22** | Pn | **Pn** | **16 26 29.5** | **-1.9** |
| **SDV** | **Santo Domingo** | **12.81** | **22** | P | **Pn** | **16 26 29.0** | **-2.4** |
| | 8.4nm,0.4s,baz=176,slow=8.9,SNR=2.2 | | | | | | |
| **SDV** | **Santo Domingo** | **12.81** | **22** | *eP* | **Pn** | **16 26 32.9** | **+1.6** |
| **SJCC** | **San Jacinto, C** | **12.86** | **1** | P | **P** | **16 26 38.3** | **+1.0** |
| | 112nm,0.8s,1µm | | | | | | |
| **ARGC** | **Ariguani, Magd** | **12.88** | **6** | P | **P** | **16 26 38.0** | **+0.5** |
| | 180nm,0.7s,1µm | | | | | | |
| **SAML** | **Samuel** | **13.59** | **116** | Pn | **Pn** | **16 26 38.4** | **-2.7** |
| **SAML** | **Samuel** | **13.59** | **116** | *eP* | **Pn** | **16 26 39.0** | **-2.2** |
| **BRU2** | **Volcan** | **13.77** | **329** | Pn | **Pn** | **16 26 43.8** | **+0.1** |
| **BAUV** | **El Baul** | **14.04** | **32** | Pn | **Pn** | **16 26 45.4** | **-1.6** |
| **CRJC** | **Cerrejon, Guaj** | **14.22** | **11** | P | **P** | **16 26 51.2** | **-1.2** |
| | 191nm,0.9s,2µm | | | | | | |
| **MACA** | **Manacapuru-AM** | **14.81** | **91** | Pn | **Pn** | **16 26 54.7** | **-1.9** |
| **MACA** | **Manacapuru-AM** | **14.81** | **91** | *eP* | **Pn** | **16 26 55.7** | **-0.9** |
| **LPAZ** | **La Paz** | **15.03** | **152** | Pn | **Pn** | **16 26 59.1** | **-0.9** |

PAULI IAmb IAmb 16 30 40.8
comp=Z,18nm,0.8s
**KMSC Kings Mountain 38.38 352** IAmb IAmb 16 31 29.6
comp=Z,25nm,0.9s
**X51A Calhoun 38.43 348** IAmb IAmb 16 30 42.8
comp=Z,32nm,1.1s
**833A Chaparral WMA, 38.73 325** P **P** **16 30 44.9 +0.2**
833A IAmb IAmb 16 30 46.5
comp=Z,30nm,0.8s
**833A Chaparral WMA, 38.73 325** P **P** **16 30 45.3 +0.6**
baz=140,SNR=6.4
**W52A Murphy 38.75 349** IAmb IAmb 16 30 45.8
comp=Z,21nm,0.8s
**V58A Windy Hill, Pi 38.78 355** IAmb IAmb 16 30 45.8
comp=Z,51nm,1.4s
**X48A Hartselle 38.85 345** IAmb IAmb 16 30 45.3
comp=Z,20nm,0.6s
**V55A Taylorsville 39.06 353** IAmb IAmb 16 31 49.1
comp=Z,19nm,0.9s
**V53A Saluda 39.12 351** IAmb IAmb 16 30 48.8
comp=Z,16nm,0.8s
**CPCT Cooper Cave 39.21 348** IAmb IAmb 16 30 49.5
comp=Z,22nm,0.9s
**SWET Sewanee 39.30 346** IAmb IAmb 16 30 49.6
comp=Z,21nm,0.8s
**U56A King 39.45 354** P **P** **16 30 50.4 -0.2**
**OXF Oxford 39.58 342** IAmb IAmb 16 30 51.9
comp=Z,24nm,0.8s
**PLAL Pickwick Lake 39.62 344** IAmb IAmb 16 30 51.9
comp=Z,24nm,0.8s
**237A Washetta, Mont 39.83 333** P **P** **16 30 53.1 -0.7**
237A IAmb IAmb 16 30 54.6
comp=Z,23nm,0.8s
**TZTN Tazewell 40.09 350** P **P** **16 30 55.2 -0.7**
TZTN IAmb IAmb 16 30 56.5
comp=Z,27nm,0.8s
**BLA Blacksburg 40.31 354** IAmb IAmb 16 30 59.3
comp=Z,30nm,1.0s
**WVT Waverly 40.64 345** P **P** **16 30 58.0 -2.3**
WVT IAmb IAmb 16 30 59.5
comp=Z,21nm,0.7s
**WVT Waverly 40.64 345** P **P** **16 30 58.8 -1.6**
WVT pP **pP** **16 31 32.1 +0.7**
WVT sP **sP** **16 31 50.5 +3.3**
**S57A Dark Hollow, R 40.73 356** IAmb IAmb 16 31 02.2
comp=Z,37nm,0.9s
**UALR University of 40.81 339** IAmb IAmb 16 31 01.7
comp=Z,29nm,0.7s
**BRDY Brady 40.81 329** P **P** **16 31 01.0 -1.0**
**WHAR Wooly Hollow 41.25 339** IAmb IAmb 16 31 05.2
comp=Z,27nm,0.9s
**LCAR Lake Charles 41.57 341** IAmb IAmb 16 31 07.7
comp=Z,31nm,1.0s
**PARMO Parma 41.68 343** P **P** **16 31 07.1 -1.7**
**PLPT Palo Pinto 41.69 331** IAmb IAmb 16 31 10.4
comp=Z,28nm,0.7s
**FCAR Ozark Folk Cen 41.73 340** IAmb IAmb 16 31 08.7
comp=Z,19nm,0.9s
**FW03 Perrin-Whitt E 41.76 331** IAmb IAmb 16 31 10.9
comp=Z,20nm,0.8s
**X37A Clayton 41.84 335** IAmb IAmb 16 31 11.0
comp=Z,20nm,1.0s
**R50A Paris 41.92 350** P **P** **16 31 09.6 -1.2**
R50A IAmb IAmb 16 31 11.1
comp=Z,19nm,0.7s
**PBMO Poplar Bluff 41.99 342** IAmb IAmb 16 31 10.9
comp=Z,33nm,0.9s
**TXAR Lajitas Array 42.01 322** P **P** **16 31 12.2 +0.4**
**TXAR Lajitas Array 42.01 322** P **P** **16 31 12.6 +0.8**
comp=Z,4.4nm,0.8s,baz=139,slow=8.2,SNR=29
TXAR PcP **PcP** **16 33 04.9 +0.5**
comp=Z,3.0nm,0.8s,baz=152,slow=5.1,SNR=8.2
comp=Z,4.4nm,0.8s
**Q56A Snyder Ridge, 42.02 356** IAmb IAmb 16 31 13.5
comp=Z,36nm,1.2s
**R49A Shelbyville 42.09 349** IAmb IAmb 16 31 12.2
comp=Z,19nm,0.8s
**Q54A Coxs Mills 42.11 354** IAmb IAmb 16 31 13.4
comp=Z,24nm,0.7s
**ABTX Abilene, Hawle 42.21 329** IAmb IAmb 16 31 14.8
comp=Z,29nm,0.8s
**CGM3 Cape Girardeau 42.24 343** IAmb IAmb 16 31 12.9
comp=Z,29nm,1.1s
**Q52A Bidwell 42.26 352** IAmb IAmb 16 31 14.4
comp=Z,27nm,0.9s
**WCI Wyandotte Cave 42.26 347** P **P** **16 31 12.3 -1.2**
**T42A Van Buren 42.43 341** IAmb IAmb 16 31 14.2
comp=Z,27nm,0.7s
**SGCY Sterling City 42.44 327** P **P** **16 31 14.2 -1.0**
SGCY IAmb IAmb 16 31 16.6
comp=Z,29nm,0.9s
**WTFS Witchita Falls 42.54 331** IAmb IAmb 16 31 17.2
comp=Z,33nm,0.9s
**P53A Whipple 42.67 353** IAmb IAmb 16 31 17.9
comp=Z,36nm,0.8s
**MCWV Mont Chateau 42.68 355** P **P** **16 31 16.9 0.0**
MCWV IAmb IAmb 16 31 18.4
comp=Z,33nm,0.9s
**ALPN Alpine 42.73 323** IAmb IAmb 16 31 19.6
comp=Z,16nm,0.8s
**HHAR Hobbs 42.74 338** IAmb IAmb 16 31 17.2
comp=Z,31nm,0.9s
**SLBS Sierra La Lagu 42.78 310** P **P** **16 31 20.6 +2.5**
SLBS pP **pP** **16 31 52.5 +3.0**
**P52A Corning 42.90 352** P **P** **16 31 18.3 -0.4**
baz=170
**MGMO Mountain Grove 42.93 340** IAmb IAmb 16 31 18.7
comp=Z,41nm,0.9s
**X34A Smith Ranch, M 42.93 333** IAmb IAmb 16 31 20.2
comp=Z,19nm,0.6s
**APMT Aspermont 43.01 329** IAmb IAmb 16 31 20.8
comp=Z,15nm,0.6s
**U38A Gravette 43.05 338** IAmb IAmb 16 31 19.1
comp=Z,12nm,0.7s
**RLO Rose Lookout 43.06 337** IAmb IAmb 16 31 20.2
comp=Z,39nm,1.1s
**TUL3 Leonard 43.15 336** IAmb IAmb 16 31 20.9
comp=Z,23nm,0.8s
**OLIL Olney 43.17 346** IAmb IAmb 16 31 20.2
comp=Z,36nm,0.9s
**P49A Miami Univ. Ec 43.21 350** IAmb IAmb 16 31 20.6
comp=Z,24nm,1.0s
**P49A Miami Univ. Ec 43.21 350** P **P** **16 31 19.6 -1.6**
baz=166
**SN07 Snyder 07 43.22 328** IAmb IAmb 16 31 23.0
comp=Z,15nm,0.7s
**O54A Avella 43.25 355** P **P** **16 31 21.1 -0.4**
O54A IAmb IAmb 16 31 23.4
comp=Z,20nm,0.8s
**FNO Franklin 43.28 334** IAmb IAmb 16 31 22.3
comp=Z,22nm,0.6s
**DEOK Depew 43.38 335** IAmb IAmb 16 31 22.9
comp=Z,46nm,1.2s
**O53A New Philadelph 43.40 354** IAmb IAmb 16 31 23.8
comp=Z,41nm,1.2s
**O53A New Philadelph 43.40 354** P **P** **16 31 22.3 -0.4**
baz=172
**CCM Cathedral Cave 43.42 342** P **P** **16 31 20.8 -2.1**
CCM IAmb IAmb 16 31 22.1
comp=Z,24nm,0.7s
**CCM Cathedral Cave 43.42 342** P **P** **16 31 21.2 -1.7**
CCM PcP **PcP** **16 33 09.0 +0.2**
**WMOK Wichita Mounta 43.48 332** IAmb IAmb 16 31 24.1
comp=Z,22nm,0.8s
**SSPA Standing Stone 43.52 357** P **P** **16 31 23.3 -0.4**
SSPA IAmb IAmb 16 31 25.1
comp=Z,28nm,0.8s
**SSPA Standing Stone 43.52 357** P **P** **16 31 24.0 +0.3**
SSPA PcP **PcP** **16 33 09.0 -0.1**
**PECS Pecos 43.59 324** P **P** **16 31 25.1 +0.7**
PECS IAmb IAmb 16 31 26.5
comp=Z,40nm,1.5s
**OK031 S. Brethren Rd 43.62 335** IAmb IAmb 16 31 24.8
comp=Z,31nm,0.8s
**OK052 Battle Ridge R 43.64 335** IAmb IAmb 16 31 25.0
comp=Z,36nm,0.9s
**QUOK Quay 43.75 335** P **P** **16 31 24.8 -0.8**
QUOK IAmb IAmb 16 31 25.8
comp=Z,41nm,1.2s
**OK029 Liberty Lake 43.76 334** IAmb IAmb 16 31 25.9
comp=Z,41nm,1.0s
**S39A Bolivar 43.77 339** IAmb IAmb 16 31 25.2
comp=Z,26nm,1.1s
**O49A Covington 43.78 350** IAmb IAmb 16 31 25.5
comp=Z,22nm,0.9s
**VHRN Van Horn 43.84 322** IAmb IAmb 16 31 28.6
comp=Z,22nm,0.9s

**N53A Lisbon 43.91 354** P **P** **16 31 26.9 +0.1**
N53A IAmb IAmb 16 31 27.7
comp=Z,40nm,0.9s
**OK048 Pawnee Station 44.06 335** P **P** **16 31 27.0 -1.1**
OK048 IAmb IAmb 16 31 28.5
comp=Z,31nm,1.1s
**OK051 E0350 and S346 44.09 335** IAmb IAmb 16 31 28.8
comp=Z,31nm,0.7s
**P43A Skaggs, Pawnee 44.39 344** IAmb IAmb 16 31 30.1
comp=Z,47nm,1.1s
**BLOK Blackwell 44.47 335** IAmb IAmb 16 31 31.9
comp=Z,21nm,0.8s
**N49A Columbus Grove 44.47 351** IAmb IAmb 16 31 31.1
comp=Z,21nm,0.8s
**SFIN Lafayette 44.50 347** IAmb IAmb 16 31 30.1
comp=Z,23nm,0.5s
**M53A WI Miller and 44.52 354** P **P** **16 31 31.7 +0.1**
baz=172
**CROK Carrier 44.58 334** IAmb IAmb 16 31 32.6
comp=Z,35nm,0.9s
**N47A Urbana 44.70 349** IAmb IAmb 16 31 32.4
comp=Z,38nm,0.8s
**KAN13 South Haven SW 44.79 335** IAmb IAmb 16 31 34.4
comp=Z,18nm,0.9s
**ELIS Ellis County 44.87 332** P **P** **16 31 34.7 +0.1**
**OK038 West end E0370 44.90 333** IAmb IAmb 16 31 35.1
comp=Z,31nm,1.0s
**OK032 Salt Plains WL 44.93 334** IAmb IAmb 16 31 35.6
comp=Z,42nm,1.1s
**KAN14 Manchester OK 44.95 334** IAmb IAmb 16 31 35.5
comp=Z,28nm,0.8s
**KAN09 Caldwell North 44.96 335** IAmb IAmb 16 31 35.7
comp=Z,24nm,0.7s
**P40A Paris 45.02 342** IAmb IAmb 16 31 34.7
comp=Z,17nm,0.9s
**AMTX Amarillo 45.03 329** IAmb IAmb 16 31 37.1
comp=Z,23nm,0.8s
**KAN01 Argonia South 45.03 335** P **P** **16 31 34.1 -1.6**
KAN01 IAmb IAmb 16 31 36.4
comp=Z,29nm,0.8s
**KAN08 Anthony NE Sta 45.18 335** IAmb IAmb 16 31 37.6
comp=Z,33nm,0.8s
**P38A Dawn 45.58 340** IAmb IAmb 16 31 39.3
comp=Z,32nm,0.7s
**J58A Remsen 46.19 0** P **P** **16 31 44.6 -0.2**
**KSU1 Kansas State U 46.23 337** IAmb IAmb 16 31 45.0
comp=Z,43nm,1.0s
**J59A Pisco 46.31 1** IAmb IAmb 16 31 47.3
comp=Z,22nm,0.9s
**R32A Long Quarter, 46.51 335** P **P** **16 31 46.7 -0.7**
R32A IAmb IAmb 16 31 48.0
comp=Z,23nm,0.8s
**121A Cookes Peak, D 46.77 322** P **P** **16 31 51.5 +1.8**
baz=133,SNR=13
**RTBA Rita Blanca 46.78 330** IAmb IAmb 16 31 51.2
comp=Z,21nm,1.1s
**DELO Deloro Mine 47.39 358** P **P** **16 31 53.5 -0.5**
**ANMO Albuquerque 47.66 325** P **P** **16 31 57.6 +1.0**
ANMO pP **pP** **16 32 30.6 +2.1**
**WBO Williamsburg 47.83 0** IAmb IAmb 16 31 58.1
comp=Z,35nm,0.9s
**T25A Trinidad 48.17 329** IAmb IAmb 16 32 02.7
comp=Z,20nm,0.9s
**T25A Trinidad 48.17 329** P **P** **16 32 01.8 +1.3**
baz=140,SNR=12
**I42A Draeger Farm, 48.25 347** P **P** **16 31 59.2 -1.5**
**TUC Tucson 48.52 319** P **P** **16 32 02.4 -0.8**
**TUC Tucson 48.52 319** P **P** **16 32 04.2 +1.0**
TUC pP **pP** **16 32 36.8 +1.6**
TUC PcP **PcP** **16 33 27.9 +1.0**
**I40A Norwalk 48.66 345** IAmb IAmb 16 32 03.2
comp=Z,27nm,1.1s
**KSCO Kaye Shedlock' 48.75 332** IAmb IAmb 16 32 06.4
comp=Z,40nm,1.2s
**TRQ Mont Tremblant 49.06 1** P **P** **16 32 05.9 -1.1**
TRQ IAmb IAmb 16 32 32.5
comp=Z,53nm,1.8s
**SDCO Great Sand Dun 49.20 328** IAmb IAmb 16 32 10.4
comp=Z,19nm,1.0s
**214A Organ Pipe Nat 49.65 317** IAmb IAmb 16 32 14.0
comp=Z,17nm,0.9s
**214A Organ Pipe Nat 49.65 317** P **P** **16 32 12.8 +1.1**
baz=127
**W18A Petrified Fore 49.71 323** P **P** **16 32 12.5 +0.3**
**W18A Petrified Fore 49.71 323** P **P** **16 32 13.7 +1.4**
baz=132,SNR=12
**S22A 4UR Ranch, Cre 49.90 327** P **P** **16 32 14.9 +1.1**
baz=137
**Q24A Divide 49.94 330** IAmb IAmb 16 32 15.6
comp=Z,33nm,1.6s
**Q24A Divide 49.94 330** P **P** **16 32 14.4 +0.4**
baz=140
**ECSD EROS Data Cent 50.28 340** IAmb IAmb 16 32 15.4
comp=Z,16nm,0.8s
**X16A Lo Mia Camp, P 50.30 321** IAmb IAmb 16 32 19.2
comp=Z,14nm,0.9s
**MVCO Mesa Verde 50.44 326** IAmb IAmb 16 32 19.5
comp=Z,40nm,1.9s
**SPMN Marine on St. 50.47 344** P **P** **16 32 15.1 -2.5**
**BRIGG Briggsdale 50.78 332** P **P** **16 32 20.9 +0.7**
**LDAQ Lac Daran 50.93 4** P **P** **16 32 19.9 -1.2**
**WUAZ Wupatki 50.97 322** IAmb IAmb 16 32 24.7
comp=Z,23nm,1.1s
**Y14A Wickenburg 50.99 319** IAmb IAmb 16 32 23.9
comp=Z,11nm,0.7s
**VTX Valle De La Tr 51.38 315** P **P** **16 32 25.9 +1.2**
**E38A The Farm, Brul 51.43 346** IAmb IAmb 16 32 24.0
comp=Z,30nm,1.1s
**N23A Red Feather La 51.81 331** P **P** **16 32 28.6 +0.7**
baz=140
**ESJX Sierra Juarez 51.84 316** P **P** **16 32 29.0 +0.8**
**F33A 5 Mile Ranch, 52.05 342** IAmb IAmb 16 32 29.1
comp=Z,19nm,1.1s
**RMX La Rumorosa 52.27 316** P **P** **16 32 31.0 -0.3**
**PKCU Pink Cliffs 52.81 323** IAmb IAmb 16 32 37.9
comp=Z,22nm,1.2s
**SRU San Rafael Swe 52.90 326** P **P** **16 32 35.5 -0.5**
SRU IAmb IAmb 16 32 37.5
comp=Z,32nm,1.7s
**TPFO Pinon Flats 53.10 317** P **P** **16 32 38.5 +1.1**
baz=125
**PFO Pinyon Flats O 53.10 317** P **P** **16 32 38.7 +1.2**
PFO PcP **PcP** **16 33 45.1 +1.1**
**P18A Preston Nutter 53.11 327** IAmb IAmb 16 32 39.5
comp=Z,24nm,1.8s
**Q16A Castle Valley 53.13 325** P **P** **16 32 38.3 +0.6**
**P17A Butcher Ranch, 53.28 326** IAmb IAmb 16 32 40.2
comp=Z,9.7nm,0.8s
**V12A Nelson 53.29 320** IAmb IAmb 16 32 40.9
comp=Z,18nm,0.9s
**GWY Greenwater Val 54.74 319** P **P** **16 32 49.9 +0.5**
**TCUT Toone Canyon 54.79 327** IAmb IAmb 16 32 51.2
comp=Z,15nm,0.6s
**DUG Dugway, Tooele 54.93 325** IAmb IAmb 16 32 52.7
comp=Z,40nm,1.8s
**PDAR Pinedale Array 55.00 330** P **P** **16 32 50.5 -0.7**
**PDAR Pinedale Array 55.00 330** P **P** **16 32 51.0 -0.2**
comp=Z,5.9nm,1.0s,baz=141,slow=9.6,SNR=27
PDAR PcP **PcP** **16 33 51.0 -0.2**
comp=Z,1.4nm,0.6s,baz=140,slow=6.8,SNR=5.1
comp=Z,5.9nm,1.0s
**HWUT Hardware Ranch 55.21 327** IAmb IAmb 16 32 53.7
comp=Z,8.3nm,0.7s
**Q12A Willow Creek R 55.35 323** IAmb IAmb 16 32 55.8
comp=Z,11nm,1.0s
**R11B Troy Canyon, C 55.37 322** P **P** **16 32 55.2 +1.4**
baz=128,SNR=12
**GMN Gold Mountain 55.79 320** P **P** **16 32 57.1 +0.1**
**ULM Lac du Bonnet 55.91 344** P **P** **16 32 55.2 -2.0**
comp=Z,22nm,0.7s,baz=158,slow=7.1,SNR=26
comp=Z,22nm,0.7s
**LOHW Long Hollow 56.14 330** IAmb IAmb 16 33 00.6
comp=Z,12nm,1.3s
**TPH Tonopah 56.23 321** IAmb IAmb 16 33 01.5
comp=Z,18nm,0.9s
**IMW Indian Meadow 56.51 330** IAmb IAmb 16 33 04.1
comp=Z,17nm,1.4s
**FLWY Flagg Ranch 56.52 330** IAmb IAmb 16 33 03.6
comp=Z,24nm,1.2s
**NV11 Mina Array Sit 57.03 321** P **P** **16 33 05.7 +0.1**
NV11 IAmb IAmb 16 33 07.7
comp=Z,11nm,0.8s
**OMMB Old Mammoth Mi 57.09 319** IAmb IAmb 16 33 08.2
comp=Z,12nm,0.9s
**NVAR Mina Array Bea 57.12 321** P **P** **16 33 06.3 0.0**
**NVAR Mina Array Bea 57.12 321** P **P** **16 33 07.4 +1.0**
comp=Z,10nm,0.7s,baz=126,slow=6.8,SNR=70

NVAR pP **pP** **16 33 40.1 +0.8**
comp=Z,3.6nm,0.8s,baz=129,slow=5.6,SNR=4.3
NVAR LR LR 17 00 06.3
comp=Z,37nm,18.3s,baz=74,slow=38
comp=Z,10nm,0.7s
**LHV Little Huntoon 57.14 320** IAmb IAmb 16 33 08.8
comp=Z,16nm,1.1s
**MDPB Devils Postpil 57.16 319** IAmb IAmb 16 33 08.6
comp=Z,11nm,0.9s
**PMPB Monarch Peak 57.51 317** IAmb IAmb 16 33 10.7
comp=Z,15nm,1.0s
**BMN Battle Mountai 57.66 323** IAmb IAmb 16 33 11.6
comp=Z,12nm,0.8s
**BOZ Bozeman (W) 58.08 331** P **P** **16 33 12.6 -0.2**
BOZ IAmb IAmb 16 33 14.2
comp=Z,14nm,0.9s
**SCHQ Schefferville 58.12 6** P **P** **16 33 10.8 -1.9**
comp=Z,3.6nm,0.8s,baz=194,slow=4.2,SNR=3.2
SCHQ PcP **sP** **16 34 01.2 +0.1**
comp=Z,5.4nm,0.7s,baz=225,slow=4.3,SNR=5.9
comp=Z,3.6nm,0.8s
**PNTR Pine Nut 58.33 320** IAmb IAmb 16 33 16.9
comp=Z,9.4nm,0.8s
**EMB Emerald Bay 58.58 320** P **P** **16 33 16.7 +0.1**
**MFID Camas Ranch 58.76 327** P **P** **16 33 17.5 0.0**
**EGMT Eagleton 59.00 334** IAmb IAmb 16 33 20.1
comp=Z,18nm,0.9s
**WVOR Wild Horse Val 59.73 324** IAmb IAmb 16 33 25.7
comp=Z,14nm,1.1s
**ORV Oroville 59.80 320** IAmb IAmb 16 33 27.0
comp=Z,21nm,1.1s
**MSO Missoula 60.08 331** IAmb IAmb 16 33 28.0
comp=Z,16nm,1.1s
**J08A Circle Bar Ran 60.20 325** P **P** **16 33 27.2 -0.2**
J08A IAmb IAmb 16 33 28.6
comp=Z,16nm,1.4s
**LRDM Redding Peak 60.29 321** P **P** **16 33 27.3 -0.7**
**O02D Mt. Diablo Mer 60.98 320** P **P** **16 33 31.7 -1.0**
**F10A Beach Ranch, E 61.18 328** IAmb IAmb 16 33 35.5
comp=Z,11nm,1.1s
**I07A Izee 61.24 325** IAmb IAmb 16 33 36.3
comp=Z,18nm,0.9s
**FFC Flin Flon 61.60 343** P **P** **16 33 35.0 -1.4**
**FFC Flin Flon 61.60 343** P **P** **16 33 35.8 -0.7**
**J05D Fort Rock, OR 61.77 324** P **P** **16 33 37.9 -0.1**
**YBH Yreka Blue Hor 61.78 321** LR LR 17 01 15.6
comp=Z,18nm,18.2s,baz=118,slow=37
**L04D Klamath Falls 61.80 322** IAmb IAmb 16 33 39.4
comp=Z,19nm,0.9s
**KMPM Mount Pierce 61.96 320** P **P** **16 33 39.5 +0.2**
KMPM IAmb IAmb 16 33 41.6
comp=Z,15nm,0.8s
**KSXB Camp Six Broad 62.56 321** IAmb IAmb 16 33 45.8
comp=Z,19nm,1.0s
**G06A Carlson Farm, 62.58 326** IAmb IAmb 16 33 45.8
comp=Z,17nm,1.1s
**NEW Newport 62.64 330** IAmb IAmb 16 33 44.6
comp=Z,8.3nm,0.8s
**LON Longmire 64.14 326** IAmb IAmb 16 33 54.9
comp=Z,8.7nm,0.8s
**GNW Green Mountain 65.19 327** IAmb IAmb 16 34 01.4
comp=Z,12nm,1.1s
**NLWA Neilton Lookou 65.66 326** IAmb IAmb 16 34 05.1
comp=Z,15nm,1.0s
**LIC Lamto 70.97 82⇓** *eP* **P** **16 34 36.4 -0.7**
comp=Z,26nm,0.8s
**TIC Toumodi 71.02 82⇑** *eP* **P** **16 34 37.0 -0.4**
comp=Z,27nm,0.9s
**DBIC Dimbokro 71.19 82** P **P** **16 34 37.2 -1.1**
**DBIC Dimbokro 71.19 82** P **P** **16 34 38.0 -0.3**
comp=Z,25nm,0.8s,baz=251,slow=5.5,SNR=23
comp=Z,25nm,0.8s
**DBIC Dimbokro 71.19 82** P **P** **16 34 37.8 -0.5**
**KIC Kosan Boka 71.27 82** *eP* **P** **16 34 38.1 -0.8**
comp=Z,43nm,0.8s
**YKA Yellowknife Ar 71.75 342** P **P** **16 34 39.6 -1.1**
comp=Z,1.9nm,0.6s,baz=134,slow=4.8,SNR=5.2
comp=Z,1.9nm,0.6s
**TOAD Toad River Com 73.11 336** P **P** **16 34 49.1 +0.2**
baz=127
**KOTAN Kotaneelee Air 73.43 337** P **P** **16 34 51.7 +1.0**
baz=129
**PFVI Vila Bisbo 73.49 50** *eP* **P** **16 34 52.3 +0.7**
**AVE Averroes 73.55 54** P **P** **16 34 52.1 +0.1**
**MORF Marmelete 73.67 50** IAmb IAmb 16 34 54.4
comp=Z,56nm,1.1s
**MORF Marmelete 73.67 50** *eP* **P** **16 34 53.2 +0.5**
comp=Z,64nm,1.1s
**MORF Marmelete 73.67 50** *eP* **P** **16 34 52.6 0.0**
MORF IAmb IAmb 16 34 54.7
comp=Z,56nm,1.1s
**PTEO Sao Teotonio 73.69 50** *eP* **P** **16 34 53.6 +0.9**
comp=Z,35nm,1.8s
**PNCL Nicolau / Gran 74.00 49** *eP* **P** **16 34 54.9 +0.4**
comp=Z,30nm,1.2s
**V35K Ketchikan 74.04 330** P **P** **16 34 55.3 +0.9**
baz=120
**PBDV Barranco-do-Ve 74.21 50** *eP* **P** **16 34 56.1 +0.3**
**PSBE So Bento 74.22 48** *eP* **P** **16 34 55.8 0.0**
**PCVE Castro Verde 74.24 50** *eP* **P** **16 34 56.6 +0.7**
comp=Z,31nm,1.4s
**T35M Bob Quinn 74.25 332** P **P** **16 34 56.8 +1.2**
baz=122
**PVAQ Vaqueiros 74.42 50** *eP* **P** **16 34 57.8 +0.9**
**PBEJ Beja 74.48 49** *eP* **P** **16 34 57.8 +0.5**
**PMTG Montargil 74.51 48** *eP* **P** **16 34 57.0 -0.4**
comp=Z,21nm,1.0s
**PCAS Casmilo, Conde 74.60 47** *eP* **P** **16 34 57.9 -0.1**
comp=Z,27nm,1.1s
**COI Coimbra 74.71 47** *eP* **P** **16 34 59.3 +0.7**
**DLBC Dease Lake 74.93 334** P **P** **16 35 00.5 +0.9**
baz=122,SNR=5.9
**S34M Telegraph Cree 75.14 333** P **P** **16 35 01.6 +1.0**
baz=121
**PBAR Barrancos 75.15 49** *eP* **P** **16 35 01.5 +0.4**
comp=Z,16nm,1.5s
**WRGLY Wrigley 75.18 340** P **P** **16 35 01.0 +0.3**
WRGLY IAmb IAmb 16 35 02.1
comp=Z,26nm,1.1s
**WRGLY Wrigley 75.18 340** P **P** **16 35 01.0 +0.3**
baz=130,SNR=5.3
**PMRV Marv??o 75.23 48** *eP* **P** **16 35 01.1 -0.5**
**PVIS Viseu 75.24 47** *eP* **P** **16 35 01.3 -0.4**
**PCBR Castelo Branco 75.29 48** *eP* **P** **16 35 01.4 -0.5**
comp=Z,14nm,1.0s
**WTLY Watson Lake, Y 75.33 335** P **P** **16 35 02.5 +0.8**
baz=124
**PGAV Gavieira, Arco 75.35 45** *eP* **P** **16 35 01.9 -0.4**
**MTE Manteigas 75.40 47** IAmb IAmb 16 35 02.9
comp=Z,19nm,1.0s
**MTE Manteigas 75.40 47** *eP* **P** **16 35 02.1 -0.5**
comp=Z,24nm,1.1s
**POLO Lamas de Olo 75.51 46** *eP* **P** **16 35 02.8 -0.5**
comp=Z,9.6nm,1.2s
**PVRL Vila Real 75.54 46** *eP* **P** **16 35 03.0 -0.3**
comp=Z,25nm,1.1s
**R33M Jennings River 75.85 334** IAmb IAmb 16 35 07.0
comp=Z,15nm,0.9s
**R33M Jennings River 75.85 334** P **P** **16 35 05.9 +1.0**
baz=122,SNR=9.1
**TGTN Hyland Airport 75.92 337** P **P** **16 35 06.5 +1.4**
baz=125
**MVO Moncorvo 76.00 46** *eP* **P** **16 35 05.5 -0.5**
comp=Z,32nm,1.1s
**Q32M Nakina River 76.20 333** P **P** **16 35 08.4 +1.4**
baz=121
**PBRG Braganca 76.39 46** *eP* **P** **16 35 07.5 -0.7**
comp=Z,14nm,2.4s
**S32K Killisnoo 76.53 332** P **P** **16 35 09.7 +1.2**
baz=118,SNR=5.3
**R32K Eaglecrest 76.89 332** P **P** **16 35 11.0 +0.5**
baz=118
**P33M Teslin, Yukon 77.08 334** P **P** **16 35 12.6 +0.9**
baz=120,SNR=8.0
**P32M Atlin 77.16 334** P **P** **16 35 12.9 +0.8**
baz=119
**PAB San Pablo 77.53 49** P **P** **16 35 13.8 -0.8**
**MMPY Sheldon Lake, 77.70 337** P **P** **16 35 16.2 +1.1**
baz=122,SNR=7.5
**ESDC Sonseca Array 77.86 48** P **P** **16 35 15.5 -0.9**
**ESDC Sonseca Array 77.86 48** P **P** **16 35 16.2 -0.2**
comp=Z,4.2nm,1.0s,baz=257,slow=6.2,SNR=31
comp=Z,4.2nm,1.0s
**WHY Whitehorse 78.19 334** P **P** **16 35 18.5 +0.6**
baz=118
**TORD Torodi Ar. Bea 78.26 76** P **P** **16 35 17.9 -1.2**
**TORD Torodi Ar. Bea 78.26 76** P **P** **16 35 18.2 -0.8**

comp=Z,4.3nm,0.6s,baz=283,slow=5.5,SNR=49
TORD pP **pP** **16 35 53.5 -0.4**
comp=Z,0.9nm,0.4s,baz=281,slow=5.2,SNR=2.1
comp=Z,4.3nm,0.6s
**PLBC** **Pleasant Camp** **78.29 333** P **P** **16 35 19.5 +1.2**
baz=117
**FARO** **Faro, Yukon** **78.33 336** P **P** **16 35 19.9 +1.4**
baz=120
**M31M** **Drury Creek, Y** **78.73 336** P **P** **16 35 21.5 +0.8**
baz=119
**O30N** **Mendenhall** **78.77 334** P **P** **16 35 22.1 +1.1**
baz=117
**P30M** **Million Dollar** **78.86 333** P **P** **16 35 22.6 +1.1**
baz=116
**N31M** **Braeburn, Yuko** **78.97 335** P **P** **16 35 23.0 +1.0**
baz=118
**P29M** **Windy Craggy** **78.99 333** P **P** **16 35 23.1 +1.0**
baz=116
**VNA3** **Neumayer Olymp** **79.51 163** ⇓P **P** **16 35 26.3 +1.5**
comp=Z,2.3nm,0.8s
VNA3 ⇑pP **pP** **16 35 59.9 +0.1**
comp=Z,3.7nm,0.6s
**N30M** **Aishikik Lake** **79.51 335** P **P** **16 35 26.4 +1.4**
baz=117,SNR=8.2
**O29M** **Mount Kennedy** **79.66 333** P **P** **16 35 27.0 +1.1**
baz=115
**YUK6** **Outpost Mounta** **79.84 334** P **P** **16 35 27.1 0.0**
baz=115
**YUK4** **Talbot Arm** **80.14 334** P **P** **16 35 29.2 +0.6**
baz=115
**M29M** **Somme Creek** **80.53 335** P **P** **16 35 31.3 +0.8**
baz=116,SNR=12
**O28M** **Mount Upton** **80.58 333** P **P** **16 35 31.8 +0.7**
baz=114
**YUK8** **Steele Glacier** **80.60 334** P **P** **16 35 32.0 +0.9**
baz=114
**J30M** **Hart River** **80.64 338** P **P** **16 35 31.9 +0.8**
baz=118,SNR=7.7
**K29M** **Barlow Dome** **80.77 337** IAmb IAmb 16 35 33.3
comp=Z,22nm,1.2s
**K29M** **Barlow Dome** **80.77 337** P **P** **16 35 32.2 +0.4**
baz=117,SNR=12
**I30M** **Mount Dempster** **80.97 338** P **P** **16 35 33.2 +0.4**
I30M IAmb IAmb 16 35 34.6
comp=Z,17nm,0.8s
**I30M** **Mount Dempster** **80.97 338** P **P** **16 35 33.2 +0.4**
baz=118,SNR=8.2
**G31M** **Satah River** **81.05 340** P **P** **16 35 33.4 +0.4**
baz=120,SNR=17
**YUK3** **Moose Creek** **81.11 334** P **P** **16 35 34.5 +0.7**
baz=114
**F31M** **Tsiigehtchic** **81.13 341** IAmb IAmb 16 35 34.9
comp=Z,25nm,0.8s
**F31M** **Tsiigehtchic** **81.13 341** P **P** **16 35 34.0 +0.5**
baz=121,SNR=5.9
**CTG** **Chitna Glacier** **81.17 333** P **P** **16 35 34.3 +0.2**
baz=113
**A36M** **Sachs Harbour** **81.34 346** P **P** **16 35 34.3 -0.1**
baz=130
**INK** **Inuvik** **81.51 341** P **P** **16 35 35.2 -0.2**
INK IAmb IAmb 16 35 36.9
comp=Z,28nm,1.0s
**INK** **Inuvik** **81.51 341** P **P** **16 35 35.7 +0.3**
baz=121,SNR=8.2
**DAWY** **Dawson** **81.61 336** P **P** **16 35 36.3 +0.1**
baz=115
**EPYK** **Eagle Plains** **81.63 339** IAmb IAmb 16 35 37.7
comp=Z,22nm,1.1s
**EPYK** **Eagle Plains** **81.63 339** P **P** **16 35 36.4 +0.2**
baz=118,SNR=6.9
**SNAA** **Sanae** **81.71 162** P **P** **16 35 36.4 -0.2**
**SNAA** **Sanae** **81.71 162** ⇓P **P** **16 35 37.4 +0.8**
comp=Z,14nm,0.8s
SNAA ⇑pP **pP** **16 36 11.2 -0.5**
comp=Z,36nm,0.6s
**SNAA** **Sanae** **81.71 162** P **P** **16 35 37.2 +0.6**
comp=Z,3.7nm,0.9s,baz=294,slow=6.4,SNR=11
SNAA pP **pP** **16 36 11.7 0.0**
comp=Z,2.6nm,0.5s,baz=271,slow=7.4,SNR=5.4
comp=Z,3.7nm,0.9s
**G30M** **tAoh Zraii Nji** **81.74 340** P **P** **16 35 38.7 +1.9**
baz=118
**I29M** **Ogilvie Camp,** **81.75 338** IAmb IAmb 16 35 38.4
comp=Z,20nm,1.1s
**I29M** **Ogilvie Camp,** **81.75 338** P **P** **16 35 37.4 +0.6**
baz=116,SNR=11
**F30M** **Barrier River** **81.90 340** P **P** **16 35 37.7 +0.2**
baz=119,SNR=11
**M27K** **Edge Creek, AK** **81.95 334** P **P** **16 35 39.1 +1.0**
baz=112
**MCARA** **McCarthy VSAT** **82.09 333** IAmb IAmb 16 35 40.8
comp=Z,40nm,1.3s
**MCARA** **McCarthy VSAT** **82.09 333** P **P** **16 35 39.5 +0.8**
baz=111
**H29M** **Whitestone** **82.15 339** IAmb IAmb 16 35 40.4
comp=Z,16nm,0.9s
**H29M** **Whitestone** **82.15 339** P **P** **16 35 39.4 +0.5**
baz=116,SNR=7.1
**BCAR** **Beaver Creek A** **82.18 335** P **P** **16 35 39.5 +0.4**
**L27K** **Beaver Creek,** **82.20 335** IAmb IAmb 16 35 41.2
comp=Z,14nm,0.8s
**L27K** **Beaver Creek,** **82.20 335** P **P** **16 35 40.0 +0.7**
baz=112,SNR=14
**VRDI** **Verde Repeater** **82.23 333** IAmb IAmb 16 35 41.2
comp=Z,18nm,0.9s
**G29M** **Pine Creek** **82.34 339** IAmb IAmb 16 35 41.1
comp=Z,18nm,0.9s
**G29M** **Pine Creek** **82.34 339** P **P** **16 35 40.3 +0.4**
baz=116,SNR=5.2
**CEST** **Esterri de Car** **82.34 46** IAmb IAmb 16 35 42.2
comp=Z,23nm,1.6s
**I28M** **Miner Creek** **82.40 338** IAmb IAmb 16 35 41.8
comp=Z,14nm,0.9s
**I28M** **Miner Creek** **82.40 338** P **P** **16 35 40.6 +0.3**
baz=114,SNR=9.5
**M26K** **Nabesna, AK** **82.45 334** P **P** **16 35 40.7 +0.1**
baz=111
**GLB** **Gilahina Butte** **82.46 333** P **P** **16 35 39.8 -0.9**
**EKA** **Eskdalemuir Ar** **82.55 33** P **P** **16 35 40.0 -1.2**
comp=Z,3.6nm,0.7s,baz=248,slow=4.2,SNR=12
comp=Z,3.6nm,0.7s
**EGAK** **Eagle** **82.60 337** IAmb IAmb 16 35 42.6
comp=Z,23nm,0.8s
**EGAK** **Eagle** **82.60 337** P **P** **16 35 41.5 +0.3**
baz=113,SNR=21
**BMRM** **Bremner River** **82.66 333** P **P** **16 35 42.0 +0.4**
baz=110
**K27K** **Chicken** **82.67 336** IAmb IAmb 16 35 43.9
comp=Z,23nm,0.8s
**K27K** **Chicken** **82.67 336** P **P** **16 35 42.8 +1.1**
baz=112
**N25K** **Chitina, Valde** **82.88 333** P **P** **16 35 43.4 +0.6**
baz=110
**E29M** **Blow River** **82.97 341** P **P** **16 35 43.4 +0.4**
baz=117
**I27K** **Kandik River** **83.11 338** P **P** **16 35 44.2 +0.2**
baz=113,SNR=5.1
**TROLL** **Troll, Antarti** **83.43 162** ⇓P **P** **16 35 46.9 +1.3**
comp=Z,258nm,0.8s
TROLL ⇑pP **pP** **16 36 21.1 +0.3**
comp=Z,177nm,0.7s
**KLU** **Klutina** **83.44 333** IAmb IAmb 16 35 47.0
comp=Z,23nm,1.0s
**KLU** **Klutina** **83.44 333** P **P** **16 35 45.9 +0.2**
baz=109
**SCRK** **Sand Creek** **83.44 336** P **P** **16 35 46.0 +0.3**
baz=111,SNR=6.4
**J26L** **Joseph Creek** **83.45 336** P **P** **16 35 46.0 +0.2**
baz=111,SNR=7.5
**I26K** **Coal Creek Min** **83.59 337** P **P** **16 35 46.2 -0.1**
**I26K** **Coal Creek Min** **83.59 337** P **P** **16 35 46.3 +0.1**
baz=112
**PAX** **Paxson** **83.72 334** P **P** **16 35 47.0 -0.1**
baz=109,SNR=5.9
**M24K** **Tolsona, Glenn** **83.75 333** P **P** **16 35 47.7 +0.4**
baz=108
**E27K** **Coleen River** **84.12 340** P **P** **16 35 49.2 +0.2**
baz=113
**K24K** **Donnelly Dome** **84.12 335** P **P** **16 35 49.6 +0.5**
baz=109
**SCM** **Sheep Creek Mo** **84.18 333** IAmb IAmb 16 35 50.8
comp=Z,30nm,1.1s
**SCM** **Sheep Creek Mo** **84.18 333** P **P** **16 35 49.6 +0.1**
baz=107
**J25K** **Salcha River,** **84.22 336** P **P** **16 35 49.0 -0.6**
**J25K** **Salcha River,** **84.22 336** P **P** **16 35 49.8 +0.2**
baz=109,SNR=5.7
**D27M** **Malcolm River** **84.34 341** P **P** **16 35 50.6 +0.5**
baz=114
**M23K** **Glacier View** **84.35 333** P **P** **16 35 50.6 +0.3**
baz=107
**PWL** **Port Wells** **84.36 332** P **P** **16 35 50.2 -0.1**
baz=106
**KNK** **Knik Glacier** **84.57 332** P **P** **16 35 51.8 +0.4**
baz=106
**WAT6** **Susitna Watana** **84.59 334** P **P** **16 35 51.8 +0.2**
baz=107
**SML** **Sawmill** **84.63 333** IAmb IAmb 16 35 52.9
comp=Z,14nm,0.8s
**SML** **Sawmill** **84.63 333** P **P** **16 35 52.0 +0.4**
baz=106,SNR=5.6
**HDA** **Harding Lake** **84.81 336** P **P** **16 35 52.4 -0.1**
baz=108,SNR=6.4
**GHO** **Glory Hole Cre** **84.89 333** IAmb IAmb 16 35 54.1
comp=Z,20nm,0.8s
**ILAR** **Eielson Array** **84.89 336** P **P** **16 35 52.1 -0.8**
**ILAR** **Eielson Array** **84.89 336** P **P** **16 35 52.9 0.0**
comp=Z,3.3nm,0.8s,baz=116,slow=3.8,SNR=25
ILAR pP **pP** **16 36 26.2 -2.0**
comp=Z,1.3nm,0.7s,baz=140,slow=4.5,SNR=1.7
ILAR PP **PP** **16 39 10.1 -1.3**
comp=Z,0.8nm,0.9s,baz=96,slow=7.3,SNR=6.1
comp=Z,3.3nm,0.8s
**WAT1** **Susitna Watana** **85.02 334** P **P** **16 35 53.6 0.0**
baz=106
**RC01** **Rabbit Creek A** **85.08 332** P **P** **16 35 54.2 +0.3**
baz=105
**SSB** **Saint Sauveur** **85.16 44** IAmb IAmb 16 35 55.7
comp=Z,18nm,1.5s
**BRSE** **Bradley Lake S** **85.22 331** P **P** **16 35 54.8 +0.2**
baz=104
**POKR** **Poker Flat Res** **85.22 336** P **P** **16 35 54.7 +0.2**
baz=108
**C27K** **Jago River** **85.39 341** P **P** **16 35 55.9 +0.7**
baz=111
**M22K** **Willow** **85.43 333** P **P** **16 35 55.9 +0.3**
baz=105
**MCK** **McKinley** **85.44 335** P **P** **16 35 55.5 -0.1**
baz=106
**MDM** **Murphy Dome** **85.50 336** IAmb IAmb 16 35 57.1
comp=Z,18nm,1.0s
**H24K** **Nood Dome** **85.62 337** P **P** **16 35 56.7 +0.2**
baz=107
**SUA** **Susitna One** **85.65 332** IAmb IAmb 16 35 57.7
comp=Z,18nm,1.0s
**SUA** **Susitna One** **85.65 332** P **P** **16 35 57.3 +0.5**
baz=104
**NEA2** **Nenana** **85.74 335** IAmb IAmb 16 35 58.3
comp=Z,21nm,1.0s
**NEA2** **Nenana** **85.74 335** P **P** **16 35 57.0 -0.1**
baz=106,SNR=12
**DOU** **Dourbes** **85.98 39** *d*P **P** **16 35 58.0 -0.6**
**I23K** **Minto, Yukon-K** **86.01 336** IAmb IAmb 16 35 59.7
comp=Z,13nm,0.8s
**I23K** **Minto, Yukon-K** **86.01 336** P **P** **16 35 58.7 +0.3**
baz=106,SNR=8.2
**BMRD** **Maredsous** **86.12 39** *d*P **P** **16 35 59.1 -0.2**
**F24K** **Squaw Lake** **86.13 338** P **P** **16 36 00.0 +1.0**
baz=107
**SKT** **Skwentna** **86.14 333** P **P** **16 35 58.9 -0.2**
baz=104,SNR=12
**D25K** **Kaz River** **86.16 340** P **P** **16 35 59.4 +0.2**
baz=109
**O20K** **Slope Mountain** **86.22 331** P **P** **16 35 60.0 +0.3**
baz=102
**N20K** **Mount Spurr** **86.27 332** P **P** **16 35 59.5 -0.3**
baz=103
**SPCR** **Spurr Chakacha** **86.27 332** P **P** **16 35 59.9 0.0**
baz=103
**H23K** **Yukon River** **86.27 337** P **P** **16 35 59.8 0.0**
baz=108
**RSO** **Redoubt South** **86.36 331** P **P** **16 36 00.1 -0.4**
**BPAW** **Bear Paw Mtn.** **86.41 335** IAmb IAmb 16 36 01.5
comp=Z,19nm,1.0s
**BPAW** **Bear Paw Mtn.** **86.41 335** P **P** **16 36 00.5 0.0**
baz=104,SNR=18
**MLY** **Manley** **86.54 336** IAmb IAmb 16 36 02.0
comp=Z,12nm,0.8s
**MLY** **Manley** **86.54 336** P **P** **16 36 01.0 -0.1**
baz=104,SNR=16
**G23K** **Bananza Creek** **86.70 337** P **P** **16 36 02.6 +0.7**
baz=105
**M20K** **Styx River** **86.85 332** IAmb IAmb 16 36 03.5
comp=Z,9.8nm,0.8s
**M20K** **Styx River** **86.85 332** P **P** **16 36 02.9 +0.2**
baz=102
**COLD** **Coldfoot** **86.90 338** P **P** **16 36 03.7 +1.0**
baz=105
**E23K** **Chandalar** **86.91 339** P **P** **16 36 02.9 0.0**
baz=106
**D24K** **Happy Valley** **86.94 340** P **P** **16 36 03.2 +0.3**
baz=106
**QSPA** **South Pole Qui** **87.03 180** P **P** **16 36 04.5 +0.9**
QSPA IAmb IAmb 16 36 43.5
comp=Z,22nm,0.9s
**QSPA** **South Pole Qui** **87.03 180** P **P** **16 36 05.0 +1.4**
comp=Z,14nm,1.0s,baz=153,slow=2.0,SNR=31
QSPA pP **pP** **16 36 38.1 -0.9**
comp=Z,18nm,0.9s,baz=164,slow=6.1,SNR=5.4
comp=Z,14nm,1.0s
**C24K** **Franklin Bluff** **87.06 340** P **P** **16 36 04.1 +0.7**
baz=107
**N19K** **Bonanza Creek** **87.27 331** P **P** **16 36 04.3 -0.5**
baz=101
**L20K** **Farewell, AK** **87.32 333** P **P** **16 36 04.5 -0.4**
baz=102,SNR=6.6
**M19K** **Big River Lodg** **87.44 332** P **P** **16 36 05.4 0.0**
baz=101
**Q17K** **Contact Creek** **87.51 329** P **P** **16 36 06.0 +0.1**
baz=100
**D23K** **Nanushuk River** **87.53 340** P **P** **16 36 06.6 +0.9**
baz=105
**H21K** **Melozitna Rive** **87.53 336** P **P** **16 36 05.9 +0.1**
baz=103
**K20K** **Telida** **87.58 334** IAmb IAmb 16 36 06.9
comp=Z,15nm,1.1s
**K20K** **Telida** **87.58 334** P **P** **16 36 05.8 -0.3**
baz=102
**KEST** **Kesra** **87.58 54** P **P** **16 36 06.7 -0.1**
comp=Z,3.5nm,1.0s,baz=219,slow=14,SNR=3.4
comp=Z,3.5nm,1.0s
**R17L** **Mt. Peulik Vol** **87.65 328** P **P** **16 36 06.8 +0.2**
baz=99
**L19K** **White Mountain** **87.71 333** IAmb IAmb 16 36 07.4
comp=Z,14nm,1.1s
**L19K** **White Mountain** **87.71 333** P **P** **16 36 06.3 -0.4**
baz=101,SNR=5.7
**F22K** **John River** **87.71 338** P **P** **16 36 07.4 +0.8**
baz=103
**E22K** **Anaktuvuk Pass** **87.73 339** P **P** **16 36 07.1 +0.4**
baz=104
**C23K** **Itkillik River** **87.73 340** P **P** **16 36 07.1 +0.5**
baz=105
**J20K** **Nowinta River** **87.78 335** IAmb IAmb 16 36 07.8
comp=Z,17nm,1.1s
**J20K** **Nowinta River** **87.78 335** P **P** **16 36 06.4 -0.6**
baz=101,SNR=7.4
**N18K** **Kilae Creek** **87.92 331** IAmb IAmb 16 36 08.5
comp=Z,14nm,0.8s
**N18K** **Kilae Creek** **87.92 331** P **P** **16 36 07.6 -0.2**
baz=100,SNR=5.2
**G21K** **Allakaket** **88.00 337** P **P** **16 36 08.2 +0.2**
G21K IAmb IAmb 16 36 09.6
comp=Z,17nm,1.1s
**G21K** **Allakaket** **88.00 337** P **P** **16 36 08.3 +0.3**
baz=102,SNR=7.7
**M18K** **Stony River** **88.03 332** P **P** **16 36 08.6 +0.4**
baz=100
**F21K** **Alatna River** **88.14 338** P **P** **16 36 09.1 +0.4**
baz=102
**H20K** **Anotleneega Mo** **88.34 336** P **P** **16 36 09.6 0.0**
baz=101,SNR=11
**O17K** **Koliganek Bris** **88.37 330** P **P** **16 36 09.9 0.0**
baz=99,SNR=5.1
**J19K** **Poorman** **88.38 334** P **P** **16 36 09.6 -0.2**
baz=100
**N17K** **Nushagak Hills** **88.53 331** P **P** **16 36 10.7 +0.1**
baz=99
**L18K** **Granite Mounta** **88.56 332** P **P** **16 36 10.7 0.0**
baz=99
**E21K** **Killik River** **88.58 339** P **P** **16 36 10.8 +0.1**
baz=102
**P16K** **Nushagak River** **88.72 329** P **P** **16 36 11.5 0.0**
baz=98
**M17K** **Holitna River** **88.78 332** P **P** **16 36 11.8 0.0**
baz=98
**B22K** **Teshekpuk Lake** **88.79 341** P **P** **16 36 12.0 +0.4**
baz=102
**O16K** **Kokwok River B** **88.85 330** P **P** **16 36 11.7 -0.4**
baz=98
**H19K** **Roundabout Mou** **89.00 336** IAmb IAmb 16 36 14.3
comp=Z,11nm,1.1s
**H19K** **Roundabout Mou** **89.00 336** P **P** **16 36 13.1 +0.5**
baz=99,SNR=6.4
**C21K** **Knifeblade Rid** **89.01 339** P **P** **16 36 13.5 +0.8**
baz=101
**B21K** **Ikpikpuk River** **89.04 340** P **P** **16 36 13.4 +0.6**
baz=101
**DAVA** **Damuels** **89.08 43** *i* P **P** **16 36 13.6 -0.2**
comp=Z,4.4nm,0.6s
**L17K** **Donlin** **89.29 332** P **P** **16 36 14.4 +0.3**
baz=98,SNR=5.6
**N16K** **Nishlik Lake** **89.30 331** P **P** **16 36 14.5 +0.3**
baz=97
**E20K** **Nigu River** **89.35 338** P **P** **16 36 15.1 +0.7**
baz=100
**K17K** **Iditarod** **89.37 333** IAmb IAmb 16 36 16.1
comp=Z,24nm,1.4s
**K17K** **Iditarod** **89.37 333** P **P** **16 36 14.9 +0.3**
baz=98
**M16K** **Timber Creek** **89.46 331** P **P** **16 36 15.9 +0.9**
baz=97
**D20K** **Etivluk River** **89.58 339** P **P** **16 36 16.1 +0.7**
baz=99
**FETA** **Feichten** **89.64 43** *i* P **P** **16 36 15.5 -0.8**
comp=Z,5.5nm,1.1s
**RETA** **Reutte** **89.70 43** *i* P **P** **16 36 15.2 -1.3**
comp=Z,2.0nm,0.7s
**F19K** **Shaleruckik Mo** **89.73 337** P **P** **16 36 17.1 +1.1**
baz=98
**H18K** **Honhosa River** **89.73 335** P **P** **16 36 17.3 +1.1**
baz=98
**L16K** **Owhat River** **89.79 332** P **P** **16 36 17.7 +1.3**
baz=97
**J17K** **VABM Dome** **89.81 333** P **P** **16 36 17.7 +1.2**
baz=97
**ELIB** **Princess Elisa** **89.87 162** *d*P **P** **16 36 18.5 +1.6**
ELIB *d*pP **pP** **16 36 54.4 +1.8**
ELIB *d*PP **PP** **16 39 51.4 +0.2**
**MOTA** **Moosalm** **89.92 43** *i* P **P** **16 36 16.8 -0.8**
comp=Z,6.4nm,0.7s
**G18K** **Tagagawik** **89.95 336** P **P** **16 36 18.3 +1.2**
baz=97
**SQTA** **Sankt Quirin** **89.98 43** *i* P **P** **16 36 17.8 -0.1**
comp=Z,5.9nm,0.6s
**CTI** **Castel Tesino** **90.20 44** P **P** **16 36 18.2 -0.7**
CTI IAmb IAmb 16 36 19.0
comp=Z,5.7nm,0.6s
**WATA** **Walderalm** **90.24 43** *i* PcP **P** **16 36 19.7 +0.6**
comp=Z,4.3nm,0.8s
**WTTA** **Wattenberg** **90.27 43** *i* P **P** **16 36 19.0 -0.3**
comp=Z,7.8nm,0.8s
**H17K** **Granite Mounta** **90.36 335** P **P** **16 36 20.2 +1.2**
baz=96
**I17K** **Unalakleet** **90.58 334** P **P** **16 36 20.8 +0.7**
baz=96
**N14K** **Kuskokwak Cree** **90.69 330** P **P** **16 36 21.8 +1.1**
baz=95
**G17K** **Kiwalik Mounta** **90.73 335** P **P** **16 36 21.7 +1.0**
baz=96
**L15K** **Ungalak Mounta** **90.74 332** P **P** **16 36 21.7 +0.8**
baz=95
**ABTA** **Abfaltersbach** **90.84 43** *i* P **P** **16 36 21.5 -0.3**
comp=Z,5.6nm,0.9s
**LESA** **Schwarzleotal** **90.99 43** *i* P **P** **16 36 22.1 -0.4**
comp=Z,5.4nm,1.0s
**NOA** **NORSAR Array B** **91.05 29** P **P** **16 36 22.5 +0.1**
comp=Z,2.5nm,0.9s,baz=268,slow=4.8,SNR=4.2
comp=Z,2.5nm,0.9s
**L14K** **Kuka Creek** **91.29 331** P **P** **16 36 24.1 +0.7**
baz=94
**H16K** **Elim** **91.32 335** P **P** **16 36 24.3 +0.8**
baz=94
**E17K** **Hotham Inlet** **91.34 337** P **P** **16 36 24.0 +0.4**
baz=94
**KBA** **Koelnbreinsper** **91.43 43** *i* P **P** **16 36 24.2 -0.4**
comp=Z,2.8nm,1.1s
**G16K** **Koyuk River** **91.43 335** P **P** **16 36 24.8 +0.8**
baz=94
**B18K** **Kokolik River** **91.52 339** P **P** **16 36 25.3 +1.0**
baz=94
**MYKA** **Terra Mystica** **91.61 44** *i* P **P** **16 36 24.8 -0.6**
comp=Z,1.1nm,0.4s
**BIOA** **Bad Ischl, Aus** **91.66 43** *e*P **P** **16 36 25.1 -0.4**
comp=Z,0.7nm,0.4s
**OBKA** **Obir** **92.23 44** *e*P **P** **16 36 27.1 -1.2**
comp=Z,2.4nm,0.9s
**SOKA** **Soboth** **92.57 44** *i* P **P** **16 36 28.1 -1.7**
comp=Z,0.9nm,0.8s
**ARSA** **Arzberg** **92.92 43** *i* P **P** **16 36 30.5 -0.9**
comp=Z,4.2nm,1.0s
**CONA** **Conrad Observa** **93.16 42** *i* P **P** **16 36 32.3 -0.2**
comp=Z,2.0nm,0.9s
**RONA** **Rosalia, Austr** **93.45 43** *e*P **P** **16 36 33.4 -0.4**
comp=Z,1.5nm,0.9s
**BVAR** **Borovoye Array** **122.79 24** PKP **PKPdf** **16 42 13.4 0.0**
comp=Z,2.4nm,0.8s,baz=288,slow=1.4,SNR=6.9
BVAR pPKP **pPKPdf** **16 42 48.3 -2.4**
comp=Z,0.7nm,0.6s,baz=319,slow=1.9,SNR=1.4
**ZALV** **Zalesovo Beam** **126.75 14** PKP **PKPdf** **16 42 21.3 +0.3**
comp=Z,8.2nm,0.7s,baz=270,slow=1.5,SNR=37
ZALV pPKP **pPKPdf** **16 42 57.3 -1.0**
comp=Z,3.3nm,0.6s,baz=299,slow=2.1,SNR=6.4
**KURBB** **Kurchatov Arra** **127.78 21** PKP **PKPdf** **16 42 23.5 +0.5**
comp=Z,6.0nm,0.9s,baz=321,slow=2.4,SNR=42
KURBB pPKP **pPKPdf** **16 42 59.6 -0.7**
comp=Z,1.9nm,0.6s,baz=315,slow=2.5,SNR=5.0
**STKA** **Stephens Creek** **130.53 222** PKP **PKPdf** **16 42 29.4 +0.5**
comp=Z,1.3nm,0.7s,baz=148,slow=13,SNR=4.6
STKA pPKP **pPKPdf** **16 43 05.6 -0.6**
comp=Z,3.6nm,0.9s,baz=165,slow=6.2,SNR=4.1
**MKAR** **Makanchi Array** **132.34 21** PKP **PKPdf** **16 42 32.2 +0.3**
comp=Z,4.0nm,0.9s,baz=323,slow=1.8,SNR=21
MKAR pPKP **pPKPdf** **16 43 08.2 -1.0**
comp=Z,1.7nm,0.8s,baz=354,slow=2.4,SNR=5.1
MKAR SKPbc **SKPbc** **16 45 45.2 -0.6**
comp=Z,0.6nm,0.8s,baz=28,slow=2.9,SNR=3.5
**MJAR** **Matsushiro Arr** **134.44 321** PKP **PKPdf** **16 42 35.8 -0.3**
comp=Z,1.2nm,0.6s,baz=16,slow=0.2,SNR=3.0
**SONM** **Songino Array** **135.35 358** PKP **PKPdf** **16 42 37.9 +0.2**
comp=Z,1.8nm,0.9s,baz=5.7,slow=1.4,SNR=4.4
SONM pPKP **pPKPdf** **16 43 14.1 -0.9**
comp=Z,1.2nm,0.4s,baz=16,slow=42,SNR=3.7
**KSRS** **Korea Array** **139.56 331** PKhKP PKPpre 16 42 34.6
comp=Z,0.9nm,0.6s,baz=144,slow=38,SNR=2.9
KSRS PKP **PKPdf** **16 42 46.0 +0.5**
comp=Z,2.1nm,0.7s,baz=5.3,slow=1.7,SNR=7.8
KSRS pPKP pPKPdf 16 43 20.9 -1.9
comp=Z,2.2nm,0.7s,baz=41,slow=2.1,SNR=5.2
**ASAR** **Alice Springs** **140.94 226** PKhKP PKPpre 16 42 41.0
comp=Z,1.7nm,0.9s,baz=132,slow=3.6,SNR=9.8
ASAR PKP **PKPdf** **16 42 50.2 +1.7**
comp=Z,0.8nm,0.4s,baz=121,slow=2.4,SNR=10
**WRA** **Warramunga Arr** **142.84 231** PKhKP PKPpre 16 42 48.5
comp=Z,4.9nm,0.7s,baz=122,slow=3.1,SNR=43
**GTA** **Gaotai** **143.55 6** PKP **PKPdf** **16 42 53.8 +1.0**
**LYN** **LuoYang** **147.78 348** PKPbc **PKPbc** **16 43 03.3 +0.3**
**NJ2** **Nanjing** **148.14 336** *e*P **PKPdf** **16 43 00.8 +0.2**
NJ2 pmax pmax
comp=Z,13nm,1.3s
**LSA** **Lhasa** **150.62 24** P **PKPdf** **16 43 06.4 +1.1**
LSA pmax pmax
comp=Z,6.0nm,1.0s
**CMAR** **Chiang Mai Arr** **163.75 19** PKP **PKPdf** **16 43 19.6 -1.8**
comp=Z,0.6nm,0.5s,baz=295,slow=2.2,SNR=5.8
CMAR pPKP **pPKPdf** **16 43 57.9 -1.1**
comp=Z,0.5nm,0.3s,baz=324,slow=2.4,SNR=2.2
CMAR PKPab **PKPab** **16 44 12.6 -1.3**
comp=Z,2.0nm,0.7s,baz=326,slow=5.3,SNR=9.7

*IDC* ***22*** *16:34:29.3±12.0, 17.68S×177.85W, h421km±129km, mb3.0/5, mbtmp3.8/5, Error ellipse: s-maj=52.2km s-min=32.3km az=42.0*

**ISC 22 16:34:27.9±1.3, 17.7S±0.2×177.9W±0.3, h400km, n6, σ0.982/6, mb3.3/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **20.94** | **191** | P | **P** | **16 38 40.9** | **+0.1** |
| | 6.0nm,0.7s,baz=248,slow=23,SNR=1.2 | | | | | | |
| | 6.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.15** | **259** | P | **P** | **16 42 06.7** | **-0.4** |
| | 0.1nm,0.4s,baz=90,slow=8.1,SNR=1.7 | | | | | | |

0.1nm,0.4s
**ASAR Alice Springs 45.32 254** P **P** **16 42 08.7 +0.3**
1.6nm,0.6s,baz=89,slow=7.9,SNR=40
1.6nm,0.6s
**QSPA South Pole Qui 72.35 180** P **P** **16 45 11.1 -0.3**
0.8nm,0.8s,baz=75,slow=5.5,SNR=1.9
0.8nm,0.8s
**ILAR Eielson Array 85.58 13** P **P** **16 46 21.5 -0.4**
0.2nm,0.5s,baz=223,slow=5.2,SNR=5.0
0.2nm,0.5s
**GERES GERESS Array B 147.54 346** PKPbc **PKPdf** **16 53 23.9 +1.2**
0.5nm,0.5s,baz=45,slow=3.3,SNR=2.5

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*IDC **22** 16:45:47.4±6.7,21°.95N×143°.38E,h273$^{km}$±61$^{km}$,mb3.0/7, mbtmp3.7/8,Error ellipse: s-maj=105.7km s-min=14.8km az=78.0*
**ISC 22 16:45:45.6±2.2,21°.9N±0°.2×143°.2E±0°.6,h250$^{km}$,n8, σ1$^{s}$16/8,mb3.3/6,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **15.24** | **345** | P | **P** | **16 49 09.1** | **+1.1** |
| | 1.0nm,0.6s,baz=158,slow=12,SNR=4.3 | | | | | | |
| **KSRS** | **Korea Array** | **20.38** | **323** | P | **P** | **16 50 03.9** | **+0.3** |
| | 0.9nm,0.6s,baz=148,slow=8.5,SNR=5.0 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.46** | **192** | P | **P** | **16 53 17.0** | **+0.6** |
| | 0.8nm,0.6s,baz=7.9,slow=7.7,SNR=18 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **46.17** | **192** | P | **P** | **16 53 45.7** | **0.0** |
| | 0.3nm,0.7s,baz=21,slow=8.8,SNR=5.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.59** | **313** | P | **P** | **16 54 47.5** | **-0.9** |
| | 0.1nm,0.5s,baz=86,slow=2.4,SNR=2.0 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.41** | **317** | P | **P** | **16 55 09.6** | **+1.5** |
| | 0.9nm,0.4s,baz=94,slow=7.7,SNR=4.9 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.55** | **319** | P | **P** | **16 55 42.7** | **-0.2** |
| | 0.3nm,0.3s,baz=84,slow=5.9,SNR=2.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **83.03** | **334** | P | **P** | **16 57 41.3** | **-1.4** |
| | 1.9nm,0.9s,baz=56,slow=5.2,SNR=4.9 | | | | | | |
| | 1.9nm,0.9s | | | | | | |

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**IDC 22 16:50:10.5±3.1,5°.17S×152°.05E,h0$^{km}$,mb3.6/3, mbtmp3.7/4,ML1.9/1,MS3.8/1,Error ellipse: s-maj=112.6km s-min=31.2km az=115.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.43** | **229** | Pn | Pn | 16 51 48.5 | +2.0 |
| | 1.6nm,0.3s,baz=48,slow=12,SNR=6.5 | | | | | | |
| PMG | | | | Sn | Sn | 16 52 58.0 | -2.6 |
| | 3.0nm,0.3s,baz=332,slow=20,SNR=6.9 | | | | | | |
| | 8.0nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.65** | **228** | P | P | 16 55 11.7 | -1.7 |
| | 0.4nm,0.4s,baz=53,slow=10.0,SNR=9.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **25.38** | **222** | P | P | 16 55 40.0 | +0.3 |
| | 1.4nm,0.8s,baz=58,slow=8.7,SNR=15 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **JCJ** | **Chichijima** | **33.46** | **344** | LR | LR | 17 11 37.2 | |
| | comp=Z,145nm,18.2s,baz=126,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.05** | **327** | P | P | 17 02 27.4 | +0.1 |
| | 0.6nm,0.4s,baz=129,slow=5.7,SNR=2.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.71** | **287** | PKPbc | PKPbc | 17 10 03.2 | -0.2 |
| | 0.3nm,0.4s,baz=78,slow=2.6,SNR=5.4 | | | | | | |

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*SOME **22** 16:54:48.1,38°.43N×70°.67E,h0$^{km}$*
*NNC **22** 16:55:12.9±4.4,39°.07N×71°.88E,h0$^{km}$,mb4.1,mpv3.9, Error ellipse: s-maj=39.0km s-min=23.5km az=167.0*
**ISC 22 16:55:17.5±3.2,39°.3N±0°.2×71°.5E±0°.2,h10$^{km}$,n6,σ2$^{s}$77/7, 1C,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRKS** | **Merke** | **3.68** | **21** | *e*P | **Pn** | **16 56 15.6** | **+1.0** |
| | 8.6nm,0.0s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **16 57 18.1** | **+2.5** |
| | 26nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **3.68** | **21** | Lg | Lg | 16 57 18.1 | |
| | 26nm,0.3s | | | | | | |
| **KK31** | **Karatay Array** | **3.86** | **349** | Pn | **Pn** | **16 56 18.1** | **+1.1** |
| | 0.6nm,0.3s,baz=161,slow=11,SNR=17 | | | | | | |
| KK31 | | | | ↑Lg | Lg | 16 57 24.9 | |
| | 3.7nm,0.5s,baz=166,slow=23 | | | | | | |
| **SGDS** | **Sogindy** | **4.77** | **29** | Pg | **Pb** | **16 56 41.1** | **-0.1** |
| | 6.8nm,0.5s | | | | | | |
| **BTLS** | **Baital** | **6.04** | **18** | *e*P | **Pb** | **16 56 58.1** | **-4.6** |
| | 0.4nm,0.2s | | | | | | |
| BTLS | | | | *e*S | **Sg** | **16 58 30.9** | **-0.3** |
| | 2.8nm,1.0s | | | | | | |
| **AB31** | **Akbulak array** | **12.91** | **324** | P | **Pn** | **16 58 21.7** | **+0.8** |
| | 0.8nm,0.8s,baz=137,slow=14,SNR=4.4 | | | | | | |

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**IDC 22 16:59:53.1±3.5,47°.50N×93°.21W,h0$^{km}$,mbtmp2.9/2, ML0.9/1,Error ellipse: s-maj=36.9km s-min=16.7km az=93.0,Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ULM** | **Lac du Bonnet** | **3.27** | **328** | Pn | Pn | 17 00 44.5 | -1.1 |
| | 0.2nm,0.3s,baz=141,slow=15,SNR=2.7 | | | | | | |
| ULM | | | | Pg | Pb | 17 00 51.1 | -0.8 |
| | 1.0nm,0.3s,baz=146,slow=15,SNR=7.8 | | | | | | |
| ULM | | | | Sn | Sn | 17 01 23.0 | -2.1 |
| | 0.6nm,0.3s,baz=77,slow=11,SNR=3.9 | | | | | | |
| ULM | | | | Lg | Lg | 17 01 33.9 | |
| | 1.5nm,0.3s,baz=243,slow=21,SNR=5.2 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.28** | **327** | I | I | 17 20 40.0 | |
| | 0.1nm,1.0s,baz=144,slow=320,SNR=6.5 | | | | | | |
| **PDAR** | **Pinedale Array** | **12.47** | **254** | Pn | Pn | 17 02 49.6 | -2.4 |
| | 0.3nm,0.4s,baz=70,slow=14,SNR=2.7 | | | | | | |
| PDAR | | | | Lg | Lg | 17 06 18.4 | |
| | 0.1nm,0.3s,baz=71,slow=35,SNR=1.5 | | | | | | |
| **I56US** | **NEWPORT INFRASt** | **6.05** | **282** | I | I | 18 34 00.0 | |
| | baz=86,slow=314,SNR=1.8 | | | | | | |

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*FUNV **22** 17:03:04.0,10°.46N×62°.85W,h29$^{km}$,MW3.4*
**ISC 22 17:03:01.4±1.5,10°.3N±0°.6×62°.8W±0°.1,h100$^{km}$,n4, σ1$^{s}$97/6,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRN** | **Trinidad (W)** | **1.46** | **75** | *e*P | **Pn** | **17 03 27.5** | **+0.3** |
| TRN | | | | *e*S | **Sn** | **17 03 46.1** | **-0.6** |
| **PCRV** | **Puerto La Cruz** | **1.77** | **267** | *e*P | **Pn** | **17 03 32.2** | **+1.1** |
| PCRV | | | | *e*S | **Sn** | **17 03 52.5** | **-1.2** |
| **CACV** | **CAICARA DEL OR** | **4.54** | **234** | *e*P | Pn | 17 04 05.5 | -2.5 |
| CACV | | | | *e*S | Sn | 17 04 51.7 | -8.0 |
| **BAUV** | **El Baul** | **5.30** | **256** | *e*P | **Pn** | **17 04 19.8** | **+1.6** |
| BAUV | | | | *e*S | **Sn** | **17 05 15.6** | **-2.5** |

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*IDC **22** 17:06:33.0±1.9,16°.84S×176°.50W,h0$^{km}$,mb4.2/4, mbtmp4.2/4,Error ellipse: s-maj=50.5km s-min=41.1km az=24.0*
*NEIC **22** 17:07:38.9±1.6,18°.3S±0°.2×178°.0W±0°.1,h560$^{km}$±11$^{km}$, mb4.2/17,Error ellipse: s-maj=28.7km s-min=7.3km az=216.0*
**ISC 22 17:07:38.7±1.0,18°.3S±0°.2×178°.2W±0°.1,h550$^{km}$,n29, σ1$^{s}$23/28,mb4.2/12,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.65** | **278** | P | **P** | **17 09 01.7** | **+3.6** |
| **NIUE** | **Niue** | **7.84** | **97** | P | **P** | **17 09 35.6** | **+0.7** |
| **THZ** | **Tophouse** | **24.60** | **196** | P | **P** | **17 12 16.3** | **+0.5** |
| **CTAO** | **Charters Tower** | **33.61** | **261** | P | **P** | **17 13 32.9** | **-1.2** |
| CTAO | | | | IAmb | IAmb | 17 13 55.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **33.65** | **233** | P | **P** | **17 13 34.2** | **-0.1** |
| **TOO** | **Toolangi** | **37.11** | **231** | P | **P** | **17 14 03.6** | **+0.7** |
| TOO | | | | IAmb | IAmb | 17 14 09.9 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.34** | **271** | P | **P** | **17 14 04.7** | **-0.4** |
| COEN | | | | IAmb | IAmb | 17 14 06.2 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.65** | **242** | P | **P** | **17 14 15.8** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.65** | **242** | P | **P** | **17 14 16.4** | **+0.9** |
| | comp=Z,2.6nm,0.8s,baz=85,slow=12,SNR=4.3 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.42** | **241** | P | **P** | **17 14 53.8** | **+0.5** |
| **WB0** | **Warramunga Arr** | **44.76** | **260** | P | **P** | **17 15 03.3** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 17 15 29.7 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.78** | **260** | P | **P** | **17 15 03.5** | **-0.5** |
| **WRAB** | **Tennant Creek** | **44.78** | **260** | P | **P** | **17 15 03.2** | **-0.9** |
| WRAB | | | | IAmb | IAmb | 17 15 24.0 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.79** | **260** | P | **P** | **17 15 02.9** | **-1.2** |
| | comp=Z,1.7nm,0.7s,baz=96,slow=7.3,SNR=51 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **44.91** | **255** | P | **P** | **17 15 04.3** | **-0.7** |
| **ASAR** | **Alice Springs** | **44.91** | **255** | P | **P** | **17 15 04.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **44.91** | **255** | P | **P** | **17 15 04.9** | **-0.1** |
| | comp=Z,6.3nm,0.6s,baz=87,slow=8.8,SNR=120 | | | | | | |
| | comp=Z,6.3nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.02** | **269** | P | **P** | **17 15 34.5** | **-1.5** |
| MTN | | | | IAmb | IAmb | 17 15 35.2 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **50.05** | **245** | P | **P** | **17 15 43.1** | **-0.3** |
| **KNRA** | **Kununurra** | **50.68** | **264** | P | **P** | **17 15 46.9** | **-1.3** |
| KNRA | | | | IAmb | IAmb | 17 16 28.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.20** | **261** | P | **P** | **17 16 05.7** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **58.04** | **256** | P | P | 17 16 45.5 | +5.7 |
| PSA00 | | | | IAmb | IAmb | 17 17 26.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.76** | **180** | P | **P** | **17 18 05.6** | **+0.2** |
| **QSPA** | **South Pole Qui** | **71.76** | **180** | P | **P** | **17 18 05.8** | **+0.3** |
| | comp=Z,0.7nm,0.6s,baz=238,slow=1.4,SNR=9.1 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **SHEL** | **Horse Pasture** | **145.15** | **167** | PKPdf | **PKPdf** | **17 26 12.3** | **-2.4** |
| **BRTR** | **Keskin Array B** | **145.22** | **315** | PKPdf | **PKPdf** | **17 26 12.5** | **-1.9** |
| **BRTR** | **Keskin Array B** | **145.22** | **315** | PKPbc | **PKPdf** | **17 26 12.7** | **-1.7** |
| | comp=Z,0.4nm,0.8s,baz=79,slow=4.1,SNR=3.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.55** | **303** | | **PKPdf** | **17 26 17.0** | **+0.3** |
| **MMAI** | **Mount Meron Ar** | **146.55** | **303** | PKPbc | **PKPdf** | **17 26 17.0** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=50,slow=6.7,SNR=2.4 | | | | | | |

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*NEIC **22** 17:09:24.9±1.6,47°.81N±0°.01×121°.66W±0°.02,h8$^{km}$±7$^{km}$, Error ellipse: s-maj=2.3km s-min=1.8km az=47.0*
**SEA 22 17:09:25.4±1.2,47°.81N±0°.01×121°.65W±0°.01,h3$^{km}$±7km, ML2.4/14,ML2.4/36(NEIC),Error ellipse: s-maj=2.0km s-min=1.4km az=167.0,Washington**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C05A** | **Tolt Reservoir** | **0.12** | **192** | | Pg | 17 09 29.7 | +2.0 |
| **MBPA** | **Monroe Substat** | **0.18** | **300** | | Pg | 17 09 29.0 | +0.1 |
| MBPA | | | | | Sg | 17 09 31.8 | +0.4 |
| **BLH** | **Bald Hill** | **0.26** | **277** | | Pg | 17 09 30.5 | +0.2 |
| BLH | | | | | Sg | 17 09 34.3 | +0.6 |
| **RATT** | **Rattlesnake La** | **0.40** | **195** | | Pg | 17 09 32.7 | -0.3 |
| RATT | | | | | Sg | 17 09 38.2 | +0.1 |
| **JCW** | **Jim Creek** | **0.43** | **334** | | Pg | 17 09 33.3 | -0.3 |
| **WRW** | **Wenatchee Ridg** | **0.52** | **84** | | Pg | 17 09 35.2 | -0.2 |
| **GSM** | **Grass Mountain** | **0.61** | **189** | | Pg | 17 09 36.6 | -0.5 |
| **RPW** | **Rockport** | **0.65** | **8** | | Pg | 17 09 37.3 | -0.5 |
| **D05A** | **Enumclaw** | **0.66** | **200** | | Pg | 17 09 38.0 | -0.1 |
| D05A | | | | | Sg | 17 09 47.5 | +0.9 |
| **D05A** | **Enumclaw** | **0.66** | **200** | IAML | | 17 09 50.1 | |
| | comp=E,128nm,0.6s | | | | | | |
| **SLFW** | **Sugar Loaf** | **0.76** | **93** | | Pg | 17 09 39.5 | -0.4 |
| **GMW** | **Gold Mountain** | **0.81** | **252** | | Pg | 17 09 39.9 | -1.0 |
| **SVOH** | **Skagit Valley** | **0.81** | **307** | | Pg | 17 09 40.5 | -0.5 |
| **GNW** | **Green Mountain** | **0.83** | **253** | | Pg | 17 09 40.3 | -0.9 |
| **B013** | **Quilcene** | **0.85** | **271** | | Sg | 17 09 52.4 | -0.2 |
| **LTY** | **Liberty** | **0.86** | **129** | | Pg | 17 09 41.0 | -0.9 |
| LTY | | | | | Sg | 17 09 52.6 | -0.5 |
| **LTY** | **Liberty** | **0.86** | **129** | IAML | | 17 09 53.0 | |
| | comp=N,106nm,0.1s | | | | | | |
| LTY | | | | IAML | | 17 09 53.3 | |
| | comp=E,85nm,0.2s | | | | | | |
| **FMW** | **Mount Fremont** | **0.88** | **181** | | Pg | 17 09 41.0 | -1.2 |
| **C04A** | **Brinnon** | **0.89** | **265** | | Pg | 17 09 41.4 | -1.1 |
| C04A | | | | | Sg | 17 09 53.2 | -0.9 |
| **B941** | **Kapowsin** | **0.91** | **205** | | Pg | 17 09 41.5 | -1.3 |
| **OBSR** | **Observation Ro** | **0.92** | **187** | | Pg | 17 09 42.0 | -0.9 |
| **NLW** | **Nelson Butte** | **0.93** | **73** | | Pg | 17 09 42.4 | -0.7 |
| **RCS** | **Mount Rainier-** | **0.94** | **183** | | Pg | 17 09 42.5 | -0.8 |
| **TBM** | **Table Mountain** | **0.96** | **131** | | Pg | 17 09 43.2 | -0.6 |
| **MBW** | **Mount Baker** | **0.99** | **351** | | Pg | 17 09 43.5 | -0.9 |
| **SHUK** | **Shuksan-Mt. Ba** | **1.05** | **359** | | Pg | 17 09 44.5 | -1.0 |
| **LON** | **Longmire** | **1.06** | **186** | IAML | | 17 09 59.4 | |
| | comp=N,79nm,0.2s | | | | | | |
| **WTV** | **Waterville** | **1.15** | **95** | | Pg | 17 09 46.4 | -1.0 |
| **MCW** | **Mount Constitu** | **1.18** | **318** | | Pg | 17 09 46.6 | -1.3 |
| **NAC** | **Naches** | **1.21** | **152** | | Pg | 17 09 47.9 | -0.7 |
| **B04A** | **Port Angeles** | **1.27** | **282** | | Pg | 17 09 47.6 | -2.1 |
| **B011** | **North Saanich** | **1.47** | **306** | | Pn | 17 09 50.9 | -1.8 |
| **PGC** | **Sidney** | **1.47** | **306** | | Pn | 17 09 50.6 | -2.1 |
| PGC | | | | IAML | | 17 10 12.6 | |
| | comp=N,75nm,0.2s | | | | | | |
| PGC | | | | IAML | | 17 10 14.9 | |
| | comp=E,78nm,0.3s | | | | | | |
| **MXC** | **Moxie City** | **1.54** | **143** | | Pn | 17 09 52.8 | -1.0 |
| MXC | | | | IAML | | 17 10 15.6 | |
| | comp=E,62nm,0.8s | | | | | | |
| **NLWA** | **Neilton Lookou** | **1.56** | **255** | Pn | Pn | 17 09 51.8 | -2.1 |
| **WISH** | **Wishkah** | **1.59** | **245** | IAML | | 17 10 15.9 | |
| | comp=E,38nm,0.1s | | | | | | |
| WISH | | | | IAML | | 17 10 16.5 | |
| | comp=N,47nm,0.1s | | | | | | |
| **HNBB** | **Haney** | **1.60** | **338** | | Pn | 17 09 53.8 | -0.7 |
| **B08A** | **Colville Reser** | **1.65** | **70** | | Pn | 17 09 55.2 | -0.1 |
| B08A | | | | IAML | | 17 10 17.9 | |
| | comp=N,49nm,0.4s | | | | | | |
| B08A | | | | IAML | | 17 10 18.6 | |
| | comp=E,30nm,0.3s | | | | | | |
| **GOBB** | **Galiano Island** | **1.68** | **313** | | Pn | 17 09 55.4 | -0.3 |
| **BIB** | **Bowen Island** | **1.94** | **326** | | Pn | 17 09 59.1 | -0.1 |
| **CLRS** | **Cowichan Lake** | **1.94** | **302** | | Pn | 17 09 58.2 | -1.0 |
| CLRS | | | | IAML | | 17 10 26.7 | |
| | comp=N,25nm,0.4s | | | | | | |
| **F04A** | **Amboy** | **1.95** | **196** | Pn | Pn | 17 09 59.1 | -0.2 |
| F04A | | | | IAML | | 17 10 25.8 | |
| | comp=E,35nm,0.6s | | | | | | |
| F04A | | | | IAML | | 17 10 29.4 | |
| | comp=N,42nm,0.4s | | | | | | |
| **B023** | **Clatskanie** | **1.96** | **210** | | Pn | 17 09 59.4 | 0.0 |
| **D08A** | **Wollman Farm,** | **2.00** | **111** | Pn | Pn | 17 09 58.6 | -1.5 |
| D08A | | | | IAML | | 17 10 31.9 | |
| | comp=N,38nm,0.3s | | | | | | |
| D08A | | | | IAML | | 17 10 33.9 | |
| | comp=E,25nm,0.4s | | | | | | |
| **HAWA** | **Hanford** | **2.03** | **134** | Pn | Pn | 17 09 59.9 | -0.5 |
| **OD2** | **Odessa Site #2** | **2.04** | **101** | | Pn | 17 09 59.6 | -0.9 |
| **BLTW** | **Bickleton** | **2.15** | **151** | | Pn | 17 10 02.0 | -0.1 |
| **C09A** | **Chrisman Ranch** | **2.28** | **89** | | Pn | 17 10 02.5 | -1.3 |
| **SHB** | **Sechelt** | **2.32** | **321** | | Pn | 17 10 04.5 | 0.0 |
| **G06A** | **Carlson Farm,** | **2.67** | **164** | Pn | Pn | 17 10 09.4 | +0.2 |
| G06A | | | | IAML | | 17 10 55.9 | |
| | comp=E,10.0nm,1.0s | | | | | | |
| **G08A** | **Pilot Rock** | **3.13** | **143** | Pn | Pn | 17 10 15.1 | -0.6 |
| G08A | | | | IAML | | 17 11 09.9 | |
| | comp=E,12nm,0.6s | | | | | | |

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**IDC 22 17:20:42.2±4.2,47°.64N×92°.91W,h0$^{km}$,mbtmp2.3/1, ML0.6/1,Error ellipse: s-maj=62.3km s-min=28.7km az=54.0,Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ULM** | **Lac du Bonnet** | **3.26** | **324** | Pn | Pn | 17 21 33.5 | -1.1 |
| | 0.1nm,0.3s,baz=142,slow=17,SNR=1.6 | | | | | | |
| ULM | | | | Pg | Pb | 17 21 40.2 | -0.7 |
| | 0.6nm,0.3s,baz=146,slow=17,SNR=6.9 | | | | | | |
| ULM | | | | Sn | Sn | 17 22 12.2 | -1.9 |
| | 0.9nm,0.3s,baz=177,slow=18,SNR=3.1 | | | | | | |
| ULM | | | | Lg | Lg | 17 22 22.8 | |
| | 0.8nm,0.3s,baz=87,slow=12,SNR=4.1 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.29** | **322** | I | I | 17 41 50.0 | |
| | 0.1nm,0.9s,baz=139,slow=320,SNR=6.6 | | | | | | |
| **I56US** | **NEWPORT INFRASt** | **6.23** | **281** | I | I | 18 59 20.0 | |
| | baz=85,slow=318,SNR=1.5 | | | | | | |

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**IDC 22 17:21:17.7±2.0,8°.30S×117°.06E,h0$^{km}$,mb3.0/3, mbtmp3.2/4,ML2.8/1,Error ellipse: s-maj=43.8km s-min=26.4km az=67.0,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.22** | **39** | Pn | Pn | 17 22 23.8 | +0.5 |
| | 0.6nm,0.3s,baz=207,slow=6.9,SNR=7.6 | | | | | | |
| KAPI | | | | Sn | Sn | 17 23 13.2 | -0.2 |
| | 1.4nm,0.3s,baz=268,slow=19,SNR=5.1 | | | | | | |
| | 2.2nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.34** | **126** | P | P | 17 25 56.0 | +0.2 |
| | 0.4nm,0.7s,baz=300,slow=12,SNR=7.9 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.22** | **135** | P | P | 17 26 15.9 | -0.2 |
| | 0.5nm,0.7s,baz=310,slow=9.4,SNR=16 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.98** | **334** | P | P | 17 31 46.3 | 0.0 |
| | 0.2nm,0.7s,baz=142,slow=7.5,SNR=2.1 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

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*IDC **22** 17:34:04.2±0.5,15°.97S×168°.29E,h0$^{km}$,mb4.7/20, mbtmp4.6/21,ML5.0/1,MS4.0/20,Error ellipse: s-maj=15.3km s-min=14.0km az=136.0*
*MOS **22** 17:34:04.1±1.4,15°.93S×168°.18E,h10$^{km}$,mb5.0/28,Error ellipse: s-maj=10.4km s-min=8.6km az=27.9*
*BJI **22** 17:34:04.9±0.0,15°.57S×168°.45E,h8$^{km}$,mb4.9/47, mB5.4/13,Ms5.2/4,Ms7 4.8/4*
*NOU **22** 17:34:06.5,15°.95S×168°.30E,h5$^{km}$,mb5.0/61,Vanuatu Islands*
*NEIC **22** 17:34:06.7±2.2,16°.03S±0°.09×168°.20E±0°.04,h10$^{km}$±1$^{km}$, mb5.1/193,Error ellipse: s-maj=15.9km s-min=4.8km az=162.0*
*GCMT **22** 17:34:09.7±0.2,15°.94S±0°.02×168°.25E±0°.01,h14$^{km}$, MW5.0/98,Moment Tensor Solution. s45,c54; s98,c144; Duration: 0 Moment tensor: Scale 10$^{16}$Nm; $M_{rr}$3.78±.19; $M_{\theta\theta}$-0.40±.12; $M_{\phi\phi}$-3.38±.13; $M_{r\theta}$0.93±.31; $M_{\theta\phi}$-0.13±.09; $M_{\phi r}$1.75±.28; Best double couple: $M_{\phi}$4.08400×10$^{16}$ NP1:ϕ$_{s}$14.00000°,δ59.00000°,λ100.00000°. NP2: ϕ$_{s}$174.00000°,δ32.00000°,λ73.00000°. Principal axes: T 4.3470, Plg74.0000°, Azm310.0000°; N -0.5320, Plg9.0000°, Azm188.0000°; P -3.8200, Plg14.0000°, Azm96.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 22 17:34:05.9±0.3,15°.95S±0°.05×168°.31E±0°.05,h10$^{km}$,n361, σ1$^{s}$32/271,mb5.1/167,MS3.9/21,18C-3D,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTV** | **Rentapao** | **1.84** | **177** | P | **Pn** | **17 34 37.0** | **-0.6** |
| **LIFNC** | **LIFOU** | **4.91** | **192** | P | **Pn** | **17 35 19.8** | **0.0** |
| **LIFNC** | **LIFOU** | **4.91** | **192** | | **Pn** | **17 35 17.0** | **-2.8** |
| **MARNC** | **Mare, Loyalty** | **5.51** | **183** | P | **Pn** | **17 35 28.3** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **5.97** | **219** | P | **Pn** | **17 35 34.8** | **+0.5** |
| **KOUNC** | **Koumac, New Ca** | **5.97** | **219** | | **Pn** | **17 35 33.9** | **-0.5** |
| **YATNC** | **Mamie plateau,** | **6.23** | **192** | P | **Pn** | **17 35 37.7** | **-0.6** |
| **DZM** | **Mont Dzumac** | **6.34** | **196** | P | **Pn** | **17 35 40.5** | **+0.9** |
| **DZM** | **Mont Dzumac** | **6.34** | **196** | *e*Pn | **Pn** | **17 35 39.0** | **-0.6** |
| | 211nm,0.8s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **17 36 51.7** | **-0.5** |
| | 280nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **6.34** | **196** | | **Pn** | **17 35 39.1** | **-0.6** |
| **DZM** | **Mont Dzumac** | **6.34** | **196** | Pn | **Pn** | **17 35 39.3** | **-0.3** |
| | 35nm,0.3s,baz=36,slow=19,SNR=160 | | | | | | |
| DZM | | | | Sn | **Sn** | **17 36 52.4** | **+0.2** |
| | 16nm,0.3s,baz=319,slow=12,SNR=4.3 | | | | | | |
| | 72nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **6.41** | **197** | P | **Pn** | **17 35 40.6** | **+0.1** |
| **PINNC** | **Pines Island,** | **6.68** | **187** | P | **Pn** | **17 35 45.2** | **+1.0** |
| **PINNC** | **Pines Island,** | **6.68** | **187** | | **Pn** | **17 35 43.7** | **-0.4** |
| **MSVF** | **Nonsavu** | **9.49** | **102** | | **Pn** | **17 36 24.3** | **+1.4** |
| **MSVF** | **Nonsavu** | **9.49** | **102** | LR | LR | 17 39 25.7 | |
| | comp=Z,4μm,19.6s,baz=297,slow=34 | | | | | | |
| **MSVF** | **Nonsavu** | **9.49** | **102** | P | **Pn** | **17 36 24.3** | **+1.4** |
| **HNR** | **Honiara** | **10.41** | **307** | Pn | **Pn** | **17 36 32.7** | **-2.7** |
| **HNR** | **Honiara** | **10.41** | **307** | LR | LR | 17 40 25.3 | |
| | comp=Z,8μm,19.1s,baz=132,slow=37 | | | | | | |
| **HNR** | **Honiara** | **10.41** | **307** | P | **Pn** | **17 36 32.7** | **-2.7** |
| **GC1S** | **Gold Coast 1 S** | **18.30** | **226** | P | **P** | **17 38 22.6** | **+2.4** |
| **RK1H** | **Rockhampton Ha** | **18.33** | **243** | P | **P** | **17 38 23.0** | **+2.5** |
| **EIDS** | **Eidsvold** | **18.63** | **237** | P | **Pn** | **17 38 25.7** | **+1.6** |
| **EIDS** | **Eidsvold** | **18.63** | **237** | P | **P** | **17 38 20.9** | **-2.9** |
| **EIDS** | **Eidsvold** | **18.63** | **237** | P | **Pn** | **17 38 25.0** | **+0.8** |
| | comp=Z,938nmcomp=Z,37nm,1.1s | | | | | | |
| **RABL** | **Rabaul** | **19.70** | **305** | P | **P** | **17 38 35.8** | **+0.1** |
| **AUAYR** | **Ayr State High** | **20.23** | **257** | P | Pn | 17 38 44.0 | +0.8 |
| **BULU** | **Kimbe** | **20.46** | **298** | P | **P** | **17 38 44.9** | **+1.0** |
| **TV1H** | **Townsville Har** | **20.77** | **258** | P | Pn | 17 38 49.0 | -0.6 |
| **ARMA** | **Armidale** | **21.00** | **224** | P | **P** | **17 38 48.1** | **-1.6** |
| **ARMA** | **Armidale** | **21.00** | **224** | P | Pn | 17 38 51.7 | -0.6 |
| | comp=Z,30nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **21.37** | **256** | P | **P** | **17 38 54.6** | **+0.8** |
| | comp=Z,1.6nm,0.8s,baz=79,slow=13,SNR=36 | | | | | | |
| CTA | | | | LR | LR | 17 45 39.7 | |
| | comp=Z,32nm,21.3s,baz=81,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **21.37** | **256** | P | **P** | **17 38 55.9** | **+2.2** |
| **CTAO** | **Charters Tower** | **21.37** | **256** | P | **P** | **17 38 51.4** | **-2.3** |
| **CTAO** | **Charters Tower** | **21.37** | **256** | P | **P** | **17 38 51.4** | **-2.3** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **21.62** | **285** | P | **P** | **17 38 54.8** | **-1.7** |
| PMG | | | | IAmb | IAmb | 17 38 59.9 | |
| | comp=Z,190nm,2.0s | | | | | | |
| **PMG** | **Port Moresby** | **21.62** | **285** | P | **P** | **17 38 57.5** | **+1.0** |
| | comp=Z,15nm,0.7s,baz=119,slow=6.4,SNR=6.1 

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| BFZ | Birch Farm | 25.59 | 166 | P | | P | | 17 39 35.3 | 0.0 | | |
| HOWZ | Holdsworth Sta | 25.64 | 167 | P | | P | | 17 39 35.8 | 0.0 | | |
| CNB | Canberra Magne | 25.68 | 218 | P | | P | | 17 39 37.6 | +1.4 | | |
| CNB | Canberra Magne | 25.68 | 218 | P | | P | | 17 39 36.9 | +0.6 | | |
| | comp=Z,42nm,1.0s | | | | | | | | | | |
| CMSA | Cobar Meteorol | 25.80 | 229 | P | | P | | 17 39 40.1 | +2.8 | | |
| CMSA | Cobar Meteorol | 25.80 | 229 | P | | P | | 17 39 37.0 | -0.3 | | |
| | comp=Z,21nm,0.7s | | | | | | | | | | |
| MSWZ | Moikau Station | 26.08 | 168 | P | | P | | 17 39 39.7 | -0.1 | | |
| KHZ | Kahutara | 26.76 | 171 | P | | P | | 17 39 47.5 | +1.7 | | |
| QIS | Mount Isa | 27.62 | 256 | P | | P | | 17 39 54.2 | +0.3 | | |
| QIS | Mount Isa | 27.62 | 256 | P | | P | | 17 39 54.6 | +0.7 | | |
| | comp=Z,23nm,1.2s | | | | | | | | | | |
| INKA | Innaminka | 28.08 | 241 | P | | P | | 17 39 59.8 | +1.9 | | |
| TABU | Tabubil | 28.62 | 289 | P | | P | | 17 40 04.5 | +1.6 | | |
| STKA | Stephens Creek | 29.01 | 232 | P | | P | | 17 40 08.1 | +2.0 | | |
| STKA | Stephens Creek | 29.01 | 232 | P | | P | | 17 40 06.4 | +0.3 | | |
| | comp=Z,2.7nm,1.0s | | | | | | | | | | |
| STKA | Stephens Creek | 29.01 | 232 | P | | P | | 17 40 06.1 | 0.0 | | |
| | comp=Z,3.1nm,0.7s,baz=40,slow=7.4,SNR=6.5 | | | | | | | | | | |
| STKA | | | | PcP | | PcP | | 17 43 13.9 | -0.7 | | |
| | comp=Z,4.9nm,0.8s,baz=29,slow=4.1,SNR=5.2 | | | | | | | | | | |
| STKA | | | | LR | | LR | | 17 50 40.1 | | | |
| | comp=Z,137nm,20.7s,baz=66,slow=34 | | | | | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | | | | | |
| TOO | Toolangi | 29.50 | 219 | P | | P | | 17 40 09.0 | -1.5 | | |
| TOO | Toolangi | 29.50 | 219 | P | | P | | 17 40 10.3 | -0.2 | | |
| | comp=Z,14nm,2.7s | | | | | | | | | | |
| TOO | Toolangi | 29.50 | 219 | P | | P | | 17 40 09.0 | -1.5 | | |
| TOO | | | | pmax | | pmax | | | | | |
| | comp=Z,27nm,1.4s | | | | | | | | | | |
| JAY | Jayapura | 30.28 | 293 | P | | P | | 17 40 17.2 | -0.4 | | |
| | comp=Z,16nm,1.5s | | | | | | | | | | |
| BRAT | Ballarat | 30.45 | 220 | P | | P | | 17 40 20.2 | +1.5 | | |
| GLAD | Gladstone | 30.52 | 211 | P | | P | | 17 40 20.0 | +0.6 | | |
| RAR | Rarotonga | 30.67 | 105 | LR | | LR | | 17 51 42.9 | | | |
| | comp=Z,81nm,19.5s,baz=294,slow=34 | | | | | | | | | | |
| GENI | Genyem | 30.72 | 293 | P | | P | | 17 40 22.4 | +1.0 | | |
| WR0 | Warramunga Arr | 32.34 | 258 | P | | P | | 17 40 33.9 | -1.8 | | |
| OOD | Oodnadatta | 32.39 | 243 | P | | P | | 17 40 38.3 | +2.3 | | |
| WB0 | Warramunga Arr | 32.47 | 258 | P | | P | | 17 40 35.4 | -1.4 | | |
| WB2 | Warramunga Arr | 32.52 | 258 | P | | P | | 17 40 35.5 | -1.7 | | |
| WRAB | Tennant Creek | 32.52 | 258 | P | | P | | 17 40 35.1 | -2.1 | | |
| WRAB | Tennant Creek | 32.52 | 258 | *i* P | | P | | 17 40 33.7 | -3.6 | | |
| WRAB | | | | pmax | | pmax | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | | |
| WRA | Warramunga Arr | 32.53 | 258 | P | | P | | 17 40 35.5 | -1.8 | | |
| WRA | Warramunga Arr | 32.53 | 258 | P | | P | | 17 40 35.1 | -2.2 | | |
| | comp=Z,3.8nm,0.7s,baz=83,slow=6.9,SNR=59 | | | | | | | | | | |
| WRA | | | | PcP | | PcP | | 17 43 23.6 | -0.6 | | |
| | comp=Z,2.4nm,0.9s,baz=97,slow=2.0,SNR=4.0 | | | | | | | | | | |
| WRA | | | | LR | | LR | | 17 52 52.1 | | | |
| | comp=Z,377nm,21.3s,baz=0.5,slow=35 | | | | | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | | | | | |
| WRA | Warramunga Arr | 32.53 | 258 | *i* P | | P | | 17 40 36.0 | -1.4 | | |
| WRA | | | | pmax | | pmax | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | | | |
| AS01 | Alice Springs | 33.16 | 251 | P | | P | | 17 40 42.7 | -0.2 | | |
| AS31 | Alice Springs | 33.20 | 251 | P | | P | | 17 40 41.9 | -1.3 | | |
| AS31 | Alice Springs | 33.20 | 251 | P | | P | | 17 40 42.3 | -0.9 | | |
| | comp=Z,11nm,0.8s | | | | | | | | | | |
| ASAR | Alice Springs | 33.20 | 251 | P | | P | | 17 40 42.1 | -1.2 | | |
| ASAR | Alice Springs | 33.20 | 251 | P | | P | | 17 40 42.5 | -0.7 | | |
| | comp=Z,25nm,0.8s,baz=80,slow=8.5,SNR=253 | | | | | | | | | | |
| ASAR | | | | PcP | | PcP | | 17 43 24.1 | -1.9 | | |
| | comp=Z,1.4nm,0.7s,baz=91,slow=2.7,SNR=5.3 | | | | | | | | | | |
| ASAR | | | | LR | | LR | | 17 53 14.5 | | | |
| | comp=Z,435nm,19.4s,baz=86,slow=35 | | | | | | | | | | |
| | comp=Z,25nm,0.8s | | | | | | | | | | |
| KDU | Kakadu | 34.85 | 271 | P | | P | | 17 40 57.6 | 0.0 | | |
| KDU | Kakadu | 34.85 | 271 | P | | P | | 17 40 56.4 | -1.2 | | |
| | comp=Z,28nm,1.9s | | | | | | | | | | |
| MTN | Manton Dam | 36.11 | 270 | P | | P | | 17 41 08.8 | +0.4 | | |
| MTN | Manton Dam | 36.11 | 270 | P | | P | | 17 41 06.9 | -1.5 | | |
| MTN | Manton Dam | 36.11 | 270 | P | | P | | 17 41 07.0 | -1.5 | | |
| | comp=Z,20nm,1.4s | | | | | | | | | | |
| GUMO | Guam | 37.39 | 320 | LR | | LR | | 17 57 06.3 | | | |
| | comp=Z,123nm,19.2s,baz=146,slow=37 | | | | | | | | | | |
| FAKI | Fak Fak | 37.77 | 286 | P | | P | | 17 41 23.8 | +1.2 | | |
| FAKI | Fak Fak | 37.77 | 286 | P | | P | | 17 41 20.6 | -2.0 | | |
| FAKI | Fak Fak | 37.77 | 286 | P | | P | | 17 41 22.1 | -0.5 | | |
| | comp=Z,79nm,1.3s,comp=Z,1µm | | | | | | | | | | |
| KNRA | Kununurra | 38.01 | 265 | P | | P | | 17 41 22.9 | -1.7 | | |
| KNRA | | | | IAmb | | IAmb | | 17 41 24.6 | | | |
| | comp=Z,40nm,1.1s | | | | | | | | | | |
| KNRA | Kununurra | 38.01 | 265 | P | | P | | 17 41 23.4 | -1.2 | | |
| | comp=Z,39nm,1.1s | | | | | | | | | | |
| WRKA | Warakurna | 38.44 | 250 | P | | P | | 17 41 29.9 | +1.7 | | |
| WRKA | Warakurna | 38.44 | 250 | P | | P | | 17 41 27.3 | -0.9 | | |
| | comp=Z,26nm,1.0s | | | | | | | | | | |
| SWI | Sorong | 39.48 | 289 | P | | P | | 17 41 37.6 | +0.6 | | |
| | comp=Z,91nm,1.2s,comp=Z,825nm | | | | | | | | | | |
| PPT2 | Papeete2 | 40.30 | 99 | *e*S | | S | | 17 47 51.5 | -0.2 | | |
| | comp=Z,162nm,23.8s | | | | | | | | | | |
| PPT2 | | | | *e*SS | | SS | | 17 50 48.3 | -1.9 | | |
| | comp=Z,141nm,25.5s | | | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | | 17 52 44.6 | | | |
| | comp=Z,667nm,29.0s | | | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | | 17 52 52.8 | | | |
| | comp=Z,852nm,26.5s | | | | | | | | | | |
| PPT | Papeete | 40.30 | 98 | LR | | LR | | 17 54 11.1 | | | |
| | comp=Z,497nm,20.2s,baz=288,slow=30 | | | | | | | | | | |
| TBI | Tubuai | 40.34 | 107 | *e*S | | S | | 17 47 50.5 | -1.5 | | |
| | comp=Z,734nm,24.2s | | | | | | | | | | |
| TBI | | | | *e*LR | | LR | | 17 52 44.6 | | | |
| | comp=Z,939nm,30.5s | | | | | | | | | | |
| TBI | | | | *e*LR | | LR | | 17 52 50.8 | | | |
| | comp=Z,3µm,31.0s | | | | | | | | | | |
| FITZ | Fitzroy Crossi | 40.79 | 261 | P | | P | | 17 41 47.6 | -0.2 | | |
| FITZ | Fitzroy Crossi | 40.79 | 261 | P | | P | | 17 41 46.7 | -1.1 | | |
| FITZ | Fitzroy Crossi | 40.79 | 261 | P | | P | | 17 41 47.0 | -0.8 | | |
| NLAI | Namlea | 42.45 | 283 | P | | P | | 17 42 01.6 | +0.2 | | |
| | comp=Z,43nm,1.3s,comp=Z,691nm | | | | | | | | | | |
| SOEI | Soe | 43.31 | 273 | P | | P | | 17 42 09.9 | +1.3 | | |
| SOEI | Soe | 43.31 | 273 | IAmb | | IAmb | | 17 42 19.6 | | | |
| | comp=Z,58nm,1.3s | | | | | | | | | | |
| SOEI | Soe | 43.31 | 273 | P | | P | | 17 42 09.2 | +0.6 | | |
| | comp=Z,39nm,1.5s | | | | | | | | | | |
| TNTI | Ternate | 43.70 | 288 | P | | P | | 17 42 11.9 | +0.3 | | |
| | comp=Z,24nm,1.2s | | | | | | | | | | |
| BATI | Baumata | 43.80 | 272 | P | | P | | 17 42 12.8 | +0.4 | | |
| MMRI | Maumere | 45.52 | 274 | P | | P | | 17 42 25.7 | -0.4 | | |
| | comp=Z,58nm,0.8s | | | | | | | | | | |
| EDFI | Ende, Flores | 46.02 | 273 | P | | P | | 17 42 29.1 | -1.1 | | |
| | comp=Z,39nm,1.1s | | | | | | | | | | |
| PSA00 | Pilbara Seismi | 46.09 | 255 | P | | P | | 17 42 30.2 | -0.4 | | |
| PSA00 | Pilbara Seismi | 46.09 | 255 | P | | P | | 17 42 30.1 | -0.4 | | |
| PSA00 | | | | IAmb | | IAmb | | 17 42 31.4 | | | |
| | comp=Z,31nm,1.2s | | | | | | | | | | |
| PSA00 | Pilbara Seismi | 46.09 | 255 | P | | P | | 17 42 30.5 | 0.0 | | |
| MBWA | Marble Bar | 46.21 | 256 | P | | P | | 17 42 31.2 | -0.3 | | |
| MEEK | Meekatharra | 47.26 | 248 | P | | P | | 17 42 40.5 | +0.8 | | |
| MEEK | Meekatharra | 47.26 | 248 | P | | P | | 17 42 39.2 | -0.4 | | |
| | comp=Z,47nm,1.0s | | | | | | | | | | |
| WBSI | Waikabubak, Su | 48.03 | 271 | P | | P | | 17 42 45.1 | -0.7 | | |
| | comp=Z,27nm,0.9s | | | | | | | | | | |
| KAPI | Kappang | 48.85 | 277 | P | | P | | 17 42 52.1 | 0.0 | | |
| KAPI | | | | IAmb | | IAmb | | 17 42 53.3 | | | |
| | comp=Z,26nm,1.1s | | | | | | | | | | |
| KAPI | Kappang | 48.85 | 277 | LR | | LR | | 18 02 55.5 | | | |
| | comp=Z,136nm,20.5s,baz=96,slow=36 | | | | | | | | | | |
| KAPI | Kappang | 48.85 | 277 | P | | P | | 17 42 52.1 | 0.0 | | |
| KAPI | | | | pmax | | pmax | | | | | |
| | comp=Z,26nm,1.1s | | | | | | | | | | |
| NWAO | Narrogin (SRO) | 49.00 | 240 | LR | | LR | | 18 03 58.4 | | | |
| | comp=Z,366nm,19.5s,baz=96,slow=37 | | | | | | | | | | |
| MPSI | Mapaga | 50.44 | 284 | P | | P | | 17 43 03.6 | -0.6 | | |
| | comp=Z,57nm,0.9s,comp=Z,469nm | | | | | | | | | | |
| TWSI | Taliwang, Sumb | 50.64 | 272 | P | | P | | 17 43 05.8 | 0.0 | | |
| TAOE | Nuku Hiva Isla | 50.73 | 88 | *e*S | | S | | 17 50 15.3 | -7.1 | | |
| | comp=Z,267nm,27.4s | | | | | | | | | | |
| MYLDM | Lahad Datu | 53.57 | 289 | P | | P | | 17 43 26.4 | -1.2 | | |
| RKT | Rikitea | 53.66 | 107 | *e*LR | | LR | | 17 58 59.9 | | | |
| | comp=Z,4µm,34.5s | | | | | | | | | | |
| KKM | Kota Kinabalu | 56.00 | 289 | P | | P | | 17 43 45.0 | -0.3 | | |
| JOW | Kunigami | 57.62 | 317 | LR | | LR | | 18 09 09.8 | | | |
| | comp=Z,168nm,18.1s,baz=158,slow=36 | | | | | | | | | | |
| STKI | Sintang | 58.27 | 280 | P | | P | | 17 44 02.1 | +0.8 | | |
| KPJI | Karang Pucung | 58.62 | 271 | P | | P | | 17 44 04.3 | +0.5 | | |
| MJAR | Matsushiro Arr | 59.44 | 332 | P | | P | | 17 44 07.4 | -1.6 | | |
| | comp=Z,6.0nm,0.9s,baz=160,slow=7.2,SNR=24 | | | | | | | | | | |
| MJAR | | | | LR | | LR | | 18 09 34.6 | | | |
| | comp=Z,48nm,18.8s,baz=177,slow=36 | | | | | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | | | |
| MAJO | Matsushiro | 59.44 | 332 | P | | P | | 17 44 09.2 | +0.2 | | |
| MAJO | Matsushiro | 59.44 | 332 | P | | P | | 17 44 08.3 | -0.7 | | |
| MAJO | | | | IAmb | | IAmb | | 17 44 09.4 | | | |
| | comp=Z,21nm,1.1s | | | | | | | | | | |
| MAJO | Matsushiro | 59.44 | 332 | *i* P | | P | | 17 44 08.0 | -1.0 | | |
| MAJO | | | | pmax | | pmax | | | | | |
| | comp=Z,21nm,1.2s | | | | | | | | | | |
| MJB9 | Matsu-Tunnel | 59.45 | 332 | P | | P | | 17 44 09.5 | +0.4 | | |
| MJB9 | | | | IAmb | | IAmb | | 17 44 10.7 | | | |
| | comp=Z,19nm,1.1s | | | | | | | | | | |
| BBJI | Bungbulang | 59.82 | 271 | P | | P | | 17 44 11.7 | -0.5 | | |
| KSMI | Kuching | 59.83 | 281 | P | | P | | 17 44 12.4 | +0.3 | | |
| KSMI | Kuching | 59.83 | 281 | P | | P | | 17 44 09.5 | -2.6 | | |
| SSLB | Suanglung | 60.82 | 309 | P | | P | | 17 44 18.6 | -0.1 | | |
| DBJI | Dramaga | 60.91 | 271 | P | | P | | 17 44 19.6 | 0.0 | | |
| SBA | Scott Base | 61.93 | 180 | P | | P | | 17 44 26.6 | +1.2 | | |
| SBA | | | | IAmb | | IAmb | | 17 44 28.1 | | | |
| | comp=Z,17nm,1.0s | | | | | | | | | | |
| SBA | Scott Base | 61.93 | 180 | P | | P | | 17 44 26.6 | +1.2 | | |
| SBA | | | | pmax | | pmax | | | | | |
| | comp=Z,17nm,1.0s | | | | | | | | | | |
| CASY | Casey | 62.79 | 203 | P | | P | | 17 44 30.6 | -0.7 | | |
| ASAJ | Asahikawa | 64.22 | 340 | LR | | LR | | 18 07 35.9 | | | |
| | comp=Z,148nm,21.5s,baz=172,slow=31 | | | | | | | | | | |
| KSRS | Korea Array | 65.30 | 325 | P | | P | | 17 44 48.0 | -0.2 | | |
| | comp=Z,2.3nm,0.8s,baz=144,slow=7.2,SNR=9.5 | | | | | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | | | | | |
| NJ2 | Nanjing | 67.24 | 316 | *e*P | | P | | 17 45 03.3 | +2.5 | | |
| NJ2 | | | | pmax | | pmax | | | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | | | | |
| BKNI | Bangkinang | 68.28 | 277 | P | | P | | 17 45 09.3 | +1.6 | | |
| USRK | Ussuriysk Ar. | 68.42 | 333 | P | | P | | 17 45 08.5 | +0.6 | | |
| USRK | Ussuriysk Ar. | 68.42 | 333 | P | | P | | 17 45 08.8 | +0.9 | | |
| | comp=Z,13nm,1.0s,baz=141,slow=6.2,SNR=17 | | | | | | | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | | | |
| USRK | Ussuriysk Ar. | 68.42 | 333 | P | | P | | 17 45 08.5 | +0.6 | | |
| USA0B | Ussuriysk Arra | 68.42 | 333 | P | | P | | 17 45 08.1 | +0.2 | | |
| USA0B | | | | IAmb | | IAmb | | 17 45 09.8 | | | |
| | comp=Z,23nm,1.1s | | | | | | | | | | |
| USA0B | Ussuriysk Arra | 68.42 | 333 | *i* P | | P | | 17 45 07.7 | -0.2 | | |
| SHEM | Shemya Is, Ala | 68.57 | 4 | LR | | LR | | 18 10 32.7 | | | |
| | comp=Z,133nm,19.6s,baz=217,slow=32 | | | | | | | | | | |
| PEA0B | Petropavlovsk- | 69.38 | 353 | *ce*P | | P | | 17 45 13.5 | -0.2 | | |
| PETK | Petropavlovsk- | 69.38 | 353 | P | | P | | 17 45 13.0 | -0.7 | | |
| | comp=Z,6.0nm,0.8s,baz=151,slow=7.4,SNR=15 | | | | | | | | | | |
| PETK | | | | LR | | LR | | 18 10 02.8 | | | |
| | comp=Z,72nm,20.1s,baz=136,slow=31 | | | | | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | | | |
| MDJ | Mudanjiang | 69.82 | 332 | P | | P | | 17 45 19.0 | +2.4 | | |
| MDJ | Mudanjiang | 69.82 | 332 | P | | P | | 17 45 17.4 | +0.8 | | |
| MDJ | | | | sP | | sP | | 17 45 21.6 | +0.9 | | |
| MDJ | | | | pmax | | pmax | | | | | |
| | comp=Z,26nm,1.0s | | | | | | | | | | |
| MDJ | | | | LR | | LR | | | | | |
| | comp=Z,650nm,15.0s | | | | | | | | | | |
| MDJ | | | | LR | | LR | | | | | |
| | comp=Z,490nm,15.0s | | | | | | | | | | |
| MDJ | | | | LR | | LR | | | | | |
| | comp=Z,560nm,15.0s | | | | | | | | | | |
| MDJ | Mudanjiang | 69.82 | 332 | IAmb | | IAmb | | 17 45 18.3 | | | |
| | comp=Z,23nm,1.0s | | | | | | | | | | |
| RPSI | Rantau Prapat | 71.00 | 279 | P | | P | | 17 45 22.4 | -2.1 | | |
| PSI | Prapat | 71.03 | 279 | P | | P | | 17 45 22.4 | -2.5 | | |
| PSI | | | | pmax | | pmax | | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | | |
| CN2 | Changchun | 71.20 | 329 | *e*P | | P | | 17 45 25.5 | +0.4 | | |
| CN2 | | | | pmax | | pmax | | | | | |
| | comp=Z,20nm,1.1s | | | | | | | | | | |
| BNX | BinXian | 71.68 | 331 | ⇓P | | P | | 17 45 27.9 | 0.0 | | |
| BNX | | | | pmax | | pmax | | | | | |
| | comp=Z,25nm,1.6s | | | | | | | | | | |
| GRNR | Gornyy | 72.08 | 339 | ⇑*i* P | | P | | 17 45 30.8 | +0.6 | | |
| GRNR | | | | pmax | | pmax | | | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | | | |
| GRNR | | | | MLR | | MLR | | | | | |
| | comp=E,250nm,20.0s | | | | | | | | | | |
| KLR | Kul'dur | 72.52 | 336 | LR | | LR | | 18 13 29.9 | | | |
| | comp=E,63nm,21.5s,baz=152,slow=33 | | | | | | | | | | |
| KLR | Kul'dur | 72.52 | 336 | *ce*P | | P | | 17 45 32.0 | -0.9 | | |
| KLR | | | | pmax | | pmax | | | | | |
| | comp=Z,20nm,1.7s | | | | | | | | | | |
| LYN | LuoYang | 73.04 | 314 | P | | P | | 17 45 36.8 | +0.5 | | |
| LYN | | | | pmax | | pmax | | | | | |
| | comp=Z,46nm,0.8s | | | | | | | | | | |
| LYN | | | | pmax | | pmax | | | | | |
| | comp=Z,500nm,5.0s | | | | | | | | | | |
| HNS | HongShan | 73.17 | 318 | ⇑P | | P | | 17 45 37.4 | +0.4 | | |
| HNS | | | | pmax | | pmax | | | | | |
| | comp=Z,22nm,1.0s | | | | | | | | | | |
| GYA | Guiyang | 73.23 | 305 | P | | P | | 17 45 38.5 | +0.8 | | |
| GYA | | | | pmax | | pmax | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | | | |
| BJI | Beijing | 73.84 | 321 | P | | P | | 17 45 41.5 | +0.7 | | |
| BJI | | | | pmax | | pmax | | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | | | |
| QSPA | South Pole Qui | 74.09 | 180 | P | | P | | 17 45 41.7 | -0.5 | | |
| QSPA | South Pole Qui | 74.09 | 180 | P | | P | | 17 45 42.6 | +0.4 | | |
| | comp=Z,32nm,0.9s,baz=1.8,slow=1.2,SNR=129 | | | | | | | | | | |
| | comp=Z,32nm,0.9s | | | | | | | | | | |
| PHRA | Phrae | 75.25 | 294 | P | | P | | 17 45 49.6 | +0.1 | | |
| XAN | Xi'an | 75.25 | 312 | ⇑P | | P | | 17 45 49.3 | 0.0 | | |
| XAN | | | | pP | | pP | | 17 45 52.0 | -0.3 | | |
| XAN | | | | pmax | | pmax | | | | | |
| | comp=Z,370nm,5.8s | | | | | | | | | | |
| KMI | Kunming | 75.80 | 302 | ⇓P | | P | | 17 45 53.9 | +1.1 | | |
| KMI | | | | pP | | sP | | 17 45 58.3 | +1.4 | | |
| KMI | | | | pmax | | pmax | | | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | | | |
| XLT | XiLinHaoTe | 76.27 | 324 | *e*P | | P | | 17 45 55.8 | +0.8 | | |
| XLT | | | | pmax | | pmax | | | | | |
| | comp=Z,12nm,0.8s | | | | | | | | | | |
| CMAR | Chiang Mai Arr | 76.36 | 294 | P | | P | | 17 45 56.0 | +0.1 | | |
| CMAR | Chiang Mai Arr | 76.36 | 294 | P | | P | | 17 45 56.3 | +0.4 | | |
| | comp=Z,4.7nm,0.8s,baz=130,slow=4.8,SNR=23 | | | | | | | | | | |
| CMAR | | | | LR | | LR | | 18 21 20.1 | | | |
| | comp=Z,33nm,19.4s,baz=105,slow=37 | | | | | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | | | | | |
| CMAR | Chiang Mai Arr | 76.36 | 294 | *i* P | | P | | 17 45 56.9 | +1.0 | | |
| CMAR | | | | pmax | | pmax | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | | | |
| MA2 | Magadan | 76.60 | 351 | *ce*P | | P | | 17 45 53.3 | -3.0 | | |
| MA2 | | | | pmax | | pmax | | | | | |
| | comp=Z,23nm,2.5s | | | | | | | | | | |
| HHC | Hu-ho-hao-te | 77.16 | 319 | *e*P | | P | | 17 46 01.6 | +1.5 | | |
| HHC | | | | pmax | | pmax | | | | | |
| | comp=Z,32nm,0.6s | | | | | | | | | | |
| HHC | | | | pmax | | pmax | | | | | |
| | comp=Z,250nm,5.2s | | | | | | | | | | |
| PZH | PanZhiHua | 77.19 | 303 | P | | P | | 17 46 02.5 | +1.9 | | |
| PZH | | | | pmax | | pmax | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | | |
| PZH | | | | pmax | | pmax | | | | | |
| | comp=Z,110nm,3.9s | | | | | | | | | | |
| CD2 | Chengdu | 77.54 | 307 | P | | P | | 17 46 02.6 | +0.2 | | |
| CD2 | | | | pmax | | pmax | | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | | | |
| HIA | Hailar | 77.84 | 330 | *e*P | | P | | 17 46 03.3 | -0.3 | | |
| HIA | | | | pmax | | pmax | | | | | |
| | comp=Z,16nm,1.3s | | | | | | | | | | |
| BTO | Baotou | 78.00 | 319 | *e*P | | P | | 17 46 06.3 | +1.5 | | |
| BTO | | | | PP | | PP | | 17 49 03.0 | +1.9 | | |
| BTO | | | | S | | S | | 17 55 57.3 | -1.3 | | |
| BTO | | | | pmax | | pmax | | | | | |
| | comp=Z,23nm,0.6s | | | | | | | | | | |
| BTO | | | | pmax | | pmax | | | | | |
| | comp=Z,390nm,5.1s | | | | | | | | | | |
| BTO | | | | LR | | LR | | | | | |
| | comp=Z,410nm,4.1s | | | | | | | | | | |
| BTO | | | | LR | | LR | | | | | |
| | comp=Z,410nm,6.9s | | | | | | | | | | |
| BTO | | | | LR | | LR | | | | | |
| | comp=Z,310nm,4.7s | | | | | | | | | | |
| PLK4 | Peulik 4 | 78.93 | 18 | IAmb | | IAmb | | 17 46 17.1 | | | |
| | comp=Z,32nm,1.1s | | | | | | | | | | |
| TNCH | TengChong | 79.25 | 300 | ⇑P | | P | | 17 46 12.0 | -0.1 | | |
| TNCH | | | | pP | | pP | | 17 46 15.5 | +0.4 | | |
| TNCH | | | | pmax | | pmax | | | | | |
| | comp=Z,6.0nm,1.5s | | | | | | | | | | |
| OHAK | Old Harbor | 79.57 | 20 | P | | P | | 17 46 14.5 | +1.6 | | |
| OHAK | Old Harbor | 79.57 | 20 | P | | P | | 17 46 13.7 | +0.8 | | |
| OHAK | | | | IAmb | | IAmb | | 17 46 14.6 | | | |
| | comp=Z,26nm,1.1s | | | | | | | | | | |
| SEY | Seymchan | 79.61 | 353 | *ce*P | | P | | 17 46 13.7 | +0.8 | | |
| SEY | | | | pmax | | pmax | | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | | | |
| LZH | Lanzhou | 79.88 | 312 | *e*P | | P | | 17 46 19.1 | +3.8 | | |
| LZH | | | | pP | | PcP | | 17 46 24.3 | +1.4 | | |
| LZH | | | | pmax | | pmax | | | | | |
| | comp=Z,35nm,1.0s | | | | | | | | | | |
| N15K | Kwethluk River | 80.03 | 15 | P | | P | | 17 46 16.2 | +0.9 | | |
| N15K | | | | IAmb | | IAmb | | 17 46 21.2 | | | |
| | comp=Z,25nm,1.2s | | | | | | | | | | |
| P18K | Big Mountain, | 80.72 | 18 | IAmb | | IAmb | | 17 46 21.8 | | | |
| | comp=Z,24nm,0.8s | | | | | | | | | | |
| M16K | Timber Creek | 81.05 | 15 | IAmb | | IAmb | | 17 46 23.1 | | | |
| | comp=Z,23nm,1.3s | | | | | | | | | | |
| MAW | Mawson | 81.14 | 202 | P | | P | | 17 46 21.3 | 0.0 | | |
| | comp=Z,2.4nm,0.9s,baz=116,slow=14,SNR=4.0 | | | | | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | | | | | |
| K15K | Wolf Creek Mou | 81.52 | 14 | IAmb | | IAmb | | 17 46 25.4 | | | |
| | comp=Z,25nm,1.1s | | | | | | | | | | |
| M17K | Holitna River | 81.76 | 16 | IAmb | | IAmb | | 17 46 28.4 | | | |
| | comp=Z,19nm,1.1s | | | | | | | | | | |
| L18K | Granite Mounta | 82.64 | 16 | IAmb | | IAmb | | 17 46 31.6 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | | |
| K17K | Iditarod | 82.65 | 15 | IAmb | | IAmb | | 17 46 31.5 | | | |
| | comp=Z,16nm,1.1s | | | | | | | | | | |
| M19K | Big River Lodg | 83.00 | 17 | IAmb | | IAmb | | 17 46 34.1 | | | |
| | comp=Z,16nm,1.1s | | | | | | | | | | |
| M20K | Styx River | 83.34 | 17 | IAmb | | IAmb | | 17 46 35.0 | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | | |
| YAK | Yakutsk | 83.48 | 343 | *ce*P | | P | | 17 46 32.6 | -0.8 | | |
| YAK | | | | pmax | | pmax | | | | | |
| | comp=Z,27nm,1.7s | | | | | | | | | | |
| ULN | Ulaanbaatar | 83.70 | 324 | *ce*P | | P | | 17 46 35.6 | +0.4 | | |
| ULN | | | | pmax | | pmax | | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | | |
| BILL | Bilibino | 83.76 | 359 | *ce*P | | P | | 17 46 34.5 | -0.3 | | |
| BILL | | | | *e**PP | | pP | | 17 46 38.3 | +0.4 | | |
| BILL | | | | *e* | | | | 17 49 50.5 | | | |
| BILL | | | | *e*PPP | | PPP | | 17 51 39.8 | | | |
| BILL | | | | pmax | | pmax | | | | | |
| | comp=Z,12nm,1.3s | | | | | | | | | | |
| SONM | Songino Array | 84.07 | 323 | P | | P | | 17 46 36.2 | -0.8 | | |
| SONM | | | | IAmb | | IAmb | | 17 46 38.3 | | | |
| | comp=Z,14nm,1.4s | | | | | | | | | | |
| SONM | Songino Array | 84.07 | 323 | P | | P | | 17 46 37.3 | +0.3 | | |
| | comp=Z,3.8nm,0.8s,baz=137,slow=5.3,SNR=22 | | | | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | | | |
| KCPM | Cahto Peak | 84.08 | 46 | IAmb | | IAmb | | 17 46 40.8 | | | |
| | comp=Z,17nm,0.9s | | | | | | | | | | |
| GTA | Gaotai | 84.23 | 314 | P | | P | | 17 46 39.0 | +1.0 | | |
| GTA | | | | pP | | sP | | 17 46 43.5 | +1.3 | | |
| GTA | | | | pmax | | pmax | | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | | | |
| PMR | Palmer | 84.31 | 19 | P | | P | | 17 46 40.2 | +2.5 | | |
| SAO | San Andreas Ge | 84.35 | 49 | IAmb | | IAmb | | 17 46 42.0 | | | |
| | comp=Z,11nm,1.1s | | | | | | | | | | |
| BBGB | Big Mountain B | 84.57 | 50 | IAmb | | IAmb | | 17 46 46.5 | | | |
| | comp=Z,24nm,1.2s | | | | | | | | | | |
| O02D | Mt. Diablo Mer | 84.84 | 46 | IAmb | | IAmb | | 17 46 44.9 | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | | |
| SHL | Shillong | 85.02 | 298 | IAmb | | IAmb | | 17 46 47.4 | | | |
| | comp=Z,11nm,0.8s | | | | | | | | | | |
| BCW | Bitter Crk WRg | 85.13 | 52 | IAmb | | IAmb | | 17 46 46.4 | | | |
| | comp=Z,14nm,0.8s | | | | | | | | | | |
| KLU | Klutina | 85.27 | 20 | IAmb | | IAmb | | 17 46 44.3 | | | |
| | comp=Z,12nm,0.9s | | | | | | | | | | |
| G18K | Tagagawik | 85.28 | 13 | IAmb | | IAmb | | 17 46 44.3 | | | |
| | comp=Z,24nm,1.2s | | | | | | | | | | |
| BELA | Belgrano 2 | 85.44 | 175 | P | | P | | 17 46 42.0 | -1.4 | | |
| AFDM | Forest Hills D | 85.60 | 48 | IAmb | | IAmb | | 17 46 48.4 | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | | |
| CMB | Columbia Colle | 85.64 | 49 | IAmb | | IAmb | | 17 46 48.1 | | | |
| | comp=Z,10nm,0.9s | | | | | | | | | | |
| N25K | Chitina, Valde | 85.80 | 21 | IAmb | | IAmb | | 17 46 47.0 | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | | |
| ISLE | Juniper Island | 85.89 | 22 | IAmb | | IAmb | | 17 46 47.3 | | | |
| | comp=Z,21nm,0.9s | | | | | | | | | | |
| VRDI | Verde Repeater | 85.92 | 21 | IAmb | | IAmb | | 17 46 47.4 | | | |
| | comp=Z,12nm,0.8s | | | | | | | | | | |
| GLB | Gilahina Butte | 85.95 | 21 | IAmb | | IAmb | | 17 46 47.5 | | | |
| | comp=Z,13nm,0.8s | | | | | | | | | | |
| HATC | Hat Creek Radi | 86.03 | 46 | IAmb | | IAmb | | 17 46 50.3 | | | |
| | comp=Z,25nm,1.1s | | | | | | | | | | |
| ISA | Isabella, Lake | 86.12 | 51 | IAmb | | IAmb | | 17 46 50.9 | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | | |
| MCARA | McCarthy VSAT | 86.18 | 21 | IAmb | | IAmb | | 17 46 48.8 | | | |
| | comp=Z,21nm,1.1s | | | | | | | | | | |
| E18K | Tukpahlearik C | 86.20 | 12 | IAmb | | IAmb | | 17 46 49.2 | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | | |
| MDPB | Devils Postpil | 86.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PRN** | **Pahroc Range** | **89.32** | **51** | IAmb | IAmb | 17 47 06.5 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **E07A** | **Sunnyside** | **89.47** | **41** | IAmb | IAmb | 17 47 06.1 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **G08A** | **Pilot Rock** | **89.53** | **42** | IAmb | IAmb | 17 47 06.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **HAWA** | **Hanford** | **89.60** | **41** | IAmb | IAmb | 17 47 06.8 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **R33M** | **Jennings River** | **89.65** | **27** | IAmb | IAmb | 17 47 09.2 | |
| | comp=Z,17nm,1.6s | | | | | | |
| **PALK** | **Pallekele** | **89.69** | **278** | LR | LR | 18 29 21.7 | |
| | comp=Z,53nm,18.1s,baz=225,slow=37 | | | | | | |
| **E08A** | **Dider Farm, El** | **89.94** | **41** | IAmb | IAmb | 17 47 08.4 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **89.95** | **16** | P | **P** | **17 47 05.4** | **+0.4** |
| **Q12A** | **Willow Creek R** | **90.06** | **49** | IAmb | IAmb | 17 47 10.2 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **D08A** | **Wollman Farm,** | **90.25** | **41** | IAmb | IAmb | 17 47 09.6 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **90.50** | **323** | *i* P | **P** | **17 47 07.8** | **-0.3** |
| KNGR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **B08A** | **Colville Reser** | **90.51** | **39** | IAmb | IAmb | 17 47 10.3 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **E09A** | **Wood Farm, Sta** | **90.53** | **41** | IAmb | IAmb | 17 47 11.4 | |
| | comp=Z,20nm,1.6s | | | | | | |
| **KNB** | **Kanab** | **90.86** | **52** | IAmb | IAmb | 17 47 14.4 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **TUC** | **Tucson** | **90.94** | **57** | P | **P** | **17 47 11.8** | **+1.3** |
| **TUC** | **Tucson** | **90.94** | **57** | P | **P** | **17 47 11.9** | **+1.3** |
| TUC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **U15A** | **North Rim** | **91.07** | **52** | IAmb | IAmb | 17 47 14.8 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **MTPU** | **Mount Pierson** | **91.67** | **51** | IAmb | IAmb | 17 47 23.1 | |
| | comp=Z,21nm,2.0s | | | | | | |
| **C27K** | **Jago River** | **91.73** | **15** | IAmb | IAmb | 17 47 15.0 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.74** | **184** | ⇑P | **P** | **17 47 11.8** | **-1.8** |
| | comp=Z,797nm,0.8s | | | | | | |
| **319A** | **Douglas** | **91.88** | **58** | IAmb | IAmb | 17 47 19.1 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **92.39** | **183** | P | **P** | **17 47 15.1** | **-1.4** |
| SNAA | | | | IAmb | IAmb | 17 47 17.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **92.39** | **183** | ⇑P | **P** | **17 47 15.2** | **-1.4** |
| | comp=Z,85nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **92.39** | **183** | P | **P** | **17 47 15.4** | **-1.1** |
| | comp=Z,10nm,1.1s,baz=203,slow=5.2,SNR=18 | | | | | | |
| | comp=Z,10nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **92.39** | **183** | *ce*P | **P** | **17 47 14.5** | **-2.1** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| **HMU** | **Henry Mountain** | **92.72** | **51** | IAmb | IAmb | 17 49 25.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.02** | **181** | ⇑P | **P** | **17 47 18.2** | **-1.2** |
| | comp=Z,8.2nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **93.30** | **181** | ⇑P | **P** | **17 47 20.2** | **-0.5** |
| | comp=Z,10nm,0.7s,baz=184,slow=5.1 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **93.59** | **181** | ⇑P | **P** | **17 47 21.4** | **-0.6** |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **WMQ** | **Urumqi** | **94.29** | **314** | *e*P | **P** | **17 47 27.9** | **+2.2** |
| **PDAR** | **Pinedale Array** | **95.03** | **47** | P | **P** | **17 47 30.8** | **+1.4** |
| | comp=Z,0.3nm,0.4s,baz=263,slow=6.0,SNR=1.7 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **ANMO** | **Albuquerque** | **95.16** | **55** | *i* P | **P** | **17 47 27.4** | **-2.7** |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,3.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **95.97** | **61** | P | **P** | **17 47 34.8** | **+1.0** |
| | comp=Z,0.5nm,0.7s,baz=238,slow=5.2,SNR=4.4 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **96.23** | **320** | *i* P | **P** | **17 47 35.6** | **+1.0** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.16** | **27** | P | **P** | **17 47 42.1** | **-0.6** |
| | comp=Z,3.8nm,0.8s,baz=268,slow=5.0,SNR=6.6 | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **98.77** | **316** | *i* P | **P** | **17 47 46.4** | **+0.5** |
| **MKAR** | **Makanchi Array** | **98.77** | **316** | P | **P** | **17 47 46.1** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=94,slow=6.2,SNR=5.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **98.77** | **316** | *i* P | **P** | **17 47 46.5** | **+0.6** |
| **ZALV** | **Zalesovo Beam** | **98.96** | **324** | P | **P** | **17 47 46.0** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=130,slow=4.5,SNR=3.9 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **98.96** | **324** | *i* P | Pdif | 17 47 47.7 | +1.1 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **H03S2** | **Juan Fernandez** | **99.12** | **129** | T | T | 19 38 06.1 | |
| | baz=241,slow=75,SNR=23 | | | | | | |
| **H03S1** | **Juan Fernandez** | **99.13** | **129** | T | T | 19 38 07.3 | |
| | baz=241,slow=75,SNR=19 | | | | | | |
| **H03S3** | **Juan Fernandez** | **99.14** | **129** | T | T | 19 38 06.7 | |
| | baz=241,slow=75,SNR=20 | | | | | | |
| **ARCES** | **ARCESS Array B** | **121.67** | **346** | PKP | **PKPdf** | **17 52 58.2** | **-1.2** |
| | comp=Z,0.8nm,0.5s,baz=62,slow=2.1,SNR=5.1 | | | | | | |
| **OBN** | **Obninsk** | **126.26** | **328** | *e*PKIKP | **PKPdf** | **17 53 05.6** | **-3.0** |
| OBN | | | | *e* | | 17 55 02.7 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **134.06** | **310** | PKP | **PKPdf** | **17 53 24.0** | **-0.2** |
| | comp=Z,0.7nm,1.0s,baz=220,slow=3.1,SNR=4.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **134.06** | **310** | PKIKP | **PKPdf** | **17 53 24.0** | **-0.2** |
| **CLL** | **Collm** | **139.57** | **336** | *e*SKPdf | **SKPdf** | **17 57 08.0** | **-0.8** |
| CLL | | | | *e*PKSdf | PKSdf | 17 57 10.0 | +0.4 |
| CLL | | | | *ep*SKPdf | | 17 57 13.0 | |
| **CONA** | **Conrad Observa** | **140.87** | **330** | *e*PKiKP | **PKiKP** | **17 53 38.5** | **-0.5** |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **GERES** | **GERESS Array B** | **141.18** | **333** | PKP | **PKPdf** | **17 53 36.8** | **-0.1** |
| | comp=Z,0.4nm,0.6s,baz=74,slow=7.2,SNR=2.3 | | | | | | |
| **SOKA** | **Soboth** | **142.15** | **330** | *i* PKP | **PKPdf** | **17 53 39.0** | **+0.3** |
| | comp=Z,1.7nm,1.0s | | | | | | |
| **KBA** | **Koelnbreinsper** | **142.66** | **332** | *i* PKP | **PKPdf** | **17 53 38.0** | **-1.7** |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **LESA** | **Schwarzleotal** | **142.70** | **332** | *i* pPKP | **PKPdf** | **17 53 41.7** | **+2.0** |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **143.28** | **333** | *i* PKP | **PKPdf** | **17 53 40.3** | **-0.5** |
| | comp=Z,6.7nm,1.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **143.28** | **332** | *i* pPKP | **PKPdf** | **17 53 43.1** | **+2.4** |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **143.44** | **334** | *ep*PKP | **PKPdf** | **17 53 43.5** | **+2.4** |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **SQTA** | **Sankt Quirin** | **143.50** | **334** | *e*PKP | **PKPdf** | **17 53 42.0** | **+0.9** |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **FETA** | **Feichten** | **143.86** | **334** | *i* pPKP | **PKPdf** | **17 53 43.5** | **+1.7** |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **DAVA** | **Damuels** | **144.00** | **335** | *i* pPKP | pPKPdf | 17 53 45.4 | +0.1 |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **145.78** | **336** | PKPdf | **PKPdf** | **17 53 43.9** | **-1.4** |
| **NRCA** | **Norcia** | **145.82** | **327** | | **PKPdf** | **17 53 44.6** | **-0.6** |
| **CAMP** | **Campotosto** | **145.87** | **326** | PKPdf | **PKPdf** | **17 53 44.9** | **-0.5** |
| **INTR** | **Introdacqua** | **145.96** | **325** | PKPdf | **PKPdf** | **17 53 42.3** | **-3.2** |
| **BNI** | **Bardonecchia** | **147.11** | **336** | PKPdf | **PKPdf** | **17 53 48.0** | **+0.6** |
| **BNI** | **Bardonecchia** | **147.11** | **336** | PKP2 | **PKPdf** | **17 53 48.0** | **+0.6** |
| **KEST** | **Kesra** | **152.78** | **320** | PKPbc | **PKPbc** | **17 54 03.0** | **-0.7** |
| | comp=Z,3.8nm,1.0s,baz=42,slow=3.1,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.75** | **260** | PKP | **PKPdf** | **17 54 13.5** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=321,slow=2.0,SNR=3.4 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **17 55 14.6** | **-1.0** |
| | comp=Z,1.9nm,0.8s,baz=84,slow=4.4,SNR=9.0 | | | | | | |

*SJA **22** 17:38:04.5±0.7,30.°32S×71.°61W,h21km±2km, ML3.4, MW3.6*

*GUC **22** 17:38:05.1±1.0,30.°33S×71.°57W,h30km±3km, ML3.5*

**ISC 22 17:38:03.2**±1.5,**30.°35S**±0.°02×**71.°60W**±0.°04,**h2**km±11km, **n38**,σ1§91/67,**5C-2D**,**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO06** | **Fray Jorge** | **0.33** | **185** | *i* P | | **Pb** | **17 38 13.4** | **+1.7** |
| CO06 | | | | *e*S | | **Sb** | **17 38 19.3** | **+1.8** |
| CO06 | | | | IAML | | | 17 38 20.0 | |
| | comp=E,15μm,0.1s | | | | | | | |
| **CO05** | **La Serena** | **0.53** | **37** | ⇓*i*P | | **Pb** | **17 38 16.3** | **+1.1** |
| CO05 | | | | *e*S | | **Sb** | **17 38 23.6** | **+0.3** |
| CO05 | | | | IAML | | | 17 38 26.0 | |
| | comp=E,3μm,0.3s | | | | | | | |
| **GO04** | **Tololo Observa** | **0.72** | **76** | *e*P | | **Pg** | **17 38 14.7** | **-2.2** |
| **GO04** | **Tololo Observa** | **0.72** | **76** | *e*P | | **Pn** | **17 38 19.9** | **-0.7** |
| GO04 | | | | *e*S | | **Sn** | **17 38 30.6** | **-1.6** |
| GO04 | | | | IAML | | | 17 38 32.9 | |
| | comp=E,8μm,0.3s | | | | | | | |
| **CO03** | **El Pedregal** | **0.93** | **122** | *e*P | | **Pn** | **17 38 23.2** | **-0.2** |
| CO03 | | | | *e*S | | **Sn** | **17 38 36.4** | **-1.0** |
| CO03 | | | | IAML | | | 17 38 37.2 | |
| | comp=Z,2μm,0.4s | | | | | | | |
| **CO03** | **El Pedregal** | **0.93** | **122** | ⇑*i*P | | **Pn** | **17 38 23.1** | **-0.2** |
| CO03 | | | | *e*S | | **Sn** | **17 38 36.1** | **-1.2** |
| CO03 | | | | IAML | | | 17 38 36.7 | |
| | comp=E,3μm,0.4s | | | | | | | |
| **CO02** | **Combarbal** | **1.00** | **149** | *e*P | | **Pn** | **17 38 24.6** | **+0.2** |
| CO02 | | | | *e*S | | **Sn** | **17 38 39.0** | **-0.2** |
| CO02 | | | | IAML | | | 17 38 39.1 | |
| | comp=Z,2μm,0.7s | | | | | | | |
| **CO02** | **Combarbal** | **1.00** | **149** | ⇓*i*P | | **Pn** | **17 38 24.6** | **+0.2** |
| CO02 | | | | *e*S | | **Sn** | **17 38 38.6** | **-0.5** |
| **CO01** | **Juntas del Tor** | **1.36** | **75** | *e*P | | **Pb** | **17 38 30.5** | **+1.0** |
| CO01 | | | | *e*S | | **Sn** | **17 38 49.4** | **+1.3** |
| CO01 | | | | IAML | | | 17 38 50.5 | |
| | comp=Z,492nm,0.3s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.36** | **75** | ⇑*i*P | | **Pb** | **17 38 30.5** | **+1.0** |
| CO01 | | | | *e*S | | **Sn** | **17 38 48.7** | **+0.6** |
| CO01 | | | | IAML | | | 17 38 51.5 | |
| | comp=N,755nm,0.3s | | | | | | | |
| **LCO** | **Las Campanas** | **1.54** | **31** | *e*P | | **Pn** | **17 38 31.5** | **-0.5** |
| LCO | | | | IAML | | | 17 38 57.9 | |
| | comp=Z,611nm,0.6s | | | | | | | |
| **CO04** | **Los Peladeros** | **1.78** | **163** | ⇑*e*P | | **Pb** | **17 38 36.5** | **-0.1** |
| CO04 | | | | *e*S | | **Sg** | **17 39 00.5** | **+0.2** |
| CO04 | | | | IAML | | | 17 39 02.8 | |
| | comp=N,813nm,0.2s | | | | | | | |
| **AROD** | **Rodeo** | **1.85** | **85** | *e*P | | **Pg** | **17 38 39.4** | **+0.7** |
| AROD | | | | *e*S | | **Sg** | **17 39 04.0** | **+1.2** |
| **AC05** | **El Transito** | **1.90** | **38** | *e*P | | **Pn** | **17 38 37.7** | **+1.0** |
| AC05 | | | | *e*S | | Sn | 17 38 47.7 | -14 |
| AC05 | | | | IAML | | | 17 39 10.2 | |
| | comp=Z,151nm,0.3s | | | | | | | |
| **AC05** | **El Transito** | **1.90** | **38** | ⇑*e*P | | **Pn** | **17 38 37.8** | **+1.1** |
| **ACDV** | **Cuesta del Vie** | **2.16** | **86** | *e*P | | **Pg** | **17 38 44.5** | **0.0** |
| ACDV | | | | *e*S | | **Sg** | **17 39 13.8** | **+1.3** |
| ACDV | | | | IAML | | | 17 39 13.8 | |
| | comp=Z,228nm,0.5s | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.18** | **12** | *e*P | | **Pn** | **17 38 39.7** | **-0.8** |
| AC04 | | | | *e*S | | **Sn** | **17 39 04.0** | **-4.1** |
| AC04 | | | | IAML | | | 17 39 15.8 | |
| | comp=Z,185nm,0.5s | | | | | | | |
| **AC04** | **Llanos de Chal** | **2.18** | **12** | ⇑*e*P | | **Pn** | **17 38 39.3** | **-1.2** |
| AC04 | | | | *e*S | | **Sn** | **17 39 09.6** | **+1.5** |
| AC04 | | | | IAML | | | 17 39 18.7 | |
| | comp=E,188nm,0.5s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.20** | **97** | *e*P | | **Pg** | **17 38 45.2** | **-0.3** |
| ACCO | | | | *e*S | | **Sb** | **17 39 11.8** | **-0.1** |
| ACCO | | | | IAML | | | 17 39 18.7 | |
| | comp=Z,222nm,0.4s | | | | | | | |
| **DOCA** | **Reserva Natura** | **2.25** | **106** | *e*P | | **Pn** | **17 38 39.9** | **-1.9** |
| DOCA | | | | *e*S | | **Sb** | **17 39 12.4** | **-0.9** |
| DOCA | | | | IAML | | | 17 39 22.1 | |
| | comp=Z,339nm,0.5s | | | | | | | |
| **RTLS** | **Leoncito** | **2.45** | **127** | *e*P | | **Pb** | **17 38 49.1** | **+0.9** |
| RTLS | | | | *e*S | | **Sb** | **17 39 17.1** | **-1.9** |
| RTLS | | | | IAML | | | 17 39 29.1 | |
| | comp=Z,391nm,0.9s | | | | | | | |
| **VA03** | **San Esteban** | **2.57** | **160** | *e*P | | **Pn** | **17 38 47.9** | **+1.9** |
| VA03 | | | | *e*S | | **Sn** | **17 39 12.2** | **-5.6** |
| VA03 | | | | IAML | | | 17 39 18.1 | |
| | comp=Z,338nm,0.8s | | | | | | | |
| **ROC1** | **El Roble** | **2.67** | **169** | *e*P | | **Pb** | **17 38 51.3** | **-0.5** |
| **ZON** | **Zonda** | **2.78** | **116** | *e*P | | **Pn** | **17 38 49.0** | **+0.1** |
| ZON | | | | *e*S | | **Sb** | **17 39 28.0** | **-0.3** |
| ZON | | | | IAML | | | 17 39 42.2 | |
| | comp=Z,81nm,0.4s | | | | | | | |
| **PEL** | **Peldehue** | **2.90** | **165** | *e*P | | **Pn** | **17 38 51.7** | **+1.3** |
| PEL | | | | *e*S | | **Sb** | **17 39 30.1** | **-1.4** |
| **MT02** | **Curacav** | **2.93** | **172** | *e*P | | **Pn** | **17 38 51.2** | **+0.4** |
| MT02 | | | | *e*S | | **Sn** | **17 39 22.7** | **-3.9** |
| MT02 | | | | IAML | | | 17 39 42.3 | |
| | comp=Z,135nm,0.6s | | | | | | | |
| **GO03** | **Copiap** | **2.99** | **24** | *e*P | | **Pn** | **17 38 51.8** | **+0.1** |
| GO03 | | | | *e*S | | **Sn** | **17 39 29.8** | **+1.6** |
| **RTCV** | **Cerro Valdivia** | **3.03** | **121** | *e*P | | **Pn** | **17 38 54.6** | **+2.4** |
| RTCV | | | | *e*S | | **Sb** | **17 39 37.0** | **+1.7** |
| **ASAL** | **Salagasta** | **3.26** | **134** | *e*P | | **Pb** | **17 38 59.9** | **-1.9** |
| ASAL | | | | *e*S | | **Sb** | **17 39 40.0** | **-1.9** |
| ASAL | | | | IAML | | | 17 39 58.7 | |
| | comp=Z,64nm,0.8s | | | | | | | |
| **MT03** | **Universidad Ad** | **3.27** | **164** | *e*P | | **Pn** | **17 38 57.7** | **+2.1** |
| MT03 | | | | *e*S | | **Sn** | **17 39 37.9** | **+2.7** |
| MT03 | | | | IAML | | | 17 39 58.4 | |
| | comp=Z,149nm,0.8s | | | | | | | |
| **MT04** | **Ro Olivares** | **3.29** | **158** | *e*P | | **Pn** | **17 38 54.0** | **-2.0** |
| MT04 | | | | *e*S | | **Sn** | **17 39 30.0** | **+3.1** |
| MT04 | | | | IAML | | | 17 39 52.4 | |
| | comp=Z,81nm,0.5s | | | | | | | |
| **VCA** | **Vinchina** | **3.37** | **62** | *e*P | | **Pn** | **17 38 56.8** | **-0.1** |
| VCA | | | | *e*S | | **Sn** | **17 39 39.8** | **+2.3** |
| VCA | | | | IAML | | | 17 39 57.5 | |
| | comp=Z,187nm,0.4s | | | | | | | |
| **MT01** | **Popeta** | **3.52** | **175** | *e*P | | **Pn** | **17 38 59.3** | **+0.4** |
| MT01 | | | | *e*S | | **Sn** | **17 39 40.8** | **-0.3** |
| MT01 | | | | IAML | | | 17 39 58.0 | |
| | comp=Z,57nm,0.5s | | | | | | | |
| **MT13** | **San Alfonso** | **3.57** | **162** | *e*P | | **Pn** | **17 39 01.7** | **+2.0** |
| MT13 | | | | IAML | | | 17 39 59.4 | |
| | comp=Z,93nm,0.8s | | | | | | | |
| **AVFE** | **Valle Fertil** | **3.59** | **96** | *e*P | | **Pb** | **17 39 05.9** | **-1.6** |
| AVFE | | | | *e*S | | **Sn** | **17 39 47.1** | **+4.0** |
| AVFE | | | | IAML | | | 17 39 57.8 | |
| | comp=Z,89nm,0.5s | | | | | | | |
| **LMEL** | **Las Melosas** | **3.69** | **162** | *e*P | | **Pn** | **17 39 03.3** | **+1.9** |
| **ACLC** | **CERRO LA CRUZ** | **4.14** | **78** | *e*P | | **Pn** | **17 39 11.2** | **+3.6** |
| ACLC | | | | *e*S | | **Sb** | **17 40 02.2** | **-5.3** |
| ACLC | | | | IAML | | | 17 40 12.2 | |
| | comp=Z,37nm,0.3s | | | | | | | |
| **AC01** | **Pan de Azucar** | **4.28** | **12** | IAML | | | 17 40 22.9 | |
| | comp=Z,40nm,0.6s | | | | | | | |

**IDC 22 17:57:09.5**±2.0,**8.°71S**×**115.°94E**,**h0**km,**mb3.5**/3, **mbtmp3.6**/4,**ML3.4**/1,**Error ellipse: s-maj=43.3km s-min=27.1km az=60.0,Bali region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **5.27** | **46** | Pn | | Pn | 17 58 29.2 | -0.3 |
| | 1.4nm,0.3s,baz=255,slow=19,SNR=1.4 | | | | | | | |
| KAPI | | | | Sn | | Sn | 17 59 33.9 | +2.8 |
| | 1.3nm,0.3s,baz=257,slow=14,SNR=1.7 | | | | | | | |
| | 6.2nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.01** | **124** | P | | P | 18 01 54.0 | -0.9 |
| | 2.4nm,0.7s,baz=301,slow=12,SNR=34 | | | | | | | |
| | 2.4nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.73** | **133** | P | | P | 18 02 14.1 | +0.7 |
| | 1.4nm,0.8s,baz=311,slow=8.9,SNR=15 | | | | | | | |
| | 1.4nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.86** | **335** | P | | P | 18 07 37.3 | 0.0 |
| | 0.4nm,0.8s,baz=124,slow=7.2,SNR=2.8 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |

**IDC 22 17:57:32.5**±13.0,**17.°86S**×**178.°25W**,**h536**km±154km, **mb2.8**/4,**mbtmp3.7**/4,**Error ellipse: s-maj=57.9km s-min=32.8km az=73.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.79** | **259** | P | | P | 18 04 58.7 | -0.2 |
| | 0.2nm,0.5s,baz=93,slow=6.9,SNR=6.2 | | | | | | | |
| WRA | | | | PcP | | PcP | 18 06 29.4 | -0.1 |
| | 0.4nm,0.8s,baz=89,slow=3.5,SNR=1.9 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.95** | **254** | P | | P | 18 05 00.0 | -0.1 |
| | 0.9nm,0.5s,baz=88,slow=7.8,SNR=27 | | | | | | | |
| | 0.9nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.19** | **180** | P | | P | 18 08 02.9 | 0.0 |
| | 1.4nm,0.8s,baz=352,slow=0.2,SNR=11 | | | | | | | |
| | 1.4nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.81** | **13** | P | | P | 18 09 14.8 | 0.0 |
| | 0.1nm,0.4s,baz=221,slow=5.3,SNR=4.6 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |

*MOS **22** 18:03:06.2±1.0,16.°80N×98.°39W,h11km,mb5.4/22, MS4.9/6,Error ellipse: s-maj=10.9km s-min=6.1km az=98.4*

*NEIC **22** 18:03:06.6,16.°57N×98.°64W,h30km,Moment Tensor Solution. Duration: 2§2 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$6.79; $M_{\theta\theta}$-6.26; $M_{\phi\phi}$-0.53; $M_{r\theta}$6.31; $M_{\theta\phi}$2.27; $M_{\phi r}$-2.72; Fault plane solution: $M_0$9.75000×$10^{16}$ NP1: $\phi_s$112.18000°,δ67.41000°,λ92.38000°. NP2: $\phi_s$285.99000°,δ22.71000°,λ84.29000°. Principal axes: T 9.6317, Plg68.0000°, Azm27.0000°; N 0.2466, Plg2.0000°, Azm291.0000°; P -9.8783, Plg22.0000°, Azm200.0000°;*

*NEIC **22** 18:03:06.6,16.°57N×98.°74W,h30km*

*BGR **22** 18:03:07.2,16.°12N×99.°33W,h32km,mb5.3*

*NEIC **22** 18:03:07.5±2.4,16.°61N±0.°05×98.°73W±0.°02,h17km±1km, mb5.4/573,Mww5.3/23,Md5.3/136(MEX),Error ellipse: s-maj=7.0km s-min=3.2km az=186.0*

*MEX **22** 18:03:08.6±1.3,16.°53N×98.°75W,h8km±6km,MD5.3*

*BJI **22** 18:03:09.0±0.0,17.°10N×98.°30W,h20km,mB5.6/1, Ms5.6/3,Ms7 5.3/4*

*IDC **22** 18:03:10.9±2.3,16.°82N×98.°41W,h35km±17km,mb4.5/23, mbtmp4.7/27,ML4.2/4,MS4.6/50,Error ellipse: s-maj=15.6km s-min=9.5km az=51.0*

*GCMT **22** 18:03:11.6±0.2,16.°75N±0.°01×98.°54W±0.°01,h29km, MW5.3/113,Moment Tensor Solution. s102,c163; s113,c206; Duration: 1§2 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$0.74±.02; $M_{\theta\theta}$-0.68±.01; $M_{\phi\phi}$-0.05±.01; $M_{r\theta}$0.91±.03; $M_{\theta\phi}$0.23±.01; $M_{\phi r}$-0.59±.03; Best double couple: $M_0$1.31600×$10^{17}$ NP1:$\phi_s$120.00000°,δ73.00000°, λ97.00000°. NP2:$\phi_s$276.00000°,δ19.00000°,λ67.00000°. Principal axes: T 1.3250, Plg61.0000°, Azm41.0000°; N -0.0180, Plg7.0000°, Azm298.0000°; P -1.3070, Plg28.0000°, Azm204.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 22 18:03:07.7**±0.5,**16.°65N**±0.°02×**98.°68W**±0.°02,**h19**km±1km, **n991**,σ1§67/786,**mb5.4**/297,**MS4.8**/63,**16C-24D**,**Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CRIG** | **Cruz Grande** | **0.44** | **282** | | | **Pg** | **18 03 16.1** | **-0.8** |
| CRIG | | | | | | **Sg** | **18 03 22.1** | **-0.9** |
| **CRIG** | **Cruz Grande** | **0.44** | **282** | ⇑*e*P | | **Pg** | **18 03 16.1** | **-0.8** |
| CRIG | | | | *e*S | | **Sg** | **18 03 22.1** | **-0.9** |
| **MGIG** | **Malinaltepec** | **0.58** | **4** | | | **Pb** | **18 03 19.8** | **+0.5** |
| MGIG | | | | | | **Sb** | **18 03 28.5** | **+1.2** |
| **MGIG** | **Malinaltepec** | **0.58** | **4** | ⇓*e*P | | **Pb** | **18 03 19.8** | **+0.5** |
| MGIG | | | | *i* S | | **Sb** | **18 03 28.5** | **+1.2** |
| **PNIG** | **Pinotepa** | **0.58** | **116** | | | **Pg** | **18 03 18.7** | **-0.7** |
| PNIG | | | | | | **Sb** | **18 03 27.3** | **+0.1** |
| **PNIG** | **Pinotepa** | **0.58** | **116** | ⇓*e*P | | **Pg** | **18 03 18.7** | **-0.7** |
| PNIG | | | | *e*S | | **Sb** | **18 03 27.3** | **+0.1** |
| **TLIG** | **Tlapa** | **0.92** | **7** | | | **Pg** | **18 03 25.1** | **-0.6** |
| **TLIG** | **Tlapa** | **0.92** | **7** | ⇓*i*P | | **Pn** | **18 03 25.2** | **-0.5** |
| TLIG | | | | *e*S | | **Sn** | **18 03 38.1** | **-0.3** |
| **DAIG** | **Los Arroyos** | **1.00** | **292** | | | **Pb** | **18 03 25.2** | **-1.3** |
| DAIG | | | | | | **Sb** | **18 03 37.6** | **-1.8** |
| **DAIG** | **Los Arroyos** | **1.00** | **292** | ⇓*e*P | | **Pb** | **18 03 25.2** | **-1.3** |
| DAIG | | | | *e*S | | **Sb** | **18 03 37.6** | **-1.8** |
| **YOIG** | **Yosondua** | **1.10** | **79** | | | **Pg** | **18 03 28.3** | **-0.9** |
| YOIG | | | | | | **Sn** | **18 03 43.4** | **+0.1** |
| **YOIG** | **Yosondua** | **1.10** | **79** | ⇑*e*P | | **Pg** | **18 03 28.3** | **-0.9** |
| YOIG | | | | *i* S | | **Sn** | **18 03 43.4** | **+0.1** |
| **HMTT** | **Tlapaneco** | **1.15** | **6** | | | **Pn** | **18 03 28.9** | **0.0** |
| HMTT | | | | | | **Sg** | **18 03 44.6** | **-0.6** |
| **HMTT** | **Tlapaneco** | **1.15** | **6** | *e*P | | **Pn** | **18 03 28.9** | **0.0** |
| HMTT | | | | *e*S | | **Sg** | **18 03 44.6** | **-0.6** |
| **ACP2** | **Acapulco** | **1.18** | **281** | | | **Pn** | **18 03 27.3** | **-1.9** |
| ACP2 | | | | | | **Sb** | **18 03 41.6** | **-2.8** |
| **ACP2** | **Acapulco** | **1.18** | **281** | *e*P | | **Pn** | **18 03 27.3** | **-1.9** |
| ACP2 | | | | *e*S | | **Sb** | **18 03 41.6** | **-2.8** |
| **FTIG** | **Fresnillo de T** | **1.36** | **22** | | | **Pb** | **18 03 32.3** | **-0.4** |
| FTIG | | | | | | **Sg** | **18 03 50.2** | **-1.6** |
| **FTIG** | **Fresnillo de T** | **1.36** | **22** | ⇑*e*P | | **Pb** | **18 03 32.3** | **-0.4** |
| FTIG | | | | *e*S | | **Sg** | **18 03 50.2** | **-1.6** |
| **HLIG** | **Huajuapan de L** | **1.44** | **35** | | | **Pb** | **18 03 33.5** | **-0.6** |
| HLIG | | | | | | **Sn** | **18 03 51.1** | **-0.5** |
| **HLIG** | **Huajuapan de L** | **1.44** | **35** | ⇑*e*P | | **Pb** | **18 03 33.5** | **-0.6** |
| HLIG | | | | *i* S | | **Sn** | **18 03 51.1** | **-0.5** |
| **MEIG** | **Mezcala** | **1.56** | **325** | | | **Pn** | **18 03 34.8** | **+0.3** |
| MEIG | | | | | | **Sn** | **18 03 51.7** | **-2.6** |
| **MEIG** | **Mezcala** | **1.56** | **325** | ⇑*e*P | | **Pn** | **18 03 34.8** | **+0.3** |
| MEIG | | | | *i* S | | **Sn** | **18 03 51.7** | **-2.6** |
| **CAIG** | **El Cayaco** | **1.57** | **285** | | | **Pn** | **18 03 32.9** | **-1.7** |
| CAIG | | | | | | **Sn** | **18 03 55.5** | **+1.1** |
| **CAIG** | **El Cayaco** | **1.57** | **285** | ⇓*e*P | | **Pn** | **18 03 32.9** | **-1.7** |
| CAIG | | | | *i* S | | **Sn** | **18 03 55.5** | **+1.

NEUV eS Sb 18 04 31.4 -3.9
**VTVM Tizayuca 3.11 358 Pb 18 04 03.1 +0.5**
**VTVM Tizayuca 3.11 358** eP **Pb 18 04 03.1 +0.5**
**JAUV Jalcomulco 3.24 33**[1] eP **Pn 18 03 57.1 -0.5**
JAUV eS **Sb 18 04 39.4 -4.4**
**XALA Xalapa 3.33 30** eP **Pn 18 03 57.7 -1.2**
**ACIG Acambay 3.51 341 Pb 18 04 10.4 +1.1**
**ACIG Acambay 3.51 341** eP **Pb 18 04 10.4 +1.1**
**DHIG Demacu 3.65 355 Pn 18 04 05.2 +1.7**
DHIG **Sg 18 04 60.0 -5.1**
**DEIG Demacu 3.65 355** eP **Pn 18 04 05.2 +1.7**
DEIG eS **Sg 18 04 60.0 -5.1**
**CXUV Coxquihui 3.66 16** eP **Pn 18 04 04.1 +0.7**
CXUV eS **Sn 18 04 50.3 +4.3**
**CMIG Matias Romero 3.66 83 Pn 18 04 02.7 -0.6**
CMIG **Sn 18 04 42.7 -3.3**
**CMIG Matias Romero 3.66 83** Pn **Pn 18 04 02.6 -0.7**
19nm,0.3s,baz=279,slow=14,SNR=90
CMIG Sn **Sn 18 04 44.5 -1.5**
110nm,0.3s,baz=302,slow=15,SNR=5.6
CMIG LR LR 18 04 51.2
comp=Z,2µm,21.2s,baz=222,slow=30
CMIG Lg Lg 18 05 01.0
113nm,0.3s,baz=323,slow=16,SNR=3.5
48nm,0.3s
**CMIG Matias Romero 3.66 83** eP **Pn 18 04 02.7 -0.6**
CMIG eS **Sn 18 04 42.7 -3.3**
**LVIG Laguna Verde 3.74 35** eP **Pn 18 04 02.3 -2.1**
LVIG eS **Sn 18 04 51.5 +3.5**
**MOIG Morelia 3.85 322 Pn 18 04 08.0 +1.9**
**MOIG Morelia 3.85 322** eP **Pn 18 04 08.8 +2.6**
MOIG eS **Sb 18 05 01.2 -0.2**
**PMUV Sontecomapan 3.88 60** eP **Pn 18 04 04.1 -2.4**
**TUIG Tuzandepetl 4.29 71** eP **Pn 18 04 11.3 -0.7**
TUIG eS **Sb 18 05 08.8 -5.2**
**JRQG Juriquilla Cam 4.37 338 Pn 18 04 14.5 +1.2**
**JRQG Juriquilla Cam 4.37 338** eP **Pn 18 04 17.0 +3.7**
JRQG eS **Sg 18 05 22.1 -6.0**
**IGIG Irapuato, Guan 4.79 329 Pb 18 04 27.0 -4.3**
IGIG **Sb 18 05 23.2 -5.5**
**IGIG Irapuato, Guan 4.79 329** eP **Pb 18 04 27.0 -4.3**
IGIG eS **Sb 18 05 23.2 -5.5**
**CTUV Llano Grande 4.81 4** eP **Pn 18 04 19.0 -0.2**
CTUV eS **Sn 18 05 19.4 +5.0**
**TGIG 5.33 88 Pn 18 04 28.9 +2.6**
TGIG **Sn 18 05 31.2 +4.0**
**TGIG 5.33 88** eP **Pn 18 04 28.9 +2.6**
TGIG eS **Sn 18 05 31.2 +4.0**
**PCIG 5.33 99 Pn 18 04 27.2 +0.9**
PCIG **Sn 18 05 28.2 +1.0**
**PCIG 5.33 99** eP **Pn 18 04 27.2 +0.9**
PCIG eS **Sn 18 05 28.2 +1.0**
**RPIG Rio Verde 5.35 347 Pn 18 04 30.2 +3.5**
RPIG **Sb 18 05 39.0 -5.7**
**RPIG Rio Verde 5.35 347** eP **Pn 18 04 30.2 +3.5**
RPIG eS **Sb 18 05 39.0 -5.7**
**TGBT Tuxtla Gutierr 5.36 88 Sn 18 05 33.4 +5.5**
**TGBT Tuxtla Gutierr 5.36 88** eS **Sn 18 05 33.4 +5.5**
**JUBC Volcan de Coli 5.46 302** eP **Pn 18 04 30.9 +2.6**
**MNGA Volcan de Coli 5.47 302** eP **Pn 18 04 30.7 +2.2**
**INCO Volcan de Coli 5.49 302** eP **Pn 18 04 31.3 +2.4**
**SOMAC Volcano de Col 5.51 302** eP **Pn 18 04 31.6 +2.4**
**CDAR Ciudad de Arme 5.57 295** eP **Pn 18 04 29.1 -0.5**
**CEGR Campo Tres 5.63 300** eP **Pn 18 04 32.2 +1.5**
**R15V 5.64 297 Pn 18 04 32.1 +1.5**
**R15V 5.64 297** eP **Pn 18 04 32.1 +1.5**
**CCIG Comitan 6.29 92 Pn Pn 18 04 39.2 -0.4**
**CCIG Comitan 6.29 92** eP **Pn 18 04 39.8 +0.2**
CCIG eS **Sn 18 05 55.0 +3.9**
**CIHU Emiliano Zapat 6.33 295** eP **Pn 18 04 40.3 +0.3**
CIHU eS **Sn 18 05 56.9 +5.1**
**GTIG Gomez Farias 6.40 356 Pn 18 04 43.5 +2.4**
GTIG **Sn 18 06 00.2 +6.5**
**GTIG Gomez Farias 6.40 356** eP **Pn 18 04 43.5 +2.4**
GTIG eS **Sn 18 06 00.2 +6.5**
**PAVE Pavencul 6.42 102** eP **Pn 18 04 42.4 +0.9**
PAVE eS **Sn 18 05 48.6 -5.8**
**CHUJ Union Juarez 6.51 103** eP **Pn 18 04 44.0 +1.2**
CHUJ eS **Sn 18 05 52.6 -4.1**
**CJM Chamela 6.69 296** *e* **Sn 18 05 58.2 -2.4**
CJM *e* 18 07 29.9
**RTAL Retalhuleu 7.05 106 Pn Pn 18 04 49.0 -0.9**
**ZAIG Zacatecas 7.11 330 Pn Pn 18 04 53.2 +2.2**
**ZAIG Zacatecas 7.11 330** eP Pn 18 04 58.8 +7.8
ZAIG eS Sn 18 06 21.6 +10
**APG El Apazote 8.07 101 Pn Pn 18 05 04.8 +0.6**
0.2nm,0.3s,baz=322,slow=17,SNR=7.6
APG Sn **Sn 18 06 33.9 -1.2**
0.5nm,0.3s,baz=355,slow=15,SNR=2.1
APG Lg Lg 18 07 20.9
0.4nm,0.3s,baz=2.2,slow=9.9,SNR=5.1
**PETF Flores 8.44 87 Pn 18 05 08.5 -0.6**
**MTO3 Montecristo 9.25 103 Pn Pn 18 05 18.6 -1.8**
**HBVL Hebbronville 10.37 0 Pn Pn 18 05 35.2 -0.2**
**833A Chaparral WMA, 11.64 357 Pn Pn 18 05 54.5 +1.6**
**833A Chaparral WMA, 11.64 357 P Pn 18 05 55.2 +2.3**
baz=176,SNR=8.3
**HPIG 12.12 329 Pn 18 06 01.7 +2.0**
**CNGN Cerro Negro 12.30 108 Pn 18 06 01.9 -0.2**
**SLBS Sierra La Lagu 12.68 305 Pn 18 06 08.6 +1.4**
**HNDO Hondo 12.84 358 Pn 18 06 08.9 -0.4**
**DRIO Del Rio 12.84 352 Pn Pn 18 06 09.1 -0.3**
**MLDN Muldoon 13.16 6 Pn 18 06 13.8 +0.1**
**LPIG La Paz 13.18 306 Pn Pn 18 06 18.2 +4.2**
6.3nm,0.3s,baz=133,slow=19,SNR=1.4
LPIG Sn Sn 18 08 49.6 +10
baz=234,slow=20
LPIG LR LR 18 11 02.4
comp=Z,3µm,18.1s,baz=128,slow=36
24nm,0.4s
**TXAR Lajitas Array 13.43 341 Pn 18 06 17.2 -0.3**
**TXAR Lajitas Array 13.43 341 Pn Pn 18 06 19.1 +1.6**
0.1nm,0.3s,baz=159,slow=15,SNR=22
TXAR Lg Lg 18 10 18.9
0.1nm,0.3s,baz=172,slow=23,SNR=3.0
TXAR LR LR 18 12 07.5
comp=Z,3µm,21.9s,baz=148,slow=40
6.7nm,1.1s
**TX31 Lajitas Ar. Si 13.44 341 Pn Pn 18 06 18.1 +0.6**
**HKT Hockley 13.50 11** *i* P **Pn 18 06 17.1 -1.1**
**SAND Sanderson 13.62 347 Pn 18 06 20.9 +1.0**
**435B Jarrell 14.11 4 Pn Pn 18 06 26.8 +0.2**
**435B Jarrell 14.11 4 P Pn 18 06 27.6 +1.0**
baz=184
**HNVL Huntsville, TX 14.35 11 Pn 18 06 29.0 -0.9**
**OZNA Ozona 14.39 351 Pn Pn 18 06 30.9 +0.5**
**JTS Las Juntas de 14.76 114 Pn 18 06 35.9 +0.2**
**JTS Las Juntas de 14.76 114 Pn P 18 06 39.7 -1.9**
2.3nm,0.3s,baz=324,slow=16,SNR=4.5
JTS Sn **Sn 18 09 23.5 +4.7**
1.0nm,0.3s,baz=306,slow=21,SNR=1.2
**JTS Las Juntas de 14.76 114 P Pn 18 06 35.9 +0.2**
**WHTX Lake Whitney, 15.32 4 IAmb IAmb 18 06 50.3**
comp=Z,177nm,1.0s
**237A Washetta, Mont 15.51 9 IAmb IAmb 18 06 52.1**
comp=Z,159nm,0.9s
**LCR2 La Lucha 2 15.84 114 P P 18 06 53.4 -0.3**
**SOR Soroa 15.96 65 P P 18 06 53.2 -1.6**
**SOR Soroa 15.96 65 P P 18 06 53.2 -1.6**
SOR pmax pmax
comp=Z,36nm,0.9s
**FW07 Weatherford 16.01 3 IAmb IAmb 18 06 57.8**
comp=Z,379nm,1.7s
**PLPT Palo Pinto 16.10 1 IAmb IAmb 18 06 59.7**
comp=Z,223nm,1.0s
**Z35A Perchaven, San 16.66 4 IAmb IAmb 18 07 04.7**
comp=Z,163nm,0.8s
**VBMS Vicksburg 17.18 24 IAmb IAmb 18 07 15.8**
comp=Z,572nm,1.9s
**Z41A Richland Creek 17.37 17 IAmb IAmb 18 07 18.0**
comp=Z,215nm,1.1s
**CAMR Camarioca 17.48 66 IAmb IAmb 18 07 22.0**
comp=Z,181nm,1.2s
**121A Cookes Peak, D 17.84 334 P P 18 07 17.2 +1.5**
baz=150,SNR=32
**X34A Smith Ranch, M 17.90 2 IAmb IAmb 18 07 26.3**
comp=Z,407nm,1.4s
**BRAL Brewton 17.92 34 IAmb IAmb 18 07 27.3**
comp=Z,256nm,1.0s
**X37A Clayton 18.11 9 IAmb IAmb 18 07 29.0**
comp=Z,397nm,1.6s
**146A Union 18.15 27 IAmb IAmb 18 07 27.1**
comp=Z,315nm,1.1s
**CCAR Cane Creek 18.29 19 IAmb IAmb 18 07 31.1**
comp=Z,270nm,1.1s
**AMTX Amarillo 18.36 352 IAmb IAmb 18 07 31.5**
comp=Z,642nm,1.7s
**MIAR Mount Ida 18.40 13 P P 18 07 20.1 -1.6**
**MIAR Mount Ida 18.40 13 P P 18 07 20.1 -1.6**
MIAR pmax pmax
comp=Z,99nm,1.0s
**SMWD Samnorwood 18.43 356 IAmb IAmb 18 07 33.0**
comp=Z,324nm,1.7s
**X40A Basin Creek Fa 18.52 15 IAmb IAmb 18 07 34.4**
comp=Z,353nm,2.0s
**553A Crawfordville 18.75 42 P P 18 07 25.3 -0.3**
**Y22D IRIS PASSCAL I 18.87 338 P Pn 18 07 29.4 +1.8**
baz=154
**UALR University of 18.92 16 P Pn 18 07 27.8 -0.3**
**250A Grady 18.97 34 IAmb IAmb 18 07 38.2**
comp=Z,697nm,1.9s
**Y45A Yeager Farm, C 19.01 24 IAmb IAmb 18 07 41.1**
comp=Z,433nm,1.2s
**Z47A Carrollton 19.06 28 IAmb IAmb 18 07 40.6**
comp=Z,196nm,0.9s
**TUC Tucson 19.07 327 P Pn 18 07 31.7 +1.7**
**TUC Tucson 19.07 327 P Pn 18 07 31.7 +1.7**
TUC pmax pmax
comp=Z,40nm,1.1s
**DEOK Depew 19.22 5 IAmb IAmb 18 07 42.2**
comp=Z,306nm,1.2s
**352A Blakely 19.35 38 IAmb IAmb 18 07 42.7**
comp=Z,261nm,0.8s
**TUL3 Leonard 19.36 7 IAmb IAmb 18 07 44.5**
comp=Z,214nm,0.9s
**ANMO Albuquerque 19.51 341 P P 18 07 34.5 +0.5**
**ANMO Albuquerque 19.51 341 P Pn 18 07 35.5 +0.1**
comp=Z,0.9nm,0.3s,baz=241,slow=9.8,SNR=61
ANMO S **Sn 18 11 13.4 -0.5**
comp=Z,1.9nm,0.3s,baz=130,slow=2.2,SNR=6.4
ANMO LR LR 18 15 52.1
comp=Z,1µm,18.5s,baz=248,slow=39
comp=Z,36nm,0.9s
**ANMO Albuquerque 19.51 341** *i* P **Pn 18 07 35.3 -0.1**
**QUOK Quay 19.52 5 IAmb IAmb 18 07 45.1**
comp=Z,340nm,1.2s
**DWPF Disney Wildern 19.58 51 P P 18 07 32.4 -2.3**
DWPF IAmb IAmb 18 07 45.7
comp=Z,189nm,1.1s
**OXF Oxford 19.64 23 IAmb IAmb 18 07 46.4**
comp=Z,370nm,1.3s
**RLO Rose Lookout 19.71 9 IAmb IAmb 18 07 48.3**
comp=Z,100nm,1.0s
**OK038 West end E0370 19.75 360 IAmb IAmb 18 07 47.4**
comp=Z,294nm,1.3s
**NOKA Waynoka 19.91 359 IAmb IAmb 18 07 49.3**
comp=Z,454nm,1.4s
**214A Organ Pipe Nat 19.92 322 P Pn 18 07 40.7 +0.6**
baz=136,SNR=12
**FCAR Ozark Folk Cen 20.03 16 IAmb IAmb 18 07 49.7**
comp=Z,174nm,1.1s
**OK032 Salt Plains WL 20.08 1 IAmb IAmb 18 07 55.2**
comp=Z,397nm,1.8s
**TIGA Tifton 20.13 40 IAmb IAmb 18 07 52.1**
comp=Z,127nm,0.9s
**MTDJ Mount Denham 20.23 82 P P 18 07 40.4 -1.7**
MTDJ IAmb IAmb 18 07 43.9
comp=Z,110nm,0.9s
**KAN14 Manchester OK 20.24 2 IAmb IAmb 18 07 53.5**
comp=Z,324nm,1.6s
**KAN17 Caldwell West 20.33 2 IAmb IAmb 18 07 52.3**
comp=Z,116nm,1.0s
**152A Waverly Hall 20.34 36 IAmb IAmb 18 07 53.1**
comp=Z,123nm,1.0s
**Y49A Blount Mountai 20.38 31 IAmb IAmb 18 07 53.4**
comp=Z,203nm,1.1s
**KAN09 Caldwell North 20.43 2 IAmb IAmb 18 07 55.8**
comp=Z,248nm,1.1s
**KAN01 Argonia South 20.44 2 IAmb IAmb 18 07 56.0**
comp=Z,194nm,1.0s
**LCAR Lake Charles 20.47 18 IAmb IAmb 18 07 57.1**
comp=Z,372nm,1.7s
**X18A Snowflake 20.48 333 IAmb IAmb 18 07 57.5**
comp=Z,300nm,1.7s
**X48A Hartselle 20.57 28 IAmb IAmb 18 07 57.6**
comp=Z,168nm,1.1s
**W18A Petrified Fore 20.88 334 P Pn 18 07 51.2 -0.3**
baz=149,SNR=15
**T25A Trinidad 21.03 347 P P 18 07 52.5 +1.8**
baz=164,SNR=80
**113A Mohawk Valley, 21.07 322 IAmb IAmb 18 08 07.3**
comp=Z,173nm,1.6s
**X16A Lo Mia Camp, P 21.08 329 IAmb IAmb 18 08 07.3**
comp=Z,137nm,0.9s
**MGMO Mountain Grove 21.20 14 IAmb IAmb 18 08 05.4**
comp=Z,249nm,1.2s
**FPAL Fort Paine 21.32 31 IAmb IAmb 18 08 07.3**
comp=Z,215nm,1.1s
**CHIV Chivirico 21.39 78 IAmb IAmb 18 08 08.6**
comp=Z,163nm,1.3s
**S39A Bolivar 21.49 12 IAmb IAmb 18 08 09.8**
comp=Z,320nm,1.8s
**Y14A Wickenburg 21.50 326 IAmb IAmb 18 08 08.8**
comp=Z,187nm,1.4s
**WVT Waverly 21.67 24 P P 18 07 55.3 -2.0**
WVT IAmb IAmb 18 08 12.7
comp=Z,101nm,1.0s
**WVT Waverly 21.67 24 P P 18 07 55.3 -2.0**
WVT pmax pmax
comp=Z,101nm,1.0s
**SWET Sewanee 21.72 29 IAmb IAmb 18 08 07.1**
comp=Z,137nm,1.0s
**X51A Calhoun 21.72 32 IAmb IAmb 18 08 10.7**
comp=Z,155nm,0.9s
**GLA Glamis 21.89 321 IAmb IAmb 18 08 13.1**
comp=Z,229nm,1.4s
**WUAZ Wupatki 21.94 331 IAmb IAmb 18 08 16.1**
comp=Z,185nm,1.1s
**W50A Signal Mountai 22.00 30 IAmb IAmb 18 08 10.2**
comp=Z,268nm,1.4s
**BLYC Blythe 22.21 323 IAmb IAmb 18 08 16.2**
comp=Z,402nm,1.9s
**S22A 4UR Ranch, Cre 22.21 343 IAmb IAmb 18 08 19.6**
comp=Z,299nm,1.9s
**S22A 4UR Ranch, Cre 22.21 343 P P 18 08 05.1 +1.7**
baz=159,SNR=50
**MVCO Mesa Verde 22.25 339 IAmb IAmb 18 08 17.1**
comp=Z,247nm,1.1s
**CLTN Cedars of Leba 22.26 27 IAmb IAmb 18 08 16.9**
comp=Z,159nm,1.1s
**R40A Maddies Statio 22.29 13 IAmb IAmb 18 08 06.8**
comp=Z,130nm,1.0s
**CCM Cathedral Cave 22.31 16 P P 18 08 02.4 -1.7**
CCM IAmb IAmb 18 08 18.4
comp=Z,218nm,1.4s
**CCM Cathedral Cave 22.31 16 P P 18 08 02.4 -1.7**
CCM pmax pmax
comp=Z,218nm,1.4s
**RMX La Rumorosa 22.37 318 IAmb IAmb 18 08 17.5**
comp=Z,275nm,1.9s
**FVM French Village 22.46 17 IAmb IAmb 18 08 20.3**
comp=Z,257nm,1.8s
**KSCO Kaye Shedlock' 22.55 352 IAmb IAmb 18 08 17.4**
comp=Z,159nm,1.1s
**CBX Cerro Bola 22.56 317 IAmb IAmb 18 08 20.8**
comp=Z,268nm,1.8s
**SIUC Southern Illin 22.58 20 IAmb IAmb 18 08 17.2**
comp=Z,140nm,1.1s
**GTBY Guantanamo Bay 22.61 78 P P 18 08 06.7 -0.8**
GTBY IAmb IAmb 18 08 17.3
comp=Z,188nm,0.9s
**T47A Sharon Grove 22.70 25 IAmb IAmb 18 08 22.4**
comp=Z,186nm,0.9s
**NMDO Nuevo Mundo 22.79 77 P P 18 08 08.1 -1.3**
NMDO IAmb IAmb 18 08 27.4
comp=Z,68nm,1.3s
**W13A Hualapai Mount 22.86 326 IAmb IAmb 18 08 24.5**
comp=Z,174nm,1.6s
**U49A Red Boiling Sp 22.86 28 IAmb IAmb 18 08 21.8**
comp=Z,164nm,1.1s
**HODGE Hodges 22.89 37 IAmb IAmb 18 08 19.5**
comp=Z,175nm,1.1s
**Q24A Divide 22.95 347 P P 18 08 12.4 +1.2**
baz=164,SNR=7.5
**U15A North Rim 23.11 331 IAmb IAmb 18 08 26.9**
comp=Z,247nm,1.3s
**TKL Tuckaleechee C 23.13 32 P P 18 08 11.0 -1.7**
comp=Z,58nm,1.1s,baz=211,slow=7.9,SNR=27
TKL S **S 18 12 17.8 -5.5**
comp=Z,6.1nm,0.9s,baz=44,slow=9.3,SNR=2.0
TKL LR LR 18 19 56.7
comp=Z,624nm,20.0s,baz=232,slow=44
comp=Z,58nm,1.1s
**TPFO Pinon Flats 23.27 320 P P 18 08 16.1 +1.8**
baz=132,SNR=12
**PFO Pinyon Flats O 23.27 320 P P 18 08 16.0 +1.6**
PFO IAmb IAmb 18 08 28.4
comp=Z,197nm,1.9s
**PFO Pinyon Flats O 23.27 320** *c i* P **P 18 08 16.4 +2.0**
PFO pmax pmax
comp=Z,153nm,2.5s
**USIN University of 23.34 22 IAmb IAmb 18 08 30.2**
comp=Z,145nm,0.9s
**NHSC New Hope 23.39 42 P P 18 08 14.8 -0.6**
**PAULI Pauline 23.57 37 IAmb IAmb 18 08 28.2**
comp=Z,137nm,1.0s
**SMCO Snowmass 23.59 344 IAmb IAmb 18 08 33.8**
comp=Z,177nm,1.4s
**KNB Kanab 23.84 331 IAmb IAmb 18 08 33.5**
comp=Z,132nm,1.1s
**ELS Elsinore Mount 23.90 319 P P 18 08 21.2 +0.7**
ELS IAmb IAmb 18 08 34.3
comp=Z,254nm,1.9s
**WCI Wyandotte Cave 24.10 24 P P 18 08 21.4 -0.8**
**WCI Wyandotte Cave 24.10 24 P P 18 08 21.4 -0.8**
WCI pmax pmax
comp=Z,215nm,1.0s
**P43A Skaggs, Pawnee 24.26 17 IAmb IAmb 18 08 41.4**
comp=Z,80nm,0.9s
**N35A Tabor 24.27 6 IAmb IAmb 18 08 37.7**
comp=Z,219nm,1.5s
**BRIGG Briggsdale 24.35 350 IAmb IAmb 18 08 37.0**
comp=Z,145nm,0.9s
**SZCU Shurtz Canyon 24.43 331 IAmb IAmb 18 08 39.4**
comp=Z,269nm,1.8s
**GSC Goldstone, Bar 24.64 322 IAmb IAmb 18 08 40.4**
comp=Z,76nm,1.2s
**O20A White River Ci 24.84 342 IAmb IAmb 18 08 42.7**
comp=Z,119nm,1.2s
**N23A Red Feather La 24.97 347 IAmb IAmb 18 08 42.2**
comp=Z,84nm,1.3s
**N23A Red Feather La 24.97 347 P P 18 08 31.3 +0.9**
baz=163,SNR=24
**R50A Paris 24.97 28 IAmb IAmb 18 08 40.2**
comp=Z,137nm,1.2s
**P18A Preston Nutter 25.02 339 IAmb IAmb 18 08 45.9**
comp=Z,147nm,1.1s
**P17A Butcher Ranch, 25.06 338 IAmb IAmb 18 08 44.6**
comp=Z,100nm,1.0s
**GWY Greenwater Val 25.18 324 IAmb IAmb 18 08 46.3**
comp=Z,104nm,1.5s
**PRN Pahroc Range 25.23 328 IAmb IAmb 18 08 47.2**
comp=Z,172nm,1.5s
**PHWY Pilot Hill 25.26 348 IAmb IAmb 18 08 44.7**
comp=Z,216nm,1.9s
**L34A Svendsen Farm, 25.31 4 IAmb IAmb 18 08 43.9**
comp=Z,180nm,1.3s
**P48A Milroy 25.50 24 IAmb IAmb 18 08 44.6**
comp=Z,213nm,1.6s
**WCT Wildcat Mounta 25.60 325 IAmb IAmb 18 08 51.0**
comp=Z,129nm,1.4s
**SCIA State Center 25.61 9 IAmb IAmb 18 08 45.9**
comp=Z,110nm,1.1s
**RDMU Red Mountain 25.64 341 IAmb IAmb 18 08 49.5**
comp=Z,172nm,1.2s
**SFIN Lafayette 25.69 21 IAmb IAmb 18 08 47.1**
comp=Z,169nm,1.2s
**OTAV Otavalo 25.75 127 P P 18 08 38.7 +0.8**
**OTAV Otavalo 25.75 127 P P 18 08 38.7 +0.8**
OTAV pmax pmax
comp=Z,55nm,1.5s
**P49A Miami Univ. Ec 25.85 25 P P 18 08 37.6 -0.4**
baz=212,SNR=22
**MPU Maple Canyon 25.87 337 IAmb IAmb 18 08 50.4**
comp=Z,80nm,1.1s
**ISA Isabella, Lake 25.88 321 IAmb IAmb 18 08 52.9**
comp=Z,87nm,1.4s
**BCW Bitter Crk WRg 25.99 318 IAmb IAmb 18 08 59.7**
comp=Z,143nm,1.4s
**S54A Dingess, Beckl 26.04 33 IAmb IAmb 18 08 51.4**
comp=Z,122nm,0.9s
**L40A Anamosa 26.13 13 IAmb IAmb 18 08 51.2**
comp=Z,133nm,0.9s
**SPR3 Spring Creek 3 26.14 331 IAmb IAmb 18 08 53.5**
comp=Z,209nm,1.9s
**SDDR Presa de Saban 26.17 81 P P 18 08 41.0 -0.2**
**R11B Troy Canyon, C 26.23 329 P P 18 08 43.6 +1.9**
baz=141,SNR=31
**M44A Midewin, Midew 26.31 18 IAmb IAmb 18 08 52.5**
comp=Z,169nm,1.2s
**GMN Gold Mountain 26.32 325 IAmb IAmb 18 08 58.0**
comp=Z,104nm,1.5s
**T57A Hurt 26.57 37 IAmb IAmb 18 08 58.0**
comp=Z,116nm,0.9s
**ROSC El Rosal 26.61 113 P P 18 08 48.4 +2.7**
comp=Z,9.5nm,0.4s,baz=311,slow=16,SNR=4.0
ROSC LR LR 18 19 11.9
comp=Z,614nm,20.4s,baz=24,slow=36
**K22A Casper 26.77 347 IAmb IAmb 18 08 58.9**
comp=Z,80nm,1.1s
**TPH Tonopah 26.86 326 IAmb IAmb 18 09 16.4**
comp=Z,124nm,1.0s
**P52A Corning 27.06 29 P P 18 08 48.5 -0.6**
baz=217,SNR=5.1
**L44A Lake County Fo 27.07 18 P P 18 08 49.2 +0.2**
baz=203
**HWUT Hardware Ranch 27.24 339 IAmb IAmb 18 09 02.8**
comp=Z,116nm,1.4s
**N49A Columbus Grove 27.24 24 IAmb IAmb 18 09 00.4**
comp=Z,204nm,1.6s
**S57A Dark Hollow, R 27.28 36 IAmb IAmb 18 09 01.2**
comp=Z,78nm,1.1s
**P53A Whipple 27.30 30 IAmb IAmb 18 09 01.5**
comp=Z,94nm,1.0s
**K43A Burlington 27.44 17 IAmb IAmb 18 09 02.4**
comp=Z,108nm,0.9s
**OMMB Old Mammoth Mi 27.51 323 IAmb IAmb 18 09 06.2**
comp=Z,86nm,1.7s
**PDAR Pinedale Array 27.64 343 P P 18 08 55.2 +0.7**
**PDAR Pinedale Array 27.64 343 P P 18 08 55.1 +0.6**
comp=Z,17nm,0.9s,baz=137,slow=9.6,SNR=66
PDAR S **S 18 13 35.2 -0.4**
comp=Z,0.2nm,0.3s,baz=129,slow=49,SNR=1.6
comp=Z,17nm,0.9s
**I37A Lemond, Waseca 27.64 8 IAmb IAmb 18 09 04.2**
comp=Z,101nm,1.4s
**LHV Little Huntoon 27.68 325 IAmb IAmb 18 09 12.1**
comp=Z,167nm,1.6s
**NVAR Mina Array Bea 27.70 325 P P 18 08 57.0 +1.9**
**NVAR Mina Array Bea 27.70 325 P P 18 08 56.6 +1.5**
comp=Z,14nm,0.9s,baz=150,slow=9.1,SNR=82
NVAR PcP **PcP 18 12 13.2 +1.4**
comp=Z,1.2nm,0.8s,baz=151,slow=2.1,SNR=3.0
NVAR LR LR 18 21 47.2
comp=Z,2µm,18.3s,baz=135,slow=40
comp=Z,14nm,0.9s
**RSSD Black Hills 27.76 352 P P 18 08 55.9 +0.4**
RSSD IAmb IAmb 18 09 07.1
comp=Z,178nm,1.9s
**RSSD Black Hills 27.76 352 P P 18 08 55.9 +0.4**
RSSD pmax pmax
comp=Z,178nm,1.9s
**HVU Hansel Valley 27.83 337 IAmb IAmb 18 09 08.8**
comp=Z,67nm,0.9s
**RYN Ryan 27.96 325 IAmb IAmb 18 09 14.6**
comp=Z,162nm,1.8s
**ELK Elko 27.96 332 IAmb IAmb 18 09 10.0**
comp=Z,98nm,1.9s
**O53A New Philadelph 27.98 29 P P 18 08 57.0 -0.2**
baz=218
**KVN Kaiserville 28.04 327 IAmb IAmb 18 09 15.3**
comp=Z,153nm,2.0s
**BBGB Big Mountain B 28.05 319 IAmb IAmb 18 09 33.6**
comp=Z,48nm,1.0s
**AHID Auburn Hatcher 28.11 340 IAmb IAmb 18 09 10.2**
comp=Z,170nm,1.8s
**SDV Santo Domingo 28.39 102 P P 18 09 02.8 +1.4**
SDV IAmb IAmb 18 09 14.1
comp=Z,51nm,0.8s
**SDV Santo Domingo 28.39 102 P P 18 08 59.9 -1.5**
comp=Z,26nm,0.8s,baz=308,slow=6.1,SNR=12
SDV LR LR 18 21 51.4
comp=Z,706nm,19.6s,baz=336,slow=40
comp=Z,26nm,0.8s
**SDV Santo Domingo 28.39 102** *eP* **P 18 09 00.8 -0.6**
**I42A Draeger Farm, 28.39 15 IAmb IAmb 18 09 10.9**
comp=Z,73nm,1.1s
**SAO San Andreas Ge 28.42 319 P P 18 09 02.9 +1.7**
**SAO San Andreas Ge 28.42 319 P P 18 09 02.9 +1.7**

SAO pmax pmax
comp=Z,19nm,1.2s
**TPAW Teton Pass 28.72 341** IAmb IAmb 18 09 19.1
comp=Z,158nm,1.4s
**LOHW Long Hollow 28.73 342** IAmb IAmb 18 09 16.0
comp=Z,116nm,1.1s
**P57A Homestead Farm 29.02 34** IAmb IAmb 18 09 17.4
comp=Z,87nm,1.2s
**IMW Indian Meadow 29.09 342** IAmb IAmb 18 09 19.2
comp=Z,62nm,1.1s
**M53A WI Miller and 29.17 28** IAmb IAmb 18 09 17.6
comp=Z,107nm,1.0s
**M53A WI Miller and 29.17 28** P **P 18 09 07.1 -0.8**
baz=217,SNR=5.9
**G40A Rib Lake 29.41 12** IAmb IAmb 18 09 19.8
comp=Z,58nm,1.1s
**H17A Grant Village 29.43 342** P **P 18 09 11.4 +1.0**
baz=156
**SSPA Standing Stone 29.92 33** P **P 18 09 14.7 +0.2**
SSPA IAmb IAmb 18 09 25.0
comp=Z,107nm,1.1s
**YHL Hebgen Lake 30.02 342** IAmb IAmb 18 09 29.3
comp=Z,103nm,1.3s
**F42A Maple Grove Fa 30.34 15** IAmb IAmb 18 09 27.7
comp=Z,62nm,1.2s
**MFID Camas Ranch 30.41 335** IAmb IAmb 18 09 31.9
comp=Z,86nm,1.4s
**COWI Conover 30.43 13** IAmb IAmb 18 09 28.9
comp=Z,55nm,1.0s
**E38A The Farm, Brul 30.45 10** IAmb IAmb 18 10 28.4
comp=Z,44nm,1.1s
**N58A Sunbury 30.68 34** IAmb IAmb 18 09 31.3
comp=Z,60nm,1.2s
**BAUV El Baul 30.81 101** IAmb IAmb 18 09 32.8
comp=Z,63nm,1.1s
**M57A Sunshine Farm, 30.82 33** IAmb IAmb 18 09 32.9
comp=Z,66nm,1.2s
**BOZ Bozeman (W) 30.84 342** IAmb IAmb 18 09 35.1
comp=Z,83nm,1.4s
**WVOR Wild Horse Val 30.86 330** IAmb IAmb 18 09 36.0
comp=Z,128nm,1.8s
**ATAH Atahualpa 31.00 138** LR LR 18 19 48.9
comp=Z,1µm,18.1s,baz=322,slow=32
**J08A Circle Bar Ran 31.50 332** IAmb IAmb 18 09 41.0
comp=Z,90nm,1.2s
**KCPM Cahto Peak 31.57 322** IAmb IAmb 18 09 42.4
comp=Z,34nm,1.0s
**EYMN Ely 31.77 9** IAmb IAmb 18 10 41.2
comp=Z,51nm,1.4s
**E46A Sault Ste Mari 31.96 19** IAmb IAmb 18 09 42.4
comp=Z,63nm,1.0s
**KMRM Mail Ridge 31.98 322** IAmb IAmb 18 09 45.6
comp=Z,48nm,1.0s
**BMO Blue Mountains 32.19 335** IAmb IAmb 18 09 46.8
comp=Z,65nm,1.4s
**TRNY Table Rock, Ra 32.26 36** IAmb IAmb 18 09 45.4
comp=Z,106nm,1.4s
**KMPM Mount Pierce 32.35 322** IAmb IAmb 18 09 48.7
comp=Z,26nm,0.9s
**KHMM Horse Mountain 32.42 323** IAmb IAmb 18 09 49.1
comp=Z,33nm,0.9s
**YBH Yreka Blue Hor 32.42 325** LR LR 18 25 12.1
comp=Z,724nm,19.3s,baz=156,slow=41
**SADO Sadowa 32.51 26** IAmb IAmb 18 09 47.2
comp=Z,85nm,1.2s
**SADO Sadowa 32.51 26** P **P 18 09 36.0 -1.2**
comp=Z,11nm,1.0s,baz=213,slow=7.5,SNR=4.1
SADO LR LR 18 26 06.0
comp=Z,814nm,18.3s,baz=232,slow=43
comp=Z,11nm,1.0s
**JCC Jacoby Creek, 32.56 323** IAmb IAmb 18 09 50.4
comp=Z,75nm,1.2s
**MSO Missoula 32.65 340** IAmb IAmb 18 09 50.3
comp=Z,52nm,1.1s
**KRPM Rodgers 32.77 323** IAmb IAmb 18 09 52.5
comp=Z,68nm,0.9s
**KRMB Red Mountain 32.95 324** IAmb IAmb 18 09 53.5
comp=Z,35nm,1.0s
**KBO Bosley Butte 33.58 325** IAmb IAmb 18 09 59.4
comp=Z,64nm,1.0s
**ULM Lac du Bonnet 33.59 3** P **P 18 09 45.4 -1.2**
comp=Z,17nm,0.8s,baz=185,slow=9.3,SNR=11
ULM LR LR 18 24 25.3
comp=Z,2µm,19.9s,baz=188,slow=38
comp=Z,17nm,0.8s
**ULM Lac du Bonnet 33.59 3** *e*P **P 18 09 45.7 -0.9**
**PCRV Puerto La Cruz 33.70 97** LR LR 18 24 57.6
comp=Z,358nm,20.3s,slow=39
**J59A Piesco 33.70 33** IAmb IAmb 18 09 58.0
comp=Z,64nm,1.1s
**E09A Wood Farm, Sta 33.89 336** IAmb IAmb 18 10 01.4
comp=Z,28nm,0.9s
**L61B Northampton 33.99 35** P **P 18 09 50.2 +0.1**
baz=228
**J01E Myrtle Point 34.06 326** IAmb IAmb 18 10 03.2
comp=Z,50nm,0.8s
**ACCN Adirondack Com 34.08 33** IAmb IAmb 18 10 01.3
comp=Z,64nm,1.4s
**NCB Newcomb 34.20 32** IAmb IAmb 18 10 02.4
comp=Z,71nm,1.4s
**H04A Detroit Lake 34.25 330** IAmb IAmb 18 10 04.0
comp=Z,64nm,1.1s
**WBO Williamsburg 34.43 30** IAmb IAmb 18 10 04.1
comp=Z,69nm,1.1s
**HOOD Mount Hood Mea 34.47 331** IAmb IAmb 18 10 10.2
comp=Z,53nm,0.8s
**LONY Lake Ozonia 34.49 31** IAmb IAmb 18 10 04.8
comp=Z,98nm,1.4s
**M65A Busby, Falmout 34.60 38** P **P 18 09 55.0 -0.5**
baz=232
**D08A Wollman Farm, 34.64 335** IAmb IAmb 18 10 06.8
comp=Z,91nm,1.9s
**NEW Newport 34.97 338** LR LR 18 23 57.4
comp=Z,870nm,21.2s,baz=156,slow=36
**MNTQ Montreal, Queb 35.59 31** IAmb IAmb 18 10 15.1
comp=Z,83nm,1.1s
**I62A Tamworth 35.66 35** IAmb IAmb 18 10 31.4
comp=Z,54nm,1.1s
**NNA Nana 35.72 141** LR LR 18 21 54.3
comp=Z,1µm,19.8s,baz=326,slow=32
**NNA Nana 35.72 141** *i* P **P 18 10 04.3 -1.1**
NNA pmax pmax
comp=Z,40nm,1.1s
**D05A Enumclaw 36.03 333** IAmb IAmb 18 10 20.0
comp=Z,56nm,0.9s
**E03A Lebam 36.27 331** IAmb IAmb 18 10 23.1
comp=Z,36nm,0.7s
**GNW Green Mountain 36.69 332** IAmb IAmb 18 10 24.6
comp=Z,37nm,0.8s
**G62A West of Eustis 36.98 34** IAmb IAmb 18 10 30.9
comp=Z,93nm,1.3s
**NLWA Neilton Lookou 37.03 331** IAmb IAmb 18 10 28.7
comp=Z,178nm,1.9s
**B04A Port Angeles 37.36 332** IAmb IAmb 18 10 31.4
comp=Z,42nm,1.0s
**FFC Flin Flon 38.09 357** P **P 18 10 24.8 -0.3**
FFC IAmb IAmb 18 10 35.8
comp=Z,101nm,0.9s
**FFC Flin Flon 38.09 357** P **P 18 10 24.8 -0.3**
FFC pmax pmax
comp=Z,101nm,1.0s
**CLRS Cowichan Lake 38.21 333** IAmb IAmb 18 10 38.3
comp=Z,138nm,1.9s
**LMQ La Malbaie 38.65 31** IAmb IAmb 18 10 40.4
comp=Z,88nm,1.5s
**D62A Allapoint, All 38.98 32** IAmb IAmb 18 10 43.5
comp=Z,86nm,1.4s
**TEFE Tefe 39.15 118** *e*P **P 18 10 33.8 -0.7**
**BOAV Boa Vista 40.10 107** P **P 18 10 42.1 -0.3**
**BOAV Boa Vista 40.10 107** *e*P **P 18 10 41.8 -0.7**
**BATG Bathurst New B 40.69 34** P **P 18 10 45.6 -1.3**
**ETMB Extrema 41.51 127** P **P 18 10 54.0 -0.1**
**ETMB Extrema 41.51 127** *e*P **P 18 10 53.2 -0.8**
**MACA Manacapuru-AM 42.38 114** P **P 18 10 60.0 -1.2**
**MACA Manacapuru-AM 42.38 114** *e*P **P 18 11 00.5 -0.7**
**BBB Bella Bella 42.41 333** LR LR 18 31 10.4
comp=Z,655nm,18.9s,baz=154,slow=40
**SAML Samuel 43.36 123** P **P 18 11 07.3 -1.8**
**SAML Samuel 43.36 123** P **P 18 11 07.3 -1.8**
SAML pmax pmax
comp=Z,8.0nm,0.8s
**SAML Samuel 43.36 123** *e*P **P 18 11 08.2 -0.9**
**LPAZ La Paz 44.48 136** P **P 18 11 20.7 +1.9**
comp=Z,2.0nm,0.8s,baz=309,slow=6.5,SNR=3.1
LPAZ S **S 18 17 48.0 -5.7**
comp=Z,0.3nm,0.4s,baz=310,slow=23,SNR=1.5
LPAZ LR LR 18 28 26.5
comp=Z,777nm,18.9s,baz=311,slow=34
comp=Z,2.0nm,0.8s
**LPAZ La Paz 44.48 136** *e*P **P 18 11 17.2 -1.6**
**RPN Rapa Nui 44.73 194** LR LR 18 24 00.9
comp=Z,133nm,20.7s,baz=358,slow=28
**SCHQ Schefferville 45.30 25** P **P 18 11 23.5 -0.7**
SCHQ IAmb IAmb 18 11 34.6
comp=Z,82nm,1.4s
**SCHQ Schefferville 45.30 25** P **P 18 11 22.8 -1.5**
comp=Z,16nm,0.8s,baz=228,slow=7.4,SNR=13
SCHQ LR LR 18 33 14.9
comp=Z,932nm,18.2s,baz=230,slow=40
comp=Z,16nm,0.8s
**U35K Hyder 45.88 336** P **P 18 11 29.9 +1.3**
baz=136
**V35K Ketchikan 46.10 334** P **P 18 11 30.5 0.0**
baz=134
**TOAD Toad River Com 46.45 341** P **P 18 11 33.6 +0.4**
baz=144
**T35M Bob Quinn 46.73 337** P **P 18 11 35.7 +0.3**
baz=136,SNR=5.1
**CRAG Craig 46.83 334** P **P 18 11 38.0 +1.8**
baz=132
**YKA Yellowknife Ar 47.14 350** P **P 18 11 38.9 +0.4**
comp=Z,9.7nm,0.8s,baz=160,slow=6.7,SNR=14
YKA LR LR 18 32 50.9
comp=Z,1µm,18.8s,baz=158,slow=38
comp=Z,9.7nm,0.8s
**WRAK Wrangell Islan 47.15 335** P **P 18 11 40.0 +1.4**
baz=133
**KOTAN Kotaneelee Air 47.16 343** P **P 18 11 40.1 +1.4**
baz=146,SNR=8.8
**LIRD Liard River Hi 47.17 341** P **P 18 11 40.1 +1.3**
baz=143
**U33K Whale Pass 47.26 334** P **P 18 11 40.8 +1.3**
baz=132
**T33K Petersburg 47.67 335** P **P 18 11 43.1 +0.5**
baz=133
**DLBC Dease Lake 47.72 338** IAmb IAmb 18 11 56.5
comp=Z,54nm,1.1s
**DLBC Dease Lake 47.72 338** LR LR 18 33 43.0
comp=Z,3µm,18.7s,baz=129,slow=38
**DLBC Dease Lake 47.72 338** P **P 18 11 43.3 +0.1**
baz=137,SNR=12
**S34M Telegraph Cree 47.74 337** P **P 18 11 42.8 -0.4**
baz=136
**VILB Vilhena 48.07 125** IAmb IAmb 18 11 55.9
comp=Z,33nm,1.1s
**VILB Vilhena 48.07 125** *e*P **P 18 11 45.5 -0.9**
**TAOE Nuku Hiva Isla 48.22 241** *e*P **P 18 11 48.7 +1.0**
comp=Z,39nm,26.2s
TAOE *e*S **S 18 18 46.7 +0.2**
comp=Z,500nm,24.7s
TAOE *e*SS **SS 18 22 15.9 -0.3**
comp=Z,143nm,26.7s
TAOE *e*LR LR 18 25 25.7
comp=Z,2µm,24.0s
**WTLY Watson Lake, Y 48.57 340** P **P 18 11 51.3 +1.6**
baz=140,SNR=6.4
**LVC Limon Verde 48.69 142** LR LR 18 28 16.4
comp=Z,463nm,21.1s,baz=336,slow=31
**R33M Jennings River 48.76 339** IAmb IAmb 18 12 05.6
comp=Z,67nm,1.4s
**R33M Jennings River 48.76 339** P **P 18 11 52.5 +1.2**
baz=137,SNR=24
**S32K Killisnoo 48.77 335** P **P 18 11 52.7 +1.6**
baz=132
**SIT Sitka 48.80 334** P **P 18 11 53.0 +1.6**
baz=130
**NPGB Novo Progresso 48.89 115** *e*P **P 18 11 51.5 -1.3**
**Q32M Nakina River 48.91 338** IAmb IAmb 18 12 05.8
comp=Z,35nm,1.3s
**Q32M Nakina River 48.91 338** P **P 18 11 53.6 +1.1**
baz=135
**MCPB Macapa, AP 48.96 105** *e*P **P 18 11 52.3 -1.0**
**SIV San Ignacio 49.27 129** LR LR 18 32 02.7
comp=Z,912nm,18.0s,baz=316,slow=35
**R32K Eaglecrest 49.28 336** P **P 18 11 56.0 +0.8**
baz=132
**TGTN Hyland Airport 49.51 342** P **P 18 11 57.9 +1.1**
baz=141,SNR=15
**WRGLY Wrigley 49.61 346** P **P 18 11 59.4 +1.8**
baz=146,SNR=5.7
**S31K Pelican 49.76 335** P **P 18 12 00.5 +1.8**
baz=130
**R31K City Hall, Gus 49.86 335** P **P 18 12 01.7 +2.2**
baz=131
**P32M Atlin 49.88 338** IAmb IAmb 18 12 12.4
comp=Z,42nm,1.0s
**P32M Atlin 49.88 338** P **P 18 12 01.8 +2.1**
baz=134,SNR=6.5
**P33M Teslin, Yukon 50.00 339** IAmb IAmb 18 12 13.3
comp=Z,41nm,1.2s
**P33M Teslin, Yukon 50.00 339** P **P 18 12 03.1 +2.4**
baz=135
**PDRB Porto dos Gac 50.09 121** *e*P **P 18 12 00.3 -1.5**
**BBSD Serra de San D 50.37 130** *e*P **P 18 12 03.6 -0.4**
**SKAG Skagway 50.39 337** P **P 18 12 05.5 +2.0**
baz=132
**PTLB Pontes e Lacer 50.39 127** *e*P **P 18 12 04.0 -0.2**
**CLDB Colider 50.46 120** *e*P **P 18 12 04.0 -0.7**
**N32M Quiet Lake 50.76 339** P **P 18 12 08.8 +2.4**
baz=136
**PLBC Pleasant Camp 50.79 336** P **P 18 12 08.9 +2.4**
baz=131
**WHY Whitehorse 51.04 338** P **P 18 12 10.9 +2.3**
baz=133
**MMPY Sheldon Lake, 51.25 341** P **P 18 12 12.7 +2.7**
baz=138,SNR=23
**FRB Frobisher Bay 51.41 17** LR LR 18 35 12.4
comp=Z,829nm,21.6s,baz=214,slow=38
**P29M Windy Craggy 51.43 336** P **P 18 12 13.5 +2.1**
baz=129
**P30M Million Dollar 51.45 337** P **P 18 12 14.0 +2.4**
baz=130
**O30N Mendenhall 51.55 338** IAmb IAmb 18 12 25.2
comp=Z,33nm,1.1s
**O30N Mendenhall 51.55 338** P **P 18 12 14.7 +2.3**
baz=132,SNR=6.8
**FARO Faro, Yukon 51.62 340** IAmb IAmb 18 12 25.4
comp=Z,38nm,1.1s
**FARO Faro, Yukon 51.62 340** P **P 18 12 15.5 +2.7**
baz=136,SNR=9.4
**N31M Braeburn, Yuko 51.93 338** IAmb IAmb 18 12 27.8
comp=Z,71nm,1.1s
**N31M Braeburn, Yuko 51.93 338** P **P 18 12 17.3 +2.2**
baz=133,SNR=6.4
**M31M Drury Creek, Y 51.95 340** P **P 18 12 17.9 +2.7**
baz=135,SNR=5.6
**PNL Peninsula 52.12 335** P **P 18 12 18.6 +2.1**
baz=127
**O29M Mount Kennedy 52.19 336** IAmb IAmb 18 12 29.8
comp=Z,36nm,1.1s
**O29M Mount Kennedy 52.19 336** P **P 18 12 19.8 +2.6**
baz=129
**N30M Aishikik Lake 52.38 338** P **P 18 12 21.5 +3.1**
baz=131,SNR=6.1
**YUK6 Outpost Mounta 52.51 337** P **P 18 12 22.7 +3.0**
baz=129,SNR=5.2
**YUK4 Talbot Arm 52.87 337** P **P 18 12 24.8 +2.5**
baz=129
**O28M Mount Upton 53.10 336** P **P 18 12 26.4 +2.2**
baz=127
**RKT Rikitea 53.12 223** *e*S **S 18 19 55.5 +1.4**
RKT *e*SS **SS 18 23 35.5 +1.5**
comp=Z,2µm,30.0s
RKT *e*LR LR 18 27 49.2
comp=Z,354nm,22.2s
comp=Z,9µm,25.5s
**H03N2 Juan Fernandez 53.25 159** T T 19 09 23.5
baz=337,slow=77,SNR=4221
**YUK8 Steele Glacier 53.26 337** P **P 18 12 27.7 +2.5**
baz=128,SNR=7.7
**H03N1 Juan Fernandez 53.26 159** T T 19 09 23.8
baz=337,slow=77,SNR=4355
**H03N3 Juan Fernandez 53.27 159** T T 19 09 23.7
baz=337,slow=77,SNR=6064
**SALV Santo Antonio 53.33 125** *e*P **P 18 12 25.8 -0.3**
**PRPB Parauapebas 53.37 111** *e*P **P 18 12 26.1 -0.3**
**MESA MESA 53.45 335** P **P 18 12 29.2 +2.5**
baz=125
**M29M Somme Creek 53.51 338** IAmb IAmb 18 12 39.9
comp=Z,66nm,1.3s
**M29M Somme Creek 53.51 338** P **P 18 12 29.4 +2.5**
baz=130,SNR=9.7
**CTG Chitna Glacier 53.67 336** P **P 18 12 30.4 +2.3**
baz=126
**GRNC Granite Creek 53.70 335** IAmb IAmb 18 12 41.2
comp=Z,43nm,1.1s
**YUK3 Moose Creek 53.82 337** P **P 18 12 31.2 +1.9**
baz=128
**K29M Barlow Dome 54.12 340** IAmb IAmb 18 12 43.5
comp=Z,51nm,1.3s
**K29M Barlow Dome 54.12 340** P **P 18 12 33.6 +2.3**
baz=132,SNR=7.5
**J30M Hart River 54.24 341** IAmb IAmb 18 12 45.5
comp=Z,74nm,1.8s
**J30M Hart River 54.24 341** P **P 18 12 34.0 +1.8**
baz=134,SNR=9.8
**CRQE Cirque 54.25 335** P **P 18 12 35.1 +2.7**
baz=124
**KAIM Kayak Island 54.34 334** P **P 18 12 35.7 +2.8**
baz=122
**MCARA McCarthy VSAT 54.58 336** IAmb IAmb 18 12 47.7
comp=Z,55nm,1.2s
**MCARA McCarthy VSAT 54.58 336** P **P 18 12 37.2 +2.6**
baz=124
**I30M Mount Dempster 54.70 342** IAmb IAmb 18 12 47.3
comp=Z,48nm,1.1s
**I30M Mount Dempster 54.70 342** P **P 18 12 37.1 +1.6**
baz=134,SNR=22
**M27K Edge Creek, AK 54.71 337** IAmb IAmb 18 12 48.5
comp=Z,40nm,1.4s
**M27K Edge Creek, AK 54.71 337** P **P 18 12 38.2 +2.6**
baz=126
**J29N Klondike Camp 54.75 340** P **P 18 12 37.7 +1.9**
baz=132
**SNDB Serra Nova Dou 54.80 118** *e*P **P 18 12 37.1 +0.2**
**DAWY Dawson 54.88 339** IAmb IAmb 18 12 48.4
comp=Z,38nm,1.4s
**DAWY Dawson 54.88 339** P **P 18 12 38.5 +1.7**
baz=130
**GLB Gilahina Butte 54.92 335** IAmb IAmb 18 12 49.9
comp=Z,36nm,1.2s
**Q23K Middleton Isla 54.92 333** P **P 18 12 37.3 +0.3**
baz=120
**BMRM Bremner River 54.98 335** P **P 18 12 37.3 -0.3**
baz=123
**C36M Paulatuk 55.01 349** P **P 18 12 37.8 +0.2**
baz=150
**BCAR Beaver Creek A 55.10 338** P **P 18 12 40.0 +1.6**
**L27K Beaver Creek, 55.11 338** IAmb IAmb 18 12 51.0
comp=Z,57nm,1.4s
**L27K Beaver Creek, 55.11 338** P **P 18 12 39.9 +1.4**
baz=132,SNR=7.6
**M26K Nabesna, AK 55.16 337** IAmb IAmb 18 12 51.4
comp=Z,51nm,1.4s
**M26K Nabesna, AK 55.16 337** P **P 18 12 40.4 +1.6**
baz=125,SNR=5.0
**EYAK Cordova Ski Ar 55.24 334** P **P 18 12 40.1 +0.7**
baz=121
**G31M Satah River 55.32 344** P **P 18 12 41.1 +1.3**
baz=137,SNR=13
**N25K Chitina, Valde 55.33 335** IAmb IAmb 18 12 53.1
comp=Z,31nm,1.2s
**N25K Chitina, Valde 55.33 335** P **P 18 12 42.1 +1.9**
baz=123
**I29M Ogilvie Camp, 55.39 341** IAmb IAmb 18 12 51.7
comp=Z,40nm,1.1s
**I29M Ogilvie Camp, 55.39 341** P **P 18 12 40.6 +0.2**
baz=132,SNR=14
**F31M Tsiigehtchic 55.57 344** IAmb IAmb 18 12 53.0
comp=Z,59nm,1.2s
**F31M Tsiigehtchic 55.57 344** P **P 18 12 42.8 +1.2**
baz=138
**EPYK Eagle Plains 55.61 342** IAmb IAmb 18 12 53.6
comp=Z,38nm,1.3s
**EPYK Eagle Plains 55.61 342** P **P 18 12 43.5 +1.5**
baz=134
**L26K Log Cabin Wild 55.65 337** IAmb IAmb 18 12 54.7
comp=Z,58nm,1.6s
**L26K Log Cabin Wild 55.65 337** P **P 18 12 44.0 +1.7**
baz=125
**P23K Montague Islan 55.67 333** P **P 18 12 43.6 +1.2**
baz=119
**K27K Chicken 55.78 339** P **P 18 12 45.3 +2.0**
baz=127
**KLU Klutina 55.80 335** IAmb IAmb 18 12 56.1
comp=Z,70nm,1.4s
**KLU Klutina 55.80 335** P **P 18 12 45.5 +1.9**
baz=122
**G30M tAoh Zraii Nji 55.90 343** P **P 18 12 44.7 +0.6**
baz=135
**EGAK Eagle 55.93 340** IAmb IAmb 18 12 55.7
comp=Z,36nm,1.1s
**EGAK Eagle 55.93 340** P **P 18 12 45.2 +1.0**
baz=128,SNR=14
**I28M Miner Creek 55.96 341** P **P 18 12 45.1 +0.5**
baz=130,SNR=6.0
**GLI Glacier Island 55.98 334** P **P 18 12 45.9 +1.2**
baz=120
**HARP HAARP 55.99 336** P **P 18 12 46.4 +1.7**
baz=123
**H29M Whitestone 55.99 342** IAmb IAmb 18 12 56.3
comp=Z,45nm,1.1s
**H29M Whitestone 55.99 342** P **P 18 12 45.9 +1.2**
baz=132,SNR=18
**INK Inuvik 56.17 345** IAmb IAmb 18 12 57.1
comp=Z,49nm,1.0s
**INK Inuvik 56.17 345** LR LR 18 36 40.4
comp=Z,869nm,18.6s,baz=161,slow=36
**INK Inuvik 56.17 345** P **P 18 12 47.0 +1.1**
baz=139,SNR=9.9
**F30M Barrier River 56.23 344** P **P 18 12 47.6 +1.3**
baz=136,SNR=9.5
**M24K Tolsona, Glenn 56.23 335** P **P 18 12 47.9 +1.4**
baz=122
**ARAG Araguaiana, MT 56.31 122** *e*P **P 18 12 46.9 -0.8**
**G29M Pine Creek 56.36 343** IAmb IAmb 18 12 58.8
comp=Z,36nm,1.1s
**G29M Pine Creek 56.36 343** P **P 18 12 48.6 +1.3**
baz=133,SNR=7.3
**PAX Paxson 56.42 336** P **P 18 12 48.9 +1.0**
baz=123,SNR=7.8
**SCRK Sand Creek 56.43 338** IAmb IAmb 18 13 00.4
comp=Z,38nm,1.2s
**SCRK Sand Creek 56.43 338** P **P 18 12 49.9 +1.9**
baz=125,SNR=8.3
**PWL Port Wells 56.49 333** P **P 18 12 49.7 +1.3**
baz=119
**SMTB Santa Maria do 56.53 113** *e*P **P 18 12 48.5 -0.8**
**SCM Sheep Creek Mo 56.56 335** P **P 18 12 50.6 +1.7**
baz=120
**J26L Joseph Creek 56.59 339** P **P 18 12 51.1 +2.0**
baz=126,SNR=35
**I27K Kandik River 56.60 340** P **P 18 12 50.1 +1.0**
baz=128,SNR=5.9
**RIDG Independent Ri 56.61 337** P **P 18 12 50.6 +1.4**
baz=124,SNR=7.3
**SEW Seward 56.63 332** P **P 18 12 50.3 +1.1**
baz=117
**M23K Glacier View 56.70 335** P **P 18 12 51.6 +1.8**
baz=120
**KNK Knik Glacier 56.82 334** P **P 18 12 52.0 +1.3**
baz=119
**I26K Coal Creek Min 56.93 339** IAmb IAmb 18 13 03.0
comp=Z,34nm,1.2s
**I26K Coal Creek Min 56.93 339** P **P 18 12 52.6 +1.2**
baz=127
**SML Sawmill 56.96 334** IAmb IAmb 18 13 03.5
comp=Z,37nm,1.2s
**SML Sawmill 56.96 334** P **P 18 12 52.5 +0.8**
baz=119
**H27K Steamboat Moun 56.97 341** P **P 18 12 52.7 +1.0**
baz=129,SNR=5.9
**K24K Donnelly Dome 56.99 337** P **P 18 12 53.9 +2.0**
baz=123
**BRSE Bradley Lake S 57.05 332** P **P 18 12 54.9 +2.6**
baz=116
**WAT6 Susitna Watana 57.10 335** P **P 18 12 54.4 +1.6**
baz=120
**KDAK Kodiak Island 57.12 329** LR LR 18 36 11.8
comp=Z,1µm,20.5s,baz=133,slow=35
**KDAK Kodiak Island 57.12 329** P **P 18 12 53.7 +0.9**
baz=113
**GHO Glory Hole Cre 57.19 334** IAmb IAmb 18 13 05.1
comp=Z,38nm,1.0s
**PMR Palmer 57.19 334** P **P 18 12 54.7 +1.5**
baz=118
**RC01 Rabbit Creek A 57.21 333** P **P 18 12 55.3 +1.9**
baz=117
**DHY Denali Highway 57.21 336** P **P 18 12 54.7 +1.1**
baz=121
**OHAK Old Harbor 57.26 328** P **P 18 12 55.3 +1.5**
baz=112
**J25K Salcha River, 57.29 338** IAmb IAmb 18 13 06.2
comp=Z,58nm,1.6s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| J25K | Salcha River, baz=124,SNR=9.4 | 57.29 | 338 | P | P | 18 12 55.4 | +1.4 | |
| E29M | Blow River comp=Z,50nm,1.2s | 57.34 | 344 | IAmb | IAmb | 18 13 06.0 | | |
| E29M | Blow River baz=134,SNR=5.6 | 57.34 | 344 | P | P | 18 12 55.7 | +1.4 | |
| Q20K | Shuyak Island baz=113 | 57.35 | 330 | P | P | 18 12 54.4 | 0.0 | |
| F28M | Old Crow comp=Z,64nm,1.1s | 57.36 | 343 | IAmb | IAmb | 18 13 06.2 | | |
| F28M | Old Crow baz=131,SNR=14 | 57.36 | 343 | P | P | 18 12 55.5 | +1.1 | |
| G27K | Doyon Strip baz=129,SNR=17 | 57.37 | 341 | P | P | 18 12 55.7 | +1.2 | |
| HOM | Homer baz=115 | 57.42 | 331 | P | P | 18 12 55.3 | +0.4 | |
| A36M | Sachs Harbour comp=Z,53nm,1.0s | 57.50 | 351 | IAmb | IAmb | 18 13 06.0 | | |
| A36M | Sachs Harbour baz=149 | 57.50 | 351 | P | P | 18 12 55.5 | +0.3 | |
| WAT1 | Susitna Watana baz=120 | 57.55 | 335 | P | P | 18 12 56.8 | +0.9 | |
| HDA | Harding Lake comp=Z,34nm,1.0s | 57.75 | 337 | IAmb | IAmb | 18 13 08.7 | | |
| HDA | Harding Lake baz=122,SNR=9.8 | 57.75 | 337 | P | P | 18 12 58.5 | +1.3 | |
| SUA | Susitna One comp=Z,57nm,1.1s | 57.81 | 333 | IAmb | IAmb | 18 13 09.7 | | |
| SUA | Susitna One baz=116 | 57.81 | 333 | P | P | 18 12 59.3 | +1.5 | |
| PRP | Porcupine Dome comp=Z,74nm,1.2s | 57.86 | 339 | IAmb | IAmb | 18 13 10.0 | | |
| PRP | Porcupine Dome baz=124,SNR=5.2 | 57.86 | 339 | P | P | 18 12 59.5 | +1.4 | |
| IL31 | comp=Z,52nm,1.1s | 57.92 | 338 | IAmb | IAmb | 18 13 10.0 | | |
| ILAR | Eielson Array | 57.92 | 338 | P | P | 18 12 59.2 | +0.8 | |
| ILAR | Eielson Array comp=Z,7.2nm,0.9s,baz=133,slow=4.8,SNR=51 | 57.92 | 338 | P | P | 18 12 58.0 | -0.4 | |
| ILAR | comp=Z,6.3nm,1.1s,baz=138,slow=2.4,SNR=5.8 | | | PcP | PcP | 18 13 51.3 | +0.8 | |
| ILAR | comp=Z,3μm,18.3s,baz=116,slow=38 comp=Z,7.2nm,0.9s | | | LR | LR | 18 40 16.9 | | |
| ILAR | Eielson Array | 57.92 | 338 | P | P | 18 12 59.2 | +0.8 | |
| E28M | Babbage River comp=Z,32nm,1.1s | 57.93 | 344 | IAmb | IAmb | 18 13 09.7 | | |
| E28M | Babbage River baz=132,SNR=6.0 | 57.93 | 344 | P | P | 18 12 59.5 | +1.0 | |
| CHIR | Chirikof Islan baz=108 | 57.99 | 326 | P | P | 18 12 60.0 | +1.0 | |
| CUT | Chulitna baz=118 | 58.04 | 335 | P | P | 18 13 00.0 | +0.8 | |
| O20K | Slope Mountain baz=114 | 58.05 | 331 | P | P | 18 12 59.4 | 0.0 | |
| Q19K | Cape Douglas, baz=112 | 58.07 | 330 | P | P | 18 12 59.5 | -0.1 | |
| G26K | Porcupine Rive baz=127 | 58.12 | 341 | P | P | 18 13 00.5 | +0.8 | |
| MCK | McKinley baz=120,SNR=6.0 | 58.15 | 336 | P | P | 18 13 02.0 | +1.9 | |
| P19K | Oil Pt baz=113 | 58.16 | 331 | P | P | 18 13 00.5 | +0.4 | |
| D28M | Stokes Point baz=133 | 58.22 | 344 | P | P | 18 13 01.3 | +1.0 | |
| E27K | Coleen River comp=Z,58nm,1.1s | 58.23 | 343 | IAmb | IAmb | 18 13 12.4 | | |
| E27K | Coleen River baz=130,SNR=9.5 | 58.23 | 343 | P | P | 18 13 01.8 | +1.3 | |
| POKR | Poker Plat Res baz=122 | 58.31 | 338 | P | P | 18 13 02.5 | +1.4 | |
| COLA | College baz=121 | 58.33 | 338 | P | P | 18 13 02.1 | +0.9 | |
| COLA | College | 58.33 | 338 | *e*P | P | 18 13 02.1 | +0.9 | |
| COLA | comp=Z,18nm,0.9s | | | pmax | pmax | | | |
| N20K | Mount Spurr baz=115 | 58.33 | 333 | P | P | 18 13 01.8 | +0.4 | |
| SPCR | Spurr Chakacha baz=115 | 58.33 | 333 | P | P | 18 13 01.8 | +0.4 | |
| SKT | Skwentna comp=Z,42nm,1.2s | 58.38 | 334 | IAmb | IAmb | 18 13 13.4 | | |
| SKT | Skwentna baz=116 | 58.38 | 334 | P | P | 18 13 02.5 | +0.8 | |
| H25L | Birch Creek baz=124,SNR=10 | 58.38 | 340 | P | P | 18 13 03.1 | +1.5 | |
| Q18K | Katmai Hardscr baz=111 | 58.63 | 329 | P | P | 18 13 04.5 | +0.9 | |
| NEA2 | Nenana comp=Z,58nm,1.6s | 58.63 | 337 | IAmb | IAmb | 18 13 14.8 | | |
| NEA2 | Nenana baz=120,SNR=6.1 | 58.63 | 337 | P | P | 18 13 04.0 | +0.6 | |
| CPUP | Villa Florida | 58.65 | 136 | P | P | 18 13 03.3 | -0.7 | |
| CPUP | Villa Florida comp=Z,1.9nm,0.6s,baz=343,slow=6.7,SNR=4.8 | 58.65 | 136 | P | P | 18 13 03.8 | -0.2 | |
| CPUP | comp=Z,411nm,21.8s,baz=326,slow=35 comp=Z,1.9nm,0.6s | | | LR | LR | 18 37 17.0 | | |
| BMAR | Burnt Mountain | 58.66 | 341 | P | P | 18 13 04.7 | +1.2 | |
| F26K | Sheenjek River baz=127,SNR=6.5 | 58.68 | 341 | P | P | 18 13 04.9 | +1.2 | |
| D27M | Malcolm River comp=Z,34nm,1.2s | 58.75 | 344 | IAmb | IAmb | 18 13 15.8 | | |
| D27M | Malcolm River baz=131 | 58.75 | 344 | P | P | 18 13 05.1 | +1.0 | |
| G25K | Bearman Lake baz=124,SNR=5.4 | 58.76 | 340 | P | P | 18 13 05.3 | +1.1 | |
| H24K | Noodor Dome baz=122,SNR=18 | 58.85 | 339 | P | P | 18 13 06.4 | +1.5 | |
| O19K | Port Alsworth baz=112 | 58.88 | 331 | P | P | 18 13 05.8 | +0.8 | |
| Q17K | Contact Creek baz=110 | 58.93 | 329 | P | P | 18 13 06.5 | +0.8 | |
| R17L | Mt. Peulik Vol baz=109 | 58.96 | 328 | P | P | 18 13 06.3 | +0.6 | |
| P18K | Big Mountain, baz=111 | 59.00 | 330 | P | P | 18 13 06.9 | +0.8 | |
| M20K | Styx River baz=114 | 59.02 | 333 | P | P | 18 13 07.3 | +1.1 | |
| I23K | Minto, Yukon-K baz=120,SNR=14 | 59.02 | 338 | P | P | 18 13 07.3 | +1.3 | |
| F25K | Christian Rive baz=125,SNR=8.8 | 59.09 | 341 | P | P | 18 13 08.3 | +1.8 | |
| SFJD | Kangerlussuaq comp=Z,678nm,22.0s,baz=240,slow=38 | 59.09 | 20 | LR | LR | 18 39 55.0 | | |
| BPAW | Bear Paw Mtn. comp=Z,27nm,1.0s | 59.12 | 336 | IAmb | IAmb | 18 13 18.0 | | |
| BPAW | Bear Paw Mtn. baz=118,SNR=11 | 59.12 | 336 | P | P | 18 13 07.4 | +0.6 | |
| O18K | Koktuh Hills baz=111 | 59.16 | 331 | P | P | 18 13 08.1 | +0.9 | |
| G24K | Hadweenzic Riv comp=Z,46nm,1.1s | 59.18 | 340 | IAmb | IAmb | 18 13 19.0 | | |
| G24K | Hadweenzic Riv baz=123,SNR=16 | 59.18 | 340 | P | P | 18 13 09.0 | +1.8 | |
| N19K | Bonanza Creek comp=Z,58nm,1.3s | 59.19 | 332 | IAmb | IAmb | 18 13 18.6 | | |
| N19K | Bonanza Creek baz=112,SNR=6.7 | 59.19 | 332 | P | P | 18 13 08.0 | +0.6 | |
| BDFB | Brasilia | 59.39 | 120 | P | P | 18 13 09.9 | +0.4 | |
| BDFB | comp=Z,28nm,0.9s | | | IAmb | IAmb | 18 13 17.4 | | |
| BDFB | Brasilia comp=Z,11nm,0.7s,baz=288,slow=8.7,SNR=17 comp=Z,11nm,0.7s | 59.39 | 120 | P | P | 18 13 09.4 | -0.1 | |
| BDFB | Brasilia | 59.39 | 120 | P | P | 18 13 09.9 | +0.4 | |
| BDFB | comp=Z,28nm,0.9s | | | pmax | pmax | | | |
| H23K | Yukon River comp=Z,81nm,1.9s | 59.43 | 338 | IAmb | IAmb | 18 13 20.6 | | |
| H23K | Yukon River baz=120,SNR=7.8 | 59.43 | 338 | P | P | 18 13 10.2 | +1.3 | |
| MLY | Manley comp=Z,51nm,1.1s | 59.47 | 337 | IAmb | IAmb | 18 13 20.9 | | |
| MLY | Manley baz=118,SNR=25 | 59.47 | 337 | P | P | 18 13 10.1 | +0.9 | |
| P17K | Kvichak River baz=110 | 59.52 | 330 | P | P | 18 13 10.2 | +0.7 | |
| M19K | Big River Lodg comp=Z,60nm,1.3s | 59.57 | 333 | IAmb | IAmb | 18 13 21.6 | | |
| M19K | Big River Lodg baz=113,SNR=6.3 | 59.57 | 333 | P | P | 18 13 10.6 | +0.7 | |
| L20K | Farewell, AK baz=114,SNR=8.8 | 59.59 | 334 | P | P | 18 13 10.7 | +0.7 | |
| CHGN | Chignik baz=106 | 59.62 | 326 | P | P | 18 13 10.5 | +0.2 | |
| ITRB | Iturama | 59.66 | 125 | *e*P | P | 18 13 10.3 | -0.8 | |
| C27K | Jago River comp=Z,26nm,1.1s | 59.74 | 343 | IAmb | IAmb | 18 13 22.7 | | |
| C27K | Jago River baz=128 | 59.74 | 343 | P | P | 18 13 12.1 | +1.1 | |
| F24K | Squaw Lake baz=123 | 59.76 | 340 | P | P | 18 13 12.4 | +1.2 | |
| N18K | Kilae Creek comp=Z,56nm,1.4s | 59.78 | 331 | IAmb | IAmb | 18 13 22.7 | | |
| N18K | Kilae Creek baz=111,SNR=5.7 | 59.78 | 331 | P | P | 18 13 12.1 | +0.7 | |
| CHNA | Chernabura Isl baz=104 | 59.88 | 324 | P | P | 18 13 12.8 | +0.8 | |
| L19K | White Mountain comp=Z,30nm,1.1s | 59.88 | 333 | IAmb | IAmb | 18 13 23.4 | | |
| L19K | White Mountain baz=113,SNR=7.1 | 59.88 | 333 | P | P | 18 13 12.2 | +0.1 | |
| I21K | Tanana baz=117 | 60.01 | 337 | P | P | 18 13 13.4 | +0.6 | |
| K20K | Telida comp=Z,51nm,1.2s | 60.03 | 335 | IAmb | IAmb | 18 13 24.2 | | |
| K20K | Telida baz=114,SNR=11 | 60.03 | 335 | P | P | 18 13 13.4 | +0.3 | |
| O17K | Koliganek Bris baz=109,SNR=5.0 | 60.03 | 330 | P | P | 18 13 13.6 | +0.5 | |
| G23K | Bananza Creek baz=120,SNR=7.0 | 60.05 | 339 | P | P | 18 13 14.6 | +1.4 | |
| M18K | Stony River baz=112 | 60.05 | 332 | P | P | 18 13 13.5 | +0.4 | |
| H22K | Ishtalitna Cre baz=118 | 60.12 | 338 | P | P | 18 13 14.0 | +0.3 | |
| P16K | Nushagak River baz=108 | 60.22 | 329 | P | P | 18 13 15.1 | +0.8 | |
| C26K | Camden Bay baz=127 | 60.25 | 343 | P | P | 18 13 15.6 | +1.2 | |
| E24K | Your Creek comp=Z,25nm,1.1s | 60.25 | 341 | IAmb | IAmb | 18 13 26.5 | | |
| E24K | Your Creek baz=122,SNR=6.6 | 60.25 | 341 | P | P | 18 13 16.0 | +1.4 | |
| DY2G | Dye2 | 60.30 | 21 | *i* P | P | 18 13 14.3 | -0.8 | |
| DY2G | comp=Z,248nm,1.8s | | | IAmb | IAmb | 18 13 25.5 | | |
| D25K | Kavik River | 60.31 | 342 | P | P | 18 13 16.1 | +1.1 | |
| D25K | comp=Z,30nm,1.1s | | | IAmb | IAmb | 18 13 26.6 | | |
| D25K | Kavik River baz=125,SNR=8.4 | 60.31 | 342 | P | P | 18 13 16.2 | +1.3 | |
| N17K | Nushagak Hills baz=110 | 60.32 | 331 | P | P | 18 13 15.7 | +0.6 | |
| COLD | Coldfoot baz=120 | 60.37 | 339 | P | P | 18 13 16.8 | +1.5 | |
| J20K | Nowinta River comp=Z,54nm,1.1s | 60.40 | 335 | IAmb | IAmb | 18 13 26.6 | | |
| J20K | Nowinta River baz=115,SNR=18 | 60.40 | 335 | P | P | 18 13 16.4 | +0.9 | |
| IPMB | Ipameri, GO | 60.44 | 122 | *e*P | P | 18 13 15.7 | -0.8 | |
| O16K | Kokwok River B comp=Z,34nm,1.4s | 60.45 | 330 | IAmb | IAmb | 18 13 26.9 | | |
| O16K | Kokwok River B baz=108 | 60.45 | 330 | P | P | 18 13 16.5 | +0.6 | |
| SDBA | SAO DESIDERIO | 60.48 | 115 | *e*P | P | 18 13 16.3 | -0.6 | |
| SDPT | Sand Point baz=104 | 60.50 | 325 | P | P | 18 13 18.6 | +2.2 | |
| H21K | Melozitna Rive | 60.53 | 337 | P | P | 18 13 16.6 | +0.1 | |
| H21K | comp=Z,22nm,1.1s | | | IAmb | IAmb | 18 13 27.5 | | |
| H21K | Melozitna Rive baz=117,SNR=7.9 | 60.53 | 337 | P | P | 18 13 17.0 | +0.6 | |
| PPT | Papeete comp=Z,524nm,19.2s,baz=41,slow=29 | 60.57 | 238 | LR | LR | 18 32 53.6 | | |
| PPT2 | Papeete2 comp=Z,64nm,24.0s | 60.58 | 238 | *e*P | P | 18 13 16.1 | -1.5 | |
| PPT2 | Papeete2 comp=Z,37nm,26.0s | 60.58 | 238 | *e*PP | PP | 18 15 29.7 | -1.7 | |
| PPT2 | comp=Z,307nm,25.8s | | | *e*S | S | 18 21 33.6 | +0.5 | |
| PPT2 | comp=Z,232nm,25.8s | | | *e*SS | SS | 18 25 35.5 | +3.7 | |
| PPT2 | comp=Z,779nm,33.2s | | | *e*LQ | LQ | 18 28 34.4 | | |
| PPT2 | comp=Z,942nm,26.0s | | | *e*LR | LR | 18 31 04.2 | | |
| PPT2 | comp=Z,1μm,23.5s | | | *e*LR | LR | 18 31 10.2 | | |
| E23K | Chandalar baz=121,SNR=12 | 60.60 | 340 | P | P | 18 13 18.0 | +1.0 | |
| G22K | Bettles baz=119 | 60.66 | 339 | P | P | 18 13 18.6 | +1.3 | |
| L18K | Granite Mounta comp=Z,41nm,1.2s | 60.70 | 333 | IAmb | IAmb | 18 13 28.8 | | |
| L18K | Granite Mounta baz=111,SNR=8.0 | 60.70 | 333 | P | P | 18 13 18.6 | +1.0 | |
| M17K | Holitna River comp=Z,43nm,1.2s | 60.74 | 332 | IAmb | IAmb | 18 13 29.1 | | |
| M17K | Holitna River baz=110 | 60.74 | 332 | P | P | 18 13 18.7 | +0.8 | |
| I20K | Naaghedeneel baz=115 | 60.79 | 336 | P | P | 18 13 18.8 | +0.6 | |
| TOLK | Toolik Lake Re | 60.89 | 341 | P | P | 18 13 20.4 | +1.4 | |
| TOLK | comp=Z,31nm,1.1s | | | IAmb | IAmb | 18 13 30.6 | | |
| TOLK | Toolik Lake Re baz=122,SNR=5.5 | 60.89 | 341 | P | P | 18 13 19.2 | +0.3 | |
| J19K | Poorman comp=Z,54nm,1.1s | 60.92 | 335 | IAmb | IAmb | 18 13 30.0 | | |
| J19K | Poorman baz=113,SNR=22 | 60.92 | 335 | P | P | 18 13 19.4 | +0.3 | |
| D24K | Happy Valley comp=Z,26nm,1.1s | 60.94 | 342 | IAmb | IAmb | 18 13 30.6 | | |
| D24K | Happy Valley baz=122 | 60.94 | 342 | P | P | 18 13 20.2 | +1.0 | |
| N16K | Nishlik Lake baz=108,SNR=5.5 | 61.05 | 331 | P | P | 18 13 20.9 | +0.9 | |
| O15K | Ungalikthiuk R baz=106 | 61.17 | 329 | P | P | 18 13 20.6 | -0.2 | |
| F22K | John River baz=118 | 61.17 | 339 | P | P | 18 13 21.9 | +1.1 | |
| G21K | Allakaket comp=Z,26nm,1.2s | 61.17 | 338 | IAmb | IAmb | 18 13 32.1 | | |
| G21K | Allakaket baz=116,SNR=5.5 | 61.17 | 338 | P | P | 18 13 21.6 | +0.8 | |
| C24K | Franklin Bluff baz=123 | 61.21 | 342 | P | P | 18 13 21.6 | +0.6 | |
| H20K | Anotleneega Mo baz=114,SNR=14 | 61.24 | 337 | P | P | 18 13 21.5 | +0.2 | |
| M16K | Timber Creek comp=Z,88nm,1.9s | 61.31 | 331 | IAmb | IAmb | 18 14 17.5 | | |
| M16K | Timber Creek baz=108 | 61.31 | 331 | P | P | 18 13 22.7 | +0.9 | |
| E22K | Anaktuvuk Pass comp=Z,26nm,1.1s | 61.35 | 340 | IAmb | IAmb | 18 13 33.6 | | |
| E22K | Anaktuvuk Pass baz=119,SNR=6.0 | 61.35 | 340 | P | P | 18 13 23.0 | +1.0 | |
| ITQB | Itaqui | 61.36 | 138 | P | P | 18 13 22.4 | -0.1 | |
| ITQB | Itaqui | 61.36 | 138 | *e*P | P | 18 13 22.0 | -0.5 | |
| L17K | Donlin baz=109,SNR=5.8 | 61.37 | 332 | P | P | 18 13 22.5 | +0.4 | |
| D23K | Nanushuk River comp=Z,45nm,1.1s | 61.41 | 341 | IAmb | IAmb | 18 13 34.5 | | |
| D23K | Nanushuk River baz=120 | 61.41 | 341 | P | P | 18 13 23.4 | +1.0 | |
| F21K | Alatna River baz=117,SNR=14 | 61.49 | 339 | P | P | 18 13 24.2 | +1.3 | |
| K17K | Iditarod comp=Z,25nm,1.1s | 61.57 | 333 | IAmb | IAmb | 18 13 34.3 | | |
| K17K | Iditarod baz=110 | 61.57 | 333 | P | P | 18 13 23.9 | +0.4 | |
| N15K | Kwethluk River baz=107 | 61.58 | 330 | P | P | 18 13 23.4 | -0.2 | |
| CRSM | Crissiumal (Br | 61.62 | 135 | *e*P | P | 18 13 23.0 | -1.4 | |
| GCSA | Galena City Sc baz=112 | 61.71 | 336 | P | P | 18 13 25.0 | +0.6 | |
| PSAL | Palomas, Salto | 61.72 | 140 | *e*P | P | 18 13 23.9 | -1.0 | |
| L16K | Owhat River comp=Z,33nm,1.4s | 61.76 | 332 | IAmb | IAmb | 18 13 36.2 | | |
| L16K | Owhat River baz=108 | 61.76 | 332 | P | P | 18 13 25.5 | +0.7 | |
| C23K | Itkillik River baz=121 | 61.84 | 342 | P | P | 18 13 26.1 | +0.9 | |
| BB19B | Bebedouro | 61.84 | 126 | *e*P | P | 18 13 26.0 | 0.0 | |
| H19K | Roundabout Mou comp=Z,28nm,1.1s | 61.85 | 336 | IAmb | IAmb | 18 13 36.2 | | |
| H19K | Roundabout Mou baz=113,SNR=7.9 | 61.85 | 336 | P | P | 18 13 26.0 | +0.7 | |
| O14K | Tigyukauivet M baz=105 | 61.90 | 329 | P | P | 18 13 26.4 | +0.6 | |
| D22K | Ayikyak River baz=118,SNR=7.8 | 61.99 | 341 | P | P | 18 13 27.1 | +0.8 | |
| M15K | Kasigluk River baz=106 | 62.02 | 331 | P | P | 18 13 27.4 | +0.8 | |
| FALS | False Pass baz=101 | 62.04 | 324 | P | P | 18 13 26.0 | -0.8 | |
| J17K | VABM Dome baz=109 | 62.13 | 334 | P | P | 18 13 27.4 | +0.1 | |
| PMNB | Patos De Minas | 62.16 | 122 | *e*P | P | 18 13 27.4 | -0.9 | |
| F20K | Avaraart Lake baz=114,SNR=5.3 | 62.20 | 338 | P | P | 18 13 28.8 | +1.2 | |
| E21K | Killik River baz=117 | 62.21 | 340 | P | P | 18 13 28.5 | +0.7 | |
| JANB | Januaria | 62.22 | 117 | *e*P | P | 18 13 27.7 | -1.0 | |
| N14K | Kuskokwak Cree baz=105 | 62.28 | 330 | P | P | 18 13 28.6 | +0.3 | |
| G19K | Purcell Mounta comp=Z,45nm,1.1s | 62.33 | 337 | IAmb | IAmb | 18 13 39.8 | | |
| G19K | Purcell Mounta baz=113,SNR=16 | 62.33 | 337 | P | P | 18 13 29.5 | +0.9 | |
| H18K | Honhosa River baz=111 | 62.45 | 336 | P | P | 18 13 29.9 | +0.4 | |
| M14K | Bethel comp=Z,38nm,1.1s | 62.63 | 330 | IAmb | IAmb | 18 13 42.0 | | |
| M14K | Bethel baz=105 | 62.63 | 330 | P | P | 18 13 31.4 | +0.7 | |
| L15K | Ungalak Mounta baz=106,SNR=6.1 | 62.67 | 331 | P | P | 18 13 31.6 | +0.7 | |
| RODS | Rosario do Sul | 62.73 | 138 | *e*P | P | 18 13 31.1 | -0.7 | |
| J16K | Anvik River comp=Z,39nm,1.1s | 62.75 | 333 | IAmb | IAmb | 18 13 43.2 | | |
| J16K | Anvik River baz=108,SNR=5.9 | 62.75 | 333 | P | P | 18 13 32.5 | +1.1 | |
| ITAB | Concordia | 62.78 | 133 | *e*P | P | 18 13 31.6 | -0.5 | |
| PLCA | Paso Flores comp=Z,827nm,18.2s,baz=337,slow=31 | 62.78 | 156 | LR | LR | 18 35 29.2 | | |
| PLCA | Paso Flores | 62.78 | 156 | *e*P | P | 18 13 31.4 | -0.6 | |
| C21K | Knifeblade Rid baz=116 | 62.80 | 340 | P | P | 18 13 32.4 | +0.8 | |
| G18K | Tagagawik comp=Z,24nm,1.2s | 62.83 | 336 | IAmb | IAmb | 18 13 43.6 | | |
| G18K | Tagagawik baz=111,SNR=5.5 | 62.83 | 336 | P | P | 18 13 33.3 | +1.3 | |
| F19K | Shaleruckik Mo comp=Z,55nm,1.4s | 62.85 | 338 | IAmb | IAmb | 18 13 43.6 | | |
| F19K | Shaleruckik Mo baz=112,SNR=7.7 | 62.85 | 338 | P | P | 18 13 32.5 | +0.5 | |
| K15K | Wolf Creek Mou baz=106,SNR=5.6 | 62.86 | 332 | P | P | 18 13 33.8 | +1.6 | |
| E20K | Nigu River baz=114 | 62.87 | 339 | P | P | 18 13 33.5 | +1.3 | |
| E19K | Redstone River comp=Z,21nm,1.1s | 62.90 | 338 | IAmb | IAmb | 18 13 43.9 | | |
| E19K | Redstone River baz=113,SNR=5.7 | 62.90 | 338 | P | P | 18 13 33.5 | +1.1 | |
| B21K | Ikpikpuk River baz=117 | 62.95 | 341 | P | P | 18 13 33.3 | +0.7 | |
| I17K | Unalakleet baz=108 | 62.98 | 334 | P | P | 18 13 33.5 | +0.6 | |
| H17K | Granite Mounta comp=Z,52nm,1.2s | 62.99 | 335 | IAmb | IAmb | 18 13 44.9 | | |
| H17K | Granite Mounta baz=109,SNR=5.7 | 62.99 | 335 | P | P | 18 13 34.6 | +1.6 | |
| L14K | Kuka Creek comp=Z,28nm,1.1s | 63.13 | 331 | IAmb | IAmb | 18 13 45.1 | | |
| L14K | Kuka Creek baz=105 | 63.13 | 331 | P | P | 18 13 35.1 | +1.2 | |
| NBCL | Cascavel-CE | 63.15 | 104 | *e*P | P | 18 13 34.3 | -0.6 | |
| TBOT | Tacuaremb | 63.16 | 140 | *e*P | P | 18 13 34.0 | -0.6 | |
| D20K | Etivluk River baz=114,SNR=5.2 | 63.20 | 340 | P | P | 18 13 35.3 | +1.0 | |
| M13K | Dall Lake baz=104 | 63.21 | 330 | P | P | 18 13 36.0 | +1.5 | |
| F18K | Selawik baz=110 | 63.46 | 337 | P | P | 18 13 37.1 | +1.0 | |
| G17K | Kiwalik Mounta baz=109,SNR=6.2 | 63.47 | 336 | P | P | 18 13 37.6 | +1.5 | |
| TBI | Tubuai comp=Z,467nm,38.5s | 63.59 | 233 | *e*P | P | 18 13 40.6 | +3.1 | |
| TBI | Tubuai comp=Z,870nm,38.8s | 63.59 | 233 | *e*PP | PP | 18 15 55.0 | -2.7 | |
| TBI | Tubuai comp=Z,979nm,41.2s | 63.59 | 233 | *e*SS | SS | 18 26 15.1 | -3.5 | |
| TBI | comp=Z,2μm,42.5s | | | *e*LQ | LQ | 18 29 53.3 | | |
| TBI | comp=Z,1μm,25.5s | | | *e*LR | LR | 18 32 35.8 | | |
| TBI | comp=Z,4μm,23.8s | | | *e*LR | LR | 18 32 38.7 | | |
| D19K | Kuna River comp=Z,28nm,1.1s | 63.62 | 339 | IAmb | IAmb | 18 13 48.4 | | |
| D19K | Kuna River baz=113 | 63.62 | 339 | P | P | 18 13 38.2 | +1.0 | |
| UNV | Unalaska Valle baz=98 | 63.66 | 322 | P | P | 18 13 37.9 | +0.3 | |
| A22K | Sinclair Lake baz=117 | 63.69 | 342 | P | P | 18 13 38.1 | +0.6 | |
| ICESG | Greenland Ices | 63.72 | 20 | *i* P | P | 18 13 36.7 | -1.5 | |
| ICESG | comp=Z,84nm,1.2s | | | IAmb | IAmb | 18 13 48.5 | | |
| H16K | Elim baz=107 | 63.85 | 335 | P | P | 18 13 39.5 | +0.9 | |
| J14K | Nanvaranak Lak baz=105 | 63.89 | 332 | P | P | 18 13 39.7 | +0.8 | |
| CPSB | Cacapava Do Su | 63.91 | 137 | *e*P | P | 18 13 38.9 | -0.6 | |
| B20K | Meade River baz=114 | 63.92 | 341 | P | P | 18 13 39.0 | 0.0 | |
| F17K | Baldwin Pennin baz=109 | 64.01 | 337 | P | P | 18 13 40.1 | +0.5 | |
| E18K | Tukpahlearik C comp=Z,40nm,1.1s | 64.10 | 338 | IAmb | IAmb | 18 13 51.6 | | |
| E18K | Tukpahlearik C baz=110,SNR=5.5 | 64.10 | 338 | P | P | 18 13 40.8 | +0.5 | |
| VAO | Valinhos | 64.11 | 126 | *e*P | P | 18 13 40.2 | -0.9 | |
| G16K | Koyuk River comp=Z,45nm,1.3s | 64.12 | 335 | IAmb | IAmb | 18 13 52.5 | | |
| G16K | Koyuk River baz=107 | 64.12 | 335 | P | P | 18 13 41.1 | +0.7 | |
| K13K | Kusilvak Mount baz=103 | 64.19 | 331 | P | P | 18 13 41.3 | +0.3 | |
| DIAM | Diamantina, MG | 64.31 | 120 | *e*P | P | 18 13 41.7 | -0.9 | |
| C19K | Lookout Ridge baz=112 | 64.34 | 340 | P | P | 18 13 42.0 | +0.1 | |
| E17K | Hotham Inlet baz=108,SNR=5.4 | 64.44 | 337 | P | P | 18 13 43.5 | +1.0 | |
| M11K | Mekoryuk baz=101 | 64.59 | 329 | P | P | 18 13 44.5 | +0.9 | |
| G15K | Nikuluk baz=105 | 64.69 | 335 | P | P | 18 13 45.4 | +1.2 | |
| PLTB | Pedras Altas | 64.69 | 138 | *e*P | P | 18 13 44.2 | -0.5 | |
| C18K | Utukok River baz=110 | 64.73 | 339 | P | P | 18 13 45.1 | +0.7 | |
| BSCB | Bom Sucesso | 64.77 | 123 | *e*P | P | 18 13 44.8 | -0.7 | |
| NIKH | Nikolski High baz=95 | 64.95 | 321 | P | P | 18 13 46.6 | +0.5 | |
| D17K | Noatak River baz=107 | 65.09 | 338 | P | P | 18 13 47.1 | +0.4 | |
| F15K | North Star Dit comp=Z,44nm,1.2s | 65.12 | 335 | IAmb | IAmb | 18 14 02.5 | | |
| F15K | North Star Dit baz=105 | 65.12 | 335 | P | P | 18 13 48.1 | +1.1 | |
| ANM | Nome baz=104 | 65.13 | 334 | P | P | 18 13 48.2 | +1.2 | |
| RDOG | Red Dog Mine baz=108 | 65.14 | 338 | P | P | 18 13 47.9 | +0.8 | |
| B18K | Kokolik River baz=109 | 65.17 | 340 | P | P | 18 13 48.1 | +0.9 | |
| NEEM | North Greenlan | 65.22 | 10 | *i* P | P | 18 13 47.1 | -0.7 | |
| NEEM | comp=Z,92nm,1.2s | | | IAmb | IAmb | 18 13 58.5 | | |
| A19K | Wainwright baz=110 | 65.23 | 341 | P | P | 18 13 47.6 | +0.1 | |
| C17K | DeLong Mountai baz=108 | 65.36 | 339 | P | P | 18 13 49.3 | +0.8 | |
| SUMG | Summit | 65.49 | 17 | P | P | 18 13 49.5 | -0.2 | |
| SUMG | comp=Z,37nm,1.1s | | | IAmb | IAmb | 18 14 02.3 | | |
| SUMG | Summit | 65.49 | 17 | P | P | 18 13 49.5 | -0.2 | |
| SUMG | comp=Z,37nm,1.1s | | | pmax | pmax | | | |
| SUMG | Summit | 65.49 | 17 | *i* P | P | 18 13 49.0 | -0.7 | |
| SUMG | comp=Z,46nm,1.1s | | | IAmb | IAmb | 18 14 00.6 | | |
| GDU01 | Guandu, BA | 65.71 | 114 | *e*P | P | 18 13 51.0 | -0.7 | |
| F14K | Arctic Creek baz=103 | 65.74 | 335 | P | P | 18 13 52.3 | +1.3 | |
| RCBR | Riachuelo comp=Z,143nm,18.3s,baz=331,slow=39 | 65.95 | 104 | LR | LR | 18 46 04.7 | | |
| SOEG | Soedalen | 66.28 | 22 | *i* P | P | 18 13 54.2 | -0.2 | |
| SOEG | comp=Z,52nm,1.2s | | | IAmb | IAmb | 18 14 05.1 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TNA | Tin City | 66.41 | 335 | | P | | P | 18 13 56.3 | +1.1 |
| | baz=102 | | | | | | | | |
| GUA01 | Guaratinga, BA | 66.77 | 117 | | eP | | P | 18 13 57.6 | -0.7 |
| RIB01 | Linhares ES | 67.52 | 120 | | eP | | P | 18 14 02.4 | -0.7 |
| BORG | Borgarnes | 69.68 | 27 | | LR | LR | LR | 18 46 26.3 | |
| | comp=Z,160nm,18.1s,baz=277,slow=37 | | | | | | | | |
| DAG | Danmarks Havn | 71.62 | 14 | | i P | | P | 18 14 26.4 | -1.1 |
| DAG | | | | | IAmb | IAmb | IAmb | 18 14 37.5 | |
| | comp=Z,55nm,1.5s | | | | | | | | |
| NOR | Nord | 72.47 | 9 | | i P | | P | 18 14 31.8 | -0.8 |
| NOR | | | | | IAmb | IAmb | IAmb | 18 14 43.3 | |
| | comp=Z,62nm,1.5s | | | | | | | | |
| PMOZ | Porto Moniz, M | 74.15 | 60 | | ePP | | PP | 18 17 51.2 | +22 |
| PMOZ | | | | | eS | | SKSac | 18 24 52.8 | +2.3 |
| PMOZ | Porto Moniz, M | 74.15 | 60 | | eLR | | LR | 18 37 52.3 | |
| | comp=Z,392nm,22.0s | | | | | | | | |
| PMOZ | Porto Moniz, M | 74.15 | 60 | | eT | | T | 20 04 34.2 | |
| PMAR | Madeira | 74.40 | 60 | | eT | | T | 20 04 28.3 | |
| JMIC | Jan Mayen | 74.45 | 20 | | LR | | LR | 18 50 43.4 | |
| | comp=Z,365nm,18.4s,baz=271,slow=38 | | | | | | | | |
| BILL | Bilibino | 76.58 | 337 | | i P | | P | 18 14 57.7 | +1.1 |
| BILL | | | | | e*PP | | pP | 18 15 02.8 | -0.2 |
| BILL | | | | | e | | | 18 15 06.9 | |
| BILL | | | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| BILL | | | | | | MLR | MLR | | |
| | comp=Z,467nm,18.0s | | | | | | | | |
| BBTS | Babate | 78.56 | 78 | | LR | | LR | 18 45 39.5 | |
| | comp=Z,598nm,20.6s,baz=174,slow=33 | | | | | | | | |
| SPITS | Spitsbergen Ar | 78.76 | 11 | | P | | P | 18 15 08.3 | -0.3 |
| | comp=Z,3.0nm,0.6s,baz=335,slow=13,SNR=7.6 | | | | | | | | |
| SPITS | | | | | LR | | LR | 18 51 38.3 | |
| | comp=Z,603nm,21.8s,baz=280,slow=37 | | | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| PGAV | Gavieira, Arco | 79.36 | 49 | | eP | | P | 18 15 12.6 | -0.1 |
| | comp=Z,33nm,1.9s | | | | | | | | |
| PGAV | Gavieira, Arco | 79.36 | 49 | | eS | | S | 18 25 14.6 | +1.8 |
| PGAV | Gavieira, Arco | 79.36 | 49 | | eLR | | LR | 18 44 18.7 | |
| | comp=Z,355nm,20.0s | | | | | | | | |
| LIS | Lisbon | 79.42 | 53 | | eP | | P | 18 15 13.1 | +0.2 |
| PSBE | So Bento | 79.52 | 52 | | eP | | P | 18 15 07.3 | -6.2 |
| | comp=Z,50nm,1.9s | | | | | | | | |
| EKA | Eskdalemuir Ar | 79.57 | 35 | | P | | P | 18 15 12.9 | -0.6 |
| | comp=Z,8.2nm,0.9s,baz=288,slow=5.1,SNR=13 | | | | | | | | |
| | comp=Z,8.2nm,0.9s | | | | | | | | |
| PCAB | Cabril | 79.60 | 50 | | eP | | P | 18 15 13.4 | -0.5 |
| PCAS | Casmilo, Conde | 79.62 | 51 | | eP | | P | 18 15 14.4 | +0.4 |
| | comp=Z,64nm,1.5s | | | | | | | | |
| COI | Coimbra | 79.65 | 51 | | eP | | P | 18 15 14.4 | +0.2 |
| POLO | Lamas de Olo | 79.84 | 50 | | eP | | P | 18 15 15.2 | -0.1 |
| | comp=Z,13nm,1.3s | | | | | | | | |
| PVIS | Viseu | 79.92 | 51 | | eP | | P | 18 15 17.0 | +1.3 |
| | comp=Z,20nm,1.3s | | | | | | | | |
| PFVI | Vila Bisbo | 80.03 | 54 | | eP | | P | 18 15 17.0 | +0.7 |
| PNCL | Nicolau / Gran | 80.04 | 53 | | eP | | P | 18 15 16.3 | 0.0 |
| PMTG | Montargil | 80.05 | 52 | | eP | | P | 18 15 16.8 | +0.5 |
| | comp=Z,28nm,1.4s | | | | | | | | |
| MORF | Marmelete | 80.13 | 54 | | eP | | P | 18 15 18.7 | +1.8 |
| | comp=Z,45nm,1.8s | | | | | | | | |
| MORF | Marmelete | 80.13 | 54 | | eP | | P | 18 15 17.1 | +0.2 |
| MORF | | | | | | IAmb | IAmb | 18 15 18.8 | |
| | comp=Z,146nm,2.4s | | | | | | | | |
| MORF | Marmelete | 80.13 | 54 | | eP | | P | 18 15 17.1 | +0.2 |
| MTE | Manteigas | 80.25 | 51 | | P | | P | 18 15 17.4 | -0.1 |
| MTE | Manteigas | 80.25 | 51 | | eP | | P | 18 15 17.2 | -0.3 |
| | comp=Z,28nm,1.1s | | | | | | | | |
| MTE | Manteigas | 80.25 | 51 | | eS | | S | 18 25 26.5 | +4.3 |
| MTE | Manteigas | 80.25 | 51 | | eLR | | LR | 18 41 00.6 | |
| | comp=Z,436nm,18.0s | | | | | | | | |
| MESJ | Messejana | 80.34 | 53 | | eP | | P | 18 15 21.2 | +3.3 |
| MESJ | Messejana | 80.34 | 53 | | eP | | P | 18 15 18.2 | +0.3 |
| MESJ | | | | | | IAmb | IAmb | 18 15 20.6 | |
| | comp=Z,63nm,2.1s | | | | | | | | |
| MESJ | Messejana | 80.34 | 53 | | eP | | P | 18 15 18.2 | +0.3 |
| PCBR | Castelo Branco | 80.43 | 51 | | eP | | P | 18 15 20.5 | +2.1 |
| | comp=Z,33nm,1.6s | | | | | | | | |
| MVO | Moncorvo | 80.45 | 50 | | eP | | P | 18 15 18.5 | -0.1 |
| | comp=Z,34nm,1.3s | | | | | | | | |
| MVO | Moncorvo | 80.45 | 50 | | eS | | S | 18 25 26.8 | +2.6 |
| MVO | Moncorvo | 80.45 | 50 | | eLR | | LR | 18 44 55.2 | |
| | comp=Z,305nm,22.0s | | | | | | | | |
| PBRG | Braganca | 80.51 | 49 | | eP | | P | 18 15 19.4 | +0.5 |
| | comp=Z,26nm,1.9s | | | | | | | | |
| PCVE | Castro Verde | 80.53 | 54 | | eP | | P | 18 15 18.9 | -0.1 |
| PBEJ | Beja | 80.56 | 53 | | eP | | P | 18 15 20.0 | +0.8 |
| | comp=Z,25nm,2.1s | | | | | | | | |
| PESTR | Estremoz | 80.58 | 52 | | eP | | P | 18 15 19.6 | +0.4 |
| | comp=Z,24nm,1.8s | | | | | | | | |
| PMRV | Marv??o | 80.59 | 52 | | eP | | P | 18 15 19.5 | +0.2 |
| | comp=Z,35nm,1.8s | | | | | | | | |
| PMRV | Marv??o | 80.59 | 52 | | eLR | | LR | 18 41 52.3 | |
| | comp=Z,317nm,18.0s | | | | | | | | |
| PBDV | Barranco-do-Ve | 80.70 | 54 | | eP | | P | 18 15 21.6 | +1.7 |
| PVAQ | Vaqueiros | 80.83 | 54 | | eP | | P | 18 15 21.0 | +0.4 |
| PVAQ | Vaqueiros | 80.83 | 54 | | eS | | S | 18 25 33.8 | +5.7 |
| PVAQ | Vaqueiros | 80.83 | 54 | | eLR | | LR | 18 42 58.7 | |
| | comp=Z,702nm,20.0s | | | | | | | | |
| PBAR | Barrancos | 81.16 | 53 | | eP | | P | 18 15 22.9 | +0.6 |
| | comp=Z,18nm,1.7s | | | | | | | | |
| PAB | San Pablo | 82.84 | 51 | | P | | P | 18 15 31.0 | -0.3 |
| PAB | | | | | | IAmb | IAmb | 18 15 42.5 | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| PAB | San Pablo | 82.84 | 51 | | P | | P | 18 15 31.0 | -0.3 |
| PAB | | | | | | pmax | pmax | | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| ESDC | Sonseca Array | 83.09 | 51 | | P | | P | 18 15 33.0 | +0.5 |
| ESDC | Sonseca Array | 83.09 | 51 | | P | | P | 18 15 32.3 | -0.3 |
| | comp=Z,2.2nm,0.8s,baz=301,slow=5.0,SNR=18 | | | | | | | | |
| ESDC | | | | | | LR | LR | 18 50 04.3 | |
| | comp=Z,354nm,19.8s,baz=280,slow=34 | | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | | |
| ESBB | Sonseca Array | 83.09 | 51 | | P | | P | 18 15 31.5 | -1.0 |
| ESBB | | | | | | IAmb | IAmb | 18 15 43.6 | |
| | comp=Z,34nm,1.7s | | | | | | | | |
| SEY | Seymchan | 83.64 | 334 | ce | eP | | P | 18 15 36.6 | +1.9 |
| SEY | | | | | | pmax | pmax | | |
| | comp=Z,25nm,1.7s | | | | | | | | |
| MDT | Midelt | 84.48 | 58 | | LR | | LR | 18 48 26.8 | |
| | comp=Z,398nm,21.5s,baz=334,slow=32 | | | | | | | | |
| KONO | Kongsberg | 84.69 | 29 | | i P | | P | 18 15 37.8 | -2.4 |
| KONO | | | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| PEA0B | Petropavlovsk- | 84.78 | 324 | ce | eP | | P | 18 15 43.0 | +2.2 |
| PETK | Petropavlovsk- | 84.78 | 324 | | P | | P | 18 15 40.9 | +0.2 |
| PETK | Petropavlovsk- | 84.78 | 324 | | P | | P | 18 15 42.0 | +1.3 |
| | comp=Z,6.9nm,0.8s,baz=74,slow=9.3,SNR=14 | | | | | | | | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| NB2 | NORSAR Subarra | 84.84 | 27 | | P | | P | 18 15 42.4 | +1.4 |
| | comp=Z,120nm,2.0s,baz=301,slow=5.1 | | | | | | | | |
| NB2 | NORSAR Subarra | 84.84 | 27 | | P | | P | 18 15 42.4 | +1.4 |
| | baz=301,slow=5.1 | | | | | | | | |
| NOA | NORSAR Array B | 84.84 | 27 | | P | | P | 18 15 41.2 | +0.3 |
| | comp=Z,3.1nm,0.9s,baz=300,slow=5.1,SNR=5.6 | | | | | | | | |
| NOA | | | | | LR | | LR | 18 53 37.8 | |
| | comp=Z,153nm,21.9s,baz=295,slow=36 | | | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | | | |
| ARCES | ARCESS Array B | 85.58 | 17 | | P | | P | 18 15 44.2 | -0.3 |
| | comp=Z,3.9nm,0.8s,baz=316,slow=3.3,SNR=5.9 | | | | | | | | |
| ARCES | | | | | LR | | LR | 18 55 47.2 | |
| | comp=Z,333nm,19.8s,baz=296,slow=37 | | | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| DOU | Dourbes | 85.64 | 39 | | dP | | P | 18 15 45.4 | +0.2 |
| | comp=Z,16nm,1.2s | | | | | | | | |
| DOU | | | | | dx | | x | 18 15 55.1 | |
| BMRD | Maredsous | 85.67 | 39 | | dP | | P | 18 15 46.3 | +1.0 |
| | comp=Z,26nm,1.2s | | | | | | | | |
| BMRD | | | | | dx | | x | 18 15 55.9 | |
| MA2 | Magadan | 85.77 | 331 | ce | eP | | P | 18 15 48.0 | +2.4 |
| MA2 | | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| BGES | Gesves | 85.83 | 39 | | dP | | P | 18 15 47.3 | +1.2 |
| | comp=Z,28nm,1.2s | | | | | | | | |
| BGES | | | | | dx | | x | 18 15 56.8 | |
| BCLA | Clavier | 85.95 | 38 | | dP | | P | 18 15 47.9 | +1.2 |
| BCLA | | | | | dx | | x | 18 15 57.5 | |
| CEST | Esterri de Car | 85.99 | 47 | | IAmb | | IAmb | 18 15 59.9 | |
| | comp=Z,104nm,1.4s | | | | | | | | |
| RCHB | Rochefort | 86.00 | 39 | | dP | | P | 18 15 47.8 | +0.9 |
| | comp=Z,21nm,1.2s | | | | | | | | |
| RCHB | | | | | dx | | x | 18 15 57.2 | |
| BSTI | Sart Tilman | 86.04 | 38 | | dP | | P | 18 15 48.3 | +1.2 |
| BSTI | | | | | dx | | x | 18 15 57.3 | |
| MEM | Membach | 86.30 | 38 | | dP | | P | 18 15 49.0 | +0.6 |
| | comp=Z,19nm,1.1s | | | | | | | | |
| MEM | | | | | dx | | x | 18 15 58.6 | |
| HFS | Hagfors | 86.34 | 28 | | LR | | LR | 18 54 08.8 | |
| | comp=Z,259nm,21.8s,baz=282,slow=36 | | | | | | | | |
| BHOU | Houvegnez | 86.39 | 38 | | dP | | P | 18 15 49.8 | +0.9 |
| BHOU | | | | | dx | | x | 18 15 59.7 | |
| WLF | Walferdange | 86.73 | 39 | | P | | P | 18 15 50.7 | +0.2 |
| WLF | | | | | | IAmb | IAmb | 18 16 03.0 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| WLF | Walferdange | 86.73 | 39 | | dP | | P | 18 15 51.2 | +0.6 |
| | comp=Z,8.4nm,1.2s | | | | | | | | |
| WLF | | | | | dx | | x | 18 16 02.3 | |
| WLF | Walferdange | 86.73 | 39 | | P | | P | 18 15 50.7 | +0.2 |
| WLF | | | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| BFO | Black Forest | 88.57 | 40 | | P | | P | 18 15 59.0 | -0.4 |
| BFO | Black Forest | 88.57 | 40 | | P | | P | 18 15 59.0 | -0.4 |
| BFO | | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| SENIN | Lac Senin/Sane | 88.70 | 42 | | IAmb | | IAmb | 18 16 17.1 | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| GRF | Grafenberg Arr | 89.74 | 38 | | eP | | P | 18 16 05.6 | +0.7 |
| | comp=Z,19nm,1.1s,baz=289,slow=4.8 | | | | | | | | |
| GRF | | | | | epP | | sP | 18 16 14.9 | +1.3 |
| DAVA | Damuels | 89.95 | 40 | | i PcP | | PcP | 18 16 06.8 | -0.6 |
| | comp=Z,9.4nm,1.3s,SNR=4.4 | | | | | | | | |
| CLL | Collm | 90.04 | 36 | | i P | | P | 18 16 06.7 | +0.5 |
| CLL | | | | | i *SP | | sP | 18 16 16.0 | +1.1 |
| CLL | | | | | e | | | 18 26 41.0 | |
| CLL | | | | | eS | | S | 18 26 55.0 | -3.4 |
| CLL | | | | | | pmax | pmax | | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| CLL | | | | | | MLR | MLR | | |
| | comp=Z,500nm,19.5s | | | | | | | | |
| DAVOX | Davos/Dischmat | 90.16 | 41 | | LR | | LR | 18 59 42.4 | |
| | comp=Z,391nm,18.2s,baz=277,slow=38 | | | | | | | | |
| RETA | Reutte | 90.41 | 40 | | i PcP | | PcP | 18 16 09.3 | 0.0 |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| FETA | Feichten | 90.59 | 40 | | i PcP | | PcP | 18 16 10.1 | -0.1 |
| | comp=Z,4.6nm,0.9s,SNR=4.6 | | | | | | | | |
| HSKC | Hora Svate Kat | 90.60 | 36 | | AMS | | AMS | 19 00 00.0 | |
| | comp=Z,600nm,17.8s | | | | | | | | |
| MOTA | Moosalm | 90.68 | 40 | | i PcP | | PcP | 18 16 10.1 | -0.5 |
| | comp=Z,3.2nm,0.7s | | | | | | | | |
| FINES | FINESS Array B | 90.74 | 23 | | P | | P | 18 16 08.0 | -1.3 |
| | comp=Z,3.7nm,0.8s,baz=264,slow=2.8,SNR=5.7 | | | | | | | | |
| FINES | | | | | LR | | LR | 18 58 57.5 | |
| | comp=Z,440nm,19.6s,baz=303,slow=37 | | | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| FINES | FINESS Array B | 90.74 | 23 | | P | | P | 18 16 08.0 | -1.3 |
| BRG | Berggiesshubel | 90.76 | 36 | | eP | | P | 18 16 10.2 | +0.6 |
| BRG | | | | | Amp | | | 18 16 11.3 | |
| | comp=Z,7.5nm,1.0s | | | | | | | | |
| BRG | Berggiesshubel | 90.76 | 36 | | P | | P | 18 16 19.8 | +10 |
| BRG | | | | | Amp | | | 18 16 20.6 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| BRG | Berggiesshubel | 90.76 | 36 | | PP | | PP | 18 19 40.0 | -4.7 |
| BRG | Berggiesshubel | 90.76 | 36 | | PS | | PS | 18 28 22.0 | +7.5 |
| BRG | Berggiesshubel | 90.76 | 36 | | SS | | SS | 18 33 15.0 | +8.5 |
| SQTA | Sankt Quirin | 90.80 | 40 | | i PcP | | PcP | 18 16 11.6 | +0.5 |
| | comp=Z,9.2nm,1.3s | | | | | | | | |
| WATA | Walderalm | 90.97 | 40 | | i PcP | | PcP | 18 16 12.1 | +0.2 |
| | comp=Z,4.7nm,0.8s | | | | | | | | |
| WTTA | Wattenberg | 91.04 | 40 | | i PcP | | PcP | 18 16 12.7 | +0.5 |
| | comp=Z,13nm,1.6s | | | | | | | | |
| PVCC | Panska Ves | 91.28 | 36 | | AMS | | AMS | 19 00 30.0 | |
| | comp=Z,500nm,15.8s | | | | | | | | |
| KHC | Kasperske Hory | 91.36 | 37 | | eP | | P | 18 16 12.5 | 0.0 |
| KHC | | | | | ex | | x | 18 16 22.2 | |
| KHC | | | | | eSKS | | SKSac | 18 26 40.7 | -3.4 |
| KHC | | | | | | AMS | AMS | 18 56 40.0 | |
| | comp=Z,600nm,21.8s | | | | | | | | |
| KHC | Kasperske Hory | 91.36 | 37 | | eP | | P | 18 16 12.5 | 0.0 |
| KHC | | | | | e | | | 18 26 40.7 | |
| KHC | | | | | | MLR | MLR | | |
| | comp=Z,600nm,21.8s | | | | | | | | |
| KHC | Kasperske Hory | 91.36 | 37 | | P | | P | 18 16 13.9 | +1.4 |
| | comp=Z,6.4nm,1.7s | | | | | | | | |
| PRA | Prague | 91.42 | 36 | | AMS | | AMS | 18 59 30.0 | |
| | comp=Z,400nm,22.0s | | | | | | | | |
| PRU | Pruhonice | 91.52 | 36 | | eP | | P | 18 16 13.2 | +0.1 |
| PRU | | | | | | AMS | AMS | 18 56 10.0 | |
| | comp=Z,400nm,21.5s | | | | | | | | |
| PRU | Pruhonice | 91.52 | 36 | | eP | | P | 18 16 13.2 | +0.1 |
| PRU | | | | | | MLR | MLR | | |
| | comp=Z,400nm,21.5s | | | | | | | | |
| GERES | GERESS Array B | 91.57 | 38 | | P | | P | 18 16 13.4 | -0.1 |
| GERES | GERESS Array B | 91.57 | 38 | | P | | P | 18 16 13.2 | -0.3 |
| | comp=Z,1.5nm,0.7s,baz=328,slow=3.8,SNR=11 | | | | | | | | |
| GERES | | | | | LR | | LR | 18 58 34.5 | |
| | comp=Z,351nm,18.7s,baz=300,slow=36 | | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | | |
| GERES | GERESS Array B | 91.57 | 38 | | P | | P | 18 16 13.4 | -0.1 |
| ZVC | Zvikov | 91.58 | 37 | | eP | | P | 18 16 13.8 | +0.4 |
| ZVC | | | | | ex | | x | 18 16 23.5 | |
| ZVC | | | | | | AMS | AMS | 19 00 20.0 | |
| | comp=Z,500nm,19.7s | | | | | | | | |
| LESA | Schwarzleotal | 91.61 | 39 | | i PcP | | P | 18 16 13.9 | +0.2 |
| | comp=Z,8.7nm,1.5s | | | | | | | | |
| DBIC | Dimbokro | 91.75 | 83 | | P | | P | 18 16 14.5 | -0.4 |
| | comp=Z,9.1nm,1.2s,baz=251,slow=1.6,SNR=2.7 | | | | | | | | |
| | comp=Z,9.1nm,1.2s | | | | | | | | |
| ABTA | Abfaltersbach | 91.81 | 40 | | i PcP | | PcP | 18 16 15.7 | +0.2 |
| | comp=Z,9.4nm,1.3s | | | | | | | | |
| CKRC | Cesky Krumlov | 91.94 | 38 | | AMS | | AMS | 18 58 00.0 | |
| | comp=Z,500nm,19.7s | | | | | | | | |
| BIOA | Bad Ischl, Aus | 92.06 | 39 | | i PcP | | PcP | 18 16 16.4 | -0.2 |
| | comp=Z,4.1nm,1.3s | | | | | | | | |
| CHVC | Chvalec | 92.08 | 35 | | AMS | | AMS | 19 01 10.0 | |
| | comp=Z,500nm,21.2s | | | | | | | | |
| UPC | Upice | 92.09 | 35 | | AMS | | AMS | 19 01 20.0 | |
| | comp=Z,500nm,15.9s | | | | | | | | |
| STAL | STALIGIAL | 92.15 | 40 | | IAmb | | IAmb | 18 16 26.6 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| KBA | Koelnbreinsper | 92.17 | 39 | | i PcP | | PcP | 18 16 16.9 | -0.3 |
| | comp=Z,9.1nm,1.6s,SNR=4.1 | | | | | | | | |
| OSTC | Ostas | 92.18 | 35 | | eP | | P | 18 16 17.2 | +1.0 |
| OSTC | | | | | ex | | x | 18 16 26.5 | |
| OSTC | Ostas | 92.18 | 35 | | eP | | P | 18 16 17.2 | +1.0 |
| OSTC | | | | | e | | | 18 16 26.5 | |
| DPC | Dobruska-Polom | 92.34 | 36 | | eP | | P | 18 16 17.9 | +0.9 |
| DPC | | | | | | AMS | AMS | 19 01 20.0 | |
| | comp=Z,600nm,19.4s | | | | | | | | |
| DPC | Dobruska-Polom | 92.34 | 36 | | eP | | P | 18 16 17.9 | +0.9 |
| DPC | | | | | | MLR | MLR | | |
| | comp=Z,600nm,19.4s | | | | | | | | |
| DPC | Dobruska-Polom | 92.34 | 36 | | P | | P | 18 16 17.4 | +0.4 |
| MOA | Molln | 92.36 | 38 | | ePcP | | PcP | 18 16 17.6 | -0.3 |
| | comp=Z,2.6nm,1.0s | | | | | | | | |
| TREC | Trest | 92.39 | 37 | | AMS | | AMS | 19 01 20.0 | |
| | comp=Z,500nm,16.1s | | | | | | | | |
| MYKA | Terra Mystica | 92.56 | 40 | | ePcP | | PcP | 18 16 19.1 | +0.3 |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| KRLC | Kraliky | 92.74 | 36 | | eP | | P | 18 16 19.3 | +0.5 |
| KRLC | | | | | | AMS | AMS | 19 01 40.0 | |
| | comp=Z,400nm,17.9s | | | | | | | | |
| KRLC | Kraliky | 92.74 | 36 | | eP | | P | 18 16 19.3 | +0.5 |
| KRLC | | | | | | MLR | MLR | | |
| | comp=Z,400nm,17.9s | | | | | | | | |
| YAK | Yakutsk | 92.82 | 339 | | eP | | P | 18 16 19.3 | +0.4 |
| YAK | | | | | e | | | 18 19 58.5 | |
| YAK | | | | | ePPP | | PPP | 18 22 01.8 | |
| YAK | | | | | eS | | SKSac | 18 26 49.6 | -2.0 |
| YAK | | | | | e | | | 18 27 28.4 | |
| YAK | | | | | eSS | | SS | 18 33 33.6 | -1.7 |
| YAK | | | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=N,6.0nm,1.8s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=E,4.0nm,1.5s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=Z,150nm,6.6s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=N,116nm,6.3s | | | | | | | | |
| YAK | | | | | | pmax | pmax | | |
| | comp=E,70nm,4.6s | | | | | | | | |
| YAK | | | | | | smax | smax | | |
| | comp=N,209nm,5.8s | | | | | | | | |
| YAK | | | | | | smax | smax | | |
| | comp=E,130nm,5.8s | | | | | | | | |
| VRAC | Vranov | 93.01 | 36 | | eP | | P | 18 16 20.6 | +0.5 |
| VRAC | Vranov | 93.01 | 36 | | LR | | LR | 19 01 54.0 | |
| | comp=E,380nm,18.3s,baz=306,slow=38 | | | | | | | | |
| KRUC | Moravsky | 93.02 | 37 | | eP | | P | 18 16 20.3 | +0.2 |
| OBKA | Obir | 93.17 | 39 | | ePcP | | P | 18 16 21.0 | 0.0 |
| | comp=E,3.8nm,0.9s | | | | | | | | |
| CONA | Conrad Observa | 93.27 | 38 | | ePcP | | PcP | 18 16 22.5 | +0.5 |
| | comp=E,8.8nm,1.7s | | | | | | | | |
| MORC | Moravsky Berou | 93.31 | 36 | | IAmb | | IAmb | 18 16 32.5 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| MORC | Moravsky Berou | 93.31 | 36 | | eP | | P | 18 16 21.8 | +0.3 |
| SOKA | Soboth | 93.38 | 39 | | ePcP | | PcP | 18 16 22.2 | -0.3 |
| | comp=Z,9.1nm,1.3s | | | | | | | | |
| ARSA | Arzberg | 93.40 | 38 | | ePcP | | PcP | 18 16 22.9 | +0.4 |
| | comp=Z,4.4nm,1.3s | | | | | | | | |
| OKC | Ostrava-Krasne | 93.62 | 35 | | AMS | | AMS | 19 02 10.0 | |
| | comp=Z,300nm,21.6s | | | | | | | | |
| RONA | Rosalia, Austr | 93.64 | 38 | | i PcP | | PcP | 18 16 23.8 | +0.2 |
| | comp=Z,6.4nm,1.1s | | | | | | | | |
| JAVC | Velka Javorina | 93.85 | 36 | | eP | | P | 18 16 24.5 | +0.5 |
| KEST | Kesra | 94.35 | 51 | | P | | P | 18 16 24.7 | -1.9 |
| | comp=Z,2.7nm,0.9s,baz=286,slow=15,SNR=4.3 | | | | | | | | |
| KEST | | | | | LR | | LR | 18 55 34.7 | |
| | comp=Z,314nm,21.3s,baz=250,slow=33 | | | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | | | |
| VYHS | Vyhne | 94.70 | 36 | | eP | | P | 18 16 29.2 | +1.3 |
| VYHS | | | | | e | | | 18 16 38.0 | |
| VYHS | Vyhne | 94.70 | 36 | | eP | | P | 18 16 29.2 | +1.3 |
| VYHS | | | | | e | | | 18 16 38.0 | |
| LANS | Liptovska Anna | 94.71 | 36 | | eP | | P | 18 16 30.3 | +2.4 |
| LANS | | | | | e | | | 18 16 39.5 | |
| LANS | Liptovska Anna | 94.71 | 36 | | eP | | P | 18 16 30.3 | +2.4 |
| LANS | | | | | e | | | 18 16 39.4 | |
| TORD | Torodi Ar. Bea | 95.96 | 74 | | P | | P | 18 16 32.2 | -2.0 |
| | comp=Z,0.7nm,0.8s,baz=267,slow=2.5,SNR=3.6 | | | | | | | | |
| TORD | | | | | LR | | LR | 18 56 36.0 | |
| | comp=Z,489nm,20.8s,baz=308,slow=34 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| LVV | L'vov | 96.81 | 33 | | eP | | P | 18 16 46.8 | +9.4 |
| VAE | Valguarnera | 97.27 | 48 | | LR | | LR | 18 59 00.6 | |
| | comp=Z,409nm,19.1s,baz=328,slow=35 | | | | | | | | |
| AKASG | Malin Array Be | 98.90 | 31 | | LR | | LR | 19 01 20.9 | |
| | comp=Z,245nm,21.4s,baz=304,slow=35 | | | | | | | | |
| OBN | Obninsk | 99.10 | 24 | | LR | | LR | 19 04 26.8 | |
| | comp=Z,414nm,19.8s,baz=350,slow=37 | | | | | | | | |
| OBN | Obninsk | 99.10 | 24 | | eP | | Pdif | 18 16 45.9 | -1.6 |
| OBN | | | | | e*PP | | sP | 18 16 54.9 | -1.4 |
| OBN | | | | | e | | | 18 20 49.0 | |
| OBN | | | | | ePPP | | PPP | 18 22 53.3 | |
| OBN | | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| OBN | | | | | | MLR | MLR | | |
| | comp=Z,432nm,19.0s | | | | | | | | |
| DZM | Mont Dzumac | 100.48 | 250 | | eLR | | LR | 18 49 47.5 | |
| | comp=Z,600nm,27.4s | | | | | | | | |
| BRTR | Keskin Array B | 108.45 | 37 | | PP | | PP | 18 22 05.8 | +6.3 |
| | comp=Z,1.1nm,1.0s,baz=353,slow=5.0,SNR=5.3 | | | | | | | | |
| ZALV | Zalesovo Beam | 109.63 | 358 | | PP | | PP | 18 21 59.1 | -8.0 |
| | comp=Z,0.6nm,0.5s,baz=344,slow=8.4,SNR=3.9 | | | | | | | | |
| BVAR | Borovoye Array | 109.98 | 7 | | PP | | PP | 18 22 20.3 | +11 |
| | comp=Z,2.3nm,1.0s,baz=0.0,slow=4.4,SNR=6.2 | | | | | | | | |
| KURK | Kurchatov | 112.89 | 2 | | i PKIKP | | PKiKP | 18 21 42.5 | -0.9 |
| KURBB | Kurchatov Arra | 112.98 | 2 | | PKiKP | | PKiKP | 18 21 42.5 | -1.1 |
| | comp=Z,0.1nm,0.4s,baz=326,slow=2.7,SNR=4.1 | | | | | | | | |
| KURBB | | | | | PP | | PP | 18 22 32.4 | +1.2 |
| | comp=Z,1.1nm,0.8s,baz=5.3,slow=6.0,SNR=4.6 | | | | | | | | |
| KURBB | | | | | PKKPbc | | PKKPbc | 18 32 36.5 | +4.5 |
| | comp=Z,0.6nm,0.7s,baz=196,slow=3.1,SNR=8.6 | | | | | | | | |
| MAK | Makhachkala | 113.04 | 26 | | eP | | Pdif | 18 17 52.2 | +2.4 |
| MAK | | | | | i | | | 18 21 43.4 | |
| MAK | | | | | e | | | 18 22 34.3 | |
| MAK | | | | | ePPP | | PPP | 18 25 00.3 | |
| MAK | | | | | e | | | 18 28 30.2 | |
| MAK | | | | | ePS | | PS | 18 32 05.2 | -2.6 |
| MAK | | | | | eSS | | SS | 18 38 10.6 | -3.8 |
| MAK | | | | | eSSS | | SSS | 18 42 26.6 | |
| MAK | | | | | | pmax | pmax | | |
| | comp=Z,123nm,1.4s | | | | | | | | |
| HHC | Hu-ho-hao-te | 116.28 | 335 | | ePKP | | PKiKP | 18 21 47.6 | -2.8 |
| HHC | | | | | | LR | LR | | |
| | comp=Z,480nm,16.8s | | | | | | | | |
| HHC | | | | | | LR | LR | | |
| | comp=Z,430nm,16.8s | | | | | | | | |
| HHC | | | | | | LR | LR | | |
| | comp=Z,670nm,18.3s | | | | | | | | |
| MKAR | Makanchi Array | 116.85 | 359 | | PKP | | PKPdf | 18 21 49.8 | -1.5 |
| | comp=Z,0.4nm,0.7s,baz=348,slow=0.8,SNR=4.9 | | | | | | | | |
| MKAR | | | | | PP | | PP | 18 22 59.6 | +1.1 |
| | comp=Z,0.9nm,0.8s,baz=35,slow=4.4,SNR=3.7 | | | | | | | | |
| MKAR | | | | | PKKPbc | | PKKPab | 18 32 23.6 | -0.1 |
| | comp=Z,1.0nm,1.0s,baz=178,slow=4.3,SNR=5.8 | | | | | | | | |
| WMQ | Urumqi | 119.55 | 355 | | ePKP | | PKiKP | 18 21 58.3 | +1.7 |
| NJ2 | Nanjing | 119.68 | 323 | | ePKP | | PKiKP | 18 21 58.3 | +1.2 |
| SIMJ | Simiganj | 123.79 | 12 | | | | PKiKP | 18 22 05.2 | 0.0 |
| KSH | Kashi | 123.91 | 5 | | PKP | | PKiKP | 18 22 06.4 | +1.0 |
| ENH | Enshi | 126.04 | 330 | | | | PKPdf | 18 22 09.0 | -0.4 |
| WRA | Warramunga Arr | 129.72 | 258 | | PKPdf | | PKiKP | 18 22 17.2 | -0.1 |
| WRA | Warramunga Arr | 129.72 | 258 | | PKP | | PKPdf | 18 22 17.1 | +0.5 |
| | comp=Z,1.9nm,0.8s,baz=86,slow=2.2,SNR=24 | | | | | | | | |
| WRA | | | | | PP | | PP | 18 24 34.1 | +6.4 |
| | comp=Z,1.1nm,1.2s,baz=57,slow=3.5,SNR=4.9 | | | | | | | | |
| WRA | Warramunga Arr | 129.72 | 258 | | PKiKP | | PKiKP | 18 22 17.2 | -0.1 |
| ASAR | Alice Springs | 130.37 | 253 | | PKP | | PKiKP | 18 22 18.9 | +0.4 |
| | comp=Z,1.1nm,0.9s,baz=91,slow=2.2,SNR=5.3 | | | | | | | | |
| ASAR | Alice Springs | 130.37 | 253 | | PKiKP | | PKiKP | 18 22 19.0 | +0.4 |
| PZH | PanZhiHua | 132.74 | 335 | | PKP | | PKPdf | 18 22 23.3 | 0.0 |
| KMI | Kunming | 133.53 | 333 | | ⇑PKP | | PKPdf | 18 22 24

*az=184.0*

**ISC 22 18:19:28.0±1.0, 18°38'S±0°2'×178°4'W±0°1, h600km, n32, σ0990/34, mb4.2/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.47** | **278** | P | **P** | **18 20 49.4** | **-0.6** |
| **NIUE** | **Niue** | **8.02** | **97** | P | **P** | **18 21 27.5** | **0.0** |
| **THZ** | **Tophouse** | **24.58** | **196** | P | **P** | **18 23 59.9** | **-2.4** |
| **KHZ** | **Kahutara** | **25.04** | **194** | P | **P** | **18 24 05.1** | **-1.2** |
| **LTZ** | **Lake Taylor** | **25.70** | **196** | P | **P** | **18 24 10.2** | **-2.0** |
| LTZ | | | | IAmb | IAmb | 18 24 30.6 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **29.20** | **251** | P | **P** | **18 24 43.8** | **+0.9** |
| EIDS | | | | IAmb | IAmb | 18 25 10.1 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.27** | **200** | P | **P** | **18 24 43.0** | **-0.3** |
| **ARMA** | **Armidale** | **29.81** | **240** | P | **P** | **18 24 46.9** | **-1.3** |
| ARMA | | | | IAmb | IAmb | 18 25 18.4 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **CTA** | **Charters Tower** | **33.45** | **261** | P | **P** | **18 25 19.5** | **+0.4** |
| | comp=Z,0.1nm,0.2s,baz=107,slow=11,SNR=5.1 | | | | | | |
| **CAN** | **Canberra** | **33.53** | **233** | P | **P** | **18 25 19.5** | **-0.1** |
| CAN | | | | IAmb | IAmb | 18 25 48.5 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **36.99** | **231** | P | **P** | **18 25 49.0** | **+0.9** |
| TOO | | | | IAmb | IAmb | 18 26 14.7 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **COEN** | **Coen** | **37.17** | **271** | P | **P** | **18 25 50.1** | **+0.2** |
| COEN | | | | IAmb | IAmb | 18 25 51.5 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.51** | **242** | P | **P** | **18 25 59.9** | **-0.6** |
| **STKA** | **Stephens Creek** | **38.51** | **242** | P | **P** | **18 26 02.2** | **+1.7** |
| | comp=Z,6.0nm,0.8s,baz=92,slow=11,SNR=7.8 | | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.28** | **241** | P | **P** | **18 26 38.9** | **+0.7** |
| BBOO | | | | IAmb | IAmb | 18 26 45.1 | |
| | comp=Z,42nm,1.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.59** | **260** | P | **P** | **18 26 48.5** | **0.0** |
| **WB2** | **Warramunga Arr** | **44.61** | **260** | P | **P** | **18 26 48.5** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 18 26 50.1 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.61** | **260** | P | **P** | **18 26 48.5** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 18 26 51.1 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.62** | **260** | P | **P** | **18 26 48.7** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.62** | **260** | P | **P** | **18 26 48.5** | **-0.2** |
| | comp=Z,2.8nm,0.7s,baz=94,slow=7.3,SNR=70 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 28 17.9** | **-0.4** |
| | comp=Z,0.2nm,0.4s,baz=93,slow=3.4,SNR=2.4 | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **44.75** | **255** | P | **P** | **18 26 50.0** | **+0.3** |
| AS31 | | | | IAmb | IAmb | 18 26 51.4 | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.75** | **255** | P | **P** | **18 26 49.6** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.75** | **255** | P | **P** | **18 26 50.4** | **+0.6** |
| | comp=Z,8.8nm,0.7s,baz=87,slow=8.6,SNR=150 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 28 17.9** | **-0.7** |
| | comp=Z,0.5nm,0.5s,baz=102,slow=4.1,SNR=6.3 | | | | | | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **48.85** | **269** | P | **P** | **18 27 20.3** | **-0.2** |
| MTN | | | | IAmb | IAmb | 18 27 20.9 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **49.90** | **245** | P | **P** | **18 27 28.2** | **+0.1** |
| **KNRA** | **Kununurra** | **50.51** | **264** | P | **P** | **18 27 32.3** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 18 27 44.1 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.02** | **261** | P | **P** | **18 27 51.3** | **+0.6** |
| **SBA** | **Scott Base** | **60.06** | **184** | P | **P** | **18 28 39.4** | **+1.6** |
| **QSPA** | **South Pole Qui** | **71.78** | **180** | P | **P** | **18 29 50.6** | **-0.1** |
| **QSPA** | **South Pole Qui** | **71.78** | **180** | P | **P** | **18 29 50.5** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=116,slow=2.3,SNR=9.6 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.08** | **314** | PKPbc | **PKPdf** | **18 37 57.8** | **-0.6** |
| | comp=Z,0.7nm,0.8s,baz=26,slow=0.9,SNR=5.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.39** | **303** | PKPbc | **PKPdf** | **18 38 01.9** | **+1.2** |
| | comp=Z,0.4nm,0.4s,baz=94,slow=3.3,SNR=4.1 | | | | | | |

*TRN **22** 18:47:22.4, 10°.73N×62°.90W, h16km, MD3.1, North of the Paria peninsula.*

*FUNV **22** 18:47:23.3, 10°.54N×62°.91W, h19km, MW3.7*

**ISC 22 18:47:21.3±1.3, 10°.79N±0°.07×62°.96W±0°.05, h25km±17km, n13, σ1950/22, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRN** | **Trinidad (W)** | **1.54** | **95** | *eP* | **Pb** | **18 47 49.2** | **+0.1** |
| TRN | | | | *eS* | **Sb** | **18 48 07.5** | **-0.7** |
| **GRFF** | **Grenada Fort F** | **1.74** | **44** | *e* | **Pb** | **18 47 54.8** | **+2.3** |
| GRFF | | | | *eS* | **Sb** | **18 48 14.7** | **+0.8** |
| **PCRV** | **Puerto La Cruz** | **1.75** | **250** | *eP* | **Pb** | **18 47 52.5** | **-0.3** |
| PCRV | | | | *eS* | **Sn** | **18 48 13.3** | **+1.6** |
| **PCRV** | **Puerto La Cruz** | **1.75** | **250** | *eP* | **Pb** | **18 47 53.3** | **+0.4** |
| PCRV | | | | *eS* | **Sb** | **18 48 14.6** | **+0.1** |
| **GRGR** | **Grenville** | **1.85** | **44** | *eP* | **Pb** | **18 47 53.8** | **-0.7** |
| GRGR | | | | *eS* | **Sb** | **18 48 17.3** | **+0.1** |
| **GRW** | **Mount Saint Ca** | **1.87** | **43** | *eP* | **Pb** | **18 47 53.1** | **-1.7** |
| GRW | | | | *eS* | **Sb** | **18 48 17.1** | **-0.6** |
| **GRSS** | **Sisters** | **2.00** | **41** | *eP* | **Pb** | **18 47 55.9** | **-1.1** |
| GRSS | | | | *eS* | **Sb** | **18 48 21.2** | **-0.3** |
| **GCMP** | **Grenada, Carri** | **2.26** | **42** | *eP* | **Pn** | **18 47 58.5** | **+1.5** |
| GCMP | | | | *eS* | **Sb** | **18 48 27.2** | **-1.8** |
| **TACV** | **Tcata** | **4.05** | **261** | *eP* | **Pn** | **18 48 23.5** | **+1.7** |
| TACV | | | | *eS* | **Sn** | **18 49 07.5** | **-0.9** |
| **BENV** | **Beln** | **4.63** | **260** | *eP* | **Pn** | **18 48 31.3** | **+1.5** |
| BENV | | | | *eS* | **Sn** | **18 49 21.6** | **-1.2** |
| **CACV** | **CAICARA DEL OR** | **4.77** | **228** | *eP* | Pn | 18 48 26.1 | -5.5 |
| CACV | | | | *eS* | Sn | 18 49 13.1 | -13 |
| **BAUV** | **El Baul** | **5.33** | **250** | *eP* | **Pn** | **18 48 39.0** | **-0.3** |
| BAUV | | | | *eS* | **Sn** | **18 49 36.3** | **-3.6** |
| **BAUV** | **El Baul** | **5.33** | **250** | *eP* | Pn | 18 48 44.9 | +5.7 |

*MOS **22** 18:49:34.5±1.1, 6°.97S×155°.69E, h34km, mb5.8/45, MS5.3/32, Error ellipse: s-maj=7.4km s-min=5.1km az=111.3*

*BJI **22** 18:49:35.7±0.0, 6°.81S×155°.76E, h44km, mb5.3/82, mB5.6/58, Ms5.3/72, Ms7 5.2/71*

*IDC **22** 18:49:35.9±1.2, 6°.95S×155°.67E, h35km±8km, mb5.3/22, mbtmp5.5/23, ML3.5/1, MS5.1/50, Error ellipse: s-maj=11.9km s-min=9.2km az=82.0*

*NEIC **22** 18:49:35.6, 6°.95S×155°.74E, h31km*

*NEIC **22** 18:49:35.6, 6°.95S×155°.74E, h46km*

*NEIC **22** 18:49:35.6, 6°.95S×155°.84E, h46km, Moment Tensor Solution. Duration: 38s7 Moment tensor: Scale 10^17^Nm; Mrr=4.26; Mθθ=3.52; Mϕϕ=0.74; Mrθ=1.03; Mθϕ=3.55; Mϕr=1.31; Fault plane solution: M0=5.51000×10^17^ NP1: ϕs=280.56000°, δ51.22000°, λ.55.54000°. NP2: ϕs=148.17000°, δ50.00000°, λ125.15000°. Principal axes: T 5.0780, Plg64.0000°, Azm125.0000°; N 0.8614, Plg26.0000°, Azm304.0000°; P -5.9394, Plg1.0000°, Azm34.0000°;*

*NEIC **22** 18:49:36.0±1.5, 6°.97S±0°.07×155°.73E±0°.07, h34km±1km, mb5.6/363, Ms_20 5.5/904, Mwb5.8/50, Mww5.8/34 Error ellipse: s-maj=12.2km s-min=9.9km az=219.0, Moment Tensor Solution. Moment tensor: Scale 10^17^Nm; Mrr=5.84; Mθθ=5.11; Mϕϕ=0.73; Mrθ=1.55; Mθϕ=1.79; Mϕr=0.97; Fault plane solution: M0=6.08000×10^17^ NP1: ϕs=121.79000°, δ40.78000°, λ.109.28000°. NP2: ϕs=276.99000°, δ51.94000°, λ.74.10000°. Principal axes: T 6.2720, Plg76.0000°, Azm132.0000°; N -0.4116, Plg12.0000°, Azm287.0000°; P -5.8604, Plg6.0000°, Azm18.0000°;*

*IPGP **22** 18:49:37.0, 7°.00S×155°.77E, h47km, Mw5.8, Fault plane solution: NP1:ϕs=284.00000°, δ53.00000°, λ.60.00000°. NP2:ϕs=148.00000°, δ46.00000°, λ.124.00000°.*

*DJA **22** 18:49:39.5±0.5, 7°.5S±3°×15°.6E±1°, h59km±5km, M5.7/94, mB6.0/72, mb5.8/94, MLv5.3/1, Mw(mB)5.7/72, MwMwp5.6/17, Mwp5.7/17*

*GCMT **22** 18:49:40.0±0.1, 7°.19S±0°.01×155°.71E±0°.01, h44km, MW5.8/147, Moment Tensor Solution. s147,c298; s146,c363; Duration: 1s9 Moment tensor: Scale 10^17^ Nm; Mrr=4.31±.06; Mθθ=3.92±.05; Mϕϕ=0.38±.05; Mrθ=1.15±.06; Mθϕ=3.30±.04; Mϕr=1.57±.05; Best double couple: M0=5.61000×10^17^ NP1:ϕs=276.00000°, δ52.00000°, λ.54.00000°. NP2:ϕs=146.00000°, δ50.00000°, λ.127.00000°. Principal axes: T 5.3200, Plg63.0000°, Azm123.0000°;*



*N 0.5840, Plg27.0000°, Azm300.0000°; P -5.8990, Plg1.0000°, Azm31.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 22 18:49:37.0±0.2, 7°.00S±0°.03×155°.76E±0°.03, h46km±1km, h46km:pP-P, n1884, σ1932/1520, mb5.6/317, MS5.5/532, 100C-23D, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **4.53** | **308** | | **Pn** | **18 50 42.5** | **-0.7** |
| **I40PG** | **Keravat** | **4.59** | **306** | Pn | **Pn** | **18 50 45.0** | **+1.0** |
| | baz=152,slow=35 | | | | | | |
| **HNR** | **Honiara** | **4.80** | **120** | P | **Pn** | **18 50 51.6** | **+4.7** |
| **HNR** | **Honiara** | **4.80** | **120** | Pn | **Pn** | **18 50 47.2** | **+0.3** |
| **HNR** | **Honiara** | **4.80** | **120** | LR | LR | 18 52 51.8 | |
| | comp=Z,594μm,18.8s,baz=300,slow=40 | | | | | | |
| **HNR** | **Honiara** | **4.80** | **120** | P | **Pn** | **18 50 47.2** | **+0.3** |
| **BULU** | **Kimbe** | **5.60** | **285** | P | **Pn** | **18 51 01.6** | **+3.8** |
| **KAVG** | **Kavieng** | **6.60** | **311** | P | Pn | 18 51 16.8 | +5.2 |
| **PMG** | **Port Moresby** | **8.84** | **254** | P | **Pn** | **18 51 46.0** | **+3.7** |
| **PMG** | **Port Moresby** | **8.84** | **254** | Pn | **Pn** | **18 51 42.5** | **+0.3** |
| **PMG** | **Port Moresby** | **8.84** | **254** | Pn | **Pn** | **18 51 43.9** | **+1.6** |
| | 20nm,0.3s,baz=47,slow=12,SNR=32 | | | | | | |
| PMG | | | | Sn | **Sn** | **18 53 23.7** | **+3.1** |
| | 8.5nm,0.3s,baz=206,slow=9.5,SNR=1.9 | | | | | | |
| PMG | | | | LR | LR | 18 54 58.2 | |
| | comp=Z,21μm,21.8s,baz=56,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **8.84** | **254** | *ceP* | **Pn** | **18 51 44.4** | **+2.1** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,904nm,0.8s | | | | | | |
| **MANU** | **Manus Island** | **9.70** | **300** | | **Pn** | **18 51 51.2** | **-2.9** |
| **PATS** | **Pohnpei** | **13.98** | **11** | Pn | **Pn** | **18 52 51.5** | **-1.1** |
| **PATS** | **Pohnpei** | **13.98** | **11** | P | **Pn** | **18 52 53.8** | **+1.2** |
| | comp=Z,0.0nmcomp=Z,1μm,0.9s | | | | | | |
| **COEN** | **Coen** | **14.17** | **240** | P | **P** | **18 52 58.5** | **-3.1** |
| **COEN** | **Coen** | **14.17** | **240** | Pn | **Pn** | **18 52 55.0** | **-0.1** |
| **COEN** | **Coen** | **14.17** | **240** | P | **P** | **18 52 58.4** | **-3.1** |
| | comp=Z,0.0nmcomp=Z,222nm,1.0s | | | | | | |
| **TABU** | **Tabubil** | **14.55** | **276** | P | **P** | **18 53 03.8** | **-2.1** |
| **AUAYR** | **Ayr State High** | **14.90** | **212** | P | **P** | **18 53 08.3** | **-1.4** |
| | comp=Z,299nm,1.0s | | | | | | |
| **TV1H** | **Townsville Har** | **14.98** | **215** | P | **P** | **18 53 09.3** | **-1.3** |
| **MMPI** | **Merauke** | **15.30** | **264** | P | **Pn** | **18 53 10.5** | **+0.4** |
| | comp=Z,477nm,1.2s,comp=Z,9μmcomp=Z,9μm | | | | | | |
| **JAY** | **Jayapura** | **15.64** | **286** | P | **P** | **18 53 16.6** | **-1.4** |
| **MTSU** | **Mount Surprise** | **15.71** | **224** | P | **P** | **18 53 18.7** | **0.0** |
| **KOUNC** | **Koumac, New Ca** | **15.80** | **149** | P | **P** | **18 53 20.5** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **15.80** | **149** | Pn | **Pn** | **18 53 15.4** | **-1.2** |
| **CTA** | **Charters Tower** | **15.95** | **214** | Pn | **Pn** | **18 53 19.2** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=41,slow=15,SNR=49 | | | | | | |
| CTA | | | | Sn | **Sn** | **18 56 19.9** | **+5.7** |
| | baz=12,slow=12 | | | | | | |
| CTA | | | | LR | LR | 18 58 55.5 | |
| | comp=Z,1μm,19.7s,baz=78,slow=35 | | | | | | |
| **CTAO** | **Charters Tower** | **15.95** | **214** | P | **P** | **18 53 22.0** | **+0.7** |
| **CTAO** | **Charters Tower** | **15.95** | **214** | Pn | **Pn** | **18 53 18.9** | **+0.5** |
| **CTAO** | **Charters Tower** | **15.95** | **214** | P | **Pn** | **18 53 18.9** | **+0.5** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,146nm,1.1s | | | | | | |
| **GENI** | **Genyem** | **16.13** | **285** | P | **P** | **18 53 23.2** | **-0.2** |
| **GENI** | **Genyem** | **16.13** | **285** | P | **P** | **18 53 25.4** | **+2.0** |
| | comp=Z,296nm,1.5s,comp=Z,6μm | | | | | | |
| **RTV** | **Rentapao** | **16.36** | **132** | P | **P** | **18 53 28.6** | **+2.7** |
| **RK1H** | **Rockhampton Ha** | **17.06** | **197** | P | **P** | **18 53 35.9** | **+2.3** |
| **GD1S** | **Gladstone Soft** | **17.32** | **194** | P | **P** | **18 53 38.3** | **+1.9** |
| **LIFNC** | **LIFOU** | **17.64** | **142** | P | **P** | **18 53 42.5** | **+2.4** |
| **LIFNC** | **LIFOU** | **17.64** | **142** | | **Pn** | **18 53 39.4** | **-0.2** |
| LIFNC | | | | IAmb | IAmb | 18 53 50.0 | |
| | comp=Z,377nm,1.1s | | | | | | |
| **NOUC** | **Port Laguerre** | **18.14** | **147** | P | **Pn** | **18 53 48.8** | **+3.1** |
| **DZM** | **Mont Dzumac** | **18.19** | **147** | P | **Pn** | **18 53 49.6** | **+3.2** |
| **DZM** | **Mont Dzumac** | **18.19** | **147** | *eP* | **Pn** | **18 53 46.8** | **+0.4** |
| | comp=Z,876nm,1.4s | | | | | | |
| DZM | | | | *eS* | **Sn** | **18 57 06.0** | **-2.7** |
| | comp=Z,19μm,31.5s | | | | | | |
| DZM | | | | *e*LR | LR | 18 58 03.4 | |
| | comp=Z,23μm,25.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.19** | **147** | | **Pn** | **18 53 46.9** | **+0.5** |
| DZM | | | | IAmb | IAmb | 18 53 52.2 | |
| | comp=Z,816nm,1.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.19** | **147** | P | **Pn** | **18 53 48.3** | **+1.9** |
| | comp=Z,115nm,0.8s,baz=349,slow=16,SNR=48 | | | | | | |
| DZM | | | | S | **S** | **18 57 14.2** | **+1.9** |
| | comp=Z,10nm,0.4s,baz=182,slow=22,SNR=1.3 | | | | | | |
| DZM | | | | ScS | **ScS** | **19 05 33.4** | **+2.6** |
| | comp=Z,13nm,1.0s,baz=8.7,slow=18,SNR=4.5 | | | | | | |
| **YATNC** | **Mamie plateau,** | **18.43** | **145** | P | **Pn** | **18 53 52.7** | **+3.5** |
| **MARNC** | **Mare, Loyalty** | **18.66** | **142** | P | **Pn** | **18 53 54.7** | **+2.8** |
| **EIDS** | **Eidsvold** | **18.80** | **193** | P | **Pn** | **18 53 55.9** | **+2.2** |
| **EIDS** | **Eidsvold** | **18.80** | **193** | P | **P** | **18 53 52.3** | **-0.6** |
| **EIDS** | **Eidsvold** | **18.80** | **193** | P | **Pn** | **18 53 54.4** | **+0.7** |
| | comp=Z,0.0nmcomp=Z,148nm,1.4s | | | | | | |
| **PINNC** | **Pines Island,** | **19.18** | **145** | P | **Pn** | **18 54 00.4** | **+2.2** |
| **PINNC** | **Pines Island,** | **19.18** | **145** | P | **Pn** | **18 53 58.0** | **-0.2** |
| PINNC | | | | IAmb | IAmb | 18 54 06.2 | |
| | comp=Z,473nm,1.0s | | | | | | |
| **RMQ** | **Roma** | **20.49** | **198** | P | Pn | 18 54 14.5 | +0.7 |
| **RMQ** | **Roma** | **20.49** | **198** | P | Pn | 18 54 14.8 | +1.0 |
| | comp=Z,76nm,1.7s | | | | | | |
| **QIS** | **Mount Isa** | **20.65** | **228** | P | Pn | 18 54 15.4 | -0.3 |
| **QIS** | **Mount Isa** | **20.65** | **228** | P | Pn | 18 54 15.4 | -0.3 |
| | comp=Z,0.0nmcomp=Z,163nm,1.0s | | | | | | |
| **GC1S** | **Gold Coast 1 S** | **21.16** | **185** | P | **P** | **18 54 21.8** | **+3.4** |
| **KMPI** | **Kaimana, Papua** | **22.20** | **277** | P | **P** | **18 54 32.2** | **+2.5** |
| | comp=Z,406nm,1.1s,comp=Z,5μm | | | | | | |
| **QLP** | **Quilpie** | **22.35** | **208** | P | **P** | **18 54 32.3** | **+1.1** |
| **QLP** | **Quilpie** | **22.35** | **208** | P | **P** | **18 54 31.8** | **+0.6** |
| | comp=Z,761nm,1.6s | | | | | | |
| **GUMO** | **Guam** | **23.14** | **332** | P | **P** | **18 54 42.2** | **+2.7** |
| **GUMO** | **Guam** | **23.14** | **332** | P | **P** | **18 54 37.9** | **-1.6** |
| **GUMO** | **Guam** | **23.14** | **332** | LR | LR | 19 02 50.8 | |
| | comp=Z,3μm,21.1s,baz=150,slow=34 | | | | | | |
| **GUMO** | **Guam** | **23.14** | **332** | P | **P** | **18 54 37.9** | **-1.6** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,654nm,1.3s | | | | | | |
| GUMO | | | | MLR | MLR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **FUNA** | **Funafuti** | **23.28** | **95** | P | **P** | **18 54 42.0** | **+1.1** |
| **FUNA** | **Funafuti** | **23.28** | **95** | P | **P** | **18 54 38.5** | **-2.4** |
| **AULRC** | **Lightning Ridg** | **23.48** | **197** | P | **P** | **18 54 43.3** | **+0.5** |
| **KDU** | **Kakadu** | **23.61** | **254** | P | **P** | **18 54 44.2** | **+0.1** |
| **KDU** | **Kakadu** | **23.61** | **254** | P | **P** | **18 54 43.2** | **-0.9** |
| | comp=Z,0.0nmcomp=Z,238nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **23.62** | **189** | P | **P** | **18 54 45.6** | **+1.5** |
| **ARMA** | **Armidale** | **23.62** | **189** | P | **P** | **18 54 42.7** | **-1.5** |
| **ARMA** | **Armidale** | **23.62** | **189** | P | **P** | **18 54 45.0** | **+0.8** |
| | comp=Z,0.0nmcomp=Z,223nm,1.5s | | | | | | |
| **FAKI** | **Fak Fak** | **23.76** | **279** | P | **P** | **18 54 46.4** | **+0.9** |
| **FAKI** | **Fak Fak** | **23.76** | **279** | P | **P** | **18 54 43.1** | **-2.5** |
| FAKI | | | | IAmb | IAmb | 18 54 58.0 | |
| | comp=Z,178nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **23.76** | **279** | P | **P** | **18 54 47.4** | **+1.9** |
| | comp=Z,230nm,1.2s,comp=Z,4μmcomp=Z,6μm | | | | | | |
| **MSVF** | **Nonsavu** | **24.22** | **118** | P | **P** | **18 54 51.8** | **+2.0** |
| **MSVF** | **Nonsavu** | **24.22** | **118** | P | **P** | **18 54 49.5** | **-0.3** |
| **MSVF** | **Nonsavu** | **24.22** | **118** | LR | LR | 19 03 36.9 | |
| | comp=Z,7μm,19.7s,baz=298,slow=35 | | | | | | |
| **MSVF** | **Nonsavu** | **24.22** | **118** | *eP* | **P** | **18 54 50.4** | **+0.6** |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,2μm,1.4s | | | | | | |
| **SAUI** | **Saumlaki** | **24.27** | **266** | P | **P** | **18 54 52.3** | **+2.1** |
| **SAUI** | **Saumlaki** | **24.27** | **266** | P | **P** | **18 54 48.6** | **-1.6** |
| **SAUI** | **Saumlaki** | **24.27** | **266** | P | **P** | **18 54 52.4** | **+2.2** |
| | comp=Z,828nm,1.1s,comp=Z,8μm | | | | | | |
| **WR0** | **Warramunga Arr** | **24.28** | **236** | P | **P** | **18 54 50.0** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 18 55 17.4 | |
| | comp=Z,142nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **24.31** | **236** | P | **P** | **18 54 50.3** | **-0.2** |
| **AUPHS** | **Peel High Scho** | **24.41** | **190** | P | **P** | **18 54 53.5** | **+2.2** |
| **WRAB** | **Tennant Creek** | **24.42** | **236** | P | **P** | **18 54 50.3** | **-1.3** |
| WRAB | | | | IAmb | IAmb | 18 55 05.2 | |
| | comp=Z,149nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.42** | **236** | *i* P | **P** | **18 54 51.1** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,402nm,1.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.43** | **236** | P | **P** | **18 54 50.0** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 18 55 04.9 | |
| | comp=Z,148nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.44** | **236** | P | **P** | **18 54 51.1** | **-0.6** |
| **WRA** | **Warramunga Arr** | **24.44** | **236** | P | **P** | **18 54 51.9** | **+0.2** |
| | comp=Z,50nm,0.7s,baz=61,slow=10,SNR=151 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 58 30.1** | **+0.1** |
| | comp=Z,25nm,1.1s,baz=62,slow=1.3,SNR=6.0 | | | | | | |
| WRA | | | | S | **S** | **18 59 07.2** | **-1.6** |
| | comp=Z,2.2nm,0.5s,baz=71,slow=15,SNR=4.6 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 02 06.3** | **+1.2** |
| | comp=Z,26nm,0.9s,baz=69,slow=3.1,SNR=14 | | | | | | |
| WRA | | | | LR | LR | 19 04 39.6 | |
| | comp=Z,9μm,18.1s,baz=67,slow=37 | | | | | | |
| WRA | | | | ScS | **ScS** | **19 05 52.1** | **-0.9** |
| | comp=Z,2.6nm,0.8s,baz=68,slow=6.7,SNR=5.6 | | | | | | |
| WRA | | | | PKiKP | **PKiKP** | **19 06 10.7** | **-1.7** |
| | comp=Z,0.9nm,0.3s,baz=316,slow=1.1,SNR=19 | | | | | | |
| | comp=Z,50nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.44** | **236** | *i* P | **P** | **18 54 51.9** | **+0.2** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,49nm,0.7s | | | | | | |
| **LHI** | **Lord Howe Isla** | **24.59** | **173** | P | **P** | **18 54 51.5** | **-1.4** |
| **MTN** | **Manton Dam** | **24.93** | **255** | P | **P** | **18 54 56.7** | **+0.5** |
| **MTN** | **Manton Dam** | **24.93** | **255** | P | **P** | **18 54 55.5** | **-0.7** |
| **MTN** | **Manton Dam** | **24.93** | **255** | P | **P** | **18 54 56.2** | **0.0** |
| | comp=Z,0.0nmcomp=Z,276nm,1.1s | | | | | | |
| **INKA** | **Innaminka** | **25.06** | **213** | P | **P** | **18 54 58.0** | **+0.8** |
| **DRS** | **Darwin Rock St** | **25.08** | **256** | P | **P** | **18 54 58.5** | **+1.0** |
| **SWI** | **Sorong** | **25.17** | **283** | P | **P** | **18 54 58.7** | **+0.3** |
| | comp=Z,434nm,1.1s,comp=Z,4μm | | | | | | |
| **BNDI** | **Bandanaira** | **25.83** | **274** | P | **P** | **18 55 05.8** | **+1.4** |
| **AUDCS** | **Dubbo College** | **25.97** | **194** | P | **P** | **18 55 06.1** | **+0.7** |
| **NTLH** | **Newcastle Hard** | **26.04** | **188** | P | **P** | **18 55 09.1** | **+3.0** |
| **CMSA** | **Cobar Meteorol** | **26.16** | **200** | P | **P** | **18 55 07.5** | **+0.3** |
| **CMSA** | **Cobar Meteorol** | **26.16** | **200** | P | **P** | **18 55 06.7** | **-0.5** |
| | comp=Z,240nm,1.1s | | | | | | |
| **AS01** | **Alice Springs** | **26.70** | **229** | P | **P** | **18 55 12.6** | **+0.4** |
| **AS31** | **Alice Springs** | **26.74** | **229** | P | **P** | **18 55 10.8** | **-1.7** |
| **AS31** | **Alice Springs** | **26.74** | **229** | P | **P** | **18 55 12.5** | **0.0** |
| | comp=Z,23nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **26.74** | **229** | P | **P** | **18 55 11.7** | **-0.9** |
| **ASAR** | **Alice Springs** | **26.74** | **229** | P | **P** | **18 55 11.3** | **-1.3** |
| | comp=Z,28nm,0.6s,baz=62,slow=9.0,SNR=90 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 58 35.2** | **+0.1** |
| | comp=Z,13nm,0.6s,baz=44,slow=3.9,SNR=6.3 | | | | | | |
| ASAR | | | | S | **S** | **18 59 47.8** | **+2.4** |
| | comp=Z,1.7nm,0.5s,baz=60,slow=15,SNR=1.9 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 02 12.5** | **+0.8** |
| | comp=Z,14nm,0.6s,baz=61,slow=3.0,SNR=16 | | | | | | |
| ASAR | | | | LR | LR | 19 05 40.1 | |
| | comp=Z,8μm,18.2s,baz=100,slow=36 | | | | | | |
| ASAR | | | | ScS | **ScS** | **19 05 55.7** | **-6.9** |
| | comp=Z,4.2nm,0.9s,baz=22,slow=6.1,SNR=6.8 | | | | | | |
| | comp=Z,28nm,0.6s | | | | | | |
| **MSAI** | **Masohi** | **26.96** | **276** | P | **P** | **18 55 16.8** | **+2.2** |
| | comp=Z,65nm,0.6s | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **27.03** | **189** | P | **P** | **18 55 17.2** | **+2.2** |
| **RIV** | **Riverview** | **27.04** | **188** | P | **P** | **18 55 17.4** | **+2.4** |
| **RIV** | **Riverview** | **27.04** | **188** | P | **P** | **18 55 16.8** | **+1.8** |
| | comp=Z,137nm,1.7s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.53** | **23** | P | **P** | **18 55 21.1** | **+1.7** |
| H11S3 | | | | T | T | 19 23 47.4 | |
| | baz=202,slow=75,SNR=340 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.54** | **23** | P | **P** | **18 55 21.2** | **+1.7** |
| H11S2 | | | | T | T | 19 23 39.8 | |
| | baz=202,slow=75,SNR=2678 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.55** | **23** | P | **P** | **18 55 21.3** | **+1.7** |
| H11S1 | | | | T | T | 19 23 44.5 | |
| | baz=202,slow=75,SNR=1765 | | | | | | |
| **WOLH** | **Wollongong Har** | **27.64** | **189** | P | **P** | **18 55 22.8** | **+2.3** |
| **KNRA** | **Kununurra** | **27.80** | **250** | P | **P** | **18 55 21.6** | **-0.6** |
| **KNRA** | **Kununurra** | **27.80** | **250** | P | **P** | **18 55 22.2** | **+0.1** |
| | comp=Z,82nm,0.7s | | | | | | |
| **YNG** | **Young** | **28.00** | **193** | P | **P** | **18 55 24.9** | **+1.2** |
| **YNG** | **Young** | **28.00** | **193** | P | **P** | **18 55 24.4** | **+0.6** |
| | comp=Z,194nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **28.06** | **206** | P | **P** | **18 55 24.2** | **0.0** |
| **STKA** | **Stephens Creek** | **28.06** | **206** | P | **P** | **18 55 23.7** | **-0.6** |
| **STKA** | **Stephens Creek** | **28.06** | **206** | P | **P** | **18 55 24.1** | **-0.2** |
| | comp=Z,19nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **28.06** | **206** | P | **P** | **18 55 24.4** | **+0.2** |
| | comp=Z,46nm,0.9s,baz=22,slow=13,SNR=31 | | | | | | |
| STKA | | | | PcP | **PcP** | **18 58 39.0** | **+0.9** |
| | comp=Z,16nm,0.6s,baz=49,slow=1.4,S

**EDFI Ende, Flores 33.78 265** P **P** **18 56 14.0 -1.0**
comp=Z,186nm,1.0s,comp=Z,2µm
**GLAD Gladstone 34.54 190** P **P** **18 56 23.0 +1.9**
**MRSI Marisa 34.54 281** P **P** **18 56 26.2 +4.7**
comp=Z,97nm,0.6s,comp=Z,1µm
**KUZ Kuaotunu 34.76 151** P **P** **18 56 25.4 +2.3**
**KUZ Kuaotunu 34.76 151** P **P** **18 56 25.5 +2.3**
**MKAZ Moumakai 34.79 152** P **P** **18 56 25.7 +2.4**
MKAZ S **ScP** **19 02 40.5 +2.6**
**BASI Baing, Sumba 34.91 262** P P 18 56 39.1 +14
**BSSI Bau Bau, Buton 35.04 269** P **P** **18 56 27.0 +1.2**
**FORT Forrest 35.11 224** P **P** **18 56 27.3 +1.1**
**FORT Forrest 35.11 224** P **P** **18 56 24.8 -1.4**
FORT IAMs_20 IAMs_20 19 10 25.9
comp=Z,7µm,20.0s
**CORO Coronation Par 35.15 191** P **P** **18 56 29.2 +2.8**
**NIUE Niue 35.44 113** P **P** **18 56 31.7 +2.5**
**NIUE Niue 35.44 113** P **P** **18 56 29.4 +0.2**
**TOZ Tahuroa Road 35.46 152** P **P** **18 56 29.0 -0.1**
**TOZ Tahuroa Road 35.46 152** P **P** **18 56 30.9 +1.8**
**BNSI Bone 35.56 272** P **P** **18 56 31.7 +1.4**
comp=Z,99nm,1.1s,comp=Z,2µm
**TOLI2 Tolitoli 35.81 282** P **P** **18 56 34.3 +1.8**
**TOLI2 Tolitoli 35.81 282** P **P** **18 56 32.1 -0.4**
TOLI2 IAmb IAmb 18 56 45.6
comp=Z,107nm,1.3s
**KAPI Kappang 35.85 271** P **P** **18 56 33.5 +0.7**
**KAPI Kappang 35.85 271** P **P** **18 56 32.4 -0.4**
KAPI IAmb IAmb 18 56 45.5
comp=Z,141nm,1.1s
**KAPI Kappang 35.85 271** *i*P **P** **18 56 31.8 -1.0**
**WBSI Waikabubak, Su 36.06 263** P P 18 56 40.5 +5.8
comp=Z,166nm,1.0s,comp=Z,2µm
**MOO Moorlands 36.10 191** P **P** **18 56 37.0 +2.5**
**OMRZ Omania 36.17 152** P **P** **18 56 37.9 +2.7**
**JCJ Chichijima 36.35 339** LR LR 19 08 52.3
comp=Z,1µm,21.3s,baz=122,slow=32
**MPSI Mapaga 36.51 280** P **P** **18 56 38.2 -0.2**
comp=Z,135nm,0.9s,comp=Z,2µm
**TAU Tasmania Unive 36.53 190** P **P** **18 56 40.4 +2.2**
**TAU Tasmania Unive 36.53 190** P **P** **18 56 39.2 +1.0**
**TAU Tasmania Unive 36.53 190** P **P** **18 56 39.2 +1.0**
TAU pmax pmax
comp=Z,203nm,1.2s
**TAU Tasmania Unive 36.53 190** P **P** **18 56 39.8 +1.6**
TAU PcP **PcP** **18 59 02.8 +1.8**
TAU ScP **ScP** **19 02 47.0 +2.8**
**AUTAR Taroona High S 36.55 190** P **P** **18 56 41.6 +3.3**
**KATZ Kakaramea 36.56 153** P **P** **18 56 39.4 +0.7**
**HAZ Te Kaha 36.57 150** P **P** **18 56 40.2 +1.6**
**URZ Urewera 36.64 151** P **P** **18 56 41.3 +2.1**
**URZ Urewera 36.64 151** P **P** **18 56 39.8 +0.7**
comp=Z,64nm,1.1s,baz=308,slow=2.6,SNR=20
URZ ScP **ScP** **19 02 45.3 +0.6**
comp=Z,46nm,0.7s,baz=58,slow=2.1,SNR=13
URZ LR LR 19 10 55.7
comp=Z,4µm,18.1s,baz=48,slow=35
comp=Z,64nm,1.1s
**URZ Urewera 36.64 151** P **P** **18 56 39.9 +0.8**
URZ S **ScP** **19 02 44.9 +0.2**
**FWVZ Far West T-bar 36.73 154** P **P** **18 56 43.4 +3.1**
**TRVZ Turoa 36.77 154** P **P** **18 56 43.4 +2.9**
**MRHZ Matea Rd 36.77 153** P **P** **18 56 43.1 +2.7**
**PKGZ Pakihiroa 36.80 150** P **P** **18 56 41.8 +1.2**
**RTZ Ruatahuna 36.86 152** P **P** **18 56 40.6 -0.6**
**QRZ Quartz Range 36.86 159** P **P** **18 56 43.6 +2.5**
**QRZ Quartz Range 36.86 159** P **P** **18 56 41.1 +0.1**
**MWZ Matawai 36.90 151** P **P** **18 56 43.5 +2.1**
**MOVZ Moawhango 36.95 154** P **P** **18 56 44.1 +2.2**
**BKZ Black Stump Fm 37.08 153** P **P** **18 56 44.5 +1.5**
**BKZ Black Stump Fm 37.08 153** P **P** **18 56 43.0 0.0**
BKZ IAmb IAmb 18 56 58.4
comp=Z,83nm,0.9s
**BKZ Black Stump Fm 37.08 153** P **P** **18 56 43.7 +0.7**
**SNGZ Shannon Statio 37.16 152** P **P** **18 56 44.8 +1.1**
**NMHZ Naumai 37.16 152** P **P** **18 56 45.8 +2.0**
**TKNZ Takaka Hill 37.20 158** P **P** **18 56 43.8 -0.2**
**DSZ Denniston Nort 37.42 160** IAMs_20 IAMs_20 19 10 07.6
comp=Z,7µm,20.0s
**NNZ Nelson 37.52 158** P **P** **18 56 46.1 -0.5**
**MBWA Marble Bar 37.55 244** P **P** **18 56 47.0 -0.2**
**MBWA Marble Bar 37.55 244** P **P** **18 56 46.2 -1.0**
MBWA IAmb IAmb 18 56 48.8
comp=Z,80nm,0.8s
**MBWA Marble Bar 37.55 244** P **P** **18 56 46.8 -0.4**
MBWA PcP **PcP** **18 59 04.8 +0.2**
MBWA ScP **ScP** **19 02 49.1 +0.6**
**PSA00 Pilbara Seismi 37.57 244** P **P** **18 56 47.6 +0.2**
**PSA00 Pilbara Seismi 37.57 244** P **P** **18 56 46.6 -0.8**
**PSA00 Pilbara Seismi 37.57 244** P **P** **18 56 46.8 -0.6**
PSA00 IAmb IAmb 18 56 49.0
comp=Z,79nm,1.1s
**PLAI Plampang 37.65 265** P **P** **18 56 48.6 +0.5**
**PLAI Plampang 37.65 265** P **P** **18 56 48.3 +0.2**
comp=Z,201nm,0.8s,comp=Z,2µm
**THZ Tophouse 37.82 159** P **P** **18 56 48.7 -0.5**
**TCW Tory Channel 37.85 157** P **P** **18 56 49.5 +0.1**
**MRZ Mangatainoka R 37.91 155** P **P** **18 56 49.7 -0.2**
**TUWZ Tuamarina 37.91 158** P **P** **18 56 50.8 +0.9**
**SNZO South Karori 38.10 157** P **P** **18 56 52.8 +1.3**
**SNZO South Karori 38.10 157** P **P** **18 56 51.6 0.0**
**SNZO South Karori 38.10 157** P **P** **18 56 52.3 +0.8**
**BSWZ Blackbirch Sta 38.13 158** P **P** **18 56 52.1 +0.3**
**INZ Inchbonnie 38.18 161** P **P** **18 56 52.5 +0.3**
INZ IAMs_20 IAMs_20 19 12 02.7
comp=Z,8µm,18.0s
**BFZ Birch Farm 38.21 155** P **P** **18 56 53.1 +0.6**
**BFZ Birch Farm 38.21 155** P **P** **18 56 52.8 +0.3**
**BHW Baring Head 38.25 157** P **P** **18 56 53.0 +0.2**
**MSWZ Moikau Station 38.41 156** P **P** **18 56 53.7 -0.5**
**FOZ Fox Glacier 38.43 163** P **P** **18 56 53.9 -0.3**
FOZ IAmb IAmb 18 56 57.0
comp=Z,126nm,1.0s
**LTZ Lake Taylor 38.50 160** IAMs_20 IAMs_20 19 10 53.2
comp=Z,9µm,20.0s
**TWSI Taliwang, Sumb 38.53 265** P P 18 57 05.5 +10
**PLWZ Palliser 38.54 156** P **P** **18 56 54.0 -1.3**
**KHZ Kahutara 38.62 159** P **P** **18 56 55.9 +0.1**
**KHZ Kahutara 38.62 159** P **P** **18 56 55.3 -0.6**
KHZ IAMs_20 IAMs_20 19 11 45.3
comp=Z,6µm,18.0s
**JCZ Jackson Bay 38.65 165** P **P** **18 56 58.4 +2.2**
**OXZ Oxford 38.91 161** IAMs_20 IAMs_20 19 12 36.1
comp=Z,8µm,18.0s
**GVZ Greta Valley S 38.93 160** IAMs_20 IAMs_20 19 11 25.4
comp=Z,6µm,19.0s
**RPZ Rata Peaks 38.96 162** P **P** **18 57 00.2 +1.5**
**RPZ Rata Peaks 38.96 162** P **P** **18 56 57.8 -0.9**
RPZ IAMs_20 IAMs_20 19 10 50.2
comp=Z,6µm,21.0s
**RPZ Rata Peaks 38.96 162** P **P** **18 56 58.8 +0.1**
comp=Z,233nm,0.8s,baz=330,slow=1.6,SNR=86
RPZ LR LR 19 11 12.8
comp=Z,7µm,21.5s,baz=321,slow=33
comp=Z,233nm,0.8s
**MYLDM Lahad Datu 39.10 287** P **P** **18 57 00.5 +0.2**
**LBZ Lake Benmore 39.32 164** IAmb IAmb 18 57 04.9
comp=Z,130nm,1.0s
LBZ IAMs_20 IAMs_20 19 12 41.8
comp=Z,8µm,19.0s
**WKZ Wanaka 39.41 165** IAmb IAmb 18 57 05.0
comp=Z,83nm,1.0s
**MQZ McQueen's Vall 39.45 161** P **P** **18 57 03.1 +0.3**
MQZ IAMs_20 IAMs_20 19 13 03.4
comp=Z,6µm,18.0s
**DCZ Deep Cove 39.58 167** P **P** **18 57 03.6 -0.2**
DCZ IAmb IAmb 18 57 06.1
comp=Z,143nm,1.3s
DCZ IAMs_20 IAMs_20 19 10 14.6
comp=Z,6µm,21.0s
**MLZ Mavora Lakes 39.70 166** IAMs_20 IAMs_20 19 11 14.9
comp=Z,10µm,20.0s
**KMBL Kambalda 39.85 228** P **P** **18 57 07.3 +0.9**
**ODZ Otahua Downs 40.05 164** P **P** **18 57 07.7 -0.1**
ODZ IAmb IAmb 18 57 10.1
comp=Z,176nm,1.5s
ODZ IAMs_20 IAMs_20 19 13 23.2
comp=Z,6µm,18.0s
**WHZ Wether Hill Ro 40.16 167** P **P** **18 57 07.9 -0.8**
WHZ IAMs_20 IAMs_20 19 10 56.0
comp=Z,6µm,22.0s
**MEEK Meekatharra 40.34 237** P **P** **18 57 10.7 +0.2**
**MTKI Muara Teweh, K 41.18 277** P **P** **18 57 18.7 +1.1**
comp=Z,76nm,0.9s,comp=Z,2µm

**JAGI Jajag, Banyuwa 41.24 265** P **P** **18 57 17.8 -0.2**
**JAGI Jajag, Banyuwa 41.24 265** P **P** **18 57 16.6 -1.5**
JAGI IAmb IAmb 18 58 04.0
comp=Z,91nm,1.0s
**JAGI Jajag, Banyuwa 41.24 265** P **P** **18 57 19.2 +1.2**
comp=Z,86nm,0.8s,comp=Z,2µm
**KKM Kota Kinabalu 41.53 287** P **P** **18 57 20.4 -0.1**
**KKM Kota Kinabalu 41.53 287** P **P** **18 57 19.8 -0.8**
KKM IAmb IAmb 18 57 34.0
comp=Z,166nm,0.8s
**SGCP Gonzaga 41.66 307** *e*P **P** **18 57 21.7 +0.3**
SGCP eS S 18 58 11.0 -324
**JHJ Hachijo jima 2 42.69 340** LR LR 19 13 30.7
comp=Z,2µm,21.6s,baz=129,slow=34
**GIRL Giralia 42.87 244** P **P** **18 57 31.4 +0.3**
**JOW Kunigami 42.90 323** LR LR 19 14 10.8
comp=Z,2µm,21.0s,baz=137,slow=34
**KLBR Kellerberrin 43.06 230** P **P** **18 57 32.6 -0.1**
**MORW Morawa 43.37 235** P **P** **18 57 35.3 +0.1**
**MORW Morawa 43.37 235** P **P** **18 57 34.5 -0.7**
MORW IAmb IAmb 18 57 36.8
comp=Z,63nm,0.8s
MORW IAMs_20 IAMs_20 19 15 35.9
comp=Z,9µm,19.0s
**BLDU Ballidu 43.45 232** P **P** **18 57 35.8 0.0**
**PWJI Pagerwojo 43.57 266** P **P** **18 57 37.5 +0.5**
comp=Z,124nm,1.0s,comp=Z,2µm
**MIDW Midway 43.58 35** IAMs_20 IAMs_20 19 12 40.1
comp=Z,7µm,21.0s
**CTZ Chatham Island 43.87 151** P **P** **18 57 41.1 +2.1**
**CTZ Chatham Island 43.87 151** P **P** **18 57 39.5 +0.5**
CTZ IAmb IAmb 18 57 43.5
comp=Z,140nm,1.0s
**NWAO Narrogin (SRO) 44.06 229** P **P** **18 57 41.5 +0.8**
**NWAO Narrogin (SRO) 44.06 229** P **P** **18 57 41.2 +0.5**
**NWAO Narrogin (SRO) 44.06 229** P **P** **18 57 40.1 -0.6**
NWAO IAmb IAmb 18 57 42.4
comp=Z,254nm,1.6s
**NWAO Narrogin (SRO) 44.06 229** IAMs_20 IAMs_20 19 15 30.9
comp=Z,6µm,21.0s
**NWAO Narrogin (SRO) 44.06 229** ScP **ScP** **19 03 16.3 +2.5**
comp=Z,16nm,0.9s,baz=38,slow=9.0,SNR=3.0
NWAO LR LR 19 15 52.5
comp=Z,6µm,20.3s,baz=56,slow=36
**NWAO Narrogin (SRO) 44.06 229** P **P** **18 57 40.1 -0.6**
NWAO pmax pmax
comp=Z,254nm,1.6s
NWAO MLR MLR
comp=Z,6µm,21.0s
**NWAO Narrogin (SRO) 44.06 229** P **P** **18 57 41.6 +1.0**
NWAO pP **pP** **18 57 52.7 -0.2**
**MUN Mundaring 44.41 231** P **P** **18 57 44.3 +0.8**
**SBUM Sibum 44.45 281** P **P** **18 57 44.0 -0.1**
**STKI Sintang 44.72 277** P **P** **18 57 48.0 +1.8**
comp=Z,327nm,2.2s,comp=Z,4µm
**UGM Wanagama 44.84 266** P **P** **18 57 48.8 +1.6**
**UGM Wanagama 44.84 266** P **P** **18 57 47.2 0.0**
**UGM Wanagama 44.84 266** P P 18 58 03.2 +16
**SMRI Semarang 44.96 267** P **P** **18 57 48.9 +0.7**
**SMRI Semarang 44.96 267** P P 18 57 55.3 +7.1
**RKGY Rocky Gully 45.03 227** P **P** **18 57 50.4 +2.0**
**RAR Rarotonga 45.21 113** P **P** **18 57 52.3 +2.3**
**RAR Rarotonga 45.21 113** P **P** **18 57 50.2 +0.2**
**RAR Rarotonga 45.21 113** P **P** **18 57 51.2 +1.1**
comp=Z,116nm,0.8s,baz=249,slow=11,SNR=14
RAR LR LR 19 13 43.9
comp=Z,1µm,19.4s,baz=281,slow=32
comp=Z,116nm,0.8s
**RAR Rarotonga 45.21 113** P **P** **18 57 52.0 +1.9**
**YULB Yu-li 45.23 313** P **P** **18 57 51.5 +1.4**
**YULB Yu-li 45.23 313** P **P** **18 57 50.0 -0.2**
YULB IAmb IAmb 18 58 52.6
comp=Z,110nm,1.3s
**NACB Ninganchiao 45.50 314** P **P** **18 57 52.4 +0.2**
**NACB Ninganchiao 45.50 314** IAmb IAmb 18 57 57.5
comp=Z,98nm,1.1s
**JMN Monobe 45.51 334** P **P** **18 57 54.3 +2.1**
**TPUB Ta-pu 45.67 312** P **P** **18 57 54.1 +0.5**
**TPUB Ta-pu 45.67 312** IAmb IAmb 18 58 06.4
comp=Z,75nm,0.8s
**INU Inuyama 45.67 338** P **P** **18 57 55.3 +1.9**
**SSLB Suanglung 45.72 313** P **P** **18 57 54.0 0.0**
**SSLB Suanglung 45.72 313** P **P** **18 57 53.3 -0.7**
**JGF Kuroka 45.78 339** P **P** **18 57 57.0 +2.7**
**JGF Kuroka 45.78 339** P **P** **18 57 52.8 -1.5**
JGF IAmb IAmb 18 58 10.9
comp=Z,53nm,1.0s
**YHNB Yeheng 45.97 314** P **P** **18 57 56.3 +0.3**
**YHNB Yeheng 45.97 314** IAmb IAmb 18 58 15.7
comp=Z,82nm,1.0s
**KSM Kuching 46.12 279** P **P** **18 57 58.0 +0.7**
**MJAR Matsushiro Arr 46.33 340** P **P** **18 57 57.5 -1.1**
comp=Z,35nm,0.8s,baz=168,slow=7.8,SNR=54
MJAR PcP **PcP** **18 59 32.4 -0.9**
comp=Z,9.7nm,0.7s,baz=155,slow=4.2,SNR=3.1
MJAR PP **PP** **18 59 46.6 -1.6**
comp=Z,15nm,0.8s,baz=156,slow=3.5,SNR=4.4
MJAR ScP **ScP** **19 03 23.9 +0.9**
comp=Z,14nm,0.9s,baz=161,slow=4.4,SNR=14
comp=Z,35nm,0.8s
**MAJO Mashiro 46.34 340** P **P** **18 57 58.0 -0.6**
**MAJO Matsushiro 46.34 340** P **P** **18 57 57.8 -0.8**
MAJO IAmb IAmb 18 58 01.8
comp=Z,60nm,0.6s
**MAJO Matsushiro 46.34 340** *e*P **P** **18 57 57.7 -0.9**
MAJO pmax pmax
comp=Z,44nm,0.6s
**MJB9 Matsu-Tunnel 46.34 340** IAmb IAmb 18 58 03.2
comp=Z,59nm,0.6s
**JNU Nakatsue 46.38 331** P **P** **18 57 59.8 +0.8**
**JNU Nakatsue 46.38 331** LR LR 19 16 29.6
comp=Z,636nm,18.4s,baz=137,slow=35
**KPJI Karang Pucung 46.44 267** P P 18 58 04.8 +5.0
comp=Z,170nm,0.7s,comp=Z,2µm
**JMM Marumori 46.77 344** P **P** **18 58 03.9 +2.0**
**JMM Marumori 46.77 344** P **P** **18 58 01.1 -0.8**
JMM IAmb IAmb 18 58 32.6
comp=Z,122nm,1.3s
**CMJI Cimerak 46.90 266** P P 18 58 08.8 +5.4
comp=Z,145nm,1.1s
**MCQ Macquarie Isla 47.43 177** P **P** **18 58 09.2 +2.3**
**MCQ Macquarie Isla 47.43 177** P **P** **18 58 05.7 -1.2**
**MCQ Macquarie Isla 47.43 177** P **P** **18 58 05.7 -1.2**
MCQ pmax pmax
comp=Z,408nm,1.3s
**JSD Sado 47.68 341** P **P** **18 58 11.9 +2.9**
**JSD Sado 47.68 341** IAmb IAmb 18 58 14.0
comp=Z,92nm,1.4s
**BBJI Bungbulang 47.71 266** P **P** **18 58 09.6 -0.2**
**QZH Quanzhou 48.14 313** *i*P **P** **18 58 13.8 +1.0**
QZH S **S** **19 05 08.9 +0.2**
QZH sS **sS** **19 05 28.6 -1.2**
QZH pmax pmax
comp=Z,95nm,1.2s
QZH LR LR
comp=Z,2µm,22.7s
QZH LR LR
comp=Z,2µm,24.0s
QZH LR LR
comp=Z,3µm,22.3s
**CNJI Cibinong 48.23 266** P **P** **18 58 13.8 +0.1**
comp=Z,272nm,1.0s,comp=Z,2µm
**DBJI Dramaga 48.65 267** P **P** **18 58 20.8 +3.8**
comp=Z,140nm,1.0s
**SKJI Sukabumi 48.81 267** P **P** **18 58 19.6 +1.3**
**JTM Tenmabayashi 49.43 345** P **P** **18 58 23.8 +1.3**
**PPBI Pangkal Pinang 49.67 273** P **P** **18 58 25.9 +1.1**
comp=Z,94nm,1.5s,comp=Z,2µm
**ERM Erimo 50.12 348** *i*P **P** **18 58 28.2 +0.5**
ERM pmax pmax
comp=Z,65nm,1.0s
**TJN Taejon 50.71 330** P **P** **18 58 33.4 +1.2**
**TJN Taejon 50.71 330** *ce*P **P** **18 58 34.6 +2.4**
**KASI Kota Agung 50.95 269** P **P** **18 58 35.8 +1.3**
comp=Z,154nm,1.2s
**KSRS Korea Array 51.30 332** P **P** **18 58 36.9 +0.3**
comp=Z,12nm,0.7s,baz=150,slow=7.0,SNR=49
KSRS PcP **PcP** **18 59 51.5 +0.3**
comp=Z,10.0nm,0.7s,baz=141,slow=4.4,SNR=10
KSRS ScP **ScP** **19 03 44.5 +0.4**
comp=Z,7.0nm,0.9s,baz=139,slow=5.2,SNR=8.6
KSRS LR LR 19 21 02.9
comp=Z,726nm,18.4s,baz=140,slow=37
comp=Z,12nm,0.7s
**KSAR Wonju Array Be 51.31 332** P **P** **18 58 36.0 -0.7**

**KSAR Wonju Array Be 51.31 332** P **P** **18 58 36.0 -0.7**
**KS19 Wonju Array Si 51.36 332** IAmb IAmb 18 58 59.7
comp=Z,120nm,1.6s
**LWLI Liwa 51.43 269** P **P** **18 58 38.5 +0.3**
comp=Z,207nm,0.8s
**YUK Yuzh-Kuril'sk 51.58 351** *e*P **P** **18 58 40.3 +1.7**
YUK *i* S **S** **19 05 52.0 -4.1**
YUK pmax pmax
comp=Z,325nm,1.1s
**TPRI Tanjung Pinang 51.71 277** P **P** **18 58 40.8 +0.6**
comp=Z,115nm,1.5s,comp=Z,3µm
**INCN Inchon 51.94 331** P **P** **18 58 42.7 +1.2**
**INCN Inchon 51.94 331** P **P** **18 58 41.6 +0.1**
**INCN Inchon 51.94 331** P **P** **18 58 41.6 +0.1**
INCN pmax pmax
comp=Z,175nm,1.3s
**INCN Inchon 51.94 331** P **P** **18 58 43.3 +1.8**
INCN pP **pP** **18 58 54.2 -0.1**
INCN PcP **PcP** **18 59 55.0 +1.4**
**QIZ Qiongzhong 52.11 301** P **P** **18 58 44.7 +1.6**
**QIZ Qiongzhong 52.11 301** P **P** **18 58 44.3 +1.3**
QIZ S **S** **19 06 05.3 +1.0**
QIZ sS **sS** **19 06 25.1 -0.5**
QIZ ScS **ScS** **19 08 30.1 +0.3**
QIZ pmax pmax
comp=Z,95nm,1.1s
QIZ pmax pmax
comp=Z,510nm,6.9s
QIZ LR LR
comp=Z,880nm,25.9s
QIZ LR LR
comp=Z,1µm,27.3s
QIZ LR LR
comp=Z,3µm,26.7s
**QIZ Qiongzhong 52.11 301** IAmb IAmb 18 58 46.1
comp=Z,117nm,1.1s
**QIZ Qiongzhong 52.11 301** P **P** **18 58 44.4 +1.3**
QIZ pP **pP** **18 58 55.7 -0.1**
QIZ PcP **PcP** **18 59 56.0 +1.4**
**ASAJ Asahikawa 52.25 348** LR LR 19 18 21.1
comp=Z,3µm,21.6s,baz=172,slow=33
**NJ2 Nanjing 52.40 320** *e*P **P** **18 58 46.8 +1.8**
NJ2 pP **pP** **18 58 58.3 +0.6**
NJ2 PcP **PcP** **18 59 56.8 +1.4**
NJ2 pmax pmax
comp=Z,19nm,0.7s
NJ2 pmax pmax
comp=Z,1µm,4.5s
NJ2 LR LR
comp=Z,2µm,20.4s
NJ2 LR LR
comp=Z,2µm,17.1s
NJ2 LR LR
comp=Z,2µm,18.5s
**BTDF Bukit Timah Da 52.53 277** P **P** **18 58 46.4 +0.1**
**CNSH ChangSha 54.14 312** P **P** **18 58 58.0 +0.2**
CNSH pmax pmax
comp=Z,38nm,1.3s
**PPT Papeete 54.27 107** P **P** **18 59 00.1 +1.1**
comp=Z,167nm,0.8s,baz=260,slow=11,SNR=10.0
PPT LR LR 19 17 20.5
comp=Z,1µm,21.7s,baz=273,slow=31
comp=Z,167nm,0.8s
**PPT2 Papeete2 54.27 107** *e*P **P** **18 58 54.8 -4.3**
comp=Z,734nm,26.5s
**PPT2 Papeete2 54.27 107** *e*PP **PP** **19 00 59.2 -2.2**
comp=Z,176nm,25.8s
PPT2 *e*S **S** **19 06 36.2 +2.2**
comp=Z,1µm,26.0s
PPT2 *e*SS **SS** **19 10 21.5 +4.9**
comp=Z,560nm,25.2s
PPT2 *e*LQ LQ 19 12 25.0
comp=Z,3µm,25.0s
PPT2 *e*LR LR 19 14 46.7
comp=Z,2µm,22.5s
PPT2 *e*LR LR 19 14 48.8
comp=Z,2µm,29.2s
**PPTF Pamatai, Papee 54.28 107** P **P** **18 59 01.0 +1.8**
**PPTF Pamatai, Papee 54.28 107** P **P** **18 59 01.8 +2.6**
**WHN Wuhan 54.47 315** P **P** **18 59 01.1 +0.9**
WHN pP **pP** **18 59 13.0 0.0**
**UBPT Khong Chiam 54.52 294** P **P** **18 59 01.2 +0.4**
**UBPT Khong Chiam 54.52 294** P **P** **18 58 59.5 -1.3**
UBPT IAmb IAmb 18 59 03.3
comp=Z,98nm,1.0s
**TEY Ternei 54.58 343** *e*P **P** **18 59 01.1 +0.4**
**YSS Yuzh-Sakhalins 54.94 349** P **P** **18 59 04.8 +1.5**
**YSS Yuzh-Sakhalins 54.94 349** P **P** **18 59 03.4 +0.1**
**YSS Yuzh-Sakhalins 54.94 349** *e*P **P** **18 59 04.3 +1.0**
YSS *e**PP **pP** **18 59 16.4 +0.2**
YSS *e**SP **sP** **18 59 20.3 -1.1**
YSS *e* 19 01 06.6
YSS *e*S **S** **19 06 42.7 +1.0**
YSS *e*SS **SS** **19 10 32.0 +5.9**
YSS pmax pmax
comp=Z,230nm,0.8s
YSS pmax pmax
comp=Z,300nm,3.0s
YSS MLR MLR
comp=Z,2µm,20.0s
YSS MLR MLR
comp=N,1µm,18.0s
YSS MLR MLR
comp=E,1µm,17.0s
**YSS Yuzh-Sakhalins 54.94 349** P **P** **18 59 04.0 +0.7**
YSS pP **pP** **18 59 16.0 -0.2**
YSS ScP **ScP** **19 04 02.9 +3.2**
**TBI Tubuai 54.98 114** *e*P **P** **18 59 04.5 +0.4**
comp=E,3µm,28.8s
**TBI Tubuai 54.98 114** *e*PP **PP** **19 01 03.2 -4.4**
comp=E,884nm,28.2s
TBI *e*S **S** **19 06 44.3 +1.1**
comp=E,5µm,30.5s
TBI *e*LQ LQ 19 12 45.1
comp=E,12µm,37.2s
TBI *e*LR LR 19 15 06.2
comp=E,8µm,31.2s
TBI *e*LR LR 19 15 06.9
comp=E,34µm,28.5s
**BKNI Bangkinang 55.06 275** P **P** **18 59 04.9 +0.1**
**BKNI Bangkinang 55.06 275** P **P** **18 59 06.1 +1.3**
comp=E,146nm,0.7s,comp=E,2µm
**USA0B Ussuriysk Arra 55.30 339** IAmb IAmb 18 59 11.7
comp=Z,94nm,1.1s
**USA0B Ussuriysk Arra 55.30 339** *i*P **P** **18 59 05.5 -0.4**
**USRK Ussuriysk Ar. 55.30 339** P **P** **18 59 05.4 -0.5**
**USRK Ussuriysk Ar. 55.30 339** P **P** **18 59 05.8 -0.1**
comp=Z,38nm,0.7s,baz=156,slow=7.4,SNR=41
USRK ScP **ScP** **19 04 03.1 +1.7**
comp=Z,5.7nm,0.8s,baz=184,slow=3.5,SNR=5.9
USRK S **S** **19 06 45.2 -1.4**
comp=Z,0.5nm,0.6s,baz=199,slow=34,SNR=1.3
comp=Z,38nm,0.7s
**PDSI Padang 55.46 274** P **P** **18 59 07.6 -0.1**
comp=Z,75nm,0.8s,comp=Z,2µm
**DL2 Dalian 55.57 328** P **P** **18 59 08.4 +0.4**
DL2 pP **pP** **18 59 22.8 +1.9**
DL2 S **S** **19 06 49.6 -0.8**
DL2 pmax pmax
comp=Z,65nm,0.8s
DL2 pmax pmax
comp=Z,960nm,4.2s
DL2 LR LR
comp=Z,2µm,24.6s
DL2 LR LR
comp=Z,2µm,22.7s
DL2 LR LR
comp=Z,4µm,24.7s
**IPM Ipoh 55.80 280** P **P** **18 59 09.8 -0.4**
**TIA Tai'an 56.23 323** P **P** **18 59 12.4 -0.4**
TIA pmax pmax
comp=Z,18nm,1.1s
TIA pmax pmax
comp=Z,610nm,4.3s
TIA LR LR
comp=Z,720nm,23.5s
TIA LR LR
comp=Z,1µm,25.0s
TIA LR LR
comp=Z,1µm,17.7s
**MDJ Mudanjiang 56.53 338** P **P** **18 59 15.8 +1.1**
**MDJ Mudanjiang 56.53 338** P **P** **18 59 15.1 +0.4**
MDJ pP pP 18 59 28.0 +0.4
MDJ S **S** **19 07 03.8 +0.8**
MDJ pmax pmax
comp=Z,60nm,1.2s

MDJ pmax pmax
comp=Z,650nm,6.1s
MDJ LR LR
comp=Z,960nm,23.3s
MDJ LR LR
comp=Z,730nm,18.6s
MDJ LR LR
comp=Z,2µm,23.2s
**MDJ Mudanjiang 56.53 338** IAmb IAmb 18 59 29.3
comp=Z,92nm,1.3s
**MDJ Mudanjiang 56.53 338** P **P** **18 59 15.8 +1.1**
MDJ pP **pP** **18 59 27.7 +0.1**
MDJ ScP **ScP** **19 04 08.6 +1.8**
**SKR Severo-Kuril's 57.45 0** *e*P P 18 59 28.8 +7.7
SKR *e*S **S** **19 07 15.6 +0.8**
SKR pmax pmax
comp=Z,400nm,6.2s
SKR MLR MLR
comp=Z,700nm,17.0s
**CN2 Changchun 57.52 334** *e*P **P** **18 59 22.5 +0.8**
CN2 *e*S **S** **19 07 17.6 +1.5**
CN2 pmax pmax
comp=Z,20nm,1.2s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=Z,1µm,13.0s
CN2 LR LR
comp=Z,1µm,13.0s
CN2 LR LR
comp=Z,1µm,13.1s
**RPSI Rantau Prapat 57.53 278** IAmb IAmb 18 59 35.6
comp=Z,79nm,1.3s
**PSI Prapat 57.55 278** P **P** **18 59 24.4 +1.7**
**ENH Enshi 57.80 312** P **P** **18 59 24.1 0.0**
**ENH Enshi 57.80 312** IAmb IAmb 18 59 37.2
comp=Z,62nm,1.0s
**ENH Enshi 57.80 312** P **P** **18 59 24.0 0.0**
ENH pP **pP** **18 59 35.3 -1.7**
ENH PcP **PcP** **19 00 16.5 +0.2**
ENH ScP **ScP** **19 04 13.1 +0.2**
**GYA Guiyang 58.06 307** P **P** **18 59 26.8 +0.8**
GYA pP pP 18 59 39.3 +0.3
GYA S **S** **19 07 23.8 -0.2**
GYA pmax pmax
comp=Z,16nm,1.2s
GYA pmax pmax
comp=Z,570nm,5.2s
GYA LR LR
comp=Z,1µm,24.3s
GYA LR LR
comp=Z,2µm,15.9s
GYA LR LR
comp=Z,2µm,22.4s
**SRIT Nakonsritamara 58.08 285** P **P** **18 59 26.7 +0.5**
**LYN LuoYang 58.12 318** *e*P **P** **18 59 26.1 -0.1**
LYN PP **PP** **19 01 39.5 +4.1**
LYN S **S** **19 07 23.3 -1.0**
LYN pmax pmax
comp=Z,57nm,1.2s
LYN pmax pmax
comp=Z,910nm,4.3s
LYN LR LR
comp=Z,2µm,18.9s
LYN LR LR
comp=Z,1µm,18.2s
LYN LR LR
comp=Z,3µm,19.2s
**SLVN Son La 58.14 300** IAmb IAmb 18 59 41.6
comp=Z,83nm,1.2s
**SURA Surathani 58.19 285** P **P** **18 59 27.0 0.0**
**BNX BinXian 58.31 337** ⇑P **P** **18 59 27.9 +0.7**
BNX pP **pP** **18 59 40.3 +0.1**
BNX pmax pmax
comp=Z,83nm,1.3s
**HNS HongShan 58.47 322** ⇑P **P** **18 59 29.3 +0.8**
HNS S **S** **19 07 27.1 -1.6**
HNS pmax pmax
comp=Z,54nm,1.5s
HNS LR LR
comp=Z,1µm,20.7s
HNS LR LR
comp=Z,2µm,21.6s
**GSI Gunungsitoli 58.63 276** P **P** **18 59 27.3 -2.8**
**GSI Gunungsitoli 58.63 276** P **P** **18 59 29.3 -0.9**
comp=Z,144nm,1.2s
**TYV Tymovskoe 58.73 350** *e*P **P** **18 59 31.4 +1.3**
TYV *e*S **S** **19 07 35.0 +3.4**
TYV pmax pmax
comp=Z,200nm,3.7s
TYV pmax pmax
comp=Z,63nm,0.9s
TYV smax smax
comp=N,400nm,5.4s
TYV smax smax
comp=E,300nm,5.4s
**BJT Baijiatuau 59.34 325** P **P** **18 59 38.0 +3.5**
**BJI Beijing 59.35 325** P **P** **18 59 35.6 +1.0**
BJI PcP **PcP** **19 00 23.6 +1.4**
BJI pmax pmax
comp=E,10.0nm,1.3s
BJI LR LR
comp=E,560nm,20.3s
BJI LR LR
comp=E,500nm,18.3s
BJI LR LR
comp=E,800nm,18.8s
**KLR Kul'dur 59.80 342** LR LR 19 24 22.8
comp=E,1µm,21.2s,baz=155,slow=35
**KLR Kul'dur 59.80 342***ce*P **P** **18 59 38.5 +1.0**
KLR pmax pmax
comp=Z,107nm,1.3s
**PET Petropavlovsk 59.84 2** P **P** **18 59 39.2 +1.6**
**PET Petropavlovsk 59.84 2** P **P** **18 59 37.4 -0.3**
PET IAmb IAmb 18 59 41.2
comp=Z,47nm,0.8s
**PET Petropavlovsk 59.84 2***ce*P **P** **18 59 39.5 +1.8**
PET pmax pmax
comp=Z,91nm,1.3s
**PET Petropavlovsk 59.84 2** P **P** **18 59 38.1 +0.4**
comp=Z,68nm,1.4s,comp=Z,1µm
**PET Petropavlovsk 59.84 2** P **P** **18 59 39.3 +1.6**
PET PcP **PcP** **19 00 24.4 +0.5**
PET ScP **ScP** **19 04 23.3 +2.1**
**PEA0B Petropavlovsk- 59.90 1** P **P** **18 59 38.5 +0.3**
**PEA0B Petropavlovsk- 59.90 1***ce*P **P** **18 59 39.9 +1.8**
**PETK Petropavlovsk- 59.90 1** P **P** **18 59 38.0 -0.1**
**PETK Petropavlovsk- 59.90 1** P **P** **18 59 38.3 +0.2**
comp=Z,24nm,0.6s,baz=167,slow=5.7,SNR=43
PETK ScP **ScP** **19 04 21.8 +0.2**
comp=Z,11nm,0.9s,baz=178,slow=4.3,SNR=5.3
PETK LR LR 19 21 44.2
comp=Z,2µm,21.4s,baz=177,slow=32
PETK PKP2bc **P'P'bc** **19 29 12.2 +0.1**
comp=Z,7.0nm,1.0s,baz=54,slow=7.7,SNR=7.4
comp=Z,24nm,0.6s
**PETK Petropavlovsk- 59.90 1** P **P** **18 59 38.0 -0.1**
**GRNR Gornyy 59.92 346** ⇓*i*P **P** **18 59 39.4 +1.1**
GRNR pmax pmax
comp=Z,40nm,1.1s
GRNR MLR MLR
comp=E,680nm,22.0s
**SRDT SRDT 60.05 291** P **P** **18 59 40.7 +0.9**
**TIY Taiyuan 60.07 321** *e*P **P** **18 59 42.3 +2.6**
TIY LR LR
comp=E,770nm,24.0s
TIY LR LR
comp=E,910nm,22.0s
TIY LR LR
comp=E,1µm,23.4s
**XAN Xi'an 60.23 316** ⇑P **P** **18 59 40.0 -0.9**
XAN pP pP 18 59 51.5 -2.4
XAN ScP **ScP** **19 04 23.4 -0.2**
XAN S **S** **19 07 52.6 +0.8**
XAN pmax pmax
comp=E,40nm,1.0s
XAN pmax pmax
comp=E,950nm,7.3s
XAN LR LR
comp=E,1µm,19.8s
XAN LR LR
comp=E,2µm,24.1s
XAN LR LR
comp=E,3µm,23.1s
**XAN Xi'an 60.23 316** P **P** **18 59 40.2 -0.6**
XAN pP **pP** **18 59 51.5 -2.4**
XAN ScP **ScP** **19 04 23.5 -0.2**
**MLSI Meulaboh, Aceh 60.28 279** P **P** **18 59 42.0 +0.5**
comp=E,116nm,0.7s
**PHRA Phrae 60.33 296** P **P** **18 59 41.9 +0.1**
**DRV Dumont d'Urvil 60.55 187** P **P** **18 59 42.7 +0.3**
DRV sP **sP** **18 59 58.8 -1.4**
DRV PcP **PcP** **19 00 28.1 +1.6**
**KMI Kunming 60.64 304** ⇑P **P** **18 59 45.8 +1.7**
KMI pP pP 18 59 57.9 +0.8
KMI sP sP 19 00 03.3 +1.0
KMI pmax pmax
comp=E,39nm,1.3s
KMI pmax pmax
comp=E,380nm,6.8s
KMI LR LR
comp=E,890nm,19.7s
KMI LR LR
comp=E,2µm,23.4s
KMI LR LR
comp=E,2µm,23.7s
**CMAR Chiang Mai Arr 61.47 295** P **P** **18 59 49.6 +0.1**
**CMAR Chiang Mai Arr 61.47 295** P **P** **18 59 49.3 -0.2**
comp=E,86nm,0.9s,baz=114,slow=4.9,SNR=166
CMAR S **S** **19 08 04.1 -3.8**
comp=E,0.3nm,0.4s,baz=211,slow=16,SNR=1.1
CMAR LR LR 19 24 18.7
comp=E,404nm,21.7s,baz=105,slow=34
CMAR PKP2bc **P'P'bc** **19 29 10.7 -1.5**
comp=E,2.5nm,0.9s,baz=293,slow=4.9,SNR=8.7
comp=E,86nm,0.9s
**CMAR Chiang Mai Arr 61.47 295** *i*P **P** **18 59 50.2 +0.7**
CMAR pmax pmax
comp=Z,91nm,0.9s
**SHEM Shemya Is, Ala 61.52 13** LR LR 19 22 19.3
comp=Z,4µm,21.8s,baz=184,slow=32
**PZH PanZhiHua 62.03 305** P **P** **18 59 55.4 +2.1**
PZH S **S** **19 08 13.4 -1.7**
PZH SS **SS** **19 12 19.3 +0.7**
PZH pmax pmax
comp=Z,30nm,0.7s
PZH pmax pmax
comp=Z,350nm,5.1s
PZH LR LR
comp=Z,1µm,20.6s
PZH LR LR
comp=Z,1µm,21.5s
PZH LR LR
comp=Z,2µm,26.0s
**XLT XiLinHaoTe 62.05 329** *e*P **P** **18 59 53.6 +0.5**
XLT sP sP 19 00 15.3 +4.0
XLT PcP **PcP** **19 00 31.8 -1.3**
XLT pmax pmax
comp=Z,84nm,0.7s
XLT pmax pmax
comp=Z,330nm,4.1s
XLT LR LR
comp=Z,2µm,18.4s
XLT LR LR
comp=Z,3µm,25.3s
**HEH HeiHe 62.09 340** *e*P **P** **18 59 52.8 -0.3**
HEH pmax pmax
comp=Z,66nm,0.7s
HEH pmax pmax
comp=Z,910nm,5.6s
HEH LR LR
comp=Z,1µm,24.0s
HEH LR LR
comp=Z,1µm,23.1s
HEH LR LR
comp=Z,2µm,24.1s
**CD2 Chengdu 62.39 310** P **P** **18 59 55.3 -0.2**
CD2 sP pP 19 00 08.6 0.0
CD2 S **S** **19 08 15.8 -3.5**
CD2 sS sS 19 08 38.1 -3.1
CD2 SS **SS** **19 12 23.3 -0.6**
CD2 pmax pmax
comp=Z,110nm,0.5s
CD2 pmax pmax
comp=Z,600nm,5.9s
CD2 LR LR
comp=Z,2µm,20.4s
CD2 LR LR
comp=Z,2µm,21.4s
CD2 LR LR
comp=Z,2µm,23.5s
**HHC Hu-ho-hao-te 62.54 323** *e*P **P** **19 00 00.8 +4.4**
HHC pP pP 19 00 12.1 +2.6
HHC pmax pmax
comp=Z,23nm,0.6s
HHC pmax pmax
comp=Z,470nm,5.0s
HHC LR LR
comp=Z,1µm,19.1s
HHC LR LR
comp=Z,770nm,19.9s
HHC LR LR
comp=Z,2µm,20.6s
**BTO Baotou 63.32 322** *e*P **P** **19 00 03.6 +2.0**
BTO pP **pP** **19 00 15.3 +0.6**
BTO S **S** **19 08 32.8 +2.1**
BTO pmax pmax
comp=Z,35nm,0.6s
BTO pmax pmax
comp=Z,560nm,3.9s
BTO LR LR
comp=Z,480nm,10.6s
BTO LR LR
comp=Z,2µm,10.9s
BTO LR LR
comp=Z,2µm,20.1s
**TAOE Nuku Hiva Isla 63.45 96** P **P** **19 00 05.2 +2.3**
**TAOE Nuku Hiva Isla 63.45 96** *e*P **P** **18 59 58.6 -4.3**
comp=Z,505nm,26.7s
**TAOE Nuku Hiva Isla 63.45 96** *e*PP **PP** **19 02 24.4 +1.5**
comp=Z,129nm,27.7s
TAOE *e*S **S** **19 08 29.6 -3.6**
comp=Z,312nm,28.8s
TAOE *e*SS **SS** **19 12 38.6 -2.3**
comp=Z,386nm,29.2s
TAOE *e*LQ LQ 19 16 09.9
comp=Z,2µm,28.8s
TAOE *e*LR LR 19 18 51.0
comp=Z,2µm,22.5s
**TAOE Nuku Hiva Isla 63.45 96** P **P** **19 00 02.9 -0.1**
TAOE IAmb IAmb 19 00 06.5
comp=Z,55nm,0.7s
**TAOE Nuku Hiva Isla 63.45 96** P **P** **19 00 04.0 +1.0**
TAOE pP **pP** **19 00 15.3 -0.6**
TAOE sP **sP** **19 00 20.0 -1.1**
TAOE PcP **PcP** **19 00 40.5 +1.0**
**TNCH TengChong 64.12 302** ⇑*i*P **P** **19 00 08.4 +1.1**
TNCH pP pP 19 00 19.8 -0.6
TNCH sP sP 19 00 23.0 -2.6
TNCH PP **PP** **19 02 34.5 +5.6**
TNCH S **S** **19 08 40.9 -0.5**
TNCH sS pS 19 08 56.6 -0.5
TNCH SS **SS** **19 12 46.8 -4.6**
TNCH pmax pmax
comp=Z,54nm,1.0s
TNCH pmax pmax
comp=Z,340nm,5.1s
TNCH LR LR
comp=Z,460nm,21.7s
TNCH LR LR
comp=Z,570nm,19.4s
TNCH LR LR
comp=Z,750nm,23.4s
**HIA Hailar 64.25 335** P **P** **19 00 08.6 +1.2**
**HIA Hailar 64.25 335** IAmb IAmb 19 00 09.9
comp=Z,78nm,1.2s
**HIA Hailar 64.25 335** *i*P **P** **19 00 07.9 +0.5**
HIA pmax pmax
comp=Z,57nm,1.0s
**HIA Hailar 64.25 335** P **P** **19 00 08.7 +1.2**
HIA pP **pP** **19 00 20.1 -0.4**
HIA sP **sP** **19 00 25.1 -0.7**
**LZH Lanzhou 64.85 315** *e*P **P** **19 00 13.0 +1.2**
LZH pP pP 19 00 25.0 +0.1
LZH sP sP 19 00 31.9 +1.8
LZH pmax pmax
comp=Z,60nm,1.1s
LZH LR LR
comp=Z,880nm,19.2s
LZH LR LR
comp=Z,1µm,20.6s
LZH LR LR
comp=Z,2µm,18.2s
**ZEA Zeya 65.11 342** *e*P **P** **19 00 13.6 +0.7**
ZEA pmax pmax
comp=Z,300nm,2.2s
ZEA pmax pmax
comp=N,100nm,0.9s
ZEA pmax pmax
comp=E,30nm,0.8s
ZEA pmax pmax
comp=Z,140nm,0.8s
**CLES Cleveland East 66.35 22** IAMs_20 IAMs_20 19 23 59.0
comp=Z,4µm,22.0s
**MA2 Magadan 66.48 357** P **P** **19 00 22.2 +0.6**
**MA2 Magadan 66.48 357** P **P** **19 00 21.1 -0.5**
MA2 IAmb IAmb 19 00 37.5
comp=Z,72nm,1.0s
**MA2 Magadan 66.48 357** LR LR 19 26 31.6
comp=Z,1µm,21.7s,baz=185,slow=33
**MA2 Magadan 66.48 357***ce*P **P** **19 00 22.4 +0.8**
MA2 pmax pmax
comp=Z,43nm,0.7s
**MA2 Magadan 66.48 357** P **P** **19 00 21.4 -0.2**
comp=Z,90nm,1.2s,comp=Z,1µm
**MA2 Magadan 66.48 357** P **P** **19 00 22.8 +1.2**
MA2 pP **pP** **19 00 34.5 -0.3**
**CASY Casey 66.82 198** P **P** **19 00 22.4 -1.3**
**CASY Casey 66.82 198** IAMs_20 IAMs_20 19 26 37.2
comp=Z,3µm,19.0s
**CASY Casey 66.82 198** P **P** **19 00 23.3 -0.4**
CASY pP **pP** **19 00 35.5 -1.4**
**NIKH Nikolski High 66.86 22** P **P** **19 00 24.5 +0.4**
baz=219
**IMP Imphal 67.94 300** *e*P **P** **19 00 29.8 -1.9**
IMP IAmb IAmb 19 00 33.7
comp=Z,68nm,1.2s
**KOHI KOHIMA 68.10 301** *e*P **P** **19 00 31.6 -1.1**
KOHI IAmb IAmb 19 00 34.7
comp=Z,85nm,1.0s
**RKT Rikitea 68.24 112** *e*P P 19 00 27.0 -6.5
comp=Z,2µm,28.2s
**RKT Rikitea 68.24 112** *e*PP **PP** **19 02 59.6 -5.0**
comp=Z,2µm,35.2s
RKT *e*S **S** **19 09 28.2 -3.0**
RKT comp=Z,2µm,28.0s *e*SS **SS** **19 14 00.6 +5.7**
RKT comp=Z,3µm,31.8s *e*LQ LQ 19 18 08.9
RKT comp=Z,2µm,28.5s *e*LR LR 19 21 14.1
comp=Z,26µm,28.8s
**UNV Unalaska Valle 68.43 23** P **P** **19 00 34.6 +0.6**
baz=221
**LVA Lava Point 68.85 23** IAMs_20 IAMs_20 19 24 58.8
comp=Z,3µm,21.0s
**ZIRO ZIRO 68.93 303** *e*P **P** **19 00 37.1 -0.9**
ZIRO IAmb IAmb 19 00 55.1
comp=Z,73nm,1.1s
**CIT Chita 68.95 334** *e*P **P** **19 00 37.2 -0.2**
CIT *e* 19 00 50.8
CIT *e* 19 01 00.0
CIT *e*S **SKiKP** **19 10 30.6 +5.5**
CIT pmax pmax
comp=Z,162nm,1.7s
**GTA Gaotai 69.26 317** P **P** **19 00 40.1 +0.4**
GTA pP pP 19 00 52.3 -0.6
GTA S **S** **19 09 44.4 +1.5**
GTA sS pS 19 10 01.5 +2.4
GTA pmax pmax
comp=Z,26nm,1.3s
GTA LR LR
comp=Z,800nm,21.8s
GTA LR LR
comp=Z,740nm,22.5s
GTA LR LR
comp=Z,2µm,22.2s
**ULN Ulaanbaatar 69.41 327** P **P** **19 00 40.5 0.0**
**ULN Ulaanbaatar 69.41 327** *i*P **P** **19 00 40.8 +0.3**
ULN pmax pmax
comp=Z,75nm,1.2s
**ULN Ulaanbaatar 69.41 327** P **P** **19 00 41.1 +0.6**
ULN pP **pP** **19 00 52.5 -1.2**
ULN PcP **PcP** **19 01 04.2 +0.6**
**SPIA Saint Paul Isl 69.72 19** P **P** **19 00 42.2 +0.3**
baz=216
**SONM Songino Array 69.75 327** P **P** **19 00 41.9 -0.6**
SONM IAmb IAmb 19 00 45.3
comp=Z,100nm,1.2s
**SONM Songino Array 69.75 327** P **P** **19 00 43.0 +0.5**
comp=Z,42nm,0.8s,baz=139,slow=5.3,SNR=110
SONM PKP2bc **P'P'df** **19 28 47.4 -0.1**
comp=Z,7.3nm,1.1s,baz=273,slow=3.1,SNR=15
SONM LR LR 19 31 34.2
comp=Z,796nm,20.2s,baz=133,slow=36
comp=Z,42nm,0.8s
**SEY Seymchan 69.78 358***ce*P **P** **19 00 43.1 +0.9**
SEY pmax pmax
comp=Z,57nm,1.3s
**SHL Shillong 69.95 300** *e*P **P** **19 00 43.8 -0.5**
SHL IAmb IAmb 19 00 45.8
comp=Z,283nm,2.0s
**FALS False Pass 70.39 24** P **P** **19 00 46.7 +0.6**
baz=224
**CCD Concordia, Ant 70.51 188** P **P** **19 00 47.4 +0.3**
**SBA Scott Base 71.05 178** P **P** **19 00 50.0 +0.2**
**SBA Scott Base 71.05 178** P **P** **19 00 50.1 +0.2**
SBA pmax pmax
comp=Z,176nm,1.5s
SBA MLR MLR
comp=Z,2µm,20.0s
**SBA Scott Base 71.05 178** P **P** **19 00 51.2 +1.4**
SBA PcP **PcP** **19 01 11.5 +1.6**
**GOMU GeErMu 71.41 312** P **P** **19 00 52.3 -0.9**
GOMU pmax pmax
comp=Z,11nm,1.0s
GOMU pmax pmax
comp=Z,580nm,5.5s
GOMU LR LR
comp=Z,1µm,19.0s
GOMU LR LR
comp=Z,2µm,19.1s
GOMU LR LR
comp=Z,5µm,19.5s
**S12K Black Hills 71.54 24** P **P** **19 00 54.2 +1.1**
baz=225
**YAK Yakutsk 71.72 347** P **P** **19 00 54.1 +0.1**
**YAK Yakutsk 71.72 347** LR LR 19 30 24.6
comp=Z,716nm,21.7s,baz=145,slow=34
**YAK Yakutsk 71.72 347** *e*P **P** **19 00 54.9 +0.9**
YAK *e**PP **sP** **19 01 12.2 -0.3**
YAK *e* 19 03 34.6
YAK *e*PPP PPP 19 05 17.8
YAK *e*S **S** **19 10 13.1 +2.7**
YAK *e**SS **sS** **19 10 37.7 +4.9**
YAK *e*SS **SS** **19 14 48.7 +1.5**
YAK pmax pmax
comp=Z,75nm,0.8s
YAK pmax pmax
comp=N,21nm,1.4s
YAK pmax pmax
comp=E,12nm,1.3s
YAK pmax pmax
comp=Z,164nm,4.3s
YAK pmax pmax
comp=N,87nm,2.5s
YAK pmax pmax
comp=E,89nm,3.5s
YAK smax smax
comp=N,608nm,7.2s
YAK smax smax
comp=E,422nm,8.6s
**YAK Yakutsk 71.72 347** P **P** **19 00 54.4 +0.4**
YAK pP **pP** **19 01 06.2 -1.1**
YAK PcP **PcP** **19 01 13.2 +0.4**
**LSA Lhasa 71.90 304** P **P** **19 00 57.5 +1.1**
LSA pmax pmax
comp=E,14nm,1.2s
**LSA Lhasa 71.90 304** IAmb IAmb 19 01 25.1
comp=Z,35nm,0.8s
**SDPT Sand Point 71.94 25** P **P** **19 00 56.4 +1.0**
baz=226
**CHNA Chernabura Isl 71.95 25** P **P** **19 00 55.7 +0.2**
baz=227
**ZAK Zakamensk 72.90 328** *e*P **P** **19 01 01.5 0.0**
ZAK pmax pmax
comp=Z,64nm,1.2s
**BOD Bodaibo 72.90 338** *e*P **P** **19 01 00.4 -0.8**

BOD pmax pmax
comp=Z,71nm,1.6s
**GTK Tadong 73.28 301** *e*P **P 19 01 03.8 -0.5**
GTK IAmb IAmb 19 01 06.4
comp=Z,111nm,1.4s
**CHGN Chignik 73.44 25** IAmb IAmb 19 01 35.3
comp=Z,44nm,1.0s
**IRK Irkutsk 73.46 330** *e*P **P 19 01 03.6 -1.0**
IRK *e*S **SKiKP 19 10 32.5 +0.8**
IRK pmax pmax
comp=Z,114nm,1.3s
**M11K Mekoryuk 73.55 19** P **P 19 01 05.6 +0.7**
baz=220
**O14K Tigyukauivet M 74.38 21** IAmb IAmb 19 01 38.0
comp=Z,99nm,0.9s
**O14K Tigyukauivet M 74.38 21** P **P 19 01 10.4 +0.6**
baz=225,SNR=9.2
**M13K Dall Lake 74.50 20** P **P 19 01 10.7 +0.2**
M13K IAmb IAmb 19 01 39.3
comp=Z,72nm,1.1s
**M13K Dall Lake 74.50 20** P **P 19 01 11.1 +0.6**
baz=222
**R16K Pilot Point 74.63 24** P **P 19 01 11.5 +0.3**
baz=228
**BOK Bokaro 74.67 297** *e*P **P 19 01 12.9 +0.7**
BOK IAmb IAmb 19 01 14.5
comp=Z,122nm,1.1s
**N14K Kuskokwak Cree 74.71 21** P **P 19 01 12.6 +0.9**
baz=224
**GAMB Gambell 74.73 14** P **P 19 01 12.9 +1.2**
baz=214
**MOY Mondy 74.81 328** *e*P P 19 01 18.3 +5.6
MOY pmax pmax
comp=Z,86nm,1.6s
**O15K Ungalikthiuk R 74.85 22** P **P 19 01 13.7 +1.1**
baz=226
**R17L Mt. Peulik Vol 75.17 24** P **P 19 01 15.0 +0.5**
baz=230,SNR=21
**PLK4 Peulik 4 75.17 24** P **P 19 01 13.8 -0.8**
PLK4 IAmb IAmb 19 01 17.5
comp=Z,76nm,0.8s
**M14K Bethel 75.22 20** IAmb IAmb 19 01 42.5
comp=Z,64nm,0.8s
**M14K Bethel 75.22 20** P **P 19 01 15.4 +0.8**
baz=224,SNR=11
**K13K Kusilvak Mount 75.22 18** P **P 19 01 15.6 +1.0**
baz=221,SNR=6.1
**BILL Bilibino 75.23 4** P **P 19 01 15.0 +0.4**
**BILL Bilibino 75.23 4***ce*P **P 19 01 15.5 +0.9**
BILL *e* 19 01 26.9
BILL *e**PP **pP 19 01 30.0 +2.1**
BILL *e**SP **sP 19 01 34.5 +1.4**
BILL *e* 19 04 03.4
BILL *e*PPP PPP 19 05 50.6
BILL *e*S **S 19 10 51.9 +2.0**
BILL *e*SS **SS 19 15 41.1 +0.6**
BILL pmax pmax
comp=Z,180nm,1.3s
BILL MLR MLR
comp=Z,1µm,18.0s
**SII Sitkinak Islan 75.40 26** IAMs_20 IAMs_20 19 31 55.1
comp=Z,2µm,20.0s
**SII Sitkinak Islan 75.40 26** P **P 19 01 16.8 +0.9**
baz=232
**L14K Kuka Creek 75.41 19** IAmb IAmb 19 01 44.2
comp=Z,186nm,1.8s
L14K IAMs_20 IAMs_20 19 29 21.1
comp=Z,3µm,22.0s
**L14K Kuka Creek 75.41 19** P **P 19 01 16.8 +1.2**
baz=223
**P16K Nushagak River 75.44 23** P **P 19 01 16.6 +0.6**
baz=228
**N15K Kwethluk River 75.45 21** IAmb IAmb 19 01 20.1
comp=Z,36nm,0.8s
**N15K Kwethluk River 75.45 21** P **P 19 01 16.7 +0.7**
baz=226,SNR=11
**M15K Kasigluk River 75.61 20** P **P 19 01 17.3 +0.4**
baz=225,SNR=17
**Q17K Contact Creek 75.77 24** P **P 19 01 18.2 +0.2**
baz=230,SNR=22
**O16K Kokwok River B 75.78 22** IAMs_20 IAMs_20 19 29 30.2
comp=Z,3µm,22.0s
**O16K Kokwok River B 75.78 22** P **P 19 01 17.6 -0.3**
baz=228
**R18K Karluk 75.92 25** P **P 19 01 18.8 +0.1**
baz=231
**L15K Ungalak Mounta 76.04 19** P **P 19 01 20.2 +0.9**
baz=224
**KNGR Kungurtug, Tuv 76.13 326** P **P 19 01 19.8 -0.5**
KNGR pmax pmax
comp=Z,79nm,1.1s
**N16K Nishlik Lake 76.14 21** P **P 19 01 21.1 +1.1**
baz=227,SNR=15
**P17K Kvichak River 76.15 23** P **P 19 01 20.7 +0.7**
baz=229
**J14K Nanvaranak Lak 76.17 18** IAmb IAmb 19 01 49.1
comp=Z,96nm,1.2s
**J14K Nanvaranak Lak 76.17 18** P **P 19 01 20.9 +0.9**
baz=222,SNR=11
**PALK Pallekele 76.19 279** P **P 19 01 20.4 -0.8**
**PALK Pallekele 76.19 279** LR LR 19 36 33.9
comp=Z,578nm,21.5s,baz=216,slow=37
**PALK Pallekele 76.19 279** P **P 19 01 20.3 -0.9**
PALK pmax pmax
comp=Z,51nm,1.0s
**OHAK Old Harbor 76.20 26** P **P 19 01 21.5 +1.2**
**OHAK Old Harbor 76.20 26** P **P 19 01 20.1 -0.2**
**OHAK Old Harbor 76.20 26** P **P 19 01 20.7 +0.4**
baz=232,SNR=7.9
**O17K Koliganek Bris 76.28 22** P **P 19 01 21.1 +0.3**
baz=228,SNR=10
**Q18K Katmai Hardscr 76.37 24** P **P 19 01 20.9 -0.5**
baz=231,SNR=22
**M16K Timber Creek 76.45 21** IAmb IAmb 19 01 51.8
comp=Z,72nm,1.1s
**M16K Timber Creek 76.45 21** P **P 19 01 22.4 +0.7**
baz=226,SNR=18
**K15K Wolf Creek Mou 76.47 19** P **P 19 01 21.7 -0.1**
K15K IAmb IAmb 19 01 26.2
comp=Z,74nm,0.7s
K15K IAMs_20 IAMs_20 19 29 31.3
comp=Z,4µm,22.0s
**K15K Wolf Creek Mou 76.47 19** P **P 19 01 22.9 +1.1**
baz=224,SNR=31
**L16K Owhat River 76.75 20** IAmb IAmb 19 01 27.2
comp=Z,34nm,0.7s
**L16K Owhat River 76.75 20** P **P 19 01 23.9 +0.6**
baz=226,SNR=25
**N17K Nushagak Hills 76.75 22** IAmb IAmb 19 01 52.4
comp=Z,56nm,1.2s
**N17K Nushagak Hills 76.75 22** P **P 19 01 24.6 +1.2**
baz=228,SNR=12
**P18K Big Mountain, 76.75 23** IAMs_20 IAMs_20 19 31 06.6
comp=Z,2µm,21.0s
**P18K Big Mountain, 76.75 23** P **P 19 01 23.2 -0.3**
baz=230
**KDAK Kodiak Island 76.84 26** P **P 19 01 24.7 +0.8**
**KDAK Kodiak Island 76.84 26** LR LR 19 33 03.2
comp=Z,846nm,19.3s,baz=244,slow=34
**KDAK Kodiak Island 76.84 26** P **P 19 01 24.6 +0.6**
baz=233
**KDAK Kodiak Island 76.84 26** *i* P **P 19 01 24.0 +0.1**
KDAK pmax pmax
comp=Z,42nm,0.9s
**ANM Nome 77.02 16** IAmb IAmb 19 01 53.7
comp=Z,58nm,1.1s
**ANM Nome 77.02 16** P **P 19 01 26.2 +1.4**
baz=220
**O18K Koktuh Hills 77.06 23** P **P 19 01 25.7 +0.6**
**O18K Koktuh Hills 77.06 23** P **P 19 01 24.8 -0.4**
baz=230
**Q19K Cape Douglas, 77.10 24** IAmb IAmb 19 01 55.0
comp=Z,85nm,0.8s
Q19K IAMs_20 IAMs_20 19 32 48.9
comp=Z,2µm,20.0s
**Q19K Cape Douglas, 77.10 24** P **P 19 01 25.2 -0.2**
baz=232
**TNA Tin City 77.14 15** P **P 19 01 25.1 -0.3**
baz=217
**M17K Holitna River 77.25 21** IAmb IAmb 19 01 32.9
comp=Z,39nm,0.8s
**M17K Holitna River 77.25 21** P **P 19 01 26.2 0.0**
baz=228,SNR=15
**N18K Kilae Creek 77.33 22** P **P 19 01 27.0 +0.3**
N18K IAmb IAmb 19 01 31.1
comp=Z,52nm,0.9s
N18K IAMs_20 IAMs_20 19 30 39.1
comp=Z,3µm,22.0s
**N18K Kilae Creek 77.33 22** P **P 19 01 27.6 +1.0**
baz=230,SNR=20
**Q20K Shuyak Island 77.42 25** P **P 19 01 27.8 +0.6**
baz=233
**SYI Shuyak Island 77.42 25** IAMs_20 IAMs_20 19 33 59.5
comp=Z,2µm,20.0s
**L17K Donlin 77.44 20** P **P 19 01 28.4 +1.2**
baz=227,SNR=22
**F14K Arctic Creek 77.47 15** P **P 19 01 27.9 +0.6**
baz=219
**J16K Anvik River 77.49 19** IAmb IAmb 19 01 56.7
comp=Z,101nm,1.3s
J16K IAMs_20 IAMs_20 19 30 36.0
comp=Z,3µm,22.0s
**J16K Anvik River 77.49 19** P **P 19 01 29.1 +1.7**
baz=225,SNR=21
**O19K Port Alsworth 77.62 23** P **P 19 01 28.1 -0.1**
baz=231
**P19K Oil Pt 77.71 24** IAmb IAmb 19 01 31.6
comp=Z,84nm,0.8s
**P19K Oil Pt 77.71 24** P **P 19 01 29.1 +0.2**
baz=232,SNR=5.8
**SVW2 Sparrevohn 77.72 22** P **P 19 01 30.5 +1.7**
**SVW2 Sparrevohn 77.72 22** P **P 19 01 28.5 -0.3**
SVW2 IAmb IAmb 19 01 57.8
comp=Z,77nm,1.5s
SVW2 IAMs_20 IAMs_20 19 30 40.1
comp=Z,2µm,22.0s
**G15K Niukluk 77.72 16** P **P 19 01 29.3 +0.6**
baz=221,SNR=12
**K17K Iditarod 77.84 20** IAmb IAmb 19 01 58.3
comp=Z,46nm,1.1s
**K17K Iditarod 77.84 20** P **P 19 01 30.5 +1.1**
baz=227,SNR=14
**M18K Stony River 77.89 22** P **P 19 01 30.9 +1.1**
baz=229,SNR=11
**I17K Unalakleet 77.89 18** IAmb IAmb 19 01 59.0
comp=Z,51nm,1.0s
**I17K Unalakleet 77.89 18** P **P 19 01 30.7 +1.0**
baz=224
**N19K Bonanza Creek 77.95 22** P **P 19 01 29.8 -0.4**
N19K IAMs_20 IAMs_20 19 30 44.4
comp=Z,3µm,22.0s
**N19K Bonanza Creek 77.95 22** P **P 19 01 30.4 +0.2**
baz=231,SNR=8.0
**ILSW Iliamna Southw 77.95 24** IAmb IAmb 19 02 13.8
comp=Z,64nm,1.3s
**H16K Elim 77.97 17** P **P 19 01 30.8 +0.7**
baz=223,SNR=5.5
**J17K VABM Dome 78.05 19** IAmb IAmb 19 01 34.8
comp=Z,49nm,0.8s
**J17K VABM Dome 78.05 19** P **P 19 01 31.8 +1.2**
baz=226,SNR=27
**L18K Granite Mounta 78.06 21** IAmb IAmb 19 01 33.8
comp=Z,66nm,1.1s
**L18K Granite Mounta 78.06 21** P **P 19 01 32.0 +1.4**
baz=228,SNR=29
**F15K North Star Dit 78.10 16** P **P 19 01 30.8 0.0**
F15K IAmb IAmb 19 01 35.3
comp=Z,64nm,1.3s
F15K IAMs_20 IAMs_20 19 32 21.2
comp=Z,3µm,20.0s
**F15K North Star Dit 78.10 16** P **P 19 01 31.8 +1.0**
baz=220,SNR=17
**O20K Slope Mountain 78.22 24** P **P 19 01 33.2 +1.5**
baz=233
**HOM Homer 78.36 24** IAMs_20 IAMs_20 19 33 06.1
comp=Z,2µm,21.0s
**HOM Homer 78.36 24** P **P 19 01 32.4 0.0**
baz=234
**CNPM China Poot 78.45 25** IAmb IAmb 19 01 36.6
comp=Z,76nm,0.8s
CNPM IAMs_20 IAMs_20 19 33 10.6
comp=Z,2µm,20.0s
**G16K Koyuk River 78.50 17** IAmb IAmb 19 01 36.9
comp=Z,49nm,0.8s
G16K IAMs_20 IAMs_20 19 31 49.7
comp=Z,3µm,21.0s
**G16K Koyuk River 78.50 17** P **P 19 01 34.2 +1.3**
baz=223,SNR=23
**M19K Big River Lodg 78.68 22** P **P 19 01 34.1 0.0**
M19K IAmb IAmb 19 01 45.2
comp=Z,53nm,0.8s
**M19K Big River Lodg 78.68 22** P **P 19 01 35.2 +1.1**
baz=231,SNR=34
**L19K White Mountain 78.69 21** IAmb IAmb 19 01 36.8
comp=Z,69nm,1.1s
**L19K White Mountain 78.69 21** P **P 19 01 34.6 +0.4**
baz=230,SNR=44
**BRLK Bradley Lake 78.73 24** IAmb IAmb 19 02 02.5
comp=Z,89nm,1.3s
BRLK IAMs_20 IAMs_20 19 33 18.7
comp=Z,2µm,20.0s
**BRSE Bradley Lake S 78.78 25** P **P 19 01 35.4 +0.7**
baz=234
**H17K Granite Mounta 78.88 18** P **P 19 01 35.4 +0.3**
H17K IAmb IAmb 19 01 39.1
comp=Z,43nm,0.8s
H17K IAMs_20 IAMs_20 19 31 49.8
comp=Z,3µm,21.0s
**H17K Granite Mounta 78.88 18** P **P 19 01 35.9 +0.7**
baz=225,SNR=28
**G17K Kiwalik Mounta 79.06 17** P **P 19 01 37.1 +1.0**
baz=224,SNR=21
**M20K Styx River 79.13 22** P **P 19 01 37.3 +0.6**
baz=232
**CAPN Captain Cook N 79.22 24** IAMs_20 IAMs_20 19 32 31.8
comp=Z,2µm,20.0s
**CAPN Captain Cook N 79.22 24** P **P 19 01 38.0 +1.0**
baz=234
**L20K Farewell, AK 79.23 21** P **P 19 01 37.8 +0.7**
baz=231,SNR=15
**SALM Salem 79.32 283** *e*P **P 19 01 40.4 +1.8**
**WMQ Urumqi 79.34 317** ⇑P **P 19 01 38.8 +0.6**
WMQ PcP **PcP 19 01 47.5 +1.2**
WMQ pP pP 19 01 51.0 -0.7
WMQ S **S 19 11 32.8 -2.9**
WMQ pmax pmax
comp=Z,16nm,1.5s
WMQ pmax pmax
comp=Z,480nm,4.5s
WMQ LR LR
comp=Z,650nm,21.7s
WMQ LR LR
comp=Z,810nm,24.3s
WMQ LR LR
comp=Z,1µm,24.0s
**H18K Honhosa River 79.50 18** IAMs_20 IAMs_20 19 34 04.2
comp=Z,3µm,20.0s
**H18K Honhosa River 79.50 18** P **P 19 01 39.2 +0.6**
baz=226,SNR=7.4
**SEW Seward 79.52 25** P **P 19 01 39.4 +0.7**
baz=236
**F17K Baldwin Pennin 79.57 16** IAmb IAmb 19 02 08.1
comp=Z,47nm,0.9s
F17K IAMs_20 IAMs_20 19 33 26.2
comp=Z,3µm,20.0s
**F17K Baldwin Pennin 79.57 16** P **P 19 01 40.0 +1.1**
baz=224,SNR=10
**J19K Poorman 79.59 20** P **P 19 01 40.2 +1.1**
baz=229,SNR=24
**O22K Cooper Landing 79.62 24** P **P 19 01 39.4 +0.1**
O22K IAMs_20 IAMs_20 19 34 55.6
comp=Z,2µm,20.0s
**O22K Cooper Landing 79.62 24** P **P 19 01 40.0 +0.7**
baz=235
**GCSA Galena City Sc 79.69 19** P **P 19 01 40.3 +0.9**
baz=228
**K20K Telida 79.71 21** P **P 19 01 40.3 +0.5**
baz=231,SNR=20
**SUA Susitna One 79.78 23** IAmb IAmb 19 01 43.4
comp=Z,32nm,0.6s
**SUA Susitna One 79.78 23** P **P 19 01 40.1 -0.2**
baz=234,SNR=13
**SKT Skwentna 79.79 22** IAMs_20 IAMs_20 19 31 31.0
comp=Z,2µm,22.0s
**SKT Skwentna 79.79 22** P **P 19 01 39.5 -0.7**
baz=233
**FIS Fire Island 79.81 24** IAMs_20 IAMs_20 19 33 24.3
comp=Z,2µm,20.0s
**KOD Kodaikanal 79.81 282** *e*P **P 19 01 42.2 +0.6**
**E17K Hotham Inlet 79.89 16** P **P 19 01 41.7 +1.2**
baz=223,SNR=28
**C16K Lisburne Hills 79.91 14** IAmb IAmb 19 01 44.1
comp=Z,75nm,1.2s
**C16K Lisburne Hills 79.91 14** P **P 19 01 41.4 +0.8**
baz=219
**G18K Tagagawik 79.93 17** P **P 19 01 40.4 -0.4**
G18K IAMs_20 IAMs_20 19 31 50.5
comp=Z,3µm,22.0s
**G18K Tagagawik 79.93 17** P **P 19 01 41.5 +0.7**
baz=226,SNR=28
**RC01 Rabbit Creek A 79.97 24** P **P 19 01 42.2 +1.1**
baz=235,SNR=9.3
**HYB Hyderabad 79.98 289** *e*P **P 19 01 41.4 -0.8**
HYB IVmB_BB 19 01 55.0
comp=Z,1µm,1.5s
**D17K Noatak River 80.02 15** P **P 19 01 43.1 +1.8**
baz=222,SNR=13
**TRD Trivandrum 80.04 280** *e*P **P 19 01 44.4 +1.9**
TRD IAmb IAmb 19 01 57.4
comp=Z,272nm,1.3s
**F18K Selawik 80.13 17** P **P 19 01 43.0 +1.1**
baz=225,SNR=16
**M22K Willow 80.20 23** IAmb IAmb 19 01 47.4
comp=Z,58nm,0.8s
**M22K Willow 80.20 23** P **P 19 01 42.6 +0.3**
baz=235
**J20K Nowinta River 80.21 20** P **P 19 01 43.1 +0.8**
baz=231,SNR=30
**NGP Nagpur 80.23 293** *e*P **P 19 01 42.9 -0.6**
NGP IAmb IAmb 19 01 44.6
comp=Z,116nm,0.9s
**P23K Montague Islan 80.32 25** P **P 19 01 43.0 0.0**
baz=237
**RDOG Red Dog Mine 80.33 15** P **P 19 01 42.8 -0.1**
RDOG IAmb IAmb 19 01 45.6
comp=Z,74nm,0.7s
RDOG IAMs_20 IAMs_20 19 32 17.1
comp=Z,3µm,22.0s
**RDOG Red Dog Mine 80.33 15** P **P 19 01 44.5 +1.5**
baz=222,SNR=12
**H19K Roundabout Mou 80.34 18** IAmb IAmb 19 01 46.8
comp=Z,72nm,0.8s
H19K IAMs_20 IAMs_20 19 32 58.6
comp=Z,3µm,21.0s
**H19K Roundabout Mou 80.34 18** P **P 19 01 44.0 +0.9**
baz=228,SNR=88
**PWL Port Wells 80.40 24** IAmb IAmb 19 01 48.1
comp=Z,86nm,0.9s
PWL IAMs_20 IAMs_20 19 34 20.2
comp=Z,2µm,21.0s
**PWL Port Wells 80.40 24** P **P 19 01 44.0 +0.5**
baz=236,SNR=28
**E18K Tukpahlearik C 80.46 16** P **P 19 01 43.6 0.0**
E18K IAmb IAmb 19 01 48.0
comp=Z,70nm,1.4s
**E18K Tukpahlearik C 80.46 16** P **P 19 01 44.6 +1.0**
baz=224,SNR=12
**Q23K Middleton Isla 80.47 26** P **P 19 01 43.8 0.0**
baz=238
**TIXI Tiksi 80.47 352** LR LR 19 36 27.3
comp=Z,715nm,21.3s,baz=158,slow=35
**PMR Palmer 80.49 23** P **P 19 01 43.8 -0.1**
**PMR Palmer 80.49 23** P **P 19 01 44.2 +0.3**
baz=236,SNR=6.2
**I20K Naaghedeneel 80.50 19** IAmb IAmb 19 01 48.0
comp=Z,68nm,0.9s
I20K IAMs_20 IAMs_20 19 32 52.4
comp=Z,3µm,21.0s
**I20K Naaghedeneel 80.50 19** P **P 19 01 44.6 +0.7**
baz=230,SNR=9.5
**CUT Chulitna 80.52 22** P **P 19 01 43.8 -0.2**
CUT IAmb IAmb 19 01 46.8
comp=Z,47nm,0.7s
**CUT Chulitna 80.52 22** P **P 19 01 44.2 +0.2**
baz=234
**G19K Purcell Mounta 80.56 18** IAmb IAmb 19 01 48.1
comp=Z,59nm,0.8s
G19K IAMs_20 IAMs_20 19 32 22.2
comp=Z,3µm,22.0s
**G19K Purcell Mounta 80.56 18** P **P 19 01 44.9 +0.6**
baz=228,SNR=61
**C17K DeLong Mountai 80.58 14** P **P 19 01 45.0 +0.7**
baz=221,SNR=14
**KNK Knik Glacier 80.66 24** P **P 19 01 44.9 0.0**
baz=236,SNR=6.2
**GHO Glory Hole Cre 80.67 23** P **P 19 01 44.4 -0.6**
GHO IAmb IAmb 19 01 48.5
comp=Z,46nm,0.9s
GHO IAMs_20 IAMs_20 19 33 19.4
comp=Z,2µm,21.0s
**H20K Anotleneega Mo 80.81 19** P **P 19 01 46.0 +0.4**
baz=230,SNR=54
**F19K Shaleruckik Mo 80.83 17** IAmb IAmb 19 01 49.0
comp=Z,71nm,1.3s
F19K IAMs_20 IAMs_20 19 33 01.5
comp=Z,3µm,22.0s
**F19K Shaleruckik Mo 80.83 17** P **P 19 01 45.8 +0.1**
baz=227,SNR=35
**GLI Glacier Island 80.92 25** IAMs_20 IAMs_20 19 34 38.0
comp=Z,2µm,20.0s
**GLI Glacier Island 80.92 25** P **P 19 01 46.5 +0.3**
baz=238,SNR=9.5
**SML Sawmill 80.93 23** P **P 19 01 46.0 -0.4**
SML IAmb IAmb 19 02 29.9
comp=Z,76nm,1.0s
**SML Sawmill 80.93 23** P **P 19 01 46.8 +0.5**
baz=236,SNR=24
**LGTI Lohaghat 80.94 301** *e*P **P 19 01 46.4 -0.6**
LGTI IAmb IAmb 19 01 49.0
comp=Z,138nm,1.3s
**M23K Glacier View 81.16 24** P **P 19 01 48.3 +0.8**
baz=237,SNR=10.0
**C18K Utukok River 81.20 15** IAmb IAmb 19 01 50.1
comp=Z,93nm,1.4s
C18K IAMs_20 IAMs_20 19 32 34.0
comp=Z,3µm,22.0s
**C18K Utukok River 81.20 15** P **P 19 01 48.1 +0.4**
baz=223,SNR=12
**BPAW Bear Paw Mtn. 81.25 21** P **P 19 01 47.8 -0.2**
baz=234,SNR=24
**EYAK Cordova Ski Ar 81.31 25** P **P 19 01 48.7 +0.4**
baz=239
**SCM Sheep Creek Mo 81.34 24** IAmb IAmb 19 01 52.1
comp=Z,43nm,0.8s
**SCM Sheep Creek Mo 81.34 24** P **P 19 01 49.2 +0.6**
baz=237,SNR=11
**WAT1 Susitna Watana 81.41 23** P **P 19 01 48.7 -0.2**
baz=236
**E19K Redstone River 81.42 17** IAMs_20 IAMs_20 19 34 54.7
comp=Z,3µm,20.0s
**E19K Redstone River 81.42 17** P **P 19 01 49.3 +0.5**
baz=227,SNR=103
**JHNI Jhansi 81.56 297** *e*P **P 19 01 48.7 -1.7**
JHNI IAmb IAmb 19 01 50.2
comp=Z,68nm,0.9s
**KAIM Kayak Island 81.56 26** P **P 19 01 50.5 +0.8**
baz=240
**F20K Avaraart Lake 81.58 17** P **P 19 01 49.7 +0.1**
**F20K Avaraart Lake 81.58 17** P **P 19 01 50.2 +0.7**
baz=229,SNR=32
**B18K Kokolik River 81.58 14** P **P 19 01 50.1 +0.5**
baz=223
**H21K Melozitna Rive 81.59 19** P **P 19 01 50.3 +0.6**
baz=232,SNR=35
**WAT6 Susitna Watana 81.59 23** P **P 19 01 50.2 +0.2**
baz=237
**DGZ Jazzator, Alta 81.60 322** *i* P **P 19 01 49.8 -0.6**
DGZ pmax pmax
comp=Z,21nm,1.2s
**RND Reindeer 81.63 22** IAmb IAmb 19 01 52.5
comp=Z,67nm,0.9s
RND IAMs_20 IAMs_20 19 33 05.3
comp=Z,4µm,22.0s
**KLU Klutina 81.73 24** P **P 19 01 50.6 -0.1**
KLU IAmb IAmb 19 02 11.0
comp=Z,56nm,1.0s
**KLU Klutina 81.73 24** P **P 19 01 51.8 +1.2**
baz=239,SNR=20
**MCK McKinley 81.78 22** P **P 19 01 49.9 -0.9**
baz=236,SNR=66
**HMT Hamilton 81.84 26** IAmb IAmb 19 01 58.0
comp=Z,74nm,1.3s
**BWN Browne 81.84 21** P **P 19 01 50.9 -0.2**
BWN IAmb IAmb 19 01 54.4
comp=Z,96nm,1.0s
**D19K Kuna River 81.89 16** IAmb IAmb 19 01 54.8
comp=Z,48nm,0.7s
**D19K Kuna River 81.89 16** P **P 19 01 51.6 +0.4**
baz=226,SNR=18
**MLY Manley 81.90 20** P **P 19 01 51.0 -0.4**
baz=234,SNR=40
**G21K Allakaket 81.90 18** IAmb IAmb 19 01 54.8
comp=Z,39nm,0.9s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| G21K | **Allakaket** | 81.90 | 18 | P | | **P** | | 19 01 51.3 | -0.1 |
| | baz=231,SNR=41 | | | | | | | | |
| C19K | **Lookout Ridge** | 81.93 | 15 | IAmb | | IAmb | | 19 01 55.5 | |
| | comp=Z,86nm,0.9s | | | | | | | | |
| C19K | **Lookout Ridge** | 81.93 | 15 | P | | **P** | | 19 01 52.8 | +1.3 |
| | baz=225,SNR=16 | | | | | | | | |
| M24K | **Tolsona, Glenn** | 81.95 | 24 | IAmb | | IAmb | | 19 01 57.8 | |
| M24K | comp=Z,103nm,1.0s | | | IAMs_20 | | IAMs_20 | | 19 37 54.0 | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| M24K | **Tolsona, Glenn** | 81.95 | 24 | P | | **P** | | 19 01 53.1 | +1.4 |
| | baz=238,SNR=18 | | | | | | | | |
| DHY | **Denali Highway** | 82.00 | 23 | P | | **P** | | 19 01 52.3 | +0.2 |
| | baz=237,SNR=8.6 | | | | | | | | |
| BMRM | **Bremner River** | 82.01 | 25 | P | | **P** | | 19 01 52.2 | +0.2 |
| | baz=240,SNR=7.2 | | | | | | | | |
| AKL | **Akola** | 82.01 | 292 | *e*P | | **P** | | 19 01 52.2 | -0.8 |
| AKL | | | | IAmb | | IAmb | | 19 01 53.9 | |
| | comp=Z,127nm,0.7s | | | | | | | | |
| BHPL | **Bhopal** | 82.11 | 295 | *e*P | | **P** | | 19 01 52.4 | -1.0 |
| BHPL | | | | IAmb | | IAmb | | 19 01 54.3 | |
| | comp=Z,107nm,0.7s | | | | | | | | |
| H22K | **Ishtalitna Cre** | 82.20 | 19 | P | | **P** | | 19 01 54.1 | +1.2 |
| | baz=233,SNR=14 | | | | | | | | |
| NEA2 | **Nenana** | 82.22 | 21 | P | | **P** | | 19 01 51.9 | -1.2 |
| NEA2 | | | | IAmb | | IAmb | | 19 01 55.3 | |
| | comp=Z,36nm,0.9s | | | | | | | | |
| NEA2 | | | | IAMs_20 | | IAMs_20 | | 19 33 33.1 | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| NEA2 | **Nenana** | 82.22 | 21 | P | | **P** | | 19 01 53.0 | 0.0 |
| | baz=235,SNR=15 | | | | | | | | |
| E20K | **Nigu River** | 82.25 | 16 | P | | **P** | | 19 01 54.5 | +1.2 |
| | baz=228,SNR=64 | | | | | | | | |
| N25K | **Chitina, Valde** | 82.33 | 25 | IAmb | | IAmb | | 19 01 58.6 | |
| | comp=Z,46nm,1.1s | | | | | | | | |
| N25K | **Chitina, Valde** | 82.33 | 25 | P | | **P** | | 19 01 54.8 | +1.0 |
| | baz=240,SNR=14 | | | | | | | | |
| F21K | **Alatna River** | 82.36 | 18 | P | | **P** | | 19 01 54.2 | +0.5 |
| | baz=231,SNR=13 | | | | | | | | |
| A19K | **Wainwright** | 82.37 | 14 | P | | **P** | | 19 01 54.9 | +1.2 |
| | baz=223 | | | | | | | | |
| ZSN | **Zaisan** | 82.43 | 320 | *e*P | | **P** | | 19 01 54.5 | -0.1 |
| | baz=320 | | | | | | | | |
| ZSN | **Zaisan** | 82.43 | 320 | *e*P | | **P** | | 19 01 54.4 | -0.1 |
| I23K | **Minto, Yukon-K** | 82.44 | 20 | P | | **P** | | 19 01 54.3 | +0.2 |
| | baz=235,SNR=13 | | | | | | | | |
| D20K | **Etivluk River** | 82.44 | 16 | P | | **P** | | 19 01 54.7 | +0.5 |
| | baz=228,SNR=23 | | | | | | | | |
| GUNA | **GUNA** | 82.47 | 296 | *e*P | | **P** | | 19 01 54.5 | -0.8 |
| WAX | **Waxell Ridge** | 82.50 | 26 | IAmb | | IAmb | | 19 02 00.6 | |
| | comp=Z,43nm,0.9s | | | | | | | | |
| WRH | **Wood River Hil** | 82.50 | 21 | P | | **P** | | 19 01 53.1 | -1.5 |
| HARP | **HAARP** | 82.51 | 24 | P | | **P** | | 19 01 55.1 | +0.4 |
| | baz=239 | | | | | | | | |
| CRQM | **Cirque** | 82.53 | 26 | IAmb | | IAmb | | 19 02 01.5 | |
| | comp=Z,60nm,1.0s | | | | | | | | |
| CRQE | **Cirque** | 82.55 | 26 | P | | **P** | | 19 01 54.8 | -0.2 |
| | baz=241,SNR=9.8 | | | | | | | | |
| GLB | **Gilahina Butte** | 82.58 | 25 | IAmb | | IAmb | | 19 01 59.5 | |
| | comp=Z,92nm,1.3s | | | | | | | | |
| VRDI | **Verde Repeater** | 82.62 | 25 | IAmb | | IAmb | | 19 02 01.4 | |
| | comp=Z,44nm,1.1s | | | | | | | | |
| VRDI | | | | IAMs_20 | | IAMs_20 | | 19 36 04.8 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| TGL | **Tana Glacier** | 82.66 | 26 | P | | **P** | | 19 01 55.2 | -0.4 |
| TGL | | | | IAmb | | IAmb | | 19 01 57.8 | |
| | comp=Z,39nm,1.0s | | | | | | | | |
| PAX | **Paxson** | 82.68 | 23 | P | | **P** | | 19 01 55.3 | -0.3 |
| | baz=239,SNR=10 | | | | | | | | |
| CCB | **Clear Creek Bu** | 82.70 | 21 | IAmb | | IAmb | | 19 01 57.5 | |
| | comp=Z,42nm,1.1s | | | | | | | | |
| MDM | **Murphy Dome** | 82.73 | 21 | IAmb | | IAmb | | 19 01 58.4 | |
| | comp=Z,49nm,1.2s | | | | | | | | |
| MDM | | | | IAMs_20 | | IAMs_20 | | 19 33 47.4 | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| HNLY | **HANLEY** | 82.76 | 304 | *e*P | | **P** | | 19 01 57.4 | +0.1 |
| H23K | **Yukon River** | 82.77 | 20 | P | | **P** | | 19 01 56.0 | +0.1 |
| | baz=235,SNR=19 | | | | | | | | |
| MESA | **MESA** | 82.77 | 26 | P | | **P** | | 19 01 56.4 | +0.1 |
| | baz=242 | | | | | | | | |
| G22K | **Bettles** | 82.78 | 18 | P | | **P** | | 19 01 57.1 | +1.2 |
| | baz=233 | | | | | | | | |
| COLA | **College** | 82.81 | 21 | P | | **P** | | 19 01 55.4 | -0.7 |
| COLA | **College** | 82.81 | 21 | P | | **P** | | 19 01 54.7 | -1.4 |
| COLA | **College** | 82.81 | 21 | P | | **P** | | 19 01 55.5 | -0.6 |
| | baz=236 | | | | | | | | |
| COLA | **College** | 82.81 | 21 | *i* P | | **P** | | 19 01 53.8 | -2.3 |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,83nm,1.0s | | | | | | | | |
| KAAM | **Kaadhehdhoo** | 82.87 | 271 | P | | **P** | | 19 01 56.4 | -1.1 |
| MCARA | **McCarthy VSAT** | 82.88 | 25 | IAmb | | IAmb | | 19 02 28.4 | |
| | comp=Z,65nm,1.0s | | | | | | | | |
| MCARA | | | | IAMs_20 | | IAMs_20 | | 19 36 12.6 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| MCARA | **McCarthy VSAT** | 82.88 | 25 | P | | **P** | | 19 01 57.5 | +1.0 |
| | baz=241,SNR=12 | | | | | | | | |
| HDA | **Harding Lake** | 82.88 | 22 | P | | **P** | | 19 01 56.6 | 0.0 |
| | baz=237,SNR=20 | | | | | | | | |
| F22K | **John River** | 82.93 | 18 | P | | **P** | | 19 01 57.9 | +1.1 |
| | baz=232 | | | | | | | | |
| QSPA | **South Pole Qui** | 82.98 | 180 | P | | **P** | | 19 01 56.7 | -0.6 |
| QSPA | **South Pole Qui** | 82.98 | 180 | IAMs_20 | | IAMs_20 | | 19 33 44.8 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| QSPA | **South Pole Qui** | 82.98 | 180 | P | | **P** | | 19 01 57.4 | +0.2 |
| | comp=Z,103nm,0.9s,baz=353,slow=0.8,SNR=163 | | | | | | | | |
| QSPA | | | | S | | **S** | | 19 12 10.0 | -2.7 |
| | comp=Z,1.8nm,1.0s,baz=134,slow=20,SNR=10 | | | | | | | | |
| QSPA | | | | LR | | LR | | 19 34 06.4 | |
| | comp=Z,2µm,20.0s,baz=9.5,slow=32 | | | | | | | | |
| | comp=Z,103nm,0.9s | | | | | | | | |
| E21K | **Killik River** | 82.99 | 17 | IAmb | | IAmb | | 19 02 00.6 | |
| | comp=Z,36nm,0.8s | | | | | | | | |
| E21K | | | | IAMs_20 | | IAMs_20 | | 19 34 44.1 | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| E21K | **Killik River** | 82.99 | 17 | P | | **P** | | 19 01 57.5 | +0.5 |
| | baz=230 | | | | | | | | |
| K24K | **Donnelly Dome** | 83.00 | 22 | P | | **P** | | 19 01 57.6 | +0.4 |
| | baz=238,SNR=9.3 | | | | | | | | |
| KLP | **Kalpa** | 83.08 | 303 | *e*P | | **P** | | 19 01 58.8 | +0.1 |
| POKR | **Poker Plat Res** | 83.10 | 21 | P | | **P** | | 19 01 56.5 | -1.1 |
| POKR | **Poker Plat Res** | 83.10 | 21 | P | | **P** | | 19 01 57.1 | -0.5 |
| | baz=237 | | | | | | | | |
| IL31 | | 83.10 | 21 | IAmb | | IAmb | | 19 02 00.1 | |
| | comp=Z,55nm,1.1s | | | | | | | | |
| ILAR | **Eielson Array** | 83.10 | 21 | P | | **P** | | 19 01 56.1 | -1.5 |
| ILAR | **Eielson Array** | 83.10 | 21 | P | | **P** | | 19 01 56.4 | -1.3 |
| | comp=Z,24nm,0.8s,baz=246,slow=5.8,SNR=109 | | | | | | | | |
| ILAR | | | | S | | S | | 19 12 04.5 | -9.3 |
| | comp=Z,0.4nm,0.9s,baz=342,slow=23,SNR=2.0 | | | | | | | | |
| ILAR | | | | PKKPbc | | **PKKPbc** | | 19 20 20.4 | -1.9 |
| | comp=Z,0.6nm,0.5s,baz=340,slow=1.3,SNR=3.1 | | | | | | | | |
| ILAR | | | | LR | | LR | | 19 34 10.5 | |
| | comp=Z,4µm,21.9s,baz=236,slow=32 | | | | | | | | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| GRNC | **Granite Creek** | 83.12 | 26 | P | | **P** | | 19 01 58.0 | 0.0 |
| G23K | **Bananza Creek** | 83.13 | 19 | P | | **P** | | 19 01 57.9 | +0.2 |
| | baz=234,SNR=18 | | | | | | | | |
| B20K | **Meade River** | 83.18 | 15 | IAmb | | IAmb | | 19 01 59.8 | |
| | comp=Z,46nm,0.6s | | | | | | | | |
| B20K | **Meade River** | 83.18 | 15 | P | | **P** | | 19 01 58.9 | +1.0 |
| | baz=227 | | | | | | | | |
| C21K | **Knifeblade Rid** | 83.23 | 16 | P | | **P** | | 19 01 58.5 | +0.3 |
| | baz=229,SNR=21 | | | | | | | | |
| TABL | **Table Mountain** | 83.25 | 26 | IAmb | | IAmb | | 19 02 04.4 | |
| | comp=Z,50nm,0.8s | | | | | | | | |
| RIDG | **Independent Ri** | 83.32 | 23 | IAmb | | IAmb | | 19 02 00.7 | |
| | comp=Z,41nm,1.0s | | | | | | | | |
| RIDG | **Independent Ri** | 83.32 | 23 | P | | **P** | | 19 01 59.2 | +0.4 |
| | baz=239,SNR=16 | | | | | | | | |
| H24K | **Noodor Dome** | 83.34 | 20 | P | | **P** | | 19 01 58.5 | -0.5 |
| | baz=236 | | | | | | | | |
| COLD | **Coldfoot** | 83.37 | 18 | P | | **P** | | 19 01 59.8 | +0.8 |
| | baz=234,SNR=12 | | | | | | | | |
| M26K | **Nabesna, AK** | 83.38 | 24 | P | | **P** | | 19 01 59.1 | -0.2 |
| M26K | | | | IAMs_20 | | IAMs_20 | | 19 37 32.9 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| M26K | **Nabesna, AK** | 83.38 | 24 | P | | **P** | | 19 01 59.8 | +0.6 |
| | baz=241,SNR=15 | | | | | | | | |
| SONA | **Sohna** | 83.39 | 299 | *e*P | | **P** | | 19 01 58.7 | -1.2 |
| CTG | **Chitna Glacier** | 83.40 | 26 | P | | **P** | | 19 02 00.5 | +1.0 |
| | baz=243,SNR=19 | | | | | | | | |
| CTGM | **Chitina Glacie** | 83.41 | 26 | IAmb | | IAmb | | 19 02 03.5 | |
| | comp=Z,52nm,0.7s | | | | | | | | |
| E22K | **Anaktuvuk Pass** | 83.43 | 17 | IAMs_20 | | IAMs_20 | | 19 33 18.9 | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| E22K | **Anaktuvuk Pass** | 83.43 | 17 | P | | **P** | | 19 02 00.5 | +1.2 |
| | baz=232,SNR=24 | | | | | | | | |
| LOGN | **Logan Glacier** | 83.49 | 26 | IAmb | | IAmb | | 19 02 05.5 | |
| | comp=Z,42nm,0.9s | | | | | | | | |
| L26K | **Log Cabin Wild** | 83.55 | 24 | P | | **P** | | 19 01 59.2 | -0.8 |
| L26K | **Log Cabin Wild** | 83.55 | 24 | P | | **P** | | 19 02 00.7 | +0.7 |
| | baz=241,SNR=8.5 | | | | | | | | |
| J25K | **Salcha River,** | 83.57 | 22 | IAmb | | IAmb | | 19 02 03.6 | |
| | comp=Z,83nm,1.2s | | | | | | | | |
| J25K | **Salcha River,** | 83.57 | 22 | P | | **P** | | 19 01 59.8 | -0.3 |
| | baz=239,SNR=46 | | | | | | | | |
| B21K | **Ikpikpuk River** | 83.58 | 16 | IAmb | | IAmb | | 19 02 05.1 | |
| | comp=Z,54nm,1.0s | | | | | | | | |
| B21K | **Ikpikpuk River** | 83.58 | 16 | P | | **P** | | 19 02 00.7 | +0.8 |
| | baz=230,SNR=11 | | | | | | | | |
| D22K | **Ayikyak River** | 83.64 | 17 | P | | **P** | | 19 02 01.3 | +0.9 |
| | baz=232,SNR=33 | | | | | | | | |
| PNL | **Peninsula** | 83.69 | 28 | P | | **P** | | 19 02 01.9 | +1.1 |
| PNL | **Peninsula** | 83.69 | 28 | P | | **P** | | 19 02 01.6 | +0.7 |
| | baz=245 | | | | | | | | |
| BCPM | **Bancas Point** | 83.71 | 27 | IAmb | | IAmb | | 19 03 07.8 | |
| | comp=Z,43nm,0.7s | | | | | | | | |
| SCRK | **Sand Creek** | 83.77 | 23 | P | | **P** | | 19 01 59.9 | -1.3 |
| SCRK | **Sand Creek** | 83.77 | 23 | P | | **P** | | 19 02 01.9 | +0.6 |
| | baz=240,SNR=19 | | | | | | | | |
| O28M | **Mount Upton** | 83.82 | 26 | P | | **P** | | 19 02 02.6 | +0.8 |
| | baz=244,SNR=16 | | | | | | | | |
| M27K | **Edge Creek, AK** | 83.82 | 25 | IAmb | | IAmb | | 19 02 07.7 | |
| | comp=Z,79nm,0.9s | | | | | | | | |
| M27K | **Edge Creek, AK** | 83.82 | 25 | P | | **P** | | 19 02 02.5 | +0.9 |
| | baz=242,SNR=44 | | | | | | | | |
| KUDL | **Kundal** | 83.89 | 299 | *e*P | | **P** | | 19 02 01.2 | -1.2 |
| MK31 | **Makanchi Array** | 83.91 | 319 | IAmb | | IAmb | | 19 02 05.2 | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| MK31 | **Makanchi Array** | 83.91 | 319 | *i* P | | **P** | | 19 02 02.2 | 0.0 |
| MKAR | **Makanchi Array** | 83.91 | 319 | P | | **P** | | 19 02 01.3 | -0.9 |
| MKAR | **Makanchi Array** | 83.91 | 319 | P | | **P** | | 19 02 02.0 | -0.2 |
| | comp=Z,31nm,0.7s,baz=99,slow=6.5,SNR=105 | | | | | | | | |
| MKAR | | | | PKiKP | | **PKiKP** | | 19 07 14.9 | -3.0 |
| | comp=Z,1.3nm,0.7s,baz=83,slow=2.0,SNR=5.1 | | | | | | | | |
| MKAR | | | | S | | **SKSac** | | 19 12 13.4 | -8.3 |
| | comp=Z,1.0nm,0.8s,baz=111,slow=6.8,SNR=6.1 | | | | | | | | |
| MKAR | | | | PKKPbc | | **PKKPbc** | | 19 20 17.9 | -1.6 |
| | comp=Z,0.7nm,0.9s,baz=348,slow=1.5,SNR=3.9 | | | | | | | | |
| MKAR | | | | PKPPKP | | **P'P'df** | | 19 28 22.6 | -0.2 |
| | comp=Z,0.8nm,1.0s,baz=241,slow=1.8,SNR=4.9 | | | | | | | | |
| MKAR | | | | LR | | LR | | 19 39 38.7 | |
| | comp=Z,613nm,20.1s,baz=109,slow=36 | | | | | | | | |
| | comp=Z,31nm,0.7s | | | | | | | | |
| MKAR | **Makanchi Array** | 83.91 | 319 | P | | **P** | | 19 02 02.0 | -0.2 |
| SMLA | **Simla** | 83.91 | 302 | *e*P | | **P** | | 19 02 01.7 | -0.8 |
| SMLA | | | | IAmb | | IAmb | | 19 02 16.4 | |
| | comp=Z,135nm,1.2s | | | | | | | | |
| G24K | **Hadweenzic Riv** | 83.95 | 20 | IAmb | | IAmb | | 19 02 06.1 | |
| | comp=Z,49nm,1.1s | | | | | | | | |
| G24K | **Hadweenzic Riv** | 83.95 | 20 | P | | **P** | | 19 02 03.1 | +1.1 |
| | baz=237,SNR=28 | | | | | | | | |
| PRP | **Porcupine Dome** | 83.99 | 21 | P | | **P** | | 19 02 02.7 | +0.3 |
| | baz=239 | | | | | | | | |
| E23K | **Chandalar** | 84.04 | 18 | IAmb | | IAmb | | 19 02 06.9 | |
| | comp=Z,72nm,1.1s | | | | | | | | |
| E23K | **Chandalar** | 84.04 | 18 | P | | **P** | | 19 02 03.5 | +1.0 |
| | baz=234,SNR=48 | | | | | | | | |
| KAD | **Karad** | 84.08 | 288 | *e*P | | **P** | | 19 02 02.9 | -0.8 |
| MAKZ | **Makanchi** | 84.12 | 318 | P | | **P** | | 19 02 02.5 | -0.8 |
| MAKZ | | | | IAmb | | IAmb | | 19 02 06.2 | |
| | comp=Z,54nm,0.9s | | | | | | | | |
| MAKZ | **Makanchi** | 84.12 | 318 | P | | **P** | | 19 02 02.5 | -0.8 |
| MAKZ | | | | pmax | | pmax | | | |
| | comp=Z,54nm,0.9s | | | | | | | | |
| MAKZ | | | | MLR | | MLR | | | |
| | comp=Z,800nm,20.0s | | | | | | | | |
| GOA | **Goa** | 84.13 | 286 | *e*P | | **P** | | 19 02 04.0 | 0.0 |
| L27K | **Beaver Creek,** | 84.17 | 24 | IAmb | | IAmb | | 19 02 05.8 | |
| | comp=Z,32nm,1.1s | | | | | | | | |
| L27K | **Beaver Creek,** | 84.17 | 24 | P | | **P** | | 19 02 03.9 | +0.7 |
| | baz=242,SNR=37 | | | | | | | | |
| J26L | **Joseph Creek** | 84.19 | 22 | IAMs_20 | | IAMs_20 | | 19 35 06.1 | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| J26L | **Joseph Creek** | 84.19 | 22 | P | | **P** | | 19 02 04.0 | +0.7 |
| | baz=240,SNR=15 | | | | | | | | |
| BCAR | **Beaver Creek A** | 84.19 | 24 | P | | **P** | | 19 02 03.2 | -0.1 |
| YUK8 | **Steele Glacier** | 84.23 | 26 | P | | **P** | | 19 02 04.9 | +1.0 |
| | baz=244,SNR=27 | | | | | | | | |
| D23K | **Nanushuk River** | 84.26 | 17 | IAMs_20 | | IAMs_20 | | 19 37 37.7 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| D23K | **Nanushuk River** | 84.26 | 17 | P | | **P** | | 19 02 04.8 | +1.3 |
| | baz=233,SNR=65 | | | | | | | | |
| F24K | **Squaw Lake** | 84.28 | 19 | IAmb | | IAmb | | 19 02 07.6 | |
| | comp=Z,66nm,1.0s | | | | | | | | |
| F24K | **Squaw Lake** | 84.28 | 19 | P | | **P** | | 19 02 04.7 | +1.0 |
| | baz=236,SNR=30 | | | | | | | | |
| H25L | **Birch Creek** | 84.28 | 20 | P | | **P** | | 19 02 04.4 | +0.8 |
| | baz=238 | | | | | | | | |
| O29M | **Mount Kennedy** | 84.34 | 27 | P | | **P** | | 19 02 03.9 | -0.3 |
| O29M | **Mount Kennedy** | 84.34 | 27 | P | | **P** | | 19 02 05.1 | +0.8 |
| | baz=245 | | | | | | | | |
| B22K | **Teshekpuk Lake** | 84.36 | 15 | IAMs_20 | | IAMs_20 | | 19 34 59.5 | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| B22K | **Teshekpuk Lake** | 84.36 | 15 | P | | **P** | | 19 02 05.0 | +1.1 |
| | baz=231 | | | | | | | | |
| A22K | **Sinclair Lake** | 84.39 | 14 | P | | **P** | | 19 02 05.1 | +1.0 |
| | baz=229 | | | | | | | | |
| TOLK | **Toolik Lake Re** | 84.40 | 17 | IAmb | | IAmb | | 19 02 07.8 | |
| | comp=Z,50nm,0.8s | | | | | | | | |
| TOLK | **Toolik Lake Re** | 84.40 | 17 | P | | **P** | | 19 02 04.9 | +0.7 |
| | baz=234,SNR=28 | | | | | | | | |
| E24K | **Your Creek** | 84.40 | 18 | P | | **P** | | 19 02 05.3 | +1.0 |
| | baz=236,SNR=14 | | | | | | | | |
| P29M | **Windy Craggy** | 84.44 | 28 | P | | **P** | | 19 02 05.8 | +1.2 |
| | baz=246 | | | | | | | | |
| G25K | **Bearman Lake** | 84.45 | 20 | P | | **P** | | 19 02 05.3 | +0.9 |
| | baz=238,SNR=16 | | | | | | | | |
| S31K | **Pelican** | 84.51 | 30 | IAmb | | IAmb | | 19 02 08.2 | |
| | comp=Z,33nm,1.1s | | | | | | | | |
| S31K | | | | IAMs_20 | | IAMs_20 | | 19 37 07.8 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| S31K | **Pelican** | 84.51 | 30 | P | | **P** | | 19 02 05.9 | +1.0 |
| | baz=248 | | | | | | | | |
| K27K | **Chicken** | 84.53 | 23 | IAmb | | IAmb | | 19 02 09.8 | |
| | comp=Z,40nm,1.0s | | | | | | | | |
| K27K | **Chicken** | 84.53 | 23 | P | | **P** | | 19 02 06.5 | +1.6 |
| | baz=242 | | | | | | | | |
| POO | **Poona** | 84.58 | 289 | *e*P | | **P** | | 19 02 05.5 | -0.7 |
| POO | | | | IAmb | | IAmb | | 19 02 07.0 | |
| | comp=Z,105nm,0.9s | | | | | | | | |
| BHK | **Bhaker** | 84.59 | 302 | *e*P | | **P** | | 19 02 06.4 | +0.4 |
| ZAA0 | **Zalesovo Array** | 84.61 | 326 | P | | **P** | | 19 02 04.3 | -1.2 |
| ZAA0 | | | | IAmb | | IAmb | | 19 02 06.8 | |
| | comp=Z,84nm,1.4s | | | | | | | | |
| ZALV | **Zalesovo Beam** | 84.61 | 326 | P | | **P** | | 19 02 04.1 | -1.4 |
| ZALV | **Zalesovo Beam** | 84.61 | 326 | P | | **P** | | 19 02 04.9 | -0.6 |
| | comp=Z,28nm,0.6s,baz=115,slow=6.0,SNR=85 | | | | | | | | |
| ZALV | | | | S | | **SKSac** | | 19 12 18.5 | -7.3 |
| | comp=Z,1.0nm,0.8s,baz=106,slow=3.1,SNR=3.9 | | | | | | | | |
| ZALV | | | | PKKPbc | | **PKKPbc** | | 19 20 15.1 | -3.1 |
| | comp=Z,0.4nm,0.3s,baz=288,slow=6.1,SNR=5.5 | | | | | | | | |
| ZALV | | | | PKPPKP | | **P'P'df** | | 19 28 19.9 | -1.1 |
| | comp=Z,0.8nm,0.8s,baz=52,slow=2.4,SNR=4.4 | | | | | | | | |
| ZALV | | | | LR | | LR | | 19 40 44.6 | |
| | comp=Z,444nm,20.7s,baz=104,slow=36 | | | | | | | | |
| | comp=Z,28nm,0.6s | | | | | | | | |
| SIT | **Sitka** | 84.62 | 31 | P | | **P** | | 19 02 06.1 | +0.6 |
| | baz=248 | | | | | | | | |
| MAW | **Mawson** | 84.68 | 203 | P | | **P** | | 19 02 06.0 | +0.3 |
| | comp=Z,82nm,1.0s,baz=89,slow=6.0,SNR=92 | | | | | | | | |
| MAW | | | | S | | **SKSac** | | 19 12 19.6 | -6.2 |
| | comp=Z,0.7nm,0.8s,baz=338,slow=12,SNR=1.3 | | | | | | | | |
| MAW | | | | LR | | LR | | 19 37 59.9 | |
| | comp=Z,889nm,18.7s,baz=83,slow=34 | | | | | | | | |
| | comp=Z,82nm,1.0s | | | | | | | | |
| MAW | **Mawson** | 84.68 | 203 | P | | **P** | | 19 02 06.0 | +0.3 |
| YUK6 | **Outpost Mounta** | 84.70 | 27 | P | | **P** | | 19 02 07.1 | +0.9 |
| | baz=246,SNR=7.2 | | | | | | | | |
| I26K | **Coal Creek Min** | 84.74 | 22 | P | | **P** | | 19 02 06.1 | +0.1 |
| | baz=241,SNR=11 | | | | | | | | |
| YUK4 | **Talbot Arm** | 84.74 | 26 | P | | **P** | | 19 02 07.0 | +0.7 |
| | baz=245,SNR=17 | | | | | | | | |
| C23K | **Itkillik River** | 84.81 | 16 | IAmb | | IAmb | | 19 02 11.2 | |
| | comp=Z,73nm,0.9s | | | | | | | | |
| C23K | **Itkillik River** | 84.81 | 16 | P | | **P** | | 19 02 06.4 | +0.2 |
| | baz=233,SNR=16 | | | | | | | | |
| DIB | **Dawson Inlet,** | 84.83 | 35 | IAmb | | IAmb | | 19 02 09.1 | |
| | comp=Z,35nm,1.2s | | | | | | | | |
| DHRM | **DHARAMSHALA** | 84.86 | 303 | *e*P | | **P** | | 19 02 06.3 | -1.3 |
| DHRM | | | | IAmb | | IAmb | | 19 02 11.5 | |
| | comp=Z,94nm,0.7s | | | | | | | | |
| SHLS | **Shalkode** | 84.86 | 314 | *e*P | | **P** | | 19 02 05.8 | -1.5 |
| | baz=314 | | | | | | | | |
| SHLS | **Shalkode** | 84.86 | 314 | *e*P | | **P** | | 19 02 05.7 | -1.5 |
| D24K | **Happy Valley** | 84.92 | 17 | IAmb | | IAmb | | 19 02 12.7 | |
| | comp=Z,40nm,0.7s | | | | | | | | |
| D24K | **Happy Valley** | 84.92 | 17 | P | | **P** | | 19 02 07.5 | +0.8 |
| | baz=235,SNR=18 | | | | | | | | |
| R31K | **City Hall, Gus** | 84.92 | 29 | P | | **P** | | 19 02 08.2 | +1.2 |
| | baz=248 | | | | | | | | |
| P30M | **Million Dollar** | 85.00 | 28 | P | | **P** | | 19 02 08.5 | +1.0 |
| | baz=247 | | | | | | | | |
| PLBC | **Pleasant Camp** | 85.02 | 28 | P | | **P** | | 19 02 07.8 | +0.3 |
| | baz=247 | | | | | | | | |
| F25K | **Christian Rive** | 85.04 | 19 | P | | **P** | | 19 02 08.6 | +1.0 |
| | baz=238,SNR=22 | | | | | | | | |
| S32K | **Killisnoo** | 85.15 | 31 | P | | **P** | | 19 02 09.4 | +1.3 |
| | baz=249 | | | | | | | | |
| UZB | **Uzynbulak** | 85.17 | 314 | *e*P | | **P** | | 19 02 08.8 | 0.0 |
| | baz=314 | | | | | | | | |
| UZB | | | | *e*S | | **SKSac** | | 19 12 28.3 | -1.9 |
| | baz=314 | | | | | | | | |
| UZB | **Uzynbulak** | 85.17 | 314 | *e*P | | **P** | | 19 02 08.8 | 0.0 |
| UZB | | | | *e*S | | **SKSac** | | 19 12 28.3 | -1.9 |
| AJM | **Ajmer** | 85.19 | 297 | *e*P | | **P** | | 19 02 08.3 | -0.8 |
| AJM | | | | IAmb | | IAmb | | 19 02 09.9 | |
| | comp=Z,185nm,0.9s | | | | | | | | |
| CRAG | **Craig** | 85.22 | 33 | IAMs_20 | | IAMs_20 | | 19 33 59.7 | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| CRAG | **Craig** | 85.22 | 33 | P | | **P** | | 19 02 09.0 | +0.4 |
| | baz=250 | | | | | | | | |
| EGAK | **Eagle** | 85.23 | 23 | P | | **P** | | 19 02 08.2 | -0.3 |
| EGAK | | | | IAmb | | IAmb | | 19 02 37.5 | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| EGAK | | | | IAMs_20 | | IAMs_20 | | 19 34 21.7 | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| EGAK | **Eagle** | 85.23 | 23 | P | | **P** | | 19 02 09.1 | +0.7 |
| | baz=243,SNR=22 | | | | | | | | |
| C24K | **Franklin Bluff** | 85.28 | 17 | IAMs_20 | | IAMs_20 | | 19 35 37.8 | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| C24K | **Franklin Bluff** | 85.28 | 17 | P | | **P** | | 19 02 09.7 | +1.1 |
| | baz=235 | | | | | | | | |
| HG4B | **Hotspring** | 85.28 | 36 | IAmb | | IAmb | | 19 02 13.1 | |
| | comp=Z,31nm,0.8s | | | | | | | | |
| M29M | **Somme Creek** | 85.28 | 25 | IAMs_20 | | IAMs_20 | | 19 37 39.2 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| M29M | **Somme Creek** | 85.28 | 25 | P | | **P** | | 19 02 09.7 | +0.8 |
| | baz=245,SNR=17 | | | | | | | | |
| BMAR | **Burnt Mountain** | 85.30 | 20 | P | | **P** | | 19 02 09.3 | +0.4 |
| G26K | **Porcupine Rive** | 85.33 | 20 | P | | **P** | | 19 02 09.8 | +1.0 |
| | baz=240,SNR=62 | | | | | | | | |
| THN | **Thein Dam** | 85.38 | 303 | *e*P | | **P** | | 19 02 09.6 | -0.3 |
| U33K | **Whale Pass** | 85.44 | 32 | IAmb | | IAmb | | 19 02 12.1 | |
| | comp=Z,34nm,0.9s | | | | | | | | |
| U33K | | | | IAMs_20 | | IAMs_20 | | 19 34 15.4 | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| U33K | **Whale Pass** | 85.44 | 32 | P | | **P** | | 19 02 10.6 | +1.0 |
| | baz=250 | | | | | | | | |
| I27K | **Kandik River** | 85.44 | 22 | P | | **P** | | 19 02 10.9 | +1.4 |
| | baz=242 | | | | | | | | |
| R32K | **Eaglecrest** | 85.47 | 30 | IAMs_20 | | IAMs_20 | | 19 35 25.3 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| R32K | **Eaglecrest** | 85.47 | 30 | P | | **P** | | 19 02 11.2 | +1.5 |
| | baz=249 | | | | | | | | |
| N30M | **Aishikik Lake** | 85.47 | 26 | P | | **P** | | 19 02 09.4 | -0.5 |
| N30M | **Aishikik Lake** | 85.47 | 26 | P | | **P** | | 19 02 10.7 | +0.9 |
| | baz=247,SNR=8.4 | | | | | | | | |
| KPKS | **Kokpek** | 85.48 | 315 | *e*P | | **P** | | 19 02 10.2 | -0.1 |
| | baz=315 | | | | | | | | |
| KPKS | **Kokpek** | 85.48 | 315 | *e*P | | **P** | | 19 02 10.2 | -0.1 |
| SKAG | **Skagway** | 85.51 | 29 | IAMs_20 | | IAMs_20 | | 19 33 42.3 | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| SKAG | **Skagway** | 85.51 | 29 | P | | **P** | | 19 02 10.9 | +1.0 |
| | baz=248 | | | | | | | | |
| JIS | **Juneau Island** | 85.54 | 30 | P | | **P** | | 19 02 13.6 | +3.5 |
| F26K | **Sheenjek River** | 85.58 | 19 | IAmb | | IAmb | | 19 02 14.4 | |
| | comp=Z,27nm,1.1s | | | | | | | | |
| F26K | **Sheenjek River** | 85.58 | 19 | P | | **P** | | 19 02 11.8 | +1.5 |
| | baz=240,SNR=23 | | | | | | | | |
| SATY | **Saty** | 85.58 | 314 | *e*P | | **P** | | 19 02 10.8 | -0.1 |
| | baz=314 | | | | | | | | |
| SATY | **Saty** | 85.58 | 314 | *e*P | | **P** | | 19 02 10.8 | -0.1 |
| ZHN | **Zhinishke** | 85.59 | 314 | *e*P | | **P** | | 19 02 10.8 | -0.1 |
| | baz=314 | | | | | | | | |
| ZHN | **Zhinishke** | 85.59 | 314 | *e*P | | **P** | | 19 02 10.8 | -0.1 |
| DAWY | **Dawson** | 85.60 | 24 | IAMs_20 | | IAMs_20 | | 19 36 00.4 | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| DAWY | **Dawson** | 85.60 | 24 | P | | **P** | | 19 02 11.8 | +1.4 |
| | baz=244,SNR=21 | | | | | | | | |
| O30N | **Mendenhall** | 85.65 | 27 | IAMs_20 | | IAMs_20 | | 19 39 48.9 | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| O30N | **Mendenhall** |

**MDOK Medeo** 86.58 314 *e*P P 19 02 15.4 -0.4
MDOK eS **SKSac** 19 12 37.0 -2.0
**KSH Kashi** 86.59 310 P P 19 02 17.3 +1.4
KSH pP pP 19 02 30.5 +1.0
KSH S S 19 12 50.1 +0.5
KSH pmax pmax
comp=Z,59nm,1.2s
KSH pmax pmax
comp=Z,680nm,4.8s
KSH LR LR
comp=Z,530nm,19.9s
KSH LR LR
comp=Z,680nm,19.2s
KSH LR LR
comp=Z,840nm,19.2s
**TNSS Tian-Shan** 86.62 314 *e*P P 19 02 15.7 -0.7
baz=314
**TNSS Tian-Shan** 86.62 314 *e*P P 19 02 15.6 -0.7
**E27K Coleen River** 86.67 19 P P 19 02 17.0 +1.5
baz=242,SNR=60
**C27K Jago River** 86.70 18 P P 19 02 17.2 +1.6
baz=240,SNR=19
**Q32M Nakina River** 86.81 30 IAmb IAmb 19 02 51.9
comp=Z,57nm,1.6s
Q32M IAMs_20 IAMs_20 19 35 06.7
comp=Z,2µm,21.0s
**Q32M Nakina River** 86.81 30 P P 19 02 17.2 +0.6
baz=251,SNR=6.3
**H29M Whitestone** 86.91 22 IAmb IAmb 19 03 00.1
comp=Z,119nm,1.9s
**H29M Whitestone** 86.91 22 P P 19 02 17.4 +0.7
baz=245
**M31M Drury Creek, Y** 86.94 26 P P 19 02 17.2 +0.2
baz=249,SNR=10
**P33M Teslin, Yukon** 86.96 28 IAMs_20 IAMs_20 19 37 44.7
comp=Z,2µm,20.0s
**P33M Teslin, Yukon** 86.96 28 P P 19 02 17.9 +0.7
baz=250
**F28M Old Crow** 86.98 20 IAmb IAmb 19 02 19.8
comp=Z,29nm,0.9s
**F28M Old Crow** 86.98 20 P P 19 02 18.5 +1.4
baz=244,SNR=25
**U35K Hyder** 87.02 33 IAMs_20 IAMs_20 19 34 43.4
comp=Z,2µm,20.0s
**U35K Hyder** 87.02 33 P P 19 02 18.4 +0.9
baz=253
**J30M Hart River** 87.02 24 IAmb IAmb 19 02 22.5
comp=Z,83nm,1.4s
**J30M Hart River** 87.02 24 P P 19 02 19.1 +1.6
baz=247,SNR=30
**KMPM Mount Pierce** 87.03 49 IAMs_20 IAMs_20 19 35 50.3
comp=Z,2µm,20.0s
**S34M Telegraph Cree** 87.05 31 IAmb IAmb 19 02 22.3
comp=Z,38nm,0.9s
S34M IAMs_20 IAMs_20 19 33 21.9
comp=Z,2µm,22.0s
**S34M Telegraph Cree** 87.05 31 P P 19 02 18.4 +0.8
baz=252,SNR=13
**BBB Bella Bella** 87.07 37 LR LR 19 34 57.5
comp=Z,4µm,20.4s,baz=281,slow=31
**N32M Quiet Lake** 87.16 27 IAMs_20 IAMs_20 19 39 00.1
comp=Z,2µm,20.0s
**N32M Quiet Lake** 87.16 27 P P 19 02 18.7 +0.6
baz=250
**JCC Jacoby Creek,** 87.18 48 IAMs_20 IAMs_20 19 34 06.2
comp=Z,2µm,22.0s
**T35M Bob Quinn** 87.22 32 IAMs_20 IAMs_20 19 35 42.5
comp=Z,2µm,20.0s
**T35M Bob Quinn** 87.22 32 P P 19 02 19.6 +1.2
baz=253
**BOOM Boomskoye usch** 87.23 313 IAmb IAmb 19 02 22.9
comp=Z,36nm,0.9s
**KUU Kurty** 87.24 315 *e*P P 19 02 18.6 -0.3
comp=Z,28nm,1.1s,baz=315
**KUU Kurty** 87.24 315 *e*P P 19 02 18.5 -0.3
KUU pmax pmax
comp=Z,28nm,1.1s
**KRPM Rodgers** 87.25 48 IAMs_20 IAMs_20 19 36 19.2
comp=Z,2µm,20.0s
**I30M Mount Dempster** 87.26 23 IAmb IAmb 19 02 22.6
comp=Z,34nm,0.8s
I30M IAMs_20 IAMs_20 19 36 22.3
comp=Z,2µm,22.0s
**I30M Mount Dempster** 87.26 23 P P 19 02 19.3 +0.7
baz=247,SNR=50
**KCPM Cahto Peak** 87.29 50 IAMs_20 IAMs_20 19 35 08.2
comp=Z,2µm,20.0s
**KMRM Mail Ridge** 87.30 49 IAMs_20 IAMs_20 19 35 58.4
comp=Z,3µm,21.0s
**KURK Kurchatov** 87.30 322 P P 19 02 17.5 -1.4
KURK IAmb IAmb 19 02 20.3
comp=Z,66nm,1.4s
**KURK Kurchatov** 87.30 322 *i* P P 19 02 17.5 -1.4
KURK pmax pmax
comp=Z,53nm,1.4s
**KBO Bosley Butte** 87.32 47 IAMs_20 IAMs_20 19 37 45.9
comp=Z,2µm,20.0s
**G29M Pine Creek** 87.33 21 P P 19 02 19.9 +1.1
baz=245,SNR=22
**KURBB Kurchatov Arra** 87.33 322 P P 19 02 18.5 -0.6
comp=Z,7.7nm,0.7s,baz=104,slow=3.8,SNR=72
KURBB S **SKSac** 19 12 38.6 -4.3
comp=Z,0.4nm,0.6s,baz=122,slow=5.4,SNR=1.5
KURBB LR LR 19 43 04.7
comp=Z,345nm,19.4s,baz=144,slow=37
comp=Z,7.7nm,0.7s
**D27M Malcolm River** 87.36 19 P P 19 02 20.5 +1.6
baz=243,SNR=57
**FARO Faro, Yukon** 87.41 26 P P 19 02 19.9 +0.6
baz=250
**KRMB Red Mountain** 87.41 48 IAMs_20 IAMs_20 19 37 02.3
comp=Z,3µm,20.0s
**KHMM Horse Mountain** 87.41 48 IAMs_20 IAMs_20 19 34 45.4
comp=Z,2µm,21.0s
**MCCM Marconi Confer** 87.53 51 IAMs_20 IAMs_20 19 35 41.7
comp=Z,2µm,20.0s
**E28M Babbage River** 87.54 19 P P 19 02 21.3 +1.6
baz=244,SNR=36
**HOPS Hopland Field** 87.55 50 IAMs_20 IAMs_20 19 33 55.0
comp=Z,2µm,21.0s
**TKM2 Tokmak 2** 87.56 314 P P 19 02 21.3 +0.7
SNR=15
**EPYK Eagle Plains** 87.58 22 P P 19 02 20.9 +0.8
baz=247,SNR=50
**R33M Jennings River** 87.59 29 IAmb IAmb 19 02 53.5
comp=Z,29nm,1.1s
**R33M Jennings River** 87.59 29 P P 19 02 21.2 +0.9
baz=252,SNR=11
**NIL Nilore** 87.64 304 P P 19 02 20.2 -0.8
NIL IAmb IAmb 19 02 23.3
comp=Z,51nm,0.8s
**NIL Nilore** 87.64 304 P P 19 02 20.2 -0.8
NIL pmax pmax
comp=Z,51nm,0.9s
**J01E Myrtle Point** 87.72 46 IAMs_20 IAMs_20 19 35 02.6
comp=Z,3µm,20.0s
**DLBC Dease Lake** 87.76 30 P P 19 02 21.7 +0.7
DLBC IAmb IAmb 19 02 54.4
comp=Z,31nm,1.1s
**DLBC Dease Lake** 87.76 30 LR LR 19 34 18.2
comp=Z,1µm,21.9s,baz=266,slow=31
**DLBC Dease Lake** 87.76 30 P P 19 02 21.8 +0.7
baz=253,SNR=18
**KBK Karagaybulak** 87.98 313 P P 19 02 23.4 +0.8
SNR=6.5
**E29M Blow River** 87.99 20 IAmb IAmb 19 02 24.0
comp=Z,27nm,0.6s
E29M IAMs_20 IAMs_20 19 36 07.5
comp=Z,3µm,22.0s
**E29M Blow River** 87.99 20 P P 19 02 22.3 +0.5
baz=246,SNR=23
**G30M tAoh Zraii Nji** 88.01 21 P P 19 02 23.0 +0.9
baz=247,SNR=7.7
**D28M Stokes Point** 88.11 19 P P 19 02 23.5 +1.1
baz=245,SNR=5.2
**CHMS Chumysh** 88.19 314 P P 19 02 23.1 -0.4
SNR=13
**DBO Dodson Butte** 88.21 46 IAMs_20 IAMs_20 19 34 37.4
comp=Z,2µm,20.0s
**HEBO Mount Hebo** 88.27 44 IAMs_20 IAMs_20 19 40 50.7
comp=Z,2µm,18.0s
**C03A Quillayute Air** 88.28 41 IAMs_20 IAMs_20 19 36 18.1
comp=Z,2µm,19.0s
**AAK Ala-Archa** 88.30 313 P P 19 02 25.0 +0.8
SNR=8.8
**AAK Ala-Archa** 88.30 313 P P 19 02 23.2 -0.9
AAK IAmb IAmb 19 02 27.5
comp=Z,18nm,0.8s
**AAK Ala-Archa** 88.30 313 LR LR 19 42 31.1
comp=Z,419nm,20.3s,baz=90,slow=36
**AAK Ala-Archa** 88.30 313 *i* P P 19 02 22.4 -1.8
AAK pmax pmax
comp=Z,18nm,0.8s
**HUMO Hull Mountain** 88.32 47 IAMs_20 IAMs_20 19 34 10.3
comp=Z,2µm,21.0s
**YBH Yreka Blue Hor** 88.33 48 LR LR 19 37 54.1
comp=Z,3µm,18.9s,baz=270,slow=33
**SGDS Sogindy** 88.36 314 *e*P P 19 02 24.2 -0.1
baz=314
**SGDS Sogindy** 88.36 314 *e*P P 19 02 24.1 -0.1
**F30M Barrier River** 88.41 21 P P 19 02 25.1 +1.2
baz=248,SNR=36
**SAO San Andreas Ge** 88.41 53 IAMs_20 IAMs_20 19 35 12.9
comp=Z,2µm,20.0s
**USP Ospenovka** 88.42 314 P P 19 02 25.0 +0.5
SNR=13
**COR Corvallis** 88.45 45 IAMs_20 IAMs_20 19 38 52.8
comp=Z,2µm,20.0s
**MMPY Sheldon Lake,** 88.45 26 IAmb IAmb 19 02 57.3
comp=Z,52nm,1.8s
**MMPY Sheldon Lake,** 88.45 26 P P 19 02 25.5 +1.2
baz=252
**BUCK Buck Mountain** 88.60 45 IAMs_20 IAMs_20 19 35 08.7
comp=Z,2µm,20.0s
**G03D McMinnville, O** 88.60 44 IAMs_20 IAMs_20 19 34 13.7
comp=Z,2µm,21.0s
**NLWA Neilton Lookou** 88.63 42 IAMs_20 IAMs_20 19 36 00.3
comp=Z,3µm,20.0s
**G31M Satah River** 88.70 22 IAMs_20 IAMs_20 19 38 46.3
comp=Z,2µm,20.0s
**G31M Satah River** 88.70 22 P P 19 02 25.5 +0.3
baz=249,SNR=40
**BBGB Big Mountain B** 88.70 53 IAMs_20 IAMs_20 19 35 02.7
comp=Z,2µm,21.0s
**CLRS Cowichan Lake** 88.75 41 IAMs_20 IAMs_20 19 35 33.5
comp=Z,2µm,20.0s
**AML Almayashu** 88.79 313 P P 19 02 27.9 +1.1
SNR=9.8
**EKS2 Erkin-Say** 88.83 313 P P 19 02 27.9 +1.3
SNR=12
**PMPB Monarch Peak** 88.83 53 IAMs_20 IAMs_20 19 35 17.1
comp=Z,2µm,20.0s
**H04D Lebanon** 88.84 45 IAMs_20 IAMs_20 19 38 57.0
comp=Z,2µm,19.0s
**WTLY Watson Lake, Y** 88.85 29 IAmb IAmb 19 02 55.7
comp=Z,28nm,1.0s
WTLY IAMs_20 IAMs_20 19 38 21.5
comp=Z,2µm,20.0s
**WTLY Watson Lake, Y** 88.85 29 P P 19 02 27.3 +1.2
baz=254
**F31M Tsiigehtchic** 89.08 21 IAmb IAmb 19 02 31.2
comp=Z,56nm,1.2s
**F31M Tsiigehtchic** 89.08 21 P P 19 02 27.8 +0.9
baz=249,SNR=12
**BTLS Baital** 89.08 315 *e*P P 19 02 27.2 -0.3
comp=Z,11nm,0.7s,baz=315
**BTLS Baital** 89.08 315 *e*P P 19 02 27.2 -0.3
BTLS pmax pmax
comp=Z,11nm,0.7s
**PGC Sidney** 89.16 41 IAMs_20 IAMs_20 19 33 52.2
comp=Z,2µm,22.0s
**BHUJ Bhuj** 89.17 293 *e*P P 19 02 28.2 -0.2
**SNCC San Nicolas Is** 89.40 57 IAMs_20 IAMs_20 19 38 02.4
comp=Z,2µm,19.0s
**CMB Columbia Colle** 89.45 52 IAMs_20 IAMs_20 19 35 38.5
comp=Z,2µm,22.0s
**INK Inuvik** 89.46 21 IAmb IAmb 19 02 30.6
comp=Z,74nm,1.3s
**INK Inuvik** 89.46 21 LR LR 19 38 32.1
comp=Z,3µm,21.8s,baz=235,slow=33
**INK Inuvik** 89.46 21 P P 19 02 29.3 +0.6
baz=250,SNR=18
**TGTN Hyland Airport** 89.48 28 P P 19 02 29.9 +0.8
baz=254
**J05D Fort Rock, OR** 89.69 46 P P 19 02 30.1 -0.5
J05D IAMs_20 IAMs_20 19 35 37.4
comp=Z,3µm,21.0s
**HOOD Mount Hood Mea** 89.74 44 IAMs_20 IAMs_20 19 41 22.9
comp=Z,2µm,19.0s
**BCW Bitter Crk WRg** 89.75 55 P P 19 02 30.8 -0.2
BCW IAmb IAmb 19 03 09.4
comp=Z,48nm,1.1s
BCW IAMs_20 IAMs_20 19 34 55.5
comp=Z,2µm,21.0s
**DRK Karamyk** 89.76 310 IAmb IAmb 19 02 33.3
comp=Z,64nm,1.1s
**I05D Terrebonne, OR** 89.79 45 IAMs_20 IAMs_20 19 37 28.2
comp=Z,2µm,20.0s
**G05A Wamic** 89.96 45 IAMs_20 IAMs_20 19 40 44.7
comp=Z,2µm,19.0s
**PINE Pine Mountain** 89.98 46 IAMs_20 IAMs_20 19 36 06.3
comp=Z,2µm,20.0s
**LIRD Liard River Hi** 89.99 30 P P 19 02 32.4 +1.0
baz=256
**PNTR Pine Nut** 90.22 51 IAMs_20 IAMs_20 19 35 29.0
comp=Z,2µm,22.0s
**WAKR Walker** 90.26 51 IAMs_20 IAMs_20 19 36 58.0
comp=Z,2µm,21.0s
**TOAD Toad River Com** 90.29 31 P P 19 02 33.5 +0.5
baz=257
**G06A Erlson Farm,** 90.44 45 IAMs_20 IAMs_20 19 35 12.2
comp=Z,2µm,21.0s
**YERR Yerington** 90.49 51 IAMs_20 IAMs_20 19 35 49.9
comp=Z,2µm,21.0s
**BTK Batken** 90.59 310 IAmb IAmb 19 02 36.5
comp=Z,56nm,1.0s
**ISA Isabella, Lake** 90.61 54 IAMs_20 IAMs_20 19 35 31.3
comp=Z,2µm,22.0s
**PASC Pasadena Art C** 90.64 56 IAMs_20 IAMs_20 19 38 14.1
comp=Z,1µm,20.0s
**CCAC Calif City Air** 90.91 55 IAMs_20 IAMs_20 19 35 31.3
comp=Z,2µm,21.0s
**RYN Ryan** 90.99 51 IAMs_20 IAMs_20 19 35 44.2
comp=Z,2µm,22.0s
**F07A Phinny Hill Vi** 91.03 44 IAMs_20 IAMs_20 19 35 42.0
comp=Z,2µm,21.0s
**I07A Izee** 91.05 46 IAMs_20 IAMs_20 19 37 10.6
comp=Z,2µm,20.0s
**NVAR Mina Array Bea** 91.13 52 PKPPKP **P'P'df** 19 28 09.6 -0.9
comp=Z,2.1nm,1.0s,baz=92,slow=6.3,SNR=5.4
NVAR LR LR 19 36 48.0
comp=Z,1µm,21.9s,baz=274,slow=31
**KOTAN Kotaneelee Air** 91.16 30 P P 19 02 37.5 +0.6
baz=258
**ELS Elsinore Mount** 91.19 56 IAMs_20 IAMs_20 19 39 32.9
comp=Z,2µm,19.0s
**RPN Rapa Nui** 91.19 117 LR LR 19 35 23.0
comp=Z,1µm,21.7s,baz=310,slow=30
**KBL Kabul** 91.22 304 P P 19 02 36.4 -1.6
KBL IAmb IAmb 19 02 38.4
comp=Z,28nm,0.8s
**KBL Kabul** 91.22 304 P P 19 02 36.4 -1.6
KBL pmax pmax
comp=Z,28nm,0.8s
**DSP Deep Springs** 91.25 53 P P 19 02 37.2 -0.5
DSP IAmb IAmb 19 03 08.7
comp=Z,33nm,1.6s
DSP IAMs_20 IAMs_20 19 36 42.1
comp=Z,2µm,21.0s
**KKAR Karatay Array** 91.27 313 P P 19 02 36.7 -1.1
**KKAR Karatay Array** 91.27 313 IAmb IAmb 19 02 40.2
comp=Z,18nm,1.0s
**KKAR Karatay Array** 91.27 313 P P 19 02 36.7 -1.1
**TJX Tijuana** 91.36 58 IAMs_20 IAMs_20 19 36 42.2
comp=Z,2µm,21.0s
**KVN Kaiserville** 91.38 51 IAMs_20 IAMs_20 19 36 17.4
comp=Z,2µm,21.0s
**HAWA Hanford** 91.38 44 IAMs_20 IAMs_20 19 36 04.1
comp=Z,3µm,22.0s
**G08A Pilot Rock** 91.61 45 P P 19 02 39.3 -0.2
G08A IAMs_20 IAMs_20 19 39 20.4
comp=Z,2µm,20.0s
**CBX Cerro Bola** 91.66 58 IAMs_20 IAMs_20 19 39 05.2
comp=Z,2µm,20.0s
**GRAC Grapevine Rang** 91.68 53 IAMs_20 IAMs_20 19 36 56.5
comp=Z,2µm,21.0s
**J08A Circle Bar Ran** 91.69 47 IAMs_20 IAMs_20 19 36 52.4
comp=Z,2µm,21.0s
**SIMJ Simiganj** 91.79 309 P P 19 02 40.1 -0.4
SIMJ IAmb IAmb 19 02 41.9
comp=Z,53nm,1.6s
**GSC Goldstone, Bar** 91.91 55 IAMs_20 IAMs_20 19 36 12.8
comp=Z,2µm,21.0s
**PFO Pinyon Flats O** 91.99 57 P P 19 02 42.0 +0.4
**PFO Pinyon Flats O** 91.99 57 LR LR 19 40 17.5
comp=Z,2µm,18.0s,baz=276,slow=33
**PFO Pinyon Flats O** 91.99 57 *e*P P 19 02 38.4 -3.1
**TPFO Pinon Flats** 91.99 57 P P 19 02 41.9 +0.3
baz=263
**Q09A Carvers** 92.06 51 IAMs_20 IAMs_20 19 36 39.5
comp=Z,2µm,22.0s
**WRGLY Wrigley** 92.06 27 IAMs_20 IAMs_20 19 45 13.3
comp=Z,1µm,18.0s
**WRGLY Wrigley** 92.06 27 P P 19 02 41.6 +0.7
baz=259
**GWY Greenwater Val** 92.13 54 IAmb IAmb 19 03 11.8
comp=Z,24nm,1.4s
**RMX La Rumorosa** 92.18 58 IAMs_20 IAMs_20 19 37 07.1
comp=Z,2µm,20.0s
**ESJX Sierra Juarez** 92.22 58 IAMs_20 IAMs_20 19 37 13.2
comp=Z,2µm,20.0s
**WCT Wildcat Mounta** 92.24 53 IAMs_20 IAMs_20 19 37 13.4
comp=Z,2µm,20.0s
**VTX Valle De La Tr** 92.29 59 IAMs_20 IAMs_20 19 35 53.0
comp=Z,2µm,21.0s
**BMO Blue Mountains** 92.72 45 IAMs_20 IAMs_20 19 39 58.6
comp=Z,1µm,20.0s
**BVAR Borovoye Array** 92.75 323 P P 19 02 43.3 -1.1
comp=Z,30nm,0.7s,baz=103,slow=4.7,SNR=97
comp=Z,30nm,0.7s
**BRVK Borovoye** 92.82 323 P P 19 02 43.2 -1.5
BRVK IAmb IAmb 19 02 45.5
comp=Z,35nm,0.9s
**BRVK Borovoye** 92.82 323 P P 19 02 43.2 -1.5
BRVK pmax pmax
comp=Z,35nm,1.0s
**F10A Beach Ranch, E** 92.91 44 IAMs_20 IAMs_20 19 36 41.6
comp=Z,2µm,22.0s
**S11A Rachel** 93.04 53 IAMs_20 IAMs_20 19 39 13.5
comp=Z,1µm,20.0s
**C36M Paulatuk** 93.04 20 P P 19 02 45.5 +0.1
baz=258
**SFX San Felipe** 93.05 59 IAMs_20 IAMs_20 19 35 21.0
comp=Z,2µm,22.0s
**A36M Sachs Harbour** 93.22 18 IAMs_20 IAMs_20 19 43 11.6
comp=Z,2µm,21.0s
**A36M Sachs Harbour** 93.22 18 P P 19 02 46.5 +0.4
baz=257
**R11B Troy Canyon, C** 93.24 52 P P 19 02 46.7 -0.6
baz=264
**NEW Newport** 93.25 42 P P 19 02 45.7 -1.2
**NEW Newport** 93.25 42 LR LR 19 38 47.6
comp=Z,3µm,19.9s,baz=262,slow=32
**NEW Newport** 93.25 42 P P 19 02 45.7 -1.2
NEW pmax pmax
comp=Z,11nm,1.2s
**GLA Glamis** 93.28 57 IAMs_20 IAMs_20 19 37 51.2
comp=Z,2µm,20.0s
**V12A Nelson** 93.55 55 IAMs_20 IAMs_20 19 37 25.0
comp=Z,2µm,21.0s
**PRN Pahroc Range** 93.56 53 IAmb IAmb 19 03 18.2
comp=Z,22nm,1.2s
**MFID Camas Ranch** 93.61 47 IAMs_20 IAMs_20 19 38 13.3
comp=Z,2µm,20.0s
**ELK Elko** 93.76 50 IAMs_20 IAMs_20 19 37 34.5
comp=Z,2µm,22.0s
**Q12A Willow Creek R** 93.90 51 IAMs_20 IAMs_20 19 37 47.3
comp=Z,2µm,22.0s
**113A Mohawk Valley,** 94.14 58 IAMs_20 IAMs_20 19 40 38.9
comp=Z,2µm,19.0s
**W13A Hualapai Mount** 94.27 55 IAMs_20 IAMs_20 19 40 18.2
comp=Z,1µm,19.0s
**SPR3 Spring Creek 3** 94.28 51 IAmb IAmb 19 03 27.3
comp=Z,26nm,1.2s
SPR3 IAMs_20 IAMs_20 19 38 12.4
comp=Z,1µm,21.0s
**HLID Hailey** 94.65 47 IAMs_20 IAMs_20 19 40 04.8
comp=Z,2µm,20.0s
**214A Organ Pipe Nat** 94.87 59 IAMs_20 IAMs_20 19 38 22.3
comp=Z,2µm,20.0s
**214A Organ Pipe Nat** 94.87 59 P P 19 02 54.7 0.0
baz=265
**CCUT Cedar City** 94.91 53 IAMs_20 IAMs_20 19 39 21.1
comp=Z,2µm,21.0s
**BELA Belgrano 2** 95.05 178 IAmb IAmb 19 02 56.3
comp=Z,30nm,1.1s
**ELIB Princess Elisa** 95.38 193 *d*P P 19 02 55.8 -0.5
comp=Z,13nm,1.2s
**DUG Dugway, Tooele** 95.56 50 IAMs_20 IAMs_20 19 38 42.0
comp=Z,2µm,22.0s
**U15A North Rim** 95.67 54 IAMs_20 IAMs_20 19 38 54.4
comp=Z,2µm,21.0s
**HVU Hansel Valley** 95.70 49 IAMs_20 IAMs_20 19 42 49.9
comp=Z,2µm,20.0s
**PKCU Pink Cliffs** 95.74 53 pP 19 03 10.6 -2.0
PKCU IAMs_20 IAMs_20 19 39 48.0
comp=Z,1µm,20.0s
**MTPU Mount Pierson** 95.88 52 IAMs_20 IAMs_20 19 39 53.8
comp=Z,1µm,21.0s
**YKA Yellowknife Ar** 95.99 28 P P 19 02 59.1 +0.1
**YKA Yellowknife Ar** 95.99 28 P P 19 02 58.8 -0.2
comp=Z,8.8nm,0.8s,baz=274,slow=4.8,SNR=13
YKA PKKPbc **PKKPbc** 19 19 46.8 -2.9
comp=Z,1.9nm,0.6s,baz=68,slow=3.0,SNR=3.8
YKA LR LR 19 42 39.3
comp=Z,1µm,19.8s,baz=295,slow=33
comp=Z,8.8nm,0.8s
**YKA Yellowknife Ar** 95.99 28 *i* P P 19 03 00.0 +1.0
YKA pmax pmax
comp=Z,9.0nm,0.8s
**NLU North Lily Min** 96.10 51 IAMs_20 IAMs_20 19 38 59.5
comp=Z,2µm,21.0s
**X16A Lo Mia Camp, P** 96.22 56 IAMs_20 IAMs_20 19 40 12.8
comp=Z,1µm,20.0s
**WUAZ Wupatki** 96.35 55 IAMs_20 IAMs_20 19 38 42.3
comp=Z,2µm,22.0s
**LPIG La Paz** 96.40 67 LR LR 19 39 16.1
comp=Z,2µm,20.3s,baz=264,slow=31
**CTU Camp Tracy** 96.40 50 IAMs_20 IAMs_20 19 38 42.4
comp=Z,1µm,22.0s
**MPU Maple Canyon** 96.45 51 IAMs_20 IAMs_20 19 39 33.6
comp=Z,2µm,21.0s
**HWUT Hardware Ranch** 96.60 49 IAMs_20 IAMs_20 19 39 26.5
comp=Z,2µm,22.0s
**TUC Tucson** 96.61 58 IAMs_20 IAMs_20 19 39 26.4
comp=Z,2µm,20.0s
**JLU Jordanelle** 96.62 50 IAMs_20 IAMs_20 19 39 04.3
comp=Z,2µm,22.0s
**SLBS Sierra La Lagu** 96.70 67 IAMs_20 IAMs_20 19 37 51.6
comp=Z,2µm,21.0s
**BOZ Bozeman (W)** 96.78 45 IAMs_20 IAMs_20 19 39 05.0
comp=Z,2µm,22.0s
**HRA Herat** 96.80 304 IAmb IAmb 19 03 04.2
comp=Z,21nm,0.8s
**AHID Auburn Hatcher** 97.01 48 IAMs_20 IAMs_20 19 42 35.3
comp=Z,1µm,20.0s
**HMU Henry Mountain** 97.01 53 IAMs_20 IAMs_20 19 41 22.7
comp=Z,1µm,20.0s
**YHL Hebgen Lake** 97.05 46 IAMs_20 IAMs_20 19 41 13.4
comp=Z,2µm,20.0s
**P17A Butcher Ranch,** 97.10 51 IAMs_20 IAMs_20 19 42 38.0
comp=Z,1µm,21.0s
**FXWY Fox Creek** 97.11 47 IAMs_20 IAMs_20 19 40 57.9
comp=Z,2µm,20.0s
**TPAW Teton Pass** 97.15 47 IAMs_20 IAMs_20 19 40 48.0
comp=Z,2µm,20.0s
**IMW Indian Meadow** 97.18 47 IAMs_20 IAMs_20 19 40 59.8
comp=Z,2µm,20.0s
**FLWY Flagg Ranch** 97.36 46 IAMs_20 IAMs_20 19 42 23.7
comp=Z,2µm,20.0s
**YNM Yellowstone No** 97.39 46 IAMs_20 IAMs_20 19 41 25.3
comp=Z,2µm,21.0s
**YNR Norris Junctio** 97.41 46 IAMs_20 IAMs_20 19 41 35.7
comp=Z,2µm,20.0s
**LOHW Long Hollow** 97.41 47 IAMs_20 IAMs_20 19 40 46.0
comp=Z,2µm,20.0s
**X18A Snowflake** 97.45 56 IAMs_20 IAMs_20 19 44 39.5
comp=Z,1µm,19.0s
**H17A Grant Village** 97.47 46 P Pdif 19 03 06.6 0.0
baz=268
**P18A Preston Nutter** 97.49 51 IAMs_20 IAMs_20 19 43 29.3
comp=Z,1µm,20.0s
**W18A Petrified Fore** 97.66 56 IAMs_20 IAMs_20 19 43 56.0
comp=Z,2µm,19.0s
**RDMU Red Mountain** 98.05 50 IAMs_20 IAMs_20 19 39 49.1
comp=Z,1µm,22.0s
**PDAR Pinedale Array** 98.14 48 P P 19 03 07.8 -1.8
**PDAR Pinedale Array** 98.14 48 P P 19 03 09.3 -0.3
comp=Z,1.3nm,0.7s,baz=254,slow=3.4,SNR=13
PDAR PKKPbc **PKKPbc** 19 19 42.5 -0.9
comp=Z,0.5nm,0.5s,baz=107,slow=5.8,SNR=4.5
PDAR LR LR 19 44 58.2
comp=Z,1µm,18.5s,baz=273,slow=34
comp=Z,1.3nm,0.7s

EGMT **Eagleton** 98.16 43 IAMs_20 IAMs_20 19 41 39.4
comp=Z,2µm,20.0s
RLMT **Red Lodge** 98.42 45 IAMs_20 IAMs_20 19 39 59.6
comp=Z,2µm,22.0s
SVE **Sverdlovsk** 98.61 326 eP **P** **19 03 09.0 -2.0**
SVE eS **SKSac** **19 13 43.2 -2.0**
SVE pmax pmax
comp=Z,13nm,0.9s
NVL **N'lazarevskaya** 98.72 191 eP Pdif 19 03 12.5 +1.2
NVL eS **SKSac** **19 13 47.0 +1.6**
NVL pmax pmax
comp=Z,4.0nm,0.9s
NVL MLR MLR
comp=Z,725nm,17.0s
MVCO **Mesa Verde** 98.76 53 IAMs_20 IAMs_20 19 40 43.1
comp=Z,1µm,22.0s
ABKAR **Akbulak array** 99.05 319 **Pdif** **19 03 10.9 -2.3**
O20A **White River Ci** 99.05 51 IAMs_20 IAMs_20 19 41 07.6
comp=Z,2µm,22.0s
121A **Cookes Peak, D** 99.16 58 IAMs_20 IAMs_20 19 39 12.8
comp=Z,2µm,22.0s
TROLL **Troll, Antarti** 99.23 188 ⇑Pdiff **Pdif** **19 03 14.0 +0.3**
comp=Z,272nm,1.1s
WSAR **Wadi Sarin** 99.25 292 LR LR 19 49 09.9
comp=Z,264nm,21.3s,baz=105,slow=36
ARU **Arti** 99.77 326 LR LR 19 51 06.8
comp=Z,668nm,19.8s,baz=77,slow=37
ARU **Arti** 99.77 326 *d* iP **Pdif** **19 03 14.3 -1.9**
ARU *PP **pP** **19 03 29.1 -0.8**
ARU 19 07 19.4
ARU PPP PPP 19 09 26.7
ARU S **SKSac** **19 13 48.8 -2.2**
ARU pmax pmax
comp=Z,20nm,0.9s
ARU MLR MLR
comp=Z,824nm,19.0s
Y22D **IRIS PASSCAL I** 99.94 57 IAMs_20 IAMs_20 19 46 20.4
comp=Z,1µm,19.0s
S22A **4UR Ranch, Cre** 100.10 53 IAMs_20 IAMs_20 19 42 21.5
comp=Z,2µm,21.0s
SNAA **Sanae** 100.23 187 IAMs_20 IAMs_20 19 48 09.4
comp=Z,2µm,18.0s
SNAA **Sanae** 100.23 187 PKiKP **PKiKP** **19 07 44.9 -0.2**
SNAA ⇑Pdiff **Pdif** **19 03 17.8 -0.2**
comp=Z,99nm,0.8s
SNAA **Sanae** 100.23 187 P **Pdif** **19 03 16.9 -1.1**
comp=Z,3.7nm,0.8s,baz=150,slow=3.4,SNR=12
LAO **LASA Array** 100.56 44 IAMs_20 IAMs_20 19 41 41.9
comp=Z,2µm,22.0s
N23A **Red Feather La** 100.81 50 P **Pdif** **19 03 21.1 -0.5**
baz=270
SDCO **Great Sand Dun** 101.15 53 IAMs_20 IAMs_20 19 43 17.3
comp=Z,2µm,21.0s
PHWY **Pilot Hill** 101.18 49 IAMs_20 IAMs_20 19 43 25.8
comp=Z,2µm,21.0s
VNA3 **Neumayer Olymp** 101.32 185 ⇑PKiKP **PKiKP** **19 07 45.7 -1.3**
comp=Z,8.9nm,0.5s
VNA2 **Neumayer--Watz** 101.42 186 ⇑PKiKP **PKiKP** **19 07 47.0 -0.2**
comp=Z,13nm,0.7s,baz=180,slow=1.1
T25A **Trinidad** 102.02 54 IAMs_20 IAMs_20 19 43 13.4
comp=Z,2µm,21.0s
T25A **Trinidad** 102.02 54 P **Pdif** **19 03 26.4 -0.5**
baz=270
BRIGG **Briggsdale** 102.05 50 IAMs_20 IAMs_20 19 43 05.1
comp=Z,2µm,22.0s
RSSD **Black Hills** 102.16 46 IAMs_20 IAMs_20 19 45 17.6
comp=Z,2µm,20.0s
PMSA **Palmer Station** 102.56 164 eP **Pdif** **19 03 30.3 +1.8**
TXAR **Lajitas Array** 102.60 62 PKiKP PKiKP 19 08 03.3 +13
comp=Z,0.4nm,0.6s,baz=243,slow=5.5,SNR=6.1
TXAR PKKPbc **PKKPbc** **19 19 27.5 -2.5**
comp=Z,0.9nm,0.6s,baz=122,slow=4.2,SNR=7.6
KSCO **Kaye Shedlock'** 103.39 52 IAMs_20 IAMs_20 19 47 41.6
comp=Z,1µm,20.0s
ZAIG **Zacatecas** 103.42 68 IAMs_20 IAMs_20 19 42 58.4
comp=Z,2µm,20.0s
OGNE **Ogallala** 103.77 50 IAMs_20 IAMs_20 19 44 23.5
comp=Z,2µm,21.0s
AMTX **Amarillo** 104.27 56 IAMs_20 IAMs_20 19 45 32.0
comp=Z,1µm,20.0s
E28A **Huff** 104.36 44 IAMs_20 IAMs_20 19 44 34.9
comp=Z,2µm,21.0s
MDND **Maddock** 104.98 42 IAMs_20 IAMs_20 19 45 15.1
comp=Z,2µm,21.0s
ABPO **Ambohimpanom** 105.02 248 IAMs_20 IAMs_20 19 44 55.3
comp=Z,1µm,20.0s
K30B **Basset** 105.47 48 IAMs_20 IAMs_20 19 54 17.3
comp=Z,1µm,18.0s
CBKS **Cedar Bluff** 105.66 52 IAMs_20 IAMs_20 19 47 29.6
comp=Z,1µm,20.0s
SUSD **Miller** 105.78 46 IAMs_20 IAMs_20 19 45 54.5
comp=Z,2µm,21.0s
KBS **Kingsbay** 105.88 353 IAMs_20 IAMs_20 19 47 40.4
comp=Z,1µm,22.0s
SPA0 **Spitsbergen Ar** 105.89 352 *e* **PKiKP** **19 07 56.5 +1.3**
SPITS **Spitsbergen Ar** 105.89 352 PKiKP **PKiKP** **19 07 55.1 -0.1**
comp=Z,5.9nm,0.7s,baz=111,slow=6.3,SNR=8.1
SPITS PKKPbc **PKKPbc** **19 19 18.9 -2.5**
comp=Z,2.7nm,0.5s,baz=154,slow=6.0,SNR=12
JCT **Junction City** 105.95 60 IAMs_20 IAMs_20 19 53 04.1
comp=Z,2µm,18.0s
ABTX **Abilene, Hawle** 106.03 58 IAMs_20 IAMs_20 19 43 33.0
comp=Z,2µm,22.0s
833A **Chaparral WMA,** 106.35 63 IAMs_20 IAMs_20 19 44 46.6
comp=Z,2µm,21.0s
FCC **Fort Churchill** 106.36 31 IAMs_20 IAMs_20 19 47 55.6
comp=Z,1µm,20.0s
NOKA **Waynoka** 106.43 54 IAMs_20 IAMs_20 19 42 01.2
comp=Z,2µm,21.0s
TULEG **Thule** 106.46 10 IAMs_20 IAMs_20 19 49 51.4
comp=Z,2µm,22.0s
UNM **Universidad Na** 106.47 72 IAMs_20 IAMs_20 19 44 26.9
comp=Z,2µm,20.0s
R32A **Long Quar--Watz** 106.48 52 IAMs_20 IAMs_20 19 47 55.5
comp=Z,1µm,20.0s
WMOK **Wichita Mounta** 106.66 56 IAMs_20 IAMs_20 19 48 45.4
comp=Z,1µm,20.0s
BGNE **Belgrade** 106.67 49 IAMs_20 IAMs_20 19 46 33.1
comp=Z,2µm,22.0s
HSPB **Hornsund (broa** 106.89 351 *e* **PKiKP** **19 07 57.5 +0.5**
OK032 **Salt Plains WL** 107.00 54 IAMs_20 IAMs_20 19 48 39.2
comp=Z,2µm,20.0s
CROK **Carrier** 107.20 54 IAMs_20 IAMs_20 19 48 16.6
comp=Z,2µm,20.0s
F33A **5 Mile Ranch,** 107.48 44 IAMs_20 IAMs_20 19 51 34.4
comp=Z,1µm,19.0s
ECSD **EROS Data Cent** 107.54 46 IAMs_20 IAMs_20 19 46 37.0
comp=Z,2µm,21.0s
FW07 **Weatherford** 107.59 58 IAMs_20 IAMs_20 19 44 33.3
comp=Z,2µm,22.0s
OK029 **Liberty Lake** 107.67 55 IAMs_20 IAMs_20 19 48 14.3
comp=Z,2µm,21.0s
735A **Kenedy** 107.73 62 IAMs_20 IAMs_20 19 45 51.2
comp=Z,1µm,20.0s
WHTX **Lake Whitney,** 107.91 59 IAMs_20 IAMs_20 19 44 29.7
comp=Z,2µm,22.0s
L34A **Svendsen Farm,** 107.93 48 IAMs_20 IAMs_20 19 55 45.5
comp=Z,1µm,20.0s
Z35A **Perchaven, San** 108.00 57 IAMs_20 IAMs_20 19 44 13.2
comp=Z,2µm,22.0s
OK048 **Pawnee Station** 108.04 54 IAMs_20 IAMs_20 19 49 20.9
comp=Z,1µm,20.0s
KSU1 **Kansas State U** 108.06 51 IAMs_20 IAMs_20 19 45 54.3
comp=Z,1µm,22.0s
MAK **Makhachkala** 108.08 313 eP **Pdif** **19 03 52.8 -0.6**
MAK *e* 19 08 19.4
MAK *e* 19 14 28.1
MAK *e*PS **PS** **19 17 44.4 -3.2**
MAK *e*SS SS 19 23 29.3 -4.3
MAK *e*SSS SSS 19 27 38.7
MAK pmax pmax
comp=Z,72nm,0.8s
OK051 **E0350 and S346** 108.12 54 IAMs_20 IAMs_20 19 49 42.0
comp=Z,2µm,20.0s
BJO1 **Bjornoya** 108.12 349 *e* **PKiKP** **19 07 59.2 -0.2**
OK031 **S. Brethren Rd** 108.16 55 IAMs_20 IAMs_20 19 48 47.2
comp=Z,2µm,20.0s
NEEM **North Greenlan** 108.17 6 *i* P **PKiKP** **19 07 59.9 +0.1**
OK052 **Battle Ridge R** 108.19 55 IAMs_20 IAMs_20 19 48 56.8
comp=Z,2µm,20.0s
QUOK **Quay** 108.25 54 IAMs_20 IAMs_20 19 50 28.5
comp=Z,2µm,20.0s
VADS **Vadso** 108.37 343 *e* **PKiKP** **19 08 00.8 +0.9**
N35A **Tabor** 108.61 49 IAMs_20 IAMs_20 19 49 07.5
comp=Z,2µm,20.0s
TUL3 **Leonard** 109.01 55 IAMs_20 IAMs_20 19 49 42.7
comp=Z,2µm,19.0s
KEV **Kevo** 109.25 343 IAMs_20 IAMs_20 19 51 12.7
comp=Z,2µm,22.0s
237A **Washetta, Mont** 109.30 59 IAMs_20 IAMs_20 19 46 58.7
comp=Z,2µm,20.0s
X37A **Clayton** 109.47 56 IAMs_20 IAMs_20 19 51 11.9
comp=Z,1µm,19.0s
HAMF **Hammerfest** 109.63 345 *e* **PKiKP** **19 08 01.1 -1.1**
I37A **Lemond, Waseca** 109.80 46 IAMs_20 IAMs_20 19 48 05.7
comp=Z,2µm,21.0s
ARA0 **ARCESS Array S** 109.81 343 *e* **PKiKP** **19 08 01.6 -1.1**
ARCES **ARCESS Array B** 109.81 343 PKiKP **PKiKP** **19 08 02.4 -0.3**
comp=Z,6.1nm,0.3s,baz=86,slow=1.9,SNR=94
ARCES PKKPbc **PKKPbc** **19 19 06.5 -2.3**
comp=Z,2.4nm,0.6s,baz=231,slow=3.6,SNR=9.6
Z38A **Mt. Pleasant** 109.90 57 IAMs_20 IAMs_20 19 48 41.5
comp=Z,2µm,21.0s
SPMN **Marine on St.** 110.00 44 IAMs_20 IAMs_20 19 47 51.1
comp=Z,1µm,21.0s
U38A **Gravette** 110.09 54 IAMs_20 IAMs_20 19 50 36.2
comp=Z,2µm,20.0s
SCIA **State Center** 110.27 48 IAMs_20 IAMs_20 19 50 42.5
comp=Z,1µm,20.0s
EYMN **Ely** 110.35 41 IAMs_20 IAMs_20 19 47 57.9
comp=Z,2µm,22.0s
VRH **Novokhopyorsk** 110.39 322 *e*PKiKP **PKiKP** **19 08 03.1 -1.1**
VRH pmax pmax
comp=Z,10.0nm,0.4s
KTK1 **Kautokeino** 110.77 344 *e* **PKiKP** **19 08 03.7 -0.8**
S39A **Bolivar** 110.79 52 IAMs_20 IAMs_20 19 48 49.5
comp=Z,2µm,21.0s
MIAR **Mount Ida** 110.95 56 IAMs_20 IAMs_20 19 49 46.1
comp=Z,1µm,22.0s
RAYN **Ar Rayn** 111.31 292 ⇑PKiKP **PKiKP** **19 08 06.8 -0.1**
JOF **Joensuu** 111.38 336 *eP* **PKiKP** **19 08 05.9 +0.1**
KIV **Kislovodsk** 111.39 314 *i* PKiKP **PKiKP** **19 08 05.6 -0.9**
KIV pmax pmax
comp=Z,4.0nm,1.0s
KIV MLR MLR
comp=Z,352nm,21.0s
WLAR **White Oak Lake** 111.42 57 IAMs_20 IAMs_20 19 49 41.6
comp=Z,1µm,20.0s
TRO **Tromso** 111.52 345 *e* **PKiKP** **19 08 05.8 -0.1**
R40A **Maddies Statio** 111.53 52 IAMs_20 IAMs_20 19 54 02.2
comp=Z,2µm,19.0s
441A **DeRidder** 111.63 60 IAMs_20 IAMs_20 19 49 42.4
comp=Z,2µm,20.0s
MGMO **Mountain Grove** 111.69 53 IAMs_20 IAMs_20 19 49 07.5
comp=Z,2µm,21.0s
Z41A **Richland Creek** 111.72 57 IAMs_20 IAMs_20 19 50 36.7
comp=Z,2µm,21.0s
VORR **Voronezh** 111.78 323 *e*PKiKP **PKiKP** **19 08 07.0 +0.2**
VORR pmax pmax
comp=Z,23nm,1.3s
G40A **Rib Lake** 111.80 44 IAMs_20 IAMs_20 19 50 59.5
comp=Z,2µm,20.0s
WHAR **Wooly Hollow** 111.92 55 IAMs_20 IAMs_20 19 51 12.6
comp=Z,1µm,20.0s
UALR **University of** 111.93 55 IAMs_20 IAMs_20 19 57 33.1
comp=Z,1µm,19.0s
FCAR **Ozark Folk Cen** 111.97 54 IAMs_20 IAMs_20 19 51 04.1
comp=Z,2µm,20.0s
OBN **Obninsk** 112.16 327 *i* P **Pdif** **19 04 11.2 -0.1**
OBN *i* 19 08 07.7
OBN *e* 19 08 51.5
OBN *e*PPP PPP 19 11 13.8
OBN *e* 19 15 14.9
OBN pmax pmax
comp=Z,10.0nm,1.0s
OBN pmax pmax
comp=Z,8.0nm,0.9s
N41A **Harden Midland** 112.22 49 IAMs_20 IAMs_20 19 49 27.2
comp=Z,1µm,21.0s
JFWS **Jewell Farm** 112.25 46 IAMs_20 IAMs_20 19 49 22.8
comp=Z,1µm,20.0s
COWI **Conover** 112.34 43 IAMs_20 IAMs_20 19 49 40.7
comp=Z,2µm,22.0s
CCM **Cathedral Cave** 112.36 52 IAMs_20 IAMs_20 19 54 55.2
comp=Z,2µm,19.0s
ERBR **Yeremizino-Bor** 112.54 317 *i* PKiKP **PKiKP** **19 08 09.9 +1.4**
ERBR pmax pmax
comp=Z,13nm,0.5s
T42A **Van Buren** 112.64 53 IAMs_20 IAMs_20 19 49 46.6
comp=Z,1µm,21.0s
LCAR **Lake Charles** 112.73 54 IAMs_20 IAMs_20 19 51 46.0
comp=Z,1µm,20.0s
L42A **Oliver, Polo** 112.86 47 IAMs_20 IAMs_20 19 52 09.9
comp=Z,2µm,20.0s
143A **Socs Landing,** 112.95 58 IAMs_20 IAMs_20 19 49 57.3
comp=Z,2µm,21.0s
I42A **Draeger Farm,** 113.00 45 IAMs_20 IAMs_20 19 50 05.4
comp=Z,2µm,21.0s
FVM **French Village** 113.02 52 IAMs_20 IAMs_20 19 49 47.4
comp=Z,2µm,22.0s
SLM **Saint Louis** 113.05 51 IAMs_20 IAMs_20 19 51 43.4
comp=Z,1µm,19.0s
F42A **Maple Grove Fa** 113.10 43 IAMs_20 IAMs_20 19 52 01.8
comp=Z,1µm,20.0s
PBMO **Poplar Bluff** 113.20 53 IAMs_20 IAMs_20 19 50 02.5
comp=Z,2µm,21.0s
HDIL **Hopedale** 113.42 49 IAMs_20 IAMs_20 19 49 52.3
comp=Z,1µm,22.0s
P43A **Skaggs, Pawnee** 113.42 50 IAMs_20 IAMs_20 19 50 13.0
comp=Z,1µm,21.0s
SOC **Sochi** 113.57 315 *i* P **Pdif** **19 04 23.2 +5.4**
SOC MLR MLR
comp=Z,700nm,22.0s
GNAR **Gosnell** 113.66 54 IAMs_20 IAMs_20 19 53 11.6
comp=Z,2µm,20.0s
K43A **Burlington** 113.68 46 IAMs_20 IAMs_20 19 51 17.5
comp=Z,1µm,20.0s
STEI **Steigen** 113.68 345 *e*PKPdf **PKiKP** **19 08 10.1 +0.1**
STEI IAmb IAmb 19 08 11.8
comp=Z,124nm,1.7s
CGM3 **Cape Girardeau** 113.73 52 IAMs_20 IAMs_20 19 49 48.4
comp=Z,1µm,22.0s
VBMS **Vicksburg** 113.75 58 IAMs_20 IAMs_20 19 50 41.5
comp=Z,2µm,20.0s
PEBM **Pemiscott Bayo** 113.76 54 IAMs_20 IAMs_20 19 49 47.2
comp=Z,2µm,22.0s
PARMO **Parma** 113.76 53 IAMs_20 IAMs_20 19 50 40.2
comp=Z,1µm,20.0s
PVMO **Portageville** 113.84 53 IAMs_20 IAMs_20 19 50 01.4
comp=Z,1µm,21.0s
MET **Memphis--Engin** 113.85 55 IAMs_20 IAMs_20 19 52 11.8
comp=Z,2µm,20.0s
LOF **Lofoten** 113.96 345 *e*PKPdf **PKiKP** **19 08 10.9 +0.4**
S44A **Carbondale** 113.98 52 IAMs_20 IAMs_20 19 54 13.9
comp=Z,2µm,20.0s
LNXT **Lenox** 114.06 54 IAMs_20 IAMs_20 19 50 07.1
comp=Z,2µm,22.0s
FAUS **Fauske** 114.06 344 *e*PKPdf **PKiKP** **19 08 10.9 +0.1**
L44A **Lake County Fo** 114.10 47 IAMs_20 IAMs_20 19 50 59.6
comp=Z,1µm,21.0s
GLAT **Glass** 114.19 53 IAMs_20 IAMs_20 19 50 55.7
comp=Z,1µm,20.0s
HICK **Hickman** 114.19 53 IAMs_20 IAMs_20 19 49 42.7
comp=Z,1µm,21.0s
HALT **Halls** 114.21 54 IAMs_20 IAMs_20 19 49 48.2
comp=Z,1µm,21.0s
HQIL **Hanson Quary C** 114.22 47 IAMs_20 IAMs_20 19 48 23.0
comp=Z,1µm,22.0s
FINES **FINESS Array B** 114.25 336 PKP PKPdf 19 08 10.6 -0.7
comp=Z,8.4nm,0.3s,baz=98,slow=2.6,SNR=104
FINES PKKPbc **PKKPbc** **19 18 51.9 -2.0**
comp=Z,5.3nm,0.9s,baz=204,slow=4.2,SNR=8.7
KEF **Keuruu** 114.32 337 *eP* PKPdf 19 08 11.3 -0.1
Y45A **Yeager Farm, C** 114.35 56 IAMs_20 IAMs_20 19 48 49.1
comp=Z,1µm,21.0s
OXF **Oxford** 114.37 55 IAMs_20 IAMs_20 19 55 20.5
comp=Z,1µm,20.0s
UTMT **University of** 114.52 53 IAMs_20 IAMs_20 19 50 01.3
comp=Z,1µm,20.0s
T45A **Paducah** 114.57 53 IAMs_20 IAMs_20 19 50 23.7
comp=Z,2µm,22.0s
VAF **Ylistaro** 114.63 339 *eP* PKPdf 19 08 12.4 +0.4
OLIL **Olney** 114.68 51 IAMs_20 IAMs_20 19 53 56.4
comp=Z,2µm,20.0s
346A **Big Creek Wild** 114.74 59 IAMs_20 IAMs_20 19 53 07.8
comp=Z,1µm,20.0s
I45A **Fountain** 114.84 45 IAMs_20 IAMs_20 19 53 03.1
comp=Z,2µm,20.0s
ANN **Anapa** 114.85 316 *i* PKiKP **PKiKP** **19 08 10.0 -2.9**
ANN *e* 19 08 24.5
ANN *e* 19 09 18.1
ANN pmax pmax
comp=Z,16nm,0.9s
ANN MLR MLR
comp=Z,454nm,23.0s
SFIN **Lafayette** 115.10 49 IAMs_20 IAMs_20 19 50 51.2
comp=Z,2µm,22.0s
USIN **University of** 115.16 51 IAMs_20 IAMs_20 19 52 57.3
comp=Z,2µm,20.0s
MOR8 **Moi Rana** 115.18 344 *e*PKPdf **PKiKP** **19 08 12.6 -0.4**
P46A **Rosedale** 115.18 49 IAMs_20 IAMs_20 19 51 39.5
comp=Z,1µm,21.0s
KONS **Konsvik** 115.30 344 *e*PKPdf **PKiKP** **19 08 12.1 -1.0**
L46A **Eue Claire** 115.31 47 IAMs_20 IAMs_20 19 58 00.6
comp=Z,1µm,19.0s
ARBE **Arbavere** 115.38 334 *eP* **PKPdf** **19 08 14.4 +0.9**
PLAL **Pickwick Lake** 115.38 55 IAMs_20 IAMs_20 19 54 13.2
comp=Z,2µm,20.0s
WVT **Waverly** 115.38 53 IAMs_20 IAMs_20 19 50 15.1
comp=Z,2µm,22.0s
STOK **Stokkvaagen** 115.45 344 *e*PKPdf **PKPdf** **19 08 13.6 +0.2**
MEF **Metsahovi** 115.62 335 *eP* **PKPdf** **19 08 14.6 +0.7**
Z47A **Carrollton** 115.67 57 IAMs_20 IAMs_20 19 49 52.0
comp=Z,2µm,22.0s
GLMI **Grayling** 115.74 43 IAMs_20 IAMs_20 19 57 57.8
comp=Z,1µm,21.0s
T47A **Sharon Grove** 115.79 52 IAMs_20 IAMs_20 19 51 43.9
comp=Z,2µm,22.0s
N47A **Urbana** 116.02 48 IAMs_20 IAMs_20 19 55 04.6
comp=Z,1µm,20.0s
POGA **Pongola** 116.04 235 **PKiKP** **19 08 15.9 +0.1**
WCI **Wyandotte Cave** 116.17 51 IAMs_20 IAMs_20 19 55 10.8
comp=Z,1µm,19.0s
RAF **Rauma** 116.20 337 *eP* **PKPdf** **19 08 15.2 +0.1**
V48A **Smith Brothers** 116.25 54 IAMs_20 IAMs_20 19 54 22.0
comp=Z,1µm,20.0s
PLCA **Paso Flores** 116.26 142 PKP **PKPdf** **19 08 15.4 -0.5**
comp=Z,1.7nm,0.4s,baz=255,slow=2.9,SNR=17
PLCA PKKPbc **PKKPbc** **19 18 45.0 -1.5**
comp=Z,8.0nm,0.8s,baz=50,slow=3.3,SNR=12
X48A **Hartselle** 116.30 55 IAMs_20 IAMs_20 19 53 55.8
comp=Z,1µm,20.0s
SCO **Scoresbysund** 116.57 359 *i* P **PKPdf** **19 08 14.9 -0.6**
CLTN **Cedars of Leba** 116.58 53 IAMs_20 IAMs_20 19 51 01.8
comp=Z,2µm,22.0s
LRAL **Lakeview Retre** 116.58 57 IAMs_20 IAMs_20 19 49 56.2
comp=Z,2µm,22.0s
MTSE **Matsula** 116.71 334 *eP* **PKiKP** **19 08 16.6 +0.6**
BRAL **Brewton** 116.82 59 IAMs_20 IAMs_20 19 50 42.8
comp=Z,1µm,22.0s
Y49A **Blount Mountai** 116.92 56 IAMs_20 IAMs_20 19 54 38.2
comp=Z,2µm,20.0s
MNK **Minsk** 116.98 329 *i* PKiKP **PKiKP** **19 08 17.7 +0.9**
MNK *i* 19 08 32.9
MNK *i* 19 09 34.3
MNK *i* PPP PPP 19 11 56.7
MNK *i* SS SS 19 25 34.4 +3.8
MNK *i* SSS SSS 19 29 54.9
MNK pmax pmax
comp=Z,17nm,0.8s
MNK pmax pmax
comp=N,16nm,0.9s
MNK pmax pmax
comp=E,15nm,0.8s
MNK MLR MLR
comp=N,620nm,22.0s
MNK MLR MLR
comp=Z,1µm,23.0s
MNK MLR MLR
comp=E,771nm,22.0s
R49A **Shelbyville** 117.02 51 IAMs_20 IAMs_20 19 56 04.3
comp=Z,1µm,20.0s
SWET **Sewanee** 117.06 54 IAMs_20 IAMs_20 19 55 42.8
comp=Z,1µm,19.0s
P49A **Miami Univ. Ec** 117.07 49 IAMs_20 IAMs_20 19 52 26.5
comp=Z,2µm,22.0s
P49A **Miami Univ. Ec** 117.07 49 P **PKPdf** **19 08 17.1 -0.3**
baz=284
NSS **Namsos** 117.09 343 *e*PKPdf **PKiKP** **19 08 16.9 +0.2**
N49A **Columbus Grove** 117.12 47 IAMs_20 IAMs_20 19 59 07.6
comp=Z,1µm,19.0s
AAM **Ann Arbor** 117.12 46 IAMs_20 IAMs_20 19 53 12.6
comp=Z,2µm,21.0s
ICESG **Greenland Ices** 117.16 6 *i* P **PKPdf** **19 08 16.1 -1.1**
O49A **Covington** 117.19 48 IAMs_20 IAMs_20 19 55 41.7
comp=Z,1µm,19.0s
I49A **Point Hope** 117.23 44 IAMs_20 IAMs_20 19 58 33.2
comp=Z,1µm,20.0s
ISAL **Salakas** 117.34 330 *eP* **PKiKP** **19 08 20.0 +2.6**
AAL **Aland** 117.41 337 *eP* **PKiKP** **19 08 17.6 +0.2**
SFJD **Kangerlussuaq** 117.44 11 IAMs_20 IAMs_20 19 56 48.6
comp=Z,2µm,22.0s
SFJD **Kangerlussuaq** 117.44 11 *i* P **PKPdf** **19 08 16.2 -1.0**
FPAL **Fort Paine** 117.45 55 IAMs_20 IAMs_20 19 58 31.1
comp=Z,1µm,19.0s
R50A **Paris** 117.67 50 IAMs_20 IAMs_20 19 51 08.4
comp=Z,2µm,22.0s
M50A **Fremont** 117.81 47 IAMs_20 IAMs_20 19 56 09.0
comp=Z,1µm,21.0s
AKASG **Malin Array Be** 117.98 325 **PKPdf** **19 08 17.2 -1.6**
AKASG **Malin Array Be** 117.98 325 PKP **PKPdf** **19 08 18.0 -0.8**
comp=Z,23nm,0.8s,baz=60,slow=2.2,SNR=40
AKASG PKKPbc **PKKPbc** **19 18 39.3 -1.2**
comp=Z,2.5nm,0.8s,baz=261,slow=3.8,SNR=4.2
KIEV **Kiev** 117.99 325 PKPdf **PKPdf** **19 08 17.7 -1.1**
KIEV **Kiev** 117.99 325 IAMs_20 IAMs_20 20 02 26.0
comp=Z,940nm,20.0s
KIEV **Kiev** 117.99 325 ⇑P **PKPdf** **19 08 16.6 -2.2**
KIEV **Kiev** 117.99 325 ⇑PKiKP **PKPdf** **19 08 16.6 -2.2**
451A **Vernon** 118.01 59 IAMs_20 IAMs_20 19 53 27.3
comp=Z,1µm,21.0s
X51A **Calhoun** 118.06 55 IAMs_20 IAMs_20 19 56 13.2
comp=Z,952nm,19.0s
HOPE **Hope Point** 118.08 172 **PKiKP** **19 08 19.3 +0.4**
HOPE **Hope Point** 118.08 172 PKiKP **PKiKP** **19 08 19.3 +0.4**
KMBO **Kilima Mbogo** 118.11 265 PKP **PKPdf** **19 08 20.3 -0.2**
comp=Z,4.1nm,0.8s,baz=56,slow=11,SNR=9.0
CPCT **Cooper Cave** 118.15 54 IAMs_20 IAMs_20 19 56 08.4
comp=Z,1µm,20.0s
VSVD **Vaisvydziai** 118.18 332 *eP* **PKiKP** **19 08 19.4 +0.4**
Q51A **Peebles** 118.23 49 IAMs_20 IAMs_20 19 53 11.8
comp=Z,2µm,22.0s
P51A **Williamsport** 118.32 49 IAMs_20 IAMs_20 19 55 39.7
comp=Z,1µm,21.0s
S51A **Beattyville** 118.38 51 IAMs_20 IAMs_20 19 57 05.4
comp=Z,1µm,20.0s
PABE **Paberze** 118.42 331 *eP* **PKiKP** **19 08 20.0 +0.5**
N51A **Ashland** 118.44 47 IAMs_20 IAMs_20 19 53 46.5
comp=Z,1µm,22.0s
UPP **Uppsala** 118.53 337 *eP* **PKiKP** **19 08 19.6 0.0**
TBLU **Trondheim** 118.56 343 *e*PKPdf **PKiKP** **19 08 19.6 0.0**
352A **Blakely** 118.57 58 IAMs_20 IAMs_20 19 53 21.9
comp=Z,1µm,21.0s
W52A **Murphy** 118.70 54 IAMs_20 IAMs_20 19 57 21.0
comp=Z,1µm,20.0s
DY2G **Dye2** 118.70 10 *i* P **PKPdf** **19 08 19.2 -0.8**
Y52A **Lilburn** 118.84 55 IAMs_20 IAMs_20 19 54 28.0
comp=Z,1µm,21.0s
KIRS **Kirsehir-Merke** 118.91 311 ⇑P **PKPdf** **19 08 20.9 -0.2**
BRTR **Keskin Array B** 118.95 312 PKPdf **PKPdf** **19 08 19.6 -1.6**
BRTR **Keskin Array B** 118.95 312 PKP **PKPdf** **19 08 20.1 -1.1**
comp=Z,7.5nm,0.9s,baz=128,slow=2.0,SNR=35
BRTR PKKPbc **PKKPbc** **19 18 36.0 -0.8**
comp=Z,0.9nm,0.8s,baz=254,slow=2.9,SNR=5.8
P52A **Corning** 118.97 48 IAMs_20 IAMs_20 19 57 12.8
comp=Z,1µm,19.0s
P52A **Corning** 118.97 48 P **PKPdf** **19 08 20.4 -0.7**
baz=286
Q52A **Bidwell** 119.06 49 IAMs_20 IAMs_20 19 57 03.1
comp=Z,1µm,20.0s
O52A **Adamsville** 119.06 48 IAMs_20 IAMs_20 20 04 53.0
comp=Z,1µm,18.0s
MMAI **Mount Meron Ar** 119.15 304 PKP **PKiKP** **19 08 22.2 +0.5**
comp=Z,17nm,1.0s,baz=83,slow=7.0,SNR=14
553A **Crawfordville** 119.20 59 IAMs_20 IAMs_20 19 52 31.9
comp=Z,1µm,22.0s
PURM **Purcari** 119.29 320 ⇑P **PKPdf** **19 08 21.4 0.0**
BOAB **BOACO BROADBA** 119.33 80 IAMs_20 IAMs_20 19 54 32.9
comp=Z,1µm,20.0s
GOGA **Godfrey** 119.42 56 IAMs_20 IAMs_20 19 52 53.3
comp=Z,1µm,21.0s
SADO **Sadowa** 119.44 42 IAMs_20 IAMs_20 19 52 51.7
comp=Z,2µm,22.0s
O53A **New Philadelph** 119.48 47 IAMs_20 IAMs_20 19 56 04.1
comp=Z,1µm,21.0s
O53A **New Philadelph** 119.48 47 P **PKPdf** **19 08 21.6 -0.4**
baz=287
M53A **WI Miller and** 119.50 46 IAMs_20 IAMs_20 19 59 31.7
comp=Z,2µm,20.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| M53A | WI Miller and baz=288 | 119.50 | 46 | P | | PKPdf | 19 08 21.7 | -0.3 | |
| BG3 | Lake Jocassee comp=Z,1µm,19.0s | 119.52 | 54 | IAMs_20 | IAMs_20 | | 19 58 12.7 | | |
| ANTO | Ankara | 119.53 | 312 | | | PKPdf | 19 08 21.8 | -0.4 | |
| ANTO | Ankara | 119.53 | 312 | ⇑P | | PKiKP | 19 08 23.4 | +1.1 | |
| ANTO | Ankara | 119.53 | 312 | ⇑PKiKP | | PKiKP | 19 08 23.4 | +1.1 | |
| P53A | Whipple comp=Z,2µm,19.0s | 119.57 | 48 | IAMs_20 | IAMs_20 | | 20 02 13.5 | | |
| N53A | Lisbon comp=Z,1µm,20.0s | 119.58 | 47 | IAMs_20 | IAMs_20 | | 19 59 20.8 | | |
| SORM | Soroca | 119.59 | 322 | ⇑P | | PKPdf | 19 08 21.7 | -0.3 | |
| SORM | Soroca | 119.59 | 322 | ⇑PKiKP | | PKPdf | 19 08 21.7 | -0.3 | |
| SUW | Suwalki | 119.61 | 330 | *e*PKiKP | | PKiKP | 19 08 22.0 | +0.2 | |
| SUW | | | | *ep*PKPdf | | pPKPdf | 19 08 35.2 | -0.8 | |
| SUW | comp=Z,1µm,24.2s | | | *e*L | | L | 19 58 35.3 | | |
| SUW | Suwalki comp=Z,1µm,22.0s | 119.61 | 330 | IAMs_20 | IAMs_20 | | 20 00 36.2 | | |
| SUW | Suwalki | 119.61 | 330 | *e*P | | PKiKP | 19 08 22.6 | +0.7 | |
| NUUK | Nuuk | 119.64 | 13 | *i* P | | PKPdf | 19 08 21.4 | -0.1 | |
| TIGA | Tifton comp=Z,1µm,21.0s | 119.70 | 58 | IAMs_20 | IAMs_20 | | 19 57 09.9 | | |
| HFS | Hagfors comp=Z,16nm,0.6s,baz=93,slow=2.9,SNR=46 | 119.78 | 339 | PKP | | PKPdf | 19 08 20.7 | -1.2 | |
| HFS | | | | PKKPbc | | PKKPab | 19 18 30.9 | -2.9 | |
| DOMB | Dombas comp=Z,4.7nm,0.6s,baz=183,slow=2.8,SNR=11 | 119.85 | 343 | *e*PKPdf | | PKPdf | 19 08 21.7 | -0.4 | |
| MOL | Molde | 119.87 | 344 | *e*PKPdf | | PKiKP | 19 08 22.7 | +0.6 | |
| NB2 | NORSAR Subarra comp=Z,9.5nm,0.6s,baz=40,slow=1.9 | 119.95 | 341 | PKPdf | | PKPdf | 19 08 21.2 | -1.2 | |
| NB2 | | | | PKKP | | PKKPab | 19 18 31.3 | -1.8 | |
| NB2 | NORSAR Subarra baz=40,slow=1.9 | 119.95 | 341 | PKPdf | | PKPdf | 19 08 21.2 | -1.2 | |
| NOA | NORSAR Array B comp=Z,11nm,0.6s,baz=45,slow=2.0,SNR=54 | 119.95 | 341 | PKP | | PKPdf | 19 08 21.5 | -0.9 | |
| NOA | | | | PKKPbc | | PKKPab | 19 18 31.6 | -1.5 | |
| U54A | comp=Z,4.1nm,0.7s,baz=216,slow=3.7,SNR=12 Nelsons Funny comp=Z,2µm,20.0s | 120.03 | 52 | IAMs_20 | IAMs_20 | | 19 54 58.2 | | |
| NC602 | NORSAR Array S | 120.07 | 341 | *e*PKPdf | | PKPdf | 19 08 22.0 | -0.5 | |
| O54A | Avella comp=Z,1µm,19.0s | 120.11 | 47 | IAMs_20 | IAMs_20 | | 20 02 51.7 | | |
| Q54A | Coxs Mills comp=Z,1µm,19.0s | 120.12 | 49 | IAMs_20 | IAMs_20 | | 20 02 32.3 | | |
| HODGE | Hodges comp=Z,1µm,21.0s | 120.23 | 54 | IAMs_20 | IAMs_20 | | 19 56 15.6 | | |
| PAULI | Pauline comp=Z,1µm,20.0s | 120.45 | 54 | IAMs_20 | IAMs_20 | | 19 57 37.4 | | |
| 255A | Hazlehurst comp=Z,1µm,21.0s | 120.54 | 57 | IAMs_20 | IAMs_20 | | 19 55 45.1 | | |
| LODK | Lodwar | 120.56 | 270 | PKPdf | | PKPdf | 19 08 24.0 | -1.0 | |
| BOSA | Boshof comp=Z,12nm,0.6s,baz=138,slow=1.5,SNR=34 | 120.61 | 231 | PKP | | PKPdf | 19 08 23.7 | -1.1 | |
| BOSA | | | | SKP | | SKPdf | 19 11 58.2 | +1.6 | |
| WVNY | comp=Z,7.0nm,0.9s,baz=150,slow=5.6,SNR=5.7 West Valley, N comp=Z,2µm,22.0s | 120.65 | 44 | IAMs_20 | IAMs_20 | | 19 53 36.7 | | |
| MCWV | Mont Chateau comp=Z,1µm,20.0s | 120.66 | 48 | IAMs_20 | IAMs_20 | | 19 56 52.3 | | |
| ANGG | Ammassalik, Gr comp=Z,1µm,21.0s | 120.73 | 6 | IAMs_20 | IAMs_20 | | 19 57 32.5 | | |
| TPGR | Topolog | 120.88 | 319 | ⇑P | | PKPdf | 19 08 23.5 | -1.1 | |
| CFR | Carcaliu | 120.94 | 319 | ⇑P | | PKPdf | 19 08 22.7 | -1.9 | |
| CFR | Carcaliu | 120.94 | 319 | ⇑PKiKP | | PKPdf | 19 08 22.7 | -1.9 | |
| OSL | Oslo | 120.94 | 340 | *e*PKPdf | | PKiKP | 19 08 25.0 | +0.7 | |
| 656A | Willston comp=Z,1µm,22.0s | 120.96 | 60 | IAMs_20 | IAMs_20 | | 19 55 31.6 | | |
| JSC | Jenkinsville comp=Z,1µm,20.0s | 121.02 | 54 | IAMs_20 | IAMs_20 | | 19 57 36.6 | | |
| GHRR | | 121.05 | 320 | ⇑P | | PKPdf | 19 08 24.2 | -0.6 | |
| SKAR | Skarslia | 121.14 | 342 | *e*PKPdf | | PKiKP | 19 08 25.6 | +0.8 | |
| 456A | Hilliard comp=Z,1µm,20.0s | 121.15 | 58 | IAMs_20 | IAMs_20 | | 19 57 48.5 | | |
| PECO | Prince Edward comp=Z,2µm,20.0s | 121.19 | 42 | IAMs_20 | IAMs_20 | | 19 57 17.8 | | |
| U56A | King comp=Z,2µm,22.0s | 121.20 | 52 | IAMs_20 | IAMs_20 | | 19 54 43.0 | | |
| TLBR | Topalu | 121.25 | 319 | ⇑P | | PKiKP | 19 08 25.5 | +0.1 | |
| HARR | Harsova | 121.27 | 319 | ⇑P | | PKPdf | 19 08 24.6 | -0.7 | |
| HARR | Harsova | 121.27 | 319 | ⇑PKiKP | | PKPdf | 19 08 24.6 | -0.7 | |
| PANC | Panciu | 121.29 | 320 | ⇑P | | PKiKP | 19 08 25.6 | +0.2 | |
| TESR | Tescani | 121.33 | 321 | ⇑P | | PKPdf | 19 08 24.2 | -1.2 | |
| Q56A | Snyder Ridge, comp=Z,1µm,20.0s | 121.33 | 48 | IAMs_20 | IAMs_20 | | 20 01 14.2 | | |
| LVV | L'vov | 121.34 | 326 | *e*PKiKP | | PKiKP | 19 08 25.7 | +0.3 | |
| LVV | comp=E,300nm,20.0s | | | MLR | | MLR | | | |
| LVV | comp=N,700nm,21.0s | | | MLR | | MLR | | | |
| LVV | comp=Z,700nm,21.0s | | | MLR | | MLR | | | |
| FOO | Floro | 121.35 | 344 | *e*PKPdf | | PKiKP | 19 08 25.2 | +0.2 | |
| HYA | Hoyanger | 121.39 | 343 | *e*PKPdf | | PKiKP | 19 08 25.6 | +0.5 | |
| SCHQ | Schefferville comp=Z,3.7nm,0.8s,baz=315,slow=1.4,SNR=4.3 | 121.44 | 27 | PKP | | PKPdf | 19 08 24.3 | -1.0 | |
| SCHQ | | | | PKKPbc | | PKKPbc | 19 18 27.8 | -0.1 | |
| SOR | comp=Z,4.5nm,0.8s,baz=90,slow=7.0,SNR=3.7 Soroa comp=Z,1000nm,20.0s | 121.44 | 68 | IAMs_20 | IAMs_20 | | 19 54 37.9 | | |
| STRU | Stroemstad | 121.46 | 339 | *i* P | | PKPdf | 19 08 22.4 | -2.8 | |
| J56A | Wolcott comp=Z,1µm,19.0s | 121.53 | 43 | IAMs_20 | IAMs_20 | | 20 09 56.9 | | |
| KONO | Kongsberg comp=Z,2µm,22.0s | 121.53 | 341 | IAMs_20 | IAMs_20 | | 20 00 38.4 | | |
| KONO | Kongsberg | 121.53 | 341 | *e*PKPdf | | PKiKP | 19 08 25.8 | +0.3 | |
| VRI | Vrincioaia | 121.56 | 320 | ⇑P | | PKPdf | 19 08 25.1 | -0.8 | |
| VRI | Vrincioaia | 121.56 | 320 | ⇑PKiKP | | PKPdf | 19 08 25.1 | -0.8 | |
| ICOR | Ion Corvin | 121.58 | 318 | ⇑P | | PKiKP | 19 08 26.2 | +0.1 | |
| PLOR | Plostina | 121.61 | 320 | ⇑P | | PKPdf | 19 08 25.2 | -0.8 | |
| PLOR | Plostina | 121.61 | 320 | ⇑PKiKP | | PKPdf | 19 08 25.2 | -0.8 | |
| BURAR | Bucovina Array | 121.71 | 323 | ⇓P | | PKPdf | 19 08 26.3 | +0.1 | |
| BURAR | Bucovina Array | 121.71 | 323 | ⇓PKiKP | | PKPdf | 19 08 26.3 | +0.1 | |
| SSPA | Standing Stone comp=Z,1µm,20.0s | 121.76 | 46 | IAMs_20 | IAMs_20 | | 19 57 09.4 | | |
| SUE | Sulen | 121.87 | 344 | *e*PKPdf | | PKPdf | 19 08 25.9 | 0.0 | |
| BORU | Boraas | 121.90 | 338 | *i* P | | PKPdf | 19 08 24.6 | -1.5 | |
| COVR | Voineasa-Covas | 121.90 | 321 | ⇓P | | PKiKP | 19 08 26.9 | +0.2 | |
| TURR | Turia | 121.92 | 321 | ⇓P | | PKiKP | 19 08 26.7 | 0.0 | |
| K57A | Scipio Center comp=Z,1µm,22.0s | 121.97 | 43 | IAMs_20 | IAMs_20 | | 19 55 36.5 | | |
| BEL | Belsk | 122.02 | 329 | *e*PKPdf | | PKiKP | 19 08 27.3 | +0.6 | |
| BEL | comp=Z,1µm,22.2s | | | *e*L | | L | 20 03 32.1 | | |
| NEHR | Nehoiu | 122.02 | 320 | ⇑P | | PKiKP | 19 08 26.9 | 0.0 | |
| TJOU | Tjoern | 122.03 | 338 | *i* P | | PKPdf | 19 08 25.1 | -1.2 | |
| OZUR | | 122.05 | 321 | ⇑P | | PKiKP | 19 08 27.2 | +0.2 | |
| M57A | Sunshine Farm, | 122.06 | 45 | | | PKPdf | 19 08 26.8 | -0.2 | |
| P57A | Homestead Farm comp=Z,1µm,20.0s | 122.06 | 47 | IAMs_20 | IAMs_20 | | 19 58 32.3 | | |
| DWPF | Disney Wildern comp=Z,976nm,20.0s | 122.13 | 61 | IAMs_20 | IAMs_20 | | 19 58 07.7 | | |
| NHSC | New Hope comp=Z,2µm,20.0s | 122.18 | 55 | IAMs_20 | IAMs_20 | | 19 57 35.3 | | |
| KWP | Kalwaria Pacla | 122.18 | 326 | *e*PKPdf | | PKiKP | 19 08 27.2 | +0.1 | |
| KWP | comp=Z,927nm,25.5s | | | *e*L | | L | 19 59 30.2 | | |
| KWP | Kalwaria Pacla comp=Z,1µm,21.0s | 122.18 | 326 | IAMs_20 | IAMs_20 | | 20 03 55.6 | | |
| MLR | Muntele Rosu | 122.21 | 320 | ⇓P | | PKPdf | 19 08 26.3 | -1.0 | |
| MLR | Muntele Rosu | 122.21 | 320 | ⇓PKiKP | | PKPdf | 19 08 26.3 | -1.0 | |
| ASK | Askoy | 122.22 | 343 | *e*PKPdf | | PKPdf | 19 08 26.6 | 0.0 | |
| BER | Bergen | 122.27 | 343 | *e*PKPdf | | PKPdf | 19 08 26.6 | -0.1 | |
| ODD1 | Odda | 122.27 | 342 | *e*PKPdf | | PKiKP | 19 08 27.9 | +0.9 | |
| DEL | Delary | 122.28 | 336 | *e*P | | PKiKP | 19 08 27.9 | +0.9 | |
| DEL | Delary | 122.28 | 336 | *i* P | | PKPdf | 19 08 26.0 | -0.9 | |
| DOPR | Dopca | 122.36 | 321 | ⇑P | | PKPdf | 19 08 26.6 | -0.8 | |
| FABU | Falkenberg | 122.37 | 337 | *i* P | | PKPdf | 19 08 26.4 | -0.6 | |
| ONAU | Onsala | 122.39 | 338 | *i* P | | PKPdf | 19 08 25.9 | -1.2 | |
| ARCR | ARCALIA | 122.48 | 323 | ⇑P | | PKPdf | 19 08 27.6 | 0.0 | |
| ELL | Elmali comp=Z,1µm,20.0s | 122.62 | 309 | IAMs_20 | IAMs_20 | | 20 12 29.3 | | |
| BMR | Baia Mare | 122.71 | 324 | ⇑P | | PKiKP | 19 08 28.1 | -0.1 | |
| BMR | Baia Mare | 122.71 | 324 | ⇑PKiKP | | PKiKP | 19 08 28.1 | -0.1 | |
| BLS5 | Blasjo | 122.71 | 342 | *e*PKPdf | | PKiKP | 19 08 28.6 | +0.7 | |
| LCO | Las Campanas | 122.72 | 131 | PKPdf | | PKPdf | 19 08 28.6 | -0.4 | |
| LCO | Las Campanas | 122.72 | 131 | PKiKP | | PKPdf | 19 08 28.6 | -0.4 | |
| BSD | Bornholm Skovb | 122.77 | 334 | *e*P | | PKiKP | 19 08 28.8 | +0.8 | |
| BSD | Bornholm Skovb | 122.77 | 334 | *i* P | | PKPdf | 19 08 27.3 | -0.5 | |
| KOLS | Kolonicke sedl | 122.78 | 325 | *e*PKiKP | | PKiKP | 19 08 28.9 | +0.6 | |
| KOLS | Kolonicke sedl | 122.78 | 325 | *e*PKP | | PKiKP | 19 08 28.9 | +0.6 | |
| VOIR | | 122.80 | 321 | ⇑P | | PKPdf | 19 08 26.5 | -1.8 | |
| VOIR | | 122.80 | 321 | ⇑PKiKP | | PKPdf | 19 08 26.5 | -1.8 | |
| BJUU | Bjuv | 122.90 | 336 | *i* P | | PKPdf | 19 08 27.4 | -0.6 | |
| CAMR | Camarioca comp=Z,1µm,20.0s | 122.92 | 67 | IAMs_20 | IAMs_20 | | 19 55 04.8 | | |
| GKP | Gorka Klasztor | 122.92 | 332 | *e*PKPdf | | PKiKP | 19 08 29.3 | +0.9 | |
| GKP | Gorka Klasztor | 122.92 | 332 | *e*P | | PKiKP | 19 08 29.6 | +1.2 | |
| CBN | Corbin Frederi comp=Z,1µm,19.0s | 122.94 | 49 | IAMs_20 | IAMs_20 | | 20 04 16.9 | | |
| HOMB | Homborsund | 122.95 | 340 | *e*PKPdf | | PKiKP | 19 08 28.3 | 0.0 | |
| HOMB | Homborsund | 122.95 | 340 | *i* P | | PKPdf | 19 08 27.0 | -1.1 | |
| 061Z | Ochoppi comp=Z,1µm,21.0s | 122.96 | 64 | IAMs_20 | IAMs_20 | | 19 56 05.7 | | |
| LDAQ | Lac Daran | 123.00 | 36 | PKPdf | | PKPdf | 19 08 28.0 | -0.7 | |
| LDAQ | comp=Z,2µm,22.0s | | | IAMs_20 | IAMs_20 | | 19 55 55.2 | | |
| LUNU | Lund | 123.03 | 336 | *i* P | | PKPdf | 19 08 28.0 | -0.3 | |
| TRQA | Tornquist | 123.05 | 145 | | | PKPdf | 19 08 28.7 | -0.3 | |
| TRQA | Tornquist | 123.05 | 145 | PKIKP | | PKPdf | 19 08 28.7 | -0.3 | |
| ARR | Arges | 123.10 | 321 | ⇓P | | PKiKP | 19 08 29.4 | +0.3 | |
| CJR | Cluj-Napoca | 123.11 | 322 | ⇑P | | PKPdf | 19 08 27.5 | -1.4 | |
| CJR | Cluj-Napoca | 123.11 | 322 | ⇑PKiKP | | PKPdf | 19 08 27.5 | -1.4 | |
| CBBR | Cluj-Babes-Bol | 123.11 | 323 | ⇑P | | PKPdf | 19 08 26.4 | -2.4 | |
| T59A | Double "B" Far comp=Z,2µm,20.0s | 123.19 | 50 | IAMs_20 | IAMs_20 | | 19 56 14.8 | | |
| KMY | Karnoy | 123.25 | 342 | *e*PKPdf | | PKiKP | 19 08 28.8 | -0.1 | |
| HUMR | Humele | 123.25 | 320 | ⇑P | | PKPdf | 19 08 28.9 | -0.3 | |
| 060A | Indiantown comp=Z,1µm,20.0s | 123.25 | 62 | IAMs_20 | IAMs_20 | | 19 57 51.4 | | |
| CRVS | Cervenica-Dubn | 123.25 | 326 | *e*PKiKP | | PKiKP | 19 08 29.4 | +0.1 | |
| CRVS | Cervenica-Dubn | 123.25 | 326 | *e*PKP | | PKiKP | 19 08 29.4 | +0.1 | |
| COPA | Copaceanca | 123.27 | 319 | ⇑P | | PKPdf | 19 08 29.2 | +0.1 | |
| SNART | Snartemo | 123.33 | 341 | *e*PKPdf | | PKiKP | 19 08 29.1 | 0.0 | |
| SNART | Snartemo | 123.33 | 341 | *i* P | | PKPdf | 19 08 28.0 | -0.8 | |
| ELND | Elena | 123.34 | 318 | ⇑P | | PKiKP | 19 08 29.7 | +0.1 | |
| COP | Copenhagen | 123.41 | 336 | *i* P | | PKPdf | 19 08 29.1 | +0.1 | |
| MARR | Marisel-Cluj | 123.42 | 323 | ⇑P | | PKPdf | 19 08 28.7 | -0.8 | |
| OJC | Ojcow | 123.44 | 328 | *e*PKPdf | | PKiKP | 19 08 30.0 | +0.4 | |
| OJC | | | | *ep*PKPdf | | pPKPdf | 19 08 42.0 | -1.4 | |
| OJC | comp=Z,1µm,24.6s | | | *e*L | | L | 20 01 32.2 | | |
| LSZ | Lusaka | 123.53 | 247 | PKPdf | | PKPdf | 19 08 30.1 | -0.5 | |
| LSZ | comp=Z,1µm,20.0s | | | IAMs_20 | IAMs_20 | | 19 58 08.6 | | |
| LSZ | Lusaka comp=Z,1µm,20.0s | 123.53 | 247 | PKIKP | | PKPdf | 19 08 30.1 | -0.5 | |
| LSZ | | | | MLR | | MLR | | | |
| LOT | Lotru | 123.60 | 321 | ⇑P | | PKPdf | 19 08 29.5 | -0.4 | |
| DRGR | | 123.61 | 323 | ⇑P | | PKPdf | 19 08 29.3 | -0.5 | |
| DRGR | | 123.61 | 323 | ⇑PKiKP | | PKPdf | 19 08 29.3 | -0.5 | |
| NIE | Niedzica | 123.62 | 327 | *e*PKPdf | | PKPdf | 19 08 29.8 | 0.0 | |
| NIE | | | | *ep*PKPdf | | pPKPdf | 19 08 42.9 | -0.9 | |
| NIE | comp=Z,674nm,23.4s | | | *e*L | | L | 20 02 20.2 | | |
| WUPA | West Chester U comp=Z,1µm,20.0s | 123.64 | 46 | IAMs_20 | IAMs_20 | | 20 02 28.2 | | |
| LMQ | La Malbaie comp=Z,1µm,20.0s | 123.74 | 36 | IAMs_20 | IAMs_20 | | 19 56 38.9 | | |
| DEV | Deva | 123.93 | 322 | ⇑P | | PKiKP | 19 08 31.7 | +1.0 | |
| DEV | Deva | 123.93 | 322 | ⇑PKiKP | | PKiKP | 19 08 31.7 | +1.0 | |
| MUD | Monsted U'grnd | 124.10 | 338 | *i* P | | PKPdf | 19 08 30.0 | -0.3 | |
| LRW | Lerwick | 124.19 | 346 | *e*P | | PKPdf | 19 08 29.8 | -0.6 | |
| LANS | Liptovska Anna | 124.22 | 327 | *e*PKiKP | | PKiKP | 19 08 32.0 | +0.8 | |
| LANS | Liptovska Anna | 124.22 | 327 | *e*PKP | | PKiKP | 19 08 32.0 | +0.8 | |
| GZR | Gura Zlata | 124.24 | 321 | ⇓P | | PKPdf | 19 08 30.8 | -0.3 | |
| GZR | Gura Zlata | 124.24 | 321 | ⇓PKiKP | | PKPdf | 19 08 30.8 | -0.3 | |
| V61A | Roper comp=Z,2µm,22.0s | 124.31 | 51 | IAMs_20 | IAMs_20 | | 19 57 07.3 | | |
| ICQ | Pointe Anglais comp=Z,1µm,20.0s | 124.38 | 33 | IAMs_20 | IAMs_20 | | 20 04 30.5 | | |
| SURR | Surduc | 124.47 | 322 | ⇑P | | PKPdf | 19 08 30.6 | -0.8 | |
| SIRR | Siria | 124.50 | 323 | ⇑P | | PKiKP | 19 08 31.8 | 0.0 | |
| OKC | Ostrava-Krasne | 124.54 | 328 | *e*PKPDF | | PKiKP | 19 08 32.0 | +0.3 | |
| OKC | comp=Z,600nm,14.9s | | | AMS | AMS | | 20 14 10.0 | | |
| OKC | Ostrava-Krasne | 124.54 | 328 | *e*PKIKP | | PKiKP | 19 08 32.0 | +0.3 | |
| OKC | comp=Z,600nm,14.9s | | | MLR | MLR | | | | |
| PSZ | Piszkesteto comp=Z,1µm,22.0s | 124.66 | 325 | IAMs_20 | IAMs_20 | | 20 05 14.7 | | |
| PSZ | Piszkesteto | 124.66 | 325 | ⇑P | | PKPdf | 19 08 32.0 | +0.1 | |
| PSZ | Piszkesteto | 124.66 | 325 | ⇑PKiKP | | PKPdf | 19 08 32.0 | +0.1 | |
| L61B | Northampton baz=296 | 124.67 | 42 | P | | PKPdf | 19 08 31.6 | -0.4 | |
| HERR | Herculane | 124.71 | 321 | ⇑P | | PKPdf | 19 08 30.2 | -1.7 | |
| D62A | Allapoint, All comp=Z,2µm,22.0s | 124.73 | 36 | IAMs_20 | IAMs_20 | | 19 57 20.9 | | |
| WSPT | Westport, CT comp=Z,2µm,22.0s | 124.76 | 44 | IAMs_20 | IAMs_20 | | 19 56 17.7 | | |
| BZS | Buzias | 124.85 | 322 | ⇑P | | PKiKP | 19 08 32.4 | -0.1 | |
| BZS | Buzias | 124.85 | 322 | ⇑PKiKP | | PKiKP | 19 08 32.4 | -0.1 | |
| KSP | Ksiaz | 124.88 | 330 | *e*PKPdf | | PKPdf | 19 08 32.0 | -0.1 | |
| KSP | | | | *ep*PKPdf | | pPKPdf | 19 08 45.4 | -0.7 | |
| KSP | comp=Z,2µm,22.6s | | | *e*L | | L | 20 03 26.0 | | |
| MORC | Moravsky Berou comp=Z,1µm,21.0s | 124.89 | 328 | IAMs_20 | IAMs_20 | | 20 05 08.4 | | |
| MORC | Moravsky Berou | 124.89 | 328 | *e*PKP | | PKPdf | 19 08 32.0 | -0.2 | |
| MORC | Moravsky Berou | 124.89 | 328 | ⇑P | | PKPdf | 19 08 31.8 | -0.4 | |
| MORC | Moravsky Berou | 124.89 | 328 | ⇑PKiKP | | PKPdf | 19 08 31.8 | -0.4 | |
| VYHS | Vyhne | 124.94 | 326 | *e*PKiKP | | PKPdf | 19 08 32.3 | 0.0 | |
| VYHS | Vyhne | 124.94 | 326 | *e*PKP | | PKPdf | 19 08 32.3 | 0.0 | |
| VYHS | | | | *e* | | | 19 22 01.0 | | |
| VYHS | | | | *e* | | | 19 51 07.0 | | |
| MAUC | Maruska | 124.98 | 328 | *e*PKPDF | | PKiKP | 19 08 32.8 | +0.1 | |
| RUE | Ruedersdorf | 125.03 | 333 | *e*P | | PKiKP | 19 08 33.3 | +0.7 | |
| RUE | Ruedersdorf baz=47,slow=1.9 | 125.03 | 333 | *e*PKPdf | | PKiKP | 19 08 33.1 | +0.5 | |
| OSTC | Ostas | 125.10 | 330 | *e*PKPDF | | PKiKP | 19 08 33.1 | +0.2 | |
| OSTC | comp=Z,2µm,19.1s | | | AMS | AMS | | 20 03 10.0 | | |
| OSTC | Ostas comp=Z,2µm,19.1s | 125.10 | 330 | *e*PKIKP | | PKiKP | 19 08 33.1 | +0.2 | |
| OSTC | | | | MLR | MLR | | | | |
| KRLC | Kraliky | 125.11 | 329 | *e*PKPDF | | PKPdf | 19 08 32.7 | +0.1 | |
| KRLC | comp=Z,1µm,20.4s | | | AMS | AMS | | 20 05 20.0 | | |
| KRLC | Kraliky comp=Z,1µm,20.4s | 125.11 | 329 | *e*PKIKP | | PKPdf | 19 08 32.7 | +0.1 | |
| KRLC | | | | MLR | MLR | | | | |
| CHVC | Chvalec | 125.16 | 330 | *e*PKPDF | | PKiKP | 19 08 33.1 | +0.1 | |
| CHVC | comp=Z,2µm,23.6s | | | AMS | AMS | | 20 03 10.0 | | |
| CHVC | Chvalec comp=Z,2µm,23.6s | 125.16 | 330 | *e*PKIKP | | PKiKP | 19 08 33.1 | +0.1 | |
| CHVC | | | | MLR | MLR | | | | |
| DPC | Dobruska-Polom comp=Z,2µm,22.5s | 125.17 | 329 | *e*PKPDF | | PKiKP | 19 08 33.2 | +0.1 | |
| DPC | | | | AMS | AMS | | 20 03 00.0 | | |
| DPC | Dobruska-Polom comp=Z,2µm,22.5s | 125.17 | 329 | *e*PKIKP | | PKiKP | 19 08 33.2 | +0.1 | |
| DPC | | | | MLR | MLR | | | | |
| MDVR | Moldovita | 125.20 | 321 | ⇑P | | PKPdf | 19 08 33.1 | +0.2 | |
| UPC | Upice | 125.23 | 330 | *e*PKPDF | | PKiKP | 19 08 33.4 | +0.3 | |
| UPC | comp=Z,2µm,23.3s | | | AMS | AMS | | 20 03 10.0 | | |
| UPC | Upice comp=Z,2µm,23.3s | 125.23 | 330 | *e*PKIKP | | PKiKP | 19 08 33.4 | +0.3 | |
| UPC | | | | MLR | MLR | | | | |
| BANR | Banloc | 125.26 | 322 | ⇑P | | PKiKP | 19 08 33.7 | +0.5 | |
| JAVC | Velka Javorina | 125.36 | 327 | *e*PKP | | PKiKP | 19 08 33.8 | +0.3 | |
| BSEG | Bad Segeberg baz=47,slow=1.9 | 125.52 | 336 | *e*PKPdf | | PKiKP | 19 08 33.7 | +0.2 | |
| VRAC | Vranov | 125.67 | 328 | *e*PKP | | PKPdf | 19 08 33.3 | -0.3 | |
| VRAC | Vranov | 125.67 | 328 | ⇑P | | PKPdf | 19 08 32.5 | -1.2 | |
| VRAC | Vranov | 125.67 | 328 | ⇑PKiKP | | PKPdf | 19 08 32.5 | -1.2 | |
| BOVS | Bovan | 125.76 | 320 | ⇑P | | PKPdf | 19 08 33.7 | -0.2 | |
| GORT1 | Trebel baz=47,slow=1.9 | 125.78 | 334 | *e*PKPdf | | PKiKP | 19 08 34.1 | +0.1 | |
| KRUC | Moravsky | 125.92 | 328 | *e*PKP | | PKPdf | 19 08 33.7 | -0.4 | |
| PVCC | Panska Ves | 125.93 | 330 | *e*PKPDF | | PKiKP | 19 08 34.6 | +0.1 | |
| PVCC | comp=Z,800nm,21.2s | | | AMS | AMS | | 20 07 10.0 | | |
| PVCC | Panska Ves comp=Z,800nm,21.2s | 125.93 | 330 | *e*PKIKP | | PKiKP | 19 08 34.6 | +0.1 | |
| PVCC | | | | MLR | MLR | | | | |
| BRG | Berggiesshubel | 126.01 | 331 | *e*PKP | | PKPdf | 19 08 34.4 | +0.2 | |
| BRG | comp=Z,44nm,0.9s | | | Amp | | | 19 08 36.3 | | |
| BRG | Berggiesshubel baz=47,slow=1.9 | 126.01 | 331 | *e*PKPdf | | PKPdf | 19 08 34.0 | -0.2 | |
| BRG | | | | *ep*PKPdf | | pPKPdf | 19 08 47.1 | -1.2 | |
| RICC | Richard | 126.15 | 331 | *e*PKPDF | | PKiKP | 19 08 36.0 | +1.1 | |
| RICC | comp=Z,900nm,20.2s | | | AMS | AMS | | 20 08 00.0 | | |
| CLL | Collm | 126.17 | 332 | IAMs_20 | IAMs_20 | | 20 06 08.0 | | |
| CLL | comp=Z,930nm,22.0s | 126.17 | 332 | *i* PKIKP | | PKPdf | 19 08 34.5 | 0.0 | |
| CLL | | | | *i* | | | 19 08 47.6 | | |
| CLL | comp=Z,54nm,0.8s | | | pmax | pmax | | | | |
| CLL | comp=Z,1µm,21.8s | | | MLR | MLR | | | | |
| CLL | Collm baz=47,slow=1.9 | 126.17 | 332 | *e*PKPdf | | PKPdf | 19 08 34.6 | 0.0 | |
| CLL | | | | *ep*PKPdf | | pPKPdf | 19 08 47.5 | -1.1 | |
| FRGS | Fruska Gora | 126.18 | 322 | ⇑P | | PKPdf | 19 08 34.0 | -0.8 | |
| TREC | Trest comp=Z,1µm,21.3s | 126.25 | 329 | AMS | | AMS | 20 06 50.0 | | |
| FLTG | Flechtingen baz=47,slow=1.9 | 126.27 | 334 | *e*PKPdf | | PKiKP | 19 08 35.0 | 0.0 | |
| FLTG | | | | *ep*PKPdf | | pPKPdf | 19 08 47.7 | -1.1 | |
| BIGH | Upper Bighouse | 126.29 | 347 | *e*P | | PKiKP | 19 08 35.6 | +0.6 | |
| PRU | Pruhonice | 126.29 | 330 | *e*PKPDF | | PKPdf | 19 08 34.9 | +0.1 | |
| PRU | comp=Z,900nm,23.8s | | | AMS | AMS | | 20 04 00.0 | | |
| PRU | Pruhonice | 126.29 | 330 | *e*PKIKP | | PKPdf | 19 08 34.9 | +0.1 | |
| PRU | comp=Z,900nm,23.8s | | | MLR | MLR | | | | |
| PRA | Prague | 126.29 | 330 | *e*PKPDF | | PKiKP | 19 08 36.0 | +0.8 | |
| PRA | comp=Z,800nm,20.9s | | | AMS | AMS | | 20 06 20.0 | | |
| PRA | Prague comp=Z,800nm,20.9s | 126.29 | 330 | *e*PKIKP | | PKiKP | 19 08 36.0 | +0.8 | |
| PRA | | | | MLR | MLR | | | | |
| HLG | Helgoland baz=47,slow=1.9 | 126.30 | 337 | *e*PKPdf | | PKiKP | 19 08 35.3 | +0.2 | |
| HLG | | | | *ep*PKPdf | | pPKPdf | 19 08 48.1 | -0.6 | |
| MORH | Mrgy, Hungar | 126.31 | 324 | ⇓P | | PKPdf | 19 08 34.9 | -0.1 | |
| HSKC | Hora Svate Kat | 126.43 | 331 | *e*PKPDF | | PKiKP | 19 08 35.5 | 0.0 | |
| HSKC | comp=Z,1µm,24.7s | | | AMS | AMS | | 20 04 10.0 | | |
| NRDL | Niedersach Rie baz=47,slow=1.9 | 126.64 | 335 | *e*PKPdf | | PKiKP | 19 08 35.9 | +0.1 | |
| NRDL | | | | *ep*PKPdf | | pPKPdf | 19 08 48.7 | -0.7 | |
| TEKS | Tekeris | 126.66 | 322 | ⇑P | | PKPdf | 19 08 34.6 | -1.1 | |
| RETH | Rethem/Aller, baz=47,slow=1.9 | 126.78 | 335 | *e*PKPdf | | PKiKP | 19 08 36.1 | 0.0 | |
| RETH | | | | *ep*PKPdf | | pPKPdf | 19 08 49.1 | -0.6 | |
| RONA | Rosalia, Austr comp=Z,33nm,0.9s,SNR=24 | 126.78 | 327 | *i* PKiKP | | PKPdf | 19 08 35.8 | 0.0 | |
| NEUB | Neuenburg baz=47,slow=1.9 | 126.81 | 332 | *e*PKPdf | | PKiKP | 19 08 36.0 | -0.2 | |
| NEUB | | | | *ep*PKPdf | | pPKPdf | 19 08 49.0 | -0.8 | |
| ZVC | Zvikov | 126.82 | 330 | *e*PKPDF | | PKPdf | 19 08 36.0 | +0.2 | |
| ZVC | comp=Z,1µm,20.8s | | | AMS | AMS | | 20 04 30.0 | | |
| CONA | Conrad Observa comp=Z,26nm,1.1s,SNR=24 | 126.88 | 327 | *i* PKiKP | | PKPdf | 19 08 36.1 | 0.0 | |
| CONA | Conrad Observa comp=Z,8.9nm,1.4s | 126.88 | 327 | *i* PKP | SKPbc | | 19 11 53.5 | | |
| IDI | Anoyia comp=Z,57nm,1.1s,baz=350,slow=4.4,SNR=11 | 126.94 | 309 | PKP | | PKPdf | 19 08 36.7 | +0.1 | |
| CLZ | Clausthal baz=47,slow=1.9 | 127.00 | 334 | *e*PKPdf | | PKiKP | 19 08 36.4 | -0.2 | |
| CLZ | | | | *ep*PKPdf | | pPKPdf | 19 08 49.5 | -0.8 | |
| TANN | Tannenbergstha baz=47,slow=1.9 | 127.03 | 331 | *e*PKPdf | | PKPdf | 19 08 36.3 | +0.1 | |
| TANN | | | | *ep*PKPdf | | pPKPdf | 19 08 49.5 | -0.8 | |
| SJES | Sjenica | 127.04 | 320 | ⇑P | | PKiKP | 19 08 37.3 | +0.2 | |
| BBLS | Lazi&#263i | 127.09 | 321 | ⇑P | | PKPdf | 19 08 35.9 | -0.7 | |
| PLN | Plauen baz=47,slow=1.9 | 127.12 | 332 | *e*PKPdf | | PKPdf | 19 08 36.1 | -0.2 | |
| PLN | | | | *ep*PKPdf | | pPKPdf | 19 08 49.7 | -0.8 | |
| CKRC | Cesky Krumlov comp=Z,1µm,20.2s | 127.15 | 329 | AMS | | AMS | 20 07 40.0 | | |
| RUDO | Rudo | 127.24 | 321 | *e*P | | PKiKP | 19 08 37.8 | +0.5 | |
| HAPS | Han Pijes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KBA | Koelnbreinsper | 128.75 | 328 | *i* PKiKP | PKPdf | 19 08 39.8 | 0.0 |
| | comp=Z,25nm,1.1s,SNR=13 | | | | | | |
| KBA | Koelnbreinsper | 128.75 | 328 | *e*PKP | SKPbc | 19 12 01.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| GBAS | Gorenja Brezov | 128.86 | 326 | *i* PKPdf | PKPdf | 19 08 40.2 | +0.3 |
| MYKA | Terra Mystica | 128.87 | 327 | *i* PKP | PKPdf | 19 08 39.7 | -0.3 |
| | comp=Z,12nm,0.9s | | | | | | |
| MYKA | Terra Mystica | 128.87 | 327 | *e*PKP | SKPbc | 19 11 58.3 | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| LESA | Schwarzleotal | 128.88 | 328 | *i* PKP | PKPdf | 19 08 39.7 | -0.3 |
| | comp=Z,32nm,1.5s | | | | | | |
| LESA | Schwarzleotal | 128.88 | 328 | *i* PKP | SKPbc | 19 11 59.2 | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| EKA | Eskdalemuir Ar | 128.94 | 345 | PKP | PKPdf | 19 08 38.9 | -0.8 |
| | comp=Z,8.0nm,0.5s,baz=13,slow=2.9,SNR=59 | | | | | | |
| EKA | | | | SKPbc | SKiKP | 19 11 57.8 | -15 |
| | comp=Z,28nm,0.9s,baz=7.4,slow=2.6,SNR=23 | | | | | | |
| ESK | Eskdalemuir | 128.97 | 345 | PKPdf | PKPdf | 19 08 39.6 | -0.1 |
| ESK | Eskdalemuir | 128.97 | 345 | IAMs_20 | IAMs_20 | 20 05 33.9 | |
| | comp=Z,1µm,21.0s | | | | | | |
| ESK | Eskdalemuir | 128.97 | 345 | *e*P | PKPdf | 19 08 39.4 | -0.3 |
| ESK | Eskdalemuir | 128.97 | 345 | PKiKP | PKPdf | 19 08 39.6 | -0.1 |
| ESK | | | | MLR | MLR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| TNS | Taunus Mts | 129.00 | 333 | *e*PKPdf | PKPdf | 19 08 40.3 | +0.3 |
| | baz=47,slow=1.9 | | | | | | |
| TNS | | | | *e*pPKPdf | pPKPdf | 19 08 53.4 | -0.7 |
| PRED | Cave del Predi | 129.03 | 327 | IAMs_20 | IAMs_20 | 20 08 12.2 | |
| | comp=Z,1µm,21.0s | | | | | | |
| EDMD | Edmundsbyers | 129.06 | 344 | *e*P | PKPdf | 19 08 39.7 | -0.2 |
| GDLE | Glaisdale, N Y | 129.09 | 343 | *e*P | PKiKP | 19 08 40.6 | -0.1 |
| FUR | Furstenfeldbru | 129.11 | 330 | *e*PKPdf | PKPdf | 19 08 40.3 | 0.0 |
| | baz=47,slow=1.9 | | | | | | |
| FUR | | | | *e*pPKPdf | pPKPdf | 19 08 53.6 | -0.8 |
| SABO | M.te Sabotino | 129.30 | 326 | IAMs_20 | IAMs_20 | 20 06 44.7 | |
| | comp=Z,534nm,20.0s | | | | | | |
| AHRW | Bad Neuenahr-A | 129.37 | 335 | *e*PKPdf | PKPdf | 19 08 40.9 | +0.3 |
| | baz=47,slow=1.9 | | | | | | |
| AHRW | | | | *e*pPKPdf | pPKPdf | 19 08 54.3 | -0.5 |
| ABTA | Abfaltersbach | 129.40 | 328 | *i* PKP | PKPdf | 19 08 40.3 | -0.6 |
| | comp=Z,44nm,1.4s,SNR=14 | | | | | | |
| WATA | Walderalm | 129.51 | 329 | *i* PKiKP | PKPdf | 19 08 41.4 | +0.2 |
| | comp=Z,43nm,1.4s,SNR=14 | | | | | | |
| WATA | Walderalm | 129.51 | 329 | *i* PKP | SKPbc | 19 12 01.4 | +1.9 |
| | comp=Z,10.0nm,1.6s | | | | | | |
| WTTA | Wattenberg | 129.53 | 329 | *i* PKiKP | PKPdf | 19 08 41.6 | +0.3 |
| | comp=Z,61nm,1.2s,SNR=18 | | | | | | |
| WTTA | Wattenberg | 129.53 | 329 | *e*PKP | SKPbc | 19 12 04.3 | +4.7 |
| | comp=Z,3.1nm,0.5s | | | | | | |
| KESW | Keswick, Cumbr | 129.59 | 344 | *e*P | PKiKP | 19 08 41.4 | -0.3 |
| STAL | STALIGIAL | 129.61 | 327 | IAMs_20 | IAMs_20 | 20 09 40.4 | |
| | comp=Z,942nm,21.0s | | | | | | |
| STU | Stuttgart | 129.70 | 332 | *e*PKPdf | PKPdf | 19 08 41.6 | +0.3 |
| | baz=47,slow=1.9 | | | | | | |
| STU | | | | *e*pPKPdf | pPKPdf | 19 08 54.7 | -0.8 |
| HPK | Haverah Park | 129.73 | 343 | *e*P | PKiKP | 19 08 41.7 | -0.3 |
| BTNL | Ternell | 129.73 | 335 | *d*PKP | PKPdf | 19 08 41.1 | -0.3 |
| MOTA | Moosalm | 129.74 | 329 | *i* PKP | PKPdf | 19 08 40.9 | -0.8 |
| | comp=Z,36nm,0.8s | | | | | | |
| MOTA | Moosalm | 129.74 | 329 | *i* PKP | SKPbc | 19 12 04.6 | +4.3 |
| | comp=Z,8.5nm,1.1s | | | | | | |
| GAL1 | Galloway | 129.76 | 345 | *e*P | PKPdf | 19 08 40.9 | -0.3 |
| MEM | Membach | 129.76 | 335 | *d*PKP | PKPdf | 19 08 40.9 | -0.5 |
| SQTA | Sankt Quirin | 129.77 | 329 | *i* PKiKP | PKiKP | 19 08 42.2 | -0.2 |
| | comp=Z,16nm,0.7s,SNR=17 | | | | | | |
| SQTA | Sankt Quirin | 129.77 | 329 | *i* PKP | SKPbc | 19 12 01.4 | +1.0 |
| | comp=Z,11nm,1.1s | | | | | | |
| RETA | Reutte | 129.82 | 330 | *i* PKiKP | PKPdf | 19 08 42.0 | +0.3 |
| | comp=Z,17nm,1.1s,SNR=6.4 | | | | | | |
| RETA | Reutte | 129.82 | 330 | *e*PKP | SKPbc | 19 12 02.9 | +2.4 |
| | comp=Z,11nm,1.3s | | | | | | |
| CLGH | Cloghs, Cushen | 129.90 | 347 | *e*P | PKPdf | 19 08 41.9 | +0.4 |
| BHOU | Houvegnez | 129.96 | 335 | *d*PKP | PKiKP | 19 08 43.0 | +0.4 |
| BSTI | Sart Tilman | 129.97 | 336 | *d*PKP | PKiKP | 19 08 42.4 | -0.2 |
| UBR | Ueberruh | 130.02 | 330 | *e*PKPdf | PKPdf | 19 08 42.0 | -0.1 |
| | baz=47,slow=1.9 | | | | | | |
| UBR | | | | *e*pPKPdf | pPKPdf | 19 08 55.3 | -0.9 |
| WACR | West Acre | 130.08 | 340 | *e*P | PKiKP | 19 08 42.3 | -0.4 |
| FETA | Feichten | 130.15 | 329 | *i* PKiKP | PKiKP | 19 08 43.2 | -0.1 |
| | comp=Z,20nm,0.8s,SNR=14 | | | | | | |
| FETA | Feichten | 130.15 | 329 | *i* PKP | | 19 12 02.1 | |
| | comp=Z,18nm,1.1s | | | | | | |
| BCLA | Clavier | 130.20 | 336 | *d*PKP | PKPdf | 19 08 42.0 | -0.3 |
| IOMK | Kirk Michael | 130.27 | 345 | *e*P | PKiKP | 19 08 42.7 | -0.4 |
| CTI | Castel Tesino | 130.31 | 328 | IAMs_20 | IAMs_20 | 20 08 04.9 | |
| | comp=Z,1µm,22.0s | | | | | | |
| BGES | Gesves | 130.31 | 336 | *d*PKP | PKiKP | 19 08 43.0 | -0.3 |
| DAVA | Damuels | 130.40 | 330 | *i* PKiKP | PKiKP | 19 08 43.5 | -0.2 |
| | comp=Z,13nm,0.8s | | | | | | |
| DAVA | Damuels | 130.40 | 330 | *i* PKP | | 19 12 04.2 | |
| | comp=Z,19nm,0.9s | | | | | | |
| WLF | Walferdange | 130.42 | 334 | IAMs_20 | IAMs_20 | 20 11 28.0 | |
| | comp=Z,873nm,21.0s | | | | | | |
| WLF | Walferdange | 130.42 | 334 | *d*PKP | PKiKP | 19 08 43.6 | +0.1 |
| WLF | Walferdange | 130.42 | 334 | *e*PKPdf | PKiKP | 19 08 43.2 | -0.3 |
| | baz=47,slow=1.9 | | | | | | |
| BFO | Black Forest | 130.42 | 332 | PKPdf | PKPdf | 19 08 41.8 | -0.9 |
| BFO | Black Forest | 130.42 | 332 | PKiKP | PKPdf | 19 08 41.8 | -0.9 |
| BFO | | | | MLR | MLR | | |
| | comp=Z,500nm,20.0s | | | | | | |
| BFO | Black Forest | 130.42 | 332 | *e*PKPdf | PKPdf | 19 08 42.6 | -0.1 |
| | baz=47,slow=1.9 | | | | | | |
| RCHB | Rochefort | 130.43 | 335 | *d*PKP | PKiKP | 19 08 43.3 | -0.2 |
| MATE | Matera | 130.47 | 319 | ⇑P | PKPdf | 19 08 43.1 | +0.1 |
| PSAL | Palomas, Salto | 130.47 | 142 | *e*P | PKiKP | 19 08 44.1 | -0.1 |
| BMRD | Maredsous | 130.51 | 336 | *d*PKP | PKPdf | 19 08 42.3 | -0.5 |
| DOU | Dourbes | 130.74 | 336 | *d*PKP | PKiKP | 19 08 44.1 | 0.0 |
| DAVOX | Davos/Dischmat | 130.74 | 329 | SKPbc | SKPab | 19 12 04.9 | +0.8 |
| | comp=Z,20nm,1.0s,baz=343,slow=1.2,SNR=13 | | | | | | |
| LPAZ | La Paz | 130.79 | 118 | PKPdf | PKPdf | 19 08 40.0 | -5.1 |
| LPAZ | La Paz | 130.79 | 118 | PKhKP | PKPpre | 19 08 38.6 | |
| | comp=Z,1.1nm,0.6s,baz=291,slow=2.8,SNR=5.0 | | | | | | |
| LPAZ | | | | PKP | PKPdf | 19 08 45.5 | +0.4 |
| | comp=Z,5.7nm,1.0s,baz=344,slow=2.0,SNR=13 | | | | | | |
| LPAZ | | | | SKPbc | SKPab | 19 12 06.2 | +0.4 |
| | comp=Z,17nm,1.0s,baz=264,slow=2.1,SNR=10.0 | | | | | | |
| LPAZ | La Paz | 130.79 | 118 | *e*P | PKPdf | 19 08 44.4 | -0.7 |
| ECH | Echery | 131.04 | 332 | IAMs_20 | IAMs_20 | 20 12 49.8 | |
| | comp=Z,813nm,19.0s | | | | | | |
| WLF1 | Llynfaes | 131.10 | 344 | *e*P | PKPdf | 19 08 43.6 | -0.1 |
| FOEL | Foel Wylfa | 131.12 | 343 | *e*P | PKPdf | 19 08 44.2 | +0.3 |
| TIP | Timpagrande | 131.18 | 317 | ⇑P | PKiKP | 19 08 45.3 | -0.1 |
| LLW | Llanuwychllyn | 131.29 | 344 | *e*P | PKPdf | 19 08 44.5 | +0.3 |
| HLM1 | Long Mynd | 131.35 | 343 | *e*P | PKiKP | 19 08 44.9 | -0.4 |
| CUC | Castrocucco | 131.39 | 319 | IAMs_20 | IAMs_20 | 20 11 48.5 | |
| | comp=Z,924nm,22.0s | | | | | | |
| PRMA | PARMA | 131.86 | 327 | IAMs_20 | IAMs_20 | 20 10 10.0 | |
| | comp=Z,1µm,21.0s | | | | | | |
| WOL | Wolverton | 131.88 | 341 | *e*P | PKPdf | 19 08 45.9 | +0.5 |
| SWN1 | Swindon | 131.90 | 341 | *e*P | PKiKP | 19 08 46.6 | +0.2 |
| MONM | Monmouth | 131.93 | 342 | *e*P | PKiKP | 19 08 46.2 | -0.3 |
| ITQB | Itaqui | 132.06 | 141 | *e*P | PKiKP | 19 08 47.0 | -0.5 |
| RSBS | Rosebush, Pemb | 132.39 | 344 | *e*P | PKiKP | 19 08 47.0 | -0.4 |
| MSSA | Maissana | 132.58 | 327 | IAMs_20 | IAMs_20 | 20 09 08.1 | |
| | comp=Z,1µm,22.0s | | | | | | |
| CLF | Chambon-Foret | 133.32 | 336 | IAMs_20 | IAMs_20 | 20 09 01.6 | |
| | comp=Z,2µm,22.0s | | | | | | |
| CPSB | Cacapava Do Su | 133.45 | 145 | *e*P | PKPdf | 19 08 49.5 | +0.4 |
| DYA | Yadsworthy | 133.50 | 342 | *e*P | PKPdf | 19 08 48.2 | -0.3 |
| CPUP | Villa Florida | 133.87 | 137 | PKPdf | PKPdf | 19 08 49.1 | -0.7 |
| CPUP | Villa Florida | 133.87 | 137 | PKP | PKPdf | 19 08 50.4 | +0.5 |
| | comp=Z,6.2nm,0.8s,baz=277,slow=1.6,SNR=7.1 | | | | | | |
| CPUP | | | | SKPbc | SKPbc | 19 12 16.0 | +0.6 |
| | comp=Z,16nm,0.8s,baz=248,slow=4.0,SNR=16 | | | | | | |
| CPUP | Villa Florida | 133.87 | 137 | *e*P | PKPdf | 19 08 48.9 | -1.0 |
| CPUP | Villa Florida | 133.87 | 137 | *e*P | PKPdf | 19 08 50.1 | +0.3 |
| JSA | Saint Aubin | 134.02 | 340 | *e*P | PKiKP | 19 08 50.5 | -0.2 |
| SDV | Santo Domingo | 134.04 | 84 | PKPdf | PKPdf | 19 08 49.4 | -1.4 |
| SDV | Santo Domingo | 134.04 | 84 | *e*P | PKPdf | 19 08 50.4 | -0.4 |
| CCA1 | Carnmenellis | 134.11 | 343 | *e*P | PKPdf | 19 08 50.1 | +0.5 |
| FDPY | Filadelfia | 134.51 | 131 | *e*P | PKPdf | 19 08 51.3 | +0.1 |
| PAPY | Pozo Azul | 134.68 | 134 | *e*P | PKPdf | 19 08 52.1 | +0.7 |
| BBSR | BB Station | 134.72 | 51 | IAMs_20 | IAMs_20 | 20 11 54.0 | |
| | comp=Z,1µm,18.0s | | | | | | |
| ALGR | Alto Alegre (B | 134.88 | 143 | *e*P | PKPdf | 19 08 51.8 | 0.0 |
| ETMB | Extrema | 134.98 | 111 | *e*P | PKPdf | 19 08 51.9 | -0.4 |
| CRSM | Crissiumal (Br | 135.20 | 141 | *e*P | PKPdf | 19 08 52.7 | +0.3 |
| KEST | Kesra | 138.00 | 318 | PKhKP | PKPpre | 19 08 45.1 | |
| | comp=Z,3.9nm,0.9s,baz=192,slow=4.1,SNR=6.1 | | | | | | |
| KEST | | | | SKPbc | SKPbc | 19 12 28.1 | +0.1 |
| | comp=Z,12nm,0.7s,baz=32,slow=9.5,SNR=10 | | | | | | |
| SAML | Samuel | 138.08 | 112 | PKPdf | PKPdf | 19 08 56.3 | -1.8 |
| SAML | Samuel | 138.08 | 112 | PKiKP | PKPdf | 19 08 56.3 | -1.8 |
| SAML | Samuel | 138.08 | 112 | *e*P | PKPdf | 19 08 57.8 | -0.2 |
| TEFE | Tefe | 138.36 | 103 | *e*P | PKPdf | 19 08 58.7 | +0.2 |
| PTGB | Pitanga | 138.43 | 140 | *e*P | PKPdf | 19 08 58.6 | +0.1 |
| VBST | Vila Bela da S | 138.57 | 121 | *e*P | PKPdf | 19 08 58.5 | -0.4 |
| PTLB | Pontes e Lacer | 138.86 | 123 | *e*P | PKPdf | 19 08 59.1 | -0.3 |
| TRCB | Terra Rica | 139.40 | 138 | *e*P | PKPdf | 19 08 59.9 | -0.4 |
| LDASE | Londrina, Braz | 139.97 | 140 | *e*P | PKPdf | 19 09 01.3 | 0.0 |
| PTET | Porto Estrela | 140.53 | 124 | *e*P | PKPdf | 19 09 02.3 | -0.2 |
| SABA | Saba | 140.55 | 71 | IAMs_20 | IAMs_20 | 20 08 25.7 | |
| | comp=Z,825nm,20.0s | | | | | | |
| SEUS | St. Eustatius | 140.81 | 71 | IAMs_20 | IAMs_20 | 20 20 58.8 | |
| | comp=Z,788nm,22.0s | | | | | | |
| PCMB | Pacaembu | 141.13 | 138 | *e*P | PKPdf | 19 09 03.1 | -0.3 |
| PCMB | Pacembu | 141.13 | 138 | *e*P | PKPdf | 19 09 03.3 | -0.2 |
| SALV | Santo Antonio | 141.43 | 126 | *e*P | PKPdf | 19 09 03.9 | -0.2 |
| PET01 | Itanhaem-SP | 141.64 | 145 | *e*P | PKPdf | 19 09 04.0 | -0.3 |
| PBRG | Braganca | 142.01 | 339 | *e*PKPdf | PKPdf | 19 09 00.0 | -4.5 |
| NBRS | Nobres | 142.22 | 124 | *e*P | PKPdf | 19 09 04.7 | -0.8 |
| PGAV | Gavieira, Arco | 142.41 | 340 | *e*PKPdf | PKPdf | 19 09 01.9 | -3.3 |
| PGAV | Gavieira, Arco | 142.41 | 340 | *e*LR | LR | 19 58 46.0 | |
| | comp=Z,700nm,24.0s | | | | | | |
| PCAB | Cabril | 142.55 | 340 | *e*PKPdf | PKPdf | 19 09 04.2 | -1.2 |
| MVO | Moncorvo | 142.68 | 338 | *e*PKPdf | PKPdf | 19 09 02.5 | -3.2 |
| MVO | Moncorvo | 142.68 | 338 | *e*LR | LR | 19 59 36.5 | |
| | comp=Z,470nm,20.0s | | | | | | |
| ESDC | Sonseca Array | 142.71 | 334 | | PKPdf | 19 09 01.7 | -4.1 |
| ESDC | Sonseca Array | 142.71 | 334 | PKhKP | PKPpre | 19 09 01.4 | |
| | comp=Z,8.9nm,0.9s,baz=22,slow=2.8,SNR=56 | | | | | | |
| ESDC | | | | PP | PP | 19 12 15.3 | +1.9 |
| | comp=Z,2.0nm,0.7s,baz=28,slow=7.5,SNR=4.6 | | | | | | |
| POLO | Lamas de Olo | 142.77 | 339 | *e*PKPdf | PKPdf | 19 09 01.8 | -4.1 |
| PDRB | Porto dos Gac | 142.77 | 120 | *e*P | PKPdf | 19 09 06.3 | -0.3 |
| PVRL | Vila Real | 142.83 | 339 | *e*PKPdf | PKPdf | 19 09 02.4 | -3.5 |
| SVN | Savane Anatole | 142.96 | 75 | IAMs_20 | IAMs_20 | 20 16 21.1 | |
| | comp=Z,975nm,19.0s | | | | | | |
| PAB | San Pablo | 142.99 | 334 | PKPdf | PKPdf | 19 09 03.2 | -3.1 |
| PAB | San Pablo | 142.99 | 334 | ⇑PKiKP | PKPdf | 19 09 02.7 | -3.6 |
| FDF | Fort de France | 143.00 | 75 | IAMs_20 | IAMs_20 | 20 13 58.9 | |
| | comp=Z,666nm,19.0s | | | | | | |
| BIM | Bigot | 143.10 | 75 | IAMs_20 | IAMs_20 | 20 11 11.8 | |
| | comp=Z,758nm,22.0s | | | | | | |
| MPOM | Morne Pois Mar | 143.31 | 75 | IAMs_20 | IAMs_20 | 20 07 49.3 | |
| | comp=Z,910nm,21.0s | | | | | | |
| PVIS | Viseu | 143.39 | 339 | *e*PKPdf | PKPbc | 19 09 05.0 | +0.9 |
| MTE | Manteigas | 143.54 | 338 | *e*PKPdf | PKPbc | 19 09 05.8 | +1.2 |
| MTE | Manteigas | 143.54 | 338 | *e*LR | LR | 19 59 45.8 | |
| | comp=Z,655nm,24.0s | | | | | | |
| BOAV | Boa Vista | 143.57 | 95 | PKPdf | PKPbc | 19 09 05.8 | +0.4 |
| PCBR | Castelo Branco | 144.00 | 338 | *e*PKPdf | PKPbc | 19 09 06.7 | +0.8 |
| COI | Coimbra | 144.02 | 339 | IAMs_20 | IAMs_20 | 20 14 19.4 | |
| | comp=Z,1µm,22.0s | | | | | | |
| COI | Coimbra | 144.02 | 339 | *e*PKPdf | PKPdf | 19 09 07.2 | -0.8 |
| PCAS | Casmilo, Conde | 144.19 | 339 | *e*PKPdf | PKPbc | 19 09 07.2 | +0.7 |
| PMRV | Marv??o | 144.33 | 337 | *e*PKPdf | PKPbc | 19 09 07.0 | +0.1 |
| PMRV | Marv??o | 144.33 | 337 | *e*LR | LR | 20 00 32.7 | |
| | comp=Z,726nm,24.0s | | | | | | |
| MAN01 | Angra dos Reis | 144.60 | 148 | *e*P | PKPdf | 19 09 09.5 | -0.1 |
| PSBE | So Bento | 144.77 | 339 | *e*PKPdf | PKPbc | 19 09 08.8 | +0.4 |
| PESTR | Estremoz | 144.89 | 337 | IAMs_20 | IAMs_20 | 20 16 14.7 | |
| | comp=Z,1µm,22.0s | | | | | | |
| PESTR | Estremoz | 144.89 | 337 | *e*PKPdf | PKPbc | 19 09 08.8 | +0.1 |
| PMTG | Montargil | 144.96 | 338 | *e*PKPdf | PKPab | 19 09 08.8 | -0.1 |
| PBAR | Barrancos | 145.27 | 336 | *e*PKPdf | PKPab | 19 09 10.1 | 0.0 |
| VAS01 | Vassouras-RJ | 145.35 | 148 | *e*P | PKPbc | 19 09 09.9 | -0.8 |
| LIS | Lisbon | 145.60 | 339 | *e*PKP | PKPdf | 19 09 10.5 | -0.2 |
| LIS | Lisbon | 145.60 | 339 | *e*PKP2 | PKPdf | 19 09 10.5 | -0.2 |
| IPMB | Ipameri, GO | 145.71 | 137 | *e*P | PKPdf | 19 09 11.2 | -0.4 |
| PBEJ | Beja | 145.73 | 337 | *e*PKPab | PKPab | 19 09 11.8 | 0.0 |
| PNCL | Nicolau / Gran | 145.91 | 338 | *e*PKPab | PKPbc | 19 09 12.1 | +0.1 |
| NPGB | Novo Progresso | 145.97 | 114 | *e*P | PKPdf | 19 09 12.1 | -0.1 |
| MESJ | Messejana | 146.03 | 337 | IAMs_20 | IAMs_20 | 20 24 13.8 | |
| | comp=Z,736nm,19.0s | | | | | | |
| MESJ | Messejana | 146.03 | 337 | *e*PKPab | PKPbc | 19 09 12.6 | +0.2 |
| MESJ | Messejana | 146.03 | 337 | *e*PKP | PKPbc | 19 09 12.1 | -0.2 |
| MESJ | | | | IAMs_20 | IAMs_20 | 20 12 11.6 | |
| | comp=Z,1µm,26.4s | | | | | | |
| MESJ | Messejana | 146.03 | 337 | *e*PKP2 | PKPbc | 19 09 12.1 | -0.2 |
| PCVE | Castro Verde | 146.14 | 337 | *e*PKPab | PKPbc | 19 09 12.7 | 0.0 |
| PVAQ | Vaqueiros | 146.21 | 336 | *e*PKPab | PKPbc | 19 09 13.1 | +0.2 |
| PVAQ | Vaqueiros | 146.21 | 336 | *e*LR | LR | 20 01 29.4 | |
| | comp=Z,598nm,20.0s | | | | | | |
| PBDV | Barranco-do-Ve | 146.43 | 336 | *e*PKPab | PKPbc | 19 09 13.7 | +0.1 |
| PTEO | Sao Teotonio | 146.48 | 337 | *e*PKPab | PKPbc | 19 09 13.5 | -0.2 |
| PMNB | Patos De Minas | 146.49 | 140 | *e*P | PKPdf | 19 09 11.9 | -1.1 |
| CAM01 | Campos-RJ | 146.65 | 150 | *e*P | PKPbc | 19 09 14.1 | -0.6 |
| MORF | Marmelete | 146.66 | 337 | *e*PKPab | PKPbc | 19 09 14.2 | -0.1 |
| MORF | Marmelete | 146.66 | 337 | *e*PKP | PKPbc | 19 09 14.6 | +0.3 |
| MORF | | | | IAMs_20 | IAMs_20 | 20 14 20.0 | |
| | comp=Z,2µm,30.4s | | | | | | |
| MORF | Marmelete | 146.66 | 337 | *e*PKP2 | PKPbc | 19 09 14.6 | +0.3 |
| PFVI | Vila Bisbo | 146.88 | 337 | *e*PKPab | PKPbc | 19 09 14.8 | -0.1 |
| SNDB | Serra Nova Dou | 147.15 | 125 | *e*P | PKPdf | 19 09 14.2 | +0.1 |
| TAM | Tamanrasset | 147.33 | 302 | | PKPdf | 19 09 13.8 | -0.5 |
| TAM | | | | IAMs_20 | IAMs_20 | 20 27 50.0 | |
| | comp=Z,765nm,20.0s | | | | | | |
| TAM | Tamanrasset | 147.33 | 302 | PKIKP | PKPdf | 19 09 13.8 | -0.5 |
| TAM | | | | MLR | MLR | | |
| | comp=Z,800nm,20.0s | | | | | | |
| BDFB | Brasilia | 147.44 | 134 | | PKPdf | 19 09 14.8 | +0.2 |
| BDFB | Brasilia | 147.44 | 134 | PKPbc | PKPdf | 19 09 15.7 | +1.0 |
| | comp=Z,72nm,0.8s,baz=247,slow=1.7,SNR=21 | | | | | | |
| BDFB | | | | SKPbc | SKiKP | 19 12 53.3 | +1.3 |
| | comp=Z,9.0nm,0.8s,baz=186,slow=8.2,SNR=3.2 | | | | | | |
| BDFB | Brasilia | 147.44 | 134 | *e*P | PKPdf | 19 09 14.3 | -0.3 |
| ALF01 | Guarapari-ES | 148.13 | 150 | *e*P | PKPdf | 19 09 15.5 | 0.0 |
| ROSA | Rosais | 148.22 | 6 | *e*PKP | PKiKP | 19 09 20.1 | -0.1 |
| PSBA | Serra de Santa | 148.25 | 5 | *e*PKP | PKiKP | 19 09 20.4 | +0.1 |
| CALA | Caldeira | 148.30 | 7 | *e*PKP | PKPab | 19 09 22.0 | +0.1 |
| PMAN | Manadas | 148.32 | 6 | *e*PKP | PKiKP | 19 09 19.9 | -0.5 |
| PSCM | Serra do Cume | 148.33 | 4 | *e*PKP | PKPab | 19 09 22.3 | +0.4 |
| DIAM | Diamantina, MG | 148.39 | 143 | *e*P | PKPdf | 19 09 15.7 | -0.5 |
| PICO | Pico | 148.41 | 6 | *e*PKP | PKiKP | 19 09 20.8 | +0.1 |
| PCAN | Candelaria | 148.44 | 6 | *e*PKP | PKPab | 19 09 22.0 | -0.4 |
| PPNO | Prainha do Nor | 148.46 | 6 | *e*PKP | PKiKP | 19 09 20.6 | -0.2 |
| MDT | Midelt | 148.49 | 327 | PKPbc | PKPdf | 19 09 16.9 | +1.0 |
| | comp=Z,55nm,0.8s,baz=88,slow=0.7,SNR=22 | | | | | | |
| PID | Ribeirinha | 148.50 | 6 | *e*PKP | PKiKP | 19 09 21.0 | +0.2 |
| MAL2 | Monte Alegre, | 148.81 | 106 | PKPdf | PKPdf | 19 09 15.8 | -1.1 |
| PSET | Sete Cidades | 149.29 | 2 | *e*PKP | PKiKP | 19 09 23.5 | +1.0 |
| BART | Pico Bartolome | 149.35 | 1 | *e*PKP | PKiKP | 19 09 22.1 | -0.6 |
| RIB01 | Linhares ES | 149.39 | 149 | *e*P | PKPdf | 19 09 17.4 | -0.2 |
| PSMN | Pico do Norte, | 150.12 | 1 | *e*PKP | PKiKP | 19 09 24.4 | +0.2 |
| MCPB | Macapa, AP | 151.31 | 104 | *e*P | PKPdf | 19 09 19.3 | -1.5 |
| PRPB | Parauapebas | 151.33 | 117 | *e*P | PKPdf | 19 09 20.1 | -0.7 |
| SDBA | SAO DESIDERIO | 151.83 | 133 | *e*P | PKPdf | 19 09 21.1 | -0.5 |
| SMTB | Santa Maria do | 151.90 | 124 | *e*P | PKPdf | 19 09 21.1 | -0.6 |
| GUA01 | Guaratinga, BA | 151.96 | 147 | *e*P | PKPdf | 19 09 21.9 | +0.2 |
| PMPST | Porto Santo, M | 153.03 | 345 | *e*PKPdf | PKiKP | 19 09 31.5 | +1.2 |
| PMPS | Porto Santo | 153.05 | 345 | *e*PKPdf | PKPdf | 19 09 25.5 | +2.7 |
| CMC01 | Camacan, BA | 153.12 | 146 | *e*P | PKPdf | 19 09 23.4 | +0.1 |
| PMOZ | Porto Moniz, M | 153.48 | 347 | *e*PKPdf | PKiKP | 19 09 31.7 | +0.3 |
| PMOZ | Porto Moniz, M | 153.48 | 347 | *e*LR | LR | 20 03 11.0 | |
| | comp=Z,510nm,22.0s | | | | | | |
| PMAR | Madeira | 153.51 | 346 | *e*PKPdf | PKiKP | 19 09 31.9 | +0.4 |
| TORD | Torodi Ar. Bea | 153.75 | 286 | PKP | PKPdf | 19 09 23.7 | -0.6 |
| | comp=Z,6.9nm,1.0s,baz=12,slow=2.5,SNR=32 | | | | | | |
| TORD | | | | PKPbc | PKPbc | 19 09 32.2 | 0.0 |
| | comp=Z,23nm,0.7s,baz=52,slow=2.6,SNR=34 | | | | | | |
| TORD | | | | PKPab | PKPab | 19 09 44.8 | -0.4 |
| | comp=Z,36nm,0.8s,baz=74,slow=4.1,SNR=12 | | | | | | |
| GDU01 | Guandu, BA | 154.40 | 144 | *e*P | PKPdf | 19 09 24.6 | -0.6 |
| KIC | Kosan Boka | 160.62 | 269 | ⇑*e*PKIKP | PKPdf | 19 09 32.8 | -0.3 |
| | comp=Z,48nm,1.1s | | | | | | |
| DBIC | Dimbokro | 160.75 | 270 | PKP | PKPdf | 19 09 32.6 | -0.5 |
| | comp=Z,19nm,1.0s,baz=340,slow=2.4,SNR=10 | | | | | | |
| DBIC | | | | PKPab | PKPab | 19 10 15.2 | -0.2 |
| | comp=Z,47nm,0.9s,baz=81,slow=4.2,SNR=19 | | | | | | |
| DBIC | | | | PP | PP | 19 14 02.3 | +3.9 |
| | comp=Z,14nm,1.1s,baz=199,slow=2.5,SNR=3.8 | | | | | | |
| LIC | Lamto | 160.89 | 269 | ⇑*e*P | PKPdf | 19 09 33.0 | -0.3 |
| | comp=Z,77nm,1.1s | | | | | | |
| TIC | Toumodi | 160.91 | 270 | ⇑*e*PKIKP | PKPdf | 19 09 33.1 | -0.3 |
| | comp=Z,45nm,1.1s | | | | | | |
| BBTS | Babate | 169.26 | 316 | PKP | PKPdf | 19 09 40.6 | +0.3 |
| | comp=Z,46nm,1.0s,baz=306,slow=1.1,SNR=5.3 | | | | | | |
| BBTS | | | | PKPab | PKPab | 19 10 52.6 | 0.0 |
| | comp=Z,40nm,0.8s,baz=309,slow=2.2,SNR=6.0 | | | | | | |

*SOME **22** 18:51:22.3, 39.87N×76.80E, h0km*
*NNC **22** 18:51:27.3±1.6, 46.29N×74.68E, h0km, mb3.3, mpv3.1, Error ellipse: s-maj=12.1km s-min=11.4km az=125.0*
*KRNET **22** 18:51:30.1±0.1, 40.07N×76.77E, mb2.5*
**ISC 22 18:51:29.0**±1.7, **40.09N**±0.07×**76.78E**±0.04, **h10**km, **n37,**

σ1§10/65, **15C-8D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NRN | **Naryn** | 1.47 | 336 | ⇑*i*P | Pg | 18 51 57.9 | +0.7 |
| | baz=36 | | | | | | |
| NRN | | | | ⇑*i*S | Sg | 18 52 18.5 | +2.2 |
| | baz=36 | | | | | | |
| KDJ | **Kajisay** | 2.06 | 8 | ⇑*e*P | Pg | 18 52 08.4 | -0.1 |
| | baz=9.0 | | | | | | |
| KDJ | | | | ⇑*e*S | Sg | 18 52 35.8 | +0.6 |
| | baz=9.0 | | | | | | |
| ULHL | **Ulahol** | 2.19 | 349 | ⇑*i*P | Pg | 18 52 09.9 | -1.1 |
| | baz=50 | | | | | | |
| ULHL | | | | ⇑*i*S | Sg | 18 52 39.0 | -0.4 |
| | baz=50 | | | | | | |
| BOOM | **Boomskoye usch** | 2.48 | 345 | ⇑*e*P | Pb | 18 52 13.8 | +0.1 |
| | baz=46 | | | | | | |
| BOOM | | | | ⇑*i*S | Sb | 18 52 46.0 | +1.6 |
| | baz=46 | | | | | | |
| SFK | **Sufi-Kurgan** | 2.52 | 269 | ⇑*i*P | Pb | 18 52 14.2 | -0.2 |
| | baz=70 | | | | | | |
| SFK | | | | ⇑*i*S | Sb | 18 52 46.3 | +0.8 |
| | baz=70 | | | | | | |
| ARLS | **Aral** | 2.57 | 314 | ⇑*e*P | Pb | 18 52 14.9 | -0.3 |
| | baz=15 | | | | | | |
| ARLS | | | | ⇑*e*S | Sb | 18 52 47.8 | +0.9 |
| | baz=15 | | | | | | |
| PRZ | **Przheval'sk** | 2.68 | 26 | ⇓*e*P | Pb | 18 52 17.1 | -0.1 |
| | baz=26 | | | | | | |
| PRZ | | | | ⇓*e*S | Sb | 18 52 51.5 | +1.2 |
| | baz=26 | | | | | | |
| KBK | **Karagaybulak** | 2.91 | 332 | ⇓*i*P | Pb | 18 52 20.1 | -1.0 |
| | baz=33 | | | | | | |
| KBK | | | | ⇓*i*S | Sb | 18 52 56.6 | -0.2 |
| | baz=33 | | | | | | |
| TNSS | **Tian-Shan** | 2.95 | 2 | *e*P | Pb | 18 52 21.6 | -0.2 |
| | 1.2nm,0.2s | | | | | | |
| TNSS | | | | *e*S | Sg | 18 53 04.5 | +0.9 |
| | 6.7nm,0.4s | | | | | | |
| TNSS | **Tian-Shan** | 2.95 | 2 | Pg | Pb | 18 52 21.6 | -0.2 |
| | 1.2nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 18 53 04.5 | |
| | 6.7nm,0.4s | | | | | | |
| TKM2 | **Tokmak 2** | 2.97 | 343 | ⇑Pn | Pb | 18 52 22.0 | 0.0 |
| | 2.8nm,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **K22A** | **Casper** | **1.26** | **215** | Pg | **Pb** | **18 54 17.3** | **-0.1** |
| **RWWY** | **Rawlins** | **2.34** | **212** | | **Pg** | **18 54 37.8** | **+0.2** |
| RWWY | | | | IAML | | 18 55 18.6 | |
| | 103nm,1.1s | | | | | | |
| RWWY | | | | IAML | | 18 55 18.6 | |
| | 135nm,0.6s | | | | | | |
| **N23A** | **Red Feather La** | **2.81** | **186** | Pn | **Pn** | **18 54 40.6** | **+1.5** |
| N23A | | | | IAML | | 18 55 27.5 | |
| | comp=E,71nm,0.7s | | | | | | |
| **RLMT** | **Red Lodge** | **3.03** | **300** | Pn | **Pn** | **18 54 44.1** | **+2.0** |
| RLMT | | | | IAML | | 18 55 46.6 | |
| | comp=E,44nm,0.4s | | | | | | |
| RLMT | | | | IAML | | 18 55 58.9 | |
| | comp=E,41nm,2.6s | | | | | | |
| **LAO** | **LASA Array** | **3.04** | **351** | Pn | **Pn** | **18 54 39.5** | **-2.6** |
| LAO | | | | IAML | | 18 55 46.5 | |
| | comp=E,58nm,0.8s | | | | | | |
| **BW06** | **Boulder Array** | **3.07** | **254** | Pn | **Pn** | **18 54 40.8** | **-1.9** |
| **PDAR** | **Pinedale Array** | **3.07** | **254** | Pn | **Pb** | **18 54 50.0** | **+1.7** |
| | comp=E,1.5nm,0.3s,baz=75,slow=18,SNR=4.3 | | | | | | |
| PDAR | | | | Lg | Lg | 18 55 32.6 | |
| | comp=E,1.8nm,0.3s,baz=72,slow=30,SNR=9.5 | | | | | | |
| | comp=E,3.9nm,0.4s | | | | | | |
| **GCMT** | **Greycliff** | **3.61** | **307** | Pg | **Pb** | **18 54 57.7** | **+0.2** |
| **OGNE** | **Ogallala** | **3.78** | **135** | Pn | **Pn** | **18 54 54.0** | **+1.6** |
| **REDW** | **Red Top Meadow** | **3.87** | **267** | | **Pg** | **18 55 05.6** | **-1.3** |
| **ISCO** | **Idaho Springs** | **3.89** | **181** | Pn | **Pn** | **18 54 51.8** | **-2.2** |
| **O20A** | **White River Ci** | **4.08** | **210** | | **Pn** | **18 54 57.0** | **+0.4** |
| **AHID** | **Auburn Hatcher** | **4.16** | **259** | | **Pn** | **18 54 58.8** | **+1.1** |
| AHID | | | | IAML | | 18 56 21.4 | |
| | comp=E,25nm,1.7s | | | | | | |
| AHID | | | | IAML | | 18 57 42.2 | |
| | comp=E,18nm,4.5s | | | | | | |
| **RDMU** | **Red Mountain** | **4.32** | **225** | | **Pn** | **18 54 59.2** | **-0.6** |
| RDMU | | | | IAML | | 18 56 25.0 | |
| | comp=N,17nm,1.6s | | | | | | |
| RDMU | | | | IAML | | 18 56 26.7 | |
| | comp=E,25nm,1.9s | | | | | | |
| **SMCO** | **Snowmass** | **4.63** | **194** | | **Pn** | **18 55 04.2** | **-0.1** |
| SMCO | | | | IAML | | 18 57 06.2 | |
| | comp=E,19nm,5.0s | | | | | | |
| **Q24A** | **Divide** | **4.73** | **176** | Pn | **Pn** | **18 55 03.0** | **-2.5** |
| Q24A | | | | IAML | | 18 56 23.5 | |
| | comp=E,17nm,0.8s | | | | | | |
| Q24A | | | | IAML | | 18 57 31.2 | |
| | comp=N,18nm,3.5s | | | | | | |
| **HWUT** | **Hardware Ranch** | **4.90** | **247** | Pn | **Pn** | **18 55 06.4** | **-1.4** |
| HWUT | | | | IAML | | 18 57 26.5 | |
| | comp=N,15nm,2.6s | | | | | | |
| **EGMT** | **Eagleton** | **5.24** | **327** | Pn | **Pn** | **18 55 11.5** | **-0.8** |
| **P18A** | **Preston Nutter** | **5.37** | **223** | Pn | **Pn** | **18 55 17.0** | **+2.6** |
| **P17A** | **Butcher Ranch,** | **5.74** | **225** | Pn | **Pn** | **18 55 18.0** | **-1.3** |
| **PV07** | **Paradox Valley** | **5.74** | **205** | Pn | **Pn** | **18 55 19.8** | **+0.4** |
| **SR13** | **San Rafael Swe** | **5.91** | **221** | Pn | **Pn** | **18 55 21.9** | **+0.2** |
| **SDCO** | **Great Sand Dun** | **5.94** | **180** | Pn | **Pn** | **18 55 22.9** | **+0.7** |
| **S22A** | **4UR Ranch, Cre** | **6.02** | **190** | Pn | **Pn** | **18 55 23.0** | **-0.2** |
| **TMUT** | **Trail Mountain** | **6.11** | **226** | Pn | **Pn** | **18 55 26.3** | **+1.8** |
| **I56US** | **NEWPORT INFRAS** | **9.27** | **304** | I | I | 19 46 50.0 | |
| | baz=116,slow=313,SNR=2.6 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.31** | **42** | Pn | **Pn** | **18 56 10.4** | **+2.3** |
| | comp=N,0.9nm,0.3s,baz=226,slow=12,SNR=6.8 | | | | | | |
| ULM | | | | Lg | Lg | 18 58 46.4 | |
| | comp=N,0.3nm,0.3s,baz=169,slow=18,SNR=2.3 | | | | | | |
| | comp=N,2.1nm,0.4s | | | | | | |

*MDD* ***22*** *19:12:07.6±0.4,37.87N×3.21W,h6km±9km,mb_Lg2.5/8, Error ellipse: s-maj=3.3km s-min=2.7km az=1.0*
*SFS* ***22*** *19:12:08.0,37.89N×3.26W,h4km,ML3.1/18,ML3.2/12, MLv3.1/18*
**ISC 22 19:12:07.2±0.9,37°88N±0.03×3°25W±0.02,h13km±7km, n50,σ0s55/64,Spain**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **E0802** | **Ubeda,Jaen** | **0.18** | **325** | Pg | **Pg** | **19 12 11.3** | **0.0** |
| E0802 | | | | Sg | **Sg** | **19 12 14.2** | **0.0** |
| **EQTA** | **Presa de Quent** | **0.69** | **193** | Pg | **Pg** | **19 12 20.6** | **0.0** |
| EQTA | | | | Sg | **Sb** | **19 12 20.6** | **-0.3** |
| **EQTA** | **Presa de Quent** | **0.69** | **193** | Pg | **Pg** | **19 12 20.3** | **-0.3** |
| **EQUE** | **Quentar** | **0.69** | **193** | Pg | **Pg** | **19 12 20.3** | **-0.3** |
| EQUE | | | | Sg | **Sg** | **19 12 29.7** | **0.0** |
| EQUE | | | | *i* Vmb_Lg | | 19 12 31.3 | |
| **EBER** | **Berja** | **1.02** | **164** | Pg | **Pg** | **19 12 26.6** | **-0.3** |
| **EBER** | **Berja** | **1.02** | **164** | Pg | **Pg** | **19 12 26.0** | **-0.9** |
| **EBER** | **Berja** | **1.02** | **164** | Pg | **Pg** | **19 12 26.4** | **-0.5** |
| EBER | | | | *i* Vmb_Lg | | 19 12 36.1 | |
| EBER | | | | Sg | **Sg** | **19 12 38.6** | **-1.6** |
| **EGOR** | **Sierra Gorda,** | **1.03** | **222** | Pg | **Pg** | **19 12 27.1** | **+0.1** |
| **EGOR** | **Sierra Gorda,** | **1.03** | **222** | Pg | **Pb** | **19 12 27.0** | **0.0** |
| **EGOR** | **Sierra Gorda,** | **1.03** | **222** | Pg | **Pg** | **19 12 27.2** | **+0.2** |
| EGOR | | | | *i* Vmb_Lg | | 19 12 36.1 | |
| **ELGU** | **Los Guajares,** | **1.05** | **197** | Pg | **Pg** | **19 12 27.6** | **+0.1** |
| **ELGU** | **Los Guajares,** | **1.05** | **197** | Pg | **Pg** | **19 12 27.5** | **+0.1** |
| **ELGU** | **Los Guajares,** | **1.05** | **197** | Pg | **Pn** | **19 12 27.9** | **+0.1** |
| ELGU | | | | Sg | **Sb** | **19 12 40.2** | **-0.9** |
| ELGU | | | | *i* Vmb_Lg | | 19 12 41.9 | |
| **EADA** | **Adamuz** | **1.09** | **286** | Pg | **Pb** | **19 12 28.1** | **+0.2** |
| EADA | | | | Sg | **Sn** | **19 12 43.3** | **+0.1** |
| **EADA** | **Adamuz** | **1.09** | **286** | Pg | **Pb** | **19 12 28.1** | **+0.2** |
| **EADA** | **Adamuz** | **1.09** | **286** | Pg | **Pb** | **19 12 28.0** | **+0.1** |
| EADA | | | | Sg | **Sg** | **19 12 42.9** | **+0.5** |
| **ENIJ** | **Nijar** | **1.23** | **137** | Pg | **Pg** | **19 12 30.8** | **0.0** |
| **ENIJ** | **Nijar** | **1.23** | **137** | Pg | **Pb** | **19 12 30.5** | **+0.3** |
| **ENIJ** | **Nijar** | **1.23** | **137** | Pg | **Pg** | **19 12 30.8** | **0.0** |
| ENIJ | | | | *i* Vmb_Lg | | 19 12 41.0 | |
| ENIJ | | | | Sg | **Sb** | **19 12 46.1** | **+0.1** |
| **EZAR** | **Zarzadilla de** | **1.23** | **90** | Pg | **Pn** | **19 12 30.1** | **0.0** |
| EZAR | | | | *i* Vmb_Lg | | 19 12 37.6 | |
| EZAR | | | | Sg | **Sb** | **19 12 45.4** | **-0.7** |
| **TLOR** | **Lorca, Murcia** | **1.25** | **100** | Pg | **Pn** | **19 12 30.3** | **-0.1** |
| **EMAL** | **Malaga-Limoner** | **1.46** | **221** | Pn | **Pn** | **19 12 33.3** | **0.0** |
| **EMAL** | **Malaga-Limoner** | **1.46** | **221** | Pn | **Pn** | **19 12 33.7** | **+0.4** |
| **ETOB** | **Tobarra** | **1.54** | **60** | Pn | **Pn** | **19 12 34.6** | **+0.2** |
| **ETOB** | **Tobarra** | **1.54** | **60** | Pn | **Pn** | **19 12 34.6** | **+0.2** |
| **ETOB** | **Tobarra** | **1.54** | **60** | Pg | **Pn** | **19 12 34.6** | **+0.2** |
| **EMUR** | **La Murta** | **1.59** | **91** | Pn | **Pn** | **19 12 35.8** | **+0.8** |
| EMUR | | | | Sn | **Sb** | **19 12 57.1** | **+0.6** |
| **EMUR** | **La Murta** | **1.59** | **91** | Pn | **Pn** | **19 12 35.7** | **+0.6** |
| **EMUR** | **La Murta** | **1.59** | **91** | Pg | **Pn** | **19 12 35.8** | **+0.8** |
| **ECAB** | **El Cabril** | **1.73** | **277** | Pn | **Pn** | **19 12 36.9** | **0.0** |
| **ECAB** | **El Cabril** | **1.73** | **277** | Pn | **Pn** | **19 12 37.0** | **0.0** |
| **ECAB** | **El Cabril** | **1.73** | **277** | Pn | **Pn** | **19 12 36.8** | **-0.2** |
| **CART** | **Cartagena** | **1.80** | **99** | Pn | **Pn** | **19 12 38.0** | **+0.1** |
| CART | | | | Sn | **Sn** | **19 13 01.5** | **+0.8** |
| **CART** | **Cartagena** | **1.80** | **99** | Pn | **Pn** | **19 12 38.3** | **+0.3** |
| **EALB** | **Alboran** | **1.94** | **175** | Sn | **Sb** | **19 13 05.9** | **-0.7** |
| **EALB** | **Alboran** | **1.94** | **175** | Pg | **Pg** | **19 12 44.2** | **-0.2** |
| **LIJA** | **Lijar** | **1.97** | **241** | Pg | **Pg** | **19 12 44.9** | **-0.1** |
| **LIJA** | **Lijar** | **1.97** | **241** | Pg | **Pg** | **19 12 45.1** | **0.0** |
| **ECHE** | **Chera** | **2.47** | **45** | Pg | **Pg** | **19 12 53.8** | **-0.7** |
| **CHAS** | **Isla Isabel II** | **2.77** | **166** | Pg | **Pb** | **19 12 57.7** | **+1.1** |
| **CHAS** | **Isla Isabel II** | **2.77** | **166** | Pg | **Pb** | **19 12 57.6** | **+1.1** |
| **PBAR** | **Barrancos** | **3.01** | **277** | *e*Pn | **Pn** | **19 12 55.2** | **+0.6** |
| PBAR | | | | *e*Sn | **Sn** | **19 13 30.6** | **+0.1** |
| **EBAD** | **Badajoz** | **3.09** | **288** | Pn | **Pn** | **19 12 54.9** | **-0.7** |
| **PESTR** | **Estremoz** | **3.55** | **287** | *e*Pn | **Pn** | **19 13 02.8** | **+0.7** |
| PESTR | | | | *e*Sn | **Sn** | **19 13 43.3** | **-0.6** |
| **PVAQ** | **Vaqueiros** | **3.58** | **264** | *e*Pn | **Pn** | **19 13 02.9** | **+0.5** |
| PVAQ | | | | *e*Sn | **Sn** | **19 13 43.6** | **-1.0** |
| **PVAQ** | **Vaqueiros** | **3.58** | **264** | Pn | **Pn** | **19 13 02.5** | **+0.1** |
| **PVAQ** | **Vaqueiros** | **3.58** | **264** | Pn | **Pn** | **19 13 02.8** | **+0.4** |
| **PBDV** | **Barranco-do-Ve** | **3.78** | **262** | *e*Pn | **Pn** | **19 13 06.8** | **+1.7** |
| **EIBI** | **Ibiza** | **3.78** | **71** | Pn | **Pn** | **19 13 04.9** | **-0.3** |
| **PCVE** | **Castro Verde** | **3.81** | **268** | Pn | **Pn** | **19 13 05.6** | **0.0** |

*MDD* ***22*** *19:12:13.7±0.2,37.88N×3.25W,h11km,mb_Lg3.2/60, Error ellipse: s-maj=1.4km s-min=1.1km az=146.0*
*LDG* ***22*** *19:12:13.2±0.1,37.89N×3.24W,h2km,Ml2.6/7,Error ellipse: s-maj=1.4km s-min=1.1km az=149.0*
*INMG* ***22*** *19:12:14.2±1.4,37.89N×3.24W,h14km±2km,ML2.9,Error ellipse: s-maj=1.6km s-min=1.3km az=5.0*
*CNRM* ***22*** *19:12:21.9,37.50N×2.85W,h56km,ML2.7*
**ISC 22 19:12:12.5±0.7,37°90N±0.02×3°25W±0.02,h16km±5km, n83,σ2s41/164,Spain**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **E0802** | **Ubeda,Jaen** | **0.16** | **322** | Pg | **Pg** | **19 12 17.4** | **+0.7** |
| E0802 | | | | Sg | **Sg** | **19 12 20.5** | **+1.1** |
| **EQUE** | **Quentar** | **0.71** | **192** | Pg | **Pg** | **19 12 26.3** | **-0.2** |
| EQUE | | | | Sg | **Sg** | **19 12 35.7** | **-0.2** |
| EQUE | | | | *i* Vmb_Lg | | 19 12 38.8 | |
| **EGOR** | **Sierra Gorda,** | **1.04** | **221** | Pg | **Pb** | **19 12 32.5** | **+0.2** |
| EGOR | | | | Sg | **Sb** | **19 12 47.5** | **+1.7** |
| EGOR | | | | *i* Vmb_Lg | | 19 12 51.3 | |
| **EBER** | **Berja** | **1.04** | **164** | Pg | **Pb** | **19 12 33.1** | **+0.8** |
| EBER | | | | Sg | **Sb** | **19 12 46.3** | **+0.5** |
| EBER | | | | *i* Vmb_Lg | | 19 12 52.3 | |
| **ELGU** | **Los Guajares,** | **1.07** | **196** | Pg | **Pb** | **19 12 33.6** | **+0.9** |
| ELGU | | | | Sg | **Sb** | **19 12 47.5** | **+0.9** |
| ELGU | | | | *i* Vmb_Lg | | 19 12 59.0 | |
| **EADA** | **Adamuz** | **1.08** | **285** | Pg | **Pb** | **19 12 34.0** | **+1.2** |
| EADA | | | | Sg | **Sb** | **19 12 48.9** | **+2.2** |
| EADA | | | | *i* Vmb_Lg | | 19 12 52.4 | |
| **ELOR** | **Lorca, Murcia** | **1.22** | **102** | Sg | **Sb** | **19 12 51.8** | **+0.9** |
| ELOR | | | | *i* Vmb_Lg | | 19 12 54.8 | |
| **EZAR** | **Zarzadilla de** | **1.23** | **91** | Pg | **Pn** | **19 12 35.9** | **+0.7** |
| EZAR | | | | Sg | **Sb** | **19 12 52.5** | **+1.3** |
| EZAR | | | | *i* Vmb_Lg | | 19 12 54.8 | |
| **ENIJ** | **Nijar** | **1.25** | **138** | Pg | **Pn** | **19 12 36.5** | **+1.2** |
| ENIJ | | | | Sg | **Sb** | **19 12 52.9** | **+1.3** |
| ENIJ | | | | *i* Vmb_Lg | | 19 12 55.0 | |
| **TLOR** | **Lorca, Murcia** | **1.26** | **101** | Pg | **Pn** | **19 12 36.4** | **+0.9** |
| TLOR | | | | Sg | **Sg** | **19 12 54.2** | **+0.8** |
| **ETOB** | **Tobarra** | **1.53** | **61** | Pn | **Pn** | **19 12 39.7** | **+0.5** |
| ETOB | | | | Sg | **Sb** | **19 13 01.5** | **+1.7** |
| **EMUR** | **La Murta** | **1.59** | **92** | Pn | **Pn** | **19 12 40.5** | **+0.4** |
| EMUR | | | | Sg | **Sb** | **19 13 03.5** | **+2.0** |
| EMUR | | | | *i* Vmb_Lg | | 19 13 05.7 | |
| **ECAB** | **El Cabril** | **1.72** | **276** | Pn | **Pn** | **19 12 42.2** | **+0.5** |
| ECAB | | | | Sn | **Sn** | **19 13 02.7** | **-0.8** |
| ECAB | | | | Sg | **Sb** | **19 13 07.6** | **+2.5** |
| ECAB | | | | *i* Vmb_Lg | | 19 13 09.0 | |
| **PAB** | **San Pablo** | **1.85** | **333** | Pn | **Pn** | **19 12 42.3** | **-1.3** |
| PAB | | | | Sn | **Sn** | **19 13 06.3** | **-0.5** |
| PAB | | | | Sg | **Sb** | **19 13 11.7** | **+2.8** |
| PAB | | | | *i* Vmb_Lg | | 19 13 15.3 | |
| **ESDC** | **Sonseca Array** | **1.85** | **343** | Pn | **Pn** | **19 12 42.2** | **-1.5** |
| ESDC | | | | Sg | **Sb** | **19 13 12.3** | **+3.3** |
| **EALB** | **Alboran** | **1.97** | **175** | Pn | **Pn** | **19 12 45.6** | **+0.4** |
| EALB | | | | Sn | **Sn** | **19 13 09.2** | **-0.3** |
| EALB | | | | *i* Vmb_Lg | | 19 13 12.7 | |
| **EVIV** | **Cofrentes, Val** | **2.16** | **50** | Pn | **Pn** | **19 12 48.0** | **+0.1** |
| EVIV | | | | Pg | **Pb** | **19 12 52.1** | **+0.9** |
| EVIV | | | | Sn | **Sn** | **19 13 13.6** | **-0.6** |
| EVIV | | | | Sg | **Sb** | **19 13 21.3** | **+3.6** |
| EVIV | | | | *i* Vmb_Lg | | 19 13 29.6 | |
| **EJIF** | **Jimena Fronter** | **2.29** | **231** | Pn | **Pn** | **19 12 50.1** | **+0.5** |
| EJIF | | | | Sn | **Sn** | **19 13 16.6** | **-0.7** |
| EJIF | | | | Sg | **Sb** | **19 13 24.8** | **+3.4** |
| **ESPR** | **Espera** | **2.32** | **244** | Pg | **Pn** | **19 12 49.8** | **-0.1** |
| **ESPR** | **Espera** | **2.32** | **244** | Pg | **Pn** | **19 12 50.4** | **+0.4** |
| **ESPR** | **Espera** | **2.32** | **244** | Pn | **Pn** | **19 12 50.3** | **+0.3** |
| ESPR | | | | Sn | **Sn** | **19 13 17.9** | **-0.2** |
| ESPR | | | | Sg | **Sg** | **19 13 26.9** | **-0.1** |
| ESPR | | | | *i* Vmb_Lg | | 19 13 33.0 | |
| **ECHE** | **Chera** | **2.46** | **46** | Pg | **Pn** | **19 12 53.0** | **+1.0** |
| **ECHE** | **Chera** | **2.46** | **46** | Pn | **Pn** | **19 12 53.0** | **+1.0** |
| ECHE | | | | Sg | **Sg** | **19 13 31.6** | **+0.1** |
| ECHE | | | | *i* Vmb_Lg | | 19 13 37.6 | |
| **EBEN2** | **Beniarda presa** | **2.53** | **71** | Pn | **Pn** | **19 12 53.7** | **+0.7** |
| EBEN2 | | | | Sn | **Sn** | **19 13 23.2** | **-0.2** |
| EBEN2 | | | | Sg | **Sg** | **19 13 33.2** | **-0.7** |
| EBEN2 | | | | *i* Vmb_Lg | | 19 13 35.3 | |
| **GOG** | **Mont Gurugu** | **2.68** | **175** | P | **Pn** | **19 12 56.4** | **+1.3** |
| **GOG** | **Mont Gurugu** | **2.68** | **175** | S | **Sn** | **19 13 29.3** | **-3.7** |
| **EMIN** | **Mina Concepcio** | **2.71** | **268** | Pn | **Pn** | **19 12 55.0** | **-0.4** |
| EMIN | | | | Pg | **Pb** | **19 13 01.5** | **+0.9** |
| EMIN | | | | Sn | **Sn** | **19 13 26.7** | **-1.1** |
| EMIN | | | | Sg | **Sb** | **19 13 37.5** | **+3.9** |
| EMIN | | | | *i* Vmb_Lg | | 19 13 40.4 | |
| **PALE** | **Palemas** | **2.74** | **192** | P | **Pn** | **19 12 59.5** | **+3.7** |
| **PALE** | **Palemas** | **2.74** | **192** | S | **Sn** | **19 13 29.3** | **+0.7** |
| **GUD** | **Guadarrama** | **2.82** | **346** | Pn | **Pn** | **19 12 59.0** | **+1.9** |
| GUD | | | | Sg | **Sg** | **19 13 42.9** | **-0.4** |
| GUD | | | | *i* Vmb_Lg | | 19 13 46.8 | |
| **PBAR** | **Barrancos** | **3.00** | **276** | *e*Pn | **Pn** | **19 13 00.2** | **+0.8** |
| **PBAR** | **Barrancos** | **3.00** | **276** | *e*Pg | **Pb** | **19 13 08.1** | **+2.5** |
| PBAR | | | | *e*Sn | **Sn** | **19 13 35.5** | **+0.5** |
| PBAR | | | | *e*Sg | **Sb** | **19 13 46.3** | **+4.3** |
| PBAR | | | | A | A | 19 13 56.3 | |
| | 36nm,0.3s | | | | | | |
| **E0901** | **Celadas (Terue** | **3.06** | **32** | Pn | **Pn** | **19 13 00.1** | **-0.2** |
| E0901 | | | | Pg | **Pb** | **19 13 07.4** | **+0.8** |
| E0901 | | | | Sg | **Sg** | **19 13 50.1** | **-0.6** |
| E0901 | | | | *i* Vmb_Lg | | 19 13 54.1 | |
| **EBAD** | **Badajoz** | **3.08** | **287** | Pn | **Pn** | **19 13 00.8** | **+0.4** |
| EBAD | | | | Sn | **Sn** | **19 13 35.8** | **-1.1** |
| EBAD | | | | Sg | **Sb** | **19 13 49.4** | **+5.3** |
| EBAD | | | | *i* Vmb_Lg | | 19 13 52.8 | |
| **EPLA** | **Plasencia** | **3.08** | **315** | Pn | **Pn** | **19 13 01.3** | **+0.7** |
| EPLA | | | | Sg | **Sb** | **19 13 49.9** | **+5.5** |
| EPLA | | | | *i* Vmb_Lg | | 19 13 58.3 | |
| **TAF** | **Taforalt** | **3.16** | **167** | P | **Pn** | **19 13 03.6** | **+2.0** |
| **TAF** | **Taforalt** | **3.16** | **167** | S | **Sn** | **19 13 36.1** | **-2.9** |
| **EMOS** | **Mosqueruela** | **3.27** | **40** | Pn | **Pn** | **19 13 04.5** | **+1.2** |
| EMOS | | | | Sg | **Sg** | **19 13 56.5** | **-1.2** |
| EMOS | | | | *i* Vmb_Lg | | 19 14 00.7 | |
| **EGRO** | **El Granado** | **3.37** | **265** | Pn | **Pn** | **19 13 04.9** | **+0.4** |
| EGRO | | | | Sn | **Sn** | **19 13 42.9** | **-1.3** |
| EGRO | | | | Sg | **Sb** | **19 13 57.8** | **+5.2** |
| EGRO | | | | *i* Vmb_Lg | | 19 14 00.4 | |
| **PESTR** | **Estremoz** | **3.54** | **287** | *e*Pn | **Pn** | **19 13 07.6** | **+0.8** |
| **PESTR** | **Estremoz** | **3.54** | **287** | *e*Pg | Pb | 19 13 19.0 | +4.2 |
| PESTR | | | | *e*Sn | **Sn** | **19 13 48.6** | **+0.2** |
| PESTR | | | | *e*Sg | **Sg** | **19 14 04.7** | **-1.5** |
| PESTR | | | | A | A | 19 14 15.7 | |
| | 29nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.58** | **263** | *e*Pn | **Pn** | **19 13 07.6** | **+0.3** |
| PVAQ | | | | *e*Sn | **Sn** | **19 13 49.1** | **-0.1** |
| PVAQ | | | | *e*Sg | **Sb** | **19 14 03.4** | **+4.9** |
| PVAQ | | | | A | A | 19 14 09.9 | |
| | 24nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **3.58** | **296** | *e*Pn | **Pn** | **19 13 08.5** | **+1.1** |
| **PMRV** | **Marv??o** | **3.58** | **296** | *e*Pg | **Pg** | **19 13 20.5** | **-0.6** |
| PMRV | | | | *e*Sn | **Sn** | **19 13 49.6** | **+0.3** |
| PMRV | | | | *e*Sg | **Sg** | **19 14 05.8** | **-1.6** |
| PMRV | | | | A | A | 19 14 13.8 | |
| | 47nm,0.6s | | | | | | |
| **PBEJ** | **Beja** | **3.65** | **273** | *e*Sn | **Sn** | **19 13 51.5** | **+0.5** |
| **PBDV** | **Barranco-do-Ve** | **3.77** | **261** | *e*Pn | **Pn** | **19 13 09.3** | **-0.7** |
| PBDV | | | | *e*Sn | **Sn** | **19 13 54.3** | **+0.2** |
| PBDV | | | | *e*Sg | **Sb** | **19 14 10.9** | **+6.7** |
| PBDV | | | | A | A | 19 14 17.8 | |
| | 17nm,0.3s | | | | | | |
| **EIBI** | **Ibiza** | **3.78** | **71** | Pn | **Pn** | **19 13 09.4** | **-0.6** |
| EIBI | | | | Sn | **Sn** | **19 13 51.8** | **-2.4** |
| EIBI | | | | *i* Vmb_Lg | | 19 14 10.3 | |
| **PCVE** | **Castro Verde** | **3.80** | **267** | *e*Pn | **Pn** | **19 13 11.3** | **+0.9** |
| **PCVE** | **Castro Verde** | **3.80** | **267** | *e*Pg | **Pb** | **19 13 23.3** | **+4.1** |
| PCVE | | | | *e*Sn | **Sn** | **19 13 54.2** | **-0.6** |
| PCVE | | | | *e*Sg | **Sb** | **19 14 10.9** | **+5.9** |
| PCVE | | | | A | A | 19 14 18.3 | |
| | 23nm,0.4s | | | | | | |
| **PCBR** | **Castelo Branco** | **3.82** | **302** | *e*Pn | **Pn** | **19 13 13.0** | **+2.3** |
| PCBR | | | | *e*Sn | **Sn** | **19 13 55.7** | **+0.5** |
| **MESJ** | **Messejana** | **3.93** | **271** | *e*Pn | **Pn** | **19 13 13.8** | **+1.6** |
| MESJ | | | | *e*Sn | **Sn** | **19 13 57.7** | **-0.2** |
| MESJ | | | | *e*Sg | **Sg** | **19 14 16.3** | **-2.4** |
| MESJ | | | | A | A | 19 14 19.2 | |
| | 19nm,0.6s | | | | | | |
| **PMTG** | **Montargil** | **4.07** | **288** | *e*Sn | **Sn** | **19 14 00.9** | **-0.5** |
| PMTG | | | | *e*Sg | **Sb** | **19 14 20.0** | **+7.3** |
| PMTG | | | | A | A | 19 14 28.4 | |
| | 27nm,0.5s | | | | | | |
| **ERTA** | **Horta de San J** | **4.12** | **41** | Pn | **Pn** | **19 13 15.5** | **+0.7** |
| ERTA | | | | Sn | **Sn** | **19 14 02.3** | **-0.5** |
| ERTA | | | | Sg | **Sg** | **19 14 23.2** | **-1.8** |
| ERTA | | | | *i* Vmb_Lg | | 19 14 29.1 | |
| **MTE** | **Manteigas** | **4.16** | **308** | *e*Sn | **Sn** | **19 14 04.7** | **+0.9** |
| MTE | | | | *e*Sg | **Sg** | **19 14 23.8** | **-2.4** |
| MTE | | | | A | A | 19 14 30.0 | |
| | 37nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.17** | **274** | *e*Sn | **Sn** | **19 14 02.4** | **+0.3** |
| PNCL | | | | *e*Sg | **Sb** | **19 14 22.7** | **+7.1** |
| **MORF** | **Marmelete** | **4.33** | **264** | *e*Sn | **Sn** | **19 14 07.6** | **-0.2** |
| MORF | | | | *e*Sg | **Sg** | **19 14 29.0** | **-2.5** |
| **PTEO** | **Sao Teotonio** | **4.35** | **267** | *e*Sn | **Sn** | **19 14 08.6** | **+0.3** |
| PTEO | | | | *e*Sg | **Sg** | **19 14 29.1** | **-3.1** |
| **MVO** | **Moncorvo** | **4.37** | **319** | *e*Sg | **Sg** | **19 14 31.6** | **-1.3** |
| MVO | | | | A | A | 19 14 39.7 | |
| | 14nm,0.5s | | | | | | |
| **ESAC** | **San Caprasio** | **4.38** | **28** | Pn | **Pn** | **19 13 18.6** | **+0.3** |
| ESAC | | | | Sn | **Sn** | **19 14 07.7** | **-1.3** |
| ESAC | | | | Sg | **Sb** | **19 14 28.5** | **+6.9** |
| ESAC | | | | *i* Vmb_Lg | | 19 14 31.8 | |
| **PFVI** | **Vila Bisbo** | **4.50** | **262** | *e*Pn | **Pn** | **19 13 21.2** | **+1.3** |
| PFVI | | | | *e*Sn | **Sn** | **19 14 11.6** | **-0.3** |
| PFVI | | | | A | A | 19 14 28.2 | |
| | 5.2nm,0.6s | | | | | | |
| PFVI | | | | *e*Sg | **Sg** | **19 14 35.7** | **-1.2** |
| **PVIS** | **Viseu** | **4.56** | **309** | *e*Sn | **Sn** | **19 14 13.9** | **+0.2** |
| PVIS | | | | *e*Sg | **Sg** | **19 14 35.6** | **-3.5** |
| PVIS | | | | A | A | 19 14 45.0 | |
| | 10nm,0.5s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **4.62** | **299** | *e*Sn | **Sn** | **19 14 15.2** | **+0.3** |
| PCAS | | | | *e*Sg | **Sb** | **19 14 36.5** | **+8.1** |
| PCAS | | | | A | A | 19 14 46.6 | |
| | 28nm,0.7s | | | | | | |
| **PSBE** | **So Bento** | **4.62** | **292** | *e*Sn | **Sn** | **19 14 15.1** | **0.0** |
| PSBE | | | | *e*Sg | **Sg** | **19 14 38.0** | **-2.9** |
| **PBRG** | **Braganca** | **4.73** | **327** | *e*Sg | **Sb** | **19 14 39.9** | **+8.1** |
| PBRG | | | | A | A | 19 14 49.7 | |
| | 6.8nm,0.4s | | | | | | |
| **EPOB** | **Poblet** | **4.80** | **43** | Pn | **Pn** | **19 13 25.8** | **+1.6** |
| EPOB | | | | Sg | **Sg** | **19 14 43.5** | **-3.1** |
| EPOB | | | | *i* Vmb_Lg | | 19 14 53.5 | |
| **PVRL** | **Vila Real** | **4.82** | **316** | *e*Sn | **Sn** | **19 14 19.6** | **-0.3** |
| PVRL | | | | *e*Sg | **Sg** | **19 14 45.8** | **-1.4** |
| PVRL | | | | A | A | 19 14 57.6 | |
| | 9.7nm,0.3s | | | | | | |
| **ECAL** | **Calabor** | **4.84** | **328** | Pn | **Pn** | **19 13 25.2** | **+0.5** |
| ECAL | | | | Sn | **Sn** | **19 14 19.7** | **-0.8** |
| ECAL | | | | Sg | **Sg** | **19 14 46.3** | **-1.6** |
| ECAL | | | | *i* Vmb_Lg | | 19 14 55.6 | |
| **PMAFR** | **Mafra** | **4.85** | **284** | *e*Sn | **Sn** | **19 14 20.2** | **-0.4** |
| PMAFR | | | | *e*Sg | **Sg** | **19 14 46.4** | **-1.8** |
| PMAFR | | | | A | A | 19 14 53.6 | |
| | 33nm,0.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **4.93** | **316** | *e*Pn | **Pn** | **19 13 27.6** | **+1.6** |
| POLO | | | | *e*Sg | **Sg** | **19 14 46.9** | **-3.8** |
| POLO | | | | A | A | 19 15 07.7 | |
| | 3.4nm,0.5s | | | | | | |
| **MD31** | **MD31** | **5.17** | **194** | P | **Pn** | **19 13 32.8** | **+3.5** |
| **MD31** | **MD31** | **5.17** | **194** | S | **Sn** | **19 14 28.5** | **-0.2** |
| **PCAB** | **Cabril** | **5.29** | **317** | *e*Sg | **Sg** | **19 14 59.6** | **-2.6** |
| PCAB | | | | A | A | 19 15 08.4 | |
| | 13nm,0.8s | | | | | | |
| **ETSF** | **Etsaut** | **5.40** | **22** | *e*Pn | **Pn** | **19 13 32.8** | **+0.4** |
| ETSF | | | | *e*Sn | **Sn** | **19 14 30.6** | **-3.6** |
| | 2.4nm,0.4s | | | | | | |
| ETSF | | | | *e*Sg | **Sg** | **19 15 01.8** | **-3.9** |
| | 3.6nm,0.4s | | | | | | |
| **ELOB** | **Lobios** | **5.42** | **318** | Pn | **Pn** | **19 13 33.7** | **+1.0** |
| ELOB | | | | Sg | **Sg** | **19 15 05.2** | **-1.1** |
| ELOB | | | | *i* Vmb_Lg | | 19 15 12.6 | |
| **SJPF** | **Ste Jean** | **5.43** | **16** | *e*Pn | **Pn** | **19 13 33.2** | **+0.4** |
| **SJPF** | **Ste Jean** | **5.43** | **16** | *e*Pg | Pb | 19 13 53.1 | +6.2 |
| SJPF | | | | *e*Sn | **Sn** | **19 14 31.8** | **-3.1** |
| | 1.4nm,0.4s | | | | | | |
| SJPF | | | | *e*Sg | **Sg** | **19 15 03.2** | **-3.5** |
| | 1.4nm,0.2s | | | | | | |
| **EARI** | **Arriondas** | **5.59** | **345** | Pn | **Pn** | **19 13 35.4** | **+0.4** |
| EARI | | | | Sn | **Sn** | **19 14 37.5** | **-1.5** |
| EARI | | | | Sg | **Sg** | **19 15 09.1** | **-2.9** |
| EARI | | | | *i* Vmb_Lg | | 19 15 22.2 | |
| **PGAV** | **Gavieira, Arco** | **5.60** | **318** | *e*Sg | **Sg** | **19 15 08.5** | **-3.6** |
| PGA

**Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RIZ** | **Raoul Island** | **4.26** | **198** | P | **Pn** | **19 32 03.9** | **+3.5** |
| RIZ | | | | S | **Sn** | **19 32 50.4** | **+1.3** |
| **RAO** | **Raoul Island** | **4.26** | **198** | Pn | **Pn** | **19 32 03.0** | **+2.5** |
| **RAO** | **Raoul Island** | **4.26** | **198** | Pn | **Pn** | **19 32 03.4** | **+2.9** |
| | 217nm,0.3s,baz=45,slow=23,SNR=7.2 | | | | | | |
| RAO | | | | Sn | **Sn** | **19 32 50.7** | **+1.6** |
| | 587nm,0.3s,baz=282,slow=23,SNR=19 | | | | | | |
| RAO | | | | LR | LR | 19 32 57.7 | |
| | comp=Z,441nm,19.0s,baz=2.5,slow=29 | | | | | | |
| **GLKZ** | **Green Lake** | **4.27** | **198** | P | **Pn** | **19 32 02.8** | **+2.2** |
| GLKZ | | | | S | **Sn** | **19 32 49.8** | **+0.4** |
| **NIUE** | **Niue** | **8.55** | **46** | P | **Pn** | **19 32 58.9** | **-0.5** |
| **NIUE** | **Niue** | **8.55** | **46** | | **Pn** | **19 32 58.8** | **-0.6** |
| **MSVF** | **Nonsavu** | **9.04** | **324** | P | Pn | 19 33 14.8 | +8.6 |
| **MSVF** | **Nonsavu** | **9.04** | **324** | LR | LR | 19 36 19.8 | |
| | comp=Z,400nm,21.2s,baz=155,slow=36 | | | | | | |
| **AFI** | **Afiamalu** | **12.04** | **22** | Pn | **Pn** | **19 33 44.9** | **-2.4** |
| **PKGZ** | **Pakihiroa** | **13.48** | **199** | P | Pn | 19 33 58.9 | -8.0 |
| PKGZ | | | | S | Sn | 19 36 16.6 | -19 |
| **URZ** | **Urewera** | **14.14** | **201** | P | **Pn** | **19 34 12.2** | **-3.7** |
| **URZ** | **Urewera** | **14.14** | **201** | Pn | **Pn** | **19 34 14.1** | **-1.7** |
| | 0.5nm,0.3s,baz=340,slow=7.5,SNR=1.5 | | | | | | |
| URZ | | | | Sn | Sn | 19 36 39.3 | -12 |
| | 2.7nm,0.3s,baz=337,slow=13,SNR=11 8.7nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **14.14** | **201** | P | Pn | 19 34 09.1 | -6.8 |
| URZ | | | | S | Sn | 19 36 28.8 | -23 |
| **RTZ** | **Ruatahuna** | **14.51** | **201** | Pn | **Pn** | **19 34 21.7** | **+0.8** |
| **HRRZ** | **Handcock Road** | **14.54** | **203** | P | Sn | 19 37 10.8 | +9.3 |
| **PINNC** | **Pines Island,** | **14.99** | **277** | | **Pn** | **19 34 27.6** | **+0.1** |
| PINNC | | | | IAmb | IAmb | 19 34 31.6 | |
| | comp=Z,71nm,1.6s | | | | | | |
| **NMHZ** | **Naumai** | **15.00** | **201** | P | Sn | 19 36 59.6 | -13 |
| **MCHZ** | **McNeill Hill** | **15.35** | **201** | P | Sn | 19 37 06.9 | -14 |
| **KWHZ** | **Kaweka Forest** | **15.42** | **201** | P | Sn | 19 37 07.8 | -15 |
| **TWVZ** | **Taurewa** | **15.46** | **204** | P | **Sn** | **19 37 16.1** | **-7.7** |
| **KAHZ** | **Kahuranaki** | **15.62** | **200** | P | **Pn** | **19 34 28.9** | **-6.7** |
| KAHZ | | | | S | Sn | 19 37 05.3 | -22 |
| **KRHZ** | **Kereru** | **15.64** | **201** | P | Sn | 19 37 12.0 | -16 |
| **MTVZ** | **Mangateitei** | **15.72** | **204** | P | **S** | **19 37 53.9** | **+10** |
| **RAR** | **Rarotonga** | **15.79** | **79** | P | **Pn** | **19 34 35.2** | **-2.7** |
| **RAR** | **Rarotonga** | **15.79** | **79** | Pn | **Pn** | **19 34 36.0** | **-1.9** |
| **RAR** | **Rarotonga** | **15.79** | **79** | Pn | **Pn** | **19 34 37.1** | **-0.8** |
| | comp=Z,3.0nm,0.3s,baz=268,slow=7.2,SNR=14 | | | | | | |
| RAR | | | | Sn | Sn | 19 37 15.6 | -16 |
| | comp=Z,1.7nm,0.3s,baz=131,slow=20,SNR=2.6 | | | | | | |
| RAR | | | | LR | LR | 19 41 12.8 | |
| | comp=Z,156nm,18.2s,baz=282,slow=39 comp=Z,29nm,0.7s | | | | | | |
| **PXZ** | **Pawanui** | **15.84** | **199** | P | **Pn** | **19 34 34.7** | **-3.7** |
| PXZ | | | | S | Sn | 19 37 13.7 | -19 |
| **RTV** | **Rentapao** | **15.91** | **295** | P | **P** | **19 34 45.2** | **+2.4** |
| **PNHZ** | **Pukenui** | **15.94** | **201** | P | **Pn** | **19 34 34.5** | **-5.2** |
| PNHZ | | | | S | Sn | 19 37 14.9 | -21 |
| **PNHZ** | **Pukenui** | **15.94** | **201** | P | Sn | 19 37 18.1 | -17 |
| **WPHZ** | **Waipukurau** | **16.00** | **200** | P | Sn | 19 37 20.7 | -16 |
| **DZM** | **Mont Dzumac** | **16.02** | **278** | P | **P** | **19 34 45.9** | **+1.8** |
| **DZM** | **Mont Dzumac** | **16.02** | **278** | | **P** | **19 34 43.1** | **-1.0** |
| **DZM** | **Mont Dzumac** | **16.02** | **278** | Pn | **P** | **19 34 48.2** | **+4.0** |
| | comp=Z,0.6nm,0.3s,baz=87,slow=16,SNR=9.0 | | | | | | |
| **PRHZ** | **Porangahau** | **16.12** | **200** | P | Sn | 19 37 19.6 | -20 |
| **DVHZ** | **Dannevirke** | **16.30** | **201** | P | Sn | 19 37 26.5 | -18 |
| **ANWZ** | **Angora Road** | **16.35** | **200** | P | Sn | 19 37 24.5 | -21 |
| **POWZ** | **Post Office Ro** | **16.51** | **201** | P | Sn | 19 37 33.4 | -16 |
| **BFZ** | **Birch Farm** | **16.62** | **200** | P | **Pn** | **19 34 44.9** | **-3.5** |
| **BFZ** | **Birch Farm** | **16.62** | **200** | | **Pn** | **19 34 44.2** | **-4.1** |
| **BFZ** | **Birch Farm** | **16.62** | **200** | P | Pn | 19 34 40.2 | -8.2 |
| BFZ | | | | S | Sn | 19 37 30.5 | -21 |
| **MRZ** | **Mangatainoka R** | **16.82** | **202** | Pn | **Pn** | **19 34 45.7** | **-5.1** |
| **MRZ** | **Mangatainoka R** | **16.82** | **202** | P | Pn | 19 34 39.8 | -11 |
| MRZ | | | | S | Sn | 19 37 32.8 | -24 |
| **MRZ** | **Mangatainoka R** | **16.82** | **202** | P | Sn | 19 37 34.9 | -22 |
| **TIWZ** | **Tintock** | **16.82** | **201** | P | Sn | 19 37 36.9 | -20 |
| **CPWZ** | **Castlepoint** | **16.84** | **200** | P | Sn | 19 37 39.7 | -18 |
| **HOWZ** | **Holdsworth Sta** | **17.05** | **201** | P | **Pn** | **19 34 47.1** | **-6.7** |
| HOWZ | | | | S | Sn | 19 37 40.2 | -22 |
| **HOWZ** | **Holdsworth Sta** | **17.05** | **201** | P | Sn | 19 37 39.7 | -23 |
| **OGWZ** | **Otaki Gorge** | **17.09** | **202** | P | **Pn** | **19 34 48.6** | **-5.7** |
| OGWZ | | | | S | Sn | 19 37 42.5 | -21 |
| **TMWZ** | **Te Maipa** | **17.12** | **200** | P | Sn | 19 37 41.4 | -23 |
| **KIW** | **Kapiti Island** | **17.22** | **203** | P | Sn | 19 37 46.2 | -20 |
| **MTW** | **Mount Morrison** | **17.29** | **201** | P | **Pn** | **19 34 56.1** | **-0.7** |
| MTW | | | | S | Sn | 19 37 46.9 | -21 |
| **MTW** | **Mount Morrison** | **17.29** | **201** | P | Sn | 19 37 44.5 | -24 |
| **TRWZ** | **Traveller** | **17.45** | **200** | P | **Pn** | **19 34 56.2** | **-2.5** |
| TRWZ | | | | S | Sn | 19 37 49.7 | -22 |
| **PAWZ** | **Paruwai Farm** | **17.52** | **201** | P | Sn | 19 37 53.1 | -21 |
| **DUWZ** | **D'Urville Isla** | **17.54** | **205** | P | Sn | 19 37 55.9 | -18 |
| **MSWZ** | **Moikau Station** | **17.61** | **201** | Pn | Pn | 19 34 52.9 | -7.8 |
| **MSWZ** | **Moikau Station** | **17.61** | **201** | P | **Pn** | **19 34 54.0** | **-6.7** |
| MSWZ | | | | S | Sn | 19 37 49.8 | -26 |
| **MSWZ** | **Moikau Station** | **17.61** | **201** | P | Sn | 19 37 53.7 | -22 |
| **BHW** | **Baring Head** | **17.72** | **202** | P | **Pn** | **19 34 59.4** | **-2.7** |
| BHW | | | | S | Sn | 19 37 55.6 | -23 |
| **BHW** | **Baring Head** | **17.72** | **202** | P | Sn | 19 37 57.2 | -21 |
| **PLWZ** | **Palliser** | **17.74** | **201** | Pn | **Pn** | **19 34 59.8** | **-2.6** |
| **PLWZ** | **Palliser** | **17.74** | **201** | P | **Pn** | **19 34 59.2** | **-3.2** |
| **PLWZ** | **Palliser** | **17.74** | **201** | P | Sn | 19 37 56.3 | -23 |
| **TCW** | **Tory Channel** | **17.76** | **204** | Pn | **Pn** | **19 34 56.5** | **-6.0** |
| **TCW** | **Tory Channel** | **17.76** | **204** | P | **Pn** | **19 34 59.3** | **-3.2** |
| TCW | | | | S | Sn | 19 37 57.9 | -22 |
| **TCW** | **Tory Channel** | **17.76** | **204** | P | Sn | 19 37 57.2 | -22 |
| **TUWZ** | **Tuamarina** | **18.07** | **204** | | **Pn** | **19 35 02.8** | **-3.5** |
| **TKNZ** | **Takaka Hill** | **18.11** | **207** | | **Pn** | **19 35 01.3** | **-5.6** |
| **QRZ** | **Quartz Range** | **18.12** | **208** | P | **Pn** | **19 35 03.7** | **-3.3** |
| **KOUNC** | **Koumac, New Ca** | **18.38** | **281** | P | **P** | **19 35 09.7** | **-0.4** |
| KOUNC | | | | IAmb | IAmb | 19 35 17.8 | |
| | comp=Z,74nm,1.4s | | | | | | |
| **CTZ** | **Chatham Island** | **18.50** | **180** | P | **P** | **19 35 07.2** | **-4.0** |
| **KHZ** | **Kahutara** | **19.08** | **203** | P | **P** | **19 35 14.8** | **-2.8** |
| **KHZ** | **Kahutara** | **19.08** | **203** | P | **P** | **19 35 12.6** | **-5.0** |
| KHZ | | | | IAmb | IAmb | 19 35 17.7 | |
| | comp=Z,44nm,1.2s | | | | | | |
| **OXZ** | **Oxford** | **20.42** | **205** | P | **P** | **19 35 28.8** | **-3.4** |
| **RPZ** | **Rata Peaks** | **21.13** | **206** | P | **P** | **19 35 40.3** | **+0.4** |
| | comp=Z,7.7nm,0.7s,baz=345,slow=23,SNR=2.3 | | | | | | |
| RPZ | | | | S | S | 19 39 15.9 | -17 |
| | comp=Z,15nm,0.8s,baz=58,slow=19,SNR=4.3 comp=Z,7.7nm,0.7s | | | | | | |
| **JCZ** | **Jackson Bay** | **22.37** | **209** | P | **P** | **19 35 51.0** | **-2.3** |
| **EIDS** | **Eidsvold** | **29.36** | **263** | P | **P** | **19 37 00.1** | **+2.0** |
| **EIDS** | **Eidsvold** | **29.36** | **263** | P | **P** | **19 36 59.0** | **+0.9** |
| EIDS | | | | IAmb | IAmb | 19 37 00.4 | |
| | comp=Z,25nm,0.7s | | | | | | |
| **YNG** | **Young** | **31.75** | **245** | P | **P** | **19 37 20.9** | **+1.8** |
| **CMSA** | **Cobar Meteorol** | **33.83** | **250** | P | **P** | **19 37 39.2** | **+1.9** |
| **CTAO** | **Charters Tower** | **34.76** | **271** | P | **P** | **19 37 46.7** | **+1.2** |
| **CTAO** | **Charters Tower** | **34.76** | **271** | P | **P** | **19 37 45.9** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 19 37 48.6 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **34.76** | **271** | P | **P** | **19 37 45.6** | **+0.1** |
| CTAO | | | | pP | **sP** | **19 37 57.7** | **-0.8** |
| **QLP** | **Quilpie** | **35.35** | **259** | P | **P** | **19 37 52.4** | **+1.9** |
| **STKA** | **Stephens Creek** | **37.32** | **250** | P | **P** | **19 38 07.8** | **+0.5** |
| **STKA** | **Stephens Creek** | **37.32** | **250** | P | **P** | **19 38 07.2** | **0.0** |
| | comp=Z,6.2nm,0.9s,baz=118,slow=10,SNR=7.2 | | | | | | |
| STKA | | | | LR | LR | 19 51 46.4 | |
| | comp=Z,196nm,18.5s,baz=95,slow=34 comp=Z,6.2nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **38.01** | **288** | P | **P** | **19 38 13.2** | **0.0** |
| **PMG** | **Port Moresby** | **38.01** | **288** | P | **P** | **19 38 13.5** | **+0.2** |
| PMG | | | | pP | **sP** | **19 38 26.3** | **+0.1** |
| **KAVG** | **Kavieng** | **38.76** | **300** | P | **P** | **19 38 23.3** | **+3.8** |
| **COEN** | **Coen** | **39.55** | **279** | P | **P** | **19 38 27.1** | **+0.9** |
| | comp=Z,14nm,1.0s | | | | | | |
| **COEN** | **Coen** | **39.55** | **279** | | **P** | **19 38 25.4** | **-0.8** |
| COEN | | | | IAmb | IAmb | 19 38 29.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **HTT** | **Hallett** | **39.57** | **247** | P | **P** | **19 38 25.4** | **-0.8** |
| **LCRK** | **Leigh Creek** | **40.27** | **252** | P | **P** | **19 38 32.4** | **+0.4** |
| **BBOO** | **Buckleboo** | **41.98** | **248** | P | **P** | **19 38 45.4** | **-0.7** |
| **AS31** | **Alice Springs** | **45.06** | **261** | P | **P** | **19 39 09.5** | **-1.5** |
| **ASAR** | **Alice Springs** | **45.06** | **261** | P | **P** | **19 39 09.2** | **-1.9** |
| **ASAR** | **Alice Springs** | **45.06** | **261** | P | **P** | **19 39 10.2** | **-0.8** |
| | comp=Z,6.4nm,0.5s,baz=92,slow=7.0,SNR=70 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 40 51.8** | **+0.2** |
| | comp=Z,1.7nm,0.8s,baz=97,slow=4.6,SNR=5.3 | | | | | | |
| ASAR | | | | S | **S** | **19 45 40.5** | **-7.7** |
| | comp=Z,0.9nm,0.9s,baz=103,slow=16,SNR=5.8 | | | | | | |
| | comp=Z,6.4nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **45.40** | **266** | P | **P** | **19 39 11.5** | **-2.2** |
| **WB2** | **Warramunga Arr** | **45.58** | **266** | P | **P** | **19 39 12.7** | **-2.5** |
| WB2 | | | | IAmb | IAmb | 19 39 15.0 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.58** | **266** | P | **P** | **19 39 13.3** | **-1.8** |
| WRAB | | | | IAmb | IAmb | 19 39 15.4 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.59** | **266** | P | **P** | **19 39 13.6** | **-1.6** |
| WB0 | | | | IAmb | IAmb | 19 39 15.1 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.59** | **266** | P | **P** | **19 39 13.5** | **-1.8** |
| | comp=Z,8.4nm,0.8s,baz=103,slow=7.9,SNR=52 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 40 53.7** | **+0.3** |
| | comp=Z,2.6nm,0.8s,baz=104,slow=3.6,SNR=8.4 | | | | | | |
| WRA | | | | S | S | 19 45 43.7 | -12 |
| | comp=Z,0.6nm,1.1s,baz=89,slow=12,SNR=1.9 comp=Z,8.4nm,0.8s | | | | | | |
| **DRV** | **Dumont d'Urvil** | **49.48** | **201** | P | **P** | **19 39 45.4** | **+0.7** |
| DRV | | | | pP | **sP** | **19 39 58.7** | **+0.7** |
| **KNRA** | **Kununurra** | **51.95** | **269** | P | **P** | **19 40 03.8** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 19 40 04.5 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **SBA** | **Scott Base** | **53.32** | **184** | P | **P** | **19 40 16.4** | **+3.0** |
| **SBA** | **Scott Base** | **53.32** | **184** | P | **P** | **19 40 16.4** | **+3.0** |
| SBA | | | | PcP | **PcP** | **19 41 22.4** | **+1.9** |
| **FITZ** | **Fitzroy Crossi** | **53.99** | **265** | P | **P** | **19 40 17.0** | **-2.1** |
| **CCD** | **Concordia, Ant** | **58.33** | **195** | P | **P** | **19 40 50.7** | **+0.9** |
| CCD | | | | PcP | **PcP** | **19 41 40.7** | **+0.2** |
| **MORW** | **Morawa** | **59.51** | **250** | P | **P** | **19 40 56.1** | **-2.2** |
| **CASY** | **Casey** | **60.40** | **206** | P | **P** | **19 41 03.6** | **0.0** |
| **CASY** | **Casey** | **60.40** | **206** | P | **P** | **19 41 03.7** | **0.0** |
| CASY | | | | PcP | **PcP** | **19 41 48.2** | **-0.2** |
| **QSPA** | **South Pole Qui** | **64.90** | **180** | P | **P** | **19 41 34.9** | **+1.0** |
| QSPA | | | | IAmb | IAmb | 19 41 36.1 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **64.90** | **180** | P | **P** | **19 41 34.5** | **+0.6** |
| | comp=Z,9.0nm,0.9s,baz=40,slow=1.4,SNR=45 comp=Z,9.0nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **64.90** | **180** | P | **P** | **19 41 35.0** | **+1.0** |
| QSPA | | | | PcP | **PcP** | **19 42 07.4** | **+0.5** |
| **TOLI2** | **Tolitoli** | **66.07** | **283** | P | **P** | **19 41 41.2** | **-0.9** |
| TOLI2 | | | | IAmb | IAmb | 19 43 37.7 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **KKM** | **Kota Kinabalu** | **72.41** | **286** | P | **P** | **19 42 20.5** | **-1.0** |
| KKM | | | | IAmb | IAmb | 19 44 35.3 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **BELA** | **Belgrano 2** | **74.73** | **172** | P | **P** | **19 42 33.6** | **-0.5** |
| BELA | | | | IAmb | IAmb | 19 42 35.0 | |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **74.84** | **324** | P | **P** | **19 42 34.5** | **-0.7** |
| | comp=Z,0.9nm,0.6s,baz=75,slow=38,SNR=2.1 comp=Z,0.9nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **77.67** | **200** | P | **P** | **19 42 51.6** | **+0.8** |
| | comp=Z,19nm,1.0s,baz=126,slow=5.9,SNR=37 comp=Z,19nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **81.16** | **345** | P | **P** | **19 43 10.4** | **+0.6** |
| | comp=Z,3.9nm,0.7s,baz=114,slow=7.2,SNR=6.9 comp=Z,3.9nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **81.36** | **318** | P | **P** | **19 43 12.0** | **+0.8** |
| | comp=Z,1.0nm,0.7s,baz=132,slow=5.3,SNR=3.0 comp=Z,1.0nm,0.7s | | | | | | |
| **H03S2** | **Juan Fernandez** | **82.16** | **124** | T | T | 21 14 16.3 | |
| | baz=243,slow=75,SNR=26 | | | | | | |
| **H03S1** | **Juan Fernandez** | **82.17** | **124** | T | T | 21 14 17.5 | |
| | baz=243,slow=75,SNR=25 | | | | | | |
| **H03S3** | **Juan Fernandez** | **82.17** | **124** | T | T | 21 14 14.6 | |
| | baz=243,slow=75,SNR=22 | | | | | | |
| **H03N2** | **Juan Fernandez** | **82.32** | **123** | T | T | 21 14 27.9 | |
| | baz=249,slow=73,SNR=17 | | | | | | |
| **H03N3** | **Juan Fernandez** | **82.32** | **123** | T | T | 21 14 33.1 | |
| | baz=249,slow=73,SNR=15 | | | | | | |
| **H03N1** | **Juan Fernandez** | **82.33** | **123** | T | T | 21 14 12.9 | |
| | baz=249,slow=73,SNR=10 | | | | | | |
| **TROLL** | **Troll, Antarti** | **83.06** | **180** | ⇑P | **P** | **19 43 19.9** | **0.0** |
| | comp=Z,870nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **83.30** | **178** | P | **P** | **19 43 20.7** | **-0.3** |
| SNAA | | | | IAmb | IAmb | 19 43 22.2 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **83.30** | **178** | ⇑P | **P** | **19 43 21.0** | **-0.1** |
| | comp=Z,118nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **83.30** | **178** | P | **P** | **19 43 20.9** | **-0.2** |
| | comp=Z,8.0nm,1.0s,baz=211,slow=3.7,SNR=18 comp=Z,8.0nm,1.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **83.38** | **176** | ⇑P | **P** | **19 43 20.8** | **-0.7** |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.45** | **42** | P | **P** | **19 43 22.6** | **+0.2** |
| | comp=Z,0.9nm,0.8s,baz=240,slow=7.3,SNR=5.0 comp=Z,0.9nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **83.65** | **325** | P | **P** | **19 43 22.9** | **-0.2** |
| | comp=Z,1.8nm,0.8s,baz=120,slow=5.7,SNR=3.9 comp=Z,1.8nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **83.84** | **176** | ⇑P | **P** | **19 43 23.4** | **-0.4** |
| | comp=Z,11nm,0.8s,baz=145,slow=1.9 | | | | | | |
| **NJ2** | **Nanjing** | **83.99** | **309** | *e*P | **P** | **19 43 26.4** | **+1.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **84.06** | **176** | ⇑P | **P** | **19 43 24.6** | **-0.2** |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **PINE** | **Pine Mountain** | **85.41** | **37** | P | **P** | **19 43 31.2** | **-1.1** |
| PINE | | | | IAmb | IAmb | 19 43 36.4 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **85.48** | **49** | P | **P** | **19 43 30.4** | **-2.4** |
| **BNX** | **BinXian** | **87.08** | **324** | ⇓P | **P** | **19 43 41.5** | **+1.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **88.37** | **57** | P | **P** | **19 43 47.9** | **+1.0** |
| | comp=Z,0.2nm,0.4s,baz=208,slow=5.0,SNR=4.2 comp=Z,0.2nm,0.4s | | | | | | |
| **TMUT** | **Trail Mountain** | **88.40** | **45** | P | **P** | **19 43 45.4** | **-1.7** |
| TMUT | | | | IAmb | IAmb | 19 44 13.7 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **89.21** | **51** | P | **P** | **19 43 51.2** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=333,slow=6.8,SNR=2.1 comp=Z,1.0nm,0.7s | | | | | | |
| **ENH** | **Enshi** | **89.87** | **304** | P | **P** | **19 43 50.0** | **-3.8** |
| **PDAR** | **Pinedale Array** | **91.38** | **43** | P | **P** | **19 44 02.2** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=300,slow=7.2,SNR=1.4 comp=Z,0.1nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **92.55** | **12** | P | **P** | **19 44 06.5** | **+1.1** |
| | comp=Z,0.4nm,0.8s,baz=218,slow=5.5,SNR=3.0 comp=Z,0.4nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.04** | **289** | P | **P** | **19 44 08.8** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **93.04** | **289** | P | **P** | **19 44 10.5** | **+1.8** |
| | comp=Z,2.9nm,1.0s,baz=145,slow=2.9,SNR=16 comp=Z,2.9nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **93.66** | **314** | *e*P | **P** | **19 44 12.9** | **+1.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,240nm,5.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,370nm,16.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,420nm,16.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,540nm,17.6s | | | | | | |
| **PZH** | **PanZhiHua** | **94.18** | **297** | P | **P** | **19 44 16.6** | **+2.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,200nm,4.7s | | | | | | |
| **LZH** | **Lanzhou** | **96.76** | **307** | *e*P | **P** | **19 44 29.3** | **+3.7** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,620nm,17.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,680nm,16.5s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1μm,16.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **115.44** | **312** | PKP | **PKPdf** | **19 49 35.1** | **-1.2** |
| | comp=Z,0.7nm,0.6s,baz=99,slow=0.4,SNR=8.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **118.45** | **316** | PKP | **PKPdf** | **19 49 40.9** | **-1.0** |
| | comp=Z,0.8nm,0.2s,baz=106,slow=1.9,SNR=1.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **123.57** | **318** | PKP | **PKPdf** | **19 49 51.3** | **-0.4** |
| | comp=Z,1.2nm,0.5s,baz=85,slow=3.7,SNR=4.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.78** | **350** | PKP | **PKiKP** | **19 50 11.7** | **-0.3** |
| | comp=Z,1.8nm,0.9s,baz=52,slow=2.0,SNR=5.9 | | | | | | |
| **FINES** | **FINESS Array B** | **140.67** | **343** | PKhKP | PKPpre | 19 50 15.9 | |
| | comp=Z,2.2nm,0.9s,baz=90,slow=1.9,SNR=4.6 | | | | | | |
| **NB2** | **NORSAR Subarra** | **143.79** | **354** | PKP | PKPbc | 19 50 27.0 | +0.2 |
| | comp=Z,1.1nm,0.5s,baz=9.9,slow=3.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **143.79** | **354** | PKhKP | PKPpre | 19 50 26.5 | |
| | comp=Z,1.9nm,0.7s,baz=2.7,slow=2.2,SNR=6.7 | | | | | | |
| **HFS** | **Hagfors** | **144.38** | **351** | PKP | PKPbc | 19 50 28.5 | -0.1 |
| | comp=Z,4.6nm,0.4s,baz=72,slow=4.8,SNR=44 | | | | | | |
| **AKASG** | **Malin Array Be** | **147.79** | **329** | PKPbc | **PKPbc** | **19 50 38.9** | **-0.2** |
| | comp=Z,2.2nm,0.5s,baz=42,slow=3.4,SNR=9.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **149.48** | **8** | PKPbc | **PKPbc** | **19 50 43.2** | **-0.1** |
| | comp=Z,1.4nm,0.8s,baz=336,slow=3.9,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **150.96** | **307** | PKPbc | **PKPbc** | **19 50 47.6** | **-0.1** |
| | comp=Z,1.9nm,0.9s,baz=121,slow=3.2,SNR=11 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **19 50 54.7** | **-0.5** |
| | comp=Z,3.4nm,0.6s,baz=114,slow=3.1,SNR=18 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **151.22** | **293** | PKPbc | **PKiKP** | **19 50 49.1** | **+0.3** |
| | comp=Z,3.1nm,0.6s,baz=76,slow=7.1,SNR=7.1 | | | | | | |
| MMAI | | | | PKPab | **PKPab** | **19 50 56.1** | **-0.2** |
| | comp=Z,10nm,0.6s,baz=81,slow=6.0,SNR=17 | | | | | | |
| **GERES** | **GERESS Array B** | **155.09** | **344** | PKP | **PKPdf** | **19 50 47.1** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=64,slow=4.5,SNR=1.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **167.89** | **171** | PKP | **PKPdf** | **19 51 01.2** | **-0.6** |
| | comp=Z,1.0nm,1.1s,baz=174,slow=2.9,SNR=3.6 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **19 52 08.6** | **+0.1** |
| | comp=Z,2.2nm,0.8s,baz=194,slow=2.8,SNR=11 | | | | | | |

*IDC **22** 19:31:35.1±1.1,43.68N×127.61W,h0km,mb4.0/13, mbtmp3.8/21,ML3.7/7,Error ellipse: s-maj=27.6km s-min=11.4km az=41.0*

*NEIC **22** 19:31:38.9±2.2,43.64N±0.08×127.4W±0.2,h10km±2km, ML3.1/60,Error ellipse: s-maj=19.0km s-min=12.7km az=255.0*

**ISC 22 19:31:37.0±0.9,43.60N±0.08×127.7W±0.1,h15km,n70, σ1°28/61,mb4.1/12,Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **J01E** | **Myrtle Point** | **2.79** | **98** | | **Pn** | **19 32 20.5** | **-0.6** |
| J01E | | | | IAML | | 19 32 58.5 | |
| | comp=E,72nm,1.6s | | | | | | |
| **HEBO** | **Mount Hebo** | **3.26** | **59** | Pn | **Pn** | **19 32 27.0** | **-0.6** |
| **DBO** | **Dodson Butte** | **3.29** | **97** | | **Pn** | **19 32 27.7** | **-0.4** |
| **KSXB** | **Camp Six Broad** | **3.33** | **121** | Pn | **Pn** | **19 32 27.8** | **-0.9** |
| **L02F** | **Cave Junction** | **3.38** | **115** | | **Pn** | **19 32 28.8** | **-0.5** |
| **BUCK** | **Buck Mountain** | **3.47** | **78** | | **Pn** | **19 32 30.6** | **+0.1** |
| BUCK | | | | IAML | | 19 33 17.9 | |
| | comp=E,53nm,2.6s | | | | | | |
| BUCK | | | | IAML | | 19 33 53.2 | |
| | comp=N,39nm,2.1s | | | | | | |
| **KRMB** | **Red Mountain** | **3.49** | **125** | Pn | **Pn** | **19 32 29.6** | **-1.4** |
| **G03D** | **McMinnville, O** | **3.57** | **62** | | **Pn** | **19 32 32.0** | **+0.2** |
| G03D | | | | IAML | | 19 33 21.0 | |
| | comp=E,81nm,1.1s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.62** | **104** | | **Pn** | **19 32 31.4** | **-1.2** |
| **H04D** | **Lebanon** | **3.70** | **74** | | **Pn** | **19 32 32.2** | **-1.4** |
| H04D | | | | IAML | | 19 33 52.8 | |
| | comp=E,72nm,0.1s | | | | | | |
| H04D | | | | IAML | | 19 33 56.9 | |
| | comp=N,67nm,0.1s | | | | | | |
| **F03A** | **Seaside** | **3.76** | **50** | | **Pn** | **19 32 35.2** | **+0.7** |
| **I04A** | **Tendick Farm,** | **3.85** | **85** | | **Pn** | **19 32 35.8** | **+0.1** |
| I04A | | | | IAML | | 19 32 59.9 | |
| | comp=N,25nm,1.8s | | | | | | |
| I04A | | | | IAML | | 19 33 13.8 | |
| | comp=E,28nm,2.1s | | | | | | |
| **RADR** | **Rader Ridge** | **3.95** | **43** | Pn | **Pn** | **19 32 36.3** | **-0.8** |
| RADR | | | | IAML | | 19 34 09.0 | |
| | comp=E,63nm,1.8s | | | | | | |
| RADR | | | | IAML | | 19 34 21.2 | |
| | comp=N,63nm,1.6s | | | | | | |
| **H04A** | **Detroit Lake** | **4.12** | **73** | Pn | **Pn** | **19 32 40.6** | **+1.2** |
| H04A | | | | IAML | | 19 33 10.0 | |
| | comp=E,30nm,0.5s | | | | | | |
| H04A | | | | IAML | | 19 33 14.4 | |
| | comp=N,33nm,0.4s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **4.13** | **115** | | **Pn** | **19 32 40.5** | **+0.8** |
| **YBH** | **Yreka Blue Hor** | **4.13** | **115** | Pn | **Pn** | **19 32 40.7** | **+1.0** |
| | comp=N,3.1nm,0.3s,baz=306,slow=8.9,S

| | | | | | | |
|---|---|---|---|---|---|---|
| **H11N2** | **WAKE ISLAND Hy** | **58.96** | **268** | T | T | 20 45 14.4 |
| | baz=50,slow=75,SNR=56 | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **58.98** | **268** | T | T | 20 45 15.1 |
| | baz=50,slow=75,SNR=51 | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **59.89** | **267** | T | T | 20 46 18.8 |
| | baz=50,slow=75,SNR=508 | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **59.89** | **267** | T | T | 20 46 22.3 |
| | baz=50,slow=75,SNR=182 | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **59.90** | **267** | T | T | 20 46 20.3 |
| | baz=50,slow=75,SNR=182 | | | | | |
| **NOA** | **NORSAR Array B** | **70.50** | **20** | P | **P** | **19 42 50.1 -0.5** |
| | comp=E,1.6nm,0.9s,baz=330,slow=6.7,SNR=3.9 | | | | | |
| | comp=E,1.6nm,0.9s | | | | | |
| **HFS** | **Hagfors** | **71.89** | **19** | P | **P** | **19 42 58.5 -0.6** |
| | comp=E,3.1nm,0.9s,baz=339,slow=7.7,SNR=2.4 | | | | | |
| | comp=E,3.1nm,0.9s | | | | | |
| **FINES** | **FINESS Array B** | **73.17** | **13** | P | **P** | **19 43 07.6 +1.0** |
| | comp=E,4.3nm,0.9s,baz=318,slow=2.6,SNR=4.6 | | | | | |
| | comp=E,4.3nm,0.9s | | | | | |
| **SONM** | **Songino Array** | **77.24** | **326** | P | **P** | **19 43 31.1 +0.7** |
| | comp=E,1.3nm,0.9s,baz=72,slow=4.8,SNR=4.7 | | | | | |
| | comp=E,1.3nm,0.9s | | | | | |
| **ZALV** | **Zalesovo Beam** | **78.92** | **341** | P | **P** | **19 43 39.6 +0.1** |
| | comp=E,0.3nm,0.4s,baz=42,slow=6.7,SNR=1.7 | | | | | |
| | comp=E,0.3nm,0.4s | | | | | |
| **BVAR** | **Borovoye Array** | **82.50** | **349** | P | **P** | **19 43 58.0 -0.7** |
| | comp=E,2.7nm,0.9s,baz=28,slow=3.4,SNR=10 | | | | | |
| | comp=E,2.7nm,0.9s | | | | | |
| **ESDC** | **Sonseca Array** | **82.79** | **40** | P | **P** | **19 44 01.1 +0.5** |
| | comp=E,0.3nm,0.3s,baz=304,slow=5.0,SNR=5.2 | | | | | |
| | comp=E,0.3nm,0.3s | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.41** | **344** | P | **P** | **19 44 03.3 -0.1** |
| | comp=E,2.1nm,0.2s,baz=18,slow=5.1,SNR=10 | | | | | |
| | comp=E,2.1nm,0.2s | | | | | |
| **AKASG** | **Malin Array Be** | **83.95** | **15** | P | **P** | **19 44 05.1 -1.1** |
| | comp=E,1.4nm,0.8s,baz=323,slow=2.9,SNR=4.4 | | | | | |
| | comp=E,1.4nm,0.8s | | | | | |

*IDC **22** 19:35:50.8±1.0,69.61N×144.95W,h0km,mb3.8/7, mbtmp3.8/11,ML3.5/4,Error ellipse: s-maj=28.5km s-min=15.5km az=70.0*

*NEIC **22** 19:35:50.9±0.7,69.58N±0.06×144.43W±0.07,h10km±6km, Error ellipse: s-maj=8.3km s-min=2.9km az=194.0*

*AEIC **22** 19:35:50.0±1.7,69.49N±0.03×144.56W±0.05,h10km±5km, ML3.5,ML3.6/96(NEIC),Error ellipse: s-maj=4.5km s-min=1.9km az=162.0*

**ISC 22 19:35:50.8±1.1,69.59N±0.03×144.41W±0.02,h9km±7km, n75,σ1955/91,mb4.2/7,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.25** | **82** | | | **Pg** | **19 35 55.2** | **-0.5** |
| C27K | | | | | | **Sg** | **19 35 59.5** | **+0.4** |
| C27K | | | | | IAML | | 19 35 59.8 | |
| | comp=N,7μm,0.5s | | | | | | | |
| **C26K** | **Camden Bay** | **0.37** | **332** | | | **Pg** | **19 35 58.5** | **+0.5** |
| C26K | | | | | | **Sb** | **19 36 05.8** | **+0.4** |
| **D25K** | **Kavik River** | **0.75** | **250** | Pg | | **Pg** | **19 36 02.4** | **-2.7** |
| D25K | | | | | | **Sg** | **19 36 14.8** | **0.0** |
| **D27M** | **Malcolm River** | **1.27** | **104** | | | **Pn** | **19 36 12.6** | **-2.1** |
| D27M | | | | | IAML | | 19 36 35.4 | |
| | comp=N,864nm,0.7s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.51** | **277** | | | **Pn** | **19 36 17.6** | **-0.3** |
| C24K | | | | | | **Sb** | **19 36 37.8** | **-0.2** |
| C24K | | | | | IAML | | 19 36 40.7 | |
| | comp=N,1μm,0.8s | | | | | | | |
| **D24K** | **Happy Valley** | **1.62** | **256** | | | **Pn** | **19 36 17.9** | **-1.6** |
| D24K | | | | | IAML | | 19 36 43.3 | |
| | comp=N,1μm,0.8s | | | | | | | |
| D24K | | | | | IAML | | 19 36 43.9 | |
| | comp=E,843nm,0.8s | | | | | | | |
| **E27K** | **Coleen River** | **1.74** | **143** | | | **Pn** | **19 36 20.7** | **-0.5** |
| E27K | | | | | | **Sb** | **19 36 44.7** | **-0.2** |
| **F26K** | **Sheenjek River** | **1.91** | **177** | | | **Pn** | **19 36 23.4** | **-0.1** |
| F26K | | | | | | **Sn** | **19 36 48.3** | **+0.6** |
| **E28M** | **Babbage River** | **2.01** | **117** | | | **Pn** | **19 36 25.1** | **+0.3** |
| E28M | | | | | | **Sb** | **19 36 52.9** | **+0.4** |
| E28M | | | | | IAML | | 19 36 57.4 | |
| | comp=N,357nm,0.6s | | | | | | | |
| **D28M** | **Stokes Point** | **2.02** | **95** | | | **Pb** | **19 36 27.7** | **+0.1** |
| D28M | | | | | | **Sb** | **19 36 55.1** | **+2.4** |
| **F25K** | **Christian River** | **2.06** | **193** | | | **Pn** | **19 36 25.6** | **0.0** |
| F25K | | | | | IAML | | 19 36 57.0 | |
| | comp=N,448nm,1.0s | | | | | | | |
| F25K | | | | | IAML | | 19 36 59.2 | |
| | comp=E,392nm,1.0s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.08** | **245** | | | **Pn** | **19 36 25.5** | **-0.4** |
| TOLK | | | | | IAML | | 19 37 05.2 | |
| | comp=E,344nm,0.7s | | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **226** | | | **Pn** | **19 36 26.5** | **0.0** |
| E24K | | | | | | **Sb** | **19 36 55.6** | **-0.3** |
| **BMAR** | **Burnt Mountain** | **2.17** | **182** | | | **Pn** | **19 36 27.2** | **+0.1** |
| **C23K** | **Itkillik River** | **2.18** | **279** | | | **Pn** | **19 36 27.2** | **+0.1** |
| **D23K** | **Nanushuk River** | **2.32** | **257** | | | **Pn** | **19 36 29.1** | **+0.1** |
| D23K | | | | | IAML | | 19 37 18.3 | |
| | comp=N,277nm,1.0s | | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **233** | | | **Pn** | **19 36 30.8** | **0.0** |
| E23K | | | | | | **Sb** | **19 37 06.9** | **+1.9** |
| E23K | | | | | IAML | | 19 37 14.6 | |
| | comp=E,306nm,1.1s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.44** | **213** | | | **Pn** | **19 36 30.6** | **-0.3** |
| F24K | | | | | | **Sn** | **19 37 02.5** | **+1.7** |
| **F28M** | **Old Crow** | **2.59** | **138** | | | **Pn** | **19 36 32.9** | **+0.1** |
| F28M | | | | | IAML | | 19 37 27.0 | |
| | comp=N,214nm,1.1s | | | | | | | |
| **E29M** | **Blow River** | **2.64** | **114** | | | **Pn** | **19 36 33.5** | **0.0** |
| E29M | | | | | | **Sb** | **19 37 11.1** | **+0.4** |
| E29M | | | | | IAML | | 19 37 14.6 | |
| | comp=N,298nm,0.7s | | | | | | | |
| E29M | | | | | IAML | | 19 37 19.6 | |
| | comp=E,239nm,1.2s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.67** | **175** | | | **Pn** | **19 36 34.5** | **+0.7** |
| **G25K** | **Bearman Lake** | **2.91** | **193** | | | **Pn** | **19 36 37.4** | **+0.2** |
| **G27K** | **Doyon Strip** | **2.98** | **159** | | | **Pn** | **19 36 38.0** | **-0.2** |
| **D22K** | **Ayikyak River** | **3.03** | **260** | Pn | | **Pn** | **19 36 38.8** | **-0.1** |
| D22K | | | | | IAML | | 19 37 37.5 | |
| | comp=N,217nm,0.8s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **245** | | | **Pn** | **19 36 38.9** | **-0.4** |
| **G24K** | **Hadweenzic Riv** | **3.12** | **203** | Pn | | **Pn** | **19 36 39.6** | **-0.6** |
| G24K | | | | | | **Sn** | **19 37 17.6** | **0.0** |
| G24K | | | | | IAML | | 19 37 29.2 | |
| | comp=E,194nm,0.8s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.19** | **288** | | | **Pn** | **19 36 42.0** | **+0.9** |
| **B21K** | **Ikpikpuk River** | **3.57** | **275** | | | **Pn** | **19 36 46.7** | **+0.5** |
| **G23K** | **Bananza Creek** | **3.58** | **219** | Pn | | **Pn** | **19 36 45.7** | **-0.7** |
| G23K | | | | | IAML | | 19 37 42.9 | |
| | comp=E,100nm,0.8s | | | | | | | |
| G23K | | | | | IAML | | 19 37 53.7 | |
| | comp=N,155nm,0.9s | | | | | | | |
| **G29M** | **Pine Creek** | **3.59** | **136** | Pn | | **Pn** | **19 36 46.8** | **+0.2** |
| **H24K** | **Noodor Dome** | **4.00** | **201** | | | **Pn** | **19 36 51.6** | **-0.6** |
| H24K | | | | | IAML | | 19 37 57.4 | |
| | comp=N,102nm,0.7s | | | | | | | |
| H24K | | | | | IAML | | 19 37 58.8 | |
| | comp=E,85nm,1.0s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.01** | **127** | | | **Pn** | **19 36 53.1** | **+0.7** |
| G30M | | | | | IAML | | 19 38 15.2 | |
| | comp=E,67nm,1.1s | | | | | | | |
| G30M | | | | | IAML | | 19 38 16.8 | |
| | comp=N,93nm,1.0s | | | | | | | |
| **H29M** | **Whitestone** | **4.08** | **143** | | | **Pn** | **19 36 53.9** | **+0.6** |
| H29M | | | | | IAML | | 19 38 03.8 | |
| | comp=N,94nm,0.9s | | | | | | | |
| H29M | | | | | IAML | | 19 38 13.1 | |
| | comp=E,117nm,1.0s | | | | | | | |
| **F21K** | **Alatna River** | **4.11** | **239** | Pn | | **Pn** | **19 36 53.5** | **-0.2** |
| F21K | | | | | IAML | | 19 38 08.7 | |
| | comp=N,64nm,1.0s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.12** | **186** | | | **Pn** | **19 36 54.5** | **+0.6** |
| PRP | | | | | IAML | | 19 37 48.1 | |
| | comp=N,63nm,0.6s | | | | | | | |
| PRP | | | | | IAML | | 19 38 01.0 | |
| | comp=E,76nm,1.0s | | | | | | | |
| **INK** | **Inuvik** | **4.13** | **103** | Pn | | **Pn** | **19 36 57.6** | **+3.7** |
| | comp=E,1.9nm,0.3s,baz=311,slow=3.0,SNR=8.4 | | | | | | | |
| INK | | | | Sn | | **Sn** | **19 37 40.6** | **-1.7** |
| | comp=E,1.3nm,0.3s,baz=251,slow=28,SNR=5.2 | | | | | | | |
| INK | | | | Lg | | Lg | 19 38 03.7 | |
| | comp=E,2.2nm,0.3s,baz=350,slow=26,SNR=4.3 | | | | | | | |
| | comp=E,3.8nm,0.3s | | | | | | | |
| **H23K** | **Yukon River** | **4.26** | **210** | | | **Pn** | **19 36 55.4** | **-0.3** |
| H23K | | | | | IAML | | 19 38 13.8 | |
| | comp=E,101nm,0.8s | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.34** | **135** | | | **Pn** | **19 36 57.8** | **+0.9** |
| **B20K** | **Meade River** | **4.44** | **281** | Pn | | **Pn** | **19 36 58.8** | **+0.6** |
| **F31M** | **Tsiigehtchic** | **4.48** | **114** | | | **Pn** | **19 36 58.7** | **+0.1** |
| F31M | | | | | IAML | | 19 38 16.6 | |
| | comp=N,78nm,0.8s | | | | | | | |
| **I28M** | **Miner Creek** | **4.50** | **155** | | | **Pn** | **19 36 59.7** | **+0.6** |
| I28M | | | | | IAML | | 19 38 22.3 | |
| | comp=E,58nm,1.0s | | | | | | | |
| I28M | | | | | IAML | | 19 38 27.0 | |
| | comp=N,44nm,0.8s | | | | | | | |
| **G21K** | **Allakaket** | **4.60** | **232** | Pn | | **Pn** | **19 36 59.4** | **-1.0** |
| G21K | | | | | IAML | | 19 38 22.9 | |
| | comp=E,68nm,1.0s | | | | | | | |
| G21K | | | | | IAML | | 19 38 34.8 | |
| | comp=N,72nm,1.1s | | | | | | | |
| **G31M** | **Satah River** | **4.62** | **121** | Pn | | **Pn** | **19 37 01.3** | **+0.6** |
| G31M | | | | | IAML | | 19 38 29.5 | |
| | comp=N,75nm,1.0s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.86** | **206** | | | **Pn** | **19 37 03.6** | **-0.3** |
| I23K | | | | | IAML | | 19 38 32.7 | |
| | comp=N,51nm,0.9s | | | | | | | |
| I23K | | | | | IAML | | 19 38 35.7 | |
| | comp=E,57nm,0.8s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.88** | **199** | | | **Pn** | **19 37 04.0** | **-0.4** |
| MDM | | | | | IAML | | 19 38 26.6 | |
| | comp=N,47nm,0.9s | | | | | | | |
| MDM | | | | | IAML | | 19 38 30.8 | |
| | comp=E,58nm,0.7s | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.91** | **244** | Pn | | **Pn** | **19 37 05.0** | **+0.4** |
| F20K | | | | | IAML | | 19 38 48.8 | |
| | comp=N,43nm,1.1s | | | | | | | |
| **IL31** | | **4.94** | **192** | | | **Pn** | **19 37 05.5** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.94** | **192** | Pn | | **Pn** | **19 37 05.1** | **+0.1** |
| | comp=N,1.3nm,0.3s,baz=6.7,slow=12,SNR=57 | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **19 37 59.0** | **-3.2** |
| | comp=N,3.1nm,0.3s,baz=8.0,slow=16,SNR=6.0 | | | | | | | |
| ILAR | | | | Lg | | Lg | 19 38 18.5 | |
| | comp=N,2.2nm,0.3s,baz=8.5,slow=26,SNR=5.8 | | | | | | | |
| | comp=N,5.7nm,0.5s | | | | | | | |
| **D19K** | **Kuna River** | **5.04** | **264** | Pn | | **Pn** | **19 37 06.8** | **+0.3** |
| **H21K** | **Melozitna River** | **5.09** | **223** | Pn | | **Pn** | **19 37 07.2** | **+0.1** |
| H21K | | | | | IAML | | 19 38 44.0 | |
| | comp=E,35nm,1.0s | | | | | | | |
| H21K | | | | | IAML | | 19 38 44.9 | |
| | comp=N,45nm,0.9s | | | | | | | |
| **E19K** | **Redstone River** | **5.17** | **252** | Pn | | **Pn** | **19 37 08.2** | **-0.1** |
| E19K | | | | | IAML | | 19 38 48.6 | |
| | comp=E,43nm,0.7s | | | | | | | |
| E19K | | | | | IAML | | 19 38 52.6 | |
| | comp=N,51nm,1.0s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.34** | **197** | | | **Pn** | **19 37 10.7** | **+0.2** |
| WRH | | | | | IAML | | 19 38 39.4 | |
| | comp=N,27nm,0.7s | | | | | | | |
| WRH | | | | | IAML | | 19 38 44.0 | |
| | comp=E,39nm,1.2s | | | | | | | |
| **I30M** | **Mount Dempster** | **5.37** | **141** | Pn | | **Pn** | **19 37 11.0** | **0.0** |
| I30M | | | | | IAML | | 19 38 18.2 | |
| | comp=N,27nm,0.6s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.39** | **272** | Pn | | **Pn** | **19 37 11.8** | **+0.5** |
| C19K | | | | | IAML | | 19 38 14.8 | |
| | comp=E,33nm,0.7s | | | | | | | |
| C19K | | | | | IAML | | 19 39 01.2 | |
| | comp=N,34nm,1.0s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **5.69** | **247** | Pn | | **Pn** | **19 37 14.9** | **-0.5** |
| **G19K** | **Purcell Mounta** | **5.91** | **240** | Pn | | **Pn** | **19 37 17.5** | **-0.8** |
| **C18K** | **Utukok River** | **6.07** | **269** | Pn | | **Pn** | **19 37 20.4** | **-0.3** |
| **BPAW** | **Bear Paw Mtn.** | **6.09** | **208** | | | **Pn** | **19 37 20.8** | **-0.2** |
| **E18K** | **Tukpahlearik C** | **6.33** | **258** | | | **Pn** | **19 37 23.7** | **-0.5** |
| **K29M** | **Barlow Dome** | **6.38** | **151** | Pn | | **Pn** | **19 37 25.3** | **+0.3** |
| **G18K** | **Tagagawik** | **6.55** | **242** | Pn | | **Pn** | **19 37 26.6** | **-0.5** |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | Pn | | **Pn** | **19 37 29.8** | **0.0** |
| **M27K** | **Edge Creek, AK** | **7.34** | **171** | | | **Pn** | **19 37 39.7** | **+1.6** |
| **M29M** | **Somme Creek** | **7.57** | **159** | Pn | | **Pn** | **19 37 42.4** | **+1.1** |
| **H17K** | **Granite Mounta** | **7.59** | **240** | | | **Pn** | **19 37 41.5** | **+0.1** |
| **DLBC** | **Dease Lake** | **12.79** | **144** | Pn | | **Pn** | **19 38 53.5** | **+0.9** |
| | comp=N,0.2nm,0.3s,baz=346,slow=8.3,SNR=1.7 | | | | | | | |
| | comp=N,1.3nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.90** | **106** | Pn | | **Pn** | **19 39 06.4** | **-1.2** |
| | comp=N,0.2nm,0.3s,baz=303,slow=9.2,SNR=2.0 | | | | | | | |
| YKA | | | | Sn | | Sn | 19 41 29.7 | -12 |
| | comp=N,0.3nm,0.3s,baz=250,slow=15,SNR=2.5 | | | | | | | |
| | comp=N,1.4nm,0.7s | | | | | | | |
| **RES** | **Resolute Bay** | **15.57** | **49** | Pn | | **Pn** | **19 39 28.1** | **-1.9** |
| | comp=N,0.4nm,0.3s,baz=8.2,slow=17,SNR=1.5 | | | | | | | |
| RES | | | | Sn | | **Sn** | **19 42 11.5** | **-11** |
| | comp=N,0.3nm,0.3s,baz=197,slow=14,SNR=1.5 | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.27** | **128** | P | | **P** | **19 42 21.8** | **+2.2** |
| | comp=N,0.3nm,0.4s,baz=356,slow=3.9,SNR=2.3 | | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.20** | **142** | P | | **P** | **19 42 38.4** | **+1.9** |
| | comp=N,0.2nm,0.5s,baz=318,slow=7.3,SNR=2.0 | | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **49.08** | **6** | P | | **P** | **19 44 38.8** | **+1.3** |
| | comp=N,4.5nm,1.0s,baz=0.0,slow=9.5,SNR=4.4 | | | | | | | |
| | comp=N,4.5nm,1.0s | | | | | | | |
| **HFS** | **Hagfors** | **49.62** | **14** | P | | **P** | **19 44 43.2** | **+1.4** |
| | comp=N,2.4nm,0.8s,baz=40,slow=4.7,SNR=2.3 | | | | | | | |
| | comp=N,2.4nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.06** | **328** | P | | **P** | **19 45 30.3** | **+0.9** |
| | comp=N,1.2nm,0.2s,baz=13,slow=7.2,SNR=2.7 | | | | | | | |
| | comp=N,1.2nm,0.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.99** | **324** | P | | **P** | **19 45 50.1** | **-0.1** |
| | comp=N,0.2nm,0.6s,baz=36,slow=8.0,SNR=2.5 | | | | | | | |
| | comp=N,0.2nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.93** | **5** | P | | **P** | **19 45 58.7** | **+2.2** |
| | comp=N,1.0nm,0.6s,baz=356,slow=7.1,SNR=4.1 | | | | | | | |
| | comp=N,1.0nm,0.6s | | | | | | | |

*NEIC **22** 19:47:19.7±2.5,52.45N±0.09×50.2W±0.2,h10km±2km, mb4.5/26,Error ellipse: s-maj=19.6km s-min=13.2km az=128.0*

*IDC **22** 19:47:20.0±0.8,52.44N×50.05W,h0km,mb3.8/16, mbtmp3.9/17,ML3.0/1,Error ellipse: s-maj=26.1km s-min=14.1km az=180.0*

*OTT **22** 19:47:23.3±0.2,52.52N×50.14W,h18km,ML4.5/15, Offshore Newfoundland. 388km east from Mary"s Harbour, NI*

**ISC 22 19:47:20.7±0.5,52.48N±0.06×50.48W±0.06,h10km,n84, σ2938/105,mb4.3/29,North Atlantic Ocean**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SJNN** | **Saint John's** | **5.09** | **197** | PN | | **Pn** | **19 48 39.2** | **+2.2** |
| SJNN | | | | SN | | **Sn** | **19 49 35.3** | **-0.5** |
| SJNN | | | | Trac | | | 19 49 39.4 | |
| | comp=Z,39nm,0.3s | | | | | | | |
| **DRLN** | **Deer Lake** | **5.50** | **237** | Pn | | **Pn** | **19 48 44.6** | **+2.0** |
| **DRLN** | **Deer Lake** | **5.50** | **237** | PN | | **Pn** | **19 48 45.1** | **+2.6** |
| DRLN | | | | PN | | **Pn** | **19 48 45.9** | **+3.4** |
| DRLN | | | | SN | | **Sn** | **19 49 47.2** | **+1.5** |
| DRLN | | | | SN | | **Sn** | **19 49 47.4** | **+1.7** |
| DRLN | | | | Trac | | | 19 50 14.2 | |
| | comp=Z,28nm,0.3s | | | | | | | |
| DRLN | | | | Trac | | | 19 50 29.7 | |
| | comp=Z,54nm,0.6s | | | | | | | |
| **BJBQ** | **Baie Johan-Bee** | **8.02** | **259** | PN | | **Pn** | **19 49 19.8** | **+2.7** |
| BJBQ | | | | SN | | **Sn** | **19 50 48.0** | **+0.1** |
| BJBQ | | | | Trac | | | 19 51 25.9 | |
| | comp=Z,39nm,0.7s | | | | | | | |
| **PCAQ** | **Pointe Carleto** | **8.31** | **256** | PN | | **Pn** | **19 49 24.4** | **+3.3** |
| PCAQ | | | | SN | | **Sn** | **19 50 54.4** | **-0.6** |
| PCAQ | | | | Trac | | | 19 51 54.8 | |
| | comp=Z,106nm,0.7s | | | | | | | |
| **GAAQ** | **Galiote** | **8.68** | **253** | PN | | **Pn** | **19 49 29.6** | **+3.4** |
| GAAQ | | | | Trac | | | 19 51 34.4 | |
| | comp=Z,80nm,0.7s | | | | | | | |
| **CHEG** | **Cheticamp, Nov** | **8.71** | **233** | PN | | **Pn** | **19 49 30.9** | **+4.3** |
| CHEG | | | | SN | | **Sn** | **19 51 03.5** | **-1.4** |
| CHEG | | | | Trac | | | 19 51 35.3 | |
| | comp=Z,31nm,0.7s | | | | | | | |
| **IVI** | **Ivigtut** | **8.84** | **7** | Pn | | **Pn** | **19 49 28.3** | **0.0** |
| IVI | | | | Sn | | Sn | 19 50 56.7 | -11 |
| **PMAQ** | **Port Menier** | **9.10** | **259** | PN | | **Pn** | **19 49 35.9** | **+3.9** |
| PMAQ | | | | SN | | **Sn** | **19 51 12.8** | **-1.5** |
| PMAQ | | | | Trac | | | 19 51 59.4 | |
| | comp=Z,5.9nm,0.3s | | | | | | | |
| **SCHQ** | **Schefferville** | **9.99** | **290** | | | **Pn** | **19 49 46.3** | **+2.2** |
| SCHQ | | | | | | **Sn** | **19 51 32.4** | **-3.8** |
| **SCHQ** | **Schefferville** | **9.99** | **290** | Pn | | **Pn** | **19 49 45.6** | **+1.5** |
| | 1.4nm,0.3s,baz=91,slow=13,SNR=18 | | | | | | | |
| SCHQ | | | | Sn | | **Sn** | **19 51 32.2** | **-4.0** |
| | 2.7nm,0.3s,baz=89,slow=14,SNR=7.2 | | | | | | | |
| | 3.1nm,0.3s | | | | | | | |
| **SCHQ** | **Schefferville** | **9.99** | **290** | PN | | **Pn** | **19 49 46.4** | **+2.2** |
| SCHQ | | | | SN | | **Sn** | **19 51 33.6** | **-2.6** |
| SCHQ | | | | Trac | | | 19 52 30.9 | |
| | comp=Z,32nm,0.8s | | | | | | | |
| **GBN** | **Guysborough** | **10.13** | **230** | Pn | | **Pn** | **19 49 47.1** | **+1.0** |
| GBN | | | | Sn | | **Sn** | **19 51 35.6** | **-4.0** |
| **GBN** | **Guysborough** | **10.13** | **230** | PN | | **Pn** | **19 49 49.4** | **+3.3** |
| GBN | | | | SN | | **Sn** | **19 51 35.7** | **-3.9** |
| GBN | | | | Trac | | | 19 51 52.8 | |
| | comp=Z,15nm,0.4s | | | | | | | |
| **SMQ** | **Clarke City** | **10.40** | **264** | PN | | **Pn** | **19 49 52.6** | **+2.9** |
| SMQ | | | | SN | | **Sn** | **19 51 43.1** | **-3.1** |
| SMQ | | | | Trac | | | 19 53 00.8 | |
| | comp=Z,22nm,0.5s | | | | | | | |
| **ICQ** | **Pointe Anglais** | **10.99** | **261** | Pn | | **Pn** | **19 49 59.3** | **+1.5** |
| **ICQ** | **Pointe Anglais** | **10.99** | **261** | PN | | **Pn** | **19 50 00.3** | **+2.5** |
| ICQ | | | | SN | | **Sn** | **19 51 57.8** | **-2.8** |
| ICQ | | | | Trac | | | 19 53 03.8 | |
| | comp=Z,207nm,2.1s | | | | | | | |
| **BATG** | **Bathurst New B** | **11.31** | **249** | Pn | | **Pn** | **19 50 03.1** | **+0.8** |
| **HSNB** | **Heath Steele M** | **11.31** | **249** | PN | | **Pn** | **19 50 05.3** | **+3.1** |
| HSNB | | | | SN | | **Sn** | **19 52 05.7** | **-3.0** |
| HSNB | | | | Trac | | | 19 53 10.0 | |
| | comp=Z,66nm,1.3s | | | | | | | |
| **CNQ** | **Baie Comeau** | **11.56** | **261** | PN | | **Pn** | **19 50 08.3** | **+2.8** |
| CNQ | | | | SN | | **Sn** | **19 52 11.5** | **-3.1** |
| CNQ | | | | Trac | | | 19 52 26.3 | |
| | comp=Z,5.4nm,0.3s | | | | | | | |
| **MNQ** | **Manicouagan** | **11.57** | **268** | PN | | **Pn** | **19 50 08.0** | **+2.3** |
| MNQ | | | | SN | | **Sn** | **19 52 11.3** | **-3.5** |
| MNQ | | | | Trac | | | 19 52 29.2 | |
| | comp=Z,6.6nm,0.3s | | | | | | | |
| **BACQ** | **Baie-Comeau** | **11.61** | **261** | PN | | **Pn** | **19 50 09.2** | **+2.9** |
| BACQ | | | | SN | | **Sn** | **19 52 11.6** | **-4.3** |
| BACQ | | | | Trac | | | 19 53 29.7 | |
| | comp=Z,46nm,0.9s | | | | | | | |
| **ELNB** | **Elgin, New Bru** | **11.66** | **241** | PN | | **Pn** | **19 50 09.4** | **+2.5** |
| ELNB | | | | SN | | **Sn** | **19 52 13.5** | **-3.6** |
| ELNB | | | | Trac | | | 19 53 06.5 | |
| | comp=Z,0.2nm,0.0s | | | | | | | |
| **WCNB** | **Wards Creek** | **11.98** | **241** | PN | | **Pn** | **19 50 15.1** | **+3.7** |
| WCNB | | | | Trac | | | 19 52 13.2 | |
| | comp=Z,0.4nm,0.0s | | | | | | | |
| **CACQ** | **Cacouna** | **12.99** | **257** | PN | | **Pn** | **19 50 28.1** | **+3.0** |
| CACQ | | | | SN | | **Sn** | **19 52 44.6** | **-4.9** |
| CACQ | | | | Trac | | | 19 53 47.3 | |
| | comp=Z,78nm,1.3s | | | | | | | |
| **D62A** | **Allapoint, All** | **13.15** | **253** | Pn | | **Pn** | **19 50 26.9** | **-0.4** |
| **A21** | **Saint Andre** | **13.22** | **256** | PN | | **Pn** | **19 50 30.9** | **+2.7** |
| A21 | | | | SN | | **Sn** | **19 52 50.6** | **-4.5** |
| A21 | | | | Trac | | | 19 53 19.1 | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **G65A** | **Princeton** | **13.38** | **244** | Pn | | **Pn** | **19 50 30.9** | **+0.4** |
| **F64A** | **Sherman** | **13.42** | **248** | Pn | | **Pn** | **19 50 30.8** | **-0.2** |
| **A61** | **Sainte Mathild** | **13.46** | **257** | PN | | **Pn** | **19 50 33.6** | **+2.1** |
| A61 | | | | SN | | **Sn** | **19 52 53.2** | **-7.9** |
| A61 | | | | Trac | | | 19 53 26.7 | |
| | comp=Z,25nm,0.8s | | | | | | | |
| **EMMW** | **East Machias** | **13.64** | **242** | Pn | | **Pn** | **19 50 33.9** | **-0.2** |
| **LMQ** | **La Malbaie** | **13.67** | **257** | | | **Pn** | **19 50 35.5** | **+1.0** |
| **F63A** | **Nahmakanta, Br** | **13.94** | **248** | Pn | | **Pn** | **19 50 38.2** | **0.0** |
| **LDAQ** | **Lac Daran** | **14.03** | **259** | Pn | | **Pn** | **19 50 40.3** | **+0.9** |
| **PKME** | **Peaks-Kenny Pk** | **14.31** | **247** | Pn | | **Pn** | **19 50 43.9** | **+0.7** |
| **F62A** | **Pittston Farm,** | **14.32** | **250** | | | **Pn** | **19 50 44.5** | **+1.2** |
| **G62A** | **West of Eustis** | **15.04** | **249** | Pn | | **Pn** | **19 50 53.8** | **+0.7** |
| G62A | | | | | IAmb | IAmb | 19 51 17.4 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **MCWV** | **Mont Chateau** | **23.88** | **249** | P | | **P** | **19 52 31.1** | **-3.2** |
| MCWV | | | | | IAmb | IAmb | 19 52 35.6 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **25.33** | **254** | P | | **P** | **19 52 47.4** | **0.0** |
| **P48A** | **Milroy** | **27.26** | **255** | P | | **P** | **19 53 04.1** | **-0.8** |
| **EKA** | **Eskdalemuir Ar** | **27.60** | **65** | P | | **P** | **19 53 05.7** | **-2.1** |
| | comp=Z,1.9nm,0.8s,baz=278,slow=7.5,SNR=4.7 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **BIRD** | **Birdtown, Kers** | **27.81** | **242** | P | | **P** | **19 53 10.2** | **+0.4** |
| **HODGE** | **Hodges** | **29.10** | **244** | P | | **P** | **19 53 21.4** | **0.0** |
| HODGE | | | | | IAmb | IAmb | 19 53 28.1 | |
| | comp=Z,8.8nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **34.12** | **93** | P | | **P** | **19 54 03.2** | **-2.2** |
| | comp=Z,0.2nm,0.4s,baz=311,slow=6.6,SNR=1.2 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **MIAR** | **Mount Ida** | **35.39** | **257** | P | | **P** | **19 54 19.5** | **+3.1** |
| MIAR | | | | | IAmb | IAmb | 19 54 29.6 | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **KAN09** | **Caldwell North** | **36.09** | **264** | P | | **P** | **19 54 22.8** | **+0.3** |
| KAN09 | | | | | IAmb | IAmb | 19 54 35.2 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| **KAN01** | **Argonia South** | **36.17** | **264** | P | | **P** | **19 54 24.3** | **+1.2** |
| **CBKS** | **Cedar Bluff** | **36.32** | **268** | P | | **P** | **19 54 27.0** | **+2.5** |
| CBKS | | | | | IAmb | IAmb | 19 54 30.9 | |
| | comp=Z,9.6nm,0.7s | | | | | | | |
| **KAN14** | **Manchester OK** | **36.42** | **264** | P | | **P** | **19 54 26.4** | **+1.2** |
| **OK038** | **West end E0370** | **37.20** | **264** | P | | **P** | **19 54 32.0** | **0.0** |
| OK038 | | | | | IAmb | IAmb | 19 54 56.8 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **37.56** | **34** | P | | **P** | **19 54 34.7** | **+0.1** |
| | comp=Z,2.2nm,0.9s,baz=278,slow=9.2,SNR=4.0 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **WMO

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **142.37** | **180** | PKhKP | PKPpre | 20 06 48.9 | |
| | comp=Z,0.6nm,0.8s,baz=140,slow=2.7,SNR=1.6 | | | | | | |
| **MAW** | **Mawson** | **145.45** | **142** | PKPbc | **PKPab** | **20 06 58.5** | **+0.9** |
| | comp=Z,1.7nm,0.6s,baz=322,slow=3.3,SNR=7.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **147.31** | **352** | PKPbc | **PKPbc** | **20 07 05.5** | **+1.2** |
| | comp=Z,0.4nm,0.3s,baz=39,slow=3.3,SNR=1.3 | | | | | | |
| **ASAR** | **Alice Springs** | **151.03** | **352** | PKPbc | **PKPbc** | **20 07 13.8** | **+0.1** |
| | comp=Z,1.8nm,0.6s,baz=353,slow=2.7,SNR=3.3 | | | | | | |

*MAN* **22** *19:58:35.6,2˚.88N×126˚.91E,h42km,mb5.6,ML4.6,MS4.9*
*IDC* **22** *19:58:38.6±0.4,3˚.59N×126˚.56E,h0km,mb4.8/31, mbtmp4.8/33,ML4.0/2,MS4.1/24, Error ellipse: s-maj=21.1km s-min=10.6km az=76.0*
*MOS* **22** *19:58:38.5±0.9,3˚.61N×126˚.56E,h13km,mb5.1/40, Error ellipse: s-maj=10.8km s-min=5.1km az=114.5*
*BJI* **22** *19:58:38.1±0.0,3˚.26N×126˚.67E,h22km,mb4.8/61, mB5.4/23,Ms4.7/21,Ms7 4.4/24*
*NEIC* **22** *19:58:41.3±1.2,3˚.65N±0˚.06×126˚.58E±0˚.08,h12km±3km, mb5.1/149,Error ellipse: s-maj=12.4km s-min=7.9km az=66.0*
*DJA* **22** *19:58:45.3±0.4,4˚N±4˚×12˚7E±˚,h10km,M4.8/16, mB5.3/11,mb5.1/13,MLv5.0/16,Mw(mB)4.7/11, MwMwp4.7/7,Mwp5.0/7*
*GCMT* **22** *19:58:46.3±0.4,3˚.69N±0˚.03×126˚.66E±0˚.02,h19km±1km, MW5.2/59,Moment Tensor Solution. s43,c60; s59,c74; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr4.88±.31; Mθθ-0.14±.18; Mϕϕ-4.74±.24; Mrθ-0.14±.46; Mθϕ0.30±.16; Mϕr4.67±.57; Best double couple: Mo6.71300×1016 NP1:ϕs175.00000°,δ23.00000°,λ.88.00000°. NP2: ϕs175.00000°,δ23.00000°,λ.88.00000°. Principal axes: T 6.7740, Plg68.0000°, Azm270.0000°; N -0.1190, Plg1.0000°, Azm177.0000°; P -6.6510, Plg22.0000°, Azm87.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 22 19:58:40.5±0.7,3˚.56N±0˚.02×126˚.66E±0˚.04,h12km±3km, n677,σ1§58/633,mb5.0/170,MS4.2/37,45C-23D,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DDMP** | **Don Marcelino,** | **2.70** | **340** | ⇑*eP* | **Pb** | **19 59 26.9** | **-1.8** |
| DDMP | | | | *eS* | **Sg** | **20 00 08.5** | **+1.2** |
| **TNTI** | **Ternate** | **2.86** | **166** | P | **Pb** | **19 59 29.8** | **-1.6** |
| **TNTI** | **Ternate** | **2.86** | **166** | Pn | **Pn** | **19 59 28.5** | **+2.6** |
| **TNTI** | **Ternate** | **2.86** | **166** | P | **Pn** | **19 59 30.7** | **-0.7** |
| **GSPH** | **General Santos** | **3.03** | **326** | ⇑*iP* | **Pn** | **19 59 31.8** | **+3.3** |
| GSPH | | | | *i* S | **Sb** | **20 00 09.0** | **-2.6** |
| **MATI** | **Mati** | **3.39** | **353** | ⇓*eP* | **Pb** | **19 59 38.0** | **-2.5** |
| MATI | | | | *eS* | **Sb** | **20 00 25.3** | **+3.6** |
| **SKMP** | **Bagumbayan, Su** | **3.62** | **325** | ⇓*eP* | **Pb** | **19 59 40.9** | **-3.5** |
| SKMP | | | | *eS* | **Sn** | **20 00 23.2** | **+4.2** |
| **DAV** | **Davao City (W)** | **3.65** | **343** | Pn | **Pn** | **19 59 34.8** | **-2.1** |
| **DAV** | **Davao City (W)** | **3.65** | **343** | Pn | **Pn** | **19 59 36.3** | **-0.5** |
| | 47nm,0.3s,baz=81,slow=8.0,SNR=1.5 | | | | | | |
| DAV | | | | Sn | **Sn** | **20 00 22.4** | **+2.6** |
| | 108nm,0.3s,baz=242,slow=20,SNR=3.9 | | | | | | |
| | 251nm,0.6s | | | | | | |
| **DMPH** | **Davao City--Mi** | **3.68** | **342** | ⇑*eP* | **Pb** | **19 59 42.8** | **-2.7** |
| DMPH | | | | *eS* | **Sg** | **20 00 38.8** | **-0.1** |
| **KCP** | **Kidapawan** | **3.77** | **336** | ⇓*iP* | **Pn** | **19 59 42.9** | **+4.4** |
| **KMSI** | **Cibinong** | **3.99** | **222** | P | **Pb** | **19 59 48.8** | **-2.0** |
| **PICP** | **Pikit** | **4.00** | **331** | ⇑*eP* | **Pn** | **19 59 46.2** | **+4.6** |
| PICP | | | | *eS* | **Sg** | **20 00 45.7** | **-3.3** |
| **CDOP** | **Cateel, Davao** | **4.21** | **357** | ⇓*eP* | **Pn** | **19 59 48.4** | **+3.9** |
| CDOP | | | | *eS* | **Sn** | **20 00 37.9** | **+4.4** |
| **LBMI** | **Labuha** | **4.25** | **169** | P | Pn | 19 59 50.1 | +5.0 |
| **BIPH** | **Bislig** | **4.61** | **356** | ⇓*eP* | **Pn** | **19 59 53.2** | **+3.3** |
| BIPH | | | | *eS* | **Sb** | **20 00 56.1** | **-0.6** |
| **GTOI** | **Gorontalo** | **4.66** | **232** | P | Pn | 19 59 56.1 | +5.5 |
| **TASP** | **Talacogon, Agu** | **4.94** | **350** | ⇓*eP* | Pb | 20 00 01.7 | -5.2 |
| TASP | | | | *eS* | **Sb** | **20 01 03.1** | **-3.1** |
| **MARW** | **Marawi** | **5.02** | **332** | ⇓*eP* | **Pn** | **19 59 56.6** | **+0.9** |
| MARW | | | | *eS* | **Sn** | **20 00 56.5** | **+2.9** |
| **CGP** | **Cagayan de Oro** | **5.24** | **338** | ⇓*eP* | Pn | 20 00 05.0 | +6.4 |
| **BLNP** | **Bacolod Lanao** | **5.26** | **330** | ⇓*eP* | **Pb** | **20 00 15.5** | **+3.1** |
| BLNP | | | | *eS* | **Sb** | **20 01 18.4** | **+2.8** |
| **PAGZ** | **Pagadian** | **5.36** | **323** | ⇓*eP* | **Pn** | **20 00 04.9** | **+4.5** |
| PAGZ | | | | *eS* | **Sn** | **20 01 10.4** | **+8.3** |
| **BUTP** | **Butuan** | **5.47** | **349** | ⇑*eP* | **Pn** | **20 00 04.0** | **+2.1** |
| BUTP | | | | *eS* | **Sb** | **20 01 19.4** | **-2.4** |
| **SANI** | **Sanana** | **5.61** | **187** | P | **Pn** | **20 00 07.7** | **+3.9** |
| **SANI** | **Sanana** | **5.61** | **187** | P | **Pn** | **20 00 08.4** | **+4.6** |
| | 94nm,0.8s,3µm2µm0.7nm | | | | | | |
| **MRSI** | **Marisa** | **5.62** | **237** | P | Pn | 20 00 10.8 | +6.9 |
| | 371nm,0.9s,4µm3µm1.3nm | | | | | | |
| **ZCP** | **Zamboanga City** | **5.66** | **307** | ⇑*iP* | **Pn** | **20 00 08.4** | **+4.0** |
| ZCP | | | | *i* S | **Sn** | **20 01 11.3** | **+1.9** |
| **DCPH** | **Dipolog City** | **5.98** | **327** | ⇑*eP* | **Pb** | **20 00 20.9** | **-3.7** |
| **LUWI** | **Luwuk** | **5.99** | **220** | P | Pn | 20 00 15.8 | +6.8 |
| **LUWI** | **Luwuk** | **5.99** | **220** | | **Pn** | **20 00 09.5** | **+0.4** |
| **LUWI** | **Luwuk** | **5.99** | **220** | P | Pn | 20 00 16.6 | +7.6 |
| | 614nm,0.9s,2.3nm | | | | | | |
| **GLSP** | **General Luna,** | **6.21** | **355** | ⇓*eP* | Pn | 20 00 16.9 | +4.9 |
| GLSP | | | | *eS* | **Sn** | **20 01 25.0** | **+2.0** |
| **SCPH** | **Surigao** | **6.29** | **349** | ⇑*eP* | Pn | 20 00 20.0 | +6.9 |
| **LSIP** | **Lazi, Siquijor** | **6.30** | **332** | ⇑*eP* | Pn | 20 00 21.0 | +7.7 |
| LSIP | | | | *eS* | **Sn** | **20 01 33.1** | **+7.9** |
| **LSIP** | **Lazi, Siquijor** | **6.30** | **332** | ⇑*eP* | Pb | 20 00 23.5 | -6.6 |
| **TOLI2** | **Tolitoli** | **6.35** | **248** | P | Pn | 20 00 19.5 | +5.5 |
| **TOLI2** | **Tolitoli** | **6.35** | **248** | Pn | **Pn** | **20 00 16.1** | **+2.1** |
| **SWI** | **Sorong** | **6.36** | **134** | P | **Pn** | **20 00 17.6** | **+3.5** |
| **GHBP** | **Garcia Hernand** | **6.46** | **339** | ⇑*eP* | **Pn** | **20 00 19.6** | **+4.1** |
| GHBP | | | | *eS* | **Sb** | **20 01 45.0** | **-5.2** |
| **GHBP** | **Garcia Hernand** | **6.46** | **339** | ⇑*eP* | **Pn** | **20 00 19.9** | **+4.4** |
| GHBP | | | | *eS* | **Sb** | **20 01 44.0** | **-6.3** |
| **SNPH** | **Sibulan** | **6.68** | **330** | eP | Pn | 20 00 26.1 | +7.6 |
| **NLAI** | **Namlea** | **6.76** | **176** | P | **Pn** | **20 00 24.2** | **+4.6** |
| | 60nm,0.6s,2µm0.7nm | | | | | | |
| **MSLP** | **Maasin** | **6.77** | **345** | ⇓*eP* | Pn | 20 00 26.4 | +6.7 |
| **LDIP** | **Loreto** | **6.87** | **351** | ⇓*eP* | Pn | 20 00 26.2 | +5.1 |
| LDIP | | | | *eS* | **Sn** | **20 01 46.2** | **+7.0** |
| **TABP** | **Talibon, Bohol** | **6.89** | **341** | ⇑*eP* | **Pn** | **20 00 25.2** | **+3.9** |
| TABP | | | | *eS* | **Sn** | **20 01 43.1** | **+3.4** |
| **DACP** | **Dalaguete, Ceb** | **6.91** | **333** | *eP* | Pn | 20 00 27.1 | +5.5 |
| DACP | | | | *eS* | **Sb** | **20 02 04.0** | **+0.9** |
| **BTTP** | **Bongao, Tawi-T** | **7.02** | **282** | ⇓*eP* | **Pn** | **20 00 26.4** | **+3.2** |
| BTTP | | | | *eS* | **Sn** | **20 01 44.5** | **+1.5** |
| **MSAI** | **Masohi** | **7.22** | **162** | P | Pn | 20 00 32.2 | +6.2 |
| | 69nm,0.8s,0.3nm | | | | | | |
| **SFCP** | **San Francisco,** | **7.39** | **342** | ⇓*eP* | Pn | 20 00 33.5 | +5.2 |
| SFCP | | | | *eS* | **Sn** | **20 01 53.2** | **+1.1** |
| **GNOP** | **Guihulngan Cit** | **7.43** | **333** | ⇓*eP* | **Pn** | **20 00 33.6** | **+4.7** |
| GNOP | | | | *eS* | Sb | 20 02 06.7 | -11 |
| **MPSI** | **Mapaga** | **7.47** | **245** | P | Pn | 20 00 35.9 | +6.6 |
| | 48nm,0.8s,1µm4µm0.2nm | | | | | | |
| **OCLP** | **Ormoc** | **7.72** | **345** | ⇓*eP* | **Pn** | **20 00 35.9** | **+3.1** |
| OCLP | | | | *eS* | Sb | 20 02 15.5 | -11 |
| **PLP** | **Palo** | **7.74** | **348** | ⇓*eP* | Pn | 20 00 38.2 | +5.1 |
| **MYLDM** | **Lahad Datu** | **8.29** | **282** | Pn | Pn | 20 00 46.9 | +6.3 |
| **FAKI** | **Fak Fak** | **8.52** | **139** | P | **Pn** | **20 00 47.2** | **+3.4** |
| **FAKI** | **Fak Fak** | **8.52** | **139** | Pn | **Pn** | **20 00 46.8** | **+3.0** |
| **FAKI** | **Fak Fak** | **8.52** | **139** | P | **Pn** | **20 00 47.3** | **+3.4** |
| | 221nm,0.9s,2µm | | | | | | |
| **IBAJ** | **Ibajay, Aklan** | **9.33** | **332** | ⇓*eP* | Pn | 20 01 03.1 | +8.2 |
| **BBSI** | **Bau Bau** | **9.87** | **204** | P | Pn | 20 01 08.2 | +5.9 |
| | 66nm,0.9s | | | | | | |
| **BNSI** | **Bone** | **10.26** | **220** | P | Pn | 20 01 13.4 | +5.8 |
| | 36nm,0.8s | | | | | | |
| **KKM** | **Kota Kinabalu** | **10.69** | **284** | P | Pn | 20 01 20.9 | +7.2 |
| **KKM** | **Kota Kinabalu** | **10.69** | **284** | Pn | **Pn** | **20 01 12.7** | **-1.0** |
| **KAPI** | **Kappang** | **10.96** | **219** | Pn | **Pn** | **20 01 17.1** | **0.0** |
| | 0.3nm,0.3s,baz=65,slow=19,SNR=1.4 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 03 21.4** | **+1.7** |
| | 0.3nm,0.3s,baz=78,slow=16,SNR=1.9 | | | | | | |
| | 4.5nm,0.9s | | | | | | |
| **KAPI** | **Kappang** | **10.96** | **219** | *i* P | **Pn** | **20 01 19.0** | **+1.8** |
| **LQP** | **Lukban** | **11.64** | **335** | ⇓*eP* | Pn | 20 01 35.6 | +8.9 |
| **RTBP** | **Dona Remedios** | **12.61** | **334** | ⇑*eP* | **P** | **20 01 50.4** | **-0.8** |
| **MMRI** | **Maumere** | **12.89** | **200** | P | Pn | 20 01 48.9 | +5.3 |
| **CAAP** | **Casiguran, Aur** | **13.37** | **340** | ⇑*eP* | **Pn** | **20 01 45.8** | **-4.3** |
| **SOEI** | **Soe** | **13.44** | **190** | Pn | **Pn** | **20 01 50.1** | **-1.1** |
| **CAUP** | **Cauayan** | **14.12** | **341** | ⇑*eP* | **P** | **20 02 04.6** | **-3.6** |
| **SBUM** | **Sibu** | **14.46** | **266** | Pn | Pn | 20 02 00.1 | -5.0 |
| **SAMP** | **Sagada Mountai** | **14.58** | **338** | ⇑*eP* | **P** | **20 02 13.9** | **+0.7** |
| **SGCP** | **Gonzaga** | **15.28** | **343** | ⇑*eP* | **P** | **20 02 21.1** | **+0.1** |
| **PACPP** | **Pamplona Cagay** | **15.69** | **341** | ⇑*eP* | **Pn** | **20 02 22.4** | **+0.9** |
| **DRS** | **Darwin Rock St** | **16.43** | **165** | P | **Pn** | **20 02 31.6** | **+0.5** |
| **KSM** | **Kuching** | **16.46** | **263** | Pn | **Pn** | **20 02 26.4** | **-5.1** |
| **MTN** | **Manton Dam** | **16.89** | **165** | Pn | **Pn** | **20 02 36.4** | **-0.5** |
| **MTN** | **Manton Dam** | **16.89** | **165** | P | **Pn** | **20 02 36.5** | **-0.5** |
| **KDU** | **Kakadu** | **17.14** | **160** | P | **Pn** | **20 02 39.6** | **-0.4** |
| **KDU** | **Kakadu** | **17.14** | **160** | P | **Pn** | **20 02 38.1** | **-1.9** |
| **JAGI** | **Jajag, Banyuwa** | **17.27** | **226** | P | **P** | **20 02 48.3** | **+5.2** |
| **JAGI** | **Jajag, Banyuwa** | **17.27** | **226** | | **Pn** | **20 02 39.3** | **-2.4** |
| **KNRA** | **Kununurra** | **19.22** | **174** | | **Pn** | **20 03 05.9** | **+0.3** |
| **KNRA** | **Kununurra** | **19.22** | **174** | P | **Pn** | **20 03 05.8** | **+0.3** |
| | comp=Z,815nmcomp=Z,64nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **19.72** | **235** | P | **Pn** | **20 03 14.0** | **+2.4** |
| **TWGBT** | **Beinan** | **19.89** | **345** | P | **P** | **20 03 11.0** | **-0.9** |
| **TWG** | **Pinlang** | **19.90** | **345** | P | **P** | **20 03 09.7** | **-2.3** |
| TWG | | | | IAmb | IAmb | 20 03 13.6 | |
| | comp=Z,179nm,1.6s | | | | | | |
| **YULB** | **Yu-li** | **20.39** | **346** | P | **P** | **20 03 15.6** | **-1.7** |
| **YULB** | **Yu-li** | **20.39** | **346** | P | **P** | **20 03 16.3** | **-1.0** |
| **TPUB** | **Ta-pu** | **20.48** | **344** | P | **P** | **20 03 17.8** | **-0.5** |
| **TPUB** | **Ta-pu** | **20.48** | **344** | P | **P** | **20 03 16.8** | **-1.5** |
| TPUB | | | | IAmb | IAmb | 20 03 19.0 | |
| | comp=Z,85nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **20.56** | **60** | LR | LR | 20 11 24.5 | |
| | comp=Z,155nm,18.6s,baz=234,slow=37 | | | | | | |
| **SSLB** | **Suanglung** | **20.85** | **345** | P | **P** | **20 03 22.6** | **+0.2** |
| **SSLB** | **Suanglung** | **20.85** | **345** | P | **P** | **20 03 21.0** | **-1.4** |
| **NACB** | **Ningan chiao** | **21.07** | **347** | P | **P** | **20 03 25.8** | **+1.1** |
| **MANU** | **Manus Island** | **21.44** | **105** | P | **P** | **20 03 28.6** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **21.54** | **183** | P | **P** | **20 03 30.1** | **+0.3** |
| **FITZ** | **Fitzroy Crossi** | **21.54** | **183** | P | **P** | **20 03 29.6** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **21.54** | **183** | P | **P** | **20 03 29.8** | **+0.1** |
| | comp=Z,765nm,0.9s | | | | | | |
| **YHNB** | **Yeheng** | **21.60** | **347** | P | **P** | **20 03 30.2** | **-0.2** |
| **YHNB** | **Yeheng** | **21.60** | **347** | P | **P** | **20 03 29.5** | **-0.9** |
| **BBJI** | **Bungbulang** | **21.90** | **240** | P | **P** | **20 03 37.6** | **+3.9** |
| **QIZ** | **Qiongzhong** | **22.50** | **314** | P | **P** | **20 03 39.3** | **-0.9** |
| QIZ | | | | S | **S** | **20 07 46.4** | **-0.6** |
| QIZ | | | | LR | LR | | |
| | comp=Z,250nm,17.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,340nm,15.7s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,590nm,18.1s | | | | | | |
| **JOW** | **Kunigami** | **23.20** | **4** | LR | LR | 20 12 14.0 | |
| | comp=Z,380nm,21.8s,baz=150,slow=35 | | | | | | |
| **UBPT** | **Khong Chiam** | **23.89** | **301** | P | **P** | **20 03 54.8** | **+0.5** |
| **UBPT** | **Khong Chiam** | **23.89** | **301** | P | **P** | **20 03 54.2** | **-0.1** |
| UBPT | | | | IAmb | IAmb | 20 03 56.0 | |
| | comp=Z,94nm,1.2s | | | | | | |
| **COEN** | **Coen** | **23.90** | **137** | P | **P** | **20 03 55.0** | **+0.6** |
| **COEN** | **Coen** | **23.90** | **137** | P | **P** | **20 03 54.5** | **+0.1** |
| **PMG** | **Port Moresby** | **24.15** | **122** | LR | LR | 20 14 50.9 | |
| | comp=Z,417nm,19.4s,baz=313,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **24.15** | **122** | *i* P | **P** | **20 03 54.9** | **-1.8** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **24.39** | **162** | P | **P** | **20 03 58.3** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 20 04 20.8 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.54** | **162** | P | **P** | **20 03 59.6** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 20 04 22.5 | |
| | comp=Z,61nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.54** | **162** | *i* P | **P** | **20 03 59.1** | **-1.1** |
| **WRA** | **Warramunga Arr** | **24.54** | **162** | P | **P** | **20 03 59.9** | **-0.3** |
| | comp=Z,36nm,0.9s,baz=343,slow=10,SNR=114 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 07 38.9** | **+0.3** |
| | comp=Z,1.4nm,0.5s,baz=330,slow=2.4,SNR=1.8 | | | | | | |
| WRA | | | | S | **S** | **20 08 13.9** | **-7.0** |
| | comp=Z,3.5nm,0.7s,baz=340,slow=17,SNR=4.9 | | | | | | |
| | comp=Z,36nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.55** | **162** | P | **P** | **20 03 59.8** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 20 04 13.9 | |
| | comp=Z,59nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **24.62** | **162** | P | **P** | **20 04 00.6** | **-0.4** |
| WR0 | | | | IAmb | IAmb | 20 04 12.8 | |
| | comp=Z,41nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **25.48** | **195** | P | **P** | **20 04 10.1** | **+1.4** |
| **MBWA** | **Marble Bar** | **25.48** | **195** | P | **P** | **20 04 09.7** | **+1.0** |
| MBWA | | | | IAmb | IAmb | 20 04 27.7 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **25.48** | **195** | P | **P** | **20 04 09.2** | **+0.5** |
| | comp=Z,36nm,1.5s | | | | | | |
| **IPM** | **Ipoh** | **25.58** | **273** | P | **P** | **20 04 11.2** | **+1.4** |
| **PSA00** | **Pilbara Seismi** | **25.85** | **195** | P | **P** | **20 04 14.0** | **+2.0** |
| **PSA00** | **Pilbara Seismi** | **25.85** | **195** | P | **P** | **20 04 12.9** | **+0.9** |
| PSA00 | | | | IAmb | IAmb | 20 04 14.3 | |
| | comp=Z,79nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.85** | **195** | P | **P** | **20 04 13.2** | **+1.2** |
| **QIS** | **Mount Isa** | **27.13** | **153** | P | **P** | **20 04 24.2** | **+0.6** |
| **QIS** | **Mount Isa** | **27.13** | **153** | P | **P** | **20 04 23.8** | **+0.2** |
| **JCJ** | **Chichijima** | **27.72** | **31** | LR | LR | 20 13 44.1 | |
| | comp=Z,395nm,21.3s,baz=146,slow=33 | | | | | | |
| **AS31** | **Alice Springs** | **27.96** | **166** | P | **P** | **20 04 30.8** | **-0.3** |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **27.97** | **166** | P | **P** | **20 04 30.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **27.97** | **166** | P | **P** | **20 04 31.1** | **0.0** |
| | comp=Z,3.7nm,0.8s,baz=339,slow=6.8,SNR=39 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 07 46.9** | **+0.4** |
| | comp=Z,3.2nm,0.5s,baz=348,slow=2.2,SNR=6.9 | | | | | | |
| ASAR | | | | S | **S** | **20 09 10.8** | **-4.4** |
| | comp=Z,0.3nm,0.6s,baz=350,slow=18,SNR=1.4 | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **27.98** | **166** | P | **P** | **20 04 31.4** | **+0.2** |
| **WRKA** | **Warakurna** | **28.47** | **177** | P | **P** | **20 04 36.4** | **+0.8** |
| **WRKA** | **Warakurna** | **28.47** | **177** | P | **P** | **20 04 36.0** | **+0.4** |
| | comp=Z,31nm,1.8s | | | | | | |
| **GIRL** | **Giralia** | **28.73** | **204** | P | **P** | **20 04 40.9** | **+3.0** |
| **SRDT** | **SRDT** | **29.19** | **293** | P | **P** | **20 04 44.5** | **+2.4** |
| **NJ2** | **Nanjing** | **29.28** | **346** | *eP* | **P** | **20 04 44.1** | **+1.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,19nm,0.5s | | | | | | |
| **GYA** | **Guiyang** | **29.76** | **322** | P | **P** | **20 04 48.1** | **+0.9** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,750nm,17.1s | | | | | | |
| **PHRA** | **Phrae** | **29.82** | **302** | P | **P** | **20 04 46.9** | **-0.7** |
| **CTA** | **Charters Tower** | **30.38** | **141** | LR | LR | 20 17 41.4 | |
| | comp=Z,25nm,19.4s,baz=304,slow=38 | | | | | | |
| **CRAI** | **Chiangrai** | **30.50** | **305** | P | **P** | **20 04 53.8** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **30.89** | **301** | P | **P** | **20 04 57.6** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **30.89** | **301** | P | **P** | **20 04 58.2** | **+1.0** |
| | comp=Z,5.6nm,0.8s,baz=117,slow=7.5,SNR=33 | | | | | | |
| CMAR | | | | PcP | **PcP** | **20 07 55.7** | **+1.7** |
| | comp=Z,0.7nm,0.4s,baz=249,slow=1.7,SNR=4.2 | | | | | | |
| CMAR | | | | LR | LR | 20 18 32.2 | |
| | comp=Z,173nm,18.6s,baz=135,slow=39 | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.89** | **301** | *ceP* | **P** | **20 04 58.2** | **+1.0** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **MEEK** | **Meekatharra** | **31.01** | **194** | P | **P** | **20 04 59.2** | **+1.1** |
| **MEEK** | **Meekatharra** | **31.01** | **194** | P | **P** | **20 04 58.2** | **+0.1** |
| | comp=Z,25nm,1.2s | | | | | | |
| **ENH** | **Enshi** | **31.14** | **330** | IAmb | IAmb | 20 05 00.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **31.87** | **21** | LR | LR | 20 16 40.2 | |
| | comp=Z,247nm,21.2s,baz=280,slow=34 | | | | | | |
| **OOD** | **Oodnadatta** | **32.36** | **165** | P | **P** | **20 05 10.4** | **+0.5** |
| **PZH** | **PanZhiHua** | **33.02** | **316** | P | **P** | **20 05 17.8** | **+1.9** |
| PZH | | | | S | **S** | **20 10 34.3** | **-0.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,190nm,5.3s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,330nm,16.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,290nm,17.0s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,500nm,23.0s | | | | | | |
| **LYN** | **LuoYang** | **33.54** | **339** | *eP* | **P** | **20 05 24.4** | **+4.2** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,670nm,4.9s | | | | | | |
| **KSRS** | **Korea Array** | **33.76** | **2** | P | **P** | **20 05 22.9** | **+0.9** |
| | comp=Z,8.1nm,0.8s,baz=179,slow=9.7,SNR=25 | | | | | | |
| KSRS | | | | PcP | **PcP** | **20 08 02.2** | **+0.9** |
| | comp=Z,1.7nm,0.6s,baz=204,slow=2.5,SNR=4.8 | | | | | | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **INKA** | **Innaminka** | **33.95** | **157** | P | **P** | **20 05 24.6** | **+0.8** |
| **MORW** | **Morawa** | **34.00** | **197** | P | **P** | **20 05 25.3** | **+1.0** |
| **FORT** | **Forrest** | **34.17** | **178** | P | **P** | **20 05 26.2** | **+0.5** |
| **MULG** | **Mulgathing** | **34.38** | **169** | P | **P** | **20 05 28.5** | **+0.9** |
| **TNCH** | **TengChong** | **34.47** | **311** | *eP* | **P** | **20 05 28.8** | **+0.1** |
| TNCH | | | | pP | pP | 20 05 32.4 | +0.6 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,11nm,2.0s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,130nm,3.8s | | | | | | |
| **MAJO** | **Matsushiro** | **34.51** | **17** | *i* P | **P** | **20 05 28.4** | **-0.2** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.51** | **17** | P | **P** | **20 05 30.0** | **+1.4** |
| | comp=Z,1.2nm,0.6s,baz=194,slow=8.4,SNR=1.8 | | | | | | |
| MJAR | | | | PcP | **PcP** | **20 08 04.6** | **+1.0** |
| | comp=Z,1.5nm,0.6s,baz=176,slow=3.8,SNR=2.3 | | | | | | |
| MJAR | | | | LR | LR | 20 17 57.5 | |
| | comp=Z,247nm,21.7s,baz=210,slow=34 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **34.54** | **334** | ⇑P | **P** | **20 05 27.8** | **-1.1** |
| XAN | | | | pP | pP | 20 05 32.4 | +0.4 |
| XAN | | | | S | **S** | **20 10 56.6** | **-1.1** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,25nm,0.8s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,940nm,4.9s | | | | | | |
| **CD2** | **Chengdu** | **34.74** | **324** | P | **P** | **20 05 30.8** | **+0.1** |
| **KMBL** | **Kambalda** | **35.03** | **187** | P | **P** | **20 05 34.1** | **+1.0** |
| **BLDU** | **Ballidu** | **35.28** | **195** | P | **P** | **20 05 36.2** | **+0.9** |
| **HNS** | **HongShan** | **35.42** | **343** | ⇑P | P | 20 05 41.4 | +5.0 |
| HNS | | | | S | **S** | **20 11 17.1** | **+6.1** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,710nm,12.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,740nm,16.9s | | | | | | |
| **DL2** | **Dalian** | **35.48** | **353** | P | **P** | **20 05 36.8** | **-0.1** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,42nm,1.0s | | | | | | |
| **LCRK** | **Leigh Creek** | **35.57** | **163** | P | **P** | **20 05 38.5** | **+0.7** |
| **HNR** | **Honiara** | **35.60** | **111** | P | **P** | **20 05 37.0** | **-1.3** |
| **HNR** | **Honiara** | **35.60** | **111** | LR | LR | 20 19 40.4 | |
| | comp=Z,3µm,20.4s,baz=296,slow=35 | | | | | | |
| **KLBR** | **Kellerberrin** | **35.97** | **193** | P | **P** | **20 05 42.1** | **+0.9** |
| **JMM** | **Marumori** | **36.52** | **19** | P | **P** | **20 05 46.1** | **+0.3** |
| **MUN** | **Mundaring** | **36.71** | **195** | P | **P** | **20 05 48.8** | **+1.3** |
| **BBOO** | **Buckleboo** | **37.25** | **167** | P | **P** | **20 05 52.6** | **+0.5** |
| **EIDS** | **Eidsvold** | **37.26** | **142** | P | **P** | **20 05 51.5** | **-0.9** |
| **EIDS** | **Eidsvold** | **37.26** | **142** | P | **P** | **20 05 51.9** | **-0.4** |
| | comp=Z,14nm,1.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **37.37** | **193** | P | **P** | **20 05 54.5** | **+1.4** |
| **BJT** | **Baijiatuan** | **37.52** | **347** | IAmb | IAmb | 20 05 56.3 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **BJI** | **Beijing** | **37.54** | **347** | P | **P** | **20 05 55.4** | **+1.0** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,28nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **38.00** | **159** | P | **P** | **20 05 59.2** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.00** | **159** | P | **P** | **20 05 58.7** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.00** | **159** | P | **P** | **20 05 58.9** | **+0.5** |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.00** | **159** | P | **P** | **20 05 59.0** | **+0.5** |
| | comp=Z,18nm,0.8s,baz=331,slow=8.5,SNR=22 | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.00** | **159** | *i* P | **P** | **20 05 58.8** | **+0.3** |
| **HTT** | **Hallett** | **38.57** | **163** | P | **P** | **20 06 04.6** | **+1.2** |
| **LZH** | **Lanzhou** | **38.61** | **330** | *eP* | **P** | **20 06 05.4** | **+1.6** |
| LZH | | | | pmax | pmax | | |

HEH pmax pmax
comp=Z,16nm,1.1s
**ULN Ulaanbaatar 47.26 342** *ce*P **P 20 07 14.4 +0.7**
ULN pmax pmax
comp=Z,13nm,1.0s
**SONM Songino Array 47.44 342** P **P 20 07 14.8 -0.3**
**SONM Songino Array 47.44 342** P **P 20 07 15.0 0.0**
comp=Z,5.3nm,0.6s,baz=160,slow=8.1,SNR=27
SONM PcP **PcP 20 08 45.9 +0.4**
comp=Z,3.6nm,0.8s,baz=161,slow=3.8,SNR=4.7
SONM LR LR 20 27 44.8
comp=Z,298nm,21.6s,baz=150,slow=37
comp=Z,5.3nm,0.6s
**HYB Hyderabad 49.10 290** *e*P **P 20 07 28.3 0.0**
**CIT Chita 49.52 349** *e*P **P 20 07 32.2 +1.2**
CIT *e* 20 07 41.2
CIT *e* 20 08 55.4
CIT *e* 20 09 25.8
CIT *e* 20 10 21.0
CIT *e* 20 19 25.6
CIT pmax pmax
comp=Z,73nm,3.9s
**ZEA Zeya 50.02 0** *e*P P 20 07 41.9 +7.2
ZEA pmax pmax
comp=Z,10.0nm,1.2s
**ZAK Zakamensk 50.66 341** *e*P **P 20 07 39.0 -0.7**
ZAK pmax pmax
comp=Z,3.0nm,1.6s
**IRK Irkutsk 51.97 343** *e*P **P 20 07 48.7 -0.7**
IRK pmax pmax
comp=Z,46nm,1.4s
**MOY Mondy 52.52 340** *e*P **P 20 07 54.4 +0.8**
MOY pmax pmax
comp=Z,32nm,2.4s
**WMQ Urumqi 52.82 325** *e*P **P 20 07 57.3 +1.4**
WMQ PP **PP 20 09 55.8 +0.3**
WMQ pmax pmax
comp=Z,13nm,1.5s
WMQ LR LR
comp=Z,240nm,12.1s
WMQ LR LR
comp=Z,270nm,16.1s
WMQ LR LR
comp=Z,430nm,23.9s
**KNGR Kungurtug, Tuv 52.91 337** *i*P **P 20 07 54.7 -1.9**
**MSVF Nonsavu 54.91 114** LR LR 20 30 01.5
comp=Z,178nm,19.7s,baz=207,slow=34
**MSVF Nonsavu 54.91 114** *i*P **P 20 08 09.9 -1.7**
MSVF pmax pmax
comp=Z,11nm,0.9s
**PEA0B Petropavlovsk- 55.62 22** IAmb IAmb 20 08 17.3
comp=Z,28nm,1.1s
**PEA0B Petropavlovsk- 55.62 22** *ce*P **P 20 08 17.1 +1.0**
**PETK Petropavlovsk- 55.62 22** P **P 20 08 16.1 0.0**
**PETK Petropavlovsk- 55.62 22** P **P 20 08 16.4 +0.3**
comp=Z,14nm,0.9s,baz=212,slow=5.3,SNR=20
PETK LR LR 20 30 56.6
comp=Z,79nm,21.8s,baz=225,slow=35
comp=Z,14nm,0.9s
**PET Petropavlovsk 55.91 23** P **P 20 08 17.9 -0.3**
comp=Z,29nm,1.1s
**ZSN Zaisan 56.61 327** *e*P **P 20 08 22.7 -0.6**
baz=327
**ZSN Zaisan 56.61 327** *e*P **P 20 08 22.7 -0.6**
**DGZ Jazzator, Alta 56.71 331** *i*P **P 20 08 23.5 -0.6**
DGZ pmax pmax
comp=Z,5.0nm,0.8s
**SHLS Shalkode 57.43 320** *e*P **P 20 08 26.6 -2.7**
comp=Z,8.9nm,0.8s,baz=321
**SHLS Shalkode 57.43 320** *e*P **P 20 08 26.6 -2.7**
SHLS pmax pmax
comp=Z,9.0nm,0.8s
**MK31 Makanchi Array 57.65 325** P **P 20 08 29.7 -1.0**
**MK31 Makanchi Array 57.65 325** *ce*P **P 20 08 30.5 -0.2**
**MKAR Makanchi Array 57.65 325** P **P 20 08 29.7 -1.0**
**MKAR Makanchi Array 57.65 325** P **P 20 08 30.2 -0.5**
comp=Z,11nm,0.5s,baz=120,slow=6.3,SNR=113
MKAR PcP **PcP 20 09 25.0 +1.2**
comp=Z,4.8nm,0.7s,baz=125,slow=4.0,SNR=6.2
MKAR ScP **ScP 20 13 26.5 +2.7**
comp=Z,0.8nm,0.8s,baz=108,slow=4.7,SNR=4.8
MKAR LR LR 20 34 56.7
comp=Z,368nm,19.1s,baz=106,slow=38
comp=Z,11nm,0.5s
**UZB Uzynbulak 57.71 320** *e*P **P 20 08 30.2 -1.2**
baz=320
**UZB Uzynbulak 57.71 320** *e*P **P 20 08 30.1 -1.2**
**MAKZ Makanchi 57.84 325** P **P 20 08 31.0 -1.0**
MAKZ IAmb IAmb 20 08 34.0
comp=Z,14nm,0.7s
**MAKZ Makanchi 57.84 325** P **P 20 08 31.0 -1.0**
MAKZ pmax pmax
comp=Z,14nm,0.7s
**NIL Nilore 57.97 308** P **P 20 08 32.3 -0.9**
**NIL Nilore 57.97 308** P **P 20 08 32.3 -0.9**
NIL pmax pmax
comp=Z,51nm,1.3s
**SATY Saty 58.06 320** *e*P **P 20 08 32.9 -0.8**
comp=Z,11nm,0.8s,baz=320
**SATY Saty 58.06 320** *e*P **P 20 08 32.9 -0.8**
SATY pmax pmax
comp=Z,11nm,0.8s
**KPKS Kokpek 58.08 320** *e*P **P 20 08 32.8 -1.0**
comp=Z,11nm,0.8s,baz=320
**KPKS Kokpek 58.08 320** *e*P **P 20 08 32.8 -1.0**
KPKS pmax pmax
comp=Z,11nm,0.8s
**ZHN Zhinishke 58.09 320** *e*P **P 20 08 33.1 -0.9**
comp=Z,13nm,0.9s,baz=320
**ZHN Zhinishke 58.09 320** *e*P **P 20 08 33.1 -0.9**
ZHN pmax pmax
comp=Z,13nm,0.9s
**KSH Kashi 58.11 315** P **P 20 08 34.6 +0.4**
KSH sP pwP 20 08 42.1 +1.5
KSH pmax pmax
comp=Z,14nm,1.3s
**YAK Yakutsk 58.38 2** *e*P **P 20 08 34.8 -0.6**
YAK *e**PP **pwP 20 08 42.1 +0.2**
YAK *e* 20 09 25.5
YAK *e* 20 10 43.3
YAK *e*S **S 20 16 32.9 -4.9**
YAK *e* 20 18 22.1
YAK *e*SS **SS 20 20 28.9 -1.2**
YAK pmax pmax
comp=Z,42nm,1.5s
YAK pmax pmax
comp=N,16nm,1.7s
YAK pmax pmax
comp=E,4.0nm,1.0s
YAK pmax pmax
comp=Z,259nm,7.4s
YAK pmax pmax
comp=N,105nm,5.1s
YAK pmax pmax
comp=E,141nm,4.3s
YAK smax smax
comp=E,121nm,4.8s
YAK smax smax
comp=N,68nm,4.8s
**MA2 Magadan 58.89 14** LR LR 20 32 09.9
comp=N,70nm,21.9s,baz=218,slow=34
**MA2 Magadan 58.89 14** P **P 20 08 39.1 0.0**
comp=N,13nm,1.1s,comp=N,1μm
**NRN Naryn 58.91 317** P **P 20 08 40.0 0.0**
**NRN Naryn 58.91 317** P **P 20 08 40.0 0.0**
**MDOK Medeo 58.98 319** *e*P **P 20 08 39.4 -0.8**
baz=319
**MDOK Medeo 58.98 319** *e*P **P 20 08 39.4 -0.8**
**TDK Taldyqorghan 59.01 322** *e*P **P 20 08 39.4 -0.9**
comp=N,15nm,0.7s,baz=322
**TDK Taldyqorghan 59.01 322** *e*P **P 20 08 39.3 -0.9**
TDK pmax pmax
comp=Z,15nm,0.7s
**AAA Alma-Ata 59.09 319** *e*P **P 20 08 40.1 -0.8**
comp=Z,14nm,1.1s,baz=319
**AAA Alma-Ata 59.09 319** *e*P **P 20 08 40.0 -0.8**
AAA pmax pmax
comp=Z,14nm,1.1s
**CHKK Chushkaly 59.34 320** *e*P **P 20 08 41.6 -1.0**
baz=320
**CHKK Chushkaly 59.34 320** *e*P **P 20 08 41.6 -1.0**
**KUU Kurty 59.78 320** *e*P **P 20 08 44.9 -0.7**
baz=320
**KUU Kurty 59.78 320** *e*P **P 20 08 44.9 -0.7**
**TKM2 Tokmak 2 59.83 319** P **P 20 08 46.7 +0.6**
SNR=8.1

**CHMS Chumysh 60.42 318** P **P 20 08 50.4 +0.4**
SNR=5.2
**AAK Ala-Archa 60.44 318** P **P 20 08 49.4 -0.8**
**AAK Ala-Archa 60.44 318** LR LR 20 37 03.5
comp=Z,302nm,21.7s,baz=89,slow=38
**AAK Ala-Archa 60.44 318** *i*P **P 20 08 49.6 -0.7**
AAK pmax pmax
comp=Z,13nm,1.2s
**SGDS Sogindy 60.69 319** *e*P **P 20 08 51.3 -0.7**
baz=319
**SGDS Sogindy 60.69 319** *e*P **P 20 08 51.2 -0.7**
**USP Ospenovka 60.70 319** P **P 20 08 51.8 -0.1**
SNR=16
**ZAA0 Zalesovo Array 60.71 333** P **P 20 08 50.1 -1.6**
**ZALV Zalesovo Beam 60.71 333** P **P 20 08 49.7 -2.0**
**ZALV Zalesovo Beam 60.71 333** P **P 20 08 50.3 -1.3**
comp=Z,3.0nm,0.5s,baz=114,slow=6.6,SNR=18
ZALV LR LR 20 37 34.4
comp=Z,133nm,18.9s,baz=126,slow=38
comp=Z,3.0nm,0.5s
**ZALV Zalesovo Beam 60.71 333** *i*P **P 20 08 50.5 -1.2**
ZALV pmax pmax
comp=Z,3.0nm,0.5s
**AML Almayashu 60.76 317** P **P 20 08 53.3 +0.5**
SNR=8.3
**SEM Semipalatinsk 60.81 328** *e*P **P 20 08 51.7 -1.1**
baz=328
**SEM Semipalatinsk 60.81 328** *e*P **P 20 08 51.6 -1.1**
**EKS2 Erkin-Say 60.93 318** P **P 20 08 54.0 +0.4**
SNR=8.7
**KBL Kabul 61.57 308** P **P 20 08 57.0 -1.2**
KBL lAmb lAmb 20 08 58.6
comp=Z,11nm,0.8s
**KBL Kabul 61.57 308** P **P 20 08 57.0 -1.2**
KBL pmax pmax
comp=Z,11nm,0.9s
**BTLS Baital 61.76 320** *e*P **P 20 08 58.5 -0.5**
baz=320
**BTLS Baital 61.76 320** *e*P **P 20 08 58.5 -0.5**
**KURBB Kurchatov Arra 61.84 327** P **P 20 08 58.9 -0.6**
comp=Z,26nm,0.7s,baz=127,slow=6.1,SNR=117
comp=Z,26nm,0.7s
**KURK Kurchatov 61.84 328** P **P 20 08 58.6 -0.9**
**KURK Kurchatov 61.84 328** *ce*P **P 20 08 59.2 -0.2**
KURK pmax pmax
comp=Z,74nm,1.0s
**SEY Seymchan 62.22 13** *ce*P **P 20 09 00.6 -1.1**
SEY pmax pmax
comp=Z,12nm,1.7s
**URZ Urewera 62.47 137** LR LR 20 36 31.4
comp=Z,319nm,19.2s,baz=20,slow=36
**SHEM Shemya Is, Ala 62.65 30** LR LR 20 32 06.2
comp=Z,124nm,20.9s,baz=300,slow=32
**SIMJ Simiganj 62.84 312** P **P 20 09 05.7 -0.9**
SIMJ lAmb lAmb 20 09 07.8
comp=Z,16nm,1.1s
**KK31 Karatay Array 63.31 317** lAmb lAmb 20 09 10.8
comp=Z,11nm,0.8s
**KKAR Karatay Array 63.31 317** P **P 20 09 08.2 -1.2**
**KKAR Karatay Array 63.31 317** lAmb lAmb 20 09 10.8
comp=Z,11nm,0.8s
**KKAR Karatay Array 63.31 317** P **P 20 09 08.2 -1.2**
**BVAR Borovoye Array 67.42 327** P **P 20 09 35.5 -0.3**
comp=Z,20nm,0.9s,baz=120,slow=5.8,SNR=37
comp=Z,20nm,0.9s
**TIXI Tiksi 68.02 1** LR LR 20 39 18.2
comp=Z,186nm,21.9s,baz=184,slow=36
**BILL Bilibino 69.74 15** *e*P **P 20 09 49.9 -0.1**
BILL *e**PP **pP 20 09 53.2 -0.1**
BILL *e* 20 10 12.4
BILL *e* 20 12 23.9
BILL *e*PPP PPP 20 14 03.6
BILL *e*S **S 20 18 58.5 0.0**
BILL *e*SS **SS 20 23 28.8 +1.9**
BILL pmax pmax
comp=Z,1.0nm,1.0s
BILL MLR MLR
comp=Z,145nm,21.0s
**CASY Casey 70.64 187** P **P 20 09 56.0 +0.5**
CASY lAmb lAmb 20 09 57.9
comp=Z,8.7nm,0.7s
**ABKAR Akbulak array 72.23 321** P **P 20 10 03.9 -1.7**
**ABKAR Akbulak array 72.23 321** lAmb lAmb 20 10 06.8
comp=Z,25nm,1.5s
**AKTO Aktyubinsk 73.75 322** P **P 20 10 13.9 -0.5**
comp=Z,10nm,0.7s,baz=94,slow=5.6,SNR=37
AKTO LR LR 20 45 11.2
comp=Z,276nm,20.9s,baz=68,slow=38
comp=Z,10nm,0.7s
**AKTO Aktyubinsk 73.75 322** P **P 20 10 14.0 -0.5**
**SVE Sverdlovsk 74.07 329** *e*P **P 20 10 16.0 -0.2**
SVE pmax pmax
comp=Z,30nm,1.1s
**GAMB Gambell 74.58 24** P **P 20 10 20.0 +0.9**
baz=246
**ARU Arti 75.04 328** P **P 20 10 20.4 -1.5**
ARU lAmb lAmb 20 10 24.9
comp=Z,13nm,0.7s
**ARU Arti 75.04 328** P **P 20 10 21.2 -0.7**
comp=Z,13nm,0.5s,baz=105,slow=4.5,SNR=30
comp=Z,13nm,0.5s
**ARU Arti 75.04 328** *c*/P **P 20 10 21.5 -0.4**
ARU 20 13 05.7
ARU S **S 20 20 02.3 +2.7**
ARU SS **SS 20 24 49.0 +0.6**
ARU pmax pmax
comp=Z,12nm,0.6s
**ARU Arti 75.04 328** P **P 20 10 20.0 -1.9**
comp=Z,19nm,0.7s
**FALS False Pass 75.62 34** P **P 20 10 25.8 +0.5**
baz=256
**M11K Mekoryuk 75.76 28** P **P 20 10 26.1 +0.2**
baz=252
**S12K Black Hills 76.58 33** P **P 20 10 30.8 0.0**
baz=256
**TNA Tin City 76.78 23** P **P 20 10 32.0 +0.4**
baz=249
**K13K Kusilvak Mount 76.95 27** P **P 20 10 33.1 +0.5**
baz=253
**F14K Arctic Creek 77.37 23** P **P 20 10 35.6 +0.6**
baz=250
**SDPT Sand Point 77.38 34** P **P 20 10 36.1 +0.9**
baz=258
**ANM Nome 77.45 24** P **P 20 10 35.3 -0.2**
baz=252
**J14K Nanvaranak Lak 77.68 26** P **P 20 10 37.2 +0.5**
baz=254
**L14K Kuka Creek 77.68 28** P **P 20 10 37.8 +1.0**
baz=255
**O14K Tigyukauivet M 77.84 30** P **P 20 10 38.4 +0.7**
baz=256
**M14K Bethel 77.87 28** P **P 20 10 38.2 +0.3**
baz=256
**S14K Fog Glacier 78.08 33** P **P 20 10 39.3 +0.1**
baz=258
**F15K North Star Dit 78.11 23** P **P 20 10 39.5 +0.4**
baz=252
**G15K Niukluk 78.13 24** P **P 20 10 40.2 +1.0**
baz=253
**L15K Ungalak Mounta 78.32 28** P **P 20 10 41.0 +0.7**
baz=256
**K15K Wolf Creek Mou 78.46 27** lAmb lAmb 20 10 52.9
comp=Z,25nm,1.2s
**K15K Wolf Creek Mou 78.46 27** P **P 20 10 41.6 +0.5**
baz=256
**M15K Kasigluk River 78.46 29** P **P 20 10 41.9 +0.7**
baz=257
**O15K Ungalikthiuk R 78.54 30** P **P 20 10 42.1 +0.5**
baz=258
**H16K Elim 78.77 25** P **P 20 10 42.8 +0.1**
baz=254
**G16K Koyuk River 78.92 24** lAmb lAmb 20 11 21.4
comp=Z,35nm,1.8s
**G16K Koyuk River 78.92 24** P **P 20 10 44.8 +1.2**
baz=254
**J16K Anvik River 79.12 26** P **P 20 10 45.3 +0.5**
**J16K Anvik River 79.12 26** P **P 20 10 45.2 +0.5**
baz=256
**I17K Unalakleet 79.22 25** P **P 20 10 45.9 +0.7**
baz=256
**L16K Owhat River 79.26 28** P **P 20 10 45.9 +0.4**
L16K lAmb lAmb 20 10 57.8
comp=Z,24nm,1.4s
**L16K Owhat River 79.26 28** P **P 20 10 45.9 +0.4**
baz=258,SNR=6.1
**D17K Noatak River 79.30 21** P **P 20 10 46.3 +0.7**
baz=253

**N16K Nishlik Lake 79.34 29** P **P 20 10 46.4 +0.4**
baz=258
**M16K Timber Creek 79.36 29** lAmb lAmb 20 10 58.4
comp=Z,19nm,1.2s
**M16K Timber Creek 79.36 29** P **P 20 10 47.0 +0.9**
baz=258
**RDOG Red Dog Mine 79.47 21** P **P 20 10 46.7 +0.2**
baz=253
**O16K Kokwok River B 79.50 30** P **P 20 10 47.0 +0.1**
baz=259
**C17K DeLong Mountai 79.50 21** P **P 20 10 47.0 +0.3**
baz=253
**E17K Hotham Inlet 79.59 22** P **P 20 10 47.0 -0.2**
baz=254
**G17K Kiwalik Mounta 79.64 24** P **P 20 10 47.6 +0.1**
baz=256
**F17K Baldwin Pennin 79.64 23** P **P 20 10 47.6 +0.1**
baz=255
**H17K Granite Mounta 79.81 25** P **P 20 10 48.7 +0.3**
baz=256
**J17K VABM Dome 79.81 26** P **P 20 10 49.2 +0.7**
baz=258,SNR=7.0
**L17K Donlin 79.90 27** P **P 20 10 49.8 +0.8**
baz=258,SNR=5.6
**K17K Iditarod 80.01 27** lAmb lAmb 20 11 01.6
comp=Z,23nm,1.1s
**K17K Iditarod 80.01 27** P **P 20 10 50.3 +0.7**
baz=258,SNR=8.3
**O17K Koliganek Bris 80.03 30** P **P 20 10 50.6 +0.9**
baz=260
**R17L Mt. Peulik Vol 80.05 32** P **P 20 10 50.3 +0.4**
baz=261
**N17K Nushagak Hills 80.12 29** P **P 20 10 50.9 +0.7**
baz=260
**E18K Tukpahlearik C 80.14 22** lAmb lAmb 20 11 01.9
comp=Z,19nm,1.0s
**E18K Tukpahlearik C 80.14 22** P **P 20 10 50.8 +0.6**
baz=256,SNR=5.7
**M17K Holitna River 80.16 28** lAmb lAmb 20 11 02.5
comp=Z,35nm,1.5s
**M17K Holitna River 80.16 28** P **P 20 10 50.2 -0.2**
baz=259
**C18K Utukok River 80.25 21** P **P 20 10 51.5 +0.6**
baz=255
**P17K Kvichak River 80.26 31** P **P 20 10 50.8 -0.1**
baz=261
**F18K Selawik 80.30 23** P **P 20 10 51.1 +0.1**
baz=256
**KIRV Kirov 80.33 329** P **P 20 10 50.8 -0.5**
comp=Z,17nm,0.5s,baz=95,slow=1.3,SNR=8.1
comp=Z,17nm,0.5s
**KIRV Kirov 80.33 329** *ce*P **P 20 10 51.3 0.0**
**Q17K Contact Creek 80.39 32** P **P 20 10 51.5 -0.4**
baz=261
**RAYN Ar Rayn 80.48 293** P **P 20 10 52.4 -0.6**
**RAYN Ar Rayn 80.48 293** P **P 20 10 52.4 -0.6**
RAYN pmax pmax
comp=Z,10.0nm,0.7s
**H18K Honhosa River 80.50 24** lAmb lAmb 20 11 03.5
comp=Z,22nm,1.5s
**H18K Honhosa River 80.50 24** P **P 20 10 51.9 -0.2**
baz=258
**BELG Belogornoye 80.50 322** P **P 20 10 51.5 -0.9**
comp=Z,35nm,0.9s,baz=129,slow=2.4,SNR=8.5
comp=Z,35nm,0.9s
**BELG Belogornoye 80.50 322** *i*P **P 20 10 49.7 -2.7**
BELG pmax pmax
comp=Z,8.0nm,0.9s
**G18K Tagagawik 80.54 24** P **P 20 10 52.8 +0.4**
baz=258
**L18K Granite Mounta 80.66 28** lAmb lAmb 20 11 05.8
comp=Z,37nm,1.6s
**L18K Granite Mounta 80.66 28** P **P 20 10 53.5 +0.5**
baz=260
**N18K Kilae Creek 80.77 29** P **P 20 10 54.2 +0.4**
baz=261
**P18K Big Mountain, 80.90 30** P **P 20 10 55.1 +0.6**
baz=262
**Q18K Katmai Hardscr 80.91 31** P **P 20 10 54.8 +0.1**
baz=262
**C19K Lookout Ridge 80.93 20** P **P 20 10 55.2 +0.8**
baz=256
**M18K Stony River 80.94 28** P **P 20 10 54.8 +0.2**
baz=261,SNR=5.3
**O18K Koktuh Hills 80.98 30** P **P 20 10 55.7 +0.8**
baz=262
**R18K Karluk 81.05 32** P **P 20 10 55.6 +0.4**
baz=263
**SII Sitkinak Islan 81.07 33** P **P 20 10 55.7 +0.3**
baz=263
**F19K Shaleruckik Mo 81.08 23** lAmb lAmb 20 11 06.3
comp=Z,29nm,1.9s
**F19K Shaleruckik Mo 81.08 23** P **P 20 10 55.7 +0.5**
baz=258
**ABPO Ambohimpanom 81.18 250** P **P 20 10 56.8 -0.2**
ABPO lAmb lAmb 20 10 59.4
comp=Z,32nm,1.4s
**ABPO Ambohimpanom 81.18 250** P **P 20 10 56.8 -0.2**
ABPO pmax pmax
comp=Z,32nm,1.5s
**G19K Purcell Mounta 81.22 24** lAmb lAmb 20 11 07.5
comp=Z,18nm,1.1s
**G19K Purcell Mounta 81.22 24** P **P 20 10 56.3 +0.3**
baz=259,SNR=13
**D19K Kuna River 81.31 21** P **P 20 10 57.1 +0.6**
**D19K Kuna River 81.31 21** P **P 20 10 56.7 +0.2**
baz=258
**H19K Roundabout Mou 81.36 24** lAmb lAmb 20 11 00.7
comp=Z,15nm,0.9s
**H19K Roundabout Mou 81.36 24** P **P 20 10 57.2 +0.5**
baz=260,SNR=17
**E19K Redstone River 81.42 22** P **P 20 10 57.3 +0.2**
baz=259,SNR=17
**J19K Poorman 81.44 26** P **P 20 10 58.0 +0.8**
baz=261,SNR=9.1
**N19K Bonanza Creek 81.48 29** lAmb lAmb 20 11 01.6
comp=Z,26nm,1.2s
**N19K Bonanza Creek 81.48 29** P **P 20 10 57.4 -0.2**
baz=262
**L19K White Mountain 81.50 28** P **P 20 10 57.4 -0.2**
baz=262,SNR=7.2
**GNI Garni 81.53 310** P **P 20 10 59.2 +0.8**
comp=Z,13nm,1.6s
**M19K Big River Lodg 81.67 28** P **P 20 10 58.9 +0.4**
baz=262,SNR=6.1
**D20K Etivluk River 81.89 21** P **P 20 10 59.6 +0.1**
baz=259,SNR=6.8
**F20K Avaraart Lake 81.92 23** lAmb lAmb 20 11 11.6
comp=Z,17nm,1.1s
**F20K Avaraart Lake 81.92 23** P **P 20 10 59.9 +0.3**
baz=260,SNR=7.1
**VOI Vohitsoka 81.94 247** P **P 20 11 00.4 -0.5**
VOI lAmb lAmb 20 11 01.9
comp=Z,24nm,1.1s
**E20K Nigu River 81.96 22** P **P 20 10 59.9 -0.1**
baz=260,SNR=11
**B20K Meade River 81.96 20** P **P 20 11 00.2 +0.4**
baz=258
**L20K Farewell, AK 81.99 27** P **P 20 11 00.2 0.0**
baz=262
**H20K Anotleneega Mo 81.99 24** P **P 20 11 01.0 +0.9**
baz=261,SNR=6.9
**K20K Telida 82.03 27** P **P 20 11 00.6 +0.3**
baz=262,SNR=6.7
**I20K Naaghedeneel 82.06 25** lAmb lAmb 20 11 03.2
comp=Z,23nm,0.9s
**I20K Naaghedeneel 82.06 25** P **P 20 11 00.8 +0.4**
baz=262
**KDAK Kodiak Island 82.08 32** P **P 20 11 00.6 -0.1**
baz=264
**J20K Nowinta River 82.11 26** lAmb lAmb 20 11 12.8
comp=Z,34nm,1.6s
**J20K Nowinta River 82.11 26** P **P 20 11 00.6 -0.1**
baz=262,SNR=8.8
**M20K Styx River 82.26 28** lAmb lAmb 20 11 13.6
comp=Z,30nm,1.5s
**M20K Styx River 82.26 28** P **P 20 11 01.6 -0.1**
baz=263
**O20K Slope Mountain 82.30 30** P **P 20 11 02.6 +0.7**
baz=264
**C21K Knifeblade Rid 82.62 21** P **P 20 11 03.8 +0.4**
baz=261
**G21K Allakaket 82.70 23** lAmb lAmb 20 11 15.7
comp=Z,19nm,1.2s
**G21K Allakaket 82.70 23** P **P 20 11 04.0 +0.2**
baz=262,SNR=7.0
**B21K Ikpikpuk River 82.76 20** lAmb lAmb 20 11 08.1
comp=Z,20nm,1.0s

**B21K Ikpikpuk River** 82.76 20 P P 20 11 04.6 +0.6
baz=261
**E21K Killik River** 82.80 21 P P 20 11 04.8 +0.5
baz=262
**F21K Alatna River** 82.81 23 P P 20 11 04.6 +0.3
baz=262
**H21K Melozitna Rive** 82.87 24 IAmb IAmb 20 11 07.4
comp=Z,15nm,1.1s
**H21K Melozitna Rive** 82.87 24 P P 20 11 05.2 +0.5
baz=263,SNR=11
**SKT Skwentna** 83.03 28 IAmb IAmb 20 11 06.5
comp=Z,18nm,1.0s
**SKT Skwentna** 83.03 28 P P 20 11 05.9 +0.3
baz=265,SNR=8.1
**KBZ Khabaz** 83.04 313 P P 20 11 05.6 -0.4
comp=Z,1.5nm,0.9s,baz=34,slow=3.6,SNR=2.2
comp=Z,1.5nm,0.9s
**KIV Kislovodsk** 83.20 314 *e*P P 20 11 04.4 -2.6
KIV pmax pmax
comp=Z,4.0nm,1.0s
**BRSE Bradley Lake S** 83.21 30 P P 20 11 07.0 +0.4
baz=266
**B22K Teshekpuk Lake** 83.28 20 P P 20 11 07.3 +0.7
baz=262
**D22K Ayikyak River** 83.33 21 P P 20 11 07.6 +0.6
baz=263
**F22K John River** 83.35 23 P P 20 11 07.1 -0.1
baz=263
**SUA Susitna One** 83.35 29 P P 20 11 07.9 +0.5
baz=265,SNR=11
**BPAW Bear Paw Mtn.** 83.47 26 P P 20 11 08.1 +0.2
baz=265,SNR=8.3
**H22K Ishtalitna Cre** 83.48 24 P P 20 11 08.4 +0.5
baz=264,SNR=11
**G22K Bettles** 83.54 23 P P 20 11 09.0 +0.9
baz=264
**E22K Anaktuvuk Pass** 83.56 22 IAmb IAmb 20 11 11.1
comp=Z,23nm,1.2s
**E22K Anaktuvuk Pass** 83.56 22 P P 20 11 08.9 +0.7
baz=264
**MAW Mawson** 83.57 200 P P 20 11 08.6 +0.5
comp=Z,5.3nm,1.0s,baz=48,slow=7.7,SNR=9.5
comp=Z,5.3nm,1.0s
**GURO Guroymak-BITLI** 83.59 308 IAmb IAmb 20 11 10.9
comp=Z,9.9nm,0.8s
**MLY Manley** 83.67 25 P P 20 11 09.2 +0.4
MLY IAmb IAmb 20 11 12.6
comp=Z,15nm,1.0s
**MLY Manley** 83.67 25 P P 20 11 09.3 +0.4
baz=265,SNR=17
**M22K Willow** 83.67 28 P P 20 11 09.7 +0.8
baz=266
**RC01 Rabbit Creek A** 83.81 29 P P 20 11 09.8 +0.2
baz=266,SNR=7.5
**SEW Seward** 83.88 30 P P 20 11 10.8 +0.8
baz=267
**D23K Nanushuk River** 84.06 21 P P 20 11 11.7 +1.0
baz=265
**VRH Novokhopyorsk** 84.07 321 *e*P P 20 11 10.0 -1.1
VRH pmax pmax
comp=Z,19nm,0.6s
**COLD Coldfoot** 84.08 23 P P 20 11 11.6 +0.7
baz=265,SNR=8.7
**G23K Bananza Creek** 84.11 23 IAmb IAmb 20 11 15.4
comp=Z,19nm,1.1s
**G23K Bananza Creek** 84.11 23 P P 20 11 11.6 +0.5
baz=265,SNR=14
**PMR Palmer** 84.13 29 P P 20 11 11.9 +0.7
baz=267
**C23K Itkillik River** 84.17 20 P P 20 11 12.1 +0.9
baz=264
**SBA Scott Base** 84.17 172 P P 20 11 12.2 +1.2
**SBA Scott Base** 84.17 172 P P 20 11 12.3 +1.2
SBA pmax pmax
comp=Z,8.0nm,1.2s
**H23K Yukon River** 84.23 24 IAmb IAmb 20 11 15.8
comp=Z,10nm,0.8s
**H23K Yukon River** 84.23 24 P P 20 11 12.5 +0.8
baz=266,SNR=13
**GHO Glory Hole Cre** 84.24 28 IAmb IAmb 20 12 20.6
comp=Z,18nm,1.0s
**I23K Minto, Yukon-K** 84.26 25 IAmb IAmb 20 11 14.1
comp=Z,19nm,1.1s
**I23K Minto, Yukon-K** 84.26 25 P P 20 11 12.2 +0.4
baz=266,SNR=9.6
**NEA2 Nenana** 84.34 26 IAmb IAmb 20 11 16.4
comp=Z,9.4nm,1.0s
**NEA2 Nenana** 84.34 26 P P 20 11 13.3 +1.0
baz=266,SNR=8.0
**MCK McKinley** 84.35 26 P P 20 11 12.7 +0.3
baz=267,SNR=5.4
**RND Reindeer** 84.37 27 IAmb IAmb 20 11 13.4
comp=Z,11nm,1.0s
**E23K Chandalar** 84.37 22 P P 20 11 12.6 +0.1
baz=266,SNR=11
**TOLK Toolik Lake Re** 84.43 21 P P 20 11 13.1 +0.4
baz=266,SNR=7.9
**KNK Knik Glacier** 84.44 29 P P 20 11 13.0 +0.2
baz=267,SNR=8.9
**WAT1 Susitna Watana** 84.47 27 P P 20 11 13.4 +0.4
baz=267
**PWL Port Wells** 84.48 29 P P 20 11 13.2 +0.2
baz=268,SNR=11
**SML Sawmill** 84.52 28 P P 20 11 13.7 +0.4
baz=267,SNR=12
**D24K Happy Valley** 84.74 21 P P 20 11 14.9 +0.7
baz=266,SNR=8.0
**WRH Wood River Hil** 84.76 26 IAmb IAmb 20 11 15.4
comp=Z,11nm,1.2s
**E24K Your Creek** 84.80 22 IAmb IAmb 20 11 27.4
comp=Z,14nm,1.4s
**E24K Your Creek** 84.80 22 P P 20 11 15.3 +0.7
baz=267
**C24K Franklin Bluff** 84.82 20 P P 20 11 15.3 +0.8
baz=266
**WAT6 Susitna Watana** 84.83 28 P P 20 11 15.6 +0.6
baz=268
**CCB Clear Creek Bu** 84.89 26 IAmb IAmb 20 11 33.0
comp=Z,14nm,1.4s
**P23K Montague Islan** 84.91 30 P P 20 11 15.8 +0.6
baz=268
**H24K Noodor Dome** 84.92 24 P P 20 11 15.6 +0.4
baz=267,SNR=6.4
**F24K Squaw Lake** 84.99 23 P P 20 11 16.2 +0.6
baz=267,SNR=8.2
**SCM Sheep Creek Mo** 85.00 28 P P 20 11 16.7 +1.0
baz=268,SNR=6.5
**DHY Denali Highway** 85.02 27 P P 20 11 16.4 +0.5
baz=268
**POKR Poker Plat Res** 85.07 25 P P 20 11 16.8 +0.9
baz=268
**GLI Glacier Island** 85.08 29 P P 20 11 17.5 +1.4
baz=269,SNR=6.5
**G24K Hadweenzic Riv** 85.12 23 P P 20 11 17.1 +1.0
baz=268,SNR=7.7
**PPT2 Papeete2** 85.13 108 *e*LR LR 20 37 58.6
comp=Z,138nm,24.2s
PPT2 *e*LR LR 20 38 04.7
comp=Z,162nm,26.8s
**HDA Harding Lake** 85.25 26 P P 20 11 16.9 +0.1
baz=268
**ILAR Eielson Array** 85.29 25 P P 20 11 16.4 -0.7
comp=Z,1.7nm,0.9s,baz=254,slow=5.7,SNR=11
comp=Z,1.7nm,0.9s
**M24K Tolsona, Glenn** 85.55 28 P P 20 11 18.8 +0.3
baz=269,SNR=6.7
**VORD Divnogorie** 85.59 321 *e*P P 20 11 16.5 -2.3
VORD pmax pmax
comp=Z,20nm,1.0s
**D25K Kavik River** 85.62 21 P P 20 11 19.3 +0.6
baz=269
**VORR Voronezh** 85.65 321 *e*P P 20 11 18.2 -0.8
VORR pmax pmax
comp=Z,52nm,0.5s
**G25K Bearman Lake** 85.66 23 P P 20 11 19.6 +0.8
baz=269
**VSR Storozhevoye** 85.67 321 *e*P P 20 11 15.7 -3.5
VSR pmax pmax
comp=Z,20nm,0.9s
**EYAK Cordova Ski Ar** 85.74 30 P P 20 11 20.2 +0.9
baz=270
**K24K Donnelly Dome** 85.75 26 P P 20 11 20.3 +0.9
baz=270
**H25L Birch Creek** 85.77 24 P P 20 11 20.2 +0.8
baz=269
**TBI Tubuai** 85.79 114 *e*LR LR 20 37 58.7
comp=Z,818nm,27.2s
TBI *e*LR LR 20 38 25.3
comp=Z,922nm,27.0s
**LPSR Galich'ya Gora** 85.81 322 *e*P P 20 11 17.5 -2.4
LPSR pmax pmax
comp=Z,50nm,0.8s
**F25K Christian Rive** 85.86 23 P P 20 11 20.2 +0.4
baz=269
**PAX Paxson** 85.89 27 P P 20 11 20.3 +0.2
baz=270
**J25K Salcha River,** 85.94 26 P P 20 11 20.8 +0.4
baz=270
**RIDG Independent Ri** 86.17 26 P P 20 11 22.2 +0.7
baz=270
**BMAR Burnt Mountain** 86.26 23 P P 20 11 22.4 +0.6
**N25K Chitina, Valde** 86.30 29 IAmb IAmb 20 11 48.1
comp=Z,18nm,1.2s
**N25K Chitina, Valde** 86.30 29 P P 20 11 22.2 0.0
baz=271
**BMRM Bremner River** 86.30 29 P P 20 11 22.5 +0.3
baz=271
**KAIM Kayak Island** 86.41 30 P P 20 11 22.6 -0.1
baz=271
**F26K Sheenjek River** 86.43 22 P P 20 11 22.7 0.0
baz=271
**SCRK Sand Creek** 86.55 26 P P 20 11 22.3 -1.2
baz=271
**G26K Porcupine Rive** 86.58 23 P P 20 11 23.4 +0.1
baz=271
**GLB Gilahina Butte** 86.68 29 IAmb IAmb 20 11 27.3
comp=Z,13nm,1.1s
**J26L Joseph Creek** 86.72 26 IAmb IAmb 20 11 56.9
comp=Z,21nm,1.9s
**J26L Joseph Creek** 86.72 26 P P 20 11 24.4 +0.1
baz=272
**I26K Coal Creek Min** 86.87 25 P P 20 11 24.6 -0.3
baz=272
**ANN Anapa** 86.97 315 *e*P P 20 11 24.6 -1.1
ANN pmax pmax
comp=Z,43nm,1.0s
**OBN Obninsk** 87.16 325 P P 20 11 26.6 +0.3
comp=Z,24nm,0.6s,baz=105,slow=3.5,SNR=6.6
comp=Z,24nm,0.6s
**OBN Obninsk** 87.16 325 *e*P P 20 11 24.6 -1.8
OBN *e**PP pP 20 11 29.9 +0.2
OBN *e* 20 14 49.5
OBN *e*PPP PPP 20 16 41.6
OBN *e*S **SKSac** 20 21 52.5 -1.0
OBN *e*SS **SS** 20 27 45.7 -3.3
OBN *e*SSS SSS 20 31 22.8
OBN pmax pmax
comp=Z,64nm,1.7s
OBN MLR MLR
comp=Z,113nm,19.0s
**OBN Obninsk** 87.16 325 P P 20 11 26.4 0.0
comp=Z,39nm,0.8s
**E27K Coleen River** 87.38 22 P P 20 11 26.7 -0.6
baz=273
**K27K Chicken** 87.39 26 P P 20 11 27.2 -0.2
baz=273
**G27K Doyon Strip** 87.42 23 P P 20 11 27.6 +0.1
baz=273
**LVZ Lovozero** 87.49 338 P P 20 11 27.1 -0.7
**I27K Kandik River** 87.50 25 P P 20 11 27.7 -0.3
baz=273
**H27K Steamboat Moun** 87.51 24 P P 20 11 27.5 -0.5
baz=273
**L27K Beaver Creek,** 87.55 27 P P 20 11 28.3 +0.1
baz=273
**D27M Malcolm River** 87.55 21 P P 20 11 28.1 0.0
baz=274
**M27K Edge Creek, AK** 87.56 28 P P 20 11 28.2 -0.2
baz=273
**EGAK Eagle** 87.74 25 P P 20 11 29.1 0.0
baz=274
**CTG Chitna Glacier** 87.89 29 P P 20 11 30.1 0.0
baz=274
**F28M Old Crow** 88.06 22 P P 20 11 30.3 -0.2
baz=275
**E28M Babbage River** 88.11 21 IAmb IAmb 20 11 32.5
comp=Z,12nm,1.4s
**E28M Babbage River** 88.11 21 P P 20 11 30.3 -0.5
baz=275
**I28M Miner Creek** 88.21 25 P P 20 11 31.7 +0.3
baz=275
**O28M Mount Upton** 88.47 29 P P 20 11 32.6 -0.3
baz=275
**DAWY Dawson** 88.56 26 P P 20 11 33.3 +0.2
baz=275
**E29M Blow River** 88.73 22 P P 20 11 33.9 +0.2
baz=276
**KIBK Kibwezi** 88.76 268 IAmb IAmb 20 11 36.6
comp=Z,13nm,0.9s
**H29M Whitestone** 88.78 24 P P 20 11 34.2 +0.2
baz=276
**G29M Pine Creek** 88.85 23 P P 20 11 34.1 -0.2
baz=276
**I29M Ogilvie Camp,** 88.90 25 P P 20 11 34.8 +0.3
baz=276
**MMAI Mount Meron Ar** 89.14 303 P P 20 11 35.7 -0.7
comp=Z,9.8nm,1.0s,baz=66,slow=8.3,SNR=8.9
comp=Z,9.8nm,1.0s
**M29M Somme Creek** 89.14 28 P P 20 11 35.3 -0.5
baz=276
**O29M Mount Kennedy** 89.31 30 P P 20 11 36.3 -0.4
baz=276
**K29M Barlow Dome** 89.41 26 P P 20 11 36.8 -0.3
baz=277
**EPYK Eagle Plains** 89.43 24 IAmb IAmb 20 11 58.8
comp=Z,15nm,1.2s
**EPYK Eagle Plains** 89.43 24 P P 20 11 37.6 +0.6
baz=278
**KMBO Kilima Mbogo** 89.47 269 P P 20 11 37.8 -0.8
KMBO IAmb IAmb 20 11 40.7
comp=Z,16nm,1.1s
**KMBO Kilima Mbogo** 89.47 269 P P 20 11 38.2 -0.4
comp=Z,9.2nm,1.0s,baz=32,slow=5.8,SNR=18
comp=Z,9.2nm,1.0s
**KMBO Kilima Mbogo** 89.47 269 *i*P P 20 11 39.5 +0.9
KMBO pmax pmax
comp=Z,8.0nm,0.9s
**F30M Barrier River** 89.62 22 P P 20 11 38.3 +0.4
baz=278
**P29M Windy Craggy** 89.80 30 P P 20 11 39.1 +0.2
baz=277
**N30M Aishikik Lake** 89.90 29 P P 20 11 39.9 +0.5
baz=277
**BR104 Keskin Array S** 90.07 310 P P 20 11 40.3 -0.5
comp=Z,7.4nm,0.9s,comp=Z,55nm
**BR131 Keskin Array S** 90.07 310 IAmb IAmb 20 11 42.5
comp=Z,9.3nm,0.9s
**BRTR Keskin Array B** 90.07 310 P P 20 11 38.7 -2.1
**BRTR Keskin Array B** 90.07 310 P P 20 11 39.6 -1.1
comp=Z,6.7nm,1.0s,baz=132,slow=5.1,SNR=28
comp=Z,6.7nm,1.0s
**BRTR Keskin Array B** 90.07 310 *i*P P 20 11 39.9 -0.9
BRTR pmax pmax
comp=Z,7.0nm,1.0s
**BR106 Keskin Array S** 90.09 310 P P 20 11 39.5 -1.3
comp=Z,7.5nm,1.0s,comp=Z,48nm
**BR105 Keskin Array S** 90.09 310 P P 20 11 40.4 -0.5
comp=Z,8.1nm,1.0s,comp=Z,60nm
**P30M Million Dollar** 90.13 30 P P 20 11 40.2 -0.3
baz=277
**G31M Satah River** 90.31 23 P P 20 11 40.8 -0.3
baz=280
**INK Inuvik** 90.35 21 P P 20 11 41.4 +0.2
baz=281
**F31M Tsiigehtchic** 90.42 22 P P 20 11 41.8 +0.2
baz=280
**N31M Braeburn, Yuko** 90.52 28 P P 20 11 42.1 -0.2
baz=278
**ARCES ARCESS Array B** 90.58 340 P P 20 11 40.9 -1.5
**ARCES ARCESS Array B** 90.58 340 P P 20 11 40.9 -1.5
comp=Z,5.7nm,0.6s,baz=83,slow=7.0,SNR=28
comp=Z,5.7nm,0.6s
**SPITS Spitsbergen Ar** 90.63 349 P P 20 11 41.8 -0.6
comp=Z,4.2nm,0.7s,baz=101,slow=6.9,SNR=2.4
SPITS LR LR 20 56 26.9
comp=Z,175nm,21.9s,baz=148,slow=38
comp=Z,4.2nm,0.7s
**CSS Mathiatis** 90.71 305 P P 20 11 43.9 +0.2
comp=Z,22nm,1.0s
**WHY Whitehorse** 91.07 29 P P 20 11 44.6 -0.3
baz=279
**LODK Lodwar** 91.08 273 P P 20 11 46.0 +0.1
**FARO Faro, Yukon** 91.53 27 IAmb IAmb 20 11 48.5
comp=Z,7.1nm,0.8s
**R32K Eaglecrest** 91.64 31 P P 20 11 47.1 -0.4
baz=280
**FINES FINESS Array B** 91.95 332 P P 20 11 47.8 -1.0
comp=Z,3.7nm,1.0s,baz=55,slow=7.2,SNR=6.9
FINES LR LR 20 56 18.4
comp=Z,284nm,21.3s,baz=245,slow=38
comp=Z,3.7nm,1.0s
**FINES FINESS Array B** 91.95 332 *i*P P 20 11 47.7 -1.0
FINES pmax pmax
comp=Z,2.0nm,0.7s
**AK09 Malin Array Si** 91.95 321 P P 20 11 48.3 -0.7
**AK08 Malin Array Si** 91.97 321 P P 20 11 48.0 -1.1
**AK10 Malin Array Si** 91.97 321 P P 20 11 48.0 -1.1
**AKASG Malin Array Be** 91.98 321 P P 20 11 47.2 -2.0
comp=Z,2.6nm,0.8s,baz=71,slow=4.3,SNR=6.8
comp=Z,2.6nm,0.8s
**AKASG Malin Array Be** 91.98 321 *i*P P 20 11 47.4 -1.8
AKASG pmax pmax
comp=Z,3.0nm,0.7s
**AKBB Malin Array Si** 91.98 321 P P 20 11 47.8 -1.4
**AK01 Malin Array Si** 91.99 321 P P 20 11 47.7 -1.5
**KIEV Kiev** 91.99 321 P P 20 11 47.8 -1.4
comp=Z,23nm,1.7s
**PURM Purcari** 92.11 317 ⇑P P 20 11 48.2 -1.7
**PURM Purcari** 92.11 317 P P 20 11 48.8 -1.0
**MMPY Sheldon Lake,** 92.40 27 P P 20 11 50.4 -0.6
baz=282
**Q32M Nakina River** 92.67 31 P P 20 11 51.8 -0.7
baz=282
**U33K Whale Pass** 92.76 33 P P 20 11 52.2 -0.4
baz=281
**KIS Kishinev** 92.76 317 P P 20 11 51.8 -1.1
comp=Z,42nm,0.5s
**MI28 Mi28,Pidlybu** 92.92 321 P P 20 11 52.3 -1.2
**LUBAR Lubar, Ukraine** 93.02 320 P P 20 11 52.7 -1.3
**R33M Jennings River** 93.24 30 P P 20 11 54.5 -0.5
baz=283
**C36M Paulatuk** 93.40 20 P P 20 11 54.7 -0.6
baz=289
**QSPA South Pole Qui** 93.47 180 P P 20 11 56.3 +0.5
comp=Z,3.3nm,1.1s,baz=291,slow=6.5,SNR=17
comp=Z,3.3nm,1.1s
**S34M Telegraph Cree** 93.47 32 P P 20 11 55.8 -0.1
baz=282
**NDNU Novodnistrovsk** 93.49 319 P P 20 11 55.0 -1.2
**CFR Carcaliu** 93.50 316 ⇑P P 20 11 54.8 -1.6
**CFR Carcaliu** 93.50 316 P P 20 11 54.7 -1.6
**TAOE Nuku Hiva Isla** 93.69 99 *e*LR LR 20 41 55.8
comp=Z,144nm,22.9s
**V35K Ketchikan** 93.75 34 P P 20 11 56.6 -0.6
baz=282
**DLBC Dease Lake** 93.93 31 P P 20 11 57.4 -0.7
baz=283
**RNPP9 Sopachiv** 93.94 322 P P 20 11 57.3 -0.9
**RNPP8 Varash** 93.97 322 P P 20 11 57.8 -0.6
**TGTN Hyland Airport** 94.03 28 P P 20 11 58.2 -0.3
baz=285
**KMPD K-Podol'skiy** 94.09 319 P PcP 20 11 57.8 -1.6
KMPD P P 20 11 57.2 -1.7
**T35M Bob Quinn** 94.14 32 P P 20 11 59.0 -0.1
baz=283
**TESR Tescani** 94.31 317 ⇑P P 20 11 59.6 -0.4
**TESR Tescani** 94.31 317 P P 20 11 59.5 -0.6
comp=Z,24nm,1.2s
**VRI Vrincioaia** 94.37 316 ⇓P P 20 11 59.7 -0.6
**VRI Vrincioaia** 94.37 316 P P 20 11 59.7 -0.6
**VRI Vrincioaia** 94.37 316 P P 20 12 00.4 +0.1
comp=Z,8.2nm,1.1s
**PLOR Plostina** 94.42 316 ⇑P P 20 11 59.7 -0.9
**PLOR Plostina** 94.42 316 P P 20 11 59.7 -0.9
**PLOR3 Plostina Array** 94.42 316 P P 20 12 00.0 -0.7
comp=Z,8.1nm,1.0s
**ISR Istrita** 94.62 316 P P 20 12 01.5 -0.1
comp=Z,14nm,0.8s
**NEHR Nehoiu** 94.74 316 ⇑P P 20 12 01.8 -0.3
**MLR Muntele Rosu** 94.97 316 IAmb IAmb 20 12 03.8
comp=Z,8.0nm,0.9s
**MLR Muntele Rosu** 94.97 316 ⇑P P 20 12 02.7 -0.6
**MLR Muntele Rosu** 94.97 316 P P 20 12 02.7 -0.6
**MLR Muntele Rosu** 94.97 316 P P 20 12 01.9 -1.4
**BURAR Bucovina Array** 95.08 318 P P 20 12 03.2 -0.5
BURAR IAmb IAmb 20 12 04.8
comp=Z,5.7nm,0.8s
**BURAR Bucovina Array** 95.08 318 ⇑P P 20 12 02.3 -1.4
**BURAR Bucovina Array** 95.08 318 P P 20 12 02.2 -1.4
**BUR08 Bucovina Ar. S** 95.08 318 IAmb IAmb 20 12 04.6
comp=Z,6.4nm,0.8s
**MORS Morshin** 95.64 320 P P 20 12 05.5 -0.6
**ARR Arges** 95.90 316 ⇑P P 20 12 05.6 -1.9
**SHIU Shidnytsya** 95.97 320 P P 20 12 08.1 +0.5
**LOT Lotru** 96.48 316 ⇑P P 20 12 09.2 -0.9
**MARR Marisel-Cluj** 96.67 318 ⇑P P 20 12 10.0 -0.9
**HOLU Holmets** 96.75 320 P P 20 12 10.9 -0.2
**DRGR** 96.92 318 ⇑P P 20 12 11.2 -0.9
**DRGR** 96.92 318 P P 20 12 11.1 -0.9
**GZR Gura Zlata** 97.18 316 ⇑P P 20 12 12.4 -0.8
**GZR Gura Zlata** 97.18 316 P P 20 12 12.4 -0.8
**CRVS Cervenica-Dubn** 97.25 320 *e*P Pdif 20 12 14.5 +1.0
**CRVS Cervenica-Dubn** 97.25 320 *e*P Pdif 20 12 14.5 +1.0
**HERR Herculane** 97.54 316 ⇑P P 20 12 13.5 -1.2
**SURR Surduc** 97.55 317 ⇓P P 20 12 14.2 -0.6
**SIRR Siria** 97.75 317 ⇑P P 20 12 13.7 -1.9
**BZS Buzias** 97.92 317 ⇑P P 20 12 15.3 -1.2
**BZS Buzias** 97.92 317 P P 20 12 15.2 -1.2
**HFS Hagfors** 98.14 332 P P 20 12 15.2 -1.9
comp=Z,1.5nm,0.7s,baz=62,slow=7.0,SNR=1.5
comp=Z,1.5nm,0.7s
**NB2 NORSAR Subarra** 98.91 334 P P 20 12 18.7 -1.9
comp=Z,24nm,1.4s,baz=67,slow=4.4
**NB2 NORSAR Subarra** 98.91 334 P P 20 12 18.7 -1.9
baz=67,slow=4.4
**NOA NORSAR Array B** 98.91 334 P P 20 12 19.1 -1.5
comp=Z,2.7nm,0.9s,baz=67,slow=4.6,SNR=4.7
NOA LR LR 21 01 57.4
comp=Z,142nm,20.6s,baz=190,slow=38
comp=Z,2.7nm,0.9s
**LSZ Lusaka** 99.09 255 P Pdif 20 12 21.7 -0.8
LSZ IAmb IAmb 20 12 22.7
comp=Z,4.0nm,0.8s
**LSZ Lusaka** 99.09 255 P Pdif 20 12 21.7 -0.8
LSZ pmax pmax
comp=Z,4.0nm,0.8s
**MORH Mrgy, Hungar** 99.78 318 P Pdif 20 12 24.6 -0.2
**R11B Troy Canyon, C** 109.11 47 P PKiKP 20 17 10.1 -0.9
baz=291
**TPFO Pinon Flats** 110.05 52 P PKiKP 20 17 11.7 -1.1
baz=289
**214A Organ Pipe Nat** 113.49 53 P PKiKP 20 17 18.4 -0.8
baz=291
**W18A Petrified Fore** 114.68 49 P PKiKP 20 17 20.9 -0.8
baz=294
**N23A Red Feather La** 114.80 42 P PKiKP 20 17 20.5 -1.3
baz=299
**TXAR Lajitas Array** 121.76 52 PKP PKPdf 20 17 33.7 -1.6
comp=Z,0.2nm,0.4s,baz=345,slow=2.8,SNR=2.8
**TORD Torodi Ar. Bea** 122.90 288 PKPdf 20 17 36.7 -1.0
**TORD Torodi Ar. Bea** 122.90 288 PKP PKPdf 20 17 37.3 -0.4
comp=Z,2.7nm,0.8s,baz=35,slow=2.7,SNR=14
**S39A Bolivar** 124.70 38 PKPdf 20 17 39.7 -0.9
**R40A Maddies Statio** 124.96 37 PKPdf 20 17 40.2 -0.8
**P49A Miami Univ. Ec** 128.31 31 P PKPdf 20 17 45.9 -1.5
baz=319
**M53A WI Miller and** 128.76 26 P PKPdf 20 17 47.4 -0.9
baz=324
**O53A New Philadelph** 129.47 28 PKPpre 20 17 38.0
**O53A New Philadelph** 129.47 28 P PKPdf 20 17 48.7 -0.9
baz=323
**P52A Corning** 129.52 29 P PKPdf 20 17 48.5 -1.2
baz=322
**L61B Northampton** 130.97 19 P PKPdf 20 17 51.7 -0.7
baz=334
**W52A Murphy** 132.02 34 PKPdf 20 17 53.5 -1.1
**PAULI Pauline** 133.38 33 PKPpre 20 17 47.3
**PLCA Paso Flores** 139.87 160 PKP PKPdf 20 18 08.4 -0.8
comp=Z,2.7nm,0.8s,baz=165,slow=3.8,SNR=3.9
**TRQA Tornquist** 144.77 168 PKPab 20 18 15.5 -1.1
**TRQA Tornquist** 144.77 168 PKIKP PKPab 20 18 15.5 -1.1
**MT13 San Alfonso** 146.06 154 PKPab 20 18 22.4 +0.8
**CO02 Combarbal** 147.86 151 PKPdf 20 18 23.0 -0.4
**CO03 El Pedregal** 148.31 151 PKPdf 20 18 23.9 -0.2
**ZON Zonda** 148.64 154 PKPbc 20 18 28.5 +0.2
**ZON Zonda** 148.64 154 PKP2 PKPbc 20 18 28.5 +0.2
**CPUP Villa Florida** 157.04 171 PKP PKPdf 20 18 35.4 -1.5
comp=Z,0.6nm,0.4s,baz=284,slow=4.2,SNR=3.0
CPUP PKPab PKPab 20 19 07.6 +0.7
comp=Z,1.0nm,0.5s,baz=223,slow=3.5,SNR=3.9
**LPAZ La Paz** 160.73 132 PKP PKPdf 20 18 42.6 +0.3

comp=Z,0.8nm,0.5s,baz=270,slow=5.1,SNR=5.5
LPAZ PKPab **PKPab** **20 19 25.4 +1.3**
comp=Z,0.5nm,0.5s,baz=259,slow=13,SNR=1.7

**IDC 22 20:26:22.6±9.6, 16°07'S×173°48'W, h0km, mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=424.0km s-min=41.0km az=139.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **49.62** | **257** | P | P | 20 35 16.0 | -0.2 |
| | 0.2nm,0.4s,baz=94,slow=7.0,SNR=5.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **49.83** | **252** | P | P | 20 35 17.8 | -0.1 |
| | 1.3nm,0.3s,baz=89,slow=7.9,SNR=35 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **83.11** | **11** | P | P | 20 38 49.9 | 0.0 |
| | 0.3nm,0.6s,baz=206,slow=5.7,SNR=2.6 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*IDC **22** 20:26:27.9±0.4, 52°.75S×27°.72E, h0km, mb5.0/24, mbtmp5.0/24, MS5.0/47, Error ellipse: s-maj=14.9km s-min=9.0km az=88.0*

*MOS **22** 20:26:28.3±1.3, 52°.72S×27°.79E, h11km, mb5.6/24, MS5.1/15, Error ellipse: s-maj=19.6km s-min=8.8km az=86.9*

*NEIC **22** 20:26:29.2, 52°.77S×27°.88E, h10km*

*NEIC **22** 20:26:29±1.9, 52°.73S±0°.09×27°.9E±0°.2, h10km±1km, mb5.5/122, Ms_20 5.3/432, Mwb5.6/20, Mww5.6/22, Error ellipse: s-maj=18.9km s-min=15.8km az=100.0, Moment Tensor Solution. Moment tensor: Scale 10^17 Nm; Mrr1.04; Mθθ2.62; Mϕϕ-3.66; Mrθ0.12; Mθϕ1.02; Mrϕ0.10; Fault plane solution: Mo3.43000×10^17 NP1:ϕs35.95000°, δ87.62000°, λ176.21000°. NP2:ϕs126.10000°, δ86.21000°, λ2.38000°. Principal axes: T 2.7924, Plg4.0000°, Azm351.0000°; N 1.0314, Plg86.0000°, Azm184.0000°; P -3.8238, Plg1.0000°, Azm81.0000°;*

*NEIC **22** 20:26:29.1, 52°.74S×27°.87E, h20km*

*NEIC **22** 20:26:29.1, 52°.74S×27°.87E, h20km, Moment Tensor Solution. Duration: 3s6 Moment tensor: Scale 10^17 Nm; Mrr0.04; Mθθ2.55; Mϕϕ-2.59; Mrθ-2.37; Mθϕ0.64; Mrϕ0.26; Fault plane solution: Mo3.42000×10^17 NP1: ϕs308.51000°, δ80.58000°, λ34.28000°. NP2: ϕs212.14000°, δ56.24000°, λ168.65000°. Principal axes: T 4.0025, Plg31.0000°, Azm176.0000°; N -1.1729, Plg55.0000°, Azm322.0000°; P -2.8296, Plg16.0000°, Azm76.0000°;*

*NEIC **22** 20:26:29.1, 52°.74S×27°.87E, h20km*

*GCMT **22** 20:26:32.0±0.1, 52°.62S±0°.01×28°.13E±0°.01, h15km, MW5.6/145, Moment Tensor Solution. s133, c239; s145, c282; Duration: 1s6 Moment tensor: Scale 10^17 Nm; Mrr0.19±.04; Mθθ3.17±.03; Mϕϕ-3.36±.03; Mrθ0.34±.11; Mθϕ0.55±.03; Mrϕ0.13±.11; Best double couple: Mo3.33200×10^17 NP1:ϕs40.00000°, δ87.00000°, λ174.00000°. NP2:ϕs130.00000°, δ84.00000°, λ3.00000°. Principal axes: T 3.2550, Plg6.0000°, Azm355.0000°; N 0.1510, Plg83.0000°, Azm190.0000°; P -3.4090, Plg2.0000°, Azm85.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 22 20:26:29.5±0.2, 52°.81S±0°.04×27°.80E±0°.06, h10km, n721, σ1°81/512, mb5.5/149, MS5.2/272, 8C-11D, South of Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H04S2** | **CROZET ISLANDS** | **16.61** | **79** | T | T | 20 47 28.0 | |
| | baz=241,slow=75,SNR=139 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **16.61** | **79** | T | T | 20 47 43.7 | |
| | baz=241,slow=75,SNR=112 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **16.62** | **79** | T | T | 20 47 55.9 | |
| | baz=241,slow=75,SNR=122 | | | | | | |
| **CRZF** | **Crozet Islands** | **16.80** | **77** | | **Pn** | **20 30 21.9** | **-2.8** |
| CRZF | | | | IAmb | IAmb | 20 30 24.8 | |
| | comp=Z,182nm,0.6s | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **16.89** | **76** | T | T | 20 47 46.2 | |
| | baz=241,slow=76,SNR=18 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **16.89** | **76** | T | T | 20 47 46.2 | |
| | baz=241,slow=76,SNR=13 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **16.91** | **76** | T | T | 20 47 45.3 | |
| | baz=241,slow=76,SNR=22 | | | | | | |
| **NMMU** | **Nelson Mandela** | **18.86** | **355** | *e*P | **P** | **20 30 45.5** | **-4.2** |
| **ELIM** | **Elim** | **19.09** | **339** | *e*P | **Pn** | **20 30 52.7** | **-0.3** |
| **ELIB** | **Princess Elisa** | **19.31** | **184** | *d*P | **Pn** | **20 30 56.1** | **+0.7** |
| | comp=Z,328nm,0.8s | | | | | | |
| ELIB | | | | *d*S | **S** | **20 34 33.1** | **+0.4** |
| **NVL** | **N'lazarevskaya** | **19.41** | **196** | *e*P | **Pn** | **20 30 56.0** | **-0.5** |
| NVL | | | | *e*S | **Sn** | **20 34 25.0** | **-8.9** |
| NVL | | | | pmax | pmax | | |
| | comp=Z,161nm,0.9s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,3μm,16.0s | | | | | | |
| **GRHM** | **Grahamstown, E** | **19.55** | **356** | | **P** | **20 30 55.7** | **-1.5** |
| GRHM | | | | IAmb | IAmb | 20 30 59.5 | |
| | comp=Z,337nm,1.1s | | | | | | |
| **GRHM** | **Grahamstown, E** | **19.55** | **356** | *e*P | **P** | **20 30 55.4** | **-1.9** |
| **SOE** | **Somerset East** | **20.15** | **355** | P | **P** | **20 31 01.5** | **-2.3** |
| SOE | | | | IAMs_20 | IAMs_20 | 20 36 34.8 | |
| | comp=Z,14μm,21.0s | | | | | | |
| **SOE** | **Somerset East** | **20.15** | **355** | *e*P | **P** | **20 31 01.1** | **-2.7** |
| SOE | | | | IAmb | IAmb | 20 31 08.5 | |
| | comp=Z,200nm,1.2s | | | | | | |
| **MATJ** | **Matjiesfontein** | **20.21** | **342** | *e*P | **P** | **20 31 03.7** | **-0.8** |
| MATJ | | | | IAmb | IAmb | 20 31 10.9 | |
| | comp=Z,1μm,1.4s | | | | | | |
| **CER** | **Ceres** | **20.38** | **339** | ⇑*i*P | Pn | 20 31 07.6 | -0.7 |
| CER | | | | IAmb | IAmb | 20 31 09.7 | |
| | comp=Z,405nm,1.2s | | | | | | |
| **ROOI** | **Rooidraai Farm** | **20.53** | **350** | *e*P | **P** | **20 31 06.4** | **-1.6** |
| ROOI | | | | IAmb | IAmb | 20 31 14.4 | |
| | comp=Z,268nm,0.8s | | | | | | |
| **MERW** | **Merweville** | **20.63** | **345** | *e*P | **P** | **20 31 07.3** | **-1.8** |
| MERW | | | | IAmb | IAmb | 20 31 12.8 | |
| | comp=Z,2μm,2.1s | | | | | | |
| **GRAF** | **Camdeboo Natio** | **20.66** | **352** | *e*P | **P** | **20 31 07.8** | **-1.5** |
| GRAF | | | | IAmb | IAmb | 20 31 13.8 | |
| | comp=Z,157nm,0.7s | | | | | | |
| **PRTV** | **Porterville,We** | **20.71** | **339** | *e*P | **P** | **20 31 10.0** | **+0.1** |
| PRTV | | | | IAmb | IAmb | 20 31 15.2 | |
| | comp=Z,444nm,1.2s | | | | | | |
| **GRAN** | **Grantham** | **20.90** | **347** | *e*P | **P** | **20 31 10.9** | **-1.1** |
| GRAN | | | | IAmb | IAmb | 20 31 19.8 | |
| | comp=Z,170nm,0.7s | | | | | | |
| **SUR** | **Sutherland** | **21.03** | **343** | | **P** | **20 31 12.3** | **-1.2** |
| **SUR** | **Sutherland** | **21.03** | **343** | IAMs_20 | IAMs_20 | 20 37 52.1 | |
| | comp=Z,11μm,20.0s | | | | | | |
| **SUR** | **Sutherland** | **21.03** | **343** | *e*P | **P** | **20 31 13.4** | **-0.2** |
| SUR | | | | IAmb | IAmb | 20 31 19.1 | |
| | comp=Z,2μm,1.9s | | | | | | |
| **SUR** | **Sutherland** | **21.03** | **343** | P | **P** | **20 31 13.0** | **-0.5** |
| | comp=Z,155nm,0.9s,baz=157,slow=10,SNR=57 | | | | | | |
| SUR | | | | S | **S** | **20 35 02.5** | **-5.2** |
| | comp=Z,6.6nm,0.5s,baz=162,slow=8.2,SNR=1.9 | | | | | | |
| SUR | | | | LR | LR | 20 37 32.6 | |
| | comp=Z,12μm,21.2s,baz=172,slow=32 | | | | | | |
| | comp=Z,155nm,0.9s | | | | | | |
| **SUR** | **Sutherland** | **21.03** | **343** | P | **P** | **20 31 12.6** | **-0.9** |
| SUR | | | | P | **P** | **20 31 12.6** | **-0.9** |
| SUR | | | | S | Sn | 20 35 12.0 | -1.8 |
| SUR | | | | S | Sn | 20 35 12.0 | -1.8 |
| **BFON** | **Badsfontein, M** | **21.21** | **350** | *e*P | **P** | **20 31 14.1** | **-1.3** |
| BFON | | | | IAmb | IAmb | 20 31 19.8 | |
| | comp=Z,2μm,1.9s | | | | | | |
| **BRAK** | **Brakfontein** | **21.31** | **348** | *e*P | **P** | **20 31 15.4** | **-1.0** |
| BRAK | | | | IAmb | IAmb | 20 31 20.3 | |
| | comp=Z,6μm,3.0s | | | | | | |
| **FRAZ** | **Fraserburg** | **21.38** | **345** | *e*P | **P** | **20 31 16.1** | **-1.1** |
| FRAZ | | | | IAmb | IAmb | 20 31 24.0 | |
| | comp=Z,516nm,1.4s | | | | | | |
| **CVNA** | **Calvinia** | **22.10** | **341** | *e*P | **P** | **20 31 24.4** | **-0.5** |
| CVNA | | | | IAmb | IAmb | 20 31 29.0 | |
| | comp=Z,155nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **22.20** | **201** | ⇓P | **P** | **20 31 27.1** | **+1.5** |
| | comp=Z,6μm,0.8s | | | | | | |
| TROLL | | | | ⇓S | Sn | 20 35 39.1 | -2.0 |
| | comp=N,373μm,8.2s | | | | | | |
| **KSTD** | **Kokstad** | **22.20** | **3** | *e*P | **P** | **20 31 24.2** | **-1.8** |
| KSTD | | | | IAmb | IAmb | 20 31 39.5 | |
| | comp=Z,113nm,0.8s | | | | | | |
| **HVD** | **Gariep Dam** | **22.25** | **355** | *e*P | **P** | **20 31 25.1** | **-1.5** |
| HVD | | | | IAmb | IAmb | 20 31 33.0 | |
| | comp=Z,310nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **22.42** | **145** | P | **P** | **20 31 28.4** | **+0.5** |
| | comp=Z,61nm,0.9s,baz=293,slow=12,SNR=66 | | | | | | |
| MAW | | | | S | **S** | **20 35 28.5** | **-5.3** |
| | comp=Z,59nm,0.7s,baz=211,slow=9.2,SNR=5.3 | | | | | | |
| MAW | | | | LR | LR | 20 38 33.1 | |
| | comp=Z,3μm,21.1s,baz=300,slow=32 | | | | | | |
| | comp=Z,61nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **23.21** | **204** | P | **P** | **20 31 36.4** | **+0.1** |
| SNAA | | | | IAmb | IAmb | 20 32 01.3 | |
| | comp=Z,212nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **23.21** | **204** | ⇑*i*P | **P** | **20 31 37.6** | **+1.3** |
| SNAA | | | | IAmb | IAmb | 20 31 41.8 | |
| | comp=Z,8μm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **23.21** | **204** | ⇓P | **P** | **20 31 38.2** | **+2.0** |
| | comp=Z,886nm,0.8s | | | | | | |
| SNAA | | | | ⇑S | **S** | **20 35 51.5** | **+3.7** |
| | comp=Z,1μm,2.1s | | | | | | |
| **SNAA** | **Sanae** | **23.21** | **204** | P | **P** | **20 31 37.3** | **+1.1** |
| | comp=Z,118nm,0.7s,baz=76,slow=8.9,SNR=218 | | | | | | |
| SNAA | | | | S | **S** | **20 35 53.1** | **+5.3** |
| | comp=Z,3.4nm,0.8s,baz=322,slow=16,SNR=1.3 | | | | | | |
| SNAA | | | | LR | LR | 20 38 43.7 | |
| | comp=Z,7μm,21.5s,baz=45,slow=32 | | | | | | |
| | comp=Z,118nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **23.21** | **204** | *c*i*c*P | **P** | **20 31 37.8** | **+1.6** |
| **PMBG** | **Pietermaritzbu** | **23.36** | **6** | *e*P | **P** | **20 31 35.4** | **-2.6** |
| PMBG | | | | IAmb | IAmb | 20 31 40.8 | |
| | comp=Z,3μm,2.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **24.00** | **208** | ⇓P | **P** | **20 31 45.8** | **+2.0** |
| | comp=Z,193nm,0.8s,baz=58,slow=7.4 | | | | | | |
| VNA2 | | | | ⇓S | | **20 36 05.4** | **+5.0** |
| | comp=Z,0.9nm,0.1s,baz=97,slow=17 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **24.11** | **209** | ⇓P | **P** | **20 31 47.5** | **+2.6** |
| | comp=Z,859nm,0.9s | | | | | | |
| **KOMG** | **Komaggas** | **24.21** | **338** | *e*P | **P** | **20 31 46.0** | **-0.2** |
| KOMG | | | | IAmb | IAmb | 20 31 49.6 | |
| | comp=Z,1μm,2.3s | | | | | | |
| **BOSA** | **Boshof** | **24.24** | **355** | P | **P** | **20 31 45.0** | **-1.6** |
| **BOSA** | **Boshof** | **24.24** | **355** | *e*P | **P** | **20 31 45.1** | **-1.6** |
| BOSA | | | | ⇑*i*P | **pP** | **20 31 45.3** | **-2.6** |
| BOSA | | | | IAmb | IAmb | 20 31 48.2 | |
| | comp=Z,179nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **24.24** | **355** | P | **P** | **20 31 45.1** | **-1.6** |
| | comp=Z,103nm,0.8s,baz=181,slow=10,SNR=40 | | | | | | |
| BOSA | | | | LR | LR | 20 39 32.6 | |
| | comp=Z,10μm,20.1s,baz=163,slow=32 | | | | | | |
| | comp=Z,103nm,0.8s | | | | | | |
| **SNKL** | **Senekal, Frees** | **24.51** | **360** | *e*P | **P** | **20 31 48.3** | **-0.8** |
| SNKL | | | | IAmb | IAmb | 20 32 02.6 | |
| | comp=Z,138nm,1.0s | | | | | | |
| **KEIM** | **Keimoes** | **24.61** | **345** | *e*P | **P** | **20 31 47.9** | **-2.0** |
| KEIM | | | | IAmb | IAmb | 20 31 52.4 | |
| | comp=Z,2μm,2.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **24.80** | **208** | ⇓P | **P** | **20 31 52.7** | **+1.5** |
| | comp=Z,97nm,0.9s | | | | | | |
| VNA3 | | | | ⇓S | **S** | **20 36 18.7** | **+5.4** |
| | comp=Z,0.0nm,0.1s | | | | | | |
| **AUGR** | **Augrabies** | **24.82** | **344** | *e*P | P | 20 31 44.2 | -7.5 |
| AUGR | | | | IAmb | IAmb | 20 31 55.0 | |
| | comp=Z,2μm,2.9s | | | | | | |
| **UPI** | **Upington** | **24.90** | **346** | *e*P | **P** | **20 31 51.7** | **-0.9** |
| UPI | | | | IAmb | IAmb | 20 32 04.7 | |
| | comp=Z,182nm,1.1s | | | | | | |
| **NWCL** | **Newcastle** | **25.09** | **4** | *e*P | **P** | **20 31 53.8** | **-0.5** |
| NWCL | | | | IAmb | IAmb | 20 31 58.4 | |
| | comp=Z,308nm,1.2s | | | | | | |
| **ARMS** | **Ukamas** | **25.46** | **343** | *e*P | P | 20 31 42.4 | -15 |
| ARMS | | | | IAmb | IAmb | 20 32 00.3 | |
| | comp=Z,401nm,1.9s | | | | | | |
| **POGA** | **Pongola** | **25.60** | **8** | P | **P** | **20 31 57.3** | **-1.5** |
| POGA | | | | IAmb | IAmb | 20 32 00.1 | |
| | comp=Z,81nm,0.9s | | | | | | |
| **POGA** | **Pongola** | **25.60** | **8** | *e*P | **P** | **20 31 56.8** | **-2.0** |
| POGA | | | | IAmb | IAmb | 20 31 59.8 | |
| | comp=Z,90nm,1.0s | | | | | | |
| **SWZ** | **Schweizer** | **25.66** | **355** | *e*P | **P** | **20 31 57.4** | **-2.2** |
| SWZ | | | | IAmb | IAmb | 20 32 12.0 | |
| | comp=Z,370nm,1.3s | | | | | | |
| **PRYS** | **Parys** | **25.86** | **359** | *e*P | **P** | **20 31 59.5** | **-1.8** |
| PRYS | | | | IAmb | IAmb | 20 32 05.0 | |
| | comp=Z,790nm,2.1s | | | | | | |
| **TEMBE** | **Tembe Elephant** | **25.97** | **9** | *e*P | **P** | **20 32 00.9** | **-1.2** |
| TEMBE | | | | IAmb | IAmb | 20 32 06.4 | |
| | comp=Z,2μm,1.9s | | | | | | |
| **WDLM** | **Western Deep L** | **26.35** | **359** | *e*P | **P** | **20 32 04.7** | **-1.2** |
| WDLM | | | | IAmb | IAmb | 20 32 07.9 | |
| | comp=Z,459nm,1.7s | | | | | | |
| **CRLN** | **Carolina, Mapu** | **26.83** | **4** | *e*P | **P** | **20 32 08.6** | **-1.5** |
| CRLN | | | | IAmb | IAmb | 20 32 13.9 | |
| | comp=Z,152nm,1.1s | | | | | | |
| **HRAO** | **HartRAO** | **26.88** | **360** | *e*P | **P** | **20 32 08.2** | **-2.3** |
| **TSWA** | **Tswaing Meteor** | **27.35** | **1** | *e*P | **P** | **20 32 13.9** | **-0.8** |
| **DULL** | **Dullstroom, Mp** | **27.46** | **5** | *e*P | **P** | **20 32 14.0** | **-2.0** |
| DULL | | | | IAmb | IAmb | 20 32 18.9 | |
| | comp=Z,184nm,1.2s | | | | | | |
| **AUSN** | **Aus** | **27.50** | **337** | *e*P | **P** | **20 32 15.2** | **-1.0** |
| AUSN | | | | IAmb | IAmb | 20 32 18.4 | |
| | comp=Z,377nm,2.1s | | | | | | |
| **RUST** | **Rust De Winter** | **27.54** | **1** | *e*P | **P** | **20 32 14.8** | **-1.6** |
| RUST | | | | IAmb | IAmb | 20 32 30.7 | |
| | comp=Z,223nm,1.5s | | | | | | |
| **LBTB** | **Lobatse** | **27.80** | **356** | P | **P** | **20 32 16.6** | **-2.2** |
| LBTB | | | | IAmb | IAmb | 20 32 24.2 | |
| | comp=Z,113nm,1.4s | | | | | | |
| **LBTB** | **Lobatse** | **27.80** | **356** | *e*P | **P** | **20 32 16.2** | **-2.6** |
| LBTB | | | | IAmb | IAmb | 20 32 19.5 | |
| | comp=Z,396nm,2.0s | | | | | | |
| **LBTB** | **Lobatse** | **27.80** | **356** | LR | LR | 20 41 49.4 | |
| | comp=Z,8μm,19.4s,baz=182,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **27.80** | **356** | P | **P** | **20 32 16.6** | **-2.2** |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,113nm,1.4s | | | | | | |
| **NHAM** | **Northam, North** | **27.86** | **359** | *e*P | **P** | **20 32 15.8** | **-3.4** |
| NHAM | | | | IAmb | IAmb | 20 33 10.2 | |
| | comp=Z,52nm,1.1s | | | | | | |
| **PILG** | **Pilgrimsrest,** | **27.92** | **6** | *e*P | **P** | **20 32 18.5** | **-1.5** |
| PILG | | | | IAmb | IAmb | 20 32 22.9 | |
| | comp=Z,128nm,1.0s | | | | | | |
| **HOED** | **Hoedspruit, Li** | **28.45** | **6** | *e*P | **P** | **20 32 22.6** | **-1.9** |
| HOED | | | | IAmb | IAmb | 20 32 26.2 | |
| | comp=Z,970nm,2.2s | | | | | | |
| **WTBG** | **Waterberg Wild** | **28.57** | **2** | *e*P | **P** | **20 32 23.7** | **-2.0** |
| WTBG | | | | IAmb | IAmb | 20 32 27.5 | |
| | comp=Z,267nm,1.9s | | | | | | |
| **LEPH** | **Lephalale, Lim** | **28.91** | **360** | *e*P | **P** | **20 32 27.2** | **-1.4** |
| LEPH | | | | IAmb | IAmb | 20 32 30.6 | |
| | comp=Z,93nm,1.0s | | | | | | |
| **MTLB** | **Matlabas, Limp** | **28.96** | **359** | *e*P | **P** | **20 32 26.9** | **-2.1** |
| MTLB | | | | IAmb | IAmb | 20 32 31.1 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **MOPA** | **Mopani** | **29.37** | **7** | *e*P | **P** | **20 32 32.0** | **-0.7** |
| MOPA | | | | IAmb | IAmb | 20 32 35.3 | |
| | comp=Z,265nm,1.0s | | | | | | |
| **MPHEP** | **Siloam, Limpop** | **29.91** | **4** | *e*P | **P** | **20 32 36.1** | **-1.4** |
| MPHEP | | | | IAmb | IAmb | 20 32 39.4 | |
| | comp=Z,375nm,2.1s | | | | | | |
| **CRAIL** | **Swartwater, Li** | **29.96** | **1** | *e*P | **P** | **20 32 36.5** | **-1.5** |
| **MUSN** | **Musina, Limpop** | **30.51** | **4** | *e*P | **P** | **20 32 39.9** | **-2.9** |
| MUSN | | | | IAmb | IAmb | 20 32 44.7 | |
| | comp=Z,559nm,1.9s | | | | | | |
| **FOMA** | **Nahampoana Res** | **31.34** | **35** | P | **P** | **20 32 48.3** | **-1.8** |
| FOMA | | | | IAmb | IAmb | 20 32 54.0 | |
| | comp=Z,64nm,0.8s | | | | | | |
| **FOMA** | **Nahampoana Res** | **31.34** | **35** | P | **P** | **20 32 49.6** | **-0.4** |
| **MATP** | **Matopo** | **32.33** | **1** | LR | LR | 20 43 55.2 | |
| | comp=Z,2μm,21.4s,baz=189,slow=32 | | | | | | |
| **BLWY** | **Bulawayo** | **32.61** | **1** | *e*P | **P** | **20 32 58.2** | **-3.2** |
| BLWY | | | | IAmb | IAmb | 20 33 03.1 | |
| | comp=Z,329nm,0.9s | | | | | | |
| **CHIPN** | **CHIPINGE** | **32.73** | **8** | *e*P | **P** | **20 32 59.8** | **-2.5** |
| **BELA** | **Belgrano 2** | **33.27** | **200** | P | **P** | **20 33 06.5** | **+0.1** |
| BELA | | | | IAmb | IAmb | 20 33 09.3 | |
| | comp=Z,61nm,0.8s | | | | | | |
| BELA | | | | IAMs_20 | IAMs_20 | 20 44 52.3 | |
| | comp=Z,7μm,22.0s | | | | | | |
| **VOI** | **Vohitsoka** | **34.12** | **33** | P | **P** | **20 33 13.8** | **-0.8** |
| VOI | | | | IAmb | IAmb | 20 33 25.0 | |
| | comp=Z,125nm,1.4s | | | | | | |
| **VOI** | **Vohitsoka** | **34.12** | **33** | *e*P | **P** | **20 33 14.5** | **0.0** |
| **VOI** | **Vohitsoka** | **34.12** | **33** | P | **P** | **20 33 14.2** | **-0.3** |
| | SNR=7.5 | | | | | | |
| **TSUM** | **Tsumeb** | **34.47** | **343** | P | **P** | **20 33 16.2** | **-1.4** |
| **TSUM** | **Tsumeb** | **34.47** | **343** | *e*P | **P** | **20 33 16.9** | **-0.6** |
| TSUM | | | | IAmb | IAmb | 20 33 19.4 | |
| | comp=Z,105nm,0.8s | | | | | | |
| **TSUM** | **Tsumeb** | **34.47** | **343** | LR | LR | 20 45 42.6 | |
| | comp=Z,8μm,21.0s,baz=163,slow=34 | | | | | | |
| **KRI** | **Karoi** | **35.93** | **3** | *e*P | **P** | **20 33 27.1** | **-3.0** |
| **ABPO** | **Ambohimpanom** | **36.96** | **32** | P | **P** | **20 33 39.1** | **+0.1** |
| ABPO | | | | IAmb | IAmb | 20 33 43.7 | |
| | comp=Z,61nm,0.9s | | | | | | |
| **ABPO** | **Ambohimpanom** | **36.96** | **32** | *e*P | **P** | **20 33 39.3** | **+0.3** |
| ABPO | | | | IAmb | IAmb | 20 33 43.4 | |
| | comp=Z,56nm,0.9s | | | | | | |
| **ABPO** | **Ambohimpanom** | **36.96** | **32** | P | **P** | **20 33 39.1** | **+0.1** |
| ABPO | | | | pmax | pmax | | |
| | comp=Z,61nm,1.0s | | | | | | |
| **OPO** | **Ambohidratompo** | **37.37** | **31** | LR | LR | 20 44 57.0 | |
| | comp=Z,2μm,19.4s,baz=334,slow=30 | | | | | | |
| **QSPA** | **South Pole Qui** | **37.41** | **180** | P | **P** | **20 33 41.4** | **-1.0** |
| **QSPA** | **South Pole Qui** | **37.41** | **180** | IAMs_20 | IAMs_20 | 20 48 30.6 | |
| | comp=Z,5μm,20.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **37.41** | **180** | P | **P** | **20 33 42.2** | **-0.2** |
| | comp=Z,103nm,0.8s,baz=250,slow=3.8,SNR=393 | | | | | | |
| QSPA | | | | S | **S** | **20 39 28.4** | **-1.9** |
| | comp=Z,4.1nm,0.9s,baz=48,slow=23,SNR=1.6 | | | | | | |
| QSPA | | | | LR | LR | 20 48 41.8 | |
| | comp=Z,5μm,19.9s,baz=250,slow=36 | | | | | | |
| | comp=Z,103nm,0.8s | | | | | | |
| **LSZ** | **Lusaka** | **37.45** | **1** | P | **P** | **20 33 40.9** | **-2.2** |
| LSZ | | | | IAmb | IAmb | 20 33 44.7 | |
| | comp=Z,252nm,2.0s | | | | | | |
| LSZ | | | | IAMs_20 | IAMs_20 | 20 46 49.4 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **LSZ** | **Lusaka** | **37.45** | **1** | *e*P | **P** | **20 33 41.8** | **-1.3** |
| LSZ | | | | IAmb | IAmb | 20 33 44.4 | |
| | comp=Z,415nm,2.0s | | | | | | |
| **LSZ** | **Lusaka** | **37.45** | **1** | P | **P** | **20 33 42.7** | **-0.4** |
| LSZ | | | | P | **P** | **20 33 42.7** | **-0.4** |
| LSZ | | | | S | **S** | **20 39 34.4** | **+2.9** |
| LSZ | | | | S | **S** | **20 39 34.4** | **+2.9** |
| **LSZ** | **Lusaka** | **37.45** | **1** | P | **P** | **20 33 40.9** | **-2.2** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,252nm,2.0s | | | | | | |
| LSZ | | | | MLR | MLR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **CASY** | **Casey** | **40.73** | **142** | P | **P** | **20 34 09.8** | **-0.1** |
| CASY | | | | IAmb | IAmb | 20 34 12.8 | |
| | comp=Z,89nm,0.8s | | | | | | |
| **KSMZ** | **Kasama** | **42.61** | **5** | *i*P | **P** | **20 34 24.0** | **-2.0** |
| **SMAI** | **San Martin Ant** | **44.17** | **212** | P | **P** | **20 34 39.0** | **+1.2** |
| **PMSA** | **Palmer Station** | **44.80** | **217** | LR | LR | 20 49 11.4 | |
| | comp=Z,2μm,21.1s,baz=119,slow=30 | | | | | | |
| **PMSA** | **Palmer Station** | **44.80** | **217** | *e*P | **P** | **20 34 47.4** | **+4.6** |
| **SBA** | **Scott Base** | **47.18** | **169** | P | **P** | **20 35 02.9** | **+1.3** |
| **SBA** | **Scott Base** | **47.18** | **169** | IAMs_20 | IAMs_20 | 20 54 09.7 | |
| | comp=Z,3μm,19.0s | | | | | | |
| **SBA** | **Scott Base** | **47.18** | **169** | P | **P** | **20 35 02.9** | **+1.3** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,111nm,0.8s | | | | | | |
| SBA | | | | MLR | MLR | | |
| | comp=Z,3μm,19.0s | | | | | | |
| **KIBK** | **Kibwezi** | **51.02** | **13** | IAMs_20 | IAMs_20 | 20 54 01.2 | |
| | comp=Z,4μm,22.0s | | | | | | |
| **KIBK** | **Kibwezi** | **51.02** | **13** | P | **P** | **20 35 34.1** | **+2.4** |
| **MBAR** | **Mbarara** | **52.08** | **4** | P | **P** | **20 35 39.6** | **-0.1** |
| MBAR | | | | IAmb | IAmb | 20 35 45.4 | |
| | comp=Z,124nm,2.0s | | | | | | |
| **MBAR** | **Mbarara** | **52.08** | **4** | P | **P** | **20 35 42.0** | **+2.2** |
| MBAR | | | | P | **P** | **20 35 42.0** | **+2.2** |
| MBAR | | | | S | **S** | **20 43 02.6** | **-1.2** |
| MBAR | | | | S | **S** | **20 43 02.6** | **-1.2** |
| **MBAR** | **Mbarara** | **52.08** | **4** | *i*P | **P** | **20 35 39.7** | **-0.1** |
| **KMBO** | **Kilima Mbogo** | **52.10** | **12** | P | **P** | **20 35 38.7** | **-1.3** |
| **KMBO** | **Kilima Mbogo** | **52.10** | **12** | IAMs_20 | IAMs_20 | 20 55 17.6 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **52.10** | **12** | *i*P | **P** | **20 35 39.8** | **-0.2** |
| | SNR=5.9 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **52.10** | **12** | P | **P** | **20 35 40.0** | **0.0** |
| | comp=Z,7.3nm,1.1s,baz=199,slow=4.3,SNR=12 | | | | | | |
| KMBO | | | | S | **S** | **20 43 06.5** | **+2.4** |
| | comp=Z,0.6nm,0.5s,baz=235,slow=23,SNR=2.1 | | | | | | |
| KMBO | | | | LR | LR | 20 55 19.8 | |
| | comp=Z,3μm,21.4s,baz=173,slow=33 | | | | | | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **52.10** | **12** | P | **P** | **20 35 42.5** | **+2.5** |
| KMBO | | | | P | **P** | **20 35 42.5** | **+2.5** |
| KMBO | | | | S | **S** | **20 43 09.3** | **+5.1** |
| KMBO | | | | S | **S** | **20 43 09.3** | **+5.1** |
| **MSEY** | **Mahe Island** | **53.12** | **35** | IAMs_20 | IAMs_20 | 20 53 19.3 | |
| | comp=Z,2μm,21.0s | | | | | | |
| **MSEY** | **Mahe Island** | **53.12** | **35** | P | **P** | **20 35 48.2** | **+0.9** |
| **H10S2** | **ASCENSION HYDR** | **55.56** | **306** | T | T | 21 36 17.5 | |
| | baz=149,slow=74,SNR=348 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **55.58** | **306** | T | T | 21 36 18.7 | |
| | baz=71,slow=74,SNR=305 | | | | | | |
| **MG05** | **Puerto Natales** | **56.34** | **227** | P | **P** | **20 36 10.2** | **0.0** |
| MG05 | | | | IAmb | IAmb | 20 36 31.4 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **LODK** | **Lodwar** | **56.38** | **9** | P | **P** | **20 36 11.4** | **+0.4** |
| LODK | | | | IAmb | IAmb | 20 36 17.1 | |
| | comp=Z,147nm,2.0s | | | | | | |
| LODK | | | | IAMs_20 | IAMs_20 | 21 01 36.4 | |
| | comp=Z,2μm,18.0s | | | | | | |
| **LODK** | **Lodwar** | **56.38** | **9** | P | **P** | **20 36 13.2** | **+2.3** |
| | SNR=18 | | | | | | |
| **H08S1** | **Diego Carcia H** | **57.80** | **55** | T | T | 21 38 45.4 | |
| | baz=210,slow=76 | | | | | | |
| **H08S2** | **Diego Garcia H** | **57.80** | **55** | T | T | 21 38 46.4 | |
| | baz=210 | | | | | | |
| **H08S3** | **Diego Garcia H** | **57.82** | **55** | T | T | 21 38 50.3 | |
| | baz=210,slow=76 | | | | | | |
| **DGAR** | **Diego Garcia** | **57.98** | **55** | P | **P** | **20 36 23.2** | **+0.9** |
| **GO08** | **Villa O'Higgin** | **58.64** | **230** | P | **P** | **20 36 26.9** | **+0.4** |
| **H01W2** | **Cape Leeuwin H** | **61.02** | **110** | T | T | 21 43 39.4 | |
| | baz=224,slow=75,SNR=7.7 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **61.03** | **110** | T | T | 21 43 39.3 | |
| | baz=224,slow=75,SNR=5.8 | | | | | | |
| **H01W

**TIC Toumodi 65.45 324↑** *e*PKP1 **P** **20 37 11.5 -1.1**
comp=Z,13nm,0.5s
**KLBR Kellerberrin 65.50 110** P **P** **20 37 14.6 +1.7**
comp=Z,80nm,0.8s
**MORW Morawa 66.39 107** P **P** **20 37 16.2 -2.4**
MORW IAmb IAmb 20 37 32.5
comp=Z,23nm,0.9s
**TRCB Terra Rica 66.47 263** IAmb IAmb 20 37 25.6
comp=Z,26nm,0.7s
**NBLA Lagarto - SE 66.62 283** *e*P **P** **20 37 20.0 -0.1**
**CPUP Villa Florida 66.62 257** P **P** **20 37 18.9 -1.2**
CPUP IAmb IAmb 20 37 42.3
comp=Z,22nm,0.8s
**CPUP Villa Florida 66.62 257** P **P** **20 37 19.2 -0.8**
comp=Z,9.9nm,0.7s,baz=121,slow=5.8,SNR=16
CPUP LR LR 21 01 59.3
comp=Z,484nm,19.3s,baz=142,slow=32
comp=Z,9.9nm,0.7s
**BI02 San Fabin de 66.70 240** P **P** **20 37 20.1 -0.5**
BI02 IAmb IAmb 20 37 45.8
comp=Z,29nm,1.0s
**NBAN Anadia - AL 66.78 285** *e*P **P** **20 37 20.7 -0.5**
**NBCA Caruaru-PE 67.78 286** *e*P **P** **20 37 28.3 +0.7**
**LMEL Las Melosas 68.27 243** IAmb IAmb 20 38 06.0
comp=Z,30nm,1.1s
**BO04 La Punta 68.38 242** IAmb IAmb 20 38 01.6
comp=Z,42nm,1.1s
**MT08 Bocatoma Ro 68.48 243** IAmb IAmb 20 37 38.5
comp=Z,30nm,0.9s
**MT09 Talagante 68.75 242** IAmb IAmb 20 37 38.8
comp=Z,40nm,1.4s
**MT01 Popeta 68.82 242** IAmb IAmb 20 37 50.6
comp=Z,22nm,0.8s
**PEL Peldehue 69.07 243** IAmb IAmb 20 37 41.3
comp=Z,39nm,1.0s
**BDFB Brasilia 69.13 272** IAmb IAmb 20 38 03.4
comp=Z,29nm,1.0s
**BDFB Brasilia 69.13 272** P **P** **20 37 35.4 -0.7**
comp=Z,7.1nm,0.6s,baz=116,slow=4.7,SNR=11
BDFB LR LR 21 01 58.6
comp=Z,1µm,20.0s,baz=142,slow=31
comp=Z,7.1nm,0.6s
**VA05 Santo Domingo 69.17 242** IAmb IAmb 20 37 44.9
comp=Z,33nm,0.8s
**MT02 Curacav 69.22 242** IAmb IAmb 20 38 01.4
comp=Z,66nm,1.4s
**VA03 San Esteban 69.29 243** IAmb IAmb 20 38 13.7
comp=Z,47nm,1.1s
**TORD Torodi Ar. Bea 69.43 333** P **P** **20 37 36.1 -1.5**
TORD IAmb IAmb 20 37 42.3
comp=Z,38nm,0.9s
**TORD Torodi Ar. Bea 69.43 333** P **P** **20 37 36.7 -0.9**
comp=Z,16nm,0.6s,baz=169,slow=5.9,SNR=91
TORD LR LR 21 01 54.8
comp=Z,976nm,21.3s,baz=159,slow=31
TORD PKP2bc **P'P'df** **21 05 44.2 +4.3**
comp=Z,1.1nm,1.0s,baz=326,slow=2.2,SNR=4.4
comp=Z,16nm,0.6s
**RCBR Riachuelo 69.65 288** P **P** **20 37 39.2 0.0**
RCBR IAmb IAmb 20 37 44.9
comp=Z,30nm,1.0s
**RCBR Riachuelo 69.65 288** IAMs_20 IAMs_20 21 02 21.0
comp=Z,1µm,19.0s
**RCBR Riachuelo 69.65 288** LR LR 21 02 59.6
comp=Z,504nm,18.0s,baz=152,slow=32
**RCBR Riachuelo 69.65 288** P **P** **20 37 39.2 0.0**
RCBR pmax pmax
comp=Z,30nm,1.0s
RCBR MLR MLR
comp=Z,1µm,19.0s
**RCBR Riachuelo 69.65 288** *e*P **P** **20 37 39.7 +0.5**
**MEEK Meekatharra 69.72 107** P **P** **20 37 38.2 -1.3**
comp=Z,44nm,1.0s
**SDBA SAO DESIDERIO 69.76 276** *e*P **P** **20 37 39.9 0.0**
**VA06 Catapilco 69.84 243** IAmb IAmb 20 38 17.6
comp=Z,22nm,0.5s
**AQDB Aquidauana 70.08 262** IAMs_20 IAMs_20 21 02 27.9
comp=Z,2µm,21.0s
**CO01 Juntas del Tor 71.17 245** IAmb IAmb 20 37 55.4
comp=Z,43nm,0.9s
**NBPB Pedra_Branca-C 72.02 285** *e*P **P** **20 37 53.8 +0.2**
**AC05 El Transito 72.15 246** IAMs_20 IAMs_20 21 03 11.3
comp=Z,1µm,20.0s
**LCO Las Campanas 72.25 245** P **P** **20 37 54.8 -0.4**
LCO IAmb IAmb 20 38 11.0
comp=Z,34nm,0.9s
**LCO Las Campanas 72.25 245** P **P** **20 37 54.8 -0.4**
LCO pmax pmax
comp=Z,34nm,0.9s
**ABTO Aybut 73.28 25** P **P** **20 38 01.9 +1.0**
**RBK Rabkut 73.66 26** P **P** **20 38 03.5 +0.4**
**WHFO Wadi Hawf 73.94 26** P **P** **20 38 05.3 +0.5**
WHFO P **P** **20 38 05.3 +0.5**
**SNDB Serra Nova Dou 73.97 271** *e*P **P** **20 38 06.1 +1.0**
**ARPS Mount Arapiles 74.03 130** P **P** **20 38 06.5 +1.2**
comp=Z,67nm,0.9s
**DMTO DMTO 74.06 27** P **P** **20 38 05.8 +0.4**
**SMTB Santa Maria do 74.16 276** *e*P **P** **20 38 07.1 +0.8**
**MBWA Marble Bar 74.57 105** P **P** **20 38 07.9 -0.7**
**DOK Doka 74.70 26** P **P** **20 38 09.7 +0.5**
DOK P **P** **20 38 09.7 +0.5**
DOK S **S** **20 47 47.0 +1.8**
DOK S **S** **20 47 47.0 +1.8**
**PALK Pallekele 74.73 55** P **P** **20 38 08.8 -0.8**
**PALK Pallekele 74.73 55** IAMs_20 IAMs_20 21 01 54.0
comp=Z,2µm,22.0s
**PALK Pallekele 74.73 55** LR LR 21 02 48.6
comp=Z,986nm,21.3s,baz=319,slow=29
**PALK Pallekele 74.73 55** P **P** **20 38 10.3 +0.7**
**PALK Pallekele 74.73 55** *i* P **P** **20 38 08.2 -1.4**
PALK pmax pmax
comp=Z,28nm,0.9s
**TOO Toolangi 75.03 133** P **P** **20 38 11.1 0.0**
**TOO Toolangi 75.03 133** P **P** **20 38 12.3 +1.2**
comp=Z,36nm,1.4s
**TOO Toolangi 75.03 133** P **P** **20 38 11.1 0.0**
TOO pmax pmax
comp=Z,39nm,1.2s
**PTLB Pontes e Lacer 76.02 263** IAMs_20 IAMs_20 21 06 04.3
comp=Z,1µm,20.0s
**PTLB Pontes e Lacer 76.02 263** *e*P **P** **20 38 17.5 +0.6**
**LVC Limon Verde 76.22 251** P **P** **20 38 18.5 0.0**
**LVC Limon Verde 76.22 251** LR LR 21 07 30.6
comp=Z,429nm,21.0s,baz=160,slow=32
**LVC Limon Verde 76.22 251** P **P** **20 38 18.5 0.0**
LVC pmax pmax
comp=Z,18nm,0.9s
**WRKA Warakurna 76.46 113** P **P** **20 38 19.2 -0.2**
comp=Z,36nm,1.5s
**SIV San Ignacio 76.76 261** LR LR 21 07 44.3
comp=Z,2µm,19.3s,baz=151,slow=32
**DQM DQM 76.90 29** P **P** **20 38 22.2 +0.5**
DQM P **P** **20 38 22.2 +0.5**
**PB09 IPOC Station P 77.05 251** IAmb IAmb 20 38 59.2
comp=Z,61nm,1.5s
**BBTS Babate 77.27 316** LR LR 21 08 03.1
comp=Z,2µm,18.2s,baz=32,slow=32
**RAYN Ar Rayn 77.56 17** P **P** **20 38 25.4 0.0**
RAYN IAmb IAmb 20 38 30.0
comp=Z,60nm,1.4s
**RAYN Ar Rayn 77.56 17** *i* P **P** **20 38 26.7 +1.3**
SNR=18
**RAYN Ar Rayn 77.56 17** P **P** **20 38 25.4 0.0**
RAYN pmax pmax
comp=Z,60nm,1.5s
**CLDB Colider 77.56 268** *e*P **P** **20 38 25.3 -0.4**
**KASI Kota Agung 77.58 83** P **P** **20 38 25.7 -0.1**
**CNJI Cibinong 77.76 86** P **P** **20 38 23.9 -2.9**
comp=Z,51nm,1.3s
**STKA Stephens Creek 77.92 127** P **P** **20 38 27.8 +0.3**
**STKA Stephens Creek 77.92 127** P **P** **20 38 28.0 +0.4**
**STKA Stephens Creek 77.92 127** P **P** **20 38 27.1 -0.4**
comp=Z,12nm,0.9s,baz=205,slow=5.3,SNR=13
comp=Z,12nm,0.9s
**STKA Stephens Creek 77.92 127** *i* P **P** **20 38 26.6 -0.9**
**MHTO MHTO 78.02 29** P **P** **20 38 28.2 +0.2**
SNR=12
MHTO P **P** **20 38 28.2 +0.2**
SNR=12
**DBJI Dramaga 78.13 85** P **P** **20 38 29.7 +0.8**
comp=Z,80nm,0.8s
**VILB Vilhena 78.60 264** IAmb IAmb 20 38 45.6
comp=Z,51nm,1.0s
VILB IAMs_20 IAMs_20 21 07 13.4
comp=Z,1µm,22.0s
**MZR Muzera 78.73 24** *i* P **P** **20 38 32.2 +0.3**
SNR=14
**MZR Muzera 78.73 24** P **P** **20 38 32.2 +0.3**
SNR=8.7
MZR P **P** **20 38 32.2 +0.3**
SNR=8.7
**KPJI Karang Pucung 78.84 87** P **P** **20 38 34.1 +1.3**
comp=Z,48nm,0.8s
**UMZA Um Al Zommool 78.89 26** P **P** **20 38 32.8 +0.1**
UMZA P **P** **20 38 32.8 +0.1**
UMZA S **S** **20 48 32.4 +1.7**
UMZA S **S** **20 48 32.4 +1.7**
**YNG Young 79.05 133** P **P** **20 38 35.0 +1.2**
comp=Z,125nm,1.0s
**SLWR Sila 79.33 22** P **P** **20 38 35.6 +0.5**
SLWR P **P** **20 38 35.6 +0.5**
SLWR S **S** **20 48 39.1 +3.7**
SLWR S **S** **20 48 39.1 +3.7**
**JMDO Jabal Madar 79.37 28** P **P** **20 38 35.8 +0.4**
JMDO P **P** **20 38 35.8 +0.4**
JMDO S **S** **20 48 39.8 +3.8**
JMDO S **S** **20 48 39.8 +3.8**
**BSY Bisya 79.47 27** P **P** **20 38 36.1 +0.2**
SNR=8.0
BSY P **P** **20 38 36.1 +0.2**
SNR=8.0
**JLN Jalan Bani Buh 79.55 30** P **P** **20 38 36.4 0.0**
SNR=6.4
JLN P **P** **20 38 36.4 0.0**
SNR=6.4
JLN S **S** **20 48 41.4 +3.6**
JLN S **S** **20 48 41.4 +3.6**
**MZWR Madinat Zayed 79.56 24** P **P** **20 38 36.5 +0.1**
MZWR P **P** **20 38 36.5 +0.1**
MZWR S **SKSac** **20 48 55.1 +2.4**
MZWR S **SKSac** **20 48 55.1 +2.4**
**SMRA Abu-Samra 79.79 21** P **P** **20 38 41.0 +3.4**
SNR=9.5
**PMBI Palembang 79.81 81** IAMs_20 IAMs_20 21 09 17.2
comp=Z,1µm,18.0s
**ARQ Araqi 79.84 27** P **P** **20 38 38.5 +0.6**
SNR=5.1
ARQ P **P** **20 38 38.5 +0.6**
SNR=5.1
**WBK Wadi Bani Khal 79.85 29** P **P** **20 38 38.7 +0.7**
SNR=6.8
WBK P **P** **20 38 38.7 +0.7**
SNR=6.8
**TRNA Turayna 79.87 22** P **P** **20 38 38.4 +0.4**
SNR=5.3
**LTZ Lake Taylor 79.98 154** P **P** **20 38 39.1 +0.4**
LTZ IAmb IAmb 20 39 11.0
comp=Z,151nm,1.8s
**SMDO Samad 80.01 28** P **P** **20 38 38.6 -0.3**
SNR=12
SMDO P **P** **20 38 38.6 -0.3**
SNR=12
**PWJI Pagerwojo 80.04 90** P **P** **20 38 39.9 +0.6**
comp=Z,36nm,0.8s
**BKNI Bangkinang 80.18 76** P **P** **20 38 41.0 +0.9**
**HOQ Hoqain 80.30 27** P **P** **20 38 40.1 -0.3**
SNR=19
HOQ P **P** **20 38 40.1 -0.3**
SNR=19
**ALNE Al Ain 80.32 26** *i* P **P** **20 38 40.7 +0.3**
SNR=30
**ALNE Al Ain 80.32 26** P **P** **20 38 40.8 +0.3**
SNR=13
ALNE P **P** **20 38 40.8 +0.3**
SNR=13
**NGJI Ngawi 80.34 89** P **P** **20 38 45.0 +4.0**
comp=Z,65nm,1.1s
**WSAR Wadi Sarin 80.34 29** LR LR 21 08 44.8
comp=Z,546nm,20.1s,baz=211,slow=32
**JRN Qarnain Island 80.44 23** P **P** **20 38 41.0 -0.1**
JRN P **P** **20 38 41.0 -0.1**
**BIDO Bidbid 80.47 28** P **P** **20 38 41.7 +0.4**
SNR=9.1
BIDO P **P** **20 38 41.7 +0.4**
SNR=9.1
**SOHO SOHO 80.61 26** *i* P **P** **20 38 42.0 0.0**
SNR=35
**SOHO SOHO 80.61 26** P **P** **20 38 41.6 -0.4**
SOHO P **P** **20 38 41.6 -0.4**
**ASAR Alice Springs 80.63 117** P **P** **20 38 41.3 -1.2**
**ASAR Alice Springs 80.63 117** P **P** **20 38 41.8 -0.7**
comp=Z,10.0nm,0.7s,baz=215,slow=4.5,SNR=62
ASAR LR LR 21 07 59.4
comp=Z,657nm,19.3s,baz=222,slow=31
comp=Z,10.0nm,0.7s
**AS31 Alice Springs 80.63 117** P **P** **20 38 41.8 -0.7**
comp=Z,15nm,0.8s
**LPAZ La Paz 80.72 255** P **P** **20 38 43.7 0.0**
comp=Z,1.3nm,0.5s,baz=126,slow=5.3,SNR=3.8
LPAZ LR LR 21 10 47.8
comp=Z,376nm,21.6s,baz=124,slow=33
comp=Z,1.3nm,0.5s
**ASUD Al Ashush, Dub 80.76 25** *i* P **P** **20 38 43.4 +0.7**
SNR=7.0
**RPSI Rantau Prapat 80.85 73** P **P** **20 38 42.7 -0.9**
RPSI IAmb IAmb 20 38 57.0
comp=Z,55nm,0.9s
**SHMA Al-Shehemyia 80.90 21** P **P** **20 38 44.5 +1.0**
**PSI Prapat 80.93 73** P **P** **20 38 42.7 -1.5**
PSI pmax pmax
comp=Z,55nm,0.9s
PSI MLR MLR
comp=Z,900nm,20.0s
**FAQ Al Faqa, Dubai 80.94 25** P **P** **20 38 43.5 -0.2**
**FAQ Al Faqa, Dubai 80.94 25** P **P** **20 38 43.8 +0.1**
FAQ P **P** **20 38 43.8 +0.1**
**ASHO Ashiyiah 81.00 26** *i* P **P** **20 38 43.8 -0.4**
SNR=17
**ASHO Ashiyiah 81.00 26** P **P** **20 38 43.9 -0.2**
SNR=13
ASHO P **P** **20 38 43.9 -0.2**
SNR=13
**JAGI Jajag, Banyuwa 81.11 92** IAMs_20 IAMs_20 21 08 39.2
comp=Z,1µm,20.0s
**HATD Hatta, Dubai 81.16 26** *i* P **P** **20 38 45.2 +0.2**
SNR=12
**HATD Hatta, Dubai 81.16 26** P **P** **20 38 44.9 0.0**
SNR=8.6
HATD P **P** **20 38 44.9 0.0**
SNR=8.6
**NAZ Nazwa, Dubai 81.19 25** *i* P **P** **20 38 45.2 0.0**
SNR=18
**NAZ Nazwa, Dubai 81.19 25** P **P** **20 38 45.1 0.0**
SNR=11
NAZ P **P** **20 38 45.1 0.0**
SNR=11
**UOSS Minazif 81.29 26** P **P** **20 38 45.2 -0.4**
UOSS IAmb IAmb 20 38 48.8
comp=Z,59nm,0.9s
**UOSS Minazif 81.29 26** IAMs_20 IAMs_20 21 08 10.0
comp=Z,1µm,20.0s
**UOSS Minazif 81.29 26** *i* P **P** **20 38 45.3 -0.4**
SNR=16
**UOSS Minazif 81.29 26** P **P** **20 38 45.4 -0.2**
UOSS P **P** **20 38 45.4 -0.2**
**MDH Madha 81.65 26** P **P** **20 38 46.8 -0.6**
**MDH Madha 81.65 26** P **P** **20 38 46.9 -0.6**
MDH P **P** **20 38 46.9 -0.6**
**MASF Masafi 81.68 26** P **P** **20 38 47.0 -0.7**
MASF P **P** **20 38 47.0 -0.7**
**UMQ Umm Al-Quwin 81.70 25** P **P** **20 38 48.8 +1.1**
UMQ P **P** **20 38 48.8 +1.1**
**SRBI Singaraja 82.06 93** P **P** **20 38 52.2 +2.1**
comp=Z,84nm,1.8s
**BANOM Banah 82.25 26** P **P** **20 38 51.6 +0.9**
**SHME Shamm 82.33 26** P **P** **20 38 50.5 -0.5**
SHME P **P** **20 38 50.5 -0.5**
**EIL Elat 82.36 6** LR LR 21 15 55.4
comp=Z,713nm,19.6s,baz=212,slow=36
**HYB Hyderabad 82.51 48** *e*P **P** **20 38 51.9 -0.4**
HYB IVMs_BB IVMs_BB 21 06 37.1
comp=Z,698nm,30.5s
**TWSI Taliwang, Sumb 82.56 95** P **P** **20 38 53.5 +0.8**
comp=Z,41nm,0.6s,comp=Z,848nm
**MRZ Mangatainoka R 82.81 156** IAMs_20 IAMs_20 21 11 10.8
comp=Z,1µm,18.0s
**PLAI Plampang 83.03 95** P **P** **20 38 56.2 +1.1**
**KBD Kabd 83.47 17** P **P** **20 38 57.6 +0.7**
**SAML Samuel 83.54 264** P **P** **20 38 57.2 -0.6**
**SAML Samuel 83.54 264** P **P** **20 38 57.2 -0.6**
SAML pmax pmax
comp=Z,117nm,1.7s
SAML MLR MLR
comp=Z,3µm,20.0s
**QLP Quilpie 83.59 126** P **P** **20 38 59.7 +1.8**
comp=Z,41nm,1.2s
**WRA Warramunga Arr 83.86 115** P **P** **20 38 59.4 -0.1**
**WRA Warramunga Arr 83.86 115** P **P** **20 38 59.4 -0.1**
comp=Z,24nm,0.9s,baz=210,slow=3.7,SNR=43
WRA LR LR 21 09 46.0
comp=Z,1µm,20.5s,baz=206,slow=31
comp=Z,24nm,0.9s
**WRAB Tennant Creek 83.88 115** P **P** **20 38 58.7 -0.8**
**WRAB Tennant Creek 83.88 115** *i* P **P** **20 38 57.9 -1.6**
WRAB pmax pmax
comp=Z,40nm,0.8s
**GHAJ Ghor Haditha 84.03 7** IAMs_20 IAMs_20 21 16 27.9
comp=Z,2µm,20.0s
**KNRA Kununurra 84.13 108** P **P** **20 39 00.5 -0.3**
**ETMB Extrema 84.68 261** IAmb IAmb 20 39 22.1
comp=Z,27nm,1.1s
**PBA Port Blair 84.70 63** IAMs_20 IAMs_20 21 09 17.9
comp=Z,1µm,20.0s
**EDFI Ende, Flores 85.45 98** P **P** **20 39 08.5 +0.9**
comp=Z,44nm,1.3s,comp=Z,749nm
**BATI Baumata 85.48 101** P **P** **20 39 09.4 +1.8**
comp=Z,77nm,1.1s
**MMAI Mount Meron Ar 85.72 6** P **P** **20 39 08.6 +0.3**
comp=Z,3.8nm,0.7s,baz=197,slow=7.9,SNR=11
MMAI LR LR 21 17 39.8
comp=Z,1µm,19.2s,baz=130,slow=36
comp=Z,3.8nm,0.7s
**MMRI Maumere 85.86 99** IAMs_20 IAMs_20 21 09 10.0
comp=Z,1µm,22.0s
**MMRI Maumere 85.86 99** P **P** **20 39 12.8 +3.3**
comp=Z,61nm,1.2s,comp=Z,1µm
**SOEI Soe 86.19 101** IAMs_20 IAMs_20 21 13 35.6
comp=Z,1µm,18.0s
**QIS Mount Isa 86.21 119** P **P** **20 39 11.0 -0.2**
**STKI Sintang 86.22 85** P **P** **20 39 13.0 +1.8**
comp=Z,31nm,1.8s
**MACA Manacapuru-AM 86.58 269** IAMs_20 IAMs_20 21 13 23.8
comp=Z,842nm,19.0s
**KAPI Kappang 87.22 95** P **P** **20 39 14.9 -1.3**
**KAPI Kappang 87.22 95** P **P** **20 39 17.5 +1.4**
comp=Z,7.0nm,0.3s,baz=212,slow=6.7,SNR=6.3
KAPI LR LR 21 13 32.3
comp=Z,645nm,19.3s,baz=214,slow=32
comp=Z,7.0nm,0.3s
**KAPI Kappang 87.22 95** *i* P **P** **20 39 14.0 -2.2**
KAPI pmax pmax
comp=Z,45nm,1.1s
**MTN Manton Dam 87.77 108** IAmb IAmb 20 39 30.9
comp=Z,33nm,1.2s
MTN IAMs_20 IAMs_20 21 14 54.1
comp=Z,925nm,20.0s
**MTN Manton Dam 87.77 108** P **P** **20 39 20.7 +1.9**
**IDI Anoyia 87.77 358** LR LR 21 19 07.8
comp=Z,609nm,20.3s,baz=170,slow=36
**MDP Montagnes des 88.27 281** LR LR 21 12 50.0
comp=Z,1µm,21.5s,baz=132,slow=32
**BKB Balikpapan 88.46 90** IAMs_20 IAMs_20 21 11 52.3
comp=Z,1µm,21.0s
**BBSI Bau Bau 88.55 97** P P 20 39 28.2 +5.7
**KDU Kakadu 88.66 109** P **P** **20 39 22.1 -1.0**
**SANT Santorini 88.83 358** IAMs_20 IAMs_20 21 22 33.2
comp=Z,1µm,20.0s
**NNA Nana 89.21 251** LR LR 21 16 00.3
comp=Z,324nm,21.4s,baz=132,slow=33
**MACI Morro de la Ar 89.48 322** IAMs_20 IAMs_20 21 12 21.3
comp=Z,1µm,21.0s
**KEST Kesra 89.63 345** IAmb IAmb 20 39 47.4
comp=Z,41nm,1.3s
**KEST Kesra 89.63 345** P **P** **20 39 28.6 +1.6**
comp=Z,4.2nm,0.7s,baz=166,slow=6.8,SNR=8.1
KEST LR LR 21 22 53.2
comp=Z,1µm,18.2s,baz=130,slow=38
comp=Z,4.2nm,0.7s
**MDT Midelt 89.83 333** P **P** **20 39 28.9 +0.9**
comp=Z,5.9nm,0.9s,baz=161,slow=6.0,SNR=14
MDT LR LR 21 18 47.9
comp=Z,847nm,18.6s,baz=166,slow=35
comp=Z,5.9nm,0.9s
**GAZ Gaziantep 89.98 8** IAmb IAmb 20 39 41.8
comp=Z,72nm,2.0s
**CTA Charters Tower 90.03 124** LR LR 21 14 27.4
comp=Z,19nm,18.9s,baz=218,slow=32
**VAE Valguarnera 90.67 349** LR LR 21 22 14.4
comp=Z,4µm,18.2s,baz=182,slow=37
**AVE Averroes 91.08 331** P **P** **20 39 35.5 +1.7**
AVE IAmb IAmb 20 39 42.6
comp=Z,21nm,0.8s
**CEL Celeste 91.28 351** IAmb IAmb 20 39 39.5
comp=Z,28nm,1.1s
**TBTG Tabatinga, AM 91.35 261** IAMs_20 IAMs_20 21 16 01.8
comp=Z,925nm,20.0s
**MPSI Mapaga 91.54 91** P **P** **20 39 40.4 +3.9**
**GURO Guroymak-BITLI 91.82 11** IAmb IAmb 20 39 42.6
comp=Z,57nm,1.9s
**RPN Rapa Nui 92.07 217** LR LR 21 11 23.6
comp=Z,395nm,21.4s,baz=10,slow=29
**TIP Timpagrande 92.11 351** IAmb IAmb 20 39 52.5
comp=Z,43nm,1.4s
**EZN Ezine 92.27 359** P **P** **20 39 39.3 +0.2**
comp=Z,18nm,1.2s
**BR104 Keskin Array S 92.28 5** P **P** **20 39 39.4 +0.1**
comp=Z,4.4nm,0.8s,comp=Z,48nm
**BR105 Keskin Array S 92.29 4** P **P** **20 39 39.4 0.0**
comp=Z,7.0nm,1.0s,comp=Z,69nm
**BR131 Keskin Array S 92.30 5** IAmb IAmb 20 39 42.2
comp=Z,42nm,1.9s
**BR131 Keskin Array S 92.30 5** *i* P **P** **20 39 38.3 -1.1**
**BRTR Keskin Array B 92.30 5** P **P** **20 39 37.9 -1.5**
**BRTR Keskin Array B 92.30 5** P **P** **20 39 38.9 -0.6**
comp=Z,2.5nm,0.7s,baz=171,slow=7.3,SNR=20
BRTR PP **PP** **20 43 22.9 +2.3**
comp=Z,0.8nm,0.9s,baz=179,slow=7.3,SNR=3.7
BRTR LR LR 21 22 33.3
comp=Z,463nm,19.2s,baz=188,slow=36
comp=Z,2.5nm,0.7s
**BR106 Keskin Array S 92.31 4** P **P** **20 39 39.3 -0.1**
comp=Z,5.0nm,0.8s,comp=Z,59nm
**ANTO Ankara 92.40 4** P **P** **20 39 38.6 -1.2**
**ANTO Ankara 92.40 4** IAMs_20 IAMs_20 21 22 28.6
comp=Z,979nm,20.0s
**ANTO Ankara 92.40 4** P **P** **20 39 38.6 -1.2**
ANTO pmax pmax
comp=Z,16nm,1.1s
ANTO MLR MLR
comp=Z,1µm,20.0s
**ANTO Ankara 92.40 4** P **P** **20 39 40.9 +1.1**
comp=Z,7.4nm,1.2s
**KEK Kerkira 92.41 354** P **P** **20 39 39.4 -0.4**
KEK IAmb IAmb 20 39 52.5
comp=Z,35nm,1.3s
**SANI Sanana 93.33 98** P P 20 39 36.1 -8.7
**ALN Alexandroupoli 93.34 359** IAMs_20 IAMs_20 21 20 45.2
comp=Z,855nm,21.0s
**CART Cartagena 93.44 337** IAMs_20 IAMs_20 21 24 40.8
comp=Z,912nm,18.0s
**CMAR Chiang Mai Arr 93.66 64** P **P** **20 39 44.3 -1.8**
**CMAR Chiang Mai Arr 93.66 64** P **P** **20 39 46.2 +0.2**
comp=Z,3.4nm,0.9s,baz=224,slow=6.1,SNR=13
CMAR LR LR 21 15 26.6
comp=Z,358nm,19.7s,baz=220,slow=31
comp=Z,3.4nm,0.9s
**PMAR Madeira 93.66 324** *e*P **P** **20 39 44.3 -1.7**
comp=Z,94nm,1.4s
**OHR Ohrid 93.74 355** *i* P **P** **20 39 49.0 +3.1**
**GNI Garni 93.74 13** IAMs_20 IAMs_20 21 20 05.8
comp=Z,843nm,21.0s
**GNI Garni 93.74 13** LR LR 21 21 09.6
comp=Z,671nm,20.4s,baz=196,slow=35
**KKM Kota Kinabalu 93.81 85** IAMs_20 IAMs_20 21 16 13.9
comp=Z,964nm,21.0s
**PMOZ Porto Moniz, M 93.86 323** *e*S **S** **20 50 52.3 -4.0**
**PMOZ Porto Moniz, M 93.86 323** *e*LQ LQ 21 03 54.9
PMOZ *e*LR LR 21 09 50.7
comp=Z,1µm,22.0s
**ATAH Atahualpa 94.01 253** LR LR 21 21 14.8
comp=Z,230nm,19.3s,baz=142,slow=35
**KBL Kabul 94.11 33** P **P** **20 39 46.0 -2.0**
**KBL Kabul 94.11 33** P **P** **20 39 49.3 +1.2**
SNR=6.9
**KBL Kabul 94.11 33** P **P** **20 39 46.0 -2.0**
KBL pmax pmax
comp=Z,21nm,1.4s
**PUK Puka 94.72 354** IAmb IAmb 20 40 03.3
comp=Z,47nm,1.5s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **NIL** | **Nilore** | **94.76** | **37** | P | **P** | **20 39 50.5** | **-0.3** | | | |
| NIL | | | | P | **P** | **20 39 50.5** | **-0.3** | | | |
| **PBDV** | **Barranco-do-Ve** | **94.91** | **332** | *e*pP | pP | 20 39 55.9 | +3.1 | | | |
| **PVAQ** | **Vaqueiros** | **95.00** | **332** | *e*pP | pP | 20 39 59.7 | +6.5 | | | |
| **PVAQ** | **Vaqueiros** | **95.00** | **332** | *e*S | S | 20 51 19.9 | +14 | | | |
| **PVAQ** | **Vaqueiros** | **95.00** | **332** | *e*LR | LR | 21 15 15.4 | | | | |
| | comp=Z,676nm,20.0s | | | | | | | | | |
| **PDG** | **Podgorica** | **95.15** | **354** | IAmb | IAmb | 20 40 05.2 | | | | |
| | comp=Z,32nm,1.6s | | | | | | | | | |
| PDG | | | | IAMs_20 | IAMs_20 | 21 24 29.5 | | | | |
| | comp=Z,1µm,20.0s | | | | | | | | | |
| **RAO** | **Raoul Island** | **95.26** | **158** | LR | LR | 21 21 14.2 | | | | |
| | comp=Z,1µm,19.7s,baz=175,slow=34 | | | | | | | | | |
| **PCVE** | **Castro Verde** | **95.31** | **332** | *e*pP | pP | 20 39 56.1 | +1.5 | | | |
| **PTEO** | **Sao Teotonio** | **95.42** | **332** | *e*P | **P** | **20 39 55.4** | **+1.8** | | | |
| **PBAR** | **Barrancos** | **95.53** | **333** | *e*pP | **pP** | **20 39 56.8** | **+1.2** | | | |
| PBAR | | | | A | A | 20 40 08.7 | | | | |
| | comp=Z,17nm,1.5s | | | | | | | | | |
| **MESJ** | **Messejana** | **95.55** | **332** | IAMs_20 | IAMs_20 | 21 19 38.7 | | | | |
| | comp=Z,806nm,21.0s | | | | | | | | | |
| **MESJ** | **Messejana** | **95.55** | **332** | *e*pP | **pP** | **20 39 56.8** | **+1.1** | | | |
| MESJ | | | | A | A | 20 40 00.0 | | | | |
| | comp=Z,21nm,1.5s | | | | | | | | | |
| **SHL** | **Shillong** | **95.82** | **55** | IAmb | IAmb | 20 40 00.0 | | | | |
| | comp=Z,26nm,1.1s | | | | | | | | | |
| SHL | | | | IAMs_20 | IAMs_20 | 21 19 53.3 | | | | |
| | comp=Z,1µm,19.0s | | | | | | | | | |
| **SHL** | **Shillong** | **95.82** | **55** | P | **P** | **20 39 56.8** | **+0.8** | | | |
| | SNR=6.7 | | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **95.89** | **332** | *e*pP | **pP** | **20 40 02.0** | **+4.8** | | | |
| PNCL | | | | A | A | 20 40 06.2 | | | | |
| | comp=Z,21nm,2.0s | | | | | | | | | |
| **PAB** | **San Pablo** | **96.11** | **336** | IAMs_20 | IAMs_20 | 21 25 12.6 | | | | |
| | comp=Z,1µm,18.0s | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **96.14** | **336** | P | **P** | **20 39 56.7** | **-0.2** | | | |
| **ESDC** | **Sonseca Array** | **96.14** | **336** | P | **P** | **20 39 57.8** | **+0.8** | | | |
| | comp=Z,1.4nm,0.7s,baz=167,slow=4.5,SNR=12 | | | | | | | | | |
| ESDC | | | | LR | LR | 21 24 06.1 | | | | |
| | comp=Z,478nm,19.0s,baz=146,slow=36 | | | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | | | |
| **PESTR** | **Estremoz** | **96.33** | **333** | IAMs_20 | IAMs_20 | 21 24 57.4 | | | | |
| | comp=Z,1µm,19.0s | | | | | | | | | |
| **PESTR** | **Estremoz** | **96.33** | **333** | *e*pP | **pP** | **20 40 03.3** | **+4.1** | | | |
| PESTR | | | | A | A | 20 40 14.6 | | | | |
| | comp=Z,12nm,1.4s | | | | | | | | | |
| **FAKI** | **Fak Fak** | **96.38** | **103** | P | P | 20 40 05.2 | +6.5 | | | |
| **TNTI** | **Ternate** | **96.40** | **97** | P | **P** | **20 40 03.2** | **+4.4** | | | |
| **TNTI** | **Ternate** | **96.40** | **97** | P | **P** | **20 40 03.2** | **+4.4** | | | |
| **SOC** | **Sochi** | **96.56** | **9** | *e*P | **P** | **20 39 56.9** | **-1.8** | | | |
| SOC | | | | *e*S | **SKSac** | **20 50 33.4** | **-1.4** | | | |
| SOC | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,1.4s | | | | | | | | | |
| SOC | | | | MLR | MLR | | | | | |
| | comp=Z,590nm,18.0s | | | | | | | | | |
| **PMRV** | **Marv??o** | **96.80** | **333** | *e*pP | pP | 20 40 02.6 | +1.2 | | | |
| **PMRV** | **Marv??o** | **96.80** | **333** | *e*LR | LR | 21 15 03.8 | | | | |
| | comp=Z,903nm,18.0s | | | | | | | | | |
| **MAK** | **Makhachkala** | **96.89** | **14** | *e*P | **P** | **20 39 55.8** | **-4.4** | | | |
| MAK | | | | *e* | | 20 43 50.7 | | | | |
| MAK | | | | *e*PPP | PPP | 20 46 00.7 | | | | |
| MAK | | | | *e* | | 20 50 29.8 | | | | |
| MAK | | | | *e*SS | SS | 20 58 00.8 | +2.0 | | | |
| MAK | | | | *e*SSS | SSS | 21 01 44.9 | | | | |
| MAK | | | | pmax | pmax | | | | | |
| | comp=Z,104nm,1.1s | | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **97.02** | **11** | *i* P | **P** | **20 40 01.0** | **-0.1** | | | |
| **KBZ** | **Khabaz** | **97.03** | **11** | P | Pdif | 20 40 02.2 | +1.3 | | | |
| | comp=Z,1.2nm,0.6s,baz=207,slow=6.8,SNR=2.8 | | | | | | | | | |
| KBZ | | | | LR | LR | 21 25 23.2 | | | | |
| | comp=Z,365nm,19.9s,baz=197,slow=36 | | | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | | | |
| **KBZ** | **Khabaz** | **97.03** | **11** | *i* P | **P** | **20 39 59.3** | **-1.5** | | | |
| KBZ | | | | pmax | pmax | | | | | |
| | comp=Z,15nm,2.2s | | | | | | | | | |
| **PCBR** | **Castelo Branco** | **97.21** | **333** | *e*pP | pP | 20 40 06.9 | +3.7 | | | |
| **DZM** | **Mont Dzumac** | **97.23** | **142** | *e*LR | LR | 21 11 35.6 | | | | |
| | comp=Z,795nm,22.7s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **97.23** | **142** | LR | LR | 21 16 21.4 | | | | |
| | comp=Z,512nm,19.7s,baz=210,slow=31 | | | | | | | | | |
| **KIV** | **Kislovodsk** | **97.23** | **11** | *e*P | **P** | **20 40 01.8** | **-0.1** | | | |
| KIV | | | | *e* | | 20 43 58.3 | | | | |
| KIV | | | | *e*SS | SS | 20 58 04.8 | +1.0 | | | |
| KIV | | | | *e*SSS | SSS | 21 01 50.5 | | | | |
| KIV | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | | |
| KIV | | | | MLR | MLR | | | | | |
| | comp=Z,299nm,20.0s | | | | | | | | | |
| **SWI** | **Sorong** | **97.43** | **101** | P | Pdif | 20 40 09.4 | +5.8 | | | |
| **ANN** | **Anapa** | **97.58** | **7** | *e*P | **P** | **20 40 03.1** | **-0.1** | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=E,283nm,16.0s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=Z,448nm,19.0s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=N,564nm,19.0s | | | | | | | | | |
| **MTE** | **Manteigas** | **97.75** | **334** | IAMs_20 | IAMs_20 | 21 21 50.9 | | | | |
| | comp=Z,971nm,20.0s | | | | | | | | | |
| **MTE** | **Manteigas** | **97.75** | **334** | *e*pP | **pP** | **20 40 09.2** | **+3.5** | | | |
| MTE | | | | A | A | 20 40 12.9 | | | | |
| | comp=Z,10nm,2.1s | | | | | | | | | |
| **MTE** | **Manteigas** | **97.75** | **334** | *e*LR | LR | 21 17 33.4 | | | | |
| | comp=Z,762nm,20.0s | | | | | | | | | |
| **CEST** | **Esterri de Car** | **97.75** | **341** | IAmb | IAmb | 20 40 09.4 | | | | |
| | comp=Z,34nm,1.8s | | | | | | | | | |
| CEST | | | | IAMs_20 | IAMs_20 | 21 28 56.8 | | | | |
| | comp=Z,1µm,18.0s | | | | | | | | | |
| **SIMJ** | **Simiganj** | **97.86** | **31** | P | **P** | **20 40 03.5** | **-1.4** | | | |
| **VOIR** | | **97.90** | **358** | P | **P** | **20 40 04.7** | **-0.1** | | | |
| | comp=Z,4.7nm,1.4s | | | | | | | | | |
| **CHGR** | **Chuyangaron** | **97.91** | **31** | IAMs_20 | IAMs_20 | 21 20 08.0 | | | | |
| | comp=Z,1µm,21.0s | | | | | | | | | |
| **MLR** | **Muntele Rosu** | **97.93** | **359** | IAmb | IAmb | 20 40 16.7 | | | | |
| | comp=Z,14nm,1.3s | | | | | | | | | |
| **MLR** | **Muntele Rosu** | **97.93** | **359** | P | Pdif | 20 40 06.1 | +1.1 | | | |
| | comp=Z,1.4nm,0.6s,baz=191,slow=13,SNR=3.2 | | | | | | | | | |
| MLR | | | | PP | **PP** | **20 44 01.5** | **-2.8** | | | |
| | comp=Z,2.1nm,0.8s,baz=166,slow=9.0,SNR=3.1 | | | | | | | | | |
| MLR | | | | LR | LR | 21 25 07.9 | | | | |
| | comp=Z,2µm,21.9s,baz=182,slow=36 | | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | | |
| **MLR** | **Muntele Rosu** | **97.93** | **359** | P | **P** | **20 40 04.9** | **-0.1** | | | |
| | comp=Z,6.9nm,1.5s | | | | | | | | | |
| **MVO** | **Moncorvo** | **98.33** | **334** | *e*LR | LR | 21 19 32.0 | | | | |
| | comp=Z,992nm,18.0s | | | | | | | | | |
| **TNCH** | **TengChong** | **98.77** | **60** | P | Pdif | 20 40 10.3 | +0.9 | | | |
| TNCH | | | | pP | sP | 20 40 13.8 | +2.6 | | | |
| TNCH | | | | sP | pwP | 20 40 16.0 | -2.6 | | | |
| TNCH | | | | SKS | **SKSac** | **20 50 48.9** | **+1.4** | | | |
| TNCH | | | | S | **S** | **20 51 39.1** | **-0.1** | | | |
| TNCH | | | | sS | sS | 20 51 53.0 | +11 | | | |
| TNCH | | | | pmax | pmax | | | | | |
| | comp=Z,18nm,1.5s | | | | | | | | | |
| TNCH | | | | LR | LR | | | | | |
| | comp=Z,250nm,10.1s | | | | | | | | | |
| TNCH | | | | LR | LR | | | | | |
| | comp=Z,240nm,9.1s | | | | | | | | | |
| TNCH | | | | LR | LR | | | | | |
| | comp=Z,410nm,17.7s | | | | | | | | | |
| **LSA** | **Lhasa** | **98.91** | **52** | P | Pdif | 20 40 11.1 | +0.9 | | | |
| LSA | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | | |
| **MORH** | **Mrgy, Hungar** | **98.96** | **354** | P | Pdif | 20 40 10.3 | +0.9 | | | |
| | comp=Z,3.9nm,2.6s | | | | | | | | | |
| **BNI** | **Bardonecchia** | **99.16** | **345** | IAmb | IAmb | 20 40 16.0 | | | | |
| | comp=Z,18nm,1.6s | | | | | | | | | |
| **SABO** | **M.te Sabotino** | **99.16** | **350** | IAMs_20 | IAMs_20 | 21 25 51.8 | | | | |
| | comp=Z,1µm,21.0s | | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **99.41** | **334** | *e*LR | LR | 21 18 27.1 | | | | |
| | comp=Z,894nm,18.0s | | | | | | | | | |
| **PMG** | **Port Moresby** | **99.48** | **119** | LR | LR | 21 20 42.3 | | | | |
| | comp=Z,517nm,20.4s,baz=208,slow=33 | | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **99.49** | **274** | LR | LR | 21 20 59.0 | | | | |
| | comp=Z,1µm,19.3s,slow=33 | | | | | | | | | |
| **OBKA** | **Obir** | **99.59** | **351** | *i* pPdiff | **Pdif** | **20 40 15.8** | **+3.5** | | | |
| | comp=Z,4.8nm,1.2s | | | | | | | | | |
| OBKA | | | | *i* PP | **PP** | **20 44 18.6** | **+1.7** | | | |
| | comp=Z,2.8nm,1.1s | | | | | | | | | |
| **PRED** | **Cave del Predi** | **99.62** | **350** | IAMs_20 | IAMs_20 | 21 26 28.9 | | | | |
| | comp=Z,1µm,21.0s | | | | | | | | | |
| **SOKA** | **Soboth** | **99.71** | **351** | *i* pPdiff | **Pdif** | **20 40 17.8** | **+5.0** | | | |
| | comp=Z,2.4nm,1.1s | | | | | | | | | |
| SOKA | | | | *i* PP | **PP** | **20 44 19.5** | **+1.7** | | | |
| | comp=Z,2.9nm,1.0s | | | | | | | | | |
| **BTK** | **Batken** | **99.71** | **32** | IAmb | IAmb | 20 40 17.2 | | | | |
| | comp=Z,39nm,1.7s | | | | | | | | | |
| **MYKA** | **Terra Mystica** | **99.80** | **350** | *i* pPdiff | **Pdif** | **20 40 17.9** | **+4.6** | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | | | |
| MYKA | | | | *e*PP | **PP** | **20 44 20.2** | **+1.7** | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | | | |
| **OTAV** | **Otavalo** | **99.97** | **257** | IAMs_20 | IAMs_20 | 21 19 50.1 | | | | |
| | comp=Z,931nm,22.0s | | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **100.04** | **349** | *i* pPdiff | **pPdif** | **20 40 17.6** | **+1.8** | | | |
| | comp=Z,7.8nm,1.7s | | | | | | | | | |
| ABTA | | | | *e*PP | **PP** | **20 44 19.2** | **-1.2** | | | |
| | comp=Z,6.5nm,1.8s | | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **100.18** | **348** | IAMs_20 | IAMs_20 | 21 29 30.8 | | | | |
| | comp=Z,904nm,18.0s | | | | | | | | | |
| **ARSA** | **Arzberg** | **100.23** | **352** | *i* Pdiff | **Pdif** | **20 40 16.0** | **+0.9** | | | |
| | comp=Z,2.2nm,1.1s | | | | | | | | | |
| ARSA | | | | *i* PP | **PP** | **20 44 21.5** | **-0.3** | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | | | |
| **QIZ** | **Qiongzhong** | **100.25** | **72** | P | **Pdif** | **20 40 15.8** | **-0.1** | | | |
| QIZ | | | | PP | **PP** | **20 44 21.3** | **-0.8** | | | |
| QIZ | | | | S | **Sdif** | **20 51 51.5** | **0.0** | | | |
| QIZ | | | | SS | **SS** | **20 58 46.8** | **+0.4** | | | |
| QIZ | | | | LR | LR | | | | | |
| | comp=Z,530nm,18.0s | | | | | | | | | |
| QIZ | | | | LR | LR | | | | | |
| | comp=Z,370nm,20.4s | | | | | | | | | |
| QIZ | | | | LR | LR | | | | | |
| | comp=Z,670nm,23.9s | | | | | | | | | |
| **QIZ** | **Qiongzhong** | **100.25** | **72** | IAMs_20 | IAMs_20 | 21 20 41.0 | | | | |
| | comp=Z,667nm,20.0s | | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **100.27** | **350** | *i* pPdiff | **pPdif** | **20 40 20.6** | **+3.7** | | | |
| | comp=Z,2.8nm,1.2s | | | | | | | | | |
| KBA | | | | *e*PP | **PP** | **20 44 24.2** | **+2.0** | | | |
| | comp=Z,7.3nm,1.4s | | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **100.39** | **348** | PP | **PP** | **20 44 20.4** | **-2.8** | | | |
| | comp=Z,6.8nm,1.1s,baz=152,slow=10,SNR=4.2 | | | | | | | | | |
| **FETA** | **Feichten** | **100.52** | **348** | *i* Pdiff | **Pdif** | **20 40 19.3** | **+2.8** | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | | | |
| FETA | | | | *i* PP | **PP** | **20 44 23.0** | **-1.1** | | | |
| | comp=Z,3.2nm,0.9s | | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **100.61** | **352** | *i* pPdiff | **pPdif** | **20 40 20.4** | **+2.2** | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | | |
| RONA | | | | *e*PP | **PP** | **20 44 24.2** | **-0.4** | | | |
| | comp=Z,5.8nm,1.7s | | | | | | | | | |
| **WTTA** | **Wattenberg** | **100.65** | **349** | *i* Pdiff | **Pdif** | **20 40 19.8** | **+2.6** | | | |
| | comp=Z,7.2nm,1.5s | | | | | | | | | |
| WTTA | | | | *e*PP | **PP** | **20 44 24.0** | **-1.1** | | | |
| | comp=Z,15nm,2.0s | | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **100.65** | **349** | *i* pPdiff | **pPdif** | **20 40 20.3** | **+1.8** | | | |
| | comp=Z,2.1nm,0.9s | | | | | | | | | |
| SQTA | | | | *e*PP | **PP** | **20 44 24.0** | **-1.1** | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | | |
| **LESA** | **Schwarzleotal** | **100.69** | **350** | *i* pPdiff | **pPdif** | **20 40 20.4** | **+1.8** | | | |
| | comp=Z,2.7nm,1.4s | | | | | | | | | |
| LESA | | | | *i* PP | **PP** | **20 44 24.5** | **-0.7** | | | |
| | comp=Z,4.9nm,1.1s | | | | | | | | | |
| **WATA** | **Walderalm** | **100.72** | **349** | *i* pPdiff | **pPdif** | **20 40 20.5** | **+1.7** | | | |
| | comp=Z,4.8nm,1.6s | | | | | | | | | |
| WATA | | | | *i* PP | **PP** | **20 44 24.5** | **-1.1** | | | |
| | comp=Z,6.6nm,1.2s | | | | | | | | | |
| **MOTA** | **Moosalm** | **100.79** | **349** | *e*Pdiff | **Pdif** | **20 40 19.9** | **+2.1** | | | |
| | comp=Z,3.9nm,1.1s | | | | | | | | | |
| MOTA | | | | *e*PP | **PP** | **20 44 24.7** | **-1.4** | | | |
| | comp=Z,8.4nm,1.0s | | | | | | | | | |
| **ILAM** | **Ilet Lapin Mar** | **100.82** | **280** | IAMs_20 | IAMs_20 | 21 15 12.4 | | | | |
| | comp=Z,706nm,21.0s | | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **100.85** | **350** | *e*pPdiff | **pPdif** | **20 40 21.5** | **+2.2** | | | |
| | comp=Z,2.2nm,1.2s | | | | | | | | | |
| BIOA | | | | *e*PP | **PP** | **20 44 24.9** | **-1.5** | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | | | |
| **CONA** | **Conrad Observa** | **100.87** | **352** | *i* pPdiff | **pPdif** | **20 40 21.4** | **+1.9** | | | |
| | comp=Z,2.6nm,1.1s | | | | | | | | | |
| CONA | | | | *i* PP | **PP** | **20 44 28.3** | **+1.6** | | | |
| | comp=Z,4.9nm,1.3s | | | | | | | | | |
| **DAVA** | **Damuels** | **100.89** | **348** | *e*pPdiff | **pPdif** | **20 40 22.1** | **+2.5** | | | |
| | comp=Z,6.1nm,1.6s | | | | | | | | | |
| DAVA | | | | *i* PP | **PP** | **20 44 26.7** | **-0.1** | | | |
| | comp=Z,10nm,1.5s | | | | | | | | | |
| **MOA** | **Molln** | **100.94** | **351** | *i* pPdiff | **pPdif** | **20 40 21.8** | **+2.2** | | | |
| | comp=Z,4.4nm,1.4s | | | | | | | | | |
| MOA | | | | *i* PP | **PP** | **20 44 27.4** | **+0.3** | | | |
| | comp=Z,3.6nm,0.8s | | | | | | | | | |
| **RETA** | **Reutte** | **100.97** | **348** | *i* Pdiff | **Pdif** | **20 40 20.9** | **+2.5** | | | |
| | comp=Z,4.1nm,1.0s | | | | | | | | | |
| RETA | | | | *e*PP | **PP** | **20 44 27.3** | **-0.1** | | | |
| | comp=Z,7.3nm,1.1s | | | | | | | | | |
| **KSH** | **Kashi** | **100.98** | **36** | P | **Pdif** | **20 40 17.0** | **-1.8** | | | |
| KSH | | | | sP | pwP | 20 40 28.5 | +0.4 | | | |
| KSH | | | | S | **Sdif** | **20 51 55.8** | **-1.1** | | | |
| KSH | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,350nm,14.8s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,390nm,17.2s | | | | | | | | | |
| KSH | | | | LR | LR | | | | | |
| | comp=Z,400nm,20.3s | | | | | | | | | |
| **KMI** | **Kunming** | **101.10** | **63** | P | **Pdif** | **20 40 20.4** | **+0.6** | | | |
| KMI | | | | SS | SS | 20 59 03.8 | +5.2 | | | |
| KMI | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | | |
| KMI | | | | LR | LR | | | | | |
| | comp=Z,410nm,19.3s | | | | | | | | | |
| KMI | | | | LR | LR | | | | | |
| | comp=Z,450nm,11.0s | | | | | | | | | |
| KMI | | | | LR | LR | | | | | |
| | comp=Z,380nm,14.2s | | | | | | | | | |
| **VYHS** | **Vyhne** | **101.21** | **354** | *e*PP | **PP** | **20 44 30.4** | **+1.3** | | | |
| **KOLS** | **Kolonicke sedl** | **101.47** | **356** | *e*PP | **PP** | **20 44 34.4** | **+3.3** | | | |
| **CRVS** | **Cervenica-Dubn** | **101.48** | **356** | *e*PP | **PP** | **20 44 34.2** | **+3.1** | | | |
| **JAVC** | **Velka Javorina** | **101.66** | **353** | *e*PP | **PP** | **20 44 31.0** | **-1.5** | | | |
| **PZH** | **PanZhiHua** | **101.67** | **62** | P | **Pdif** | **20 40 22.3** | **+0.1** | | | |
| **LANS** | **Liptovska Anna** | **101.83** | **354** | *e*PP | **PP** | **20 44 37.1** | **+3.3** | | | |
| **CKRC** | **Cesky Krumlov** | **101.90** | **351** | *e*PP | **PP** | **20 44 31.7** | **-2.6** | | | |
| CKRC | | | | AMS | AMS | 21 29 40.0 | | | | |
| | comp=Z,800nm,15.8s | | | | | | | | | |
| **KRUC** | **Moravsky** | **101.95** | **352** | *e*PP | **PP** | **20 44 35.1** | **+0.4** | | | |
| **GERES** | **GERESS Array B** | **101.98** | **351** | PP | **PP** | **20 44 31.1** | **-3.9** | | | |
| | comp=Z,0.5nm,0.6s,baz=184,slow=6.9,SNR=3.0 | | | | | | | | | |
| **SDV** | **Santo Domingo** | **102.12** | **269** | IAMs_20 | IAMs_20 | 21 26 25.4 | | | | |
| | comp=Z,698nm,18.0s | | | | | | | | | |
| **VRAC** | **Vranov** | **102.18** | **353** | *e*PP | **PP** | **20 44 34.9** | **-1.5** | | | |
| **VRAC** | **Vranov** | **102.18** | **353** | PP | **PP** | **20 44 35.4** | **-1.0** | | | |
| | comp=Z,4.1nm,0.9s,baz=172,slow=6.8,SNR=4.4 | | | | | | | | | |
| **TREC** | **Trest** | **102.26** | **352** | AMS | AMS | 21 30 50.0 | | | | |
| | comp=Z,1µm,17.7s | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **102.28** | **350** | *e*PP | **PP** | **20 44 36.5** | **-0.7** | | | |
| KHC | | | | AMS | AMS | 21 28 30.0 | | | | |
| | comp=Z,1µm,21.5s | | | | | | | | | |
| **STU** | **Stuttgart** | **102.43** | **348** | IAMs_20 | IAMs_20 | 21 27 21.4 | | | | |
| | comp=Z,1µm,22.0s | | | | | | | | | |
| **ZVC** | **Zvikov** | **102.52** | **351** | AMS | AMS | 21 28 00.0 | | | | |
| | comp=Z,1µm,19.0s | | | | | | | | | |
| **MORC** | **Moravsky Berou** | **102.58** | **353** | *e*PP | **PP** | **20 44 39.3** | **-0.1** | | | |
| **OKC** | **Ostrava-Krasne** | **102.60** | **354** | AMS | AMS | 21 29 00.0 | | | | |
| | comp=Z,800nm,20.3s | | | | | | | | | |
| **RKT** | **Rikitea** | **102.92** | **196** | *e*S | **Sdif** | **20 52 14.6** | **+0.7** | | | |
| | comp=Z,3µm,40.0s | | | | | | | | | |
| RKT | | | | *e*SS | **SS** | **20 59 22.6** | **+1.6** | | | |
| | comp=Z,1µm,26.2s | | | | | | | | | |
| **RKT** | **Rikitea** | **102.92** | **196** | *e*LR | LR | 21 14 06.9 | | | | |
| | comp=Z,6µm,26.8s | | | | | | | | | |
| **KRLC** | **Kraliky** | **102.93** | **353** | AMS | AMS | 21 28 10.0 | | | | |
| | comp=Z,800nm,22.1s | | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **102.94** | **351** | AMS | AMS | 21 29 10.0 | | | | |
| | comp=Z,800nm,20.0s | | | | | | | | | |
| **PRU** | **Pruhonice** | **103.03** | **351** | AMS | AMS | 21 29 10.0 | | | | |
| | comp=Z,1µm,22.1s | | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **103.09** | **349** | *e*PP | **PP** | **20 44 38.2** | **-5.0** | | | |
| GRF | | | | *e*L | L | 21 28 59.5 | | | | |
| | comp=Z,1µm,19.9s | | | | | | | | | |
| **PRA** | **Prague** | **103.13** | **351** | AMS | AMS | 21 29 00.0 | | | | |
| | comp=Z,1µm,22.0s | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **103.14** | **1** | PP | **PP** | **20 44 43.9** | **+0.4** | | | |
| | comp=Z,0.6nm,0.4s,baz=195,slow=6.7,SNR=5.0 | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **103.24** | **352** | AMS | AMS | 21 30 00.0 | | | | |
| | comp=Z,600nm,19.8s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **103.57** | **351** | AMS | AMS | 21 30 30.0 | | | | |
| | comp=Z,1µm,19.0s | | | | | | | | | |
| **RICC** | **Richard** | **103.63** | **351** | AMS | AMS | 21 30 10.0 | | | | |
| | comp=Z,1µm,18.9s | | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **103.75** | **351** | AMS | AMS | 21 29 10.0 | | | | |
| | comp=Z,900nm,19.6s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **103.97** | **351** | *e*PKP | **PP** | **20 44 50.8** | **+1.0** | | | |
| BRG | | | | Amp | | 20 44 51.1 | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| **MOX** | **Moxa** | **103.98** | **349** | *e*L | L | 21 28 56.5 | | | | |
| | comp=Z,1µm,20.9s | | | | | | | | | |
| **TBI** | **Tubuai** | **104.13** | **183** | *e*S | **Sdif** | **20 52 24.0** | **0.0** | | | |
| | comp=Z,1µm,28.0s | | | | | | | | | |
| TBI | | | | *e*SS | **SS** | **20 59 34.9** | **-2.6** | | | |
| | comp=Z,2µm,32.2s | | | | | | | | | |
| **TBI** | **Tubuai** | **104.13** | **183** | *e*LR | LR | 21 14 42.4 | | | | |
| | comp=Z,2µm,24.0s | | | | | | | | | |
| TBI | | | | *e*LR | LR | 21 14 44.1 | | | | |
| | comp=Z,6µm,23.2s | | | | | | | | | |
| **CLL** | **Collm** | **104.49** | **350** | IAMs_20 | IAMs_20 | 21 31 31.7 | | | | |
| | comp=Z,828nm,19.0s | | | | | | | | | |
| **CLL** | **Collm** | **104.49** | **350** | *e*Pdif | **Pdif** | **20 40 35.0** | **+1.1** | | | |
| CLL | | | | *e*PP | **PP** | **20 44 53.0** | **-0.6** | | | |
| CLL | | | | *e*PS | **PS** | **20 54 04.0** | **-1.5** | | | |
| CLL | | | | *e*SS | SS | 20 59 34.0 | -10 | | | |
| CLL | | | | AMS | AMS | 21 31 00.0 | | | | |
| | comp=N,700nm,20.0s | | | | | | | | | |
| CLL | | | | AMS | AMS | 21 31 00.0 | | | | |
| | comp=E,500nm,19.5s | | | | | | | | | |
| CLL | | | | AMS | AMS | 21 31 00.0 | | | | |
| | comp=Z,800nm,18.6s | | | | | | | | | |
| **CLL** | **Collm** | **104.49** | **350** | *e*P | **Pdif** | **20 40 35.0** | **+1.1** | | | |
| CLL | | | | *e* | | 20 44 53.0 | | | | |
| CLL | | | | MLR | MLR | | | | | |
| | comp=Z,800nm,18.6s | | | | | | | | | |
| **GOMU** | **GeErMu** | **105.99** | **51** | Pdif | **Pdif** | **20 40 42.3** | **+0.8** | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,840nm,17.7s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,620nm,17.5s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,1µm,17.6s | | | | | | | | | |
| **CD2** | **Chengdu** | **106.23** | **60** | Pdif | Pdif | **20 40 42.4** | **+0.1** | | | |
| **GCPR** | **Guaynabo City** | **106.69** | **278** | IAMs_20 | IAMs_20 | 21 23 07.8 | | | | |
| | comp=Z,819nm,22.0s | | | | | | | | | |
| **RGN** | **Rugen** | **107.66** | **351** | IAMs_20 | IAMs_20 | 21 31 12.6 | | | | |
| | comp=Z,948nm,18.0s | | | | | | | | | |
| **OBN** | **Obninsk** | **107.80** | **5** | *i* P | **Pdif** | **20 40 48.1** | **-0.4** | | | |
| OBN | | | | *e*PPP | PPP | 20 47 34.2 | | | | |
| OBN | | | | *e* | | 20 52 08.3 | | | | |
| OBN | | | | *e*SS | SS | 21 00 29.8 | +0.5 | | | |
| OBN | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | | |
| OBN | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | | |
| OBN | | | | MLR | MLR | | | | | |
| | comp=Z,453nm,21.0s | | | | | | | | | |
| **WMQ** | **Urumqi** | **109.14** | **42** | Pdif | **Pdif** | **20 40 56.0** | **+1.1** | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=Z,930nm,24.3s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=Z,980nm,24.1s | | | | | | | | | |
| WMQ | | | | LR | LR | | | | | |
| | comp=Z,430nm,24.3s | | | | | | | | | |
| **DSB** | **Dublin** | **109.47** | **339** | IAMs_20 | IAMs_20 | 21 35 34.8 | | | | |
| | comp=Z,1µm,20.0s | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.58** | **36** | Pdiff | **Pdif** | **20 40 57.1** | **+0.4** | | | |
| | comp=Z,0.7nm,0.8s,baz=230,slow=7.3,SNR=5.8 | | | | | | | | | |
| MKAR | | | | PKiKP | **PKiKP** | **20 44 59.9** | **+0.4** | | | |
| | comp=Z,1.3nm,0.8s,baz=250,slow=2.2,SNR=7.8 | | | | | | | | | |
| **PPT2** | **Papeete2** | **109.86** | **183** | *e*S | Sdif | 20 52 49.5 | -23 | | | |
| | comp=Z,341nm,26.5s | | | | | | | | | |
| PPT2 | | | | *e*SS | **SS** | **21 00 54.5** | **-1.1** | | | |
| | comp=Z,416nm,30.0s | | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **110.78** | **342** | PP | **PP** | **20 45 38.0** | **-1.6** | | | |
| | comp=Z,3.5nm,0.9s,baz=160,slow=6.6,SNR=4.1 | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **111.30** | **26** | Pdiff | **Pdif** | **20 41 06.0** | **+1.8** | | | |
| | comp=Z,1.4nm,0.7s,baz=134,slow=6.4,SNR=4.6 | | | | | | | | | |
| BVAR | | | | PKiKP | **PKiKP** | **20 45 02.1** | **-0.4** | | | |
| | comp=Z,2.0nm,0.7s,baz=227,slow=0.5,SNR=8.1 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **111.58** | **32** | Pdiff | **Pdif** | **20 41 06.7** | **+1.3** | | | |
| | comp=Z,0.5nm,0.7s,baz=224,slow=5.0,SNR=5.2 | | | | | | | | | |
| KURBB | | | | PKiKP | **PKiKP** | **20 45 02.1** | **-0.9** | | | |
| | comp=Z,1.1nm,0.7s,baz=222,slow=2.1,SNR=10 | | | | | | | | | |
| **KURK** | **Kurchatov** | **111.69** | **32** | *i* PKiKP | **PKiKP** | **20 45 02.1** | **-1.1** | | | |
| **HFS** | **Hagfors** | **113.16** | **352** | PP | **PP** | **20 45 57.3** | **+0.7** | | | |
| | comp=Z,3.3nm,0.8s,baz=164,slow=11,SNR=3.6 | | | | | | | | | |
| **MTDJ** | **Mount Denham** | **113.56** | **269

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **S57A** | **Dark Hollow, R** | **128.56** | **284** | IAMs_20 | IAMs_20 | 21 36 22.8 | | | |
| | comp=Z,490nm,20.0s | | | | | | | | |
| **BRAL** | **Brewton** | **128.90** | **272** | IAMs_20 | IAMs_20 | 21 37 06.0 | | | |
| | comp=Z,566nm,21.0s | | | | | | | | |
| **BLA** | **Blacksburg** | **129.06** | **282** | IAMs_20 | IAMs_20 | 21 36 09.1 | | | |
| | comp=Z,468nm,21.0s | | | | | | | | |
| **SSPA** | **Standing Stone** | **129.82** | **287** | IAMs_20 | IAMs_20 | 21 33 07.3 | | | |
| | comp=Z,598nm,22.0s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **129.91** | **80** | PKP | **PKiKP** | **20 45 40.0** | **+0.5** | | |
| | comp=Z,3.5nm,1.0s,baz=229,slow=1.9,SNR=6.9 | | | | | | | | |
| MJAR | | | | SKPbc | SKPbc | 20 49 01.4 | +0.4 | | |
| | comp=Z,4.0nm,1.0s,baz=215,slow=4.1,SNR=5.5 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **129.91** | **80** | PKIKP | **PKiKP** | **20 45 40.0** | **+0.5** | | |
| **MDJ** | **Mudanjiang** | **130.15** | **66** | PKP | **PKiKP** | **20 45 41.8** | **+2.1** | | |
| **LRAL** | **Lakeview Retre** | **130.17** | **274** | IAMs_20 | IAMs_20 | 21 37 31.7 | | | |
| | comp=Z,529nm,22.0s | | | | | | | | |
| **CPCT** | **Cooper Cave** | **130.32** | **278** | IAMs_20 | IAMs_20 | 21 36 39.7 | | | |
| | comp=Z,562nm,22.0s | | | | | | | | |
| **MNTQ** | **Montreal, Queb** | **130.50** | **295** | IAMs_20 | IAMs_20 | 21 32 25.1 | | | |
| | comp=Z,546nm,19.0s | | | | | | | | |
| **J57A** | **Williamstown** | **130.52** | **291** | IAMs_20 | IAMs_20 | 21 36 38.5 | | | |
| | comp=Z,603nm,21.0s | | | | | | | | |
| **Z47A** | **Carrollton** | **130.93** | **273** | IAMs_20 | IAMs_20 | 21 40 24.8 | | | |
| | comp=Z,565nm,20.0s | | | | | | | | |
| **146A** | **Union** | **131.14** | **272** | IAMs_20 | IAMs_20 | 21 39 06.4 | | | |
| | comp=Z,549nm,21.0s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **131.23** | **68** | PKP | **PKPdf** | **20 45 39.7** | **-1.2** | | |
| | comp=Z,3.4nm,0.8s,baz=220,slow=1.1,SNR=3.5 | | | | | | | | |
| **T50A** | **Nancy** | **131.56** | **279** | IAMs_20 | IAMs_20 | 21 42 21.5 | | | |
| | comp=Z,530nm,22.0s | | | | | | | | |
| **VBMS** | **Vicksburg** | **131.74** | **270** | IAMs_20 | IAMs_20 | 21 37 56.2 | | | |
| | comp=Z,458nm,20.0s | | | | | | | | |
| **KBS** | **Kingsbay** | **131.82** | **356** | IAMs_20 | IAMs_20 | 21 42 30.7 | | | |
| | comp=Z,558nm,20.0s | | | | | | | | |
| **Q51A** | **Peebles** | **131.98** | **282** | IAMs_20 | IAMs_20 | 21 37 58.9 | | | |
| | comp=Z,480nm,21.0s | | | | | | | | |
| **P51A** | **Williamsport** | **132.11** | **283** | IAMs_20 | IAMs_20 | 21 37 30.9 | | | |
| | comp=Z,523nm,22.0s | | | | | | | | |
| **Y45A** | **Yeager Farm, C** | **132.28** | **273** | IAMs_20 | IAMs_20 | 21 41 34.6 | | | |
| | comp=Z,484nm,18.0s | | | | | | | | |
| **SCHQ** | **Schefferville** | **132.57** | **308** | PKP | **PKPdf** | **20 45 43.1** | **0.0** | | |
| | comp=Z,6.2nm,0.9s,baz=159,slow=2.2,SNR=5.3 | | | | | | | | |
| **OXF** | **Oxford** | **132.64** | **273** | IAMs_20 | IAMs_20 | 21 40 24.1 | | | |
| | comp=Z,468nm,20.0s | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **133.12** | **282** | IAMs_20 | IAMs_20 | 21 36 20.8 | | | |
| | comp=Z,443nm,21.0s | | | | | | | | |
| **SUMG** | **Summit** | **133.16** | **338** | | **PKPdf** | **20 45 43.3** | **-0.9** | | |
| **SUMG** | **Summit** | **133.16** | **338** | PKIKP | **PKPdf** | **20 45 43.3** | **-0.9** | | |
| SUMG | | | | MLR | MLR | | | | |
| | comp=Z,900nm,18.0s | | | | | | | | |
| **O49A** | **Covington** | **133.31** | **283** | IAMs_20 | IAMs_20 | 21 38 17.8 | | | |
| | comp=Z,486nm,22.0s | | | | | | | | |
| **Z41A** | **Richland Creek** | **133.84** | **269** | IAMs_20 | IAMs_20 | 21 39 35.9 | | | |
| | comp=Z,552nm,22.0s | | | | | | | | |
| **PEBM** | **Pemiscott Bayo** | **133.99** | **275** | IAMs_20 | IAMs_20 | 21 39 39.8 | | | |
| | comp=Z,407nm,20.0s | | | | | | | | |
| **KLR** | **Kul'dur** | **134.11** | **62** | *e*PKIKP | **PKPdf** | **20 45 46.6** | **+0.4** | | |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **AAM** | **Ann Arbor** | **134.24** | **285** | IAMs_20 | IAMs_20 | 21 45 41.1 | | | |
| | comp=Z,515nm,21.0s | | | | | | | | |
| **WLAR** | **White Oak Lake** | **134.33** | **270** | IAMs_20 | IAMs_20 | 21 41 07.7 | | | |
| | comp=Z,522nm,22.0s | | | | | | | | |
| **L48A** | **N Adams** | **134.47** | **285** | IAMs_20 | IAMs_20 | 21 32 33.4 | | | |
| | comp=Z,528nm,22.0s | | | | | | | | |
| **UALR** | **University of** | **134.60** | **271** | IAMs_20 | IAMs_20 | 21 42 05.9 | | | |
| | comp=Z,711nm,22.0s | | | | | | | | |
| **LCAR** | **Lake Charles** | **134.74** | **274** | IAMs_20 | IAMs_20 | 21 42 30.7 | | | |
| | comp=Z,424nm,20.0s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **134.77** | **275** | IAMs_20 | IAMs_20 | 21 40 00.5 | | | |
| | comp=Z,546nm,22.0s | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **134.91** | **272** | IAMs_20 | IAMs_20 | 21 39 12.2 | | | |
| | comp=Z,611nm,22.0s | | | | | | | | |
| **SFIN** | **Lafayette** | **135.08** | **281** | IAMs_20 | IAMs_20 | 21 35 48.5 | | | |
| | comp=Z,550nm,22.0s | | | | | | | | |
| **T42A** | **Van Buren** | **135.34** | **275** | IAMs_20 | IAMs_20 | 21 40 15.4 | | | |
| | comp=Z,450nm,22.0s | | | | | | | | |
| **MGMO** | **Mountain Grove** | **136.13** | **274** | IAMs_20 | IAMs_20 | 21 41 21.4 | | | |
| | comp=Z,549nm,22.0s | | | | | | | | |
| **FW07** | **Weatherford** | **136.48** | **265** | IAMs_20 | IAMs_20 | 21 42 44.7 | | | |
| | comp=Z,580nm,21.0s | | | | | | | | |
| **HHAR** | **Hobbs** | **136.57** | **272** | IAMs_20 | IAMs_20 | 21 40 50.1 | | | |
| | comp=Z,585nm,22.0s | | | | | | | | |
| **I45A** | **Fountain** | **136.78** | **286** | IAMs_20 | IAMs_20 | 21 37 13.6 | | | |
| | comp=Z,642nm,22.0s | | | | | | | | |
| **U38A** | **Gravette** | **136.95** | **271** | IAMs_20 | IAMs_20 | 21 41 12.1 | | | |
| | comp=Z,584nm,22.0s | | | | | | | | |
| **S39A** | **Bolivar** | **137.12** | **274** | | **PKPdf** | **20 45 48.9** | **-3.3** | | |
| S39A | | | | IAMs_20 | IAMs_20 | 21 42 14.5 | | | |
| | comp=Z,432nm,20.0s | | | | | | | | |
| **TUL3** | **Leonard** | **137.45** | **270** | IAMs_20 | IAMs_20 | 21 43 57.4 | | | |
| | comp=Z,426nm,21.0s | | | | | | | | |
| **P40A** | **Paris** | **137.51** | **277** | IAMs_20 | IAMs_20 | 21 43 52.0 | | | |
| | comp=Z,466nm,21.0s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **137.59** | **256** | PKPdf | **PKPdf** | **20 45 47.6** | **-5.9** | | |
| **TXAR** | **Lajitas Array** | **137.59** | **256** | PKP | **PKiKP** | **20 45 54.6** | **-0.7** | | |
| | comp=Z,7.9nm,1.1s,baz=159,slow=2.8,SNR=16 | | | | | | | | |
| TXAR | | | | SKPbc | **SKPbc** | **20 49 27.8** | **+1.0** | | |
| | comp=Z,2.9nm,0.9s,baz=157,slow=4.9,SNR=5.4 | | | | | | | | |
| **I42A** | **Draeger Farm,** | **138.27** | **284** | IAMs_20 | IAMs_20 | 21 46 10.0 | | | |
| | comp=Z,517nm,20.0s | | | | | | | | |
| **APMT** | **Aspermont** | **138.32** | **263** | | **PKPdf** | **20 45 52.7** | **-1.9** | | |
| **WMOK** | **Wichita Mounta** | **138.48** | **266** | | PKPpre | 20 45 47.7 | | | |
| **WMOK** | **Wichita Mounta** | **138.48** | **266** | PKHKP | PKPpre | 20 45 47.7 | | | |
| WMOK | | | | MLR | MLR | | | | |
| | comp=Z,300nm,20.0s | | | | | | | | |
| **SN07** | **Snyder 07** | **138.62** | **262** | | **PKPdf** | **20 45 52.0** | **-3.2** | | |
| **F42A** | **Maple Grove Fa** | **138.88** | **287** | IAMs_20 | IAMs_20 | 21 42 37.9 | | | |
| | comp=Z,517nm,20.0s | | | | | | | | |
| **N38A** | **Joes South For** | **139.01** | **277** | IAMs_20 | IAMs_20 | 21 44 36.6 | | | |
| | comp=Z,443nm,21.0s | | | | | | | | |
| **I40A** | **Norwalk** | **139.28** | **283** | IAMs_20 | IAMs_20 | 21 46 19.6 | | | |
| | comp=Z,453nm,21.0s | | | | | | | | |
| **YAK** | **Yakutsk** | **139.44** | **45** | IAMs_20 | IAMs_20 | 21 42 34.7 | | | |
| | comp=Z,519nm,21.0s | | | | | | | | |
| **COWI** | **Conover** | **139.65** | **287** | IAMs_20 | IAMs_20 | 21 45 55.4 | | | |
| | comp=Z,500nm,19.0s | | | | | | | | |
| **G40A** | **Rib Lake** | **139.81** | **285** | IAMs_20 | IAMs_20 | 21 41 35.7 | | | |
| | comp=Z,480nm,20.0s | | | | | | | | |
| **AMTX** | **Amarillo** | **140.33** | **264** | IAMs_20 | IAMs_20 | 21 46 50.6 | | | |
| | comp=Z,445nm,20.0s | | | | | | | | |
| **R32A** | **Long Quarter,** | **140.85** | **270** | IAMs_20 | IAMs_20 | 21 42 19.4 | | | |
| | comp=Z,558nm,22.0s | | | | | | | | |
| **SPMN** | **Marine on St.** | **141.32** | **283** | IAMs_20 | IAMs_20 | 21 40 28.6 | | | |
| | comp=Z,431nm,22.0s | | | | | | | | |
| **E38A** | **The Farm, Brul** | **141.33** | **286** | IAMs_20 | IAMs_20 | 21 41 02.9 | | | |
| | comp=Z,549nm,21.0s | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **141.72** | **270** | IAMs_20 | IAMs_20 | 21 42 48.5 | | | |
| | comp=Z,473nm,22.0s | | | | | | | | |
| **EYMN** | **Ely** | **142.00** | **288** | IAMs_20 | IAMs_20 | 21 44 14.4 | | | |
| | comp=Z,543nm,22.0s | | | | | | | | |
| **RTBA** | **Rita Blanca** | **142.01** | **265** | | PKPpre | 20 45 51.9 | | | |
| **ECSD** | **EROS Data Cent** | **142.76** | **279** | IAMs_20 | IAMs_20 | 21 45 26.9 | | | |
| | comp=Z,696nm,22.0s | | | | | | | | |
| **T25A** | **Trinidad** | **143.48** | **264** | IAMs_20 | IAMs_20 | 21 46 33.0 | | | |
| | comp=Z,450nm,22.0s | | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **143.72** | **282** | IAMs_20 | IAMs_20 | 22 02 38.1 | | | |
| | comp=Z,457nm,20.0s | | | | | | | | |
| **TUC** | **Tucson** | **143.92** | **252** | | PKPab | 20 46 01.3 | -0.7 | | |
| **TUC** | **Tucson** | **143.92** | **252** | PKIKP | PKPab | 20 46 01.3 | -0.7 | | |
| **K30B** | **Basset** | **143.97** | **275** | IAMs_20 | IAMs_20 | 21 43 51.9 | | | |
| | comp=Z,429nm,20.0s | | | | | | | | |
| **OGNE** | **Ogallala** | **144.42** | **271** | | **PKPab** | **20 46 03.1** | **-0.5** | | |
| **AGMN** | **Agassiz Nation** | **144.71** | **286** | IAMs_20 | IAMs_20 | 21 44 18.2 | | | |
| | comp=Z,507nm,22.0s | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **145.34** | **263** | IAMs_20 | IAMs_20 | 22 04 14.1 | | | |
| | comp=Z,364nm,19.0s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **145.63** | **289** | PKPdf | **PKPdf** | **20 46 04.9** | **-2.1** | | |
| **ULM** | **Lac du Bonnet** | **145.63** | **289** | PKPbc | **PKPdf** | **20 46 06.2** | **-0.8** | | |
| | comp=Z,28nm,1.0s,baz=100,slow=1.5,SNR=17 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **145.63** | **289** | PKP2 | **PKPdf** | **20 46 04.9** | **-2.1** | | |
| **ISCO** | **Idaho Springs** | **145.90** | **267** | IAMs_20 | IAMs_20 | 22 06 04.1 | | | |
| | comp=Z,540nm,22.0s | | | | | | | | |
| **MVCO** | **Mesa Verde** | **145.99** | **260** | IAMs_20 | IAMs_20 | 21 51 06.0 | | | |
| | comp=Z,468nm,21.0s | | | | | | | | |
| **PHWY** | **Pilot Hill** | **146.71** | **269** | IAMs_20 | IAMs_20 | 22 02 38.6 | | | |
| | comp=Z,366nm,20.0s | | | | | | | | |
| **E28A** | **Huff** | **146.72** | **280** | IAMs_20 | IAMs_20 | 21 47 15.5 | | | |
| | comp=Z,538nm,20.0s | | | | | | | | |
| **N23A** | **Red Feather La** | **146.77** | **268** | IAMs_20 | IAMs_20 | 22 00 41.0 | | | |
| | comp=Z,420nm,19.0s | | | | | | | | |
| **CBX** | **Cerro Bola** | **147.25** | **245** | IAMs_20 | IAMs_20 | 21 32 37.3 | | | |
| | comp=Z,395nm,20.0s | | | | | | | | |
| **RSSD** | **Black Hills** | **147.45** | **274** | | **PKPdf** | **20 46 09.6** | **-1.0** | | |
| **RSSD** | **Black Hills** | **147.45** | **274** | IAMs_20 | IAMs_20 | 22 03 58.1 | | | |
| | comp=Z,442nm,20.0s | | | | | | | | |
| **RSSD** | **Black Hills** | **147.45** | **274** | PKIKP | **PKPdf** | **20 46 09.6** | **-1.0** | | |
| RSSD | | | | MLR | MLR | | | | |
| | comp=Z,400nm,20.0s | | | | | | | | |
| **O20A** | **White River Ci** | **147.70** | **265** | IAMs_20 | IAMs_20 | 21 49 53.6 | | | |
| | comp=Z,400nm,22.0s | | | | | | | | |
| **FCC** | **Fort Churchill** | **147.71** | **304** | PKPdf | **PKPdf** | **20 46 10.9** | **+0.7** | | |
| **FCC** | **Fort Churchill** | **147.71** | **304** | PKP2 | **PKPdf** | **20 46 10.9** | **+0.7** | | |
| FCC | | | | MLR | MLR | | | | |
| | comp=Z,1$\mu$m,20.0s | | | | | | | | |
| **HMU** | **Henry Mountain** | **147.81** | **259** | IAMs_20 | IAMs_20 | 21 58 23.4 | | | |
| | comp=Z,553nm,19.0s | | | | | | | | |
| **RWWY** | **Rawlins** | **148.01** | **268** | IAMs_20 | IAMs_20 | 21 48 32.8 | | | |
| | comp=Z,401nm,21.0s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **148.11** | **247** | | **PKPdf** | **20 46 13.5** | **+1.6** | | |
| **PFO** | **Pinyon Flats O** | **148.11** | **247** | PKPbc | **PKPbc** | **20 46 14.7** | **-0.4** | | |
| | comp=Z,8.1nm,1.1s,baz=148,slow=1.2,SNR=7.5 | | | | | | | | |
| **K22A** | **Casper** | **148.14** | **270** | IAMs_20 | IAMs_20 | 21 47 31.4 | | | |
| | comp=Z,445nm,21.0s | | | | | | | | |
| **SRU** | **San Rafael Swe** | **148.43** | **261** | IAMs_20 | IAMs_20 | 21 48 37.0 | | | |
| | comp=Z,436nm,22.0s | | | | | | | | |
| **MA2** | **Magadan** | **148.45** | **55** | | **PKPdf** | **20 46 10.0** | **-1.4** | | |
| **MA2** | **Magadan** | **148.45** | **55** | PKIKP | **PKPdf** | **20 46 10.0** | **-1.4** | | |
| **Q16A** | **Castle Valley** | **148.70** | **260** | IAMs_20 | IAMs_20 | 21 51 25.0 | | | |
| | comp=Z,405nm,22.0s | | | | | | | | |
| **RDMU** | **Red Mountain** | **148.77** | **264** | IAMs_20 | IAMs_20 | 22 07 45.9 | | | |
| | comp=Z,388nm,18.0s | | | | | | | | |
| **SZCU** | **Shurtz Canyon** | **148.97** | **256** | IAMs_20 | IAMs_20 | 21 43 32.2 | | | |
| | comp=Z,625nm,21.0s | | | | | | | | |
| **CCUT** | **Cedar City** | **149.10** | **256** | IAMs_20 | IAMs_20 | 22 07 05.7 | | | |
| | comp=Z,496nm,20.0s | | | | | | | | |
| **TCRU** | **The Creeks R** | **149.26** | **259** | IAMs_20 | IAMs_20 | 22 08 47.9 | | | |
| | comp=Z,411nm,18.0s | | | | | | | | |
| **MPU** | **Maple Canyon** | **149.67** | **261** | IAMs_20 | IAMs_20 | 21 49 01.7 | | | |
| | comp=Z,511nm,22.0s | | | | | | | | |
| **DGMT** | **Dagmar** | **149.71** | **281** | IAMs_20 | IAMs_20 | 21 51 33.6 | | | |
| | comp=Z,584nm,20.0s | | | | | | | | |
| **SEY** | **Seymchan** | **149.80** | **48** | *e*PKP2 | **PKiKP** | **20 46 19.1** | **-0.1** | | |
| SEY | | | | pmax | pmax | | | | |
| | comp=Z,57nm,1.3s | | | | | | | | |
| **NLU** | **Noh Lily Min** | **149.90** | **261** | IAMs_20 | IAMs_20 | 22 01 02.8 | | | |
| | comp=Z,474nm,20.0s | | | | | | | | |
| **JLU** | **Jordanelle** | **149.92** | **263** | IAMs_20 | IAMs_20 | 22 08 09.4 | | | |
| | comp=Z,458nm,18.0s | | | | | | | | |
| **PSUT** | **Pine Spring** | **150.04** | **257** | IAMs_20 | IAMs_20 | 22 05 31.7 | | | |
| | comp=Z,435nm,20.0s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **150.05** | **268** | PKPdf | **PKPdf** | **20 46 12.2** | **-2.7** | | |
| **LAO** | **LASA Array** | **150.09** | **277** | IAMs_20 | IAMs_20 | 21 53 32.9 | | | |
| | comp=Z,471nm,19.0s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **150.31** | **69** | | **PKPdf** | **20 46 17.0** | **+2.4** | | |
| **PEA0B** | **Petropavlovsk-** | **150.31** | **69** | PKIKP | **PKPdf** | **20 46 17.0** | **+2.4** | | |
| **PETK** | **Petropavlovsk-** | **150.31** | **69** | PKP | **PKPdf** | **20 46 14.8** | **+0.2** | | |
| | comp=Z,3.6nm,0.6s,baz=196,slow=1.5,SNR=3.4 | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **150.49** | **261** | IAMs_20 | IAMs_20 | 21 50 34.4 | | | |
| | comp=Z,441nm,21.0s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **150.59** | **264** | IAMs_20 | IAMs_20 | 22 02 36.3 | | | |
| | comp=Z,400nm,20.0s | | | | | | | | |
| **SPR3** | **Spring Creek 3** | **150.63** | **257** | IAMs_20 | IAMs_20 | 21 56 18.2 | | | |
| | comp=Z,400nm,19.0s | | | | | | | | |
| **ISA** | **Isabella, Lake** | **150.74** | **248** | IAMs_20 | IAMs_20 | 21 56 55.7 | | | |
| | comp=Z,473nm,19.0s | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **150.94** | **255** | IAMs_20 | IAMs_20 | 22 06 24.4 | | | |
| | comp=Z,422nm,20.0s | | | | | | | | |
| **SPUT** | **South Promonto** | **150.95** | **263** | IAMs_20 | IAMs_20 | 21 57 58.7 | | | |
| | comp=Z,394nm,21.0s | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **150.99** | **266** | IAMs_20 | IAMs_20 | 22 05 15.7 | | | |
| | comp=Z,435nm,19.0s | | | | | | | | |
| **BGU** | **Big Grassy Mou** | **151.07** | **262** | IAMs_20 | IAMs_20 | 21 55 23.7 | | | |
| | comp=Z,394nm,20.0s | | | | | | | | |
| **RLMT** | **Red Lodge** | **151.15** | **272** | IAMs_20 | IAMs_20 | 22 07 52.0 | | | |
| | comp=Z,476nm,20.0s | | | | | | | | |
| **LOHW** | **Long Hollow** | **151.16** | **268** | IAMs_20 | IAMs_20 | 22 06 36.3 | | | |
| | comp=Z,398nm,20.0s | | | | | | | | |
| **TPAW** | **Teton Pass** | **151.30** | **268** | IAMs_20 | IAMs_20 | 22 06 05.1 | | | |
| | comp=Z,493nm,20.0s | | | | | | | | |
| **HVU** | **Hansel Valley** | **151.43** | **263** | IAMs_20 | IAMs_20 | 22 04 45.3 | | | |
| | comp=Z,537nm,19.0s | | | | | | | | |
| **FXWY** | **Fox Creek** | **151.43** | **268** | IAMs_20 | IAMs_20 | 21 57 38.4 | | | |
| | comp=Z,529nm,19.0s | | | | | | | | |
| **YPP** | **Pitchstone Pla** | **151.64** | **269** | IAMs_20 | IAMs_20 | 22 09 06.9 | | | |
| | comp=Z,535nm,18.0s | | | | | | | | |
| **DSP** | **Deep Springs** | **151.66** | **251** | IAMs_20 | IAMs_20 | 22 05 07.2 | | | |
| | comp=Z,477nm,18.0s | | | | | | | | |
| **YNR** | **Norris Junctio** | **151.80** | **270** | IAMs_20 | IAMs_20 | 21 48 48.1 | | | |
| | comp=Z,441nm,21.0s | | | | | | | | |
| **YNM** | **Yellowstone No** | **151.82** | **270** | IAMs_20 | IAMs_20 | 21 50 14.6 | | | |
| | comp=Z,546nm,22.0s | | | | | | | | |
| **YHL** | **Hebgen Lake** | **152.17** | **270** | IAMs_20 | IAMs_20 | 22 02 13.1 | | | |
| | comp=Z,441nm,21.0s | | | | | | | | |
| **ELK** | **Elko** | **152.28** | **259** | IAMs_20 | IAMs_20 | 22 03 30.8 | | | |
| | comp=Z,440nm,20.0s | | | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **152.42** | **250** | IAMs_20 | IAMs_20 | 21 56 57.3 | | | |
| | comp=Z,447nm,22.0s | | | | | | | | |
| **LHV** | **Little Huntoon** | **152.57** | **251** | IAMs_20 | IAMs_20 | 22 03 59.4 | | | |
| | comp=Z,418nm,20.0s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **152.58** | **252** | PKP | **PKPdf** | **20 46 18.4** | **-0.5** | | |
| | comp=Z,0.0nm,0.8s,baz=151,slow=3.2,SNR=13 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **152.83** | **271** | IAMs_20 | IAMs_20 | 22 11 05.3 | | | |
| | comp=Z,466nm,19.0s | | | | | | | | |
| **EGMT** | **Eagleton** | **152.84** | **277** | IAMs_20 | IAMs_20 | 21 53 58.5 | | | |
| | comp=Z,526nm,20.0s | | | | | | | | |
| **RYN** | **Ryan** | **152.84** | **252** | IAMs_20 | IAMs_20 | 22 11 14.5 | | | |
| | comp=Z,426nm,20.0s | | | | | | | | |
| **BMN** | **Battle Mountai** | **153.26** | **257** | IAMs_20 | IAMs_20 | 21 56 09.7 | | | |
| | comp=Z,516nm,21.0s | | | | | | | | |
| **DLMT** | **Dillon** | **153.29** | **270** | IAMs_20 | IAMs_20 | 22 09 12.7 | | | |
| | comp=Z,440nm,19.0s | | | | | | | | |
| **HLID** | **Hailey** | **153.44** | **265** | IAMs_20 | IAMs_20 | 22 01 27.6 | | | |
| | comp=Z,514nm,19.0s | | | | | | | | |
| **YERR** | **Yerington** | **153.49** | **252** | IAMs_20 | IAMs_20 | 21 55 44.8 | | | |
| | comp=Z,541nm,19.0s | | | | | | | | |
| **CMB** | **Columbia Colle** | **153.50** | **249** | IAMs_20 | IAMs_20 | 22 02 05.9 | | | |
| | comp=Z,402nm,20.0s | | | | | | | | |
| **PNTR** | **Pine Nut** | **153.77** | **252** | IAMs_20 | IAMs_20 | 22 01 11.1 | | | |
| | comp=Z,479nm,20.0s | | | | | | | | |
| **PAHR** | **Pah Rah Range** | **154.06** | **253** | IAMs_20 | IAMs_20 | 22 00 42.8 | | | |
| | comp=Z,424nm,19.0s | | | | | | | | |
| **MPK** | **Martis Peak** | **154.16** | **251** | IAMs_20 | IAMs_20 | 21 58 05.4 | | | |
| | comp=Z,573nm,20.0s | | | | | | | | |
| **MFID** | **Camas Ranch** | **154.21** | **263** | IAMs_20 | IAMs_20 | 22 03 14.0 | | | |
| | comp=Z,380nm,20.0s | | | | | | | | |
| **AFDM** | **Forest Hills D** | **154.46** | **250** | IAMs_20 | IAMs_20 | 22 01 49.3 | | | |
| | comp=Z,410nm,21.0s | | | | | | | | |
| **MSO** | **Missoula** | **154.83** | **272** | IAMs_20 | IAMs_20 | 21 54 29.3 | | | |
| | comp=Z,470nm,21.0s | | | | | | | | |
| **BILL** | **Bilibino** | **155.13** | **36** | IAMs_20 | IAMs_20 | 22 07 59.5 | | | |
| | comp=Z,382nm,18.0s | | | | | | | | |
| **BILL** | **Bilibino** | **155.13** | **36** | *e*PKIKP | **PKPdf** | **20 46 21.8** | **+0.6** | | |
| BILL | | | | *e* | | 20 50 22.3 | | | |
| BILL | | | | *e* | | 20 53 28.2 | | | |
| BILL | | | | *e*PPP | PPP | 20 53 52.9 | | | |
| BILL | | | | *e*SS | SS | 21 10 06.9 | +0.5 | | |
| BILL | | | | *e*SSS | SSS | 21 16 01.4 | | | |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **155.33** | **259** | IAMs_20 | IAMs_20 | 21 57 48.5 | | | |
| | comp=Z,535nm,20.0s | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **155.77** | **261** | IAMs_20 | IAMs_20 | 21 57 36.2 | | | |
| | comp=Z,541nm,21.0s | | | | | | | | |
| **F10A** | **Beach Ranch, E** | **156.41** | **267** | IAMs_20 | IAMs_20 | 22 06 58.2 | | | |
| | comp=Z,505nm,20.0s | | | | | | | | |
| **I07A** | **Izee** | **156.79** | **261** | IAMs_20 | IAMs_20 | 22 06 04.3 | | | |
| | comp=Z,584nm,21.0s | | | | | | | | |
| **G08A** | **Pilot Rock** | **157.11** | **264** | IAMs_20 | IAMs_20 | 21 54 17.8 | | | |
| | comp=Z,465nm,22.0s | | | | | | | | |
| **E09A** | **Wood Farm, Sta** | **157.23** | **268** | IAMs_20 | IAMs_20 | 22 07 20.9 | | | |
| | comp=Z,482nm,20.0s | | | | | | | | |
| **K04D** | **Chiloquin, OR** | **157.29** | **256** | IAMs_20 | IAMs_20 | 21 59 58.3 | | | |
| | comp=Z,539nm,20.0s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **157.29** | **253** | IAMs_20 | IAMs_20 | 22 01 33.4 | | | |
| | comp=Z,444nm,19.0s | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **157.37** | **258** | IAMs_20 | IAMs_20 | 22 05 56.6 | | | |
| | comp=Z,459nm,18.0s | | | | | | | | |
| **PINE** | **Pine Mountain** | **157.49** | **259** | IAMs_20 | IAMs_20 | 22 10 10.7 | | | |
| | comp=Z,497nm,19.0s | | | | | | | | |
| **D08A** | **Wollman Farm,** | **157.96** | **268** | IAMs_20 | IAMs_20 | 22 08 36.1 | | | |
| | comp=Z,526nm,20.0s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **157.99** | **311** | PKPdf | **PKPdf** | **20 46 22.0** | **-3.0** | | |
| **YKA** | **Yellowknife Ar** | **157.99** | **311** | PKP | **PKPdf** | **20 46 22.9** | **-2.2** | | |
| | comp=Z,1.4nm,0.8s,baz=64,slow=2.9,SNR=2.5 | | | | | | | | |
| **I05D** | **Terrebonne, OR** | **158.03** | **260** | IAMs_20 | IAMs_20 | 22 05 00.1 | | | |
| | comp=Z,476nm,21.0s | | | | | | | | |
| **MXC** | **Moxie City** | **158.56** | **266** | IAMs_20 | IAMs_20 | 22 12 41.2 | | | |
| | comp=Z,491nm,19.0s | | | | | | | | |
| **H04A** | **Detroit Lake** | **158.73** | **260** | IAMs_20 | IAMs_20 | 22 07 56.5 | | | |
| | comp=Z,433nm,20.0s | | | | | | | | |
| **DLBC** | **Dease Lake** | **166.30** | **303** | PKPab | **PKPab** | **20 47 36.7** | **+1.5** | | |
| | comp=Z,8.9nm,1.1s,baz=58,slow=5.4,SNR=8.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **167.70** | **349** | PKP | **PKPdf** | **20 46 32.3** | **-2.2** | | |
| | comp=Z,1.0nm,1.0s,baz=280,slow=1.4,SNR=4.4 | | | | | | | | |
| ILAR | | | | PKPab | **pPKPab** | **20 47 42.6** | **+0.2** | | |
| | comp=Z,1.5nm,0.8s,baz=357,slow=4.1,SNR=5.9 | | | | | | | | |
| ILAR | | | | PP | **PP** | **20 51 32.8** | **+2.8** | | |
| | comp=Z,0.3nm,0.8s,baz=12,slow=4.6,SNR=1.7 | | | | | | | | |

*JMA* ***22*** *20:30:14.4±0.2,22.8°N±0.4×121.6°E±1.0,h25km±3km, MV4.4/18,TAIWAN REGION*

*NIED* ***22*** *20:30:14.4,22.84°N×121.63E,h25km,MW4.2,Moment Tensor Solution. s2 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.09; $M_{\theta\theta}$-1.09; $M_{\phi\phi}$1.00; $M_{r\theta}$-1.26; $M_{\theta\phi}$0.61; $M_{\phi r}$-0.71; Fault plane solution: $M_0$1.89000×$10^{15}$ NP1: $\phi_s$241.00000°,$\delta$88.00000°,$\lambda$50.00000°. NP2: $\phi_s$149.00000°,$\delta$40.00000°,$\lambda$177.00000°.*

*NEIC* ***22*** *20:30:15.8±2.0,23.00°N±0.07×121.62E±0.05,h10km±1km, mb4.4/11 Error ellipse: s-maj=12.7km s-min=8.1km az=193.0*

*TAP* ***22*** *20:30:16.1,22.88N×121.57E,h19km,ML4.3,C*

*ASIES* ***22*** *20:30:16.1,22.88N×121.57E,h19km,ML4.3,Mw4.0, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; $M_{rr}$9.44; $M_{\theta\theta}$2.63; $M_{\phi\phi}$-7.80; $M_{r\theta}$6.65; $M_{\theta\phi}$-2.69; $M_{\phi r}$3.20; Fault plane solution: $M_0$11.83830×$10^{21}$ NP1: $\phi_s$41.17000°,$\delta$65.25000°,$\lambda$118.56000°. NP2: $\phi_s$168.74000°,$\delta$37.09000°,$\lambda$43.97000°. Principal axes: T Plg59.3300°, Azm352.6550°; N Plg25.7240°, Azm208.3270°; P Plg15.5440°, Azm110.6260°;*

*IDC* ***22*** *20:30:22.5±5.5,22.90N×121.71E,h76km±53km,mb3.6/12, mbtmp3.9/14,ML3.4/2,MS4.1/2 Error ellipse: s-maj=23.5km s-min=22.0km az=64.0*

**ISC 22 20:30:15.0±1.0, 22°86N±0.02×121°65E±0.02, h13km±6km, n214,σ1°18/334, mb4.2/19, 30C-14D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LDUT** | **Ludao** | **0.25** | **222** | ⇑*i*P | **Pb** | **20 30 21.6** | **+0.2** |
| | baz=205 | | | | | | |
| LDUT | | | | *e*S | **Sb** | **20 30 25.5** | **-0.1** |
| | baz=205 | | | | | | |
| **EDH** | **Donghe** | **0.34** | **289** | ⇓*i*P | **Pg** | **20 30 22.1** | **+0.2** |
| | baz=297 | | | | | | |
| EDH | | | | *i* S | **Sg** | **20 30 26.5** | **-0.1** |
| | baz=297 | | | | | | |
| **CHKT** | **Chengkung** | **0.35** | **312** | ⇓*i*P | **Pg** | **20 30 22.4** | **+0.2** |
| | baz=325 | | | | |

TEYL Yanliau Villag 1.00 357 eP Pb 20 30 33.9 -0.4
baz=16
TEYL eS Sb 20 30 47.5 +0.1
baz=16
VWDT VWDT 1.00 332 ⇑P Pb 20 30 33.4 -0.9
baz=336
VWDT S Sb 20 30 45.7 -1.7
baz=336
SGST Jiashian 1.01 283 eP Pb 20 30 33.0 -1.3
baz=283
SGST S Sb 20 30 46.6 -0.9
baz=283
SLIU Shizi 1.01 231 eP Pb 20 30 33.5 -1.0
baz=227
SLIU eS Sb 20 30 45.7 -2.0
baz=227
WTP Ta-pu 1.03 292 ⇓P Pb 20 30 34.1 -0.6
baz=298
WTP eS Sb 20 30 47.5 -0.6
baz=298
TPUB Ta-pu 1.04 295 P Pb 20 30 34.3 -0.6
TPUB Ta-pu 1.04 295 Pb 20 30 34.1 -0.7
TPUB Ta-pu 1.04 295 ⇓P Pb 20 30 34.2 -0.6
baz=302
TPUB eS Sb 20 30 47.2 -1.1
baz=302
SCST Cishan 1.07 272 eP Pb 20 30 35.2 -0.1
baz=271
SCZT Fangliau 1.07 243 eP Pb 20 30 34.5 -0.8
baz=234
SCZT eS Sb 20 30 48.7 -0.5
baz=234
SGLT Jiouru 1.08 263 eP Pb 20 30 35.6 0.0
baz=263
SGLT eS Sb 20 30 49.6 +0.1
baz=263
CHN1 Nanshi 1.08 288 eP Pb 20 30 35.5 -0.1
baz=293
CHN1 S Sb 20 30 48.9 -0.8
baz=293
WHYT Xinyi Township 1.11 319 ⇑P Pb 20 30 35.9 -0.2
baz=322
WHYT iS Sb 20 30 49.5 -0.9
baz=322
ETM Tongmen 1.11 353 P Pb 20 30 34.6 -1.5
baz=12
HWA Hwalien 1.11 358 eP Pn 20 30 34.9 -1.4
baz=14
HWA eS Sb 20 30 49.7 -0.8
baz=14
SNST Tainan City 1.12 289 eP Pb 20 30 36.0 -0.2
baz=290
SNST eS Sg 20 30 51.4 +0.2
baz=290
WCKO Fanlu 1.12 301 eP Pn 20 30 36.6 +0.2
baz=308
WCKO eS Sb 20 30 50.0 -0.7
baz=308
SSLB Suanglung 1.12 325 P Pb 20 30 35.3 -1.0
SSLB Suanglung 1.12 325 Pb 20 30 34.7 -1.6
SSLB Suanglung 1.12 325 iP Pb 20 30 35.1 -1.2
baz=340
SSLB eS Sb 20 30 49.6 -1.3
baz=340
SMST Manzhou Townsh 1.12 222 eP Pn 20 30 35.2 -1.3
baz=218
TWM1 Shoushan 1.13 268 eP Pg 20 30 37.4 +0.6
baz=260
TWM1 eS Sb 20 30 50.4 -0.7
baz=260
TWK Hsinying 1.14 291 eP Pn 20 30 36.2 -0.6
baz=292
TWK eS Sn 20 30 51.6 -0.8
baz=292
CHN5 Tsauling 1.16 310 P Pn 20 30 36.8 -0.2
baz=320
CHN5 eS Sb 20 30 51.3 -0.6
baz=320
OWD Renai 1.17 338 P Pn 20 30 36.0 -1.3
baz=342
OWD S Sb 20 30 50.0 -2.5
baz=342
LXIB Xiulin Townshi 1.18 349⇑iP Pn 20 30 35.5 -1.8
baz=353
LXIB S Sb 20 30 49.2 -3.3
baz=353
HEN Hengchun 1.20 225 eP Pn 20 30 37.0 -0.5
baz=221
HEN eS Sb 20 30 51.2 -1.8
baz=221
TWD Chiawan 1.22 358 eP Pn 20 30 36.0 -1.7
baz=13
TWD eS Sb 20 30 50.9 -2.5
baz=13
SNJT Kaohsiung City 1.22 265 eP Pb 20 30 38.2 +0.3
baz=264
SNJT eS Sg 20 30 56.7 +2.4
baz=264
WUSB Renai 1.23 337 ⇑P Pn 20 30 36.9 -1.1
baz=340
WUSB eS Sb 20 30 51.0 -2.9
baz=340
TYC Yuchr 1.27 325 eP Pn 20 30 38.4 0.0
baz=338
TYC iS Sb 20 30 54.5 -0.5
baz=338
CHN2 Minshiung 1.27 302 eP Pb 20 30 39.4 +0.6
baz=303
CHN2 eS Sg 20 30 56.4 +0.4
baz=303
CHGB Renai 1.27 340⇑iP Pn 20 30 37.7 -1.0
baz=355
CHGB eS Sb 20 30 52.6 -2.8
baz=355
WJS Zhushan 1.28 319 eP Pb 20 30 39.0 +0.1
baz=321
WJS eS Sn 20 30 55.3 -0.3
baz=321
SSHA Shanhua 1.28 283 eP Pg 20 30 40.7 +1.0
baz=283
SSHA eS Sg 20 30 57.5 +1.1
baz=283
ETL Fush Village 1.29 359 eP Pn 20 30 37.4 -1.4
baz=14
TWP Hsiaoliuchiu 1.29 247 eP Pn 20 30 39.2 +0.4
baz=227
TWP eS Sg 20 30 57.4 +0.6
baz=227
NACB Ninganchiao 1.31 358 Pn Pn 20 30 37.0 -2.0
NACB Ninganchiao 1.31 358⇑iP Pn 20 30 37.3 -1.7
baz=13
NACB S Sn 20 30 53.2 -3.1
baz=13
WDLH Douliu 1.31 309 P Pb 20 30 40.1 +0.6
baz=311
WDLH iS Sg 20 30 57.6 +0.2
baz=311
TAI1 Yung-k'ang 1.32 278 eP Pn 20 30 39.4 +0.2
baz=278
TAI1 eS Sb 20 30 56.8 +0.3
baz=278
WHF Hehuan Shan 1.33 345 P Pn 20 30 38.4 -1.3
baz=348
WNT Mingjian 1.35 319⇑iP Pb 20 30 40.3 +0.2
baz=321
WNT iS Sb 20 30 57.5 +0.2
baz=321
ETLH Xiulin Townshi 1.35 353 P Pn 20 30 38.2 -1.5
baz=357
ETLH eS Sn 20 30 54.6 -2.9
baz=357
ICHU Yijhu 1.36 292 eP Pb 20 30 40.5 +0.2
baz=293
ICHU eS Sg 20 30 58.1 -0.7
baz=293
WCS Beigang Elemen 1.37 331 iP Pn 20 30 40.0 +0.1
baz=342
WCS eS Sn 20 30 56.7 -1.2
baz=342
SCLT Jiali 1.38 283 eP Pn 20 30 39.7 -0.2
baz=284
SCLT eS Sg 20 30 59.0 -0.4
baz=284
EOS4 EOS4 1.40 26 eP Pn 20 30 39.5 -0.4
baz=29
EOS4 S Sn 20 30 56.3 -1.7
baz=29
CHN8 Yiju 1.41 290 eP Pb 20 30 41.2 0.0
baz=291
CHN8 S Sb 20 30 59.5 +0.5
baz=291
FUSS Fushou 1.43 345 ⇑P Pb 20 30 40.1 -0.8
baz=348
FUSS S Sn 20 30 56.8 -2.9
baz=348
TWT Tachien 1.45 343⇑eP Pn 20 30 40.7 -0.4
baz=345
TWT eS Sn 20 30 57.1 -3.0
baz=345
TDCB Techi 1.46 342 P Pn 20 30 41.0 -0.2
baz=345
TDCB eS Sn 20 30 57.1 -3.2
baz=345
EAHA Aohua 1.46 3 eP Pn 20 30 40.1 -1.0
baz=6.0
EAHA S Sn 20 30 58.0 -2.2
baz=6.0
WSL Shuilin Townsh 1.46 297 eP Pn 20 30 41.7 +0.6
baz=298
WSL iS Sb 20 31 01.1 +0.5
baz=298
TSCK Chigu Township 1.47 281 eP Pb 20 30 42.0 -0.2
baz=282
TSCK eS Sb 20 31 01.4 +0.6
baz=282
WSF Szhu 1.52 301 eP Pn 20 30 41.8 -0.1
baz=302
WSF S Sb 20 31 01.9 -0.4
baz=302
EOS3 EOS3 1.55 23 P Pn 20 30 42.1 -0.1
baz=23
EOS3 S Sn 20 31 00.6 -1.4
baz=23
WHP Taichung City 1.55 336 eP Pb 20 30 43.6 -0.1
baz=345
WHP eS Sb 20 31 02.5 -0.8
baz=345
ENA Nanau 1.56 3 eP Pn 20 30 41.2 -1.3
baz=6.0
WCHH Zhanghua 1.57 321 eP Pb 20 30 43.6 -0.4
baz=322
WCHH S Sb 20 31 04.2 +0.4
baz=322
NNSB Datong 1.58 351 ⇑P Pn 20 30 41.9 -1.0
baz=7.0
NNSB eS Sn 20 31 00.4 -2.8
baz=7.0
EWUT Wuta 1.58 4 P Pn 20 30 42.0 -0.7
baz=18
EWUT eS Sn 20 31 01.9 -1.2
baz=18
NNS Nan Shan 1.59 351 eP Pn 20 30 42.5 -0.5
baz=7.0
NNS S Sn 20 31 00.6 -2.9
baz=7.0
WTCT Ta-ch'eng 1.61 309 eP Pb 20 30 43.9 -0.6
baz=310
WTCT eS Sb 20 31 04.2 -0.5
baz=310
EOS2 EOS2 1.64 19 eP Pn 20 30 43.5 +0.1
baz=18
EOS2 eS Sn 20 31 01.5 -2.8
baz=18
LATG Datong 1.67 356 eP Pn 20 30 42.9 -1.2
baz=359
TWQ1 Liyutan 1.69 332 ⇑P Pb 20 30 45.5 -0.4
baz=334
TWQ1 eS Sb 20 31 06.0 -1.0
baz=334
ESAO Su ao 1.72 6 eP Pn 20 30 43.8 -0.8
baz=20
ESAO eS Sn 20 31 03.6 -2.8
baz=20
NDT Datong Townshi 1.74 356 eP Pn 20 30 44.5 -0.4
baz=358
WDJ Dajia District 1.75 328 eP Pb 20 30 46.9 0.0
baz=330
WDJ S Sb 20 31 09.7 +1.0
baz=330
NSY Sanyi 1.75 332 eP Pb 20 30 46.6 -0.4
baz=335
NSY eS Sb 20 31 09.2 +0.3
baz=335
TWC Suao 1.75 6 eP Pn 20 30 44.8 -0.3
baz=19
TWC S Sn 20 31 05.7 -1.5
baz=19
NDS Dongshan 1.77 2 eP Pn 20 30 45.0 -0.3
baz=15
NDS eS Sn 20 31 07.2 -0.4
baz=15
ENTT Nioudou 1.77 358 eP Pn 20 30 44.9 -0.5
ENTT eS Sn 20 31 07.0 -0.9
YHNB Yeheng 1.82 352 P Pn 20 30 45.9 -0.2
YHNB Yeheng 1.82 352 Pn 20 30 45.5 -0.6
YHNB Yeheng 1.82 352 eP Pn 20 30 45.9 -0.2
baz=6.0
YHNB eS Sn 20 31 07.7 -1.4
baz=6.0
NSK Sanguang 1.83 352⇑eP Pn 20 30 45.9 -0.3
baz=6.0
NSK eS Sn 20 31 07.5 -1.7
baz=6.0
NFF Wufeng Townshi 1.83 345 P Pn 20 30 47.1 +0.9
baz=358
NMLH Miaoli 1.84 335 eP Pb 20 30 47.8 -0.9
baz=337
NMLH S Sb 20 31 11.6 -0.1
baz=337
TWE Neicheng 1.85 1 eP Pn 20 30 46.3 -0.2
baz=352
TWE eS Sn 20 31 10.3 +0.6
baz=352
NSTT Nanjuang 1.86 342 ⇑P Pn 20 30 47.6 +1.0
baz=344
NSTT eS Sn 20 31 10.5 +0.5
baz=344
LIOB Emei 1.87 342 eP Pn 20 30 47.8 +1.1
baz=344
LIOB eS Sn 20 31 10.3 +0.1
baz=344
WDGT Dungji 1.88 283 eP Pn 20 30 46.5 -0.3
baz=283
WDGT eS Sn 20 31 08.9 -1.4
baz=283
FUSB Fushanzhiwuyua 1.89 358 eP Pn 20 30 46.5 -0.6
baz=1.0
FUSB eS Sn 20 31 11.3 +0.5
baz=1.0
NWLT Wulai 1.91 356 eP Pn 20 30 47.1 -0.2
baz=358
NWLT eS Sn 20 31 09.9 -1.4
baz=358
JYNG Yonagunijimaku 1.98 37 eP Pn 20 30 48.4 +0.2
JYNG eS Sn 20 31 12.4 -0.5
EGS 1.99 7 eP Pn 20 30 48.5 +0.1
baz=22
EGS eS Sn 20 31 13.6 +0.4
baz=22
SBCB Hsinchu 2.02 343 eP Pn 20 30 49.3 +0.6
baz=345
PHUB P'eng-hu 2.02 289 eP Pn 20 30 47.5 -1.2
baz=290
PHUB eS Sn 20 31 12.2 -1.7
baz=290
YOJ Yonaguni jima 2.02 38 P Pn 20 30 49.4 +0.6
YOJ Yonaguni jima 2.02 38 Pn 20 30 49.1 +0.3
YOJ Yonaguni jima 2.02 38 eP Pn 20 30 49.1 +0.3
baz=52
YOJ iS Sn 20 31 14.3 +0.3
baz=52
YOJ Yonaguni jima 2.02 38 P Pn 20 30 49.1 +0.3
YOJ eS Sn 20 31 13.5 -0.5
HSN Hsinchu 2.03 342 eP Pn 20 30 49.7 +0.7
baz=329
HSN eS Sn 20 31 14.0 -0.2
baz=329
PNG Penghu 2.05 290 eP Pn 20 30 49.2 0.0
baz=291
PNG eS Sn 20 31 13.9 -0.8
baz=291
VCHM Qimei 2.07 280 P Pn 20 30 49.3 -0.2
baz=280
VCHM eS Sn 20 31 13.3 -2.0
baz=280
NHDH Xindian Distri 2.10 357 eP Pn 20 30 50.8 +1.0
baz=359
NHDH iS Sn 20 31 15.8 0.0
baz=359
TIPB Shuangxi 2.11 4 eP Pn 20 30 51.2 +1.1
baz=18
TIPB eS Sn 20 31 15.6 -0.5
baz=18
TATO Taipei 2.11 356 P Pn 20 30 50.5 +0.5
TATO Taipei 2.11 356 Pn 20 30 50.0 0.0
TWA Mucha 2.11 358 eP Pn 20 30 50.8 +0.7
baz=1.0
TWA eS Sn 20 31 16.1 -0.1
baz=1.0
NCUH Zhongli 2.14 349 eP Pb 20 30 52.7 -0.9
baz=351
NCUH eS Sb 20 31 18.7 -1.5
baz=351
TWB1 Santiao Chiao 2.16 8 eP Pn 20 30 51.4 +0.7
baz=23
TWB1 eS Sn 20 31 16.6 -0.7
baz=23
NWF Wu-fen Shan 2.20 3 P Pn 20 30 52.3 +0.9
baz=354
NWF iS Sn 20 31 18.7 +0.1
baz=354
WFSB Wu-fen Shan 2.20 3 P Pn 20 30 52.0 +0.7
baz=355
WFSB eS Sn 20 31 18.5 +0.1
baz=355
SXI1 Grass Mountain 2.23 5 eP Pn 20 30 52.4 +0.6
baz=356
SXI1 eS Sn 20 31 19.9 +0.6
baz=356
TWS1 Kuangyinshan 2.24 355 eP Pn 20 30 52.9 +1.1
baz=7.0
TWS1 S Sn 20 31 19.2 -0.2
baz=7.0
YM01 YM01 2.28 358 eP Pn 20 30 52.0 -0.3
YM01 eS Sn 20 31 20.0 -0.3
TNOU National Taiwa 2.28 3 eP Pn 20 30 52.0 -0.4
baz=351
TNOU eS Sn 20 31 20.1 -0.3
baz=351
NTST Danshui 2.30 355 eP Pn 20 30 53.3 +0.7
baz=12
HATJ Hateruma jima 2.31 59 eP Pn 20 30 52.8 0.0
HATJ S Sn 20 31 20.7 -0.3
YM08 YM08 2.32 359 eP Pn 20 30 52.6 -0.3
baz=1.0
ANP Anpu 2.32 357 eP Pn 20 30 52.8 -0.2
baz=359
TWY Chenhua 2.41 359 eP Pn 20 30 54.6 +0.5
baz=1.0
IRIF Iriomote-Funau 2.41 52 P Pn 20 30 54.7 +0.6
IRIF S Sn 20 31 23.4 -0.1
BBP Basco 2.42 173⇑eP Pg 20 31 11.3 +10
BBP iS Sn 20 31 21.6 -2.2
BBPB Basco Batanes 2.43 173⇑eP Pn 20 30 54.5 +0.1
BBPB eS Sn 20 31 20.0 -4.0
JKRS Kuro-shima 2.56 57 eP Pn 20 30 57.0 +0.8
JKRS eS Sn 20 31 26.7 -0.6
JIJ Ishigaki jima 2.73 56 P Pn 20 30 58.8 +0.2
JIJ S Sn 20 31 30.0 -1.5
VWUC VWUC 2.92 317 iP Pn 20 31 01.2 0.0
baz=319
JISG Ishigakijimahi 2.98 54 eP Pn 20 31 01.9 -0.1
JISG eS Sn 20 31 36.5 -1.2
PTMZ Houxiangcun 3.17 314 eP Pn 20 31 04.2 -0.4
baz=316
KNM Kinmen 3.33 298 eP Pn 20 31 07.6 +0.8
baz=300
KNMB Chin-men Tao 3.39 299 Pn Pn 20 31 07.2 -0.4
KNMB Chin-men Tao 3.39 299 eP Pn 20 31 07.2 -0.4
baz=301
MATB Ma-tsu 3.62 335 eP Pn 20 31 09.8 -1.1
baz=337
ZPLA Ao Xicun 3.74 287 eP Pn 20 31 12.4 0.0
baz=289
JIRB Irabujima 3.77 58 eP Pn 20 31 13.3 +0.4
JIRB eS Sn 20 31 55.8 -1.4
JMJ2 Miyako jima3 3.85 60 eP Pn 20 31 14.7 +0.7
JMJ2 eS Sn 20 31 58.2 -1.0
JMJ Miyako jima 2 3.86 59 P Pn 20 31 15.2 +1.1
JIKM Ikemajima 3.88 57 eS Sn 20 31 58.5 -1.3
JOGS Gusukube 3.93 60 S Sn 20 32 01.0 +0.1
MHZQ Yeshan 4.01 324 eP Pn 20 31 15.3 -0.8
baz=327
LYJJ Jianjiangzhen 4.05 335 eP Pn 20 31 16.0 -0.8
baz=338
PACPP Pamplona Cagay 4.39 184⇑eP Pn 20 31 23.7 +2.3
PACPP eS Sn 20 32 11.0 -1.4
SGCP Gonzaga 4.61 175⇑eP Pn 20 31 25.4 +0.9
SGCP eS Sn 20 32 15.0 -2.9
SXFK Yanhouchang 5.07 315 eP Pn 20 31 30.0 -0.7
baz=319
HKPS Hong Kong Po S 6.96 267 Pn Pn 20 31 58.0 +1.3
KSRS Korea Array 15.52 19 P Pn 20 33 55.7 +2.2
0.8nm,0.3s,baz=194,slow=12,SNR=17
2.5nm,0.4s
JCJ Chichijima 19.08 73 LR LR 20 41 09.3
comp=Z,290nm,20.8s,baz=159,slow=34
MJAR Matsushiro Arr 19.78 43 P P 20 34 46.1 +1.1
baz=234,slow=9.0,SNR=2.9
1.7nm,0.9s
CMAR Chiang Mai Arr 21.69 263 P P 20 35 06.0 +0.2
CMAR Chiang Mai Arr 21.69 263 P P 20 35 09.8 +4.0
0.4nm,0.4s,baz=72,slow=8.3,SNR=2.6
0.4nm,0.4s
USRK Ussuriysk Ar. 22.93 19 P P 20 35 19.5 +0.8
1.4nm,0.7s,baz=202,slow=11,SNR=3.5
1.4nm,0.7s
SONM Songino Array 27.75 338 P P 20 36 02.8 -0.6
0.3nm,0.3s,baz=150,slow=8.5,SNR=2.9
0.3nm,0.3s
MK31 Makanchi Array 39.59 317 P P 20 37 46.4 +0.4
MKAR Makanchi Array 39.59 317 P P 20 37 45.7 -0.4
MKAR Makanchi Array 39.59 317 P P 20 37 46.9 +0.8
4.7nm,0.9s,baz=111,slow=9.9,SNR=26
4.7nm,0.9s
MAKZ Makanchi 39.79 317 P P 20 37 47.7 0.0
MAKZ IAmb IAmb 20 37 49.5
comp=Z,5.0nm,0.9s
PETK Petropavlovsk- 40.73 33 P P 20 37 55.9 +0.5
ZAA0 Zalesovo Array 41.59 328 P P 20 38 01.4 -1.0
ZALV Zalesovo Beam 41.59 328 P P 20 38 01.2 -1.2
ZALV Zalesovo Beam 41.59 328 P P 20 38 02.0 -0.4
comp=Z,3.5nm,0.6s,baz=113,slow=7.6,SNR=16
comp=Z,3.5nm,0.6s
H11N1 WAKE ISLAND Hy 42.15 85 T T 21 23 21.2
baz=282,slow=75,SNR=112
H11N2 WAKE ISLAND Hy 42.15 85 T T 21 23 22.1
baz=282,slow=75,SNR=122
H11N3 WAKE ISLAND Hy 42.17 85 T T 21 23 22.4
baz=282,slow=75,SNR=86
H11S3 WAKE ISLAND Hy 42.24 87 T T 21 23 28.5
baz=284,slow=75,SNR=152
H11S1 WAKE ISLAND Hy 42.25 87 T T 21 23 28.8
baz=284,slow=75,SNR=118
H11S2 WAKE ISLAND Hy 42.26 87 T T 21 23 29.9
baz=284,slow=75,SNR=176
KURBB Kurchatov Arra 43.40 321 P P 20 38 17.3 +0.1
comp=Z,1.3nm,0.8s,baz=112,slow=8.0,SNR=9.8
comp=Z,1.3nm,0.8s
WRA Warramunga Arr 44.31 163 P P 20 38 24.4 -0.4
comp=Z,0.5nm,1.0s,baz=344,slow=8.6,SNR=4.8
comp=Z,0.5nm,1.0s
GAR Garm 46.28 303 P 20 38 41.5 +1.0
KK31 Karatay Array 46.62 308 P P 20 38 44.1 +1.1
KK31 IAmb IAmb 20 38 45.3
comp=Z,3.6nm,0.9s
KKAR Karatay Array 46.62 308 P P 20 38 44.1 +1.1
KKAR IAmb IAmb 20 38 45.3
comp=Z,3.6nm,0.9s
KBL Kabul 47.12 296 P P 20 38 47.0 -0.3
KBL IAmb IAmb 20 38 49.6
comp=Z,4.9nm,1.1s
CHGR Chuyangaron 47.16 302 P P 20 38 48.1 +0.7
BVAR Borovoye Array 48.97 321 P P 20 39 01.3 +0.3
comp=Z,1.2nm,0.5s,baz=107,slow=9.5,SNR=5.3
comp=Z,1.2nm,0.5s
BRVK Borovoye 49.04 321 P P 20 39 00.6 -0.9
BRVK IAmb IAmb 20 39 10.0
comp=Z,4.7nm,1.2s
ABKAR Akbulak array 54.67 315 P P 20 39 43.2 -0.5
ABKAR IAmb IAmb 20 39 45.0
comp=Z,2.5nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **ARU** | **Arti** | **56.42 324** | P | **P** | **20 39 55.9** | **-0.2** |
| ARU | | | IAmb | IAmb | 20 39 56.4 | |
| | comp=Z,5.5nm,0.5s | | | | | |
| **STKA** | **Stephens Creek** | **57.68 160** | LR | LR | 21 06 30.6 | |
| | comp=Z,318nm,21.2s,baz=206,slow=38 | | | | | |
| **KBZ** | **Khabaz** | **66.64 309** | P | **P** | **20 41 05.3** | **0.0** |
| | comp=Z,3.9nm,0.8s,baz=105,slow=5.2,SNR=5.6 | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | |
| **ILAR** | **Eielson Array** | **70.19 27** | P | **P** | **20 41 28.5** | **+1.3** |
| | comp=Z,0.4nm,0.5s,baz=274,slow=5.0,SNR=4.1 | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | |
| **FINES** | **FINESS Array B** | **72.80 330** | P | **P** | **20 41 41.9** | **-1.1** |
| | comp=Z,2.0nm,0.7s,baz=77,slow=6.0,SNR=6.6 | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | |
| **NOA** | **NORSAR Array B** | **79.59 332** | P | **P** | **20 42 20.7** | **-1.0** |
| | comp=Z,0.8nm,0.7s,baz=59,slow=5.2,SNR=2.4 | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | |

*IDC **22** 20:36:06.5±40.0, 2˚.34N×123˚.06E, h0km, mb4.4/3, mbtmp4.4/3, Error ellipse: s-maj=670.6km s-min=315.3km az=149.0*
*NEIC **22** 20:36:47.4±2.5, 0˚.55S±0˚.09×124˚.6E±0˚.1, h81km±11km, mb4.3/18, Error ellipse: s-maj=21.3km s-min=12.8km az=75.0*

**ISC 22 20:36:48.6±1.3, 0.7˚S±0˚.2×124˚.5E±0˚.2, h100km, n39, σ2s 02/38, mb4.2/11, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LUWI** | **Luwuk** | **1.74** | **257** | Pn | **Pn** | **20 37 16.8** | **-1.1** |
| **SOEI** | **Soe** | **9.05** | **181** | Pn | **Pn** | **20 38 55.6** | **-1.0** |
| **DRS** | **Darwin Rock St** | **13.34** | **152** | P | P | 20 40 10.0 | +10 |
| **KNRA** | **Kununurra** | **15.53** | **164** | P | **P** | **20 40 26.0** | **+1.8** |
| **FITZ** | **Fitzroy Crossi** | **17.38** | **176** | | **Pn** | **20 40 44.9** | **0.0** |
| **MBWA** | **Marble Bar** | **20.91** | **192** | P | **P** | **20 41 25.6** | **+2.5** |
| **MBWA** | **Marble Bar** | **20.91** | **192** | P | **P** | **20 41 25.6** | **+2.5** |
| MBWA | | | | IAmb | IAmb | 20 41 26.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.28** | **192** | P | **P** | **20 41 29.2** | **+2.0** |
| **PSA00** | **Pilbara Seismi** | **21.28** | **192** | P | **P** | **20 41 28.1** | **+0.9** |
| PSA00 | | | | IAmb | IAmb | 20 41 30.8 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **21.28** | **192** | P | **P** | **20 41 29.1** | **+2.0** |
| PSA00 | | | | IAmb | IAmb | 20 41 46.6 | |
| | comp=Z,31nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.35** | **154** | P | **P** | **20 41 28.1** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 20 41 29.1 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.47** | **154** | P | **P** | **20 41 29.4** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 20 41 32.0 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.48** | **154** | P | **P** | **20 41 28.3** | **-1.0** |
| **WRA** | **Warramunga Arr** | **21.48** | **154** | P | **P** | **20 41 29.2** | **-0.1** |
| | comp=Z,6.4nm,0.5s,baz=335,slow=8.3,SNR=95 | | | | | | |
| | comp=Z,6.4nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.48** | **154** | P | **P** | **20 41 29.3** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 20 42 03.3 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.58** | **153** | P | **P** | **20 41 30.4** | **0.0** |
| WR0 | | | | IAmb | IAmb | 20 41 31.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **24.02** | **204** | P | **P** | **20 42 01.2** | **+6.8** |
| **AS31** | **Alice Springs** | **24.65** | **159** | P | **P** | **20 41 57.8** | **-2.3** |
| **ASAR** | **Alice Springs** | **24.65** | **159** | P | **P** | **20 41 58.0** | **-2.1** |
| **ASAR** | **Alice Springs** | **24.65** | **159** | P | **P** | **20 41 57.8** | **-2.4** |
| | comp=Z,2.7nm,0.5s,baz=332,slow=8.3,SNR=22 | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | |
| **AS01** | **Alice Springs** | **24.66** | **159** | P | **P** | **20 41 58.1** | **-2.2** |
| **QIS** | **Mount Isa** | **24.71** | **144** | P | **P** | **20 42 03.2** | **+2.5** |
| **MEEK** | **Meekatharra** | **26.45** | **192** | P | **P** | **20 42 16.7** | **+0.3** |
| **OOD** | **Oodnadatta** | **29.06** | **159** | P | **P** | **20 42 37.2** | **-2.4** |
| **MORW** | **Morawa** | **29.39** | **195** | P | **P** | **20 42 43.5** | **+1.0** |
| **MORW** | **Morawa** | **29.39** | **195** | P | **P** | **20 42 43.3** | **+0.9** |
| **KMBL** | **Kambalda** | **30.65** | **184** | P | **P** | **20 42 51.2** | **-2.5** |
| **BLDU** | **Ballidu** | **30.70** | **193** | P | **P** | **20 42 54.6** | **+0.5** |
| **MULG** | **Mulgathing** | **30.85** | **164** | P | **P** | **20 42 52.4** | **-3.0** |
| **KLBR** | **Kellerberrin** | **31.43** | **191** | P | **P** | **20 43 00.0** | **-0.5** |
| **MUN** | **Mundaring** | **32.13** | **193** | P | **P** | **20 43 06.8** | **+0.2** |
| **LCRK** | **Leigh Creek** | **32.39** | **157** | P | **P** | **20 43 07.0** | **-1.9** |
| **NWAO** | **Narrogin (SRO)** | **32.82** | **191** | P | **P** | **20 43 11.8** | **-0.9** |
| **BBOO** | **Buckleboo** | **33.81** | **162** | P | **P** | **20 43 18.3** | **-2.9** |
| **STKA** | **Stephens Creek** | **35.03** | **154** | P | **P** | **20 43 30.3** | **-1.5** |
| **STKA** | **Stephens Creek** | **35.03** | **154** | P | **P** | **20 43 30.8** | **-1.0** |
| | comp=Z,2.7nm,0.5s,baz=338,slow=8.9,SNR=7.7 | | | | | | |
| | comp=Z,2.7nm,0.5s | | | | | | |
| **CAN** | **Canberra** | **41.38** | **149** | P | **P** | **20 44 27.0** | **+1.9** |
| CAN | | | | IAmb | IAmb | 20 44 27.6 | |
| | comp=Z,7.2nm,0.5s | | | | | | |
| **TOO** | **Toolangi** | **41.55** | **155** | P | **P** | **20 44 26.7** | **+0.3** |
| TOO | | | | IAmb | IAmb | 20 44 40.6 | |
| | comp=Z,8.1nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **64.27** | **330** | P | **P** | **20 47 12.9** | **-0.3** |
| KURK | | | | IAmb | IAmb | 20 47 22.5 | |
| | comp=Z,2.8nm,1.1s | | | | | | |

*IDC **22** 20:46:14.4±0.8, 23˚.62N×143˚.96E, h0km, mb4.1/15, mbtmp4.1/17, ML3.2/2, MS4.5/4, Error ellipse: s-maj=27.6km s-min=15.2km az=78.0*
*NEIC **22** 20:46:15.9±1.3, 23˚.7N±0˚.1×144˚.1E±0˚.2, h10km±2km, mb4.5/18, Error ellipse: s-maj=29.2km s-min=17.4km az=69.0*

**ISC 22 20:46:18.6±0.8, 23˚.68N±0˚.09×143˚.9E±0˚.1, h28km, n43, σ0s 69/40, mb4.2/24, MS4.6/4, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **3.75** | **336** | Pn | **Pn** | **20 47 14.0** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **13.74** | **340** | Pn | **Pn** | **20 49 30.3** | **-1.2** |
| | baz=163,slow=13,SNR=2.4 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **JMM** | **Marumori** | **14.39** | **350** | Pn | **Pn** | **20 49 39.8** | **-0.7** |
| **JNU** | **Nakatsue** | **14.83** | **312** | P | **P** | **20 49 51.1** | **-0.9** |
| **KSRS** | **Korea Array** | **19.41** | **319** | P | **P** | **20 50 43.0** | **+0.5** |
| | 0.1nm,0.3s,baz=136,slow=12,SNR=5.6 | | | | | | |
| | 2.6nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.69** | **337** | P | **P** | **20 51 18.7** | **+0.8** |
| | 2.1nm,0.9s,baz=148,slow=15,SNR=3.1 | | | | | | |
| | 2.1nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **38.29** | **319** | P | **P** | **20 53 36.1** | **-0.6** |
| **SONM** | **Songino Array** | **38.29** | **319** | P | **P** | **20 53 36.4** | **-0.3** |
| | 0.6nm,0.6s,baz=129,slow=8.6,SNR=4.4 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **CRAI** | **Chiangrai** | **40.43** | **274** | P | **P** | **20 53 55.6** | **+0.8** |
| CRAI | | | | IAmb | IAmb | 20 54 08.1 | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.17** | **272** | P | **P** | **20 54 09.4** | **+0.4** |
| | comp=Z,0.9nm,0.4s,baz=64,slow=7.3,SNR=8.2 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.34** | **193** | P | **P** | **20 54 25.2** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 20 54 36.2 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.35** | **193** | P | **P** | **20 54 25.9** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.35** | **193** | P | **P** | **20 54 25.9** | **-0.7** |
| | comp=Z,2.4nm,0.7s,baz=13,slow=8.6,SNR=20 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 56 11.2** | **+0.8** |
| | comp=Z,0.7nm,0.8s,baz=5.0,slow=3.3,SNR=3.6 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **LSA** | **Lhasa** | **47.20** | **289** | P | **P** | **20 54 50.4** | **+0.7** |
| LSA | | | | IAmb | IAmb | 20 54 52.8 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **48.06** | **192** | P | **P** | **20 54 54.5** | **-1.2** |
| **ASAR** | **Alice Springs** | **48.06** | **192** | P | **P** | **20 54 54.9** | **-0.8** |
| **ASAR** | **Alice Springs** | **48.06** | **192** | P | **P** | **20 54 55.0** | **-0.7** |
| | comp=Z,0.9nm,0.7s,baz=18,slow=9.1,SNR=16 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **53.11** | **321** | P | **P** | **20 55 33.2** | **-0.3** |
| ZAA0 | | | | IAmb | IAmb | 20 55 34.5 | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.11** | **321** | P | **P** | **20 55 33.6** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **53.11** | **321** | P | **P** | **20 55 33.8** | **+0.3** |
| | comp=Z,1.6nm,0.6s,baz=102,slow=8.1,SNR=9.2 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **53.89** | **312** | P | **P** | **20 55 39.9** | **+0.5** |
| MK31 | | | | IAmb | IAmb | 20 55 41.1 | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.89** | **312** | P | **P** | **20 55 40.0** | **+0.7** |
| **MKAR** | **Makanchi Array** | **53.89** | **312** | P | **P** | **20 55 39.9** | **+0.5** |
| | comp=Z,1.6nm,0.6s,baz=93,slow=9.1,SNR=18 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **54.10** | **312** | P | **P** | **20 55 41.4** | **+0.5** |
| MAKZ | | | | IAmb | IAmb | 20 55 42.8 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **55.29** | **182** | P | **P** | **20 55 49.0** | **-0.6** |
| | comp=Z,1.3nm,0.7s,baz=337,slow=7.8,SNR=3.2 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.57** | **316** | P | **P** | **20 55 59.3** | **+0.7** |
| | comp=Z,6.2nm,0.6s,baz=93,slow=7.9,SNR=70 | | | | | | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **59.52** | **307** | LR | LR | 21 22 56.9 | |
| | comp=Z,302nm,21.1s,baz=220,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **59.97** | **28** | P | **P** | **20 56 22.6** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=259,slow=5.7,SNR=5.5 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.63** | **319** | P | **P** | **20 56 35.0** | **+1.3** |
| | comp=Z,7.4nm,0.7s,baz=95,slow=7.9,SNR=17 | | | | | | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **CHGR** | **Chuyangaron** | **64.09** | **303** | P | **P** | **20 56 50.1** | **-0.3** |
| **SIMJ** | **Simiganj** | **64.20** | **303** | P | **P** | **20 56 51.4** | **+0.1** |
| SIMJ | | | | IAmb | IAmb | 20 56 53.0 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **64.30** | **26** | P | **P** | **20 56 50.8** | **-0.4** |
| **KBL** | **Kabul** | **64.99** | **298** | P | **P** | **20 56 56.7** | **+0.2** |
| **ARU** | **Arti** | **68.09** | **323** | P | **P** | **20 57 16.3** | **+0.7** |
| ARU | | | | IAmb | IAmb | 20 57 16.9 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **68.61** | **316** | | **P** | **20 57 19.1** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 20 57 20.3 | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **KIRV** | **Kirov** | **72.40** | **327** | LR | LR | 21 32 39.3 | |
| | comp=Z,575nm,20.4s,baz=198,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.38** | **52** | P | **P** | **20 58 33.8** | **+0.5** |
| | comp=Z,1.0nm,0.8s,baz=258,slow=7.3,SNR=4.4 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **81.49** | **314** | P | **P** | **20 58 34.3** | **+0.8** |
| | comp=Z,3.3nm,0.7s,baz=104,slow=5.3,SNR=8.4 | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **81.70** | **335** | P | **P** | **20 58 34.6** | **+0.4** |
| **FINES** | **FINESS Array B** | **81.70** | **335** | P | **P** | **20 58 34.7** | **+0.5** |
| | comp=Z,1.6nm,0.6s,baz=76,slow=8.0,SNR=9.1 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **JMIC** | **Jan Mayen** | **83.63** | **351** | LR | LR | 21 39 44.1 | |
| | comp=Z,133nm,20.5s,baz=164,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **89.48** | **314** | P | **P** | **20 59 12.9** | **-0.6** |
| | comp=Z,0.9nm,0.7s,baz=70,slow=4.1,SNR=6.7 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **BORG** | **Borgarnes** | **91.12** | **354** | LR | LR | 21 38 55.1 | |
| | comp=Z,478nm,21.9s,baz=135,slow=35 | | | | | | |

*NEIC **22** 20:58:50.8±1.2, 5˚.44S±0˚.08×152˚.0E±0˚.1, h56km±9km, mb5.0/44, Error ellipse: s-maj=16.8km s-min=9.6km az=120.0*
*IDC **22** 20:58:54.2±4.5, 5˚.51S×151˚.83E, h84km±38km, mb3.9/12, mbtmp4.3/13, MS3.3/1, Error ellipse: s-maj=30.4km s-min=19.7km az=87.0*

**ISC 22 20:58:49.5±0.6, 5˚.51S±0˚.06×152˚.08E±0˚.09, h45km, n71, σ1s 51/68, mb4.9/41, MS4.7/3, 1D, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.31** | **4** | | **Pn** | **20 59 11.5** | **+0.1** |
| **MANU** | **Manus Island** | **5.83** | **306** | | **Pn** | **21 00 14.6** | **+1.2** |
| **PMG** | **Port Moresby** | **6.23** | **231** | Pn | **Pn** | **21 00 20.1** | **+1.2** |
| PMG | | | | Sn | **Sn** | **21 01 27.7** | **-1.1** |
| **PMG** | **Port Moresby** | **6.23** | **231** | P | **Pn** | **21 00 21.0** | **+2.1** |
| | 82nm,0.8s,baz=25,slow=10,SNR=18 | | | | | | |
| PMG | | | | S | **Sn** | **21 01 29.5** | **+0.7** |
| | 112nm,0.5s,baz=150,slow=20,SNR=8.7 | | | | | | |
| PMG | | | | LR | LR | 21 02 11.6 | |
| | comp=Z,292nm,19.8s,baz=26,slow=33 | | | | | | |
| **COEN** | **Coen** | **12.14** | **226** | Pn | **Pn** | **21 01 41.6** | **+1.7** |
| **CTA** | **Charters Tower** | **15.56** | **201** | P | **P** | **21 02 29.3** | **-0.3** |
| | 0.4nm,0.8s,baz=19,slow=12,SNR=6.6 | | | | | | |
| **CTAO** | **Charters Tower** | **15.56** | **201** | P | **P** | **21 02 30.3** | **+0.8** |
| **EIDS** | **Eidsvold** | **19.77** | **183** | P | **P** | **21 03 16.4** | **+0.5** |
| **MTN** | **Manton Dam** | **21.91** | **249** | P | **P** | **21 03 38.6** | **-0.6** |
| **WB0** | **Warramunga Arr** | **22.29** | **229** | P | **P** | **21 03 42.2** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 21 03 52.0 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.30** | **228** | P | **P** | **21 03 42.6** | **-0.7** |
| **WRAB** | **Tennant Creek** | **22.43** | **229** | P | **P** | **21 03 43.5** | **-1.1** |
| **WB2** | **Warramunga Arr** | **22.43** | **229** | P | **P** | **21 03 43.9** | **-0.8** |
| **WRA** | **Warramunga Arr** | **22.44** | **229** | P | **P** | **21 03 43.5** | **-1.3** |
| **WRA** | **Warramunga Arr** | **22.44** | **229** | P | **P** | **21 03 43.8** | **-1.0** |
| | comp=Z,2.3nm,0.4s,baz=52,slow=9.8,SNR=52 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 07 37.5** | **-0.8** |
| | comp=Z,0.7nm,0.8s,baz=52,slow=2.3,SNR=2.7 | | | | | | |
| | comp=Z,2.3nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **25.02** | **244** | P | **P** | **21 04 08.9** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 21 04 13.8 | |
| | comp=Z,53nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **25.14** | **222** | P | **P** | **21 04 09.8** | **-0.8** |
| **ASAR** | **Alice Springs** | **25.14** | **222** | P | **P** | **21 04 12.0** | **+1.4** |
| **ASAR** | **Alice Springs** | **25.14** | **222** | P | **P** | **21 04 10.0** | **-0.7** |
| | comp=Z,9.4nm,0.8s,baz=54,slow=9.4,SNR=65 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 07 43.6** | **-0.4** |
| | comp=Z,0.5nm,0.9s,baz=46,slow=4.0,SNR=1.7 | | | | | | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **28.01** | **199** | P | **P** | **21 04 36.5** | **+0.2** |
| **STKA** | **Stephens Creek** | **28.01** | **199** | P | **P** | **21 04 36.9** | **+0.6** |
| | comp=Z,1.6nm,0.9s,baz=30,slow=14,SNR=1.8 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.69** | **242** | P | **P** | **21 04 41.5** | **-1.1** |
| **MBWA** | **Marble Bar** | **35.00** | **241** | P | **P** | **21 05 36.6** | **-1.3** |
| MBWA | | | | IAmb | IAmb | 21 06 07.2 | |
| | comp=Z,75nm,1.8s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **37.75** | **263** | P | **P** | **21 05 58.7** | **-2.8** |
| **NJ2** | **Nanjing** | **48.95** | **322** | *eP* | **P** | **21 07 33.6** | **+2.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **COCO** | **West Island** | **54.91** | **259** | P | **P** | **21 08 14.9** | **-1.3** |
| **XAN** | **Xi'an** | **56.64** | **317** | ‖P | **P** | **21 08 27.8** | **-0.6** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.53** | **296** | P | **P** | **21 08 32.6** | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **57.53** | **296** | P | **P** | **21 08 34.3** | **-0.6** |
| | comp=Z,1.3nm,0.7s,baz=126,slow=6.0,SNR=9.3 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **58.20** | **306** | P | **P** | **21 08 43.1** | **+3.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | 112nm,0.5s,baz=90,slow=4.9s | | | | | | |
| **CD2** | **Chengdu** | **58.66** | **311** | P | **P** | **21 08 43.6** | **+1.0** |
| **HHC** | **Hu-ho-hao-te** | **59.21** | **325** | *eP* | **P** | **21 08 49.6** | **+3.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,5.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,250nm,17.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,450nm,17.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,580nm,17.6s | | | | | | |
| **BTO** | **Baotou** | **59.94** | **324** | *eP* | **P** | **21 08 54.6** | **+3.2** |
| BTO | | | | pP | **pP** | **21 08 59.5** | **-4.9** |
| BTO | | | | sP | sP | 21 09 01.3 | -8.4 |
| BTO | | | | PP | **PP** | **21 11 04.9** | **+0.8** |
| BTO | | | | S | S | 21 17 08.6 | +8.1 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,490nm,6.0s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,570nm,5.8s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,650nm,5.1s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,570nm,7.9s | | | | | | |
| **TNCH** | **TengChong** | **60.25** | **303** | *eP* | **P** | **21 08 53.6** | **-0.2** |
| TNCH | | | | pP | pP | 21 09 00.1 | -6.9 |
| TNCH | | | | sP | sP | 21 09 01.4 | -11 |
| TNCH | | | | S | **S** | **21 17 05.8** | **+0.7** |
| TNCH | | | | sS | pS | 21 17 15.1 | -5.6 |
| TNCH | | | | SS | **SS** | **21 21 03.3** | **0.0** |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,210nm,5.0s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,320nm,5.2s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,310nm,10.4s | | | | | | |
| **LZH** | **Lanzhou** | **61.24** | **316** | *eP* | **P** | **21 09 03.9** | **+3.5** |
| LZH | | | | sP | pP | 21 09 11.0 | -2.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,480nm,6.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,560nm,15.1s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,460nm,14.8s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,370nm,14.4s | | | | | | |
| **SONM** | **Songino Array** | **66.54** | **328** | P | **P** | **21 09 35.2** | **+0.2** |
| | comp=Z,2.1nm,0.6s,baz=151,slow=4.4,SNR=15 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **PLK4** | **Peulik 4** | **75.38** | **26** | P | **P** | **21 10 26.7** | **-1.6** |
| PLK4 | | | | IAmb | IAmb | 21 10 30.5 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **WMQ** | **Urumqi** | **75.78** | **318** | *eP* | **P** | **21 10 33.4** | **+2.5** |
| **K17K** | **Iditarod** | **77.73** | **21** | P | **P** | **21 10 40.8** | **-0.6** |
| K17K | | | | IAmb | IAmb | 21 11 06.9 | |
| | comp=Z,33nm,1.8s | | | | | | |
| **L18K** | **Granite Mounta** | **78.01** | **22** | P | **P** | **21 10 43.6** | **+0.7** |
| L18K | | | | IAmb | IAmb | 21 10 45.0 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **CNPM** | **China Poot** | **78.66** | **26** | P | **P** | **21 10 47.4** | **+0.8** |
| CNPM | | | | IAmb | IAmb | 21 10 48.6 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **L19K** | **White Mountain** | **78.67** | **22** | P | **P** | **21 10 47.6** | **+0.9** |
| L19K | | | | IAmb | IAmb | 21 10 48.8 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **M19K** | **Big River Lodg** | **78.69** | **23** | IAmb | IAmb | 21 11 45.9 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **H19K** | **Roundabout Mou** | **80.12** | **19** | P | **P** | **21 10 56.0** | **+1.6** |
| **MK31** | **Makanchi Array** | **80.39** | **319** | P | **P** | **21 10 55.0** | **-1.4** |
| **MKAR** | **Makanchi Array** | **80.39** | **319** | P | **P** | **21 10 55.3** | **-1.0** |
| **MKAR** | **Makanchi Array** | **80.39** | **319** | P | **P** | **21 10 55.9** | **-0.4** |
| | comp=Z,1.7nm,0.9s,baz=108,slow=6.6,SNR=9.7 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **PWL** | **Port Wells** | **80.59** | **25** | P | **P** | **21 10 57.2** | **+0.1** |
| PWL | | | | IAmb | IAmb | 21 10 58.9 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **80.59** | **319** | P | **P** | **21 10 56.8** | **-0.6** |
| **SML** | **Sawmill** | **81.06** | **24** | IAmb | IAmb | 21 13 51.9 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **GLI** | **Glacier Island** | **81.13** | **26** | IAmb | IAmb | 21 13 33.7 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.34** | **327** | P | **P** | **21 10 59.8** | **-1.4** |
| | comp=Z,1.4nm,0.5s,baz=116,slow=6.8,SNR=7.8 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **KSH** | **Kashi** | **82.85** | **311** | P | **P** | **21 11 11.3** | **+1.7** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **M26K** | **Nabesna, AK** | **83.56** | **25** | IAmb | IAmb | 21 11 25.2 | |
| | comp=Z,41nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **83.88** | **322** | P | **P** | **21 11 13.6** | **-0.9** |
| KURK | | | | IAmb | IAmb | 21 11 15.7 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.91** | **322** | P | **P** | **21 11 13.8** | **-0.9** |
| | comp=Z,1.5nm,0.9s,baz=109,slow=4.1,SNR=10 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.45** | **180** | P | **P** | **21 11 17.3** | **0.0** |
| | comp=Z,2.5nm,1.0s,baz=327,slow=5.5,SNR=6.1 | | | | | | |
| | comp=Z,2.5nm,1.0s | | | | | | |
| **ARSB** | **Arslanbob** | **85.46** | **312** | IAmb | IAmb | 21 11 24.7 | |
| | comp=Z,4.6nm,1.2s | | | | | | |
| **R32K** | **Eaglecrest** | **86.03** | **31** | IAmb | IAmb | 21 11 29.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **O30N** | **Mendenhall** | **86.03** | **28** | IAmb | IAmb | 21 14 43.2 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **N31M** | **Braeburn, Yuko** | **86.40** | **27** | IAmb | IAmb | 21 14 49.0 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **M31M** | **Drury Creek, Y** | **87.25** | **27** | IAmb | IAmb | 21 14 15.1 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **S34M** | **Telegraph Cree** | **87.66** | **31** | IAmb | IAmb | 21 11 36.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **DLBC** | **Dease Lake** | **88.36** | **31** | IAmb | IAmb | 21 11 39.9 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **DLBC** | **Dease Lake** | **88.36** | **31** | P | **P** | **21 11 37.4** | **+0.9** |
| | comp=Z,9.0nm,1.1s,baz=275,slow=5.7,SNR=6.5 | | | | | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **BVAR** | **Borovoye Array** | **89.38** | **323** | P | **P** | **21 11 39.7** | **-1.6** |
| | comp=Z,1.1nm,0.7s,baz=107,slow=5.6,SNR=5.9 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.08** | **52** | P | **P** | **21 12 00.1** | **+1.0** |
| | comp=Z,1.0nm,0.9s,baz=242,slow=3.2,SNR=6.4 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **KVN** | **Kaiserville** | **93.29** | **51** | P | **P** | **21 11 59.2** | **-0.8** |
| KVN | | | | IAmb | IAmb | 21 14 50.4 | |
| | comp=Z,7.2nm,1.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **99.86** | **48** | P | **Pdif** | **21 12 29.9** | **+0.1** |
| | comp=Z,0.1nm,0.4s,baz=231,slow=5.3,SNR=2.1 | | | | | | |
| **GERES** | **GERESS Array B** | **124.28** | **328** | PKP | **PKiKP** | **21 17 43.9** | **0.0** |
| | comp=Z,0.5nm,0.6s,baz=58,slow=3.3,SNR=3.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.83** | **287** | PKPbc | **PKPbc** | **21 18 35.2** | **-0.6** |
| | comp=Z,7.7nm,1.0s,baz=49,slow=3.6,SNR=36 | | | | | | |

*IDC **22** 21:06:44.5±2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BFZ | | | | IAmb | IAmb | 21 15 15.0 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **28.88 232** | | P | **P** | **21 15 24.7** | **+2.4** |
| | comp=Z,1.4nm,0.7s,baz=66,slow=10.0,SNR=3.9 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.36 258** | | P | **P** | **21 15 52.4** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 21 15 52.8 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.42 258** | | P | **P** | **21 15 52.2** | **-1.5** |
| | comp=Z,0.9nm,0.8s,baz=89,slow=7.9,SNR=7.8 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 18 40.9** | **-0.3** |
| | comp=Z,0.8nm,1.0s,baz=79,slow=3.2,SNR=4.6 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **33.09 251** | | P | **P** | **21 15 59.5** | **-0.1** |
| **ASAR** | **Alice Springs** | **33.09 251** | | P | **P** | **21 15 59.0** | **-0.6** |
| **ASAR** | **Alice Springs** | **33.09 251** | | P | **P** | **21 15 59.0** | **-0.6** |
| | comp=Z,7.0nm,1.0s,baz=82,slow=9.0,SNR=29 | | | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **33.53 234** | | P | **P** | **21 16 02.7** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 21 16 05.8 | |
| | comp=Z,47nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.69 261** | | P | **P** | **21 17 03.5** | **-0.7** |
| **NWAO** | **Narrogin (SRO)** | **48.88 240** | | P | **P** | **21 18 08.3** | **-1.2** |
| **SBA** | **Scott Base** | **61.85 180** | | P | **P** | **21 19 43.3** | **+1.2** |
| SBA | | | | IAmb | IAmb | 21 19 54.4 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **JTM** | **Tenmabayashi** | **61.89 337** | | P | **P** | **21 19 42.9** | **0.0** |
| **CASY** | **Casey** | **62.68 203** | | P | **P** | **21 19 47.4** | **-0.5** |
| CASY | | | | IAmb | IAmb | 21 19 55.7 | |
| | comp=Z,3.6nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **68.45 333** | | P | **P** | **21 20 25.1** | **-0.3** |
| **QSPA** | **South Pole Qui** | **74.00 180** | | P | **P** | **21 20 59.3** | **+0.3** |
| QSPA | | | | IAmb | IAmb | 21 21 19.4 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.31 294** | | P | **P** | **21 21 12.8** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **76.31 294** | | P | **P** | **21 21 13.6** | **+0.6** |
| | comp=Z,0.6nm,0.4s,baz=131,slow=4.7,SNR=6.6 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **84.08 323** | | P | **P** | **21 21 55.8** | **+1.4** |
| | comp=Z,0.9nm,0.7s,baz=133,slow=6.3,SNR=5.5 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **85.36 175** | | P | **P** | **21 21 59.3** | **-1.0** |
| BELA | | | | IAmb | IAmb | 21 22 00.6 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.43 49** | | P | **P** | **21 22 12.2** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=230,slow=6.9,SNR=5.1 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **87.48 18** | | P | **P** | **21 22 09.8** | **-0.9** |
| | comp=Z,0.6nm,0.9s,baz=233,slow=6.7,SNR=5.4 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.64 184** | | ⇓P | **P** | **21 22 30.1** | **-0.4** |
| | comp=Z,142nm,0.8s | | | | | | |
| **H03S2** | **Juan Fernandez** | **99.14 129** | | T | T | 23 13 26.9 | |
| | baz=241,slow=74 | | | | | | |
| **H03S1** | **Juan Fernandez** | **99.15 129** | | T | T | 23 13 26.9 | |
| | baz=241,slow=74 | | | | | | |
| **H03S3** | **Juan Fernandez** | **99.16 129** | | T | T | 23 13 26.5 | |
| | baz=241 | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **144.40 334** | | PKPdf | PKPbc | 21 28 59.4 | +0.8 |
| **TIP** | **Timpagrande** | **146.02 318** | | PKPdf | **PKPdf** | **21 29 02.6** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **166.64 259** | | PKPab | **PKPab** | **21 30 31.2** | **-1.3** |
| | comp=Z,1.3nm,1.0s,baz=89,slow=4.9,SNR=4.7 | | | | | | |

*AEIC **22** 21:09:33.7±1.4, 69.°58N±0.°04×144.°42W±0.°07, h9km±3km, ML3.9, ML4.0/120(NEIC), Error ellipse: s-maj=6.3km s-min=3.3km az=201.0*
*IDC **22** 21:09:34.8±0.7, 69.°77N×144.°30W, h0km, mb3.8/13, mbtmp3.9/18, ML3.7/5, MS4.3/2, Error ellipse: s-maj=19.4km s-min=12.6km az=57.0*
*NEIC **22** 21:09:34.7±1.1, 69.°56N±0.°05×144.°37W±0.°06, h7km±5km, Error ellipse: s-maj=7.8km s-min=2.8km az=193.0*

**ISC 22 21:09:35.0**±0.5, **69.°57N**±0.°04×**144.°36W**±0.°02, **h10**km, **n134,**σ0s**99**/141, **mb3.9**/13, **Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.23** | **75** | Pg | **Pg** | **21 09 38.6** | **-1.1** |
| C27K | | | | Sg | **Sg** | **21 09 42.5** | **-0.6** |
| **C26K** | **Camden Bay** | **0.40** | **331** | | **Pg** | **21 09 42.5** | **-0.4** |
| C26K | | | | | **Sg** | **21 09 48.9** | **+0.7** |
| **D25K** | **Kavik River** | **0.75** | **252** | | **Pg** | **21 09 46.9** | **-2.6** |
| D25K | | | | | **Sg** | **21 09 57.2** | **-2.2** |
| **D27M** | **Malcolm River** | **1.24** | **104** | | **Pn** | **21 09 56.0** | **-2.4** |
| D27M | | | | | **Sb** | **21 10 14.2** | **-0.4** |
| D27M | | | | IAML | | 21 10 18.7 | |
| | comp=N,2μm,0.3s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.53** | **278** | | **Pb** | **21 10 02.6** | **-0.7** |
| C24K | | | | IAML | | 21 10 25.3 | |
| | comp=N,2μm,1.0s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.53** | **278** | | **Sg** | **21 10 23.8** | **-0.2** |
| **D24K** | **Happy Valley** | **1.64** | **257** | | **Pn** | **21 10 03.0** | **-0.8** |
| D24K | | | | | **Sb** | **21 10 25.8** | **0.0** |
| **E27K** | **Coleen River** | **1.71** | **143** | | **Pn** | **21 10 05.2** | **+0.3** |
| **F26K** | **Sheenjek River** | **1.88** | **178** | | **Pn** | **21 10 07.5** | **+0.3** |
| F26K | | | | IAML | | 21 10 38.5 | |
| | comp=E,1μm,0.9s | | | | | | |
| **E28M** | **Babbage River** | **1.98** | **117** | | **Pn** | **21 10 08.7** | **+0.1** |
| E28M | | | | | **Sn** | **21 10 32.8** | **-0.6** |
| E28M | | | | IAML | | 21 10 41.0 | |
| | comp=N,760nm,0.8s | | | | | | |
| **D28M** | **Stokes Point** | **2.00** | **94** | | **Pb** | **21 10 10.1** | **-1.3** |
| **F25K** | **Christian River** | **2.04** | **194** | | **Pn** | **21 10 09.4** | **+0.1** |
| F25K | | | | IAML | | 21 10 44.2 | |
| | comp=N,834nm,1.1s | | | | | | |
| F25K | | | | IAML | | 21 10 47.4 | |
| | comp=E,765nm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.09** | **246** | | **Pn** | **21 10 09.6** | **-0.4** |
| TOLK | | | | IAML | | 21 10 47.9 | |
| | comp=E,826nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **227** | | **Pn** | **21 10 09.5** | **-1.0** |
| E24K | | | | IAML | | 21 10 45.8 | |
| | comp=E,951nm,1.0s | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **227** | | **Sb** | **21 10 40.5** | **+0.6** |
| **BMAR** | **Burnt Mountain** | **2.15** | **182** | | **Pn** | **21 10 10.0** | **-0.9** |
| **C23K** | **Itkillik River** | **2.20** | **280** | | **Pn** | **21 10 11.2** | **-0.3** |
| C23K | | | | IAML | | 21 10 50.3 | |
| | comp=N,1μm,0.5s | | | | | | |
| C23K | | | | IAML | | 21 10 52.6 | |
| | comp=E,997nm,1.5s | | | | | | |
| **D23K** | **Nanushuk River** | **2.33** | **258** | | **Pn** | **21 10 13.4** | **+0.1** |
| D23K | | | | IAML | | 21 10 56.0 | |
| | comp=N,544nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **214** | | **Pn** | **21 10 14.5** | **-0.3** |
| F24K | | | | IAML | | 21 10 54.5 | |
| | comp=N,514nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **214** | | **Sb** | **21 10 49.6** | **+0.7** |
| **E23K** | **Chandalar** | **2.44** | **234** | | **Pn** | **21 10 14.1** | **-0.8** |
| E23K | | | | IAML | | 21 11 02.9 | |
| | comp=E,483nm,1.1s | | | | | | |
| **F28M** | **Old Crow** | **2.56** | **138** | | **Pn** | **21 10 15.8** | **-0.8** |
| F28M | | | | IAML | | 21 10 58.5 | |
| | comp=E,600nm,0.9s | | | | | | |
| F28M | | | | IAML | | 21 10 58.6 | |
| | comp=N,601nm,1.2s | | | | | | |
| **E29M** | **Blow River** | **2.61** | **114** | | **Pn** | **21 10 16.6** | **-0.6** |
| E29M | | | | IAML | | 21 10 59.8 | |
| | comp=N,561nm,0.9s | | | | | | |
| E29M | | | | IAML | | 21 11 04.6 | |
| | comp=E,604nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.89** | **194** | | **Pn** | **21 10 22.1** | **+1.1** |
| **G27K** | **Doyon Strip** | **2.95** | **159** | | **Pn** | **21 10 21.4** | **-0.5** |
| **FYU** | **Fort Yukon** | **3.03** | **187** | | **Pn** | **21 10 21.7** | **-1.2** |
| FYU | | | | IAML | | 21 11 13.7 | |
| | comp=E,454nm,0.9s | | | | | | |
| **D22K** | **Ayikyak River** | **3.05** | **261** | | **Pn** | **21 10 22.9** | **-0.3** |
| D22K | | | | IAML | | 21 11 18.3 | |
| | comp=N,454nm,1.1s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **245** | | **Pn** | **21 10 22.4** | **-1.1** |
| E22K | | | | Sn | **Sn** | **21 11 00.2** | **+0.1** |
| **G24K** | **Hadweenzic Riv** | **3.11** | **204** | | **Pn** | **21 10 23.1** | **-0.9** |
| **COLD** | **Coldfoot** | **3.19** | **225** | | **Pn** | **21 10 25.1** | **0.0** |
| **B22K** | **Teshekpuk Lake** | **3.22** | **288** | | **Pn** | **21 10 25.5** | **0.0** |
| B22K | | | | IAML | | 21 11 30.5 | |
| | comp=N,386nm,1.2s | | | | | | |
| **F22K** | **John River** | **3.54** | **238** | | **Pn** | **21 10 31.3** | **+1.3** |
| **G29M** | **Pine Creek** | **3.56** | **136** | Pn | **Pn** | **21 10 30.2** | **0.0** |
| **G23K** | **Bananza Creek** | **3.57** | **219** | Pn | **Pn** | **21 10 30.6** | **+0.2** |
| G23K | | | | IAML | | 21 11 33.3 | |
| | comp=N,264nm,1.1s | | | | | | |
| G23K | | | | IAML | | 21 11 34.8 | |
| | comp=E,320nm,1.5s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.59** | **276** | | **Pn** | **21 10 31.1** | **+0.4** |
| **E21K** | **Killik River** | **3.64** | **256** | | **Pn** | **21 10 31.2** | **-0.1** |
| E21K | | | | IAML | | 21 11 42.8 | |
| | comp=E,224nm,1.2s | | | | | | |
| E21K | | | | IAML | | 21 11 44.5 | |
| | comp=N,279nm,0.9s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.88** | **297** | | **Pn** | **21 10 34.8** | **+0.3** |
| **H24K** | **Noodor Dome** | **3.98** | **201** | Pn | **Pn** | **21 10 35.4** | **-0.6** |
| H24K | | | | IAML | | 21 11 27.6 | |
| | comp=N,186nm,0.8s | | | | | | |
| H24K | | | | IAML | | 21 11 48.7 | |
| | comp=E,220nm,1.4s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.99** | **127** | | **Pn** | **21 10 36.3** | **+0.2** |
| G30M | | | | IAML | | 21 11 48.7 | |
| | comp=N,184nm,1.1s | | | | | | |
| G30M | | | | IAML | | 21 11 58.8 | |
| | comp=E,201nm,1.0s | | | | | | |
| **H29M** | **Whitestone** | **4.05** | **143** | Pn | **Pn** | **21 10 37.5** | **+0.5** |
| **PRP** | **Porcupine Dome** | **4.09** | **187** | | **Pn** | **21 10 37.9** | **+0.2** |
| PRP | | | | IAML | | 21 11 30.9 | |
| | comp=E,174nm,0.8s | | | | | | |
| PRP | | | | IAML | | 21 11 33.3 | |
| | comp=N,204nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **4.11** | **103** | | **Pn** | **21 10 37.5** | **-0.2** |
| **INK** | **Inuvik** | **4.11** | **103** | Pn | **Pn** | **21 10 38.1** | **+0.4** |
| | comp=N,1.6nm,0.3s,baz=284,slow=6.9,SNR=8.3 | | | | | | |
| INK | | | | Sn | **Sn** | **21 11 25.9** | **+0.2** |
| | comp=N,2.3nm,0.3s,baz=278,slow=20,SNR=4.0 | | | | | | |
| | comp=N,6.1nm,0.4s | | | | | | |
| **F21K** | **Alatna River** | **4.11** | **239** | Pn | **Pn** | **21 10 38.0** | **+0.1** |
| F21K | | | | IAML | | 21 11 48.2 | |
| | comp=E,211nm,1.1s | | | | | | |
| F21K | | | | IAML | | 21 11 48.9 | |
| | comp=N,185nm,1.3s | | | | | | |
| **H23K** | **Yukon River** | **4.25** | **210** | | **Pn** | **21 10 39.4** | **-0.2** |
| **I26K** | **Coal Creek Min** | **4.31** | **173** | | **Pn** | **21 10 40.6** | **+0.1** |
| **F31M** | **Tsiigehtchic** | **4.45** | **114** | | **Pn** | **21 10 41.6** | **-0.7** |
| F31M | | | | IAML | | 21 11 59.6 | |
| | comp=N,108nm,1.5s | | | | | | |
| **B20K** | **Meade River** | **4.46** | **282** | Pn | **Pn** | **21 10 42.9** | **+0.3** |
| **I28M** | **Miner Creek** | **4.47** | **156** | Pn | **Pn** | **21 10 43.1** | **+0.3** |
| I28M | | | | IAML | | 21 11 37.6 | |
| | comp=N,124nm,0.6s | | | | | | |
| I28M | | | | IAML | | 21 12 06.8 | |
| | comp=E,134nm,1.2s | | | | | | |
| **A21K** | **Barrow** | **4.48** | **299** | | **Pn** | **21 10 43.8** | **+1.1** |
| **G31M** | **Satah River** | **4.60** | **120** | Pn | **Pn** | **21 10 44.0** | **-0.4** |
| G31M | | | | IAML | | 21 12 20.5 | |
| | comp=N,139nm,1.1s | | | | | | |
| **G21K** | **Allakaket** | **4.60** | **233** | | **Pn** | **21 10 44.1** | **-0.4** |
| G21K | | | | IAML | | 21 12 10.9 | |
| | comp=N,130nm,1.4s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.63** | **196** | | **Pn** | **21 10 45.2** | **+0.3** |
| POKR | | | | IAML | | 21 12 08.4 | |
| | comp=E,132nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.82** | **148** | Pn | **Pn** | **21 10 47.0** | **-0.5** |
| I29M | | | | IAML | | 21 11 47.2 | |
| | comp=N,126nm,0.5s | | | | | | |
| I29M | | | | IAML | | 21 12 24.1 | |
| | comp=E,116nm,1.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.84** | **206** | | **Pn** | **21 10 47.9** | **+0.2** |
| **MDM** | **Murphy Dome** | **4.87** | **200** | | **Pn** | **21 10 48.4** | **+0.3** |
| MDM | | | | IAML | | 21 12 12.4 | |
| | comp=N,91nm,1.0s | | | | | | |
| MDM | | | | IAML | | 21 12 13.8 | |
| | comp=E,85nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92** | **244** | Pn | **Pn** | **21 10 48.5** | **-0.3** |
| F20K | | | | IAML | | 21 12 13.6 | |
| | comp=N,99nm,1.2s | | | | | | |
| **IL31** | | **4.92** | **193** | | **Pn** | **21 10 47.9** | **-0.9** |
| **ILAR** | **Eielson Array** | **4.92** | **193** | | **Pn** | **21 10 49.0** | **+0.2** |
| **ILAR** | **Eielson Array** | **4.92** | **193** | Pn | **Pn** | **21 10 50.1** | **+1.3** |
| | comp=N,1.4nm,0.3s,baz=7.1,slow=14,SNR=55 | | | | | | |
| ILAR | | | | Sn | **Sn** | **21 11 46.9** | **+1.2** |
| | comp=N,2.9nm,0.3s,baz=7.2,slow=23,SNR=7.5 | | | | | | |
| | comp=N,10nm,0.7s | | | | | | |
| **EGAK** | **Eagle** | **4.97** | **164** | | **Pn** | **21 10 48.8** | **-0.7** |
| EGAK | | | | IAML | | 21 12 30.8 | |
| | comp=N,72nm,1.1s | | | | | | |
| EGAK | | | | IAML | | 21 12 32.2 | |
| | comp=N,82nm,1.0s | | | | | | |
| **J25K** | **Salcha River,** | **4.99** | **185** | | **Pn** | **21 10 48.8** | **-1.1** |
| J25K | | | | IAML | | 21 12 17.8 | |
| | comp=E,102nm,1.0s | | | | | | |
| **D19K** | **Kuna River** | **5.06** | **264** | Pn | **Pn** | **21 10 51.1** | **+0.3** |
| **H21K** | **Melozitna River** | **5.08** | **223** | Pn | **Pn** | **21 10 51.2** | **+0.1** |
| H21K | | | | IAML | | 21 12 30.1 | |
| | comp=E,103nm,1.2s | | | | | | |
| H21K | | | | IAML | | 21 12 36.6 | |
| | comp=N,77nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.10** | **176** | | **Pn** | **21 10 51.7** | **+0.2** |
| J26L | | | | IAML | | 21 12 18.3 | |
| | comp=E,84nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.12** | **197** | Pn | **Pn** | **21 10 52.2** | **+0.6** |
| **MLY** | **Manley** | **5.18** | **211** | Pn | **Pn** | **21 10 52.7** | **+0.2** |
| MLY | | | | IAML | | 21 12 29.5 | |
| | comp=E,63nm,1.2s | | | | | | |
| MLY | | | | IAML | | 21 12 35.1 | |
| | comp=N,72nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **5.18** | **252** | Pn | **Pn** | **21 10 52.8** | **+0.4** |
| E19K | | | | IAML | | 21 12 26.5 | |
| | comp=N,87nm,0.8s | | | | | | |
| E19K | | | | IAML | | 21 12 31.4 | |
| | comp=E,80nm,0.9s | | | | | | |
| **HDA** | **Harding Lake** | **5.28** | **192** | | **Pn** | **21 10 54.2** | **+0.4** |
| HDA | | | | IAML | | 21 12 28.5 | |
| | comp=E,88nm,1.0s | | | | | | |
| **WRH** | **Wood River Hil** | **5.32** | **198** | | **Pn** | **21 10 54.8** | **+0.3** |
| WRH | | | | IAML | | 21 12 31.8 | |
| | comp=E,70nm,1.2s | | | | | | |
| WRH | | | | IAML | | 21 12 35.0 | |
| | comp=N,57nm,1.1s | | | | | | |
| **NEA2** | **Nenana** | **5.32** | **202** | | **Pn** | **21 10 54.5** | **+0.1** |
| NEA2 | | | | IAML | | 21 12 33.2 | |
| | comp=E,80nm,1.3s | | | | | | |
| **I30M** | **Mount Dempster** | **5.34** | **141** | Pn | **Pn** | **21 10 54.8** | **+0.1** |
| I30M | | | | IAML | | 21 11 57.9 | |
| | comp=N,72nm,0.5s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.41** | **272** | Pn | **Pn** | **21 10 56.1** | **+0.5** |
| C19K | | | | IAML | | 21 12 57.9 | |
| | comp=E,66nm,1.4s | | | | | | |
| C19K | | | | IAML | | 21 13 01.4 | |
| | comp=N,70nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **5.62** | **178** | Pn | **Pn** | **21 10 59.7** | **+1.1** |
| **K27K** | **Chicken** | **5.64** | **170** | | **Pn** | **21 10 59.3** | **+0.6** |
| **J29N** | **Klondike Camp** | **5.67** | **152** | | **Pn** | **21 10 59.1** | **-0.1** |
| **F19K** | **Shaleruckik Mo** | **5.70** | **248** | Pn | **Pn** | **21 10 59.7** | **+0.2** |
| **BWN** | **Browne** | **5.78** | **203** | | **Pn** | **21 11 00.7** | **0.0** |
| **K24K** | **Donnelly Dome** | **5.82** | **186** | | **Pn** | **21 11 03.2** | **+1.9** |
| **RIDG** | **Independent Ri** | **5.86** | **182** | | **Pn** | **21 11 02.4** | **+0.6** |
| **DAWY** | **Dawson** | **5.86** | **158** | Pn | **Pn** | **21 11 02.1** | **+0.3** |
| **G19K** | **Purcell Mounta** | **5.91** | **241** | Pn | **Pn** | **21 11 02.5** | **+0.1** |
| **J30M** | **Hart River** | **5.91** | **144** | Pn | **Pn** | **21 11 02.1** | **-0.4** |
| **DOT** | **Dot Lake** | **5.95** | **179** | | **Pn** | **21 11 04.6** | **+1.6** |
| **BPAW** | **Bear Paw Mtn.** | **6.08** | **209** | Pn | **Pn** | **21 11 04.7** | **-0.2** |
| **C18K** | **Utukok River** | **6.09** | **269** | Pn | **Pn** | **21 11 04.8** | **-0.1** |
| **MCK** | **McKinley** | **6.13** | **199** | | **Pn** | **21 11 06.5** | **+1.0** |
| **H19K** | **Roundabout Mou** | **6.15** | **235** | Pn | **Pn** | **21 11 06.4** | **+0.7** |
| **E18K** | **Tukpahlearik C** | **6.34** | **258** | | **Pn** | **21 11 08.6** | **+0.2** |
| **K29M** | **Barlow Dome** | **6.35** | **152** | Pn | **Pn** | **21 11 09.6** | **+1.0** |
| **RND** | **Reindeer** | **6.44** | **198** | | **Pn** | **21 11 09.8** | **0.0** |
| **G18K** | **Tagagawik** | **6.56** | **243** | Pn | **Pn** | **21 11 10.4** | **-0.9** |
| **L26K** | **Log Cabin Wild** | **6.58** | **176** | | **Pn** | **21 11 12.6** | **+0.9** |
| **BCAR** | **Beaver Creek A** | **6.61** | **170** | Pn | **Pn** | **21 11 12.8** | **+0.7** |
| **L27K** | **Beaver Creek,** | **6.61** | **170** | Pn | **Pn** | **21 11 13.1** | **+1.0** |
| **DHY** | **Denali Highway** | **6.63** | **192** | Pn | **Pn** | **21 11 14.0** | **+1.4** |
| **J20K** | **Nowinta River** | **6.64** | **220** | Pn | **Pn** | **21 11 12.7** | **+0.3** |
| **A36M** | **Sachs Harbour** | **6.75** | **60** | Pn | **Pn** | **21 11 13.3** | **-0.5** |
| **C17K** | **DeLong Mountai** | **6.84** | **270** | | **Pn** | **21 11 14.5** | **-0.7** |
| **RDOG** | **Red Dog Mine** | **6.88** | **266** | | **Pn** | **21 11 15.4** | **-0.4** |
| **H18K** | **Honhosa River** | **6.98** | **237** | | **Pn** | **21 11 16.8** | **-0.4** |
| **WAT7** | **Susitna Watana** | **7.00** | **197** | | **Pn** | **21 11 19.5** | **+2.0** |
| **F17K** | **Baldwin Pennin** | **7.07** | **252** | Pn | **Pn** | **21 11 17.9** | **-0.4** |
| **C36M** | **Paulatuk** | **7.13** | **82** | | **Pn** | **21 11 17.8** | **-1.3** |
| **J19K** | **Poorman** | **7.14** | **224** | Pn | **Pn** | **21 11 19.8** | **+0.5** |
| **HARP** | **HAARP** | **7.21** | **183** | | **Pn** | **21 11 22.2** | **+1.9** |
| **M26K** | **Nabesna, AK** | **7.22** | **175** | Pn | **Pn** | **21 11 20.6** | **+0.2** |
| **M27K** | **Edge Creek, AK** | **7.31** | **171** | | **Pn** | **21 11 22.3** | **+0.5** |
| **PTPK** | **Patty Peak** | **8.45** | **174** | | **Pn** | **21 11 38.7** | **+1.2** |
| **YUK8** | **Steele Glacier** | **8.53** | **165** | | **Pn** | **21 11 39.8** | **+1.1** |
| **L19K** | **White Mountain** | **8.56** | **215** | Pn | **Pn** | **21 11 37.9** | **-0.9** |
| **YUK5** | **Granite Creek** | **8.89** | **159** | | **Pn** | **21 11 45.2** | **+1.8** |
| **L18K** | **Granite Mounta** | **8.91** | **220** | Pn | **Pn** | **21 11 43.0** | **-0.7** |
| **N19K** | **Bonanza Creek** | **9.75** | **211** | Pn | **Pn** | **21 11 53.9** | **-1.2** |
| **M16K** | **Timber Creek** | **10.49** | **222** | Pn | **Pn** | **21 12 04.9** | **-0.3** |
| **Q32M** | **Nakina River** | **11.84** | **148** | Pn | **Pn** | **21 12 24.0** | **+0.2** |
| **DLBC** | **Dease Lake** | **12.76** | **144** | Pn | **Pn** | **21 12 36.9** | **+0.5** |
| | comp=N,0.3nm,0.3s,baz=335,slow=13,SNR=3.8 | | | | | | |
| | comp=N,3.6nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.87** | **106** | Pn | **Pn** | **21 12 47.2** | **-4.1** |
| | comp=N,0.4nm,0.3s,baz=316,slow=14,SNR=5.3 | | | | | | |
| | comp=N,1.6nm,0.6s | | | | | | |
| **RES** | **Resolute Bay** | **15.57** | **49** | Pn | **Pn** | **21 13 12.1** | **-2.0** |
| | comp=N,1.2nm,0.3s,baz=265,slow=18,SNR=9.9 | | | | | | |
| RES | | | | Sn | Sn | 21 15 53.6 | -13 |
| | comp=N,0.7nm,0.3s,baz=175,slow=20,SNR=2.2 | | | | | | |
| | comp=N,4.3nm,0.4s | | | | | | |
| **SEY** | **Seymchan** | **25.19** | **286** | P | **P** | **21 15 00.7** | **+0.5** |
| | comp=N,4.6nm,0.9s,baz=62,slow=11,SNR=7.8 | | | | | | |
| | comp=N,4.6nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **32.24** | **128** | P | **P** | **21 16 05.2** | **+1.8** |
| | comp=N,1.2nm,0.8s,baz=5.7,slow=6.0,SNR=9.2 | | | | | | |
| | comp=N,1.2nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.17** | **142** | P | **P** | **21 16 23.8** | **+3.5** |
| | comp=N,2.0nm,1.0s,baz=338,slow=8.0,SNR=7.2 | | | | | | |
| | comp=N,2.0nm,1.0s | | | | | | |
| **SCHQ** | **Schefferville** | **36.14** | **73** | LR | LR | 21 33 26.6 | |
| | comp=N,446nm,20.2s,baz=124,slow=40 | | | | | | |
| **KLR** | **Kul'dur** | **42.98** | **287** | LR | LR | 21 37 12.1 | |
| | comp=N,414nm,21.9s,baz=234,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **46.46** | **128** | P | **P** | **21 18 04.7** | **+2.9** |
| | comp=N,0.2nm,0.6s,baz=343,slow=3.9,SNR=3.4 | | | | | | |
| | comp=N,0.2nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **49.10** | **6** | P | **P** | **21 18 22.0** | **+0.2** |
| | comp=N,2.4nm,1.0s,baz=4.8,slow=9.1,SNR=8.6 | | | | | | |
| | comp=N,2.4nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **49.64** | **14** | P | **P** | **21 18 26.1** | **+0.2** |
| | comp=N,2.6nm,0.9s,baz=308,slow=3.6,SNR=4.3 | | | | | | |
| | comp=N,2.6nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.72** | **325** | P | **P** | **21 18 43.3** | **+1.6** |
| | comp=N,0.5nm,0.5s,baz=2.3,slow=7.2,SNR=2.7 | | | | | | |
| | comp=N,0.5nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **52.13** | **306** | P | **P** | **21 18 46.2** | **+1.2** |
| | comp=N,0.5nm,0.7s,baz=31,slow=6.9,SNR=2.4 | | | | | | |
| | comp=N,0.5nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.26** | **27** | P | **P** | **21 18 45.9** | **+0.2** |
| | comp=N,2.5nm,0.9s,baz=332,slow=5.2,SNR=3.8 | | | | | | |
| | comp=N,2.5nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.09** | **329** | P | **P** | **21 19 14.0** | **+0.4** |
| | comp=N,0.4nm,0.3s,baz=14,slow=7.0,SNR=6.3 | | | | | | |
| | comp=N,0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.02** | **324** | P | **P** | **21 19 34.1** | **-0.4** |
| | comp=N,0.4nm,0.6s,baz=47,slow=6.3,SNR=4.0 | | | | | | |
| | comp=N,0.4nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **59.95** | **5** | P | **P** | **21 19 38.8** | **-1.9** |
| | comp=N,1.3nm,0.5s,baz=359,slow=6.7,SNR=4.6 | | | | | | |
| | comp=N,1.3nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **67.26** | **32** | P | **P** | **21 20 30.1** | **+0.8** |
| | comp=N,0.2nm,0.5s,baz=341,slow=7.8,SNR=2.6 | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | |

*UPA **22** 21:17:23.9±1.9, 8.°67N×83.°16W, h10km±5km, MD3.6, ML3.5, MW4.1*
*UCR **22** 21:17:23.7±0.7, 8.°63N×83.°22W, h21km±2km, MW3.8*
*CATAC **22** 21:17:24.1±0.6, 8.°65N×83.°22W, h3km±3km, ML3.4*

**ISC 22 21:17:23.1**±0.9, **8.°61N**±0.°03×**83.°15W**±0.°03, **h23**km±5km, **n45,**σ1s**03**/69, **2D,Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.02** | **358** | *eP* | **Pb** | **21 17 26.7** | **-0.4** |
| FITO | | | | *eS* | **Sb** | **21 17 29.3** | **-0.5** |
| **EDAD** | **Golfito** | **0.05** | **345** | *eP* | **Pb** | **21 17 26.8** | **-0.4** |
| EDAD | | | | *eS* | **Sb** | **21 17 29.5** | **-0.5** |
| **JIME** | **Puerto Jimenez** | **0.18** | **248** | *eP* | **Pb** | **21 17 27.8** | **-0.5** |
| JIME | | | | *eS* | **Sb** | **21 17 32.0** | **+0.2** |
| **NELY** | **Ciudad Neily** | **0.21** | **78** | *eP* | **Pn** | **21 17 30.0** | **-0.8** |
| **CDITO** | **Canoas** | **0.28** | **97** | *i P* | **Pb** | **21 17 30.6** | **+1.0** |
| CDITO | | | | *i S* | **Sn** | **21 17 36.6** | **-0.7** |
| CDITO | | | | IAML | | 21 17 42.2 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **VITO** | **San Vito** | **0.28** | **41** | *eP* | **Pn** | **21 17 31.0** | **-0.9** |
| **EDP2** | **Potrero Grande** | **0.41** | **357** | *eP* | **Pb** | **21 17 32.0** | **+0.3** |
| **EDPN** | **Palmar Norte** | **0.46** | **320** | *eP* | **Pb** | **21 17 31.7** | **-1.0** |
| **PTPM** | **Petroterminale** | **0.48** | **146** | *i P* | **Pn** | **21 17 34.6** | **0.0** |
| PTPM | | | | *eS* | **Sn** | **21 17 42.6** | **+0.3** |
| **BRU2** | **Volcan** | **0.49** | **68** | *i P* | **Pn** | **21 17 34.3** | **-0.6** |
| BRU2 | | | | *i S* | **Sn** | **21 17 42.6** | **-0.2** |
| BRU2 | | | | IAML | | 21 17 48.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.49** | **68** | ⇓*iP* | **Pn** | **21 17 34.4** | **-0.5** |
| BRU2 | | | | AMP | | 21 17 35.8 | |
| | comp

*az=217.0*

*BJI* ***22*** *21:56:21.9±0.0,7.°63S×154.°45E,h10km,mb4.7/48, mB5.4/14,Ms5.0/2,Ms7.4,8/2*

*GCMT* ***22*** *21:56:26.9±0.3,7.°67S±0.°02×154.°62E±0.°02,h25km±1km, MW4.9/67,Moment Tensor Solution. s12,c15; s67,c92; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr0.39±.17; Mθθ-0.74±.12; Mφφ0.35±.12; Mrθ0.14±.23; Mθφ2.02±.09; Mφr2.50±.39; Best double couple: M₀3.26200×10¹⁶ NP1:φs352.00000°,δ85.00000°,λ131.00000°. NP2: φs88.00000°,δ41.00000°,λ8.00000°. Principal axes: T 3.4660, Plg37.0000°, Azm297.0000°; N -0.4070, Plg41.0000°, Azm167.0000°; P -3.0570, Plg28.0000°, Azm50.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*DJA* ***22*** *21:56:31.1±3.7,8.°5S±15.°5×15.°5E±2.°5,h85km±21km, M5.3/12,mB5.7/2,mb4.8/12,MLv5.6/1,Mw(mB)5.2/2*

**ISC 22 21:56:20.6±0.3,7.71S±0.05×154.98E±0.05,h10km,n410, σ1§32/404,mb5.0/74,MS4.0/8,9C-2D,**
**Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **4.48** | **321** | | **Pn** | **21 57 28.1** | **-0.5** |
| **BULU** | **Kimbe** | **5.11** | **295** | P | **Pn** | **21 57 37.8** | **+0.5** |
| **HNR** | **Honiara** | **5.20** | **110** | Pn | **Pn** | **21 57 37.6** | **-0.9** |
| **HNR** | **Honiara** comp=Z,15μm,21.2s,baz=270,slow=36 | **5.20** | **110** | LR | LR | 21 59 38.7 | |
| **HNR** | **Honiara** | **5.20** | **110** | P | **Pn** | **21 57 37.6** | **-0.9** |
| **KAVG** | **Kavieng** | **6.57** | **321** | P | **Pn** | **21 57 59.7** | **+2.3** |
| **PMG** | **Port Moresby** | **7.92** | **257** | P | **Pn** | **21 58 20.5** | **+4.6** |
| **PMG** | **Port Moresby** | **7.92** | **257** | Pn | **Pn** | **21 58 16.0** | **+0.1** |
| **PMG** | **Port Moresby** 4.2nm,0.3s,baz=31,slow=8.8,SNR=12 | **7.92** | **257** | Pn | **Pn** | **21 58 16.7** | **+0.8** |
| PMG | 12nm,0.3s,baz=52,slow=11,SNR=12 | | | Sn | **Sn** | **21 59 45.2** | **-0.5** |
| PMG | comp=Z,2μm,19.2s,baz=64,slow=38 | | | LR | LR | 22 01 15.1 | |
| **PMG** | **Port Moresby** | **7.92** | **257** | *i* P | **Pn** | **21 58 18.7** | **+2.8** |
| **MANU** | **Manus Island** | **9.45** | **306** | | **Pn** | **21 58 37.1** | **+0.3** |
| **TV1H** | **Townsville Har** | **13.97** | **214** | P | **P** | **21 59 48.0** | **+1.2** |
| **PATS** | **Pohnpei** | **14.82** | **13** | Pn | **Pn** | **21 59 49.4** | **-1.0** |
| **CTA** | **Charters Tower** baz=28,slow=15,SNR=1.6 | **14.94** | **214** | Pn | **Pn** | **21 59 52.8** | **+0.8** |
| CTA | comp=Z,55nm,20.4s,baz=36,slow=34 | | | LR | LR | 22 04 42.8 | |
| **CTAO** | **Charters Tower** | **14.94** | **214** | Pn | **Pn** | **21 59 52.9** | **+0.9** |
| **CTAO** | **Charters Tower** | **14.94** | **214** | P | **Pn** | **21 59 52.9** | **+0.9** |
| **RK1H** | **Rockhampton Ha** | **16.18** | **195** | P | **P** | **22 00 18.1** | **+6.8** |
| **EIDS** | **Eidsvold** | **17.96** | **192** | P | **Pn** | **22 00 29.8** | **-0.7** |
| **DZM** | **Mont Dzumac** 536nm,23.8s | **18.05** | **144** | *e*LR | LR | 22 04 32.7 | |
| **DZM** | **Mont Dzumac** | **18.05** | **144** | | **Pn** | **22 00 31.3** | **-0.5** |
| **DZM** | **Mont Dzumac** 0.1nm,0.3s,baz=330,slow=20,SNR=2.3 | **18.05** | **144** | P | **P** | **22 00 34.2** | **+1.9** |
| DZM | comp=Z,337nm,20.7s,baz=306,slow=33 5.2nm,0.9s | | | LR | LR | 22 06 22.3 | |
| **TARA** | **Tarawa** | **20.03** | **64** | P | **P** | **22 00 53.0** | **-0.9** |
| TARA | comp=Z,56nm,0.5s | | | IAmb | IAmb | 22 01 02.0 | |
| **ARMA** | **Armidale** | **22.81** | **187** | P | **P** | **22 01 22.4** | **-1.5** |
| **FAKI** | **Fak Fak** | **23.12** | **281** | P | **P** | **22 01 25.3** | **-1.8** |
| FAKI | comp=Z,166nm,1.8s | | | IAmb | IAmb | 22 01 36.7 | |
| **FAKI** | **Fak Fak** comp=Z,41nm,1.4s | **23.12** | **281** | P | **P** | **22 01 25.6** | **-1.5** |
| **WRA** | **Warramunga Arr** | **23.41** | **237** | P | **P** | **22 01 27.5** | **-2.5** |
| **WRA** | **Warramunga Arr** comp=Z,34nm,0.9s,baz=62,slow=9.8,SNR=17 | **23.41** | **237** | P | **P** | **22 01 28.7** | **-1.3** |
| WRA | comp=Z,1.3nm,0.6s,baz=64,slow=2.7,SNR=5.0 | | | PcP | **PcP** | **22 05 18.0** | **+1.4** |
| WRA | comp=Z,579nm,19.0s,baz=12,slow=36 comp=Z,34nm,0.9s | | | LR | LR | 22 10 05.3 | |
| **MTN** | **Manton Dam** | **24.01** | **256** | P | **P** | **22 01 34.1** | **-1.7** |
| MTN | comp=Z,37nm,1.0s | | | IAmb | IAmb | 22 01 35.9 | |
| **SWI** | **Sorong** comp=Z,33nm,1.4s,comp=Z,1μm | **24.60** | **285** | P | **P** | **22 01 40.0** | **-1.3** |
| **AS31** | **Alice Springs** | **25.70** | **230** | P | **P** | **22 01 49.9** | **-1.3** |
| **ASAR** | **Alice Springs** | **25.70** | **230** | P | **P** | **22 01 49.3** | **-1.9** |
| **ASAR** | **Alice Springs** comp=Z,3.9nm,0.6s,baz=60,slow=9.6,SNR=20 | **25.70** | **230** | P | **P** | **22 01 50.1** | **-1.1** |
| ASAR | comp=Z,0.9nm,0.8s,baz=90,slow=0.9,SNR=2.8 | | | PcP | **PcP** | **22 05 22.1** | **+0.5** |
| ASAR | comp=Z,327nm,19.6s,baz=47,slow=36 comp=Z,3.9nm,0.6s | | | LR | LR | 22 11 37.1 | |
| **KNRA** | **Kununurra** | **26.85** | **250** | P | **P** | **22 02 00.7** | **-0.9** |
| **STKA** | **Stephens Creek** | **27.09** | **206** | P | **P** | **22 02 03.1** | **-0.5** |
| **STKA** | **Stephens Creek** comp=Z,15nm,1.1s,baz=38,slow=14,SNR=8.4 | **27.09** | **206** | P | **P** | **22 02 03.4** | **-0.2** |
| STKA | comp=Z,463nm,20.5s,baz=29,slow=36 comp=Z,15nm,1.1s | | | LR | LR | 22 12 27.7 | |
| **STKA** | **Stephens Creek** | **27.09** | **206** | P | **P** | **22 02 03.3** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **30.36** | **247** | P | **P** | **22 02 31.3** | **-1.6** |
| **BBOO** | **Buckleboo** | **30.53** | **213** | P | **P** | **22 02 31.8** | **-2.5** |
| BBOO | comp=Z,48nm,1.4s | | | IAmb | IAmb | 22 02 49.5 | |
| **LUWI** | **Luwuk** | **32.77** | **280** | P | **P** | **22 02 53.0** | **-1.2** |
| **LUWI** | **Luwuk** comp=Z,31nm,1.2s | **32.77** | **280** | P | **P** | **22 02 53.6** | **-0.6** |
| **DAV** | **Davao City (W)** comp=Z,106nm,19.2s,baz=118,slow=37 | **32.79** | **296** | LR | LR | 22 16 27.8 | |
| **EDFI** | **Ende, Flores** comp=Z,33nm,0.8s | **32.96** | **266** | P | **P** | **22 02 53.5** | **-2.5** |
| **FORT** | **Forrest** | **34.07** | **224** | P | **P** | **22 03 04.0** | **-1.3** |
| **KAPI** | **Kappang** | **35.11** | **272** | P | **P** | **22 03 13.6** | **-0.9** |
| KAPI | comp=Z,57nm,1.4s | | | IAmb | IAmb | 22 03 14.7 | |
| **KAPI** | **Kappang** comp=Z,18nm,0.9s,baz=82,slow=7.2,SNR=6.5 comp=Z,18nm,0.9s | **35.11** | **272** | P | **P** | **22 03 13.5** | **-1.1** |
| **KAPI** | **Kappang** | **35.11** | **272** | P | **P** | **22 03 13.6** | **-0.9** |
| KAPI | comp=Z,57nm,1.4s | | | pmax | pmax | | |
| **TAU** | **Tasmania Unive** | **35.71** | **190** | P | **P** | **22 03 20.1** | **+0.9** |
| TAU | comp=Z,30nm,1.2s | | | IAmb | IAmb | 22 03 23.0 | |
| **TAU** | **Tasmania Unive** | **35.71** | **190** | P | **P** | **22 03 20.1** | **+0.9** |
| TAU | comp=Z,30nm,1.2s | | | pmax | pmax | | |
| **MPSI** | **Mapaga** | **35.88** | **281** | P | **P** | **22 03 18.9** | **-2.3** |
| **URZ** | **Urewera** comp=Z,182nm,18.1s,baz=40,slow=36 | **36.40** | **150** | LR | LR | 22 17 58.2 | |
| **QRZ** | **Quartz Range** | **36.50** | **157** | P | **P** | **22 03 24.3** | **-1.8** |
| QRZ | comp=Z,84nm,1.5s | | | IAmb | IAmb | 22 03 40.8 | |
| **MBWA** | **Marble Bar** | **36.56** | **245** | P | **P** | **22 03 25.7** | **-1.2** |
| MBWA | comp=Z,80nm,1.7s | | | IAmb | IAmb | 22 03 41.7 | |
| **MYLDM** | **Lahad Datu** | **38.58** | **288** | P | **P** | **22 03 43.0** | **-1.1** |
| **JAGI** | **Jajag, Banyuwa** | **40.42** | **266** | P | **P** | **22 03 55.5** | **-4.0** |
| JAGI | comp=Z,37nm,0.7s | | | IAmb | IAmb | 22 03 57.1 | |
| **NWAO** | **Narrogin (SRO)** | **43.02** | **229** | P | **P** | **22 04 18.4** | **-2.1** |
| NWAO | comp=Z,42nm,1.3s | | | IAmb | IAmb | 22 04 30.9 | |
| **NWAO** | **Narrogin (SRO)** comp=Z,262nm,19.2s,baz=222,slow=36 | **43.02** | **229** | LR | LR | 22 22 08.3 | |
| **NWAO** | **Narrogin (SRO)** | **43.02** | **229** | P | **P** | **22 04 18.4** | **-2.1** |
| NWAO | comp=Z,42nm,1.3s | | | pmax | pmax | | |
| **SBUM** | **Sibu** | **43.84** | **282** | P | **P** | **22 04 26.8** | **-0.6** |
| **KSM** | **Kuching** | **45.48** | **280** | P | **P** | **22 04 38.4** | **-2.1** |
| KSM | comp=Z,41nm,1.1s | | | IAmb | IAmb | 22 04 40.8 | |
| **MJAR** | **Matsushiro Arr** comp=Z,1.6nm,0.6s,baz=169,slow=8.9,SNR=6.0 | **46.75** | **341** | P | **P** | **22 04 48.8** | **-1.3** |
| **JTM** | **Tenmabayashi** comp=Z,1.6nm,0.6s | **49.93** | **346** | P | **P** | **22 05 14.1** | **-0.5** |
| JTM | comp=Z,37nm,1.3s | | | IAmb | IAmb | 22 05 32.5 | |
| **KSRS** | **Korea Array** comp=Z,1.8nm,0.5s,baz=149,slow=7.4,SNR=9.9 comp=Z,1.8nm,0.5s | **51.56** | **332** | P | **P** | **22 05 26.8** | **-0.1** |
| **NJ2** | **Nanjing** | **52.45** | **321** | *e*P | **P** | **22 05 34.6** | **+0.9** |
| NJ2 | comp=Z,63nm,0.8s | | | pmax | pmax | | |
| **JKA** | **Kamikawa-asahi** | **52.78** | **349** | P | **P** | **22 05 35.8** | **-0.1** |
| JKA | comp=Z,53nm,1.6s | | | IAmb | IAmb | 22 06 09.2 | |
| **ASAJ** | **Asahikawa** comp=Z,6.0nm,0.7s,baz=218,slow=16,SNR=5.0 comp=Z,6.0nm,0.7s | **52.78** | **349** | P | **P** | **22 05 35.7** | **-0.1** |
| **ASAJ** | **Asahikawa** | **52.78** | **349** | P | **P** | **22 05 35.8** | **-0.1** |
| ASAJ | comp=Z,53nm,1.6s | | | pmax | pmax | | |
| **PPT2** | **Papeete2** comp=Z,105nm,24.8s | **54.81** | **106** | *e*S | **S** | **22 13 28.3** | **-4.5** |
| PPT2 | comp=Z,78nm,24.2s | | | *e*SS | **SS** | **22 17 10.2** | **-6.0** |
| PPT2 | comp=Z,143nm,25.0s | | | *e*LR | LR | 22 21 38.2 | |
| **TBI** | **Tubuai** comp=Z,476nm,30.8s | **55.41** | **113** | *e*SS | **SS** | **22 17 25.3** | **0.0** |
| TBI | comp=Z,1μm,33.2s | | | *e*LR | LR | 22 21 58.9 | |
| **YSS** | **Yuzh-Sakhalins** | **55.49** | **350** | *e*P | **P** | **22 05 51.4** | **-4.2** |
| **USA0B** | **Ussuriysk Arra** | **55.69** | **340** | *i* P | **P** | **22 05 57.3** | **+0.2** |
| **USRK** | **Ussuriysk Ar.** | **55.69** | **340** | P | **P** | **22 05 57.2** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** comp=Z,3.2nm,0.9s,baz=163,slow=10,SNR=9.2 comp=Z,3.2nm,0.9s | **55.69** | **340** | P | **P** | **22 05 57.8** | **+0.7** |
| **CN2** | **Changchun** | **57.83** | **335** | *e*P | **P** | **22 06 14.1** | **+1.8** |
| CN2 | comp=Z,10.0nm,0.7s | | | pmax | pmax | | |
| **GYA** | **Guiyang** | **57.88** | **308** | P | P | 22 06 18.4 | +5.3 |
| GYA | comp=Z,7.0nm,0.9s | | | pmax | pmax | | |
| **HNS** | **HongShan** | **58.56** | **323** | ⇓P | **P** | **22 06 18.4** | **+0.9** |
| HNS | comp=Z,16nm,1.6s | | | pmax | pmax | | |
| **BNX** | **BinXian** | **58.66** | **338** | ⇓P | **P** | **22 06 18.8** | **+0.7** |
| BNX | comp=Z,6.0nm,1.3s | | | pmax | pmax | | |
| **PHRA** | **Phrae** | **59.95** | **296** | P | **P** | **22 06 26.7** | **-0.9** |
| **XAN** | **Xi'an** | **60.21** | **316** | ⇑P | **P** | **22 06 28.6** | **-0.5** |
| XAN | | | | pP | pP | 22 06 32.0 | +0.7 |
| XAN | comp=Z,12nm,1.3s | | | pmax | pmax | | |
| **KLR** | **Kul'dur** comp=Z,0.7nm,0.3s,baz=148,slow=10,SNR=4.7 comp=Z,0.7nm,0.3s | **60.24** | **343** | P | **P** | **22 06 28.3** | **-0.6** |
| **KLR** | **Kul'dur** | **60.24** | **343** | *ce*P | **P** | **22 06 29.9** | **+1.0** |
| KLR | comp=Z,14nm,1.7s | | | pmax | pmax | | |
| **KMI** | **Kunming** | **60.41** | **304** | ⇑P | **P** | **22 06 31.3** | **+0.4** |
| KMI | | | | pP | sP | 22 06 35.8 | +2.0 |
| KMI | comp=Z,13nm,1.3s | | | pmax | pmax | | |
| **CRAI** | **Chiangrai** | **60.45** | **298** | P | **P** | **22 06 30.9** | **-0.1** |
| CRAI | comp=Z,16nm,1.1s | | | IAmb | IAmb | 22 06 32.4 | |
| **PEA0B** | **Petropavlovsk-** | **60.62** | **2** | P | **P** | **22 06 31.3** | **-0.2** |
| **PEA0B** | **Petropavlovsk-** | **60.62** | **2** | P | **P** | **22 06 31.3** | **-0.2** |
| PEA0B | comp=Z,55nm,1.7s | | | pmax | pmax | | |
| **PETK** | **Petropavlovsk-** | **60.62** | **2** | P | **P** | **22 06 31.4** | **-0.1** |
| **PETK** | **Petropavlovsk-** comp=Z,1.7nm,0.5s,baz=143,slow=7.4,SNR=6.0 comp=Z,1.7nm,0.5s | **60.62** | **2** | P | **P** | **22 06 31.3** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **60.62** | **2** | P | **P** | **22 06 31.4** | **-0.1** |
| **CM31** | **Chiang Mai Arr** | **61.08** | **296** | P | **P** | **22 06 34.8** | **-0.5** |
| CM31 | comp=Z,20nm,1.4s | | | IAmb | IAmb | 22 06 36.9 | |
| **CMAR** | **Chiang Mai Arr** comp=Z,3.3nm,0.9s,baz=111,slow=5.0,SNR=14 | **61.08** | **296** | P | **P** | **22 06 35.0** | **-0.3** |
| CMAR | comp=Z,34nm,18.0s,baz=50,slow=38 comp=Z,3.3nm,0.9s | | | LR | LR | 22 34 58.4 | |
| **CMAR** | **Chiang Mai Arr** | **61.08** | **296** | *ce*P | **P** | **22 06 36.0** | **+0.7** |
| CMAR | comp=Z,3.0nm,0.8s | | | pmax | pmax | | |
| **PZH** | **PanZhiHua** | **61.81** | **305** | P | P | 22 06 46.0 | +5.7 |
| PZH | comp=Z,20nm,1.0s | | | pmax | pmax | | |
| PZH | comp=Z,180nm,5.5s | | | pmax | pmax | | |
| **XLT** | **XiLinHaoTe** | **62.26** | **329** | *e*P | P | 22 06 47.9 | +5.0 |
| XLT | comp=Z,13nm,1.2s | | | pmax | pmax | | |
| **CD2** | **Chengdu** | **62.27** | **311** | P | **P** | **22 06 43.0** | **-0.1** |
| CD2 | comp=Z,20nm,0.7s | | | pmax | pmax | | |
| **SHEM** | **Shemya Is, Ala** comp=Z,135nm,22.0s,baz=326,slow=31 | **62.37** | **13** | LR | LR | 22 28 32.1 | |
| **HHC** | **Hu-ho-hao-te** | **62.66** | **324** | *e*P | **P** | **22 06 46.8** | **+1.2** |
| HHC | comp=Z,10.0nm,0.7s | | | pmax | pmax | | |
| HHC | comp=Z,220nm,6.7s | | | pmax | pmax | | |
| **BTO** | **Baotou** | **63.41** | **323** | *e*P | P | 22 06 58.4 | +7.7 |
| BTO | | | | pP | pwP | 22 07 03.1 | +6.0 |
| BTO | | | | sP | sP | 22 07 04.8 | +11 |
| BTO | | | | PP | PP | 22 09 20.8 | +11 |
| BTO | | | | S | S | 22 15 39.0 | +15 |
| **TNCH** | **TengChong** | **63.85** | **303** | P | **P** | **22 06 54.3** | **+0.3** |
| TNCH | | | | pP | sP | 22 06 57.9 | +0.9 |
| TNCH | | | | sP | pwP | 22 07 00.4 | -0.1 |
| TNCH | | | | S | **S** | **22 15 27.3** | **-2.6** |
| TNCH | | | | sS | sS | 22 15 34.3 | +0.9 |
| TNCH | | | | SS | **SS** | **22 19 36.0** | **-2.4** |
| TNCH | comp=Z,26nm,1.1s | | | pmax | pmax | | |
| TNCH | comp=Z,110nm,4.3s | | | LR | LR | | |
| TNCH | comp=Z,250nm,6.4s | | | LR | LR | | |
| TNCH | comp=Z,200nm,4.9s | | | LR | LR | | |
| **TAOE** | **Nuku Hiva Isla** comp=Z,257nm,28.0s | **64.13** | **96** | *e*LR | LR | 22 26 03.8 | |
| **LZH** | **Lanzhou** | **64.81** | **316** | *e*P | **P** | **22 07 01.4** | **+1.4** |
| LZH | | | | sP | pwP | 22 07 11.0 | +4.5 |
| LZH | | | | S | **S** | **22 15 44.3** | **+3.0** |
| LZH | comp=Z,15nm,1.0s | | | pmax | pmax | | |
| **ZEA** | **Zeya** | **65.55** | **342** | *e*P | P | 22 07 09.7 | +5.5 |
| **CASY** | **Casey** | **65.92** | **198** | P | **P** | **22 07 06.8** | **+0.4** |
| **NIKH** | **Nikolski High** baz=219 | **67.80** | **23** | P | **P** | **22 07 19.0** | **+0.5** |
| **RKT** | **Rikitea** comp=Z,654nm,26.2s | **68.69** | **112** | *e*LR | LR | 22 28 07.0 | |
| **GTA** | **Gaotai** | **69.25** | **317** | *e*P | **P** | **22 07 29.3** | **+1.2** |
| GTA | | | | pP | pwP | 22 07 36.3 | +1.6 |
| GTA | comp=Z,5.0nm,1.5s | | | pmax | pmax | | |
| **UNV** | **Unalaska Valle** baz=221 | **69.38** | **23** | P | **P** | **22 07 29.2** | **+0.8** |
| **ULN** | **Ulaanbaatar** | **69.59** | **328** | P | **P** | **22 07 29.9** | **-0.3** |
| **ULN** | **Ulaanbaatar** | **69.59** | **328** | *ce*P | **P** | **22 07 30.5** | **+0.4** |
| ULN | comp=Z,9.0nm,1.3s | | | pmax | pmax | | |
| **SHL** | **Shillong** | **69.65** | **301** | P | **P** | **22 07 29.9** | **-1.0** |
| **SHL** | **Shillong** | **69.65** | **301** | P | **P** | **22 07 29.9** | **-1.0** |
| SHL | comp=Z,60nm,1.5s | | | pmax | pmax | | |
| **SONM** | **Songino Array** | **69.92** | **327** | P | **P** | **22 07 32.3** | **+0.2** |
| **SONM** | **Songino Array** comp=Z,4.5nm,0.8s,baz=135,slow=6.0,SNR=16 comp=Z,4.5nm,0.8s | **69.92** | **327** | P | **P** | **22 07 33.1** | **+0.9** |
| **SEY** | **Seymchan** | **70.46** | **359** | *ce*P | **P** | **22 07 34.7** | **-0.2** |
| SEY | comp=Z,4.0nm,1.3s | | | pmax | pmax | | |
| **LSA** | **Lhasa** | **71.66** | **305** | P | **P** | **22 07 44.4** | **+0.9** |
| LSA | comp=Z,11nm,1.3s | | | pmax | pmax | | |
| **LSA** | **Lhasa** | **71.66** | **305** | P | **P** | **22 07 43.1** | **-0.4** |
| LSA | comp=Z,18nm,1.2s | | | IAmb | IAmb | 22 07 45.4 | |
| **LSA** | **Lhasa** | **71.66** | **305** | P | **P** | **22 07 43.1** | **-0.4** |
| LSA | comp=Z,18nm,1.2s | | | pmax | pmax | | |
| **YAK** | **Yakutsk** | **72.25** | **348** | P | **P** | **22 07 45.5** | **-0.2** |
| YAK | comp=Z,29nm,1.0s | | | IAmb | IAmb | 22 07 52.3 | |
| **YAK** | **Yakutsk** | **72.25** | **348** | *e*P | **P** | **22 07 46.1** | **+0.4** |
| YAK | comp=Z,6.0nm,0.8s | | | pmax | pmax | | |
| YAK | comp=N,1.0nm,0.8s | | | pmax | pmax | | |
| YAK | comp=E,3.0nm,1.3s | | | pmax | pmax | | |
| **S12K** | **Black Hills** baz=225 | **72.50** | **24** | P | **P** | **22 07 48.0** | **+0.7** |
| **SDPT** | **Sand Point** baz=227 | **72.89** | **25** | P | **P** | **22 07 49.9** | **+0.2** |
| **CHNA** | **Chernabura Isl** baz=228 | **72.92** | **26** | P | **P** | **22 07 50.4** | **+0.5** |
| **ZAK** | **Zakamensk** | **73.09** | **328** | *e*P | **P** | **22 07 51.3** | **+0.2** |
| ZAK | comp=Z,8.0nm,1.4s | | | pmax | pmax | | |
| **IRK** | **Irkutsk** | **73.69** | **330** | *e*P | **P** | **22 07 54.0** | **-0.5** |
| IRK | comp=Z,27nm,1.6s | | | pmax | pmax | | |
| **CHGN** | **Chignik** baz=228 | **74.40** | **25** | P | **P** | **22 07 59.2** | **+0.7** |
| **O14K** | **Tigyukauivet M** | **75.31** | **22** | P | **P** | **22 08 04.7** | **+1.0** |
| **O14K** | **Tigyukauivet M** baz=225 | **75.31** | **22** | P | **P** | **22 08 04.9** | **+1.2** |
| **R16K** | **Pilot Point** baz=229 | **75.58** | **24** | P | **P** | **22 08 06.4** | **+1.1** |
| **O15K** | **Ungalikthiuk R** baz=226 | **75.79** | **22** | P | **P** | **22 08 07.9** | **+1.4** |
| **BILL** | **Bilibino** | **75.99** | **4** | P | **P** | **22 08 07.9** | **+0.5** |
| BILL | comp=Z,16nm,0.4s | | | IAmb | IAmb | 22 08 42.7 | |
| **BILL** | **Bilibino** | **75.99** | **4** | *e*P | **P** | **22 08 08.0** | **+0.5** |
| BILL | | | | *e* | | 22 08 19.1 | |
| BILL | | | | *e*PPP | PPP | 22 12 43.5 | |
| BILL | comp=Z,13nm,0.9s | | | pmax | pmax | | |
| **R17L** | **Mt. Peulik Vol** baz=230,SNR=9.0 | **76.12** | **25** | P | **P** | **22 08 09.1** | **+0.7** |
| **PLK4** | **Peulik 4** | **76.12** | **25** | P | **P** | **22 08 08.4** | **-0.2** |
| **K13K** | **Kusilvak Mount** baz=221 | **76.12** | **18** | P | **P** | **22 08 09.6** | **+1.2** |
| **M14K** | **Bethel** baz=224 | **76.14** | **20** | P | **P** | **22 08 09.9** | **+1.4** |
| **L14K** | **Kuka Creek** | **76.32** | **20** | P | **P** | **22 08 10.4** | **+0.9** |
| L14K | comp=Z,28nm,1.1s | | | IAmb | IAmb | 22 08 17.9 | |
| **L14K** | **Kuka Creek** baz=223 | **76.32** | **20** | P | **P** | **22 08 10.8** | **+1.3** |
| **SII** | **Sitkinak Islan** baz=232 | **76.37** | **26** | P | **P** | **22 08 10.7** | **+0.7** |
| **N15K** | **Kwethluk River** | **76.38** | **21** | P | **P** | **22 08 10.9** | **+1.0** |
| N15K | comp=Z,19nm,0.8s | | | IAmb | IAmb | 22 08 13.2 | |
| **N15K** | **Kwethluk River** baz=226 | **76.38** | **21** | P | **P** | **22 08 10.8** | **+0.9** |
| **P16K** | **Nushagak River** baz=228 | **76.39** | **23** | P | **P** | **22 08 10.2** | **+0.3** |
| **M15K** | **Kasigluk River** baz=225,SNR=5.3 | **76.54** | **21** | P | **P** | **22 08 11.3** | **+0.6** |
| **Q17K** | **Contact Creek** baz=230,SNR=17 | **76.72** | **24** | P | **P** | **22 08 13.5** | **+1.5** |
| **O16K** | **Kokwok River B** baz=228 | **76.72** | **22** | P | **P** | **22 08 13.0** | **+1.2** |
| **R18K** | **Karluk** baz=232 | **76.88** | **25** | P | **P** | **22 08 14.1** | **+1.4** |
| **L15K** | **Ungalak Mounta** baz=224 | **76.96** | **20** | P | **P** | **22 08 14.6** | **+1.5** |
| **N16K** | **Nishlik Lake** baz=227,SNR=6.6 | **77.07** | **22** | P | **P** | **22 08 14.6** | **+0.8** |
| **J14K** | **Nanvaranak Lak** | **77.08** | **18** | P | **P** | **22 08 14.1** | **+0.4** |
| J14K | comp=Z,36nm,1.2s | | | IAmb | IAmb | 22 08 22.5 | |
| **J14K** | **Nanvaranak Lak** baz=222 | **77.08** | **18** | P | **P** | **22 08 14.9** | **+1.2** |
| **P17K** | **Kvichak River** baz=230 | **77.10** | **23** | P | **P** | **22 08 15.4** | **+1.4** |
| **OHAK** | **Old Harbor** baz=233 | **77.17** | **26** | P | **P** | **22 08 15.2** | **+0.9** |
| **O17K** | **Koliganek Bris** baz=229 | **77.22** | **23** | P | **P** | **22 08 15.9** | **+1.3** |
| **Q18K** | **Katmai Hardscr** baz=231,SNR=14 | **77.32** | **24** | P | **P** | **22 08 16.1** | **+0.8** |
| **M16K** | **Timber Creek** | **77.38** | **21** | P | **P** | **22 08 17.1** | **+1.6** |
| **M16K** | **Timber Creek** baz=227,SNR=8.6 | **77.38** | **21** | P | **P** | **22 08 15.8** | **+0.3** |
| **K15K** | **Wolf Creek Mou** | **77.39** | **19** | P | **P** | **22 08 17.1** | **+1.6** |
| **K15K** | **Wolf Creek Mou** baz=224,SNR=10 | **77.39** | **19** | P | **P** | **22 08 15.9** | **+0.4** |
| **L16K** | **Owhat River** baz=226,SNR=7.2 | **77.67** | **20** | P | **P** | **22 08 18.1** | **+1.0** |
| **N17K** | **Nushagak Hills** baz=229 | **77.69** | **22** | P | **P** | **22 08 18.3** | **+1.1** |
| **P18K** | **Big Mountain,** baz=231 | **77.70** | **24** | P | **P** | **22 08 18.5** | **+1.1** |
| **KDAK** | **Kodiak Island** baz=233 | **77.81** | **26** | P | **P** | **22 08 18.8** | **+0.9** |
| **ANM** | **Nome** baz=220 | **77.91** | **16** | P | **P** | **22 08 19.3** | **+0.9** |
| **O18K** | **Koktuh Hills** baz=231 | **78.00** | **23** | P | **P** | **22 08 20.0** | **+1.0** |
| **TNA** | **Tin City** baz=218 | **78.01** | **15** | P | **P** | **22 08 20.0** | **+1.2** |
| **Q19K** | **Cape Douglas,** | **78.05** | **24** | P | **P** | **22 08 20.0** | **+0.7** |
| **Q19K** | **Cape Douglas,** baz=232,SNR=6.2 | **78.05** | **24** | P | **P** | **22 08 20.3** | **+1.0** |
| **M17K** | **Holitna River** baz=228,SNR=9.7 | **78.17** | **21** | P | **P** | **22 08 21.8** | **+1.9** |
| **N18K** | **Kilae Creek** baz=230,SNR=11 | **78.27** | **22** | P | **P** | **22 08 21.9** | **+1.4** |
| **F14K** | **Arctic Creek** baz=219 | **78.35** | **15** | P | **P** | **22 08 21.7** | **+0.9** |
| **L17K** | **Donlin** baz=227,SNR=7.7 | **78.37** | **20** | P | **P** | **22 08 22.5** | **+1.6** |
| **Q20K** | **Shuyak Island** baz=233 | **78.38** | **25** | P | **P** | **22 08 22.4** | **+1.3** |
| **J16K** | **Anvik River** baz=225,SNR=5.5 | **78.40** | **19** | P | **P** | **22 08 22.6** | **+1.5** |
| **G15K** | **Niukluk** baz=222 | **78.61** | **17** | P | **P** | **22 08 23.2** | **+1.0** |
| **P19K** | **Oil Pt** baz=232,SNR=6.1 | **78.66** | **24** | P | **P** | **22 08 23.6** | **+1.0** |
| **K17K** | **Iditarod** baz=227,SNR=5.2 | **78.76** | **20** | P | **P** | **22 08 24.9** | **+1.8** |
| **I17K** | **Unalakleet** baz=225 | **78.79** | **18** | P | **P** | **22 08 24.8** | **+1.5** |
| **M18K** | **Stony River** baz=230 | **78.82** | **22** | P | **P** | **22 08 24.6** | **+1.2** |
| **H16K** | **Elim** baz=223 | **78.87** | **17** | P | **P** | **22 08 24.8** | **+1.2** |
| **N19K** | **Bonanza Creek** baz=231 | **78.89** | **23** | P | **P** | **22 08 25.2** | **+1.2** |
| **J17K** | **VABM Dome** baz=226,SNR=13 | **78.97** | **19** | P | **P** | **22 08 25.6** | **+1.3** |
| **F15K** | **North Star Dit** baz=221 | **78.98** | **16** | P | **P** | **22 08 25.9** | **+1.6** |
| **L18K** | **Granite Mounta** baz=229,SNR=16 | **78.98** | **21** | P | **P** | **22 08 25.3** | **+1.0** |
| **O20K** | **Slope Mountain** baz=233 | **79.17** | **24** | P | **P** | **22 08 26.2** | **+0.7** |
| **HOM** | **Homer** baz=234 | **79.31** | **24** | P | **P** | **22 08 27.3** | **+1.1** |
| **WMQ** | **Urumqi** | **79.33** | **317** | *e*P | **P** | **22 08 28.9** | **+2.1** |
| **G16K** | **Koyuk River** baz=223,SNR=5.2 | **79.39** | **17** | P | **P** | **22 08 27.9** | **+1.4** |
| **M19K** | **Big River Lodg** baz=231,SNR=15 | **79.61** | **22** | P | **P** | **22 08 29.7** | **+1.9** |
| **L19K** | **White Mountain** baz=231,SNR=20 | **79.62** | **21** | P | **P** | **22 08 29.4** | **+1.6** |
| **BRSE** | **Bradley Lake S** baz=235 | **79.73** | **25** | P | **P** | **22 08 29.8** | **+1.3** |
| **H17K** | **Granite Mounta** baz=225 | **79.78** | **18** | P | **P** | **22 08 29.7** | **+1.0** |
| **G17K** | **Kiwalik Mounta** baz=225 | **79.96** | **17** | P | **P** | **22 08 31.1** | **+1.5** |
| **N20K** | **Mount Spurr** baz=233 | **80.00** | **23** | P | **P** | **22 08 31.6** | **+1.6** |
| **SPCR** | **Spurr Chakacha** baz=233 | **80.00** | **23** | P | **P** | **22 08 31.4** | **+1.3** |
| **M20K** | **Styx River** | **80.07** | **22** | P | **P** | **22 08 30.8** | **+0.4** |
| M20K | comp=Z,15nm,0.9s | | | IAmb | IAmb | 22 08 41.5 | |
| **M20K** | **Styx River** baz=232 | **80.07** | **22** | P | **P** | **22 08 31.6** | **+1.2** |
| **L20K** | **Farewell, AK** baz=232,SNR=5.8 | **80.16** | **22** | P | **P** | **22 08 32.7** | **+1.9** |
| **CAPN** | **Captain Cook N** baz=234 | **80.16** | **24** | P | **P** | **22 08 31.5** | **+0.8** |
| **H18K** | **Honhosa River** baz=227 | **80.40** | **18** | P | **P** | **22 08 33.1** | **+1.1** |
| **F17K** | **Baldwin Pennin** baz=224 | **80.46** | **16** | P | **P** | **22 08 33.7** | **+1.4** |
| **SEW** | **Seward** baz=236 | **80.48** | **25** | P | **P** | **22 08 33.5** | **+1.1** |
| **J19K** | **Poorman** baz=230 | **80.51** | **20** | P | **P** | **22 08 34.0** | **+1.4** |
| **O22K** | **Cooper Landing** baz=236 | **80.58** | **24** | P | **P** | **22 08 34.3** | **+1.3** |
| **GCSA** | **Galena City Sc** baz=228 | **80.60** | **19** | P | **P** | **22 08 34.4** | **+1.4** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| K20K | Telida | 80.64 | 21 | P | P | 22 08 34.2 | +0.9 |
| | baz=231,SNR=6.0 | | | | | | |
| SKT | Skwentna | 80.73 | 23 | P | P | 22 08 35.0 | +1.2 |
| | baz=234 | | | | | | |
| SUA | Susitna One | 80.73 | 23 | P | P | 22 08 34.4 | +0.4 |
| SUA | | | | IAmb | IAmb | 22 08 40.6 | |
| | comp=Z,21nm,0.7s | | | | | | |
| SUA | Susitna One | 80.73 | 23 | P | P | 22 08 35.0 | +1.0 |
| | baz=234 | | | | | | |
| E17K | Hotham Inlet | 80.77 | 16 | P | P | 22 08 35.2 | +1.3 |
| | baz=223 | | | | | | |
| C16K | Lisburne Hills | 80.77 | 14 | P | P | 22 08 35.9 | +2.0 |
| | baz=220 | | | | | | |
| G18K | Tagagawik | 80.83 | 18 | P | P | 22 08 35.8 | +1.5 |
| | baz=226,SNR=6.3 | | | | | | |
| D17K | Noatak River | 80.89 | 15 | P | P | 22 08 36.0 | +1.4 |
| | baz=222 | | | | | | |
| RC01 | Rabbit Creek A | 80.92 | 24 | P | P | 22 08 35.5 | +0.6 |
| RC01 | | | | IAmb | IAmb | 22 08 42.6 | |
| | comp=Z,27nm,0.9s | | | | | | |
| RC01 | Rabbit Creek A | 80.92 | 24 | P | P | 22 08 35.9 | +1.0 |
| | baz=236 | | | | | | |
| F18K | Selawik | 81.03 | 17 | P | P | 22 08 36.1 | +0.8 |
| | baz=226 | | | | | | |
| J20K | Nowinta River | 81.13 | 20 | P | P | 22 08 36.4 | +0.5 |
| | baz=231 | | | | | | |
| H19K | Roundabout Mou | 81.25 | 18 | P | P | 22 08 37.8 | +1.3 |
| | baz=229 | | | | | | |
| P23K | Montague Islan | 81.28 | 25 | P | P | 22 08 37.1 | +0.3 |
| | baz=238 | | | | | | |
| E18K | Tukpahlearik C | 81.34 | 16 | P | P | 22 08 38.0 | +1.0 |
| | baz=224 | | | | | | |
| PWL | Port Wells | 81.36 | 24 | P | P | 22 08 37.5 | +0.3 |
| | baz=237,SNR=25 | | | | | | |
| I20K | Naaghedeneel | 81.41 | 20 | P | P | 22 08 37.9 | +0.5 |
| | baz=231 | | | | | | |
| PMR | Palmer | 81.44 | 24 | P | P | 22 08 38.1 | +0.5 |
| | baz=236 | | | | | | |
| G19K | Purcell Mounta | 81.47 | 18 | P | P | 22 08 38.6 | +0.9 |
| | baz=228 | | | | | | |
| KNK | Knik Glacier | 81.61 | 24 | P | P | 22 08 39.1 | +0.5 |
| | baz=237 | | | | | | |
| DGZ | Jazzator, Alta | 81.70 | 323 | *i* P | P | 22 08 37.9 | -1.6 |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.6s | | | | | | |
| H20K | Anotleneega Mo | 81.72 | 19 | P | P | 22 08 40.1 | +1.0 |
| | baz=230,SNR=6.8 | | | | | | |
| F19K | Shaleruckik Mo | 81.73 | 17 | P | P | 22 08 40.0 | +1.0 |
| | baz=227,SNR=5.3 | | | | | | |
| GLI | Glacier Island | 81.88 | 25 | P | P | 22 08 40.9 | +1.0 |
| | baz=238,SNR=8.0 | | | | | | |
| SML | Sawmill | 81.88 | 24 | P | P | 22 08 40.4 | +0.4 |
| | baz=237,SNR=11 | | | | | | |
| C18K | Utukok River | 82.07 | 15 | P | P | 22 08 41.9 | +1.0 |
| | baz=224 | | | | | | |
| M23K | Glacier View | 82.11 | 24 | P | P | 22 08 41.6 | +0.4 |
| | baz=237 | | | | | | |
| BPAW | Bear Paw Mtn. | 82.18 | 21 | P | P | 22 08 41.9 | +0.4 |
| | baz=234 | | | | | | |
| EYAK | Cordova Ski Ar | 82.27 | 25 | P | P | 22 08 42.4 | +0.4 |
| | baz=239 | | | | | | |
| QSPA | South Pole Qui | 82.27 | 180 | P | P | 22 08 43.5 | +1.3 |
| QSPA | | | | IAmb | IAmb | 22 08 56.8 | |
| | comp=Z,14nm,1.3s | | | | | | |
| QSPA | South Pole Qui | 82.27 | 180 | P | P | 22 08 43.8 | +1.6 |
| | comp=Z,5.6nm,0.9s,baz=355,slow=0.9,SNR=21 | | | | | | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| SCM | Sheep Creek Mo | 82.29 | 24 | P | P | 22 08 42.9 | +0.7 |
| | baz=238 | | | | | | |
| E19K | Redstone River | 82.31 | 17 | P | P | 22 08 43.0 | +0.9 |
| | baz=228,SNR=20 | | | | | | |
| WAT1 | Susitna Watana | 82.36 | 23 | P | P | 22 08 43.5 | +1.0 |
| | baz=236 | | | | | | |
| F20K | Avaraart Lake | 82.47 | 17 | P | P | 22 08 44.1 | +1.2 |
| | baz=229 | | | | | | |
| H21K | Melozitna Rive | 82.50 | 19 | P | P | 22 08 44.1 | +1.0 |
| | baz=232 | | | | | | |
| KAIM | Kayak Island | 82.53 | 26 | P | P | 22 08 43.8 | +0.4 |
| | baz=240 | | | | | | |
| WAT6 | Susitna Watana | 82.53 | 23 | P | P | 22 08 44.0 | +0.5 |
| | baz=237 | | | | | | |
| KLU | Klutina | 82.68 | 25 | P | P | 22 08 44.8 | +0.5 |
| | baz=239,SNR=7.3 | | | | | | |
| MCK | McKinley | 82.72 | 22 | P | P | 22 08 45.1 | +0.8 |
| | baz=236,SNR=6.2 | | | | | | |
| D19K | Kuna River | 82.77 | 16 | P | P | 22 08 45.5 | +1.0 |
| | baz=227 | | | | | | |
| C19K | Lookout Ridge | 82.81 | 15 | P | P | 22 08 46.3 | +1.6 |
| | baz=225 | | | | | | |
| G21K | Allakaket | 82.81 | 18 | P | P | 22 08 45.8 | +1.1 |
| | baz=231,SNR=13 | | | | | | |
| MLY | Manley | 82.82 | 20 | P | P | 22 08 45.9 | +1.0 |
| | baz=234,SNR=12 | | | | | | |
| DHY | Denali Highway | 82.94 | 23 | P | P | 22 08 47.3 | +1.6 |
| DHY | | | | IAmb | IAmb | 22 08 53.5 | |
| | comp=Z,16nm,0.9s | | | | | | |
| DHY | Denali Highway | 82.94 | 23 | P | P | 22 08 45.9 | +0.2 |
| | baz=237,SNR=6.8 | | | | | | |
| BMRM | Bremner River | 82.97 | 25 | P | P | 22 08 46.4 | +0.6 |
| | baz=240 | | | | | | |
| H22K | Ishtalitna Cre | 83.11 | 19 | P | P | 22 08 46.6 | +0.3 |
| | baz=233 | | | | | | |
| BGLC | Bering Glacier | 83.12 | 26 | P | P | 22 08 46.9 | +0.5 |
| | baz=242 | | | | | | |
| E20K | Nigu River | 83.14 | 16 | P | P | 22 08 47.8 | +1.3 |
| | baz=229,SNR=15 | | | | | | |
| NEA2 | Nenana | 83.15 | 21 | P | P | 22 08 47.5 | +0.9 |
| | baz=236,SNR=5.2 | | | | | | |
| A19K | Wainwright | 83.23 | 14 | P | P | 22 08 47.8 | +1.0 |
| | baz=224 | | | | | | |
| F21K | Alatna River | 83.26 | 18 | P | P | 22 08 47.9 | +0.8 |
| | baz=231 | | | | | | |
| N25K | Chitina, Valde | 83.29 | 25 | P | P | 22 08 48.2 | +0.8 |
| | baz=240,SNR=6.2 | | | | | | |
| D20K | Etivluk River | 83.32 | 16 | P | P | 22 08 48.5 | +1.1 |
| | baz=228,SNR=5.1 | | | | | | |
| I23K | Minto, Yukon-K | 83.36 | 21 | P | P | 22 08 48.4 | +0.9 |
| | baz=235 | | | | | | |
| CRQE | Cirque | 83.51 | 26 | P | P | 22 08 49.7 | +1.1 |
| | baz=242 | | | | | | |
| GLB | Gilahina Butte | 83.54 | 25 | P | P | 22 08 49.5 | +0.8 |
| PAX | Paxson | 83.63 | 23 | P | P | 22 08 49.4 | +0.3 |
| | baz=239 | | | | | | |
| G22K | Bettles | 83.69 | 19 | P | P | 22 08 50.0 | +0.8 |
| | baz=233 | | | | | | |
| H23K | Yukon River | 83.69 | 20 | P | P | 22 08 50.0 | +0.7 |
| | baz=235,SNR=6.4 | | | | | | |
| MAW | Mawson | 83.74 | 203 | P | P | 22 08 50.7 | +1.1 |
| | comp=Z,4.8nm,0.8s,baz=97,slow=6.5,SNR=14 | | | | | | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| COLA | College | 83.74 | 21 | P | P | 22 08 50.6 | +1.0 |
| | baz=237 | | | | | | |
| COLA | College | 83.74 | 21 | *i* P | P | 22 08 48.7 | -0.8 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | |
| HDA | Harding Lake | 83.82 | 22 | P | P | 22 08 50.4 | +0.4 |
| | baz=238 | | | | | | |
| F22K | John River | 83.83 | 18 | P | P | 22 08 50.3 | +0.3 |
| | baz=232 | | | | | | |
| MCARA | McCarthy VSAT | 83.84 | 25 | P | P | 22 08 50.1 | 0.0 |
| | baz=242 | | | | | | |
| E21K | Killik River | 83.89 | 17 | P | P | 22 08 51.0 | +0.7 |
| | baz=231 | | | | | | |
| MK31 | Makanchi Array | 83.93 | 319 | P | P | 22 08 50.8 | -0.2 |
| MK31 | Makanchi Array | 83.93 | 319 | *ce*P | P | 22 08 51.1 | +0.1 |
| MKAR | Makanchi Array | 83.93 | 319 | P | P | 22 08 50.7 | -0.3 |
| MKAR | Makanchi Array | 83.93 | 319 | P | P | 22 08 51.2 | +0.3 |
| | comp=Z,3.4nm,0.8s,baz=107,slow=6.1,SNR=30 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 83.93 | 319 | *ce*P | P | 22 08 51.7 | +0.7 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| POKR | Poker Plat Res | 84.03 | 21 | P | P | 22 08 51.4 | +0.4 |
| | baz=237 | | | | | | |
| ILAR | Eielson Array | 84.03 | 21 | P | P | 22 08 51.0 | -0.1 |
| ILAR | Eielson Array | 84.03 | 21 | P | P | 22 08 51.5 | +0.5 |
| | comp=Z,1.6nm,0.7s,baz=234,slow=5.3,SNR=26 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| G23K | Bananza Creek | 84.04 | 19 | P | P | 22 08 51.3 | +0.2 |
| | baz=235 | | | | | | |
| B20K | Meade River | 84.05 | 15 | P | P | 22 08 51.1 | +0.1 |
| | baz=228 | | | | | | |
| C21K | Knifeblade Rid | 84.12 | 16 | P | P | 22 08 53.1 | +1.7 |
| | baz=230 | | | | | | |
| MAKZ | Makanchi | 84.14 | 319 | P | P | 22 08 51.8 | -0.2 |
| MAKZ | | | | IAmb | IAmb | 22 09 00.5 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| MAKZ | Makanchi | 84.14 | 319 | P | P | 22 08 51.8 | -0.2 |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| RIDG | Independent Ri | 84.26 | 23 | P | P | 22 08 53.3 | +1.0 |
| | baz=240,SNR=6.0 | | | | | | |
| H24K | Noodor Dome | 84.26 | 20 | P | P | 22 08 53.2 | +0.9 |
| | baz=237 | | | | | | |
| COLD | Coldfoot | 84.28 | 19 | P | P | 22 08 53.8 | +1.5 |
| | baz=234 | | | | | | |
| E22K | Anaktuvuk Pass | 84.33 | 18 | P | P | 22 08 53.9 | +1.4 |
| | baz=233,SNR=6.9 | | | | | | |
| M26K | Nabesna, AK | 84.34 | 24 | P | P | 22 08 54.0 | +1.3 |
| | baz=242 | | | | | | |
| CTG | Chitna Glacier | 84.37 | 26 | P | P | 22 08 54.0 | +1.0 |
| | baz=243,SNR=5.1 | | | | | | |
| B21K | Ikpikpuk River | 84.46 | 16 | P | P | 22 08 54.4 | +1.3 |
| | baz=230 | | | | | | |
| J25K | Salcha River, | 84.51 | 22 | P | P | 22 08 55.5 | +1.9 |
| | baz=239 | | | | | | |
| D22K | Ayikyak River | 84.53 | 17 | P | P | 22 08 54.8 | +1.3 |
| | baz=232 | | | | | | |
| PNL | Peninsula | 84.67 | 28 | P | P | 22 08 55.4 | +1.0 |
| | baz=245 | | | | | | |
| SCRK | Sand Creek | 84.71 | 23 | P | P | 22 08 54.2 | -0.4 |
| SCRK | | | | IAmb | IAmb | 22 09 02.1 | |
| | comp=Z,12nm,1.0s | | | | | | |
| SCRK | Sand Creek | 84.71 | 23 | P | P | 22 08 55.7 | +1.0 |
| | baz=240,SNR=6.0 | | | | | | |
| ZAA0 | Zalesovo Array | 84.76 | 326 | P | P | 22 08 53.8 | -1.1 |
| ZALV | Zalesovo Beam | 84.76 | 326 | P | P | 22 08 54.2 | -0.8 |
| ZALV | Zalesovo Beam | 84.76 | 326 | P | P | 22 08 54.8 | -0.1 |
| | comp=Z,2.5nm,0.4s,baz=118,slow=6.3,SNR=14 | | | | | | |
| | comp=Z,2.5nm,0.4s | | | | | | |
| ZALV | Zalesovo Beam | 84.76 | 326 | *i* P | P | 22 08 54.7 | -0.2 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| M27K | Edge Creek, AK | 84.78 | 25 | P | P | 22 08 56.8 | +1.7 |
| | baz=242 | | | | | | |
| O28M | Mount Upton | 84.79 | 26 | P | P | 22 08 56.1 | +0.8 |
| | baz=244 | | | | | | |
| G24K | Hadweenzic Riv | 84.87 | 20 | P | P | 22 08 56.5 | +1.2 |
| | baz=237 | | | | | | |
| PRP | Porcupine Dome | 84.92 | 21 | P | P | 22 08 57.6 | +1.9 |
| | baz=239 | | | | | | |
| E23K | Chandalar | 84.95 | 18 | P | P | 22 08 56.9 | +1.2 |
| | baz=235 | | | | | | |
| L27K | Beaver Creek, | 85.12 | 24 | P | P | 22 08 57.1 | +0.5 |
| | baz=242 | | | | | | |
| J26L | Joseph Creek | 85.13 | 22 | P | P | 22 08 57.6 | +0.9 |
| | baz=241 | | | | | | |
| BCAR | Beaver Creek A | 85.14 | 24 | P | P | 22 08 57.7 | +0.9 |
| D23K | Nanushuk River | 85.16 | 17 | P | P | 22 08 58.2 | +1.5 |
| | baz=234 | | | | | | |
| F24K | Squaw Lake | 85.19 | 19 | P | P | 22 08 58.3 | +1.4 |
| | baz=237 | | | | | | |
| H25L | Birch Creek | 85.20 | 20 | P | P | 22 08 58.0 | +1.1 |
| | baz=239 | | | | | | |
| B22K | Teshekpuk Lake | 85.24 | 15 | P | P | 22 08 58.1 | +1.1 |
| | baz=231 | | | | | | |
| TOLK | Toolik Lake Re | 85.30 | 18 | P | P | 22 08 59.1 | +1.7 |
| | baz=235,SNR=5.2 | | | | | | |
| E24K | Your Creek | 85.31 | 18 | P | P | 22 08 58.7 | +1.2 |
| | baz=236 | | | | | | |
| O29M | Mount Kennedy | 85.31 | 27 | P | P | 22 08 58.7 | +1.0 |
| | baz=246 | | | | | | |
| G25K | Bearman Lake | 85.37 | 20 | P | P | 22 08 59.2 | +1.5 |
| | baz=238 | | | | | | |
| P29M | Windy Craggy | 85.42 | 28 | P | P | 22 08 58.5 | +0.3 |
| | baz=246 | | | | | | |
| K27K | Chicken | 85.47 | 23 | P | P | 22 08 59.0 | +0.7 |
| | baz=242 | | | | | | |
| S31K | Pelican | 85.50 | 30 | P | P | 22 08 59.3 | +0.8 |
| | baz=248 | | | | | | |
| SIT | Sitka | 85.62 | 31 | P | P | 22 09 00.2 | +1.1 |
| | baz=249 | | | | | | |
| YUK6 | Outpost Mounta | 85.67 | 27 | P | P | 22 09 00.2 | +0.5 |
| | baz=246 | | | | | | |
| I26K | Coal Creek Min | 85.67 | 22 | P | P | 22 09 00.2 | +0.9 |
| | baz=241 | | | | | | |
| C23K | Itkillik River | 85.69 | 16 | P | P | 22 09 00.4 | +1.1 |
| | baz=234 | | | | | | |
| YUK4 | Talbot Arm | 85.71 | 26 | P | P | 22 09 00.3 | +0.5 |
| | baz=246 | | | | | | |
| D24K | Happy Valley | 85.81 | 17 | P | P | 22 09 01.3 | +1.4 |
| | baz=236 | | | | | | |
| F25K | Christian Rive | 85.95 | 19 | P | P | 22 09 01.7 | +1.0 |
| | baz=239 | | | | | | |
| P30M | Million Dollar | 85.98 | 28 | P | P | 22 09 02.1 | +1.1 |
| | baz=247 | | | | | | |
| C24K | Franklin Bluff | 86.17 | 17 | P | P | 22 09 02.8 | +1.2 |
| | baz=236 | | | | | | |
| EGAK | Eagle | 86.17 | 23 | P | P | 22 09 03.2 | +1.5 |
| EGAK | | | | IAmb | IAmb | 22 09 10.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| EGAK | Eagle | 86.17 | 23 | P | P | 22 09 02.6 | +0.8 |
| | baz=243,SNR=7.3 | | | | | | |
| BMAR | Burnt Mountain | 86.22 | 20 | P | P | 22 09 03.1 | +1.1 |
| CRAG | Craig | 86.22 | 33 | P | P | 22 09 02.7 | +0.5 |
| | baz=251 | | | | | | |
| M29M | Somme Creek | 86.25 | 25 | P | P | 22 09 02.9 | +0.6 |
| | baz=246 | | | | | | |
| G26K | Porcupine Rive | 86.25 | 20 | P | P | 22 09 03.1 | +1.0 |
| | baz=240 | | | | | | |
| I27K | Kandik River | 86.38 | 22 | P | P | 22 09 03.6 | +0.7 |
| | baz=243 | | | | | | |
| N30M | Aishikik Lake | 86.44 | 26 | P | P | 22 09 04.5 | +1.3 |
| | baz=247 | | | | | | |
| R32K | Eaglecrest | 86.46 | 30 | P | P | 22 09 04.1 | +0.8 |
| | baz=249 | | | | | | |
| KSH | Kashi | 86.46 | 310 | P | P | 22 09 05.8 | +1.8 |
| KSH | | | | sP | pwP | 22 09 11.3 | +0.7 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| F26K | Shenjek River | 86.50 | 20 | P | P | 22 09 04.5 | +1.1 |
| | baz=240 | | | | | | |
| DAWY | Dawson | 86.55 | 24 | P | P | 22 09 04.8 | +1.1 |
| | baz=245,SNR=5.9 | | | | | | |
| O30N | Mendenhall | 86.63 | 27 | P | P | 22 09 04.6 | +0.5 |
| | baz=248 | | | | | | |
| D25K | Kavik River | 86.64 | 18 | P | P | 22 09 05.7 | +1.6 |
| | baz=238 | | | | | | |
| H27K | Steamboat Moun | 86.70 | 21 | P | P | 22 09 05.6 | +1.2 |
| | baz=243 | | | | | | |
| G27K | Doyon Strip | 86.92 | 21 | P | P | 22 09 07.1 | +1.7 |
| | baz=242 | | | | | | |
| I28M | Miner Creek | 86.94 | 22 | P | P | 22 09 06.6 | +1.0 |
| | baz=244 | | | | | | |
| V35K | Ketchikan | 86.99 | 33 | P | P | 22 09 06.9 | +1.0 |
| | baz=252 | | | | | | |
| N31M | Braeburn, Yuko | 87.03 | 27 | P | P | 22 09 07.3 | +1.2 |
| | baz=248 | | | | | | |
| K29M | Barlow Dome | 87.21 | 24 | P | P | 22 09 08.4 | +1.4 |
| K29M | Barlow Dome | 87.21 | 24 | P | P | 22 09 07.9 | +0.9 |
| | baz=246 | | | | | | |
| KURK | Kurchatov | 87.38 | 322 | *i* P | P | 22 09 06.9 | -1.1 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | |
| KURBB | Kurchatov Arra | 87.41 | 322 | P | P | 22 09 07.7 | -0.4 |
| | comp=Z,0.6nm,0.7s,baz=104,slow=4.5,SNR=4.6 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| E27K | Coleen River | 87.58 | 20 | P | P | 22 09 09.5 | +0.9 |
| | baz=242 | | | | | | |
| Q32M | Nakina River | 87.80 | 30 | P | P | 22 09 10.6 | +0.5 |
| | baz=251 | | | | | | |
| H29M | Whitestone | 87.85 | 22 | P | P | 22 09 11.0 | +1.0 |
| | baz=246 | | | | | | |
| F28M | Old Crow | 87.91 | 20 | P | P | 22 09 12.1 | +1.9 |
| | baz=244 | | | | | | |
| M31M | Drury Creek, Y | 87.91 | 26 | P | P | 22 09 11.0 | +0.7 |
| | baz=249 | | | | | | |
| J30M | Hart River | 87.97 | 24 | P | P | 22 09 11.9 | +1.2 |
| | baz=247 | | | | | | |
| N32M | Quiet Lake | 88.13 | 27 | P | P | 22 09 12.4 | +0.9 |
| | baz=250 | | | | | | |
| I30M | Mount Dempster | 88.20 | 23 | P | P | 22 09 13.0 | +1.2 |
| | baz=247 | | | | | | |
| T35M | Bob Quinn | 88.22 | 32 | P | P | 22 09 12.8 | +0.9 |
| | baz=253 | | | | | | |
| G29M | Pine Creek | 88.26 | 21 | P | P | 22 09 13.3 | +1.4 |
| | baz=246 | | | | | | |
| D27M | Malcolm River | 88.27 | 19 | P | P | 22 09 13.8 | +1.8 |
| | baz=243 | | | | | | |
| E28M | Babbage River | 88.45 | 20 | P | P | 22 09 13.5 | +0.7 |
| | baz=244 | | | | | | |
| EPYK | Eagle Plains | 88.52 | 22 | P | P | 22 09 13.9 | +0.8 |
| | baz=247,SNR=5.3 | | | | | | |
| R33M | Jennings River | 88.57 | 29 | P | P | 22 09 14.1 | +0.4 |
| | baz=252 | | | | | | |
| DLBC | Dease Lake | 88.75 | 31 | P | P | 22 09 15.3 | +0.8 |
| | baz=253 | | | | | | |
| E29M | Blow River | 88.91 | 20 | P | P | 22 09 15.8 | +1.0 |
| | baz=246 | | | | | | |
| G30M | tAoh Zraii Nji | 88.94 | 22 | P | P | 22 09 16.1 | +1.0 |
| | baz=248 | | | | | | |
| F30M | Barrier River | 89.33 | 21 | P | P | 22 09 18.4 | +1.5 |
| | baz=248 | | | | | | |
| MMPY | Sheldon Lake, | 89.42 | 26 | P | P | 22 09 18.8 | +1.3 |
| | baz=252 | | | | | | |
| G31M | Satah River | 89.63 | 22 | P | P | 22 09 19.7 | +1.4 |
| | baz=249 | | | | | | |
| NVAR | Mina Array Bea | 92.17 | 52 | P | P | 22 09 30.8 | -0.2 |
| NVAR | Mina Array Bea | 92.17 | 52 | P | P | 22 09 34.0 | +2.9 |
| | comp=Z,1.8nm,0.9s,baz=250,slow=6.9,SNR=10.0 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| BVAR | Borovoye Array | 92.85 | 323 | P | P | 22 09 33.0 | -0.5 |
| | comp=Z,0.5nm,0.7s,baz=87,slow=10,SNR=5.2 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| PDAR | Pinedale Array | 99.18 | 48 | P | Pdif | 22 10 05.7 | +2.7 |
| | comp=Z,0.3nm,0.3s,baz=264,slow=3.4,SNR=1.8 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| SNAA | Sanae | 99.44 | 187 | *i* P | Pdif | 22 10 03.7 | +0.4 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.8s | | | | | | |
| ARU | Arti | 99.92 | 326 | *c i* P | Pdif | 22 10 03.0 | -2.6 |
| ARU | | | | | | 22 14 06.4 | |
| ARU | | | | S | SKSac | 22 20 41.4 | -2.9 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| OBN | Obninsk | 112.33 | 327 | *i* PKIKP | PKiKP | 22 14 56.2 | -0.4 |
| OBN | | | | *e* | | 22 15 40.2 | |
| OBN | | | | *e*PPP | PPP | 22 18 03.4 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| CLL | Collm | 126.43 | 331 | *e*PKIKP | PKiKP | 22 15 30.0 | +5.7 |
| RONA | Rosalia, Austr | 126.95 | 326 | *e*PKiKP | PKPdf | 22 15 25.0 | -0.1 |
| | comp=Z,1.7nm,0.9s | | | | | | |
| GERES | GERESS Array B | 127.65 | 329 | PKP | PKiKP | 22 15 27.7 | +0.7 |
| | comp=Z,0.4nm,0.6s,baz=20,slow=3.2,SNR=3.6 | | | | | | |
| SOKA | Soboth | 128.24 | 326 | *i* PKiKP | PKiKP | 22 15 28.6 | +0.3 |
| | comp=Z,2.2nm,1.3s | | | | | | |
| OBKA | Obir | 128.61 | 326 | *i* pPKP | PKiKP | 22 15 30.1 | +1.1 |
| | comp=Z,1.9nm,1.1s | | | | | | |
| KBA | Koelnbreinsper | 128.93 | 327 | *i* PKiKP | PKPdf | 22 15 29.7 | +0.6 |
| | comp=Z,2.6nm,1.2s | | | | | | |
| LESA | Schwarzleotal | 129.07 | 328 | *e*PKiKP | PKiKP | 22 15 30.5 | +0.6 |
| | comp=Z,0.6nm,0.5s | | | | | | |
| WATA | Walderalm | 129.71 | 328 | *e*PKiKP | PKPdf | 22 15 31.1 | +0.7 |
| | comp=Z,1.1nm,0.8s | | | | | | |
| WTTA | Wattenberg | 129.72 | 328 | *e*pPKP | PKiKP | 22 15 32.2 | +0.9 |
| | comp=Z,1.5nm,0.6s | | | | | | |
| MOTA | Moosalm | 129.95 | 328 | *i* PKiKP | PKPdf | 22 15 31.2 | +0.2 |
| | comp=Z,4.5nm,1.7s | | | | | | |
| SQTA | Sankt Quirin | 129.97 | 328 | *e*PKiKP | PKPdf | 22 15 31.1 | +0.2 |
| | comp=Z,1.1nm,0.6s | | | | | | |
| FETA | Feichten | 130.35 | 328 | *i* pPKP | PKiKP | 22 15 33.0 | +0.5 |
| | comp=Z,4.0nm,1.4s | | | | | | |
| PBRG | Braganca | 142.38 | 337 | *e*PKP | PKiKP | 22 15 56.0 | -1.0 |
| ESDC | Sonseca Array | 142.99 | 333 | PKP | PKPdf | 22 15 55.5 | +0.3 |
| | comp=Z,0.5nm,0.8s,baz=7.3,slow=2.4,SNR=3.4 | | | | | | |
| POLO | Lamas de Olo | 143.15 | 338 | *e*PKP | PKiKP | 22 16 00.1 | +1.4 |
| PVIS | Viseu | 143.76 | 338 | *e*PKP | PKPbc | 22 15 55.3 | +1.3 |
| MTE | Manteigas | 143.90 | 337 | *e*PKP | PKPdf | 22 15 56.2 | -0.5 |
| PCBR | Castelo Branco | 144.35 | 337 | *e*PKP | PKiKP | 22 16 00.2 | -0.9 |
| PMRV | Marv??o | 144.67 | 336 | *e*PKP | PKPdf | 22 15 58.3 | +0.2 |
| PESTR | Estremoz | 145.23 | 336 | PKPbc | PKPab | 22 15 59.1 | +0.4 |
| PESTR | Estremoz | 145.23 | 336 | *e*PKP | PKPdf | 22 16 00.0 | +1.0 |
| PMTG | Montargil | 145.31 | 337 | *e*PKP | PKPdf | 22 16 00.2 | +1.1 |
| PBAR | Barrancos | 145.59 | 335 | *e*PKP | PKPab | 22 16 01.6 | +1.6 |
| PBEJ | Beja | 146.06 | 335 | *e*PKP | PKPab | 22 16 03.5 | +1.7 |
| PNCL | Nicolau / Gran | 146.25 | 336 | *e*PKP | PKPab | 22 16 04.0 | +1.5 |
| MESJ | Messejana | 146.36 | 336 | *e*PKP | PKPab | 22 16 04.2 | +1.2 |
| PCVE | Castro Verde | 146.47 | 335 | *e*PKP | PKiKP | 22 16 05.0 | -0.5 |
| PVAQ | Vaqueiros | 146.52 | 335 | *e*PKP | PKiKP | 22 16 09.3 | +3.7 |
| PBDV | Barranco-do-Ve | 146.75 | 335 | *e*PKP | PKPdf | 22 16 02.3 | +0.6 |
| PTEO | Sao Teotonio | 146.82 | 336 | *e*PKP | PKPdf | 22 16 01.4 | -0.3 |
| TAM | Tamanrasset | 147.04 | 300 | PKPbc | PKPdf | 22 16 03.9 | +1.2 |
| TAM | Tamanrasset | 147.04 | 300 | PKP2 | PKPdf | 22 16 03.9 | +1.2 |
| BDFB | Brasilia | 147.49 | 136 | PKPbc | PKPab | 22 16 07.9 | -0.1 |
| | comp=Z,2.3nm,0.7s,baz=298,slow=6.0,SNR=3.7 | | | | | | |
| TORD | Torodi Ar. Bea | 153.19 | 284 | PKPbc | PKPbc | 22 16 19.9 | +0.1 |
| | comp=Z,3.1nm,0.7s,baz=85,slow=2.1,SNR=26 | | | | | | |

**IDC 22 21:58:00.5±25.0, 20°.96S×172°.97W, h0km, mb4.3/4, mbtmp4.3/4, Error ellipse: s-maj=474.6km s-min=150.3km az=75.0, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CTA | Charters Tower | 38.13 | 264 | P | P | 22 05 22.7 | +1.0 |
| | 0.6nm,0.4s,baz=92,slow=9.7,SNR=14 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| STKA | Stephens Creek | 41.85 | 245 | P | P | 22 05 50.8 | -1.7 |
| | 3.0nm,0.6s,baz=69,slow=7.7,SNR=6.1 | | | | | | |
| | 3.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 48.99 | 256 | P | P | 22 06 48.9 | -0.4 |
| | 2.1nm,0.4s,baz=95,slow=7.5,SNR=28 | | | | | | |
| | 2.1nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 49.19 | 261 | P | P | 22 06 51.1 | +0.3 |
| | 4.5nm,0.6s,baz=92,slow=8.4,SNR=99 | | | | | | |
| | 4.5nm,0.6s | | | | | | |

**IDC 22 22:02:58.5±7.3, 23°.65N×144°.38E, h0km, mb3.6/5, mbtmp3.6/5, Error ellipse: s-maj=293.0km s-min=24.7km az=76.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 44.42 | 194 | P | P | 22 11 11.4 | +0.2 |
| | 0.6nm,0.8s,baz=16,slow=8.6,SNR=5.8 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| ASAR | Alice Springs | 48.12 | 193 | P | P | 22 11 39.9 | -0.5 |
| | 0.2nm,0.6s,baz=15,slow=12,SNR=2.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 54.21 | 312 | P | P | 22 12 25.8 | -0.2 |
| | 0.3nm,0.6s,baz=87,slow=9.4,SNR=2.6 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 56.87 | 316 | P | P | 22 12 44.7 | -0.3 |
| | 1.2nm,0.7s,baz=93,slow=7.6,SNR=12 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 61.92 | 319 | P | P | 22 13 20.1 | +0.2 |
| | 1.5nm,0.7s,baz=92,slow=7.3,SNR=8.9 | | | | | | |
| | 1.5nm,0.7s | | | | | | |

*TRN 22 22:10:39.4, 10°.68N×62°.91W, h106km, MD3.6, Paria peninsula.*
*FUNV 22 22:10:40.2, 10°.55N×62°.85W, h21km, MW3.5*

**ISC 22 22:10:37.4±1.4, 10°.61N±0°.05×62°.87W±0°.04, h128km±14km, n18, σ1°.63/34, 3C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CUMV | Cumana_UDO | 1.32 | 262 | eP | Pn | 22 11 05.1 | +1.8 |
| CUMV | | | | eS | Sn | 22 11 20.9 | -2.1 |
| TRN | Trinidad (W) | 1.44 | 88 | eP | Pn | 22 11 06.0 | +1.4 |
| TRN | | | | eS | Sn | 22 11 24.3 | -1.0 |
| TBH | Brigand Hill | 1.77 | 94 | eP | Pn | 22 11 10.3 | +1.8 |
| TBH | | | | eS | Sn | 22 11 33.2 | +1.0 |
| PCRV | Puerto La Cruz | 1.79 | 256 | eP | Pn | 22 11 10.3 | +1.5 |
| PCRV | | | | eS | Sn | 22 11 30.6 | -2.2 |
| PCRV | Puerto La Cruz | 1.79 | 256 | eP | Pn | 22 11 10.4 | +1.6 |
| PCRV | | | | eS | Sn | 22 11 31.4 | -1.4 |
| GRFF | Grenada Fort F | 1.81 | 37 | eP | Pn | 22 11 09.5 | +0.5 |
| GRFF | | | | eS | Sn | 22 11 32.0 | -1.2 |
| GRGR | Grenville | 1.93 | 38 | eP | Pn | 22 11 11.0 | +0.6 |
| GRGR | | | | eS | Sn | 22 11 33.5 | -2.2 |
| GRW | Mount

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LUEV** | **Luepa** | **4.93** | **164** | *e*P | **Pn** | **22 11 50.7** | **+1.0** |
| LUEV | | | | *e*S | **Sn** | **22 12 43.3** | **-2.7** |
| **BAUV** | **El Baul** | **5.36** | **253** | *e*P | **Pn** | **22 11 56.2** | **+0.8** |
| BAUV | | | | *e*S | **Sn** | **22 12 53.1** | **-3.0** |
| **BAUV** | **El Baul** | **5.36** | **253** | *e*P | **Pn** | **22 11 56.0** | **+0.6** |
| BAUV | | | | *e*S | **Sn** | **22 12 54.0** | **-2.2** |

*IDC **22** 22:11:00.4±1.9, 24˚.72N× 122˚.67E, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=170.9km s-min=26.3km az=64.0*
*JMA **22** 22:11:01.8±0.1, 24˚.9N±0˚.9× 122˚.4E±0˚.4, h47km±3km, MV2.8/12, TAIWAN REGION*
*TAP **22** 22:11:02.0, 24˚.94N× 122˚.30E, h16km, ML3.6, C*
**ISC 22 22:11:01.5**±1.0, **24˚.92N**±0˚.02× **122˚.37E**±0˚.02, **h10**km±8km, **n96**, σ0**891**/147, **mb3.2**/3, **3C-3D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.36** | **284** | ⇑*i* P | **Pg** | **22 11 08.6** | **0.0** |
| | baz=283 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **22 11 12.8** | **-0.6** |
| | baz=283 | | | | | | |
| **EGS** | | **0.41** | **259** | *i* P | **Pg** | **22 11 10.2** | **+0.7** |
| | baz=246 | | | | | | |
| EGS | | | | *i* S | **Sg** | **22 11 15.1** | **+0.3** |
| | baz=246 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.48** | **291** | ⇑*i* P | **Pg** | **22 11 11.2** | **+0.3** |
| | baz=291 | | | | | | |
| SXI1 | | | | *i* S | **Sg** | **22 11 17.2** | **-0.1** |
| | baz=291 | | | | | | |
| **NTC** | **Toucheng** | **0.50** | **263** | P | **Pg** | **22 11 11.7** | **+0.6** |
| | baz=268 | | | | | | |
| NTC | | | | S | **Sg** | **22 11 19.0** | **+1.3** |
| | baz=268 | | | | | | |
| **TIPB** | **Shuangxi** | **0.50** | **276** | *i* P | **Pg** | **22 11 11.4** | **+0.3** |
| | baz=274 | | | | | | |
| TIPB | | | | *i* S | **Sg** | **22 11 17.9** | **+0.1** |
| | baz=274 | | | | | | |
| **EOS2** | **EOS2** | **0.52** | **194** | ⇓*i* P | **Pb** | **22 11 12.8** | **+0.2** |
| | baz=209 | | | | | | |
| EOS2 | | | | *i* S | **Sb** | **22 11 20.7** | **+0.7** |
| | baz=209 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.56** | **286** | *i* P | **Pg** | **22 11 12.7** | **+0.4** |
| | baz=285 | | | | | | |
| WFSB | | | | *i* S | **Sg** | **22 11 19.8** | **+0.2** |
| | baz=285 | | | | | | |
| **TWC** | **Suao** | **0.57** | **237** | *i* P | **Pg** | **22 11 12.0** | **-0.5** |
| | baz=232 | | | | | | |
| TWC | | | | *i* S | **Sg** | **22 11 19.6** | **-0.4** |
| | baz=232 | | | | | | |
| **ILA** | **Ilan** | **0.59** | **255** | *e*P | **Pb** | **22 11 13.7** | **-0.1** |
| | baz=252 | | | | | | |
| ILA | | | | S | **Sb** | **22 11 22.4** | **+0.2** |
| | baz=252 | | | | | | |
| **TNOU** | **National Taiwa** | **0.59** | **293** | ⇓*i* P | **Pg** | **22 11 13.2** | **+0.2** |
| | baz=293 | | | | | | |
| TNOU | | | | S | **Sg** | **22 11 20.1** | **-0.5** |
| | baz=293 | | | | | | |
| **ESAO** | **Su ao** | **0.59** | **235** | P | **Pg** | **22 11 12.7** | **-0.2** |
| | baz=231 | | | | | | |
| ESAO | | | | *e*S | **Sg** | **22 11 20.9** | **+0.2** |
| | baz=231 | | | | | | |
| **EOS3** | **EOS3** | **0.63** | **184** | *i* P | **Pb** | **22 11 15.0** | **+0.5** |
| | baz=177 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **22 11 24.7** | **-1.7** |
| | baz=177 | | | | | | |
| **NDS** | **Dongshan** | **0.66** | **245** | P | **Pg** | **22 11 14.4** | **+0.1** |
| | baz=234 | | | | | | |
| NDS | | | | S | **Sg** | **22 11 23.2** | **+0.2** |
| | baz=234 | | | | | | |
| **TWE** | **Neicheng** | **0.67** | **253** | *i* P | **Pg** | **22 11 14.0** | **-0.5** |
| | baz=240 | | | | | | |
| TWE | | | | *i* S | **Sg** | **22 11 23.7** | **+0.5** |
| | baz=240 | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.70** | **132** | P | **Pg** | **22 11 15.3** | **+0.3** |
| JYNG | | | | S | **Sb** | **22 11 25.4** | **-0.1** |
| **EWUT** | **Wuta** | **0.72** | **229** | *e*P | **Pg** | **22 11 15.6** | **+0.2** |
| | baz=218 | | | | | | |
| EWUT | | | | S | **Sg** | **22 11 24.3** | **-0.4** |
| | baz=218 | | | | | | |
| **TWA** | **Mucha** | **0.72** | **275** | *i* P | **Pg** | **22 11 15.6** | **+0.2** |
| | baz=273 | | | | | | |
| TWA | | | | *i* S | **Sg** | **22 11 25.1** | **+0.3** |
| | baz=273 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.73** | **258** | P | **Pg** | **22 11 15.5** | **-0.1** |
| | baz=255 | | | | | | |
| FUSB | | | | *e*S | **Sg** | **22 11 25.8** | **+0.6** |
| | baz=255 | | | | | | |
| **NHY** | **Taipei** | **0.74** | **279** | P | **Pb** | **22 11 16.5** | **+0.1** |
| | baz=278 | | | | | | |
| NHY | | | | S | **Sg** | **22 11 25.3** | **-0.1** |
| | baz=278 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.74** | **128** | *i* P | **Pg** | **22 11 16.1** | **+0.4** |
| | baz=116 | | | | | | |
| YOJ | | | | *i* S | **Sb** | **22 11 26.6** | **0.0** |
| | baz=116 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.74** | **128** | P | **Pg** | **22 11 15.9** | **+0.2** |
| YOJ | | | | S | **Sb** | **22 11 26.4** | **-0.2** |
| **ENA** | **Nanau** | **0.76** | **230** | *i* P | **Pg** | **22 11 15.9** | **-0.2** |
| | baz=219 | | | | | | |
| ENA | | | | *i* S | **Sg** | **22 11 25.6** | **-0.3** |
| | baz=219 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.76** | **339** | *i* P | **Pg** | **22 11 16.5** | **+0.4** |
| | baz=342 | | | | | | |
| PCYT | | | | *i* S | **Sb** | **22 11 27.4** | **+0.3** |
| | baz=342 | | | | | | |
| **YM08** | **YM08** | **0.76** | **291** | *i* P | **Pg** | **22 11 16.0** | **-0.1** |
| | baz=290 | | | | | | |
| YM08 | | | | S | **Sg** | **22 11 25.5** | **-0.5** |
| | baz=290 | | | | | | |
| **YM01** | **YM01** | **0.76** | **287** | ⇑*i* P | **Pg** | **22 11 16.3** | **+0.1** |
| | baz=287 | | | | | | |
| YM01 | | | | S | **Sg** | **22 11 26.2** | **+0.1** |
| | baz=287 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.77** | **273** | *e*P | **Pg** | **22 11 16.6** | **+0.3** |
| | baz=272 | | | | | | |
| NHDH | | | | *e*S | **Sg** | **22 11 26.3** | **-0.1** |
| | baz=272 | | | | | | |
| **ENTT** | **Nioudou** | **0.78** | **249** | P | **Pb** | **22 11 16.6** | **-0.6** |
| | baz=238 | | | | | | |
| ENTT | | | | S | **Sg** | **22 11 27.6** | **+0.8** |
| | baz=238 | | | | | | |
| **TWY** | **Chenhua** | **0.78** | **297** | ⇓*i* P | **Pb** | **22 11 16.7** | **-0.5** |
| | baz=285 | | | | | | |
| TWY | | | | *i* S | **Sg** | **22 11 27.1** | **+0.2** |
| | baz=285 | | | | | | |
| **TAP** | **Taipei** | **0.79** | **279** | P | **Pb** | **22 11 16.8** | **-0.6** |
| | baz=278 | | | | | | |
| TAP | | | | S | **Sb** | **22 11 27.1** | **-1.1** |
| | baz=278 | | | | | | |
| **EOS4** | **EOS4** | **0.80** | **184** | P | **Pb** | **22 11 17.3** | **+0.1** |
| | baz=167 | | | | | | |
| EOS4 | | | | S | **Sn** | **22 11 29.6** | **-0.6** |
| | baz=167 | | | | | | |
| **NWLT** | **Wulai** | **0.80** | **260** | P | **Pb** | **22 11 17.2** | **-0.3** |
| | baz=258 | | | | | | |
| NWLT | | | | S | **Sb** | **22 11 26.9** | **-1.5** |
| | baz=258 | | | | | | |
| **ANP** | **Anpu** | **0.82** | **289** | *i* P | **Pb** | **22 11 16.9** | **-0.9** |
| | baz=277 | | | | | | |
| ANP | | | | *e*S | **Sb** | **22 11 27.5** | **-1.4** |
| | baz=277 | | | | | | |
| **EAHA** | **Aohua** | **0.82** | **224** | P | **Pb** | **22 11 17.4** | **-0.4** |
| | baz=222 | | | | | | |
| EAHA | | | | *e*S | **Sb** | **22 11 27.4** | **-1.6** |
| | baz=222 | | | | | | |
| **NDT** | **Datong Townshi** | **0.84** | **248** | *e*P | **Pb** | **22 11 18.2** | **0.0** |
| | baz=255 | | | | | | |
| NDT | | | | *e*S | **Sb** | **22 11 29.4** | **-0.2** |
| | baz=255 | | | | | | |
| **LATG** | **Datong** | **0.86** | **244** | P | **Pb** | **22 11 18.0** | **-0.6** |
| | baz=231 | | | | | | |
| LATG | | | | S | **Sb** | **22 11 28.9** | **-1.2** |
| | baz=231 | | | | | | |
| **NTST** | **Danshui** | **0.87** | **286** | P | **Pb** | **22 11 18.4** | **-0.3** |
| | baz=286 | | | | | | |
| NTST | | | | *e*S | **Sb** | **22 11 30.2** | **-0.2** |
| | baz=286 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.88** | **282** | *i* P | **Pb** | **22 11 17.5** | **-1.4** |
| | baz=281 | | | | | | |
| TWS1 | | | | *i* S | **Sb** | **22 11 29.4** | **-1.4** |
| | baz=281 | | | | | | |
| **YHNB** | **Yeheng** | **0.94** | **255** | P | **Pb** | **22 11 19.2** | **-0.7** |
| | baz=253 | | | | | | |
| YHNB | | | | S | **Sb** | **22 11 31.1** | **-1.3** |
| | baz=253 | | | | | | |
| **ETL** | **Fush Village** | **1.02** | **222** | *e*P | **Pb** | **22 11 20.9** | **-0.4** |
| | baz=220 | | | | | | |
| **NNSB** | **Datong** | **1.02** | **242** | P | **Pb** | **22 11 20.6** | **-0.7** |
| | baz=225 | | | | | | |
| NNSB | | | | S | **Sb** | **22 11 34.0** | **-0.9** |
| | baz=225 | | | | | | |
| **NACB** | **Ninganchiao** | **1.03** | **224** | P | **Pb** | **22 11 20.5** | **-0.8** |
| | baz=222 | | | | | | |
| NACB | | | | S | **Sb** | **22 11 33.3** | **-1.6** |
| | baz=222 | | | | | | |
| **NNS** | **Nan Shan** | **1.03** | **242** | *i* P | **Pb** | **22 11 21.0** | **-0.5** |
| | baz=226 | | | | | | |
| NNS | | | | *i* S | **Sb** | **22 11 33.9** | **-1.1** |
| | baz=226 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.08** | **229** | P | **Pb** | **22 11 21.8** | **-0.5** |
| | baz=219 | | | | | | |
| ETLH | | | | S | **Sb** | **22 11 34.9** | **-1.5** |
| | baz=219 | | | | | | |
| **NCUH** | **Zhongli** | **1.08** | **273** | *e*P | **Pb** | **22 11 21.0** | **-1.2** |
| | baz=272 | | | | | | |
| NCUH | | | | S | **Sb** | **22 11 35.3** | **-1.1** |
| | baz=272 | | | | | | |
| **TWD** | **Chiawan** | **1.09** | **220** | *e*P | **Pb** | **22 11 22.2** | **-0.3** |
| | baz=219 | | | | | | |
| TWD | | | | *e*S | **Sb** | **22 11 36.4** | **-0.4** |
| | baz=219 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.18** | **256** | P | **Pn** | **22 11 23.3** | **-0.7** |
| | baz=267 | | | | | | |
| NFF | | | | S | **Sb** | **22 11 38.1** | **-1.1** |
| | baz=267 | | | | | | |
| **FUSS** | **Fushou** | **1.23** | **237** | *e*P | **Pn** | **22 11 24.8** | **-0.1** |
| | baz=237 | | | | | | |
| FUSS | | | | *e*S | **Sb** | **22 11 40.7** | **-0.2** |
| | baz=237 | | | | | | |
| **ETM** | **Tongmen** | **1.24** | **220** | *e*P | **Pn** | **22 11 24.6** | **-0.3** |
| | baz=220 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.25** | **224** | P | **Pn** | **22 11 24.8** | **-0.4** |
| | baz=224 | | | | | | |
| **LIOB** | **Emei** | **1.26** | **258** | P | **Pn** | **22 11 24.2** | **-1.0** |
| | baz=257 | | | | | | |
| LIOB | | | | S | **Sb** | **22 11 40.7** | **-1.0** |
| | baz=257 | | | | | | |
| **SBCB** | **Hsinchu** | **1.27** | **265** | *e*P | **Pn** | **22 11 24.8** | **-0.5** |
| | baz=281 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.27** | **233** | P | **Pn** | **22 11 25.4** | **-0.3** |
| | baz=232 | | | | | | |
| WHF | | | | S | **Sb** | **22 11 41.0** | **-1.4** |
| | baz=232 | | | | | | |
| **TWT** | **Tachien** | **1.27** | **239** | *e*P | **Pb** | **22 11 26.1** | **+0.4** |
| | baz=224 | | | | | | |
| TWT | | | | *e*S | **Sb** | **22 11 41.6** | **-0.6** |
| | baz=224 | | | | | | |
| **NSTT** | **Nanjuang** | **1.28** | **257** | *e*P | **Pn** | **22 11 24.5** | **-0.9** |
| | baz=257 | | | | | | |
| **TDCB** | **Techi** | **1.29** | **239** | P | **Pn** | **22 11 25.6** | **0.0** |
| | baz=226 | | | | | | |
| TDCB | | | | S | **Sb** | **22 11 41.9** | **-0.7** |
| | baz=226 | | | | | | |
| **SHUL** | **Shoufeng** | **1.35** | **213** | *e*P | **Pn** | **22 11 26.4** | **+0.1** |
| | baz=213 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.37** | **115** | *e*P | **Pn** | **22 11 24.6** | **-2.1** |
| **CHGB** | **Renai** | **1.39** | **232** | *i* P | **Pb** | **22 11 27.7** | **+0.1** |
| | baz=232 | | | | | | |
| **ESL** | **Shilin** | **1.40** | **218** | *e*P | **Pn** | **22 11 26.8** | **-0.2** |
| | baz=217 | | | | | | |
| **WHP** | **Taichung City** | **1.45** | **244** | *e*P | **Pb** | **22 11 29.2** | **+0.7** |
| | baz=258 | | | | | | |
| **OWD** | **Renai** | **1.45** | **229** | *e*P | **Pb** | **22 11 28.5** | **-0.2** |
| | baz=214 | | | | | | |
| **WUSB** | **Renai** | **1.47** | **231** | *i* P | **Pb** | **22 11 29.0** | **0.0** |
| | baz=216 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.50** | **217** | *e*P | **Pn** | **22 11 27.8** | **-0.6** |
| | baz=217 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.58** | **237** | *e*P | **Pb** | **22 11 30.8** | **-0.1** |
| | baz=225 | | | | | | |
| **VWDT** | **VWDT** | **1.61** | **224** | *i* P | **Pb** | **22 11 30.9** | **-0.5** |
| | baz=225 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.64** | **114** | *e*P | **Pn** | **22 11 29.0** | **-1.4** |
| **HGSD** | **Ruisui** | **1.66** | **212** | *e*P | **Pn** | **22 11 30.8** | **+0.1** |
| | baz=195 | | | | | | |
| **EHYH** | **Wanrong** | **1.70** | **214** | *e*P | **Pn** | **22 11 30.1** | **-1.1** |
| | baz=214 | | | | | | |
| **EHY** | **Hungye** | **1.70** | **214** | *e*P | **Pn** | **22 11 30.4** | **-0.9** |
| | baz=215 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.70** | **109** | *e*P | **Pn** | **22 11 29.6** | **-1.7** |
| **TYC** | **Yuchr** | **1.71** | **234** | *e*P | **Pb** | **22 11 32.5** | **-0.5** |
| | baz=234 | | | | | | |
| **SSLB** | **Suanglung** | **1.72** | **229** | *e*P | **Pb** | **22 11 32.8** | **-0.4** |
| | baz=230 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.79** | **100** | *e*P | **Pn** | **22 11 31.1** | **-1.3** |
| **YULB** | **Yu-li** | **1.81** | **213** | *e*P | **Pn** | **22 11 31.4** | **-1.3** |
| | baz=213 | | | | | | |
| **EYUL** | **Yuli** | **1.84** | **212** | *e*P | **Pn** | **22 11 32.6** | **-0.5** |
| | baz=228 | | | | | | |
| **TWF1** | **Yuli** | **1.84** | **212** | *e*P | **Pn** | **22 11 31.6** | **-1.6** |
| | baz=213 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.84** | **229** | *e*P | **Pb** | **22 11 34.9** | **-0.4** |
| | baz=216 | | | | | | |
| **WNT** | **Mingjian** | **1.86** | **236** | *e*P | **Pb** | **22 11 35.6** | **+0.1** |
| | baz=237 | | | | | | |
| **FULB** | **Fuli** | **1.98** | **210** | *e*P | **Pn** | **22 11 35.8** | **+0.8** |
| | baz=194 | | | | | | |
| **CHN5** | **Tsauling** | **2.03** | **230** | *e*P | **Pb** | **22 11 38.4** | **-0.2** |
| | baz=231 | | | | | | |
| **EHD** | **Haiduan** | **2.06** | **211** | *e*P | **Pn** | **22 11 35.7** | **-0.5** |
| | baz=212 | | | | | | |
| **ELDTW** | **Lidau** | **2.12** | **216** | *e*P | **Pn** | **22 11 37.6** | **+0.5** |
| | baz=203 | | | | | | |
| **WCKO** | **Fanlu** | **2.19** | **228** | *e*P | **Pb** | **22 11 40.5** | **-0.7** |
| | baz=229 | | | | | | |
| **TPUB** | **Ta-pu** | **2.27** | **225** | *e*P | **Pb** | **22 11 41.3** | **-1.2** |
| | baz=210 | | | | | | |
| **STYH** | **Taoyuan** | **2.27** | **220** | *e*P | **Pn** | **22 11 40.3** | **+1.2** |
| | baz=206 | | | | | | |
| **WTP** | **Ta-pu** | **2.31** | **224** | *e*P | **Pn** | **22 11 41.3** | **+1.6** |
| | baz=209 | | | | | | |
| **TWK** | **Hsinying** | **2.38** | **227** | *e*P | **Pb** | **22 11 43.0** | **-1.5** |
| | baz=227 | | | | | | |
| **SNST** | **Tainan City** | **2.41** | **226** | *e*P | **Pn** | **22 11 42.8** | **+1.8** |
| | baz=227 | | | | | | |
| **CHN1** | **Nanshi** | **2.41** | **225** | *e*P | **Pb** | **22 11 43.8** | **-1.2** |
| | baz=226 | | | | | | |
| **SGST** | **Jiashian** | **2.45** | **222** | *e*P | **Pn** | **22 11 42.5** | **+0.9** |
| | baz=223 | | | | | | |
| **ICHU** | **Yijhu** | **2.46** | **231** | *e*P | **Pn** | **22 11 43.2** | **+1.5** |
| | baz=233 | | | | | | |
| **SLGT** | **Liugui** | **2.48** | **220** | *e*P | **Pb** | **22 11 44.2** | **-2.1** |
| | baz=221 | | | | | | |
| **MATB** | **Ma-tsu** | **2.51** | **300** | *e*P | **Pn** | **22 11 40.8** | **-1.6** |
| | baz=298 | | | | | | |
| **SONM** | **Songino Array** | **26.13** | **335** | P | **P** | **22 16 39.3** | **+3.4** |
| | 0.2nm,0.3s,baz=126,slow=7.3,SNR=2.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **38.58** | **315** | P | **P** | **22 18 27.7** | **+3.2** |
| | 0.4nm,0.8s,baz=105,slow=10.0,SNR=2.0 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.09** | **164** | P | **P** | **22 19 24.8** | **-1.1** |
| | 0.8nm,0.8s,baz=346,slow=8.5,SNR=7.3 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 21 00.6** | **-1.6** |
| | 0.4nm,0.8s,baz=352,slow=3.5,SNR=5.3 | | | | | | |
| | 0.8nm,0.8s | | | | | | |

*IDC **22** 22:31:20.7±2.3, 0˚.60N× 98˚.02E, h0km, mb3.8/7, mbtmp3.8/8, ML4.2/1, Error ellipse: s-maj=69.9km s-min=28.8km az=52.0*
*NEIC **22** 22:31:22.6±1.3, 0˚.43N±0˚.06× 97˚.79E±0˚.08, h28km±8km, mb4.0/5, Error ellipse: s-maj=11.8km s-min=8.2km az=60.0*
*DJA **22** 22:31:25.6±0.3, 1˚N±2˚× 9˚8E±˚, h10km, M3.9/11, mb4.0/1, MLv3.9/11*
**ISC 22 22:31:24.7**±0.7, **0˚.65N**±0˚.05× **97˚.93E**±0˚.08, **h29**km, **n39**, σ1§**61**/33, **mb4.0**/10, **Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **0.74** | **331** | | **Pb** | **22 31 39.1** | **0.0** |
| GSI | | | | Sn | **Sn** | **22 31 49.9** | **+0.3** |
| **GSI** | **Gunungsitoli** | **0.74** | **331** | P | **Pb** | **22 31 39.4** | **+0.3** |
| GSI | | | | S | **Sn** | **22 31 50.9** | **+1.4** |
| **PBSI** | **Pulau Batu** | **0.78** | **154** | P | **Pn** | **22 31 40.3** | **+0.5** |
| PBSI | | | | S | **Sn** | **22 31 53.3** | **+2.7** |
| **RPSI** | **Rantau Prapat** | **2.26** | **26** | | **Pn** | **22 32 01.5** | **+1.3** |
| **SISI** | **Saibi** | **2.28** | **150** | P | **Pb** | **22 32 05.2** | **0.0** |
| **SNSI** | **Sinabang, Aceh** | **2.37** | **317** | P | **Pn** | **22 32 03.6** | **+1.9** |
| **KCSI** | **Kotacane, Aceh** | **2.86** | **357** | P | **Pn** | **22 32 09.3** | **+0.9** |
| **PDSI** | **Padang** | **2.97** | **122** | P | **Pn** | **22 32 12.8** | **+2.9** |
| PDSI | | | | Pg | Pb | 22 32 22.0 | +5.0 |
| **BKNI** | **Bangkinang** | **3.12** | **96** | Pn | **Pn** | **22 32 11.2** | **-0.8** |
| **BKNI** | **Bangkinang** | **3.12** | **96** | P | **Pn** | **22 32 14.6** | **+2.5** |
| **LHMI** | **Lhok Sumawe** | **4.65** | **348** | Pn | **Pn** | **22 32 33.3** | **+0.3** |
| **IPM** | **Ipoh** | **4.90** | **39** | | **Pn** | **22 32 38.3** | **+1.8** |
| **KULM** | **Kulim** | **5.35** | **30** | Pn | **Pn** | **22 32 43.5** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** | **17.72** | **3** | P | **P** | **22 35 29.9** | **-0.3** |
| | 0.3nm,0.3s,baz=184,slow=11,SNR=1.6 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.68** | **252** | T | T | 23 04 33.7 | |
| | baz=72,slow=75,SNR=185 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.68** | **252** | T | T | 23 04 34.0 | |
| | baz=72,slow=75,SNR=386 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.69** | **252** | T | T | 23 04 35.1 | |
| | baz=72,slow=75,SNR=110 | | | | | | |
| **WB0** | **Warramunga Arr** | **41.10** | **122** | P | **P** | **22 39 02.5** | **-3.9** |
| WB0 | | | | IAmb | IAmb | 22 39 05.9 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.12** | **122** | P | **P** | **22 39 06.1** | **-0.6** |
| | comp=Z,0.3nm,0.7s,baz=304,slow=8.9,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **42.48** | **127** | P | **P** | **22 39 14.3** | **-3.4** |
| **AS31** | **Alice Springs** | **42.48** | **127** | P | **P** | **22 39 14.5** | **-3.2** |
| **KSRS** | **Korea Array** | **45.89** | **34** | P | **P** | **22 39 44.2** | **-0.5** |
| | comp=Z,1.4nm,0.7s,baz=222,slow=9.2,SNR=5.4 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **47.57** | **8** | P | **P** | **22 39 58.8** | **+0.9** |
| | comp=Z,0.7nm,0.5s,baz=189,slow=11,SNR=4.2 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **47.95** | **346** | P | **P** | **22 40 00.3** | **-0.4** |
| **MKAR** | **Makanchi Array** | **47.95** | **346** | P | **P** | **22 40 01.8** | **+1.1** |
| | comp=Z,0.8nm,0.5s,baz=161,slow=8.5,SNR=17 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **48.04** | **345** | P | **P** | **22 40 01.3** | **-0.1** |
| **KURBB** | **Kurchatov Arra** | **52.45** | **345** | P | **P** | **22 40 35.5** | **+0.9** |
| | comp=Z,0.6nm,0.7s,baz=168,slow=7.3,SNR=6.7 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **54.21** | **350** | P | **P** | **22 40 47.1** | **-0.5** |
| ZAA0 | | | | IAmb | IAmb | 22 40 48.3 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.21** | **350** | P | **P** | **22 40 46.7** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **54.21** | **350** | P | **P** | **22 40 48.2** | **+0.6** |
| | comp=Z,1.3nm,0.5s,baz=179,slow=5.9,SNR=5.5 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **57.01** | **341** | P | **P** | **22 41 08.1** | **+0.4** |
| | comp=Z,0.9nm,0.5s,baz=150,slow=12,SNR=5.0 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.34** | **332** | P | **P** | **22 41 16.9** | **-0.2** |
| **ABKAR** | **Akbulak array** | **58.34** | **332** | P | **P** | **22 41 16.6** | **-0.5** |
| ABKAR | | | | IAmb | IAmb | 22 41 18.3 | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **61.74** | **215** | T | T | 23 48 47.6 | |
| | baz=54,slow=75,SNR=61 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **61.75** | **215** | T | T | 23 48 48.2 | |
| | baz=54,slow=75,SNR=63 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **61.76** | **215** | T | T | 23 48 46.8 | |
| | baz=54,slow=75,SNR=60 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **62.07** | **214** | T | T | 23 48 57.4 | |
| | baz=54 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **62.08** | **214** | T | T | 23 48 58.6 | |
| | baz=54 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **62.08** | **214** | T | T | 23 48 58.0 | |
| | baz=54 | | | | | | |

*IDC **22** 22:42:17.3±4.1, 18˚.99N× 108˚.89W, h0km, mb3.7/4, mbtmp3.6/6, ML3.2/1, MS3.3/2, Error ellipse: s-maj=72.6km s-min=67.1km az=127.0*
**ISC 22 22:42:23.5**±3.5, **19˚.1N**±0˚.4× **108˚.9W**±0˚.3, **h35**km, **n12**, σ0§**36**/6, **mb3.6**/3, **Revilla Gigedo Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **5.11** | **346** | LR | LR | 22 45 07.2 | |
| | comp=Z,268nm,18.4s,baz=236,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **11.23** | **24** | Pn | **Pn** | **22 45 01.8** | **0.0** |
| | baz=201,slow=17,SNR=4.1 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **15.91** | **7** | Pn | **Pn** | **22 46 04.8** | **-0.2** |
| | 1.8nm,0.9s,baz=259,slow=10,SNR=1.7 | | | | | | |
| **APG** | **El Apazote** | **18.12** | **100** | LR | LR | 22 53 28.4 | |
| | comp=Z,7.4nm,18.5s,baz=275,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **20.89** | **339** | P | **P** | **22 47 03.4** | **+0.5** |
| | 1.7nm,0.8s,baz=170,slow=12,SNR=6.6 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **23.57** | **359** | P | **P** | **22 47 31.1** | **0.0** |
| | 0.6nm,0.4s,baz=168,slow=9.2,SNR=4.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **25.41** | **335** | LR | LR | 22 57 26.2 | |
| | comp=Z,61nm,18.5s,baz=218,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **52.14** | **340** | P | **P** | **22 51 29.8** | **-0.3** |
| | 0.6nm,0.7s,baz=144,slow=8.2,SNR=4.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **H03N2** | **Juan Fernandez** | **59.60** | **151** | T | T | 23 57 46.7 | |
| | baz=329,slow=77,SNR=19 | | | | | | |
| **H03N1** | **Juan Fernandez** | **59.61** | **151** | T | T | 23 57 48.0 | |
| | baz=329,slow=77,SNR=18 | | | | | | |
| **H03N3** | **Juan Fernandez** | **59.62** | **151** | T | T | 23 57 45.9 | |
| | baz=329,slow=77,SNR=20 | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.86** | **15** | P | **P** | **22 54 59.5** | **+0.2** |
| | 0.8nm,0.6s,baz=311,slow=5.8,SNR=5.1 | | | | | | |
| | 0.8nm,0.6s | | | | | | |

*IDC **22** 22:44:10.4±2.1, 3˚.22S× 130˚.19E, h0km, mb3.7/2, mbtmp3.7/3, ML3.6/1, Error ellipse: s-maj=117.5km s-min=27.5km az=70.0*
*DJA **22** 22:44:12.8±0.5, 3˚S±6˚× 13˚1E±˚, h10km, M3.4/7, MLv3.4/7*
**ISC 22 22:44:12.9**±1.0, **2˚.97S**±0˚.07× **130˚.70E**±0˚.06, **h24**km, **n8**, σ1§**18**/8, **Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **1.54** | **88** | P | **Pb** | **22 44 41.8** | **+1.0** |
| **BNDI** | **Bandanaira** | **1.74** | **207** | P | **Pb** | **22 44 44.1** | **0.0** |
| **MSAI** | **Masohi** | **1.81** | **258** | P | **Pb** | **22 44 45.7** | **+0.4** |
| **SWI** | **Sorong** | **2.17** | **15** | P | **Pb** | **22 44 50.7** | **-0.7** |
| **NLAI** | **Namlea** | **3.61** | **266** | P | **Pn** | **22 45 08.0** | **+0.7** |
| **WRA** | **Warramunga Arr** | **17.24** | **168** | P | **Pn** | **22 48 10.2** | **-2.0** |
| | 0.2nm,0.3s,baz=347,slow=11,SNR=15 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **20.81** | **172** | P | **P** | **22 48 52.2** | **-0.5** |
| | 2.4nm,0.3s,baz=351,slow=11,SNR=37 | | | | | | |
| | 2.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.29** | **326** | P | **P** | **22 54 53.6** | **+0.8** |
| | 0.2nm,0.4s,baz=126,slow=7.1,SNR=7.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*MOS **22** 22:48:40.1±0.9, 8˚.98S× 114˚.70E, h69km, mb5.2/36, Error ellipse: s-maj=10.1km s-min=5.2km az=120.2*
*GCMT **22** 22:48:41.6±0.4, 9˚.26S±0˚.03× 114˚.79E±0˚.03, h93km±5km, MW5.0/79, Moment Tensor Solution. s22,c25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JAGI | **Jajag, Banyuwa** | **0.90** | **320** | P | | **Pn** | **22 49 00.8** | **+1.3** |
| JAGI | | | | S | | **Sn** | **22 49 14.5** | **+2.2** |
| SRBI | **Singaraja** | **1.17** | **24** | P | | **Pn** | **22 49 04.8** | **+2.1** |
| SRBI | | | | S | | **Sn** | **22 49 22.0** | **+3.8** |
| TWSI | **Taliwang, Sumb** | **2.16** | **79** | P | | **Pn** | **22 49 17.3** | **+1.4** |
| PLAI | **Plampang** | **3.02** | **84** | P | | **Pn** | **22 49 29.3** | **+1.8** |
| PWJI | **Pagerwojo** | **3.11** | **291** | P | | **Pn** | **22 49 31.6** | **+2.8** |
| GRJI | **Gresik** | **3.16** | **315** | P | | **Pn** | **22 49 32.4** | **+3.0** |
| NGJI | **Ngawi** | **3.70** | **299** | P | | **Pn** | **22 49 39.8** | **+3.0** |
| UGM | **Wanagama** | **4.35** | **286** | P | | **Pn** | **22 49 49.2** | **+3.5** |
| UGM | **Wanagama** | **4.35** | **286** | Pn | | **Pn** | **22 49 47.9** | **+2.2** |
| UGM | **Wanagama** | **4.35** | **286** | P | | **Pn** | **22 49 47.9** | **+2.2** |
| WBSI | **Waikabubak, Su** | **4.62** | **96** | P | | **Pn** | **22 49 46.9** | **-2.4** |
| SMRI | **Semarang** | **4.74** | **296** | P | | **Pn** | **22 49 54.5** | **+3.4** |
| SMRI | **Semarang** | **4.74** | **296** | Pn | | **Pn** | **22 49 52.7** | **+1.6** |
| SMRI | **Semarang** | **4.74** | **296** | P | | **Pn** | **22 49 53.8** | **+2.7** |
| BASI | **Baing, Sumba** | **5.85** | **101** | P | | **Pn** | **22 50 02.5** | **-3.7** |
| | 781nm,1.3s,10µm8µm5.5nm | | | | | | | |
| CMJI | **Cimerak** | **6.37** | **282** | P | | **Pn** | **22 50 14.5** | **+1.2** |
| | 481nm,0.9s,8µm2.5nm | | | | | | | |
| BSSI | **Bau Bau, Buton** | **6.44** | **63** | P | | **Pn** | **22 50 16.1** | **+1.8** |
| | 364nm,0.7s,6µm1.9nm | | | | | | | |
| KAPI | **Kappang** | **6.46** | **51** | Pn | | **Pn** | **22 50 15.2** | **+0.7** |
| KAPI | **Kappang** | **6.46** | **51** | P | | **Pn** | **22 50 15.4** | **+0.9** |
| | 97nm,0.5s,baz=144,slow=5.2,SNR=6 | | | | | | | |
| KAPI | | | | S | | **Sn** | **22 51 25.0** | **-1.8** |
| | 479nm,0.6s,baz=54,slow=22,SNR=22 | | | | | | | |
| KAPI | | | | LR | | LR | 22 53 20.9 | |
| | comp=Z,2µm,18.9s,baz=260,slow=44 | | | | | | | |
| KAPI | **Kappang** | **6.46** | **51** | *i* P | | **Pn** | **22 50 15.5** | **+1.0** |
| BKSI | **Bulukumba** | **6.56** | **55** | P | | **Pn** | **22 50 17.3** | **+1.4** |
| | 257nm,0.6s,3µm2.1nm | | | | | | | |
| EDFI | **Ende, Flores** | **6.88** | **87** | P | | **Pn** | **22 50 19.8** | **-0.6** |
| | 377nm,0.6s,5µm1.4nm | | | | | | | |
| JCJI | **Jatiwangi** | **6.94** | **292** | P | | **Pn** | **22 50 21.8** | **+0.8** |
| | 359nm,0.7s,10µm2.3nm | | | | | | | |
| BNSI | **Bone** | **7.12** | **49** | P | | **Pn** | **22 50 27.5** | **+3.9** |
| | 491nm,1.2s,5µm3.1nm | | | | | | | |
| BBJI | **Bungbulang** | **7.21** | **283** | P | | **Pn** | **22 50 26.6** | **+1.7** |
| MMRI | **Maumere** | **7.43** | **87** | P | | **Pn** | **22 50 26.7** | **-1.1** |
| MMRI | **Maumere** | **7.43** | **87** | Pn | | **Pn** | **22 50 26.2** | **-1.6** |
| MMRI | **Maumere** | **7.43** | **87** | P | | **Pn** | **22 50 26.9** | **-0.9** |
| | 547nm,1.3s,7µm2.3nm | | | | | | | |
| CNJI | **Cibinong** | **7.75** | **283** | P | | **Pn** | **22 50 33.6** | **+1.4** |
| | 201nm,0.6s,4µm1.0nm | | | | | | | |
| TTSI | **Tana Toraja** | **7.90** | **40** | P | | **Pn** | **22 50 38.3** | **+4.1** |
| MTKI | **Muara Teweh, K** | **8.16** | **1** | P | | **Pn** | **22 50 42.5** | **+4.6** |
| DBJI | **Dramaga** | **8.33** | **288** | P | | **Pn** | **22 50 42.2** | **+2.1** |
| | 183nm,0.7s | | | | | | | |
| SKJI | **Sukabumi** | **8.38** | **284** | P | | **Pn** | **22 50 42.9** | **+2.1** |
| BBSI | **Bau Bau** | **8.58** | **65** | P | | **Pn** | **22 50 45.8** | **+2.3** |
| | 335nm,1.5s,5µm | | | | | | | |
| BATI | **Baumata** | **8.86** | **97** | P | | **Pn** | **22 50 45.2** | **-2.2** |
| | 153nm,0.6s,2µm | | | | | | | |
| SMKI | **Samarinda** | **9.00** | **16** | P | | Pn | 22 50 55.4 | +6.2 |
| | 396nm,1.2s | | | | | | | |
| XMIS | **Christmas Isla** | **9.05** | **261** | Pn | | **Pn** | **22 50 48.7** | **-1.3** |
| SOEI | **Soe** | **9.42** | **94** | P | | **Pn** | **22 50 55.1** | **0.0** |
| SOEI | **Soe** | **9.42** | **94** | Pn | | **Pn** | **22 50 53.9** | **-1.2** |
| SOEI | **Soe** | **9.42** | **94** | P | | **Pn** | **22 50 54.0** | **-1.2** |
| | 216nm,0.8s,3µm | | | | | | | |
| STKI | **Sintang** | **9.72** | **340** | P | | **Pn** | **22 51 02.3** | **+3.2** |
| | 94nm,0.6s,6µm | | | | | | | |
| MPSI | **Mapaga** | **10.74** | **29** | P | | **Pn** | **22 51 16.8** | **+3.8** |
| KASI | **Kota Agung** | **10.78** | **289** | P | | **Pn** | **22 51 14.5** | **+0.9** |
| | 152nm,0.6s,3µm | | | | | | | |
| PPBI | **Pangkal Pinang** | **11.02** | **309** | P | | **Pn** | **22 51 21.5** | **+4.6** |
| LUWI | **Luwuk** | **11.36** | **45** | P | | Pn | 22 51 26.2 | +4.8 |
| | 164nm,1.1s,5µm | | | | | | | |
| LWLI | **Liwa** | **11.37** | **290** | P | | **Pn** | **22 51 22.9** | **+1.2** |
| KSM | **Kuching** | **11.45** | **337** | P | | Pn | 22 51 28.2 | +5.5 |
| KSM | **Kuching** | **11.45** | **337** | | | **Pn** | **22 51 24.3** | **+1.6** |
| SBUM | **Sibu** | **11.80** | **348** | | | **Pn** | **22 51 28.5** | **+1.0** |
| TOLI2 | **Tolitoli** | **11.85** | **31** | | | **Pn** | **22 51 28.4** | **+0.2** |
| MRSI | **Marisa** | **11.96** | **37** | P | | **Pn** | **22 51 33.9** | **+4.2** |
| | 85nm,0.7s | | | | | | | |
| GTOI | **Gorontalo** | **12.75** | **41** | P | | **P** | **22 51 45.5** | **-3.3** |
| | 75nm,0.7s | | | | | | | |
| MBWA | **Marble Bar** | **12.87** | **159** | P | | Pn | 22 51 37.0 | -4.9 |
| MBWA | **Marble Bar** | **12.87** | **159** | P | | Pn | 22 51 36.3 | -5.7 |
| | comp=Z,µmcomp=Z,35nm,0.5s | | | | | | | |
| MBWA | **Marble Bar** | **12.87** | **159** | P | | Pn | 22 51 36.5 | -5.4 |
| SANI | **Sanana** | **13.23** | **58** | P | | **P** | **22 51 51.7** | **-2.4** |
| SANI | **Sanana** | **13.23** | **58** | P | | **Pn** | **22 51 49.8** | **+2.9** |
| PSA00 | **Pilbara Seismi** | **13.29** | **159** | P | | **Pn** | **22 51 43.4** | **-4.2** |
| PSA00 | **Pilbara Seismi** | **13.29** | **159** | P | | Pn | 22 51 42.5 | -5.0 |
| | comp=Z,2µmcomp=Z,36nm,0.9s | | | | | | | |
| KMSI | **Cibinong** | **13.35** | **44** | P | | **P** | **22 51 52.1** | **-3.4** |
| NLAI | **Namlea** | **13.62** | **65** | P | | **P** | **22 51 55.7** | **-2.7** |
| | comp=Z,180nm,1.2s | | | | | | | |
| FITZ | **Fitzroy Crossi** | **13.82** | **131** | P | | **Pn** | **22 51 51.1** | **-3.5** |
| FITZ | **Fitzroy Crossi** | **13.82** | **131** | Pn | | **Pn** | **22 51 51.6** | **-3.1** |
| FITZ | **Fitzroy Crossi** | **13.82** | **131** | P | | **Pn** | **22 51 51.2** | **-3.5** |
| | comp=Z,842nm,0.9s | | | | | | | |
| MYLDM | **Lahad Datu** | **14.73** | **15** | | | **Pn** | **22 52 03.0** | **-3.5** |
| KNRA | **Kununurra** | **15.15** | **117** | Pn | | **Pn** | **22 52 09.3** | **-2.6** |
| KNRA | **Kununurra** | **15.15** | **117** | P | | **Pn** | **22 52 08.7** | **-3.2** |
| | comp=Z,1µmcomp=Z,185nm,0.8s | | | | | | | |
| KKM | **Kota Kinabalu** | **15.17** | **6** | | | **Pn** | **22 52 11.6** | **-0.8** |
| MSAI | **Masohi** | **15.24** | **69** | P | | **Pn** | **22 52 14.7** | **+1.6** |
| | comp=Z,123nm,0.6s,comp=Z,6µm | | | | | | | |
| LBMI | **Labuha** | **15.27** | **57** | P | | **P** | **22 52 16.4** | **-0.4** |
| | comp=Z,414nm,1.2s,comp=Z,4µm | | | | | | | |
| BNDI | **Bandanaira** | **15.74** | **74** | P | | **P** | **22 52 21.4** | **-0.7** |
| PPSI | **Pulau Pagai** | **15.96** | **293** | P | | **P** | **22 52 24.3** | **-0.2** |
| | comp=Z,394nm,1.7s | | | | | | | |
| TNTI | **Ternate** | **15.99** | **53** | | | **Pn** | **22 52 21.7** | **-0.8** |
| TNTI | **Ternate** | **15.99** | **53** | P | | **P** | **22 52 25.4** | **+0.6** |
| | comp=Z,174nm,1.3s,comp=Z,2µm | | | | | | | |
| DRS | **Darwin Rock St** | **16.20** | **103** | P | | **Pn** | **22 52 26.0** | **+0.7** |
| SAUI | **Saumlaki** | **16.42** | **87** | Pn | | **Pn** | **22 52 26.0** | **-2.0** |
| SAUI | **Saumlaki** | **16.42** | **87** | P | | **P** | **22 52 29.2** | **-0.4** |
| MTN | **Manton Dam** | **16.50** | **104** | Pn | | **Pn** | **22 52 26.0** | **-3.1** |
| MTN | **Manton Dam** | **16.50** | **104** | P | | **Pn** | **22 52 25.8** | **-3.2** |
| SGSI | **Sangihe** | **16.69** | **41** | P | | **P** | **22 52 36.0** | **+3.5** |
| | comp=Z,322nm,0.9s | | | | | | | |
| KDU | **Kakadu** | **17.76** | **103** | P | | **P** | **22 52 43.4** | **-1.0** |
| | comp=Z,912nmcomp=Z,53nm,1.0s | | | | | | | |
| MEEK | **Meekatharra** | **17.77** | **169** | P | | **P** | **22 52 44.0** | **-0.4** |
| SWI | **Sorong** | **18.39** | **64** | P | | **P** | **22 52 51.7** | **+0.3** |
| | comp=Z,209nm,0.9s,comp=Z,2µm | | | | | | | |
| FAKI | **Fak Fak** | **18.48** | **71** | P | | **P** | **22 52 49.1** | **-3.2** |
| IPM | **Ipoh** | **19.25** | **314** | P | | **Pn** | **22 53 01.8** | **-0.6** |
| DAV | **Davao City (W)** | **19.41** | **34** | P | | **P** | **22 53 01.0** | **-1.5** |
| KMPI | **Kaimana, Papua** | **19.62** | **75** | P | | **P** | **22 53 05.6** | **+0.9** |
| RPSI | **Rantau Prapat** | **19.67** | **306** | P | | **P** | **22 53 04.1** | **-1.2** |
| PSI | **Prapat** | **19.74** | **306** | P | | **P** | **22 53 04.1** | **-2.1** |
| PSI | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| MORW | **Morawa** | **19.84** | **177** | | | **P** | **22 53 05.5** | **-1.6** |
| MORW | | | | IAmb | | IAmb | 22 53 14.1 | |
| | comp=Z,93nm,1.4s | | | | | | | |
| MORW | **Morawa** | **19.84** | **177** | P | | **P** | **22 53 05.8** | **-1.3** |
| | comp=Z,2µmcomp=Z,23nm,1.1s | | | | | | | |
| GSI | **Gunungsitoli** | **20.01** | **300** | P | | **P** | **22 53 07.4** | **-1.7** |
| GSI | | | | IAmb | | IAmb | 22 53 09.4 | |
| | comp=Z,121nm,1.5s | | | | | | | |
| GSI | **Gunungsitoli** | **20.01** | **300** | P | | Pn | 22 53 10.4 | -1.0 |
| | comp=Z,70nm,1.2s | | | | | | | |
| KULM | **Kulim** | **20.08** | **315** | P | | **P** | **22 53 08.8** | **-1.0** |
| WRKA | **Warakurna** | **20.40** | **142** | P | | **P** | **22 53 14.1** | **+0.9** |
| | comp=Z,41nm,1.0s | | | | | | | |
| BLDU | **Ballidu** | **21.43** | **175** | P | | **P** | **22 53 23.1** | **-1.0** |
| | comp=Z,69nm,1.2s | | | | | | | |
| WB0 | **Warramunga Arr** | **21.73** | **121** | P | | **P** | **22 53 27.0** | **-0.5** |
| WB0 | | | | IAmb | | IAmb | 22 53 50.6 | |
| | comp=Z,151nm,1.6s | | | | | | | |
| WRA | **Warramunga Arr** | **21.76** | **122** | P | | **P** | **22 53 27.0** | **-0.8** |
| WRA | **Warramunga Arr** | **21.76** | **122** | P | | **P** | **22 53 28.3** | **+0.4** |
| | comp=Z,6.1nm,0.4s,baz=295,slow=12,SNR=105 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **23 00 55.9** | **-1.1** |
| | comp=Z,9.4nm,0.8s,baz=293,slow=2.2,SNR=12 | | | | | | | |
| | comp=Z,6.1nm,0.4s | | | | | | | |
| WRAB | **Tennant Creek** | **21.77** | **122** | *i* P | | **P** | **22 53 27.5** | **-0.4** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| WR0 | **Warramunga Arr** | **21.94** | **121** | P | | **P** | **22 53 29.4** | **-0.3** |
| WR0 | | | | IAmb | | IAmb | 22 53 53.0 | |
| | comp=Z,68nm,1.4s | | | | | | | |
| KLBR | **Kellerberrin** | **22.50** | **173** | P | | **P** | **22 53 35.7** | **+0.1** |
| | comp=Z,56nm,0.6s | | | | | | | |
| MUN | **Mundaring** | **22.75** | **177** | P | | P | 22 53 46.8 | +8.6 |
| KMBL | **Kambalda** | **23.08** | **164** | P | | **P** | **22 53 40.7** | **-0.8** |
| | comp=Z,54nm,2.1s | | | | | | | |
| AS31 | **Alice Springs** | **23.32** | **131** | P | | **P** | **22 53 43.3** | **-0.7** |
| AS31 | | | | IAmb | | IAmb | 22 53 46.2 | |
| | comp=Z,18nm,0.2s | | | | | | | |
| AS31 | **Alice Springs** | **23.32** | **131** | P | | **P** | **22 53 44.0** | **-0.1** |
| ASAR | **Alice Springs** | **23.32** | **131** | P | | **P** | **22 53 43.4** | **-0.7** |
| ASAR | **Alice Springs** | **23.32** | **131** | P | | **P** | **22 53 44.1** | **+0.1** |
| | comp=Z,12nm,0.4s,baz=302,slow=9.2,SNR=148 | | | | | | | |
| ASAR | | | | S | | **S** | **22 57 54.1** | **+2.9** |
| | comp=Z,4.4nm,0.9s,baz=299,slow=18,SNR=2.7 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **23 01 00.3** | **-0.7** |
| | comp=Z,8.2nm,0.8s,baz=319,slow=2.5,SNR=11 | | | | | | | |
| | comp=Z,12nm,0.4s | | | | | | | |
| NWAO | **Narrogin (SRO)** | **23.77** | **175** | P | | **P** | **22 53 49.1** | **+1.2** |
| NWAO | | | | IAmb | | IAmb | 22 53 50.9 | |
| | comp=Z,49nm,0.9s | | | | | | | |
| NWAO | **Narrogin (SRO)** | **23.77** | **175** | P | | **P** | **22 53 49.4** | **+1.6** |
| NWAO | **Narrogin (SRO)** | **23.77** | **175** | P | | **P** | **22 53 49.8** | **+1.9** |
| | comp=Z,46nm,1.1s,baz=346,slow=7.9,SNR=12 | | | | | | | |
| | comp=Z,46nm,1.1s | | | | | | | |
| FORT | **Forrest** | **24.84** | **152** | P | | **P** | **22 53 57.7** | **0.0** |
| FORT | | | | IAmb | | IAmb | 22 54 01.3 | |
| | comp=Z,103nm,1.0s | | | | | | | |
| FORT | **Forrest** | **24.84** | **152** | P | | **P** | **22 53 58.6** | **+1.0** |
| | comp=Z,97nm,1.2s | | | | | | | |
| RKGY | **Rocky Gully** | **25.41** | **176** | P | | **P** | **22 54 03.4** | **+0.5** |
| | comp=Z,104nm,0.9s | | | | | | | |
| QIS | **Mount Isa** | **26.53** | **118** | P | | **P** | **22 54 13.4** | **+0.3** |
| | comp=Z,29nm,1.0s | | | | | | | |
| JAY | **Jayapura** | **26.65** | **77** | P | | **P** | **22 54 15.1** | **+0.9** |
| | comp=Z,35nm,1.0s,comp=Z,826nm | | | | | | | |
| COEN | **Coen** | **28.25** | **102** | P | | **P** | **22 54 27.9** | **-0.6** |
| COEN | **Coen** | **28.25** | **102** | P | | **P** | **22 54 29.1** | **+0.6** |
| | comp=Z,29nm,0.8s | | | | | | | |
| BBOO | **Buckleboo** | **30.70** | **143** | P | | **P** | **22 54 49.8** | **-0.2** |
| BBOO | **Buckleboo** | **30.70** | **143** | P | | **P** | **22 54 50.2** | **+0.2** |
| | comp=Z,24nm,0.9s | | | | | | | |
| PHRA | **Phrae** | **30.99** | **332** | P | | **P** | **22 54 52.6** | **0.0** |
| CM31 | **Chiang Mai Arr** | **31.56** | **330** | P | | **P** | **22 54 57.5** | **-0.3** |
| CM31 | | | | IAmb | | IAmb | 22 55 00.2 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| CMAR | **Chiang Mai Arr** | **31.56** | **330** | P | | **P** | **22 54 57.7** | **0.0** |
| CMAR | **Chiang Mai Arr** | **31.56** | **330** | P | | **P** | **22 54 58.5** | **+0.8** |
| | comp=Z,15nm,0.8s,baz=160,slow=8.0,SNR=74 | | | | | | | |
| CMAR | | | | ScP | | **ScP** | **23 01 25.4** | **-0.5** |
| | comp=Z,3.7nm,0.8s,baz=182,slow=3.1,SNR=18 | | | | | | | |
| CMAR | | | | LR | | LR | 23 09 56.4 | |
| | comp=Z,128nm,19.7s,baz=150,slow=40 | | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| CTAO | **Charters Tower** | **32.31** | **113** | P | | **P** | **22 55 04.5** | **+0.2** |
| CTAO | **Charters Tower** | **32.31** | **113** | P | | **P** | **22 55 04.6** | **+0.2** |
| CTAO | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| CTAO | **Charters Tower** | **32.31** | **113** | P | | **P** | **22 55 05.8** | **+1.4** |
| CRAI | **Chiangrai** | **32.45** | **334** | P | | **P** | **22 55 05.8** | **+0.3** |
| HTT | **Hallett** | **32.86** | **141** | P | | **P** | **22 55 10.1** | **+1.0** |
| HTT | **Hallett** | **32.86** | **141** | P | | **P** | **22 55 09.8** | **+0.7** |
| | comp=Z,121nm,1.2s | | | | | | | |
| STKA | **Stephens Creek** | **33.64** | **136** | P | | **P** | **22 55 15.3** | **-0.4** |
| STKA | **Stephens Creek** | **33.64** | **136** | P | | **P** | **22 55 16.6** | **+0.9** |
| | comp=Z,19nm,0.8s,baz=313,slow=8.9,SNR=23 | | | | | | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| KMI | **Kunming** | **36.02** | **341** | ⇓P | | P | **22 55 39.4** | **+2.8** |
| KMI | | | | pP | | pP | 22 55 57.6 | +3.5 |
| KMI | | | | sP | | sP | 22 56 06.1 | +3.5 |
| KMI | | | | PP | | **PP** | **22 57 02.8** | **+2.9** |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| GYA | **Guiyang** | **36.26** | **348** | P | | **P** | **22 55 42.6** | **+4.1** |
| GYA | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| TNCH | **TengChong** | **37.48** | **335** | P | | **P** | **22 55 51.8** | **+2.9** |
| TNCH | | | | pP | | pP | 22 56 08.3 | +1.9 |
| TNCH | | | | PP | | **PnPn** | **22 57 20.6** | **+3.2** |
| TNCH | | | | S | | **S** | **23 01 33.4** | **+0.7** |
| TNCH | | | | sS | | sS | 23 02 06.4 | +4.8 |
| TNCH | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| TNCH | | | | pmax | | pmax | | |
| | comp=Z,84nm,3.9s | | | | | | | |
| TNCH | | | | LR | | LR | | |
| | comp=Z,250nm,5.5s | | | | | | | |
| TNCH | | | | LR | | LR | | |
| | comp=Z,300nm,6.0s | | | | | | | |
| TNCH | | | | LR | | LR | | |
| | comp=Z,220nm,9.2s | | | | | | | |
| PZH | **PanZhiHua** | **37.63** | **341** | P | | **P** | **22 55 53.6** | **+3.5** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,130nm,5.7s | | | | | | | |
| PALK | **Pallekele** | **37.64** | **295** | P | | **P** | **22 55 49.9** | **-0.4** |
| PALK | **Pallekele** | **37.64** | **295** | P | | **P** | **22 55 51.1** | **+0.8** |
| PALK | **Pallekele** | **37.64** | **295** | *i* P | | **P** | **22 55 49.2** | **-1.1** |
| PALK | **Pallekele** | **37.64** | **295** | P | | **P** | **22 55 50.6** | **+0.3** |
| EIDS | **Eidsvold** | **38.10** | **120** | P | | **P** | **22 55 53.8** | **-0.3** |
| JOW | **Kunigami** | **38.11** | **20** | LR | | LR | 23 11 38.4 | |
| | comp=Z,176nm,21.1s,baz=106,slow=36 | | | | | | | |
| IMP | **Imphal** | **39.40** | **329** | *e*P | | **P** | **22 56 04.0** | **-1.0** |
| KOHI | **KOHIMA** | **40.06** | **330** | *e*P | | **P** | **22 56 11.9** | **+1.3** |
| ARMA | **Armidale** | **40.37** | **127** | P | | **P** | **22 56 13.3** | **+0.2** |
| ARMA | | | | IAmb | | IAmb | 22 56 23.4 | |
| | comp=Z,66nm,1.6s | | | | | | | |
| LKP | **Lekhapani** | **40.64** | **334** | *e*P | | **P** | **22 56 14.1** | **-1.0** |
| CAN | **Canberra** | **40.68** | **135** | P | | **P** | **22 56 16.2** | **+0.7** |
| CAN | | | | IAmb | | IAmb | 22 56 24.5 | |
| | comp=Z,46nm,1.2s | | | | | | | |
| CAN | **Canberra** | **40.68** | **135** | P | | **P** | **22 56 16.2** | **+0.7** |
| CAN | | | | pmax | | pmax | | |
| | comp=Z,46nm,1.2s | | | | | | | |
| SHL | **Shillong** | **41.07** | **328** | P | | **P** | **22 56 18.8** | **0.0** |
| SHL | | | | IAmb | | IAmb | 22 56 41.3 | |
| | comp=Z,22nm,0.8s | | | | | | | |
| SHL | **Shillong** | **41.07** | **328** | *e*P | | **P** | **22 56 18.9** | **0.0** |
| SHL | | | | IAmb | | IAmb | 22 56 21.1 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| SHL | **Shillong** | **41.07** | **328** | P | | **P** | **22 56 18.7** | **0.0** |
| SHL | **Shillong** | **41.07** | **328** | P | | **P** | **22 56 18.8** | **0.0** |
| SHL | | | | pmax | | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| NJ2 | **Nanjing** | **41.17** | **5** | *e*P | | **P** | **22 56 23.3** | **+4.0** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| CD2 | **Chengdu** | **41.21** | **346** | P | | **P** | **22 56 20.3** | **+0.5** |
| CD2 | | | | pP | | pP | 22 56 38.3 | +0.7 |
| CD2 | | | | sP | | sP | 22 56 47.6 | +1.6 |
| CD2 | | | | S | | **S** | **23 02 30.3** | **+2.1** |
| CD2 | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.5s | | | | | | | |
| CD2 | | | | pmax | | pmax | | |
| | comp=Z,320nm,5.2s | | | | | | | |
| CD2 | | | | LR | | LR | | |
| | comp=Z,760nm,18.2s | | | | | | | |
| CD2 | | | | LR | | LR | | |
| | comp=Z,1µm,20.8s | | | | | | | |
| CD2 | | | | LR | | LR | | |
| | comp=Z,360nm,14.5s | | | | | | | |
| TRD | **Trivandrum** | **41.52** | **294** | *e*P | | **P** | **22 56 23.4** | **+0.8** |
| KOD | **Kodaikanal** | **41.80** | **297** | *e*P | | **P** | **22 56 24.9** | **-0.3** |
| KOD | | | | IAmb | | IAmb | 22 56 25.8 | |
| | comp=Z,42nm,0.8s | | | | | | | |
| SALM | **Salem** | **41.80** | **299** | *e*P | | **P** | **22 56 24.9** | **+0.1** |
| SALM | | | | IAmb | | IAmb | 22 56 28.1 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| H08S2 | **Diego Garcia H** | **41.80** | **269** | T | | T | 23 40 55.1 | |
| | baz=95,slow=75,SNR=43 | | | | | | | |
| H08S3 | **Diego Garcia H** | **41.81** | **269** | T | | T | 23 40 59.7 | |
| | baz=95,slow=75,SNR=88 | | | | | | | |
| H08S1 | **Diego Carcia H** | **41.82** | **269** | T | | T | 23 41 22.8 | |
| | baz=95,slow=75,SNR=53 | | | | | | | |
| KAAM | **Kaadhehdhoo** | **42.66** | **281** | P | | **P** | **22 56 32.4** | **+0.5** |
| XAN | **Xi'an** | **43.31** | **353** | ⇓P | | P | 22 56 46.8 | +10 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| LYN | **LuoYang** | **43.52** | **357** | *e*P | | **P** | **22 56 42.8** | **+4.4** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,610nm,4.5s | | | | | | | |
| GTK | **Tadong** | **44.23** | **326** | *e*P | | **P** | **22 56 44.2** | **-0.2** |
| HYB | **Hyderabad** | **44.45** | **306** | *e*P | | **P** | **22 56 45.6** | **-0.6** |
| HYB | | | | IVmB_BB | | | 22 56 46.0 | |
| | comp=Z,359nm,2.3s | | | | | | | |
| LSA | **Lhasa** | **44.82** | **330** | P | | **P** | **22 56 50.8** | **+1.4** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| LSA | **Lhasa** | **44.82** | **330** | P | | **P** | **22 56 48.4** | **-1.0** |
| LSA | | | | IAmb | | IAmb | 22 57 16.2 | |
| | comp=Z,10nm,0.6s | | | | | | | |
| LSA | **Lhasa** | **44.82** | **330** | P | | **P** | **22 56 50.6** | **+1.1** |
| LSA | **Lhasa** | **44.82** | **330** | P | | **P** | **22 56 48.4** | **-1.0** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| LZH | **Lanzhou** | **46.16** | **348** | *e*P | | **P** | **22 57 00.3** | **+0.7** |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| NGP | **Nagpur** | **46.22** | **311** | *e*P | | **P** | **22 56 59.1** | **-1.0** |
| KSRS | **Korea Array** | **47.98** | **14** | P | | **P** | **22 57 12.9** | **-0.6** |
| | comp=Z,2.9nm,0.8s,baz=195,slow=6.8,SNR=8.3 | | | | | | | |
| KSRS | | | | ScP | | **ScP** | **23 02 27.8** | **-1.1** |
| | comp=Z,1.8nm,0.9s,baz=193,slow=5.0,SNR=3.4 | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| BHPL | **Bhopal** | **48.68** | **312** | *e*P | | **P** | **22 57 18.2** | **-1.0** |
| BHPL | | | | IAmb | | IAmb | 22 57 19.4 | |
| | comp=Z,24nm,0.8s | | | | | | | |
| POO | **Poona** | **48.83** | **304** | *e*P | | **P** | **22 57 19.5** | **-1.0** |
| JHNI | **Jhansi** | **49.26** | **315** | *e*P | | **P** | **22 57 21.2** | **-2.4** |
| JHNI | | | | IAmb | | IAmb | 22 57 22.1 | |
| | comp=Z,38nm,0.6s | | | | | | | |
| JGF | **Kuroka** | **49.37** | **24** | P | | **P** | **22 57 23.6** | **-0.7** |
| JGF | | | | IAmb | | IAmb | 22 57 27.6 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| BTO | **Baotou** | **49.71** | **355** | *e*P | | **P** | **22 57 29.0** | **+2.2** |
| BTO | | | | pP | | **sP** | **22 57 52.3** | **-1.0** |
| BTO | | | | S | | **S** | **23 04 32.5** | **+2.1** |
| BTO | | | | SS | | **SS** | **23 08 04.8** | **+0.8** |
| BTO | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| BTO | | | | pmax | | pmax | | |
| | comp=Z,380nm,4.0s | | | | | | | |
| BTO | | | | LR | | LR | | |
| | comp=Z,540nm,4.9s | | | | | | | |
| BTO | | | | LR | | LR | | |
| | comp=Z,440nm,8.3s | | | | | | | |
| BTO | | | | LR | | LR | | |
| | comp=Z,500nm,6.8s | | | | | | | |
| HHC | **Hu-ho-hao-te** | **49.84** | **357** | *e*P | | **P** | **22 57 32.4** | **+4.5** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,87nm,4.3s | | | | | | | |
| GTA | **Gaotai** | **50.27** | **345** | *e*P | | **P** | **22 57 33.3** | **+2.1** |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | | |
| MAJO | **Matsushiro** | **50.53** | **25** | P | | **P** | **22 57 32.7** | **-0.4** |
| MAJO | | | | IAmb | | IAmb | 22 57 36.3 | |
| | comp=Z,70nm,1.9s | | | | | | | |
| MAJO | **Matsushiro** | **50.53** | **25** | P | | **P** | **22 57 32.7** | **-0.4** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,70nm,1.9s | | | | | | | |
| MAJO | **Matsushiro** | **50.53** | **25** | P | | **P** | **22 57 34.4** | **+1.4** |
| MJAR | **Matsushiro Arr** | **50.53** | **25** | P | | **P** | **22 57 32.5** | **-0.5** |
| | comp=Z,14nm,0.8s,baz=198,slow=7.4,SNR=26 | | | | | | | |
| MJAR | | | | ScP | | **ScP** | **23 02 38.5** | **-1.3** |
| | comp=Z,3.9nm,1.0s,baz=190,slow=5.6,SNR=6.1 | | | | | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| MJB9 | **Matsu-Tunnel** | **50.53** | **25** | P | | **P** | **22 57 33.8** | **+0.7** |
| MJB9 | | | | IAmb | | IAmb | 22 57 37.6 | |
| | comp=Z,66nm,1.9s | | | | | | | |
| LGTI | **Lohaghat** | **50.77** | **320** | *e*P | | **P** | **22 57 33.8** | **-1.1** |
| LGTI | | | | IAmb | | IAmb | 22 57 34.5 | |
| | comp=Z,21nm,0.7s | | | | | | | |
| DZM | **Mont Dzumac** | **51.20** | **111** | P | | **P** | **22 57 39.0** | **+0.6** |
| DZM | | | | IAmb | | IAmb | 22 58 27.5 | |
| | comp=Z,49nm,1.7s | | | | | | | |
| KUDL | **Kundal** | **52.37** | **316** | *e*P | | **P** | **22 57 44.5** | **-2.4** |
| SMLA | **Simla** | **53.86** | **320** | *e*P | | **P** | **22 57 55.8** | **-2.0** |
| SMLA | | | | IAmb | | IAmb | 22 57 59.2 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| HNLY | **HANLEY** | **53.86** | **322** | *e*P | | **P** | **22 57 58.6** | **+0.1** |
| DHRM | **DHARAMSHALA** | **55.15** | **320** | *e*P | | **P** | **22 58 05.8** | **-1.7** |
| DHRM | | | | IAmb | | IAmb | 22 58 27.7 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| JTM | **Tenmabayashi** | **55.31** | **24** | P | | **P** | **22 58 07.6** | **-0.6** |
| JTM | | | | IAmb | | IAmb | 22 58 11.0 | |
| | comp=Z,23nm,0.8s | | | | | | | |
| USA0B | **Ussuriysk Arra** | **55.36** | **15** | P | | **P** | **22 58 07.9** | **-0.5** |
| USA0B | | | | IAmb | | IAmb | 22 58 28.2 | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| USA0B | **Ussuriysk Arra** | **55.36** | **15** | *e*P | | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ZHN | **Zhinishke** | **61.68** | **331** | *e*P | | **P** | **22 58 51.9** | **-0.8** |
| | baz=330 | | | | | | | |
| ZHN | **Zhinishke** | **61.68** | **331** | *e*P | | **P** | **22 58 51.8** | **-0.8** |
| KPKS | **Kokpek** | **61.78** | **331** | *e*P | | **P** | **22 58 52.5** | **-0.8** |
| | baz=331 | | | | | | | |
| KPKS | **Kokpek** | **61.78** | **331** | *e*P | | **P** | **22 58 52.4** | **-0.8** |
| MSVF | **Nonsavu** | **61.93** | **105** | P | | **P** | **22 58 57.9** | **+3.2** |
| MSWZ | **Moikau Station** | **61.98** | **132** | P | | **P** | **22 58 55.5** | **+0.8** |
| ZSN | **Zaisan** | **62.29** | **338** | *e*P | | **P** | **22 58 56.1** | **-0.4** |
| | comp=Z,16nm,1.2s,baz=338 | | | | | | | |
| ZSN | **Zaisan** | **62.29** | **338** | *e*P | | **P** | **22 58 56.0** | **-0.4** |
| ZSN | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | | |
| TNSS | **Tian-Shan** | **62.32** | **330** | *e*P | | **P** | **22 58 56.0** | **-1.2** |
| | baz=330 | | | | | | | |
| TNSS | **Tian-Shan** | **62.32** | **330** | *e*P | | **P** | **22 58 56.0** | **-1.2** |
| MDOK | **Medeo** | **62.36** | **330** | *e*P | | **P** | **22 58 56.3** | **-0.9** |
| | baz=330 | | | | | | | |
| MDOK | **Medeo** | **62.36** | **330** | *e*P | | **P** | **22 58 56.2** | **-0.9** |
| BOOM | **Boomskoye usch** | **62.43** | **328** | P | | **P** | **22 58 56.8** | **-0.9** |
| BOOM | **Boomskoye usch** | **62.43** | **328** | P | | **P** | **22 58 56.8** | **-0.9** |
| BOOM | | | | pmax | | pmax | | |
| | comp=Z,64nm,1.5s | | | | | | | |
| JLN | **Jalan Bani Buh** | **62.52** | **301** | P | | **P** | **22 58 56.9** | **-1.6** |
| MK31 | **Makanchi Array** | **62.77** | **336** | P | | **P** | **22 58 58.4** | **-1.3** |
| MK31 | **Makanchi Array** | **62.77** | **336** | *ce*P | | **P** | **22 58 58.4** | **-1.3** |
| MKAR | **Makanchi Array** | **62.77** | **336** | P | | **P** | **22 58 58.5** | **-1.2** |
| MKAR | **Makanchi Array** | **62.77** | **336** | P | | **P** | **22 58 58.6** | **-1.1** |
| | comp=Z,4.6nm,0.6s,baz=148,slow=6.9,SNR=48 | | | | | | | |
| MKAR | | | | S | | **S** | **23 07 19.7** | **-3.4** |
| | comp=Z,2.4nm,1.2s,baz=152,slow=13,SNR=4.1 | | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| MAKZ | **Makanchi** | **62.91** | **335** | P | | **P** | **22 58 59.8** | **-0.8** |
| MAKZ | | | | pP | | **pP** | **22 59 16.0** | **-3.3** |
| TDK | **Taldyqorghan** | **63.07** | **332** | *e*P | | **P** | **22 59 01.0** | **-0.8** |
| | comp=Z,11nm,0.6s,baz=332 | | | | | | | |
| TDK | **Taldyqorghan** | **63.07** | **332** | *e*P | | **P** | **22 59 00.9** | **-0.8** |
| TDK | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| WBK | **Wadi Bani Khal** | **63.08** | **301** | P | | **P** | **22 59 00.6** | **-1.6** |
| ARSB | **Arslanbob** | **63.21** | **326** | P | | **P** | **22 59 01.9** | **-1.0** |
| ARSB | **Arslanbob** | **63.21** | **326** | P | | **P** | **22 59 01.9** | **-1.0** |
| ARSB | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| GAR | **Garm** | **63.23** | **322** | P | | **P** | **22 59 01.8** | **-1.2** |
| GAR | | | | lAmb | | lAmb | 22 59 24.3 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| KUU | **Kurty** | **63.24** | **330** | *e*P | | **P** | **22 59 02.1** | **-0.8** |
| | baz=330 | | | | | | | |
| KUU | **Kurty** | **63.24** | **330** | *e*P | | **P** | **22 59 02.1** | **-0.8** |
| DQM | **DQM** | **63.28** | **298** | P | | **P** | **22 59 03.3** | **-0.2** |
| AAK | **Ala-Archa** | **63.29** | **328** | LR | | LR | 23 28 43.4 | |
| | comp=Z,67nm,20.5s,baz=150,slow=38 | | | | | | | |
| AAK | **Ala-Archa** | **63.29** | **328** | *ce*P | | **P** | **22 59 03.2** | **-0.2** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| DGZ | **Jazzator, Alta** | **63.29** | **341** | *i* P | | **P** | **22 59 02.7** | **-0.5** |
| DGZ | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| MHTO | **MHTO** | **63.30** | **299** | P | | **P** | **22 59 02.7** | **-0.9** |
| BTK | **Batken** | **63.61** | **324** | P | | **P** | **22 59 05.1** | **-0.3** |
| BTK | | | | lAmb | | lAmb | 22 59 28.0 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| BTK | **Batken** | **63.61** | **324** | P | | **P** | **22 59 05.1** | **-0.3** |
| BTK | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| JMDO | **Jabal Madar** | **63.72** | **300** | P | | **P** | **22 59 06.3** | **-0.1** |
| CHGR | **Chuyangaron** | **63.72** | **321** | P | | **P** | **22 59 04.2** | **-2.0** |
| CHGR | | | | lAmb | | lAmb | 22 59 43.1 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| CHGR | **Chuyangaron** | **63.72** | **321** | P | | **P** | **22 59 04.2** | **-2.0** |
| CHGR | | | | pmax | | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| SGDS | **Sogindy** | **63.79** | **328** | *e*P | | **P** | **22 59 05.5** | **-1.1** |
| | baz=328 | | | | | | | |
| SGDS | **Sogindy** | **63.79** | **328** | *e*P | | **P** | **22 59 05.5** | **-1.1** |
| SIMJ | **Simiganj** | **63.82** | **321** | P | | **P** | **22 59 04.5** | **-2.4** |
| SMDO | **Samad** | **64.03** | **301** | P | | **P** | **22 59 07.8** | **-0.8** |
| BIDO | **Bidbid** | **64.15** | **302** | P | | **P** | **22 59 08.4** | **-0.8** |
| BSY | **Bisya** | **64.63** | **300** | P | | **P** | **22 59 12.1** | **-0.3** |
| H04N2 | **CROZET ISLANDS** | **64.79** | **223** | T | | T | 00 10 13.0 | |
| | baz=76,slow=75,SNR=25 | | | | | | | |
| H04N1 | **CROZET ISLANDS** | **64.81** | **223** | T | | T | 00 10 08.9 | |
| | baz=76,slow=75,SNR=14 | | | | | | | |
| H04N3 | **CROZET ISLANDS** | **64.81** | **223** | T | | T | 00 10 17.2 | |
| | baz=76,slow=75,SNR=28 | | | | | | | |
| HOQ | **Hoqain** | **64.86** | **301** | P | | **P** | **22 59 13.3** | **-0.6** |
| BTLS | **Baital** | **65.21** | **329** | *e*P | | **P** | **22 59 14.8** | **-1.0** |
| | baz=329 | | | | | | | |
| BTLS | **Baital** | **65.21** | **329** | *e*P | | **P** | **22 59 14.7** | **-1.0** |
| RBK | **Rabkut** | **65.40** | **294** | P | | **P** | **22 59 17.2** | **-0.3** |
| ARQ | **Araqi** | **65.43** | **301** | P | | **P** | **22 59 16.7** | **-0.9** |
| SOHO | **SOHO** | **65.73** | **302** | *i* P | | **P** | **22 59 19.0** | **-0.5** |
| | SNR=6.2 | | | | | | | |
| KKAR | **Karatay Array** | **65.76** | **326** | P | | **P** | **22 59 18.2** | **-1.1** |
| KKAR | **Karatay Array** | **65.76** | **326** | P | | **P** | **22 59 18.2** | **-1.1** |
| DOK | **Doka** | **65.84** | **295** | P | | **P** | **22 59 19.3** | **-1.0** |
| ABPO | **Ambohimpanom** | **65.89** | **253** | P | | **P** | **22 59 21.1** | **+0.3** |
| ABPO | | | | lAmb | | lAmb | 22 59 23.7 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| ABPO | **Ambohimpanom** | **65.89** | **253** | P | | **P** | **22 59 21.2** | **+0.3** |
| ABPO | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| ABPO | **Ambohimpanom** | **65.89** | **253** | P | | **P** | **22 59 22.9** | **+2.0** |
| ABPO | | | | sP | | **sP** | **22 59 46.4** | **-0.1** |
| ABPO | | | | PcP | | **PcP** | **22 59 51.5** | **+0.3** |
| WHFO | **Wadi Hawf** | **65.93** | **294** | P | | **P** | **22 59 19.5** | **-1.4** |
| | SNR=25 | | | | | | | |
| CCD | **Concordia, Ant** | **66.09** | **178** | P | | **P** | **22 59 23.2** | **+1.8** |
| ABTO | **Aybut** | **66.17** | **294** | P | | **P** | **22 59 22.5** | **0.0** |
| VOI | **Vohitsoka** | **66.24** | **250** | P | | **P** | **22 59 23.5** | **+0.6** |
| VOI | | | | lAmb | | lAmb | 22 59 25.8 | |
| | comp=Z,28nm,1.0s | | | | | | | |
| UOSS | **Minazif** | **66.32** | **302** | P | | **P** | **22 59 22.4** | **-0.9** |
| UOSS | | | | lAmb | | lAmb | 22 59 33.0 | |
| | comp=Z,44nm,1.6s | | | | | | | |
| UOSS | **Minazif** | **66.32** | **302** | P | | **P** | **22 59 23.0** | **-0.3** |
| UOSS | **Minazif** | **66.32** | **302** | P | | **P** | **22 59 22.6** | **-0.6** |
| UOSS | **Minazif** | **66.32** | **302** | P | | **P** | **22 59 22.8** | **-0.4** |
| UOSS | | | | pP | | **pP** | **22 59 39.2** | **-2.6** |
| UOSS | | | | PcP | | **PcP** | **22 59 51.9** | **-0.8** |
| HATD | **Hatta, Dubai** | **66.34** | **302** | P | | **P** | **22 59 23.2** | **-0.2** |
| HATD | | | | P | | **P** | **22 59 23.5** | **+0.1** |
| HATD | **Hatta, Dubai** | **66.34** | **302** | P | | **P** | **22 59 23.1** | **-0.2** |
| ASHO | **Ashiyiah** | **66.34** | **302** | *i* P | | **P** | **22 59 24.0** | **+0.5** |
| | SNR=8.3 | | | | | | | |
| ASHO | **Ashiyiah** | **66.34** | **302** | P | | **P** | **22 59 23.0** | **-0.4** |
| | SNR=8.6 | | | | | | | |
| ALNE | **Al Ain** | **66.36** | **301** | *i* P | | **P** | **22 59 23.3** | **-0.3** |
| | SNR=12 | | | | | | | |
| ALNE | **Al Ain** | **66.36** | **301** | P | | **P** | **22 59 22.9** | **-0.6** |
| MDH | **Madha** | **66.38** | **303** | P | | **P** | **22 59 22.1** | **-1.6** |
| MDH | **Madha** | **66.38** | **303** | P | | **P** | **22 59 22.2** | **-1.4** |
| SEM | **Semipalatinsk** | **66.47** | **337** | *e*P | | **P** | **22 59 23.1** | **-0.8** |
| | baz=337 | | | | | | | |
| SEM | **Semipalatinsk** | **66.47** | **337** | *e*P | | **P** | **22 59 23.1** | **-0.8** |
| MSFE | **Esma-Masafi** | **66.52** | **303** | P | | **P** | **22 59 24.9** | **+0.3** |
| FAQ | **Al Faqa, Dubai** | **66.76** | **302** | *i* P | | **P** | **22 59 25.6** | **-0.5** |
| | SNR=23 | | | | | | | |
| ASUD | **Al Ashush, Dub** | **66.93** | **302** | *i* P | | **P** | **22 59 26.6** | **-0.6** |
| | SNR=12 | | | | | | | |
| ASUD | **Al Ashush, Dub** | **66.93** | **302** | P | | **P** | **22 59 27.0** | **-0.2** |
| | SNR=12 | | | | | | | |
| KURBB | **Kurchatov Arra** | **67.32** | **336** | P | | **P** | **22 59 28.0** | **-1.0** |
| | comp=Z,2.0nm,0.6s,baz=153,slow=5.5,SNR=17 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| KURK | **Kurchatov** | **67.36** | **336** | P | | **P** | **22 59 27.6** | **-1.7** |
| KURK | **Kurchatov** | **67.36** | **336** | P | | **P** | **22 59 26.7** | **-2.6** |
| KURK | **Kurchatov** | **67.36** | **336** | *ce*P | | **P** | **22 59 27.5** | **-1.7** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| KURK | **Kurchatov** | **67.36** | **336** | P | | **P** | **22 59 28.2** | **-1.0** |
| MAW | **Mawson** | **67.69** | **199** | P | | **P** | **22 59 31.7** | **+0.6** |
| | comp=Z,4.6nm,0.5s,baz=61,slow=7.0,SNR=15 | | | | | | | |
| | comp=Z,4.6nm,0.5s | | | | | | | |
| ZAA0 | **Zalesovo Array** | **67.77** | **341** | P | | **P** | **22 59 29.7** | **-2.1** |
| ZALV | **Zalesovo Beam** | **67.77** | **341** | P | | **P** | **22 59 29.7** | **-2.1** |
| ZALV | **Zalesovo Beam** | **67.77** | **341** | P | | **P** | **22 59 30.1** | **-1.7** |
| | comp=Z,3.3nm,0.4s,baz=150,slow=5.5,SNR=15 | | | | | | | |
| | comp=Z,3.3nm,0.4s | | | | | | | |
| ZALV | **Zalesovo Beam** | **67.77** | **341** | *i* P | | **P** | **22 59 30.0** | **-1.8** |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | | |
| MZWR | **Madinat Zayed** | **67.84** | **300** | P | | **P** | **22 59 32.9** | **0.0** |
| MZR | **Muzera** | **67.91** | **299** | *i* P | | **P** | **22 59 32.8** | **-0.6** |
| | SNR=14 | | | | | | | |
| MZR | **Muzera** | **67.91** | **299** | P | | **P** | **22 59 33.0** | **-0.4** |
| GHWR | **Ruwais** | **68.77** | **300** | P | | **P** | **22 59 38.4** | **-0.3** |
| JRN | **Qarnain Island** | **69.14** | **301** | P | | **P** | **22 59 40.4** | **-0.6** |
| SLWR | **Sila** | **69.82** | **300** | P | | **P** | **22 59 44.9** | **-0.3** |
| TRNA | **Turayna** | **70.46** | **300** | P | | **P** | **22 59 48.7** | **-0.4** |
| SMRA | **Abu-Samra** | **70.80** | **300** | P | | **P** | **22 59 50.5** | **-0.7** |
| SHMA | **Al-Shehemyia** | **71.06** | **301** | P | | **P** | **22 59 52.3** | **-0.4** |
| SAKB | **Bahrain** | **71.46** | **301** | P | | **P** | **22 59 54.3** | **-0.9** |
| PETK | **Petropavlovsk-** | **71.97** | **26** | P | | **P** | **22 59 57.5** | **-0.2** |
| PETK | **Petropavlovsk-** | **71.97** | **26** | P | | **P** | **22 59 57.6** | **-0.1** |
| | comp=Z,1.3nm,0.5s,baz=206,slow=6.4,SNR=3.8 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| BVAR | **Borovoye Array** | **72.51** | **334** | P | | **P** | **23 00 00.0** | **-0.8** |
| | comp=Z,5.0nm,0.6s,baz=143,slow=8.0,SNR=26 | | | | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| BRVK | **Borovoye** | **72.58** | **334** | P | | **P** | **22 59 60.0** | **-1.3** |
| BRVK | **Borovoye** | **72.58** | **334** | P | | **P** | **23 00 00.0** | **-1.3** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| SBA | **Scott Base** | **73.55** | **170** | P | | **P** | **23 00 07.8** | **+1.2** |
| SBA | | | | lAmb | | lAmb | 23 00 17.5 | |
| | comp=Z,36nm,1.9s | | | | | | | |
| SBA | **Scott Base** | **73.55** | **170** | P | | **P** | **23 00 07.8** | **+1.2** |
| SBA | | | | pmax | | pmax | | |
| | comp=Z,36nm,1.9s | | | | | | | |
| KBD | **Kabd** | **74.92** | **303** | P | | **P** | **23 00 14.6** | **-0.9** |
| RAYN | **Ar Rayn** | **75.02** | **297** | P | | **P** | **23 00 15.1** | **-1.1** |
| RAYN | | | | lAmb | | lAmb | 23 00 16.9 | |
| | comp=Z,30nm,0.9s | | | | | | | |
| RAYN | **Ar Rayn** | **75.02** | **297** | *i* P | | **P** | **23 00 15.3** | **-0.9** |
| | SNR=26 | | | | | | | |
| RAYN | **Ar Rayn** | **75.02** | **297** | P | | **P** | **23 00 15.7** | **-0.5** |
| RAYN | **Ar Rayn** | **75.02** | **297** | P | | **P** | **23 00 15.1** | **-1.1** |
| RAYN | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| ABKAR | **Akbulak array** | **75.31** | **326** | P | | **P** | **23 00 16.1** | **-1.2** |
| ABKAR | **Akbulak array** | **75.31** | **326** | P | | **P** | **23 00 16.1** | **-1.2** |
| ABKAR | | | | lAmb | | lAmb | 23 00 22.1 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| KIBK | **Kibwezi** | **76.50** | **270** | P | | **P** | **23 00 25.7** | **+0.8** |
| KIBK | | | | lAmb | | lAmb | 23 00 27.5 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| SEY | **Seymchan** | **77.46** | **17** | *ce*P | | **P** | **23 00 29.1** | **-0.1** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | | |
| KMBO | **Kilima Mbogo** | **77.47** | **271** | P | | **P** | **23 00 30.8** | **+0.2** |
| KMBO | **Kilima Mbogo** | **77.47** | **271** | *i* P | | **P** | **23 00 31.7** | **+1.1** |
| | SNR=7.8 | | | | | | | |
| KMBO | **Kilima Mbogo** | **77.47** | **271** | P | | **P** | **23 00 31.3** | **+0.7** |
| | comp=Z,6.9nm,0.8s,baz=71,slow=7.9,SNR=11 | | | | | | | |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| SVE | **Sverdlovsk** | **79.27** | **333** | *e*P | | **P** | **23 00 38.9** | **-0.4** |
| POGA | **Pongola** | **79.70** | **244** | P | | **P** | **23 00 43.2** | **+0.9** |
| ARU | **Arti** | **79.99** | **332** | *c i* P | | **P** | **23 00 41.1** | **-2.1** |
| ARU | | | | | | | 23 03 40.0 | |
| ARU | | | | S | | **S** | **23 10 39.6** | **-1.6** |
| ARU | | | | SS | | **SS** | **23 15 47.5** | **-5.3** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,19nm,2.8s | | | | | | | |
| LODK | **Lodwar** | **80.08** | **275** | P | | **P** | **23 00 44.9** | **+0.2** |
| QSPA | **South Pole Qui** | **80.84** | **180** | P | | **P** | **23 00 48.3** | **+0.5** |
| QSPA | | | | lAmb | | lAmb | 23 00 50.2 | |
| | comp=Z,37nm,1.1s | | | | | | | |
| QSPA | **South Pole Qui** | **80.84** | **180** | P | | **P** | **23 00 48.7** | **+0.9** |
| | comp=Z,27nm,1.0s,baz=285,slow=1.4,SNR=18 | | | | | | | |
| QSPA | | | | LR | | LR | 23 35 05.9 | |
| | comp=Z,125nm,20.4s,baz=284,slow=34 | | | | | | | |
| | comp=Z,27nm,1.0s | | | | | | | |
| KARS | **Kars** | **82.30** | **313** | P | | **P** | **23 00 56.8** | **+0.7** |
| KARS | **Kars** | **82.30** | **313** | P | | **P** | **23 00 56.8** | **+0.7** |
| KARS | | | | pmax | | pmax | | |
| | comp=Z,109nm,0.9s | | | | | | | |
| GURO | **Guroymak-BITLI** | **82.41** | **311** | P | | **P** | **23 00 57.2** | **+0.5** |
| GURO | | | | lAmb | | lAmb | 23 00 58.6 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| NCK | **Nalchik** | **82.89** | **316** | *i* P | | **P** | **23 00 59.1** | **+0.3** |
| NCK | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| KBZ | **Khabaz** | **83.44** | **316** | P | | **P** | **23 01 01.4** | **-0.2** |
| | comp=Z,8.7nm,0.9s,baz=95,slow=3.9,SNR=19 | | | | | | | |
| | comp=Z,8.7nm,0.9s | | | | | | | |
| KBZ | **Khabaz** | **83.44** | **316** | *ce*P | | **P** | **23 01 02.2** | **+0.6** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| SHA1 | **Shidzhatmaz** | **83.61** | **316** | *ce*P | | **P** | **23 01 03.4** | **+0.6** |
| KIV | **Kislovodsk** | **83.66** | **316** | P | | **P** | **23 01 02.1** | **-0.8** |
| KIV | **Kislovodsk** | **83.66** | **316** | *e*P | | **P** | **23 01 02.7** | **-0.2** |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| BELG | **Belogornoye** | **83.66** | **325** | *i* P | | **P** | **23 01 01.8** | **-0.7** |
| BELG | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| GRHM | **Grahamstown, E** | **83.68** | **237** | P | | **P** | **23 01 04.3** | **+1.0** |
| MBAR | **Mbarara** | **83.98** | **270** | P | | **P** | **23 01 05.5** | **+0.2** |
| MBAR | **Mbarara** | **83.98** | **270** | *i* P | | **P** | **23 01 05.5** | **+0.2** |
| MBAR | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| LSZ | **Lusaka** | **84.33** | **255** | P | | **P** | **23 01 07.4** | **+0.4** |
| LSZ | **Lusaka** | **84.33** | **255** | P | | **P** | **23 01 07.4** | **+0.4** |
| LSZ | | | | pmax | | pmax | | |
| | comp=Z,36nm,0.7s | | | | | | | |
| SOE | **Somerset East** | **84.43** | **238** | P | | **P** | **23 01 07.8** | **+0.7** |
| BILL | **Bilibino** | **85.15** | **17** | *e*P | | **P** | **23 01 09.8** | **0.0** |
| BILL | | | | *e* | | | 23 04 28.0 | |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| BOSA | **Boshof** | **85.23** | **242** | P | | **P** | **23 01 11.7** | **+0.4** |
| BOSA | | | | lAmb | | lAmb | 23 01 13.9 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| BOSA | **Boshof** | **85.23** | **242** | P | | **P** | **23 01 12.1** | **+0.8** |
| | comp=Z,21nm,0.9s,baz=93,slow=4.2,SNR=23 | | | | | | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| VSLR | **Vesyoloye** | **85.34** | **315** | *i* P | | **P** | **23 01 10.3** | **-1.0** |
| VSLR | | | | pmax | | pmax | | |
| | comp=Z,65nm,0.9s | | | | | | | |
| KIRV | **Kirov** | **85.34** | **331** | *ce*P | | **P** | **23 01 10.0** | **-0.8** |
| LBTB | **Lobatse** | **85.42** | **246** | P | | **P** | **23 01 12.5** | **+0.3** |
| LBTB | | | | lAmb | | lAmb | 23 01 15.0 | |
| | comp=Z,23nm,1.0s | | | | | | | |
| LBTB | **Lobatse** | **85.42** | **246** | P | | **P** | **23 01 12.5** | **+0.3** |
| LBTB | | | | pmax | | pmax | | |
| | comp=Z,23nm,1.0s | | | | | | | |
| GHAJ | **Ghor Haditha** | **85.58** | **303** | P | | **P** | **23 01 13.3** | **+0.6** |
| SOC | **Sochi** | **85.59** | **315** | *e*P | | **P** | **23 01 11.7** | **-0.8** |
| SOC | | | | *e*S | | **SKSac** | **23 11 32.4** | **+0.9** |
| SOC | | | | pmax | | pmax | | |
| | comp=Z,22nm,0.7s | | | | | | | |
| GAZ | **Gaziantep** | **85.69** | **309** | P | | **P** | **23 01 13.4** | **+0.1** |
| GAZ | | | | lAmb | | lAmb | 23 01 15.3 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| MMAI | **Mount Meron Ar** | **86.11** | **304** | P | | **P** | **23 01 16.6** | **+1.1** |
| | comp=Z,8.3nm,0.7s,baz=101,slow=6.9,SNR=22 | | | | | | | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| VRH | **Novokhopyorsk** | **86.64** | **323** | *e*P | | **P** | **23 01 15.2** | **-2.3** |
| VRH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| BNN | **Bunyan** | **87.15** | **310** | P | | **P** | **23 01 20.6** | **+0.2** |
| VORD | **Divnogorie** | **88.03** | **322** | *e*P | | **P** | **23 01 22.2** | **-1.9** |
| VORD | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.5s | | | | | | | |
| TROLL | **Troll, Antarti** | **88.03** | **197** | ⇑P | | **P** | **23 01 25.6** | **+1.5** |
| | comp=Z,577nm,0.9s | | | | | | | |
| VSR | **Storozhevoye** | **88.18** | **322** | *e*P | | **P** | **23 01 23.7** | **-1.2** |
| VSR | | | | pmax | | pmax | | |
| | comp=Z,50nm,0.7s | | | | | | | |
| CSS | **Mathiatis** | **88.23** | **306** | P | | **P** | **23 01 25.5** | **0.0** |
| CSS | **Mathiatis** | **88.23** | **306** | P | | **P** | **23 01 26.2** | **+0.7** |
| | comp=Z,43nm,1.0s | | | | | | | |
| VORR | **Voronezh** | **88.29** | **323** | *e*P | | **P** | **23 01 25.0** | **-0.3** |
| VORR | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.4s | | | | | | | |
| LPSR | **Galich'ya Gora** | **88.72** | **324** | *e*P | | **P** | **23 01 25.4** | **-2.0** |
| LPSR | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| BR131 | **Keskin Array S** | **89.02** | **310** | P | | **P** | **23 01 28.7** | **-0.6** |
| BR131 | **Keskin Array S** | **89.02** | **310** | *i* P | | **P** | **23 01 29.1** | **-0.2** |
| BRTR | **Keskin Array B** | **89.02** | **310** | P | | **P** | **23 01 28.5** | **-0.8** |
| BRTR | **Keskin Array B** | **89.02** | **310** | P | | **P** | **23 01 28.9** | **-0.5** |
| | comp=Z,13nm,0.8s,baz=127,slow=5.4,SNR=82 | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| BR105 | **Keskin Array S** | **89.03** | **310** | P | | **P** | **23 01 29.3** | **-0.1** |
| | comp=Z,22nm,0.9s,comp=Z,148nm | | | | | | | |
| ANTO | **Ankara** | **89.68** | **310** | P | | **P** | **23 01 31.5** | **-0.9** |
| ANTO | | | | lAmb | | lAmb | 23 01 33.5 | |
| | comp=Z,10nm,0.9s | | | | | | | |
| ANTO | **Ankara** | **89.68** | **310** | P | | **P** | **23 01 31.5** | **-0.9** |
| ANTO | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| ANTO | **Ankara** | **89.68** | **310** | P | | **P** | **23 01 33.0** | **+0.7** |
| SNAA | **Sanae** | **89.69** | **196** | P | | **P** | **23 01 32.8** | **+1.0** |
| SNAA | **Sanae** | **89.69** | **196** | ⇑P | | **P** | **23 01 33.8** | **+2.0** |
| | comp=Z,173nm,0.6s | | | | | | | |
| SNAA | **Sanae** | **89.69** | **196** | P | | **P** | **23 01 33.1** | **+1.3** |
| | comp=Z,13nm,0.8s,baz=224,slow=3.7,SNR=32 | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| SNAA | **Sanae** | **89.69** | **196** | *ce*P | | **P** | **23 01 33.8** | **+2.0** |
| SNAA | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| SIM | **Simferopol'** | **89.83** | **316** | *e*P | | **P** | **23 01 32.0** | **-0.8** |
| SIM | | | | pmax | | pmax | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| OBN | **Obninsk** | **90.75** | **326** | *e*P | | **P** | **23 01 36.4** | **-0.4** |
| OBN | | | | *e* | | | 23 05 13.1 | |
| OBN | | | | *e*PPP | | PPP | 23 07 10.2 | |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| VNA2 | **Neumayer--Watz** | **91.34** | **196** | ⇑P | | **P** | **23 01 41.0** | **+1.6** |
| | comp=Z,11nm,0.7s,baz=143,slow=3.1 | | | | | | | |
| BELA | **Belgrano 2** | **91.44** | **186** | P | | **P** | **23 01 40.3** | **+0.6** |
| BELA | | | | lAmb | | lAmb | 23 01 41.9 | |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| VNA1 | **Neumayer--Stat** | **91.73** | **196** | ⇑P | | **P** | **23 01 42.7** | **+1.5** |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| VNA3 | **Neumayer Olymp** | **91.77** | **195** | ⇑P | | **P** | **23 01 42.0** | **+0.7** |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| AKASG | **Malin Array Be** | **94.18** | **321** | P | | **P** | **23 01 51.9** | **-0.9** |
| | comp=Z,4.6nm,0.8s,baz=86,slow=4.4,SNR=8.8 | | | | | | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| AKBB | **Malin Array Si** | **94.18** | **321** | *ce*P | | **P** | **23 01 50.5** | **-2.3** |
| AKBB | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| KIEV | **Kiev** | **94.19** | **321** | P | | **P** | **23 01 51.0** | **-1.8** |
| KIEV | | | | lAmb | | lAmb | 23 01 54.5 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| KIEV | **Kiev** | **94.19** | **321** | P | | **P** | **23 01 51.5** | **-1.3** |
| KIEV | **Kiev** | **94.19** | **321** | P | | **P** | **23 01 51.0** | **-1.8** |
| KIEV | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| MNK | **Minsk** | **95.56** | **324** | *i* P | | **P** | **23 01 56.5** | **-2.5** |
| MNK | | | | *i* *PP | | **pP** | **23 02 18.2** | **-0.4** |
| MNK | | | | *i* PPP | | PPP | 23 07 51.4 | |
| MNK | | | | *i* S | | **SKSac** | **23 12 24.9** | **-3.6** |
| MNK | | | | *i* *SS | | **S** | **23 13 04.2** | **-5.5** |
| MNK | | | | *i* SS | | **SS** | **23 19 38.8** | **-0.9** |
| MNK | | | | *i* SSS | | SSS | 23 23 22.8 | |
| MNK | | | | pmax | | pmax | | |
| | comp=N,10.0nm,1.0s | | | | | | | |
| MNK | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| MNK | | | | pmax | | pmax | | |
| | comp=E,9.0nm,1.0s | | | | | | | |
| BUR08 | **Bucovina Ar. S** | **96.38** | **317** | P | | **P** | **23 02 02.5** | **-0.6** |
| FINES | **FINESS Array B** | **97.33** | **331** | P | | **P** | **23 02 06.5** | **-0.3** |
| | comp=E,3.0nm,0.9s,baz=106,slow=6.3,SNR=4.3 | | | | | | | |
| | comp=E,3.0nm,0.9s | | | | | | | |
| CLL | **Collm** | **104.43** | **321** | *e*PP | | **PKiKP** | **23 06 59.0** | **+4.3** |
| TORD | **Torodi Ar. Bea** | **114.35** | **280** | PKP | | PKPdf | 23 07 13.8 | -0.5 |
| | comp=E,1.0nm,0.7s,baz=50,slow=2.2,SNR=8.3 | | | | | | | |
| ESDC | **Sonseca Array** | **117.81** | **310** | PKP | | **PKPdf** | **23 07 19.8** | **-0.6** |
| | comp=E,0.6nm,0.6s,baz=24,slow=3.3,SNR=7.7 | | | | | | | |
| ESDC | | | | PKKPbc | | **PKKPab** | **23 17 43.9** | **-0.6** |
| | comp=E,0.9nm,1.2s,baz=272,slow=3.8,SNR=4.8 | | | | | | | |
| DBIC | **Dimbokro** | **120.17** | **272** | PKP | | **PKPdf** | **23 07 25.2** | **-0.4** |
| | comp=E,3.5nm,0.7s,baz=157,slow=4.0,SNR=4.5 | | | | | | | |
| NVAR | **Mina Array Bea** | **124.34** | **49** | PKP | | **PKiKP** | **23 07 34.2** | **+0.6** |
| | comp=E,0.7nm,0.6s,baz=260,slow=2.3,SNR=5.9 | | | | | | | |
| SCHQ | **Schefferville** | **134.43** | **1** | PKP | | **PKiKP** | **23 07 53.0** | **-0.1** |
| | comp=E,2.6nm,0.8s,baz=252,slow=2.7,SNR=3.8 | | | | | | | |
| TXAR | **Lajitas Array** | **138.83** | **55** | PKhKP | | PKPpre | 23 07 53.2 | |
| | comp=E,0.4nm,0.6s,baz=282,slow=2.2,SNR=4.4 | | | | | | | |
| CPUP | **Villa Florida** | **143.89** | **192** | | | **PKPdf** | **23 08 09.1** | **-0.6** |
| CPUP | **Villa Florida** | **143.89** | **192** | PKP | | **PKPdf** | **23 08 09.0** | **-0.8**

comp=Z,529nm,1.4s
**SBA Scott Base 17.23 171** Pn **Pn** **22 53 07.5 -4.1**
**SBA Scott Base 17.23 171** P **Pn** **22 53 07.5 -4.1**
SBA pmax pmax
comp=Z,73nm,1.1s
**DCZ Deep Cove 17.42 31** **Pn** **22 53 15.0 +0.9**
**MLZ Mavora Lakes 17.76 33** **Pn** **22 53 19.3 +0.8**
MLZ IAmb IAmb 22 53 22.7
comp=Z,940nm,1.4s
**WKZ Wanaka 18.50 34** P **Pn** **22 53 28.8 +1.2**
WKZ IAmb IAmb 22 53 33.5
comp=Z,690nm,1.4s
**AUTAR Taroona High S 18.74 344** P **P** **22 53 31.2 +1.2**
**ODZ Otahua Downs 18.77 38** P **Pn** **22 53 31.7 +1.0**
ODZ IAmb IAmb 22 53 34.9
comp=Z,434nm,1.2s
**TAU Tasmania Unive 18.78 344** P **P** **22 53 30.6 +0.2**
**TAU Tasmania Unive 18.78 344** P **P** **22 53 29.7 -0.7**
TAU IAmb IAmb 22 53 34.0
comp=Z,736nm,1.6s
**TAU Tasmania Unive 18.78 344** P **P** **22 53 29.7 -0.7**
TAU pmax pmax
comp=Z,736nm,1.6s
**JCZ Jackson Bay 19.14 33** P **Pn** **22 53 36.8 +1.5**
**LBZ Lake Benmore 19.23 36** P **P** **22 53 36.4 +0.9**
LBZ IAmb IAmb 22 53 39.9
comp=Z,404nm,1.4s
**MOO Moorlands 19.26 344** P **P** **22 53 36.7 +1.0**
**MOO Moorlands 19.26 344** P **P** **22 53 36.4 +0.7**
comp=Z,0.0nmcomp=Z,6µmcomp=Z,605nm,1.0s
**CASY Casey 19.74 236** P **P** **22 53 39.7 -1.1**
CASY IAmb IAmb 22 53 48.5
comp=Z,290nm,1.6s
**FOZ Fox Glacier 19.92 35** P **P** **22 53 43.8 +0.9**
FOZ IAmb IAmb 22 53 48.3
comp=Z,539nm,1.4s
**RPZ Rata Peaks 20.10 37** P **P** **22 53 46.0 +1.1**
RPZ IAmb IAmb 22 53 51.1
comp=Z,451nm,1.3s
**RPZ Rata Peaks 20.10 37** P Pn 22 53 47.5 +0.8
comp=Z,165nm,1.0s,baz=209,slow=10,SNR=22
RPZ LR LR 23 00 29.7
comp=Z,5µm,18.1s,baz=186,slow=34
comp=Z,165nm,1.0s
**CORO Coronation Par 20.23 344** P **P** **22 53 47.3 +1.0**
**GLAD Gladstone 20.59 346** P **P** **22 53 51.5 +1.3**
**MQZ McQueen's Vall 20.59 40** P **P** **22 53 50.8 +0.6**
MQZ IAmb IAmb 22 53 56.7
comp=Z,429nm,1.5s
**OXZ Oxford 20.75 39** P **P** **22 53 53.4 +1.5**
OXZ IAmb IAmb 22 54 00.3
comp=Z,427nm,1.7s
OXZ IAMs_20 IAMs_20 23 01 31.0
comp=Z,7µm,18.0s
**INZ Inchbonnie 21.12 37** P **P** **22 53 54.7 -1.3**
**LTZ Lake Taylor 21.31 38** P **P** **22 53 58.4 +0.3**
LTZ IAmb IAmb 22 54 14.1
comp=Z,273nm,1.5s
**GVZ Greta Valley S 21.38 40** P **P** **22 53 59.8 +1.1**
GVZ IAmb IAmb 22 54 10.1
comp=Z,514nm,1.8s
**KHZ Kahutara 22.04 40** P **P** **22 54 07.0 +1.3**
KHZ IAmb IAmb 22 54 10.8
comp=Z,364nm,1.2s
**THZ Tophouse 22.44 38** IAMs_20 IAMs_20 23 01 40.6
comp=Z,8µm,20.0s
**TUWZ Tuamarina 23.06 40** P **P** **22 54 17.5 +0.9**
**NNZ Nelson 23.08 39** P **P** **22 54 17.9 +1.2**
NNZ IAMs_20 IAMs_20 23 02 18.7
comp=Z,7µm,18.0s
**QRZ Quartz Range 23.18 37** IAMs_20 IAMs_20 23 01 46.5
comp=Z,7µm,21.0s
**SNZO South Karori 23.41 41** IAMs_20 IAMs_20 23 02 37.5
comp=Z,6µm,19.0s
**AUSSC Sale College, 23.55 345** P **P** **22 54 22.3 +0.8**
**GEXS Deakin Univers 23.85 340** P **P** **22 54 25.4 +1.0**
**TOO Toolangi 24.28 343** P **P** **22 54 29.6 +1.1**
**TOO Toolangi 24.28 343** P **P** **22 54 27.9 -0.6**
TOO IAmb IAmb 22 54 30.5
comp=Z,228nm,1.0s
**TOO Toolangi 24.28 343** P **P** **22 54 28.5 -0.1**
comp=Z,244nm,1.0s
**TOO Toolangi 24.28 343** P **P** **22 54 27.9 -0.6**
TOO pmax pmax
comp=Z,228nm,1.0s
TOO MLR MLR
comp=Z,2µm,18.0s
**AUHPC Hawkesdale P12 24.29 336** P **P** **22 54 29.4 +0.8**
**MILA Mila 24.36 350** P **P** **22 54 29.5 +0.2**
**MILA Mila 24.36 350** P **P** **22 54 29.6 +0.2**
comp=Z,284nm,1.6s
**BFZ Birch Farm 24.47 43** P **P** **22 54 32.0 +1.8**
**BFZ Birch Farm 24.47 43** IAMs_20 IAMs_20 23 03 47.8
comp=Z,7µm,18.0s
**BRAT Ballarat 24.54 340** P **P** **22 54 31.6 +0.7**
**ARPS Mount Arapiles 25.68 336** P **P** **22 54 41.9 +0.7**
**ARPS Mount Arapiles 25.68 336** P **P** **22 54 41.0 -0.2**
comp=Z,277nm,1.0s
**BKZ Black Stump Fm 25.92 42** P **P** **22 54 45.6 +2.2**
**BKZ Black Stump Fm 25.92 42** IAMs_20 IAMs_20 23 05 07.1
comp=Z,5µm,18.0s
**HIZ Hauiti 26.01 39** IAMs_20 IAMs_20 23 03 37.2
comp=Z,6µm,19.0s
**CNB Canberra Magne 26.07 351** P **P** **22 54 45.9 +1.1**
**CNB Canberra Magne 26.07 351** P **P** **22 54 45.3 +0.5**
comp=Z,211nm,1.1s
**CAN Canberra 26.10 350** P **P** **22 54 45.9 +0.9**
**CAN Canberra 26.10 350** P **P** **22 54 44.6 -0.4**
CAN IAmb IAmb 22 54 48.6
comp=Z,123nm,1.1s
**CAN Canberra 26.10 350** P **P** **22 54 45.4 +0.3**
comp=Z,131nm,1.2s
**CAN Canberra 26.10 350** P **P** **22 54 44.7 -0.4**
CAN pmax pmax
comp=Z,123nm,1.1s
CAN MLR MLR
comp=Z,3µm,20.0s
**RTZ Ruatahuna 26.58 42** IAMs_20 IAMs_20 23 05 38.6
comp=Z,6µm,18.0s
**WOLH Wollongong Har 26.87 354** P **P** **22 54 53.2 +1.2**
**TOZ Tahuroa Road 26.93 39** IAMs_20 IAMs_20 23 03 53.5
comp=Z,6µm,21.0s
**URZ Urewera 26.95 42** P **P** **22 54 55.3 +2.7**
comp=Z,87nm,1.0s,baz=340,slow=6.9,SNR=11
URZ LR LR 23 06 08.5
comp=Z,3µm,18.2s,baz=293,slow=38
comp=Z,87nm,1.0s
**YNG Young 27.16 349** P **P** **22 54 55.4 +0.8**
**YNG Young 27.16 349** P **P** **22 54 55.1 +0.5**
comp=Z,707nm,1.1s
**RIV Riverview 27.43 354** P **P** **22 54 57.6 +0.6**
**RIV Riverview 27.43 354** P **P** **22 54 52.6 -4.4**
**SYDH Sydney Hard Ro 27.52 353** P **P** **22 54 59.1 +1.3**
**QSPA South Pole Qui 28.92 180** P **P** **22 55 10.1 -0.2**
**QSPA South Pole Qui 28.92 180** P **P** **22 55 11.4 +1.2**
comp=Z,9.6nm,1.0s,baz=350,slow=7.4,SNR=15
QSPA LR LR 23 07 03.0
comp=Z,3µm,18.7s,baz=16,slow=37
comp=Z,9.6nm,1.0s
**CMSA Cobar Meteorol 30.19 345** P **P** **22 55 21.8 +0.2**
**CMSA Cobar Meteorol 30.19 345** P **P** **22 55 21.7 +0.2**
comp=Z,140nm,1.4s
**WHYH Whyalla 30.20 331** P **P** **22 55 22.0 +0.4**
**STKA Stephens Creek 30.48 338** P **P** **22 55 24.1 0.0**
STKA IAmb IAmb 22 55 26.0
comp=Z,24nm,1.0s
**STKA Stephens Creek 30.48 338** P **P** **22 55 25.2 +1.0**
comp=Z,30nm,1.3s
**STKA Stephens Creek 30.48 338** P **P** **22 55 24.6 +0.4**
comp=Z,75nm,0.9s,baz=162,slow=10.0,SNR=32
STKA LR LR 23 04 53.8
comp=Z,3µm,21.8s,baz=160,slow=31
comp=Z,75nm,0.9s
**STKA Stephens Creek 30.48 338** P **P** **22 55 24.1 0.0**
STKA pmax pmax
comp=Z,24nm,1.0s
**BBOO Buckleboo 30.78 329** P **P** **22 55 27.1 +0.3**
**BBOO Buckleboo 30.78 329** P **P** **22 55 26.0 -0.8**
**BBOO Buckleboo 30.78 329** P **P** **22 55 27.0 +0.2**
comp=Z,201nm,1.0s
**ARMA Armidale 30.81 355** P **P** **22 55 28.3 +1.1**
**ARMA Armidale 30.81 355** P **P** **22 55 27.2 0.0**
ARMA IAmb IAmb 22 55 29.2
comp=Z,69nm,1.1s
ARMA IAMs_20 IAMs_20 23 04 38.2
comp=Z,4µm,19.0s

**ARMA Armidale 30.81 355** P **P** **22 55 27.8 +0.6**
comp=Z,88nm,1.1s
**LCRK Leigh Creek 32.54 333** P **P** **22 55 42.9 +0.7**
**GC1S Gold Coast 1 S 33.01 359** P **P** **22 55 47.8 +1.5**
**MULG Mulgathing 33.70 327** P **P** **22 55 53.0 +0.6**
**INKA Innaminka 34.67 338** P **P** **22 56 02.1 +1.3**
**RMQ Roma 34.88 351** P **P** **22 56 03.3 +0.6**
**RMQ Roma 34.88 351** P **P** **22 56 04.1 +1.5**
comp=Z,59nm,1.3s
**FORT Forrest 35.00 318** P **P** **22 56 03.9 +0.4**
comp=Z,139nm,1.2s
**QLP Quilpie 35.26 344** P **P** **22 56 06.9 +1.0**
**QLP Quilpie 35.26 344** P **P** **22 56 06.7 +0.8**
comp=Z,564nm,1.2s
**EIDS Eidsvold 35.86 355** P **P** **22 56 11.4 +0.4**
**EIDS Eidsvold 35.86 355** P **P** **22 56 10.6 -0.4**
EIDS IAmb IAmb 22 56 12.7
comp=Z,144nm,1.2s
**EIDS Eidsvold 35.86 355** P **P** **22 56 11.0 0.0**
comp=Z,105nm,1.5s
**MAW Mawson 36.59 220** P **P** **22 56 17.2 +0.3**
comp=Z,11nm,1.0s,baz=127,slow=10.0,SNR=18
MAW LR LR 23 11 22.1
comp=Z,4µm,18.1s,baz=112,slow=36
comp=Z,11nm,1.0s
**H01W1 Cape Leeuwin H 36.66 297** T T 23 35 03.6
baz=147,slow=76,SNR=465
**H01W2 Cape Leeuwin H 36.67 297** T T 23 35 03.3
baz=147,slow=76,SNR=545
**H01W3 Cape Leeuwin H 36.68 297** T T 23 35 03.8
baz=147,slow=76,SNR=442
**RAO Raoul Island 36.83 43** LR LR 23 09 59.0
comp=Z,3µm,19.0s,baz=193,slow=34
**NWAO Narrogin (SRO) 37.06 303** LR LR 23 08 00.7
comp=Z,3µm,19.6s,baz=140,slow=31
**GD1S Gladstone Soft 37.37 355** P **P** **22 56 25.0 +1.1**
**AUHAR St Anne's Scho 37.47 301** P **P** **22 56 25.7 +1.0**
**RK1H Rockhampton Ha 37.85 354** P **P** **22 56 28.9 +0.9**
**BLDU Ballidu 39.30 304** P **P** **22 56 39.9 -0.2**
**PINNC Pines Island, 39.58 19** P **P** **22 56 44.0 +1.5**
**PINNC Pines Island, 39.58 19** P **P** **22 56 42.6 +0.1**
PINNC IAmb IAmb 22 56 44.3
comp=Z,93nm,1.2s
**NOUC Port Laguerre 39.91 17** P **P** **22 56 46.3 +1.1**
**DZM Mont Dzumac 39.96 18** P **P** **22 56 47.0 +1.2**
**DZM Mont Dzumac 39.96 18** *e*P **P** **22 56 44.4 -1.4**
comp=Z,319nm,1.2s
DZM *e*S **S** **23 02 47.8 -3.1**
comp=Z,713nm,27.5s
DZM *e*LR LR 23 07 45.3
comp=Z,6µm,25.8s
**DZM Mont Dzumac 39.96 18** P **P** **22 56 46.0 +0.2**
DZM IAmb IAmb 22 56 48.2
comp=Z,176nm,1.2s
DZM IAMs_20 IAMs_20 23 09 33.7
comp=Z,3µm,19.0s
**DZM Mont Dzumac 39.96 18** LR LR 23 10 13.7
comp=Z,2µm,19.6s,baz=208,slow=32
**YATNC Mamie plateau, 40.03 18** P **P** **22 56 47.9 +1.6**
**AS01 Alice Springs 40.05 330** P **P** **22 56 46.9 +0.4**
**ASAR Alice Springs 40.06 330** P **P** **22 56 45.5 -1.1**
**ASAR Alice Springs 40.06 330** P **P** **22 56 46.0 -0.5**
comp=Z,55nm,0.9s,baz=165,slow=8.7,SNR=78
ASAR PcP **PcP** **22 58 50.5 -0.8**
comp=Z,10nm,1.0s,baz=157,slow=4.0,SNR=4.5
ASAR LR LR 23 11 48.1
comp=Z,221nm,21.3s,baz=157,slow=34
comp=Z,55nm,0.9s
**AS31 Alice Springs 40.06 330** P **P** **22 56 45.9 -0.7**
**WRKA Warakurna 40.28 322** P **P** **22 56 48.3 -0.1**
**BELA Belgrano 2 41.09 177** P **P** **22 56 54.9 +0.4**
**KOUNC Koumac, New Ca 41.17 14** P **P** **22 56 56.8 +1.1**
**KOUNC Koumac, New Ca 41.17 14** P **P** **22 56 55.8 +0.1**
**LIFNC LIFOU 41.35 18** P **P** **22 56 58.5 +1.4**
**LIFNC LIFOU 41.35 18** P **P** **22 56 56.6 -0.6**
**CTA Charters Tower 41.44 348** LR LR 23 11 37.3
comp=Z,183nm,21.9s,baz=179,slow=33
**CTAO Charters Tower 41.44 348** P **P** **22 56 58.6 +0.7**
**CTAO Charters Tower 41.44 348** P **P** **22 56 57.7 -0.2**
**CTAO Charters Tower 41.44 348** IAMs_20 IAMs_20 23 11 03.2
comp=Z,3µm,20.0s
**CTAO Charters Tower 41.44 348** P **P** **22 56 57.7 -0.2**
CTAO pmax pmax
comp=Z,218nm,1.2s
CTAO MLR MLR
comp=Z,3µm,20.0s
**AUAYR Ayr State High 41.84 350** P **P** **22 57 02.3 +1.1**
**QIS Mount Isa 41.89 339** P **P** **22 57 01.6 0.0**
**TV1H Townsville Har 42.21 349** P **P** **22 57 04.9 +0.7**
**ELIB Princess Elisa 42.97 200** *d*P **P** **22 57 10.6 +0.6**
comp=Z,8.5nm,1.0s
ELIB *d*PP **PP** **22 58 52.6 +3.3**
**WR0 Warramunga Arr 43.48 332** P **P** **22 57 12.1 -2.4**
WR0 IAmb IAmb 22 57 14.8
comp=Z,166nm,1.2s
**WB2 Warramunga Arr 43.54 332** P **P** **22 57 13.2 -1.9**
WB2 IAmb IAmb 22 57 15.2
comp=Z,181nm,1.2s
**WRA Warramunga Arr 43.54 332** P **P** **22 57 13.0 -2.0**
**WRA Warramunga Arr 43.54 332** P **P** **22 57 13.8 -1.2**
comp=Z,63nm,1.0s,baz=166,slow=7.1,SNR=66
WRA PcP **PP** **22 59 00.1 +3.8**
comp=Z,6.3nm,0.8s,baz=158,slow=3.7,SNR=6.1
WRA LR LR 23 15 08.0
comp=Z,1µm,18.4s,baz=157,slow=36
comp=Z,63nm,1.0s
**WRAB Tennant Creek 43.55 332** *i* P P 22 57 11.3 -3.8
WRAB pmax pmax
comp=Z,157nm,1.3s
**MTSU Mount Surprise 43.58 346** P **P** **22 57 16.2 +0.8**
**TROLL Troll, Antarti 45.69 192** ⇑P **P** **22 57 31.4 -0.4**
comp=Z,296nm,0.8s
TROLL ⇓S **S** **23 04 12.6 -1.8**
comp=Z,0.8nm,0.1s
**NVL N'lazarevskaya 45.76 196** *e*P **P** **22 57 32.8 +0.6**
NVL *e*S **S** **23 04 15.5 +0.5**
NVL pmax pmax
comp=Z,32nm,1.6s
NVL MLR MLR
comp=Z,2µm,16.0s
**PSA00 Pilbara Seismi 46.27 313** P **P** **22 57 36.3 -0.4**
**PSA00 Pilbara Seismi 46.27 313** P **P** **22 57 35.1 -1.6**
PSA00 IAmb IAmb 22 57 39.7
comp=Z,63nm,1.4s
**SNAA Sanae 46.51 190** P **P** **22 57 37.6 -0.5**
SNAA IAmb IAmb 22 57 42.0
comp=Z,72nm,1.8s
**SNAA Sanae 46.51 190** ⇑P **P** **22 57 37.6 -0.5**
comp=Z,44nm,0.6s
SNAA ⇑S **S** **23 04 24.0 -1.9**
comp=Z,3µm,0.1s
**SNAA Sanae 46.51 190** P **P** **22 57 38.6 +0.5**
comp=Z,6.3nm,1.0s,baz=157,slow=7.6,SNR=12
SNAA LR LR 23 17 39.1
comp=Z,6µm,19.5s,baz=168,slow=37
comp=Z,6.3nm,1.0s
**SNAA Sanae 46.51 190** *i* P **P** **22 57 34.9 -3.2**
SNAA pmax pmax
comp=Z,12nm,1.1s
**MSVF Nonsavu 46.53 32** IAMs_20 IAMs_20 23 12 34.1
comp=Z,2µm,19.0s
**MSVF Nonsavu 46.53 32** *i* P **P** **22 57 38.8 0.0**
MSVF pmax pmax
comp=Z,27nm,1.4s
**MBWA Marble Bar 46.69 313** P **P** **22 57 38.6 -1.4**
MBWA IAmb IAmb 22 57 43.0
comp=Z,124nm,1.5s
**MBWA Marble Bar 46.69 313** IAMs_20 IAMs_20 23 13 44.9
comp=Z,3µm,21.0s
**VNA3 Neumayer Olymp 47.40 187** ⇑P **P** **22 57 44.1 -1.0**
comp=Z,8.5nm,0.7s
VNA3 ⇑S **S** **23 04 37.3 -1.3**
comp=Z,0.0nm,0.1s
**FITZ Fitzroy Crossi 47.61 322** P **P** **22 57 47.5 +0.3**
**FITZ Fitzroy Crossi 47.61 322** P **P** **22 57 46.2 -1.0**
**COEN Coen 47.84 345** P **P** **22 57 49.3 +0.3**
**COEN Coen 47.84 345** P **P** **22 57 48.2 -0.9**
**VNA1 Neumayer--Stat 47.90 188** ⇑P **P** **22 57 48.4 -0.5**
comp=Z,11nm,0.8s
**KNRA Kununurra 49.02 326** P **P** **22 57 56.8 -1.3**
KNRA IAMs_20 IAMs_20 23 16 22.2
comp=Z,2µm,19.0s
**KDU Kakadu 50.98 332** P **P** **22 58 13.0 +0.1**
**PMSA Palmer Station 51.12 160** LR LR 23 18 14.7
comp=Z,1µm,18.4s,baz=215,slow=34
**MTN Manton Dam 51.14 330** P **P** **22 58 13.9 -0.3**

**MTN Manton Dam 51.14 330** P **P** **22 58 13.2 -1.0**
**DRS Darwin Rock St 51.59 330** P **P** **22 58 17.4 -0.2**
**HNR Honiara 51.80 7** P **P** **22 58 19.9 +0.8**
**HNR Honiara 51.80 7** P **P** **22 58 19.3 +0.2**
**HNR Honiara 51.80 7** P **P** **22 58 19.3 +0.2**
HNR pmax pmax
comp=Z,403nm,1.2s
HNR MLR MLR
comp=Z,3µm,19.0s
**PMG Port Moresby 51.94 351** P **P** **22 58 20.1 -0.1**
**PMG Port Moresby 51.94 351** P **P** **22 58 19.9 -0.3**
**PMG Port Moresby 51.94 351** P **P** **22 58 19.7 -0.5**
**PMG Port Moresby 51.94 351** P **P** **22 58 20.6 +0.4**
comp=Z,81nm,0.9s,baz=179,slow=8.8,SNR=18
PMG LR LR 23 17 52.6
comp=Z,2µm,18.6s,baz=152,slow=33
comp=Z,81nm,0.9s
**PMG Port Moresby 51.94 351** *i* P **P** **22 58 20.4 +0.2**
PMG pmax pmax
comp=Z,115nm,0.9s
**TBI Tubuai 53.63 71** *e*S **S** **23 06 06.6 +0.6**
comp=Z,1µm,27.5s
TBI *e*SS **SS** **23 09 45.5 -0.7**
comp=Z,668nm,28.2s
TBI *e*LR LR 23 13 58.3
comp=Z,6µm,26.2s
TBI *e*LR LR 23 13 58.9
comp=Z,1µm,29.2s
**BATI Baumata 55.66 322** P **P** **22 58 47.8 +0.3**
**SOEI Soe 55.91 323** P **P** **22 58 50.3 +0.9**
**SOEI Soe 55.91 323** P **P** **22 58 48.1 -1.3**
SOEI IAMs_20 IAMs_20 23 21 10.6
comp=Z,2µm,20.0s
**SOEI Soe 55.91 323** P **P** **22 58 50.7 +1.3**
comp=Z,90nm,1.2s,comp=Z,2µm
**BASI Baing, Sumba 56.60 319** P **P** **22 58 53.4 -0.7**
**TABU Tabubil 56.65 344** P **P** **22 58 55.6 +1.1**
**RABL Rabaul 56.87 357** P **P** **22 58 55.2 -0.8**
**WBSI Waikabubak, Su 57.52 318** P **P** **22 58 58.9 -1.8**
**MMRI Maumere 57.58 321** P **P** **22 59 02.2 +1.1**
**MMRI Maumere 57.58 321** P **P** **22 58 59.3 -1.7**
**MMRI Maumere 57.58 321** P **P** **22 58 59.1 -2.0**
comp=Z,94nm,1.5s
**KAVG Kaviena 58.51 356** P **P** **22 59 08.3 +0.8**
**PPT2 Papeete2 58.59 68** *e*S **S** **23 07 15.8 +3.7**
comp=Z,139nm,24.2s
PPT2 *e*SS **SS** **23 11 10.9 +6.3**
comp=Z,130nm,25.8s
PPT2 *e*LQ LQ 23 13 51.9
comp=Z,1µm,25.0s
PPT2 *e*LR LR 23 16 19.2
comp=Z,1µm,25.0s
PPT2 *e*LR LR 23 16 19.9
comp=Z,1µm,26.0s
**PPT Papeete 58.61 68** LR LR 23 21 12.8
comp=Z,533nm,18.2s,baz=212,slow=33
**TWSI Taliwang, Sumb 59.20 315** P P 22 59 08.4 -4.0
**MANU Manus Island 59.22 352** P **P** **22 59 12.1 -0.4**
MANU IAmb IAmb 22 59 13.9
comp=Z,72nm,1.2s
**GENI Genyem 59.43 343** P **P** **22 59 14.1 +0.2**
comp=Z,55nm,1.5s
**JAY Jayapura 59.43 344** P **P** **22 59 13.7 -0.3**
**BNDI Bandanaira 59.46 331** P **P** **22 59 14.1 0.0**
**KMPI Kaimana, Papua 59.47 336** P **P** **22 59 14.6 +0.4**
**DNP Denpasar 59.84 314** P **P** **22 59 17.2 +0.4**
**SRBI Singaraja 60.39 314** P **P** **22 59 20.9 +0.4**
comp=Z,55nm,0.9s
**JAGI Jajag, Banyuwa 60.40 313** P **P** **22 59 21.1 +0.4**
comp=Z,32nm,1.1s
**BBSI Bau Bau 60.46 323** P **P** **22 59 21.4 +0.3**
comp=Z,68nm,1.4s,comp=Z,2µm
**BSSI Bau Bau, Buton 60.47 320** P **P** **22 59 21.4 +0.3**
comp=Z,57nm,1.4s
**FAKI Fak Fak 60.49 334** P **P** **22 59 21.6 +0.4**
**FAKI Fak Fak 60.49 334** P **P** **22 59 20.4 -0.9**
**FAKI Fak Fak 60.49 334** P **P** **22 59 21.6 +0.4**
**RKT Rikitea 60.68 85** *e*S **S** **23 07 36.1 -2.8**
comp=Z,2µm,36.8s
RKT *e*LR LR 23 17 19.7
comp=Z,8µm,25.5s
**MSAI Masohi 60.82 331** P **P** **22 59 21.3 -2.2**
comp=Z,35nm,1.2s
**BKSI Bulukumba 61.36 320** P **P** **22 59 26.4 -0.7**
**NLAI Namlea 61.37 329** P **P** **22 59 27.0 -0.2**
comp=Z,123nm,1.3s,comp=Z,2µm
**MG05 Puerto Natales 61.43 149** IAMs_20 IAMs_20 23 21 55.3
comp=Z,1µm,18.0s
**KAPI Kappang 61.76 320** P **P** **22 59 28.9 -1.0**
KAPI IAmb IAmb 22 59 31.0
comp=Z,43nm,1.1s
**KAPI Kappang 61.76 320** LR LR 23 24 42.5
comp=Z,892nm,18.7s,baz=158,slow=35
**KAPI Kappang 61.76 320** *i* P **P** **22 59 27.9 -2.0**
KAPI pmax pmax
comp=Z,51nm,1.1s
**BNSI Bone 62.23 321** P **P** **22 59 33.2 +0.2**
**UGM Wanagama 62.25 309** P **P** **22 59 29.8 -3.4**
**NGJI Ngawi 62.40 310** P **P** **22 59 36.5 +2.3**
comp=Z,60nm,1.0s
**SWI Sorong 62.70 334** P **P** **22 59 36.3 +0.2**
comp=Z,52nm,1.9s
**SANI Sanana 62.80 328** P **P** **22 59 36.4 -0.4**
**SANI Sanana 62.80 328** P **P** **22 59 35.6 -1.2**
comp=Z,48nm,1.3s,comp=Z,882nm
**SMRI Semarang 63.07 309** P **P** **22 59 39.3 +0.6**
comp=Z,83nm,2.5s
**LUWI Luwuk 64.63 325** P **P** **22 59 48.1 -0.8**
LUWI IAmb IAmb 22 59 49.7
comp=Z,78nm,1.3s
**DBJI Dramaga 64.94 306** P **P** **22 59 51.1 +0.1**
**TNTI Ternate 65.17 330** P **P** **22 59 51.1 -1.2**
**TNTI Ternate 65.17 330** P **P** **22 59 51.2 -1.2**
comp=Z,29nm,1.2s
**MPSI Mapaga 66.78 322** P **P** **23 00 02.2 -0.5**
**MTKI Muara Teweh, K 67.16 316** P **P** **23 00 06.5 +1.3**
**TOLI2 Tolitoli 67.25 323** P **P** **23 00 03.4 -2.3**
TOLI2 IAmb IAmb 23 00 13.2
comp=Z,54nm,1.8s
**STKI Sintang 69.28 313** P **P** **23 00 19.5 +1.0**
**TAOE Nuku Hiva Isla 70.56 72** *e*S **S** **23 09 35.9 -4.1**
comp=Z,78nm,25.9s
TAOE *e*LQ LQ 23 18 41.3
comp=Z,1µm,25.2s
TAOE *e*LR LR 23 21 45.9
comp=Z,640nm,22.5s
**KSM Kuching 71.00 313** P **P** **23 00 29.0 0.0**
**KSM Kuching 71.00 313** P **P** **23 00 27.9 -1.1**
KSM IAmb IAmb 23 00 30.1
comp=Z,52nm,1.2s
**SBUM Sibu 71.24 315** P **P** **23 00 29.1 -1.4**
**DAV Davao City (W) 71.67 330** LR LR 23 34 03.8
comp=Z,164nm,18.1s,baz=88,slow=38
**MYLDM Lahad Datu 71.79 322** P **P** **23 00 32.9 -0.8**
MYLDM IAmb IAmb 23 00 47.4
comp=Z,47nm,1.4s
**PLCA Paso Flores 72.07 146** P **P** **23 00 35.6 +0.3**
comp=Z,5.3nm,0.8s,baz=198,slow=7.8,SNR=8.1
PLCA LR LR 23 25 12.9
comp=Z,874nm,21.9s,baz=207,slow=30
comp=Z,5.3nm,0.8s
**KKM Kota Kinabalu 73.30 320** P **P** **23 00 42.9 0.0**
**KKM Kota Kinabalu 73.30 320** P **P** **23 00 41.1 -1.8**
KKM IAmb IAmb 23 00 43.1
comp=Z,47nm,1.3s
**GUMO Guam 74.89 350** LR LR 23 32 52.8
comp=Z,288nm,18.7s,baz=198,slow=35
**H03S2 Juan Fernandez 75.88 136** T T 00 24 56.4
baz=202,slow=74,SNR=54
**H03S1 Juan Fernandez 75.88 137** T T 00 24 57.9
baz=202,slow=74,SNR=61
**H03S3 Juan Fernandez 75.90 136** T T 00 24 57.8
baz=202,slow=74,SNR=48
**RPSI Rantau Prapat 76.50 302** P **P** **23 00 59.3 -1.9**
**PSI Prapat 76.59 302** P **P** **23 00 59.3 -2.7**
PSI pmax pmax
comp=Z,37nm,1.3s
**TRQA Tornquist 76.77 151** IAMs_20 IAMs_20 23 28 06.7
comp=Z,944nm,21.0s
**GRHM Grahamstown, E 76.85 223** IAMs_20 IAMs_20 23 26 01.4
comp=Z,1µm,22.0s
**IPM Ipoh 77.27 305** P **P** **23 01 06.0 +0.3**
**IPM Ipoh 77.27 305** P **P** **23 01 05.0 -0.7**
IPM IAmb IAmb 23 01 06.2
comp=Z,44nm,1.2s
**BO01 Tunca 77.83 143** P **P** **23 01 08.3 -0.4**

**KULM Kulim 78.16 305** P **P** **23 01 08.0 -2.5**
KULM IAmb IAmb 23 01 11.2
comp=Z,78nm,1.2s
**BO04 La Punta 78.34 143** P **P** **23 01 10.8 -0.7**
**MT13 San Alfonso 78.67 143** P **P** **23 01 13.4 0.0**
**PEL Peldehue 79.11 143** P **P** **23 01 15.3 -0.5**
**PEL Peldehue 79.11 143** P **P** **23 01 15.3 -0.5**
PEL pmax pmax
comp=Z,19nm,1.0s
**SUR Sutherland 79.44 219** LR LR 23 33 45.6
comp=Z,565nm,21.2s,baz=156,slow=34
**H08S2 Diego Garcia H 79.45 273** T T 00 28 39.2
baz=150,slow=75,SNR=59
**H08S1 Diego Carcia H 79.46 273** T T 00 28 38.7
baz=150,slow=75,SNR=30
**H08S3 Diego Garcia H 79.47 273** T T 00 28 52.2
baz=150,slow=75,SNR=113
**VA06 Catapilco 79.47 142** P **P** **23 01 17.2 -0.5**
**H11S2 WAKE ISLAND Hy 79.99 12** T T 00 29 03.0
baz=188,slow=76,SNR=10.0
**H11S3 WAKE ISLAND Hy 80.00 12** T T 00 29 04.0
baz=188,slow=76,SNR=6.4
**H11S1 WAKE ISLAND Hy 80.01 12** T T 00 29 05.6
baz=188,slow=76,SNR=8.6
**CO02 Combarbal 80.83 142** P **P** **23 01 25.0 -0.2**
**H11N1 WAKE ISLAND Hy 81.22 12** T T 00 30 43.0
baz=188,slow=76,SNR=6.4
**H11N3 WAKE ISLAND Hy 81.23 12** T T 00 30 42.8
baz=188,slow=76,SNR=6.8
**H11N2 WAKE ISLAND Hy 81.24 12** T T 00 30 37.7
baz=188,slow=76,SNR=5.8
**CO03 El Pedregal 81.26 142** P **P** **23 01 27.4 -0.1**
**BOSA Boshof 81.51 224** P **P** **23 01 29.2 +0.4**
comp=Z,4.3nm,0.8s,baz=122,slow=6.5,SNR=3.3
comp=Z,4.3nm,0.8s
**SURA Surathani 82.09 305** P **P** **23 01 32.5 +0.7**
**CO01 Juntas del Tor 82.25 142** P **P** **23 01 32.9 +0.1**
**UBPT Khong Chiam 85.52 313** P **P** **23 01 49.9 +0.7**
**UBPT Khong Chiam 85.52 313** P **P** **23 01 48.0 -1.2**
**SRDT SRDT 87.02 307** P **P** **23 01 57.0 +0.4**
**QIZ Qiongzhong 87.53 318** P **P** **23 01 59.6 +0.6**
QIZ S **S** **23 12 42.6 +2.6**
QIZ SS **SS** **23 18 28.8 +2.8**
QIZ LR LR
comp=Z,510nm,19.0s
QIZ LR LR
comp=Z,430nm,18.0s
**MATP Matopo 87.89 229** LR LR 23 34 38.0
comp=Z,127nm,21.3s,baz=191,slow=31
**JCJ Chichijima 88.51 349** LR LR 23 36 40.6
comp=Z,229nm,19.4s,baz=116,slow=32
**PALK Pallekele 88.58 288** LR LR 23 35 17.3
comp=Z,415nm,20.0s,baz=248,slow=31
**CPUP Villa Florida 89.09 152** P **P** **23 02 08.9 +2.3**
comp=Z,2.9nm,1.0s,baz=100,slow=4.5,SNR=3.2
CPUP LR LR 23 38 44.2
comp=Z,587nm,18.9s,baz=194,slow=33
comp=Z,2.9nm,1.0s
**LVC Limon Verde 89.51 141** P **P** **23 02 09.2 +0.1**
**LVC Limon Verde 89.51 141** LR LR 23 34 43.8
comp=Z,494nm,20.3s,baz=202,slow=30
**LVC Limon Verde 89.51 141** P **P** **23 02 09.2 +0.1**
LVC pmax pmax
comp=Z,19nm,1.2s
**JOW Kunigami 90.22 337** LR LR 23 41 12.4
comp=Z,446nm,19.6s,baz=140,slow=35
**PHRA Phrae 90.38 310** P **P** **23 02 11.8 -0.7**
**CMAR Chiang Mai Arr 90.83 309** P **P** **23 02 14.0 -0.6**
**CMAR Chiang Mai Arr 90.83 309** P **P** **23 02 14.8 +0.2**
comp=Z,5.8nm,1.0s,baz=188,slow=3.9,SNR=15
CMAR LR LR 23 39 58.2
comp=Z,371nm,21.2s,baz=165,slow=34
comp=Z,5.8nm,1.0s
**CMAR Chiang Mai Arr 90.83 309** P **P** **23 02 14.0 -0.6**
**SLVN Son La 91.66 314** P **P** **23 02 18.3 -0.1**
SLVN IAmb IAmb 23 02 30.1
comp=Z,50nm,2.0s
**CRAI Chiangrai 91.91 310** P **P** **23 02 19.1 -0.5**
CRAI IAmb IAmb 23 02 21.4
comp=Z,36nm,1.2s
**AP01 Chacalluta 93.03 138** IAMs_20 IAMs_20 23 34 31.3
comp=Z,988nm,21.0s
**JHJ Hachijo jima 2 94.71 348** LR LR 23 41 34.2
comp=Z,398nm,21.2s,baz=122,slow=33
**GYA Guiyang 95.48 318** P **P** **23 02 36.8 +0.8**
GYA pmax pmax
comp=Z,13nm,0.8s
**LPAZ La Paz 95.69 139** P **P** **23 02 38.8 +0.8**
comp=Z,1.2nm,0.8s,baz=209,slow=4.0,SNR=4.5
LPAZ LR LR 23 36 16.1
comp=Z,421nm,21.9s,baz=149,slow=30
comp=Z,1.2nm,0.8s
**JNU Nakatsue 95.90 340** LR LR 23 44 09.8
comp=Z,309nm,19.6s,baz=162,slow=34
**NNA Nana 96.68 130** LR LR 23 37 04.8
comp=Z,284nm,21.3s,baz=196,slow=30
**TNCH TengChong 96.98 311** P **P** **23 02 43.3 +0.4**
TNCH pmax pmax
comp=Z,12nm,0.8s
**PZH PanZhiHua 97.17 314** P Pdif 23 02 45.6 +1.8
PZH S **S** **23 14 04.3 -2.5**
PZH LR LR
comp=Z,370nm,19.6s
PZH LR LR
comp=Z,390nm,19.2s
PZH LR LR
comp=Z,550nm,23.0s
**NJ2 Nanjing 97.30 330** *e*P Pdif 23 02 46.4 +2.4
NJ2 pmax pmax
comp=Z,10.0nm,0.5s
**SIV San Ignacio 98.06 146** LR LR 23 41 51.2
comp=Z,320nm,20.5s,baz=195,slow=32
**MJAR Matsushiro Arr 98.26 347** LR LR 23 44 23.9
comp=Z,239nm,20.7s,baz=166,slow=34
**CD2 Chengdu 100.54 317** P **Pdif** **23 02 59.3 +0.8**
**LYN LuoYang 101.32 326** *e*P **Pdif** **23 03 01.6 -0.2**
LYN pmax pmax
comp=Z,13nm,0.9s
**USRK Ussuriysk Ar. 106.58 343** PP **PP** **23 07 50.7 -0.1**
comp=Z,1.4nm,0.9s,baz=205,slow=7.3,SNR=5.7
**H06S1 SOCORRO T 108.44 85** T T 01 05 21.1
SNR=42
**H06E1 SOCORRO T-PHAS 108.49 85** T T 01 05 08.6
SNR=44
**BOAV Boa Vista 115.68 141** IAMs_20 IAMs_20 23 49 12.3
comp=Z,591nm,19.0s
**WMQ Urumqi 117.70 311** *e*PKP **PKPdf** **23 07 57.4 +0.7**
WMQ LR LR
comp=Z,310nm,23.9s
**CHGR Chuyangaron 120.85 295** IAMs_20 IAMs_20 23 55 17.3
comp=Z,594nm,22.0s
**O02D Mt. Diablo Mer 121.03 63** IAMs_20 IAMs_20 23 51 13.0
comp=Z,558nm,20.0s
**ARSB Arslanbob 121.40 299** **PKPdf** **23 08 03.6 -0.4**
**ARSB Arslanbob 121.40 299** PKIKP **PKPdf** **23 08 03.6 -0.4**
**EPT El Paso 121.56 81** IAMs_20 IAMs_20 23 53 22.1
comp=Z,395nm,20.0s
**AAK Ala-Archa 121.85 301** *i* PKIKP **PKPdf** **23 08 04.3 -0.5**
**MK31 Makanchi Array 122.23 309** PKPdf **PKPdf** **23 08 03.9 -1.3**
**MK31 Makanchi Array 122.23 309** PKIKP **PKPdf** **23 08 03.9 -1.3**
**MKAR Makanchi Array 122.23 309** PKPdf **PKPdf** **23 08 04.0 -1.2**
**MKAR Makanchi Array 122.23 309** PKP **PKPdf** **23 08 04.1 -1.1**
comp=Z,1.1nm,0.8s,baz=119,slow=1.8,SNR=8.0
**MAKZ Makanchi 122.36 309** **PKPdf** **23 08 04.5 -0.9**
**MAKZ Makanchi 122.36 309** PKIKP **PKPdf** **23 08 04.5 -0.9**
**R11B Troy Canyon, C 122.71 69** IAMs_20 IAMs_20 23 51 14.6
comp=Z,591nm,20.0s
**DGZ Jazzator, Alta 122.83 315** *i* PKIKP **PKPdf** **23 08 03.8 -2.6**
**Y22D IRIS PASSCAL I 123.26 79** IAMs_20 IAMs_20 23 55 34.0
comp=Z,422nm,18.0s
**KK31 Karatay Array 123.91 299** **PKPdf** **23 08 07.6 -1.0**
**KK31 Karatay Array 123.91 299** PKIKP **PKPdf** **23 08 07.6 -1.0**
**KKAR Karatay Array 123.91 299** PKPdf **PKPdf** **23 08 07.7 -0.8**
**KKAR Karatay Array 123.91 299** PKIKP **PKPdf** **23 08 07.7 -0.8**
**ANMO Albuquerque 124.19 79** IAMs_20 IAMs_20 23 56 20.6
comp=Z,393nm,19.0s
**PLK4 Peulik 4 124.55 30** IAMs_20 IAMs_20 23 51 35.0
comp=Z,602nm,21.0s
**WVOR Wild Horse Val 124.67 64** IAMs_20 IAMs_20 00 04 44.4
comp=Z,357nm,18.0s
**ELK Elko 124.81 68** IAMs_20 IAMs_20 23 55 28.2
comp=Z,583nm,20.0s
**O14K Tigyukauivet M 124.91 26** IAMs_20 IAMs_20 23 53 53.2
comp=Z,450nm,21.0s
**OHAK Old Harbor 124.94 32** IAMs_20 IAMs_20 23 53 01.6
comp=Z,465nm,21.0s

**MSTX Muleshoe 125.16 82** IAMs_20 IAMs_20 23 52 34.2
comp=Z,416nm,20.0s
**HKT Hockley 125.21 91** PKPdf **PKPdf** **23 08 10.9 -0.5**
**HKT Hockley 125.21 91** PKIKP **PKPdf** **23 08 10.9 -0.5**
HKT MLR MLR
comp=Z,300nm,22.0s
**DUG Dugway, Tooele 125.47 70** IAMs_20 IAMs_20 23 52 43.5
comp=Z,364nm,20.0s
**O16K Kokwok River B 125.91 28** IAMs_20 IAMs_20 23 53 25.8
comp=Z,430nm,22.0s
**N15K Kwethluk River 125.99 26** IAMs_20 IAMs_20 23 55 10.9
comp=Z,485nm,21.0s
**Q19K Cape Douglas, 126.36 30** IAMs_20 IAMs_20 23 56 25.1
comp=Z,426nm,20.0s
**AMTX Amarillo 126.42 83** IAMs_20 IAMs_20 23 54 41.7
comp=Z,428nm,20.0s
**K13K Kusilvak Mount 126.69 23** IAMs_20 IAMs_20 23 56 32.0
comp=Z,607nm,21.0s
**KURBB Kurchatov Arra 126.80 310** PKP **PKPdf** **23 08 13.1 -0.7**
comp=Z,2.0nm,0.8s,baz=152,slow=1.3,SNR=15
KURBB PP **PP** **23 10 09.3 -2.7**
comp=Z,0.2nm,0.4s,baz=161,slow=5.1,SNR=2.0
**KURK Kurchatov 126.84 310** PKPdf **PKPdf** **23 08 12.5 -1.3**
**KURK Kurchatov 126.84 310** PKIKP **PKPdf** **23 08 13.1 -0.7**
**N17K Nushagak Hills 126.95 28** IAMs_20 IAMs_20 23 54 09.3
comp=Z,399nm,22.0s
**M16K Timber Creek 127.00 26** IAMs_20 IAMs_20 23 55 53.7
comp=Z,408nm,20.0s
**HWUT Hawgwaw Ranch 127.16 70** IAMs_20 IAMs_20 23 53 27.4
comp=Z,417nm,21.0s
**BMO Blue Mountains 127.19 63** IAMs_20 IAMs_20 23 59 56.9
comp=Z,439nm,18.0s
**ZALV Zalesovo Beam 127.27 316** PKP **PKPdf** **23 08 14.3 -0.3**
comp=Z,0.5nm,0.5s,baz=152,slow=6.4,SNR=2.5
**O19K Port Alsworth 127.31 29** IAMs_20 IAMs_20 23 53 21.8
comp=Z,402nm,22.0s
**L16K Owhat River 127.51 26** IAMs_20 IAMs_20 23 55 25.1
comp=Z,569nm,22.0s
**J14K Nanvaranak Lak 127.64 23** IAMs_20 IAMs_20 23 57 22.4
comp=Z,472nm,20.0s
**M17K Holitna River 127.67 27** IAMs_20 IAMs_20 23 54 19.5
comp=Z,572nm,22.0s
**WMOK Wichita Mounta 127.70 85** IAMs_20 IAMs_20 23 56 53.6
comp=Z,543nm,19.0s
**TORD Torodi Ar. Bea 128.12 215** PKP **PKPdf** **23 08 17.6 +0.1**
comp=Z,2.0nm,1.1s,baz=75,slow=2.7,SNR=3.9
**ISCO Idaho Springs 128.49 76** IAMs_20 IAMs_20 23 54 35.4
comp=Z,559nm,20.0s
**L18K Granite Mounta 128.56 27** IAMs_20 IAMs_20 23 54 55.1
comp=Z,522nm,22.0s
**O22K Cooper Landing 128.69 32** IAMs_20 IAMs_20 23 56 26.9
comp=Z,427nm,21.0s
**TPAW Teton Pass 128.93 69** IAMs_20 IAMs_20 23 56 01.0
comp=Z,533nm,20.0s
**ANM Nome 128.98 21** IAMs_20 IAMs_20 23 56 01.5
comp=Z,451nm,21.0s
**SABA Saba 128.99 131** IAMs_20 IAMs_20 23 53 13.9
comp=Z,520nm,20.0s
**M20K Styx River 129.07 29** IAMs_20 IAMs_20 23 56 20.7
comp=Z,447nm,21.0s
**LOHW Long Hollow 129.18 69** IAMs_20 IAMs_20 23 56 09.7
comp=Z,492nm,20.0s
**BILL Bilibino 129.20 6** *e*PKIKP **PKPdf** **23 08 17.8 0.0**
BILL pmax pmax
comp=Z,2.0nm,1.1s
**RC01 Rabbit Creek A 129.21 31** IAMs_20 IAMs_20 23 57 16.6
comp=Z,346nm,20.0s
**I17K Unalakleet 129.23 24** IAMs_20 IAMs_20 23 58 24.3
comp=Z,537nm,20.0s
**IMW Indian Meadow 129.25 69** IAMs_20 IAMs_20 23 56 19.5
comp=Z,467nm,20.0s
**SUA Susitna One 129.28 30** IAMs_20 IAMs_20 23 56 42.4
comp=Z,381nm,21.0s
**HIN Hinchinbrook I 129.46 33** IAMs_20 IAMs_20 23 55 59.4
comp=Z,474nm,20.0s
**FLWY Flagg Ranch 129.50 69** IAMs_20 IAMs_20 23 56 17.3
comp=Z,453nm,20.0s
**SKT Skwentna 129.54 30** IAMs_20 IAMs_20 23 54 40.1
comp=Z,561nm,22.0s
**OK031 S. Brethren Rd 129.62 86** IAMs_20 IAMs_20 23 55 01.3
comp=Z,504nm,20.0s
**OK052 Battle Ridge R 129.67 86** IAMs_20 IAMs_20 23 57 56.6
comp=Z,533nm,20.0s
**M22K Wiow 129.69 31** IAMs_20 IAMs_20 23 56 53.1
comp=Z,454nm,21.0s
**KNK Knik Glacier 129.81 32** IAMs_20 IAMs_20 23 59 44.5
comp=Z,380nm,21.0s
**RAGM Ragged Mountai 129.95 34** IAMs_20 IAMs_20 23 57 47.8
comp=Z,414nm,20.0s
**TUL3 Leonard 130.09 87** IAMs_20 IAMs_20 23 55 09.8
comp=Z,379nm,20.0s
**F15K North Star Dit 130.15 21** IAMs_20 IAMs_20 23 54 47.5
comp=Z,544nm,22.0s
**SML Sawmill 130.18 32** IAMs_20 IAMs_20 00 00 05.2
comp=Z,357nm,21.0s
**BOZ Bozeman (W) 130.26 67** IAMs_20 IAMs_20 00 02 57.4
comp=Z,348nm,18.0s
**G16K Koyuk River 130.27 22** IAMs_20 IAMs_20 23 56 13.8
comp=Z,530nm,22.0s
**K22A Casper 130.30 73** IAMs_20 IAMs_20 00 00 57.4
comp=Z,376nm,19.0s
**S31K Pelican 130.46 41** IAMs_20 IAMs_20 23 58 55.7
comp=Z,393nm,20.0s
**CBKS Cedar Bluff 130.50 81** IAMs_20 IAMs_20 00 00 02.6
comp=Z,471nm,18.0s
**WAX Waxell Ridge 130.51 35** IAMs_20 IAMs_20 23 52 40.6
comp=Z,456nm,19.0s
**R32A Long Quarter, 130.68 82** IAMs_20 IAMs_20 23 59 46.4
comp=Z,340nm,19.0s
**CRQM Cirque 130.68 35** IAMs_20 IAMs_20 23 57 07.5
comp=Z,428nm,21.0s
**TGL Tana Glacier 130.77 35** IAMs_20 IAMs_20 23 57 18.4
comp=Z,397nm,21.0s
**J20K Nowinta River 130.84 27** IAMs_20 IAMs_20 23 57 11.3
comp=Z,505nm,20.0s
**RLMT Red Lodge 130.96 69** IAMs_20 IAMs_20 23 57 54.7
comp=Z,488nm,19.0s
**TABL Table Mountain 130.99 36** IAMs_20 IAMs_20 23 58 47.3
comp=Z,391nm,20.0s
**N25K Chitina, Valde 130.99 34** IAMs_20 IAMs_20 23 55 48.7
comp=Z,364nm,21.0s
**OGNE Ogallala 131.07 78** IAMs_20 IAMs_20 00 01 46.9
comp=Z,317nm,19.0s
**U38A Gravette 131.19 88** IAMs_20 IAMs_20 00 00 18.0
comp=Z,334nm,18.0s
**MCARA McCarthy VSAT 131.23 35** IAMs_20 IAMs_20 23 57 56.7
comp=Z,354nm,21.0s
**R32K Eaglecrest 131.26 42** IAMs_20 IAMs_20 00 04 24.8
comp=Z,431nm,19.0s
**I20K Naghedemeel 131.31 26** IAMs_20 IAMs_20 00 02 34.5
comp=Z,550nm,20.0s
**P29M Windy Craggy 131.34 39** IAMs_20 IAMs_20 23 57 06.7
comp=Z,445nm,20.0s
**LOGN Logan Glacier 131.34 36** IAMs_20 IAMs_20 23 58 54.6
comp=Z,355nm,20.0s
**RND Reindeer 131.41 30** IAMs_20 IAMs_20 23 56 02.4
comp=Z,387nm,22.0s
**G18K Tagagawik 131.42 24** IAMs_20 IAMs_20 00 00 20.2
comp=Z,508nm,21.0s
**BPAW Bear Paw Mtn. 131.49 29** IAMs_20 IAMs_20 00 03 56.5
comp=Z,371nm,20.0s
**T35M Bob Quinn 131.66 45** IAMs_20 IAMs_20 23 58 42.7
comp=Z,531nm,20.0s
**BVAR Borovoye Array 131.81 306** PKP **PKPdf** **23 08 23.3 0.0**
comp=Z,2.2nm,0.8s,baz=150,slow=1.2,SNR=8.2
**BWN Browne 131.91 29** IAMs_20 IAMs_20 23 58 20.7
comp=Z,490nm,22.0s
**S34M Telegraph Cree 132.09 44** IAMs_20 IAMs_20 23 58 20.9
comp=Z,466nm,20.0s
**KSU1 Kansas State U 132.22 84** IAMs_20 IAMs_20 00 00 39.3
comp=Z,458nm,19.0s
**MLY Manley 132.34 28** IAMs_20 IAMs_20 23 57 48.8
comp=Z,360nm,22.0s
**M27K Edge Creek, AK 132.34 34** IAMs_20 IAMs_20 23 58 31.6
comp=Z,424nm,21.0s
**C16K Lisburne Hills 132.38 19** IAMs_20 IAMs_20 23 57 59.1
comp=Z,534nm,21.0s
**F19K Shaleruckik Mo 132.41 23** IAMs_20 IAMs_20 00 01 19.5
comp=Z,359nm,20.0s
**WRH Wood River Hil 132.49 30** IAMs_20 IAMs_20 00 03 22.0
comp=Z,312nm,19.0s
**L26K Log Cabin Wild 132.49 33** IAMs_20 IAMs_20 23 57 30.4
comp=Z,381nm,20.0s
**P32M Atlin 132.55 41** IAMs_20 IAMs_20 00 01 45.0
comp=Z,471nm,19.0s
**RSSD Black Hills 132.59 73** IAMs_20 IAMs_20 00 00 08.9
comp=Z,328nm,19.0s
**RIDG Independent Ri 132.68 32** IAMs_20 IAMs_20 00 04 09.4
comp=Z,391nm,20.0s
**S39A Bolivar 132.70 87** IAMs_20 IAMs_20 00 01 20.9
comp=Z,374nm,19.0s
**O30N Mendenhall 132.74 39** IAMs_20 IAMs_20 00 06 37.9
comp=Z,311nm,19.0s
**I23K Minto, Yukon-K 132.75 29** IAMs_20 IAMs_20 00 06 15.9
comp=Z,380nm,20.0s
**COLA College 132.88 30** IAMs_20 IAMs_20 23 58 58.3
comp=Z,464nm,22.0s
**EGMT Eagleton 132.95 66** IAMs_20 IAMs_20 23 59 05.4
comp=Z,382nm,20.0s
**ILAR Eielson Array 133.03 30** PKP **PKPdf** **23 08 24.6 -0.6**
comp=Z,1.2nm,0.9s,baz=277,slow=3.4,SNR=5.2
ILAR PP **PP** **23 10 49.7 -2.7**
comp=Z,1.6nm,1.1s,baz=227,slow=5.9,SNR=6.3
**POKR Poker Plat Res 133.18 30** IAMs_20 IAMs_20 23 59 17.3
comp=Z,387nm,20.0s
**J25K Salcha River, 133.27 31** IAMs_20 IAMs_20 23 59 22.8
comp=Z,432nm,20.0s
**H23K Yukon River 133.28 28** IAMs_20 IAMs_20 00 04 22.8
comp=Z,335nm,18.0s
**BGNE Belgrade 133.28 80** IAMs_20 IAMs_20 00 00 08.3
comp=Z,335nm,20.0s
**R33M Jennings River 133.29 43** IAMs_20 IAMs_20 00 06 07.6
comp=Z,466nm,18.0s
**P33M Teslin, Yukon 133.32 41** IAMs_20 IAMs_20 00 02 18.4
comp=Z,460nm,19.0s
**M29M Somme Creek 133.37 36** IAMs_20 IAMs_20 00 09 00.3
comp=Z,314nm,19.0s
**C18K Utukok River 133.40 21** IAMs_20 IAMs_20 00 04 33.2
comp=Z,464nm,20.0s
**N31M Braeburn, Yuko 133.40 38** IAMs_20 IAMs_20 23 59 51.2
comp=Z,451nm,20.0s
**K30B Basset 133.56 78** IAMs_20 IAMs_20 00 04 23.6
comp=Z,370nm,18.0s
**J26L Joseph Creek 133.63 32** IAMs_20 IAMs_20 00 06 16.5
comp=Z,371nm,22.0s
**H24K Noodor Dome 133.67 29** IAMs_20 IAMs_20 23 58 52.9
comp=Z,413nm,22.0s
**N35A Tabor 134.06 83** IAMs_20 IAMs_20 00 02 18.9
comp=Z,368nm,20.0s
**M31M Drury Creek, Y 134.37 38** IAMs_20 IAMs_20 00 00 41.0
comp=Z,507nm,20.0s
**I26K Coal Creek Min 134.39 31** IAMs_20 IAMs_20 00 00 59.2
comp=Z,464nm,21.0s
**G24K Hadweenzic Riv 134.48 28** IAMs_20 IAMs_20 23 59 27.4
comp=Z,441nm,21.0s
**EGAK Eagle 134.48 33** IAMs_20 IAMs_20 23 56 16.9
comp=Z,434nm,22.0s
**E21K Killik River 134.55 24** IAMs_20 IAMs_20 00 00 22.8
comp=Z,370nm,20.0s
**L34A Svendsen Farm, 134.56 81** IAMs_20 IAMs_20 00 00 48.1
comp=Z,366nm,20.0s
**K29M Barlow Dome 134.73 35** IAMs_20 IAMs_20 00 07 05.3
comp=Z,328nm,19.0s
**P40A Paris 134.76 87** IAMs_20 IAMs_20 23 58 33.5
comp=Z,416nm,21.0s
**FYU Fort Yukon 134.89 29** IAMs_20 IAMs_20 00 04 47.5
comp=Z,302nm,19.0s
**J29N Klondike Camp 135.01 34** IAMs_20 IAMs_20 23 59 58.2
comp=Z,445nm,21.0s
**F24K Squaw Lake 135.05 27** IAMs_20 IAMs_20 23 58 48.6
comp=Z,546nm,22.0s
**E23K Chandalar 135.12 26** IAMs_20 IAMs_20 00 00 05.3
comp=Z,524nm,20.0s
**SUSD Miller 135.21 77** IAMs_20 IAMs_20 23 59 24.4
comp=Z,338nm,20.0s
**B21K Ikpikpuk River 135.42 23** IAMs_20 IAMs_20 23 57 34.0
comp=Z,546nm,22.0s
**F25K Christian Rive 135.62 28** IAMs_20 IAMs_20 23 59 39.8
comp=Z,507nm,22.0s
**J30M Hart River 135.63 35** IAMs_20 IAMs_20 00 07 06.0
comp=Z,340nm,20.0s
**I29M Ogilvie Camp, 135.69 34** IAMs_20 IAMs_20 23 59 07.1
comp=Z,343nm,22.0s
**DGMT Dagmar 135.77 69** IAMs_20 IAMs_20 00 03 20.1
comp=Z,397nm,20.0s
**ECSD EROS Data Cent 135.79 79** IAMs_20 IAMs_20 00 06 39.6
comp=Z,330nm,19.0s
**G27K Doyon Strip 135.95 31** IAMs_20 IAMs_20 00 05 18.7
comp=Z,340nm,20.0s
**TAM Tamanrasset 136.05 223** IAMs_20 IAMs_20 00 05 36.4
comp=Z,383nm,20.0s
**I30M Mount Dempster 136.11 35** IAMs_20 IAMs_20 00 00 07.7
comp=Z,351nm,21.0s
**EPYK Eagle Plains 136.89 33** IAMs_20 IAMs_20 23 57 52.6
comp=Z,395nm,22.0s
**KBZ Khabaz 137.00 279** PKP **PKPdf** **23 08 33.7 +0.5**
comp=Z,3.4nm,1.0s,baz=185,slow=3.0,SNR=3.1
**F28M Old Crow 137.02 31** IAMs_20 IAMs_20 00 06 48.9
comp=Z,322nm,20.0s
**KIV Kislovodsk 137.27 279** *i* PKIKP **PKPdf** **23 08 32.2 -1.7**
KIV pmax pmax
comp=Z,7.0nm,1.1s
**MDND Maddock 137.42 73** IAMs_20 IAMs_20 23 59 40.9
comp=Z,347nm,21.0s
**G30M tAoh Zraii Nji 137.48 33** IAMs_20 IAMs_20 00 01 59.2
comp=Z,304nm,20.0s
**F33A 5 Mile Ranch, 137.51 78** IAMs_20 IAMs_20 00 00 53.2
comp=Z,434nm,19.0s
**D27M Malcolm River 138.00 29** IAMs_20 IAMs_20 00 02 30.5
comp=Z,346nm,21.0s
**E29M Blow River 138.09 31** IAMs_20 IAMs_20 00 09 15.3
comp=Z,393nm,20.0s
**BRTR Keskin Array B 138.42 267** PKP **PKPdf** **23 08 36.6 +0.4**
comp=Z,0.7nm,0.8s,baz=173,slow=4.5,SNR=4.2
**SVE Sverdlovsk 138.43 304** *e*PKIKP **PKPdf** **23 08 36.4 +0.9**
**HQIL Hanson Quary C 138.54 88** IAMs_20 IAMs_20 00 00 45.5
comp=Z,361nm,20.0s
**ARU Arti 139.00 303** PKPdf **PKPdf** **23 08 36.2 -0.4**
**ARU Arti 139.00 303** *i* PKIKP **PKPdf** **23 08 36.4 -0.1**
**INK Inuvik 139.15 33** IAMs_20 IAMs_20 00 04 27.4
comp=Z,400nm,22.0s
**G40A Rib Lake 140.00 83** IAMs_20 IAMs_20 00 03 19.1
comp=Z,469nm,20.0s
**L48A N Adams 140.31 91** IAMs_20 IAMs_20 23 51 27.2
comp=Z,457nm,20.0s
**C36M Paulatuk 142.41 35** IAMs_20 IAMs_20 00 01 20.6
comp=Z,340nm,21.0s
**VRH Novokhopyorsk 142.90 286** *e*PKIKP **PKPdf** **23 08 44.4 +0.7**
VRH pmax pmax
comp=Z,6.0nm,1.0s
**TATN Tataouine 143.07 236** PKPdf **PKPdf** **23 08 44.3 -0.4**
**E46A Sault Ste Mari 143.64 87** IAMs_20 IAMs_20 00 00 59.3
comp=Z,475nm,22.0s
**A36M Sachs Harbour 143.70 31** IAMs_20 IAMs_20 00 06 03.5
comp=Z,318nm,20.0s
**VORD Divnogorie 143.88 284** *e*PKHKP PKPpre 23 08 40.6
VORD pmax pmax
comp=Z,10.0nm,1.6s
**VSR Storozhevoye 144.10 284** *e*PKHKP PKPpre 23 08 41.4
VSR pmax pmax
comp=Z,10.0nm,1.6s
**WDD Wied Dalam 144.20 243** IAMs_20 IAMs_20 00 15 38.8
comp=Z,379nm,19.0s
**VORR Voronezh 144.38 285** *e*PKIKP **PKPab** **23 08 43.8 -0.7**
VORR pmax pmax
comp=Z,13nm,1.0s
**ELND Elena 144.63 263** ⇓P **PKPab** **23 08 45.8 +0.1**
**TLBR Topalu 144.78 267** ⇑P **PKPab** **23 08 45.5 -0.8**
**TPGR Topolog 144.83 268** ⇓P **PKPab** **23 08 45.1 -1.3**
**HARR Harsova 144.95 267** ⇓P PKPbc 23 08 46.8 0.0
**HARR Harsova 144.95 267** ⇓PKIKP PKPbc 23 08 46.8 0.0
**FNA Florina 145.12 256** **PKPbc** **23 08 46.8 -0.8**
**FNA Florina 145.12 256** PKIKP **PKPbc** **23 08 46.8 -0.8**
**LPSR Galich'ya Gora 145.12 286** *e*PKP2 **PKPbc** **23 08 45.3 -1.8**
LPSR pmax pmax
comp=Z,40nm,1.4s
**CFR Carcaliu 145.20 268** ⇓P **PKPbc** **23 08 47.7 +0.1**
**CFR Carcaliu 145.20 268** ⇓PKIKP **PKPbc** **23 08 47.7 +0.1**
**CEL Celeste 145.62 247** **PKPdf** **23 08 48.5 -0.5**
**OHR Ohrid 145.65 256** *i* P **PKPbc** **23 08 50.2 +0.9**
**HUMR Humele 146.25 264** ⇓P **PKiKP** **23 08 54.5 +0.4**
**TIR Tirane 146.27 255** ⇓P **PKiKP** **23 08 55.6 +1.4**
**TIR Tirane 146.27 255** ⇓PKP2 **PKiKP** **23 08 55.6 +1.4**
**NEHR Nehoiu 146.28 266** ⇓P **PKiKP** **23 08 56.9 +2.8**
**KEST Kesra 146.29 237** PKPbc **PKPbc** **23 08 52.6 +1.2**
comp=Z,16nm,1.0s,baz=297,slow=2.0,SNR=16
**VRI Vrincioaia 146.38 267** ⇑P **PKPdf** **23 08 49.5 -0.5**
**VRI Vrincioaia 146.38 267** ⇑PKIKP **PKPdf** **23 08 49.5 -0.5**
**PLOR Plostina 146.41 267** ⇑P **PKPdf** **23 08 51.2 +1.1**
**PLOR Plostina 146.41 267** ⇑PKP2 **PKPdf** **23 08 51.2 +1.1**
**MLR Muntele Rosu 146.49 266** PKPdf **PKPdf** **23 08 50.1 -0.2**
**MLR Muntele Rosu 146.49 266** ⇓P **PKPdf** **23 08 51.4 +1.1**
**MLR Muntele Rosu 146.49 266** ⇓PKP2 **PKPdf** **23 08 51.4 +1.1**
**COVR Voineasa-Covas 146.62 267** ⇑P **PKiKP** **23 08 57.6 +2.8**
**TURR Turia 146.87 267** ⇓P **PKPdf** **23 08 52.3 +1.5**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VOIR | | 146.89 | 265 | ⇓P | | PKPdf | 23 08 49.6 | -1.4 |
| VOIR | | 146.89 | 265 | ⇓PKIKP | | PKPdf | 23 08 49.6 | -1.4 |
| TESR | Tescani | 146.89 | 268 | ⇑P | | PKPbc | 23 08 54.3 | +1.5 |
| ARR | Arges | 147.04 | 265 | ⇓P | | PKPdf | 23 08 52.6 | +1.4 |
| BOVS | Bovan | 147.16 | 260 | ⇑P | | PKPdf | 23 08 53.3 | +2.0 |
| MATE | Matera | 147.18 | 251 | ⇑P | | PKPdf | 23 08 53.3 | +1.9 |
| SORM | Soroca | 147.20 | 272 | ⇑P | | PKPdf | 23 08 53.3 | +2.1 |
| SORM | Soroca | 147.20 | 272 | ⇑PKP2 | | PKPdf | 23 08 53.3 | +2.1 |
| PDG | Podgorica | 147.40 | 256 | ⇓P | | PKPdf | 23 08 53.9 | +2.1 |
| LOT | Lotru | 147.51 | 264 | ⇓P | | PKPbc | 23 08 54.4 | -0.3 |
| MOS | Moscow | 147.66 | 289 | ePKIKP | | PKPdf | 23 08 50.5 | -1.2 |
| MOS | | | | e | | | 23 12 18.3 | |
| MOS | | | | pmax | pmax | | | |
| | comp=Z,64nm,1.4s | | | | | | | |
| HERR | Herculane | 147.75 | 262 | ⇓P | | PKPbc | 23 08 56.2 | +1.0 |
| OBN | Obninsk | 147.78 | 288 | PKPdf | | PKPdf | 23 08 52.7 | +0.8 |
| OBN | Obninsk | 147.78 | 288 | ePKIKP | | PKPdf | 23 08 52.0 | +0.1 |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,39nm,1.1s | | | | | | | |
| GZR | Gura Zlata | 147.95 | 263 | ⇓P | | PKPab | 23 09 01.3 | +2.8 |
| GZR | Gura Zlata | 147.95 | 263 | ⇓PKP2 | | PKPab | 23 09 01.3 | +2.8 |
| MDVR | Moldovita | 148.01 | 261 | ⇑P | | PKPdf | 23 08 55.3 | +2.5 |
| BURAR | Bucovina Array | 148.36 | 268 | | | PKPdf | 23 08 55.7 | +2.4 |
| BURAR | Bucovina Array | 148.36 | 268 | ⇓P | | PKPbc | 23 08 57.3 | +0.5 |
| BURAR | Bucovina Array | 148.36 | 268 | ⇓PKP2 | | PKPbc | 23 08 57.3 | +0.5 |
| BUR08 | Bucovina Ar. S | 148.39 | 268 | | | PKPbc | 23 08 56.7 | -0.2 |
| ARCR | ARCALIA | 148.41 | 267 | ⇓P | | PKPdf | 23 08 55.3 | +2.0 |
| AKASG | Malin Array Be | 148.50 | 276 | PKPbc | | PKPbc | 23 08 56.4 | -0.5 |
| | comp=Z,2.6nm,0.6s,baz=105,slow=2.2,SNR=7.3 | | | | | | | |
| AKBB | Malin Array Si | 148.50 | 276 | | | PKPbc | 23 08 56.5 | -0.4 |
| AKBB | Malin Array Si | 148.50 | 276 | PKP2 | | PKPbc | 23 08 56.5 | -0.4 |
| KIEV | Kiev | 148.51 | 276 | | | PKPdf | 23 08 53.6 | +0.4 |
| KIEV | Kiev | 148.51 | 276 | PKIKP | | PKPdf | 23 08 53.7 | +0.4 |
| SURR | Surduc | 148.53 | 263 | ⇑P | | PKPbc | 23 08 57.2 | 0.0 |
| BZS | Buzias | 148.67 | 262 | ⇑P | | PKPbc | 23 08 57.2 | -0.3 |
| BZS | Buzias | 148.67 | 262 | ⇑PKP2 | | PKPbc | 23 08 57.2 | -0.3 |
| MARR | Marisel-Cluj | 148.71 | 265 | ⇑P | | PKPdf | 23 08 56.2 | +0.3 |
| DRGR | | 148.99 | 265 | ⇑P | | PKPbc | 23 08 57.9 | -0.5 |
| DRGR | | 148.99 | 265 | ⇑PKP2 | | PKPbc | 23 08 57.9 | -0.5 |
| SIRR | Siria | 149.12 | 263 | ⇑P | | PKPbc | 23 09 00.3 | +1.6 |
| LVV | L'vov | 150.44 | 270 | ePKIKP | | PKPbc | 23 09 00.7 | -1.1 |
| MORH | Mrgy, Hungar | 150.53 | 260 | ⇓P | | PKPbc | 23 09 02.0 | -0.1 |
| NRCA | Norcia | 150.55 | 249 | | | PKPbc | 23 09 01.4 | -0.9 |
| KOLS | Kolonicke sedl | 150.69 | 267 | ePKIKP | | PKiKP | 23 09 04.0 | +0.9 |
| KOLS | | | | e | | | 23 09 11.3 | |
| KOLS | Kolonicke sedl | 150.69 | 267 | ePKP | | PKiKP | 23 09 04.0 | +0.9 |
| KOLS | | | | e | | | 23 09 11.3 | |
| KWP | Kalwaria Pacla | 150.95 | 269 | | | PKPbc | 23 09 02.6 | -0.4 |
| KWP | Kalwaria Pacla | 150.95 | 269 | PKIKP | | PKPbc | 23 09 02.6 | -0.4 |
| CRVS | Cervenica-Dubn | 151.06 | 267 | ePKIKP | | PKPbc | 23 09 03.4 | +0.1 |
| CRVS | | | | e | | | 23 09 11.5 | |
| CRVS | Cervenica-Dubn | 151.06 | 267 | ePKP | | PKPbc | 23 09 03.4 | +0.1 |
| CRVS | | | | e | | | 23 09 11.5 | |
| PMOZ | Porto Moniz, M | 151.12 | 195 | eLR | | LR | 00 00 30.8 | |
| | comp=Z,383nm,22.0s | | | | | | | |
| PSZ | Piszkesteto | 151.14 | 264 | | | PKPbc | 23 09 03.5 | -0.1 |
| PSZ | Piszkesteto | 151.14 | 264 | ⇑P | | PKPab | 23 09 09.2 | -2.3 |
| PSZ | Piszkesteto | 151.14 | 264 | PKIKP | | PKPbc | 23 09 03.5 | -0.1 |
| MNK | Minsk | 151.50 | 281 | i PKIKP | | PKPdf | 23 08 55.1 | -2.8 |
| MNK | | | | i | | | 23 12 41.5 | |
| MNK | | | | i PPP | PPP | | 23 16 04.9 | |
| MNK | | | | i SS | SS | | 23 32 06.8 | -2.2 |
| MNK | | | | i SSS | SSS | | 23 37 50.8 | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,12nm,1.0s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,18nm,1.7s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,28nm,0.8s | | | | | | | |
| VYHS | Vyhne | 152.05 | 263 | ePKIKP | | PKPbc | 23 09 05.7 | +0.1 |
| VYHS | | | | e | | | 23 09 13.5 | |
| VYHS | Vyhne | 152.05 | 263 | ePKP | | PKPbc | 23 09 05.7 | +0.1 |
| VYHS | | | | e | | | 23 09 13.5 | |
| SOKA | Soboth | 152.58 | 257 | ePKP | | PKPdf | 23 08 59.4 | -0.5 |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| OBKA | Obir | 152.69 | 256 | i pPKP | | PKiKP | 23 09 10.7 | +3.3 |
| | comp=Z,8.3nm,1.2s | | | | | | | |
| RONA | Rosalia, Austr | 152.72 | 260 | i pPKP | | PKPab | 23 09 20.8 | +2.8 |
| | comp=Z,7.7nm,1.0s | | | | | | | |
| ARSA | Arzberg | 152.76 | 258 | i PKP | | PKPab | 23 09 16.8 | -1.5 |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| CONA | Conrad Observa | 153.08 | 260 | i pPKiKP | | PKPab | 23 09 15.9 | -3.7 |
| | comp=Z,3.1nm,1.0s | | | | | | | |
| MYKA | Terra Mystica | 153.20 | 255 | epPKiKP | | PKiKP | 23 09 14.0 | +5.6 |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| MORC | Moravsky Berou | 153.55 | 264 | ePKP | | PKPbc | 23 09 09.1 | +0.2 |
| KRUC | Moravsky | 153.62 | 262 | ePKP | | PKPbc | 23 09 09.5 | +0.5 |
| KBA | Koelnbreinsper | 153.67 | 255 | i pPKiKP | | PKiKP | 23 09 16.7 | +7.2 |
| | comp=Z,4.7nm,1.2s | | | | | | | |
| VRAC | Vranov | 153.69 | 263 | ePKP | | PKPbc | 23 09 09.5 | +0.3 |
| PVAQ | Vaqueiros | 153.69 | 213 | ePKP | | PKPab | 23 09 24.8 | +2.5 |
| PVAQ | Vaqueiros | 153.69 | 213 | eSS | SS | | 23 32 41.4 | +9.1 |
| PVAQ | Vaqueiros | 153.69 | 213 | eLR | LR | | 00 03 33.4 | |
| | comp=Z,495nm,20.0s | | | | | | | |
| MOA | Molln | 153.79 | 258 | ePKP | | PKPab | 23 09 22.0 | -0.6 |
| | comp=Z,12nm,1.0s | | | | | | | |
| ABTA | Abfaltersbach | 153.81 | 254 | i PKP | | PKPab | 23 09 22.1 | -0.7 |
| | comp=Z,8.7nm,1.0s | | | | | | | |
| BIOA | Bad Ischl, Aus | 153.97 | 257 | epPKiKP | | PKiKP | 23 09 16.8 | +6.9 |
| | comp=Z,5.3nm,1.0s | | | | | | | |
| LESA | Schwarzleotal | 154.23 | 255 | i PKP | | PKPab | 23 09 24.8 | +0.3 |
| | comp=Z,7.6nm,0.8s | | | | | | | |
| CKRC | Cesky Krumlov | 154.45 | 259 | AMS | AMS | | 00 34 10.0 | |
| | comp=Z,300nm,15.2s | | | | | | | |
| DPC | Dobruska-Polom | 154.52 | 264 | AMS | AMS | | 00 26 50.0 | |
| | comp=Z,300nm,21.0s | | | | | | | |
| WTTA | Wattenberg | 154.60 | 254 | ePKP | | PKPab | 23 09 25.8 | -0.4 |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| WATA | Walderalm | 154.68 | 254 | i PKP | | PKPab | 23 09 26.6 | +0.1 |
| | comp=Z,15nm,1.3s | | | | | | | |
| ESDC | Sonseca Array | 154.69 | 222 | PKPbc | | PKPbc | 23 09 11.4 | -0.2 |
| | comp=Z,2.2nm,0.9s,baz=353,slow=0.2,SNR=5.9 | | | | | | | |
| OSTC | Ostas | 154.71 | 264 | AMS | AMS | | 00 30 50.0 | |
| | comp=Z,400nm,23.8s | | | | | | | |
| GERES | GERESS Array B | 154.75 | 259 | PKPbc | | PKPbc | 23 09 10.1 | -1.5 |
| | comp=Z,1.1nm,0.8s,baz=83,slow=3.1,SNR=4.5 | | | | | | | |
| FUORN | Ofenpass-Fuorn | 154.76 | 251 | IAMs_20 | IAMs_20 | | 00 24 57.3 | |
| | comp=Z,283nm,22.0s | | | | | | | |
| SQTA | Sankt Quirin | 154.77 | 253 | i PKP | | PKPab | 23 09 26.7 | -0.2 |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| UPC | Upice | 154.77 | 264 | AMS | AMS | | 00 32 00.0 | |
| | comp=Z,300nm,23.3s | | | | | | | |
| FETA | Feichten | 154.84 | 252 | i PKP | | PKPab | 23 09 27.2 | -0.1 |
| | comp=Z,6.6nm,1.2s | | | | | | | |
| MOTA | Moosalm | 154.91 | 253 | i pPKiKP | | PKiKP | 23 09 19.8 | +7.8 |
| | comp=Z,5.4nm,1.3s | | | | | | | |
| KHC | Kasperske Hory | 155.01 | 259 | ePKPAB | | PKPab | 23 09 30.7 | +2.9 |
| KHC | | | | AMS | AMS | | 00 36 00.0 | |
| | comp=Z,400nm,21.4s | | | | | | | |
| KHC | Kasperske Hory | 155.01 | 259 | ePKP2 | | PKPab | 23 09 30.7 | +2.9 |
| PRU | Pruhonice | 155.13 | 262 | AMS | AMS | | 00 35 10.0 | |
| | comp=Z,300nm,22.7s | | | | | | | |
| RETA | Reutte | 155.17 | 253 | i PKP | | PKPab | 23 09 28.7 | +0.2 |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| PRA | Prague | 155.24 | 262 | AMS | AMS | | 00 35 20.0 | |
| | comp=Z,300nm,23.5s | | | | | | | |
| CEST | Esterri de Car | 155.40 | 233 | IAMs_20 | IAMs_20 | | 00 15 53.8 | |
| | comp=Z,427nm,22.0s | | | | | | | |
| DAVA | Damuels | 155.43 | 252 | epPKP | | pPKPdf | 23 09 16.7 | +10 |
| | comp=Z,5.1nm,1.0s | | | | | | | |
| PVCC | Panska Ves | 155.48 | 263 | AMS | AMS | | 00 31 20.0 | |
| | comp=Z,300nm,16.8s | | | | | | | |
| PMRV | Marv??o | 155.50 | 216 | ePKP | | PKPab | 23 09 31.5 | +1.5 |
| PMRV | Marv??o | 155.50 | 216 | eLR | LR | | 00 07 40.0 | |
| | comp=Z,492nm,20.0s | | | | | | | |
| FINES | FINESS Array B | 155.72 | 294 | PKPbc | | PKPdf | 23 09 12.7 | +9.0 |
| | comp=Z,1.5nm,0.8s,baz=120,slow=2.2,SNR=1.3 | | | | | | | |
| BRG | Berggiesshubel | 156.01 | 263 | ePKP | | PKPab | 23 09 34.3 | +2.4 |
| BRG | | | | Amp | | | 23 09 37.3 | |
| | comp=Z,4.4nm,1.3s | | | | | | | |
| HSKC | Hora Svate Kat | 156.08 | 262 | AMS | AMS | | 00 40 00.0 | |
| | comp=Z,300nm,18.3s | | | | | | | |
| SSB | Saint Sauveur | 156.27 | 242 | IAMs_20 | IAMs_20 | | 00 25 28.7 | |
| | comp=Z,351nm,19.0s | | | | | | | |
| MTE | Manteigas | 156.44 | 216 | ePKP | | PKPab | 23 09 49.0 | +15 |
| MTE | Manteigas | 156.44 | 216 | eSS | SS | | 23 33 05.7 | +3.4 |
| MTE | Manteigas | 156.44 | 216 | eLR | LR | | 00 11 27.1 | |
| | comp=Z,686nm,20.0s | | | | | | | |
| GRA1 | Grafenberg Arr | 156.51 | 258 | IAMs_20 | IAMs_20 | | 00 28 33.8 | |
| | comp=Z,250nm,20.0s | | | | | | | |
| GRF | Grafenberg Arr | 156.51 | 258 | ePKP | | PKPab | 23 09 37.4 | +3.2 |
| | baz=133,slow=5.0 | | | | | | | |
| GRF | | | | eL | L | | 00 23 43.8 | |
| | comp=Z,210nm,21.9s | | | | | | | |
| GRFO | Grafenberg | 156.51 | 258 | IAMs_20 | IAMs_20 | | 00 28 43.8 | |
| | comp=Z,260nm,19.0s | | | | | | | |
| CLL | Collm | 156.74 | 262 | ePKP2 | | PKPab | 23 09 34.0 | -1.0 |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.7s | | | | | | | |
| CLL | | | | MLR | MLR | | | |
| | comp=Z,500nm,21.1s | | | | | | | |
| STU | Stuttgart | 156.82 | 254 | IAMs_20 | IAMs_20 | | 00 32 01.9 | |
| | comp=Z,281nm,20.0s | | | | | | | |
| MOX | Moxa | 156.97 | 260 | eL | L | | 00 31 24.7 | |
| | comp=Z,288nm,20.8s | | | | | | | |
| MVO | Moncorvo | 157.00 | 218 | ePKP | | PKPab | 23 09 40.5 | +4.0 |
| MVO | Moncorvo | 157.00 | 218 | eSS | SS | | 23 33 11.1 | +2.8 |
| MVO | Moncorvo | 157.00 | 218 | eLR | LR | | 00 10 09.5 | |
| | comp=Z,485nm,20.0s | | | | | | | |
| ARCES | ARCESS Array B | 157.80 | 314 | PKPab | | PKPab | 23 09 38.2 | -1.0 |
| | comp=Z,14nm,1.0s,baz=106,slow=3.9,SNR=12 | | | | | | | |
| PGAV | Gavieira, Arco | 158.10 | 217 | ePKP | | PKPab | 23 10 07.2 | +26 |
| PGAV | Gavieira, Arco | 158.10 | 217 | eSS | SS | | 23 33 28.8 | +8.7 |
| PGAV | Gavieira, Arco | 158.10 | 217 | eLR | LR | | 00 12 30.2 | |
| | comp=Z,486nm,18.0s | | | | | | | |
| HFS | Hagfors | 160.91 | 284 | PKPab | | PKPab | 23 09 52.6 | -0.4 |
| | comp=Z,5.1nm,0.9s,baz=116,slow=6.8,SNR=4.1 | | | | | | | |
| NOA | NORSAR Array B | 162.36 | 286 | PKPab | | PKPab | 23 09 58.6 | -0.7 |
| | comp=Z,0.4nm,0.6s,baz=11,slow=6.8,SNR=3.3 | | | | | | | |
| SUMG | Summit | 167.53 | 18 | | | PKPab | 23 10 21.7 | -0.5 |
| SUMG | Summit | 167.53 | 18 | PKP2 | | PKPab | 23 10 21.7 | -0.5 |

**KRSC 22 23:09:23.5±1.5, 50.93N×158.02E, h118km±20km, MI4.0, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KDTR | Khodutka, Kamc | 0.88 | 2 | eP | Pn | 23 09 47.0 | +2.9 |
| KDTR | | | | eS | Sn | 23 10 01.9 | +2.1 |
| SKR | Severo-Kuril's | 1.23 | 259 | eP | Pn | 23 09 49.4 | +1.7 |
| SKR | | | | eS | Sn | 23 10 06.6 | +0.5 |
| ASAK | Asacha | 1.46 | 357 | eP | Pn | 23 09 51.5 | +1.2 |
| MTVR | Mutnovka | 1.56 | 4 | eP | Pn | 23 09 53.4 | +1.8 |
| MTVR | | | | eS | Sn | 23 10 13.9 | +0.9 |
| GRL | Gorelyy | 1.63 | 1 | eP | Pn | 23 09 54.1 | +1.8 |
| DALK | Dalny | 2.15 | 12 | eP | Pn | 23 10 00.4 | +1.7 |
| DALK | | | | eS | Sn | 23 10 25.9 | +0.2 |
| AVH | Avacha | 2.38 | 10 | eP | Pn | 23 10 04.2 | +2.6 |
| SMAR | Somma | 2.39 | 11 | eP | Pn | 23 10 04.4 | +2.5 |
| KOK | Koryaka | 2.40 | 9 | eP | Pn | 23 10 04.1 | +2.2 |
| KRER | Koryakskii | 2.42 | 10 | eP | Pn | 23 10 04.2 | +1.9 |
| KRER | | | | eS | Sn | 23 10 33.2 | +1.1 |
| KII | Karymskiy | 3.23 | 15 | eP | Pn | 23 10 14.9 | +2.2 |
| BKI | Bering | 6.42 | 45 | eS | Sn | 23 12 05.6 | -1.6 |

*NEIC **22** 23:09:37.0±1.6, 17.8S±0.1×179.8E±0.1, h622km±8km, mb4.3/28, Error ellipse: s-maj=19.4km s-min=16.2km az=145.0*
*NOU **22** 23:09:38.3, 18.06S×179.81E, h617km, mb4.5/14, Fiji Islands*
*IDC **22** 23:09:40.7±2.2, 17.62S×179.45E, h672km±28km, mb3.3/11, mbtmp4.4/12, Error ellipse: s-maj=18.0km s-min=12.1km az=160.0*

**ISC 22 23:09:38.3±0.5, 17.71S±0.1×179.69E±0.07, h650km, n64, σ1ᵗ31/67, mb4.2/24, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 1.56 | 269 | P | P | 23 10 53.7 | -2.1 |
| MSVF | Nonsavu | 1.56 | 269 | | P | 23 10 53.5 | -2.3 |
| NIUE | Niue | 9.96 | 99 | P | P | 23 11 54.6 | -3.1 |
| NIUE | Niue | 9.96 | 99 | P | P | 23 11 54.6 | -3.1 |
| LIFNC | LIFOU | 12.14 | 253 | P | P | 23 12 17.3 | -0.9 |
| LIFNC | LIFOU | 12.14 | 253 | P | P | 23 12 16.1 | -2.1 |
| PINNC | Pines Island, | 12.48 | 245 | P | P | 23 12 20.2 | -1.2 |
| DZM | Mont Dzumac | 13.19 | 249 | P | P | 23 12 27.5 | -0.5 |
| DZM | Mont Dzumac | 13.19 | 249 | P | P | 23 12 27.4 | -0.5 |
| DZM | Mont Dzumac | 13.19 | 249 | P | P | 23 12 27.6 | -0.4 |
| | 18nm,0.7s,baz=74,slow=20,SNR=15 | | | | | | |
| DZM | | | | S | S | 23 14 47.8 | +1.3 |
| | 11nm,1.0s,baz=16,slow=18,SNR=3.8 | | | | | | |
| NOUC | Port Laguerre | 13.32 | 249 | P | P | 23 12 31.6 | +2.5 |
| BFZ | Birch Farm | 23.08 | 187 | P | P | 23 13 56.1 | -1.0 |
| BFZ | Birch Farm | 23.08 | 187 | P | P | 23 13 55.1 | -1.9 |
| MRZ | Mangatainoka R | 23.14 | 188 | P | P | 23 13 55.2 | -2.4 |
| MRZ | | | | IAmb | IAmb | 23 13 58.5 | |
| | comp=Z,19nm,1.2s | | | | | | |
| QRZ | Quartz Range | 23.85 | 194 | P | P | 23 14 04.0 | +0.2 |
| SNZO | South Karori | 23.91 | 189 | P | P | 23 14 03.6 | -0.7 |
| TKNZ | Takaka Hill | 23.95 | 193 | P | P | 23 14 04.1 | -0.7 |
| KHZ | Kahutara | 25.18 | 191 | P | P | 23 14 14.0 | -1.5 |
| RPZ | Rata Peaks | 26.93 | 194 | P | P | 23 14 32.1 | +1.2 |
| | comp=Z,12nm,0.6s,baz=27,slow=8.3,SNR=4.4 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| EIDS | Eidsvold | 27.64 | 249 | P | P | 23 14 36.6 | -0.6 |
| EIDS | | | | IAmb | IAmb | 23 14 37.8 | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| JCZ | Jackson Bay | 27.84 | 197 | P | P | 23 14 38.5 | -0.3 |
| ODZ | Otahua Downs | 28.28 | 194 | P | P | 23 14 41.2 | -1.3 |
| ARMA | Armidale | 28.48 | 238 | P | P | 23 14 45.6 | +1.0 |
| ARMA | Armidale | 28.48 | 238 | P | P | 23 14 44.9 | +0.3 |
| COEN | Coen | 35.29 | 271 | P | P | 23 15 42.1 | +0.1 |
| COEN | | | | IAmb | IAmb | 23 16 07.6 | |
| | comp=Z,13nm,1.1s | | | | | | |
| MANU | Manus Island | 35.34 | 293 | P | P | 23 15 43.2 | +0.8 |
| TOO | Toolangi | 35.90 | 230 | P | P | 23 15 46.9 | +0.2 |
| STKA | Stephens Creek | 37.14 | 240 | P | P | 23 15 57.7 | +0.8 |
| STKA | | | | IAmb | IAmb | 23 15 58.4 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| STKA | Stephens Creek | 37.14 | 240 | P | P | 23 15 58.0 | +1.1 |
| | comp=Z,15nm,0.7s,baz=90,slow=10,SNR=29 | | | | | | |
| | comp=Z,15nm,0.7s | | | | | | |
| TAU | Tasmania Unive | 37.19 | 221 | P | P | 23 15 57.2 | +0.2 |
| TAU | | | | IAmb | IAmb | 23 16 01.1 | |
| | comp=Z,17nm,1.1s | | | | | | |
| BBOO | Buckleboo | 41.92 | 240 | P | P | 23 16 34.9 | +0.1 |
| WB0 | Warramunga Arr | 42.85 | 260 | P | P | 23 16 41.5 | -0.7 |
| WB0 | | | | IAmb | IAmb | 23 16 56.3 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 42.88 | 260 | P | P | 23 16 41.3 | -1.2 |
| WRA | Warramunga Arr | 42.88 | 260 | P | P | 23 16 41.6 | -0.9 |
| | comp=Z,0.8nm,0.3s,baz=95,slow=8.3,SNR=33 | | | | | | |
| WRA | | | | S | S | 23 22 19.6 | -3.0 |
| | comp=Z,0.7nm,0.7s,baz=94,slow=14,SNR=6.9 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| AS31 | Alice Springs | 43.10 | 254 | P | P | 23 16 44.1 | 0.0 |
| AS31 | | | | IAmb | IAmb | 23 16 44.9 | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 43.10 | 254 | P | P | 23 16 43.8 | -0.4 |
| ASAR | Alice Springs | 43.10 | 254 | P | P | 23 16 44.1 | -0.1 |
| | comp=Z,14nm,0.5s,baz=88,slow=8.1,SNR=214 | | | | | | |
| ASAR | | | | S | S | 23 22 24.2 | -1.5 |
| | comp=Z,4.1nm,0.9s,baz=86,slow=17,SNR=18 | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| FORT | Forrest | 48.45 | 244 | P | P | 23 17 23.8 | -0.5 |
| FITZ | Fitzroy Crossi | 51.27 | 261 | P | P | 23 17 45.1 | +0.1 |
| MORW | Morawa | 58.90 | 246 | P | P | 23 18 37.2 | -0.3 |
| SBA | Scott Base | 60.51 | 183 | P | P | 23 18 49.4 | +2.2 |
| TOLI2 | Tolitoli | 60.90 | 282 | P | P | 23 18 52.2 | +1.3 |
| CASY | Casey | 65.56 | 205 | P | P | 23 19 20.3 | +0.8 |
| CASY | | | | IAmb | IAmb | 23 19 22.3 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| MJAR | Matsushiro Arr | 66.68 | 324 | P | P | 23 19 26.7 | -0.2 |
| | comp=Z,1.3nm,0.3s,baz=158,slow=6.1,SNR=6.0 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| QSPA | South Pole Qui | 72.34 | 180 | P | P | 23 20 01.0 | +0.8 |
| QSPA | South Pole Qui | 72.34 | 180 | P | P | 23 20 01.5 | +1.4 |
| | comp=Z,2.0nm,0.6s,baz=273,slow=0.6,SNR=28 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| P18K | Big Mountain, | 79.52 | 13 | P | P | 23 20 38.8 | -0.4 |
| P18K | | | | IAmb | IAmb | 23 20 40.0 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| O18K | Koktuh Hills | 79.94 | 13 | P | P | 23 20 41.4 | 0.0 |
| O18K | | | | IAmb | IAmb | 23 20 42.1 | |
| | comp=Z,9.7nm,0.7s | | | | | | |
| DBO | Dodson Butte | 80.01 | 39 | P | P | 23 20 42.0 | -0.3 |
| DBO | | | | IAmb | IAmb | 23 20 45.2 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| DSP | Deep Springs | 80.23 | 46 | P | P | 23 20 45.0 | +1.6 |
| M16K | Timber Creek | 80.32 | 10 | P | P | 23 20 44.5 | +1.2 |
| M16K | | | | IAmb | IAmb | 23 20 45.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| PAHR | Pah Rah Range | 80.51 | 43 | P | P | 23 20 46.0 | +1.0 |
| NVAR | Mina Array Bea | 80.55 | 45 | P | P | 23 20 46.0 | +0.7 |
| NVAR | Mina Array Bea | 80.55 | 45 | P | P | 23 20 46.4 | +1.1 |
| | comp=Z,1.1nm,0.7s,baz=224,slow=8.1,SNR=8.6 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| K15K | Wolf Creek Mou | 81.11 | 9 | P | P | 23 20 48.7 | +1.4 |
| K15K | | | | IAmb | IAmb | 23 20 49.7 | |
| | comp=Z,10nm,0.9s | | | | | | |
| J05D | Fort Rock, OR | 81.31 | 39 | P | P | 23 20 50.4 | +1.4 |
| J05D | | | | IAmb | IAmb | 23 20 51.5 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| MAW | Mawson | 83.42 | 200 | P | P | 23 21 00.5 | +1.5 |
| | comp=Z,1.6nm,0.5s,baz=95,slow=2.8,SNR=12 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| ILAR | Eielson Array | 86.11 | 14 | P | P | 23 21 11.8 | -0.1 |
| | comp=Z,0.8nm,0.8s,baz=239,slow=6.0,SNR=5.8 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 87.43 | 58 | P | P | 23 21 21.1 | +2.1 |
| | comp=Z,0.8nm,0.9s,baz=243,slow=5.5,SNR=7.0 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| SNAA | Sanae | 90.83 | 179 | P | P | 23 21 34.3 | +0.4 |
| | comp=Z,0.4nm,0.5s,baz=183,slow=8.1,SNR=6.1 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| KWP | Kalwaria Pacla | 143.14 | 335 | PKPbc | PKPdf | 23 27 59.2 | -0.7 |
| BRTR | Keskin Array B | 143.35 | 314 | PKPbc | PKPdf | 23 28 00.1 | -0.7 |
| BRTR | Keskin Array B | 143.35 | 314 | PKP | PKPdf | 23 28 00.5 | -0.3 |
| | comp=Z,0.5nm,0.6s,baz=96,slow=1.7,SNR=3.3 | | | | | | |
| MMAI | Mount Meron Ar | 144.51 | 302 | PKP | PKPab | 23 28 02.9 | -1.3 |
| | comp=Z,1.0nm,0.6s,baz=101,slow=4.3,SNR=4.1 | | | | | | |

*SJA **22** 23:15:33.3±0.9, 23.42S×69.60W, h90km±19km, ML4.3, MW4.3*
*NEIC **22** 23:15:34.5±2.8, 23.38S±0.04×69.56W±0.05, h78km±5km, mb4.5/25, Mwr4.3/24, ML4.2(GUC), Error ellipse: s-maj=7.3km s-min=5.3km az=112.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-3.24; $M_{\theta\theta}$0.54; $M_{\phi\phi}$2.70; $M_{r\theta}$0.09; $M_{\theta\phi}$-0.57; $M_{\phi r}$-1.01; Fault plane solution: $M_0$3.22000×$10^{15}$ NP1:$\phi_s$164.04000°, δ35.92000°, λ-93.63000°. NP2:$\phi_s$348.52000°, δ54.17000°, λ-87.37000°. Principal axes: T 2.9984, Plg9.0000°, Azm77.0000°; N 0.4080, Plg2.0000°, Azm167.0000°; P -3.4063, Plg81.0000°, Azm270.0000°;*
*NEIC **22** 23:15:34.2, 23.36S×69.56W, h81km*
*GUC **22** 23:15:35.7±0.5, 23.42S×69.55W, h68km±9km, ML4.2*
*IDC **22** 23:15:35.9±0.5, 23.38S×69.32W, h84km±3km, mb4.1/13, mbtmp4.4/17, MS4.0/3, Error ellipse: s-maj=16.2km s-min=7.2km az=104.0*
*VAO **22** 23:15:38.0±1.1, 23.19S×69.16W, h90km±3km, mb4.6*

**ISC 22 23:15:34.4±0.4, 23.39S±0.03×69.55W±0.04, h82km±4km, n140, σ1ᵗ53/165, mb4.5/24, 11C, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LVC | Limon Verde | 0.97 | 38 | eP | Pn | 23 15 54.2 | +0.6 |
| LVC | | | | eS | Sn | 23 16 08.9 | +1.0 |
| LVC | | | | IAML | | 23 16 10.6 | |
| | comp=Z,5μm,0.4s | | | | | | |
| LVC | Limon Verde | 0.97 | 38 | P | Pn | 23 15 54.3 | +0.7 |
| | comp=Z,2μm,0.3s,baz=186,slow=8.0 | | | | | | |
| LVC | | | | S | Sn | 23 16 08.0 | +0.2 |
| | comp=Z,10μm,0.5s,baz=217,slow=13,SNR=61 | | | | | | |
| LVC | Limon Verde | 0.97 | 38 | ⇑iP | Pn | 23 15 54.0 | +0.4 |
| LVC | | | | i S | Sn | 23 16 08.1 | +0.2 |
| LVC | Limon Verde | 0.97 | 38 | eP | Pn | 23 15 54.1 | +0.6 |
| LVC | | | | eS | Sn | 23 16 08.2 | +0.2 |
| PB04 | IPOC Station P | 1.18 | 332 | Pn | Pn | 23 15 56.9 | +1.0 |
| PB04 | | | | Sn | Sn | 23 16 12.5 | +0.4 |
| PB04 | IPOC Station P | 1.18 | 332 | eP | Pn | 23 15 56.3 | +0.3 |
| PB04 | | | | eS | Sn | 23 16 14.0 | +1.9 |
| PB04 | | | | IAML | | 23 16 15.2 | |
| | comp=Z,4μm,0.2s | | | | | | |
| PB04 | IPOC Station P | 1.18 | 332 | ⇑iP | Pn | 23 15 57.0 | +1.0 |
| PB04 | | | | i S | Sn | 23 16 13.3 | +1.2 |
| PB04 | | | | IAML | | 23 16 15.1 | |
| | comp=N,7μm,0.3s | | | | | | |
| AF01 | San Pedro de A | 1.33 | 71 | | Pn | 23 15 59.1 | +1.2 |
| AF01 | | | | Sn | Sn | 23 16 16.4 | +0.8 |
| AF01 | San Pedro de A | 1.33 | 71 | eP | Pn | 23 15 59.2 | +1.3 |
| AF01 | | | | IAML | | 23 16 36.3 | |
| | comp=Z,12μm,0.6s | | | | | | |
| AF01 | San Pedro de A | 1.33 | 71 | ⇑iP | Pn | 23 15 59.1 | +1.2 |
| AF01 | | | | i S | Sn | 23 16 16.8 | +1.1 |
| PB14 | IPOC Station P | 1.46 | 212 | | Pn | 23 16 00.7 | +1.1 |
| PB14 | | | | Sn | Sn | 23 16 19.1 | +0.6 |
| PB14 | IPOC Station P | 1.46 | 212 | ⇑iP | Pn | 23 16 00.6 | +1.0 |
| PB14 | | | | eS | Sn | 23 16 19.2 | +0.6 |
| PB09 | IPOC Station P | 1.61 | 10 | | Pn | 23 16 02.8 | +1.4 |
| PB09 | IPOC Station P | 1.61 | 10 | eP | Pn | 23

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MT09** | **Talagante** | **10.43** | **187** | Pn | **Pn** | **23 18 00.3** | **-0.8** |
| **SIV** | **San Ignacio** | **10.85** | **49** | P | **Pn** | **23 18 04.4** | **-2.5** |
| | comp=Z,19nm,0.6s,baz=260,slow=9.3,SNR=32 | | | | | | |
| SIV | | | | pP | | 23 18 31.3 | |
| | comp=Z,42nm,0.6s,baz=244,slow=8.6,SNR=14 | | | | | | |
| SIV | | | | S | Sn | 23 19 56.8 | -10 |
| | comp=Z,3.8nm,0.6s,baz=309,slow=20,SNR=1.6 | | | | | | |
| **CPUP** | **Villa Florida** | **11.48** | **107** | | **Pn** | **23 18 13.4** | **-1.8** |
| **CPUP** | **Villa Florida** | **11.48** | **107** | P | **Pn** | **23 18 14.2** | **-1.1** |
| | comp=Z,2.4nm,0.5s,baz=283,slow=11,SNR=8.6 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **12.60** | **53** | Pn | **Pn** | **23 18 28.2** | **-2.3** |
| **PTLB** | **Pontes e Lacer** | **12.60** | **53** | *eP* | **Pn** | **23 18 27.3** | **-3.2** |
| **H03N1** | **Juan Fernandez** | **12.96** | **217** | P | **Pn** | **23 18 33.4** | **-1.7** |
| H03N1 | | | | T | T | 23 31 10.2 | |
| | baz=41,slow=72,SNR=18 | | | | | | |
| **H03N2** | **Juan Fernandez** | **12.97** | **217** | P | **Pn** | **23 18 34.4** | **-0.8** |
| H03N2 | | | | T | T | 23 31 32.6 | |
| | baz=41,slow=72,SNR=43 | | | | | | |
| **H03N3** | **Juan Fernandez** | **12.98** | **217** | P | **Pn** | **23 18 34.2** | **-1.1** |
| H03N3 | | | | T | T | 23 31 09.1 | |
| | baz=41,slow=72,SNR=40 | | | | | | |
| **AQDB** | **Aquidauana** | **13.18** | **80** | Pn | **Pn** | **23 18 37.5** | **-0.7** |
| **H03S3** | **Juan Fernandez** | **13.25** | **216** | P | **Pn** | **23 18 35.1** | **-3.7** |
| | baz=35,slow=17,SNR=4.8 | | | | | | |
| **H03S1** | **Juan Fernandez** | **13.26** | **216** | P | **Pn** | **23 18 37.7** | **-1.3** |
| | baz=35,slow=17,SNR=4.0 | | | | | | |
| **H03S2** | **Juan Fernandez** | **13.27** | **216** | P | **Pn** | **23 18 36.8** | **-2.2** |
| | baz=35,slow=17,SNR=3.5 | | | | | | |
| **VILB** | **Vilhena** | **13.65** | **42** | Pn | **Pn** | **23 18 43.9** | **-0.7** |
| **SALV** | **Santo Antonio** | **15.02** | **63** | *eP* | **Pn** | **23 19 00.4** | **-1.8** |
| **SAML** | **Samuel** | **15.60** | **24** | | **Pn** | **23 19 10.2** | **+0.6** |
| **CZSB** | **Cruzeiro do Su** | **15.86** | **348** | Pn | **Pn** | **23 19 11.4** | **-1.4** |
| CZSB | | | | IAmb | IAmb | 23 19 45.1 | |
| | comp=Z,37nm,1.3s | | | | | | |
| **TRQA** | **Tornquist** | **16.00** | **158** | | **Pn** | **23 19 13.6** | **-0.8** |
| **ITAB** | **Concordia** | **16.21** | **107** | Pn | **Pn** | **23 19 16.1** | **-1.1** |
| ITAB | | | | IAmb | IAmb | 23 19 38.8 | |
| | comp=Z,53nm,1.4s | | | | | | |
| **PLTB** | **Pedras Altas** | **16.40** | **124** | Pn | **Pn** | **23 19 18.3** | **-1.3** |
| **PDRB** | **Porto dos Gac** | **16.91** | **48** | *eP* | **Pn** | **23 19 25.4** | **-0.6** |
| **LDASE** | **Londrina, Braz** | **16.92** | **94** | *eP* | **Pn** | **23 19 24.4** | **-1.7** |
| **PCMB** | **Pacaembu** | **16.99** | **88** | *eP* | **Pn** | **23 19 25.9** | **-1.1** |
| **PLCA** | **Paso Flores** | **17.32** | **183** | P | **P** | **23 19 34.2** | **+3.1** |
| | comp=Z,1.3nm,0.6s,baz=42,slow=15,SNR=1.4 | | | | | | |
| PLCA | | | | pP | **pP** | **23 19 49.7** | **+2.2** |
| | comp=Z,2.5nm,0.7s,baz=12,slow=17,SNR=2.2 | | | | | | |
| **ITRB** | **Iturama** | **18.22** | **82** | *eP* | **P** | **23 19 40.6** | **-0.6** |
| **FRTB** | **Fartura** | **18.35** | **94** | *eP* | **P** | **23 19 41.5** | **-1.0** |
| **ARAG** | **Araguaiana, MT** | **18.37** | **69** | *eP* | **P** | **23 19 41.5** | **-1.2** |
| **RCLB** | **Rio Claro- Sao** | **20.31** | **92** | *eP* | **P** | **23 20 03.1** | **-0.8** |
| **TEFE** | **Tefe** | **20.32** | **14** | *eP* | **P** | **23 20 03.6** | **-0.4** |
| **IPMB** | **Ipameri, GO** | **20.67** | **79** | *eP* | **P** | **23 20 07.0** | **-0.8** |
| **SNDB** | **Serra Nova Dou** | **20.74** | **60** | *eP* | **P** | **23 20 05.9** | **-2.7** |
| **VAO** | **Valinhos** | **20.76** | **93** | P | **P** | **23 20 06.6** | **-2.2** |
| VAO | | | | IAmb | IAmb | 23 20 11.4 | |
| | comp=Z,42nm,1.1s | | | | | | |
| **VAO** | **Valinhos** | **20.76** | **93** | *eP* | **P** | **23 20 07.9** | **-0.9** |
| **NPGB** | **Novo Progresso** | **21.21** | **42** | *eP* | **P** | **23 20 12.4** | **-1.2** |
| **BDFB** | **Brasilia** | **21.69** | **73** | P | **P** | **23 20 17.3** | **-1.5** |
| **BDFB** | **Brasilia** | **21.69** | **73** | P | **P** | **23 20 17.8** | **-1.0** |
| | comp=Z,5.0nm,0.5s,baz=247,slow=14,SNR=8.5 | | | | | | |
| BDFB | | | | pP | **pP** | **23 20 35.4** | **-1.0** |
| | comp=Z,3.8nm,0.8s,baz=255,slow=16,SNR=2.0 | | | | | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **MACA** | **Manacapuru-AM** | **21.86** | **24** | P | **P** | **23 20 18.7** | **-1.8** |
| **MACA** | **Manacapuru-AM** | **21.86** | **24** | *eP* | **P** | **23 20 20.0** | **-0.5** |
| **PARB** | **Paraibuna** | **21.96** | **95** | *eP* | **P** | **23 20 20.4** | **-1.2** |
| **SMTB** | **Santa Maria do** | **25.51** | **59** | *eP* | **P** | **23 20 54.5** | **-0.9** |
| **PRPB** | **Parauapebas** | **25.57** | **51** | *eP* | **P** | **23 20 55.1** | **-0.8** |
| **SDBA** | **SAO DESIDERIO** | **25.83** | **69** | *eP* | **P** | **23 20 57.2** | **-1.1** |
| **MAL2** | **Monte Alegre,** | **25.94** | **37** | P | **P** | **23 20 57.4** | **-1.9** |
| MAL2 | | | | IAmb | IAmb | 23 21 03.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **BOAV** | **Boa Vista** | **27.09** | **20** | P | **P** | **23 21 07.3** | **-2.3** |
| BOAV | | | | IAmb | IAmb | 23 21 44.1 | |
| | comp=Z,21nm,1.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **58.49** | **161** | ⇑P | **P** | **23 25 22.3** | **+0.7** |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **HNDO** | **Hondo** | **59.88** | **330** | P | **P** | **23 25 32.4** | **+0.7** |
| **SNAA** | **Sanae** | **60.70** | **161** | P | **P** | **23 25 37.4** | **+0.5** |
| **SNAA** | **Sanae** | **60.70** | **161** | ⇑P | **P** | **23 25 37.0** | **+0.1** |
| | comp=Z,52nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **60.70** | **161** | P | **P** | **23 25 37.7** | **+0.8** |
| | comp=Z,3.8nm,0.7s,baz=289,slow=8.9,SNR=24 | | | | | | |
| SNAA | | | | pP | **pP** | **23 25 58.8** | **+0.5** |
| | comp=Z,2.6nm,0.6s,baz=272,slow=9.5,SNR=4.6 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **BRDY** | **Brady** | **61.25** | **331** | P | **P** | **23 25 41.7** | **+0.7** |
| BRDY | | | | IAmb | IAmb | 23 25 42.9 | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **61.84** | **326** | P | **P** | **23 25 47.0** | **+1.8** |
| | comp=Z,0.4nm,0.5s,baz=150,slow=7.6,SNR=6.5 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **62.42** | **161** | ⇑P | **P** | **23 25 49.5** | **+1.0** |
| | comp=Z,184nm,0.5s | | | | | | |
| **VHRN** | **Van Horn** | **63.69** | **326** | P | **P** | **23 25 58.5** | **+1.1** |
| VHRN | | | | IAmb | IAmb | 23 25 59.8 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **64.43** | **341** | P | **P** | **23 26 01.8** | **-0.1** |
| CCM | | | | IAmb | IAmb | 23 26 03.2 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.81** | **180** | P | **P** | **23 26 18.9** | **+1.8** |
| **QSPA** | **South Pole Qui** | **66.81** | **180** | P | **P** | **23 26 19.0** | **+1.8** |
| | comp=Z,9.0nm,0.5s,baz=218,slow=0.3,SNR=117 | | | | | | |
| QSPA | | | | pP | **pP** | **23 26 39.9** | **+1.0** |
| | comp=Z,4.9nm,0.7s,baz=144,slow=3.4,SNR=5.2 | | | | | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **ANMO** | **Albuquerque** | **67.76** | **328** | | **P** | **23 26 24.6** | **+1.0** |
| ANMO | | | | IAmb | IAmb | 23 26 27.1 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **69.57** | **330** | P | **P** | **23 26 36.3** | **+1.4** |
| SDCO | | | | IAmb | IAmb | 23 26 38.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **DBIC** | **Dimbokro** | **69.84** | **73** | P | **P** | **23 26 36.5** | **-0.3** |
| **DBIC** | **Dimbokro** | **69.84** | **73** | P | **P** | **23 26 36.8** | **0.0** |
| | comp=Z,4.0nm,0.6s,baz=226,slow=4.5,SNR=6.6 | | | | | | |
| DBIC | | | | pP | **PcP** | **23 26 58.3** | **-0.5** |
| | comp=Z,2.0nm,0.5s,baz=222,slow=2.7,SNR=1.4 | | | | | | |
| DBIC | | | | LR | LR | 23 55 41.2 | |
| | comp=Z,550nm,21.5s,baz=140,slow=34 | | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **SRU** | **San Rafael Swe** | **73.04** | **328** | | **P** | **23 26 57.1** | **+1.4** |
| SRU | | | | IAmb | IAmb | 23 26 58.9 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **75.45** | **331** | P | **P** | **23 27 11.4** | **+1.7** |
| | comp=Z,1.0nm,0.3s,baz=100,slow=5.0,SNR=4.0 | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **HWUT** | **Hardware Ranch** | **75.47** | **329** | P | **P** | **23 27 10.9** | **+1.1** |
| HWUT | | | | IAmb | IAmb | 23 27 13.8 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.62** | **323** | P | **P** | **23 27 18.9** | **+2.5** |
| | comp=Z,1.1nm,0.8s,baz=148,slow=6.4,SNR=6.6 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **ULM** | **Lac du Bonnet** | **76.93** | **343** | P | **P** | **23 27 18.3** | **+0.7** |
| | comp=Z,3.5nm,0.5s,baz=155,slow=7.8,SNR=7.4 | | | | | | |
| ULM | | | | LR | LR | 00 06 28.7 | |
| | comp=Z,191nm,18.0s,baz=240,slow=40 | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | |
| **RLMT** | **Red Lodge** | **77.19** | **332** | | **P** | **23 27 20.7** | **+1.3** |
| **TORD** | **Torodi Ar. Bea** | **78.55** | **70** | P | **P** | **23 27 27.1** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **78.55** | **70** | P | **P** | **23 27 27.3** | **-0.1** |
| | comp=Z,5.3nm,0.6s,baz=260,slow=5.2,SNR=108 | | | | | | |
| TORD | | | | pP | **pP** | **23 27 49.0** | **-0.6** |
| | comp=Z,6.4nm,0.5s,baz=258,slow=5.0,SNR=14 | | | | | | |
| | comp=Z,5.3nm,0.6s | | | | | | |
| **WVOR** | **Wild Horse Val** | **79.62** | **325** | P | **P** | **23 27 32.9** | **+0.1** |
| WVOR | | | | IAmb | IAmb | 23 27 42.5 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **82.70** | **163** | P | **P** | **23 27 49.9** | **+1.3** |
| | comp=Z,4.7nm,0.5s,baz=207,slow=6.3,SNR=30 | | | | | | |
| MAW | | | | pP | **pP** | **23 28 11.5** | **+0.5** |
| | comp=Z,3.6nm,0.7s,baz=221,slow=5.5,SNR=5.5 | | | | | | |
| | comp=Z,4.7nm,0.5s | | | | | | |
| **BOSA** | **Boshof** | **83.09** | **118** | P | **P** | **23 27 51.6** | **0.0** |
| **BOSA** | **Boshof** | **83.09** | **118** | P | **P** | **23 27 51.9** | **+0.3** |
| | comp=Z,2.2nm,0.5s,baz=237,slow=5.5,SNR=7.0 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **87.59** | **45** | P | **P** | **23 28 13.7** | **+0.2** |
| | comp=Z,0.6nm,1.0s,baz=258,slow=5.0,SNR=4.6 | | | | | | |
| ESDC | | | | pP | **pP** | **23 28 36.8** | **+0.6** |
| | comp=Z,0.8nm,0.9s,baz=268,slow=4.5,SNR=4.4 | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **92.76** | **341** | P | **P** | **23 28 38.4** | **+1.4** |
| | comp=Z,2.3nm,0.8s,baz=129,slow=4.9,SNR=4.7 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **27.50** | **276** | T | T | 01 54 43.3 | |
| | baz=105,slow=75,SNR=22 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **27.51** | **276** | T | T | 01 54 40.0 | |
| | baz=105,slow=75,SNR=20 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **27.52** | **276** | T | T | 01 54 38.1 | |
| | baz=105,slow=75,SNR=17 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **27.64** | **277** | T | T | 01 54 20.1 | |
| | baz=104,slow=75,SNR=18 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **27.65** | **277** | T | T | 01 54 16.3 | |
| | baz=104,slow=75,SNR=17 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **27.65** | **277** | T | T | 01 54 22.9 | |
| | baz=104,slow=75,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **127.97** | **208** | PKP | **PKiKP** | **23 34 32.5** | **+0.4** |
| | comp=Z,1.4nm,0.6s,baz=134,slow=1.8,SNR=14 | | | | | | |
| ASAR | | | | pPKP | **pPKPdf** | **23 34 55.4** | **+0.3** |
| | comp=Z,1.1nm,0.8s,baz=129,slow=2.1,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.03** | **210** | PKP | **PKiKP** | **23 34 38.6** | **+0.3** |
| | comp=Z,1.0nm,0.4s,baz=155,slow=1.7,SNR=37 | | | | | | |
| WRA | | | | pPKP | **pPKPdf** | **23 35 01.5** | **+0.6** |
| | comp=Z,1.0nm,0.8s,baz=154,slow=1.6,SNR=4.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **137.67** | **35** | PKP | **PKiKP** | **23 34 50.4** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=270,slow=3.0,SNR=4.6 | | | | | | |
| BVAR | | | | pPKP | **pPKPdf** | **23 35 13.5** | **+1.1** |
| | comp=Z,0.8nm,0.6s,baz=255,slow=2.9,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **143.23** | **34** | PKP | **PKPdf** | **23 34 57.5** | **-1.3** |
| | comp=Z,1.2nm,1.0s,baz=294,slow=3.7,SNR=6.4 | | | | | | |
| KURBB | | | | pPKP | **pPKPdf** | **23 35 20.2** | **-2.3** |
| | comp=Z,0.6nm,0.6s,baz=310,slow=2.9,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.90** | **26** | PKP | **PKPdf** | **23 34 59.4** | **-0.5** |
| | comp=Z,2.6nm,0.6s,baz=306,slow=4.0,SNR=12 | | | | | | |
| ZALV | | | | pPKP | **pPKPdf** | **23 35 22.3** | **-1.2** |
| | comp=Z,1.8nm,0.6s,baz=277,slow=3.2,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **147.49** | **37** | PKP | **PKPbc** | **23 35 07.8** | **-1.2** |
| | comp=Z,4.4nm,0.7s,baz=349,slow=1.2,SNR=32 | | | | | | |
| MKAR | | | | PKPbc | **PKiKP** | **23 35 09.9** | **-1.2** |
| | comp=Z,4.4nm,0.7s,baz=315,slow=2.8,SNR=36 | | | | | | |
| MKAR | | | | pPKPbc | **pPKPab** | **23 35 32.9** | **-1.3** |
| | comp=Z,6.3nm,0.8s,baz=46,slow=3.5,SNR=15 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **152.74** | **325** | PKPbc | **PKiKP** | **23 35 23.5** | **+1.6** |
| | comp=Z,1.1nm,0.4s,baz=47,slow=3.0,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **155.39** | **7** | PKPab | **PKPab** | **23 35 45.0** | **+1.0** |
| | comp=Z,0.5nm,0.8s,baz=293,slow=4.5,SNR=3.9 | | | | | | |

**IDC 22 23:24:37.1±7.3, 5.34S×151.43E, h117km±52km, mb3.2/3, mbtmp3.7/4, MS3.8/1, Error ellipse: s-maj=68.0km s-min=51.6km az=129.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.85** | **226** | P | Pn | 23 26 03.0 | +1.4 |
| | 11nm,0.4s,baz=126,slow=3.8,SNR=4.0 | | | | | | |
| PMG | | | | S | Sn | 23 27 07.6 | +0.1 |
| | 6.6nm,0.4s,baz=327,slow=23,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.07** | **227** | P | P | 23 29 22.1 | -0.8 |
| | 0.4nm,0.5s,baz=52,slow=10,SNR=6.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.84** | **221** | P | P | 23 29 49.8 | +0.9 |
| | 1.1nm,0.7s,baz=57,slow=9.1,SNR=11 | | | | | | |
| ASAR | | | | LR | LR | 23 39 05.2 | |
| | comp=Z,189nm,18.9s,baz=339,slow=35 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.62** | **180** | P | P | 23 36 56.9 | -0.6 |
| | 0.7nm,0.6s,baz=112,slow=1.4,SNR=7.2 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.17** | **287** | PKPbc | PKPbc | 23 44 12.6 | -0.4 |
| | 0.5nm,0.8s,baz=61,slow=3.2,SNR=2.5 | | | | | | |

**IDC 22 23:40:54.6±2.4, 32.25S×178.25W, h0km, mb4.1/2, mbtmp4.1/3, ML3.7/1, Error ellipse: s-maj=64.0km s-min=43.4km az=131.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **7.09** | **211** | Pn | Pn | 23 42 38.4 | -1.3 |
| | 1.3nm,0.3s,baz=1.7,slow=3.3,SNR=6.1 | | | | | | |
| URZ | | | | Sn | Sn | 23 43 56.4 | -4.6 |
| | 3.7nm,0.3s,baz=75,slow=23,SNR=12 | | | | | | |
| | 14nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **42.83** | **269** | P | P | 23 48 54.6 | 0.0 |
| | 0.9nm,0.5s,baz=106,slow=7.4,SNR=13 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.99** | **274** | P | P | 23 49 03.9 | -0.1 |
| | 2.5nm,0.6s,baz=114,slow=7.9,SNR=54 | | | | | | |
| | 2.5nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **146.80** | **339** | PKPbc | PKPdf | 00 00 36.7 | +0.6 |
| | 2.8nm,0.8s,baz=52,slow=3.1,SNR=7.8 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **151.72** | **281** | PKPbc | PKiKP | 00 00 51.7 | -0.1 |
| | 0.9nm,0.6s,baz=96,slow=4.3,SNR=2.5 | | | | | | |

*IDC 22 23:43:21.5±4.6, 18.13S×178.10W, h560km±49km, mb3.5/7, mbtmp4.4/8, Error ellipse: s-maj=31.3km s-min=21.2km az=47.0*

*NEIC 22 23:43:24.2±1.3, 18.5S±0.2×178.22W±0.05, h568km±11km, mb4.2/18, Error ellipse: s-maj=26.3km s-min=6.7km az=177.0*

**ISC 22 23:43:22.0±0.9, 18.3S±0.1×178.1W±0.1, h557km, n36, σ1§11/37, mb4.2/14, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.70** | **278** | P | **P** | **23 44 45.2** | **+2.8** |
| **LIFNC** | **LIFOU** | **14.03** | **258** | P | **P** | **23 46 20.8** | **-0.7** |
| **PINNC** | **Pines Island,** | **14.20** | **250** | P | **P** | **23 46 23.4** | **+0.3** |
| **YATNC** | **Mamie plateau,** | **14.57** | **253** | P | **P** | **23 46 28.5** | **+1.5** |
| **DZM** | **Mont Dzumac** | **14.97** | **253** | P | **P** | **23 46 30.2** | **-1.0** |
| **DZM** | **Mont Dzumac** | **14.97** | **253** | | **P** | **23 46 31.0** | **-0.2** |
| **DZM** | **Mont Dzumac** | **14.97** | **253** | P | **P** | **23 46 31.2** | **-0.1** |
| | 4.5nm,0.4s,baz=98,slow=22,SNR=8.8 | | | | | | |
| **URZ** | **Urewera** | **20.30** | **191** | P | **P** | **23 47 20.6** | **+0.3** |
| | 13nm,0.7s,baz=342,slow=3.7,SNR=5.7 | | | | | | |
| | 13nm,0.7s | | | | | | |
| **MRZ** | **Mangatainoka R** | **22.92** | **192** | | **P** | **23 47 40.5** | **-3.3** |
| **THZ** | **Tophouse** | **24.60** | **196** | P | **P** | **23 47 58.5** | **-0.2** |
| **EIDS** | **Eidsvold** | **29.40** | **251** | P | **P** | **23 48 41.0** | **0.0** |
| EIDS | | | | IAmb | IAmb | 23 48 42.2 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **29.99** | **241** | P | **P** | **23 48 46.3** | **+0.2** |
| ARMA | | | | IAmb | IAmb | 23 48 48.2 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **33.66** | **261** | P | **P** | **23 49 16.1** | **-1.3** |
| CTAO | | | | IAmb | IAmb | 23 49 18.3 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **34.81** | **280** | P | **P** | **23 49 27.1** | **0.0** |
| **TOO** | **Toolangi** | **37.14** | **231** | P | **P** | **23 49 45.7** | **-0.3** |
| TOO | | | | IAmb | IAmb | 23 50 04.0 | |
| | comp=Z,9.2nm,1.5s | | | | | | |
| **COEN** | **Coen** | **37.40** | **271** | P | **P** | **23 49 47.9** | **-0.5** |
| COEN | | | | IAmb | IAmb | 23 49 49.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.69** | **242** | P | **P** | **23 49 58.7** | **0.0** |
| **BBOO** | **Buckleboo** | **43.46** | **241** | P | **P** | **23 50 36.0** | **-0.5** |
| **WR0** | **Warramunga Arr** | **44.65** | **260** | P | **P** | **23 50 45.4** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 23 50 45.5 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | P | **P** | **23 50 46.7** | **-0.7** |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | P | **P** | **23 50 46.6** | **-0.7** |
| | comp=Z,2.1nm,0.5s,baz=95,slow=7.3,SNR=31 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.96** | **255** | P | **P** | **23 50 47.5** | **-0.7** |
| **ASAR** | **Alice Springs** | **44.96** | **255** | P | **P** | **23 50 47.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **44.96** | **255** | P | **P** | **23 50 48.2** | **0.0** |
| | comp=Z,5.9nm,0.5s,baz=86,slow=8.9,SNR=43 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 52 16.4** | **-1.1** |
| | comp=Z,0.3nm,0.5s,baz=100,slow=5.0,SNR=1.8 | | | | | | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| **KNRA** | **Kununurra** | **50.73** | **264** | P | **P** | **23 51 30.4** | **-1.0** |
| KNRA | | | | IAmb | IAmb | 23 51 32.7 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **60.03** | **184** | P | **P** | **23 52 36.9** | **+2.1** |
| **CASY** | **Casey** | **65.89** | **205** | P | **P** | **23 53 12.7** | **0.0** |
| CASY | | | | IAmb | IAmb | 23 53 15.2 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.74** | **180** | P | **P** | **23 53 48.8** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 23 53 49.4 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.74** | **180** | P | **P** | **23 53 48.9** | **+0.8** |
| | comp=Z,5.7nm,0.7s,baz=267,slow=0.3,SNR=52 | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **83.57** | **200** | P | **P** | **23 54 51.9** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=187,slow=3.8,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.97** | **57** | P | **P** | **23 55 03.1** | **-1.0** |
| | comp=Z,0.6nm,0.7s,baz=224,slow=6.6,SNR=9.4 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.18** | **179** | P | **P** | **23 55 22.0** | **-1.0** |
| SNAA | | | | IAmb | IAmb | 23 55 23.0 | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **90.18** | **179** | P | **P** | **23 55 22.3** | **-0.7** |
| | comp=Z,1.1nm,0.5s,baz=208,slow=7.3,SNR=18 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.27** | **315** | PKPbc | **PKPdf** | **00 01 55.9** | **-1.1** |
| | comp=Z,0.3nm,0.7s,baz=56,slow=2.0,SNR=2.0 | | | | | | |
| **GRA1** | **Grafenberg Arr** | **147.81** | **349** | PKPbc | **PKPbc** | **00 02 04.8** | **+0.2** |
| **GERES** | **GERESS Array B** | **148.08** | **345** | PKPbc | **PKPdf** | **00 02 03.1** | **+1.7** |
| | comp=Z,0.2nm,0.4s,baz=349,slow=4.5,SNR=4.2 | | | | | | |

*GEN 23 00:09:08.9, 46.20N×7.09E, h6km±1km, Ml3.2*
*ROM 23 00:09:09.9±0.1, 46.152N±0.005×7.122E±0.008, h10km, ML2.9/70, Error ellipse: s-maj=0.6km s-min=0.4km az=152.0*
*ZUR 23 00:09:09.8, 46.19N×7.08E, h7km, MLh3.2/130, Error ellipse: s-maj=1165.1km s-min=439.5km az=28.0*
*LDG 23 00:09:09.8±0.2, 46.17N×7.12E, h8km, Ml3.5/44, Error ellipse: s-maj=1.1km s-min=0.9km az=119.0*
*STR 23 00:09:09.6±0.2, 46.N±1×±, h2km, MLv3.3/63, Error ellipse: s-maj=0.0km s-min=0.0km az=87.1, preliminary*
*PRU 23 00:09:10.8, 46.46N×6.85E, h10km*
*BGR 23 00:09:10.1±0.8, 46.20N×7.03E, h10km, ML3.3/12, Error ellipse: s-maj=8.9km s-min=6.7km az=115.0*

**ISC 23 00:09:08.8±0.7, 46.20N±0.01×7.08E±0.01, h16km±3km, n313, σ1§46/464, 62C-37D, Switzerland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GRYON** | **Gryon** | **0.06** | **22** | ⇑Pg | **Pg** | **00 09 11.7** | **-0.2** |
| GRYON | | | | Sg | **Sg** | **00 09 12.9** | **-1.1** |
| **SMAO** | **Martigny, Rue** | **0.10** | **182** | ⇑Pg | **Pg** | **00 09 12.0** | **-0.1** |
| SMAO | | | | Sg | **Sg** | **00 09 13.6** | **-0.7** |
| **SARC** | **Ardon Commune,** | **0.12** | **84** | ⇑Pg | **Pb** | **00 09 12.6** | **-0.2** |
| SARC | | | | Sg | **Sg** | **00 09 14.6** | **-0.3** |
| **SMUK** | **Muraz-Klaeranl** | **0.13** | **313** | ⇓Pg | **Pb** | **00 09 13.0** | **0.0** |
| **SAIG** | **Aigle Rue de l** | **0.14** | **327** | ⇓Pg | **Pg** | **00 09 13.0** | **+0.3** |
| SAIG | | | | Sg | **Sg** | **00 09 15.4** | **+0.2** |
| **SEMOS** | **Emosson Stauma** | **0.16** | **218** | ⇑Pg | **Pg** | **00 09 13.2** | **0.0** |
| SEMOS | | | | Sg | **Sg** | **00 09 15.4** | **-0.6** |
| **SEMOS** | **Emosson Stauma** | **0.16** | **218** | ⇑Pg | **Pg** | **00 09 13.2** | **0.0** |
| SEMOS | | | | Sg | **Sg** | **00 09 15.5** | **-0.6** |
| **ESION** | **College des Cr** | **0.19** | **81** | ⇑Pg | **Pb** | **00 09 13.8** | **-0.1** |
| **ESION** | **College des Cr** | **0.19** | **81** | ⇑Pg | **Pb** | **00 09 13.8** | **-0.1** |
| **SIOM** | **Sion-Mayennets** | **0.20** | **81** | ⇑Pg | **Pb** | **00 09 13.9** | **-0.2** |
| **SIOV** | **Sion-Valere** | **0.20** | **79** | ⇑Pg | **Pb** | **00 09 14.0** | **-0.2** |
| SIOV | | | | Sg | **Sg** | **00 09 16.9** | **+0.2** |
| **SIOO** | **Sion-Ophtalmol** | **0.21** | **80** | ⇑Pg | **Pb** | **00 09 14.3** | **0.0** |
| **SHER** | **Hrmence, R** | **0.22** | **93** | ⇓Pg | **Pb** | **00 09 14.4** | **-0.2** |
| SHER | | | | Sg | **Sg** | **00 09 17.5** | **+0.2** |
| **SENIN** | **Lac Senin/Sane** | **0.23** | **42** | ⇑Pg | **Pb** | **00 09 14.5** | **-0.2** |
| SENIN | | | | Sg | **Sg** | **00 09 17.9** | **+0.2** |
| **SENIN** | **Lac Senin/Sane** | **0.23** | **42** | P | **Pb** | **00 09 14.5** | **-0.2** |
| SENIN | | | | S | **Sg** | **00 09 17.9** | **+0.2** |
| **SAYF2** | **Ayent-Fortunoz** | **0.25** | **69** | ⇑Pg | **Pb** | **00 09 14.9** | **-0.2** |
| **DIX** | **Grande Dixence** | **0.26** | **117** | ⇓Pg | **Pb** | **00 09 15.0** | **-0.3** |
| DIX | | | | Sg | **Sg** | **00 09 18.6** | **0.0** |

SATI S Sg 00 09 29.4 -0.4
SATI AML AML
comp=E,582µm,0.7s
SATI AML AML
comp=N,544µm,0.7s
SATI AML AML
comp=E,556µm,0.3s
SATI AML AML
comp=N,501µm,0.2s
SATI AML AML
comp=E,582µm,1.3s
**SATI Passo dei Sala 0.64 120** Pg **Pg 00 09 21.3 0.0**
**SATI Passo dei Sala 0.64 120** Sg **Sg 00 09 29.5 -0.4**
**SATI Passo dei Sala 0.64 120** P **Pg 00 09 21.4 0.0**
**GIMEL St. Georges / 0.66 301** ⇓Pg **Pb 00 09 23.0 +1.0**
**GIMEL St. Georges / 0.66 301** ⇓P **Pb 00 09 23.0 +1.0**
GIMEL AML AML
comp=E,632µm,0.4s
GIMEL AML AML
comp=E,632µm,0.3s
GIMEL AML AML
comp=N,590µm,0.5s
GIMEL AML AML
comp=E,580µm,0.1s
GIMEL AML AML
comp=N,492µm,0.2s
**GIMEL St. Georges / 0.66 301** Pg **Pb 00 09 22.8 +0.8**
**SCOU Cournillens 0.66 1** ⇑Pg **Pb 00 09 22.7 +0.8**
**LPL La Plagne 0.72 200** *e*Pg **Pg 00 09 22.9 0.0**
LPL *e*Sg **Sg 00 09 32.3 -0.2**
comp=N,97nm,0.3s
**LPG La Plagne 0.74 198** *e*Pg **Pg 00 09 23.4 +0.2**
LPG *e*Sg **Sg 00 09 32.5 -0.5**
comp=N,422nm,0.3s
**LSD Lago del Serru 0.74 177** ⇑Pg **Pb 00 09 23.6 +0.1**
**LSD Lago del Serru 0.74 177** ⇑P **Pb 00 09 23.6 +0.1**
LSD S **Sg 00 09 32.8 -0.3**
LSD AML AML
comp=E,1780µm,0.4s
LSD AML AML
comp=N,858µm,0.5s
LSD AML AML
comp=N,788µm,0.2s
LSD AML AML
comp=E,1224µm,0.1s
**LSD Lago del Serru 0.74 177** Pg **Pb 00 09 23.5 +0.1**
**LSD Lago del Serru 0.74 177** Sg **Sg 00 09 32.7 -0.3**
**LSD Lago del Serru 0.74 177** P **Pb 00 09 23.6 +0.1**
LSD S **Sg 00 09 33.0 0.0**
**FIESA Fiescheralp 0.75 71** ⇑Pg **Pb 00 09 24.0 +0.3**
**FIESA Fiescheralp 0.75 71** P **Pb 00 09 24.0 +0.3**
FIESA S **Sb 00 09 34.5 +0.6**
**CABF La Chapelle 0.80 301** *e*Pg **Pb 00 09 25.6 +1.2**
CABF *e*Sg **Sb 00 09 36.0 +0.9**
comp=E,131nm,0.2s
**TRAV Traversella 0.83 145** ⇓Pg **Pg 00 09 24.7 -0.2**
TRAV Sg **Sg 00 09 35.3 -0.5**
**TRAV Traversella 0.83 145** ⇓P **Pg 00 09 24.7 -0.2**
TRAV S **Sg 00 09 35.3 -0.5**
TRAV AML AML
comp=N,2140µm,0.9s
TRAV AML AML
comp=E,1985µm,0.2s
TRAV AML AML
comp=E,1987µm,0.2s
TRAV AML AML
comp=N,2073µm,0.2s
**TRAV Traversella 0.83 145** Pg **Pg 00 09 24.7 -0.2**
**TRAV Traversella 0.83 145** P **Pg 00 09 24.7 -0.2**
TRAV S **Sg 00 09 35.4 -0.5**
**BRANT Les Verrieres 0.85 331** ⇓Pg **Pn 00 09 26.6 +0.3**
**BRANT Les Verrieres 0.85 331** Pg **Pn 00 09 26.6 +0.3**
**BRANT Les Verrieres 0.85 331** Sg **Sn 00 09 38.7 +0.2**
**HASLI Hasliberg/Brie 0.93 53** ⇑Pg **Pn 00 09 27.3 -0.1**
**RIVEL MONT RIVEL 0.98 306** Pg **Pn 00 09 28.6 +0.6**
**STFL Fournets-Luisa 0.98 339** Pg **Pn 00 09 29.1 +1.0**
STFL Sg **Sn 00 09 42.3 +0.6**
**OGMO Fort Saint-Gob 1.03 196** Pg **Pb 00 09 28.6 +0.4**
**OGMO Fort Saint-Gob 1.03 196** P **Pb 00 09 28.6 +0.4**
OGMO S **Sg 00 09 42.0 -0.1**
**RSP Reno Superiore 1.06 173** ⇑Pg **Pb 00 09 29.2 +0.4**
**RSP Reno Superiore 1.06 173** P **Pb 00 09 29.1 +0.4**
RSP AML AML
comp=E,1205µm,0.2s
RSP AML AML
comp=N,876µm,1.6s
RSP AML AML
comp=N,844µm,1.6s
RSP AML AML
comp=N,842µm,0.2s
RSP AML AML
comp=E,1203µm,0.2s
RSP AML AML
comp=N,776µm,0.2s
RSP AML AML
comp=E,1114µm,0.2s
RSP AML AML
comp=E,1115µm,0.2s
RSP AML AML
comp=N,876µm,0.4s
RSP AML AML
comp=N,844µm,0.4s
**RSP Reno Superiore 1.06 173** Pg **Pb 00 09 29.0 +0.2**
**RSP Reno Superiore 1.06 173** P **Pb 00 09 29.2 +0.4**
RSP S **Sg 00 09 42.3 -0.7**
**OG35 Corcelles 1.06 262** Pg **Pg 00 09 29.7 +0.4**
OG35 Sg **Sg 00 09 44.0 +0.8**
**CHMF Charmoille 1.09 345** ⇑Pg **Pn 00 09 30.7 +1.1**
**CHMF Charmoille 1.09 345** Pg **Pn 00 09 30.3 +0.7**
CHMF Sg **Sn 00 09 45.6 +1.2**
**SAIRA Les Sairains D 1.11 0** ⇑Pg **Pn 00 09 31.0 +1.2**
**FUSIO Fusio 1.13 76** ⇓Pg **Pn 00 09 30.7 +0.6**
**FUSIO Fusio 1.13 76** P **Pn 00 09 30.6 +0.6**
FUSIO AML AML
comp=E,555µm,0.5s
FUSIO AML AML
comp=N,829µm,0.4s
FUSIO AML AML
comp=E,555µm,0.5s
FUSIO AML AML
comp=N,829µm,0.4s
FUSIO AML AML
comp=N,829µm,0.4s
FUSIO AML AML
comp=E,555µm,0.5s
FUSIO AML AML
comp=N,829µm,1.6s
FUSIO AML AML
comp=E,555µm,1.5s
**FUSIO Fusio 1.13 76** P **Pn 00 09 30.7 +0.6**
**OGSM Saint Maurice 1.13 239** Pg **Pg 00 09 31.1 +0.5**
**BNALP Bannalp 1.15 54** ⇑Pg **Pn 00 09 31.4 +1.0**
**BNALP Bannalp 1.15 54** ⇑P **Pn 00 09 31.5 +1.0**
BNALP AML AML
comp=E,416µm,1.1s
BNALP AML AML
comp=E,394µm,0.3s
BNALP AML AML
comp=N,452µm,0.4s
BNALP AML AML
comp=N,452µm,0.4s
**BNI Bardonecchia 1.18 194** ⇑Pg **Pb 00 09 31.4 +0.5**
**BNI Bardonecchia 1.18 194** ⇑P **Pb 00 09 31.4 +0.5**
BNI AML AML
comp=E,226µm,0.7s
BNI AML AML
comp=N,158µm,1.6s
BNI AML AML
comp=E,284µm,0.7s
BNI AML AML
comp=N,192µm,0.3s
BNI AML AML
comp=E,284µm,0.7s
BNI AML AML
comp=N,155µm,0.4s
BNI AML AML
comp=E,226µm,0.7s
BNI AML AML
comp=E,284µm,1.3s
BNI AML AML
comp=E,226µm,1.3s
BNI AML AML
comp=N,202µm,1.6s
**BNI Bardonecchia 1.18 194** P **Pb 00 09 31.4 +0.5**
**MTI02 Mont Terri, (H 1.18 3** ⇑Pg **Pg 00 09 32.3 +0.7**

**BOUC Bouclans 1.19 332** Pg **Pg 00 09 32.6 +0.8**
**BOURR Bourrignon 1.20 5** ⇑Pn **Pg 00 09 32.6 +0.6**
**BOURR Bourrignon 1.20 5** Pg **Pg 00 09 32.4 +0.4**
**DAGMA Lutertal, Dagm 1.22 31** ⇑Pn **Pg 00 09 32.9 +0.7**
**VARE Varese 1.22 105** ⇑P **Pg 00 09 32.4 0.0**
VARE S **Sn 00 09 48.2 +0.5**
VARE AML AML
comp=E,575µm,0.5s
VARE AML AML
comp=N,738µm,0.3s
VARE AML AML
comp=E,575µm,0.5s
VARE AML AML
comp=N,738µm,0.3s
**VARE Varese 1.22 105** P **Pg 00 09 32.3 -0.1**
**MONC Moncucco Torin 1.27 152** P **Pg 00 09 34.8 +1.5**
MONC AML AML
comp=N,853µm,0.4s
**MONC Moncucco Torin 1.27 152** P **Pg 00 09 34.9 +1.7**
**RRL Rocca Remolon 1.29 189** Pg **Pb 00 09 33.5 +0.6**
**RRL Rocca Remolon 1.29 189** Sg **Sb 00 09 50.1 +0.8**
**RRL Rocca Remolon 1.29 189** P **Pb 00 09 33.5 +0.6**
**MUO Muotathal 1.32 54** ⇑Pn **Pg 00 09 34.9 +0.6**
**HAMIK Hmikon, Dlik 1.33 38** ⇑Pn **Pg 00 09 34.6 +0.2**
**BHB Bricherasio 1.36 174** Pn **Pg 00 09 34.9 -0.1**
**BHB Bricherasio 1.36 174** P **Pg 00 09 35.0 0.0**
BHB S **Sn 00 09 52.2 +1.2**
**MUGIO Muggio 1.39 101** P **Pg 00 09 35.4 -0.2**
MUGIO S **Sg 00 09 52.9 -0.9**
**EMMET Emmethof 1.40 27** ⇑Pn **Pb 00 09 35.0 +0.5**
**ROTHE Rothenfluh 1.40 24** ⇑Pn **Pb 00 09 35.2 +0.5**
ROTHE PmP 00 09 37.3
**STUF Presbytere Uff 1.48 10** Pn **Pb 00 09 35.9 0.0**
**MBDF Montbardon 1.49 188** *e*Pg **Pb 00 09 36.7 +0.6**
MBDF *e*Sg **Sb 00 09 55.6 +0.8**
comp=N,301nm,0.6s
**SULZ Cheisacher 1.51 28** ⇑Pn **Pb 00 09 36.5 +0.1**
SULZ PmP 00 09 38.7
**SULZ Cheisacher 1.51 28** Pn **Pb 00 09 36.3 -0.1**
**SULZ Cheisacher 1.51 28** Pg **Pg 00 09 38.7 +1.0**
**SULZ Cheisacher 1.51 28** *e*Pg **Pg 00 09 38.5 +0.7**
SULZ *e*Sg **Sg 00 09 58.9 +1.4**
**ORIF Oris-en-Rattie 1.53 214** *e*Pg **Pb 00 09 37.1 +0.2**
ORIF *e*Sg **Sb 00 09 57.4 +1.3**
comp=N,153nm,0.4s
**ORIF Oris-en-Rattie 1.53 214** Pn **Pb 00 09 37.4 +0.6**
**RONF Ronchamp 1.54 349** ⇑Pn **Pb 00 09 37.3 +0.2**
RONF PmP 00 09 39.2
**RONF Ronchamp 1.54 349** Pn **Pb 00 09 37.2 +0.1**
RONF Pg **Pg 00 09 39.2 +0.8**
**ZUR Degenried 1.56 41** ⇑Pn **Pb 00 09 37.7 +0.3**
ZUR PmP 00 09 39.5
**ZUR Degenried 1.56 41** Pn **Pb 00 09 37.5 +0.1**
**ZUR Degenried 1.56 41** Pg **Pg 00 09 39.7 +0.9**
**ENDD Endenburg 1.58 16** ⇑Pn **Pn 00 09 37.0 +0.8**
ENDD PmP 00 09 39.9
**ENDD Endenburg 1.58 16** Pg **Pg 00 09 39.8 +0.6**
**BOBI Bbikon, Wasse 1.60 32** ⇑Pn **Pb 00 09 37.9 -0.2**
BOBI PmP 00 09 40.6
**ACHB Acheberg 1.61 30** ⇑Pn **Pb 00 09 37.7 -0.4**
ACHB PmP 00 09 40.5
**ROTM Rocchetta Tana 1.62 146** Pg **Pg 00 09 41.3 +1.4**
**HINF Hinteralfeld 1.63 355** *e*Pn **Pn 00 09 37.8 +0.9**
**HINF Hinteralfeld 1.63 355** *e*Pg **Pg 00 09 40.4 +0.3**
HINF *e*Sn **Sn 00 09 57.8 +0.2**
HINF *e*Sg **Sg 00 10 01.3 +0.1**
comp=N,362nm,0.3s
**MOF Molkenrain 1.66 1** Pn **Pn 00 09 38.4 +1.0**
MOF Pg **Pg 00 09 41.3 +0.7**
**STBO Bollwiller 1.67 4** Pg **Pg 00 09 43.4 +1.1**
**CREF Crivoux 1.68 191** Pn **Pg 00 09 40.5 -0.5**
**PZZ Stroppo 1.69 179** Pn **Pb 00 09 40.4 +0.8**
**FLACH Flaach 1.71 36** ⇑Pn **Pb 00 09 39.4 -0.5**
**METMA Mettma DE 1.72 28** ⇑Pn **Pn 00 09 38.8 +0.7**
METMA PmP 00 09 42.1
**SURF Saint Ours 1.73 186** Pn **Pb 00 09 41.2 +1.0**
**WILA Wila 1.75 45** ⇑Pn **Pb 00 09 40.4 -0.2**
**WILA Wila 1.75 45** *e*Pg **Pg 00 09 43.5 +1.1**
WILA *e*Sg **Sg 00 10 06.8 +1.7**
**WALT Westhalten 1.77 4** Pn **Pn 00 09 39.8 +1.0**
**JAUF Jausiers 1.78 188** Pn **Pb 00 09 42.3 +1.1**
**OGAG Argentiere 1.78 192** Pn **Pn 00 09 36.8 -2.3**
OGAG Pg **Pb 00 09 39.8 -1.4**
**OGAG Argentiere 1.78 192** P **Pn 00 09 36.8 -2.3**
OGAG S **Sn 00 09 57.9 -3.6**
**FELD Feldberg im Sc 1.79 20** Pn **Pn 00 09 39.8 +0.5**
**PLONS Plons/SG 1.80 61** *e*Pg **Pg 00 09 44.1 +0.8**
**SLE Schleitheim 1.84 31** ⇑Pn **Pn 00 09 40.7 +0.8**
SLE PmP 00 09 44.6
**SLE Schleitheim 1.84 31** Pn **Pn 00 09 40.5 +0.7**
**SLE Schleitheim 1.84 31** Pg **Pg 00 09 44.5 +0.3**
**SLE Schleitheim 1.84 31** *e*Pg **Pg 00 09 44.5 +0.3**
SLE *e*Sg **Sg 00 10 09.0 +0.9**
**KIZ Kirchzarten 1.85 18** ⇑Pn **Pn 00 09 40.5 +0.6**
**KIZ Kirchzarten 1.85 18** Pn **Pn 00 09 40.5 +0.6**
**KIZ Kirchzarten 1.85 18** Pg **Pg 00 09 44.6 +0.3**
**HAU Haudompre 1.88 345** *e*Pn **Pn 00 09 41.3 +1.0**
**HAU Haudompre 1.88 345** *e*Pg **Pg 00 09 44.9 +0.1**
HAU *e*Sg **Sg 00 10 08.1 -1.1**
comp=N,242nm,0.2s
**VOGT Vogtsburg - To 1.93 12** Pn **Pn 00 09 41.9 +0.9**
**PCP Piancastagn 1.95 148** Pn **Pb 00 09 44.9 +0.8**
**ENR Entracque 1.98 173** Pn **Pb 00 09 44.2 -0.4**
**ISO Isola 2.01 181** Pn **Pg 00 09 46.8 -0.6**
**ECH Echery 2.02 2** Pn **Pn 00 09 43.2 +0.9**
**ECH Echery 2.02 2** Pn **Pn 00 09 42.9 +0.6**
ECH Sn **Sn 00 10 07.0 -0.2**
**EMING Emmingen-Lipti 2.08 35** ⇑Pn **Pn 00 09 44.0 +0.9**
EMING PmP 00 09 48.9
**WALHA Wallhausen, DE 2.09 41** PmP 00 09 49.1
**SPIF crte de Spivo 2.14 177** Pn **Pb 00 09 47.2 -0.1**
**VIVF Saint-Julien-l 2.16 232** *e*Pn **Pn 00 09 45.6 +1.4**
**VIVF Saint-Julien-l 2.16 232** *e*Pg **Pg 00 09 49.8 -0.4**
VIVF *e*Sg **Sg 00 10 17.2 -1.0**
comp=N,114nm,0.2s
**DAVA Damuels 2.21 59** Pn **Pb 00 09 47.6 -0.9**
comp=N,0.4nm,0.1s,SNR=34
DAVA Sg **Sg 00 10 21.4 +1.5**
comp=N,75nm,0.4s
**CDF Champ du Feu 2.22 3** *e*Pn **Pn 00 09 45.8 +0.7**
**CDF Champ du Feu 2.22 3** *e*Pg **Pg 00 09 51.2 -0.2**
CDF *e*Sg **Sg 00 10 19.6 -0.6**
comp=N,84nm,0.5s
**WLS Welschbruch 2.23 5** Pn **Pn 00 09 46.0 +0.9**
**GORR Gorreto 2.23 135** Pn **Pb 00 09 49.3 +0.6**
**TURF col de Turini 2.23 174** Pn **Pb 00 09 48.3 -0.6**
**SMF Signal de Mont 2.28 282** *e*Pn **Pn 00 09 47.5 +1.6**
**SMF Signal de Mont 2.28 282** *e*Pg **Pg 00 09 52.4 -0.2**
SMF *e*Sn **Sn 00 10 14.2 +0.5**
SMF *e*Sg **Sg 00 10 21.4 -0.8**
comp=N,60nm,0.2s
**BFO Black Forest 2.30 21** ⇑Pn **Pn 00 09 46.5 +0.4**
**BFO Black Forest 2.30 21** *e*Sg **Sg 00 10 22.5 -0.1**
**MVIF Mont Vial 2.30 179** Pn **Pb 00 09 50.3 +0.3**
**SALSA La sagne 2.33 187** Pn **Pb 00 09 50.2 -0.4**
**GUT Gutenstein 2.33 36** ⇑Pn **Pn 00 09 47.3 +0.7**
**SBF Sospel 2.35 174** *e*Pg **Pb 00 09 51.9 +1.1**
SBF *e*Sg **Sb 00 10 21.2 +1.6**
comp=N,280nm,0.6s
**BLAF les Blancs 2.36 198** Pn **Pb 00 09 49.8 -1.2**
**MLYF Mely 2.40 203** Pn **Pb 00 09 50.5 -1.1**
MLYF Pg **Pg 00 09 55.2 +0.5**
**SFTF Sexfontaines 2.44 326** *e*Pn **Pn 00 09 49.5 +1.4**
baz=151
**SFTF Sexfontaines 2.44 326** *e*Pg **Pg 00 09 54.8 -0.8**
SFTF *e*Sn **Sn 00 10 17.7 0.0**
SFTF *e*Sg **Sg 00 10 27.2 -0.1**
comp=N,176nm,0.4s
**CALF Calern 2.45 183** Pn **Pb 00 09 51.4 -1.1**
**LOR Lormes 2.46 297** *e*Pn **Pn 00 09 50.0 +1.7**
baz=112
**LOR Lormes 2.46 297** *e*Pg **Pg 00 09 55.8 -0.2**
LOR *e*Sn **Sn 00 10 17.4 -0.7**
LOR *e*Sg **Sg 00 10 26.8 -1.1**
comp=N,35nm,0.2s
**COLF Collangettes 2.46 255** Pn **Pn 00 09 49.5 +1.2**
COLF Pg **Pg 00 09 55.8 -0.2**
**SMRF Simiane la Rot 2.46 206** *e*Pn **Pn 00 09 50.0 +1.6**
**SMRF Simiane la Rot 2.46 206** *e*Pg **Pg 00 09 56.1 +0.1**
SMRF *e*Sg **Sg 00 10 26.8 -1.1**
comp=N,18nm,0.5s

**HOHE HOHENGOEFT 2.48 6** Pn **Pn 00 09 49.1 +0.6**
HOHE Pg **Pg 00 09 56.6 +0.3**
**TRIGF Trigance 2.50 191** Pn **Pn 00 09 51.4 +2.6**
**RUSF Rustrel 2.52 207** Pn **Pn 00 09 51.6 +2.4**
RUSF Pg **Pg 00 09 57.9 +0.8**
**BSTF la Bastide-des 2.53 204** Pn **Pb 00 09 52.7 -1.1**
BSTF Pg **Pg 00 09 59.7 +2.4**
BSTF Sn **Sb 00 10 24.1 -0.7**
**PAGF Fort de Pagny 2.53 339** *e*P **Pn 00 09 51.4 +2.1**
baz=158
**PAGF Fort de Pagny 2.53 339** *e*Pg **Pg 00 09 57.7 +0.4**
PAGF *e*Sn **Sn 00 10 18.9 -0.9**
PAGF *e*Sg **Sg 00 10 29.0 -1.1**
comp=N,77nm,0.4s
**UBR Ueberruh 2.55 53** *e*Pg **Pg 00 09 57.7 0.0**
UBR *e*Sg **Sg 00 10 31.8 +1.0**
**SSF Saint Saulge 2.61 291** *e*Pn **Pn 00 09 51.9 +1.6**
**SSF Saint Saulge 2.61 291** *e*Pg **Pb 00 09 57.2 +2.0**
SSF *e*Sn **Sn 00 10 21.1 -0.6**
SSF *e*Sg **Sg 00 10 32.6 0.0**
comp=N,41nm,0.3s
**AVF Avril sur Loir 2.64 284** *e*Pn **Pn 00 09 52.3 +1.5**
**AVF Avril sur Loir 2.64 284** *e*Pg **Pg 00 09 58.9 -0.5**
AVF *e*Sn **Sn 00 10 22.4 -0.1**
AVF *e*Sg **Sg 00 10 32.6 -1.1**
comp=N,14nm,0.2s
**CIEL Dossenheim-sur 2.64 4** Pn **Pn 00 09 51.6 +0.8**
CIEL Pg **Pg 00 09 59.9 +0.4**
**FETA Feichten 2.65 71** *e*Pn **Pb 00 09 54.5 -1.4**
comp=N,0.3nm,0.1s
FETA *e*Pg **Pg 00 09 59.7 +0.2**
comp=N,8.4nm,0.4s
**MEZF Maizieres J'vi 2.69 330** *e*Pn **Pn 00 09 51.0 -0.4**
**MEZF Maizieres J'vi 2.69 330** *e*PKP1 **Pb 00 09 54.7 -1.8**
**MEZF Maizieres J'vi 2.69 330** *e*Pg **Pg 00 09 59.6 -0.7**
MEZF *e*Sn **Sn 00 10 23.6 0.0**
MEZF *e*Sg **Sg 00 10 34.6 -0.5**
comp=N,35nm,0.2s
**MANO Manonville 2.75 344** Pn **Pn 00 09 54.6 +2.4**
**SAVF Savonnieres en 2.76 332** *e*P **Pn 00 09 55.4 +3.0**
**SAVF Savonnieres en 2.76 332** *e*Pg **Pg 00 10 01.5 -0.2**
SAVF *e*Sg **Sg 00 10 36.4 -1.0**
comp=N,89nm,0.4s
**ARTF Artigues 2.76 200** Pn **Pn 00 09 54.5 +2.1**
ARTF Pg **Pg 00 10 01.4 -0.3**
**VOEL Voellerdingen 2.77 1** Pn **Pn 00 09 53.5 +1.0**
**RETA Reutte 2.84 62** *e*Pn **Pn 00 09 56.3 +2.7**
comp=N,0.6nm,0.3s,SNR=5.3
RETA *e*Pg **Pg 00 10 04.0 +0.8**
comp=N,5.9nm,0.2s
**LBL Lubilhac 2.85 252** Pn **Pn 00 09 54.9 +1.1**
LBL Pg **Pg 00 10 03.3 -0.1**
**LMR La Mourre 2.89 188** *e*PKP1 **Pn 00 09 56.4 +2.2**
**LMR La Mourre 2.89 188** *e*Pg **Pg 00 10 03.3 -0.9**
LMR *e*Sn **Sn 00 10 27.5 -1.2**
LMR *e*Sg **Sb 00 10 37.7 +2.6**
comp=N,29nm,0.4s
**STU Stuttgart 2.95 28** *e*Sg **Sg 00 10 44.4 +0.9**
**BGF Bois d'Agland 2.95 279** *e*Pn **Pn 00 09 56.9 +1.8**
**BGF Bois d'Agland 2.95 279** *e*Pg **Pg 00 10 04.9 -0.4**
BGF *e*Sg **Sg 00 10 42.4 -1.2**
comp=N,98nm,0.4s
**MOTA Moosalm 3.00 66** *e*Pn **Pb 00 09 59.1 -2.8**
comp=N,1.8nm,0.3s
MOTA *e*Pg **Pg 00 10 08.2 +2.0**
comp=N,3.2nm,0.2s
MOTA *e*Sn **Sn 00 10 33.5 +2.1**
comp=N,3.1nm,0.2s
**SQTA Sankt Quirin 3.02 69** *i* Pn **Pb 00 09 59.7 -2.6**
comp=N,1.2nm,0.2s,SNR=9.8
SQTA Pg **Pg 00 10 07.6 +0.9**
comp=N,8.1nm,0.2s
**HYF Humbligny 3.24 291** *e*PKP1 **Pn 00 10 01.4 +2.4**
HYF *e*Sn **Sn 00 10 37.7 +0.5**
HYF *e*Sg **Sg 00 10 52.7 0.0**
comp=N,82nm,0.3s
**FRNF Fournols 3.26 257** Pn **Pn 00 10 01.9 +2.5**
FRNF Pg **Pg 00 10 11.3 0.0**
**WATA Walderalm 3.29 68** *e*Pn **Pn 00 10 02.9 +3.0**
comp=N,1.2nm,0.2s,SNR=6.1
**WTTA Wattenberg 3.31 70** *i* Pn **Pn 00 10 03.8 +3.6**
comp=N,2.5nm,0.2s,SNR=9.4
WTTA *e*Pg **Pg 00 10 12.5 +0.3**
comp=N,7.7nm,0.3s
**TCF Toulx Ste Croi 3.38 273** *e*Pn **Pn 00 10 02.6 +1.6**
**TCF Toulx Ste Croi 3.38 273** *e*Pg **Pg 00 10 13.3 -0.2**
TCF *e*Sn **Sn 00 10 40.0 -0.8**
TCF *e*Sg **Sg 00 10 56.1 -1.2**
comp=N,24nm,0.3s
**FUR Furstenfeldbru 3.47 54** *e*Pg **Pg 00 10 15.3 0.0**
FUR *e*Sg **Sg 00 11 01.3 +1.0**
**FIU Minerbio Fiu 3.48 115** AML AML
comp=E,83µm,0.7s
FIU AML AML
comp=N,64µm,0.4s
**NORI Noerdlinger Ri 3.49 42** *e*Pg **Pg 00 10 15.1 -0.4**
**WLF Walferdange 3.52 350** Pn **Pn 00 10 05.7 +2.8**
**WLF Walferdange 3.52 350** Pg **Pg 00 10 16.1 -0.2**
**WLF Walferdange 3.52 350** *d*S **Sn 00 10 44.7 +0.4**
**MORSI Morsiglia 3.63 152** Pn **Pn 00 10 07.1 +2.8**
**CAF Calviac 3.75 252** *e*Pn **Pn 00 10 07.6 +1.6**
**CAF Calviac 3.75 252** *e*Pg **Pg 00 10 19.5 -1.0**
CAF *e*Sg **Sb 00 11 04.8 +5.1**
comp=N,17nm,0.3s
**ABTA Abfaltersbach 3.79 80** *e*Pn **Pn 00 10 10.8 +4.1**
comp=N,0.4nm,0.3s
ABTA Pg **Pg 00 10 24.9 +3.4**
comp=N,5.4nm,0.5s
ABTA *e*Sn **Sb 00 10 57.5 -3.7**
comp=N,3.0nm,0.3s
**PGF Pioggiola 3.90 159** *e*P **Pn 00 10 10.5 +2.3**
PGF *e*Sn **Sn 00 10 54.8 +1.1**
comp=N,4.6nm,0.3s
**RJF Les Rejaudoux 4.00 259** *e*Pn **Pn 00 10 11.4 +2.0**
**RJF Les Rejaudoux 4.00 259** *e*Pg **Pg 00 10 24.4 -0.9**
RJF *e*Sg **Sg 00 11 13.2 -3.8**
comp=N,30nm,0.4s
**LESA Schwarzleotal 4.04 70** *e*Pn **Pn 00 10 13.4 +3.4**
comp=N,1.4nm,0.3s
**TNS Taunus Mts 4.13 12** *e*Pn **Pn 00 10 12.6 +1.3**
**RCHB Rochefort 4.15 343** Pn **Pn 00 10 13.9 +2.4**
**RCHB Rochefort 4.15 343** *d*P **Pn 00 10 13.8 +2.4**
RCHB *d*S **Sn 00 10 58.0 -1.7**
**GIVF Givet 4.19 340** *e*Pn **Pn 00 10 13.4 +1.4**
GIVF *e*Sn **Sn 00 10 59.0 -1.7**
GIVF *e*Sg **Sg 00 11 21.7 -1.5**
comp=N,31nm,0.5s
**BHOU Houvegnez 4.22 351** *d*P **Pn 00 10 14.8 +2.3**
BHOU *d*S **Sn 00 10 58.1 -3.3**
**DOU Dourbes 4.24 338** Pn **Pn 00 10 15.0 +2.3**
**DOU Dourbes 4.24 338** *d*P **Pn 00 10 15.3 +2.5**
DOU *d*S **Sn 00 11 00.3 -1.6**
**BAIF Baives 4.32 335** *e*Pn **Pn 00 10 15.8 +2.0**
BAIF *e*Sn **Sn 00 11 02.4 -1.4**
BAIF *e*Sg **Sg 00 11 25.5 -1.8**
comp=N,20nm,0.5s
**BCLA Clavier 4.39 345** *d*P **Pn 00 10 17.1 +2.3**
BCLA *d*S **Sn 00 11 04.3 -1.3**
**BMRD Maredsous 4.39 340** *d*P **Pn 00 10 17.3 +2.5**
BMRD *d*S **Sn 00 11 04.0 -1.5**
**BGES Gesves 4.40 343** *d*P **Pn 00 10 17.6 +2.7**
BGES *d*S **Sn 00 11 04.4 -1.4**
**KBA Koelnbreinsper 4.41 76** *i* Pn **Pn 00 10 19.1 +4.0**
comp=N,0.4nm,0.2s,SNR=7.7
KBA Pg **Pg 00 10 34.0 +0.8**
comp=N,3.5nm,0.2s
**BTNL Ternell 4.44 352** *d*P **Pn 00 10 17.5 +2.0**
BTNL *d*S **Sn 00 11 04.2 -2.6**
**MEM Membach 4.47 351** *d*P **Pn 00 10 18.1 +2.2**
MEM *d*S **Sn 00 11 06.8 -0.8**
**MTLF Montolieu 4.49 232** *e*Pn **Pn 00 10 17.5 +1.3**
**MTLF Montolieu 4.49 232** *e*Pg **Pg 00 10 32.0 -2.7**
MTLF *e*Sg **Sg 00 11 28.4 -4.4**
comp=N,18nm,0.4s
**BSTI Sart Tilman 4.50 348** *d*P **Pn 00 10 18.7 +2.4**
**MONQ Montcuq 4.54 248** Pn **Pn 00 10 18.4 +1.6**
MONQ Pg **Pg 00 10 35.4 -0.3**
**LFF La Frestale 4.63 257** *e*Pn **Pn 00 10 20.1 +2.1**
**LFF La Frestale 4.63 257** *e*Pg **Pg 00 10 35.8 -1.5**
LFF *e*Sn **Sn 00 11 10.1 -1.3**
LFF *e*Sg **Sg 00 11 32.2 -5.0**
comp=N,23nm,0.5s
**BIOA Bad Ischl, Aus 4.73 69** *i* Pn **Pn 00 10 21.9 +2.3**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=N,0.7nm,0.3s | | | | | | | | |
| BIOA | | | | | Pg | | **Pg** | **00 10 39.5** | **+0.1** |
| | comp=N,6.0nm,0.3s | | | | | | | | |
| **WET** | **Wettzell** | **4.90** | **51** | *e*Pn | | | **Pn** | **00 10 22.8** | **+1.0** |
| **CARF** | **Carcanieres** | **4.98** | **227** | Pn | | | **Pn** | **00 10 25.3** | **+2.3** |
| **MFF** | **Saint Martin d** | **5.01** | **277** | *e*Pn | | | **Pn** | **00 10 25.2** | **+1.8** |
| MFF | | | | *e*Sn | | | **Sn** | **00 11 18.9** | **-2.1** |
| MFF | | | | *e*Sg | | | **Sg** | **00 11 46.3** | **-3.4** |
| | comp=N,12nm,0.5s | | | | | | | | |
| **OBKA** | **Obir** | **5.18** | **84** | *e*Pn | | | **Pn** | **00 10 28.9** | **+3.2** |
| | comp=N,0.3nm,0.2s | | | | | | | | |
| **MOA** | **Molln** | **5.18** | **69** | *e*Pn | | | **Pn** | **00 10 28.2** | **+2.5** |
| | comp=N,0.7nm,0.3s | | | | | | | | |
| **GEC2** | **GERESS Array S** | **5.21** | **57** | *e*Pn | | | **Pn** | **00 10 27.4** | **+1.3** |
| **KHC** | **Kasperske Hory** | **5.28** | **54** | *e*PN | | | **Pn** | **00 10 28.1** | **+1.0** |
| KHC | | | | *e*PG | | | **Pg** | **00 10 48.5** | **-1.4** |
| KHC | | | | *e*SN | | | **Sn** | **00 11 26.9** | **-0.7** |
| KHC | | | | *e*SG | | | **Sg** | **00 11 58.3** | **+0.1** |
| | comp=N,24nm,1.2s | | | | | | | | |
| **LDF** | **La Druitiere** | **5.45** | **299** | *e*Pn | | | **Pn** | **00 10 30.9** | **+1.6** |
| LDF | | | | *e*Sn | | | **Sn** | **00 11 29.1** | **-2.5** |
| LDF | | | | *e*Sg | | | **Sg** | **00 11 59.2** | **-4.3** |
| | comp=N,14nm,0.6s | | | | | | | | |
| **SOKA** | **Soboth** | **5.52** | **82** | *i* Pn | | | **Pn** | **00 10 33.2** | **+2.8** |
| | comp=N,0.4nm,0.3s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **5.56** | **59** | *e*PN | | | **Pn** | **00 10 32.5** | **+1.6** |
| **FLN** | **La Foliniere** | **5.73** | **299** | *e*Pn | | | **Pn** | **00 10 34.8** | **+1.6** |
| FLN | | | | *e*Sn | | | **Sn** | **00 11 36.3** | **-2.4** |
| FLN | | | | *e*Sg | | | **Sg** | **00 12 09.5** | **-3.1** |
| | comp=N,8.5nm,0.4s | | | | | | | | |
| **EPF** | **Esparros** | **5.76** | **239** | *e*Pn | | | **Pn** | **00 10 33.8** | **+0.1** |
| **EPF** | **Esparros** | **5.76** | **239** | *e*Pg | | | **Pg** | **00 10 56.2** | **-2.8** |
| EPF | | | | *e*Sg | | | **Sg** | **00 12 09.0** | **-4.5** |
| | comp=N,5.9nm,0.3s | | | | | | | | |
| **ZVC** | **Zvikov** | **5.79** | **53** | *e*PN | | | **Pn** | **00 10 35.3** | **+1.3** |
| **GRR** | **Gorron** | **5.83** | **295** | *e*Pn | | | **Pn** | **00 10 36.4** | **+1.9** |
| GRR | | | | *e*Sn | | | **Sn** | **00 11 38.2** | **-2.8** |
| | comp=N,3.7nm,0.2s | | | | | | | | |
| GRR | | | | *e*Sg | | | **Sg** | **00 12 12.7** | **-3.0** |
| **ARSA** | **Arzberg** | **5.90** | **77** | *e*Pn | | | **Pn** | **00 10 38.1** | **+2.5** |
| | comp=N,0.5nm,0.4s | | | | | | | | |
| ARSA | | | | *e*Sn | | | **Sn** | **00 11 44.3** | **+1.4** |
| | comp=N,1.2nm,0.4s | | | | | | | | |
| **ECHI** | **Chisagues Biel** | **6.06** | **237** | Pn | | | Pn | 00 10 42.9 | +5.0 |
| **LOUF** | **Saint-Loup** | **6.19** | **297** | Pn | | | **Pn** | **00 10 41.4** | **+1.9** |
| **CONA** | **Conrad Observa** | **6.25** | **71** | *i* Pn | | | **Pn** | **00 10 43.4** | **+3.0** |
| | comp=N,0.2nm,0.2s | | | | | | | | |
| CONA | | | | *i* Sn | | | **Sn** | **00 11 49.7** | **-1.7** |
| | comp=N,3.3nm,0.3s | | | | | | | | |
| **PRU** | **Pruhonice** | **6.27** | **50** | *e*PN | | | **Pn** | **00 10 42.7** | **+2.0** |
| PRU | | | | *e*SG | | | **Sg** | **00 12 29.4** | **-0.6** |
| **ETSF** | **Etsaut** | **6.38** | **242** | *e*P | | | **Pn** | **00 10 46.3** | **+4.1** |
| **ETSF** | **Etsaut** | **6.38** | **242** | *e*Pg | | | **Pg** | **00 11 08.2** | **-2.6** |
| ETSF | | | | *e*Sn | | | **Sn** | **00 11 52.3** | **-2.4** |
| ETSF | | | | *e*Sg | | | **Sg** | **00 12 30.0** | **-3.3** |
| | comp=N,3.6nm,0.3s | | | | | | | | |
| **CLL** | **Collm** | **6.44** | **35** | *e*Pg | | | **Pg** | **00 11 10.0** | **-2.0** |
| CLL | | | | *ex* | | | x | 00 11 15.0 | |
| CLL | | | | *e*Sg | | | **Sg** | **00 12 33.0** | **-2.3** |
| | comp=N,8.0nm,0.8s | | | | | | | | |
| **TREC** | **Trest** | **6.46** | **58** | *e*PN | | | **Pn** | **00 10 45.6** | **+2.3** |
| **RONA** | **Rosalia, Austr** | **6.49** | **73** | *e*Pn | | | **Pn** | **00 10 45.7** | **+2.0** |
| | comp=N,0.8nm,0.2s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **6.53** | **42** | Pg | | | **Pg** | **00 11 14.3** | **+0.5** |
| BRG | | | | Sg | | | **Sg** | **00 12 40.3** | **+2.1** |
| BRG | | | | Amp | | | | 00 12 48.7 | |
| | comp=Z,4.3nm,0.5s | | | | | | | | |
| **SJPF** | **Ste Jean** | **6.68** | **245** | *e*Pn | | | **Pn** | **00 10 46.6** | **+0.4** |
| **SJPF** | **Ste Jean** | **6.68** | **245** | *e*Pg | | | **Pg** | **00 11 13.0** | **-3.5** |
| SJPF | | | | *e*Sn | | | **Sn** | **00 12 00.2** | **-1.8** |
| SJPF | | | | *e*Sg | | | **Sg** | **00 12 38.5** | **-4.4** |
| | comp=Z,7.6nm,0.5s | | | | | | | | |
| **SGMF** | **Saint Gilles** | **6.88** | **291** | *e*Pn | | | **Pn** | **00 10 49.8** | **+0.9** |
| SGMF | | | | *e*Sn | | | **Sn** | **00 12 03.2** | **-3.6** |
| | comp=Z,4.0nm,0.3s | | | | | | | | |
| SGMF | | | | *e*Sg | | | **Sg** | **00 12 46.3** | **-3.0** |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| **KRUC** | **Moravsky** | **6.92** | **62** | *e*PN | | | **Pn** | **00 10 51.8** | **+2.3** |
| KRUC | | | | *e*SN | | | **Sn** | **00 12 06.1** | **-1.7** |
| **VRAC** | **Vranov** | **7.13** | **61** | *e*PN | | | **Pn** | **00 10 54.0** | **+1.6** |
| VRAC | | | | *e*SN | | | **Sn** | **00 12 09.6** | **-3.5** |
| **QUIF** | **Quistinic** | **7.21** | **288** | *e*Pn | | | **Pn** | **00 10 54.4** | **+0.9** |
| QUIF | | | | *e*Sn | | | **Sn** | **00 12 10.6** | **-4.3** |
| | comp=Z,3.6nm,0.4s | | | | | | | | |
| **ROSF** | **Rostrenen** | **7.36** | **291** | *e*Pn | | | **Pn** | **00 10 56.2** | **+0.6** |
| ROSF | | | | *e*Sn | | | **Sn** | **00 12 15.1** | **-3.7** |
| | comp=Z,14nm,0.6s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **7.43** | **53** | *e*SG | | | **Sg** | **00 13 06.4** | **-0.8** |
| **MORC** | **Moravsky Berou** | **7.88** | **59** | *e*PN | | | **Pn** | **00 11 03.5** | **+0.8** |

*IDC* ***23*** *00:13:22.5±1.1, 59°.70N×19°.60E, h0km, mb3.1/1, mbtmp3.0/5, ML1.9/3, Error ellipse: s-maj=20.0km s-min=6.8km az=166.0*
*DNK* ***23*** *00:13:23.2±1.7, 59°.84N×19°.41E, h0km, ML2.2, ML2.4(UPP), Explosion*
*HEL* ***23*** *00:13:23.7±0.1, 59°.90N×19°.34E, h0km, ML2.0, Explosion*
*UPP* ***23*** *00:13:23.2±0.1, 59°.87N×19°.39E, h0km, ML2.4, Unknown*
*BER* ***23*** *00:13:24.1±2.4, 59°.84N×19°.44E, h0km, ML1.6, ML2.4(UPP), Suspected explosion*

**ISC 23 00:13:22.6±0.7, 59°.86N±0°.02×19°.39E±0°.02, h0km, n68, σ1s00/93, Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NRTU** | **Norrtaelje** | **0.43** | **244** | P | **Pg** | **00 13 31.4** | **+0.6** |
| NRTU | | | | S | **Sg** | **00 13 37.3** | **+1.0** |
| **NRTU** | **Norrtaelje** | **0.43** | **244** | P | **Pg** | **00 13 31.4** | **+0.6** |
| NRTU | | | | S | **Sg** | **00 13 37.3** | **+1.0** |
| **NRTU** | **Norrtaelje** | **0.43** | **244** | P | **Pg** | **00 13 31.4** | **+0.6** |
| NRTU | | | | S | **Sg** | **00 13 37.3** | **+1.0** |
| **NRTU** | **Norrtaelje** | **0.43** | **244** | *e*P | **Pg** | **00 13 31.4** | **+0.6** |
| NRTU | | | | *e*S | **Sg** | **00 13 36.2** | **0.0** |
| **AAL** | **Aland** | **0.44** | **44** | *e*P | **Pg** | **00 13 31.3** | **+0.3** |
| **AAL** | **Aland** | **0.44** | **44** | P | **Pg** | **00 13 31.6** | **+0.6** |
| AAL | | | | S | **Sg** | **00 13 38.3** | **+1.7** |
| **AAL** | **Aland** | **0.44** | **44** | P | **Pg** | **00 13 31.6** | **+0.6** |
| AAL | | | | S | **Sg** | **00 13 38.3** | **+1.7** |
| **AAL** | **Aland** | **0.44** | **44** | *e*P | **Pg** | **00 13 31.6** | **+0.6** |
| AAL | | | | *e*S | **Sg** | **00 13 36.8** | **+0.2** |
| **GRAU** | **Graesoe** | **0.64** | **318** | P | **Pg** | **00 13 35.1** | **+0.4** |
| GRAU | | | | S | **Sg** | **00 13 44.0** | **+1.0** |
| **GRAU** | **Graesoe** | **0.64** | **318** | P | **Pg** | **00 13 35.1** | **+0.4** |
| GRAU | | | | S | **Sg** | **00 13 44.0** | **+1.0** |
| **GRAU** | **Graesoe** | **0.64** | **318** | P | **Pg** | **00 13 35.1** | **+0.4** |
| GRAU | | | | S | **Sg** | **00 13 44.0** | **+1.0** |
| **FLYU** | **Flymyra** | **0.80** | **290** | P | **Pg** | **00 13 38.4** | **+0.5** |
| FLYU | | | | S | **Sg** | **00 13 49.4** | **+1.1** |
| **FLYU** | **Flymyra** | **0.80** | **290** | P | **Pg** | **00 13 38.4** | **+0.5** |
| FLYU | | | | S | **Sg** | **00 13 49.4** | **+1.1** |
| **FLYU** | **Flymyra** | **0.80** | **290** | P | **Pg** | **00 13 38.4** | **+0.5** |
| FLYU | | | | S | **Sg** | **00 13 49.4** | **+1.1** |
| **FORU** | **Forsmark** | **0.80** | **311** | P | **Pg** | **00 13 38.1** | **+0.2** |
| **FORU** | **Forsmark** | **0.80** | **311** | P | **Pg** | **00 13 38.1** | **+0.2** |
| **FORU** | **Forsmark** | **0.80** | **311** | P | **Pg** | **00 13 38.1** | **+0.2** |
| **UPP** | **Uppsala** | **0.89** | **270** | P | **Pg** | **00 13 40.2** | **+0.5** |
| **UPP** | **Uppsala** | **0.89** | **270** | *e*P | **Pg** | **00 13 40.3** | **+0.7** |
| **UPP** | **Uppsala** | **0.89** | **270** | P | **Pg** | **00 13 40.2** | **+0.5** |
| **UPP** | **Uppsala** | **0.89** | **270** | P | **Pg** | **00 13 40.2** | **+0.5** |
| **FIBU** | **Brunna** | **1.03** | **273** | P | **Pg** | **00 13 42.4** | **+0.2** |
| **FIBU** | **Brunna** | **1.03** | **273** | P | **Pg** | **00 13 42.4** | **+0.2** |
| **FIBU** | **Brunna** | **1.03** | **273** | P | **Pg** | **00 13 42.4** | **+0.2** |
| **NYNU** | **Nynaeshamn** | **1.11** | **220** | P | **Pg** | **00 13 43.9** | **0.0** |
| **NYNU** | **Nynaeshamn** | **1.11** | **220** | P | **Pg** | **00 13 43.9** | **0.0** |
| **NYNU** | **Nynaeshamn** | **1.11** | **220** | P | **Pg** | **00 13 43.9** | **0.0** |
| **OSTU** | **Oestervaala** | **1.19** | **289** | P | **Pg** | **00 13 45.1** | **-0.2** |
| **OSTU** | **Oestervaala** | **1.19** | **289** | P | **Pg** | **00 13 45.1** | **-0.2** |
| **OSTU** | **Oestervaala** | **1.19** | **289** | P | **Pg** | **00 13 45.1** | **-0.2** |
| **IGGU** | **Iggoen** | **1.45** | **315** | P | **Pn** | **00 13 49.7** | **-0.2** |
| **IGGU** | **Iggoen** | **1.45** | **315** | P | **Pn** | **00 13 49.7** | **-0.2** |
| **IGGU** | **Iggoen** | **1.45** | **315** | P | **Pn** | **00 13 49.7** | **-0.2** |
| **RAF** | **Rauma** | **1.66** | **44** | *e*P | **Pn** | **00 13 52.4** | **-0.4** |
| **RAF** | **Rauma** | **1.66** | **44** | *e*P | **Pn** | **00 13 52.6** | **-0.2** |
| RAF | | | | *e*S | **Sn** | **00 14 14.5** | **-0.2** |
| RAF | | | | MSG | | 00 14 19.1 | |
| | comp=Z,9.5nm,0.2s | | | | | | |
| **ARNU** | **Arnoeviken** | **2.08** | **333** | *e*PB | **Pn** | **00 13 59.5** | **+0.8** |
| ARNU | | | | *e*SG | **Sb** | **00 14 28.2** | **+0.7** |
| **GOTU** | **Gotland** | **2.23** | **191** | *e*P | **Pn** | **00 14 01.8** | **+1.2** |
| GOTU | | | | *e*S | **Sn** | **00 14 30.1** | **+1.3** |
| **KPF** | **Kankaanpaa** | **2.37** | **32** | *e*PB | **Pb** | **00 14 05.1** | **-1.0** |
| KPF | | | | *e*SG | **Sb** | **00 14 35.9** | **0.0** |
| KPF | | | | MSG | | 00 14 38.0 | |
| | comp=Z,9.0nm,0.2s | | | | | | |
| **MEF** | **Metsahovi** | **2.54** | **80** | *e*P | **Pn** | **00 14 05.8** | **+0.8** |
| **MEF** | **Metsahovi** | **2.54** | **80** | MSG | | 00 14 42.3 | |
| | comp=Z,6.8nm,0.2s | | | | | | |
| **MTSE** | **Matsula** | **2.55** | **115** | *e*P | **Pn** | **00 14 06.5** | **+1.5** |
| **MTSE** | **Matsula** | **2.55** | **115** | *e*P | **Pn** | **00 14 07.0** | **+2.0** |
| MTSE | | | | *e*SB | **Sb** | **00 14 39.9** | **-0.9** |
| **SLIT** | **Slitere, Latvi** | **2.70** | **145** | *e*P | **Pn** | **00 14 07.8** | **+0.6** |
| **NUR** | **Nurmijrvi** | **2.71** | **74** | MSG | | 00 14 46.1 | |
| | comp=Z,4.7nm,0.2s | | | | | | |
| **HFS** | **Hagfors** | **2.87** | **278** | Pn | **Pn** | **00 14 11.0** | **+1.4** |
| | comp=Z,0.5nm,0.3s,baz=101,slow=14,SNR=22 | | | | | | |
| HFS | | | | Pg | **Pb** | **00 14 14.3** | **-0.4** |
| | comp=Z,1.1nm,0.3s,baz=99,slow=19,SNR=3.8 | | | | | | |
| HFS | | | | Sn | **Sn** | **00 14 47.2** | **+2.4** |
| | comp=Z,0.8nm,0.3s,baz=96,slow=28,SNR=4.2 | | | | | | |
| HFS | | | | Lg | Lg | 00 14 50.6 | |
| | comp=Z,1.9nm,0.3s,baz=92,slow=32,SNR=12 | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **KEF** | **Keuruu** | **3.53** | **47** | *e*P | **Pn** | **00 14 20.1** | **+1.5** |
| **VAF** | **Ylistaro** | **3.56** | **25** | *e*P | **Pn** | **00 14 21.4** | **+2.5** |
| **FINES** | **FINESS Array B** | **3.65** | **61** | Pn | **Pn** | **00 14 21.0** | **+0.8** |
| | comp=Z,0.3nm,0.3s,baz=242,slow=12,SNR=20 | | | | | | |
| FINES | | | | Pg | **Pb** | **00 14 26.0** | **-1.9** |
| | comp=Z,0.7nm,0.3s,baz=248,slow=18,SNR=22 | | | | | | |
| FINES | | | | Lg | Lg | 00 15 15.2 | |
| | comp=Z,0.7nm,0.3s,baz=242,slow=27,SNR=7.5 | | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **NC602** | **NORSAR Array S** | **4.00** | **286** | *e*P | **Pn** | **00 14 26.1** | **+1.0** |
| **BORU** | **Boraas** | **4.11** | **240** | *i* P | **Pn** | **00 14 28.4** | **+1.8** |
| **NB201** | **NORSAR Array S** | **4.18** | **290** | *e*P | **Pn** | **00 14 28.4** | **+0.8** |
| NB201 | | | | IAML | | 00 15 37.5 | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **NC303** | **NORSAR Array S** | **4.19** | **292** | *e*P | **Pn** | **00 14 28.2** | **+0.5** |
| NC303 | | | | *e*S | **Sn** | **00 15 17.6** | **+0.3** |
| **NOA** | **NORSAR Array B** | **4.22** | **290** | Pn | **Pn** | **00 14 28.3** | **+0.2** |
| | baz=108,slow=13,SNR=12 | | | | | | |
| NOA | | | | Lg | Lg | 00 15 33.5 | |
| | comp=Z,0.1nm,0.3s,baz=103,slow=16,SNR=2.2 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **STRU** | **Stroemstad** | **4.27** | **262** | *i* P | **Pn** | **00 14 30.0** | **+1.2** |
| **NAO01** | **NORSAR Array S** | **4.34** | **287** | *e*P | **Pn** | **00 14 30.5** | **+0.8** |
| NAO01 | | | | IAML | | 00 15 47.1 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **TJOU** | **Tjoern** | **4.42** | **249** | *i* P | **Pn** | **00 14 30.7** | **-0.1** |
| **NBO00** | **NORSAR Array S** | **4.42** | **289** | *e*P | **Pn** | **00 14 31.3** | **+0.4** |
| NBO00 | | | | *e*S | **Sn** | **00 15 22.5** | **-0.6** |
| NBO00 | | | | IAML | | 00 15 43.5 | |
| | comp=Z,2.8nm,0.3s | | | | | | |
| **DEL** | **Delary** | **4.49** | **223** | *e*P | **Pn** | **00 14 31.9** | **+0.3** |
| **DEL** | **Delary** | **4.49** | **223** | *i* P | **Pn** | **00 14 33.0** | **+1.3** |
| **NC204** | **NORSAR Array S** | **4.49** | **292** | *e*P | **Pn** | **00 14 31.6** | **-0.1** |
| **FABU** | **Falkenberg** | **4.53** | **234** | *i* P | **Pn** | **00 14 33.6** | **+1.3** |
| **ONAU** | **Onsala** | **4.62** | **241** | *i* P | **Pn** | **00 14 34.2** | **+0.6** |
| **BJUU** | **Bjuv** | **5.09** | **224** | *i* P | **Pn** | **00 14 41.1** | **+1.1** |
| BJUU | | | | *i* S | **Sn** | **00 15 40.3** | **+0.9** |
| **LUNU** | **Lund** | **5.30** | **219** | *i* P | **Pn** | **00 14 43.0** | **+0.1** |
| LUNU | | | | *i* S | **Sn** | **00 15 43.6** | **-1.1** |
| **BSD** | **Bornholm Skovb** | **5.34** | **209** | *i* P | **Pn** | **00 14 43.6** | **+0.2** |
| BSD | | | | *i* S | **Sn** | **00 15 43.8** | **-1.7** |
| BSD | | | | IAML | | 00 16 13.6 | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **HOMB** | **Homborsund** | **5.84** | **259** | *i* P | **Pn** | **00 14 50.0** | **-0.2** |
| HOMB | | | | *i* S | **Sn** | **00 15 54.3** | **-3.5** |
| **ARCES** | **ARCESS Array B** | **10.05** | **12** | Pn | **Pn** | **00 15 46.1** | **-1.9** |
| | comp=Z,0.7nm,0.3s,baz=194,slow=14,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.44** | **203** | P | **P** | **00 22 05.6** | **-0.9** |
| | comp=Z,0.3nm,0.9s,baz=13,slow=7.4,SNR=6.5 | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | |

*IDC* ***23*** *00:28:42.5±2.9, 13°.57N×91°.51W, h0km, mb3.8/1, mbtmp3.5/3, ML3.7/2, MS2.4/1, Error ellipse: s-maj=48.4km s-min=17.0km az=142.0*
*CATAC* ***23*** *00:28:49.6±0.6, 13°.92N×91°.53W, h8km±5km, ML4.2*
*NEIC* ***23*** *00:28:50.1±2.5, 13°.92N±0°.07×91°.57W±0°.07, h21km±4km, mb4.0/3, Error ellipse: s-maj=11.1km s-min=7.4km az=224.0*
*GCG* ***23*** *00:28:52.8±1.4, 14°.05N×91°.52W, h51km, MD4.1*
*SNET* ***23*** *00:28:53.0±0.9, 14°.15N×91°.32W, h15km±6km, ML4.1*

**ISC 23 00:28:49.2±1.4, 13°.91N±0°.05×91°.56W±0°.04, h18km±6km, n71, σ1s29/96, 1C-1D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SULM** | **Suchitepequez,** | **0.40** | **359** | *e*P | **Pn** | **00 29 01.7** | **+1.7** |
| **RTAL** | **Retalhuleu** | **0.63** | **348** | Pn | **Pg** | **00 29 01.9** | **+0.2** |
| RTAL | | | | Sg | **Sb** | **00 29 11.6** | **+1.5** |
| **RTAL** | **Retalhuleu** | **0.63** | **348** | *e*P | **Pg** | **00 29 02.4** | **+0.7** |
| RTAL | | | | *e*S | **Sb** | **00 29 11.5** | **+1.4** |
| **RTAL** | **Retalhuleu** | **0.63** | **348** | *i* P | **Pg** | **00 29 02.2** | **+0.6** |
| RTAL | | | | *i* S | **Sb** | **00 29 11.9** | **+1.8** |
| RTAL | | | | IAML | | 00 29 20.4 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **STG3** | **Santiaguito 3,** | **0.80** | **359** | *e*P | **Pg** | **00 29 05.0** | **+0.1** |
| **FUG** | **Fuego 3** | **0.88** | **52** | *i*/P | **Pn** | **00 29 07.6** | **+0.8** |
| **SOKI** | **Kika Raxquin** | **0.92** | **9** | *i* P | **Pg** | **00 29 06.5** | **-0.7** |
| SOKI | | | | *i* S | **Sg** | **00 29 18.8** | **-0.6** |
| SOKI | | | | IAML | | 00 29 22.6 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **CHTG** | **Tecpan** | **1.02** | **33** | *i* P | **Pb** | **00 29 08.6** | **+0.2** |
| CHTG | | | | *i* S | **Sg** | **00 29 22.4** | **0.0** |
| CHTG | | | | IAML | | 00 29 23.6 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **PCG** | **Pacaya** | **1.04** | **62** | *i*/P | **Pn** | **00 29 10.6** | **+1.4** |
| **GUMI** | **Mixco** | **1.17** | **52** | *i* P | **Pb** | **00 29 10.6** | **-0.4** |
| GUMI | | | | *i* S | **Sn** | **00 29 27.3** | **+0.9** |
| GUMI | | | | IAML | | 00 29 29.4 | |
| | comp=Z,14μm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.36** | **60** | *e*P | **Pg** | **00 29 15.6** | **+0.2** |
| NBG | | | | *e*S | **Sg** | **00 29 33.2** | **0.0** |
| **HUEH** | **Huehuetenango** | **1.40** | **2** | Pn | **Pn** | **00 29 13.6** | **-0.5** |
| HUEH | | | | Sn | **Sn** | **00 29 33.1** | **+0.8** |
| **HUEH** | **Huehuetenango** | **1.40** | **2** | *e*P | **Pn** | **00 29 14.4** | **+0.3** |
| HUEH | | | | *e*S | **Sn** | **00 29 31.3** | **-1.0** |
| **HUEH** | **Huehuetenango** | **1.40** | **2** | *i* P | **Pn** | **00 29 14.3** | **+0.2** |
| HUEH | | | | *i* S | **Sb** | **00 29 34.1** | **+1.4** |
| HUEH | | | | IAML | | 00 29 39.7 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **QUIS** | **Sacapulas** | **1.45** | **18** | *i* P | **Pn** | **00 29 15.2** | **+0.5** |
| QUIS | | | | *i* S | **Sn** | **00 29 34.3** | **+1.0** |
| QUIS | | | | IAML | | 00 29 35.0 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **APG** | **El Apazote** | **1.52** | **44** | Pg | **Pn** | **00 29 16.3** | **+0.6** |
| | comp=Z,2.7nm,0.3s,baz=214,slow=10,SNR=440 | | | | | | |
| APG | | | | Lg | Lg | 00 29 36.9 | |
| | comp=Z,18nm,0.3s,baz=310,slow=19,SNR=35 | | | | | | |
| APG | | | | LR | LR | 00 29 55.3 | |
| | comp=Z,35nm,20.8s,baz=267,slow=42 | | | | | | |
| **NUBE** | **Las Nubes** | **1.73** | **90** | *e*P | **Pn** | **00 29 18.9** | **+0.4** |
| **NUBE** | **Las Nubes** | **1.73** | **90** | *i* P | **Pn** | **00 29 19.0** | **+0.4** |
| NUBE | | | | *i* S | **Sn** | **00 29 40.0** | **-0.2** |
| NUBE | | | | IAML | | 00 29 46.1 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.73** | **86** | *e*P | **Pn** | **00 29 19.3** | **+0.9** |
| SLOZ | | | | *e*S | **Sn** | **00 29 39.6** | **-0.4** |
| **LOAL** | **Lomas de Alarc** | **1.73** | **87** | *e*P | **Pn** | **00 29 19.4** | **+1.0** |
| **LOAL** | **Lomas de Alarc** | **1.73** | **87** | *i* P | **Pn** | **00 29 19.9** | **+1.5** |
| LOAL | | | | *i* S | **Sb** | **00 29 41.8** | **-0.1** |
| LOAL | | | | IAML | | 00 29 50.6 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **RTR** | **El Retiro** | **1.86** | **90** | *e*P | **Pn** | **00 29 21.8** | **+1.4** |
| **CEVE** | **Cerro Verde** | **1.88** | **92** | *e*P | **Pn** | **00 29 22.0** | **+1.3** |
| CEVE | | | | *e*S | **Sn** | **00 29 45.2** | **+1.0** |
| CEVE | | | | IAML | | 00 29 55.6 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.88** | **92** | *i* P | **Pn** | **00 29 21.8** | **+1.1** |
| CEVE | | | | *i* S | **Sb** | **00 29 47.9** | **+1.4** |
| CEVE | | | | IAML | | 00 30 00.7 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **1.88** | **92** | *e*P | **Pn** | **00 29 21.9** | **+1.1** |
| **SNJE** | **San Jose** | **1.90** | **91** | *e*P | **Pn** | **00 29 22.1** | **+1.2** |
| **JAYA** | **Jayaque - finc** | **2.07** | **97** | *e*P | **Pn** | **00 29 24.0** | **+0.8** |
| JAYA | | | | IAML | | 00 29 52.1 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.07** | **97** | *i* P | **Pn** | **00 29 23.8** | **+0.6** |
| JAYA | | | | *i* S | **Sn** | **00 29 49.5** | **+0.9** |
| JAYA | | | | IAML | | 00 29 54.0 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **2.19** | **77** | Pn | **Pn** | **00 29 24.2** | **-0.7** |
| MTO3 | **Montecristo** | **2.19** | **77** | *e*P | **Pn** | **00 29 25.3** | **+0.4** |
| MTO3 | | | | IAML | | 00 29 43.6 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **2.19** | **95** | *e*P | **Pn** | **00 29 26.1** | **+1.3** |
| **PMON** | **Piamonte** | **2.19** | **95** | *i* P | **Pn** | **00 29 26.1** | **+1.3** |
| PMON | | | | *i* S | **Sb** | **00 29 53.9** | **-1.3** |
| PMON | | | | IAML | | 00 30 02.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LALI** | **Alcalda de L** | **2.21** | **101** | *e*P | **Pn** | **00 29 26.3** | **+1.2** |
| **LALI** | **Alcalda de L** | **2.21** | **101** | *i* P | **Pn** | **00 29 26.1** | **+1.0** |
| LALI | | | | *i* S | **Sn** | **00 29 52.9** | **+0.9** |
| LALI | | | | IAML | | 00 30 03.4 | |
| | comp=Z,320nm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **2.22** | **94** | *e*P | **Pn** | **00 29 26.9** | **+1.5** |
| **PIC2** | **El Picacho** | **2.24** | **94** | *e*P | **Pn** | **00 29 27.6** | **+1.9** |
| **ESQI** | **Esquipulas** | **2.25** | **73** | Pn | **Pn** | **00 29 25.1** | **-0.5** |
| **LOMA** | **Loma Larga** | **2.33** | **96** | *e*P | **Pn** | **00 29 28.2** | **+1.4** |
| **LOMA** | **Loma Larga** | **2.33** | **96** | *i* P | **Pn** | **00 29 28.3** | **+1.4** |
| LOMA | | | | *i* S | **Sb** | **00 29 57.8** | **-1.7** |
| LOMA | | | | IAML | | 00 30 09.2 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **LFU** | **La Fuente** | **2.38** | **94** | *e*P | **Pn** | **00 29 29.4** | **+1.9** |
| **CCIG** | **Comitan** | **2.43** | **347** | Pn | **Pn** | **00 29 28.5** | **+0.3** |
| **LFRS** | **El Faro** | **2.44** | **96** | *e*P | **Pn** | **00 29 29.3** | **+1.0** |
| **PAVA** | **Las Pavas** | **2.56** | **94** | *e*P | **Pn** | **00 29 31.4** | **+1.6** |
| PAVA | | | | IAML | | 00 30 17.8 | |
| | comp=Z,412nm,0.4s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.76** | **94** | *i* P | **Pn** | **00 29 34.2** | **+1.6** |
| SCLA | | | | *i* S | **Sb** | **00 30 08.9** | **-2.7** |
| SCLA | | | | IAML | | 00 30 28.1 | |
| | comp=Z,170nm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **3.00** | **97** | *e*P | **Pn** | **00 29 38.1** | **+2.1** |
| **LCY** | **Lacayo** | **3.21** | **98** | *e*P | **Pn** | **00 29 41.2** | **+2.3** |
| **RANC** | **El Ranchito** | **3.21** | **98** | *e*P | **Pn** | **00 29 40.9** | **+2.0** |
| **JUCU** | **Jucuar¡n** | **3.28** | **101** | *e*P | **Pn** | **00 29 41.6** | **+1.7** |
| JUCU | | | | *e*S | **Sn** | **00 30 19.5** | **+1.0** |
| JUCU | | | | IAML | | 00 30 37.6 | |
| | comp=Z,319nm,0.3s | | | | | | |
| **PETF** | **Flores** | **3.41** | **28** | Pn | **Pn** | **00 29 40.6** | **-0.9** |
| **LCND** | **La Caada** | **3.62** | **99** | *e*P | **Pn** | **00 29 46.1** | **+1.8** |
| LCND | | | | IAML | | 00 30 41.3 | |
| | comp=Z,372nm,0.4s | | | | | | |
| **LCND** | **La Caada** | **3.62** | **99** | *i* P | **Pn** | **00 29 46.3** | **+1.9** |
| LCND | | | | *i* S | **Sn** | **00 30 29.5** | **+2.8** |
| LCND | | | | IAML | | 00 30 41.0 | |
| | comp=Z,350nm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **3.68** | **99** | *e*P | **Pn** | **00 29 47.5** | **+2.2** |
| CNCH | | | | IAML | | 00 30 47.1 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **CNCH** | **Conchagua** | **3.68** | **99** | *i* P | **Pn** | **00 29 46.6** | **+1.3** |
| CNCH | | | | *i* S | **Sn** | **00 30 31.3** | **+3.0** |
| CNCH | | | | IAML | | 00 30 46.9 | |
| | comp=Z,910nm,1.0s | | | | | | |
| **CMIG** | **Matias Romero** | **4.50** | **315** | Pn | **Pn** | **00 29 55.9** | **-0.7** |
| | comp=Z,2.8nm,0.3s,baz=155,slow=11,SNR=23 | | | | | | |
| CMIG | | | | Sn | **Sn** | **00 30 48.5** | **-0.1** |
| | comp=Z,8.1nm,0.3s,baz=91,slow=23,SNR=5.3 | | | | | | |
| CMIG | | | | LR | LR | 00 31 02.4 | |
| | comp=Z,48nm,20.7s,baz=145,slow=29 | | | | | | |
| | comp=Z,7.5nm,0.3s | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KURBB | Kurchatov Arra | 84.12 | 322 | P | | P | 00 41 35.7 | -2.3 |
| | comp=Z,0.5nm,0.3s,baz=116,slow=4.4,SNR=5.1 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| QSPA | South Pole Qui | 84.33 | 180 | P | | P | 00 41 39.8 | +0.9 |
| QSPA | | | | IAmb | | IAmb | 00 41 51.9 | |
| | comp=Z,5.3nm,1.3s | | | | | | | |
| QSPA | South Pole Qui | 84.33 | 180 | P | | P | 00 41 39.9 | +0.9 |
| | comp=Z,0.7nm,0.7s,baz=332,slow=2.8,SNR=5.3 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| ARU | Arti | 96.71 | 326 | LR | | LR | 01 28 51.9 | |
| | comp=Z,31nm,19.2s,baz=112,slow=37 | | | | | | | |
| TORD | Torodi Ar. Bea | 150.04 | 287 | PKPbc | | PKPbc | 00 48 57.7 | -0.9 |
| | comp=Z,2.7nm,0.9s,baz=64,slow=2.6,SNR=13 | | | | | | | |

*IDC* **23** 00:39:36.2±4.1, **5°.04S×151°.20E, h0**km, **mb3.1**/2, **mbtmp3.2**/2, **Error ellipse: s-maj=175.6km s-min=50.2km az=117.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 22.11 | 226 | P | P | 00 44 33.7 | +0.3 |
| | 0.3nm,0.6s,baz=51,slow=9.9,SNR=4.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| ASAR | Alice Springs | 24.92 | 220 | P | P | 00 45 00.9 | -0.3 |
| | 0.9nm,0.8s,baz=54,slow=8.7,SNR=6.4 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 148.86 | 287 | PKPbc | PKPbc | 00 59 26.4 | -0.5 |
| | 0.3nm,0.5s,baz=81,slow=2.0,SNR=6.7 | | | | | | |

*TEH* **23** 00:52:53.3, 32°.64N×46°.73E, h8km±45km, *ML2.5*
*ISN* **23** 00:52:53.9±0.8, 32°.64N×46°.60E, h36km±15km, *ML2.3*
**ISC 23 00:52:53.7**±1.0, **32°.65N**±0°.04×**46°.67E**±0°.04, **h10**km, **n12, σ0s88/15, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IBDR | Badra | 0.77 | 306 | *e*Pg | Pg | 00 53 08.0 | -0.6 |
| | baz=130 | | | | | | |
| IBDR | | | | *e*Sg | Sg | 00 53 19.0 | +0.3 |
| IBDR | | | | *e* | | 00 53 39.6 | |
| RAFI | Al-Rafai | 1.04 | 207 | *e*Pn | Pg | 00 53 13.0 | -0.7 |
| RAFI | | | | *e*Sn | Sb | 00 53 28.0 | +0.6 |
| RAFI | | | | AML | AML | 00 53 37.9 | |
| | comp=E,90nm,0.4s | | | | | | |
| RAFI | | | | AML | AML | 00 53 38.2 | |
| | comp=N,84nm,0.4s | | | | | | |
| ILBA | Ilam Banvizeh | 1.04 | 338 | Pg | Pn | 00 53 14.2 | -0.3 |
| ILBA | | | | Sg | Sn | 00 53 29.7 | +0.5 |
| IKFM | Kafar-mosalman | 1.32 | 48 | Pg | Pg | 00 53 18.1 | -0.9 |
| GLG1 | Gilan-e-Gharb | 1.59 | 337 | Pg | Pg | 00 53 24.2 | 0.0 |
| IGHG | Ghaleghazi | 1.68 | 357 | Pg | Pb | 00 53 24.9 | +0.1 |
| IDOB | Doab | 1.70 | 48 | Pg | Pb | 00 53 24.8 | -0.3 |
| IDHR | Dehrash | 2.06 | 353 | Pn | Pb | 00 53 30.5 | -0.8 |
| IBZA | Bozab | 2.07 | 28 | Pn | Pg | 00 53 33.2 | -0.2 |
| HSAM | Samen | 2.24 | 46 | Pn | Pb | 00 53 32.8 | -1.7 |
| HAGD | Aghdareh | 2.99 | 43 | Pn | Pn | 00 53 42.6 | +1.3 |
| IPIR | Pirpir | 3.56 | 88 | Pn | Pn | 00 53 50.5 | +1.2 |

*IDC* **23** 01:07:18.9±6.6, 17°.68S×178°.71W, h568km±75km, *mb2.7/5, mbtmp3.6/5, Error ellipse: s-maj=108.7km s-min=27.2km az=154.0*
**ISC 23 01:07:17.3**±1.9, **17°.6S**±0°.7×**178°.8W**±0°.4, **h550**km, **n8, σ0s78/8, mb3.1**/5, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 44.36 | 259 | P | P | 01 14 40.1 | +0.7 |
| | 0.2nm,0.5s,baz=97,slow=7.1,SNR=6.0 | | | | | | |
| WRA | | | | PcP | PcP | 01 16 10.0 | -1.4 |
| | 0.5nm,0.9s,baz=91,slow=3.5,SNR=3.2 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| ASAR | Alice Springs | 44.56 | 254 | P | P | 01 14 41.3 | +0.4 |
| | 1.4nm,0.6s,baz=86,slow=8.6,SNR=17 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 79.41 | 44 | P | P | 01 18 27.3 | +0.3 |
| | 0.4nm,0.7s,baz=218,slow=9.4,SNR=3.9 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| ILAR | Eielson Array | 85.62 | 13 | P | P | 01 18 57.2 | -0.2 |
| | 0.2nm,0.4s,baz=215,slow=4.9,SNR=4.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| TXAR | Lajitas Array | 86.09 | 58 | P | P | 01 19 00.9 | +0.3 |
| | 0.3nm,0.7s,baz=215,slow=6.1,SNR=5.4 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| BRTR | Keskin Array B | 144.29 | 315 | PKP | PKPbc | 01 25 51.0 | -0.2 |
| | 0.2nm,0.5s,baz=63,slow=1.8,SNR=5.0 | | | | | | |
| MMAI | Mount Meron Ar | 145.67 | 303 | PKPbc | PKPbc | 01 25 55.5 | +0.1 |
| | 0.4nm,0.3s,baz=68,slow=5.5,SNR=5.6 | | | | | | |
| GERES | GERESS Array B | 147.18 | 345 | PKPbc | PKPbc | 01 25 58.5 | -0.5 |
| | 0.5nm,0.4s,baz=35,slow=5.1,SNR=4.7 | | | | | | |

*NOU* **23** 01:25:44.0, 15°.90S×168°.28E, h3km, *MLv4.3/10, Vanuatu Islands*
*IDC* **23** 01:25:48.1±8.0, 16°.02S×168°.31E, h41km±77km, *mb3.3/3, mbtmp3.6/4, ML3.9/1, Error ellipse: s-maj=64.3km s-min=39.6km az=147.0*
**ISC 23 01:25:47.3**±1.4, **16°.0S**±0°.1×**168°.4E**±0°.2, **h35**km, **n13, σ0s80/12, mb3.7/3, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RTV | Rentapao | 1.81 | 178 | P | Pn | 01 26 16.5 | +0.5 |
| LIFNC | LIFOU | 4.90 | 192 | P | Pn | 01 26 59.4 | +0.9 |
| KOUNC | Koumac, New Ca | 5.98 | 220 | P | Pn | 01 27 14.6 | +1.2 |
| YATNC | Mamie plateau, | 6.22 | 193 | P | Pn | 01 27 17.2 | +0.6 |
| DZM | Mont Dzumac | 6.34 | 196 | P | Pn | 01 27 19.2 | +0.9 |
| DZM | Mont Dzumac | 6.34 | 196 | P | Pn | 01 27 18.7 | +0.4 |
| | 2.5nm,0.3s,baz=13,slow=8.6,SNR=24 | | | | | | |
| DZM | | | | S | Sn | 01 28 28.8 | -0.8 |
| | 3.6nm,0.4s,baz=43,slow=14,SNR=1.3 | | | | | | |
| | 5.2nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 6.41 | 197 | P | Pn | 01 27 19.0 | -0.2 |
| WRA | Warramunga Arr | 32.58 | 258 | P | P | 01 32 14.6 | -1.0 |
| | 0.2nm,0.7s,baz=85,slow=7.2,SNR=2.7 | | | | | | |
| WRA | | | | PcP | PcP | 01 35 01.8 | +0.1 |
| | 0.5nm,1.0s,baz=88,slow=3.2,SNR=2.5 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| ASAR | Alice Springs | 33.25 | 251 | P | P | 01 32 21.2 | -0.3 |
| | 0.6nm,0.6s,baz=78,slow=8.8,SNR=11 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| ILAR | Eielson Array | 87.38 | 18 | P | P | 01 38 30.4 | +0.1 |
| | 0.5nm,0.8s,baz=218,slow=5.7,SNR=5.1 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| H03S2 | Juan Fernandez | 99.06 | 129 | T | T | 03 29 46.6 | |
| | baz=241,slow=75,SNR=7.7 | | | | | | |
| H03S1 | Juan Fernandez | 99.08 | 129 | T | T | 03 29 49.0 | |
| | baz=241,slow=75,SNR=6.1 | | | | | | |
| H03S3 | Juan Fernandez | 99.08 | 129 | T | T | 03 29 44.8 | |
| | baz=241,slow=75,SNR=4.9 | | | | | | |

*IDC* **23** 02:44:08.3±8.1, 18°.09S×178°.14W, h559km±87km, *mb2.9/4, mbtmp3.8/4, Error ellipse: s-maj=41.1km s-min=28.4km az=46.0*
**ISC 23 02:44:10.8**±1.0, **18°.1S**±0°.3×**178°.2W**±0°.2, **h590**km, **n7, σ0s39/9, mb3.5**/4, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 44.79 | 260 | P | P | 02 51 33.2 | -0.3 |
| | 0.6nm,0.7s,baz=97,slow=7.0,SNR=11 | | | | | | |
| WRA | | | | PcP | PcP | 02 53 02.1 | -0.5 |
| | 0.3nm,0.9s,baz=92,slow=3.8,SNR=1.7 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| ASAR | Alice Springs | 44.93 | 254 | P | P | 02 51 34.6 | +0.1 |
| | 1.8nm,0.6s,baz=88,slow=8.5,SNR=20 | | | | | | |
| ASAR | | | | PcP | PcP | 02 53 03.2 | +0.1 |
| | 0.3nm,0.5s,baz=100,slow=4.8,SNR=1.8 | | | | | | |
| | 1.8nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 72.01 | 180 | P | P | 02 54 35.7 | +0.1 |
| | 2.4nm,1.0s,baz=322,slow=1.5,SNR=13 | | | | | | |
| | 2.4nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 85.91 | 58 | P | P | 02 55 49.5 | -0.2 |
| | 0.3nm,0.7s,baz=218,slow=5.7,SNR=4.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| BRTR | Keskin Array B | 145.01 | 315 | PKPbc | PKPbc | 03 02 43.2 | +0.2 |
| | 0.4nm,1.0s,baz=79,slow=3.1,SNR=2.4 | | | | | | |
| MMAI | Mount Meron Ar | 146.37 | 303 | PKPbc | PKPbc | 03 02 47.6 | +0.7 |
| | 0.3nm,0.3s,baz=69,slow=4.8,SNR=2.1 | | | | | | |
| GERES | GERESS Array B | 147.79 | 345 | PKPbc | PKPbc | 03 02 50.3 | +0.1 |
| | 0.3nm,0.3s,baz=20,slow=3.1,SNR=2.4 | | | | | | |

*NEIC* **23** 02:56:38.8±0.8, 2°.62N×0°.08×95°.6E±0°.1, h26km±6km, *mb4.5/16, Error ellipse: s-maj=19.7km s-min=9.9km az=64.0*
*DJA* **23** 02:56:38.2±0.9, 3°.N×4°.×9°.6E±°, h10km, *M4.0/7, MLv4.0/7*
*IDC* **23** 02:56:49.4±13.0, 2°.94N×96°.15E, h115km±114km, *mb3.7/8, mbtmp4.1/9, ML5.1/1, Error ellipse: s-maj=105.8km s-min=16.8km az=57.0*
**ISC 23 02:56:38.1**±0.7, **2°.60N**±0°.06×**95°.71E**±0°.08, **h25**km, **n49, σ0s98/39, mb4.4**/15, **Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SNSI | Sinabang, Aceh | 0.65 | 107 | P | Pn | 02 56 52.0 | +0.3 |
| SNSI | | | | S | Sb | 02 56 57.3 | -2.2 |
| MLSI | Meulaboh, Aceh | 1.79 | 23 | P | Pn | 02 57 07.2 | -0.3 |
| MLSI | | | | S | Sb | 02 57 31.7 | -0.7 |
| KCSI | Kotacane, Aceh | 2.25 | 66 | P | Pb | 02 57 17.0 | -1.2 |
| GSI | Gunungsitoli | 2.27 | 125 | Pn | Pn | 02 57 14.6 | +0.6 |
| GSI | Gunungsitoli | 2.27 | 125 | P | Pn | 02 57 15.3 | +1.3 |
| LHMI | Lhok Sumawe | 2.89 | 25 | Pn | Pn | 02 57 23.2 | +0.7 |
| LHMI | Lhok Sumawe | 2.89 | 25 | P | Pn | 02 57 23.9 | +1.4 |
| RPSI | Rantau Prapat | 3.22 | 88 | | Pn | 02 57 29.3 | +2.3 |
| PBSI | Pulau Batu | 3.69 | 136 | P | Pn | 02 57 33.2 | -0.3 |
| KULM | Kulim | 5.61 | 61 | Pn | Pn | 02 58 00.9 | +0.9 |
| IPM | Ipoh | 5.63 | 71 | | Pn | 02 58 01.4 | +1.1 |
| CMAR | Chiang Mai Arr | 16.07 | 11 | P | Pn | 03 00 24.4 | +1.8 |
| | 2.9nm,0.3s,baz=200,slow=12,SNR=15 | | | | | | |
| | 4.4nm,0.3s | | | | | | |
| PHRA | Phrae | 16.41 | 15 | P | P | 03 00 29.2 | -0.2 |
| PHRA | | | | IAmb | IAmb | 03 00 35.3 | |
| | comp=Z,82nm,1.4s | | | | | | |
| H08S2 | Diego Garcia H | 25.30 | 246 | T | T | 03 28 13.5 | |
| | baz=66,slow=76 | | | | | | |
| H08S3 | Diego Garcia H | 25.30 | 246 | T | T | 03 28 13.7 | |
| | baz=66,slow=76 | | | | | | |
| H08S1 | Diego Garcia H | 25.32 | 246 | T | T | 03 28 14.8 | |
| | baz=66,slow=76 | | | | | | |
| H01W3 | Cape Leeuwin H | 41.11 | 157 | T | T | 03 47 56.0 | |
| | baz=332,slow=76 | | | | | | |
| H01W2 | Cape Leeuwin H | 41.12 | 157 | T | T | 03 47 57.1 | |
| | baz=332,slow=76 | | | | | | |
| H01W1 | Cape Leeuwin H | 41.12 | 157 | T | T | 03 47 57.2 | |
| | baz=332,slow=76 | | | | | | |
| BOOM | Boomskoye usch | 43.47 | 339 | P | P | 03 04 40.1 | +0.7 |
| BOOM | | | | IAmb | IAmb | 03 04 54.4 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| ARSB | Arslanbob | 43.64 | 335 | P | P | 03 04 40.3 | -0.5 |
| WRA | Warramunga Arr | 44.04 | 122 | P | P | 03 04 44.3 | +0.1 |
| | comp=Z,0.8nm,0.9s,baz=299,slow=9.6,SNR=7.2 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| WB2 | Warramunga Arr | 44.05 | 122 | P | P | 03 04 43.6 | -0.7 |
| WB2 | | | | IAmb | IAmb | 03 04 46.2 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| WR0 | Warramunga Arr | 44.22 | 122 | P | P | 03 04 46.0 | +0.4 |
| ASAR | Alice Springs | 45.43 | 127 | P | P | 03 04 55.9 | +0.6 |
| | comp=Z,0.4nm,0.6s,baz=302,slow=8.0,SNR=4.9 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| MK31 | Makanchi Array | 45.54 | 347 | P | P | 03 04 56.1 | +0.3 |
| MK31 | | | | IAmb | IAmb | 03 04 56.7 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| MKAR | Makanchi Array | 45.54 | 347 | P | P | 03 04 56.0 | +0.3 |
| MKAR | Makanchi Array | 45.54 | 347 | P | P | 03 04 55.9 | +0.2 |
| | comp=Z,3.1nm,0.5s,baz=161,slow=8.1,SNR=42 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| MAKZ | Makanchi | 45.62 | 347 | P | P | 03 04 56.6 | +0.2 |
| MAKZ | | | | IAmb | IAmb | 03 04 57.3 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| SONM | Songino Array | 45.99 | 10 | P | P | 03 04 57.8 | -1.7 |
| | comp=Z,1.4nm,0.6s,baz=186,slow=9.4,SNR=8.1 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 50.01 | 346 | P | P | 03 05 29.8 | -0.5 |
| | comp=Z,0.8nm,0.2s,baz=160,slow=5.9,SNR=5.2 | | | | | | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| ZALV | Zalesovo Beam | 51.96 | 352 | P | P | 03 05 44.7 | -0.2 |
| | comp=Z,4.2nm,0.6s,baz=179,slow=7.1,SNR=14 | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| BVAR | Borovoye Array | 54.45 | 341 | P | P | 03 06 03.0 | -0.3 |
| | comp=Z,2.2nm,0.6s,baz=148,slow=9.2,SNR=12 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| BRVK | Borovoye | 54.51 | 341 | P | P | 03 06 03.5 | -0.3 |
| ABKAR | Akbulak array | 55.58 | 332 | P | P | 03 06 11.5 | -0.1 |
| ABKAR | Akbulak array | 55.58 | 332 | P | P | 03 06 11.2 | -0.3 |
| ABKAR | | | | IAmb | IAmb | 03 06 12.2 | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| EIDS | Eidsvold | 60.38 | 121 | P | P | 03 06 48.1 | +2.5 |
| EIDS | | | | IAmb | IAmb | 03 07 01.7 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| H04N2 | CROZET ISLANDS | 62.11 | 213 | T | T | 04 14 19.2 | |
| | baz=52,slow=75 | | | | | | |
| H04N1 | CROZET ISLANDS | 62.12 | 213 | T | T | 04 14 19.8 | |
| | baz=52,slow=75 | | | | | | |
| H04N3 | CROZET ISLANDS | 62.13 | 213 | T | T | 04 14 18.5 | |
| | baz=52,slow=75 | | | | | | |
| H04S1 | CROZET ISLANDS | 62.47 | 212 | T | T | 04 14 46.4 | |
| | baz=50,slow=75 | | | | | | |
| H04S3 | CROZET ISLANDS | 62.48 | 212 | T | T | 04 14 45.8 | |
| | baz=50,slow=75 | | | | | | |
| H04S2 | CROZET ISLANDS | 62.49 | 212 | T | T | 04 14 47.1 | |
| | baz=50,slow=75 | | | | | | |
| HNR | Honiara | 65.10 | 102 | P | P | 03 07 17.1 | -0.2 |
| FIA1 | FINESS Array S | 78.07 | 333 | P | P | 03 08 33.5 | -1.1 |
| ARCES | ARCESS Array B | 80.72 | 340 | P | P | 03 08 49.2 | +0.3 |
| | comp=Z,0.6nm,0.5s,baz=81,slow=5.8,SNR=4.3 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| PAOL | Paolisi | 81.61 | 311 | P | P | 03 08 54.1 | -0.1 |
| PAOL | | | | IAmb | IAmb | 03 09 01.7 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| ZCCA | Zocca | 84.42 | 314 | P | P | 03 09 08.5 | -0.3 |
| ZCCA | | | | IAmb | IAmb | 03 09 08.9 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| SPB2 | Spitsbergen Ar | 85.28 | 348 | P | P | 03 09 12.6 | +0.2 |

*NEIC* **23** 03:01:22.7±1.1, 6°.67S±0°.10×103°.32E±0°.09, h10km±1km, *mb4.3/11, Error ellipse: s-maj=21.6km s-min=6.8km az=43.0*
*IDC* **23** 03:01:23.1±1.9, 6°.18S×103°.63E, h0km, *mb4.0/10, mbtmp4.0/10, MS3.4/1, Error ellipse: s-maj=64.8km s-min=20.4km az=51.0*
*DJA* **23** 03:01:26.8±2.2, 6°.S±6°.×10°.4E±°, h20km±21km, *M4.3/4, MLv4.3/4*
**ISC 23 03:01:26.3**±0.9, **6°.50S**±0°.08×**103°.49E**±0°.10, **h35**km, **n37, σ1s29/32, mb4.2**/16, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KASI | Kota Agung | 1.40 | 46 | P | Pn | 03 01 48.3 | -1.0 |
| LWLI | Liwa | 1.58 | 21 | P | Pn | 03 01 51.7 | -0.2 |
| LWLI | | | | S | Sn | 03 02 09.6 | -1.6 |
| MNAI | Manna | 2.19 | 346 | | Pn | 03 02 01.6 | +1.4 |
| XMIS | Christmas Isla | 4.50 | 152 | Pn | Pn | 03 02 29.7 | -2.3 |
| UGM | Wanagama | 7.12 | 102 | Pn | Pn | 03 03 09.7 | +1.6 |
| JAGI | Jajag, Banyuwa | 10.76 | 101 | Pn | Pn | 03 03 59.0 | +1.0 |
| KULM | Kulim | 12.05 | 346 | Pn | Pn | 03 04 14.1 | -1.5 |
| TOLI2 | Tolitoli | 18.85 | 67 | P | Pn | 03 05 44.8 | +0.5 |
| TOLI2 | | | | IAmb | IAmb | 03 05 45.3 | |
| | comp=Z,11nm,0.7s | | | | | | |
| SOEI | Soe | 20.82 | 100 | P | P | 03 06 05.1 | -0.1 |
| CMAR | Chiang Mai Arr | 25.20 | 350 | P | P | 03 06 47.9 | -1.0 |
| | comp=Z,3.4nm,0.7s,baz=183,slow=9.1,SNR=14 | | | | | | |
| CMAR | | | | LR | LR | 03 16 47.6 | |
| | comp=Z,78nm,18.3s,baz=355,slow=37 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| WB0 | Warramunga Arr | 32.78 | 117 | P | P | 03 07 55.5 | -0.9 |
| WB0 | | | | IAmb | IAmb | 03 08 07.2 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 32.79 | 117 | P | P | 03 07 56.2 | -0.4 |
| WRA | Warramunga Arr | 32.79 | 117 | P | P | 03 07 58.0 | +1.4 |
| | comp=Z,0.6nm,1.0s,baz=294,slow=6.5,SNR=5.6 | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 32.80 | 117 | P | P | 03 07 53.1 | -3.5 |
| WRAB | | | | IAmb | IAmb | 03 07 57.2 | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 32.80 | 117 | P | P | 03 07 56.0 | -0.6 |
| WB2 | | | | IAmb | IAmb | 03 08 16.5 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| WR0 | Warramunga Arr | 32.98 | 117 | P | P | 03 07 59.7 | +1.6 |
| WR0 | | | | IAmb | IAmb | 03 08 20.2 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| ASAR | Alice Springs | 33.84 | 124 | P | P | 03 08 08.0 | +2.2 |
| | comp=Z,0.2nm,0.4s,baz=300,slow=9.1,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| KSRS | Korea Array | 49.32 | 26 | P | P | 03 10 11.5 | -0.6 |
| | comp=Z,1.5nm,0.8s,baz=221,slow=7.8,SNR=3.0 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| INU | Inuyama | 52.24 | 35 | P | P | 03 10 35.0 | +0.8 |
| SONM | Songino Array | 54.16 | 2 | P | P | 03 10 49.0 | +0.8 |
| SONM | Songino Array | 54.16 | 2 | P | P | 03 10 47.9 | -0.3 |
| | comp=Z,2.0nm,0.7s,baz=178,slow=9.1,SNR=11 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| MK31 | Makanchi Array | 56.30 | 343 | P | P | 03 11 04.8 | +1.3 |
| MK31 | | | | IAmb | IAmb | 03 11 05.7 | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 56.30 | 343 | P | P | 03 11 03.9 | +0.3 |
| MKAR | Makanchi Array | 56.30 | 343 | P | P | 03 11 03.8 | +0.2 |
| | comp=Z,2.1nm,0.7s,baz=149,slow=7.9,SNR=17 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| USRK | Ussuriysk Ar. | 56.64 | 24 | P | P | 03 11 05.0 | -1.0 |
| | comp=Z,3.7nm,0.7s,baz=208,slow=6.1,SNR=8.8 | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| H04N2 | CROZET ISLANDS | 59.40 | 219 | T | T | 04 16 00.6 | |
| | baz=65 | | | | | | |
| H04N1 | CROZET ISLANDS | 59.41 | 219 | T | T | 04 15 56.7 | |
| | baz=65 | | | | | | |
| H04N3 | CROZET ISLANDS | 59.42 | 219 | T | T | 04 15 56.7 | |
| | baz=65 | | | | | | |
| H04S1 | CROZET ISLANDS | 59.62 | 219 | T | T | 04 16 12.5 | |
| | baz=65 | | | | | | |
| H04S3 | CROZET ISLANDS | 59.64 | 219 | T | T | 04 16 09.5 | |
| | baz=65 | | | | | | |
| H04S2 | CROZET ISLANDS | 59.64 | 219 | T | T | 04 16 11.0 | |
| | baz=65 | | | | | | |
| KURBB | Kurchatov Arra | 60.85 | 342 | P | P | 03 11 35.4 | +0.3 |
| | comp=Z,1.0nm,0.7s,baz=158,slow=6.1,SNR=11 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 62.24 | 348 | P | P | 03 11 44.3 | -0.1 |
| | comp=Z,1.9nm,0.4s,baz=160,slow=4.8,SNR=9.3 | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | |
| BVAR | Borovoye Array | 65.59 | 339 | P | P | 03 12 06.7 | +0.1 |
| | comp=Z,1.3nm,0.6s,baz=150,slow=8.1,SNR=7.1 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 67.23 | 331 | P | P | 03 12 17.7 | +0.6 |
| ABKAR | Akbulak array | 67.23 | 331 | P | P | 03 12 17.2 | +0.1 |
| ABKAR | | | | IAmb | IAmb | 03 12 33.7 | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 145.77 | 45 | PKPbc | PKPab | 03 21 04.3 | +1.4 |
| | comp=Z,1.2nm,0.8s,baz=289,slow=1.4,SNR=13 | | | | | | |

*TRN* **23** 03:05:00.3, 10°.89N×63°.29W, h159km, *MD3.2, North of the Paria peninsula.*
*FUNV* **23** 03:05:02.0, 10°.51N×63°.19W, h20km, *MW3.2*
**ISC 23 03:05:02.3**±1.2, **10°.39N**±0°.06×**63°.28W**±0°.04, **h35**km, **n14, σ2s48/20, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCRV | Puerto La Cruz | 1.36 | 261 | *e*S | Sn | 03 05 45.2 | +3.6 |
| PCRV | Puerto La Cruz | 1.36 | 261 | *e*P | Pn | 03 05 31.4 | +6.6 |
| PCRV | | | | *e*S | Sn | 03 05 52.9 | +11 |
| TRN | Trinidad (W) | 1.86 | 82 | *e*P | Pn | 03 05 35.1 | +3.5 |
| TRN | | | | *e*S | Sn | 03 05 59.4 | +5.5 |
| TBH | Brigand Hill | 2.17 | 87 | *e*P | Pn | 03 05 39.5 | +3.5 |
| TBH | | | | *e*S | Sn | 03 06 05.4 | +3.6 |
| GRGR | Grenville | 2.35 | 42 | *e*P | Pn | 03 05 36.1 | -2.3 |
| GRGR | | | | *e*S | Sn | 03 06 02.3 | -3.8 |
| TACV | Tcata | 3.70 | 266 | *e*P | Pn | 03 05 58.6 | +1.5 |
| TACV | | | | *e*S | Sn | 03 06 40.4 | +0.9 |
| CACV | CAICARA DEL OR | 4.28 | 229 | *e*P | Pn | 03 06 02.8 | -2.1 |
| CACV | | | | *e*S | Sn | 03 06 46.2 | -7.5 |
| CACV | CAICARA DEL OR | 4.28 | 229 | *e*P | Pn | 03 06 03.0 | -2.0 |
| CACV | | | | *e*S | Sn | 03 06 45.4 | -8.3 |
| BENV | Beln | 4.28 | 265 | *e*P | Pn | 03 06 06.4 | +1.4 |
| BENV | | | | *e*S | Sn | 03 06 53.0 | -0.8 |
| LUEV | Luepa | 4.86 | 158 | *e*P | Pn | 03 06 13.6 | +0.4 |
| LUEV | | | | *e*S | Sn | 03 07 07.1 | -1.3 |
| LUEV | Luepa | 4.86 | 158 | *e*P | Pn | 03 06 14.4 | +1.2 |
| LUEV | | | | *e*S | Sn | 03 07 05.4 | -3.0 |
| BAUV | El Baul | 4.92 | 253 | *e*P | Pn | 03 06 14.0 | +0.3 |
| BAUV | | | | *e*S | Sn | 03 07 08.8 | -0.6 |
| BAUV | El Baul | 4.92 | 253 | *e*S | Sn | 03 07 08.4 | -0.9 |
| BAUV | El Baul | 4.92 | 253 | *e*P | Pn | 03 06 14.0 | +0.3 |
| BAUV | | | | *e*S | Sn | 03 07 08.5 | -0.9 |

*IDC* **23** 03:32:14.0±2.4, 43°.74N×127°.38W, h0km, *mb2.9/2, mbtmp3.2/7, ML3.4/5, MS2.6/3, Error ellipse: s-maj=35.0km s-min=18.2km az=58.0*
*NEIC* **23** 03:32:17.4±1.6, 43°.62N±0°.08×127°.4W±0°.2, h10km±2km, *ML3.1/74, Error ellipse: s-maj=19.5km s-min=12.9km az=270.0*
**ISC 23 03:32:16.1**±1.7, **43°.62N**±0°.06×**127°.6W**±0°.1, **h15**km, **n69, σ0s92/63, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| J01E | Myrtle Point | 2.71 | 98 | | Pn | 03 32 57.0 | -2.2 |
| KBO | Bosley Butte | 2.85 | 118 | Pn | Pn | 03 32 59.5 | -1.7 |
| KBO | | | | IAML | | 03 34 13.2 | |
| | comp=N,60nm,2.2s | | | | | | |
| KBO | | | | IAML | | 03 34 25.2 | |
| | comp=E,72nm,2.4s | | | | | | |
| K02D | Willamette Mer | 3.02 | 106 | | Pn | 03 33 01.3 | -2.2 |
| K02D | | | | IAML | | 03 33 44.5 | |
| | comp=E,39nm,0.7s | | | | | | |
| HEBO | Mount Hebo | 3.19 | 59 | Pn | Pn | 03 33 05.0 | -0.8 |
| HEBO | | | | IAML | | 03 33 47.3 | |
| | comp=N,110nm,1.0s | | | | | | |
| DBO | Dodson Butte | 3.22 | 97 | | Pn | 03 33 04.4 | -1.8 |
| COR | Corvallis | 3.25 | 71 | | Pn | 03 33 05.9 | -0.5 |
| COR | | | | IAML | | 03 33 36.4 | |
| | comp=N,52nm,1.9s | | | | | | |
| COR | | | | IAML | | 03 34 00.9 | |
| | comp=N,44nm,2.2s | | | | | | |
| KSXB | Camp Six Broad | 3.27 | 122 | Pn | Pn | 03 33 05.2 | -1.8 |
| L02F | Cave Junction | 3.32 | 115 | Pn | Pn | 03 33 06.6 | -0.9 |
| BUCK | Buck Mountain | 3.39 | 79 | | Pn | 03 33 07.9 | -0.6 |
| BUCK | | | | IAML | | 03 33 58.6 | |
| | comp=E,34nm,2.1s | | | | | | |
| BUCK | | | | IAML | | 03 35 14.0 | |
| | comp=N,30nm,2.9s | | | | | | |
| KRMB | Red Mountain | 3.44 | 126 | Pn | Pn | 03 33 09.8 | +0.5 |
| G03D | McMinnville, O | 3.49 | 61 | | Pn | 03 33 09.4 | -0.5 |
| G03D | | | | IAML | | 03 33 57.7 | |
| | comp=E,64nm,0.8s | | | | | | |
| HUMO | Hull Mountain | 3.55 | 105 | Pn | Pn | 03 33 09.7 | -1.0 |
| H04D | Lebanon | 3.62 | 74 | | Pn | 03 33 11.6 | -0.1 |
| H04D | | | | IAML | | 03 33 44.9 | |
| | comp=N,39nm,2.1s | | | | | | |
| H04

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **I05D** | **Terrebonne, OR** | **4.58** | **79** | | | **Pn** | **03 33 24.7** | **-0.1** |
| I05D | | | | | IAML | | 03 34 04.2 | |
| | comp=E,21nm,2.9s | | | | | | | |
| I05D | | | | | IAML | | 03 34 56.8 | |
| | comp=N,23nm,3.8s | | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.59** | **66** | | | **Pn** | **03 33 25.6** | **+0.6** |
| HOOD | | | | | IAML | | 03 34 05.0 | |
| | comp=N,38nm,0.9s | | | | | | | |
| HOOD | | | | | IAML | | 03 34 23.6 | |
| | comp=E,34nm,1.1s | | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.60** | **34** | | | **Pn** | **03 33 24.5** | **-0.6** |
| **J05D** | **Fort Rock, OR** | **4.65** | **92** | | | **Pn** | **03 33 26.6** | **+0.7** |
| J05D | | | | | IAML | | 03 34 13.5 | |
| | comp=E,13nm,3.8s | | | | | | | |
| J05D | | | | | IAML | | 03 34 43.3 | |
| | comp=N,12nm,3.4s | | | | | | | |
| **G05A** | **Wamic** | **4.79** | **68** | | | **Pn** | **03 33 28.2** | **+0.4** |
| G05A | | | | | IAML | | 03 35 10.8 | |
| | comp=N,24nm,3.2s | | | | | | | |
| G05A | | | | | IAML | | 03 35 35.3 | |
| | comp=E,23nm,4.2s | | | | | | | |
| **PINE** | **Pine Mountain** | **4.83** | **86** | Pn | | **Pn** | **03 33 28.2** | **-0.4** |
| PINE | | | | | IAML | | 03 34 33.7 | |
| | comp=N,16nm,3.9s | | | | | | | |
| PINE | | | | | IAML | | 03 36 34.2 | |
| | comp=E,13nm,3.3s | | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **4.97** | **132** | | | Pn | 03 33 25.5 | -4.8 |
| O02D | | | | | IAML | | 03 36 26.3 | |
| | comp=E,10nm,5.0s | | | | | | | |
| **LON** | **Longmire** | **5.16** | **51** | | | **Pn** | **03 33 33.2** | **+0.4** |
| LON | | | | | IAML | | 03 34 38.3 | |
| | comp=E,16nm,0.7s | | | | | | | |
| LON | | | | | IAML | | 03 34 46.3 | |
| | comp=N,15nm,0.9s | | | | | | | |
| **GNW** | **Green Mountain** | **5.18** | **39** | | | **Pn** | **03 33 32.6** | **-0.5** |
| **G06A** | **Carlson Farm,** | **5.25** | **70** | | | **Pn** | **03 33 34.1** | **+0.1** |
| G06A | | | | | IAML | | 03 34 23.4 | |
| | comp=N,10nm,3.3s | | | | | | | |
| G06A | | | | | IAML | | 03 34 55.0 | |
| | comp=E,7.9nm,2.4s | | | | | | | |
| **D05A** | **Enumclaw** | **5.33** | **46** | | | **Pn** | **03 33 35.5** | **+0.4** |
| **I07A** | **Izee** | **5.88** | **83** | Pn | | **Pn** | **03 33 42.8** | **0.0** |
| **F07A** | **Phinny Hill Vi** | **5.92** | **65** | | | **Pn** | **03 33 43.6** | **+0.4** |
| **MXC** | **Moxie City** | **5.96** | **58** | | | **Pn** | **03 33 44.0** | **+0.2** |
| **LTY** | **Liberty** | **6.09** | **51** | | | **Pn** | **03 33 46.3** | **+0.7** |
| **ORV** | **Oroville** | **6.12** | **130** | Pn | | **Pn** | **03 33 48.3** | **+2.4** |
| **E07A** | **Sunnyside** | **6.22** | **59** | Pn | | **Pn** | **03 33 48.6** | **+1.1** |
| **HAWA** | **Hanford** | **6.36** | **61** | Pn | | **Pn** | **03 33 49.6** | **+0.4** |
| **G08A** | **Pilot Rock** | **6.41** | **72** | Pn | | **Pn** | **03 33 50.1** | **0.0** |
| **J08A** | **Circle Bar Ran** | **6.65** | **89** | Pn | | **Pn** | **03 33 53.5** | **+0.2** |
| **E08A** | **Dider Farm, El** | **6.70** | **62** | Pn | | **Pn** | **03 33 54.5** | **+0.6** |
| **AFDM** | **Forest Hills D** | **6.83** | **131** | Pn | | **Pn** | **03 33 56.9** | **+1.1** |
| **D08A** | **Wollman Farm,** | **7.02** | **58** | Pn | | **Pn** | **03 33 58.9** | **+0.6** |
| **PAHR** | **Pah Rah Range** | **7.29** | **120** | | | **Pn** | **03 34 02.5** | **+0.3** |
| **B08A** | **Colville Reser** | **7.46** | **48** | Pn | | **Pn** | **03 34 03.8** | **-0.6** |
| **BMO** | **Blue Mountains** | **7.50** | **77** | Pn | | **Pn** | **03 34 05.0** | **0.0** |
| **PNTR** | **Pine Nut** | **7.53** | **124** | Pn | | **Pn** | **03 34 08.4** | **+0.9** |
| **C09A** | **Chrisman Ranch** | **7.75** | **54** | | | **Pn** | **03 34 08.6** | **+0.2** |
| **CMB** | **Columbia Colle** | **7.81** | **133** | Pn | | **Pn** | **03 34 11.4** | **+2.1** |
| **YERR** | **Yerington** | **7.81** | **123** | | | **Pn** | **03 34 10.2** | **+0.8** |
| **WAKR** | **Walker** | **8.01** | **127** | | | **Pn** | **03 34 13.9** | **+1.8** |
| **NEW** | **Newport** | **8.65** | **54** | Pn | | **Pn** | **03 34 21.0** | **+0.2** |
| **NEW** | **Newport** | **8.65** | **54** | Pn | | **Pn** | **03 34 20.4** | **-0.4** |
| | comp=E,0.7nm,0.3s,baz=252,slow=12,SNR=9.3 | | | | | | | |
| NEW | | | | | LR | LR | 03 37 41.5 | |
| | comp=E,90nm,21.2s,baz=263,slow=39 | | | | | | | |
| | comp=E,2.1nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **8.73** | **123** | Pn | | **Pn** | **03 34 22.6** | **+0.6** |
| | comp=E,0.2nm,0.3s,baz=309,slow=14,SNR=8.5 | | | | | | | |
| NVAR | | | | | LR | LR | 03 37 47.3 | |
| | comp=E,100nm,21.7s,baz=276,slow=38 | | | | | | | |
| | comp=E,0.9nm,0.7s | | | | | | | |
| **ELK** | **Elko** | **9.62** | **103** | Pn | | **Pn** | **03 34 34.2** | **0.0** |
| | baz=330,slow=20,SNR=3.3 | | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | | |
| **PDAR** | **Pinedale Array** | **13.20** | **87** | Pn | | **Pn** | **03 35 23.3** | **+0.1** |
| | comp=E,0.1nm,0.3s,baz=270,slow=11,SNR=6.4 | | | | | | | |
| | comp=E,0.7nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **23.81** | **339** | P | | **P** | **03 37 27.4** | **-0.7** |
| | comp=E,0.2nm,0.8s,baz=150,slow=9.3,SNR=2.8 | | | | | | | |
| | comp=E,0.2nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **23.84** | **119** | P | | **P** | **03 37 28.9** | **+0.1** |
| | comp=E,0.7nm,1.0s,baz=320,slow=9.1,SNR=3.0 | | | | | | | |
| | comp=E,0.7nm,1.0s | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **59.04** | **268** | T | | T | 04 45 53.9 | |
| | baz=49,slow=75 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **59.04** | **268** | T | | T | 04 46 01.6 | |
| | baz=49,slow=75 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **59.06** | **268** | T | | T | 04 46 05.4 | |
| | baz=49,slow=75 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **59.96** | **267** | T | | T | 04 47 10.1 | |
| | baz=54,slow=75 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **59.97** | **267** | T | | T | 04 47 15.0 | |
| | baz=54,slow=75 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **59.98** | **267** | T | | T | 04 47 06.6 | |
| | baz=54,slow=75 | | | | | | | |

*AEIC* ***23*** *03:35:09.8±2.8,51°.06N±0°.04×177°.70W±0°.05,h1km±3km, Error ellipse: s-maj=6.0km s-min=4.5km az=194.0*

*BJI* ***23*** *03:35:10.2±0.0,51°.35N×177°.80W,h20km,mb5.7/90, mB6.2/68,Ms6.3/99,Ms7 6.1/97*

*MOS* ***23*** *03:35:11.1±0.9,51°.37N×177°.77W,h27km,mb6.0/86, MS6.1/81,Error ellipse: s-maj=7.1km s-min=4.1km az=105.6*

*NEIC* ***23*** *03:35:12.3±1.6,51°.35N±0°.06×177°.76W±0°.05,h20km±1km, mb6.0/994, Ms_20 6.2/612,Mwb6.2/123,Mww6.3/47, ML6.0(AEIC),Error ellipse: s-maj=10.2km s-min=5.0km az=177.0,Moment Tensor Solution. Moment tensor: Scale $10^{18}$Nm; $M_{rr}$1.61; $M_{\theta\theta}$-1.47; $M_{\phi\phi}$-0.14; $M_{r\theta}$1.18; $M_{\theta\phi}$-0.43; $M_{r\theta}$0.77; Fault plane solution: $M_0$2.13000×$10^{18}$ NP1:$\phi_s$263.57000°,$\delta$25.65000°,$\lambda$108.86000°. NP2: $\phi_s$62.82000°,$\delta$65.82000°,$\lambda$81.18000°. Principal axes: T 2.1674, Plg68.0000°, Azm316.0000°; N -0.0711, Plg8.0000°, Azm66.0000°; P -2.0963, Plg20.0000°, Azm159.0000°;*

*NEIC* ***23*** *03:35:12.2,51°.34N×177°.76W,h30km,Moment Tensor Solution. Duration: 6s5 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$2.25; $M_{\theta\theta}$-2.26; $M_{\phi\phi}$0.01; $M_{r\theta}$1.38; $M_{\theta\phi}$-0.78; $M_{\phi r}$1.37; Fault plane solution: $M_0$3.08000×$10^{18}$ NP1:$\phi_s$55.74000°, $\delta$65.13000°,$\lambda$73.99000°. NP2:$\phi_s$270.05000°,$\delta$29.30000°, $\lambda$120.75000°. Principal axes: T 3.0700, Plg66.0000°, Azm297.0000°; N 0.0183, Plg14.0000°, Azm63.0000°; P -3.0883, Plg19.0000°, Azm158.0000°;*

*NEIC* ***23*** *03:35:12.2,51°.34N×177°.76W,h30km*

*NEIC* ***23*** *03:35:15.9,51°.47N×177°.83W,h43km*

*IDC* ***23*** *03:35:15.5±1.2,51°.45N×177°.79W,h45km±9km,mb4.9/38, mbtmp5.2/43,ML5.3/4,MS6.0/90,Error ellipse: s-maj=12.5km s-min=7.9km az=176.0*

*IPGP* ***23*** *03:35:15.0,51°.51N×177°.88W,h21km,Mw6.4,Fault plane solution: NP1:$\phi_s$63.00000°,$\delta$65.00000°,$\lambda$79.00000°. NP2:$\phi_s$268.00000°,$\delta$27.00000°,$\lambda$113.00000°.*

*BGR* ***23*** *03:35:17.9,51°.60N×178°.24E,h33km,mb5.7,Ms6.0*

*GCMT* ***23*** *03:35:17.3±0.0,51°.26N×177°.59W,h32km,MW6.3/173, Moment Tensor Solution. s173,c427; s171,c723; Duration: 3s5 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$2.62±.01; $M_{\theta\theta}$-2.43±.01; $M_{\phi\phi}$-0.19±.01; $M_{r\theta}$2.07±.02; $M_{\theta\phi}$-0.95±.01; $M_{\phi r}$1.54±.02; Best double couple: $M_o$3.73700×$10^{18}$ NP1:$\phi_s$58.00000°,$\delta$67.00000°, $\lambda$81.00000°. NP2:$\phi_s$262.00000°,$\delta$25.00000°,$\lambda$111.00000°. Principal axes: T 3.7130, Plg67.0000°, Azm311.0000°; N 0.0470, Plg9.0000°, Azm62.0000°; P -3.7600, Plg22.0000°, Azm156.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 23 03:35:14.5±0.3,51°.28N±0°.03×177°.77W±0°.02,h42km±1km, h44km;pP-P,n2521,σ1s90/2584,mb5.9/716,MS6.2/486, 436C-26D,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TAPA** | **Tanaga Point A** | **0.54** | **357** | | | | **Pn** | **03 35 26.1** | **+0.1** |
| TAPA | | | | | | | **Sn** | **03 35 39.0** | **+5.0** |
| **TASE** | **Tanaga Southea** | **0.58** | **343** | | | | **Pn** | **03 35 26.7** | **+0.2** |
| **KIMD** | **Kanaga Island** | **0.59** | **34** | | | | **Pn** | **03 35 25.9** | **-0.7** |
| **TANO** | **Tanaga North** | **0.68** | **341** | | | | **Pn** | **03 35 28.1** | **+0.4** |
| **KIWB** | **Kanaga Island** | **0.69** | **33** | Pn | | | **Pn** | **03 35 27.4** | **-0.6** |
| **GAKI** | **Gareloi-Kavalg** | **0.71** | **294** | | | | **Pn** | **03 35 28.0** | **-0.1** |
| GAKI | | | | | | | **Sn** | **03 35 38.4** | **+0.5** |
| **KICM** | **Kanaga Island** | **0.74** | **29** | | | | **Pn** | **03 35 28.6** | **+0.1** |
| **KIRH** | **Kanaga Island** | **0.75** | **34** | | | | **Pn** | **03 35 28.6** | **-0.2** |
| **GALAA** | **Gareloi Lava P** | **0.79** | **308** | | | | **Pn** | **03 35 29.7** | **+0.4** |
| **GAEA** | **Gareloi East** | **0.79** | **310** | | | | **Pn** | **03 35 29.7** | **+0.4** |
| **GANO** | **Gareloi North** | **0.84** | **311** | | | | **Pn** | **03 35 30.6** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **1.24** | **53** | | | | **Pn** | **03 35 35.4** | **0.0** |
| **GSMY** | **Great Sitkin M** | **1.31** | **54** | | | | **Pn** | **03 35 36.4** | **0.0** |
| **GSTR** | **Great Sitkin T** | **1.34** | **52** | Pn | | | **Pn** | **03 35 36.1** | **-0.7** |
| **AMKA** | **Amchitka** | **1.84** | **274** | | | | **Pn** | **03 35 43.0** | **-0.6** |
| **AMKA** | **Amchitka** | **1.84** | **274** | | | | **Sn** | **03 36 05.6** | **0.0** |
| AMKA | | | | | | | | 03 36 09.3 | |
| **KOKL** | **Mount Kliuchef** | **2.45** | **63** | | | | **Pn** | **03 35 52.9** | **+0.9** |
| **KOFP** | **Korovin Flat P** | **2.49** | **65** | | | | **Pn** | **03 35 53.0** | **+0.4** |
| **CLES** | **Cleveland East** | **5.10** | **69** | Pn | | | **Pn** | **03 36 29.7** | **+1.4** |
| CLES | | | | | | | **Sn** | **03 37 25.5** | **-0.4** |
| **CLCO** | **Concord Point,** | **5.19** | **70** | | | | **Sn** | **03 36 31.7** | **+2.2** |
| **SHEM** | **Shemya Is, Ala** | **5.23** | **289** | P | | | **Pn** | **03 36 31.1** | **+1.0** |
| | 34nm,0.3s,baz=44,slow=2.6,SNR=32 | | | | | | | | |
| SHEM | | | | | | S | **Sn** | **03 37 29.1** | **0.0** |
| | 1μm,0.9s,baz=336,slow=20,SNR=1.6 | | | | | | | | |
| | 1μm,0.8s | | | | | | | | |
| **NIKH** | **Nikolski High** | **5.75** | **69** | P | | | **Pn** | **03 36 40.1** | **+2.9** |
| **NIKH** | **Nikolski High** | **5.75** | **69** | | | | **Pn** | **03 36 38.9** | **+1.7** |
| NIKH | | | | | | | **Sn** | **03 37 43.5** | **+1.7** |
| **NIKH** | **Nikolski High** | **5.75** | **69** | P | | | **Pn** | **03 36 38.1** | **+0.9** |
| | baz=254,SNR=62 | | | | | | | | |
| NIKH | | | | | | S | **Sn** | **03 37 43.8** | **+2.0** |
| | baz=254 | | | | | | | | |
| **OKSP** | **Okmok Steeple** | **6.15** | **68** | | | | **Pn** | **03 36 45.3** | **+2.5** |
| **OKCE** | **Okmok Cone E** | **6.27** | **66** | | | | **Pn** | **03 36 47.2** | **+2.9** |
| **OKNC** | **Okmok New Cone** | **6.30** | **66** | | | | **Sn** | **03 38 03.3** | **+7.9** |
| **OKFG** | **Magazine Ridge** | **6.41** | **67** | | | | **Pn** | **03 36 49.0** | **+2.8** |
| OKFG | | | | | | | **Sn** | **03 38 05.3** | **+7.3** |
| **MGOD** | **Makushin Gods** | **7.11** | **65** | | | | **Pn** | **03 36 57.9** | **+2.0** |
| **P08K** | **Saint George I** | **7.21** | **39** | | | | **Pn** | **03 36 58.6** | **+1.5** |
| **P08K** | **Saint George I** | **7.21** | **39** | P | | | **Pn** | **03 36 58.3** | **+1.1** |
| | baz=225,SNR=21 | | | | | | | | |
| P08K | | | | | | S | **Sn** | **03 38 16.0** | **-1.7** |
| | baz=225 | | | | | | | | |
| P08K | | | | | | S | **Sn** | **03 38 16.0** | **-1.7** |
| | baz=225 | | | | | | | | |
| **MTBL** | **Makushin Table** | **7.27** | **64** | | | | **Pn** | **03 37 00.8** | **+2.7** |
| **UNV** | **Unalaska Valle** | **7.33** | **65** | P | | | **Pn** | **03 37 02.2** | **+3.3** |
| **UNV** | **Unalaska Valle** | **7.33** | **65** | P | | | **Pn** | **03 36 59.9** | **+0.9** |
| | baz=253,SNR=82 | | | | | | | | |
| UNV | | | | | | S | **Sn** | **03 38 21.2** | **+0.5** |
| | baz=253 | | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **7.37** | **34** | P | | | **Pn** | **03 37 03.2** | **+3.7** |
| **SPIA** | **Saint Paul Isl** | **7.37** | **34** | | | | **Pn** | **03 37 03.1** | **+3.7** |
| **SPIA** | **Saint Paul Isl** | **7.37** | **34** | P | | | **Pn** | **03 37 00.7** | **+1.2** |
| | baz=219,SNR=50 | | | | | | | | |
| SPIA | | | | | | S | **Sn** | **03 38 20.9** | **-0.8** |
| | baz=219 | | | | | | | | |
| **AKRB** | **Akutan Reef Bi** | **7.66** | **64** | | | | **Pn** | **03 37 06.1** | **+2.7** |
| **LVA** | **Lava Point** | **7.69** | **63** | | | | **Pn** | **03 37 06.7** | **+2.9** |
| **AKLV** | **Akutan Long Va** | **7.73** | **63** | | | | **Pn** | **03 37 07.2** | **+2.7** |
| **AKSA** | **Akutan Strait** | **7.87** | **64** | | | | **Pn** | **03 37 10.2** | **+3.9** |
| **WEBT** | **Westdahl Beart** | **8.53** | **62** | | | | **Pn** | **03 37 20.1** | **+4.7** |
| **SSLS** | **Shishaldin Sou** | **8.99** | **62** | | | | **Pn** | **03 37 24.6** | **+2.9** |
| **ISNN** | **Isanotski Nort** | **9.15** | **62** | | | | **Pn** | **03 37 26.5** | **+2.7** |
| **ISLZ** | **Isanotski Laza** | **9.15** | **62** | | | | **Pn** | **03 37 26.1** | **+2.2** |
| **FALS** | **False Pass** | **9.35** | **62** | P | | | **Pn** | **03 37 29.5** | **+2.9** |
| **FALS** | **False Pass** | **9.35** | **62** | P | | | **Pn** | **03 37 29.4** | **+2.8** |
| **FALS** | **False Pass** | **9.35** | **62** | P | | | **Pn** | **03 37 27.6** | **+1.1** |
| | baz=252,SNR=15 | | | | | | | | |
| FALS | | | | | | S | **Sn** | **03 39 11.9** | **+1.6** |
| | baz=252 | | | | | | | | |
| **S12K** | **Black Hills** | **10.35** | **59** | | | | **Pn** | **03 37 42.8** | **+2.5** |
| **S12K** | **Black Hills** | **10.35** | **59** | P | | | **Pn** | **03 37 42.3** | **+2.0** |
| | baz=250,SNR=10 | | | | | | | | |
| S12K | | | | | | S | **Sn** | **03 39 40.6** | **+5.8** |
| | baz=250 | | | | | | | | |
| **SDPT** | **Sand Point** | **11.11** | **62** | Pn | | | **Pn** | **03 37 52.1** | **+1.5** |
| **SDPT** | **Sand Point** | **11.11** | **62** | P | | | **Pn** | **03 37 51.6** | **+1.0** |
| | baz=255,SNR=22 | | | | | | | | |
| SDPT | | | | | | S | **Sn** | **03 39 56.8** | **+3.4** |
| | baz=255 | | | | | | | | |
| **M11K** | **Mekoryuk** | **11.19** | **31** | P | | | **Pn** | **03 37 52.5** | **+0.8** |
| | baz=220,SNR=49 | | | | | | | | |
| **CNBA** | **Chernabura Isl** | **11.50** | **65** | Pn | | | **Pn** | **03 37 55.0** | **-0.9** |
| **CHNA** | **Chernabura Isl** | **11.50** | **65** | P | | | **Pn** | **03 37 55.7** | **-0.2** |
| | baz=258,SNR=28 | | | | | | | | |
| CHNA | | | | | | S | Sn | 03 40 15.8 | +13 |
| | baz=258 | | | | | | | | |
| **M13K** | **Dall Lake** | **12.20** | **36** | Pn | | | **Pn** | **03 38 09.2** | **+3.8** |
| **M13K** | **Dall Lake** | **12.20** | **36** | P | | | **Pn** | **03 38 06.1** | **+0.7** |
| | baz=227,SNR=47 | | | | | | | | |
| M13K | | | | | | S | **Sn** | **03 40 25.7** | **+5.9** |
| | baz=227 | | | | | | | | |
| **O14K** | **Tigyukauivet M** | **12.32** | **43** | Pn | | | **Pn** | **03 38 07.2** | **+0.2** |
| **O14K** | **Tigyukauivet M** | **12.32** | **43** | P | | | **Pn** | **03 38 08.5** | **+1.5** |
| | baz=236,SNR=49 | | | | | | | | |
| O14K | | | | | | S | **Sn** | **03 40 26.9** | **+4.2** |
| | baz=236 | | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **12.53** | **40** | P | | | **Pn** | **03 38 11.6** | **+1.7** |
| | baz=233,SNR=49 | | | | | | | | |
| N14K | | | | | | S | **Sn** | **03 40 31.1** | **+3.3** |
| | baz=233 | | | | | | | | |
| **K13K** | **Kusilvak Mount** | **12.86** | **29** | Pn | | | **Pn** | **03 38 13.1** | **-1.4** |
| **K13K** | **Kusilvak Mount** | **12.86** | **29** | P | | | **Pn** | **03 38 14.9** | **+0.5** |
| | baz=219,SNR=30 | | | | | | | | |
| K13K | | | | | | S | Sn | 03 40 47.2 | +11 |
| | baz=219 | | | | | | | | |
| **O15K** | **Ungalikthiuk R** | **12.91** | **45** | P | | | **Pn** | **03 38 16.2** | **+1.1** |
| | baz=239,SNR=108 | | | | | | | | |
| O15K | | | | | | S | **Sn** | **03 40 42.3** | **+5.1** |
| | baz=239 | | | | | | | | |
| **M14K** | **Bethel** | **12.94** | **37** | Pn | | | **Pn** | **03 38 12.9** | **-2.6** |
| **M14K** | **Bethel** | **12.94** | **37** | P | | | **Pn** | **03 38 16.1** | **+0.6** |
| | baz=229,SNR=76 | | | | | | | | |
| M14K | | | | | | S | **Sn** | **03 40 40.9** | **+3.1** |
| | baz=229 | | | | | | | | |
| **GAMB** | **Gambell** | **12.94** | **12** | ⇑P | | | **Pn** | **03 38 16.2** | **+0.7** |
| **GAMB** | **Gambell** | **12.94** | **12** | P | | | **Pn** | **03 38 17.2** | **+1.7** |
| | baz=197,SNR=13 | | | | | | | | |
| GAMB | | | | | | S | **Sn** | **03 40 45.5** | **+7.6** |
| | baz=197 | | | | | | | | |
| **L14K** | **Kuka Creek** | **13.07** | **34** | Pn | | | **Pn** | **03 38 14.0** | **-3.3** |
| **L14K** | **Kuka Creek** | **13.07** | **34** | P | | | **Pn** | **03 38 18.4** | **+1.2** |
| | baz=226,SNR=65 | | | | | | | | |
| L14K | | | | | | S | S | 03 40 54.1 | -11 |
| | baz=226 | | | | | | | | |
| **R16K** | **Pilot Point** | **13.31** | **54** | | | | **Pn** | **03 38 19.2** | **-1.3** |
| **R16K** | **Pilot Point** | **13.31** | **54** | P | | | **Pn** | **03 38 21.3** | **+0.7** |
| | baz=250 | | | | | | | | |
| R16K | | | | | | S | **Sn** | **03 40 52.9** | **+5.9** |
| | baz=250 | | | | | | | | |
| R16K | | | | | | S | **Sn** | **03 40 52.9** | **+5.9** |
| | baz=250 | | | | | | | | |
| **N15K** | **Kwethluk River** | **13.32** | **41** | | | | **Pn** | **03 38 21.9** | **+1.2** |
| **N15K** | **Kwethluk River** | **13.32** | **41** | P | | | **Pn** | **03 38 21.5** | **+0.7** |
| | baz=235,SNR=31 | | | | | | | | |
| N15K | | | | | | S | **Sn** | **03 40 49.2** | **+1.9** |
| | baz=235 | | | | | | | | |
| **M15K** | **Kasigluk River** | **13.39** | **39** | P | | | **Pn** | **03 38 23.8** | **+2.1** |
| | baz=232,SNR=100 | | | | | | | | |
| M15K | | | | | | S | **Sn** | **03 40 51.5** | **+2.6** |
| | baz=232 | | | | | | | | |
| **P16K** | **Nushagak River** | **13.68** | **48** | P | | | **Pn** | **03 38 27.1** | **+1.5** |
| | baz=243,SNR=64 | | | | | | | | |
| P16K | | | | | | S | **Sn** | **03 41 00.2** | **+4.3** |
| | baz=243 | | | | | | | | |
| P16K | | | | | | S | **Sn** | **03 41 00.2** | **+4.3** |
| | baz=243 | | | | | | | | |
| **L15K** | **Ungalak Mounta** | **13.72** | **34** | P | | | **Pn** | **03 38 27.2** | **+1.0** |
| | baz=227,SNR=87 | | | | | | | | |
| L15K | | | | | | S | **Sn** | **03 41 02.4** | **+5.4** |
| | baz=227 | | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **13.82** | **28** | | | | **Pn** | **03 38 27.5** | **+0.1** |
| **J14K** | **Nanvaranak Lak** | **13.82** | **28** | P | | | **Pn** | **03 38 29.6** | **+2.1** |
| | baz=220,SNR=31 | | | | | | | | |
| J14K | | | | | | S | **Sn** | **03 41 07.1** | **+7.8** |
| | baz=220 | | | | | | | | |
| **O16K** | **Kokwok River B** | **13.89** | **46** | P | | | **Pn** | **03 38 30.7** | **+2.3** |
| | baz=241,SNR=138 | | | | | | | | |
| O16K | | | | | | S | **Sn** | **03 41 02.9** | **+1.9** |
| | baz=241 | | | | | | | | |
| **CHIR** | **Chirikof Islan** | **13.91** | **62** | P | | | **Pn** | **03 38 28.5** | **-0.2** |
| | baz=259 | | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **13.95** | **55** | P | | | **Pn** | **03 38 29.6** | **+0.2** |
| | baz=251,SNR=18 | | | | | | | | |
| R17L | | | | | | S | **Sn** | **03 41 10.0** | **+7.4** |
| | baz=251 | | | | | | | | |
| **PLK4** | **Peulik 4** | **13.95** | **55** | Pn | | | **Pn** | **03 38 28.9** | **-0.5** |
| **N16K** | **Nishlik Lake** | **14.04** | **42** | P | | | **Pn** | **03 38 32.1** | **+1.5** |
| | baz=237 | | | | | | | | |
| N16K | | | | | | S | **Sn** | **03 41 11.4** | **+6.6** |
| | baz=237 | | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **14.13** | **32** | Pn | | | **Pn** | **03 38 31.6** | **-0.1** |
| **K15K** | **Wolf Creek Mou** | **14.13** | **32** | P | | | **Pn** | **03 38 34.7** | **+3.0** |
| | baz=226,SNR=97 | | | | | | | | |
| K15K | | | | | | S | **Sn** | **03 41 15.8** | **+8.9** |
| | baz=226 | | | | | | | | |
| **Q16K** | **King Salmon** | **14.16** | **50** | P | | | **Pn** | **03 38 33.9** | **+1.7** |
| | baz=247,SNR=104 | | | | | | | | |
| Q16K | | | | | | S | S | 03 41 17.8 | -9.3 |
| | baz=247 | | | | | | | | |
| **M16K** | **Timber Creek** | **14.27** | **40** | | | | **Pn** | **03 38 32.7** | **-0.9** |
| **M16K** | **Timber Creek** | **14.27** | **40** | P | | | **Pn** | **03 38 35.2** | **+1.6** |
| | baz=235,SNR=32 | | | | | | | | |
| M16K | | | | | | S | **Sn** | **03 41 17.3** | **+7.0** |
| | baz=235 | | | | | | | | |
| **Q17K** | **Contact Creek** | **14.39** | **52** | P | | | **Pn** | **03 38 35.3** | **-0.1** |
| | baz=250 | | | | | | | | |
| Q17K | | | | | | S | **Sn** | **03 41 20.3** | **+6.8** |
| | baz=250 | | | | | | | | |
| **O17K** | **Koliganek Bris** | **14.42** | **46** | P | | | **Pn** | **03 38 38.0** | **+2.4** |
| | baz=242,SNR=175 | | | | | | | | |
| O17K | | | | | | S | **Sn** | **03 41 20.3** | **+6.4** |
| | baz=242 | | | | | | | | |
| **P17K** | **Kvichak River** | **14.47** | **49** | P | | | **Pn** | **03 38 38.7** | **+2.4** |
| | baz=245,SNR=98 | | | | | | | | |
| P17K | | | | | | S | **Sn** | **03 41 21.2** | **+6.0** |
| | baz=245 | | | | | | | | |
| P17K | | | | | | S | **Sn** | **03 41 21.2** | **+6.0** |
| | baz=245 | | | | | | | | |
| **L16K** | **Owhat River** | **14.48** | **37** | Pn | | | **Pn** | **03 38 34.4** | **-2.0** |
| **L16K** | **Owhat River** | **14.48** | **37** | P | | | **Pn** | **03 38 38.1** | **+1.7** |
| | baz=232,SNR=82 | | | | | | | | |
| L16K | | | | | | S | **Sn** | **03 41 22.2** | **+6.8** |
| | baz=232 | | | | | | | | |
| **PET** | **Petropavlovsk** | **14.57** | **286** | P | | | **Pn** | **03 38 39.7** | **+2.1** |
| **PET** | **Petropavlovsk** | **14.57** | **286** | Pn | | | **Pn** | **03 38 35.7** | **-1.9** |
| **PET** | **Petropavlovsk** | **14.57** | **286** | ⇑P | | | **Pn** | **03 38 36.8** | **-0.8** |
| **PET** | **Petropavlovsk** | **14.57** | **286** | *ce*P | | | **Pn** | **03 38 37.3** | **-0.3** |
| PET | | | | | | *e*S | **Sn** | **03 41 10.4** | **-7.2** |
| PET | | | | | | pmax | pmax | | |
| | comp=Z,6μm,16.3s | | | | | | | | |
| PET | | | | | | pmax | pmax | | |
| | comp=Z,7μm,17.3s | | | | | | | | |
| PET | | | | | | pmax | pmax | | |
| | comp=Z,210nm,1.2s | | | | | | | | |
| PET | | | | | | MLR | MLR | | |
| | comp=Z,21μm,17.0s | | | | | | | | |
| PET | | | | | | MLR | MLR | | |
| | comp=Z,21μm,17.0s | | | | | | | | |
| **ACHA** | **Angle Creek He** | **14.65** | **53** | | | | **Pn** | **03 38 37.6** | **-1.3** |
| **N17K** | **Nushagak Hills** | **14.74** | **43** | Pn | | | **Pn** | **03 38 39.8** | **-0.1** |
| **N17K** | **Nushagak Hills** | **14.74** | **43** | P | | | **Pn** | **03 38 41.6** | **+1.7** |
| | baz=240,SNR=65 | | | | | | | | |
| N17K | | | | | | S | **Sn** | **03 41 27.4** | **+5.7** |
| | baz=240 | | | | | | | | |
| **ANM** | **Nome** | **14.82** | **21** | Pn | | | **Pn** | **03 38 39.7** | **-1.2** |
| **ANM** | **Nome** | **14.82** | **21** | P | | | **Pn** | **03 38 42.1** | **+1.1** |
| | baz=211,SNR=18 | | | | | | | | |
| ANM | | | | | | S | **S** | **03 41 33.4** | **-7.1** |
| | baz=211 | | | | | | | | |
| **ANM** | **Nome** | **14.82** | **21** | P | | | **Pn** | **03 38 39.7** | **-1.2** |
| **SII** | **Sitkinak Islan** | **14.83** | **60** | P | | | **Pn** | **03 38 43.1** | **+1.9** |
| **SII** | **Sitkinak Islan** | **14.83** | **60** | | | | **Pn** | **03 38 39.0** | **-2.2** |
| **SII** | **Sitkinak Islan** | **14.83** | **60** | P | | | **Pn** | **03 38 40.1** | **-1.1** |
| | baz=258,SNR=19 | | | | | | | | |
| **R18K** | **Karluk** | **14.91** | **56** | P | | | **Pn** | **03 38 41.4** | **-0.8** |
| | baz=254 | | | | | | | | |
| R18K | | | | | | S | **S** | **03 41 39.1** | **-3.4** |
| | baz=254 | | | | | | | | |
| R18K | | | | | | S | **S** | **03 41 39.1** | **-3.4** |
| | baz=254 | | | | | | | | |
| **Q18K** | **Katmai Hardscr** | **14.96** | **52** | P | | | **Pn** | **03 38 42.9** | **0.0** |
| | baz=250,SNR=97 | | | | | | | | |
| Q18K | | | | | | S | **S** | **03 41 41.6** | **-2.0** |
| | baz=250 | | | | | | | | |
| **M17K** | **Holitna River** | **15.09** | **40** | Pn | | | **Pn** | **03 38 44.7** | **+0.2** |
| **M17K** | **Holitna River** | **15.09** | **40** | P | | | **Pn** | **03 38 46.1** | **+1.6** |
| | baz=236,SNR=198 | | | | | | | | |
| M17K | | | | | | S | **S** | **03 41 39.2** | **-7.0** |
| | baz=236 | | | | | | | | |
| **P18K** | **Big Mountain,** | **15.12** | **49** | | | | **Pn** | **03 38 45.8** | **+0.9** |
| **P18K** | **Big Mountain,** | **15.12** | **49** | P | | | **Pn** | **03 38 46.1** | **+1.1** |
| | baz=247,SNR=156 | | | | | | | | |
| P18K | | | | | | S | **S** | **03 41 48.8** | **+2.0** |
| | baz=247 | | | | | | | | |
| **J16K** | **Anvik River** | **15.13** | **31** | P | | | **Pn** | **03 38 46.8** | **+1.8** |
| **J16K** | **Anvik River** | **15.13** | **31** | P | | | **P** | **03 38 47.7** | **-1.8** |
| | baz=225,SNR=96 | | | | | | | | |
| J16K | | | | |

baz=239,SNR=87
M18K S S 03 41 55.6 -4.9
baz=239
L18K Granite Mounta 15.84 38 P P 03 38 56.1 -1.4
baz=235,SNR=129
L18K S S 03 41 56.8 -4.7
baz=235
L18K S S 03 41 56.8 -4.7
baz=235
O19K Port Alsworth 15.86 47 P Pn 03 38 56.0 +1.5
baz=246
O19K S Sn 03 41 55.2 +6.3
baz=246
O19K S Sn 03 41 55.2 +6.3
baz=246
KDAK Kodiak Island 15.94 56 ⇑P Pn 03 38 52.5 -3.0
KDAK Kodiak Island 15.94 56 P Pn 03 38 54.7 -0.9
comp=Z,7.9nm,0.3s,baz=267,slow=4.7,SNR=80
KDAK S Sn 03 41 46.3 -4.6
comp=Z,55nm,0.9s,baz=12,slow=20,SNR=1.7
comp=Z,130nm,0.4s
KDAK Kodiak Island 15.94 56 P Pn 03 38 54.7 -0.9
baz=256
KDAK S Sn 03 41 56.7 +5.7
baz=256
KDAK Kodiak Island 15.94 56 *i* P Pn 03 38 52.2 -3.3
F15K North Star Dit 15.96 20 P P 03 38 57.6 -1.1
baz=211,SNR=178
F15K S S 03 42 00.5 -3.2
baz=211
N19K Bonanza Creek 16.05 45 P P 03 38 59.2 -0.7
baz=243,SNR=150
N19K S S 03 42 02.6 -3.3
baz=243
N19K S S 03 42 02.6 -3.3
baz=243
P19K Oil Pt 16.16 49 P P 03 38 59.7 -1.4
baz=249,SNR=38
P19K S Sn 03 42 00.6 +4.3
baz=249
G16K Koyuk River 16.23 23 IAmb IAmb 03 39 06.2
comp=Z,2µm,2.0s
G16K Koyuk River 16.23 23 P P 03 39 01.5 -0.2
baz=216,SNR=89
G16K S S 03 42 04.8 -4.4
baz=216
Q20K Shuyak Island 16.25 53 P Pn 03 39 00.5 +1.1
baz=254,SNR=18
Q20K S Sn 03 42 03.3 +5.0
baz=254
SKR Severo-Kuril's 16.43 278 *e*P P 03 39 03.7 -0.4
SKR *e*S Sn 03 42 02.1 -0.8
SKR pmax pmax
comp=Z,7µm,8.9s
SKR pmax pmax
comp=Z,301nm,0.9s
SKR smax smax
comp=N,135nm,1.0s
SKR smax smax
comp=E,189nm,0.9s
SKR MLR MLR
comp=Z,35µm,20.0s
H17K Granite Mounta 16.53 27 P P 03 39 05.9 +0.7
baz=222,SNR=260
H17K S S 03 42 14.2 -1.4
baz=222
L19K White Mountain 16.55 40 P P 03 39 05.2 -0.1
baz=239,SNR=99
L19K S Sn 03 42 09.4 +3.8
baz=239
L19K S Sn 03 42 09.4 +3.8
baz=239
J18K Innoko River 16.57 34 P P 03 39 05.1 -0.4
baz=232
J18K S S 03 42 17.1 +0.9
baz=232
M19K Big River Lodg 16.59 41 P P 03 39 05.9 +0.1
baz=240,SNR=107
M19K S Sn 03 42 07.2 +0.4
baz=240
M19K S Sn 03 42 07.2 +0.4
baz=240
O20K Slope Mountain 16.60 48 P Pn 03 39 04.7 +0.8
baz=248,SNR=50
O20K S Sn 03 42 11.2 +4.2
baz=248
O20K S Sn 03 42 11.2 +4.2
baz=248
G17K Kiwalik Mounta 16.75 25 P P 03 39 08.5 +0.9
baz=220,SNR=85
G17K S Sn 03 42 15.1 +4.6
baz=220
HOM Homer 16.93 50 P P 03 39 09.0 -0.5
baz=251
HOM S S 03 42 19.7 -3.9
baz=251
L20K Farewell, AK 17.09 40 P P 03 39 11.9 +0.6
baz=239,SNR=100
L20K S S 03 42 23.5 -3.5
baz=239
L20K S S 03 42 23.5 -3.5
baz=239
M20K Styx River 17.11 42 P P 03 39 13.4 +1.7
baz=242
M20K S S 03 42 23.9 -3.6
baz=242
M20K S S 03 42 23.9 -3.6
baz=242
H18K Honhosa River 17.14 28 P P 03 39 14.2 +2.4
baz=225,SNR=155
H18K S S 03 42 27.4 -0.6
baz=225
N20K Mount Spurr 17.22 45 P P 03 39 13.7 +0.9
baz=246,SNR=142
N20K S S 03 42 26.7 -2.9
baz=246
SPCR Spurr Chakacha 17.22 45 P P 03 39 13.5 +0.7
baz=246,SNR=122
SPCR S S 03 42 28.2 -1.4
baz=246
J19K Poorman 17.27 34 P P 03 39 14.2 +0.9
baz=232,SNR=506
J19K S S 03 42 30.7 0.0
baz=232
J19K S S 03 42 30.7 0.0
baz=232
GCSA Galena City Sc 17.33 31 P P 03 39 15.5 +1.6
baz=228,SNR=242
GCSA S S 03 42 31.9 +0.3
baz=228
F17K Baldwin Pennin 17.34 23 P P 03 39 16.2 +2.2
baz=216,SNR=80
F17K S S 03 42 34.0 +2.1
baz=216
BRSE Bradley Lake S 17.39 50 P Pn 03 39 13.2 -0.5
baz=252,SNR=35
BRSE S S 03 42 30.5 -2.5
baz=252
K20K Telida 17.48 37 P P 03 39 16.7 +1.1
baz=237
K20K S S 03 42 36.2 +1.4
baz=237
K20K S S 03 42 36.2 +1.4
baz=237
CAPN Captain Cook N 17.53 47 P P 03 39 17.5 +1.4
baz=249
CAPN S S 03 42 37.2 +1.5
baz=249
G18K Tagagawik 17.60 26 P P 03 39 18.8 +1.9
baz=222,SNR=105
G18K S S 03 42 39.5 +2.3
baz=222
E17K Hotham Inlet 17.73 21 P P 03 39 20.6 +2.3
baz=214,SNR=197
E17K S S 03 42 43.9 +4.0
baz=214
SKT Skwentna 17.83 43 P P 03 39 20.7 +1.2
baz=245,SNR=280
SKT S S 03 42 40.8 -1.2
baz=245
F18K Selawik 17.86 24 P P 03 39 22.2 +2.4
baz=219,SNR=134
F18K S S 03 42 44.1 +1.7
baz=219
J20K Nowinta River 17.91 35 P P 03 39 21.5 +1.2
baz=234,SNR=246
J20K S S 03 42 45.0 +1.6
baz=234
J20K S S 03 42 45.0 +1.6
baz=234
SUA Susitna One 17.97 45 P Pn 03 39 20.4 -0.6
baz=247,SNR=77
SUA S S 03 42 47.6 +2.7
baz=247
H19K Roundabout Mou 17.98 29 P P 03 39 22.5 +1.4
baz=227,SNR=108
H19K S S 03 42 48.7 +3.7
baz=227
D17K Noatak River 17.99 18 P P 03 39 23.4 +2.2
baz=211,SNR=96
D17K S S 03 42 49.7 +4.6
baz=211
C16K Lisburne Hills 18.09 15 P P 03 39 24.3 +2.1
baz=206,SNR=24
C16K S S 03 42 51.8 +4.7
baz=206
O22K Cooper Landing 18.10 49 IAmb IAmb 03 39 32.3
comp=Z,817nm,0.7s
O22K Cooper Landing 18.10 49 P Pn 03 39 21.3 -1.1
baz=251,SNR=30
O22K S S 03 42 52.3 +5.0
baz=251
SEW Seward 18.11 50 P P 03 39 20.4 -2.1
baz=253,SNR=58
SEW S S 03 42 56.9 +9.3
baz=253
I20K Naaghedeneel 18.16 33 P Pn 03 39 24.5 +1.4
baz=232,SNR=78
I20K S S 03 42 53.1 +4.7
baz=232
E18K Tukpahlearik C 18.29 21 P Pn 03 39 26.8 +2.2
baz=216,SNR=59
E18K S S 03 42 57.9 +6.9
baz=216
RC01 Rabbit Creek A 18.29 47 P P 03 39 22.1 -2.5
baz=250,SNR=41
RC01 S S 03 42 51.5 +0.3
baz=250
RDOG Red Dog Mine 18.33 18 P Pn 03 39 26.1 +0.9
baz=210,SNR=28
RDOG S S 03 42 57.7 +5.7
baz=210
M22K Willow 18.36 45 IAmb IAmb 03 39 32.2
comp=Z,1µm,1.1s
M22K Willow 18.36 45 P Pn 03 39 25.5 0.0
baz=247,SNR=59
H20K Anotleneega Mo 18.46 31 P Pn 03 39 27.6 +0.8
baz=230,SNR=186
H20K S S 03 42 57.9 +3.3
baz=230
F19K Shaleruckik Mo 18.53 25 P Pn 03 39 28.7 +1.1
baz=222,SNR=317
F19K S S 03 42 58.5 +2.5
baz=222
BILL Bilibino 18.54 341 P Pn 03 39 28.2 +0.5
BILL Bilibino 18.54 341 *ce*P Pn 03 39 28.7 +1.0
BILL pmax pmax
comp=Z,438nm,1.5s
BILL MLR MLR
comp=Z,84µm,24.0s
CUT Chulitna 18.55 43 P P 03 39 26.5 -0.8
baz=245,SNR=35
CUT S S 03 42 55.5 -1.0
baz=245
C17K DeLong Mountai 18.64 17 P Pn 03 39 30.5 +1.5
baz=209,SNR=62
C17K S S 03 43 01.1 +2.7
baz=209
PMR Palmer 18.74 46 P Pn 03 39 31.2 +1.1
PMR Palmer 18.74 46 P P 03 39 26.0 -3.4
baz=249,SNR=26
PMR S S 03 43 03.7 +3.5
baz=249
PWL Port Wells 18.86 48 P P 03 39 28.0 -2.9
baz=252,SNR=40
PWL S S 03 43 06.0 +3.1
baz=252
KNK Knik Glacier 18.98 46 P P 03 39 29.5 -2.6
baz=250,SNR=32
KNK S S 03 43 06.4 +1.2
baz=250
BPAW Bear Paw Mtn. 19.03 37 P Pn 03 39 33.8 +0.1
baz=240,SNR=207
BPAW S S 03 43 09.0 +2.7
baz=240
P23K Montague Islan 19.08 51 P P 03 39 33.3 +0.1
baz=256,SNR=27
P23K S S 03 43 10.0 +2.9
baz=256
P23K S S 03 43 10.0 +2.9
baz=256
E19K Redstone River 19.14 24 IAmb IAmb 03 39 40.3
comp=Z,848nm,1.2s
E19K Redstone River 19.14 24 P Pn 03 39 35.5 +0.6
baz=222,SNR=496
E19K S S 03 43 11.2 +3.0
baz=222
SML Sawmill 19.17 45 P P 03 39 33.2 -1.0
baz=250,SNR=74
SML S S 03 43 11.5 +2.5
baz=250
C18K Utukok River 19.17 19 P Pn 03 39 36.2 +0.8
baz=213,SNR=56
C18K S S 03 43 10.7 +1.7
baz=213
H21K Melozitna Rive 19.24 32 P Pn 03 39 36.5 +0.3
baz=233,SNR=650
H21K S Sn 03 43 11.1 +0.5
baz=233
H21K S Sn 03 43 11.1 +0.5
baz=233
F20K Avaraart Lake 19.25 27 P Pn 03 39 36.6 +0.4
baz=225
F20K S Sn 03 43 14.8 +4.1
baz=225
M23K Glacier View 19.43 46 P P 03 39 35.1 -2.0
baz=250,SNR=44
M23K S S 03 43 14.4 +0.1
baz=250
WAT1 Susitna Watana 19.45 42 P P 03 39 36.3 -1.0
baz=247
WAT1 S Sn 03 43 15.2 -0.5
baz=247
GLI Glacier Island 19.45 49 P P 03 39 35.0 -2.2
baz=254,SNR=22
GLI S Sn 03 43 17.8 +2.0
baz=254
Q23K Middleton Isla 19.48 53 P P 03 39 37.6 +0.1
baz=259
Q23K S Sn 03 43 25.3 +8.9
baz=259
Q23K S Sn 03 43 25.3 +8.9
baz=259
MID Middleton Isla 19.48 53 P Pn 03 39 40.0 +0.9
MA2 Magadan 19.53 307 P Pn 03 39 39.2 -0.4
MA2 Magadan 19.53 307 P P 03 39 37.8 -0.3
MA2 Magadan 19.53 307 ⇑P P 03 39 38.2 +0.1
MA2 Magadan 19.53 307 P Pn 03 39 39.2 -0.4
comp=Z,2.8nm,0.3s,baz=94,slow=8.8,SNR=20
MA2 LR LR 03 46 22.7
comp=Z,61µm,21.4s,baz=106,slow=34
comp=Z,52nm,0.9s
MA2 Magadan 19.53 307 *ce*P P 03 39 38.8 +0.7
MA2 pmax pmax
comp=Z,80nm,1.0s
MA2 MLR MLR
comp=Z,73µm,22.0s
G21K Allakaket 19.54 29 IAmb IAmb 03 39 47.1
comp=Z,503nm,0.8s
G21K Allakaket 19.54 29 P Pn 03 39 39.9 +0.1
baz=230,SNR=585
G21K S Sn 03 43 22.0 +4.1
baz=230
MLY Manley 19.60 35 IAmb IAmb 03 39 52.7
comp=Z,913nm,1.4s
MLY Manley 19.60 35 P Pn 03 39 40.1 -0.4
baz=238,SNR=448
MLY S Sn 03 43 22.0 +2.6
baz=238
SCM Sheep Creek Mo 19.63 46 P P 03 39 36.3 -2.9
baz=251,SNR=26
SCM S Sn 03 43 20.4 +0.3
baz=251
BWN Browne 19.65 38 IAmb IAmb 03 39 46.4
comp=Z,1µm,1.4s
MCK McKinley 19.66 40 P P 03 39 38.9 -0.6
baz=244,SNR=27
MCK S Sn 03 43 22.1 +1.2
baz=244
B18K Kokolik River 19.67 17 P Pn 03 39 41.0 -0.2
baz=211,SNR=32
B18K S Sn 03 43 21.5 +0.6
baz=211
WAT6 Susitna Watana 19.70 43 P P 03 39 38.3 -1.8
baz=248,SNR=76
WAT6 S Sn 03 43 22.6 +0.6
baz=248
D19K Kuna River 19.71 22 IAmb IAmb 03 39 49.2
comp=Z,883nm,1.2s
D19K Kuna River 19.71 22 P Pn 03 39 41.7 -0.1
baz=218,SNR=253
D19K S Sn 03 43 22.1 +0.1
baz=218
SEY Seymchan 19.75 318 P P 03 39 40.6 +0.1
comp=Z,4.7nm,0.3s,baz=106,slow=11,SNR=59
SEY LR LR 03 46 44.0
comp=Z,77µm,21.7s,baz=116,slow=35
SEY ScP ScP 03 47 28.4 -1.3
comp=Z,1.9nm,0.4s,baz=179,slow=23,SNR=2.2
comp=Z,95nm,1.0s
SEY Seymchan 19.75 318 *ce*P P 03 39 41.3 +0.8
SEY pmax pmax
comp=Z,442nm,1.7s
SEY MLR MLR
comp=Z,85µm,23.0s
H22K Ishtalitna Cre 19.86 33 P Pn 03 39 43.3 -0.2
baz=235,SNR=431
H22K S Sn 03 43 25.5 0.0
baz=235
H22K S Sn 03 43 25.5 0.0
baz=235
C19K Lookout Ridge 19.88 19 P Pn 03 39 43.3 -0.4
baz=215,SNR=55
C19K S Sn 03 43 26.1 +0.1
baz=215
E20K Nigu River 20.00 24 P Pn 03 39 44.6 -0.6
baz=222,SNR=279
E20K S Sn 03 43 27.5 -1.4
baz=222
NEA2 Nenana 20.00 37 IAmb IAmb 03 39 51.3
comp=Z,636nm,1.2s
NEA2 Nenana 20.00 37 P P 03 39 42.7 -0.6
baz=241,SNR=219
NEA2 S S 03 43 24.9 -0.7
baz=241
EYAK Cordova Ski Ar 20.01 50 P Pn 03 39 44.4 -0.9
EYAK Cordova Ski Ar 20.01 50 P P 03 39 41.4 -1.9
baz=256,SNR=18
EYAK S S 03 43 27.0 +1.3
baz=256
F21K Alatna River 20.01 28 P P 03 39 43.6 +0.3
F21K Alatna River 20.01 28 P Pn 03 39 44.9 -0.4
baz=229,SNR=247
F21K S Sn 03 43 27.8 -1.4
baz=229
DHY Denali Highway 20.04 42 IAmb IAmb 03 39 52.9
comp=Z,423nm,0.7s
DHY Denali Highway 20.04 42 P P 03 39 43.3 -0.5
baz=248,SNR=305
DHY S S 03 43 25.5 -1.1
baz=248
KLU Klutina 20.16 47 P P 03 39 43.2 -1.9
baz=254,SNR=76
KLU S S 03 43 30.1 +1.1
baz=254
I23K Minto, Yukon-K 20.17 36 P P 03 39 45.6 +0.6
baz=240,SNR=290
I23K S S 03 43 30.5 +1.7
baz=240
I23K S S 03 43 30.5 +1.7
baz=240
M24K Tolsona, Glenn 20.23 45 IAmb IAmb 03 39 56.6
comp=Z,556nm,0.8s
M24K Tolsona, Glenn 20.23 45 P P 03 39 43.6 -2.2
baz=252,SNR=72
M24K S Sn 03 43 34.6 0.0
baz=252
D20K Etivluk River 20.23 22 P Pn 03 39 47.1 -0.8
baz=221,SNR=619
D20K S Sn 03 43 33.1 -1.4
baz=221
G22K Bettles 20.42 30 P P 03 39 48.6 +0.9
baz=232
G22K S S 03 43 35.4 +1.6
baz=232
H23K Yukon River 20.45 34 P P 03 39 49.0 +0.9
baz=238,SNR=241
H23K S Sn 03 43 38.1 -1.6
baz=238
H23K S Sn 03 43 38.1 -1.6
baz=238
RAGM Ragged Mountai 20.49 51 IAMs_20 IAMs_20 03 48 43.8
comp=Z,105µm,20.0s
MDM Murphy Dome 20.49 37 P P 03 39 48.5 -0.1
MDM IAmb IAmb 03 40 03.4
comp=Z,924nm,1.3s
A19K Wainwright 20.52 16 P Pn 03 39 50.3 -0.9
baz=211,SNR=9.9
A19K S S 03 43 37.6 +2.0
baz=211
KAIM Kayak Island 20.53 52 P Pn 03 39 51.2 -0.2
KAIM IAMs_20 IAMs_20 03 49 04.0
comp=Z,76µm,20.0s
KAIM Kayak Island 20.53 52 P P 03 39 49.5 +0.5
baz=259
KAIM S S 03 43 38.9 +2.8
baz=259
F22K John River 20.58 28 P Pn 03 39 50.9 -1.1
baz=230
F22K S S 03 43 35.5 -1.5
baz=230
COLA College 20.60 37 P Pn 03 39 51.7 -0.4
COLA College 20.60 37 P P 03 39 49.8 +0.1
COLA College 20.60 37 ⇑P P 03 39 48.4 -1.3
COLA College 20.60 37 P P 03 39 47.1 -2.5
baz=242
COLA S S 03 43 39.0 +1.7
baz=242
COLA College 20.60 37 *ci*P P 03 39 48.3 -1.3
COLA pmax pmax
comp=Z,203nm,0.8s
COLA MLR MLR
comp=Z,49µm,16.0s
BMRM Bremner River 20.65 49 P P 03 39 47.6 -2.8
baz=256,SNR=72
BMRM S S 03 43 32.4 -6.2
baz=256
HMT Hamilton 20.68 51 IAmb IAmb 03 40 08.6
comp=Z,730nm,1.6s
E21K Killik River 20.70 25 IAmb IAmb 03 40 06.9
comp=Z,618nm,1.4s
E21K IAMs_20 IAMs_20 03 48 30.8
comp=Z,78µm,18.0s
E21K Killik River 20.70 25 P P 03 39 51.4 +0.6
baz=226
E21K S S 03 43 39.8 +0.4
baz=226
HDA Harding Lake 20.74 39 IAMs_20 IAMs_20 03 48 54.3
comp=Z,104µm,18.0s
HDA Harding Lake 20.74 39 P P 03 39 49.0 -2.2
baz=245,SNR=47
HDA S S 03 43 36.1 -4.2
baz=245
G23K Bananza Creek 20.77 31 P P 03 39 52.8 +1.2
baz=235,SNR=363
G23K S S 03 43 42.3 +1.4
baz=235
HARP HAARP 20.77 45 P P 03 39 50.4 -1.2
baz=252,SNR=33
HARP S Sn 03 43 45.1 -2.5
baz=252
N25K Chitina, Valde 20.81 47 P P 03 39 49.9 -2.2
baz=255,SNR=81
N25K S S 03 43 40.1 -1.5
baz=255
PAX Paxson 20.82 43 P P 03 39 50.0 -2.2
baz=250,SNR=100
PAX S S 03 43 43.1 +1.3
baz=250
POKR Poker Plat Res 20.87 37 P P 03 39 51.3 -1.3
baz=243,SNR=65
POKR S S 03 43 40.4 -2.3
baz=243
SUCK Suckling Hills 20.88 52 IAmb IAmb 03 40 09.6

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,826nm,1.7s | | | | | | | | |
| SUCK | | | | | IAMs_20 | IAMs_20 | 03 49 14.8 | | |
| | comp=Z,68µm,19.0s | | | | | | | | |
| **ILAR** | **Eielson Array** | **20.92** | **38** | P | **P** | | **03 39 52.0** | **-1.2** | |
| **ILAR** | **Eielson Array** | **20.92** | **38** | P | **P** | | **03 39 52.8** | **-0.3** | |
| | comp=Z,39nm,1.0s,baz=240,slow=9.9,SNR=51 | | | | | | | | |
| ILAR | | | | PcP | **PcP** | | **03 43 59.2** | **-0.1** | |
| | comp=Z,9.3nm,0.9s,baz=256,slow=3.5,SNR=3.3 | | | | | | | | |
| ILAR | | | | ScP | **ScP** | | **03 47 32.0** | **-0.3** | |
| | comp=Z,4.0nm,0.5s,baz=280,slow=3.4,SNR=11 | | | | | | | | |
| ILAR | | | | LR | LR | | 03 49 12.1 | | |
| | comp=Z,70µm,18.6s,baz=228,slow=40 | | | | | | | | |
| | comp=Z,39nm,1.0s | | | | | | | | |
| **K24K** | **Donnelly Dome** | **20.98** | **41** | P | **P** | | **03 39 53.1** | **-0.7** | |
| | baz=248,SNR=140 | | | | | | | | |
| K24K | | | | S | **S** | | **03 43 46.3** | **+1.4** | |
| | baz=248 | | | | | | | | |
| K24K | | | | S | **S** | | **03 43 46.3** | **+1.4** | |
| | baz=248 | | | | | | | | |
| **C21K** | **Knifeblade Rid** | **21.01** | **23** | P | **P** | | **03 39 54.9** | **+0.8** | |
| | baz=223 | | | | | | | | |
| C21K | | | | S | **S** | | **03 43 45.3** | **-0.1** | |
| | baz=223 | | | | | | | | |
| **COLD** | **Coldfoot** | **21.01** | **30** | P | **P** | | **03 39 55.0** | **+0.9** | |
| | baz=234,SNR=109 | | | | | | | | |
| COLD | | | | S | **S** | | **03 43 46.4** | **+0.8** | |
| | baz=234 | | | | | | | | |
| **H24K** | **Noodor Dome** | **21.05** | **35** | P | **P** | | **03 39 54.7** | **+0.2** | |
| | baz=240,SNR=176 | | | | | | | | |
| H24K | | | | S | **S** | | **03 43 46.9** | **+0.6** | |
| | baz=240 | | | | | | | | |
| H24K | | | | S | **S** | | **03 43 46.9** | **+0.6** | |
| | baz=240 | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **21.09** | **27** | IAmb | IAmb | | 03 40 05.2 | | |
| | comp=Z,1µm,1.9s | | | | | | | | |
| E22K | | | | IAMs_20 | IAMs_20 | | 03 48 25.9 | | |
| | comp=Z,80µm,19.0s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **21.09** | **27** | P | **P** | | **03 39 55.7** | **+0.7** | |
| | baz=230,SNR=138 | | | | | | | | |
| E22K | | | | S | **S** | | **03 43 47.9** | **+0.8** | |
| | baz=230 | | | | | | | | |
| **B20K** | **Meade River** | **21.12** | **20** | IAmb | IAmb | | 03 40 00.3 | | |
| | comp=Z,361nm,0.9s | | | | | | | | |
| B20K | | | | IAMs_20 | IAMs_20 | | 03 48 30.5 | | |
| | comp=Z,107µm,20.0s | | | | | | | | |
| **B20K** | **Meade River** | **21.12** | **20** | P | **P** | | **03 39 55.7** | **+0.5** | |
| | baz=218 | | | | | | | | |
| B20K | | | | S | **S** | | **03 43 47.2** | **-0.3** | |
| | baz=218 | | | | | | | | |
| **BGLC** | **Bering Glacier** | **21.13** | **52** | P | **P** | | **03 39 55.3** | **0.0** | |
| | baz=260 | | | | | | | | |
| BGLC | | | | S | **S** | | **03 43 49.9** | **+2.1** | |
| | baz=260 | | | | | | | | |
| **GLB** | **Gilahina Butte** | **21.13** | **48** | P | **P** | | **03 39 55.3** | **-0.2** | |
| GLB | | | | IAmb | IAmb | | 03 40 12.2 | | |
| | comp=Z,709nm,1.7s | | | | | | | | |
| **VRDI** | **Verde Repeater** | **21.25** | **49** | IAmb | IAmb | | 03 40 14.0 | | |
| | comp=Z,847nm,1.5s | | | | | | | | |
| **CRQM** | **Cirque** | **21.31** | **50** | IAMs_20 | IAMs_20 | | 03 49 11.9 | | |
| | comp=Z,75µm,20.0s | | | | | | | | |
| **CRQE** | **Cirque** | **21.33** | **50** | P | **P** | | **03 39 55.5** | **-2.3** | |
| | baz=259,SNR=35 | | | | | | | | |
| CRQE | | | | S | **S** | | **03 43 51.2** | **-0.9** | |
| | baz=259 | | | | | | | | |
| **RIDG** | **Independent Ri** | **21.34** | **42** | IAmb | IAmb | | 03 40 10.9 | | |
| | comp=Z,1µm,1.8s | | | | | | | | |
| RIDG | | | | IAMs_20 | IAMs_20 | | 03 48 33.4 | | |
| | comp=Z,97µm,20.0s | | | | | | | | |
| **RIDG** | **Independent Ri** | **21.34** | **42** | P | **P** | | **03 39 56.6** | **-1.1** | |
| | baz=249,SNR=62 | | | | | | | | |
| RIDG | | | | S | **S** | | **03 43 50.3** | **-1.9** | |
| | baz=249 | | | | | | | | |
| **D22K** | **Ayikyak River** | **21.35** | **25** | IAmb | IAmb | | 03 40 06.0 | | |
| | comp=Z,502nm,0.9s | | | | | | | | |
| D22K | | | | IAMs_20 | IAMs_20 | | 03 48 53.2 | | |
| | comp=Z,103µm,19.0s | | | | | | | | |
| **D22K** | **Ayikyak River** | **21.35** | **25** | P | **P** | | **03 39 58.9** | **+1.1** | |
| | baz=227,SNR=260 | | | | | | | | |
| D22K | | | | S | **S** | | **03 43 54.4** | **+2.3** | |
| | baz=227 | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **21.39** | **22** | IAmb | IAmb | | 03 40 03.7 | | |
| | comp=Z,718nm,1.1s | | | | | | | | |
| B21K | | | | IAMs_20 | IAMs_20 | | 03 49 14.9 | | |
| | comp=Z,98µm,18.0s | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **21.39** | **22** | P | **P** | | **03 39 58.6** | **+0.5** | |
| | baz=222 | | | | | | | | |
| B21K | | | | S | **S** | | **03 43 53.3** | **+0.4** | |
| | baz=222 | | | | | | | | |
| **WAX** | **Waxell Ridge** | **21.39** | **51** | IAMs_20 | IAMs_20 | | 03 49 33.6 | | |
| | comp=Z,92µm,20.0s | | | | | | | | |
| **J25K** | **Salcha River,** | **21.45** | **39** | IAMs_20 | IAMs_20 | | 03 49 25.1 | | |
| | comp=Z,104µm,18.0s | | | | | | | | |
| **J25K** | **Salcha River,** | **21.45** | **39** | P | **P** | | **03 39 55.8** | **-3.1** | |
| | baz=247,SNR=58 | | | | | | | | |
| J25K | | | | S | **S** | | **03 43 49.0** | **-5.3** | |
| | baz=247 | | | | | | | | |
| J25K | | | | S | **S** | | **03 43 49.0** | **-5.3** | |
| | baz=247 | | | | | | | | |
| **TGL** | **Tana Glacier** | **21.46** | **50** | IAMs_20 | IAMs_20 | | 03 49 17.3 | | |
| | comp=Z,77µm,20.0s | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **21.49** | **49** | IAmb | IAmb | | 03 40 11.4 | | |
| | comp=Z,338nm,0.9s | | | | | | | | |
| MCARA | | | | IAMs_20 | IAMs_20 | | 03 49 00.9 | | |
| | comp=Z,78µm,22.0s | | | | | | | | |
| **MCARA** | **McCarthy VSAT** | **21.49** | **49** | P | **P** | | **03 39 56.8** | **-2.5** | |
| | baz=257,SNR=43 | | | | | | | | |
| MCARA | | | | S | **S** | | **03 43 54.4** | **-0.6** | |
| | baz=257 | | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **21.62** | **33** | IAmb | IAmb | | 03 40 08.9 | | |
| | comp=Z,872nm,1.1s | | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **21.62** | **33** | P | **P** | | **03 40 01.5** | **+0.9** | |
| | baz=239,SNR=393 | | | | | | | | |
| G24K | | | | S | **S** | | **03 43 59.1** | **+1.6** | |
| | baz=239 | | | | | | | | |
| **ISLE** | **Juniper Island** | **21.67** | **51** | IAMs_20 | IAMs_20 | | 03 49 42.9 | | |
| | comp=Z,85µm,20.0s | | | | | | | | |
| **E23K** | **Chandalar** | **21.69** | **29** | IAmb | IAmb | | 03 40 18.8 | | |
| | comp=Z,586nm,1.6s | | | | | | | | |
| E23K | | | | IAMs_20 | IAMs_20 | | 03 48 35.2 | | |
| | comp=Z,83µm,19.0s | | | | | | | | |
| **E23K** | **Chandalar** | **21.69** | **29** | P | **P** | | **03 40 01.9** | **+0.5** | |
| | baz=233,SNR=54 | | | | | | | | |
| E23K | | | | S | **S** | | **03 43 57.4** | **-1.6** | |
| | baz=233 | | | | | | | | |
| **M26K** | **Nabesna, AK** | **21.74** | **46** | IAMs_20 | IAMs_20 | | 03 49 23.3 | | |
| | comp=Z,72µm,22.0s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **21.74** | **46** | P | **P** | | **03 39 59.5** | **-2.5** | |
| | baz=255,SNR=84 | | | | | | | | |
| M26K | | | | S | **S** | | **03 43 57.0** | **-3.0** | |
| | baz=255 | | | | | | | | |
| M26K | | | | S | **S** | | **03 43 57.0** | **-3.0** | |
| | baz=255 | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **21.75** | **44** | IAmb | IAmb | | 03 40 18.4 | | |
| | comp=Z,388nm,1.0s | | | | | | | | |
| **L26K** | **Log Cabin Wild** | **21.75** | **44** | P | **P** | | **03 40 00.5** | **-1.7** | |
| | baz=253,SNR=124 | | | | | | | | |
| L26K | | | | S | **S** | | **03 43 56.3** | **-3.9** | |
| | baz=253 | | | | | | | | |
| L26K | | | | S | **S** | | **03 43 56.3** | **-3.9** | |
| | baz=253 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **21.76** | **37** | P | **P** | | **03 40 01.4** | **-0.9** | |
| **PRP** | **Porcupine Dome** | **21.76** | **37** | P | **P** | | **03 40 00.0** | **-2.3** | |
| | baz=244,SNR=29 | | | | | | | | |
| PRP | | | | S | **S** | | **03 43 56.1** | **-4.4** | |
| | baz=244 | | | | | | | | |
| **SCRK** | **Sand Creek** | **21.78** | **41** | P | **P** | | **03 40 02.3** | **-0.2** | |
| SCRK | | | | IAMs_20 | IAMs_20 | | 03 48 56.9 | | |
| | comp=Z,77µm,20.0s | | | | | | | | |
| **SCRK** | **Sand Creek** | **21.78** | **41** | P | **P** | | **03 40 00.9** | **-1.6** | |
| | baz=250,SNR=147 | | | | | | | | |
| SCRK | | | | S | **S** | | **03 43 54.9** | **-6.0** | |
| | baz=250 | | | | | | | | |
| **MESA** | **MESA** | **21.80** | **52** | P | **P** | | **03 40 02.6** | **-0.2** | |
| | baz=262,SNR=11 | | | | | | | | |
| MESA | | | | S | **S** | | **03 43 54.7** | **-6.6** | |
| | baz=262 | | | | | | | | |
| **F24K** | **Squaw Lake** | **21.92** | **31** | IAmb | IAmb | | 03 40 09.7 | | |
| | comp=Z,526nm,1.1s | | | | | | | | |
| **F24K** | **Squaw Lake** | **21.92** | **31** | P | **P** | | **03 40 04.8** | **+1.0** | |
| | baz=237,SNR=466 | | | | | | | | |
| F24K | | | | S | **S** | | **03 44 03.0** | **-0.3** | |
| | baz=237 | | | | | | | | |
| **D23K** | **Nanushuk River** | **21.95** | **26** | IAmb | IAmb | | 03 40 24.2 | | |
| | comp=Z,628nm,1.2s | | | | | | | | |
| D23K | | | | IAMs_20 | IAMs_20 | | 03 49 04.9 | | |
| | comp=Z,84µm,19.0s | | | | | | | | |
| **D23K** | **Nanushuk River** | **21.95** | **26** | P | **P** | | **03 40 05.2** | **+1.0** | |
| | baz=230 | | | | | | | | |
| D23K | | | | S | **S** | | **03 44 01.6** | **-2.1** | |
| | baz=230 | | | | | | | | |
| **GRNC** | **Granite Creek** | **21.98** | **51** | IAMs_20 | IAMs_20 | | 03 49 52.1 | | |
| | comp=Z,86µm,20.0s | | | | | | | | |
| **H25L** | **Birch Creek** | **21.99** | **35** | P | **P** | | **03 40 04.3** | **-0.2** | |
| | baz=242,SNR=262 | | | | | | | | |
| **E24K** | **Your Creek** | **22.04** | **29** | IAMs_20 | IAMs_20 | | 03 48 46.4 | | |
| | comp=Z,75µm,20.0s | | | | | | | | |
| **E24K** | **Your Creek** | **22.04** | **29** | P | **P** | | **03 40 06.0** | **+0.8** | |
| | baz=235 | | | | | | | | |
| E24K | | | | S | **S** | | **03 44 05.8** | **+0.1** | |
| | baz=235 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **22.06** | **27** | IAmb | IAmb | | 03 40 25.3 | | |
| | comp=Z,636nm,1.2s | | | | | | | | |
| TOLK | | | | IAMs_20 | IAMs_20 | | 03 48 48.1 | | |
| | comp=Z,87µm,20.0s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **22.06** | **27** | P | **P** | | **03 40 05.8** | **+0.5** | |
| | baz=232,SNR=150 | | | | | | | | |
| TOLK | | | | S | **S** | | **03 44 06.7** | **+0.8** | |
| | baz=232 | | | | | | | | |
| **G25K** | **Bearman Lake** | **22.13** | **34** | P | **P** | | **03 40 06.2** | **+0.2** | |
| | baz=241,SNR=104 | | | | | | | | |
| G25K | | | | S | **S** | | **03 44 06.8** | **-0.3** | |
| | baz=241 | | | | | | | | |
| **J26L** | **Joseph Creek** | **22.14** | **40** | IAMs_20 | IAMs_20 | | 03 50 03.2 | | |
| | comp=Z,101µm,18.0s | | | | | | | | |
| **J26L** | **Joseph Creek** | **22.14** | **40** | P | **P** | | **03 40 04.6** | **-1.6** | |
| | baz=249,SNR=94 | | | | | | | | |
| J26L | | | | S | **S** | | **03 44 00.2** | **-7.3** | |
| | baz=249 | | | | | | | | |
| J26L | | | | S | **S** | | **03 44 00.2** | **-7.3** | |
| | baz=249 | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **22.20** | **22** | IAmb | IAmb | | 03 40 16.9 | | |
| | comp=Z,634nm,1.4s | | | | | | | | |
| B22K | | | | IAMs_20 | IAMs_20 | | 03 49 34.5 | | |
| | comp=Z,93µm,19.0s | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **22.20** | **22** | P | **P** | | **03 40 06.6** | **-0.2** | |
| | baz=223 | | | | | | | | |
| B22K | | | | S | **S** | | **03 44 08.0** | **-0.3** | |
| | baz=223 | | | | | | | | |
| **CTG** | **Chitna Glacier** | **22.21** | **50** | P | **P** | | **03 40 06.1** | **-1.1** | |
| | baz=260,SNR=17 | | | | | | | | |
| CTG | | | | S | **S** | | **03 44 05.2** | **-3.8** | |
| | baz=260 | | | | | | | | |
| **TABL** | **Table Mountain** | **22.23** | **51** | IAMs_20 | IAMs_20 | | 03 49 30.6 | | |
| | comp=Z,69µm,22.0s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **22.24** | **46** | IAMs_20 | IAMs_20 | | 03 49 47.4 | | |
| | comp=Z,91µm,21.0s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **22.24** | **46** | P | **P** | | **03 40 06.4** | **-1.1** | |
| | baz=256,SNR=210 | | | | | | | | |
| M27K | | | | S | **S** | | **03 44 07.7** | **-1.8** | |
| | baz=256 | | | | | | | | |
| M27K | | | | S | **S** | | **03 44 07.7** | **-1.8** | |
| | baz=256 | | | | | | | | |
| **A21K** | **Barrow** | **22.28** | **18** | P | **P** | | **03 40 07.5** | **-0.1** | |
| | baz=216 | | | | | | | | |
| A21K | | | | S | **S** | | **03 44 08.0** | **-1.7** | |
| | baz=216 | | | | | | | | |
| **FYU** | **Fort Yukon** | **22.34** | **34** | IAmb | IAmb | | 03 40 30.9 | | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| **LOGN** | **Logan Glacier** | **22.35** | **50** | IAMs_20 | IAMs_20 | | 03 50 03.1 | | |
| | comp=Z,73µm,20.0s | | | | | | | | |
| **A22K** | **Sinclair Lake** | **22.36** | **19** | P | **P** | | **03 40 08.5** | **0.0** | |
| | baz=220 | | | | | | | | |
| A22K | | | | S | **S** | | **03 44 09.6** | **-1.5** | |
| | baz=220 | | | | | | | | |
| **L27K** | **Beaver Creek,** | **22.43** | **44** | P | **P** | | **03 40 08.4** | **-1.1** | |
| | baz=255,SNR=118 | | | | | | | | |
| L27K | | | | S | **S** | | **03 44 08.9** | **-3.9** | |
| | baz=255 | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **22.45** | **44** | P | **P** | | **03 40 09.5** | **-0.2** | |
| **C23K** | **Itkillik River** | **22.54** | **24** | IAmb | IAmb | | 03 40 15.8 | | |
| | comp=Z,416nm,0.7s | | | | | | | | |
| C23K | | | | IAMs_20 | IAMs_20 | | 03 49 43.6 | | |
| | comp=Z,75µm,19.0s | | | | | | | | |
| **C23K** | **Itkillik River** | **22.54** | **24** | P | **P** | | **03 40 10.6** | **+0.2** | |
| | baz=228,SNR=109 | | | | | | | | |
| C23K | | | | S | **S** | | **03 44 14.0** | **-0.4** | |
| | baz=228 | | | | | | | | |
| **D24K** | **Happy Valley** | **22.59** | **27** | IAmb | IAmb | | 03 40 16.2 | | |
| | comp=Z,317nm,0.8s | | | | | | | | |
| D24K | | | | IAMs_20 | IAMs_20 | | 03 49 17.0 | | |
| | comp=Z,95µm,19.0s | | | | | | | | |
| **D24K** | **Happy Valley** | **22.59** | **27** | P | **P** | | **03 40 11.1** | **+0.2** | |
| | baz=232,SNR=132 | | | | | | | | |
| D24K | | | | S | **S** | | **03 44 13.8** | **-1.5** | |
| | baz=232 | | | | | | | | |
| **I26K** | **Coal Creek Min** | **22.59** | **38** | IAMs_20 | IAMs_20 | | 03 50 10.3 | | |
| | comp=Z,97µm,19.0s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **22.59** | **38** | P | **P** | | **03 40 08.7** | **-2.3** | |
| | baz=248 | | | | | | | | |
| I26K | | | | S | **S** | | **03 44 10.3** | **-5.1** | |
| | baz=248 | | | | | | | | |
| I26K | | | | S | **S** | | **03 44 10.3** | **-5.1** | |
| | baz=248 | | | | | | | | |
| **K27K** | **Chicken** | **22.59** | **42** | IAmb | IAmb | | 03 40 33.5 | | |
| | comp=Z,811nm,1.4s | | | | | | | | |
| K27K | | | | IAMs_20 | IAMs_20 | | 03 49 31.8 | | |
| | comp=Z,73µm,19.0s | | | | | | | | |
| **K27K** | **Chicken** | **22.59** | **42** | P | **P** | | **03 40 10.4** | **-0.7** | |
| | baz=252 | | | | | | | | |
| K27K | | | | S | **S** | | **03 44 12.1** | **-3.5** | |
| K27K | | | | S | **S** | | **03 44 12.1** | **-3.5** | |
| | baz=252 | | | | | | | | |
| **PINM** | **Pinnacle** | **22.63** | **52** | P | **P** | | **03 40 10.5** | **-1.1** | |
| | baz=263 | | | | | | | | |
| PINM | | | | S | **S** | | **03 44 12.8** | **-3.5** | |
| | baz=263 | | | | | | | | |
| **F25K** | **Christian Rive** | **22.69** | **32** | P | **P** | | **03 40 12.3** | **+0.1** | |
| | baz=240,SNR=179 | | | | | | | | |
| F25K | | | | S | **S** | | **03 44 18.9** | **+1.6** | |
| | baz=240 | | | | | | | | |
| **O28M** | **Mount Upton** | **22.74** | **51** | P | **P** | | **03 40 11.0** | **-2.0** | |
| | baz=262,SNR=30 | | | | | | | | |
| O28M | | | | S | **S** | | **03 44 13.2** | **-5.5** | |
| | baz=262 | | | | | | | | |
| **YUK3** | **Moose Creek** | **22.77** | **48** | P | **P** | | **03 40 11.6** | **-1.5** | |
| | baz=259,SNR=19 | | | | | | | | |
| YUK3 | | | | S | **S** | | **03 44 18.0** | **-1.0** | |
| | baz=259 | | | | | | | | |
| **BCPM** | **Bancas Point** | **22.92** | **53** | IAmb | IAmb | | 03 40 37.7 | | |
| | comp=Z,1µm,2.0s | | | | | | | | |
| BCPM | | | | IAMs_20 | IAMs_20 | | 03 49 45.1 | | |
| | comp=Z,103µm,21.0s | | | | | | | | |
| **BMAR** | **Burnt Mountain** | **22.97** | **33** | P | **P** | | **03 40 13.6** | **-1.4** | |
| **C24K** | **Franklin Bluff** | **22.97** | **26** | IAmb | IAmb | | 03 40 35.6 | | |
| | comp=Z,1µm,1.4s | | | | | | | | |
| C24K | | | | IAMs_20 | IAMs_20 | | 03 49 58.1 | | |
| | comp=Z,77µm,19.0s | | | | | | | | |
| **C24K** | **Franklin Bluff** | **22.97** | **26** | P | **P** | | **03 40 14.6** | **-0.4** | |
| | baz=231 | | | | | | | | |
| C24K | | | | S | **S** | | **03 44 21.7** | **-0.2** | |
| | baz=231 | | | | | | | | |
| **PNL** | **Peninsula** | **23.02** | **54** | P | **P** | | **03 40 16.2** | **+0.7** | |
| **PNL** | **Peninsula** | **23.02** | **54** | P | **P** | | **03 40 13.8** | **-1.8** | |
| | baz=265 | | | | | | | | |
| PNL | | | | S | **S** | | **03 44 16.9** | **-5.9** | |
| | baz=265 | | | | | | | | |
| **YUK8** | **Steele Glacier** | **23.02** | **50** | P | **P** | | **03 40 15.1** | **-0.7** | |
| | baz=261,SNR=35 | | | | | | | | |
| YUK8 | | | | S | **S** | | **03 44 18.3** | **-5.0** | |
| | baz=261 | | | | | | | | |
| **G26K** | **Porcupine Rive** | **23.02** | **34** | P | **P** | | **03 40 14.3** | **-1.2** | |
| | baz=244,SNR=333 | | | | | | | | |
| G26K | | | | S | **S** | | **03 44 21.7** | **-1.1** | |
| | baz=244 | | | | | | | | |
| **MIDW** | **Midway** | **23.03** | **179** | P | **P** | | **03 40 18.1** | **+2.2** | |
| **MIDW** | **Midway** | **23.03** | **179** | P | **P** | | **03 40 16.4** | **+0.5** | |
| MIDW | | | | IAmb | IAmb | | 03 40 30.1 | | |
| | comp=Z,804nm,1.5s | | | | | | | | |
| **MIDW** | **Midway** | **23.03** | **179** | ⇑P | **P** | | **03 40 15.0** | **-0.9** | |
| **EGAK** | **Eagle** | **23.20** | **40** | IAmb | IAmb | | 03 40 42.5 | | |
| | comp=Z,266nm,0.9s | | | | | | | | |
| EGAK | | | | IAMs_20 | IAMs_20 | | 03 50 54.5 | | |
| | comp=Z,98µm,19.0s | | | | | | | | |
| **EGAK** | **Eagle** | **23.20** | **40** | ⇑P | **P** | | **03 40 16.1** | **-1.2** | |
| **EGAK** | **Eagle** | **23.20** | **40** | P | **P** | | **03 40 16.1** | **-1.2** | |
| | baz=252,SNR=184 | | | | | | | | |
| EGAK | | | | S | **S** | | **03 44 23.8** | **-2.0** | |
| | baz=252 | | | | | | | | |
| **F26K** | **Sheenjek River** | **23.24** | **32** | P | **P** | | **03 40 17.9** | **+0.1** | |
| | baz=242,SNR=125 | | | | | | | | |
| F26K | | | | S | **S** | | **03 44 26.2** | **-0.2** | |
| | baz=242 | | | | | | | | |
| **I27K** | **Kandik River** | **23.30** | **38** | P | **P** | | **03 40 16.1** | **-2.2** | |
| | baz=249,SNR=64 | | | | | | | | |
| I27K | | | | S | **S** | | **03 44 23.1** | **-4.3** | |
| | baz=249 | | | | | | | | |
| I27K | | | | S | **S** | | **03 44 23.1** | **-4.3** | |
| | baz=249 | | | | | | | | |
| **D25K** | **Kavik River** | **23.39** | **28** | IAMs_20 | IAMs_20 | | 03 49 31.3 | | |
| | comp=Z,70µm,20.0s | | | | | | | | |
| **D25K** | **Kavik River** | **23.39** | **28** | P | **P** | | **03 40 18.9** | **-0.3** | |
| | baz=235 | | | | | | | | |
| D25K | | | | S | **S** | | **03 44 26.9** | **-2.0** | |
| | baz=235 | | | | | | | | |
| **O29M** | **Mount Kennedy** | **23.48** | **52** | IAMs_20 | IAMs_20 | | 03 50 26.9 | | |
| | comp=Z,104µm,21.0s | | | | | | | | |
| **O29M** | **Mount Kennedy** | **23.48** | **52** | P | **P** | | **03 40 18.4** | **-1.8** | |
| | baz=265 | | | | | | | | |
| O29M | | | | S | **S** | | **03 44 25.6** | **-5.1** | |
| | baz=265 | | | | | | | | |
| **KUR** | **Kuril'sk** | **23.51** | **269** | *c* P | **P** | | **03 40 21.3** | **+0.9** | |
| KUR | | | | *e* PPP | PPP | | 03 40 54.9 | | |
| KUR | | | | *e* S | **S** | | **03 44 33.6** | **+2.5** | |
| KUR | | | | pmax | pmax | | | | |
| | comp=Z,17µm,4.6s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=E,15µm,4.7s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=Z,2µm,1.5s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=E,2µm,1.8s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=N,652nm,1.6s | | | | | | | | |
| KUR | | | | MLR | MLR | | | | |
| | comp=E,11µm,17.0s | | | | | | | | |
| KUR | | | | MLR | MLR | | | | |
| | comp=Z,13µm,17.0s | | | | | | | | |
| KUR | | | | MLR | MLR | | | | |
| | comp=N,12µm,19.0s | | | | | | | | |
| **H27K** | **Steamboat Moun** | **23.56** | **37** | P | **P** | | **03 40 18.2** | **-2.6** | |
| | baz=248,SNR=20 | | | | | | | | |
| H27K | | | | S | **S** | | **03 44 28.9** | **-2.7** | |
| | baz=248 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **23.56** | **50** | P | **P** | | **03 40 19.5** | **-1.6** | |
| | baz=262,SNR=11 | | | | | | | | |
| **YUK6** | **Outpost Mounta** | **23.65** | **51** | P | **P** | | **03 40 20.2** | **-1.7** | |
| | baz=263 | | | | | | | | |
| YUK6 | | | | S | **S** | | **03 44 27.9** | **-5.7** | |
| | baz=263 | | | | | | | | |
| **G27K** | **Doyon Strip** | **23.73** | **35** | IAMs_20 | IAMs_20 | | 03 50 30.2 | | |
| | comp=Z,59µm,19.0s | | | | | | | | |
| **G27K** | **Doyon Strip** | **23.73** | **35** | P | **P** | | **03 40 20.3** | **-2.1** | |
| | baz=247,SNR=21 | | | | | | | | |
| G27K | | | | S | **S** | | **03 44 35.8** | **+1.4** | |
| | baz=247 | | | | | | | | |
| **DAWY** | **Dawson** | **23.74** | **43** | IAmb | IAmb | | 03 40 46.5 | | |
| | comp=Z,412nm,1.3s | | | | | | | | |
| DAWY | | | | IAMs_20 | IAMs_20 | | 03 51 10.9 | | |
| | comp=Z,81µm,18.0s | | | | | | | | |
| **DAWY** | **Dawson** | **23.74** | **43** | P | **P** | | **03 40 21.8** | **-0.7** | |
| | baz=255,SNR=73 | | | | | | | | |
| DAWY | | | | S | **S** | | **03 44 31.5** | **-3.1** | |
| | baz=255 | | | | | | | | |
| **M29M** | **Somme Creek** | **23.81** | **47** | IAMs_20 | IAMs_20 | | 03 50 13.2 | | |
| | comp=Z,75µm,19.0s | | | | | | | | |
| **M29M** | **Somme Creek** | **23.81** | **47** | P | **P** | | **03 40 22.5** | **-0.8** | |
| | baz=260,SNR=106 | | | | | | | | |
| M29M | | | | S | **S** | | **03 44 30.8** | **-5.1** | |
| | baz=260 | | | | | | | | |
| **P29M** | **Windy Craggy** | **23.86** | **54** | IAMs_20 | IAMs_20 | | 03 50 20.0 | | |
| | comp=Z,76µm,20.0s | | | | | | | | |
| **P29M** | **Windy Craggy** | **23.86** | **54** | P | **P** | | **03 40 21.5** | **-2.1** | |
| | baz=267 | | | | | | | | |
| P29M | | | | S | **S** | | **03 44 33.0** | **-3.6** | |
| | baz=267 | | | | | | | | |
| **I28M** | **Miner Creek** | **23.91** | **39** | IAmb | IAmb | | 03 40 42.9 | | |
| | comp=Z,499nm,1.3s | | | | | | | | |
| I28M | | | | IAMs_20 | IAMs_20 | | 03 51 09.1 | | |
| | comp=Z,89µm,18.0s | | | | | | | | |
| **I28M** | **Miner Creek** | **23.91** | **39** | P | **P** | | **03 40 22.9** | **-1.2** | |
| | baz=252,SNR=204 | | | | | | | | |
| I28M | | | | S | **S** | | **03 44 33.7** | **-3.7** | |
| | baz=252 | | | | | | | | |
| **C26K** | **Camden Bay** | **24.15** | **27** | P | **P** | | **03 40 26.4** | **+0.3** | |
| | baz=236,SNR=14 | | | | | | | | |
| C26K | | | | S | **S** | | **03 44 40.2** | **-0.7** | |
| | baz=236 | | | | | | | | |
| **P30M** | **Million Dollar** | **24.27** | **53** | P | **P** | | **03 40 26.5** | **-1.0** | |
| | baz=266 | | | | | | | | |
| P30M | | | | S | **S** | | **03 44 40.5** | **-2.7** | |
| | baz=266 | | | | | | | | |
| **N30M** | **Aishikik Lake** | **24.32** | **49** | IAMs_20 | IAMs_20 | | 03 51 06.9 | | |
| | comp=Z,68µm,21.0s | | | | | | | | |
| **N30M** | **Aishikik Lake** | **24.32** | **49** | P | **P** | | **03 40 27.4** | **-0.5** | |
| | baz=264,SNR=12 | | | | | | | | |
| N30M | | | | S | **S** | | **03 44 40.1** | **-3.9** | |
| | baz=264 | | | | | | | | |
| **E27K** | **Coleen River** | **24.32** | **32** | IAmb | IAmb | | 03 40 48.3 | | |
| | comp=Z,321nm,1.1s | | | | | | | | |
| E27K | | | | IAMs_20 | IAMs_20 | | 03 50 33.7 | | |
| | comp=Z,56µm,20.0s | | | | | | | | |
| **E27K** | **Coleen River** | **24.32** | **32** | P | **P** | | **03 40 27.8** | **-0.1** | |
| | baz=244,SNR=124 | | | | | | | | |
| E27K | | | | S | **S** | | **03 44 42.7** | **-1.2** | |
| | baz=244 | | | | | | | | |
| **J29N** | **Klondike Camp** | **24.33** | **42** | IAMs_20 | IAMs_20 | | 03 50 36.7 | | |
| | comp=Z,84µm,19.0s | | | | | | | | |
| **J29N** | **Klondike Camp** | **24.33** | **42** | P | **P** | | **03 40 27.1** | **-0.9** | |
| | baz=256 | | | | | | | | |
| J29N | | | | S | **S** | | **03 44 40.7** | **-3.4** | |
| | baz=256 | | | | | | | | |
| **C27K** | **Jago River** | **24.34** | **28** | IAMs_20 | IAMs_20 | | 03 50 22.2 | | |
| | comp=Z,69µm,20.0s | | | | | | | | |
| **C27K** | **Jago River** | **24.34** | **28** | P | **P** | | **03 40 27.4** | **-0.6** | |
| | baz=238 | | | | | | | | |
| C27K | | | | S | **S** | | **03 44 42.8** | **-1.4** | |
| | baz=238 | | | | | | | | |
| **K29M** | **Barlow Dome** | **24.50** | **44** | IAmb | IAmb | | 03 40 35.0 | | |
| | comp=Z,197nm,0.8s | | | | | | | | |
| K29M | | | | IAMs_20 | IAMs_20 | | 03 51 14.1 | | |
| | comp=Z,75µm,22.0s | | | | | | | | |
| **K29M** | **Barlow Dome** | **24.50** | **44** | P | **P** | | **03 40 28.8** | **-0.8** | |
| | baz=258,SNR=294 | | | | | | | | |
| K29M | | | | S | **S** | | **03 44 46.1** | **-0.8** | |
| | baz=258 | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **24.53** | **40** | IAmb | IAmb | | 03 40 54.3 | | |
| | comp=Z,618nm,1.6s | | | | | | | | |
| I29M | | | | IAMs_20 | IAMs_20 | | 03 51 46.8 | | |
| | comp=Z,86µm,20.0s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **24.53** | **40** | P | **P** | | **03 40 28.3** | **-1.5** | |
| | baz=254,SNR=223 | | | | | | | | |
| I29M | | | | S | **S** | | **03 44 45.5** | **-1.7** | |
| | baz=254 | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **24.55** | **54** | P | **P** | | **03 40 28.4** | **-1.6** | |
| | baz=268 | | | | | | | | |
| PLBC | | | | S | **S** | | **03 44 43.9** | **-3.7** | |
| | baz=268 | | | | | | | | |
| **S31K** | **Pelican** | **24.64** | **58** | P | **P** | | **03 40 30.0** | **-0.7** | |
| | baz=272 | | | | | | | | |
| S31K | | | | S | **S** | | **03 44 45.6** | **-3.3** | |
| | baz=272 | | | | | | | | |
| S31K | | | | S | **S** | | **03 44 45.6** | **-3.3** | |
| | baz=272 | | | | | | | | |
| **F28M** | **Old Crow** | **24.68** | **34** | IAmb | IAmb | | 03 40 36.9 | | |
| | comp=Z,323nm,1.1s | | | | | | | | |
| F28M | | | | IAMs_20 | IAMs_20 | | 03 51 00.5 | | |
| | comp=Z,62µm,20.0s | | | | | | | | |
| **F28M** | **

D27M IAMs_20 IAMs_20 03 50 42.7
comp=Z,67µm,20.0s
**D27M Malcolm River 25.00 30** P **P** **03 40 33.8 -0.2**
baz=243
D27M S **S** **03 44 51.9 -3.0**
baz=243
**SKAG Skagway 25.08 54** P **P** **03 40 37.3 +2.6**
**SKAG Skagway 25.08 54** ⇑P **P** **03 40 33.9 -0.8**
**SKAG Skagway 25.08 54** P **P** **03 40 33.2 -1.5**
baz=269
SKAG S **S** **03 44 53.3 -2.7**
baz=269
**G29M Pine Creek 25.11 36** IAMs_20 IAMs_20 03 51 40.8
comp=Z,71µm,19.0s
**G29M Pine Creek 25.11 36** P **P** **03 40 34.5 -0.4**
baz=251,SNR=42
G29M S **S** **03 44 53.0 -3.5**
baz=251
**J30M Hart River 25.16 42** IAmb IAmb 03 41 06.0
comp=Z,346nm,1.3s
**J30M Hart River 25.16 42** P **P** **03 40 34.9 -0.7**
baz=258,SNR=148
J30M S **S** **03 44 52.0 -5.4**
baz=258
**SIT Sitka 25.18 60** P **P** **03 40 37.8 +2.2**
**SIT Sitka 25.18 60** IAmb IAmb 03 40 56.6
comp=Z,398nm,1.2s
**SIT Sitka 25.18 60** P **P** **03 40 35.9 +0.2**
baz=275
SIT S **S** **03 45 00.0 +2.4**
baz=275
**E28M Babbage River 25.19 32** IAmb IAmb 03 40 43.7
comp=Z,195nm,0.8s
**E28M Babbage River 25.19 32** P **P** **03 40 35.7 +0.1**
baz=246
E28M S **S** **03 44 58.5 +0.7**
baz=246
**NKL Nikolayevsk 25.28 291** *e*P **P** **03 40 34.9 -1.6**
NKL *e*S **S** **03 44 59.9 +0.7**
NKL pmax pmax
comp=N,251nm,1.4s
NKL pmax pmax
comp=E,89nm,0.7s
NKL pmax pmax
comp=Z,443nm,1.4s
NKL smax smax
comp=E,1µm,3.3s
NKL smax smax
comp=N,1µm,4.4s
NKL MLR MLR
comp=E,76µm,20.0s
NKL MLR MLR
comp=N,67µm,19.0s
NKL MLR MLR
comp=Z,125µm,21.0s
**I30M Mount Dempster 25.28 41** IAmb IAmb 03 40 60.0
comp=Z,438nm,1.3s
I30M IAMs_20 IAMs_20 03 52 15.7
comp=Z,88µm,19.0s
**I30M Mount Dempster 25.28 41** P **P** **03 40 35.4 -1.3**
baz=256,SNR=218
I30M S **S** **03 44 53.9 -5.5**
baz=256
**WHY Whitehorse 25.33 52** P **P** **03 40 36.3 -0.8**
baz=267
WHY S **S** **03 44 53.9 -6.3**
baz=267
**YUK Yuzh-Kuril'sk 25.34 268** *i* P **P** **03 40 37.7 +0.5**
**EPYK Eagle Plains 25.44 38** IAMs_20 IAMs_20 03 52 07.7
comp=Z,67µm,18.0s
**EPYK Eagle Plains 25.44 38** P **P** **03 40 36.6 -1.4**
baz=254,SNR=47
EPYK S **S** **03 45 00.1 -1.6**
baz=254
**R32K Eaglecrest 25.53 57** P **P** **03 40 37.8 -1.1**
baz=273
R32K S **S** **03 45 02.3 -0.9**
baz=273
R32K S **S** **03 45 02.3 -0.9**
baz=273
**S32K Killisnoo 25.55 59** IAmb IAmb 03 41 11.0
comp=Z,406nm,1.9s
**S32K Killisnoo 25.55 59** P **P** **03 40 38.5 -0.5**
baz=274,SNR=10
S32K S **S** **03 45 07.0 +3.5**
baz=274
S32K S **S** **03 45 07.0 +3.5**
baz=274
**UGL Uglegorsk 25.59 281** *e*P **P** **03 40 42.5 +3.0**
UGL *e*S **S** **03 45 08.8 +4.5**
UGL pmax pmax
comp=Z,9µm,4.3s
UGL pmax pmax
comp=Z,600nm,1.2s
UGL smax smax
comp=E,13µm,9.7s
UGL smax smax
comp=N,8µm,7.8s
UGL MLR MLR
comp=E,21µm,19.0s
UGL MLR MLR
comp=N,11µm,17.0s
UGL MLR MLR
comp=Z,24µm,19.0s
**JIS Juneau Island 25.60 57** P **P** **03 40 41.5 +2.1**
**M31M Drury Creek, Y 25.66 48** IAMs_20 IAMs_20 03 51 40.4
comp=Z,80µm,20.0s
**M31M Drury Creek, Y 25.66 48** P **P** **03 40 39.2 -0.8**
baz=264,SNR=16
M31M S **S** **03 45 04.5 -0.8**
baz=264
**E29M Blow River 25.67 33** IAmb IAmb 03 41 10.0
comp=Z,322nm,1.3s
E29M IAMs_20 IAMs_20 03 52 15.4
comp=Z,68µm,20.0s
**E29M Blow River 25.67 33** P **P** **03 40 39.9 -0.1**
baz=248,SNR=42
E29M S **S** **03 45 07.1 +2.0**
baz=248
**D28M Stokes Point 25.75 31** P **P** **03 40 40.1 -0.6**
baz=245
D28M S **S** **03 45 06.4 -0.1**
baz=245
**G30M tAoh Zraii Nji 25.80 37** IAMs_20 IAMs_20 03 52 12.2
comp=Z,57µm,19.0s
**G30M tAoh Zraii Nji 25.80 37** P **P** **03 40 40.3 -1.0**
baz=253,SNR=18
G30M S **S** **03 45 02.3 -5.1**
baz=253
**P32M Atlin 25.90 54** IAMs_20 IAMs_20 03 52 17.1
comp=Z,57µm,18.0s
**P32M Atlin 25.90 54** P **P** **03 40 42.0 -0.3**
baz=271
P32M S **S** **03 45 08.5 -0.7**
baz=271
**YSS Yuzh-Sakhalins 25.97 276** P **P** **03 40 44.6 +1.7**
**YSS Yuzh-Sakhalins 25.97 276** P **P** **03 40 43.9 +1.0**
YSS IAmb IAmb 03 40 46.1
comp=Z,634nm,1.2s
**YSS Yuzh-Sakhalins 25.97 276** *o**e*P **P** **03 40 44.2 +1.3**
YSS *e**SP **pwP** **03 40 55.9 -0.1**
YSS *e*S **S** **03 45 10.2 -0.2**
YSS pmax pmax
comp=Z,5µm,7.5s
YSS pmax pmax
comp=N,2µm,7.6s
YSS pmax pmax
comp=E,3µm,7.7s
YSS pmax pmax
comp=N,110nm,1.0s
YSS pmax pmax
comp=Z,270nm,1.0s
YSS pmax pmax
comp=E,240nm,1.2s
YSS MLR MLR
comp=E,14µm,19.0s
YSS MLR MLR
comp=Z,15µm,19.0s
**F30M Barrier River 26.15 36** P **P** **03 40 43.9 -0.5**
baz=252,SNR=35
F30M S **S** **03 45 07.8 -5.1**
baz=252
**FARO Faro, Yukon 26.16 48** IAMs_20 IAMs_20 03 51 56.3
comp=Z,77µm,20.0s
**FARO Faro, Yukon 26.16 48** P **P** **03 40 43.9 -0.6**
baz=266,SNR=18
FARO S S 03 45 02.0 -11
baz=266

**N32M Quiet Lake 26.23 51** P **P** **03 40 44.6 -0.5**
baz=268
N32M S **S** **03 45 14.9 +0.6**
baz=268
**P33M Teslin, Yukon 26.35 53** P **P** **03 40 45.7 -0.6**
baz=270,SNR=24
P33M S **S** **03 45 16.2 0.0**
baz=270
**T33K Petersburg 26.50 60** P **P** **03 40 48.6 +1.0**
baz=277
T33K S **S** **03 45 20.7 +2.2**
baz=277
**U33K Whale Pass 26.50 62** IAmb IAmb 03 41 09.7
comp=Z,376nm,1.3s
**U33K Whale Pass 26.50 62** P **P** **03 40 48.8 +1.2**
baz=278,SNR=8.5
U33K S **S** **03 45 22.9 +4.4**
baz=278
U33K S **S** **03 45 22.9 +4.4**
baz=278
**G31M Satah River 26.53 37** IAMs_20 IAMs_20 03 52 51.4
comp=Z,58µm,20.0s
**G31M Satah River 26.53 37** P **P** **03 40 46.1 -1.6**
baz=255,SNR=24
G31M S **S** **03 45 15.7 -3.0**
baz=255
**CRAG Craig 26.61 63** P **P** **03 40 51.0 +2.5**
**CRAG Craig 26.61 63** IAmb IAmb 03 41 10.8
comp=Z,820nm,1.3s
**CRAG Craig 26.61 63** ⇑P **P** **03 40 50.6 +2.1**
**CRAG Craig 26.61 63** P **P** **03 40 50.2 +1.7**
baz=279
CRAG S **S** **03 45 23.9 +3.7**
baz=279
**Q32M Nakina River 26.67 55** IAmb IAmb 03 41 23.4
comp=Z,507nm,1.8s
Q32M IAMs_20 IAMs_20 03 52 27.4
comp=Z,59µm,19.0s
**Q32M Nakina River 26.67 55** P **P** **03 40 49.8 +0.4**
baz=273,SNR=14
Q32M S **S** **03 45 25.6 +4.1**
baz=273
**F31M Tsiigehtchic 26.86 36** IAMs_20 IAMs_20 03 53 03.1
comp=Z,50µm,18.0s
**F31M Tsiigehtchic 26.86 36** P **P** **03 40 49.6 -1.1**
baz=255,SNR=25
F31M S **S** **03 45 23.4 -0.6**
baz=255
**WRAK Wrangell Islan 26.89 61** ⇑P **P** **03 40 52.4 +1.4**
**WRAK Wrangell Islan 26.89 61** P **P** **03 40 51.7 +0.6**
baz=278,SNR=13
WRAK S **S** **03 45 23.7 -0.9**
baz=278
**JMP Maruseppu 26.93 270** P **P** **03 40 52.2 +0.6**
**INK Inuvik 27.17 35** ⇑P **P** **03 40 52.9 -0.7**
**INK Inuvik 27.17 35** P **P** **03 40 53.0 -0.6**
baz=253,SNR=22
INK S **S** **03 45 22.9 -6.0**
baz=253
**R33M Jennings River 27.31 54** IAMs_20 IAMs_20 03 52 59.6
comp=Z,57µm,18.0s
**R33M Jennings River 27.31 54** P **P** **03 40 55.4 +0.4**
baz=273,SNR=12
R33M S **S** **03 45 34.2 +2.7**
baz=273
**JKA Kamikawa-asahi 27.35 271** IAmb IAmb 03 40 58.4
comp=Z,657nm,1.4s
**JKA Kamikawa-asahi 27.35 271** ⇑P **P** **03 40 56.4 +1.0**
**ASAJ Asahikawa 27.35 271** LR LR 03 50 27.4
comp=Z,20µm,21.9s,baz=64,slow=33
**ASAJ Asahikawa 27.35 271** P **P** **03 40 56.5 +1.1**
**S34M Telegraph Cree 27.35 58** P **P** **03 40 56.1 +0.9**
baz=276
S34M S **S** **03 45 33.3 +1.3**
baz=276
**DIB Dawson Inlet, 27.45 68** IAmb IAmb 03 41 28.5
comp=Z,342nm,1.2s
**V35K Ketchikan 27.48 63** IAmb IAmb 03 41 17.1
comp=Z,407nm,1.4s
**V35K Ketchikan 27.48 63** P **P** **03 40 57.5 +1.1**
baz=281,SNR=15
V35K S **S** **03 45 39.0 +5.1**
baz=281
V35K S **S** **03 45 39.0 +5.1**
baz=281
**DLBC Dease Lake 27.88 56** P **P** **03 41 00.3 +0.3**
comp=Z,6.5nm,1.0s,baz=284,slow=9.5,SNR=7.9
DLBC LR LR 03 53 14.7
comp=Z,36µm,18.2s,baz=278,slow=39
comp=Z,6.5nm,1.0s
**DLBC Dease Lake 27.88 56** P **P** **03 41 00.8 +0.7**
baz=276,SNR=12
DLBC S **S** **03 45 44.5 +4.1**
baz=276
**T35M Bob Quinn 27.95 59** IAmb IAmb 03 41 42.7
comp=Z,352nm,1.8s
**T35M Bob Quinn 27.95 59** P **P** **03 41 01.8 +1.2**
baz=278,SNR=9.5
T35M S **S** **03 45 45.9 +4.5**
baz=278
**JEM Erimo 28.08 266** P **P** **03 41 03.6 +1.7**
**ERM Erimo 28.08 266** P **P** **03 41 03.7 +1.8**
**ERM Erimo 28.08 266** P **P** **03 41 02.4 +0.5**
**ERM Erimo 28.08 266** ⇑P **P** **03 41 02.9 +1.0**
**ERM Erimo 28.08 266** *ce*P **P** **03 41 02.8 +0.9**
ERM pmax pmax
comp=Z,140nm,1.7s
**U35K Hyder 28.25 62** P **P** **03 41 04.6 +1.3**
baz=280
U35K S **S** **03 45 53.1 +7.0**
baz=280
**WTLY Watson Lake, Y 28.36 53** P **P** **03 41 04.9 +0.6**
baz=274
WTLY S **S** **03 45 50.8 +2.9**
baz=274
**HG4B Hotspring 28.45 69** IAmb IAmb 03 41 26.8
comp=Z,548nm,1.6s
**RUBB Prince Rupert 28.46 65** IAmb IAmb 03 41 53.0
comp=Z,571nm,1.6s
**GRNR Gornyy 28.46 287** ⇑*i*P **P** **03 41 05.7 +0.4**
GRNR *e*S **S** **03 45 53.1 +3.5**
GRNR pmax pmax
comp=E,60nm,1.1s
GRNR pmax pmax
comp=N,30nm,1.0s
GRNR pmax pmax
comp=Z,120nm,1.1s
GRNR smax smax
comp=E,10.0nm,0.8s
GRNR MLR MLR
comp=N,11µm,21.0s
GRNR MLR MLR
comp=E,16µm,21.0s
GRNR MLR MLR
comp=Z,20µm,21.0s
**TGTN Hyland Airport 28.54 50** P **P** **03 41 05.6 -0.3**
baz=271
TGTN S **S** **03 45 52.3 +1.5**
baz=271
**GRNB Grenville Isla 28.75 66** IAmb IAmb 03 41 55.4
comp=Z,206nm,1.1s
**JSH Shimam 29.70 270** P **P** **03 41 16.4 +0.2**
**JOT Ohata 29.75 267** P **P** **03 41 17.5 +0.8**
**LIRD Liard River Hi 29.79 54** P **P** **03 41 17.1 +0.2**
baz=277
LIRD S **S** **03 46 11.4 +1.2**
baz=277
**YAK Yakutsk 29.97 311** ⇑P **P** **03 41 16.3 -2.2**
**YAK Yakutsk 29.97 311** LR LR 03 53 40.7
comp=Z,36µm,20.1s,baz=80,slow=37
**YAK Yakutsk 29.97 311** *eP* **P** **03 41 15.8 -2.6**
YAK *e**PP **pP** **03 41 25.8 -3.7**
YAK *e* 03 42 12.9
YAK *e* 03 44 20.3
YAK *e*S **S** **03 46 10.5 -2.5**
YAK *e* 03 51 51.7
YAK pmax pmax
comp=Z,50nm,1.4s
YAK pmax pmax
comp=N,14nm,1.8s
YAK pmax pmax
comp=E,22nm,1.4s
YAK pmax pmax
comp=Z,416nm,3.0s
YAK pmax pmax
comp=N,128nm,2.6s
YAK pmax pmax
comp=E,212nm,1.8s
YAK smax smax
comp=N,259nm,2.5s
YAK smax smax
comp=E,256nm,3.0s
YAK MLR MLR
comp=Z,50µm,24.0s
YAK MLR MLR
comp=E,39µm,22.0s
YAK MLR MLR
comp=N,27µm,20.0s
**JTM Tenmabayashi 30.07 266** P **P** **03 41 20.5 +0.9**
**JTM Tenmabayashi 30.07 266** IAmb IAmb 03 41 21.0
comp=Z,222nm,1.4s
**JTM Tenmabayashi 30.07 266** ⇑P **P** **03 41 19.9 +0.4**
**JTM Tenmabayashi 30.07 266** P **P** **03 41 19.8 +0.3**
**BBB Bella Bella 30.29 69** IAmb IAmb 03 41 43.1
comp=Z,196nm,1.1s
**BBB Bella Bella 30.29 69** ⇑P **P** **03 41 23.2 +1.9**
**BBB Bella Bella 30.29 69** P **P** **03 41 22.6 +1.3**
comp=Z,76nm,0.9s,baz=274,slow=9.4,SNR=15
BBB LR LR 03 53 50.4
comp=Z,21µm,18.2s,baz=291,slow=37
comp=Z,76nm,0.9s
**TOAD Toad River Com 30.31 55** P **P** **03 41 21.6 +0.1**
baz=279,SNR=7.0
TOAD S **S** **03 46 20.4 +2.0**
baz=279
**TEY Ternei 30.67 276** ⇑*eP* **P** **03 41 25.1 +0.3**
TEY pmax pmax
comp=E,80nm,1.2s
TEY pmax pmax
comp=Z,130nm,1.2s
TEY pmax pmax
comp=N,30nm,1.2s
TEY MLR MLR
comp=N,300nm,18.0s
TEY MLR MLR
comp=E,100nm,18.0s
TEY MLR MLR
comp=Z,200nm,20.0s
**JOM Ohasama 30.69 264** P **P** **03 41 25.9 +0.9**
**WRGLY Wrigley 30.72 46** P **P** **03 41 25.2 +0.2**
baz=273,SNR=29
WRGLY S **S** **03 46 18.6 -6.0**
baz=273
**KOTAN Kotaneelee Air 30.72 52** P **P** **03 41 25.4 +0.3**
baz=277,SNR=10.0
KOTAN S **S** **03 46 26.1 +1.3**
baz=277
**C36M Paulatuk 30.75 34** P **P** **03 41 24.8 -0.5**
baz=262,SNR=23
C36M S **S** **03 46 22.1 -2.8**
baz=262
**HOLB Holberg 30.79 71** IAmb IAmb 03 41 46.9
comp=Z,256nm,1.2s
**A36M Sachs Harbour 30.86 29** P **P** **03 41 26.6 +0.4**
A36M IAmb IAmb 03 41 32.9
comp=Z,153nm,0.7s
A36M **PcP** **03 44 20.8 -1.1**
**A36M Sachs Harbour 30.86 29** P **P** **03 41 26.4 +0.1**
baz=256,SNR=31
A36M S **S** **03 46 24.5 -2.3**
baz=256
**TIXI Tiksi 31.04 330** LR LR 03 54 46.1
comp=Z,39µm,18.9s,baz=136,slow=38
**KLR Kul'dur 31.83 286** LR LR 03 54 20.7
comp=Z,44µm,21.5s,baz=66,slow=36
**KLR Kul'dur 31.83 286** *ce*P **P** **03 41 35.0 0.0**
KLR pmax pmax
comp=Z,792nm,1.7s
KLR MLR MLR
comp=Z,41µm,21.0s
**JMM Marumori 31.97 262** P **P** **03 41 37.6 +1.3**
**JMM Marumori 31.97 262** IAmb IAmb 03 41 38.7
comp=Z,264nm,1.2s
**JMM Marumori 31.97 262** ⇑P **P** **03 41 37.0 +0.7**
**JMM Marumori 31.97 262** P **P** **03 41 36.9 +0.6**
**JYA Atsumi 32.20 264** P **P** **03 41 39.1 +0.7**
**CBB Campbell River 32.67 71** IAmb IAmb 03 42 02.8
comp=Z,210nm,1.2s
**ZEA Zeya 32.85 296** *eP* **P** **03 41 42.5 -1.4**
ZEA *e**SP **pP** **03 41 55.3 +0.3**
ZEA *e* 03 43 09.7
ZEA *eS* **S** **03 46 50.7 -7.5**
ZEA pmax pmax
comp=N,30nm,1.6s
ZEA pmax pmax
comp=E,40nm,1.6s
ZEA pmax pmax
comp=Z,70nm,1.7s
ZEA pmax pmax
comp=Z,800nm,5.8s
ZEA smax smax
comp=E,2µm,14.7s
ZEA MLR MLR
comp=E,8µm,24.0s
ZEA MLR MLR
comp=N,6µm,21.0s
ZEA MLR MLR
comp=Z,13µm,24.0s
**OZB Mount Ozzard 33.02 73** IAmb IAmb 03 42 05.7
comp=Z,315nm,1.1s
**JSD Sado 33.45 264** P **P** **03 41 50.5 +1.3**
**JSD Sado 33.45 264** P **P** **03 41 50.1 +0.9**
**KIP Kipapa 33.55 145** P **P** **03 41 53.1 +2.8**
**KIP Kipapa 33.55 145** P **P** **03 41 51.8 +1.6**
**KIP Kipapa 33.55 145** *ce*P **P** **03 41 50.6 +0.3**
KIP pmax pmax
comp=Z,68nm,1.3s
**H11N2 WAKE ISLAND Hy 33.72 207** T T 04 18 26.5
baz=17,slow=76
**H11N3 WAKE ISLAND Hy 33.73 207** T T 04 18 27.0
baz=17,slow=76
**H11N1 WAKE ISLAND Hy 33.74 207** T T 04 18 36.0
baz=17,slow=76
**USA0B Ussuriysk Arra 33.95 278** *c i*P **P** **03 41 52.8 -0.7**
**USRK Ussuriysk Ar. 33.95 278** P **P** **03 41 53.0 -0.5**
**USRK Ussuriysk Ar. 33.95 278** P **P** **03 41 53.5 0.0**
comp=Z,64nm,0.7s,baz=57,slow=9.5,SNR=82
USRK LR LR 03 57 28.0
comp=Z,11µm,19.0s,baz=52,slow=39
comp=Z,64nm,0.7s
**HEH HeiHe 34.01 290** *eP* **P** **03 41 52.5 -1.5**
HEH sP **pP** **03 42 01.3 -3.8**
HEH PP **PP** **03 43 12.6 +1.3**
HEH sS **sS** **03 47 33.3 -1.0**
HEH pmax pmax
comp=Z,190nm,1.6s
HEH pmax pmax
comp=Z,2µm,5.0s
HEH LR LR
comp=Z,21µm,23.7s
HEH LR LR
comp=Z,8µm,23.5s
HEH LR LR
comp=Z,35µm,22.9s
**JRY Ryogami san 34.31 261** P **P** **03 41 58.3 +1.4**
**PGC Sidney 34.37 73** IAmb IAmb 03 42 17.4
comp=Z,523nm,1.5s
**MJAR Matsushiro Arr 34.41 262** P **P** **03 41 58.7 +1.1**
comp=Z,42nm,0.8s,baz=46,slow=7.4,SNR=82
MJAR PcP **PcP** **03 44 32.5 +0.1**
comp=Z,20nm,1.1s,baz=58,slow=1.5,SNR=5.9
MJAR ScP **ScP** **03 48 14.9 +1.0**
comp=Z,0.8nm,0.2s,baz=51,slow=2.5,SNR=2.4
MJAR LR LR 03 54 18.9
comp=Z,29µm,21.4s,baz=53,slow=33
comp=Z,42nm,0.8s
**MJB9 Matsu-Tunnel 34.41 262** IAmb IAmb 03 42 01.9
comp=Z,302nm,1.2s
**MAJO Matsushiro 34.41 262** P **P** **03 41 58.8 +1.2**
**MAJO Matsushiro 34.41 262** P **P** **03 41 58.4 +0.8**
MAJO IAmb IAmb 03 42 00.6
comp=Z,309nm,1.2s
**MAJO Matsushiro 34.41 262** *c i*P **P** **03 41 58.5 +0.8**
MAJO pmax pmax
comp=Z,320nm,1.4s
**MAT Matsushiro 34.41 262** P **P** **03 41 58.7 +1.1**
**NLWA Neilton Lookou 34.68 75** IAMs_20 IAMs_20 03 53 03.6
comp=Z,44µm,21.0s
**NLWA Neilton Lookou 34.68 75** ⇑P **P** **03 42 02.3 +2.5**
**YKA Yellowknife Ar 34.83 46** P **P** **03 42 00.2 -0.7**
**YKA Yellowknife Ar 34.83 46** P **P** **03 42 00.4 -0.6**
comp=Z,68nm,1.1s,baz=284,slow=8.8,SNR=46
YKA PcP **PcP** **03 44 33.3 +0.2**
comp=Z,17nm,1.0s,baz=297,slow=3.0,SNR=5.3

YKA ScP **ScP** **03 48 15.5 +0.6**
comp=Z,7.5nm,1.1s,baz=297,slow=3.4,SNR=4.1
YKA LR LR 03 58 06.5
comp=Z,29µm,18.4s,baz=274,slow=39
comp=Z,68nn,1.1s
**H11S1 WAKE ISLAND Hy 34.94 206** T T 04 19 39.5
baz=17,slow=76
**H11S2 WAKE ISLAND Hy 34.95 206** T T 04 19 59.9
baz=17,slow=76
**H11S3 WAKE ISLAND Hy 34.95 206** T T 04 20 07.1
baz=17,slow=76
**JOHN Johnston Islan 35.09 166** P **P** **03 42 05.3 +1.8**
**JOHN Johnston Islan 35.09 166** IAMs_20 IAMs_20 03 53 14.2
comp=Z,31µm,20.0s
**JGN Niukaw 35.17 262** P **P** **03 42 05.5 +1.3**
**MDJ Mudanjiang 35.23 280** P **P** **03 42 04.1 -0.5**
MDJ pP pP 03 42 10.1 -5.4
MDJ S **S** **03 47 37.6 +2.6**
MDJ pmax pmax
comp=Z,74nm,1.2s
MDJ pmax pmax
comp=Z,3µm,10.2s
MDJ LR LR
comp=Z,21µm,18.0s
MDJ LR LR
comp=Z,15µm,19.2s
MDJ LR LR
comp=Z,28µm,23.1s
**JGF Kuroka 35.54 262** P **P** **03 42 09.0 +1.6**
**JGF Kuroka 35.54 262** IAmb IAmb 03 42 10.5
comp=Z,369nm,1.3s
**JGF Kuroka 35.54 262** ⇑P **P** **03 42 08.7 +1.2**
**JGF Kuroka 35.54 262** P **P** **03 42 08.6 +1.2**
**F03A Seaside 35.55 77** IAmb IAmb 03 42 29.8
comp=Z,435nm,1.2s
**JHJ Hachijo jima 2 35.70 256** LR LR 03 54 45.0
comp=Z,12µm,21.2s,baz=64,slow=33
**INU Inuyama 35.91 262** P **P** **03 42 11.7 +1.1**
**INU Inuyama 35.91 262** ⇑P **P** **03 42 11.8 +1.2**
**POHA Pohakuloa 35.99 143** P **P** **03 42 14.1 +2.5**
**POHA Pohakuloa 35.99 143** IAMs_20 IAMs_20 03 53 58.0
comp=Z,51µm,20.0s
**BNX BinXian 36.02 283** ⇑P **P** **03 42 10.6 -0.7**
BNX pP **pP** **03 42 22.0 -0.2**
BNX pmax pmax
comp=Z,260nm,1.2s
BNX pmax pmax
comp=Z,3µm,12.9s
BNX LR LR
comp=Z,16µm,19.5s
BNX LR LR
comp=Z,33µm,19.6s
BNX LR LR
comp=Z,39µm,20.9s
**G03D McMinnville, O 36.08 78** IAmb IAmb 03 42 36.6
comp=Z,497nm,1.5s
**LON Longmire 36.22 75** IAmb IAmb 03 42 47.0
comp=Z,647nm,1.8s
**F04A Amboy 36.24 76** IAmb IAmb 03 42 34.5
comp=Z,407nm,1.2s
**COR Corvallis 36.37 79** P **P** **03 42 16.2 +1.9**
COR IAmb IAmb 03 42 36.4
comp=Z,336nm,1.2s
**COR Corvallis 36.37 79** IAMs_20 IAMs_20 03 53 25.7
comp=Z,37µm,22.0s
**COR Corvallis 36.37 79** ⇑P **P** **03 42 17.1 +2.8**
**COR Corvallis 36.37 79** P **P** **03 42 16.2 +1.9**
COR pmax pmax
comp=Z,336nm,1.2s
**LTY Liberty 36.67 73** IAmb IAmb 03 42 36.7
comp=Z,255nm,1.2s
**J01E Myrtle Point 36.72 81** IAmb IAmb 03 42 40.9
comp=Z,302nm,1.4s
**H04D Lebanon 36.75 78** IAmb IAmb 03 43 18.6
comp=Z,337nm,1.3s
**BUCK Buck Mountain 36.76 79** IAmb IAmb 03 42 39.9
comp=Z,285nm,1.2s
**B08A Colville Reser 36.96 71** IAmb IAmb 03 42 39.2
comp=Z,456nm,1.1s
**JWT Wachi 36.96 263** P **P** **03 42 20.6 +1.0**
**HOOD Mount Hood Mea 37.01 77** IAmb IAmb 03 42 41.4
comp=Z,574nm,1.2s
**KBO Bosley Butte 37.05 83** IAmb IAmb 03 42 39.4
comp=Z,480nm,1.5s
**MXC Moxie City 37.22 74** IAmb IAmb 03 42 46.0
comp=Z,297nm,1.4s
**KSXB Camp Six Broad 37.47 83** IAmb IAmb 03 42 42.9
comp=Z,410nm,1.7s
**E07A Sunnyside 37.49 74** IAmb IAmb 03 42 43.8
comp=Z,167nm,0.9s
**HUMO Hull Mountain 37.62 81** IAmb IAmb 03 42 46.9
comp=Z,229nm,1.6s
HUMO IAMs_20 IAMs_20 03 54 12.0
comp=Z,34µm,22.0s
**HUMO Hull Mountain 37.62 81** ⇑P **P** **03 42 27.4 +2.3**
**KRMB Red Mountain 37.62 83** IAmb IAmb 03 42 44.3
comp=Z,422nm,1.6s
**G06A Carlson Farm, 37.68 76** IAmb IAmb 03 42 47.9
comp=Z,312nm,1.4s
**I05D Terrebonne, OR 37.70 78** IAmb IAmb 03 42 47.9
comp=Z,373nm,1.1s
**HAWA Hanford 37.77 74** IAMs_20 IAMs_20 03 54 55.4
comp=Z,33µm,22.0s
**HAWA Hanford 37.77 74** ⇑P **P** **03 42 28.0 +1.8**
**F07A Phinny Hill Vi 37.78 75** IAmb IAmb 03 42 49.5
comp=Z,214nm,0.8s
**D08A Wollman Farm, 37.81 73** IAmb IAmb 03 42 46.1
comp=Z,588nm,1.5s
**C09A Chrisman Ranch 37.85 71** IAmb IAmb 03 42 48.8
comp=Z,398nm,1.2s
**JCC Jacoby Creek, 37.94 84** IAmb IAmb 03 42 47.7
comp=Z,786nm,1.9s
**JAD Aida 37.95 264** P **P** **03 42 29.0 +1.1**
**KHMM Horse Mountain 38.10 84** P **P** **03 42 31.5 +2.2**
KHMM IAmb IAmb 03 42 48.5
comp=Z,413nm,1.5s
**KMPM Mount Pierce 38.12 85** P **P** **03 42 31.8 +2.5**
KMPM IAmb IAmb 03 42 48.5
comp=Z,641nm,1.6s
**CN2 Changchun 38.20 282** *e*P **P** **03 42 29.3 -0.6**
CN2 *e*PP **PnPn** **03 44 00.9 +1.5**
CN2 *e*S **S** **03 48 16.9 -3.4**
CN2 *e*SS **SnSn** **03 50 56.6 -10**
CN2 pmax pmax
comp=Z,80nm,1.7s
CN2 LR LR
comp=Z,4µm,18.0s
CN2 LR LR
comp=Z,4µm,18.0s
CN2 LR LR
comp=Z,9µm,20.0s
**PINE Pine Mountain 38.23 78** IAmb IAmb 03 42 52.2
comp=Z,440nm,1.2s
**YBH Yreka Blue Hor 38.25 82** P **P** **03 42 31.1 +0.7**
**YBH Yreka Blue Hor 38.25 82** LR LR 03 55 15.8
comp=Z,20µm,21.7s,baz=306,slow=31
**YBH Yreka Blue Hor 38.25 82** P **P** **03 42 31.2 +0.7**
YBH pmax pmax
comp=Z,173nm,1.2s
**NEW Newport 38.31 70** IAmb IAmb 03 42 56.8
comp=Z,220nm,0.9s
**NEW Newport 38.31 70** IAMs_20 IAMs_20 03 55 24.5
comp=Z,28µm,22.0s
**NEW Newport 38.31 70** ⇑P **P** **03 42 31.9 +1.1**
**NEW Newport 38.31 70** LR LR 03 55 58.4
comp=Z,25µm,21.7s,baz=296,slow=32
**J05D Fort Rock, OR 38.32 79** IAmb IAmb 03 42 53.6
comp=Z,581nm,1.3s
**K04D Chiloquin, OR 38.36 80** IAmb IAmb 03 42 53.0
comp=Z,425nm,1.1s
**KMRM Mail Ridge 38.48 85** IAmb IAmb 03 42 51.9
comp=Z,616nm,1.8s
**E09A Wood Farm, Sta 38.55 73** P **P** **03 42 33.8 +1.0**
E09A IAmb IAmb 03 42 53.0
comp=Z,706nm,1.6s
**BOD Bodaibo 38.56 307** *e*P **P** **03 42 30.8 -1.9**
BOD pmax pmax
comp=Z,108nm,1.8s
**JHS Saijyo 38.57 265** P **P** **03 42 34.4 +1.3**
**JCJ Chichijima 38.63 247** P **P** **03 42 35.4 +1.8**
**JCJ Chichijima 38.63 247** ⇑P **P** **03 42 35.2 +1.6**
**JCJ Chichijima 38.63 247** LR LR 03 55 45.4
comp=Z,12µm,21.9s,baz=38,slow=32
**G08A Pilot Rock 38.67 75** IAmb IAmb 03 42 55.9
comp=Z,266nm,1.6s
**KCPM Cahto Peak 38.87 86** IAmb IAmb 03 42 54.5
comp=Z,504nm,1.5s

**HIA Hailar 38.92 292** P **P** **03 42 36.0 +0.1**
**HIA Hailar 38.92 292** IAMs_20 IAMs_20 03 59 36.4
comp=Z,40µm,20.0s
**HIA Hailar 38.92 292** P **P** **03 42 36.0 +0.1**
HIA pmax pmax
comp=Z,214nm,1.2s
HIA MLR MLR
comp=Z,40µm,20.0s
**JMN Monobe 38.93 262** P **P** **03 42 38.1 +1.9**
**I07A Izee 38.96 77** IAmb IAmb 03 42 58.3
comp=Z,356nm,1.2s
**O02D Mt. Diablo Mer 39.09 84** IAmb IAmb 03 42 56.6
comp=Z,360nm,1.5s
**F10A Beach Ranch, E 39.37 73** IAmb IAmb 03 43 03.7
comp=Z,585nm,1.6s
**F10A Beach Ranch, E 39.37 73** ⇑P **P** **03 42 40.9 +1.2**
**HATC Hat Creek Radi 39.55 83** IAmb IAmb 03 43 02.2
comp=Z,429nm,1.1s
**RES Resolute Bay 39.57 24** ⇑P **P** **03 42 40.6 -0.3**
**RES Resolute Bay 39.57 24** LR LR 04 02 08.4
comp=Z,23µm,19.6s,baz=269,slow=41
**HOPS Hopland Field 39.60 86** IAmb IAmb 03 43 00.1
comp=Z,555nm,1.6s
HOPS IAMs_20 IAMs_20 03 54 54.6
comp=Z,28µm,21.0s
**LRDM Redding Peak 39.75 83** IAmb IAmb 03 43 13.6
comp=Z,195nm,0.9s
**GDXM Geysers 39.88 86** IAmb IAmb 03 43 03.0
comp=Z,359nm,1.4s
**BMO Blue Mountains 39.90 75** IAmb IAmb 03 43 07.0
comp=Z,648nm,2.0s
BMO IAMs_20 IAMs_20 03 56 09.7
comp=Z,31µm,22.0s
**BMO Blue Mountains 39.90 75** ⇑P **P** **03 42 45.5 +1.3**
**J08A Circle Bar Ran 39.98 77** IAmb IAmb 03 43 09.0
comp=Z,203nm,1.0s
**EUNU Eureka 40.21 16** ⇑P **P** **03 42 46.1 -0.2**
**MCCM Marconi Confer 40.23 87** IAmb IAmb 03 43 04.8
comp=Z,317nm,1.4s
**MCCM Marconi Confer 40.23 87** ⇑P **P** **03 42 48.3 +1.5**
**ORV Oroville 40.25 84** P **P** **03 42 48.0 +0.9**
**ORV Oroville 40.25 84** P **P** **03 42 48.0 +0.9**
ORV pmax pmax
comp=Z,210nm,1.6s
**KSRS Korea Array 40.29 272** P **P** **03 42 48.6 +1.3**
comp=Z,38nm,1.1s,baz=58,slow=8.0,SNR=50
KSRS LR LR 03 58 15.7
comp=Z,6µm,21.9s,baz=55,slow=34
comp=Z,38nm,1.1s
**KSAR Wonju Array Be 40.32 272** P **P** **03 42 48.0 +0.4**
**KSAR Wonju Array Be 40.32 272** P **P** **03 42 48.0 +0.4**
**WVOR Wild Horse Val 40.39 79** IAmb IAmb 03 43 09.5
comp=Z,304nm,1.1s
WVOR IAMs_20 IAMs_20 03 55 57.1
comp=Z,33µm,22.0s
**WVOR Wild Horse Val 40.39 79** ⇑P **P** **03 42 50.0 +1.7**
**PYAG Pyongyang 40.68 275** P **P** **03 42 51.0 +0.5**
PYAG S **S** **03 48 59.9 +2.4**
PYAG AmB
comp=Z,4µm,3.1s
**SUJ Sinuiju 40.85 277** P **P** **03 42 52.7 +0.8**
SUJ S **S** **03 49 01.5 +1.4**
SUJ AmB
comp=Z,1µm,1.7s
SUJ AMS AMS
comp=Z,7µm,16.9s
**MSO Missoula 40.89 70** IAmb IAmb 03 43 14.7
comp=Z,446nm,1.3s
**MSO Missoula 40.89 70** ⇑P **P** **03 42 53.1 +0.7**
**INCN Inchon 41.08 273** P **P** **03 42 55.4 +1.5**
**INCN Inchon 41.08 273** P **P** **03 42 53.6 -0.2**
INCN IAmb IAmb 03 42 56.6
comp=Z,673nm,2.0s
**INCN Inchon 41.08 273** P **P** **03 42 54.8 +0.9**
**INCN Inchon 41.08 273** P **P** **03 42 53.7 -0.2**
INCN pmax pmax
comp=Z,673nm,2.0s
INCN MLR MLR
comp=Z,7µm,20.0s
**CIT Chita 41.16 299** *e*P **P** **03 42 53.2 -1.2**
CIT *e* 03 43 04.2
CIT *e* 03 44 35.6
CIT *e* 03 44 53.0
CIT *e* 03 45 02.6
CIT *e* 03 48 56.0
CIT pmax pmax
comp=Z,278nm,1.8s
**JNU Nakatsue 41.20 264** P **P** **03 42 56.4 +1.4**
**JNU Nakatsue 41.20 264** P **P** **03 42 54.7 -0.3**
JNU IAmb IAmb 03 42 58.0
comp=Z,343nm,1.2s
**JNU Nakatsue 41.20 264** LR LR 03 58 46.1
comp=Z,27µm,21.9s,baz=48,slow=34
**TJN Taejon 41.30 271** P **P** **03 42 57.2 +1.5**
**TJN Taejon 41.30 271** IAmb IAmb 03 43 16.1
comp=Z,337nm,0.9s
**TJN Taejon 41.30 271** *ce*P **P** **03 42 54.2 -1.5**
**HJU Haeju 41.31 274** P **P** **03 42 56.7 +1.0**
HJU S **S** **03 49 08.8 +1.9**
HJU AmB
comp=Z,1µm,1.6s
HJU AMS AMS
comp=Z,8µm,14.4s
**MPK Martis Peak 41.33 84** IAmb IAmb 03 43 18.4
comp=Z,428nm,1.3s
**PAHR Pah Rah Range 41.48 83** IAmb IAmb 03 43 18.5
comp=Z,480nm,1.4s
**MFID Camas Ranch 41.57 76** IAMs_20 IAMs_20 03 56 47.9
comp=Z,25µm,22.0s
**PNTR Pine Nut 41.72 84** P **P** **03 43 01.0 +1.6**
PNTR IAmb IAmb 03 43 17.2
comp=Z,217nm,0.8s
**CMB Columbia Colle 41.86 85** IAmb IAmb 03 43 18.8
comp=Z,351nm,1.7s
**SAO San Andreas Ge 41.98 88** ⇑P **P** **03 43 02.5 +1.3**
**YERR Yerington 42.00 83** IAmb IAmb 03 43 22.9
comp=Z,398nm,1.5s
**WAKR Walker 42.17 84** IAmb IAmb 03 43 21.8
comp=Z,301nm,1.5s
**HLID Hailey 42.34 75** IAMs_20 IAMs_20 03 57 38.5
comp=Z,31µm,22.0s
**HLID Hailey 42.34 75** ⇑P **P** **03 43 05.8 +1.3**
**BBGB Big Mountain B 42.35 88** IAmb IAmb 03 43 34.4
comp=Z,348nm,1.1s
**RYN Ryan 42.66 83** IAmb IAmb 03 43 25.3
comp=Z,299nm,1.5s
**KVN Kaiserville 42.67 83** IAmb IAmb 03 43 25.4
comp=Z,400nm,1.8s
**PMPB Monarch Peak 42.73 88** IAmb IAmb 03 43 32.0
comp=Z,659nm,1.9s
**EGMT Eagleton 42.73 67** IAmb IAmb 03 43 30.4
comp=Z,210nm,0.9s
**EGMT Eagleton 42.73 67** ⇑P **P** **03 43 07.7 +0.3**
**LHV Little Huntoon 42.91 84** IAmb IAmb 03 43 27.8
comp=Z,380nm,1.4s
**BOZ Bozeman (W) 42.91 71** IAmb IAmb 03 43 29.7
comp=Z,981nm,1.9s
**BOZ Bozeman (W) 42.91 71** ⇑P **P** **03 43 09.6 +0.7**
**NVAR Mina Array Bea 42.92 83** P **P** **03 43 10.5 +1.3**
**NVAR Mina Array Bea 42.92 83** P **P** **03 43 10.7 +1.5**
comp=Z,29nm,0.8s,baz=293,slow=8.1,SNR=114
NVAR ScP **ScP** **03 48 46.8 +0.1**
comp=Z,2.4nm,1.1s,baz=282,slow=4.2,SNR=2.0
NVAR LR LR 03 57 41.7
comp=Z,12µm,21.2s,baz=296,slow=31
NVAR PKKP **PKKPdf** **04 06 35.9 -2.1**
comp=Z,0.3nm,0.6s,baz=301,slow=4.0,SNR=3.6
comp=Z,29nm,0.8s
**MDPB Devils Postpil 42.92 85** IAmb IAmb 03 43 27.9
comp=Z,392nm,1.5s
**DL2 Dalian 43.34 278** P **P** **03 43 12.9 +0.6**
DL2 S **S** **03 49 43.3 +6.4**
DL2 ScS **ScS** **03 53 07.3 -1.0**
DL2 pmax pmax
comp=Z,160nm,1.6s
DL2 pmax pmax
comp=Z,4µm,9.3s
DL2 LR LR
comp=Z,5µm,19.8s
DL2 LR LR
comp=Z,16µm,18.8s
DL2 LR LR
comp=Z,19µm,18.8s
**Q09A Carvers 43.38 82** IAmb IAmb 03 43 36.2
comp=Z,282nm,1.0s
**ELK Elko 43.44 79** ⇑P **P** **03 43 14.9 +1.5**

**ELK Elko 43.44 79** LR LR 04 01 33.2
comp=Z,19µm,18.0s,baz=312,slow=36
**YHL Hebgen Lake 43.58 71** IAmb IAmb 03 43 38.3
comp=Z,593nm,1.3s
**FFC Flin Flon 43.68 55** P **P** **03 43 14.2 -0.6**
**FFC Flin Flon 43.68 55** ⇑P **P** **03 43 14.1 -0.6**
**FFC Flin Flon 43.68 55** P **P** **03 43 14.2 -0.6**
FFC pmax pmax
comp=Z,54nm,1.2s
**DSP Deep Springs 43.78 84** IAmb IAmb 03 43 34.7
comp=Z,430nm,1.5s
**XLT XiLinHaoTe 43.84 287** *e*P **P** **03 43 17.5 +1.1**
XLT PcP **PcP** **03 45 04.8 +2.7**
XLT S **S** **03 49 46.9 +2.6**
XLT ScS **ScS** **03 53 11.9 +0.3**
XLT pmax pmax
comp=Z,380nm,1.3s
XLT LR LR
comp=Z,24µm,20.4s
XLT LR LR
comp=Z,30µm,21.9s
**YNM Yellowstone No 43.93 71** IAmb IAmb 03 43 37.1
comp=Z,282nm,1.2s
**YNR Norris Junctio 43.95 71** IAmb IAmb 03 43 37.3
comp=Z,539nm,1.3s
**YFT Old Faithful 44.00 72** IAmb IAmb 03 43 38.1
comp=Z,327nm,1.2s
**YPP Pitchstone Pla 44.12 72** IAmb IAmb 03 43 54.4
comp=Z,181nm,1.2s
**H17A Grant Village 44.19 71** P **P** **03 43 21.8 +2.4**
baz=304,SNR=49
H17A S **S** **03 49 53.6 +3.9**
baz=304
**LKWY Lake 44.20 71** IAmb IAmb 03 43 44.9
comp=Z,244nm,0.9s
**YMP Mirror Lake Pl 44.25 71** IAmb IAmb 03 43 43.3
comp=Z,237nm,1.2s
**IMW Indian Meadow 44.25 72** IAmb IAmb 03 43 39.6
comp=Z,296nm,1.3s
**GMN Gold Mountain 44.27 84** IAmb IAmb 03 43 38.2
comp=Z,420nm,1.9s
**FLWY Flagg Ranch 44.29 72** IAmb IAmb 03 43 54.2
comp=Z,446nm,1.2s
**FXWY Fox Creek 44.34 73** IAmb IAmb 03 43 45.0
comp=Z,277nm,1.6s
FXWY IAMs_20 IAMs_20 03 58 56.3
comp=Z,22µm,22.0s
**HVU Hansel Valley 44.35 76** IAmb IAmb 03 43 43.9
comp=Z,186nm,1.1s
**GRAC Grapevine Rang 44.39 84** IAmb IAmb 03 43 39.4
comp=Z,646nm,1.7s
**TPAW Teton Pass 44.47 73** IAmb IAmb 03 43 45.2
comp=Z,187nm,1.1s
TPAW IAMs_20 IAMs_20 03 58 58.6
comp=Z,24µm,22.0s
**ISA Isabella, Lake 44.54 87** IAmb IAmb 03 43 40.2
comp=Z,274nm,1.4s
**RLMT Red Lodge 44.56 70** IAmb IAmb 03 43 41.9
comp=Z,394nm,1.1s
**RLMT Red Lodge 44.56 70** ⇑P **P** **03 43 23.6 +1.4**
**REDW Red Top Meadow 44.60 73** IAMs_20 IAMs_20 03 59 04.2
comp=Z,27µm,22.0s
**LOHW Long Hollow 44.61 72** IAmb IAmb 03 43 47.0
comp=Z,342nm,1.6s
**R11B Troy Canyon, C 44.66 82** IAmb IAmb 03 43 43.9
comp=Z,332nm,1.6s
**R11B Troy Canyon, C 44.66 82** P **P** **03 43 24.3 +1.2**
baz=308,SNR=201
R11B S **S** **03 49 59.4 +2.8**
baz=308
**BGU Big Grassy Mou 44.69 77** IAmb IAmb 03 43 45.0
comp=Z,127nm,1.0s
**Q12A Willow Creek R 44.71 80** IAmb IAmb 03 43 48.4
comp=Z,409nm,1.3s
**AHID Auburn Hatcher 44.80 74** IAMs_20 IAMs_20 03 59 09.3
comp=Z,34µm,22.0s
**AHID Auburn Hatcher 44.80 74** ⇑P **P** **03 43 25.4 +1.3**
**SPUT South Promonto 44.82 76** IAmb IAmb 03 43 47.7
comp=Z,166nm,1.1s
**TULEG Thule 44.87 18** ⇑P **P** **03 43 23.4 -0.6**
**TULEG Thule 44.87 18** *i* P **P** **03 43 19.6 -4.5**
TULEG IAmb IAmb 03 45 23.6
comp=Z,147nm,1.4s
**WCT Wildcat Mounta 44.98 84** IAmb IAmb 03 43 43.6
comp=Z,194nm,1.5s
**SPR3 Spring Creek 3 45.05 80** IAmb IAmb 03 43 51.1
comp=Z,222nm,1.7s
**CCAC Calif City Air 45.15 87** IAmb IAmb 03 43 44.4
comp=Z,319nm,1.8s
**HWUT Hardware Ranch 45.19 75** IAmb IAmb 03 43 45.9
comp=Z,194nm,1.2s
**HWUT Hardware Ranch 45.19 75** ⇑P **P** **03 43 28.4 +1.2**
**DUG Dugway, Tooele 45.26 78** IAMs_20 IAMs_20 03 58 54.0
comp=Z,22µm,22.0s
**DUG Dugway, Tooele 45.26 78** ⇑P **P** **03 43 29.2 +1.4**
**GWY Greenwater Val 45.33 85** IAmb IAmb 03 43 46.2
comp=Z,627nm,1.8s
**LAO LASA Array 45.47 66** IAMs_20 IAMs_20 04 00 12.8
comp=Z,23µm,22.0s
**LAO LASA Array 45.47 66** ⇑P **P** **03 43 30.2 +0.9**
**CTU Camp Tracy 45.61 76** P **P** **03 43 31.4 +0.7**
CTU IAmb IAmb 03 43 56.7
comp=Z,228nm,1.3s
**PSUT Pine Spring 45.62 80** IAmb IAmb 03 43 51.5
comp=Z,226nm,1.3s
**DGMT Dagmar 45.65 63** IAmb IAmb 03 43 54.3
comp=Z,326nm,1.1s
**DGMT Dagmar 45.65 63** IAMs_20 IAMs_20 04 03 28.4
comp=Z,30µm,19.0s
**DGMT Dagmar 45.65 63** ⇑P **P** **03 43 30.6 0.0**
**PASC Pasadena Art C 45.68 88** IAmb IAmb 03 43 48.7
comp=Z,318nm,1.6s
**BW06 Boulder Array 45.72 73** ⇑P **P** **03 43 32.4 +0.8**
**PD31 Pinedale Array 45.72 73** IAmb IAmb 03 43 55.2
comp=Z,314nm,1.0s
**PDAR Pinedale Array 45.72 73** P **P** **03 43 31.4 -0.2**
**PDAR Pinedale Array 45.72 73** P **P** **03 43 32.5 +0.9**
comp=Z,67nm,0.9s,baz=316,slow=4.1,SNR=275
PDAR LR LR 04 00 13.4
comp=Z,16µm,21.6s,baz=296,slow=33
comp=Z,67nm,0.9s
**GSC Goldstone, Bar 45.81 86** IAmb IAmb 03 43 54.8
comp=Z,393nm,1.3s
**NLU North Lily Min 45.86 77** IAmb IAmb 03 43 57.5
comp=Z,139nm,1.1s
**BJI Beijing 46.03 283** P **P** **03 43 34.4 +0.8**
BJI sP **sP** **03 43 50.1 +0.7**
BJI PcS **PcS** **03 49 03.3 -0.6**
BJI S **S** **03 50 14.0 -1.8**
BJI pmax pmax
comp=Z,52nm,1.3s
BJI LR LR
comp=Z,8µm,20.4s
BJI LR LR
comp=Z,7µm,23.1s
BJI LR LR
comp=Z,13µm,24.3s
**IRK Irkutsk 46.04 303** *e*P **P** **03 43 32.7 -0.9**
IRK *e* 03 45 10.4
IRK pmax pmax
comp=Z,158nm,3.6s
**BJT Baijiatuau 46.05 283** IAmb IAmb 03 43 35.6
comp=Z,174nm,1.3s
**TCRU Three Creeks R 46.45 79** IAmb IAmb 03 43 55.0
comp=Z,115nm,0.8s
**ELS Elsinore Mount 46.50 88** IAmb IAmb 03 43 55.3
comp=Z,380nm,1.6s
**CCUT Cedar City 46.54 81** IAmb IAmb 03 43 59.1
comp=Z,147nm,1.1s
**SZCU Shurtz Canyon 46.68 81** IAmb IAmb 03 43 59.9
comp=Z,115nm,1.2s
**TMUT Trail Mountain 46.79 78** IAmb IAmb 03 44 06.6
comp=Z,209nm,1.0s
**ULN Ulaanbaatar 46.88 297** P **P** **03 43 40.2 -0.3**
**ULN Ulaanbaatar 46.88 297** ⇑P **P** **03 43 40.2 -0.3**
**ULN Ulaanbaatar 46.88 297** P **P** **03 43 40.1 -0.4**
ULN P **P** **03 43 40.1 -0.4**
ULN P **P** **03 43 40.1 -0.4**
ULN S **S** **03 50 26.5 -1.8**
ULN S **S** **03 50 26.5 -1.8**
ULN S **S** **03 50 26.5 -1.8**
**ULN Ulaanbaatar 46.88 297** *ce*P **P** **03 43 40.8 +0.3**
ULN pmax pmax
comp=Z,99nm,1.7s
ULN MLR MLR
comp=Z,45µm,21.0s
**LCMT Little Creek M 46.95 81** IAmb IAmb 03 44 04.1

comp=Z,329nm,1.3s
**MTPU Mount Pierson 46.96 80** IAmb IAmb 03 44 02.9
comp=Z,173nm,1.2s
**P17A Butcher Ranch, 46.97 77** IAmb IAmb 03 44 05.1
comp=Z,121nm,0.8s
**NOR Nord 46.98 4** ⇑P **P** **03 43 40.0 -0.7**
**NOR Nord 46.98 4** *i* P **P** **03 43 36.5 -4.1**
NOR IAmb IAmb 03 45 51.8
comp=Z,953nm,3.2s
**Q16A Castle Valley 47.04 78** IAmb IAmb 03 44 03.1
comp=Z,163nm,0.9s
**PFO Pinyon Flats O 47.13 87** P **P** **03 43 42.1 -0.4**
PFO IAmb IAmb 03 44 00.3
comp=Z,331nm,1.6s
**PFO Pinyon Flats O 47.13 87** P **P** **03 43 43.3 +0.7**
comp=Z,11nm,0.9s,baz=312,slow=10,SNR=20
PFO LR LR 03 59 27.9
comp=Z,14µm,21.7s,baz=297,slow=31
comp=Z,11nm,0.9s
**PFO Pinyon Flats O 47.13 87** *i* P **P** **03 43 41.4 -1.1**
PFO pmax pmax
comp=Z,352nm,1.5s
PFO MLR MLR
comp=Z,13µm,17.0s
**TPFO Pinon Flats 47.13 87** P **P** **03 43 43.5 +1.0**
baz=311,SNR=12
TPFO S **S** **03 50 33.7 +1.7**
baz=311
**JOW Kunigami 47.19 260** LR LR 04 03 38.6
comp=Z,4µm,19.8s,baz=45,slow=36
**PKCU Pink Cliffs 47.26 80** IAmb IAmb 03 44 40.2
comp=Z,292nm,1.3s
**SONM Songino Array 47.27 297** P **P** **03 43 42.1 -1.3**
SONM IAmb IAmb 03 44 38.5
comp=Z,303nm,1.8s
**SONM Songino Array 47.27 297** P **P** **03 43 44.3 +0.8**
comp=Z,16nm,0.5s,baz=59,slow=6.8,SNR=50
SONM PcP **PcP** **03 45 15.0 +0.9**
comp=Z,8.2nm,0.6s,baz=72,slow=1.8,SNR=5.3
SONM ScP **ScP** **03 49 05.4 +1.0**
comp=Z,4.7nm,1.0s,baz=69,slow=4.0,SNR=3.6
SONM LR LR 04 04 12.6
comp=Z,46µm,20.8s,baz=60,slow=37
SONM PKPPKP **P'P'df** **04 14 58.9 -5.6**
comp=Z,0.4nm,0.4s,baz=204,slow=3.3,SNR=3.5
comp=Z,16nm,0.5s
**SRU San Rafael Swe 47.32 77** IAmb IAmb 03 44 03.5
comp=Z,249nm,1.1s
**NEEM North Greenlan 47.38 14** ⇑P **P** **03 43 43.0 -1.1**
**NEEM North Greenlan 47.38 14** *i* P **P** **03 43 41.5 -2.7**
NEEM IAmb IAmb 03 43 47.1
comp=Z,83nm,0.8s
**ZAK Zakamensk 47.56 302** *e*P **P** **03 43 44.6 -1.1**
ZAK pmax pmax
comp=Z,132nm,1.2s
**K22A Casper 47.60 71** IAmb IAmb 03 44 09.4
comp=Z,239nm,1.1s
**TKX Tecate 47.73 88** IAmb IAmb 03 44 04.9
comp=Z,218nm,1.4s
**RWWY Rawlins 47.77 73** IAMs_20 IAMs_20 04 01 08.8
comp=Z,30µm,22.0s
**W13A Hualapai Mount 47.77 84** IAmb IAmb 03 44 06.1
comp=Z,193nm,1.3s
**TIA Tai'an 47.82 278** P **P** **03 43 47.9 +0.2**
TIA S **S** **03 50 37.6 -3.8**
TIA pmax pmax
comp=Z,160nm,2.2s
TIA pmax pmax
comp=Z,4µm,10.7s
TIA LR LR
comp=Z,12µm,21.6s
TIA LR LR
comp=Z,13µm,17.7s
TIA LR LR
comp=Z,23µm,21.1s
**RMX La Rumorosa 48.03 88** IAmb IAmb 03 44 07.9
comp=Z,190nm,1.4s
**MOY Mondy 48.06 304** *e*P **P** **03 43 48.7 -0.8**
MOY pmax pmax
comp=Z,151nm,1.7s
**GUMO Guam 48.16 232** P **P** **03 43 49.6 -0.9**
**GUMO Guam 48.16 232** P **P** **03 43 50.0 -0.5**
**GUMO Guam 48.16 232** LR LR 03 59 50.8
comp=Z,4µm,21.1s,baz=38,slow=31
**GUMO Guam 48.16 232** P **P** **03 43 50.0 -0.5**
GUMO pmax pmax
comp=Z,400nm,1.2s
**CCX Cicese 48.16 89** IAmb IAmb 03 44 09.1
comp=Z,176nm,1.4s
**RSSD Black Hills 48.20 68** P **P** **03 43 50.6 -0.2**
RSSD IAmb IAmb 03 44 09.6
comp=Z,88nm,0.7s
**RSSD Black Hills 48.20 68** ⇑P **P** **03 43 50.9 +0.1**
**RSSD Black Hills 48.20 68** P **P** **03 43 50.7 -0.2**
RSSD pmax pmax
comp=Z,88nm,0.7s
RSSD MLR MLR
comp=Z,14µm,19.0s
**BLYC Blythe 48.25 86** IAmb IAmb 03 44 13.5
comp=Z,184nm,1.1s
**HHC Hu-ho-hao-te 48.34 287** ⇑*i*P **P** **03 43 53.3 +1.5**
HHC pP pwP 03 44 05.3 -0.6
HHC PP **PP** **03 45 48.6 +4.3**
HHC S **S** **03 50 47.1 -1.8**
HHC pmax pmax
comp=Z,350nm,1.4s
HHC pmax pmax
comp=Z,3µm,4.7s
HHC LR LR
comp=Z,17µm,17.7s
HHC LR LR
comp=Z,25µm,20.1s
HHC LR LR
comp=Z,36µm,21.6s
**KULLO Kullorsuaq 48.37 18** ⇑P **P** **03 43 50.8 -0.7**
**KULLO Kullorsuaq 48.37 18** *i* P P 03 43 45.5 -6.0
KULLO IAmb IAmb 03 45 19.2
comp=Z,90nm,0.9s
**ESJX Sierra Juarez 48.52 89** IAmb IAmb 03 44 12.2
comp=Z,346nm,1.6s
**PATS Pohnpei 48.53 212** P **P** **03 43 55.1 +1.7**
**PATS Pohnpei 48.53 212** P **P** **03 43 54.1 +0.8**
**PATS Pohnpei 48.53 212** P **P** **03 43 54.9 +1.5**
comp=Z,0.0nmcomp=Z,265nm,1.5s
**MDND Maddock 48.56 62** IAMs_20 IAMs_20 04 02 44.0
comp=Z,24µm,22.0s
**HNS HongShan 48.56 281** ⇑P **P** **03 43 54.5 +1.1**
HNS PP **PP** **03 45 48.4 +2.2**
HNS S **S** **03 50 54.8 +3.0**
HNS pmax pmax
comp=Z,200nm,1.7s
HNS pmax pmax
comp=Z,4µm,9.1s
HNS LR LR
comp=Z,10µm,18.0s
HNS LR LR
comp=Z,18µm,18.6s
HNS LR LR
comp=Z,11µm,20.7s
**E28A Huff 48.68 64** IAMs_20 IAMs_20 04 05 21.5
comp=Z,30µm,20.0s
**N23A Red Feather La 49.01 73** P **P** **03 43 58.5 +1.4**
baz=308,SNR=78
N23A S **S** **03 50 59.7 +1.1**
baz=308
**VTX Valle De La Tr 49.03 89** IAmb IAmb 03 44 15.1
comp=Z,125nm,1.3s
**PHWY Pilot Hill 49.05 72** IAmb IAmb 03 44 20.0
comp=Z,108nm,1.2s
**WUAZ Wupatki 49.06 82** IAmb IAmb 03 44 20.5
comp=Z,265nm,1.2s
**WUAZ Wupatki 49.06 82** ⇑P **P** **03 43 58.7 +1.2**
**Y14A Wickenburg 49.08 84** IAmb IAmb 03 44 15.2
comp=Z,191nm,1.4s
**ULM Lac du Bonnet 49.20 57** ⇑P **P** **03 43 57.2 -0.9**
**ULM Lac du Bonnet 49.20 57** P **P** **03 43 57.2 -0.9**
comp=Z,17nm,0.7s,baz=305,slow=7.3,SNR=18
ULM LR LR 04 04 35.0
comp=Z,20µm,21.9s,baz=306,slow=36
comp=Z,17nm,0.7s
**ULM Lac du Bonnet 49.20 57***c i*P **P** **03 43 56.4 -1.7**
**113A Mohawk Valley, 49.37 86** IAmb IAmb 03 44 18.0
comp=Z,313nm,1.5s
**BTO Baotou 49.41 287** *e*P **P** **03 44 01.8 +1.7**
BTO PP **PP** **03 45 50.0 -4.1**
BTO S **S** **03 51 08.3 +4.3**
BTO pmax pmax
comp=Z,4µm,6.6s
BTO LR LR
comp=Z,28µm,18.0s
BTO LR LR
comp=Z,52µm,19.4s
BTO LR LR
comp=Z,65µm,20.8s
**SMCO Snowmass 49.45 75** ⇑P **P** **03 44 01.2 +0.6**
**NJ2 Nanjing 49.46 273** ⇑*i*P **P** **03 44 00.6 +0.2**
NJ2 pP **pwP** **03 44 13.6 -0.4**
NJ2 PP **PP** **03 45 53.1 -1.5**
NJ2 S **S** **03 51 08.9 +4.3**
NJ2 pmax pmax
comp=Z,76nm,1.0s
NJ2 pmax pmax
comp=Z,2µm,6.6s
NJ2 LR LR
comp=Z,9µm,21.8s
NJ2 LR LR
comp=Z,7µm,22.7s
NJ2 LR LR
comp=Z,15µm,17.0s
**X16A Lo Mia Camp, P 49.74 83** IAmb IAmb 03 44 21.0
comp=Z,444nm,1.8s
**MVCO Mesa Verde 49.76 78** IAMs_20 IAMs_20 04 01 49.3
comp=Z,25µm,22.0s
**MVCO Mesa Verde 49.76 78** ⇑P **P** **03 44 03.7 +0.8**
**TIY Taiyuan 49.76 283** ⇑P **P** **03 44 04.4 +1.7**
TIY PP **PP** **03 46 03.8 +6.5**
TIY S **S** **03 51 10.0 +1.2**
TIY sS **sS** **03 51 27.9 +0.3**
TIY pmax pmax
comp=Z,150nm,0.9s
TIY pmax pmax
comp=Z,3µm,4.1s
TIY LR LR
comp=Z,7µm,23.4s
TIY LR LR
comp=Z,9µm,22.0s
TIY LR LR
comp=Z,15µm,24.7s
**UPNV Upernavik 49.86 19** *i* P **P** **03 44 01.0 -1.8**
UPNV IAmb IAmb 03 44 05.6
comp=Z,48nm,0.7s
**ISCO Idaho Springs 49.88 74** IAmb IAmb 03 44 29.1
comp=Z,452nm,1.8s
ISCO IAMs_20 IAMs_20 04 02 16.8
comp=Z,33µm,22.0s
**ISCO Idaho Springs 49.88 74** ⇑P **P** **03 44 05.2 +1.4**
**KBS Kingsbay 49.93 358** P **P** **03 44 03.1 -0.1**
**KBS Kingsbay 49.93 358** *e*P **P** **03 44 03.2 -0.1**
KBS IVmBBB 03 44 14.3
comp=Z,2µm,3.5s
KBS *e*S **S** **03 51 09.8 -0.3**
KBS IVMs_BB IVMs_BB 04 10 10.1
comp=Z,7µm,16.6s
**KBS Kingsbay 49.93 358** ⇑P **P** **03 44 03.3 0.0**
**KBS Kingsbay 49.93 358***c e*P **P** **03 44 04.0 +0.7**
KBS pmax pmax
comp=Z,62nm,1.3s
**KBS Kingsbay 49.93 358** *i* P P 03 43 58.4 -4.9
**BRIGG Diggsdale 50.17 72** IAmb IAmb 03 44 27.5
comp=Z,313nm,1.1s
**AGMN Agassiz Nation 50.34 59** IAmb IAmb 03 44 42.2
comp=Z,293nm,1.4s
AGMN IAMs_20 IAMs_20 04 09 11.9
comp=Z,21µm,18.0s
**AGMN Agassiz Nation 50.34 59** ⇑P **P** **03 44 05.8 -1.0**
**W18A Petrified Fore 50.34 81** IAmb IAmb 03 44 28.3
comp=Z,273nm,1.1s
**W18A Petrified Fore 50.34 81** P **P** **03 44 08.7 +1.4**
baz=311,SNR=49
W18A S **S** **03 51 19.8 +2.6**
baz=311
**TARA Tarawa 50.36 192** P **P** **03 44 08.6 +1.4**
**PIX Pinacate 50.38 87** IAmb IAmb 03 44 25.6
comp=Z,286nm,1.4s
**S22A 4UR Ranch, Cre 50.44 76** IAmb IAmb 03 44 27.7
comp=Z,321nm,1.3s
**S22A 4UR Ranch, Cre 50.44 76** P **P** **03 44 09.7 +1.6**
baz=310,SNR=253
S22A S **S** **03 51 21.0 +2.3**
baz=310
**KNGR Kungurtug, Tuv 50.47 305** *i* P **P** **03 44 08.0 +0.1**
KNGR pmax pmax
comp=Z,196nm,1.6s
KNGR MLR MLR
comp=Z,9µm,17.0s
**214A Organ Pipe Nat 50.52 86** IAmb IAmb 03 44 26.1
comp=Z,355nm,1.4s
**214A Organ Pipe Nat 50.52 86** P **P** **03 44 09.3 +0.8**
baz=312,SNR=24
214A S **S** **03 51 22.2 +2.8**
baz=312
**SPA0 Spitsbergen Ar 50.52 356** *e*P **P** **03 44 06.7 -1.2**
SPA0 *epe*P **pP** **03 44 20.1 +0.8**
SPA0 IVmB_BB 03 44 33.2
comp=Z,1µm,1.9s
SPA0 *e*PP **PP** **03 46 04.0 +0.6**
SPA0 *e*S **S** **03 51 19.0 +0.7**
**SPITS Spitsbergen Ar 50.52 356** P **P** **03 44 07.4 -0.4**
comp=Z,17nm,0.5s,baz=44,slow=6.1,SNR=32
SPITS LR LR 04 06 11.6
comp=Z,7µm,18.7s,baz=336,slow=37
comp=Z,17nm,0.5s
**SPB2 Spitsbergen Ar 50.52 356** P **P** **03 44 07.5 -0.4**
SPB2 IAmb IAmb 03 44 47.4
comp=Z,188nm,1.2s
**X18A Snowflake 50.59 82** IAmb IAmb 03 44 28.4
comp=Z,562nm,1.8s
**Q24A Divide 50.68 74** IAmb IAmb 03 44 31.4
comp=Z,143nm,1.2s
**Q24A Divide 50.68 74** P **P** **03 44 11.2 +1.3**
baz=309,SNR=17
Q24A S **S** **03 51 23.5 +1.3**
baz=309
**SUSD Miller 50.93 65** IAMs_20 IAMs_20 04 03 38.2
comp=Z,19µm,21.0s
**SDCO Great Sand Dun 51.25 76** IAmb IAmb 03 44 33.5
comp=Z,361nm,1.4s
**SDCO Great Sand Dun 51.25 76** ⇑P **P** **03 44 15.3 +1.1**
**OGNE Ogallala 51.30 70** ⇑P **P** **03 44 15.3 +1.0**
**NUUG Nuugaatsiaq 51.39 20** ⇑P **P** **03 44 13.3 -1.1**
**NUUG Nuugaatsiaq 51.39 20** *i* P **P** **03 44 12.4 -2.0**
NUUG IAmb IAmb 03 45 40.1
comp=Z,51nm,1.2s
**DAG Danmarks Havn 51.53 6** ⇑P **P** **03 44 14.1 -1.4**
**DAG Danmarks Havn 51.53 6** *i* P **P** **03 44 14.0 -1.4**
DAG IAmb IAmb 03 45 34.4
comp=Z,44nm,1.1s
**TUC Tucson 51.55 84** P **P** **03 44 17.3 +1.1**
TUC IAmb IAmb 03 44 34.1
comp=Z,360nm,1.6s
**TUC Tucson 51.55 84** ⇑P **P** **03 44 17.2 +1.0**
**TUC Tucson 51.55 84** P **P** **03 44 17.3 +1.1**
TUC pmax pmax
comp=Z,360nm,1.6s
TUC MLR MLR
comp=Z,10µm,18.0s
**F33A 5 Mile Ranch, 51.58 62** IAmb IAmb 03 44 51.1
comp=Z,140nm,1.1s
F33A IAMs_20 IAMs_20 04 07 20.9
comp=Z,23µm,19.0s
**HOPEN Hopen 51.65 353** *e*P **P** **03 44 15.3 -1.0**
HOPEN IVmB_BB 03 44 40.6
comp=Z,2µm,2.1s
HOPEN *e*PP **PP** **03 46 14.8 +1.2**
HOPEN *e*S **S** **03 51 34.4 +0.4**
HOPEN IVMs_BB IVMs_BB 04 06 28.4
comp=Z,4µm,19.7s
**HSPB Hornsund (broa 51.72 356** *e*P **P** **03 44 16.5 -0.2**
HSPB *e*S **S** **03 51 31.8 -3.0**
HSPB *e*L L 04 02 05.2
comp=Z,19µm,29.1s
**LYN LuoYang 51.78 280** ⇑*i*P **P** **03 44 18.8 +0.9**
LYN PP **PP** **03 46 13.5 -2.1**
LYN S **S** **03 51 35.4 -1.4**
LYN pmax pmax
comp=Z,200nm,1.9s
LYN pmax pmax
comp=Z,5µm,5.7s
LYN LR LR
comp=Z,16µm,19.0s
LYN LR LR
comp=Z,17µm,18.8s
LYN LR LR
comp=Z,11µm,16.8s
**XMAS Kiritimati 51.96 154** IAMs_20 IAMs_20 04 01 40.3
comp=Z,22µm,20.0s
**KSCO Kaye Shedlock' 52.17 72** IAMs_20 IAMs_20 04 04 13.4
comp=Z,23µm,21.0s
**UMMG Uummannaq 52.27 20** *i* P **P** **03 44 17.4 -3.6**
UMMG IAmb IAmb 03 46 46.3
comp=Z,281nm,2.0s
**T25A Trinidad 52.30 75** P **P** **03 44 23.3 +1.4**
baz=310,SNR=174
T25A S **S** **03 51 49.3 +5.0**
baz=310
**ANMO Albuquerque 52.48 79** P **P** **03 44 23.9 +0.6**
**ANMO Albuquerque 52.48 79** IAMs_20 IAMs_20 04 03 52.2
comp=Z,18µm,22.0s
**ANMO Albuquerque 52.48 79** ⇑P **P** **03 44 24.1 +0.9**
**ANMO Albuquerque 52.48 79** P **P** **03 44 24.2 +0.9**
comp=Z,25nm,1.0s,baz=41,slow=7.9,SNR=72
ANMO LR LR 04 04 13.7
comp=Z,19µm,21.4s,baz=44,slow=33
comp=Z,25nm,1.0s
**ANMO Albuquerque 52.48 79***c i*P **P** **03 44 23.7 +0.4**
ANMO pmax pmax
comp=Z,37nm,1.4s
ANMO MLR MLR
comp=Z,8µm,17.0s
**ECSD EROS Data Cent 52.70 64** IAMs_20 IAMs_20 04 04 43.8
comp=Z,23µm,22.0s
**ECSD EROS Data Cent 52.70 64** ⇑P **P** **03 44 23.8 -0.7**
**TATO Taipei 52.75 264** IAMs_20 IAMs_20 04 04 43.5
comp=Z,21µm,22.0s
**Y22D IRIS PASSCAL I 52.77 80** IAMs_20 IAMs_20 04 03 34.0
comp=Z,25µm,21.0s
**Y22D IRIS PASSCAL I 52.77 80** P **P** **03 44 26.9 +1.5**
baz=312
Y22D S **S** **03 51 56.6 +6.0**
baz=312
**FRB Frobisher Bay 52.77 32** ⇑P **P** **03 44 23.1 -1.6**
**FRB Frobisher Bay 52.77 32** LR LR 04 10 05.3
comp=Z,34µm,18.2s,baz=304,slow=40
**EYMN Ely 52.88 57** IAmb IAmb 03 45 01.5
comp=Z,219nm,1.4s
**EYMN Ely 52.88 57** IAMs_20 IAMs_20 04 09 14.1
comp=Z,20µm,18.0s
**EYMN Ely 52.88 57** ⇑P **P** **03 44 25.0 -0.8**
**YHNB Yeheng 53.04 264** IAMs_20 IAMs_20 04 05 15.3
comp=Z,18µm,22.0s
**319A Douglas 53.12 84** IAmb IAmb 03 44 46.6
comp=Z,460nm,1.5s
**SUMG Summit 53.24 14** P **P** **03 44 28.2 -0.4**
SUMG IAMs_20 IAMs_20 04 09 29.9
comp=Z,20µm,20.0s
**SUMG Summit 53.24 14** S **S** **03 51 50.2 -6.3**
**SUMG Summit 53.24 14** P **P** **03 44 28.2 -0.4**
SUMG pmax pmax
comp=Z,98nm,1.0s
SUMG MLR MLR
comp=Z,20µm,20.0s
**SUMG Summit 53.24 14** *i* P **P** **03 44 27.0 -1.6**
SUMG IAmb IAmb 03 45 42.9
comp=Z,93nm,1.0s
**NACB Ninganchiao 53.26 263** P **P** **03 44 29.0 +0.1**
**NACB Ninganchiao 53.26 263** IAmb IAmb 03 45 40.5
comp=Z,187nm,1.5s
**121A Cookes Peak, D 53.27 82** IAmb IAmb 03 44 48.2
comp=Z,483nm,1.9s
**121A Cookes Peak, D 53.27 82** P **P** **03 44 30.4 +1.3**
baz=312,SNR=39
121A S **S** **03 52 01.1 +3.6**
baz=312
**BGNE Belgrade 53.28 67** IAmb IAmb 03 44 31.6
comp=Z,280nm,0.9s
BGNE IAMs_20 IAMs_20 04 04 54.6
comp=Z,21µm,22.0s
**WHN Wuhan 53.31 275** P **P** **03 44 29.3 +0.1**
WHN sP **pP** **03 44 38.6 -2.0**
WHN PcP **PcP** **03 45 35.5 -0.8**
WHN PP **PP** **03 46 29.5 +0.1**
WHN S **S** **03 52 01.3 +3.6**
WHN pmax pmax
comp=Z,670nm,1.2s
WHN pmax pmax
comp=Z,10µm,4.7s
WHN LR LR
comp=Z,9µm,14.1s
WHN LR LR
comp=Z,10µm,13.2s
WHN LR LR
comp=Z,33µm,20.6s
**E38A The Farm, Brul 53.69 59** IAmb IAmb 03 45 07.0
comp=Z,386nm,1.4s
E38A IAMs_20 IAMs_20 04 09 35.8
comp=Z,15µm,19.0s
**RTBA Rita Blanca 53.77 75** IAmb IAmb 03 44 51.4
comp=Z,349nm,1.2s
**DBG Daneborg 53.79 7** ⇑P **P** **03 44 30.6 -1.5**
**DBG Daneborg 53.79 7** *i* P **P** **03 44 27.3 -4.8**
DBG IAmb IAmb 03 45 01.7
comp=Z,348nm,2.4s
**SPMN Marine on St. 53.88 61** IAmb IAmb 03 44 59.8
comp=Z,164nm,1.4s
SPMN IAMs_20 IAMs_20 04 11 16.1
comp=Z,21µm,18.0s
**SSLB Suanglung 53.94 264** P **P** **03 44 34.5 +0.6**
**SSLB Suanglung 53.94 264** IAmb IAmb 03 44 54.1
comp=Z,233nm,1.1s
**L34A Svendsen Farm, 53.95 66** IAMs_20 IAMs_20 04 10 16.4
comp=Z,15µm,18.0s
**BJO1 Bjornoya 54.00 354** *e*P **P** **03 44 33.5 -0.1**
BJO1 IVmB_BB 03 44 42.9
comp=Z,2µm,4.8s
BJO1 *e*PP **PP** **03 46 34.8 0.0**
BJO1 *e*S **S** **03 52 06.9 +1.0**
BJO1 IVMs_BB IVMs_BB 04 14 44.9
comp=Z,4µm,21.4s
**YULB Yu-li 54.02 263** P **P** **03 44 34.0 -0.5**
**YULB Yu-li 54.02 263** IAmb IAmb 03 44 37.6
comp=Z,239nm,1.4s
**CBKS Cedar Bluff 54.02 71** ⇑P **P** **03 44 35.2 +0.8**
**SRIG Santa Rosalia 54.08 90** ⇑P **P** **03 44 35.3 +0.5**
**XAN Xi'an 54.31 282** ⇑P **P** **03 44 36.6 0.0**
XAN pP pP 03 44 48.5 +0.6
XAN PP **PP** **03 46 40.5 +2.0**
XAN S **S** **03 52 10.9 -0.4**
XAN sS pS 03 52 26.5 +1.4
XAN pmax pmax
comp=Z,200nm,1.6s
XAN pmax pmax
comp=Z,4µm,10.6s
XAN LR LR
comp=Z,14µm,23.5s
XAN LR LR
comp=Z,16µm,22.5s
XAN LR LR
comp=Z,19µm,23.9s
**TPUB Ta-pu 54.50 263** P **P** **03 44 39.6 +1.6**
**TPUB Ta-pu 54.50 263** IAmb IAmb 03 44 40.9
comp=Z,234nm,1.3s
TPUB IAMs_20 IAMs_20 04 06 06.1
comp=Z,21µm,22.0s
**ZAA0 Zalesovo Array 54.57 314** P **P** **03 44 37.5 -0.6**
**ZALV Zalesovo Beam 54.57 314** P **P** **03 44 37.5 -0.5**
**ZALV Zalesovo Beam 54.57 314** P **P** **03 44 38.2 +0.2**
comp=Z,2.6nm,0.5s,baz=56,slow=6.4,SNR=8.3
ZALV PcP **PcP** **03 45 41.8 +1.1**
comp=Z,40nm,0.7s,baz=45,slow=3.0,SNR=12
ZALV LR LR 04 08 53.0
comp=Z,13µm,22.0s,baz=45,slow=37
ZALV PKP2bc 04 15 06.2
comp=Z,0.3nm,0.3s,baz=241,slow=4.9,SNR=4.0
comp=Z,2.6nm,0.5s
**QZH Quanzhou 54.58 266** ⇑*i*P **P** **03 44 39.3 +0.8**
QZH S **S** **03 52 20.3 +5.3**
QZH sS **sS** **03 52 32.9 -1.2**
QZH SS **SS** **03 56 01.5 +3.7**
QZH pmax pmax
comp=Z,190nm,1.4s
QZH pmax pmax
comp=Z,4µm,8.8s
QZH LR LR
comp=Z,9µm,21.0s
QZH LR LR
comp=Z,3µm,24.0s
QZH LR LR
comp=Z,12µm,23.7s
**N35A Tabor 55.08 66** IAMs_20 IAMs_20 04 09 11.5

comp=Z,15µm,20.0s
**G40A Rib Lake** **55.27 59** IAmb IAmb 03 45 18.8
comp=Z,233nm,1.4s
G40A IAMs_20 IAMs_20 04 08 46.7
comp=Z,17µm,19.0s
**COWI Conover** **55.30 58** IAmb IAmb 03 45 26.2
COWI IAMs_20 IAMs_20 04 10 57.4
comp=Z,18µm,18.0s
**COWI Conover** **55.30 58** ⇑P **P** **03 44 42.0 -1.5**
**MNTX Cornudas Mount** **55.33 81** ⇑P **P** **03 44 44.9 +1.0**
**AMTX Amarillo** **55.45 76** IAMs_20 IAMs_20 04 05 34.3
comp=Z,16µm,22.0s
**AMTX Amarillo** **55.45 76** ⇑P **P** **03 44 45.6 +0.8**
**SFJD Kangerlussuaq** **55.50 22** P **P** **03 44 44.0 -0.5**
SFJD IAmb IAmb 03 45 44.8
comp=Z,126nm,1.4s
**SFJD Kangerlussuaq** **55.50 22** IAMs_20 IAMs_20 04 10 12.3
comp=Z,19µm,21.0s
**SFJD Kangerlussuaq** **55.50 22** ⇑P **P** **03 44 43.6 -1.0**
**SFJD Kangerlussuaq** **55.50 22** LR LR 04 10 23.8
comp=Z,19µm,21.4s,baz=323,slow=38
**SFJD Kangerlussuaq** **55.50 22** P **P** **03 44 44.0 -0.5**
SFJD pmax pmax
comp=Z,126nm,1.4s
SFJD MLR MLR
comp=Z,19µm,21.0s
**SFJD Kangerlussuaq** **55.50 22** *i* P P 03 44 38.3 -6.3
SFJD IAmb IAmb 03 45 44.0
comp=Z,146nm,1.4s
**KSU1 Kansas State U** **55.68 69** IAmb IAmb 03 45 09.1
comp=Z,226nm,0.9s
KSU1 IAMs_20 IAMs_20 04 13 14.3
comp=Z,20µm,18.0s
**KSU1 Kansas State U** **55.68 69** ⇑P **P** **03 44 46.1 -0.1**
**SCIA State Center** **55.79 64** IAmb IAmb 03 45 10.8
comp=Z,376nm,1.4s
SCIA IAMs_20 IAMs_20 04 06 40.8
comp=Z,25µm,22.0s
**SCIA State Center** **55.79 64** ⇑P **P** **03 44 47.1 +0.1**
**CNSH ChangSha** **55.84 274** P **P** **03 44 47.6 +0.1**
CNSH S **S** **03 52 32.8 +1.1**
CNSH pmax pmax
comp=Z,56nm,2.1s
CNSH LR LR
comp=Z,7µm,24.4s
CNSH LR LR
comp=Z,5µm,22.3s
CNSH LR LR
comp=Z,10µm,23.1s
**I40A Norwalk** **55.93 61** IAmb IAmb 03 45 13.9
comp=Z,90nm,0.8s
I40A IAMs_20 IAMs_20 04 10 10.5
comp=Z,19µm,18.0s
**LZH Lanzhou** **56.03 287**⇑ *i* P **P** **03 44 50.6 +1.5**
LZH pP pwP 03 45 02.1 -1.1
LZH ScP **ScP** **03 49 46.6 +4.2**
LZH S **S** **03 52 35.6 +1.1**
LZH sS sS 03 52 53.1 -1.2
LZH pmax pmax
comp=Z,540nm,1.2s
LZH pmax pmax
comp=Z,5µm,4.1s
LZH LR LR
comp=Z,26µm,18.9s
LZH LR LR
comp=Z,28µm,18.7s
LZH LR LR
comp=Z,46µm,20.1s
**F42A Maple Grove Fa** **56.05 58** IAmb IAmb 03 45 24.9
comp=Z,169nm,1.1s
F42A IAMs_20 IAMs_20 04 07 37.0
comp=Z,19µm,22.0s
**ICESG Greenland Ices** **56.06 17** ⇑P **P** **03 44 47.5 -1.5**
**ICESG Greenland Ices** **56.06 17** *i* P **P** **03 44 46.3 -2.7**
ICESG IAmb IAmb 03 45 48.4
comp=Z,67nm,0.8s
**DGZ Jazzator, Alta** **56.11 309***c i* P **P** **03 44 48.4 -1.0**
DGZ pmax pmax
comp=Z,66nm,1.4s
DGZ MLR MLR
comp=Z,20µm,18.0s
**KAN08 Anthony NE Sta** **56.12 71** IAmb IAmb 03 45 09.5
comp=Z,417nm,1.6s
**OK038 West end E0370** **56.15 72** IAMs_20 IAMs_20 04 06 50.8
comp=Z,14µm,20.0s
**SMWD Samnorwood** **56.17 75** IAmb IAmb 03 45 08.9
comp=Z,204nm,1.0s
**VHRN Van Horn** **56.20 82** IAmb IAmb 03 45 12.3
comp=Z,220nm,1.1s
**GTA Gaotai** **56.20 292** P **P** **03 44 51.0 +0.8**
GTA pP pP 03 44 56.6 -5.3
GTA sP sP 03 45 00.8 -5.9
GTA PP **PP** **03 46 58.8 +3.4**
GTA PcS **PcS** **03 49 47.4 -0.7**
GTA S **S** **03 52 37.3 +0.6**
GTA pmax pmax
comp=Z,210nm,1.3s
GTA pmax pmax
comp=Z,3µm,7.1s
GTA LR LR
comp=Z,18µm,20.7s
GTA LR LR
comp=Z,17µm,19.6s
GTA LR LR
comp=Z,32µm,21.1s
**KAN14 Manchester OK** **56.30 71** IAmb IAmb 03 45 13.7
comp=Z,346nm,1.8s
**PECS Pecos** **56.49 80** IAmb IAmb 03 45 14.6
comp=Z,163nm,1.2s
**N38A Joes South For** **56.51 65** IAmb IAmb 03 44 54.8
comp=Z,212nm,0.8s
N38A IAMs_20 IAMs_20 04 07 02.0
comp=Z,16µm,22.0s
**JFWS Jewell Farm** **56.78 61** IAmb IAmb 03 45 19.4
comp=Z,163nm,0.9s
**JFWS Jewell Farm** **56.78 61** IAMs_20 IAMs_20 04 07 36.9
comp=Z,24µm,22.0s
**JFWS Jewell Farm** **56.78 61** ⇑P **P** **03 44 53.2 -0.8**
**POST Post** **56.79 77** IAmb IAmb 03 45 20.2
comp=Z,184nm,0.9s
**L40A Anamosa** **56.80 63** IAmb IAmb 03 45 20.4
comp=Z,157nm,1.0s
**I42A Draeger Farm,** **56.86 60** IAmb IAmb 03 45 30.3
comp=Z,194nm,1.4s
I42A IAMs_20 IAMs_20 04 08 03.0
comp=Z,22µm,22.0s
**DY2G Dye2** **56.94 21** ⇑P **P** **03 44 53.7 -1.4**
**DY2G Dye2** **56.94 21** *i* P P 03 44 48.3 -6.9
DY2G IAmb IAmb 03 45 50.5
comp=Z,252nm,1.5s
**H43A Windswept, Lux** **57.10 59** IAmb IAmb 03 45 24.6
comp=Z,92nm,0.8s
H43A IAMs_20 IAMs_20 04 11 38.0
comp=Z,19µm,18.0s
**P38A Dawn** **57.11 66** IAmb IAmb 03 44 58.9
comp=Z,192nm,0.8s
P38A IAMs_20 IAMs_20 04 14 00.2
comp=Z,17µm,18.0s
**SN07 Snyder 07** **57.14 77** IAmb IAmb 03 45 19.1
comp=Z,438nm,1.7s
**MNHN Monahans** **57.20 80** IAmb IAmb 03 45 21.0
comp=Z,187nm,0.9s
**OK048 Pawnee Station** **57.27 71** IAMs_20 IAMs_20 04 13 58.3
comp=Z,14µm,18.0s
**OK051 E0350 and S346** **57.27 71** IAmb IAmb 03 45 18.5
comp=Z,301nm,1.2s
**SN05 Snyder 5** **57.29 77** IAmb IAmb 03 45 21.6
comp=Z,97nm,1.0s
**SCO Scoresbysund** **57.30 9** IAMs_20 IAMs_20 04 10 04.2
comp=Z,22µm,21.0s
**SCO Scoresbysund** **57.30 9** ⇑P **P** **03 44 57.0 -0.3**
**SCO Scoresbysund** **57.30 9** *i* P **P** **03 44 57.0 -0.3**
SCO IAmb IAmb 03 45 53.9
comp=Z,259nm,2.3s
**WMOK Wichita Mounta** **57.30 74** IAmb IAmb 03 45 16.7
comp=Z,181nm,1.2s
**WMOK Wichita Mounta** **57.30 74** IAMs_20 IAMs_20 04 08 18.4
comp=Z,17µm,20.0s
**WMOK Wichita Mounta** **57.30 74** ⇑P **P** **03 44 58.5 +0.6**
**VADS Vadso** **57.32 349** *e*P **P** **03 44 56.7 -0.7**
VADS IVmB_BB 03 45 07.8
comp=Z,2µm,3.4s
VADS *e*S **S** **03 52 49.8 -0.5**
VADS *e*SS **SS** **03 56 42.3 +3.3**
VADS IVMs_BB IVMs_BB 04 09 49.3
comp=Z,6µm,22.2s
**ALPN Alpine** **57.32 81** IAmb IAmb 03 45 16.2
comp=Z,198nm,1.4s
**HAMF Hammerfest** **57.41 352** *e*P **P** **03 44 57.0 -1.1**
HAMF IVmB_BB 03 45 22.6
comp=Z,2µm,3.9s
HAMF *e*PP **PP** **03 47 05.4 +0.2**
HAMF *e*S **S** **03 52 49.8 -1.6**
HAMF IVMs_BB IVMs_BB 04 09 59.9
comp=Z,5µm,19.9s
**NUUK Nuuk** **57.47 25** ⇑P **P** **03 44 58.8 +0.2**
**NUUK Nuuk** **57.47 25** *i* P **P** **03 44 55.2 -3.4**
NUUK IAmb IAmb 03 46 20.7
comp=Z,110nm,1.3s
**LPIG La Paz** **57.59 91** LR LR 04 04 08.7
comp=Z,6µm,22.0s,baz=308,slow=30
**OK052 Battle Ridge R** **57.64 71** IAMs_20 IAMs_20 04 14 12.1
comp=Z,16µm,18.0s
**OK031 S. Brethren Rd** **57.64 72** IAMs_20 IAMs_20 04 14 12.2
comp=Z,16µm,18.0s
**E46A Sault Ste Mari** **57.65 55** IAmb IAmb 03 45 57.8
comp=Z,189nm,0.9s
**L42A Oliver, Polo** **57.70 62** IAmb IAmb 03 45 26.4
comp=Z,210nm,1.1s
L42A IAMs_20 IAMs_20 04 08 14.5
comp=Z,17µm,21.0s
**FNO Franklin** **57.78 72** IAmb IAmb 03 45 22.3
comp=Z,359nm,1.7s
**JMIC Jan Mayen** **57.80 4** *e*P **P** **03 45 01.2 +0.4**
JMIC IVmB_BB 03 45 20.9
comp=Z,1µm,2.8s
JMIC *e*S **S** **03 52 57.0 +0.5**
JMIC IVMs_BB IVMs_BB 04 05 44.8
comp=Z,5µm,25.4s
**JMIC Jan Mayen** **57.80 4** LR LR 04 09 05.4
comp=Z,5µm,21.4s,baz=349,slow=35
**JMI Jan Mayen** **57.85 4** *e*P **P** **03 45 01.4 +0.3**
JMI IVmBBB 03 45 17.2
comp=Z,3µm,2.5s
JMI *e*S **S** **03 52 58.7 +1.6**
JMI IVMs_BB IVMs_BB 04 05 45.2
comp=Z,6µm,29.5s
**N41A Harden Midland** **57.91 64** IAmb IAmb 03 45 24.6
comp=Z,303nm,1.3s
**KEV Kevo** **57.93 350** IAMs_20 IAMs_20 04 10 53.5
comp=Z,16µm,21.0s
**K43A Burlington** **57.97 60** IAmb IAmb 03 45 28.8
comp=Z,178nm,1.1s
K43A IAMs_20 IAMs_20 04 11 31.3
comp=Z,21µm,19.0s
**P40A Paris** **58.03 65** IAMs_20 IAMs_20 04 07 48.3
comp=Z,17µm,22.0s
**TXAR Lajitas Array** **58.03 82** P **P** **03 45 03.6 +0.4**
comp=Z,39nm,0.9s,baz=305,slow=4.4,SNR=218
TXAR LR LR 04 09 35.4
comp=Z,6µm,19.3s,baz=316,slow=36
TXAR PKPPKP P'P'df 04 14 36.4 -11
comp=Z,0.9nm,1.1s,baz=151,slow=2.9,SNR=4.2
TXAR PKP2bc 04 14 58.6
comp=Z,1.2nm,0.9s,baz=165,slow=6.3,SNR=5.1
comp=Z,39nm,0.9s
**SLBS Sierra La Lagu** **58.12 91** P **P** **03 45 04.5 +0.6**
SLBS IAmb IAmb 03 45 26.4
comp=Z,426nm,1.6s
**SLBS Sierra La Lagu** **58.12 91** ⇑P **P** **03 45 05.0 +1.2**
**WTFS Witchita Falls** **58.16 74** IAmb IAmb 03 45 22.5
comp=Z,269nm,1.1s
**I45A Fountain** **58.21 58** IAmb IAmb 03 45 31.4
comp=Z,154nm,1.0s
I45A IAMs_20 IAMs_20 04 12 28.0
comp=Z,19µm,18.0s
**ABTX Abilene, Hawle** **58.23 76** IAMs_20 IAMs_20 04 07 56.1
comp=Z,14µm,22.0s
**SOEG Soedalen** **58.23 14** *i* P **P** **03 44 59.2 -4.7**
SOEG IAmb IAmb 03 45 45.8
comp=Z,61nm,1.3s
**ARA0 ARCESS Array S** **58.30 351** *e*P **P** **03 45 04.3 -0.1**
ARA0 *e*S **S** **03 53 01.8 -1.3**
**ARCES ARCESS Array B** **58.30 351** P **P** **03 45 03.4 -1.0**
ARCES IAmb IAmb 03 45 56.4
comp=Z,123nm,1.4s
**ARCES ARCESS Array B** **58.30 351** P **P** **03 45 03.4 -1.0**
comp=Z,5.6nm,0.4s,baz=28,slow=8.4,SNR=53
ARCES ScP **ScP** **03 49 49.0 -2.7**
comp=Z,6.5nm,1.0s,baz=15,slow=6.3,SNR=3.9
ARCES LR LR 04 11 14.5
comp=Z,12µm,20.6s,baz=14,slow=37
ARCES PKP2bc 04 14 53.7
comp=Z,3.7nm,0.9s,baz=241,slow=2.5,SNR=4.5
comp=Z,5.6nm,0.4s
**HPIG** **58.47 85** IAmb IAmb 03 45 23.8
comp=Z,224nm,1.3s
**HPIG** **58.47 85** ⇑P **P** **03 45 06.8 +0.3**
**OZNA Ozona** **58.49 79** IAmb IAmb 03 45 29.4
comp=Z,189nm,1.1s
**GLMI Grayling** **58.53 56** IAmb IAmb 03 46 15.9
comp=Z,191nm,0.9s
GLMI IAMs_20 IAMs_20 04 13 12.4
comp=Z,14µm,18.0s
**GLMI Grayling** **58.53 56** ⇑P **P** **03 45 06.5 +0.2**
**L44A Lake County Fo** **58.55 61** IAmb IAmb 03 45 30.7
comp=Z,224nm,1.1s
**L44A Lake County Fo** **58.55 61** P **P** **03 45 06.2 -0.4**
baz=312,SNR=6.7
L44A S **S** **03 53 03.8 -3.3**
baz=312
**RLO Rose Lookout** **58.58 70** IAmb IAmb 03 45 29.7
comp=Z,376nm,1.5s
**LVZ Lovozero** **58.70 346** P **P** **03 45 07.2 0.0**
LVZ IAmb IAmb 03 45 57.6
comp=Z,110nm,1.2s
LVZ IAMs_20 IAMs_20 04 13 02.7
comp=Z,21µm,21.0s
**LVZ Lovozero** **58.70 346***ce*P **P** **03 45 08.3 +1.1**
LVZ pmax pmax
comp=Z,163nm,2.5s
LVZ MLR MLR
comp=Z,21µm,21.0s
**R40A Maddies Statio** **58.74 67** IAmb IAmb 03 45 24.9
comp=Z,99nm,0.6s
R40A IAMs_20 IAMs_20 04 14 51.2
comp=Z,13µm,18.0s
**U38A Gravette** **58.77 70** IAmb IAmb 03 45 27.8
comp=Z,172nm,1.1s
U38A IAMs_20 IAMs_20 04 13 48.2
comp=Z,14µm,18.0s
**TRO Tromso** **58.79 353** *e*P **P** **03 45 07.1 -0.6**
TRO IVmB_BB 03 45 14.4
comp=Z,2µm,6.5s
TRO *e*S **S** **03 53 08.8 -0.6**
TRO IVMs_BB IVMs_BB 04 13 32.6
comp=Z,3µm,19.8s
**ZSN Zaisan** **58.88 308** *e*P **P** **03 45 08.0 -0.8**
comp=Z,31nm,0.8s,baz=308
ZSN *e*S **S** **03 53 11.7 +0.3**
baz=308
**ZSN Zaisan** **58.88 308** *e*P **P** **03 45 08.0 -0.8**
ZSN *e*S **S** **03 53 11.6 +0.3**
ZSN pmax pmax
comp=Z,31nm,0.8s
**HDIL Hopedale** **58.89 63** IAMs_20 IAMs_20 04 11 36.9
comp=Z,17µm,19.0s
**FW03 Perrin-Whitt E** **58.90 75** IAmb IAmb 03 45 27.8
comp=Z,191nm,1.0s
**M44A Midewin, Midew** **59.02 61** IAMs_20 IAMs_20 04 13 57.1
comp=Z,19µm,19.0s
**KTK1 Kautokeino** **59.03 351** *e*P **P** **03 45 08.8 -0.6**
KTK1 IVmB_BB 03 45 16.6
comp=Z,2µm,3.6s
KTK1 *e*S **S** **03 53 11.1 -1.5**
KTK1 IVMs_BB IVMs_BB 04 11 59.3
comp=Z,6µm,19.9s
**SEM Semipalatinsk** **59.03 313** *e*P **P** **03 45 09.1 -1.0**
baz=313
SEM LR LR 04 12 30.8
comp=Z,6µm,18.7s,baz=313
**SEM Semipalatinsk** **59.03 313** *e*P **P** **03 45 09.0 -1.0**
**HHAR Hobbs** **59.14 69** IAmb IAmb 03 45 28.4
comp=Z,75nm,0.7s
**APA Apatity** **59.18 347**⇓ *i* P **P** **03 45 07.9 -2.6**
APA *i* 03 45 57.7
APA *i* 03 47 28.2
APA *i* 03 54 50.0
APA pmax pmax
comp=Z,11nm,1.1s
**Z35A Perchaven, San** **59.19 74** IAmb IAmb 03 45 29.5
comp=Z,260nm,1.2s
**FW06 Azle** **59.25 75** IAmb IAmb 03 45 30.4
comp=Z,251nm,1.1s
**ISOG Isortoq, Green** **59.28 19** ⇑P **P** **03 45 09.8 -1.4**
**ISOG Isortoq, Green** **59.28 19** *i* P P 03 45 05.2 -6.0
ISOG IAmb IAmb 03 46 00.7
comp=Z,618nm,2.4s
**HKPS Hong Kong Po S** **59.31 268** P **P** **03 45 13.8 +1.8**
**P43A Skaggs, Pawnee** **59.38 64** IAMs_20 IAMs_20 04 08 41.1
comp=Z,22µm,22.0s
**ANGG Ammassalik, Gr** **59.49 18** P **P** **03 45 11.8 -0.8**
ANGG IAMs_20 IAMs_20 04 12 13.4
comp=Z,15µm,21.0s
**ANGG Ammassalik, Gr** **59.49 18** ⇑P **P** **03 45 11.0 -1.6**
**ANGG Ammassalik, Gr** **59.49 18** *i* P P 03 45 07.2 -5.4
ANGG IAmb IAmb 03 46 02.7
comp=Z,80nm,1.3s
**CCM Cathedral Cave** **59.49 66** P **P** **03 45 12.2 -0.9**
CCM IAmb IAmb 03 45 33.2
comp=Z,350nm,1.7s
**CCM Cathedral Cave** **59.49 66** IAMs_20 IAMs_20 04 15 19.0
comp=Z,15µm,18.0s
**CCM Cathedral Cave** **59.49 66** ⇑P **P** **03 45 12.2 -0.9**
**CCM Cathedral Cave** **59.49 66** P **P** **03 45 12.2 -0.9**
CCM pmax pmax
comp=Z,350nm,1.7s
CCM MLR MLR
comp=Z,15µm,18.0s
**GULI GuiLin** **59.50 273** ⇑P **P** **03 45 13.8 +0.5**
GULI S **S** **03 53 25.3 +5.5**
GULI pmax pmax
comp=Z,100nm,1.4s
GULI LR LR
comp=Z,7µm,21.7s
GULI LR LR
comp=Z,4µm,21.7s
GULI LR LR
comp=Z,10µm,24.4s
**J47A Sunmer** **59.50 58** IAmb IAmb 03 46 02.9
comp=Z,247nm,1.4s
J47A IAMs_20 IAMs_20 04 13 16.3
comp=Z,15µm,18.0s
**MGMO Mountain Grove** **59.52 68** IAmb IAmb 03 45 35.9
comp=Z,98nm,0.8s
**L46A Eue Claire** **59.55 60** IAmb IAmb 03 45 39.5
comp=Z,156nm,0.9s
L46A IAMs_20 IAMs_20 04 09 34.0
comp=Z,20µm,22.0s
**KURK Kurchatov** **59.56 314** P **P** **03 45 12.1 -1.2**
KURK IAmb IAmb 03 46 05.0
comp=Z,107nm,1.1s
**KURK Kurchatov** **59.56 314** IAMs_20 IAMs_20 04 11 49.3
comp=Z,19µm,21.0s
**KURK Kurchatov** **59.56 314** ⇑P **P** **03 45 12.0 -1.3**
**KURK Kurchatov** **59.56 314** P **P** **03 45 12.2 -1.2**
KURK P **P** **03 45 12.2 -1.2**
KURK P **P** **03 45 12.2 -1.2**
**KURK Kurchatov** **59.56 314***ce*P **P** **03 45 12.6 -0.7**
KURK pmax pmax
comp=Z,55nm,1.3s
KURK MLR MLR
comp=Z,20µm,20.0s
**FUNA Funafuti** **59.62 183** IAMs_20 IAMs_20 04 05 13.2
comp=Z,22µm,20.0s
**JCT Junction City** **59.62 78** IAmb IAmb 03 45 35.8
comp=Z,228nm,1.4s
JCT IAMs_20 IAMs_20 04 08 08.1
comp=Z,23µm,21.0s
**JCT Junction City** **59.62 78** ⇑P **P** **03 45 13.9 -0.2**
**CD2 Chengdu** **59.63 283** P **P** **03 45 14.5 +0.3**
CD2 pP pP 03 45 24.1 -1.6
CD2 sP sP 03 45 30.4 +0.1
CD2 PP **PP** **03 47 26.6 +0.8**
CD2 S **S** **03 53 20.6 -0.9**
CD2 sS sS 03 53 40.4 -0.8
CD2 SS **SS** **03 57 22.5 +5.5**
CD2 pmax pmax
comp=Z,120nm,1.3s
CD2 pmax pmax
comp=Z,4µm,8.5s
CD2 LR LR
comp=Z,11µm,18.5s
CD2 LR LR
comp=Z,8µm,18.2s
CD2 LR LR
comp=Z,12µm,17.2s
**KURBB Kurchatov Arra** **59.66 314** P **P** **03 45 13.1 -1.0**
comp=Z,12nm,0.6s,baz=42,slow=6.6,SNR=71
KURBB LR LR 04 12 06.2
comp=Z,19µm,20.8s,baz=44,slow=37
KURBB PKPPKP 04 14 41.7
comp=Z,1.1nm,0.9s,baz=244,slow=2.9,SNR=5.1
comp=Z,12nm,0.6s
**SLM Saint Louis** **59.67 65** IAmb IAmb 03 45 38.6
comp=Z,133nm,0.8s
**SCHQ Schefferville** **59.68 39** P **P** **03 45 12.8 -1.4**
comp=Z,13nm,0.9s,baz=341,slow=7.0,SNR=10
SCHQ LR LR 04 12 56.5
comp=Z,32µm,18.9s,baz=322,slow=38
comp=Z,13nm,0.9s
**FW13 Cleburne** **59.76 75** IAmb IAmb 03 45 33.9
comp=Z,227nm,1.1s
**DRIO Del Rio** **59.86 80** IAmb IAmb 03 45 36.9
comp=Z,178nm,1.3s
**VLDQ Val d'Or** **59.86 50** IAmb IAmb 03 45 57.2
comp=Z,178nm,1.4s
**FW14 Alvarado** **59.87 75** IAmb IAmb 03 45 34.6
comp=Z,186nm,1.0s
**WMQ Urumqi** **59.94 304** ⇑P **P** **03 45 16.4 +0.2**
WMQ S **S** **03 53 20.6 -4.6**
WMQ SS **SS** **03 57 22.3 +1.0**
WMQ pmax pmax
comp=Z,60nm,1.3s
WMQ pmax pmax
comp=Z,2µm,7.1s
WMQ LR LR
comp=Z,13µm,21.1s
WMQ LR LR
comp=Z,17µm,17.3s
WMQ LR LR
comp=Z,26µm,22.1s
**FW16 Waxahatchie** **59.99 75** IAmb IAmb 03 45 35.5
comp=Z,291nm,1.6s
**WHTX Lake Whitney,** **60.00 75** IAMs_20 IAMs_20 04 13 46.8
comp=Z,12µm,19.0s
**I49A Point Hope** **60.07 56** IAmb IAmb 03 45 36.0
comp=Z,139nm,0.9s
**Q44A Meyer Farm, Va** **60.17 64** IAMs_20 IAMs_20 04 11 58.0
comp=Z,19µm,20.0s
**SFIN Lafayette** **60.23 62** IAMs_20 IAMs_20 04 12 30.3
comp=Z,19µm,19.0s
**T42A Van Buren** **60.28 67** IAmb IAmb 03 45 35.5
comp=Z,57nm,0.7s
**FCAR Ozark Folk Cen** **60.47 69** IAmb IAmb 03 45 22.5
comp=Z,151nm,0.7s
**MIAR Mount Ida** **60.55 71** IAMs_20 IAMs_20 04 15 01.1
comp=Z,13µm,18.0s
**MIAR Mount Ida** **60.55 71** ⇑P **P** **03 45 20.8 +0.4**
**L48A N Adams** **60.60 59** IAmb IAmb 03 45 47.0
comp=Z,146nm,0.8s
**MK31 Makanchi Array** **60.60 309** P **P** **03 45 18.8 -1.8**
**MK31 Makanchi Array** **60.60 309** P **P** **03 45 19.0 -1.6**
**MKAR Makanchi Array** **60.60 309** P **P** **03 45 18.9 -1.7**
comp=Z,5.6nm,0.5s,baz=47,slow=6.4,SNR=62
MKAR LR LR 04 11 59.2
comp=Z,21µm,21.7s,baz=45,slow=36
MKAR PKPPKP 04 14 36.6
comp=Z,1.3nm,1.0s,baz=194,slow=3.6,SNR=5.2
comp=Z,5.6nm,0.5s
**MKAR Makanchi Array** **60.60 309** P **P** **03 45 19.0 -1.7**
**Z38A Mt. Pleasant** **60.60 73** IAMs_20 IAMs_20 04 16 17.6
comp=Z,14µm,19.0s
**STEI Steigen** **60.72 354** *e*P **P** **03 45 20.9 -0.1**
STEI IVmBBB 03 45 32.2
comp=Z,2µm,3.8s
STEI *e*PP **PP** **03 47 35.5 +1.0**
STEI *e*S **S** **03 53 36.5 +2.3**
STEI IVMs_BB IVMs_BB 04 11 26.4
comp=Z,4µm,24.9s
**MAKZ Makanchi** **60.74 309** P **P** **03 45 20.2 -1.4**
MAKZ IAMs_20 IAMs_20 04 11 31.1
comp=Z,17µm,21.0s
**MAKZ Makanchi** **60.74 309** ⇑P **P** **03 45 19.6 -2.0**
**MAKZ Makanchi** **60.74 309** P **P** **03 45 20.2 -1.4**
MAKZ pmax pmax
comp=Z,45nm,1.2s
**435B Jarrell** **60.76 76** IAMs_20 IAMs_20 04 12 20.3
comp=Z,11µm,18.0s

**435B Jarrell** 60.76 76 P P 03 45 22.9 +0.9
baz=315
435B S S 03 53 37.7 +1.8
baz=315
**AAM Ann Arbor** 60.77 58 IAmb IAmb 03 45 48.4
comp=Z,100nm,0.8s
AAM IAMs_20 IAMs_20 04 11 18.8
comp=Z,15µm,21.0s
**AAM Ann Arbor** 60.77 58 ⇑P P 03 45 22.1 +0.3
**MANU Manus Island** 60.82 221 P P 03 45 22.6 +0.2
MANU IAmb IAmb 03 45 24.8
comp=Z,168nm,1.4s
**MANU Manus Island** 60.82 221 ⇑P P 03 45 23.1 +0.6
**PBMO Poplar Bluff** 60.84 67 IAmb IAmb 03 45 42.0
comp=Z,215nm,1.0s
**IVI Ivigtut** 60.86 25 P P 03 45 21.9 -0.2
IVI IAmb IAmb 03 45 23.7
comp=Z,108nm,1.4s
**IVI Ivigtut** 60.86 25 ⇑P P 03 45 21.8 -0.2
**IVI Ivigtut** 60.86 25 *i* P P 03 45 16.2 -5.9
IVI IAmb IAmb 03 46 54.4
comp=Z,71nm,1.2s
**S44A Carbondale** 60.88 65 IAmb IAmb 03 45 37.5
comp=Z,92nm,0.9s
S44A IAMs_20 IAMs_20 04 14 23.7
comp=Z,15µm,19.0s
**SIUC Southern Illin** 60.88 65 IAmb IAmb 03 45 37.5
comp=Z,95nm,0.9s
**LCAR Lake Charles** 60.91 68 IAmb IAmb 03 45 42.0
comp=Z,80nm,0.8s
**RABL Rabaul** 60.94 215 ⇑P P 03 45 23.6 +0.3
**GYA Guiyang** 60.98 277 ⇑P P 03 45 23.6 0.0
GYA pP pP 03 45 36.1 +0.9
GYA PcP **PcP** 03 46 06.4 -0.2
GYA PP **PP** 03 47 38.8 +0.9
GYA S **S** 03 53 36.4 -2.6
GYA pmax pmax
comp=Z,98nm,2.0s
GYA pmax pmax
comp=Z,3µm,5.4s
GYA LR LR
comp=Z,3µm,25.4s
GYA LR LR
comp=Z,5µm,24.3s
GYA LR LR
comp=Z,6µm,27.0s
**K50A Casco** 60.98 57 IAmb IAmb 03 45 42.1
comp=Z,215nm,1.2s
**237A Washetta, Mont** 60.99 74 IAmb IAmb 03 45 42.1
comp=Z,257nm,1.1s
**X40A Basin Creek Fa** 61.03 70 IAmb IAmb 03 45 44.8
comp=Z,159nm,1.1s
**UALR University of** 61.12 70 IAmb IAmb 03 45 45.3
comp=Z,270nm,1.3s
**FAUS Fauske** 61.26 354 *e*P P 03 45 24.8 +0.1
FAUS IVmBBB 03 45 26.7
comp=Z,2µm,4.0s
FAUS *e*S **S** 03 53 38.8 -2.3
FAUS *e*SS **SS** 03 57 44.5 +3.7
FAUS IVMs_BB IVMs_BB 04 10 43.3
comp=Z,5µm,18.6s
**GOMU GeErMu** 61.29 293 P P 03 45 25.8 -0.1
GOMU sP pP 03 45 34.1 -3.6
GOMU pmax pmax
comp=Z,120nm,1.1s
GOMU LR LR
comp=Z,31µm,16.7s
GOMU LR LR
comp=Z,20µm,17.1s
GOMU LR LR
comp=Z,39µm,16.7s
**SADO Sadowa** 61.38 53 IAmb IAmb 03 46 10.2
comp=Z,199nm,1.2s
**SADO Sadowa** 61.38 53 ⇑P P 03 45 25.4 -0.5
**SADO Sadowa** 61.38 53 LR LR 04 13 55.7
comp=Z,15µm,18.2s,baz=334,slow=38
**BVAR Borovoye Array** 61.38 320 P P 03 45 25.0 -0.8
comp=Z,16nm,0.4s,baz=51,slow=7.2,SNR=57
BVAR PKPPKP P'P'df 04 14 34.1 -11
comp=Z,0.7nm,0.5s,baz=205,slow=3.1,SNR=4.0
comp=Z,16nm,0.4s
**BVAR Borovoye Array** 61.38 320 P P 03 45 25.0 -0.8
**833A Chaparral WMA,** 61.39 80 IAmb IAmb 03 45 48.6
comp=Z,202nm,1.1s
**833A Chaparral WMA,** 61.39 80 P P 03 45 27.0 +0.8
baz=315,SNR=18
833A S S 03 53 44.5 +0.5
baz=315
**BRVK Borovoye** 61.40 320 P P 03 45 24.9 -1.0
**BRVK Borovoye** 61.40 320 P P 03 45 24.2 -1.7
BRVK P P 03 45 24.2 -1.7
BRVK S S 03 53 42.4 -1.0
BRVK S S 03 53 42.4 -1.0
**BRVK Borovoye** 61.40 320 P P 03 45 24.9 -1.0
BRVK pmax pmax
comp=Z,58nm,1.1s
**N49A Columbus Grove** 61.45 59 IAMs_20 IAMs_20 04 10 43.3
comp=Z,16µm,22.0s
**T45A Paducah** 61.70 65 IAMs_20 IAMs_20 04 10 02.4
comp=Z,13µm,21.0s
**M50A Fremont** 61.72 58 IAmb IAmb 03 45 54.5
comp=Z,178nm,0.9s
M50A IAMs_20 IAMs_20 04 11 13.5
comp=Z,18µm,22.0s
**ADZR Andozero** 61.73 343 ⇑*i*P P 03 45 26.5 -1.4
ADZR *e**SP **sP** 03 45 42.9 -1.5
ADZR *e* 03 46 08.2
ADZR pmax pmax
comp=Z,52nm,1.0s
**NATX Nacogdoches** 61.85 74 ⇑P P 03 45 30.1 +0.9
**O49A Covington** 61.88 60 IAmb IAmb 03 45 51.6
comp=Z,171nm,1.1s
**735A Kenedy** 61.99 78 IAmb IAmb 03 45 54.7
comp=Z,234nm,1.1s
**SVE Sverdlovsk** 62.03 328 *d* iP P 03 45 30.3 +0.3
SVE *e* 03 49 17.1
SVE *e*S **S** 03 53 52.8 +1.6
SVE pmax pmax
comp=Z,2µm,20.4s
SVE pmax pmax
comp=Z,220nm,1.6s
SVE MLR MLR
comp=E,26µm,21.0s
SVE MLR MLR
comp=Z,38µm,20.0s
SVE MLR MLR
comp=N,15µm,20.0s
**P49A Miami Univ. Ec** 62.13 61 IAmb IAmb 03 45 32.1
comp=Z,167nm,0.9s
**P49A Miami Univ. Ec** 62.13 61 P P 03 45 30.6 -0.5
baz=315,SNR=55
P49A S S 03 53 50.4 -2.7
baz=315
**WCI Wyandotte Cave** 62.17 63 P P 03 45 31.6 +0.3
WCI IAmb IAmb 03 45 34.3
comp=Z,130nm,0.8s
**WCI Wyandotte Cave** 62.17 63 IAMs_20 IAMs_20 04 13 37.9
comp=Z,16µm,19.0s
**WCI Wyandotte Cave** 62.17 63 ⇑P P 03 45 31.5 +0.1
**WCI Wyandotte Cave** 62.17 63 P P 03 45 31.6 +0.3
WCI pmax pmax
comp=Z,130nm,0.8s
WCI MLR MLR
comp=Z,16µm,19.0s
**KONS Konsvik** 62.26 355 *e*P P 03 45 31.6 +0.2
**DELO Deloro Mine** 62.32 53 IAmb IAmb 03 46 05.5
comp=Z,185nm,1.1s
**HKT Hockley** 62.42 76 P P 03 45 33.6 +0.7
HKT IAmb IAmb 03 45 56.0
comp=Z,285nm,1.4s
**HKT Hockley** 62.42 76 IAMs_20 IAMs_20 04 09 55.6
comp=Z,17µm,22.0s
**HKT Hockley** 62.42 76 ⇑P P 03 45 33.2 +0.2
**HKT Hockley** 62.42 76 *c* iP P 03 45 33.0 0.0
HKT pmax pmax
comp=Z,191nm,1.8s
**STOK Stokkvaagen** 62.43 355 *e*P P 03 45 33.3 +0.7
STOK IVmBBB 03 45 45.5
comp=Z,2µm,5.2s
STOK *e*S **S** 03 53 56.2 +0.3
STOK IVMs_BB IVMs_BB 04 10 43.9
comp=Z,5µm,26.9s
**MOR8 Moi Rana** 62.51 354 *e*P P 03 45 32.4 -0.8
MOR8 IVmBBB 03 45 36.3
comp=Z,2µm,3.8s
MOR8 *e*S **S** 03 53 54.5 -2.6
MOR8 IVMs_BB IVMs_BB 04 11 12.3
comp=Z,6µm,19.5s
**M52A Chesterland** 62.52 57 IAmb IAmb 03 46 00.2
comp=Z,194nm,0.9s
**ACSO Alum Creek Sta** 62.58 59 IAmb IAmb 03 46 00.5
comp=Z,151nm,0.8s
ACSO IAMs_20 IAMs_20 04 15 14.3
comp=Z,15µm,18.0s
**ACSO Alum Creek Sta** 62.58 59 ⇑P P 03 45 34.1 0.0
**T47A Sharon Grove** 62.59 64 IAMs_20 IAMs_20 04 13 43.0
comp=Z,21µm,20.0s
**TRQ Mont Tremblant** 62.59 50 P P 03 45 34.3 +0.2
**J54A Appleton** 62.70 54 IAmb IAmb 03 45 54.0
comp=Z,187nm,0.9s
**HBVL Hebbronville** 62.74 80 P P 03 45 36.2 +1.0
HBVL IAmb IAmb 03 45 58.5
comp=Z,219nm,1.3s
**R49A Shelbyville** 62.76 62 IAmb IAmb 03 45 36.4
comp=Z,199nm,1.4s
**WVT Waverly** 62.79 66 P P 03 45 35.9 +0.5
WVT IAmb IAmb 03 45 36.6
comp=Z,227nm,1.4s
**WVT Waverly** 62.79 66 IAMs_20 IAMs_20 04 15 42.3
comp=Z,16µm,18.0s
**WVT Waverly** 62.79 66 ⇑P P 03 45 35.6 +0.2
**WVT Waverly** 62.79 66 P P 03 45 35.9 +0.5
WVT pmax pmax
comp=Z,227nm,1.5s
WVT MLR MLR
comp=Z,16µm,18.0s
**ERPA Erie** 62.83 56 ⇑P P 03 45 35.2 -0.4
**MEDO Medina** 62.87 54 IAmb IAmb 03 46 20.9
comp=Z,85nm,1.0s
**KVTX Kingsville** 62.87 79 IAmb IAmb 03 46 01.5
comp=Z,220nm,1.1s
KVTX IAMs_20 IAMs_20 04 13 55.4
comp=Z,14µm,18.0s
**KVTX Kingsville** 62.87 79 ⇑P P 03 45 37.8 +1.7
**BORG Borgarnes** 62.88 11 LR LR 04 13 31.2
comp=Z,10µm,21.4s,baz=335,slow=37
**M53A WI Miller and** 62.95 57 P P 03 45 36.8 +0.4
baz=316,SNR=29
M53A S S 03 54 01.0 -2.4
baz=316
**OXF Oxford** 63.02 68 IAMs_20 IAMs_20 04 13 55.7
comp=Z,13µm,19.0s
**OXF Oxford** 63.02 68 ⇑P P 03 45 37.2 +0.2
**ARU Arti** 63.03 329 P P 03 45 37.1 +0.3
ARU IAmb IAmb 03 46 14.9
comp=Z,94nm,1.0s
ARU IAMs_20 IAMs_20 04 16 10.0
comp=Z,14µm,19.0s
**ARU Arti** 63.03 329 LR LR 04 16 31.8
comp=Z,14µm,18.5s,baz=34,slow=39
**ARU Arti** 63.03 329 *c* iP P 03 45 36.4 -0.3
ARU 03 46 11.7
ARU 03 47 52.8
ARU S S 03 54 06.4 +2.6
ARU SS SS 03 58 14.0 +5.1
ARU pmax pmax
comp=Z,129nm,1.6s
ARU MLR MLR
comp=Z,13µm,18.0s
**PECO Prince Edward** 63.05 53 IAmb IAmb 03 46 10.4
comp=Z,228nm,1.1s
**P51A Williamsport** 63.07 60 IAmb IAmb 03 46 17.7
comp=Z,145nm,1.0s
P51A IAMs_20 IAMs_20 04 11 31.3
comp=Z,20µm,22.0s
**J55A Hilton** 63.12 54 IAmb IAmb 03 46 21.0
comp=Z,187nm,0.9s
J55A IAMs_20 IAMs_20 04 14 40.7
comp=Z,18µm,18.0s
**143A Socs Landing,** 63.13 71 IAMs_20 IAMs_20 04 16 38.4
comp=Z,13µm,18.0s
**WBO Williamsburg** 63.13 51 IAmb IAmb 03 46 09.4
comp=Z,350nm,1.9s
**N53A Lisbon** 63.32 57 IAmb IAmb 03 46 06.1
comp=Z,226nm,1.1s
**ZAIG Zacatecas** 63.42 86 IAmb IAmb 03 46 02.5
comp=Z,250nm,1.4s
**ZAIG Zacatecas** 63.42 86 ⇑P P 03 45 40.8 +0.7
**441A DeRidder** 63.45 73 IAMs_20 IAMs_20 04 11 23.1
comp=Z,21µm,21.0s
**PLAL Pickwick Lake** 63.46 67 IAmb IAmb 03 45 58.2
comp=Z,89nm,0.8s
**MMNY Mt. Morris Dam** 63.46 54 IAmb IAmb 03 46 13.0
comp=Z,121nm,1.4s
**HNR Honiara** 63.46 205 ⇑P P 03 45 46.9 +6.9
**HNR Honiara** 63.46 205 LR LR 04 07 40.6
comp=Z,106µm,21.3s,baz=20,slow=31
**P52A Corning** 63.47 59 IAmb IAmb 03 46 06.2
comp=Z,169nm,0.9s
P52A IAMs_20 IAMs_20 04 11 55.7
comp=Z,19µm,22.0s
**P52A Corning** 63.47 59 P P 03 45 39.9 0.0
baz=316,SNR=23
P52A S S 03 54 06.5 -3.3
baz=316
**O53A New Philadelph** 63.52 58 P P 03 45 40.5 +0.3
baz=316,SNR=30
O53A S S 03 54 08.7 -1.7
baz=316
**LMQ La Malbaie** 63.59 46 IAmb IAmb 03 46 23.8
comp=Z,104nm,1.1s
**J56A Wolcott** 63.60 53 IAmb IAmb 03 46 14.3
comp=Z,162nm,0.8s
J56A IAMs_20 IAMs_20 04 16 33.2
comp=Z,16µm,18.0s
**V48A Smith Brothers** 63.64 65 IAmb IAmb 03 45 42.9
comp=Z,144nm,1.1s
V48A IAMs_20 IAMs_20 04 13 43.8
comp=Z,15µm,20.0s
**U49A Red Boiling Sp** 63.68 64 IAmb IAmb 03 45 43.3
comp=Z,219nm,1.2s
U49A IAMs_20 IAMs_20 04 14 25.8
comp=Z,20µm,21.0s
**LONY Lake Ozonia** 63.75 51 P P 03 45 40.8 -0.9
**LONY Lake Ozonia** 63.75 51 ⇑P P 03 45 40.2 -1.5
**TDK Taldyqorghan** 63.77 310 *e*P P 03 45 41.2 -0.7
comp=Z,26nm,0.6s,baz=310
TDK LR LR 04 16 10.2
comp=Z,9µm,15.9s,baz=310
**TDK Taldyqorghan** 63.77 310 *e*P P 03 45 41.2 -0.7
TDK pmax pmax
comp=Z,28nm,0.6s
TDK MLR MLR
comp=Z,9µm,16.0s
**T50A Nancy** 63.84 63 IAMs_20 IAMs_20 04 14 42.1
comp=Z,15µm,19.0s
**JOF Joensuu** 63.86 346 *e*P P 03 45 41.0 -1.1
**Q52A Bidwell** 63.87 60 IAmb IAmb 03 46 09.1
comp=Z,197nm,0.9s
Q52A IAMs_20 IAMs_20 04 12 06.5
comp=Z,20µm,22.0s
**J57A Williamstown** 63.93 53 IAmb IAmb 03 46 32.9
comp=Z,116nm,1.0s
J57A IAMs_20 IAMs_20 04 16 27.0
comp=Z,16µm,18.0s
**KIRV Kirov** 63.95 335 LR LR 04 15 39.4
comp=Z,31µm,21.6s,baz=28,slow=38
**KIRV Kirov** 63.95 335 *ce*P P 03 45 43.1 +0.4
**VBMS Vicksburg** 64.00 70 IAMs_20 IAMs_20 04 17 03.4
comp=Z,13µm,19.0s
**VBMS Vicksburg** 64.00 70 ⇑P P 03 45 44.3 +0.8
**PZH PanZhiHua** 64.00 280 P P 03 45 44.3 +0.5
PZH PP **PP** 03 48 08.4 +3.9
PZH S **S** 03 54 16.3 -0.7
PZH pmax pmax
comp=Z,160nm,1.8s
PZH pmax pmax
comp=Z,3µm,4.3s
PZH LR LR
comp=Z,4µm,18.0s
PZH LR LR
comp=Z,7µm,19.2s
PZH LR LR
comp=Z,9µm,23.5s
**DAV Davao City (W)** 64.03 247 ⇑P P 03 45 44.6 +0.7
**DAV Davao City (W)** 64.03 247 LR LR 04 09 15.3
comp=Z,11µm,21.9s,baz=44,slow=32
**S51A Beattyville** 64.09 62 IAmb IAmb 03 45 47.3
comp=Z,125nm,0.8s
**JAY Jayapura** 64.16 227 P P 03 45 46.5 +1.8
comp=Z,50nm,1.1s
**OTUK Ortayu** 64.16 316 P P 03 45 43.7 -0.7
**K57A Scipio Center** 64.17 53 IAmb IAmb 03 46 11.0
comp=Z,174nm,0.8s
K57A IAMs_20 IAMs_20 04 14 05.3
comp=Z,15µm,21.0s
**NSS Namsos** 64.28 355 *e*P P 03 45 44.8 0.0
NSS IVmB_BB 03 45 52.8
comp=Z,4µm,4.0s
NSS *e*S **S** 03 54 14.9 -4.2
NSS IVMs_BB IVMs_BB 04 08 52.4
comp=Z,5µm,25.7s
**J58A Remsen** 64.32 52 IAmb IAmb 03 46 18.6
comp=Z,104nm,1.1s
**KMI Kunming** 64.38 279 ⇑P P 03 45 47.1 +0.7
KMI pP pwP 03 45 59.4 -1.0
KMI PP **PP** 03 48 09.4 +1.4
KMI S **S** 03 54 21.4 -0.5
KMI SS **SS** 03 58 35.6 +3.7
KMI pmax pmax
comp=Z,100nm,2.8s
KMI pmax pmax
comp=Z,3µm,4.1s
KMI LR LR
comp=Z,3µm,18.2s
KMI LR LR
comp=Z,8µm,18.7s
KMI LR LR
comp=Z,7µm,19.3s
**NCB Newcomb** 64.40 51 IAmb IAmb 03 46 22.4
comp=Z,132nm,1.2s
**QIZ Qiongzhong** 64.41 269 P P 03 45 46.5 +0.2
QIZ PP **PP** 03 48 07.3 -0.8
QIZ S **S** 03 54 21.8 -0.1
QIZ ScS **SKSac** 03 55 36.8 -0.4
QIZ SS **SS** 03 58 32.5 +0.4
QIZ pmax pmax
comp=Z,82nm,1.5s
QIZ LR LR
comp=Z,6µm,22.0s
QIZ LR LR
comp=Z,3µm,21.8s
QIZ LR LR
comp=Z,7µm,23.7s
**QIZ Qiongzhong** 64.41 269 IAmb IAmb 03 45 49.5
comp=Z,190nm,1.5s
**X48A Hartselle** 64.43 66 IAmb IAmb 03 46 04.3
comp=Z,151nm,1.2s
X48A IAMs_20 IAMs_20 04 16 34.9
comp=Z,11µm,20.0s
**PDGK Podgornoye** 64.47 308 P P 03 45 45.7 -0.9
**GENI Genyem** 64.48 228 P P 03 45 47.9 +1.2
**GENI Genyem** 64.48 228 ⇑P P 03 45 48.4 +1.6
**GENI Genyem** 64.48 228 P P 03 45 48.9 +2.2
comp=Z,137nm,1.1s,comp=Z,9µm
**D62A Allapoint, All** 64.51 46 IAmb IAmb 03 46 20.2
comp=Z,100nm,1.0s
**SWET Sewanee** 64.52 65 IAmb IAmb 03 45 47.6
comp=Z,253nm,1.4s
**146A Union** 64.56 69 IAMs_20 IAMs_20 04 18 52.6
comp=Z,17µm,18.0s
**SHLS Shalkode** 64.61 308 *e*P P 03 45 45.6 -2.0
comp=Z,64nm,1.2s,baz=308
**SHLS Shalkode** 64.61 308 *e*P P 03 45 45.5 -2.0
SHLS pmax pmax
comp=Z,64nm,1.2s
**MCWV Mont Chateau** 64.67 58 IAmb IAmb 03 46 06.9
comp=Z,163nm,1.1s
**MCWV Mont Chateau** 64.67 58 ⇑P P 03 45 47.9 +0.1
**Z47A Carrollton** 64.73 68 IAMs_20 IAMs_20 04 14 59.1
comp=Z,12µm,20.0s
**KPKS Kokpek** 64.77 309 *e*P P 03 45 47.9 -0.6
comp=Z,44nm,1.3s,baz=309
KPKS *e*S S 03 54 26.5 +0.5
baz=309
**KPKS Kokpek** 64.77 309 *e*P P 03 45 47.9 -0.6
KPKS *e*S S 03 54 26.5 +0.5
KPKS pmax pmax
comp=Z,44nm,1.3s
**BINY Binghamton** 64.82 53 IAmb IAmb 03 46 15.6
comp=Z,199nm,1.0s
BINY IAMs_20 IAMs_20 04 14 16.6
comp=Z,14µm,20.0s
**BINY Binghamton** 64.82 53 ⇑P P 03 45 48.7 -0.1
**UZB Uzynbulak** 64.84 308 *e*P P 03 45 48.2 -0.8
baz=308
**UZB Uzynbulak** 64.84 308 *e*P P 03 45 48.2 -0.8
**M57A Sunshine Farm,** 64.87 55 IAmb IAmb 03 46 21.9
comp=Z,233nm,1.1s
**VAF Ylistaro** 64.89 350 *e*P P 03 45 49.1 +0.3
**TZTN Tazewell** 64.91 62 ⇑P P 03 45 50.0 +0.6
**SSPA Standing Stone** 64.99 56 P P 03 45 50.1 +0.2
SSPA IAmb IAmb 03 46 22.3
comp=Z,169nm,1.1s
**SSPA Standing Stone** 64.99 56 ⇑P P 03 45 49.7 -0.2
**ACCN Adirondack Com** 65.10 51 IAmb IAmb 03 46 23.4
comp=Z,100nm,1.0s
**ZHN Zhinishke** 65.11 308 *e*P P 03 45 50.1 -0.7
baz=308
**ZHN Zhinishke** 65.11 308 *e*P P 03 45 50.0 -0.7
**CPCT Cooper Cave** 65.15 64 IAmb IAmb 03 45 52.8
comp=Z,228nm,1.2s
**346A Big Creek Wild** 65.22 70 P P 03 45 52.1 +0.7
346A IAmb IAmb 03 46 19.2
comp=Z,209nm,1.2s
346A IAMs_20 IAMs_20 04 17 49.7
comp=Z,11µm,19.0s
**Y49A Blount Mountai** 65.22 66 P P 03 45 51.4 -0.1
Y49A IAMs_20 IAMs_20 04 11 20.8
comp=Z,14µm,22.0s
**S54A Dingess, Beckl** 65.23 60 IAMs_20 IAMs_20 04 15 53.5
comp=Z,14µm,18.0s
**G62A West of Eustis** 65.23 48 IAmb IAmb 03 46 24.3
comp=Z,82nm,0.9s
**PQI Presque Isle** 65.29 46 P P 03 45 51.0 -0.7
**L59A Walton** 65.30 53 P P 03 45 51.0 -0.9
L59A IAmb IAmb 03 46 25.3
comp=Z,118nm,0.9s
L59A IAMs_20 IAMs_20 04 14 59.3
comp=Z,15µm,20.0s
**CHKK Chushkaly** 65.31 310 *e*P P 03 45 51.1 -0.9
baz=310
**CHKK Chushkaly** 65.31 310 *e*P P 03 45 51.0 -0.9
**LBNH Lisbon** 65.31 50 P P 03 45 51.4 -0.5
**LBNH Lisbon** 65.31 50 ⇑P P 03 45 51.8 -0.1
**LBNH Lisbon** 65.31 50 P P 03 45 51.4 -0.5
LBNH pmax pmax
comp=Z,69nm,1.1s
LBNH MLR MLR
comp=Z,25µm,21.0s
**VALR Valaam** 65.40 345 *i* P P 03 45 51.3 -0.8
VALR pmax pmax
comp=Z,95nm,1.0s
**KSPA Keystone Colle** 65.40 54 P P 03 45 51.8 -0.7
**TKL Tuckaleechee C** 65.42 63 P P 03 45 52.8 +0.1
**TKL Tuckaleechee C** 65.42 63 LR LR 04 15 33.9
comp=Z,16µm,19.3s,baz=328,slow=37
**TKL Tuckaleechee C** 65.42 63 P P 03 45 52.8 +0.1
TKL pmax pmax
comp=Z,358nm,1.2s
**H62A Milan** 65.42 49 P P 03 45 51.4 -1.2
H62A IAmb IAmb 03 46 26.8
comp=Z,118nm,0.8s
**N58A Sunbury** 65.45 55 P P 03 45 52.8 0.0
**Q56A Snyder Ridge,** 65.47 58 P P 03 45 53.1 +0.1
Q56A IAmb IAmb 03 46 36.0
comp=Z,83nm,0.9s
Q56A IAMs_20 IAMs_20 04 16 17.3
comp=Z,16µm,18.0s
**LRAL Lakeview Retre** 65.47 67 P P 03 45 52.7 -0.4
LRAL IAmb IAmb 03 46 15.1
comp=Z,82nm,0.8s
LRAL IAMs_20 IAMs_20 04 18 37.4
comp=Z,10µm,20.0s
**KEF Keuruu** 65.48 349 *e*P P 03 45 51.4 -1.3
**R55A Marlinton** 65.53 59 P P 03 45 54.0 +0.5
**F63A Nahmakanta, Br** 65.53 47 P P 03 45 52.9 -0.5
F63A IAmb IAmb 03 46 26.1
comp=Z,101nm,1.1s
F63A IAMs_20 IAMs_20 04 15 43.7
comp=Z,15µm,18.0s
**HNH Hanover** 65.53 50 P P 03 45 53.1 -0.3
HNH IAmb IAmb 03 46 36.4
comp=Z,132nm,1.5s
**TRY Troy** 65.59 52 P P 03 45 53.3 -0.3
TRY IAmb IAmb 03 46 26.6
comp=Z,70nm,1.0s
**KUU Kurty** 65.59 310 *e*P P 03 45 53.0 -0.7
baz=310

KUU LR LR 04 17 07.3
comp=Z,5µm,14.5s,baz=310
**KUU Kurty 65.59 310** *e*P **P 03 45 53.0 -0.7**
**X51A Calhoun 65.60 65** P **P 03 45 54.1 +0.3**
X51A IAMs_20 IAMs_20 04 15 14.7
comp=Z,16µm,20.0s
**PRZ Przheval'sk 65.64 308** IAMs_20 IAMs_20 04 14 44.4
comp=Z,14µm,20.0s
**TBLU Trondheim 65.64 356** *e*P **P 03 45 53.5 -0.1**
TBLU IVmB_BB 03 46 12.0
comp=Z,1µm,6.1s
TBLU *e*S **S 03 54 32.1 -3.7**
TBLU IVMs_BB IVMs_BB 04 10 13.3
comp=Z,5µm,21.6s
**J61A Chester 65.67 51** P **P 03 45 54.3 +0.1**
J61A IAmb IAmb 03 46 27.2
comp=Z,106nm,1.1s
**BATG Bathurst New B 65.69 44** P **P 03 45 54.4 +0.1**
BATG IAmb IAmb 03 46 38.1
comp=Z,97nm,1.2s
**W52A Murphy 65.74 64** P **P 03 45 55.1 +0.2**
W52A IAmb IAmb 03 45 56.9
comp=Z,227nm,1.1s
W52A IAMs_20 IAMs_20 04 15 50.4
comp=Z,18µm,20.0s
**F64A Sherman 65.75 46** P **P 03 45 54.0 -0.7**
F64A IAMs_20 IAMs_20 04 16 30.5
comp=Z,16µm,19.0s
**P57A Homestead Farm 65.77 57** P **P 03 45 54.9 0.0**
P57A IAmb IAmb 03 46 30.9
comp=Z,92nm,0.9s
**PKME Peaks-Kenny Pk 65.78 47** P **P 03 45 54.8 0.0**
PKME IAmb IAmb 03 46 29.1
comp=Z,80nm,1.1s
**PKME Peaks-Kenny Pk 65.78 47** ⇑P **P 03 45 54.8 0.0**
**MDOK Medeo 65.79 309** *e*P **P 03 45 54.4 -0.8**
baz=309
MDOK *e*S **S 03 54 38.1 -0.6**
baz=309
MDOK LR LR 04 17 11.8
comp=Z,3µm,17.2s,baz=309
**MDOK Medeo 65.79 309** *e*P **P 03 45 54.4 -0.8**
MDOK *e*S **S 03 54 38.9 +0.2**
MDOK MLR MLR
comp=Z,3µm,17.0s
**BTLS Baital 65.81 312** *e*P **P 03 45 54.4 -0.7**
baz=312
**BTLS Baital 65.81 312** *e*P **P 03 45 54.4 -0.7**
**I62A Tamworth 65.86 49** P **P 03 45 55.6 +0.1**
**U54A Nelsons Funny 65.88 61** P **P 03 45 56.3 +0.5**
**TNSS Tian-Shan 65.94 309** *e*P **P 03 45 55.4 -1.1**
baz=309
**TNSS Tian-Shan 65.94 309** *e*P **P 03 45 55.3 -1.1**
**V53A Saluda 65.95 63** P **P 03 45 56.8 +0.6**
V53A IAmb IAmb 03 45 58.6
comp=Z,175nm,0.9s
**FIA1 FINESS Array S 66.02 348** P **P 03 45 55.6 -0.6**
**FINES FINESS Array B 66.02 348** P **P 03 45 55.4 -0.8**
comp=Z,10nm,0.4s,baz=18,slow=9.3,SNR=40
FINES PKPPKP **P'P'df 04 14 33.4 -4.3**
comp=Z,4.1nm,0.9s,baz=116,slow=4.4,SNR=3.6
FINES LR LR 04 15 25.6
comp=Z,9µm,21.9s,baz=19,slow=37
comp=Z,10nm,0.4s
**FINES FINESS Array B 66.02 348** *i* P **P 03 45 55.4 -0.8**
FINES pmax pmax
comp=Z,10.0nm,0.4s
**I63A Otisfield 66.09 49** IAmb IAmb 03 46 30.1
comp=Z,102nm,0.9s
**WVL Waterville 66.14 48** IAmb IAmb 03 46 30.2
comp=Z,78nm,0.9s
**BLA Blacksburg 66.14 60** IAMs_20 IAMs_20 04 16 41.7
comp=Z,14µm,20.0s
**BLA Blacksburg 66.14 60** ⇑P **P 03 45 57.9 +0.4**
**L61B Northampton 66.28 51** P **P 03 45 59.2 +1.0**
baz=318,SNR=5.4
L61B S **S 03 54 42.9 -1.4**
baz=318
**K62A Royalston 66.34 51** P **P 03 45 58.5 0.0**
K62A IAmb IAmb 03 46 30.7
comp=Z,351nm,1.8s
**ODNJ Ogdensburg 66.34 53** P **P 03 45 58.4 -0.2**
ODNJ IAmb IAmb 03 46 30.8
comp=Z,184nm,1.4s
**TABU Tabubil 66.36 226** P **P 03 46 00.8 +1.8**
**BG3 Lake Jocassee 66.38 63** P **P 03 45 59.3 +0.4**
**MOL Molde 66.42 357** *e*P **P 03 45 59.2 +0.5**
MOL *e*S **S 03 54 44.3 -1.0**
**KSCT Kent School, K 66.43 52** P **P 03 45 59.4 +0.4**
**SLVN Son La 66.43 275** P **P 03 45 59.6 +0.2**
SLVN IAmb IAmb 03 46 14.1
comp=Z,184nm,1.7s
SLVN IAMs_20 IAMs_20 04 15 29.5
comp=Z,13µm,22.0s
**SDMD Soldier's Deli 66.44 56** P **P 03 45 59.6 +0.4**
**TRNY Table Rock, Ra 66.49 53** P **P 03 45 59.7 +0.2**
TRNY IAmb IAmb 03 46 42.6
comp=Z,96nm,1.2s
**TARG Taragay, Kyrgy 66.49 308** P **P 03 45 59.7 -0.4**
TARG IAMs_20 IAMs_20 04 15 33.3
comp=Z,16µm,21.0s
**TARG Taragay, Kyrgy 66.49 308** P **P 03 45 59.7 -0.4**
TARG pmax pmax
comp=Z,49nm,1.1s
TARG MLR MLR
comp=Z,16µm,21.0s
**S57A Dark Hollow, R 66.53 59** P **P 03 46 00.4 +0.5**
S57A IAmb IAmb 03 46 26.3
comp=Z,149nm,1.1s
S57A IAMs_20 IAMs_20 04 16 53.9
comp=Z,18µm,20.0s
**MOIG Morelia 66.56 87** P **P 03 46 00.8 +0.2**
**MOIG Morelia 66.56 87** ⇑P **P 03 46 01.4 +0.9**
**Y52A Lilburn 66.56 65** P **P 03 46 00.4 +0.3**
Y52A IAMs_20 IAMs_20 04 15 34.1
comp=Z,17µm,20.0s
**G65A Princeton 66.62 46** P **P 03 46 00.5 +0.3**
G65A IAmb IAmb 03 46 32.4
comp=Z,168nm,1.4s
G65A IAMs_20 IAMs_20 04 17 06.4
comp=Z,17µm,19.0s
**250A Grady 66.67 68** P **P 03 46 01.0 +0.2**
250A IAMs_20 IAMs_20 04 18 15.2
comp=Z,12µm,18.0s
**WUPA West Chester U 66.69 55** P **P 03 46 01.3 +0.5**
**V55A Taylorsville 66.70 61** P **P 03 46 01.6 +0.7**
**SGDS Sogindy 66.74 311** *e*P **P 03 46 00.4 -0.8**
baz=311
**SGDS Sogindy 66.74 311** *e*P **P 03 46 00.3 -0.8**
**PAL Palisades 66.75 53** P **P 03 46 01.5 +0.3**
PAL IAmb IAmb 03 46 34.9
comp=Z,150nm,1.1s
**PAL Palisades 66.75 53** P **P 03 46 01.5 +0.3**
PAL pmax pmax
comp=Z,150nm,1.1s
**HRV Adam Dziewonsk 66.79 51** P **P 03 46 01.4 0.0**
HRV IAmb IAmb 03 46 32.9
comp=Z,98nm,1.1s
**HRV Adam Dziewonsk 66.79 51** P **P 03 46 01.4 0.0**
HRV pmax pmax
comp=Z,98nm,1.1s
HRV MLR MLR
comp=Z,26µm,18.0s
**BRAL Brewton 66.80 69** P **P 03 46 02.1 +0.5**
BRAL IAMs_20 IAMs_20 04 18 37.8
comp=Z,13µm,18.0s
**BRAL Brewton 66.80 69** ⇑P **P 03 46 02.6 +1.0**
**U56A King 66.80 61** P **P 03 46 01.9 +0.4**
U56A IAmb IAmb 03 46 24.6
comp=Z,165nm,1.0s
**BOOM Boomskoye usch 66.84 309** P **P 03 46 01.1 -0.9**
**BOOM Boomskoye usch 66.84 309** P **P 03 46 01.1 -0.9**
BOOM pmax pmax
comp=Z,29nm,0.8s
**CPNY Central Park 66.89 53** P **P 03 46 02.4 +0.3**
CPNY IAmb IAmb 03 46 28.5
comp=Z,119nm,0.9s
**DOMB Dombas 66.90 357** *e*P **P 03 46 01.9 +0.1**
DOMB IVmB_BB 03 46 09.5
comp=Z,2µm,4.1s
DOMB *e*S **S 03 54 52.0 +0.7**
DOMB IVMs_BB IVMs_BB 04 12 04.5
comp=Z,5µm,25.2s
**WSPT Westport, CT 66.92 53** P **P 03 46 02.6 +0.3**
**T57A Hurt 66.93 59** P **P 03 46 02.6 +0.2**

T57A IAmb IAmb 03 46 28.5
comp=Z,125nm,0.8s
**R58B Mineral 66.96 58** P **P 03 46 02.9 +0.3**
R58B IAmb IAmb 03 46 28.9
comp=Z,106nm,1.0s
**RAF Rauma 66.96 350** *e*P **P 03 46 01.4 -0.8**
**WES Weston 66.99 51** P **P 03 46 02.6 -0.1**
WES IAmb IAmb 03 46 35.5
comp=Z,84nm,1.1s
**WES Weston 66.99 51** P **P 03 46 02.6 -0.1**
WES pmax pmax
comp=Z,84nm,1.1s
WES MLR MLR
comp=Z,22µm,18.0s
**UCCT U. Connecticut 67.00 52** P **P 03 46 03.2 +0.4**
UCCT IAmb IAmb 03 46 45.9
comp=Z,91nm,1.1s
**GGN Saint George 67.00 46** P **P 03 46 02.9 +0.2**
**LKP Lekhapani 67.01 285** *e*P **P 03 46 04.6 +1.6**
**N62A Caumsett State 67.03 53** IAMs_20 IAMs_20 04 18 12.0
comp=Z,16µm,18.0s
**EMMW East Machias 67.04 47** P **P 03 46 02.4 -0.5**
EMMW IAmb IAmb 03 46 35.8
comp=Z,64nm,0.9s
EMMW IAMs_20 IAMs_20 04 17 09.7
comp=Z,16µm,19.0s
**CBN Corbin Frederi 67.05 57** P **P 03 46 02.8 -0.3**
CBN IAmb IAmb 03 46 22.1
comp=Z,162nm,1.2s
**CBN Corbin Frederi 67.05 57** ⇑P **P 03 46 03.3 +0.2**
**152A Waverly Hall 67.06 66** P **P 03 46 03.0 -0.3**
152A IAmb IAmb 03 46 22.8
comp=Z,194nm,1.3s
152A IAMs_20 IAMs_20 04 18 06.4
comp=Z,17µm,19.0s
**TNCH TengChong 67.06 282** ⇑P **P 03 46 04.0 +0.4**
TNCH pP pwP 03 46 16.6 -1.1
TNCH PP **PP 03 48 30.4 -1.0**
TNCH S **S 03 54 52.9 -1.6**
TNCH sS pS 03 55 11.6 +2.5
TNCH pmax pmax
comp=Z,3µm,3.6s
TNCH LR LR
comp=Z,3µm,22.8s
TNCH LR LR
comp=Z,4µm,24.6s
TNCH LR LR
comp=Z,7µm,27.8s
**PAULI Pauline 67.13 63** P **P 03 46 04.0 +0.4**
**KMSC Kings Mountain 67.16 62** P **P 03 46 04.4 +0.6**
**GOGA Godfrey 67.23 65** P **P 03 46 04.5 +0.2**
**GOGA Godfrey 67.23 65** IAMs_20 IAMs_20 04 16 14.8
comp=Z,17µm,20.0s
**GOGA Godfrey 67.23 65** ⇑P **P 03 46 04.2 -0.2**
**GOGA Godfrey 67.23 65** P **P 03 46 04.5 +0.2**
GOGA pmax pmax
comp=Z,269nm,1.2s
GOGA MLR MLR
comp=Z,17µm,20.0s
**HODGE Hodges 67.31 63** P **P 03 46 05.1 +0.3**
**LMN Caledonia Moun 67.34 44** P **P 03 46 05.2 +0.4**
**M63A Gales Ferry 67.38 52** P **P 03 46 04.4 -0.7**
M63A IAmb IAmb 03 46 31.2
comp=Z,148nm,1.0s
**AAK Ala-Archa 67.42 310** P **P 03 46 05.1 -0.5**
**AAK Ala-Archa 67.42 310** *i* P **P 03 46 05.1 -0.5**
SNR=9.4
**AAK Ala-Archa 67.42 310** ⇑P **P 03 46 05.4 -0.3**
**AAK Ala-Archa 67.42 310** LR LR 04 17 08.0
comp=Z,9µm,21.1s,baz=24,slow=37
**AAK Ala-Archa 67.42 310** P **P 03 46 05.2 -0.5**
AAK P **P 03 46 05.2 -0.5**
AAK P **P 03 46 05.2 -0.5**
AAK S **S 03 54 56.8 -1.6**
AAK S **S 03 54 56.8 -1.6**
AAK S **S 03 54 56.8 -1.6**
**AAK Ala-Archa 67.42 310** *ce*P **P 03 46 06.0 +0.4**
AAK pmax pmax
comp=Z,55nm,1.7s
AAK MLR MLR
comp=Z,12µm,23.0s
**SWI Sorong 67.43 237** P **P 03 46 06.4 +0.7**
**MEF Metsahovi 67.43 348** *e*P **P 03 46 05.8 +0.7**
**FOO Floro 67.45 359** *e*P **P 03 46 05.6 +0.4**
FOO IVmB_BB 03 46 13.7
comp=Z,3µm,3.4s
FOO *e*S **S 03 54 56.3 -1.5**
FOO IVMs_BB IVMs_BB 04 09 20.9
comp=Z,3µm,25.6s
**DIBR DIBRUGARH 67.47 286** *e*P **P 03 46 07.3 +1.3**
**NC204 NORSAR Array S 67.59 356** P **P 03 46 05.2 -1.1**
**NRN Naryn 67.61 309** P **P 03 46 06.9 -0.1**
**NRN Naryn 67.61 309** P **P 03 46 06.9 -0.1**
NRN pmax pmax
comp=Z,67nm,1.2s
**PMG Port Moresby 67.61 218** P **P 03 46 09.1 +2.3**
**PMG Port Moresby 67.61 218** P **P 03 46 08.5 +1.6**
**PMG Port Moresby 67.61 218** P **P 03 46 07.8 +1.0**
**PMG Port Moresby 67.61 218** ⇑P **P 03 46 07.7 +0.9**
**PMG Port Moresby 67.61 218** *ce*P **P 03 46 08.4 +1.6**
PMG pmax pmax
comp=Z,146nm,2.5s
**NC303 NORSAR Array S 67.61 355** P **P 03 46 05.1 -1.2**
NC303 IAmb IAmb 03 46 39.6
comp=Z,90nm,1.1s
**DRLN Deer Lake 67.64 38** P **P 03 46 06.4 -0.3**
**DRLN Deer Lake 67.64 38** ⇑P **P 03 46 05.3 -1.3**
**NC405 NORSAR Array S 67.70 355** P **P 03 46 06.8 -0.1**
NC405 IAmb IAmb 03 46 32.1
comp=Z,143nm,1.4s
**NB201 NORSAR Array S 67.79 355** P **P 03 46 06.9 -0.6**
**NB2 NORSAR Subarra 67.80 355** P **P 03 46 06.6 -1.0**
comp=Z,47nm,1.2s,baz=7.2,slow=6.5
**NB2 NORSAR Subarra 67.80 355** P **P 03 46 06.6 -1.0**
baz=7.2,slow=6.5
**NOA NORSAR Array B 67.80 355** P **P 03 46 06.6 -1.0**
comp=Z,4.0nm,0.4s,baz=246,slow=5.5,SNR=58
NOA LR LR 04 14 09.4
comp=Z,10µm,21.8s,baz=355,slow=34
comp=Z,4.0nm,0.4s
**352A Blakely 67.81 67** P **P 03 46 07.8 -0.2**
352A IAMs_20 IAMs_20 04 16 35.4
comp=Z,11µm,20.0s
**JSC Jenkinsville 67.83 63** P **P 03 46 08.7 +0.6**
**JSC Jenkinsville 67.83 63** P **P 03 46 08.7 +0.6**
JSC pmax pmax
comp=Z,215nm,0.9s
**HYA Hoyanger 67.86 358** *e*P **P 03 46 07.7 -0.2**
HYA IVmBBB 03 46 14.5
comp=Z,1µm,3.4s
HYA *e*S **S 03 55 00.0 -2.6**
HYA IVMs_BB IVMs_BB 04 10 42.1
comp=Z,5µm,25.5s
**T59A Double "B" Far 67.87 58** P **P 03 46 09.0 +0.7**
T59A IAmb IAmb 03 46 35.3
comp=Z,208nm,1.1s
**W57A Gilead 67.89 61** P **P 03 46 08.6 +0.2**
W57A IAmb IAmb 03 46 11.7
comp=Z,91nm,0.8s
**V58A Windy Hill, Pi 67.90 60** P **P 03 46 08.7 +0.2**
V58A IAmb IAmb 03 46 35.5
comp=Z,194nm,1.1s
**451A Vernon 67.96 68** P **P 03 46 09.5 +0.5**
451A IAMs_20 IAMs_20 04 17 02.6
comp=Z,9µm,19.0s
**ARBE Arbavere 67.97 347** *e*P **P 03 46 07.4 -1.2**
**AAL Aland 67.98 351** *e*P **P 03 46 07.1 -1.5**
**SUE Sulen 68.00 359** *e*P **P 03 46 08.2 -0.5**
SUE *e*S **S 03 55 04.7 +0.4**
**BIRD Birdtown, Kers 68.01 62** P **P 03 46 09.3 +0.1**
BIRD IAmb IAmb 03 46 13.8
comp=Z,153nm,1.0s
**154A Montrose 68.02 65** P **P 03 46 09.7 +0.4**
154A IAMs_20 IAMs_20 04 13 46.8
comp=Z,17µm,22.0s
**ZIRO ZIRO 68.07 287** *e*P **P 03 46 11.4 +1.5**
**UNM Universidad Na 68.08 86** ⇑P **P 03 46 10.8 +0.6**
**LSA Lhasa 68.08 290** P **P 03 46 12.8 +2.4**
LSA pmax pmax
comp=Z,400nm,1.4s
LSA LR LR
comp=Z,5µm,18.6s
LSA LR LR
comp=Z,7µm,18.9s

LSA LR LR
comp=Z,10µm,19.9s
**LSA Lhasa 68.08 290** P **P 03 46 11.8 +1.4**
LSA IAMs_20 IAMs_20 04 18 04.7
comp=Z,10µm,20.0s
**LSA Lhasa 68.08 290** P **P 03 46 12.0 +1.7**
**LSA Lhasa 68.08 290** P **P 03 46 11.8 +1.4**
LSA pmax pmax
comp=Z,833nm,1.4s
LSA MLR MLR
comp=Z,10µm,20.0s
**NC602 NORSAR Array S 68.09 355** P **P 03 46 08.9 -0.4**
**NC602 NORSAR Array S 68.09 355** IVmB_BB 03 46 09.3
comp=Z,2µm,4.2s
NC602 *e*P **P 03 46 09.4 0.0**
NC602 *e*S **S 03 55 05.0 -0.5**
NC602 IVMs_BB IVMs_BB 04 10 13.8
comp=Z,4µm,29.8s
**TAOE Nuku Hiva Isla 68.12 139** P **P 03 46 11.6 +1.5**
**TAOE Nuku Hiva Isla 68.12 139** *e*P **P 03 46 14.3 +4.2**
comp=Z,155nm,1.3s
TAOE *e*S **S 03 55 00.4 -6.6**
comp=Z,6µm,31.1s
TAOE *e*SS **SS 03 59 27.7 -2.8**
comp=Z,5µm,30.1s
TAOE *e*LQ LQ 04 03 16.4
comp=Z,8µm,38.0s
TAOE *e*LR LR 04 06 48.0
comp=Z,47µm,22.3s
**AKTO Aktyubinsk 68.14 325** LR LR 04 19 28.3
comp=Z,25µm,20.3s,baz=36,slow=39
**TNTI Ternate 68.17 242** P **P 03 46 11.3 +0.9**
**TNTI Ternate 68.17 242** ⇑P **P 03 46 10.5 +0.1**
**TNTI Ternate 68.17 242** P P 03 46 26.0 +16
**SKAR Skarslia 68.29 357** *e*P **P 03 46 11.1 +0.5**
SKAR IVmBBB 03 46 12.7
comp=Z,1µm,1.8s
SKAR *e*S **S 03 55 08.5 +0.6**
SKAR IVMs_BB IVMs_BB 04 13 10.7
comp=Z,4µm,22.9s
**JORH JORHAT 68.40 286** *e*P **P 03 46 13.4 +1.6**
**AB31 Akbulak array 68.41 323** *e*P **P 03 46 11.2 -0.3**
**ABKAR Akbulak array 68.41 323** P **P 03 46 11.0 -0.5**
ABKAR IAmb IAmb 03 46 13.2
comp=Z,216nm,1.5s
**ABKAR Akbulak array 68.41 323** P **P 03 46 11.1 -0.4**
**Y57A Sumter 68.51 62** P **P 03 46 13.2 +0.8**
**UPP Uppsala 68.52 352** *e*P **P 03 46 11.8 -0.2**
**MOKO MOKOCHONG 68.55 286** *e*P **P 03 46 14.6 +1.7**
MOKO IAmb IAmb 03 46 16.1
comp=Z,810nm,1.3s
**HFS Hagfors 68.56 354** P **P 03 46 11.3 -1.0**
comp=Z,11nm,0.4s,baz=354,slow=1.5,SNR=89
HFS LR LR 04 14 52.3
comp=Z,12µm,22.0s,baz=0.5,slow=35
comp=Z,11nm,0.4s
**ASK Askoy 68.57 358** *e*P **P 03 46 12.6 +0.4**
**TIGA Tifton 68.61 66** P **P 03 46 14.1 +1.1**
TIGA IAMs_20 IAMs_20 04 19 04.5
comp=Z,14µm,19.0s
**FAKI Fak Fak 68.65 235** P **P 03 46 14.1 +0.7**
**FAKI Fak Fak 68.65 235** P **P 03 46 13.9 +0.5**
FAKI IAmb IAmb 03 46 28.4
comp=Z,167nm,1.1s
**FAKI Fak Fak 68.65 235** ⇑P **P 03 46 13.9 +0.5**
**FAKI Fak Fak 68.65 235** P **P 03 46 14.3 +0.9**
comp=Z,158nm,1.4s,comp=Z,4µm
**BER Bergen 68.67 358** *e*P **P 03 46 13.7 +0.8**
BER IVmB_BB 03 46 27.1
comp=Z,2µm,3.1s
BER *e*S **S 03 55 13.3 +1.1**
BER IVMs_BB IVMs_BB 04 11 56.5
comp=Z,3µm,17.8s
**X58A Rowland 68.69 61** P **P 03 46 14.3 +0.8**
X58A IAmb IAmb 03 46 15.8
comp=Z,130nm,0.9s
**W59A Clinton 68.73 60** P **P 03 46 14.1 +0.4**
**VSU Vasula 68.81 346** ⇑P **P 03 46 12.8 -1.0**
**VSU Vasula 68.81 346** *ce*P **P 03 46 15.7 +1.9**
VSU pmax pmax
comp=Z,93nm,1.7s
VSU MLR MLR
comp=Z,15µm,21.0s
**MSVF Nonsavu 68.81 184** LR LR 04 12 03.1
comp=Z,11µm,19.6s,baz=352,slow=32
**255A Hazlehurst 68.89 65** P **P 03 46 15.0 +0.3**
255A IAMs_20 IAMs_20 04 14 23.7
comp=Z,14µm,21.0s
**LRW Lerwick 68.91 2** *e*P **P 03 46 14.8 +0.4**
**KK31 Karatay Array 68.93 313** P **P 03 46 14.0 -0.8**
**KK31 Karatay Array 68.93 313** *i* P **P 03 46 14.1 -0.8**
**KKAR Karatay Array 68.93 313** P **P 03 46 14.0 -0.9**
**KKAR Karatay Array 68.93 313** P **P 03 46 13.9 -0.9**
**KKAR Karatay Array 68.93 313** ⇑P **P 03 46 14.1 -0.8**
**KKAR Karatay Array 68.93 313** P **P 03 46 14.0 -0.9**
KKAR pmax pmax
comp=Z,75nm,1.4s
**OSL Oslo 68.93 355** *e*P **P 03 46 14.5 0.0**
OSL IVmB_BB 03 46 44.5
comp=Z,2µm,2.5s
OSL *e*S **S 03 55 12.5 -2.9**
OSL IVMs_BB IVMs_BB 04 12 45.1
comp=Z,4µm,26.8s
**MTSE Matsula 68.96 348** *e*P **P 03 46 15.7 +1.0**
**CNNC Cliffs of the 68.98 60** P **P 03 46 15.8 +0.6**
CNNC IAmb IAmb 03 46 34.1
comp=Z,149nm,1.1s
**Y58A Scranton 69.00 62** P **P 03 46 16.0 +0.6**
**553A Crawfordville 69.04 68** P **P 03 46 15.8 +0.1**
**KSH Kashi 69.08 307** P **P 03 46 18.9 +2.9**
KSH PP **PP 03 48 49.4 +1.0**
KSH S **S 03 55 20.3 +2.2**
KSH pmax pmax
comp=Z,87nm,1.5s
KSH pmax pmax
comp=Z,2µm,13.1s
KSH LR LR
comp=Z,19µm,21.3s
KSH LR LR
comp=Z,9µm,23.4s
KSH LR LR
comp=Z,24µm,21.6s
**ODD1 Odda 69.11 358** *e*P **P 03 46 15.6 -0.1**
ODD1 IVmBBB 03 46 18.8
comp=Z,2µm,3.8s
ODD1 *e*S **S 03 55 18.0 +0.3**
ODD1 IVMs_BB IVMs_BB 04 11 30.5
comp=Z,5µm,24.8s
**ARSB Arslanbob 69.15 310** P **P 03 46 15.9 -0.6**
**ARSB Arslanbob 69.15 310** P **P 03 46 15.9 -0.6**
ARSB pmax pmax
comp=Z,26nm,1.3s
ARSB MLR MLR
comp=Z,3µm,22.0s
**PASG PASIGHAT 69.17 288** *e*P P 03 46 03.7 -13
**KOHI KOHIMA 69.24 285** *e*P **P 03 46 18.3 +1.0**
KOHI IAmb IAmb 03 46 24.2
comp=Z,936nm,1.4s
**KONO Kongsberg 69.27 356** P **P 03 46 17.0 +0.3**
**KONO Kongsberg 69.27 356** IAMs_20 IAMs_20 04 14 04.2
comp=Z,12µm,22.0s
**KONO Kongsberg 69.27 356** *e*P **P 03 46 17.9 +1.3**
KONO IVmB_BB 03 46 45.0
comp=Z,1µm,11.8s
KONO *e*S **S 03 55 18.4 -1.1**
KONO IVMs_BB IVMs_BB 04 12 40.3
comp=Z,4µm,26.4s
**KONO Kongsberg 69.27 356** ⇑P **P 03 46 16.9 +0.2**
**KONO Kongsberg 69.27 356** *i* P **P 03 46 17.0 +0.3**
**NHSC New Hope 69.31 63** P **P 03 46 18.5 +1.2**
**NHSC New Hope 69.31 63** ⇑P **P 03 46 18.6 +1.3**
**MOS Moscow 69.38 340** *e*P **P 03 46 13.2 -4.2**
MOS *e* 03 46 38.2
MOS *e*S **S 03 55 13.4 -7.5**
MOS pmax pmax
comp=Z,239nm,1.8s
MOS pmax pmax
comp=Z,1µm,3.5s
MOS MLR MLR
comp=N,9µm,18.0s
MOS MLR MLR
comp=E,11µm,18.0s
MOS MLR MLR
comp=Z,15µm,18.0s
**CRAI Chiangrai 69.45 277** P **P 03 46 18.9 +0.5**

CRAI IAmb IAmb 03 46 20.8
comp=Z,149nm,1.1s
**BLS5 Blasjo 69.60 358** *e*P **P** **03 46 19.0 +0.2**
BLS5 IVmB_BB 03 46 28.9
comp=Z,2μm,3.6s
BLS5 *e*S **S** **03 55 21.4 -2.1**
BLS5 IVMs_BB IVMs_BB 04 12 10.3
comp=Z,5μm,25.1s
**257A Skidaway Islan 69.67 64** P **P** **03 46 19.6 0.0**
257A IAMs_20 IAMs_20 04 14 51.5
comp=Z,16μm,21.0s
**MYLDM Lahad Datu 69.72 252** P **P** **03 46 20.1 0.0**
MYLDM IAmb IAmb 03 46 37.3
comp=Z,308nm,1.4s
**MYLDM Lahad Datu 69.72 252** ⇑P **P** **03 46 22.1 +2.1**
**TLIG Tlapa 69.78 87** P **P** **03 46 21.6 +1.0**
TLIG IAmb IAmb 03 46 39.7
comp=Z,279nm,1.5s
**TLIG Tlapa 69.78 87** ⇑P **P** **03 46 21.6 +1.0**
**KMY Karmoy 69.84 358** *e*P **P** **03 46 20.7 +0.5**
KMY IVmBBB 03 46 21.7
comp=Z,2μm,2.8s
KMY *e*S **S** **03 55 27.5 +1.4**
KMY IVMs_BB IVMs_BB 04 11 51.3
comp=Z,3μm,21.6s
**BELG Belogornoye 69.84 332** LR LR 04 19 25.3
comp=Z,28μm,21.3s,baz=30,slow=38
**BELG Belogornoye 69.84 332** *c i*P **P** **03 46 18.5 -1.8**
BELG pmax pmax
comp=Z,47nm,1.5s
BELG MLR MLR
comp=Z,5μm,21.0s
**UBPT Khong Chiam 69.96 270** P **P** **03 46 22.2 +0.6**
**UBPT Khong Chiam 69.96 270** P **P** **03 46 21.8 +0.2**
UBPT IAmb IAmb 03 46 23.0
comp=Z,198nm,1.5s
**UBPT Khong Chiam 69.96 270** ⇑P **P** **03 46 22.1 +0.5**
**IMP Imphal 70.00 285** *e*P **P** **03 46 22.3 +0.5**
**456A Hilliard 70.04 66** P **P** **03 46 22.7 +0.8**
456A IAMs_20 IAMs_20 04 19 55.3
comp=Z,15μm,18.0s
**OBN Obninsk 70.19 340** P **P** **03 46 22.0 -0.4**
OBN IAMs_20 IAMs_20 04 23 04.8
comp=Z,13μm,18.0s
**OBN Obninsk 70.19 340** ⇑P **P** **03 46 21.8 -0.6**
**OBN Obninsk 70.19 340** LR LR 04 23 17.1
comp=Z,11μm,18.1s,baz=28,slow=41
**OBN Obninsk 70.19 340** ⇑P **P** **03 46 24.8 +2.4**
**OBN Obninsk 70.19 340** *ce*P **P** **03 46 21.8 -0.6**
OBN *e* 03 46 46.1
OBN *i* S **S** **03 55 25.3 -5.0**
OBN *i* SS **SS** **04 00 07.2 +7.6**
OBN pmax pmax
comp=Z,195nm,1.7s
OBN MLR MLR
comp=Z,12μm,18.0s
**OBN Obninsk 70.19 340** P **P** **03 46 21.6 -0.8**
comp=Z,124nm,1.0s,comp=Z,3μm
**SLIT Slitere, Latvi 70.21 349** ⇑P **P** **03 46 21.3 -1.2**
**SLIT Slitere, Latvi 70.21 349** *e*P **P** **03 46 21.5 -1.0**
**KKM Kota Kinabalu 70.41 255** P **P** **03 46 25.7 +1.3**
**KKM Kota Kinabalu 70.41 255** P **P** **03 46 23.8 -0.6**
KKM IAmb IAmb 03 46 26.4
comp=Z,204nm,1.5s
**KKM Kota Kinabalu 70.41 255** ⇑P **P** **03 46 25.5 +1.0**
**SNART Snartemo 70.67 357** *e*P **P** **03 46 25.5 +0.2**
**HOMB Homborsund 70.69 356** *e*P **P** **03 46 25.3 -0.1**
**SHL Shillong 70.70 287** IAMs_20 IAMs_20 04 19 50.6
comp=Z,16μm,20.0s
**656A Willston 70.75 67** P **P** **03 46 27.0 +0.8**
656A IAMs_20 IAMs_20 04 20 33.4
comp=Z,12μm,19.0s
**MSAI Masohi 70.75 238** P P 03 46 31.2 +4.8
comp=Z,73nm,1.1s,comp=Z,2μm
**PHRA Phrae 70.83 276** P **P** **03 46 27.3 +0.4**
**PMOR Pomariorio Ree 70.96 149** *e*P P 03 46 32.7 +5.2
comp=Z,279nm,1.1s
**PMOR Pomariorio Ree 70.96 149** *e*LR LR 04 08 09.3
comp=Z,30μm,20.8s
**DRK Karamyk 71.15 310** IAMs_20 IAMs_20 04 21 40.3
comp=Z,9μm,18.0s
**BTK Batken 71.17 311** P **P** **03 46 28.0 -0.7**
BTK IAmb IAmb 03 47 27.9
comp=Z,76nm,1.0s
BTK IAMs_20 IAMs_20 04 20 07.8
comp=Z,12μm,20.0s
**BTK Batken 71.17 311** P **P** **03 46 28.0 -0.7**
BTK pmax pmax
comp=Z,76nm,1.0s
BTK MLR MLR
comp=Z,12μm,20.0s
**BNDI Bandanaira 71.23 236** ⇑P **P** **03 46 29.6 +0.3**
**SANI Sanana 71.27 241** P **P** **03 46 29.1 -0.4**
**SANI Sanana 71.27 241** P **P** **03 46 28.0 -1.5**
**SANI Sanana 71.27 241** ⇑P **P** **03 46 29.0 -0.4**
**SANI Sanana 71.27 241** P **P** **03 46 29.2 -0.3**
comp=Z,62nm,0.9s,comp=Z,3μmcomp=Z,9μm
**VAH Vaihoa 71.27 149** *e*P **P** **03 46 31.1 +1.8**
comp=Z,241nm,1.0s
VAH *e*S **S** **03 55 45.4 +1.8**
comp=Z,10μm,25.4s
**VAH Vaihoa 71.27 149** *e*LR LR 04 08 16.8
comp=Z,34μm,20.9s
**GTK Tadong 71.35 290** *e*P **P** **03 46 31.8 +1.7**
GTK IAmb IAmb 03 46 32.8
comp=Z,535nm,1.1s
**TOLI2 Tolitoli 71.63 248** P **P** **03 46 31.3 -0.4**
**CM31 Chiang Mai Arr 71.67 277** P **P** **03 46 31.0 -0.9**
CM31 IAmb IAmb 03 46 47.0
comp=Z,173nm,1.4s
**CMAR Chiang Mai Arr 71.67 277** P **P** **03 46 31.9 0.0**
**CMAR Chiang Mai Arr 71.67 277** P **P** **03 46 32.5 +0.6**
comp=Z,22nm,0.8s,baz=26,slow=6.6,SNR=78
CMAR LR LR 04 21 44.9
comp=Z,5μm,18.8s,baz=40,slow=39
comp=Z,22nm,0.8s
**ISAL Salakas 71.68 346** *e*P **P** **03 46 29.9 -1.6**
**LPSR Galich'ya Gora 71.97 337** *e*P **P** **03 46 30.1 -3.1**
LPSR *e*S **S** **03 55 42.9 -8.2**
LPSR pmax pmax
comp=Z,170nm,1.5s
LPSR smax smax
comp=N,2μm,13.4s
LPSR MLR MLR
comp=Z,19μm,22.0s
**PABE Paberze 72.06 347** P **P** **03 46 32.5 -1.2**
**PABE Paberze 72.06 347** *e*P **P** **03 46 34.3 +0.6**
**DRUM Mains of Drumt 72.11 3** *e*P **P** **03 46 33.2 -0.8**
**DEL Delary 72.19 353** *e*P **P** **03 46 33.2 -1.2**
**NACGM Naroch 72.23 345** *e*P **P** **03 46 33.4 -1.3**
NACGM *e*P **P** **03 46 33.4 -1.3**
NACGM ⇑ *i*P **P** **03 46 33.4 -1.3**
comp=Z,38nm,0.9s,baz=16
NACGM *ep*P **pwP** **03 46 49.7 +0.8**
NACGM *es*P **PcP** **03 46 56.7 +4.0**
NACGM PP PP 03 49 27.7 +13
NACGM *i* PPP PPP 03 51 13.1
NACGM S **S** **03 55 50.2 -3.7**
NACGM sS sS 03 56 22.5 +8.0
NACGM SS SS 04 00 55.5 +25
NACGM SSS SSS 04 03 59.7
NACGM LQ LQ 04 11 28.3
NACGM LQ LQ 04 11 33.6
NACGM LR LR 04 16 03.9
NACGM LRM MLR 04 18 50.3
comp=Z,7μm,20.0s
NACGM LRM MLR 04 18 57.8
comp=N,409μm,18.9s
**LUWI Luwuk 72.24 245** P **P** **03 46 35.2 -0.1**
**LUWI Luwuk 72.24 245** P **P** **03 46 35.2 -0.1**
**LUWI Luwuk 72.24 245** P **P** **03 46 34.2 -1.1**
LUWI S **S** **03 55 49.4 -5.7**
**LUWI Luwuk 72.24 245** ⇑P **P** **03 46 34.9 -0.4**
**LUWI Luwuk 72.24 245** P **P** **03 46 35.4 +0.1**
**GAR Garm 72.24 311** P **P** **03 46 34.9 -0.4**
GAR IAmb IAmb 03 47 08.8
comp=Z,122nm,0.9s
**DWPF Disney Wildern 72.33 67** P **P** **03 46 36.8 +1.0**
**DWPF Disney Wildern 72.33 67** IAMs_20 IAMs_20 04 21 31.2
comp=Z,12μm,19.0s
**AGT Agartala 72.34 286** *e*P **P** **03 46 38.1 +2.2**
**MNK Minsk 72.43 345** *i*P **P** **03 46 35.0 -0.9**
comp=E,34nm,0.9s
MNK *i*P **P** **03 46 35.0 -0.9**
comp=N,11nm,0.9s
MNK *i*P **P** **03 46 35.0 -0.9**
comp=Z,54nm,0.9s,baz=16
MNK *i* pP **pP** **03 46 47.4 -0.4**
MNK *i* PP **PP** **03 49 16.1 -0.5**
MNK *i* PPP PPP 03 50 59.6
MNK *i* S **S** **03 55 56.5 +0.2**
MNK *i* sS **sS** **03 56 17.5 +0.6**
MNK *i* SS **SS** **04 00 35.9 +1.9**
MNK *i* SSS SSS 04 03 52.6
MNK *i* LQ LQ 04 12 57.0
MNK *i* LR LR 04 16 23.7
MNK *i* LRM MLR 04 18 21.2
comp=N,9μm,20.1s
MNK *i* LRM MLR 04 18 59.7
comp=Z,17μm,23.5s
MNK *i* LRM MLR 04 19 07.8
comp=E,12μm,22.4s
**MNK Minsk 72.43 345** *i*P **P** **03 46 35.0 -0.9**
MNK *i* *PP **pP** **03 46 47.4 -0.4**
MNK *i* 03 49 16.0
MNK *i* PPP PPP 03 50 59.6
MNK *i* S **S** **03 55 56.5 +0.2**
MNK *i* SS **SS** **04 00 35.9 +1.9**
MNK *i* SSS SSS 04 03 52.5
MNK pmax pmax
comp=N,11nm,0.9s
MNK pmax pmax
comp=Z,54nm,0.9s
MNK pmax pmax
comp=E,34nm,0.9s
MNK MLR MLR
comp=N,9μm,20.0s
MNK MLR MLR
comp=Z,17μm,24.0s
MNK MLR MLR
comp=E,12μm,22.0s
**CMIG Matias Romero 72.44 85** LR LR 04 13 35.7
comp=E,8μm,22.0s,baz=302,slow=32
**MUD Monsted U'grnd 72.48 356** *i*P P 03 46 30.9 -5.2
MUD IAmb IAmb 03 47 03.5
comp=Z,36nm,0.9s
**INVG Invergeldie, C 72.54 4** *e*P **P** **03 46 35.8 -0.7**
**VRH Novokhopyorsk 72.55 335** *e*P **P** **03 46 35.4 -1.3**
VRH pmax pmax
comp=Z,100nm,0.6s
VRH MLR MLR
comp=Z,13μm,26.0s
**LAWE Loch Awe, Argy 72.64 4** *e*P **P** **03 46 36.7 -0.5**
**HNLY HANLEY 72.67 301** *e*P **P** **03 46 38.8 +0.4**
**VORR Voronezh 72.76 337** *e*P **P** **03 46 38.6 +0.7**
VORR pmax pmax
comp=Z,93nm,0.4s
**MPSI Mapaga 72.77 248** P **P** **03 46 38.7 +0.2**
comp=Z,89nm,1.1s,comp=Z,3μmcomp=Z,11μm
**PPT Papeete 72.86 152** LR LR 04 11 44.9
comp=Z,11μm,21.5s,baz=304,slow=30
**PPT2 Papeete2 72.88 152** *e*P **P** **03 46 40.5 +1.5**
comp=Z,2μm,28.5s
**PPT2 Papeete2 72.88 152** *e*PP **PP** **03 49 16.3 -5.7**
comp=Z,809nm,27.8s
PPT2 *e*S **S** **03 56 04.3 +2.1**
comp=Z,12μm,29.5s
PPT2 *e*S **SKiKP** **03 56 05.7 -2.8**
comp=Z,2μm,26.1s
PPT2 *e*SS **SS** **04 00 45.0 +1.4**
comp=Z,1μm,22.8s
PPT2 *e*SS SS 04 00 47.4 +3.8
comp=Z,6μm,26.5s
PPT2 *e*LQ LQ 04 05 53.8
comp=Z,2μm,27.2s
PPT2 *e*LQ LQ 04 06 05.8
comp=Z,1μm,24.0s
PPT2 *e*LR LR 04 09 00.2
comp=Z,23μm,26.8s
PPT2 *e*LR LR 04 09 03.8
comp=Z,7μm,21.8s
PPT2 *e*LR LR 04 09 06.9
comp=Z,32μm,26.0s
**PPTF Pamatai, Papee 72.89 152** IAMs_20 IAMs_20 04 11 54.9
comp=Z,11μm,21.0s
**LIFNC LIFOU 72.94 195** P **P** **03 46 40.8 +1.6**
**PAE Paea 72.95 152** *e*S **SKiKP** **03 56 07.6 -0.9**
comp=Z,1μm,27.3s
PAE *e*SS **SS** **04 00 46.1 +1.6**
comp=Z,642nm,23.2s
PAE *e*LQ LQ 04 06 03.5
comp=Z,738nm,23.6s
PAE *e*LR LR 04 09 03.9
comp=Z,4μm,21.5s
**CHGR Chuyangaron 73.06 311** P **P** **03 46 39.5 -0.6**
CHGR IAmb IAmb 03 46 46.7
comp=Z,215nm,0.9s
**CHGR Chuyangaron 73.06 311** P **P** **03 46 39.5 -0.6**
CHGR pmax pmax
comp=Z,215nm,0.9s
CHGR MLR MLR
comp=Z,32μm,22.0s
**COP Copenhagen 73.07 354** *i*P **P** **03 46 36.9 -2.8**
COP IAmb IAmb 03 47 19.0
comp=Z,390nm,1.6s
**EDI Edinburgh 73.07 3** *e*P **P** **03 46 37.6 -2.1**
**ESY Stoneypath 73.10 3** *e*P **P** **03 46 40.2 +0.3**
**SIMJ Simiganj 73.13 311** P **P** **03 46 40.1 -0.5**
SIMJ IAmb IAmb 03 46 43.3
comp=Z,255nm,1.4s
SIMJ IAMs_20 IAMs_20 04 19 12.7
comp=Z,14μm,22.0s
**TVO Taravao 73.16 152** *e*S **SKiKP** **03 56 08.3 -0.6**
comp=Z,1μm,25.5s
TVO *e*SS **SS** **04 00 48.7 +0.8**
comp=Z,722nm,23.8s
TVO *e*LQ LQ 04 06 08.0
comp=Z,693nm,24.0s
TVO *e*LR LR 04 09 09.3
comp=Z,5μm,22.1s
**VSR Storozhevoye 73.19 337** *e*P **P** **03 46 38.0 -2.5**
VSR *e*S **S** **03 55 58.1 -6.9**
VSR pmax pmax
comp=Z,210nm,1.6s
VSR smax smax
comp=N,790nm,5.4s
VSR MLR MLR
comp=Z,17μm,19.0s
**KOUNC Koumac, New Ca 73.23 198** ⇑P P 03 46 49.8 +8.9
**COEN Coen 73.32 220** P **P** **03 46 42.2 +0.5**
COEN IAmb IAmb 03 47 43.8
comp=Z,94nm,0.8s
**COEN Coen 73.32 220** ⇑P **P** **03 46 42.4 +0.7**
**COEN Coen 73.32 220** P **P** **03 46 42.0 +0.3**
comp=Z,0.0nmcomp=Z,62nm,1.1s
**VORD Divnogorie 73.39 337** *e*P **P** **03 46 40.5 -1.2**
VORD *e*S S 03 55 58.1 -9.2
VORD pmax pmax
comp=Z,220nm,1.5s
VORD smax smax
comp=N,70nm,4.1s
VORD MLR MLR
comp=Z,14μm,20.0s
**SSRD Sdr. Stenderup 73.43 356** *i*P **P** **03 46 39.9 -1.9**
SSRD IAmb IAmb 03 47 19.4
comp=Z,228nm,1.4s
**BSD Bornholm Skovb 73.45 352** ⇑P **P** **03 46 41.4 -0.6**
**BSD Bornholm Skovb 73.45 352** *e*P **P** **03 46 41.4 -0.6**
**BSD Bornholm Skovb 73.45 352** *i*P P 03 46 36.9 -5.1
BSD IAmb IAmb 03 47 19.8
comp=Z,44nm,1.1s
**SAUI Saumlaki 73.46 233** ⇑P **P** **03 46 44.2 +1.7**
**SUW Suwalki 73.62 347** *e*P **P** **03 46 40.6 -2.4**
SUW *e*S S 03 56 22.2 +12
SUW *e*SS SS 04 01 16.9 +25
SUW *e*L L 04 19 12.8
comp=Z,12μm,22.9s
**SUW Suwalki 73.62 347** P **P** **03 46 41.6 -1.4**
SUW IAmb IAmb 03 47 03.6
comp=Z,127nm,1.0s
SUW IAMs_20 IAMs_20 04 21 44.8
comp=Z,11μm,20.0s
**SUW Suwalki 73.62 347** *e*P **P** **03 46 44.5 +1.5**
**SUW Suwalki 73.62 347** P **P** **03 46 41.6 -1.4**
SUW pmax pmax
comp=Z,127nm,1.0s
SUW MLR MLR
comp=Z,12μm,20.0s
**EKA Eskdalemuir Ar 73.66 3** P **P** **03 46 43.5 +0.3**
comp=Z,8.5nm,0.5s,baz=359,slow=4.5,SNR=64
comp=Z,8.5nm,0.5s
**ESK Eskdalemuir 73.68 3** P **P** **03 46 43.4 +0.1**
**ESK Eskdalemuir 73.68 3** *e*P **P** **03 46 42.6 -0.7**
ESK IAmb IAmb 03 46 45.2
comp=Z,75nm,1.5s
**ESK Eskdalemuir 73.68 3** ⇑P **P** **03 46 42.8 -0.5**
**ESK Eskdalemuir 73.68 3** P **P** **03 46 43.4 +0.1**
ESK pmax pmax
comp=Z,75nm,1.2s
ESK MLR MLR
comp=Z,7μm,19.0s
**IDGL Inch Island, C 73.71 6** P **P** **03 46 44.2 +0.7**
**060A Indiantown 73.77 67** P **P** **03 46 45.5 +1.2**
060A IAMs_20 IAMs_20 04 22 24.1
comp=Z,14μm,18.0s
**CLGH Cloghs, Cushen 73.78 5** *e*P **P** **03 46 42.9 -1.1**
CLGH IAmb IAmb 03 46 46.5
comp=Z,87nm,1.2s
**NEWG New Galloway 73.84 4** *e*P **P** **03 46 42.8 -1.4**
**RAR Rarotonga 73.89 163** LR LR 04 12 50.3
comp=Z,28μm,20.5s,baz=306,slow=30
**KLP Kalpa 74.02 300** *e*P **P** **03 46 46.0 -0.1**
KLP IAmb IAmb 03 47 06.9
comp=Z,216nm,1.1s
**GAL1 Galloway 74.07 4** *e*P **P** **03 46 44.7 -0.9**
**RGN Rugen 74.14 353** IAMs_20 IAMs_20 04 17 27.0
comp=Z,12μm,22.0s
**RGN Rugen 74.14 353** ⇑P **P** **03 46 46.1 +0.2**
**EDMD Edmundbyers 74.20 3** *e*P **P** **03 46 45.7 -0.7**
**061Z Ochoppi 74.33 68** P **P** **03 46 48.1 +0.5**
061Z IAMs_20 IAMs_20 04 23 01.4
comp=Z,9μm,19.0s
**DZM Mont Dzumac 74.34 195** *e*P **P** **03 46 45.9 -1.6**
comp=Z,1μm,27.4s
**DZM Mont Dzumac 74.34 195** *e*PP **PP** **03 49 31.4 -2.9**
comp=Z,854nm,27.4s
DZM *e*S **S** **03 56 20.7 +2.1**
comp=Z,6μm,25.9s
DZM *e*SS **SS** **04 01 06.6 +0.8**
comp=Z,6μm,29.3s
DZM *e*LQ LQ 04 06 14.6
comp=Z,13μm,27.8s
DZM *e*LR LR 04 09 44.3
comp=Z,26μm,24.9s
**DZM Mont Dzumac 74.34 195** P **P** **03 46 48.8 +1.3**
comp=Z,28nm,0.8s,baz=39,slow=7.5,SNR=6.2
DZM LR LR 04 12 54.2
comp=Z,9μm,21.6s,baz=20,slow=30
comp=Z,28nm,0.8s
**NOUC Port Laguerre 74.39 195** P **P** **03 46 50.1 +2.4**
**KESW Keswick, Cumbr 74.41 3** *e*P **P** **03 46 46.6 -1.0**
**DHRM DHARAMSHALA 74.51 302** *e*P **P** **03 46 49.1 +0.3**
DHRM IAmb IAmb 03 46 55.4
comp=Z,87nm,0.8s
**LGTI Lohaghat 74.52 298** *e*P **P** **03 46 49.1 +0.5**
**THN Thein Dam 74.67 303** *e*P **P** **03 46 50.1 +0.6**
**IOMK Kirk Michael 74.68 4** *e*P **P** **03 46 48.6 -0.6**
**CCIG Comitan 74.77 83** P **P** **03 46 50.9 +0.4**
CCIG IAmb IAmb 03 47 13.9
comp=Z,310nm,1.8s
**CCIG Comitan 74.77 83** ⇑P **P** **03 46 51.8 +1.4**
**WIM Isle of Man 74.79 4** *e*P **P** **03 46 49.4 -0.4**
**ILTH Belurgan, Co L 74.82 5** P **P** **03 46 49.4 -0.5**
**ILTH Belurgan, Co L 74.82 5** *e*P **P** **03 46 49.5 -0.5**
**SMLA Simla 74.91 301** *e*P **P** **03 46 50.8 -0.1**
SMLA IAmb IAmb 03 46 53.9
comp=Z,57nm,0.8s
**NIL Nilore 75.00 305** P **P** **03 46 51.3 -0.1**
NIL IAmb IAmb 03 47 25.3
comp=Z,160nm,1.2s
**NIL Nilore 75.00 305** P **P** **03 46 51.5 +0.1**
NIL P **P** **03 46 51.5 +0.1**
**NIL Nilore 75.00 305** P **P** **03 46 51.3 -0.1**
NIL pmax pmax
comp=Z,160nm,1.2s
NIL MLR MLR
comp=Z,18μm,22.0s
**GKP Gorka Klasztor 75.06 351** *e*P **P** **03 46 51.1 -0.3**
**HPK Haverah Park 75.09 2** *e*P **P** **03 46 50.0 -1.5**
**BHK Bhakra 75.09 302** *e*P **P** **03 46 52.3 +0.4**
BHK IAmb IAmb 03 46 59.6
comp=Z,75nm,0.7s
**IGLA Glengowla, Co 75.22 7** P **P** **03 46 52.0 -0.3**
**SOR Soroa 75.43 72** P **P** **03 46 54.5 +0.5**
SOR IAmb IAmb 03 47 16.3
comp=Z,191nm,1.2s
**SOR Soroa 75.43 72** P **P** **03 46 54.5 +0.5**
SOR pmax pmax
comp=Z,191nm,1.2s
**WPS Cemaes, Angles 75.54 4** *e*P **P** **03 46 53.3 -0.8**
**WME Myndd Eilian 75.56 4** *e*P **P** **03 46 53.9 -0.3**
**DSB Dublin 75.60 5** P **P** **03 46 54.0 -0.4**
**DSB Dublin 75.60 5** P **P** **03 46 54.3 -0.2**
DSB IAmb IAmb 03 46 56.2
comp=Z,146nm,1.5s
DSB IAMs_20 IAMs_20 04 18 10.8
comp=Z,10μm,22.0s
**DSB Dublin 75.60 5** P **P** **03 46 54.1 -0.4**
DSB S **S** **03 56 28.5 -3.4**
**DSB Dublin 75.60 5** ⇑P **P** **03 46 54.1 -0.3**
**BOK Bokaro 75.61 290** *e*P **P** **03 46 56.0 +1.0**
BOK IAmb IAmb 03 46 57.5
comp=Z,281nm,1.0s
**LMK Market Rasen 75.62 2** *e*P **P** **03 46 53.7 -0.8**
**LBWR Ladybower, Pea 75.64 2** *e*P **P** **03 46 53.1 -1.6**
**SBUM Sibu 75.67 256** P **P** **03 46 56.0 +0.6**
**SBUM Sibu 75.67 256** ⇑P **P** **03 46 56.4 +1.0**
**BKB Balikpapan 75.81 250** ⇑P **P** **03 46 57.7 +1.5**
**AKASG Malin Array Be 75.84 343** P **P** **03 46 55.0 -0.9**
**AKASG Malin Array Be 75.84 343** P **P** **03 46 54.8 -1.1**
comp=Z,22nm,0.6s,baz=18,slow=5.7,SNR=73
AKASG LR LR 04 23 17.2
comp=Z,11μm,21.4s,baz=14,slow=38
comp=Z,22nm,0.6s
**AKASG Malin Array Be 75.84 343** *i*P **P** **03 46 54.7 -1.1**
AKASG pmax pmax
comp=Z,21nm,0.6s
**AKBB Malin Array Si 75.84 343** P **P** **03 46 55.0 -0.9**
**AKBB Malin Array Si 75.84 343** *ce*P **P** **03 46 54.8 -1.1**
AKBB pmax pmax
comp=Z,142nm,1.5s
AKBB MLR MLR
comp=Z,17μm,24.0s
**KIEV Kiev 75.85 343** P **P** **03 46 54.8 -1.1**
**KIEV Kiev 75.85 343** IAMs_20 IAMs_20 04 23 06.2
comp=Z,12μm,22.0s
**KIEV Kiev 75.85 343** *i*P **P** **03 46 54.4 -1.5**
SNR=14
**KIEV Kiev 75.85 343** ⇑P **P** **03 46 54.9 -1.0**
**KIEV Kiev 75.85 343** ⇑P **P** **03 46 56.0 0.0**
**KIEV Kiev 75.85 343** P **P** **03 46 55.9 0.0**
**STNC Stoke 75.94 3** *e*P **P** **03 46 55.4 -1.0**
**BBSI Bau Bau 76.00 242** P **P** **03 47 00.5 +3.3**
comp=Z,124nm,1.1s,comp=Z,5μmcomp=Z,11μm
**BEL Belsk 76.07 348** *e*P **P** **03 46 56.9 -0.3**
BEL *e*S **S** **03 56 35.5 -1.6**
BEL *e*L L 04 20 27.7
comp=Z,13μm,22.9s
**FOEL Foel Wylfa 76.11 3** *e*P **P** **03 46 56.8 -0.6**
FOEL IAmb IAmb 03 46 58.6
comp=Z,147nm,1.4s
**LLW Llanuwychllyn 76.13 4** *e*P **P** **03 46 56.8 -0.7**
**RUE Ruedersdorf 76.16 353** *e*P **P** **03 46 57.3 -0.3**
**CAMR Camarioca 76.20 70** P **P** **03 47 00.1 +1.7**
CAMR IAmb IAmb 03 47 20.8
comp=Z,361nm,1.0s
**CWF Charnwood Fore 76.32 2** *e*P **P** **03 46 57.6 -1.0**
CWF IAmb IAmb 03 46 59.7
comp=Z,84nm,1.5s
**WACR West Acre 76.36 1** *e*P **P** **03 46 57.6 -1.2**
WACR IAmb IAmb 03 47 01.4
comp=Z,119nm,1.0s
**KBL Kabul 76.41 309** P **P** **03 46 58.3 -1.4**
KBL IAmb IAmb 03 47 01.3
comp=Z,185nm,1.3s
**KBL Kabul 76.41 309** P **P** **03 46 58.2 -1.4**
SNR=54
KBL P **P** **03 46 58.2 -1.4**
SNR=54
KBL S **S** **03 56 38.6 -3.3**
KBL S **S** **03 56 38.6 -3.3**
**KBL Kabul 76.41 309** P **P** **03 46 58.3 -1.4**
KBL pmax pmax
comp=Z,185nm,1.3s
**IWEX Carrickbyrne, 76.44 6** P **P** **03 46 59.3 0.0**

**IWEX Carrickbyrne, 76.44 6** *e*P **P 03 46 59.0 -0.3**
**FLTG Flechtingen 76.49 354** ⇑P **P 03 46 58.9 -0.7**
**HLM1 Long Mynd 76.49 3** *e*P **P 03 46 58.4 -1.2**
HLM1 IAmb IAmb 03 47 00.0
comp=Z,92nm,1.7s
**BNSI Bone 76.50 245** P **P 03 47 02.4 +2.3**
comp=Z,109nm,1.1s,comp=Z,2µmcomp=Z,13µm
**VAL Valentia 76.62 8** P **P 03 47 00.6 +0.4**
**VAL Valentia 76.62 8** ⇑P **P 03 47 00.2 0.0**
**IBBN Ibbenburen 76.69 357** ⇑P **P 03 47 00.6 0.0**
**ALBI Allahabad 76.82 294** *e*P **P 03 47 01.7 -0.2**
ALBI IAmb IAmb 03 47 03.7
comp=Z,268nm,0.5s
**KDU Kakadu 76.93 230** ⇑P **P 03 47 02.8 +0.4**
**KDU Kakadu 76.93 230** P **P 03 47 02.5 +0.2**
comp=Z,0.0nmcomp=Z,117nm,1.2s
**RSBS Rosebush, Pemb 76.98 4** *e*P **P 03 47 00.8 -1.5**
RSBS IAmb IAmb 03 47 04.6
comp=Z,87nm,1.2s
**ELMS Elmsett, Ipswi 77.00 1** *e*P **P 03 47 01.1 -1.3**
**MCH1 Michaelchurch 77.01 3** *e*P **P 03 47 03.0 +0.6**
**MONM Monmouth 77.17 3** *e*P **P 03 47 02.6 -0.8**
MONM IAmb IAmb 03 47 03.9
comp=Z,147nm,1.5s
**KAPI Kappang 77.20 245** P **P 03 47 04.7 +0.7**
KAPI IAmb IAmb 03 47 15.4
comp=Z,173nm,1.4s
**KAPI Kappang 77.20 245** ⇑P **P 03 47 05.3 +1.3**
**KAPI Kappang 77.20 245** P **P 03 47 05.1 +1.1**
comp=Z,22nm,0.8s,baz=98,slow=1.7,SNR=13
KAPI LR LR 04 18 51.2
comp=Z,1µm,20.5s,baz=31,slow=34
comp=Z,22nm,0.8s
**KAPI Kappang 77.20 245** P **P 03 47 04.5 +0.5**
KAPI P **P 03 47 04.5 +0.5**
KAPI S **S 03 56 52.1 +1.7**
KAPI S **S 03 56 52.1 +1.7**
**KAPI Kappang 77.20 245** *i* P **P 03 47 05.1 +1.1**
KAPI pmax pmax
comp=Z,134nm,1.5s
**SONA Sohna 77.20 299** *e*P **P 03 47 03.6 -0.3**
**STRD Stroud 77.25 3** *e*P **P 03 47 03.4 -0.5**
STRD IAmb IAmb 03 47 05.0
comp=Z,390nm,1.6s
**CLL Collm 77.39 353** P **P 03 47 03.6 -1.0**
CLL IAMs_20 IAMs_20 04 24 07.8
comp=Z,12µm,22.0s
**CLL Collm 77.39 353** ⇑*i*P **P 03 47 03.4 -1.2**
comp=Z,111nm,1.8s
CLL *e*Pmax 03 47 08.0
CLL *i* sP **PcP 03 47 13.6 -1.4**
CLL *e*x x 03 47 19.0
CLL *e*PP **PP 03 50 02.0 +3.6**
CLL *e*PPP PPP 03 51 42.0
CLL *e*x x 03 53 30.0
CLL *e*S **S 03 56 50.0 -1.5**
CLL *e*PS **PnS 03 57 38.0 +3.4**
CLL *e*SS **SS 04 01 48.0 -1.1**
CLL *e*SSS SSS 04 05 18.0
CLL *e*SSSS 04 07 12.0
CLL AMS AMS 04 23 00.0
CLL AMS AMS 04 24 00.0
comp=Z,11µm,21.6s
**CLL Collm 77.39 353** ⇑*i*P **P 03 47 03.4 -1.2**
CLL *e**PP **pwP 03 47 19.0 +0.2**
CLL *e*S **S 03 56 50.0 -1.5**
CLL pmax pmax
comp=Z,111nm,1.8s
CLL MLR MLR
comp=Z,11µm,21.6s
**SWN1 Swindon 77.53 3** *e*P **P 03 47 05.5 +0.1**
SWN1 IAmb IAmb 03 47 06.9
comp=Z,192nm,1.2s
**KSP Ksiaz 77.56 351** *e*P **P 03 47 04.2 -1.4**
KSP *e*S **S 03 56 48.0 -5.5**
KSP *e*L L 04 18 11.6
comp=Z,11µm,25.4s
**KSP Ksiaz 77.56 351** ⇑P **P 03 47 04.9 -0.7**
**KSP Ksiaz 77.56 351** P **P 03 47 04.1 -1.5**
comp=Z,27nm,1.6s,comp=Z,1µm
**LVV L'vov 77.58 346** *e*P **P 03 47 05.1 -0.6**
LVV *e* 03 47 20.9
LVV *e*S **S 03 56 52.0 -1.7**
LVV *e*PS **PnS 03 57 45.2 +8.0**
LVV pmax pmax
comp=Z,500nm,1.3s
LVV MLR MLR
comp=E,3µm,19.0s
LVV MLR MLR
comp=N,12µm,21.0s
LVV MLR MLR
comp=Z,9µm,22.0s
**KSM Kuching 77.60 257** P **P 03 47 06.0 -0.3**
**KSM Kuching 77.60 257** ⇑P **P 03 47 06.5 +0.2**
**KUDL Kundal 77.61 300** *e*P **P 03 47 05.7 -0.5**
KUDL IAmb IAmb 03 47 10.3
comp=Z,80nm,0.8s
**MTN Manton Dam 77.71 231** P **P 03 47 07.0 +0.2**
MTN IAmb IAmb 03 47 21.6
comp=Z,274nm,1.4s
**MTN Manton Dam 77.71 231** ⇑P **P 03 47 07.3 +0.5**
**MTN Manton Dam 77.71 231** P **P 03 47 07.0 +0.2**
comp=Z,0.0nmcomp=Z,153nm,1.1s
**BRG Berggiesshubel 77.74 352** *i* P **P 03 47 06.5 -0.2**
BRG Amp 03 47 07.9
comp=Z,49nm,1.4s
**BRG Berggiesshubel 77.74 352** P P 03 47 12.9 +6.3
BRG Amp 03 47 13.6
comp=Z,19nm,0.8s
**BRG Berggiesshubel 77.74 352** P P 03 47 24.4 +18
BRG Amp 03 47 29.4
comp=Z,24nm,1.1s
**BRG Berggiesshubel 77.74 352** PP PP 03 50 14.0 +13
**BRG Berggiesshubel 77.74 352** *i* P **P 03 47 06.4 -0.2**
BRG S **S 03 56 55.0 -0.4**
BRG SP ScS 03 57 36.0 +14
BRG pmax pmax
comp=Z,49nm,1.4s
**CTA Charters Tower 77.75 214** LR LR 04 17 58.8
comp=Z,508nm,20.2s,baz=25,slow=33
**CTAO Charters Tower 77.75 214** P **P 03 47 08.0 +1.0**
CTAO IAmb IAmb 03 47 12.5
comp=Z,76nm,0.8s
**CTAO Charters Tower 77.75 214** ⇑P **P 03 47 07.8 +0.9**
**CTAO Charters Tower 77.75 214** P **P 03 47 08.0 +1.0**
CTAO pmax pmax
comp=Z,76nm,0.8s
**GOF Gofitskoye 77.76 332***c* *i*P **P 03 47 07.0 +0.2**
GOF *e*S **S 03 56 56.4 +0.6**
**OJC Ojcow 77.78 349** *e*P **P 03 47 05.3 -1.5**
OJC *e*L L 04 20 22.0
comp=Z,11µm,24.1s
**OJC Ojcow 77.78 349** P **P 03 47 05.8 -1.0**
**OJC Ojcow 77.78 349** ⇑P **P 03 47 06.5 -0.4**
**OJC Ojcow 77.78 349** P **P 03 47 05.8 -1.0**
OJC pmax pmax
comp=Z,34nm,1.1s
**OJC Ojcow 77.78 349** P **P 03 47 05.2 -1.6**
comp=Z,28nm,1.6s,comp=Z,2µm
**CHVC Chvalec 77.83 351** *e*P **P 03 47 06.8 -0.4**
CHVC AMS AMS 04 20 30.0
comp=Z,10µm,21.3s
**CHVC Chvalec 77.83 351** *e*P **P 03 47 06.8 -0.4**
CHVC MLR MLR
comp=Z,10µm,21.3s
**OSTC Ostas 77.85 351** *e*P **P 03 47 06.4 -0.9**
OSTC AMS AMS 04 20 40.0
comp=Z,10µm,23.0s
**OSTC Ostas 77.85 351** *e*P **P 03 47 06.4 -0.9**
OSTC MLR MLR
comp=Z,10µm,23.0s
**ERBR Yeremizino-Bor 77.90 334** *e*P **P 03 47 08.2 +0.6**
ERBR *e**PP **pP 03 47 20.1 +0.5**
ERBR *e*S **S 03 57 00.5 +3.2**
ERBR pmax pmax
comp=Z,362nm,1.3s
ERBR MLR MLR
comp=Z,25µm,20.0s
ERBR MLR MLR
comp=N,27µm,18.0s
ERBR MLR MLR
comp=E,12µm,18.0s
**UPC Upice 77.92 351** *e*P **P 03 47 06.7 -0.9**
UPC AMS AMS 04 19 00.0
comp=E,11µm,22.9s
**UPC Upice 77.92 351** *e*P **P 03 47 06.7 -0.9**
UPC MLR MLR
comp=Z,11µm,22.9s
**MTO3 Montecristo 77.92 82** P **P 03 47 08.4 0.0**
**HTL Hartland 77.95 4** *e*P **P 03 47 07.1 -0.6**
**ELSH Elham, Standar 77.95 1** *e*P **P 03 47 07.0 -0.7**
**KWP Kalwaria Pacla 77.96 347** *e*P **P 03 47 05.8 -2.0**
KWP *e*S S 03 56 41.8 -16
KWP *e*L L 04 22 40.9
comp=Z,17µm,23.0s
**KWP Kalwaria Pacla 77.96 347** P **P 03 47 07.2 -0.7**
KWP IAmb IAmb 03 47 33.9
comp=Z,245nm,1.1s
KWP IAMs_20 IAMs_20 04 22 54.5
comp=Z,15µm,22.0s
**KWP Kalwaria Pacla 77.96 347** ⇑P **P 03 47 07.5 -0.4**
**KWP Kalwaria Pacla 77.96 347** P **P 03 47 07.2 -0.7**
KWP pmax pmax
comp=Z,245nm,1.1s
KWP MLR MLR
comp=Z,15µm,22.0s
**PVCC Panska Ves 78.03 352** *e*P **P 03 47 07.8 -0.4**
PVCC AMS AMS 04 23 50.0
comp=Z,11µm,20.4s
**PVCC Panska Ves 78.03 352** *e*P **P 03 47 07.8 -0.4**
PVCC MLR MLR
comp=Z,11µm,20.4s
**DPC Dobruska-Polom 78.04 351** *e*P **P 03 47 08.5 +0.1**
DPC AMS AMS 04 20 50.0
comp=Z,10µm,22.2s
**DPC Dobruska-Polom 78.04 351** *e*P **P 03 47 08.5 +0.1**
DPC MLR MLR
comp=Z,10µm,22.2s
**HSKC Hora Svate Kat 78.05 353** *e*P **P 03 47 07.1 -1.3**
HSKC AMS AMS 04 24 40.0
comp=Z,11µm,19.8s
**RICC Richard 78.06 352** *e*P **P 03 47 07.2 -1.2**
RICC AMS AMS 04 25 00.0
comp=Z,10µm,20.2s
**BBSR BB Station 78.09 53** P **P 03 47 08.6 -0.2**
BBSR IAmb IAmb 03 47 12.6
comp=Z,76nm,0.9s
**BBSR BB Station 78.09 53** IAMs_20 IAMs_20 04 23 30.9
comp=Z,9µm,19.0s
**MOX Moxa 78.14 354** *e*L L 04 21 58.9
comp=Z,7µm,21.2s
**HMNX Herstmonceux 78.22 1** *e*P **P 03 47 08.5 -0.7**
HMNX IAmb IAmb 03 47 16.4
comp=Z,136nm,1.1s
**MAK Makhachkala 78.24 328***d* *i*P **P 03 47 09.9 +0.4**
MAK *e**PP **sP 03 47 23.9 -2.2**
MAK *e* 03 50 06.1
MAK *e*PPP PPP 03 51 57.2
MAK *e*S **S 03 57 00.6 -0.3**
MAK *e**SS **ScS 03 57 25.6 -0.4**
MAK *e*SS **SS 04 02 07.7 +5.3**
MAK pmax pmax
comp=Z,416nm,1.2s
MAK MLR MLR
comp=Z,16µm,20.0s
**BEBN Eben Emael 78.26 358** *d*P **P 03 47 09.3 -0.2**
**KRLC Kraliky 78.27 350** *e*P **P 03 47 09.1 -0.5**
KRLC AMS AMS 04 20 00.0
comp=Z,10µm,22.5s
**KRLC Kraliky 78.27 350** *e*P **P 03 47 09.1 -0.5**
KRLC MLR MLR
comp=Z,10µm,22.5s
**OKC Ostrava-Krasne 78.35 350** *e*P **P 03 47 09.5 -0.5**
OKC AMS AMS 04 23 30.0
comp=Z,12µm,19.9s
**OKC Ostrava-Krasne 78.35 350** *e*P **P 03 47 09.5 -0.5**
OKC MLR MLR
comp=Z,12µm,19.9s
**SBD Saint Breward 78.36 4** *e*P **P 03 47 09.1 -0.9**
**TBI Tubuai 78.37 154** *e*P **P 03 47 10.1 -0.1**
comp=Z,6µm,28.8s
**TBI Tubuai 78.37 154** *e*PP **PP 03 50 06.9 -1.3**
comp=Z,4µm,29.8s
TBI *e*S **S 03 57 02.1 -0.4**
comp=Z,3µm,24.3s
TBI *e*S **S 03 57 04.5 +2.0**
comp=Z,30µm,38.8s
TBI *e*SS **SS 04 02 08.2 +1.6**
comp=Z,5µm,23.8s
TBI *e*SS SS 04 02 10.3 +3.7
comp=Z,18µm,26.2s
TBI *e*LQ LQ 04 08 17.2
comp=Z,7µm,27.8s
TBI *e*LQ LQ 04 08 23.5
comp=Z,6µm,28.3s
TBI *e*LR LR 04 11 29.9
comp=Z,144µm,28.2s
TBI *e*LR LR 04 11 32.6
comp=Z,32µm,30.0s
TBI *e*LR LR 04 11 35.5
comp=Z,26µm,21.5s
**JHSG JHARSUGUGA 78.41 290** *e*P **P 03 47 11.7 +0.9**
**MEM Membach 78.44 358** *d*P **P 03 47 10.3 -0.2**
comp=Z,43nm,1.1s
**BTNL Ternell 78.46 357** *d*P **P 03 47 10.4 -0.2**
**SORM Soroca 78.47 342** ⇑P **P 03 47 10.3 -0.4**
**SORM Soroca 78.47 342** P **P 03 47 10.2 -0.4**
**SORM Soroca 78.47 342** P **P 03 47 09.5 -1.1**
comp=Z,191nm,1.2s,comp=Z,4µm
**BSTI Sart Tilman 78.48 358** *d*P **P 03 47 11.3 +0.6**
comp=Z,10nm,0.6s
**MORC Moravsky Berou 78.48 350** P **P 03 47 09.8 -1.0**
MORC IAMs_20 IAMs_20 04 20 59.8
comp=Z,9µm,21.0s
**MORC Moravsky Berou 78.48 350** *e*P **P 03 47 09.7 -1.0**
MORC *e*S **S 03 57 01.7 -1.8**
**MORC Moravsky Berou 78.48 350** ⇑P **P 03 47 10.2 -0.6**
**MORC Moravsky Berou 78.48 350** ⇓P **P 03 47 10.7 -0.2**
**MORC Moravsky Berou 78.48 350** P **P 03 47 10.6 -0.2**
**PRA Prague 78.50 352** *e*P **P 03 47 09.6 -1.2**
PRA AMS AMS 04 25 20.0
comp=Z,10µm,20.5s
**PRA Prague 78.50 352** *e*P **P 03 47 09.6 -1.2**
PRA MLR MLR
comp=Z,10µm,20.5s
**NIE Niedzica 78.50 348** *e*P **P 03 47 08.7 -2.2**
NIE *e*PP **PP 03 50 09.5 +1.6**
NIE *e*S S 03 57 19.2 +15
NIE *e*L L 04 24 08.5
comp=Z,10µm,21.6s
**NIE Niedzica 78.50 348** P **P 03 47 10.2 -0.7**
comp=Z,13nm,1.0s,comp=Z,814nm
**JHNI Jhansi 78.56 296** *e*P **P 03 47 10.8 -0.8**
JHNI IAmb IAmb 03 47 14.8
comp=Z,113nm,1.0s
**PRU Pruhonice 78.57 352** *e*P **P 03 47 10.5 -0.7**
PRU AMS AMS 04 24 20.0
comp=Z,11µm,21.0s
**PRU Pruhonice 78.57 352** *e*P **P 03 47 10.5 -0.7**
PRU MLR MLR
comp=Z,11µm,21.0s
**SOEI Soe 78.61 238** P **P 03 47 12.0 0.0**
**SOEI Soe 78.61 238** P **P 03 47 12.2 +0.2**
**SOEI Soe 78.61 238** ⇑P **P 03 47 12.2 +0.2**
**SOEI Soe 78.61 238** P **P 03 47 13.0 +1.0**
comp=Z,152nm,1.0s,comp=Z,3µmcomp=Z,12µm
**GOPC GO Pecny, Ondr 78.62 352** *e*P **P 03 47 10.0 -1.5**
GOPC AMS AMS 04 24 30.0
comp=Z,13µm,20.5s
**GOPC GO Pecny, Ondr 78.62 352** *e*P **P 03 47 10.0 -1.5**
GOPC MLR MLR
comp=Z,13µm,20.5s
**BCLA Clavier 78.65 358** *d*P **P 03 47 09.9 -1.8**
**BGES Gesves 78.69 358** *d*P **P 03 47 10.5 -1.3**
**BHOU Houvegnez 78.70 358** *d*P **P 03 47 11.8 -0.1**
**KOLS Kolonicke sedl 78.71 347** *e*P **P 03 47 12.1 +0.1**
KOLS pmax pmax
comp=Z,27nm,1.1s
**KOLS Kolonicke sedl 78.71 347** *e*P **P 03 47 12.1 +0.1**
**CCA1 Carnmenellis 78.72 5** *e*P **P 03 47 11.2 -0.7**
CCA1 IAmb IAmb 03 47 16.5
comp=Z,128nm,1.2s
**SRIT Nakonsritamara 78.74 270** P **P 03 47 13.4 +0.8**
SRIT IAmb IAmb 03 47 14.4
comp=Z,136nm,1.4s
**BMRD Maredsous 78.78 358** *d*P **P 03 47 12.4 +0.1**
comp=Z,55nm,0.9s
**MMRI Maumere 78.78 241** ⇑P **P 03 47 12.4 -0.4**
**MMRI Maumere 78.78 241** P **P 03 47 14.9 +2.1**
comp=Z,121nm,1.3s,comp=Z,5µmcomp=Z,8µm
**LABN Labinsk 78.82 333** *e*P **P 03 47 10.9 -1.8**
LABN *e**PP **pP 03 47 23.9 -0.8**
LABN *e*S **S 03 57 05.8 -1.4**
LABN pmax pmax
comp=Z,135nm,1.1s
LABN MLR MLR
comp=Z,26µm,20.0s
LABN MLR MLR
comp=E,27µm,19.0s
LABN MLR MLR
comp=N,8µm,15.0s
**CRVS Cervenica-Dubn 78.85 347** *e*P **P 03 47 12.7 -0.1**
CRVS pmax pmax
comp=Z,260nm,2.2s
**CRVS Cervenica-Dubn 78.85 347** *e*P **P 03 47 12.7 -0.1**
**MAUC Maruska 78.86 350** *e*P **P 03 47 12.6 -0.2**
**KVAR Kislovodsk Arr 78.87 331** LR LR 04 26 38.7
comp=Z,15µm,20.2s,baz=272,slow=39
**KIV Kislovodsk 78.87 331** P **P 03 47 13.2 +0.2**
KIV IAmb IAmb 03 47 17.9
comp=Z,136nm,1.0s
**KIV Kislovodsk 78.87 331** *i* P **P 03 47 12.9 -0.2**
SNR=18
**KIV Kislovodsk 78.87 331** ⇑P **P 03 47 13.2 +0.2**
**KIV Kislovodsk 78.87 331** P **P 03 47 13.1 0.0**
KIV P **P 03 47 13.1 0.0**
KIV S **S 03 57 08.7 +0.7**
KIV S **S 03 57 08.7 +0.7**
**KIV Kislovodsk 78.87 331** ⇑P **P 03 47 13.5 +0.4**
**KIV Kislovodsk 78.87 331** *e*P **P 03 47 13.3 +0.2**
KIV *e* 03 50 12.0
KIV *e*PPP PPP 03 52 01.7
KIV *e*S **S 03 57 08.8 +0.8**
KIV *e*SS **SS 04 02 15.7 +3.6**
KIV pmax pmax
comp=Z,119nm,1.1s
KIV pmax pmax
comp=Z,310nm,3.9s
KIV MLR MLR
comp=Z,12µm,19.0s
**LANS Liptovska Anna 78.87 349** *e*P **P 03 47 13.2 +0.2**
LANS pmax pmax
comp=Z,33nm,1.4s
**LANS Liptovska Anna 78.87 349** *e*P **P 03 47 13.2 +0.2**
**RCHB Rochefort 78.91 358** *d*P **P 03 47 12.5 -0.6**
comp=Z,29nm,1.1s
**DOU Dourbes 78.98 358** *d*P **P 03 47 12.9 -0.6**
**NCK Nalchik 79.01 331***c* *i*P **P 03 47 13.7 -0.1**
NCK pmax pmax
comp=Z,388nm,1.3s
NCK MLR MLR
comp=Z,13µm,21.0s
**KBZ Khabaz 79.01 331** P **P 03 47 14.2 +0.4**
comp=Z,56nm,0.9s,baz=17,slow=4.1,SNR=59
KBZ PKPPKP **P'P'df 04 14 09.0 -5.3**
comp=Z,0.6nm,0.5s,baz=140,slow=3.4,SNR=3.9
KBZ LR LR 04 26 59.2
comp=Z,22µm,20.8s,baz=26,slow=39
comp=Z,56nm,0.9s
**KBZ Khabaz 79.01 331***ce*P **P 03 47 14.0 +0.3**
KBZ pmax pmax
comp=Z,75nm,0.9s
KBZ MLR MLR
comp=Z,23µm,20.0s
**GRA3 Grafenberg Arr 79.04 354** *e*S **S 03 57 07.6 -1.8**
baz=341,slow=9.1
**VRAC Vranov 79.05 350** *e*P **P 03 47 13.3 -0.6**
VRAC *e*S **S 03 57 03.6 -5.9**
**VRAC Vranov 79.05 350** LR LR 04 21 10.1
comp=Z,9µm,22.0s,baz=9.0,slow=35
**VRAC Vranov 79.05 350** ⇑P **P 03 47 15.0 +1.1**
**VRAC Vranov 79.05 350** P **P 03 47 15.0 +1.1**
**SHA1 Shidzhatmaz 79.08 331***ce*P **P 03 47 15.0 +0.6**
**BLSP Bilaspur 79.09 292** *e*P **P 03 47 14.5 -0.1**
BLSP IAmb IAmb 03 47 15.7
comp=Z,534nm,1.4s
**GRA1 Grafenberg Arr 79.12 354** P **P 03 47 14.6 +0.4**
GRA1 IAMs_20 IAMs_20 04 22 37.6
comp=Z,9µm,21.0s
**GRF Grafenberg Arr 79.12 354** P **P 03 47 14.6 +0.4**
GRF pmax pmax
comp=Z,79nm,1.0s
GRF MLR MLR
comp=Z,9µm,21.0s
**GRF Grafenberg Arr 79.12 354** *e*P **P 03 47 14.0 -0.2**
comp=Z,96nm,1.4s,baz=10,slow=4.8
GRF *e*S **S 03 57 07.6 -2.6**
baz=341,slow=9.1
GRF *e*L L 04 22 38.5
comp=Z,8µm,21.6s
**GRFO Grafenberg 79.12 354** P **P 03 47 14.5 +0.3**
GRFO IAMs_20 IAMs_20 04 22 38.7
comp=Z,9µm,22.0s
**GRFO Grafenberg 79.12 354** P **P 03 47 14.5 +0.3**
GRFO pmax pmax
comp=Z,88nm,1.1s
GRFO MLR MLR
comp=Z,9µm,22.0s
**ZVC Zvikov 79.14 352** *e*P **P 03 47 13.8 -0.6**
ZVC AMS AMS 04 25 40.0
comp=Z,10µm,20.3s
**GRA2 Grafenberg Arr 79.14 354** *e*S **S 03 57 09.5 -1.1**
baz=341,slow=9.1
**TREC Trest 79.17 351** *e*P **P 03 47 14.3 -0.2**
TREC AMS AMS 04 20 30.0
comp=Z,11µm,21.9s
**TREC Trest 79.17 351** *e*P **P 03 47 14.3 -0.2**
TREC MLR MLR
comp=Z,11µm,21.9s
**EDFI Ende, Flores 79.18 241** P **P 03 47 14.1 -1.0**
comp=Z,97nm,1.2s,comp=Z,3µm
**GRA4 Grafenberg Arr 79.23 354** *e*S **S 03 57 11.4 -0.1**
baz=341,slow=9.1
**KRUC Moravsky 79.31 351** *e*P **P 03 47 14.5 -0.8**
KRUC *e*S **S 03 57 11.2 -1.1**
**BATI Baumata 79.31 239** P **P 03 47 16.9 +1.2**
comp=Z,182nm,1.1s,comp=Z,3µmcomp=Z,9µm
**GRB4 Grafenberg Arr 79.32 354** *e*S **S 03 57 12.3 -0.1**
baz=341,slow=9.1
**JAVC Velka Javorina 79.37 350** *e*P **P 03 47 16.2 +0.5**
JAVC *e*S **S 03 57 07.8 -5.3**
**WLF Walferdange 79.38 357** P **P 03 47 15.8 +0.2**
WLF IAMs_20 IAMs_20 04 28 46.6
comp=Z,10µm,20.0s
**WLF Walferdange 79.38 357** P **P 03 47 16.3 +0.6**
**WLF Walferdange 79.38 357** ⇑P **P 03 47 15.8 +0.2**
**WLF Walferdange 79.38 357** *d*P **P 03 47 15.5 -0.1**
**WLF Walferdange 79.38 357** P **P 03 47 15.8 +0.2**
WLF pmax pmax
comp=Z,58nm,1.1s
**GRB1 Grafenberg Arr 79.39 354** *e*S **S 03 57 11.4 -1.8**
baz=341,slow=9.1
**KECS Kecovo 79.40 348** *e*P **P 03 47 16.2 +0.4**
KECS pmax pmax
comp=Z,28nm,1.2s
**KECS Kecovo 79.40 348** *e*P **P 03 47 16.2 +0.4**
**GRB3 Grafenberg Arr 79.42 354** *e*S **S 03 57 12.3 -1.2**
baz=341,slow=9.1
**KIS Kishinev 79.47 342** ⇑*i*P **P 03 47 15.0 -1.2**
comp=Z,580nm,2.2s
**KIS Kishinev 79.47 342** *e*PP PP 03 50 18.0 +2.1
KIS *i* S **S 03 57 14.0 0.0**
KIS *e*L L 04 16 31.0
KIS LRM MLR 04 27 21.0
comp=Z,4µm,17.0s
**KIS Kishinev 79.47 342***c* *i*P **P 03 47 15.0 -1.2**
KIS *e* 03 50 18.0
KIS *i* S **S 03 57 14.0 0.0**
KIS pmax pmax
comp=Z,580nm,2.2s
KIS MLR MLR
comp=Z,4µm,17.0s
**TGUH Tegucigalpa,Un 79.48 81** P **P 03 47 18.1 +1.3**
TGUH IAmb IAmb 03 47 41.3
comp=Z,282nm,1.1s
**TGUH Tegucigalpa,Un 79.48 81** ⇑P **P 03 47 17.2 +0.4**
**KHC Kasperske Hory 79.50 352** P **P 03 47 15.9 -0.4**
KHC IAMs_20 IAMs_20 04 25 49.8
comp=Z,10µm,21.0s
**KHC Kasperske Hory 79.50 352** ⇑P **P 03 47 16.2 -0.2**
**KHC Kasperske Hory 79.50 352** *e*P **P 03 47 15.8 -0.6**
KHC *ex* x 03 47 34.5
KHC *e*S **S 03 57 08.1 -6.3**
KHC AMS AMS 04 25 40.0

comp=Z,11µm,21.4s
**KHC Kasperske Hory 79.50 352** *ce* P **P** **03 47 16.4 0.0**
KHC pmax pmax
comp=Z,109nm,1.3s
KHC MLR MLR
comp=Z,20µm,21.0s
**BUR08 Bucovina Ar. S 79.50 344** P **P** **03 47 16.5 0.0**
**GRB2 Grafenberg Arr 79.51 354** *eS* **S** **03 57 14.2 -0.2**
baz=341,slow=9.1
**BURAR Bucovina Array 79.53 344** P **P** **03 47 16.7 +0.1**
**BURAR Bucovina Array 79.53 344** ⇑P **P** **03 47 16.4 -0.2**
**BURAR Bucovina Array 79.53 344** P **P** **03 47 16.4 -0.2**
**MILM Milestii Mici 79.54 342** ⇑ *i* P **P** **03 47 15.9 -0.7**
comp=Z,700nm,1.7s
**MILM Milestii Mici 79.54 342** *e* PP PP 03 50 17.0 +0.4
**MILM Milestii Mici 79.54 342** *e* PPP PPP 03 52 06.0
MILM *eS* **S** **03 57 14.0 -0.8**
MILM *eL* L 04 14 03.0
MILM LRM MLR 04 27 26.0
comp=Z,10µm,17.0s
**MILM Milestii Mici 79.54 342** ⇑P **P** **03 47 16.4 -0.1**
**MILM Milestii Mici 79.54 342** *c i* P **P** **03 47 15.9 -0.7**
MILM *e* 03 50 17.0
MILM *e* PPP PPP 03 52 06.0
MILM *eS* **S** **03 57 14.0 -0.8**
MILM pmax pmax
comp=Z,700nm,1.7s
**ANN Anapa 79.57 335** *eP* **P** **03 47 14.7 -2.0**
ANN *e* *PP **pP** **03 47 26.7 -2.1**
ANN *eS* **S** **03 57 13.2 -1.9**
ANN pmax pmax
comp=Z,98nm,1.7s
ANN MLR MLR
comp=Z,4µm,19.0s
ANN MLR MLR
comp=E,2µm,16.0s
ANN MLR MLR
comp=N,12µm,18.0s
**VYHS Vyhne 79.60 349** *eP* **P** **03 47 16.7 -0.2**
VYHS pmax pmax
comp=Z,93nm,1.7s
**VYHS Vyhne 79.60 349** *eP* **P** **03 47 16.7 -0.2**
**GRB5 Grafenberg Arr 79.67 354** *eS* **S** **03 57 14.2 -1.9**
baz=341,slow=9.1
**GRC4 Grafenberg Arr 79.70 354** *eS* **S** **03 57 14.2 -2.2**
baz=341,slow=9.1
**PURM Purcari 79.70 341** ⇑P **P** **03 47 18.0 +0.5**
**SMOL Smolenice 79.74 350** *eP* **P** **03 47 17.8 +0.2**
SMOL pmax pmax
comp=Z,493nm,3.8s
**CKRC Cesky Krumlov 79.75 352** *eP* **P** **03 47 16.9 -0.8**
CKRC *eS* **S** **03 57 13.2 -3.8**
CKRC AMS AMS 04 26 00.0
comp=Z,9µm,20.2s
**CKRC Cesky Krumlov 79.75 352** *eP* **P** **03 47 16.9 -0.8**
CKRC *eS* **S** **03 57 13.2 -3.8**
CKRC MLR MLR
comp=Z,9µm,20.2s
**BMR Baia Mare 79.75 346** ⇑P **P** **03 47 18.1 +0.3**
**BMR Baia Mare 79.75 346** P **P** **03 47 18.0 +0.3**
**HRA Herat 79.76 313** P **P** **03 47 18.1 -0.1**
**GEC2 GERESS Array S 79.78 352** P **P** **03 47 17.4 -0.6**
**GERES GERESS Array B 79.78 352** P **P** **03 47 17.0 -1.0**
**GERES GERESS Array B 79.78 352** P **P** **03 47 18.1 +0.1**
comp=Z,2.5nm,0.7s,baz=359,slow=5.7,SNR=26
GERES PKPPKP **P'P'df** **04 14 09.8 -3.6**
comp=Z,0.9nm,0.8s,baz=124,slow=2.4,SNR=3.6
GERES LR LR 04 21 25.4
comp=Z,6µm,21.9s,baz=7.5,slow=35
comp=Z,2.5nm,0.7s
**GRC1 Grafenberg Arr 79.79 354** *eS* **S** **03 57 15.1 -2.3**
baz=341,slow=9.1
**JLP Les Platons 79.79 3** *eP* **P** **03 47 17.0 -0.9**
**JSA Saint Aubin 79.84 3** *eP* **P** **03 47 17.1 -1.0**
JSA IAmb IAmb 03 47 22.6
comp=Z,211nm,1.2s
**GUNA GUNA 79.88 297** *eP* **P** **03 47 18.1 -0.7**
GUNA IAmb IAmb 03 47 19.4
comp=Z,190nm,1.2s
**GRC3 Grafenberg Arr 79.89 354** *eS* **S** **03 57 15.1 -3.3**
baz=341,slow=9.1
**AJM Ajmer 79.92 300** *eP* **P** **03 47 18.7 -0.4**
**GRC2 Grafenberg Arr 79.93 354** *eS* **S** **03 57 17.0 -1.8**
baz=341,slow=9.1
**PSZ Piszkesteto 80.03 348** P **P** **03 47 19.4 +0.2**
PSZ IAMs_20 IAMs_20 04 28 03.8
comp=Z,9µm,20.0s
**PSZ Piszkesteto 80.03 348** ⇑P **P** **03 47 19.5 +0.2**
**PSZ Piszkesteto 80.03 348** ⇑P **P** **03 47 19.7 +0.3**
**PSZ Piszkesteto 80.03 348** P **P** **03 47 19.6 +0.3**
**SOC Sochi 80.08 333** *c i* P **P** **03 47 18.9 -0.6**
SOC *e* *PP **pP** **03 47 29.9 -1.7**
SOC *e* 03 50 20.1
SOC *e* PPP PPP 03 52 15.1
SOC *eS* **S** **03 57 21.0 +0.5**
SOC pmax pmax
comp=Z,62nm,1.1s
SOC MLR MLR
comp=Z,23µm,21.0s
**ZST Bratislava 80.09 350** *eP* **P** **03 47 20.0 +0.5**
ZST pmax pmax
comp=Z,425nm,1.8s
**ZST Bratislava 80.09 350** *eP* **P** **03 47 20.0 +0.5**
**VSLR Vesyoloye 80.10 333** *c i* P **P** **03 47 19.3 -0.4**
VSLR pmax pmax
comp=Z,148nm,1.2s
VSLR MLR MLR
comp=Z,19µm,22.0s
**STU Stuttgart 80.15 355** P **P** **03 47 19.5 -0.4**
STU IAMs_20 IAMs_20 04 20 28.0
comp=Z,9µm,22.0s
**STU Stuttgart 80.15 355** ⇑P **P** **03 47 19.6 -0.4**
**STU Stuttgart 80.15 355** P **P** **03 47 19.5 -0.4**
STU pmax pmax
comp=Z,26nm,0.8s
**RAO Raoul Island 80.18 180** LR LR 04 16 49.5
comp=Z,15µm,20.6s,baz=14,slow=31
**ARCR ARCALIA 80.19 345** ⇑P **P** **03 47 20.9 +0.8**
**SIM Simferopol' 80.26 338** *eP* **P** **03 47 20.3 -0.2**
SIM *e* 03 47 28.0
SIM *e* 03 50 26.0
SIM *e* PPP PPP 03 52 11.0
SIM *eS* **S** **03 57 18.0 -4.5**
SIM pmax pmax
comp=Z,127nm,1.4s
**TESR Tescani 80.34 343** ⇓P **P** **03 47 21.9 +0.9**
**MESR Meseseni 80.35 346** ⇑P **P** **03 47 21.7 +0.8**
**CONA Conrad Observa 80.48 351** *eP* **P** **03 47 21.8 0.0**
comp=Z,45nm,1.4s,SNR=30
**RAGD RAYAGADA 80.53 289** *eP* **P** **03 47 23.2 +0.8**
**ONER Baraj Valea Uz 80.56 343** ⇑P **P** **03 47 22.6 +0.4**
**KULM Kulim 80.63 267** ⇑P **P** **03 47 23.4 +0.5**
**BFO Black Forest 80.64 356** P **P** **03 47 22.3 -0.2**
**BFO Black Forest 80.64 356** ⇑P **P** **03 47 21.9 -0.6**
**BFO Black Forest 80.64 356** P **P** **03 47 22.3 -0.2**
BFO pmax pmax
comp=Z,55nm,1.3s
**GHRR 80.64 343** ⇑P **P** **03 47 23.1 +0.6**
**ROSF Rostrenen 80.65 4** ⇑P **P** **03 47 22.2 -0.3**
**RONA Rosalia, Austr 80.67 350** *i* P **P** **03 47 23.5 +0.8**
comp=Z,31nm,1.6s,SNR=26
**CJR Cluj-Napoca 80.67 345** ⇑P **P** **03 47 23.3 +0.6**
**CJR Cluj-Napoca 80.67 345** P **P** **03 47 23.3 +0.6**
**PBA Port Blair 80.69 277** ⇑P **P** **03 47 23.3 +0.1**
**VARL Varlezi 80.71 342** ⇑P **P** **03 47 23.5 +0.6**
**MOA Molln 80.71 352** *eP* **P** **03 47 23.1 +0.1**
comp=Z,18nm,1.4s,SNR=10.0
**VLDR Vladesti 80.72 342** ⇑P **P** **03 47 23.2 +0.3**
**DRGR 80.73 346** ⇑P **P** **03 47 23.1 -0.1**
**DRGR 80.73 346** P **P** **03 47 23.0 -0.1**
**MARR Marisel-Cluj 80.78 346** ⇑P **P** **03 47 24.2 +0.8**
**ECH Echery 80.80 357** P **P** **03 47 22.8 -0.6**
**ECH Echery 80.80 357** ⇑P **P** **03 47 22.6 -0.7**
**ECH Echery 80.80 357** P **P** **03 47 22.8 -0.6**
ECH pmax pmax
comp=Z,57nm,1.2s
**PANC Panciu 80.87 343** ⇑P **P** **03 47 24.8 +1.0**
**TURR Turia 80.90 343** ⇑P **P** **03 47 24.8 +0.8**
**OZUR 80.90 344** ⇑P **P** **03 47 24.6 +0.6**
**BIOA Bad Ischl, Aus 80.93 352** *i* P **P** **03 47 24.2 +0.2**
comp=Z,57nm,1.3s,SNR=29
**BHPL Bhopal 80.93 296** *eP* **P** **03 47 24.1 -0.3**
BHPL IAmb IAmb 03 47 25.4
comp=Z,512nm,1.4s

**BOSR Bodos 80.94 344** ⇑P **P** **03 47 25.2 +1.0**
**VRI Vrincioaia 80.95 343** ⇑P **P** **03 47 25.6 +1.3**
**VRI Vrincioaia 80.95 343** P **P** **03 47 25.5 +1.3**
**PLOR Plostina 80.98 343** ⇓P **P** **03 47 24.7 +0.3**
**PLOR Plostina 80.98 343** P **P** **03 47 24.7 +0.3**
**ODBI Odobesti 80.99 343** ⇑P **P** **03 47 25.2 +0.8**
**BASI Baing, Sumba 81.00 241** P P 03 47 38.7 +14
**IPM Ipoh 81.02 266** ⇑P **P** **03 47 25.1 +0.1**
**SLCR Slobozia Conac 81.02 342** ⇑P **P** **03 47 25.4 +0.9**
**TUDR 81.04 342** ⇑P **P** **03 47 25.3 +0.7**
**COVR Voineasa-Covas 81.07 343** ⇑P **P** **03 47 25.8 +1.0**
**IZVR Izvoarele 81.07 342** ⇑P **P** **03 47 26.4 +1.6**
**CLF Chambon-Foret 81.08 360** P **P** **03 47 24.8 0.0**
**CLF Chambon-Foret 81.08 360** ⇑P **P** **03 47 25.1 +0.3**
**DOPR Dopca 81.09 344** ⇑P **P** **03 47 26.0 +1.0**
**EIDS Eidsvold 81.10 208** P **P** **03 47 26.4 +1.4**
**EIDS Eidsvold 81.10 208** ⇑P **P** **03 47 26.0 +1.0**
**SCHL Schela 81.10 342** ⇓P **P** **03 47 26.7 +1.7**
**SCHLR Schela 81.13 342** ⇑P **P** **03 47 26.8 +1.7**
**WBSI Waikabubak, Su 81.18 243** P **P** **03 47 25.0 -0.8**
comp=Z,101nm,1.1s,comp=Z,2µm
**ARSA Arzberg 81.19 351** *eP* **P** **03 47 25.8 +0.3**
comp=Z,40nm,1.3s,SNR=16
**ARSA Arzberg 81.19 351** ⇑P **P** **03 47 25.6 +0.1**
**LESA Schwarzleotal 81.27 353** *i* P **P** **03 47 26.3 +0.3**
comp=Z,37nm,1.6s
**KNRA Kununurra 81.30 232** P **P** **03 47 26.4 +0.1**
KNRA IAmb IAmb 03 49 26.0
comp=Z,89nm,0.8s
**RETA Reutte 81.34 354** *i* P **P** **03 47 26.1 -0.3**
comp=Z,29nm,1.5s,SNR=15
**CFR Carcaliu 81.35 342** ⇑P **P** **03 47 26.6 +0.4**
**CFR Carcaliu 81.35 342** P **P** **03 47 26.6 +0.4**
**GRER 81.38 343** ⇓P **P** **03 47 27.6 +1.2**
**SIRR Siria 81.40 347** ⇑P **P** **03 47 26.8 +0.2**
**WATA Walderalm 81.44 354** *i* P **P** **03 47 27.2 +0.3**
comp=Z,83nm,1.3s,SNR=29
**NEHR Nehoiu 81.46 343** ⇑P **P** **03 47 26.8 -0.1**
**MLR Muntele Rosu 81.46 343** P **P** **03 47 27.2 +0.1**
MLR IAmb IAmb 03 47 33.0
comp=Z,131nm,0.9s
**MLR Muntele Rosu 81.46 343** LR LR 04 26 45.2
comp=Z,13µm,21.8s,baz=23,slow=38
**MLR Muntele Rosu 81.46 343** ⇑P **P** **03 47 27.7 +0.7**
**MLR Muntele Rosu 81.46 343** P **P** **03 47 27.7 +0.7**
**MOTA Moosalm 81.46 354** *eP* **P** **03 47 26.9 -0.2**
comp=Z,68nm,1.2s
**CHIV Chivirico 81.49 69** P **P** **03 47 27.6 +0.2**
CHIV IAmb IAmb 03 47 53.1
comp=Z,196nm,1.0s
**WTTA Wattenberg 81.51 354** *i* P **P** **03 47 27.7 +0.4**
comp=Z,90nm,1.4s,SNR=40
**KBA Koelnbreinsper 81.56 352** *i* P **P** **03 47 27.9 +0.3**
comp=Z,136nm,1.3s,SNR=83
**KBA Koelnbreinsper 81.56 352** ⇑P **P** **03 47 27.6 0.0**
**SQTA Sankt Quirin 81.58 354** *i* P **P** **03 47 27.8 +0.2**
comp=Z,74nm,1.4s,SNR=33
**DAVA Damuels 81.60 355** *i* P **P** **03 47 27.7 -0.1**
comp=Z,40nm,1.4s,SNR=15
**DAVA Damuels 81.60 355** ⇑P **P** **03 47 27.6 -0.2**
**TPGR Topolog 81.60 342** ⇑P **P** **03 47 28.1 +0.4**
**NGP Nagpur 81.64 293** *eP* **P** **03 47 28.1 -0.2**
NGP IAmb IAmb 03 47 29.3
comp=Z,428nm,1.3s
**VOIR 81.67 344** ⇑P **P** **03 47 28.7 +0.6**
**VOIR 81.67 344** P **P** **03 47 28.7 +0.6**
**GNI Garni 81.67 328** P **P** **03 47 28.9 +0.6**
GNI IAmb IAmb 03 48 51.0
comp=Z,282nm,1.4s
**GNI Garni 81.67 328** P **P** **03 47 28.9 +0.6**
**GNI Garni 81.67 328** ⇑P **P** **03 47 29.4 +1.1**
**GNI Garni 81.67 328** LR LR 04 29 17.4
comp=Z,17µm,19.1s,baz=23,slow=40
**GNI Garni 81.67 328** P **P** **03 47 29.3 +1.0**
GNI P **P** **03 47 29.3 +1.0**
GNI S **S** **03 57 39.3 +1.6**
GNI S **S** **03 57 39.3 +1.6**
**GNI Garni 81.67 328** *ce* P **P** **03 47 29.9 +1.6**
GNI pmax pmax
comp=Z,160nm,1.3s
**ISR Istrita 81.71 343** ⇑P **P** **03 47 29.9 +1.6**
**ISR Istrita 81.71 343** P **P** **03 47 29.9 +1.6**
**BOAB BOACO BROADBAN 81.71 81** P **P** **03 47 28.6 -0.1**
BOAB IAmb IAmb 03 47 30.8
comp=Z,480nm,1.8s
BOAB IAMs_20 IAMs_20 04 26 31.6
comp=Z,14µm,21.0s
**BOAB BOACO BROADBAN 81.71 81** P **P** **03 47 29.3 +0.6**
BOAB S **S** **03 57 33.7 -4.6**
**BOAB BOACO BROADBAN 81.71 81** ⇑P **P** **03 47 28.9 +0.3**
**KARS Kars 81.78 330** P **P** **03 47 29.5 +0.7**
KARS IAmb IAmb 03 47 37.7
comp=Z,201nm,0.9s
**KARS Kars 81.78 330** P **P** **03 47 29.5 +0.7**
KARS pmax pmax
comp=Z,201nm,0.9s
**SOKA Soboth 81.80 351** *i* P **P** **03 47 28.6 -0.2**
comp=Z,117nm,1.3s,SNR=95
**ARR Arges 81.81 344** ⇑P **P** **03 47 30.1 +1.3**
**FETA Feichten 81.81 354** *i* P **P** **03 47 29.0 +0.1**
comp=Z,46nm,1.2s,SNR=35
**SURR Surduc 81.83 346** ⇑P **P** **03 47 28.8 0.0**
**PERS Pernice 81.84 351** *i* P **P** **03 47 28.5 -0.4**
PERS *eS* **S** **03 57 36.9 -2.0**
**HARR Harsova 81.86 342** ⇑P **P** **03 47 30.1 +1.1**
**HARR Harsova 81.86 342** P **P** **03 47 30.1 +1.1**
**MORH Mrgy, Hungar 81.86 349** ⇓P **P** **03 47 29.2 +0.2**
**MTUR Matau 81.87 344** ⇑P **P** **03 47 28.2 -1.0**
**MTUR Matau 81.87 344** P **P** **03 47 28.1 -1.0**
**NMDO Nuevo Mundo 81.87 67** P **P** **03 47 30.0 +0.6**
NMDO IAmb IAmb 03 47 50.9
comp=Z,143nm,1.0s
**LOT Lotru 81.87 345** ⇑P **P** **03 47 28.8 -0.4**
**ABTA Abfaltersbach 81.95 353** *i* P **P** **03 47 29.3 -0.3**
comp=Z,68nm,1.3s,SNR=51
**TLBR Topalu 81.97 342** ⇓P **P** **03 47 30.4 +0.8**
**MYKA Terra Mystica 81.98 352** *i* P **P** **03 47 29.4 -0.3**
comp=Z,42nm,1.5s,SNR=20
**OBKA Obir 82.02 351** *i* P **P** **03 47 29.9 0.0**
comp=Z,54nm,1.3s,SNR=34
**OBKA Obir 82.02 351** ⇑P **P** **03 47 29.5 -0.4**
**BZS Buzias 82.04 346** ⇑P **P** **03 47 29.5 -0.5**
**BZS Buzias 82.04 346** ⇑P **P** **03 47 29.5 -0.5**
**BZS Buzias 82.04 346** P **P** **03 47 29.4 -0.5**
**GZR Gura Zlata 82.08 346** ⇑P **P** **03 47 30.3 0.0**
**GZR Gura Zlata 82.08 346** P **P** **03 47 30.3 0.0**
**DAVOX Davos/Dischmat 82.10 355** LR LR 04 22 48.9
comp=Z,8µm,21.8s,baz=1.0,slow=35
**PRED Cave del Predi 82.17 352** P **P** **03 47 29.0 -1.7**
**SULR 82.19 343** ⇑P **P** **03 47 31.0 +0.3**
**MTDJ Mount Denham 82.19 71** P **P** **03 47 32.0 +0.7**
**MTDJ Mount Denham 82.19 71** ⇑P **P** **03 47 32.5 +1.2**
**WB0 Warramunga Arr 82.21 225** P **P** **03 47 31.1 +0.1**
WB0 IAmb IAmb 03 48 41.5
comp=Z,72nm,0.8s
**PTCC Patocco-Chiusa 82.23 352** ⇑P **P** **03 47 29.8 -1.2**
**FUORN Ofenpass-Fuorn 82.24 354** P **P** **03 47 31.4 +0.1**
**STFAR Stefanesti-Arg 82.24 344** ⇑P **P** **03 47 32.6 +1.6**
**LEHL Lehliu 82.28 343** ⇓P **P** **03 47 31.4 +0.2**
**GTBY Guantanamo Bay 82.29 68** P **P** **03 47 31.2 -0.4**
GTBY IAmb IAmb 03 47 59.9
comp=Z,264nm,1.4s
GTBY IAMs_20 IAMs_20 04 28 59.8
comp=Z,11µm,18.0s
**GTBY Guantanamo Bay 82.29 68** ⇑P **P** **03 47 32.1 +0.5**
**WR0 Warramunga Arr 82.32 225** P **P** **03 47 31.2 -0.4**
WR0 IAmb IAmb 03 47 49.9
comp=Z,188nm,1.8s
**WRAB Tennant Creek 82.38 225** P **P** **03 47 31.7 -0.2**
WRAB IAmb IAmb 03 48 41.7
comp=Z,59nm,0.7s
**WRAB Tennant Creek 82.38 225** *i* P **P** **03 47 31.3 -0.6**
WRAB pmax pmax
comp=Z,107nm,1.6s
**ACON Acoyapa 82.39 80** P **P** **03 47 32.5 +0.3**
**ACON Acoyapa 82.39 80** *eP* **P** **03 47 31.6 -0.6**
**ACON Acoyapa 82.39 80** *eP* **P** **03 47 32.1 -0.1**
**WB2 Warramunga Arr 82.39 225** P **P** **03 47 31.6 -0.3**
WB2 IAmb IAmb 03 48 41.7
comp=Z,72nm,0.6s
**WRA Warramunga Arr 82.39 225** P **P** **03 47 31.3 -0.7**
**WRA Warramunga Arr 82.39 225** P **P** **03 47 32.0 0.0**
comp=Z,18nm,0.7s,baz=36,slow=5.9,SNR=91

WRA PKKPbc **PKKPbc** **04 05 58.0 +0.7**
comp=Z,0.5nm,0.5s,baz=219,slow=2.2,SNR=11
WRA LR LR 04 21 31.3
comp=Z,6µm,21.1s,baz=21,slow=34
comp=Z,18nm,0.7s
**WRA Warramunga Arr 82.39 225** *i* P **P** **03 47 32.0 0.0**
WRA pmax pmax
comp=Z,20nm,0.7s
**STAL STALIGIAL 82.42 353** P **P** **03 47 30.2 -1.7**
STAL IAMs_20 IAMs_20 04 28 19.3
comp=Z,9µm,21.0s
**ICOR Ion Corvin 82.43 342** ⇓P **P** **03 47 33.5 +1.5**
**LJU Ljubljana 82.48 351** *i* P **P** **03 47 31.6 -0.7**
LJU *e* PP PP 03 50 49.0 +8.2
LJU *eS* **S** **03 57 42.3 -3.1**
**SABO M.te Sabotino 82.63 352** P **P** **03 47 32.2 -0.8**
SABO IAmb IAmb 03 47 47.8
comp=Z,67nm,1.4s
SABO IAMs_20 IAMs_20 04 28 12.4
comp=Z,10µm,22.0s
**HERR Herculane 82.64 346** ⇑P **P** **03 47 33.9 +0.8**
**SENIN Lac Senin/Sane 82.64 356** P **P** **03 47 32.7 -0.7**
SENIN IAmb IAmb 03 48 55.2
comp=Z,183nm,1.4s
**SGRR Singureni 82.68 343** ⇑P **P** **03 47 33.6 +0.3**
**CTI Castel Tesino 82.72 353** P **P** **03 47 32.5 -1.1**
CTI IAMs_20 IAMs_20 04 29 14.0
comp=Z,11µm,21.0s
**CTI Castel Tesino 82.72 353** P **P** **03 47 32.5 -1.1**
CTI pmax pmax
comp=Z,48nm,1.1s
**FRGS Fruska Gora 82.75 348** ⇑ *i* P **P** **03 47 33.2 -0.5**
**ESPN Las Esperanzas 82.75 80** P **P** **03 47 34.9 +0.8**
**ESPN Las Esperanzas 82.75 80** *eP* **P** **03 47 34.9 +0.8**
**ESPN Las Esperanzas 82.75 80** *eP* **P** **03 47 35.1 +1.0**
**DJES Djerdap 82.83 346** ⇑P **P** **03 47 34.7 +0.5**
**MDVR Moldovita 82.85 346** ⇑P **P** **03 47 33.9 -0.4**
**COPA Copaceanca 82.90 344** ⇑P **P** **03 47 34.8 +0.4**
**BOJS Bojanci 82.94 351** *i* P **P** **03 47 34.1 -0.5**
**LHMI Lhok Sumawe 83.00 270** P **P** **03 47 35.5 +0.1**
**LHMI Lhok Sumawe 83.00 270** ⇑P **P** **03 47 36.9 +1.5**
**LHMI Lhok Sumawe 83.00 270** P **P** **03 47 37.8 +2.4**
**RKT Rikitea 83.08 141** *eP* **P** **03 47 35.8 +0.4**
comp=Z,5µm,29.8s
**RKT Rikitea 83.08 141** *ePP* **PP** **03 50 44.4 -2.8**
comp=Z,2µm,30.8s
RKT *eS* **S** **03 57 49.5 -2.2**
comp=Z,5µm,23.9s
RKT *eS* **SKSac** **03 57 51.2 -2.5**
comp=Z,15µm,26.0s
RKT *eSS* **SS** **04 03 18.9 +1.9**
comp=Z,5µm,23.0s
RKT *eSS* SS 04 03 20.2 +3.2
comp=Z,24µm,26.8s
RKT *eLQ* LQ 04 10 09.9
comp=Z,17µm,36.0s
RKT *eLR* LR 04 13 44.9
comp=Z,129µm,22.8s
RKT *eLR* LR 04 13 49.8
comp=Z,31µm,22.5s
RKT *eLR* LR 04 13 51.9
comp=Z,945nm,25.5s
**DIKM Dikmen 83.08 336** ⇑P **P** **03 47 36.3 +0.9**
**DIKM Dikmen 83.08 336** P **P** **03 47 35.4 0.0**
comp=Z,82nm,1.7s,comp=Z,9µm
**BZK Bozkurt 83.11 337** ⇑P **P** **03 47 35.3 -0.2**
**PUNG Punghina 83.15 345** ⇑P **P** **03 47 36.6 +0.8**
**AKL Akola 83.16 295** *eP* **P** **03 47 36.4 +0.2**
AKL IAmb IAmb 03 47 37.5
comp=Z,304nm,1.3s
**VLAD Vladila 83.17 344** ⇑P **P** **03 47 37.1 +1.3**
**VRLE La Escondida, 83.18 81** *eP* **P** **03 47 35.9 -0.5**
**VRLE La Escondida, 83.18 81** *eP* **P** **03 47 35.5 -0.9**
**ALIBA Liberia Airpor 83.21 82** *eP* **P** **03 47 38.2 +1.7**
**ALIBA Liberia Airpor 83.21 82** *eP* **P** **03 47 38.5 +2.1**
**A051A Mrakovica 83.25 350** ⇑ *i* P **P** **03 47 35.8 -0.6**
**GRTK Grand Turk 83.33 64** ⇑P **P** **03 47 38.0 +1.0**
**BAIL Bailesti 83.33 345** ⇑P **P** **03 47 37.8 +1.2**
**TEKS Tekeris 83.39 348** ⇑ *i* P **P** **03 47 36.6 -0.4**
**TEOL Teolo 83.40 353** P **P** **03 47 36.7 -0.3**
**CUI Cuipilapa 83.40 81** *eP* **P** **03 47 37.0 -0.5**
**PRD Provadia 83.43 342** *i* P **P** **03 47 37.7 +0.5**
**BLY Banja Luka 83.48 349** ⇑P **P** **03 47 36.8 -0.7**
**BLY Banja Luka 83.48 349** ⇑ *i* P **P** **03 47 36.9 -0.5**
**JUD3 Juan Diaz 3 83.55 82** P **P** **03 47 39.5 +1.2**
JUD3 IAmb IAmb 03 48 03.9
comp=Z,147nm,1.3s
**JUD3 Juan Diaz 3 83.55 82** *eP* **P** **03 47 38.7 +0.4**
**JUD3 Juan Diaz 3 83.55 82** *eP* **P** **03 47 38.7 +0.4**
**SGH Strazhitsa 83.60 343** *i* P **P** **03 47 37.9 -0.2**
**NICO Nicoya 83.63 82** *eP* **P** **03 47 40.1 +1.5**
**PSI Prapat 83.63 267** P **P** **03 47 38.2 -0.6**
PSI pmax pmax
comp=Z,240nm,1.2s
PSI MLR MLR
comp=Z,3µm,22.0s
**PRVC Isla de Provid 83.65 77** *eP* **P** **03 47 37.6 -1.1**
**RPSI Rantau Prapat 83.72 266** P **P** **03 47 38.2 -0.8**
**SSB Saint Sauveur 83.80 358** P **P** **03 47 38.9 -0.3**
SSB IAmb IAmb 03 47 40.2
comp=Z,102nm,1.5s
**SSB Saint Sauveur 83.80 358** ⇑P **P** **03 47 39.1 -0.1**
**SSB Saint Sauveur 83.80 358** P **P** **03 47 38.9 -0.3**
SSB pmax pmax
comp=Z,102nm,1.5s
SSB MLR MLR
comp=Z,7µm,22.0s
**JTS Las Juntas de 83.81 81** ⇑P **P** **03 47 39.4 -0.2**
**JTS Las Juntas de 83.81 81** LR LR 04 25 38.3
comp=Z,3µm,21.6s,baz=308,slow=36
**JTS Las Juntas de 83.81 81** *eP* **P** **03 47 37.7 -1.9**
JTS *eS* **SKSac** **03 57 56.7 -2.6**
**CEDE Laguna Cedeo 83.82 81** *eP* **P** **03 47 39.5 -0.2**
**CEDE Laguna Cedeo 83.82 81** *eP* **P** **03 47 39.5 -0.2**
**A050A Klekovaca 83.82 350** ⇑ *i* P **P** **03 47 38.7 -0.6**
**ARE1 Arenal 1 83.83 81** *eP* **P** **03 47 38.4 -1.3**
**MPEP Malo Peshtene 83.91 344** P **P** **03 47 39.5 -0.2**
**HAPS Han Pijesak,Bl 83.92 348** ⇑ *i* P **P** **03 47 40.0 +0.2**
**ELND Elena 83.95 343** ⇑P **P** **03 47 39.5 -0.4**
**SOCE Pocosol 83.95 81** P **P** **03 47 40.6 +0.2**
SOCE IAmb IAmb 03 48 04.6
comp=Z,108nm,1.2s
**BOVS Bovan 83.97 346** ⇑P **P** **03 47 39.2 -0.7**
**BNI Bardonecchia 83.97 357** P **P** **03 47 41.0 +0.8**
BNI IAmb IAmb 03 48 45.3
comp=Z,241nm,1.6s
BNI IAMs_20 IAMs_20 04 29 25.3
comp=Z,11µm,22.0s
**BNI Bardonecchia 83.97 357** ⇑P **P** **03 47 41.0 +0.8**
**BNI Bardonecchia 83.97 357** P **P** **03 47 41.0 +0.8**
BNI pmax pmax
comp=Z,241nm,1.6s
BNI MLR MLR
comp=Z,11µm,22.0s
**GURO Guroymak-BITLI 84.00 330** P **P** **03 47 40.9 +0.5**
GURO IAmb IAmb 03 47 42.9
comp=Z,174nm,1.5s
GURO IAMs_20 IAMs_20 04 31 57.5
comp=Z,9µm,20.0s
**BBLS Lazi&#263i 84.07 348** ⇑ *i* P **P** **03 47 40.7 +0.1**
**BKNI Bangkinang 84.23 263** ⇑P **P** **03 47 42.2 +0.6**
**PWJI Pagerwojo 84.23 250** P **P** **03 47 39.2 -2.4**
**RUDO Rudo 84.32 348** *eP* **P** **03 47 41.3 -0.5**
**QLP Quilpie 84.44 214** ⇑P **P** **03 47 43.6 +1.3**
**ZCCA Zocca 84.45 354** P **P** **03 47 43.1 +0.6**
ZCCA IAMs_20 IAMs_20 04 30 31.5
comp=Z,13µm,21.0s
**MSSA Maissana 84.58 355** P **P** **03 47 42.7 -0.5**
MSSA IAmb IAmb 03 47 44.9
comp=Z,91nm,1.1s
MSSA IAMs_20 IAMs_20 04 30 02.9
comp=Z,9µm,22.0s
**SJES Sjenica 84.59 347** ⇑ *i* P **P** **03 47 43.4 +0.1**
**PLE Pljevlja 84.60 348** ⇑ *i* P **P** **03 47 43.7 +0.4**
**ARPR Arapgir-MALATY 84.62 333** P **P** **03 47 43.6 +0.1**
ARPR IAMs_20 IAMs_20 04 30 09.2
comp=Z,8µm,20.0s
**PGB Panagyurishte 84.66 344** *i* P **P** **03 47 43.7 +0.2**
**VLC Villacollemand 84.68 354** P **P** **03 47 43.8 +0.2**
**VLC Villacollemand 84.68 354** ⇑P **P** **03 47 43.2 -0.4**
**VTS Vitosha 84.72 345** *i* P **P** **03 47 43.7 -0.3**
**UPM Unac-Piva 84.79 348** ⇑ *i* P **P** **03 47 43.4 -1.0**
**UPM Unac-Piva 84.79 348** ⇑ *i* P **P** **03 47 43.7 -0.7**
**EDRB Edirne 84.83 342** P **P** **03 47 43.6 -0.7**

**LCR2 La Lucha 2 84.83 81** P **P** **03 47 45.0 0.0**
LCR2 IAmb IAmb 03 48 08.5
comp=Z,134nm,1.6s
**HYB Hyderabad 84.86 291** *e*P **P** **03 47 45.1 +0.3**
HYB IVmB_BB 03 47 45.5
comp=Z,3µm,3.6s
HYB *e*PP **PP** **03 51 02.4 +1.2**
HYB *e*SKSac **S** **03 58 08.3 -1.9**
HYB *e*SS **SS** **04 03 48.8 +6.3**
HYB IVMs_BB IVMs_BB 04 28 37.8
comp=Z,4µm,17.0s
**FITZ Fitzroy Crossi 84.91 233** P **P** **03 47 45.8 +0.9**
**FITZ Fitzroy Crossi 84.91 233** ⇑P **P** **03 47 46.0 +1.2**
**PLD Plovdiv 84.91 343** *i* P **P** **03 47 45.0 +0.3**
**IVA Berane 84.98 347** ⇑*i*P **P** **03 47 45.1 -0.1**
**KOME Kolasin 85.06 347** ⇑*i*P **P** **03 47 45.4 -0.2**
**BRY Bratogost 85.14 348** ⇑*i*P **P** **03 47 45.0 -1.0**
**BRY Bratogost 85.14 348** ⇑*i*P **P** **03 47 45.2 -0.8**
**MDUB Mudurnu 85.19 338** P **P** **03 47 46.5 +0.2**
**NKME Niksic 85.21 348** ⇑*i*P **P** **03 47 45.6 -0.7**
**SDDR Presa de Saban 85.24 66** P **P** **03 47 47.5 +0.7**
SDDR IAmb IAmb 03 48 11.2
comp=Z,99nm,1.4s
SDDR IAMs_20 IAMs_20 04 30 54.0
comp=Z,7µm,20.0s
**SDDR Presa de Saban 85.24 66** ⇑P **P** **03 47 47.5 +0.7**
**SDDR Presa de Saban 85.24 66** *e*P **P** **03 47 46.5 -0.4**
**STON Ston 85.27 349** ⇑*i*P **P** **03 47 45.5 -1.0**
**BR131 Keskin Array S 85.30 336** P **P** **03 47 47.2 +0.2**
BR131 IAmb IAmb 03 47 51.4
comp=Z,104nm,0.8s
**BR131 Keskin Array S 85.30 336** *c i*P **P** **03 47 46.4 -0.6**
**BRTR Keskin Array B 85.30 336** P **P** **03 47 47.0 0.0**
**BRTR Keskin Array B 85.30 336** P **P** **03 47 46.8 -0.2**
comp=Z,65nm,0.8s,baz=42,slow=2.0,SNR=133
BRTR PKPPKP P'P'df 04 13 50.8 -12
comp=Z,0.8nm,0.8s,baz=191,slow=5.7,SNR=5.1
BRTR LR LR 04 31 24.5
comp=Z,3µm,19.5s,baz=26,slow=40
comp=Z,65nm,0.8s
**BRTR Keskin Array B 85.30 336** *i* P **P** **03 47 46.7 -0.2**
BRTR pmax pmax
comp=Z,67nm,0.8s
**BR105 Keskin Array S 85.32 336** P **P** **03 47 45.3 -1.7**
comp=Z,95nm,0.8s,comp=Z,679nm
**TREB Trebinje 85.34 348** *e*P **P** **03 47 46.0 -0.9**
**RZN Rozhen 85.35 343** *i* P **P** **03 47 47.3 +0.1**
**ANTO Ankara 85.38 337** P **P** **03 47 47.4 +0.2**
ANTO IAmb IAmb 03 47 49.2
comp=Z,218nm,1.3s
**ANTO Ankara 85.38 337** IAMs_20 IAMs_20 04 28 53.0
comp=Z,11µm,22.0s
**ANTO Ankara 85.38 337** ⇑P **P** **03 47 47.4 +0.2**
**ANTO Ankara 85.38 337** P **P** **03 47 47.7 +0.5**
ANTO P **P** **03 47 47.7 +0.5**
ANTO S **SKSac** **03 58 09.6 +0.8**
ANTO S **SKSac** **03 58 09.6 +0.8**
**ANTO Ankara 85.38 337** ⇑P **P** **03 47 47.8 +0.5**
**ANTO Ankara 85.38 337** P **P** **03 47 47.7 +0.5**
**BR231 Keskin MP Arra 85.41 337** P **P** **03 47 47.9 +0.4**
BR231 IAmb IAmb 03 47 49.4
comp=Z,225nm,1.4s
**EPON Pontenova 85.42 7** ⇑P **P** **03 47 46.9 -0.4**
**CEME Cevo 85.43 348** ⇑*i*P **P** **03 47 46.6 -0.8**
**KKB Krupnik 85.49 344** *i* P **P** **03 47 48.1 +0.4**
**PDG Podgorica 85.50 347** P **P** **03 47 47.3 -0.4**
PDG IAmb IAmb 03 47 51.8
comp=Z,164nm,0.9s
**PDG Podgorica 85.50 347** ⇑P **P** **03 47 47.1 -0.6**
**PDG Podgorica 85.50 347** ⇑*i*P **P** **03 47 47.0 -0.6**
**PDG Podgorica 85.50 347** ⇑P **P** **03 47 47.5 -0.2**
**PDG Podgorica 85.50 347** ⇑*i*P **P** **03 47 47.3 -0.4**
**YLV Yalova 85.51 340** P **P** **03 47 46.6 -1.3**
comp=Z,77nm,1.3s,comp=Z,3µm
**BNN Bunyan 85.54 334** P **P** **03 47 48.5 +0.3**
**FDMO Fiordimonte 85.59 352** P **P** **03 47 48.6 +0.4**
FDMO IAmb IAmb 03 48 16.7
comp=Z,88nm,1.0s
FDMO IAMs_20 IAMs_20 04 27 37.8
comp=Z,7µm,21.0s
**DRK0 Durika 85.67 81** *e*P **P** **03 47 50.3 +1.1**
**DRK0 Durika 85.67 81** *e*P **P** **03 47 50.9 +1.8**
**MMB Musomishta 85.67 344** *i* P **P** **03 47 48.9 +0.3**
**BUM Brajici-Budva 85.68 348** ⇑*i*P **P** **03 47 48.0 -0.7**
**ARMA Armidale 85.70 206** P **P** **03 47 49.8 +1.1**
ARMA IAmb IAmb 03 48 13.5
comp=Z,161nm,1.4s
**ARMA Armidale 85.70 206** ⇑P **P** **03 47 50.9 +2.2**
**DRME Dracevica, Mon 85.75 347** ⇑*i*P **P** **03 47 48.2 -0.7**
**DRME Dracevica, Mon 85.75 347** ⇑*i*P **P** **03 47 48.0 -0.9**
**MTLF Montolieu 85.76 0** ⇑P **P** **03 47 48.9 -0.1**
**KIRS Kirsehir-Merke 85.79 336** ⇓P **P** **03 47 49.1 -0.2**
**NRCA Norcia 85.79 352** P **P** **03 47 49.7 +0.5**
**PUK Puka 85.79 347** P **P** **03 47 49.4 +0.1**
**NVR Nevrokopi 85.84 344** P **P** **03 47 49.8 +0.3**
**AS31 Alice Springs 85.85 223** P **P** **03 47 50.5 +1.0**
AS31 IAmb IAmb 03 48 43.6
comp=Z,94nm,0.6s
**ASAR Alice Springs 85.85 223** P **P** **03 47 50.4 +0.9**
**ASAR Alice Springs 85.85 223** P **P** **03 47 50.3 +0.8**
comp=Z,32nm,0.8s,baz=25,slow=5.2,SNR=111
ASAR LR LR 04 23 45.4
comp=Z,6µm,20.4s,baz=32,slow=34
comp=Z,32nm,0.8s
**ASAR Alice Springs 85.85 223** P **P** **03 47 50.4 +0.9**
**ALN Alexandroupoli 85.88 342** P **P** **03 47 50.0 +0.4**
ALN IAmb IAmb 03 47 51.2
comp=Z,141nm,1.6s
**ALN Alexandroupoli 85.88 342** ⇑P **P** **03 47 49.1 -0.5**
**ALN Alexandroupoli 85.88 342** P **P** **03 47 50.0 +0.4**
ALN pmax pmax
comp=Z,141nm,1.6s
**EDP2 Potrero Grande 85.90 81** *e*P **P** **03 47 52.9 +2.8**
**CASP Castiglione de 86.01 354** P **P** **03 47 50.1 -0.2**
CASP IAmb IAmb 03 47 53.9
comp=Z,44nm,0.7s
CASP IAMs_20 IAMs_20 04 31 42.8
comp=Z,8µm,21.0s
**SRS Serrai 86.11 344** P **P** **03 47 48.3 -2.5**
**EDAD Golfito 86.19 81** *e*P **P** **03 47 53.9 +2.3**
**KNT Kendrikon 86.19 345** P **P** **03 47 49.8 -1.3**
**NELY Ciudad Neily 86.33 81** *e*P **P** **03 47 54.3 +2.1**
**PGF Pioggiola 86.37 355** ⇑P **P** **03 47 51.7 -0.4**
**BRU2 Volcan 86.38 81** P **P** **03 47 52.8 +0.2**
BRU2 IAmb IAmb 03 48 16.7
comp=Z,220nm,1.5s
**BRU2 Volcan 86.38 81** *e*P **P** **03 47 52.3 -0.3**
**TIR Tirane 86.48 347** P **P** **03 47 52.7 +0.1**
TIR IAMs_20 IAMs_20 04 30 32.7
comp=Z,12µm,20.0s
**TIR Tirane 86.48 347** ⇑P **P** **03 47 52.4 -0.1**
**TIR Tirane 86.48 347** P **P** **03 47 52.7 +0.1**
TIR pmax pmax
comp=Z,377nm,2.0s
TIR MLR MLR
comp=Z,12µm,20.0s
**TIR Tirane 86.48 347** P **P** **03 47 51.1 -1.4**
comp=Z,74nm,1.0s,comp=Z,3µm
**CEST Esterri de Car 86.50 1** P **P** **03 47 52.9 +0.1**
CEST IAmb IAmb 03 47 54.7
comp=Z,99nm,1.4s
**BCO2 Palmira 86.53 80** *e*P **P** **03 47 53.2 -0.2**
**INTR Introdacqua 86.54 351** P **P** **03 47 52.5 -0.4**
INTR IAmb IAmb 03 48 15.2
comp=Z,60nm,0.9s
**OHR Ohrid 86.57 346** *i* P **P** **03 47 53.0 -0.1**
**SGRT San Giovanni R 86.60 350** P **P** **03 47 53.4 +0.1**
SGRT IAmb IAmb 03 47 54.4
comp=Z,223nm,1.3s
**EJON La Jonquera 86.65 360** P **P** **03 47 53.6 +0.1**
**POO Poona 86.68 296** *e*P **P** **03 47 53.8 -0.1**
**PGAV Gavieira, Arco 86.69 8** ⇑*i*P **P** **03 47 52.2 -1.5**
comp=Z,43nm,1.5s
**PGAV Gavieira, Arco 86.69 8** *e*PP **PP** **03 51 17.5 +2.3**
PGAV *e*S **S** **03 58 27.9 +0.3**
PGAV *e*SS SS 04 04 24.4 +17
PGAV *e*LQ LQ 04 11 26.7
PGAV *e*LR LR 04 16 38.3
comp=Z,7µm,20.0s
**PTPM Petroterminale 86.72 81** *e*P **P** **03 47 52.2 -1.8**
PTPM *i* S **SKSac** **03 58 16.3 -1.3**
**GAZ Gaziantep 86.73 333** P **P** **03 47 54.4 +0.5**
GAZ IAmb IAmb 03 47 56.0
comp=Z,166nm,1.2s
**DVD David 86.80 81** *e*P **P** **03 47 54.0 -0.5**
**FNA Florina 86.81 346** P **P** **03 47 54.2 0.0**
**FNA Florina 86.81 346** P **P** **03 47 50.2 -4.0**
**FNA Florina 86.81 346** ⇑P **P** **03 47 53.4 -0.9**
**FNA Florina 86.81 346** P **P** **03 47 54.2 0.0**
FNA pmax pmax
comp=Z,31nm,0.7s
**ECAL Calabor 86.83 7** P **P** **03 47 54.0 -0.4**
**PCAB Cabril 86.96 8** ⇑*i*P **P** **03 47 54.5 -0.5**
comp=Z,41nm,1.4s
**PBRG Braganca 86.97 7** ⇑*i*P **P** **03 47 53.3 -1.7**
comp=Z,50nm,1.8s
**PBRG Braganca 86.97 7** *e*PP **PP** **03 51 23.8 +6.4**
**KBN Korca 87.05 346** P **P** **03 47 54.9 -0.6**
**KBN Korca 87.05 346** P **P** **03 47 54.9 -0.6**
KBN pmax pmax
comp=Z,30nm,0.7s
**NEST Nestorio 87.22 346** P **P** **03 47 54.5 -1.8**
**POLO Lamas de Olo 87.31 8** ⇑*i*P **P** **03 47 56.1 -0.6**
comp=Z,19nm,1.0s
**POLO Lamas de Olo 87.31 8** *e*PP **PP** **03 51 23.5 +3.2**
**PENT Pentalofos 87.42 346** P **P** **03 47 55.3 -2.0**
**PVRL Vila Real 87.42 7** ⇑*i*P **P** **03 47 56.7 -0.5**
comp=Z,59nm,1.2s
**PAOL Paolisi 87.44 351** P **P** **03 47 56.8 -0.5**
PAOL IAmb IAmb 03 47 58.3
comp=Z,114nm,1.4s
PAOL IAMs_20 IAMs_20 04 34 11.7
comp=Z,8µm,18.0s
**KAD Karad 87.47 295** *e*P **P** **03 47 57.3 -0.5**
KAD IAmb IAmb 03 47 58.5
comp=Z,351nm,1.3s
**MATE Matera 87.58 349** ⇑P **P** **03 47 57.5 -0.4**
**MATE Matera 87.58 349** ⇑P **P** **03 47 57.6 -0.3**
**MVO Moncorvo 87.58 7** ⇑*i*P **P** **03 47 57.3 -0.7**
comp=Z,59nm,1.3s
**MVO Moncorvo 87.58 7** *e*PP **PP** **03 51 27.8 +5.4**
MVO *e*S **S** **03 58 35.6 -0.6**
MVO *e*SS **SS** **04 04 23.2 +2.5**
MVO *e*LQ LQ 04 11 22.4
MVO *e*LR LR 04 17 00.8
comp=Z,7µm,20.0s
**KULA Kula-Manisa 87.63 340** P **P** **03 47 55.3 -3.0**
**TYRN Tyrnavos 87.72 345** P **P** **03 47 55.8 -2.7**
**EPOB Poblet 87.74 1** ⇑P **P** **03 47 58.2 -0.6**
**NGCH Negor - Chabah 87.83 309** P **P** **03 47 59.3 0.0**
NGCH S **SKSac** **03 58 25.3 +1.2**
**BCIP Isla Barro Col 87.85 78** ⇑P **P** **03 48 00.2 +0.7**
**BCIP Isla Barro Col 87.85 78** *e*P **P** **03 47 59.3 -0.2**
**SRN Sarande 87.90 346** P **P** **03 47 57.0 -2.4**
**SCTE Santa Cesarea 87.93 348** P **P** **03 47 59.7 +0.1**
SCTE IAmb IAmb 03 48 03.5
comp=Z,105nm,0.8s
**PVIS Viseu 87.96 8** ⇑*i*P **P** **03 47 58.9 -0.9**
comp=Z,56nm,1.0s
**PVIS Viseu 87.96 8** *e*PP **PP** **03 51 26.7 +1.3**
**ZANG Zanguenga, Cho 87.99 78** *e*P P 03 47 54.8 -5.4
**AGPR Aguadilla, PR 88.01 63** P P **03 48 01.0 +0.7**
**CMLA Conca de Macela 88.05 22** IAMs_20 IAMs_20 04 24 46.0
comp=Z,11µm,22.0s
**GMAL Guarumal, Vera 88.08 80** *e*P **P** **03 47 59.7 -0.9**
GMAL *e*S **SKSac** **03 58 24.5 -1.4**
**KEK Kerkira 88.09 347** P **P** **03 47 59.8 -0.6**
KEK IAmb IAmb 03 48 24.8
comp=Z,51nm,0.9s
**KEK Kerkira 88.09 347** P **P** **03 47 58.4 -2.0**
**KEK Kerkira 88.09 347** ⇑P **P** **03 47 58.3 -2.1**
**UPA Univ. de Panam 88.18 78** *e*P **P** **03 48 00.8 -0.3**
**IGT Igoumenitsa 88.19 346** P **P** **03 47 59.1 -1.7**
**MTE Manteigas 88.30 7** P **P** **03 48 01.1 -0.4**
MTE IAmb IAmb 03 48 04.8
comp=Z,52nm,1.0s
**MTE Manteigas 88.30 7** ⇑*i*P **P** **03 48 00.4 -1.0**
comp=Z,53nm,0.9s
**MTE Manteigas 88.30 7** *e*PP **PP** **03 51 30.3 +2.1**
MTE *e*S **S** **03 58 41.7 -1.4**
MTE *e*SS **SS** **04 04 35.4 +4.2**
MTE *e*LQ LQ 04 11 24.2
MTE *e*LR LR 04 17 25.9
comp=Z,5µm,22.0s
**MTE Manteigas 88.30 7** ⇑P **P** **03 48 00.7 -0.8**
**AOPR Arecibo Observ 88.31 62** P P **03 48 01.4 -0.3**
**MARI3 Mariato, Verag 88.31 80** *e*P **P** **03 48 00.1 -1.7**
**CUC Castrocucco 88.33 350** P **P** **03 48 00.4 -1.2**
CUC IAMs_20 IAMs_20 04 32 02.7
comp=Z,11µm,20.0s
**CUC Castrocucco 88.33 350** ⇑P **P** **03 48 00.1 -1.5**
**UUPR Utuado, UPR, P 88.40 63** P **P** **03 48 02.5 +0.4**
UUPR IAmb IAmb 03 48 21.1
comp=Z,167nm,1.5s
**COI Coimbra 88.42 8** P **P** **03 48 01.6 -0.2**
COI IAmb IAmb 03 48 04.2
comp=Z,53nm,0.9s
COI IAMs_20 IAMs_20 04 26 05.8
comp=Z,9µm,21.0s
**COI Coimbra 88.42 8** ⇑*i*P **P** **03 48 01.7 -0.2**
comp=Z,90nm,1.3s
**COI Coimbra 88.42 8** *e*PP **PP** **03 51 30.1 +1.1**
**COI Coimbra 88.42 8** ⇑P **P** **03 48 01.7 -0.2**
**COI Coimbra 88.42 8** P **P** **03 48 01.6 -0.2**
COI pmax pmax
comp=Z,53nm,1.0s
COI MLR MLR
comp=Z,9µm,21.0s
**MLPR Magueyes Islan 88.45 63** P **P** **03 48 02.7 +0.4**
MLPR IAmb IAmb 03 48 21.5
comp=Z,102nm,1.1s
**EVR Evrytania 88.56 345** P **P** **03 48 02.0 -0.7**
**PCAS Casmilo, Conde 88.56 8** ⇑*i*P **P** **03 48 01.5 -1.1**
comp=Z,75nm,1.2s
**PCAS Casmilo, Conde 88.56 8** *e*PP **PP** **03 51 30.8 +0.6**
**CELP Cerrillos 88.63 63** P **P** **03 48 03.3 +0.1**
**CACAO El Cacao, Vera 88.63 80** *e*P **P** **03 48 03.1 -0.1**
CACAO *e*S **SKSac** **03 58 28.1 -1.1**
**OBIP Obispado Ponce 88.64 63** P **P** **03 48 03.3 +0.1**
**AZU Azuero 88.65 79** ⇑*e*P **P** **03 48 02.7 -0.6**
AZU *e*S **SKSac** **03 58 31.0 +1.7**
**GCPR Guaynabo City 88.71 62** P **P** **03 48 04.2 +0.6**
**TOZ Tahuroa Road 88.83 185** P **P** **03 48 04.1 +0.6**
TOZ IAmb IAmb 03 48 06.1
comp=Z,281nm,2.0s
**TSLK Tsoukalades, L 88.83 346** P **P** **03 48 01.9 -2.0**
**ANX Ano Chora 88.86 345** P **P** **03 48 01.8 -2.3**
**PCBR Castelo Branco 88.86 7** ⇑*i*P **P** **03 48 02.4 -1.6**
comp=Z,44nm,1.3s
**LKD2 Lefkada island 88.87 346** P **P** **03 48 02.3 -1.8**
**PVO Paravola 88.90 345** P **P** **03 48 02.0 -2.2**
**JASK Jask - Hormozg 88.96 312** P **P** **03 48 04.2 -0.5**
**TOTI Torti 88.97 77** *e*P **P** **03 48 00.5 -4.3**
**HUMP Col San Antoni 88.98 62** P **P** **03 48 05.2 +0.4**
HUMP IAmb IAmb 03 48 22.3
comp=Z,181nm,1.4s
**IGPR InterUniversit 88.98 62** P **P** **03 48 05.4 +0.6**
**PDPR Patillas Dam, 88.98 62** P **P** **03 48 06.1 +1.2**
PDPR IAmb IAmb 03 48 25.2
comp=Z,81nm,1.4s
**ACHO3 Achotines, Los 89.00 79** *e*P **P** **03 48 02.4 -2.5**
**EFP Efpalio 89.02 345** P **P** **03 48 03.4 -1.3**
**TIP Timpagrande 89.03 349** P **P** **03 48 04.8 -0.1**
TIP IAmb IAmb 03 48 06.3
comp=Z,102nm,1.2s
TIP IAMs_20 IAMs_20 04 26 47.0
comp=Z,7µm,22.0s
**TIP Timpagrande 89.03 349** ⇑P **P** **03 48 04.3 -0.6**
**TIP Timpagrande 89.03 349** ⇑P **P** **03 48 04.7 -0.2**
**EVGI Lefkada island 89.03 346** P **P** **03 48 02.5 -2.3**
**ELL Elmali 89.04 338** P **P** **03 48 05.1 +0.1**
ELL IAmb IAmb 03 48 19.6
comp=Z,95nm,1.0s
**ELL Elmali 89.04 338** ⇑P **P** **03 48 03.5 -1.5**
**ELL Elmali 89.04 338** P **P** **03 48 05.1 +0.1**
ELL pmax pmax
comp=Z,95nm,1.0s
**RIV Riverview 89.05 205** ⇑P **P** **03 48 06.6 +2.0**
**PSBE So Bento 89.07 9** ⇑*i*P **P** **03 48 04.0 -1.0**
comp=Z,71nm,1.4s
**PSBE So Bento 89.07 9** *e*PP **PP** **03 51 35.1 +0.8**
**ESBB Sonseca Array 89.26 5** P **P** **03 48 05.6 -0.3**
**ESDC Sonseca Array 89.26 5** P **P** **03 48 05.2 -0.8**
**ESDC Sonseca Array 89.26 5** P **P** **03 48 05.1 -0.8**
comp=Z,21nm,0.9s,baz=351,slow=4.4,SNR=98
ESDC PKKPbc **PKKPbc** **04 05 40.6 +0.6**
comp=Z,1.0nm,1.0s,baz=231,slow=0.9,SNR=3.5
ESDC PKPPKP P'P'df 04 13 45.9 -10
comp=Z,0.6nm,1.1s,baz=286,slow=1.5,SNR=4.8
ESDC LR LR 04 30 31.5
comp=Z,5µm,19.5s,baz=356,slow=37
comp=Z,21nm,0.9s
**URZ Urewera 89.27 184** LR LR 04 22 31.2
comp=Z,10µm,20.6s,baz=137,slow=32
**PMRV Marv??o 89.28 7** ⇑*i*P **P** **03 48 04.6 -1.4**
comp=Z,44nm,1.4s
**PMRV Marv??o 89.28 7** *e*PP **PP** **03 51 37.0 +1.1**
PMRV *e*S **S** **03 58 48.7 -3.5**
PMRV *e*SS **SS** **04 04 48.3 +3.0**
PMRV *e*LQ LQ 04 11 48.2
PMRV *e*LR LR 04 17 38.8
comp=Z,6µm,22.0s
**ETOS Mallorca 89.33 360** P **P** **03 48 05.9 -0.3**
**ETOS Mallorca 89.33 360** ⇑P **P** **03 48 05.5 -0.8**
**KLV Kalavryta, Ach 89.36 344** P **P** **03 48 03.5 -2.9**
**PAB San Pablo 89.37 5** P **P** **03 48 05.6 -0.9**
**PAB San Pablo 89.37 5** IAMs_20 IAMs_20 04 31 06.0
comp=Z,9µm,21.0s
**PAB San Pablo 89.37 5** ⇑P **P** **03 48 05.1 -1.4**
**PAB San Pablo 89.37 5** P **P** **03 48 05.6 -0.9**
PAB pmax pmax
comp=Z,30nm,1.3s
PAB MLR MLR
comp=Z,9µm,21.0s
**VSL Villasalto 89.39 354** P **P** **03 48 06.9 +0.5**
**VSL Villasalto 89.39 354** ⇑P **P** **03 48 05.8 -0.7**
**GUR Goura 89.43 344** P **P** **03 48 03.9 -2.9**
**UPD2 Meteti 89.45 77** *e*P **P** **03 48 08.0 +0.9**
**DMLN Damoulianata-K 89.45 346** P **P** **03 48 05.3 -1.5**
**ECHE Chera 89.47 2** P **P** **03 48 06.4 -0.5**
**PSDA Pessada-Kefalo 89.54 346** P **P** **03 48 04.2 -3.0**
**PMTG Montargil 89.57 8** ⇑*i*P **P** **03 48 05.8 -1.5**
comp=Z,34nm,1.3s
**PMTG Montargil 89.57 8** *e*PP **PP** **03 51 41.4 +3.2**
**PMAFR Mafra 89.58 9** P **P** **03 48 06.6 -0.8**
**SHME Shamm 89.60 313** P **P** **03 48 06.1 -1.6**
**SHME Shamm 89.60 313** P **P** **03 48 06.5 -1.2**
SHME P **P** **03 48 06.5 -1.2**
**SALM Salem 89.60 288** *e*P **P** **03 48 09.7 +1.9**
**HIZ Hauiti 89.65 186** IAMs_20 IAMs_20 04 24 04.7
comp=Z,9µm,20.0s
**APE Apeiranthos 89.68 342** ⇑P **P** **03 48 05.7 -2.3**
**PESTR Estremoz 89.82 8** P **P** **03 48 08.1 -0.5**
PESTR IAMs_20 IAMs_20 04 26 38.1
comp=Z,9µm,22.0s
**PESTR Estremoz 89.82 8** ⇑*i*P **P** **03 48 07.3 -1.2**
comp=Z,62nm,1.3s
**PESTR Estremoz 89.82 8** *e*PP **PP** **03 51 43.1 +2.9**
**PESTR Estremoz 89.82 8** P **P** **03 48 07.4 -1.2**
**LIS Lisbon 89.83 9** *e*P **P** **03 48 07.0 -1.5**
LIS *e*SKSac **SKSac** **03 58 33.9 -1.7**
LIS IAMs_20 IAMs_20 04 22 43.0
comp=Z,13µm,25.0s
**LIS Lisbon 89.83 9** ⇑P **P** **03 48 07.9 -0.6**
**LIS Lisbon 89.83 9** *e*P **P** **03 48 07.0 -1.5**
LIS *e* 03 58 33.9
**CSS Mathiatis 89.88 335** P **P** **03 48 09.1 +0.2**
CSS IAmb IAmb 03 48 13.3
comp=Z,101nm,1.1s
CSS IAMs_20 IAMs_20 04 30 48.2
comp=Z,9µm,22.0s
**CSS Mathiatis 89.88 335** ⇑P **P** **03 48 08.1 -0.8**
**CSS Mathiatis 89.88 335** P **P** **03 48 07.3 -1.6**
comp=Z,98nm,1.2s,comp=Z,2µm
**USI Ustica 89.88 351** ⇑P **P** **03 48 07.0 -1.8**
**EBAD Badajoz 89.98 7** P **P** **03 48 08.1 -1.1**
**CEL Celeste 90.04 349** P **P** **03 48 08.7 -0.9**
CEL IAmb IAmb 03 48 12.6
comp=Z,82nm,0.8s
**CEL Celeste 90.04 349** ⇑P **P** **03 48 07.2 -2.4**
**EIBI Ibiza 90.07 1** P **P** **03 48 09.5 -0.2**
**EIBI Ibiza 90.07 1** ⇑P **P** **03 48 09.5 -0.2**
**EVO Evora 90.12 8** P **P** **03 48 08.8 -1.1**
**MDH Madha 90.17 313** P **P** **03 48 08.7 -1.7**
**MDH Madha 90.17 313** P **P** **03 48 09.1 -1.2**
**MASF Masafi 90.17 313** P **P** **03 48 09.3 -1.1**
**MSFE Esma-Masafi 90.18 313** P **P** **03 48 09.2 -1.3**
**STKA Stephens Creek 90.19 214** LR LR 04 25 14.3
comp=Z,12µm,20.7s,baz=18,slow=33
**LCBC Los crdobas, 90.21 76** *e*P **P** **03 48 12.8 +2.2**
**UMQ Umm Al-Quwin 90.27 313** P **P** **03 48 10.8 +0.1**
**UMQ Umm Al-Quwin 90.27 313** P **P** **03 48 10.6 -0.2**
**SANT Santorini 90.37 341** IAMs_20 IAMs_20 04 30 21.7
comp=Z,10µm,22.0s
**ETOB Tobarra 90.39 3** P **P** **03 48 11.2 -0.1**
**KBD Kabd 90.45 321** P **P** **03 48 10.5 -1.1**
KBD S **SKSac** **03 58 37.4 -2.2**
**MBWA Marble Bar 90.49 236** P **P** **03 48 10.2 -1.4**
MBWA IAmb IAmb 03 50 18.7
comp=Z,250nm,1.7s
**MBWA Marble Bar 90.49 236** ⇑P **P** **03 48 12.3 +0.7**
**PNCL Nicolau / Gran 90.49 8** ⇑*i*P **P** **03 48 10.4 -1.2**
comp=Z,41nm,1.7s
**PNCL Nicolau / Gran 90.49 8** *e*PP **PP** **03 51 46.1 +0.6**
**PNCL Nicolau / Gran 90.49 8** P **P** **03 48 10.7 -0.9**
**UOSS Minazif 90.52 313** P **P** **03 48 11.1 -0.9**
**UOSS Minazif 90.52 313** IAMs_20 IAMs_20 04 34 04.8
comp=Z,9µm,21.0s
**UOSS Minazif 90.52 313** *i* P **P** **03 48 10.6 -1.4**
SNR=5.2
**UOSS Minazif 90.52 313** P **P** **03 48 10.8 -1.2**
**PBAR Barrancos 90.55 7** ⇑*i*P **P** **03 48 11.1 -0.8**
comp=Z,80nm,1.4s
**PBAR Barrancos 90.55 7** *e*PP **PP** **03 51 46.1 +0.1**
**PBAR Barrancos 90.55 7** P **P** **03 48 11.2 -0.8**
**SMRT St. Maarten 90.57 60** P **P** **03 48 12.0 -0.3**
SMRT IAMs_20 IAMs_20 04 34 00.6
comp=Z,6µm,19.0s
**PBEJ Beja 90.63 8** ⇑*i*P **P** **03 48 11.4 -0.9**
comp=Z,39nm,1.5s
**PBEJ Beja 90.63 8** *e*PP **PP** **03 51 47.5 +0.8**
**HATD Hatta, Dubai 90.65 313** *i* P **P** **03 48 11.6 -1.1**
SNR=5.7
**HATD Hatta, Dubai 90.65 313** P **P** **03 48 11.1 -1.5**
HATD P **P** **03 48 11.1 -1.5**
**PTAC Punta Ardita, 90.67 78** *e*P **P** **03 48 10.4 -2.3**
**NAZ Nazwa, Dubai 90.73 313** P **P** **03 48 11.6 -1.4**
**NAZ Nazwa, Dubai 90.73 313** P **P** **03 48 11.0 -2.0**
NAZ P **P** **03 48 11.0 -2.0**
**EADA Adamuz 90.73 5** P **P** **03 48 12.4 -0.5**
**MALK Mahakanadarawa 90.75 284** P **P** **03 48 13.1 -0.1**
**MALK Mahakanadarawa 90.75 284** ⇑P **P** **03 48 13.4 +0.3**
**ECAB El Cabril 90.77 6** P **P** **03 48 12.1 -0.9**
**PSA00 Pilbara Seismi 90.77 236** P **P** **03 48 13.7 +0.7**
PSA00 IAmb IAmb 03 48 14.8
comp=Z,146nm,1.8s
**PSA00 Pilbara Seismi 90.77 236** P **P** **03 48 13.7 +0.7**
PSA00 IAmb IAmb 03 50 17.5
comp=Z,76nm,0.7s
**MESJ Messejana 90.79 8** IAMs_20 IAMs_20 04 29 35.7
comp=Z,8µm,19.0s
**MESJ Messejana 90.79 8** ⇑*i*P **P** **03 48 11.5 -1.5**
comp=Z,35nm,1.8s
**MESJ Messejana 90.79 8** *e*PP **PP** **03 51 54.1 +6.2**
**MESJ Messejana 90.79 8** *e*P **P** **03 48 11.7 -1.3**
MESJ *e*SKSac **SKSac** **03 58 39.5 -1.8**
MESJ IAMs_20 IAMs_20 04 23 38.9
comp=Z,14µm,27.0s
**MESJ Messejana 90.79 8** *e*P **P** **03 48 11.7 -1.3**
MESJ *e* 03 58 39.5
**ASHO Ashiyiah 90.81 313** *i* P **P** **03 48 13.0 -0.4**
SNR=8.6
**ASHO Ashiyiah 90.81 313** P **P** **03 48 11.5 -1.9**
ASHO P **P** **03 48 11.5 -1.9**
**KARP Karpathos 90.81 340** IAMs_20 IAMs_20 04 37 01.4
comp=Z,7µm,20.0s
**KARP Karpathos 90.81 340** ⇑P **P** **03 48 11.4 -1.8**
**WSAR Wadi Sarin 90.83 310** LR LR 04 32 58.1
comp=Z,7µm,21.7s,baz=87,slow=38
**BIDO Bidbid 90.83 311** P **P** **03 48 12.4 -1.1**
BIDO P **P** **03 48 12.4 -1.1**
**FAQ Al Faqa, Dubai 90.97 313** P **P** **03 48 11.8 -2.3**
FAQ P **P** **03 48 11.8 -2.3**
**VAE Valguarnera 90.97 350** LR LR 04 33 01.6
comp=Z,9µm,19.0s,baz=7.5,slow=38
**EMIN Mina Concepcio 90.99 7** P **P** **03 48 13.2 -0.7**
**CLTB Caltabellotta 91.00 351** P **P** **03 48 12.3 -1.8**
**CLTB Caltabellotta 91.00 351** ⇑P **P** **03 48 12.9 -1.2**
**PCVE Castro Verde 91.01 8** ⇑*i*P **P** **03 48 13.3 -0.7**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,57nm,1.4s | | | | | | | | | |
| PCVE | Castro Verde | 91.01 | 8 | *e*PP | PP | 03 51 52.3 | +2.7 | | | |
| PCVE | Castro Verde | 91.01 | 8 | P | P | 03 48 13.4 | -0.6 | | | |
| PTEO | Sao Teotonio | 91.03 | 9 | ⇑*i*P | P | 03 48 12.9 | -1.2 | | | |
| | comp=Z,76nm,2.1s | | | | | | | | | |
| CAN | Canberra | 91.04 | 207 | P | P | 03 48 15.7 | +1.8 | | | |
| SOHO | SOHO | 91.06 | 312 | *i* P | P | 03 48 13.1 | -1.4 | | | |
| | SNR=7.8 | | | | | | | | | |
| SOHO | SOHO | 91.06 | 312 | P | P | 03 48 12.0 | -2.5 | | | |
| HAGA | Augusta | 91.08 | 350 | ⇑P | P | 03 48 12.6 | -1.8 | | | |
| MMAI | Mount Meron Ar | 91.13 | 333 | P | P | 03 48 14.3 | -0.5 | | | |
| | comp=Z,66nm,1.2s,baz=55,slow=3.2,SNR=40 | | | | | | | | | |
| | comp=Z,66nm,1.2s | | | | | | | | | |
| EGRO | El Granado | 91.15 | 8 | P | P | 03 48 14.0 | -0.7 | | | |
| KOD | Kodaikanal | 91.16 | 288 | *e*P | P | 03 48 15.3 | -0.2 | | | |
| HOQ | Hoqain | 91.17 | 311 | P | P | 03 48 14.0 | -1.1 | | | |
| | SNR=7.2 | | | | | | | | | |
| HOQ | | | | P | P | 03 48 14.0 | -1.1 | | | |
| | SNR=7.2 | | | | | | | | | |
| ASUD | Al Ashush, Dub | 91.19 | 313 | *i* P | P | 03 48 14.1 | -1.0 | | | |
| | SNR=8.9 | | | | | | | | | |
| ASUD | Al Ashush, Dub | 91.19 | 313 | P | P | 03 48 12.8 | -2.3 | | | |
| | SNR=5.4 | | | | | | | | | |
| ASUD | | | | P | P | 03 48 12.8 | -2.3 | | | |
| | SNR=5.4 | | | | | | | | | |
| WBK | Wadi Bani Khal | 91.20 | 309 | P | P | 03 48 14.8 | -0.4 | | | |
| | SNR=5.3 | | | | | | | | | |
| WBK | | | | P | P | 03 48 14.8 | -0.4 | | | |
| | SNR=5.3 | | | | | | | | | |
| EMUR | La Murta | 91.20 | 3 | P | P | 03 48 14.2 | -0.8 | | | |
| RAFF | Raffo Rosso | 91.23 | 350 | P | P | 03 48 13.5 | -1.6 | | | |
| RAFF | | | | IAmb | IAmb | 03 48 20.3 | | | | |
| | comp=Z,48nm,0.8s | | | | | | | | | |
| RAFF | | | | IAMs_20 | IAMs_20 | 04 33 25.3 | | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| SMDO | Samad | 91.26 | 310 | P | P | 03 48 14.7 | -0.9 | | | |
| | SNR=6.3 | | | | | | | | | |
| SMDO | | | | P | P | 03 48 14.7 | -0.9 | | | |
| | SNR=6.3 | | | | | | | | | |
| PVAQ | Vaqueiros | 91.26 | 8 | P | P | 03 48 14.5 | -0.8 | | | |
| PVAQ | | | | IAMs_20 | IAMs_20 | 04 30 02.3 | | | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| PVAQ | Vaqueiros | 91.26 | 8 | ⇑*i*P | P | 03 48 14.6 | -0.6 | | | |
| | comp=Z,62nm,1.9s | | | | | | | | | |
| PVAQ | Vaqueiros | 91.26 | 8 | *e*PP | PP | 03 51 53.2 | +1.6 | | | |
| PVAQ | | | | *e*S | S | 03 59 11.4 | +0.9 | | | |
| PVAQ | | | | *e*SS | SS | 04 05 16.3 | +2.3 | | | |
| PVAQ | | | | *e*LQ | LQ | 04 12 07.3 | | | | |
| PVAQ | | | | *e*LR | LR | 04 18 46.0 | | | | |
| | comp=Z,7µm,18.0s | | | | | | | | | |
| PVAQ | Vaqueiros | 91.26 | 8 | P | P | 03 48 14.6 | -0.6 | | | |
| MORF | Marmelete | 91.28 | 9 | ⇑*i*P | P | 03 48 13.6 | -1.8 | | | |
| | comp=Z,63nm,1.6s | | | | | | | | | |
| MORF | Marmelete | 91.28 | 9 | *e*PP | PP | 03 51 56.0 | +4.2 | | | |
| MORF | Marmelete | 91.28 | 9 | *e*P | P | 03 48 13.8 | -1.5 | | | |
| MORF | | | | IAMs_20 | IAMs_20 | 04 24 28.9 | | | | |
| | comp=Z,15µm,25.4s | | | | | | | | | |
| MORF | Marmelete | 91.28 | 9 | *e*P | P | 03 48 13.9 | -1.5 | | | |
| JLN | Jalan Bani Buh | 91.37 | 309 | P | P | 03 48 15.6 | -0.3 | | | |
| JLN | | | | P | P | 03 48 15.6 | -0.3 | | | |
| PBDV | Barranco-do-Ve | 91.40 | 8 | ⇑*i*P | P | 03 48 15.4 | -0.5 | | | |
| PBDV | Barranco-do-Ve | 91.40 | 8 | *e*PP | PP | 03 51 54.2 | +1.4 | | | |
| PBDV | Barranco-do-Ve | 91.40 | 8 | P | P | 03 48 15.6 | -0.3 | | | |
| AJN | Ajban | 91.40 | 314 | P | P | 03 48 14.4 | -1.6 | | | |
| AJN | | | | P | P | 03 48 14.4 | -1.6 | | | |
| PFVI | Vila Bisbo | 91.43 | 9 | IAMs_20 | IAMs_20 | 04 32 03.8 | | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| PFVI | Vila Bisbo | 91.43 | 9 | ⇑*i*P | P | 03 48 15.1 | -0.9 | | | |
| PFVI | Vila Bisbo | 91.43 | 9 | P | P | 03 48 15.2 | -0.8 | | | |
| CART | Cartagena | 91.47 | 3 | P | P | 03 48 15.2 | -0.9 | | | |
| CART | | | | IAMs_20 | IAMs_20 | 04 29 31.5 | | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| CART | Cartagena | 91.47 | 3 | P | P | 03 48 14.8 | -1.4 | | | |
| CART | Cartagena | 91.47 | 3 | ⇑P | P | 03 48 14.7 | -1.4 | | | |
| ASF | Jabal al Asfar | 91.48 | 331 | LR | LR | 04 36 19.3 | | | | |
| | comp=Z,7µm,18.6s,baz=355,slow=40 | | | | | | | | | |
| ALNE | Al Ain | 91.49 | 313 | *i* P | P | 03 48 15.7 | -0.9 | | | |
| | SNR=5.0 | | | | | | | | | |
| ALNE | Al Ain | 91.49 | 313 | P | P | 03 48 15.9 | -0.6 | | | |
| | SNR=8.2 | | | | | | | | | |
| ALNE | | | | P | P | 03 48 15.9 | -0.6 | | | |
| | SNR=8.2 | | | | | | | | | |
| PALK | Pallekele | 91.53 | 283 | LR | LR | 04 33 07.7 | | | | |
| | comp=Z,3µm,20.1s,baz=120,slow=38 | | | | | | | | | |
| IDI | Anoyia | 91.53 | 342 | ⇑P | P | 03 48 13.7 | -2.9 | | | |
| IDI | Anoyia | 91.53 | 342 | LR | LR | 04 35 12.9 | | | | |
| | comp=Z,6µm,18.8s,baz=10.0,slow=39 | | | | | | | | | |
| ANWB | Willy Bob | 91.58 | 59 | IAMs_20 | IAMs_20 | 04 27 49.3 | | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| ANWB | Willy Bob | 91.58 | 59 | ⇑P | P | 03 48 17.2 | +0.2 | | | |
| ANWB | Willy Bob | 91.58 | 59 | *e*P | P | 03 48 09.5 | -7.4 | | | |
| UREC | San Jos de Ur | 91.58 | 76 | ⇑*e*P | P | 03 48 16.9 | -0.1 | | | |
| UREC | | | | *i* S | SKSac | 03 58 46.9 | +0.4 | | | |
| BFZ | Birch Farm | 91.73 | 185 | IAMs_20 | IAMs_20 | 04 23 22.8 | | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| ARQ | Araqi | 91.75 | 312 | P | P | 03 48 16.7 | -1.0 | | | |
| | SNR=8.1 | | | | | | | | | |
| ARQ | | | | P | P | 03 48 16.7 | -1.0 | | | |
| | SNR=8.1 | | | | | | | | | |
| EQTA | Presa de Quent | 91.75 | 5 | P | P | 03 48 17.2 | -0.5 | | | |
| EGOR | Sierra Gorda, | 91.81 | 5 | P | P | 03 48 17.8 | -0.2 | | | |
| EGOR | Sierra Gorda, | 91.81 | 5 | ⇑P | P | 03 48 17.5 | -0.4 | | | |
| JMDO | Jabal Madar | 91.82 | 310 | P | P | 03 48 17.3 | -0.7 | | | |
| JMDO | | | | P | P | 03 48 17.3 | -0.7 | | | |
| BSY | Bisya | 91.93 | 311 | P | P | 03 48 17.3 | -1.3 | | | |
| | SNR=7.2 | | | | | | | | | |
| BSY | | | | P | P | 03 48 17.3 | -1.3 | | | |
| | SNR=7.2 | | | | | | | | | |
| LIJA | Lijar | 91.94 | 6 | P | P | 03 48 18.8 | +0.3 | | | |
| HATO | Hato, Curacao | 92.00 | 68 | IAMs_20 | IAMs_20 | 04 33 48.4 | | | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| JRN | Qarnain Island | 92.03 | 315 | P | P | 03 48 18.1 | -0.9 | | | |
| | SNR=7.4 | | | | | | | | | |
| JRN | | | | P | P | 03 48 18.1 | -0.9 | | | |
| | SNR=7.4 | | | | | | | | | |
| SHMA | Al-Shehemyia | 92.05 | 317 | P | P | 03 48 18.2 | -0.8 | | | |
| SALP | Salfit | 92.08 | 332 | ⇑P | P | 03 48 18.6 | -0.6 | | | |
| ANBD | Bethesda, Anti | 92.10 | 59 | *e*P | P | 03 48 20.1 | +0.7 | | | |
| MBFL | Flemmings, Mon | 92.11 | 60 | *e*P | P | 03 48 15.4 | -4.0 | | | |
| MBWH | | 92.12 | 60 | *e*P | P | 03 48 18.9 | -0.6 | | | |
| SAKB | Bahrain | 92.12 | 318 | P | P | 03 48 18.7 | -0.7 | | | |
| SFS | San Fernando | 92.32 | 7 | IAMs_20 | IAMs_20 | 04 27 56.2 | | | | |
| | comp=Z,11µm,22.0s | | | | | | | | | |
| HALK | Hakmana | 92.47 | 283 | ⇑P | P | 03 48 22.1 | +1.0 | | | |
| BHW | Baring Head | 92.53 | 186 | IAMs_20 | IAMs_20 | 04 23 03.0 | | | | |
| | comp=Z,9µm,22.0s | | | | | | | | | |
| WDD | Wied Dalam | 92.59 | 350 | ⇑P | P | 03 48 20.5 | -0.8 | | | |
| MZWR | Madinat Zayed | 92.60 | 314 | P | P | 03 48 19.8 | -1.8 | | | |
| GHAJ | Ghor Haditha | 92.69 | 332 | P | P | 03 48 21.8 | -0.1 | | | |
| GHAJ | | | | IAMs_20 | IAMs_20 | 04 35 58.6 | | | | |
| | comp=Z,11µm,21.0s | | | | | | | | | |
| GDHS | Morne Mazeau, | 92.74 | 60 | P | P | 03 48 22.2 | -0.2 | | | |
| MSBI | Mazada | 92.74 | 332 | ⇑P | P | 03 48 21.5 | -0.6 | | | |
| GHWR | Ruwais | 92.87 | 315 | P | P | 03 48 21.6 | -1.2 | | | |
| GHWR | | | | P | P | 03 48 21.6 | -1.2 | | | |
| TRNA | Turayna | 92.93 | 317 | P | P | 03 48 21.8 | -1.3 | | | |
| ECEU | Ceuta | 92.94 | 6 | ⇑P | P | 03 48 22.9 | -0.1 | | | |
| EALB | Alboran | 93.03 | 4 | ⇑P | P | 03 48 21.2 | -2.2 | | | |
| MHTO | MHTO | 93.06 | 309 | P | P | 03 48 23.5 | -0.3 | | | |
| | SNR=6.7 | | | | | | | | | |
| SMRA | Abu-Samra | 93.09 | 317 | P | P | 03 48 22.6 | -1.2 | | | |
| | SNR=7.2 | | | | | | | | | |
| KEST | Kesra | 93.14 | 354 | P | P | 03 48 23.8 | -0.3 | | | |
| KEST | Kesra | 93.14 | 354 | P | P | 03 48 23.4 | -0.7 | | | |
| | comp=Z,18nm,1.0s,baz=20,slow=2.1,SNR=16 | | | | | | | | | |
| KEST | | | | LR | LR | 04 33 36.6 | | | | |
| | comp=Z,4µm,20.0s,baz=316,slow=38 | | | | | | | | | |
| | comp=Z,18nm,1.0s | | | | | | | | | |
| TBG | Guadaloupe-3 | 93.15 | 60 | *e*P | P | 03 48 24.5 | +0.2 | | | |
| MAGL | Barre de l'ile | 93.27 | 60 | IAMs_20 | IAMs_20 | 04 36 51.0 | | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| SLWR | Sila | 93.30 | 316 | P | P | 03 48 23.1 | -1.7 | | | |
| SLWR | | | | P | P | 03 48 23.1 | -1.7 | | | |
| KZIT | Kziot | 93.40 | 333 | ⇑P | P | 03 48 24.2 | -1.0 | | | |
| MZR | Muzera | 93.44 | 314 | *i* P | P | 03 48 24.8 | -0.7 | | | |
| | SNR=27 | | | | | | | | | |
| MZR | Muzera | 93.44 | 314 | P | P | 03 48 25.1 | -0.4 | | | |
| | SNR=8.4 | | | | | | | | | |
| MZR | | | | P | P | 03 48 25.1 | -0.4 | | | |
| | SNR=8.4 | | | | | | | | | |
| KHZ | Kahutara | 93.62 | 186 | IAMs_20 | IAMs_20 | 04 24 27.8 | | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| SDV | Santo Domingo | 93.64 | 71 | P | P | 03 48 26.9 | +0.2 | | | |
| SDV | | | | IAmb | IAmb | 03 48 54.0 | | | | |
| | comp=Z,75nm,1.2s | | | | | | | | | |
| SDV | | | | IAMs_20 | IAMs_20 | 04 36 55.7 | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| SDV | Santo Domingo | 93.64 | 71 | LR | LR | 04 33 26.2 | | | | |
| | comp=Z,4µm,19.2s,baz=350,slow=37 | | | | | | | | | |
| SDV | Santo Domingo | 93.64 | 71 | *e*P | P | 03 48 25.8 | -0.9 | | | |
| SVN | Savane Anatole | 94.24 | 60 | IAMs_20 | IAMs_20 | 04 29 25.9 | | | | |
| | comp=Z,11µm,22.0s | | | | | | | | | |
| SVN | Savane Anatole | 94.24 | 60 | *e*P | P | 03 48 31.3 | +2.0 | | | |
| FDF | Fort de France | 94.34 | 60 | ⇑P | P | 03 48 30.2 | +0.5 | | | |
| EIL | Elat | 94.40 | 332 | ⇑P | P | 03 48 29.1 | -0.7 | | | |
| EIL | Elat | 94.40 | 332 | LR | LR | 04 39 05.2 | | | | |
| | comp=Z,9µm,18.1s,baz=52,slow=41 | | | | | | | | | |
| PMPST | Porto Santo, M | 94.43 | 16 | *e*P | P | 03 48 28.5 | -1.4 | | | |
| PMPS | Porto Santo | 94.45 | 16 | *e*P | P | 03 48 29.5 | -0.5 | | | |
| | comp=Z,131nm,1.4s | | | | | | | | | |
| ILAM | Ilet Lapin Mar | 94.45 | 60 | IAMs_20 | IAMs_20 | 04 29 31.5 | | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| PMOZ | Porto Moniz, M | 94.53 | 16 | *e*P | P | 03 48 30.0 | -0.5 | | | |
| | comp=Z,99nm,1.4s | | | | | | | | | |
| PMOZ | Porto Moniz, M | 94.53 | 16 | *e*S | S | 03 59 41.7 | +1.8 | | | |
| PMOZ | Porto Moniz, M | 94.53 | 16 | *e*LR | LR | 04 22 04.0 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| BIM | Bigot | 94.56 | 60 | P | P | 03 48 30.9 | +0.1 | | | |
| ROSC | El Rosal | 94.61 | 76 | P | P | 03 48 31.9 | +0.4 | | | |
| | comp=Z,3.9nm,0.3s,baz=50,slow=6.6,SNR=3.7 | | | | | | | | | |
| ROSC | | | | LR | LR | 04 37 09.9 | | | | |
| | comp=Z,2µm,18.1s,baz=351,slow=39 | | | | | | | | | |
| | comp=Z,3.9nm,0.3s | | | | | | | | | |
| MQZ | McQueen's Vall | 94.97 | 187 | IAMs_20 | IAMs_20 | 04 23 37.5 | | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| SLBI | Saint Lucia, B | 95.02 | 60 | *e*P | P | 03 48 28.3 | -4.5 | | | |
| RPZ | Rata Peaks | 95.11 | 188 | LR | LR | 04 28 46.5 | | | | |
| | comp=Z,14µm,19.0s,baz=33,slow=34 | | | | | | | | | |
| BAUV | El Baul | 95.12 | 69 | P | P | 03 48 33.7 | +0.3 | | | |
| BAUV | El Baul | 95.12 | 69 | *e*P | P | 03 48 19.3 | -14 | | | |
| SLAC | Saint Lucia, A | 95.16 | 60 | *e*P | P | 03 48 31.3 | -2.2 | | | |
| AVE | Averroes | 95.36 | 8 | P | P | 03 48 33.6 | -0.6 | | | |
| AVE | | | | IAmb | IAmb | 03 49 06.9 | | | | |
| | comp=Z,68nm,1.2s | | | | | | | | | |
| AVE | | | | IAMs_20 | IAMs_20 | 04 33 14.9 | | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| AVE | Averroes | 95.36 | 8 | ⇑P | P | 03 48 33.0 | -1.2 | | | |
| SVB | Belmont | 95.48 | 61 | *e*P | P | 03 48 40.3 | +5.3 | | | |
| OTAV | Otavalo | 95.65 | 83 | P | P | 03 48 35.0 | -1.3 | | | |
| OTAV | Otavalo | 95.65 | 83 | ⇑P | P | 03 48 37.1 | +0.8 | | | |
| OTAV | Otavalo | 95.65 | 83 | P | P | 03 48 35.0 | -1.3 | | | |
| OTAV | | | | pmax | pmax | | | | | |
| | comp=Z,27nm,1.4s | | | | | | | | | |
| OTAV | | | | MLR | MLR | | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| OTAV | Otavalo | 95.65 | 83 | *e*P | P | 03 48 36.0 | -0.3 | | | |
| TULM | Tulcn-Chalpat | 95.69 | 82 | P | P | 03 48 37.5 | +0.9 | | | |
| TULM | | | | IAmb | IAmb | 03 49 15.2 | | | | |
| | comp=Z,62nm,1.4s | | | | | | | | | |
| GCMP | Grenada, Carri | 96.03 | 62 | *e*P | P | 03 48 22.3 | -15 | | | |
| MDT | Midelt | 96.06 | 6 | PKKPbc | PKKPbc | 04 05 24.1 | +1.4 | | | |
| | comp=Z,1.9nm,0.9s,baz=158,slow=4.1,SNR=4.2 | | | | | | | | | |
| MDT | | | | LR | LR | 04 32 58.2 | | | | |
| | comp=Z,3µm,20.6s,baz=3.0,slow=36 | | | | | | | | | |
| PCRV | Puerto La Cruz | 96.11 | 66 | LR | LR | 04 32 49.0 | | | | |
| | comp=Z,5µm,20.1s,slow=36 | | | | | | | | | |
| TATN | Tataouine | 96.19 | 353 | ⇑P | P | 03 48 35.4 | -2.6 | | | |
| GRGR | Grenville | 96.19 | 62 | IAMs_20 | IAMs_20 | 04 31 26.8 | | | | |
| | comp=Z,10µm,22.0s | | | | | | | | | |
| GRGR | Grenville | 96.19 | 62 | *e*P | P | 03 48 34.3 | -3.9 | | | |
| RAYN | Ar Rayn | 96.37 | 321 | P | P | 03 48 38.6 | -0.4 | | | |
| RAYN | | | | IAmb | IAmb | 03 48 40.9 | | | | |
| | comp=Z,51nm,1.1s | | | | | | | | | |
| RAYN | Ar Rayn | 96.37 | 321 | IAMs_20 | IAMs_20 | 04 38 36.1 | | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| RAYN | Ar Rayn | 96.37 | 321 | *i* P | P | 03 48 38.0 | -1.0 | | | |
| | SNR=48 | | | | | | | | | |
| RAYN | Ar Rayn | 96.37 | 321 | P | P | 03 48 38.3 | -0.7 | | | |
| RAYN | Ar Rayn | 96.37 | 321 | P | P | 03 48 38.6 | -0.4 | | | |
| RAYN | | | | pmax | pmax | | | | | |
| | comp=Z,51nm,1.1s | | | | | | | | | |
| DOK | Doka | 96.93 | 311 | P | P | 03 48 42.5 | +1.1 | | | |
| MLZ | Mavora Lakes | 97.03 | 190 | IAMs_20 | IAMs_20 | 04 31 16.5 | | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| DCZ | Deep Cove | 97.24 | 191 | IAMs_20 | IAMs_20 | 04 27 21.9 | | | | |
| | comp=Z,9µm,22.0s | | | | | | | | | |
| TRN | Trinidad (W) | 97.55 | 63 | *e*P | P | 03 48 40.3 | -4.1 | | | |
| WHZ | Wether Hill Ro | 97.57 | 190 | IAMs_20 | IAMs_20 | 04 28 30.7 | | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| WHFO | Wadi Hawf | 97.70 | 311 | P | P | 03 48 44.1 | -1.0 | | | |
| WHFO | | | | P | P | 03 48 44.1 | -1.0 | | | |
| ABTO | Aybut | 98.41 | 311 | P | P | 03 48 45.8 | -2.5 | | | |
| RPN | Rapa Nui | 98.46 | 123 | LR | LR | 04 23 25.5 | | | | |
| | comp=Z,6µm,21.1s,baz=324,slow=29 | | | | | | | | | |
| TAM | Tamanrasset | 106.20 | 357 | IAMs_20 | IAMs_20 | 04 43 15.0 | | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| SAML | Samuel | 112.24 | 76 | IAMs_20 | IAMs_20 | 04 46 39.1 | | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| LPAZ | La Paz | 114.81 | 85 | PP | PP | 03 54 46.6 | -3.4 | | | |
| | comp=Z,2.0nm,0.8s,baz=350,slow=7.0,SNR=4.1 | | | | | | | | | |
| TORD | Tsoodi Ar. Bea | 115.85 | 1 | PKP | PKiKP | 03 53 52.5 | -0.2 | | | |
| | comp=Z,8.8nm,0.5s,baz=357,slow=2.9,SNR=136 | | | | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 04 04 22.3 | +0.2 | | | |
| | comp=Z,4.6nm,1.0s,baz=174,slow=1.1,SNR=6.8 | | | | | | | | | |
| MSEY | Mahe Island | 115.95 | 297 | IAMs_20 | IAMs_20 | 04 45 17.9 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| SIV | San Ignacio | 118.98 | 79 | PKP | PKPdf | 03 53 58.3 | -0.3 | | | |
| | comp=Z,0.8nm,0.4s,baz=252,slow=2.9,SNR=6.8 | | | | | | | | | |
| SIV | | | | PP | PP | 03 55 13.3 | -5.0 | | | |
| | comp=Z,4.2nm,1.0s,baz=27,slow=3.9,SNR=4.0 | | | | | | | | | |
| SIV | | | | PKKPab | PKKPab | 04 04 14.5 | -0.7 | | | |
| | comp=Z,5.0nm,1.0s,baz=162,slow=5.2,SNR=12 | | | | | | | | | |
| LVC | Limon Verde | 119.02 | 91 | PKKPbc | PKKPbc | 04 04 09.7 | -1.5 | | | |
| | comp=Z,3.9nm,0.7s,baz=90,slow=6.3,SNR=3.3 | | | | | | | | | |
| BBSD | Serra de San D | 120.17 | 80 | *e*P | PKPdf | 03 54 00.0 | -0.8 | | | |
| H03N2 | Juan Fernandez | 120.50 | 106 | T | T | 06 05 51.8 | | | | |
| | baz=317,slow=77,SNR=256 | | | | | | | | | |
| H03N1 | Juan Fernandez | 120.51 | 106 | T | T | 06 06 00.6 | | | | |
| | baz=317,slow=77,SNR=325 | | | | | | | | | |
| H03N3 | Juan Fernandez | 120.51 | 106 | T | T | 06 05 59.8 | | | | |
| | baz=317,slow=77,SNR=407 | | | | | | | | | |
| DBIC | Dimbokro | 121.96 | 8 | PKP | PKPdf | 03 54 04.3 | -0.1 | | | |
| | comp=Z,27nm,0.5s,baz=6.1,slow=1.9,SNR=113 | | | | | | | | | |
| DBIC | | | | PKKPbc | PKKPbc | 04 03 59.3 | -0.6 | | | |
| | comp=Z,3.0nm,0.9s,baz=155,slow=14,SNR=1.6 | | | | | | | | | |
| KMBO | Kilima Mbogo | 121.97 | 317 | | PKiKP | 03 54 05.9 | +1.0 | | | |
| KMBO | Kilima Mbogo | 121.97 | 317 | *i* P | PKPdf | 03 54 04.6 | -0.2 | | | |
| | SNR=11 | | | | | | | | | |
| KMBO | Kilima Mbogo | 121.97 | 317 | PKP | PKiKP | 03 54 05.3 | +0.4 | | | |
| | comp=Z,7.8nm,1.0s,baz=16,slow=4.1,SNR=11 | | | | | | | | | |
| KMBO | Kilima Mbogo | 121.97 | 317 | PKIKP | PKiKP | 03 54 05.9 | +1.0 | | | |
| TIC | Toumodi | 121.97 | 8 | ⇑*e*PKIKP | PKPdf | 03 54 04.3 | -0.2 | | | |
| | comp=Z,14nm,0.4s | | | | | | | | | |
| KIC | Kosan Boka | 122.28 | 8 | ⇑*e*PKIKP | PKPdf | 03 54 04.9 | -0.2 | | | |
| | comp=Z,22nm,0.5s | | | | | | | | | |
| LIC | Lamto | 122.39 | 9 | ⇑*e*PKIKP | PKPdf | 03 54 05.1 | -0.2 | | | |
| | comp=Z,29nm,0.4s | | | | | | | | | |
| LCO | Las Campanas | 122.47 | 97 | IAMs_20 | IAMs_20 | 04 36 47.9 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| KIBK | Kibwezi | 122.72 | 316 | | PKiKP | 03 54 06.5 | +0.3 | | | |
| MBAR | Mbarara | 124.06 | 325 | | PKiKP | 03 54 09.0 | +0.1 | | | |
| MBAR | Mbarara | 124.06 | 325 | IAMs_20 | IAMs_20 | 04 53 24.5 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| MBAR | Mbarara | 124.06 | 325 | PKIKP | PKiKP | 03 54 09.0 | +0.1 | | | |
| PEL | Peldehue | 125.33 | 101 | IAMs_20 | IAMs_20 | 04 43 00.8 | | | | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| ZON | Zonda | 125.49 | 98 | | PKPdf | 03 54 10.0 | -0.7 | | | |
| ZON | Zonda | 125.49 | 98 | PKIKP | PKPdf | 03 54 10.0 | -0.7 | | | |
| MT03 | Universidad Ad | 125.67 | 101 | | PKPdf | 03 54 11.1 | +0.1 | | | |
| AQDB | Aquidauana | 125.68 | 78 | | PKiKP | 03 54 11.7 | 0.0 | | | |
| MT08 | Bocatoma Ro | 125.94 | 100 | | PKiKP | 03 54 12.7 | +0.5 | | | |
| MT13 | San Alfonso | 125.98 | 101 | | PKiKP | 03 54 12.5 | +0.4 | | | |
| BDFB | Brasilia | 126.55 | 67 | | PKiKP | 03 54 14.0 | +0.4 | | | |
| BDFB | Brasilia | 126.55 | 67 | PKP | PKPdf | 03 54 12.8 | -0.4 | | | |
| | comp=Z,11nm,1.0s,baz=9.9,slow=1.2,SNR=9.0 | | | | | | | | | |
| BDFB | | | | PP | PP | 03 56 05.3 | -4.2 | | | |
| | comp=Z,5.1nm,0.8s,baz=54,slow=18,SNR=2.0 | | | | | | | | | |
| BDFB | Brasilia | 126.55 | 67 | PKIKP | PKiKP | 03 54 14.0 | +0.4 | | | |
| BI02 | San Fabin de | 127.30 | 104 | | PKPdf | 03 54 14.0 | 0.0 | | | |
| JANB | Januaria | 128.19 | 63 | *e*P | PKPdf | 03 54 15.8 | -0.5 | | | |
| IPMB | Ipameri, GO | 128.28 | 69 | *e*P | PKPdf | 03 54 15.8 | -0.6 | | | |
| CPUP | Villa Florida | 128.97 | 84 | PKP | PKPdf | 03 54 17.0 | -0.4 | | | |
| | comp=Z,3.3nm,0.9s,baz=4.2,slow=5.2,SNR=5.3 | | | | | | | | | |
| CPUP | Villa Florida | 128.97 | 84 | PKIKP | PKPdf | 03 54 17.0 | -0.4 | | | |
| CASY | Casey | 129.18 | 210 | | PKiKP | 03 54 17.3 | +0.1 | | | |
| CASY | Casey | 129.18 | 210 | IAMs_20 | IAMs_20 | 04 42 03.9 | | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| SBA | Scott Base | 129.22 | 184 | | PKiKP | 03 54 17.6 | +0.6 | | | |
| SBA | Scott Base | 129.22 | 184 | PKIKP | PKiKP | 03 54 17.6 | +0.6 | | | |
| PLCA | Paso Flores | 130.32 | 108 | | PKPdf | 03 54 20.0 | +0.3 | | | |
| PLCA | Paso Flores | 130.32 | 108 | PKP | PKPdf | 03 54 19.4 | -0.2 | | | |
| | comp=Z,22nm,1.1s,baz=296,slow=4.0,SNR=9.9 | | | | | | | | | |
| PLCA | | | | SKPbc | SKPab | 03 57 38.1 | -1.1 | | | |
| | comp=Z,5.1nm,0.9s,baz=357,slow=6.8,SNR=2.6 | | | | | | | | | |
| PLCA | | | | SKP | | 03 57 52.2 | | | | |
| | comp=Z,6.0nm,0.9s,baz=302,slow=4.7,SNR=2.9 | | | | | | | | | |
| LL02 | Futaleuf | 131.05 | 111 | | PKiKP | 03 54 21.9 | +0.1 | | | |
| DIAM | Diamantina, MG | 131.15 | 65 | *e*P | PKPdf | 03 54 21.6 | -0.3 | | | |
| SPB | Sao Paulo | 133.05 | 73 | IAMs_20 | IAMs_20 | 04 59 39.4 | | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| TRQA | Tornquist | 133.90 | 99 | IAMs_20 | IAMs_20 | 04 59 37.5 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| ASCN | Ascension | 134.67 | 23 | IAMs_20 | IAMs_20 | 04 54 03.3 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| VOI | Vohitsoka | 134.77 | 293 | IAMs_20 | IAMs_20 | 04 54 09.1 | | | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| LSZ | Lusaka | 138.49 | 320 | IAMs_20 | IAMs_20 | 05 01 11.2 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| QSPA | South Pole Qui | 141.03 | 180 | IAMs_20 | IAMs_20 | 04 50 38.2 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| QSPA | South Pole Qui | 141.03 | 180 | PKhKP | PKPpre | 03 54 32.4 | | | | |
| | comp=Z,9.4nm,0.6s,baz=290,slow=1.3,SNR=15 | | | | | | | | | |
| QSPA | | | | SKPbc | SKiKP | 03 58 12.8 | -1.0 | | | |
| | comp=Z,26nm,1.1s,baz=328,slow=2.7,SNR=4.4 | | | | | | | | | |
| TSUM | Tsumeb | 145.77 | 334 | | PKPdf | 03 54 48.7 | +0.1 | | | |
| MAW | Mawson | 146.80 | 218 | PKPbc | PKPbc | 03 54 50.6 | +0.1 | | | |
| | comp=Z,86nm,1.1s,baz=82,slow=3.4,SNR=48 | | | | | | | | | |
| POGA | Pongola | 147.35 | 306 | | PKPdf | 03 54 51.2 | +0.4 | | | |
| LBTB | Lobatse | 148.25 | 317 | | PKPdf | 03 54 53.5 | +0.9 | | | |
| LBTB | Lobatse | 148.25 | 317 | PKIKP | PKPdf | 03 54 53.5 | +0.9 | | | |
| BOSA | Boshof | 151.52 | 314 | PKPbc | PKiKP | 03 55 04.3 | +0.1 | | | |
| BOSA | Boshof | 151.52 | 314 | PKPbc | PKiKP | 03 55 04.2 | -0.1 | | | |
| | comp=Z,52nm,0.5s,baz=23,slow=2.3,SNR=63 | | | | | | | | | |
| SOE | Somerset East | 154.79 | 308 | | PKPab | 03 55 26.2 | +0.2 | | | |
| ELIB | Princess Elisa | 157.22 | 197 | *d*PKPdf | PKPdf | 03 55 03.9 | -0.4 | | | |
| ELIB | | | | *dp*PKPdf | pPKPdf | 03 55 18.4 | +1.6 | | | |
| TROLL | Troll, Antarti | 159.19 | 180 | ⇑PKPdf | PKPdf | 03 55 05.9 | -0.8 | | | |
| | comp=Z,623nm,0.8s | | | | | | | | | |
| VNA3 | Neumayer Olymp | 159.25 | 169 | ⇑PKPdf | PKPdf | 03 55 05.8 | -0.8 | | | |
| | comp=Z,7.2nm,0.9s | | | | | | | | | |
| SNAA | Sanae | 159.41 | 175 | ⇑PKPdf | PKPdf | 03 55 05.7 | -1.1 | | | |
| | comp=Z,146nm,1.2s | | | | | | | | | |
| SNAA | Sanae | 159.41 | 175 | PKP | PKPdf | 03 55 05.7 | -1.1 | | | |
| | comp=Z,11nm,1.1s,baz=30,slow=0.2,SNR=14 | | | | | | | | | |
| SNAA | | | | PKPab | PKPab | 03 55 45.5 | +0.7 | | | |
| | comp=Z,6.2nm,0.7s,baz=298,slow=12,SNR=3.8 | | | | | | | | | |
| VNA2 | Neumayer--Watz | 159.79 | 171 | ⇑PKPdf | PKPdf | 03 55 06.2 | -0.9 | | | |
| | comp=Z,12nm,0.8s,baz=53,slow=4.3 | | | | | | | | | |
| NVL | N'lazarevskaya | 159.95 | 189 | *e*PKIKP | PKPdf | 03 55 05.6 | -1.7 | | | |
| NVL | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LTZ | Lake Taylor | 25.77 | 196 | P | | P | | 03 46 02.3 | -1.2 |
| INZ | Inchbonnie | 25.95 | 198 | P | | P | | 03 46 04.5 | -0.6 |
| OXZ | Oxford | 26.34 | 196 | P | | P | | 03 46 08.1 | -0.3 |
| WVZ | Waitaha Valley | 26.48 | 198 | P | | P | | 03 46 09.1 | -0.6 |
| MQZ | McQueen's Vall | 26.54 | 195 | P | | P | | 03 46 09.0 | -1.2 |
| RPZ | Rata Peaks | 26.97 | 197 | P | | P | | 03 46 13.0 | -1.0 |
| FOZ | Fox Glacier | 27.17 | 199 | P | | P | | 03 46 15.4 | -0.4 |
| PAE | Paea | 27.23 | 93 | *e*P | | P | | 03 46 16.0 | -0.6 |
| | comp=Z,44nm,1.2s | | | | | | | | |
| PPT2 | Papeete2 | 27.24 | 93 | *e*P | | P | | 03 46 16.6 | -0.2 |
| | comp=Z,144nm,1.4s | | | | | | | | |
| PPT | Papeete | 27.24 | 93 | P | | P | | 03 46 16.5 | -0.2 |
| | comp=Z,60nm,0.6s,baz=92,slow=4.6,SNR=12 | | | | | | | | |
| | comp=Z,60nm,0.6s | | | | | | | | |
| TVO | Taravao | 27.53 | 94 | *e*P | | P | | 03 46 19.8 | +0.5 |
| | comp=Z,38nm,0.9s | | | | | | | | |
| LBZ | Lake Benmore | 27.84 | 198 | P | | P | | 03 46 20.5 | -1.1 |
| LBZ | Lake Benmore | 27.84 | 198 | P | | P | | 03 46 20.4 | -1.2 |
| JCZ | Jackson Bay | 27.99 | 200 | P | | P | | 03 46 23.0 | 0.0 |
| ODZ | Otahua Downs | 28.31 | 197 | P | | P | | 03 46 25.6 | -0.1 |
| EIDS | Eidsvold | 29.34 | 251 | P | | P | | 03 46 35.9 | +1.0 |
| | comp=Z,22nm,0.8s | | | | | | | | |
| EIDS | Eidsvold | 29.34 | 251 | P | | P | | 03 46 34.2 | -0.7 |
| EIDS | | | | IAmb | | IAmb | | 03 47 46.4 | |
| | comp=Z,88nm,1.3s | | | | | | | | |
| EIDS | Eidsvold | 29.34 | 251 | P | | P | | 03 46 34.2 | -0.7 |
| | comp=Z,0.0nmcomp=Z,23nm,0.8s | | | | | | | | |
| RK1H | Rockhampton Ha | 29.67 | 255 | P | | P | | 03 46 38.7 | +0.9 |
| DCZ | Deep Cove | 29.77 | 201 | P | | P | | 03 46 38.6 | +0.4 |
| DCZ | | | | IAmb | | IAmb | | 03 46 43.1 | |
| | comp=Z,63nm,0.8s | | | | | | | | |
| ARMA | Armidale | 29.95 | 240 | P | | P | | 03 46 41.9 | +1.7 |
| ARMA | Armidale | 29.95 | 240 | P | | P | | 03 46 41.9 | +1.7 |
| ARMA | Armidale | 29.95 | 240 | P | | P | | 03 46 41.9 | +1.7 |
| | comp=Z,0.0nmcomp=Z,44nm,0.8s | | | | | | | | |
| SYZ | Scrubby Hill | 30.10 | 198 | P | | P | | 03 46 41.8 | +0.7 |
| KWJN | Gagan, Kwajale | 30.71 | 332 | P | | P | | 03 46 46.9 | +0.2 |
| SYDH | Sydney Hard Ro | 31.75 | 235 | P | | P | | 03 46 56.2 | +0.7 |
| TV1H | Townsville Har | 33.13 | 263 | P | | P | | 03 47 07.8 | +0.5 |
| CNB | Canberra Magne | 33.38 | 233 | P | | P | | 03 47 10.9 | +1.6 |
| CNB | Canberra Magne | 33.38 | 233 | P | | P | | 03 47 10.6 | +1.2 |
| | comp=Z,0.0nmcomp=Z,121nm,0.8s | | | | | | | | |
| CTA | Charters Tower | 33.59 | 261 | P | | P | | 03 47 11.5 | +0.3 |
| | comp=Z,5.9nm,0.8s,baz=93,slow=11,SNR=41 | | | | | | | | |
| CTA | | | | PcP | | PcP | | 03 49 34.5 | -0.3 |
| | comp=Z,0.7nm,0.8s,baz=103,slow=4.3,SNR=2.7 | | | | | | | | |
| CTA | | | | S | | S | | 03 51 52.1 | -2.1 |
| | comp=Z,0.3nm,0.6s,baz=264,slow=9.2,SNR=2.5 | | | | | | | | |
| CAN | Canberra | 33.66 | 233 | P | | P | | 03 47 13.1 | +1.4 |
| CAN | Canberra | 33.66 | 233 | P | | P | | 03 47 12.5 | +0.8 |
| CAN | | | | IAmb | | IAmb | | 03 47 13.9 | |
| | comp=Z,45nm,0.7s | | | | | | | | |
| CAN | Canberra | 33.66 | 233 | P | | P | | 03 47 12.9 | +1.3 |
| | comp=Z,0.0nmcomp=Z,70nm,1.0s | | | | | | | | |
| CAN | Canberra | 33.66 | 233 | P | | P | | 03 47 12.5 | +0.8 |
| CAN | | | | pmax | | pmax | | | |
| | comp=Z,45nm,0.7s | | | | | | | | |
| CAN | Canberra | 33.66 | 233 | P | | P | | 03 47 12.7 | +1.1 |
| YNG | Young | 33.77 | 235 | P | | P | | 03 47 14.2 | +1.7 |
| YNG | Young | 33.77 | 235 | P | | P | | 03 47 13.7 | +1.2 |
| | comp=Z,81nm,1.1s | | | | | | | | |
| PATS | Pohnpei | 34.02 | 315 | P | | P | | 03 47 15.6 | +0.8 |
| PATS | Pohnpei | 34.02 | 315 | P | | P | | 03 47 14.9 | +0.1 |
| | comp=Z,139nm,0.9s | | | | | | | | |
| KAVG | Kavieng | 34.12 | 294 | P | | P | | 03 47 15.5 | -0.2 |
| MILA | Mila | 34.22 | 230 | P | | P | | 03 47 18.0 | +1.7 |
| MILA | Mila | 34.22 | 230 | P | | P | | 03 47 16.5 | +0.2 |
| | comp=Z,22nm,1.7s | | | | | | | | |
| PMG | Port Moresby | 34.71 | 280 | P | | P | | 03 47 21.8 | +1.2 |
| PMG | Port Moresby | 34.71 | 280 | P | | P | | 03 47 20.0 | -0.6 |
| PMG | Port Moresby | 34.71 | 280 | *i* P | | P | | 03 47 19.8 | -0.8 |
| PMG | | | | pmax | | pmax | | | |
| | comp=Z,296nm,0.9s | | | | | | | | |
| PMG | Port Moresby | 34.71 | 280 | P | | P | | 03 47 21.7 | +1.1 |
| CMSA | Cobar Meteorol | 35.16 | 241 | P | | P | | 03 47 25.4 | +1.2 |
| CMSA | Cobar Meteorol | 35.16 | 241 | P | | P | | 03 47 24.9 | +0.7 |
| | comp=Z,59nm,0.8s | | | | | | | | |
| QLP | Quilpie | 35.60 | 250 | P | | P | | 03 47 29.4 | +1.5 |
| JOHN | Johnston Islan | 35.78 | 14 | P | | P | | 03 47 28.7 | -0.6 |
| GLAD | Gladstone | 36.76 | 225 | P | | P | | 03 47 38.5 | +1.4 |
| TOO | Toolangi | 37.12 | 231 | P | | P | | 03 47 41.8 | +1.6 |
| TOO | Toolangi | 37.12 | 231 | P | | P | | 03 47 41.6 | +1.4 |
| TOO | Toolangi | 37.12 | 231 | P | | P | | 03 47 41.3 | +1.1 |
| | comp=Z,0.0nmcomp=Z,124nm,1.3s | | | | | | | | |
| TOO | Toolangi | 37.12 | 231 | P | | P | | 03 47 41.6 | +1.4 |
| TOO | | | | pmax | | pmax | | | |
| | comp=Z,84nm,0.7s | | | | | | | | |
| COEN | Coen | 37.30 | 271 | P | | P | | 03 47 43.3 | +1.3 |
| MANU | Manus Island | 37.40 | 292 | P | | P | | 03 47 43.8 | +1.0 |
| CORO | Coronation Par | 37.55 | 225 | P | | P | | 03 47 45.5 | +1.9 |
| MOO | Moorlands | 37.99 | 223 | P | | P | | 03 47 48.7 | +1.5 |
| MOO | Moorlands | 37.99 | 223 | P | | P | | 03 47 48.2 | +1.0 |
| | comp=Z,60nm,1.0s | | | | | | | | |
| TAOE | Nuku Hiva Isla | 38.08 | 81 | P | | P | | 03 47 49.0 | +0.5 |
| TAU | Tasmania Unive | 38.13 | 222 | P | | P | | 03 47 49.4 | +1.1 |
| TAU | | | | IAmb | | IAmb | | 03 47 50.4 | |
| | comp=Z,35nm,1.0s | | | | | | | | |
| TAU | Tasmania Unive | 38.13 | 222 | P | | P | | 03 47 49.4 | +1.1 |
| TAU | | | | pmax | | pmax | | | |
| | comp=Z,35nm,1.0s | | | | | | | | |
| TAU | Tasmania Unive | 38.13 | 222 | P | | P | | 03 47 49.0 | +0.7 |
| GEXS | Deakin Univers | 38.23 | 231 | P | | P | | 03 47 51.3 | +2.1 |
| BRAT | Ballarat | 38.27 | 232 | P | | P | | 03 47 51.6 | +2.1 |
| STKA | Stephens Creek | 38.65 | 242 | P | | P | | 03 47 54.5 | +1.8 |
| STKA | Stephens Creek | 38.65 | 242 | P | | P | | 03 47 54.1 | +1.4 |
| STKA | Stephens Creek | 38.65 | 242 | P | | P | | 03 47 54.0 | +1.3 |
| | comp=Z,0.0nmcomp=Z,11nm,1.1s | | | | | | | | |
| STKA | Stephens Creek | 38.65 | 242 | P | | P | | 03 47 53.7 | +1.0 |
| | comp=Z,26nm,0.7s,baz=92,slow=10,SNR=37 | | | | | | | | |
| | comp=Z,26nm,0.7s | | | | | | | | |
| STKA | Stephens Creek | 38.65 | 242 | *i* P | | P | | 03 47 53.4 | +0.7 |
| INKA | Innaminka | 38.81 | 248 | P | | P | | 03 47 55.7 | +1.7 |
| ARPS | Mount Arapiles | 39.62 | 234 | P | | P | | 03 48 01.7 | +1.3 |
| ARPS | Mount Arapiles | 39.62 | 234 | P | | P | | 03 48 00.9 | +0.6 |
| | comp=Z,32nm,0.8s | | | | | | | | |
| WAKE | Wake Island | 40.14 | 337 | P | | P | | 03 48 04.1 | -0.6 |
| WAKE | Wake Island | 40.14 | 337 | P | | P | | 03 48 04.1 | -0.6 |
| WAKE | | | | pP | | pwP | | 03 49 46.5 | -0.3 |
| HTT | Hallett | 41.15 | 240 | P | | P | | 03 48 14.6 | +1.9 |
| HTT | Hallett | 41.15 | 240 | P | | P | | 03 48 13.8 | +1.0 |
| | comp=Z,34nm,1.4s | | | | | | | | |
| WHYH | Whyalla | 42.19 | 241 | P | | P | | 03 48 22.8 | +1.9 |
| JAY | Jayapura | 43.18 | 286 | P | | P | | 03 48 29.6 | +0.7 |
| | comp=Z,310nm,0.9s,comp=Z,2µm | | | | | | | | |
| BBOO | Buckleboo | 43.42 | 241 | P | | P | | 03 48 31.5 | +1.0 |
| BBOO | Buckleboo | 43.42 | 241 | P | | P | | 03 48 31.4 | +1.0 |
| BBOO | | | | IAmb | | IAmb | | 03 49 33.5 | |
| | comp=Z,169nm,1.9s | | | | | | | | |
| GENI | Genyem | 43.64 | 286 | P | | P | | 03 48 34.1 | +1.6 |
| GENI | Genyem | 43.64 | 286 | P | | P | | 03 48 34.0 | +1.6 |
| | comp=Z,384nm,0.9s | | | | | | | | |
| HMH | Humu'ula Sheep | 43.72 | 32 | P | | P | | 03 48 34.2 | +1.0 |
| MHA | Mahukona | 44.01 | 31 | P | | P | | 03 48 35.7 | +0.6 |
| MHA | Mahukona | 44.01 | 31 | P | | P | | 03 48 35.7 | +0.6 |
| KIP | Kipapa | 44.09 | 28 | P | | P | | 03 48 36.6 | +0.8 |
| KIP | Kipapa | 44.09 | 28 | *i* P | | P | | 03 48 34.6 | -1.1 |
| KIP | | | | pmax | | pmax | | | |
| | comp=Z,212nm,3.8s | | | | | | | | |
| WRAB | Tennant Creek | 44.76 | 260 | *e*P | | P | | 03 48 39.6 | -1.4 |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,53nm,0.9s | | | | | | | | |
| WRA | Warramunga Arr | 44.77 | 260 | P | | P | | 03 48 40.7 | -0.3 |
| WRA | Warramunga Arr | 44.77 | 260 | P | | P | | 03 48 40.8 | -0.3 |
| | comp=Z,57nm,0.7s,baz=97,slow=6.9,SNR=167 | | | | | | | | |
| WRA | | | | PcP | | PcP | | 03 50 11.6 | +0.7 |
| | comp=Z,24nm,0.9s,baz=90,slow=3.8,SNR=7.5 | | | | | | | | |
| WRA | | | | S | | S | | 03 54 33.6 | -3.8 |
| | comp=Z,14nm,0.8s,baz=100,slow=13,SNR=10 | | | | | | | | |
| WRA | | | | PKiKP | | PKiKP | | 03 57 07.1 | -0.8 |
| | comp=Z,2.4nm,1.1s,baz=61,slow=0.5,SNR=7.5 | | | | | | | | |
| | comp=Z,57nm,0.7s | | | | | | | | |
| AS01 | Alice Springs | 44.85 | 255 | P | | P | | 03 48 42.1 | +0.4 |
| AS31 | Alice Springs | 44.89 | 255 | P | | P | | 03 48 42.7 | +0.7 |
| AS31 | Alice Springs | 44.89 | 255 | P | | P | | 03 48 42.3 | +0.3 |
| | comp=Z,130nm,0.7s | | | | | | | | |
| ASAR | Alice Springs | 44.89 | 255 | P | | P | | 03 48 42.6 | +0.6 |
| | comp=Z,295nm,0.6s,baz=88,slow=8.6,SNR=448 | | | | | | | | |
| ASAR | | | | PcP | | PcP | | 03 50 12.0 | +0.7 |
| | comp=Z,20nm,0.6s,baz=110,slow=3.6,SNR=8.0 | | | | | | | | |
| ASAR | | | | S | | S | | 03 54 37.5 | -1.6 |
| | comp=Z,29nm,0.8s,baz=89,slow=16,SNR=47 | | | | | | | | |
| | comp=Z,295nm,0.6s | | | | | | | | |
| KDU | Kakadu | 47.75 | 269 | P | | P | | 03 49 03.3 | -0.3 |
| | comp=Z,122nm,0.7s | | | | | | | | |
| GUMO | Guam | 48.23 | 308 | P | | P | | 03 49 07.9 | +0.8 |
| GUMO | Guam | 48.23 | 308 | P | | P | | 03 49 07.9 | +0.8 |
| GUMO | | | | pmax | | pmax | | | |
| | comp=Z,483nm,0.8s | | | | | | | | |
| GUMO | Guam | 48.23 | 308 | P | | P | | 03 49 07.6 | +0.5 |
| MTN | Manton Dam | 48.98 | 269 | P | | P | | 03 49 12.7 | -0.1 |
| MTN | | | | IAmb | | IAmb | | 03 49 13.4 | |
| | comp=Z,82nm,0.8s | | | | | | | | |
| MTN | Manton Dam | 48.98 | 269 | P | | P | | 03 49 12.0 | -0.8 |
| | comp=Z,104nm,0.8s | | | | | | | | |
| WRKA | Warakurna | 49.93 | 252 | P | | P | | 03 49 20.2 | +0.5 |
| WRKA | Warakurna | 49.93 | 252 | P | | P | | 03 49 19.9 | +0.2 |
| | comp=Z,189nm,0.8s | | | | | | | | |
| FORT | Forrest | 50.05 | 245 | P | | P | | 03 49 20.0 | -0.3 |
| | comp=Z,118nm,0.8s | | | | | | | | |
| KNRA | Kununurra | 50.65 | 264 | P | | P | | 03 49 24.9 | -0.1 |
| | comp=Z,128nm,0.8s | | | | | | | | |
| FAKI | Fak Fak | 50.83 | 281 | P | | P | | 03 49 25.9 | -0.4 |
| FAKI | | | | IAmb | | IAmb | | 03 49 27.6 | |
| | comp=Z,185nm,1.6s | | | | | | | | |
| SWI | Sorong | 52.51 | 283 | P | | P | | 03 49 38.9 | +0.5 |
| MSAI | Masohi | 53.79 | 279 | P | | P | | 03 49 49.4 | +1.9 |
| | comp=Z,98nm,0.7s | | | | | | | | |
| KMBL | Kambalda | 55.34 | 244 | P | | P | | 03 49 57.5 | -0.6 |
| | comp=Z,61nm,1.6s | | | | | | | | |
| DRV | Dumont d'Urvil | 55.42 | 199 | P | | P | | 03 49 58.9 | +0.9 |
| DRV | | | | pP | | pwP | | 03 51 49.0 | 0.0 |
| NLAI | Namlea | 55.54 | 279 | P | | P | | 03 50 00.3 | +0.6 |
| | comp=Z,145nm,0.7s | | | | | | | | |
| TNTI | Ternate | 56.73 | 283 | P | | P | | 03 50 08.0 | +0.1 |
| TNTI | Ternate | 56.73 | 283 | P | | P | | 03 50 08.6 | +0.7 |
| | comp=Z,227nm,1.1s,comp=Z,2µm | | | | | | | | |
| SANI | Sanana | 56.99 | 280 | P | | P | | 03 50 09.5 | -0.2 |
| | comp=Z,227nm,1.2s,comp=Z,2µm | | | | | | | | |
| PSA00 | Pilbara Seismi | 58.02 | 256 | P | | P | | 03 50 16.4 | -0.2 |
| | comp=Z,112nm,0.7s | | | | | | | | |
| MBWA | Marble Bar | 58.18 | 256 | P | | P | | 03 50 17.8 | +0.1 |
| MBWA | Marble Bar | 58.18 | 256 | P | | P | | 03 50 17.6 | -0.1 |
| | comp=Z,87nm,1.2s | | | | | | | | |
| MBWA | Marble Bar | 58.18 | 256 | P | | P | | 03 50 17.7 | -0.1 |
| MEEK | Meekatharra | 58.50 | 250 | P | | P | | 03 50 19.6 | -0.2 |
| | comp=Z,47nm,0.7s | | | | | | | | |
| NWAO | Narrogin (SRO) | 59.23 | 242 | P | | P | | 03 50 24.8 | +0.2 |
| NWAO | | | | PcP | | PcP | | 03 51 03.9 | -1.6 |
| BLDU | Ballidu | 59.82 | 245 | P | | P | | 03 50 28.3 | -0.2 |
| | comp=Z,61nm,0.8s | | | | | | | | |
| SBA | Scott Base | 60.11 | 184 | P | | P | | 03 50 32.5 | +2.9 |
| SBA | Scott Base | 60.11 | 184 | P | | P | | 03 50 32.5 | +2.9 |
| SBA | | | | pmax | | pmax | | | |
| | comp=Z,41nm,1.0s | | | | | | | | |
| SBA | Scott Base | 60.11 | 184 | P | | P | | 03 50 32.4 | +2.9 |
| SBA | | | | pP | | pP | | 03 52 24.6 | +4.1 |
| MUN | Mundaring | 60.15 | 243 | P | | P | | 03 50 26.7 | -4.0 |
| LUWI | Luwuk | 60.35 | 279 | P | | P | | 03 50 33.7 | +1.4 |
| MORW | Morawa | 60.53 | 246 | P | | P | | 03 50 33.4 | +0.2 |
| | comp=Z,57nm,1.2s | | | | | | | | |
| GTOI | Gorontalo | 60.72 | 281 | P | | P | | 03 50 36.5 | +1.8 |
| | comp=Z,56nm,0.7s | | | | | | | | |
| BNSI | Bone | 61.76 | 275 | P | | P | | 03 50 43.4 | +1.9 |
| | comp=Z,126nm,1.2s | | | | | | | | |
| KAPI | Kappang | 61.91 | 274 | P | | P | | 03 50 43.0 | +0.5 |
| KAPI | Kappang | 61.91 | 274 | P | | P | | 03 50 42.5 | 0.0 |
| | comp=Z,17nm,0.6s,baz=134,slow=2.1,SNR=5.8 | | | | | | | | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| KAPI | Kappang | 61.91 | 274 | P | | P | | 03 50 40.9 | -1.6 |
| KAPI | | | | pmax | | pmax | | | |
| | comp=Z,47nm,1.5s | | | | | | | | |
| GIRL | Giralia | 62.99 | 253 | P | | P | | 03 50 48.5 | -0.8 |
| | comp=Z,308nm,1.6s | | | | | | | | |
| MPSI | Mapaga | 63.52 | 280 | P | | P | | 03 50 53.2 | +0.4 |
| | comp=Z,119nm,1.1s | | | | | | | | |
| TWSI | Taliwang, Sumb | 63.56 | 269 | P | | P | | 03 50 53.4 | +0.3 |
| | comp=Z,193nm,0.8s,comp=Z,2µm | | | | | | | | |
| CCD | Concordia, Ant | 64.60 | 194 | P | | P | | 03 51 00.2 | +1.0 |
| CCD | | | | pP | | pwP | | 03 52 53.4 | -1.1 |
| CASY | Casey | 65.92 | 205 | P | | P | | 03 51 07.7 | +0.7 |
| CASY | Casey | 65.92 | 205 | P | | P | | 03 51 07.9 | +0.9 |
| CASY | | | | pP | | pwP | | 03 53 03.1 | -0.9 |
| JAGI | Jajag, Banyuwa | 66.23 | 269 | P | | P | | 03 51 09.4 | -0.5 |
| JAGI | Jajag, Banyuwa | 66.23 | 269 | P | | P | | 03 51 09.1 | -0.8 |
| | comp=Z,210nm,0.8s | | | | | | | | |
| MYLDM | Lahad Datu | 66.58 | 284 | P | | P | | 03 51 13.9 | +1.9 |
| JMM | Marumori | 67.82 | 326 | P | | P | | 03 51 19.0 | -0.1 |
| JMM | | | | IAmb | | IAmb | | 03 51 20.1 | |
| | comp=Z,57nm,0.9s | | | | | | | | |
| JGF | Kuroka | 68.11 | 322 | P | | P | | 03 51 20.6 | -0.4 |
| JGF | | | | IAmb | | IAmb | | 03 51 21.9 | |
| | comp=Z,45nm,0.8s | | | | | | | | |
| INU | Inuyama | 68.14 | 322 | P | | P | | 03 51 21.5 | +0.4 |
| INU | | | | IAmb | | IAmb | | 03 51 22.2 | |
| | comp=Z,50nm,1.1s | | | | | | | | |
| MJAR | Matsushiro Arr | 68.28 | 323 | P | | P | | 03 51 21.6 | -0.3 |
| | comp=Z,60nm,0.7s,baz=157,slow=5.8,SNR=113 | | | | | | | | |
| MJAR | | | | PcP | | PcP | | 03 51 43.7 | +1.0 |
| | comp=Z,15nm,0.8s,baz=161,slow=4.1,SNR=5.9 | | | | | | | | |
| | comp=Z,60nm,0.7s | | | | | | | | |
| MAJO | Matsushiro | 68.28 | 323 | P | | P | | 03 51 21.8 | -0.2 |
| MAJO | | | | IAmb | | IAmb | | 03 51 22.8 | |
| | comp=Z,86nm,0.9s | | | | | | | | |
| MAJO | Matsushiro | 68.28 | 323 | *i* P | | P | | 03 51 20.5 | -1.5 |
| MAJO | | | | pmax | | pmax | | | |
| | comp=Z,57nm,0.6s | | | | | | | | |
| MAJO | Matsushiro | 68.28 | 323 | P | | P | | 03 51 21.8 | -0.2 |
| MJB9 | Matsu-Tunnel | 68.29 | 323 | P | | P | | 03 51 23.4 | +1.4 |
| MJB9 | | | | IAmb | | IAmb | | 03 51 24.2 | |
| | comp=Z,79nm,0.9s | | | | | | | | |
| PWJI | Pagerwoja | 68.58 | 268 | P | | P | | 03 51 29.1 | +4.8 |
| | comp=Z,108nm,0.8s | | | | | | | | |
| JMN | Monobe | 68.96 | 318 | P | | P | | 03 51 26.4 | +0.2 |
| KKM | Kota Kinabalu | 69.01 | 284 | P | | P | | 03 51 27.2 | +0.3 |
| KKM | | | | IAmb | | IAmb | | 03 51 28.0 | |
| | comp=Z,53nm,0.7s | | | | | | | | |
| AMKA | Amchitka | 69.34 | 358 | P | | P | | 03 51 27.6 | -0.4 |
| UGM | Wanagama | 69.83 | 268 | P | | P | | 03 51 32.3 | +0.5 |
| JTM | Tenmabayashi | 69.85 | 328 | P | | P | | 03 51 31.8 | +0.6 |
| JTM | | | | IAmb | | IAmb | | 03 51 32.4 | |
| | comp=Z,100nm,1.0s | | | | | | | | |
| YUK | Yuzh-Kuril'sk | 70.15 | 333 | *i* P | | P | | 03 51 31.8 | -1.1 |
| SMRI | Semarang | 70.15 | 269 | P | | P | | 03 51 34.9 | +1.2 |
| JNU | Nakatsue | 70.51 | 316 | P | | P | | 03 51 35.3 | 0.0 |
| JNU | | | | IAmb | | IAmb | | 03 51 36.6 | |
| | comp=Z,81nm,1.1s | | | | | | | | |
| SHEM | Shemya Is, Ala | 70.98 | 355 | P | | P | | 03 51 36.9 | -0.7 |
| | comp=Z,84nm,0.6s,baz=34,slow=4.4,SNR=15 | | | | | | | | |
| | comp=Z,84nm,0.6s | | | | | | | | |
| YOJ | Yonaguni jima | 71.29 | 305 | P | | P | | 03 51 40.5 | +0.4 |
| YOJ | Yonaguni jima | 71.29 | 305 | P | | P | | 03 51 40.5 | +0.4 |
| YOJ | | | | pmax | | pmax | | | |
| | comp=Z,332nm,1.2s | | | | | | | | |
| JKA | Kamikawa-asahi | 71.65 | 331 | P | | P | | 03 51 43.3 | +1.5 |
| ASAJ | Asahikawa | 71.66 | 331 | P | | P | | 03 51 43.3 | +1.6 |
| | comp=Z,50nm,0.7s,baz=219,slow=5.7,SNR=41 | | | | | | | | |
| | comp=Z,50nm,0.7s | | | | | | | | |
| QSPA | South Pole Qui | 71.82 | 180 | P | | P | | 03 51 44.3 | +1.7 |
| QSPA | | | | IAmb | | IAmb | | 03 51 45.2 | |
| | comp=Z,57nm,0.9s | | | | | | | | |
| QSPA | South Pole Qui | 71.82 | 180 | P | | P | | 03 51 44.2 | +1.6 |
| | comp=Z,52nm,0.9s,baz=9.8,slow=0.7,SNR=259 | | | | | | | | |
| | comp=Z,52nm,0.9s | | | | | | | | |
| QSPA | South Pole Qui | 71.82 | 180 | P | | P | | 03 51 44.0 | +1.3 |
| QSPA | | | | pP | | pwP | | 03 53 41.5 | 0.0 |
| TWG | Pinlang | 72.01 | 302 | P | | P | | 03 51 43.4 | -0.9 |
| TWG | | | | IAmb | | IAmb | | 03 51 43.6 | |
| | comp=Z,67nm,0.6s | | | | | | | | |
| YULB | Yu-li | 72.11 | 303 | P | | P | | 03 51 44.0 | -0.9 |
| YULB | | | | IAmb | | IAmb | | 03 51 45.1 | |
| | comp=Z,44nm,0.6s | | | | | | | | |
| SKR | Severo-Kuril's | 72.25 | 343 | *i* P | | P | | 03 51 43.4 | -1.6 |
| NACB | Ninganchiao | 72.26 | 304 | P | | P | | 03 51 45.6 | -0.1 |
| SSLB | Suanglung | 72.58 | 303 | P | | P | | 03 51 47.0 | -0.6 |
| TPUB | Ta-pu | 72.60 | 302 | P | | P | | 03 51 47.1 | -0.6 |
| YHNB | Yeheng | 72.68 | 304 | P | | P | | 03 51 48.8 | +0.6 |
| YHNB | | | | IAmb | | IAmb | | 03 51 49.2 | |
| | comp=Z,100nm,1.0s | | | | | | | | |
| TATO | Taipei | 72.74 | 304 | P | | P | | 03 51 49.0 | +0.6 |
| TATO | | | | IAmb | | IAmb | | 03 51 49.3 | |
| | comp=Z,70nm,0.7s | | | | | | | | |
| PET | Petropavlovsk | 73.74 | 346 | P | | P | | 03 51 53.2 | -0.3 |
| | comp=Z,59nm,1.1s | | | | | | | | |
| YSS | Yuzh-Sakhalins | 73.79 | 333 | P | | P | | 03 51 54.8 | +0.8 |
| YSS | Yuzh-Sakhalins | 73.79 | 333 | *e*P | | P | | 03 51 55.1 | +1.2 |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,90nm,0.7s | | | | | | | | |
| PEA0B | Petropavlovsk- | 74.04 | 345 | P | | P | | 03 51 55.2 | 0.0 |
| PEA0B | Petropavlovsk- | 74.04 | 345 | P | | P | | 03 51 55.2 | 0.0 |
| PEA0B | | | | pmax | | pmax | | | |
| | comp=Z,98nm,0.8s | | | | | | | | |
| PETK | Petropavlovsk- | 74.04 | 345 | P | | P | | 03 51 54.8 | -0.5 |
| PETK | Petropavlovsk- | 74.04 | 345 | P | | P | | 03 51 55.0 | -0.3 |
| | comp=Z,68nm,0.7s,baz=126,slow=7.4,SNR=109 | | | | | | | | |
| | comp=Z,68nm,0.7s | | | | | | | | |
| PETK | Petropavlovsk- | 74.04 | 345 | P | | P | | 03 51 55.0 | -0.3 |
| QZH | Quanzhou | 75.02 | 303 | P | | P | | 03 52 01.9 | +0.6 |
| QZH | | | | pmax | | pmax | | | |
| | comp=Z,89nm,0.9s | | | | | | | | |
| KSRS | Korea Array | 75.07 | 318 | P | | P | | 03 52 01.6 | +0.3 |
| | comp=Z,14nm,0.7s,baz=131,slow=6.5,SNR=40 | | | | | | | | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| KSAR | Wonju Array Be | 75.09 | 318 | P | | P | | 03 52 02.4 | +0.9 |
| KSAR | Wonju Array Be | 75.09 | 318 | P | | P | | 03 52 02.4 | +0.9 |
| INCN | Inchon | 75.91 | 318 | P | | P | | 03 52 07.2 | +1.1 |
| INCN | | | | IAmb | | IAmb | | 03 52 46.7 | |
| | comp=Z,153nm,1.5s | | | | | | | | |
| INCN | Inchon | 75.91 | 318 | P | | P | | 03 52 07.2 | +1.1 |
| INCN | | | | pmax | | pmax | | | |
| | comp=Z,153nm,1.5s | | | | | | | | |
| SAO | San Andreas Ge | 76.52 | 44 | P | | P | | 03 52 09.1 | -0.3 |
| SAO | | | | IAmb | | IAmb | | 03 52 11.7 | |
| | comp=Z,42nm,0.8s | | | | | | | | |
| SAO | San Andreas Ge | 76.52 | 44 | P | | P | | 03 52 09.1 | -0.3 |
| SAO | | | | pmax | | pmax | | | |
| | comp=Z,42nm,0.9s | | | | | | | | |
| PMPB | Monarch Peak | 76.64 | 44 | P | | P | | 03 52 11.0 | +0.9 |
| PMPB | | | | IAmb | | IAmb | | 03 52 12.8 | |
| | comp=Z,134nm,1.6s | | | | | | | | |
| BBGB | Big Mountain B | 76.69 | 44 | P | | P | | 03 52 11.8 | +1.3 |
| BBGB | | | | IAmb | | IAmb | | 03 52 13.4 | |
| | comp=Z,65nm,1.2s | | | | | | | | |
| HOPS | Hopland Field | 76.79 | 41 | P | | P | | 03 52 12.0 | +1.2 |
| HOPS | | | | IAmb | | IAmb | | 03 52 13.1 | |
| | comp=Z,55nm,1.1s | | | | | | | | |
| GDXM | Geysers | 76.85 | 41 | P | | P | | 03 52 11.7 | +0.4 |
| BCW | Bitter Crk WRg | 76.86 | 46 | P | | P | | 03 52 12.5 | +1.0 |
| KCPM | Cahto Peak | 76.89 | 40 | P | | P | | 03 52 12.4 | +0.8 |
| KCPM | | | | IAmb | | IAmb | | 03 52 13.9 | |
| | comp=Z,70nm,1.3s | | | | | | | | |
| USA0B | Ussuriysk Arra | 76.99 | 326 | P | | P | | 03 52 13.1 | +1.3 |
| USA0B | Ussuriysk Arra | 76.99 | 326 | *i* P | | P | | 03 52 12.0 | +0.2 |
| USRK | Ussuriysk Ar. | 76.99 | 326 | P | | P | | 03 52 12.3 | +0.6 |
| USRK | Ussuriysk Ar. | 76.99 | 326 | P | | P | | 03 52 12.5 | +0.7 |
| | comp=Z,20nm,0.8s,baz=112,slow=4.0,SNR=34 | | | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| KMPM | Mount Pierce | 77.01 | 39 | P | | P | | 03 52 12.9 | +0.9 |
| KMPM | | | | IAmb | | IAmb | | 03 52 14.7 | |
| | comp=Z,68nm,1.1s | | | | | | | | |
| KMRM | Mail Ridge | 77.14 | 40 | P | | P | | 03 52 14.3 | +1.5 |
| KMRM | | | | IAmb | | IAmb | | 03 52 15.5 | |
| | comp=Z,106nm,0.9s | | | | | | | | |
| SII | Sitkinak Islan | 77.19 | 13 | P | | P | | 03 52 12.8 | +0.2 |
| PASC | Pasadena Art C | 77.30 | 47 | P | | P | | 03 52 13.6 | -0.1 |
| CBX | Cerro Bola | 77.41 | 50 | P | | P | | 03 52 14.8 | +0.3 |
| HKPS | Hong Kong Po S | 77.44 | 299 | P | | P | | 03 52 16.0 | +1.3 |
| HKPS | | | | IAmb | | IAmb | | 03 52 17.2 | |
| | comp=Z,96nm,1.1s | | | | | | | | |
| KRPM | Rodgers | 77.52 | 39 | P | | P | | 03 52 16.2 | +1.4 |
| KRPM | | | | IAmb | | IAmb | | 03 52 17.7 | |
| | comp=Z,82nm,1.1s | | | | | | | | |
| KHMM | Horse Mountain | 77.52 | 39 | P | | P | | 03 52 15.3 | +0.4 |
| ELS | Elsinore Mount | 77.55 | 48 | P | | P | | 03 52 16.1 | +0.9 |
| VTX | Valle De La Tr | 77.58 | 51 | P | | P | | 03 52 15.8 | +0.5 |
| O02D | Mt. Diablo Mer | 77.67 | 40 | P | | P | | 03 52 15.6 | -0.1 |
| O02D | | | | IAmb | | IAmb | | 03 52 18.5 | |
| | comp=Z,68nm,1.2s | | | | | | | | |
| PLK4 | Peulik 4 | 77.74 | 12 | P | | P | | 03 52 15.3 | -0.3 |
| ESJX | Sierra Juarez | 77.77 | 50 | P | | P | | 03 52 17.5 | +1.0 |
| KRMB | Red Mountain | 77.81 | 39 | P | | P | | 03 52 17.2 | +0.8 |
| ISA | Isabella, Lake | 77.90 | 46 | P | | P | | 03 52 18.0 | +1.0 |
| ISA | Isabella, Lake | 77.90 | 46 | P | | P | | 03 52 18.0 | +1.0 |
| ISA | | | | pmax | | pmax | | | |
| | comp=Z,43nm,1.0s | | | | | | | | |
| CCAC | Calif City Air | 77.94 | 47 | P | | P | | 03 52 18.4 | +1.1 |
| CMB | Columbia Colle | 77.94 | 43 | P | | P | | 03 52 18.0 | +0.8 |
| CMB | Columbia Colle | 77.94 | 43 | P | | P | | 03 52 18.0 | +0.8 |
| CMB | | | | pmax | | pmax | | | |
| | comp=Z,33nm,0.9s | | | | | | | | |
| RMX | La Rumorosa | 77.98 | 50 | P | | P | | 03 52 17.6 | 0.0 |
| OHAK | Old Harbor | 78.00 | 14 | P | | P | | 03 52 16.7 | -0.2 |
| OHAK | | |

GRNR MLR MLR
comp=N,2µm,14.0s
GRNR MLR MLR
comp=Z,2µm,15.0s
**GWY Greenwater Val 79.42 46** P **P 03 52 25.1 -0.1**
**SYI Shuyak Island 79.47 13** P **P 03 52 24.9 +0.2**
SYI IAmb IAmb 03 52 25.8
comp=Z,87nm,0.8s
**RYN Ryan 79.49 43** P **P 03 52 26.5 +1.0**
**Q19K Cape Douglas, 79.49 13** P **P 03 52 24.6 -0.3**
**N15K Kwethluk River 79.50 9** P **P 03 52 25.5 +0.7**
N15K IAmb IAmb 03 52 26.4
comp=Z,50nm,0.7s
**NVAR Mina Array Bea 79.52 44** P **P 03 52 26.9 +1.1**
**NVAR Mina Array Bea 79.52 44** P **P 03 52 26.7 +1.0**
comp=Z,22nm,0.8s,baz=225,slow=8.7,SNR=79
NVAR PKKPbc **PKKPbc 04 11 09.4 -1.0**
comp=Z,0.5nm,0.8s,baz=76,slow=6.3,SNR=3.7
comp=Z,22nm,0.8s
**PAHR Pah Rah Range 79.53 42** P **P 03 52 26.5 +0.8**
**P18K Big Mountain, 79.60 12** P **P 03 52 25.1 -0.3**
**GMN Gold Mountain 79.61 45** P **P 03 52 27.0 +0.8**
**NV11 Mina Array Sit 79.62 44** P **P 03 52 26.0 -0.2**
**113A Mohawk Valley, 79.75 51** P **P 03 52 27.5 +0.7**
**WCT Wildcat Mounta 79.77 46** P **P 03 52 27.2 +0.3**
**M14K Bethel 79.79 8** P **P 03 52 26.6 +0.3**
M14K IAmb IAmb 03 52 27.8
comp=Z,105nm,1.2s
**DL2 Dalian 79.96 317** P **P 03 52 28.5 +0.8**
DL2 pmax pmax
comp=Z,84nm,0.9s
**BUCK Buck Mountain 79.98 37** P **P 03 52 29.3 +1.4**
BUCK IAmb IAmb 03 52 30.1
comp=Z,86nm,1.1s
**P19K Oil Pt 80.24 13** IAmb IAmb 03 52 29.0
comp=Z,54nm,0.7s
**L14K Kuka Creek 80.27 8** IAmb IAmb 03 52 30.5
comp=Z,49nm,0.9s
**N17K Nushagak Hills 80.30 10** IAmb IAmb 03 52 30.1
comp=Z,93nm,1.5s
**H04D Lebanon 80.32 37** IAmb IAmb 03 52 31.7
comp=Z,82nm,1.2s
**CN2 Changchun 80.40 322** *e*P **P 03 52 30.4 +0.5**
CN2 pmax pmax
comp=Z,80nm,1.2s
**G03D McMinnville, O 80.45 36** IAmb IAmb 03 52 32.4
comp=Z,145nm,1.3s
**J05D Fort Rock, OR 80.45 38** IAmb IAmb 03 52 32.8
comp=Z,104nm,0.9s
**BNX BinXian 80.47 325** ⇑P **P 03 52 31.0 +0.8**
BNX pmax pmax
comp=Z,140nm,0.9s
**KLR Kul'dur 80.49 329** *i* P **P 03 52 30.3 +0.1**
KLR pmax pmax
comp=Z,45nm,1.5s
**CNPM China Poot 80.55 14** IAmb IAmb 03 52 31.3
comp=Z,75nm,1.0s
**H04A Detroit Lake 80.73 37** IAmb IAmb 03 52 33.2
comp=Z,152nm,1.6s
**SMAI San Martin Ant 80.78 159** P **P 03 52 33.4 +1.9**
SMAI IAmb IAmb 03 54 56.6
comp=Z,145nm,1.3s
**S11A Rachel 80.81 45** IAmb IAmb 03 52 34.5
comp=Z,57nm,1.0s
**BRLK Bradley Lake 80.84 14** IAmb IAmb 03 52 32.7
comp=Z,68nm,0.8s
**PINE Pine Mountain 80.92 38** IAmb IAmb 03 52 35.4
comp=Z,105nm,0.9s
**WHN Wuhan 80.95 306** P **P 03 52 34.4 +1.3**
WHN pmax pmax
comp=Z,200nm,1.1s
**CNSH ChangSha 81.00 304** P **P 03 52 34.3 +0.9**
CNSH pmax pmax
comp=Z,38nm,1.0s
**I05D Terrebonne, OR 81.02 37** IAmb IAmb 03 52 35.3
comp=Z,59nm,1.0s
**N19K Bonanza Creek 81.06 12** IAmb IAmb 03 52 33.4
comp=Z,47nm,0.9s
**L16K Owhat River 81.06 9** IAmb IAmb 03 52 34.8
comp=Z,113nm,1.1s
**E03A Lebam 81.11 35** IAmb IAmb 03 52 35.6
comp=Z,102nm,1.0s
**PRN Pahroc Range 81.16 46** IAmb IAmb 03 52 36.8
comp=Z,48nm,0.9s
**BMN Battle Mountai 81.31 42** IAmb IAmb 03 52 37.1
comp=Z,53nm,1.0s
**F04A Amboy 81.36 36** IAmb IAmb 03 52 36.6
comp=Z,114nm,1.3s
**HOOD Mount Hood Mea 81.42 37** IAmb IAmb 03 52 37.1
comp=Z,80nm,1.1s
**NLWA Neilton Lookou 81.47 34** IAmb IAmb 03 52 37.6
comp=Z,47nm,1.1s
**WVOR Wild Horse Val 81.53 40** IAmb IAmb 03 52 38.2
comp=Z,68nm,1.1s
**J14K Nanvaranak Lak 81.54 7** IAmb IAmb 03 52 36.8
comp=Z,75nm,1.2s
**MA2 Magadan 81.56 345** P **P 03 52 34.8 -0.7**
MA2 IAmb IAmb 03 52 35.9
comp=Z,71nm,1.0s
**MA2 Magadan 81.56 345** P **P 03 52 34.9 -0.7**
comp=Z,45nm,0.8s,baz=140,slow=6.2,SNR=22
comp=Z,45nm,0.8s
**MA2 Magadan 81.56 345** *i* P **P 03 52 34.2 -1.3**
MA2 pmax pmax
comp=Z,75nm,1.1s
**G05A Wamic 81.56 37** IAmb IAmb 03 52 37.8
comp=Z,50nm,0.9s
**TUC Tucson 81.74 52** P **P 03 52 37.4 +0.2**
**TUC Tucson 81.74 52** P **P 03 52 37.4 +0.2**
TUC pmax pmax
comp=Z,36nm,1.0s
**O22K Cooper Landing 81.75 14** IAmb IAmb 03 52 37.8
comp=Z,71nm,0.7s
**BELA Belgrano 2 81.82 173** P **P 03 52 37.4 +0.7**
**SPU Mount Spurr 81.88 12** IAmb IAmb 03 52 37.1
comp=Z,50nm,1.2s
**I07A Izee 81.94 38** IAmb IAmb 03 52 40.2
comp=Z,61nm,0.9s
**G06A Carlson Farm, 81.95 37** IAmb IAmb 03 52 39.8
comp=Z,49nm,1.1s
**L18K Granite Mounta 81.98 10** IAmb IAmb 03 52 39.5
comp=Z,64nm,0.8s
**M19K Big River Lodg 82.08 11** IAmb IAmb 03 52 38.8
comp=Z,36nm,0.8s
**GNW Green Mountain 82.13 34** IAmb IAmb 03 52 40.6
comp=Z,44nm,0.9s
**J08A Circle Bar Ran 82.14 39** IAmb IAmb 03 52 41.2
comp=Z,86nm,1.2s
**Q12A Willow Creek R 82.15 45** IAmb IAmb 03 52 41.3
comp=Z,69nm,1.2s
**UBPT Khong Chiam 82.22 289** IAmb IAmb 03 52 41.8
comp=Z,55nm,1.1s
**L19K White Mountain 82.26 11** IAmb IAmb 03 52 41.2
comp=Z,73nm,1.1s
**RC01 Rabbit Creek A 82.29 14** IAmb IAmb 03 52 40.0
comp=Z,69nm,1.0s
**CBB Campbell River 82.38 31** IAmb IAmb 03 52 41.8
comp=Z,60nm,1.1s
**PWL Port Wells 82.40 14** IAmb IAmb 03 52 40.3
comp=Z,95nm,0.9s
**SUA Susitna One 82.41 13** IAmb IAmb 03 52 40.3
comp=Z,76nm,0.7s
**J16K Anvik River 82.41 8** IAmb IAmb 03 52 41.6
comp=Z,84nm,1.0s
**HIN Hinchinbrook I 82.44 15** IAmb IAmb 03 52 40.7
comp=Z,114nm,1.3s
**319A Douglas 82.46 54** IAmb IAmb 03 52 44.0
comp=Z,59nm,1.0s
**PGC Sidney 82.47 33** IAmb IAmb 03 52 42.1
comp=Z,43nm,1.0s
**IPM Ipoh 82.66 277** IAmb IAmb 03 52 44.1
comp=Z,87nm,0.8s
**J17K VABM Dome 82.73 9** IAmb IAmb 03 52 42.5
comp=Z,41nm,0.8s
**F07A Phinny Hill Vi 82.74 37** IAmb IAmb 03 52 43.7
comp=Z,35nm,0.9s
**WUAZ Wupatki 82.81 49** IAmb IAmb 03 52 45.3
comp=Z,43nm,1.1s
**KNK Knik Glacier 82.86 14** IAmb IAmb 03 52 42.8
comp=Z,59nm,0.8s
**PMR Palmer 82.87 14** IAmb IAmb 03 52 42.9
comp=Z,122nm,1.4s
**RAGM Ragged Mountai 82.90 16** IAmb IAmb 03 52 43.5
comp=Z,86nm,1.1s
**G08A Pilot Rock 82.95 38** IAmb IAmb 03 52 45.0
comp=Z,89nm,1.3s
**HMT Hamilton 82.97 16** IAmb IAmb 03 52 43.7
comp=Z,70nm,0.9s
**I17K Unalakleet 82.98 8** IAmb IAmb 03 52 44.4
comp=Z,109nm,1.6s
**PKCU Pink Cliffs 83.07 47** IAmb IAmb 03 52 47.4
comp=Z,71nm,1.1s
**DUN6 Lazy B Ranch 83.13 53** IAmb IAmb 03 52 47.4
comp=Z,87nm,1.1s
**E07A Sunnyside 83.16 36** IAmb IAmb 03 52 46.0
comp=Z,82nm,1.1s
**U33K Whale Pass 83.21 24** IAmb IAmb 03 52 45.8
comp=Z,39nm,0.8s
**V35K Ketchikan 83.22 25** IAmb IAmb 03 52 45.9
comp=Z,44nm,1.1s
**SML Sawmill 83.24 14** IAmb IAmb 03 52 44.9
comp=Z,127nm,1.7s
**HAWA Hanford 83.25 37** IAmb IAmb 03 52 46.4
comp=Z,63nm,1.0s
**KLU Klutina 83.53 15** IAmb IAmb 03 52 46.4
comp=Z,47nm,1.0s
**MAW Mawson 83.62 200** P **P 03 52 47.0 +1.1**
comp=Z,4.2nm,0.7s,baz=120,slow=7.7,SNR=11
comp=Z,4.2nm,0.7s
**MAW Mawson 83.62 200** P **P 03 52 47.0 +1.1**
**WRAK Wrangell Islan 83.73 24** IAmb IAmb 03 52 48.3
comp=Z,45nm,0.9s
**MFID Camas Ranch 83.79 40** IAmb IAmb 03 52 49.4
comp=Z,50nm,1.1s
**J19K Poorman 83.82 10** IAmb IAmb 03 52 48.2
comp=Z,37nm,0.9s
**HNS HongShan 83.88 312** ⇓P **P 03 52 48.9 +1.2**
HNS pmax pmax
comp=Z,58nm,1.3s
**VRDI Verde Repeater 83.94 16** IAmb IAmb 03 52 48.6
comp=Z,64nm,1.0s
**D08A Wollman Farm, 83.97 36** IAmb IAmb 03 52 49.9
comp=Z,52nm,1.0s
**GRNC Granite Creek 83.98 17** IAmb IAmb 03 52 49.1
comp=Z,88nm,1.0s
**GLB Gilahina Butte 84.02 16** IAmb IAmb 03 52 48.8
comp=Z,62nm,0.7s
**E09A Wood Farm, Sta 84.11 37** IAmb IAmb 03 52 50.3
comp=Z,62nm,1.4s
**SEY Seymchan 84.14 347** P **P 03 52 48.1 -0.2**
comp=Z,116nm,0.9s,baz=144,slow=5.7,SNR=104
comp=Z,116nm,0.9s
**SEY Seymchan 84.14 347** *i* P **P 03 52 47.3 -1.0**
SEY pmax pmax
comp=Z,141nm,1.1s
**BJT Baijiatuan 84.15 315** IAmb IAmb 03 52 51.0
comp=Z,90nm,1.3s
**BJI Beijing 84.15 315** P **P 03 52 49.6 +0.7**
BJI pmax pmax
comp=Z,26nm,1.0s
**MCARA McCarthy VSAT 84.18 16** IAmb IAmb 03 52 49.8
comp=Z,85nm,1.1s
**LYN LuoYang 84.18 309** ⇓*i* P **P 03 52 50.3 +1.1**
LYN pmax pmax
comp=Z,250nm,0.8s
**J20K Nowinta River 84.23 10** IAmb IAmb 03 52 49.9
comp=Z,52nm,0.8s
**G16K Koyuk River 84.24 7** IAmb IAmb 03 52 50.1
comp=Z,36nm,1.1s
**LOGN Logan Glacier 84.27 17** IAmb IAmb 03 52 50.4
comp=Z,69nm,0.9s
**P29M Windy Craggy 84.29 19** IAmb IAmb 03 52 51.0
comp=Z,70nm,0.8s
**CTGM Chitina Glacie 84.29 17** IAmb IAmb 03 52 50.5
comp=Z,73nm,0.9s
**F10A Beach Ranch, E 84.34 38** IAmb IAmb 03 52 51.4
comp=Z,80nm,1.1s
**B08A Colville Reser 84.49 35** IAmb IAmb 03 52 51.7
comp=Z,44nm,0.9s
**O29M Mount Kennedy 84.56 19** IAmb IAmb 03 52 52.3
comp=Z,64nm,1.2s
**TMUT Trail Mountain 84.72 46** IAmb IAmb 03 52 54.7
comp=Z,50nm,1.4s
**C09A Chrisman Ranch 84.76 36** IAmb IAmb 03 52 53.4
comp=Z,35nm,0.9s
**EPT El Paso 84.77 54** IAmb IAmb 03 52 54.9
comp=Z,36nm,1.0s
**SKAG Skagway 84.94 20** IAmb IAmb 03 52 54.6
comp=Z,90nm,1.4s
**GYA Guiyang 85.37 300** ⇑P **P 03 52 56.6 +1.2**
GYA pmax pmax
comp=Z,48nm,1.0s
**TCUT Toone Canyon 85.46 44** IAmb IAmb 03 52 57.7
comp=Z,22nm,0.8s
**VHRN Van Horn 85.54 56** IAmb IAmb 03 52 60.0
comp=Z,100nm,1.8s
**ZEA Zeya 85.57 331** *e*P **P 03 52 56.4 +0.9**
ZEA pmax pmax
comp=N,40nm,0.6s
ZEA pmax pmax
comp=E,20nm,0.8s
ZEA pmax pmax
comp=Z,70nm,0.8s
**Q32M Nakina River 85.61 22** IAmb IAmb 03 52 57.7
comp=Z,39nm,0.7s
**TIY Taiyuan 85.63 312** *e*P **P 03 52 57.6 +1.3**
TIY pmax pmax
comp=Z,100nm,0.8s
**O30N Mendenhall 85.69 19** IAmb IAmb 03 52 57.6
comp=Z,44nm,0.8s
**RIDG Independent Ri 85.72 14** IAmb IAmb 03 52 57.0
comp=Z,78nm,1.1s
**HDA Harding Lake 85.83 13** IAmb IAmb 03 52 57.0
comp=Z,44nm,0.8s
**L27K Beaver Creek, 85.89 16** IAmb IAmb 03 52 58.1
comp=Z,34nm,1.2s
**BCAR Beaver Creek A 85.91 16** P **P 03 52 57.1 +0.1**
**I23K Minto, Yukon-K 85.99 12** IAmb IAmb 03 52 57.5
comp=Z,48nm,1.4s
**WHY Whitehorse 85.99 20** IAmb IAmb 03 52 59.2
comp=Z,43nm,1.0s
**TX31 Lajitas Ar. Si 86.00 58** IAmb IAmb 03 53 01.5
comp=Z,44nm,1.0s
**TXAR Lajitas Array 86.00 58** P **P 03 52 59.0 +0.7**
**TXAR Lajitas Array 86.00 58** P **P 03 53 00.3 +2.0**
comp=Z,24nm,0.8s,baz=220,slow=6.1,SNR=78
TXAR PKKPbc **PKKPbc 04 10 54.7 -0.2**
comp=Z,0.2nm,0.6s,baz=134,slow=2.6,SNR=4.1
comp=Z,24nm,0.8s
**TXAR Lajitas Array 86.00 58** P **P 03 52 59.0 +0.7**
**COLA College 86.05 12** P **P 03 52 57.0 -0.4**
**COLA College 86.05 12** *i* P **P 03 52 56.5 -1.0**
COLA pmax pmax
comp=Z,124nm,1.3s
**XLT XiLinHaoTe 86.12 319** *e*P **P 03 52 59.6 +1.1**
XLT pmax pmax
comp=Z,74nm,1.2s
XLT pmax pmax
comp=Z,520nm,4.6s
**ANMO Albuquerque 86.15 51** P **P 03 52 59.6 +0.7**
**ANMO Albuquerque 86.15 51** *i* P **P 03 52 59.8 +0.8**
ANMO pmax pmax
comp=Z,10.0nm,1.0s
**IL31 86.16 13** IAmb IAmb 03 52 58.4
comp=Z,37nm,0.8s
**ILAR Eielson Array 86.16 13** P **P 03 52 57.3 -0.8**
**ILAR Eielson Array 86.16 13** P **P 03 52 57.1 -1.0**
comp=Z,15nm,0.4s,baz=221,slow=4.9,SNR=152
PP **PP 03 56 30.0 +0.3**
ILAR comp=Z,2.4nm,0.8s,baz=219,slow=8.0,SNR=5.0
PKiKP **PKiKP 03 58 00.9 -0.5**
ILAR comp=Z,0.5nm,0.6s,baz=306,slow=2.2,SNR=5.2
comp=Z,15nm,0.4s
**ILAR Eielson Array 86.16 13** P **P 03 52 57.3 -0.8**
**F19K Shaleruckik Mo 86.17 8** IAmb IAmb 03 52 58.3
comp=Z,22nm,0.8s
**M29M Somme Creek 86.30 17** IAmb IAmb 03 53 01.3
comp=Z,36nm,0.9s
**P33M Tesin, Yukon 86.34 21** IAmb IAmb 03 53 00.6
comp=Z,26nm,0.9s
**N31M Braeburn, Yuko 86.34 19** IAmb IAmb 03 53 00.7
comp=Z,66nm,1.0s
**POKR Poker Plat Res 86.35 13** IAmb IAmb 03 52 59.0
comp=Z,38nm,0.7s
**J25K Salcha River, 86.35 14** IAmb IAmb 03 52 59.3
comp=Z,27nm,0.7s
**R33M Jennings River 86.39 22** IAmb IAmb 03 53 01.5
comp=Z,79nm,1.4s
**E18K Tukpahlearik C 86.39 7** IAmb IAmb 03 53 00.8
comp=Z,26nm,0.7s
**ALPN Alpine 86.44 57** IAmb IAmb 03 53 03.1
comp=Z,51nm,1.3s
**AHID Auburn Hatcher 86.45 43** IAmb IAmb 03 53 02.4
comp=Z,30nm,1.1s
**XAN Xi'an 86.61 307** ⇑P **P 03 53 01.6 +0.6**
XAN PP **PP 03 56 36.0 +2.0**
XAN S **S 04 02 54.3 +3.3**
XAN pmax pmax
comp=Z,190nm,1.0s
XAN pmax pmax
comp=Z,3µm,9.7s
**HIA Hailar 86.75 325** IAmb IAmb 03 53 03.0
comp=Z,38nm,1.2s
**HIA Hailar 86.75 325** *i* P **P 03 53 00.7 -0.5**
HIA pmax pmax
comp=Z,40nm,1.3s
**RDOG Red Dog Mine 86.77 6** IAmb IAmb 03 53 03.2
comp=Z,113nm,2.0s
**BILL Bilibino 86.77 354** ⇑*e*P **P 03 52 59.8 -1.1**
BILL *e**SP **sP 03 56 02.9 +2.7**
BILL *e* 03 56 35.4
BILL *e*PPP PPP 03 58 37.2
BILL pmax pmax
comp=Z,39nm,0.9s
**DLMT Dillon 86.78 40** IAmb IAmb 03 53 03.8
comp=Z,36nm,0.9s
**E19K Redstone River 86.83 8** IAmb IAmb 03 53 02.1
comp=Z,36nm,0.7s
**TPAW Teton Pass 86.89 42** IAmb IAmb 03 53 03.7
comp=Z,30nm,1.1s
**N32M Quiet Lake 86.95 20** IAmb IAmb 03 53 03.8
comp=Z,84nm,1.2s
**IMW Indian Meadow 87.10 42** IAmb IAmb 03 53 05.7
comp=Z,45nm,0.9s
**M31M Drury Creek, Y 87.32 19** IAmb IAmb 03 53 04.5
comp=Z,34nm,1.1s
**FLWY Flagg Ranch 87.34 42** IAmb IAmb 03 53 07.0
comp=Z,52nm,1.0s
**DAWY Dawson 87.34 16** IAmb IAmb 03 53 05.2
comp=Z,67nm,1.3s
**YPP Pitchstone Pla 87.36 42** IAmb IAmb 03 53 07.4
comp=Z,62nm,1.9s
**YFT Old Faithful 87.43 41** IAmb IAmb 03 53 08.3
comp=Z,28nm,0.9s
**PD31 Pinedale Array 87.45 43** IAmb IAmb 03 53 06.4
comp=Z,21nm,0.9s
**PDAR Pinedale Array 87.45 43** P **P 03 53 05.3 +0.3**
**PDAR Pinedale Array 87.45 43** P **P 03 53 05.0 +0.1**
comp=Z,12nm,0.7s,baz=216,slow=2.8,SNR=56
PDAR PKKPbc **PKKPbc 04 10 49.4 -2.8**
comp=Z,0.3nm,0.6s,baz=94,slow=5.9,SNR=3.7
comp=Z,12nm,0.7s
**EGAK Eagle 87.48 15** IAmb IAmb 03 53 05.4
comp=Z,55nm,1.1s
**SAND Sanderson 87.48 57** IAmb IAmb 03 53 07.4
comp=Z,26nm,1.0s
**BOZ Bozeman (W) 87.49 40** IAmb IAmb 03 53 07.2
comp=Z,36nm,1.2s
**MNHN Monahans 87.51 56** IAmb IAmb 03 53 07.4
comp=Z,24nm,1.1s
**H17A Grant Village 87.56 42** IAmb IAmb 03 53 08.8
comp=Z,35nm,0.9s
**HHC Hu-ho-hao-te 87.64 314** ⇓*i* P **P 03 53 07.1 +1.4**
HHC pmax pmax
comp=Z,41nm,1.0s
HHC pmax pmax
comp=Z,520nm,6.7s
**YNM Yellowstone No 87.64 41** IAmb IAmb 03 53 09.7
comp=Z,37nm,0.9s
**YNR Norris Junctio 87.65 41** IAmb IAmb 03 53 09.9
comp=Z,31nm,1.2s
**WTLY Watson Lake, Y 87.68 22** IAmb IAmb 03 53 07.2
comp=Z,22nm,1.0s
**D19K Kuna River 87.71 7** IAmb IAmb 03 53 05.7
comp=Z,22nm,0.8s
**LKWY Lake 87.76 41** IAmb IAmb 03 53 09.9
comp=Z,33nm,0.9s
**COYC Coyhaique 87.94 138** P **P 03 53 09.4 +2.4**
COYC IAmb IAmb 03 53 11.1
comp=Z,34nm,1.1s
**ODSA Odessa 87.98 55** IAmb IAmb 03 53 09.6
comp=Z,40nm,1.1s
**KMI Kunming 88.15 297** ⇓P **P 03 53 10.4 +1.8**
KMI pmax pmax
comp=Z,28nm,1.1s
**I28M Miner Creek 88.33 15** IAmb IAmb 03 53 09.2
comp=Z,28nm,0.8s
**F24K Squaw Lake 88.37 11** IAmb IAmb 03 53 09.8
comp=Z,36nm,0.8s
**DRIO Del Rio 88.50 58** IAmb IAmb 03 53 12.3
comp=Z,44nm,0.9s
**RWWY Rawlins 88.52 45** IAmb IAmb 03 53 12.4
comp=Z,32nm,1.1s
**BTO Baotou 88.59 314** *e*P **P 03 53 12.4 +2.2**
BTO sP **sP 03 56 10.1 -0.9**
BTO PP **PP 03 56 54.5 +5.0**
BTO S **S 04 03 03.3 -5.8**
BTO SS **SS 04 09 18.8 +0.7**
BTO pmax pmax
comp=Z,49nm,1.0s
BTO pmax pmax
comp=Z,850nm,5.1s
**OZNA Ozona 88.64 57** IAmb IAmb 03 53 12.6
comp=Z,21nm,0.8s
**I29M Ogilvie Camp, 88.66 16** IAmb IAmb 03 53 10.7
comp=Z,46nm,1.1s
**E24K Your Creek 88.75 11** IAmb IAmb 03 53 10.9
comp=Z,14nm,0.7s
**ELIB Princess Elisa 88.86 187** *d*P **P 03 53 11.6 +0.6**
**F25K Christian Rive 88.86 12** IAmb IAmb 03 53 12.3
comp=Z,24nm,1.0s
**LL02 Futaleuf 89.06 135** P **P 03 53 13.7 +1.4**
**TOLK Toolik Lake Re 89.07 10** IAmb IAmb 03 53 12.7
comp=Z,40nm,1.2s
**POST Post 89.16 55** IAmb IAmb 03 53 14.3
comp=Z,24nm,0.8s
**CMAR Chiang Mai Arr 89.18 290** P **P 03 53 14.7 +1.4**
comp=Z,27nm,0.8s,baz=112,slow=2.9,SNR=39
CMAR PP **PP 03 56 55.4 +0.9**
comp=Z,1.2nm,0.5s,baz=118,slow=5.2,SNR=1.6
comp=Z,27nm,0.8s
**HBVL Hebbronville 89.24 61** IAmb IAmb 03 53 17.6
comp=Z,25nm,1.1s
**F26K Sheenjek River 89.25 12** IAmb IAmb 03 53 14.2
comp=Z,27nm,1.0s
**CD2 Chengdu 89.41 303** P **P 03 53 15.3 +1.2**
CD2 pmax pmax
comp=Z,20nm,0.8s
**PZH PanZhiHua 89.48 298** P **P 03 53 16.0 +1.3**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,350nm,6.8s
**PHWY Pilot Hill 89.55 46** IAmb IAmb 03 53 16.5
comp=Z,25nm,1.2s
**SN05 Snyder 5 89.57 55** IAmb IAmb 03 53 16.3
comp=Z,24nm,0.8s
**HNDO Hondo 89.62 59** IAmb IAmb 03 53 17.9
comp=Z,34nm,0.9s
**AMTX Amarillo 89.71 53** IAmb IAmb 03 53 17.1
comp=Z,24nm,1.1s
**YAK Yakutsk 89.95 338** *e*P **P 03 53 15.0 -0.8**
YAK *e*S **SKSac 04 02 51.1 -0.9**
YAK pmax pmax
comp=Z,50nm,1.0s
YAK smax smax
comp=N,5µm,20.2s
**TROLL Troll, Antarti 89.98 180** ⇓P **P 03 53 17.0 +0.8**
comp=Z,391nm,0.5s
**F28M Old Crow 90.10 14** IAmb IAmb 03 53 17.6
comp=Z,35nm,1.2s
**SNAA Sanae 90.27 179** P **P 03 53 17.7 +0.3**
SNAA IAmb IAmb 03 55 53.1
comp=Z,29nm,1.1s
**SNAA Sanae 90.27 179** ⇓P **P 03 53 17.9 +0.5**
comp=Z,120nm,0.6s
**SNAA Sanae 90.27 179** P **P 03 53 17.6 +0.3**
comp=Z,5.5nm,0.7s,baz=206,slow=5.6,SNR=28
SNAA S **SKSac 04 02 53.3 -0.9**
comp=Z,1.8nm,0.8s,baz=198,slow=20,SNR=2.7
comp=Z,5.5nm,0.7s
**SNAA Sanae 90.27 179** *i* P **P 03 53 17.5 +0.1**
SNAA pmax pmax
comp=Z,17nm,1.2s
**APMT Aspermont 90.33 55** IAmb IAmb 03 53 19.9
comp=Z,22nm,0.9s
**VNA3 Neumayer Olymp 90.40 176** ⇓P **P 03 53 18.6 +0.7**
comp=Z,24nm,0.6s
**BRDY Brady 90.48 57** IAmb IAmb 03 53 20.8
comp=Z,22nm,1.2s
**VNA2 Neumayer--Watz 90.84 177** ⇓P **P 03 53 20.7 +0.8**
comp=Z,19nm,0.7s,baz=178,slow=3.6

**NVL N'lazarevskaya 90.96 183** *e*P P **03 53 19.8 -0.7**
NVL pmax pmax
comp=Z,12nm,0.7s
**PLCA Paso Flores 90.97 134** P P **03 53 21.9 +0.6**
comp=Z,3.8nm,0.9s,baz=210,slow=4.3,SNR=6.9
comp=Z,3.8nm,0.9s
**VNA1 Neumayer--Stat 91.07 177** ⇓P P **03 53 21.9 +0.9**
comp=Z,23nm,0.9s
**LZH Lanzhou 91.24 308** ⇑P P **03 53 23.8 +1.2**
LZH sP sP 03 56 23.6 -0.3
LZH pmax pmax
comp=Z,83nm,1.1s
**TNCH TengChong 91.71 296** *e*P P **03 53 27.0 +1.9**
TNCH pP pP 03 55 24.3 -4.3
TNCH S S **04 03 32.0 -5.9**
TNCH pmax pmax
comp=Z,330nm,7.0s
**FW03 Perrin-Whitt E 91.84 56** IAmb IAmb 03 53 27.3
comp=Z,20nm,0.8s
**HKT Hockley 92.58 59** *i* P P **03 53 29.1 +0.5**
HKT pmax pmax
comp=Z,20nm,1.7s
**YKA Yellowknife Ar 94.55 25** P P **03 53 36.4 -0.5**
comp=Z,9.1nm,0.9s,baz=247,slow=4.4,SNR=16
comp=Z,9.1nm,0.9s
**GTA Gaotai 95.39 310** P P **03 53 41.9 +0.4**
GTA pmax pmax
comp=Z,12nm,1.2s
**WMQ Urumqi 105.30 312** Pdif **Pdif 03 54 26.6 +1.2**
**ZSN Zaisan 107.83 315** *e*PKiKP **PKiKP 03 58 39.7 -0.6**
baz=315
**ZALV Zalesovo Beam 108.61 322** PKiKP **PKiKP 03 58 40.5 -1.0**
comp=Z,3.3nm,0.5s,baz=98,slow=0.9,SNR=7.2
**MKAR Makanchi Array 109.50 314** PKiKP **PKiKP 03 58 42.8 -0.7**
comp=Z,4.0nm,0.5s,baz=171,slow=0.6,SNR=32
**SHLS Shalkode 111.13 310** *e*PKiKP **PKiKP 03 58 45.4 -1.5**
baz=310
**SHLS Shalkode 111.13 310** *i* PKiKP **PKiKP 03 58 45.3 -1.5**
**UZB Uzynbulak 111.45 310** *e*PKiKP **PKiKP 03 58 46.7 -0.8**
baz=310
**UZB Uzynbulak 111.45 310** *i* PKiKP **PKiKP 03 58 46.6 -0.8**
**KPKS Kokpek 111.73 310** *e*PKiKP **PKiKP 03 58 47.2 -0.8**
baz=310
**KPKS Kokpek 111.73 310** *i* PKiKP **PKiKP 03 58 47.1 -0.8**
**ZHN Zhinishke 111.88 310** *e*PKiKP **PKiKP 03 58 47.5 -0.8**
baz=310
**ZHN Zhinishke 111.88 310** *i* PKiKP **PKiKP 03 58 47.4 -0.8**
**TDK Taldyqorghan 112.05 312** *e*PKiKP **PKiKP 03 58 47.5 -0.9**
baz=312
**TDK Taldyqorghan 112.05 312** *i* PKiKP **PKiKP 03 58 47.4 -0.9**
**KURK Kurchatov 112.20 318** *i* PKiKP **PKiKP 03 58 47.6 -0.8**
**KURBB Kurchatov Arra 112.25 318** PKiKP **PKiKP 03 58 47.6 -0.9**
comp=Z,7.2nm,0.7s,baz=91,slow=1.7,SNR=40
KURBB PP **PP 03 59 39.7 -5.2**
comp=Z,3.1nm,0.9s,baz=93,slow=6.6,SNR=7.4
**MDOK Medeo 112.89 310** *e*PKiKP **PKiKP 03 58 49.3 -0.9**
baz=310
**MDOK Medeo 112.89 310** *i* PKiKP **PKiKP 03 58 49.3 -0.9**
**TNSS Tian-Shan 112.96 310** *e*PKiKP **PKiKP 03 58 49.6 -1.1**
baz=310
**TNSS Tian-Shan 112.96 310** *i* PKiKP **PKiKP 03 58 49.6 -1.1**
**AAA Alma-Ata 112.99 310** *e*PKiKP **PKiKP 03 58 49.7 -0.6**
baz=310
**AAA Alma-Ata 112.99 310** *i* PKiKP **PKiKP 03 58 49.6 -0.6**
**KSH Kashi 113.43 306** PKP **PKiKP 03 58 52.4 +1.1**
**AAK Ala-Archa 114.74 309** *i* PKiKP PKPdf 03 58 51.9 -1.9
**BTLS Baital 115.14 312** *e*PKiKP **PKPdf 03 58 53.7 -0.6**
baz=312
BTLS *e*PP **PP 04 00 04.1 -1.1**
baz=312
**BTLS Baital 115.14 312** *i* PKiKP **PKPdf 03 58 53.6 -0.6**
BTLS *e* 04 00 04.1
**NEEM North Greenlan 115.40 11** *i* P **PKPdf 03 58 53.3 -0.9**
**SCHQ Schefferville 117.00 37** PKP **PKPdf 03 58 56.6 -0.9**
comp=Z,2.1nm,0.6s,baz=271,slow=2.5,SNR=3.9
**BVAR Borovoye Array 117.22 321** PKP **PKPdf 03 58 57.6 -0.4**
comp=Z,14nm,0.5s,baz=109,slow=0.9,SNR=26
BVAR PP **PP 04 00 20.1 +0.8**
comp=Z,4.7nm,0.8s,baz=69,slow=7.9,SNR=5.6
**KKAR Karatay Array 117.67 310** **PKPdf 03 58 58.9 -0.3**
**KKAR Karatay Array 117.67 310** PKiKP **PKPdf 03 58 58.9 -0.3**
**BRLS Borolday 118.17 310** *e*PKiKP **PKPdf 03 58 59.8 -0.4**
baz=309
**BRLS Borolday 118.17 310** *i* PKiKP **PKPdf 03 58 59.8 -0.4**
**KBL Kabul 118.62 300** **PKiKP 03 59 01.7 +0.1**
**KBL Kabul 118.62 300** PKiKP **PKiKP 03 59 01.7 +0.1**
**SPITS Spitsbergen Ar 119.60 357** PKiKP **PKiKP 03 59 01.7 -0.9**
comp=Z,14nm,0.8s,baz=70,slow=5.1,SNR=10
**SPITS Spitsbergen Ar 119.60 357** PKiKP **PKPdf 03 59 01.5 -0.5**
**BDFB Brasilia 120.50 121** PKKPbc PKKPbc 04 09 13.3 -0.1
comp=Z,3.6nm,0.7s,baz=26,slow=2.7,SNR=5.5
**DAG Danmarks Havn 120.51 5** *i* P **PKPdf 03 59 02.0 -1.7**
**SUMG Summit 121.00 13** **PKiKP 03 59 05.5 +0.1**
**SUMG Summit 121.00 13** PKiKP **PKiKP 03 59 05.5 +0.1**
**SVE Sverdlovsk 122.01 326** *e*PKiKP **PKPdf 03 59 07.1 0.0**
SVE pmax pmax
comp=Z,38nm,0.9s
**DBG Daneborg 122.62 7** *i* P **PKPdf 03 59 06.3 -1.5**
**DY2G Dye2 122.67 21** *i* P **PKPdf 03 59 07.0 -1.4**
**ICESG Greenland Ices 123.09 16** *i* P **PKPdf 03 59 07.2 -2.1**
**ARU Arti 123.23 326** **PKiKP 03 59 09.7 0.0**
**ARU Arti 123.23 326** *i* PKiKP **PKPdf 03 59 08.9 -0.5**
ARU 04 01 00.8
ARU 04 05 25.4
ARU SS SS 04 16 54.4 -7.0
**ABKAR Akbulak array 124.30 318** **PKiKP 03 59 11.9 -0.1**
**IVI Ivigtut 124.62 27** *i* P **PKPdf 03 59 10.2 -1.7**
**ISOG Isortoq, Green 125.62 20** *i* P **PKPdf 03 59 12.6 -1.1**
**SCO Scoresbysund 125.82 10** *i* P **PKPdf 03 59 13.4 -0.6**
**ARCES ARCESS Array B 126.67 350** **PKPdf 03 59 15.3 -0.4**
**ARCES ARCESS Array B 126.67 350** PKP **PKPdf 03 59 15.5 -0.2**
comp=Z,24nm,0.8s,baz=38,slow=1.6,SNR=22
**FINES FINESS Array B 133.55 344** PKhKP PKPpre 03 59 14.0
comp=Z,3.1nm,0.8s,baz=40,slow=3.5,SNR=6.4
FINES PKP **PKPdf 03 59 28.2 -0.7**
comp=Z,11nm,0.6s,baz=97,slow=3.7,SNR=8.0
FINES PP **PP 04 02 03.0 -2.5**
comp=Z,4.4nm,0.9s,baz=83,slow=3.2,SNR=2.3
**VRH Novokhopyorsk 134.45 326** *e*PKiKP **PKPdf 03 59 29.3 -1.6**
VRH pmax pmax
comp=Z,20nm,1.0s
**LPSR Galich'ya Gora 135.12 329** *e*PKiKP **PKPdf 03 59 30.8 -1.3**
LPSR pmax pmax
comp=Z,20nm,1.1s
**VORR Voronezh 135.51 327** *e*PKiKP **PKPdf 03 59 31.3 -1.5**
VORR pmax pmax
comp=Z,20nm,0.9s
**VSR Storozhevoye 135.79 327** *e*PKiKP **PKPdf 03 59 31.7 -1.7**
VSR pmax pmax
comp=Z,10.0nm,1.1s
**VORD Divnogorie 135.87 326** *e*PKiKP **PKPdf 03 59 31.5 -2.0**
VORD pmax pmax
comp=Z,20nm,1.0s
**NB2 NORSAR Subarra136.72 353** PKP PKPpre 03 59 23.7
comp=Z,4.5nm,0.8s,baz=16,slow=3.2
NB2 pPKP PP 04 02 16.2 -8.8
comp=Z,45nm,1.7s,baz=16,slow=4.6
**NOA NORSAR Array B136.72 353** PKhKP PKPpre 03 59 23.0
comp=Z,4.6nm,0.7s,baz=22,slow=3.8,SNR=18
NOA PKP **PKPdf 03 59 34.5 -0.4**
comp=Z,4.5nm,0.7s,baz=14,slow=4.0,SNR=12
NOA SKPbc **SKPbc 04 02 15.8 +1.3**
comp=Z,3.5nm,1.1s,baz=6.3,slow=4.0,SNR=4.2
**KBZ Khabaz 137.17 315** PKP **PKPdf 03 59 36.5 +0.3**
comp=Z,5.8nm,0.9s,baz=158,slow=2.6,SNR=7.7
KBZ SKPbc **SKPbc 04 02 18.3 +2.0**
comp=Z,2.0nm,0.8s,baz=337,slow=1.8,SNR=2.5
**KIV Kislovodsk 137.22 316** *e*PKiKP **PKPdf 03 59 36.4 0.0**
KIV pmax pmax
comp=Z,11nm,1.0s
**HFS Hagfors 137.28 351** PKhKP PKPpre 03 59 23.8
comp=Z,5.2nm,0.4s,baz=64,slow=3.4,SNR=21
HFS PKP **PKPdf 03 59 35.6 -0.2**
comp=Z,8.8nm,0.7s,baz=38,slow=2.6,SNR=6.2
HFS SKPbc **SKPbc 04 02 16.2 0.0**
comp=Z,4.2nm,0.8s,baz=153,slow=0.7,SNR=4.0
**RAYN Ar Rayn 138.94 285** ⇑PKHKP PKPpre 03 59 33.3
**KMBO Kilima Mbogo 140.17 245** PKhKP PKPpre 03 59 36.6
comp=Z,4.1nm,0.9s,baz=90,slow=2.0,SNR=7.8
**ONAU Onsala 140.18 351** *i* P **PKPdf 03 59 33.6 -7.6**
**FABU Falkenberg 140.44 351** *i* P **PKPdf 03 59 34.2 -7.4**
**SUW Suwalki 140.66 340** *e*PKP **PKPdf 03 59 37.6 -4.6**
**DEL Delary 140.76 349** *i* P **PKPdf 03 59 35.6 -6.7**
**AKASG Malin Array Be 140.94 332** PKhKP PKPpre 03 59 36.8
comp=Z,5.5nm,0.4s,baz=42,slow=4.2,SNR=44
AKASG SKPbc **SKiKP 04 02 27.4 -0.8**
comp=Z,3.9nm,0.8s,baz=41,slow=3.0,SNR=6.4
**KIEV Kiev 140.95 332** ⇑P **PKPdf 03 59 37.0 -5.9**
**KIEV Kiev 140.95 332** ⇑PKHKP PKPpre 03 59 37.0
**BJUU Bjuv 141.28 350** *i* P **PKPdf 03 59 36.5 -6.7**
**INVG Invergeldie, C 141.62 5** *e*P **PKPdf 03 59 39.1 -4.7**
**LUNU Lund 141.63 349** *i* P **PKPdf 03 59 38.0 -5.8**
**LAWE Loch Awe, Argy 141.65 6** *e*P **PKPdf 03 59 39.2 -4.7**
**BSD Bornholm Skovb 141.84 348** *i* P **PKPdf 03 59 39.2 -5.1**
**SIM Simferopol' 142.12 322** *e*PKiKP **PKPdf 03 59 42.1 -3.0**
SIM pmax pmax
comp=Z,85nm,0.9s
**PGBU Glenifferbraes 142.19 6** *e*P **PKPdf 03 59 41.4 -3.5**
**SSRD Sdr. Stenderup 142.34 353** *i* P **PKPdf 03 59 42.0 -3.1**
**EKA Eskdalemuir Ar 142.77 5** PKhKP PKPpre 03 59 42.8
comp=Z,9.3nm,0.7s,baz=322,slow=2.6,SNR=29
**GAL1 Galloway 143.10 6** *e*P PKPab 03 59 44.1 -0.1
**DIKM Dikmen 143.14 316** ⇑P **PKPdf 03 59 46.5 -0.5**
**SORM Soroca 143.17 330** ⇑P PKPab 03 59 44.9 +0.1
**SORM Soroca 143.17 330** ⇑PKiKP PKPab 03 59 44.9 +0.1
**BEL Belsk 143.27 340** *e*PKP PKPbc 03 59 45.8 +0.4
**EDMD Edmundbyers 143.36 4** *e*P PKPab 03 59 45.1 -0.2
**PURM Purcari 143.51 327** ⇓P **PKPdf 03 59 46.9 -0.6**
**KESW Keswick, Cumbr 143.52 5** *e*P PKPab 03 59 45.8 -0.1
**IOMK Kirk Michael 143.71 6** *e*P PKPbc 03 59 46.2 -0.5
**ILTH Belurgan, Co L 143.72 8** *e*P PKPbc 03 59 45.9 -0.7
**KIS Kishinev 143.73 328** *i* P PKPab 03 59 47.0 0.0
comp=Z,150nm,0.7s
**KIS Kishinev 143.73 328** *i* PKiKP PKPab 03 59 47.0 0.0
KIS pmax pmax
comp=Z,150nm,0.7s
**LVV L'vov 143.78 335** *e*PKiKP PKPab 03 59 47.3 +0.2
**MILM Milestii Mici 143.79 328** ⇓*i* PKP PKPbc 03 59 46.7 -0.4
comp=Z,2μm,1.2s
**MILM Milestii Mici 143.79 328** ⇑P PKPab 03 59 47.3 +0.1
**MILM Milestii Mici 143.79 328** ⇑PKiKP PKPab 03 59 47.3 +0.1
**BZK Bozkurt 143.80 318** ⇑P **PKPdf 03 59 48.7 +0.6**
**WIM Isle of Man 143.81 6** *e*P PKPbc 03 59 46.3 -0.6
**IGLA Ilengowla, Co 143.82 11** *e*P PKPbc 03 59 46.6 -0.4
**IAS Iasi 144.22 330** ⇑P **PKPab 03 59 49.1 +0.3**
**IAS Iasi 144.22 330** ⇑PKiKP **PKPab 03 59 49.1 +0.3**
**HPK Haverah Park 144.25 3** *e*P PKPbc 03 59 48.3 -0.1
**KWP Kalwaria Pacla 144.44 336** *e*PKP **PKPdf 03 59 48.2 -0.8**
**WPS Cemaes, Angles 144.56 7** *e*P **PKPdf 03 59 48.9 -0.2**
**WME Myndd Eilian 144.59 6** *e*P **PKPdf 03 59 48.8 -0.3**
**WLF1 Llynfaes 144.68 6** *e*P **PKPdf 03 59 49.3 +0.1**
**LBWR Ladybower, Pea 144.80 4** *e*P PKPbc 03 59 50.0 0.0
**LMK Market Rasen 144.81 2** *e*P PKPbc 03 59 49.9 -0.1
**YLL Llanberis 144.85 6** *e*P **PKPdf 03 59 49.3 -0.3**
**VLDR Vladesti 144.89 327** ⇓P **PKPab 03 59 51.4 -0.1**
**TLCR 144.95 326** ⇑P **PKPab 03 59 51.6 -0.1**
**TLCR 144.95 326** ⇑PKiKP **PKPab 03 59 51.6 -0.1**
**VARL Varlezi 144.97 328** ⇓P **PKPab 03 59 52.0 +0.2**
**OJC Ojcow 144.98 340** *e*PKP **PKPdf 03 59 50.2 +0.3**
**BURAR Bucovina Array 144.99 332** **PKPab 03 59 51.7 -0.2**
**BURAR Bucovina Array 144.99 332** ⇑P **PKPab 03 59 52.0 +0.1**
**BURAR Bucovina Array 144.99 332** ⇑PKiKP **PKPab 03 59 52.0 +0.1**
**SCTR Scanteiesti 145.05 327** ⇑P **PKPab 03 59 52.4 +0.4**
**GIUM Giurgiulesti 145.07 327** ⇑P **PKPab 03 59 52.1 0.0**
**STNC Stoke 145.07 4** *e*P **PKPbc 03 59 51.2 +0.3**
**GHRR 145.08 328** ⇓P **PKPab 03 59 52.6 +0.4**
**TESR Tescani 145.14 329** ⇓P **PKPab 03 59 52.0 -0.4**
**BR131 Keskin Array S 145.15 315** **PKPbc 03 59 51.9 +0.2**
**BR131 Keskin Array S 145.15 315** PKP2 **PKPbc 03 59 51.9 +0.2**
**BRTR Keskin Array B 145.15 315** **PKPdf 03 59 51.1 +0.3**
**BRTR Keskin Array B 145.15 315** PKPbc **PKPbc 03 59 51.9 +0.2**
comp=Z,40nm,0.8s,baz=137,slow=3.5,SNR=116
**KOLS Kolonicke sedl 145.18 336** *e*PKiKP **PKPbc 03 59 51.6 +0.2**
**KOLS Kolonicke sedl 145.18 336** *e*PKP **PKPbc 03 59 51.6 +0.2**
**JURR Jurilovca 145.19 325** ⇑P **PKPab 03 59 52.3 -0.3**
**LLW Llanuwychllyn 145.19 6** *e*P **PKPdf 03 59 50.6 +0.4**
**FOPL Fogi Wyifa 145.19 5** *e*P **PKPbc 03 59 51.1 +0.1**
**NEGRR Negrea 145.21 327** ⇓P **PKPab 03 59 52.8 +0.1**
**KIRS Kirsehir-Merke 145.24 314** ⇑P **PKPdf 03 59 51.0 +0.2**
**IZVR Izvoarele 145.26 327** ⇓P **PKPab 03 59 52.8 0.0**
**IWEX Carrickbyrne, 145.27 9** *e*P **PKPbc 03 59 51.2 -0.2**
**TUDR 145.27 327** ⇑P **PKPab 03 59 52.9 0.0**
**CFR Carcaliu 145.31 327** ⇓P **PKPbc 03 59 51.9 +0.1**
**CFR Carcaliu 145.31 327** ⇓PKP2 **PKPbc 03 59 51.9 +0.1**
**TPGR Topolog 145.38 326** ⇑P **PKPab 03 59 53.2 -0.2**
**ONER Baraj Valea Uz 145.39 329** ⇓P **PKPab 03 59 53.3 -0.1**
**ODBI Odobesti 145.47 328** ⇓P **PKPab 03 59 53.8 +0.1**
**KSP Ksiaz 145.47 344** *e*PKP **PKPbc 03 59 52.1 -0.1**
**CWF Charnwood Fore 145.48 3** *e*P **PKPbc 03 59 51.9 -0.2**
**NIE Niedzica 145.50 339** *e*PKP **PKPbc 03 59 52.4 +0.1**
**CRVS Cervenica-Dubn 145.51 337** *e*PKP2 **PKPab 03 59 53.1 -0.7**
**CRVS Cervenica-Dubn 145.51 337** *e*PKP **PKPab 03 59 53.1 -0.7**
**VRI Vrincioaia 145.56 329** ⇓P **PKPbc 03 59 53.1 +0.6**
**VRI Vrincioaia 145.56 329** ⇓PKP2 **PKPbc 03 59 53.1 +0.6**
**WACR West Acre 145.57 1** *e*P **PKPbc 03 59 51.9 -0.4**
**HLM1 Long Mynd 145.59 5** *e*P **PKPbc 03 59 52.1 -0.3**
**PLOR Plostina 145.61 329** ⇑P **PKPbc 03 59 53.3 +0.6**
**PLOR Plostina 145.61 329** ⇑PKP2 **PKPbc 03 59 53.3 +0.6**
**ANTO Ankara 145.65 315** **PKPbc 03 59 53.8 +0.7**
**ANTO Ankara 145.65 315** ⇑P **PKPdf 03 59 52.0 +0.5**
**ANTO Ankara 145.65 315** ⇑PKP2 **PKPdf 03 59 52.0 +0.5**
**BMR Baia Mare 145.69 334** ⇓P **PKPbc 03 59 53.5 +0.7**
**BMR Baia Mare 145.69 334** ⇓PKP2 **PKPbc 03 59 53.5 +0.7**
**HARR Harsova 145.75 326** ⇑P **PKPab 03 59 54.1 -0.7**
**HARR Harsova 145.75 326** ⇑PKP2 **PKPab 03 59 54.1 -0.7**
**OSTC Ostas 145.76 344** *e*PKPDF **PKPbc 03 59 52.5 -0.5**
OSTC ⇑*e*PKP **PKPab 03 59 54.6 -0.1**
**OSTC Ostas 145.76 344** *e*PKP2 **PKPbc 03 59 52.5 -0.5**
**TURR Turia 145.77 329** ⇑P **PKPab 03 59 54.5 -0.5**
**ARCR ARCALIA 145.78 332** ⇑P **PKPab 03 59 54.5 -0.4**
**TLBR Topalu 145.78 326** ⇑P **PKPab 03 59 54.2 -0.7**
**CLZ Clausthal 145.79 351** *e*PKPdf **PKPdf 03 59 52.1 +0.8**
baz=15,slow=1.5
**CLL Collm 145.82 347** *e*PKPdf **PKPdf 03 59 52.0 +0.7**
CLL ⇓*i* PKPbc **PKPbc 03 59 53.5 +0.4**
comp=Z,217nm,0.9s
CLL *ex* x 04 02 13.0
CLL *e*SKPbc **SKiKP 04 02 40.0 +1.7**
CLL *e*PP **PP 04 03 19.0 -0.5**
CLL *e*PKSdf **PKSdf 04 03 27.0 +0.6**
**CLL Collm 145.82 347** ⇓*e*PKP2 **PKPdf 03 59 52.0 +0.7**
CLL *i* 03 59 53.5
CLL pmax pmax
comp=Z,217nm,0.9s
**CLL Collm 145.82 347** *e*PKPdf **PKPdf 03 59 52.0 +0.7**
baz=15,slow=1.5
CLL *e*PKPbc **PKPbc 03 59 53.6 +0.6**
baz=17,slow=2.6
**MFTR Murfatlar 145.82 325** ⇓P **PKPbc 03 59 53.3 0.0**
**COVR Voineasa-Covas 145.83 329** ⇑P **PKPbc 03 59 53.9 +0.5**
**OKC Ostrava-Krasne 145.84 341** ⇑*e*PKP **PKPbc 03 59 53.9 +0.7**
**OKC Ostrava-Krasne 145.84 341** *e*PKP2 **PKPbc 03 59 53.9 +0.7**
**OZUR 145.85 330** ⇑P **PKPab 03 59 54.6 -0.6**
**UPC Upice 145.85 344** ⇑*e*PKP **PKPbc 03 59 54.0 +0.8**
**UPC Upice 145.85 344** *e*PKP2 **PKPbc 03 59 54.0 +0.8**
**DPC Dobruska-Polom 145.91 343** *e*PKPDF **PKPdf 03 59 52.3 +0.7**
DPC ⇑*e*PKP **PKPbc 03 59 54.3 +0.8**
**DPC Dobruska-Polom 145.91 343** *e*PKP2 **PKPbc 03 59 52.3 +0.7**
**BOSR Bodos 145.93 330** ⇑P **PKPab 03 59 55.1 -0.4**
**RSBS Rosebush, Pemb 145.96 7** *e*P **PKPbc 03 59 53.0 -0.5**
**LANS Liptovska Anna 146.01 339** *e*PKP2 **PKPab 03 59 55.2 -0.6**
**LANS Liptovska Anna 146.01 339** *e*PKP **PKPab 03 59 55.2 -0.6**
**BRG Berggiesshubel 146.03 346** *e*PKP **PKPdf 03 59 52.5 +0.8**
BRG Amp 03 59 53.3
comp=Z,15nm,1.0s
**BRG Berggiesshubel 146.03 346** P **PKPbc 03 59 54.6 +0.9**
BRG Amp 03 59 55.3
comp=Z,81nm,0.8s
**BRG Berggiesshubel 146.03 346** P **PKiKP 04 00 00.8 +4.6**
BRG Amp 04 00 01.5
comp=Z,25nm,0.9s
**BRG Berggiesshubel 146.03 346** SS pPKiKP 04 02 09.0 +1.1
**BRG Berggiesshubel 146.03 346** *e*PKP2 **PKPdf 03 59 52.4 +0.8**
BRG pmax pmax
comp=Z,15nm,1.0s
**BRG Berggiesshubel 146.03 346** *e*PKPdf **PKPdf 03 59 52.2 +0.5**
baz=15,slow=1.5
BRG *e*PKPbc **PKPbc 03 59 54.5 +0.9**
baz=17,slow=2.6
**KRLC Kraliky 146.03 343** ⇑*e*PKP **PKPbc 03 59 54.6 +0.8**
**KRLC Kraliky 146.03 343** *e*PKP2 **PKPbc 03 59 54.6 +0.8**
**MORC Moravsky Berou 146.08 342** *e*PKP **PKPdf 03 59 51.9 0.0**
**MORC Moravsky Berou 146.08 342** ⇑P **PKPbc 03 59 54.9 +0.9**
**MORC Moravsky Berou 146.08 342** ⇑PKP2 **PKPbc 03 59 54.9 +0.9**
**NEHR Nehoiu 146.08 328** ⇑P **PKPbc 03 59 54.7 +0.6**
**MCH1 Michaelchurch 146.10 5** *e*P **PKPbc 03 59 53.7 -0.1**
**DOPR Dopca 146.13 330** ⇓P **PKPab 03 59 55.5 -0.9**
**GTTG Gottingen 146.14 351** *e*PKPdf **PKPdf 03 59 52.4 +0.5**
baz=15,slow=1.5
GTTG *e*PKPbc **PKPbc 03 59 54.4 +0.4**
baz=17,slow=2.6
**NEUB Neuenburg 146.16 349** *e*PKPdf **PKPdf 03 59 52.4 +0.6**
baz=15,slow=1.5
NEUB *e*PKPbc **PKPbc 03 59 54.6 +0.6**
baz=17,slow=2.6
**ISR Istrita 146.18 328** ⇓P **PKPbc 03 59 55.1 +0.8**
**ISR Istrita 146.18 328** ⇓PKP2 **PKPbc 03 59 55.2 +0.8**
**ICOR Ion Corvin 146.20 325** ⇑P **PKPbc 03 59 55.1 +0.7**
**PVCC Panska Ves 146.20 345** ⇑*e*PKP **PKPbc 03 59 55.2 +1.0**
**PVCC Panska Ves 146.20 345** *e*PKP2 **PKPbc 03 59 55.2 +1.0**
**ELMS Elmsett, Ipswi 146.21 1** *e*P **PKPbc 03 59 53.8 -0.3**
**MLR Muntele Rosu 146.21 329** PKPbc **PKPbc 03 59 54.6 +0.1**
comp=Z,48nm,0.7s,baz=360,slow=5.1,SNR=48
**MLR Muntele Rosu 146.21 329** ⇑P **PKPbc 03 59 55.0 +0.4**
**MLR Muntele Rosu 146.21 329** ⇑PKP2 **PKPbc 03 59 55.0 +0.4**
**KECS Kecovo 146.22 337** *e*PKP2 **PKPbc 03 59 55.1 +0.8**
**KECS Kecovo 146.22 337** *e*PKP **PKPbc 03 59 55.1 +0.8**
**MONM Monmouth 146.27 5** *e*P **PKPbc 03 59 54.0 -0.2**
**RICC Richard 146.30 346** ⇑*e*PKP **PKPbc 03 59 55.4 +1.0**
**PSN Preselentsi 146.33 324** P **PKPbc 03 59 55.4 +0.7**
**MESR Meseseni 146.33 334** ⇓P **PKPbc 03 59 55.5 +0.8**
**MAUC Maruska 146.36 341** *e*PKPDF **PKPdf 03 59 53.4 +1.1**
MAUC ⇑*e*PKP **PKPbc 03 59 55.5 +0.8**
**CBBR Cluj-Babes-Bol 146.37 333** ⇑P **PKPdf 03 59 52.3 -0.1**
**STRD Stroud 146.38 4** *e*P **PKPbc 03 59 54.4 -0.2**
**HSKC Hora Svate Kat 146.39 347** ⇑*e*PKP **PKPbc 03 59 55.4 +0.7**
**CJR Cluj-Napoca 146.39 333** ⇑P **PKiKP 03 59 56.1 -1.0**
**CJR Cluj-Napoca 146.39 333** ⇑PKP2 **PKiKP 03 59 56.1 -1.0**
**LEHL Lehliu 146.48 327** ⇑P **PKPdf 03 59 53.7 +1.1**
**MMAI Mount Meron Ar 146.48 303** PKPbc **PKPbc 03 59 56.5 +0.9**
comp=Z,79nm,0.7s,baz=60,slow=4.9,SNR=111
**LTVH Ltavrtes, Hu 146.58 335** ⇑P **PKPbc 03 59 55.5 +0.2**
**BUG Bochum--Univer 146.58 354** *e*PKPdf **PKPdf 03 59 52.7 +0.1**
baz=15,slow=1.5
**MARR Marisel-Cluj 146.63 333** ⇓P **PKPbc 03 59 56.3 +0.7**
**PRA Prague 146.66 345** ⇑*e*PKP **PKPbc 03 59 56.3 +0.9**
**PRA Prague 146.66 345** *e*PKP2 **PKPbc 03 59 56.3 +0.9**
**SWN1 Swindon 146.67 4** *e*P **PKPbc 03 59 55.3 -0.1**
**VOIR 146.68 330** ⇑P **PKPbc 03 59 56.4 +0.6**
**VOIR 146.68 330** ⇑PKP2 **PKPbc 03 59 56.4 +0.6**
**KASTN Kahler Asten 146.69 352** *e*PKPdf **PKPdf 03 59 52.7 -0.1**
baz=15,slow=1.5
KASTN *e*PKPbc **PKPbc 03 59 56.1 +0.6**
baz=17,slow=2.6
**PRU Pruhonice 146.71 345** ⇑*e*PKP **PKPbc 03 59 56.3 +0.7**
**DRGR 146.72 333** ⇑P **PKPbc 03 59 56.7 +0.9**
**MOX Moxa 146.73 349** *e*PKPdf **PKPdf 03 59 52.9 0.0**
baz=15,slow=1.5
MOX *e*PKPbc **PKPbc 03 59 56.1 +0.5**
baz=17,slow=2.6
**PLN Plauen 146.77 348** *e*PKPdf **PKPdf 03 59 53.1 +0.2**
baz=15,slow=1.5
PLN *e*PKPbc **PKPbc 03 59 56.2 +0.5**
baz=17,slow=2.6
**VRAC Vranov 146.78 342** *e*PKP **PKPdf 03 59 53.7 +0.7**
**VRAC Vranov 146.78 342** PKPbc **PKPbc 03 59 56.4 +0.6**
comp=Z,29nm,0.7s,baz=40,slow=2.8,SNR=26
**VRAC Vranov 146.78 342** ⇓P **PKPbc 03 59 56.7 +0.9**
**VRAC Vranov 146.78 342** ⇓PKP2 **PKPbc 03 59 56.7 +0.9**
**TANN Tannenbergstha 146.78 348** *e*PKPdf **PKPdf 03 59 53.5 +0.5**
baz=15,slow=1.5
TANN *e*PKPbc **PKPbc 03 59 56.3 +0.4**
baz=17,slow=2.6
**VYHS Vyhne 146.79 339** *e*PKP2 **PKPbc 03 59 56.6 +0.7**
**VYHS Vyhne 146.79 339** *e*PKP **PKPbc 03 59 56.6 +0.7**
**UBBA Unterbreizbach 146.84 350** *e*PKPdf **PKPdf 03 59 53.6 +0.7**
baz=15,slow=1.5
UBBA *e*PKPbc **PKPbc 03 59 56.0 +0.3**
baz=17,slow=2.6
**JAVC Velka Javorina 146.85 341** *e*PKP **PKPbc 03 59 55.0 -1.1**
**BORR Bors 146.86 335** ⇑P **PKiKP 03 59 57.4 -0.6**
**WOL Wolverton 146.91 3** *e*P **PKPbc 03 59 55.8 -0.2**
**PSZ Piszkesteto 146.91 337** ⇓P **PKPbc 03 59 56.7 +0.4**
**ARR Arges 146.93 330** ⇑P **PKiKP 03 59 58.0 -0.3**
**KRUC Moravsky 147.06 342** *e*PKP **PKPdf 03 59 53.6 +0.1**
**SGRR Singureni 147.09 327** ⇑P **PKPbc 03 59 56.9 +0.2**
**TREC Trest 147.10 343** ⇑*e*PKP **PKPbc 03 59 57.1 +0.4**
**TREC Trest 147.10 343** *e*PKP2 **PKPbc 03 59 57.1 +0.4**
**SMOL Smolenice 147.23 341** *e*PKP2 **PKiKP 03 59 58.4 -0.3**
**MANZ Manzenberg 147.26 348** *e*PKPdf **PKPdf 03 59 54.2 +0.4**
baz=15,slow=1.5
MANZ *e*PKPbc **PKPbc 03 59 57.7 +0.6**
baz=17,slow=2.6
**LOT Lotru 147.28 331** ⇑P **PKPbc 03 59 57.5 +0.1**
**ZVC Zvikov 147.30 345** ⇑*e*PKP **PKPbc 03 59 57.8 +0.6**
**SBD Saint Breward 147.33 8** *e*P **PKPbc 03 59 56.8 -0.4**
**DEV Deva 147.34 332** ⇑P **PKPbc 03 59 57.7 +0.3**
**DEV Deva 147.34 332** ⇑PKP2 **PKPbc 03 59 57.7 +0.3**
**HUMR Humele 147.38 329** ⇑P **PKPbc 03 59 57.6 +0.1**
**HMNX Herstmonceux 147.42 2** *e*P **PKPbc 03 59 57.8 +0.5**
**ROTZ Rotzenmuhle 147.45 347** *e*PKPdf **PKPdf 03 59 54.1 0.0**
baz=15,slow=1.5
ROTZ *e*PKPbc **PKPbc 03 59 58.2 +0.7**
baz=17,slow=2.6
**AHRW Bad Neuenahr-A 147.49 354** *e*PKPdf **PKPdf 03 59 54.4 +0.3**
baz=15,slow=1.5
AHRW *e*PKPbc **PKPbc 03 59 58.3 +0.7**
baz=17,slow=2.6
AHRW *e*PKPab **PKPab 04 00 01.7 +0.1**
baz=15,slow=4.2
**MEM Membach 147.53 355** *d*PKP **PKPbc 03 59 57.9 +0.2**
**BTNL Ternell 147.54 355** *d*PKPdf **PKPdf 03 59 54.7 +0.5**
BTNL *d*PKP **PKPbc 03 59 58.0 +0.2**
**SIRR Siria 147.57 334** ⇑P **PKiKP 03 59 58.9 -0.6**
**BSTI Sart Tilman 147.59 356** *d*PKP **PKPbc 03 59 58.1 +0.3**
**ZST Bratislava 147.62 341** *e*PKP2 **PKiKP 03 59 59.0 -0.5**
**ZST Bratislava 147.62 341** *e*PKP **PKiKP 03 59 59.0 -0.5**
**TNS Taunus Mts 147.64 352** *e*PKPdf **PKPdf 03 59 54.4 -0.1**
baz=15,slow=1.5
TNS *e*PKPbc **PKPbc 03 59 58.7 +0.6**
baz=17,slow=2.6
TNS *e*PKPab **PKPab 04 00 02.6 +0.2**
baz=15,slow=4.2
**GRF Grafenberg Arr 147.71 349** *e*PKPdf **PKPdf 03 59 54.5 0.0**
baz=15,slow=1.5
GRF *e*PKPbc **PKPbc 03 59 58.9 +0.6**
baz=17,slow=2.6
GRF *e*PKPab **PKPab 04 00 02.9 +0.3**
baz=15,slow=4.2
**GRFO Grafenberg 147.71 349** **PKiKP 03 59 59.1 -0.6**
**GRFO Grafenberg 147.71 349** PKP2 **PKiKP 03 59 59.1 -0.6**
**KHC Kasperske Hory 147.74 345** *e*PKPDF **PKPdf 03 59 55.1 +0.5**
KHC ⇑*e*PKP **PKiKP 03 59 59.4 -0.4**
KHC *e*PKPAB **PKPab 04 00 04.2 +1.4**
**KHC Kasperske Hory 147.74 345** *e*PKiKP **PKPdf 03 59 55.1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SRE | Strehaia | 148.14 | 330 | ⇑PKP2 | | PKiKP | 04 00 00.4 | -0.3 |
| CONA | Conrad Observa | 148.23 | 342 | *i* PKP | | PKiKP | 04 00 00.4 | -0.5 |
| | comp=Z,91nm,1.0s,SNR=34 | | | | | | | |
| RONA | Rosalia, Austr | 148.31 | 341 | *i* PKP | | PKPbc | 04 00 00.4 | +0.5 |
| | comp=Z,124nm,1.2s,SNR=30 | | | | | | | |
| HERR | Herculane | 148.33 | 332 | ⇓P | | PKPbc | 04 00 00.4 | +0.5 |
| BAND | Balkesir-Ban | 148.40 | 320 | ⇓P | | PKPbc | 04 00 00.2 | 0.0 |
| WLF | Walferdange | 148.45 | 355 | *d*PKPdf | | PKPdf | 03 59 56.5 | +0.8 |
| WLF | | | | *d*PKP | | PKiKP | 04 00 00.7 | -0.4 |
| WLF | Walferdange | 148.45 | 355 | *e*PKPdf | | PKPdf | 03 59 55.8 | +0.1 |
| | baz=15,slow=1.5 | | | | | | | |
| WLF | | | | *e*PKPbc | | PKiKP | 04 00 01.2 | 0.0 |
| | baz=17,slow=2.6 | | | | | | | |
| WLF | | | | *e*PKPab | | PKPab | 04 00 06.6 | +1.0 |
| | baz=15,slow=4.2 | | | | | | | |
| DJES | Djerdap | 148.45 | 331 | ⇑P | | PKPbc | 04 00 00.2 | 0.0 |
| BANR | Banloc | 148.50 | 333 | ⇓P | | PKiKP | 04 00 01.6 | +0.2 |
| MDVR | Moldovita | 148.73 | 332 | ⇑P | | PKPbc | 04 00 01.1 | +0.1 |
| VALD | Valchedram | 148.75 | 329 | *i* P | | PKiKP | 04 00 01.6 | -0.4 |
| MOA | Molln | 148.75 | 344 | *i* PKP | | PKPbc | 04 00 01.3 | +0.4 |
| | comp=Z,53nm,1.0s,SNR=14 | | | | | | | |
| MORH | Mrgy, Hungar | 148.81 | 337 | ⇓P | | PKPbc | 04 00 01.2 | +0.2 |
| MPEP | Malo Peshtene | 148.84 | 328 | *i* P | | PKiKP | 04 00 01.8 | -0.4 |
| JLP | Les Platons | 148.91 | 5 | *e*P | | PKPbc | 04 00 01.2 | 0.0 |
| ARSA | Arzberg | 148.94 | 342 | *i* PKP | | PKPbc | 04 00 01.5 | +0.1 |
| | comp=Z,33nm,1.0s,SNR=14 | | | | | | | |
| STU | Stuttgart | 148.95 | 350 | *e*PKPdf | | PKPdf | 03 59 56.4 | -0.2 |
| | baz=15,slow=1.5 | | | | | | | |
| STU | | | | *e*PKPbc | | PKiKP | 04 00 02.0 | -0.3 |
| | baz=17,slow=2.6 | | | | | | | |
| STU | | | | *e*PKPab | | PKPab | 04 00 07.7 | 0.0 |
| | baz=15,slow=4.2 | | | | | | | |
| JQE | Queens East | 148.96 | 5 | *e*P | | PKPbc | 04 00 01.4 | +0.2 |
| JSA | Saint Aubin | 148.96 | 5 | *e*P | | PKPbc | 04 00 01.2 | -0.1 |
| BIOA | Bad Ischl, Aus | 149.06 | 344 | *i* PKP | | PKPbc | 04 00 01.7 | 0.0 |
| | comp=Z,70nm,1.1s,SNR=16 | | | | | | | |
| FUR | Furstenfeldbru | 149.16 | 348 | *e*PKPbc | | PKiKP | 04 00 02.6 | -0.2 |
| | baz=17,slow=2.6 | | | | | | | |
| FUR | | | | *e*PKPab | | PKPab | 04 00 08.8 | +0.2 |
| | baz=15,slow=4.2 | | | | | | | |
| PGB | Panagyurishte | 149.23 | 327 | P | | PKPbc | 04 00 02.4 | +0.2 |
| RJOB | Jochberg | 149.23 | 345 | *e*PKPdf | | PKPdf | 03 59 56.9 | -0.2 |
| | baz=15,slow=1.5 | | | | | | | |
| RJOB | | | | *e*PKPbc | | PKPbc | 04 00 02.3 | +0.2 |
| | baz=17,slow=2.6 | | | | | | | |
| RJOB | | | | *e*PKPab | | PKPab | 04 00 10.0 | +1.0 |
| | baz=15,slow=4.2 | | | | | | | |
| FRGS | Fruska Gora | 149.23 | 335 | ⇓*i* P | | PKPbc | 04 00 02.1 | 0.0 |
| BFO | Black Forest | 149.51 | 351 | | | PKPbc | 04 00 03.0 | +0.3 |
| BFO | Black Forest | 149.51 | 351 | PKP2 | | PKPbc | 04 00 03.0 | +0.3 |
| BFO | Black Forest | 149.51 | 351 | *e*PKPdf | | PKPdf | 03 59 57.5 | 0.0 |
| | baz=15,slow=1.5 | | | | | | | |
| BFO | | | | *e*PKPbc | | PKPbc | 04 00 03.0 | +0.3 |
| | baz=17,slow=2.6 | | | | | | | |
| LESA | Schwarzleotal | 149.55 | 345 | *i* PKP | | PKPbc | 04 00 02.7 | -0.3 |
| | comp=Z,57nm,0.9s | | | | | | | |
| SOKA | Soboth | 149.60 | 342 | *i* PKP | | PKPbc | 04 00 02.8 | -0.2 |
| | comp=Z,77nm,1.0s,SNR=27 | | | | | | | |
| BOVS | Bovan | 149.62 | 331 | ⇓P | | PKPbc | 04 00 03.0 | -0.1 |
| PERS | Pernice | 149.62 | 342 | *i* PKPdf | | PKPdf | 03 59 57.4 | -0.4 |
| PERS | | | | *i* PKPbc | | PKPbc | 04 00 02.9 | -0.2 |
| PERS | | | | *i* PKPab | | PKPab | 04 00 10.6 | -0.1 |
| VTS | Vitosha | 149.63 | 328 | P | | PKiKP | 04 00 03.8 | -0.3 |
| KBA | Koelnbreinsper | 149.71 | 344 | *i* PKP | | PKPbc | 04 00 03.0 | -0.4 |
| | comp=Z,55nm,0.7s,SNR=23 | | | | | | | |
| TEKS | Tekeris | 149.85 | 334 | ⇓*i* P | | PKPbc | 04 00 03.4 | -0.2 |
| UBR | Ueberruh | 149.85 | 349 | *e*PKPdf | | PKPdf | 03 59 58.2 | +0.1 |
| | baz=15,slow=1.5 | | | | | | | |
| UBR | | | | *e*PKPbc | | PKiKP | 04 00 04.0 | -0.2 |
| | baz=17,slow=2.6 | | | | | | | |
| WATA | Walderalm | 149.88 | 347 | *i* PKP | | PKPbc | 04 00 03.9 | +0.1 |
| | comp=Z,55nm,0.6s,SNR=17 | | | | | | | |
| OBKA | Obir | 149.90 | 342 | *i* PKP | | PKPbc | 04 00 03.3 | -0.5 |
| | comp=Z,26nm,0.8s,SNR=10 | | | | | | | |
| OBKA | Obir | 149.90 | 342 | ⇓*i* P | | PKPbc | 04 00 03.3 | -0.5 |
| RETA | Reutte | 149.91 | 348 | *i* PKP | | PKPbc | 04 00 04.0 | +0.3 |
| | comp=Z,32nm,0.7s,SNR=15 | | | | | | | |
| WTTA | Wattenberg | 149.94 | 347 | *i* PKP | | PKPbc | 04 00 04.2 | +0.2 |
| | comp=Z,110nm,0.6s,SNR=31 | | | | | | | |
| MOTA | Moosalm | 149.98 | 347 | *i* PKP | | PKPbc | 04 00 04.0 | -0.1 |
| | comp=Z,84nm,0.9s | | | | | | | |
| MYKA | Terra Mystica | 150.04 | 344 | *i* PKP | | PKPbc | 04 00 03.3 | -0.8 |
| | comp=Z,52nm,0.6s,SNR=22 | | | | | | | |
| SQTA | Sankt Quirin | 150.07 | 347 | *i* PKP | | PKPbc | 04 00 04.4 | +0.2 |
| | comp=Z,80nm,0.7s,SNR=19 | | | | | | | |
| MMB | Musomishta | 150.13 | 326 | *i* P | | PKPbc | 04 00 04.3 | -0.1 |
| ABTA | Abfaltersbach | 150.22 | 345 | *i* PKP | | PKPbc | 04 00 04.4 | -0.1 |
| | comp=Z,111nm,0.7s | | | | | | | |
| DAVA | Damuels | 150.27 | 349 | *i* PKP | | PKiKP | 04 00 05.1 | -0.2 |
| | comp=Z,82nm,1.1s,SNR=29 | | | | | | | |
| LJU | Ljubljana | 150.33 | 342 | *i* PKPdf | | PKPdf | 03 59 59.0 | +0.2 |
| LJU | | | | *i* PKPbc | | PKPbc | 04 00 04.9 | +0.2 |
| FETA | Feichten | 150.36 | 348 | *i* PKP | | PKiKP | 04 00 05.5 | +0.1 |
| | comp=Z,105nm,1.0s,SNR=12 | | | | | | | |
| BBLS | Lazi&#263i | 150.46 | 334 | ⇓*i* P | | PKiKP | 04 00 05.4 | -0.2 |
| HAPS | Han Pijesak,BI | 150.46 | 334 | ⇓*i* P | | PKiKP | 04 00 05.7 | 0.0 |
| A051A | Mrakovica | 150.47 | 338 | ⇓*i* P | | PKPbc | 04 00 05.2 | +0.1 |
| BOJS | Bojanci | 150.59 | 341 | *i* PKPbc | | PKiKP | 04 00 05.8 | 0.0 |
| BLY | Banja Luka | 150.59 | 337 | ⇓*i* P | | PKPbc | 04 00 05.4 | +0.1 |
| RUDO | Rudo | 150.67 | 333 | *e*P | | PKPbc | 04 00 05.3 | -0.3 |
| SJES | Sjenica | 150.70 | 332 | ⇓*i* P | | PKiKP | 04 00 06.0 | -0.2 |
| DAVOX | Davos/Dischmat | 150.76 | 349 | PKPbc | | PKiKP | 04 00 06.5 | +0.2 |
| | comp=Z,107nm,0.7s,baz=352,slow=7.1,SNR=105 | | | | | | | |
| A050A | Klekovaca | 151.06 | 338 | ⇓*i* P | | PKPbc | 04 00 05.9 | -0.6 |
| UPM | Unac-Piva | 151.21 | 333 | ⇓*i* P | | PKPbc | 04 00 06.2 | -0.8 |
| BRY | Bratogost | 151.61 | 334 | ⇓*i* P | | PKPbc | 04 00 07.3 | -0.6 |
| PDG | Podgorica | 151.68 | 332 | ⇓*i* P | | PKPbc | 04 00 07.4 | -0.4 |
| PDG | Podgorica | 151.68 | 332 | ⇓P | | PKPbc | 04 00 07.7 | -0.2 |
| TREB | Trebinje | 151.84 | 334 | *e*P | | PKPbc | 04 00 07.7 | -0.5 |
| DRME | Dracevica, Mon | 151.90 | 332 | ⇓*i* P | | PKPbc | 04 00 07.2 | -0.2 |
| STON | Ston | 151.98 | 335 | ⇓*i* P | | PKPbc | 04 00 07.6 | -0.9 |
| TIR | Tirane | 152.25 | 330 | ⇓P | | PKPbc | 04 00 09.1 | 0.0 |
| TIR | Tirane | 152.25 | 330 | ⇓PKIKP | | PKPbc | 04 00 09.1 | 0.0 |
| IDI | Anoyia | 153.39 | 314 | PKPbc | | PKPbc | 04 00 11.9 | 0.0 |
| | comp=Z,18nm,0.6s,baz=358,slow=6.6,SNR=16 | | | | | | | |
| PGAV | Gavieira, Arco | 154.83 | 18 | *e*PKPdf | | PKPdf | 04 00 06.3 | +0.7 |
| PCAB | Cabril | 155.14 | 18 | *e*PKPdf | | PKPdf | 04 00 07.1 | +1.2 |
| PCAB | Cabril | 155.14 | 18 | *e*PKPab | | PKPab | 04 00 34.7 | +0.6 |
| PBRG | Braganca | 155.40 | 15 | *e*PKPdf | | PKPdf | 04 00 06.9 | +0.6 |
| PBRG | Braganca | 155.40 | 15 | *e*PKPab | | PKPab | 04 00 35.5 | +0.2 |
| POLO | Lamas de Olo | 155.52 | 18 | *e*PKPdf | | PKPdf | 04 00 07.0 | +0.5 |
| POLO | Lamas de Olo | 155.52 | 18 | *e*PKPab | | PKPab | 04 00 36.2 | +0.3 |
| PVRL | Vila Real | 155.63 | 18 | *e*PKPdf | | PKPdf | 04 00 07.4 | +0.8 |
| PVRL | Vila Real | 155.63 | 18 | *e*PKPab | | PKPab | 04 00 36.8 | +0.5 |
| MVO | Moncorvo | 155.92 | 16 | *e*PKPdf | | PKPdf | 04 00 07.8 | +0.8 |
| MVO | Moncorvo | 155.92 | 16 | *e*PKPab | | PKPab | 04 00 38.0 | +0.4 |
| PVIS | Viseu | 156.09 | 18 | *e*PKPdf | | PKPdf | 04 00 07.8 | +0.6 |
| PVIS | Viseu | 156.09 | 18 | *e*PKPab | | PKPab | 04 00 38.3 | 0.0 |
| COI | Coimbra | 156.39 | 20 | *e*PKPab | | PKPab | 04 00 40.1 | +0.6 |
| MTE | Manteigas | 156.49 | 18 | *e*PKPdf | | PKPdf | 04 00 08.5 | +0.8 |
| MTE | Manteigas | 156.49 | 18 | *e*PKPab | | PKPab | 04 00 40.5 | +0.5 |
| PCAS | Casmilo, Conde | 156.51 | 20 | *e*PKPdf | | PKPdf | 04 00 08.7 | +1.0 |
| PCAS | Casmilo, Conde | 156.51 | 20 | *e*PKPab | | PKPab | 04 00 40.2 | +0.1 |
| PSBE | So Bento | 156.89 | 21 | *e*PKPab | | PKPab | 04 00 41.8 | 0.0 |
| PCBR | Castelo Branco | 157.02 | 19 | *e*PKPdf | | PKPdf | 04 00 09.1 | +0.8 |
| PCBR | Castelo Branco | 157.02 | 19 | *e*PKPab | | PKPab | 04 00 42.2 | -0.1 |
| PMRV | Marv??o | 157.43 | 19 | *e*PKPdf | | PKPdf | 04 00 09.6 | +0.7 |
| PMRV | Marv??o | 157.43 | 19 | *e*PKPab | | PKPab | 04 00 44.5 | +0.4 |
| PMTG | Montargil | 157.49 | 21 | *e*PKPdf | | PKPdf | 04 00 09.6 | +0.7 |
| PMTG | Montargil | 157.49 | 21 | *e*PKPab | | PKPab | 04 00 44.1 | -0.2 |
| PMAR | Madeira | 157.84 | 46 | *e*PKPab | | PKPab | 04 00 47.3 | +0.9 |
| PESTR | Estremoz | 157.88 | 20 | *e*PKPdf | | PKPdf | 04 00 10.4 | +0.9 |
| PESTR | Estremoz | 157.88 | 20 | *e*PKPab | | PKPab | 04 00 46.1 | 0.0 |
| PMPS | Porto Santo | 158.03 | 44 | *e*PKPab | | PKPab | 04 00 47.3 | +0.3 |
| ESDC | Sonseca Array | 158.06 | 12 | PKP | | PKPdf | 04 00 09.6 | -0.2 |
| | comp=Z,2.7nm,1.0s,baz=334,slow=2.1,SNR=10 | | | | | | | |
| ESDC | | | | PKPab | | PKPab | 04 00 46.9 | 0.0 |
| | comp=Z,12nm,1.0s,baz=343,slow=4.2,SNR=28 | | | | | | | |
| ESDC | | | | PP | | PP | 04 04 26.8 | -1.3 |
| | comp=Z,1.1nm,1.1s,baz=349,slow=3.9,SNR=3.8 | | | | | | | |
| PAB | San Pablo | 158.10 | 13 | | | PKPdf | 04 00 10.2 | +0.5 |
| PAB | San Pablo | 158.10 | 13 | ⇑PKIKP | | PKPdf | 04 00 11.0 | +1.2 |
| PNCL | Nicolau / Gran | 158.23 | 22 | *e*PKPdf | | PKPdf | 04 00 11.0 | +1.1 |
| PNCL | Nicolau / Gran | 158.23 | 22 | *e*PKPab | | PKPab | 04 00 47.8 | +0.2 |
| PBEJ | Beja | 158.54 | 21 | *e*PKPdf | | PKPdf | 04 00 11.9 | +1.6 |
| PBEJ | Beja | 158.54 | 21 | *e*PKPab | | PKPab | 04 00 49.4 | +0.4 |
| MESJ | Messejana | 158.59 | 22 | *e*PKPdf | | PKPdf | 04 00 11.2 | +0.9 |
| MESJ | Messejana | 158.59 | 22 | *e*PKPdf | | PKPdf | 04 00 11.1 | +0.8 |
| MESJ | | | | *e*PKPab | | PKPab | 04 00 49.3 | +0.1 |
| PTEO | Sao Teotonio | 158.66 | 24 | *e*PKPdf | | PKPdf | 04 00 12.0 | +1.6 |
| PTEO | Sao Teotonio | 158.66 | 24 | *e*PKPab | | PKPab | 04 00 49.9 | +0.4 |
| PBAR | Barrancos | 158.68 | 19 | *e*PKPdf | | PKPdf | 04 00 10.3 | -0.1 |
| PBAR | Barrancos | 158.68 | 19 | *e*PKPab | | PKPab | 04 00 49.6 | 0.0 |
| PCVE | Castro Verde | 158.84 | 22 | *e*PKPdf | | PKPdf | 04 00 11.8 | +1.2 |
| PCVE | Castro Verde | 158.84 | 22 | *e*PKPab | | PKPab | 04 00 50.8 | +0.5 |
| MORF | Marmelete | 158.90 | 24 | *e*PKPab | | PKPab | 04 00 51.0 | +0.4 |
| MORF | Marmelete | 158.90 | 24 | *e*PKPab | | PKPab | 04 00 50.9 | +0.2 |
| PVAQ | Vaqueiros | 159.16 | 22 | *e*PKPab | | PKPab | 04 00 52.0 | +0.4 |
| PBDV | Barranco-do-Ve | 159.22 | 22 | *e*PKPdf | | PKPdf | 04 00 12.3 | +1.2 |
| PBDV | Barranco-do-Ve | 159.22 | 22 | *e*PKPab | | PKPab | 04 00 52.7 | +0.7 |
| KEST | Kesra | 161.33 | 340 | PKP | | PKPdf | 04 00 13.8 | +0.2 |
| | comp=Z,3.0nm,0.9s,baz=235,slow=5.2,SNR=4.4 | | | | | | | |
| KEST | | | | PKPab | | PKPab | 04 01 01.7 | +0.4 |
| | comp=Z,22nm,0.8s,baz=288,slow=1.5,SNR=23 | | | | | | | |
| AVE | Averroes | 162.87 | 27 | | | PKPdf | 04 00 16.3 | +1.3 |
| MDT | Midelt | 164.38 | 20 | PKP | | PKPdf | 04 00 17.2 | +0.7 |
| | comp=Z,8.4nm,0.8s,baz=52,slow=1.3,SNR=27 | | | | | | | |
| MDT | | | | PKPab | | PKPab | 04 01 15.5 | +0.6 |
| | comp=Z,11nm,0.9s,baz=329,slow=5.0,SNR=15 | | | | | | | |
| DBIC | Dimbokro | 166.80 | 150 | PKP | | PKPdf | 04 00 18.8 | -0.1 |
| | comp=Z,7.7nm,0.9s,baz=154,slow=3.0,SNR=5.4 | | | | | | | |
| TORD | Torodi Ar. Bea | 174.94 | 179 | | | PKPdf | 04 00 22.6 | -0.4 |
| TORD | Torodi Ar. Bea | 174.94 | 179 | PKP | | PKPdf | 04 00 22.3 | -0.7 |
| | comp=Z,6.6nm,1.0s,baz=353,slow=2.6,SNR=11 | | | | | | | |
| TORD | | | | PKPab | | PKPab | 04 02 02.6 | +0.8 |
| | comp=Z,1.5nm,1.0s,baz=187,slow=2.3,SNR=3.5 | | | | | | | |

*DJA* ***23*** *03:44:05.2±0.5, 7°S±3°×10°E±°, h33km±6km, M5.4/35, mb5.3/35, mbS5.8/17, MLv5.4/22, Mw(mB)5.4/17, MwMwp5.3/12, Mwp5.5/12*

*NEIC* ***23*** *03:44:05.7±2.6, 6°.39S±0°.07×103°.61E±0°.09, h20km±3km, mb5.2/48, Error ellipse: s-maj=14.1km s-min=8.5km az=57.0*

*BJI* ***23*** *03:44:07.0±0.0, 6°.10S×103°.70E, h45km, mb5.1/40, mB5.6/4, Ms5.6/2, Ms7 5.7/5*

*MOS* ***23*** *03:44:25.7±0.9, 5°.32S×103°.73E, h182km, mb4.9/54, MS5.7/5, Error ellipse: s-maj=13.6km s-min=5.3km az=109.8*

*IDC* ***23*** *03:44:27.8±5.4, 5°.36S×103°.76E, h186km±48km, mb4.3/20, mbtmp4.8/20, MS4.6/2, Error ellipse: s-maj=22.0km s-min=12.6km az=52.0*

**ISC 23 03:44:06.1±0.4, 6°31S±0°.07×103°.59E±0°.06, h35km, n341, σ1s26/334, mb5.1/99, MS5.7/10, 5C-4D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KASI | Kota Agung | 1.20 | 49 | P | Pn | 03 44 26.8 | +0.4 |
| LWLI | Liwa | 1.37 | 20 | P | Pn | 03 44 29.8 | +0.9 |
| BLSI | Bandar Lampung | 1.90 | 61 | P | Pn | 03 44 37.1 | +1.0 |
| MNAI | Manna | 2.04 | 342 | P | Pn | 03 44 39.7 | +1.8 |
| MNAI | Manna | 2.04 | 342 | | Pn | 03 44 39.0 | +1.1 |
| MNAI | Manna | 2.04 | 342 | P | Pn | 03 44 39.8 | +1.8 |
| SBJI | Serang | 2.54 | 86 | P | Pn | 03 44 46.3 | +1.5 |
| SKJI | Sukabumi | 3.03 | 103 | P | Pn | 03 44 52.8 | +1.2 |
| TNG | Tangerang | 3.05 | 88 | P | Pn | 03 44 53.8 | +2.0 |
| TNG | | | | P | Pn | 03 44 53.8 | +2.0 |
| DBJI | Dramaga | 3.15 | 95 | P | Pn | 03 44 55.5 | +2.2 |
| PMBI | Palembang | 3.56 | 19 | P | Pn | 03 45 02.5 | +3.5 |
| PMBI | Palembang | 3.56 | 19 | | Pn | 03 44 59.2 | +0.2 |
| PMBI | Palembang | 3.56 | 19 | P | Pn | 03 45 01.5 | +2.5 |
| CNJI | Cibinong | 3.66 | 106 | P | Pn | 03 45 00.2 | 0.0 |
| BBJI | Bungbulang | 4.19 | 106 | P | Pn | 03 45 08.4 | +0.7 |
| XMI | Christmas Isla | 4.61 | 153 | P | Pn | 03 45 09.5 | -3.9 |
| XMIS | Christmas Isla | 4.62 | 154 | P | Pn | 03 45 09.2 | -4.3 |
| XMIS | Christmas Isla | 4.62 | 154 | Pn | Pn | 03 45 09.2 | -4.4 |
| JCJI | Jatiwangi | 4.66 | 92 | P | Pn | 03 45 15.3 | +1.3 |
| PPBI | Pangkal Pinang | 4.84 | 32 | P | Pn | 03 45 19.6 | +3.0 |
| | 112nm,1.0s,3.0nm | | | | | | |
| PPSI | Pulau Pagai | 5.01 | 315 | P | Pn | 03 45 19.8 | +0.9 |
| | 464nm,0.6s | | | | | | |
| CMJI | Cimerak | 5.04 | 107 | P | Pn | 03 45 20.2 | +0.9 |
| | 396nm,0.6s,7μm2.5nm | | | | | | |
| PDSI | Padang | 6.20 | 330 | P | Pn | 03 45 35.7 | +0.4 |
| | 192nm,0.5s,13μm3.6nm | | | | | | |
| SISI | Saibi | 6.68 | 318 | P | Pn | 03 45 43.1 | +1.3 |
| | 180nm,0.9s,4.4nm | | | | | | |
| SMRI | Semarang | 6.85 | 97 | P | Pn | 03 45 47.1 | +2.9 |
| SMRI | Semarang | 6.85 | 97 | Pn | Pn | 03 45 42.2 | -2.0 |
| SMRI | Semarang | 6.85 | 97 | P | Pn | 03 45 45.4 | +1.2 |
| | 205nm,0.7s,1.2nm | | | | | | |
| BKNI | Bangkinang | 7.07 | 339 | P | Pn | 03 45 48.3 | +1.2 |
| BKNI | Bangkinang | 7.07 | 339 | Pn | Pn | 03 45 47.6 | +0.4 |
| BKNI | Bangkinang | 7.07 | 339 | P | Pn | 03 45 48.0 | +0.9 |
| | 206nm,1.0s,10μm3.3nm | | | | | | |
| UGM | Wanagama | 7.07 | 103 | P | Pn | 03 45 49.6 | +2.4 |
| UGM | Wanagama | 7.07 | 103 | Pn | Pn | 03 45 47.9 | +0.7 |
| UGM | Wanagama | 7.07 | 103 | P | Pn | 03 45 48.7 | +1.5 |
| NGJI | Ngawi | 7.89 | 98 | P | Pn | 03 46 00.3 | +1.9 |
| | 174nm,0.7s,0.8nm | | | | | | |
| PBSI | Pulau Batu | 8.16 | 319 | P | Pn | 03 45 59.6 | -2.6 |
| | 137nm,1.5s | | | | | | |
| PWJI | Pagerwojo | 8.33 | 102 | P | Pn | 03 46 06.4 | +1.9 |
| | 261nm,0.7s | | | | | | |
| GRJI | Gresik | 8.86 | 94 | P | Pn | 03 46 12.9 | +1.2 |
| GSI | Gunungsitoli | 9.65 | 321 | Pn | Pn | 03 46 22.2 | -0.5 |
| GSI | Gunungsitoli | 9.65 | 321 | P | Pn | 03 46 22.4 | -0.3 |
| | 88nm,1.1s,11μm | | | | | | |
| STKI | Sintang | 10.11 | 51 | P | Pn | 03 46 31.7 | +2.8 |
| | 85nm,0.7s,11μm | | | | | | |
| JAGI | Jajag, Banyuwa | 10.70 | 102 | P | Pn | 03 46 39.1 | +2.1 |
| JAGI | Jajag, Banyuwa | 10.70 | 102 | Pn | Pn | 03 46 36.7 | -0.3 |
| JAGI | Jajag, Banyuwa | 10.70 | 102 | P | Pn | 03 46 37.3 | +0.3 |
| | 246nm,0.9s,3μm7μm | | | | | | |
| IPM | Ipoh | 11.02 | 347 | Pn | Pn | 03 46 43.5 | +2.1 |
| SNSI | Sinabang, Aceh | 11.29 | 320 | P | Pn | 03 46 46.0 | +0.9 |
| | 94nm,1.3s | | | | | | |
| SRBI | Singaraja | 11.67 | 99 | P | Pn | 03 46 51.2 | +0.9 |
| | 184nm,0.7s,3μm9μm | | | | | | |
| DNP | Denpasar | 11.76 | 102 | P | Pn | 03 46 51.5 | 0.0 |
| KULM | Kulim | 11.89 | 346 | Pn | Pn | 03 46 54.6 | +1.3 |
| MLSI | Meulaboh, Aceh | 12.72 | 326 | P | Pn | 03 47 05.6 | +0.9 |
| | 39nm,0.6s | | | | | | |
| TWSI | Taliwang, Sumb | 13.40 | 101 | P | Pn | 03 47 12.2 | -1.7 |
| KAPI | Kappang | 16.14 | 86 | LR | LR | 03 54 44.3 | |
| | comp=Z,2μm,18.6s,baz=234,slow=39 | | | | | | |
| MMRI | Maumere | 18.64 | 98 | P | Pn | 03 48 22.2 | +0.7 |
| MMRI | Maumere | 18.64 | 98 | | Pn | 03 48 21.7 | +0.2 |
| MMRI | | | | IAmb | IAmb | 03 48 22.5 | |
| | comp=Z,146nm,0.5s | | | | | | |
| MMRI | Maumere | 18.64 | 98 | P | P | 03 48 21.0 | 0.0 |
| TOLI2 | Tolitoli | 18.68 | 67 | P | Pn | 03 48 23.2 | +1.1 |
| TOLI2 | Tolitoli | 18.68 | 67 | P | Pn | 03 48 22.4 | +0.3 |
| TOLI2 | | | | IAmb | IAmb | 03 48 24.6 | |
| | comp=Z,129nm,0.6s | | | | | | |
| LUWI | Luwuk | 19.84 | 75 | P | Pn | 03 48 35.9 | -0.1 |
| | comp=Z,195nm,1.2s | | | | | | |
| BATI | Batumata | 20.24 | 102 | P | P | 03 48 39.2 | +0.6 |
| GTOI | Gorontalo | 20.58 | 71 | P | P | 03 48 42.6 | +0.4 |
| SOEI | Soe | 20.76 | 101 | P | P | 03 48 43.9 | -0.4 |
| SOEI | Soe | 20.76 | 101 | P | P | 03 48 43.7 | -0.6 |
| SOEI | | | | | S | 03 52 29.4 | -5.1 |
| SOEI | Soe | 20.76 | 101 | P | P | 03 48 44.3 | 0.0 |
| SANI | Sanana | 22.73 | 80 | P | P | 03 49 05.9 | +0.5 |
| NLAI | Namlea | 23.63 | 84 | P | P | 03 49 14.4 | +0.1 |
| | comp=Z,39nm,0.6s,comp=Z,3μm | | | | | | |
| PHRA | Phrae | 24.87 | 352 | P | P | 03 49 25.8 | +0.1 |
| CM31 | Chiang Mai Arr | 25.03 | 350 | P | P | 03 49 27.3 | +0.1 |
| CM31 | | | | IAmb | IAmb | 03 49 29.3 | |
| | comp=Z,39nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 25.03 | 350 | P | P | 03 49 27.1 | -0.1 |
| CMAR | Chiang Mai Arr | 25.03 | 350 | P | P | 03 49 26.3 | -0.9 |
| | comp=Z,18nm,0.7s,baz=182,slow=8.8,SNR=27 | | | | | | |
| CMAR | | | | LR | LR | 04 00 44.2 | |
| | comp=Z,1μm,19.0s,baz=35,slow=40 | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 25.03 | 350 | P | P | 03 49 27.1 | -0.1 |
| DAV | Davao City (W) | 25.66 | 59 | P | P | 03 49 34.0 | +1.1 |
| DRS | Darwin Rock St | 27.61 | 105 | P | P | 03 49 52.0 | +1.5 |
| H08S2 | Diego Garcia H | 30.89 | 266 | T | T | 04 24 14.3 | |
| | baz=88 | | | | | | |
| H08S3 | Diego Garcia H | 30.90 | 266 | T | T | 04 24 12.3 | |
| | baz=88 | | | | | | |
| H08S1 | Diego Garcia H | 30.91 | 266 | T | T | 04 24 11.5 | |
| | baz=88 | | | | | | |
| PZH | PanZhiHua | 32.67 | 357 | P | P | 03 50 40.6 | +5.4 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,430nm,7.6s | | | | | | |
| WRA | Warramunga Arr | 32.79 | 117 | P | P | 03 50 45.5 | +9.1 |
| | comp=Z,2.1nm,0.4s,baz=294,slow=10.0,SNR=4.4 | | | | | | |
| | comp=Z,2.1nm,0.4s | | | | | | |
| WRAB | Tennant Creek | 32.80 | 117 | *i* P | P | 03 50 34.5 | -1.9 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| WR0 | Warramunga Arr | 32.97 | 117 | P | P | 03 50 38.3 | +0.3 |
| SHL | Shillong | 33.67 | 341 | P | P | 03 50 42.9 | -1.1 |
| SHL | | | | IAmb | IAmb | 03 50 44.4 | |
| | comp=Z,62nm,1.3s | | | | | | |
| SHL | Shillong | 33.67 | 341 | P | P | 03 50 42.9 | -1.1 |
| SHL | | | | pmax | pmax | | |
| | comp=Z,62nm,1.3s | | | | | | |
| KNMB | Chin-men Tao | 33.82 | 25 | P | P | 03 50 46.2 | +1.1 |
| ASAR | Alice Springs | 33.87 | 124 | P | P | 03 50 57.1 | +11 |
| | comp=Z,8.2nm,0.4s,baz=299,slow=7.7,SNR=13 | | | | | | |
| | comp=Z,8.2nm,0.4s | | | | | | |
| CD2 | Chengdu | 37.01 | 0 | P | P | 03 51 12.5 | -0.1 |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| LSA | Lhasa | 37.75 | 342 | P | P | 03 51 19.1 | -0.2 |
| LSA | | | | IAmb | IAmb | 03 51 21.8 | |
| | comp=Z,46nm,1.2s | | | | | | |
| LSA | Lhasa | 37.75 | 342 | P | P | 03 51 19.1 | -0.2 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,46nm,1.2s | | | | | | |
| COEN | Coen | 39.66 | 104 | P | P | 03 51 34.9 | -0.2 |
| XAN | Xi'an | 40.45 | 7 | ⇓P | P | 03 51 40.6 | -0.8 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| NJ2 | Nanjing | 40.83 | 20 | *e*P | P | 03 51 48.4 | +3.9 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,19nm,1.3s | | | | | | |
| LYN | LuoYang | 41.50 | 11 | P | P | 03 51 50.6 | +0.6 |
| LYN | | | | pP | pwP | 03 52 02.0 | -0.4 |
| LYN | | | | sP | sP | 03 52 07.1 | +3.6 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,44nm,1.7s | | | | | | |
| LZH | Lanzhou | 42.17 | 0 | P | P | 03 51 55.6 | -0.1 |
| LZH | | | | pP | pP | 03 52 05.3 | 0.0 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,39nm,1.0s | | | | | | |
| PMG | Port Moresby | 43.25 | 97 | P | P | 03 52 04.8 | +0.2 |
| PMG | Port Moresby | 43.25 | 97 | P | P | 03 52 04.5 | -0.1 |
| PMG | | | | IAmb | IAmb | 03 52 06.5 | |
| | comp=Z,60nm,0.9s | | | | | | |
| PMG | Port Moresby | 43.25 | 97 | *i* P | P | 03 52 04.4 | -0.2 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,66nm,0.9s | | | | | | |
| STKA | Stephens Creek | 43.64 | 131 | P | P | 03 52 08.8 | +1.3 |
| STKA | Stephens Creek | 43.64 | 131 | P | P | 03 52 08.8 | +1.3 |
| STKA | | | | pmax | pmax | | |
| | comp=Z,14nm,1.7s | | | | | | |
| HNS | HongShan | 44.71 | 13 | ⇓P | P | 03 52 16.3 | +0.5 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| GTA | Gaotai | 45.62 | 356 | P | P | 03 52 23.9 | +0.6 |
| GTA | | | | pP | pwP | 03 52 36.1 | +0.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,29nm,1.5s | | | | | | |
| BTO | Baotou | 47.06 | 7 | *e*P | P | 03 52 34.3 | -0.2 |
| BTO | | | | pP | pwP | 03 52 46.6 | -0.5 |
| BTO | | | | sP | sP | 03 52 57.4 | +9.2 |
| BTO | | | | PP | PP | 03 54 21.9 | -3.8 |
| BTO | | | | S | S | 03 59 20.3 | -3.9 |
| BTO | | | | SS | SS | 04 02 43.6 | -8.2 |
| BTO | | | | pmax | pmax | | |
| | comp=Z,18nm,0.5s | | | | | | |
| HHC | Hu-ho-hao-te | 47.50 | 8 | ⇓*i* P | P | 03 52 38.9 | +1.0 |
| HHC | | | | sP | sP | 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TNSS | Tian-Shan | 54.75 | 336 | *e*P | | P | | 03 53 32.5 | -0.2 |
| MDOK | Medeo | 54.81 | 336 | *e*P | | P | | 03 53 33.0 | +0.1 |
| | baz=336 | | | | | | | | | |
| MDOK | Medeo | 54.81 | 336 | *e*P | | P | | 03 53 32.9 | +0.1 |
| CHGR | Chuyangaron | 54.97 | 327 | P | | P | | 03 53 34.1 | +0.1 |
| CHGR | Chuyangaron | 54.97 | 327 | P | | P | | 03 53 34.1 | +0.1 |
| CHGR | | | | pmax | pmax | | | | | |
| | comp=Z,59nm,1.3s | | | | | | | | | |
| SIMJ | Simiganj | 55.05 | 327 | P | | P | | 03 53 33.9 | -0.8 |
| SIMJ | | | | IAmb | IAmb | | | 03 53 38.1 | | |
| | comp=Z,25nm,1.3s | | | | | | | | | |
| ARSB | Arslanbob | 55.07 | 332 | P | | P | | 03 53 35.1 | +0.3 |
| ARSB | Arslanbob | 55.07 | 332 | P | | P | | 03 53 35.1 | +0.3 |
| ARSB | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | | |
| TKM2 | Tokmak 2 | 55.20 | 335 | P | | P | | 03 53 35.8 | 0.0 |
| AAK | Ala-Archa | 55.44 | 334 | P | | P | | 03 53 37.3 | -0.1 |
| AAK | | | | IAmb | IAmb | | | 03 53 38.7 | | |
| | comp=Z,46nm,1.9s | | | | | | | | | |
| AAK | Ala-Archa | 55.44 | 334 | *i* P | | P | | 03 53 36.5 | -0.9 |
| AAK | | | | pmax | pmax | | | | | |
| | comp=Z,35nm,1.5s | | | | | | | | | |
| KUU | Kurty | 55.70 | 336 | *e*P | | P | | 03 53 39.4 | +0.2 |
| | comp=Z,31nm,1.0s,baz=336 | | | | | | | | | |
| KUU | Kurty | 55.70 | 336 | *e*P | | P | | 03 53 39.3 | +0.2 |
| KUU | | | | pmax | pmax | | | | | |
| | comp=Z,31nm,1.0s | | | | | | | | | |
| TDK | Taldyqorghan | 55.86 | 339 | *e*P | | P | | 03 53 40.5 | +0.2 |
| | comp=Z,16nm,0.7s,baz=338 | | | | | | | | | |
| TDK | Taldyqorghan | 55.86 | 339 | *e*P | | P | | 03 53 40.4 | +0.2 |
| TDK | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | | |
| BNX | BinXian | 56.02 | 20 | ⇑P | | P | | 03 53 40.6 | -0.7 |
| BNX | | | | pmax | pmax | | | | | |
| | comp=Z,99nm,1.4s | | | | | | | | | |
| ZSN | Zaisan | 56.03 | 345 | *e*P | | P | | 03 53 41.9 | +0.5 |
| | comp=Z,43nm,1.2s,baz=345 | | | | | | | | | |
| ZSN | Zaisan | 56.03 | 345 | *e*P | | P | | 03 53 41.9 | +0.5 |
| ZSN | | | | pmax | pmax | | | | | |
| | comp=Z,43nm,1.2s | | | | | | | | | |
| SGDS | Sogindy | 56.04 | 335 | *e*P | | P | | 03 53 41.5 | -0.1 |
| | baz=335 | | | | | | | | | |
| SGDS | Sogindy | 56.04 | 335 | *e*P | | P | | 03 53 41.5 | -0.1 |
| MK31 | Makanchi Array | 56.15 | 343 | P | | P | | 03 53 42.4 | +0.1 |
| MK31 | Makanchi Array | 56.15 | 343 | P | | P | | 03 53 42.1 | -0.2 |
| MKAR | Makanchi Array | 56.15 | 343 | P | | P | | 03 53 42.3 | 0.0 |
| | comp=Z,14nm,0.7s,baz=148,slow=8.8,SNR=58 | | | | | | | | | |
| | comp=Z,14nm,0.7s | | | | | | | | | |
| MAKZ | Makanchi | 56.26 | 342 | P | | P | | 03 53 42.9 | -0.2 |
| MAKZ | | | | IAmb | IAmb | | | 03 53 44.4 | | |
| | comp=Z,23nm,1.3s | | | | | | | | | |
| MAKZ | Makanchi | 56.26 | 342 | P | | P | | 03 53 42.9 | -0.2 |
| MAKZ | | | | pmax | pmax | | | | | |
| | comp=Z,23nm,1.3s | | | | | | | | | |
| USA0B | Ussuriysk Arra | 56.43 | 24 | P | | P | | 03 53 43.2 | -1.0 |
| USA0B | Ussuriysk Arra | 56.43 | 24 | *i* P | | P | | 03 53 42.4 | -1.8 |
| USRK | Ussuriysk Ar. | 56.43 | 24 | P | | P | | 03 53 43.4 | -0.9 |
| USRK | Ussuriysk Ar. | 56.43 | 24 | P | | P | | 03 53 43.5 | -0.7 |
| | comp=Z,21nm,0.6s,baz=209,slow=5.6,SNR=38 | | | | | | | | | |
| | comp=Z,21nm,0.6s | | | | | | | | | |
| ZAK | Zakamensk | 56.46 | 360 | *e*P | | P | | 03 53 43.7 | -0.8 |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,13nm,1.4s | | | | | | | | | |
| KNGR | Kungurtug, Tuv | 56.93 | 355 | *i* P | | P | | 03 53 48.4 | +0.6 |
| KNGR | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | | |
| DGZ | Jazzator, Alta | 57.53 | 348 | *i* P | | P | | 03 53 51.8 | -0.3 |
| DGZ | | | | pmax | pmax | | | | | |
| | comp=Z,48nm,0.7s | | | | | | | | | |
| BTLS | Baital | 57.58 | 336 | *e*P | | P | | 03 53 52.0 | -0.4 |
| | baz=335 | | | | | | | | | |
| BTLS | Baital | 57.58 | 336 | *e*P | | P | | 03 53 52.0 | -0.4 |
| KK31 | Karatay Array | 57.61 | 332 | P | | P | | 03 53 53.1 | +0.4 |
| MOY | Mondy | 57.79 | 358 | *e*P | | P | | 03 54 07.2 | +13 |
| MOY | | | | pmax | pmax | | | | | |
| | comp=Z,39nm,1.8s | | | | | | | | | |
| H04N2 | CROZET ISLANDS | 59.61 | 219 | T | | T | | 05 00 31.4 | | |
| | baz=64,slow=75,SNR=3521 | | | | | | | | | |
| H04N1 | CROZET ISLANDS | 59.62 | 219 | T | | T | | 05 00 31.8 | | |
| | baz=64,slow=75,SNR=2229 | | | | | | | | | |
| H04N3 | CROZET ISLANDS | 59.63 | 219 | T | | T | | 05 00 30.5 | | |
| | baz=64,slow=75,SNR=2819 | | | | | | | | | |
| H04S1 | CROZET ISLANDS | 59.83 | 219 | T | | T | | 05 00 43.2 | | |
| | baz=65,slow=75,SNR=12 | | | | | | | | | |
| H04S3 | CROZET ISLANDS | 59.84 | 219 | T | | T | | 05 00 42.6 | | |
| | baz=65,slow=75,SNR=19 | | | | | | | | | |
| H04S2 | CROZET ISLANDS | 59.85 | 219 | T | | T | | 05 00 43.2 | | |
| | baz=65,slow=75,SNR=20 | | | | | | | | | |
| SEM | Semipalatinsk | 59.99 | 343 | *e*P | | P | | 03 54 09.1 | -0.3 |
| | comp=Z,19nm,1.2s,baz=343 | | | | | | | | | |
| SEM | Semipalatinsk | 59.99 | 343 | *e*P | | P | | 03 54 09.0 | -0.3 |
| SEM | | | | pmax | pmax | | | | | |
| | comp=Z,19nm,1.2s | | | | | | | | | |
| KLR | Kul'dur | 60.53 | 21 | *i* P | | P | | 03 54 11.8 | -1.0 |
| KLR | | | | pmax | pmax | | | | | |
| | comp=Z,31nm,1.5s | | | | | | | | | |
| KURBB | Kurchatov Arra | 60.70 | 342 | P | | P | | 03 54 13.7 | -0.2 |
| | comp=Z,7.8nm,0.7s,baz=157,slow=6.2,SNR=22 | | | | | | | | | |
| | comp=Z,7.8nm,0.7s | | | | | | | | | |
| KURK | Kurchatov | 60.75 | 342 | P | | P | | 03 54 14.1 | -0.1 |
| KURK | | | | IAmb | IAmb | | | 03 54 17.5 | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| KURK | Kurchatov | 60.75 | 342 | *i* P | | P | | 03 54 14.1 | -0.1 |
| KURK | | | | pmax | pmax | | | | | |
| | comp=Z,37nm,1.4s | | | | | | | | | |
| OTUK | Ortayu | 60.87 | 337 | P | | P | | 03 54 15.2 | +0.1 |
| ASAJ | Asahikawa | 61.28 | 31 | P | | P | | 03 54 17.4 | -0.5 |
| | comp=Z,11nm,0.5s,baz=239,slow=7.4,SNR=6.8 | | | | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | | | | |
| ZAA0 | Zalesovo Array | 62.08 | 348 | P | | P | | 03 54 22.9 | -0.2 |
| ZALV | Zalesovo Beam | 62.08 | 348 | P | | P | | 03 54 23.1 | -0.1 |
| ZALV | Zalesovo Beam | 62.08 | 348 | P | | P | | 03 54 22.8 | -0.4 |
| | comp=Z,20nm,0.4s,baz=153,slow=5.5,SNR=80 | | | | | | | | | |
| | comp=Z,20nm,0.4s | | | | | | | | | |
| ZEA | Zeya | 63.06 | 16 | *e*P | | P | | 03 54 43.4 | +14 |
| ZEA | | | | pmax | pmax | | | | | |
| | comp=N,20nm,1.3s | | | | | | | | | |
| ZEA | | | | pmax | pmax | | | | | |
| | comp=Z,40nm,1.2s | | | | | | | | | |
| YSS | Yuzh-Sakhalins | 63.36 | 29 | *e*P | | P | | 03 54 30.3 | -1.5 |
| YSS | | | | pmax | pmax | | | | | |
| | comp=Z,60nm,1.0s | | | | | | | | | |
| BVAR | Borovoye Array | 65.45 | 339 | P | | P | | 03 54 45.4 | 0.0 |
| | comp=Z,10nm,0.5s,baz=143,slow=9.0,SNR=25 | | | | | | | | | |
| | comp=Z,10nm,0.5s | | | | | | | | | |
| AB31 | Akbulak array | 67.12 | 331 | *e*P | | P | | 03 54 56.3 | +0.1 |
| ABKAR | Akbulak array | 67.12 | 331 | P | | P | | 03 54 56.2 | 0.0 |
| ABKAR | Akbulak array | 67.12 | 331 | P | | P | | 03 54 56.7 | +0.6 |
| ABKAR | | | | IAmb | IAmb | | | 03 54 57.8 | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| MAK | Makhachkala | 70.55 | 320 | *d i* P | | P | | 03 55 18.9 | +1.3 |
| MAK | | | | *e* | | | | 03 57 51.6 | | |
| MAK | | | | *e*PPP | PPP | | | 03 59 40.5 | | |
| MAK | | | | pmax | pmax | | | | | |
| | comp=Z,225nm,1.6s | | | | | | | | | |
| MAK | | | | MLR | MLR | | | | | |
| | comp=Z,19μm,18.0s | | | | | | | | | |
| YAK | Yakutsk | 71.06 | 13 | *e*P | | P | | 03 55 18.8 | -1.5 |
| YAK | | | | *e* | | | | 03 55 39.9 | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,30nm,1.0s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=N,9.0nm,1.0s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=E,16nm,1.5s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=Z,2μm,17.0s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=N,1μm,20.0s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=E,2μm,17.0s | | | | | | | | | |
| SVE | Sverdlovsk | 72.02 | 337 | *e*P | | P | | 03 55 27.6 | +1.4 |
| SVE | | | | pmax | pmax | | | | | |
| | comp=Z,58nm,1.4s | | | | | | | | | |
| GURO | Guroymak-BITLI | 72.33 | 314 | P | | P | | 03 55 29.7 | +1.0 |
| GURO | | | | IAmb | IAmb | | | 03 55 31.8 | | |
| | comp=Z,25nm,1.3s | | | | | | | | | |
| KARS | Kars | 72.44 | 316 | P | | P | | 03 55 30.2 | +0.9 |
| KARS | Kars | 72.44 | 316 | P | | P | | 03 55 30.2 | +0.9 |
| KARS | | | | pmax | pmax | | | | | |
| | comp=Z,109nm,1.2s | | | | | | | | | |
| ARU | Arti | 72.57 | 336 | *c i* P | | P | | 03 55 30.1 | +0.6 |
| ARU | | | | | | | | 03 55 45.9 | | |
| ARU | | | | SS | SS | | | 04 09 21.9 | -9.5 |
| ARU | | | | pmax | pmax | | | | | |
| | comp=Z,29nm,1.0s | | | | | | | | | |
| NCK | Nalchik | 73.33 | 319 | *i* P | | P | | 03 55 35.3 | +0.9 |
| NCK | | | | pmax | pmax | | | | | |
| | comp=Z,26nm,1.2s | | | | | | | | | |
| KBZ | Khabaz | 73.89 | 319 | P | | P | | 03 55 38.5 | +1.0 |
| | comp=Z,15nm,1.0s,baz=140,slow=5.3,SNR=14 | | | | | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | | |
| KBZ | Khabaz | 73.89 | 319 | *i* P | | P | | 03 55 36.8 | -0.8 |
| KBZ | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| SHA1 | Shidzhatmaz | 74.05 | 319 | *i* P | | P | | 03 55 39.6 | +0.8 |
| KIV | Kislovodsk | 74.12 | 319 | P | | P | | 03 55 39.3 | +0.2 |
| KIV | | | | IAmb | IAmb | | | 03 55 42.2 | | |
| | comp=Z,54nm,1.6s | | | | | | | | | |
| KIV | Kislovodsk | 74.12 | 319 | *e*P | | P | | 03 55 40.2 | +1.1 |
| KIV | | | | pmax | pmax | | | | | |
| | comp=Z,15nm,1.1s | | | | | | | | | |
| MMAI | Mount Meron Ar | 75.45 | 306 | P | | P | | 03 55 50.4 | +3.3 |
| | comp=Z,0.8nm,0.5s,baz=90,slow=8.6,SNR=2.3 | | | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | | | |
| MA2 | Magadan | 75.53 | 23 | P | | P | | 03 55 47.2 | +0.5 |
| | comp=Z,2.8nm,0.3s,baz=225,slow=7.1,SNR=4.8 | | | | | | | | | |
| | comp=Z,2.8nm,0.3s | | | | | | | | | |
| KIRV | Kirov | 77.77 | 334 | *i* P | | P | | 03 56 00.9 | +1.5 |
| VRH | Novokhopyorsk | 77.88 | 325 | *e*P | | P | | 03 55 59.8 | -0.4 |
| VRH | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| ANN | Anapa | 77.91 | 318 | *e*P | | P | | 03 55 59.1 | -1.4 |
| ANN | | | | *e*PP | | PcP | | 03 56 10.2 | -0.1 |
| ANN | | | | *e*S | | S | | 04 05 51.5 | +0.2 |
| ANN | | | | pmax | pmax | | | | | |
| | comp=Z,40nm,1.1s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=Z,5μm,18.0s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=N,5μm,18.0s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=E,5μm,17.0s | | | | | | | | | |
| SEY | Seymchan | 78.32 | 21 | *i* P | | P | | 03 56 02.1 | -0.3 |
| SEY | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,1.8s | | | | | | | | | |
| BR131 | Keskin Array S | 78.85 | 312 | P | | P | | 03 56 06.5 | +0.4 |
| BR131 | Keskin Array S | 78.85 | 312 | *i* P | | P | | 03 56 06.4 | +0.4 |
| BRTR | Keskin Array B | 78.85 | 312 | P | | P | | 03 56 07.0 | +1.0 |
| BRTR | Keskin Array B | 78.85 | 312 | P | | P | | 03 56 07.6 | +1.5 |
| | comp=Z,4.3nm,0.9s,baz=128,slow=7.1,SNR=11 | | | | | | | | | |
| | comp=Z,4.3nm,0.9s | | | | | | | | | |
| VORD | Divnogorie | 79.16 | 325 | *e*P | | P | | 03 56 06.7 | -0.6 |
| VORD | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| VSR | Storozhevoye | 79.34 | 325 | *e*P | | P | | 03 56 06.5 | -1.7 |
| VSR | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | | |
| VORR | Voronezh | 79.50 | 325 | *e*P | | P | | 03 56 08.7 | -0.4 |
| VORR | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| ANTO | Ankara | 79.52 | 312 | P | | P | | 03 56 10.8 | +1.2 |
| ANTO | Ankara | 79.52 | 312 | P | | P | | 03 56 10.8 | +1.2 |
| ANTO | | | | pmax | pmax | | | | | |
| | comp=Z,18nm,1.2s | | | | | | | | | |
| LPSR | Galich'ya Gora | 80.04 | 326 | *e*P | | P | | 03 56 10.5 | -1.5 |
| LPSR | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| SIM | Simferopol' | 80.17 | 318 | *e*P | | P | | 03 56 14.0 | +1.1 |
| SIM | | | | *e* | | | | 03 56 20.0 | | |
| SIM | | | | *e*S | | S | | 04 06 16.0 | +0.5 |
| SIM | | | | pmax | pmax | | | | | |
| | comp=Z,26nm,1.0s | | | | | | | | | |
| SIM | | | | MLR | MLR | | | | | |
| | comp=Z,5μm,17.0s | | | | | | | | | |
| MOS | Moscow | 82.01 | 329 | *e*P | | P | | 03 56 21.3 | -1.1 |
| MOS | | | | *e* | | | | 03 59 28.0 | | |
| MOS | | | | pmax | pmax | | | | | |
| | comp=Z,46nm,1.4s | | | | | | | | | |
| OBN | Obninsk | 82.32 | 328 | *c e*P | | P | | 03 56 24.6 | +0.5 |
| OBN | | | | *e* | | | | 03 59 29.1 | | |
| OBN | | | | *e*PPP | PPP | | | 04 01 28.4 | | |
| OBN | | | | *e*S | S | | | 04 06 15.4 | -22 |
| OBN | | | | pmax | pmax | | | | | |
| | comp=Z,45nm,1.4s | | | | | | | | | |
| AKASG | Malin Array Be | 85.06 | 322 | P | | P | | 03 56 39.4 | +1.1 |
| | comp=Z,4.2nm,0.7s,baz=87,slow=4.8,SNR=12 | | | | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | | | | |
| AKBB | Malin Array Si | 85.06 | 322 | P | | P | | 03 56 38.5 | +0.3 |
| AKBB | | | | IAmb | IAmb | | | 03 56 40.4 | | |
| | comp=Z,8.6nm,0.8s | | | | | | | | | |
| AKBB | Malin Array Si | 85.06 | 322 | *i* P | | P | | 03 56 39.0 | +0.8 |
| AKBB | | | | pmax | pmax | | | | | |
| | comp=Z,48nm,3.6s | | | | | | | | | |
| KIEV | Kiev | 85.07 | 322 | P | | P | | 03 56 38.5 | +0.3 |
| KIEV | Kiev | 85.07 | 322 | P | | P | | 03 56 38.5 | +0.3 |
| KIEV | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | | |
| ADZR | Andozero | 85.09 | 336 | P | | P | | 03 56 38.2 | +0.1 |
| ADZR | | | | pmax | pmax | | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| MLR | Muntele Rosu | 85.87 | 316 | P | | P | | 03 56 44.3 | +1.7 |
| MLR | | | | IAmb | IAmb | | | 03 56 52.7 | | |
| | comp=Z,28nm,1.2s | | | | | | | | | |
| MLR | Muntele Rosu | 85.87 | 316 | P | | P | | 03 56 44.3 | +1.7 |
| MLR | | | | pmax | pmax | | | | | |
| | comp=Z,28nm,1.2s | | | | | | | | | |
| BILL | Bilibino | 85.96 | 20 | ⇑*e*P | | P | | 03 56 41.8 | -0.6 |
| BILL | | | | *e*S | | S | | 04 06 44.7 | -29 |
| BILL | | | | *e*SS | | SS | | 04 12 32.9 | -19 |
| BILL | | | | pmax | pmax | | | | | |
| | comp=Z,243nm,15.4s | | | | | | | | | |
| BILL | | | | MLR | MLR | | | | | |
| | comp=Z,2μm,16.0s | | | | | | | | | |
| BURAR | Bucovina Array | 86.84 | 318 | P | | P | | 03 56 48.7 | +1.5 |
| BURAR | | | | IAmb | IAmb | | | 03 56 51.5 | | |
| | comp=Z,9.9nm,0.8s | | | | | | | | | |
| BUR08 | Bucovina Ar. S | 86.85 | 318 | P | | P | | 03 56 48.8 | +1.4 |
| BUR08 | | | | IAmb | IAmb | | | 03 56 53.9 | | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| MNK | Minsk | 86.88 | 326 | *i* P | | P | | 03 56 45.8 | -1.3 |
| | comp=E,20nm,0.9s | | | | | | | | | |
| MNK | | | | *i* P | | P | | 03 56 45.8 | -1.3 |
| | comp=N,25nm,1.2s | | | | | | | | | |
| MNK | | | | *i* P | | P | | 03 56 45.8 | -1.3 |
| | comp=Z,23nm,0.9s,baz=105 | | | | | | | | | |
| MNK | | | | *i* PP | | PP | | 04 00 07.8 | -2.5 |
| MNK | | | | *i* PPP | PPP | | | 04 02 05.1 | | |
| MNK | | | | *i* S | S | | | 04 07 09.6 | -13 |
| MNK | | | | *i* SS | | SS | | 04 13 06.0 | +0.4 |
| MNK | | | | *i* SSS | SSS | | | 04 16 43.5 | | |
| MNK | | | | *i* LQ | LQ | | | 04 30 09.1 | | |
| MNK | | | | *i* LR | LR | | | 04 34 50.9 | | |
| MNK | | | | *i* LRM | MLR | | | 04 36 39.9 | | |
| | comp=Z,3μm,18.2s | | | | | | | | | |
| MNK | | | | *i* LRM | MLR | | | 04 36 50.0 | | |
| | comp=N,4μm,19.1s | | | | | | | | | |
| MNK | | | | *i* LRM | MLR | | | 04 37 30.7 | | |
| | comp=E,2μm,18.2s | | | | | | | | | |
| MNK | Minsk | 86.88 | 326 | *i* P | | P | | 03 56 45.8 | -1.3 |
| MNK | | | | *i* | | | | 04 00 07.8 | | |
| MNK | | | | *i* PPP | PPP | | | 04 02 05.0 | | |
| MNK | | | | *i* S | | SKSac | | 04 07 09.6 | -1.8 |
| MNK | | | | pmax | pmax | | | | | |
| | comp=Z,23nm,0.9s | | | | | | | | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=N,25nm,1.2s | | | | | | | | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=E,20nm,0.9s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=Z,3μm,18.0s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=N,4μm,19.0s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=E,2μm,18.0s | | | | | | | | | |
| KOLS | Kolonicke sedl | 89.03 | 319 | *e*P | | P | | 03 57 00.7 | +3.1 |
| KOLS | | | | pmax | pmax | | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| KOLS | Kolonicke sedl | 89.03 | 319 | *e*P | | P | | 03 57 00.7 | +3.1 |
| KEK | Kerkira | 89.23 | 310 | P | | P | | 03 56 60.0 | +1.3 |
| KEK | | | | IAmb | IAmb | | | 03 57 01.6 | | |
| | comp=Z,29nm,1.5s | | | | | | | | | |
| SUW | Suwalki | 89.45 | 324 | P | | P | | 03 57 00.2 | +0.9 |
| SUW | Suwalki | 89.45 | 324 | P | | P | | 03 57 00.2 | +0.9 |
| SUW | | | | pmax | pmax | | | | | |
| | comp=Z,45nm,1.1s | | | | | | | | | |
| CRVS | Cervenica-Dubn | 89.55 | 319 | *e*P | | P | | 03 57 02.8 | +2.8 |
| CRVS | Cervenica-Dubn | 89.55 | 319 | *e*P | | P | | 03 57 02.8 | +2.8 |
| FINES | FINESS Array B | 89.57 | 332 | P | | P | | 03 57 00.8 | +1.0 |
| | comp=Z,3.6nm,0.6s,baz=106,slow=6.0,SNR=14 | | | | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | | | | |
| ARCES | ARCESS Array B | 91.72 | 340 | P | | P | | 03 57 10.1 | +0.4 |
| | comp=Z,3.0nm,0.9s,baz=91,slow=6.1,SNR=5.2 | | | | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| JAVC | Velka Javorina | 92.02 | 319 | *e*P | | P | | 03 57 14.2 | +2.6 |
| MORC | Moravsky Berou | 92.22 | 320 | *e*P | | P | | 03 57 14.9 | +2.5 |
| PRED | Cave del Predi | 94.54 | 316 | P | | P | | 03 57 24.1 | +0.8 |
| HFS | Hagfors | 95.37 | 330 | P | | P | | 03 57 27.3 | +0.7 |
| | comp=Z,2.6nm,0.7s,baz=102,slow=5.0,SNR=4.6 | | | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | | | |
| ILAR | Eielson Array | 103.95 | 25 | PKKPbc | PKKPbc | | | 04 13 58.1 | +0.7 |
| | comp=Z,0.7nm,1.0s,baz=36,slow=4.9,SNR=4.5 | | | | | | | | | |
| MFID | Camas Ranch | 129.38 | 37 | | | PKPdf | | 04 03 07.7 | -3.7 |
| HLID | Hailey | 130.12 | 36 | | | PKPdf | | 04 03 11.6 | -1.4 |
| NVAR | Mina Array Bea | 130.45 | 44 | PKP | | PKiKP | | 04 03 15.7 | +1.0 |
| | comp=Z,0.7nm,0.6s,baz=321,slow=2.2,SNR=8.0 | | | | | | | | | |
| SCHQ | Schefferville | 131.01 | 353 | PKP | | PKiKP | | 04 03 15.1 | +0.1 |
| | comp=Z,2.0nm,0.5s,baz=52,slow=4.4,SNR=5.3 | | | | | | | | | |
| YHL | Hebgen Lake | 131.12 | 33 | | | PKPdf | | 04 03 14.7 | -0.3 |
| ELK | Elko | 131.25 | 39 | | | PKPdf | | 04 03 14.6 | -0.7 |
| ELK | Elko | 131.25 | 39 | PKIKP | | PKPdf | | 04 03 14.6 | -0.7 |
| R11B | Troy Canyon, C | 132.33 | 42 | | | PKPdf | | 04 03 17.4 | 0.0 |
| ULM | Lac du Bonnet | 133.27 | 17 | PKP | | PKiKP | | 04 03 19.3 | -0.3 |
| | comp=Z,3.9nm,0.7s,baz=47,slow=2.9,SNR=4.6 | | | | | | | | | |
| PDAR | Pinedale Array | 133.38 | 34 | PKP | | PKPdf | | 04 03 19.4 | +0.2 |
| | comp=Z,0.5nm,0.7s,baz=207,slow=1.4,SNR=5.0 | | | | | | | | | |
| VHRN | Van Horn | 143.79 | 44 | | | PKPdf | | 04 03 37.8 | -0.7 |
| DKNS | Dickens | 144.54 | 37 | | | PKPdf | | 04 03 39.3 | -0.4 |
| POST | Post | 144.61 | 38 | | | PKPdf | | 04 03 39.5 | -0.2 |
| OK048 | Pawnee Station | 144.63 | 29 | | | PKPbc | | 04 03 38.5 | +0.1 |
| P43A | Skaggs, Pawnee | 144.78 | 18 | | | PKPab | | 04 03 38.8 | +0.2 |
| M53A | WI Miller and | 144.81 | 6 | | | PKPbc | | 04 03 39.4 | +0.6 |
| OK029 | Liberty Lake | 144.87 | 30 | | | PKPbc | | 04 03 39.6 | +0.4 |
| OU0K | Ouay | 144.94 | 29 | | | PKPab | | 04 03 39.0 | -0.3 |
| MNHN | Monahans | 144.95 | 41 | | | PKPbc | | 04 03 39.8 | +0.2 |
| SN07 | Snyder 07 | 144.97 | 37 | | | PKPab | | 04 03 39.3 | -0.3 |
| ALPN | Alpine | 144.97 | 44 | | | PKPab | | 04 03 39.7 | -0.1 |
| WMOK | Wichita Mounta | 144.98 | 33 | | | PKPab | | 04 03 38.5 | -1.1 |
| WMOK | Wichita Mounta | 144.98 | 33 | PKIKP | | PKPab | | 04 03 38.5 | -1.1 |
| R40A | Maddies Statio | 145.07 | 22 | | | PKPab | | 04 03 39.3 | -0.4 |
| S39A | Bolivar | 145.18 | 24 | | | PKPbc | | 04 03 39.7 | -0.4 |
| N53A | Lisbon | 145.43 | 6 | | | PKPbc | | 04 03 40.3 | -0.4 |
| O49A | Covington | 145.53 | 11 | | | PKPbc | | 04 03 40.4 | -0.8 |
| TX31 | Lajitas Ar. Si | 145.57 | 45 | | | PKPdf | | 04 03 41.5 | -0.1 |
| TXAR | Lajitas Array | 145.57 | 45 | | | PKPdf | | 04 03 41.5 | -0.1 |
| TXAR | Lajitas Array | 145.57 | 45 | PKP | | PKPab | | 04 03 42.6 | +0.6 |
| | comp=Z,12nm,0.7s,baz=282,slow=1.1,SNR=116 | | | | | | | | | |
| TUL3 | Leonard | 145.59 | 28 | | | PKPab | | 04 03 42.0 | +0.3 |
| Q44A | Meyer Farm, Va | 145.61 | 18 | | | PKPdf | | 04 03 40.6 | -0.6 |
| N58A | Sunbury | 145.62 | 0 | | | PKPdf | | 04 03 40.9 | -0.2 |
| SGCY | Sterling City | 145.63 | 39 | | | PKPdf | | 04 03 41.8 | +0.3 |
| CCM | Cathedral Cave | 145.65 | 21 | | | PKPdf | | 04 03 41.2 | -0.1 |
| CCM | Cathedral Cave | 145.65 | 21 | PKIKP | | PKPdf | | 04 03 41.2 | -0.1 |
| ACSO | Alum Creek Sta | 145.72 | 9 | | | PKPdf | | 04 03 41.2 | -0.1 |
| U38A | Gravette | 145.79 | 26 | | | PKPdf | | 04 03 41.1 | -0.6 |
| SSPA | Standing Stone | 145.80 | 2 | | | PKPdf | | 04 03 41.9 | +0.4 |
| P48A | Milroy | 146.01 | 13 | | | PKPbc | | 04 03 42.5 | -0.1 |
| OLIL | Olney | 146.03 | 16 | | | PKPdf | | 04 03 42.4 | +0.5 |
| BLO | Bloomington | 146.03 | 14 | | | PKPdf | | 04 03 42.0 | +0.1 |
| BLO | Bloomington | 146.03 | 14 | PKIKP | | PKPdf | | 04 03 42.0 | +0.1 |
| MGMO | Mountain Grove | 146.06 | 23 | | | PKPbc | | 04 03 43.0 | +0.1 |
| O54A | Avella | 146.09 | 5 | | | PKPdf | | 04 03 41.9 | -0.1 |
| HHAR | Hobbs | 146.12 | 26 | | | PKPdf | | 04 03 42.4 | +0.2 |
| MVL | Millersville | 146.46 | 360 | | | PKPab | | 04 03 44.8 | 0.0 |
| T42A | Van Buren | 146.62 | 22 | | | PKPdf | | 04 03 43.3 | +0.3 |
| P53A | Whipple | 146.67 | 7 | | | PKPbc | | 04 03 44.3 | -0.3 |
| Q51A | Peebles | 146.83 | 10 | | | PKPdf | | 04 03 43.2 | -0.1 |
| X37A | Clayton | 146.86 | 29 | | | PKPbc | | 04 03 44.9 | -0.4 |
| P57A | Homestead Farm | 146.94 | 2 | | | PKPbc | | 04 03 45.1 | -0.2 |
| WCI | Wyandotte Cave | 146.99 | 14 | | | PKPdf | | 04 03 44.6 | +1.1 |
| WCI | Wyandotte Cave | 146.99 | 14 | PKP2 | | PKPdf | | 04 03 44.7 | +1.1 |
| Q52A | Bidwell | 147.07 | 8 | | | PKPab | | 04 03 46.7 | -0.5 |
| PBMO | Poplar Bluff | 147.08 | 21 | | | PKPdf | | 04 03 44.8 | +1.1 |
| R49A | Shelbyville | 147.19 | 13 | | | PKPbc | | 04 03 46.4 | +0.3 |
| FCAR | Ozark Folk Cen | 147.22 | 24 | | | PKPbc | | 04 03 45.6 | -0.6 |
| Q54A | Coxs Mills | 147.23 | 6 | | | PKPdf | | 04 03 45.0 | +1.0 |
| BRDY | Brady | 147.37 | 38 | PKPdf | | PKPdf | | 04 03 45.6 | +1.1 |
| R50A | Paris | 147.37 | 12 | | | PKPdf | | 04 03 44.6 | +0.3 |
| LCAR | Lake Charles | 147.44 | 23 | | | PKPdf | | 04 03 44.4 | 0.0 |
| DRIO | Del Rio | 147.60 | 42 | | | PKPdf | | 04 03 44.3 | -0.5 |
| WHAR | Wooly Hollow | 147.67 | 25 | | | PKPdf | | 04 03 46.1 | +1.3 |
| HICK | Hickman | 147.71 | 20 | | | PKPbc | | 04 03 48.6 | +1.0 |
| MIAR | Mount Ida | 147.74 | 27 | | | PKPbc | | 04 03 48.6 | +0.8 |
| MIAR | Mount Ida | 147.74 | 27 | PKP2 | | PKPbc | | 04 03 48.6 | +0.8 |
| WHTX | Lake Whitney, | 147.77 | 35 | PKPbc | | PKiKP | | 04 03 49.3 | -0.6 |
| S51A | Beattyville | 148.14 | 11 | | | PKPbc | | 04 03 48.9 | +0.2 |
| HNDO | Hondo | 148.41 | 40 | PKPdf | | PKPdf | | 04 03 46.6 | +0.4 |
| WVT | Waverly | 148.53 | 18 | | | PKPdf | | 04 03 47.3 | +1.1 |
| WVT | Waverly | 148.53 | 18 | PKIKP | | PKPdf | | 04 03 47.3 | +1.1 |
| WLAR | White Oak Lake | 148.66 | 27 | PKPbc | | PKPbc | | 04 03 51.0 | +0.9 |
| U49A | Red Boiling Sp | 148.74 | 15 | PKPbc | | PKPbc | | 04 03 50.4 | +0.1 |
| V48A | Smith Brothers | 149.19 | 17 | | | P

**RHSSO 23 03:58:46.6±0.2, 44°21'N×17°83'E, h5km±4km, ML1.6/5, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BLY** | **Banja Luka** | **0.71** | **319** | *e*Pg | Pg | 03 58 59.3 | -1.0 |
| BLY | | | | *e*Sg | Sg | 03 59 09.9 | +0.4 |
| **HAPS** | **Han Pijesak,Bl** | **0.81** | **98** | *e*Pg | Pg | 03 59 01.0 | -1.2 |
| HAPS | | | | *e*Sg | Sg | 03 59 12.3 | -0.5 |
| **RICI** | **Ricice** | **0.88** | **216** | *e*Pg | Pg | 03 59 03.3 | -0.1 |
| RICI | | | | Sg | Sb | 03 59 15.9 | -0.5 |
| **A050A** | **Klekovaca** | **0.97** | **287** | *e*Pg | Pg | 03 59 03.8 | -1.5 |
| A050A | | | | *e*Sg | Sg | 03 59 17.4 | -0.5 |
| **A051A** | **Mrakovica** | **1.04** | **321** | *e*Pg | Pg | 03 59 05.5 | -1.0 |
| A051A | | | | *e*Sg | Sg | 03 59 19.6 | -0.4 |
| **KIJV** | **Kijevo** | **1.05** | **259** | *e*Pg | Pg | 03 59 05.8 | -0.9 |
| KIJV | | | | Sg | Sb | 03 59 21.1 | -0.2 |
| **MAKA** | **Makarska** | **1.09** | **213** | Sg | Sb | 03 59 22.9 | +0.4 |
| **BBLS** | **Lazi&#263i** | **1.19** | **106** | *e*Pg | Pg | 03 59 07.9 | -1.4 |
| BBLS | | | | *e*Sg | Sg | 03 59 24.9 | +0.2 |
| **RUDO** | **Rudo** | **1.26** | **118** | *e*Pg | Pg | 03 59 09.3 | -1.4 |
| RUDO | | | | *e*Sg | Sg | 03 59 26.2 | -0.8 |
| **STON** | **Ston** | **1.34** | **184** | *e*Pg | Pn | 03 59 11.2 | -0.8 |
| STON | | | | *e*Sg | Sg | 03 59 29.0 | -0.7 |
| **HVAR** | **Hvar** | **1.44** | **225** | Sn | Sg | 03 59 33.8 | +1.0 |
| **TREB** | **Trebinje** | **1.54** | **166** | *e*Sn | Sb | 03 59 35.4 | 0.0 |
| **MORI** | **Morici** | **1.57** | **258** | *i* Pn | Pn | 03 59 15.2 | 0.0 |
| MORI | | | | Sn | Sg | 03 59 39.0 | +2.0 |
| **ZIRJ** | **Zirje** | **1.68** | **251** | Sn | Sg | 03 59 41.4 | +1.0 |
| **SJES** | **Sjenica** | **1.82** | **121** | *e*Sn | Sn | 03 59 42.0 | -0.2 |

**ATH 23 03:59:25.7, 38°89'N×21°91'E, h19km±4km, ML1.1/4, Manual Solution by I.Dede This location: 2020/07/03 22:40:46 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 2 km; Longitude uncertainty: 4 km, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EVR** | **Evrytania** | **0.09** | **289** | P | Pg | 03 59 29.7 | +0.1 |
| EVR | | | | S | Sg | 03 59 31.9 | -0.2 |
| **MAKR** | **Makrakomi, Fth** | **0.21** | **54** | P | Pg | 03 59 31.0 | +0.1 |
| MAKR | | | | S | Sg | 03 59 34.6 | 0.0 |
| **ANX** | **Ano Chora** | **0.29** | **179** | P | Pg | 03 59 32.1 | -0.2 |
| ANX | | | | S | Sb | 03 59 37.1 | +0.2 |
| **EFP** | **Efpalio** | **0.46** | **181** | P | Pg | 03 59 35.1 | 0.0 |
| EFP | | | | S | Sb | 03 59 42.1 | +0.4 |
| **KLV** | **Kalavryta, Ach** | **0.86** | **167** | P | Pb | 03 59 41.9 | -0.2 |

*UCR **23** 04:04:44.4±1.1, 9.76N×83.96W, h6km±3km, MW3.6, Fault plane solution: NP1:φ₀58.61000°, δ80.15000°, λ1.75000°.*
*CATAC **23** 04:04:44.4±0.2, 9.77N×83.95W, h4km±1km, ML3.6*
*UPA **23** 04:04:45.8±2.1, 9.87N×83.85W, h0km±83km, MD3.8, MW4.1*

**ISC 23 04:04:44.5±0.8, 9°73'N±0°02×83°97'W±0°02, h9km±4km, n67, σ0$50/96, 17C-20D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LCR2** | **La Lucha 2** | **0.04** | **285** | *i* P | **Pg** | **04 04 46.2** | **-0.3** |
| LCR2 | | | | *i* S | **Sg** | **04 04 47.3** | **-0.6** |
| LCR2 | | | | IAML | | 04 04 47.4 | |
| | comp=Z,66μm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **0.04** | **285** | *e*P | **Pg** | **04 04 46.2** | **-0.3** |
| LCR2 | | | | *e*S | **Sg** | **04 04 47.2** | **-0.7** |
| **ABE2** | **San Pablo** | **0.09** | **252** | *e*P | **Pg** | **04 04 47.2** | **+0.1** |
| ABE2 | | | | *e*S | **Sg** | **04 04 49.1** | **+0.3** |
| **RAZU** | **San Marcos de** | **0.09** | **216** | *e*P | **Pg** | **04 04 47.2** | **+0.2** |
| RAZU | | | | *e*S | **Sg** | **04 04 49.3** | **+0.5** |
| **REPA** | **Paraso** | **0.14** | **46** | *e*P | **Pg** | **04 04 48.5** | **+0.8** |
| REPA | | | | *e*S | **Sg** | **04 04 50.6** | **+0.7** |
| **TAGO** | **Cartago** | **0.14** | **18** | *e*P | **Pg** | **04 04 47.6** | **-0.1** |
| TAGO | | | | *e*S | **Sg** | **04 04 50.0** | **0.0** |
| **TRIO** | **Tres Rios** | **0.17** | **352** | *e*P | **Pg** | **04 04 48.1** | **-0.2** |
| TRIO | | | | *e*S | **Sg** | **04 04 50.7** | **-0.2** |
| **AMPA** | **Desamparados** | **0.19** | **331** | *e*P | **Pg** | **04 04 49.4** | **+0.9** |
| AMPA | | | | *e*S | **Sg** | **04 04 52.0** | **+0.7** |
| **ACOS** | **Acosta** | **0.20** | **288** | *e*P | **Pg** | **04 04 49.1** | **+0.3** |
| ACOS | | | | *e*S | **Sg** | **04 04 52.5** | **+0.8** |
| **LUJA** | **Lujan** | **0.22** | **332** | *e*P | **Pg** | **04 04 50.2** | **+1.1** |
| **SJS3** | **Mercedes San J** | **0.22** | **338** | *e*P | **Pg** | **04 04 49.4** | **+0.3** |
| **SJS** | **Escuela Geolog** | **0.22** | **338** | *e*P | **Pg** | **04 04 49.3** | **+0.1** |
| **CENT** | **San Jose** | **0.23** | **331** | *e*P | **Pg** | **04 04 50.4** | **+1.1** |
| **LUPE** | **Guadalupe** | **0.23** | **338** | *e*P | **Pg** | **04 04 49.4** | **+0.1** |
| **MEXI** | **Barrio Mexico** | **0.24** | **331** | *e*P | **Pg** | **04 04 49.6** | **+0.2** |
| **PCAYA** | **Pacayas** | **0.24** | **40** | *e*P | **Pg** | **04 04 49.6** | **+0.1** |
| PCAYA | | | | *e*S | **Sg** | **04 04 53.2** | **+0.4** |
| **CORON** | **Coronado** | **0.24** | **352** | *e*P | **Pg** | **04 04 49.8** | **+0.3** |
| **VINA** | **Juan Vinas** | **0.27** | **54** | *e*P | **Pg** | **04 04 50.2** | **+0.2** |
| **RAFA** | **San Farael, Vo** | **0.27** | **35** | *i* P | **Pg** | **04 04 50.2** | **0.0** |
| RAFA | | | | *i* S | **Sg** | **04 04 53.1** | **-0.8** |
| RAFA | | | | IAML | | 04 04 54.7 | |
| | comp=Z,27μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **0.27** | **35** | *e*P | **Pg** | **04 04 50.2** | **0.0** |
| **DOMI** | **Santo Domingo** | **0.28** | **334** | *e*P | **Pg** | **04 04 50.4** | **+0.3** |
| **VICA** | **Volcano Irazu** | **0.28** | **26** | *e*P | **Pg** | **04 04 50.3** | **-0.1** |
| **BUS1** | **Rivas** | **0.28** | **129** | *e*P | **Pg** | **04 04 50.4** | **+0.1** |
| BUS1 | | | | *e*S | **Sg** | **04 04 54.8** | **+0.6** |
| **LLNJ** | **Naranjito** | **0.29** | **207** | *e*P | **Pb** | **04 04 51.5** | **-0.4** |
| **CVIMO** | **Finca Echandi** | **0.29** | **5** | *e*P | **Pg** | **04 04 50.6** | **+0.1** |
| **SANTA** | **Santa Ana** | **0.29** | **313** | *e*P | **Pg** | **04 04 50.5** | **0.0** |
| SANTA | | | | *e*S | **Sg** | **04 04 54.6** | **+0.2** |
| **HDC3** | **Heredia 3** | **0.30** | **332** | *i* P | **Pg** | **04 04 50.9** | **+0.2** |
| HDC3 | | | | *i* S | **Sg** | **04 04 54.1** | **-0.6** |
| HDC3 | | | | IAML | | 04 04 56.2 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **HDC** | **Heredia** | **0.30** | **332** | *e*P | **Pg** | **04 04 50.8** | **+0.1** |
| HDC | | | | *e*S | **Sg** | **04 04 55.6** | **+0.9** |
| **BELE** | **Belen** | **0.33** | **318** | *e*P | **Pg** | **04 04 51.0** | **-0.1** |
| BELE | | | | *e*S | **Sg** | **04 04 55.7** | **+0.3** |
| **VTLA** | **Turrialba Volc** | **0.33** | **35** | *e*P | **Pg** | **04 04 51.2** | **0.0** |
| **CVTQ** | **Turrialba Volc** | **0.34** | **36** | *e*P | **Pg** | **04 04 51.4** | **+0.1** |
| **VERB** | **Verbena** | **0.34** | **52** | *e*P | **Pg** | **04 04 51.6** | **+0.2** |
| **VTCV** | **VTCV, Calle Va** | **0.35** | **44** | *e*P | **Pg** | **04 04 51.5** | **+0.1** |
| **CVTV** | **Tajo** | **0.35** | **39** | *e*P | **Pg** | **04 04 51.7** | **+0.1** |
| **VTR0** | **Volcan Turrial** | **0.35** | **36** | *e*P | **Pg** | **04 04 51.6** | **0.0** |
| **CVTR** | **Volcan Turrial** | **0.35** | **36** | *e*P | **Pg** | **04 04 51.7** | **0.0** |
| **RVSTA** | **Santa Teresita** | **0.40** | **52** | *e*P | **Pg** | **04 04 52.6** | **+0.2** |
| **RITA** | **Parrita** | **0.41** | **240** | *e*P | **Pb** | **04 04 54.3** | **+0.2** |
| **TCS1** | **Tacares** | **0.45** | **313** | *i* P | **Pg** | **04 04 53.7** | **+0.3** |
| TCS1 | | | | IAML | | 04 05 03.0 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **TCS1** | **Tacares** | **0.45** | **313** | *e*P | **Pg** | **04 04 53.6** | **+0.3** |
| **RVLA** | **Villa Bonita** | **0.53** | **45** | *e*P | **Pg** | **04 04 55.0** | **+0.2** |
| **LCOCO** | **El Coco** | **0.54** | **49** | *e*P | **Pg** | **04 04 55.1** | **+0.1** |
| **OCHAL** | **Ojochal** | **0.71** | **153** | *i* P | **Pb** | **04 04 58.9** | **-0.1** |
| OCHAL | | | | *i* S | **Sb** | **04 05 10.0** | **+1.1** |
| OCHAL | | | | IAML | | 04 05 13.3 | |
| | comp=Z,700nm,1.0s | | | | | | |
| **ARZA** | **Esparza** | **0.73** | **291** | *e*P | **Pg** | **04 04 58.4** | **-0.3** |
| **DRK0** | **Durika** | **0.85** | **123** | *i* P | **Pg** | **04 04 59.9** | **-1.1** |
| DRK0 | | | | *i* S | **Sg** | **04 05 11.6** | **-0.5** |
| DRK0 | | | | IAML | | 04 05 12.3 | |
| | comp=Z,5μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.85** | **123** | *e*P | **Pg** | **04 04 59.9** | **-1.1** |
| **SOCE** | **Pocosol** | **0.91** | **315** | *i* P | **Pg** | **04 05 01.8** | **-0.3** |
| SOCE | | | | *i* S | **Sg** | **04 05 14.2** | **+0.3** |
| SOCE | | | | IAML | | 04 05 16.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **SOCE** | **Pocosol** | **0.91** | **315** | *e*P | **Pg** | **04 05 01.7** | **-0.3** |
| **VACR** | **Volcan Arenal** | **1.01** | **317** | *e*P | **Pg** | **04 05 03.5** | **-0.6** |
| **ARE1** | **Arenal 1** | **1.03** | **315** | *e*P | **Pg** | **04 05 03.8** | **-0.6** |
| **COVE** | **Coope Vega, Sa** | **1.07** | **337** | *i* P | **Pg** | **04 05 04.5** | **-0.6** |
| COVE | | | | *i* S | **Sb** | **04 05 19.1** | **-0.3** |
| COVE | | | | IAML | | 04 05 24.7 | |
| | comp=Z,320nm,1.0s | | | | | | |
| **BRIBI** | **Bribri** | **1.11** | **95** | *e*P | **Pn** | **04 05 06.7** | **+0.4** |
| **JTS** | **Las Juntas de** | **1.12** | **300** | *e*P | **Pg** | **04 05 04.9** | **-1.2** |
| **JUNT** | **Juntas** | **1.12** | **299** | *e*P | **Pg** | **04 05 05.1** | **-0.9** |
| **TENO** | **El Achiote** | **1.39** | **314** | *e*P | **Pg** | **04 05 10.9** | **-0.3** |
| **CNI2** | **El Empalme, Bo** | **1.51** | **102** | *e*P | **Pn** | **04 05 11.4** | **-0.4** |
| CNI2 | | | | *e*S | **Sb** | **04 05 31.8** | **-0.2** |
| **INDI** | **Punta indio, G** | **1.52** | **275** | *i* P | **Pn** | **04 05 11.9** | **0.0** |
| INDI | | | | IAML | | 04 05 38.8 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.57** | **126** | *i* P | **Pn** | **04 05 13.2** | **+0.5** |
| BRU2 | | | | *i* S | **Sg** | **04 05 35.1** | **0.0** |
| BRU2 | | | | IAML | | 04 05 38.9 | |
| | comp=Z,320nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.57** | **126** | *e*P | **Pb** | **04 05 13.4** | **-0.5** |
| BRU2 | | | | *e*S | **Sg** | **04 05 35.1** | **0.0** |
| **BCO2** | **Palmira** | **1.74** | **125** | *e*P | **Pb** | **04 05 16.7** | **-0.1** |
| BCO2 | | | | *e*S | **Sg** | **04 05 40.5** | **-0.1** |
| **LNBQ3** | **Los Naranjos,** | **1.77** | **122** | *e*P | **Pn** | **04 05 16.3** | **+0.8** |
| LNBQ3 | | | | *e*S | **Sb** | **04 05 40.0** | **+0.2** |
| **PTPM** | **Petroterminale** | **1.86** | **145** | *e*P | **Pg** | **04 05 20.5** | **+0.3** |
| PTPM | | | | *e*S | **Sg** | **04 05 45.3** | **+0.9** |
| **CHGR2** | **Aguacate** | **1.97** | **114** | *e*P | **Pb** | **04 05 19.9** | **-0.6** |
| CHGR2 | | | | *e*S | **Sb** | **04 05 45.1** | **-0.1** |
| **DVD** | **David** | **1.98** | **131** | *e*P | **Pb** | **04 05 20.6** | **-0.1** |
| DVD | | | | *e*S | **Sg** | **04 05 47.4** | **-0.7** |
| **BOAB** | **BOACO BROADBAN** | **3.17** | **328** | *i* P | **Pn** | **04 05 33.6** | **-1.1** |
| BOAB | | | | *i* S | **Sn** | **04 06 13.3** | **+0.6** |
| BOAB | | | | IAML | | 04 06 21.6 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **R4DEC** | **Barrio San Lui** | **3.28** | **317** | *i* P | **Pn** | **04 05 36.2** | **0.0** |
| R4DEC | | | | *i* P | Pb | 04 05 36.4 | -6.6 |
| R4DEC | | | | IAML | | 04 05 46.0 | |
| | comp=Z,290nm,1.0s | | | | | | |
| R4DEC | | | | IAML | | 04 07 47.9 | |
| | comp=Z,340nm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **4.12** | **98** | *i* P | **Pn** | **04 05 48.1** | **+0.5** |
| BCIP | | | | IAML | | 04 07 51.0 | |
| | comp=Z,84nm,1.0s | | | | | | |

*MOS **23** 04:30:38.6±1.0, 69.59N×144.20W, h12km, mb4.5/9, Error ellipse: s-maj=30.0km s-min=7.3km az=90.6*
*AEIC **23** 04:30:39.0±1.5, 69.50N±0.05×144.3W±0.1, h12km±5km, ML4.5, mb4.7/2(NEIC), ML4.6/118(NEIC), Mwr4.4/15(SLM), Error ellipse: s-maj=7.1km s-min=5.3km az=189.0*
*IDC **23** 04:30:39.2±0.6, 69.69N×144.42W, h0km, mb4.0/19, mbtmp4.0/23, ML4.3/4, Error ellipse: s-maj=17.2km s-min=10.7km az=57.0*
*NEIC **23** 04:30:40.3±1.5, 69.58N±0.05×144.25W±0.06, h10km±1km, Error ellipse: s-maj=8.2km s-min=3.4km az=2.0*
*NEIC **23** 04:30:40, 69.52N×144.30W, h17km, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$2.31; $M_{\theta\theta}$-3.92; $M_{\phi\phi}$ 1.61; $M_{r\theta}$2.60; $M_{\theta\phi}$-2.93; $M_{\phi r}$-1.97; Fault plane solution: $M_0$5.56000×$10^{15}$ NP1:φ₀210.00000°, δ50.00000°, λ25.00000°. NP2:φ₀103.00000°, δ71.00000°, λ137.00000°. Principal axes: T 5.5553, Plg43.0000°, Azm59.0000°; N 0.0021, Plg44.0000°, Azm264.0000°; P -5.5574, Plg13.0000°, Azm161.0000°;*

**ISC 23 04:30:39.6±1.1, 69°53N±0°04×144°27W±0°03, h5km±7km, n213, σ1$23/223, mb4.2/29, 2C, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.22** | **64** | | **Pg** | **04 30 44.2** | **+0.3** |
| C27K | | | | | **Sg** | **04 30 47.8** | **+1.0** |
| **C26K** | **Camden Bay** | **0.45** | **330** | | **Pg** | **04 30 49.1** | **+0.9** |
| **D25K** | **Kavik River** | **0.77** | **255** | | **Pg** | **04 30 53.1** | **-1.3** |
| **D25K** | **Kavik River** | **0.77** | **255** | | **Sg** | **04 31 03.9** | **-0.5** |
| **D27M** | **Malcolm River** | **1.21** | **102** | | **Pn** | **04 31 01.3** | **-1.8** |
| **D27M** | **Malcolm River** | **1.21** | **102** | | **Sb** | **04 31 18.6** | **-0.2** |
| **D27M** | **Malcolm River** | **1.21** | **102** | IAML | | 04 31 24.7 | |
| | comp=E,7μm,0.6s | | | | | | |
| D27M | | | | IAML | | 04 31 25.0 | |
| | comp=N,8μm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.56** | **279** | | **Pn** | **04 31 08.2** | **+0.2** |
| C24K | | | | Sg | **Sb** | **04 31 30.2** | **+1.3** |
| C24K | | | | IAML | | 04 31 34.7 | |
| | comp=E,10μm,1.1s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **259** | Pn | **Pn** | **04 31 09.6** | **+0.3** |
| D24K | | | | | **Sb** | **04 31 33.4** | **+1.7** |
| D24K | | | | IAML | | 04 31 34.2 | |
| | comp=E,8μm,0.6s | | | | | | |
| D24K | | | | IAML | | 04 31 41.1 | |
| | comp=N,8μm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.66** | **143** | | **Pn** | **04 31 09.8** | **+0.4** |
| E27K | | | | | **Sn** | **04 31 32.2** | **+1.1** |
| **F26K** | **Sheenjek River** | **1.84** | **179** | | **Pn** | **04 31 12.6** | **+0.7** |
| F26K | | | | | **Sn** | **04 31 36.9** | **+1.3** |
| F26K | | | | IAML | | 04 31 43.4 | |
| | comp=N,4μm,0.5s | | | | | | |
| F26K | | | | IAML | | 04 31 43.8 | |
| | comp=E,6μm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **1.94** | **116** | Pn | **Pn** | **04 31 14.1** | **+1.0** |
| E28M | | | | | **Sb** | **04 31 40.5** | **+0.7** |
| E28M | | | | IAML | | 04 31 45.0 | |
| | comp=N,5μm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **1.97** | **93** | | **Pn** | **04 31 14.4** | **+1.0** |
| **F25K** | **Christian River** | **2.01** | **195** | | **Pn** | **04 31 15.0** | **+0.8** |
| F25K | | | | | **Sn** | **04 31 41.9** | **+2.2** |
| F25K | | | | IAML | | 04 31 45.1 | |
| | comp=E,4μm,0.7s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.10** | **247** | Pn | **Pn** | **04 31 15.8** | **+0.3** |
| TOLK | | | | IAML | | 04 31 52.1 | |
| | comp=E,4μm,0.6s | | | | | | |
| TOLK | | | | IAML | | 04 31 57.6 | |
| | comp=N,3μm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.11** | **183** | Pn | **Pn** | **04 31 16.1** | **+0.5** |
| **E24K** | **Your Creek** | **2.12** | **228** | | **Pn** | **04 31 16.5** | **+0.8** |
| **C23K** | **Itkillik River** | **2.23** | **281** | Pn | **Pn** | **04 31 17.4** | **+0.2** |
| **D23K** | **Nanushuk River** | **2.35** | **259** | Pn | **Pn** | **04 31 19.5** | **+0.6** |
| D23K | | | | IAML | | 04 32 12.1 | |
| | comp=N,3μm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.42** | **215** | Pn | **Pn** | **04 31 20.6** | **+0.8** |
| **E23K** | **Chandalar** | **2.44** | **235** | | **Pn** | **04 31 20.6** | **+0.5** |
| E23K | | | | IAML | | 04 32 00.0 | |
| | comp=N,3μm,0.7s | | | | | | |
| **F28M** | **Old Crow** | **2.51** | **138** | Pn | **Pn** | **04 31 21.7** | **+0.6** |
| F28M | | | | IAML | | 04 32 06.0 | |
| | comp=N,3μm,0.5s | | | | | | |
| F28M | | | | IAML | | 04 32 08.1 | |
| | comp=E,3μm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.57** | **113** | Pn | **Pn** | **04 31 22.4** | **+0.6** |
| E29M | | | | IAML | | 04 32 02.2 | |
| | comp=N,4μm,0.8s | | | | | | |
| E29M | | | | IAML | | 04 32 08.3 | |
| | comp=E,3μm,0.9s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.60** | **176** | | **Pn** | **04 31 22.6** | **+0.4** |
| **G25K** | **Bearman Lake** | **2.86** | **195** | | **Pn** | **04 31 26.6** | **+0.8** |
| **G27K** | **Doyon Strip** | **2.90** | **159** | | **Pn** | **04 31 26.7** | **+0.2** |
| **FYU** | **Fort Yukon** | **3.00** | **187** | Pn | **Pn** | **04 31 28.5** | **+0.8** |
| FYU | | | | IAML | | 04 32 21.7 | |
| | comp=E,2μm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **3.07** | **262** | Pn | **Pn** | **04 31 28.9** | **+0.2** |
| D22K | | | | IAML | | 04 32 28.1 | |
| | comp=E,2μm,1.1s | | | | | | |
| D22K | | | | IAML | | 04 32 36.3 | |
| | comp=N,2μm,1.0s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.08** | **246** | | **Pn** | **04 31 28.6** | **-0.2** |
| **G24K** | **Hadweenzic Riv** | **3.09** | **204** | | **Pn** | **04 31 29.3** | **+0.4** |
| G24K | | | | IAML | | 04 32 17.2 | |
| | comp=E,2μm,1.0s | | | | | | |
| G24K | | | | IAML | | 04 32 24.6 | |
| | comp=N,2μm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **3.19** | **226** | | **Pn** | **04 31 30.9** | **+0.6** |
| **B22K** | **Teshekpuk Lake** | **3.26** | **289** | Pn | **Pn** | **04 31 31.7** | **+0.5** |
| **H25L** | **Birch Creek** | **3.33** | **191** | | **Pn** | **04 31 33.0** | **+0.8** |
| **H27K** | **Steamboat Moun** | **3.47** | **161** | | **Pn** | **04 31 35.0** | **+0.8** |
| **G29M** | **Pine Creek** | **3.51** | **136** | | **Pn** | **04 31 35.5** | **+0.7** |
| **F22K** | **John River** | **3.55** | **239** | | **Pn** | **04 31 35.5** | **+0.3** |
| **G23K** | **Bananza Creek** | **3.56** | **220** | | **Pn** | **04 31 35.4** | **-0.1** |
| G23K | | | | IAML | | 04 32 36.1 | |
| | comp=E,1μm,0.7s | | | | | | |
| G23K | | | | IAML | | 04 32 39.6 | |
| | comp=N,1μm,0.8s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.63** | **276** | | **Pn** | **04 31 36.6** | **+0.3** |
| **E21K** | **Killik River** | **3.66** | **257** | | **Pn** | **04 31 36.3** | **-0.5** |
| E21K | | | | IAML | | 04 32 43.5 | |
| | comp=N,1μm,0.7s | | | | | | |
| E21K | | | | IAML | | 04 32 45.1 | |
| | comp=E,945nm,0.8s | | | | | | |
| **F30M** | **Barrier River** | **3.66** | **118** | | **Pn** | **04 31 38.7** | **+1.9** |
| **C21K** | **Knifeblade Rid** | **3.74** | **269** | | **Pn** | **04 31 38.5** | **+0.6** |
| **G22K** | **Bettles** | **3.76** | **229** | | **Pn** | **04 31 38.1** | **0.0** |
| **A22K** | **Sinclair Lake** | **3.92** | **297** | | **Pn** | **04 31 41.1** | **+0.8** |
| **G30M** | **tAoh Zrail Nji** | **3.94** | **127** | | **Pn** | **04 31 41.4** | **+0.8** |
| G30M | | | | IAML | | 04 32 52.8 | |
| | comp=N,766nm,1.2s | | | | | | |
| G30M | | | | IAML | | 04 33 02.8 | |
| | comp=E,604nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **3.96** | **202** | | **Pn** | **04 31 41.1** | **+0.2** |
| H24K | | | | IAML | | 04 32 51.0 | |
| | comp=N,836nm,0.7s | | | | | | |
| H24K | | | | IAML | | 04 32 52.3 | |
| | comp=E,765nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **4.00** | **143** | Pn | **Pn** | **04 31 42.3** | **+0.8** |
| **PRP** | **Porcupine Dome** | **4.06** | **187** | Pn | **Pn** | **04 31 43.1** | **+0.7** |
| PRP | | | | IAML | | 04 32 34.9 | |
| | comp=N,767nm,0.5s | | | | | | |
| PRP | | | | IAML | | 04 32 54.4 | |
| | comp=E,608nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.07** | **102** | Pn | **Pn** | **04 31 42.7** | **+0.3** |
| **INK** | **Inuvik** | **4.07** | **102** | Pn | **Pn** | **04 31 42.8** | **+0.4** |
| | comp=E,7.7nm,0.3s,baz=302,slow=9.7,SNR=125 | | | | | | |
| INK | | | | | **Sn** | **04 32 30.8** | **+0.5** |
| | comp=E,21nm,0.3s,baz=71,slow=22,SNR=7.4 | | | | | | |
| INK | | | | Lg | Lg | 04 32 47.6 | |
| | comp=E,20nm,0.3s,baz=174,slow=32,SNR=5.1 | | | | | | |
| | comp=E,59nm,0.4s | | | | | | |
| **I27K** | **Kandik River** | **4.07** | **164** | | **Pn** | **04 31 43.4** | **+0.9** |
| **F21K** | **Alatna River** | **4.12** | **240** | Pn | **Pn** | **04 31 43.5** | **+0.4** |
| F21K | | | | IAML | | 04 32 56.6 | |
| | comp=E,842nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.23** | **211** | Pn | **Pn** | **04 31 44.9** | **+0.3** |
| H23K | | | | IAML | | 04 33 00.7 | |
| | comp=N,750nm,0.8s | | | | | | |
| H23K | | | | IAML | | 04 33 01.4 | |
| | comp=E,738nm,1.2s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.26** | **135** | Pn | **Pn** | **04 31 45.8** | **+0.7** |
| **I26K** | **Coal Creek Min** | **4.26** | **174** | | **Pn** | **04 31 45.8** | **+0.7** |
| **F31M** | **Tsiigehtchic** | **4.41** | **113** | Pn | **Pn** | **04 31 47.3** | **+0.3** |
| F31M | | | | IAML | | 04 33 01.7 | |
| | comp=N,541nm,0.7s | | | | | | |
| **I28M** | **Miner Creek** | **4.42** | **156** | Pn | **Pn** | **04 31 48.4** | **+1.0** |
| I28M | | | | IAML | | 04 32 44.0 | |
| | comp=N,591nm,0.5s | | | | | | |
| I28M | | | | IAML | | 04 33 07.5 | |
| | comp=E,551nm,1.1s | | | | | | |
| **D20K** | **Etivluk River** | **4.49** | **265** | | **Pn** | **04 31 49.3** | **+1.1** |
| **E20K** | **Nigu River** | **4.49** | **259** | | **Pn** | **04 31 48.0** | **-0.3** |
| **B20K** | **Meade River** | **4.50** | **282** | | **Pn** | **04 31 49.0** | **+0.7** |
| **A21K** | **Barrow** | **4.52** | **299** | | **Pn** | **04 31 49.5** | **+0.9** |
| **H22K** | **Ishtalitna Cre** | **4.54** | **220** | | **Pn** | **04 31 49.0** | **0.0** |
| **G31M** | **Satah River** | **4.55** | **120** | Pn | **Pn** | **04 31 49.6** | **+0.6** |
| **POKR** | **Poker Plat Res** | **4.60** | **197** | | **Pn** | **04 31 50.9** | **+1.2** |
| POKR | | | | IAML | | 04 33 10.9 | |
| | comp=N,393nm,0.8s | | | | | | |
| POKR | | | | IAML | | 04 33 16.8 | |
| | comp=E,505nm,1.1s | | | | | | |
| **G21K** | **Allakaket** | **4.60** | **233** | Pn | **Pn** | **04 31 49.6** | **-0.1** |
| G21K | | | | IAML | | 04 33 10.7 | |
| | comp=E,635nm,0.7s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.82** | **206** | | **Pn** | **04 31 53.3** | **+0.6** |
| I23K | | | | IAML | | 04 33 18.9 | |
| | comp=N,470nm,1.1s | | | | | | |
| I23K | | | | IAML | | 04 33 28.1 | |
| | comp=E,519nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **200** | Pn | **Pn** | **04 31 53.7** | **+0.6** |
| MDM | | | | IAML | | 04 33 20.3 | |
| | comp=N,282nm,0.7s | | | | | | |
| MDM | | | | IAML | | 04 33 21.1 | |
| | comp=E,306nm,0.8s | | | | | | |
| **COLA** | **College** | **4.88** | **198** | *i* P | **Pn** | **04 31 54.2** | **+0.7** |
| **IL31** | | **4.89** | **193** | | **Pn** | **04 31 54.4** | **+0.9** |
| **ILAR** | **Eielson Array** | **4.89** | **193** | Pn | **Pn** | **04 31 54.1** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.89** | **193** | Pn | **Pn** | **04 31 54.5** | **+0.9** |
| | comp=E,11nm,0.3s,baz=6.1,slow=13,SNR=393 | | | | | | |
| ILAR | | | | | **Sn** | **04 32 50.4** | **-0.1** |
| | comp=E,17nm,0.3s,baz=8.1,slow=26,SNR=11 | | | | | | |
| ILAR | | | | Lg | Lg | 04 33 08.4 | |
| | comp=E,27nm,0.3s,baz=10,slow=28,SNR=4.4 | | | | | | |
| | comp=E,39nm,0.5s | | | | | | |
| **EGAK** | **Eagle** | **4.93** | **164** | | **Pn** | **04 31 54.8** | **+0.7** |
| EGAK | | | | IAML | | 04 32 53.4 | |
| | comp=E,391nm,1.1s | | | | | | |
| EGAK | | | | IAML | | 04 33 23.6 | |
| | comp=E,312nm,0.9s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.93** | **245** | | **Pn** | **04 31 54.7** | **+0.6** |
| F20K | | | | IAML | | 04 33 27.4 | |
| | comp=N,302nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **4.96** | **185** | | **Pn** | **04 31 55.5** | **+0.9** |
| J25K | | | | IAML | | 04 33 20.9 | |
| | comp=E,368nm,1.1s | | | | | | |
| **J26L** | **Joseph Creek** | **5.06** | **177** | | **Pn** | **04 31 57.0** | **+0.9** |
| J26L | | | | IAML | | 04 33 19.1 | |
| | comp=E,335nm,0.7s | | | | | | |
| J26L | | | | IAML | | 04 33 23.7 | |
| | comp=N,251nm,0.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.08** | **224** | | **Pn** | **04 31 56.7** | **+0.5** |
| H21K | | | | IAML | | 04 33 31.5 | |
| | comp=E,492nm,0.9s | | | | | | |
| H21K | | | | IAML | | 04 33 31.6 | |
| | comp=N,410nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **5.08** | **265** | Pn | **Pn** | **04 31 56.9** | **+0.6** |
| D19K | | | | IAML | | 04 33 43.1 | |
| | comp=N,492nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09** | **197** | | **Pn** | **04 31 57.3** | **+0.9** |
| CCB | | | | IAML | | 04 33 23.3 | |
| | comp=N,237nm,0.5s | | | | | | |
| CCB | | | | IAML | | 04 33 28.0 | |
| | comp=E,236nm,0.9s | | | | | | |
| **MLY** | **Manley** | **5.17

BALM Baldy 8.57 174 Pn Pn 04 32 46.8 +2.6
I17K Unalakleet 8.60 237 Pn Pn 04 32 45.0 +0.5
N30M Aishikik Lake 8.63 156 Pn 04 32 45.8 +0.8
F15K North Star Dit 8.64 253 Pn Pn 04 32 43.8 -1.3
STLK Strandline Lak 8.64 205 Pn 04 32 46.8 +1.6
KIAG Kiagna River 8.68 174 Pn 04 32 48.8 +3.0
M19K Big River Lodg 8.70 213 Pn Pn 04 32 46.7 +0.7
YUK5 Granite Creek 8.84 159 Pn 04 32 49.5 +1.5
G15K Niukluk 8.88 249 Pn 04 32 47.5 -0.8
O28M Mount Upton 8.96 167 Pn 04 32 52.6 +2.9
YUK6 Outpost Mounta 8.97 161 Pn 04 32 51.4 +1.7
GOAT Goat Mountain 8.99 181 Pn 04 32 52.8 +2.8
BAGL Bagley Icefiel 9.12 173 Pn 04 32 55.4 +3.7
KHIT Khitrov Hills 9.14 177 Pn 04 32 55.8 +3.8
BARK Barkley Ridge 9.20 174 Pn 04 32 56.7 +3.9
F14K Arctic Creek 9.35 255 Pn 04 32 53.4 -1.3
L17K Donlin 9.36 224 Pn 04 32 55.1 +0.1
M18K Stony River 9.37 216 Pn 04 32 55.3 +0.3
YUK7 Dusty Glacier 9.39 161 Pn 04 32 57.8 +2.2
O30N Mendenhall 9.43 155 Pn Pn 04 32 56.6 +0.6
O29M Mount Kennedy 9.57 163 Pn 04 33 00.6 +2.7
P29M Windy Craggy 10.32 161 Pn 04 33 11.1 +2.9
WRGLY Wrigley 10.42 117 Pn Pn 04 33 08.8 -0.6
Q32M Nakina River 11.79 148 Pn Pn 04 33 30.1 +1.7
DLBC Dease Lake 12.71 144 Pn Pn 04 33 41.9 +1.0
DLBC Dease Lake 12.71 144 Pn Pn 04 33 40.9 0.0
comp=E,1.4nm,0.3s,baz=334,slow=8.3,SNR=22
DLBC Sn Sn 04 35 59.5 -3.2
comp=E,0.2nm,0.3s,baz=198,slow=20,SNR=2.4
comp=E,6.6nm,0.6s
YKA Yellowknife Ar 13.83 106 Pn Pn 04 33 51.6 -4.4
comp=E,1.7nm,0.3s,baz=315,slow=13,SNR=34
YKA Sn Sn 04 36 15.9 -14
comp=E,2.8nm,0.3s,baz=312,slow=24,SNR=8.3
comp=E,4.6nm,0.5s
BILL Bilibino 17.57 289 ⇑ *e*P Pn 04 34 43.7 -1.1
BILL pmax pmax
comp=Z,16nm,1.5s
BILL MLR MLR
comp=Z,2μm,15.0s
SEY Seymchan 25.23 286 *i* P P 04 36 07.4 +1.5
SEY pmax pmax
comp=Z,17nm,1.5s
SPITS Spitsbergen Ar 32.06 7 P P 04 37 06.1 -0.5
comp=Z,0.7nm,0.4s,baz=33,slow=6.3,SNR=6.2
comp=Z,0.7nm,0.4s
PDAR Pinedale Array 32.19 128 P P 04 37 10.0 +1.6
comp=Z,1.4nm,0.7s,baz=357,slow=5.8,SNR=14
comp=Z,1.4nm,0.7s
NVAR Mina Array Bea 34.12 142 P P 04 37 27.2 +2.0
comp=Z,1.5nm,0.8s,baz=346,slow=6.3,SNR=13
comp=Z,1.5nm,0.8s
SCHQ Schefferville 36.12 73 P P 04 37 42.0 0.0
comp=Z,6.4nm,0.8s,baz=311,slow=10,SNR=5.1
comp=Z,6.4nm,0.8s
ANMO Albuquerque 40.35 129 *i* P P 04 38 17.7 -0.3
ANMO pmax pmax
comp=Z,1.0nm,0.8s
ARCES ARCESS Array B 41.02 5 P P 04 38 23.1 +0.1
comp=Z,1.6nm,0.8s,baz=359,slow=9.0,SNR=4.5
comp=Z,1.6nm,0.8s
KLR Kul'dur 43.02 287 P P 04 38 40.5 +1.0
KLR pmax pmax
comp=Z,27nm,3.2s
TXAR Lajitas Array 46.41 128 P P 04 39 07.8 +0.9
comp=Z,0.7nm,0.6s,baz=354,slow=8.0,SNR=12
comp=Z,0.7nm,0.6s
USRK Ussuriysk Ar. 47.32 283 P P 04 39 13.9 +0.2
comp=Z,1.8nm,0.7s,baz=28,slow=8.8,SNR=4.4
comp=Z,1.8nm,0.7s
FINES FINESS Array B 49.13 6 P P 04 39 25.3 -2.2
comp=Z,3.2nm,0.9s,baz=12,slow=9.9,SNR=8.8
comp=Z,3.2nm,0.9s
FINES FINESS Array B 49.13 6 *i* P P 04 39 27.6 +0.2
FINES pmax pmax
comp=Z,2.0nm,0.7s
VALR Valaam 49.35 3 *i* P P 04 39 27.0 -2.1
VALR pmax pmax
comp=Z,77nm,1.0s
HFS Hagfors 49.67 14 P P 04 39 29.2 -2.4
comp=Z,1.0nm,0.5s,baz=350,slow=5.9,SNR=1.5
comp=Z,1.0nm,0.5s
ZALV Zalesovo Beam 51.77 325 P P 04 39 44.7 -2.7
comp=Z,0.6nm,0.3s,baz=14,slow=6.5,SNR=4.3
comp=Z,0.6nm,0.3s
ZALV Zalesovo Beam 51.77 325 *i* P P 04 39 46.0 -1.4
ZALV pmax pmax
comp=Z,1.0nm,0.6s
MJAR Matsushiro Arr 51.96 273 P P 04 39 47.6 -1.6
comp=Z,0.9nm,0.3s,baz=12,slow=9.9,SNR=2.0
comp=Z,0.9nm,0.3s
SONM Songino Array 52.17 306 P P 04 39 51.0 +0.2
comp=Z,0.3nm,0.3s,baz=15,slow=6.3,SNR=2.4
comp=Z,0.3nm,0.3s
SONM Songino Array 52.17 306 P P 04 39 51.0 +0.2
EKA Eskdalemuir Ar 52.28 27 P P 04 39 51.0 -0.3
comp=Z,1.3nm,0.6s,baz=325,slow=6.3,SNR=6.6
comp=Z,1.3nm,0.6s
EKA Eskdalemuir Ar 52.28 27 P P 04 39 51.0 -0.3
ARU Arti 53.26 344 *c i* P P 04 39 57.9 -0.6
ARU 04 41 56.7
ARU S S 04 47 31.7 +2.1
ARU SS SS 04 51 06.2 -2.1
ARU pmax pmax
comp=Z,13nm,2.9s
BVAR Borovoye Array 55.16 335 P P 04 40 12.0 -0.4
comp=Z,0.6nm,0.6s,baz=48,slow=6.4,SNR=2.8
comp=Z,0.6nm,0.6s
DGZ Jazzator, Alta 55.23 322 *i* P P 04 40 13.8 +0.7
DGZ pmax pmax
comp=Z,5.0nm,1.8s
KURK Kurchatov 56.03 329 *i* P P 04 40 17.1 -1.6
KURK pmax pmax
comp=Z,6.0nm,1.1s
KURBB Kurchatov Arra 56.14 329 P P 04 40 18.6 -0.8
comp=Z,2.3nm,0.8s,baz=13,slow=7.2,SNR=16
comp=Z,2.3nm,0.8s
HHC Hu-ho-hao-te 57.00 299 *e*P P 04 40 25.8 -0.1
HHC pmax pmax
comp=Z,10.0nm,0.5s
MKAR Makanchi Array 59.07 324 P P 04 40 39.5 -0.7
comp=Z,0.6nm,0.5s,baz=39,slow=7.8,SNR=7.2
comp=Z,0.6nm,0.5s
MKAR Makanchi Array 59.07 324 *i* P P 04 40 41.7 +1.5
MKAR pmax pmax
comp=Z,1.0nm,0.6s
AK21 Malin Array Si 59.91 5 P P 04 40 47.4 +1.6
AK22 Malin Array Si 59.92 5 P P 04 40 47.2 +1.3
AK20 Malin Array Si 59.94 5 P P 04 40 46.2 +0.2
AK03 Malin Array Si 59.96 5 P P 04 40 46.4 +0.2
AK04 Malin Array Si 59.97 5 P P 04 40 46.4 +0.2
AKASG Malin Array Be 59.99 5 P P 04 40 46.0 -0.4
comp=Z,2.3nm,0.5s,baz=358,slow=7.0,SNR=7.4
comp=Z,2.3nm,0.5s
AKBB Malin Array Si 59.99 5 P P 04 40 46.3 -0.1
AKBB IAmb IAmb 04 40 52.1
comp=Z,4.6nm,0.8s
AKBB Malin Array Si 59.99 5 P P 04 40 46.3 -0.1
AKBB pmax pmax
comp=Z,5.0nm,0.8s
KIEV Kiev 59.99 5 P P 04 40 46.3 -0.1
KIEV IAmb IAmb 04 40 52.1
comp=Z,4.1nm,0.7s
KIEV Kiev 59.99 5 P P 04 40 46.3 -0.1
KIEV pmax pmax
comp=Z,4.0nm,0.7s
AK11 Malin Array Si 60.01 5 P P 04 40 46.7 +0.2
AK02 Malin Array Si 60.03 5 P P 04 40 46.9 +0.2
AK12 Malin Array Si 60.04 5 P P 04 40 47.0 +0.2
AK14 Malin Array Si 60.06 5 P P 04 40 47.0 +0.2
AK08 Malin Array Si 60.06 5 P P 04 40 47.1 +0.3
AK05 Malin Array Si 60.07 5 P P 04 40 47.2 +0.3
AK09 Malin Array Si 60.08 5 P P 04 40 46.8 -0.2
AK10 Malin Array Si 60.09 5 P P 04 40 47.3 +0.2
OBKA Obir 63.23 16 *e*pP pP 04 41 12.5 +2.2
comp=Z,5.2nm,0.9s
ESDC Sonseca Array 67.27 32 P P 04 41 35.6 +0.9
comp=Z,0.4nm,0.6s,baz=345,slow=6.8,SNR=3.0
comp=Z,0.4nm,0.6s
BRTR Keskin Array B 71.05 2 P P 04 41 58.8 +0.5
comp=Z,0.9nm,0.9s,baz=324,slow=2.4,SNR=3.3
comp=Z,0.9nm,0.9s
PZH PanZhiHua 73.30 301 P P 04 42 13.0 +1.1
PZH pmax pmax
comp=Z,20nm,1.0s

*IDC* ***23*** *04:36:04.3±6.3, 17.°83S×178.°37W, h567km±74km, mb3.0/6, mbtmp3.9/7, Error ellipse: s-maj=86.9km s-min=31.7km az=153.0*

**ISC 23 04:36:05.2±1.5, 17.°8S±0.°5×178.°4W±0.°3, h579km, n10, σ0s48/10, mb3.3/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 14.86 | 251 | P | P | P | 04 39 13.0 | +0.2 |
| | 2.5nm,0.4s,baz=81,slow=20,SNR=8.0 | | | | | | | |
| CTA | Charters Tower | 33.46 | 260 | P | P | P | 04 41 58.1 | +0.4 |
| | 0.1nm,0.3s,baz=130,slow=14,SNR=4.3 | | | | | | | |
| STKA | Stephens Creek | 38.67 | 241 | P | P | P | 04 42 39.6 | -0.7 |
| | 2.2nm,0.8s,baz=101,slow=14,SNR=4.4 | | | | | | | |
| | 2.2nm,0.8s | | | | | | | |
| WRA | Warramunga Arr | 44.65 | 259 | P | P | P | 04 43 27.2 | -0.3 |
| | 0.5nm,0.3s,baz=97,slow=7.0,SNR=12 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| ASAR | Alice Springs | 44.81 | 254 | P | P | P | 04 43 29.1 | +0.2 |
| | 4.5nm,0.5s,baz=89,slow=8.8,SNR=58 | | | | | | | |
| | 4.5nm,0.5s | | | | | | | |
| ILAR | Eielson Array | 85.81 | 13 | P | P | P | 04 47 43.1 | -0.4 |
| | 0.3nm,0.4s,baz=225,slow=4.8,SNR=5.7 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| TXAR | Lajitas Array | 85.95 | 58 | P | P | P | 04 47 45.7 | +0.5 |
| | 0.3nm,0.7s,baz=185,slow=4.5,SNR=4.4 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| PDAR | Pinedale Array | 87.29 | 43 | P | P | P | 04 47 51.2 | -0.2 |
| | 0.1nm,0.4s,baz=222,slow=3.6,SNR=2.1 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| BRTR | Keskin Array B | 144.72 | 315 | PKP | PKPdf | | 04 54 37.5 | +0.5 |
| | 0.3nm,0.4s,baz=91,slow=2.4,SNR=5.0 | | | | | | | |
| GERES | GERESS Array B | 147.53 | 345 | PKPbc | PKPbc | | 04 54 45.0 | 0.0 |
| | 0.5nm,0.5s,baz=358,slow=7.0,SNR=2.6 | | | | | | | |

*IDC* ***23*** *04:38:11.6±2.0, 5.°73S×141.°49E, h0km, mb3.6/4, mbtmp3.6/6, ML3.2/2, Error ellipse: s-maj=81.6km s-min=30.3km az=100.0*

**ISC 23 04:38:16.3±1.6, 6.°0S±0.°2×141.°6E±0.°5, h35km, n6, σ1s92/7, mb3.6/4, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 15.42 | 205 | Pn | P | P | 04 41 53.5 | -2.1 |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=2.9 | | | | | | | |
| WRA | | | | Sn | Sn | Sn | 04 44 40.3 | -1.0 |
| | 0.1nm,0.3s,baz=41,slow=23,SNR=2.0 | | | | | | | |
| | 0.5nm,0.9s | | | | | | | |
| ASAR | Alice Springs | 18.95 | 201 | P | Pn | Pn | 04 42 38.5 | +2.9 |
| | 0.2nm,0.3s,baz=34,slow=10,SNR=18 | | | | | | | |
| | 1.9nm,0.7s | | | | | | | |
| MKAR | Makanchi Array | 73.95 | 322 | P | P | P | 04 49 48.7 | +0.6 |
| | 0.2nm,0.5s,baz=111,slow=6.1,SNR=2.3 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| KURBB | Kurchatov Arra | 77.88 | 325 | P | P | P | 04 50 10.4 | -0.1 |
| | 0.2nm,0.3s,baz=117,slow=5.1,SNR=1.7 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| BVAR | Borovoye Array | 83.47 | 325 | P | P | P | 04 50 40.2 | -0.1 |
| | 0.8nm,0.6s,baz=116,slow=3.4,SNR=3.7 | | | | | | | |
| | 0.8nm,0.6s | | | | | | | |
| ILAR | Eielson Array | 87.75 | 24 | P | P | P | 04 51 00.9 | -0.5 |
| | 0.3nm,0.8s,baz=242,slow=3.9,SNR=2.5 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |

*IDC* ***23*** *04:51:04.1±4.7, 23.°83S×179.°80W, h548km±54km, mb3.2/5, mbtmp4.1/7, Error ellipse: s-maj=38.1km s-min=27.0km az=27.0*

*NEIC* ***23*** *04:51:04.6±1.1, 23.°9S±0.°1×179.°8W±0.°1, h546km±6km, mb4.3/19, Error ellipse: s-maj=21.6km s-min=16.0km az=139.0*

**ISC 23 04:51:01.7±0.8, 23.°93S±0.°09×179.°7W±0.°1, h512km, n33, σ1s56/34, mb4.1/15, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 6.53 | 340 | P | P | P | 04 52 44.3 | +0.4 |
| PINNC | Pines Island, | 11.93 | 274 | P | P | P | 04 53 41.7 | +2.3 |
| DZM | Mont Dzumac | 12.94 | 275 | P | P | P | 04 53 53.8 | +3.5 |
| DZM | Mont Dzumac | 12.94 | 275 | P | P | P | 04 53 52.6 | +2.4 |
| | 1.4nm,0.5s,baz=210,slow=20,SNR=1.3 | | | | | | | |
| MXZ | Matakaoa Point | 13.70 | 187 | P | P | P | 04 54 01.6 | +3.7 |
| URZ | Urewera | 14.55 | 190 | P | P | P | 04 54 08.2 | +1.5 |
| | 8.7nm,0.7s,baz=332,slow=3.1,SNR=1.7 | | | | | | | |
| URZ | | | | S | S | S | 04 56 37.5 | -1.9 |
| | 31nm,1.2s,baz=31,slow=14,SNR=1.8 | | | | | | | |
| MRZ | Mangatainoka R | 17.15 | 192 | P | P | P | 04 54 33.7 | +0.2 |
| MRZ | | | | IAmb | IAmb | | 04 54 34.6 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| QRZ | Quartz Range | 18.08 | 199 | P | P | P | 04 54 43.0 | +1.0 |
| CTAO | Charters Tower | 31.79 | 270 | P | P | P | 04 56 43.9 | 0.0 |
| CTAO | | | | IAmb | IAmb | | 04 56 44.1 | |
| | comp=Z,9.1nm,0.4s | | | | | | | |
| TOO | Toolangi | 32.69 | 237 | P | P | P | 04 56 51.0 | -0.4 |
| TOO | | | | IAmb | IAmb | | 04 56 58.1 | |
| | comp=Z,6.0nm,1.3s | | | | | | | |
| STKA | Stephens Creek | 35.00 | 248 | P | P | P | 04 57 10.6 | -0.3 |
| | comp=Z,1.4nm,0.5s,baz=94,slow=11,SNR=4.6 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| COEN | Coen | 36.43 | 279 | P | P | P | 04 57 23.0 | +0.1 |
| COEN | | | | IAmb | IAmb | | 04 57 30.1 | |
| | comp=Z,5.1nm,1.3s | | | | | | | |
| BBOO | Buckleboo | 39.72 | 247 | P | P | P | 04 57 48.6 | -0.9 |
| ASAR | Alice Springs | 42.34 | 261 | P | P | P | 04 58 09.8 | -0.8 |
| ASAR | Alice Springs | 42.34 | 261 | P | P | P | 04 58 09.3 | -1.2 |
| | comp=Z,1.3nm,0.4s,baz=95,slow=7.2,SNR=18 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| WR0 | Warramunga Arr | 42.53 | 266 | P | P | P | 04 58 10.6 | -1.5 |
| WB2 | Warramunga Arr | 42.71 | 266 | P | P | P | 04 58 12.0 | -1.5 |
| WB2 | | | | IAmb | IAmb | | 04 58 12.5 | |
| | comp=Z,4.7nm,0.5s | | | | | | | |
| WRAB | Tennant Creek | 42.71 | 266 | P | P | P | 04 58 12.1 | -1.4 |
| WRAB | | | | IAmb | IAmb | | 04 58 12.5 | |
| | comp=Z,4.0nm,0.4s | | | | | | | |
| WB0 | Warramunga Arr | 42.71 | 266 | P | P | P | 04 58 12.0 | -1.5 |
| WB0 | | | | IAmb | IAmb | | 04 58 12.7 | |
| | comp=Z,5.9nm,0.7s | | | | | | | |
| WRA | Warramunga Arr | 42.72 | 266 | P | P | P | 04 58 11.8 | -1.7 |
| WRA | Warramunga Arr | 42.72 | 266 | P | P | P | 04 58 12.2 | -1.4 |
| | comp=Z,4.3nm,0.5s,baz=96,slow=8.4,SNR=205 | | | | | | | |
| | comp=Z,4.3nm,0.5s | | | | | | | |
| FORT | Forrest | 46.59 | 250 | P | P | P | 04 58 42.1 | -1.2 |
| MTN | Manton Dam | 47.77 | 274 | P | P | P | 04 58 50.9 | -1.5 |
| MTN | | | | IAmb | IAmb | | 04 58 51.6 | |
| | comp=Z,9.0nm,1.3s | | | | | | | |
| KNRA | Kununurra | 49.00 | 270 | P | P | P | 04 59 00.5 | -1.0 |
| KNRA | | | | IAmb | IAmb | | 04 59 01.7 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| FITZ | Fitzroy Crossi | 51.14 | 266 | P | P | P | 04 59 16.9 | -0.3 |
| PSA00 | Pilbara Seismi | 55.47 | 260 | P | P | P | 04 59 46.5 | -1.5 |
| PSA00 | | | | IAmb | IAmb | | 04 59 54.4 | |
| | comp=Z,29nm,1.4s | | | | | | | |
| MBWA | Marble Bar | 55.68 | 260 | P | P | P | 04 59 47.1 | -2.4 |
| MORW | Morawa | 57.16 | 250 | P | P | P | 04 59 58.8 | -0.8 |
| QSPA | South Pole Qui | 66.15 | 180 | P | P | P | 05 00 58.5 | +0.7 |
| QSPA | South Pole Qui | 66.15 | 180 | P | P | P | 05 00 58.3 | +0.5 |
| | comp=Z,0.8nm,0.7s,baz=83,slow=8.3,SNR=2.6 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| S12K | Black Hills | 80.72 | 10 | P | P | P | 05 02 21.1 | +0.3 |
| P17A | Butcher Ranch, | 90.04 | 46 | P | P | P | 05 03 06.3 | -0.4 |
| P17A | | | | IAmb | IAmb | | 05 03 06.9 | |
| | comp=Z,2.4nm,0.5s | | | | | | | |
| TXAR | Lajitas Array | 90.18 | 58 | P | P | P | 05 03 06.8 | -0.7 |
| | comp=Z,0.4nm,0.8s,baz=218,slow=6.8,SNR=3.9 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |

*NOU* ***23*** *04:53:52.5, 17.°53S×177.°09W, h649km, mb4.8/11, Fiji Islands Region*

*NEIC* ***23*** *04:54:01.6±1.6, 18.°3S±0.°1×178.°2W±0.°1, h619km±8km, mb4.4/44, Error ellipse: s-maj=22.0km s-min=17.3km az=124.0*

*IDC* ***23*** *04:54:05.3±2.3, 18.°31S×178.°43W, h670km±27km, mb3.4/12, mbtmp4.4/13, Error ellipse: s-maj=17.7km s-min=11.6km az=154.0*

**ISC 23 04:53:59.9±0.5, 18.°28S±0.°09×178.°31W±0.°09, h600km, n111, σ2s00/112, mb4.4/37, 5C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 14.80 | 253 | P | P | P | 04 57 09.1 | +2.8 |
| | 6.7nm,0.7s,baz=243,slow=21,SNR=7.6 | | | | | | | |
| QRZ | Quartz Range | 23.81 | 197 | P | P | P | 04 58 28.5 | +1.1 |
| KHZ | Kahutara | 25.04 | 194 | P | P | P | 04 58 37.5 | -0.7 |
| MLZ | Mavora Lakes | 29.28 | 200 | P | P | P | 04 59 16.5 | +1.3 |
| BUKA | Buka | 29.31 | 293 | P | P | P | 04 59 13.4 | -2.5 |
| DCZ | Deep Cove | 29.69 | 201 | P | P | P | 04 59 19.0 | +0.4 |
| ARMA | Armidale | 29.84 | 240 | P | P | P | 04 59 22.3 | +1.9 |
| ARMA | | | | IAmb | IAmb | | 04 59 23.1 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| CNB | Canberra Magne | 33.28 | 233 | P | P | P | 04 59 51.2 | +1.8 |
| CTA | Charters Tower | 33.48 | 261 | P | P | P | 04 59 52.1 | +0.8 |
| CTAO | Charters Tower | 33.48 | 261 | P | P | P | 04 59 52.1 | +0.8 |
| CTAO | | | | IAmb | IAmb | | 04 59 53.1 | |
| | comp=Z,9.8nm,0.7s | | | | | | | |
| CAN | Canberra | 33.55 | 233 | P | P | P | 04 59 53.5 | +1.8 |
| CAN | Canberra | 33.55 | 233 | P | P | P | 04 59 53.3 | +1.6 |
| CMSA | Cobar Meteorol | 35.05 | 241 | P | P | P | 05 00 05.4 | +1.2 |
| MTSU | Mount Surprise | 35.46 | 264 | P | P | P | 05 00 09.0 | +1.2 |
| QLP | Quilpie | 35.49 | 250 | P | P | P | 05 00 08.3 | +0.4 |
| TOO | Toolangi | 37.01 | 231 | P | P | P | 05 00 21.6 | +1.3 |
| TOO | Toolangi | 37.01 | 231 | P | P | P | 05 00 21.5 | +1.3 |
| COEN | Coen | 37.20 | 271 | P | P | P | 05 00 23.6 | +1.5 |
| STKA | Stephens Creek | 38.53 | 242 | P | P | P | 05 00 33.9 | +1.3 |
| STKA | Stephens Creek | 38.53 | 242 | P | P | P | 05 00 33.7 | +1.1 |
| | comp=Z,16nm,0.7s,baz=89,slow=9.7,SNR=29 | | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | | |
| BBOO | Buckleboo | 43.31 | 241 | P | P | P | 05 01 10.9 | +0.6 |
| WR0 | Warramunga Arr | 44.47 | 260 | P | P | P | 05 01 19.9 | +0.5 |
| WR0 | | | | IAmb | IAmb | | 05 01 20.9 | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| WB0 | Warramunga Arr | 44.62 | 260 | P | P | P | 05 01 20.8 | +0.1 |
| WB0 | | | | IAmb | IAmb | | 05 01 21.3 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| WB2 | Warramunga Arr | 44.65 | 260 | P | P | P | 05 01 20.6 | -0.2 |
| WB2 | | | | IAmb | IAmb | | 05 01 21.6 | |
| | comp=Z,19nm,1.1s | | | | | | | |
| WRAB | Tennant Creek | 44.65 | 260 | P | P | P | 05 01 20.8 | -0.1 |
| WRAB | | | | IAmb | IAmb | | 05 01 21.5 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| WRA | Warramunga Arr | 44.66 | 260 | P | P | P | 05 01 20.1 | -0.8 |
| WRA | Warramunga Arr | 44.66 | 260 | P | P | P | 05 01 20.6 | -0.3 |
| | comp=Z,6.4nm,0.3s,baz=97,slow=7.2,SNR=203 | | | | | | | |
| WRA | | | | PcP | PcP | PcP | 05 02 49.3 | -1.0 |
| | comp=Z,1.3nm,0.4s,baz=92,slow=3.6,SNR=7.1 | | | | | | | |
| WRA | | | | S | S | S | 05 07 09.9 | -5.0 |
| | comp=Z,0.9nm,0.9s,baz=95,slow=13,SNR=4.8 | | | | | | | |
| | comp=Z,6.4nm,0.3s | | | | | | | |
| AS31 | Alice Springs | 44.78 | 255 | P | P | P | 05 01 22.4 | +0.5 |
| AS31 | | | | IAmb | IAmb | | 05 01 22.9 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| ASAR | Alice Springs | 44.78 | 255 | P | P | P | 05 01 22.3 | +0.5 |
| ASAR | Alice Springs | 44.78 | 255 | P | P | P | 05 01 22.0 | +0.2 |
| | comp=Z,45nm,1.0s,baz=85,slow=8.5,SNR=188 | | | | | | | |
| ASAR | | | | PcP | PcP | PcP | 05 02 49.6 | -1.1 |
| | comp=Z,3.3nm,0.5s,baz=102,slow=3.9,SNR=10 | | | | | | | |
| ASAR | | | | S | S | S | 05 07 13.3 | -3.3 |
| | comp=Z,2.5nm,0.7s,baz=90,slow=15,SNR=21 | | | | | | | |
| | comp=Z,45nm,1.0s | | | | | | | |
| MTN | Manton Dam | 48.88 | 269 | P | P | P | 05 01 52.6 | -0.1 |
| MTN | | | | IAmb | IAmb | | 05 01 53.0 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| FORT | Forrest | 49.93 | 245 | P | P | P | 05 02 00.0 | -0.1 |
| KNRA | Kununurra | 50.54 | 264 | P | P | P | 05 02 04.5 | -0.3 |
| KNRA | | | | IAmb | IAmb | | 05 02 05.1 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| FITZ | Fitzroy Crossi | 53.06 | 261 | P | P | P | 05 02 23.0 | +0.2 |
| SOEI | Soe | 56.16 | 270 | P | P | P | 05 02 44.6 | 0.0 |
| SOEI | | | | IAmb | IAmb | | 05 02 46.8 | |
| | comp=Z,25nm,0.7s | | | | | | | |
| PSA00 | Pilbara Seismi | 57.91 | 256 | P | P | P | 05 02 55.6 | -0.7 |
| PSA00 | | | | IAmb | IAmb | | 05 02 56.2 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| MBWA | Marble Bar | 58.07 | 256 | P | P | P | 05 02 57.0 | -0.4 |
| MBWA | | | | IAmb | IAmb | | 05 02 59.7 | |
| | comp=Z,42nm,1.3s | | | | | | | |
| NWAO | Narrogin (SRO) | 59.12 | 242 | P | P | P | 05 03 02.5 | -1.7 |
| NWAO | | | | IAmb | IAmb | | 05 03 08.0 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| SBA | Scott Base | 60.06 | 184 | P | P | P | 05 03 11.6 | +2.0 |
| TOLI2 | Tolitoli | 62.88 | 281 | P | P | P | 05 03 29.0 | 0.0 |
| GIRL | Giralia | 62.88 | 253 | P | P | P | 05 03 29.5 | +0.6 |
| TWSI | Taliwang, Sumb | 63.45 | 269 | P | P | P | 05 03 31.9 | -0.8 |
| | comp=Z,34nm,1.3s | | | | | | | |
| CASY | Casey | 65.84 | 205 | P | P | P | 05 03 46.4 | -0.4 |
| CASY | | | | IAmb | IAmb | | 05 03 47.7 | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| UGM | Wanagama | 69.73 | 268 | P | P | P | 05 04 11.1 | -0.3 |
| QSPA | South Pole Qui | 71.78 | 180 | P | P | P | 05 04 23.0 | +0.4 |
| QSPA | | | | IAmb | IAmb | | 05 04 23.8 | |
| | comp=Z,9.9nm,0.9s | | | | | | | |
| QSPA | South Pole Qui | 71.78 | 180 | P | P | P | 05 04 22.5 | 0.0 |
| | comp=Z,8.4nm,0.8s,baz=21,slow=1.1,SNR=25 | | | | | | | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| PETK | Petropavlovsk- | 74.06 | 345 | P | P | P | 05 04 35.0 | -0.5 |
| | comp=Z,2.3nm,0.6s,baz=120,slow=5.9,SNR=4.8 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| USRK | Ussuriysk Ar. | 76.97 | 326 | P | P | P | 05 04 53.0 | +1.3 |
| SYI | Shuyak Island | 79.53 | 13 | P | P | P | 05 05 08.2 | +3.1 |
| N15K | Kwethluk River | 79.56 | 9 | P | P | P | 05 05 05.6 | +0.4 |
| N15K | | | | IAmb | IAmb | | 05 05 07.1 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| NVAR | Mina Array Bea | 79.63 | 44 | P | P | P | 05 05 06.0 | -0.3 |
| | comp=Z,0.3nm,0.6s,baz=224,slow=7.6,SNR=4.1 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| P18K | Big Mountain, | 79.66 | 12 | P | P | P | 05 05 04.9 | -1.0 |
| P18K | | | | IAmb | IAmb | | 05 05 09.6 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| O18K | Koktuh Hills | 80.10 | 12 | P | P | P | 05 05 07.4 | -0.7 |
| O18K | | | | IAmb | IAmb | | 05 05 23.7 | |
| | comp=Z,9.9nm,1.3s | | | | | | | |
| KVN | Kaiserville | 80.10 | 43 | P | P | P | 05 05 08.9 | +0.1 |
| M16K | Timber Creek | 80.55 | 9 | P | P | P | 05 05 11.0 | +0.7 |
| M16K | | | | IAmb | IAmb | | 05 05 13.5 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| M17K | Holitna River | 81.15 | 10 | P | P | P | 05 05 14.0 | +0.5 |
| M17K | | | | IAmb | IAmb | | 05 05 30.6 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| K15K | Wolf Creek Mou | 81.40 | 8 | P | P | P | 05 05 15.3 | +0.7 |
| BELA | Belgrano 2 | 81.79 | 173 | P | P | P | 05 05 15.9 | -0.7 |
| BELA | | | | IAmb | IAmb | | 05 05 16.7 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| I07A | Izee | 82.04 | 38 | P | P | P | 05 05 18.3 | -0.2 |
| L18K | Granite Mounta | 82.04 | 10 | P | P | P | 05 05 18.0 | 0.0 |
| J16K | Anvik River | 82.47 | 8 | P | P | P | 05 05 20.4 | +0.3 |
| MAW | Mawson | 83.54 | 200 | P | P | P | 05 05 25.2 | -0.3 |
| | comp=Z,3.7nm,0.7s,baz=143,slow=3.7,SNR=14 | | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| K20K | Telida | 83.55 | 11 | P | P | P | 05 05 24.9 | -0.6 |
| SCM | Sheep Creek Mo | 83.56 | 14 | P | P | P | 05 05 24.4 | -1.3 |
| SCM | | | | IAmb | IAmb | | 05 05 40.3 | |
| | comp=Z,18nm,1.5s | | | | | | | |
| TX31 | Lajitas Ar. Si | 86.11 | 58 | P | P | P | 05 05 38.9 | +0.1 |
| TXAR | Lajitas Array | 86.11 | 58 | P | P | P | 05 05 39.5 | +0.7 |
| | comp=Z,1.4nm,0.8s,baz=221,slow=6.0,SNR=20 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| ILAR | Eielson Array | 86.23 | 13 | P | P | P | 05 05 36.7 | -1.7 |
| | comp=Z,0.2nm,0.5s,baz=222,slow=5.0,SNR=6.2 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| PDAR | Pinedale Array | 87.56 | 43 | P | P | P | 05 05 44.6 | -0.8 |
| | comp=Z,0.3nm,0.6s,baz=181,slow=2.5,SNR=5.3 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| CMAR | Chiang Mai Arr | 89.09 | 290 | P | P | P | 05 05 53.6 | +0.8 |
| | comp=Z,0.6nm,0.3s,baz=91,slow=3.0,SNR=8.0 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| TROLL | Troll, Antarti | 89.94 | 180 | ⇑P | P | | 05 05 54.9 | -1.1 |
| | comp=Z,109nm,0.5s | | | | | | | |
| SNAA | Sanae | 90.23 | 179 | ⇑P | P | | 05 05 55.9 | -1.3 |
| | comp=Z,42nm,0

comp=Z,1.6nm,0.6s,baz=20,slow=4.9,SNR=5.4
**BUR08 Bucovina Ar. S 144.97 332 PKPdf 05 12 30.3 +0.5**
**BR131 Keskin Array S 145.11 314 PKPdf 05 12 28.8 -1.6**
**BRTR Keskin Array B 145.11 314 PKPdf 05 12 29.2 -1.1**
**BRTR Keskin Array B 145.11 314 PKPbc PKPdf 05 12 30.0 -0.3**
comp=Z,2.3nm,0.8s,baz=140,slow=4.5,SNR=16
**CLL Collm 145.84 347** *e*(PP) 05 16 06.0
**CLL Collm 145.84 347** ‖ *i* PKPbc P 05 12 31.9 -5.8
comp=Z,12nm,0.8s
**MMAI Mount Meron Ar 146.42 303** PKPbc **PKPdf 05 12 34.1 +1.5**
comp=Z,3.5nm,0.5s,baz=64,slow=5.7,SNR=10
**GERES GERESS Array B 147.99 345** PKPbc **PKPdf 05 12 37.9 +3.1**
comp=Z,1.7nm,0.6s,baz=46,slow=3.9,SNR=6.8
**CONA Conrad Observa 148.24 342** *i* PKP **PKPdf 05 12 38.0 +2.8**
comp=Z,5.5nm,1.0s
**RONA Rosalia, Austr 148.31 341** *i* PKP **PKPdf 05 12 38.5 +3.2**
comp=Z,6.1nm,1.0s
**MOA Molln 148.76 344** *e*PKiKP **PKPbc 05 12 40.4 -0.2**
comp=Z,0.6nm,0.3s
**ARSA Arzberg 148.95 342** *e*PKP **PKPdf 05 12 40.1 +3.8**
comp=Z,2.0nm,0.5s
**BIOA Bad Ischl, Aus 149.08 344** *e*PKP **PKPdf 05 12 40.1 +3.6**
comp=Z,1.7nm,0.4s
**LESA Schwarzleotal 149.57 345** *i* PKP **PKPdf 05 12 41.5 +4.2**
comp=Z,1.8nm,0.4s
**SOKA Soboth 149.61 342** *i* PKP **PKPdf 05 12 41.1 +3.7**
comp=Z,2.0nm,0.7s
**KBA Koelnbreinsper 149.72 344** *i* PKP **PKPdf 05 12 41.9 +4.2**
comp=Z,4.9nm,0.9s
**WATA Walderalm 149.91 347** *i* PKP **PKPdf 05 12 41.9 +3.9**
comp=Z,3.4nm,0.7s
**OBKA Obir 149.91 342** *i* PKP **PKPdf 05 12 41.7 +3.8**
comp=Z,4.0nm,1.1s
**RETA Reutte 149.93 348** *i* PKP **PKPdf 05 12 42.3 +4.4**
comp=Z,2.2nm,0.8s
**WTTA Wattenberg 149.96 346** *i* PKP **PKPdf 05 12 42.0 +3.9**
comp=Z,7.3nm,0.8s
**MOTA Moosalm 150.00 347** *i* PKP **PKPdf 05 12 42.5 +4.4**
comp=Z,4.9nm,0.9s
**MYKA Terra Mystica 150.05 343** *e*PKP **PKPdf 05 12 41.3 +3.2**
comp=Z,2.8nm,0.5s
**SQTA Sankt Quirin 150.09 347** *i* PKP **PKPdf 05 12 42.8 +4.6**
comp=Z,6.0nm,0.7s
**ABTA Abfaltersbach 150.24 345** *e*PKP **PKPdf 05 12 42.7 +4.3**
comp=Z,5.8nm,0.6s
**DAVA Damuels 150.30 349** *i* PKiKP **PKPbc 05 12 44.1 -0.3**
comp=Z,7.1nm,1.0s
**FETA Feichten 150.38 347** *i* PKP **PKPbc 05 12 43.7 -1.0**
comp=Z,7.0nm,1.1s
**STAL STALIGIAL 150.64 344 PKPdf 05 12 43.2 +4.2**
**FUORN Ofenpass-Fuorn 150.86 348 PKPbc 05 12 44.9 -1.0**
**FNA Florina 151.91 327 PKPdf 05 12 46.1 +5.1**
**TORD Torodi Ar. Bea 174.90 180** PKP **PKPdf 05 12 59.4 -3.2**
comp=Z,0.3nm,0.8s,baz=113,slow=2.3,SNR=3.8
TORD PKPab **PKPab 05 14 39.6 -1.8**
comp=Z,0.3nm,0.7s,baz=193,slow=2.5,SNR=4.2

**IDC 23 05:04:31.7±3.2, 53°53N×87°70E, h0km, mbtmp3.1/2, ML2.5/2, Error ellipse: s-maj=33.7km s-min=20.3km az=85.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZALV** | **Zalesovo Beam** | **1.76** | **285** | Pn | Pn | 05 05 02.5 | -0.9 |
| | 0.6nm,0.3s,baz=105,slow=16,SNR=5.8 | | | | | | |
| ZALV | | | | Sn | Sn | 05 05 26.9 | +0.3 |
| | 1.4nm,0.3s,baz=106,slow=27,SNR=11 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **1.76** | **285** | I | I | 05 16 00.0 | |
| | 0.1nm,0.7s,baz=101,slow=323,SNR=5.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.36** | **246** | Pn | Pn | 05 06 07.8 | +1.3 |
| | baz=63,slow=14,SNR=2.4 | | | | | | |
| KURBB | | | | Lg | Lg | 05 07 53.0 | |
| | baz=63,slow=32,SNR=3.3 | | | | | | |
| | 1.1nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.58** | **209** | Pn | Pn | 05 06 24.4 | +1.0 |
| | 0.1nm,0.3s,baz=28,slow=12,SNR=5.0 | | | | | | |
| MKAR | | | | Lg | Lg | 05 08 32.3 | |
| | baz=24,slow=29,SNR=5.1 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*IDC 23 05:08:27.8±10.0, 17°.95S×178°.30W, h650km±145km, mb3.1/6, mbtmp4.1/7, Error ellipse: s-maj=54.0km s-min=30.1km az=105.0*

**ISC 23 05:08:23.8±1.3, 17°.9S±0°.3×178°.1W±0°.2, h600km, n7, σ0$83/6, mb3.7/6, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.09** | **252** | P | **P** | **05 11 33.9** | **+1.0** |
| | 2.3nm,0.6s,baz=75,slow=19,SNR=2.0 | | | | | | |
| **STKA** | **Stephens Creek** | **38.87** | **241** | P | **P** | **05 14 59.3** | **0.0** |
| | 3.6nm,0.6s,baz=73,slow=12,SNR=4.5 | | | | | | |
| | 3.6nm,0.6s | | | | | | |
| **WRA** | **Warrannunga Arr** | **44.91** | **260** | P | **P** | **05 15 45.7** | **-1.0** |
| | 2.5nm,0.7s,baz=95,slow=7.1,SNR=37 | | | | | | |
| | 2.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.06** | **254** | P | **P** | **05 15 47.8** | **-0.1** |
| | 13nm,0.6s,baz=88,slow=8.5,SNR=150 | | | | | | |
| | 13nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.13** | **180** | P | **P** | **05 18 48.4** | **-0.1** |
| | 1.0nm,0.6s,baz=282,slow=0.9,SNR=10 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.24** | **44** | P | **P** | **05 19 28.4** | **+0.2** |
| | 0.2nm,0.5s,baz=230,slow=9.2,SNR=3.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.76** | **58** | P | P | 05 20 02.2 | +1.1 |
| | 0.6nm,0.8s,baz=208,slow=6.1,SNR=7.4 | | | | | | |
| | 0.6nm,0.8s | | | | | | |

*MOS 23 05:19:01.2±1.0, 29°.29N×56°.86E, h93km, mb4.8/27, Error ellipse: s-maj=6.3km s-min=4.7km az=96.2*
*TEH 23 05:19:01.6, 29°.40N×56°.86E, h90km, ML4.7*
*IDC 23 05:19:02.5±0.4, 29°.25N×56°.85E, h91km±3km, mb4.1/24, mbtmp4.5/31, MS4.4/3, Error ellipse: s-maj=9.4km s-min=9.1km az=166.0*
*NEIC 23 05:19:02.6±1.7, 29°.34N±0°.06×56°.82E±0°.08, h87km±6km, mb4.6/79, Error ellipse: s-maj=10.9km s-min=8.1km az=111.0*
*OMAN 23 05:19:03.5±0.2, 29°.10N×56°.55E, h10km, mb5.6/21, ml5.1/13, Error ellipse: s-maj=3.6km s-min=2.0km az=238.0*

**ISC 23 05:19:02.2±0.3, 29°31N±0°.03×56°83E±0°.03, h86km±2km, h86km:pP-P, n397, σ1$28/458, mb4.6/116, 13C-6D, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NGRK** | **Negar Kerman** | **0.35** | **346** | Pg | **Pn** | **05 19 15.3** | **-0.6** |
| **TVBK** | **TV Kerman** | **0.68** | **355** | Pg | **Pn** | **05 19 18.3** | **-0.2** |
| **CHMN** | **Cheshme madani** | **0.83** | **48** | | **Pn** | **05 19 19.6** | **-0.5** |
| **CHMN** | **Cheshme madani** | **0.83** | **48** | Pg | **Pn** | **05 19 19.6** | **-0.5** |
| **KHGB** | **Koh Gabri** | **1.11** | **344** | Pg | **Pn** | **05 19 22.6** | **-0.6** |
| KHGB | | | | Sg | **Sn** | **05 19 37.9** | **-0.9** |
| **KRM1** | **Kerman Provinc** | **1.25** | **18** | Pg | **Pn** | **05 19 24.0** | **-0.9** |
| **KBAM** | **BAM** | **1.43** | **96** | Pg | **Pn** | **05 19 27.2** | **+0.3** |
| **KHNJ** | **Kahnooj** | **1.56** | **150** | Pg | **Pn** | **05 19 30.6** | **+2.1** |
| **ZRDN** | **Zarand Kerman** | **1.68** | **351** | Pg | **Pn** | **05 19 29.7** | **-0.5** |
| **IBND** | **Bandar-abas** | **1.87** | **188** | Pn | **Pn** | **05 19 34.5** | **+2.0** |
| **GENO** | **Geno** | **1.98** | **197** | Pn | **Pn** | **05 19 36.3** | **+2.1** |
| **IBAF** | **Bafgh** | **2.52** | **335** | Pn | **Pn** | **05 19 41.3** | **-0.1** |
| **LAR1** | **LAR** | **2.71** | **234** | Pn | **Pn** | **05 19 45.8** | **+2.1** |
| **IMEH** | **Mehriz** | **2.83** | **318** | Pn | **Pn** | **05 19 45.6** | **+0.2** |
| **JHRM** | **Jahrom** | **2.96** | **255** | Pn | **Pn** | **05 19 48.6** | **+1.4** |
| **SHME** | **Shamm** | **3.30** | **191** | *i* Pb | **Pn** | **05 19 53.4** | **+1.7** |
| | SNR=25 | | | | | | |
| **SHME** | **Shamm** | **3.30** | **191** | P | **Pn** | **05 19 53.4** | **+1.7** |
| | SNR=8.1 | | | | | | |
| SHME | | | | S | **Sn** | **05 20 30.2** | **+0.3** |
| **BSRN** | **Basiran** | **3.31** | **36** | Pn | **Pn** | **05 19 51.1** | **-0.9** |
| **BANOM** | **Banah** | **3.40** | **188** | *i* Pb | **Pn** | **05 19 55.1** | **+2.0** |
| | SNR=51 | | | | | | |
| **BANOM** | **Banah** | **3.40** | **188** | P | **Pn** | **05 19 54.8** | **+1.7** |
| BANOM | | | | S | **Sn** | **05 20 33.6** | **+1.1** |
| **QIR1** | **Qir** | **3.42** | **257** | Pn | **Pn** | **05 19 55.0** | **+1.6** |
| **NHDN** | **Nehbandan** | **3.48** | **52** | Pn | **Pn** | **05 19 53.8** | **-0.4** |
| **ZHDN** | **Zahedan** | **3.48** | **87** | Pn | **Pn** | **05 19 54.6** | **+0.3** |
| **JASK** | **Jask - Hormozg** | **3.55** | **165** | Pn | **Pn** | **05 19 56.7** | **+1.7** |
| **JASK** | **Jask - Hormozg** | **3.55** | **165** | P | **Pn** | **05 19 57.3** | **+2.2** |
| | SNR=78 | | | | | | |
| JASK | | | | S | **Sn** | **05 20 38.2** | **+2.3** |
| **ICHK** | **Chekchek** | **3.59** | **325** | Pn | **Pn** | **05 19 56.4** | **+0.5** |
| **IKOO** | **Kooshah** | **3.63** | **31** | Pn | **Pn** | **05 19 55.8** | **-0.6** |
| **TPRV** | **Parvadeh(Tabas** | **3.71** | **358** | Pn | **Pn** | **05 19 57.1** | **-0.2** |
| **ISAD** | **Sadrabad** | **3.75** | **315** | Pn | **Pn** | **05 19 59.2** | **+1.1** |
| **LMD1** | **Lamerd** | **3.78** | **240** | Pn | **Pn** | **05 20 00.1** | **+1.9** |
| **SHI** | **Shiraz** | **3.78** | **276** | Pn | **Pn** | **05 19 59.4** | **+1.1** |
| **UMQ** | **Umm Al-Quwin** | **3.91** | **196** | *i* Pb | **Pn** | **05 20 01.9** | **+2.0** |
| | SNR=18 | | | | | | |
| **MASF** | **Masafi** | **3.96** | **189** | P | **Pn** | **05 20 03.2** | **+2.4** |
| | SNR=47 | | | | | | |
| MASF | | | | S | **Sn** | **05 20 47.0** | **+0.9** |
| **MSFE** | **Esma-Masafi** | **3.98** | **189** | *i* Pb | **Pn** | **05 20 02.9** | **+2.0** |
| | SNR=47 | | | | | | |
| **MDH** | **Madha** | **4.02** | **187** | *i* Pb | **Pn** | **05 20 01.9** | **+0.5** |
| | SNR=6.5 | | | | | | |
| **MDH** | **Madha** | **4.02** | **187** | P | **Pn** | **05 20 02.9** | **+1.5** |
| | SNR=6.6 | | | | | | |
| **TKDS** | **Koohdasht(Taba** | **4.30** | **3** | Pn | **Pn** | **05 20 04.8** | **-0.6** |
| **IDAH** | **Dahanechah** | **4.30** | **37** | Pn | **Pn** | **05 20 05.3** | **-0.2** |
| **UOSS** | **Minazif** | **4.38** | **187** | | **Pn** | **05 20 06.5** | **+0.1** |
| UOSS | | | | Sn | **Sn** | **05 20 56.3** | **+0.2** |
| **UOSS** | **Minazif** | **4.38** | **187** | *i* Pb | **Pn** | **05 20 07.4** | **+1.1** |
| | SNR=18 | | | | | | |
| **UOSS** | **Minazif** | **4.38** | **187** | Pn | **Pn** | **05 20 07.8** | **+1.4** |
| **UOSS** | **Minazif** | **4.38** | **187** | P | **Pn** | **05 20 08.6** | **+2.3** |
| UOSS | | | | S | **Sn** | **05 20 56.7** | **+0.5** |
| **NAZ** | **Nazwa, Dubai** | **4.42** | **194** | *i* Pb | **Pn** | **05 20 09.6** | **+2.7** |
| | SNR=40 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **4.42** | **194** | P | **Pn** | **05 20 09.7** | **+2.7** |
| | SNR=40 | | | | | | |
| NAZ | | | | S | **Sn** | **05 20 58.3** | **+1.1** |
| **HATD** | **Hatta, Dubai** | **4.50** | **188** | *i* Pb | **Pn** | **05 20 09.5** | **+1.5** |
| | SNR=19 | | | | | | |
| **HATD** | **Hatta, Dubai** | **4.50** | **188** | P | **Pn** | **05 20 10.8** | **+2.8** |
| | SNR=20 | | | | | | |
| HATD | | | | S | **Sn** | **05 21 00.1** | **+0.8** |
| **AFRZ** | **Afriz** | **4.51** | **24** | Pn | **Pn** | **05 20 07.8** | **-0.5** |
| **AFRZ** | **Afriz** | **4.51** | **24** | Pn | **Pn** | **05 20 07.9** | **-0.3** |
| **KAZ2** | **Kazeron-Fars-I** | **4.51** | **275** | Pn | **Pn** | **05 20 08.9** | **+0.7** |
| **IRAM** | **Ramesheh** | **4.58** | **304** | Pn | **Pn** | **05 20 10.0** | **+0.8** |
| **TNSJ** | **Nastanj** | **4.65** | **358** | Pn | **Pn** | **05 20 09.6** | **-0.4** |
| **ASHO** | **Ashiyiah** | **4.65** | **189** | *i* Pb | **Pn** | **05 20 12.1** | **+2.0** |
| | SNR=272 | | | | | | |
| ASHO | | | | Sn | **Sn** | **05 21 03.0** | **+0.1** |
| **ASHO** | **Ashiyiah** | **4.65** | **189** | P | **Pn** | **05 20 12.6** | **+2.5** |
| | SNR=8.1 | | | | | | |
| ASHO | | | | S | **Sn** | **05 21 03.4** | **+0.4** |
| **FAQ** | **Al Faqa, Dubai** | **4.67** | **194** | *i* Pb | **Pn** | **05 20 12.4** | **+2.0** |
| | SNR=40 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **4.67** | **194** | P | **Pn** | **05 20 12.8** | **+2.5** |
| | SNR=40 | | | | | | |
| FAQ | | | | S | **Sn** | **05 21 03.5** | **+0.1** |
| **ANAR** | **Anarak** | **4.69** | **326** | Pn | **Pn** | **05 20 11.2** | **+0.4** |
| **KLNJ** | **Kolanjah** | **4.84** | **292** | Pn | **Pn** | **05 20 13.9** | **+1.0** |
| **ASUD** | **Al Ashush, Dub** | **4.85** | **196** | *i* Pb | **Pn** | **05 20 15.3** | **+2.6** |
| | SNR=16 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **4.85** | **196** | P | **Pn** | **05 20 13.1** | **+0.4** |
| | SNR=16 | | | | | | |
| ASUD | | | | S | **Sn** | **05 21 09.0** | **+1.4** |
| **AHBU** | **AHRAM** | **4.86** | **266** | Pn | **Pn** | **05 20 13.7** | **+0.8** |
| **CHBR** | **Chabahar** | **4.92** | **138** | Pn | **Pn** | **05 20 13.4** | **-0.3** |
| **DSBU** | **Dashti - Bushe** | **4.97** | **260** | Pn | **Pn** | **05 20 15.0** | **+0.6** |
| **AJN** | **Ajban** | **5.00** | **200** | *i* Pb | **Pn** | **05 20 16.7** | **+1.9** |
| | SNR=33 | | | | | | |
| **AJN** | **Ajban** | **5.00** | **200** | P | **Pn** | **05 20 16.9** | **+2.1** |
| | SNR=33 | | | | | | |
| AJN | | | | S | **Sn** | **05 21 10.6** | **-0.7** |
| **IGAR** | **Gharneh** | **5.14** | **308** | Pn | **Pn** | **05 20 18.0** | **+1.1** |
| **SOHO** | **SOHO** | **5.16** | **183** | *i* Pn | **Pn** | **05 20 16.8** | **-0.2** |
| | SNR=70 | | | | | | |
| **SOHO** | **SOHO** | **5.16** | **183** | P | **Pn** | **05 20 17.4** | **+0.5** |
| **SHRT** | **Shahrakht** | **5.24** | **33** | Pn | **Pn** | **05 20 17.9** | **-0.2** |
| **IZEF** | **Zefreh** | **5.26** | **314** | Pn | **Pn** | **05 20 19.3** | **+0.8** |
| **SRVN** | **Saravan** | **5.26** | **110** | Pn | **Pn** | **05 20 19.4** | **+0.9** |
| **ALNE** | **Al Ain** | **5.32** | **191** | *i* Pb | **Pn** | **05 20 20.5** | **+1.4** |
| | SNR=21 | | | | | | |
| **ALNE** | **Al Ain** | **5.32** | **191** | P | **Pn** | **05 20 21.0** | **+1.9** |
| | SNR=21 | | | | | | |
| ALNE | | | | S | **Sn** | **05 21 17.7** | **-1.3** |
| **IBRJ** | **Brojen** | **5.46** | **300** | Pn | **Pn** | **05 20 22.5** | **+1.3** |
| **NGCH** | **Negor - Chabah** | **5.49** | **135** | Pn | **Pn** | **05 20 21.4** | **0.0** |
| **TAPT** | **Tabas- Tapeh t** | **5.57** | **3** | Pn | **Pn** | **05 20 22.1** | **-0.5** |
| **JRN** | **Qarnain Island** | **5.61** | **220** | P | **Pn** | **05 20 23.9** | **+0.9** |
| | SNR=24 | | | | | | |
| JRN | | | | S | **Sn** | **05 21 25.7** | **-0.4** |
| **HOQ** | **Hoqain** | **5.72** | **176** | P | **Pn** | **05 20 24.6** | **0.0** |
| | SNR=58 | | | | | | |
| **ZNGN** | **Zangian** | **5.86** | **300** | Pn | **Pn** | **05 20 27.4** | **+0.7** |
| **BIDO** | **Bidbid** | **5.88** | **168** | P | **Pn** | **05 20 27.0** | **+0.2** |
| | SNR=23 | | | | | | |
| **ARQ** | **Araqi** | **5.95** | **183** | P | **Pn** | **05 20 30.2** | **+2.4** |
| | SNR=139 | | | | | | |
| ARQ | | | | S | **Sn** | **05 21 35.8** | **+1.2** |
| **IKLH** | **Kolahrood** | **6.01** | **313** | Pn | **Pn** | **05 20 29.8** | **+0.9** |
| **JHBN** | **Jahan bin** | **6.05** | **300** | Pn | **Pn** | **05 20 30.1** | **+0.8** |
| **IPIR** | **Pirpir** | **6.11** | **305** | Pn | **Pn** | **05 20 30.8** | **+0.6** |
| **MZWR** | **Madinat Zayed** | **6.12** | **206** | S | **Sn** | **05 21 36.7** | **-2.0** |
| **KRSH** | **Karshahi** | **6.13** | **320** | Pn | **Pn** | **05 20 31.2** | **+0.9** |
| **SHMA** | **Al-Shehemyia** | **6.23** | **238** | P | **Pn** | **05 20 32.8** | **+1.2** |
| | SNR=350 | | | | | | |
| SHMA | | | | S | **Sn** | **05 21 40.7** | **-0.7** |
| **WSAR** | **Wadi Sarin** | **6.25** | **165** | P | **Pn** | **05 20 33.5** | **+1.5** |
| | 70nm,0.3s,baz=312,slow=3.9,SNR=376 | | | | | | |
| WSAR | | | | S | **Sn** | **05 21 39.5** | **-2.5** |
| | 703nm,0.3s,baz=93,slow=22,SNR=23 | | | | | | |
| WSAR | | | | LR | LR | 05 23 22.9 | |
| | comp=Z,586nm,18.3s,baz=260,slow=42 | | | | | | |
| **SMDO** | **Samad** | **6.32** | **170** | P | **Pn** | **05 20 34.0** | **+1.2** |
| | SNR=24 | | | | | | |
| **ISFB** | **Sefidab** | **6.37** | **323** | Pn | **Pn** | **05 20 34.4** | **+0.9** |
| **GHWR** | **Ruwais** | **6.39** | **215** | P | **Pn** | **05 20 34.0** | **+0.3** |
| GHWR | | | | S | **Sn** | **05 21 42.7** | **-2.4** |
| **SAKB** | **Bahrain** | **6.49** | **241** | P | **Pn** | **05 20 36.2** | **+1.1** |
| SAKB | | | | S | **Sn** | **05 21 46.7** | **-0.9** |
| **BSY** | **Bisya** | **6.54** | **177** | P | **Pn** | **05 20 38.3** | **+2.5** |
| | SNR=24 | | | | | | |
| BSY | | | | S | **Sn** | **05 21 51.1** | **+2.1** |
| **TBJM** | **Torbat-e-JAM** | **6.64** | **26** | Pn | **Pn** | **05 20 37.2** | **-0.1** |
| **TRNA** | **Turayna** | **6.77** | **229** | P | **Pn** | **05 20 39.0** | **+0.1** |
| | SNR=272 | | | | | | |
| TRNA | | | | S | **Sn** | **05 21 51.9** | **-2.6** |
| **HRA** | **Herat** | **6.85** | **41** | | **Pn** | **05 20 40.3** | **+0.2** |
| **WBK** | **Wadi Bani Khal** | **6.94** | **163** | Pn | **Pn** | **05 20 42.0** | **+0.7** |
| **WBK** | **Wadi Bani Khal** | **6.94** | **163** | P | **Pn** | **05 20 42.2** | **+0.9** |
| | SNR=20 | | | | | | |
| **SLWR** | **Sila** | **6.95** | **223** | P | **Pn** | **05 20 41.2** | **-0.1** |
| SLWR | | | | S | **Sn** | **05 21 56.2** | **-2.7** |
| **MZR** | **Muzera** | **6.96** | **206** | *i* Pn | **Pn** | **05 20 41.6** | **+0.1** |
| | SNR=10 | | | | | | |
| **MZR** | **Muzera** | **6.96** | **206** | P | **Pn** | **05 20 41.5** | **-0.1** |
| | SNR=10 | | | | | | |
| **JMDO** | **Jabal Madar** | **7.00** | **170** | P | **Pn** | **05 20 44.1** | **+2.0** |
| | SNR=15 | | | | | | |
| **SMRA** | **Abu-Samra** | **7.02** | **231** | P | **Pn** | **05 20 42.6** | **+0.3** |
| | SNR=132 | | | | | | |
| SMRA | | | | S | **Sn** | **05 21 58.8** | **-1.8** |
| **SBZV** | **Sabzevar** | **7.09** | **5** | Pn | **Pn** | **05 20 43.8** | **+0.3** |
| **IVRN** | **Varamin** | **7.13** | **324** | Pn | **Pn** | **05 20 44.6** | **+0.7** |
| **IFIR** | **Firoozkooh** | **7.19** | **332** | Pn | **Pn** | **05 20 45.4** | **+0.5** |
| **JRKH** | **Jarkhoshk** | **7.22** | **23** | Pn | **Pn** | **05 20 45.1** | **0.0** |
| **IQOM** | **Qom** | **7.37** | **320** | Pn | **Pn** | **05 20 48.4** | **+1.1** |
| **IDMV** | **Damavand** | **7.45** | **328** | Pn | **Pn** | **05 20 49.0** | **+0.6** |
| **IAKL** | **Akhelmad** | **7.46** | **12** | Pn | **Pn** | **05 20 49.8** | **+1.3** |
| **JLN** | **Jalan Bani Buh** | **7.50** | **161** | P | **Pn** | **05 20 49.3** | **+0.5** |
| | SNR=22 | | | | | | |
| **IMYA** | **Miami** | **7.54** | **21** | Pn | **Pn** | **05 20 50.0** | **+0.5** |
| **IGLO** | **Ghaloghah** | **7.61** | **341** | Pn | **Pn** | **05 20 51.3** | **+0.8** |
| **IHSB** | **Hasanabad** | **7.71** | **324** | Pn | **Pn** | **05 20 51.9** | **+0.1** |
| **IKRD** | **Kardeh** | **7.78** | **16** | Pn | **Pn** | **05 20 53.4** | **+0.5** |
| **ISFR** | **Sfrayin** | **7.79** | **7** | Pn | **Pn** | **05 20 53.0** | **-0.1** |
| **IPRN** | **Peran** | **7.88** | **333** | Pn | **Pn** | **05 20 55.0** | **+0.8** |
| **KBD** | **Kabd** | **7.98** | **271** | P | **Pn** | **05 20 56.0** | **+0.5** |
| **IMND** | **Minoodasht** | **8.02** | **352** | Pn | **Pn** | **05 20 56.5** | **+0.6** |
| **IEMG** | **Emamgholi** | **8.23** | **10** | Pn | **Pn** | **05 20 59.2** | **+0.1** |
| **MHTO** | **MHTO** | **8.35** | **173** | P | **Pn** | **05 21 02.0** | **+1.6** |
| | SNR=49 | | | | | | |
| **IRAZ** | **Razeghan** | **8.43** | **318** | Pn | **Pn** | **05 21 02.1** | **+0.4** |
| **HAGD** | **Aghdareh** | **8.53** | **312** | Pn | **Pn** | **05 21 04.7** | **+1.6** |
| **HSAM** | **Samen** | **8.54** | **307** | Pn | **Pn** | **05 21 03.0** | **-0.3** |
| **QABG** | **Abgarm-Qazvin** | **8.84** | **318** | Pn | **Pn** | **05 21 08.3** | **+1.0** |
| **IGZV** | **Ghazvin** | **8.98** | **324** | Pn | **Pn** | **05 21 11.4** | **+2.1** |
| **DQM** | **DQM** | **9.36** | **176** | P | **Pn** | **05 21 13.8** | **-0.4** |
| **DOK** | **Doka** | **10.92** | **194** | P | **Pn** | **05 21 34.9** | **-0.6** |
| | SNR=50 | | | | | | |
| **SHAO** | **Shalim** | **11.29** | **186** | *i* Pn | **Pn** | **05 21 40.0** | **-0.5** |
| | SNR=21 | | | | | | |
| **SHAO** | **Shalim** | **11.29** | **186** | P | **Pn** | **05 21 39.8** | **-0.7** |
| | SNR=21 | | | | | | |
| **KBL** | **Kabul** | **11.61** | **60** | Pn | **Pn** | **05 21 44.8** | **-0.3** |
| **KBL** | **Kabul** | **11.61** | **60** | P | **Pn** | **05 21 44.8** | **-0.3** |
| **DMTO** | **DMTO** | **11.66** | **189** | P | **Pn** | **05 21 44.0** | **-1.6** |
| | SNR=33 | | | | | | |
| **RAYN** | **Ar Rayn** | **11.66** | **243** | Pn | **Pn** | **05 21 42.1** | **-3.6** |
| **RAYN** | **Ar Rayn** | **11.66** | **243** | *i* Pn | **Pn** | **05 21 42.1** | **-3.6** |
| | SNR=79 | | | | | | |
| **RAYN** | **Ar Rayn** | **11.66** | **243** | P | **Pn** | **05 21 42.1** | **-3.6** |
| **WHFO** | **Wadi Hawf** | **11.67** | **195** | P | **Pn** | **05 21 44.3** | **-1.5** |
| | SNR=417 | | | | | | |
| **RBK** | **Rabkut** | **11.99** | **192** | P | **Pn** | **05 21 48.3** | **-1.8** |
| | SNR=11 | | | | | | |
| **ABTO** | **Aybut** | **12.33** | **196** | P | **Pn** | **05 21 53.0** | **-1.7** |
| | SNR=74 | | | | | | |
| **SIMJ** | **Simiganj** | **13.74** | **44** | | **Pn** | **05 22 10.7** | **-2.7** |
| **CHGR** | **Chuyangaron** | **13.83** | **44** | | **Pn** | **05 22 14.0** | **-0.5** |
| **CHGR** | **Chuyangaron** | **13.83** | **44** | P | **Pn** | **05 22 14.0** | **-0.5** |
| **GEVA** | **Gevas** | **14.54** | **312** | Pn | **Pn** | **05 22 23.6** | **-0.1** |
| **NIL** | **Nilore** | **14.67** | **69** | | **Pn** | **05 22 24.9** | **-0.3** |
| **NIL** | **Nilore** | **14.67** | **69** | P | **Pn** | **05 22 25.0** | **-0.3** |
| **GNI** | **Garni** | **14.67** | **321** | | **Pn** | **05 22 24.8** | **-0.7** |
| **GNI** | **Garni** | **14.67** | **321** | P | **Pn** | **05 22 26.7** | **+1.3** |
| | 3.7nm,0.4s,baz=198,slow=20,SNR=1.4 | | | | | | |
| **GNI** | **Garni** | **14.67** | **321** | *i* P | **Pn** | **05 22 25.2** | **-0.2** |
| **GAR** | **Garm** | **14.76** | **46** | | **Pn** | **05 22 25.1** | **-1.4** |
| **GURO** | **Guroymak-BITLI** | **15.34** | **311** | Pn | **Pn** | **05 22 34.1** | **+0.1** |
| GURO | | | | IAmb | IAmb | 05 22 41.3 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **MARD** | **Mardin** | **15.60** | **305** | Pn | **Pn** | **05 22 35.0** | **-2.3** |
| MARD | | | | IAmb | IAmb | 05 22 47.1 | |
| | comp=Z,30nm,0.6s | | | | | | |
| **BTK** | **Batken** | **15.71** | **43** | | **Pn** | **05 22 37.6** | **-1.0** |
| **BTK** | **Batken** | **15.71** | **43** | P | **Pn** | **05 22 37.6** | **-1.0** |
| BTK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KARS** | **Kars** | **15.93** | **319** | Pn | **Pn** | **05 22 40.3** | **-1.1** |
| KARS | | | | IAmb | IAmb | 05 22 45.0 | |
| | comp=Z,75nm,1.2s | | | | | | |
| **KARS** | **Kars** | **15.93** | **319** | P | **Pn** | **05 22 40.3** | **-1.1** |
| KARS | | | | pmax | pmax | | |
| | comp=Z,75nm,1.2s | | | | | | |
| **DRK** | **Karamyk** | **15.97** | **47** | Pn | **Pn** | **05 22 41.5** | **-0.6** |
| **DRK** | **Karamyk** | **15.97** | **47** | P | **Pn** | **05 22 41.5** | **-0.6** |
| DRK | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| **ASF** | **Jabal al Asfar** | **17.37** | **284** | P | **Pn** | **05 22 58.5** | **-0.7** |
| | comp=Z,12nm,0.3s,baz=68,slow=0.0,SNR=40 | | | | | | |
| ASF | | | | ScP | **ScP** | **05 31 00.0** | **-3.8** |
| | comp=Z,2.7nm,0.7s,baz=1.4,slow=2.9,SNR=6.3 | | | | | | |
| **ASF** | **Jabal al Asfar** | **17.37** | **284** | P | **P** | **05 23 01.0** | **+1.7** |
| **KK31** | **Karatay Array** | **17.62** | **35** | P | **P** | **05 23 00.6** | **-1.2** |
| **KK31** | **Karatay Array** | **17.62** | **35** | P | **P** | **05 23 00.6** | **-1.2** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | | |
| **KKAR** | **Karatay Array** | **17.62** | **35** | P | **P** | **05 23 01.1** | **-0.7** |
| **KKAR** | **Karatay Array** | **17.62** | **35** | P | **P** | **05 23 01.1** | **-0.7** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | | |
| **NCK** | **Nalchik** | **17.69** | **327** | *i* P | **Pn** | **05 23 04.8** | **+2.0** |
| NCK | | | | pmax | pmax | | |
| | comp=Z,32nm,1.0s | | | | | | |
| **ARSB** | **Arslanbob** | **17.79** | **43** | P | **P** | **05 23 02.8** | **-1.0** |
| **ARSB** | **Arslanbob** | **17.79** | **43** | P | **P** | **05 23 02.8** | **-1.0** |
| ARSB | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **18.12** | **307** | P | **P** | **05 23 07.7** | **+0.2** |
| **GAZ** | **Gaziantep** | **18.17** | **301** | | **P** | **05 23 06.8** | **-1.2** |
| **KBZ** | **Khabaz** | **18.20** | **326** | P | **Pn** | **05 23 10.6** | **+1.6** |
| | comp=Z,7.9nm,0.8s,baz=124,slow=9.9,SNR=11 | | | | | | |
| KBZ | | | | ScP | **ScP** | **05 31 02.6** | **-2.5** |
| | comp=Z,1.6nm,0.7s,baz=248,slow=5.4,SNR=4.0 | | | | | | |
| **SHA1** | **Shidzhatmaz** | **18.32** | **326** | *ce*P | **Pn** | **05 23 11.8** | **+1.1** |
| **KVAR** | **Kislovodsk Arr** | **18.46** | **326** | P | **Pn** | **05 23 13.3** | **+1.0** |
| | comp=Z,2.3nm,0.3s,baz=270,slow=20,SNR=2.7 | | | | | | |
| **GHAJ** | **Ghor Haditha** | **18.47** | **281**

VRH pmax pmax
comp=Z,89nm,0.7s
**VORD Divnogorie 25.33 334** *e*P **P** **05 24 20.8 +0.1**
VORD pmax pmax
comp=Z,20nm,0.7s
**VSR Storozhevoye 25.57 334** *e*P **P**
VSR pmax pmax
comp=Z,20nm,0.6s
**BVAR Borovoye Array 25.71 19** P **P** **05 24 24.9 +0.6**
comp=Z,35nm,0.7s,baz=203,slow=7.9,SNR=180
BVAR PcP **PcP** **05 27 51.4 -0.9**
comp=Z,1.0nm,0.4s,baz=238,slow=2.6,SNR=5.9
BVAR ScP **ScP** **05 31 21.9 -2.1**
comp=Z,2.9nm,0.8s,baz=241,slow=3.1,SNR=9.2
comp=Z,35nm,0.7s
**KARP Karpathos 25.74 292** P **P** **05 24 25.8 +1.0**
**VORR Voronezh 25.92 334** *e*P **P** **05 24 24.7 -1.4**
VORR pmax pmax
comp=Z,132nm,0.4s
**MAKZ Makanchi 26.24 41** P **P** **05 24 29.9 +0.8**
MAKZ lAmb lAmb 05 24 34.3
comp=Z,11nm,0.6s
**MAKZ Makanchi 26.24 41** P **P** **05 24 29.9 +0.8**
MAKZ pmax pmax
comp=Z,11nm,0.6s
**MK31 Makanchi Array 26.41 42** P **P** **05 24 31.6 +0.9**
**MK31 Makanchi Array 26.41 42***ce*P **P** **05 24 30.9 +0.2**
**MKAR Makanchi Array 26.41 42** P **P** **05 24 31.2 +0.5**
**MKAR Makanchi Array 26.41 42** P **P** **05 24 31.3 +0.7**
comp=Z,4.1nm,0.6s,baz=226,slow=8.3,SNR=44
MKAR pP **pP** **05 24 51.6 +0.7**
comp=Z,2.7nm,0.6s,baz=216,slow=6.0,SNR=4.9
comp=Z,4.1nm,0.6s
**LPSR Galich'ya Gora 26.77 335** *e*P **P** **05 24 33.9 +0.2**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**KURBB Kurchatov Arra 26.84 31** P **P** **05 24 35.4 +1.0**
comp=Z,2.1nm,0.8s,baz=230,slow=9.1,SNR=17
KURBB pP **pP** **05 24 55.6 +1.0**
comp=Z,3.6nm,1.0s,baz=230,slow=9.4,SNR=5.9
KURBB ScP **ScP** **05 31 24.1 -3.2**
comp=Z,1.3nm,0.7s,baz=235,slow=3.5,SNR=8.7
comp=Z,2.1nm,0.8s
**KURK Kurchatov 26.94 31** P **P** **05 24 35.9 +0.5**
**KURK Kurchatov 26.94 31***ce*P **P** **05 24 36.9 +1.6**
KURK pmax pmax
comp=Z,12nm,2.5s
**ARU Arti 27.14 2***c i*P **P** **05 24 38.7 +1.7**
ARU 05 25 27.1
ARU S **S** **05 29 15.0 +6.0**
ARU SS **SnSn** **05 30 32.1 +6.9**
ARU pmax pmax
comp=Z,5.0nm,0.9s
**IDI Anoyia 27.57 291** P **P** **05 24 40.5 -0.8**
IDI lAmb lAmb 05 25 11.3
comp=Z,22nm,0.8s
**WMQ Urumqi 28.52 51** *e*P **P** **05 24 51.4 +1.8**
**MLR Muntele Rosu 29.14 312** ScP **ScP** **05 31 32.9 -1.9**
comp=Z,3.2nm,0.8s,baz=194,slow=7.4,SNR=3.5
**OBN Obninsk 29.62 336**‖ *e*P **P** **05 24 59.9 +0.9**
OBN *i* *PP **pP** **05 25 21.4 +1.9**
OBN *e* 05 25 59.5
OBN pmax pmax
comp=Z,35nm,1.3s
**AK09 Malin Array Si 29.69 324** P **P** **05 24 59.6 -0.2**
**KIRV Kirov 29.72 352***ce*P **P** **05 25 00.6 +0.7**
**MOS Moscow 29.76 338** *e*P **P** **05 24 57.7 -2.6**
MOS *e* 05 25 20.5
MOS *e* 05 25 58.1
**AK01 Malin Array Si 29.77 324** P **P** **05 25 00.6 +0.1**
**AKASG Malin Array Be 29.77 324** P **P** **05 24 59.0 -1.4**
comp=Z,2.9nm,0.6s,baz=131,slow=8.3,SNR=12
comp=Z,2.9nm,0.6s
**AKASG Malin Array Be 29.77 324***ce*P **P** **05 25 00.2 -0.3**
AKASG pmax pmax
comp=Z,4.0nm,0.7s
**AKBB Malin Array Si 29.77 324** P **P** **05 25 00.0 -0.5**
AKBB lAmb lAmb 05 25 02.1
comp=Z,9.9nm,0.7s
**AKBB Malin Array Si 29.77 324***ce*P **P** **05 24 59.6 -0.9**
AKBB pmax pmax
comp=Z,8.0nm,0.9s
**AKBB Malin Array Si 29.77 324** P **P** **05 25 00.5 0.0**
**KIEV Kiev 29.77 324** P **P** **05 24 59.7 -0.8**
KIEV lAmb lAmb 05 25 02.1
comp=Z,8.8nm,0.7s
**KIEV Kiev 29.77 324** *i* P **P** **05 25 00.6 +0.1**
SNR=6.1
**KIEV Kiev 29.77 324** P **P** **05 24 59.7 -0.8**
KIEV pmax pmax
comp=Z,9.0nm,0.7s
**KIEV Kiev 29.77 324** P **P** **05 25 00.4 -0.1**
comp=Z,57nm,0.8s
**AK19 Malin Array Si 29.89 323** P **P** **05 25 01.4 -0.2**
**LUBAR Lubar, Ukraine 30.12 321** P **P** **05 25 03.7 +0.1**
**BURAR Bucovina Array 30.48 316** P **P** **05 25 06.7 -0.2**
**DGZ Jazzator, Alta 30.86 40** P **P** **05 25 11.3 +1.0**
DGZ pmax pmax
comp=Z,6.0nm,0.5s
**FNA Florina 31.00 301** lAmb lAmb 05 25 14.8
comp=Z,4.5nm,0.6s
**PALK Pallekele 31.40 130** P **P** **05 25 14.5 -0.8**
**PALK Pallekele 31.40 130** P **P** **05 25 14.5 -0.8**
PALK pmax pmax
comp=Z,43nm,1.5s
**KBN Korca 31.42 301** P **P** **05 25 15.3 0.0**
KBN lAmb lAmb 05 25 38.0
comp=Z,18nm,1.0s
**KBN Korca 31.42 301** P **P** **05 25 15.3 0.0**
KBN pmax pmax
comp=Z,19nm,1.0s
**ZALV Zalesovo Beam 31.93 32** P **P** **05 25 20.1 +0.6**
comp=Z,3.2nm,0.3s,baz=243,slow=10,SNR=12
ZALV pP **pP** **05 25 41.0 +1.0**
comp=Z,4.9nm,0.6s,baz=238,slow=9.0,SNR=3.3
comp=Z,3.2nm,0.3s
**KOLS Kolonicke sedl 32.81 316** *e*P **P** **05 25 29.1 +1.8**
**KOLS Kolonicke sedl 32.81 316** *e*P **P** **05 25 29.1 +1.8**
**KWP Kalwaria Pacla 32.85 318** *e*P **P** **05 25 28.9 +1.4**
**VYHS Vyhne 34.77 314** *e*P **P** **05 25 43.3 -0.9**
**VYHS Vyhne 34.77 314** *e*P **P** **05 25 43.3 -0.9**
**OJC Ojcow 34.80 317** *e*P **P** **05 25 44.8 +0.3**
**OJC Ojcow 34.80 317** lAmb lAmb 05 25 46.7
comp=Z,9.9nm,0.8s
**OJC Ojcow 34.80 317** P **P** **05 25 44.9 +0.4**
comp=Z,13nm,0.7s
**KMBO Kilima Mbogo 35.58 215** P **P** **05 25 52.7 +0.9**
KMBO lAmb lAmb 05 25 55.7
comp=Z,13nm,0.8s
**KMBO Kilima Mbogo 35.58 215** P **P** **05 25 54.7 +2.9**
**KMBO Kilima Mbogo 35.58 215** P **P** **05 25 55.1 +3.3**
comp=Z,12nm,0.7s,baz=29,slow=11,SNR=32
KMBO pP **pP** **05 26 14.7 +2.1**
comp=Z,4.5nm,0.7s,baz=44,slow=11,SNR=3.9
**KMBO Kilima Mbogo 35.58 215** *i* P **P** **05 25 54.7 +2.9**
KMBO pmax pmax
comp=Z,12nm,0.7s
**MORC Moravsky Berou 36.00 316** P **P** **05 25 54.1 -0.7**
**MORC Moravsky Berou 36.00 316** P **P** **05 25 54.1 -0.7**
MORC pmax pmax
comp=Z,3.0nm,0.7s
**RONA Rosalia, Austr 36.15 312** *e*P **P** **05 25 56.4 +0.3**
comp=Z,4.1nm,1.0s
**PAOL Paolisi 36.15 300** P **P** **05 25 56.9 +0.6**
PAOL lAmb lAmb 05 26 19.4
comp=Z,16nm,1.2s
**KIBK Kibwezi 36.25 213** P **P** **05 25 57.3 0.0**
**CONA Conrad Observa 36.49 312** *e*P **P** **05 25 59.1 0.0**
comp=Z,2.1nm,1.0s
**ARSA Arzberg 36.54 311** *e*P **P** **05 25 58.4 -1.1**
comp=Z,1.5nm,0.7s
**GTA Gaotai 36.59 62** P **P** **05 26 01.4 +1.3**
GTA pP pP 05 26 22.4 +1.4
GTA sP sP 05 26 33.3 +2.0
GTA pmax pmax
comp=Z,11nm,0.8s
**SOKA Soboth 36.73 310** *e*P **P** **05 26 00.6 -0.5**
comp=Z,1.9nm,1.1s
**OBKA Obir 37.01 309** *e*P **P** **05 26 02.9 -0.6**
comp=Z,1.3nm,0.6s
**KNGR Kungurtug, Tuv 37.13 43** *i* P **P** **05 26 05.6 +1.1**
KNGR pmax pmax
comp=Z,9.0nm,0.9s
**CAMP Campotosto 37.16 303** P **P** **05 26 05.9 +1.0**
CAMP lAmb lAmb 05 26 35.8
comp=Z,9.7nm,1.1s
**NRCA Norcia 37.41 303** P **P** **05 26 05.8 -1.1**
**FDMO Fiordimonte 37.46 304** P **P** **05 26 06.7 -0.5**
FDMO lAmb lAmb 05 26 30.4
comp=Z,5.9nm,1.1s
**MOA Molln 37.51 312** *i* P **P** **05 26 06.9 -0.7**
comp=Z,1.9nm,0.6s
**MYKA Terra Mystica 37.65 309** *e*P **P** **05 26 08.4 -0.5**
comp=Z,1.5nm,0.5s
**PRED Cave del Predi 37.66 309** P **P** **05 26 07.7 -1.3**
**CKRC Cesky Krumlov 37.73 313** *e*P **P** **05 26 11.5 +2.0**
**CKRC Cesky Krumlov 37.73 313** *e*P **P** **05 26 11.5 +2.0**
**BIOA Bad Ischl, Aus 37.88 311** *e*P **P** **05 26 10.9 +0.1**
comp=Z,0.3nm,0.3s
**KBA Koelnbreinsper 37.94 310** *e*P **P** **05 26 11.3 -0.2**
comp=Z,3.2nm,1.1s
**ZVC Zvikov 37.97 314** *e*P **P** **05 26 11.3 -0.2**
ZVC *ex* x 05 26 33.0
**FIA1 FINESS Array S 38.02 336** P **P** **05 26 12.3 +0.5**
**FINES FINESS Array B 38.02 336** P **P** **05 26 12.0 +0.3**
**FINES FINESS Array B 38.02 336** P **P** **05 26 12.4 +0.6**
comp=Z,5.3nm,0.5s,baz=140,slow=9.5,SNR=27
FINES pP **pP** **05 26 33.1 +0.6**
comp=Z,3.8nm,0.7s,baz=142,slow=9.6,SNR=2.5
comp=Z,5.3nm,0.5s
**FINES FINESS Array B 38.02 336** *i* P **P** **05 26 12.1 +0.4**
FINES pmax pmax
comp=Z,5.0nm,0.5s
**GERES GERESS Array B 38.12 313** P **P** **05 26 11.8 -1.1**
comp=Z,2µm,0.5s,baz=105,slow=10,SNR=8.7
**KHC Kasperske Hory 38.27 313** P **P** **05 26 13.5 -0.6**
KHC lAmb lAmb 05 26 14.4
comp=Z,5.6nm,0.9s
**KHC Kasperske Hory 38.27 313** *e*P **P** **05 26 13.6 -0.6**
KHC *e*pP **pP** **05 26 34.5 -0.7**
**KHC Kasperske Hory 38.27 313***ce*P **P** **05 26 13.8 -0.3**
KHC pmax pmax
comp=Z,16nm,1.3s
**KHC Kasperske Hory 38.27 313** P **P** **05 26 13.5 -0.6**
comp=Z,7.3nm,0.9s
**ABTA Abfaltersbach 38.44 309** *e*P **P** **05 26 15.1 -0.4**
comp=Z,3.3nm,0.8s
**LESA Schwarzleotal 38.46 310** *e*P **P** **05 26 15.4 -0.4**
comp=Z,0.9nm,0.3s
**MBAR Mbarara 38.80 225** P **P** **05 26 21.2 +2.2**
MBAR lAmb lAmb 05 26 22.1
comp=Z,13nm,0.8s
**MBAR Mbarara 38.80 225***c i*P **P** **05 26 20.0 +1.0**
MBAR pmax pmax
comp=Z,35nm,1.8s
**WTTA Wattenberg 39.12 310** *i* P **P** **05 26 20.6 -0.8**
comp=Z,12nm,1.6s
**WATA Walderalm 39.18 310** *e*P **P** **05 26 21.2 -0.6**
comp=Z,2.5nm,0.4s
**CLL Collm 39.23 317** *i* P **P** **05 26 20.6 -1.4**
comp=Z,6.0nm,0.8s
CLL *e*pP **pP** **05 26 41.0 -2.1**
CLL *e*(sP) **sP** **05 26 50.0 -3.3**
CLL *ex* x 05 28 33.0
**CLL Collm 39.23 317** *i* P **P** **05 26 20.6 -1.4**
CLL *e**PP **pP** **05 26 41.0 -2.1**
CLL pmax pmax
comp=Z,6.0nm,0.8s
**SQTA Sankt Quirin 39.40 310** *i* P **P** **05 26 22.9 -0.7**
comp=Z,5.0nm,0.4s
**MOTA Moosalm 39.49 310** *i* P **P** **05 26 23.6 -0.8**
comp=Z,3.5nm,0.9s
**PZH PanZhiHua 39.61 83** P **P** **05 26 27.1 +1.5**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,260nm,6.1s
**FETA Feichten 39.69 309** *e*P **P** **05 26 24.8 -1.2**
comp=Z,3.5nm,0.7s
**RETA Reutte 39.75 310** *i* P **P** **05 26 24.7 -1.7**
comp=Z,2.0nm,0.6s
**CMAR Chiang Mai Arr 39.80 96** PcP **PcP** **05 28 31.7 -0.1**
comp=Z,2.2nm,0.4s,baz=282,slow=4.4,SNR=4.7
**KEST Kesra 40.24 292** P **P** **05 26 31.8 +1.1**
comp=Z,3.2nm,0.9s,baz=341,slow=4.2,SNR=5.2
KEST LR LR 05 48 01.3
comp=Z,1µm,18.2s,baz=154,slow=43
comp=Z,3.2nm,0.9s
**DAVA Damuels 40.30 310** *i* P **P** **05 26 30.0 -1.1**
comp=Z,6.3nm,0.6s
**CRAI Chiangrai 40.37 93** P **P** **05 26 31.9 +0.1**
CRAI lAmb lAmb 05 26 33.9
comp=Z,5.1nm,0.9s
**CD2 Chengdu 40.40 76** P **P** **05 26 31.9 -0.1**
CD2 pmax pmax
comp=Z,20nm,0.4s
**LVZ Lovozero 40.81 347** P **P** **05 26 35.7 +0.8**
**LVZ Lovozero 40.81 347** P **P** **05 26 35.7 +0.8**
LVZ pmax pmax
comp=Z,62nm,1.5s
**PHRA Phrae 40.91 95** P **P** **05 26 36.6 +0.3**
**SONM Songino Array 42.14 50** P **P** **05 26 47.0 +0.8**
comp=Z,1.1nm,0.5s,baz=259,slow=9.1,SNR=8.7
comp=Z,1.1nm,0.5s
**HFS Hagfors 42.22 329** P **P** **05 26 46.5 +0.1**
comp=Z,5.0nm,0.6s,baz=132,slow=8.2,SNR=16
comp=Z,5.0nm,0.6s
**BNI Bardonecchia 42.25 306** P **P** **05 26 46.1 -1.0**
**BNI Bardonecchia 42.25 306** P **P** **05 26 46.1 -1.0**
BNI pmax pmax
comp=Z,5.0nm,1.0s
**ULN Ulaanbaatar 42.58 50***ce*P **P** **05 26 49.8 0.0**
ULN pmax pmax
comp=Z,10.0nm,2.5s
**NB2 NORSAR Subarra 43.72 330** P **P** **05 26 57.9 -0.7**
comp=Z,1.7nm,0.6s,baz=112,slow=7.9
**NOA NORSAR Array B 43.72 330** P **P** **05 26 58.2 -0.4**
comp=Z,3.2nm,0.8s,baz=116,slow=8.0,SNR=9.8
NOA pP **pP** **05 27 20.4 +0.5**
comp=Z,2.4nm,0.8s,baz=113,slow=8.0,SNR=3.6
comp=Z,3.2nm,0.8s
**BCLA Clavier 43.79 314** *d*P **P** **05 26 59.6 +0.4**
**ARCES ARCESS Array B 44.09 345** P **P** **05 27 02.0 +0.6**
comp=Z,4.5nm,0.7s,baz=137,slow=8.8,SNR=18
ARCES pP **pP** **05 27 24.1 +1.5**
comp=Z,5.0nm,1.0s,baz=132,slow=7.2,SNR=2.4
comp=Z,4.5nm,0.7s
**BMRD Maredsous 44.11 313** *d*P **P** **05 27 01.7 -0.1**
**DOU Dourbes 44.19 313** *d*P **P** **05 27 02.8 +0.3**
**XAN Xi'an 44.20 70** ⇓P **P** **05 27 02.0 -0.8**
XAN pP pP 05 27 25.4 +1.1
XAN pmax pmax
comp=Z,21nm,0.6s
**HHC Hu-ho-hao-te 45.59 60** *e*P **P** **05 27 13.9 +0.1**
HHC pmax pmax
comp=Z,10.0nm,0.5s
HHC pmax pmax
comp=Z,240nm,5.3s
**LYN LuoYang 47.02 69** *e*P **P** **05 27 25.8 +0.8**
LYN sP pP 05 27 48.8 +2.3
LYN pmax pmax
comp=Z,27nm,0.6s
**XLT XiLinHaoTe 48.76 56** *e*P P 05 27 47.8 +9.4
XLT pmax pmax
comp=Z,750nm,8.3s
**EKA Eskdalemuir Ar 49.51 319** P **P** **05 27 42.6 -1.2**
comp=Z,0.9nm,0.3s,baz=97,slow=7.3,SNR=18
comp=Z,0.9nm,0.3s
**ESDC Sonseca Array 50.31 299** P **P** **05 27 49.8 -0.4**
comp=Z,1.4nm,0.7s,baz=72,slow=7.4,SNR=14
ESDC sP **sP** **05 28 21.9 -0.2**
comp=Z,1.8nm,1.0s,baz=70,slow=7.2,SNR=3.1
comp=Z,1.4nm,0.7s
**PAB San Pablo 50.62 299** P **P** **05 27 52.7 +0.1**
PAB lAmb lAmb 05 28 15.2
comp=Z,5.5nm,0.9s
**PAB San Pablo 50.62 299** P **P** **05 27 52.7 +0.1**
PAB pmax pmax
comp=Z,6.0nm,1.0s
**DSB Dublin 51.26 317** P **P** **05 27 56.6 -0.5**
**VOI Vohitsoka 51.83 192** P **P** **05 28 02.3 +0.6**
VOI lAmb lAmb 05 28 04.4
comp=Z,11nm,0.9s
**SPITS Spitsbergen Ar 52.16 350** P **P** **05 28 04.0 +0.6**
comp=Z,7.3nm,1.0s,baz=211,slow=0.8,SNR=8.4
comp=Z,7.3nm,1.0s
**SPITS Spitsbergen Ar 52.16 350** P **P** **05 28 04.0 +0.6**
**LSZ Lusaka 52.24 216** P **P** **05 28 05.1 +0.2**
**LSZ Lusaka 52.24 216** P **P** **05 28 05.1 +0.2**
LSZ pmax pmax
comp=Z,21nm,1.2s
**MVO Moncorvo 52.42 301** *e*P **P** **05 28 06.1 +0.1**
comp=Z,14nm,2.0s
MVO *e*pP **pP** **05 28 28.3 +0.3**
**NJ2 Nanjing 52.77 70** *e*P **P** **05 28 08.4 -0.1**
NJ2 pmax pmax
comp=Z,17nm,1.0s
**PBAR Barrancos 52.92 298** *e*P **P** **05 28 09.7 +0.1**
comp=Z,18nm,1.8s
PBAR *e*pP **pP** **05 28 31.9 +0.2**
**MTE Manteigas 52.92 300** P **P** **05 28 09.7 0.0**
MTE lAmb lAmb 05 28 10.9
comp=Z,5.8nm,0.9s
**MTE Manteigas 52.92 300** *e*P **P** **05 28 10.1 +0.4**
comp=Z,13nm,1.3s
MTE *e*pP **pP** **05 28 32.1 +0.3**
**PCBR Castelo Branco 52.96 300** *e*P **P** **05 28 10.3 +0.4**
comp=Z,16nm,1.5s
PCBR *e*pP **pP** **05 28 31.0 -1.0**
**PMRV Marv??o 52.97 299** *e*P **P** **05 28 09.9 -0.1**
PMRV *e*pP **pP** **05 28 32.1 0.0**
**PVIS Viseu 53.14 301** *e*P **P** **05 28 10.8 -0.4**
PVIS *e*pP **pP** **05 28 30.3 -3.0**
**PGAV Gavieira, Arco 53.22 302** *e*P **P** **05 28 11.4 -0.5**
**TORD Torodi Ar. Bea 53.38 265** P **P** **05 28 12.8 -0.5**
**TORD Torodi Ar. Bea 53.38 265** P **P** **05 28 13.2 -0.1**
comp=Z,18nm,0.6s,baz=60,slow=7.6,SNR=287
TORD pP **pP** **05 28 35.4 +0.2**
comp=Z,5.8nm,0.5s,baz=59,slow=7.5,SNR=4.3
TORD sP **sP** **05 28 46.9 +1.9**
comp=Z,9.7nm,0.7s,baz=54,slow=7.8,SNR=4.1
comp=Z,18nm,0.6s
**PBEJ Beja 53.59 297** *e*P **P** **05 28 13.9 -0.6**
PBEJ *e*pP **pP** **05 28 35.9 -0.8**
**PVAQ Vaqueiros 53.59 297** *e*P **P** **05 28 14.4 -0.2**
**PCVE Castro Verde 53.80 297** *e*P **P** **05 28 15.8 -0.3**
**PNCL Nicolau / Gran 54.09 298** *e*P **P** **05 28 18.7 +0.6**
**CN2 Changchun 55.50 55** *e*P **P** **05 28 30.6 +2.3**
CN2 *es*P pP 05 28 53.4 +2.9
**KS19 Wonju Array Si 58.61 62** P **P** **05 28 50.1 -0.2**
**KSAR Wonju Array Be 58.64 62** P **P** **05 28 49.9 -0.6**
**KSAR Wonju Array Be 58.64 62** P **P** **05 28 49.9 -0.6**
**KSRS Korea Array 58.66 62** P **P** **05 28 50.0 -0.6**
comp=Z,5.1nm,0.5s,baz=278,slow=7.0,SNR=19
KSRS pP **pP** **05 29 12.9 -0.3**
comp=Z,10nm,0.8s,baz=274,slow=6.7,SNR=15
KSRS sP **sP** **05 29 22.9 -0.2**
comp=Z,5.5nm,0.9s,baz=275,slow=7.5,SNR=3.9
comp=Z,5.1nm,0.5s
**KLR Kul'dur 58.89 48** *e*P **P** **05 28 48.4 -3.7**
KLR *e* 05 29 06.6
KLR pmax pmax
comp=Z,3.0nm,0.6s
**TSUM Tsumeb 61.31 223** P **P** **05 29 08.9 -0.1**
**LBTB Lobatse 61.78 212** P **P** **05 29 11.5 -0.6**
**LBTB Lobatse 61.78 212** P **P** **05 29 11.5 -0.6**
LBTB pmax pmax
comp=Z,40nm,0.7s
**DBIC Dimbokro 62.11 262** P **P** **05 29 13.8 -0.6**
**DBIC Dimbokro 62.11 262** P **P** **05 29 14.7 +0.2**
comp=Z,7.6nm,0.5s,baz=44,slow=5.9,SNR=25
comp=Z,7.6nm,0.5s
**KIC Kosan Boka 62.17 261**⇑ *i*P **P** **05 29 15.2 +0.3**
comp=Z,20nm,0.6s
**TIC Toumodi 62.27 262**⇓ *e*P **P** **05 29 15.5 -0.1**
comp=Z,19nm,0.6s
**LIC Lamto 62.48 261**⇓ *e*P **P** **05 29 16.7 -0.3**
comp=Z,31nm,0.8s
**BOSA Boshof 65.02 211** P **P** **05 29 33.8 +0.4**
**BOSA Boshof 65.02 211** P **P** **05 29 34.5 +1.1**
comp=Z,35nm,0.5s,baz=27,slow=6.6,SNR=126
**SEY Seymchan 66.78 30***ce*P **P** **05 29 44.8 +0.7**
SEY pmax pmax
comp=Z,7.0nm,1.3s
**MJAR Matsushiro Arr 66.79 60** pP pP 05 30 07.6 -0.2
comp=Z,2.2nm,0.6s,baz=278,slow=11,SNR=2.7
**SOE Somerset East 68.44 208** P **P** **05 29 55.0 0.0**
**GRHM Grahamstown, E 68.60 207** P **P** **05 29 55.3 -0.7**
**SUR Sutherland 70.23 212** P **P** **05 30 05.6 -0.7**
**C18K Utukok River 78.40 13** P **P** **05 30 52.8 -0.2**
C18K lAmb lAmb 05 30 56.0
comp=Z,24nm,1.4s
**SCHQ Schefferville 83.28 331** P **P** **05 31 18.6 -0.6**
comp=Z,3.2nm,0.7s,baz=29,slow=10,SNR=3.9
SCHQ pP **pP** **05 31 42.1 -0.8**
comp=Z,3.2nm,0.7s,baz=49,slow=3.2,SNR=2.3
comp=Z,3.2nm,0.7s
**ILAR Eielson Array 84.42 10** P **P** **05 31 23.6 -1.2**
comp=Z,0.5nm,0.6s,baz=322,slow=4.5,SNR=11
ILAR pP **pP** **05 31 47.0 -1.6**
comp=Z,0.8nm,0.7s,baz=327,slow=4.2,SNR=6.3
ILAR PKKPbc **PKKPbc** **05 49 35.4 -1.5**
comp=Z,0.3nm,0.6s,baz=199,slow=2.4,SNR=4.6
comp=Z,0.5nm,0.6s
**I28M Miner Creek 84.67 7** P **P** **05 31 25.4 -0.8**
**L16K Owhat River 84.67 16** P **P** **05 31 26.1 -0.1**
L16K lAmb lAmb 05 31 52.0
comp=Z,9.6nm,1.2s
**J25K Salcha River, 84.79 9** P **P** **05 31 26.7 -0.1**
**L18K Granite Mounta 84.89 15** P **P** **05 31 26.8 -0.5**
L18K lAmb lAmb 05 31 52.8
comp=Z,6.8nm,1.2s
**J26L Joseph Creek 85.15 9** P **P** **05 31 28.2 -0.4**
J26L lAmb lAmb 05 31 53.2
comp=Z,6.3nm,1.1s
**EGAK Eagle 85.18 8** P **P** **05 31 28.2 -0.4**
EGAK lAmb lAmb 05 31 53.2
comp=Z,5.6nm,1.2s
**I30M Mount Dempster 85.22 6** P **P** **05 31 28.6 -0.4**
I30M lAmb lAmb 05 31 54.5
comp=Z,3.9nm,0.6s
**RND Reindeer 85.38 11** P **P** **05 31 28.8 -1.0**
RND lAmb lAmb 05 31 28.9
comp=Z,5.5nm,1.2s
**RND Reindeer 85.38 11** P **P** **05 31 28.8 -1.0**
RND pmax pmax
comp=Z,6.0nm,1.2s
**SCRK Sand Creek 85.59 9** P **P** **05 31 30.7 -0.2**
SCRK lAmb lAmb 05 31 56.6
comp=Z,4.6nm,1.0s
**DAWY Dawson 86.07 7** P **P** **05 31 33.0 -0.2**
DAWY lAmb lAmb 05 31 35.3
comp=Z,11nm,1.4s
**K29M Barlow Dome 86.47 6** P **P** **05 31 35.4 +0.1**
K29M lAmb lAmb 05 32 01.5
comp=Z,5.1nm,0.7s
**YKA Yellowknife Ar 88.26 356** P **P** **05 31 43.8 +0.1**
comp=Z,1.0nm,0.7s,baz=359,slow=5.4,SNR=4.5
YKA pP **pP** **05 32 07.5 -0.1**
comp=Z,2.2nm,0.7s,baz=359,slow=5.4,SNR=5.4
comp=Z,1.0nm,0.7s
**WRA Warramunga Arr 89.28 113** P **P** **05 31 48.4 -0.8**
comp=Z,2.2nm,1.0s,baz=314,slow=4.3,SNR=18
comp=Z,2.2nm,1.0s
**ASAR Alice Springs 90.88 117** P **P** **05 31 55.8 -0.8**
comp=Z,1.9nm,0.6s,baz=307,slow=4.8,SNR=14
comp=Z,1.9nm,0.6s
**SADO Sadowa 96.06 330** LR LR 06 15 19.8
comp=Z,352nm,21.6s,baz=142,slow=35
**MAW Mawson 96.72 178** P **P** **05 32 23.8 +1.6**
comp=Z,1.1nm,0.7s,baz=324,slow=8.7,SNR=2.4
**TXAR Lajitas Array 118.79 341** PKP **PKPdf** **05 37 39.9 -1.2**
comp=Z,0.2nm,0.5s,baz=147,slow=2.1,SNR=5.6
TXAR pPKP **pPKPdf** **05 38 04.4 -1.7**
comp=Z,0.3nm,0.7s,baz=199,slow=1.5,SNR=2.6
**QSPA South Pole Qui 119.14 180** PKP **PKPdf** **05 37 39.8 -0.6**
comp=Z,0.6nm,0.4s,baz=116,slow=1.3,SNR=11
QSPA pPKP **pPKPdf** **05 38 04.3 -0.9**
comp=Z,1.2nm,0.8s,baz=271,slow=6.5,SNR=2.8
**CPUP Villa Florida 122.39 256** PKP **PKPdf** **05 37 46.8 -1.0**
comp=Z,1.4nm,0.6s,baz=44,slow=1.3,SNR=5.8
**PLCA Paso Flores 136.01 240** PKP **PKiKP** **05 38 15.1 +0.1**
comp=Z,1.3nm,1.0s,baz=18,slow=3.2,SNR=4.7

**IDC 23 05:21:05.6±3.8,5.16S×151.69E,h0km,mb3.6/2, mbtmp3.7/2,Error ellipse: s-maj=141.3km s-min=51.6km az=118.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.38** | **227** | P | P | 05 26 05.8 | +0.1 |
| | 1.1nm,0.6s,baz=52,slow=9.9,SNR=25 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **25.15** | **221** | P | P | 05 26 32.5 | -0.1 |
| | 1.7nm,0.8s,baz=54,slow=8.8,SNR=13 | | | | | | |
| | 1.7nm,0.8s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **149.36** | **287** | PKPbc | PKPbc | 05 40 57.2 | -0.5 | | |
| | 0.6nm,1.1s,baz=69,slow=3.8,SNR=3.5 | | | | | | | | |

**IDC 23 05:22:56.0±2.9, 16°38S×176°83W, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=334.7km s-min=35.7km az=158.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **46.41** | **258** | P | P | 05 31 24.4 | -0.3 |
| | 0.2nm,0.5s,baz=94,slow=7.2,SNR=7.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.67** | **253** | P | P | 05 31 26.9 | +0.1 |
| | 0.7nm,0.6s,baz=87,slow=8.4,SNR=6.0 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **83.90** | **57** | P | P | 05 35 28.3 | 0.0 |
| | 0.1nm,0.5s,baz=246,slow=6.7,SNR=1.7 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

*IDC **23** 05:29:09.1±0.9, 7°70S×107°84E, h0km, mb4.0/11, mbtmp4.0/11, Error ellipse: s-maj=48.7km s-min=15.9km az=51.0*
*NEIC **23** 05:29:20.1±1.9, 7°90S±0°05×107°97E±0°06, h93km±8km, mb4.1/15, Error ellipse: s-maj=9.9km s-min=4.4km az=125.0*
*DJA **23** 05:29:22.6±0.2, 8°S±3°×107°8E±°, h87km±4km, M4.7/18, mb4.9/6, mB5.7/4, MLv4.5/18, Mw(mB)5.2/4*
**ISC 23 05:29:21.4±0.7, 7°92S±0°06×108°09E±0°04, h109km±6km, n66, σ1s84/68, mb3.9/17, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMJI** | **Cimerak** | **0.38** | **69** | P | Pn | 05 29 38.1 | +0.7 |
| CMJI | | | | S | Sn | 05 29 48.2 | -1.2 |
| **KPJI** | **Karang Pucung** | **1.02** | **55** | P | Pn | 05 29 43.7 | +1.0 |
| KPJI | | | | S | Sn | 05 29 59.4 | +0.7 |
| **CNJI** | **Cibinong** | **1.13** | **302** | P | Pn | 05 29 45.4 | +1.5 |
| CNJI | | | | S | Sn | 05 30 01.9 | +1.0 |
| **SKJI** | **Sukabumi** | **1.77** | **301** | P | Pn | 05 29 53.6 | +2.1 |
| SKJI | | | | S | Sn | 05 30 17.2 | +2.8 |
| **DBJI** | **Dramaga** | **1.90** | **315** | P | Pn | 05 29 55.1 | +2.0 |
| DBJI | | | | S | Sn | 05 30 19.7 | +2.4 |
| **YOGI** | **Yogyakarta** | **2.19** | **87** | P | Pn | 05 29 57.3 | +0.6 |
| **UGM** | **Wanagama** | **2.41** | **90** | | Pn | 05 30 00.8 | +1.1 |
| UGM | | | | Sn | Sn | 05 30 29.3 | +0.4 |
| **UGM** | **Wanagama** | **2.41** | **90** | P | Pn | 05 30 00.6 | +1.0 |
| **SMRI** | **Semarang** | **2.48** | **70** | | Pn | 05 30 01.8 | +1.2 |
| **SMRI** | **Semarang** | **2.48** | **70** | P | Pn | 05 30 02.2 | +1.6 |
| **SBJI** | **Serang** | **2.64** | **312** | P | Pn | 05 30 03.8 | +1.1 |
| **UWJI** | **Ujung Watu** | **3.20** | **62** | P | Pn | 05 30 11.2 | +1.1 |
| **NGJI** | **Ngawi** | **3.38** | **81** | P | Pn | 05 30 15.1 | +2.6 |
| **XMIS** | **Christmas Isla** | **3.50** | **223** | Pn | Pn | 05 30 12.4 | -1.7 |
| XMIS | | | | Sn | Sn | 05 30 50.9 | -4.0 |
| **PWJI** | **Pagerwojo** | **3.68** | **92** | P | Pn | 05 30 18.1 | +1.7 |
| **KASI** | **Kota Agung** | **4.29** | **303** | P | Pn | 05 30 27.4 | +2.7 |
| **GRJI** | **Gresik** | **4.46** | **77** | P | Pn | 05 30 27.9 | +0.9 |
| **PMBI** | **Palembang** | **5.96** | **326** | Pn | Pn | 05 30 45.2 | -2.0 |
| **JAGI** | **Jajag, Banyuwa** | **6.02** | **96** | | Pn | 05 30 48.3 | +0.1 |
| **JAGI** | **Jajag, Banyuwa** | **6.02** | **96** | P | Pn | 05 30 49.6 | +1.5 |
| | 119nm,0.7s,3µm0.6nm | | | | | | |
| **MNAI** | **Manna** | **6.21** | **304** | Pn | Pn | 05 30 47.4 | -3.3 |
| **MNAI** | **Manna** | **6.21** | **304** | P | Pn | 05 30 52.4 | +1.7 |
| | 433nm,2.5s | | | | | | |
| **SRBI** | **Singaraja** | **7.05** | **92** | P | Pn | 05 31 03.4 | +1.3 |
| | 126nm,1.1s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **8.74** | **96** | P | Pn | 05 31 24.7 | -0.3 |
| | 51nm,0.8s,2µm | | | | | | |
| **PPSI** | **Pulau Pagai** | **9.54** | **302** | P | Pn | 05 31 38.3 | +2.5 |
| | 308nm,1.2s | | | | | | |
| **KSM** | **Kuching** | **9.59** | **13** | Pn | Pn | 05 31 34.0 | -2.5 |
| **PDSI** | **Padang** | **10.31** | **312** | P | Pn | 05 31 48.9 | +2.6 |
| **EDFI** | **Ende, Flores** | **13.48** | **94** | P | Pn | 05 32 24.5 | -4.0 |
| **GSI** | **Gunungsitoli** | **13.93** | **311** | Pn | Pn | 05 32 31.1 | -3.1 |
| **IPM** | **Ipoh** | **14.19** | **330** | Pn | Pn | 05 32 34.1 | -3.5 |
| **TOLI2** | **Tolitoli** | **15.51** | **55** | Pn | Pn | 05 32 51.7 | -2.7 |
| TOLI2 | | | | IAmb | IAmb | 05 33 02.1 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **16.09** | **98** | Pn | Pn | 05 32 59.8 | -1.8 |
| **MYLDM** | **Lahad Datu** | **16.65** | **39** | Pn | Pn | 05 33 06.3 | -2.1 |
| MYLDM | | | | IAmb | IAmb | 05 33 25.0 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **21.64** | **113** | P | P | 05 34 03.5 | +0.3 |
| KNRA | | | | IAmb | IAmb | 05 34 16.7 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **MTN** | **Manton Dam** | **23.18** | **104** | P | P | 05 34 19.2 | +0.4 |
| MTN | | | | IAmb | IAmb | 05 34 34.5 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.72** | **341** | P | P | 05 34 55.3 | -4.5 |
| | comp=Z,1.7nm,0.3s,baz=149,slow=11,SNR=2.2 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **WB0** | **Warramunga Arr** | **28.07** | **118** | P | P | 05 35 03.9 | +0.9 |
| **WRA** | **Warramunga Arr** | **28.09** | **118** | P | P | 05 35 05.0 | +1.8 |
| | comp=Z,0.3nm,0.4s,baz=290,slow=12,SNR=7.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **28.10** | **118** | P | P | 05 35 04.1 | +0.9 |
| **WR0** | **Warramunga Arr** | **28.27** | **118** | P | P | 05 35 06.4 | +1.6 |
| WR0 | | | | IAmb | IAmb | 05 35 24.9 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **COEN** | **Coen** | **34.94** | **103** | P | P | 05 36 02.5 | -0.7 |
| COEN | | | | IAmb | IAmb | 05 36 05.1 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **35.27** | **268** | T | T | 06 13 33.5 | |
| | baz=93,slow=75,SNR=17 | | | | | | |
| **H08S3** | **Diego Garcia H** | **35.27** | **268** | T | T | 06 13 39.8 | |
| | baz=93,slow=75,SNR=27 | | | | | | |
| **H08S1** | **Diego Garcia H** | **35.28** | **268** | T | T | 06 13 22.4 | |
| | baz=93,slow=75,SNR=7.3 | | | | | | |
| **CTA** | **Charters Tower** | **38.85** | **112** | P | P | 05 36 39.0 | +2.7 |
| | comp=Z,0.1nm,0.6s,baz=225,slow=7.1,SNR=4.1 | | | | | | |
| **STKA** | **Stephens Creek** | **39.23** | **132** | P | P | 05 36 42.3 | +3.0 |
| | comp=Z,5.4nm,0.5s,baz=314,slow=8.9,SNR=16 | | | | | | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **NIL** | **Nilore** | **52.94** | **323** | P | P | 05 38 26.3 | -0.4 |
| **SONM** | **Songino Array** | **55.53** | **359** | P | P | 05 38 45.2 | -0.2 |
| | comp=Z,0.7nm,0.5s,baz=171,slow=11,SNR=4.0 | | | | | | |
| SONM | | | | PcP | PcP | 05 39 44.9 | +0.8 |
| | comp=Z,1.6nm,0.5s,baz=180,slow=4.3,SNR=6.2 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **59.12** | **340** | P | P | 05 39 10.5 | 0.0 |
| MK31 | | | | IAmb | IAmb | 05 39 32.6 | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.12** | **340** | P | P | 05 39 10.0 | -0.5 |
| **MKAR** | **Makanchi Array** | **59.12** | **340** | P | P | 05 39 09.6 | -1.0 |
| | comp=Z,0.7nm,0.4s,baz=155,slow=8.0,SNR=9.7 | | | | | | |
| MKAR | | | | PcP | PcP | 05 39 59.4 | +1.3 |
| | comp=Z,0.8nm,0.6s,baz=117,slow=6.0,SNR=4.8 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **61.28** | **221** | T | T | 06 46 35.6 | |
| | baz=70,slow=75,SNR=83 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **61.30** | **221** | T | T | 06 46 45.0 | |
| | baz=70,slow=75,SNR=57 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **61.30** | **221** | T | T | 06 46 39.9 | |
| | baz=70,slow=75,SNR=83 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.68** | **339** | P | P | 05 39 40.5 | -0.6 |
| | comp=Z,0.4nm,0.5s,baz=146,slow=4.9,SNR=4.1 | | | | | | |
| KURBB | | | | PcP | PcP | 05 40 17.1 | +0.7 |
| | comp=Z,0.8nm,0.4s,baz=154,slow=3.7,SNR=6.7 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **64.69** | **345** | P | P | 05 39 47.2 | -0.4 |
| | comp=Z,0.4nm,0.4s,baz=144,slow=6.5,SNR=2.0 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **68.63** | **337** | P | P | 05 40 12.1 | -0.7 |
| | comp=Z,0.6nm,0.5s,baz=134,slow=8.5,SNR=3.5 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **70.75** | **329** | P | P | 05 40 25.5 | -0.3 |
| **PEA0B** | **Petropavlovsk-** | **73.87** | **29** | P | P | 05 40 43.6 | -0.7 |
| **KBZ** | **Khabaz** | **78.05** | **318** | P | P | 05 41 06.6 | -1.6 |
| | comp=Z,1.8nm,0.8s,baz=126,slow=5.7,SNR=4.2 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.08** | **180** | P | P | 05 41 30.8 | +1.1 |
| **QSPA** | **South Pole Qui** | **82.08** | **180** | P | P | 05 41 32.4 | +2.8 |
| | comp=Z,1.0nm,0.9s,baz=284,slow=8.3,SNR=2.0 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **BR131** | **Keskin Array S** | **83.24** | **312** | P | P | 05 41 35.5 | -0.7 |
| BR131 | | | | IAmb | IAmb | 05 41 37.9 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **83.24** | **312** | P | P | 05 41 37.5 | +1.3 |
| **BRTR** | **Keskin Array B** | **83.24** | **312** | P | P | 05 41 37.2 | +1.0 |
| | comp=Z,0.9nm,0.7s,baz=137,slow=5.7,SNR=8.6 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **143.34** | **50** | PKhKP | PKPpre | 05 48 42.7 | |
| | comp=Z,0.3nm,0.4s,baz=239,slow=0.7,SNR=12 | | | | | | |

**IDC 23 05:41:43.3±3.0, 54°32N×87°03E, h0km, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=26.4km s-min=17.4km az=63.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.35** | **255** | I | I | 05 50 50.0 | |
| | baz=75,slow=322,SNR=8.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.35** | **255** | Pg | Pg | 05 42 08.0 | -1.1 |
| | 2.1nm,0.3s,baz=74,slow=17,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 05 42 25.9 | |
| | 1.2nm,0.3s,baz=73,slow=27,SNR=7.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.37** | **238** | Pn | Pn | 05 43 19.5 | +1.2 |
| | 0.2nm,0.3s,baz=54,slow=14,SNR=6.7 | | | | | | |
| KURBB | | | | Lg | Lg | 05 45 05.8 | |
| | 0.1nm,0.3s,baz=47,slow=31,SNR=1.2 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.11** | **204** | Pn | Pn | 05 43 42.9 | +0.7 |
| | 0.1nm,0.3s,baz=21,slow=12,SNR=2.9 | | | | | | |
| MKAR | | | | Lg | Lg | 05 46 02.4 | |
| | 0.1nm,0.3s,baz=24,slow=32,SNR=2.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*SJA **23** 05:42:25.3±0.5, 21°28S×68°87W, h134km±4km, ML4.3, MW4.2*
*VAO **23** 05:42:25.8±0.4, 21°13S×68°60W, h102km±5km, mb4.7*
*NEIC **23** 05:42:26.0±2.5, 21°29S±0°04×68°87W±0°07, h127km±7km, mb4.4/15, ML4.3(GUC), Error ellipse: s-maj=11.1km s-min=2.8km az=61.0*
*IDC **23** 05:42:27.1±1.0, 21°27S×68°48W, h109km±8km, mb4.0/7, mbtmp4.3/11, Error ellipse: s-maj=21.1km s-min=12.1km az=111.0*
*GUC **23** 05:42:27.8±0.6, 21°29S×68°79W, h108km±7km, ML4.3*
**ISC 23 05:42:25.5±0.6, 21°27S±0°03×68°82W±0°05, h116km±7km, n120, σ1s91/135, mb4.3/11, 4C-1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.66** | **217** | | Pn | 05 42 46.2 | +1.9 |
| **LVC** | **Limon Verde** | **1.34** | **184** | eP | Pn | 05 42 53.0 | +1.8 |
| LVC | | | | eS | Sn | 05 43 13.3 | +2.7 |
| **LVC** | **Limon Verde** | **1.34** | **184** | P | Pn | 05 42 52.9 | +1.8 |
| | 311nm,0.4s,baz=57,slow=11,SNR=848 | | | | | | |
| LVC | | | | S | Sn | 05 43 12.2 | +1.6 |
| | 822nm,0.2s,baz=108,slow=20,SNR=13 | | | | | | |
| **LVC** | **Limon Verde** | **1.34** | **184** | eP | Pn | 05 42 52.4 | +1.2 |
| LVC | | | | eS | Sn | 05 43 12.1 | +1.4 |
| LVC | | | | IAML | | 05 43 13.9 | |
| | 7µm,0.3s | | | | | | |
| **LVC** | **Limon Verde** | **1.34** | **184** | eP | Pn | 05 42 52.6 | +1.4 |
| LVC | | | | eS | Sn | 05 43 12.4 | +1.8 |
| **HMBC** | **Humberstone** | **1.41** | **314** | | Pn | 05 42 53.1 | +1.3 |
| HMBC | | | | Sn | Sn | 05 43 13.0 | +1.5 |
| **HMBC** | **Humberstone** | **1.41** | **314** | eP | Pn | 05 42 53.0 | +1.3 |
| HMBC | | | | eS | Sn | 05 43 13.8 | +2.2 |
| HMBC | | | | IAML | | 05 43 14.4 | |
| | comp=Z,8µm,0.3s | | | | | | |
| **HMBC** | **Humberstone** | **1.41** | **314** | ⇑iP | Pn | 05 42 53.0 | +1.3 |
| HMBC | | | | eS | Sn | 05 43 13.0 | +1.5 |
| HMBC | | | | IAML | | 05 43 14.4 | |
| | comp=N,10µm,0.4s | | | | | | |
| **TA01** | **Diego Aracena** | **1.45** | **298** | Pn | Pn | 05 42 53.5 | +1.4 |
| TA01 | | | | Sn | Sn | 05 43 13.7 | +1.4 |
| **TA01** | **Diego Aracena** | **1.45** | **298** | eP | Pn | 05 42 53.5 | +1.4 |
| TA01 | | | | eS | Sn | 05 43 14.3 | +2.0 |
| TA01 | | | | IAML | | 05 43 16.6 | |
| | comp=Z,3µm,0.5s | | | | | | |
| **TA01** | **Diego Aracena** | **1.45** | **298** | ⇑iP | Pn | 05 42 53.6 | +1.5 |
| TA01 | | | | eS | Sn | 05 43 13.6 | +1.4 |
| TA01 | | | | IAML | | 05 43 16.5 | |
| | comp=N,7µm,0.4s | | | | | | |
| **TA02** | **Huaiquique** | **1.58** | **309** | | Pn | 05 42 54.9 | +1.3 |
| **TA02** | **Huaiquique** | **1.58** | **309** | eP | Pn | 05 42 54.9 | +1.3 |
| **TA02** | **Huaiquique** | **1.58** | **309** | eP | Pn | 05 42 54.9 | +1.3 |
| TA02 | | | | eS | Sn | 05 43 16.0 | +1.0 |
| TA02 | | | | IAML | | 05 43 19.4 | |
| | comp=N,3µm,0.2s | | | | | | |
| **GO01** | **Chusmiza** | **1.63** | **347** | Pn | Pn | 05 42 56.3 | +1.6 |
| **GO01** | **Chusmiza** | **1.63** | **347** | eP | Pn | 05 42 56.4 | +1.6 |
| GO01 | | | | eS | Sn | 05 43 19.7 | +2.9 |
| **GO01** | **Chusmiza** | **1.63** | **347** | ⇓iP | Pn | 05 42 56.2 | +1.6 |
| GO01 | | | | eS | Sn | 05 43 18.9 | +2.1 |
| GO01 | | | | IAML | | 05 43 21.3 | |
| | comp=E,4µm,0.1s | | | | | | |
| **PB04** | **IPOC Station P** | **1.63** | **229** | Pn | Pn | 05 42 55.9 | +1.5 |
| **PB04** | **IPOC Station P** | **1.63** | **229** | eP | Pn | 05 42 55.4 | +1.0 |
| PB04 | | | | eS | Sn | 05 43 19.1 | +2.7 |
| PB04 | | | | IAML | | 05 43 24.9 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **1.63** | **229** | eP | Pn | 05 42 55.9 | +1.5 |
| PB04 | | | | eS | Sn | 05 43 16.9 | +0.6 |
| PB04 | | | | IAML | | 05 43 22.6 | |
| | comp=N,3µm,0.2s | | | | | | |
| **AF01** | **San Pedro de A** | **1.78** | **161** | | Pn | 05 42 58.5 | +2.3 |
| **AF01** | **San Pedro de A** | **1.78** | **161** | eP | Pn | 05 42 58.3 | +2.1 |
| AF01 | | | | IAML | | 05 43 41.1 | |
| | comp=Z,1µm,0.5s | | | | | | |
| **AF01** | **San Pedro de A** | **1.78** | **161** | eP | Pn | 05 42 58.8 | +2.5 |
| **PB10** | **IPOC Station P** | **2.75** | **215** | | Pn | 05 43 09.2 | +0.8 |
| **YJA** | **Yavi** | **3.20** | **107** | eP | Pn | 05 43 17.2 | +2.5 |
| YJA | | | | eS | Sn | 05 43 57.0 | +4.4 |
| **YJA** | **Yavi** | **3.20** | **107** | eP | Pn | 05 43 16.9 | +2.2 |
| **AP01** | **Chacalluta** | **3.22** | **333** | eP | Pn | 05 43 16.6 | +2.1 |
| **PB14** | **IPOC Station P** | **3.65** | **203** | Pn | Pn | 05 43 20.6 | +0.1 |
| **PB14** | **IPOC Station P** | **3.65** | **203** | eP | Pn | 05 43 20.9 | +0.4 |
| **PB18** | **Visviri** | **3.71** | **350** | Pn | Pn | 05 43 24.5 | +2.9 |
| **PB18** | **Visviri** | **3.71** | **350** | eP | Pn | 05 43 25.7 | +4.1 |
| **GO02** | **Mina Guanaco** | **3.94** | **190** | Pn | Pn | 05 43 25.0 | +0.6 |
| **GO02** | **Mina Guanaco** | **3.94** | **190** | eP | Pn | 05 43 24.8 | +0.4 |
| **AZAP** | **Zapla** | **4.54** | **131** | eP | Pn | 05 43 34.4 | +2.0 |
| **SLA** | **San Lorenzo** | **4.60** | **139** | eP | Pn | 05 43 35.8 | +2.7 |
| **SLA** | **San Lorenzo** | **4.60** | **139** | eP | Pn | 05 43 35.5 | +2.4 |
| **LPAZ** | **La Paz** | **5.00** | **8** | Pn | Pn | 05 43 41.9 | +3.0 |
| **LPAZ** | **La Paz** | **5.00** | **8** | P | Pn | 05 43 41.7 | +2.8 |
| | comp=Z,6.0nm,0.4s,baz=180,slow=2.8,SNR=93 | | | | | | |
| **AC01** | **Pan de Azucar** | **5.12** | **198** | | Pn | 05 43 39.4 | -0.7 |
| **AC01** | **Pan de Azucar** | **5.12** | **198** | eP | Pn | 05 43 39.1 | -1.0 |
| AC01 | | | | eS | Sn | 05 44 37.0 | -1.2 |
| AC01 | | | | IAML | | 05 45 02.1 | |
| | comp=Z,119nm,0.8s | | | | | | |
| **AC01** | **Pan de Azucar** | **5.12** | **198** | eP | Pn | 05 43 39.1 | -1.0 |
| **AC06** | **Mina Casimiro** | **6.22** | **193** | | Pn | 05 43 53.0 | -1.9 |
| **GO03** | **Copiap** | **6.43** | **191** | Pn | Pn | 05 43 55.8 | -1.9 |
| **AC04** | **Llanos de Chal** | **7.21** | **196** | Pn | Pn | 05 44 05.1 | -3.0 |
| **AC05** | **El Transito** | **7.65** | **190** | | Pn | 05 44 12.8 | -1.5 |
| **LCO** | **Las Campanas** | **7.90** | **192** | Pn | Pn | 05 44 15.5 | -2.3 |
| **FDPY** | **Filadelfia** | **8.31** | **99** | eP | Pn | 05 44 21.6 | -1.5 |
| **CO01** | **Juntas del Tor** | **8.75** | **187** | | Pn | 05 44 28.4 | -0.9 |
| **BBSD** | **Serra de San D** | **8.75** | **64** | eP | Pn | 05 44 25.8 | -3.4 |
| **CO05** | **La Serena** | **8.89** | **194** | Pn | Pn | 05 44 26.9 | -4.0 |
| **SIV** | **San Ignacio** | **9.02** | **56** | P | Pn | 05 44 30.3 | -2.6 |
| | comp=Z,38nm,0.4s,baz=250,slow=9.9,SNR=242 | | | | | | |
| **GO04** | **Tololo Observa** | **9.05** | **191** | Pn | Pn | 05 44 30.7 | -2.6 |
| **CO03** | **El Pedregal** | **9.68** | **190** | Pn | Pn | 05 44 38.5 | -3.3 |
| **CO06** | **Fray Jorge** | **9.70** | **195** | Pn | Pn | 05 44 36.7 | -5.3 |
| **CO02** | **Combarbal** | **10.09** | **191** | Pn | Pn | 05 44 43.9 | -3.4 |
| **MURT** | **Porto Murtinho** | **10.44** | **94** | eP | Pn | 05 44 49.0 | -3.0 |
| **PTLB** | **Pontes e Lacer** | **10.86** | **59** | Pn | Pn | 05 44 54.5 | -3.2 |
| **PTLB** | **Pontes e Lacer** | **10.86** | **59** | eP | Pn | 05 44 54.4 | -3.2 |
| **VA03** | **San Esteban** | **11.55** | **187** | Pn | Pn | 05 45 05.7 | -1.2 |
| **ETMB** | **Extrema** | **11.66** | **13** | Pn | Pn | 05 45 06.9 | -1.4 |
| **CPUP** | **Villa Florida** | **11.66** | **118** | Pn | Pn | 05 45 08.1 | -0.1 |
| **CPUP** | **Villa Florida** | **11.66** | **118** | P | Pn | 05 45 06.8 | -1.5 |
| | comp=Z,1.1nm,0.5s,baz=310,slow=12,SNR=5.3 | | | | | | |
| **VILB** | **Vilhena** | **11.67** | **46** | Pn | Pn | 05 45 07.7 | -0.8 |
| **VILB** | **Vilhena** | **11.67** | **46** | eP | Pn | 05 45 06.9 | -1.6 |
| **NNA** | **Nana** | **12.01** | **319** | Pn | Pn | 05 45 11.8 | -1.2 |
| **MT02** | **Curacav** | **12.12** | **189** | | Pn | 05 45 13.1 | -1.2 |
| **AQDB** | **Aquidauana** | **12.29** | **89** | Pn | Pn | 05 45 14.7 | -1.9 |
| **AQDB** | **Aquidauana** | **12.29** | **89** | eP | Pn | 05 45 14.3 | -2.3 |
| **MT09** | **Talagante** | **12.61** | **188** | Pn | Pn | 05 45 20.8 | 0.0 |
| **MT01** | **Popeta** | **12.73** | **189** | Pn | Pn | 05 45 20.8 | -1.5 |
| **SAML** | **Samuel** | **13.40** | **25** | Pn | Pn | 05 45 30.4 | -0.6 |
| **SAML** | **Samuel** | **13.40** | **25** | eP | Pn | 05 45 28.8 | -2.3 |
| **SALV** | **Santo Antonio** | **13.54** | **69** | eP | Pn | 05 45 30.8 | -2.1 |
| **PDRB** | **Porto dos Gac** | **15.04** | **52** | eP | Pn | 05 45 49.0 | -3.1 |
| **CLDB** | **Colider** | **16.21** | **52** | eP | P | 05 46 06.4 | -1.2 |
| **ITAB** | **Concordia** | **16.33** | **115** | | P | 05 46 07.3 | -1.5 |
| ITAB | | | | IAmb | IAmb | 05 46 11.0 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **LDASE** | **Londrina, Braz** | **16.51** | **101** | eP | P | 05 46 10.0 | -0.9 |
| **ARAG** | **Araguaiana, MT** | **17.05** | **74** | eP | Pn | 05 46 16.6 | -0.3 |
| **PLTB** | **Pedras Altas** | **17.14** | **131** | P | P | 05 46 14.4 | -3.4 |
| PLTB | | | | IAmb | IAmb | 05 46 29.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **TRQA** | **Tornquist** | **17.75** | **162** | P | Pn | 05 46 24.2 | -1.0 |
| **FRTB** | **Fartura** | **17.93** | **100** | eP | Pn | 05 46 26.7 | -0.9 |
| **TEFE** | **Tefe** | **18.11** | **14** | eP | Pn | 05 46 28.2 | -1.5 |
| **BB19B** | **Bebedouro** | **18.93** | **93** | eP | Pn | 05 46 36.7 | -2.7 |
| **LR05** | **Currie** | **19.10** | **187** | P | P | 05 46 38.0 | -1.0 |
| LR05 | | | | IAmb | IAmb | 05 46 39.5 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **SNDB** | **Serra Nova Dou** | **19.15** | **64** | eP | P | 05 46 36.8 | -3.1 |
| **NPGB** | **Novo Progresso** | **19.22** | **45** | eP | P | 05 46 38.8 | -1.9 |
| **PLCA** | **Paso Flores** | **19.46** | **184** | P | Pn | 05 46 45.8 | +0.3 |
| | comp=Z,6.0nm,0.7s,baz=349,slow=11,SNR=15 | | | | | | |
| **MACA** | **Manacapuru-AM** | **19.66** | **25** | P | P | 05 46 43.6 | -1.8 |
| **MACA** | **Manacapuru-AM** | **19.66** | **25** | eP | P | 05 46 44.2 | -1.2 |
| **IPMB** | **Ipameri, GO** | **19.68** | **84** | eP | P | 05 46 44.6 | -1.1 |
| **RCLB** | **Rio Claro- Sao** | **19.79** | **97** | eP | Pn | 05 46 46.3 | -3.2 |
| **LL04** | **Puerto Octay** | **19.82** | **188** | P | P | 05 46 46.2 | -0.6 |
| LL04 | | | | IAmb | IAmb | 05 46 49.1 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **VAO** | **Valinhos** | **20.31** | **99** | P | P | 05 46 51.2 | -1.3 |
| **VAO** | **Valinhos** | **20.31** | **99** | eP | P | 05 46 51.1 | -1.4 |
| **BDFB** | **Brasilia** | **20.50** | **78** | P | P | 05 46 53.7 | -0.9 |
| **BDFB** | **Brasilia** | **20.50** | **78** | P | P | 05 46 53.5 | -1.1 |
| | comp=Z,18nm,0.5s,baz=248,slow=9.4,SNR=66 | | | | | | |
| | comp=Z,18nm,0.5s | | | | | | |
| **PRPB** | **Parauapebas** | **23.74** | **54** | eP | P | 05 47 26.3 | -1.0 |
| **MAL2** | **Monte Alegre,** | **23.86** | **39** | P | P | 05 47 28.1 | -0.3 |
| MAL2 | | | | IAmb | IAmb | 05 47 29.0 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **SMTB** | **Santa Maria do** | **23.88** | **62** | eP | P | 05 47 28.5 | -0.1 |
| **JANB** | **Januaria** | **24.07** | **79** | eP | P | 05 47 29.0 | -1.3 |
| **SDBA** | **SAO DESIDERIO** | **24.50** | **73** | eP | P | 05 47 33.7 | -0.5 |
| **BOAV** | **Boa Vista** | **24.88** | **20** | P | P | 05 47 38.2 | +0.7 |
| BOAV | | | | IAmb | IAmb | 05 47 39.0 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **BOAV** | **Boa Vista** | **24.88** | **20** | eP | P | 05 47 38.0 | +0.4 |
| **MCPB** | **Macapa, AP** | **26.45** | **40** | eP | P | 05 47 51.5 | -0.3 |
| **BAUV** | **El Baul** | **30.03** | **2** | P | P | 05 48 23.8 | +0.2 |
| BAUV | | | | IAmb | IAmb | 05 48 44.9 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **OBIP** | **Obispado Ponce** | **39.13** | **3** | P | P | 05 49 41.1 | -0.7 |
| OBIP | | | | IAmb | IAmb | 05 50 04.0 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **58.97** | **172** | P | P | 05 52 14.5 | +2.2 |
| **TXAR** | **Lajitas Array** | **60.49** | **325** | P | P | 05 52 27.3 | +3.8 |
| | comp=Z,0.1nm,0.6s,baz=147,slow=7.3,SNR=1.7 | | | | | | |
| **SNAA** | **Sanae** | **62.47** | **161** | P | P | 05 52 37.6 | +1.4 |
| SNAA | | | | IAmb | IAmb | 05 52 38.9 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **62.47** | **161** | ⇑P | P | 05 52 37.9 | +1.7 |
| | comp=Z,48nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **62.47** | **161** | P | P | 05 52 38.1 | +1.9 |
| | comp=Z,2.1nm,0.6s,baz=278,slow=8.3,SNR=28 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **64.19** | **161** | ⇑P | P | 05 52 49.4 | +1.9 |
| | comp=Z,158nm,0.6s | | | | | | |
| **DBIC** | **Dimbokro** | **68.58** | **73** | P | P | 05 53 16.6 | +0.2 |
| | comp=Z,4.7nm,0.7s,baz=237,slow=7.5,SNR=3.8 | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.92** | **180** | P | P | 05 53 20.6 | +2.8 |
| | comp=Z,2.3nm,0.6s,baz=149,slow=0.7,SNR=25 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.36** | **322** | P | P | 05 53 59.1 | +2.5 |
| | comp=Z,0.6nm,1.0s,baz=98,slow=4.6,SNR=2.2 | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.20** | **70** | P | P | 05 54 07.4 | +0.3 |
| **TORD** | **Torodi Ar. Bea** | **77.20** | **70** | P | P | 05 54 07.5 | +0.3 |
| | comp=Z,1.2nm,0.5s,baz=259,slow=5.1,SNR=34 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **84.53** | **163** | P | P | 05 54 47.2 | +2.0 |
| | comp=Z,2.1nm,0.5s,baz=227,slow=4.0,SNR=13 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **133.20** | **210** | PKP | **PKiKP** | 06 01 30

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GNL** | **Ganaly** | **1.70** | **334** | *e*P | | **Pn** | **06 06 55.5** | **+0.1** |
| GNL | | | | *e*S | | **Sn** | **06 07 16.5** | **+0.5** |
| **KII** | **Karymskiy** | **1.87** | **5** | *e*P | | **Pn** | **06 06 58.8** | **+1.0** |
| KII | | | | *e*S | | **Sn** | **06 07 22.6** | **+2.4** |
| **SKR** | **Severo-Kuril's** | **2.43** | **233** | *e*P | | **Pn** | **06 07 05.7** | **+0.4** |
| SKR | | | | *e*S | | **Sn** | **06 07 33.6** | **-0.3** |
| **MKZ** | **Mys Kozlova** | **2.83** | **32** | *e*P | | **Pn** | **06 07 11.3** | **+0.5** |
| **TUMD** | **Tumrok D** | **3.12** | **13** | *e*P | | **Pn** | **06 07 16.2** | **+1.4** |
| TUMD | | | | *e*S | | **Sn** | **06 07 52.4** | **+1.6** |
| **TUMR** | **Tumrok** | **3.17** | **10** | *e*P | | **Pn** | **06 07 17.1** | **+1.5** |
| **KMNR** | **Kamenistaya** | **3.64** | **9** | *e*P | | **Pn** | **06 07 24.4** | **+2.3** |
| **ESO** | **Esso** | **3.77** | **356** | *e*P | | **Pn** | **06 07 24.7** | **+1.0** |
| **BZP** | **Bezymyannyi-Pe** | **3.83** | **11** | *e*P | | **Pn** | **06 07 26.1** | **+1.5** |
| **BZMR** | **Bezymyannaya** | **3.84** | **11** | *e*P | | **Pn** | **06 07 26.3** | **+1.4** |
| **KIRR** | **Kirishev** | **3.85** | **10** | *e*P | | **Pn** | **06 07 26.0** | **+1.1** |
| **KPT** | **Kopyto** | **3.85** | **9** | *e*P | | **Pn** | **06 07 26.4** | **+1.5** |
| **BZWR** | **Bezymyannyi-We** | **3.87** | **11** | *e*P | | **Pn** | **06 07 27.1** | **+1.8** |
| **BZGR** | **Bezymyannyi-Gr** | **3.88** | **13** | *e*P | | **Pn** | **06 07 27.4** | **+2.2** |
| **KOZ** | **Kozyrevsk** | **3.91** | **6** | *e*P | | **Pn** | **06 07 26.8** | **+1.1** |
| **ZLN** | **Zelenaya** | **3.97** | **13** | *e*P | | **Pn** | **06 07 28.4** | **+1.9** |
| **LGNR** | **Loginova** | **4.01** | **12** | *e*P | | **Pn** | **06 07 29.1** | **+1.8** |
| **KRSR** | **Krestovskiy** | **4.13** | **11** | *e*P | | **Pn** | **06 07 29.6** | **+0.9** |
| **SRDR** | **Sredinnyy** | **4.16** | **4** | *e*P | | **Pn** | **06 07 30.4** | **+1.2** |
| **KBTR** | **Krutoberegovo** | **4.57** | **26** | *e*P | | **Pn** | **06 07 35.1** | **+0.4** |
| **BKI** | **Bering** | **5.05** | **50** | *e*P | | **Pn** | **06 07 40.5** | **-0.7** |
| **ILAR** | **Eielson Array** | **29.86** | **44** | P | | **P** | **06 12 29.4** | **-1.2** |
| | 0.7nm,0.8s,baz=258,slow=7.5,SNR=8.2 0.7nm,0.8s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.94** | **167** | T | | T | 06 48 01.8 | |
| | baz=350,SNR=42 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.95** | **167** | T | | T | 06 48 06.4 | |
| | baz=350,slow=74,SNR=36 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **32.95** | **167** | T | | T | 06 48 05.1 | |
| | baz=350,slow=74,SNR=57 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.11** | **167** | T | | T | 06 49 27.8 | |
| | baz=351,slow=76,SNR=21 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.12** | **167** | T | | T | 06 49 28.6 | |
| | baz=351,slow=76,SNR=18 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.13** | **167** | T | | T | 06 49 23.7 | |
| | baz=351,slow=76,SNR=18 | | | | | | | |
| **JOW** | **Kunigami** | **34.33** | **234** | LR | | LR | 06 29 14.1 | |
| | comp=Z,342nm,18.9s,baz=260,slow=39 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **56.58** | **69** | P | | **P** | **06 16 07.1** | **+1.1** |
| | 0.2nm,0.4s,baz=294,slow=8.8,SNR=4.0 0.2nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **58.46** | **60** | P | | **P** | **06 16 18.2** | **-1.1** |
| | 0.2nm,0.5s,baz=302,slow=4.1,SNR=2.0 0.2nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.51** | **66** | P | | **P** | **06 17 43.8** | **-0.3** |
| | 0.4nm,0.6s,baz=298,slow=4.2,SNR=7.9 0.4nm,0.6s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **134.76** | **89** | T | | T | 08 56 07.3 | |
| | baz=314,slow=77,SNR=47 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **134.77** | **89** | T | | T | 08 56 08.6 | |
| | baz=314,slow=77,SNR=43 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **134.77** | **89** | T | | T | 08 56 07.4 | |
| | baz=314,slow=77,SNR=45 | | | | | | | |

*IDC* ***23*** *06:17:16.8±1.1,2.41N×122.17E,h0km,mb4.0/6, mbtmp4.0/6,Error ellipse: s-maj=79.0km s-min=17.6km az=70.0*

**ISC 23 06:18:06.9±1.1,2.3N±0.2×123.0E±0.5,h550km,n6, σ18 31/6,mb3.6/6,Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.80** | **154** | P | | | **P** | **06 22 44.9** | **-1.2** |
| | 0.9nm,0.5s,baz=336,slow=9.6,SNR=16 0.9nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **27.96** | **158** | P | | | **P** | **06 23 12.5** | **-1.3** |
| | 0.4nm,0.5s,baz=332,slow=6.9,SNR=7.0 0.4nm,0.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.36** | **154** | P | | | **P** | **06 24 42.7** | **+1.4** |
| | 1.3nm,0.5s,baz=299,slow=3.4,SNR=4.2 1.3nm,0.5s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **42.44** | **10** | P | | | **P** | **06 25 13.5** | **-0.2** |
| | 2.8nm,0.5s,baz=196,slow=7.0,SNR=7.5 2.8nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **47.53** | **345** | P | | | **P** | **06 25 53.0** | **+0.3** |
| | 1.0nm,0.7s,baz=175,slow=7.2,SNR=4.0 1.0nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.62** | **328** | P | | | **P** | **06 26 57.8** | **-0.1** |
| | 0.9nm,0.3s,baz=127,slow=7.9,SNR=19 0.9nm,0.3s | | | | | | | | |

**TAP 23 06:22:02.5,23.98N×121.00E,h16km,ML3.7,13C-27D,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WPL** | **Puli Township** | **0.05** | **309** | ⇑P | | | Pg | 06 22 07.7 | +2.2 |
| | baz=309 | | | | | | | | |
| WPL | | | | *i* S | | | Sg | 06 22 09.9 | +2.3 |
| | baz=309 | | | | | | | | |
| **DPDB** | **Guoxing** | **0.08** | **308** | ⇑*i*P | | | Pg | 06 22 06.1 | +0.2 |
| | baz=308 | | | | | | | | |
| DPDB | | | | S | | | Sg | 06 22 08.4 | +0.3 |
| | baz=308 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.11** | **313** | ⇑*i*P | | | Pb | 06 22 06.3 | +0.1 |
| | baz=313 | | | | | | | | |
| WCS | | | | *i* S | | | Sb | 06 22 09.0 | +0.3 |
| | baz=313 | | | | | | | | |
| **WUSB** | **Renai** | **0.11** | **85** | ⇑*i*P | | | Pb | 06 22 06.5 | +0.1 |
| | baz=86 | | | | | | | | |
| WUSB | | | | *i* S | | | Sg | 06 22 08.7 | +0.1 |
| | baz=86 | | | | | | | | |
| **TYC** | **Yuchr** | **0.15** | **239** | ⇑*i*P | | | Pg | 06 22 06.7 | +0.2 |
| | baz=235 | | | | | | | | |
| TYC | | | | S | | | Sg | 06 22 09.5 | +0.2 |
| | baz=235 | | | | | | | | |
| **OWD** | **Renai** | **0.17** | **100** | ⇓*i*P | | | Pb | 06 22 07.3 | 0.0 |
| | baz=100 | | | | | | | | |
| OWD | | | | S | | | Sb | 06 22 10.4 | -0.1 |
| | baz=100 | | | | | | | | |
| **CHGB** | **Renai** | **0.18** | **64** | ⇑*i*P | | | Pb | 06 22 07.5 | -0.1 |
| | baz=71 | | | | | | | | |
| CHGB | | | | *i* S | | | Sb | 06 22 10.8 | -0.2 |
| | baz=71 | | | | | | | | |
| **SSLB** | **Suanglung** | **0.20** | **192** | ⇑*i*P | | | Pg | 06 22 07.2 | -0.1 |
| | baz=186 | | | | | | | | |
| SSLB | | | | *i* S | | | Sg | 06 22 10.2 | -0.3 |
| | baz=186 | | | | | | | | |
| **VWDT** | **VWDT** | **0.26** | **150** | ⇓*i*P | | | Pb | 06 22 08.8 | 0.0 |
| | baz=150 | | | | | | | | |
| VWDT | | | | S | | | Sg | 06 22 12.5 | +0.3 |
| | baz=150 | | | | | | | | |
| **WWF** | **Wufeng** | **0.28** | **282** | ⇓*i*P | | | Pb | 06 22 10.1 | +0.9 |
| | baz=282 | | | | | | | | |
| WWF | | | | S | | | Sn | 06 22 15.8 | -2.1 |
| | baz=282 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.29** | **56** | ⇓*i*P | | | Pb | 06 22 09.8 | +0.1 |
| | baz=66 | | | | | | | | |
| WHF | | | | *i* S | | | Sb | 06 22 14.4 | -0.1 |
| | baz=66 | | | | | | | | |
| **WJS** | **Zhushan** | **0.29** | **237** | P | | | Pb | 06 22 09.7 | +0.3 |
| | baz=232 | | | | | | | | |
| WJS | | | | S | | | Sb | 06 22 15.2 | +1.2 |
| | baz=232 | | | | | | | | |
| **WHP** | **Taichung City** | **0.30** | **351** | ⇑*i*P | | | Pb | 06 22 09.3 | -0.3 |
| | baz=352 | | | | | | | | |
| WHP | | | | S | | | Sb | 06 22 14.4 | +0.1 |
| | baz=352 | | | | | | | | |
| **WNT1** | **Nantou City** | **0.30** | **256** | ⇓*i*P | | | Pb | 06 22 10.2 | +0.7 |
| | baz=255 | | | | | | | | |
| WNT1 | | | | S | | | Sb | 06 22 15.7 | +1.5 |
| | baz=255 | | | | | | | | |
| **WNT** | **Mingjian** | **0.30** | **250** | ⇓*i*P | | | Pb | 06 22 10.1 | +0.5 |
| | baz=248 | | | | | | | | |
| WNT | | | | S | | | Sb | 06 22 15.8 | +1.5 |
| | baz=248 | | | | | | | | |
| **TDCB** | **Techi** | **0.31** | **28** | ⇑*i*P | | | Pg | 06 22 09.2 | +0.1 |
| | baz=29 | | | | | | | | |
| TDCB | | | | *i* S | | | Sg | 06 22 13.2 | -0.5 |
| | baz=29 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.31** | **205** | *e*P | | | Pg | 06 22 09.5 | +0.3 |
| | baz=200 | | | | | | | | |
| WHYT | | | | S | | | Sb | 06 22 15.1 | +0.5 |
| | baz=200 | | | | | | | | |
| **TWT** | **Tachien** | **0.32** | **31** | ⇑P | | | Pg | 06 22 09.2 | -0.1 |
| | baz=29 | | | | | | | | |
| TWT | | | | S | | | Sg | 06 22 13.4 | -0.5 |
| | baz=29 | | | | | | | | |
| **TCU** | **Taichung** | **0.34** | **299** | ⇓P | | | Pb | 06 22 10.9 | +0.8 |
| | baz=300 | | | | | | | | |
| TCU | | | | *e*S | | | Sb | 06 22 16.8 | +1.5 |
| | baz=300 | | | | | | | | |
| **FUSS** | **Fushou** | **0.35** | **40** | P | | | Pg | 06 22 09.9 | +0.1 |
| | baz=41 | | | | | | | | |
| FUSS | | | | *e*S | | | Sg | 06 22 15.1 | +0.2 |
| | baz=41 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.38** | **84** | ⇓*i*P | | | Pb | 06 22 10.8 | -0.2 |
| | baz=81 | | | | | | | | |
| LXIB | | | | S | | | Sg | 06 22 16.1 | +0.3 |
| | baz=81 | | | | | | | | |
| **WCHH** | **Zhanghua** | **0.41** | **284** | ⇓*i*P | | | Pb | 06 22 12.0 | +0.6 |
| | baz=283 | | | | | | | | |
| WCHH | | | | *e*S | | | Sb | 06 22 18.6 | +1.1 |
| | baz=283 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.42** | **331** | ⇓*i*P | | | Pb | 06 22 12.2 | +0.6 |
| | baz=343 | | | | | | | | |
| TWQ1 | | | | *i* S | | | Sb | 06 22 18.8 | +1.1 |
| | baz=343 | | | | | | | | |
| **ESL** | **Shilin** | **0.43** | **113** | ⇓*i*P | | | Pb | 06 22 11.6 | -0.1 |
| | baz=107 | | | | | | | | |
| ESL | | | | S | | | Sb | 06 22 17.8 | -0.2 |
| | baz=107 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.44** | **126** | ⇓*i*P | | | Pg | 06 22 11.6 | +0.2 |
| | baz=118 | | | | | | | | |
| WARBT | | | | S | | | Sg | 06 22 17.4 | -0.1 |
| | baz=118 | | | | | | | | |
| **ETM** | **Tongmen** | **0.45** | **92** | ⇓*i*P | | | Pg | 06 22 11.8 | +0.1 |
| | baz=92 | | | | | | | | |
| ETM | | | | *e*S | | | Sb | 06 22 18.5 | -0.1 |
| | baz=92 | | | | | | | | |
| **NSY** | **Sanyi** | **0.48** | **333** | ⇓*i*P | | | Pb | 06 22 13.7 | +1.1 |
| | baz=336 | | | | | | | | |
| NSY | | | | *e*S | | | Sb | 06 22 21.1 | +1.6 |
| | baz=336 | | | | | | | | |
| **WDJ** | **Dajia District** | **0.49** | **318** | *i* P | | | Pn | 06 22 13.9 | -0.9 |
| | baz=319 | | | | | | | | |
| WDJ | | | | *e*S | | | Sn | 06 22 21.4 | -1.6 |
| | baz=319 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.50** | **63** | ⇓*i*P | | | Pg | 06 22 12.6 | +0.1 |
| | baz=60 | | | | | | | | |
| ETLH | | | | *i* S | | | Sg | 06 22 19.3 | +0.1 |
| | baz=60 | | | | | | | | |
| **EGFH** | **Guangfu** | **0.50** | **128** | *e*P | | | Pg | 06 22 12.6 | +0.1 |
| | baz=123 | | | | | | | | |
| EGFH | | | | *e*S | | | Sg | 06 22 18.6 | -0.7 |
| | baz=123 | | | | | | | | |
| **WDLH** | **Douliu** | **0.51** | **235** | ⇓P | | | Pb | 06 22 13.7 | +0.6 |
| | baz=233 | | | | | | | | |
| WDLH | | | | *e*S | | | Sn | 06 22 22.1 | -1.5 |
| | baz=233 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.55** | **110** | ⇓P | | | Pb | 06 22 14.1 | +0.3 |
| | baz=106 | | | | | | | | |
| SHUL | | | | *e*S | | | Sb | 06 22 21.6 | +0.2 |
| | baz=106 | | | | | | | | |
| **HWA** | **Hwalien** | **0.56** | **90** | ⇓*e*P | | | Pb | 06 22 14.1 | +0.3 |
| | baz=91 | | | | | | | | |
| HWA | | | | *e*S | | | Sn | 06 22 23.6 | -1.1 |
| | baz=91 | | | | | | | | |
| **TWD** | **Chiawan** | **0.56** | **80** | ⇓*i*P | | | Pg | 06 22 13.5 | 0.0 |
| | baz=88 | | | | | | | | |
| TWD | | | | *e*S | | | Sg | 06 22 21.2 | +0.2 |
| | baz=88 | | | | | | | | |
| **EHY** | **Hungye** | **0.56** | **148** | ⇓*i*P | | | Pb | 06 22 13.8 | -0.1 |
| | baz=142 | | | | | | | | |
| EHY | | | | S | | | Sg | 06 22 20.9 | -0.2 |
| | baz=142 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.56** | **102** | *e*P | | | Pg | 06 22 12.1 | -1.5 |
| | baz=98 | | | | | | | | |
| TEYL | | | | *e*S | | | Sb | 06 22 22.9 | +1.2 |
| | baz=98 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.57** | **119** | *e*P | | | Pb | 06 22 14.5 | +0.4 |
| | baz=113 | | | | | | | | |
| TEGC | | | | *e*S | | | Sb | 06 22 23.2 | +1.4 |
| | baz=113 | | | | | | | | |
| **NNSB** | **Datong** | **0.57** | **38** | P | | | Pg | 06 22 13.5 | -0.3 |
| | baz=38 | | | | | | | | |
| NNSB | | | | *e*S | | | Sg | 06 22 20.2 | -1.2 |
| | baz=38 | | | | | | | | |
| **NNSH** | **Datong** | **0.57** | **38** | *e*P | | | Pg | 06 22 13.5 | -0.3 |
| | baz=38 | | | | | | | | |
| NNSH | | | | *e*S | | | Sg | 06 22 20.6 | -0.9 |
| | baz=38 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.57** | **37** | *e*P | | | Pg | 06 22 13.8 | -0.1 |
| | baz=38 | | | | | | | | |
| NNS | | | | *e*S | | | Sb | 06 22 22.0 | -0.2 |
| | baz=38 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **0.57** | **262** | *e*P | | | Pb | 06 22 14.7 | +0.5 |
| | baz=261 | | | | | | | | |
| WRL | | | | *e*S | | | Sn | 06 22 23.8 | -1.3 |
| | baz=261 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.58** | **71** | ⇓*i*P | | | Pg | 06 22 13.9 | -0.1 |
| | baz=81 | | | | | | | | |
| NACB | | | | *e*S | | | Sg | 06 22 21.5 | -0.2 |
| | baz=81 | | | | | | | | |
| **EHYH** | **Wanrong** | **0.58** | **147** | *e*P | | | Pg | 06 22 14.1 | +0.1 |
| | baz=142 | | | | | | | | |
| EHYH | | | | *e*S | | | Sg | 06 22 21.1 | -0.6 |
| | baz=142 | | | | | | | | |
| **NMLH** | **Miaoli** | **0.58** | **341** | *e*P | | | Pn | 06 22 15.5 | -0.6 |
| | baz=341 | | | | | | | | |
| NMLH | | | | *e*S | | | Sn | 06 22 25.1 | -0.3 |
| | baz=341 | | | | | | | | |
| **ETL** | **Fush Village** | **0.60** | **73** | *e*P | | | Pg | 06 22 14.2 | -0.1 |
| | baz=83 | | | | | | | | |
| ETL | | | | *e*S | | | Sb | 06 22 22.8 | -0.1 |
| | baz=83 | | | | | | | | |
| **HGSD** | **Ruisui** | **0.62** | **141** | P | | | Pb | 06 22 15.3 | +0.3 |
| | baz=141 | | | | | | | | |
| HGSD | | | | *e*S | | | Sb | 06 22 24.0 | +0.4 |
| | baz=141 | | | | | | | | |
| **WTK** | **Tuku** | **0.63** | **242** | *e*P | | | Pb | 06 22 15.7 | +0.6 |
| | baz=241 | | | | | | | | |
| WTK | | | | *i* S | | | Sn | 06 22 25.7 | -0.8 |
| | baz=241 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.65** | **0** | *e*P | | | Pb | 06 22 16.2 | +0.8 |
| | baz=1.0 | | | | | | | | |
| NSTT | | | | *i* S | | | Sb | 06 22 24.9 | +0.7 |
| | baz=1.0 | | | | | | | | |
| **YULB** | **Yu-li** | **0.65** | **155** | ⇓*i*P | | | Pg | 06 22 15.3 | 0.0 |
| | baz=146 | | | | | | | | |
| YULB | | | | *e*S | | | Sb | 06 22 24.7 | +0.4 |
| | baz=146 | | | | | | | | |
| **WCKO** | **Fanlu** | **0.65** | **214** | P | | | Pb | 06 22 15.8 | +0.3 |
| | baz=214 | | | | | | | | |
| WCKO | | | | S | | | Sb | 06 22 25.2 | +0.9 |
| | baz=214 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.66** | **10** | *e*P | | | Pb | 06 22 15.9 | +0.3 |
| | baz=18 | | | | | | | | |
| NFF | | | | *i* S | | | Sb | 06 22 25.4 | +0.8 |
| | baz=18 | | | | | | | | |
| **LIOB** | **Emei** | **0.66** | **1** | *e*P | | | Pb | 06 22 16.4 | +0.7 |
| | baz=2.0 | | | | | | | | |
| LIOB | | | | *e*S | | | Sb | 06 22 25.7 | +1.0 |
| | baz=2.0 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.67** | **260** | *e*P | | | Pn | 06 22 17.7 | +0.5 |
| | baz=258 | | | | | | | | |
| WTCT | | | | *e*S | | | Sn | 06 22 26.1 | -1.2 |
| | baz=258 | | | | | | | | |
| **TWF1** | **Yuli** | **0.68** | **156** | ⇓*i*P | | | Pb | 06 22 16.1 | 0.0 |
| | baz=147 | | | | | | | | |
| TWF1 | | | | *e*S | | | Sb | 06 22 25.6 | +0.3 |
| | baz=147 | | | | | | | | |
| **EYUL** | **Yuli** | **0.70** | **155** | *i* P | | | Pb | 06 22 16.4 | +0.1 |
| | baz=155 | | | | | | | | |
| EYUL | | | | *i* S | | | Sb | 06 22 26.2 | +0.6 |
| | baz=155 | | | | | | | | |
| **LATG** | **Datong** | **0.73** | **41** | ⇓*i*P | | | Pg | 06 22 16.4 | -0.4 |
| | baz=33 | | | | | | | | |
| LATG | | | | S | | | Sg | 06 22 26.1 | -0.5 |
| | baz=33 | | | | | | | | |
| **EHP** | **Heping Village** | **0.75** | **64** | *e*P | | | Pg | 06 22 16.8 | -0.4 |
| | baz=65 | | | | | | | | |
| EHP | | | | *e*S | | | Sb | 06 22 28.1 | +0.8 |
| | baz=65 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.76** | **207** | *e*P | | | Pb | 06 22 17.3 | 0.0 |
| | baz=207 | | | | | | | | |
| TPUB | | | | *e*S | | | Sb | 06 22 28.3 | +0.9 |
| | baz=207 | | | | | | | | |
| **EAHA** | **Aohua** | **0.76** | **63** | P | | | Pb | 06 22 17.2 | -0.2 |
| | baz=63 | | | | | | | | |
| EAHA | | | | *e*S | | | Sb | 06 22 28.4 | +0.9 |
| | baz=63 | | | | | | | | |
| **NSK** | **Sanguang** | **0.77** | **25** | *e*P | | | Pg | 06 22 17.5 | 0.0 |
| | baz=35 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.77** | **27** | ⇓P | | | Pg | 06 22 17.3 | -0.2 |
| | baz=36 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.78** | **37** | ⇑*i*P | | | Pb | 06 22 17.4 | -0.2 |
| | baz=29 | | | | | | | | |
| NDT | | | | *e*S | | | Sg | 06 22 28.1 | +0.1 |
| | baz=29 | | | | | | | | |
| **WSF** | **Szhu** | **0.79** | **244** | *e*P | | | Pb | 06 22 17.4 | -0.4 |
| | baz=242 | | | | | | | | |
| WSF | | | | S | | | Sn | 06 22 29.7 | -0.7 |
| | baz=242 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.79** | **179** | *e*P | | | Pb | 06 22 17.7 | -0.2 |
| | baz=184 | | | | | | | | |
| ELDTW | | | | *e*S | | | Sn | 06 22 29.5 | -1.1 |
| | baz=184 | | | | | | | | |
| **SBCB** | **Hsinchu** | **0.81** | **359** | *e*P | | | Pn | 06 22 19.4 | +0.2 |
| | baz=1.0 | | | | | | | | |
| SBCB | | | | *e*S | | | Sn | 06 22 30.9 | 0.0 |
| | baz=1.0 | | | | | | | | |
| **ENA** | **Nanau** | **0.81** | **57** | ⇓*i*P | | | Pb | 06 22 18.2 | 0.0 |
| | baz=57 | | | | | | | | |
| ENA | | | | S | | | Sb | 06 22 28.7 | -0.2 |
| | baz=57 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.81** | **206** | P | | | Pg | 06 22 18.4 | 0.0 |
| | baz=205 | | | | | | | | |
| WTP | | | | *i* S | | | Sg | 06 22 29.8 | +0.7 |
| | baz=205 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.82** | **358** | *e*P | | | Pb | 06 22 17.3 | -1.0 |
| | baz=2.0 | | | | | | | | |
| HSN | | | | *e*S | | | Sn | 06 22 31.4 | +0.3 |
| | baz=2.0 | | | | | | | | |
| **FULB** | **Fuli** | **0.83** | **161** | *e*P | | | Pn | 06 22 19.4 | 0.0 |
| | baz=161 | | | | | | | | |
| FULB | | | | *i* S | | | Sn | 06 22 31.4 | 0.0 |
| | baz=161 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.83** | **194** | P | | | Pg | 06 22 18.9 | +0.1 |
| | baz=194 | | | | | | | | |
| STYH | | | | *e*S | | | Sg | 06 22 30.1 | +0.3 |
| | baz=194 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.83** | **38** | ⇑P | | | Pb | 06 22 18.5 | -0.1 |
| | baz=31 | | | | | | | | |
| ENTT | | | | *e*S | | | Sg | 06 22 30.4 | +0.5 |
| | baz=31 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.84** | **237** | *e*P | | | Pg | 06 22 18.9 | 0.0 |
| | baz=235 | | | | | | | | |
| WSL | | | | S | | | Sn | 06 22 31.7 | +0.1 |
| | baz=235 | | | | | | | | |
| **EWUT** | **Wuta** | **0.85** | **57** | ⇓*e*P | | | Pb | 06 22 18.8 | -0.1 |
| | baz=57 | | | | | | | | |
| EWUT | | | | *e*S | | | Sg | 06 22 30.8 | +0.6 |
| | baz=57 | | | | | | | | |
| **EHD** | **Haiduan** | **0.85** | **167** | P | | | Pg | 06 22 19.3 | +0.2 |
| | baz=167 | | | | | | | | |
| EHD | | | | *e*S | | | Sg | 06 22 30.5 | +0.2 |
| | baz=167 | | | | | | | | |
| **TWK** | **Hsinying** | **0.85** | **213** | *e*P | | | Pg | 06 22 19.1 | 0.0 |
| | baz=212 | | | | | | | | |
| TWK | | | | *e*S | | | Sn | 06 22 31.3 | -0.8 |
| | baz=212 | | | | | | | | |
| **CHKH** | **Chenggong** | **0.87** | **155** | *e*P | | | Pn | 06 22 20.3 | +0.3 |
| | baz=155 | | | | | | | | |
| CHKH | | | | *i* S | | | Sn | 06 22 33.3 | +1.0 |
| | baz=155 | | | | | | | | |
| **SNST** | **Tainan City** | **0.89** | **211** | *e*P | | | Pn | 06 22 20.4 | +0.1 |
| | baz=211 | | | | | | | | |
| SNST | | | | *e*S | | | Sn | 06 22 32.2 | -0.6 |
| | baz=211 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.90** | **209** | *e*P | | | Pg | 06 22 20.2 | +0.1 |
| | baz=209 | | | | | | | | |
| CHN1 | | | | *i* S | | | Sn | 06 22 32.6 | -0.6 |
| | baz=209 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.90** | **227** | *e*P | | | Pg | 06 22 20.1 | 0.0 |
| | baz=236 | | | | | | | | |
| ICHU | | | | *i* S | | | Sn | 06 22 33.5 | +0.3 |
| | baz=236 | | | | | | | | |
| **ECS** | **Chishang** | **0.91** | **167** | *e*P | | | Pn | 06 22 20.5 | -0.1 |
| | baz=177 | | | | | | | | |
| ECS | | | | *e*S | | | Sn | 06 22 33.2 | -0.1 |
| | baz=177 | | | | | | | | |
| **NWLT** | **Wulai** | **0.92** | **30** | ⇑*e*P | | | Pb | 06 22 20.0 | 0.0 |
| | baz=30 | | | | | | | | |
| NWLT | | | | *e*S | | | Sb | 06 22 30.6 | -1.4 |
| | baz=30 | | | | | | | | |
| **NDS** | **Dongshan** | **0.92** | **45** | *e*P | | | Pb | 06 22 20.2 | +0.1 |
| | baz=45 | | | | | | | | |
| NDS | | | | *e*S | | | Sb | 06 22 32.0 | -0.1 |
| | baz=45 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.94** | **159** | *e*P | | | Pn | 06 22 21.5 | +0.5 |
| | baz=159 | | | | | | | | |
| CHKT | | | | *e*S | | | Sn | 06 22 35.4 | +1.2 |
| | baz=159 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.94** | **35** | *e*P | | | Pb | 06 22 20.3 | -0.2 |
| | baz=28 | | | | | | | | |
| FUSB | | | | *e*S | | | Sn | 06 22 33.9 | -0.4 |
| | baz=28 | | | | | | | | |
| **TWE** | **Neicheng** | **0.96** | **40** | *e*P | | | Pb | 06 22 20.7 | 0.0 |
| | baz=40 | | | | | | | | |
| TWE | | | | *e*S | | | Sn | 06 22 35.0 | +0.4 |
| | baz=40 | | | | | | | | |
| **CHN8** | **Yiju** | **0.96** | **229** | *e*P | | | Pg | 06 22 21.0 | -0.2 |
| | baz=237 | | | | | | | | |
| CHN8 | | | | *e*S | | | Sn | 06 22 34.9 | +0.3 |
| | baz=237 | | | | | | | | |
| **ESAO** | **Su ao** | **0.97** | **52** | *i* P | | | Pb | 06 22 21.1 | +0.1 |
| | baz=52 | | | | | | | | |
| ESAO | | | | *i* S | | | Sb | 06 22 33.4 | -0.2 |
| | baz=52 | | | | | | | | |
| **SGST** | **Jiashian** | **0.97** | **203** | *e*P | | | Pb | 06 22 20.9 | -0.1 |
| | baz=213 | | | | | | | | |
| SGST | | | | S | | | Sn | 06 22 34.6 | -0.4 |
| | baz=213 | | | | | | | | |
| **NCUH** | **Zhongli** | **1.00** | **10** | *e*P | | | Pg | 06 22 22.3 | +0.4 |
| | baz=10.0 | | | | | | | | |
| NCUH | | | | S | | | Sn | 06 22 36.8 | +1.3 |
| | baz=10.0 | | | | | | | | |
| **TWC** | **Suao** | **1.00** | **51** | *i* P | | | Pg | 06 22 21.8 | 0.0 |
| | baz=51 | | | | | | | | |
| TWC | | | | *e*S | | | Sb | 06 22 34.1 | -0.2 |
| | baz=51 | | | | | | | | |
| **SLGT** | **Liugui** | **1.04** | **198** | P | | | Pg | 06 22 22.8 | +0.2 |
| | baz=190 | | | | | | | | |
| SLGT | | | | S | | | Sn | 06 22 37.8 | +1.3 |
| | baz=190 | | | | | | | | |
| **EDH** | **Donghe** | **1.04** | **164** | P | | | Pg | 06 22 23.2 | +0.5 |
| | baz=149 | | | | | | | | |
| EDH | | | | *e*S | | | Sn | 06 22 37.8 | +1.1 |
| | baz=149 | | | | | | | | |
| **SSHA** | **Shanhua** | **1.06** | **218** | *e*P | | | Pg | 06 22 23.2 | 0.0 |
| | baz=217 | | | | | | | | |
| **LONT** | **Longtian** | **1.08** | **174** | *e*P | | | Pg | 06 22 23.6 | +0.3 |
| | baz=174 | | | | | | | | |
| LONT | | | | *e*S | | | Sn | 06 22 37.9 | +0.3 |
| | baz=174 | | | | | | | | |
| **SCLT** | **Jiali** | **1.09** | **223** | *e*P | | | Pg | 06 22 23.5 | -0.1 |
| | baz=221 | | | | | | | | |
| SCLT | | | | *e*S | | | Sg | 06 22 40.2 | +2.3 |
| | baz=221 | | | | | | | | |
| **TWA** | **Mucha** | **1.13** | **28** | *e*P | | | Pg | 06 22 25.4 | +1.1 |
| | baz=28 | | | | | | | | |
| TWA | | | | *e*S | | | Sg | 06 22 40.0 | +0.9 |
| | baz=28 | | | | | | | | |
| **TWG** | **Pinlang** | **1.16** | **177** | *e*P | | | Pg | 06 22 24.9 | 0.0 |
| | baz=170 | | | | | | | | |
| TWG | | | | *i* S | | | Sg | 06 22 40.6 | +0.5 |
| | baz=170 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.16** | **176** | P | | | Pg | 06 22 25.1 | +0.1 |
| | baz=170 | | | | | | | | |
| TWGBT | | | | S | | | Sg | 06 22 40.5 | +0.3 |
| | baz=170 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.18** | **19** | *e*P | | | Pg | 06 22 26.3 | +1.0 |
| | baz=19 | | | | | | | | |
| TWS1 | | | | *e*S | | | Sg | 06 22 41.0 | +0.4 |
| | baz=19 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.18** | **225** | P | | | Pn | 06 22 24.2 | -0.1 |
| | baz=235 | | | | | | | | |
| TSCK | | | | *e*S | | | Sg | 06 22 41.9 | +1.2 |
| | baz=235 | | | | | | | | |
| **SCST** | **Cishan** | **1.19** | **203** | P | | | Pg | 06 22 25.5 | +0.1 |
| | baz=204 | | | | | | | | |
| S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SXI1 | Grass Mountain | 1.37 | 36 | eP | | Pb | 06 22 28.1 | +0.3 |
| | baz=19 | | | | | | | |
| LDUT | Ludao | 1.37 | 162 | eP | | Pn | 06 22 27.4 | +0.4 |
| | baz=161 | | | | | | | |
| ECL | Taimali | 1.38 | 182 | eP | | Pg | 06 22 28.9 | -0.2 |
| | baz=165 | | | | | | | |
| PNG | Penghu | 1.39 | 253 | eP | | Pn | 06 22 26.7 | -0.4 |
| | baz=251 | | | | | | | |
| PHUB | P'eng-hu | 1.39 | 251 | eP | | Pn | 06 22 26.4 | -0.8 |
| | baz=249 | | | | | | | |
| MASBT | Mashibuluo | 1.41 | 194 | eP | | Pb | 06 22 28.4 | 0.0 |
| | baz=205 | | | | | | | |
| WDGT | Dungji | 1.42 | 240 | eP | | Pn | 06 22 28.1 | +0.4 |
| | baz=238 | | | | | | | |
| VCHM | Qimei | 1.63 | 242 | eP | | Pn | 06 22 30.1 | -0.5 |
| | baz=225 | | | | | | | |
| SCZT | Fangliau | 1.64 | 192 | eP | | Pb | 06 22 31.7 | -0.7 |
| | baz=191 | | | | | | | |
| VWUC | VWUC | 1.73 | 306 | eP | | Pn | 06 22 30.3 | -1.6 |
| | baz=304 | | | | | | | |
| SLIU | Shizi | 1.77 | 186 | eP | | Pb | 06 22 34.6 | +0.1 |
| | baz=202 | | | | | | | |
| PTMZ | Houxiangcun | 2.01 | 302 | eP | | Pn | 06 22 34.6 | -1.2 |
| | baz=300 | | | | | | | |

*IDC **23** 06:37:19.9±11.0, 43.46N×127.93W, h0km, mb3.1/2, mbtmp3.2/3, ML2.7/1, Error ellipse: s-maj=235.0km s-min=31.2km az=65.0*
*NEIC **23** 06:37:19.9±1.2, 43.67N±0.08×127.7W±0.2, h10km±2km, ML3.1/74, Error ellipse: s-maj=19.6km s-min=12.7km az=255.0*

**ISC 23 06:37:19.6±2.7, 43.65N±0.07×127.8W±0.2, h11km, n55, σ1§01/48, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| J01E | Myrtle Point | 2.87 | 98 | | Pn | 06 38 03.1 | -2.1 |
| KBO | Bosley Butte | 3.00 | 117 | Pn | Pn | 06 38 05.3 | -1.8 |
| KBO | | | | IAML | | 06 39 14.4 | |
| | comp=E,68nm,2.7s | | | | | | |
| KBO | | | | IAML | | 06 40 01.8 | |
| | comp=N,68nm,2.4s | | | | | | |
| HEBO | Mount Hebo | 3.30 | 60 | | Pn | 06 38 10.5 | -0.7 |
| HEBO | | | | IAML | | 06 40 00.8 | |
| | comp=N,74nm,2.7s | | | | | | |
| DBO | Dodson Butte | 3.37 | 97 | Pn | Pn | 06 38 10.3 | -1.9 |
| COR | Corvallis | 3.38 | 72 | Pn | Pn | 06 38 11.2 | -1.0 |
| COR | | | | IAML | | 06 39 57.6 | |
| | comp=N,30nm,2.6s | | | | | | |
| KSXB | Camp Six Broad | 3.42 | 121 | Pn | Pn | 06 38 11.8 | -1.1 |
| L02F | Cave Junction | 3.47 | 115 | Pn | Pn | 06 38 12.0 | -1.5 |
| BUCK | Buck Mountain | 3.53 | 79 | | Pn | 06 38 13.8 | -0.6 |
| BUCK | | | | IAML | | 06 39 08.9 | |
| | comp=E,30nm,2.3s | | | | | | |
| BUCK | | | | IAML | | 06 39 11.0 | |
| | comp=N,25nm,3.7s | | | | | | |
| KRMB | Red Mountain | 3.58 | 125 | Pn | Pn | 06 38 14.4 | -0.7 |
| G03D | McMinnville, O | 3.61 | 63 | | Pn | 06 38 15.0 | -0.5 |
| G03D | | | | IAML | | 06 39 05.4 | |
| | comp=N,53nm,2.0s | | | | | | |
| G03D | | | | IAML | | 06 40 09.0 | |
| | comp=E,35nm,2.1s | | | | | | |
| HUMO | Hull Mountain | 3.70 | 105 | Pn | Pn | 06 38 16.5 | -0.2 |
| F03A | Seaside | 3.79 | 51 | | Pn | 06 38 17.8 | -0.1 |
| I04A | Tendick Farm, | 3.92 | 86 | | Pn | 06 38 19.6 | -0.1 |
| RADR | Rader Ridge | 3.97 | 44 | Pn | Pn | 06 38 19.0 | -1.4 |
| JCC | Jacoby Creek, | 3.98 | 134 | Pn | Pn | 06 38 21.2 | +0.7 |
| JCC | | | | IAML | | 06 39 16.5 | |
| | comp=N,19nm,2.5s | | | | | | |
| JCC | | | | IAML | | 06 40 17.5 | |
| | comp=E,20nm,4.5s | | | | | | |
| KHMM | Horse Mountain | 4.10 | 131 | Pn | Pn | 06 38 23.8 | +1.5 |
| KHMM | | | | IAML | | 06 39 37.8 | |
| | comp=N,17nm,4.0s | | | | | | |
| KHMM | | | | IAML | | 06 40 36.1 | |
| | comp=E,21nm,3.7s | | | | | | |
| E03A | Lebam | 4.18 | 45 | Pn | Pn | 06 38 21.9 | -1.2 |
| E03A | | | | IAML | | 06 38 58.9 | |
| | comp=N,35nm,2.4s | | | | | | |
| E03A | | | | IAML | | 06 40 38.9 | |
| | comp=E,33nm,2.9s | | | | | | |
| H04A | Detroit Lake | 4.18 | 74 | Pn | Pn | 06 38 23.0 | -0.3 |
| H04A | | | | IAML | | 06 39 23.1 | |
| | comp=N,15nm,0.5s | | | | | | |
| F04D | Rainier, OR | 4.19 | 53 | Pn | Pn | 06 38 24.0 | +0.6 |
| YBH | Yreka Blue Hor | 4.22 | 115 | | Pn | 06 38 23.6 | -0.2 |
| F04A | Amboy | 4.47 | 57 | | Pn | 06 38 27.4 | +0.3 |
| F04A | | | | IAML | | 06 39 25.4 | |
| | comp=N,27nm,0.6s | | | | | | |
| WISH | Wishkah | 4.49 | 38 | Pn | Pn | 06 38 26.8 | -0.6 |
| KMRM | Mail Ridge | 4.59 | 137 | Pn | Pn | 06 38 29.3 | +0.3 |
| KMRM | | | | IAML | | 06 39 13.4 | |
| | comp=N,17nm,4.5s | | | | | | |
| KMRM | | | | IAML | | 06 39 16.0 | |
| | comp=E,24nm,4.7s | | | | | | |
| NLWA | Neilton Lookou | 4.66 | 35 | Pn | Pn | 06 38 29.8 | 0.0 |
| NLWA | | | | IAML | | 06 39 35.1 | |
| | comp=E,20nm,2.8s | | | | | | |
| NLWA | | | | IAML | | 06 41 10.5 | |
| | comp=E,14nm,2.3s | | | | | | |
| HOOD | Mount Hood Mea | 4.71 | 67 | | Pn | 06 38 31.1 | +0.4 |
| HOOD | | | | IAML | | 06 39 07.6 | |
| | comp=N,20nm,0.8s | | | | | | |
| I05D | Terrebonne, OR | 4.72 | 79 | | Pn | 06 38 30.5 | -0.2 |
| I05D | | | | IAML | | 06 40 25.0 | |
| | comp=N,19nm,4.2s | | | | | | |
| I05D | | | | IAML | | 06 41 01.7 | |
| | comp=E,18nm,2.9s | | | | | | |
| J05D | Fort Rock, OR | 4.80 | 92 | Pn | Pn | 06 38 31.1 | -0.8 |
| J05D | | | | IAML | | 06 39 42.9 | |
| | comp=E,14nm,4.4s | | | | | | |
| J05D | | | | IAML | | 06 41 32.1 | |
| | comp=N,11nm,3.9s | | | | | | |
| C03A | Quillayute Air | 4.86 | 27 | Pn | Pn | 06 38 31.4 | -1.2 |
| G05A | Wamic | 4.92 | 69 | Pn | Pn | 06 38 33.0 | -0.4 |
| PINE | Pine Mountain | 4.98 | 86 | | Pn | 06 38 33.4 | -1.0 |
| PINE | | | | IAML | | 06 39 10.3 | |
| | comp=N,12nm,4.0s | | | | | | |
| PINE | | | | IAML | | 06 39 56.4 | |
| | comp=E,11nm,3.7s | | | | | | |
| KCPM | Cahto Peak | 5.07 | 140 | Pn | Pn | 06 38 35.0 | -0.6 |
| KCPM | | | | IAML | | 06 40 38.2 | |
| | comp=N,20nm,4.0s | | | | | | |
| GNW | Green Mountain | 5.25 | 40 | | Pn | 06 38 37.5 | -0.5 |
| GNW | | | | IAML | | 06 40 01.2 | |
| | comp=N,8.5nm,2.0s | | | | | | |
| GNW | | | | IAML | | 06 41 03.8 | |
| | comp=E,8.6nm,3.7s | | | | | | |
| LON | Longmire | 5.25 | 52 | | Pn | 06 38 37.9 | -0.1 |
| LON | | | | IAML | | 06 39 50.6 | |
| | comp=E,7.2nm,1.8s | | | | | | |
| LON | | | | IAML | | 06 40 01.9 | |
| | comp=N,7.3nm,2.4s | | | | | | |
| B04A | Port Angeles | 5.34 | 33 | Pn | Pn | 06 38 38.4 | -0.7 |
| D05A | Enumclaw | 5.42 | 47 | | Pn | 06 38 39.9 | -0.3 |
| D05A | | | | IAML | | 06 39 19.6 | |
| | comp=E,15nm,1.6s | | | | | | |
| D05A | | | | IAML | | 06 41 40.0 | |
| | comp=N,16nm,3.1s | | | | | | |
| CLRS | Cowichan Lake | 5.77 | 25 | Pn | Pn | 06 38 44.5 | -0.5 |
| PGC | Sidney | 5.85 | 30 | Pn | Pn | 06 38 46.0 | -0.1 |
| I07A | Izee | 6.02 | 83 | Pn | Pn | 06 38 47.4 | -1.2 |
| MXC | Moxie City | 6.07 | 59 | | Pn | 06 38 48.8 | -0.5 |
| LTY | Liberty | 6.18 | 52 | | Pn | 06 38 50.4 | -0.4 |
| ORV | Oroville | 6.25 | 129 | | Pn | 06 38 51.7 | 0.0 |
| HAWA | Hanford | 6.48 | 62 | Pn | Pn | 06 38 53.7 | -1.1 |
| G08A | Pilot Rock | 6.54 | 72 | Pn | Pn | 06 38 55.0 | -0.9 |
| CBB | Campbell River | 6.60 | 14 | Pn | Pn | 06 38 56.1 | -0.4 |
| PNTR | Pine Nut | 7.67 | 124 | Pn | Pn | 06 39 10.8 | -0.6 |
| CMB | Columbia Colle | 7.94 | 132 | Pn | Pn | 06 39 15.0 | +0.1 |
| NVAR | Mina Array Bea | 8.87 | 123 | Pn | Pn | 06 39 31.0 | +3.1 |
| | comp=N,0.1nm,0.3s,baz=299,slow=13,SNR=9.4 | | | | | | |
| | comp=N,0.8nm,0.8s | | | | | | |
| YKA | Yellowknife Ar | 20.40 | 18 | P | Pn | 06 42 00.3 | +2.0 |
| | comp=N,1.0nm,0.7s,baz=205,slow=10,SNR=3.9 | | | | | | |
| | comp=N,1.0nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 23.99 | 119 | P | P | 06 42 35.7 | +1.5 |
| | comp=N,0.3nm,0.6s,baz=303,slow=9.5,SNR=5.8 | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | |
| H11N3 | WAKE ISLAND Hy | 58.89 | 268 | T | T | 07 50 51.0 | |
| | baz=49,slow=75,SNR=26 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 58.89 | 268 | T | T | 07 50 52.0 | |
| | baz=49,slow=75,SNR=22 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 58.91 | 268 | T | T | 07 50 55.6 | |
| | baz=49,slow=75,SNR=14 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 59.81 | 267 | T | T | 07 51 56.2 | |
| | baz=50,slow=75,SNR=57 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 59.82 | 267 | T | T | 07 52 00.7 | |
| | baz=50,slow=75,SNR=45 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 59.83 | 267 | T | T | 07 52 00.9 | |
| | baz=50,slow=75,SNR=36 | | | | | | |

*IDC **23** 06:45:11.5±1.3, 22.89N×144.28E, h0km, mb3.7/7, mbtmp3.7/7, Error ellipse: s-maj=46.7km s-min=22.5km az=76.0*

**ISC 23 06:45:17.0±1.2, 22.8N±0.2×144.3E±0.3, h35km, n7, σ1§50/7, mb3.6/6, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSRS | Korea Array | 20.25 | 320 | P | P | 06 49 50.1 | +0.9 |
| | 1.7nm,0.8s,baz=131,slow=13,SNR=4.0 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 43.60 | 194 | P | P | 06 53 18.3 | +0.2 |
| | 0.6nm,0.7s,baz=17,slow=9.1,SNR=7.7 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| ASAR | Alice Springs | 47.30 | 193 | P | P | 06 53 47.3 | 0.0 |
| | 0.2nm,0.4s,baz=11,slow=7.6,SNR=4.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 54.67 | 312 | P | P | 06 54 40.5 | -2.1 |
| | 0.4nm,0.6s,baz=85,slow=6.5,SNR=4.1 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| KURBB | Kurtchatov Arra | 57.38 | 316 | P | P | 06 55 03.2 | +1.3 |
| | 0.7nm,0.2s,baz=94,slow=8.1,SNR=1.7 | | | | | | |
| | 0.7nm,0.2s | | | | | | |
| BVAR | Borovoye Array | 62.46 | 319 | P | P | 06 55 35.3 | -1.4 |
| | 1.8nm,0.5s,baz=86,slow=7.1,SNR=8.1 | | | | | | |
| | 1.8nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 81.67 | 52 | P | P | 06 57 32.3 | +0.1 |
| | 0.4nm,0.8s,baz=255,slow=6.3,SNR=2.4 | | | | | | |
| | 0.4nm,0.8s | | | | | | |

**NOU 23 07:03:10.4, 16.40S×167.66E, h0km, MLv4.4/7, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RTV | Rentapao | 1.57 | 152 | P | Pb | 07 03 40.0 | -0.3 |
| KOUNC | Koumac, New Ca | 5.22 | 217 | P | Pn | 07 04 30.1 | +0.3 |
| YATNC | Mamie plateau, | 5.68 | 187 | P | Pn | 07 04 35.3 | -0.8 |
| DZM | Mont Dzumac | 5.76 | 191 | P | Pn | 07 04 36.4 | -0.8 |

*JMA **23** 07:11:10.7±0.4, 45.1N×131.7E, h356km, MV3.1/17, NEAR VLADIVOSTOK*
*IDC **23** 07:11:13.3±1.4, 45.26N×137.12E, h350km±14km, mb2.9/6, mbtmp3.6/9, Error ellipse: s-maj=33.6km s-min=19.8km az=39.0*

**ISC 23 07:11:12.5±0.8, 45.14N±0.08×137.21E±0.07, h350km, n24, σ1§73/28, mb3.2/6, Primorye**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JRBN | Rebuntou | 2.73 | 83 | eP | Pn | 07 12 10.0 | +0.5 |
| JSK | Shakotan | 2.95 | 126 | eP | Pn | 07 12 12.4 | +1.0 |
| JSH | Shimam | 3.23 | 140 | eP | Pn | 07 12 14.9 | +0.9 |
| USRK | Ussuriysk Ar. | 3.84 | 258 | P | Pn | 07 12 20.6 | +0.7 |
| | 12nm,0.4s,baz=64,slow=11,SNR=38 | | | | | | |
| ASAJ | Asahikawa | 3.98 | 103 | P | Pn | 07 12 22.9 | +1.6 |
| | 8.7nm,0.3s,baz=271,slow=3.9,SNR=9.5 | | | | | | |
| JKK2 | Kamakawa 2 | 4.16 | 106 | eP | Pn | 07 12 24.6 | +1.5 |
| JKB | Okyabe | 4.27 | 138 | eP | Pn | 07 12 26.1 | +1.8 |
| JOT | Ohata | 4.68 | 142 | eP | Pn | 07 12 30.0 | +1.2 |
| JTKR | Abashiri--Toko | 4.92 | 101 | eP | Pn | 07 12 32.5 | +1.2 |
| JNBK | Urakawa-nobuka | 4.93 | 123 | eP | Pn | 07 12 32.8 | +1.4 |
| JNBK | | | | eS | S | 07 13 36.8 | +1.7 |
| JIW | Iwasaki | 4.98 | 155 | eP | Pn | 07 12 33.2 | +1.2 |
| JAR | Ashorobuto | 5.06 | 109 | eP | Pn | 07 12 33.8 | +1.1 |
| JAR | | | | eS | S | 07 13 39.6 | +1.9 |
| JCH | Churui | 5.11 | 117 | eP | Pn | 07 12 32.8 | -0.6 |
| KLR | Kul'dur | 5.53 | 320 | P | Pn | 07 12 37.4 | -0.5 |
| | 2.0nm,0.4s,baz=131,slow=11,SNR=8.5 | | | | | | |
| JRG | Rokugo | 6.27 | 155 | eP | Pn | 07 12 47.5 | +0.9 |
| NEM2 | Nemuro 2 | 6.38 | 103 | eS | S | 07 13 59.5 | -5.3 |
| JMK | Ichinoseki | 6.86 | 153 | eP | Pn | 07 12 54.4 | +1.0 |
| JMK | | | | eS | S | 07 14 12.8 | -2.4 |
| JMM | Marumori | 7.74 | 158 | eP | Pn | 07 13 04.0 | +0.4 |
| JMM | | | | eS | S | 07 14 31.2 | -3.0 |
| SONM | Songino Array | 21.32 | 288 | P | P | 07 15 31.7 | -0.8 |
| | 0.5nm,0.4s,baz=78,slow=9.5,SNR=4.4 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| ZALV | Zalesovo Beam | 34.40 | 304 | P | P | 07 17 26.6 | -1.0 |
| | 1.0nm,0.5s,baz=69,slow=10,SNR=4.5 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 37.56 | 293 | P | P | 07 17 54.6 | +0.3 |
| | 0.1nm,0.3s,baz=81,slow=12,SNR=4.0 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 38.84 | 300 | P | P | 07 18 04.7 | -0.1 |
| | 0.5nm,0.3s,baz=75,slow=9.1,SNR=5.2 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| FINES | FINESS Array B | 60.21 | 329 | P | P | 07 20 44.2 | 0.0 |
| | 3.4nm,0.8s,baz=37,slow=13,SNR=4.0 | | | | | | |
| | 3.4nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 64.82 | 183 | P | P | 07 21 16.3 | +1.5 |
| | 0.1nm,0.4s,baz=0.7,slow=6.8,SNR=2.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*NEIC **23** 07:16:23.7±2.2, 43.63N±0.07×127.5W±0.1, h10km±2km, mb4.0/23, ML3.3/80, Error ellipse: s-maj=15.3km s-min=11.2km az=248.0*
*IDC **23** 07:16:26.0±1.7, 43.77N×127.00W, h0km, mb3.7/4, mbtmp3.8/12, ML3.5/8, MS3.2/3, Error ellipse: s-maj=27.4km s-min=12.2km az=57.0*

**ISC 23 07:16:25.6±0.9, 43.67N±0.08×127.33W±0.10, h15km, n110, σ1§27/108, mb4.0/10, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| J01E | Myrtle Point | 2.53 | 100 | | Pn | 07 17 04.5 | -1.6 |
| J01E | | | | IAML | | 07 17 45.7 | |
| | comp=N,92nm,0.7s | | | | | | |
| KBO | Bosley Butte | 2.70 | 121 | Pn | Pn | 07 17 06.6 | -1.9 |
| KBO | | | | IAML | | 07 17 39.5 | |
| | comp=N,61nm,2.2s | | | | | | |
| KBO | | | | IAML | | 07 18 41.0 | |
| | comp=E,74nm,2.2s | | | | | | |
| K02D | Willamette Mer | 2.85 | 109 | Pn | Pn | 07 17 09.0 | -1.6 |
| K02D | | | | IAML | | 07 17 48.0 | |
| | comp=E,68nm,0.7s | | | | | | |
| HEBO | Mount Hebo | 2.99 | 58 | | Pn | 07 17 12.4 | -0.1 |
| HEBO | | | | IAML | | 07 17 54.8 | |
| | comp=N,162nm,0.9s | | | | | | |
| HEBO | | | | IAML | | 07 17 54.9 | |
| | comp=E,158nm,0.8s | | | | | | |
| DBO | Dodson Butte | 3.03 | 99 | | Pn | 07 17 12.1 | -0.9 |
| DBO | | | | IAML | | 07 17 56.2 | |
| | comp=E,45nm,0.8s | | | | | | |
| COR | Corvallis | 3.04 | 71 | | Pn | 07 17 13.4 | +0.3 |
| COR | | | | IAML | | 07 18 05.6 | |
| | comp=E,48nm,2.0s | | | | | | |
| L02F | Cave Junction | 3.16 | 118 | | Pn | 07 17 13.6 | -1.2 |
| BUCK | Buck Mountain | 3.18 | 79 | | Pn | 07 17 15.1 | 0.0 |
| BUCK | | | | IAML | | 07 18 05.0 | |
| | comp=E,42nm,0.8s | | | | | | |
| G03D | McMinnville, O | 3.30 | 61 | | Pn | 07 17 17.1 | +0.5 |
| G03D | | | | IAML | | 07 18 03.4 | |
| | comp=E,117nm,0.7s | | | | | | |
| KRMB | Red Mountain | 3.31 | 129 | Pn | Pn | 07 17 14.4 | -2.5 |
| HUMO | Hull Mountain | 3.37 | 107 | | Pn | 07 17 17.5 | -0.2 |
| H04D | Lebanon | 3.42 | 74 | | Pn | 07 17 18.8 | +0.5 |
| H04D | | | | IAML | | 07 17 42.9 | |
| | comp=E,64nm,1.8s | | | | | | |
| H04D | | | | IAML | | 07 17 55.1 | |
| | comp=N,43nm,1.1s | | | | | | |
| KRPM | Rodgers | 3.50 | 135 | Pn | Pn | 07 17 18.6 | -0.9 |
| KRPM | | | | IAML | | 07 18 48.6 | |
| | comp=E,51nm,2.2s | | | | | | |
| KRPM | | | | IAML | | 07 19 21.2 | |
| | comp=N,43nm,4.5s | | | | | | |
| F03A | Seaside | 3.51 | 49 | | Pn | 07 17 19.4 | -0.1 |
| I04A | Tendick Farm, | 3.57 | 86 | | Pn | 07 17 21.1 | +0.8 |
| I04A | | | | IAML | | 07 18 11.2 | |
| | comp=N,37nm,0.8s | | | | | | |
| I04A | | | | IAML | | 07 18 12.1 | |
| | comp=E,39nm,1.1s | | | | | | |
| RADR | Rader Ridge | 3.72 | 41 | | Pn | 07 17 22.1 | -0.4 |
| RADR | | | | IAML | | 07 18 15.4 | |
| | comp=N,83nm,2.1s | | | | | | |
| RADR | | | | IAML | | 07 18 17.6 | |
| | comp=E,63nm,2.2s | | | | | | |
| H04A | Detroit Lake | 3.84 | 73 | | Pn | 07 17 24.5 | +0.4 |
| H04A | | | | IAML | | 07 18 20.3 | |
| | comp=E,29nm,0.7s | | | | | | |
| H04A | | | | IAML | | 07 18 23.5 | |
| | comp=N,43nm,0.5s | | | | | | |
| KHMM | Horse Mountain | 3.86 | 135 | | Pn | 07 17 23.9 | -0.7 |
| KHMM | | | | IAML | | 07 18 26.9 | |
| | comp=E,25nm,3.6s | | | | | | |
| F04D | Rainier, OR | 3.91 | 50 | | Pn | 07 17 25.8 | +0.8 |
| YBH | Yreka Blue Hor | 3.91 | 118 | | Pn | 07 17 24.9 | -0.3 |
| YBH | Yreka Blue Hor | 3.91 | 118 | Pn | Pn | 07 17 25.7 | +0.5 |
| | comp=E,1.1nm,0.3s,baz=292,slow=14,SNR=41 | | | | | | |
| YBH | | | | Sn | Sn | 07 18 09.8 | -1.2 |
| | comp=E,0.3nm,0.3s,baz=331,slow=10,SNR=2.1 | | | | | | |
| | comp=E,5.5nm,0.5s | | | | | | |
| E03A | Lebam | 3.92 | 41 | Pn | Pn | 07 17 24.6 | -0.6 |
| KMPM | Mount Pierce | 4.03 | 143 | | Pn | 07 17 26.5 | -0.3 |
| KMPM | | | | IAML | | 07 18 22.7 | |
| | comp=N,25nm,4.8s | | | | | | |
| F04A | Amboy | 4.17 | 55 | | Pn | 07 17 29.3 | +0.7 |
| K04D | Chiloquin, OR | 4.21 | 102 | | Pn | 07 17 29.9 | +0.6 |
| WISH | Wishkah | 4.27 | 35 | | Pn | 07 17 29.4 | -0.5 |
| WISH | | | | IAML | | 07 19 25.4 | |
| | comp=E,53nm,2.9s | | | | | | |
| KMRM | Mail Ridge | 4.37 | 141 | | Pn | 07 17 31.8 | +0.3 |
| KMRM | | | | IAML | | 07 20 01.0 | |
| | comp=N,20nm,4.1s | | | | | | |
| KMRM | | | | IAML | | 07 20 18.1 | |
| | comp=E,28nm,4.8s | | | | | | |
| I05D | Terrebonne, OR | 4.37 | 79 | | Pn | 07 17 31.6 | +0.1 |
| I05D | | | | IAML | | 07 18 14.8 | |
| | comp=E,25nm,0.9s | | | | | | |
| I05D | | | | IAML | | 07 18 18.4 | |
| | comp=N,30nm,3.1s | | | | | | |
| HOOD | Mount Hood Mea | 4.39 | 66 | | Pn | 07 17 32.6 | +0.9 |
| HOOD | | | | IAML | | 07 18 06.1 | |
| | comp=N,52nm,0.9s | | | | | | |
| HOOD | | | | IAML | | 07 18 36.6 | |
| | comp=E,49nm,0.6s | | | | | | |
| NLWA | Neilton Lookou | 4.45 | 32 | Pn | Pn | 07 17 31.9 | -0.6 |
| NLWA | | | | IAML | | 07 18 26.9 | |
| | comp=E,43nm,0.4s | | | | | | |
| J05D | Fort Rock, OR | 4.45 | 93 | | Pn | 07 17 32.0 | -0.6 |
| J05D | | | | IAML | | 07 18 31.5 | |
| | comp=E,16nm,2.6s | | | | | | |
| J05D | | | | IAML | | 07 18 32.6 | |
| | comp=N,15nm,1.3s | | | | | | |
| G05A | Wamic | 4.58 | 68 | | Pn | 07 17 35.3 | +1.0 |
| G05A | | | | IAML | | 07 18 09.4 | |
| | comp=E,35nm,1.8s | | | | | | |
| G05A | | | | IAML | | 07 18 11.4 | |
| | comp=N,30nm,1.5s | | | | | | |
| PINE | Pine Mountain | 4.63 | 86 | | Pn | 07 17 35.2 | +0.1 |
| PINE | | | | IAML | | 07 18 25.8 | |
| | comp=E,15nm,3.7s | | | | | | |
| C03A | Quillayute Air | 4.70 | 23 | Pn | Pn | 07 17 34.5 | -1.3 |
| O02D | Mt. Diablo Mer | 4.86 | 134 | | Pn | 07 17 38.4 | +0.2 |
| LON | Longmire | 4.97 | 50 | | Pn | 07 17 40.2 | +0.5 |
| LON | | | | IAML | | 07 18 47.8 | |
| | comp=E,24nm,0.5s | | | | | | |
| GNW | Green Mountain | 5.02 | 37 | | Pn | 07 17 39.4 | -0.8 |
| G06A | Carlson Farm, | 5.04 | 70 | | Pn | 07 17 40.9 | +0.3 |
| G06A | | | | IAML | | 07 18 41.1 | |
| | comp=E,10nm,3.1s | | | | | | |
| D05A | Enumclaw | 5.15 | 45 | | Pn | 07 17 42.7 | +0.6 |
| CLRS | Cowichan Lake | 5.61 | 22 | Pn | Pn | 07 17 47.1 | -1.3 |
| HOPS | Hopland Field | 5.66 | 144 | | Pn | 07 17 48.2 | -0.9 |
| PGC | Sidney | 5.67 | 27 | Pn | Pn | 07 17 48.6 | -0.5 |
| I07A | Izee | 5.67 | 83 | Pn | Pn | 07 17 49.9 | +0.5 |
| MXC | Moxie City | 5.77 | 57 | | Pn | 07 17 52.0 | +1.4 |
| LTY | Liberty | 5.90 | 50 | | Pn | 07 17 53.4 | +0.9 |
| E07A | Sunnyside | 6.03 | 59 | Pn | Pn | 07 17 55.0 | +0.8 |
| HAWA | Hanford | 6.16 | 61 | Pn | Pn | 07 17 57.1 | +1.1 |
| G08A | Pilot Rock | 6.21 | 72 | Pn | Pn | 07 17 57.0 | +0.3 |
| J08A | Circle Bar Ran | 6.45 | 90 | Pn | Pn | 07 17 59.7 | -0.3 |
| WVOR | Wild Horse Val | 6.49 | 98 | | Pn | 07 18 00.1 | -0.5 |
| CBB | Campbell River | 6.51 | 11 | Pn | Pn | 07 17 59.8 | -0.9 |
| D08A | Wollman Farm, | 6.83 | 57 | Pn | Pn | 07 18 06.5 | +1.4 |
| B08A | Colville Reser | 7.28 | 47 | Pn | Pn | 07 18 10.9 | -0.5 |
| BMO | Blue Mountains | 7.29 | 77 | Pn | Pn | 07 18 11.4 | -0.2 |
| F10A | Beach Ranch, E | 7.54 | 69 | | Pn | 07 18 14.7 | -0.3 |
| YERR | Yerington | 7.67 | 125 | | Pn | 07 18 19.1 | +2.2 |
| MFID | Camas Ranch | 8.36 | 88 | Pn | Pn | 07 18 28.8 | +2.5 |
| NEW | Newport | 8.46 | 54 | Pn | Pn | 07 18 27.4 | -0.2 |
| | comp=E,1.1nm,0.3s,baz=256,slow=12,SNR=16 | | | | | | |
| NEW | | | | LR | LR | 07 21 52.1 | |
| | comp=E,259nm,20.2s,baz=237,slow=40 | | | | | | |
| | comp=E,3.9nm,0.4s | | | | | | |
| BBB | Bella Bella | 8.54 | 357 | Pn | Pn | 07 18 27.5 | -1.1 |
| BBB | Bella Bella | 8.54 | 357 | Pn | Pn | 07 18 28.2 | -0.4 |
| | comp=E,0.9nm,0.3s,baz=208,slow=10,SNR=6.0 | | | | | | |
| BBB | | | | LR | LR | 07 21 28.2 | |
| | comp=E,44nm,21.4s,baz=212,slow=36 | | | | | | |
| | comp=E,8.9nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 8.59 | 124 | Pn | Pn | 07 18 31.4 | +1.8 |
| | comp=E,0.1nm,0.3s,baz=298,slow=13,SNR=14 | | | | | | |
| | comp=E,2.0nm,0.8s | | | | | | |
| HLID | Hailey | 9.37 | 86 | Pn | Pn | 07 18 40.5 | +0.3 |
| ELK | Elko | 9.44 | 104 | Pn | Pn | 07 18 43.0 | +1.9 |
| ELK | Elko | 9.44 | 104 | Pn | Pn | 07 18 44.1 | +3.0 |
| | comp=E,0.1nm,0.3s,baz=289,slow=13,SNR=8.2 | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | |
| MSO | Missoula | 9.96 | 67 | Pn | Pn | 07 18 49.0 | +0.9 |
| BPMT | Black Pine Rid | 10.21 | 69 | | Pn | 07 18 52.8 | +1.0 |
| ISA | Isabella, Lake | 10.50 | 137 | Pn | Pn | 07 18 56.1 | +0.5 |
| DLMT | Dillon | 10.66 | 76 | Pn | Pn | 07 18 59.8 | +1.9 |
| GWY | Greenwater Val | 11.07 | 129 | | Pn | 07 19 05.8 | +2.3 |
| PRN | Pahroc Range | 11.24 | 120 | | Pn | 07 19 08.7 | +3.0 |
| BOZ | Bozeman (W) | 11.36 | 75 | | Pn | 07 19 10.1 | +2.7 |
| YHL | Hebgen Lake | 11.64 | 79 | Pn | Pn | 07 19 13.0 | +1.6 |
| SHPR | Sheep Range | 11.74 | 123 | | Pn | 07 19 15.2 | +2.5 |
| HWUT | Hardware Ranch | 11.79 | 95 | Pn | Pn | 07 19 15.1 | +1.7 |
| YHH | Holmes Hill | 11.88 | 79 | | Pn | 07 19 16.9 | +2.3 |
| YPP | Pitchstone Pla | 11.93 | 81 | | Pn | 07 19 18.7 | +3.4 |
| REDW | Red Top Meadow | 11.97 | 86 | | Pn | 07 19 16.3 | +0.5 |
| PD31 | Pinedale Array | 13.00 | 88 | Pn | Pn | 07 19 30.2 | +0.4 |
| PDAR | Pinedale Array | 13.00 | 88 | Pn | Pn | 07 19 33.5 | +3.6 |
| | comp=E,0.1nm,0.3s,baz=278,slow=13,SNR=14 | | | | | | |
| | comp=E,2.5nm,0.9s | | | | | | |
| DLBC | Dease Lake | 14.89 | 354 | Pn | Pn | 07 19 57.1 | +1.7 |
| | comp=E,0.1nm,0.3s,baz=207,slow=9.0,SNR=5.0 | | | | | | |
| | comp=E,3.5nm,0.8s | | | | | | |
| R33M | Jennings River | 15.91 | 353 | P | Pn | 07 20 09.6 | +0.7 |
| R33M | | | | IAmb | IAmb | 07 20 11.7 | |
| | comp=Z,9.9nm,1.4s | | | | | | |
| N23A | Red Feather La | 16.06 | 93 | | Pn | 07 20 11.1 | 0.0 |
| N23A | | | | IAmb | IAmb | 07 20 20.3 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| X18A | Snowflake | 16.26 | 118 | P | Pn | 07 20 13.6 | +0.1 |
| PHWY | Pilot Hill | 16.30 | 91 | P | Pn | 07 20 14.4 | +0.3 |
| S22A | 4UR Ranch, Cre | 16.61 | 104 | P | Pn | 07 20 19.2 | +1.0 |
| DGMT | Dagmar | 16.73 | 65 | P | P | 07 20 20.5 | -1.1 |
| DGMT | | | | IAmb | IAmb | 07 20 25.3 | |
| | comp=Z,16nm,0.9s | | | | | | |
| RSSD | Black Hills | 16.79 | 80 | P | P | 07 20 21.6 | -0.8 |
| RSSD | | | | IAmb | IAmb | 07 20 25.7 | |
| | comp=Z,9.7nm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,7.0nm,0.7s | | | | | | |
| **I30M** | **Mount Dempster** | **22.19** | **350** | P | **P** | **07 21 19.2** | **-1.8** |
| I30M | | | | IAmb | IAmb | 07 21 27.5 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.34** | **62** | P | **P** | **07 21 23.0** | **+0.4** |
| | comp=Z,3.5nm,0.8s,baz=278,slow=13,SNR=1.8 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **SMWD** | **Samnorwood** | **22.54** | **103** | P | **P** | **07 21 24.1** | **-0.8** |
| **ODSA** | **Odessa** | **22.61** | **112** | P | **P** | **07 21 25.9** | **+0.1** |
| **N35A** | **Tabor** | **23.54** | **86** | P | **P** | **07 21 36.4** | **+1.2** |
| **TXAR** | **Lajitas Array** | **23.69** | **119** | P | **P** | **07 21 37.5** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=302,slow=8.2,SNR=14 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **WMOK** | **Wichita Mounta** | **23.76** | **102** | P | **P** | **07 21 37.6** | **+0.3** |
| WMOK | | | | IAmb | IAmb | 07 21 39.4 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **SAND** | **Sanderson** | **24.27** | **116** | P | **P** | **07 21 43.2** | **+1.0** |
| SAND | | | | IAmb | IAmb | 07 21 44.8 | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **SCHQ** | **Schefferville** | **39.83** | **52** | LR | LR | 07 40 29.2 | |
| | comp=Z,96nm,18.8s,baz=238,slow=36 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **80.57** | **319** | *e*P | **P** | **07 28 37.0** | **-0.4** |
| HHC | | | | pP | pP | 07 28 41.9 | +0.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,4.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.43** | **344** | P | **P** | **07 28 55.1** | **+3.0** |
| | comp=Z,0.9nm,0.6s,baz=19,slow=5.9,SNR=7.5 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **PZH** | **PanZhiHua** | **96.93** | **317** | P | **P** | **07 29 55.3** | **-1.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,250nm,8.4s | | | | | | |

**RSNC 23 07:29:37.4**±0.0,**10°N**±3°×**7°4W**±°,**h20**km±4km,**M2.0, ML2.0, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARGC** | **Ariguani, Magd** | **0.58** | **226** | P | Pb | 07 29 47.0 | -1.9 |
| ARGC | | | | S | Sb | 07 29 54.1 | -2.6 |
| **ARGC** | **Ariguani, Magd** | **0.58** | **226** | P | Pb | 07 29 47.1 | -1.8 |
| ARGC | | | | S | Sb | 07 29 54.2 | -2.5 |
| **SMRC** | **Santa Marta, M** | **0.98** | **336** | P | Pb | 07 29 53.8 | -2.0 |
| SMRC | | | | S | Sb | 07 30 05.3 | -3.0 |
| **SMRC** | **Santa Marta, M** | **0.98** | **336** | P | Pb | 07 29 53.9 | -1.9 |
| SMRC | | | | S | Sb | 07 30 07.1 | -1.2 |
| **CRJC** | **Cerrejon, Guaj** | **1.19** | **51** | P | Pn | 07 29 56.7 | -2.3 |
| CRJC | | | | S | Sb | 07 30 11.1 | -3.3 |
| **SJCC** | **San Jacinto, C** | **1.39** | **255** | P | Pn | 07 30 01.3 | -0.4 |
| SJCC | | | | S | Sb | 07 30 20.5 | +0.5 |
| **SJCC** | **San Jacinto, C** | **1.39** | **255** | P | Pn | 07 30 01.4 | -0.3 |
| SJCC | | | | S | Sb | 07 30 20.7 | +0.7 |
| **OCAC** | **Ocana** | **2.07** | **166** | P | Pn | 07 30 09.6 | -1.6 |
| OCAC | | | | S | Sn | 07 30 32.5 | -3.9 |
| **OCAC** | **Ocana** | **2.07** | **166** | P | Pn | 07 30 12.6 | +1.4 |
| OCAC | | | | S | Sn | 07 30 33.6 | -2.8 |
| **PTBC** | **PUERTO BERRIO,** | **3.75** | **190** | P | Pn | 07 30 32.2 | -2.0 |
| PTBC | | | | S | Sn | 07 31 18.5 | +0.7 |

*NOU* ***23*** *07:33:49.5, 38°.54S×175°.03E, h245km, MLv3.8/7, North Island, New Zealand*
*WEL* ***23*** *07:33:55.5±0.9, 39°.5±9°×17°.5E±°, h204km±6km, M2.2/13, ML2.2/6, MLv2.2/13, Error ellipse: s-maj=0.0km s-min=0.0km az=164.2, confirmed*

**ISC 23 07:33:49.0**±2.0,**38°.67S**±0°.08×**175°.15E**±0°.07,
**h247**km±11km,**n89,σ1§75/99,North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TLZ** | **Tolley Road** | **0.46** | **42** | P | **Pn** | **07 34 23.2** | **+1.7** |
| **WTVZ** | **West Tongariro** | **0.56** | **142** | P | **Pn** | **07 34 23.6** | **+1.8** |
| **NNVZ** | **North Ngauruho** | **0.59** | **141** | P | **Pn** | **07 34 23.8** | **+1.8** |
| NNVZ | | | | S | **S** | **07 34 46.6** | **-1.3** |
| **NTVZ** | **North Tongarir** | **0.59** | **136** | P | **Pn** | **07 34 24.0** | **+2.1** |
| **NGZ** | **Ngauruhoe** | **0.61** | **145** | P | **Pn** | **07 34 24.0** | **+2.0** |
| NGZ | | | | S | **S** | **07 34 46.6** | **-1.5** |
| **TMVZ** | **Te Maari** | **0.62** | **136** | P | **Pn** | **07 34 24.1** | **+2.1** |
| TMVZ | | | | S | **S** | **07 34 46.5** | **-1.5** |
| **OTVZ** | **Oturere** | **0.64** | **141** | P | **Pn** | **07 34 24.5** | **+2.3** |
| **ETVZ** | **East Tongariro** | **0.64** | **136** | P | **Pn** | **07 34 24.2** | **+2.0** |
| ETVZ | | | | S | **S** | **07 34 46.4** | **-1.8** |
| **SNVZ** | **South Ngauruho** | **0.64** | **143** | P | **Pn** | **07 34 24.3** | **+2.1** |
| **FWVZ** | **Far West T-bar** | **0.66** | **151** | P | **Pn** | **07 34 24.2** | **+1.8** |
| **TRVZ** | **Turoa** | **0.70** | **153** | P | **Pn** | **07 34 24.4** | **+1.9** |
| TRVZ | | | | S | **S** | **07 34 47.0** | **-1.8** |
| **WHVZ** | **Whangaehu Hut** | **0.70** | **151** | P | **Pn** | **07 34 24.6** | **+2.1** |
| **TUVZ** | **Tukino** | **0.71** | **146** | P | **Pn** | **07 34 24.5** | **+2.0** |
| **WNVZ** | **Wahianoa** | **0.74** | **152** | P | **Pn** | **07 34 24.6** | **+2.0** |
| **MOVZ** | **Moawhango** | **0.87** | **147** | P | **Pn** | **07 34 24.6** | **+1.5** |
| MOVZ | | | | S | **S** | **07 34 46.7** | **-3.2** |
| **ALRZ** | **Allen Road** | **0.94** | **84** | P | **Pn** | **07 34 24.9** | **+1.5** |
| **TOZ** | **Tahuroa Road** | **0.98** | **17** | P | **Pn** | **07 34 25.5** | **+1.9** |
| **MRHZ** | **Matea Rd** | **1.01** | **100** | P | **Pn** | **07 34 25.1** | **+1.3** |
| MRHZ | | | | S | **S** | **07 34 47.7** | **-3.4** |
| **NEZ** | **North Egmont** | **1.01** | **234** | P | **Pn** | **07 34 26.3** | **+2.5** |
| NEZ | | | | S | **S** | **07 34 51.1** | **-0.1** |
| **WAZ** | **Wanganui** | **1.09** | **187** | P | **Pn** | **07 34 26.4** | **+2.2** |
| WAZ | | | | S | **S** | **07 34 50.7** | **-1.2** |
| **BKZ** | **Black Stump Fm** | **1.16** | **115** | P | **Pn** | **07 34 26.2** | **+1.6** |
| **BKZ** | **Black Stump Fm** | **1.16** | **115** | P | **Pn** | **07 34 26.3** | **+1.6** |
| BKZ | | | | S | **S** | **07 34 49.8** | **-2.9** |
| **MUGZ** | **Murupara** | **1.29** | **82** | P | **Pn** | **07 34 24.8** | **-0.7** |
| **MTHZ** | **Maungataniwha** | **1.34** | **98** | P | **Pn** | **07 34 27.5** | **+1.7** |
| **KRHZ** | **Kereru** | **1.36** | **136** | P | **Pn** | **07 34 28.0** | **+2.0** |
| **NMHZ** | **Naumai** | **1.36** | **109** | P | **Pn** | **07 34 28.7** | **+2.6** |
| **MCHZ** | **McNeill Hill** | **1.43** | **123** | P | **Pn** | **07 34 29.1** | **+2.6** |
| **RTZ** | **Ruatahuna** | **1.44** | **88** | P | **Pn** | **07 34 28.2** | **+1.6** |
| **PNHZ** | **Pukenui** | **1.48** | **147** | P | **Pn** | **07 34 28.9** | **+2.0** |
| **ARHZ** | **Aropaoanui** | **1.56** | **113** | P | **Pn** | **07 34 29.7** | **+2.3** |
| **URZ** | **Urewera** | **1.60** | **76** | P | **Pn** | **07 34 28.7** | **+0.9** |
| **URZ** | **Urewera** | **1.60** | **76** | P | **Pn** | **07 34 28.8** | **+1.1** |
| **WPHZ** | **Waipukurau** | **1.71** | **145** | P | **Pn** | **07 34 30.8** | **+2.1** |
| **SNGZ** | **Shannon Statio** | **1.72** | **94** | P | **Pn** | **07 34 30.7** | **+1.9** |
| **KAHZ** | **Kahuranaki** | **1.75** | **130** | P | **Pn** | **07 34 31.4** | **+2.4** |
| **CKHZ** | **Cape Kidnapper** | **1.79** | **124** | P | **Pn** | **07 34 31.8** | **+2.4** |
| **DVHZ** | **Dannevirke** | **1.81** | **154** | P | **Pn** | **07 34 31.2** | **+1.8** |
| **MWZ** | **Matawai** | **1.90** | **80** | P | **Pn** | **07 34 31.7** | **+1.4** |
| **PXZ** | **Pawanui** | **1.90** | **136** | P | **Pn** | **07 34 32.2** | **+2.0** |
| **PRHZ** | **Porangahau** | **1.96** | **145** | P | **Pn** | **07 34 32.9** | **+2.1** |
| **MRZ** | **Mangatainoka R** | **2.01** | **171** | P | **Pn** | **07 34 33.0** | **+1.7** |
| **RIGZ** | **Rimuhau** | **2.05** | **92** | P | **Pn** | **07 34 33.6** | **+1.9** |
| **ANWZ** | **Angora Road** | **2.06** | **150** | P | **Pn** | **07 34 33.8** | **+2.1** |
| **RUGZ** | **Raukumara Rang** | **2.11** | **71** | P | **Pn** | **07 34 33.0** | **+0.6** |
| **TKGZ** | **Te Karaka** | **2.13** | **85** | P | **Pn** | **07 34 34.6** | **+2.2** |
| **OGWZ** | **Otaki Gorge** | **2.14** | **180** | P | **Pn** | **07 34 34.4** | **+2.0** |
| **PRGZ** | **Paritu Road** | **2.15** | **97** | P | **Pn** | **07 34 34.6** | **+2.0** |
| **KIW** | **Kapiti Island** | **2.19** | **185** | P | **Pn** | **07 34 34.6** | **+1.6** |
| **HOWZ** | **Holdsworth Sta** | **2.24** | **173** | P | **Pn** | **07 34 34.9** | **+1.5** |
| **HAZ** | **Te Kaha** | **2.27** | **67** | P | **Pn** | **07 34 34.7** | **+1.0** |
| **TWGZ** | **Tauwhareparae** | **2.28** | **78** | P | **Pn** | **07 34 36.1** | **+2.2** |
| **DUWZ** | **D'Urville Isla** | **2.33** | **204** | P | **Pn** | **07 34 36.9** | **+1.7** |
| **CAW** | **Cannon Point** | **2.43** | **181** | P | **Pn** | **07 34 36.9** | **+1.7** |
| **PKGZ** | **Pakihiroa** | **2.45** | **72** | P | **Pn** | **07 34 37.1** | **+1.6** |
| **MTW** | **Mount Morrison** | **2.50** | **174** | P | **Pn** | **07 34 37.2** | **+1.3** |
| **TMWZ** | **Te Maipa** | **2.50** | **167** | P | **Pn** | **07 34 37.5** | **+1.5** |
| **TCW** | **Tory Channel** | **2.62** | **195** | P | **Pn** | **07 34 39.1** | **+1.9** |
| **WEL** | **Wellington** | **2.62** | **186** | P | **Pn** | **07 34 37.0** | **-0.2** |
| **SNZO** | **South Karori** | **2.66** | **187** | P | **Pn** | **07 34 39.1** | **+1.6** |
| **PAWZ** | **Paruwai Farm** | **2.71** | **176** | P | **Pn** | **07 34 39.6** | **+1.4** |
| **BHW** | **Baring Head** | **2.74** | **184** | P | **Pn** | **07 34 39.8** | **+1.4** |
| **MSWZ** | **Moikau Station** | **2.74** | **178** | P | **Pn** | **07 34 39.8** | **+1.4** |
| **NNZ** | **Nelson** | **2.88** | **208** | P | **Pn** | **07 34 41.2** | **+1.3** |
| **PLWZ** | **Palliser** | **2.89** | **178** | P | **Pn** | **07 34 41.3** | **+1.2** |
| **TKNZ** | **Takaka Hill** | **2.90** | **215** | P | **Pn** | **07 34 41.1** | **+0.9** |
| **TUWZ** | **Tuamarina** | **2.90** | **198** | P | **Pn** | **07 34 42.1** | **+2.0** |
| **QRZ** | **Quartz Range** | **2.95** | **222** | P | **Pn** | **07 34 41.6** | **+1.0** |
| **QRZ** | **Quartz Range** | **2.95** | **222** | P | **Pn** | **07 34 41.6** | **+1.0** |
| **BSWZ** | **Blackbirch Sta** | **3.19** | **197** | P | **Pn** | **07 34 45.2** | **+1.9** |
| **MRNZ** | **Matariki Terra** | **3.28** | **213** | P | **Pn** | **07 34 45.2** | **+0.8** |
| **THZ** | **Tophouse** | **3.53** | **208** | P | **Pn** | **07 34 48.3** | **+1.1** |
| **KHZ** | **Kahutara** | **3.93** | **198** | P | **Pn** | **07 34 53.7** | **+1.9** |
| **KHZ** | **Kahutara** | **3.93** | **198** | P | **Pn** | **07 34 53.6** | **+1.8** |
| **DSZ** | **Denniston Nort** | **3.99** | **219** | P | **Pn** | **07 34 53.3** | **+0.8** |
| **GVZ** | **Greta Valley S** | **4.58** | **200** | P | **Pn** | **07 35 00.8** | **+1.3** |
| **LTZ** | **Lake Taylor** | **4.65** | **207** | P | **Pn** | **07 35 01.6** | **+1.2** |
| **AMCZ** | **Amberley** | **4.88** | **202** | P | **Pn** | **07 35 04.2** | **+1.1** |
| **INZ** | **Inchbonnie** | **4.93** | **214** | P | **Pn** | **07 35 05.3** | **+1.6** |
| **OXZ** | **Oxford** | **5.21** | **206** | P | **Pn** | **07 35 07.6** | **+0.4** |
| **OKCZ** | **Okains Bay** | **5.29** | **197** | P | **Pn** | **07 35 09.2** | **+1.0** |
| **MQZ** | **McQueen's Vall** | **5.37** | **200** | P | **Pn** | **07 35 09.3** | **+0.2** |
| **MHCZ** | **Mount Hutt** | **5.55** | **208** | P | **Pn** | **07 35 12.0** | **+0.5** |
| **WACZ** | **Wakanui South** | **5.82** | **204** | P | **Pn** | **07 35 15.4** | **+0.7** |
| **RPZ** | **Rata Peaks** | **5.91** | **210** | P | **Pn** | **07 35 16.9** | **+1.1** |
| **RPZ** | **Rata Peaks** | **5.91** | **210** | P | **Pn** | **07 35 16.3** | **+0.5** |
| **ARCZ** | **Arundel** | **6.06** | **208** | P | **Pn** | **07 35 18.4** | **+0.7** |
| **TMZ** | **Timaru** | **6.49** | **207** | P | **Pn** | **07 35 24.2** | **+1.0** |
| **ODZ** | **Otahua Downs** | **7.20** | **206** | P | **Pn** | **07 35 33.7** | **+1.7** |
| **ODZ** | **Otahua Downs** | **7.20** | **206** | P | **Pn** | **07 35 33.7** | **+1.7** |

**IDC 23 07:35:07.3**±3.8,**53°.66N**×**87°.85E, h0**km,**mbtmp2.9**/2, **ML2.7**/2,**Error ellipse: s-maj=37.9km s-min=17.4km az=48.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.82** | **280** | I | I | 07 45 30.0 | |
| | baz=98,slow=325,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.82** | **280** | Pg | Pb | 07 35 41.8 | +0.3 |
| | 1.1nm,0.3s,baz=95,slow=18,SNR=8.2 | | | | | | |
| ZALV | | | | Lg | Lg | 07 36 04.8 | |
| | 1.5nm,0.3s,baz=96,slow=28,SNR=7.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.49** | **246** | Pn | Pn | 07 36 43.8 | -0.2 |
| | 0.1nm,0.3s,baz=65,slow=15,SNR=4.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.74** | **210** | Pn | Pn | 07 37 02.5 | +1.4 |
| | 0.2nm,0.3s,baz=28,slow=15,SNR=9.2 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

**IDC 23 07:44:31.0**±3.5,**53°.58N**×**87°.76E, h0**km,**mbtmp3.1**/2, **ML2.4**/2,**Error ellipse: s-maj=36.0km s-min=18.7km az=52.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.78** | **283** | I | I | 07 55 40.0 | |
| | baz=100,slow=326,SNR=5.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.78** | **283** | Pn | Pb | 07 45 03.8 | -0.7 |
| | 1.1nm,0.3s,baz=102,slow=14,SNR=8.2 | | | | | | |
| ZALV | | | | Lg | Lg | 07 45 27.6 | |
| | 1.1nm,0.3s,baz=102,slow=27,SNR=4.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.41** | **246** | Pn | Pn | 07 46 06.2 | -0.4 |
| | 0.1nm,0.3s,baz=64,slow=13,SNR=1.4 | | | | | | |
| | 1.2nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.64** | **209** | Pn | Pn | 07 46 25.0 | +1.5 |
| | 0.1nm,0.3s,baz=28,slow=14,SNR=5.4 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*KRSC* ***23*** *07:46:58.1±1.2, 56°.09N×163°.51E, h18km±14km, Mc4.5, Ml4.5, Felt [IV-V] at HMS cape Afrika.*
*NEIC* ***23*** *07:46:59.7±2.0, 56°.3N±0°.1×162°.9E±0°.1, h10km±1km, mb4.3/35, Error ellipse: s-maj=20.3km s-min=11.9km az=167.0*
*MOS* ***23*** *07:47:00.2±0.8, 56°.21N×163°.51E, h35km, mb4.4/13, Error ellipse: s-maj=7.7km s-min=5.0km az=60.4*
*IDC* ***23*** *07:47:03.7±2.5, 56°.22N×163°.02E, h42km±24km, mb3.8/23, mbtmp4.1/26, ML3.9/3, MS3.4/4, Error ellipse: s-maj=15.8km s-min=13.5km az=127.0*

**ISC 23 07:47:00.4**±0.4,**56°.18N**±0°.04×**163°.40E**±0°.03,**h21**km±2km, **n186,σ1§50/208,mb4.3**/46,**MS3.3**/3,**3C-10D,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.33** | **275** | *e*P | **Pb** | **07 47 06.5** | **-0.9** |
| **KBTR** | **Krutoberegovo** | **0.33** | **275** | PN | **Pb** | **07 47 06.5** | **-0.9** |
| **KBG** | **Krutoberegovo** | **0.40** | **281** | *e*P | **Pb** | **07 47 07.8** | **-0.8** |
| KBG | | | | *e*S | **Sb** | **07 47 13.8** | **-0.3** |
| **KBG** | **Krutoberegovo** | **0.40** | **281** | PN | **Pb** | **07 47 07.7** | **-0.8** |
| **SMKR** | **Semkarok** | **1.15** | **291** | *e*P | **Pn** | **07 47 20.5** | **-0.9** |
| SMKR | | | | *e*S | **Sn** | **07 47 36.4** | **-0.1** |
| **SMKR** | **Semkarok** | **1.15** | **291** | PN | **Pn** | **07 47 20.4** | **-0.9** |
| SMKR | | | | S | **Sn** | **07 47 36.3** | **-0.1** |
| **SRKR** | **Sorokina** | **1.33** | **292** | *e*P | **Pn** | **07 47 23.9** | **0.0** |
| SRKR | | | | *e*S | **Sn** | **07 47 40.5** | **-0.4** |
| **SRKR** | **Sorokina** | **1.33** | **292** | PN | **Pn** | **07 47 23.8** | **0.0** |
| SRKR | | | | S | **Sn** | **07 47 40.5** | **-0.4** |
| **ZLN** | **Zelenaya** | **1.47** | **265** | *e*P | **Pn** | **07 47 26.3** | **+0.5** |
| ZLN | | | | *e*S | **Sn** | **07 47 45.5** | **+1.1** |
| **ZLN** | **Zelenaya** | **1.47** | **265** | PN | **Pn** | **07 47 26.2** | **+0.5** |
| ZLN | | | | S | **Sn** | **07 47 45.4** | **+1.1** |
| **CIRR** | **Tsirk** | **1.49** | **269** | *e*P | **Pn** | **07 47 26.2** | **+0.1** |
| CIRR | | | | *e*S | **Sn** | **07 47 45.6** | **+0.7** |
| **CIRR** | **Tsirk** | **1.49** | **269** | PN | **Pn** | **07 47 26.1** | **+0.1** |
| CIRR | | | | S | **Sn** | **07 47 45.5** | **+0.7** |
| **LGNR** | **Loginova** | **1.52** | **267** | *e*P | **Pn** | **07 47 27.1** | **+0.5** |
| LGNR | | | | *e*S | **Sn** | **07 47 46.4** | **+0.5** |
| **LGNR** | **Loginova** | **1.52** | **267** | PN | **Pn** | **07 47 27.1** | **+0.5** |
| LGNR | | | | S | **Sn** | **07 47 46.4** | **+0.5** |
| **BZGR** | **Bezymyannyi-Gr** | **1.54** | **262** | *e*P | **Pn** | **07 47 27.2** | **+0.4** |
| BZGR | | | | *e*S | **Sn** | **07 47 46.6** | **+0.5** |
| **BZGR** | **Bezymyannyi-Gr** | **1.54** | **262** | PN | **Pn** | **07 47 27.1** | **+0.4** |
| BZGR | | | | S | **Sn** | **07 47 46.6** | **+0.5** |
| **KLY** | **Klyuchi** | **1.54** | **276** | *e*P | **Pn** | **07 47 25.0** | **-1.7** |
| KLY | | | | *e*S | **Sn** | **07 47 44.3** | **-1.7** |
| **KLY** | **Klyuchi** | **1.54** | **276** | PN | **Pn** | **07 47 24.9** | **-1.7** |
| KLY | | | | S | **Sn** | **07 47 44.3** | **-1.7** |
| **KRSR** | **Krestovskiy** | **1.59** | **272** | *e*P | **Pn** | **07 47 27.5** | **+0.2** |
| **KRSR** | **Krestovskiy** | **1.59** | **272** | PN | **Pn** | **07 47 27.5** | **+0.2** |
| **BZP** | **Bezymyannyi-Pe** | **1.63** | **262** | *e*P | **Pn** | **07 47 28.5** | **+0.5** |
| BZP | | | | *e*S | **Sn** | **07 47 49.3** | **+0.8** |
| **BZWR** | **Bezymyannyi-We** | **1.64** | **264** | *e*P | **Pn** | **07 47 29.0** | **+0.8** |
| BZWR | | | | *e*S | **Sn** | **07 47 50.3** | **+1.4** |
| **BZWR** | **Bezymyannyi-We** | **1.64** | **264** | PN | **Pn** | **07 47 29.0** | **+0.8** |
| BZWR | | | | S | **Sn** | **07 47 50.2** | **+1.4** |
| **BZMR** | **Bezymyannaya** | **1.65** | **263** | *e*P | **Pn** | **07 47 28.7** | **+0.4** |
| BZMR | | | | *e*S | **Sn** | **07 47 49.9** | **+0.9** |
| **BZMR** | **Bezymyannaya** | **1.65** | **263** | PN | **Pn** | **07 47 28.7** | **+0.4** |
| BZMR | | | | S | **Sn** | **07 47 49.8** | **+0.9** |
| **KIRR** | **Kirishev** | **1.73** | **264** | *e*P | **Pn** | **07 47 30.2** | **+0.8** |
| KIRR | | | | *e*S | **Sn** | **07 47 52.3** | **+1.4** |
| **KIRR** | **Kirishev** | **1.73** | **264** | PN | **Pn** | **07 47 30.2** | **+0.8** |
| KIRR | | | | S | **Sn** | **07 47 52.3** | **+1.4** |
| **BKI** | **Bering** | **1.75** | **123** | *e*P | **Pn** | **07 47 29.1** | **-0.5** |
| BKI | | | | *e*S | **Sn** | **07 47 51.0** | **-0.2** |
| **BKI** | **Bering** | **1.75** | **123** | PN | **Pn** | **07 47 29.0** | **-0.5** |
| BKI | | | | S | **Sn** | **07 47 51.0** | **-0.2** |
| **KPT** | **Kopyto** | **1.80** | **264** | *e*P | **Pn** | **07 47 31.2** | **+0.9** |
| KPT | | | | *e*S | **Sn** | **07 47 54.8** | **+2.3** |
| **KPT** | **Kopyto** | **1.80** | **264** | PN | **Pn** | **07 47 31.1** | **+0.9** |
| KPT | | | | S | **Sn** | **07 47 54.7** | **+2.3** |
| **KMNR** | **Kamenistaya** | **1.83** | **258** | *e*P | **Pn** | **07 47 31.8** | **+1.1** |
| KMNR | | | | *e*S | **Sb** | **07 47 56.7** | **+1.0** |
| **KMNR** | **Kamenistaya** | **1.83** | **258** | PN | **Pn** | **07 47 31.8** | **+1.1** |
| KMNR | | | | S | **Sb** | **07 47 56.6** | **+1.0** |
| **TUMD** | **Tumrok D** | **1.96** | **241** | *e*P | **Pn** | **07 47 32.4** | **-0.1** |
| TUMD | | | | *e*S | **Sn** | **07 47 56.6** | **+0.2** |
| **KOZ** | **Kozyrevsk** | **1.98** | **268** | *e*P | **Pn** | **07 47 34.3** | **+1.6** |
| KOZ | | | | *e*S | **Sn** | **07 47 59.5** | **+2.6** |
| **KOZ** | **Kozyrevsk** | **1.98** | **268** | PN | **Pn** | **07 47 34.3** | **+1.6** |
| KOZ | | | | S | **Sn** | **07 47 59.4** | **+2.6** |
| **TUMR** | **Tumrok** | **2.05** | **245** | *e*P | **Pn** | **07 47 34.7** | **+1.0** |
| **TUMR** | **Tumrok** | **2.05** | **245** | PN | **Pn** | **07 47 34.7** | **+1.0** |
| **SRDR** | **Sredinnyy** | **2.06** | **275** | *e*P | **Pn** | **07 47 35.3** | **+1.5** |
| SRDR | | | | *e*S | **Sn** | **07 48 02.3** | **+3.4** |
| **SRDR** | **Sredinnyy** | **2.06** | **275** | PN | **Pn** | **07 47 35.3** | **+1.5** |
| SRDR | | | | S | **Sn** | **07 48 02.3** | **+3.4** |
| **ESO** | **Esso** | **2.65** | **266** | *e*P | **Pn** | **07 47 43.7** | **+1.7** |
| **ESO** | **Esso** | **2.65** | **266** | PN | **Pn** | **07 47 43.6** | **+1.7** |
| **TIGL** | **Tigil** | **3.04** | **303** | *e*P | **Pn** | **07 47 49.9** | **+2.7** |
| **OSSR** | **Ossora** | **3.08** | **357** | *e*P | **Pn** | **07 47 48.1** | **+0.2** |
| **OSSR** | **Ossora** | **3.08** | **357** | PN | **Pn** | **07 47 48.0** | **+0.2** |
| **KII** | **Karymskiy** | **3.13** | **228** | *e*P | **Pn** | **07 47 49.4** | **+0.9** |
| **KII** | **Karymskiy** | **3.13** | **228** | PN | **Pn** | **07 47 49.4** | **+0.9** |
| **PALN** | **Palana** | **3.45** | **329** | *e*P | **Pn** | **07 47 53.3** | **+0.4** |
| **PALN** | **Palana** | **3.45** | **329** | PN | **Pn** | **07 47 53.2** | **+0.4** |
| **SPN** | **Mys Shipunski** | **3.66** | **214** | *e*P | **Pn** | **07 47 54.8** | **-0.9** |
| **SPN** | **Mys Shipunski** | **3.66** | **214** | PN | **Pn** | **07 47 54.8** | **-0.9** |
| **NLC** | **Nalytchevo** | **3.83** | **220** | *e*P | **Pn** | **07 47 58.3** | **+0.3** |
| **NLC** | **Nalytchevo** | **3.83** | **220** | PN | **Pn** | **07 47 58.3** | **+0.3** |
| **SMAR** | **Somma** | **3.96** | **224** | *e*P | **Pn** | **07 48 01.0** | **+1.0** |
| **SMAR** | **Somma** | **3.96** | **224** | PN | **Pn** | **07 48 01.0** | **+1.0** |
| **AVH** | **Avacha** | **3.98** | **225** | *e*P | **Pn** | **07 48 01.9** | **+1.6** |
| **AVH** | **Avacha** | **3.98** | **225** | PN | **Pn** | **07 48 01.8** | **+1.6** |
| **UGLR** | **Uglovaya** | **3.99** | **224** | *e*P | **Pn** | **07 48 01.6** | **+1.1** |
| **UGLR** | **Uglovaya** | **3.99** | **224** | PN | **Pn** | **07 48 01.5** | **+1.1** |
| **KOK** | **Koryaka** | **4.00** | **226** | *e*P | **Pn** | **07 48 02.0** | **+1.4** |
| **KOK** | **Koryaka** | **4.00** | **226** | PN | **Pn** | **07 48 01.9** | **+1.4** |
| **GNL** | **Ganaly** | **4.01** | **234** | *e*P | **Pn** | **07 48 02.1** | **+1.4** |
| **GNL** | **Ganaly** | **4.01** | **234** | PN | **Pn** | **07 48 02.1** | **+1.4** |
| **DALK** | **Dalny** | **4.16** | **222** | *e*P | **Pn** | **07 48 03.3** | **+0.7** |
| DALK | | | | *e*S | **Sn** | **07 48 50.0** | **-0.4** |
| **DALK** | **Dalny** | **4.16** | **222** | PN | **Pn** | **07 48 03.2** | **+0.7** |
| **PET** | **Petropavlovsk** | **4.20** | **223** | | **Pn** | **07 48 03.0** | **-0.1** |
| **PET** | **Petropavlovsk** | **4.20** | **223** | *e*P | **Pn** | **07 48 04.7** | **+1.5** |
| **PET** | **Petropavlovsk** | **4.20** | **223** | *e*PN | **Pn** | **07 48 04.7** | **+1.5** |
| PET | | | | MLR | MLR | | |
| | comp=Z,500nm,15.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,300nm,13.0s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **4.52** | **229** | | **Pn** | **07 48 05.9** | **-1.7** |
| **PEA0B** | **Petropavlovsk-** | **4.52** | **229** | *e*PN | **Pn** | **07 48 09.4** | **+1.8** |
| **PETK** | **Petropavlovsk-** | **4.52** | **229** | | **Pn** | **07 48 06.7** | **-0.9** |
| **PETK** | **Petropavlovsk-** | **4.52** | **229** | P | **Pn** | **07 48 09.0** | **+1.4** |
| | comp=Z,3.8nm,0.3s,baz=62,slow=16,SNR=14 | | | | | | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **KRMR** | **Karymshinskiy** | **4.55** | **225** | *e*P | **Pn** | **07 48 09.8** | **+1.8** |
| **KRMR** | **Karymshinskiy** | **4.55** | **225** | PN | **Pn** | **07 48 09.7** | **+1.8** |
| **GRL** | **Gorelyy** | **4.79** | **223** | *e*P | **Pn** | **07 48 13.4** | **+2.0** |
| **GRL** | **Gorelyy** | **4.79** | **223** | PN | **Pn** | **07 48 13.3** | **+2.0** |
| **MTVR** | **Mutnovka** | **4.80** | **222** | *e*P | **Pn** | **07 48 13.0** | **+1.4** |
| **MTVR** | **Mutnovka** | **4.80** | **222** | PN | **Pn** | **07 48 13.0** | **+1.4** |
| **APC** | **Apacha** | **4.88** | **231** | *e*P | **Pn** | **07 48 14.8** | **+2.3** |
| **APC** | **Apacha** | **4.88** | **231** | PN | **Pn** | **07 48 14.8** | **+2.3** |
| **ASAK** | **Asacha** | **4.99** | **223** | *e*P | **Pn** | **07 48 15.9** | **+1.8** |
| **ASAK** | **Asacha** | **4.99** | **223** | PN | **Pn** | **07 48 15.8** | **+1.8** |
| **KDTR** | **Khodutka, Kamc** | **5.39** | **218** | *e*P | **Pn** | **07 48 18.9** | **-0.6** |
| **KDTR** | **Khodutka, Kamc** | **5.39** | **218** | PN | **Pn** | **07 48 18.9** | **-0.6** |
| **SHEM** | **Shemya Is, Ala** | **7.13** | **115** | P | **Pn** | **07 48 47.0** | **+3.6** |
| | comp=Z,6.3nm,0.3s,baz=5.5,slow=2.9,SNR=8.2 | | | | | | |
| | comp=Z,31nm,0.6s | | | | | | |
| **MA2** | **Magadan** | **7.54** | **302** | LR | LR | 07 52 04.1 | |
| | comp=Z,173nm,18.6s,baz=120,slow=41 | | | | | | |
| **KIWB** | **Kanaga Island** | **12.22** | **103** | Pn | Pn | 07 49 58.6 | +5.5 |
| **JKA** | **Kamikawa-asahi** | **17.90** | **236** | P | **Pn** | **07 51 08.3** | **+0.4** |
| JKA | | | | IAmb | IAmb | 07 51 46.9 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **17.90** | **236** | P | **Pn** | **07 51 08.6** | **+0.7** |
| | comp=Z,1.2nm,0.3s,baz=76,slow=11,SNR=6.1 | | | | | | |
| | comp=Z,6.1nm,0.5s | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **48.57** | **295** | P | **P** | **07 55 39.3** | **-2.6** |
| MK31 | | | | IAmb | IAmb | 07 55 41.4 | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **48.57** | **295** | *d* iP | **P** | **07 55 39.6** | **-2.3** |
| **MKAR** | **Makanchi Array** | **48.57** | **295** | P | **P** | **07 55 39.3** | **-2.6** |
| **MKAR** | **Makanchi Array** | **48.57** | **295** | P | **P** | **07 55 39.6** | **-2.3** |
| | comp=Z,1.3nm,0.4s,baz=57,slow=6.2,SNR=23 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **50.94** | **342** | P | **P** | **07 55 59.3** | **-0.3** |
| **ARCES** | **ARCESS Array B** | **50.94** | **342** | P | **P** | **07 55 59.1** | **-0.5** |
| | comp=Z,1.1nm,0.6s,baz=18,slow=8.9,SNR=4.7 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **50.94** | **342** | *e*P | **P** | **07 56 02.8** | **+3.2** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **PZH** | **PanZhiHua** | **52.71** | **262** | P | **P** | **07 56 12.3** | **-1.2** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,180nm,6.1s | | | | | | | |
| **FRB** | **Frobisher Bay** | **53.89** | **26** | LR | LR | 08 21 36.4 | | |
| | comp=Z,27nm,19.3s,baz=354,slow=38 | | | | | | | |
| **KIRV** | **Kirov** | **54.04** | **324** | ⇓*i*P | **P** | **07 56 23.4** | **+0.8** |
| **AAK** | **Ala-Archa** | **55.43** | **296** | *de*P | **P** | **07 56 32.2** | **-1.0** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **57.05** | **299** | P | **P** | **07 56 42.2** | **-2.4** |
| KK31 | | | | IAmb | IAmb | 07 56 43.6 | | |
| | comp=Z,3.6nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **57.05** | **299** | P | **P** | **07 56 42.2** | **-2.4** |
| KK31 | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **KKAR** | **Karatay Array** | **57.05** | **299** | P | **P** | **07 56 42.1** | **-2.5** |
| KKAR | | | | IAmb | IAmb | 07 56 43.6 | | |
| | comp=Z,3.6nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **57.05** | **299** | P | **P** | **07 56 42.2** | **-2.4** |
| **KKAR** | **Karatay Array** | **57.05** | **299** | P | **P** | **07 56 42.1** | **-2.5** |
| KKAR | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **57.15** | **313** | P | **P** | **07 56 44.8** | **-0.3** |
| | comp=Z,1.9nm,0.9s,baz=0.6,slow=5.8,SNR=5.1 | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **57.24** | **311** | P | **P** | **07 56 44.7** | **-1.1** |
| **FIA1** | **FINESS Array S** | **58.02** | **337** | P | **P** | **07 56 50.9** | **-0.2** |
| **FINES** | **FINESS Array B** | **58.02** | **337** | P | **P** | **07 56 51.0** | **-0.1** |
| **FINES** | **FINESS Array B** | **58.02** | **337** | P | **P** | **07 56 50.5** | **-0.6** |
| | comp=Z,2.9nm,0.7s,baz=50,slow=10,SNR=5.9 | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **58.02** | **337** | *e*P | **P** | **07 56 52.2** | **+1.1** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **59.52** | **67** | P | **P** | **07 57 03.8** | **+1.5** |
| S22A | | | | IAmb | IAmb | 07 57 48.0 | | |
| | comp=Z,2.7nm,1.5s | | | | | | | |
| **BELG** | **Belogornoye** | **59.59** | **320** | ⇑*e*P | **P** | **07 57 02.1** | **0.0** |
| BELG | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **NC204** | **NORSAR Array S** | **60.92** | **345** | P | **P** | **07 57 10.5** | **-0.7** |
| **NB2** | **NORSAR Subarra** | **61.08** | **345** | P | **P** | **07 57 12.2** | **-0.1** |
| | comp=Z,0.9nm,0.5s,baz=18,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **61.08** | **345** | P | **P** | **07 57 12.0** | **-0.3** |
| | comp=Z,0.9nm,0.5s,baz=18,slow=6.9,SNR=4.9 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **NOA** | **NORSAR Array B** | **61.08** | **345** | P | **P** | **07 57 12.0** | **-0.3** |
| **HFS** | **Hagfors** | **61.57** | **343** | P | **P** | **07 57 14.6** | **-0.9** |
| | comp=Z,2.2nm,0.7s,baz=45,slow=6.9,SNR=6.0 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **N35A** | **Tabor** | **62.63** | **57** | P | **P** | **07 57 21.4** | **-1.6** |
| **AKASG** | **Malin Array Be** | **66.92** | **330** | P | **P** | **07 57 50.2** | **-0.4** |
| | comp=Z,1.5nm,0.5s,baz=26,slow=6.0,SNR=4.5 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **AKASG** | **Malin Array Be** | **66.92** | **330** | *ce*P | **P** | **07 57 50.5** | **-0.2** |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **AKBB** | **Malin Array Si** | **66.92** | **330** | ⇓*i*P | **P** | **07 57 50.6** | **-0.1** |
| AKBB | | | | pmax | pmax | | | |
| | comp=Z,26nm,2.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **67.72** | **70** | P | **P** | **07 57 58.8** | **+2.5** |
| | comp=Z,0.9nm,0.8s,baz=307,slow=4.5,SNR=13 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **68.31** | **352** | P | **P** | **07 57 59.3** | **-0.1** |
| | comp=Z,2.0nm,0.6s,baz=21,slow=6.1,SNR=8.0 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **KBZ** | **Khabaz** | **68.57** | **318** | P | **P** | **07 58 01.5** | **+0.3** |
| | comp=Z,1.6nm,0.6s,baz=191,slow=7.7,SNR=4.0 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **KBZ** | **Khabaz** | **68.57** | **318** | ⇓*e*P | **P** | **07 58 01.8** | **+0.6** |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **GERES** | **GERESS Array B** | **72.33** | **340** | P | **P** | **07 58 24.0** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=48,slow=5.8,SNR=2.3 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **GERES** | **GERESS Array B** | **72.33** | **340** | P | **P** | **07 58 24.0** | **-0.3** |
| **BRTR** | **Keskin Array B** | **75.41** | **322** | P | **P** | **07 58 42.4** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=76,slow=2.9,SNR=4.1 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.41** | **322** | *e*P | **P** | **07 58 42.7** | **+0.2** |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **WB2** | **Warramunga Arr** | **79.70** | **208** | P | **P** | **07 59 05.5** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 07 59 20.9 | | |
| | comp=Z,7.7nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **79.71** | **208** | P | **P** | **07 59 06.0** | **-0.3** |
| | comp=Z,1.1nm,0.7s,baz=15,slow=5.8,SNR=15 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **83.38** | **207** | P | **P** | **07 59 25.5** | **-0.2** |
| **ASAR** | **Alice Springs** | **83.38** | **207** | P | **P** | **07 59 25.6** | **-0.1** |
| | comp=Z,2.2nm,0.9s,baz=16,slow=4.7,SNR=13 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **83.91** | **350** | P | **P** | **07 59 29.2** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=358,slow=5.9,SNR=9.1 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **STKA** | **Stephens Creek** | **89.66** | **198** | P | **P** | **07 59 55.7** | **-0.5** |
| | comp=Z,1.2nm,0.5s,baz=27,slow=6.8,SNR=3.3 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **145.93** | **180** | PKPbc | **PKPdf** | **08 06 36.4** | **+0.3** | |
| | comp=Z,3.1nm,0.6s,baz=307,slow=0.9,SNR=48 | | | | | | | |

*KRNET **23** 07:48:38.4±0.1, 40.78N×69.14E, mb2.5*

**ISC 23 07:48:41.2±3.1, 40.77N±0.07×69.4E±0.2, h10km, n4, σ0s99/8, 5C-3D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BTK** | **Batken** | **1.31** | **123** | ⇑*e*P | **Pn** | **07 49 04.9** | **-0.7** |
| BTK | baz=19 | | | ⇑*e*S | **Sn** | **07 49 24.1** | **+0.9** |
| | baz=19 | | | | | | |
| **TRKS** | **Terek-Say** | **1.53** | **60** | ⇑*e*P | **Pn** | **07 49 07.7** | **-1.0** |
| TRKS | baz=66 | | | ⇑*e*S | **Sn** | **07 49 29.4** | **+0.7** |
| | baz=66 | | | | | | |
| **DRK** | **Karamyk** | **2.26** | **124** | ⇓*e*P | **Pn** | **07 49 18.2** | **-0.7** |
| DRK | baz=22 | | | ⇓*e*S | **Sn** | **07 49 47.1** | **+0.2** |
| | baz=22 | | | | | | |
| **KK31** | **Karatay Array** | **2.48** | **19** | ⇓Pn | **Pb** | **07 49 26.8** | **+1.0** |
| | 1.2nm,0.3s,baz=199,slow=17,SNR=19 | | | | | | |
| KK31 | | | | ⇑Sn | **Sg** | **07 50 00.1** | **-0.7** |
| | 5.0nm,0.5s,baz=196,slow=29,SNR=12 | | | | | | |

**RSNC 23 07:56:20.7±0.0, 7°N±1°×7°6W±°, h0km±2km, M3.6, mb4.2, ML3.6, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DBBC** | **Dabeiba** | **0.14** | **52** | P | Pg | 07 56 22.8 | -0.6 |
| DBBC | | | | S | Sg | 07 56 26.0 | +0.8 |
| **APAC** | **Apartado, Choc** | **1.00** | **345** | P | Pg | 07 56 39.0 | -0.9 |
| APAC | | | | S | Sb | 07 56 55.0 | +0.4 |
| **CBOC** | **Ciudad Bolivar** | **1.10** | **164** | P | Pg | 07 56 38.7 | -3.2 |
| CBOC | | | | S | Sg | 07 56 55.8 | -0.4 |
| **UREC** | **San Jos de Ur** | **1.13** | **44** | P | Pg | 07 56 38.7 | -3.7 |
| UREC | | | | S | Sg | 07 56 53.9 | -3.2 |
| **SOLC** | **Bahia Solano** | **1.29** | **237** | P | Pg | 07 56 42.7 | -2.7 |
| SOLC | | | | S | Sg | 07 57 00.6 | -1.5 |
| **PTAC** | **Punta Ardita,** | **1.49** | **278** | P | Pn | 07 56 45.5 | -3.3 |
| PTAC | | | | S | Sg | 07 57 07.2 | -1.5 |
| **ZARC** | **Zaragoza, Cauc** | **1.55** | **69** | P | Pn | 07 56 45.3 | -4.4 |
| ZARC | | | | S | Sn | 07 57 04.4 | -6.2 |
| **PTBC** | **PUERTO BERRIO,** | **1.89** | **102** | P | Pn | 07 56 50.1 | -4.2 |
| PTBC | | | | S | Sn | 07 57 13.9 | -5.0 |
| **LCBC** | **Los crdobas,** | **1.92** | **359** | P | Pn | 07 56 51.6 | -3.0 |
| LCBC | | | | S | Sn | 07 57 17.1 | -2.3 |
| **CAPC** | **Capurgana** | **1.98** | **329** | P | Pn | 07 56 52.5 | -3.0 |
| CAPC | | | | S | Sn | 07 57 17.6 | -3.4 |
| **NORC** | **Norcasia** | **1.98** | **133** | P | Pn | 07 56 52.1 | -3.5 |
| NORC | | | | S | Sn | 07 57 17.5 | -3.6 |
| **PLMC** | **San Jos del P** | **2.01** | **179** | P | Pn | 07 56 51.9 | -4.1 |
| PLMC | | | | S | Sn | 07 57 21.0 | -0.9 |
| **NIZA** | **Niza - Manizal** | **2.04** | **156** | P | Pn | 07 56 55.9 | -0.7 |
| NIZA | | | | S | Sn | 07 57 23.2 | +0.2 |
| **RECRC** | **Villamaria, Ca** | **2.18** | **154** | P | Pn | 07 56 58.3 | -0.5 |
| RECRC | | | | S | Sn | 07 57 27.2 | +0.5 |
| **PIZC** | **Pizarro, Choco** | **2.21** | **208** | P | Pn | 07 56 56.9 | -1.8 |
| PIZC | | | | S | Sn | 07 57 23.3 | -3.4 |
| **BRJC** | **Barrancabermej** | **2.56** | **89** | P | Pn | 07 57 01.8 | -1.7 |
| BRJC | | | | S | Sn | 07 57 33.7 | -1.6 |
| **SPBC** | **San Pablo de B** | **2.57** | **119** | P | Pn | 07 57 01.5 | -2.2 |
| SPBC | | | | S | Sn | 07 57 32.8 | -3.0 |
| **ROSC** | **El Rosal** | **2.88** | **136** | P | Pn | 07 57 08.0 | -0.2 |
| ROSC | | | | S | Sn | 07 57 45.5 | +1.8 |
| **YOTC** | **Yotoco, Valle** | **2.93** | **180** | P | Pn | 07 57 05.0 | -3.7 |
| YOTC | | | | S | Sn | 07 57 40.2 | -4.4 |
| **MALC** | **Bahia Malaga** | **3.07** | **199** | P | Pn | 07 57 10.2 | -0.3 |
| MALC | | | | S | Sb | 07 57 54.4 | +0.1 |
| **BARC** | **Barichara** | **3.13** | **96** | P | Pn | 07 57 09.5 | -2.1 |
| BARC | | | | S | Sn | 07 57 46.8 | -3.1 |
| **SJCC** | **San Jacinto, C** | **3.16** | **21** | P | Pn | 07 57 07.0 | -4.8 |
| SJCC | | | | S | Sn | 07 57 42.6 | -7.6 |
| **ORTC** | **Ortega, Tolima** | **3.19** | **160** | P | Pn | 07 57 11.8 | -0.3 |
| ORTC | | | | S | Sn | 07 57 50.4 | -0.5 |
| **OCAC** | **Ocana** | **3.25** | **66** | P | Pn | 07 57 09.3 | -3.8 |
| OCAC | | | | S | Sn | 07 57 50.3 | -2.3 |
| **RUSC** | **La Rusia** | **3.38** | **108** | P | Pn | 07 57 12.9 | -2.3 |
| RUSC | | | | S | Sn | 07 57 54.8 | -1.4 |
| **CHIC** | **Chingaza** | **3.44** | **131** | P | Pn | 07 57 16.5 | +0.5 |
| CHIC | | | | S | Sn | 07 57 57.5 | -0.3 |
| **PRAC** | **Prado** | **3.50** | **156** | P | Pn | 07 57 15.5 | -1.0 |
| PRAC | | | | S | Sn | 07 57 59.4 | +0.8 |
| **ARGC** | **Ariguani, Magd** | **3.56** | **35** | P | Pn | 07 57 15.8 | -1.5 |
| ARGC | | | | S | Sn | 07 57 58.0 | -2.1 |
| **PAMC** | **Pamplona, Colo** | **3.62** | **83** | P | Pn | 07 57 16.9 | -1.6 |
| PAMC | | | | S | Sn | 07 57 58.6 | -3.5 |
| **JAMC** | **Jamundi, Valle** | **3.71** | **185** | P | Pn | 07 57 16.0 | -3.5 |
| JAMC | | | | S | Sn | 07 57 57.8 | -6.2 |
| **VILC** | **Villavicencio,** | **3.83** | **137** | P | Pn | 07 57 21.6 | +0.5 |
| **AZU** | **Azuero** | **4.01** | **283** | P | Pn | 07 57 21.0 | -2.5 |
| AZU | | | | S | Sn | 07 58 06.7 | -4.6 |
| **BCIP** | **Isla Barro Col** | **4.13** | **303** | P | Pn | 07 57 22.3 | -2.8 |
| BCIP | | | | S | Sn | 07 58 11.1 | -3.1 |
| **POPC** | **Popayan, Colom** | **4.38** | **185** | P | Pn | 07 57 26.7 | -2.0 |
| POPC | | | | S | Sn | 07 58 17.7 | -2.8 |
| **TAMC** | **Tame, Arauca** | **4.53** | **96** | P | Pn | 07 57 28.7 | -1.9 |
| TAMC | | | | S | Sn | 07 58 21.8 | -2.2 |
| **SMRC** | **Santa Marta, M** | **4.69** | **26** | P | Pn | 07 57 31.0 | -1.8 |
| SMRC | | | | S | Sn | 07 58 21.3 | -6.6 |
| **GARC** | **Garzon, Huila** | **4.78** | **170** | P | Pn | 07 57 33.1 | -1.2 |
| **BBAC** | **Balboa, Cauca** | **4.96** | **191** | P | Pn | 07 57 36.1 | -0.7 |
| BBAC | | | | S | Sn | 07 58 31.2 | -3.8 |
| **PTGC** | **Puerto Gaitan,** | **4.97** | **123** | P | Pn | 07 57 34.2 | -2.5 |
| PTGC | | | | S | Sn | 07 58 28.4 | -6.5 |
| **CRJC** | **Cerrejon, Guaj** | **5.30** | **40** | P | Pn | 07 57 37.8 | -3.4 |
| | 27nm,0.6s | | | | | | |
| CRJC | | | | S | Sn | 07 58 33.0 | -10 |
| | 27nm,0.6s | | | | | | |
| **FLOC** | **Florencia** | **5.35** | **173** | P | Pn | 07 57 40.2 | -1.8 |
| | 16nm,0.6s | | | | | | |
| **URIC** | **Uribia, Colomb** | **6.38** | **42** | P | Pn | 07 57 51.6 | -4.5 |
| URIC | | | | S | Sn | 07 58 58.0 | -12 |
| **PTLC** | **Puerto Leguiza** | **6.88** | **167** | P | Pn | 07 58 05.9 | +2.9 |
| **OTAV** | **Otavalo** | **6.98** | **198** | P | Pn | 07 58 03.5 | -1.2 |

**IDC 23 08:07:40.5±1.6, 18.87S×177.44W, h0km, mb3.7/4, mbtmp3.7/4, MS3.4/1, Error ellipse: s-maj=61.2km s-min=33.6km az=169.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RPZ** | **Rata Peaks** | **26.60** | **199** | LR | LR | 08 22 43.6 | |
| | comp=Z,74nm,18.9s,baz=130,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.37** | **260** | P | P | 08 16 00.3 | -0.7 |
| | 0.3nm,0.3s,baz=97,slow=7.7,SNR=11 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.42** | **255** | P | P | 08 16 01.9 | +0.4 |
| | 2.0nm,0.7s,baz=88,slow=8.4,SNR=28 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.19** | **180** | P | P | 08 19 01.1 | 0.0 |
| | 1.2nm,1.1s,baz=5.2,slow=11,SNR=2.0 | | | | | | |
| | 1.2nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.74** | **57** | P | P | 08 20 22.1 | 0.0 |
| | 0.2nm,0.6s,baz=227,slow=7.3,SNR=3.4 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IGQ **23** 08:16:29.4±0.6, 3°S±4°×7°7W±°, h80km, M4.2/19*
*RSNC **23** 08:16:30.9±0.8, 3°S±5°×7°7W±°, h0km, M3.9, mb4.1, mB4.6, ML3.5, Mw(mB)3.8*

**ISC 23 08:16:25.6±1.3, 3.56S±0.06×77.02W±0.06, h76km±14km, n106, σ1s67/111, Peru-Ecuador border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAIS** | **Taisha** | **1.27** | **338** | S | **Sn** | **08 17 05.6** | **+1.1** |
| TAIS | | | | P | **Pn** | **08 16 49.8** | **+2.0** |
| **TAIS** | **Taisha** | **1.27** | **338** | P | **Pn** | **08 16 50.0** | **+2.2** |
| TAIS | | | | S | **Sn** | **08 17 05.5** | **+1.1** |
| **BOSC** | **San Juan Bosco** | **1.53** | **285** | P | **Pn** | **08 16 50.9** | **-0.4** |
| **BOSC** | **San Juan Bosco** | **1.53** | **285** | P | **Pn** | **08 16 51.1** | **-0.2** |
| BOSC | | | | S | **Sn** | **08 17 07.0** | **-3.8** |
| **ALJ1** | **Ecuador-Loja-U** | **2.22** | **259** | P | **Pn** | **08 17 02.4** | **+1.8** |
| **PUYO** | **Puyo, Santa Ro** | **2.29** | **334** | P | **Pn** | **08 17 01.6** | **+0.2** |
| PUYO | | | | S | **Sn** | **08 17 26.0** | **-2.7** |
| **PUYO** | **Puyo, Santa Ro** | **2.29** | **334** | P | **Pn** | **08 17 01.4** | **+0.1** |
| **GONZ** | **Gonzanam** | **2.47** | **254** | P | **Pn** | **08 17 06.1** | **+2.0** |
| **BPAT** | **Tungurahua Vol** | **2.48** | **325** | P | **Pn** | **08 17 04.7** | **+0.3** |
| BPAT | | | | S | **Sn** | **08 17 31.9** | **-2.0** |
| **BPAT** | **Tungurahua Vol** | **2.48** | **325** | P | **Pn** | **08 17 04.7** | **+0.3** |
| BPAT | | | | S | **Sn** | **08 17 31.5** | **-2.4** |
| **ZUMB** | **Zumba** | **2.49** | **238** | P | **Pn** | **08 17 06.4** | **+2.3** |
| ZUMB | | | | S | **Sn** | **08 17 34.4** | **+0.8** |
| **ZUMB** | **Zumba** | **2.49** | **238** | P | **Pn** | **08 17 06.5** | **+2.3** |
| **TUYU** | **Q. Yuibug Volc** | **2.52** | **325** | P | **Pn** | **08 17 04.9** | **+0.1** |
| **TUYU** | **Q. Yuibug Volc** | **2.52** | **325** | P | **Pn** | **08 17 05.0** | **+0.2** |
| TUYU | | | | S | **Sn** | **08 17 31.1** | **-3.7** |
| **BULB** | **Ulba Tungurahu** | **2.52** | **327** | P | **Pn** | **08 17 04.9** | **+0.1** |
| **BULB** | **Ulba Tungurahu** | **2.52** | **327** | P | **Pn** | **08 17 04.5** | **-0.3** |
| **BBIL** | **Ulba Tungurahu** | **2.56** | **325** | P | **Pn** | **08 17 05.7** | **+0.4** |
| **BBIL** | **Ulba Tungurahu** | **2.56** | **325** | P | **Pn** | **08 17 05.3** | **+0.1** |
| **BIL2** | **Estacion Bilba** | **2.56** | **325** | P | **Pn** | **08 17 06.0** | **+0.7** |
| **BIL2** | **Estacion Bilba** | **2.56** | **325** | P | **Pn** | **08 17 06.2** | **+0.9** |
| **JUI6** | **Juive** | **2.57** | **326** | P | **Pn** | **08 17 05.6** | **+0.2** |
| **JUI6** | **Juive** | **2.57** | **326** | P | **Pn** | **08 17 06.0** | **+0.6** |
| **IGUA** | **Igualata** | **2.62** | **322** | P | **Pn** | **08 17 07.7** | **+1.4** |
| **IGUA** | **Igualata** | **2.62** | **322** | P | **Pn** | **08 17 07.9** | **+1.6** |
| **ARDO** | **Archidona, Ten** | **2.66** | **343** | P | **Pn** | **08 17 06.6** | **+0.2** |
| **ARDO** | **Archidona, Ten** | **2.66** | **343** | P | **Pn** | **08 17 06.5** | **0.0** |
| **TAMH** | **Tambohuasha Ch** | **2.67** | **319** | P | **Pn** | **08 17 08.3** | **+1.4** |
| **TAMH** | **Tambohuasha Ch** | **2.67** | **319** | P | **Pn** | **08 17 08.4** | **+1.6** |
| **JSCH** | **Cashca Tororas** | **2.68** | **313** | P | **Pn** | **08 17 08.2** | **+1.3** |
| **JSCH** | **Cashca Tororas** | **2.68** | **313** | P | **Pn** | **08 17 09.1** | **+2.1** |
| **CHSH** | **Refugio Sur-Vo** | **2.76** | **318** | P | **Pn** | **08 17 09.7** | **+1.5** |
| **PIAT** | **Ana Tenorio** | **2.83** | **334** | P | **Pn** | **08 17 08.9** | **-0.1** |
| **PIAT** | **Ana Tenorio** | **2.83** | **334** | P | **Pn** | **08 17 09.1** | **+0.1** |
| **MILO** | **Milagro-Astudi** | **2.84** | **297** | P | **Pn** | **08 17 09.3** | **+0.6** |
| **MILO** | **Milagro-Astudi** | **2.84** | **297** | P | **Pn** | **08 17 08.7** | **0.0** |
| **APSY** | **Ecuador-Napo A** | **2.85** | **334** | P | **Pn** | **08 17 09.3** | **0.0** |
| **APSY** | **Ecuador-Napo A** | **2.85** | **334** | P | **Pn** | **08 17 08.9** | **-0.3** |
| **AMCR** | **Ecuador-Macara** | **3.04** | **255** | P | **Pn** | **08 17 11.7** | **+0.2** |
| **AMCR** | **Ecuador-Macara** | **3.04** | **255** | P | **Pn** | **08 17 11.7** | **+0.2** |
| **MCRA** | **Macar, Loja** | **3.04** | **255** | P | **Pn** | **08 17 11.2** | **-0.3** |
| **MCRA** | **Macar, Loja** | **3.04** | **255** | P | **Pn** | **08 17 12.2** | **+0.8** |
| **ARNL** | **Arenillas** | **3.04** | **270** | P | **Pn** | **08 17 10.2** | **-1.2** |
| **ARNL** | **Arenillas** | **3.04** | **270** | P | **Pn** | **08 17 10.6** | **-0.9** |
| **TAMB** | **Tambo** | **3.15** | **335** | P | **Pn** | **08 17 14.1** | **+0.6** |
| **TAMB** | **Tambo** | **3.15** | **335** | P | **Pn** | **08 17 13.4** | **0.0** |
| **BTAM** | **Cotopaxi Volca** | **3.18** | **334** | P | **Pn** | **08 17 14.6** | **+0.7** |
| **BTAM** | **Cotopaxi Volca** | **3.18** | **334** | P | **Pn** | **08 17 15.3** | **+1.4** |
| **BVC2** | **Cotopaxi Volca** | **3.20** | **334** | P | **Pn** | **08 17 15.0** | **+0.8** |
| **BVC2** | **Cotopaxi Volca** | **3.20** | **334** | P | **Pn** | **08 17 15.7** | **+1.5** |
| **ISPG** | **Isla Puna-Puer** | **3.20** | **280** | P | **Pn** | **08 17 13.5** | **-0.2** |
| **BREF** | **Cotopaxi Volca** | **3.20** | **334** | P | **Pn** | **08 17 15.1** | **+0.8** |
| **BREF** | **Cotopaxi Volca** | **3.20** | **334** | P | **Pn** | **08 17 16.4** | **+2.2** |
| **VC1** | **Cotopaxi 1** | **3.21** | **334** | P | **Pn** | **08 17 15.4** | **+1.1** |
| **VC1** | **Cotopaxi 1** | **3.21** | **334** | P | **Pn** | **08 17 15.5** | **+1.2** |
| **BNAS** | **Cotopaxi Volca** | **3.22** | **333** | P | **Pn** | **08 17 16.3** | **+1.9** |
| **BNAS** | **Cotopaxi Volca** | **3.22** | **333** | P | **Pn** | **08 17 16.4** | **+2.1** |
| **ANTS** | **Antisana-Sarah** | **3.25** | **339** | P | **Pn** | **08 17 14.9** | **0.0** |
| **ANTS** | **Antisana-Sarah** | **3.25** | **339** | P | **Pn** | **08 17 14.6** | **-0.3** |
| **ANTG** | **Antisana-Guama** | **3.28** | **338** | P | **Pn** | **08 17 15.4** | **+0.3** |
| **ANTI** | **Antisana** | **3.29** | **340** | P | **Pn** | **08 17 15.4** | **0.0** |
| **ANTI** | **Antisana** | **3.29** | **340** | P | **Pn** | **08 17 16.3** | **+0.8** |
| **PITA** | **Cotopaxi Volc** | **3.30** | **335** | P | **Pn** | **08 17 17.6** | **+2.2** |
| **MORR** | **Playas El Morr** | **3.44** | **285** | P | **Pn** | **08 17 15.7** | **-1.2** |
| **REVS** | **Reventador Sur** | **3.48** | **350** | P | **Pn** | **08 17 18.1** | **+0.4** |
| **REVS** | **Reventador Sur** | **3.48** | **350** | P | **Pn** | **08 17 18.0** | **+0.4** |
| **LAV4** | **Lava4-Reventad** | **3.50** | **350** | P | **Pn** | **08 17 18.6** | **+0.6** |
| **LAV4** | **Lava4-Reventad** | **3.50** | **350** | P | **Pn** | **08 17 18.8** | **+0.9** |
| **AQUE** | **Quevedo** | **3.51** | **315** | P | **Pn** | **08 17 18.0** | **+0.1** |
| **REVN** | **San Rafael** | **3.51** | **350** | P | **Pn** | **08 17 18.8** | **+0.7** |
| **AV03** | **Acelerografo,** | **3.60** | **355** | P | Pn | 08 17 27.1 | +8.0 |
| **APS1** | **Acelerografo,** | **3.63** | **2** | P | **Pn** | **08 17 21.5** | **+1.9** |
| **JUA2** | **San Juan 2** | **3.68** | **334** | P | **Pn** | **08 17 22.0** | **+1.4** |
| **CASC** | **Dorado de Casc** | **3.69** | **355** | P | **Pn** | **08 17 20.7** | **+0.3** |
| **ANGU** | **Angureal** | **3.71** | **345** | P | **Pn** | **08 17 22.3** | **+1.1** |
| **TERV** | **Terraza Guagua** | **3.72** | **335** | P | Sn | 08 17 51.2 | -13 |
| **IMBA** | **Imbabura, San** | **3.99** | **343** | P | Pn | 08 17 30.6 | +5.8 |
| **OTAV** | **Otavalo** | **4.03** | **339** | P | **Pn** | **08 17 28.4** | **+2.9** |
| **YAHU** | **Yahuarcocha** | **4.04** | **345** | P | **Pn** | **08 17 28.1** | **+2.6** |
| **CUIC** | **Cuicocha-Domo** | **4.07** | **341** | P | Sn | 08 17 59.5 | -13 |
| **URCU** | **Urcuqui** | **4.16** | **343** | P | **Pn** | **08 17 30.6** | **+3.5** |
| **URCU** | **Urcuqui** | **4.16** | **343** | P | **Pn** | **08 17 29.4** | **+2.3** |
| **PAC1** | **Pacto, Paraso** | **4.19** | **335** | P | **Pn** | **08 17 31.1** | **+3.8** |
| **PAC1** | **Pacto, Paraso** | **4.19** | **335** | P | **Pn** | **08 17 30.8** | **+3.5** |
| **SALI** | **Salinas** | **4.20** | **289** | P | **Pn** | **08 17 27.2** | **0.0** |
| **SALI** | **Salinas** | **4.20** | **289** | P | **Pn** | **08 17 29.9** | **+2.7** |
| **FLF1** | **Flavio Alfaro-** | **4.25** | **318** | P | **Pn** | **08 17 27.6** | **-0.4** |
| **FLF1** | **Flavio Alfaro-** | **4.25** | **318** | P | **Pn** | **08 17 27.3** | **-0.7** |
| **PTLC** | **Puerto Leguiza** | **4.32** | **31** | P | **Pn** | **08 17 27.6** | **-1.3** |
| PTLC | | | | S | **Sn** | **08 18 11.9** | **-6.1** |
| **PTLC** | **Puerto Leguiza** | **4.32** | **31** | P | **Pn** | **08 17 27.9** | **-0.9** |
| **PTLC** | **Puerto Leguiza** | **4.32** | **31** | P | **Pn** | **08 17 28.0** | **-0.9** |
| **RVRD** | **Rio Verde** | **5.17** | **333** | P | **Pn** | **08 17 42.4** | **+1.9** |
| **FLOC** | **Florencia** | **5.29** | **15** | P | **Pn** | **08 17 43.0** | **+0.9** |
| FLOC | | | | S | **Sn** | **08 18 40.9** | **-0.9** |
| **FLOC** | **Florencia** | **5.29** | **15** | P | **Pn** | **08 17 43.2** | **+1.1** |
| **FLOC** | **Florencia** | **5.29** | **15** | P | **Pn** | **08 17 42.5** | **+0.4** |
| **BBAC** | **Balboa, Cauca** | **5.55** | **358** | P | **Pn** | **08 17 48.9** | **+3.1** |
| **GARC** | **Garzon, Huila** | **5.91** | **15** | P | **Pn** | **08 17 51.6** | **+0.8** |
| GARC | | | | S | **Sn** | **08 18 58.1** | **+0.8** |
| **POPC** | **Popayan, Colom** | **6.07** | **3** | P | **Pn** | **08 17 56.3** | **+3.3** |
| | 8.9nm,1.1s | | | | | | |
| **GR1C** | **Gorgona, Isla** | **6.62** | **350** | P | **Pn** | **08 18 03.0** | **+2.7** |
| **TBTG** | **Tabatinga, AM** | **7.12** | **95** | P | Pn | 08 18 12.8 | +5.6 |
| | 34nm,0.5s,1µm | | | | | | |
| **URMC** | **La Uribe, Meta** | **7.26** | **21** | P | **Pn** | **

**ISC 23 08:45:39.6±2.5, 43°.7N±0°.1×147°.9E±0°.1, h34km, n11, σ0§83/18, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.77** | **281** | *eP* | **Pb** | **08 45 54.4** | **-0.2** |
| SHO | | | | AMB | AMB | 08 45 57.0 | |
| | 40nm,0.3s | | | | | | |
| SHO | | | | *eS* | **Sb** | **08 46 04.8** | **0.0** |
| SHO | | | | A | A | 08 46 07.1 | |
| | 240nm,0.3s | | | | | | |
| SHO | | | | A | A | 08 46 07.1 | |
| | 300nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.49** | **283** | *eP* | **Pn** | **08 46 03.8** | **-0.1** |
| YUK | | | | AMB | AMB | 08 46 05.3 | |
| | 70nm,0.2s | | | | | | |
| YUK | | | | *eS* | **Sn** | **08 46 21.5** | **-0.6** |
| YUK | | | | A | A | 08 46 23.5 | |
| | 240nm,0.4s | | | | | | |
| YUK | | | | A | A | 08 46 23.5 | |
| | 150nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.51** | **360** | *eP* | **Pn** | **08 46 04.3** | **+0.1** |
| KUR | | | | AMB | AMB | 08 46 06.5 | |
| | 60nm,0.5s | | | | | | |
| KUR | | | | *eS* | **Sn** | **08 46 22.4** | **-0.3** |
| KUR | | | | A | A | 08 46 26.2 | |
| | 70nm,0.2s | | | | | | |
| KUR | | | | A | A | 08 46 26.2 | |
| | 80nm,0.2s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.59** | **258** | P | **Pn** | **08 46 04.7** | **-0.6** |
| NEM2 | | | | S | **Sn** | **08 46 23.1** | **-1.6** |
| **JRA** | **Rausu** | **2.00** | **277** | P | **Pn** | **08 46 11.7** | **+0.7** |
| JRA | | | | S | **Sn** | **08 46 35.4** | **+0.6** |
| **JNSB** | **Nemuroshibetsu** | **2.08** | **272** | S | **Sn** | **08 46 37.2** | **+0.5** |
| **JNK** | **Nakash** | **2.29** | **268** | P | **Pn** | **08 46 15.7** | **+0.7** |
| **JAK** | **Akkeshi** | **2.43** | **254** | *eP* | **Pn** | **08 46 16.9** | **0.0** |
| JAK | | | | *eS* | **Sn** | **08 46 44.2** | **-1.1** |
| **JAR** | **Ashorobuto** | **3.02** | **263** | P | **Pn** | **08 46 26.1** | **+1.1** |
| JAR | | | | eS | **Sn** | **08 46 59.7** | **-0.2** |
| **JCH** | **Churui** | **3.48** | **253** | P | **Pn** | **08 46 33.0** | **+1.6** |
| **JNBK** | **Urakawa-nobuka** | **4.02** | **251** | *eP* | **Pn** | **08 46 39.3** | **+0.5** |

*AEIC **23** 08:59:27.9±1.6, 69°.52N±0°.03×144°.5W±0°.1, h7km±6km, ML3.8,ML3.8/98(NEIC),Mwr3.9/33(NEIC), Error ellipse: s-maj=5.5km s-min=3.2km az=118.0*
*IDC **23** 08:59:29.7±1.6, 69°.67N×144°.28W, h0km, mb3.5/4, mbtmp3.7/9,ML3.6/5,MS3.1/6, Error ellipse: s-maj=21.8km s-min=17.9km az=122.0*
*NEIC **23** 08:59:29.7±1.0, 69°.62N±0°.05×144°.4W±0°.1, h10km±2km, Error ellipse: s-maj=8.8km s-min=5.8km az=22.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.58; $M_{\theta\theta}$=4.14; $M_{\phi\phi}$=4.72; $M_{r\theta}$=1.97; $M_{\theta\phi}$=-5.27; $M_{\phi r}$=-4.37; Fault plane solution: $M_0$8.40000×$10^{14}$ NP1: $\phi_s$202.86000°,δ72.81000°,λ19.17000°. NP2: $\phi_s$106.99000°,δ71.72000°,λ161.87000°. Principal axes: T 9.4606, Plg26.0000°, Azm65.0000°; N -2.8694, Plg64.0000°, Azm243.0000°; P -6.5912, Plg1.0000°, Azm335.0000°;*
*NEIC **23** 08:59:29.3, 69°.58N×144°.42W, h4km*

**ISC 23 08:59:29.0±0.6, 69°.59N±0°.03×144°.45W±0°.02, h10km, n106, σ1§26/113, mb3.5/4, MS3.0/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.26** | **81** | | **Pg** | **08 59 33.3** | **-1.0** |
| C27K | | | | Sg | **Sg** | **08 59 37.8** | **-0.2** |
| C27K | | | | IAML | | 08 59 40.0 | |
| | comp=N,12μm,0.7s | | | | | | |
| **C26K** | **Camden Bay** | **0.37** | **334** | | **Pb** | **08 59 36.5** | **-1.1** |
| C26K | | | | | **Sb** | **08 59 43.5** | **0.0** |
| **D25K** | **Kavik River** | **0.73** | **250** | | **Pg** | **08 59 40.8** | **-2.3** |
| D25K | | | | Sg | **Sg** | **08 59 51.9** | **-0.7** |
| **D27M** | **Malcolm River** | **1.28** | **104** | | **Pn** | **08 59 51.5** | **-1.5** |
| D27M | | | | IAML | | 09 00 14.2 | |
| | comp=N,2μm,0.6s | | | | | | |
| D27M | | | | IAML | | 09 00 16.4 | |
| | comp=E,2μm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.49** | **277** | | **Pb** | **08 59 56.1** | **-0.7** |
| C24K | | | | | **Sg** | **09 00 16.6** | **-0.3** |
| C24K | | | | IAML | | 09 00 19.0 | |
| | comp=E,1μm,0.5s | | | | | | |
| C24K | | | | IAML | | 09 00 20.3 | |
| | comp=N,2μm,0.9s | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **256** | | **Pb** | **08 59 57.9** | **-0.9** |
| D24K | | | | | **Sg** | **09 00 21.3** | **+0.6** |
| D24K | | | | IAML | | 09 00 26.2 | |
| | comp=N,1μm,1.1s | | | | | | |
| D24K | | | | IAML | | 09 00 28.8 | |
| | comp=E,958nm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **1.75** | **142** | | **Pb** | **08 59 59.7** | **-1.5** |
| E27K | | | | | **Sg** | **09 00 23.8** | **-1.3** |
| E27K | | | | IAML | | 09 00 26.7 | |
| | comp=N,841nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.91** | **176** | | **Pb** | **09 00 02.6** | **-1.3** |
| F26K | | | | | **Sb** | **09 00 26.6** | **-1.1** |
| **E28M** | **Babbage River** | **2.02** | **117** | Pn | **Pb** | **09 00 03.9** | **-1.9** |
| E28M | | | | | **Sb** | **09 00 31.3** | **+0.3** |
| E28M | | | | IAML | | 09 00 36.3 | |
| | comp=N,547nm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **2.03** | **95** | | **Pb** | **09 00 05.8** | **-0.2** |
| **F25K** | **Christian River** | **2.05** | **193** | | **Pb** | **09 00 04.9** | **-1.4** |
| F25K | | | | IAML | | 09 00 35.9 | |
| | comp=N,799nm,1.0s | | | | | | |
| F25K | | | | IAML | | 09 00 38.3 | |
| | comp=E,994nm,1.2s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.07** | **245** | | **Pn** | **09 00 04.5** | **+0.6** |
| **E24K** | **Your Creek** | **2.11** | **226** | | **Pb** | **09 00 05.5** | **-1.9** |
| E24K | | | | | **Sb** | **09 00 34.5** | **+0.9** |
| E24K | | | | IAML | | 09 00 44.3 | |
| | comp=E,706nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **2.16** | **280** | | **Pb** | **09 00 06.3** | **-1.9** |
| C23K | | | | IAML | | 09 00 45.1 | |
| | comp=E,626nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.17** | **181** | Pn | **Pb** | **09 00 06.3** | **-2.1** |
| **D23K** | **Nanushuk River** | **2.30** | **257** | Pn | **Pb** | **09 00 08.1** | **-2.5** |
| **E23K** | **Chandalar** | **2.42** | **233** | | **Pn** | **09 00 09.5** | **+0.8** |
| E23K | | | | IAML | | 09 00 51.6 | |
| | comp=E,394nm,0.9s | | | | | | |
| **F24K** | **Squaw Lake** | **2.43** | **213** | Pn | **Pn** | **09 00 09.7** | **+0.9** |
| F24K | | | | IAML | | 09 00 45.4 | |
| | comp=E,389nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.60** | **138** | | **Pn** | **09 00 11.6** | **+0.5** |
| F28M | | | | IAML | | 09 00 57.7 | |
| | comp=E,383nm,0.6s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.66** | **174** | | **Pn** | **09 00 12.9** | **+1.1** |
| **G25K** | **Bearman Lake** | **2.90** | **193** | | **Pn** | **09 00 16.1** | **+1.0** |
| **G27K** | **Doyon Strip** | **2.98** | **158** | | **Pn** | **09 00 16.9** | **+0.5** |
| **D22K** | **Ayikyak River** | **3.02** | **260** | Pn | **Pn** | **09 00 17.5** | **+0.7** |
| D22K | | | | IAML | | 09 01 13.6 | |
| | comp=N,375nm,1.2s | | | | | | |
| D22K | | | | IAML | | 09 01 14.6 | |
| | comp=E,372nm,1.2s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.04** | **245** | Pn | **Pn** | **09 00 17.3** | **+0.1** |
| **G24K** | **Hadweenzic Riv** | **3.11** | **203** | | **Pn** | **09 00 18.7** | **+0.5** |
| **B22K** | **Teshekpuk Lake** | **3.18** | **288** | | **Pn** | **09 00 20.1** | **+1.1** |
| B22K | | | | IAML | | 09 01 25.0 | |
| | comp=E,339nm,1.1s | | | | | | |
| **COLD** | **Coldfoot** | **3.18** | **225** | | **Pn** | **09 00 20.1** | **+1.0** |
| **H25L** | **Birch Creek** | **3.38** | **189** | | **Pn** | **09 00 22.8** | **+1.1** |
| **F22K** | **John River** | **3.52** | **237** | | **Pn** | **09 00 24.8** | **+1.0** |
| **H27K** | **Steamboat Moun** | **3.55** | **160** | | **Pn** | **09 00 24.8** | **+0.7** |
| **G29M** | **Pine Creek** | **3.60** | **135** | | **Pn** | **09 00 25.5** | **+0.7** |
| **E21K** | **Killik River** | **3.61** | **256** | | **Pn** | **09 00 25.3** | **+0.3** |
| E21K | | | | IAML | | 09 01 30.9 | |
| | comp=N,218nm,0.9s | | | | | | |
| E21K | | | | IAML | | 09 01 35.2 | |
| | comp=E,144nm,0.8s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.68** | **268** | | **Pn** | **09 00 26.8** | **+0.9** |
| **F30M** | **Barrier River** | **3.74** | **118** | | **Pn** | **09 00 28.8** | **+2.0** |
| **H24K** | **Noodor Dome** | **3.99** | **201** | | **Pn** | **09 00 30.8** | **+0.6** |
| H24K | | | | IAML | | 09 01 45.7 | |
| | comp=E,187nm,1.3s | | | | | | |
| H24K | | | | IAML | | 09 01 47.5 | |
| | comp=N,104nm,0.9s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **4.02** | **127** | | **Pn** | **09 00 31.7** | **+1.0** |
| G30M | | | | IAML | | 09 01 24.9 | |
| | comp=N,122nm,0.9s | | | | | | |
| G30M | | | | IAML | | 09 01 55.3 | |
| | comp=E,118nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **4.09** | **143** | | **Pn** | **09 00 32.6** | **+1.1** |
| **F21K** | **Alatna River** | **4.09** | **239** | Pn | **Pn** | **09 00 32.1** | **+0.5** |
| F21K | | | | IAML | | 09 01 42.5 | |
| | comp=N,111nm,1.6s | | | | | | |
| F21K | | | | IAML | | 09 01 44.8 | |
| | comp=E,123nm,0.9s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.11** | **186** | Pn | **Pn** | **09 00 33.3** | **+1.3** |
| PRP | | | | IAML | | 09 01 29.3 | |
| | comp=N,108nm,0.7s | | | | | | |
| PRP | | | | IAML | | 09 01 46.5 | |
| | comp=E,98nm,1.0s | | | | | | |
| **I27K** | **Kandik River** | **4.15** | **163** | | **Pn** | **09 00 33.5** | **+1.1** |
| **INK** | **Inuvik** | **4.15** | **103** | Pn | **Pn** | **09 00 32.7** | **+0.5** |
| **INK** | **Inuvik** | **4.15** | **103** | Pn | **Pn** | **09 00 32.0** | **-0.3** |
| | comp=E,1.0nm,0.3s,baz=300,slow=14,SNR=42 | | | | | | |
| INK | | | | Sn | **Sn** | **09 01 20.1** | **-0.6** |
| | comp=E,5.3nm,0.3s,baz=70,slow=26,SNR=7.0 | | | | | | |
| INK | | | | Lg | Lg | 09 01 40.1 | |
| | comp=E,3.2nm,0.3s,baz=154,slow=22,SNR=5.5 | | | | | | |
| | comp=E,2.4nm,0.3s | | | | | | |
| **H23K** | **Yukon River** | **4.25** | **210** | Pn | **Pn** | **09 00 34.1** | **+0.4** |
| **I26K** | **Coal Creek Min** | **4.33** | **173** | | **Pn** | **09 00 35.7** | **+0.9** |
| **B20K** | **Meade River** | **4.43** | **281** | | **Pn** | **09 00 36.9** | **+0.7** |
| **D20K** | **Etivluk River** | **4.43** | **264** | | **Pn** | **09 00 37.3** | **+1.1** |
| **A21K** | **Barrow** | **4.44** | **299** | | **Pn** | **09 00 38.5** | **+2.2** |
| **E20K** | **Nigu River** | **4.44** | **258** | | **Pn** | **09 00 37.3** | **+0.8** |
| **I28M** | **Miner Creek** | **4.50** | **155** | Pn | **Pn** | **09 00 38.6** | **+1.3** |
| I28M | | | | IAML | | 09 01 34.3 | |
| | comp=E,113nm,0.8s | | | | | | |
| I28M | | | | IAML | | 09 01 36.4 | |
| | comp=N,80nm,0.6s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.55** | **219** | | **Pn** | **09 00 38.5** | **+0.6** |
| **G21K** | **Allakaket** | **4.59** | **232** | | **Pn** | **09 00 38.5** | **+0.2** |
| G21K | | | | IAML | | 09 02 15.1 | |
| | comp=E,115nm,1.3s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.84** | **205** | | **Pn** | **09 00 43.0** | **+1.1** |
| **MDM** | **Murphy Dome** | **4.87** | **199** | | **Pn** | **09 00 43.4** | **+1.1** |
| MDM | | | | IAML | | 09 02 10.2 | |
| | comp=N,66nm,0.9s | | | | | | |
| MDM | | | | IAML | | 09 02 11.1 | |
| | comp=E,68nm,1.1s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.89** | **244** | | **Pn** | **09 00 43.8** | **+1.2** |
| F20K | | | | IAML | | 09 02 25.5 | |
| | comp=N,89nm,1.2s | | | | | | |
| **IL31** | | **4.93** | **192** | | **Pn** | **09 00 44.8** | **+1.7** |
| **ILAR** | **Eielson Array** | **4.93** | **192** | Pn | **Pn** | **09 00 43.9** | **+0.8** |
| **ILAR** | **Eielson Array** | **4.93** | **192** | Pn | **Pn** | **09 00 44.1** | **+1.0** |
| | comp=N,1.7nm,0.3s,baz=5.3,slow=12,SNR=94 | | | | | | |
| ILAR | | | | Sn | **Sn** | **09 01 41.1** | **+1.1** |
| | comp=N,3.2nm,0.3s,baz=18,slow=17,SNR=5.5 | | | | | | |
| ILAR | | | | Lg | Lg | 09 02 07.2 | |
| | comp=N,3.8nm,0.3s,baz=20,slow=26,SNR=6.2 | | | | | | |
| ILAR | | | | LR | LR | 09 03 06.2 | |
| | comp=N,97nm,18.8s,baz=46,slow=43 | | | | | | |
| | comp=N,5.9nm,0.6s | | | | | | |
| **EGAK** | **Eagle** | **5.00** | **164** | | **Pn** | **09 00 45.0** | **+1.1** |
| EGAK | | | | IAML | | 09 02 21.8 | |
| | comp=N,68nm,1.1s | | | | | | |
| EGAK | | | | IAML | | 09 02 23.5 | |
| | comp=N,72nm,1.1s | | | | | | |
| **J25K** | **Salcha River,** | **5.01** | **185** | | **Pn** | **09 00 45.4** | **+1.2** |
| J25K | | | | IAML | | 09 02 14.9 | |
| | comp=N,56nm,1.2s | | | | | | |
| J25K | | | | IAML | | 09 02 20.2 | |
| | comp=E,75nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **5.03** | **264** | | **Pn** | **09 00 44.2** | **-0.2** |
| **H21K** | **Melozitna Rive** | **5.07** | **223** | | **Pn** | **09 00 46.2** | **+1.1** |
| H21K | | | | IAML | | 09 02 16.4 | |
| | comp=E,79nm,1.4s | | | | | | |
| H21K | | | | IAML | | 09 02 20.8 | |
| | comp=N,74nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.12** | **176** | | **Pn** | **09 00 46.7** | **+0.9** |
| J26L | | | | IAML | | 09 01 52.0 | |
| | comp=N,67nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.13** | **196** | | **Pn** | **09 00 46.8** | **+1.0** |
| CCB | | | | IAML | | 09 02 27.2 | |
| | comp=E,60nm,1.3s | | | | | | |
| **MLY** | **Manley** | **5.18** | **211** | Pn | **Pn** | **09 00 47.6** | **+1.1** |
| MLY | | | | IAML | | 09 02 15.9 | |
| | comp=E,60nm,1.1s | | | | | | |
| MLY | | | | IAML | | 09 02 24.3 | |
| | comp=N,45nm,1.0s | | | | | | |
| **WRH** | **Wood River Hil** | **5.33** | **197** | | **Pn** | **09 00 49.9** | **+1.3** |
| WRH | | | | IAML | | 09 02 23.9 | |
| | comp=N,59nm,1.3s | | | | | | |
| WRH | | | | IAML | | 09 02 35.1 | |
| | comp=E,74nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.37** | **141** | Pn | **Pn** | **09 00 49.9** | **+0.6** |
| I30M | | | | IAML | | 09 01 55.1 | |
| | comp=N,52nm,0.6s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.38** | **272** | Pn | **Pn** | **09 00 50.6** | **+1.4** |
| C19K | | | | IAML | | 09 02 43.2 | |
| | comp=E,53nm,1.4s | | | | | | |
| C19K | | | | IAML | | 09 03 05.2 | |
| | comp=N,63nm,1.4s | | | | | | |
| **SCRK** | **Sand Creek** | **5.64** | **178** | Pn | **Pn** | **09 00 54.4** | **+1.5** |
| **K27K** | **Chicken** | **5.66** | **169** | | **Pn** | **09 00 54.4** | **+1.3** |
| **K24K** | **Donnelly Dome** | **5.83** | **186** | | **Pn** | **09 00 57.4** | **+1.9** |
| **DAWY** | **Dawson** | **5.89** | **158** | | **Pn** | **09 00 57.6** | **+1.3** |
| **J30M** | **Hart River** | **5.95** | **144** | Pn | **Pn** | **09 00 57.9** | **+0.8** |
| **DOT** | **Dot Lake** | **5.97** | **178** | | **Pn** | **09 00 58.5** | **+1.2** |
| **C18K** | **Utukok River** | **6.06** | **269** | Pn | **Pn** | **09 00 59.1** | **+0.5** |
| **MCK** | **McKinley** | **6.14** | **199** | | **Pn** | **09 01 00.7** | **+1.0** |
| **E18K** | **Tukpahlearik C** | **6.32** | **258** | Pn | **Pn** | **09 01 02.8** | **+0.7** |
| **F18K** | **Selawik** | **6.42** | **249** | | **Pn** | **09 01 04.1** | **+0.6** |
| **L26K** | **Log Cabin Wild** | **6.61** | **176** | Pn | **Pn** | **09 01 07.5** | **+1.5** |
| **J20K** | **Nowinta River** | **6.63** | **220** | | **Pn** | **09 01 07.5** | **+1.1** |
| **L27K** | **Beaver Creek,** | **6.64** | **170** | | **Pn** | **09 01 07.8** | **+1.3** |
| **PAX** | **Paxson** | **6.66** | **184** | | **Pn** | **09 01 08.6** | **+1.8** |
| **A36M** | **Sachs Harbour** | **6.76** | **60** | Pn | **Pn** | **09 01 07.9** | **-0.3** |
| **C17K** | **DeLong Mountai** | **6.80** | **269** | | **Pn** | **09 01 07.8** | **-1.0** |
| **E17K** | **Hutham Inlet** | **6.90** | **257** | | **Pn** | **09 01 09.9** | **-0.1** |
| **WAT7** | **Susitna Watana** | **7.01** | **197** | | **Pn** | **09 01 13.7** | **+2.0** |
| **D17K** | **Noatak River** | **7.05** | **263** | | **Pn** | **09 01 11.5** | **-0.6** |
| **WAT6** | **Susitna Watana** | **7.16** | **192** | | **Pn** | **09 01 16.4** | **+2.6** |
| **C36M** | **Paulatuk** | **7.16** | **82** | | **Pn** | **09 01 12.5** | **-1.1** |
| **G17K** | **Kiwalik Mounta** | **7.42** | **244** | | **Pn** | **09 01 17.2** | **0.0** |
| **M29M** | **Somme Creek** | **7.57** | **158** | | **Pn** | **09 01 20.9** | **+1.4** |
| **H17K** | **Granite Mounta** | **7.58** | **239** | Pn | **Pn** | **09 01 20.2** | **+0.9** |
| **YUK2** | **White River** | **7.97** | **168** | | **Pn** | **09 01 26.7** | **+1.8** |
| **L20K** | **Farewell, AK** | **8.09** | **213** | | **Pn** | **09 01 27.3** | **+0.8** |
| **M20K** | **Styx River** | **8.51** | **209** | Pn | **Pn** | **09 01 33.4** | **+1.1** |
| **YUK6** | **Outpost Mounta** | **9.04** | **161** | | **Pn** | **09 01 41.4** | **+1.7** |
| **DLBC** | **Dease Lake** | **12.80** | **144** | Pn | **Pn** | **09 02 31.6** | **+0.7** |
| | comp=N,0.2nm,0.3s,baz=326,slow=9.6,SNR=4.7 | | | | | | |
| DLBC | | | | LR | LR | 09 07 46.8 | |
| | comp=N,128nm,18.4s,baz=307,slow=39 | | | | | | |
| | comp=N,1.9nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.91** | **106** | Pn | **Pn** | **09 02 42.4** | **-3.5** |
| | comp=N,0.4nm,0.3s,baz=314,slow=13,SNR=7.5 | | | | | | |
| YKA | | | | Sn | Sn | 09 05 08.5 | -12 |
| | comp=N,0.4nm,0.3s,baz=312,slow=24,SNR=6.7 | | | | | | |
| | comp=N,1.2nm,0.5s | | | | | | |
| **RES** | **Resolute Bay** | **15.58** | **49** | Pn | **Pn** | **09 03 07.6** | **-0.7** |
| | comp=N,0.5nm,0.3s,baz=86,slow=19,SNR=2.5 | | | | | | |
| | comp=N,1.1nm,0.7s | | | | | | |
| **BBB** | **Bella Bella** | **19.06** | **148** | LR | LR | 09 12 04.7 | |
| | comp=N,34nm,18.6s,baz=354,slow=40 | | | | | | |
| **NEW** | **Newport** | **25.18** | **134** | LR | LR | 09 15 31.2 | |
| | comp=N,44nm,20.2s,baz=334,slow=38 | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.72** | **268** | LR | LR | 09 21 03.1 | |
| | comp=N,77nm,18.9s,baz=173,slow=42 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.28** | **128** | P | **P** | **09 05 59.9** | **+2.1** |
| | comp=N,0.5nm,0.7s,baz=349,slow=5.3,SNR=5.4 | | | | | | |
| | comp=N,0.5nm,0.7s | | | | | | |
| **ELK** | **Elko** | **32.70** | **137** | LR | LR | 09 20 21.4 | |
| | comp=N,34nm,19.8s,baz=2.5,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.21** | **142** | P | **P** | **09 06 17.1** | **+2.5** |
| | comp=N,0.2nm,0.7s,baz=347,slow=6.5,SNR=2.9 | | | | | | |
| | comp=N,0.2nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.50** | **128** | P | **P** | **09 07 58.9** | **+2.7** |
| | comp=N,0.5nm,0.9s,baz=347,slow=5.1,SNR=4.9 | | | | | | |
| | comp=N,0.5nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **49.08** | **6** | P | **P** | **09 08 17.2** | **+1.5** |
| | comp=N,1.6nm,0.8s,baz=2.3,slow=10,SNR=1.3 | | | | | | |
| | comp=N,1.6nm,0.8s | | | | | | |

*CNRM **23** 09:11:10.4, 34°.75N×4°.14W, h18km, ML2.6*
*MDD **23** 09:11:11.4±0.5, 34°.67N×4°.04W, h0km, mb_Lg2.3/9, Error ellipse: s-maj=5.5km s-min=3.4km az=119.0*

**ISC 23 09:11:09.8±0.8, 34°.69N±0°.02×4°.09W±0°.03, h15km, n32, σ1§78/38, Morocco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKLM** | **AKL** | **0.26** | **134** | P | **Pg** | **09 11 14.7** | **-0.7** |
| **AKLM** | **AKL** | **0.26** | **134** | S | **Sg** | **09 11 19.1** | **-0.1** |
| **PALE** | **Palemas** | **0.54** | **13** | P | **Pg** | **09 11 20.3** | **-0.2** |
| **PALE** | **Palemas** | **0.54** | **13** | S | **Sb** | **09 11 28.5** | **-0.2** |
| **GOG** | **Mont Gurugu** | **1.04** | **59** | P | **Pb** | **09 11 29.0** | **-0.6** |
| **GOG** | **Mont Gurugu** | **1.04** | **59** | S | **Sn** | **09 11 45.0** | **+0.6** |
| **EMEL** | **Melilla** | **1.11** | **56** | S | **Sn** | **09 11 47.2** | **+1.3** |
| **CHEFC** | **Chefchaouen** | **1.11** | **292** | P | **Pg** | **09 11 31.5** | **+0.2** |
| **CHEFC** | **Chefchaouen** | **1.11** | **292** | S | **Sb** | **09 11 44.1** | **-1.0** |
| **TAF** | **Taforalt** | **1.38** | **84** | P | **Pn** | **09 11 35.2** | **+0.5** |
| **TAF** | **Taforalt** | **1.38** | **84** | S | **Sg** | **09 11 54.8** | **+0.3** |
| **EALB** | **Alboran** | **1.52** | **34** | P | **Pg** | **09 11 39.1** | **+0.2** |
| EALB | | | | S | **Sg** | **09 11 58.6** | **-0.1** |
| EALB | | | | *i* Vmb_Lg | | 09 12 07.7 | |
| **MD31** | **MD31** | **1.90** | **197** | P | **Pb** | **09 11 43.4** | **-0.9** |
| **MD31** | **MD31** | **1.90** | **197** | S | **Sb** | **09 12 08.1** | **+0.3** |
| **MDT** | **Midelt** | **1.92** | **193** | P | **Pn** | **09 11 43.4** | **+1.4** |
| **MDT** | **Midelt** | **1.92** | **193** | S | **Sb** | **09 12 08.5** | **+0.2** |
| **ELGU** | **Los Guajares,** | **2.21** | **10** | P | **Pn** | **09 11 46.4** | **+0.4** |
| ELGU | | | | S | **Sb** | **09 12 16.5** | **-0.2** |
| ELGU | | | | *i* Vmb_Lg | | 09 12 16.6 | |
| **EBER** | **Berja** | **2.41** | **23** | P | **Pn** | **09 11 50.2** | **+1.3** |
| EBER | | | | S | **Sn** | **09 12 18.7** | **+0.5** |
| EBER | | | | *i* Vmb_Lg | | 09 12 26.4 | |
| **EGOR** | **Sierra Gorda,** | **2.42** | **360** | P | **Pn** | **09 11 50.4** | **+1.5** |
| EGOR | | | | S | **Sb** | **09 12 21.4** | **-1.4** |
| EGOR | | | | *i* Vmb_Lg | | 09 12 28.9 | |
| **ZHG** | **ZHG** | **2.46** | **240** | P | **Pb** | **09 11 53.0** | **-0.7** |
| **ZHG** | **ZHG** | **2.46** | **240** | S | **Sb** | **09 12 21.5** | **-2.3** |
| **ENIJ** | **Nijar** | **2.74** | **33** | S | **Sn** | **09 12 26.7** | **+0.5** |
| ENIJ | | | | *i* Vmb_Lg | | 09 12 27.8 | |
| **FIGM** | **Figuig** | **3.47** | **136** | P | **Pn** | **09 12 04.1** | **+0.7** |
| **FIGM** | **Figuig** | **3.47** | **136** | S | **Sn** | **09 12 46.6** | **+2.2** |
| **EADA** | **Adamuz** | **3.50** | **354** | P | **Pb** | **09 12 07.5** | **-3.9** |
| EADA | | | | S | **Sn** | **09 12 47.4** | **+2.6** |
| EADA | | | | *i* Vmb_Lg | | 09 13 00.0 | |
| **ECAB** | **El Cabril** | **3.55** | **343** | P | **Pn** | **09 12 07.6** | **+3.2** |
| ECAB | | | | S | **Sn** | **09 12 46.9** | **+0.8** |
| ECAB | | | | *i* Vmb_Lg | | 09 12 50.5 | |
| **EGRO** | **El Granado** | **3.95** | **317** | P | **Pn** | **09 12 10.8** | **+0.9** |
| EGRO | | | | *i* Vmb_Lg | | 09 13 09.1 | |
| **OUZM** | **OUZ** | **4.39** | **212** | P | **Pn** | **09 12 18.5** | **+2.5** |
| **OUZM** | **OUZ** | **4.39** | **212** | S | **Sb** | **09 13 13.7** | **-5.8** |
| **TIO** | **Tiouine** | **4.61** | **216** | P | **Pn** | **09 12 19.3** | **+0.3** |
| **TIO** | **Tiouine** | **4.61** | **216** | S | **Sn** | **09 13 15.0** | **+2.7** |
| **EBAD** | **Badajoz** | **4.69** | **331** | S | **Sn** | **09 13 16.3** | **+2.1** |
| EBAD | | | | *i* Vmb_Lg | | 09 13 21.0 | |

**IDC 23 09:29:38.4±3.2, 54°.43N×87°.07E, h0km, mbtmp2.8/2, ML2.7/2, Error ellipse: s-maj=26.7km s-min=18.2km az=63.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.41** | **251** | I | I | 09 38 10.0 | |
| | baz=68,slow=325,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.41** | **251** | Pg | Pn | 09 30 03.5 | -1.8 |
| | 2.3nm,0.3s,baz=72,slow=14,SNR=15 | | | | | | |
| ZALV | | | | Lg | Lg | 09 30 23.6 | |
| | 2.3nm,0.3s,baz=70,slow=26,SNR=5.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.46** | **237** | Pn | Pn | 09 31 14.9 | +0.4 |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=4.5 | | | | | | |
| KURBB | | | | Lg | Lg | 09 33 05.1 | |
| | 0.2nm,0.3s,baz=54,slow=30,SNR=1.7 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.22** | **204** | Pn | Pn | 09 31 41.2 | +2.3 |
| | 0.1nm,0.3s,baz=15,slow=12,SNR=2.9 | | | | | | |
| MKAR | | | | Sn | Sn | 09 33 09.8 | -2.7 |
| | baz=21,slow=25,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 09 34 01.8 | |
| | 0.1nm,0.3s,baz=24,slow=29,SNR=2.4 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*IDC **23** 09:30:25.2±3.1, 50°.60N×178°.53W, h0km, mb3.1/3, mbtmp3.4/4,ML3.7/1,MS3.3/1, Error ellipse: s-maj=78.5km s-min=36.4km az=13.0*
*NEIC **23** 09:30:26.9±1.3, 51°.47N±0°.03×178°.36W±0°.02, h10km±6km, mb3.7/8,ML3.4(AEIC), Error ellipse: s-maj=4.9km s-min=1.3km az=165.0*
*AEIC **23** 09:30:28.7±2.2, 51°.70N±0°.09×178°.43W±0°.04, h22km±7km, Error ellipse: s-maj=12.6km s-min=3.4km az=170.0*

**ISC 23 09:30:28.1±1.0, 51°.58N±0°.09×178°.34W±0°.03, h10km, n38, σ1§28/36, mb3.5/4, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TASE** | **Tanaga Southea** | **0.32** | **37** | | **Pb** | **09 30 35.2** | **-0.7** |
| **GAEA** | **Gareloi East** | **0.32** | **309** | | **Pg** | **09 30 34.5** | **+0.1** |
| **TANO** | **Tanaga North** | **0.36** | **23** | | **Pb** | **09 30 35.9** | **-0.6** |
| **GANO** | **Gareloi North** | **0.37** | **310** | | **Pg** | **09 30 35.1** | **-0.4** |
| **KIKV** | **Kanaga Island** | **0.79** | **68** | | **Pg** | **09 30 43.2** | **-0.1** |
| KIKV | | | | | **Sb** | **09 30 53.9** | **-0.7** |
| **KICM** | **Kanaga Island** | **0.79** | **64** | | **Pg** | **09 30 43.5** | **+0.2** |
| **KIWB** | **Kanaga Island** | **0.79** | **70** | | **Pg** | **09 30 43.1** | **-0.2** |
| **KIRH** | **Kanaga Island** | **0.84** | **67** | | **Pg** | **09 30 44.1** | **-0.2** |
| **ADAG** | **Mount Adagdak** | **1.15** | **69** | | **Pb** | **09 30 49.3** | **-0.7** |
| **GSCK** | **Great Sitkin C** | **1.42** | **72** | | **Pn** | **09 30 53.5** | **-0.5** |
| **AMKA** | **Amchitka** | **1.49** | **263** | | **Pn** | **09 30 53.6** | **-1.2** |
| AMKA | | | | Sn | **Sn** | **09 31 12.2** | **-2.3** |
| **GSMY** | **Great Sitkin M

*NEIC* ***23*** *09:32:32.7±2.3, 21°.99S±0°.09×169°.30E±0°.07, h10km±1km, mb4.7/30, Error ellipse: s-maj=15.0km s-min=11.1km az=163.0*

**ISC 23 09:32:34.2±0.5, 21°.99S±0°.08×169°.34E±0°.07, h25km, n70, σ0: 91/66, mb4.6/30, MS3.5/5, 3C-8D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **1.32** | **292** | P | | **Pn** | **09 32 56.3** | **-0.8** |
| **PINNC** | **Pines Island,** | **1.86** | **250** | P | | **Pn** | **09 33 04.3** | **-0.2** |
| **PINNC** | **Pines Island,** | **1.86** | **250** | Pn | | **Pn** | **09 33 04.2** | **-0.3** |
| **YATNC** | **Mamie plateau,** | **2.28** | **268** | P | | **Pn** | **09 33 09.4** | **-0.8** |
| **LIFNC** | **LIFOU** | **2.30** | **301** | P | | **Pn** | **09 33 09.4** | **-1.2** |
| **LIFNC** | **LIFOU** | **2.30** | **301** | | | **Pn** | **09 33 09.7** | **-0.9** |
| **DZM** | **Mont Dzumac** | **2.69** | **268** | P | | **Pn** | **09 33 16.3** | **+0.3** |
| **DZM** | **Mont Dzumac** | **2.69** | **268** | Pn | | **Pn** | **09 33 16.2** | **+0.2** |
| **DZM** | **Mont Dzumac** | **2.69** | **268** | Pn | | **Pn** | **09 33 16.5** | **+0.5** |
| | 27nm,0.3s,baz=129,slow=4.7,SNR=376 | | | | | | | |
| DZM | | | | | | **Sn** | **09 33 48.7** | **+0.8** |
| | 33nm,0.3s,baz=198,slow=20,SNR=3.2 | | | | | | | |
| DZM | | | | | LR | LR | 09 34 16.3 | |
| | comp=Z,488nm,18.2s,baz=6.5,slow=38 60nm,0.3s | | | | | | | |
| **NOUC** | **Port Laguerre** | **2.82** | **267** | P | | **Pn** | **09 33 17.9** | **+0.2** |
| **KOUNC** | **Koumac, New Ca** | **4.93** | **286** | Pn | | **Pn** | **09 33 47.6** | **+0.9** |
| **MSVF** | **Nonsavu** | **9.22** | **64** | Pn | | **Pn** | **09 34 46.4** | **+0.6** |
| **HNR** | **Honiara** | **15.41** | **323** | LR | | LR | 09 41 12.8 | |
| | comp=Z,2μm,19.7s,baz=204,slow=34 | | | | | | | |
| **BKZ** | **Black Stump Fm** | **18.18** | **162** | | | **Pn** | **09 36 43.8** | **-1.1** |
| **CTA** | **Charters Tower** | **21.63** | **271** | P | | **P** | **09 37 23.7** | **+0.9** |
| | 0.5nm,0.8s,baz=101,slow=10,SNR=12 | | | | | | | |
| CTA | | | | | LR | LR | 09 45 50.9 | |
| | comp=Z,14nm,18.2s,baz=102,slow=37 | | | | | | | |
| **CTAO** | **Charters Tower** | **21.63** | **271** | P | | **P** | **09 37 21.4** | **-1.4** |
| **COEN** | **Coen** | **26.11** | **283** | P | | **P** | **09 38 04.6** | **-1.8** |
| **STKA** | **Stephens Creek** | **26.56** | **242** | P | | **P** | **09 38 10.6** | **+0.3** |
| **STKA** | **Stephens Creek** | **26.56** | **242** | P | | **P** | **09 38 10.1** | **-0.2** |
| | 2.0nm,0.8s,baz=81,slow=8.8,SNR=3.7 2.0nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **32.52** | **267** | P | | **P** | **09 39 03.2** | **-0.2** |
| WR0 | | | | | IAmb | IAmb | 09 39 04.0 | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| **AS31** | **Alice Springs** | **32.66** | **260** | P | | **P** | **09 39 04.9** | **+0.4** |
| **ASAR** | **Alice Springs** | **32.66** | **260** | P | | **P** | **09 39 04.8** | **+0.3** |
| | comp=Z,5.3nm,0.9s,baz=83,slow=8.9,SNR=42 comp=Z,5.3nm,0.9s | | | | | | | |
| **WB0** | **Warramunga Arr** | **32.69** | **267** | P | | **P** | **09 39 04.4** | **-0.4** |
| WB0 | | | | | IAmb | IAmb | 09 39 05.6 | |
| | comp=Z,9.4nm,1.0s | | | | | | | |
| **WB2** | **Warramunga Arr** | **32.70** | **267** | P | | **P** | **09 39 04.5** | **-0.4** |
| WB2 | | | | | IAmb | IAmb | 09 39 06.9 | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **32.70** | **267** | P | | **P** | **09 39 04.5** | **-0.4** |
| WRAB | | | | | IAmb | IAmb | 09 39 06.1 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.71** | **267** | P | | **P** | **09 39 04.7** | **-0.3** |
| **WRA** | **Warramunga Arr** | **32.71** | **267** | P | | **P** | **09 39 04.5** | **-0.5** |
| | comp=Z,4.1nm,0.9s,baz=97,slow=8.2,SNR=21 comp=Z,4.1nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **38.83** | **272** | P | | **P** | **09 39 57.5** | **0.0** |
| KNRA | | | | | IAmb | IAmb | 09 39 58.5 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **45.80** | **261** | P | | **P** | **09 40 54.6** | **+0.3** |
| PSA00 | | | | | IAmb | IAmb | 09 40 55.7 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **45.98** | **261** | P | | **P** | **09 40 56.0** | **+0.3** |
| **NWAO** | **Narrogin (SRO)** | **47.09** | **245** | LR | | LR | 10 00 54.9 | |
| | comp=Z,92nm,18.2s,baz=146,slow=36 | | | | | | | |
| **KAPI** | **Kappang** | **50.83** | **282** | P | | **P** | **09 41 30.8** | **-2.3** |
| **QSPA** | **South Pole Qui** | **68.07** | **180** | P | | **P** | **09 43 31.9** | **+0.3** |
| QSPA | | | | | IAmb | IAmb | 09 43 32.7 | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.07** | **180** | P | | **P** | **09 43 31.5** | **-0.1** |
| | comp=Z,5.1nm,0.8s,baz=136,slow=1.3,SNR=25 comp=Z,5.1nm,0.8s | | | | | | | |
| **NJ2** | **Nanjing** | **72.26** | **317** | *e*P | | **P** | **09 43 59.3** | **+1.8** |
| NJ2 | | | | | pmax | pmax | | |
| | comp=Z,25nm,1.2s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.22** | **333** | P | | **P** | **09 44 06.4** | **-2.4** |
| **SHEM** | **Shemya Is, Ala** | **74.52** | **3** | LR | | LR | 10 09 23.8 | |
| | comp=Z,38nm,21.7s,baz=273,slow=30 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.47** | **353** | P | | **P** | **09 44 16.7** | **+0.9** |
| | comp=Z,3.1nm,0.9s,baz=101,slow=7.7,SNR=4.1 | | | | | | | |
| PETK | | | | | LR | LR | 10 10 52.7 | |
| | comp=Z,28nm,21.8s,baz=208,slow=30 comp=Z,3.1nm,0.9s | | | | | | | |
| **MAW** | **Mawson** | **75.93** | **202** | P | | **P** | **09 44 18.6** | **+0.2** |
| | comp=Z,2.9nm,0.8s,baz=140,slow=8.6,SNR=7.7 comp=Z,2.9nm,0.8s | | | | | | | |
| **BELA** | **Belgrano 2** | **79.36** | **175** | P | | **P** | **09 44 37.4** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **79.73** | **295** | P | | **P** | **09 44 41.5** | **+1.1** |
| | comp=Z,0.7nm,0.3s,baz=90,slow=2.7,SNR=4.3 comp=Z,0.7nm,0.3s | | | | | | | |
| **XAN** | **Xi'an** | **80.04** | **313** | P | | **P** | **09 44 43.3** | **+1.5** |
| XAN | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.8s | | | | | | | |
| **PZH** | **PanZhiHua** | **81.28** | **303** | P | | **P** | **09 44 50.5** | **+1.8** |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| PZH | | | | | pmax | pmax | | |
| | comp=Z,210nm,5.6s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **82.37** | **320** | *e*P | | P | 09 44 59.4 | +5.3 |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,230nm,5.6s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.81** | **184** | ⇑P | | **P** | **09 45 10.9** | **-0.4** |
| | comp=Z,182nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **86.43** | **182** | ⇑P | | **P** | **09 45 13.7** | **-0.5** |
| | comp=Z,47nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **86.43** | **182** | P | | **P** | **09 45 13.5** | **-0.8** |
| | comp=Z,3.2nm,1.0s,baz=206,slow=7.1,SNR=6.4 comp=Z,3.2nm,1.0s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **87.01** | **180** | ⇑P | | **P** | **09 45 16.0** | **-1.1** |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **89.47** | **323** | P | | **P** | **09 45 30.6** | **+1.4** |
| | comp=Z,0.5nm,0.4s,baz=149,slow=6.9,SNR=5.3 comp=Z,0.5nm,0.4s | | | | | | | |
| **WAKR** | **Walker** | **89.80** | **48** | P | | **P** | **09 45 31.1** | **+0.2** |
| WAKR | | | | | IAmb | IAmb | 09 45 42.8 | |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| **DSP** | **Deep Springs** | **90.28** | **50** | P | | **P** | **09 45 34.9** | **+1.9** |
| DSP | | | | | IAmb | IAmb | 09 45 45.2 | |
| | comp=Z,3.2nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.54** | **48** | P | | **P** | **09 45 34.5** | **0.0** |
| | comp=Z,1.2nm,0.8s,baz=227,slow=8.4,SNR=12 comp=Z,1.2nm,0.8s | | | | | | | |
| **NV11** | **Mina Array Sit** | **90.65** | **49** | P | | **P** | **09 45 35.2** | **+0.4** |
| NV11 | | | | | IAmb | IAmb | 09 45 46.7 | |
| | comp=Z,2.7nm,0.9s | | | | | | | |
| **J05D** | **Fort Rock, OR** | **90.93** | **43** | P | | **P** | **09 45 36.2** | **+0.2** |
| J05D | | | | | IAmb | IAmb | 09 45 48.2 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **KVN** | **Kaiserville** | **90.97** | **48** | P | | **P** | **09 45 36.9** | **+0.5** |
| KVN | | | | | IAmb | IAmb | 09 45 48.1 | |
| | comp=Z,3.2nm,0.9s | | | | | | | |
| **PRN** | **Pahroc Range** | **92.38** | **51** | IAmb | | IAmb | 09 45 57.2 | |
| | comp=Z,4.2nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.82** | **17** | P | | **P** | **09 45 42.6** | **-1.5** |
| | comp=Z,0.4nm,0.8s,baz=232,slow=5.6,SNR=3.0 comp=Z,0.4nm,0.8s | | | | | | | |
| **K27K** | **Chicken** | **93.67** | **19** | IAmb | | IAmb | 09 46 00.2 | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **EGAK** | **Eagle** | **94.48** | **19** | P | | **P** | **09 45 50.2** | **-1.6** |
| **G30M** | **tAoh Zraii Nji** | **97.47** | **19** | P | | **P** | **09 46 05.0** | **-0.3** |
| **E28M** | **Babbage River** | **97.62** | **17** | P | | **P** | **09 46 05.8** | **-0.2** |
| **PDAR** | **Pinedale Array** | **98.40** | **47** | LR | | LR | 10 29 45.7 | |
| | comp=Z,12nm,18.2s,baz=142,slow=35 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.24** | **352** | PKPbc | | **PKPdf** | **09 52 11.4** | **+0.3** |
| | comp=Z,3.2nm,0.8s,baz=324,slow=2.4,SNR=5.9 | | | | | | | |
| **BTNL** | **Ternell** | **148.57** | **339** | *d*PKPdf | | **PKPdf** | **09 52 15.9** | **+0.7** |
| **BCLA** | **Clavier** | **148.98** | **340** | *d*PKP | | **PKPbc** | **09 52 19.9** | **+0.1** |
| **BGES** | **Gesves** | **149.08** | **340** | *d*PKPdf | | **PKPdf** | **09 52 16.1** | **+0.2** |
| BGES | | | | *d*PKPbc | | **PKPbc** | **09 52 19.3** | **-0.8** |
| **BMRD** | **Maredsous** | **149.25** | **341** | *d*PKPdf | | **PKPdf** | **09 52 16.3** | **+0.1** |
| **WLF** | **Walferdange** | **149.35** | **338** | *d*PKPdf | | **PKPdf** | **09 52 17.1** | **+0.7** |
| **DOU** | **Dourbes** | **149.49** | **341** | *d*PKPdf | | **PKPdf** | **09 52 16.9** | **+0.3** |
| DOU | | | | *d*PKiKP | | **PKiKP** | **09 52 22.6** | **+0.4** |
| **DAVOX** | **Davos/Dischmat** | **150.20** | **331** | PKPbc | | **PKPbc** | **09 52 23.1** | **-0.1** |
| | comp=Z,1.6nm,0.4s,baz=8.1,slow=7.1,SNR=4.9 | | | | | | | |

*NEIC* ***23*** *09:44:02.9±2.4, 17°.23S±0°.04×69°.51W±0°.08, h158km±5km, mb4.9/438, Mwr5.0(GUC), Error ellipse: s-maj=10.8km s-min=5.8km az=109.0*

*MOS* ***23*** *09:44:02.6±1.4, 17°.19S×69°.48W, h167km, mb4.8/17, Error ellipse: s-maj=11.1km s-min=6.6km az=104.0*

*SVSA* ***23*** *09:44:02.0, 17°.24S×69°.49W, h157km, MW4.9(INMG)*

*GUC* ***23*** *09:44:03.8±0.9, 17°.29S×69°.68W, h175km±6km, ML4.9*

*SCB* ***23*** *09:44:04.1±1.0, 17°.30S×69°.49W, h167km±12km, ML4.8/3, MW4.6, Error ellipse: s-maj=6.2km s-min=3.6km az=1.0*

*IDC* ***23*** *09:44:04.8±0.4, 17°.16S×69°.37W, h172km±2km, mb4.6/15, mbtmp5.1/17, MS3.7/14, Error ellipse: s-maj=9.4km s-min=8.9km az=124.0*

*VAO* ***23*** *09:44:04.0±0.4, 17°.19S×69°.30W, h168km±3km, mb5.5*

*GCMT* ***23*** *09:44:05.9±0.3, 17°.26S±0°.02×69°.55W±0°.02, h173km±2km, MW5.1/104, Moment Tensor Solution. s40,c48; s104,c147; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-0.41±.17; Mθθ-0.91±.17; Mϕϕ1.32±.21; Mrθ1.85±.11; Mθϕ1.19±.18; Mϕr-5.57±.14; Best double couple: Mo6.10200×10^16 NP1:ϕs342.00000°, δ88.00000°, λ-105.00000°. NP2:ϕs245.00000°, δ16.00000°, λ-8.00000°. Principal axes: T 6.1060, Plg41.0000°, Azm87.0000°; N -0.0070, Plg15.0000°, Azm343.0000°; P -6.0970, Plg45.0000°, Azm237.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 23 09:44:03.6±0.3, 17°.24S±0°.03×69°.41W±0°.04, h171km±2km, h171km: pP-P, n537, σ1: 37/427, mb4.9/253, 42C-15D, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PB18** | **Visviri** | **0.35** | **190** | Pn | | **Pn** | **09 44 27.4** | **-0.1** |
| **PB18** | **Visviri** | **0.35** | **190** | ⇑*i*P | | **Pn** | **09 44 27.6** | **+0.1** |
| PB18 | | | | *i* S | | **Sn** | **09 44 46.4** | **+0.5** |
| **BBOD** | **La Paz, Gloria** | **0.98** | **53** | Pg | | **Pn** | **09 44 31.8** | **+0.8** |
| **SOEJ** | **Jacaque** | **1.20** | **77** | Pg | | **Pn** | **09 44 34.5** | **+1.9** |
| **I08BO** | **LAS PENAS INFR** | **1.37** | **42** | P | | **Pn** | **09 44 35.8** | **+1.6** |
| | baz=239,slow=13,SNR=34 | | | | | | | |
| I08BO | | | | I | | I | 09 47 40.0 | |
| | baz=252,slow=332,SNR=0.8 | | | | | | | |
| **AP01** | **Chacalluta** | **1.43** | **218** | | | **Pn** | **09 44 32.1** | **-2.0** |
| **AP01** | **Chacalluta** | **1.43** | **218** | ⇑*i*P | | **Pn** | **09 44 31.9** | **-2.2** |
| AP01 | | | | *i* S | | **Sn** | **09 44 53.9** | **-3.9** |
| AP01 | | | | IAML | | | 09 44 54.7 | |
| | comp=E,48μm,0.3s | | | | | | | |
| **BBOE** | **La Paz, Chanca** | **1.43** | **73** | Pg | | **Pn** | **09 44 36.6** | **+1.8** |
| **BS00** | **La Paz** | **1.43** | **59** | Pg | | **Pn** | **09 44 36.5** | **+1.8** |
| **LPAZ** | **La Paz** | **1.55** | **53** | P | | **Pn** | **09 44 37.3** | **+1.3** |
| | comp=E,26μm,0.3s,baz=259,slow=4.2 | | | | | | | |
| LPAZ | | | | | S | **Sn** | **09 45 01.4** | **+0.4** |
| | baz=0.0,slow=20 | | | | | | | |
| LPAZ | | | | | LR | LR | 09 45 17.8 | |
| | comp=E,3μm,18.0s,baz=164,slow=50 | | | | | | | |
| **LPAZ** | **La Paz** | **1.55** | **53** | Pg | | **Pn** | **09 44 37.5** | **+1.5** |
| **LPAZ** | **La Paz** | **1.55** | **53** | *e*P | | **Pn** | **09 44 36.9** | **+0.9** |
| **SOEO** | **Opoqueri** | **1.96** | **132** | Pg | | **Pn** | **09 44 41.7** | **+1.6** |
| **GO01** | **Chusmiza** | **2.42** | **175** | Pn | | **Pn** | **09 44 45.5** | **0.0** |
| **GO01** | **Chusmiza** | **2.42** | **175** | ⇑*i*P | | **Pn** | **09 44 45.4** | **0.0** |
| GO01 | | | | *i* S | | **Sn** | **09 45 17.7** | **-0.1** |
| GO01 | | | | IAML | | | 09 45 24.5 | |
| | comp=N,4μm,0.4s | | | | | | | |
| **GO01** | **Chusmiza** | **2.42** | **175** | Pg | | **Pn** | **09 44 45.4** | **0.0** |
| GO01 | | | | Sg | | **Sn** | **09 45 16.9** | **-0.9** |
| GO01 | | | | IAML | | | 09 45 21.2 | |
| | comp=N,618nm,0.3s | | | | | | | |
| **HMBC** | **Humberstone** | **3.05** | **188** | | | **Pn** | **09 44 51.1** | **-1.6** |
| **TA02** | **Huaiquique** | **3.09** | **193** | | | **Pn** | **09 44 50.6** | **-2.3** |
| **TA01** | **Diego Aracena** | **3.39** | **192** | Pn | | **Pn** | **09 44 54.5** | **-2.2** |
| **SOET** | **ToroToro** | **3.54** | **105** | Pg | | **Pn** | **09 45 00.0** | **+1.0** |
| SOET | | | | Sg | | **Sn** | **09 45 43.0** | **+0.9** |
| SOET | | | | IAML | | | 09 45 45.1 | |
| | comp=N,2μm,0.6s | | | | | | | |
| **PATCX** | **Punta Patache** | **3.63** | **191** | | | **Pn** | **09 44 57.8** | **-2.0** |
| **AOEA** | **Aiquile** | **4.09** | **104** | Pg | | **Pn** | **09 45 07.6** | **+1.7** |
| **AOEA** | **Aiquile** | **4.09** | **104** | Pg | | **Pn** | **09 45 07.8** | **+1.9** |
| AOEA | | | | Sg | | **Sn** | **09 45 54.7** | **+0.1** |
| AOEA | | | | IAML | | | 09 45 58.3 | |
| | comp=N,4μm,0.7s | | | | | | | |
| **PB09** | **IPOC Station P** | **4.53** | **178** | | | **Pn** | **09 45 10.8** | **-0.7** |
| **PB04** | **IPOC Station P** | **5.11** | **188** | Pn | | **Pn** | **09 45 16.7** | **-2.3** |
| **MOCB** | **Mochara** | **5.35** | **139** | Pg | | **Pn** | **09 45 23.8** | **+1.4** |
| **LVC** | **Limon Verde** | **5.36** | **175** | P | | **Pn** | **09 45 22.1** | **-0.4** |
| | comp=N,173nm,0.5s,baz=18,slow=8.4,SNR=420 | | | | | | | |
| LVC | | | | | S | **Sn** | **09 46 20.1** | **-4.3** |
| | comp=N,899nm,0.7s,baz=0.9,slow=22,SNR=17 | | | | | | | |
| LVC | | | | | LR | LR | 09 48 27.7 | |
| | comp=N,360nm,20.3s,baz=64,slow=48 | | | | | | | |
| **LVC** | **Limon Verde** | **5.36** | **175** | *e*P | | **Pn** | **09 45 21.8** | **-0.7** |
| **AF01** | **San Pedro de A** | **5.80** | **169** | | | **Pn** | **09 45 28.1** | **0.0** |
| **SOTI** | **Planta Incahua** | **6.04** | **116** | Pg | | **Pn** | **09 45 31.5** | **+0.4** |
| **PB14** | **IPOC Station P** | **7.41** | **187** | Pn | | **Pn** | **09 45 45.8** | **-3.6** |
| **GO02** | **Mina Guanaco** | **7.88** | **181** | Pn | | **Pn** | **09 45 53.9** | **-1.8** |
| **ETMB** | **Extrema** | **8.01** | **23** | Pn | | **Pn** | **09 45 56.1** | **-1.1** |
| **ETMB** | **Extrema** | **8.01** | **23** | *e*P | | **Pn** | **09 45 56.1** | **-1.1** |
| **SIV** | **San Ignacio** | **8.09** | **82** | P | | **Pn** | **09 45 56.8** | **-1.5** |
| | comp=N,205nm,0.4s,baz=268,slow=10,SNR=405 | | | | | | | |
| SIV | | | | | S | **Sn** | **09 47 25.2** | **-3.7** |
| | comp=N,261nm,0.9s,baz=167,slow=22,SNR=15 | | | | | | | |
| **BBSD** | **Serra de San D** | **8.41** | **91** | *e*P | | **Pn** | **09 46 01.3** | **-1.2** |
| **NNA** | **Nana** | **8.88** | **305** | P | | **Pn** | **09 46 05.9** | **-2.8** |
| | comp=N,128nm,0.4s,baz=130,slow=11,SNR=45 | | | | | | | |
| NNA | | | | | S | Sn | 09 47 37.6 | -10 |
| | comp=N,106nm,0.3s,baz=206,slow=22,SNR=8.7 | | | | | | | |
| **NNA** | **Nana** | **8.88** | **305** | *c iP* | | **Pn** | **09 46 05.3** | **-3.5** |
| **AC01** | **Pan de Azucar** | **8.93** | **187** | | | **Pn** | **09 46 05.1** | **-4.1** |
| **VILB** | **Vilhena** | **9.87** | **66** | Pn | | **Pn** | **09 46 20.4** | **-1.3** |
| **VILB** | **Vilhena** | **9.87** | **66** | *e*P | | **Pn** | **09 46 20.1** | **-1.5** |
| **CZSB** | **Cruzeiro do Su** | **9.98** | **341** | | | **Pn** | **09 46 20.0** | **-3.2** |
| **CZSB** | **Cruzeiro do Su** | **9.98** | **341** | *e*P | | **Pn** | **09 46 22.2** | **-1.0** |
| **PTLB** | **Pontes e Lacer** | **10.03** | **81** | Pn | | **Pn** | **09 46 22.1** | **-1.6** |
| **PTLB** | **Pontes e Lacer** | **10.03** | **81** | *e*P | | **Pn** | **09 46 21.9** | **-1.9** |
| **AC06** | **Mina Casimiro** | **10.11** | **185** | | | **Pn** | **09 46 21.7** | **-3.0** |
| **FDPY** | **Filadelfia** | **10.22** | **121** | *e*P | | **Pn** | **09 46 25.5** | **-0.8** |
| **SAML** | **Samuel** | **10.23** | **37** | | | **Pn** | **09 46 24.1** | **-2.3** |
| **SAML** | **Samuel** | **10.23** | **37** | P | | **Pn** | **09 46 24.1** | **-2.3** |
| **SAML** | **Samuel** | **10.23** | **37** | *e*P | | **Pn** | **09 46 24.2** | **-2.2** |
| **LCO** | **Las Campanas** | **11.78** | **186** | | | **Pn** | **09 46 44.2** | **-2.5** |
| **LCO** | **Las Campanas** | **11.78** | **186** | P | | **Pn** | **09 46 44.2** | **-2.5** |
| **PAPY** | **Pozo Azul** | **12.48** | **125** | *e*P | | **Pn** | **09 46 55.5** | **0.0** |
| **TBTG** | **Tabatinga, AM** | **12.98** | **358** | P | | **P** | **09 47 04.1** | **-2.0** |
| **TBTG** | **Tabatinga, AM** | **12.98** | **358** | *e*P | | **Pn** | **09 47 02.0** | **0.0** |
| **SALV** | **Santo Antonio** | **13.22** | **86** | *e*P | | **Pn** | **09 47 03.5** | **-1.5** |
| **ATAH** | **Atahualpa** | **13.33** | **318** | P | | **Pn** | **09 47 05.8** | **-1.0** |
| | comp=N,18nm,0.7s,baz=141,slow=2.3,SNR=10 | | | | | | | |
| **AQDB** | **Aquidauana** | **13.37** | **106** | | | **Pn** | **09 47 06.5** | **-0.3** |
| **AQDB** | **Aquidauana** | **13.37** | **106** | *e*P | | **Pn** | **09 47 06.2** | **-0.7** |
| **PDRB** | **Porto dos Gac** | **13.50** | **67** | *e*P | | **Pn** | **09 47 05.4** | **-3.2** |
| **ZON** | **Zonda** | **14.26** | **177** | | | **Pn** | **09 47 18.5** | **+0.5** |
| **ZON** | **Zonda** | **14.26** | **177** | P | | **Pn** | **09 47 18.5** | **+0.5** |
| **CPUP** | **Villa Florida** | **14.40** | **131** | Pn | | **Pn** | **09 47 18.1** | **-1.7** |
| **CPUP** | **Villa Florida** | **14.40** | **131** | P | | **Pn** | **09 47 18.8** | **-1.0** |
| | comp=N,24nm,0.6s,baz=303,slow=12,SNR=21 | | | | | | | |
| CPUP | | | | | LR | LR | 09 53 29.7 | |
| | comp=N,240nm,18.6s,baz=326,slow=39 | | | | | | | |
| **CPUP** | **Villa Florida** | **14.40** | **131** | P | | **Pn** | **09 47 18.1** | **-1.7** |
| **CLDB** | **Colider** | **14.64** | **66** | *e*P | | **Pn** | **09 47 23.1** | **+0.3** |
| **VA01** | **Torpederas** | **15.84** | **187** | IAmb | | IAmb | 09 47 39.4 | |
| | comp=Z,39nm,0.8s | | | | | | | |
| **PEL** | **Peldehue** | **15.88** | **184** | IAmb | | IAmb | 09 47 41.0 | |
| | comp=Z,83nm,1.0s | | | | | | | |
| **MT02** | **Curacav** | **16.03** | **185** | IAmb | | IAmb | 09 47 41.3 | |
| | comp=Z,67nm,0.8s | | | | | | | |
| **MT05** | **Renca** | **16.13** | **184** | | | **Pn** | **09 47 39.4** | **-1.5** |
| MT05 | | | | IAmb | | IAmb | 09 47 45.1 | |
| | comp=Z,51nm,0.8s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **16.14** | **182** | P | | **P** | **09 47 42.0** | **+0.7** |
| **MACA** | **Manacapuru-AM** | **16.41** | **32** | P | | **P** | **09 47 43.8** | **-0.3** |
| **MACA** | **Manacapuru-AM** | **16.41** | **32** | *e*P | | **P** | **09 47 43.4** | **-0.7** |
| **MT13** | **San Alfonso** | **16.45** | **183** | IAmb | | IAmb | 09 47 50.4 | |
| | comp=Z,79nm,0.8s | | | | | | | |
| **VA05** | **Santo Domingo** | **16.47** | **186** | IAmb | | IAmb | 09 47 47.7 | |
| | comp=Z,63nm,0.7s | | | | | | | |
| **TRCB** | **Terra Rica** | **16.70** | **112** | P | | **P** | **09 47 47.4** | **0.0** |
| **ARAG** | **Araguaiana, MT** | **16.95** | **87** | *e*P | | **P** | **09 47 50.4** | **+0.3** |
| **ITQB** | **Itaqui** | **17.03** | **139** | P | | **P** | **09 47 50.4** | **-0.4** |
| **ITQB** | **Itaqui** | **17.03** | **139** | *e*P | | **P** | **09 47 50.8** | **0.0** |
| **NPGB** | **Novo Progresso** | **17.06** | **55** | *e*P | | **P** | **09 47 50.7** | **-0.6** |
| **ARNL** | **Arenillas** | **17.16** | **321** | IAmb | | IAmb | 09 47 58.3 | |
| | comp=Z,57nm,0.7s | | | | | | | |
| **PSAL** | **Palomas, Salto** | **17.47** | **144** | *e*P | | **P** | **09 47 56.3** | **+0.7** |
| **CRSM** | **Crissiumal (Br** | **17.48** | **128** | *e*P | | **P** | **09 47 56.0** | **+0.2** |
| **PCMB** | **Pacaembu** | **17.66** | **107** | *e*P | | **P** | **09 47 58.8** | **+1.0** |
| **GO05** | **Huala** | **17.84** | **187** | IAmb | | IAmb | 09 48 19.4 | |
| | comp=Z,65nm,1.0s | | | | | | | |
| **LDASE** | **Londrina, Braz** | **18.21** | **113** | *e*P | | **P** | **09 48 04.3** | **+0.4** |
| **ITRB** | **Iturama** | **18.24** | **101** | *e*P | | **P** | **09 48 05.3** | **+1.1** |
| **SNDB** | **Serra Nova Dou** | **18.30** | **76** | *e*P | | **P** | **09 48 05.3** | **+0.5** |
| **RODS** | **Rosario do Sul** | **18.40** | **138** | *e*P | | **P** | **09 48 06.8** | **+1.0** |
| **ANTS** | **Antisana-Sarah** | **18.74** | **332** | P | | **P** | **09 48 08.4** | **-1.8** |
| ANTS | | | | | IAmb | IAmb | 09 48 25.4 | |
| | comp=Z,75nm,0.7s | | | | | | | |
| **ITAB** | **Concordia** | **18.82** | **125** | P | | **P** | **09 48 10.0** | **-0.3** |
| **ITAB** | **Concordia** | **18.82** | **125** | *e*P | | **P** | **09 48 10.2** | **-0.2** |
| **TBOT** | **Tacuaremb** | **18.87** | **142** | *e*P | | **P** | **09 48 11.8** | **+0.9** |
| **ALGR** | **Alto Alegre (B** | **18.94** | **130** | *e*P | | **P** | **09 48 11.6** | **-0.1** |
| **PULU** | **Pululahua** | **19.35** | **332** | P | | **P** | **09 48 16.1** | **-0.5** |
| **BI02** | **San Fabin de** | **19.42** | **185** | IAmb | | IAmb | 09 48 26.3 | |
| | comp=Z,85nm,1.0s | | | | | | | |
| **OTAV** | **Otavalo** | **19.52** | **332** | P | | **P** | **09 48 18.2** | **-0.3** |
| **OTAV** | **Otavalo** | **19.52** | **332** | P | | **P** | **09 48 18.2** | **-0.3** |
| OTAV | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **OTAV** | **Otavalo** | **19.52** | **332** | *e*P | | **Pn** | **09 48 20.4** | **-1.3** |
| **FRTB** | **Fartura** | **19.57** | **111** | *e*P | | **P** | **09 48 18.9** | **+0.3** |
| **CPSB** | **Cacapava Do Su** | **19.60** | **135** | *e*P | | **P** | **09 48 18.7** | **0.0** |
| **TULM** | **Tulcn-Chalpat** | **19.66** | **334** | P | | **Pn** | **09 48 22.1** | **-1.3** |
| TULM | | | | | IAmb | IAmb | 09 48 33.9 | |
| | comp=Z,50nm,0.8s | | | | | | | |
| **IPMB** | **Ipameri, GO** | **20.22** | **95** | *e*P | | **P** | **09 48 24.6** | **-1.1** |
| **PLTB** | **Pedras Altas** | **20.36** | **138** | P | | **P** | **09 48 25.9** | **-1.1** |
| **BDFB** | **Brasilia** | **20.59** | **89** | P | | **P** | **09 48 29.0** | **-0.6** |
| **BDFB** | **Brasilia** | **20.59** | **89** | P | | **P** | **09 48 29.2** | **-0.4** |
| | comp=Z,201nm,0.5s,baz=260,slow=9.7,SNR=46 comp=Z,201nm,0.5s | | | | | | | |
| **CNLB** | **Canela** | **20.82** | **129** | *e*P | | **P** | **09 48 30.1** | **-1.9** |
| **RCLB** | **Rio Claro- Sao** | **21.21** | **108** | *e*P | | **P** | **09 48 34.7** | **-1.4** |
| **MAL2** | **Monte Alegre,** | **21.28** | **46** | P | | **P** | **09 48 36.0** | **-1.0** |
| **BOAV** | **Boa Vista** | **21.39** | **25** | *e*P | | **P** | **09 48 37.7** | **-0.4** |
| **SPB** | **Sao Paulo** | **21.54** | **111** | P | | **P** | **09 48 38.2** | **-1.4** |
| **SPB** | **Sao Paulo** | **21.54** | **111** | *e*P | | **P** | **09 48 38.4** | **-1.1** |
| **TRQA** | **Tornquist** | **21.74** | **164** | P | | **P** | **09 48 41.3** | **-0.2** |
| TRQA | | | | | IAmb | IAmb | 09 48 51.3 | |
| | comp=Z,85nm,1.4s | | | | | | | |
| **TRQA** | **Tornquist** | **21.74** | **164** | P | | **P** | **09 48 41.3** | **-0.2** |
| TRQA | | | | | pmax | pmax | | |
| | comp=Z,85nm,1.4s | | | | | | | |
| **TER01** | **Tubaro-SC** | **21.77** | **125** | *e*P | | **P** | **09 48 39.7** | **-2.2** |
| **VAO** | **Valinhos** | **21.83** | **109** | P | | **P** | **09 48 41.3** | **-1.4** |
| **PET01** | **Itanhaem-SP** | **21.84** | **112** | *e*P | | **P** | **09 48 42.6** | **-0.1** |
| **PMNB** | **Patos De Minas** | **21.90** | **97** | *e*P | | **P** | **09 48 42.9** | **-0.6** |
| **PRPB** | **Parauapebas** | **22.09** | **62** | *e*P | | **P** | **09 48 44.0** | **-1.3** |
| **LR03** | **Panguipulli** | **22.46** | **186** | IAmb | | IAmb | 09 48 50.6 | |
| |

ZAIG lAmb lAmb 09 52 53.2
comp=Z,21nm,0.8s
**HBVL Hebbronville 52.40 327** lAmb lAmb 09 53 00.1
comp=Z,21nm,0.6s
**HODGE Hodges 52.63 347** P **P** **09 53 00.2 +0.1**
**Z47A Carrollton 53.23 340** lAmb lAmb 09 53 05.8
comp=Z,12nm,0.7s
**HKT Hockley 53.38 331** P **P** **09 53 06.1 +0.5**
**HKT Hockley 53.38 331** *d iP* **P** **09 53 06.2 +0.6**
HKT pmax pmax
comp=Z,11nm,0.9s
**HKT Hockley 53.38 331** P **P** **09 53 06.4 +0.8**
**TKL Tuckaleechee C 54.34 346** P **P** **09 53 12.0 -0.5**
**TKL Tuckaleechee C 54.34 346** LR LR 10 19 28.0
comp=Z,45nm,18.7s,baz=158,slow=39
**TKL Tuckaleechee C 54.34 346** P **P** **09 53 12.0 -0.5**
TKL pmax pmax
comp=Z,8.0nm,1.0s
**SWET Sewanee 54.48 343** P **P** **09 53 13.4 -0.2**
**HNDO Hondo 54.70 328** P **P** **09 53 15.8 +0.5**
**U54A Nelsons Funny 54.74 348** lAmb lAmb 09 53 21.3
comp=Z,14nm,0.8s
**435B Jarrell 54.90 330** lAmb lAmb 09 53 17.9
comp=Z,26nm,0.8s
**V48A Smith Brothers 55.21 343** lAmb lAmb 09 53 18.9
comp=Z,8.4nm,0.6s
**DRIO Del Rio 55.31 327** lAmb lAmb 09 53 20.4
comp=Z,23nm,0.7s
**SACV Santiago Islan 55.37 57** P **P** **09 53 19.6 -0.7**
**WLAR White Oak Lake 55.46 336** lAmb lAmb 09 53 22.7
comp=Z,22nm,0.8s
**WVT Waverly 55.87 342** P **P** **09 53 20.3 -3.1**
**WVT Waverly 55.87 342** P **P** **09 53 20.3 -3.1**
WVT pmax pmax
comp=Z,6.0nm,0.6s
**WVT Waverly 55.87 342** P **P** **09 53 22.3 -1.2**
WVT pP **pP** **09 54 03.9 -0.1**
**S54A Dingess, Beckl 55.88 349** lAmb lAmb 09 53 23.3
comp=Z,27nm,1.2s
**BRDY Brady 56.00 329** lAmb lAmb 09 53 25.2
comp=Z,12nm,0.7s
**UALR University of 56.13 337** lAmb lAmb 09 53 25.6
comp=Z,12nm,0.8s
**HPIG 56.27 321** lAmb lAmb 09 53 28.3
comp=Z,30nm,1.4s
**MIAR Mount Ida 56.40 336** lAmb lAmb 09 53 37.1
comp=Z,13nm,1.1s
**T47A Sharon Grove 56.46 343** lAmb lAmb 09 53 27.4
comp=Z,11nm,0.8s
**SAND Sanderson 56.53 326** lAmb lAmb 09 53 29.6
comp=Z,16nm,1.1s
**WHAR Wooly Hollow 56.57 338** lAmb lAmb 09 53 29.0
comp=Z,9.8nm,0.8s
**SLBS Sierra La Lagu 56.76 315** P **P** **09 53 30.8 +0.7**
**SLBS Sierra La Lagu 56.76 315** P **P** **09 53 31.3 +1.2**
SLBS pP **pP** **09 54 12.2 +1.3**
SLBS PcP **PcP** **09 54 24.2 +0.1**
**LCAR Lake Charles 56.87 339** lAmb lAmb 09 53 30.4
comp=Z,10nm,0.8s
**TXAR Lajitas Array 56.90 324** P **P** **09 53 30.5 -0.5**
**TXAR Lajitas Array 56.90 324** P **P** **09 53 30.9 -0.1**
comp=Z,3.9nm,0.7s,baz=150,slow=9.2,SNR=61
TXAR pP **pP** **09 54 09.9 -1.9**
comp=Z,4.1nm,0.8s,baz=143,slow=8.2,SNR=5.3
comp=Z,3.9nm,0.7s
**Q54A Coxs Mills 56.94 349** lAmb lAmb 09 53 32.0
comp=Z,20nm,1.4s
**FW03 Perrin-Whitt E 57.01 331** lAmb lAmb 09 53 34.3
comp=Z,15nm,0.6s
**FCAR Ozark Folk Cen 57.05 338** lAmb lAmb 09 53 31.5
comp=Z,10nm,0.8s
**X37A Clayton 57.15 335** lAmb lAmb 09 53 34.6
comp=Z,20nm,0.7s
**P53A Whipple 57.53 349** lAmb lAmb 09 53 40.2
comp=Z,23nm,1.1s
**ALPN Alpine 57.68 325** P **P** **09 53 36.6 +0.1**
**T42A Van Buren 57.72 340** lAmb lAmb 09 53 36.0
comp=Z,10nm,0.6s
**MGMO Mountain Grove 58.24 339** lAmb lAmb 09 53 39.8
comp=Z,12nm,0.6s
**RLO Rose Lookout 58.38 336** P **P** **09 53 41.1 0.0**
RLO lAmb lAmb 09 53 42.8
comp=Z,11nm,0.6s
**TUL3 Leonard 58.47 335** lAmb lAmb 09 53 42.7
comp=Z,17nm,0.6s
**PECS Pecos 58.57 325** lAmb lAmb 09 53 43.7
comp=Z,29nm,1.5s
**POST Post 58.67 329** lAmb lAmb 09 53 44.9
comp=Z,26nm,1.0s
**CCM Cathedral Cave 58.70 340** P **P** **09 53 42.0 -1.3**
CCM lAmb lAmb 09 53 43.3
comp=Z,12nm,0.7s
**CCM Cathedral Cave 58.70 340** P **P** **09 53 42.0 -1.3**
CCM pmax pmax
comp=Z,12nm,0.7s
**CCM Cathedral Cave 58.70 340** P **P** **09 53 42.4 -0.9**
**VHRN Van Horn 58.74 324** lAmb lAmb 09 53 44.4
comp=Z,16nm,0.6s
**WMOK Wichita Mounta 58.75 332** lAmb lAmb 09 53 45.9
comp=Z,7.1nm,0.6s
**DKNS Dickens 58.87 329** lAmb lAmb 09 53 45.2
comp=Z,15nm,0.7s
**QUOK Quay 59.07 334** **P** **09 53 46.1 +0.2**
**S39A Bolivar 59.09 338** lAmb lAmb 09 53 45.7
comp=Z,14nm,0.6s
**R40A Maddies Statio 59.26 339** lAmb lAmb 09 53 46.9
comp=Z,16nm,0.7s
**M53A WI Miller and 59.31 350** P **P** **09 53 46.7 -0.7**
**BINY Binghamton 59.45 354** P **P** **09 53 46.6 -1.8**
BINY lAmb lAmb 09 53 50.9
comp=Z,37nm,1.4s
**CSTR Hydro, Custer 59.47 332** lAmb lAmb 09 53 49.7
comp=Z,7.0nm,0.6s
**N49A Columbus Grove 59.47 347** lAmb lAmb 09 53 50.4
comp=Z,15nm,0.8s
**HRV Adam Dziewonsk 59.48 358** P **P** **09 53 47.7 -0.9**
**P43A Skaggs, Pawnee 59.62 342** lAmb lAmb 09 53 49.0
comp=Z,17nm,0.7s
**BLOK Blackwell 59.78 334** **P** **09 53 51.2 +0.5**
**AMTX Amarillo 60.23 330** lAmb lAmb 09 53 54.5
comp=Z,30nm,1.4s
**OK032 Salt Plains WL 60.24 334** **P** **09 53 54.0 +0.2**
**P40A Paris 60.30 340** P **P** **09 53 52.3 -1.9**
P40A lAmb lAmb 09 53 53.7
comp=Z,10nm,0.6s
**MBO M'Bour 60.56 62** P **P** **09 53 57.5 +1.1**
**P38A Dawn 60.89 339** lAmb lAmb 09 53 58.9
comp=Z,13nm,0.5s
**121A Cookes Peak, D 61.63 323** lAmb lAmb 09 54 05.0
comp=Z,9.7nm,0.7s
**319A Douglas 61.66 321** lAmb lAmb 09 54 05.4
comp=Z,33nm,1.2s
**RTBA Rita Blanca 61.98 330** lAmb lAmb 09 54 07.7
comp=Z,10.0nm,0.9s
**SADO Sadowa 62.34 352** LR LR 10 23 45.1
comp=Z,36nm,19.6s,baz=356,slow=38
**L40A Anamosa 62.35 342** lAmb lAmb 09 54 10.5
comp=Z,10nm,0.8s
**DUN6 Lazy B Ranch 62.39 323** P **P** **09 54 09.1 +0.5**
**ANMO Albuquerque 62.70 326** P **P** **09 54 11.0 +0.4**
**ANMO Albuquerque 62.70 326** *d iP* **P** **09 54 10.9 +0.2**
ANMO pmax pmax
comp=Z,3.0nm,0.7s
**ANMO Albuquerque 62.70 326** P **P** **09 54 10.8 +0.2**
ANMO pP **pP** **09 54 53.8 +1.6**
ANMO sP **sP** **09 55 14.6 +3.4**
**N35A Tabor 62.73 338** lAmb lAmb 09 54 10.6
comp=Z,18nm,0.6s
**SCIA State Center 62.83 340** lAmb lAmb 09 54 11.1
comp=Z,19nm,0.7s
**JFWS Jewell Farm 62.85 343** lAmb lAmb 09 54 20.9
comp=Z,13nm,0.6s
**BELA Belgrano 2 63.01 172** P **P** **09 54 12.9 +1.1**
BELA lAmb lAmb 09 54 14.7
comp=Z,8.4nm,0.5s
**TUC Tucson 63.22 321** P **P** **09 54 13.7 -0.3**
**TUC Tucson 63.22 321** P **P** **09 54 13.7 -0.3**
TUC pmax pmax
comp=Z,9.0nm,1.4s
**TUC Tucson 63.22 321** P **P** **09 54 14.3 +0.4**
TUC PcP **PcP** **09 54 50.9 +1.1**
TUC pP **pP** **09 54 56.9 +1.3**
**TRQ Mont Tremblant 63.33 356** P **P** **09 54 13.8 -0.6**
TRQ lAmb lAmb 09 54 16.4
comp=Z,10nm,0.9s
**I42A Draeger Farm, 63.40 344** P **P** **09 54 14.3 -0.5**
I42A lAmb lAmb 09 54 16.8
comp=Z,9.5nm,0.8s
**D62A Allapoint, All 64.02 0** P **P** **09 54 18.5 -0.3**
D62A lAmb lAmb 09 54 19.1
comp=Z,20nm,0.8s
**VNA3 Neumayer Olymp 64.25 162** ⇑P **P** **09 54 21.3 +1.2**
comp=Z,15nm,0.8s
**X18A Snowflake 64.32 323** lAmb lAmb 09 54 23.4
comp=Z,18nm,1.3s
**SDCO Great Sand Dun 64.37 329** P **P** **09 54 22.3 +0.6**
SDCO lAmb lAmb 09 54 23.3
comp=Z,14nm,0.7s
**VNA1 Neumayer--Stat 64.44 161** ⇑P **P** **09 54 22.7 +1.5**
comp=Z,18nm,1.0s
**W18A Petrified Fore 64.62 324** lAmb lAmb 09 54 25.1
comp=Z,31nm,1.5s
**VNA2 Neumayer--Watz 64.81 161** ⇑P **P** **09 54 23.8 +0.1**
comp=Z,8.8nm,0.5s,baz=302,slow=5.1
**LDAQ Lac Daran 64.92 359** lAmb lAmb 09 54 27.8
comp=Z,11nm,0.8s
**X16A Lo Mia Camp, P 65.10 322** lAmb lAmb 09 54 28.6
comp=Z,17nm,1.2s
**Q24A Divide 65.15 330** lAmb lAmb 09 54 28.4
comp=Z,9.7nm,0.8s
**MVCO Mesa Verde 65.49 326** P **P** **09 54 29.4 +0.6**
MVCO lAmb lAmb 09 54 30.6
comp=Z,25nm,1.2s
**ECSD EROS Data Cent 65.60 339** lAmb lAmb 09 54 31.1
comp=Z,9.6nm,0.7s
**Y14A Wickenburg 65.69 321** lAmb lAmb 09 54 31.4
comp=Z,7.4nm,0.6s
**SPMN Marine on St. 65.70 342** P **P** **09 54 29.1 -0.6**
SPMN lAmb lAmb 09 54 33.9
comp=Z,17nm,1.1s
**WUAZ Wupatki 65.84 323** lAmb lAmb 09 54 33.4
comp=Z,12nm,0.8s
**BRIGG Briggsdale 66.05 332** lAmb lAmb 09 54 34.2
comp=Z,23nm,1.0s
**SMCO Snowmass 66.20 329** lAmb lAmb 09 54 35.4
comp=Z,16nm,0.6s
**SNAA Sanae 66.44 162** P **P** **09 54 35.5 +1.2**
SNAA lAmb lAmb 09 54 38.8
comp=Z,13nm,0.7s
**SNAA Sanae 66.44 162** ⇑P **P** **09 54 35.7 +1.4**
comp=Z,328nm,0.7s
**SNAA Sanae 66.44 162** P **P** **09 54 35.5 +1.2**
comp=Z,11nm,0.7s,baz=280,slow=5.2,SNR=42
SNAA pP **pP** **09 55 14.5 -1.7**
comp=Z,5.2nm,0.8s,baz=330,slow=4.5,SNR=1.7
comp=Z,11nm,0.7s
**SNAA Sanae 66.44 162** *c iP* **P** **09 54 35.5 +1.2**
SNAA pmax pmax
comp=Z,12nm,0.7s
**YUH Yuha Desert 66.63 318** lAmb lAmb 09 54 38.4
comp=Z,18nm,1.4s
**U15A North Rim 67.01 323** lAmb lAmb 09 54 41.2
comp=Z,27nm,1.3s
**TKX Tecate 67.02 318** lAmb lAmb 09 54 40.8
comp=Z,19nm,0.9s
**N23A Red Feather La 67.05 331** lAmb lAmb 09 54 40.4
comp=Z,18nm,1.2s
**HMU Henry Mountain 67.23 326** lAmb lAmb 09 54 42.4
comp=Z,23nm,1.3s
**F33A 5 Mile Ranch, 67.34 340** lAmb lAmb 09 54 40.6
comp=Z,23nm,0.7s
**CALA Caldeira 67.37 34** *eP* **P** **09 54 40.6 +0.1**
comp=Z,187nm,0.8s
**PCAN Candelaria 67.40 34** *eP* **P** **09 54 40.5 -0.1**
comp=Z,148nm,1.6s
**PICO Pico 67.46 34** *eP* **P** **09 54 40.8 -0.3**
comp=Z,115nm,1.2s
**PPNO Prainha do Nor 67.52 34** *eP* **P** **09 54 41.1 -0.4**
comp=Z,40nm,0.7s
**O20A White River Ci 67.57 329** lAmb lAmb 09 54 43.7
comp=Z,14nm,0.8s
**PID Ribeirinha 67.58 34** *eP* **P** **09 54 41.6 -0.2**
comp=Z,84nm,1.7s
**PFO Pinyon Flats O 67.60 319** P **P** **09 54 43.1 +0.9**
PFO lAmb lAmb 09 54 44.5
comp=Z,14nm,1.0s
**PFO Pinyon Flats O 67.60 319** *d iP* **P** **09 54 43.4 +1.3**
PFO pmax pmax
comp=Z,25nm,1.1s
**PFO Pinyon Flats O 67.60 319** P **P** **09 54 43.4 +1.3**
PFO pP **pP** **09 55 26.2 +1.9**
PFO sP **sP** **09 55 45.3 +2.1**
**ROSA Rosais 67.72 34** *eP* **P** **09 54 42.8 +0.2**
comp=Z,164nm,1.6s
**LIC Lamto 67.73 76** ⇑*eP* **P** **09 54 43.2 0.0**
comp=Z,381nm,0.8s
**PMAN Manadas 67.73 34** *eP* **P** **09 54 43.4 +0.7**
comp=Z,101nm,0.9s
**TIC Toumodi 67.89 75** ⇑*eP* **P** **09 54 44.2 0.0**
comp=Z,129nm,0.9s
**SRU San Rafael Swe 67.97 327** lAmb lAmb 09 54 45.6
comp=Z,8.8nm,0.7s
**V12A Nelson 68.02 321** lAmb lAmb 09 54 47.0
comp=Z,30nm,1.4s
**KIC Kosan Boka 68.04 76** *eP* **P** **09 54 45.4 +0.2**
comp=Z,624nm,0.6s
**DBIC Dimbokro 68.05 75** P **P** **09 54 45.5 +0.3**
comp=Z,310nm,0.7s,baz=239,slow=6.1,SNR=370
DBIC LR LR 10 23 35.4
comp=Z,110nm,20.4s,baz=246,slow=35
**DBIC Dimbokro 68.05 75** ⇑P **P** **09 54 45.5 +0.3**
**TROLL Troll, Antarti 68.16 161** ⇑P **P** **09 54 46.8 +1.7**
comp=Z,317nm,0.8s
**P18A Preston Nutter 68.20 327** lAmb lAmb 09 54 48.0
comp=Z,12nm,0.7s
**PSMA Santa Maria 68.21 37** *eP* **P** **09 54 45.3 -0.4**
comp=Z,45nm,1.1s
**ELS Elsinore Mount 68.23 318** P **P** **09 54 46.5 +0.5**
**PAGU Agualva, Azore 68.32 34** *eP* **P** **09 54 46.5 +0.1**
comp=Z,105nm,0.6s
**P17A Butcher Ranch, 68.35 327** lAmb lAmb 09 54 48.6
comp=Z,13nm,0.8s
**CCUT Cedar City 68.41 324** lAmb lAmb 09 54 50.2
comp=Z,17nm,1.1s
**PSET Sete Cidades 68.45 36** *eP* **P** **09 54 47.9 +0.6**
comp=Z,114nm,0.3s
**RDMU Red Mountain 68.56 328** P **P** **09 54 48.8 +0.7**
RDMU lAmb lAmb 09 54 49.6
comp=Z,16nm,0.7s
**TCRU Three Creeks R 68.64 325** lAmb lAmb 09 54 50.6
comp=Z,14nm,0.5s
**K22A Casper 68.69 331** lAmb lAmb 09 54 50.4
comp=Z,11nm,0.6s
**RSSD Black Hills 68.78 334** P **P** **09 54 50.1 +0.7**
RSSD lAmb lAmb 09 54 51.0
comp=Z,8.4nm,0.6s
**RSSD Black Hills 68.78 334** P **P** **09 54 50.1 +0.7**
RSSD pmax pmax
comp=Z,8.0nm,0.6s
**RSSD Black Hills 68.78 334** P **P** **09 54 50.1 +0.7**
RSSD pP **pP** **09 55 34.3 +2.8**
**PASC Pasadena Art C 69.05 318** lAmb lAmb 09 54 53.5
comp=Z,34nm,1.3s
**PSUT Pine Spring 69.37 324** lAmb lAmb 09 54 55.1
comp=Z,9.3nm,0.6s
**AGMN Agassiz Nation 69.39 341** lAmb lAmb 09 54 53.5
comp=Z,14nm,0.7s
**GWY Greenwater Val 69.42 321** lAmb lAmb 09 54 55.6
comp=Z,16nm,0.8s
**JLU Jordanelle 69.55 327** P **P** **09 54 55.3 +1.1**
JLU lAmb lAmb 09 54 56.3
comp=Z,30nm,1.4s
**CCAC Calif City Air 69.58 319** lAmb lAmb 09 54 56.6
comp=Z,21nm,0.8s
**WCT Wildcat Mounta 69.79 321** lAmb lAmb 09 54 58.5
comp=Z,39nm,1.3s
**S11A Rachel 69.84 322** lAmb lAmb 09 54 58.5
comp=Z,10.0nm,0.7s
**SPR3 Spring Creek 3 69.96 324** lAmb lAmb 09 54 59.1
comp=Z,25nm,1.4s
**DUG Dugway, Tooele 69.97 326** lAmb lAmb 09 54 59.0
comp=Z,20nm,1.3s
**ISA Isabella, Lake 70.19 319** lAmb lAmb 09 55 00.7
comp=Z,26nm,1.2s
**PDAR Pinedale Array 70.21 330** P **P** **09 54 57.6 -0.6**
**PDAR Pinedale Array 70.21 330** P **P** **09 54 58.3 +0.1**
comp=Z,3.1nm,0.5s,baz=126,slow=8.3,SNR=49
PDAR pP **pP** **09 55 42.9 +2.3**
comp=Z,3.6nm,0.7s,baz=149,slow=7.2,SNR=4.5
comp=Z,3.1nm,0.5s
**Q12A Willow Creek R 70.27 324** lAmb lAmb 09 55 01.0
comp=Z,26nm,1.3s
**BCW Bitter Crk WRg 70.32 318** lAmb lAmb 09 55 06.4
comp=Z,51nm,1.5s
**GMN Gold Mountain 70.51 321** P **P** **09 55 01.4 +1.3**
GMN lAmb lAmb 09 55 02.2
comp=Z,9.7nm,0.6s
**AHID Auburn Hatcher 70.96 329** lAmb lAmb 09 55 04.1
comp=Z,18nm,1.1s
**NVL N'lazarevskaya 70.97 160** *eP* **P** **09 55 03.4 +1.3**
NVL pmax pmax
comp=Z,17nm,0.8s
**ULM Lac du Bonnet 71.13 342** P **P** **09 55 03.0 -0.3**
**ULM Lac du Bonnet 71.13 342** P **P** **09 55 03.0 -0.3**
comp=Z,32nm,0.5s,baz=151,slow=5.6,SNR=67
ULM pP **pP** **09 55 45.5 -0.2**
comp=Z,15nm,0.6s,baz=157,slow=5.3,SNR=3.2
ULM LR LR 10 29 16.7
comp=Z,20nm,18.8s,baz=77,slow=38
comp=Z,32nm,0.5s
**ULM Lac du Bonnet 71.13 342** *ceP* **P** **09 55 02.9 -0.4**
**ELK Elko 71.67 325** P **P** **09 55 07.3 +0.2**
**ELK Elko 71.67 325** P **P** **09 55 07.3 +0.2**
ELK pmax pmax
comp=Z,10.0nm,1.3s
**IMW Indian Meadow 71.72 330** lAmb lAmb 09 55 09.9
comp=Z,9.1nm,0.6s
**FLWY Flagg Ranch 71.74 330** lAmb lAmb 09 55 09.7
comp=Z,29nm,1.1s
**OMMB Old Mammoth Mi 71.76 320** lAmb lAmb 09 55 10.2
comp=Z,22nm,1.1s
**SCHG Schefferville 71.82 2** P **P** **09 55 06.3 -1.0**
comp=Z,5.0nm,0.6s,baz=134,slow=2.4,SNR=7.6
comp=Z,5.0nm,0.6s
**NVAR Mina Array Bea 71.87 321** P **P** **09 55 09.1 +0.8**
**NVAR Mina Array Bea 71.87 321** P **P** **09 55 09.6 +1.3**
comp=Z,4.8nm,0.8s,baz=138,slow=5.9,SNR=42
NVAR pP **pP** **09 55 51.6 +0.8**
comp=Z,4.8nm,0.8s,baz=145,slow=6.8,SNR=6.7
comp=Z,4.8nm,0.8s
**LHV Little Huntoon 71.88 321** lAmb lAmb 09 55 11.0
comp=Z,30nm,1.3s
**LKWY Lake 71.96 330** lAmb lAmb 09 55 11.8
comp=Z,23nm,0.8s
**PMPB Monarch Peak 72.00 318** P **P** **09 55 08.3 -0.6**
PMPB lAmb lAmb 09 55 11.7
comp=Z,19nm,0.8s
**BBGB Big Mountain B 72.38 319** lAmb lAmb 09 55 16.6
comp=Z,34nm,0.9s
**DGMT Dagmar 72.39 337** lAmb lAmb 09 55 12.8
comp=Z,28nm,1.1s
**YHL Hebgen Lake 72.55 330** lAmb lAmb 09 55 15.2
comp=Z,38nm,1.5s
**SAO San Andreas Ge 72.75 318** P **P** **09 55 14.1 +0.8**
**SAO San Andreas Ge 72.75 318** P **P** **09 55 14.1 +0.8**
SAO pmax pmax
comp=Z,6.0nm,1.0s
**YERR Yerington 72.79 321** lAmb lAmb 09 55 16.4
comp=Z,45nm,1.5s
**QSPA South Pole Qui 72.93 180** P **P** **09 55 15.5 +1.4**
**QSPA South Pole Qui 72.93 180** P **P** **09 55 15.9 +1.9**
comp=Z,8.5nm,0.6s,baz=188,slow=0.5,SNR=84
QSPA pP **pP** **09 55 55.9 -0.7**
comp=Z,6.4nm,0.8s,baz=164,slow=5.6,SNR=3.5
comp=Z,8.5nm,0.6s
**PNTR Pine Nut 73.07 321** lAmb lAmb 09 55 18.2
comp=Z,14nm,0.8s
**PAHR Pah Rah Range 73.34 322** lAmb lAmb 09 55 19.6
comp=Z,28nm,1.0s
**MFID Camas Ranch 73.84 327** lAmb lAmb 09 55 22.3
comp=Z,33nm,1.3s
**EGMT Eagleton 74.30 333** lAmb lAmb 09 55 23.6
comp=Z,12nm,0.7s
**MCCM Marconi Confer 74.49 319** lAmb lAmb 09 55 25.7
comp=Z,16nm,0.8s
**ORV Oroville 74.51 321** lAmb lAmb 09 55 26.2
comp=Z,31nm,1.1s
**HATC Hat Creek Radi 75.27 322** lAmb lAmb 09 55 30.1
comp=Z,28nm,1.1s
**BMO Blue Mountains 75.60 327** lAmb lAmb 09 55 31.6
comp=Z,23nm,1.4s
**KMRM Mail Ridge 76.26 320** lAmb lAmb 09 55 36.4
comp=Z,20nm,1.1s
**TORD Torodi Ar. Bea 76.42 71** P **P** **09 55 34.9 0.0**
**TORD Torodi Ar. Bea 76.42 71** P **P** **09 55 34.9 0.0**
comp=Z,189nm,0.8s,baz=262,slow=5.2,SNR=1083
TORD pP **pP** **09 56 16.3 -1.4**
comp=Z,17nm,0.8s,baz=255,slow=5.4,SNR=1.6
TORD S **S** **10 04 59.4 -7.1**
comp=Z,5.1nm,0.9s,baz=262,slow=14,SNR=4.1
TORD LR LR 10 28 53.0
comp=Z,236nm,18.8s,baz=232,slow=35
**KMPM Mount Pierce 76.63 320** lAmb lAmb 09 55 38.5
comp=Z,16nm,0.8s
**KHMM Horse Mountain 76.66 321** lAmb lAmb 09 55 38.6
comp=Z,20nm,1.1s
**PINE Pine Mountain 76.86 324** lAmb lAmb 09 55 39.8
comp=Z,30nm,1.2s
**L02F Cave Junction 77.32 322** lAmb lAmb 09 55 41.8
comp=Z,31nm,1.4s
**KSXB Camp Six Broad 77.33 321** lAmb lAmb 09 55 46.5
comp=Z,37nm,1.4s
**I05D Terrebonne, OR 77.43 325** lAmb lAmb 09 55 42.6
comp=Z,53nm,1.4s
**G05A Wamic 77.99 325** lAmb lAmb 09 55 48.6
comp=Z,22nm,0.9s
**C09A Chrisman Ranch 78.09 329** lAmb lAmb 09 55 45.8
comp=Z,24nm,1.3s
**H04A Detroit Lake 78.11 325** lAmb lAmb 09 55 45.5
comp=Z,30nm,1.5s
**HOOD Mount Hood Mea 78.22 325** lAmb lAmb 09 55 47.2
comp=Z,31nm,1.2s
**PFVI Vila Bisbo 78.58 45** ⇑*iP* **P** **09 55 47.1 +0.7**
comp=Z,76nm,0.9s
**MORF Marmelete 78.79 45** lAmb lAmb 09 55 49.9
comp=Z,77nm,0.8s
**MORF Marmelete 78.79 45** ⇑*iP* **P** **09 55 48.7 +1.2**
comp=Z,100nm,0.9s
**MORF Marmelete 78.79 45** *eP* **P** **09 55 48.8 +1.2**
MORF lAmb lAmb 09 55 49.7
comp=Z,75nm,0.8s
**MORF Marmelete 78.79 45** *eP* **P** **09 55 48.8 +1.2**
**PTEO Sao Teotonio 78.87 45** ⇑*eP* **P** **09 55 49.4 +1.5**
comp=Z,139nm,1.4s
**F04A Amboy 79.03 325** lAmb lAmb 09 55 50.8
comp=Z,29nm,1.0s
**PBDV Barranco-do-Ve 79.25 46** ⇑*iP* **P** **09 55 51.3 +1.2**
comp=Z,102nm,1.2s
**PNCL Nicolau / Gran 79.30 45** ⇑*iP* **P** **09 55 51.3 +1.1**
comp=Z,57nm,1.2s
**MESJ Messejana 79.36 45** lAmb lAmb 09 55 52.9
comp=Z,44nm,1.0s
**MESJ Messejana 79.36 45** ⇑*eP* **P** **09 55 51.8 +1.2**
comp=Z,51nm,1.1s
**MESJ Messejana 79.36 45** *eP* **P** **09 55 51.8 +1.2**
MESJ lAmb lAmb 09 55 53.2
comp=Z,58nm,1.2s
**MESJ Messejana 79.36 45** *eP* **P** **09 55 51.8 +1.2**
**PCVE Castro Verde 79.38 45** ⇑*iP* **P** **09 55 52.0 +1.3**
comp=Z,52nm,0.7s
**MDT Midelt 79.42 51** LR LR 10 30 30.2
comp=Z,31nm,19.8s,baz=238,slow=35
**PVAQ Vaqueiros 79.48 45** lAmb lAmb 09 55 53.4
comp=Z,14nm,0.6s
**PVAQ Vaqueiros 79.48 45** ⇑*iP* **P** **09 55 52.1 +0.9**
comp=Z,34nm,1.5s
**D05A Enumclaw 79.59 327** lAmb lAmb 09 55 54.4
comp=Z,36nm,1.1s
**PBEJ Beja 79.70 45** ⇑*iP* **P** **09 55 53.5 +1.1**
comp=Z,36nm,0.9s
**EVO Evora 79.86 44** ⇑*eP* **P** **09 55 54.2 +0.9**
comp=Z,43nm,1.7s
**PSBE So Bento 79.86 43** ⇑*iP* **P** **09 55 54.2 +0.9**
comp=Z,66nm,1.2s
**SBA Scott Base 79.91 190** P **P** **09 55 54.5 +1.6**
**SBA Scott Base 79.91 190** P **P** **09 55 54.5 +1.6**
SBA pmax pmax
comp=Z,12nm,1.1s
**PMTG Montargil 80.00 44** ⇑*iP* **P** **09 55 54.8 +0.8**
comp=Z,66nm,1.4s
**E03A Lebam 80.03 325** lAmb lAmb 09 55 57.2
comp=Z,43nm,1.1s
**GNW Green Mountain 80.27 327** lAmb lAmb 09 55 57.3
comp=Z,29nm,1.4s
**PESTR Estremoz 80.32 44** ⇑*iP* **P** **09 55 56.8 +1.0**
comp=Z,69nm,1.2s
**PBAR Barrancos 80.33 45** ⇑*iP* **P** **09 55 56.5 +0.7**
comp=Z,43nm,1.1s
**PCAS Casmilo, Conde 80.34 43** ⇑*iP* **P** **09 55 56.7 +0.8**
comp=Z,45nm,1.5s
**COI Coimbra 80.48 43** *eP* **P** **09 55 58.3 +1.7**

comp=Z,102nm,1.1s
**NLWA Neilton Lookou 80.72 326** IAmb IAmb 09 56 00.5
comp=Z,24nm,1.1s
**PMRV Marv??o 80.74 44** *e*P **P 09 55 58.1 +0.1**
comp=Z,24nm,1.2s
**PCBR Castelo Branco 80.90 43**⇑*e*P **P 09 55 59.2 +0.4**
comp=Z,34nm,1.2s
**PVIS Viseu 81.08 43**⇑*i*P **P 09 55 59.9 +0.1**
comp=Z,44nm,1.0s
**MTE Manteigas 81.15 43**⇑*i*P **P 09 56 00.6 +0.4**
comp=Z,77nm,1.0s
**SUR Sutherland 81.15 121** LR LR 10 30 44.0
comp=Z,16nm,18.8s,baz=224,slow=34
**PVRL Vila Real 81.49 42** *e*P **P 09 56 02.7 +0.7**
comp=Z,49nm,0.9s
**POLO Lamas de Olo 81.50 42**⇑*i*P **P 09 56 02.5 +0.5**
comp=Z,29nm,0.9s
**PGAV Gavieira, Arco 81.51 41**⇑*i*P **P 09 56 02.4 +0.3**
comp=Z,37nm,1.0s
**PCAB Cabril 81.53 42**⇑*e*P **P 09 56 02.5 +0.4**
comp=Z,76nm,0.9s
**CLRS Cowichan Lake 81.73 327** IAmb IAmb 09 56 06.4
comp=Z,41nm,1.5s
**TSUM Tsumeb 81.74 108** P **P 09 56 04.9 +0.9**
**MVO Moncorvo 81.88 43**⇑*i*P **P 09 56 04.8 +0.8**
comp=Z,84nm,0.8s
**BRLDA Berland Loevuo 82.03 334** IAmb IAmb 09 56 05.3
comp=Z,29nm,1.3s
**PBRG Braganca 82.39 42**⇑*i*P **P 09 56 07.3 +0.6**
comp=Z,45nm,1.5s
**PAB San Pablo 82.84 45** P **P 09 56 10.2 +1.1**
**PAB San Pablo 82.84 45** P **P 09 56 10.2 +1.1**
PAB pmax pmax
comp=Z,62nm,1.1s
**CBB Campbell River 83.11 327** IAmb IAmb 09 56 12.4
comp=Z,19nm,1.0s
**ESDC Sonseca Array 83.16 45** P **P 09 56 11.3 +0.6**
**ESDC Sonseca Array 83.16 45** P **P 09 56 11.7 +1.1**
comp=Z,33nm,0.9s,baz=253,slow=5.4,SNR=176
ESDC pP **pP 09 56 52.5 -1.7**
comp=Z,4.5nm,0.8s,baz=256,slow=6.8,SNR=2.6
ESDC LR LR 10 30 50.5
comp=Z,30nm,20.3s,baz=220,slow=34
comp=Z,33nm,0.9s
**TAM Tamanrasset 83.36 64** IAmb IAmb 09 56 14.2
comp=Z,20nm,0.9s
**CART Cartagena 84.24 48** IAmb IAmb 09 56 17.7
comp=Z,28nm,1.0s
**DY2G Dye2 85.24 9** *i*P **P 09 56 19.8 -1.0**
DY2G IAmb IAmb 09 56 21.5
comp=Z,64nm,1.2s
**ISOG Isortoq, Green 85.69 12** *i*P **P 09 56 21.6 -1.1**
ISOG IAmb IAmb 09 56 23.6
comp=Z,48nm,0.8s
**BBB Bella Bella 85.78 328** LR LR 10 40 17.7
comp=Z,26nm,18.5s,baz=290,slow=39
**BOSA Boshof 85.87 119** P **P 09 56 25.4 +0.6**
BOSA IAmb IAmb 09 56 26.5
comp=Z,23nm,1.2s
**BOSA Boshof 85.87 119** P **P 09 56 25.4 +0.6**
comp=Z,6.3nm,0.6s,baz=217,slow=3.2,SNR=7.0
BOSA LR LR 10 32 50.5
comp=Z,71nm,20.0s,baz=235,slow=34
comp=Z,6.3nm,0.6s
**ANGG Ammassalik, Gr 86.03 13** *i*P **P 09 56 23.0 -1.3**
ANGG IAmb IAmb 09 56 25.0
comp=Z,37nm,0.9s
**YKA Yellowknife Ar 87.03 341** P **P 09 56 29.8 +0.5**
comp=Z,5.9nm,0.7s,baz=226,slow=3.9,SNR=31
YKA pP **pP 09 57 12.7 -0.5**
comp=Z,6.1nm,0.8s,baz=135,slow=4.7,SNR=4.0
comp=Z,5.9nm,0.7s
**YKA Yellowknife Ar 87.03 341** P **P 09 56 29.9 +0.6**
**LBTB Lobatse 87.24 115** P **P 09 56 31.6 +0.2**
LBTB IAmb IAmb 09 56 33.0
comp=Z,18nm,0.8s
**LBTB Lobatse 87.24 115** LR LR 10 34 11.3
comp=Z,69nm,19.0s,baz=168,slow=34
**LBTB Lobatse 87.24 115** P **P 09 56 31.6 +0.2**
LBTB pmax pmax
comp=Z,18nm,0.9s
**CEST Esterri de Car 88.00 44** IAmb IAmb 09 56 38.3
comp=Z,30nm,1.0s
**MAW Mawson 88.53 164** P **P 09 56 38.2 +1.8**
comp=Z,5.7nm,0.6s,baz=237,slow=7.3,SNR=22
MAW pP **pP 09 57 19.8 -0.8**
comp=Z,7.2nm,0.8s,baz=243,slow=6.6,SNR=4.0
comp=Z,5.7nm,0.6s
**ICESG Greenland Ices 88.69 10** *i*P **P 09 56 36.9 -0.5**
ICESG IAmb IAmb 09 56 38.7
comp=Z,48nm,0.9s
**DLBC Dease Lake 90.22 333** IAmb IAmb 09 56 46.7
comp=Z,11nm,1.1s
**CLF Chambon-Foret 90.95 40** P **P 09 56 46.9 -1.1**
**TATN Tataouine 90.97 56** IAmb IAmb 09 56 51.2
comp=Z,20nm,1.2s
**KEST Kesra 91.13 53** P **P 09 56 50.5 +1.2**
comp=Z,14nm,0.8s,baz=169,slow=3.2,SNR=11
comp=Z,14nm,0.8s
**EKA Eskdalemuir Ar 91.25 32** P **P 09 56 48.9 -0.4**
comp=Z,9.3nm,0.8s,baz=241,slow=6.2,SNR=17
comp=Z,9.3nm,0.8s
**SSB Saint Sauveur 91.27 43** P **P 09 56 49.9 +0.2**
**SSB Saint Sauveur 91.27 43** P **P 09 56 49.9 +0.2**
SSB pmax pmax
comp=Z,25nm,0.9s
**SUMG Summit 91.95 9** P **P 09 56 53.2 +0.6**
**SUMG Summit 91.95 9** P **P 09 56 53.3 +0.6**
SUMG pmax pmax
comp=Z,17nm,0.8s
**SUMG Summit 91.95 9** *i*P **P 09 56 53.0 +0.4**
SUMG IAmb IAmb 09 56 54.5
comp=Z,16nm,0.8s
**BNI Bardonecchia 92.58 44** IAmb IAmb 09 56 57.5
comp=Z,8.4nm,0.9s
**ECH Echery 94.05 41** IAmb IAmb 09 57 03.2
comp=Z,12nm,1.0s
**NEEM North Greenlan 95.11 4** *i*P **P 09 57 06.6 -0.3**
NEEM IAmb IAmb 09 57 09.3
comp=Z,14nm,1.0s
**ZCCA Zocca 95.21 45** P **P 09 57 05.8 -2.1**
**DAVA Damuels 95.45 42** *i*P **P 09 57 09.5 +0.5**
comp=Z,6.5nm,0.5s
**FUORN Ofenpass-Fuorn 95.47 43** IAmb IAmb 09 57 10.4
comp=Z,5.5nm,0.9s
**FETA Feichten 95.91 43** *i*P **P 09 57 11.4 +0.3**
comp=Z,8.3nm,1.0s
**RETA Reutte 96.08 42** *i*P **P 09 57 11.6 -0.1**
comp=Z,7.5nm,1.1s
**FDMO Fiordimonte 96.25 47** IAmb IAmb 09 57 13.8
comp=Z,7.8nm,1.0s
**MOTA Moosalm 96.25 42** *e*P **P 09 57 12.4 -0.2**
comp=Z,7.0nm,0.7s
**SQTA Sankt Quirin 96.28 43** *i*P **P 09 57 13.1 +0.4**
comp=Z,20nm,1.0s,SNR=5.5
**WATA Walderalm 96.56 43** *e*P **P 09 57 14.2 +0.2**
comp=Z,14nm,1.4s
**WTTA Wattenberg 96.57 43** *i*P **P 09 57 14.6 +0.5**
comp=Z,21nm,1.0s,SNR=8.5
**CIMO Cimolais 96.80 44** IAmb IAmb 09 57 17.1
comp=Z,7.3nm,1.2s
**ABTA Abfaltersbach 96.98 43** *i*P **P 09 57 16.4 +0.6**
comp=Z,15nm,1.1s,SNR=7.3
**GRF Grafenberg Arr 97.07 40** *e*Pdiff **P 09 57 16.3 +0.2**
**LESA Schwarzleotal 97.29 43** *i*P Pdif 09 57 18.0 +0.7
comp=Z,3.5nm,0.7s
**PRED Cave del Predi 97.59 44** IAmb IAmb 09 57 18.4
comp=Z,8.1nm,1.1s
**KBA Koelnbreinsper 97.63 43** *i*P **P 09 57 19.0 +0.1**
comp=Z,3.5nm,0.6s
**MYKA Terra Mystica 97.69 44** *e*P Pdif 09 57 20.0 +0.9
comp=Z,2.5nm,0.4s
**BIOA Bad Ischl, Aus 98.00 43** *e*Pdiff Pdif 09 57 20.9 +0.6
comp=Z,7.6nm,0.6s
**OBKA Obir 98.26 44** *i*Pdiff **P 09 57 21.6 0.0**
comp=Z,4.5nm,0.8s
**MOA Molln 98.45 43** *i*Pdiff **P 09 57 22.5 +0.2**
comp=Z,4.3nm,0.6s
**SOKA Soboth 98.62 44** *i*Pdiff **P 09 57 23.3 +0.1**
comp=Z,2.1nm,0.9s
**CLL Collm 98.64 39**⇓*i*Pdif Pdif 09 57 23.8 +0.8
comp=Z,9.0nm,0.9s
**CLL Collm 98.64 39**⇓*i*P Pdif 09 57 23.8 +0.8
CLL pmax pmax
comp=Z,9.0nm,0.9s
**ARSA Arzberg 99.10 43** *e*Pdiff **Pdif 09 57 25.7 +0.5**
comp=Z,2.6nm,0.7s
**ILAR Eielson Array 100.21 335** P **Pdif 09 57 32.3 +2.5**
comp=Z,0.7nm,1.0s,baz=101,slow=2.9,SNR=3.1
ILAR PP PP 10 01 29.8 -8.3
comp=Z,0.4nm,0.6s,baz=106,slow=7.7,SNR=5.9
**BR131 Keskin Array S 110.73 53**⇓*i*PKIKP **PKiKP 10 02 17.6 +1.1**
**BRTR Keskin Array B 110.73 53** PKKPab PKKPab 10 13 27.4 +2.0
comp=Z,0.8nm,0.7s,baz=136,slow=3.0,SNR=5.6
**KBZ Khabaz 117.77 49** PKP **PKiKP 10 02 30.5 +0.8**
comp=Z,2.4nm,0.8s,baz=305,slow=5.1,SNR=5.5
**KBZ Khabaz 117.77 49**⇓*i*PKIKP **PKiKP 10 02 31.0 +1.3**
**NCK Nalchik 118.29 50**⇑*i*PKIKP **PKPdf 10 02 29.4 -1.3**
**STKA Stephens Creek 122.82 211** PKP **PKPdf 10 02 40.5 +0.6**
comp=Z,1.6nm,0.6s,baz=128,slow=7.1,SNR=5.0
**SEY Seymchan 126.01 338**⇑*i*PKIKP **PKiKP 10 02 46.3 +1.0**
**AKTO Aktyubinsk 126.72 39** PKP **PKiKP 10 02 47.9 +0.8**
comp=Z,1.9nm,0.5s,baz=296,slow=3.8,SNR=3.5
**ABKAR Akbulak array 128.29 40 PKiKP 10 02 50.7 +0.4**
**PETK Petropavlovsk- 128.84 325** PKP **PKPdf 10 02 51.0 +0.4**
comp=Z,2.5nm,0.9s,baz=76,slow=4.4,SNR=4.8
**BVAR Borovoye Array 132.51 32** PKP **PKiKP 10 02 59.4 +0.7**
comp=Z,0.6nm,0.4s,baz=276,slow=1.3,SNR=5.6
BVAR SKPbc **SKPab 10 06 11.5 +1.4**
comp=Z,5.4nm,0.6s,baz=300,slow=2.9,SNR=14
**ASAR Alice Springs 133.40 210** PKhKP PKPpre 10 02 45.2
comp=Z,0.4nm,0.8s,baz=130,slow=2.4,SNR=5.1
ASAR PKP **PKPdf 10 03 00.7 +0.4**
comp=Z,2.1nm,0.7s,baz=129,slow=1.6,SNR=19
ASAR pPKP pPKPdf 10 03 46.1 -0.4
comp=Z,0.9nm,0.6s,baz=138,slow=2.7,SNR=2.7
ASAR PP **PP 10 05 24.4 -4.1**
comp=Z,2.1nm,1.0s,baz=146,slow=6.2,SNR=6.7
ASAR SKPbc **SKPbc 10 06 13.8 +1.1**
comp=Z,7.5nm,0.9s,baz=140,slow=3.5,SNR=20
**PMG Port Moresby 135.19 237** SKPbc **SKPbc 10 06 21.0 +2.2**
comp=Z,16nm,0.8s,baz=176,slow=3.6,SNR=3.8
**WRA Warramunga Arr 136.30 213** PKhKP PKPpre 10 02 54.0
comp=Z,0.5nm,0.7s,baz=149,slow=3.0,SNR=8.4
WRA PKP **PKPdf 10 03 06.5 +0.8**
comp=Z,5.0nm,0.6s,baz=147,slow=1.8,SNR=32
WRA pPKP pPKPdf 10 03 51.5 -0.5
comp=Z,3.4nm,0.8s,baz=150,slow=1.5,SNR=4.6
WRA SKPbc **SKPbc 10 06 22.9 +0.8**
comp=Z,10nm,0.9s,baz=146,slow=2.4,SNR=20
**WRAB Tennant Creek 136.30 213**⇑*i*PKIKP **PKPdf 10 03 05.6 -0.2**
**KURK Kurchatov 137.97 30**⇓*e*PKIKP **PKPdf 10 03 09.0 +1.2**
**KURBB Kurchatov Arra 137.99 30** PKhKP PKPpre 10 03 00.3
comp=Z,0.9nm,0.8s,baz=308,slow=2.7,SNR=5.0
KURBB PKP **PKPdf 10 03 09.1 +1.3**
comp=Z,1.6nm,0.8s,baz=310,slow=2.7,SNR=11
KURBB pPKP pPKPdf 10 03 54.2 +0.2
comp=Z,1.9nm,0.8s,baz=306,slow=2.5,SNR=4.7
KURBB SKPbc **SKPbc 10 06 28.1 +2.1**
comp=Z,3.8nm,0.8s,baz=302,slow=3.3,SNR=12
**ZALV Zalesovo Beam 138.27 23** PKhKP PKPpre 10 02 58.9
comp=Z,1.1nm,0.5s,baz=324,slow=1.3,SNR=2.7
ZALV PKP **PKPdf 10 03 09.3 +1.1**
comp=Z,5.2nm,0.6s,baz=264,slow=1.5,SNR=16
ZALV pPKP pPKPdf 10 03 55.5 +1.1
comp=Z,12nm,0.8s,baz=299,slow=3.1,SNR=6.2
ZALV SKPbc **SKPbc 10 06 28.7 +2.0**
comp=Z,9.0nm,0.7s,baz=316,slow=3.5,SNR=15
**AAK Ala-Archa 140.23 43** SKPbc **SKiKP 10 06 35.9 +0.7**
comp=Z,4.6nm,0.6s,baz=184,slow=2.1,SNR=7.2
**AAK Ala-Archa 140.23 43**⇑*i*PKIKP **PKiKP 10 03 15.1 +0.1**
**MK31 Makanchi Array 142.39 32**⇓*e*PKIKP **PKPdf 10 03 13.5 -2.5**
**MKAR Makanchi Array 142.39 32** PKhKP PKPpre 10 03 12.3
comp=Z,1.3nm,0.5s,baz=336,slow=2.7,SNR=14
MKAR pPKP pPKPdf 10 04 01.5 -0.7
comp=Z,1.5nm,0.6s,baz=318,slow=4.1,SNR=1.8
MKAR SKP 10 06 36.9
comp=Z,3.9nm,0.8s,baz=336,slow=2.7,SNR=8.8
**DGZ Jazzator, Alta 142.61 25**⇓*e*PKIKP **PKPdf 10 03 13.9 -2.6**
**KSH Kashi 142.66 46** PKP **PKPdf 10 03 14.0 -2.9**
**KLR Kul'dur 143.77 336** PKP PKPbc 10 03 16.9 +0.5
comp=Z,3.5nm,0.8s,baz=41,slow=4.3,SNR=5.0
KLR SKPbc **SKiKP 10 06 43.0 +1.1**
comp=Z,4.0nm,0.9s,baz=351,slow=6.3,SNR=5.4
**HEH HeiHe 144.40 341** *e*P **PKPab 10 03 18.1 +0.2**
HEH pmax pmax
comp=Z,16nm,0.6s
**KNGR Kungurtug, Tuv 145.10 15**⇓*e*PKIKP **PKPdf 10 03 22.3 +1.5**
**ZAK Zakamensk 146.42 8** *e*PKP2 **PKPbc 10 03 25.1 +0.5**
ZAK pmax pmax
comp=Z,8.0nm,1.1s
**GUMO Guam 146.78 269** PKPbc **PKPdf 10 03 25.0 +0.6**
comp=Z,73nm,0.8s,baz=188,slow=8.5,SNR=5.0
**WMQ Urumqi 147.19 31** *e*PKPbc **PKPdf 10 03 22.6 -1.8**
WMQ PKPab **PKPbc 10 03 27.9 +1.0**
WMQ LR LR
comp=N,1μm,17.7s
WMQ LR LR
comp=E,790nm,18.9s
WMQ LR LR
comp=Z,780nm,22.5s
**USRK Ussuriysk Ar. 147.63 331** PKPbc **PKPbc 10 03 29.3 +1.3**
comp=Z,6.4nm,0.6s,baz=20,slow=1.7,SNR=15
USRK pKPbc **pPKPab 10 04 13.7 -1.9**
comp=Z,16nm,0.7s,baz=49,slow=1.3,SNR=5.1
**BNX BinXian 148.31 337** ⇑P **PKPbc 10 03 30.3 +0.6**
BNX pmax pmax
comp=Z,8.0nm,0.8s
**MJAR Matsushiro Arr 148.93 314** PKPbc **PKPbc 10 03 32.7 +1.0**
comp=Z,3.3nm,0.5s,baz=71,slow=1.2,SNR=10
MJAR pPKPbc **pPKPbc 10 04 17.4 -0.2**
comp=Z,11nm,0.8s,baz=88,slow=2.0,SNR=6.6
**MAJO Matsushiro 148.93 314**⇓*e*PKHKP PKPpre 10 03 25.4
**SONM Songino Array 149.30 6** PKPbc **PKiKP 10 03 34.1 +0.7**
comp=Z,11nm,0.6s,baz=331,slow=1.9,SNR=29
SONM pPKPbc **pPKPab 10 04 19.4 -2.8**
comp=Z,15nm,0.8s,baz=324,slow=1.7,SNR=8.1
**ULN Ulaanbaatar 149.32 5**⇓*i*PKP2 **PKiKP 10 03 34.1 +0.6**
**HYB Hyderabad 149.44 85** *e*PKiKP **PKPbc 10 03 34.0 +0.6**
**GTA Gaotai 156.00 21** P **PKPab 10 04 06.8 +1.0**
GTA pP pPKPdf 10 04 27.1 +2.6
GTA sP 10 04 34.5
GTA pmax pmax
comp=Z,8.0nm,1.2s
**KAPI Kappang 156.10 203** PKPab **PKPab 10 04 08.5 +1.8**
comp=Z,7.0nm,0.3s,baz=197,slow=2.0,SNR=6.1
**HHC Hu-ho-hao-te 156.46 358** *e*P **PKPdf 10 03 38.8 +0.4**
**XAN Xi'an 163.21 5** ⇓PKP **PKPdf 10 03 41.5 -4.7**
**NJ2 Nanjing 163.46 335** *e*P **PKPdf 10 03 47.3 +0.9**
NJ2 pmax pmax
comp=Z,33nm,1.0s
**PZH PanZhiHua 167.66 40** PKP **PKPdf 10 03 48.8 -1.4**
**CMAR Chiang Mai Arr 168.85 82** pPKP **pPKPdf 10 04 39.1 +1.4**
comp=Z,0.7nm,0.3s,baz=5.7,slow=2.9,SNR=2.1
CMAR PKPab **PKPab 10 05 03.0 +0.2**
comp=Z,3.7nm,0.8s,baz=272,slow=6.1,SNR=11
**CMAR Chiang Mai Arr 168.85 82** PKP2 **PKPab 10 05 03.0 +0.2**
**QIZ Qiongzhong 178.09 22** PKP **PKPdf 10 03 53.3 -1.1**
QIZ pPKP **pPKPdf 10 04 37.8 -3.3**
QIZ PP **PP 10 09 36.6 +1.1**

*IDC **23** 09:48:35.6±8.0, 3°.87N×125°.54E, h88$^{km}$±75$^{km}$, mb3.7/9, mbtmp4.0/9, MS2.8/1, Error ellipse: s-maj=58.2km s-min=14.0km az=74.0*
*NEIC **23** 09:48:38.9±2.0, 3°.89N±0°.09×125°.93E±0°.09, h108$^{km}$±9$^{km}$, mb4.3/27, Error ellipse: s-maj=13.9km s-min=11.5km az=219.0*
*DJA **23** 09:48:38.9±0.5, 4°N±4°×12°6E±°, h69$^{km}$±6$^{km}$, M4.4/14, mb4.4/8, mB5.0/6, MLv4.4/14, Mw(mB)4.4/6*

**ISC 23 09:48:37.8±0.5, 3°.87N±0°.06×125°.86E±0°.07, h107$^{km}$, n58, σ1$^{s}$28/61, mb4.2/22, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SGSI** | **Sangihe** | **0.38** | **241** | P | **Pn** | **09 48 51.9** | **-1.7** |
| SGSI | | | | S | **Sn** | **09 49 02.6** | **-2.9** |
| **DAV** | **Davao City (W)** | **3.19** | **355** | LR | LR | 09 50 50.0 | |
| | comp=Z,135nm,19.9s,baz=290,slow=42 | | | | | | |
| **TNTI** | **Ternate** | **3.43** | **154** | | **Pn** | **09 49 29.1** | **-0.3** |
| **TNTI** | **Ternate** | **3.43** | **154** | P | **Pn** | **09 49 29.0** | **-0.4** |
| TNTI | | | | S | **Sn** | **09 50 06.5** | **-2.8** |
| **KMSI** | **Cibinong** | **3.77** | **210** | P | **Pn** | **09 49 32.5** | **-1.6** |
| **GTOI** | **Gorontalo** | **4.29** | **222** | P | **Pn** | **09 49 41.7** | **+0.6** |
| **TOLI2** | **Tolitoli** | **5.77** | **242** | | **Pn** | **09 50 01.2** | **+0.1** |
| TOLI2 | | | | | **Sn** | **09 51 02.6** | **-3.4** |
| **LUWI** | **Luwuk** | **5.78** | **212** | | **Pn** | **09 50 04.5** | **+3.4** |
| **LUWI** | **Luwuk** | **5.78** | **212** | P | **Pn** | **09 50 02.9** | **+1.8** |
| **SANI** | **Sanana** | **5.88** | **179** | P | **Pn** | **09 50 01.2** | **-1.4** |
| | 18nm,0.6s,1μm0.2nm | | | | | | |
| **MPSI** | **Mapaga** | **6.92** | **240** | P | **Pn** | **09 50 16.7** | **+0.1** |
| **NLAI** | **Namlea** | **7.17** | **170** | P | Pn | 09 50 14.9 | -5.2 |
| | 23nm,0.7s,799nm | | | | | | |
| **MYLDM** | **Lahad Datu** | **7.45** | **280** | | **Pn** | **09 50 26.4** | **+2.5** |
| **MSAI** | **Masohi** | **7.80** | **157** | P | **Pn** | **09 50 29.4** | **+0.8** |
| **FAKI** | **Fak Fak** | **9.29** | **136** | Pn | **Pn** | **09 50 49.2** | **+0.4** |
| **KKM** | **Kota Kinabalu** | **9.85** | **283** | Pn | **Pn** | **09 50 59.2** | **+2.7** |
| **MTN** | **Manton Dam** | **17.41** | **163** | P | **P** | **09 52 32.0** | **-1.8** |
| MTN | | | | IAmb | IAmb | 09 52 33.0 | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **KNRA** | **Kununurra** | **19.63** | **172** | P | **P** | **09 52 59.5** | **+1.3** |
| KNRA | | | | IAmb | IAmb | 09 53 06.0 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| **COEN** | **Coen** | **24.67** | **136** | P | **P** | **09 53 49.2** | **+0.3** |
| **WB0** | **Warramunga Arr** | **24.94** | **161** | P | **P** | **09 53 52.4** | **+1.1** |
| WB0 | | | | IAmb | IAmb | 09 54 20.3 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **25.08** | **161** | P | **P** | **09 53 53.7** | **+1.1** |
| **WRA** | **Warramunga Arr** | **25.09** | **161** | P | **P** | **09 53 52.1** | **-0.6** |
| **WRA** | **Warramunga Arr** | **25.09** | **161** | P | **P** | **09 53 53.3** | **+0.6** |
| | comp=Z,1.1nm,0.5s,baz=343,slow=9.9,SNR=19 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **25.09** | **161** | P | **P** | **09 53 52.5** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 09 54 27.8 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **25.17** | **161** | P | **P** | **09 53 53.5** | **+0.1** |
| WR0 | | | | IAmb | IAmb | 09 54 34.8 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **25.96** | **193** | P | **P** | **09 54 00.0** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 09 54 25.6 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **28.47** | **164** | P | **P** | **09 54 23.7** | **+0.7** |
| **ASAR** | **Alice Springs** | **28.47** | **164** | P | **P** | **09 54 24.2** | **+1.2** |
| **ASAR** | **Alice Springs** | **28.47** | **164** | P | **P** | **09 54 23.6** | **+0.7** |
| | comp=Z,0.4nm,0.5s,baz=342,slow=7.0,SNR=10 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 57 33.1** | **+0.5** |
| | comp=Z,0.5nm,0.4s,baz=349,slow=2.2,SNR=7.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **33.48** | **3** | P | **P** | **09 55 07.0** | **+0.2** |
| | comp=Z,1.1nm,0.6s,baz=178,slow=9.9,SNR=4.8 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **MORW** | **Morawa** | **34.08** | **195** | P | **P** | **09 55 13.4** | **+1.3** |
| MORW | | | | IAmb | IAmb | 09 55 18.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **HNR** | **Honiara** | **36.45** | **111** | P | **P** | **09 55 32.1** | **-0.6** |
| **JMM** | **Marumori** | **36.49** | **20** | P | **P** | **09 55 32.0** | **-0.7** |
| **BBOO** | **Buckleboo** | **37.74** | **166** | P | **P** | **09 55 42.6** | **-0.8** |
| **STKA** | **Stephens Creek** | **38.57** | **158** | P | **P** | **09 55 50.3** | **-0.1** |
| **STKA** | **Stephens Creek** | **38.57** | **158** | P | **P** | **09 55 50.5** | **+0.2** |
| | comp=Z,1.7nm,0.6s,baz=338,slow=10,SNR=5.1 | | | | | | |
| STKA | | | | PcP | **PcP** | **09 58 01.6** | **+0.7** |
| | comp=Z,1.0nm,0.4s,baz=330,slow=8.1,SNR=4.0 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **USA0B** | **Ussuriysk Ar** | **40.53** | **7** | P | **P** | **09 56 05.5** | **-0.8** |
| USA0B | | | | IAmb | IAmb | 09 56 22.4 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **40.53** | **7** | P | **P** | **09 56 06.5** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** | **40.53** | **7** | P | **P** | **09 56 06.2** | **-0.2** |
| | comp=Z,3.9nm,0.7s,baz=182,slow=5.9,SNR=10 | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **42.72** | **18** | P | **P** | **09 56 24.3** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **55.63** | **23** | P | **P** | **09 58 02.0** | **-0.5** |
| **MKAR** | **Makanchi Array** | **56.95** | **326** | P | **P** | **09 58 11.8** | **-0.3** |
| **MKAR** | **Makanchi Array** | **56.95** | **326** | P | **P** | **09 58 10.9** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=118,slow=6.8,SNR=6.4 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.16** | **328** | P | **P** | **09 58 39.4** | **-1.6** |
| | comp=Z,0.9nm,0.6s,baz=121,slow=7.1,SNR=6.4 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **66.73** | **327** | P | **P** | **09 59 16.6** | **-0.8** |
| | comp=Z,0.8nm,0.5s,baz=145,slow=8.1,SNR=4.2 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **71.50** | **321** | P | **P** | **09 59 47.5** | **+0.5** |
| **D19K** | **Kuna River** | **81.30** | **21** | P | **P** | **10 00 42.4** | **+0.3** |
| D19K | | | | IAmb | IAmb | 10 01 05.1 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **81.43** | **22** | P | **P** | **10 00 43.8** | **+1.1** |
| E19K | | | | IAmb | IAmb | 10 00 47.5 | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **SUA** | **Susitna One** | **83.46** | **29** | P | **P** | **10 00 53.2** | **-0.3** |
| **E22K** | **Anaktuvuk Pass** | **83.56** | **22** | P | **P** | **10 00 54.6** | **+0.8** |
| E22K | | | | IAmb | IAmb | 10 00 55.9 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **MLY** | **Manley** | **83.72** | **25** | P | **P** | **10 00 55.4** | **+0.7** |
| MLY | | | | IAmb | IAmb | 10 00 56.2 | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **RC01** | **Rabbit Creek A** | **83.92** | **29** | P | **P** | **10 00 55.9** | **+0.2** |
| **H23K** | **Yukon River** | **84.27** | **24** | P | **P** | **10 00 58.7** | **+1.3** |
| H23K | | | | IAmb | IAmb | 10 00 59.4 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **84.31** | **25** | P | **P** | **10 00 58.8** | **+1.3** |
| I23K | | | | IAmb | IAmb | 10 00 59.2 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **PWL** | **Port Wells** | **84.59** | **29** | P | **P** | **10 00 59.4** | **+0.3** |
| PWL | | | | IAmb | IAmb | 10 01 26.0 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **86.28** | **23** | P | **P** | **10 01 08.1** | **+0.6** |
| **BCAR** | **Beaver Creek A** | **87.65** | **27** | P | **P** | **10 01 14.6** | **+0.5** |
| **ARCES** | **ARCESS Array B** | **90.02** | **340** | P | **P** | **10 01 23.4** | **-1.7** |
| | comp=Z,1.2nm,0.6s,baz=80,slow=6.7,SNR=5.9 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |

**IDC 23 09:53:46.1±2.4, 54°.66N×83°.74E, h0$^{km}$, mbtmp2.7/2, ML2.5/2, Error ellipse: s-maj=19.9km s-min=11.6km az=169.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.95** | **138** | I | I | 09 59 00.0 | |
| | baz=318,slow=320,SNR=1.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.96** | **138** | Pg | Pg | 09 54 04.2 | -0.2 |
| | 2.6nm,0.3s,baz=322,slow=19,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 09 54 18.5 | |
| | 6.5nm,0.3s,baz=318,slow=29,SNR=19 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.14** | **220** | Pn | Pn | 09 55 05.2 | +0.9 |
| | 0.1nm,0.3s,baz=41,slow=15,SNR=1.8 | | | | | | |
| KURBB | | | | Lg | Lg | 09 56 30.5 | |
| | 0.1nm,0.3s,baz=42,slow=35,SNR=8.5 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.93** | **187** | Pn | Pn | 09 55 41.8 | -0.9 |
| | 0.2nm,0.3s,baz=6.7,slow=14,SNR=5.7 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*UPP **23** 10:01:10.4±2.9, 64°.61N×31°.06E, h0$^{km}$, ML1.8*
*IDC **23** 10:01:11.8±2.5, 64°.60N×30°.96E, h0$^{km}$, mbtmp3.1/3, ML2.1/3, Error ellipse: s-maj=38.6km s-min=8.6km az=103.0*
*KOLA **23** 10:01:11.4, 64°.59N×30°.44E, h0$^{km}$, ML2.3, Error ellipse: s-maj=20.1km s-min=16.4km az=160.0, Karelia*
*HEL **23** 10:01:11.5±0.1, 64°.68N×30°.66E, h0$^{km}$, ML2.1, Suspected explosion*

**ISC 23 10:01:11.4±0.8, 64°.68N±0°.02×30°.40E±0°.04, h0$^{km}$, n45, σ1$^{s}$65/71, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RMF** | **Romuvaara** | **0.51** | **203** | PG | **Pg** | **10 01 21.8** | **+0.7** |
| RMF | | | | SG | **Sg** | **10 01 29.1** | **+1.5** |
| RMF | | | | MSG | | 10 01 29.4 | |
| | comp=Z,24nm,0.2s | | | | | | |
| **MSF** | **Maaselka** | **1.36** | **336** | PG | **Pg** | **10 01 36.9** | **-0.5** |
| | baz=151 | | | | | | |
| MSF | | | | SB | **Sb** | **10 01 55.4** | **-0.2** |
| **KU6** | **Riekki** | **1.36** | **351** | PG | **Pg** | **10 01 36.5** | **-1.0** |
| | baz=164 | | | | | | |
| KU6 | | | | MSG | | 10 01 53.2 | |
| | comp=Z,16nm,0.2s | | | | | | |
| KU6 | | | | SB | **Sg** | **10 01 55.1** | **0.0** |
| **NIF** | **Nilsia** | **1.73** | **222** | PG | **Pb** | **10 01 43.8** | **-0.1** |
| | baz=40 

baz=85
OUF MSG 10 02 27.7
comp=Z,15nm,0.2s
OUF SG **Sg** **10 02 30.4 -0.2**
**RNF** **Rovaniemi** **2.65 319** PB **Pb** **10 01 57.7 -2.0**
RNF SG **Sg** **10 02 36.9 +0.5**
**OBF0** **Syolatti, Pyha** **2.66 269** PB **Pb** **10 01 59.5 -0.4**
OBF0 MSG 10 02 33.1
comp=Z,8.0nm,0.2s
OBF0 SG **Sg** **10 02 36.4 -0.4**
**SUF** **Sumiainen** **2.73 226** PB **Pb** **10 02 00.2 -0.8**
SUF MSG 10 02 34.2
comp=Z,4.2nm,0.2s
SUF SG **Sg** **10 02 39.5 +0.5**
**TOF** **Tornio** **2.90 302** PG **Pb** **10 02 05.0 +1.1**
TOF MSG 10 02 39.6
comp=Z,3.3nm,0.2s
TOF SB **Sb** **10 02 41.0 +1.1**
**VRF** **Varrio** **3.09 354** PN **Pn** **10 02 02.1 +0.7**
baz=167
VRF MSG 10 02 43.0
comp=Z,5.7nm,0.2s
VRF SG **Sb** **10 02 46.8 +1.4**
**APA0** **Apatity Array** **3.12 19** P **Pn** **10 02 02.4 +0.7**
APA0 S **Sn** **10 02 41.1 +1.5**
**KAF** **Kangasniemi** **3.17 217** PB **Pb** **10 02 06.4 -2.0**
KAF SG **Sg** **10 02 51.4 -1.7**
**KALU** **Kalix** **3.19 295** P **Pn** **10 02 05.0 +2.4**
KALU S **Sb** **10 02 46.3 -1.7**
**KALU** **Kalix** **3.19 295** PN **Pn** **10 02 04.8 +2.2**
KALU SG **Sg** **10 02 50.7 -2.9**
**SGF** **Sodankyl** **3.19 332** PB **Pn** **10 02 05.8 +3.1**
SGF SB **Sb** **10 02 47.6 -0.5**
**RUF** **Ruokolahti** **3.34 192** PN **Pn** **10 02 05.9 +1.2**
**KEF** **Keuruu** **3.54 227** *eP* **Pn** **10 02 08.0 +0.5**
**KEF** **Keuruu** **3.54 227** PB **Pn** **10 02 11.2 +3.7**
baz=40
**LVZ** **Lovozero** **3.66 26** SG **Sb** **10 03 03.6 +2.0**
**KLF** **Kolari** **3.67 317** PN **Pn** **10 02 12.4 +3.1**
**VAF** **Ylistaro** **3.79 248** *eP* **Pn** **10 02 14.5 +3.6**
**VAF** **Ylistaro** **3.79 248** PB **Pb** **10 02 17.3 -1.8**
**FIA0** **FINESS Array S** **3.80 213** PN **Pn** **10 02 12.3 +1.2**
baz=33
**FINES** **FINESS Array B** **3.80 213** Pn **Pn** **10 02 12.5 +1.5**
comp=Z,0.2nm,0.3s,baz=37,slow=14,SNR=6.3
FINES Pg **Pb** **10 02 19.0 -0.2**
comp=Z,0.5nm,0.3s,baz=35,slow=15,SNR=9.4
FINES Sn **Sn** **10 02 56.1 -0.3**
comp=Z,0.3nm,0.3s,baz=34,slow=21,SNR=2.9
FINES Lg Lg 10 03 12.7
comp=Z,0.7nm,0.3s,baz=33,slow=28,SNR=3.5
comp=Z,1.7nm,0.9s
**PAJU** **Pajala** **3.80 311** P **Pn** **10 02 13.4 +2.3**
**PAJU** **Pajala** **3.80 311** PN **Pn** **10 02 12.8 +1.7**
PAJU SG **Sg** **10 03 12.8 -0.6**
**SJUU** **Sjulsmark** **3.81 286** P **Pn** **10 02 13.8 +2.6**
SJUU S **Sb** **10 03 03.1 -2.8**
**RAJF** **Raja-Jooseppi** **3.90 349** PN **Pn** **10 02 12.8 +0.4**
RAJF SG **Sb** **10 03 10.8 +2.3**
**HARU** **Harads** **4.21 295** P **Pn** **10 02 20.1 +3.4**
**UMAU** **Umeaa** **4.31 264** PN **Pn** **10 02 19.1 +1.0**
baz=71
UMAU SG **Sg** **10 03 29.1 -0.5**
**HEF** **Hetta** **4.61 327** PN **Pn** **10 02 24.2 +2.0**
HEF SG **Sg** **10 03 34.9 -4.2**
**PRVG** **Vayda Guba** **5.13 7** S **Sn** **10 03 27.6 -1.6**
**ARCES** **ARCESS Array B** **5.23 341** P **Pn** **10 02 30.9 +0.1**
ARCES S **Sn** **10 03 30.4 -1.2**
**ARCES** **ARCESS Array B** **5.23 341** Pn **Pn** **10 02 30.8 +0.1**
comp=Z,0.2nm,0.3s,baz=152,slow=13,SNR=20
ARCES Sn **Sn** **10 03 31.0 -0.7**
comp=Z,0.2nm,0.3s,baz=153,slow=24,SNR=1.5
ARCES Lg Lg 10 03 55.6
comp=Z,0.5nm,0.3s,baz=154,slow=31,SNR=6.1
comp=Z,0.4nm,0.3s
**MEF** **Metsahovi** **5.28 215** *eP* **Pn** **10 02 30.0 -1.3**
**RAF** **Rauma** **5.39 231** *eP* **Pn** **10 02 33.4 +0.5**
**VADS** **Vadso** **5.48 356** S **Sn** **10 03 36.2 -1.4**
**I37NO** **I37NO** **6.39 319** I I 10 38 40.0
baz=126,slow=326,SNR=4.8
**AAL** **Aland** **6.61 232** *eP* **Pn** **10 02 50.2 +0.7**
**HFS** **Hagfors** **8.98 247** Pn **Pn** **10 03 22.2 +0.1**
comp=Z,0.2nm,0.3s,baz=54,slow=13,SNR=2.0
comp=Z,4.7nm,1.1s

**IDC 23 10:04:18.8±49.0, 16°19S×174°58W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=938.6km s-min=181.7km az=78.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **42.66** | **240** | P | P | 10 12 17.3 | -0.1 |
| | 0.8nm,0.5s,baz=78,slow=14,SNR=1.5 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.56** | **258** | P | P | 10 13 04.0 | -0.3 |
| | 0.3nm,0.3s,baz=94,slow=6.9,SNR=28 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **48.79** | **253** | P | P | 10 13 06.1 | +0.1 |
| | 3.6nm,0.5s,baz=88,slow=8.7,SNR=104 | | | | | | |
| | 3.6nm,0.5s | | | | | | |

**IDC 23 10:08:05.2±4.7, 15°82S×173°83W, h0km, mb3.7/3, mbtmp3.7/3, MS2.9/2, Error ellipse: s-maj=218.8km s-min=34.9km az=139.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **8.01** | **255** | LR | LR | 10 11 59.1 | |
| | comp=Z,65nm,20.4s,baz=74,slow=29 | | | | | | |
| **RAR** | **Rarotonga** | **14.37** | **114** | LR | LR | 10 15 40.6 | |
| | comp=Z,47nm,18.3s,baz=242,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.35** | **257** | P | P | 10 16 56.4 | -0.3 |
| | 0.3nm,0.5s,baz=94,slow=6.6,SNR=12 | | | | | | |
| WRA | | | | PcP | PcP | 10 18 19.5 | 0.0 |
| | 0.3nm,0.8s,baz=90,slow=4.2,SNR=2.3 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **49.59** | **252** | P | P | 10 16 58.2 | -0.3 |
| | 1.8nm,0.6s,baz=88,slow=8.4,SNR=29 | | | | | | |
| | 1.8nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **82.93** | **11** | P | P | 10 20 31.1 | -0.4 |
| | 0.2nm,0.6s,baz=224,slow=8.8,SNR=5.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **146.21** | **320** | PKPbc | PKPbc | 10 27 48.1 | 0.0 |
| | 0.4nm,0.6s,baz=8.6,slow=2.3,SNR=4.1 | | | | | | |

*AEIC **23** 10:10:38.1±1.1, 69°56N±0°03×144°5W±0°1, h12km±5km, ML3.7, ML3.8/98(NEIC), Error ellipse: s-maj=6.0km s-min=4.1km az=119.0*
*IDC **23** 10:10:39.4±0.9, 69°66N×145°36W, h0km, mb3.5/8, mbtmp3.5/10, ML3.4/2, MS3.1/5, Error ellipse: s-maj=28.0km s-min=14.4km az=76.0*
*NEIC **23** 10:10:40.0±1.1, 69°60N±0°05×144°43W±0°09, h10km±1km, Error ellipse: s-maj=8.1km s-min=5.0km az=8.0*
**ISC 23 10:10:40.0±0.6, 69°56N±0°04×144°51W±0°02, h10km, n115, σ1s10/115, mb3.7/8, MS3.0/3, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.29** | **77** | | **Pg** | **10 10 43.5** | **-2.3** |
| C27K | | | | | **Sg** | **10 10 47.6** | **-1.9** |
| **D25K** | **Kavik River** | **0.70** | **251** | Pg | **Pg** | **10 10 51.2** | **-2.4** |
| D25K | | | | | **Sg** | **10 11 02.2** | **-0.5** |
| **D27M** | **Malcolm River** | **1.29** | **103** | Pn | **Pn** | **10 11 02.3** | **-1.8** |
| **D27M** | **Malcolm River** | **1.29** | **103** | | **Sg** | **10 11 21.1** | **-0.4** |
| **C24K** | **Franklin Bluff** | **1.48** | **278** | | **Pb** | **10 11 06.9** | **-0.6** |
| C24K | | | | | **Sg** | **10 11 26.5** | **-0.9** |
| **D24K** | **Happy Valley** | **1.58** | **257** | Pn | **Pb** | **10 11 08.5** | **-0.8** |
| D24K | | | | | **Sg** | **10 11 31.3** | **+0.5** |
| **E27K** | **Coleen River** | **1.74** | **141** | | **Pb** | **10 11 10.4** | **-1.5** |
| E27K | | | | | **Sb** | **10 11 33.8** | **0.0** |
| **F26K** | **Sheenjek River** | **1.88** | **176** | | **Pb** | **10 11 12.9** | **-1.5** |
| F26K | | | | | **Sb** | **10 11 36.9** | **-1.1** |
| **F25K** | **Christian River** | **2.02** | **192** | | **Pb** | **10 11 15.0** | **-1.8** |
| F25K | | | | IAML | | 10 11 45.7 | |
| | comp=N,668nm,0.8s | | | | | | |
| F25K | | | | IAML | | 10 11 47.4 | |
| | comp=E,760nm,1.4s | | | | | | |
| **F25K** | **Christian Rive** | **2.02** | **192** | | **Sb** | **10 11 41.7** | **-0.3** |
| **E28M** | **Babbage River** | **2.03** | **116** | Pn | **Pn** | **10 11 14.4** | **+0.2** |
| E28M | | | | | **Sb** | **10 11 41.3** | **-0.8** |
| **TOLK** | **Toolik Lake Re** | **2.04** | **245** | Pn | **Pb** | **10 11 15.4** | **-1.7** |
| TOLK | | | | IAML | | 10 11 54.0 | |
| | comp=N,724nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 10 11 54.9 | |
| | comp=E,752nm,1.1s | | | | | | |
| **D28M** | **Stokes Point** | **2.05** | **94** | | **Pb** | **10 11 16.1** | **-1.1** |
| **D28M** | **Stokes Point** | **2.05** | **94** | IAML | | 10 11 55.7 | |
| | comp=E,742nm,0.9s | | | | | | |
| D28M | | | | IAML | | 10 11 59.3 | |
| | comp=N,714nm,1.6s | | | | | | |
| **E24K** | **Your Creek** | **2.08** | **226** | | **Pb** | **10 11 16.0** | **-1.8** |
| E24K | | | | | **Sg** | **10 11 45.3** | **-1.4** |
| E24K | | | | IAML | | 10 11 53.9 | |
| | comp=E,514nm,1.3s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.14** | **181** | | **Pb** | **10 11 16.8** | **-2.1** |
| **C23K** | **Itkillik River** | **2.15** | **280** | | **Pn** | **10 11 16.2** | **+0.4** |
| **D23K** | **Nanushuk River** | **2.28** | **258** | Pn | **Pn** | **10 11 18.0** | **+0.4** |
| D23K | | | | IAML | | 10 12 05.1 | |
| | comp=N,536nm,0.9s | | | | | | |
| D23K | | | | IAML | | 10 12 06.5 | |
| | comp=E,547nm,1.0s | | | | | | |
| **E23K** | **Chandalar** | **2.39** | **233** | Pn | **Pn** | **10 11 19.4** | **+0.2** |
| E23K | | | | IAML | | 10 12 00.5 | |
| | comp=E,440nm,0.7s | | | | | | |
| E23K | | | | IAML | | 10 12 05.1 | |
| | comp=N,417nm,1.0s | | | | | | |
| **F24K** | **Squaw Lake** | **2.40** | **213** | Pn | **Pn** | **10 11 19.9** | **+0.6** |
| F24K | | | | IAML | | 10 11 56.7 | |
| | comp=N,312nm,0.6s | | | | | | |
| F24K | | | | IAML | | 10 12 01.8 | |
| | comp=E,356nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.59** | **137** | Pn | **Pn** | **10 11 21.8** | **-0.1** |
| **G26K** | **Porcupine Rive** | **2.64** | **174** | | **Pn** | **10 11 22.4** | **-0.1** |
| **E29M** | **Blow River** | **2.66** | **113** | | **Pn** | **10 11 23.9** | **+1.1** |
| **G25K** | **Bearman Lake** | **2.87** | **193** | | **Pn** | **10 11 25.5** | **-0.2** |
| **G27K** | **Doyon Strip** | **2.96** | **158** | | **Pn** | **10 11 27.3** | **+0.3** |
| **D22K** | **Ayikyak River** | **3.00** | **261** | | **Pn** | **10 11 27.6** | **+0.1** |
| **E22K** | **Anaktuvuk Pass** | **3.01** | **245** | | **Pn** | **10 11 27.6** | **-0.2** |
| E22K | | | | IAML | | 10 12 21.8 | |
| | comp=N,218nm,0.7s | | | | | | |
| **FYU** | **Fort Yukon** | **3.02** | **186** | Pn | **Pn** | **10 11 29.2** | **+1.4** |
| **G24K** | **Hadweenzic Riv** | **3.08** | **203** | | **Pn** | **10 11 28.6** | **-0.1** |
| G24K | | | | IAML | | 10 12 23.4 | |
| | comp=E,377nm,1.4s | | | | | | |
| **COLD** | **Coldfoot** | **3.15** | **225** | | **Pn** | **10 11 30.2** | **+0.7** |
| **B22K** | **Teshekpuk Lake** | **3.17** | **288** | | **Pn** | **10 11 30.5** | **+0.7** |
| **H25L** | **Birch Creek** | **3.35** | **189** | | **Pn** | **10 11 33.0** | **+0.8** |
| **F22K** | **John River** | **3.50** | **237** | | **Pn** | **10 11 34.6** | **+0.3** |
| **H27K** | **Steamboat Moun** | **3.53** | **160** | | **Pn** | **10 11 35.1** | **+0.3** |
| **B21K** | **Ikpikpuk River** | **3.54** | **276** | | **Pn** | **10 11 35.0** | **+0.1** |
| **B21K** | **Ikpikpuk River** | **3.54** | **276** | IAML | | 10 12 45.9 | |
| | comp=E,277nm,0.7s | | | | | | |
| **E21K** | **Killik River** | **3.59** | **256** | | **Pn** | **10 11 35.2** | **-0.5** |
| **E21K** | **Killik River** | **3.59** | **256** | IAML | | 10 12 46.0 | |
| | comp=E,215nm,1.1s | | | | | | |
| E21K | | | | IAML | | 10 12 48.1 | |
| | comp=N,230nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **3.59** | **135** | | **Pn** | **10 11 36.1** | **+0.4** |
| G29M | | | | IAML | | 10 12 44.0 | |
| | comp=N,225nm,1.4s | | | | | | |
| G29M | | | | IAML | | 10 12 49.4 | |
| | comp=E,194nm,1.6s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.66** | **268** | | **Pn** | **10 11 36.9** | **+0.3** |
| **F30M** | **Barrier River** | **3.75** | **117** | | **Pn** | **10 11 38.5** | **+0.7** |
| **A22K** | **Sinclair Lake** | **3.83** | **297** | | **Pn** | **10 11 39.5** | **+0.7** |
| **H24K** | **Noodor Dome** | **3.96** | **201** | | **Pn** | **10 11 40.6** | **0.0** |
| H24K | | | | IAML | | 10 12 49.1 | |
| | comp=E,160nm,0.9s | | | | | | |
| H24K | | | | IAML | | 10 13 01.5 | |
| | comp=N,127nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.07** | **239** | Pn | **Pn** | **10 11 42.2** | **0.0** |
| F21K | | | | IAML | | 10 12 52.6 | |
| | comp=N,122nm,0.8s | | | | | | |
| F21K | | | | IAML | | 10 12 56.9 | |
| | comp=E,161nm,1.2s | | | | | | |
| **H29M** | **Whitestone** | **4.08** | **142** | Pn | **Pn** | **10 11 43.0** | **+0.7** |
| H29M | | | | IAML | | 10 13 03.1 | |
| | comp=E,126nm,1.4s | | | | | | |
| H29M | | | | IAML | | 10 13 12.0 | |
| | comp=N,104nm,0.9s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.08** | **186** | Pn | **Pn** | **10 11 43.3** | **+0.8** |
| PRP | | | | IAML | | 10 12 34.9 | |
| | comp=E,138nm,0.6s | | | | | | |
| PRP | | | | IAML | | 10 12 50.7 | |
| | comp=N,116nm,0.8s | | | | | | |
| **I27K** | **Kandik River** | **4.13** | **163** | | **Pn** | **10 11 43.6** | **+0.6** |
| **INK** | **Inuvik** | **4.16** | **102** | | **Pn** | **10 11 43.2** | **-0.1** |
| **I26K** | **Coal Creek Min** | **4.31** | **172** | | **Pn** | **10 11 45.9** | **+0.4** |
| **B20K** | **Meade River** | **4.41** | **282** | | **Pn** | **10 11 47.3** | **+0.4** |
| **D20K** | **Etivluk River** | **4.41** | **265** | | **Pn** | **10 11 47.5** | **+0.6** |
| **E20K** | **Nigu River** | **4.42** | **258** | | **Pn** | **10 11 47.7** | **+0.7** |
| **A21K** | **Barrow** | **4.44** | **299** | | **Pn** | **10 11 48.6** | **+1.5** |
| **I28M** | **Miner Creek** | **4.49** | **155** | Pn | **Pn** | **10 11 48.5** | **+0.5** |
| I28M | | | | IAML | | 10 12 44.0 | |
| | comp=E,85nm,0.5s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.50** | **113** | | **Pn** | **10 11 48.6** | **+0.6** |
| F31M | | | | IAML | | 10 13 11.9 | |
| | comp=E,82nm,1.4s | | | | | | |
| F31M | | | | IAML | | 10 13 13.6 | |
| | comp=N,62nm,1.6s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **4.52** | **219** | | **Pn** | **10 11 47.5** | **-0.8** |
| **G21K** | **Allakaket** | **4.56** | **232** | | **Pn** | **10 11 48.0** | **-0.8** |
| **G21K** | **Allakaket** | **4.56** | **232** | IAML | | 10 13 13.1 | |
| | comp=E,116nm,0.9s | | | | | | |
| G21K | | | | IAML | | 10 13 16.7 | |
| | comp=N,123nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **205** | | **Pn** | **10 11 52.3** | **0.0** |
| **MDM** | **Murphy Dome** | **4.84** | **199** | | **Pn** | **10 11 53.2** | **+0.4** |
| MDM | | | | IAML | | 10 13 16.2 | |
| | comp=N,60nm,0.7s | | | | | | |
| MDM | | | | IAML | | 10 13 22.9 | |
| | comp=E,77nm,1.0s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.87** | **244** | | **Pn** | **10 11 54.0** | **+0.9** |
| F20K | | | | IAML | | 10 13 24.5 | |
| | comp=E,50nm,1.2s | | | | | | |
| F20K | | | | IAML | | 10 13 35.7 | |
| | comp=N,96nm,1.1s | | | | | | |
| **IL31** | | **4.90** | **192** | | **Pn** | **10 11 54.4** | **+0.9** |
| **ILAR** | **Eielson Array** | **4.90** | **192** | Pn | **Pn** | **10 11 54.0** | **+0.4** |
| | comp=N,1.8nm,0.3s,baz=8.1,slow=14,SNR=86 | | | | | | |
| ILAR | | | | Pg | **Pg** | **10 12 12.4** | **-1.3** |
| | comp=N,1.4nm,0.3s,baz=11,slow=16,SNR=8.7 | | | | | | |
| ILAR | | | | Sn | **Sn** | **10 12 50.4** | **+0.1** |
| | comp=N,2.2nm,0.3s,baz=5.0,slow=24,SNR=6.0 | | | | | | |
| ILAR | | | | Lg | Lg | 10 13 14.2 | |
| | comp=N,4.1nm,0.3s,baz=9.1,slow=29,SNR=6.5 | | | | | | |
| | comp=N,5.9nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **4.98** | **184** | | **Pn** | **10 11 55.3** | **+0.5** |
| J25K | | | | IAML | | 10 13 26.4 | |
| | comp=E,95nm,1.2s | | | | | | |
| J25K | | | | IAML | | 10 13 27.9 | |
| | comp=N,54nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **5.00** | **264** | | **Pn** | **10 11 55.2** | **+0.2** |
| **H21K** | **Melozitna Rive** | **5.04** | **223** | | **Pn** | **10 11 56.1** | **+0.6** |
| H21K | | | | IAML | | 10 13 37.5 | |
| | comp=N,66nm,1.3s | | | | | | |
| **J26L** | **Joseph Creek** | **5.10** | **175** | | **Pn** | **10 11 56.8** | **+0.4** |
| J26L | | | | IAML | | 10 13 24.6 | |
| | comp=E,82nm,1.3s | | | | | | |
| J26L | | | | IAML | | 10 13 25.2 | |
| | comp=N,42nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.10** | **196** | | **Pn** | **10 11 56.6** | **+0.3** |
| CCB | | | | IAML | | 10 13 36.9 | |
| | comp=E,48nm,1.2s | | | | | | |
| **E19K** | **Redstone River** | **5.13** | **252** | | **Pn** | **10 11 56.2** | **-0.6** |
| **E19K** | **Redstone River** | **5.13** | **252** | IAML | | 10 13 28.2 | |
| | comp=N,78nm,1.3s | | | | | | |
| E19K | | | | IAML | | 10 13 37.9 | |
| | comp=E,79nm,0.9s | | | | | | |
| **MLY** | **Manley** | **5.15** | **211** | Pn | **Pn** | **10 11 57.4** | **+0.3** |
| MLY | | | | IAML | | 10 13 37.6 | |
| | comp=E,55nm,1.6s | | | | | | |
| MLY | | | | IAML | | 10 13 38.0 | |
| | comp=N,51nm,1.5s | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **197** | | **Pn** | **10 11 59.7** | **+0.6** |
| WRH | | | | IAML | | 10 13 33.6 | |
| | comp=E,53nm,0.9s | | | | | | |
| WRH | | | | IAML | | 10 13 40.4 | |
| | comp=N,46nm,0.9s | | | | | | |
| **I30M** | **Mount Dempster** | **5.37** | **140** | Pn | **Pn** | **10 11 59.9** | **-0.2** |
| I30M | | | | IAML | | 10 13 02.5 | |
| | comp=E,38nm,0.6s | | | | | | |
| **SCRK** | **Sand Creek** | **5.62** | **178** | Pn | **Pn** | **10 12 04.5** | **+1.0** |
| **K27K** | **Chicken** | **5.64** | **169** | | **Pn** | **10 12 04.4** | **+0.6** |
| **F19K** | **Shaleruckik Mo** | **5.65** | **247** | Pn | **Pn** | **10 12 01.8** | **-2.0** |
| **A19K** | **Wainwright** | **5.75** | **284** | | **Pn** | **10 12 05.6** | **+0.4** |
| **K24K** | **Donnelly Dome** | **5.81** | **186** | | **Pn** | **10 12 07.3** | **+1.3** |
| **DAWY** | **Dawson** | **5.88** | **157** | | **Pn** | **10 12 07.8** | **+0.8** |
| **J30M** | **Hart River** | **5.94** | **144** | Pn | **Pn** | **10 12 07.8** | **-0.1** |
| **DOT** | **Dot Lake** | **5.94** | **178** | | **Pn** | **10 12 08.9** | **+1.0** |
| **C18K** | **Utukok River** | **6.04** | **269** | Pn | **Pn** | **10 12 08.7** | **-0.5** |
| **BPAW** | **Bear Paw Mtn.** | **6.05** | **208** | Pn | **Pn** | **10 12 09.6** | **+0.2** |
| **E18K** | **Tukpahlearik C** | **6.29** | **258** | | **Pn** | **10 12 12.6** | **-0.1** |
| **K29M** | **Barlow Dome** | **6.37** | **151** | Pn | **Pn** | **10 12 15.3** | **+1.4** |
| **F18K** | **Selawik** | **6.39** | **250** | | **Pn** | **10 12 13.7** | **-0.4** |
| **G18K** | **Tagagawik** | **6.51** | **242** | Pn | **Pn** | **10 12 15.6** | **-0.1** |
| **J20K** | **Nowinta River** | **6.60** | **220** | | **Pn** | **10 12 17.1** | **+0.2** |
| **BCAR** | **Beaver Creek A** | **6.62** | **169** | | **Pn** | **10 12 17.6** | **+0.4** |
| **PAX** | **Paxson** | **6.63** | **184** | | **Pn** | **10 12 19.2** | **+1.7** |
| **C17K** | **DeLong Mountai** | **6.79** | **270** | | **Pn** | **10 12 18.0** | **-1.4** |
| **E17K** | **Hotham Inlet** | **6.87** | **257** | | **Pn** | **10 12 19.9** | **-0.7** |
| **D17K** | **Noatak River** | **7.03** | **263** | | **Pn** | **10 12 21.3** | **-1.5** |
| **WAT6** | **Susitna Watana** | **7.13** | **192** | | **Pn** | **10 12 26.9** | **+2.5** |
| **C36M** | **Paulatuk** | **7.18** | **82** | | **Pn** | **10 12 22.3** | **-2.5** |
| **M27K** | **Edge Creek, AK** | **7.31** | **170** | | **Pn** | **10 12 28.0** | **+1.1** |
| **G17K** | **Kiwalik Mounta** | **7.39** | **244** | | **Pn** | **10 12 27.6** | **-0.2** |
| **C16K** | **Lisburne Hills** | **7.61** | **270** | | **Pn** | **10 12 30.0** | **-0.7** |
| **YUK2** | **White River** | **7.95** | **167** | | **Pn** | **10 12 36.6** | **+1.1** |
| **L20K** | **Farewell, AK** | **8.06** | **213** | | **Pn** | **10 12 36.6** | **-0.3** |
| **L18K** | **Granite Mounta** | **8.88** | **220** | | **Pn** | **10 12 48.3** | **+0.2** |
| **DLBC** | **Dease Lake** | **12.79** | **144** | LR | LR | 10 18 56.2 | |
| | comp=E,79nm,18.1s,baz=286,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.92** | **106** | Pn | **Pn** | **10 13 57.2** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=323,slow=11,SNR=2.4 | | | | | | |
| YKA | | | | Sn | Sn | 10 16 20.9 | -10 |
| | comp=E,0.2nm,0.3s,baz=315,slow=22,SNR=3.6 | | | | | | |
| | comp=E,0.8nm,0.5s | | | | | | |
| **BBB** | **Bella Bella** | **19.05** | **148** | LR | LR | 10 22 07.0 | |
| | comp=E,30nm,19.6s,baz=292,slow=36 | | | | | | |
| **NEW** | **Newport** | **25.18** | **134** | LR | LR | 10 25 25.3 | |
| | comp=E,40nm,19.6s,baz=72,slow=35 | | | | | | |
| **TIXI** | **Tiksi** | **26.54** | **315** | LR | LR | 10 29 43.7 | |
| | comp=E,55nm,18.5s,baz=184,slow=44 | | | | | | |
| **MA2** | **Magadan** | **28.08** | **282** | LR | LR | 10 28 44.4 | |
| | comp=E,38nm,18.1s,baz=171,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.28** | **128** | P | **P** | **10 17 12.0** | **+3.3** |
| | comp=E,0.2nm,0.6s,baz=14,slow=7.6,SNR=2.0 | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.20** | **142** | P | **P** | **10 17 28.6** | **+3.1** |
| | comp=E,0.1nm,0.4s,baz=349,slow=1.8,SNR=2.5 | | | | | | |
| | comp=E,0.1nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.50** | **128** | P | **P** | **10 19 10.9** | **+3.7** |
| | comp=E,0.1nm,0.6s,baz=339,slow=4.8,SNR=1.8 | | | | | | |
| | comp=E,0.1nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **49.11** | **6** | P | **P** | **10 19 26.5** | **-0.3** |
| | comp=E,1.9nm,0.9s,baz=2.7,slow=5.8,SNR=4.2 | | | | | | |
| | comp=E,1.9nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **49.66** | **14** | P | **P** | **10 19 31.5** | **+0.4** |
| | comp=E,0.6nm,0.4s,baz=340,slow=8.1,SNR=1.7 | | | | | | |
| | comp=E,0.6nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.69** | **325** | P | **P** | **10 19 44.9** | **-1.6** |
| | comp=E,0.5nm,0.4s,baz=4.3,slow=5.8,SNR=2.0 | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.07** | **328** | P | **P** | **10 20 18.2** | **-0.3** |
| | comp=E,0.7nm,0.6s,baz=21,slow=8.0,SNR=7.1 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.00** | **324** | P | **P** | **10 20 38.9** | **-0.3** |
| | comp=E,0.3nm,0.7s,baz=30,slow=6.0,SNR=2.5 | | | | | | |
| | comp=E,0.3nm,0.7s | | | | | | |

**KRSC 23 10:22:50.7±1.6, 55°18N×166°60E, h33km±11km, MlI3.6, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BKI** | **Bering** | **0.36** | **275** | *eP* | Pn | 10 22 59.9 | +0.3 |
| BKI | | | | *eS* | Sn | 10 23 05.8 | +0.5 |
| **ZLN** | **Zelenaya** | **3.40** | **287** | *eP* | Pn | 10 23 44.4 | +3.1 |
| ZLN | | | | *eS* | Sn | 10 24 24.3 | +3.8 |
| **SRKR** | **Sorokina** | **3.40** | **298** | *eS* | Sn | 10 24 25.7 | +5.2 |
| **BZGR** | **Bezymyannyi-Gr** | **3.44** | **285** | *eP* | Pn | 10 23 45.4 | +3.4 |
| BZGR | | | | *eS* | Sn | 10 24 24.5 | +2.9 |
| **CIRR** | **Tsirk** | **3.45** | **288** | *eS* | Sb | 10 24 27.5 | -5.0 |
| **BZP** | **Bezymyannyi-Pe** | **3.52** | **285** | *eP* | Pn | 10 23 46.7 | +3.5 |
| BZP | | | | *eS* | Sn | 10 24 27.5 | +3.8 |
| **KLY** | **Klyuchi** | **3.55** | **291** | *eP* | Pn | 10 23 44.8 | +1.5 |
| KLY | | | | *eS* | Sn | 10 24 27.2 | +3.1 |
| **BZMR** | **Bezymyannaya** | **3.55** | **285** | *eP* | Pn | 10 23 47.5 | +4.0 |
| **BZWR** | **Bezymyannyi-We** | **3.56** | **285** | *eP* | Pn | 10 23 47.6 | +4.0 |
| BZWR | | | | *eS* | Sn | 10 24 28.1 | +3.6 |
| **TUMD** | **Tumrok D** | **3.56** | **273** | *eP* | Pn | 10 23 47.2 | +3.8 |
| TUMD | | | | *eS* | Sn | 10 24 28.9 | +4.6 |
| **KRSR** | **Krestovskiy** | **3.57** | **289** | *eP* | Pn | 10 23 48.4 | +4.7 |
| KRSR | | | | *eS* | Sb | 10 24 30.9 | -5.1 |
| **KIRR** | **Kirishev** | **3.64** | **285** | *eP* | Pn | 10 23 48.4 | +3.7 |
| KIRR | | | | *eS* | Sn | 10 24 31.8 | +5.2 |
| **KMNR** | **Kamenistaya** | **3.67** | **282** | *eP* | Pn | 10 23 49.6 | +4.5 |
| KMNR | | | | *eS* | Sb | 10 24 33.0 | -5.8 |
| **TUMR** | **Tumrok** | **3.70** | **274** | *eP* | Pn | 10 23 49.6 | +4.1 |
| **KPT** | **Kopyto** | **3.71** | **285** | *eP* | Pn | 10 23 49.5 | +3.9 |
| **KOZ** | **Kozyrevsk** | **3.92** | **286** | *eP* | Pn | 10 23 52.7 | +4.3 |
| **SPN** | **Mys Shipunski** | **4.39** | **244** | *eP* | Pn | 10 23 59.0 | +4.1 |
| SPN | | | | *eS* | Sn | 10 24 48.5 | +3.6 |
| **NLC** | **Nalytchevo** | **4.71** | **248** | *eS* | Sn | 10 24 56.3 | +3.6 |
| **SMAR** | **Somma** | **4.96** | **250** | *eP* | Pn | 10 24 07.8 | +4.9 |
| SMAR | | | | *eS* | Sn | 10 25 03.6 | +4.3 |
| **KRER** | **Koryakskii** | **4.97** | **251** | *eP* | Pn | 10 24 08.4 | +5.3 |
| KRER | | | | *eS* | Sn | 10 25 04.0 | +4.5 |
| **UGLR** | **Uglovaya** | **4.97** | **250** | *eP* | Pn | 10 24 08.2 | +5.2 |
| UGLR | | | | *eS* | Sn | 10 25 04.6 | +5.2 |
| **AVH** | **Avacha** | **5.00** | **251** | *eS* | Sn | 10 25 05.4 | +5.6 |
| **KOK** | **Koryaka** | **5.04** | **251** | *eP* | Pn | 10 24 09.0 | +5.1 |
| KOK | | | | *eS* | Sn | 10 25 07.1 | +6.2 |
| **DALK** | **Dalny** | **5.09** | **248** | *eP* | Pn | 10 24 09.5 | +5.0 |
| DALK | | | | *eS* | Sn | 10 25 05.7 | +3.6 |
| **GNL** | **Ganaly** | **5.27** | **257** | *eP* | Pn | 10 24 12.2 | +5.1 |

*az=2.0*

**ISC 23 10:44:08.1**±0.9,**10°60′N**±0°05′×**62°90′W**±0°04,**h117**km±9km, **n38**,σ**1§67/61**,**mb3.8**/4,**1C**,**Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.48** | **88** | *eP* | **Pn** | **10 44 36.7** | **+1.7** |
| TRN | | | | *eS* | **Sn** | **10 44 55.2** | **-0.3** |
| **PCRV** | **Puerto La Cruz** | **1.76** | **256** | *i eP* | **Pn** | **10 44 39.4** | **+0.9** |
| PCRV | | | | *eS* | **Sn** | **10 45 01.6** | **0.0** |
| **PCRV** | **Puerto La Cruz** | **1.76** | **256** | P | **Pn** | **10 44 40.4** | **+2.0** |
| | 34nm,0.5s,baz=65,slow=5.9,SNR=41 | | | | | | |
| PCRV | | | | S | **Sn** | **10 45 01.6** | **0.0** |
| | 71nm,0.5s,baz=48,slow=12,SNR=20 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **1.76** | **256** | *eP* | **Pn** | **10 44 39.2** | **+0.8** |
| **TBH** | **Brigand Hill** | **1.81** | **94** | *eP* | **Pn** | **10 44 41.6** | **+2.5** |
| **GRFF** | **Grenada Fort F** | **1.84** | **38** | *eP* | **Pn** | **10 44 39.8** | **+0.4** |
| GRFF | | | | *eS* | **Sn** | **10 45 01.6** | **-1.7** |
| **GRGR** | **Grenville** | **1.95** | **39** | *eP* | **Pn** | **10 44 41.5** | **+0.7** |
| GRGR | | | | *eS* | **Sn** | **10 45 04.4** | **-1.4** |
| **GRW** | **Mount Saint Ca** | **1.97** | **38** | *eP* | **Pn** | **10 44 41.8** | **+0.7** |
| GRW | | | | *eS* | **Sn** | **10 45 05.2** | **-1.1** |
| **GRHS** | **Sauteurs** | **2.03** | **37** | *eP* | **Pn** | **10 44 42.7** | **+0.9** |
| GRHS | | | | *eS* | **Sn** | **10 45 06.0** | **-1.6** |
| **GRSS** | **Sisters** | **2.11** | **37** | *eP* | **Pn** | **10 44 43.6** | **+0.8** |
| GRSS | | | | *eS* | **Sn** | **10 45 08.7** | **-0.6** |
| **GRIC** | **Isle de Caille** | **2.11** | **38** | *eP* | **Pn** | **10 44 44.5** | **+1.6** |
| GRIC | | | | *eS* | **Sn** | **10 45 08.9** | **-0.5** |
| **TPR** | **Prospect** | **2.17** | **74** | *eP* | **Pn** | **10 44 46.0** | **+2.5** |
| **GCMP** | **Grenada, Carri** | **2.37** | **38** | *eP* | **Pn** | **10 44 47.1** | **+1.1** |
| GCMP | | | | *eS* | **Sn** | **10 45 14.6** | **-0.5** |
| **SVOC** | **Richmond Hill,** | **3.02** | **33** | *eP* | **Pn** | **10 44 57.0** | **+2.4** |
| SVOC | | | | *eS* | **Sn** | **10 45 31.1** | **+0.7** |
| **SVT** | **Saint Vincent** | **3.03** | **32** | *eP* | **Pn** | **10 44 56.6** | **+1.9** |
| SVT | | | | *eS* | **Sn** | **10 45 30.2** | **-0.3** |
| **SVB** | **Belmont** | **3.11** | **31** | *eP* | **Pn** | **10 44 57.6** | **+1.9** |
| SVB | | | | *eS* | **Sn** | **10 45 31.6** | **-0.9** |
| **SVV** | **Soufriere Volc** | **3.16** | **31** | *eP* | **Pn** | **10 44 57.8** | **+1.3** |
| **MCLT** | **Moule a Chique** | **3.64** | **32** | *eP* | **Pn** | **10 45 03.6** | **+0.9** |
| **SLB** | **Belfond** | **3.69** | **29** | *eP* | **Pn** | **10 45 05.5** | **+2.0** |
| SLB | | | | *eS* | **Sn** | **10 45 46.8** | **+0.5** |
| **SLAC** | **Saint Lucia, A** | **3.82** | **31** | *eP* | **Pn** | **10 45 07.2** | **+2.1** |
| SLAC | | | | *eS* | **Sn** | **10 45 48.8** | **-0.6** |
| **SLBI** | **Saint Lucia, B** | **3.89** | **29** | *eP* | **Pn** | **10 45 07.9** | **+1.8** |
| SLBI | | | | *eS* | **Sn** | **10 45 49.5** | **-1.5** |
| **SLW** | **Petit Monier** | **3.90** | **29** | *eP* | **Pn** | **10 45 08.1** | **+1.8** |
| **BCHC** | **Barbados, Cave** | **4.07** | **52** | x | **Sn** | **10 45 55.5** | **0.0** |
| **TACV** | **Tcata** | **4.08** | **264** | *eP* | **Pn** | **10 45 10.8** | **+2.0** |
| TACV | | | | *eS* | **Sn** | **10 45 55.8** | **0.0** |
| **BBGH** | **Gun Hill** | **4.13** | **52** | x | **Sn** | **10 45 52.3** | **-4.7** |
| **H05S1** | **Guadeloupe/Mar** | **4.30** | **28** | P | **Pn** | **10 45 11.5** | **-0.2** |
| H05S1 | | | | S | **Sn** | **10 46 00.5** | **-0.5** |
| **BENV** | **Beln** | **4.67** | **263** | *eP* | **Pn** | **10 45 18.5** | **+2.0** |
| BENV | | | | *eS* | **Sn** | **10 46 09.3** | **-0.5** |
| **CACV** | **CAICARA DEL OR** | **4.69** | **230** | *eP* | **Pn** | **10 45 13.9** | **-2.9** |
| CACV | | | | *eS* | Sn | 10 46 00.8 | -10 |
| **LUEV** | **Luepa** | **4.94** | **163** | *eP* | **Pn** | **10 45 21.8** | **+1.4** |
| LUEV | | | | *eS* | **Sn** | **10 46 15.3** | **-1.3** |
| **BAUV** | **El Baul** | **5.33** | **252** | *eP* | **Pn** | **10 45 26.9** | **+1.4** |
| BAUV | | | | *eS* | **Sn** | **10 46 23.6** | **-2.1** |
| **BAUV** | **El Baul** | **5.33** | **252** | *eP* | **Pn** | **10 45 27.3** | **+1.9** |
| BAUV | | | | *eS* | **Sn** | **10 46 24.3** | **-1.4** |
| **TEPV** | **Terepaima** | **6.22** | **265** | *eP* | **Pn** | **10 45 39.3** | **+1.7** |
| TEPV | | | | *eS* | **Sn** | **10 46 45.4** | **-2.1** |
| **ANBD** | **Bethesda, Anti** | **6.50** | **10** | x | **Pn** | **10 45 44.8** | **+3.5** |
| **ANWB** | **Willy Bob** | **7.11** | **9** | x | **Pn** | **10 45 45.7** | **-3.8** |
| **ULM** | **Lac du Bonnet** | **47.96** | **332** | P | **P** | **10 52 34.5** | **-0.3** |
| | 2.0nm,0.6s,baz=138,slow=16,SNR=4.6 2.0nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **51.64** | **317** | P | **P** | **10 53 03.0** | **-0.2** |
| | 0.7nm,0.6s,baz=111,slow=9.7,SNR=8.5 0.7nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.59** | **336** | P | **P** | **10 54 25.7** | **-0.5** |
| | 0.8nm,0.6s,baz=108,slow=7.2,SNR=2.8 0.8nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **77.92** | **334** | P | **P** | **10 55 52.9** | **0.0** |
| | 0.5nm,0.5s,baz=98,slow=5.0,SNR=7.7 0.5nm,0.5s | | | | | | |

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*BJI* ***23*** *10:52:42.6*±*0.0,26°.99N*×*54°.04E,h5*km*,mb4.9/60, mB5.3/20,Ms4.9/29,Ms7 4.4/29*

*MOS* ***23*** *10:52:43.5*±*1.0,27°.09N*×*54°.19E,h11*km*,mb5.0/56, MS4.5/8,Error ellipse: s-maj=5.2km s-min=3.7km az=80.1*

*IDC* ***23*** *10:52:43.3*±*0.4,27°.09N*×*54°.28E,h0*km*,mb4.7/38, mbtmp4.7/44,ML4.3/5,MS4.4/49,Error ellipse: s-maj=8.3km s-min=7.1km az=36.0*

*TEH* ***23*** *10:52:43.1,27°.05N*×*54°.23E,h11*km*±23*km*,ML4.9*

*GCMT* ***23*** *10:52:43.3*±*0.2,26°.89N*±*0°.01*×*54°.10E*±*0°.02,h12*km*, MW5.0/118,Moment Tensor Solution. s57,c63; s118,c207; Duration: 0 Moment tensor: Scale 10*16*Nm; Mrr3.74*±*.08; Mθθ-4.00*±*.07; Mφφ0.26*±*.08; Mrθ1.23*±*.23; Mθφ-0.07*±*.07; Mφr-0.59*±*.33; Best double couple: M=4.10800*×*10*16* NP1:φs98.00000°,δ54.00000°, λ101.00000°. NP2:φs260.00000°,δ37.00000°,λ75.00000°. Principal axes: T 4.0240, Plg77.0000°, Azm46.0000°; N 0.1670, Plg9.0000°, Azm272.0000°; P -4.1910, Plg9.0000°, Azm180.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*DSN* ***23*** *10:52:45.0*±*0.8,27°.15N*×*54°.08E,h15*km*,mb5.4/1, ML4.9/14 Error ellipse: s-maj=9.5km s-min=7.2km az=178.0*

*GII* ***23*** *10:52:45.9*±*0.5,27°.08N*×*54°.19E,h10*km*,confirmed*

*NEIC* ***23*** *10:52:45.4*±*1.8,27°.11N*±*0°.07*×*54°.21E*±*0°.07,h10*km*±1*km*, mb5.0/192,Mww5.0/13,Error ellipse: s-maj=11.6km s-min=10.2km az=30.0*

*NEIC* ***23*** *10:52:45.3,27°.11N*×*54°.21E,h14*km*,Moment Tensor Solution. Duration: 1§7 Moment tensor: Scale 10*16*Nm; Mrr3.40; Mθθ-3.76; Mφφ0.36; Mrθ-1.33; Mθφ-0.02; Mφr0.69; Fault plane solution: M=3.89000×10*16* NP1: φs280.66000°,δ56.17000°,λ103.06000°. NP2: φs78.03000°,δ35.98000°,λ71.37000°. Principal axes: T 3.7759, Plg75.0000°, Azm229.0000°; N 0.2234, Plg11.0000°, Azm93.0000°; P -3.9993, Plg10.0000°, Azm1.0000°;*

*NEIC* ***23*** *10:52:45.3,27°.11N*×*54°.21E,h14*km*

*OMAN* ***23*** *10:52:46.8*±*0.2,27°.07N*×*54°.21E,h11*km*±2*km*,mb5.3/17, ml5.0/21,ms4.7/4,Mwp5.2/16,Error ellipse: s-maj=3.2km s-min=1.7km az=27.0*

**ISC 23 10:52:45.5**±0.5,**27°.06N**±0°.03×**54°.21E**±0°.02,**h11**km±2km, **h11**km:**pP-P,n835,**σ**1§34**/870,**mb4.9**/230,**MS4.4**/60, **20C-32D**,**Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAR1** | **LAR** | **0.63** | **14** | Pg | **Pg** | **10 52 55.6** | **-2.1** |
| **LMD1** | **Lamerd** | **0.97** | **287** | Pg | **Pg** | **10 53 03.0** | **-1.3** |
| **JHRM** | **Jahrom** | **1.55** | **339** | Pg | **Pg** | **10 53 14.3** | **-1.0** |
| **QIR1** | **Qir** | **1.75** | **324** | Pg | **Pn** | **10 53 16.1** | **+0.3** |
| **GENO** | **Geno** | **1.78** | **79** | Pg | **Pn** | **10 53 16.2** | **-0.2** |
| **SHME** | **Shamm** | **2.00** | **120** | *eP* | **Pn** | **10 53 18.9** | **-0.4** |
| | SNR=32 | | | | | | |
| SHME | | | | S | **Sb** | **10 53 48.6** | **+1.8** |
| **SHME** | **Shamm** | **2.00** | **120** | P | **Pn** | **10 53 20.3** | **+1.1** |
| | SNR=113 | | | | | | |
| SHME | | | | P | **Pn** | **10 53 20.3** | **+1.1** |
| | SNR=113 | | | | | | |
| SHME | | | | S | **Sb** | **10 53 46.2** | **-0.7** |
| SHME | | | | S | **Sb** | **10 53 46.2** | **-0.7** |
| **UMQ** | **Umm Al-Quwin** | **2.01** | **139** | *eP* | **Pn** | **10 53 19.6** | **+0.2** |
| | SNR=19 | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **2.01** | **139** | P | **Pb** | **10 53 21.8** | **-0.3** |
| | SNR=31 | | | | | | |
| UMQ | | | | P | **Pb** | **10 53 21.8** | **-0.3** |
| | SNR=31 | | | | | | |
| UMQ | | | | S | **Sb** | **10 53 46.4** | **-0.7** |
| UMQ | | | | S | **Sb** | **10 53 46.4** | **-0.7** |
| **IBND** | **Bandar-abas** | **2.11** | **79** | Pn | **Pn** | **10 53 21.0** | **+0.3** |
| **BANOM** | **Banah** | **2.19** | **121** | *eP* | **Pn** | **10 53 21.6** | **-0.3** |
| | SNR=15 | | | | | | |
| **BANOM** | **Banah** | **2.19** | **121** | P | **Pb** | **10 53 24.2** | **-0.9** |
| **MASF** | **Masafi** | **2.43** | **133** | P | **Pn** | **10 53 27.1** | **+2.0** |
| | SNR=50 | | | | | | |
| MASF | | | | P | **Pn** | **10 53 27.1** | **+2.0** |
| | SNR=50 | | | | | | |
| MASF | | | | S | **Sn** | **10 53 56.8** | **+2.0** |
| MASF | | | | S | **Sn** | **10 53 56.8** | **+2.0** |
| **MSFE** | **Esma-Masafi** | **2.44** | **134** | *eP* | **Pn** | **10 53 26.1** | **+0.8** |
| | SNR=71 | | | | | | |
| **JRN** | **Qarnain Island** | **2.44** | **210** | P | **Pb** | **10 53 27.5** | **-1.8** |
| | SNR=20 | | | | | | |
| JRN | | | | S | **Sb** | **10 53 58.6** | **-0.7** |
| **NAZ** | **Nazwa, Dubai** | **2.44** | **147** | *eP* | **Pn** | **10 53 27.1** | **+1.8** |
| | SNR=43 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **2.44** | **147** | P | **Pb** | **10 53 27.5** | **-1.9** |
| | SNR=43 | | | | | | |
| NAZ | | | | P | **Pb** | **10 53 27.5** | **-1.9** |
| | SNR=43 | | | | | | |
| **MDH** | **Madha** | **2.57** | **133** | *eP* | **Pn** | **10 53 28.0** | **+0.9** |
| | SNR=30 | | | | | | |
| **MDH** | **Madha** | **2.57** | **133** | P | **Pn** | **10 53 28.9** | **+1.8** |
| | SNR=30 | | | | | | |
| MDH | | | | P | **Pn** | **10 53 28.9** | **+1.8** |
| | SNR=30 | | | | | | |
| MDH | | | | S | **Sn** | **10 53 59.8** | **+1.5** |
| MDH | | | | S | **Sn** | **10 53 59.8** | **+1.5** |
| **AJN** | **Ajban** | **2.58** | **164** | *eP* | **Pn** | **10 53 29.2** | **+2.0** |
| | SNR=14 | | | | | | |
| **AJN** | **Ajban** | **2.58** | **164** | P | **Pb** | **10 53 29.4** | **-2.4** |
| | SNR=62 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.62** | **151** | *eP* | **Pn** | **10 53 29.0** | **+1.2** |
| | SNR=234 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.62** | **151** | P | **Pn** | **10 53 29.6** | **+1.9** |
| | SNR=234 | | | | | | |
| FAQ | | | | P | **Pn** | **10 53 29.6** | **+1.9** |
| | SNR=234 | | | | | | |
| FAQ | | | | S | **Sn** | **10 54 02.3** | **+2.7** |
| FAQ | | | | S | **Sn** | **10 54 02.3** | **+2.7** |
| **ASUD** | **Al Ashush, Dub** | **2.62** | **157** | *eP* | **Pn** | **10 53 29.9** | **+2.1** |
| | SNR=147 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.62** | **157** | P | **Pb** | **10 53 30.6** | **-2.0** |
| | SNR=72 | | | | | | |
| ASUD | | | | P | **Pb** | **10 53 30.6** | **-2.0** |
| | SNR=72 | | | | | | |
| ASUD | | | | S | **Sb** | **10 54 02.6** | **-2.2** |
| ASUD | | | | S | **Sb** | **10 54 02.6** | **-2.2** |
| **UOSS** | **Minazif** | **2.77** | **139** | | **Pn** | **10 53 30.2** | **+0.4** |
| **UOSS** | **Minazif** | **2.77** | **139** | *eP* | **Pn** | **10 53 29.1** | **-0.7** |
| | SNR=76 | | | | | | |
| **UOSS** | **Minazif** | **2.77** | **139** | Pn | **Pn** | **10 53 30.0** | **+0.2** |
| **UOSS** | **Minazif** | **2.77** | **139** | P | **Pn** | **10 53 31.5** | **+1.7** |
| UOSS | | | | S | **Sn** | **10 54 05.8** | **+2.6** |
| **HATD** | **Hatta, Dubai** | **2.82** | **142** | *eP* | **Pn** | **10 53 31.5** | **+1.0** |
| | SNR=53 | | | | | | |
| **HATD** | **Hatta, Dubai** | **2.82** | **142** | P | **Pn** | **10 53 32.6** | **+2.1** |
| | SNR=54 | | | | | | |
| HATD | | | | P | **Pn** | **10 53 32.6** | **+2.1** |
| | SNR=54 | | | | | | |
| HATD | | | | S | **Sb** | **10 54 07.9** | **-2.6** |
| HATD | | | | S | **Sb** | **10 54 07.9** | **-2.6** |
| **ASHO** | **Ashiyiah** | **2.89** | **144** | *i P* | **Pn** | **10 53 32.5** | **+0.9** |
| | SNR=129 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.89** | **144** | P | **Pn** | **10 53 33.1** | **+1.5** |
| | SNR=129 | | | | | | |
| ASHO | | | | P | **Pn** | **10 53 33.1** | **+1.5** |
| | SNR=129 | | | | | | |
| ASHO | | | | S | **Sb** | **10 54 10.3** | **-2.3** |
| ASHO | | | | S | **Sb** | **10 54 10.3** | **-2.3** |
| **DSBU** | **Dashti - Bushe** | **2.92** | **297** | Pn | **Pn** | **10 53 32.3** | **+0.4** |
| **SHI** | **Shiraz** | **2.98** | **330** | Pn | **Pn** | **10 53 33.5** | **+0.6** |
| **AHBU** | **AHRAM** | **3.14** | **306** | Pn | **Pn** | **10 53 35.1** | **+0.2** |
| **SHMA** | **Al-Shehemyia** | **3.15** | **248** | P | **Pn** | **10 53 37.4** | **+2.5** |
| | SNR=29 | | | | | | |
| **KHNJ** | **Kahnooj** | **3.23** | **73** | Pn | **Pn** | **10 53 35.9** | **-0.3** |
| **ALNE** | **Al Ain** | **3.30** | **155** | *i P* | **Pn** | **10 53 37.7** | **+0.6** |
| | SNR=156 | | | | | | |
| **ALNE** | **Al Ain** | **3.30** | **155** | P | **Pn** | **10 53 38.7** | **+1.6** |
| | SNR=155 | | | | | | |
| ALNE | | | | P | **Pn** | **10 53 38.7** | **+1.6** |
| | SNR=155 | | | | | | |
| ALNE | | | | S | **Sn** | **10 54 19.4** | **+3.1** |
| ALNE | | | | S | **Sn** | **10 54 19.4** | **+3.1** |
| **KAZ2** | **Kazeron-Fars-I** | **3.39** | **319** | Pn | **Pn** | **10 53 38.8** | **+0.3** |
| **NGRK** | **Negar Kerman** | **3.40** | **40** | Pn | **Pn** | **10 53 38.6** | **-0.2** |
| **SAKB** | **Bahrain** | **3.46** | **253** | P | **Pn** | **10 53 41.4** | **+2.1** |
| **JASK** | **Jask - Hormozg** | **3.49** | **109** | Pn | **Pn** | **10 53 39.4** | **-0.3** |
| **JASK** | **Jask - Hormozg** | **3.49** | **109** | P | **Pn** | **10 53 40.6** | **+0.9** |
| | SNR=31 | | | | | | |
| JASK | | | | S | **Sn** | **10 54 22.3** | **+1.3** |
| **TRNA** | **Turayna** | **3.55** | **230** | P | **Pn** | **10 53 42.0** | **+1.4** |
| | SNR=99 | | | | | | |
| TRNA | | | | S | **Sn** | **10 54 25.7** | **+3.1** |
| **SOHO** | **SOHO** | **3.59** | **144** | *i P* | **Pn** | **10 53 40.7** | **-0.4** |
| | SNR=73 | | | | | | |
| **SOHO** | **SOHO** | **3.59** | **144** | P | **Pn** | **10 53 42.6** | **+1.5** |
| SOHO | | | | P | **Pn** | **10 53 42.6** | **+1.5** |
| SOHO | | | | S | **Sn** | **10 54 26.0** | **+2.5** |
| SOHO | | | | S | **Sn** | **10 54 26.0** | **+2.5** |
| **TVBK** | **TV Kerman** | **3.68** | **37** | Pn | **Pn** | **10 53 43.1** | **+0.4** |
| **SLWR** | **Sila** | **3.75** | **218** | S | **Sn** | **10 54 29.7** | **+2.4** |
| **SMRA** | **Abu-Samra** | **3.82** | **234** | P | **Pn** | **10 53 46.1** | **+1.8** |
| | SNR=16 | | | | | | |
| SMRA | | | | S | **Sn** | **10 54 32.1** | **+2.9** |
| **KHGB** | **Koh Gabri** | **3.86** | **31** | Pn | **Pn** | **10 53 45.7** | **+0.7** |
| **CHMN** | **Cheshme madani** | **4.05** | **46** | Pn | **Pn** | **10 53 48.9** | **+1.2** |
| **MZR** | **Muzera** | **4.09** | **189** | *i P* | **Pn** | **10 53 49.0** | **+0.9** |
| | SNR=55 | | | | | | |
| **MZR** | **Muzera** | **4.09** | **189** | P | **Pn** | **10 53 49.0** | **+0.9** |
| | SNR=55 | | | | | | |
| MZR | | | | S | **Sn** | **10 54 38.7** | **+2.8** |
| **ARQ** | **Araqi** | **4.26** | **150** | P | **Pn** | **10 53 51.2** | **+0.9** |
| | SNR=85 | | | | | | |
| ARQ | | | | S | **Sn** | **10 54 42.6** | **+2.6** |
| **KBAM** | **BAM** | **4.28** | **60** | Pn | **Pn** | **10 53 51.2** | **+0.5** |
| **IMEH** | **Mehriz** | **4.33** | **5** | Pn | **Pn** | **10 53 52.3** | **+0.8** |
| **KRM1** | **Kerman Provinc** | **4.36** | **37** | Pn | **Pn** | **10 53 52.5** | **+0.6** |
| **ZRDN** | **Zarand Kerman** | **4.39** | **27** | Pn | **Pn** | **10 53 52.7** | **+0.3** |
| **HOQ** | **Hoqain** | **4.46** | **140** | Pn | **Pn** | **10 53 52.9** | **-0.1** |
| **HOQ** | **Hoqain** | **4.46** | **140** | P | **Pn** | **10 53 54.9** | **+1.8** |
| | SNR=25 | | | | | | |
| HOQ | | | | P | **Pn** | **10 53 54.9** | **+1.8** |
| | SNR=25 | | | | | | |
| HOQ | | | | S | **Sn** | **10 54 47.2** | **+2.2** |
| HOQ | | | | S | **Sn** | **10 54 47.2** | **+2.2** |
| **KLNJ** | **Kolanjah** | **4.55** | **330** | Pn | **Pn** | **10 53 54.6** | **-0.1** |
| **IBAF** | **Bafgh** | **4.67** | **14** | Pn | **Pn** | **10 53 56.6** | **+0.5** |
| **ISAD** | **Sadrabad** | **4.86** | **355** | Pn | **Pn** | **10 53 59.7** | **+0.9** |
| **IRAM** | **Rameshеh** | **4.99** | **342** | Pn | **Pn** | **10 54 01.1** | **+0.5** |
| **BIDO** | **Bidbid** | **5.00** | **134** | P | **Pn** | **10 54 01.7** | **+1.2** |
| | SNR=15 | | | | | | |
| **BSY** | **Bisya** | **5.08** | **147** | P | **Pn** | **10 54 03.0** | **+1.3** |
| | SNR=81 | | | | | | |
| **ICHK** | **Chekchek** | **5.17** | **2** | Pn | **Pn** | **10 54 03.6** | **+0.5** |
| **SMDO** | **Samad** | **5.29** | **138** | P | **Pn** | **10 54 06.1** | **+1.5** |
| | SNR=46 | | | | | | |
| SMDO | | | | P | **Pn** | **10 54 06.1** | **+1.5** |
| | SNR=46 | | | | | | |
| **IBRJ** | **Brojen** | **5.47** | **333** | Pn | **Pn** | **10 54 07.7** | **+0.4** |
| **WSAR** | **Wadi Sarin** | **5.52** | **133** | Pn | **Pn** | **10 54 08.4** | **+0.7** |
| | 37nm,0.3s,baz=313,slow=12,SNR=130 | | | | | | |
| WSAR | | | | Sn | **Sn** | **10 55 11.2** | **-0.1** |
| | 26nm,0.3s,baz=323,slow=20,SNR=11 | | | | | | |
| WSAR | | | | LR | LR | 10 56 57.1 | |
| | comp=Z,4μm,20.5s,baz=328,slow=46 130nm,0.5s | | | | | | |
| **IGAR** | **Gharneh** | **5.65** | **341** | Pn | **Pn** | **10 54 10.1** | **+0.5** |
| **CHBR** | **Chabahar** | **5.81** | **103** | Pn | **Pn** | **10 54 12.0** | **+0.3** |
| **ZNGN** | **Zangian** | **5.83** | **331** | Pn | **Pn** | **10 54 12.6** | **+0.5** |
| **JMDO** | **Jabal Madar** | **5.86** | **142** | P | **Pn** | **10 54 14.2** | **+1.8** |
| | SNR=21 | | | | | | |
| JMDO | | | | P | **Pn** | **10 54 14.2** | **+1.8** |
| | SNR=21 | | | | | | |
| **JHBN** | **Jahan bin** | **6.01** | **330** | Pn | **Pn** | **10 54 15.4** | **+0.8** |
| **ANAR** | **Anarak** | **6.12** | **356** | Pn | **Pn** | **10 54 15.9** | **-0.2** |
| **KBD** | **Kabd** | **6.13** | **292** | P | **Pn** | **10 54 16.8** | **+0.8** |
| **WBK** | **Wadi Bani Khal** | **6.19** | **135** | Pn | **Pn** | **10 54 16.6** | **-0.2** |
| **WBK** | **Wadi Bani Khal** | **6.19** | **135** | P | **Pn** | **10 54 17.0** | **+0.1** |
| | SNR=62 | | | | | | |
| **ZHDN** | **Zahedan** | **6.27** | **67** | Pn | **Pn** | **10 54 18.6** | **+0.5** |
| **TPRV** | **Parvadeh(Tabas** | **6.32** | **19** | Pn | **Pn** | **10 54 19.4** | **+0.7** |
| **NGCH** | **Negor - Chabah** | **6.45** | **104** | Pn | **Pn** | **10 54 20.8** | **+0.4** |
| **NGCH** | **Negor - Chabah** | **6.45** | **104** | P | **Pn** | **10 54 21.6** | **+1.2** |
| | SNR=18 | | | | | | |
| **BSRN** | **Basiran** | **6.50** | **40** | Pn | **Pn** | **10 54 22.0** | **+0.8** |
| **IKLH** | **Kolahrood** | **6.64** | **341** | Pn | **Pn** | **10 54 23.2** | **0.0** |
| **NHDN** | **Nehbandan** | **6.69** | **48** | Pn | **Pn** | **10 54 24.1** | **+0.4** |
| **IKOO** | **Kooshah** | **6.78** | **37** | Pn | **Pn** | **10 54 25.8** | **+0.6** |
| **JLN** | **Jalan Bani Buh** | **6.80** | **135** | P | **Pn** | **10 54 25.0** | **-0.3** |
| | SNR=32 | | | | | | |
| **MHTO** | **MHTO** | **6.95** | **150** | P | **Pn** | **10 54 27.7** | **+0.4** |
| | SNR=124 | | | | | | |
| MHTO | | | | P | **Pn** | **10 54 27.7** | **+0.4** |
| | SNR=124 | | | | | | |
| **TKDS** | **Koohdasht(Taba** | **7.00** | **20** | Pn | **Pn** | **10 54 28.7** | **+0.6** |
| **TNSJ** | **Nastanj** | **7.19** | **16** | Pn | **Pn** | **10 54 31.2** | **+0.5** |
| **SRVN** | **Saravan** | **7.30** | **85** | Pn | **Pn** | **10 54 32.6** | **+0.4** |
| **AFRZ** | **Afriz** | **7.58** | **32** | Pn | **Pn** | **10 54 36.6** | **+0.5** |
| **DQM** | **DQM** | **7.73** | **156** | P | **Pn** | **10 54 38.3** | **+0.3** |
| | SNR=16 | | | | | | |
| **TAPT** | **Tabas- Tapeh t** | **8.20** | **17** | Pn | **Pn** | **10 54 45.1** | **+0.5** |
| **DOK** | **Doka** | **8.40** | **181** | P | **Pn** | **10 54 47.0** | **-0.3** |
| | SNR=37 | | | | | | |
| **SHRT** | **Shahrakht** | **8.41** | **37** | Pn | **Pn** | **10 54 48.1** | **+0.8** |
| **RAYN** | **Ar Rayn** | **8.63** | **248** | Pn | **Pn** | **10 54 50.2** | **-0.2** |
| **RAYN** | **Ar Rayn** | **8.63** | **248** | *i P* | **Pn** | **10 54 48.6** | **-1.8** |
| | SNR=16 | | | | | | |
| **RAYN** | **Ar Rayn** | **8.63** | **248** | P | **Pn** | **10 54 49.9** | **-0.5** |
| **RAYN** | **Ar Rayn** | **8.63** | **248** | P | **Pn** | **10 54 50.2** | **-0.2** |
| **IDMV** | **Damavand** | **8.69** | **348** | Pn | **Pn** | **10 54 52.0** | **+0.5** |
| **SHAO** | **Shalim** | **9.09** | **171** | P | **Pn** | **10 54 56.4** | **-0.3** |
| | SNR=23 | | | | | | |
| **WHFO** | **Wadi Hawf** | **9.11** | **183** | P | **Pn** | **10 54 56.1** | **-0.9** |
| | SNR=105 | | | | | | |
| **IPRN** | **Peran** | **9.29** | **351** | Pn | **Pn** | **10 55 00.4** | **+0.9** |
| **DMTO** | **DMTO** | **9.32** | **176** | P | **Pn** | **10 54 59.1** | **-0.8** |
| | SNR=11 | | | | | | |
| **IGLO** | **Ghaloghah** | **9.42** | **358** | Pn | **Pn** | **10 55 02.9** | **+1.5** |
| **RBK** | **Rabkut** | **9.51** | **180** | P | **Pn** | **10 55 02.7** | **+0.2** |
| | SNR=14 | | | | | | |
| **ABTO** | **Aybut** | **9.70** | **185** | P | **Pn** | **10 55 04.2** | **-0.8** |
| | SNR=20 | | | | | | |
| ABTO | | | | P | **Pn** | **10 55 04.2** | **-0.8** |
| | SNR=20 | | | | | | |
| **TBJM** | **Torbat-e-JAM** | **9.72** | **31** | Pn | **Pn** | **10 55 06.1** | **+0.7** |
| **SBZV** | **Sabzevar** | **9.74** | **16** | Pn | **Pn** | **10 55 06.8** | **+1.0** |
| **HRA** | **Herat** | **10.05** | **41** | | **Pn** | **10 55 11.1** | **+1.0** |
| **IDHR** | **Dehrash** | **10.15** | **320** | Pn | **Pn** | **10 55 11.6** | **+0.2** |
| **ISFR** | **Sfrayin** | **10.47** | **17** | Pn | **Pn** | **10 55 16.5** | **+0.7** |
| **IMYA** | **Miami** | **10.52** | **27** | Pn | **Pn** | **10 55 17.2** | **+0.7** |
| **MRVT** | **Maraveh tapeh** | **10.69** | **8** | Pn | **Pn** | **10 55 19.4** | **+0.8** |
| **GRMI** | **Germi** | **12.86** | **337** | Pn | **Pn** | **10 55 48.9** | **+0.6** |
| **KBL** | **Kabul** | **14.76** | **56** | Pn | **Pn** | **10 56 14.9** | **+0.5** |
| **KBL** | **Kabul** | **14.76** | **56** | P | **Pn** | **10 56 16.8** | **+2.4** |
| | SNR=38 | | | | | | |
| KBL | | | | P | **Pn** | **10 56 16.8** | **+2.4** |
| | SNR=38 | | | | | | |
| **KBL** | **Kabul** | **14.76** | **56** | P | **Pn** | **10 56 14.9** | **+0.5** |
| **GNI** | **Garni** | **15.24** | **331** | Pn | **Pn** | **10 56 20.4** | **-0.4** |
| **GNI** | **Garni** | **15.24** | **331** | Pn | **P** | **10 56 24.8** | **-0.9** |
| | 2.0nm,0.3s,baz=160,slow=11,SNR=5.8 | | | | | | |
| GNI | | | | Sn | **Sn** | **10 59 14.5** | **+4.9** |
| | 1.4nm,0.3s,baz=169,slow=18,SNR=1.6 | | | | | | |
| GNI | | | | Lg | Lg | 11 00 51.0 | |
| | 1.1nm,0.3s,baz=148,slow=19,SNR=1.2 | | | | | | |
| GNI | | | | LR | LR | 11 02 53.4 | |
| | comp=Z,2μm,18.1s,baz=146,slow=40 15nm,0.7s | | | | | | |
| **GNI** | **Garni** | **15.24** | **331** | *d iP* | **Pn** | **10 56 21.9** | **+1.1** |
| **GURO** | **Guroymak-BITLI** | **15.35** | **321** | Pn | **Pn** | **10 56 22.4** | **+0.2** |
| **ASF** | **Jabal al Asfar** | **15.89** | **293** | Pn | **Pn** | **10 56 25.1** | **-4.2** |
| | 0.8nm,0.3s,baz=114,slow=0.3,SNR=4.9 | | | | | | |
| **ASF** | **Jabal al Asfar** | **15.89** | **293** | P | **P** | **10 56 31.3** | **-1.6** |
| **KARS** | **Kars** | **16.37** | **329** | Pn | **Pn** | **10 56 34.2** | **-1.2** |
| **KARS** | **Kars** | **16.37** | **329** | P | **Pn** | **10 56 34.2** | **-1.2** |
| KARS | | | | pmax | pmax | | |
| | comp=Z,338nm,1.6s | | | | | | |
| **HSUJ** | **Al Zarqa** | **16.45** | **292** | P | **P** | **10 56 42.2** | **+3.0** |
| **MAK** | **Makhachkala** | **16.78** | **343** | *d iP* | **Pn** | **10 56 37.7** | **-2.7** |
| MAK | | | | *eS* | **Sn** | **10 59 44.1** | **-2.6** |
| MAK | | | | pmax | pmax | | |
| | comp=Z,247nm,1.3s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,1μm,14.0s | | | | | | |
| **GHAJ** | **Ghor Haditha** | **16.82** | **289** | Pn | **Pn** | **10 56 40.3** | **-0.7** |
| **GHAJ** | **Ghor Haditha** | **16.82** | **289** | P | **Pn** | **10 56 40.8** | **-0.1** |
| **SIMJ** | **Simiganj** | **16.96** | **43** | Pn | **Pn** | **10 56 39.7** | **-3.2** |
| **KSHT** | **Keshet** | **16.98** | **295** | P | **Pn** | **10 56 43.1** | **-0.1** |
| **MSBI** | **Mazada** | **17.00** | **289** | P | **Pn** | **10 56 43.3** | **+0.1** |
| **DSI** | **Dead Sea** | **17.02** | **290** | P | **P** | **10 56 44.4** | **-1.0** |
| **DSI** | **Dead Sea** | **17.02** | **290** | P | **Pn** | **10 56 43.8** | **+0.3** |
| **ZFRI** | **Zfri** | **17.04** | **286** | P | **P

**CSS Mathiatis 19.53 299** P **Pn** **10 57 14.5 +0.2**
comp=Z,51nm,1.1s,comp=Z,928nm
**VSLR Vesyoloye 20.00 329**⇓*e*P **Pn** **10 57 21.0 +1.2**
**TRKS Terek-Say 20.05 40** P **P** **10 57 17.7 -1.1**
**SOC Sochi 20.24 328** *e*P **P** **10 57 20.8 +0.2**
SOC *e* 10 57 35.2
SOC *e* 11 01 07.7
SOC pmax pmax
comp=Z,68nm,1.2s
SOC MLR MLR
comp=Z,1μm,16.0s
**BRLS Borolday 20.38 35** *e*P **P** **10 57 18.9 -3.3**
baz=35
BRLS *e*S **S** **11 01 05.9 -4.6**
baz=35
**BRLS Borolday 20.38 35** *e*P **P** **10 57 18.9 -3.3**
BRLS *e*S **S** **11 01 05.8 -4.6**
**OHH Osh 20.41 44** P Pn 10 57 24.8 +0.1
**KK31 Karatay Array 20.78 35** P **P** **10 57 25.5 -1.0**
KK31 IAmb IAmb 10 57 33.5
comp=Z,97nm,1.8s
**KK31 Karatay Array 20.78 35** P **P** **10 57 25.5 -1.0**
KK31 pmax pmax
comp=Z,97nm,1.8s
**KKAR Karatay Array 20.78 35** P **P** **10 57 25.1 -1.4**
KKAR IAmb IAmb 10 57 33.5
comp=Z,97nm,1.8s
**KKAR Karatay Array 20.78 35** P **P** **10 57 25.1 -1.4**
KKAR pmax pmax
comp=Z,97nm,1.8s
**KIRS Kirsehir-Merke 20.78 311** ⇓P Pn 10 57 27.7 -1.4
**ARSB Arslanbob 21.00 43** P **P** **10 57 27.4 -1.7**
**ARSB Arslanbob 21.00 43** P **P** **10 57 27.4 -1.7**
ARSB pmax pmax
comp=Z,22nm,0.7s
**BR104 Keskin Array S 21.25 312** P **P** **10 57 31.9 +0.1**
comp=Z,26nm,0.7s,comp=Z,273nm
**BR131 Keskin Array S 21.26 312***c i*P **P** **10 57 31.6 -0.3**
**BRTR Keskin Array B 21.26 312** P **P** **10 57 31.7 -0.3**
**BRTR Keskin Array B 21.26 312** P **P** **10 57 31.4 -0.5**
comp=Z,15nm,0.7s,baz=130,slow=13,SNR=61
BRTR S **S** **11 01 30.2 +2.0**
comp=Z,0.7nm,0.7s,baz=117,slow=15,SNR=1.3
BRTR PcP **PcP** **11 01 36.0 -0.7**
comp=Z,1.2nm,0.8s,baz=148,slow=3.7,SNR=2.4
BRTR LR LR 11 07 27.1
comp=Z,1μm,18.7s,baz=131,slow=42
comp=Z,15nm,0.7s
**BR105 Keskin Array S 21.27 312** P **P** **10 57 32.1 +0.1**
comp=Z,38nm,1.1s,comp=Z,325nm
**BR106 Keskin Array S 21.28 312** P **P** **10 57 32.3 +0.2**
comp=Z,36nm,0.7s,comp=Z,317nm
**DIKM Dikmen 21.30 318** ⇑P **P** **10 57 32.6 +0.5**
**BR231 Keskin MP Arra 21.90 311** P **P** **10 57 38.8 +0.1**
BR231 IAmb IAmb 10 57 53.0
comp=Z,42nm,0.9s
**ANTO Ankara 21.90 311** P **P** **10 57 38.1 -0.5**
ANTO IAmb IAmb 10 57 54.2
comp=Z,48nm,0.9s
**ANTO Ankara 21.90 311** P **P** **10 57 38.5 -0.1**
ANTO P **P** **10 57 38.5 -0.1**
**ANTO Ankara 21.90 311** ⇓P **P** **10 57 38.7 +0.1**
**ANTO Ankara 21.90 311** P **P** **10 57 38.7 +0.1**
**ANTO Ankara 21.90 311** P **P** **10 57 38.6 -0.1**
comp=Z,30nm,1.2s,comp=Z,387nm
**AML Almayashu 21.91 42** P **P** **10 57 38.2 -1.0**
SNR=24
**ARLS Aral 22.13 43** P **P** **10 57 40.6 -0.6**
**ANN Anapa 22.24 327** *e*P **P** **10 57 43.2 +1.0**
ANN *e**PP **sP** **10 57 45.6 -1.4**
ANN *e*S **S** **11 01 51.3 +4.6**
ANN pmax pmax
comp=Z,45nm,1.8s
**EKS2 Erkin-Say 22.28 41** P **P** **10 57 43.1 +0.3**
SNR=53
**ABKAR Akbulak array 22.60 10** P **P** **10 57 44.7 -1.3**
**ABKAR Akbulak array 22.60 10** IAmb IAmb 10 57 52.7
comp=Z,73nm,1.2s
**AAK Ala-Archa 22.69 42** P **P** **10 57 51.0 +3.7**
SNR=11
**AAK Ala-Archa 22.69 42** P **P** **10 57 47.4 +0.2**
**AAK Ala-Archa 22.69 42** P **P** **10 57 47.1 -0.2**
comp=Z,8.4nm,0.5s,baz=232,slow=12,SNR=16
AAK S **S** **11 01 55.9 +0.4**
comp=Z,1.7nm,0.4s,baz=233,slow=20,SNR=1.3
AAK LR LR 11 07 01.5
comp=Z,1μm,19.4s,baz=247,slow=38
comp=Z,8.4nm,0.5s
**AAK Ala-Archa 22.69 42** P **P** **10 57 49.0 +1.8**
**AAK Ala-Archa 22.69 42***c i*P **P** **10 57 46.8 -0.4**
AAK pmax pmax
comp=Z,87nm,1.7s
**NRN Naryn 22.94 46** P **P** **10 57 48.4 -1.6**
**NRN Naryn 22.94 46** P **P** **10 57 48.4 -1.6**
NRN pmax pmax
comp=Z,30nm,0.9s
**KBK Karagaybulak 22.97 42** P **P** **10 57 53.4 +3.2**
SNR=10
**CHMS Chumysh 23.06 41** P **P** **10 57 53.8 +2.9**
SNR=5.4
**USP Ospenovka 23.07 40** P **P** **10 57 54.0 +2.9**
SNR=10
**MDUB Mudurnu 23.26 311** P **P** **10 57 52.6 -0.4**
**SGDS Sogindy 23.26 40** *e*P **P** **10 57 52.5 -0.6**
comp=Z,21nm,1.1s,baz=40
**SGDS Sogindy 23.26 40** *e*P **P** **10 57 52.4 -0.6**
SGDS pmax pmax
comp=Z,21nm,1.1s
**FURI Furi 23.29 222** LR LR 11 08 43.3
comp=Z,902nm,20.7s,baz=33,slow=41
**FURI Furi 23.29 222** *e*P **P** **10 57 54.8 +1.0**
FURI *e*S Sn 11 02 15.2 -9.2
**BOOM Boomskoye usch 23.47 43** P **P** **10 57 54.2 -1.1**
BOOM IAmb IAmb 10 57 59.1
comp=Z,41nm,1.1s
**BOOM Boomskoye usch 23.47 43** P **P** **10 57 54.2 -1.1**
BOOM pmax pmax
comp=Z,41nm,1.1s
**TKM2 Tokmak 2 23.51 42** P **P** **10 57 58.3 +2.6**
SNR=7.9
**AKTO Aktyubinsk 23.52 6** P **P** **10 57 55.6 +0.2**
comp=Z,20nm,0.7s,baz=183,slow=9.1,SNR=37
AKTO S **S** **11 02 10.8 +1.6**
comp=Z,7.2nm,0.9s,baz=121,slow=19,SNR=7.3
AKTO LR LR 11 09 08.4
comp=Z,1μm,21.0s,baz=221,slow=42
comp=Z,20nm,0.7s
**BTLS Baital 23.96 36** *e*P **P** **10 57 59.3 -0.4**
baz=36
BTLS *e*S **S** **11 02 16.9 +0.7**
baz=36
**BTLS Baital 23.96 36** *e*P **P** **10 57 59.3 -0.4**
BTLS *e*S **S** **11 02 16.9 +0.7**
**SIM Simferopol' 24.03 323** *e*P **P** **10 58 03.6 +3.1**
SIM *e* 10 58 39.0
SIM *e*PPP PPP 10 58 44.0
SIM *e* 11 01 49.0
SIM *e*S **S** **11 02 18.0 +0.6**
SIM pmax pmax
comp=Z,104nm,1.9s
SIM MLR MLR
comp=Z,200nm,15.1s
**TARG Taragay, Kyrgy 24.25 47** P **P** **10 58 02.2 -0.8**
**TARG Taragay, Kyrgy 24.25 47** P **P** **10 58 02.2 -0.8**
TARG pmax pmax
comp=Z,25nm,1.0s
**TNSS Tian-Shan 24.39 43** *e*P **P** **10 58 04.0 -0.4**
baz=43
**TNSS Tian-Shan 24.39 43** *e*P **P** **10 58 03.9 -0.4**
**HYB Hyderabad 24.45 108** *e*P **P** **10 58 05.0 +0.4**
**AAA Alma-Ata 24.47 43** *e*P **P** **10 58 04.6 -0.1**
comp=Z,19nm,0.5s,baz=43
**AAA Alma-Ata 24.47 43** *e*P **P** **10 58 04.5 -0.1**
AAA pmax pmax
comp=Z,19nm,0.5s
**KUU Kurty 24.52 41** *e*P **P** **10 58 05.0 0.0**
comp=Z,16nm,1.1s,baz=41
**KUU Kurty 24.52 41** *e*P **P** **10 58 04.9 0.0**
KUU pmax pmax
comp=Z,16nm,1.1s
**MDOK Medeo 24.53 43** *e*P **P** **10 58 05.0 -0.2**
baz=43
MDOK *e*S **S** **11 02 26.5 +0.7**
baz=43
**MDOK Medeo 24.53 43** *e*P **P** **10 58 05.0 -0.2**
MDOK *e*S **S** **11 02 26.4 +0.7**
**YLV Yalova 24.54 310** P **P** **10 58 05.8 +0.5**
comp=Z,19nm,2.1s,comp=Z,753nm
**ANVS Anan'yevo 24.70 45** P **P** **10 58 06.7 -0.1**
**CHKK Chushkaly 24.88 42** *e*P **P** **10 58 08.1 -0.2**
baz=42
**CHKK Chushkaly 24.88 42** *e*P **P** **10 58 08.0 -0.2**
**SATY Saty 25.31 45** *e*P **P** **10 58 11.9 -0.3**
baz=45
**SATY Saty 25.31 45** *e*P **P** **10 58 11.9 -0.3**
**ZHN Zhinishke 25.39 44** *e*P **P** **10 58 12.7 -0.3**
baz=44
**ZHN Zhinishke 25.39 44** *e*P **P** **10 58 12.6 -0.3**
**ARXS Arharly 25.58 42** *e*P **P** **10 58 13.9 -0.7**
**KPKS Kokpek 25.70 44** *e*P **P** **10 58 15.4 -0.3**
comp=Z,15nm,1.1s,baz=44
KPKS *e*S **S** **11 02 44.7 +0.3**
baz=44
**KPKS Kokpek 25.70 44** *e*P **P** **10 58 15.4 -0.3**
KPKS *e*S **S** **11 02 44.6 +0.3**
KPKS pmax pmax
comp=Z,15nm,1.1s
**UZB Uzynbulak 25.74 45** *e*P **P** **10 58 16.1 -0.2**
baz=45
**UZB Uzynbulak 25.74 45** *e*P **P** **10 58 16.0 -0.2**
**BELG Belogornoye 25.78 351** P **P** **10 58 15.7 -0.5**
comp=Z,60nm,0.8s,baz=176,slow=1.3,SNR=17
BELG S **S** **11 02 49.7 +4.5**
comp=Z,4.6nm,0.4s,baz=180,slow=18,SNR=1.1
comp=Z,60nm,0.8s
**VRH Novokhopyorsk 25.91 342** *e*P **P** **10 58 16.2 -1.2**
VRH *e*S **S** **11 02 44.8 -2.4**
VRH pmax pmax
comp=Z,36nm,0.7s
VRH smax smax
comp=N,300nm,3.0s
**SHLS Shalkode 26.03 45** *e*P **P** **10 58 20.9 +2.1**
baz=46
**SHLS Shalkode 26.03 45** *e*P **P** **10 58 20.9 +2.1**
**IDI Anoyia 26.32 295** P **P** **10 58 21.4 0.0**
comp=N,33nm,0.6s,baz=95,slow=11,SNR=31
IDI S **S** **11 02 58.6 +4.3**
comp=N,13nm,1.1s,baz=133,slow=19,SNR=2.0
IDI LR LR 11 11 48.4
comp=N,198nm,19.5s,baz=78,slow=43
comp=N,33nm,0.6s
**TDK Taldyqorghan 26.37 41** *e*P **P** **10 58 21.9 +0.1**
comp=N,18nm,0.8s,baz=41
**TDK Taldyqorghan 26.37 41** *e*P **P** **10 58 21.8 +0.1**
TDK pmax pmax
comp=Z,18nm,0.8s
**VORD Divnogorie 26.44 339** *e*P **P** **10 58 24.7 +2.5**
VORD pmax pmax
comp=Z,10.0nm,0.5s
**VSR Storozhevoye 26.69 339** *e*P **P** **10 58 25.4 +0.9**
VSR pmax pmax
comp=Z,8.0nm,0.5s
**VORR Voronezh 27.07 339** *e*P **P** **10 58 29.6 +1.7**
VORR pmax pmax
comp=Z,20nm,0.8s
**LPSR Galich'ya Gora 27.96 340** *e*P **P** **10 58 36.2 +0.3**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
**BRVK Borovoye 28.60 20** P **P** **10 58 40.8 -0.8**
**BRVK Borovoye 28.60 20** P **P** **10 58 40.8 -0.8**
BRVK pmax pmax
comp=Z,11nm,0.9s
**BVAR Borovoye Array 28.61 21** P **P** **10 58 40.6 -1.0**
comp=Z,11nm,0.6s,baz=216,slow=7.1,SNR=29
BVAR PcP **PcP** **11 01 52.5 0.0**
comp=Z,5.8nm,0.6s,baz=215,slow=1.4,SNR=6.2
BVAR ScP **ScP** **11 05 34.6 +0.9**
comp=Z,1.2nm,0.6s,baz=224,slow=6.0,SNR=3.1
comp=Z,11nm,0.6s
**VRI Vrincioaia 28.78 318** ⇑P **P** **10 58 42.4 -0.9**
**VRI Vrincioaia 28.78 318** P **P** **10 58 42.3 -0.9**
**PLOR Plostina 28.82 318** ⇓P **P** **10 58 42.9 -0.7**
**PLOR Plostina 28.82 318** P **P** **10 58 42.9 -0.7**
**MLR Muntele Rosu 29.06 317** P **P** **10 58 45.9 0.0**
MLR IAmb IAmb 10 59 09.7
comp=Z,45nm,1.5s
**MLR Muntele Rosu 29.06 317** P **P** **10 58 46.6 +0.7**
comp=Z,2.2nm,0.3s,baz=116,slow=13,SNR=7.7
MLR LR LR 11 14 12.9
comp=Z,1μm,19.1s,baz=118,slow=44
comp=Z,2.2nm,0.3s
**MLR Muntele Rosu 29.06 317** ⇑P **P** **10 58 46.8 +0.9**
**MLR Muntele Rosu 29.06 317** P **P** **10 58 45.9 0.0**
MLR pmax pmax
comp=Z,45nm,1.5s
**TURR Turia 29.30 318** ⇓P **P** **10 58 48.2 +0.2**
**MAKZ Makanchi 29.44 41** P **P** **10 58 46.7 -2.5**
MAKZ IAmb IAmb 10 58 52.5
comp=Z,17nm,0.9s
**MAKZ Makanchi 29.44 41** P **P** **10 58 48.7 -0.5**
**VOIR 29.59 316** ⇑P **P** **10 58 51.1 +0.5**
**VOIR 29.59 316** P **P** **10 58 51.0 +0.5**
**MK31 Makanchi Array 29.62 41***c i*P **P** **10 58 49.7 -1.0**
**MKAR Makanchi Array 29.62 41** P **P** **10 58 48.9 -1.8**
**MKAR Makanchi Array 29.62 41** P **P** **10 58 49.6 -1.2**
comp=Z,4.0nm,0.7s,baz=233,slow=10,SNR=30
MKAR PcP **PcP** **11 01 54.7 -0.6**
comp=Z,1.4nm,0.7s,baz=226,slow=2.9,SNR=3.5
MKAR S **S** **11 03 45.0 -0.9**
comp=Z,1.3nm,1.2s,baz=248,slow=23,SNR=1.1
MKAR ScP **ScP** **11 05 36.8 -0.3**
comp=Z,0.8nm,0.7s,baz=243,slow=3.1,SNR=5.0
MKAR LR LR 11 11 03.6
comp=Z,777nm,18.8s,baz=254,slow=37
comp=Z,4.0nm,0.7s
**LODK Lodwar 29.62 221** P **P** **10 58 51.6 +0.5**
**LODK Lodwar 29.62 221** P **P** **10 58 54.7 +3.6**
SNR=5.7
**KURBB Kurchatov Arra 29.95 32** P **P** **10 58 52.7 -0.9**
comp=Z,2.8nm,0.6s,baz=231,slow=8.5,SNR=9.5
KURBB PcP **PcP** **11 01 55.9 0.0**
comp=Z,2.2nm,0.6s,baz=230,slow=3.3,SNR=7.2
KURBB ScP **ScP** **11 05 39.1 +1.1**
comp=Z,1.0nm,0.3s,baz=228,slow=3.6,SNR=5.8
KURBB LR LR 11 12 56.2
comp=Z,1μm,19.2s,baz=199,slow=41
comp=Z,2.8nm,0.6s
**KURK Kurchatov 30.06 32** P **P** **10 58 54.5 0.0**
**KURK Kurchatov 30.06 32**⇑*e*P **P** **10 58 56.0 +1.5**
KURK pmax pmax
comp=Z,14nm,1.7s
**AK08 Malin Array Si 30.26 328** P **P** **10 58 56.2 -0.1**
**AK12 Malin Array Si 30.31 328** P **P** **10 58 56.3 -0.5**
**AKASG Malin Array Be 30.32 328** P **P** **10 58 54.7 -2.1**
comp=Z,0.6nm,0.3s,baz=129,slow=7.3,SNR=4.6
AKASG PcP **PcP** **11 01 56.2 -0.6**
comp=Z,1.0nm,0.5s,baz=118,slow=1.2,SNR=4.2
AKASG LR LR 11 14 01.8
comp=Z,267nm,18.7s,baz=136,slow=42
comp=Z,0.6nm,0.3s
**AKASG Malin Array Be 30.32 328** *i* P **P** **10 58 58.9 +2.1**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 30.32 328** P **P** **10 58 55.2 -1.6**
**AKBB Malin Array Si 30.32 328**⇓*e*P **P** **10 58 56.4 -0.4**
AKBB pmax pmax
comp=Z,12nm,1.1s
**KIEV Kiev 30.32 328** P **P** **10 58 55.1 -1.8**
**KIEV Kiev 30.32 328** P **P** **10 58 55.1 -1.8**
KIEV pmax pmax
comp=Z,14nm,1.1s
**AK11 Malin Array Si 30.33 328** P **P** **10 58 56.8 -0.1**
**LUBAR Lubar, Ukraine 30.53 325** P **P** **10 58 58.2 -0.5**
**BURAR Bucovina Array 30.58 320** P **P** **10 58 59.0 -0.3**
**BURAR Bucovina Array 30.58 320** ⇓P **P** **10 58 59.0 -0.3**
**BURAR Bucovina Array 30.58 320** P **P** **10 58 59.0 -0.3**
**BUR08 Bucovina Ar. S 30.60 320** IAmb IAmb 11 00 06.0
comp=Z,38nm,2.0s
**SEM Semipalatinsk 30.64 33** *e*P **P** **10 58 59.9 -0.1**
baz=33
**SEM Semipalatinsk 30.64 33** *e*P **P** **10 58 59.8 -0.1**
**OBN Obninsk 30.84 340** P **P** **10 59 01.4 0.0**
comp=Z,18nm,0.4s,baz=175,slow=18,SNR=1.4
OBN LR LR 11 14 17.0
comp=Z,438nm,18.6s,baz=166,slow=42
comp=Z,18nm,0.4s
**OBN Obninsk 30.84 340**⇑*e*P **P** **10 59 01.5 +0.2**
OBN *e* 11 00 00.3
OBN *e*SS SS 11 05 47.6 -29
OBN pmax pmax
comp=Z,14nm,0.5s
OBN MLR MLR
comp=Z,461nm,18.0s
**GZR Gura Zlata 30.99 314** ⇓P **P** **10 59 01.9 -1.0**
**GZR Gura Zlata 30.99 314** P **P** **10 59 01.9 -1.0**
**BOVS Bovan 31.00 311** ⇓P **P** **10 59 03.4 +0.5**
**MOS Moscow 31.07 342** *e*P **P** **10 59 06.3 +2.9**
MOS *e* 11 00 06.4
MOS *e*PPP PPP 11 00 20.5
MOS *e*S **S** **11 04 14.9 +6.6**
MOS pmax pmax
comp=Z,51nm,0.6s
**MARR Marisel-Cluj 31.35 317** ⇑P **P** **10 59 05.8 -0.4**
**ZSN Zaisan 31.46 42** *e*P **P** **10 59 07.2 +0.1**
baz=41
**ZSN Zaisan 31.46 42** *e*P **P** **10 59 07.1 +0.1**
**KIRV Kirov 31.69 355** LR LR 11 14 51.8
comp=Z,576nm,20.9s,baz=164,slow=42
**KIRV Kirov 31.69 355**⇓*e*P **P** **10 59 08.7 -0.1**
**WMQ Urumqi 31.73 49** *e*P **P** **10 59 12.0 +2.5**
WMQ LR LR
comp=Z,1μm,16.5s
WMQ LR LR
comp=Z,690nm,15.7s
WMQ LR LR
comp=Z,820nm,24.7s
**PUK Puka 31.73 307** IAmb IAmb 10 59 12.0
comp=Z,10nm,0.7s
**BZS Buzias 31.83 314** ⇓P **P** **10 59 09.4 -0.8**
**BZS Buzias 31.83 314** P **P** **10 59 09.4 -0.8**
**PALK Pallekele 31.93 123** LR LR 11 12 19.9
comp=Z,414nm,19.6s,baz=45,slow=37
**SIRR Siria 32.07 315** ⇑P **P** **10 59 11.5 -0.9**
**KMBO Kilima Mbogo 32.44 213** P **P** **10 59 17.4 +1.3**
KMBO IAmb IAmb 10 59 20.6
comp=Z,19nm,1.3s
**KMBO Kilima Mbogo 32.44 213** P **P** **10 59 16.2 +0.2**
comp=Z,6.9nm,0.9s,baz=22,slow=13,SNR=9.8
KMBO LR LR 11 13 57.1
comp=Z,1μm,21.3s,baz=62,slow=39
comp=Z,6.9nm,0.9s
**KMBO Kilima Mbogo 32.44 213** P **P** **10 59 17.4 +1.3**
KMBO pmax pmax
comp=Z,19nm,1.3s
**LSA Lhasa 32.52 77** P **P** **10 59 19.1 +2.0**
**KOLS Kolonicke sedl 32.94 320** *e*P **P** **10 59 20.7 +0.7**
KOLS pmax pmax
comp=Z,21nm,1.1s
**KOLS Kolonicke sedl 32.94 320** *e*P **P** **10 59 20.7 +0.7**
**KIBK Kibwezi 33.13 211** P **P** **10 59 23.1 +1.1**
KIBK IAmb IAmb 10 59 26.3
comp=Z,16nm,1.2s
**KIBK Kibwezi 33.13 211** P **P** **10 59 25.3 +3.3**
SNR=5.2
**CRVS Cervenica-Dubn 33.39 320** *e*P **P** **10 59 24.1 +0.1**
CRVS pmax pmax
comp=Z,12nm,0.9s
**CRVS Cervenica-Dubn 33.39 320** *e*P **P** **10 59 24.0 +0.1**
**MNK Minsk 33.52 332** *i* P **P** **10 59 23.9 -1.0**
comp=E,26nm,0.9s
MNK *i* P **P** **10 59 23.9 -1.0**
comp=N,22nm,0.9s
MNK *i* P **P** **10 59 23.9 -1.0**
comp=Z,9.0nm,0.7s,baz=134
MNK *i* PP **PnPn** **11 00 35.5 -0.5**
MNK *i* PPP PPP 11 00 46.4
MNK *i* S **S** **11 04 46.2 -0.3**
MNK *i* SS **SnSn** **11 06 50.9 +2.1**
MNK *i* SSS SSS 11 07 06.9
MNK *i* LQ LQ 11 10 46.2
MNK *i* LR LR 11 13 04.1
MNK *i* LRM MLR 11 14 51.6
comp=E,386nm,17.1s
MNK *i* LRM MLR 11 14 55.6
comp=Z,775nm,20.4s
MNK *i* LRM MLR 11 15 12.7
comp=N,352nm,20.2s
**MNK Minsk 33.52 332** *i* P **P** **10 59 23.8 -1.0**
MNK *i* 11 00 35.5
MNK *i* S **S** **11 04 46.2 -0.3**
MNK *i* SS **SnSn** **11 06 50.8 +2.1**
MNK *i* SSS SSS 11 07 06.8
MNK pmax pmax
comp=E,26nm,0.9s
MNK pmax pmax
comp=N,22nm,0.9s
MNK pmax pmax
comp=Z,9.0nm,0.7s
MNK MLR MLR
comp=E,386nm,17.0s
MNK MLR MLR
comp=Z,775nm,20.0s
MNK MLR MLR
comp=N,352nm,20.0s
**SHL Shillong 33.72 84** P **P** **10 59 26.8 -0.5**
**SHL Shillong 33.72 84** P **P** **10 59 26.8 -0.5**
SHL pmax pmax
comp=Z,10.0nm,0.9s
**KECS Kecovo 33.77 318** *e*P **P** **10 59 29.0 +1.8**
KECS pmax pmax
comp=Z,9.0nm,0.7s
**KECS Kecovo 33.77 318** *e*P **P** **10 59 29.0 +1.8**
**MORH Mrgy, Hungar 33.97 314** ⇓P **P** **10 59 28.6 -0.3**
**MORH Mrgy, Hungar 33.97 314** P **P** **10 59 28.3 -0.6**
comp=Z,16nm,0.7s
**DGZ Jazzator, Alta 34.05 39**⇑*e*P **P** **10 59 29.1 -0.7**
DGZ pmax pmax
comp=Z,33nm,1.8s
**LANS Liptovska Anna 34.67 319** *e*P **P** **10 59 35.2 +0.2**
LANS pmax pmax
comp=Z,6.0nm,1.0s
**LANS Liptovska Anna 34.67 319** *e*P **P** **10 59 35.1 +0.1**
**OJC Ojcow 34.98 321** P **P** **10 59 36.6 -0.9**
OJC IAmb IAmb 10 59 42.2
comp=Z,17nm,1.0s
**OJC Ojcow 34.98 321** P **P** **10 59 36.7 -0.9**
OJC pmax pmax
comp=Z,17nm,1.0s
**MPLH Magyarpolny 35.03 315** P **P** **10 59 37.9 -0.2**
comp=Z,25nm,0.7s,comp=Z,1μm
**ZAA0 Zalesovo Array 35.05 32** IAmb IAmb 11 00 03.0
comp=Z,20nm,1.0s
**ZALV Zalesovo Beam 35.05 32** P **P** **10 59 36.7 -1.5**
comp=Z,14nm,0.5s,baz=238,slow=10,SNR=47
ZALV PP **PnPn** **11 00 51.8 -3.5**
comp=Z,4.7nm,0.7s,baz=243,slow=9.7,SNR=1.0
ZALV PcP **PcP** **11 02 08.9 -1.0**
comp=Z,3.1nm,0.6s,baz=227,slow=3.3,SNR=5.4
ZALV S **S** **11 05 09.3 -0.9**
comp=Z,1.6nm,0.8s,baz=248,slow=15,SNR=2.4
ZALV LR LR 11 15 42.2
comp=Z,662nm,18.8s,baz=232,slow=39
comp=Z,14nm,0.5s
**GOMU GeErMu 35.54 65** P **P** **10 59 43.0 -0.1**
GOMU pP sP 10 59 49.5 +1.4
GOMU sP pP 10 59 56.3 +10
GOMU pmax pmax
comp=Z,82nm,1.1s
GOMU LR LR
comp=Z,480nm,16.2s
GOMU LR LR
comp=Z,640nm,15.9s
GOMU LR LR
comp=Z,930nm,16.7s
**MBAR Mbarara 35.59 223**⇓*e*P **P** **10 59 44.1 +0.7**
MBAR pmax pmax
comp=Z,36nm,1.6s
**JAVC Velka Javorina 35.61 318** *e*P **P** **10 59 43.8 +0.6**
**ZST Bratislava 35.70 316** *e*P **P** **10 59 43.5 -0.3**
**ZST Bratislava 35.70 316** *e*P **P** **10 59 43.5 -0.3**
**RONA Rosalia, Austr 36.01 315** *i* P **P** **10 59 47.4 +0.8**
comp=Z,4.0nm,0.6s
**MORC Moravsky Berou 36.07 319** P **P** **10 59 46.8 -0.3**
**MORC Moravsky Berou 36.07 319** *e*P **P** **10 59 46.8 -0.3**
**MORC Moravsky Berou 36.07 319** ⇓P **P** **10 59 46.3 -0.8**
**MORC Moravsky Berou 36.07 319** P **P** **10 59 46.8 -0.3**
MORC pmax pmax
comp=Z,8.0nm,1.0s
**GBRS Gornja Briga 36.27 311** *i* P **P** **10 59 48.0 -0.8**
**ARSA Arzberg 36.34 314** *i* P **P** **10 59 49.6 +0.2**
comp=Z,0.1nm,0.3s
**CONA Conrad Observa 36.37 315** *e*P **P** **10 59 50.5 +0.8**
comp=Z,2.3nm,0.6s
**VRAC Vranov 36.44 318** *e*P **P** **10 59 49.6 -0.6**
**VRAC Vranov 36.44 318** LR LR 11 17 47.4
comp=Z,601nm,20.5s,baz=102,slow=41

KRUC **Moravsky** **36.47 317** *e*P **P** **10 59 48.8 -1.6**
SOKA **Soboth** **36.47 313** *i* P **P** **10 59 51.5 +0.9**
comp=Z,3.7nm,0.8s
LJU **Ljubljana** **36.61 312** *i* P **P** **10 59 51.5 -0.2**
GBAS **Gorenja Brezov** **36.63 312** *i* P **P** **10 59 51.4 -0.6**
OBKA **Obir** **36.74 313** *i* P **P** **10 59 53.5 +0.6**
comp=Z,5.0nm,0.9s
NRCA **Norcia** **36.78 306** IAmb IAmb 10 59 56.0
comp=Z,17nm,0.7s
FDMO **Fiordimonte** **36.85 306** IAmb IAmb 11 00 26.1
comp=Z,38nm,1.3s
SABO **M.te Sabotino** **37.21 311** IAmb IAmb 10 59 58.4
comp=Z,17nm,0.7s
MOA **Molln** **37.35 315** *i* P **P** **10 59 59.0 +1.0**
comp=Z,5.7nm,0.7s
MYKA **Terra Mystica** **37.37 312** *i* P **P** **10 59 58.4 +0.1**
comp=Z,6.0nm,0.8s
BIOA **Bad Ischl, Aus** **37.70 314** *i* P **P** **10 59 58.6 -2.3**
comp=Z,11nm,0.8s
KBA **Koelnbreinsper** **37.70 313** *i* P **P** **11 00 00.3 -0.8**
comp=Z,16nm,0.7s,SNR=11
GERES **GERESS Array B** **38.04 316** P **P** **11 00 03.4 -0.5**
comp=Z,3.3nm,0.4s,baz=93,slow=9.9,SNR=1.4
GERES PcP **PcP** **11 02 18.3 -0.9**
comp=Z,1.4nm,0.6s,baz=77,slow=4.3,SNR=0.8
comp=Z,3.3nm,0.4s
CIMO **Cimolais** **38.08 312** IAmb IAmb 11 00 05.8
comp=Z,9.2nm,0.7s
ABTA **Abfaltersbach** **38.15 312** *i* P **P** **11 00 04.2 -0.6**
comp=Z,10nm,0.7s,SNR=6.7
KHC **Kasperske Hory** **38.21 316** *e*P **P** **11 00 05.4 +0.1**
KHC **Kasperske Hory** **38.21 316***ce*P **P** **11 00 03.5 -1.8**
KHC pmax pmax
comp=Z,23nm,1.0s
KHC **Kasperske Hory** **38.21 316** P **P** **11 00 04.4 -0.9**
comp=Z,9.8nm,1.4s
LESA **Schwarzleotal** **38.23 313** *i* P **P** **11 00 04.1 -1.4**
comp=Z,8.5nm,0.7s
CTI **Castel Tesino** **38.54 311** IAmb IAmb 11 00 10.2
comp=Z,26nm,0.6s
ZCCA **Zocca** **38.62 308** P **P** **11 00 08.8 +0.1**
ZCCA IAmb IAmb 11 00 31.8
comp=Z,49nm,1.1s
BRG **Berggiesshubel** **38.63 319** *e*P **P** **11 00 12.1 +3.3**
BRG Amp 11 00 17.2
comp=Z,2.6nm,0.6s
BRG **Berggiesshubel** **38.63 319** *e*P **P** **11 00 12.0 +3.3**
BRG pmax pmax
comp=Z,3.0nm,0.6s
BRG pmax pmax
comp=Z,645nm,17.5s
BRG MLR MLR
comp=E,318nm,15.5s
BRG MLR MLR
comp=N,429nm,13.4s
WTTA **Wattenberg** **38.87 313** *i* P **P** **11 00 09.4 -1.6**
comp=N,26nm,0.7s,SNR=9.9
WATA **Walderalm** **38.93 313** *i* P **P** **11 00 09.9 -1.5**
comp=N,17nm,0.6s,SNR=6.6
KEST **Kesra** **38.98 294** P **P** **11 00 12.1 +0.1**
comp=N,5.3nm,0.8s,baz=90,slow=4.3,SNR=6.4
comp=N,5.3nm,0.8s
VSL **Villasalto** **39.10 300** IAmb IAmb 11 00 16.2
comp=Z,21nm,0.7s
SQTA **Sankt Quirin** **39.14 313** *i* P **P** **11 00 11.7 -1.4**
comp=Z,33nm,0.6s,SNR=23
FINES **FINESS Array B** **39.22 339** P **P** **11 00 12.3 -1.2**
comp=Z,4.2nm,0.5s,baz=141,slow=9.0,SNR=24
FINES PcP **PcP** **11 02 21.2 -1.2**
comp=Z,3.6nm,0.7s,baz=128,slow=2.3,SNR=2.1
FINES LR LR 11 19 47.1
comp=Z,570nm,20.2s,baz=153,slow=41
comp=Z,4.2nm,0.5s
FINES **FINESS Array B** **39.22 339** *i* P **P** **11 00 12.1 -1.4**
FINES pmax pmax
comp=Z,4.0nm,0.5s
MOTA **Moosalm** **39.24 313** *i* P **P** **11 00 12.3 -1.7**
comp=Z,9.0nm,1.0s
CLL **Collm** **39.34 319** *e*P **P** **11 00 13.0 -1.7**
CLL *ep*P **pP** **11 00 18.0 -0.3**
comp=Z,16nm,1.5s
CLL *ex* x 11 01 37.0
CLL *e*S **S** **11 06 16.0 +0.4**
CLL *e*SS **SnSn** **11 09 18.0 +8.3**
CLL *e*SSS SSS 11 09 30.0
CLL AMS AMS 11 19 00.0
comp=Z,600nm,20.0s
CLL **Collm** **39.34 319** *e*P **P** **11 00 13.0 -1.7**
CLL *e* 11 00 18.0
CLL *e*S **S** **11 06 16.0 +0.4**
CLL MLR MLR
comp=Z,600nm,20.0s
FETA **Feichten** **39.40 312** *i* P **P** **11 00 14.1 -1.3**
comp=Z,29nm,0.8s,SNR=28
RETA **Reutte** **39.50 313** *i* P **P** **11 00 14.2 -1.9**
comp=Z,15nm,0.6s,SNR=12
GTA **Gaotai** **39.70 60** P **P** **11 00 17.8 -0.2**
GTA pP sP 11 00 24.3 +1.3
GTA SS SS 11 09 08.8 -8.1
GTA pmax pmax
comp=Z,50nm,1.1s
GTA pmax pmax
comp=Z,320nm,4.4s
GTA LR LR
comp=Z,660nm,16.0s
GTA LR LR
comp=Z,250nm,15.3s
GTA LR LR
comp=Z,520nm,16.4s
TNCH **TengChong** **39.71 83** P **P** **11 00 19.8 +1.5**
TNCH pP pP 11 00 22.1 +0.2
TNCH sP sP 11 00 25.1 +1.7
TNCH PP **PP** **11 01 50.8 +1.3**
TNCH S **S** **11 06 16.3 -5.9**
TNCH sS sS 11 06 33.4 +5.3
TNCH pmax pmax
comp=Z,67nm,1.2s
TNCH pmax pmax
comp=Z,320nm,3.4s
TNCH LR LR
comp=Z,220nm,5.1s
TNCH LR LR
comp=Z,220nm,4.5s
TNCH LR LR
comp=Z,210nm,17.2s
GRF **Grafenberg Arr** **39.85 316** *e*P **P** **11 00 17.6 -1.4**
comp=Z,7.1nm,1.0s,baz=108,slow=9.1
DAVOX **Davos/Dischmat** **39.91 312** LR LR 11 20 06.0
comp=Z,552nm,21.9s,baz=84,slow=41
DAVA **Damuels** **40.03 312** *i* P **P** **11 00 19.2 -1.5**
comp=Z,61nm,0.7s,SNR=34
BFO **Black Forest** **41.30 313** P **P** **11 00 30.1 -0.9**
BFO **Black Forest** **41.30 313** P **P** **11 00 30.1 -0.9**
BFO pmax pmax
comp=Z,6.0nm,0.8s
BNI **Bardonecchia** **41.76 308** IAmb IAmb 11 01 00.2
comp=Z,33nm,1.4s
CM31 **Chiang Mai Arr** **41.95 92** P **P** **11 00 36.5 -0.2**
CMAR **Chiang Mai Arr** **41.95 92** P **P** **11 00 35.6 -1.0**
CMAR **Chiang Mai Arr** **41.95 92** P **P** **11 00 36.8 +0.1**
comp=Z,6.5nm,0.6s,baz=287,slow=9.2,SNR=32
CMAR PcP **PcP** **11 02 31.8 -0.3**
comp=Z,2.2nm,0.8s,baz=284,slow=3.6,SNR=3.2
CMAR LR LR 11 20 55.3
comp=Z,111nm,18.6s,baz=290,slow=40
comp=Z,6.5nm,0.6s
CMAR **Chiang Mai Arr** **41.95 92** P **P** **11 00 35.6 -1.0**
PZH **PanZhiHua** **42.24 80** P **P** **11 00 39.9 +0.8**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,260nm,7.1s
LZH **Lanzhou** **42.85 65** P **P** **11 00 45.5 +1.6**
LZH sP sP 11 00 55.4 +6.4
LZH pmax pmax
comp=Z,57nm,1.0s
WLF **Walferdange** **43.01 315** *d*P **P** **11 00 43.6 -1.2**
HFS **Hagfors** **43.02 332** P **P** **11 00 42.9 -1.9**
comp=Z,3.0nm,0.5s,baz=124,slow=9.6,SNR=9.6
HFS LR LR 11 22 19.7
comp=Z,354nm,18.4s,baz=125,slow=41
comp=Z,3.0nm,0.5s
CD2 **Chengdu** **43.23 73** P **P** **11 00 45.8 -1.2**
SSB **Saint Sauveur** **43.28 308** P **P** **11 00 45.5 -1.7**
SSB **Saint Sauveur** **43.28 308** P **P** **11 00 45.5 -1.7**
SSB pmax pmax
comp=Z,6.0nm,0.7s

KMI **Kunming** **43.42 81** ⇓P **P** **11 00 49.8 +1.0**
KMI pmax pmax
comp=Z,25nm,1.2s
SRDT **SRDT** **43.65 98** P **P** **11 00 52.1 +1.6**
RCHB **Rochefort** **43.70 315** *d*P **P** **11 00 49.6 -0.8**
ZAK **Zakamensk** **43.81 44** *e*P **P** **11 00 51.6 +0.1**
ZAK pmax pmax
comp=Z,7.0nm,1.1s
DOU **Dourbes** **44.09 315** *d*P **P** **11 00 52.5 -1.0**
TAM **Tamanrasset** **44.14 276** P **P** **11 00 53.2 -1.3**
TAM **Tamanrasset** **44.14 276** P **P** **11 00 53.2 -1.3**
TAM pmax pmax
comp=Z,9.0nm,0.8s
NC405 **NORSAR Array S** **44.37 332** P **P** **11 00 54.9 -0.7**
NB2 **NORSAR Subarra** **44.54 332** P **P** **11 00 55.6 -1.5**
comp=Z,1.9nm,0.7s,baz=118,slow=8.6
NOA **NORSAR Array B** **44.54 332** P **P** **11 00 55.6 -1.5**
comp=Z,1.8nm,0.6s,baz=119,slow=8.0,SNR=8.4
NOA LR LR 11 21 19.5
comp=Z,355nm,21.6s,baz=135,slow=38
comp=Z,1.8nm,0.6s
IRK **Irkutsk** **44.86 42** *e*P **P** **11 01 00.2 +0.5**
IRK pmax pmax
comp=Z,33nm,1.1s
SONM **Songino Array** **45.35 48** P **P** **11 01 04.2 +0.3**
SONM IAmb IAmb 11 01 07.3
comp=Z,16nm,1.1s
SONM **Songino Array** **45.35 48** P **P** **11 01 03.2 -0.7**
comp=Z,13nm,1.0s,baz=266,slow=8.5,SNR=31
SONM LR LR 11 21 03.3
comp=Z,842nm,20.5s,baz=252,slow=38
comp=Z,13nm,1.0s
CEST **Esterri de Car** **45.42 304** IAmb IAmb 11 01 30.8
comp=Z,17nm,1.1s
ARCES **ARCESS Array B** **45.68 346** P **P** **11 01 05.2 -0.8**
comp=Z,4.1nm,0.7s,baz=146,slow=6.6,SNR=13
ARCES PcP **PcP** **11 02 44.0 +0.2**
comp=Z,3.4nm,0.7s,baz=150,slow=4.2,SNR=3.0
ARCES LR LR 11 24 15.6
comp=Z,337nm,20.3s,baz=152,slow=41
comp=Z,4.1nm,0.7s
ULN **Ulaanbaatar** **45.80 48** P **P** **11 01 07.2 -0.2**
ULN IAmb IAmb 11 01 10.5
comp=Z,16nm,0.9s
ULN **Ulaanbaatar** **45.80 48** P **P** **11 01 08.4 +1.0**
ULN P **P** **11 01 08.4 +1.0**
ULN **Ulaanbaatar** **45.80 48**⇓*e*P **P** **11 01 06.7 -0.7**
ULN pmax pmax
comp=Z,24nm,1.3s
NONG **Nongkai** **45.84 91** P **P** **11 01 08.6 +0.7**
OPO **Ambohidratompo** **45.87 189** LR LR 11 19 45.0
comp=Z,590nm,18.1s,baz=170,slow=35
MLSI **Meulaboh, Aceh** **46.19 112** P **P** **11 01 12.2 +1.5**
comp=Z,42nm,0.9s
GYA **Guiyang** **46.55 78** ⇓P **P** **11 01 15.9 +2.3**
GYA pmax pmax
comp=Z,22nm,1.1s
XAN **Xi'an** **47.16 68** ⇓P **P** **11 01 18.0 -0.2**
XAN PP **PP** **11 03 13.5 +4.5**
XAN pmax pmax
comp=Z,31nm,0.9s
XAN pmax pmax
comp=Z,580nm,5.3s
XAN LR LR
comp=Z,980nm,10.1s
XAN LR LR
comp=Z,850nm,11.4s
XAN LR LR
comp=Z,2μm,19.2s
BTO **Baotou** **47.56 59** *e*P **P** **11 01 21.8 +0.6**
BTO pP **sP** **11 01 26.0 -0.3**
BTO sP **pP** **11 01 29.3 +4.4**
BTO PP **PP** **11 03 16.3 +3.7**
BTO S **S** **11 08 18.9 +2.6**
BTO pmax pmax
comp=Z,91nm,1.2s
BTO pmax pmax
comp=Z,250nm,3.6s
BTO LR LR
comp=Z,1μm,12.7s
BTO LR LR
comp=Z,910nm,16.0s
BTO LR LR
comp=Z,1μm,13.5s
ENH **Enshi** **48.21 72** P **P** **11 01 27.2 +0.8**
HHC **Hu-ho-hao-te** **48.72 58**⇑*i*P **P** **11 01 32.3 +2.1**
HHC pmax pmax
comp=Z,35nm,1.1s
HHC pmax pmax
comp=Z,160nm,4.0s
UBPT **Khong Chiam** **48.92 93** P **P** **11 01 32.3 +0.4**
UBPT **Khong Chiam** **48.92 93** IAmb IAmb 11 01 34.7
comp=Z,25nm,1.2s
LSZ **Lusaka** **49.09 214** P **P** **11 01 34.0 +0.8**
LSZ IAmb IAmb 11 01 37.8
comp=Z,15nm,1.1s
LSZ **Lusaka** **49.09 214** P **P** **11 01 34.8 +1.6**
LSZ **Lusaka** **49.09 214** P **P** **11 01 34.0 +0.8**
LSZ pmax pmax
comp=Z,15nm,1.1s
PSI **Prapat** **49.09 112** P **P** **11 01 34.6 +1.3**
RPSI **Rantau Prapat** **49.15 112** IAmb IAmb 11 01 37.7
comp=Z,17nm,0.8s
VOI **Vohitsoka** **49.20 189** P **P** **11 01 34.9 +0.9**
VOI **Vohitsoka** **49.20 189** P **P** **11 01 36.6 +2.6**
KULM **Kulim** **49.20 108** P **P** **11 01 33.8 -0.3**
KULM IAmb IAmb 11 01 38.3
comp=Z,18nm,1.0s
ESDC **Sonseca Array** **49.41 300** P **P** **11 01 33.1 -2.3**
ESDC IAmb IAmb 11 01 54.8
comp=Z,21nm,1.8s
ESDC **Sonseca Array** **49.41 300** P **P** **11 01 34.4 -1.1**
comp=Z,6.0nm,0.9s,baz=70,slow=7.2,SNR=36
comp=Z,6.0nm,0.9s
PAB **San Pablo** **49.71 300** P **P** **11 01 36.2 -1.6**
PAB IAmb IAmb 11 01 39.8
comp=Z,10nm,0.7s
PAB **San Pablo** **49.71 300** P **P** **11 01 36.2 -1.6**
PAB pmax pmax
comp=Z,10.0nm,0.7s
EKA **Eskdalemuir Ar** **49.75 321** P **P** **11 01 35.9 -1.9**
comp=Z,1.8nm,0.5s,baz=108,slow=8.3,SNR=10.0
comp=Z,1.8nm,0.5s
IPM **Ipoh** **49.94 108** P **P** **11 01 40.2 +0.4**
IPM **Ipoh** **49.94 108** P **P** **11 01 38.9 -0.9**
IPM IAmb IAmb 11 01 42.0
comp=Z,21nm,0.8s
LYN **LuoYang** **50.01 66** P **P** **11 01 41.1 +1.1**
LYN pmax pmax
comp=Z,45nm,0.9s
MDT **Midelt** **50.74 291** LR LR 11 27 28.9
comp=Z,73nm,21.8s,baz=79,slow=41
TORD **Torodi Ar. Bea** **50.88 265** P **P** **11 01 45.3 -1.5**
TORD IAmb IAmb 11 01 50.6
comp=Z,20nm,1.1s
TORD **Torodi Ar. Bea** **50.88 265** P **P** **11 01 45.4 -1.5**
comp=Z,20nm,1.1s,baz=59,slow=8.4,SNR=40
comp=Z,20nm,1.1s
PBRG **Braganca** **51.37 303** *e*P **P** **11 01 50.6 +0.3**
HNS **HongShan** **51.44 62** ⇓P **P** **11 01 52.5 +1.8**
HNS *e*S **S** **11 09 14.4 +3.9**
HNS pmax pmax
comp=Z,17nm,1.2s
HNS LR LR
comp=Z,900nm,19.1s
HNS LR LR
comp=Z,470nm,20.7s
QIZ **Qiongzhong** **51.48 87** P **P** **11 01 53.5 +2.2**
BOD **Bodaibo** **51.51 36** *e*P **P** **11 01 49.0 -2.0**
BOD pmax pmax
comp=Z,54nm,1.3s
CNSH **ChangSha** **51.59 74** ⇑P **P** **11 01 53.0 +1.0**
CNSH pmax pmax
comp=Z,40nm,1.4s
MVO **Moncorvo** **51.63 302** *e*P **P** **11 01 51.6 -0.7**
comp=Z,20nm,0.8s
PBAR **Barrancos** **51.93 299** *e*P **P** **11 01 53.3 -1.1**
comp=Z,30nm,1.9s
XLT **XiLinHaoTe** **51.93 54** *e*P **P** **11 01 56.1 +1.6**
XLT pP pP 11 01 58.1 -0.1
XLT pmax pmax
comp=Z,14nm,0.9s
XLT pmax pmax
comp=Z,120nm,5.4s
XLT LR LR
comp=Z,390nm,16.7s

PMRV **Marv??o** **52.07 300** *e*P **P** **11 01 56.0 +0.5**
comp=Z,16nm,2.0s
PCBR **Castelo Branco** **52.09 301** *e*P **P** **11 01 55.6 0.0**
comp=Z,24nm,1.6s
PVRL **Vila Real** **52.14 303** *e*P **P** **11 01 57.3 +1.3**
comp=Z,22nm,1.5s
POLO **Lamas de Olo** **52.19 303** *e*P **P** **11 01 55.7 -0.8**
comp=Z,12nm,1.9s
BKNI **Bangkinang** **52.22 113** P **P** **11 01 57.3 +0.5**
PESTR **Estremoz** **52.28 300** *e*P **P** **11 01 55.9 -1.2**
BJI **Beijing** **52.29 59** P **P** **11 01 58.0 +1.0**
BJI pmax pmax
comp=Z,5.0nm,1.1s
BJI LR LR
comp=Z,460nm,18.6s
BJI LR LR
comp=Z,350nm,15.8s
BJI LR LR
comp=Z,220nm,18.4s
PVIS **Viseu** **52.33 302** *e*P **P** **11 01 56.7 -0.7**
comp=Z,18nm,0.9s
PDSI **Padang** **52.45 114** P **P** **11 02 00.4 +1.8**
comp=Z,34nm,1.2s
PBEJ **Beja** **52.60 299** *e*P **P** **11 02 00.6 +1.2**
comp=Z,25nm,1.8s
PBDV **Barranco-do-Ve** **52.75 298** *e*P **P** **11 01 58.3 -2.3**
COI **Coimbra** **52.77 301** IAmb IAmb 11 02 03.8
comp=Z,18nm,0.8s
PCVE **Castro Verde** **52.79 298** *e*P **P** **11 02 00.0 -0.8**
comp=Z,35nm,1.8s
PCAS **Casmilo, Conde** **52.85 301** *e*P **P** **11 01 58.0 -3.3**
comp=Z,18nm,2.0s
PNCL **Nicolau / Gran** **53.11 299** *e*P **P** **11 02 04.7 +1.6**
PSBE **So Bento** **53.14 301** *e*P **P** **11 02 03.9 +0.5**
comp=Z,26nm,1.8s
MATP **Matopo** **53.37 210** LR LR 11 26 23.1
comp=Z,518nm,19.6s,baz=57,slow=38
PFVI **Vila Bisbo** **53.48 298** *e*P **P** **11 02 07.3 +1.4**
SPITS **Spitsbergen Ar** **53.99 351** P **P** **11 02 08.4 -0.6**
comp=Z,4.1nm,0.7s,baz=133,slow=10.0,SNR=6.4
SPITS LR LR 11 30 59.7
comp=Z,236nm,18.0s,baz=94,slow=43
comp=Z,4.1nm,0.7s
NJ2 **Nanjing** **55.72 68** *e*P **P** **11 02 21.3 -0.9**
NJ2 pmax pmax
comp=Z,27nm,1.3s
JMIC **Jan Mayen** **55.84 339** LR LR 11 29 08.1
comp=Z,199nm,18.8s,baz=72,slow=39
TSUM **Tsumeb** **58.10 222** P **P** **11 02 41.3 +1.9**
TSUM IAmb IAmb 11 02 42.5
comp=Z,28nm,1.5s
TSUM **Tsumeb** **58.10 222** LR LR 11 28 49.5
comp=Z,549nm,18.3s,baz=8.5,slow=37
LBTB **Lobatse** **58.67 211** P **P** **11 02 43.2 0.0**
LBTB **Lobatse** **58.67 211** LR LR 11 29 30.6
comp=Z,700nm,20.0s,baz=24,slow=38
LBTB **Lobatse** **58.67 211** P **P** **11 02 43.2 0.0**
LBTB pmax pmax
comp=Z,15nm,0.8s
CN2 **Changchun** **58.68 53** *e*P **P** **11 02 43.3 +0.3**
CN2 *es*P sP 11 02 50.3 +2.1
CN2 pmax pmax
comp=Z,20nm,1.2s
ZEA **Zeya** **58.77 42** *e*P **P** **11 02 43.1 -0.3**
ZEA pmax pmax
comp=Z,10.0nm,1.2s
ZEA MLR MLR
comp=N,500nm,16.0s
ZEA MLR MLR
comp=Z,400nm,13.0s
HEH **HeiHe** **59.18 46** *e*P **P** **11 02 44.5 -1.9**
HEH pmax pmax
comp=Z,11nm,0.7s
KSM **Kuching** **59.42 105** P **P** **11 02 49.3 +0.8**
DBIC **Dimbokro** **59.50 261** P **P** **11 02 47.6 -1.4**
DBIC **Dimbokro** **59.50 261** P **P** **11 02 48.1 -1.0**
comp=Z,19nm,0.7s,baz=62,slow=9.4,SNR=20
DBIC LR LR 11 29 12.8
comp=Z,108nm,18.9s,baz=47,slow=37
comp=Z,19nm,0.7s
KIC **Kosan Boka** **59.54 261**⇓*e*P **P** **11 02 50.4 +1.0**
comp=Z,35nm,0.7s
TIC **Toumodi** **59.65 262**⇑*e*P **P** **11 02 48.3 -1.9**
comp=Z,31nm,0.8s
YAK **Yakutsk** **59.70 32** LR LR 11 31 23.7
comp=Z,679nm,18.4s,baz=262,slow=39
YAK **Yakutsk** **59.70 32** *e*P **P** **11 02 49.5 -0.2**
YAK *e**PP **pP** **11 02 53.3 -0.2**
YAK *e* 11 03 36.5
YAK *e* 11 05 04.6
YAK *e*S **S** **11 11 00.9 +0.8**
YAK *e**SS **sS** **11 11 09.0 +2.7**
YAK *e* 11 12 41.2
YAK pmax pmax
comp=Z,22nm,0.9s
YAK pmax pmax
comp=N,2.0nm,0.9s
YAK pmax pmax
comp=E,13nm,1.2s
YAK pmax pmax
comp=Z,58nm,2.2s
YAK pmax pmax
comp=E,39nm,2.7s
YAK pmax pmax
comp=N,45nm,2.7s
YAK smax smax
comp=N,86nm,3.3s
YAK smax smax
comp=E,41nm,3.3s
YAK MLR MLR
comp=Z,972nm,21.0s
YAK MLR MLR
comp=E,778nm,21.0s
BORG **Borgarnes** **59.72 331** LR LR 11 29 44.7
comp=E,243nm,21.6s,baz=102,slow=37
TIXI **Tiksi** **59.74 21** LR LR 11 31 12.3
comp=E,654nm,19.2s,baz=272,slow=39
TIXI **Tiksi** **59.74 21**⇑*e*P **P** **11 02 50.3 +0.4**
TIXI pmax pmax
comp=Z,24nm,1.5s
BNX **BinXian** **59.77 51** ⇑P **P** **11 02 50.6 +0.1**
BNX pmax pmax
comp=Z,13nm,1.4s
LIC **Lamto** **59.85 261**⇑*e*P **P** **11 02 50.2 -1.3**
comp=Z,22nm,0.6s
SBUM **Sibu** **60.58 103** P **P** **11 02 55.4 -1.1**
KSRS **Korea Array** **61.77 60** P **P** **11 03 03.8 -0.5**
comp=Z,4.7nm,0.7s,baz=278,slow=6.8,SNR=11
comp=Z,4.7nm,0.7s
BOSA **Boshof** **61.93 209** P **P** **11 03 05.7 +0.2**
BOSA IAmb IAmb 11 03 07.2
comp=Z,12nm,0.8s
BOSA **Boshof** **61.93 209** P **P** **11 03 05.7 +0.2**
comp=Z,10nm,0.8s,baz=31,slow=8.8,SNR=24
BOSA LR LR 11 29 44.1
comp=Z,470nm,21.8s,baz=28,slow=36
comp=Z,10nm,0.8s
KLR **Kul'dur** **62.11 46** LR LR 11 30 07.6
comp=Z,567nm,20.0s,baz=203,slow=36
KLR **Kul'dur** **62.11 46***de*P **P** **11 03 06.0 -0.4**
KLR pmax pmax
comp=Z,15nm,1.1s
USRK **Ussuriysk Ar.** **63.25 52** P **P** **11 03 13.0 -1.1**
comp=Z,2.7nm,0.7s,baz=265,slow=6.1,SNR=4.7
comp=Z,2.7nm,0.7s
USRK **Ussuriysk Ar.** **63.25 52** P **P** **11 03 13.0 -1.1**
MYLDM **Lahad Datu** **64.79 97** P **P** **11 03 24.9 +0.2**
SUMG **Summit** **65.23 341** P **P** **11 03 26.7 -0.4**
SUMG **Summit** **65.23 341** P **P** **11 03 26.7 -0.4**
SUMG pmax pmax
comp=Z,23nm,1.0s
SUR **Sutherland** **67.12 210** LR LR 11 33 04.5
comp=Z,543nm,18.9s,baz=24,slow=36
MPSI **Mapaga** **68.30 101** P **P** **11 03 48.5 +1.4**
comp=Z,15nm,1.4s,comp=Z,5μm
TYV **Tymovskoe** **68.57 43** *e*P **P** **11 03 48.6 +0.4**
TYV pmax pmax
comp=Z,10.0nm,1.4s
TYV pmax pmax
comp=Z,200nm,3.5s
YSS **Yuzh-Sakhalins** **69.81 47** *e*P **P** **11 03 55.9 0.0**
YSS pmax pmax
comp=Z,30nm,0.9s
SEY **Seymchan** **69.86 29**⇑*e*P **P** **11 03 55.0 -1.0**
SEY pmax pmax
comp=Z,23nm,1.3s
MJAR **Matsushiro Arr** **69.92 59** P **P** **11 03 56.3 -0.6**

comp=Z,5.0nm,1.1s,baz=290,slow=4.1,SNR=5.5
comp=Z,5.0nm,1.1s
**SPSI Sidrap Palu 70.31 105** P **P** **11 04 02.0 +2.5**
comp=Z,15nm,1.3s
**KAPI Kappang 70.82 106** P **P** **11 04 03.6 +1.0**
**KAPI Kappang 70.82 106** P **P** **11 04 01.9 -0.7**
comp=Z,6.9nm,0.3s,baz=294,slow=4.0,SNR=5.9
comp=Z,6.9nm,0.3s
**SFJD Kangerlussuaq 70.95 336** LR LR 11 37 40.6
comp=Z,184nm,21.9s,baz=58,slow=38
**ERM Erimo 71.70 52** ⇓*i*P **P** **11 04 04.7 -2.9**
ERM pmax pmax
comp=Z,50nm,1.2s
**BILL Bilibino 72.95 21** ⇓*e*P **P** **11 04 16.0 +1.4**
BILL *e* 11 06 53.6
BILL pmax pmax
comp=Z,11nm,0.9s
BILL MLR MLR
comp=Z,586nm,17.0s
**SANI Sanana 74.78 100** P **P** **11 04 26.5 +0.3**
**SANI Sanana 74.78 100** P **P** **11 04 27.1 +0.9**
comp=Z,36nm,1.0s
**PETK Petropavlovsk- 76.37 37** P **P** **11 04 32.6 -2.2**
**PETK Petropavlovsk- 76.37 37** P **P** **11 04 33.6 -1.2**
comp=Z,8.8nm,1.1s,baz=270,slow=1.4,SNR=6.7
comp=Z,8.8nm,1.1s
**SWI Sorong 78.87 97** P **P** **11 04 51.5 +2.2**
comp=Z,36nm,0.9s
**FRB Frobisher Bay 79.01 338** LR LR 11 41 08.2
comp=Z,138nm,20.6s,baz=23,slow=37
**A21K Barrow 79.53 10** P **P** **11 04 51.1 -0.8**
baz=332
**A19K Wainwright 79.78 12** P **P** **11 04 51.8 -1.5**
baz=328
**A22K Sinclair Lake 80.06 9** P **P** **11 04 53.7 -1.0**
baz=334
**B18K Kokolik River 80.36 12** P **P** **11 04 56.0 -0.4**
baz=328
**C16K Lisburne Hills 80.56 14** P **P** **11 04 56.8 -0.7**
baz=325
**B20K Meade River 80.62 10** P **P** **11 04 57.3 -0.5**
baz=332
**C17K DeLong Mountai 80.85 13** P **P** **11 04 59.0 -0.1**
baz=327
**B22K Teshekpuk Lake 80.89 9** P **P** **11 04 59.2 0.0**
baz=335
**C19K Lookout Ridge 81.00 12** P **P** **11 04 59.4 -0.5**
baz=330
**C18K Utukok River 81.09 12** P **P** **11 05 00.3 -0.2**
baz=328
**A36M Sachs Harbour 81.22 360** P **P** **11 05 01.1 +0.1**
**A36M Sachs Harbour 81.22 360** P **P** **11 05 01.4 +0.4**
baz=0.5
**RDOG Red Dog Mine 81.26 13** P **P** **11 05 02.0 +0.7**
baz=327
**B21K Ikpikpuk River 81.36 10** IAmb IAmb 11 05 04.5
comp=Z,15nm,0.8s
**B21K Ikpikpuk River 81.36 10** P **P** **11 05 02.0 +0.3**
baz=334
**D17K Noatak River 81.52 14** P **P** **11 05 02.8 +0.1**
baz=327
**C23K Itkillik River 81.73 8** P **P** **11 05 04.2 +0.5**
baz=338
**C21K Knifeblade Rid 81.76 10** P **P** **11 05 04.9 +1.0**
baz=334
**D19K Kuna River 81.79 11** IAmb IAmb 11 05 05.8
comp=Z,11nm,1.0s
**D19K Kuna River 81.79 11** P **P** **11 05 04.3 +0.2**
baz=331
**D20K Etivluk River 81.86 11** P **P** **11 05 04.4 0.0**
baz=333
**C24K Franklin Bluff 82.09 8** P **P** **11 05 05.9 +0.4**
baz=340
**TNA Tin City 82.17 16** P **P** **11 05 06.2 +0.1**
baz=323
**E18K Tukpahlearik C 82.26 13** P **P** **11 05 07.3 +0.8**
baz=329
**E17K Hotham Inlet 82.30 13** P **P** **11 05 06.5 -0.2**
baz=328
**D22K Ayikyak River 82.33 10** IAmb IAmb 11 05 09.6
comp=Z,20nm,1.2s
**D22K Ayikyak River 82.33 10** P **P** **11 05 07.1 +0.2**
baz=336
**E20K Nigu River 82.34 11** P **P** **11 05 07.4 +0.3**
baz=333
**E21K Killik River 82.53 10** IAmb IAmb 11 05 09.4
comp=Z,11nm,1.1s
**E21K Killik River 82.53 10** P **P** **11 05 08.1 0.0**
baz=335
**D23K Nanushuk River 82.54 9** IAmb IAmb 11 05 10.1
comp=Z,8.9nm,0.8s
**D23K Nanushuk River 82.54 9** P **P** **11 05 08.8 +0.8**
baz=338
**D24K Happy Valley 82.60 8** P **P** **11 05 08.7 +0.3**
baz=339
**F14K Arctic Creek 82.63 16** P **P** **11 05 09.1 +0.6**
baz=324
**C27K Jago River 82.72 6** P **P** **11 05 09.3 +0.3**
baz=344
**D25K Kavik River 82.74 7** IAmb IAmb 11 05 48.2
comp=Z,9.8nm,1.2s
**D25K Kavik River 82.74 7** P **P** **11 05 09.8 +0.7**
baz=342
**F15K North Star Dit 82.84 15** IAmb IAmb 11 05 12.0
comp=Z,21nm,1.2s
**F15K North Star Dit 82.84 15** P **P** **11 05 09.8 +0.2**
baz=326
**E19K Redstone River 82.87 12** IAmb IAmb 11 05 11.1
comp=Z,7.8nm,0.7s
**E19K Redstone River 82.87 12** P **P** **11 05 10.3 +0.6**
baz=332
**TOLK Toolik Lake Re 82.99 9** P **P** **11 05 09.6 -0.8**
TOLK IAmb IAmb 11 05 12.6
comp=Z,7.8nm,0.8s
**TOLK Toolik Lake Re 82.99 9** P **P** **11 05 10.6 +0.2**
baz=339
**E22K Anaktuvuk Pass 83.14 10** P **P** **11 05 12.1 +0.9**
E22K IAmb IAmb 11 05 14.8
comp=Z,17nm,1.4s
**E22K Anaktuvuk Pass 83.14 10** P **P** **11 05 11.5 +0.2**
baz=337
**F18K Selawik 83.16 13** P **P** **11 05 11.5 +0.2**
baz=330,SNR=6.5
**F19K Shaleruckik Mo 83.32 12** IAmb IAmb 11 05 20.1
comp=Z,13nm,1.1s
**F19K Shaleruckik Mo 83.32 12** P **P** **11 05 11.1 -0.9**
baz=332,SNR=8.4
**D27M Malcolm River 83.34 5** P **P** **11 05 12.0 -0.2**
baz=346
**D28M Stokes Point 83.43 5** P **P** **11 05 13.0 +0.4**
baz=348
**F20K Avaraart Lake 83.50 11** P **P** **11 05 12.9 -0.1**
baz=333
**E23K Chandalar 83.53 9** IAmb IAmb 11 05 15.8
comp=Z,8.6nm,0.9s
**E23K Chandalar 83.53 9** P **P** **11 05 13.5 +0.2**
baz=339
**G15K Niukluk 83.58 15** P **P** **11 05 13.1 -0.3**
baz=326
**ANM Nome 83.61 16** P **P** **11 05 13.7 +0.1**
baz=325
**G16K Koyuk River 83.63 15** IAmb IAmb 11 05 16.1
comp=Z,19nm,1.4s
**G16K Koyuk River 83.63 15** P **P** **11 05 13.8 +0.1**
baz=328
**E24K Your Creek 83.66 8** IAmb IAmb 11 05 17.9
comp=Z,8.3nm,1.1s
**E24K Your Creek 83.66 8** P **P** **11 05 13.7 -0.2**
baz=340
**F22K John River 83.67 10** P **P** **11 05 13.5 -0.4**
baz=336
**F21K Alatna River 83.72 10** IAmb IAmb 11 05 16.5
comp=Z,9.5nm,1.2s
**F21K Alatna River 83.72 10** P **P** **11 05 13.4 -0.8**
baz=335
**C36M Paulatuk 83.87 359** P **P** **11 05 14.3 -0.5**
baz=1.6
**G17K Kiwalik Mounta 83.91 14** P **P** **11 05 14.7 -0.4**
baz=329
**G18K Tagagawik 83.98 13** IAmb IAmb 11 05 43.6
comp=Z,11nm,1.3s
**G18K Tagagawik 83.98 13** P **P** **11 05 15.1 -0.4**
baz=331
**DRS Darwin Rock St 84.04 107** P **P** **11 05 18.2 +1.6**
**E28M Babbage River 84.08 5** P **P** **11 05 15.0 -1.0**
baz=348
**SCHQ Schefferville 84.09 330** P **P** **11 05 15.6 -0.7**
comp=Z,9.3nm,0.9s,baz=62,slow=1.7,SNR=4.7

SCHQ LR LR 11 45 00.4
comp=Z,122nm,19.3s,baz=37,slow=37
comp=Z,9.3nm,0.9s
**COLD Coldfoot 84.22 9** P **P** **11 05 16.6 -0.1**
baz=338,SNR=6.6
**F24K Squaw Lake 84.27 8** P **P** **11 05 16.2 -0.8**
baz=340
**H16K Elim 84.30 15** P **P** **11 05 17.2 +0.1**
baz=328
**G22K Bettles 84.31 10** P **P** **11 05 16.8 -0.3**
baz=337
**E27K Coleen River 84.32 6** IAmb IAmb 11 05 19.3
comp=Z,7.3nm,1.1s
**E27K Coleen River 84.32 6** P **P** **11 05 16.6 -0.7**
baz=346
**G21K Allakaket 84.37 11** IAmb IAmb 11 05 20.5
comp=Z,13nm,1.1s
**G21K Allakaket 84.37 11** P **P** **11 05 17.3 -0.2**
baz=335
**E29M Blow River 84.42 4** P **P** **11 05 16.9 -0.8**
baz=349
**MTN Manton Dam 84.44 107** P **P** **11 05 19.1 +0.4**
**MTN Manton Dam 84.44 107** IAmb IAmb 11 05 19.8
comp=Z,19nm,1.4s
**F25K Christian Rive 84.47 8** IAmb IAmb 11 05 22.2
comp=Z,28nm,1.9s
**F25K Christian Rive 84.47 8** P **P** **11 05 18.0 0.0**
baz=342
**F26K Sheenjek River 84.54 7** P **P** **11 05 17.9 -0.4**
baz=344
**H17K Granite Mounta 84.55 14** P **P** **11 05 17.8 -0.6**
baz=330
**H18K Honhosa River 84.69 13** P **P** **11 05 18.2 -0.9**
baz=331
**G23K Bananza Creek 84.73 9** IAmb IAmb 11 05 23.2
comp=Z,12nm,1.2s
**G23K Bananza Creek 84.73 9** P **P** **11 05 19.1 -0.3**
baz=338,SNR=7.6
**H19K Roundabout Mou 84.73 12** P **P** **11 05 19.0 -0.3**
baz=333,SNR=6.0
**INK Inuvik 84.75 3** LR LR 11 48 28.2
comp=Z,134nm,20.4s,baz=336,slow=40
**INK Inuvik 84.75 3** P **P** **11 05 19.5 +0.2**
baz=353
**BMAR Burnt Mountain 84.75 7** P **P** **11 05 19.2 -0.2**
**F28M Old Crow 85.03 5** IAmb IAmb 11 05 23.2
comp=Z,6.9nm,0.9s
**F28M Old Crow 85.03 5** P **P** **11 05 21.0 +0.2**
baz=347,SNR=7.1
**H20K Anotleneega Mo 85.06 12** P **P** **11 05 20.3 -0.7**
baz=334,SNR=8.7
**G24K Hadweenzic Riv 85.09 8** P **P** **11 05 20.8 -0.3**
baz=341,SNR=26
**G25K Bearman Lake 85.21 8** P **P** **11 05 21.5 -0.1**
baz=342
**H21K Melozitna Rive 85.27 11** P **P** **11 05 21.8 -0.2**
baz=336,SNR=12
**H22K Ishtalitna Cre 85.28 10** P **P** **11 05 21.6 -0.5**
baz=337,SNR=19
**I17K Unalakleet 85.29 15** P **P** **11 05 22.2 +0.1**
baz=329
**G26K Porcupine Rive 85.30 7** P **P** **11 05 22.2 +0.1**
baz=344
**F30M Baker River 85.32 4** P **P** **11 05 21.4 -0.9**
baz=351
**GCSA Galena City Sc 85.35 13** P **P** **11 05 22.9 +0.5**
baz=332,SNR=6.9
**FYU Fort Yukon 85.50 8** P **P** **11 05 23.9 +0.8**
**KDU Kakadu 85.51 107** P **P** **11 05 24.5 +0.5**
**J14K Nanvaranak Lak 85.57 16** P **P** **11 05 23.2 -0.3**
baz=327
**F31M Tsiigehtchic 85.60 3** P **P** **11 05 23.1 -0.5**
**F31M Tsiigehtchic 85.60 3** P **P** **11 05 23.6 +0.1**
baz=353,SNR=9.1
**H23K Yukon River 85.63 10** P **P** **11 05 24.0 +0.2**
baz=339,SNR=19
**G27K Doyon Strip 85.66 6** IAmb IAmb 11 05 26.2
comp=Z,7.6nm,0.8s
**G27K Doyon Strip 85.66 6** P **P** **11 05 24.0 +0.1**
baz=346,SNR=12
**H25L Birch Creek 85.72 8** P **P** **11 05 24.4 +0.2**
baz=342
**I20K Naagheadeneel 85.76 12** P **P** **11 05 24.7 +0.3**
baz=335,SNR=12
**J16K Anvik River 85.83 15** P **P** **11 05 25.2 +0.3**
baz=329,SNR=11
**I21K Tanana 85.85 11** IAmb IAmb 11 05 27.4
comp=Z,9.5nm,0.9s
**I21K Tanana 85.85 11** P **P** **11 05 25.3 +0.5**
baz=337
**H24K Noodor Dome 85.86 9** IAmb IAmb 11 05 27.8
comp=Z,14nm,1.4s
**H24K Nodor Dome 85.86 9** P **P** **11 05 25.4 +0.4**
baz=340,SNR=6.5
**G29M Pine Creek 85.87 5** P **P** **11 05 25.4 +0.5**
G29M IAmb IAmb 11 05 26.4
comp=Z,16nm,1.2s
**G29M Pine Creek 85.87 5** P **P** **11 05 24.5 -0.5**
baz=349
**G30M tAoh Zraii Nji 85.92 4** P **P** **11 05 24.1 -1.1**
**G30M tAoh Zraii Nji 85.92 4** P **P** **11 05 25.0 -0.3**
baz=351,SNR=6.1
**K13K Kusilvak Mount 85.97 17** IAmb IAmb 11 05 28.9
comp=Z,19nm,1.2s
**K13K Kusilvak Mount 85.97 17** P **P** **11 05 25.8 +0.2**
baz=326
**J17K VABM Dome 86.08 14** IAmb IAmb 11 05 28.3
comp=Z,16nm,1.2s
**J17K VABM Dome 86.08 14** P **P** **11 05 26.5 +0.5**
baz=331,SNR=7.8
**G31M Satah River 86.09 3** IAmb IAmb 11 05 28.0
comp=Z,16nm,1.0s
**G31M Satah River 86.09 3** P **P** **11 05 25.6 -0.4**
baz=352,SNR=6.4
**MLY Manley 86.19 10** IAmb IAmb 11 05 28.3
comp=Z,7.0nm,0.8s
**MLY Manley 86.19 10** P **P** **11 05 26.7 0.0**
baz=338,SNR=9.5
**H27K Steamboat Moun 86.23 6** P **P** **11 05 27.2 +0.4**
baz=346,SNR=11
**J19K Poorman 86.27 13** IAmb IAmb 11 05 29.4
comp=Z,16nm,1.0s
**J19K Poorman 86.27 13** P **P** **11 05 27.4 +0.4**
baz=334,SNR=13
**I23K Minto, Yukon-K 86.29 10** IAmb IAmb 11 05 30.8
comp=Z,18nm,1.3s
**I23K Minto, Yukon-K 86.29 10** P **P** **11 05 27.6 +0.6**
baz=339,SNR=9.0
**J20K Nowinta River 86.38 12** IAmb IAmb 11 05 30.0
comp=Z,15nm,1.0s
**J20K Nowinta River 86.38 12** P **P** **11 05 28.2 +0.7**
baz=335,SNR=12
**K15K Wolf Creek Mou 86.46 16** P **P** **11 05 28.4 +0.4**
baz=329
**PRP Porcupine Dome 86.47 8** P **P** **11 05 27.5 -0.7**
PRP IAmb IAmb 11 05 32.6
comp=Z,10nm,1.1s
**PRP Porcupine Dome 86.47 8** P **P** **11 05 28.3 +0.1**
baz=342,SNR=9.5
**EPYK Eagle Plains 86.49 4** IAmb IAmb 11 05 29.3
comp=Z,9.4nm,0.9s
**EPYK Eagle Plains 86.49 4** P **P** **11 05 28.2 0.0**
baz=350,SNR=7.3
**H29M Whitestone 86.52 5** IAmb IAmb 11 05 31.6
comp=Z,20nm,1.3s
**H29M Whitestone 86.52 5** P **P** **11 05 27.6 -0.6**
baz=349,SNR=8.0
**J18K Innoko River 86.52 13** IAmb IAmb 11 05 31.7
comp=Z,7.5nm,0.9s
**J18K Innoko River 86.52 13** P **P** **11 05 27.7 -0.6**
baz=333
**POKR Poker Plat Res 86.60 9** P **P** **11 05 28.9 +0.3**
baz=341
**COLA College 86.77 9** P **P** **11 05 30.3 +0.9**
**COLA College 86.77 9** P **P** **11 05 29.2 -0.2**
baz=340
**COLA College 86.77 9** *d*/*i*P **P** **11 05 29.9 +0.5**
COLA pmax pmax
comp=Z,9.0nm,1.4s
**M11K Mekoryuk 86.82 19** P **P** **11 05 28.8 -0.9**
baz=325
**I27K Kandik River 86.83 7** P **P** **11 05 29.5 -0.3**
baz=346,SNR=6.2
**K17K Iditarod 86.85 14** P **P** **11 05 29.7 -0.1**
baz=331
**NEA2 Nenana 86.86 10** IAmb IAmb 11 05 32.5
comp=Z,9.8nm,1.3s
**NEA2 Nenana 86.86 10** P **P** **11 05 29.9 0.0**
baz=339
**I26K Coal Creek Min 86.96 7** IAmb IAmb 11 05 46.9
comp=Z,18nm,1.6s
**I26K Coal Creek Min 86.96 7** P **P** **11 05 30.6 +0.3**
baz=345
**L14K Kuka Creek 86.98 17** P **P** **11 05 30.7 +0.3**
baz=328
**L15K Ungalak Mounta 87.00 16** P **P** **11 05 30.8 +0.2**
baz=329
**IL31 87.00 9** P **P** **11 05 29.7 -0.8**
**ILAR Eielson Array 87.00 9** P **P** **11 05 28.6 -2.0**
**ILAR Eielson Array 87.00 9** P **P** **11 05 29.4 -1.2**
comp=Z,2.1nm,0.7s,baz=328,slow=4.2,SNR=23
ILAR LR LR 11 51 49.1
comp=Z,238nm,18.1s,baz=279,slow=41
comp=Z,2.1nm,0.7s
**BPAW Bear Paw Mtn. 87.01 11** P **P** **11 05 29.0 -1.6**
**BPAW Bear Paw Mtn. 87.01 11** P **P** **11 05 30.5 -0.2**
baz=338,SNR=18
**K20K Telida 87.14 12** P **P** **11 05 31.4 +0.1**
baz=335,SNR=15
**I28M Miner Creek 87.15 6** IAmb IAmb 11 05 59.3
comp=Z,10nm,1.2s
**I28M Miner Creek 87.15 6** P **P** **11 05 31.5 +0.1**
baz=347
**HDA Harding Lake 87.34 9** P **P** **11 05 31.7 -0.5**
baz=341
**J25K Salcha River, 87.36 8** IAmb IAmb 11 05 36.1
comp=Z,8.2nm,0.8s
**J25K Salcha River, 87.36 8** P **P** **11 05 32.5 +0.1**
baz=343,SNR=12
**L17K Donlin 87.36 15** P **P** **11 05 32.1 -0.3**
baz=331
**I29M Ogilvie Camp, 87.37 5** P **P** **11 05 31.8 -0.6**
I29M IAmb IAmb 11 05 35.2
comp=Z,13nm,1.2s
**I29M Ogilvie Camp, 87.37 5** P **P** **11 05 32.2 -0.2**
baz=349,SNR=7.3
**L16K Owhat River 87.46 15** IAmb IAmb 11 05 35.3
comp=Z,9.3nm,0.9s
**L16K Owhat River 87.46 15** P **P** **11 05 32.6 -0.2**
baz=330
**GENI Genyem 87.57 94** P **P** **11 05 35.3 +1.1**
**GENI Genyem 87.57 94** P **P** **11 05 35.8 +1.6**
**M13K Dall Lake 87.59 18** P **P** **11 05 33.3 -0.1**
baz=327
**L18K Granite Mounta 87.64 14** P **P** **11 05 33.9 +0.3**
baz=333
**I30M Mount Dempster 87.65 4** IAmb IAmb 11 05 36.9
comp=Z,9.0nm,1.1s
**I30M Mount Dempster 87.65 4** P **P** **11 05 33.9 0.0**
baz=351,SNR=10
**M14K Bethel 87.67 17** P **P** **11 05 33.9 +0.1**
baz=328
**EGAK Eagle 87.69 7** P **P** **11 05 33.7 -0.2**
EGAK IAmb IAmb 11 05 42.1
comp=Z,15nm,1.1s
**EGAK Eagle 87.69 7** P **P** **11 05 33.9 +0.1**
baz=346,SNR=8.6
**MCK McKinley 87.69 10** P **P** **11 05 33.7 -0.2**
baz=340,SNR=6.8
**J26L Joseph Creek 87.69 8** P **P** **11 05 32.6 -1.4**
**J26L Joseph Creek 87.69 8** P **P** **11 05 34.1 +0.1**
baz=344,SNR=14
**L20K Farewell, AK 87.98 13** P **P** **11 05 35.0 -0.3**
baz=335,SNR=10
**RND Reindeer 88.01 10** IAmb IAmb 11 05 45.2
comp=Z,11nm,1.2s
**M15K Kasigluk River 88.05 16** P **P** **11 05 35.9 +0.3**
baz=329
**L19K White Mountain 88.06 13** IAmb IAmb 11 05 39.1
comp=Z,10nm,1.1s
**L19K White Mountain 88.06 13** P **P** **11 05 35.7 0.0**
baz=334
**K24K Donnelly Dome 88.08 9** P **P** **11 05 35.1 -0.8**
baz=342
**SCRK Sand Creek 88.14 8** P **P** **11 05 36.3 0.0**
baz=344,SNR=11
**M16K Timber Creek 88.18 15** P **P** **11 05 36.0 -0.3**
baz=331
**M17K Holitna River 88.20 15** P **P** **11 05 36.1 -0.3**
baz=332
**WRKA Warakurna 88.20 119** P **P** **11 05 37.9 +0.9**
**RIDG Independent Ri 88.26 8** P **P** **11 05 36.9 +0.2**
baz=343
**J29N Klondike Camp 88.28 5** P **P** **11 05 36.6 -0.2**
baz=349
**J30M Hart River 88.30 5** IAmb IAmb 11 05 41.3
comp=Z,11nm,1.4s
**J30M Hart River 88.30 5** P **P** **11 05 36.7 -0.2**
baz=351
**K27K Chicken 88.32 7** P **P** **11 05 36.9 +0.1**
baz=346
**M19K Big River Lodg 88.40 13** P **P** **11 05 37.6 +0.2**
baz=335
**M18K Stony River 88.48 14** P **P** **11 05 38.2 +0.5**
baz=334
**DHY Denali Highway 88.55 10** P **P** **11 05 37.7 -0.5**
baz=341
**DAWY Dawson 88.55 6** P **P** **11 05 38.2 +0.2**
DAWY IAmb IAmb 11 05 40.1
comp=Z,14nm,1.3s
**DAWY Dawson 88.55 6** P **P** **11 05 37.6 -0.5**
baz=348,SNR=7.5
**N15K Kwethluk River 88.65 16** P **P** **11 05 38.8 +0.2**
baz=330
**M20K Styx River 88.67 13** P **P** **11 05 38.4 -0.3**
baz=336
**N16K Nishlik Lake 88.71 16** P **P** **11 05 39.5 +0.7**
baz=331
**P08K Saint George I 88.81 22** P **P** **11 05 39.8 +0.5**
baz=322
**SKT Skwentna 88.88 12** P **P** **11 05 38.9 -0.8**
baz=337
**PAX Paxson 88.92 9** P **P** **11 05 39.0 -0.9**
baz=343
**K29M Barlow Dome 88.93 5** P **P** **11 05 39.8 -0.2**
baz=350
**WAT6 Susitna Watana 88.96 10** P **P** **11 05 39.3 -0.9**
baz=341
**N17K Nushagak Hills 89.03 15** P **P** **11 05 39.2 -1.1**
baz=332
**O14K Tigyukauivet M 89.14 17** P **P** **11 05 40.3 -0.5**
baz=329
**L26K Log Cabin Wild 89.14 8** P **P** **11 05 39.6 -1.2**
baz=344
**N18K Kilae Creek 89.19 14** P **P** **11 05 40.8 -0.3**
baz=334
**L27K Beaver Creek, 89.28 7** IAmb IAmb 11 05 45.4
comp=Z,12nm,1.4s
**L27K Beaver Creek, 89.28 7** P **P** **11 05 41.3 -0.3**
baz=346,SNR=6.8
**BCAR Beaver Creek A 89.29 7** P **P** **11 05 39.4 -2.2**
**M22K Willow 89.35 11** P **P** **11 05 41.8 +0.1**
baz=338
**N19K Bonanza Creek 89.37 14** IAmb IAmb 11 09 10.3
comp=Z,14nm,1.3s
**N19K Bonanza Creek 89.37 14** P **P** **11 05 41.7 -0.3**
baz=335
**N20K Mount Spurr 89.47 12** P **P** **11 05 41.9 -0.6**
baz=337
**SUA Susitna One 89.50 12** P **P** **11 05 42.7 0.0**
baz=338
**O15K Ungalikthiuk R 89.58 17** P **P** **11 05 43.2 +0.3**
baz=330
**SML Sawmill 89.60 10** P **P** **11 05 43.1 +0.1**
baz=340
**O16K Kokwok River B 89.65 16** P **P** **11 05 43.5 +0.3**
baz=332
**PMR Palmer 89.67 11** P **P** **11 05 42.8 -0.4**
baz=339
**M23K Glacier View 89.71 10** P **P** **11 05 42.8 -0.7**
baz=341
**TABU Tabubil 89.72 96** P **P** **11 05 46.2 +1.8**
**O17K Koliganek Bris 89.73 15** P **P** **11 05 43.0 -0.5**
baz=332
**SCM Sheep Creek Mo 89.73 10** P **P** **11 05 43.0 -0.7**
baz=341
**M26K Nabesna, AK 89.79 8** P **P** **11 05 43.6 -0.3**
baz=345
**M27K Edge Creek, AK 89.96 7** P **P** **11 05 44.4 -0.4**
baz=346
**O19K Port Alsworth 89.97 14** P **P** **11 05 44.4 -0.2**
baz=335
**RC01 Rabbit Creek A 90.03 11** P **P** **11 05 44.9 -0.1**
baz=339
**O18K Koktuh Hills 90.08 14** IAmb IAmb 11 05 49.3
comp=Z,7.8nm,0.9s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **O18K** | **Koktuh Hills** | **90.08** | **14** | P | | **P** | 11 05 44.8 | **-0.5** | |
| | baz=334 | | | | | | | | |
| **P16K** | **Nushagak River** | **90.17** | **16** | P | | **P** | 11 05 45.9 | **+0.3** | |
| | baz=332 | | | | | | | | |
| **M29M** | **Somme Creek** | **90.23** | **6** | P | | **P** | 11 05 46.4 | **+0.3** | |
| | baz=349 | | | | | | | | |
| **KLU** | **Klutina** | **90.27** | **10** | P | | **P** | 11 05 45.9 | **-0.3** | |
| | baz=342 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.31** | **355** | P | | **P** | 11 05 45.7 | **-0.5** | |
| | comp=Z,2.7nm,0.7s,baz=4.8,slow=5.6,SNR=14 | | | | | | | | |
| YKA | | | | LR | | LR | 11 53 03.6 | | |
| | comp=Z,130nm,20.1s,baz=324,slow=40 | | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.31** | **355** | *i* P | | **P** | 11 05 47.4 | **+1.2** | |
| YKA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **N25K** | **Chitina, Valde** | **90.35** | **9** | P | | **P** | 11 05 45.9 | **-0.7** | |
| | baz=343 | | | | | | | | |
| **P17K** | **Kvichak River** | **90.39** | **15** | P | | **P** | 11 05 46.5 | **-0.2** | |
| | baz=333 | | | | | | | | |
| **O20K** | **Slope Mountain** | **90.42** | **13** | P | | **P** | 11 05 46.5 | **-0.4** | |
| | baz=336 | | | | | | | | |
| **PWL** | **Port Wells** | **90.49** | **11** | P | | **P** | 11 05 46.4 | **-0.8** | |
| | baz=340 | | | | | | | | |
| **P18K** | **Big Mountain,** | **90.50** | **15** | P | | **P** | 11 05 46.3 | **-1.0** | |
| | baz=334 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **90.55** | **112** | P | | **P** | 11 05 47.2 | **-0.9** | |
| **WRA** | **Warramunga Arr** | **90.55** | **112** | P | | **P** | 11 05 47.4 | **-0.7** | |
| | comp=Z,4.4nm,0.9s,baz=309,slow=4.1,SNR=33 | | | | | | | | |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **90.55** | **112** | *i* P | | **P** | 11 05 48.4 | **+0.3** | |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **90.56** | **112** | P | | **P** | 11 05 46.5 | **-1.6** | |
| WRAB | | | | IAmb | | IAmb | 11 05 50.4 | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **90.56** | **112** | ⇓*e* P | | **P** | 11 05 47.7 | **-0.4** | |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **90.56** | **112** | P | | **P** | 11 05 47.7 | **-0.5** | |
| **O22K** | **Cooper Landing** | **90.60** | **12** | P | | **P** | 11 05 47.9 | **+0.3** | |
| | baz=339 | | | | | | | | |
| **GLI** | **Glacier Island** | **90.67** | **10** | P | | **P** | 11 05 47.4 | **-0.6** | |
| | baz=341 | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **90.78** | **4** | P | | **P** | 11 05 48.0 | **-0.5** | |
| | baz=352 | | | | | | | | |
| **FARO** | **Faro, Yukon** | **90.82** | **4** | P | | **P** | 11 05 48.1 | **-0.6** | |
| | baz=353 | | | | | | | | |
| **BMRM** | **Bremner River** | **90.96** | **9** | P | | **P** | 11 05 49.7 | **+0.3** | |
| | baz=343 | | | | | | | | |
| **Q18K** | **Katmai Hardscr** | **91.22** | **15** | P | | **P** | 11 05 50.6 | **-0.1** | |
| | baz=334 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **91.30** | **6** | P | | **P** | 11 05 50.1 | **-1.0** | |
| | baz=349 | | | | | | | | |
| **CTG** | **Chitna Glacier** | **91.38** | **8** | P | | **P** | 11 05 51.7 | **+0.2** | |
| | baz=346 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **91.40** | **5** | P | | **P** | 11 05 51.5 | **+0.1** | |
| | baz=351 | | | | | | | | |
| **ASAR** | **Alice Springs** | **91.97** | **115** | P | | **P** | 11 05 54.7 | **+0.1** | |
| **ASAR** | **Alice Springs** | **91.97** | **115** | P | | **P** | 11 05 54.2 | **-0.4** | |
| | comp=Z,6.7nm,1.1s,baz=302,slow=4.8,SNR=29 | | | | | | | | |
| | comp=Z,6.7nm,1.1s | | | | | | | | |
| **ASAR** | **Alice Springs** | **91.97** | **115** | P | | **P** | 11 05 54.7 | **+0.1** | |
| **AS31** | **Alice Springs** | **91.97** | **115** | P | | **P** | 11 05 54.2 | **-0.5** | |
| **AS01** | **Alice Springs** | **92.00** | **115** | P | | **P** | 11 05 56.1 | **+1.3** | |
| **UNV** | **Unalaska Valle** | **92.07** | **23** | P | | **P** | 11 05 54.3 | **-0.2** | |
| | baz=324 | | | | | | | | |
| **O30N** | **Mendenhall** | **92.09** | **5** | P | | **P** | 11 05 54.6 | **0.0** | |
| | baz=351 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **92.54** | **14** | P | | **P** | 11 05 57.0 | **+0.3** | |
| | baz=336 | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **93.36** | **5** | P | | **P** | 11 05 59.6 | **-0.9** | |
| | baz=351 | | | | | | | | |
| **P32M** | **Atlin** | **93.43** | **4** | P | | **P** | 11 06 00.2 | **-0.6** | |
| | baz=353 | | | | | | | | |
| **R33M** | **Jennings River** | **93.76** | **3** | P | | **P** | 11 06 01.9 | **-0.6** | |
| | baz=355 | | | | | | | | |
| **TOAD** | **Toad River Com** | **94.42** | **360** | P | | **P** | 11 06 04.1 | **-1.3** | |
| | baz=0.5 | | | | | | | | |
| **MAW** | **Mawson** | **94.59** | **177** | P | | **P** | 11 06 05.9 | **+0.3** | |
| | comp=Z,2.7nm,0.8s,baz=311,slow=9.3,SNR=6.5 | | | | | | | | |
| MAW | | | | LR | | LR | 11 41 24.8 | | |
| | comp=Z,214nm,21.7s,baz=13,slow=31 | | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **R32K** | **Eaglecrest** | **94.68** | **5** | P | | **P** | 11 06 06.1 | **-0.4** | |
| | baz=352 | | | | | | | | |
| **DLBC** | **Dease Lake** | **94.76** | **2** | LR | | LR | 11 57 31.2 | | |
| | comp=Z,174nm,18.0s,baz=324,slow=41 | | | | | | | | |
| **DLBC** | **Dease Lake** | **94.76** | **2** | P | | **P** | 11 06 05.8 | **-1.2** | |
| | baz=356 | | | | | | | | |
| **S31K** | **Pelican** | **94.86** | **6** | P | | **P** | 11 06 07.3 | **0.0** | |
| | baz=351 | | | | | | | | |
| **QIS** | **Mount Isa** | **95.22** | **110** | P | | **P** | 11 06 09.9 | **+0.3** | |
| **L61B** | **Northampton** | **95.27** | **324** | P | | **P** | 11 06 09.1 | **-0.5** | |
| | baz=46 | | | | | | | | |
| **CTA** | **Charters Tower** | **100.63** | **107** | P | | **Pdif** | 11 06 33.0 | **-1.0** | |
| | comp=Z,0.1nm,0.7s,baz=264,slow=9.2,SNR=1.8 | | | | | | | | |
| **CTA** | **Charters Tower** | **100.63** | **107** | P | | **Pdif** | 11 06 33.0 | **-1.0** | |
| **PDAR** | **Pinedale Array** | **108.93** | **347** | PKiKP | | **PKiKP** | 11 11 14.1 | **-1.4** | |
| | comp=Z,0.3nm,0.7s,baz=58,slow=2.2,SNR=2.3 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **114.48** | **354** | PKP | | **PKiKP** | 11 11 25.8 | **-0.3** | |
| | comp=Z,0.9nm,0.6s,baz=36,slow=1.7,SNR=10.0 | | | | | | | | |
| NVAR | | | | PKKPbc | | **PKKPbc** | 11 22 04.1 | **-1.3** | |
| | comp=Z,0.3nm,0.7s,baz=173,slow=1.5,SNR=3.8 | | | | | | | | |
| NVAR | | | | PKKPab | | **PKKPab** | 11 22 14.7 | **+0.6** | |
| | comp=Z,0.2nm,0.2s,baz=193,slow=3.7,SNR=6.9 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **116.90** | **180** | | | **PKPdf** | 11 11 29.1 | **-0.4** | |
| **QSPA** | **South Pole Qui** | **116.90** | **180** | PKP | | **PKPdf** | 11 11 28.9 | **-0.6** | |
| | comp=Z,3.6nm,0.8s,baz=241,slow=1.4,SNR=16 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **120.02** | **347** | P | | **PKPdf** | 11 11 36.3 | **-0.5** | |
| | baz=13 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.05** | **338** | PKP | | **PKiKP** | 11 11 36.9 | **-0.2** | |
| | comp=Z,0.5nm,0.7s,baz=49,slow=2.7,SNR=8.8 | | | | | | | | |
| **LPAZ** | **La Paz** | **125.75** | **269** | PKP | | **PKiKP** | 11 11 48.7 | **-0.4** | |
| | comp=Z,0.9nm,0.5s,baz=124,slow=3.6,SNR=5.0 | | | | | | | | |

*WEL* ***23*** *10:59:33.5±0.6,45°S×3°×16°E±°,h73km±6km, M3.7/18, ML4.0/23, MLv3.7/18, Error ellipse: s-maj=0.0km s-min=0.0km az=123.8, confirmed*
*NOU* ***23*** *10:59:34.2,44.625S×168.25E,h72km, MLv4.1/11, South Island, New Zealand*

**ISC 23 10:59:33.6±1.4, 44°65S±0.05×168°26E±0.05, h83km±10km, n72, σ1°47/83, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSZ** | **Milford Sound** | **0.24** | **264** | P | **Pn** | **10 59 45.8** | **-0.1** |
| MSZ | | | | S | **Sn** | **10 59 55.8** | **+0.8** |
| **WKZ** | **Wanaka** | **0.57** | **109** | P | **Pn** | **10 59 49.4** | **+1.1** |
| WKZ | | | | S | **Sn** | **10 59 59.8** | **+0.7** |
| **JCZ** | **Jackson Bay** | **0.69** | **33** | P | **Pn** | **10 59 50.2** | **+0.7** |
| **JCZ** | **Jackson Bay** | **0.69** | **33** | P | **Pn** | **10 59 49.9** | **+0.4** |
| JCZ | | | | S | **Sn** | **11 00 00.9** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **0.72** | **188** | P | **Pn** | **10 59 50.1** | **+0.2** |
| MLZ | | | | S | **Sn** | **11 00 02.1** | **+0.2** |
| **EAZ** | **Earnscleugh** | **0.94** | **128** | P | **Pn** | **10 59 53.2** | **+0.9** |
| EAZ | | | | S | **Sn** | **11 00 06.4** | **+0.3** |
| **DCZ** | **Deep Cove** | **1.13** | **223** | P | **Pn** | **10 59 53.5** | **-0.9** |
| **WHZ** | **Wether Hill Ro** | **1.26** | **190** | P | **Pn** | **10 59 56.4** | **+0.3** |
| WHZ | | | | S | **Sn** | **11 00 12.8** | **-0.1** |
| **FOZ** | **Fox Glacier** | **1.58** | **46** | P | **Pn** | **10 59 59.6** | **-0.5** |
| **TUZ** | **Tuapeka** | **1.62** | **144** | P | **Pn** | **11 00 01.5** | **+0.9** |
| TUZ | | | | S | **Sn** | **11 00 20.2** | **-0.9** |
| **ODZ** | **Otahua Downs** | **1.74** | **104** | P | **Pn** | **11 00 02.7** | **+0.5** |
| **PYZ** | **Puysegur Point** | **1.88** | **216** | P | **Pn** | **11 00 04.4** | **+0.4** |
| **PYZ** | **Puysegur Point** | **1.88** | **216** | P | **Pn** | **11 00 04.0** | **-0.1** |
| PYZ | | | | S | **Sn** | **11 00 26.7** | **-0.5** |
| **TMZ** | **Timaru** | **1.98** | **83** | P | **Pn** | **11 00 05.2** | **-0.1** |
| **SYZ** | **Scrubby Hill** | **1.99** | **162** | P | **Pn** | **11 00 06.2** | **+0.8** |
| **SYZ** | **Scrubby Hill** | **1.99** | **162** | P | **Pn** | **11 00 06.2** | **+0.8** |
| SYZ | | | | S | **Sn** | **11 00 28.5** | **-1.0** |
| **GCSZ** | **Gaunt Creek Bo** | **2.00** | **49** | P | **Pn** | **11 00 04.7** | **-0.9** |
| **HHSZ** | **Highcliff Hill** | **2.06** | **128** | P | **Pn** | **11 00 07.7** | **+1.3** |
| HHSZ | | | | S | **Sn** | **11 00 30.4** | **-1.0** |
| **APZ** | **The Paps** | **2.19** | **185** | P | **Pn** | **11 00 08.2** | **0.0** |
| **ARCZ** | **Arundel** | **2.21** | **72** | P | **Pn** | **11 00 07.7** | **-0.7** |
| ARCZ | | | | S | **Sn** | **11 00 33.4** | **-1.6** |
| **RPZ** | **Rata Peaks** | **2.22** | **66** | P | **Pn** | **11 00 08.1** | **-0.4** |
| **RPZ** | **Rata Peaks** | **2.22** | **66** | P | **Pn** | **11 00 07.9** | **-0.6** |
| **WVZ** | **Waitaha Valley** | **2.38** | **50** | P | **Pn** | **11 00 09.6** | **-1.1** |
| **MHCZ** | **Mount Hutt** | **2.63** | **66** | P | **Pn** | **11 00 12.9** | **-1.2** |
| **WACZ** | **Wakanui South** | **2.67** | **76** | P | **Pn** | **11 00 13.9** | **-0.5** |
| WACZ | | | | S | **Sn** | **11 00 43.6** | **-2.2** |
| **INZ** | **Inchbonnie** | **3.01** | **51** | P | **Pn** | **11 00 18.1** | **-1.0** |
| **OXZ** | **Oxford** | **3.03** | **65** | P | **Pn** | **11 00 17.6** | **-1.8** |
| **MQZ** | **McQueen's Vall** | **3.30** | **75** | P | **Pn** | **11 00 22.0** | **-1.0** |
| **AKCZ** | **Akaroa Harbour** | **3.43** | **79** | P | **Pn** | **11 00 24.6** | **-0.2** |
| **LTZ** | **Lake Taylor** | **3.46** | **59** | P | **Pn** | **11 00 23.5** | **-1.7** |
| **AMCZ** | **Amberley** | **3.50** | **67** | P | **Pn** | **11 00 24.6** | **-1.1** |
| **OKCZ** | **Okains Bay** | **3.57** | **77** | P | **Pn** | **11 00 26.6** | **-0.2** |
| **GVZ** | **Greta Valley S** | **3.84** | **66** | P | **Pn** | **11 00 29.2** | **-1.3** |
| **DSZ** | **Denniston Nort** | **3.89** | **43** | P | **Pn** | **11 00 30.2** | **-1.0** |
| **KHZ** | **Kahutara** | **4.44** | **62** | P | **Pn** | **11 00 39.6** | **+1.1** |
| **THZ** | **Tophouse** | **4.46** | **51** | P | **Pn** | **11 00 37.1** | **-1.7** |
| **MRNZ** | **Matariki Terra** | **4.63** | **47** | P | **Pn** | **11 00 40.7** | **-0.5** |
| **QRZ** | **Quartz Range** | **4.95** | **41** | P | **Pn** | **11 00 45.6** | **+0.1** |
| **QRZ** | **Quartz Range** | **4.95** | **41** | P | **Pn** | **11 00 44.9** | **-0.5** |
| **TKNZ** | **Takaka Hill** | **5.00** | **45** | P | **Pn** | **11 00 46.2** | **0.0** |
| **BSWZ** | **Blackbirch Sta** | **5.04** | **56** | P | Pn | 11 00 51.8 | +5.0 |
| **NNZ** | **Nelson** | **5.09** | **49** | P | **Pn** | **11 00 48.6** | **+1.3** |
| **TUWZ** | **Tuamarina** | **5.26** | **54** | P | **Pn** | **11 00 50.6** | **+0.8** |
| **TCW** | **Tory Channel** | **5.59** | **54** | P | **Pn** | **11 00 55.7** | **+1.5** |
| **DUWZ** | **D'Urville Isla** | **5.67** | **49** | P | **Pn** | **11 00 55.7** | **+0.4** |
| **CAW** | **Cannon Point** | **6.12** | **57** | P | **Pn** | **11 00 59.9** | **-1.6** |
| **MTW** | **Mount Morrison** | **6.36** | **59** | P | **Pn** | **11 01 03.4** | **-1.3** |
| **NBEZ** | **Newall Road No** | **6.81** | **40** | P | **Pn** | **11 01 11.4** | **+0.6** |
| **KHEZ** | **Kahui Hut** | **6.86** | **41** | P | **Pn** | **11 01 12.0** | **+0.4** |
| **KHEZ** | **Kahui Hut** | **6.86** | **41** | P | **Pn** | **11 01 12.4** | **+0.8** |
| **PREZ** | **Palmer Road** | **6.88** | **42** | P | **Pn** | **11 01 13.2** | **+1.3** |
| **NEZ** | **North Egmont** | **6.91** | **41** | P | **Pn** | **11 01 13.4** | **+1.1** |
| **PKE** | **Pukeiti** | **6.92** | **40** | P | **Pn** | **11 01 13.4** | **+0.9** |
| **WAZ** | **Wanganui** | **6.99** | **48** | P | **Pn** | **11 01 16.5** | **+3.2** |
| **VRZ** | **Vera Road** | **7.34** | **44** | P | **Pn** | **11 01 19.4** | **+1.2** |
| **TRVZ** | **Turoa** | **7.62** | **48** | P | **Pn** | **11 01 26.2** | **+4.1** |
| **WNVZ** | **Wahianoa** | **7.62** | **48** | P | **Pn** | **11 01 24.8** | **+2.7** |
| **FWVZ** | **Far West T-bar** | **7.65** | **48** | P | **Pn** | **11 01 25.7** | **+3.2** |
| **NGZ** | **Ngauruhoe** | **7.74** | **48** | P | **Pn** | **11 01 26.8** | **+3.2** |
| **NNVZ** | **North Ngauruho** | **7.78** | **47** | P | **Pn** | **11 01 27.1** | **+2.9** |
| **OTVZ** | **Oturere** | **7.78** | **48** | P | **Pn** | **11 01 27.7** | **+3.5** |
| **HIZ** | **Hauiti** | **7.87** | **41** | P | **Pn** | **11 01 25.4** | **0.0** |
| **HIZ** | **Hauiti** | **7.87** | **41** | P | **Pn** | **11 01 25.4** | **0.0** |
| **BKZ** | **Black Stump Fm** | **8.22** | **51** | P | **Pn** | **11 01 30.5** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **8.22** | **51** | P | **Pn** | **11 01 33.6** | **+3.4** |
| **TLZ** | **Tolley Road** | **8.35** | **43** | P | **Pn** | **11 01 31.9** | **0.0** |
| **AWAZ** | **Awhitu Peninsu** | **8.98** | **35** | P | **Pn** | **11 01 42.5** | **+2.0** |
| **RVAZ** | **Riverhead Bore** | **9.21** | **34** | P | **Pn** | **11 01 45.1** | **+1.4** |
| **WIAZ** | **Waiheke Island** | **9.42** | **36** | P | **Pn** | **11 01 48.1** | **+1.6** |
| **WHRZ** | **Whale Island** | **9.44** | **47** | P | **Pn** | **11 01 51.0** | **+4.3** |
| **OUZ** | **Omahuta** | **10.27** | **25** | P | **Pn** | **11 01 58.5** | **+0.5** |
| **OUZ** | **Omahuta** | **10.27** | **25** | P | **Pn** | **11 01 58.8** | **+0.8** |

**ROM 23 11:05:37.0±0.1, 41°867N±0.005×14°875E±0.007, h23km±1km, ML2.0/8, 2C-1D, Error ellipse: s-maj=0.5km s-min=0.5km az=35.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T1411** | **Guglionesi (CB** | **0.09** | **25** | AML | AML | | |
| | comp=N,10675μm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,23400μm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,12450μm,0.5s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,23950μm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,11550μm,0.5s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,23424μm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,23933μm,0.3s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,10659μm,0.3s | | | | | | |
| **FRES** | **Fresagrandinar** | **0.19** | **305** | P | Pb | 11 05 42.4 | +0.1 |
| FRES | | | | S | Sb | 11 05 46.1 | +0.3 |
| FRES | | | | AML | AML | | |
| | comp=E,3555μm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,2335μm,0.7s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,2271μm,0.2s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,3196μm,0.1s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,522μm,0.2s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,1164μm,0.8s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.21** | **174** | P | Pb | 11 05 42.8 | +0.2 |
| CIGN | | | | S | Sb | 11 05 46.9 | +0.5 |
| **MELA** | **Melanico ??? S** | **0.25** | **130** | P | Pb | 11 05 43.4 | +0.3 |
| MELA | | | | S | Sb | 11 05 47.9 | +0.7 |
| **TRIV** | **Trivento** | **0.26** | **248** | P | Pb | 11 05 43.8 | +0.4 |
| TRIV | | | | S | Sb | 11 05 48.2 | +0.6 |
| TRIV | | | | AML | AML | | |
| | comp=E,1225μm,0.8s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1137μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,1295μm,0.8s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,920μm,1.0s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1136μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,971μm,1.0s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1210μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1210μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,1198μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,1263μm,0.5s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1138μm,0.4s | | | | | | |
| **GATE** | **Gambatesa** | **0.35** | **176** | P | Pb | 11 05 45.1 | +0.3 |
| **BSSO** | **Busso** | **0.38** | **213** | ⇑P | Pb | 11 05 45.7 | +0.4 |
| BSSO | | | | AML | AML | | |
| | comp=E,510μm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,402μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,219μm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,156μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,401μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,356μm,0.4s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,208μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,156μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,496μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,210μm,0.2s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,89μm,0.2s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.49** | **195** | ⇑P | Pb | 11 05 47.1 | +0.1 |
| SACR | | | | S | Sb | 11 05 54.7 | +0.9 |
| SACR | | | | AML | AML | | |
| | comp=E,644μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,346μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,674μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,356μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,346μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,356μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,644μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,346μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,674μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,184μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,181μm,0.3s | | | | | | |
| **APRC** | **Apricena** | **0.51** | **102** | P | Pb | 11 05 47.3 | -0.1 |
| APRC | | | | AML | AML | | |
| | comp=E,626μm,0.2s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,1105μm,0.3s | | | | | | |
| **MIDA** | **Miranda** | **0.52** | **244** | P | Pb | 11 05 47.3 | -0.2 |
| MIDA | | | | S | Sb | 11 05 55.1 | +0.5 |
| MIDA | | | | AML | AML | | |
| | comp=E,874μm,1.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,861μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,863μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,948μm,1.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,899μm,0.5s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,863μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,798μm,0.3s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,861μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,853μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,239μm,0.4s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,246μm,0.3s | | | | | | |
| **LPEL** | **Lama dei Peligno** | **0.55** | **289** | P | Pb | 11 05 48.1 | +0.1 |
| LPEL | | | | AML | AML | | |
| | comp=E,983μm,0.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,929μm,1.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,985μm,0.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,928μm,0.2s | | | | | | |
| **PTRJ** | **Pietraroja** | **0.56** | **207** | P | Pb | 11 05 47.8 | -0.6 |
| PTRJ | | | | AML | AML | | |
| | comp=E,398μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,450μm,1.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,445μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,398μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,404μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,10μm,0.5s | | | | | | |
| **RNI2** | **Rionero Sannit** | **0.56** | **253** | P | Pb | 11 05 48.5 | +0.1 |
| RNI2 | | | | AML | AML | | |
| | comp=E,1159μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2190μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2355μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1158μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1250μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2190μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1160μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2356μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1251μm,0.2s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.66** | **227** | P | Pb | 11 05 49.5 | -0.4 |
| VAGA | | | | AML | AML | | |
| | comp=E,220μm,0.5s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,330μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,226μm,0.7s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,340μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,204μm,0.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,339μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,219μm,0.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,330μm,0.3s | | | | | | |
| **INTR** | **Introdacqua** | **0.74** | **282** | ⇓P | Pb | 11 05 51.0 | -0.3 |
| INTR | | | | AML | AML | | |
| | comp=E,2850μm,1.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,2450μm,1.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,393μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,630μm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,7968μm,5.7s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,595μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,393μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,17555μm,10.8s | | | | | | |
| **SNAL** | **S. Angelo Dei** | **0.97** | **165** | P | Pb | 11 05 54.7 | -0.5 |
| SNAL | | | | AML | AML | | |
| | comp=E,384μm,1.1s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=N,270μm,0.8s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=N,224μm,0.5s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=N,223μm,0.4s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,263μm,0.6s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,284μm,0.6s | | | | | | |
| **CSP1** | **Cessapalombo** | **1.74** | **315** | AML | AML | | |
| | comp=N,112μm,0.3s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=E,81μm,1.5s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=N,112μm,0.3s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=E,78μm,0.5s | | | | | | |
| **COR1** | **Corinaldo** | **2.24** | **323** | AML | AML | | |
| | comp=N,57μm,0.5s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,1845μm,1.4s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,1140μm,1.2s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,44μm,0.6s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,1196μm,1.8s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,1846μm,1.4s | | | | | | |
| **SPS2** | **Spezzano della** | **2.80** | **156** | AML | AML | | |
| | comp=E,35μm,0.3s | | | | | | |
| SPS2 | | | | AML | AML | | |
| | comp=N,29μm,0.1s | | | | | | |
| **NDIM** | **Novi di Modena** | **4.18** | **318** | AML | AML | | |
| | comp=E,564μm,0.1s | | | | | | |
| NDIM | | | | AML | AML | | |
| | comp=N,643μm,0.1s | | | | | | |
| NDIM | | | | AML | AML | | |
| | comp=E,608μm,0.1s | | | | | | |
| NDIM | | | | AML | AML | | |
| | comp=N,480μm,0.3s | | | | | | |
| **PGF** | **Pioggiola** | **4.42** | **281** | AML | AML | | |
| | comp=N,13μm,1.1s | | | | | | |
| PGF | | | | AML | AML | | |
| | comp=E,11μm,1.2s | | | | | | |

**ROM 23 11:05:43.7±0.1, 41°852N±0.007×14°848E±0.009, h14km±1km, ML2.4/32, 1C, Error ellipse: s-maj=0.8km s-min=0.2km az=193.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **T1412** | **Lupara (CB)** | **0.09** | **222** | ⇑P | Pg | 11 05 46.7 | 0.0 |
| T1412 | | | | S | Sg | 11 05 49.1 | +0.3 |
| **T1411** | **Guglionesi (CB** | **0.11** | **32** | P | Pg | 11 05 47.1 | +0.2 |
| T1411 | | | | S | Sb | 11 05 50.2 | 0.0 |
| **FRES** | **Fresagrandinar** | **0.18** | **312** | P | Pb | 11 05 48.5 | -0.3 |
| FRES | | | | S | Sb | 11 05 52.0 | -0.3 |
| FRES | | | | AML | AML | | |
| | comp=E,3555μm,0.3s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,2335μm,0.7s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,1250μm,0.2s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FRES | | | | AML | AML | | |
| | comp=E,1357μm,0.2s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.20** | **168** | P | Pg | 11 05 48.2 | 0.0 |
| CIGN | | | | S | Sb | 11 05 52.3 | -0.5 |
| **TRIV** | **Trivento** | **0.24** | **249** | P | Pg | 11 05 48.9 | 0.0 |
| TRIV | | | | S | Sb | 11 05 54.3 | +0.4 |
| TRIV | | | | AML | AML | | |
| | comp=E,1225μm,0.8s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1137μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,1295μm,0.8s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1210μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,272μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,466μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,284μm,0.3s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,503μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1210μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=N,1139μm,0.4s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,914μm,1.0s | | | | | | |
| TRIV | | | | AML | AML | | |
| | comp=E,973μm,1.0s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.26** | **125** | P | Pg | 11 05 48.9 | -0.2 |
| MELA | | | | S | Sg | 11 05 53.4 | +0.6 |
| **GATE** | **Gambatesa** | **0.34** | **172** | P | Pb | 11 05 51.1 | -0.4 |
| **BSSO** | **Busso** | **0.36** | **212** | P | Pg | 11 05 51.4 | +0.4 |
| BSSO | | | | S | Sb | 11 05 58.0 | +0.6 |
| BSSO | | | | AML | AML | | |
| | comp=N,402μm,0.6s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,219μm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,156μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,510μm,1.1s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,496μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=E,208μm,0.3s | | | | | | |
| BSSO | | | | AML | AML | | |
| | comp=N,356μm,0.4s | | | | | | |
| **SACR** | **S. Croce Del S** | **0.47** | **193** | P | Pg | 11 05 52.8 | -0.2 |
| SACR | | | | S | Sb | 11 06 00.2 | -0.3 |
| SACR | | | | AML | AML | | |
| | comp=E,644μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,346μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,674μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,356μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,674μm,0.4s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=E,644μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,356μm,0.3s | | | | | | |
| SACR | | | | AML | AML | | |
| | comp=N,346μm,0.3s | | | | | | |
| **MIDA** | **Miranda** | **0.49** | **245** | P | Pg | 11 05 53.0 | -0.4 |
| MIDA | | | | S | Sb | 11 06 00.8 | -0.4 |
| MIDA | | | | AML | AML | | |
| | comp=E,874μm,1.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,861μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,948μm,1.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,899μm,0.5s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,859μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,798μm,0.3s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=E,853μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,863μm,0.2s | | | | | | |
| MIDA | | | | AML | AML | | |
| | comp=N,861μm,0.2s | | | | | | |
| **APRC** | **Apricena** | **0.53** | **100** | P | Pb | 11 05 54.9 | +0.2 |
| APRC | | | | AML | AML | | |
| | comp=E,626μm,0.2s | | | | | | |
| APRC | | | | AML | AML | | |
| | comp=N,1105μm,0.3s | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.53** | **292** | P | Pg | 11 05 54.0 | -0.2 |
| LPEL | | | | AML | AML | | |
| | comp=N,929μm,1.5s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,983μm,0.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=E,985μm,0.1s | | | | | | |
| LPEL | | | | AML | AML | | |
| | comp=N,928μm,0.2s | | | | | | |
| **MOCO** | **Biccari - m.te** | **0.54** | **154** | P | Pg | 11 05 54.3 | +0.1 |
| **RNI2** | **Rionero Sannit** | **0.54** | **254** | P | Pg | 11 05 54.3 | 0.0 |
| RNI2 | | | | AML | AML | | |
| | comp=E,1159μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2190μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1250μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2355μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1160μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2356μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=N,2190μm,0.1s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1160μm,0.2s | | | | | | |
| RNI2 | | | | AML | AML | | |
| | comp=E,1251μm,0.2s | | | | | | |
| **PTRJ** | **Pietraroja** | **0.54** | **206** | P | Pg | 11 05 54.4 | 0.0 |
| PTRJ | | | | AML | AML | | |
| | comp=E,398μm,0.4s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,450μm,1.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,445μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=N,404μm,0.3s | | | | | | |
| PTRJ | | | | AML | AML | | |
| | comp=E,398μm,0.4s | | | | | | |
| **SGG** | **Gregorio Mates** | **0.58** | **217** | P | Pb | 11 05 55.7 | 0.0 |
| SGG | | | | AML | AML | | |
| | comp=E,1.0nm,0.4s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,1.0nm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=E,268μm,0.5s | | | | | | |
| SGG | | | | AML | AML | | |
| | comp=N,232μm,0.4s | | | | | | |
| **VAGA** | **Valle Agricola** | **0.63** | **227** | P | Pg | 11 05 55.4 | -0.7 |
| VAGA | | | | AML | AML | | |
| | comp=E,226μm,0.7s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,340μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,219μm,0.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=E,204μm,0.2s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,339μm,0.3s | | | | | | |
| VAGA | | | | AML | AML | | |
| | comp=N,329μm,0.3s | | | | | | |
| **SGRT** | **San Giovanni R** | **0.68** | **98** | P | Pg | 11 05 56.9 | +0.1 |
| **INTR** | **Introdacqua** | **0.72** | **283** | P | Pg | 11 05 56.8 | -1.0 |
| INTR | | | | AML | AML | | |
| | comp=E,2800μm,1.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,2300μm,1.6s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,393μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,630μm,0.3s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=N,595μm,0.2s | | | | | | |
| INTR | | | | AML | AML | | |
| | comp=E,393μm,0.2s | | | | | | |
| **MSAG** | **Monte S. Angel** | **0.81** | **100** | P | Pb | 11 05 59.8 | +0.3 |
| **SNAL** | **S. Angelo Dei** | **0.96** | **164** | AML | AML | | |
| | comp=N,270μm,0.8s | | | | | | |
| SNAL | | | | AML | AML | | |
| | comp=E,384μm,1.1s | | | | | | |
| **MIGL** | **Miglionico** | **1.73** | **136** | AML | AML | | |
| | comp=N,237μm,1.4s | | | | | | |
| MIGL | | | | AML | AML | | |
| | comp=E,231μm,1.5s | | | | | | |
| **CSP1** | **Cessapalombo** | **1.74** | **316** | AML | AML | | |
| | comp=N,112μm,0.3s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=E,81μm,1.5s | | | | | | |
| **LTRZ** | **Laterza** | **1.94** | **129** | AML | AML | | |
| | comp=E,340μm,1.3s | | | | | | |
| LTRZ | | | | AML | AML | | |
| | comp=N,16250μm,0.5s | | | | | | |
| **COR1** | **Corinaldo** | **2.24** | **323** | AML | AML | | |
| | comp=N,1140μm,1.2s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,1845μm,1.3s | | | | | | |
| **SPS2** | **Spezzano della** | **2.80** | **156** | AML | AML | | |
| | comp=N,29μm,0.1s | | | | | | |
| SPS2 | | | | AML | AML | | |
| | comp=E,35μm,0.3s | | | | | | |

*IDC **23** 11:07:59.5±4.2,6°.89S×155°.43E,h89$^{km}_{\pm 35}$,mb3.7/12, mbtmp4.0/14,MS3.8/4,Error ellipse: s-maj=26.2km s-min=17.1km az=90.0*

*NEIC **23** 11:08:02.1±1.7,6°.95S±0°.09×155°.38E±0°.09,h103$^{km}_{\pm 10}$, mb4.2/17,Error ellipse: s-maj=14.8km s-min=11.9km az=219.0*

**ISC 23 11:08:01.1**±0.6,**6°.94S**±0°.09×**155°.36E**±0°.08,**h100**$^{km}$,**n48, σ0$^{s}$89/45,mb4.0**/21,**Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **4.20** | **310** | | **Pn** | **11 09 04.1** | **+1.1** |
| **HNR** | **Honiara** | **5.17** | **119** | Pn | **Pn** | **11 09 16.8** | **+0.6** |
| **HNR** | **Honiara** | **5.17** | **119** | LR | LR | 11 11 08.4 | |
| | comp=Z,3μm,21.3s,baz=273,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **8.48** | **253** | Pn | **Pn** | **11 10 01.7** | **+0.5** |
| **PMG** | **Port Moresby** | **8.48** | **253** | P | **Pn** | **11 10 01.4** | **+0.2** |
| | 7.4nm,0.4s,baz=84,slow=19,SNR=2.8 | | | | | | |
| PMG | | | | S | **Sn** | **11 11 34.9** | **-0.3** |
| | 8.6nm,0.6s,baz=99,slow=18,SNR=1.4 | | | | | | |
| PMG | | | | LR | LR | 11 13 02.3 | |
| | comp=Z,173nm,18.8s,baz=34,slow=35 | | | | | | |
| **COEN** | **Coen** | **13.86** | **239** | Pn | **Pn** | **11 11 13.1** | **-0.2** |
| **PATS** | **Pohnpei** | **14.00** | **12** | Pn | Pn | 11 11 10.5 | -4.6 |
| **CTA** | **Charters Tower** | **15.78** | **213** | P | **Pn** | **11 11 37.8** | **+0.1** |
| | 0.1nm,0.7s,baz=36,slow=15,SNR=4.4 | | | | | | |
| **CTAO** | **Charters Tower** | | | Pn | **Pn** | **11 11 37.9** | **+0.2** |
| **DZM** | **Mont Dzumac** | **18.46** | **146** | P | **P** | **11 12 09.0** | **-0.2** |
| | 4.0nm,0.7s,baz=331,slow=13,SNR=2.2 | | | | | | |
| DZM | | | | LR | LR | 11 18 18.2 | |
| | comp=Z,110nm,20.4s,baz=92,slow=34 | | | | | | |
| **WR0** | **Warramunga Arr** | **23.99** | **235** | P | **P** | **11 13 06.6** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 11 13 31.8 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **24.02** | **236** | P | **P** | **11 13 07.6** | **+0.6** |
| WB0 | | | | IAmb | IAmb | 11 13 18.8 | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **24.13** | **236** | P | **P** | **11 13 08.2** | **+0.3** |
| WRAB | | | | IAmb | IAmb | 11 13 20.8 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.14** | **236** | P | **P** | **11 13 08.6** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 11 13 19.9 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.15** | **236** | P | **P** | **11 13 07.8** | **-0.3** |
| **WRA** | **Warramunga Arr** | **24.15** | **236** | P | **P** | **11 13 08.3** | **+0.2** |
| | comp=Z,1.8nm,0.4s,baz=60,slow=9.7,SNR=64 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 16 46.4** | **-0.4** |
| | comp=Z,0.2nm,0.4s,baz=57,slow=3.0,SNR=2.4 | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **24.57** | **254** | P | **P** | **11 13 12.5** | **+0.5** |
| MTN | | | | IAmb | IAmb | 11 13 26.4 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **26.48** | **229** | P | **P** | **11 13 28.4** | **-0.9** |
| **ASAR** | **Alice Springs** | **26.48** | **229** | P | **P** | **11 13 28.4** | **-0.9** |
| **ASAR** | **Alice Springs** | **26.48** | **229** | P | **P** | **11 13 28.7** | **-0.6** |
| | comp=Z,0.6nm,0.5s,baz=59,slow=10.0,SNR=24 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **KNRA** | **Kununurra** | **27.46** | **249** | P | **P** | **11 13 37.6** | **-0.4** |
| KNRA | | | | IAmb | IAmb | 11 14 18.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.64** | **24** | T | T | 11 42 00.4 | |
| | baz=203,slow=75,SNR=69 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.64** | **24** | T | T | 11 41 56.9 | |
| | baz=203,slow=75,SNR=111 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.65** | **24** | T | T | 11 41 57.9 | |
| | baz=203,slow=75,SNR=50 | | | | | | |
| **STKA** | **Stephens Creek** | **27.94** | **206** | P | **P** | **11 13 43.8** | **+1.6** |
| **STKA** | **Stephens Creek** | **27.94** | **206** | P | **P** | **11 13 43.1** | **+0.9** |
| | comp=Z,1.2nm,0.5s,baz=35,slow=16,SNR=2.9 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **31.01** | **246** | P | **P** | **11 14 08.9** | **-0.5** |
| **BBOO** | **Buckleboo** | **31.37** | **212** | P | **P** | **11 14 13.1** | **+0.5** |
| **FORT** | **Forrest** | **34.88** | **224** | P | **P** | **11 14 42.0** | **-1.1** |
| **JNU** | **Nakatsue** | **46.14** | **331** | P | **P** | **11 16 16.7** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **46.15** | **341** | P | **P** | **11 16 14.5** | **-1.3** |
| | comp=Z,2.0nm,0.8s,baz=173,slow=8.6,SNR=4.0 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **51.06** | **332** | P | **P** | **11 16 53.2** | **-0.1** |
| | comp=Z,1.1nm,0.7s,baz=144,slow=7.4,SNR=2.6 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **69.49** | **327** | P | **P** | **11 18 59.6** | **+0.6** |
| | comp=Z,0.6nm,0.4s,baz=122,slow=11,SNR=3.1 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.03** | **180** | P | **P** | **11 20 15.3** | **-0.1** |
| | comp=Z,1.9nm,0.6s,baz=332,slow=14,SNR=24 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **83.19** | **21** | P | **P** | **11 20 13.6** | **-2.3** |
| | comp=Z,0.4nm,0.3s,baz=242,slow=5.2,SNR=16 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **83.61** | **319** | P | **P** | **11 20 20.4** | **+1.9** |
| MK31 | | | | IAmb | IAmb | 11 20 21.9 | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **83.61** | **319** | P | **P** | **11 20 19.5** | **+1.0** |
| **MKAR** | **Makanchi Array** | **83.61** | **319** | P | **P** | **11 20 19.0** | **+0.5** |
| | comp=Z,1.2nm,0.7s,baz=104,slow=5.6,SNR=8.4 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **84.32** | **17** | P | **P** | **11 20 21.7** | **+0.1** |
| D23K | | | | IAmb | IAmb | 11 20 23.7 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.34** | **326** | P | **P** | **11 20 22.2** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=108,slow=4.7,SNR=1.6 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **MAW** | **Mawson** | **84.58** | **203** | P | **P** | **11 20 23.5** | **+0.5** |
| | comp=Z,1.3nm,0.6s,baz=80,slow=6.8,SNR=2.4 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **87.02** | **322** | P | **P** | **11 20 37.0** | **+1.7** |
| KURK | | | | IAmb | IAmb | 11 20 56.0 | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **BBB** | **Bella Bella** | **87.26** | **37** | LR | LR | 11 54 34.4 | |
| | comp=Z,130nm,19.1s,baz=342,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.40** | **52** | P | **P** | **11 20 57.1** | **+0.6** |
| | comp=Z,0.2nm,0.5s,baz=262,slow=6.9,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **117.71** | **325** | PKP | **PKPdf** | **11 26 33.6** | **-2.1** |
| | comp=Z,0.3nm,0.3s,baz=51,slow=0.6,SNR=1.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **118.62** | **312** | PKP | **PKPdf** | **11 26 38.3** | **+0.3** |
| | comp=Z,1.5nm,0.9s,baz=90,slow=1.4,SNR=1.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **119.77** | **341** | PKP | **PKPdf** | **11 26 39.1** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=47,slow=4.6,SNR=0.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.36** | **285** | PKPbc | **PKPbc** | **11 27 47.9** | **-0.8** |
| | comp=Z,0.5nm,0.5s,baz=79,slow=2.5,SNR=9.5 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **11 28 00.5** | **-0.7** |
| | comp=Z,0.6nm,0.6s,baz=51,slow=2.4,SNR=3.6 | | | | | | |

*TEH **23** 11:10:47.3,27°.06N×54°.21E,h11$^{km}_{\pm 19}$,ML4.3*

*IDC **23** 11:10:47.1±0.6,27°.07N×54°.23E,h0$^{km}$,mb4.1/22, mbtmp4.2/29,ML4.0/7,MS3.6/9,Error ellipse: s-maj=15.5km s-min=10.5km az=24.0*

*MOS **23** 11:10:48.8±1.0,27°.11N×54°.17E,h20$^{km}$,mb4.6/21,Error ellipse: s-maj=7.1km s-min=5.5km az=89.9*

*NEIC **23** 11:10:49.9±1.8,27°.18N±0°.07×54°.23E±0°.07,h10$^{km}_{\pm 1}$km, mb4.4/49,Error ellipse: s-maj=12.4km s-min=9.7km az=25.0*

*DSN **23** 11:10:50.5±1.1,27°.16N×54°.23E,h15$^{km}$,ML4.1.1/14,Error ellipse: s-maj=15.2km s-min=4.6km az=5.0*

*OMAN **23** 11:10:54.0±0.7,26°.81N×54°.24E,h10$^{km}$,mb5.2/9, ml4.2/22,ms3.4/1,Error ellipse: s-maj=8.2km s-min=3.7km az=0.0*

**ISC 23 11:10:48.6**±1.3,**27°.08N**±0°.03×**54°.21E**±0°.02,**h7**$^{km}_{\pm 9}$km, **n276,σ1$^{s}$34/292,mb4.3/71,MS3.5/7,6C-11D,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAR1** | **LAR** | **0.61** | **14** | Pg | **Pg** | **11 10 59.9** | **-0.4** |
| **LMD1** | **Lamerd** | **0.97** | **286** | Pg | **Pg** | **11 11 06.7** | **-0.4** |
| **JHRM** | **Jahrom** | **1.53** | **339** | Pg | **Pg** | **11 11 18.1** | **+0.2** |
| **QIR1** | **Qir** | **1.73** | **324** | Pg | **Pb** | **11 11 20.3** | **-0.5** |
| **GENO** | **Geno** | **1.77** | **79** | Pg | **Pb** | **11 11 20.8** | **-0.8** |
| **SHME** | **Shamm** | **2.01** | **120** | *e*P | **Pn** | **11 11 23.9** | **+1.0** |
| | SNR=34 | | | | | | |
| SHME | | | | S | **Sb** | **11 11 50.2** | **-0.4** |
| **SHME** | **Shamm** | **2.01** | **120** | P | **Pb** | **11 11 24.8** | **-0.6** |
| | SNR=18 | | | | | | |
| SHME | | | | S | **Sb** | **11 11 49.6** | **-1.0** |
| **UMQ** | **Umm Al-Quwin** | **2.02** | **140** | *e*P | **Pb** | **11 11 26.3** | **+0.7** |
| | SNR=5.7 | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **2.02** | **140** | P | **Pg** | **11 11 27.0** | **-0.4** |
| **IBND** | **Bandar-abas** | **2.11** | **79** | Pn | **Pn** | **11 11 25.3** | **+1.1** |
| **BANOM** | **Banah** | **2.20** | **121** | *e*P | **Pn** | **11 11 26.7** | **+1.2** |
| | SNR=13 | | | | | | |
| **BANOM** | **Banah** | **2.20** | **121** | P | **Pb** | **11 11 28.0** | **-0.6** |
| BANOM | | | | S | **Sn** | **11 11 53.7** | **+0.8** |
| **MASF** | **Masafi** | **2.44** | **134** | P | **Pb** | **11 11 32.7** | **-0.1** |
| | SNR=13 | | | | | | |
| MASF | | | | S | **Sn** | **11 11 58.5** | **-0.4** |
| **MSFE** | **Esma-Masafi** | **2.45** | **134** | *e*P | **Pb** | **11 11 31.1** | **-1.8** |
| | SNR=13 | | | | | | |
| **JRN** | **Qarnain Island** | **2.46** | **210** | P | **Pb** | **11 11 32.6** | **-0.4** |
| JRN | | | | S | **Sn** | **11 11 59.0** | **-0.2** |
| **NAZ** | **Nazwa, Dubai** | **2.46** | **148** | *e*P | **Pn** | **11 11 30.7** | **+1.7** |
| | SNR=23 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **2.46** | **148** | P | **Pb** | **11 11 32.3** | **-0.7** |
| | SNR=23 | | | | | | |
| NAZ | | | | S | **Sn** | **11 11 58.7** | **-0.6** |
| **MDH** | **Madha** | **2.58** | **133** | *e*P | **Pn** | **11 11 31.5** | **+0.8** |
| | SNR=14 | | | | | | |
| **MDH** | **Madha** | **2.58** | **133** | P | **Pb** | **11 11 34.3** | **-0.8** |
| | SNR=12 | | | | | | |
| MDH | | | | S | **Sn** | **11 12 03.3** | **+1.0** |
| **AJN** | **Ajban** | **2.60** | **164** | P | **Pb** | **11 11 34.2** | **-1.3** |
| **FAQ** | **Al Faqa, Dubai** | **2.64** | **152** | *e*P | **Pn** | **11 11 33.8** | **+2.2** |
| | SNR=48 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.64** | **152** | P | **Pb** | **11 11 34.4** | **-1.7** |
| | SNR=48 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.64** | **157** | *e*P | **Pb** | **11 11 34.6** | **-1.6** |
| | SNR=23 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.64** | **157** | P | **Pb** | **11 11 35.1** | **-1.1** |
| | SNR=23 | | | | | | |
| ASUD | | | | S | **Sn** | **11 12 05.5** | **+1.6** |
| **UOSS** | **Minazif** | **2.78** | **139** | Pn | **Pn** | **11 11 35.4** | **+1.9** |
| **UOSS** | **Minazif** | **2.78** | **139** | *e*P | **Pn** | **11 11 34.8** | **+1.3** |
| | SNR=14 | | | | | | |
| **UOSS** | **Minazif** | **2.78** | **139** | Pn | **Pn** | **11 11 34.7** | **+1.2** |
| **UOSS** | **Minazif** | **2.78** | **139** | P | **Pb** | **11 11 37.2** | **-1.4** |
| **HATD** | **Hatta, Dubai** | **2.83** | **142** | *e*P | **Pn** | **11 11 35.9** | **+1.6** |
| | SNR=9.8 | | | | | | |
| **HATD** | **Hatta, Dubai** | **2.83** | **142** | P | **Pn** | **11 11 36.8** | **+2.6** |
| | SNR=12 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.91** | **145** | *e*P | **Pn** | **11 11 37.1** | **+1.9** |
| | SNR=15 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.91** | **145** | P | **Pn** | **11 11 37.8** | **+2.5** |
| | SNR=15 | | | | | | |
| ASHO | | | | S | **Sn** | **11 12 09.8** | **-0.8** |
| **DSBU** | **Dashti - Bushe** | **2.91** | **297** | Pn | **Pn** | **11 11 36.4** | **+1.0** |
| **SHI** | **Shiraz** | **2.96** | **330** | Pn | **Pn** | **11 11 37.5** | **+1.4** |
| **AHBU** | **AHRAM** | **3.13** | **305** | Pn | **Pn** | **11 11 39.3** | **+1.0** |
| **SHMA** | **Al-Shehemyia** | **3.15** | **248** | P | **Pb** | **11 11 43.2** | **-1.8** |
| | SNR=8.7 | | | | | | |
| SHMA | | | | S | **Sb** | **11 12 21.2** | **-2.4** |
| **KHNJ** | **Kahnooj** | **3.22** | **74** | Pn | **Pn** | **11 11 40.3** | **+0.7** |
| **ALNE** | **Al Ain** | **3.32** | **155** | *i* P | **Pn** | **11 11 43.4** | **+2.5** |
| | SNR=55 | | | | | | |
| **ALNE** | **Al Ain** | **3.32** | **155** | P | **Pn** | **11 11 43.6** | **+2.7** |
| | SNR=55 | | | | | | |
| **KAZ2** | **Kazeron-Fars-I** | **3.38** | **319** | Pn | **Pn** | **11 11 42.7** | **+0.9** |
| **NGRK** | **Negar Kerman** | **3.38** | **40** | Pn | **Pn** | **11 11 43.5** | **+1.3** |
| **JASK** | **Jask - Hormozg** | **3.49** | **109** | Pn | **Pn** | **11 11 44.5** | **+1.3** |
| **JASK** | **Jask - Hormozg** | **3.49** | **109** | P | **Pn** | **11 11 45.2** | **+2.0** |
| | SNR=6.2 | | | | | | |
| JASK | | | | S | **Sn** | **11 12 27.3** | **+2.4** |
| **TRNA** | **Turayna** | **3.57** | **230** | P | **Pn** | **11 11 47.1** | **+2.7** |
| | SNR=29 | | | | | | |
| TRNA | | | | S | **Sn** | **11 12 28.4** | **+1.7** |
| **SOHO** | **SOHO** | **3.60** | **144** | *i* P | **Pn** | **11 11 46.6** | **+1.8** |
| | SNR=13 | | | | | | |
| **SOHO** | **SOHO** | **3.60** | **144** | P | **Pn** | **11 11 47.4** | **+2.5** |
| **SLWR** | **Sila** | **3.76** | **218** | P | **Pn** | **11 11 49.0** | **+2.0** |
| **SMRA** | **Abu-Samra** | **3.83** | **233** | P | **Pn** | **11 11 50.8** | **+2.9** |
| | SNR=20 | | | | | | |
| SMRA | | | | S | **Sn** | **11 12 35.9** | **+2.6** |
| **KHGB** | **Koh Gabri** | **3.84** | **31** | Pn | **Pn** | **11 11 49.7** | **+1.4** |
| **CHMN** | **Cheshme madani** | **4.03** | **46** | Pn | **Pn** | **11 11 53.0** | **+1.9** |
| **MZR** | **Muzera** | **4.11** | **189** | *i* P | **Pn** | **11 11 53.5** | **+1.6** |
| | SNR=29 | | | | | | |
| **MZR** | **Muzera** | **4.11** | **189** | P | **Pn** | **11 11 53.5** | **+1.6** |
| | SNR=29 | | | | | | |
| **KBAM** | **BAM** | **4.27** | **60** | Pn | **Pn** | **11 11 55.7** | **+1.6** |
| **ARQ** | **Araqi** | **4.27** | **150** | P | **Pn** | **11 11 56.0** | **+1.9** |
| | SNR=16 | | | | | | |
| ARQ | | | | P | **Pn** | **11 11 56.0** | **+1.9** |
| | SNR=52 | | | | | | |
| ARQ | | | | S | **Sn** | **11 12 44.5** | **+0.3** |
| **IMEH** | **Mehriz** | **4.31** | **5** | Pn | **Pn** | **11 11 56.0** | **+1.2** |
| **KRM1** | **Kerman Provinc** | **4.34** | **37** | Pn | **Pn** | **11 11 55.9** | **+0.8** |
| **UMZA** | **Um Al Zommool** | **4.43** | **169** | P | **Pn** | **11 11 58.1** | **+1.9** |
| UMZA | | | | S | **Sn** | **11 12 48.6** | **+0.5** |
| **HOQ** | **Hoqain** | **4.47** | **140** | Pn | **Pn** | **11 11 57.1** | **+0.3** |
| **HOQ** | **Hoqain** | **4.47** | **140** | P | **Pn** | **11 11 59.6** | **+2.9** |
| | SNR=16 | | | | | | |
| HOQ | | | | S | **Sn** | **11 12 48.8** | **-0.2** |
| **KLNJ** | **Kolanjah** | **4.54** | **330** | Pn | **Pn** | **11 11 59.1** | **+1.1** |
| **IBAF** | **Bafgh** | **4.65** | **14** | Pn | **Pn** | **11 12 00.5** | **+1.2** |
| **ISAD** | **Sadrabad** | **4.84** | **355** | Pn | **Pn** | **11 12 03.9** | **+1.8** |
| **IRAM** | **Ramesheh** | **4.98** | **342** | Pn | **Pn** | **11 12 05.5** | **+1.6** |
| **BIDO** | **Bidbid** | **5.01** | **134** | P | **Pn** | **11 12 05.4** | **+1.2** |
| BIDO | | | | S | **Sn** | **11 13 01.9** | **-0.4** |
| | SNR=12 | | | | | | |
| **BSY** | **Bisya** | **5.10** | **147** | P | **Pn** | **11 12 08.0** | **+2.6** |
| | SNR=43 | | | | | | |
| BSY | | | | S | **Sn** | **11 13 04.5** | **0.0** |
| **ICHK** | **Chekchek** | **5.15** | **2** | Pn | **Pn** | **11 12 07.5** | **+1.2** |
| **SMDO** | **Samad** | **5.30** | **138** | P | **Pn** | **11 12 11.0** | **+2.7** |
| | SNR=24 | | | | | | |
| SMDO | | | | S | **Sn** | **11 13 10.1** | **+0.4** |
| | SNR=8.8 | | | | | | |
| **IBRJ** | **Brojen** | **5.46** | **333** | Pn | **Pn** | **11 12 11.7** | **+1.2** |
| **WSAR** | **Wadi Sarin** | **5.54** | **133** | Pn | **Pn** | **11 12 11.8** | **+0.4** |
| | 11nm,0.3s,baz=312,slow=12,SNR=92 | | | | | | |
| WSAR | | | | Sn | **Sn** | **11 13 13.4** | **-1.9** |
| | 16nm,0.3s,baz=243,slow=2.3,SNR=12 | | | | | | |
| WSAR | | | | LR | LR | 11 15 01.7 | |
| | comp=Z,433nm,21.7s,baz=325,slow=46 | | | | | | |
| | 32nm,0.5s | | | | | | |
| **IGAR** | **Gharneh** | **5.63** | **341** | Pn | **Pn** | **11 12 14.3** | **+1.4** |
| **ZNGN** | **Zangian** | **5.81** | **331** | Pn | **Pn** | **11 12 16.5** | **+1.1** |
| **CHBR** | **Chabahar** | **5.82** | **103** | Pn | **Pn** | **11 12 15.9** | **+0.6** |
| **JMDO** | **Jabal Madar** | **5.87** | **142** | P | **Pn** | **11 12 18.0** | **+1.9** |
| | SNR=26 | | | | | | |
| JMDO | | | | S | **Sn** | **11 13 23.6** | **-0.1** |
| **ANAR** | **Anarak** | **6.10** | **356** | Pn | **Pn** | **11 12 20.3** | **+1.0** |
| **WBK** | **

MHTO S **Sn** **11 13 49.3 -1.3**
**QAMS Qamsar 7.07 341** Pn **Pn** **11 12 33.6 +1.0**
**KRSH Karshahi 7.10 346** Pn **Pn** **11 12 34.0 +1.0**
**TNSJ Nastanj 7.17 16** Pn **Pn** **11 12 35.0 +1.1**
**SRVN Saravan 7.29 86** Pn **Pn** **11 12 37.0 +1.3**
**ISFB Sefidab 7.45 347** Pn **Pn** **11 12 38.2 +0.5**
**AFRZ Afriz 7.57 32** Pn **Pn** **11 12 40.8 +1.4**
**DQM DQM 7.75 156** P **Pn** **11 12 42.5 +0.8**
SNR=7.2
**TAPT Tabas- Tapeh t 8.18 17** Pn **Pn** **11 12 49.0 +1.2**
**DOK Doka 8.42 181** P **Pn** **11 12 52.0 +0.9**
SNR=23
**HSAM Samen 8.59 327** Pn **Pn** **11 12 54.6 +1.0**
**RAYN Ar Rayn 8.64 248** Pn **Pn** **11 12 54.7 +0.6**
**RAYN Ar Rayn 8.64 248** *i* P **Pn** **11 12 55.6 +1.5**
SNR=10
**RAYN Ar Rayn 8.64 248** Pn **Pn** **11 12 54.9 +0.9**
**RAYN Ar Rayn 8.64 248** P **Pn** **11 12 55.5 +1.4**
**RAYN Ar Rayn 8.64 248** P **Pn** **11 12 54.7 +0.6**
**SHAO Shalim 9.11 171** P **Pn** **11 13 02.1 +1.6**
SNR=9.7
**WHFO Wadi Hawf 9.13 183** P **Pn** **11 13 02.4 +1.6**
SNR=37
**DMTO DMTO 9.34 176** P **Pn** **11 13 04.2 +0.5**
SNR=14
**IGLO Ghaloghah 9.40 358** Pn **Pn** **11 13 06.3 +1.6**
**RBK Rabkut 9.53 180** P **Pn** **11 13 07.5 +1.2**
SNR=5.5
**ABTO Aybut 9.72 185** P **Pn** **11 13 09.3 +0.4**
ABTO P **Pn** **11 13 09.3 +0.4**
**IMYA Miami 10.51 27** Pn **Pn** **11 13 21.7 +2.0**
**KBL Kabul 14.75 56** Pn **Pn** **11 14 20.1 +2.3**
**KBL Kabul 14.75 56** P **Pn** **11 14 20.1 +2.3**
**GNI Garni 15.22 331** P **Pn** **11 14 24.1 0.0**
**GNI Garni 15.22 331** Pn **P** **11 14 26.9 -2.3**
1.0nm,0.3s,baz=204,slow=20,SNR=1.5
GNI LR LR 11 20 16.4
comp=Z,162nm,18.3s,baz=151,slow=37
8.8nm,0.9s
**GURO Guroymak-BITLI 15.33 321** **Pn** **11 14 22.8 -2.8**
GURO IAmb IAmb 11 14 37.2
comp=Z,16nm,1.1s
**ASF Jabal al Asfar 15.88 293** Pn **Pn** **11 14 32.5 -0.2**
comp=Z,0.4nm,0.3s,baz=13,slow=0.1,SNR=7.5
comp=Z,4.6nm,0.7s
**ASF Jabal al Asfar 15.88 293** P **P** **11 14 36.0 -0.5**
**KARS Kars 16.35 329** Pn **Pn** **11 14 36.5 -2.2**
**KARS Kars 16.35 329** P **Pn** **11 14 36.5 -2.2**
KARS pmax pmax
comp=Z,104nm,1.2s
**MAK Makhachkala 16.76 343** *eP* **Pn** **11 14 40.2 -3.5**
MAK *eS* **Sn** **11 17 45.8 -4.2**
MAK pmax pmax
comp=Z,104nm,1.0s
MAK MLR MLR
comp=Z,319nm,11.0s
**GHAJ Ghor Haditha 16.81 289** P **Pn** **11 14 44.9 +0.4**
**GHAJ Ghor Haditha 16.81 289** P **P** **11 14 47.2 +0.6**
**SIMJ Simiganj 16.94 43** P **Pn** **11 14 44.1 -2.1**
**DSI Dead Sea 17.02 290** P **P** **11 14 48.1 -0.8**
**CHGR Chuyangaron 17.03 44** P **Pn** **11 14 48.1 +0.8**
**CHGR Chuyangaron 17.03 44** P **Pn** **11 14 48.1 +0.8**
CHGR pmax pmax
comp=Z,23nm,1.3s
**ZFRI Zfri 17.04 286** P **P** **11 14 50.3 +1.2**
**EIL Elat 17.15 283** P **Pn** **11 14 47.8 -0.9**
comp=Z,0.3nm,0.3s,baz=78,slow=6.0,SNR=1.2
EIL Lg Lg 11 20 05.8
comp=Z,0.2nm,0.3s,baz=148,slow=9.5,SNR=1.4
comp=Z,7.9nm,0.9s
**PRNI Paran 17.16 285** P **P** **11 14 51.2 +0.6**
**MBRI Mt Berech 17.19 284** P **P** **11 14 52.5 +1.6**
**MMAI Mount Meron Ar 17.32 294** P **Pn** **11 14 50.3 -0.6**
comp=Z,0.8nm,0.3s,baz=95,slow=15,SNR=3.8
MMAI S **Sn** **11 18 05.1 +1.3**
comp=Z,0.6nm,0.3s,baz=105,slow=37,SNR=2.6
comp=Z,5.6nm,0.8s
**GAZ Gaziantep 17.54 309** P **Pn** **11 14 54.1 +0.5**
GAZ IAmb IAmb 11 15 02.0
comp=Z,18nm,1.0s
**NIL Nilore 17.68 64** **P** **11 14 56.8 +0.5**
NIL IAmb IAmb 11 14 57.5
comp=Z,34nm,1.1s
**NIL Nilore 17.68 64** P **P** **11 14 56.8 +0.5**
NIL pmax pmax
comp=Z,34nm,1.2s
**KZIT Kziot 17.75 287** P **P** **11 14 58.1 +1.1**
**ARPR Arapgir-MALATY 17.87 316** P **Pn** **11 14 58.1 +0.3**
ARPR IAmb IAmb 11 15 14.4
comp=Z,25nm,1.0s
**GAR Garm 17.96 45** P **Pn** **11 14 57.3 -1.6**
**NCK Nalchik 18.50 335**⇓ *eP* **P** **11 15 04.5 -0.8**
NCK pmax pmax
comp=Z,11nm,0.7s
**ATD Arta Tunnel 18.80 217** LR LR 11 23 56.4
comp=Z,12nm,19.0s,baz=24,slow=42
**KBZ Khabaz 18.97 334** P **P** **11 15 10.3 0.0**
comp=Z,0.1nm,0.3s,baz=134,slow=10,SNR=4.3
KBZ LR LR 11 22 01.7
comp=Z,137nm,20.2s,baz=180,slow=36
comp=Z,3.2nm,0.8s
**KBZ Khabaz 18.97 334**⇓ *iP* **Pn** **11 15 12.5 +1.5**
KBZ pmax pmax
comp=Z,22nm,2.2s
**SHA1 Shidzhatmaz 19.07 334** *ceP* **Pn** **11 15 15.5 +3.0**
**DRK Karamyk 19.17 45** P **Pn** **11 15 13.7 -0.1**
**DRK Karamyk 19.17 45** P **Pn** **11 15 13.7 -0.1**
DRK pmax pmax
comp=Z,9.0nm,0.8s
**KVAR Kislovodsk Arr 19.24 334** P **P** **11 15 12.5 -0.9**
baz=183,slow=18
comp=Z,2.8nm,0.3s
**KIV Kislovodsk 19.24 334** *eP* **Pn** **11 15 15.1 +0.7**
KIV pmax pmax
comp=Z,15nm,1.1s
**BNN Bunyan 19.33 312** P **Pn** **11 15 15.2 -0.3**
**CSS Mathiatis 19.52 299** P **Pn** **11 15 17.1 -0.7**
CSS IAmb IAmb 11 15 20.7
comp=Z,16nm,0.7s
**VSLR Vesyoloye 19.98 329**⇓ *eP* **Pn** **11 15 23.7 +0.6**
VSLR pmax pmax
comp=Z,49nm,1.3s
**SOC Sochi 20.22 328** *eP* **P** **11 15 24.4 +0.3**
SOC *e* 11 19 12.0
SOC pmax pmax
comp=Z,54nm,1.2s
SOC MLR MLR
comp=Z,353nm,19.0s
**KK31 Karatay Array 20.76 35** P **P** **11 15 29.7 -0.3**
**KK31 Karatay Array 20.76 35** P **P** **11 15 29.7 -0.3**
KK31 pmax pmax
comp=Z,6.0nm,0.8s
**KKAR Karatay Array 20.76 35** P **P** **11 15 29.4 -0.6**
**KKAR Karatay Array 20.76 35** P **P** **11 15 29.4 -0.6**
**ARSB Arslanbob 20.98 43** **P** **11 15 31.9 -0.6**
**ARSB Arslanbob 20.98 43** P **P** **11 15 31.9 -0.6**
ARSB pmax pmax
comp=Z,4.0nm,0.8s
**BR131 Keskin Array S 21.25 312** P **P** **11 15 35.9 +0.5**
BR131 IAmb IAmb 11 15 41.1
comp=Z,20nm,0.8s
**BR131 Keskin Array S 21.25 312** *ceP* **P** **11 15 36.2 +0.8**
**BRTR Keskin Array B 21.25 312** P **P** **11 15 36.1 +0.7**
comp=Z,17nm,0.8s,baz=132,slow=11,SNR=52
BRTR S Sn 11 19 36.4 -2.4
comp=Z,0.2nm,0.5s,baz=116,slow=13,SNR=1.3
BRTR LR LR 11 25 20.7
comp=Z,187nm,18.9s,baz=340,slow=41
comp=Z,17nm,0.8s
**ANTO Ankara 21.89 311** P **P** **11 15 40.4 -1.7**
**ANTO Ankara 21.89 311** P **P** **11 15 40.4 -1.7**
ANTO pmax pmax
comp=Z,32nm,1.0s
**KSH Kashi 21.95 50** P **P** **11 15 36.8 -6.1**
KSH pmax pmax
comp=Z,5.0nm,0.9s
**ABKAR Akbulak array 22.58 10** P **P** **11 15 49.3 -0.1**
**ABKAR Akbulak array 22.58 10** IAmb IAmb 11 15 55.7
comp=Z,17nm,1.2s
**AAK Ala-Archa 22.67 42** P **P** **11 15 50.7 0.0**
AAK IAmb IAmb 11 16 04.4
comp=Z,9.0nm,0.8s
**AAK Ala-Archa 22.67 42** LR LR 11 26 16.9
comp=Z,147nm,21.7s,baz=236,slow=41
**AAK Ala-Archa 22.67 42**⇓ *iP* **P** **11 15 51.4 +0.8**
AAK pmax pmax
comp=Z,10.0nm,0.8s
**NRN Naryn 22.92 46** IAmb IAmb 11 16 21.4
comp=Z,7.7nm,0.8s
**FURI Furi 23.30 222** LR LR 11 25 10.8
comp=Z,177nm,18.9s,baz=11,slow=37
**BOOM Boomskoye usch 23.46 43** P **P** **11 15 58.9 +0.1**
**BOOM Boomskoye usch 23.46 43** P **P** **11 15 58.9 +0.1**
**AKTO Aktyubinsk 23.50 6** LR LR 11 27 02.5
comp=Z,290nm,18.9s,baz=106,slow=42
**BELG Belogornoye 25.76 351**⇑ *eP* **P** **11 16 19.8 +0.1**
BELG pmax pmax
comp=Z,5.0nm,1.1s
**VRH Novokhopyorsk 25.89 342** *eP* **P** **11 16 20.6 -0.3**
VRH pmax pmax
comp=Z,35nm,1.4s
**VORR Voronezh 27.05 339** *eP* P 11 16 45.3 +14
VORR pmax pmax
comp=Z,88nm,0.4s
**BRVK Borovoye 28.58 20**⇑ *eP* **P** **11 16 45.9 +0.9**
BRVK pmax pmax
comp=Z,10.0nm,2.3s
**BVAR Borovoye Array 28.59 21** P **P** **11 16 45.0 -0.1**
comp=Z,2.3nm,0.4s,baz=216,slow=7.1,SNR=9.3
BVAR PcP **PcP** **11 19 56.5 +0.4**
comp=Z,1.2nm,0.6s,baz=242,slow=3.1,SNR=2.9
comp=Z,2.3nm,0.4s
**MAKZ Makanchi 29.43 41** P **P** **11 16 52.5 -0.2**
**MAKZ Makanchi 29.43 41** P **P** **11 16 52.5 -0.2**
MAKZ pmax pmax
comp=Z,3.0nm,0.8s
**MK31 Makanchi Array 29.60 41** P **P** **11 16 53.4 -0.8**
**MK31 Makanchi Array 29.60 41** *ceP* **P** **11 16 54.2 0.0**
**MKAR Makanchi Array 29.60 41** P **P** **11 16 53.7 -0.5**
**MKAR Makanchi Array 29.60 41** P **P** **11 16 54.1 -0.2**
comp=Z,0.5nm,0.5s,baz=232,slow=9.9,SNR=8.6
MKAR PcP **PcP** **11 19 60.0 +1.1**
comp=Z,0.2nm,0.4s,baz=215,slow=4.0,SNR=2.0
comp=Z,0.5nm,0.5s
**MKAR Makanchi Array 29.60 41** *i* P **P** **11 16 54.2 0.0**
MKAR pmax pmax
comp=Z,1.0nm,0.5s
**KURBB Kurchatov Arra 29.93 32** P **P** **11 16 57.3 +0.2**
comp=Z,1.3nm,0.8s,baz=232,slow=8.3,SNR=8.5
KURBB PcP **PcP** **11 19 59.6 0.0**
comp=Z,0.5nm,0.3s,baz=228,slow=3.6,SNR=3.4
KURBB LR LR 11 31 00.0
comp=Z,225nm,19.4s,baz=202,slow=40
comp=Z,1.3nm,0.8s
**KURK Kurchatov 30.04 32**⇓ *iP* **P** **11 16 58.8 +0.8**
KURK pmax pmax
comp=Z,6.0nm,1.6s
**AKASG Malin Array Be 30.30 328** P **P** **11 16 59.0 -1.3**
comp=Z,0.5nm,0.4s,baz=128,slow=8.4,SNR=4.4
comp=Z,0.5nm,0.4s
**AKASG Malin Array Be 30.30 328** *i* P **P** **11 17 01.0 +0.7**
**AKBB Malin Array Si 30.30 328**⇓ *eP* **P** **11 16 59.3 -1.0**
AKBB pmax pmax
comp=Z,19nm,2.5s
**KIRV Kirov 31.67 355** *d iP* **P** **11 17 13.2 +1.0**
**KMBO Kilima Mbogo 32.45 213** LR LR 11 33 27.0
comp=Z,69nm,18.2s,baz=82,slow=42
**KOLS Kolonicke sedl 32.93 320** *eP* **P** **11 17 25.2 +1.7**
**KOLS Kolonicke sedl 32.93 320** *eP* **P** **11 17 25.2 +1.7**
**DGZ Jazzator, Alta 34.04 39**⇓ *iP* **P** **11 17 34.0 +0.7**
DGZ pmax pmax
comp=Z,3.0nm,0.6s
**ZAA0 Zalesovo Array 35.03 32** P **P** **11 17 40.1 -1.6**
ZAA0 IAmb IAmb 11 17 41.8
comp=Z,4.1nm,0.8s
**ZALV Zalesovo Beam 35.03 32** P **P** **11 17 41.2 -0.5**
**ZALV Zalesovo Beam 35.03 32** P **P** **11 17 40.8 -0.8**
comp=Z,4.2nm,0.5s,baz=238,slow=9.7,SNR=14
ZALV PcP **PcP** **11 20 13.9 +0.4**
comp=Z,0.5nm,0.3s,baz=242,slow=5.2,SNR=2.0
comp=Z,4.2nm,0.5s
**ZALV Zalesovo Beam 35.03 32** *i* P **P** **11 17 41.4 -0.3**
ZALV pmax pmax
comp=Z,4.0nm,0.5s
**CONA Conrad Observa 36.35 315** *eP* **P** **11 17 53.8 +0.5**
comp=Z,1.1nm,0.6s
**SOKA Soboth 36.46 313** *i* pP **P** **11 17 58.6 +4.4**
comp=Z,3.8nm,1.3s
**OBKA Obir 36.73 313** *ep*P **P** **11 17 60.0 +3.6**
comp=Z,1.7nm,0.4s
**FDMO Fiordimonte 36.84 306** IAmb IAmb 11 18 04.2
comp=Z,8.7nm,0.9s
**MOA Molln 37.34 315** *i* P **P** **11 18 01.8 +0.3**
comp=Z,2.2nm,0.6s
**PRED Cave del Predi 37.35 312** IAmb IAmb 11 18 07.3
comp=Z,5.5nm,1.0s
**MYKA Terra Mystica 37.36 312** *i* pP **P** **11 18 04.5 +2.8**
comp=Z,2.7nm,0.5s
**BIOA Bad Ischl, Aus 37.69 314** *i* P **P** **11 18 04.7 +0.2**
comp=Z,2.4nm,0.4s
**KBA Koelnbreinsper 37.69 313** *i* P **P** **11 18 04.7 +0.1**
comp=Z,6.6nm,0.9s
**STAL STALIGIAL 37.87 312** IAmb IAmb 11 18 06.8
comp=Z,6.0nm,0.9s
**GERES GERESS Array B 38.02 316** P **P** **11 18 06.9 -0.5**
comp=Z,0.4nm,0.3s,baz=116,slow=8.9,SNR=2.1
comp=Z,0.4nm,0.3s
**CIMO Cimolais 38.06 312** IAmb IAmb 11 18 08.0
comp=Z,4.6nm,0.9s
**ABTA Abfaltersbach 38.14 312** *i* P **P** **11 18 08.8 +0.5**
comp=Z,8.8nm,1.2s
**KHC Kasperske Hory 38.20 316** P **P** **11 18 07.6 -1.2**
KHC IAmb IAmb 11 18 10.2
comp=Z,5.9nm,1.2s
**KHC Kasperske Hory 38.20 316** *eP* P 11 18 18.0 +9.2
**KHC Kasperske Hory 38.20 316**⇑ *iP* **P** **11 18 08.1 -0.7**
**LESA Schwarzleotal 38.22 313** *i* P **P** **11 18 08.6 -0.5**
comp=Z,3.1nm,0.9s
**WTTA Wattenberg 38.86 313** *i* P **P** **11 18 13.8 -0.8**
comp=Z,10.0nm,0.7s
**WATA Walderalm 38.91 313** *i* P **P** **11 18 14.6 -0.4**
comp=Z,11nm,0.8s
**SQTA Sankt Quirin 39.12 313** *i* P **P** **11 18 15.9 -0.9**
comp=Z,9.8nm,0.5s
**FINES FINESS Array B 39.20 339** P **P** **11 18 16.6 -0.4**
comp=Z,1.0nm,0.3s,baz=143,slow=10,SNR=9.0
comp=Z,1.0nm,0.3s
**MOTA Moosalm 39.23 313** *i* P **P** **11 18 16.6 -1.0**
comp=Z,10nm,0.9s
**CLL Collm 39.33 319** *i* P **P** **11 18 18.6 +0.4**
comp=Z,4.0nm,0.6s
**CLL Collm 39.33 319** *i* P **P** **11 18 18.6 +0.4**
CLL pmax pmax
comp=Z,4.0nm,0.6s
**FETA Feichten 39.39 312** *i* P **P** **11 18 18.6 -0.3**
comp=Z,11nm,0.8s
**RETA Reutte 39.49 313** *i* P **P** **11 18 18.9 -0.8**
comp=Z,3.8nm,0.6s
**GTA Gaotai 39.69 60** P **P** **11 18 22.4 +0.9**
GTA pP sP 11 18 29.0 +4.1
GTA sP pP 11 18 31.8 +7.9
GTA pmax pmax
comp=Z,8.0nm,1.0s
**DAVA Damuels 40.02 312** *i* P **P** **11 18 23.6 -0.6**
comp=Z,24nm,0.5s
**KNGR Kungurtug, Tuv 40.32 42**⇓ *eP* **P** **11 18 27.9 +1.3**
KNGR pmax pmax
comp=Z,15nm,1.6s
**BNI Bardonecchia 41.75 308** P **P** **11 18 37.8 -0.7**
BNI IAmb IAmb 11 18 40.1
comp=Z,4.1nm,0.8s
**BNI Bardonecchia 41.75 308** P **P** **11 18 37.8 -0.7**
BNI pmax pmax
comp=Z,4.0nm,0.9s
**CMAR Chiang Mai Arr 41.95 92** P **P** **11 18 40.5 +0.2**
comp=Z,2.0nm,0.8s,baz=304,slow=40,SNR=7.0
comp=Z,2.0nm,0.8s
**ECH Echery 42.02 313** IAmb IAmb 11 18 42.3
comp=Z,8.6nm,1.0s
**PZH PanZhiHua 42.23 80** P **P** **11 18 42.1 -0.6**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,250nm,6.9s
**CRAI Chiangrai 42.65 89** P **P** **11 18 46.8 +0.9**
CRAI IAmb IAmb 11 18 49.6
comp=Z,12nm,1.0s
**HFS Hagfors 43.01 332** P **P** **11 18 47.3 -1.1**
comp=Z,1.5nm,0.6s,baz=124,slow=7.7,SNR=5.7
comp=Z,1.5nm,0.6s
**TAM Tamanrasset 44.14 276** P **P** **11 18 58.1 -0.1**
TAM IAmb IAmb 11 19 01.5
comp=Z,4.6nm,0.9s
**TAM Tamanrasset 44.14 276** P **P** **11 18 58.1 -0.1**
TAM pmax pmax
comp=Z,5.0nm,0.9s
**NOA NORSAR Array B 44.52 332** P **P** **11 18 58.4 -2.2**
comp=Z,2.0nm,1.0s,baz=123,slow=7.9,SNR=2.9
comp=Z,2.0nm,1.0s
**SONM Songino Array 45.34 48** P **P** **11 19 07.3 -0.1**
comp=Z,1.5nm,0.6s,baz=270,slow=7.2,SNR=7.0
comp=Z,1.5nm,0.6s
**CEST Esterri de Car 45.41 304** P **P** **11 19 08.5 +0.4**
CEST IAmb IAmb 11 19 09.4
comp=Z,4.6nm,0.8s
**ARCES ARCESS Array B 45.66 346** P **P** **11 19 09.0 -0.5**
comp=Z,1.4nm,0.7s,baz=146,slow=9.8,SNR=5.8
comp=Z,1.4nm,0.7s
**ARCES ARCESS Array B 45.66 346** P **P** **11 19 09.0 -0.5**
**ULN Ulaanbaatar 45.78 48**⇓ *iP* **P** **11 19 11.2 +0.3**
ULN pmax pmax
comp=Z,14nm,2.7s
**ESBB Sonseca Array 49.40 300** IAmb IAmb 11 19 51.5
comp=Z,4.6nm,0.9s
**ESDC Sonseca Array 49.40 300** P **P** **11 19 38.5 -0.6**
ESDC IAmb IAmb 11 19 40.1
comp=Z,4.3nm,1.2s
**ESDC Sonseca Array 49.40 300** P **P** **11 19 38.3 -0.7**
comp=Z,3.2nm,1.0s,baz=75,slow=6.1,SNR=23
comp=Z,3.2nm,1.0s
**PAB San Pablo 49.70 300** P **P** **11 19 41.6 +0.2**
PAB IAmb IAmb 11 19 42.5
comp=Z,6.1nm,0.9s
**PAB San Pablo 49.70 300** P **P** **11 19 41.6 +0.2**
PAB pmax pmax
comp=Z,6.0nm,1.0s
**EKA Eskdalemuir Ar 49.74 321** P **P** **11 19 40.9 -0.4**
comp=Z,0.6nm,0.4s,baz=112,slow=8.0,SNR=5.8
comp=Z,0.6nm,0.4s
**TORD Torodi Ar. Bea 50.88 265** P **P** **11 19 49.7 -0.8**
comp=Z,6.9nm,1.0s,baz=57,slow=6.8,SNR=27
comp=Z,6.9nm,1.0s
**PBRG Braganca 51.36 303** *eP* **P** **11 19 54.2 +0.3**
**MVO Moncorvo 51.62 302** *eP* **P** **11 19 55.9 0.0**
**PBAR Barrancos 51.92 299** *eP* **P** **11 19 58.4 +0.3**
**PMRV Marv??o 52.06 300** *eP* **P** **11 19 57.8 -1.3**
**PCBR Castelo Branco 52.08 301** *eP* **P** **11 20 00.2 +1.0**
**POLO Lamas de Olo 52.18 303** *eP* **P** **11 20 00.7 +0.6**
**PESTR Estremoz 52.27 300** *eP* **P** **11 20 00.7 0.0**
**PVIS Viseu 52.32 302** *eP* **P** **11 20 02.1 +1.1**
**EVO Evora 52.64 299** *eP* **P** **11 20 03.4 0.0**
**PNCL Nicolau / Gran 53.10 299** *eP* **P** **11 20 09.3 +2.5**
**SPITS Spitsbergen Ar 53.97 351** P **P** **11 20 12.2 -0.3**
comp=Z,2.1nm,0.7s,baz=141,slow=14,SNR=1.5
comp=Z,2.1nm,0.7s
**LBTB Lobatse 58.69 211** P **P** **11 20 48.1 +1.1**
**LBTB Lobatse 58.69 211** P **P** **11 20 48.1 +1.1**
LBTB pmax pmax
comp=Z,13nm,1.3s
**DBIC Dimbokro 59.50 261** P **P** **11 20 53.3 +0.5**
**DBIC Dimbokro 59.50 261** P **P** **11 20 52.4 -0.4**
comp=Z,6.8nm,0.8s,baz=73,slow=7.5,SNR=5.9
comp=Z,6.8nm,0.8s
**DBIC Dimbokro 59.50 261** P **P** **11 20 53.3 +0.5**
DBIC pmax pmax
comp=Z,26nm,1.4s
**KSRS Korea Array 61.76 60** P **P** **11 21 06.1 -1.8**
comp=Z,1.3nm,0.8s,baz=281,slow=6.4,SNR=2.6
comp=Z,1.3nm,0.8s
**BOSA Boshof 61.95 209** P **P** **11 21 10.2 +0.9**
**BOSA Boshof 61.95 209** P **P** **11 21 09.8 +0.6**
comp=Z,2.3nm,0.7s,baz=24,slow=7.1,SNR=4.5
comp=Z,2.3nm,0.7s
**BOSA Boshof 61.95 209** P **P** **11 21 10.2 +0.9**
BOSA pmax pmax
comp=Z,7.0nm,1.1s
**SUMG Summit 65.21 341** P **P** **11 21 31.2 +0.6**
**SUMG Summit 65.21 341** P **P** **11 21 31.3 +0.6**
SUMG pmax pmax
comp=Z,7.0nm,1.0s
**CMLA Cha da Macela 66.29 302** *i* P **P** **11 21 38.8 +1.1**
**SEY Seymchan 69.84 29**⇓ *iP* **P** **11 21 59.8 +0.3**
SEY pmax pmax
comp=Z,18nm,1.6s
**WRA Warramunga Arr 90.56 112** P **P** **11 23 51.1 -0.7**
comp=Z,0.9nm,0.8s,baz=312,slow=4.0,SNR=1.7
comp=Z,0.9nm,0.8s
**ASAR Alice Springs 91.97 115** P **P** **11 23 57.2 -1.1**
comp=Z,0.8nm,0.7s,baz=305,slow=5.2,SNR=1.8
comp=Z,0.8nm,0.7s
**NVAR Mina Array Bea 114.46 354** PKP PKPdf 11 29 30.7 +0.9
comp=Z,0.2nm,0.6s,baz=318,slow=1.2,SNR=1.8
**QSPA South Pole Qui 116.92 180** PKP **PKPdf** **11 29 32.9 -0.4**
comp=Z,4.3nm,1.3s,baz=306,slow=2.8,SNR=6.9
**TXAR Lajitas Array 120.03 338** PKP **PKPdf** **11 29 40.2 -0.4**
comp=Z,0.2nm,0.7s,baz=3.5,slow=3.0,SNR=2.7

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*IDC **23** 11:13:01.1±0.4, 23°.02N×144°.11E, h0km, mb4.5/26, mbtmp4.5/28, ML3.8/2, MS4.4/45, Error ellipse: s-maj=18.8km s-min=11.0km az=74.0*
*MOS **23** 11:13:03.8±0.9, 22°.97N×144°.05E, h27km, mb5.1/48, MS4.7/7, Error ellipse: s-maj=11.0km s-min=4.8km az=117.5*
*GCMT **23** 11:13:06.0±0.2, 23°.14N±0°.02×144°.47E±0°.02, h17km±1km, MW5.1/98, Moment Tensor Solution. s44,c58; s98,c146; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr3.38±.18; Mθθ-0.90±.10; Mϕϕ-2.48±.12; Mrθ-1.04±.26; Mrϕ1.04±.06; Mθϕ3.51±.32; Best double couple: M0 4.85100×10^16 NP1:ϕs341.00000°, δ70.00000°, λ94.00000°. NP2: ϕs149.00000°, δ21.00000°, λ79.00000°. Principal axes: T 5.0660, Plg65.0000°, Azm258.0000°; N -0.4260, Plg4.0000°, Azm159.0000°; P -4.6370, Plg24.0000°, Azm67.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*BJI **23** 11:13:07.9±0.0, 23°.04N×144°.16E, h58km, mb5.0/75, mB5.3/37, Ms4.9/67, Ms7 4.7/63*
*NEIC **23** 11:13:09.0±2.4, 23°.08N±0°.06×144°.0E±0°.1, h40km±2km, mb5.0/282, Error ellipse: s-maj=14.3km s-min=8.5km az=74.0*
*JMA **23** 11:13:08.9±0.5, 23°.N±2°.×14°.3E±°, h149km, MV4.6/19, IOTO ISLANDS REGION*

**ISC 23 11:13:08.3±0.4, 23°.11N±0°.04×144°.20E±0°.05, h46km±2km, h46km:pP-P, n715, σ1§70/650, mb5.0/212, MS4.6/73, 19C-20D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **3.96** | **333** | *eP* | **Pn** | **11 14 06.1** | **-0.4** |
| JHH2 | | | | *eS* | **Sn** | **11 14 50.9** | **-0.7** |
| **JCJ** | **Chichijima** | **4.36** | **336** | | **Pn** | **11 14 11.9** | **-0.1** |
| **JCJ** | **Chichijima** | **4.36** | **336** | Pn | Pn | 11 14 06.8 | -5.3 |
| | 54nm,0.3s,baz=139,slow=20,SNR=14 | | | | | | |
| JCJ | | | | Sn | **Sn** | **11 14 56.3** | **-5.4** |
| | 105nm,0.3s,baz=197,slow=19,SNR=9.5 | | | | | | |
| **CBIJ** | **Chichi jima** | **4.36** | **336** | *eP* | **Pn** | **11 14 11.8** | **-0.2** |
| CBIJ | | | | *eS* | **Sn** | **11 14 59.7** | **-2.0** |
| **GUMO** | **Guam** | **9.49** | **176** | Pn | **Pn** | **11 15 24.7** | **+2.2** |
| **GUMO** | **Guam** | **9.49** | **176** | Pn | **Pn** | **11 15 19.4** | **-3.1** |
| | 1.8nm,0.3s,baz=337,slow=19,SNR=1.2 | | | | | | |
| | 20nm,0.7s | | | | | | |
| **BSO1** | **Boso 1** | **11.84** | **347** | *eP* | **Pn** | **11 15 51.1** | **-2.9** |
| BSO1 | | | | *eS* | **Sn** | **11 17 58.3** | **-6.1** |
| **BSO3** | **Boso 3** | **12.08** | **345** | *eP* | **Pn** | **11 15 54.6** | **-3.0** |
| **JMZ** | **Minamidaito 2** | **12.12** | **285** | Pn | **Pn** | **11 15 55.2** | **-3.1** |
| **BSO4** | **Boso 4** | **12.30** | **345** | *eP* | **Pn** | **11 15 59.5** | **-1.3** |
| **JOD2** | **Odawara 2** | **12.90** | **341** | *eP* | **Pn** | **11 16 06.7** | **-2.3** |
| **JRY** | **Ryogami san** | **13.65** | **342** | *eP* | **Pn** | **11 16 16.7** | **-2.6** |
| **INU** | **Inuyama** | **13.70** | **334** | Pn | **Pn** | **11 16 21.3** | **+1.3** |
| **JGF** | **Kuroka** | **13.79** | **336** | Pn | **Pn** | **11 16 22.8** | **+1.6** |
| **JHO** | **Hitachi** | **13.81** | **348** | *eP* | **Pn** | **11 16 19.2** | **-2.2** |
| **MJAR** | **Matsushiro Arr** | **14.35** | **340** | Pn | **Pn** | **11 16 25.9** | **-2.8** |
| | 0.3nm,0.3s,baz=137,slow=11,SNR=12 | | | | | | |
| MJAR | | | | Sn | **Sn** | **11 19 02.3** | **-4.2** |
| | 0.1nm,0.3s,baz=159,slow=28,SNR=4.0 | | | | | | |
| MJAR | | | | LR | LR | 11 21 53.6 | |
| | comp=Z,1μm,18.1s,baz=138,slow=37 | | | | | | |
| | 2.2nm,0.4s | | | | | | |
| **MAJO** | **Matsushiro** | **14.35** | **340** | | **Pn** | **11 16 28.1** | **-0.6** |
| **MAJO** | **Matsushiro** | **14.35** | **340** | P | **Pn** | **11 16 28.1** | **-0.6** |
| **MJB9** | **Matsu-Tunnel** | **14.36** | **340** | | **Pn** | **11 16 28.8** | **0.0** |
| **JOW** | **Kunigami** | **14.90** | **288** | LR | LR | 11 21 58.9 | |
| | comp=Z,4μm,19.0s,baz=106,slow=36 | | | | | | |

**JMM Marumori 14.99 350** Pn **Pn** **11 16 34.7 -2.5**
**JNU Nakatsue 15.39 313** Pn **Pn** **11 16 43.0 +0.5**
JNU IAmb IAmb 11 16 43.8
comp=Z,156nm,1.8s
**JNU Nakatsue 15.39 313** Pn **P** **11 16 45.7 -0.7**
comp=Z,0.4nm,0.3s,baz=60,slow=4.2,SNR=5.7
JNU LR LR 11 22 22.0
comp=Z,598nm,18.5s,baz=127,slow=36
**JTM Tenmabayashi 17.82 352** P **Pn** **11 17 13.3 +0.5**
**ERM Erimo 18.87 358** P **P** **11 17 26.3 +1.6**
**ERM Erimo 18.87 358**⇓*e*P **Pn** **11 17 27.9 +2.3**
ERM pmax pmax
comp=Z,57nm,1.1s
**KSRS Korea Array 20.00 319** P **P** **11 17 36.9 -0.2**
comp=Z,14nm,0.8s,baz=133,slow=9.9,SNR=9.7
KSRS LR LR 11 25 24.0
comp=Z,2µm,18.8s,baz=125,slow=37
comp=Z,14nm,0.8s
**KSAR Wonju Array Be 20.02 319** P **P** **11 17 38.1 +0.9**
**KSAR Wonju Array Be 20.02 319** P **P** **11 17 38.1 +0.9**
**KS19 Wonju Array Si 20.07 319** P **P** **11 17 38.3 +0.6**
KS19 IAmb IAmb 11 17 48.4
comp=Z,148nm,1.7s
**NACB Ninganchiao 20.73 277** P **P** **11 17 45.0 -0.1**
**JKA Kamikawa-asahi 20.99 357** P **P** **11 17 50.0 +2.3**
**ASAJ Asahikawa 20.99 357** P **P** **11 17 48.3 +0.6**
comp=Z,8.9nm,1.0s,baz=180,slow=13,SNR=4.3
ASAJ S **S** **11 21 36.0 -2.9**
comp=Z,6.4nm,0.8s,baz=221,slow=19,SNR=3.9
ASAJ LR LR 11 27 30.9
comp=Z,631nm,19.6s,baz=194,slow=41
comp=Z,8.9nm,1.0s
**YULB Yu-li 21.04 275** P **P** **11 17 48.4 -0.1**
**PATS Pohnpei 21.13 138** P **P** **11 17 51.1 +1.7**
**SSLB Suanglung 21.33 276** P **P** **11 17 53.3 +1.7**
**H11N1 WAKE ISLAND Hy 21.39 95** T T 11 39 59.5
baz=283,slow=74,SNR=20
**H11N2 WAKE ISLAND Hy 21.40 95** T T 11 39 57.4
baz=283,slow=74,SNR=23
**H11N3 WAKE ISLAND Hy 21.41 95** T T 11 40 07.7
baz=283,slow=74,SNR=18
**TEY Ternei 22.73 346** *e*P **P** **11 18 01.7 -4.6**
**USA0B Ussuriysk Arra 23.31 337** P **P** **11 18 13.2 +1.0**
**USA0B Ussuriysk Arra 23.31 337**⇑*i*P **P** **11 18 14.0 +1.9**
**USRK Ussuriysk Ar. 23.31 337** P **P** **11 18 11.7 -0.4**
comp=Z,32nm,1.0s,baz=153,slow=13,SNR=26
USRK LR LR 11 26 54.6
comp=Z,860nm,18.4s,baz=148,slow=36
comp=Z,32nm,1.0s
**YSS Yuzh-Sakhalins 23.82 358** *e*P **P** **11 18 17.6 +0.7**
YSS *e*S **S** **11 22 31.6 +2.2**
YSS pmax pmax
comp=Z,30nm,1.2s
YSS MLR MLR
comp=Z,1µm,20.0s
YSS MLR MLR
comp=N,800nm,15.0s
**DAV Davao City (W) 23.98 231** LR LR 11 25 58.8
comp=N,2µm,20.8s,baz=52,slow=33
**NJ2 Nanjing 24.12 297**⇓*i*P **P** **11 18 20.4 +0.6**
NJ2 sP **pwP** **11 18 38.6 +2.6**
NJ2 S **S** **11 22 33.8 -0.7**
NJ2 pmax pmax
comp=N,45nm,0.8s
NJ2 pmax pmax
comp=N,1µm,6.2s
NJ2 LR LR
comp=N,780nm,10.4s
NJ2 LR LR
comp=N,2µm,10.4s
NJ2 LR LR
comp=N,2µm,14.7s
**MDJ Mudanjiang 24.56 334** P **P** **11 18 24.4 +0.6**
MDJ pmax pmax
comp=N,51nm,1.7s
MDJ pmax pmax
comp=N,1µm,5.7s
MDJ LR LR
comp=N,2µm,13.7s
MDJ LR LR
comp=N,2µm,14.4s
MDJ LR LR
comp=N,1µm,14.8s
**MDJ Mudanjiang 24.56 334** P **P** **11 18 24.9 +1.1**
MDJ IAmb IAmb 11 18 27.1
comp=Z,100nm,1.4s
**MANU Manus Island 25.20 173** P **P** **11 18 30.9 +1.1**
**JAY Jayapura 25.70 188** P **P** **11 18 36.3 +1.9**
comp=Z,22nm,0.9s
**CN2 Changchun 25.78 328** *e*P **P** **11 18 36.9 +2.1**
CN2 *e*pP pwP 11 18 51.3 -0.8
CN2 *e*S **S** **11 22 59.5 -1.4**
CN2 pmax pmax
comp=Z,30nm,1.2s
CN2 LR LR
comp=Z,820nm,18.0s
CN2 LR LR
comp=Z,800nm,18.0s
**BNX BinXian 26.38 333**⇓P **P** **11 18 41.6 +1.4**
BNX S **S** **11 23 09.3 -0.9**
BNX sS **sS** **11 23 29.8 +1.7**
BNX pmax pmax
comp=Z,51nm,1.9s
BNX pmax pmax
comp=Z,430nm,7.4s
BNX LR LR
comp=Z,1µm,14.5s
BNX LR LR
comp=Z,1µm,16.2s
BNX LR LR
comp=Z,1µm,15.1s
**TIA Tai'an 26.80 305** P **P** **11 18 44.3 +0.1**
TIA pmax pmax
comp=Z,55nm,0.8s
TIA LR LR
comp=Z,860nm,13.3s
TIA LR LR
comp=Z,2µm,16.3s
TIA LR LR
comp=Z,2µm,16.2s
**WHN Wuhan 27.59 292** P **P** **11 18 54.3 +3.1**
WHN S **S** **11 23 35.8 +6.2**
WHN pmax pmax
comp=Z,110nm,0.9s
WHN LR LR
comp=Z,3µm,15.5s
WHN LR LR
comp=Z,3µm,13.0s
WHN LR LR
comp=Z,5µm,15.3s
**KLR Kul'dur 27.86 342***d i*P **P** **11 18 55.0 +1.5**
KLR pmax pmax
comp=Z,28nm,0.9s
**HNS HongShan 29.04 306**⇓P **P** **11 19 04.6 +0.5**
HNS S **S** **11 23 53.6 +1.3**
HNS pmax pmax
comp=Z,42nm,1.2s
HNS LR LR
comp=Z,2µm,15.9s
HNS LR LR
comp=Z,1µm,14.3s
**BJT Baijiatuau 29.06 312** P **P** **11 19 03.3 -1.0**
**BJT Baijiatuau 29.06 312** P **P** **11 19 03.3 -1.0**
BJT pmax pmax
comp=Z,14nm,1.0s
**BJI Beijing 29.06 312** P **P** **11 19 06.6 +2.3**
BJI pmax pmax
comp=Z,7.0nm,1.0s
BJI LR LR
comp=Z,380nm,14.6s
BJI LR LR
comp=Z,360nm,16.2s
BJI LR LR
comp=Z,490nm,15.2s
**LYN LuoYang 29.92 300** P **P** **11 19 12.3 +0.3**
LYN S **S** **11 24 08.3 +2.0**
LYN pmax pmax
comp=Z,80nm,1.2s
LYN pmax pmax
comp=Z,780nm,8.0s
LYN LR LR
comp=Z,1µm,15.3s
LYN LR LR
comp=Z,2µm,14.3s
LYN LR LR
comp=Z,3µm,16.2s

**HEH HeiHe 30.10 338** *e*P **P** **11 19 14.1 +0.7**
HEH pP **pwP** **11 19 29.4 -1.8**
HEH S **S** **11 24 07.1 -1.7**
HEH SS **SnSn** **11 25 45.3 +0.6**
HEH pmax pmax
comp=Z,22nm,1.1s
HEH pmax pmax
comp=Z,320nm,5.3s
HEH LR LR
comp=Z,1µm,16.3s
HEH LR LR
comp=Z,2µm,17.1s
HEH LR LR
comp=Z,990nm,16.4s
**MYLDM Lahad Datu 30.54 238** P **P** **11 19 16.3 -1.3**
**XLT XiLinHaoTe 31.05 319** *e*P P 11 19 27.8 +5.8
XLT pmax pmax
comp=Z,13nm,0.7s
XLT pmax pmax
comp=Z,190nm,5.1s
XLT LR LR
comp=Z,2µm,14.7s
XLT LR LR
comp=Z,2µm,16.6s
**TOLI2 Tolitoli 31.55 229** P **P** **11 19 26.1 -0.4**
**PETK Petropavlovsk- 31.66 16** LR LR 11 35 26.1
comp=Z,554nm,18.1s,baz=200,slow=42
**ENH Enshi 31.73 291** P **P** **11 19 26.5 -1.6**
ENH IAmb IAmb 11 19 40.4
comp=Z,17nm,0.8s
**HIA Hailar 32.44 330** P **P** **11 19 33.5 -0.6**
HIA IAmb IAmb 11 19 36.1
comp=Z,26nm,1.1s
**HIA Hailar 32.44 330***c i*P **P** **11 19 34.5 +0.4**
HIA pmax pmax
comp=Z,31nm,1.1s
**PMG Port Moresby 32.45 175**⇓*e*P **P** **11 19 34.2 -0.1**
PMG pmax pmax
comp=Z,20nm,0.9s
**HHC Hu-ho-hao-te 32.59 311** *e*P **P** **11 19 34.5 -1.1**
HHC pmax pmax
comp=Z,8.0nm,0.5s
HHC pmax pmax
comp=Z,140nm,4.8s
**HHC Hu-ho-hao-te 32.59 311**⇑*i*P **P** **11 19 35.8 +0.2**
HHC pP sP 11 19 47.9 -3.5
HHC sP pwP 11 19 54.1 +1.9
HHC *e*S **S** **11 24 52.1 +3.9**
HHC pmax pmax
comp=Z,25nm,0.5s
HHC LR LR
comp=Z,950nm,14.7s
HHC LR LR
comp=Z,1µm,14.7s
HHC LR LR
comp=Z,1µm,15.5s
**XAN Xi'an 32.69 297**⇓P **P** **11 19 37.0 +0.6**
XAN pmax pmax
comp=Z,47nm,1.5s
XAN LR LR
comp=Z,1µm,14.9s
XAN LR LR
comp=Z,1µm,17.3s
XAN LR LR
comp=Z,2µm,20.6s
**XAN Xi'an 32.69 297** P **P** **11 19 36.8 +0.4**
XAN pP **pP** **11 19 47.7 +0.3**
**ZEA Zeya 33.16 342** *e*P **P** **11 19 41.7 +1.5**
ZEA pmax pmax
comp=N,10.0nm,0.5s
ZEA pmax pmax
comp=Z,20nm,1.0s
ZEA MLR MLR
comp=N,500nm,12.0s
ZEA MLR MLR
comp=Z,400nm,15.0s
**BTO Baotou 33.59 309** *e*P **P** **11 19 45.3 +1.0**
BTO pP **pwP** **11 20 03.8 +2.8**
BTO PP **PnPn** **11 20 58.0 +1.0**
BTO S **S** **11 25 04.6 +0.9**
BTO SS **SnSn** **11 27 11.9 +2.1**
BTO pmax pmax
comp=Z,22nm,0.7s
BTO pmax pmax
comp=Z,530nm,7.9s
BTO LR LR
comp=Z,3µm,16.9s
BTO LR LR
comp=Z,2µm,15.3s
BTO LR LR
comp=Z,3µm,15.8s
**GYA Guiyang 34.16 283**⇓P **P** **11 19 49.8 +0.4**
GYA pP pwP 11 20 06.3 +0.3
GYA S **S** **11 25 12.4 -0.4**
GYA pmax pmax
comp=Z,18nm,0.9s
GYA pmax pmax
comp=Z,540nm,5.9s
GYA LR LR
comp=Z,640nm,10.6s
GYA LR LR
comp=Z,780nm,11.8s
GYA LR LR
comp=Z,810nm,17.6s
**HNR Honiara 35.83 153** LR LR 11 33 28.2
comp=Z,9µm,22.0s,baz=344,slow=34
**HNR Honiara 35.83 153** P **P** **11 20 05.5 +1.8**
**SPSI Sidrap Palu 35.95 225** P **P** **11 20 03.9 -0.9**
comp=Z,38nm,1.8s,comp=Z,4µm
**BNSI Bone 36.07 224** P **P** **11 20 06.1 +0.4**
comp=Z,35nm,1.9s,comp=Z,761nm
**CD2 Chengdu 36.70 291** P **P** **11 20 10.8 -0.3**
CD2 pP pwP 11 20 26.3 -1.3
CD2 sP sP 11 20 34.5 +7.4
CD2 S **S** **11 25 47.8 -3.8**
CD2 pmax pmax
comp=Z,40nm,1.1s
CD2 pmax pmax
comp=Z,410nm,7.3s
CD2 LR LR
comp=Z,1µm,5.7s
CD2 LR LR
comp=Z,1µm,18.1s
CD2 LR LR
comp=Z,1µm,15.6s
**KAPI Kappang 36.76 224** LR LR 11 33 37.4
comp=Z,398nm,21.0s,baz=84,slow=34
**COEN Coen 36.86 182** P **P** **11 20 11.1 -1.3**
**LZH Lanzhou 37.13 300**⇑P **P** **11 20 15.5 +0.6**
LZH sP pwP 11 20 39.6 +8.4
LZH pmax pmax
comp=Z,55nm,1.1s
LZH LR LR
comp=Z,760nm,15.1s
LZH LR LR
comp=Z,1µm,15.3s
LZH LR LR
comp=Z,1µm,16.8s
**MTKI Muara Teweh, K 37.21 234** P **P** **11 20 17.2 +1.7**
**SLVN Son La 37.26 275** P **P** **11 20 14.9 -1.1**
SLVN IAmb IAmb 11 20 18.4
comp=Z,31nm,1.5s
**SHEM Shemya Is, Ala 37.32 30** LR LR 11 34 32.5
comp=Z,422nm,20.6s,baz=230,slow=34
**KMI Kunming 37.79 282**⇓P **P** **11 20 21.6 +1.0**
KMI S **S** **11 26 11.8 +3.2**
KMI pmax pmax
comp=Z,18nm,1.8s
KMI LR LR
comp=Z,300nm,16.1s
KMI LR LR
comp=Z,450nm,20.9s
KMI LR LR
comp=Z,380nm,16.1s
**MTN Manton Dam 37.95 201** P **P** **11 20 20.0 -1.7**
**ULN Ulaanbaatar 38.49 319** P **P** **11 20 26.4 +0.2**
ULN IAmb IAmb 11 20 40.9
comp=Z,24nm,1.1s
**ULN Ulaanbaatar 38.49 319**⇑*i*P **P** **11 20 26.3 +0.2**
ULN pmax pmax
comp=Z,34nm,1.7s
**PZH PanZhiHua 38.56 284** P **P** **11 20 27.5 +0.5**
PZH S **S** **11 26 14.8 -5.2**
PZH pmax pmax
comp=Z,30nm,0.8s
PZH pmax pmax
comp=Z,250nm,5.5s
PZH LR LR
comp=Z,430nm,16.0s
PZH LR LR
comp=Z,710nm,16.9s
PZH LR LR
comp=Z,940nm,18.8s
**SONM Songino Array 38.87 319** P **P** **11 20 29.6 +0.2**
**SONM Songino Array 38.87 319** P **P** **11 20 29.3 0.0**
comp=Z,2.9nm,0.6s,baz=120,slow=6.5,SNR=17
SONM LR LR 11 37 33.5
comp=Z,1µm,18.1s,baz=108,slow=38
comp=Z,2.9nm,0.6s
**YAK Yakutsk 40.14 349** P **P** **11 20 39.5 +0.1**
**YAK Yakutsk 40.14 349** *e*P **P** **11 20 40.3 +0.8**
YAK *e* 11 22 09.8
YAK *e*S **S** **11 26 42.1 -0.5**
YAK *e*SS **SS** **11 29 40.3 -1.2**
YAK *e* 11 30 39.2
YAK pmax pmax
comp=Z,61nm,1.1s
YAK pmax pmax
comp=E,6.0nm,1.4s
YAK pmax pmax
comp=N,24nm,1.3s
YAK pmax pmax
comp=Z,108nm,3.3s
YAK pmax pmax
comp=E,65nm,3.7s
YAK smax smax
comp=E,156nm,2.7s
**SEY Seymchan 40.18 6**⇓*e*P **P** **11 20 39.0 -0.8**
SEY pmax pmax
comp=Z,9.0nm,1.3s
**CRAI Chiangrai 40.72 275** P **P** **11 20 44.7 -0.2**
CRAI IAmb IAmb 11 20 46.6
comp=Z,42nm,1.6s
**GTA Gaotai 40.84 304** P **P** **11 20 46.8 +1.0**
GTA S **S** **11 26 55.8 +1.9**
GTA sS sS 11 27 13.8 +1.6
GTA pmax pmax
comp=Z,16nm,1.6s
GTA pmax pmax
comp=Z,190nm,5.8s
GTA LR LR
comp=Z,470nm,16.7s
GTA LR LR
comp=Z,550nm,16.7s
GTA LR LR
comp=Z,900nm,15.3s
**KNRA Kununurra 41.40 203** P **P** **11 20 48.5 -1.9**
KNRA IAmb IAmb 11 21 18.9
comp=Z,43nm,1.6s
**TNCH TengChong 41.60 282** P **P** **11 20 51.8 -0.5**
TNCH S **S** **11 27 06.0 +0.4**
TNCH pmax pmax
comp=Z,31nm,0.6s
TNCH pmax pmax
comp=Z,160nm,3.4s
TNCH LR LR
comp=Z,370nm,13.6s
TNCH LR LR
comp=Z,450nm,15.9s
TNCH LR LR
comp=Z,770nm,18.6s
**ZAK Zakamensk 41.82 321** *e*P **P** **11 20 53.4 -0.2**
ZAK pmax pmax
comp=Z,31nm,1.2s
**IRK Irkutsk 42.10 324** *e*P **P** **11 20 56.6 +0.8**
IRK *e* 11 21 10.2
IRK pmax pmax
comp=Z,77nm,3.5s
**CMAR Chiang Mai Arr 42.43 272** P **P** **11 20 58.3 -0.7**
comp=Z,0.9nm,0.3s,baz=57,slow=9.1,SNR=10
comp=Z,0.9nm,0.3s
**CMAR Chiang Mai Arr 42.43 272** *i* P **P** **11 20 59.4 +0.5**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**CTA Charters Tower 42.99 177** P **P** **11 21 01.5 -1.8**
comp=Z,0.4nm,0.8s,baz=359,slow=9.7,SNR=3.6
**CTAO Charters Tower 42.99 177** P **P** **11 21 01.7 -1.5**
**CTAO Charters Tower 42.99 177** P **P** **11 21 01.7 -1.5**
CTAO pmax pmax
comp=Z,13nm,0.8s
**MOY Mondy 43.67 322** *e*P **P** **11 21 09.7 +1.1**
MOY pmax pmax
comp=Z,30nm,1.8s
**WR0 Warramunga Arr 43.84 193** P **P** **11 21 08.9 -1.2**
**WRAB Tennant Creek 43.85 193** P **P** **11 21 08.6 -1.6**
WRAB IAmb IAmb 11 21 33.2
comp=Z,55nm,1.8s
**WRAB Tennant Creek 43.85 193**⇓*i*P **P** **11 21 08.7 -1.5**
WRAB pmax pmax
comp=Z,12nm,0.8s
**WRA Warramunga Arr 43.86 193** P **P** **11 21 08.2 -2.1**
**WRA Warramunga Arr 43.86 193** P **P** **11 21 08.7 -1.6**
comp=Z,2.6nm,0.5s,baz=15,slow=8.5,SNR=44
WRA PcP **PP** **11 22 55.3 +2.1**
comp=Z,2.3nm,0.9s,baz=10,slow=3.7,SNR=1.9
WRA ScP **ScP** **11 26 46.6 +2.5**
comp=Z,7.6nm,1.2s,baz=12,slow=4.1,SNR=9.4
WRA LR LR 11 38 30.8
comp=Z,728nm,20.1s,baz=11,slow=35
comp=Z,2.6nm,0.5s
**WRA Warramunga Arr 43.86 193** *i* P **P** **11 21 08.6 -1.7**
WRA pmax pmax
comp=Z,3.0nm,0.5s
**PWJI Pagerwojo 44.29 229** P **P** **11 21 12.4 -1.4**
comp=Z,53nm,1.4s
**GOMU GeErMu 44.41 299** P **P** **11 21 15.9 +0.8**
GOMU pmax pmax
comp=Z,100nm,1.2s
GOMU LR LR
comp=Z,590nm,12.9s
GOMU LR LR
comp=Z,510nm,13.0s
**FITZ Fitzroy Crossi 44.79 205** P **P** **11 21 16.6 -1.2**
**KNGR Kungurtug, Tuv 45.30 319**⇓*e*P **P** **11 21 22.8 +1.1**
KNGR pmax pmax
comp=Z,11nm,1.4s
**KULM Kulim 45.55 254** P **P** **11 21 24.1 +0.1**
**NIKH Nikolski High 46.30 38** P **P** **11 21 31.1 +1.8**
baz=249
**BILL Bilibino 46.95 11**⇓*e*P **P** **11 21 35.0 +0.8**
BILL *e* 11 23 05.8
BILL *e* 11 23 25.6
BILL *e*SS SKiKP 11 32 52.8 -35
BILL pmax pmax
comp=Z,19nm,1.3s
**SPIA Saint Paul Isl 47.28 32** P **P** **11 21 38.2 +1.3**
baz=244
**P08K Saint George I 47.37 33** P **P** **11 21 39.3 +1.7**
baz=245
**SHL Shillong 47.47 284** IAmb IAmb 11 21 49.9
comp=Z,18nm,0.7s
**ASAR Alice Springs 47.56 193** P **P** **11 21 37.8 -1.7**
**ASAR Alice Springs 47.56 193** P **P** **11 21 37.4 -2.1**
comp=Z,1.5nm,0.6s,baz=11,slow=6.5,SNR=29
ASAR ScP **ScP** **11 27 01.7 +2.3**
comp=Z,2.2nm,1.1s,baz=14,slow=4.2,SNR=7.1
ASAR LR LR 11 40 18.5
comp=Z,656nm,20.8s,baz=1.5,slow=34
comp=Z,1.5nm,0.6s
**LSA Lhasa 47.62 290** P **P** **11 21 43.3 +2.7**
**UNV Unalaska Valle 47.92 37** P **P** **11 21 43.0 +1.1**
baz=250
**DZM Mont Dzumac 49.86 153** *e*P **P** **11 21 56.1 -1.2**
comp=Z,101nm,1.2s
DZM *e*S **S** **11 29 03.8 -0.4**
comp=Z,151nm,27.6s
DZM *e*SS **SS** **11 32 33.9 -3.8**
comp=Z,202nm,25.4s
DZM *e*LR LR 11 36 08.2
comp=Z,519nm,22.4s
**DZM Mont Dzumac 49.86 153** P **P** **11 21 59.0 +1.7**
**DZM Mont Dzumac 49.86 153** P **P** **11 21 56.6 -0.7**
comp=Z,13nm,0.8s,baz=324,slow=9.5,SNR=9.3
comp=Z,13nm,0.8s
**DZM Mont Dzumac 49.86 153** P **P** **11 21 59.5 +2.2**
**GAMB Gambell 49.95 24** P **P** **11 21 58.7 +1.4**
baz=237
**WMQ Urumqi 50.42 308** *e*P **P** **11 22 02.8 +1.4**
WMQ pP sP 11 22 15.8 -1.7
WMQ PP **PP** **11 24 02.3 +5.1**
WMQ pmax pmax
comp=Z,24nm,1.3s

WMQ pmax pmax
comp=Z,360nm,3.6s
WMQ LR LR
comp=Z,590nm,14.5s
WMQ LR LR
comp=Z,670nm,17.1s
WMQ LR LR
comp=Z,500nm,15.9s
**M11K Mekoryuk 50.57 29 P P 11 22 03.7 +1.7**
baz=245
**S12K Black Hills 50.95 36 P P 11 22 06.6 +1.5**
baz=253
**DGZ Jazzator, Alta 51.35 316** *c i* P **P 11 22 09.2 +0.8**
DGZ pmax pmax
comp=Z,34nm,1.5s
**SDPT Sand Point 51.72 37 P P 11 22 12.4 +1.6**
baz=255
**M13K Dall Lake 51.88 30 P P 11 22 14.2 +2.3**
baz=248
**K13K Kusilvak Mount 51.90 28 P P 11 22 13.6 +1.6**
baz=246
**CHNA Chernabura Isl 52.08 38 P P 11 22 15.3 +1.8**
baz=256
**TNA Tin City 52.28 23 P P 11 22 15.6 +0.9**
baz=240
**MSVF Nonsavu 52.37 138** LR LR 11 43 30.1
comp=Z,291nm,18.8s,baz=303,slow=35
**O14K Tigyukauivet M 52.46 32 P P 11 22 18.0 +1.8**
baz=251
**N14K Kuskokwak Cree 52.48 31 P P 11 22 18.1 +1.7**
baz=250
**L14K Kuka Creek 52.53 29 IAmb IAmb** 11 22 28.4
comp=Z,22nm,1.2s
**L14K Kuka Creek 52.53 29 P P 11 22 18.4 +1.7**
baz=248
**M14K Bethel 52.64 30 P P 11 22 19.3 +1.8**
baz=249
**J14K Nanvaranak Lak 52.70 27 IAmb IAmb** 11 22 23.4
comp=Z,33nm,1.5s
**J14K Nanvaranak Lak 52.70 27 P P 11 22 20.1 +2.1**
baz=246
**ZSN Zaisan 52.74 313** *e* P **P 11 22 18.4 -0.2**
comp=Z,9.8nm,1.1s,baz=313
**ZSN Zaisan 52.74 313** *e* P **P 11 22 18.4 -0.2**
ZSN pmax pmax
comp=Z,10.0nm,1.1s
**ANM Nome 52.75 25 P P 11 22 18.3 0.0**
baz=243
**F14K Arctic Creek 52.81 23 P P 11 22 20.4 +1.6**
baz=242
**O15K Ungalikthiuk R 53.14 32 P P 11 22 23.0 +1.8**
baz=253
**L15K Ungalak Mounta 53.19 29 P P 11 22 23.5 +1.9**
baz=249
**M15K Kasigluk River 53.21 30 P P 11 22 23.2 +1.5**
baz=251
**N15K Kwethluk River 53.32 31 P P 11 22 24.3 +1.7**
baz=252
**K15K Wolf Creek Mou 53.39 28 P P 11 22 25.4 +2.3**
**K15K Wolf Creek Mou 53.39 28 P P 11 22 24.7 +1.6**
baz=249
**G15K Niukluk 53.45 25 P P 11 22 25.3 +1.8**
baz=244
**F15K North Star Dit 53.54 24 IAmb IAmb** 11 22 36.0
comp=Z,24nm,1.2s
**F15K North Star Dit 53.54 24 P P 11 22 25.8 +1.7**
baz=243
**ZAA0 Zalesovo Array 53.70 321 P P 11 22 25.0 -0.4**
**ZALV Zalesovo Beam 53.70 321 P P 11 22 24.7 -0.7**
**ZALV Zalesovo Beam 53.70 321 P P 11 22 24.2 -1.3**
comp=Z,2.9nm,0.6s,baz=108,slow=8.3,SNR=11
ZALV PcP **PcP 11 23 30.5 -0.7**
comp=Z,1.6nm,0.5s,baz=115,slow=2.9,SNR=1.4
ZALV ScP **ScP 11 27 28.2 +2.8**
comp=Z,0.4nm,0.4s,baz=90,slow=1.4,SNR=1.4
ZALV LR LR 11 46 33.7
comp=Z,404nm,18.2s,baz=98,slow=38
comp=Z,2.9nm,0.6s
**ZALV Zalesovo Beam 53.70 321** *i* P **P 11 22 25.5 +0.1**
ZALV pmax pmax
comp=Z,3.0nm,0.6s
**R16K Pilot Point 53.84 35 P P 11 22 28.3 +1.9**
baz=256
**H16K Elim 54.00 25 P P 11 22 29.2 +1.7**
baz=246
**P16K Nushagak River 54.01 33 P P 11 22 29.3 +1.8**
baz=255
**N16K Nishlik Lake 54.04 31 P P 11 22 29.2 +1.3**
baz=253
**L16K Owhat River 54.10 29 P P 11 22 30.5 +2.3**
baz=251
**O16K Kokwok River B 54.11 32 P P 11 22 30.0 +1.6**
baz=254
**M16K Timber Creek 54.12 30 P P 11 22 30.1 +1.7**
baz=252
**J16K Anvik River 54.15 27 P P 11 22 30.5 +1.9**
baz=249
**G16K Koyuk River 54.27 24 P P 11 22 31.2 +1.8**
baz=246
**I17K Unalakleet 54.33 27 P P 11 22 31.4 +1.5**
baz=249
**MK31 Makanchi Array 54.44 312** P **P 11 22 31.4 +0.4**
MK31 IAmb IAmb 11 22 49.9
comp=Z,27nm,1.6s
**MK31 Makanchi Array 54.44 312** *c e* P **P 11 22 31.2 +0.1**
**MKAR Makanchi Array 54.44 312** P **P 11 22 32.0 +1.0**
**MKAR Makanchi Array 54.44 312** P **P 11 22 30.9 -0.1**
comp=Z,1.9nm,0.5s,baz=88,slow=9.1,SNR=18
MKAR PcP **PcP 11 23 34.0 -0.2**
comp=Z,1.7nm,0.6s,baz=102,slow=2.2,SNR=1.3
MKAR LR LR 11 48 49.4
comp=Z,207nm,19.1s,baz=104,slow=40
comp=Z,1.9nm,0.5s
**R17L Mt. Peulik Vol 54.49 35 P P 11 22 32.1 +0.9**
baz=257
**C16K Lisburne Hills 54.52 21 P P 11 22 31.8 +0.7**
baz=241
**O17K Koliganek Bris 54.65 32 P P 11 22 33.6 +1.4**
baz=255
**MAKZ Makanchi 54.66 312** P **P 11 22 32.6 +0.1**
MAKZ IAmb IAmb 11 22 52.1
comp=Z,14nm,1.0s
**MAKZ Makanchi 54.66 312** P **P 11 22 32.7 +0.1**
MAKZ pmax pmax
comp=Z,14nm,1.0s
**MAKZ Makanchi 54.66 312** P **P 11 22 33.2 +0.6**
**STKA Stephens Creek 54.74 183** P **P 11 22 31.6 -1.5**
**STKA Stephens Creek 54.74 183** P **P 11 22 31.3 -1.9**
comp=Z,2.8nm,0.6s,baz=357,slow=9.5,SNR=7.3
STKA LR LR 11 46 07.9
comp=Z,539nm,21.3s,baz=3.7,slow=36
comp=Z,2.8nm,0.6s
**L17K Donlin 54.77 29 P P 11 22 34.6 +1.6**
baz=252
**N17K Nushagak Hills 54.81 31 P P 11 22 35.2 +1.8**
baz=254
**P17K Kvichak River 54.82 33 P P 11 22 35.6 +2.1**
baz=256
**J17K VABM Dome 54.84 27 IAmb IAmb** 11 22 46.2
comp=Z,33nm,1.4s
**J17K VABM Dome 54.84 27 P P 11 22 35.2 +1.7**
baz=250
**Q17K Contact Creek 54.88 34 P P 11 22 36.0 +1.9**
baz=257
**M17K Holitna River 54.94 30 IAmb IAmb** 11 24 01.3
comp=Z,17nm,1.2s
**M17K Holitna River 54.94 30 P P 11 22 36.6 +2.2**
baz=254
**K17K Iditarod 54.95 28 IAmb IAmb** 11 22 47.0
comp=Z,24nm,1.1s
**K17K Iditarod 54.95 28 P P 11 22 36.4 +2.0**
baz=252
**G17K Kiwalik Mounta 54.96 25 P P 11 22 36.3 +1.9**
baz=248
**D17K Noatak River 55.00 22 P P 11 22 36.6 +2.0**
baz=244
**H17K Granite Mounta 55.04 25 P P 11 22 39.0 +4.0**
**H17K Granite Mounta 55.04 25 P P 11 22 36.8 +1.8**
baz=249
**F17K Baldwin Pennin 55.11 24 P P 11 22 37.5 +2.0**
baz=246
**E17K Hotham Inlet 55.17 23 P P 11 22 37.6 +1.8**
baz=245
**RDOG Red Dog Mine 55.22 21 P P 11 22 38.4 +2.2**
baz=244
**C17K DeLong Mountai 55.32 21 P P 11 22 38.8 +1.8**
baz=243
**Q18K Katmai Hardscr 55.42 34 P P 11 22 39.6 +1.7**
baz=258
**SII Sitkinak Islan 55.44 36 P P 11 22 39.8 +1.8**
baz=260
**N18K Kilae Creek 55.46 31 P P 11 22 42.6 +4.5**
**N18K Kilae Creek 55.46 31 P P 11 22 39.7 +1.5**
baz=255
**P18K Big Mountain, 55.47 33 P P 11 22 40.1 +1.9**
baz=257
**R18K Karluk 55.48 35 P P 11 22 40.0 +1.7**
baz=259
**L18K Granite Mounta 55.51 29 P P 11 22 40.6 +2.1**
L18K IAmb IAmb 11 22 51.2
comp=Z,29nm,1.5s
**L18K Granite Mounta 55.51 29 P P 11 22 40.2 +1.8**
baz=254
**O18K Koktuh Hills 55.59 32 P P 11 22 41.1 +2.0**
**O18K Koktuh Hills 55.59 32 P P 11 22 40.8 +1.8**
baz=257
**M18K Stony River 55.70 30 P P 11 22 41.7 +1.9**
baz=255
**H18K Honhosa River 55.73 26 IAmb IAmb** 11 22 52.0
comp=Z,27nm,1.5s
**H18K Honhosa River 55.73 26 P P 11 22 41.8 +1.8**
baz=250
**E18K Tukpahlearik C 55.74 23 P P 11 22 41.7 +1.7**
baz=246
**F18K Selawik 55.76 24 P P 11 22 41.6 +1.4**
baz=248
**J18K Innoko River 55.86 28 P P 11 22 43.2 +2.2**
baz=253
**G18K Tagagawik 55.88 25 IAmb IAmb** 11 22 53.6
comp=Z,23nm,1.2s
**G18K Tagagawik 55.88 25 P P 11 22 42.6 +1.6**
baz=249
**OHAK Old Harbor 56.04 36 P P 11 22 44.6 +2.4**
OHAK IAmb IAmb 11 22 57.3
comp=Z,28nm,1.4s
**OHAK Old Harbor 56.04 36 P P 11 22 44.7 +2.4**
baz=260
**C18K Utukok River 56.05 21 P P 11 22 43.9 +1.6**
C18K IAmb IAmb 11 23 15.8
comp=Z,19nm,1.2s
**C18K Utukok River 56.05 21 P P 11 22 44.3 +2.0**
baz=245
**O19K Port Alsworth 56.10 32 IAmb IAmb** 11 23 07.4
comp=Z,24nm,1.1s
**O19K Port Alsworth 56.10 32 P P 11 22 45.1 +2.4**
baz=257
**BBOO Buckleboo 56.15 188 P P 11 22 41.6 -1.7**
**B18K Kokolik River 56.16 20 P P 11 22 45.2 +2.2**
baz=244
**N19K Bonanza Creek 56.17 31 P P 11 22 45.5 +2.2**
N19K IAmb IAmb 11 23 06.7
comp=Z,18nm,1.2s
**N19K Bonanza Creek 56.17 31 P P 11 22 45.6 +2.3**
baz=257
**Q19K Cape Douglas, 56.17 34 P P 11 22 45.5 +2.2**
baz=259
**GCSA Galena City Sc 56.19 26 P P 11 22 45.3 +2.0**
baz=252
**L19K White Mountain 56.33 30 P P 11 22 46.5 +2.2**
baz=255
**SHLS Shalkode 56.39 307** *e* P **P 11 22 42.7 -2.5**
baz=307
**SHLS Shalkode 56.39 307** *e* P **P 11 22 42.7 -2.5**
**M19K Big River Lodg 56.47 30 P P 11 22 47.4 +2.1**
baz=256
**J19K Poorman 56.48 27 IAmb IAmb** 11 22 57.5
comp=Z,24nm,1.4s
**J19K Poorman 56.48 27 P P 11 22 47.2 +1.8**
baz=254,SNR=6.4
**KDAK Kodiak Island 56.51 35 LR LR** 11 44 08.3
comp=Z,298nm,21.8s,baz=284,slow=33
**KDAK Kodiak Island 56.51 35 P P 11 22 48.3 +2.7**
baz=260
**KDAK Kodiak Island 56.51 35 P P 11 22 50.2 +4.6**
**P19K Oil Pt 56.52 33 P P 11 22 48.2 +2.4**
baz=259
**F19K Shaleruckik Mo 56.54 24 P P 11 22 48.4 +2.6**
baz=250
**H19K Roundabout Mou 56.61 25 P P 11 22 48.2 +2.0**
baz=252,SNR=10
**UZB Uzynbulak 56.71 307** *e* P **P 11 22 47.2 -0.3**
baz=307
**UZB Uzynbulak 56.71 307** *e* P **P 11 22 47.2 -0.3**
**Q20K Shuyak Island 56.75 34 P P 11 22 49.5 +2.1**
baz=260
**C19K Lookout Ridge 56.77 21 P P 11 22 49.6 +2.2**
baz=246
**L20K Farewell, AK 56.84 29 P P 11 22 50.3 +2.2**
baz=256
**O20K Slope Mountain 56.91 32 P P 11 22 50.2 +1.7**
baz=259
**KPKS Kokpek 56.95 308** *e* P **P 11 22 49.0 -0.1**
baz=308
**KPKS Kokpek 56.95 308** *e* P **P 11 22 49.0 -0.1**
**E19K Redstone River 56.96 23 IAmb IAmb** 11 23 01.1
comp=Z,25nm,1.4s
**E19K Redstone River 56.96 23 P P 11 22 50.6 +1.9**
baz=250
**K20K Telida 56.98 28 IAmb IAmb** 11 23 01.5
comp=Z,21nm,1.2s
**K20K Telida 56.98 28 P P 11 22 51.1 +2.1**
baz=256
**D19K Kuna River 57.02 22 IAmb IAmb** 11 23 07.7
comp=Z,12nm,0.9s
**D19K Kuna River 57.02 22 P P 11 22 51.4 +2.2**
baz=248
**M20K Styx River 57.05 30 IAmb IAmb** 11 23 06.4
comp=Z,39nm,1.8s
**M20K Styx River 57.05 30 P P 11 22 51.5 +1.9**
baz=257
**KURK Kurchatov 57.09 316 P P 11 22 48.5 -1.3**
KURK IAmb IAmb 11 23 05.8
comp=Z,15nm,1.1s
**KURK Kurchatov 57.09 316** *c i* P **P 11 22 49.7 -0.2**
KURK pmax pmax
comp=Z,17nm,1.1s
**KURK Kurchatov 57.09 316** P **P 11 22 49.4 -0.5**
KURK sP **sP 11 23 05.3 -0.6**
**TDK Taldyqorghan 57.12 310** *e* P **P 11 22 50.3 +0.1**
comp=Z,13nm,0.7s,baz=310
**TDK Taldyqorghan 57.12 310** *e* P **P 11 22 50.3 +0.1**
TDK pmax pmax
comp=Z,13nm,0.7s
**KURBB Kurchatov Arra 57.14 316** P **P 11 22 49.3 -0.9**
comp=Z,5.3nm,0.8s,baz=95,slow=7.2,SNR=24
KURBB LR LR 11 48 43.4
comp=Z,1μm,18.0s,baz=164,slow=38
KURBB PKP2bc 11 52 52.3
comp=Z,0.3nm,0.3s,baz=260,slow=3.9,SNR=4.2
comp=Z,5.3nm,0.8s
**J20K Nowinta River 57.16 27 P P 11 22 51.7 +1.5**
**J20K Nowinta River 57.16 27 P P 11 22 52.1 +2.0**
baz=255,SNR=11
**SATY Saty 57.16 307** *e* P **P 11 22 50.7 0.0**
comp=Z,7.4nm,1.1s,baz=307
**SATY Saty 57.16 307** *e* P **P 11 22 50.7 0.0**
SATY pmax pmax
comp=Z,7.0nm,1.1s
**I20K Naaghedeneel 57.19 27 P P 11 22 52.5 +2.2**
baz=254
**H20K Anotleneega Mo 57.22 26 P P 11 22 52.7 +2.1**
baz=253,SNR=10
**HOM Homer 57.32 33 P P 11 22 52.8 +1.5**
baz=260
**N20K Mount Spurr 57.33 31 P P 11 22 53.7 +2.2**
baz=259
**SPCR Spurr Chakacha 57.33 31 P P 11 22 53.9 +2.4**
baz=259
**F20K Avaraart Lake 57.37 24 P P 11 22 54.0 +2.4**
baz=252
**ARXS Arharly 57.55 309** *e* P **P 11 22 53.1 -0.2**
**E20K Nigu River 57.61 22 P P 11 22 55.5 +2.1**
baz=250
**D20K Etiviuk River 57.62 22 P P 11 22 55.6 +2.2**
baz=250
**CAPN Captain Cook N 57.76 32 P P 11 22 57.2 +2.9**
baz=260
**BRSE Bradley Lake S 57.78 33 P P 11 22 56.4 +1.8**
baz=261
**SKT Skwentna 57.81 30 IAmb IAmb** 11 23 25.8
comp=Z,17nm,1.3s
**SKT Skwentna 57.81 30 P P 11 22 56.7 +1.9**
baz=259
**B20K Meade River 57.91 20 P P 11 22 57.4 +2.1**
baz=248
**G21K Allakaket 58.05 25 IAmb IAmb** 11 23 08.8
comp=Z,22nm,1.4s
**G21K Allakaket 58.05 25 P P 11 22 58.3 +1.9**
baz=254
**SUA Susitna One 58.08 31 P P 11 22 58.6 +1.8**
baz=260
**H21K Melozitna Rive 58.10 26 P P 11 22 58.6 +1.9**
baz=255,SNR=8.3
**MDOK Medeo 58.15 307** *e* P **P 11 22 57.4 -0.4**
baz=308
**MDOK Medeo 58.15 307** *e* P **P 11 22 57.3 -0.4**
**CHKK Chushkaly 58.16 308** *e* P **P 11 22 57.6 -0.1**
baz=308
**CHKK Chushkaly 58.16 308** *e* P **P 11 22 57.5 -0.1**
**TNSS Tian-Shan 58.23 307** *e* P **P 11 22 58.1 -0.5**
baz=307
**TNSS Tian-Shan 58.23 307** *e* P **P 11 22 58.1 -0.5**
**AAA Alma-Ata 58.25 308** *e* P **P 11 22 58.2 -0.1**
baz=308
**AAA Alma-Ata 58.25 308** *e* P **P 11 22 58.2 -0.1**
**F21K Alatna River 58.26 24 P P 11 22 60.0 +2.1**
baz=254
**I21K Tanana 58.31 26 IAmb IAmb** 11 23 07.0
comp=Z,11nm,0.9s
**C21K Knifeblade Rid 58.39 22 P P 11 23 01.3 +2.5**
baz=251
**O22K Cooper Landing 58.40 32 P P 11 23 01.0 +2.1**
baz=261
**M22K Willow 58.42 31 P P 11 23 00.7 +1.7**
baz=260
**E21K Killik River 58.45 22 IAmb IAmb** 11 23 11.4
comp=Z,23nm,1.3s
**E21K Killik River 58.45 22 P P 11 23 01.0 +1.8**
baz=252
**CUT Chulitna 58.47 30 P P 11 23 01.1 +1.7**
baz=260
**SEW Seward 58.48 33 P P 11 23 01.9 +2.4**
baz=262
**BPAW Bear Paw Mtn. 58.48 28 P P 11 23 01.4 +1.9**
**BPAW Bear Paw Mtn. 58.48 28 P P 11 23 01.4 +1.9**
baz=258,SNR=6.8
**RC01 Rabbit Creek A 58.49 31 P P 11 23 01.0 +1.4**
baz=261
**B21K Ikpikpuk River 58.60 21 P P 11 23 02.1 +2.0**
baz=251
**KUU Kurty 58.63 308** *e* P **P 11 23 01.0 +0.1**
comp=Z,16nm,0.9s,baz=308
**KUU Kurty 58.63 308** *e* P **P 11 23 00.9 +0.1**
KUU pmax pmax
comp=Z,16nm,0.9s
**H22K Ishtalitna Cre 58.73 26 P P 11 23 02.9 +1.7**
baz=256
**MLY Manley 58.79 27 IAmb IAmb** 11 23 14.0
comp=Z,22nm,1.4s
**MLY Manley 58.79 27 P P 11 23 03.4 +1.8**
baz=258,SNR=8.0
**F22K John River 58.83 24 P P 11 23 03.4 +1.6**
baz=255
**PMR Palmer 58.86 31 IAmb IAmb** 11 23 17.4
comp=Z,16nm,1.0s
**PMR Palmer 58.86 31 P P 11 23 03.8 +1.7**
baz=261
**G22K Bettles 58.93 25 P P 11 23 04.2 +1.8**
baz=256
**A22K Sinclair Lake 58.95 19 P P 11 23 04.3 +1.8**
baz=250
**GHO Glory Hole Cre 58.98 31 IAmb IAmb** 11 23 14.5
comp=Z,18nm,1.0s
**BOOM Boomskoye usch 59.00 307 IAmb IAmb** 11 23 16.0
comp=Z,13nm,1.0s
**D22K Ayikyak River 59.03 22 P P 11 23 05.1 +1.8**
**D22K Ayikyak River 59.03 22 P P 11 23 05.0 +1.8**
baz=254
**NRN Naryn 59.04 305 IAmb IAmb** 11 23 29.3
comp=Z,19nm,1.2s
**E22K Anaktuvuk Pass 59.13 23 P P 11 23 05.6 +1.7**
baz=255,SNR=7.1
**PWL Port Wells 59.13 32 P P 11 23 05.8 +1.8**
baz=262
**KNK Knik Glacier 59.15 31 P P 11 23 06.3 +2.1**
baz=262
**B22K Teshekpuk Lake 59.22 20 P P 11 23 06.5 +2.1**
baz=252
**KSH Kashi 59.23 303 P P 11 23 09.0 +3.8**
KSH pP pwP 11 23 24.9 +2.2
KSH sP sP 11 23 32.5 +11
KSH pmax pmax
comp=Z,15nm,1.0s
KSH pmax pmax
comp=Z,240nm,6.4s
KSH LR LR
comp=Z,740nm,18.9s
KSH LR LR
comp=Z,900nm,16.8s
KSH LR LR
comp=Z,660nm,18.6s
**SML Sawmill 59.27 31 P P 11 23 07.1 +2.1**
**SML Sawmill 59.27 31 P P 11 23 06.8 +1.8**
baz=262,SNR=5.5
**RND Reindeer 59.28 29 P P 11 23 06.0 +1.0**
RND IAmb IAmb 11 23 13.3
comp=Z,11nm,1.1s
**RND Reindeer 59.28 29 P P 11 23 06.1 +1.0**
RND pmax pmax
comp=Z,11nm,1.1s
**MCK McKinley 59.30 28 P P 11 23 07.1 +1.9**
baz=260
**WAT1 Susitna Watana 59.32 29 P P 11 23 07.4 +2.0**
baz=261
**I23K Minto, Yukon-K 59.39 27 IAmb IAmb** 11 23 18.1
comp=Z,18nm,1.3s
**I23K Minto, Yukon-K 59.39 27 P P 11 23 07.8 +2.1**
baz=259
**NEA2 Nenana 59.40 27 P P 11 23 07.7 +1.9**
baz=260
**G23K Bananza Creek 59.45 25 P P 11 23 08.6 +2.4**
baz=257,SNR=6.4
**H23K Yukon River 59.45 26 IAmb IAmb** 11 23 11.8
comp=Z,26nm,1.4s
**H23K Yukon River 59.45 26 P P 11 23 08.5 +2.4**
baz=258,SNR=9.2
**P23K Montague Islan 59.48 33 P P 11 23 08.1 +1.7**
baz=264
**COLD Coldfoot 59.50 24 P P 11 23 08.3 +1.8**
baz=257
**M23K Glacier View 59.55 31 P P 11 23 09.2 +2.3**
baz=262
**WAT6 Susitna Watana 59.66 30 P P 11 23 09.5 +1.7**
baz=262
**GLI Glacier Island 59.74 32 P P 11 23 10.3 +2.1**
baz=264
**SCM Sheep Creek Mo 59.74 31 P P 11 23 09.7 +1.3**
baz=263,SNR=5.9
**D23K Nanushuk River 59.75 22 P P 11 23 10.4 +2.3**
baz=255
**WRH Wood River Hil 59.80 28 P P 11 23 10.3 +1.8**
WRH IAmb IAmb 11 23 25.0
comp=Z,22nm,1.4s
**MDM Murphy Dome 59.82 27 P P 11 23 11.1 +2.4**
MDM IAmb IAmb 11 23 17.9
comp=Z,12nm,1.2s
**DHY Denali Highway 59.89 29 IAmb IAmb** 11 23 42.0
comp=Z,25nm,1.6s
**DHY Denali Highway 59.89 29 P P 11 23 10.7 +1.3**
baz=262
**SGDS Sogindy 59.90 308** *e* P **P 11 23 09.9 +0.2**
baz=308
**SGDS Sogindy 59.90 308** *e* P **P 11 23 09.8 +0.2**
**E23K Chandalar 59.91 23 P P 11 23 10.9 +1.6**
baz=257,SNR=15
**Q23K Middleton Isla 59.96 34 P P 11 23 11.7 +2.0**
baz=265
**COLA College 59.97 27 P P 11 23 11.7 +2.1**
baz=260
**COLA College 59.97 27 P P** 11 23 14.6 +5.0
**C23K Itkillik River 60.00 21 P P 11 23 11.9 +2.1**
baz=255
**AAK Ala-Archa 60.06 307 LR LR** 11 51 33.2
comp=Z,599nm,18.1s,baz=86,slow=38
**AAK Ala-Archa 60.06 307** || *i* P **P 11 23 12.1 +1.2**
AAK pmax pmax
comp=Z,13nm,1.4s
**TOLK Toolik Lake Re 60.06 23 P P 11 23 12.3 +1.9**
**TOLK Toolik Lake Re 60.06 23 P P 11 23 12.1 +1.8**
baz=257
**H24K Noodor Dome 60.12 26 P P 11 23 13.3 +2.5**
H24K IAmb IAmb 11 23 22.4

comp=Z,12nm,1.1s
**H24K Noodor Dome** 60.12 26 P P 11 23 12.7 +1.9
baz=260,SNR=6.5
**POKR Poker Plat Res** 60.18 27 P P 11 23 13.1 +1.9
baz=261
**BTLS Baital** 60.20 310 eP P 11 23 11.7 0.0
baz=310
**BTLS Baital** 60.20 310 eP P 11 23 11.6 0.0
**HDA Harding Lake** 60.28 28 P P 11 23 13.2 +1.4
baz=262
**M24K Tolsona, Glenn** 60.32 30 P P 11 23 13.4 +1.2
baz=264
**E24K Your Creek** 60.32 24 IAmb IAmb 11 23 25.0
comp=Z,22nm,1.3s
**E24K Your Creek** 60.32 24 P P 11 23 14.2 +2.1
baz=258,SNR=9.6
**IL31** 60.36 27 P P 11 23 13.4 +1.1
IL31 IAmb IAmb 11 23 23.0
comp=Z,16nm,1.2s
**ILAR Eielson Array** 60.36 27 P P 11 23 12.6 +0.2
**ILAR Eielson Array** 60.36 27 P P 11 23 12.1 -0.3
comp=Z,3.1nm,0.7s,baz=258,slow=5.3,SNR=19
comp=Z,3.1nm,0.7s
**EYAK Cordova Ski Ar** 60.36 32 P P 11 23 14.3 +1.9
baz=265
**KLU Klutina** 60.37 31 P P 11 23 14.6 +2.0
baz=264
**F24K Squaw Lake** 60.44 24 P P 11 23 14.9 +2.0
baz=259
**G24K Hadweenzic Riv** 60.44 25 IAmb IAmb 11 23 26.2
comp=Z,15nm,1.0s
**G24K Hadweenzic Riv** 60.44 25 P P 11 23 15.2 +2.3
baz=260,SNR=11
**D24K Happy Valley** 60.44 22 P P 11 23 14.7 +1.8
baz=257
**C24K Franklin Bluff** 60.61 22 P P 11 23 16.2 +2.2
baz=257
**K24K Donnelly Dome** 60.70 29 P P 11 23 16.9 +2.1
baz=263
**PAX Paxson** 60.74 30 P P 11 23 17.1 +1.9
baz=264
**HARP HAARP** 60.82 30 P P 11 23 16.9 +1.2
baz=264
**BMRM Bremner River** 60.96 32 P P 11 23 18.1 +1.5
baz=266
**KAIM Kayak Island** 60.97 33 P P 11 23 18.6 +2.0
baz=266
**J25K Salcha River,** 60.98 28 P P 11 23 18.3 +1.6
baz=263
**G25K Bearman Lake** 60.99 25 P P 11 23 18.5 +2.0
baz=261
**N25K Chitina, Valde** 61.01 31 P P 11 23 18.5 +1.5
baz=265
**H25L Birch Creek** 61.02 26 P P 11 23 18.7 +1.8
baz=262
**PRP Porcupine Dome** 61.03 27 P P 11 23 18.4 +1.3
baz=262
**RIDG Independent Ri** 61.11 29 P P 11 23 19.2 +1.6
RIDG IAmb IAmb 11 23 30.3
comp=Z,14nm,0.9s
**RIDG Independent Ri** 61.11 29 P P 11 23 19.1 +1.5
baz=264
**F25K Christian Rive** 61.30 24 P P 11 23 19.9 +1.1
**F25K Christian Rive** 61.30 24 P P 11 23 20.0 +1.3
baz=261,SNR=9.2
**D25K Kavik River** 61.33 22 P P 11 23 20.2 +1.3
baz=259
**NWAO Narrogin (SRO)** 61.38 206 P P 11 23 16.5 -3.2
NWAO pP pP 11 23 27.8 -3.8
**SCRK Sand Creek** 61.51 28 IAmb IAmb 11 23 32.4
comp=Z,12nm,0.8s
**SCRK Sand Creek** 61.51 28 P P 11 23 21.2 +0.9
baz=265,SNR=16
**CRQM Cirque** 61.66 32 IAmb IAmb 11 23 29.6
comp=Z,17nm,0.9s
**BMAR Burnt Mountain** 61.68 25 P P 11 23 22.6 +1.2
**CRQE Cirque** 61.68 32 P P 11 23 23.2 +1.7
baz=267
**L26K Log Cabin Wild** 61.71 30 P P 11 23 23.5 +1.9
baz=266
**J26L Joseph Creek** 61.74 28 IAmb IAmb 11 23 30.4
comp=Z,13nm,0.9s
**J26L Joseph Creek** 61.74 28 P P 11 23 23.3 +1.4
baz=265,SNR=7.8
**MCARA McCarthy VSAT** 61.75 31 P P 11 23 22.9 +1.0
baz=267
**M26K Nabesna, AK** 61.83 30 P P 11 23 23.7 +1.3
baz=266
**F26K Sheenjek River** 61.88 24 P P 11 23 24.5 +1.8
baz=262
**G26K Porcupine Rive** 61.92 25 P P 11 23 24.5 +1.6
baz=263
**C26K Camden Bay** 61.94 22 P P 11 23 24.5 +1.6
baz=261
**I26K Coal Creek Min** 61.99 27 P P 11 23 25.7 +2.2
baz=265
**BVAR Borovoye Array** 62.21 319 P P 11 23 24.9 -0.3
comp=Z,14nm,0.5s,baz=90,slow=7.9,SNR=35
comp=Z,14nm,0.5s
**MESA MESA** 62.22 33 P P 11 23 26.4 +1.1
baz=268
**NIL Nilore** 62.22 297 P P 11 23 26.4 +0.8
**NIL Nilore** 62.22 297 P P 11 23 26.4 +0.8
NIL pmax pmax
comp=Z,94nm,1.4s
**NIL Nilore** 62.22 297 P P 11 23 26.3 +0.7
NIL pP pP 11 23 38.1 +0.9
**BRVK Borovoye** 62.28 319 P P 11 23 26.0 +0.4
BRVK IAmb IAmb 11 23 39.8
comp=Z,15nm,0.8s
**BRVK Borovoye** 62.28 319*c* *i*P P 11 23 25.8 +0.3
BRVK pmax pmax
comp=Z,19nm,1.0s
**BRVK Borovoye** 62.28 319 P P 11 23 25.9 +0.4
BRVK pP pP 11 23 37.8 +0.7
**C27K Jago River** 62.31 22 P P 11 23 26.9 +1.4
baz=262
**M27K Edge Creek, AK** 62.34 30 IAmb IAmb 11 23 30.9
comp=Z,22nm,1.6s
**M27K Edge Creek, AK** 62.34 30 P P 11 23 26.9 +0.9
baz=267
**K27K Chicken** 62.35 28 IAmb IAmb 11 23 42.7
**K27K Chicken** 62.35 28 P P 11 23 27.1 +1.2
baz=266
**L27K Beaver Creek,** 62.40 30 IAmb IAmb 11 23 42.8
comp=Z,20nm,1.5s
**L27K Beaver Creek,** 62.40 30 P P 11 23 27.6 +1.3
baz=267
**BCAR Beaver Creek A** 62.42 30 P P 11 23 27.1 +0.7
**CTG Chitna Glacier** 62.55 32 P P 11 23 28.1 +0.7
baz=269
**I27K Kandik River** 62.66 27 P P 11 23 28.4 +0.4
baz=266
**G27K Doyon Strip** 62.74 25 P P 11 23 29.5 +1.0
baz=265
**H27K Steamboat Moun** 62.75 26 P P 11 23 29.8 +1.2
baz=266,SNR=13
**EGAK Eagle** 62.80 28 P P 11 23 29.7 +0.9
**EGAK Eagle** 62.80 28 P P 11 23 30.0 +1.2
baz=267
**PALK Pallekele** 62.82 266 LR LR 11 50 07.7
comp=Z,94nm,20.3s,baz=208,slow=36
**E27K Coleen River** 62.89 24 P P 11 23 30.6 +1.1
baz=265
**KK31 Karatay Array** 62.92 308 IAmb IAmb 11 23 47.0
comp=Z,16nm,1.0s
**KKAR Karatay Array** 62.92 308 P P 11 23 30.0 0.0
**KKAR Karatay Array** 62.92 308 P P 11 23 30.1 0.0
KKAR IAmb IAmb 11 23 47.0
comp=Z,16nm,1.0s
**KKAR Karatay Array** 62.92 308 P P 11 23 30.0 0.0
KKAR pmax pmax
comp=Z,16nm,1.0s
**YUK3 Moose Creek** 62.99 31 P P 11 23 31.4 +0.9
baz=269
**O28M Mount Upton** 63.11 32 P P 11 23 32.5 +1.2
baz=270
**D27M Malcolm River** 63.22 23 IAmb IAmb 11 23 44.6
comp=Z,28nm,1.4s
**D27M Malcolm River** 63.22 23 P P 11 23 32.7 +1.1
baz=265
**YUK8 Steele Glacier** 63.32 32 P P 11 23 33.5 +0.9
baz=270
**I28M Miner Creek** 63.35 27 IAmb IAmb 11 23 48.8
comp=Z,22nm,1.5s
**I28M Miner Creek** 63.35 27 P P 11 23 33.5 +0.9
baz=268
**BRLS Borolday** 63.42 308 eP P 11 23 34.5 +1.0
baz=308
**BRLS Borolday** 63.42 308 eP P 11 23 34.4 +1.0
**F28M Old Crow** 63.49 25 P P 11 23 35.2 +1.8
F28M IAmb IAmb 11 23 46.0
comp=Z,24nm,1.4s
**F28M Old Crow** 63.49 25 P P 11 23 34.6 +1.1
baz=266
**PNL Peninsula** 63.50 33 P P 11 23 35.1 +1.5
baz=271
**DAWY Dawson** 63.53 29 P P 11 23 35.0 +1.2
baz=269
**E28M Babbage River** 63.69 23 P P 11 23 36.6 +1.9
baz=266
**CHM Chimkent** 63.69 307 eP P 11 23 35.4 +0.2
baz=307
**CHM Chimkent** 63.69 307 eP P 11 23 35.4 +0.2
**YUK4 Talbot Arm** 63.86 32 P P 11 23 36.9 +0.8
baz=271
**O29M Mount Kennedy** 63.91 33 P P 11 23 37.5 +1.1
baz=271
**M29M Somme Creek** 63.94 30 IAmb IAmb 11 23 54.7
comp=Z,37nm,1.8s
**M29M Somme Creek** 63.94 30 P P 11 23 37.4 +0.9
baz=270
**YUK6 Outpost Mounta** 64.00 32 P P 11 23 37.9 +0.8
baz=271
**D28M Stokes Point** 64.02 23 P P 11 23 38.1 +1.3
baz=267
**H29M Whitestone** 64.02 26 IAmb IAmb 11 23 59.5
comp=Z,22nm,1.2s
**H29M Whitestone** 64.02 26 P P 11 23 37.7 +0.8
baz=269
**I29M Ogilvie Camp,** 64.03 27 P P 11 23 37.6 +0.7
baz=269
**J29N Klondike Camp** 64.05 28 P P 11 23 38.4 +1.2
baz=270
**G29M Pine Creek** 64.18 25 IAmb IAmb 11 23 50.7
comp=Z,26nm,1.2s
**G29M Pine Creek** 64.18 25 P P 11 23 38.8 +0.9
baz=269
**E29M Blow River** 64.28 24 P P 11 23 39.5 +1.0
baz=268
**P29M Windy Craggy** 64.35 33 P P 11 23 40.3 +1.1
baz=272
**K29M Barlow Dome** 64.36 29 P P 11 23 40.9 +1.6
baz=270
**N30M Aishikik Lake** 64.60 31 P P 11 23 41.9 +1.1
baz=272
**EPYK Eagle Plains** 64.69 26 IAmb IAmb 11 23 50.7
comp=Z,17nm,1.0s
**EPYK Eagle Plains** 64.69 26 P P 11 23 42.3 +1.0
baz=270
**SIMJ Simiganj** 64.72 303 P P 11 23 42.8 +0.7
**SIMJ Simiganj** 64.72 303 P P 11 23 42.8 +0.7
SIMJ pP pP 11 23 54.3 +0.5
SIMJ sP pwP 11 23 59.1 -0.6
**P30M Million Dollar** 64.72 33 P P 11 23 42.7 +1.1
baz=273
**I30M Mount Dempster** 64.84 27 P P 11 23 42.5 +0.1
baz=271
**J30M Hart River** 64.87 28 IAmb IAmb 11 24 24.8
comp=Z,21nm,1.6s
**J30M Hart River** 64.87 28 P P 11 23 43.2 +0.6
baz=271
**G30M tAoh Zraii Nji** 64.89 25 IAmb IAmb 11 24 08.0
comp=Z,23nm,1.2s
**G30M tAoh Zraii Nji** 64.89 25 P P 11 23 43.4 +0.8
baz=270
**PLBC Pleasant Camp** 65.06 34 P P 11 23 44.7 +0.9
baz=274
**F30M Barrier River** 65.06 25 P P 11 23 44.4 +0.8
baz=270
**O30N Mendenhall** 65.12 32 P P 11 23 44.8 +0.6
baz=273
**S31K Pelican** 65.22 35 P P 11 23 45.6 +0.8
baz=274
**N31M Braeburn, Yuko** 65.23 31 IAmb IAmb 11 24 01.3
comp=Z,15nm,1.0s
**N31M Braeburn, Yuko** 65.23 31 P P 11 23 45.9 +1.0
baz=273
**R31K City Hall, Gus** 65.45 35 P P 11 23 47.7 +1.4
baz=275
**KBL Kabul** 65.48 299 P P 11 23 47.3 +0.1
**KBL Kabul** 65.48 299 P P 11 23 47.3 +0.1
KBL pmax pmax
comp=Z,32nm,0.8s
**SKAG Skagway** 65.58 34 P P 11 23 49.0 +1.9
baz=274
**G31M Satah River** 65.66 25 P P 11 23 49.1 +1.6
baz=272
**WHY Whitehorse** 65.72 32 P P 11 23 49.6 +1.4
baz=274
**SIT Sitka** 65.79 36 P P 11 23 49.0 +0.5
baz=276
**M31M Drury Creek, Y** 65.84 31 P P 11 23 52.4 +3.5
**M31M Drury Creek, Y** 65.84 31 P P 11 23 50.0 +1.2
baz=274
**F31M Tsiigehtchic** 65.85 25 P P 11 23 49.8 +1.1
baz=272
**INK Inuvik** 65.90 24 IAmb IAmb 11 24 00.7
comp=Z,25nm,1.5s
**INK Inuvik** 65.90 24 P P 11 23 50.0 +1.0
baz=272
**R32K Eaglecrest** 66.10 35 P P 11 23 51.3 +0.8
baz=276
**S32K Killisnoo** 66.15 36 P P 11 23 51.5 +0.7
baz=276
**FARO Faro, Yukon** 66.33 30 P P 11 23 52.8 +0.8
baz=275
**P32M Atlin** 66.39 33 P P 11 23 53.5 +1.1
baz=276
**N32M Quiet Lake** 66.55 32 P P 11 23 54.3 +0.9
baz=276
**P33M Teslin, Yukon** 66.78 33 P P 11 23 56.1 +1.2
baz=276
**U33K Whale Pass** 67.11 37 P P 11 23 58.5 +1.6
baz=278
**CRAG Craig** 67.19 38 P P 11 23 58.4 +0.9
baz=278
**Q32M Nakina River** 67.20 34 P P 11 23 58.9 +1.2
baz=277
**SVE Sverdlovsk** 67.49 324 eP P 11 24 00.5 +1.1
**WRAK Wrangell Islan** 67.49 37 P P 11 24 00.7 +1.3
baz=278
**R33M Jennings River** 67.81 33 P P 11 24 02.3 +0.8
baz=278
**S34M Telegraph Cree** 67.93 35 P P 11 24 02.8 +0.6
baz=279
**V35K Ketchikan** 68.06 38 P P 11 24 03.8 +0.8
baz=279
**A36M Sachs Harbour** 68.40 20 P P 11 24 05.3 +0.6
baz=278
**DLBC Dease Lake** 68.43 34 P P 11 24 06.7 +1.3
baz=279
**T35M Bob Quinn** 68.55 36 P P 11 24 07.3 +1.3
baz=280
**WTLY Watson Lake, Y** 68.78 32 IAmb IAmb 11 24 16.1
comp=Z,35nm,1.7s
**WTLY Watson Lake, Y** 68.78 32 P P 11 24 08.6 +1.1
baz=280
**TGTN Hyland Airport** 68.80 31 P P 11 24 09.4 +1.8
baz=280
**U35K Hyder** 68.85 37 P P 11 24 09.7 +1.8
baz=280
**ABKAR Akbulak array** 69.19 316 P P 11 24 09.2 -0.9
**C36M Paulatuk** 69.20 22 P P 11 24 11.4 +1.6
baz=280
**RAR Rarotonga** 70.15 125 LR LR 11 51 50.9
comp=Z,299nm,18.6s,baz=277,slow=33
**AKTO Aktyubinsk** 70.16 317 LR LR 11 57 01.8
comp=Z,526nm,18.6s,baz=60,slow=38
**LIRD Liard River Hi** 70.25 33 P P 11 24 17.6 +1.1
baz=282
**WRGLY Wrigley** 70.67 29 P P 11 24 20.3 +1.3
baz=283
**TOAD Toad River Com** 70.81 33 P P 11 24 20.9 +0.9
baz=283
**RPZ Rata Peaks** 70.93 160 LR LR 11 50 41.6
comp=Z,220nm,20.6s,baz=332,slow=32
**HRA Herat** 70.97 300 IAmb IAmb 11 24 23.6
comp=Z,15nm,0.9s
**KOTAN Kotaneelee Air** 71.11 32 P P 11 24 22.8 +1.1
baz=284
**KIRV Kirov** 73.00 327 LR LR 11 59 55.6
comp=Z,413nm,18.5s,baz=65,slow=38
**KIRV Kirov** 73.00 327‖ *e*P P 11 24 34.4 +1.4
**SPITS Spitsbergen Ar** 74.60 350 LR LR 12 05 54.4
comp=Z,27nm,18.5s,baz=10,slow=42
**YKA Yellowknife Ar** 74.77 28 P P 11 24 44.2 +0.9
comp=Z,1.7nm,0.8s,baz=293,slow=6.3,SNR=3.9
comp=Z,1.7nm,0.8s
**YKA Yellowknife Ar** 74.77 28 *i* P P 11 24 46.5 +3.2
YKA pmax pmax
comp=Z,2.0nm,0.8s
**GNW Green Mountain** 75.24 44 IAmb IAmb 11 25 18.1
comp=Z,24nm,1.4s
**BELG Belogornoye** 75.88 321 LR LR 11 59 56.9
comp=Z,241nm,18.2s,baz=77,slow=37
**BELG Belogornoye** 75.88 321 *de*P P 11 24 50.3 +0.4
BELG pmax pmax
comp=Z,7.0nm,1.0s
**PPT Papeete** 76.30 116 LR LR 11 53 41.5
comp=Z,219nm,19.5s,baz=284,slow=32
**PPT2 Papeete2** 76.31 116 *e*S S 11 34 30.5 -4.2
comp=Z,62nm,23.0s
PPT2 *e*SS SS 11 39 33.1 +3.2
comp=Z,144nm,24.8s
PPT2 *e*LR LR 11 48 32.8
comp=Z,253nm,22.8s
PPT2 *e*LR LR 11 48 39.9
comp=Z,226nm,21.0s
**APA Apatity** 76.41 338⇓ *i*P P 11 24 51.1 -1.5
APA *i* 11 25 11.0
APA *i* 11 27 40.0
APA *i*S S 11 34 28.0 -6.1
APA *i* 11 34 57.0
APA pmax pmax
comp=Z,7.0nm,0.8s
APA MLR MLR
comp=Z,700nm,12.0s
**I04A Tendick Farm,** 76.72 48 P P 11 24 57.6 +2.7
I04A IAmb IAmb 11 25 06.0
comp=Z,26nm,1.5s
**LTY Liberty** 76.72 44 IAmb IAmb 11 25 35.1
comp=Z,24nm,1.6s
**HUMO Hull Mountain** 76.73 49 IAmb IAmb 11 25 00.5
comp=Z,19nm,1.5s
**O02D Mt. Diablo Mer** 77.66 52 IAmb IAmb 11 25 18.4
comp=Z,17nm,1.4s
**PINE Pine Mountain** 77.72 48 IAmb IAmb 11 25 17.9
comp=Z,26nm,1.1s
**ARCES ARCESS Array B** 77.88 342 P P 11 25 00.6 -0.2
comp=Z,6.6nm,1.0s,baz=52,slow=10,SNR=5.1
ARCES LR LR 12 03 25.5
comp=Z,259nm,19.9s,baz=65,slow=39
comp=Z,6.6nm,1.0s
**LRDM Redding Peak** 78.51 51 P P 11 25 05.3 +0.3
LRDM IAmb IAmb 11 25 35.8
comp=Z,14nm,1.0s
**G08A Pilot Rock** 78.52 46 P P 11 25 06.8 +1.7
**TBI Tubuai** 79.30 121 *e*S S 11 35 04.3 -2.3
comp=Z,484nm,26.5s
**TBI Tubuai** 79.30 121 *e*LR LR 11 49 40.2
comp=Z,667nm,22.5s
**AFDM Forest Hills D** 79.40 52 IAmb IAmb 11 25 21.8
comp=Z,30nm,1.8s
**J08A Circle Bar Ran** 79.55 47 IAmb IAmb 11 25 15.6
comp=Z,20nm,1.4s
**VRH Novokhopyorsk** 79.73 321 *e*P P 11 25 09.6 -1.7
VRH pmax pmax
comp=Z,9.0nm,1.1s
**BMO Blue Mountains** 79.77 46 IAmb IAmb 11 25 23.8
comp=Z,27nm,1.8s
**MPK Martis Peak** 79.96 52 IAmb IAmb 11 25 18.1
comp=Z,34nm,1.4s
**MOS Moscow** 80.01 327 *e*P P 11 25 12.2 -0.5
MOS pmax pmax
comp=Z,34nm,0.6s
**EMB Emerald Bay** 80.03 52 P P 11 25 13.1 -0.4
**BBGB Big Mountain B** 80.21 54 IAmb IAmb 11 25 22.9
comp=Z,26nm,1.3s
**PNTR Pine Nut** 80.35 52 IAmb IAmb 11 25 40.1
comp=Z,34nm,1.6s
**TAOE Nuku Hiva Isla** 80.46 104 *e*S S 11 35 18.5 -1.0
comp=Z,85nm,27.2s
TAOE *e*SS SS 11 40 27.8 -4.7
comp=Z,51nm,29.0s
TAOE *e*LR LR 11 50 27.8
comp=Z,177nm,25.3s
**YERR Yerington** 80.65 52 IAmb IAmb 11 25 28.8
comp=Z,27nm,1.5s
**WAKR Walker** 80.68 52 IAmb IAmb 11 25 28.4
comp=Z,25nm,1.8s
**LPSR Galich'ya Gora** 80.71 323 *e*P P 11 25 15.4 -1.1
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**OBN Obninsk** 80.83 326⇑ *e*P P 11 25 16.6 -0.5
OBN *e* 11 25 24.8
OBN *e* 11 28 21.5
OBN *e*PPP PPP 11 30 16.0
OBN *e*S S 11 35 23.2 +1.4
OBN pmax pmax
comp=Z,7.0nm,0.4s
OBN MLR MLR
comp=Z,403nm,15.0s
**VORR Voronezh** 80.96 322 *e*P P 11 25 17.1 -0.8
VORR pmax pmax
comp=Z,10.0nm,1.0s
**VSR Storozhevoye** 81.18 322 *e*P P 11 25 17.2 -1.9
VSR pmax pmax
comp=Z,20nm,1.3s
**VORD Divnogorie** 81.22 322 *e*P P 11 25 17.6 -1.7
VORD pmax pmax
comp=Z,8.0nm,1.0s
**RYN Ryan** 81.30 52 P P 11 25 21.6 +1.4
**MFID Camas Ranch** 81.31 47 P P 11 25 21.0 +0.9
MFID IAmb IAmb 11 25 32.2
comp=Z,34nm,1.8s
**NVAR Mina Array Bea** 81.53 52 P P 11 25 21.8 +0.2
**NVAR Mina Array Bea** 81.53 52 P P 11 25 22.7 +1.1
comp=Z,3.2nm,0.8s,baz=280,slow=5.4,SNR=21
comp=Z,3.2nm,0.8s
**NCK Nalchik** 81.69 314⇑ *e*P P 11 25 22.4 +0.4
NCK pmax pmax
comp=Z,14nm,1.1s
**KBZ Khabaz** 82.06 314 P P 11 25 23.9 +0.1
comp=Z,11nm,0.9s,baz=59,slow=5.6,SNR=19
KBZ LR LR 12 04 47.5
comp=Z,411nm,19.2s,baz=64,slow=38
comp=Z,11nm,0.9s
**KBZ Khabaz** 82.06 314*c* *i*P P 11 25 23.8 -0.1
KBZ pmax pmax
comp=Z,16nm,0.8s
**KVAR Kislovodsk Arr** 82.10 314 P P 11 25 24.0 -0.3
comp=Z,3.6nm,0.5s,baz=107,slow=19,SNR=1.9
comp=Z,3.6nm,0.5s
**KIV Kislovodsk** 82.11 314 *e*P P 11 25 25.5 +1.2
KIV pmax pmax
comp=Z,17nm,1.1s
KIV MLR MLR
comp=Z,372nm,19.0s
**DSP Deep Springs** 82.19 53 IAmb IAmb 11 25 30.0
comp=Z,19nm,1.4s
**SHA1 Shidzhatmaz** 82.22 314‖ *e*P P 11 25 24.4 -0.6
**GNI Garni** 82.25 310 LR LR 12 04 17.1
comp=Z,75nm,20.9s,baz=93,slow=37
**FINES FINESS Array B** 82.31 335 P P 11 25 23.2 -1.7
comp=Z,1.8nm,0.4s,baz=72,slow=8.9,SNR=11
FINES LR LR 12 04 26.5
comp=Z,140nm,18.6s,baz=64,slow=38
comp=Z,1.8nm,0.4s
**FINES FINESS Array B** 82.31 335 *i* P P 11 25 22.8 -2.0
FINES pmax pmax
comp=Z,2.0nm,0.4s
**ISA Isabella, Lake** 82.48 55 P P 11 25 27.1 +0.7
**ISA Isabella, Lake** 82.48 55 P P 11 25 27.1 +0.7
ISA pmax pmax
comp=Z,13nm,1.5s
**R11B Troy Canyon, C** 83.53 51 IAmb IAmb 11 26 01.4
comp=Z,30nm,1.9s
**R11B Troy Canyon, C** 83.53 51 P P 11 25 32.6 +0.7
baz=294
**GWY Greenwater Val** 83.62 53 P P 11 25 33.3 +0.9
GWY IAmb IAmb 11 25 52.3
comp=Z,18nm,1.1s
**S11A Rachel** 83.70 52 P P 11 25 33.8 +1.0
**Q12A Willow Creek R** 83.78 50 IAmb IAmb 11 25 47.5
comp=Z,15nm,1.3s
**HVU Hansel Valley** 84.04 47 IAmb IAmb 11 25 39.5
comp=Z,20nm,1.6s
**SPR3 Spring Creek 3** 84.15 50 IAmb IAmb 11 25 47.4
comp=Z,17nm,1.6s
**SOC Sochi** 84.21 315 *e*P P 11 25 33.2 -1.8

SOC *e* 11 28 50.5
SOC *eS* **SKSac** **11 35 49.4 -5.5**
SOC pmax pmax
comp=Z,46nm,1.2s
SOC MLR MLR
comp=Z,472nm,22.0s
**H17A** **Grant Village** **84.33 44** IAmb IAmb 11 26 00.9
comp=Z,14nm,1.4s
**H17A** **Grant Village** **84.33 44** P **P** **11 25 35.9 -0.1**
baz=297
**FXWY** **Fox Creek** **84.38 45** IAmb IAmb 11 25 41.6
comp=Z,16nm,1.6s
**SUMG** **Summit** **84.54 1** IAmb IAmb 11 25 48.5
comp=Z,18nm,1.4s
**DUG** **Dugway, Tooele** **84.70 49** P **P** **11 25 38.1 +0.3**
DUG IAmb IAmb 11 25 42.5
comp=Z,20nm,1.6s
**DUG** **Dugway, Tooele** **84.70 49** P **P** **11 25 38.1 +0.3**
DUG pmax pmax
comp=Z,20nm,1.6s
**PFO** **Pinyon Flats O** **84.82 56** P **P** **11 25 39.5 +1.0**
PFO IAmb IAmb 11 25 42.8
comp=Z,15nm,1.2s
**PFO** **Pinyon Flats O** **84.82 56** P **P** **11 25 39.5 +1.0**
PFO pmax pmax
comp=Z,15nm,1.2s
**TPFO** **Pinon Flats** **84.83 56** P **P** **11 25 39.9 +1.4**
baz=294
**RLMT** **Red Lodge** **84.83 43** IAmb IAmb 11 26 03.6
comp=Z,23nm,1.6s
**HWUT** **Hardware Ranch** **84.93 47** IAmb IAmb 11 25 50.8
comp=Z,30nm,1.8s
**ANN** **Anapa** **85.12 317** *e*P **P** **11 25 38.0 -1.5**
ANN *e**PP **sP** **11 25 54.0 -2.1**
ANN *eS* **SKSac** **11 35 56.2 -4.4**
ANN pmax pmax
comp=Z,41nm,1.1s
**V12A** **Nelson** **85.15 53** IAmb IAmb 11 25 45.0
comp=Z,25nm,1.5s
**NLU** **North Lily Min** **85.31 49** IAmb IAmb 11 25 45.7
comp=Z,24nm,1.9s
**JLU** **Jordanelle** **85.45 48** IAmb IAmb 11 25 59.1
comp=Z,27nm,1.7s
**CCUT** **Cedar City** **85.46 51** IAmb IAmb 11 25 46.8
comp=Z,19nm,1.6s
**MNK** **Minsk** **85.47 328** *i* P **P** **11 25 40.6 -0.5**
MNK *i* 11 28 58.8
MNK *i* PPP PPP 11 30 53.3
MNK *i* S **SKSac** **11 35 59.5 -3.0**
MNK *i* SS **SS** **11 41 46.5 +2.6**
MNK *i* SSS SSS 11 45 17.8
MNK pmax pmax
comp=E,28nm,0.9s
MNK pmax pmax
comp=Z,13nm,0.9s
MNK pmax pmax
comp=N,17nm,0.9s
MNK MLR MLR
comp=Z,480nm,16.0s
MNK MLR MLR
comp=N,384nm,16.0s
**MPU** **Maple Canyon** **85.59 48** IAmb IAmb 11 25 53.2
comp=Z,18nm,1.7s
**YUH** **Yuha Desert** **85.63 56** IAmb IAmb 11 25 53.9
comp=Z,12nm,1.4s
**PDAR** **Pinedale Array** **85.73 45** P **P** **11 25 43.1 +0.1**
comp=Z,0.5nm,0.8s,baz=284,slow=3.6,SNR=5.3
comp=Z,0.5nm,0.8s
**ESJX** **Sierra Juarez** **85.87 57** IAmb IAmb 11 25 48.4
comp=Z,12nm,1.5s
**LAO** **LASA Array** **85.95 41** IAmb IAmb 11 26 11.3
comp=Z,16nm,1.2s
**MTPU** **Mount Pierson** **86.08 50** IAmb IAmb 11 25 50.1
comp=Z,13nm,1.6s
**W13A** **Hualapai Mount** **86.13 54** IAmb IAmb 11 25 49.9
comp=Z,13nm,1.6s
**TMUT** **Trail Mountain** **86.21 49** IAmb IAmb 11 26 03.0
comp=Z,13nm,1.5s
**BLYC** **Blythe** **86.23 55** IAmb IAmb 11 25 57.3
comp=Z,18nm,1.4s
**P17A** **Butcher Ranch,** **86.45 48** P **P** **11 25 47.4 +0.9**
**U15A** **North Rim** **86.72 52** IAmb IAmb 11 26 03.0
comp=Z,29nm,1.9s
**AKASG** **Malin Array Be** **86.90 325** P **P** **11 25 47.2 -1.0**
AKASG LR LR 12 08 02.5
comp=Z,268nm,18.1s,baz=52,slow=38
comp=Z,0.9nm,0.4s,baz=49,slow=5.2,SNR=3.2
comp=Z,0.9nm,0.4s
**AKASG** **Malin Array Be** **86.90 325** *i* P **P** **11 25 51.2 +3.0**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB** **Malin Array Si** **86.90 325** P **P** **11 25 47.1 -1.1**
AKBB IAmb IAmb 11 25 53.6
comp=Z,11nm,1.2s
**AKBB** **Malin Array Si** **86.90 325**⇓ *e*P **P** **11 25 46.0 -2.2**
AKBB pmax pmax
comp=Z,11nm,1.1s
**KIEV** **Kiev** **86.91 325** P **P** **11 25 46.5 -1.8**
KIEV IAmb IAmb 11 25 53.5
comp=Z,10nm,1.2s
**KIEV** **Kiev** **86.91 325** P **P** **11 25 46.5 -1.8**
KIEV pmax pmax
comp=Z,10.0nm,1.2s
**AK22** **Malin Array Si** **86.95 325** P **P** **11 25 47.8 -0.7**
**AK14** **Malin Array Si** **87.00 325** P **P** **11 25 48.1 -0.6**
**HMU** **Henry Mountain** **87.15 50** IAmb IAmb 11 25 54.3
comp=Z,9.8nm,1.1s
**Y14A** **Wickenburg** **87.29 54** IAmb IAmb 11 25 55.4
comp=Z,7.9nm,0.9s
**HFS** **Hagfors** **87.78 338** P **P** **11 25 50.8 -1.5**
comp=Z,1.9nm,0.5s,baz=29,slow=3.3,SNR=11
HFS LR LR 12 08 51.9
comp=Z,206nm,18.6s,baz=46,slow=38
comp=Z,1.9nm,0.5s
**WUAZ** **Wupatki** **87.79 52** IAmb IAmb 11 25 58.1
comp=Z,16nm,1.2s
**NB2** **NORSAR Subarra** **87.97 339** P **P** **11 25 52.4 -0.8**
comp=Z,18nm,1.4s,baz=45,slow=4.4
**NB2** **NORSAR Subarra** **87.97 339** P **P** **11 25 52.4 -0.8**
baz=45,slow=4.4
**NOA** **NORSAR Array B** **87.97 339** P **P** **11 25 52.0 -1.2**
comp=Z,5.3nm,1.1s,baz=44,slow=4.8,SNR=3.8
NOA LR LR 12 09 55.7
comp=Z,143nm,19.2s,baz=50,slow=39
comp=Z,5.3nm,1.1s
**X16A** **Lo Mia Camp, P** **88.23 53** IAmb IAmb 11 26 00.5
comp=Z,16nm,1.6s
**214A** **Organ Pipe Nat** **88.30 56** P **P** **11 25 56.7 +1.3**
214A IAmb IAmb 11 26 00.5
comp=Z,12nm,1.1s
**214A** **Organ Pipe Nat** **88.30 56** P **P** **11 25 56.5 +1.1**
baz=296
**RAYN** **Ar Rayn** **88.44 295** P **P** **11 25 54.4 -1.8**
RAYN IAmb IAmb 11 26 14.1
comp=Z,14nm,1.1s
**RAYN** **Ar Rayn** **88.44 295** P **P** **11 25 54.4 -1.8**
RAYN pmax pmax
comp=Z,14nm,1.1s
**N23A** **Red Feather La** **89.00 45** P **P** **11 25 59.8 +0.9**
baz=300
**MVCO** **Mesa Verde** **89.06 50** IAmb IAmb 11 26 03.9
comp=Z,16nm,1.6s
**W18A** **Petrified Fore** **89.16 52** P **P** **11 26 00.7 +1.1**
baz=298
**SFJD** **Kangerlussuaq** **89.48 6** LR LR 12 05 11.1
comp=Z,65nm,20.6s,baz=348,slow=35
**TUC** **Tucson** **89.68 55** P **P** **11 26 02.2 +0.2**
TUC IAmb IAmb 11 26 07.3
comp=Z,11nm,1.4s
**TUC** **Tucson** **89.68 55** P **P** **11 26 02.2 +0.2**
TUC pmax pmax
comp=Z,11nm,1.4s
**FRB** **Frobisher Bay** **89.70 14** LR LR 12 12 20.5
comp=Z,147nm,18.6s,baz=358,slow=40
**S22A** **4UR Ranch, Cre** **89.96 49** IAmb IAmb 11 26 08.5
comp=Z,11nm,1.5s
**S22A** **4UR Ranch, Cre** **89.96 49** P **P** **11 26 04.4 +1.0**
baz=300
**BR131** **Keskin Array S** **90.05 314**⇑ *i*P **P** **11 26 03.0 -0.6**
**BRTR** **Keskin Array B** **90.05 314** P **P** **11 26 01.6 -2.0**
**BRTR** **Keskin Array B** **90.05 314** P **P** **11 26 02.0 -1.6**
comp=Z,2.3nm,0.9s,baz=65,slow=3.9,SNR=12
BRTR LR LR 12 10 19.4
comp=Z,182nm,18.2s,baz=48,slow=38
comp=Z,2.3nm,0.9s
**BRTR** **Keskin Array B** **90.05 314** *i* P **P** **11 26 02.7 -0.9**
BRTR pmax pmax
comp=Z,2.0nm,0.9s
**BR106** **Keskin Array S** **90.06 314** P **P** **11 26 03.0 -0.6**
comp=Z,2.7nm,0.9s,comp=Z,30nm
**BR105** **Keskin Array S** **90.07 314** P **P** **11 26 03.3 -0.4**
**Q24A** **Divide** **90.50 47** P **P** **11 26 06.3 +0.4**
baz=301
**ANMO** **Albuquerque** **91.61 51** P **P** **11 26 11.8 +0.8**
**ANMO** **Albuquerque** **91.61 51** LR LR 12 05 51.8
comp=Z,174nm,18.4s,baz=94,slow=35
**ANMO** **Albuquerque** **91.61 51**⇑ *e*P **P** **11 26 12.5 +1.5**
ANMO pmax pmax
comp=Z,6.0nm,1.5s
**MLR** **Muntele Rosu** **91.67 322** LR LR 12 08 08.4
comp=Z,194nm,21.3s,baz=50,slow=36
**Y22D** **IRIS PASSCAL I** **91.70 52** P **P** **11 26 12.1 +0.7**
baz=300
**121A** **Cookes Peak, D** **91.81 53** P **P** **11 26 12.1 +0.1**
baz=299
**T25A** **Trinidad** **91.93 48** IAmb IAmb 11 26 17.4
comp=Z,15nm,1.6s
**T25A** **Trinidad** **91.93 48** P **P** **11 26 13.2 +0.7**
baz=301
**CRVS** **Cervenica-Dubn** **92.02 326** *e*P **P** **11 26 15.4 +3.0**
**CRVS** **Cervenica-Dubn** **92.02 326** *e*P **P** **11 26 15.4 +3.0**
**VRAC** **Vranov** **94.16 329** LR LR 12 13 18.6
comp=Z,373nm,18.2s,baz=46,slow=38
**VHRN** **Van Horn** **94.75 54** P **P** **11 26 26.1 +0.7**
VHRN IAmb IAmb 11 26 30.5
comp=Z,9.9nm,1.4s
**CONA** **Conrad Observa** **95.46 328** *i* PP **PP** **11 30 17.5 -1.2**
comp=Z,2.4nm,1.1s
**GERES** **GERESS Array B** **95.85 330** PP **PP** **11 30 21.7 0.0**
comp=Z,0.5nm,0.2s,baz=52,slow=10,SNR=2.0
GERES LR LR 12 14 58.7
comp=Z,224nm,18.5s,baz=44,slow=39
**TXAR** **Lajitas Array** **96.47 54** P **P** **11 26 33.3 0.0**
comp=Z,1.4nm,1.2s,baz=282,slow=5.4,SNR=3.8
TXAR LR LR 12 11 58.4
comp=Z,93nm,18.1s,baz=356,slow=37
comp=Z,1.4nm,1.2s
**OBKA** **Obir** **97.09 328** *i* PP **PP** **11 30 32.1 +0.8**
comp=Z,5.4nm,1.2s
**KBA** **Koelnbreinsper** **97.28 329** *i* PP **PP** **11 30 32.6 -0.2**
comp=Z,8.1nm,1.7s
**LESA** **Schwarzleotal** **97.34 329** *i* PP **PP** **11 30 33.8 +0.6**
comp=Z,3.9nm,1.0s
**MYKA** **Terra Mystica** **97.45 328** *e*PP **PP** **11 30 34.8 +0.7**
comp=Z,0.8nm,0.2s
**ABTA** **Abfaltersbach** **97.91 329** *e*PP **PP** **11 30 37.2 -0.4**
comp=Z,0.9nm,0.4s
**SCHQ** **Schefferville** **97.94 18** LR LR 12 11 46.7
comp=Z,33nm,20.6s,baz=9.0,slow=36
**WTTA** **Wattenberg** **97.95 330** *e*PP **PP** **11 30 37.8 -0.2**
comp=Z,11nm,1.6s
**MOTA** **Moosalm** **98.14 330** *e*PP **PP** **11 30 38.9 -0.4**
comp=Z,2.4nm,0.9s
**RETA** **Reutte** **98.19 330** *i* PP **PP** **11 30 38.8 -0.8**
comp=Z,0.7nm,0.4s
**FETA** **Feichten** **98.55 330** *e*PP **PP** **11 30 41.6 -0.9**
comp=Z,2.6nm,1.0s
**DAVOX** **Davos/Dischmat** **99.12 330** LR LR 12 17 15.9
comp=Z,353nm,18.3s,baz=64,slow=39
**L44A** **Lake County Fo** **99.16 36** P **Pdif** **11 26 44.9 -0.1**
baz=313
**435B** **Jarrell** **100.13 50** P **Pdif** **11 26 50.1 +0.6**
baz=305
**833A** **Chaparral WMA,** **100.18 53** P **Pdif** **11 26 49.9 +0.1**
baz=303
**P49A** **Miami Univ. Ec** **102.74 37** P **Pdif** **11 27 00.4 -0.6**
baz=315
**M53A** **WI Miller and** **103.49 33** P **Pdif** **11 27 03.6 -0.7**
baz=318
**P52A** **Corning** **104.06 35** P **Pdif** **11 27 06.7 -0.2**
baz=317
**O53A** **New Philadelph** **104.09 34** P **Pdif** **11 27 06.0 -1.0**
baz=318
**L61B** **Northampton** **106.42 28** P **PKiKP** **11 31 27.1 -1.1**
baz=325
**ESDC** **Sonseca Array** **110.82 334** PP **PP** **11 32 11.4 -2.0**
comp=Z,0.8nm,0.9s,baz=29,slow=6.0,SNR=4.8
ESDC PKKP **PKKPdf** **11 42 52.2 +0.4**
comp=Z,0.6nm,0.9s,baz=228,slow=1.5,SNR=4.6
**QSPA** **South Pole Qui** **112.90 180** PKiKP **PKiKP** **11 31 38.9 -0.7**
comp=Z,1.5nm,1.0s,baz=357,slow=3.1,SNR=6.2
**ELIB** **Princess Elisa** **121.20 198** *d*PKPdf **PKPdf** **11 31 55.6 +0.1**
ELIB *dp*PKPdf **sPKPdf** **11 32 14.2 +1.8**
**TROLL** **Troll, Antarti** **126.54 194**⇑PKPdf **PKPdf** **11 32 05.7 -0.1**
comp=Z,104nm,0.6s
**SNAA** **Sanae** **127.93 193**⇑PKPdf **PKPdf** **11 32 07.2 -1.2**
comp=Z,33nm,0.7s
**SNAA** **Sanae** **127.93 193** PKP **PKPdf** **11 32 07.6 -0.7**
comp=Z,2.2nm,1.0s,baz=188,slow=6.6,SNR=11
**TORD** **Toro Ar. Bea** **128.56 311** PKP **PKPdf** **11 32 11.5 +0.3**
comp=Z,1.3nm,1.1s,baz=14,slow=2.5,SNR=4.1
**VNA2** **Neumayer--Watz** **129.41 192**⇑PKPdf **PKPdf** **11 32 09.5 -1.6**
comp=Z,6.2nm,0.6s,baz=9.9,slow=5.2
**VNA3** **Neumayer Olymp** **129.55 191**⇑PKPdf **PKPdf** **11 32 09.3 -2.0**
comp=Z,1.3nm,0.5s
**LL02** **Futaleuf** **144.16 133** **PKPab** **11 32 36.3 -0.6**
**BOAV** **Boa Vista** **145.03 47** PKPbc **PKPbc** **11 32 41.0 +0.1**
**PLCA** **Paso Flores** **145.96 129** PKPdf **PKPdf** **11 32 43.9 +1.5**
**PLCA** **Paso Flores** **145.96 129** PKPbc **PKPdf** **11 32 42.7 +0.3**
comp=Z,2.4nm,0.6s,baz=241,slow=4.7,SNR=9.0
**BI02** **San Fabin de** **146.61 122** PKPbc **PKPdf** **11 32 45.7 +2.0**
**MT02** **Curacav** **147.39 116** PKPbc **PKPdf** **11 32 47.8 +2.8**
**BO02** **Sierra Bellavi** **147.41 119** **PKPdf** **11 32 47.5 +2.4**
**CO02** **Combarbal** **147.77 112** **PKPdf** **11 32 48.1 +2.3**
**LPAZ** **La Paz** **148.87 83** PKPbc **PKPdf** **11 32 52.2 +3.6**
comp=Z,4.1nm,0.7s,baz=276,slow=3.2,SNR=4.9

*NEIC **23** 11:13:26.6±1.5, 18°.2S±0°.2×178°.1W±0°.2, h574km±10km, mb4.3/24, Error ellipse: s-maj=27.1km s-min=16.7km az=139.0*
*IDC **23** 11:13:30.1±5.9, 17°.98S×178°.44W, h603km±72km, mb3.0/8, mbtmp4.0/9, Error ellipse: s-maj=40.3km s-min=26.9km az=141.0*
**ISC 23 11:13:29.2±0.7, 18°.1S±0°.1×178°.4W±0°.1, h600km, n40, σ1=05/39, mb4.1/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.44** | **276** | P | **P** | **11 14 49.2** | **-1.9** |
| **AFI** | **Afiamalu** | **7.58** | **57** | P | P | 11 15 17.8 | -6.9 |
| **DZM** | **Mont Dzumac** | **14.81** | **252** | P | **P** | **11 16 37.3** | **+1.5** |
| DZM | | | | IAmb | IAmb | 11 16 38.2 | |
| comp=Z,16nm,1.3s | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.81** | **252** | P | **P** | **11 16 37.5** | **+1.8** |
| comp=Z,5.4nm,0.8s,baz=81,slow=18,SNR=2.6 | | | | | | | |
| **THZ** | **Tophouse** | **24.73** | **196** | P | **P** | **11 18 03.3** | **-1.6** |
| **FOZ** | **Fox Glacier** | **27.24** | **199** | P | **P** | **11 18 25.0** | **-1.8** |
| **EIDS** | **Eidsvold** | **29.25** | **250** | P | **P** | **11 18 42.9** | **-1.7** |
| **MLZ** | **Mavora Lakes** | **29.42** | **200** | P | **P** | **11 18 45.3** | **-0.5** |
| **ARMA** | **Armidale** | **29.88** | **240** | P | **P** | **11 18 50.6** | **+0.5** |
| ARMA | | | | IAmb | IAmb | 11 19 27.3 | |
| comp=Z,12nm,1.4s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.95** | **199** | P | **P** | **11 18 49.0** | **-1.3** |
| **CTA** | **Charters Tower** | **33.46** | **261** | P | **P** | **11 19 19.4** | **-1.1** |
| comp=Z,0.2nm,0.6s,baz=86,slow=13,SNR=2.4 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.46** | **261** | P | **P** | **11 19 19.9** | **-0.6** |
| CTAO | | | | IAmb | IAmb | 11 19 21.9 | |
| comp=Z,12nm,1.5s | | | | | | | |
| **CAN** | **Canberra** | **33.62** | **233** | P | **P** | **11 19 22.8** | **+1.1** |
| CAN | | | | IAmb | IAmb | 11 19 30.8 | |
| comp=Z,12nm,1.4s | | | | | | | |
| **TOO** | **Toolangi** | **37.08** | **231** | P | **P** | **11 19 50.9** | **+0.7** |
| TOO | | | | IAmb | IAmb | 11 19 51.8 | |
| comp=Z,6.3nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | **11 20 02.6** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | **11 20 03.3** | **+1.0** |
| comp=Z,2.6nm,0.6s,baz=97,slow=8.1,SNR=6.0 | | | | | | | |
| comp=Z,2.6nm,0.6s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.35** | **241** | P | **P** | **11 20 40.5** | **+0.5** |
| **WR0** | **Warramunga Arr** | **44.45** | **260** | P | **P** | **11 20 48.6** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 11 21 31.6 | |
| comp=Z,17nm,1.4s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.61** | **260** | P | **P** | **11 20 50.3** | **+0.4** |
| WB0 | | | | IAmb | IAmb | 11 21 27.1 | |
| comp=Z,14nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.63** | **260** | P | **P** | **11 20 50.4** | **+0.4** |
| **WRAB** | **Tennant Creek** | **44.63** | **260** | P | **P** | **11 20 50.5** | **+0.4** |
| WRAB | | | | IAmb | IAmb | 11 21 28.6 | |
| comp=Z,9.7nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **11 20 51.1** | **+0.9** |
| **WRA** | **Warramunga Arr** | **44.64** | **260** | P | **P** | **11 20 50.2** | **0.0** |
| comp=Z,0.6nm,0.5s,baz=96,slow=6.9,SNR=21 | | | | | | | |
| comp=Z,0.6nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **44.78** | **254** | P | **P** | **11 20 51.9** | **+0.7** |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | **P** | **11 20 51.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | **P** | **11 20 51.9** | **+0.7** |
| comp=Z,3.7nm,0.5s,baz=88,slow=8.8,SNR=72 | | | | | | | |
| comp=Z,3.7nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **11 23 53.0** | **+0.1** |
| **QSPA** | **South Pole Qui** | **71.94** | **180** | P | **P** | **11 23 53.6** | **+0.7** |
| comp=Z,1.2nm,0.9s,baz=56,slow=3.6,SNR=2.2 | | | | | | | |
| comp=Z,1.2nm,0.9s | | | | | | | |
| **P18K** | **Big Mountain,** | **79.51** | **12** | P | **P** | **11 24 34.0** | **-0.4** |
| P18K | | | | IAmb | IAmb | 11 24 51.8 | |
| comp=Z,15nm,1.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.54** | **44** | P | **P** | **11 24 35.2** | **0.0** |
| comp=Z,0.3nm,0.5s,baz=228,slow=9.4,SNR=4.9 | | | | | | | |
| comp=Z,0.3nm,0.5s | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.94** | **12** | P | **P** | **11 24 36.4** | **-0.2** |
| **J05D** | **Fort Rock, OR** | **80.45** | **38** | P | **P** | **11 24 37.4** | **-2.4** |
| J05D | | | | IAmb | IAmb | 11 25 17.4 | |
| comp=Z,15nm,1.1s | | | | | | | |
| **L18K** | **Granite Mounta** | **81.89** | **10** | P | **P** | **11 24 47.5** | **+1.0** |
| L18K | | | | IAmb | IAmb | 11 25 01.9 | |
| comp=Z,10nm,1.4s | | | | | | | |
| **J16K** | **Anvik River** | **82.31** | **8** | P | **P** | **11 24 49.8** | **+1.2** |
| J16K | | | | IAmb | IAmb | 11 25 20.8 | |
| comp=Z,12nm,1.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.06** | **58** | P | **P** | **11 25 09.5** | **+1.6** |
| comp=Z,0.7nm,0.8s,baz=224,slow=5.0,SNR=9.7 | | | | | | | |
| comp=Z,0.7nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.07** | **13** | P | **P** | **11 25 06.4** | **-0.6** |
| comp=Z,0.3nm,0.4s,baz=219,slow=5.1,SNR=5.0 | | | | | | | |
| comp=Z,0.3nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.47** | **43** | P | **P** | **11 25 14.7** | **+0.4** |
| comp=Z,0.4nm,0.8s,baz=257,slow=3.6,SNR=2.8 | | | | | | | |
| comp=Z,0.4nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.31** | **314** | PKiKP | **PKiKP** | **11 30 52.9** | **+0.7** |
| comp=Z,0.3nm,0.7s,baz=92,slow=4.3,SNR=2.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **140.76** | **332** | PKP | **PKPdf** | **11 31 51.0** | **-0.5** |
| comp=Z,0.4nm,0.3s,baz=70,slow=1.1,SNR=4.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.96** | **315** | PKP | **PKPbc** | **11 31 59.6** | **-0.7** |
| comp=Z,0.4nm,0.6s,baz=119,slow=1.8,SNR=2.9 | | | | | | | |

*DSN **23** 11:28:39.6±1.4, 28°.93N×56°.01E, h15km, ML3.4/8, Error ellipse: s-maj=18.0km s-min=8.3km az=48.0*
*IDC **23** 11:28:45.2±0.8, 28°.23N×55°.69E, h0km, mb3.8/11, mbtmp3.8/13, ML3.6/2, Error ellipse: s-maj=20.8km s-min=19.6km az=142.0*
*TEH **23** 11:28:48.0, 28°.23N×55°.76E, h15km±48km, ML3.5*
*OMAN **23** 11:28:53.3±0.3, 27°.97N×55°.64E, h14km±6km, mb3.9/5, ml3.5/16, Error ellipse: s-maj=15.0km s-min=3.0km az=11.0*
**ISC 23 11:28:49.2±0.6, 28°.24N±0°.04×55°.73E±0°.04, h22km, n80, σ1=93/92, mb3.9/11, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GENO** | **Geno** | **0.93** | **155** | Pg | **Pb** | **11 29 06.4** | **-0.4** |
| **IBND** | **Bandar-abas** | **1.07** | **137** | Pg | **Pb** | **11 29 09.3** | **+0.3** |
| **LAR1** | **LAR** | **1.32** | **245** | Pg | **Pn** | **11 29 14.4** | **+1.9** |
| **NGRK** | **Negar Kerman** | **1.65** | **32** | Pg | **Pn** | **11 29 18.9** | **+1.6** |
| **KHNJ** | **Kahnooj** | **1.77** | **99** | Pg | **Pn** | **11 29 19.3** | **+0.6** |
| **JHRM** | **Jahrom** | **1.91** | **278** | Pn | **Pn** | **11 29 23.3** | **+2.7** |
| **TVBK** | **TV Kerman** | **1.96** | **27** | Pn | **Pn** | **11 29 24.0** | **+2.5** |
| **SHME** | **Shamm** | **2.21** | **170** | P | **Pn** | **11 29 26.2** | **+1.5** |
| SHME | | | | S | **Sb** | **11 30 00.3** | **+4.8** |
| **SHME** | **Shamm** | **2.21** | **170** | P | **Pn** | **11 29 28.3** | **+3.6** |
| **KHGB** | **Koh Gabri** | **2.23** | **17** | Pn | **Pn** | **11 29 27.6** | **+2.6** |
| **CHMN** | **Cheshme madani** | **2.27** | **44** | Pn | **Pn** | **11 29 28.1** | **+2.4** |
| **KBAM** | **BAM** | **2.56** | **69** | Pn | **Pn** | **11 29 32.2** | **+2.8** |
| **KRM1** | **Kerman Provinc** | **2.63** | **31** | Pn | **Pn** | **11 29 32.4** | **+1.9** |
| **ZRDN** | **Zarand Kerman** | **2.81** | **14** | Pn | **Pn** | **11 29 36.3** | **+3.3** |
| **MASF** | **Masafi** | **2.88** | **172** | P | **Pn** | **11 29 35.9** | **+1.9** |
| **MSFE** | **Esma-Masafi** | **2.90** | **172** | P | **Pn** | **11 29 34.4** | **+0.3** |
| **MDH** | **Madha** | **2.98** | **170** | P | **Pn** | **11 29 34.9** | **-0.2** |
| **MDH** | **Madha** | **2.98** | **170** | P | **Pn** | **11 29 38.4** | **+3.3** |
| **JASK** | **Jask - Hormozg** | **3.04** | **141** | P | **Pn** | **11 29 38.8** | **+2.8** |
| JASK | | | | S | **Sn** | **11 30 12.5** | **+0.8** |
| **NAZ** | **Nazwa, Dubai** | **3.24** | **181** | P | **Pn** | **11 29 41.2** | **+2.4** |
| **UOSS** | **Minazif** | **3.31** | **172** | P | **Pn** | **11 29 40.3** | **+0.6** |
| **UOSS** | **Minazif** | **3.31** | **172** | P | **Pn** | **11 29 41.0** | **+1.3** |
| **IBAF** | **Bafgh** | **3.34** | **358** | Pn | **Pn** | **11 29 43.1** | **+2.8** |
| **HATD** | **Hatta, Dubai** | **3.42** | **174** | P | **Pn** | **11 29 42.4** | **+1.1** |
| **HATD** | **Hatta, Dubai** | **3.42** | **174** | P | **Pn** | **11 29 42.9** | **+1.6** |
| **FAQ** | **Al Faqa, Dubai** | **3.48** | **182** | P | **Pn** | **11 29 42.3** | **+0.2** |
| **FAQ** | **Al Faqa, Dubai** | **3.48** | **182** | P | **Pn** | **11 29 43.7** | **+1.6** |
| **ASHO** | **Ashiyiah** | **3.56** | **175** | P | **Pn** | **11 29 43.9** | **+0.8** |
| **ASHO** | **Ashiyiah** | **3.56** | **175** | P | **Pn** | **11 29 44.4** | **+1.2** |
| SNR=10 | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **3.62** | **186** | P | **Pn** | **11 29 45.9** | **+2.0** |
| **ASUD** | **Al Ashush, Dub** | **3.62** | **186** | P | **Pn** | **11 29 46.2** | **+2.2** |
| **ISAD** | **Sadrabad** | **4.07** | **335** | Pn | **Pn** | **11 29 53.3** | **+2.9** |
| **SOHO** | **SOHO** | **4.15** | **170** | P | **Pn** | **11 29 50.7** | **-0.6** |
| **SOHO** | **SOHO** | **4.15** | **170** | P | **Pn** | **11 29 53.8** | **+2.5** |
| **ALNE** | **Al Ain** | **4.17** | **180** | P | **Pn** | **11 29 52.7** | **+1.1** |
| **JRN** | **Qarnain Island** | **4.17** | **219** | P | **Pn** | **11 29 53.8** | **+2.2** |
| **KLNJ** | **Kolanjah** | **4.53** | **308** | Pn | **Pn** | **11 29 59.9** | **+3.1** |
| **IRAM** | **Ramesheh** | **4.59** | **322** | Pn | **Pn** | **11 30 00.5** | **+3.0** |
| **TPRV** | **Parvadeh(Tabas** | **4.84** | **10** | Pn | **Pn** | **11 30 03.8** | **+2.9** |
| **NHDN** | **Nehbandan** | **4.90** | **49** | Pn | **Pn** | **11 30 04.1** | **+2.4** |
| **ARQ** | **Araqi** | **4.94** | **171** | P | **Pn** | **11 30 03.8** | **+1.7** |
| SNR=9.4 | | | | | | | |
| ARQ | | | | S | **Sn** | **11 30 59.6** | **+1.0** |
| **IKOO** | **Kooshah** | **5.04** | **33** | Pn | **Pn** | **11 30 06.5** | **+2.7** |
| **ANAR** | **Anarak** | **5.22** | **341** | Pn | **Pn** | **11 30 09.2** | **+3.0** |
| **TRNA** | **Turayna** | **5.34** | **230** | P | **Pn** | **11 30 08.1** | **+0.4** |
| SNR=11 | | | | | | | |
| TRNA | | | | S | **Sn** | **11 31 08.9** | **+0.4** |
| **IZEF** | **Zefreh** | **5.49** | **329** | Pn | **Pn** | **11 30 12.0** | **+2.1** |
| **SLWR** | **Sila** | **5.51** | **222** | P | **Pn** | **11 30 11.3** | **+1.2** |
| SLWR | | | | S | **Sn** | **11 31 12.5** | **-0.3** |
| **UMZA** | **Um Al Zommool** | **5.53** | **185** | P | **Pn** | **11 30 11.0** | **+0.7** |
| UMZA | | | | S | **Sn** | **11 31 12.7** | **-0.4** |
| **SMDO** | **Samad** | **5.57** | **157** | P | **Pn** | **11 30 12.2** | **+1.3** |
| SMDO | | | | S | **Sn** | **11 31 14.3** | **0.0** |
| **MZR** | **Muzera** | **5.60** | **202** | P | **Pn** | **11 30 10.9** | **-0.3** |
| MZR | | | | S | **Sn** | **11 31 13.8** | **-1.0** |
| **SMRA** | **Abu-Samra** | **5.60** | **233** | P | **Pn** | **11 30 12.4** | **+1.2** |
| SMRA | | | | S | **Sn** | **11 31 15.8** | **+0.9** |
| **NGCH** | **Negor - Chabah** | **5.62** | **119** | P | **Pn** | **11 30 12.3** | **+0.7** |
| **WSAR** | **Wadi Sarin** | **5.63** | **152** | Pn | **Pn** | **11 30 11.2** | **-0.5** |
| 2.5nm,0.3s,baz=334,slow=15,SNR=28 | | | | | | | |
| WSAR | | | | Sn | **Sn** | **11 31 12.3** | **-3.3** |
| 2.5nm,0.3s,baz=0.0,slow=20,SNR=15 | | | | | | | |
| 5.8nm,0.4s | | | | | | | |
| **BSY** | **Bisya** | **5.63** | **166** | P | **Pn** | **11 30 13.0** | **+1.3** |
| BSY | | | | S | **Sn** | **11 31 18.5** | **+2.7** |
| **JHBN** | **Jahan bin** | **5.91** | **313** | Pn | **Pn** | **11 30 18.6** | **+2.8** |
| **SRVN** | **Saravan** | **5.97** | **96** | Pn | **Pn** | **11 30 18.8** | **+2.4** |
| **IPIR** | **Pirpir** | **6.08** | **318** | Pn | **Pn** | **11 30 20.9** | **+2.7** |
| **JMDO** | **Jabal Madar** | **6.23** | **159** | P | **Pn** | **11 30 19.9** | **0.0** |
| JMDO | | | | S | **Sn** | **11 31 31.9** | **+1.4** |
| **WBK** | **Wadi Bani Khal** | **6.33** | **152** | P | **Pn** | **11 30 23.9** | **+2.7** |
| WBK | | | | S | **Sn** | **11 31 31.4** | **-1.5** |
| **KRSH** | **Karshahi** | **6.49** | **333** | Pn | **Pn** | **11 30 26.9** | **+3.4** |
| **QAMS** | **Qamsar** | **6.62** | **327** | Pn | **Pn** | **11 30 28.1** | **+2.7** |
| **JLN** | **Jalan Bani Buh** | **6.92** | **150** | P | **Pn** | **11 30 28.5** | **-0.9** |
| **MHTO** | **MHTO** | **7.50** | **164** | P | **Pn** | **11 30 37.7** | **+0.3** |
| **DOK** | **Doka** | **9.69** | **189** | P | **Pn** | **11 31 06.8** | **-0.6** |
| **RAYN** | **Ar Rayn** | **10.33** | **245** | P | **Pn** | **11 31 14.4** | **

0.3nm,0.3s
**HFS Hagfors 42.65 330** P P 11 36 41.9 -1.9
1.8nm,0.7s,baz=116,slow=16,SNR=1.8
1.8nm,0.7s
**TORD Torodi Ar. Bea 52.32 265** P **P** **11 37 58.8 -0.9**
1.2nm,0.6s,baz=54,slow=6.9,SNR=9.6
1.2nm,0.6s
**BOSA Boshof 63.62 210** P **P** **11 39 17.9 -0.8**
4.5nm,1.2s,baz=32,slow=9.5,SNR=3.8
4.5nm,1.2s
**WRA Warramunga Arr 89.76 113** P **P** **11 41 46.0 -0.3**
0.5nm,1.0s,baz=304,slow=5.7,SNR=2.1
0.5nm,1.0s
**ASAR Alice Springs 91.27 116** P **P** **11 41 52.7 -0.6**
0.5nm,0.9s,baz=299,slow=5.2,SNR=2.2
0.5nm,0.9s
**TXAR Lajitas Array 119.45 339** PKP **PKPdf** **11 47 35.5 -2.1**
0.1nm,0.3s,baz=22,slow=1.0,SNR=2.1

*NOU **23** 11:30:08.1, 15°.87S×176°.41W, h667km, mb4.7/11, Fiji Islands Region*
*NEIC **23** 11:30:26.5±1.2, 17°.9S±0°.2×177°.9W±0°.1, h576km±13km, mb4.6/26, Error ellipse: s-maj=25.5km s-min=14.5km az=212.0*
*IDC **23** 11:30:28.0±1.8, 18°.08S×178°.06W, h586km±20km, mb3.4/12, mbtmp4.3/13, Error ellipse: s-maj=16.4km s-min=12.2km az=171.0*
**ISC 23 11:30:27.6±0.6, 18°.0S±0°.1×177°.98W±0°.08, h590km, n61, σ1s10/61, mb4.6/25, 3C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.79** | **274** | P | **P** | **P** | **11 31 49.7** | **-1.3** |
| **MSVF** | **Nonsavu** | **3.79** | **274** | P | **P** | **P** | **11 31 50.0** | **-1.0** |
| **AFI** | **Afiamalu** | **7.23** | **56** | P | **P** | | 11 32 15.5 | -4.0 |
| **NIUE** | **Niue** | **7.71** | **99** | P | **P** | | **11 32 20.9** | **-2.9** |
| **RAO** | **Raoul Island** | **11.17** | **180** | P | **P** | | **11 32 57.4** | **-0.4** |
| | 187nm,0.3s,baz=0.0,slow=20,SNR=2.1 | | | | | | | |
| **LIFNC** | **LIFOU** | **14.21** | **257** | P | **P** | | **11 33 26.8** | **-1.9** |
| **PINNC** | **Pines Island,** | **14.41** | **249** | P | **P** | | **11 33 29.0** | **-1.6** |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | | **11 33 36.7** | **-1.2** |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | | **11 33 38.4** | **+0.5** |
| DZM | | | | IAmb | IAmb | | 11 33 40.0 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | | **11 33 36.9** | **-0.9** |
| | comp=Z,12nm,0.7s,baz=80,slow=18,SNR=22 | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.31** | **252** | P | **P** | | **11 33 38.0** | **-1.0** |
| **KOUNC** | **Koumac, New Ca** | **16.93** | **259** | P | **P** | | **11 33 49.7** | **-4.2** |
| **KOUNC** | **Koumac, New Ca** | **16.93** | **259** | P | **P** | | **11 33 54.8** | **+0.9** |
| **OUZ** | **Omahuta** | **18.69** | **202** | P | **P** | | **11 34 10.5** | **+0.7** |
| **KUZ** | **Kuaotunu** | **19.46** | **195** | P | **P** | | **11 34 17.8** | **+1.1** |
| **URZ** | **Urewera** | **20.61** | **191** | P | **P** | | **11 34 26.7** | **-0.4** |
| **URZ** | **Urewera** | **20.61** | **191** | P | **P** | | **11 34 25.1** | **-1.9** |
| | comp=Z,6.2nm,0.4s,baz=28,slow=6.3,SNR=8.8 | | | | | | | |
| | comp=Z,6.2nm,0.4s | | | | | | | |
| **KHZ** | **Kahutara** | **25.36** | **195** | P | **P** | | **11 35 08.4** | **-0.8** |
| **EIDS** | **Eidsvold** | **29.61** | **250** | P | **P** | | **11 35 46.6** | **0.0** |
| EIDS | | | | IAmb | IAmb | | 11 35 47.2 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **ARMA** | **Armidale** | **30.24** | **240** | P | **P** | | **11 35 53.0** | **+0.9** |
| ARMA | | | | IAmb | IAmb | | 11 35 53.8 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **CTA** | **Charters Tower** | **33.83** | **261** | P | **P** | | **11 36 22.3** | **-0.1** |
| | comp=Z,0.9nm,0.6s,baz=89,slow=10,SNR=30 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.83** | **261** | P | **P** | | **11 36 22.4** | **-0.1** |
| CTAO | | | | IAmb | IAmb | | 11 36 23.2 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **33.96** | **233** | P | **P** | | **11 36 24.5** | **+1.1** |
| CAN | | | | IAmb | IAmb | | 11 36 25.1 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **34.88** | **280** | P | **P** | | **11 36 31.8** | **+0.5** |
| **PMG** | **Port Moresby** | **34.88** | **280** | P | **P** | | **11 36 31.9** | **+0.6** |
| | comp=Z,45nm,0.8s,baz=101,slow=5.2,SNR=11 | | | | | | | |
| | comp=Z,45nm,0.8s | | | | | | | |
| **TOO** | **Toolangi** | **37.41** | **231** | P | **P** | | **11 36 52.9** | **+1.1** |
| TOO | | | | IAmb | IAmb | | 11 36 53.7 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **37.52** | **270** | P | **P** | | **11 36 53.6** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.93** | **241** | P | **P** | | **11 37 05.1** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.93** | **241** | P | **P** | | **11 37 05.0** | **+0.8** |
| | comp=Z,18nm,0.8s,baz=87,slow=10.0,SNR=25 | | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.71** | **241** | P | **P** | | **11 37 42.5** | **+0.7** |
| BBOO | | | | IAmb | IAmb | | 11 37 43.0 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.83** | **260** | P | **P** | | **11 37 49.9** | **-0.7** |
| **WB0** | **Warramunga Arr** | **44.98** | **260** | P | **P** | | **11 37 51.7** | **-0.1** |
| WB0 | | | | IAmb | IAmb | | 11 37 52.0 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **45.00** | **260** | P | **P** | | **11 37 51.4** | **-0.5** |
| WB2 | | | | IAmb | IAmb | | 11 37 52.2 | |
| | comp=Z,16nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.01** | **260** | P | **P** | | **11 37 51.5** | **-0.5** |
| WRAB | | | | IAmb | IAmb | | 11 37 52.2 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.02** | **260** | P | **P** | | **11 37 51.5** | **-0.5** |
| **WRA** | **Warramunga Arr** | **45.02** | **260** | P | **P** | | **11 37 51.6** | **-0.5** |
| | comp=Z,12nm,0.7s,baz=96,slow=7.2,SNR=241 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **11 39 21.0** | **+0.8** |
| | comp=Z,0.8nm,0.8s,baz=100,slow=2.6,SNR=2.8 | | | | | | | |
| WRA | | | | S | **S** | | **11 43 47.0** | **-1.9** |
| | comp=Z,0.3nm,0.7s,baz=100,slow=12,SNR=3.1 | | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **45.15** | **254** | P | **P** | | **11 37 53.3** | **+0.2** |
| AS31 | | | | IAmb | IAmb | | 11 37 54.2 | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | **P** | | **11 37 53.4** | **+0.3** |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | **P** | | **11 37 53.1** | **+0.1** |
| | comp=Z,50nm,0.7s,baz=87,slow=8.6,SNR=636 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **11 39 21.4** | **+0.7** |
| | comp=Z,0.6nm,0.6s,baz=104,slow=3.9,SNR=2.3 | | | | | | | |
| ASAR | | | | S | **S** | | **11 43 50.0** | **-0.8** |
| | comp=Z,1.7nm,0.8s,baz=90,slow=15,SNR=12 | | | | | | | |
| **MTN** | **Manton Dam** | **49.21** | **268** | IAmb | IAmb | | 11 38 23.9 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **50.33** | **245** | P | **P** | | **11 38 31.3** | **-0.1** |
| **KNRA** | **Kununurra** | **50.89** | **264** | IAmb | IAmb | | 11 38 36.2 | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.41** | **261** | P | **P** | | **11 38 54.2** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **58.28** | **255** | P | **P** | | **11 39 26.9** | **-0.3** |
| **MBWA** | **Marble Bar** | **58.44** | **256** | P | **P** | | **11 39 28.1** | **-0.2** |
| **NWAO** | **Narrogin (SRO)** | **59.52** | **242** | P | **P** | | **11 39 36.0** | **+0.7** |
| NWAO | | | | IAmb | IAmb | | 11 40 09.5 | |
| | comp=Z,44nm,1.4s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.25** | **323** | P | **P** | | **11 40 30.3** | **-0.3** |
| | comp=Z,1.7nm,0.8s,baz=162,slow=8.4,SNR=2.8 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **UGM** | **Wanagama** | **70.05** | **268** | P | **P** | | **11 40 41.7** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | | **11 40 54.1** | **+1.6** |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | **P** | | **11 40 53.9** | **+1.3** |
| | comp=Z,5.2nm,0.7s,baz=41,slow=0.5,SNR=52 | | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.22** | **44** | P | **P** | | **11 41 33.6** | **+0.7** |
| | comp=Z,0.3nm,0.6s,baz=227,slow=10,SNR=4.2 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.71** | **57** | P | **P** | | **11 42 06.8** | **+1.3** |
| | comp=Z,0.9nm,0.8s,baz=224,slow=5.0,SNR=12 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.91** | **13** | P | **P** | | **11 42 04.7** | **-0.7** |
| | comp=Z,0.2nm,0.4s,baz=224,slow=5.2,SNR=4.6 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **86.11** | **319** | *eP* | P | | 11 41 55.8 | -11 |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,580nm,8.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.31** | **290** | P | **P** | | **11 42 23.3** | **+0.9** |
| | comp=Z,0.4nm,0.4s,baz=122,slow=3.3,SNR=4.9 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.19** | **180** | ⇑P | P | | **11 42 26.3** | **+0.6** |
| | comp=Z,100nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.47** | **178** | ⇑P | **P** | | **11 42 26.8** | **-0.1** |
| | comp=Z,26nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.47** | **178** | P | **P** | | **11 42 27.2** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=190,slow=6.1,SNR=9.4 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.59** | **176** | ⇑P | **P** | | **11 42 28.1** | **+0.7** |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.16** | **315** | PKPbc | **PKPbc** | | **11 49 00.6** | **+0.4** |
| | comp=Z,0.9nm,0.6s,baz=136,slow=3.9,SNR=6.2 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.55** | **303** | PKPbc | **PKPbc** | | **11 49 05.3** | **+1.1** |
| | comp=Z,1.9nm,0.5s,baz=100,slow=7.5,SNR=2.6 | | | | | | | |

**IDC 23 11:33:51.5±1.9, 38°.24S×46°.29E, h0km, mb4.0/3,**
**mbtmp3.9/4, ML4.2/1, Error ellipse: s-maj=68.6km s-min=38.4km az=59.0, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **H04N1** | **CROZET ISLANDS** | **8.90** | **155** | T | T | T | 11 44 36.7 | |
| | baz=331,slow=76,SNR=185 | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **8.91** | **154** | T | T | T | 11 44 28.9 | |
| | baz=331,slow=76,SNR=146 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **8.91** | **155** | T | T | T | 11 44 29.9 | |
| | baz=331,slow=76,SNR=81 | | | | | | | |
| **OPO** | **Ambohidratompo** | **19.62** | **3** | P | P | P | 11 38 21.6 | 0.0 |
| | 0.1nm,0.3s,baz=200,slow=21,SNR=5.1 | | | | | | | |
| | 1.7nm,0.5s | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **53.48** | **109** | T | T | T | 12 40 19.3 | |
| | baz=244 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **53.48** | **109** | T | T | T | 12 40 19.9 | |
| | baz=244 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **53.49** | **109** | T | T | T | 12 40 18.2 | |
| | baz=244,SNR=3.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **73.97** | **108** | P | P | P | 11 45 28.7 | -0.3 |
| | 0.6nm,0.8s,baz=230,slow=5.8,SNR=5.2 | | | | | | | |
| | 0.6nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **74.81** | **119** | P | P | P | 11 45 34.2 | +0.4 |
| | 2.4nm,0.7s,baz=227,slow=6.9,SNR=3.9 | | | | | | | |
| | 2.4nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **76.45** | **105** | P | P | P | 11 45 43.3 | 0.0 |
| | 0.7nm,0.8s,baz=228,slow=4.7,SNR=5.9 | | | | | | | |
| | 0.7nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **153.59** | **259** | PKPbc | PKiKP | | 11 53 52.5 | +0.1 |
| | 0.2nm,0.6s,baz=148,slow=5.3,SNR=2.7 | | | | | | | |

*NEIC **23** 11:50:14.3±1.0, 17°.8S±0°.1×178°.3W±0°.1, h580km±11km, mb4.2/26, Error ellipse: s-maj=21.6km s-min=18.4km az=218.0*
*IDC **23** 11:50:17.4±5.3, 17°.78S×178°.66W, h600km±64km, mb3.0/7, mbtmp4.0/8, Error ellipse: s-maj=35.8km s-min=22.9km az=137.0*
**ISC 23 11:50:15.5±0.8, 17°.8S±0°.2×178°.6W±0°.1, h579km, n39, σ0s89/42, mb4.2/21, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.24** | **270** | P | **P** | **P** | **11 51 35.4** | **+0.9** |
| **PINNC** | **Pines Island,** | **14.00** | **248** | P | **P** | | **11 53 15.7** | **+1.1** |
| **DZM** | **Mont Dzumac** | **14.75** | **251** | P | **P** | | **11 53 23.6** | **+1.6** |
| **DZM** | **Mont Dzumac** | **14.75** | **251** | P | **P** | | **11 53 22.6** | **+0.6** |
| | 4.0nm,0.6s,baz=65,slow=17,SNR=7.8 | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.45** | **258** | P | **P** | | **11 53 38.9** | **+0.9** |
| **EIDS** | **Eidsvold** | **29.19** | **250** | P | **P** | | **11 55 31.6** | **+0.1** |
| EIDS | | | | IAmb | IAmb | | 11 55 33.2 | |
| | comp=Z,6.8nm,1.2s | | | | | | | |
| **ARMA** | **Armidale** | **29.89** | **240** | P | **P** | | **11 55 38.2** | **+0.6** |
| **CTAO** | **Charters Tower** | **33.34** | **260** | P | **P** | | **11 56 06.7** | **-0.3** |
| CTAO | | | | IAmb | IAmb | | 11 56 28.6 | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **CAN** | **Canberra** | **33.68** | **232** | P | **P** | | **11 56 09.8** | **+0.2** |
| CAN | | | | IAmb | IAmb | | 11 56 12.2 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **COEN** | **Coen** | **36.97** | **270** | P | **P** | | **11 56 37.0** | **-0.1** |
| COEN | | | | IAmb | IAmb | | 11 57 13.7 | |
| | comp=Z,6.8nm,1.1s | | | | | | | |
| **TOO** | **Toolangi** | **37.15** | **231** | P | **P** | | **11 56 37.9** | **-0.4** |
| TOO | | | | IAmb | IAmb | | 11 56 38.7 | |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | | **11 56 50.1** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.58** | **241** | P | **P** | | **11 56 50.2** | **+0.3** |
| | comp=Z,4.1nm,0.5s,baz=76,slow=12,SNR=7.8 | | | | | | | |
| | comp=Z,4.1nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.35** | **241** | P | **P** | | **11 57 27.5** | **-0.2** |
| **WR0** | **Warramunga Arr** | **44.34** | **259** | P | **P** | | **11 57 34.5** | **-1.0** |
| **WB0** | **Warramunga Arr** | **44.49** | **260** | P | **P** | | **11 57 36.0** | **-0.7** |
| WB0 | | | | IAmb | IAmb | | 11 58 14.3 | |
| | comp=Z,5.3nm,1.2s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.52** | **259** | P | **P** | | **11 57 36.2** | **-0.7** |
| **WRAB** | **Tennant Creek** | **44.52** | **259** | P | **P** | | **11 57 35.9** | **-0.9** |
| WRAB | | | | IAmb | IAmb | | 11 57 36.5 | |
| | comp=Z,7.4nm,1.2s | | | | | | | |
| WRAB | | | | PcP | **PcP** | | **11 59 05.3** | **-2.1** |
| **WRA** | **Warramunga Arr** | **44.53** | **259** | P | **P** | | **11 57 36.0** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.53** | **259** | P | **P** | | **11 57 36.1** | **-0.9** |
| | comp=Z,2.1nm,0.4s,baz=96,slow=6.9,SNR=101 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **11 59 07.1** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=90,slow=3.5,SNR=1.7 | | | | | | | |
| | comp=Z,2.1nm,0.4s | | | | | | | |
| **AS31** | **Alice Springs** | **44.70** | **254** | P | **P** | | **11 57 38.0** | **-0.3** |
| AS31 | | | | IAmb | IAmb | | 11 57 38.9 | |
| | comp=Z,6.2nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.70** | **254** | P | **P** | | **11 57 38.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **44.70** | **254** | P | **P** | | **11 57 38.0** | **-0.3** |
| | comp=Z,23nm,0.6s,baz=87,slow=8.4,SNR=159 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **11 59 07.7** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=107,slow=3.3,SNR=2.4 | | | | | | | |
| **MTN** | **Manton Dam** | **48.67** | **268** | P | **P** | | **11 58 07.8** | **-0.4** |
| MTN | | | | IAmb | IAmb | | 11 58 29.4 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **49.95** | **245** | P | **P** | | **11 58 16.6** | **-0.8** |
| **KNRA** | **Kununurra** | **50.37** | **264** | P | **P** | | **11 58 20.4** | **-0.3** |
| KNRA | | | | IAmb | IAmb | | 11 58 28.0 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.92** | **260** | P | **P** | | **11 58 38.8** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **57.81** | **255** | P | **P** | | **11 59 12.3** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | | 11 59 29.1 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **MBWA** | **Marble Bar** | **57.98** | **256** | P | **P** | | **11 59 13.2** | **-0.8** |
| **GIRL** | **Giralia** | **62.81** | **253** | P | **P** | | **11 59 46.5** | **+0.7** |
| **QSPA** | **South Pole Qui** | **72.28** | **180** | P | **P** | | **12 00 41.8** | **-1.0** |
| QSPA | | | | IAmb | IAmb | | 12 01 22.9 | |
| | comp=Z,8.4nm,1.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.28** | **180** | P | **P** | | **12 00 42.5** | **-0.3** |
| | comp=Z,0.7nm,0.7s,baz=45,slow=1.4,SNR=5.7 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.42** | **44** | P | **P** | | **12 01 22.7** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=229,slow=8.9,SNR=5.4 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **O18K** | **Koktuh Hills** | **79.65** | **12** | P | **P** | | **12 01 20.8** | **-2.4** |
| O18K | | | | IAmb | IAmb | | 12 01 45.3 | |
| | comp=Z,9.3nm,1.2s | | | | | | | |
| **L18K** | **Granite Mounta** | **81.59** | **10** | P | **P** | | **12 01 33.4** | **+0.2** |
| **SCM** | **Sheep Creek Mo** | **83.13** | **14** | P | **P** | | **12 01 39.6** | **-1.4** |
| SCM | | | | IAmb | IAmb | | 12 01 42.0 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.79** | **13** | P | **P** | | **12 01 53.5** | **-0.3** |
| | comp=Z,0.2nm,0.4s,baz=217,slow=5.1,SNR=8.4 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.04** | **58** | P | **P** | | **12 01 58.0** | **+2.0** |
| | comp=Z,0.5nm,0.7s,baz=211,slow=6.3,SNR=6.6 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.35** | **43** | P | **P** | | **12 02 02.4** | **+0.4** |
| | comp=Z,0.5nm,0.6s,baz=242,slow=1.9,SNR=4.6 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |

*IDC **23** 12:07:47.2±1.0, 46°.58S×13°.33W, h0km, mb3.8/6, mbtmp3.8/6, MS3.7/2, Error ellipse: s-maj=32.7km s-min=24.5km az=71.0*
**ISC 23 12:07:48.7±0.9, 46°.6S±0°.2×13°.3W±0°.2, h10km, n13, σ0s89/7, mb3.8/7, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **25.64** | **172** | P | **P** | **P** | **12 13 18.6** | **+0.4** |
| | 1.4nm,1.0s,baz=3.4,slow=17,SNR=4.0 | | | | | | | |
| | 1.4nm,1.0s | | | | | | | |
| **SUR** | **Sutherland** | **29.67** | **74** | LR | LR | | 12 22 28.9 | |
| | comp=Z,92nm,21.9s,baz=126,slow=30 | | | | | | | |
| **BOSA** | **Boshof** | **35.02** | **73** | P | **P** | | **12 14 41.4** | **-0.1** |
| | 2.6nm,0.9s,baz=207,slow=4.5,SNR=2.6 | | | | | | | |
| | 2.6nm,0.9s | | | | | | | |
| **CPUP** | **Villa Florida** | **40.12** | **285** | P | **P** | | **12 15 24.4** | **-0.2** |
| | 1.2nm,0.6s,baz=97,slow=8.1,SNR=3.3 | | | | | | | |
| | 1.2nm,0.6s | | | | | | | |
| **MAW** | **Mawson** | **42.95** | **147** | P | **P** | | **12 15 47.1** | **-0.2** |
| | 1.2nm,0.6s,baz=250,slow=4.4,SNR=6.8 | | | | | | | |
| | 1.2nm,0.6s | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **43.53** | **115** | T | T | T | 13 02 46.7 | |
| | baz=246,slow=75,SNR=5.5 | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **43.53** | **115** | T | T | T | 13 02 43.6 | |
| | baz=246,slow=75,SNR=5.2 | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **43.55** | **115** | T | T | T | 13 02 39.1 | |
| | baz=246,slow=75,SNR=6.3 | | | | | | | |
| **LVC** | **Limon Verde** | **50.43** | **279** | LR | LR | | 12 36 12.2 | |
| | comp=Z,113nm,18.3s,baz=238,slow=34 | | | | | | | |
| **LPAZ** | **La Paz** | **54.29** | **285** | P | P | | 12 17 07.5 | -8.4 |
| | 0.5nm,0.5s,baz=239,slow=5.9,SNR=1.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.98** | **17** | P | **P** | | **12 18 01.5** | **-0.6** |
| | 0.8nm,0.7s,baz=216,slow=6.4,SNR=6.5 | | | | | | | |
| | 0.8nm,0.7s | | | | | | | |
| **ESDC** | **Sonseca Array** | **86.29** | **7** | P | **P** | | **12 20 31.7** | **+1.4** |
| | 0.4nm,0.7s,baz=182,slow=4.4,SNR=4.4 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **149.08** | **323** | PKPbc | **PKPbc** | | **12 27 35.0** | **-0.8** |
| | 1.2nm,0.7s,baz=356,slow=1.8,SNR=11 | | | | | | | |

*IDC **23** 12:19:03.7±1.4, 2°.63S×139°.06E, h0km, mb3.7/5, mbtmp3.8/6, ML3.7/1, Error ellipse: s-maj=68.6km s-min=24.3km az=91.0*
**ISC 23 12:19:09.4±1.2, 2°.7S±0°.1×138°.9E±0°.4, h37km, n6, σ1s11/6, mb3.6/5, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.72** | **194** | P | **P** | **Pn** | **12 23 12.1** | **-1.2** |
| | 0.3nm,0.3s,baz=18,slow=13,SNR=21 | | | | | | | |
| | 1.1nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **21.41** | **193** | P | **P** | **P** | **12 23 54.7** | **+0.5** |
| | 0.9nm,0.4s,baz=17,slow=11,SNR=15 | | | | | | | |
| | 0.9nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.91** | **322** | P | **P** | **P** | **12 30 17.4** | **+0.6** |
| | 0.3nm,0.5s,baz=101,slow=7.8,SNR=5.3 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **79.42** | **325** | P | **P** | **P** | **12 31 11.2** | **-0.6** |
| | 0.5nm,0.3s,baz=111,slow=7.9,SNR=2.6 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.73** | **24** | P | **P** | **P** | **12 31 43.8** | **-0.5** |
| | 0.3nm,0.8s,baz=260,slow=4.5,SNR=4.0 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **87.25** | **180** | P | **P** | **P** | **12 31 52.9** | **+0.9** |
| | 1.2nm,0.7s,baz=296,slow=1.0,SNR=2.3 | | | | | | | |
| | 1.2nm,0.7s | | | | | | | |

**IDC 23 12:21:15.9±2.3, 30°.61S×178°.07W, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=63.9km s-min=41.9km az=41.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **43.03** | **267** | P | P | P | 12 29 17.1 | -0.5 |
| | 1.2nm,0.9s,baz=104,slow=7.7,SNR=6.4 | | | | | | | |
| | 1.2nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.04** | **272** | P | P | P | 12 29 25.9 | +0.2 |
| | 0.9nm,0.7s,baz=112,slow=7.7,SNR=8.4 | | | | | | | |
| | 0.9nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.50** | **180** | P | P | P | 12 31 20.4 | -0.3 |
| | 0.7nm,0.6s,baz=319,slow=1.0,SNR=1.6 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **145.32** | **340** | PKPbc | PKPbc | | 12 40 54.2 | -0.5 |
| | 2.4nm,0.9s,baz=44,slow=4.2,SNR=3.9 | | | | | | | |

*MEX **23** 12:22:25.1±0.6, 14°.84N×92°.78W, h79km±11km, MD4.3*
*GCG **23** 12:22:26.6±0.7, 15°.12N×92°.68W, h35km±142km, MD4.3*
**ISC 23 12:22:25.5±1.2, 14°.92N±0°.05×92°.79W±0°.04, h65km±12km, n39, σ2s03/63, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **THIG** | | **0.51** | **91** | *eP* | **Pn** | | **12 22 37.3** | **-0.7** |
| THIG | | | | *eS* | **Sn** | | **12 22 46.2** | **-1.0** |
| **PAVE** | **Pavencul** | **0.66** | **65** | *eP* | **Pn** | | **12 22 39.4** | **-0.5** |
| PAVE | | | | *eS* | **Sn** | | **12 22 50.8** | **+0.5** |
| **CHUJ** | **Union Juarez** | **0.69** | **75** | *eP* | **Pn** | | **12 22 39.4** | **-0.8** |
| CHUJ | | | | *eS* | **Sn** | | **12 22 50.6** | **-0.3** |
| **PCIG** | | **0.89** | **332** | *i P* | **Pn** | | **12 22 42.4** | **0.0** |
| PCIG | | | | *eS* | **Sn** | | **12 22 55.4** | **+0.7** |
| **STG3** | **Santiaguito 3,** | **1.20** | **100** | *eP* | **Pn** | | **12 22 46.4** | **-0.2** |
| STG3 | | | | *eS* | **Sn** | | **12 23 03.9** | **+1.7** |
| **SULM** | **Suchitepequez,** | **1.34** | **117** | *eP* | **Pn** | | **12 22 48.9** | **+0.7** |
| SULM | | | | *eS* | **Sn** | | **12 23 02.2** | **-2.9** |
| **CCIG** | **Comitan** | **1.50** | **25** | *eP* | **Pn** | | **12 22 51.4** | **+0.9** |
| CCIG | | | | *eS* | **Sn** | | **12 23 12.8** | **+3.5** |
| **CARR** | **Arriaga** | **1.71** | **321** | *i P* | **Pn** | | **12 22 53.9** | **+0.8** |
| CARR | | | | *i S* | **Sn** | | **12 23 16.4** | **+2.3** |
| **TGBT** | **Tuxtla Gutierr** | **1.87** | **351** | *i P* | Pn | | 12 23 00.7 | +5.4 |
| TGBT | | | | *i S* | **Sn** | | **12 23 18.1** | **+0.1** |
| **TGIG** | | **1.88** | **350** | *eP* | **Pn** | | **12 22 54.4** | **-1.1** |
| TGIG | | | | *eS* | **Sn** | | **12 23 18.1** | **-0.1** |
| **FUG** | **Fuego 3** | **1.94** | **104** | *eP* | **Pn** | | **12 22 57.3** | **+0.8** |
| FUG | | | | *eS* | **Sn** | | **12 23 21.2** | **+1.1** |
| **PCG** | **Pacaya** | **2.18** | **104** | *eS* | **Sn** | | **12 23 27.3** | **+1.4** |
| **UXUV** | **UXUV** | **2.72** | **332** | *eP* | **Pn** | | **12 23 07.3** | **+0.4**

σ1ᵍ19/7, **mb3.5**/5, **South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **12.21** | **278** | P | **P** | **12 45 06.2** | **-1.1** |
| | 7.0nm,0.7s,baz=91,slow=18,SNR=5.5 | | | | | | |
| **STKA** | **Stephens Creek** | **34.18** | **249** | P | **P** | **12 48 24.1** | **+0.8** |
| | 1.2nm,0.5s,baz=104,slow=14,SNR=3.6 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **41.54** | **261** | P | **P** | **12 49 24.0** | **+0.9** |
| | 0.3nm,0.3s,baz=94,slow=7.3,SNR=8.2 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.94** | **267** | P | **P** | **12 49 26.7** | **+0.5** |
| | 1.2nm,0.5s,baz=97,slow=8.3,SNR=42 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.83** | **180** | P | **P** | **12 52 12.5** | **-0.7** |
| | 1.0nm,0.7s,baz=281,slow=0.7,SNR=8.8 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **91.00** | **58** | P | **P** | **12 54 28.6** | **+0.8** |
| | 0.2nm,0.4s,baz=193,slow=3.6,SNR=2.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **142.80** | **348** | PKP | **PKPdf** | **13 00 50.5** | **-1.2** |
| | 0.8nm,0.4s,baz=56,slow=5.4,SNR=8.6 | | | | | | |

*FUNV **23** 13:06:57.5, 10˚.54N×62˚.82W, h23ᵏᵐ, MW3.6*
*TRN **23** 13:06:57.1, 10˚.36N×62˚.76W, h95ᵏᵐ, MD2.9, Venezuela.*
**ISC 23 13:06:54.0**±1.0, **10°.42N**±0˚.06×**62°.90W**±0˚.04, **h9ᵏᵐ, n11,**
σ1ᵍ86/19, **Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.49** | **81** | *eP* | **Pn** | **13 07 22.2** | **+1.2** |
| TRN | | | | *eS* | **Sn** | **13 07 39.0** | **-1.5** |
| **PCRV** | **Puerto La Cruz** | **1.73** | **262** | *eP* | **Pg** | **13 07 27.5** | **+0.3** |
| PCRV | | | | *eS* | **Sb** | **13 07 48.3** | **+0.4** |
| **PCRV** | **Puerto La Cruz** | **1.73** | **262** | *eP* | **Pg** | **13 07 28.3** | **+1.1** |
| PCRV | | | | *eS* | **Sg** | **13 07 50.3** | **+0.6** |
| **GRW** | **Mount Saint Ca** | **2.12** | **35** | *eP* | **Pn** | **13 07 30.9** | **+1.3** |
| **GRHS** | **Sauteurs** | **2.18** | **34** | *eP* | **Pn** | **13 07 32.2** | **+1.7** |
| **GCMP** | **Grenada, Carri** | **2.51** | **35** | *eP* | **Pn** | **13 07 35.7** | **+0.6** |
| GCMP | | | | *eS* | **Sn** | **13 08 01.6** | **-4.2** |
| **CACV** | **CAICARA DEL OR** | **4.58** | **232** | *eP* | **Pn** | **13 08 01.1** | **-2.4** |
| CACV | | | | *eS* | Sn | 13 08 47.6 | -9.3 |
| **BENV** | **Beln** | **4.65** | **265** | *eP* | **Pn** | **13 08 05.8** | **+1.2** |
| BENV | | | | *eS* | **Sn** | **13 08 56.8** | **-2.0** |
| **LUEV** | **Luepa** | **4.76** | **163** | *eP* | **Pn** | **13 08 07.8** | **+1.6** |
| LUEV | | | | *eS* | **Sn** | **13 08 59.9** | **-1.7** |
| **BAUV** | **El Baul** | **5.28** | **254** | *eP* | **Pn** | **13 08 14.1** | **+1.0** |
| BAUV | | | | *eS* | **Sn** | **13 09 12.1** | **-2.0** |
| **BAUV** | **El Baul** | **5.28** | **254** | *eP* | **Pn** | **13 08 15.2** | **+2.0** |
| BAUV | | | | *eS* | **Sn** | **13 09 12.9** | **-1.3** |

*IDC **23** 13:30:07.8±10.0, 16˚.93N×104˚.93W, h0ᵏᵐ, mb3.5/4, mbtmp3.6/6, ML3.3/2, MS3.3/20, Error ellipse: s-maj=204.1km s-min=80.1km az=123.0*
*NEIC **23** 13:30:15.7±2.3, 17˚.6N±0˚.1×105˚.0W±0˚.1, h18ᵏᵐ±6ᵏᵐ, mb4.1/45, Md4.1/13(MEX), Error ellipse: s-maj=22.2km s-min=10.3km az=49.0*
*MEX **23** 13:30:25.4±0.5, 18˚.06N×104˚.43W, h16ᵏᵐ±180ᵏᵐ, MD4.1*
**ISC 23 13:30:14.1**±1.5, **17°.6N**±0˚.1×**105°.1W**±0˚.1, **h10ᵏᵐ, n89,**
σ1ᵍ88/62, **mb4.1**/18, **MS3.3**/16, **Off coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CDAR** | **Ciudad de Arme** | **1.63** | **37** | *eP* | **Pn** | **13 30 40.4** | **-2.6** |
| CDAR | | | | *eS* | Sn | 13 30 52.2 | -12 |
| **CIHU** | **Emiliano Zapat** | **1.65** | **10** | *i P* | **Pn** | **13 30 39.7** | **-3.5** |
| **MMIG** | **Aquila** | **1.75** | **68** | | **Pn** | **13 30 41.8** | **-2.7** |
| MMIG | | | | | Pg | 13 30 55.7 | +8.0 |
| **MMIG** | **Aquila** | **1.75** | **68** | *eP* | **Pn** | **13 30 41.8** | **-2.7** |
| MMIG | | | | *eS* | Sn | 13 30 55.7 | -11 |
| **CEGR** | **Campo Tres** | **2.08** | **33** | *eP* | **Pn** | **13 30 47.3** | **-2.0** |
| **MNGA** | **Volcan de Coli** | **2.27** | **37** | *eP* | **Pn** | **13 30 50.2** | **-1.7** |
| **SOMAC** | **Volcano de Col** | **2.31** | **35** | *eP* | **Pn** | **13 30 51.8** | **-0.8** |
| **JUBC** | **Volcan de Coli** | **2.34** | **37** | *eP* | **Pn** | **13 30 51.7** | **-1.3** |
| **ANIG** | **Ahuacatlan** | **3.44** | **8** | | **Pn** | **13 31 05.9** | **-1.9** |
| **ANIG** | **Ahuacatlan** | **3.44** | **8** | *eP* | **Pn** | **13 31 05.9** | **-1.9** |
| **MOIG** | **Morelia** | **4.19** | **60** | Pn | **Pn** | **13 31 19.5** | **+1.1** |
| **ARIG** | **Puente Sto Nin** | **4.52** | **81** | | **Pn** | **13 31 22.6** | **-0.2** |
| **ARIG** | **Puente Sto Nin** | **4.52** | **81** | *eP* | **Pn** | **13 31 22.6** | **-0.2** |
| **MEIG** | **Mezcala** | **5.18** | **86** | | **Pn** | **13 31 33.2** | **+1.3** |
| **MEIG** | **Mezcala** | **5.18** | **86** | *i P* | **Pn** | **13 31 33.2** | **+1.3** |
| **PLIG** | **Platanillo** | **5.33** | **81** | | **Pn** | **13 31 32.9** | **-1.1** |
| **PLIG** | **Platanillo** | **5.33** | **81** | *eP* | **Pn** | **13 31 32.9** | **-1.1** |
| **ZAIG** | **Zacatecas** | **5.61** | **24** | Pn | **Pn** | **13 31 38.9** | **+0.9** |
| **TLIG** | **Tlapa** | **6.19** | **90** | Pn | **Pn** | **13 31 44.3** | **-1.4** |
| **LPIG** | **La Paz** | **8.09** | **324** | LR | LR | 13 34 32.9 | |
| | comp=Z,345nm,19.5s,baz=168,slow=30 | | | | | | |
| **CMIG** | **Matias Romero** | **9.72** | **92** | LR | LR | 13 36 26.1 | |
| | comp=Z,70nm,19.8s,baz=344,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **11.71** | **6** | Pn | **Pn** | **13 33 01.7** | **+0.2** |
| **TXAR** | **Lajitas Array** | **11.71** | **6** | Pn | **Pn** | **13 33 05.9** | **+4.4** |
| | 0.1nm,0.3s,baz=187,slow=14,SNR=17 | | | | | | |
| TXAR | | | | LR | LR | 13 37 18.3 | |
| | comp=Z,63nm,19.0s,baz=183,slow=35 | | | | | | |
| | 3.9nm,0.9s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **11.71** | **6** | | **Pn** | **13 33 04.6** | **+3.1** |
| **833A** | **Chaparral WMA,** | **11.84** | **25** | Pn | **Pn** | **13 33 04.5** | **+1.4** |
| **DRIO** | **Del Rio** | **12.41** | **18** | | **Pn** | **13 33 10.8** | **-0.2** |
| **ALPN** | **Alpine** | **12.75** | **6** | | Pn | 13 33 20.7 | +5.1 |
| **HNDO** | **Hondo** | **12.96** | **23** | Pn | **Pn** | **13 33 22.4** | **+3.9** |
| **VHRN** | **Van Horn** | **13.09** | **0** | | **Pn** | **13 33 22.7** | **+2.3** |
| **JCT** | **Junction City** | **13.65** | **20** | Pn | **Pn** | **13 33 30.9** | **+3.0** |
| **OZNA** | **Ozona** | **13.70** | **14** | Pn | **Pn** | **13 33 32.2** | **+3.7** |
| **319A** | **Douglas** | **14.21** | **345** | Pn | **Pn** | **13 33 33.7** | **-1.9** |
| **BRDY** | **Brady** | **14.66** | **21** | Pn | **Pn** | **13 33 42.5** | **+0.8** |
| **121A** | **Cookes Peak, D** | **15.04** | **351** | Pn | **Pn** | **13 33 49.4** | **+2.4** |
| 121A | | | | IAmb | IAmb | 13 34 01.8 | |
| | comp=Z,5.6nm,1.0s | | | | | | |
| **TUC** | **Tucson** | **15.50** | **342** | Pn | **Pn** | **13 33 53.2** | **+0.3** |
| **SN07** | **Snyder 07** | **15.84** | **13** | Pn | **Pn** | **13 33 56.1** | **-1.2** |
| **WHTX** | **Lake Whitney,** | **15.86** | **24** | Pn | **Pn** | **13 33 58.1** | **+0.6** |
| WHTX | | | | IAmb | IAmb | 13 34 05.1 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **214A** | **Organ Pipe Nat** | **15.89** | **335** | Pn | **Pn** | **13 33 59.3** | **+1.2** |
| **PLPT** | **Palo Pinto** | **16.29** | **21** | Pn | **Pn** | **13 34 04.1** | **+1.0** |
| PLPT | | | | IAmb | IAmb | 13 34 10.0 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **DKNS** | **Dickens** | **16.39** | **12** | Pn | **Pn** | **13 34 06.1** | **+1.7** |
| DKNS | | | | IAmb | IAmb | 13 34 16.8 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **16.39** | **7** | Pn | **Pn** | **13 34 05.5** | **+0.9** |
| MSTX | | | | IAmb | IAmb | 13 34 11.1 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **BNM** | **Barren Site** | **16.51** | **355** | Pn | **Pn** | **13 34 07.7** | **+1.7** |
| **LENM** | **Lemitar** | **16.55** | **354** | Pn | **Pn** | **13 34 07.7** | **+1.2** |
| **ANMO** | **Albuquerque** | **17.29** | **356** | P | **P** | **13 34 20.0** | **+2.7** |
| | comp=Z,0.1nm,0.3s,baz=180,slow=7.1,SNR=3.6 | | | | | | |
| ANMO | | | | LR | LR | 13 41 05.0 | |
| | comp=Z,53nm,19.4s,baz=269,slow=36 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **WMOK** | **Wichita Mounta** | **17.93** | **17** | | **Pn** | **13 34 23.5** | **-0.2** |
| **QUOK** | **Quay** | **19.89** | **20** | P | **P** | **13 34 46.8** | **+1.1** |
| QUOK | | | | IAmb | IAmb | 13 34 57.6 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **SDCO** | **Great Sand Dun** | **20.04** | **359** | P | **Pn** | **13 34 52.1** | **+2.7** |
| **HMU** | **Henry Mountain** | **20.83** | **347** | IAmb | IAmb | 13 35 15.0 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **HHAR** | **Hobbs** | **21.02** | **26** | P | **P** | **13 34 59.1** | **+1.1** |
| HHAR | | | | IAmb | IAmb | 13 35 01.2 | |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **MTPU** | **Mount Pierson** | **21.27** | **344** | IAmb | IAmb | 13 35 06.0 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **Q16A** | **Castle Valley** | **21.87** | **347** | IAmb | IAmb | 13 35 39.9 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **S11A** | **Rachel** | **22.04** | **337** | IAmb | IAmb | 13 35 28.4 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **LCAR** | **Lake Charles** | **22.11** | **31** | IAmb | IAmb | 13 35 13.4 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **S39A** | **Bolivar** | **22.48** | **25** | IAmb | IAmb | 13 35 21.3 | |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **23.42** | **26** | IAmb | IAmb | 13 35 30.7 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **23.67** | **28** | P | **P** | **13 35 26.4** | **+0.5** |
| CCM | | | | IAmb | IAmb | 13 35 27.6 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **23.74** | **333** | P | **P** | **13 35 28.7** | **+1.9** |
| | comp=Z,0.5nm,0.8s,baz=145,slow=11,SNR=2.3 | | | | | | |
| NVAR | | | | LR | LR | 13 44 22.8 | |
| | comp=Z,53nm,20.5s,baz=162,slow=35 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **FVM** | **French Village** | **23.99** | **29** | P | **P** | **13 35 29.1** | **+0.1** |
| **P38A** | **Dawn** | **24.09** | **22** | IAmb | IAmb | 13 35 31.6 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **KVN** | **Kaiserville** | **24.18** | **335** | IAmb | IAmb | 13 35 34.7 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **WAKR** | **Walker** | **24.30** | **332** | IAmb | IAmb | 13 35 36.6 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **ELK** | **Elko** | **24.65** | **341** | P | **P** | **13 35 35.2** | **-0.1** |
| **ELK** | **Elko** | **24.65** | **341** | P | **P** | **13 35 37.2** | **+1.9** |
| | comp=Z,0.5nm,0.4s,baz=81,slow=2.7,SNR=4.0 | | | | | | |
| ELK | | | | LR | LR | 13 44 53.0 | |
| | comp=Z,12nm,19.4s,baz=164,slow=35 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **X51A** | **Calhoun** | **24.68** | **43** | P | **P** | **13 35 33.2** | **-2.1** |
| **CLTN** | **Cedars of Leba** | **24.75** | **38** | P | **P** | **13 35 35.7** | **-0.3** |
| **T47A** | **Sharon Grove** | **24.94** | **36** | P | **P** | **13 35 37.9** | **+0.3** |
| T47A | | | | IAmb | IAmb | 13 35 40.4 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **GOGA** | **Godfrey** | **24.95** | **47** | P | **P** | **13 35 38.2** | **+0.5** |
| GOGA | | | | IAmb | IAmb | 13 36 16.1 | |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **25.34** | **352** | P | **P** | **13 35 43.4** | **+1.9** |
| **PDAR** | **Pinedale Array** | **25.34** | **352** | P | **P** | **13 35 43.9** | **+2.4** |
| | comp=Z,1.7nm,1.1s,baz=172,slow=7.3,SNR=4.5 | | | | | | |
| | comp=Z,1.7nm,1.1s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **25.39** | **30** | P | **P** | **13 35 42.5** | **+0.9** |
| **TKL** | **Tuckaleechee C** | **26.05** | **42** | LR | LR | 13 48 23.2 | |
| | comp=Z,50nm,18.8s,baz=256,slow=41 | | | | | | |
| **TPAW** | **Teton Pass** | **26.25** | **350** | P | **P** | **13 35 51.8** | **+2.0** |
| TPAW | | | | IAmb | IAmb | 13 36 04.0 | |
| | comp=Z,5.3nm,1.0s | | | | | | |
| **BIRD** | **Birdtown, Kers** | **27.71** | **48** | P | **P** | **13 36 02.9** | **+0.2** |
| **YBH** | **Yreka Blue Hor** | **28.38** | **331** | LR | LR | 13 46 59.4 | |
| | comp=Z,57nm,19.6s,baz=184,slow=35 | | | | | | |
| **NEW** | **Newport** | **32.10** | **345** | LR | LR | 13 48 42.3 | |
| | comp=Z,32nm,18.1s,baz=186,slow=34 | | | | | | |
| **ULM** | **Lac du Bonnet** | **33.36** | **11** | LR | LR | 13 50 48.9 | |
| | comp=Z,51nm,19.8s,baz=207,slow=36 | | | | | | |
| **SADO** | **Sadowa** | **34.68** | **33** | LR | LR | 13 51 38.6 | |
| | comp=Z,37nm,20.2s,baz=337,slow=37 | | | | | | |
| **ATAH** | **Atahualpa** | **36.05** | **131** | LR | LR | 13 48 14.1 | |
| | comp=Z,52nm,21.3s,baz=304,slow=31 | | | | | | |
| **BAUV** | **El Baul** | **36.98** | **99** | P | **P** | **13 37 22.0** | **-2.1** |
| **BBB** | **Bella Bella** | **38.97** | **337** | LR | LR | 13 53 32.1 | |
| | comp=Z,36nm,19.4s,baz=93,slow=35 | | | | | | |
| **NNA** | **Nana** | **40.53** | **135** | LR | LR | 13 50 59.3 | |
| | comp=Z,50nm,20.4s,baz=282,slow=31 | | | | | | |
| **MAGL** | **Barre de l'ile** | **41.87** | **86** | P | **P** | **13 38 03.1** | **-1.8** |
| **DLBC** | **Dease Lake** | **44.70** | **342** | LR | LR | 13 56 56.0 | |
| | comp=Z,64nm,20.4s,baz=125,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **49.59** | **131** | LR | LR | 13 57 52.2 | |
| | comp=Z,28nm,18.8s,baz=299,slow=34 | | | | | | |
| **FRB** | **Frobisher Bay** | **52.37** | **20** | LR | LR | 14 02 11.1 | |
| | comp=Z,64nm,18.1s,baz=238,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **54.79** | **340** | P | **P** | **13 39 43.4** | **-0.6** |
| | comp=Z,0.7nm,1.0s,baz=147,slow=7.5,SNR=5.3 | | | | | | |
| | comp=Z,0.7nm,1.0s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **60.34** | **22** | LR | LR | 14 07 17.7 | |
| | comp=Z,38nm,20.5s,baz=270,slow=37 | | | | | | |
| **BORG** | **Borgarnes** | **71.53** | **27** | LR | LR | 14 11 53.1 | |
| | comp=Z,35nm,18.9s,baz=303,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.69** | **26** | LR | LR | 14 21 38.4 | |
| | comp=Z,13nm,21.7s,baz=35,slow=35 | | | | | | |

*IDC **23** 14:06:38.8±1.2, 26˚.57S×175˚.78W, h0ᵏᵐ, mb3.7/4, mbtmp3.9/6, ML4.0/2, MS3.0/1, Error ellipse: s-maj=35.0km s-min=26.0km az=106.0*
**ISC 23 14:06:40.7**±1.1, **26°.7S**±0˚.1×**175°.8W**±0˚.2, **h10ᵏᵐ, n11,**
σ1ᵍ85/11, **mb3.8**/4, **South of Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **3.10** | **216** | Pn | **Pn** | **14 07 31.6** | **+1.9** |
| | 59nm,0.3s,baz=52,slow=19,SNR=1.7 | | | | | | |
| RAO | | | | Sn | **Sb** | **14 08 14.1** | **+0.3** |
| | 146nm,0.3s,baz=76,slow=22,SNR=3.5 | | | | | | |
| | 191nm,0.4s | | | | | | |
| **URZ** | **Urewera** | **12.92** | **206** | Pn | **Pn** | **14 09 45.6** | **+1.2** |
| | 0.2nm,0.3s,baz=326,slow=22,SNR=1.6 | | | | | | |
| URZ | | | | Sn | **Sn** | **14 12 04.2** | **-4.1** |
| | 0.9nm,0.3s,baz=111,slow=21,SNR=10.0 | | | | | | |
| | 7.6nm,0.9s | | | | | | |
| **RAR** | **Rarotonga** | **15.68** | **73** | Pn | Pn | 14 10 07.4 | -14 |
| | 0.6nm,0.3s,baz=248,slow=8.3,SNR=8.4 | | | | | | |
| RAR | | | | Sn | Sn | 14 12 40.6 | -35 |
| | 0.5nm,0.3s,baz=261,slow=14,SNR=1.1 | | | | | | |
| **PPT** | **Papeete** | **25.94** | **75** | LR | LR | 14 18 53.0 | |
| | comp=Z,39nm,21.4s,baz=246,slow=28 | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **262** | P | **P** | **14 14 59.5** | **+0.2** |
| | 0.4nm,0.5s,baz=96,slow=8.3,SNR=13 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.01** | **267** | P | **P** | **14 15 04.3** | **-0.4** |
| | 0.3nm,0.4s,baz=105,slow=7.9,SNR=4.9 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **63.35** | **180** | P | **P** | **14 17 10.9** | **+0.9** |
| | 1.3nm,0.9s,baz=13,slow=0.7,SNR=9.9 | | | | | | |
| | 1.3nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **81.73** | **178** | P | **P** | **14 18 59.0** | **-0.3** |
| | 1.7nm,1.2s,baz=204,slow=10.0,SNR=2.4 | | | | | | |
| | 1.7nm,1.2s | | | | | | |
| **NB2** | **NORSAR Subarra** | **145.38** | **354** | PKP | **PKPbc** | **14 26 16.8** | **-1.5** |
| | comp=Z,4.2nm,0.8s,baz=5.8,slow=2.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **145.38** | **354** | PKPbc | **PKPbc** | **14 26 16.9** | **-1.3** |
| | comp=Z,2.7nm,0.8s,baz=5.4,slow=2.4,SNR=9.9 | | | | | | |
| **HFS** | **Hagfors** | **145.98** | **351** | PKPbc | **PKPdf** | **14 26 19.0** | **-0.4** |
| | comp=Z,1.5nm,0.5s,baz=101,slow=4.6,SNR=11 | | | | | | |

*NEIC **23** 14:11:52.3±1.2, 17˚.6S±0˚.1×177˚.9W±0˚.1, h549ᵏᵐ±8ᵏᵐ, mb4.2/32, Error ellipse: s-maj=20.2km s-min=17.4km az=210.0*
*IDC **23** 14:11:54.2±2.8, 17˚.79S×178˚.17W, h552ᵏᵐ±29ᵏᵐ, mb3.5/10, mbtmp4.4/11, Error ellipse: s-maj=22.3km s-min=17.6km az=17.0*
**ISC 23 14:11:52.7**±0.7, **17°.6S**±0˚.1×**178°.01W**±0˚.10, **h550ᵏᵐ, n51,**
σ1ᵍ09/54, **mb4.1**/22, **2C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.76** | **267** | P | **P** | **14 13 14.0** | **+1.1** |
| **DZM** | **Mont Dzumac** | **15.29** | **251** | P | **P** | **14 15 06.7** | **+1.5** |
| DZM | | | | IAmb | IAmb | 14 15 07.9 | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.29** | **251** | P | **P** | **14 15 05.9** | **+0.7** |
| | comp=Z,5.0nm,0.7s,baz=61,slow=12,SNR=5.7 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.99** | **257** | P | **P** | **14 15 20.9** | **-0.4** |
| KOUNC | | | | IAmb | IAmb | 14 15 36.9 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.86** | **195** | P | **P** | **14 15 56.9** | **+0.5** |
| TOZ | | | | IAmb | IAmb | 14 15 58.0 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **21.04** | **191** | P | **P** | **14 15 56.0** | **-1.9** |
| | comp=Z,7.2nm,0.4s,baz=339,slow=5.3,SNR=12 | | | | | | |
| | comp=Z,7.2nm,0.4s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.65** | **192** | P | **P** | **14 16 18.4** | **-2.9** |
| **NNZ** | **Nelson** | **24.69** | **196** | P | **P** | **14 16 27.9** | **-2.6** |
| **THZ** | **Tophouse** | **25.32** | **196** | P | **P** | **14 16 35.0** | **-1.1** |
| THZ | | | | IAmb | IAmb | 14 16 54.1 | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.44** | **196** | P | **P** | **14 16 43.7** | **-2.2** |
| **RPZ** | **Rata Peaks** | **27.64** | **197** | P | **P** | **14 16 54.8** | **-1.6** |
| | comp=Z,12nm,1.0s,baz=59,slow=16,SNR=2.6 | | | | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.84** | **199** | P | **P** | **14 16 57.2** | **-0.9** |
| **WKZ** | **Wanaka** | **29.26** | **199** | P | **P** | **14 17 09.3** | **-1.2** |
| **MLZ** | **Mavora Lakes** | **30.03** | **200** | P | **P** | **14 17 17.3** | **+0.1** |
| MLZ | | | | IAmb | IAmb | 14 17 18.1 | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.55** | **199** | P | **P** | **14 17 21.2** | **-0.4** |
| WHZ | | | | IAmb | IAmb | 14 17 25.1 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **34.20** | **232** | P | **P** | **14 17 52.5** | **-0.3** |
| CAN | | | | IAmb | IAmb | 14 17 53.6 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **COEN** | **Coen** | **37.48** | **270** | P | **P** | **14 18 20.8** | **+0.7** |
| COEN | | | | IAmb | IAmb | 14 18 40.0 | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.66** | **231** | P | **P** | **14 18 20.9** | **-0.5** |
| TOO | | | | IAmb | IAmb | 14 18 22.9 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.81** | **82** | P | **P** | **14 18 20.9** | **-2.0** |
| **STKA** | **Stephens Creek** | **39.12** | **241** | P | **P** | **14 18 33.7** | **+0.5** |
| **STKA** | **Stephens Creek** | **39.12** | **241** | P | **P** | **14 18 33.5** | **+0.3** |
| | comp=Z,3.4nm,0.4s,baz=94,slow=10,SNR=14 | | | | | | |
| | comp=Z,3.4nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.89** | **241** | P | **P** | **14 19 11.0** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 14 19 11.4 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.87** | **259** | P | **P** | **14 19 18.2** | **-0.5** |
| **WB0** | **Warramunga Arr** | **45.03** | **259** | P | **P** | **14 19 19.1** | **-0.8** |
| WB0 | | | | PcP | **PcP** | **14 20 48.0** | **-1.1** |
| **WB2** | **Warramunga Arr** | **45.05** | **259** | P | **P** | **14 19 19.4** | **-0.6** |
| **WRAB** | **Tennant Creek** | **45.05** | **259** | P | **P** | **14 19 19.4** | **-0.7** |
| **WRA** | **Warramunga Arr** | **45.06** | **259** | P | **P** | **14 19 19.5** | **-0.7** |
| | comp=Z,1.0nm,0.2s,baz=94,slow=7.1,SNR=67 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 20 49.9** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=88,slow=3.5,SNR=2.3 | | | | | | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **AS31** | **Alice Springs** | **45.24** | **254** | P | **P** | **14 19 21.5** | **0.0** |
| AS31 | | | | IAmb | IAmb | 14 19 22.0 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **45.24** | **254** | P | **P** | **14 19 20.9** | **-0.6** |
| **ASAR** | **Alice Springs** | **45.24** | **254** | P | **P** | **14 19 21.3** | **-0.2** |
| | comp=Z,14nm,0.5s,baz=89,slow=7.6,SNR=463 | | | | | | |
| ASAR | | | | S | **S** | **14 25 19.9** | **-2.1** |
| | comp=Z,0.5nm,0.7s,baz=88,slow=16,SNR=4.9 | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **49.19** | **268** | P | **P** | **14 19 50.3** | **-0.9** |
| MTN | | | | IAmb | IAmb | 14 20 01.1 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **50.48** | **244** | P | **P** | **14 19 59.7** | **-0.8** |
| **KNRA** | **Kununurra** | **50.90** | **264** | P | **P** | **14 20 03.2** | **-0.5** |
| KNRA | | | | IAmb | IAmb | 14 20 04.2 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.45** | **260** | P | **P** | **14 20 21.1** | **-0.9** |
| **NWAO** | **Narrogin (SRO)** | **59.69** | **242** | P | **P** | **14 21 04.7** | **0.0** |
| NWAO | | | | IAmb | IAmb | 14 21 05.8 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.69** | **242** | P | **P** | **14 21 05.0** | **+0.3** |
| | comp=Z,3.9nm,0.6s,baz=115,slow=5.1,SNR=1.6 | | | | | | |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **SBA** | **Scott Base** | **60.76** | **184** | P | **P** | **14 21 13.2** | **+2.3** |
| **CASY** | **Casey** | **66.59** | **205** | P | **P** | **14 21 48.2** | **0.0** |
| CASY | | | | IAmb | IAmb | 14 21 50.2 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **UGM** | **Wanagama** | **70.03** | **268** | P | **P** | **14 22 09.3** | **-0.8** |
| **QSPA** | **South Pole Qui** | **72.47** | **180** | P | **P** | **14 22 23.9** | **+0.4** |
| QSPA | | | | IAmb | IAmb | 14 22 25.7 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.47** | **180** | P | **P** | **14 22 24.5** | **+1.0** |
| | comp=Z,4.3nm,0.8s,baz=321,slow=0.5,SNR=35 | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **82.44** | **173** | P | **P** | **14 23 17.7** | **+0.6** |
| **MAW** | **Mawson** | **84.29** | **200** | P | **P** | **14 23 27.0** | **+0.6** |
| | comp=Z,1.9nm,0.6s,baz=180,slow=2.0,SNR=4.4 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.49** | **13** | P | **P** | **14 23 33.2** | **+1.0** |
| | comp=Z,0.2nm,0.4s,baz=217,slow=5.4,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **178** | | **P** | **14 23 57.8** | **+0.2** |
| **SNAA** | **Sanae** | **90.91** | **178** | ⇑P | **P** | **14 23 57.6** | **0.0** |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **178** | P | **P** | **14 23 57.8** | **+0.2** |
| | comp=Z,0.9nm,0.9s,baz=189,slow=9.3,SNR=6.6 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.04** | **176** | ⇑P | **P** | **14 23 58.9** | **+0.7** |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.82** | **315** | PKP | **PKPab** | **14 30 29.4** | **+0.5** |
| | comp=Z,0.7nm,0.6s,baz=136,slow=4.9,SNR=4.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.28** | **304** | PKPbc | **PKPbc** | **14 30 32.7** | **+0.2** |
| | comp=Z,0.9nm,0.4s,baz=56,slow=4.4,SNR=3.5 | | | | | | |
| **GERES** | **GERESS Array B** | **147.40** | **346** | PKPbc | **PKiKP** | **14 30 36.2** | **-0.4** |
| |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KSU1 | | | | | Sn | | 14 43 32.2 | +0.7 |
| **KAN12** | **Harper NE Stat** | **2.14** | **158** | Pn | Pn | | 14 43 10.4 | -0.7 |
| **KAN08** | **Anthony NE Sta** | **2.21** | **158** | Pn | Pn | | 14 43 10.9 | -1.1 |
| **BGNE** | **Belgrade** | **2.22** | **17** | Pn | Pn | | 14 43 13.4 | +1.2 |
| **KAN01** | **Argonia South** | **2.35** | **155** | Pn | Pn | | 14 43 13.4 | -0.5 |
| **KAN09** | **Caldwell North** | **2.41** | **152** | Pn | Pn | | 14 43 14.4 | -0.4 |
| **KAN17** | **Caldwell West** | **2.45** | **156** | Pn | Pn | | 14 43 14.7 | -0.6 |
| **KAN14** | **Manchester OK** | **2.47** | **160** | Pn | Pn | | 14 43 14.9 | -0.7 |
| **OK032** | **Salt Plains WL** | **2.56** | **165** | Pn | Pn | | 14 43 16.6 | -0.2 |
| **KAN13** | **South Haven SW** | **2.57** | **151** | | Pn | | 14 43 16.6 | -0.5 |
| **OK035** | **E0210 Rd and N** | **2.59** | **175** | Pn | Pn | | 14 43 16.7 | -0.5 |
| OK035 | | | | IAmb_Lg | | | 14 44 01.4 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **GC02** | **Grant County #** | **2.60** | **159** | Pn | Pn | | 14 43 17.6 | +0.2 |
| **NOKA** | **Waynoka** | **2.65** | **179** | Pn | Pn | | 14 43 17.6 | -0.5 |
| **OK038** | **West end E0370** | **2.81** | **176** | Pn | Pn | | 14 43 19.8 | -0.6 |
| **OGNE** | **Ogallala** | **2.85** | **307** | Pn | Pn | | 14 43 20.5 | -0.4 |
| **BLOK** | **Blackwell** | **2.90** | **150** | Pn | Pn | | 14 43 21.0 | -0.5 |
| **CROK** | **Carrier** | **2.90** | **163** | Pn | Pn | | 14 43 21.1 | -0.3 |
| **N35A** | **Tabor** | **3.03** | **58** | | Pn | | 14 43 24.5 | +1.2 |
| N35A | | | | IAmb_Lg | | | 14 44 14.4 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **T35A** | **Sooner Cattle** | **3.08** | **139** | Pn | Pn | | 14 43 23.4 | -0.6 |
| **ELIS** | **Ellis County** | **3.23** | **186** | Pn | Pn | | 14 43 25.4 | -0.7 |
| **OK051** | **E0350 and S346** | **3.27** | **148** | Pn | Pn | | 14 43 25.6 | -0.9 |
| **OK048** | **Pawnee Station** | **3.30** | **150** | Pn | Pn | | 14 43 26.8 | -0.2 |
| **L34A** | **Svendsen Farm,** | **3.35** | **36** | Pn | Pn | | 14 43 27.2 | -0.4 |
| **K30B** | **Basset** | **3.41** | **353** | Pn | Pn | | 14 43 28.1 | -0.5 |
| **QUOK** | **Quay** | **3.61** | **149** | Pn | Pn | | 14 43 29.0 | -2.3 |
| **CSTR** | **Hydro, Custer** | **3.64** | **176** | Pn | Pn | | 14 43 30.1 | -1.7 |
| **OK029** | **Liberty Lake** | **3.70** | **160** | Pn | Pn | | 14 43 30.4 | -2.0 |
| **RTBA** | **Rita Blanca** | **4.09** | **227** | Pn | Pn | | 14 43 36.4 | -1.7 |
| **P38A** | **Dawn** | **4.26** | **84** | Pn | Pn | | 14 43 38.3 | -1.9 |
| P38A | | | | IAmb_Lg | | | 14 44 52.3 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **SMWD** | **Samnorwood** | **4.29** | **194** | IAmb_Lg | | | 14 44 55.7 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **RLO** | **Rose Lookout** | **4.44** | **133** | Pn | Pn | | 14 43 41.8 | -0.9 |
| **WMOK** | **Wichita Mounta** | **4.54** | **178** | Pn | Pn | | 14 43 44.1 | -0.1 |
| WMOK | | | | IAmb_Lg | | | 14 45 07.0 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **S39A** | **Bolivar** | **4.74** | **108** | Pn | Pn | | 14 43 47.1 | +0.2 |
| S39A | | | | IAmb_Lg | | | 14 45 05.1 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **T25A** | **Trinidad** | **4.76** | **245** | Pn | Pn | | 14 43 46.2 | -1.1 |
| **Q24A** | **Divide** | **4.78** | **268** | Pn | Pn | | 14 43 45.5 | -2.2 |
| Q24A | | | | IAmb_Lg | | | 14 45 18.5 | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **4.79** | **21** | Pn | Pn | | 14 43 47.8 | +0.2 |
| **AMTX** | **Amarillo** | **4.88** | **207** | Pn | Pn | | 14 43 45.9 | -3.0 |
| **HHAR** | **Hobbs** | **5.01** | **125** | Pn | Pn | | 14 43 49.5 | -1.1 |
| **SDCO** | **Great Sand Dun** | **5.32** | **255** | | Pn | | 14 43 53.0 | -1.9 |
| SDCO | | | | IAmb_Lg | | | 14 45 19.8 | |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| **PHWY** | **Pilot Hill** | **5.32** | **294** | Pn | Pn | | 14 43 51.9 | -3.1 |
| **R40A** | **Maddies Statio** | **5.36** | **99** | Pn | Pn | | 14 43 54.5 | -0.9 |
| R40A | | | | IAmb_Lg | | | 14 45 30.8 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **P40A** | **Paris** | **5.40** | **85** | Pn | Pn | | 14 43 53.7 | -2.2 |
| **N23A** | **Red Feather La** | **5.55** | **289** | Pn | Pn | | 14 43 57.5 | -0.7 |
| N23A | | | | IAmb_Lg | | | 14 45 43.0 | |
| | comp=Z,9.6nm,0.7s | | | | | | | |
| **MGMO** | **Mountain Grove** | **5.72** | **110** | Pn | Pn | | 14 43 58.3 | -2.0 |
| **DKNS** | **Dickens** | **5.82** | **196** | IAmb_Lg | | | 14 45 50.8 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **MSTX** | **Muleshoe** | **6.11** | **211** | IAmb_Lg | | | 14 45 57.7 | |
| | comp=Z,7.9nm,1.1s | | | | | | | |
| **CCM** | **Cathedral Cave** | **6.20** | **99** | IAmb_Lg | | | 14 45 56.6 | |
| | comp=Z,8.7nm,0.7s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **6.32** | **258** | Pn | Pn | | 14 44 06.8 | -2.0 |
| **T42A** | **Van Buren** | **6.64** | **107** | IAmb_Lg | | | 14 46 10.5 | |
| | comp=Z,7.9nm,0.8s | | | | | | | |

*IDC **23** 14:42:31.0±0.9, 59.°70S×26.°25W, h0km, mb4.1/5, mbtmp4.1/6, ML4.5/1, MS3.4/2, Error ellipse: s-maj=40.3km s-min=23.2km az=70.0*

**ISC 23 14:42:36.2±0.8, 59.°8S±0.°2×25.°9W±0.°3, h35km, n22, σ3°46/16, mb3.8/5, 7C-1D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNA1** | **Neumayer--Stat** | **13.05** | **153** | ⇑P | **Pn** | **14 45 42.4** | **+3.7** |
| | comp=Z,24nm,0.2s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **13.20** | **157** | ⇑P | **Pn** | **14 45 43.7** | **+2.8** |
| | comp=Z,15nm,0.3s | | | | | | |
| VNA3 | | | | ⇑S | Sn | 14 47 57.0 | -9.1 |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **13.45** | **153** | ⇑P | **Pn** | **14 45 47.0** | **+2.8** |
| | comp=Z,1.8nm,0.2s,baz=309,slow=16 | | | | | | |
| **SNAA** | **Sanae** | **15.03** | **151** | ⇑P | **Pn** | **14 46 08.4** | **+2.7** |
| | comp=Z,77nm,0.4s | | | | | | |
| SNAA | | | | ⇑S | **Sn** | **14 48 45.0** | **-5.7** |
| | comp=Z,47nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **15.03** | **151** | Pn | **Pn** | **14 46 08.4** | **+2.7** |
| | comp=Z,2.0nm,0.3s,baz=307,slow=14,SNR=88 | | | | | | |
| SNAA | | | | Sn | **Sn** | **14 48 44.5** | **-6.2** |
| | baz=18,slow=17,SNR=1.2 | | | | | | |
| | comp=Z,5.2nm,0.4s | | | | | | |
| **TROLL** | **Troll, Antarti** | **16.58** | **149** | ⇑P | **P** | **14 46 29.9** | **+2.0** |
| | comp=Z,68nm,0.2s | | | | | | |
| TROLL | | | | ⇓S | **Sn** | **14 49 23.6** | **-4.9** |
| | comp=Z,8.9nm,0.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **30.39** | **180** | P | **P** | **14 48 46.8** | **+2.1** |
| | comp=Z,1.1nm,0.7s,baz=203,slow=4.7,SNR=12 | | | | | | |
| QSPA | | | | LR | LR | 15 01 33.4 | |
| | comp=Z,40nm,18.1s,baz=7.0,slow=37 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **CPUP** | **Villa Florida** | **39.87** | **313** | P | **P** | **14 50 04.7** | **-1.6** |
| | comp=Z,1.0nm,0.5s,baz=123,slow=5.7,SNR=3.7 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **45.50** | **110** | T | T | 15 41 16.7 | |
| | baz=224,slow=75,SNR=21 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **45.51** | **110** | T | T | 15 41 22.2 | |
| | baz=224,slow=75,SNR=9.2 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **45.52** | **110** | T | T | 15 41 22.7 | |
| | baz=224,slow=75,SNR=14 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **51.48** | **14** | T | T | 15 47 17.9 | |
| | baz=181 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **51.49** | **14** | T | T | 15 47 18.2 | |
| | baz=39 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **52.60** | **14** | T | T | 15 48 38.3 | |
| | baz=185 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **52.60** | **14** | T | T | 15 48 41.0 | |
| | baz=185 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **52.62** | **14** | T | T | 15 48 40.7 | |
| | baz=185 | | | | | | |
| **LPAZ** | **La Paz** | **53.15** | **306** | P | **P** | **14 51 49.8** | **-1.3** |
| | comp=Z,1.4nm,0.5s,baz=170,slow=4.6,SNR=5.1 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.07** | **28** | P | **P** | **14 54 20.5** | **+0.7** |
| | comp=Z,1.4nm,0.3s,baz=200,slow=6.0,SNR=37 | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **SDV** | **Santo Domingo** | **77.17** | **315** | LR | LR | 15 30 53.6 | |
| | comp=Z,30nm,18.7s,baz=42,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **95.16** | **161** | P | **P** | **14 55 56.0** | **+0.1** |
| | comp=Z,0.2nm,0.6s,baz=184,slow=4.2,SNR=5.2 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **150.10** | **92** | PKPbc | **PKPbc** | **15 02 21.9** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=228,slow=0.9,SNR=3.4 | | | | | | |
| **ILAR** | **Eielson Array** | **153.03** | **306** | PKPbc | **PKPbc** | **15 02 26.6** | **-1.6** |
| | comp=Z,0.2nm,0.4s,baz=143,slow=2.2,SNR=4.6 | | | | | | |

*IDC **23** 14:44:23.9±3.7, 16.°52S×179.°40W, h481km±37km, mb3.0/7, mbtmp3.9/7, Error ellipse: s-maj=104.9km s-min=17.5km az=149.0*

**ISC 23 14:44:25.6±1.9, 16.°5S±0.°7×179.°5W±0.°5, h500km, n7, σ0°72/8, mb3.4/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **38.45** | **239** | P | **P** | **14 51 03.8** | **-0.3** |
| | 2.0nm,0.7s,baz=120,slow=8.6,SNR=3.5 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.92** | **258** | P | **P** | **14 51 47.5** | **-0.2** |
| | 0.4nm,0.6s,baz=89,slow=6.0,SNR=12 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.23** | **253** | P | **P** | **14 51 50.1** | **0.0** |
| | 2.2nm,0.8s,baz=87,slow=7.8,SNR=50 | | | | | | |
| ASAR | | | | ScP | **ScP** | **14 56 29.7** | **+1.5** |
| | 0.3nm,0.8s,baz=91,slow=4.5,SNR=2.0 | | | | | | |
| | 2.2nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.12** | **44** | P | **P** | **14 55 38.2** | **0.0** |
| | 0.5nm,0.5s,baz=217,slow=7.9,SNR=5.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ELK** | **Elko** | **82.33** | **44** | P | **P** | **14 55 54.9** | **0.0** |
| | 0.4nm,0.3s,baz=291,slow=5.9,SNR=3.7 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **84.76** | **13** | P | **P** | **14 56 06.1** | **0.0** |
| | 0.3nm,0.5s,baz=230,slow=5.9,SNR=4.7 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.03** | **44** | P | **P** | **14 56 17.4** | **-0.4** |
| | 0.6nm,0.6s,baz=227,slow=3.2,SNR=7.0 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

**DJA 23 14:46:56.0±0.6, 3.°N±7.°×12.°8E±.°, h80km±10km, M3.8/6, mb4.1/3, mB4.3/2, MLv3.6/6, Mw(mB)3.5/2, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **2.09** | **192** | P | Pn | 14 47 29.3 | +0.2 |
| **SWI** | **Sorong** | **5.05** | **137** | P | Pn | 14 48 08.0 | -1.3 |
| | 8.1nm,0.5s,538nm0.1nm | | | | | | |
| **GTOI** | **Gorontalo** | **5.25** | **246** | P | Pn | 14 48 13.1 | +1.1 |
| | 14nm,0.5s,226nm0.1nm | | | | | | |
| **MRSI** | **Marisa** | **6.30** | **248** | P | Pn | 14 48 26.5 | +0.2 |

*IDC **23** 15:10:46.7±1.6, 1.°31N×120.°56E, h0km, mb3.4/4, mbtmp3.4/4, Error ellipse: s-maj=243.4km s-min=28.0km az=60.0*

*DJA **23** 15:10:47.4±1.5, 2.°N±13.°×12.°2E±.°, h10km, M3.2/6, MLv3.2/6*

**ISC 23 15:10:51.5±1.4, 2.°0N±0.°1×121.°54E±0.°10, h35km, n8, σ0°88/9, mb3.2/4, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **1.52** | **165** | P | **Pn** | **15 11 16.5** | **+0.3** |
| MRSI | | | | S | **Sn** | **15 11 36.1** | **+1.3** |
| **MPSI** | **Mapaga** | **2.30** | **226** | P | **Pn** | **15 11 27.4** | **+0.5** |
| MPSI | | | | S | **Sn** | **15 11 53.7** | **-0.3** |
| **KMSI** | **Cibinong** | **2.80** | **119** | P | Pn | 15 11 29.2 | -4.6 |
| **LUWI** | **Luwuk** | **3.22** | **158** | P | **Pn** | **15 11 40.1** | **+0.5** |
| **WRA** | **Warramunga Arr** | **25.12** | **151** | P | **P** | **15 16 13.1** | **-0.3** |
| | 0.3nm,0.6s,baz=324,slow=11,SNR=7.4 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **28.16** | **155** | P | **P** | **15 16 39.9** | **-0.9** |
| | 0.2nm,0.7s,baz=337,slow=9.1,SNR=1.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.65** | **152** | P | **P** | **15 18 10.9** | **-0.9** |
| | 1.9nm,0.9s,baz=342,slow=9.6,SNR=2.8 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **56.20** | **328** | P | **P** | **15 20 28.9** | **+0.8** |
| | 0.2nm,0.5s,baz=149,slow=6.2,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*KRNET **23** 15:16:11.2±0.1, 40.°73N×77.°52E, h16km, mb2.8*
*SOME **23** 15:16:12.1, 40.°80N×77.°60E, h10km*
*NNC **23** 15:16:13.0±0.8, 40.°83N×77.°60E, h0km, mb3.7, mpv3.4, Error ellipse: s-maj=5.4km s-min=3.6km az=172.0*

**ISC 23 15:16:11.7±1.9, 40.°73N±0.°08×77.°40E±0.°03, h10km, n54, σ1°23/81, 15C-12D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NRN** | **Naryn** | **1.27** | **304** | ⇑*i*P | **Pg** | **15 16 36.9** | **+0.7** |
| | baz=1.0 | | | | | | |
| NRN | | | | ⇑*i*S | **Sn** | **15 16 55.8** | **+2.6** |
| | baz=1.0 | | | | | | |
| **KDJ** | **Kajisay** | **1.41** | **353** | ⇓*i*P | **Pg** | **15 16 38.0** | **-0.8** |
| | baz=50 | | | | | | |
| KDJ | | | | ⇓*i*S | **Sg** | **15 16 57.4** | **+0.3** |
| | baz=50 | | | | | | |
| **ULHL** | **Ulahol** | **1.75** | **330** | *i* P | **Pg** | **15 16 44.7** | **-0.5** |
| | baz=28 | | | | | | |
| ULHL | | | | *i* S | **Sg** | **15 17 09.2** | **+1.3** |
| | baz=28 | | | | | | |
| **PRZ** | **Przheval'sk** | **1.91** | **23** | ⇑*e*P | **Pb** | **15 16 46.5** | **-0.2** |
| | baz=20 | | | | | | |
| PRZ | | | | ⇑*e*S | **Sb** | **15 17 11.8** | **+1.2** |
| | baz=20 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.07** | **329** | ⇑*i*P | **Pg** | **15 16 50.1** | **-1.4** |
| | baz=27 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sg** | **15 17 18.4** | **+0.1** |
| | baz=27 | | | | | | |
| **TNSS** | **Tian-Shan** | **2.33** | **352** | *e*P | **Pb** | **15 16 54.5** | **+0.4** |
| | 15nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **15 17 24.9** | **+1.9** |
| | 36nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.33** | **352** | Pg | **Pb** | **15 16 54.5** | **+0.4** |
| | 15nm,0.2s | | | | | | |
| TNSS | | | | Lg | Lg | 15 17 24.9 | |
| | 36nm,0.6s | | | | | | |
| **IZV** | **Izvestkoviy** | **2.38** | **346** | *e*P | **Pg** | **15 16 56.3** | **-1.0** |
| | 13nm,0.2s | | | | | | |
| IZV | | | | *e*S | **Sg** | **15 17 28.1** | **-0.1** |
| | 24nm,0.4s | | | | | | |
| **IZV** | **Izvestkoviy** | **2.38** | **346** | Pg | **Pg** | **15 16 56.3** | **-1.0** |
| IZV | | | | Lg | Lg | 15 17 28.1 | |
| **SATY** | **Saty** | **2.45** | **17** | *e*P | **Pb** | **15 16 55.8** | **-0.1** |
| | 4.7nm,0.3s | | | | | | |
| SATY | | | | *e*S | **Sb** | **15 17 27.1** | **+1.0** |
| | 23nm,0.5s | | | | | | |
| **SATY** | **Saty** | **2.45** | **17** | Pg | **Pb** | **15 16 55.7** | **-0.1** |
| | 4.7nm,0.3s | | | | | | |
| SATY | | | | Lg | Lg | 15 17 27.1 | |
| | 23nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **2.45** | **354** | *e*P | **Pb** | **15 16 56.1** | **+0.3** |
| | 24nm,0.4s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **15 17 27.7** | **+1.5** |
| | 41nm,0.6s | | | | | | |
| **MDOK** | **Medeo** | **2.45** | **354** | Pg | **Pb** | **15 16 56.1** | **+0.3** |
| | 24nm,0.4s | | | | | | |
| MDOK | | | | ⇑Pg | **Pg** | **15 16 56.5** | **-2.1** |
| | 12nm,0.4s | | | | | | |
| MDOK | | | | Lg | Lg | 15 17 27.7 | |
| | 42nm,0.9s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 15 17 30.2 | |
| | 36nm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **2.51** | **343** | *e*P | **Pg** | **15 16 58.3** | **-1.4** |
| | 30nm,0.3s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **15 17 31.4** | **-0.8** |
| | 16nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **2.51** | **343** | Pg | **Pg** | **15 16 58.3** | **-1.4** |
| | 30nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 15 17 31.2 | |
| | 16nm,0.5s | | | | | | |
| **KNDC** | **Almaty** | **2.51** | **353** | ⇑Pg | **Pg** | **15 16 58.7** | **-1.0** |
| | 17nm,0.4s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 15 17 32.6 | |
| | 14nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.51** | **355** | *e*P | **Pg** | **15 16 58.0** | **-1.8** |
| | 18nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **15 17 31.1** | **-1.3** |
| | 69nm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **2.51** | **355** | Pg | **Pg** | **15 16 58.0** | **-1.8** |
| | 18nm,0.4s | | | | | | |
| KOTS | | | | Lg | Lg | 15 17 30.8 | |
| | 70nm,0.3s | | | | | | |
| **KST** | **Kastek** | **2.55** | **336** | *e*P | **Pg** | **15 16 59.7** | **-0.9** |
| | 14nm,0.3s | | | | | | |
| KST | | | | *e*S | **Sg** | **15 17 33.8** | **+0.2** |
| | 16nm,0.3s | | | | | | |
| **KST** | **Kastek** | **2.55** | **336** | Pg | **Pg** | **15 16 59.6** | **-0.9** |
| | 14nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 15 17 34.0 | |
| | 16nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **2.56** | **17** | *e*P | **Pb** | **15 16 57.2** | **-0.5** |
| | 6.0nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **15 17 29.4** | **+0.2** |
| | 27nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.56** | **17** | Pg | **Pb** | **15 16 56.1** | **-1.6** |
| | 6.3nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 15 17 28.0 | |
| | 43nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.57** | **329** | ⇑Pg | **Pg** | **15 16 59.7** | **-1.3** |
| | 2.2nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 15 17 35.6 | |
| | 5.1nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.57** | **329** | ⇓*e*P | **Pb** | **15 16 57.0** | **-1.0** |
| | baz=27 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sb** | **15 17 30.4** | **+0.6** |
| | baz=27 | | | | | | |
| **ARLS** | **Aral** | **2.58** | **297** | ⇓*e*P | **Pb** | **15 16 57.3** | **-0.9** |
| | baz=96 | | | | | | |
| ARLS | | | | ⇓*e*S | **Sb** | **15 17 30.6** | **+0.6** |
| | baz=96 | | | | | | |
| **KBK** | **Karagaybulak** | **2.66** | **317** | ⇑*i*P | **Pb** | **15 16 58.4** | **-1.2** |
| | baz=16 | | | | | | |
| KBK | | | | ⇑*i*S | **Sb** | **15 17 32.8** | **+0.4** |
| | baz=16 | | | | | | |
| **UZB** | **Uzynbulak** | **2.70** | **26** | *e*P | **Pb** | **15 16 59.9** | **-0.3** |
| | 6.2nm,0.5s | | | | | | |
| UZB | | | | *e*S | **Sb** | **15 17 34.2** | **+0.7** |
| | 12nm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **2.70** | **26** | Pg | **Pb** | **15 16 58.6** | **-1.6** |
| | 6.2nm,0.7s | | | | | | |
| UZB | | | | Lg | Lg | 15 17 31.7 | |
| | 12nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **2.79** | **335** | *e*P | **Pg** | **15 17 03.5** | **-1.6** |
| | 5.8nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sg** | **15 17 40.5** | **-0.8** |
| | 8.4nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **2.79** | **335** | Pg | **Pg** | **15 17 03.5** | **-1.6** |
| | 5.8nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 15 17 39.9 | |
| | 8.4nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **2.82** | **11** | *e*P | **Pb** | **15 17 01.2** | **-0.9** |
| | 4.8nm,0.5s | | | | | | |
| KURS | | | | *e*S | **Sb** | **15 17 36.5** | **-0.2** |
| | 9.0nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **2.82** | **11** | Pg | **Pb** | **15 17 01.2** | **-0.9** |
| | 4.8nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 15 17 36.5 | |
| | 9.0nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.87** | **32** | *e*P | **Pg** | **15 17 05.7** | **-1.0** |
| | 5.7nm,0.2s | | | | | | |
| SHLS | | | | *e*S | **Sg** | **15 17 44.1** | **+0.2** |
| | 49nm,0.7s | | | | | | |
| **SHLS** | **Shalkode** | **2.87** | **32** | Pg | **Pg** | **15 17 05.7** | **-1.0** |
| | 5.7nm,0.2s | | | | | | |
| SHLS | | | | Lg | Lg | 15 17 43.8 | |
| | 25nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **2.90** | **312** | ⇑Pg | **Pg** | **15 17 05.6** | **-1.6** |
| | 2.7nm,0.4s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 15 17 45.8 | |
| | 24nm,0.7s | | | | | | |
| **KPKS** | **Kokpek** | **2.90** | **19** | *e*P | **Pb** | **15 17 03.3** | **-0.2** |
| | 4.6nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **15 17 40.0** | **+1.0** |
| | 22nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.90** | **19** | Pg | **Pb** | **15 17 03.1** | **-0.4** |
| | 3.2nm,0.3s | | | | | | |
| KPKS | | | | Lg | Lg | 15 17 40.0 | |
| | 17nm,0.6s | | | | | | |
| **CHMS** | **Chumysh** | **3.01** | **320** | ⇓Pg | **Pg** | **15 17 08.0** | **-1.4** |
| | 5.2nm,0.6s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 15 17 48.3 | |
| | 12nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **3.03** | **30** | ⇑Pg | **Pb** | **15 17 05.6** | **-0.2** |
| | 4.1nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 15 17 44.4 | |
| | 20nm,0.8s | | | | | | |
| **KTBS** | **Karatobe** | **3.03** | **350** | *e*P | **Pg** | **15 17 07.5** | **-2.2** |
| | 6.0nm,0.4s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **15 17 47.2** | **-1.7** |
| | 22nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.03** | **350** | Pg | **Pb** | **15 17 06.7** | **+1.0** |
| | 5.3nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 15 17 45.8 | |
| | 22nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **3.14** | **355** | *e*P | **Pb** | **15 17 08.8** | **+1.3** |
| | 5.4nm,0.2s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **15 17 49.6** | **-2.8** |
| | 20nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **3.14** | **355** | Pg | **Pb** | **15 17 08.8** | **+1.3** |
| | 5.4nm,0.2s | | | | | | |
| CHKK | | | | Lg | Lg | 15 17 49.6 | |
| | 20nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **3.23** | **337** | *e*P | **Pg** | **15 17 11.6** | **-2.0** |
| | 8.4nm,0.3s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **15 17 54.6** | **-0.8** |
| | 7.0nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.23** | **337** | Pg | **Pg** | **15 17 11.6** | **-2.0** |
| | 8.3nm,0.3s | | | | | | |
| KRBS | | | | Lg | Lg | 15 17 54.6 | |
| | 6.9nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **3.46** | **13** | Pg | **Pb** | **15 17 13.9** | **+0.8** |
| | 3.8nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 15 17 57.9 | |
| | 17nm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **3.49** | **38** | *e*P | **Pb** | **15 17 14.0** | **+0.3** |
| | 1.1nm,0.2s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **15 17 58.1** | **+1.9** |
| | 7.6nm,0.5s | | | | | | |
| **KTMS** | **Ketmen** | **3.49** | **38** | Pg | **Pb** | **15 17 14.0** | **+0.3** |
| | 1.1nm,0.2s | | | | | | |
| KTMS | | | | Lg | Lg | 15 17 58.1 | |
| | 7.6nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.50** | **5** | *e*P | **Pb** | **15 17 14.4** | **+0.7** |
| | 1.1nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **15 17 58.9** | **+2.7** |
| | 12nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.50** | **5** | Pg | **Pb** | **15 17 14.4** | **+0.7** |
| | 1.1nm,0.2s | | | | | | |
| ARXS | | | | Lg | Lg | 15 17 58.9 | |
| | 12nm,0.6s | | | | | | |
| **MRKS** | **Merke** | **3.72** | **304** | *e*P | **Pg** | **15 17 21.4** | **-1.5** |
| | 1.8nm,0.3s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **15 18 11.0** | **-0.1** |
| | 4.9nm,0.5s | | | | | | |
| **MRKS** | **Merke** | **3.72** | **304** | Pg | **Pg** | **15 17 21.4** | **-1.5** |
| | 1.8nm,0.3s | | | | | | |
| MRKS | | | | Lg | Lg | 15 18 11.0 | |
| | 4.9nm,0.5s | | | | | | |
| **KNOS** | **Konyrlen** | **3.86** | **19** | Pg | **Pb** | **15 17 21.1** | **+1.2** |
| | 2.7nm,0.7s | | | | | | |
| KNOS | | | | Lg | Lg | 15 18 11.0 | |
| | 2.7nm,0.4s | | | | | | |
| **KK31** | **Karatay Array** | **5.66** | **297** | ⇓Lg | Lg | 15 19 13.3 | |
| | 1.2nm,0.6s,baz=115,slow=30,SNR=3.9 | | | | | | |

*IDC **23** 15:23:17.8±7.2, 18.°13S×178.°13W, h564km±66km, mb3.2/6, mbtmp4.2/7, Error ellipse: s-maj=75.7km s-min=26.4km az=120.0*

*NEIC **23** 15:23:21.8±1.1, 18.°1S±0.°2×178.°4W±0.°1, h591km±10km, mb4.1/14, Error ellipse: s-maj=32.0km s-min=18.7km az=192.0*

**ISC 23 15:23:21.1±0.9, 18.°0S±0.°1×178.°4W±0.°1, h596km±11km, n32, σ0°56/38, mb3.9/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | PcP | PcP | 15 32 11.8 | -0.4 | |
| **ASAR** | **Alice Springs** | **44.78** | **254** | P | P | 15 30 43.6 | +0.3 | |
| | comp=Z,6.5nm,0.6s,baz=88,slow=9.0,SNR=170 | | | | | | | |
| ASAR | | | | PcP | PcP | 15 32 12.3 | 0.0 | |
| | comp=Z,0.5nm,0.4s,baz=102,slow=3.9,SNR=7.7 | | | | | | | |
| | comp=Z,6.5nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **49.97** | **245** | P | P | 15 31 21.4 | -0.6 | |
| **KNRA** | **Kununurra** | **50.49** | **264** | P | P | 15 31 25.8 | -0.1 | |
| KNRA | | | | IAmb | IAmb | 15 31 26.9 | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.03** | **261** | P | P | 15 31 44.5 | +0.4 | |
| **MBWA** | **Marble Bar** | **58.06** | **256** | P | P | 15 32 18.6 | -0.3 | |
| **MJAR** | **Matsushiro Arr** | **68.01** | **323** | P | P | 15 33 22.7 | +0.6 | |
| | comp=Z,3.2nm,1.0s,baz=97,slow=8.9,SNR=4.6 | | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.03** | **180** | P | P | 15 33 44.7 | -0.9 | |
| **PETK** | **Petropavlovsk-** | **73.80** | **345** | P | P | 15 33 56.1 | +0.5 | |
| | comp=Z,1.6nm,0.7s,baz=108,slow=7.0,SNR=4.4 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.00** | **13** | P | P | 15 34 58.0 | -0.8 | |
| | comp=Z,0.2nm,0.4s,baz=220,slow=5.0,SNR=6.1 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.95** | **321** | PKP | PKPdf | 15 40 58.3 | -0.5 | |
| | comp=Z,0.3nm,0.4s,baz=116,slow=3.4,SNR=2.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.88** | **315** | PKPbc | PKPdf | 15 41 52.3 | +0.8 | |
| | comp=Z,0.5nm,0.5s,baz=48,slow=1.8,SNR=4.2 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.22** | **303** | PKPbc | PKPbc | 15 41 56.4 | +0.1 | |
| | comp=Z,1.5nm,0.5s,baz=83,slow=6.8,SNR=5.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.73** | **345** | PKPbc | PKPbc | 15 41 59.1 | -0.6 | |
| | comp=Z,0.5nm,0.5s,baz=46,slow=2.8,SNR=2.4 | | | | | | | |

*IDC* ***23*** *15:59:39.7±2.2,20.°92S×69.°88W,h0km,mb4.1/1, mbtmp4.1/2,ML4.1/1,MS3.0/4,Error ellipse: s-maj=90.9km s-min=51.1km az=111.0*

*NEIC* ***23*** *15:59:45.1±2.3,20.°16S±0.°04×70.°50W±0.°04,h37km±13km, mb4.0/6,ML3.9(GUC),Error ellipse: s-maj=8.5km s-min=1.9km az=223.0*

*GUC* ***23*** *15:59:46.4±0.9,20.°06S×70.°36W,h33km±3km,ML3.9*

**ISC 23 15:59:44.6**±0.9,**20.°09S**±0.°03×**70.°45W**±0.°06,**h36**km±2km, **n63**,σ1§**69**/65,**1C-2D**,**Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TA02** | **Huaiquique** | **0.35** | **121** | | **Pn** | **15 59 53.2** | **+0.1** |
| TA02 | | | | Sn | **Sn** | **15 59 58.1** | **-1.3** |
| **TA02** | **Huaiquique** | **0.35** | **121** | *eP* | **Pn** | **15 59 53.4** | **+0.3** |
| TA02 | | | | *i* S | **Sn** | **15 59 58.8** | **-0.6** |
| **TA01** | **Diego Aracena** | **0.54** | **152** | | **Pn** | **15 59 56.0** | **+0.3** |
| TA01 | | | | | **Sn** | **16 00 03.5** | **0.0** |
| **TA01** | **Diego Aracena** | **0.54** | **152** | ⇑*eP* | **Pn** | **15 59 56.1** | **+0.3** |
| TA01 | | | | *i* S | **Sn** | **16 00 03.6** | **0.0** |
| TA01 | | | | IAML | | 16 00 04.5 | |
| | comp=E,8μm,0.5s | | | | | | |
| **HMBC** | **Humberstone** | **0.56** | **110** | | **Pn** | **15 59 55.8** | **-0.5** |
| HMBC | | | | Sn | **Sn** | **16 00 03.5** | **-0.8** |
| **HMBC** | **Humberstone** | **0.56** | **110** | ⇓*eP* | **Pn** | **15 59 56.3** | **0.0** |
| HMBC | | | | *i* S | **Sn** | **16 00 03.8** | **-0.6** |
| HMBC | | | | IAML | | 16 00 05.2 | |
| | comp=N,13μm,0.4s | | | | | | |
| **PATCX** | **Punta Patache** | **0.78** | **159** | | **Pn** | **15 59 59.4** | **+0.3** |
| **PX03** | **IPOC Station P** | **0.83** | **112** | *eP* | **Pn** | **15 59 59.5** | **-0.4** |
| PX03 | | | | *i* S | **Sn** | **16 00 09.5** | **-1.5** |
| PX03 | | | | IAML | | 16 00 14.7 | |
| | comp=N,11μm,0.4s | | | | | | |
| **PX02** | **IPOC Station P** | **1.15** | **12** | *eP* | **Pn** | **16 00 04.2** | **+0.1** |
| PX02 | | | | *i* S | **Sn** | **16 00 17.1** | **-1.6** |
| **GO01** | **Chusmiza** | **1.26** | **71** | Pn | **Pn** | **16 00 06.9** | **+0.9** |
| GO01 | | | | Sn | **Sn** | **16 00 22.7** | **+0.8** |
| **GO01** | **Chusmiza** | **1.26** | **71** | *eP* | **Pn** | **16 00 06.9** | **+0.9** |
| GO01 | | | | *i* S | **Sn** | **16 00 22.9** | **+0.9** |
| **PB01** | **IPOC Station P** | **1.31** | **137** | | **Pn** | **16 00 07.5** | **+1.1** |
| **PB01** | **IPOC Station P** | **1.31** | **137** | ⇓*eP* | **Pn** | **16 00 07.7** | **+1.3** |
| PB01 | | | | *i* S | **Sn** | **16 00 24.4** | **+1.7** |
| PB01 | | | | IAML | | 16 00 28.2 | |
| | comp=N,2μm,0.3s | | | | | | |
| **AP01** | **Chacalluta** | **1.71** | **4** | | **Pn** | **16 00 13.6** | **+1.7** |
| AP01 | | | | Sn | **Sn** | **16 00 34.7** | **+2.2** |
| **AP01** | **Chacalluta** | **1.71** | **4** | *eP* | **Pn** | **16 00 13.5** | **+1.7** |
| AP01 | | | | *i* S | **Sn** | **16 00 34.8** | **+2.2** |
| AP01 | | | | IAML | | 16 00 41.3 | |
| | comp=E,4μm,0.6s | | | | | | |
| **PB09** | **IPOC Station P** | **2.04** | **147** | | **Pn** | **16 00 19.5** | **+3.0** |
| **PB09** | **IPOC Station P** | **2.04** | **147** | *eP* | **Pn** | **16 00 19.6** | **+3.0** |
| PB09 | | | | *eS* | **Sn** | **16 00 44.7** | **+3.9** |
| PB09 | | | | IAML | | 16 00 51.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **2.25** | **173** | | **Pn** | **16 00 20.4** | **+1.0** |
| **PB04** | **IPOC Station P** | **2.25** | **173** | *eP* | **Pn** | **16 00 21.5** | **+2.1** |
| PB04 | | | | *i* S | **Sn** | **16 00 46.0** | **-0.1** |
| PB04 | | | | IAML | | 16 00 59.5 | |
| | comp=E,748nm,0.9s | | | | | | |
| **PB18** | **Visviri** | **2.65** | **20** | | **Pn** | **16 00 29.4** | **+4.1** |
| **PB18** | **Visviri** | **2.65** | **20** | *eP* | **Pn** | **16 00 29.8** | **+4.5** |
| **LVC** | **Limon Verde** | **2.89** | **150** | | **Pn** | **16 00 31.5** | **+3.1** |
| **LVC** | **Limon Verde** | **2.89** | **150** | *eP* | **Pn** | **16 00 31.4** | **+2.9** |
| **AF01** | **San Pedro de A** | **3.55** | **144** | Pn | **Pn** | **16 00 37.7** | **+0.3** |
| **AF01** | **San Pedro de A** | **3.55** | **144** | *eP* | **Pn** | **16 00 37.5** | **+0.1** |
| AF01 | | | | *i* S | Sn | 16 01 32.5 | +14 |
| **LPAZ** | **La Paz** | **4.38** | **31** | Pn | **Pn** | **16 00 52.4** | **+3.3** |
| **LPAZ** | **La Paz** | **4.38** | **31** | Pn | Pn | 16 00 55.3 | +6.2 |
| | comp=E,4.2nm,0.3s,baz=198,slow=6.6,SNR=51 | | | | | | |
| LPAZ | | | | LR | LR | 16 02 51.7 | |
| | comp=E,162nm,18.8s,baz=222,slow=39 | | | | | | |
| | comp=E,13nm,0.3s | | | | | | |
| **PB14** | **IPOC Station P** | **4.51** | **179** | | **Pn** | **16 00 49.4** | **-1.3** |
| **GO02** | **Mina Guanaco** | **5.11** | **171** | Pn | **Pn** | **16 00 59.5** | **+0.6** |
| **AC01** | **Pan de Azucar** | **6.03** | **181** | Pn | **Pn** | **16 01 10.1** | **-1.2** |
| **AC06** | **Mina Casimiro** | **7.24** | **179** | Pn | **Pn** | **16 01 24.5** | **-3.3** |
| **GO03** | **Copiap** | **7.47** | **179** | Pn | **Pn** | **16 01 28.1** | **-3.0** |
| **AC04** | **Llanos de Chal** | **8.10** | **184** | Pn | **Pn** | **16 01 40.9** | **+1.3** |
| **AC05** | **El Transito** | **8.71** | **179** | Pn | **Pn** | **16 01 48.4** | **+0.2** |
| **LCO** | **Las Campanas** | **8.88** | **181** | Pn | **Pn** | **16 01 50.7** | **0.0** |
| **SIV** | **San Ignacio** | **9.81** | **67** | LR | LR | 16 06 38.1 | |
| | comp=E,95nm,19.5s,baz=43,slow=43 | | | | | | |
| **NNA** | **Nana** | **10.13** | **322** | Pn | **Pn** | **16 02 07.3** | **-0.3** |
| **NNA** | **Nana** | **10.13** | **322** | LR | LR | 16 05 56.5 | |
| | comp=E,36nm,18.6s,baz=145,slow=34 | | | | | | |
| **CO06** | **Fray Jorge** | **10.59** | **186** | Pn | **Pn** | **16 02 12.5** | **-1.3** |
| **ETMB** | **Extrema** | **11.00** | **22** | Pn | **Pn** | **16 02 20.9** | **+1.4** |
| **PTLB** | **Pontes e Lacer** | **11.72** | **69** | | **Pn** | **16 02 31.2** | **+1.8** |
| **VILB** | **Vilhena** | **12.12** | **56** | Pn | **Pn** | **16 02 35.1** | **+0.3** |
| **VA03** | **San Esteban** | **12.62** | **180** | Pn | **Pn** | **16 02 41.1** | **-0.6** |
| **SAML** | **Samuel** | **13.12** | **33** | Pn | **Pn** | **16 02 49.1** | **+0.7** |
| **H03N1** | **Juan Fernandez** | **15.28** | **208** | T | T | 16 19 31.4 | |
| | baz=33,slow=72,SNR=70 | | | | | | |
| **H03N2** | **Juan Fernandez** | **15.29** | **208** | T | T | 16 19 11.8 | |
| | baz=33,slow=72,SNR=19 | | | | | | |
| **H03N3** | **Juan Fernandez** | **15.30** | **208** | T | T | 16 19 18.3 | |
| | baz=33,slow=72,SNR=16 | | | | | | |
| **ITAB** | **Concordia** | **18.22** | **116** | | **Pn** | **16 03 54.7** | **+0.1** |
| ITAB | | | | IAmb | IAmb | 16 03 55.9 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **PLTB** | **Pedras Altas** | **19.07** | **131** | P | **P** | **16 04 03.2** | **-0.8** |
| PLTB | | | | IAmb | IAmb | 16 04 27.6 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **TRQA** | **Tornquist** | **19.36** | **159** | P | **P** | **16 04 05.9** | **-1.2** |
| TRQA | | | | IAmb | IAmb | 16 04 38.0 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **BOAV** | **Boa Vista** | **24.38** | **25** | P | **P** | **16 04 59.2** | **-0.3** |
| **SDV** | **Santo Domingo** | **28.79** | **360** | P | **P** | **16 05 39.1** | **-0.5** |
| **BAUV** | **El Baul** | **28.95** | **5** | P | **P** | **16 05 40.1** | **-0.6** |
| **MDP** | **Montagnes des** | **30.55** | **37** | LR | LR | 16 18 54.5 | |
| | comp=Z,38nm,19.9s,baz=142,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.26** | **71** | P | **P** | **16 11 40.8** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=257,slow=4.9,SNR=13 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.25** | **279** | T | T | 18 38 00.5 | |
| | baz=101,slow=74,SNR=83 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.26** | **279** | T | T | 18 38 06.4 | |
| | baz=101,slow=74,SNR=86 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.27** | **279** | T | T | 18 38 04.1 | |
| | baz=101,slow=74,SNR=83 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.30** | **280** | T | T | 18 38 09.0 | |
| | baz=100,slow=75,SNR=68 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.32** | **280** | T | T | 18 38 07.2 | |
| | baz=100,slow=75,SNR=55 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.32** | **280** | T | T | 18 38 03.7 | |
| | baz=100,slow=75,SNR=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **133.39** | **213** | PKP | **PKPdf** | **16 18 57.7** | **-0.1** |
| | comp=Z,0.3nm,0.9s,baz=152,slow=2.0,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.30** | **34** | PKPbc | **PKPdf** | **16 19 19.6** | **+1.0** |
| | comp=Z,1.4nm,0.6s,baz=318,slow=3.5,SNR=13 | | | | | | |

*GUC* ***23*** *16:08:18.5±0.7,28.°64S×72.°35W,h29km±10km,ML3.1*
*SJA* ***23*** *16:08:20.4±1.8,28.°70S×69.°29W,h103km,ML3.5,MW3.6*

**ISC 23 16:08:13.7**±3.4,**28.°61S**±0.°06×**72.°6W**±0.°1,**h6**km±27km,**n18**, σ1§**15**/24,**2C-2D**,**Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AC04** | **Llanos de Chal** | **1.40** | **74** | *eP* | **Pn** | **16 08 40.2** | **+0.4** |
| **AC04** | **Llanos de Chal** | **1.40** | **74** | ⇓*eP* | **Pn** | **16 08 40.3** | **+0.5** |
| AC04 | | | | *eS* | **Sb** | **16 08 57.2** | **-1.1** |
| AC04 | | | | IAML | | 16 08 57.9 | |
| | comp=E,469nm,0.1s | | | | | | |
| **LCO** | **Las Campanas** | **1.71** | **104** | *eP* | **Pb** | **16 08 46.0** | **+0.3** |
| LCO | | | | IAML | | 16 09 06.7 | |
| | comp=Z,518nm,0.7s | | | | | | |
| **LCO** | **Las Campanas** | **1.71** | **104** | *eP* | **Pb** | **16 08 45.9** | **+0.1** |
| LCO | | | | *eS* | **Sn** | **16 09 05.9** | **-0.7** |
| **CO05** | **La Serena** | **1.77** | **138** | *eP* | **Pb** | **16 08 46.4** | **-0.2** |
| CO05 | | | | *eS* | **Sn** | **16 09 05.5** | **-2.1** |
| CO05 | | | | IAML | | 16 09 06.7 | |
| | comp=E,345nm,0.4s | | | | | | |
| **AC05** | **El Transito** | **2.05** | **97** | ⇑*eP* | **Pb** | **16 08 51.4** | **-0.1** |
| AC05 | | | | *eS* | **Sn** | **16 09 15.4** | **+0.5** |
| **GO04** | **Tololo Observa** | **2.21** | **135** | *eP* | **Pn** | **16 08 52.6** | **+1.4** |
| GO04 | | | | *eS* | **Sn** | **16 09 19.7** | **+0.7** |
| GO04 | | | | IAML | | 16 09 23.2 | |
| | comp=Z,406nm,0.4s | | | | | | |
| **GO04** | **Tololo Observa** | **2.21** | **135** | *eP* | **Pn** | **16 08 52.6** | **+1.4** |
| **CO06** | **Fray Jorge** | **2.23** | **158** | ⇓*eP* | **Pn** | **16 08 51.0** | **-0.1** |
| CO06 | | | | IAML | | 16 09 16.9 | |
| | comp=N,219nm,0.2s | | | | | | |
| **GO03** | **Copiap** | **2.32** | **65** | *eP* | **Pn** | **16 08 54.6** | **+2.1** |
| **GO03** | **Copiap** | **2.32** | **65** | *eP* | **Pb** | **16 08 55.0** | **-0.9** |
| GO03 | | | | IAML | | 16 09 24.5 | |
| | comp=N,195nm,0.2s | | | | | | |
| **AC06** | **Mina Casimiro** | **2.34** | **58** | *eP* | **Pn** | **16 08 53.9** | **+1.1** |
| AC06 | | | | IAML | | 16 09 24.6 | |
| | comp=E,183nm,0.2s | | | | | | |
| **CO01** | **Juntas del Tor** | **2.58** | **123** | *eP* | **Pb** | **16 08 59.1** | **-1.4** |
| **CO03** | **El Pedregal** | **2.78** | **144** | *eP* | **Pn** | **16 09 00.0** | **+1.2** |
| CO03 | | | | *eS* | **Sn** | **16 09 32.7** | **0.0** |
| **CO03** | **El Pedregal** | **2.78** | **144** | *eP* | **Pn** | **16 09 00.3** | **+1.5** |
| CO03 | | | | IAML | | 16 09 32.8 | |
| | comp=E,153nm,0.2s | | | | | | |
| **CO02** | **Combarbal** | **2.94** | **152** | *eP* | **Pn** | **16 09 02.7** | **+1.6** |
| CO02 | | | | IAML | | 16 09 44.2 | |
| | comp=Z,78nm,0.6s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.02** | **36** | ⇓*eP* | **Pn** | **16 09 02.7** | **+0.6** |
| **VA06** | **Catapilco** | **4.10** | **164** | *eP* | **Pn** | **16 09 17.2** | **+0.3** |

*NEIC* ***23*** *16:08:21.5±1.9,23.°93S±0.°06×67.°1W±0.°1,h220km±12km, mb4.1/5,ML3.9(GUC),Error ellipse: s-maj=15.9km s-min=9.1km az=97.0*

*IDC* ***23*** *16:08:22.4±1.0,23.°81S×66.°86W,h189km±11km,mb3.5/5, mbtmp4.1/10,MS2.0/1,Error ellipse: s-maj=16.4km s-min=14.7km az=134.0*

*VAO* ***23*** *16:08:23.0±0.6,23.°82S×67.°03W,h211km±8km,mb4.0*

*GUC* ***23*** *16:08:23.4±0.6,23.°90S×67.°28W,h223km±5km,ML4.0*

**ISC 23 16:08:21.7**±0.6,**23.°93S**±0.°04×**66.°98W**±0.°05,**h194**km±6km, **n89**,σ1§**44**/109,**mb3.8**/6,**6C**,**Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **1.47** | **311** | | **Pn** | **16 08 56.9** | **+2.0** |
| AF01 | | | | Sn | **Sn** | **16 09 24.5** | **+3.9** |
| **AF01** | **San Pedro de A** | **1.47** | **311** | *eP* | **Pn** | **16 08 56.9** | **+2.0** |
| AF01 | | | | *i* S | **Sn** | **16 09 22.5** | **+1.9** |
| AF01 | | | | IAML | | 16 09 27.5 | |
| | comp=E,563nm,0.3s | | | | | | |
| **SLA** | **San Lorenzo** | **1.56** | **121** | IAML | | 16 09 39.8 | |
| | comp=Z,34nm,1.6s | | | | | | |
| **SLA** | **San Lorenzo** | **1.56** | **121** | *eP* | **Pn** | **16 08 56.8** | **+1.3** |
| **SLA** | **San Lorenzo** | **1.56** | **121** | *eP* | **Pn** | **16 08 57.1** | **+1.5** |
| **AZAP** | **Zapla** | **1.77** | **100** | *eP* | Pn | 16 08 52.7 | -5.0 |
| **YJA** | **Yavi** | **2.20** | **38** | *eP* | **Pn** | **16 09 03.2** | **+0.8** |
| YJA | | | | *eS* | **Sn** | **16 09 33.4** | **-0.6** |
| **LVC** | **Limon Verde** | **2.21** | **306** | P | **Pn** | **16 09 03.9** | **+1.5** |
| | comp=Z,57nm,0.3s,baz=136,slow=5.7,SNR=222 | | | | | | |
| LVC | | | | LR | LR | 16 09 28.4 | |
| | comp=Z,33nm,20.2s,baz=316,slow=30 | | | | | | |
| LVC | | | | S | **Sn** | **16 09 34.6** | **+0.7** |
| | comp=Z,194nm,0.5s,baz=350,slow=20,SNR=61 | | | | | | |
| **LVC** | **Limon Verde** | **2.21** | **306** | *eP* | **Pn** | **16 09 03.9** | **+1.5** |
| LVC | | | | *i* S | **Sn** | **16 09 34.0** | **+0.1** |
| LVC | | | | IAML | | 16 09 36.4 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **2.21** | **306** | *eP* | **Pn** | **16 09 03.7** | **+1.4** |
| LVC | | | | *eS* | **Sn** | **16 09 34.9** | **+1.0** |
| **GO02** | **Mina Guanaco** | **2.68** | **242** | | **Pn** | **16 09 08.7** | **+1.1** |
| GO02 | | | | Sn | **Sn** | **16 09 43.7** | **+0.4** |
| **GO02** | **Mina Guanaco** | **2.68** | **242** | *eP* | **Pn** | **16 09 08.8** | **+1.3** |
| GO02 | | | | *i* S | **Sn** | **16 09 43.6** | **+0.4** |
| GO02 | | | | IAML | | 16 09 45.2 | |
| | comp=N,642nm,0.5s | | | | | | |
| **PB09** | **IPOC Station P** | **2.98** | **315** | | **Pn** | **16 09 12.5** | **+1.6** |
| PB09 | | | | Sn | **Sn** | **16 09 50.1** | **+0.7** |
| **PB09** | **IPOC Station P** | **2.98** | **315** | *eP* | **Pn** | **16 09 12.5** | **+1.6** |
| **PB09** | **IPOC Station P** | **2.98** | **315** | ⇓*eP* | **Pn** | **16 09 12.5** | **+1.6** |
| PB09 | | | | *i* S | **Sn** | **16 09 49.3** | **0.0** |
| PB09 | | | | IAML | | 16 09 51.2 | |
| | comp=N,146nm,0.6s | | | | | | |
| **PB14** | **IPOC Station P** | **3.20** | **257** | | **Pn** | **16 09 14.4** | **+0.7** |
| PB14 | | | | Sn | **Sn** | **16 09 53.2** | **-1.2** |
| **PB14** | **IPOC Station P** | **3.20** | **257** | ⇑*eP* | **Pn** | **16 09 14.4** | **+0.7** |
| PB14 | | | | *eS* | **Sn** | **16 09 52.9** | **-1.5** |
| PB14 | | | | IAML | | 16 09 56.9 | |
| | comp=E,104nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **3.32** | **298** | | **Pn** | **16 09 15.8** | **+0.7** |
| PB04 | | | | Sn | **Sn** | **16 09 54.9** | **-1.9** |
| **PB04** | **IPOC Station P** | **3.32** | **298** | ⇑*eP* | **Pn** | **16 09 15.8** | **+0.7** |
| PB04 | | | | *i* S | **Sn** | **16 09 54.7** | **-2.1** |
| **PB01** | **IPOC Station P** | **3.69** | **321** | | **Pn** | **16 09 20.0** | **+0.5** |
| PB01 | | | | Sn | **Sn** | **16 10 03.0** | **-1.8** |
| **PB01** | **IPOC Station P** | **3.69** | **321** | *eP* | **Pn** | **16 09 20.1** | **+0.6** |
| PB01 | | | | *i* S | **Sn** | **16 10 03.2** | **-1.6** |
| **AC01** | **Pan de Azucar** | **3.96** | **235** | | **Pn** | **16 09 22.4** | **-0.3** |
| **AC01** | **Pan de Azucar** | **3.96** | **235** | *eP* | **Pn** | **16 09 22.4** | **-0.3** |
| AC01 | | | | *eS* | **Sn** | **16 10 07.8** | **-2.8** |
| **TA01** | **Diego Aracena** | **4.47** | **318** | Pn | **Pn** | **16 09 29.1** | **-0.1** |
| **TA01** | **Diego Aracena** | **4.47** | **318** | *eP* | **Pn** | **16 09 29.2** | **0.0** |
| TA01 | | | | *i* S | **Sn** | **16 10 19.0** | **-3.2** |
| **HMBC** | **Humberstone** | **4.52** | **323** | | **Pn** | **16 09 29.7** | **-0.3** |
| **HMBC** | **Humberstone** | **4.52** | **323** | *eP* | **Pn** | **16 09 29.8** | **-0.2** |
| HMBC | | | | *i* S | **Sn** | **16 10 19.8** | **-3.9** |
| **TA02** | **Huaiquique** | **4.67** | **321** | | **Pn** | **16 09 30.3** | **-1.4** |
| **GO01** | **Chusmiza** | **4.71** | **334** | Pn | **Pn** | **16 09 31.4** | **-1.4** |
| **GO01** | **Chusmiza** | **4.71** | **334** | *eP* | **Pn** | **16 09 34.6** | **+1.9** |
| GO01 | | | | *i* S | **Sn** | **16 10 27.7** | **-0.9** |
| **AC04** | **Llanos de Chal** | **5.63** | **220** | Pn | **Pn** | **16 09 43.2** | **-0.8** |
| **AC04** | **Llanos de Chal** | **5.63** | **220** | *i* S | **Sn** | **16 10 46.3** | **-2.8** |
| **AC05** | **El Transito** | **5.71** | **210** | Pn | **Pn** | **16 09 43.4** | **-1.8** |
| **AC05** | **El Transito** | **5.71** | **210** | *i* S | **Sn** | **16 10 49.0** | **-2.3** |
| **LCO** | **Las Campanas** | **6.06** | **213** | Pn | **Pn** | **16 09 47.9** | **-2.0** |
| **CO05** | **La Serena** | **7.08** | **212** | Pn | **Pn** | **16 10 01.3** | **-1.5** |
| **LPAZ** | **La Paz** | **7.68** | **352** | | **Pn** | **16 10 11.0** | **-0.3** |
| **LPAZ** | **La Paz** | **7.68** | **352** | P | **Pn** | **16 10 12.2** | **+0.8** |
| | comp=E,2.3nm,0.4s,baz=140,slow=2.3,SNR=13 | | | | | | |
| LPAZ | | | | S | **Sn** | **16 11 37.5** | **-0.8** |
| | comp=E,1.9nm,0.5s,baz=2.4,slow=23,SNR=1.3 | | | | | | |
| **LPAZ** | **La Paz** | **7.68** | **352** | *eP* | **Pn** | **16 10 12.1** | **+0.7** |
| **ZON** | **Zonda** | **7.74** | **191** | Pn | **Pn** | **16 10 08.6** | **-2.9** |
| **CPUP** | **Villa Florida** | **9.06** | **107** | P | **Pn** | **16 10 27.7** | **-1.2** |
| | comp=E,1.0nm,0.3s,baz=318,slow=12,SNR=3.4 | | | | | | |
| **SIV** | **San Ignacio** | **9.65** | **36** | P | **Pn** | **16 10 35.0** | **-1.6** |
| | comp=E,14nm,0.6s,baz=210,slow=13,SNR=61 | | | | | | |
| **MT08** | **Bocatoma Ro** | **9.85** | **195** | Pn | **Pn** | **16 10 36.2** | **-3.0** |
| **MT01** | **Popeta** | **10.58** | **200** | Pn | **Pn** | **16 10 47.2** | **-1.3** |
| **PTLB** | **Pontes e Lacer** | **11.21** | **43** | | **Pn** | **16 10 54.1** | **-2.6** |
| **PTLB** | **Pontes e Lacer** | **11.21** | **43** | *eP* | **Pn** | **16 10 55.1** | **-1.6** |
| **VILB** | **Vilhena** | **12.66** | **32** | P | **Pn** | **16 11 16.1** | **+0.8** |
| **VILB** | **Vilhena** | **12.66** | **32** | *eP* | **Pn** | **16 11 16.2** | **+1.0** |
| **PTGB** | **Pitanga** | **13.62** | **96** | *eP* | **P** | **16 11 28.9** | **-0.9** |
| **CPSB** | **Cacapava Do Su** | **13.66** | **121** | *eP* | **P** | **16 11 29.7** | **-0.5** |
| **ITAB** | **Concordia** | **13.80** | **107** | | **Pn** | **16 11 29.8** | **+0.4** |
| **ETMB** | **Extrema** | **14.05** | **3** | | **Pn** | **16 11 32.3** | **-0.3** |
| **LDASE** | **Londrina, Braz** | **14.54** | **91** | *eP* | **P** | **16 11 41.0** | **+1.0** |
| **PCMB** | **Pacaembu** | **14.68** | **84** | *eP* | **P** | **16 11 42.6** | **+1.1** |
| **TRQA** | **Tornquist** | **14.72** | **164** | | **Pn** | **16 11 39.0** | **-1.7** |
| **SAML** | **Samuel** | **15.33** | **14** | P | **Pn** | **16 11 46.5** | **-1.7** |
| SAML | | | | IAmb | IAmb | 16 11 49.1 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **SAML** | **Samuel** | **15.33** | **14** | *eP* | **Pn** | **16 11 48.0** | **-0.3** |
| **PDRB** | **Porto dos Gac** | **15.65** | **40** | *eP* | **Pn** | **16 11 51.4** | **-0.8** |
| **FRTB** | **Fartura** | **15.97** | **91** | *eP* | **P** | **16 11 55.7** | **0.0** |
| **ITRB** | **Iturama** | **15.99** | **78** | *eP* | **Pn** | **16 11 57.0** | **+0.7** |
| **ARAG** | **Araguaiana, MT** | **16.44** | **63** | *eP* | **Pn** | **16 12 02.0** | **+0.4** |
| **CLDB** | **Colider** | **16.79** | **41** | *eP* | **P** | **16 12 04.5** | **-0.3** |
| **VAO** | **Valinhos** | **18.39** | **91** | P | **P** | **16 12 21.1** | **-1.1** |
| **VAO** | **Valinhos** | **18.39** | **91** | *eP* | **P** | **16 12 22.1** | **-0.1** |
| **IPMB** | **Ipameri, GO** | **18.49** | **75** | *eP* | **P** | **16 12 24.0** | **+0.6** |
| **SNDB** | **Serra Nova Dou** | **19.05** | **54** | *eP* | **P** | **16 12 29.1** | **-0.3** |
| **PARB** | **Paraibuna** | **19.58** | **93** | *eP* | **P** | **16 12 35.6** | **+0.5** |
| **LL02** | **Futaleuf** | **19.63** | **191** | P | **P** | **16 12 37.2** | **+1.8** |
| LL02 | | | | IAmb | IAmb | 16 12 57.6 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **BDFB** | **Brasilia** | **19.64** | **69** | P | **P** | **16 12 36.2** | **+0.4** |
| **BDFB** | **Brasilia** | **19.64** | **69** | P | **P** | **16 12 36.4** | **+0.6** |
| | comp=Z,18nm,0.6s,baz=240,slow=11,SNR=24 | | | | | | |
| **PMNB** | **Patos De Minas** | **19.88** | **78** | *eP* | **P** | **16 12 38.7** | **+0.3** |
| **NPGB** | **Novo Progresso** | **20.15** | **35** | *eP* | **P** | **16 12 39.2** | **-2.1** |
| **TEFE** | **Tefe** | **20.42** | **7** | *eP* | **P** | **16 12 43.5** | **-0.6** |
| **JANB** | **Januaria** | **23.09** | **72** | *eP* | **P** | **16 13 10.0** | **-0.6** |
| **SMTB** | **Santa Maria do** | **23.83** | **54** | *eP* | **P** | **16 13 17.3** | **0.0** |
| **SDBA** | **SAO DESIDERIO** | **23.83** | **54** | *eP* | **P** | **16 13 16.8** | **-0.8** |
| **BOAV** | **Boa Vista** | **26.91** | **14** | P | **P** | **16 13 45.1** | **+0.2** |
| **VNA3** | **Neumayer Olymp** | **57.22** | **161** | ⇑P | **P** | **16 17 50.1** | **+1.9** |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **59.41** | **161** | ⇑P | **P** | **16 18 03.7** | **+0.3** |
| | comp=Z,24nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **59.41** | **161** | P | **P** | **16 18 05.2** | **+1.7** |
| | comp=Z,1.6nm,0.7s,baz=270,slow=7.2,SNR=13 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **61.13** | **161** | ⇑P | **P** | **16 18 16.8** | **+1.7** |
| | comp=Z,120nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.63** | **324** | P | **P** | **16 18 33.5** | **+1.3** |
| | comp=Z,0.3nm,0.5s,baz=170,slow=5.5,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.28** | **180** | P | **P** | **16 18 51.2** | **+2.3** |
| | comp=Z,1.9nm,0.5s,baz=226,slow=0.7,SNR=22 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.52** | **69** | P | **P** | **16 19 50.7** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=266,slow=6.6,SNR=10.0 | | | | | | |
| TORD | | | | pP | **pP** | **16 20 37.1** | **-1.6** |
| | comp=Z,0.3nm,0.7s,baz=252,slow=6.1,SNR=1.6 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **81.50** | **163** | P | **P** | **16 20 18.8** | **+1.9** |
| | comp=Z,1.0nm,0.6s,baz=84,slow=11,SNR=2.2 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **128.53** | **205** | PKP | **PKiKP** | **16 27 07.4** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=130,slow=1.6,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **131

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **G29M** | **Pine Creek** | **3.47 136** | | | **Pn** | | **16 12 20.8 +1.0** | | |
| **G23K** | **Bananza Creek** | **3.57 221** | | | **Pn** | | **16 12 21.8 +0.6** | | |
| G23K | | | | IAML | | | 16 13 23.2 | | |
| | comp=E,408nm,0.9s | | | | | | | | |
| **F30M** | **Barrier River** | **3.62 118** | | | **Pn** | | **16 12 23.8 +2.0** | | |
| **B21K** | **Ikpikpuk River** | **3.67 277** | Pn | | **Pn** | | **16 12 22.8 +0.3** | | |
| B21K | | | | IAML | | | 16 13 36.9 | | |
| | comp=E,389nm,1.2s | | | | | | | | |
| **E21K** | **Killik River** | **3.70 258** | | | **Pn** | | **16 12 23.0 +0.1** | | |
| E21K | | | | IAML | | | 16 13 35.6 | | |
| | comp=E,362nm,1.0s | | | | | | | | |
| E21K | | | | IAML | | | 16 13 37.1 | | |
| | comp=N,380nm,1.1s | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **3.90 127** | | | **Pn** | | **16 12 26.1 +0.5** | | |
| G30M | | | | IAML | | | 16 13 36.1 | | |
| | comp=E,296nm,0.6s | | | | | | | | |
| **H24K** | **Noodor Dome** | **3.95 203** | | | **Pn** | | **16 12 27.4 +0.9** | | |
| H24K | | | | IAML | | | 16 13 42.7 | | |
| | comp=E,303nm,1.0s | | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.96 297** | | | **Pn** | | **16 12 26.8 +0.3** | | |
| **H29M** | **Whitestone** | **3.96 144** | | | **Pn** | | **16 12 28.0 +1.4** | | |
| **INK** | **Inuvik** | **4.03 102** | | | **Pn** | | **16 12 28.2 +0.8** | | |
| **INK** | **Inuvik** | **4.03 102** | Pn | | **Pn** | | **16 12 28.1 +0.8** | | |
| | comp=E,5.4nm,0.3s,baz=313,slow=13,SNR=18 | | | | | | | | |
| INK | | | | Sn | **Sn** | | **16 13 15.1 +0.6** | | |
| | comp=E,8.9nm,0.3s,baz=338,slow=24,SNR=3.2 | | | | | | | | |
| INK | | | | LR | LR | | 16 14 36.2 | | |
| | comp=E,173nm,20.4s,baz=326,slow=47 | | | | | | | | |
| | comp=E,32nm,0.5s | | | | | | | | |
| **I27K** | **Kandik River** | **4.04 165** | | | **Pn** | | **16 12 29.1 +1.3** | | |
| **PRP** | **Porcupine Dome** | **4.05 188** | | | **Pn** | | **16 12 29.3 +1.5** | | |
| PRP | | | | IAML | | | 16 13 36.3 | | |
| | comp=N,224nm,0.7s | | | | | | | | |
| **F21K** | **Alatna River** | **4.15 241** | Pn | | **Pn** | | **16 12 30.0 +0.9** | | |
| F21K | | | | IAML | | | 16 13 39.7 | | |
| | comp=E,223nm,0.8s | | | | | | | | |
| F21K | | | | IAML | | | 16 13 47.1 | | |
| | comp=N,190nm,0.8s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.22 135** | Pn | | **Pn** | | **16 12 31.1 +1.0** | | |
| **H23K** | **Yukon River** | **4.23 212** | Pn | | **Pn** | | **16 12 31.1 +0.8** | | |
| H23K | | | | IAML | | | 16 13 48.7 | | |
| | comp=N,200nm,1.1s | | | | | | | | |
| H23K | | | | IAML | | | 16 13 54.7 | | |
| | comp=E,238nm,0.9s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **4.24 174** | | | **Pn** | | **16 12 31.1 +0.7** | | |
| **F31M** | **Tsiigehtchic** | **4.36 114** | | | **Pn** | | **16 12 32.0 0.0** | | |
| F31M | | | | IAML | | | 16 13 56.9 | | |
| | comp=N,214nm,1.4s | | | | | | | | |
| **I28M** | **Miner Creek** | **4.39 156** | | | **Pn** | | **16 12 33.7 +1.2** | | |
| I28M | | | | IAML | | | 16 13 28.3 | | |
| | comp=E,271nm,0.6s | | | | | | | | |
| **G31M** | **Satah River** | **4.51 121** | | | **Pn** | | **16 12 34.1 +0.1** | | |
| G31M | | | | IAML | | | 16 13 53.7 | | |
| | comp=E,222nm,1.4s | | | | | | | | |
| G31M | | | | IAML | | | 16 14 01.0 | | |
| | comp=N,264nm,1.1s | | | | | | | | |
| **B20K** | **Meade River** | **4.54 282** | | | **Pn** | | **16 12 32.7 -1.8** | | |
| B20K | | | | IAML | | | 16 14 00.3 | | |
| | comp=N,247nm,1.1s | | | | | | | | |
| **A21K** | **Barrow** | **4.57 299** | | | **Pn** | | **16 12 35.3 +0.5** | | |
| **POKR** | **Poker Plat Res** | **4.59 198** | Pn | | **Pn** | | **16 12 36.3 +1.1** | | |
| POKR | | | | IAML | | | 16 14 05.7 | | |
| | comp=N,151nm,1.2s | | | | | | | | |
| POKR | | | | IAML | | | 16 14 07.7 | | |
| | comp=E,178nm,1.3s | | | | | | | | |
| **G21K** | **Allakaket** | **4.62 234** | Pn | | **Pn** | | **16 12 36.1 +0.5** | | |
| G21K | | | | IAML | | | 16 14 09.6 | | |
| | comp=N,183nm,0.9s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.74 149** | Pn | | **Pn** | | **16 12 38.1 +0.9** | | |
| I29M | | | | IAML | | | 16 13 56.3 | | |
| | comp=N,185nm,0.7s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.82 207** | | | **Pn** | | **16 12 39.6 +1.3** | | |
| I23K | | | | IAML | | | 16 14 08.4 | | |
| | comp=E,140nm,1.3s | | | | | | | | |
| I23K | | | | IAML | | | 16 14 17.3 | | |
| | comp=N,135nm,0.9s | | | | | | | | |
| **MDM** | **Murphy Dome** | **4.84 201** | Pn | | **Pn** | | **16 12 40.1 +1.5** | | |
| MDM | | | | IAML | | | 16 14 03.3 | | |
| | comp=E,170nm,1.1s | | | | | | | | |
| MDM | | | | IAML | | | 16 14 04.2 | | |
| | comp=N,134nm,1.1s | | | | | | | | |
| **COLA** | **College** | **4.88 199** | Pn | | **Pn** | | **16 12 41.0 +1.9** | | |
| **IL31** | | **4.88 194** | | | **Pn** | | **16 12 41.1 +2.0** | | |
| **ILAR** | **Eielson Array** | **4.88 194** | Pn | | **Pn** | | **16 12 40.8 +1.7** | | |
| | comp=N,4.9nm,0.3s,baz=6.6,slow=13,SNR=134 | | | | | | | | |
| ILAR | | | | Sn | **Sn** | | **16 13 38.1 +2.5** | | |
| | comp=N,7.4nm,0.3s,baz=7.2,slow=22,SNR=12 | | | | | | | | |
| ILAR | | | | Lg | Lg | | 16 13 56.1 | | |
| | comp=N,10nm,0.3s,baz=8.8,slow=29,SNR=7.9 | | | | | | | | |
| | comp=N,14nm,0.6s | | | | | | | | |
| **EGAK** | **Eagle** | **4.90 165** | | | **Pn** | | **16 12 40.9 +1.6** | | |
| **J25K** | **Salcha River,** | **4.94 186** | | | **Pn** | | **16 12 41.8 +1.7** | | |
| J25K | | | | IAML | | | 16 14 01.5 | | |
| | comp=E,170nm,1.0s | | | | | | | | |
| J25K | | | | IAML | | | 16 14 15.7 | | |
| | comp=N,118nm,0.9s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.96 246** | Pn | | **Pn** | | **16 12 41.2 +1.1** | | |
| F20K | | | | IAML | | | 16 14 10.2 | | |
| | comp=E,108nm,1.5s | | | | | | | | |
| F20K | | | | IAML | | | 16 14 12.3 | | |
| | comp=N,115nm,1.2s | | | | | | | | |
| **J26L** | **Joseph Creek** | **5.04 177** | | | **Pn** | | **16 12 43.2 +1.8** | | |
| J26L | | | | IAML | | | 16 14 07.5 | | |
| | comp=E,136nm,0.9s | | | | | | | | |
| J26L | | | | IAML | | | 16 14 16.0 | | |
| | comp=N,120nm,0.7s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.09 198** | | | **Pn** | | **16 12 43.4 +1.4** | | |
| **H21K** | **Melozitna Rive** | **5.09 225** | | | **Pn** | | **16 12 43.1 +1.1** | | |
| H21K | | | | IAML | | | 16 14 17.7 | | |
| | comp=E,106nm,1.2s | | | | | | | | |
| H21K | | | | IAML | | | 16 14 23.0 | | |
| | comp=N,96nm,1.3s | | | | | | | | |
| **D19K** | **Kuna River** | **5.12 265** | Pn | | **Pn** | | **16 12 43.4 +0.9** | | |
| D19K | | | | IAML | | | 16 14 28.7 | | |
| | comp=E,167nm,1.4s | | | | | | | | |
| D19K | | | | IAML | | | 16 14 30.6 | | |
| | comp=N,166nm,1.1s | | | | | | | | |
| **MLY** | **Manley** | **5.17 213** | | | **Pn** | | **16 12 44.5 +1.3** | | |
| **E19K** | **Redstone River** | **5.23 253** | Pn | | **Pn** | | **16 12 45.0 +1.0** | | |
| E19K | | | | IAML | | | 16 14 19.9 | | |
| | comp=N,115nm,0.7s | | | | | | | | |
| E19K | | | | IAML | | | 16 14 31.4 | | |
| | comp=E,90nm,1.2s | | | | | | | | |
| **HDA** | **Harding Lake** | **5.24 193** | | | **Pn** | | **16 12 46.2 +2.1** | | |
| HDA | | | | IAML | | | 16 14 18.1 | | |
| | comp=N,149nm,0.9s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.25 141** | | | **Pn** | | **16 12 45.4 +1.1** | | |
| I30M | | | | IAML | | | 16 13 46.8 | | |
| | comp=N,147nm,0.6s | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.29 199** | | | **Pn** | | **16 12 46.6 +1.8** | | |
| WRH | | | | IAML | | | 16 14 20.4 | | |
| | comp=E,111nm,0.7s | | | | | | | | |
| **NEA2** | **Nenana** | **5.30 204** | | | **Pn** | | **16 12 46.4 +1.5** | | |
| **C19K** | **Lookout Ridge** | **5.49 273** | Pn | | **Pn** | | **16 12 48.0 +0.5** | | |
| **SCRK** | **Sand Creek** | **5.56 179** | | | **Pn** | | **16 12 50.5 +1.9** | | |
| **K27K** | **Chicken** | **5.57 171** | | | **Pn** | | **16 12 50.5 +1.9** | | |
| **J29N** | **Klondike Camp** | **5.59 153** | Pn | | **Pn** | | **16 12 50.9 +2.0** | | |
| **F19K** | **Shaleruckik Mo** | **5.74 249** | Pn | | **Pn** | | **16 12 52.3 +1.4** | | |
| **BWN** | **Browne** | **5.76 204** | Pn | | **Pn** | | **16 12 52.8 +1.6** | | |
| **K24K** | **Donnelly Dome** | **5.77 187** | | | **Pn** | | **16 12 54.5 +3.1** | | |
| **DAWY** | **Dawson** | **5.78 159** | | | **Pn** | | **16 12 53.7 +2.1** | | |
| **RIDG** | **Independent Ri** | **5.80 183** | Pn | | **Pn** | | **16 12 53.9 +2.1** | | |
| **J30M** | **Hart River** | **5.82 145** | Pn | | **Pn** | | **16 12 53.6 +1.4** | | |
| **A19K** | **Wainwright** | **5.88 285** | | | **Pn** | | **16 12 52.4 -0.5** | | |
| **DOT** | **Dot Lake** | **5.89 180** | | | **Pn** | | **16 12 55.0 +2.0** | | |
| **BPAW** | **Bear Paw Mtn.** | **6.06 210** | Pn | | **Pn** | | **16 12 56.0 +0.6** | | |
| **MCK** | **McKinley** | **6.11 200** | | | **Pn** | | **16 12 57.9 +1.9** | | |
| **C18K** | **Utukok River** | **6.16 270** | Pn | | **Pn** | | **16 12 57.1 +0.3** | | |
| **H19K** | **Roundabout Mou** | **6.17 236** | Pn | | **Pn** | | **16 12 58.5 +1.6** | | |
| **I20K** | **Naaghedeneel** | **6.20 225** | | | **Pn** | | **16 12 58.6 +1.3** | | |
| **K29M** | **Barlow Dome** | **6.27 152** | | | **Pn** | | **16 13 00.2 +1.9** | | |
| **E18K** | **Tukpahlearik C** | **6.40 259** | Pn | | **Pn** | | **16 13 01.1 +1.1** | | |
| **RND** | **Reindeer** | **6.41 199** | Pn | | **Pn** | | **16 13 02.2 +2.0** | | |
| **L26K** | **Log Cabin Wild** | **6.52 177** | Pn | | **Pn** | | **16 13 03.8 +2.1** | | |
| **BCAR** | **Beaver Creek A** | **6.54 170** | Pn | | **Pn** | | **16 13 03.8 +1.8** | | |
| **L27K** | **Beaver Creek,** | **6.54 171** | Pn | | **Pn** | | **16 13 04.1 +2.1** | | |
| **PAX** | **Paxson** | **6.59 185** | | | **Pn** | | **16 13 05.3 +2.6** | | |
| **DHY** | **Denali Highway** | **6.59 193** | Pn | | **Pn** | | **16 13 04.2 +1.5** | | |
| **G18K** | **Tagagawik** | **6.59 244** | Pn | | **Pn** | | **16 13 03.7 +1.0** | | |
| **J20K** | **Nowinta River** | **6.64 221** | | | **Pn** | | **16 13 03.2 -0.1** | | |
| **A36M** | **Sachs Harbour** | **6.71 60** | Pn | | **Pn** | | **16 13 03.5 -0.7** | | |
| **WAT1** | **Susitna Watana** | **6.94 197** | | | **Pn** | | **16 13 10.1 +2.6** | | |
| **RDOG** | **Red Dog Mine** | **6.95 267** | Pn | | **Pn** | | **16 13 07.2 -0.3** | | |
| **WAT7** | **Susitna Watana** | **6.97 198** | | | **Pn** | | **16 13 10.8 +2.9** | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **H18K** | **Honhosa River** | **7.01 238** | Pn | | **Pn** | | **16 13 07.2 -1.2** | | |
| **C36M** | **Paulatuk** | **7.07 82** | Pn | | **Pn** | | **16 13 07.8 -1.3** | | |
| **F17K** | **Baldwin Pennin** | **7.12 253** | Pn | | **Pn** | | **16 13 09.7 0.0** | | |
| **J19K** | **Poorman** | **7.15 225** | Pn | | **Pn** | | **16 13 10.8 +0.5** | | |
| **HARP** | **HAARP** | **7.16 184** | | | **Pn** | | **16 13 13.8 +3.5** | | |
| **M26K** | **Nabesna, AK** | **7.16 176** | Pn | | **Pn** | | **16 13 12.2 +1.8** | | |
| **M27K** | **Edge Creek, AK** | **7.24 172** | | | **Pn** | | **16 13 13.4 +1.7** | | |
| **K20K** | **Telida** | **7.34 217** | Pn | | **Pn** | | **16 13 13.6 +0.7** | | |
| **M29M** | **Somme Creek** | **7.46 159** | | | **Pn** | | **16 13 16.0 +1.3** | | |
| **M24K** | **Tolsona, Glenn** | **7.48 187** | Pn | | **Pn** | | **16 13 16.0 +1.1** | | |
| **CUT** | **Chulitna** | **7.56 202** | Pn | | **Pn** | | **16 13 16.3 +0.5** | | |
| **H17K** | **Granite Mounta** | **7.63 241** | Pn | | **Pn** | | **16 13 16.8 0.0** | | |
| **C16K** | **Lisburne Hills** | **7.73 271** | Pn | | **Pn** | | **16 13 16.9 -1.4** | | |
| **SCM** | **Sheep Creek Mo** | **7.82 191** | Pn | | **Pn** | | **16 13 19.0 -0.5** | | |
| **YUK2** | **White River** | **7.88 168** | | | **Pn** | | **16 13 22.9 +2.6** | | |
| **SML** | **Sawmill** | **7.92 195** | Pn | | **Pn** | | **16 13 19.9 -1.0** | | |
| **N25K** | **Chitina, Valde** | **7.94 182** | Pn | | **Pn** | | **16 13 20.2 -1.0** | | |
| **GHO** | **Glory Hole Cre** | **8.02 196** | Pn | | **Pn** | | **16 13 21.2 -1.0** | | |
| **L20K** | **Farewell, AK** | **8.09 214** | | | **Pn** | | **16 13 24.1 +0.9** | | |
| **KLU** | **Klutina** | **8.09 186** | Pn | | **Pn** | | **16 13 25.2 +2.0** | | |
| **G16K** | **Koyuk River** | **8.10 248** | Pn | | **Pn** | | **16 13 21.5 -1.7** | | |
| **GLB** | **Gilahina Butte** | **8.11 179** | Pn | | **Pn** | | **16 13 25.0 +1.6** | | |
| **SKT** | **Skwentna** | **8.14 205** | Pn | | **Pn** | | **16 13 25.3 +1.4** | | |
| **MCARA** | **McCarthy VSAT** | **8.18 176** | | | **Pn** | | **16 13 25.0 +0.6** | | |
| **PMR** | **Palmer** | **8.21 197** | Pn | | **Pn** | | **16 13 24.9 +0.1** | | |
| **VRDI** | **Verde Repeater** | **8.32 178** | Pn | | **Pn** | | **16 13 29.2 +2.7** | | |
| **KNK** | **Knik Glacier** | **8.32 194** | Pn | | **Pn** | | **16 13 28.9 +2.6** | | |
| **M31M** | **Drury Creek, Y** | **8.35 147** | Pn | | **Pn** | | **16 13 26.9 +0.2** | | |
| **SUA** | **Susitna One** | **8.53 202** | Pn | | **Pn** | | **16 13 29.9 +0.6** | | |
| **FARO** | **Faro, Yukon** | **8.53 144** | Pn | | **Pn** | | **16 13 30.2 +1.0** | | |
| **J17K** | **VABM Dome** | **8.54 231** | Pn | | **Pn** | | **16 13 29.4 +0.1** | | |
| **L19K** | **White Mountain** | **8.55 216** | Pn | | **Pn** | | **16 13 29.9 +0.4** | | |
| **N30M** | **Aishikik Lake** | **8.59 157** | | | **Pn** | | **16 13 31.6 +1.4** | | |
| **I17K** | **Unalakleet** | **8.62 237** | Pn | | **Pn** | | **16 13 30.9 +0.4** | | |
| **STLK** | **Strandline Lak** | **8.64 205** | | | **Pn** | | **16 13 33.3 +2.4** | | |
| **KIAG** | **Kiagna River** | **8.66 174** | | | Pn | | 16 13 35.8 +4.7 | | |
| **MMPY** | **Sheldon Lake,** | **8.66 137** | Pn | | **Pn** | | **16 13 32.3 +1.3** | | |
| **CTGM** | **Chitina Glacie** | **8.66 171** | Pn | | **Pn** | | **16 13 33.9 +2.8** | | |
| **F15K** | **North Star Dit** | **8.68 254** | Pn | | **Pn** | | **16 13 31.1 -0.1** | | |
| **M19K** | **Big River Lodg** | **8.71 214** | Pn | | **Pn** | | **16 13 33.1 +1.5** | | |
| **N31M** | **Braeburn, Yuko** | **8.77 153** | Pn | | **Pn** | | **16 13 33.7 +1.2** | | |
| **RC01** | **Rabbit Creek A** | **8.77 198** | Pn | | Pn | | 16 13 37.2 +4.8 | | |
| **CRQM** | **Cirque** | **8.80 177** | | | **Pn** | | **16 13 34.5 +1.4** | | |
| **TGL** | **Tana Glacier** | **8.81 176** | | | **Pn** | | **16 13 34.3 +1.2** | | |
| **YUK5** | **Granite Creek** | **8.81 160** | | | **Pn** | | **16 13 35.2 +2.0** | | |
| **LOGN** | **Logan Glacier** | **8.82 170** | | | **Pn** | | **16 13 34.4 +1.1** | | |
| **PWL** | **Port Wells** | **8.86 193** | Pn | | **Pn** | | **16 13 35.5 +1.7** | | |
| **GRNC** | **Granite Creek** | **8.87 172** | Pn | | **Pn** | | **16 13 33.9 -0.2** | | |
| **K17K** | **Iditarod** | **8.89 227** | Pn | | **Pn** | | **16 13 33.1 -1.0** | | |
| **L18K** | **Granite Mounta** | **8.92 201** | Pn | | **Pn** | | **16 13 35.3 +0.8** | | |
| **YUK6** | **Outpost Mounta** | **8.94 162** | | | **Pn** | | **16 13 37.2 +2.3** | | |
| **ISLE** | **Juniper Island** | **8.98 174** | | | Pn | | 16 13 40.1 +4.6 | | |
| **BAGL** | **Bagley Icefiel** | **9.10 174** | | | Pn | | 16 13 41.4 +4.5 | | |
| **WAX** | **Waxell Ridge** | **9.12 176** | | | **Pn** | | **16 13 40.9 +3.6** | | |
| **RAGM** | **Ragged Mountai** | **9.17 182** | | | Pn | | 16 13 42.4 +4.4 | | |
| **TABL** | **Table Mountain** | **9.20 171** | | | **Pn** | | **16 13 41.9 +3.4** | | |
| **HIN** | **Hinchinbrook I** | **9.21 187** | | | **Pn** | | **16 13 42.1 +3.6** | | |
| **HMT** | **Hamilton** | **9.21 180** | | | Pn | | 16 13 42.7 +4.1 | | |
| **L17K** | **Donlin** | **9.38 225** | | | **Pn** | | **16 13 41.1 +0.3** | | |
| **SNH** | **Sunshine Point** | **9.39 176** | Pn | | Pn | | 16 13 44.9 +3.9 | | |
| **O30N** | **Mendenhall** | **9.40 155** | Pn | | **Pn** | | **16 13 42.0 +0.9** | | |
| **O29M** | **Mount Kennedy** | **9.54 163** | Pn | | **Pn** | | **16 13 43.8 +0.7** | | |
| **WHY** | **Whitehorse** | **9.69 152** | Pn | | **Pn** | | **16 13 43.8 -1.5** | | |
| **N19K** | **Bonanza Creek** | **9.73 211** | Pn | | **Pn** | | **16 13 46.3 +0.5** | | |
| **M17K** | **Holitna River** | **9.81 220** | Pn | | **Pn** | | **16 13 46.5 -0.2** | | |
| **L16K** | **Owhat River** | **10.03 226** | Pn | | **Pn** | | **16 13 51.3 +1.6** | | |
| **K15K** | **Wolf Creek Mou** | **10.10 233** | Pn | | **Pn** | | **16 13 53.1 +0.6** | | |
| **J14K** | **Nanvaranak Lak** | **10.33 238** | Pn | | **Pn** | | **16 13 54.8 +1.0** | | |
| **WRGLY** | **Wrigley** | **10.38 117** | Pn | | **Pn** | | **16 13 54.2 -0.2** | | |
| **P33M** | **Teslin, Yukon** | **10.48 147** | Pn | | **Pn** | | **16 13 56.1 +0.2** | | |
| **M16K** | **Timber Creek** | **10.50 223** | Pn | | **Pn** | | **16 13 56.3 +0.1** | | |
| **N17K** | **Nushagak Hills** | **10.54 218** | Pn | | **Pn** | | **16 13 56.9 +0.3** | | |
| **P32M** | **Atlin** | **10.90 151** | | | **Pn** | | **16 14 03.4 +1.7** | | |
| **P18K** | **Big Mountain,** | **11.20 210** | Pn | | **Pn** | | **16 14 08.9 +3.2** | | |
| **N15K** | **Kwethluk River** | **11.52 223** | Pn | | **Pn** | | **16 14 11.2 +1.1** | | |
| **R33M** | **Jennings River** | **11.60 145** | Pn | | **Pn** | | **16 14 13.8 +2.5** | | |
| **BESE** | **Bessie Mountai** | **11.68 155** | Pn | | **Pn** | | **16 14 14.7 +2.3** | | |
| **Q32M** | **Nakina River** | **11.75 148** | Pn | | **Pn** | | **16 14 14.7 +1.3** | | |
| **R32K** | **Eaglecrest** | **12.03 155** | Pn | | **Pn** | | **16 14 19.7 +2.7** | | |
| **S31K** | **Pelican** | **12.10 159** | Pn | | **Pn** | | **16 14 19.2 +1.3** | | |
| **KDAK** | **Kodiak Island** | **12.33 202** | Pn | | **Pn** | | **16 14 24.0 +2.8** | | |
| | comp=E,0.1nm,0.3s,baz=317,slow=22,SNR=2.8 | | | | | | | | |
| KDAK | | | | LR | LR | | 16 19 30.3 | | |
| | comp=E,83nm,18.3s,baz=44,slow=39 | | | | | | | | |
| **DLBC** | **Dease Lake** | **12.68 144** | Pn | | **Pn** | | **16 14 26.9 +0.9** | | |
| | comp=E,0.6nm,0.3s,baz=330,slow=14,SNR=11 | | | | | | | | |
| DLBC | | | | Sn | Sn | | 16 16 35.2 | -12 | |
| | comp=E,1.1nm,0.3s,baz=355,slow=25,SNR=2.5 | | | | | | | | |
| DLBC | | | | LR | LR | | 16 20 04.5 | | |
| | comp=E,52nm,20.1s,baz=304,slow=40 | | | | | | | | |
| | comp=E,4.5nm,0.6s | | | | | | | | |
| **S32K** | **Killisoo** | **12.80 156** | Pn | | **Pn** | | **16 14 30.1 +2.6** | | |
| **S34M** | **Telegraph Cree** | **12.95 148** | Pn | | **Pn** | | **16 14 31.3 +1.7** | | |
| **YKA** | **Yellowknife Ar** | **13.79 106** | Pn | | Pn | | 16 14 35.9 -5.1 | | |
| **YKA** | **Yellowknife Ar** | **13.79 106** | Pn | | **Pn** | | **16 14 37.5 -3.5** | | |
| | comp=E,1.3nm,0.3s,baz=300,slow=19,SNR=15 | | | | | | | | |
| YKA | | | | Sn | Sn | | 16 17 01.1 | -13 | |
| | comp=E,0.8nm,0.3s,baz=326,slow=8.4,SNR=3.1 | | | | | | | | |
| YKA | | | | LR | LR | | 16 20 25.4 | | |
| | comp=E,61nm,20.0s,baz=310,slow=39 | | | | | | | | |
| | comp=E,4.4nm,0.6s | | | | | | | | |
| **YKAB2** | **New Yellowknif** | **13.84 106** | Pn | | **Pn** | | **16 14 38.0 -3.6** | | |
| **RES** | **Resolute Bay** | **15.55 49** | Pn | | **Pn** | | **16 14 58.7 -6.0** | | |
| RES | | | | IAmb | IAmb | | 16 15 23.8 | | |
| | comp=E,14nm,0.9s | | | | | | | | |
| **RES** | **Resolute Bay** | **15.55 49** | Pn | | **Pn** | | **16 15 00.8 -3.9** | | |
| | comp=E,2.4nm,0.3s,baz=264,slow=12,SNR=11 | | | | | | | | |
| RES | | | | Sn | Sn | | 16 17 39.9 | -17 | |
| | comp=E,0.7nm,0.3s,baz=279,slow=10,SNR=2.1 | | | | | | | | |
| RES | | | | LR | LR | | 16 22 22.6 | | |
| | comp=E,33nm,20.5s,baz=8.0,slow=43 | | | | | | | | |
| **BBB** | **Bella Bella** | **18.94 148** | | | LR | | 16 23 33.2 | | |
| | comp=E,38nm,18.6s,baz=354,slow=38 | | | | | | | | |
| **NEW** | **Newport** | **25.05 134** | LR | | LR | | 16 27 13.3 | | |
| | comp=E,82nm,19.1s,baz=338,slow=38 | | | | | | | | |
| **LTY** | **Liberty** | **25.15 140** | P | | **P** | | **16 16 51.9 +1.1** | | |
| LTY | | | | IAmb | IAmb | | 16 16 55.9 | | |
| | comp=E,4.3nm,0.8s | | | | | | | | |
| **LON** | **Longmire** | **25.38 142** | P | | **P** | | **16 16 54.5 +1.6** | | |
| LON | | | | IAmb | IAmb | | 16 16 58.3 | | |
| | comp=E,7.3nm,1.0s | | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.48 250** | LR | | LR | | 16 26 43.8 | | |
| | comp=E,28nm,20.1s,baz=298,slow=36 | | | | | | | | |
| **MA2** | **Magadan** | **28.21 283** | LR | | LR | | 16 29 51.6 | | |
| | comp=E,45nm,18.2s,baz=52,slow=39 | | | | | | | | |
| **I07A** | **Izee** | **28.42 141** | P | | **P** | | **16 17 20.9 +0.6** | | |
| **DBO** | **Dodson Butte** | **28.56 147** | P | | **P** | | **16 17 24.1 +2.6** | | |
| DBO | | | | IAmb | IAmb | | 16 17 28.5 | | |
| | comp=E,5.0nm,1.0s | | | | | | | | |
| **FRB** | **Frobisher Bay** | **28.69 64** | LR | | LR | | 16 29 16.9 | | |
| | comp=E,64nm,19.9s,baz=262,slow=37 | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **28.81 144** | P | | **P** | | **16 17 24.8 +1.0** | | |
| **YBH** | **Yreka Blue Hor** | **30.00 147** | LR | | LR | | 16 29 50.2 | | |
| | comp=E,37nm,19.8s,baz=309,slow=37 | | | | | | | | |
| **HLID** | **Hailey** | **30.12 134** | P | | **P** | | **16 17 35.7 +0.2** | | |
| **LOHW** | **Long Hollow** | **31.08 129** | P | | **P** | | **16 17 43.5 -0.5** | | |
| **BW06** | **Boulder Array** | **32.15 128** | P | | **P** | | **16 17 53.3 -0.1** | | |
| BW06 | | | | IAmb | IAmb | | 16 17 58.7 | | |
| | comp=E,2.1nm,0.8s | | | | | | | | |
| **PD31** | **Pinedale Array** | **32.15 128** | P | | **P** | | **16 17 53.5 +0.1** | | |
| PD31 | | | | IAmb | IAmb | | 16 17 58.8 | | |
| | comp=E,2.0nm,0.8s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.15 128** | P | | **P** | | **16 17 54.4 +0.9** | | |
| **PDAR** | **Pinedale Array** | **32.15 128** | P | | **P** | | **16 17 55.7 +2.3** | | |
| | comp=E,1.5nm,0.7s,baz=8.0,slow=5.8,SNR=12 | | | | | | | | |
| | comp=E,1.5nm,0.7s | | | | | | | | |
| **HVU** | **Hansel Valley** | **32.21 133** | P | | **P** | | **16 17 54.1 +0.3** | | |
| HVU | | | | IAmb | IAmb | | 16 17 59.4 | | |
| | comp=E,2.3nm,0.8s | | | | | | | | |
| **ELK** | **Elko** | **32.57 137** | P | | **P** | | **16 17 56.7 -0.5** | | |
| **HWUT** | **Hardware Ranch** | **32.69 132** | P | | **P** | | **16 17 57.4 -0.7** | | |
| HWUT | | | | IAmb | IAmb | | 16 18 03.7 | | |
| | comp=E,3.7nm,0.8s | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **33.69 134** | P | | **P** | | **16 18 07.5 +0.7** | | |
| **WAKR** | **Walker** | **33.77 144** | P | | **P** | | **16 18 08.1 +0.6** | | |
| WAKR | | | | IAmb | IAmb | | 16 18 14.0 | | |
| | comp=E,3.5nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.08 142** | P | | **P** | | **16 18 10.1 -0.2** | | |
| **NVAR** | **Mina Array Bea** | **34.08 142** | P | | **P** | | **16 18 13.7 +3.4** | | |
| | comp=E,2.1nm,0.8s,baz=332,slow=7.4,SNR=13 | | | | | | | | |
| | comp=E,2.1nm,0.8s | | | | | | | | |
| **NLU** | **North Lily Min** | **34.11 133** | P | | **P** | | **16 18 10.8 +0.3** | | |
| NLU | | | | IAmb | IAmb | | 16 18 16.0 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| **LHV** | **Little Huntoon** | **34.21 143** | P | | **P** | | **16 18 11.2 +0.1** | | |
| LHV | | | IAmb | | IAmb | | 16 18 17.6 | | |
| | comp=Z,3.7nm,1.1s | | | | | | | | |
| **Q12A** | **Willow Creek R** | **34.29 137** | P | | **P** | | **16 18 12.8 +0.7** | | |
| Q12A | | | IAmb | | IAmb | | 16 18 20.3 | | |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **TPH** | **Tonopah** | **34.66 141** | P | | **P** | | **16 18 15.7 +0.4** | | |
| **P18A** | **Preston Nutter** | **34.89 131** | P | | **P** | | **16 18 18.2 +0.8** | | |
| P18A | | | IAmb | | IAmb | | 16 18 21.9 | | |
| | comp=Z,4.3nm,0.8s | | | | | | | | |
| **MZP** | **Montezuma Peak** | **34.98 141** | P | | **P** | | **16 18 18.4 +0.2** | | |
| **PSUT** | **Pine Spring** | **35.01 136** | P | | **P** | | **16 18 17.5 -0.8** | | |
| PSUT | | | IAmb | | IAmb | | 16 18 22.1 | | |
| | comp=Z,3.6nm,1.0s | | | | | | | | |
| **DSP** | **Deep Springs** | **35.17 142** | P | | **P** | | **16 18 18.4 -1.0** | | |
| **SRU** | **San Rafael Swe** | **35.30 132** | P | | **P** | | **16 18 18.1 -2.6** | | |
| SRU | | | IAmb | | IAmb | | 16 18 24.3 | | |
| | comp=Z,3.1nm,0.6s | | | | | | | | |
| **MVU** | **Marysvale** | **35.44 134** | P | | **P** | | **16 18 20.6 -1.5** | | |
| **MSU** | **Marysvale** | **35.44 134** | P | | **P** | | **16 18 20.8 -1.2** | | |
| **CCUT** | **Cedar City** | **36.06 136** | P | | **P** | | **16 18 27.2 -0.1** | | |
| **SCHQ** | **Schefferville** | **36.09 73** | P | | **P** | | **16 18 27.7 +0.6** | | |
| **SCHQ** | **Schefferville** | **36.09 73** | P | | **P** | | **16 18 27.2 +0.1** | | |
| | comp=Z,9.2nm,0.8s,baz=328,slow=5.2,SNR=5.8 | | | | | | | | |
| | comp=Z,9.2nm,0.8s | | | | | | | | |
| **PV23** | **Carpenter Ridg** | **36.32 130** | P | | **P** | | **16 18 30.4 +0.8** | | |
| **PV14** | **Lion Creek, Pa** | **36.39 130** | P | | **P** | | **16 18 29.8 -0.4** | | |
| **PV04** | **Paradox Valley** | **36.41 130** | P | | **P** | | **16 18 30.7 +0.5** | | |
| PV04 | | | IAmb | | IAmb | | 16 18 35.3 | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **PV13** | **Radium Mtn., P** | **36.65 130** | P | | **P** | | **16 18 32.5 +0.2** | | |
| PV13 | | | IAmb | | IAmb | | 16 18 38.0 | | |
| | comp=Z,3.1nm,0.7s | | | | | | | | |
| **PV01** | **Paradox Valley** | **36.74 130** | P | | **P** | | **16 18 33.7 +0.5** | | |
| PV01 | | | IAmb | | IAmb | | 16 18 38.9 | | |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| **E46A** | **Sault Ste Mari** | **37.09 97** | P | | **P** | | **16 18 34.6 -1.1** | | |
| **WUAZ** | **Wupatki** | **38.48 135** | P | | **P** | | **16 18 48.7 +0.9** | | |
| WUAZ | | | IAmb | | IAmb | | 16 18 54.2 | | |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.12 142** | LR | | LR | | 16 36 32.8 | | |
| | comp=Z,52nm,19.8s,baz=302,slow=38 | | | | | | | | |
| **X16A** | **Lo Nlia Camp, P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SIUC | Southern Illin | 0.72 | 341 | | | Pg | 16 31 34.6 | -1.0 |
| SIUC | Southern Illin | 0.72 | 341 | | Sg | Sg | 16 31 44.4 | -0.7 |
| SIUC | | | | IAmb_Lg | | | 16 31 44.8 | |
| | comp=Z,25nm,0.9s | | | | | | | |
| SIUC | | | | IAML | | | 16 31 45.2 | |
| | comp=N,343nm,0.1s | | | | | | | |
| SIUC | | | | IAML | | | 16 31 45.3 | |
| | comp=E,342nm,0.1s | | | | | | | |
| GUAMO | Guam | 0.75 | 260 | | | Pg | 16 31 35.1 | -0.9 |
| PARMO | Parma | 0.76 | 242 | | | Pg | 16 31 35.1 | -1.1 |
| PARMO | | | | | | Sg | 16 31 45.1 | -1.0 |
| PARMO | | | | IAML | | | 16 31 45.5 | |
| | comp=N,317nm,0.2s | | | | | | | |
| PARMO | | | | IAML | | | 16 31 46.1 | |
| | comp=E,319nm,0.2s | | | | | | | |
| MARMO | Marston | 0.78 | 230 | | | Pg | 16 31 35.7 | -0.8 |
| MARMO | | | | | | Sg | 16 31 46.4 | -0.3 |
| PENMO | Penman | 0.81 | 225 | | | Pg | 16 31 36.3 | -0.9 |
| PENMO | | | | | | Sg | 16 31 47.0 | -0.7 |
| PPLM | Point Pleasant | 0.82 | 221 | | | Pg | 16 31 36.5 | -0.8 |
| WYBT | Wynnburg | 0.82 | 214 | | | Pg | 16 31 36.5 | -0.8 |
| POBM | Portage Bay | 0.86 | 224 | | | Pg | 16 31 37.2 | -0.9 |
| PGVM | Portageville | 0.86 | 229 | | | Pg | 16 31 37.1 | -1.0 |
| PVMO | Portageville | 0.87 | 226 | Pg | | Pg | 16 31 36.6 | -1.8 |
| PVMO | | | | Sg | | Sg | 16 31 48.0 | -1.8 |
| MLDM | Malden | 0.89 | 244 | | | Pb | 16 31 37.7 | -1.0 |
| BRNM | Bernie | 0.91 | 251 | | | Pb | 16 31 37.8 | -1.2 |
| TOPM | Tallapoosa | 0.92 | 237 | | | Pb | 16 31 38.3 | -0.9 |
| WADM | Wardell | 0.96 | 227 | | | Pb | 16 31 39.0 | -0.8 |
| MIST | Miston | 0.97 | 209 | | | Pb | 16 31 39.3 | -0.8 |
| BETM | Bethany | 1.00 | 246 | | | Pb | 16 31 39.5 | -1.0 |
| LNXT | Lenox | 1.03 | 206 | | | Pb | 16 31 40.2 | -0.8 |
| LNXT | | | | | Sg | Sb | 16 31 54.2 | -0.2 |
| LNXT | | | | IAML | | | 16 31 56.4 | |
| | comp=E,200nm,0.4s | | | | | | | |
| LNXT | | | | IAML | | | 16 31 58.0 | |
| | comp=N,253nm,0.3s | | | | | | | |
| HALT | Halls | 1.17 | 197 | | | Pn | 16 31 42.2 | -1.1 |
| HALT | Halls | 1.17 | 197 | | Sg | Sn | 16 31 58.6 | -0.3 |
| PEBM | Pemiscott Bayo | 1.19 | 220 | | | Pn | 16 31 42.9 | -0.7 |
| PEBM | | | | | Sg | Sb | 16 31 58.9 | +0.1 |
| PBMO | Poplar Bluff | 1.23 | 259 | | | Pn | 16 31 43.1 | -1.2 |
| PBMO | | | | | Sg | Sb | 16 31 58.8 | -1.5 |
| PBMO | | | | IAML | | | 16 32 02.2 | |
| | comp=N,177nm,0.3s | | | | | | | |
| WVT | Waverly | 1.26 | 135 | | | Pn | 16 31 43.5 | -1.1 |
| WVT | Waverly | 1.26 | 135 | | | Sb | 16 31 59.5 | -1.4 |
| USIN | University of | 1.37 | 47 | | | Pg | 16 31 51.6 | +3.8 |
| USIN | University of | 1.37 | 47 | | | Sn | 16 32 03.7 | -0.3 |
| USIN | University of | 1.37 | 47 | | | Pn | 16 31 46.3 | +0.1 |
| T47A | Sharon Grove | 1.46 | 91 | | | Pn | 16 31 47.0 | -0.3 |
| T47A | Sharon Grove | 1.46 | 91 | | | Pn | 16 31 46.9 | -0.4 |
| FVM | French Village | 1.53 | 309 | | | Pn | 16 31 48.3 | 0.0 |
| FVM | French Village | 1.53 | 309 | | | Pn | 16 31 47.9 | -0.4 |
| T42A | Van Buren | 1.73 | 271 | | | Pn | 16 31 50.9 | -0.3 |
| T42A | | | | IAmb_Lg | | | 16 32 20.9 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| OLIL | Olney | 1.82 | 21 | Pn | | Pb | 16 31 53.7 | -0.9 |
| Q44A | Meyer Farm, Va | 1.87 | 358 | Pn | | Pn | 16 31 53.4 | +0.4 |
| SLM | Saint Louis | 1.91 | 327 | Pn | | Pn | 16 31 54.0 | +0.4 |
| HBAR | Harrisburg | 2.03 | 224 | Pn | | Pn | 16 31 56.3 | +1.1 |
| LCAR | Lake Charles | 2.04 | 243 | | | Pn | 16 31 56.2 | +1.0 |
| CCM | Cathedral Cave | 2.11 | 300 | | | Pn | 16 31 56.5 | +0.2 |
| CCM | Cathedral Cave | 2.11 | 300 | | | Pn | 16 31 56.4 | +0.1 |
| CCM | | | | IAmb_Lg | | | 16 32 29.3 | |
| | comp=Z,8.9nm,1.0s | | | | | | | |
| PLAL | Pickwick Lake | 2.15 | 161 | | | Pn | 16 31 56.1 | -0.8 |
| PWLA | Pickwick Lake | 2.16 | 161 | | | Pn | 16 31 56.4 | -0.6 |
| CLTN | Cedars of Leba | 2.29 | 113 | | | Pn | 16 31 57.6 | -1.2 |
| CLTN | | | | IAmb_Lg | | | 16 32 38.9 | |
| | comp=Z,9.6nm,1.1s | | | | | | | |
| WCI | Wyandotte Cave | 2.41 | 59 | | | Pn | 16 31 59.8 | -0.6 |
| OXF | Oxford | 2.54 | 189 | Pn | | Pn | 16 32 01.2 | -1.0 |
| U49A | Red Boiling Sp | 2.58 | 101 | | | Pn | 16 32 01.6 | -1.1 |
| MGMO | Mountain Grove | 2.68 | 274 | Pn | | Pn | 16 32 03.9 | -0.2 |
| FCAR | Ozark Folk Cen | 2.82 | 247 | | | Pn | 16 32 05.9 | -0.1 |
| BLO | Bloomington | 2.86 | 41 | Pn | | Pn | 16 32 06.5 | -0.1 |
| P46A | Rosedale | 2.92 | 27 | Pn | | Pn | 16 32 08.3 | +0.9 |
| P46A | | | | IAmb_Lg | | | 16 32 56.6 | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| R40A | Maddies Statio | 2.94 | 296 | Pn | | Pn | 16 32 08.4 | +0.8 |
| X48A | Hartselle | 2.99 | 149 | Pn | | Pn | 16 32 07.8 | -0.6 |
| SWET | Sewanee | 3.02 | 126 | Pn | | Pn | 16 32 09.0 | +0.1 |
| SWET | | | | IAmb_Lg | | | 16 33 00.5 | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| Y45A | Yeager Farm, C | 3.20 | 189 | Pn | | Pn | 16 32 11.2 | -0.1 |
| WHAR | Wooly Hollow | 3.23 | 238 | Pn | | Pn | 16 32 11.3 | -0.4 |
| R49A | Shelbyville | 3.23 | 66 | Pn | | Pn | 16 32 12.7 | +1.0 |
| T50A | Nancy | 3.27 | 89 | Pn | | Pn | 16 32 12.6 | +0.3 |
| W50A | Signal Mountai | 3.45 | 121 | Pn | | Pn | 16 32 15.3 | +0.5 |
| P40A | Paris | 3.50 | 316 | Pn | | Pn | 16 32 14.4 | -1.1 |
| P40A | | | | IAmb_Lg | | | 16 33 19.9 | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| S39A | Bolivar | 3.57 | 282 | | | Pn | 16 32 16.9 | +0.6 |
| FPAL | Fort Paine | 3.66 | 132 | Pn | | Pn | 16 32 18.7 | +1.0 |
| P48A | Milroy | 3.67 | 48 | Pn | | Pn | 16 32 16.4 | -1.4 |
| Y49A | Blount Mountai | 3.77 | 146 | Pn | | Pn | 16 32 19.5 | +0.3 |
| Y49A | | | | IAmb_Lg | | | 16 33 18.5 | |
| | comp=Z,7.5nm,1.0s | | | | | | | |
| Z47A | Carrollton | 3.88 | 169 | Pn | | Pn | 16 32 21.1 | +0.4 |
| N41A | Harden Midland | 3.97 | 338 | Pn | | Pn | 16 32 21.2 | -0.7 |
| X40A | Basin Creek Fa | 4.07 | 233 | Pn | | Pn | 16 32 20.9 | -2.3 |
| X40A | | | | IAmb_Lg | | | 16 33 30.0 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| HHAR | Hobbs | 4.10 | 261 | Pn | | Pn | 16 32 23.6 | -0.1 |
| X51A | Calhoun | 4.12 | 125 | | | Pn | 16 32 22.0 | -1.9 |
| P49A | Miami Univ. Ec | 4.15 | 52 | Pn | | Pn | 16 32 21.9 | -2.4 |
| P49A | | | | IAmb_Lg | | | 16 33 31.6 | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| LRAL | Lakeview Retre | 4.29 | 158 | Pn | | Pn | 16 32 24.2 | -2.0 |
| S51A | Beattyville | 4.29 | 80 | Pn | | Pn | 16 32 24.6 | -1.7 |
| TZTN | Tazewell | 4.34 | 95 | Pn | | Pn | 16 32 25.9 | -1.1 |
| TKL | Tuckaleechee C | 4.38 | 107 | Pn | | Pn | 16 32 26.4 | -1.1 |
| 146A | Union | 4.38 | 181 | Pn | | Pn | 16 32 26.4 | -1.2 |
| P38A | Dawn | 4.46 | 307 | Pn | | Pn | 16 32 26.6 | -1.9 |
| W52A | Murphy | 4.49 | 114 | | | Pn | 16 32 27.4 | -1.6 |
| MIAR | Mount Ida | 4.52 | 238 | Pn | | Pn | 16 32 28.7 | -0.7 |
| HODGE | Hodges | 6.10 | 115 | IAmb_Lg | | | 16 34 33.0 | |
| | comp=Z,3.1nm,0.8s | | | | | | | |

**NEIC 23 16:41:57.0±0.8, 38°.023N±0°.007×98°.00W±0°.03, h5km±1km, mb_Lg2.4/22, ML2.6/8, Error ellipse: s-maj=3.4km s-min=3.0km az=79.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| R32A | Long Quarter, | 0.69 | 306 | Pg | Pg | 16 42 09.6 | -0.7 |
| R32A | | | | Sg | Sg | 16 42 19.5 | +0.3 |
| R32A | | | | IAML | | 16 42 20.3 | |
| | comp=N,269nm,0.6s | | | | | | |
| R32A | | | | IAML | | 16 42 24.5 | |
| | comp=E,285nm,0.4s | | | | | | |
| KAN12 | Harper NE Stat | 0.72 | 180 | Pg | Pg | 16 42 10.5 | -0.4 |
| KS21 | Milan North St | 0.78 | 160 | Pg | Pg | 16 42 11.4 | -0.6 |
| KS21 | | | | Sg | Sg | 16 42 21.9 | -0.3 |
| KAN08 | Anthony NE Sta | 0.80 | 178 | Pg | Pg | 16 42 11.2 | -1.1 |
| KAN08 | | | | Sg | Sg | 16 42 22.1 | -0.5 |
| KAN01 | Argonia South | 0.89 | 167 | Pg | Pg | 16 42 13.1 | -1.0 |
| KAN01 | | | | Sg | Sg | 16 42 25.0 | -0.6 |
| KAN09 | Caldwell North | 0.94 | 161 | Pg | Pg | 16 42 14.2 | -0.8 |
| KAN09 | | | | Sg | Sg | 16 42 27.1 | -0.1 |
| KAN17 | Caldwell West | 0.99 | 169 | Pg | Pg | 16 42 15.2 | -0.9 |
| KAN17 | | | | Sg | Sg | 16 42 28.3 | -0.7 |
| KAN14 | Manchester OK | 1.06 | 178 | Pg | Pg | 16 42 16.8 | -0.7 |
| KAN13 | South Haven SW | 1.09 | 157 | Pg | Pg | 16 42 16.6 | -1.2 |
| KAN13 | | | | Sg | Sg | 16 42 30.7 | -1.3 |
| GC02 | Grant County # | 1.17 | 174 | Pg | Pg | 16 42 18.9 | -0.7 |
| GC02 | | | | Sg | Sg | 16 42 34.6 | -0.2 |
| OK032 | Salt Plains WL | 1.23 | 188 | Pg | Pg | 16 42 19.6 | -1.0 |
| OK032 | | | | Sg | Sg | 16 42 35.1 | -1.3 |
| OK032 | | | | IAML | | 16 42 43.5 | |
| | comp=E,106nm,0.6s | | | | | | |
| OK032 | | | | IAML | | 16 42 45.2 | |
| | comp=E,132nm,0.2s | | | | | | |
| BLOK | Blackwell | 1.41 | 153 | | | Pn | 16 42 22.6 | -0.7 |
| CROK | Carrier | 1.52 | 179 | | | Pn | 16 42 24.3 | -0.5 |
| KSU1 | Kansas State U | 1.53 | 45 | | | Pn | 16 42 24.9 | -0.2 |
| NOKA | Waynoka | 1.57 | 208 | | | Pn | 16 42 25.1 | -0.5 |
| CBKS | Cedar Bluff | 1.58 | 301 | | | Pn | 16 42 24.8 | -0.9 |
| T35A | Sooner Cattle | 1.62 | 133 | | | Pn | 16 42 26.2 | 0.0 |
| OK038 | West end E0370 | 1.65 | 201 | Pn | | Pn | 16 42 25.8 | -0.9 |
| OK051 | E0350 and S346 | 1.78 | 148 | Pn | | Pn | 16 42 27.4 | -1.0 |
| OK048 | Pawnee Station | 1.81 | 152 | Pn | | Pn | 16 42 28.7 | -0.2 |
| QUOK | Quay | 2.12 | 150 | Pn | | Pn | 16 42 32.0 | -1.1 |
| OK052 | Battle Ridge R | 2.24 | 154 | Pn | | Pn | 16 42 33.4 | -1.4 |
| ELIS | Ellis County | 2.26 | 211 | Pn | | Pn | 16 42 34.5 | -0.6 |
| ELIS | | | | IAmb_Lg | | | 16 43 08.1 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| OK029 | Liberty Lake | 2.26 | 169 | Pn | | Pn | 16 42 34.8 | -0.4 |
| OK031 | S. Brethren Rd | 2.27 | 155 | Pn | | Pn | 16 42 34.5 | -0.7 |
| CSTR | Hydro, Custer | 2.44 | 193 | Pn | | Pn | 16 42 35.5 | -2.0 |
| DEOK | Depew | 2.49 | 151 | Pn | | Pn | 16 42 37.1 | -1.1 |
| TUL3 | Leonard | 2.75 | 139 | IAmb_Lg | | | 16 43 24.6 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| RLO | Rose Lookout | 3.02 | 127 | Pn | | Pn | 16 42 45.2 | -0.3 |
| U38A | Gravette | 3.29 | 118 | Pn | | Pn | 16 42 48.8 | -0.5 |
| U38A | | | | IAmb_Lg | | | 16 43 41.4 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| WMOK | Wichita Mounta | 3.34 | 191 | Pn | | Pn | 16 42 49.4 | -0.5 |
| N35A | Tabor | 3.37 | 32 | Pn | | Pn | 16 42 49.9 | -0.5 |
| X34A | Smith Ranch, M | 3.42 | 178 | Pn | | Pn | 16 42 48.0 | -3.0 |
| SMWD | Samnorwood | 3.43 | 212 | Pn | | Pn | 16 42 49.8 | -1.4 |
| SMWD | | | | IAmb_Lg | | | 16 43 51.4 | |
| | comp=Z,9.6nm,0.7s | | | | | | | |
| HHAR | Hobbs | 3.68 | 117 | Pn | | Pn | 16 42 54.9 | +0.3 |
| S39A | Bolivar | 3.72 | 94 | Pn | | Pn | 16 42 55.7 | +0.6 |
| S39A | | | | IAmb_Lg | | | 16 44 05.4 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| KSCO | Kaye Shedlock* | 3.76 | 287 | Pn | | Pn | 16 42 55.7 | -0.1 |
| P38A | Dawn | 3.84 | 64 | Pn | | Pn | 16 42 57.0 | +0.2 |
| P38A | | | | IAmb_Lg | | | 16 44 03.9 | |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| X37A | Clayton | 4.03 | 147 | Pn | | Pn | 16 42 59.2 | -0.2 |
| X37A | | | | IAmb_Lg | | | 16 44 07.2 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| RTBA | Rita Blanca | 4.10 | 249 | Pn | | Pn | 16 43 01.3 | +0.8 |
| OGNE | Ogallala | 4.27 | 314 | | | Pn | 16 43 00.2 | -2.6 |
| R40A | Maddies Statio | 4.53 | 85 | Pn | | Pn | 16 43 04.7 | -1.6 |
| N38A | Joes South For | 4.61 | 52 | Pn | | Pn | 16 43 06.1 | -1.3 |
| MGMO | Mountain Grove | 4.63 | 99 | Pn | | Pn | 16 43 05.8 | -2.0 |
| MGMO | | | | IAmb_Lg | | | 16 44 25.7 | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| P40A | Paris | 4.89 | 70 | Pn | | Pn | 16 43 08.4 | -2.8 |
| MIAR | Mount Ida | 4.98 | 133 | Pn | | Pn | 16 43 09.5 | -3.0 |
| MIAR | | | | IAmb_Lg | | | 16 44 47.3 | |
| | comp=Z,8.1nm,0.7s | | | | | | | |
| APMT | Aspermont | 5.00 | 201 | Pn | | Pn | 16 43 10.7 | -2.0 |
| FW06 | Azle | 5.05 | 176 | Pn | | Pn | 16 43 11.3 | -2.2 |
| FCAR | Ozark Folk Cen | 5.17 | 113 | IAmb_Lg | | | 16 44 39.6 | |
| | comp=Z,7.2nm,0.9s | | | | | | | |
| T25A | Trinidad | 5.17 | 262 | Pn | | Pn | 16 43 12.5 | -2.8 |
| CCM | Cathedral Cave | 5.33 | 88 | Pn | | Pn | 16 43 15.0 | -2.3 |
| WHAR | Wooly Hollow | 5.34 | 119 | Pn | | Pn | 16 43 15.3 | -2.1 |
| X40A | Basin Creek Fa | 5.46 | 129 | Pn | | Pn | 16 43 17.9 | -1.2 |
| X40A | | | | IAmb_Lg | | | 16 44 55.9 | |
| | comp=Z,6.8nm,0.7s | | | | | | | |
| T42A | Van Buren | 5.58 | 98 | Pn | | Pn | 16 43 18.8 | -1.9 |
| Q24A | Divide | 5.69 | 282 | Pn | | Pn | 16 43 20.5 | -2.0 |
| LCAR | Lake Charles | 5.81 | 108 | IAmb_Lg | | | 16 45 02.9 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |

*UPP **23** 17:01:41.9±0.1, 67°.04N×20°.98E, h0km, ML2.1, Unknown*
*IDC **23** 17:01:42.8±1.1, 67°.04N×21°.15E, h0km, mbtmp2.8/4, ML1.8/4, Error ellipse: s-maj=20.4km s-min=9.0km az=114.0*

**ISC 23 17:01:42.5±1.0, 67°.06N±0°.04×20°.93E±0°.04, h10km, n16, σ1§23/18, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DUNU | Dundret | 0.15 | 296 | P | Pg | 17 01 45.5 | -0.4 |
| MASU | Masugnsbyn | 0.58 | 45 | P | Pg | 17 01 52.9 | -0.9 |
| PAJU | Pajala | 0.86 | 91 | P | Pg | 17 01 57.5 | -1.4 |
| HARU | Harads | 0.90 | 179 | P | Pg | 17 01 58.4 | -1.3 |
| SALU | Saltoluokta | 1.00 | 290 | eP | Pg | 17 02 00.8 | -0.8 |
| SALU | Saltoluokta | 1.00 | 290 | P | Pg | 17 02 00.8 | -0.8 |
| LANU | Lannavaara | 1.08 | 22 | P | Pg | 17 02 01.8 | -1.4 |
| KOVU | Salmi | 1.21 | 346 | P | Pn | 17 02 04.4 | -1.0 |
| KALU | Kalix | 1.55 | 140 | P | Pn | 17 02 09.8 | -0.2 |
| SJUU | Sjulsmark | 1.58 | 170 | P | Pn | 17 02 10.6 | +0.1 |
| HEF | Hetta | 1.71 | 36 | eP | Pn | 17 02 12.6 | +0.3 |
| I37NO | I37NO | 2.21 | 338 | I | I | 17 15 35.0 | |
| | baz=157,slow=330,SNR=2.1 | | | | | | |
| ARCES | ARCESS Array B | 3.02 | 32 | Pn | Pn | 17 02 31.1 | +0.9 |
| | 0.2nm,0.3s,baz=214,slow=14,SNR=11 | | | | | | |
| ARCES | | | | Sn | Sn | 17 03 09.3 | +3.0 |
| | 0.2nm,0.3s,baz=213,slow=23,SNR=1.9 | | | | | | |
| | 0.5nm,0.2s | | | | | | |
| FINES | FINESS Array B | 6.06 | 156 | Pn | Pn | 17 03 13.3 | +1.3 |
| | baz=347,slow=12,SNR=1.2 | | | | | | |
| FINES | | | | Sn | Sn | 17 04 22.3 | +1.0 |
| | 0.1nm,0.3s,baz=348,slow=24,SNR=1.2 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| NOA | NORSAR Array B | 7.38 | 220 | Pn | Pn | 17 03 30.9 | +0.7 |
| | baz=35,slow=13,SNR=1.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| HFS | Hagfors | 7.65 | 208 | Pn | Pn | 17 03 33.6 | -0.2 |
| | 0.1nm,0.3s,baz=31,slow=17,SNR=2.0 | | | | | | |
| HFS | | | | Sn | Sn | 17 04 59.5 | -1.0 |
| | 0.1nm,0.3s,baz=29,slow=27,SNR=1.3 | | | | | | |
| | 1.1nm,0.7s | | | | | | |

*AEIC **23** 17:16:47.7±1.6, 69°.48N±0°.04×144°.16W±0°.09, h6km±5km, ML3.5,ML3.7/120(NEIC), Error ellipse: s-maj=6.0km s-min=4.5km az=182.0*
*IDC **23** 17:16:48.8±1.1, 69°.70N×144°.41W, h0km, mb3.4/5, mbtmp3.5/8, ML3.6/3, MS2.9/6, Error ellipse: s-maj=27.7km s-min=18.6km az=51.0*
*NEIC **23** 17:16:48.8±0.9, 69°.57N±0°.02×144°.0W±0°.1, h10km±2km, Error ellipse: s-maj=6.5km s-min=3.6km az=67.0*

**ISC 23 17:16:48.9±0.6, 69°.54N±0°.03×144°.21W±0°.03, h10km, n94, σ1§44/75, mb3.5/5, MS2.9/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| C27K | Jago River | 0.20 | 64 | Pg | Pg | 17 16 51.9 | -1.1 |
| C26K | Camden Bay | 0.45 | 327 | | Pb | 17 16 58.0 | -0.9 |
| C26K | | | | | Sb | 17 17 05.6 | 0.0 |
| D25K | Kavik River | 0.80 | 255 | | Pg | 17 17 02.4 | -1.8 |
| D25K | | | | | Sg | 17 17 13.6 | -1.0 |
| D27M | Malcolm River | 1.19 | 103 | Pg | Pb | 17 17 09.4 | -2.2 |
| D27M | Malcolm River | 1.19 | 103 | | Sg | 17 17 26.2 | -0.9 |
| D27M | Malcolm River | 1.19 | 103 | IAML | | 17 17 31.6 | |
| | comp=E,766nm,0.6s | | | | | | |
| D27M | | | | IAML | | 17 17 34.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| C24K | Franklin Bluff | 1.58 | 279 | | Pb | 17 17 17.4 | -0.7 |
| C24K | | | | | Sg | 17 17 40.2 | +0.5 |
| C24K | Franklin Bluff | 1.58 | 279 | IAML | | 17 17 41.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| C24K | | | | IAML | | 17 17 43.5 | |
| | comp=E,988nm,0.8s | | | | | | |
| E27K | Coleen River | 1.66 | 144 | | Pn | 17 17 18.0 | -0.1 |
| E27K | | | | IAML | | 17 17 41.9 | |
| | comp=E,739nm,0.7s | | | | | | |
| D24K | Happy Valley | 1.68 | 259 | | Pb | 17 17 18.8 | -1.1 |
| F26K | Sheenjek River | 1.86 | 179 | | Pb | 17 17 21.3 | -1.6 |
| F26K | Sheenjek River | 1.86 | 179 | | Sb | 17 17 46.1 | 0.0 |
| F26K | Sheenjek River | 1.86 | 179 | IAML | | 17 17 49.0 | |
| | comp=E,844nm,0.6s | | | | | | |
| F26K | | | | IAML | | 17 17 49.9 | |
| | comp=N,502nm,0.8s | | | | | | |
| E28M | Babbage River | 1.93 | 117 | | Pb | 17 17 22.3 | -1.7 |
| F25K | Christian Rive | 2.03 | 196 | | Pb | 17 17 23.9 | -1.9 |
| F25K | Christian Rive | 2.03 | 196 | | Sb | 17 17 51.3 | +0.2 |
| F25K | Christian Rive | 2.03 | 196 | IAML | | 17 17 53.4 | |
| | comp=E,574nm,1.0s | | | | | | |
| F25K | | | | IAML | | 17 17 54.7 | |
| | comp=N,588nm,0.7s | | | | | | |
| TOLK | Toolik Lake Re | 2.12 | 247 | Pn | Pn | 17 17 24.5 | +0.1 |
| TOLK | Toolik Lake Re | 2.12 | 247 | Pg | Pn | 17 17 24.7 | +0.2 |
| TOLK | Toolik Lake Re | 2.12 | 247 | | Sg | 17 17 57.6 | +0.5 |
| TOLK | Toolik Lake Re | 2.12 | 247 | IAML | | 17 17 58.4 | |
| | comp=E,570nm,0.6s | | | | | | |
| TOLK | | | | IAML | | 17 18 04.1 | |
| | comp=N,465nm,0.6s | | | | | | |
| BMAR | Burnt Mountain | 2.13 | 184 | Pg | Pb | 17 17 25.8 | -1.8 |
| E24K | Your Creek | 2.14 | 228 | | Pb | 17 17 25.8 | -1.9 |
| C23K | Itkillik River | 2.25 | 281 | Pn | Pn | 17 17 26.7 | +0.6 |
| D23K | Nanushuk River | 2.38 | 259 | | Pn | 17 17 28.1 | +0.2 |
| D23K | | | | IAML | | 17 18 17.4 | |
| | comp=N,361nm,0.8s | | | | | | |
| D23K | | | | IAML | | 17 18 19.4 | |
| | comp=E,352nm,0.8s | | | | | | |
| F24K | Squaw Lake | 2.44 | 215 | | Pn | 17 17 29.1 | +0.3 |
| E23K | Chandalar | 2.47 | 235 | | Pn | 17 17 29.8 | +0.6 |
| E23K | | | | IAML | | 17 18 13.4 | |
| | comp=N,358nm,0.7s | | | | | | |
| F28M | Old Crow | 2.51 | 139 | | Pn | 17 17 29.5 | -0.2 |
| F28M | | | | IAML | | 17 18 10.5 | |
| | comp=N,320nm,0.8s | | | | | | |
| F28M | | | | IAML | | 17 18 13.8 | |
| | comp=E,318nm,0.8s | | | | | | |
| E29M | Blow River | 2.56 | 114 | | Pn | 17 17 28.9 | -1.4 |
| E29M | | | | IAML | | 17 18 10.4 | |
| | comp=E,252nm,0.8s | | | | | | |
| G26K | Porcupine Rive | 2.61 | 176 | | Pn | 17 17 31.6 | +0.5 |
| G25K | Bearman Lake | 2.88 | 195 | | Pn | 17 17 36.2 | +1.5 |
| G27K | Doyon Strip | 2.91 | 160 | | Pn | 17 17 35.4 | +0.2 |
| FYU | Fort Yukon | 3.02 | 188 | | Pn | 17 17 36.9 | +0.3 |
| D22K | Ayikyak River | 3.09 | 262 | | Pn | 17 17 38.5 | +0.8 |
| E22K | Anaktuvuk Pass | 3.10 | 246 | | Pn | 17 17 38.2 | +0.4 |
| E22K | | | | IAML | | 17 18 28.1 | |
| | comp=N,167nm,0.9s | | | | | | |
| G24K | Hadweenzic Riv | 3.10 | 205 | | Pn | 17 17 38.4 | +0.5 |
| G24K | | | | IAML | | 17 18 28.5 | |
| | comp=E,234nm,0.8s | | | | | | |
| G24K | | | | IAML | | 17 18 39.2 | |
| | comp=N,254nm,1.1s | | | | | | |
| B22K | Teshekpuk Lake | 3.27 | 288 | | Pn | 17 17 41.5 | +1.4 |
| G29M | Pine Creek | 3.51 | 136 | | Pn | 17 17 43.9 | +0.4 |
| G29M | | | | IAML | | 17 18 48.4 | |
| | comp=N,155nm,1.0s | | | | | | |
| G23K | Bananza Creek | 3.58 | 220 | Pn | Pn | 17 17 43.6 | -0.8 |
| G23K | | | | IAML | | 17 18 45.9 | |
| | comp=E,170nm,0.8s | | | | | | |
| G23K | | | | IAML | | 17 18 46.4 | |
| | comp=N,108nm,0.9s | | | | | | |
| B21K | Ikpikpuk River | 3.65 | 276 | Pn | Pn | 17 17 46.3 | +1.0 |
| F30M | Barrier River | 3.65 | 118 | | Pn | 17 17 47.4 | +2.1 |
| E21K | Killik River | 3.68 | 257 | | Pn | 17 17 46.1 | +0.3 |
| E21K | | | | IAML | | 17 18 53.3 | |
| | comp=N,141nm,0.7s | | | | | | |
| E21K | | | | IAML | | 17 18 58.2 | |
| | comp=E,131nm,0.8s | | | | | | |
| G30M | tAoh Zrail Nji | 3.93 | 127 | | Pn | 17 17 50.0 | +0.7 |
| G30M | | | | IAML | | 17 19 05.8 | |
| | comp=N,82nm,1.1s | | | | | | |
| H24K | Noodor Dome | 3.98 | 202 | | Pn | 17 17 50.5 | +0.6 |
| H24K | | | | IAML | | 17 18 54.1 | |
| | comp=N,76nm,0.7s | | | | | | |
| H24K | | | | IAML | | 17 19 01.4 | |
| | comp=E,92nm,1.2s | | | | | | |
| H29M | Whitestone | 4.00 | 144 | Pn | Pn | 17 17 51.1 | +0.9 |
| H29M | | | | IAML | | 17 18 47.8 | |
| | comp=N,111nm,0.6s | | | | | | |
| INK | Inuvik | 4.05 | 103 | Pn | Pn | 17 17 49.4 | -1.4 |
| INK | Inuvik | 4.05 | 103 | Pn | Pn | 17 17 52.3 | +1.4 |
| | comp=N,1.4nm,0.3s,baz=315,slow=11,SNR=6.2 | | | | | | |
| INK | | | | Sn | Sn | 17 18 42.4 | +4.1 |
| | comp=N,3.9nm,0.3s,baz=249,slow=11,SNR=5.8 | | | | | | |
| | comp=N,7.6nm,0.4s | | | | | | |
| PRP | Porcupine Dome | 4.08 | 188 | | Pn | 17 17 52.3 | +1.0 |
| PRP | | | | IAML | | 17 19 03.3 | |
| | comp=E,104nm,0.8s | | | | | | |
| F21K | Alatna River | 4.14 | 240 | IAML | | 17 19 09.1 | |
| | comp=N,72nm,0.7s | | | | | | |
| F21K | | | | IAML | | 17 19 15.1 | |
| | comp=E,88nm,0.7s | | | | | | |
| H23K | Yukon River | 4.25 | 211 | | Pn | 17 17 54.4 | +0.8 |
| H23K | | | | IAML | | 17 19 06.0 | |
| | comp=N,88nm,0.8s | | | | | | |
| H23K | | | | IAML | | 17 19 09.1 | |
| | comp=E,70nm,1.2s | | | | | | |
| F31M | Tsiigehtchic | 4.39 | 114 | Pn | Pn | 17 17 56.2 | +0.7 |
| F31M | | | | IAML | | 17 19 15.5 | |
| | comp=E,78nm,1.1s | | | | | | |
| I28M | Miner Creek | 4.43 | 156 | Pn | Pn | 17 17 57.3 | +1.2 |
| I28M | | | | IAML | | 17 18 51.6 | |
| | comp=N,73nm,0.5s | | | | | | |
| I28M | | | | IAML | | 17 19 21.0 | |
| | comp=E,67nm,0.7s | | | | | | |
| B20K | Meade River | 4.52 | 282 | | Pn | 17 17 58.2 | +1.0 |
| G31M | Satah River | 4.54 | 121 | Pn | Pn | 17 17 57.8 | +0.3 |
| G31M | | | | IAML | | 17 19 21.2 | |
| | comp=N,66nm,1.1s | | | | | | |
| POKR | Poker Plat Res | 4.62 | 197 | IAML | | 17 18 56.6 | |
| | comp=E,70nm,0.8s | | | | | | |
| POKR | | | | IAML | | 17 19 29.4 | |
| | comp=N,59nm,0.8s | | | | | | |
| G21K | Allakaket | 4.63 | 233 | IAML | | 17 19 21.7 | |
| | comp=E,70nm,1.2s | | | | | | |
| G21K | | | | IAML | | 17 19 26.1 | |
| | comp=N,76nm,0.9s | | | | | | |
| I29M | Ogilvie Camp, | 4.77 | 149 | IAML | | 17 18 58.2 | |
| | comp=E,58nm,0.6s | | | | | | |
| I29M | | | | IAML | | 17 18 59.2 | |
| | comp=N,54nm,0.3s | | | | | | |
| I23K | Minto, Yukon-K | 4.84 | 207 | IAML | | 17 19 30.9 | |
| | comp=E,44nm,1.2s | | | | | | |
| I23K | | | | IAML | | 17 19 34.4 | |
| | comp=N,55nm,1.2s | | | | | | |
| MDM | Murphy Dome | 4.86 | 201 | IAML | | 17 19 29.9 | |
| | comp=E,56nm,0.8s | | | | | | |
| MDM | | | | IAML | | 17 19 30.9 | |
| | comp=N,54nm,0.6s | | | | | | |
| COLA | College | 4.90 | 198 | | Pn | 17 18 04.5 | +2.1 |
| ILAR | Eielson Array | 4.90 | 194 | Pn | Pn | 17 18 02.0 | -0.5 |
| ILAR | Eielson Array | 4.90 | 194 | Pn | Pn | 17 18 03.5 | +0.9 |
| | comp=N,1.9nm,0.3s,baz=4.8,slow=14,SNR=82 | | | | | | |
| ILAR | | | | Sn | Sn | 17 18 59.6 | +0.3 |
| | comp=N,3.6nm,0.3s,baz=8.3,slow=20,SNR=9.2 | | | | | | |
| ILAR | | | | Lg | Lg | 17 19 16.9 | |
| | comp=N,4.7nm,0.3s,baz=5.5,slow=32,SNR=7.2 | | | | | | |
| | comp=N,5.6nm,0.5s | | | | | | |
| EGAK | Eagle | 4.93 | 165 | | Pn | 17 18 03.7 | +0.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,21nm,21.3s,baz=260,slow=35 | | | | | | |
| **NEW** | **Newport** | **25.09** | **134** | LR | LR | 17 32 00.3 | |
| | comp=E,24nm,19.3s,baz=1.0,slow=36 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **25.47** | **250** | LR | LR | 17 31 25.2 | |
| | comp=E,32nm,21.1s,baz=109,slow=34 | | | | | | |
| **FRB** | **Frobisher Bay** | **28.70** | **64** | LR | LR | 17 34 41.3 | |
| | comp=E,36nm,18.8s,baz=244,slow=37 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **30.04** | **147** | LR | LR | 17 36 05.8 | |
| | comp=E,30nm,19.4s,baz=298,slow=38 | | | | | | |
| **PDAR** | **Pinedale Array** | **32.19** | **128** | P | **P** | **17 23 20.1** | **+3.3** |
| | comp=E,0.5nm,0.7s,baz=0.0,slow=6.4,SNR=3.7 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.12** | **142** | P | **P** | **17 23 37.4** | **+3.6** |
| | comp=E,0.3nm,0.5s,baz=347,slow=6.6,SNR=3.6 | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **46.41** | **128** | P | **P** | **17 25 18.5** | **+3.1** |
| | comp=E,0.2nm,0.3s,baz=350,slow=4.9,SNR=2.2 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.14** | **329** | P | **P** | **17 26 28.4** | **+0.5** |
| | comp=E,0.2nm,0.5s,baz=12,slow=6.7,SNR=4.2 | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.07** | **324** | P | **P** | **17 26 48.4** | **-0.3** |
| | comp=E,0.3nm,0.7s,baz=37,slow=6.8,SNR=4.1 | | | | | | |
| | comp=E,0.3nm,0.7s | | | | | | |

*KEA **23** 17:57:14.9,37.98N×125.74E,h17km,ML2.7/5*
*KMA **23** 17:57:16.0±0.1,37.91N×125.67E,h14km±1km, Error ellipse: s-maj=2.1km s-min=0.9km az=9.0*
**ISC 23 17:57:15.5**±0.9,**37.95N**±0.03×**125.68E**±0.03,**h16**km±8km, **n23**,σ0**39**/40,**South Korea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HJU** | **Haeju** | **0.10** | **19** | Pg | **Pg** | **17 57 19.0** | **+0.1** |
| HJU | | | | Sg | **Sb** | **17 57 21.6** | **+0.1** |
| HJU | | | | AML | AML | | |
| | comp=N,4μm,0.2s | | | | | | |
| HJU | | | | AML | AML | | |
| | comp=E,5μm,0.3s | | | | | | |
| HJU | | | | AML | AML | | |
| | comp=Z,2μm,0.2s | | | | | | |
| **YPDB** | **Yeonpyeongdo** | **0.34** | **176** | P | **Pg** | **17 57 22.5** | **0.0** |
| | SNR=955 | | | | | | |
| YPDB | | | | P | **Pg** | **17 57 22.5** | **0.0** |
| | SNR=955 | | | | | | |
| YPDB | | | | S | **Sg** | **17 57 26.6** | **-0.7** |
| YPDB | | | | S | **Sg** | **17 57 26.6** | **-0.7** |
| **KSGAH** | **Ganghwa** | **0.65** | **111** | P | **Pb** | **17 57 28.6** | **+0.2** |
| | SNR=151 | | | | | | |
| KSGAH | | | | P | **Pb** | **17 57 28.6** | **+0.2** |
| | SNR=151 | | | | | | |
| KSGAH | | | | S | **Sb** | **17 57 37.1** | **-0.1** |
| KSGAH | | | | S | **Sb** | **17 57 37.1** | **-0.1** |
| **YJD** | **YOUNGJONGDO** | **0.76** | **129** | P | **Pg** | **17 57 30.5** | **+0.1** |
| **KSBAR** | **Backryungdo** | **0.77** | **272** | P | **Pg** | **17 57 30.9** | **+0.4** |
| | SNR=140 | | | | | | |
| KSBAR | | | | P | **Pg** | **17 57 30.9** | **+0.4** |
| | SNR=140 | | | | | | |
| **KSDEI** | **Deokjeokdo** | **0.77** | **154** | P | **Pb** | **17 57 30.3** | **-0.1** |
| | SNR=275 | | | | | | |
| KSDEI | | | | P | **Pb** | **17 57 30.3** | **-0.1** |
| | SNR=275 | | | | | | |
| **DACB** | **Daecheong-do R** | **0.78** | **262** | P | **Pb** | **17 57 30.5** | **-0.2** |
| | SNR=224 | | | | | | |
| DACB | | | | P | **Pb** | **17 57 30.5** | **-0.2** |
| | SNR=224 | | | | | | |
| DACB | | | | S | **Sg** | **17 57 41.6** | **+0.6** |
| DACB | | | | S | **Sg** | **17 57 41.6** | **+0.6** |
| **GMPB** | **Gimpo** | **0.80** | **134** | P | **Pn** | **17 57 32.1** | **0.0** |
| | SNR=43 | | | | | | |
| GMPB | | | | P | **Pn** | **17 57 32.1** | **0.0** |
| | SNR=43 | | | | | | |
| **KSMUS** | **Musan** | **0.85** | **94** | P | **Pn** | **17 57 32.7** | **-0.1** |
| | SNR=153 | | | | | | |
| **KSINC** | **Incheon** | **0.88** | **122** | P | **Pg** | **17 57 32.6** | **0.0** |
| | SNR=18 | | | | | | |
| **YNCB** | **YEONCHEON** | **0.99** | **84** | P | **Pn** | **17 57 35.0** | **+0.4** |
| | SNR=272 | | | | | | |
| YNCB | | | | P | **Pn** | **17 57 35.0** | **+0.4** |
| | SNR=272 | | | | | | |
| **KSGSG** | **Gangseo** | **1.00** | **113** | P | **Pg** | **17 57 35.0** | **+0.2** |
| | SNR=14 | | | | | | |
| **SHHB** | **Siheung-si** | **1.01** | **126** | P | **Pn** | **17 57 34.9** | **0.0** |
| | SNR=18 | | | | | | |
| SHHB | | | | P | **Pn** | **17 57 34.9** | **0.0** |
| | SNR=18 | | | | | | |
| **NJDA** | **Nanjido** | **1.07** | **147** | P | **Pb** | **17 57 35.5** | **-0.1** |
| | SNR=66 | | | | | | |
| **KSSEO** | **Seoul** | **1.08** | **115** | P | **Pg** | **17 57 36.5** | **+0.1** |
| | SNR=13 | | | | | | |
| KSSEO | | | | P | **Pg** | **17 57 36.5** | **+0.1** |
| | SNR=13 | | | | | | |
| **KSSOD** | **Songwoldong** | **1.08** | **110** | P | **Pg** | **17 57 36.6** | **+0.2** |
| | SNR=18 | | | | | | |
| **KSDDC** | **Dongducheon** | **1.09** | **92** | P | **Pg** | **17 57 36.8** | **+0.3** |
| | SNR=50 | | | | | | |
| **PYAG** | **Pyongyang** | **1.10** | **3** | Pg | **Pb** | **17 57 35.9** | **-0.3** |
| PYAG | | | | AML | AML | | |
| | comp=N,351nm,0.3s | | | | | | |
| PYAG | | | | AML | AML | | |
| | comp=E,583nm,0.2s | | | | | | |
| PYAG | | | | AML | AML | | |
| | comp=Z,246nm,0.3s | | | | | | |
| **KSNOW** | **Nowan** | **1.13** | **103** | P | **Pg** | **17 57 37.2** | **0.0** |
| | SNR=10 | | | | | | |
| **KSJUR** | **Jungrangju** | **1.16** | **106** | P | **Pg** | **17 57 37.6** | **-0.3** |
| | SNR=14 | | | | | | |
| **PYS** | **Pyongsong** | **1.31** | **6** | Pg | **Pg** | **17 57 40.5** | **-0.2** |
| PYS | | | | Sg | **Sg** | **17 57 58.6** | **+0.8** |
| PYS | | | | AML | AML | | |
| | comp=N,619nm,0.3s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=E,669nm,0.2s | | | | | | |
| PYS | | | | AML | AML | | |
| | comp=Z,416nm,0.3s | | | | | | |
| **WOSN** | **Wonsan** | **1.82** | **48** | Sg | **Sg** | **17 58 14.3** | **0.0** |
| WOSN | | | | AML | AML | | |
| | comp=N,127nm,0.4s | | | | | | |
| WOSN | | | | AML | AML | | |
| | comp=E,89nm,0.2s | | | | | | |
| WOSN | | | | AML | AML | | |
| | comp=Z,68nm,0.5s | | | | | | |
| **SUJ** | **Sinuiju** | **2.34** | **337** | Pg | **Pg** | **17 57 59.1** | **-1.3** |
| SUJ | | | | AML | AML | | |
| | comp=N,102nm,0.4s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=E,101nm,0.3s | | | | | | |
| SUJ | | | | AML | AML | | |
| | comp=Z,68nm,0.3s | | | | | | |

*IDC **23** 18:08:33.6±0.9,8.20S×116.17E,h0km,mb3.9/9, mbtmp3.9/10,ML4.0/1,MS3.5/8,Error ellipse: s-maj=30.0km s-min=18.4km az=61.0*
*NEIC **23** 18:08:35.1±2.1,8.33S±0.06×116.05E±0.05,h10km±1km, mb4.2/13,Error ellipse: s-maj=13.0km s-min=5.3km az=38.0*
*DJA **23** 18:08:36.0±0.3,8°S±4°×117°E±°,h10km,M4.5/12,mb4.7/3, mB4.5/1,MLv4.4/12,Mw(mB)3.7/1*
**ISC 23 18:08:35.6**±0.5,**8.28S**±0.06×**116.15E**±0.04,**h10**km,**n62**, σ1**63**/54,**mb4.1**/15,**MS3.6**/8,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.86** | **122** | P | **Pg** | **18 08 52.4** | **+0.2** |
| **SRBI** | **Singaraja** | **0.94** | **282** | P | **Pg** | **18 08 54.2** | **+0.4** |
| **DNP** | **Denpasar** | **1.01** | **247** | P | **Pg** | **18 08 56.7** | **+1.7** |
| **PLAI** | **Plampang** | **1.70** | **109** | P | **Pn** | **18 09 06.8** | **+1.4** |
| **JAGI** | **Jajag, Banyuwa** | **1.98** | **264** | | **Pn** | **18 09 08.6** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **1.98** | **264** | P | **Pn** | **18 09 08.9** | **-0.4** |
| **WBSI** | **Waikabubak, Su** | **3.48** | **113** | P | **Pn** | **18 09 30.2** | **+0.3** |
| **GRJI** | **Gresik** | **3.88** | **290** | P | **Pn** | **18 09 35.6** | **+0.3** |
| **PWJI** | **Pagerwojo** | **4.31** | **273** | P | **Pn** | **18 09 41.5** | **+0.3** |
| **BSSI** | **Bau Bau, Buton** | **4.80** | **64** | P | **Pn** | **18 09 47.5** | **-0.6** |
| **KAPI** | **Kappang** | **4.83** | **48** | Pn | **Pn** | **18 09 49.2** | **+0.7** |
| **KAPI** | **Kappang** | **4.83** | **48** | Pn | **Pn** | **18 09 47.2** | **-1.2** |
| | 6.6nm,0.3s,baz=210,slow=6.0,SNR=6.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 10 41.9** | **-2.6** |
| | 3.7nm,0.3s,baz=240,slow=17,SNR=1.7 | | | | | | |
| KAPI | | | | LR | LR | 18 11 31.6 | |
| | comp=Z,168nm,18.5s,baz=222,slow=37 | | | | | | |
| | 16nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **5.50** | **95** | P | **Pn** | **18 09 58.2** | **+0.4** |
| | 30nm,0.7s,463nm0.1nm | | | | | | |
| **BNSI** | **Bone** | **5.50** | **46** | P | **Pn** | **18 09 58.8** | **+1.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **5.58** | **273** | Pn | **Pn** | **18 09 57.9** | **-0.9** |
| **UGM** | **Wanagama** | **5.58** | **273** | P | **Pn** | **18 10 00.4** | **+1.6** |
| **MMRI** | **Maumere** | **6.04** | **94** | Pn | **Pn** | **18 10 07.5** | **+2.5** |
| **SOEI** | **Soe** | **8.15** | **101** | P | Pn | 18 10 39.9 | +5.6 |
| **SOEI** | **Soe** | **8.15** | **101** | Pn | **Pn** | **18 10 36.6** | **+2.4** |
| **MBWA** | **Marble Bar** | **13.27** | **165** | P | **Pn** | **18 11 43.7** | **-0.5** |
| **MBWA** | **Marble Bar** | **13.27** | **165** | | Pn | 18 11 40.8 | -3.4 |
| **FITZ** | **Fitzroy Crossi** | **13.44** | **138** | P | **Pn** | **18 11 45.5** | **-1.0** |
| | 18nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.44** | **138** | | **Pn** | **18 11 45.1** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **165** | P | **Pn** | **18 11 49.8** | **-0.2** |
| **PSA00** | **Pilbara Seismi** | **13.69** | **165** | Pn | Pn | **18 11 48.2** | **-1.8** |
| **KNRA** | **Kununurra** | **14.36** | **122** | Pn | **Pn** | **18 11 59.5** | **+0.3** |
| **GIRL** | **Giralia** | **14.40** | **187** | P | **Pn** | **18 11 58.0** | **-1.7** |
| **GIRL** | **Giralia** | **14.40** | **187** | Pn | Pn | 18 11 56.8 | -2.9 |
| **MTN** | **Manton Dam** | **15.41** | **108** | Pn | **Pn** | **18 12 11.7** | **-1.6** |
| MTN | | | | IAmb | IAmb | 18 12 30.9 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **16.88** | **73** | P | **P** | **18 12 40.9** | **+6.6** |
| | comp=Z,14nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **16.88** | **73** | Pn | **Pn** | **18 12 31.9** | **-0.3** |
| FAKI | | | | IAmb | IAmb | 18 12 46.4 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **MEEK** | **Meekatharra** | **18.41** | **173** | P | **Pn** | **18 12 53.0** | **+1.8** |
| **WRKA** | **Warakurna** | **20.30** | **147** | P | **P** | **18 13 13.1** | **+1.2** |
| **MORW** | **Morawa** | **20.68** | **180** | P | **P** | **18 13 18.4** | **+2.5** |
| **MORW** | **Morawa** | **20.68** | **180** | | **P** | **18 13 13.7** | **-2.2** |
| **WB0** | **Warramunga Arr** | **21.04** | **125** | P | **P** | **18 13 18.4** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 18 13 24.0 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.09** | **125** | P | **P** | **18 13 19.5** | **-0.9** |
| **WRA** | **Warramunga Arr** | **21.09** | **125** | P | **P** | **18 13 20.3** | **-0.1** |
| | comp=Z,6.5nm,0.8s,baz=302,slow=12,SNR=58 | | | | | | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.09** | **125** | P | **P** | **18 13 20.0** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 18 13 21.3 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.10** | **125** | P | **P** | **18 13 19.8** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 18 13 24.2 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.26** | **125** | P | **P** | **18 13 22.1** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 18 13 23.7 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **22.88** | **134** | P | **P** | **18 13 39.5** | **-0.2** |
| **ASAR** | **Alice Springs** | **22.88** | **134** | P | **P** | **18 13 39.7** | **+0.1** |
| **ASAR** | **Alice Springs** | **22.88** | **134** | P | **P** | **18 13 39.5** | **-0.1** |
| | comp=Z,4.5nm,0.8s,baz=308,slow=8.6,SNR=29 | | | | | | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.55** | **178** | LR | LR | 18 22 47.2 | |
| | comp=Z,99nm,20.7s,baz=212,slow=35 | | | | | | |
| **FORT** | **Forrest** | **25.00** | **155** | P | **P** | **18 13 58.2** | **-1.6** |
| **COEN** | **Coen** | **27.10** | **104** | P | **P** | **18 14 16.5** | **-2.4** |
| COEN | | | | IAmb | IAmb | 18 14 33.1 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **31.40** | **115** | LR | LR | 18 28 56.6 | |
| | comp=Z,6.5nm,21.5s,baz=282,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.52** | **328** | P | **P** | **18 14 58.8** | **+0.6** |
| | comp=Z,0.8nm,0.8s,baz=147,slow=8.0,SNR=5.3 | | | | | | |
| CMAR | | | | LR | LR | 18 29 47.7 | |
| | comp=Z,128nm,18.4s,baz=145,slow=40 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **33.34** | **138** | LR | LR | 18 28 33.3 | |
| | comp=Z,127nm,18.7s,baz=276,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.16** | **24** | LR | LR | 18 39 09.3 | |
| | comp=Z,36nm,19.8s,baz=200,slow=37 | | | | | | |
| **CN2** | **Changchun** | **52.51** | **8** | *e*P | **P** | **18 17 52.5** | **+3.5** |
| **USRK** | **Usuriysk Ar.** | **54.16** | **14** | P | **P** | **18 18 00.8** | **-0.3** |
| | comp=Z,1.6nm,0.7s,baz=201,slow=7.7,SNR=3.3 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.47** | **353** | P | **P** | **18 18 18.2** | **+0.3** |
| **SONM** | **Songino Array** | **56.53** | **352** | P | **P** | **18 18 16.8** | **-1.4** |
| **KLR** | **Kul'dur** | **58.88** | **12** | LR | LR | 18 45 56.2 | |
| | comp=Z,39nm,19.8s,baz=206,slow=38 | | | | | | |
| **HEH** | **HeiHe** | **59.11** | **8** | *e*P | **P** | **18 18 36.4** | **+0.3** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.56** | **334** | P | P | 18 18 57.9 | -1.9 |
| | comp=Z,0.3nm,0.6s,baz=138,slow=5.6,SNR=3.8 | | | | | | |
| MKAR | | | | LR | LR | 18 50 29.9 | |
| | comp=Z,40nm,18.3s,baz=120,slow=40 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.10** | **335** | P | **P** | **18 19 27.6** | **-1.7** |
| | comp=Z,0.3nm,0.3s,baz=133,slow=3.9,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.39** | **341** | P | **P** | **18 19 29.8** | **-1.2** |
| | comp=Z,0.5nm,0.5s,baz=148,slow=8.5,SNR=2.1 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.72** | **180** | P | **P** | **18 20 53.9** | **-0.4** |
| | comp=Z,1.4nm,1.1s,baz=245,slow=4.1,SNR=2.4 | | | | | | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **90.92** | **196** | P | **P** | **18 21 40.1** | **+0.6** |
| | comp=Z,0.6nm,0.8s,baz=135,slow=1.4,SNR=1.8 | | | | | | |
| SNAA | | | | LR | LR | 19 00 48.8 | |
| | comp=Z,49nm,18.3s,baz=118,slow=34 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |

*ISN **23** 18:25:12.0±2.2,33.06N×46.10E,h34km±38km,ML2.6*
*TEH **23** 18:25:19.9,33.09N×46.05E,h10km±102km,ML2.6*
**ISC 23 18:25:17.4**±4.1,**33.0N**±0.2×**45.9E**±0.1,**h10**km,**n7**,σ0**89**/8, **Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.11** | **6** | *e*Pg | **Pg** | **18 25 19.4** | **-0.8** |
| IBDR | baz=110 | | | *e*Sg | **Sg** | **18 25 21.6** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.67** | **21** | Pg | **Pg** | **18 25 28.9** | **-1.4** |
| **GLG1** | **Gilan-e-Gharb** | **1.11** | **360** | Pg | **Pg** | **18 25 39.5** | **+0.7** |
| **RAFI** | **Al-Rafai** | **1.29** | **172** | *e*Pn | Pn | 18 25 37.0 | -4.4 |
| RAFI | | | | *e*Sn | Sb | 18 25 53.0 | -5.2 |
| RAFI | | | | AML | AML | 18 26 05.0 | |
| | comp=E,117nm,0.4s | | | | | | |
| RAFI | | | | AML | AML | 18 26 09.4 | |
| | comp=N,96nm,0.8s | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.43** | **22** | Pg | **Pg** | **18 25 45.0** | **+0.1** |
| **IKFM** | **Kafar-mosalman** | **1.70** | **72** | Pg | **Pb** | **18 25 49.0** | **+0.3** |
| IKFM | | | | Sg | **Sg** | **18 26 12.6** | **+0.6** |
| **IDHR** | **Dehrash** | **1.74** | **13** | Pg | **Pb** | **18 25 50.0** | **+0.4** |

**IDC 23 18:29:43.5**±1.4,**44.66N×106.41W,h0**km,**mbtmp3.3**/2, **ML1.9**/1,**Error ellipse: s-maj=42.8km s-min=10.1km az=140.0,Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDAR** | **Pinedale Array** | **2.96** | **232** | Pn | Pn | 18 30 34.4 | +2.4 |
| | 2.5nm,0.3s,baz=54,slow=17,SNR=61 | | | | | | |
| PDAR | | | | Lg | Lg | 18 31 16.7 | |
| | 1.9nm,0.3s,baz=54,slow=50,SNR=4.2 | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **8.23** | **300** | I | I | 19 16 10.0 | |
| | baz=112,slow=318,SNR=6.8 | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.06** | **48** | Pn | Pn | 18 31 54.3 | -1.2 |
| | 0.2nm,0.3s,baz=239,slow=12,SNR=2.2 | | | | | | |
| ULM | | | | Lg | Lg | 18 34 22.0 | |
| | 0.1nm,0.3s,baz=319,slow=20,SNR=1.9 | | | | | | |
| | 2.7nm,0.8s | | | | | | |

*IDC **23** 18:41:25.1±2.3,17.91S×177.76W,h591km±24km, mb3.4/10,mbtmp4.4/11,Error ellipse: s-maj=21.8km s-min=17.7km az=118.0*
*NEIC **23** 18:41:27.2±1.5,18.0S±0.1×177.8W±0.1,h609km±8km, mb4.5/42,Error ellipse: s-maj=20.1km s-min=17.2km az=104.0*
**ISC 23 18:41:25.4**±0.5,**18.00S**±0.08×**177.91W**±0.08,**h590**km, **n75**,σ1**25**/**79**,**mb4.5**/35,**1D**,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.86** | **273** | P | P | 18 42 54.8 | +5.5 |
| **AFI** | **Afiamalu** | **7.16** | **56** | P | **P** | **18 43 18.5** | **+1.8** |
| **FUNA** | **Funafuti** | **9.82** | **343** | P | **P** | **18 43 44.0** | **+1.6** |
| **LIFNC** | **LIFOU** | **14.28** | **256** | P | **P** | **18 44 27.9** | **+0.7** |
| **PINNC** | **Pines Island,** | **14.48** | **249** | P | **P** | **18 44 30.2** | **+1.1** |
| **DZM** | **Mont Dzumac** | **15.25** | **252** | P | **P** | **18 44 38.0** | **+1.6** |
| **DZM** | **Mont Dzumac** | **15.25** | **252** | P | **P** | **18 44 37.9** | **+1.6** |
| | 8.9nm,0.6s,baz=109,slow=20,SNR=11 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **17.00** | **259** | P | **P** | **18 44 52.4** | **0.0** |
| KOUNC | | | | IAmb | IAmb | 18 45 12.6 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.49** | **200** | P | **P** | **18 46 24.9** | **-0.8** |
| **EIDS** | **Eidsvold** | **29.68** | **250** | P | **P** | **18 46 45.4** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 18 46 46.4 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,13nm,0.7s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.20** | **200** | P | **P** | **18 46 49.6** | **+0.5** |
| WHZ | | | | IAmb | IAmb | 18 46 50.9 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.31** | **240** | P | **P** | **18 46 51.8** | **+1.3** |
| ARMA | | | | IAmb | IAmb | 18 46 52.8 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **RABL** | **Rabaul** | **32.34** | **292** | P | **P** | **18 47 09.8** | **+2.0** |
| **CTAO** | **Charters Tower** | **33.90** | **261** | P | **P** | **18 47 21.4** | **+0.5** |
| CTAO | | | | IAmb | IAmb | 18 47 22.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **34.03** | **233** | P | **P** | **18 47 22.9** | **+1.1** |
| **PMG** | **Port Moresby** | **34.94** | **279** | P | **P** | **18 47 30.9** | **+1.4** |
| PMG | | | | IAmb | IAmb | 18 47 32.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **37.48** | **231** | P | **P** | **18 47 51.1** | **+0.9** |
| TOO | | | | IAmb | IAmb | 18 47 52.3 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **MANU** | **Manus Island** | **37.57** | **291** | P | **P** | **18 47 52.7** | **+1.5** |
| MANU | | | | IAmb | IAmb | 18 48 14.0 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.58** | **270** | P | **P** | **18 47 53.0** | **+1.7** |
| **STKA** | **Stephens Creek** | **39.00** | **241** | P | **P** | **18 48 03.5** | **+1.0** |
| **STKA** | **Stephens Creek** | **39.00** | **241** | P | **P** | **18 48 03.6** | **+1.0** |
| | comp=Z,18nm,0.7s,baz=88,slow=9.5,SNR=30 | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **43.78** | **241** | P | **P** | **18 48 40.6** | **+0.4** |
| **WR0** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **18 48 48.7** | **-0.2** |
| **WB0** | **Warramunga Arr** | **45.05** | **260** | P | **P** | **18 48 49.9** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 18 48 50.8 | |
| | comp=Z,16nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.07** | **260** | P | **P** | **18 48 50.0** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 18 48 51.0 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.07** | **260** | P | **P** | **18 48 50.3** | **0.0** |
| WRAB | | | | IAmb | IAmb | 18 48 50.9 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.08** | **260** | P | **P** | **18 48 49.8** | **-0.6** |
| **WRA** | **Warramunga Arr** | **45.08** | **260** | P | **P** | **18 48 50.5** | **+0.2** |
| | comp=Z,12nm,0.6s,baz=95,slow=7.0,SNR=291 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 50 18.0** | **-0.3** |
| | comp=Z,0.7nm,0.3s,baz=92,slow=3.2,SNR=3.8 | | | | | | |
| WRA | | | | ScP | **ScP** | **18 53 14.6** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=96,slow=3.7,SNR=3.6 | | | | | | |
| WRA | | | | S | **S** | **18 54 41.8** | **-5.9** |
| | comp=Z,0.3nm,0.7s,baz=94,slow=13,SNR=2.6 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.22** | **254** | P | **P** | **18 48 51.7** | **+0.2** |
| AS31 | | | | IAmb | IAmb | 18 48 52.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **45.22** | **254** | P | **P** | **18 48 51.9** | **+0.4** |
| | comp=Z,22nm,0.5s,baz=92,slow=7.9,SNR=361 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 50 18.4** | **-0.3** |
| | comp=Z,2.1nm,0.5s,baz=105,slow=3.7,SNR=6.9 | | | | | | |
| ASAR | | | | ScP | **ScP** | **18 53 16.0** | **+0.3** |
| | comp=Z,0.6nm,0.8s,baz=90,slow=3.7,SNR=4.3 | | | | | | |
| ASAR | | | | S | **S** | **18 54 47.1** | **-2.5** |
| | comp=Z,1.0nm,0.7s,baz=90,slow=15,SNR=9.0 | | | | | | |
| | comp=Z,22nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **49.27** | **268** | P | **P** | **18 49 21.4** | **-0.4** |
| MTN | | | | IAmb | IAmb | 18 49 22.1 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **50.40** | **245** | P | **P** | **18 49 29.6** | **-0.2** |
| **KNRA** | **Kununurra** | **50.95** | **264** | IAmb | IAmb | 18 49 35.1 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **51.06** | **281** | P | **P** | **18 49 34.8** | **0.0** |
| FAKI | | | | IAmb | IAmb | 18 50 16.5 | |
| | comp=Z,28nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.48** | **261** | P | **P** | **18 49 52.4** | **+0.4** |
| **SOEI** | **Soe** | **56.55** | **270** | P | **P** | **18 50 13.6** | **+0.1** |
| SOEI | | | | IAmb | IAmb | 18 50 16.5 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.35** | **255** | P | **P** | **18 50 25.3** | **-0.2** |
| **MBWA** | **Marble Bar** | **58.51** | **256** | P | **P** | **18 50 26.2** | **-0.4** |
| **MMRI** | **Maumere** | **58.77** | **271** | P | **P** | **18 50 28.5** | **0.0** |
| MMRI | | | | IAmb | IAmb | 18 50 29.7 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.59** | **242** | P | **P** | **18 50 33.7** | **+0.1** |
| NWAO | | | | IAmb | IAmb | 18 51 07.9 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **60.36** | **184** | P | **P** | **18 50 40.1** | **+2.2** |
| **MORW** | **Morawa** | **60.88** | **246** | P | **P** | **18 50 41.2** | **-1.1** |
| MORW | | | | IAmb | IAmb | 18 51 12.6 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **GIRL** | **Giralia** | **63.32** | **253** | P | **P** | **18 50 59.0** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **66.51** | **268** | P | **P** | **18 51 17.2** | **-1.0** |
| **UGM** | **Wanagama** | **70.12** | **268** | P | **P** | **18 51 39.9** | **-0.2** |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **18 51 50.9** | **+0.4** |
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | **P** | **18 51 51.2** | **+0.6** |
| | comp=Z,2.5nm,0.6s,baz=219,slow=1.0,SNR=33 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **KSM** | **Kuching** | **73.17** | **277** | P | **P** | **18 51 58.1** | **+0.4** |
| KSM | | | | IAmb | IAmb | 18 51 59.9 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.89** | **345** | P | **P** | **18 52 01.1** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=98,slow=6.8,SNR=4.4 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **KSAR** | **Wonju Array Be** | **75.10** | **318** | P | **P** | **18 52 08.4** | **+0.3** |
| **NJ2** | **Nanjing** | **78.36** | **309** | *e*P | **P** | **18 52 26.0** | **+0.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,17nm,1.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.16** | **44** | P | **P** | **18 52 28.3** | **-2.0** |
| | comp=Z,0.3nm,0.7s,baz=206,slow=7.9,SNR=3.0 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MRSI | | | | S | Sn | 18 51 38.5 | +0.5 | |
| **LUWI** | **Luwuk** | **2.41** | **85** | P | Pn | 18 51 11.9 | +0.4 | |
| LUWI | | | | S | Sn | 18 51 40.0 | +0.2 | |
| **BNSI** | **Bone** | **3.12** | **185** | P | Pn | 18 51 22.3 | +1.0 | |
| **GTOI** | **Gorontalo** | **3.25** | **54** | P | Pn | 18 51 22.4 | -0.6 | |
| GTOI | | | | S | Sn | 18 52 00.0 | -0.4 | |
| **SMKI** | **Samarinda** | **3.26** | **284** | P | Pn | 18 51 16.5 | -6.7 | |
| **BBSI** | **Bau Bau** | **4.73** | **152** | P | Pn | 18 51 43.7 | +0.3 | |
| **BSSI** | **Bau Bau, Buton** | **4.85** | **179** | P | Pn | 18 51 43.0 | -2.0 | |
| **WRA** | **Warramunga Arr** | **23.05** | **145** | P | P | 18 55 35.6 | -1.4 | |
| | 0.7nm,0.9s,baz=319,slow=10.0,SNR=3.1<br>0.7nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **25.85** | **151** | P | P | 18 56 03.2 | +0.3 | |
| | 0.5nm,0.8s,baz=342,slow=14,SNR=5.3<br>0.5nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.35** | **330** | P | P | 19 00 27.2 | +0.9 | |
| | 0.3nm,0.7s,baz=114,slow=7.0,SNR=3.0<br>0.3nm,0.7s | | | | | | | |

*DJA* ***23*** *18:53:49.6±0.3, 8˚S±4˚×11˚6E±˚, h10km, M3.9/12, mb4.1/3, MLv3.8/12*

*IDC* ***23*** *18:53:49.4±3.5, 8˚.39S×116˚.25E, h0km, mb3.5/3, mbtmp3.6/3, MS3.9/2, Error ellipse: s-maj=255.3km s-min=27.9km az=49.0*

**ISC 23 18:53:49.8±0.8, 8˚.28S±0˚.09×116˚.12E±0˚.04, h10km, n16, σ1s 03/16, mb3.6/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.88** | **121** | P | | **Pg** | | **18 54 06.8** | **+0.1** |
| **SRBI** | **Singaraja** | **0.92** | **282** | P | | **Pb** | | **18 54 07.8** | **-0.1** |
| **DNP** | **Denpasar** | **0.99** | **246** | P | | **Pg** | | **18 54 09.1** | **+0.3** |
| **PLAI** | **Plampang** | **1.72** | **109** | P | | **Pn** | | **18 54 19.8** | **-0.1** |
| PLAI | | | | S | | **Sn** | | **18 54 42.3** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **1.96** | **264** | P | | **Pn** | | **18 54 22.5** | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **3.50** | **113** | P | | **Pn** | | **18 54 44.4** | **0.0** |
| **PWJI** | **Pagerwojo** | **4.29** | **273** | P | | **Pn** | | **18 54 55.3** | **+0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.82** | **64** | P | | **Pn** | | **18 55 01.5** | **-1.1** |
| **BNSI** | **Bone** | **5.52** | **46** | P | | **Pn** | | **18 55 12.1** | **-0.1** |
| | 15nm,1.9s,0.1nm | | | | | | | | |
| BNSI | | | | S | | **Sn** | | **18 56 14.3** | **-1.5** |
| | 15nm,1.9s,0.1nm | | | | | | | | |
| **EDFI** | **Ende, Flores** | **5.53** | **95** | P | | **Pn** | | **18 55 12.0** | **-0.3** |
| | 9.2nm,0.8s,0.0nm | | | | | | | | |
| **UGM** | **Wanagama** | **5.56** | **273** | P | | **Pn** | | **18 55 10.9** | **-1.8** |
| **WRA** | **Warramunga Arr** | **21.10** | **125** | P | | **P** | | **18 58 33.9** | **-0.8** |
| | 2.3nm,0.6s,baz=301,slow=12,SNR=67<br>2.3nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.90** | **134** | P | | **P** | | **18 58 53.1** | **-0.9** |
| | 1.2nm,0.6s,baz=309,slow=9.2,SNR=23<br>1.2nm,0.6s | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **46.92** | **27** | LR | | LR | | 19 20 48.4 | |
| | comp=Z,411nm,21.8s,baz=77,slow=34 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.55** | **334** | P | | **P** | | **19 04 16.2** | **+2.2** |
| | 0.4nm,0.9s,baz=125,slow=7.2,SNR=2.8<br>0.4nm,0.9s | | | | | | | | |
| **AAK** | **Ala-Archa** | **63.30** | **327** | LR | | LR | | 19 33 57.1 | |
| | comp=Z,37nm,20.6s,baz=335,slow=38 | | | | | | | | |

**IDC 23 18:58:12.6±4.9, 16˚.76S×175˚.59W, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=364.6km s-min=33.7km az=152.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **47.50** | **258** | P | | P | P | 19 06 49.8 | -0.1 |
| | 0.2nm,0.8s,baz=94,slow=7.4,SNR=5.2<br>0.2nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **47.70** | **253** | P | | P | P | 19 06 51.2 | -0.2 |
| | 0.7nm,0.5s,baz=87,slow=8.8,SNR=22<br>0.7nm,0.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.74** | **43** | P | | P | P | 19 10 06.3 | 0.0 |
| | 0.2nm,0.4s,baz=226,slow=4.9,SNR=1.9<br>0.2nm,0.4s | | | | | | | | |

**HEL 23 19:06:42.6±0.5, 67˚.18N×20˚.62E, h0km, ML1.1, Suspected explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PAJU** | **Pajala** | **0.99** | **98** | PG | | Pg | Pg | 19 07 00.8 | -0.7 |
| PAJU | | | | SB | | Sg | | 19 07 14.0 | -0.3 |
| **KLF** | **Kolari** | **1.30** | **86** | PG | | Pg | Pg | 19 07 06.2 | -1.3 |
| | baz=270 | | | | | | | | |
| KLF | | | | MSG | | | | 19 07 22.0 | |
| | comp=Z,0.9nm,0.2s | | | | | | | | |
| KLF | | | | SG | | Sg | | 19 07 23.6 | -0.8 |
| **HEF** | **Hetta** | **1.69** | **42** | PG | | Pn | | 19 07 13.0 | -0.3 |
| HEF | | | | MSG | | | | 19 07 33.1 | |
| | comp=Z,1.0nm,0.2s | | | | | | | | |
| HEF | | | | SN | | Sn | | 19 07 35.1 | -0.5 |
| **KALU** | **Kalix** | **1.72** | **139** | PG | | Pn | | 19 07 13.7 | 0.0 |
| KALU | | | | SN | | Sb | | 19 07 36.8 | -0.4 |
| **TOF** | **Tornio** | **1.84** | **125** | PG | | Pn | | 19 07 15.8 | +0.3 |
| TOF | | | | MSG | | | | 19 07 37.5 | |
| | comp=Z,1.2nm,0.2s | | | | | | | | |
| TOF | | | | SG | | Sb | | 19 07 41.0 | +0.2 |
| **KTK1** | **Kautokeino** | **2.08** | **27** | PG | | Pb | | 19 07 20.3 | -1.0 |
| **RNF** | **Rovaniemi** | **2.20** | **103** | PG | | Pn | | 19 07 21.1 | +0.7 |
| RNF | | | | SG | | Sb | | 19 07 50.6 | -0.4 |
| **SGF** | **Sodankyl** | **2.31** | **81** | PB | | Pn | | 19 07 21.5 | -0.3 |
| SGF | | | | SG | | Sn | | 19 07 52.3 | +1.5 |
| **ARA0** | **ARCESS Array S** | **2.98** | **35** | PB | | Pn | | 19 07 32.2 | +1.2 |

*IDC* ***23*** *19:16:32.7±6.6, 18˚.03S×178˚.07W, h568km±71km, mb3.0/5, mbtmp4.0/5, Error ellipse: s-maj=34.8km s-min=27.3km az=51.0*

**ISC 23 19:16:34.3±1.0, 17˚.9S±0˚.3×178˚.2W±0˚.2, h590km, n8, σ0s 44/12, mb3.8/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.80** | **241** | P | | **P** | | **19 23 09.8** | **0.0** |
| | 2.4nm,0.8s,baz=340,slow=16,SNR=3.3<br>2.4nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.84** | **260** | P | | **P** | | **19 23 57.4** | **0.0** |
| | 0.7nm,0.8s,baz=95,slow=7.3,SNR=12 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **19 25 26.1** | **-0.3** |
| | 0.2nm,0.4s,baz=92,slow=3.4,SNR=2.1 | | | | | | | | |
| WRA | | | | S | | **S** | | **19 29 52.7** | **-0.4** |
| | 0.2nm,0.7s,baz=92,slow=15,SNR=1.5<br>0.7nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.99** | **254** | P | | **P** | | **19 23 59.2** | **+0.7** |
| | 2.2nm,0.6s,baz=88,slow=8.5,SNR=35 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **19 25 27.0** | **+0.1** |
| | 0.5nm,0.4s,baz=103,slow=4.1,SNR=10 | | | | | | | | |
| ASAR | | | | S | | **S** | | **19 29 55.2** | **0.0** |
| | 0.7nm,0.9s,baz=86,slow=16,SNR=5.1<br>2.2nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.11** | **180** | P | | **P** | | **19 26 59.6** | **-0.2** |
| | 1.8nm,0.6s,baz=233,slow=1.0,SNR=21<br>1.8nm,0.6s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.30** | **44** | P | | **P** | | **19 27 40.0** | **0.0** |
| | 0.4nm,0.6s,baz=206,slow=5.9,SNR=2.7<br>0.4nm,0.6s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.96** | **315** | PKPbc | | **PKPab** | | **19 35 06.7** | **-0.7** |
| | 0.5nm,0.6s,baz=127,slow=3.2,SNR=2.5 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.34** | **303** | PKPbc | | **PKPbc** | | **19 35 11.0** | **+0.6** |
| | 0.5nm,0.4s,baz=81,slow=6.9,SNR=6.6 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.70** | **345** | PKPbc | | **PKPbc** | | **19 35 13.7** | **+0.2** |
| | 0.2nm,0.4s,baz=23,slow=7.2,SNR=3.8 | | | | | | | | |

*IDC* ***23*** *19:24:22.3±0.8, 58˚.03S×25˚.22W, h0km, mb4.2/7, mbtmp4.1/8, ML4.2/1, Error ellipse: s-maj=32.3km s-min=20.7km az=76.0*

*NEIC* ***23*** *19:24:23.5±1.8, 58˚.06S±0˚.04×24˚.8W±0˚.3, h10km±1km, mb4.2/6, Error ellipse: s-maj=24.4km s-min=6.3km az=81.0*

**ISC 23 19:24:27.9±0.5, 58˚.07S±0˚.1×25˚.1W±0˚.1, h40km, n49, σ0s 71/41, mb4.2/7,5C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **7.40** | **296** | Pn | | **Pn** | | **19 26 14.9** | **+1.7** |
| **VNA1** | **Neumayer--Stat** | **14.49** | **157** | ⇑P | | **Pn** | | **19 27 49.9** | **0.0** |
| | comp=Z,2.4nm,0.2s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **14.70** | **160** | ⇑P | | **Pn** | | **19 27 51.8** | **-1.0** |
| | comp=Z,1.7nm,0.2s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **14.88** | **157** | ⇑P | | **Pn** | | **19 27 54.1** | **-1.1** |
| | comp=Z,1.2nm,0.2s,baz=323,slow=14 | | | | | | | | |
| **SNAA** | **Sanae** | **16.43** | **155** | P | | **Pn** | | **19 28 15.3** | **+0.1** |
| **SNAA** | **Sanae** | **16.43** | **155** | ⇑P | | **Pn** | | **19 28 15.8** | **+0.6** |
| | comp=Z,28nm,0.3s | | | | | | | | |
| **SNAA** | **Sanae** | **16.43** | **155** | Pn | | **Pn** | | **19 28 15.5** | **+0.4** |
| | comp=Z,0.8nm,0.3s,baz=316,slow=15,SNR=39 | | | | | | | | |
| SNAA | | | | Sn | | Sn | | 19 31 03.1 | -13 |
| | baz=22,slow=9.6,SNR=1.3<br>comp=Z,1.7nm,0.4s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **17.92** | **152** | ⇑P | | **P** | | **19 28 34.7** | **+0.7** |
| | comp=Z,1.1nm,0.1s | | | | | | | | |
| **BELA** | **Belgrano 2** | **20.16** | **186** | P | | **P** | | **19 28 58.1** | **-0.2** |
| BELA | | | | IAmb | | IAmb | | 19 29 04.0 | |
| | comp=Z,2.7nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **32.18** | **180** | P | | **P** | | **19 30 52.3** | **+0.7** |
| QSPA | | | | IAmb | | IAmb | | 19 30 54.3 | |
| | comp=Z,4.6nm,1.2s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **32.18** | **180** | P | | **P** | | **19 30 52.4** | **+0.8** |
| | comp=Z,1.7nm,0.8s,baz=192,slow=2.6,SNR=8.1<br>comp=Z,1.7nm,0.8s | | | | | | | | |
| **PLCA** | **Paso Flores** | **33.50** | **281** | P | | **P** | | **19 31 03.1** | **-0.2** |
| PLCA | | | | IAmb | | IAmb | | 19 31 04.8 | |
| | comp=Z,5.5nm,1.1s | | | | | | | | |
| **PLCA** | **Paso Flores** | **33.50** | **281** | P | | **P** | | **19 31 03.1** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=93,slow=5.8,SNR=4.0<br>comp=Z,1.5nm,0.6s | | | | | | | | |
| **MAW** | **Mawson** | **37.85** | **141** | P | | **P** | | **19 31 40.6** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=254,slow=7.4,SNR=1.8<br>comp=Z,0.9nm,0.7s | | | | | | | | |
| **BDFB** | **Brasilia** | **45.69** | **328** | P | | **P** | | **19 32 44.1** | **-0.7** |
| | comp=Z,2.0nm,0.4s,baz=166,slow=12,SNR=2.1<br>comp=Z,2.0nm,0.4s | | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **45.72** | **111** | T | | T | | 20 23 21.5 | |
| | baz=226,slow=75,SNR=3.7 | | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **45.73** | **111** | T | | T | | 20 23 22.4 | |
| | baz=226,slow=75,SNR=4.7 | | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **45.73** | **111** | T | | T | | 20 23 20.0 | |
| | baz=226,slow=75,SNR=4.4 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **49.65** | **14** | T | | T | | 20 27 50.5 | |
| | baz=187,slow=74,SNR=2.8 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **49.66** | **14** | T | | T | | 20 27 50.8 | |
| | baz=33,slow=74,SNR=4.2 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **50.77** | **14** | T | | T | | 20 29 08.4 | |
| | baz=191 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **50.77** | **14** | T | | T | | 20 29 14.9 | |
| | baz=191 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **50.79** | **14** | T | | T | | 20 29 16.3 | |
| | baz=191 | | | | | | | | |
| **DBIC** | **Dimbokro** | **66.57** | **22** | P | | **P** | | **19 35 14.4** | **+0.7** |
| | comp=Z,1.6nm,0.4s,baz=175,slow=6.0,SNR=5.8<br>comp=Z,1.6nm,0.4s | | | | | | | | |
| **BOAV** | **Boa Vista** | **66.58** | **321** | P | | **P** | | **19 35 12.4** | **-1.4** |
| **TORD** | **Torodi Ar. Bea** | **74.29** | **27** | P | | **P** | | **19 36 01.6** | **+0.8** |
| TORD | | | | IAmb | | IAmb | | 19 36 02.1 | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.29** | **27** | P | | **P** | | **19 36 01.6** | **+0.8** |
| | comp=Z,2.0nm,0.5s,baz=201,slow=5.8,SNR=39<br>comp=Z,2.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **96.71** | **161** | P | | **P** | | **19 37 53.6** | **-0.4** |
| | comp=Z,0.6nm,0.9s,baz=198,slow=3.5,SNR=3.4<br>comp=Z,0.6nm,0.9s | | | | | | | | |
| **FINES** | **FINESS Array B** | **125.64** | **27** | PKP | | **PKPdf** | | **19 43 22.8** | **-0.5** |
| | comp=Z,0.5nm,0.5s,baz=110,slow=1.6,SNR=1.4 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **137.12** | **65** | PKP | | **PKiKP** | | **19 43 47.3** | **+0.1** |
| | comp=Z,0.1nm,0.4s,baz=13,slow=1.2,SNR=1.4 | | | | | | | | |
| **S31K** | **Pelican** | **144.97** | **300** | | | **PKPdf** | | **19 43 58.8** | **-0.3** |
| **N30M** | **Aishikik Lake** | **146.99** | **305** | PKPbc | | **PKPab** | | **19 44 05.4** | **-1.0** |
| **G31M** | **Satah River** | **147.92** | **315** | PKPdf | | **PKPdf** | | **19 44 05.1** | **+1.2** |
| **M29M** | **Somme Creek** | **147.99** | **306** | PKPbc | | **PKPbc** | | **19 44 06.9** | **-0.6** |
| **G30M** | **tAoh Zraii Nji** | **148.67** | **315** | PKPbc | | **PKPbc** | | **19 44 08.4** | **-0.6** |
| **H29M** | **Whitestone** | **149.26** | **313** | PKPbc | | **PKPbc** | | **19 44 09.7** | **-0.8** |
| **G29M** | **Pine Creek** | **149.32** | **315** | PKPbc | | **PKPbc** | | **19 44 10.4** | **-0.3** |
| **BCAR** | **Beaver Creek A** | **149.64** | **306** | PKPbc | | **PKPbc** | | **19 44 11.7** | **+0.1** |
| **L27K** | **Beaver Creek,** | **149.66** | **306** | PKPbc | | **PKPbc** | | **19 44 11.2** | **-0.4** |
| **E29M** | **Blow River** | **149.67** | **317** | PKPbc | | **PKPbc** | | **19 44 11.4** | **0.0** |
| **SONM** | **Songino Array** | **149.68** | **88** | PKPbc | | **PKPbc** | | **19 44 12.0** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=243,slow=0.3,SNR=4.6 | | | | | | | | |
| **VRDI** | **Verde Repeater** | **149.71** | **302** | PKPbc | | **PKPbc** | | **19 44 11.9** | **-0.1** |
| **K27K** | **Chicken** | **150.08** | **308** | PKPbc | | **PKiKP** | | **19 44 13.3** | **-0.1** |
| **J26L** | **Joseph Creek** | **150.84** | **309** | PKPbc | | **PKiKP** | | **19 44 15.0** | **-0.1** |
| **SCRK** | **Sand Creek** | **150.87** | **308** | PKPbc | | **PKPbc** | | **19 44 13.8** | **-0.8** |
| **I26K** | **Coal Creek Min** | **150.90** | **310** | PKPbc | | **PKPbc** | | **19 44 14.2** | **-0.2** |
| **RIDG** | **Independent Ri** | **151.16** | **307** | PKPbc | | **PKiKP** | | **19 44 15.4** | **-0.3** |
| **SCM** | **Sheep Creek Mo** | **151.66** | **302** | PKPdf | | **PKPdf** | | **19 44 08.8** | **-1.3** |
| **ILAR** | **Eielson Array** | **152.29** | **308** | PKPbc | | **PKPbc** | | **19 44 17.3** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=158,slow=1.5,SNR=7.9 | | | | | | | | |

*FUNV* ***23*** *19:49:30.5, 10˚.54N×62˚.85W, h31km, MW3.5*

**ISC 23 19:49:26.8±1.4, 10˚.38N±0˚.09×62˚.86W±0˚.04, h9km, n6, σ2s 30/10, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TRN** | **Trinidad (W)** | **1.46** | **79** | *e*P | | **Pn** | | **19 49 53.7** | **+0.4** |
| TRN | | | | *e*S | | **Sn** | | **19 50 11.7** | **-0.9** |
| **PCRV** | **Puerto La Cruz** | **1.76** | **264** | *e*P | | **Pn** | | **19 49 59.4** | **+1.8** |
| PCRV | | | | *e*S | | **Sn** | | **19 50 18.9** | **-1.3** |
| **PCRV** | **Puerto La Cruz** | **1.76** | **264** | *e*P | | **Pn** | | **19 49 59.5** | **+1.8** |
| PCRV | | | | *e*S | | **Sn** | | **19 50 21.7** | **+1.6** |
| **CACV** | **CAICARA DEL OR** | **4.59** | **233** | *e*P | | Pn | | 19 50 32.8 | -3.7 |
| CACV | | | | *e*S | | Sn | | 19 51 19.1 | -11 |
| **LUEV** | **Luepa** | **4.72** | **163** | *e*P | | **Pn** | | **19 50 39.9** | **+1.5** |
| LUEV | | | | *e*S | | **Sn** | | **19 51 32.3** | **-1.1** |
| **BAUV** | **El Baul** | **5.31** | **255** | *e*P | | **Pn** | | **19 50 46.4** | **+0.1** |
| BAUV | | | | *e*S | | **Sn** | | **19 51 43.0** | **-4.7** |

*BJI* ***23*** *19:57:31.8±0.0, 55˚.80N×120˚.40E, h5km, mb4.0/4, ML4.7/4, Ms4.4/3, Ms7 4.1/2*

*IDC* ***23*** *19:57:34.1±0.7, 55˚.89N×120˚.48E, h0km, mb3.5/10, mbtmp3.7/18, ML3.7/8, MS3.1/11, Error ellipse: s-maj=15.2km s-min=14.2km az=17.0*

*MOS* ***23*** *19:57:34.2±1.2, 55˚.74N×120˚.45E, h10km, mb3.9/4, Error ellipse: s-maj=8.9km s-min=6.3km az=92.2*

*MOS Felt (III) at Khani.*

*BYKL* ***23*** *19:57:39.3±0.3, 55˚.90N×120˚.51E*

**ISC 23 19:57:36.1±0.8, 55˚.85N±0˚.02×120˚.31E±0˚.02, h10km±5km, n85, σ2s 00/116, mb3.7/10, MS3.2/7, 1C-12D, Southeastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **YKLR** | **Yuktali** | **1.06** | **45** | ⇓*i*P | | **Pg** | | **19 57 56.5** | **-0.1** |
| YKLR | | | | *e*Sg | | **Sg** | | **19 58 09.5** | **-0.8** |
| **YKLR** | **Yuktali** | **1.06** | **45** | P | | **Pg** | | **19 57 56.4** | **-0.1** |
| YKLR | | | | | | | | 19 58 09.5 | |
| **KHNR** | **Khani** | **1.09** | **351** | *e*Pg | | **Pb** | | **19 57 58.4** | **+1.3** |
| KHNR | | | | *e*Sg | | **Sg** | | **19 58 12.7** | **+1.3** |
| **KHNR** | **Khani** | **1.09** | **351** | P | | **Pg** | | **19 57 58.2** | **+1.0** |
| KHNR | | | | | | | | 19 58 11.7 | |
| **TUP** | **Tupik** | **1.44** | **188** | ⇑*i* | | **Pg** | | **19 58 04.0** | **+0.3** |
| TUP | | | | *e*Pg | | **Pg** | | **19 58 05.6** | **+1.9** |
| TUP | | | | Pmax | | | | 19 58 06.0 | |
| | 1μm,0.3s | | | | | | | | |
| TUP | | | | *e*Sg | | **Sg** | | **19 58 25.9** | **+3.6** |
| TUP | | | | Smax | | | | 19 58 26.3 | |
| | 12μm,0.5s | | | | | | | | |
| **TUP** | **Tupik** | **1.44** | **188** | *e*P | | **Pg** | | **19 58 05.5** | **+1.9** |
| TUP | | | | *e* | | | | 19 58 26.0 | |
| TUP | | | | pmax | pmax | | | | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| TUP | | | | smax | smax | | | | |
| | comp=N,12μm,0.6s | | | | | | | | |
| **CRS** | **Chara** | **1.55** | **314** | *e*Pg | | **Pg** | | **19 58 07.9** | **+2.0** |
| CRS | | | | Pmax | | | | 19 58 09.8 | |
| | comp=N,675nm,0.4s | | | | | | | | |
| CRS | | | | *e*Sg | | **Sg** | | **19 58 28.6** | **+2.6** |
| CRS | | | | Smax | | | | 19 58 30.2 | |
| | comp=N,5μm,1.2s | | | | | | | | |
| **CRS** | **Chara** | **1.55** | **314** | P | | **Pg** | | **19 58 07.8** | **+1.9** |
| CRS | | | | | | | | 19 58 25.9 | |
| **TNDR** | **Tynda** | **2.61** | **104** | P | | **Pn** | | **19 58 18.5** | **+0.2** |
| **NLYR** | **Nelyaty** | **2.65** | **286** | *e*Pn | | **Pn** | | **19 58 21.8** | **+2.8** |
| NLYR | | | | *e*Pg | | **Pg** | | **19 58 28.3** | **+1.3** |
| NLYR | | | | Pmax | | | | 19 58 31.4 | |
| | comp=N,133nm,0.2s | | | | | | | | |
| NLYR | | | | *e* | | | | 19 58 37.6 | |
| NLYR | | | | *e*Sg | | **Sg** | | **19 59 03.7** | **+2.4** |
| NLYR | | | | *e* | | | | 19 59 09.8 | |
| NLYR | | | | max | | | | 19 59 10.9 | |
| | comp=N,4μm,0.8s | | | | | | | | |
| **NLYR** | **Nelyaty** | **2.65** | **286** | *e*P | | **Pn** | | **19 58 21.7** | **+2.8** |
| NLYR | | | | pmax | pmax | | | | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| **CLNS** | **Chul'man** | **2.74** | **67** | *e* | | **Pn** | | **19 58 19.0** | **-1.1** |
| CLNS | | | | *e*Pg | | **Pb** | | **19 58 26.1** | **+0.9** |
| CLNS | | | | *e* | | | | 19 58 35.1 | |
| CLNS | | | | *e*Sg | | **Sg** | | **19 59 00.6** | **-3.5** |
| **CLNS** | **Chul'man** | **2.74** | **67** | P | | **Pn** | | **19 58 19.0** | **-1.1** |
| CLNS | | | | | | | | 19 59 01.1 | |
| **SVKR** | **Severomuysk** | **3.80** | **277** | *e* | | **Pn** | | **19 58 37.6** | **+2.9** |
| SVKR | | | | *e*Pg | | **Pg** | | **19 58 48.9** | **0.0** |
| SVKR | | | | Pmax | | | | 19 59 05.7 | |
| | comp=Z,377nm,0.3s | | | | | | | | |
| SVKR | | | | *e*Sg | | **Sg** | | **19 59 40.6** | **+2.5** |
| SVKR | | | | Smax | | | | 19 59 54.1 | |
| | comp=Z,5μm,0.8s | | | | | | | | |
| **UKT** | **Uakit** | **3.80** | **267** | ⇓*i* | | **Pn** | | **19 58 37.4** | **+2.7** |
| UKT | | | | *e*Pg | | **Pg** | | **19 58 48.2** | **-0.7** |
| UKT | | | | *e* | | | | 19 58 59.5 | |
| UKT | | | | max | | | | 19 59 01.5 | |
| | comp=Z,177nm,0.2s | | | | | | | | |
| UKT | | | | *e*Sg | | **Sg** | | **19 59 40.2** | **+2.1** |
| UKT | | | | Smax | | | | 19 59 49.3 | |
| | comp=Z,2μm,0.9s | | | | | | | | |
| **UKT** | **Uakit** | **3.80** | **267** | ⇓*i*P | | **Pn** | | **19 58 37.3** | **+2.6** |
| UKT | | | | pmax | pmax | | | | |
| | comp=Z,114nm,0.4s | | | | | | | | |
| **ALDR** | **Aldan** | **3.92** | **43** | P | | **Pn** | | **19 58 36.9** | **+0.6** |
| ALDR | | | | | | | | 19 59 20.4 | |
| **BOD** | **Bodaibo** | **3.99** | **302** | *e* | | **Pn** | | **19 58 39.0** | **+1.8** |
| BOD | | | | *e*Pg | | **Pg** | | **19 58 51.4** | **-1.0** |
| BOD | | | | Pmax | | | | 19 59 19.0 | |
| | comp=Z,121nm,0.3s | | | | | | | | |
| BOD | | | | *e*Sg | | **Sg** | | **19 59 43.6** | **-0.5** |
| BOD | | | | Smax | | | | 19 59 52.2 | |
| | comp=Z,2μm,1.1s | | | | | | | | |
| **ZEA** | **Zeya** | **4.54** | **115** | *e*P | | **Pn** | | **19 58 45.2** | **+0.4** |
| ZEA | | | | *e* | | | | 19 59 34.1 | |
| ZEA | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,0.6s | | | | | | | | |
| ZEA | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| ZEA | | | | MLR | MLR | | | | |
| | comp=N,1μm,3.0s | | | | | | | | |
| ZEA | | | | MLR | MLR | | | | |
| | comp=Z,2μm,2.0s | | | | | | | | |
| **OLMR** | **Olekminsk** | **4.54** | **1** | P | | **Pn** | | **19 58 44.3** | **-0.5** |
| **YOAB** | **Uoyan, Buryati** | **4.83** | **277** | *e*Pg | | **Pg** | | **19 59 08.3** | **-0.2** |
| YOAB | | | | *e* | | | | 19 59 16.7 | |
| YOAB | | | | max | | | | 19 59 28.1 | |
| | comp=Z,345nm,0.9s | | | | | | | | |
| YOAB | | | | *e*Sg | | **Sg** | | **20 00 12.8** | **+1.8** |
| YOAB | | | | Smax | | | | 20 00 25.4 | |
| | comp=Z,4μm,1.1s | | | | | | | | |
| **KMO** | **Kumora** | **5.13** | **274** | ⇓*i*Pn | | **Pn** | | **19 58 55.8** | **+2.9** |
| KMO | | | | *e* | | | | 19 59 03.9 | |
| KMO | | | | *e*Pg | | **Pg** | | **19 59 12.7** | **-1.6** |
| KMO | | | | *e* | | | | 19 59 19.9 | |
| KMO | | | | max | | | | 19 59 22.4 | |
| | comp=Z,112nm,0.5s | | | | | | | | |
| KMO | | | | *e*Sg | | **Sg** | | **20 00 21.3** | **+0.6** |
| KMO | | | | Smax | | | | 20 00 31.6 | |
| | comp=Z,2μm,1.2s | | | | | | | | |
| **KMO** | **Kumora** | **5.13** | **274** | ⇓*i*P | | **Pn** | | **19 58 55.8** | **+2.9** |
| KMO | | | | *e*S | | **Sn** | | **19 59 58.1** | **+6.0** |
| KMO | | | | pmax | pmax | | | | |
| | comp=Z,49nm,0.3s | | | | | | | | |
| KMO | | | | smax | smax | | | | |
| | comp=N,2μm,1.4s | | | | | | | | |
| **YLYR** | **Ulyunkhan** | **5.31** | **263** | ⇓*i* | | **Pn** | | **19 58 58.1** | **+2.8** |
| YLYR | | | | *e* | | | | 19 59 05.9 | |
| YLYR | | | | *e*Pg | | **Pg** | | **19 59 17.4** | **-0.3** |
| YLYR | | | | Pmax | | | | 19 59 19.3 | |
| | comp=N,66nm,0.4s | | | | | | | | |
| YLYR | | | | *e*Sg | | **Sg** | | **20 00 28.3** | **+1.9** |
| YLYR | | | | Smax | | | | 20 00 47.9 | |
| | comp=N,1μm,1.3s | | | | | | | | |
| **VTMR** | **Vitim** | **5.51** | **314** | P | | **Pn** | | **19 58 59.0** | **+1.0** |
| **CIT** | **Chita** | **5.53** | **229** | *e* | | **Pb** | | **19 59 13.7** | **+1.0** |
| CIT | | | | *e*Sg | | **Sg** | | **20 00 33.3** | **-0.2** |
| CIT | | | | Smax | | | | 20 00 48.7 | |
| | comp=N,4μm,1.8s | | | | | | | | |
| **NIZB** | **Nizh Angarsk** | **6.07** | **274** | *e* | | **Pn** | | **19 59 08.5** | **+2.7** |
| NIZB | | | | *e*Pg | | **Pg** | | **19 59 30.4** | **-1.9** |
| NIZB | | | | Pmax | | | | 19 59 44.1 | |
| | comp=N,38nm,0.6s | | | | | | | | |
| NIZB | | | | *e*Sg | | **Sg** | | **20 00 49.4** | **-1.4** |
| NIZB | | | | Smax | | | | 20 01 08.7 | |
| | comp=N,600nm,1.5s | | | | | | | | |
| **CGD** | **Chagda** | **6.30** | **58** | P | | **Pn** | | **19 59 08.9** | **0.0** |
| **SYVR** | **Suvo** | **6.36** | **254** | *e* | | **Pn** | | **19 59 12.1** | **+2.4** |
| SYVR | | | | *e* | | | | 19 59 20.3 | |
| SYVR | | | | *e*Sg | | **Sg** | | **20 01 00.2** | **+0.2** |
| SYVR | | | | Smax | | | | 20 01 09.2 | |
| | comp=N,749nm,1.4s | | | | | | | | |
| **HIA** | **Hailar** | **6.60** | **183** | *e*Sg | | **Sg** | | **20 01 05.9** | **-1.9** |
| **HIA** | **Hailar** | **6.60** | **183** | *de*P | | **Pn** | | **19 59 11.9** | **-1.2** |
| **HEIH** | **HeiHe** | **7.05** | **140** | *e*Pn | | **Pn** | | **19 59 19.8** | **+0.6** |
| HEH | | | | Sn | | **Sn** | | **20 00 45.6** | **+6.3** |
| HE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BGT** | **Bolshoye Golou** | **9.57 253** | *e* | **Pn** | **19 59 55.7** | **+1.9** |
| BGT | | | *e*Sg | Sn | 20 02 39.8 | +59 |
| BGT | | | Smax | | 20 03 13.5 | |
| | comp=E,132nm,1.2s | | | | | |
| **KLR** | **Kul'dur** | **9.61 129** | Pn | **Pn** | **19 59 53.3** | **-1.0** |
| | comp=E,0.5nm,0.3s,baz=315,slow=11,SNR=20 | | | | | |
| KLR | | | Sn | Sn | 20 01 28.6 | -14 |
| | comp=E,0.6nm,0.3s,baz=72,slow=15,SNR=2.1 | | | | | |
| KLR | | | Lg | Lg | 20 02 36.2 | |
| | comp=E,1.5nm,0.3s,baz=21,slow=8.7,SNR=1.6 | | | | | |
| KLR | | | LR | LR | 20 03 59.5 | |
| | comp=E,117nm,19.3s,baz=308,slow=40 | | | | | |
| | comp=E,3.8nm,0.5s | | | | | |
| **KLR** | **Kul'dur** | **9.61 129** | *de*P | **Pn** | **19 59 53.4** | **-0.9** |
| **LSTR** | **Listvyanka** | **9.97 253** | *e* | **Pn** | **20 00 01.1** | **+1.9** |
| LSTR | | | *e*Sg | Sn | 20 02 51.0 | +60 |
| LSTR | | | Smax | | 20 03 29.5 | |
| | comp=E,161nm,1.5s | | | | | |
| **IRK** | **Irkutsk** | **10.09 256** | *e*Sg | Sn | 20 02 55.3 | +61 |
| IRK | | | Smax | | 20 03 15.3 | |
| | comp=E,277nm,1.2s | | | | | |
| **GRNR** | **Gornyy** | **10.89 111** | *e*P | Pn | 20 00 21.6 | +10 |
| **ULN** | **Ulaanbaatar** | **11.43 231** | *e*Sg | | 20 03 37.5 | |
| **ZAK** | **Zakamensk** | **11.59 249** | *e*P | **Pn** | **20 00 22.6** | **+1.1** |
| ZAK | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | |
| **SONM** | **Songino Array** | **11.74 233** | Pn | **Pn** | **20 00 25.6** | **+1.9** |
| | comp=Z,0.2nm,0.3s,baz=151,slow=24,SNR=4.3 | | | | | |
| SONM | | | Lg | Lg | 20 03 47.6 | |
| | comp=Z,3.6nm,0.3s,baz=51,slow=24,SNR=7.5 | | | | | |
| SONM | | | LR | LR | 20 05 14.1 | |
| | comp=Z,39nm,20.8s,baz=159,slow=39 | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | |
| **USRK** | **Ussuriysk Ar.** | **13.84 142** | Pn | **Pn** | **20 00 49.4** | **-2.7** |
| | comp=Z,0.1nm,0.3s,baz=56,slow=24,SNR=2.4 | | | | | |
| USRK | | | Lg | Lg | 20 04 47.5 | |
| | comp=Z,0.1nm,0.3s,baz=110,slow=41,SNR=2.3 | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **14.59 258** | *e*P | **Pn** | **20 01 03.7** | **+1.2** |
| **TIXI** | **Tiksi** | **16.28 10** | Pn | Pn | 20 01 17.3 | -7.1 |
| | comp=Z,0.7nm,0.3s,baz=100,slow=22,SNR=1.8 | | | | | |
| TIXI | | | Sn | Sn | 20 04 01.3 | -23 |
| | comp=Z,0.4nm,0.3s,baz=289,slow=3.0,SNR=2.2 | | | | | |
| TIXI | | | Lg | Lg | 20 06 07.9 | |
| | baz=32,slow=6.8 | | | | | |
| TIXI | | | LR | LR | 20 08 38.1 | |
| | comp=Z,52nm,19.7s,baz=224,slow=41 | | | | | |
| | comp=Z,2.3nm,0.3s | | | | | |
| **TIXI** | **Tiksi** | **16.28 10** | *e*P | **Pn** | **20 01 25.1** | **+0.7** |
| **MA2** | **Magadan** | **16.61 64** | Lg | Lg | 20 06 12.4 | |
| | comp=Z,0.2nm,0.3s,baz=314,slow=22,SNR=1.9 | | | | | |
| **BTO** | **Baotou** | **16.69 208** | *e*P | **Pn** | **20 01 27.6** | **-2.3** |
| BTO | | | pP | **P** | **20 01 31.4** | **-0.9** |
| BTO | | | sP | **pP** | **20 01 34.6** | **-0.9** |
| BTO | | | PP | **PnPn** | **20 01 40.4** | **+1.3** |
| BTO | | | S | **Sn** | **20 04 33.5** | **-1.7** |
| BTO | | | SS | **SnSn** | **20 04 50.9** | **+2.9** |
| BTO | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | |
| BTO | | | LR | LR | | |
| | comp=Z,400nm,5.1s | | | | | |
| BTO | | | LR | LR | | |
| | comp=Z,380nm,3.8s | | | | | |
| BTO | | | LR | LR | | |
| | comp=Z,300nm,4.7s | | | | | |
| **SEY** | **Seymchan** | **17.65 53** | P | **Pn** | **20 01 41.6** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=265,slow=14,SNR=12 | | | | | |
| SEY | | | Lg | Lg | 20 06 46.6 | |
| | comp=Z,0.1nm,0.3s,baz=354,slow=19,SNR=4.3 | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | |
| **SEY** | **Seymchan** | **17.65 53** | *e*P | **Pn** | **20 01 42.1** | **+0.4** |
| **ASAJ** | **Asahikawa** | **18.43 120** | P | **Pn** | **20 01 49.1** | **-2.3** |
| | comp=Z,0.2nm,0.3s,baz=120,slow=33,SNR=3.2 | | | | | |
| ASAJ | | | LR | LR | 20 09 10.0 | |
| | comp=Z,67nm,20.6s,baz=341,slow=38 | | | | | |
| | comp=Z,5.2nm,1.0s | | | | | |
| **KSRS** | **Korea Array** | **19.10 161** | P | **P** | **20 01 58.6** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=231,slow=24,SNR=1.5 | | | | | |
| KSRS | | | LR | LR | 20 10 30.4 | |
| | comp=Z,27nm,20.9s,baz=335,slow=41 | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.36 280** | P | **P** | **20 02 11.8** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=57,slow=11,SNR=1.6 | | | | | |
| ZALV | | | Lg | Lg | 20 08 20.9 | |
| | comp=Z,0.1nm,0.3s,baz=136,slow=21,SNR=1.6 | | | | | |
| ZALV | | | LR | LR | 20 10 51.0 | |
| | comp=Z,41nm,18.3s,baz=46,slow=39 | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | |
| **DGZ** | **Jazzator, Alta** | **20.68 267** | *e*P | **P** | **20 02 15.2** | **-0.9** |
| DGZ | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | |
| **PETK** | **Petropavlovsk-** | **21.73 82** | P | **P** | **20 02 26.7** | **-0.4** |
| | comp=Z,1.3nm,0.6s,baz=11,slow=8.3,SNR=2.0 | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | |
| **MKAR** | **Makanchi Array** | **25.14 265** | P | **P** | **20 03 02.6** | **+1.6** |
| | comp=Z,1.1nm,0.7s,baz=64,slow=7.3,SNR=12 | | | | | |
| MKAR | | | LR | LR | 20 13 29.6 | |
| | comp=Z,75nm,19.3s,baz=84,slow=38 | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | |
| **KURK** | **Kurchatov** | **25.15 276** | P | **P** | **20 03 03.2** | **+2.2** |
| **KURBB** | **Kurchatov Arra** | **25.25 276** | P | **P** | **20 03 03.2** | **+1.3** |
| | comp=Z,0.7nm,0.5s,baz=67,slow=9.1,SNR=6.3 | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | |
| **AAK** | **Ala-Archa** | **32.07 265** | LR | LR | 20 17 49.9 | |
| | comp=Z,62nm,21.4s,baz=110,slow=38 | | | | | |
| **ARCES** | **ARCESS Array B** | **40.85 328** | LR | LR | 20 26 14.0 | |
| | comp=Z,31nm,19.0s,baz=96,slow=42 | | | | | |
| **ILAR** | **Eielson Array** | **42.76 39** | P | **P** | **20 05 32.8** | **-0.2** |
| | comp=Z,0.2nm,0.5s,baz=271,slow=7.1,SNR=2.0 | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | |
| **FINES** | **FINESS Array B** | **45.23 318** | P | **P** | **20 05 50.6** | **-2.3** |
| | comp=Z,1.2nm,0.8s,baz=51,slow=7.6,SNR=4.5 | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | |
| **FINES** | **FINESS Array B** | **45.23 318** | *e*P | **P** | **20 05 53.1** | **+0.2** |
| FINES | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | |
| **SOC** | **Sochi** | **50.63 292** | *e*P | **P** | **20 06 33.4** | **-1.5** |
| SOC | | | *e* | | 20 08 29.7 | |
| SOC | | | *e*PPP | PPP | 20 09 32.5 | |
| SOC | | | *e*S | **S** | **20 13 48.9** | **-0.4** |
| SOC | | | *e* | | 20 16 30.2 | |
| SOC | | | *e*SS | **SS** | **20 17 21.1** | **-1.9** |
| SOC | | | *e*SSS | SSS | 20 18 48.9 | |
| SOC | | | MLR | MLR | | |
| | comp=Z,44nm,18.0s | | | | | |
| **HFS** | **Hagfors** | **50.64 322** | P | **P** | **20 06 33.8** | **-1.0** |
| | comp=Z,1.8nm,0.8s,baz=31,slow=5.9,SNR=2.6 | | | | | |
| HFS | | | LR | LR | 20 29 44.9 | |
| | comp=Z,30nm,20.5s,baz=52,slow=38 | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | |
| **NOA** | **NORSAR Array B** | **50.83 324** | LR | LR | 20 30 14.8 | |
| | comp=Z,16nm,18.7s,baz=95,slow=39 | | | | | |
| **AKASG** | **Malin Array Be** | **50.91 305** | P | **P** | **20 06 37.1** | **+0.2** |
| | comp=Z,0.5nm,0.5s,baz=44,slow=8.6,SNR=1.5 | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | |
| **CLL** | **Collm** | **57.48 315** | *e*P | **P** | **20 07 24.0** | **-0.8** |
| **CLL** | **Collm** | **57.48 315** | *e*P | **P** | **20 07 22.0** | **-2.8** |
| CLL | | | *i* | | 20 07 26.8 | |
| CLL | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | |
| **WRA** | **Warramunga Arr** | **76.42 166** | P | **P** | **20 09 24.9** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=351,slow=6.6,SNR=5.2 | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | |
| **ASAR** | **Alice Springs** | **80.03 167** | P | **P** | **20 09 45.1** | **-0.4** |
| | comp=Z,0.2nm,0.7s,baz=352,slow=5.6,SNR=1.7 | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | |

*IDC **23** 19:59:34.2±9.9, 18°.93S×177°.54W, h512km±99km, mb2.8/5, mbtmp3.7/5, Error ellipse: s-maj=50.6km s-min=39.3km az=72.0*

**ISC 23 19:59:39.0±1.1, 18°.9S±0°.3×177°.7W±0°.3, h570km, n9, σ0.838/11, mb3.4/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **38.78 242** | | P | **P** | **20 06 15.8** | **+0.1** |
| | 1.2nm,0.7s,baz=80,slow=12,SNR=2.9 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.15 260** | | P | **P** | **20 07 05.4** | **-0.5** |
| | 0.6nm,0.5s,baz=95,slow=8.0,SNR=21 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 08 34.0** | **0.0** |
| | 0.1nm,0.3s,baz=97,slow=3.5,SNR=1.8 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.21 255** | | P | **P** | **20 07 06.3** | **+0.1** |
| | 0.9nm,0.7s,baz=87,slow=8.3,SNR=19 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 08 34.6** | **+0.4** |
| | 0.2nm,0.4s,baz=106,slow=4.0,SNR=6.1 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.16 180** | | P | **P** | **20 10 00.5** | **-0.1** |
| | 0.9nm,0.9s,baz=198,slow=13,SNR=2.1 | | | | | | |
| | 0.9nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **86.69 13** | | P | **P** | **20 11 22.2** | **-0.2** |
| | 0.2nm,0.5s,baz=224,slow=4.7,SNR=2.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.41 350** | | PKP | **PKiKP** | **20 17 39.9** | **+0.4** |
| | 1.0nm,0.8s,baz=45,slow=3.6,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.98 314** | | PKPbc | **PKPbc** | **20 18 16.6** | **+0.6** |
| | 0.4nm,0.6s,baz=87,slow=4.2,SNR=1.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.27 302** | | PKPbc | **PKiKP** | **20 18 20.8** | **-0.4** |
| | 1.1nm,0.5s,baz=79,slow=7.8,SNR=2.7 | | | | | | |
| **GERES** | **GERESS Array B** | **148.75 345** | | PKPbc | **PKiKP** | **20 18 23.6** | **-0.2** |
| | 0.3nm,0.3s,baz=69,slow=6.5,SNR=3.5 | | | | | | |

*IDC **23** 20:01:13.5±1.1, 18°.88N×144°.81E, h0km, mb3.7/8, mbtmp3.7/8, Error ellipse: s-maj=36.4km s-min=24.2km az=90.0*

**ISC 23 20:01:18.8±1.0, 18°.9N±0°.2×144°.8E±0°.3, h35km, n14, σ0.884/8, mb3.8/8, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H11S3** | **WAKE ISLAND Hy** | **20.78 87** | | T | T | 20 27 49.2 | |
| | baz=276,slow=75,SNR=81 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.79 87** | | T | T | 20 27 42.0 | |
| | baz=276,slow=75,SNR=58 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.80 87** | | T | T | 20 27 42.3 | |
| | baz=276,slow=75,SNR=50 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.91 84** | | T | T | 20 28 07.0 | |
| | baz=269,slow=74 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.91 84** | | T | T | 20 28 07.7 | |
| | baz=269,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.93 84** | | T | T | 20 28 04.6 | |
| | baz=269 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.89 195** | | P | **P** | **20 08 48.8** | **-0.7** |
| | 1.0nm,1.2s,baz=17,slow=8.9,SNR=3.1 | | | | | | |
| | 1.0nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **43.57 195** | | P | **P** | **20 09 20.0** | **+0.4** |
| | 0.2nm,0.8s,baz=19,slow=12,SNR=1.6 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.35 323** | | P | **P** | **20 11 03.2** | **-0.1** |
| | 0.5nm,0.4s,baz=104,slow=6.1,SNR=2.6 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.71 314** | | P | **P** | **20 11 06.2** | **+0.2** |
| | 0.7nm,1.0s,baz=100,slow=6.0,SNR=3.2 | | | | | | |
| | 0.7nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.60 318** | | P | **P** | **20 11 26.3** | **+0.4** |
| | 0.4nm,0.4s,baz=95,slow=7.4,SNR=5.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **63.90 26** | | P | **P** | **20 11 46.6** | **-1.2** |
| | 0.6nm,0.8s,baz=274,slow=5.7,SNR=6.1 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **65.78 320** | | P | **P** | **20 12 00.5** | **+0.2** |
| | 2.0nm,0.8s,baz=89,slow=7.9,SNR=7.1 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.74 52** | | P | **P** | **20 13 45.9** | **+1.1** |
| | 0.7nm,0.7s,baz=280,slow=6.3,SNR=4.7 | | | | | | |
| | 0.7nm,0.7s | | | | | | |

**DJA 23 20:06:59.3±0.4, 8°.3S×11°.6E, h15km±4km, M3.9/9, mb4.3/2, MLv3.6/9, Bali region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DNP** | **Denpasar** | **0.76 249** | | P | Pg | 20 07 13.0 | -1.1 |
| **SRBI** | **Singaraja** | **0.78 294** | | P | Pn | 20 07 15.7 | -0.1 |
| **TWSI** | **Taliwang, Sumb** | **1.00 109** | | P | Pn | 20 07 18.9 | +0.1 |
| TWSI | | | | S | Sg | 20 07 31.9 | +0.2 |
| **JAGI** | **Jajag, Banyuwa** | **1.76 268** | | P | Pn | 20 07 30.2 | +0.9 |
| **PLAI** | **Plampang** | **1.87 103** | | P | Pn | 20 07 31.2 | +0.4 |
| **WBSI** | **Waikabubak, Su** | **3.63 110** | | P | Pn | 20 07 55.6 | +0.5 |
| **PWJI** | **Pagerwojo** | **4.10 275** | | P | Pn | 20 08 01.1 | -0.4 |
| **BSSI** | **Bau Bau, Buton** | **5.05 64** | | P | Pn | 20 08 13.4 | -1.2 |
| | 34nm,1.7s,0.1nm | | | | | | |
| **UGM** | **Wanagama** | **5.38 275** | | P | Pn | 20 08 18.6 | -0.5 |

**IDC 23 20:26:40.6±3.2, 5°.72S×151°.44E, h0km, mb3.2/2, mbtmp3.4/3, ML1.3/1, Error ellipse: s-maj=129.7km s-min=41.3km az=127.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.61 229** | | P | Pn | 20 28 05.2 | -0.2 |
| | 0.6nm,0.3s,baz=326,slow=13,SNR=1.3 | | | | | | |
| PMG | | | | Sn | Sn | 20 29 13.5 | +2.9 |
| | 1.1nm,0.3s,baz=106,slow=11,SNR=1.9 | | | | | | |
| | 4.0nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.83 228** | | P | P | 20 31 35.4 | +0.6 |
| | 0.6nm,0.6s,baz=53,slow=10,SNR=8.9 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **24.57 222** | | P | P | 20 32 01.8 | -0.7 |
| | 0.4nm,0.6s,baz=59,slow=9.1,SNR=8.3 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.28 286** | | PKPbc | PKPbc | 20 46 32.3 | -0.2 |
| | 0.1nm,0.3s,baz=102,slow=2.4,SNR=1.9 | | | | | | |

**IDC 23 20:37:52.6±2.5, 4°.06N×127°.11E, h0km, mb3.3/3, mbtmp3.3/3, Error ellipse: s-maj=207.9km s-min=28.1km az=66.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **24.88 164** | | P | P | 20 43 17.0 | -0.3 |
| | 0.3nm,0.4s,baz=343,slow=9.7,SNR=8.6 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **28.34 167** | | P | P | 20 43 48.8 | +0.4 |
| | 0.1nm,0.5s,baz=345,slow=12,SNR=1.7 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.51 325** | | P | P | 20 47 43.7 | -0.1 |
| | 0.3nm,0.6s,baz=120,slow=6.4,SNR=4.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*SKO **23** 20:38:22.4, 41°.88N×20°.21E, h17km, ML2.4*
*TIR **23** 20:38:22.6, 41°.89N×20°.39E, h13km±1km, Md2.6, Ml2.4*
*PDG **23** 20:38:23.8±0.2, 41°.87N×20°.43E, h3km±1km, ML2.3/9, Error ellipse: s-maj=0.5km s-min=0.7km az=0.0*
*RHSSO **23** 20:38:23.9±0.8, 41°.84N×20°.42E, h6km±2km, ML2.4/10*
*BEO **23** 20:38:24.9±0.2, 41°.87N×20°.46E, h5km±2km, ML2.1/5*

**ISC 23 20:38:23.7±1.1, 41°.87N±0°.02×20°.41E±0°.02, h4km±10km, n42, σ0.997/80, 1C-2D, Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PUK** | **Puka** | **0.42 294** | | P | **Pg** | **20 38 30.8** | **-1.1** |
| | baz=293 | | | | | | |
| PUK | | | | S | **Sg** | **20 38 37.0** | **-0.3** |
| | baz=293 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,2.3nm,0.3s,baz=293 | | | | | | |
| **BCI** | **Bajram Curri** | **0.56 333** | | P | **Pg** | **20 38 33.9** | **-0.6** |
| | baz=334 | | | | | | |
| BCI | | | | S | **Sg** | **20 38 42.7** | **+1.0** |
| | baz=334 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,0.9nm,0.5s,baz=334 | | | | | | |
| **TIR** | **Tirane** | **0.66 218** | | P | **Pg** | **20 38 36.2** | **-0.3** |
| | baz=217 | | | | | | |
| TIR | | | | S | **Sb** | **20 38 46.5** | **-1.0** |
| | baz=217 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,0.3nm,0.1s,baz=217 | | | | | | |
| **TIR** | **Tirane** | **0.66 218** | | *e*Pg | **Pg** | **20 38 36.3** | **-0.1** |
| TIR | | | | *e*Sg | **Sb** | **20 38 47.2** | **-0.3** |
| **PVY** | **Plav** | **0.80 335** | | *e*Pg | **Pg** | **20 38 37.6** | **-1.4** |
| PVY | | | | *i* Sg | **Sg** | **20 38 50.1** | **+0.7** |
| **OHR** | **Ohrid** | **0.81 159** | | *e*Pg | **Pg** | **20 38 38.3** | **-1.1** |
| OHR | | | | *e*Sg | **Sb** | **20 38 51.6** | **-0.3** |
| **OHR** | **Ohrid** | **0.81 159** | | *i* Pg | **Pg** | **20 38 38.2** | **-1.1** |
| OHR | | | | *i* Sg | **Sb** | **20 38 51.6** | **-0.3** |
| OHR | | | | *e*Lg | Lg | 20 38 52.2 | |
| | comp=N,78nm,0.3s | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.96 290** | | *e*Pg | **Pg** | **20 38 41.4** | **-0.8** |
| DRME | | | | *e*Sg | **Sg** | **20 38 54.8** | **0.0** |
| **DRME** | **Dracevica, Mon** | **0.96 290** | | *e*Pg | **Pg** | **20 38 41.0** | **-1.2** |
| DRME | | | | *i* Sg | **Sb** | **20 38 56.3** | **+0.1** |
| **PDG** | **Podgorica** | **1.02 303** | | *e*Pg | **Pg** | **20 38 42.8** | **-0.6** |
| PDG | | | | *e*Sg | **Sg** | **20 38 57.0** | **+0.4** |
| **PDG** | **Podgorica** | **1.02 303** | | *i* Pg | **Pg** | **20 38 41.6** | **-1.8** |
| PDG | | | | *i* Sg | **Sb** | **20 38 58.1** | **+0.2** |
| **IVA** | **Berane** | **1.07 339** | | *i* Pg | **Pg** | **20 38 42.7** | **-1.6** |
| IVA | | | | *i* Sg | **Sb** | **20 38 59.1** | **-0.3** |
| **KOME** | **Kolasin** | **1.18 326** | | *e*Pg | **Pg** | **20 38 44.8** | **-1.6** |
| KOME | | | | *i* Sg | **Sn** | **20 39 03.1** | **-0.7** |
| **BUM** | **Brajici-Budva** | **1.21 291** | | *e*Pg | **Pg** | **20 38 45.5** | **-1.4** |
| BUM | | | | *i* Sg | **Sb** | **20 39 03.6** | **+0.4** |
| **KBN** | **Korca** | **1.28 167** | | P | **Pn** | **20 38 47.3** | **-1.3** |
| | baz=166 | | | | | | |
| KBN | | | | S | **Sn** | **20 39 06.2** | **0.0** |
| | baz=166 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=N,0.3nm,0.8s,baz=166 | | | | | | |
| **CEME** | **Cevo** | **1.30 302** | | *e*Pg | **Pn** | **20 38 47.0** | **-1.8** |
| CEME | | | | *i* Sg | **Sn** | **20 39 07.5** | **+0.9** |
| **FNA** | **Florina** | **1.31 146** | | P | **Pn** | **20 38 46.8** | **-2.1** |
| | baz=145 | | | | | | |
| FNA | | | | S | **Sn** | **20 39 07.3** | **+0.5** |
| | baz=145 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=N,0.3nm,0.5s,baz=145 | | | | | | |
| **FNA** | **Florina** | **1.31 146** | | *e*Pg | **Pn** | **20 38 46.8** | **-2.1** |
| FNA | | | | *e*Sg | **Sn** | **20 39 07.7** | **+0.9** |
| **FNA** | **Florina** | **1.31 146** | | *i* Pg | **Pn** | **20 38 46.9** | **-2.1** |
| FNA | | | | *i* Sg | **Sn** | **20 39 07.8** | **+0.9** |
| **NKME** | **Niksic** | **1.40 310** | | *e*Pg | **Pn** | **20 38 49.0** | **-1.2** |
| NKME | | | | *i* Sg | **Sg** | **20 39 10.1** | **+1.3** |
| **BARS** | **Barje** | **1.41 47** | | *e*Pg | **Pg** | **20 38 50.8** | **+0.1** |
| BARS | | | | *e*Sg | **Sg** | **20 39 09.2** | **+0.2** |
| **BARS** | **Barje** | **1.41 47** | | *i* Pg | **Pg** | **20 38 51.0** | **+0.2** |
| BARS | | | | *i* Sg | **Sg** | **20 39 10.2** | **+1.2** |
| **SJES** | **Sjenica** | **1.43 347** | | *e*Pg | **Pn** | **20 38 49.9** | **-0.7** |
| SJES | | | | *e*Sg | **Sg** | **20 39 11.7** | **+2.1** |
| **SJES** | **Sjenica** | **1.43 347** | | *i* Pg | **Pn** | **20 38 49.7** | **-0.9** |
| SJES | | | | *e*Sg | **Sg** | **20 39 10.5** | **+0.9** |
| **SELS** | **Selova** | **1.45 21** | | *e*Pg | **Pn** | **20 38 49.9** | **-0.9** |
| SELS | | | | *e*Sg | **Sg** | **20 39 11.1** | **+0.9** |
| **IVAS** | **Ivanjica** | **1.71 354** | | *e*Pn | **Pn** | **20 38 54.7** | **+0.2** |
| IVAS | | | | *e*Sn | **Sb** | **20 39 17.9** | **0.0** |
| **BRY** | **Bratogost** | **1.73 307** | | *e*Pn | **Pn** | **20 38 54.5** | **-0.2** |
| BRY | | | | *e*Sn | **Sn** | **20 39 17.1** | **-0.2** |
| **BRY** | **Bratogost** | **1.73 307** | | *e*Pn | **Pn** | **20 38 55.0** | **+0.3** |
| BRY | | | | *i* Sn | **Sg** | **20 39 20.8** | **+1.6** |
| **TREB** | **Trebinje** | **1.75 300** | | *e*Pn | **Pg** | **20 38 57.1** | **-0.1** |
| TREB | | | | *e*Sn | **Sg** | **20 39 22.0** | **+2.2** |
| **TREB** | **Trebinje** | **1.75 300** | | *e*Pn | **Pn** | **20 38 54.9** | **0.0** |
| TREB | | | | *e*Sn | **Sn** | **20 39 17.8** | **+0.2** |
| **RUDO** | **Rudo** | **1.91 337** | | *e*Pn | **Pn** | **20 38 57.8** | **+0.7** |
| RUDO | | | | *e*Sn | **Sn** | **20 39 21.9** | **+0.3** |
| **KNT** | **Kendrikon** | **2.00 110** | | *i* Pn | **Pn** | **20 38 58.0** | **-0.4** |
| **SRN** | **Sarande** | **2.01 189** | | P | **Pb** | **20 39 01.5** | **+0.6** |
| | baz=189 | | | | | | |
| **BBLS** | **Lazi&#263i** | **2.13 340** | | *e*Pn | **Pn** | **20 38 59.0** | **-1.2** |
| BBLS | | | | *e*Sn | **Sb** | **20 39 28.8** | **-0.9** |
| **BBLS** | **Lazi&#263i** | **2.13 340** | | *e*Pn | **Pn** | **20 39 00.9** | **+0.7** |
| BBLS | | | | *e*Sn | **Sn** | **20 39 27.2** | **+0.1** |
| **STON** | **Ston** | **2.24 297** | | *e*Pn | **Pn** | **20 39 02.5** | **+0.8** |
| **STON** | **Ston** | **2.24 297** | | *e*Pn | **Pn** | **20 39 01.9** | **+0.2** |
| STON | | | | *e*Sn | **Sn** | **20 39 30.2** | **+0.4** |
| **IGT** | **Igoumenitsa** | **2.34 181** | | P | **Pn** | **20 39 04.5** | **+1.5** |
| | baz=182 | | | | | | |
| IGT | | | | S | **Sb** | **20 39 36.5** | **+0.8** |
| | baz=182 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=N,0.1nm,0.4s,baz=182 | | | | | | |
| **HAPS** | **Han Pijesak,Bl** | **2.46 335** | | *e*Pn | **Pn** | **20 39 04.6** | **-0.2** |
| HAPS | | | | *e*Sn | **Sn** | **20 39 35.3** | **-0.1** |
| **TEKS** | **Tekeris** | **2.75 347** | | *e*Pn | **Pn** | **20 39 08.4** | **-0.4** |
| **A050A** | **Klekovaca** | **3.85 314** | | *e*Pn | **Pn** | **20 39 24.0** | **+0.1** |
| A050A | | | | *e*Sn | **Sn** | **20 40 09.1** | **-0.6** |
| **A051A** | **Mrakovica** | **4.04 322** | | *e*Pn | **Pn** | **20 39 26.7** | **+0.2** |
| A051A | | | | *e*Sn | **Sn** | **20 40 13.6** | **-0.8** |

*IDC **23** 20:42:57.7±0.9, 34°.17S×179°.24W, h0km, mb4.0/5, mbtmp4.1/6, ML4.6/1, MS2.7/1, Error ellipse: s-maj=30.6km s-min=27.5km az=62.0*
*WEL **23** 20:43:01.6±0.8, 35°.S±7°.×17°.9W±1°.3, h33km, M4.4/23, mB4.9/7, ML4.9/30, MLv4.6/23, Mw(mB)4.2/7, Error ellipse: s-maj=0.0km s-min=0.0km az=115.0, confirmed*
*NEIC **23** 20:43:03.1±2.6, 34°.5S±0°.1×179°.3W±0°.1, h35km±2km, mb4.4/6, Error ellipse: s-maj=20.7km s-min=20.1km az=101.0*

**ISC 23 20:43:01.5±0.7, 34°.44S±0°.07×179°.0W±0°.1, h35km, n77, σ1.942/83, mb4.2/6, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **3.80 214** | | Pn | **Pn** | **20 43 57.6** | **+0.1** |
| **MXZ** | **Matakaoa Point** | **3.80 214** | | P | **Pn** | **20 43 58.0** | **+0.4** |
| MXZ | | | | S | **Sn** | **20 44 39.4** | **-1.6** |
| **PKGZ** | **Pakihiroa** | **4.15 214** | | P | **Pn** | **20 44 12.9** | **+0.5** |
| PKGZ | | | | S | **Sn** | **20 44 49.8** | **+0.1** |
| **HAZ** | **Te Kaha** | **4.21 217** | | P | **Pn** | **20 44 03.7** | **+0.6** |
| HAZ | | | | S | **Sn** | **20 44 51.5** | **+0.5** |
| **PUZ** | **Puketiti** | **4.24 210** | | P | **Pn** | **20 44 04.3** | **+0.6** |
| PUZ | | | | S | **Sn** | **20 44 51.2** | **-0.8** |
| **RUGZ** | **Raukumara Rang** | **4.42 216** | | P | **Pn** | **20 44 06.8** | **+0.6** |
| RUGZ | | | | S | **Sn** | **20 44 56.5** | **+0.1** |
| **TWGZ** | **Tauwhareparae** | **4.45 212** | | P | **Pn** | **20 44 07.0** | **+0.5** |
| TWGZ | | | | S | **Sn** | **20 44 57.8** | **+0.7** |
| **CNGZ** | **Carnagh Statio** | **4.62 208** | | P | **Pn** | **20 44 09.2** | **+0.4** |
| **TKGZ** | **Te Karaka** | **4.73 211** | | P | **Pn** | **20 44 11.1** | **+0.8** |
| TKGZ | | | | S | **Sn** | **20 45 02.1** | **-1.7** |
| **MWZ** | **Matawai** | **4.78 215** | | P | **Pn** | **20 44 10.6** | **-0.5** |
| MWZ | | | | S | **Sn** | **20 45 04.0** | **-1.3**

1.9nm,0.5s,baz=112,slow=7.9,SNR=24
1.9nm,0.5s
**WRA Warramunga Arr 43.56 277 P P 20 50 60.0 -2.2**
**WRA Warramunga Arr 43.56 277 P P 20 51 01.2 -1.0**
2.2nm,0.5s,baz=118,slow=7.6,SNR=48
2.2nm,0.5s
**WB0 Warramunga Arr 43.60 277 P P 20 51 00.9 -1.6**
**KNRA Kununurra 50.29 278 P P 20 51 54.6 -0.1**
**CASY Casey 51.19 209 P P 20 52 01.2 +0.3**
CASY IAmb IAmb 20 52 17.8
comp=Z,8.0nm,1.3s
**FITZ Fitzroy Crossi 51.62 274 P P 20 52 04.2 -0.6**
**QSPA South Pole Qui 55.68 180 P P 20 52 36.0 +2.0**
QSPA IAmb IAmb 20 52 47.9
comp=Z,2.4nm,0.7s
**QSPA South Pole Qui 55.68 180 P P 20 52 38.5 +4.5**
comp=Z,1.6nm,0.9s,baz=303,slow=1.9,SNR=7.2
comp=Z,1.6nm,0.9s
**H03S2 Juan Fernandez 78.96 123 T T** 22 23 37.5
baz=234
**H03S1 Juan Fernandez 78.97 123 T T** 22 23 40.4
baz=234
**H03S3 Juan Fernandez 78.98 123 T T** 22 23 35.7
baz=234
**H03N3 Juan Fernandez 79.18 123 T T** 22 23 41.1
baz=232,slow=74
**H03N2 Juan Fernandez 79.18 123 T T** 22 23 37.8
baz=232
**H03N1 Juan Fernandez 79.19 123 T T** 22 23 42.8
baz=232,slow=74
**PETK Petropavlovsk- 89.51 346 P P 20 55 55.9 +1.4**
comp=Z,0.7nm,0.6s,baz=136,slow=7.4,SNR=4.4
comp=Z,0.7nm,0.6s
**MKAR Makanchi Array 119.66 309 PKP PKPdf 21 01 47.4 +0.1**
comp=Z,0.5nm,0.8s,baz=108,slow=2.6,SNR=2.5
**KURBB Kurchatov Arra 123.19 312 PKP PKPdf 21 01 53.8 -0.1**
comp=Z,0.6nm,0.2s,baz=135,slow=0.5,SNR=1.6
**ABKAR Akbulak array 134.79 308 PKPdf PKPdf 21 02 13.4 -2.7**
**ABKAR Akbulak array 134.79 308 PKPdf 21 02 13.4 -2.7**
**FINES FINESS Array B 148.57 337 PKPbc PKiKP 21 02 44.9 -0.4**
comp=Z,0.8nm,0.4s,baz=45,slow=3.5,SNR=11
**MMAI Mount Meron Ar 151.41 277 PKPbc PKiKP 21 02 53.4 +1.1**
comp=Z,2.7nm,0.6s,baz=77,slow=3.6,SNR=7.0
**NOA NORSAR Array B 152.57 349 PKPbc PKiKP 21 02 54.8 +1.1**
comp=Z,0.6nm,0.9s,baz=16,slow=3.5,SNR=2.5
**BRTR Keskin Array B 153.51 291 PKPbc PKPbc 21 02 56.0 -0.3**
comp=Z,0.7nm,0.5s,baz=148,slow=3.9,SNR=7.2
**AKASG Malin Array Be 153.82 317 PKPbc PKiKP 21 02 56.8 +0.2**
comp=Z,0.9nm,0.6s,baz=48,slow=2.4,SNR=1.6
**TORD Torodi Ar. Bea 158.80 182 PKPab PKPab 21 03 34.4 +2.6**
comp=Z,0.4nm,0.8s,baz=170,slow=3.8,SNR=2.0

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*IDC **23** 20:52:44.6±1.9, 41˚.56N×142˚.16E, h60km±16km, mb3.7/16, mbtmp3.9/19, MS2.9/2, Error ellipse: s-maj=20.8km s-min=12.6km az=102.0*
*NIED **23** 20:52:44.8, 41˚.56N×142˚.07E, h63km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr6.80; Mθθ-1.62; Mφφ-5.18; Mrθ1.45; Mθφ-3.75; Mφr5.51; Fault plane solution: M₀9.18000×10¹⁴ NP1:φ±21.00000°, δ65.00000°, λ.79.00000°. NP2:φs225.00000°, δ28.00000°, λ.111.00000°.*
*JMA **23** 20:52:44.8±0.1, 41˚.6N±0˚.5×142˚.1E±0˚.6, h63km±2km, MV3.5/39, E OFF AOMORI PREF .*
*JMA Felt I J1 at E OFF AOMORI PREF .*
*NEIC **23** 20:52:45.2±1.5, 41˚.56N±0˚.08×142˚.08E±0˚.08, h56km±10km, mb4.1/12, Error ellipse: s-maj=13.5km s-min=5.7km az=147.0*

**ISC 23 20:52:45.1±0.8, 41˚.55N±0˚.04×142˚.08E±0˚.04, h61km±7km, n69, σ0s63/74, mb4.0/22, 14D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JAHD** | **Aomorihigashid** | **0.63** | **243** | ⇓*iP* | | **P** | **Pn** | **20 52 58.8** | **+0.3** |
| JAHD | | | | ⇓S | | | **Sn** | **20 53 08.7** | **+0.4** |
| **JARK** | **Aomorirokkasho** | **0.77** | **225** | ⇓*iP* | | **P** | **Pn** | **20 52 60.0** | **-0.2** |
| JARK | | | | ⇓S | | | **Sn** | **20 53 10.8** | **-0.4** |
| **JOT** | **Ohata** | **0.80** | **258** | ⇓*iP* | | **P** | **Pn** | **20 53 00.4** | **-0.2** |
| **JKB** | **Kayabe** | **0.85** | **294** | ⇓*iP* | | **P** | **Pn** | **20 53 00.8** | **-0.5** |
| **JNBK** | **Urakawa-nobuka** | **0.88** | **34** | P | | **P** | **Pn** | **20 53 01.1** | **-0.6** |
| JNBK | | | | S | | | **Sn** | **20 53 13.7** | **-0.2** |
| **ERM** | **Erimo** | **0.93** | **60** | | | | **Pn** | **20 53 01.8** | **-0.4** |
| **JEM** | **Erimo** | **0.93** | **60** | *i* P | | | **Pn** | **20 53 02.0** | **-0.2** |
| JEM | | | | *e*S | | | **Sn** | **20 53 14.8** | **-0.1** |
| **JIAM** | **Iburiatsuma** | **1.08** | **354** | P | | | **Pn** | **20 53 04.3** | **+0.1** |
| **JTM** | **Tenmabayashi** | **1.08** | **225** | | | | **Pn** | **20 53 04.0** | **-0.3** |
| **JTM** | **Tenmabayashi** | **1.08** | **225** | ⇓*iP* | | | **Pn** | **20 53 04.5** | **+0.2** |
| JTM | | | | ⇓S | | | **Sn** | **20 53 18.4** | **0.0** |
| **JNB** | **Noboribetsu** | **1.20** | **320** | ⇓*iP* | | | **Pn** | **20 53 05.2** | **-0.6** |
| **JBT2** | **Biratori 2** | **1.25** | **10** | P | | | **Pn** | **20 53 06.5** | **+0.1** |
| JBT2 | | | | S | | | **Sn** | **20 53 22.7** | **+0.4** |
| **JSR** | **Shiriuchi** | **1.25** | **270** | ⇓P | | | **Pn** | **20 53 06.4** | **0.0** |
| **JANG** | **Nango** | **1.25** | **200** | P | | | **Pn** | **20 53 06.4** | **-0.1** |
| JANG | | | | S | | | **Sn** | **20 53 22.1** | **-0.4** |
| **JEW** | **Eniwo** | **1.37** | **340** | ⇓*iP* | | | **Pn** | **20 53 08.4** | **+0.3** |
| JEW | | | | ⇓S | | | **Sn** | **20 53 24.7** | **-0.6** |
| **JYM2** | **Yakumo 2** | **1.40** | **294** | ⇓*iP* | | | **Pn** | **20 53 08.7** | **+0.3** |
| **JCH** | **Churui** | **1.43** | **41** | *i* P | | | **Pn** | **20 53 09.4** | **+0.6** |
| JCH | | | | *e*S | | | **Sn** | **20 53 27.0** | **+0.4** |
| **JOMM** | **Oshimamatsumae** | **1.56** | **270** | ⇓P | | | **Pn** | **20 53 10.5** | **-0.1** |
| **JOSM** | **Okushiri--Mats** | **2.02** | **286** | P | | | **Pn** | **20 53 16.4** | **-0.5** |
| **JKA** | **Kamikawa-asahi** | **2.59** | **8** | | | | **Pn** | **20 53 25.0** | **+0.4** |
| **ASAJ** | **Asahikawa** | **2.59** | **8** | P | | | **Pn** | **20 53 25.6** | **+1.0** |
| | 24nm,0.5s,baz=213,slow=15,SNR=57 | | | | | | | | |
| ASAJ | | | | S | | | **Sn** | **20 53 54.2** | **-0.8** |
| | 36nm,0.4s,baz=136,slow=14,SNR=6.2 | | | | | | | | |
| **JMM** | **Marumori** | **3.81** | **196** | Pn | | | **Pn** | **20 53 41.4** | **+0.1** |
| **JSD** | **Sado** | **4.59** | **221** | Pn | | | **Pn** | **20 53 52.6** | **+0.7** |
| **MJAR** | **Matsushiro Arr** | **5.84** | **112** | P | | | **Pn** | **20 54 08.9** | **-0.2** |
| | 1.1nm,0.5s,baz=276,slow=39,SNR=2.6 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.87** | **293** | Pn | | | **Pn** | **20 54 36.0** | **-0.9** |
| **USRK** | **Ussuriysk Ar.** | **7.87** | **293** | P | | | **Pn** | **20 54 37.9** | **+1.0** |
| | 2.2nm,0.5s,baz=92,slow=14,SNR=18 | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **7.87** | **293** | Pn | | | **Pn** | **20 54 37.4** | **+0.5** |
| **KLR** | **Kul'dur** | **10.56** | **320** | P | | | **Pn** | **20 55 16.5** | **+2.9** |
| | 2.6nm,1.1s,baz=123,slow=13,SNR=4.2 | | | | | | | | |
| **KSRS** | **Korea Array** | **11.68** | **254** | P | | | Pn | 20 55 35.1 | +6.3 |
| | 2.1nm,0.4s,baz=63,slow=14,SNR=6.6 | | | | | | | | |
| KSRS | | | | S | | | Sn | 20 57 46.9 | +9.3 |
| | 2.2nm,0.6s,baz=68,slow=23,SNR=4.8 | | | | | | | | |
| KSRS | | | | LR | | LR | | 20 59 32.7 | |
| | comp=Z,21nm,19.8s,baz=215,slow=35 | | | | | | | | |
| **SONM** | **Songino Array** | **25.97** | **296** | P | | | **Pn** | **20 58 12.7** | **+0.7** |
| **SONM** | **Songino Array** | **25.97** | **296** | P | | | **Pn** | **20 58 11.6** | **-0.4** |
| | 1.0nm,0.5s,baz=84,slow=8.2,SNR=8.8 | | | | | | | | |
| | 1.0nm,0.5s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 30.29** | | **128** | T | | T | | 21 31 18.0 | |
| | baz=321,slow=75,SNR=5.3 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 30.30** | | **128** | T | | T | | 21 31 21.9 | |
| | baz=321,slow=75,SNR=59 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 30.30** | | **128** | T | | T | | 21 31 23.4 | |
| | baz=321,slow=75,SNR=59 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 31.13** | | **130** | T | | T | | 21 32 24.3 | |
| | baz=323,slow=76,SNR=38 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 31.13** | | **130** | T | | T | | 21 32 24.1 | |
| | baz=323,slow=76,SNR=33 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 31.15** | | **130** | T | | T | | 21 32 25.2 | |
| | baz=323,slow=76,SNR=30 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **39.38** | **308** | P | | | **Pn** | **21 00 09.1** | **+0.6** |
| ZAA0 | | | | IAmb | | IAmb | | 21 00 11.2 | |
| | comp=Z,3.9nm,1.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.38** | **308** | P | | | **Pn** | **21 00 08.6** | **+0.1** |
| **ZALV** | **Zalesovo Beam** | **39.38** | **308** | P | | | **Pn** | **21 00 08.2** | **-0.3** |
| | comp=Z,1.3nm,0.4s,baz=91,slow=8.8,SNR=8.8 | | | | | | | | |
| ZALV | | | | PcP | | **PcP** | | **21 02 15.6** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=138,slow=3.5,SNR=3.3 | | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **42.30** | **298** | P | | | **Pn** | **21 00 32.2** | **-0.5** |
| MK31 | | | | IAmb | | IAmb | | 21 00 37.0 | |
| | comp=Z,2.6nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.30** | **298** | P | | | **Pn** | **21 00 32.7** | **0.0** |
| **MKAR** | **Makanchi Array** | **42.30** | **298** | P | | | **Pn** | **21 00 32.5** | **-0.1** |
| | comp=Z,1.9nm,0.9s,baz=86,slow=11,SNR=7.4 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | | **21 02 25.6** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=69,slow=4.9,SNR=1.4 | | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | | |
| **J20K** | **Nowinta River** | **42.33** | **36** | P | | | **Pn** | **21 00 33.1** | **+0.6** |
| J20K | | | | IAmb | | IAmb | | 21 00 36.2 | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **PHRA** | **Phrae** | **42.36** | **250** | P | | | **Pn** | **21 00 34.3** | **+0.9** |
| **CMAR** | **Chiang Mai Arr** | **43.30** | **251** | P | | | **Pn** | **21 00 41.1** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=38,slow=7.4,SNR=4.1 | | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **43.40** | **30** | P | | | **Pn** | **21 00 41.6** | **+0.3** |
| **KURK** | **Kurchatov** | **43.67** | **305** | P | | | **Pn** | **21 00 42.8** | **-0.8** |
| KURK | | | | IAmb | | IAmb | | 21 00 44.1 | |
| | comp=Z,5.2nm,1.0s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.75** | **304** | P | | | **Pn** | **21 00 44.4** | **+0.1** |
| | comp=Z,1.5nm,0.3s,baz=78,slow=8.9,SNR=9.8 | | | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | | | |
| **NEA2** | **Nenana** | **44.52** | **35** | P | | | **Pn** | **21 00 51.2** | **+0.9** |
| NEA2 | | | | IAmb | | IAmb | | 21 00 51.9 | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **IL31** | | **45.45** | **35** | P | | | **Pn** | **21 00 58.0** | **+0.5** |
| IL31 | | | | IAmb | | IAmb | | 21 01 00.9 | |
| | comp=Z,2.6nm,1.1s | | | | | | | | |
| **ILAR** | **Eielson Array** | **45.45** | **35** | P | | | **Pn** | **21 00 57.3** | **-0.2** |
| | comp=Z,0.8nm,0.9s,baz=273,slow=7.8,SNR=8.1 | | | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.01** | **310** | P | | | **Pn** | **21 01 18.4** | **+0.7** |
| | comp=Z,2.0nm,0.4s,baz=73,slow=8.4,SNR=16 | | | | | | | | |
| BVAR | | | | PcP | | **PcP** | | **21 02 44.9** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=99,slow=3.7,SNR=1.7 | | | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **I30M** | **Mount Dempster** | **49.78** | **33** | | | | **Pn** | **21 01 32.3** | **+1.1** |
| **ARSB** | **Arslanbob** | **50.48** | **294** | P | | | **Pn** | **21 01 37.4** | **+0.4** |
| **KKAR** | **Karatay Array** | **51.41** | **297** | P | | | **Pn** | **21 01 43.1** | **-0.7** |
| **KKAR** | **Karatay Array** | **51.41** | **297** | P | | | **Pn** | **21 01 43.3** | **-0.5** |
| KKAR | | | | IAmb | | IAmb | | 21 01 44.1 | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **DLBC** | **Dease Lake** | **54.79** | **40** | LR | | LR | | 21 27 37.9 | |
| | comp=Z,26nm,18.2s,baz=87,slow=38 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.97** | **339** | P | | | **Pn** | **21 02 43.5** | **-1.1** |
| | comp=Z,1.8nm,1.0s,baz=55,slow=3.6,SNR=1.7 | | | | | | | | |
| | comp=Z,1.8nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **61.60** | **188** | P | | | **Pn** | **21 02 55.2** | **-1.0** |
| | comp=Z,0.5nm,0.6s,baz=6.6,slow=7.3,SNR=16 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.08** | **332** | P | | | **Pn** | **21 03 17.7** | **-1.0** |
| | comp=Z,2.4nm,0.8s,baz=45,slow=8.4,SNR=6.0 | | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **65.33** | **188** | P | | | **Pn** | **21 03 20.8** | **0.0** |
| | comp=Z,0.6nm,0.9s,baz=359,slow=5.1,SNR=4.8 | | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | | |
| **HFS** | **Hagfors** | **70.20** | **335** | P | | | **Pn** | **21 03 50.8** | **-0.2** |
| | comp=Z,0.9nm,0.3s,baz=33,slow=5.7,SNR=11 | | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.23** | **337** | P | | | **Pn** | **21 03 50.7** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=35,slow=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.23** | **337** | P | | | **Pn** | **21 03 51.0** | **-0.3** |
| | comp=Z,0.6nm,0.8s,baz=37,slow=6.2,SNR=4.1 | | | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.06** | **322** | P | | | **Pn** | **21 03 55.8** | **-0.7** |
| | comp=Z,0.8nm,0.5s,baz=47,slow=5.2,SNR=4.3 | | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **76.26** | **311** | P | | | **Pn** | **21 04 27.7** | **+0.4** |
| | comp=Z,0.3nm,0.5s,baz=75,slow=4.8,SNR=2.4 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **79.78** | **305** | P | | | **Pn** | **21 04 46.7** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=46,slow=4.2,SNR=1.9 | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | |
| **SNAA** | **Sanae** | **145.20** | **199** | PKPbc | | **PKPbc** | | **21 12 13.7** | **-0.6** |
| | comp=Z,1.1nm,0.9s,baz=333,slow=4.5,SNR=3.6 | | | | | | | | |

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*IDC **23** 21:26:57.3±1.1, 8˚.39S×117˚.04E, h0km, mb3.9/6, mbtmp3.9/7, ML3.8/1, Error ellipse: s-maj=26.7km s-min=18.1km az=84.0*
*DJA **23** 21:26:58.6±0.3, 8˚S±3˚×117˚7E±˚, h10km, M4.1/10, mb4.2/2, MLv4.1/10*

**ISC 23 21:26:58.5±0.8, 8˚39S±0˚.06×116˚.95E±0˚.05, h10km, n17, σ0s78/19, mb3.9/5, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.35** | **190** | P | | **P** | **Pg** | **21 27 05.4** | **-0.1** |
| TWSI | | | | S | | S | **Sg** | **21 27 10.3** | **+0.1** |
| **PLAI** | **Plampang** | **0.93** | **118** | P | | P | **Pg** | **21 27 15.7** | **-0.7** |
| **SRBI** | **Singaraja** | **1.74** | **280** | P | | P | **Pn** | **21 27 29.6** | **+0.8** |
| **WBSI** | **Waikabubak, Su** | **2.71** | **117** | P | | P | **Pn** | **21 27 42.8** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **2.77** | **268** | P | | P | **Pn** | **21 27 43.1** | **+0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **58** | P | | P | **Pn** | **21 28 02.3** | **+0.1** |
| **KAPI** | **Kappang** | **4.36** | **40** | Pn | | P | **Pn** | **21 28 05.2** | **+0.3** |
| | 4.8nm,0.3s,baz=239,slow=3.4,SNR=25 | | | | | | | | |
| KAPI | | | | Sn | | | **Sn** | **21 28 56.0** | **+0.2** |
| | 4.3nm,0.3s,baz=224,slow=23,SNR=9.4 | | | | | | | | |
| KAPI | | | | Lg | | Lg | | 21 29 13.2 | |
| | 1.6nm,0.3s,baz=233,slow=20,SNR=3.6 | | | | | | | | |
| | 11nm,0.2s | | | | | | | | |
| **GRJI** | **Gresik** | **4.67** | **288** | P | | | **Pn** | **21 28 07.7** | **-1.4** |
| **EDFI** | **Ende, Flores** | **4.71** | **95** | P | | | **Pn** | **21 28 11.3** | **+1.6** |
| **PWJI** | **Pagerwojo** | **5.10** | **274** | P | | | **Pn** | **21 28 14.8** | **-0.3** |
| | 34nm,0.9s,0.3nm | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.38** | **126** | P | | | **P** | **21 31 35.3** | **-0.3** |
| | 2.7nm,0.4s,baz=300,slow=12,SNR=127 | | | | | | | | |
| | 2.7nm,0.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.24** | **135** | P | | | **P** | **21 31 55.5** | **-0.2** |
| | 1.4nm,0.5s,baz=314,slow=9.2,SNR=20 | | | | | | | | |
| | 1.4nm,0.5s | | | | | | | | |
| **STKA** | **Stephens Creek** | **32.73** | **139** | P | | | **P** | **21 33 31.1** | **-0.4** |
| | 1.9nm,0.6s,baz=309,slow=9.5,SNR=7.1 | | | | | | | | |
| | 1.9nm,0.6s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.09** | **13** | P | | | **P** | **21 36 23.2** | **-0.2** |
| | 2.5nm,0.8s,baz=196,slow=11,SNR=4.1 | | | | | | | | |
| | 2.5nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.01** | **334** | P | | | **P** | **21 37 27.4** | **+1.8** |
| | 0.5nm,1.0s,baz=153,slow=9.7,SNR=2.6 | | | | | | | | |
| | 0.5nm,1.0s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.77** | **340** | P | | | **P** | **21 37 56.2** | **-0.1** |
| | 0.5nm,0.5s,baz=114,slow=9.6,SNR=2.4 | | | | | | | | |
| | 0.5nm,0.5s | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.04** | **189** | PKPbc | | **PKPab** | | **21 46 35.6** | **-0.7** |
| | 2.9nm,0.8s,baz=167,slow=2.5,SNR=6.5 | | | | | | | | |

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**DJA 23 21:32:19.8±0.6, 8˚S±7˚×117˚7E±˚, h10km±4km, M3.7/8, mb4.2/1, MLv3.5/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.34** | **193** | P | | P | Pg | 21 32 27.2 | +0.5 |
| **PLAI** | **Plampang** | **0.91** | **118** | P | | P | Pg | 21 32 37.1 | -0.3 |
| **SRBI** | **Singaraja** | **1.76** | **280** | P | | P | Pn | 21 32 51.0 | +0.7 |
| SRBI | | | | S | | S | Sb | 21 33 13.7 | -0.6 |
| **WBSI** | **Waikabubak, Su** | **2.70** | **117** | P | | P | Pn | 21 33 04.1 | +0.7 |
| WBSI | | | | S | | S | Sn | 21 33 37.3 | +1.2 |
| **JAGI** | **Jajag, Banyuwa** | **2.78** | **268** | P | | P | Pn | 21 33 04.3 | -0.1 |
| **BSSI** | **Bau Bau, Buton** | **4.16** | **58** | P | | P | Pn | 21 33 23.6 | +0.2 |
| **EDFI** | **Ende, Flores** | **4.69** | **95** | P | | P | Pn | 21 33 30.5 | -0.3 |
| **PWJI** | **Pagerwojo** | **5.12** | **274** | P | | P | Pn | 21 33 35.7 | -0.9 |

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*IDC **23** 21:45:29.9±0.8, 21˚.81N×120˚.05E, h0km, mb3.9/10, mbtmp3.9/10, MS3.2/3, Error ellipse: s-maj=36.7km s-min=16.4km az=63.0*
*TAP **23** 21:45:32.9, 21˚.86N×119˚.86E, h54km, ML3.8, D*

**ISC 23 21:45:33.8±2.4, 21˚.83N±0˚.06×119˚.79E±0˚.04, h28km±17km, n94, σ1s35/135, mb3.9/9, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWP** | **Hsiaoliuchiu** | **0.74** | **46** | *e*S | | | **Sb** | **21 45 58.1** | **+0.3** |
| | baz=38 | | | | | | | | |
| **KAU** | **Kaohsiung** | **0.87** | **33** | *e*S | | | **Sn** | **21 46 02.4** | **+0.4** |
| | baz=31 | | | | | | | | |
| **HEN** | **Hengchun** | **0.90** | **79** | S | | | **Sn** | **21 46 01.9** | **-0.6** |
| | baz=89 | | | | | | | | |
| **SCZT** | **Fangliau** | **0.94** | **55** | *e*P | | | **Pn** | **21 45 49.5** | **-1.5** |
| | baz=55 | | | | | | | | |
| SCZT | | | | *e*S | | | **Sn** | **21 46 02.0** | **-1.5** |
| | baz=55 | | | | | | | | |
| **SLIU** | **Shizi** | **1.01** | **68** | *e*P | | | **Pn** | **21 45 50.8** | **-1.3** |
| | baz=58 | | | | | | | | |
| SLIU | | | | *e*S | | | **Sn** | **21 46 03.8** | **-1.5** |
| | baz=58 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.10** | **45** | *e*P | | | **Pn** | **21 45 52.0** | **-1.3** |
| | baz=44 | | | | | | | | |
| MASBT | | | | S | | | **Sn** | **21 46 05.2** | **-2.3** |
| | baz=44 | | | | | | | | |
| **SGLT** | **Jiouru** | **1.10** | **36** | *e*S | | | **Sn** | **21 46 07.5** | **-0.1** |
| | baz=35 | | | | | | | | |
| **EAST** | **Anshuo** | **1.12** | **61** | P | | | **Pn** | **21 45 52.4** | **-1.3** |
| | baz=61 | | | | | | | | |
| EAST | | | | *e*S | | | **Sn** | **21 46 05.8** | **-2.3** |
| | baz=61 | | | | | | | | |
| **TAWH** | **Dawu Township** | **1.14** | **63** | *e*P | | | **Pn** | **21 45 52.5** | **-1.3** |
| | baz=54 | | | | | | | | |
| TAWH | | | | *e*S | | | **Sn** | **21 46 06.1** | **-2.3** |
| | baz=54 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.15** | **31** | *e*P | | | **Pn** | **21 45 54.1** | **+0.2** |
| | baz=29 | | | | | | | | |
| **TAW** | **Tawu** | **1.15** | **63** | *e*P | | | **Pn** | **21 45 52.0** | **-2.0** |
| | baz=63 | | | | | | | | |
| TAW | | | | *e*S | | | **Sn** | **21 46 06.5** | **-2.3** |
| | baz=63 | | | | | | | | |
| **TSMG** | **Majia** | **1.17** | **42** | *e*P | | | **Pn** | **21 45 52.9** | **-1.5** |
| | baz=41 | | | | | | | | |
| TSMG | | | | *e*S | | | **Sn** | **21 46 07.2** | **-2.2** |
| | baz=41 | | | | | | | | |
| **SCST** | **Cishan** | **1.23** | **32** | *e*S | | | **Sn** | **21 46 10.5** | **-0.3** |
| | baz=30 | | | | | | | | |
| **ECL** | **Taimali** | **1.32** | **55** | *e*S | | | **Sn** | **21 46 10.8** | **-2.1** |
| | baz=54 | | | | | | | | |
| **TSCK** | **Chigu Township** | **1.34** | **12** | *e*P | | | **Pn** | **21 45 55.2** | **-1.3** |
| | baz=10.0 | | | | | | | | |
| TSCK | | | | *e*S | | | **Sn** | **21 46 12.3** | **-1.1** |
| | baz=10.0 | | | | | | | | |
| **SSHA** | **Shanhua** | **1.38** | **19** | *e*S | | | **Sn** | **21 46 14.6** | **+0.2** |
| | baz=18 | | | | | | | | |
| **SCLT** | **Jiali** | **1.39** | **15** | *e*S | | | **Sn** | **21 46 13.8** | **-0.9** |
| | baz=14 | | | | | | | | |
| **SLGT** | **Liugui** | **1.40** | **34** | *e*S | | | **Sn** | **21 46 13.3** | **-1.7** |
| | baz=33 | | | | | | | | |
| **VCHM** | **Qimei** | **1.41** | **346** | *e*P | | | **Pn** | **21 45 56.1** | **-1.5** |
| | baz=344 | | | | | | | | |
| VCHM | | | | *e*S | | | **Sn** | **21 46 13.7** | **-1.5** |
| | baz=344 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.51** | **27** | *e*S | | | **Sn** | **21 46 16.2** | **-1.5** |
| | baz=36 | | | | | | | | |
| **SNST** | **Tainan City** | **1.53** | **25** | *e*S | | | **Sn** | **21 46 17.2** | **-1.0** |
| | baz=35 | | | | | | | | |
| **TWG** | **Pinlang** | **1.54** | **50** | *e*P | | | **Pn** | **21 45 58.8** | **-0.6** |
| | baz=40 | | | | | | | | |
| TWG | | | | *e*S | | | **Sn** | **21 46 16.5** | **-2.0** |
| | baz=40 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.54** | **50** | P | | | **Pn** | **21 45 59.0** | **-0.4** |
| | baz=40 | | | | | | | | |
| TWGBT | | | | *e*S | | | **Sn** | **21 46 17.1** | **-1.4** |
| | baz=40 | | | | | | | | |
| **CHN8** | **Yiju** | **1.56** | **14** | *e*S | | | **Sn** | **21 46 19.2** | **+0.4** |
| | baz=13 | | | | | | | | |
| **TWK** | **Hsinying** | **1.57** | **24** | *e*S | | | **Sn** | **21 46 18.1** | **-1.1** |
| | baz=33 | | | | | | | | |
| **ICHU** | **Yijhu** | **1.59** | **16** | *e*S | | | **Sn** | **21 46 18.2** | **-1.4** |
| | baz=15 | | | | | | | | |
| **LONT** | **Longtian** | **1.64** | **49** | *e*P | | | **Pn** | **21 46 00.5** | **-0.2** |
| | baz=39 | | | | | | | | |
| LONT | | | | *e*S | | | **Sn** | **21 46 19.3** | **-1.5** |
| | baz=39 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.65** | **28** | *e*S | | | **Sn** | **21 46 19.2** | **-2.1** |
| | baz=36 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **1.69** | **353** | *e*P | | | **Pn** | **21 45 59.6** | **-1.8** |
| | baz=359 | | | | | | | | |
| PHUB | | | | *e*S | | | **Sn** | **21 46 19.6** | **-2.5** |
| | baz=359 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.73** | **13** | *e*S | | | **Sn** | **21 46 22.1** | **-1.0** |
| | baz=12 | | | | | | | | |
| **PNG** | **Penghu** | **1.74** | **353** | *e*P | | | **Pn** | **21 46 00.6** | **-1.5** |
| | baz=351 | | | | | | | | |
| PNG | | | | *e*S | | | **Sn** | **21 46 21.9** | **-1.5** |
| | baz=351 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.76** | **40** | *e*P | | | **Pn** | **21 46 01.6** | **-1.0** |
| | baz=39 | | | | | | | | |
| **LDUT** | **Ludao** | **1.77** | **61** | *e*P | | | **Pn** | **21 46 01.0** | **-1.4** |
| | baz=62 | | | | | | | | |
| LDUT | | | | *e*S | | | **Sn** | **21 46 21.5** | **-2.5** |
| | baz=62 | | | | | | | | |
| **EDH** | **Donghe** | **1.80** | **51** | *e*P | | | **Pn** | **21 46 02.2** | **-0.8** |
| | baz=60 | | | | | | | | |
| EDH | | | | *e*S | | | **Sn** | **21 46 24.6** | **-0.3** |
| | baz=60 | | | | | | | | |
| **ECS** | **Chishang** | **1.82** | **46** | *e*S | | | **Sn** | **21 46 25.6** | **+0.1** |
| | baz=37 | | | | | | | | |
| **WSF** | **Szhu** | **1.84** | **12** | *e*S | | | **Sn** | **21 46 24.2** | **-1.6** |
| | baz=2.0 | | | | | | | | |
| **EHD** | **Haiduan** | **1.85** | **45** | *e*P | | | **Pn** | **21 46 03.8** | **+0.2** |
| | baz=44 | | | | | | | | |
| EHD | | | | *e*S | | | **Sn** | **21 46 24.4** | **-1.8** |
| | baz=44 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.93** | **49** | *e*P | | | **Pn** | **21 46 03.3** | **-1.4** |
| | baz=57 | | | | | | | | |
| **WTK** | **Tuku** | **1.93** | **16** | *e*P | | | **Pn** | **21 46 03.3** | **-1.4** |
| | baz=15 | | | | | | | | |
| WTK | | | | *e*S | | | **Sn** | **21 46 26.0** | **-2.0** |
| | baz=15 | | | | | | | | |
| **FULB** | **Fuli** | **1.94** | **45** | *e*P | | | **Pn** | **21 46 05.5** | **+0.6** |
| | baz=38 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TWT** | **Tachien** | **2.73** | **28** | *eP* | **Pn** | **21 46 16.1** | **+0.3** |
| | baz=35 | | | | | | | |
| TWT | | | | *eS* | **Sn** | **21 46 47.2** | **-0.7** |
| | baz=35 | | | | | | | |
| **FUSS** | **Fushou** | **2.75** | **29** | *eP* | **Pn** | **21 46 16.7** | **+0.4** |
| | baz=28 | | | | | | | |
| FUSS | | | | *eS* | **Sn** | **21 46 47.4** | **-1.3** |
| | baz=28 | | | | | | | |
| **ZPLA** | **Ao Xicun** | **2.81** | **318** | *eP* | **Pn** | **21 46 15.9** | **-0.9** |
| | baz=317 | | | | | | | |
| ZPLA | | | | *eS* | **Sn** | **21 46 47.9** | **-1.9** |
| | baz=317 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **2.83** | **33** | *eP* | **Pn** | **21 46 17.2** | **0.0** |
| | baz=33 | | | | | | | |
| ETLH | | | | *eS* | **Sn** | **21 46 48.7** | **-1.7** |
| | baz=33 | | | | | | | |
| **KNM** | **Kinmen** | **2.86** | **334** | *eS* | **Sn** | **21 46 50.6** | **-0.5** |
| | baz=331 | | | | | | | |
| **NACB** | **Ninganchiao** | **2.86** | **35** | *eP* | **Pn** | **21 46 16.6** | **-0.9** |
| | baz=35 | | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.92** | **334** | *eP* | **Pn** | **21 46 17.1** | **-1.2** |
| | baz=333 | | | | | | | |
| KNMB | | | | *eS* | **Sn** | **21 46 50.0** | **-2.5** |
| | baz=333 | | | | | | | |
| **NNSB** | **Datong** | **2.97** | **29** | *eP* | **Pn** | **21 46 19.6** | **+0.4** |
| | baz=29 | | | | | | | |
| NNSB | | | | *eS* | **Sn** | **21 46 52.3** | **-1.7** |
| | baz=29 | | | | | | | |
| **NNS** | **Nan Shan** | **2.98** | **29** | *eS* | **Sn** | **21 46 53.6** | **-0.5** |
| | baz=29 | | | | | | | |
| **LIOB** | **Emei** | **3.02** | **22** | *eP* | **Pn** | **21 46 19.4** | **-0.3** |
| | baz=21 | | | | | | | |
| **LATG** | **Datong** | **3.13** | **30** | P | **Pn** | **21 46 21.8** | **+0.4** |
| | baz=38 | | | | | | | |
| **ENA** | **Nanau** | **3.15** | **34** | *eP* | **Pn** | **21 46 20.9** | **-0.6** |
| | baz=34 | | | | | | | |
| **VWUC** | **VWUC** | **3.16** | **354** | *eS* | **Sn** | **21 46 56.7** | **-1.7** |
| | baz=353 | | | | | | | |
| **YHNB** | **Yeheng** | **3.18** | **27** | *eP* | **Pn** | **21 46 21.9** | **0.0** |
| | baz=16 | | | | | | | |
| **ENTT** | **Nioudou** | **3.24** | **30** | *eP* | **Pn** | **21 46 24.3** | **+1.6** |
| | baz=19 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.25** | **349** | *eP* | **Pn** | **21 46 22.4** | **-0.5** |
| | baz=348 | | | | | | | |
| PTMZ | | | | *eS* | **Sn** | **21 46 57.8** | **-2.9** |
| | baz=348 | | | | | | | |
| **EOS4** | **EOS4** | **3.26** | **45** | *eP* | **Pn** | **21 46 23.0** | **+0.3** |
| | baz=53 | | | | | | | |
| EOS4 | | | | *eS* | **Sn** | **21 46 58.5** | **-1.8** |
| | baz=53 | | | | | | | |
| **NWLT** | **Wulai** | **3.33** | **28** | *eP* | **Pn** | **21 46 24.3** | **+0.3** |
| | baz=28 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **19.86** | **264** | P | **Pn** | **21 50 06.1** | **+1.6** |
| | 0.5nm,0.3s,baz=74,slow=10,SNR=4.9 | | | | | | | |
| CMAR | | | | LR | LR | 21 57 45.6 | | |
| | comp=Z,26nm,19.5s,baz=115,slow=37 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **28.09** | **341** | P | **P** | **21 51 23.7** | **+0.5** |
| | 0.5nm,0.7s,baz=163,slow=5.3,SNR=1.8 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.19** | **319** | P | **P** | **21 53 00.9** | **+1.6** |
| | 1.6nm,0.7s,baz=112,slow=10,SNR=13 | | | | | | | |
| | 1.6nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.56** | **329** | P | **P** | **21 53 20.0** | **+1.2** |
| | 1.2nm,0.6s,baz=120,slow=8.8,SNR=5.7 | | | | | | | |
| | 1.2nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.12** | **322** | P | **P** | **21 53 33.0** | **+1.5** |
| | 1.7nm,0.8s,baz=144,slow=6.3,SNR=16 | | | | | | | |
| | 1.7nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.89** | **160** | P | **P** | **21 53 36.6** | **-1.4** |
| | 0.9nm,0.7s,baz=343,slow=9.0,SNR=7.0 | | | | | | | |
| | 0.9nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **47.27** | **162** | P | **P** | **21 54 04.4** | **-0.3** |
| | 0.9nm,0.8s,baz=329,slow=6.3,SNR=7.4 | | | | | | | |
| | 0.9nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.71** | **322** | P | **P** | **21 54 17.3** | **+1.7** |
| | 0.7nm,0.5s,baz=103,slow=6.2,SNR=3.2 | | | | | | | |
| | 0.7nm,0.5s | | | | | | | |
| **ARU** | **Arti** | **56.23** | **324** | LR | LR | 22 22 51.2 | | |
| | comp=Z,34nm,18.6s,baz=288,slow=40 | | | | | | | |
| **STKA** | **Stephens Creek** | **57.34** | **158** | P | **P** | **21 55 19.3** | **-0.1** |
| | 1.2nm,0.6s,baz=10,slow=7.9,SNR=2.8 | | | | | | | |
| | 1.2nm,0.6s | | | | | | | |
| **KDAK** | **Kodiak Island** | **70.56** | **35** | P | **P** | **21 56 46.6** | **+0.5** |
| | 3.8nm,0.7s,baz=318,slow=4.6,SNR=4.8 | | | | | | | |
| | 3.8nm,0.7s | | | | | | | |
| **INK** | **Inuvik** | **75.87** | **22** | LR | LR | 22 35 30.8 | | |
| | comp=Z,16nm,20.2s,baz=336,slow=40 | | | | | | | |

*IDC **23** 21:46:05.4±1.1, 12°.15N×143°.74E, h0km, mb4.0/10, mbtmp4.0/10, Error ellipse: s-maj=31.8km s-min=21.5km az=135.0*

**ISC 23 21:46:09.4±1.0, 12°.2N±0°.2×143°.7E±0°.2, h25km, n11, σ1s05/12, mb4.3/10, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.84** | **40** | Pn | **Pn** | **21 46 39.8** | **+0.4** |
| | 168nm,0.3s,baz=267,slow=4.0,SNR=20 | | | | | | |
| GUMO | | | | Sn | **Sn** | **21 47 02.0** | **+0.2** |
| | 114nm,0.3s,baz=120,slow=20,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.21** | **196** | P | **P** | **21 52 44.7** | **+0.2** |
| | 0.4nm,0.7s,baz=19,slow=9.5,SNR=4.6 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.69** | **317** | P | **P** | **21 56 27.2** | **+1.7** |
| | 0.5nm,0.6s,baz=91,slow=8.6,SNR=6.1 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.09** | **325** | P | **P** | **21 56 28.2** | **+0.3** |
| | 0.5nm,0.5s,baz=141,slow=5.0,SNR=2.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.94** | **320** | P | **P** | **21 56 47.7** | **+0.8** |
| | 2.0nm,0.8s,baz=104,slow=6.6,SNR=20 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **70.30** | **322** | P | **P** | **21 57 21.6** | **+0.8** |
| | 1.6nm,0.5s,baz=109,slow=8.6,SNR=6.3 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **70.34** | **25** | P | **P** | **21 57 19.6** | **-1.1** |
| | 1.1nm,0.5s,baz=251,slow=6.0,SNR=14 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.65** | **27** | P | **P** | **21 58 41.2** | **+0.5** |
| | 0.7nm,0.6s,baz=281,slow=11,SNR=6.3 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.06** | **342** | P | **P** | **21 58 55.9** | **-1.5** |
| | 1.2nm,0.7s,baz=61,slow=7.5,SNR=10.0 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.72** | **51** | P | **P** | **21 59 01.7** | **+0.2** |
| | 1.0nm,0.7s,baz=278,slow=5.5,SNR=6.6 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **91.93** | **335** | P | **P** | **21 59 14.3** | **-1.3** |
| | 1.4nm,0.6s,baz=78,slow=4.1,SNR=9.8 | | | | | | |
| | 1.4nm,0.6s | | | | | | |

*IDC **23** 21:49:39.9±1.2, 12°.2N×143°.73E, h0km, mb3.9/10, mbtmp3.9/10, MS3.6/2, Error ellipse: s-maj=33.5km s-min=25.7km az=137.0*

**ISC 23 21:49:43.8±1.0, 12°.2N±0°.2×143°.7E±0°.2, h25km, n13, σ0s86/12, mb4.1/10, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.82** | **40** | Pn | **Pn** | **21 50 13.5** | **0.0** |
| | 147nm,0.3s,baz=250,slow=3.7,SNR=13 | | | | | | |
| GUMO | | | | Sn | **Sn** | **21 50 36.2** | **+0.5** |
| | 77nm,0.3s,baz=9.0,slow=19,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.23** | **196** | P | **P** | **21 56 19.2** | **+0.1** |
| | 0.5nm,0.8s,baz=19,slow=9.6,SNR=3.2 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **40.73** | **147** | LR | LR | 22 12 37.1 | |
| | comp=Z,126nm,18.4s,baz=214,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.68** | **317** | P | **P** | **22 00 01.2** | **+1.3** |
| | 0.4nm,0.6s,baz=90,slow=8.6,SNR=5.0 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.07** | **325** | P | **P** | **22 00 02.3** | **0.0** |
| | 0.3nm,0.4s,baz=90,slow=10,SNR=2.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.93** | **320** | P | **P** | **22 00 21.4** | **+0.2** |
| | 1.2nm,0.7s,baz=103,slow=6.9,SNR=11 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **70.29** | **322** | P | **P** | **22 00 56.1** | **+1.0** |
| | 1.2nm,0.5s,baz=100,slow=8.3,SNR=5.9 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **70.32** | **25** | P | **P** | **22 00 53.8** | **-1.2** |
| | 0.9nm,0.5s,baz=251,slow=5.8,SNR=11 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.63** | **27** | P | **P** | **22 02 14.5** | **-0.5** |
| | 0.3nm,0.5s,baz=191,slow=6.4,SNR=4.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.04** | **342** | P | **P** | **22 02 31.5** | **-0.2** |
| | 1.1nm,0.6s,baz=69,slow=6.6,SNR=7.5 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.70** | **51** | P | **P** | **22 02 36.8** | **+1.1** |
| | 0.6nm,0.6s,baz=285,slow=4.7,SNR=4.2 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **91.92** | **335** | P | **P** | **22 02 49.1** | **-0.8** |
| | 0.8nm,0.6s,baz=49,slow=5.8,SNR=6.6 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **97.15** | **313** | LR | LR | 22 50 16.3 | |
| | comp=Z,13nm,20.0s,baz=113,slow=37 | | | | | | |

*IDC **23** 21:54:11.7±0.6, 17°.29N×147°.07E, h0km, mb4.3/19, mbtmp4.4/19, MS3.5/9, Error ellipse: s-maj=23.1km s-min=13.0km az=86.0*
*NEIC **23** 21:54:17.7±1.7, 17°.17N±0°.08×147°.24E±0°.10, h35km±2km, mb4.7/120, Error ellipse: s-maj=17.3km s-min=12.1km az=123.0*

**ISC 23 21:54:18.0±0.4, 17°.15N±0°.06×147°.22E±0°.08, h48km, n169, σ1s23/160, mb4.6/81, MS3.4/9, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **4.21** | **213** | Pn | **Pn** | **21 55 20.5** | **+0.9** |
| **PATS** | **Pohnpei** | **14.92** | **132** | Pn | **Pn** | **21 57 41.6** | **-4.3** |
| **JOW** | **Kunigami** | **20.01** | **302** | LR | LR | 22 05 39.4 | |
| | comp=Z,175nm,20.4s,baz=144,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.89** | **339** | P | **P** | **21 58 54.4** | **-1.9** |
| | 6.2nm,0.6s,baz=170,slow=11,SNR=11 | | | | | | |
| | 6.2nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **20.90** | **339** | P | **P** | **21 58 54.7** | **-1.6** |
| MAJO | | | | IAmb | IAmb | 21 58 57.4 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **20.90** | **339** | P | **P** | **21 58 55.7** | **-0.7** |
| MJB9 | | | | IAmb | IAmb | 21 58 58.8 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **JNU** | **Nakatsue** | **21.67** | **320** | LR | LR | 22 05 37.9 | |
| | comp=Z,72nm,21.8s,baz=172,slow=32 | | | | | | |
| **FAKI** | **Fak Fak** | **24.82** | **218** | P | **P** | **21 59 34.5** | **-1.4** |
| FAKI | | | | IAmb | IAmb | 21 59 54.7 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **TATO** | **Taipei** | **25.21** | **292** | P | **P** | **21 59 38.3** | **-1.1** |
| **YHNB** | **Yeheng** | **25.24** | **292** | P | **P** | **21 59 39.0** | **-0.8** |
| **PMG** | **Port Moresby** | **26.39** | **180** | P | **P** | **21 59 51.8** | **+1.7** |
| | comp=Z,5.1nm,0.3s,baz=292,slow=20,SNR=1.8 | | | | | | |
| | comp=Z,5.1nm,0.3s | | | | | | |
| **NJ2** | **Nanjing** | **29.63** | **305** | *eP* | **P** | **22 00 20.5** | **+1.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,38nm,1.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **29.87** | **338** | P | **P** | **22 00 19.8** | **-1.1** |
| | comp=Z,1.7nm,0.6s,baz=152,slow=7.9,SNR=5.4 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **TOLI2** | **Tolitoli** | **30.51** | **241** | P | **P** | **22 00 26.2** | **-0.6** |
| **COEN** | **Coen** | **31.17** | **188** | P | **P** | **22 00 33.2** | **+0.6** |
| COEN | | | | IAmb | IAmb | 22 00 55.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **KKM** | **Kota Kinabalu** | **32.26** | **254** | P | **P** | **22 00 40.9** | **-1.5** |
| **KLR** | **Kul'dur** | **34.37** | **342** | P | **P** | **22 00 59.2** | **-1.0** |
| | comp=Z,3.2nm,0.5s,baz=136,slow=7.7,SNR=16 | | | | | | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **HEH** | **HeiHe** | **36.66** | **339** | *eP* | **P** | **22 01 19.6** | **-0.3** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **36.81** | **11** | LR | LR | 22 15 09.2 | |
| | comp=Z,39nm,19.1s,baz=231,slow=34 | | | | | | |
| **SBUM** | **Sibu** | **37.35** | **251** | P | **P** | **22 01 26.7** | **+0.5** |
| **KNRA** | **Kununurra** | **37.36** | **210** | P | **P** | **22 01 25.4** | **-0.7** |
| KNRA | | | | IAmb | IAmb | 22 01 53.0 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **38.71** | **315** | *eP* | **P** | **22 01 37.4** | **-0.1** |
| HHC | | | | pP | pP | 22 01 45.9 | -3.0 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,18nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,180nm,5.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **38.79** | **199** | P | **P** | **22 01 38.4** | **+0.2** |
| **WR0** | **Warramunga Arr** | **38.93** | **199** | P | **P** | **22 01 39.4** | **0.0** |
| **WB2** | **Warramunga Arr** | **38.97** | **199** | P | **P** | **22 01 40.0** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 22 01 41.1 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **38.98** | **199** | P | **P** | **22 01 40.1** | **+0.3** |
| **WRA** | **Warramunga Arr** | **38.98** | **199** | P | **P** | **22 01 39.6** | **-0.2** |
| | comp=Z,5.0nm,0.7s,baz=23,slow=9.1,SNR=57 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 03 50.5** | **+0.9** |
| | comp=Z,0.5nm,0.4s,baz=19,slow=3.3,SNR=5.8 | | | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **KSM** | **Kuching** | **39.49** | **251** | P | **P** | **22 01 43.7** | **-0.6** |
| **BTO** | **Baotou** | **39.66** | **314** | *eP* | **P** | **22 01 47.3** | **+1.9** |
| BTO | | | | pP | **sP** | **22 02 00.3** | **-1.8** |
| BTO | | | | sP | pwP | 22 02 11.5 | +9.0 |
| BTO | | | | PP | **PnPn** | **22 03 21.6** | **+1.1** |
| BTO | | | | S | **S** | **22 07 47.8** | **+2.3** |
| BTO | | | | SS | **SS** | **22 10 36.9** | **-5.3** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,17nm,0.5s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,280nm,3.9s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=N,310nm,4.7s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=E,250nm,5.7s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,200nm,6.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **40.97** | **212** | P | **P** | **22 01 56.1** | **-0.1** |
| **SLVN** | **Son La** | **41.01** | **283** | P | **P** | **22 01 56.9** | **+0.1** |
| **LIFNC** | **LIFOU** | **42.51** | **152** | P | **P** | **22 02 10.0** | **+1.2** |
| **ASAR** | **Alice Springs** | **42.61** | **198** | P | **P** | **22 02 10.0** | **+0.3** |
| **ASAR** | **Alice Springs** | **42.61** | **198** | P | **P** | **22 02 09.8** | **+0.1** |
| | comp=Z,1.2nm,0.7s,baz=23,slow=10,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 04 02.4** | **+1.1** |
| | comp=Z,0.2nm,0.5s,baz=17,slow=3.5,SNR=4.1 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **PZH** | **PanZhiHua** | **43.04** | **291** | P | **P** | **22 02 14.0** | **+0.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,230nm,5.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **43.29** | **154** | *e*LR | LR | 22 14 09.8 | |
| | comp=Z,92nm,22.9s | | | | | | |
| **SONM** | **Songino Array** | **45.25** | **322** | P | **P** | **22 02 30.5** | **-0.3** |
| **SONM** | **Songino Array** | **45.25** | **322** | P | **P** | **22 02 29.1** | **-1.7** |
| | comp=Z,1.2nm,0.6s,baz=133,slow=6.7,SNR=7.1 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **45.88** | **279** | P | **P** | **22 02 35.0** | **-1.0** |
| CM31 | | | | IAmb | IAmb | 22 02 37.4 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.88** | **279** | P | **P** | **22 02 36.2** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **45.88** | **279** | P | **P** | **22 02 35.4** | **-0.6** |
| | comp=Z,5.9nm,0.7s,baz=72,slow=6.7,SNR=33 | | | | | | |
| CMAR | | | | LR | LR | 22 20 37.7 | |
| | comp=Z,37nm,20.8s,baz=280,slow=35 | | | | | | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **46.50** | **349** | P | **P** | **22 02 41.1** | **+0.9** |
| **YAK** | **Yakutsk** | **46.50** | **349** | P | **P** | **22 02 40.9** | **+0.7** |
| | comp=Z,18nm,0.5s,baz=201,slow=1.5,SNR=5.9 | | | | | | |
| | comp=Z,18nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **49.05** | **186** | P | **P** | **22 03 03.0** | **+2.7** |
| | comp=Z,0.9nm,0.6s,baz=4.4,slow=6.6,SNR=3.4 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **GSI** | **Gunungsitoli** | **51.28** | **258** | P | **P** | **22 03 17.7** | **+0.1** |
| **MORW** | **Morawa** | **54.94** | **214** | P | **P** | **22 03 43.9** | **-0.3** |
| **K13K** | **Kusilvak Mount** | **55.94** | **25** | P | **P** | **22 03 52.3** | **+1.3** |
| K13K | | | | IAmb | IAmb | 22 04 20.1 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **N15K** | **Kwethluk River** | **57.07** | **28** | P | **P** | **22 03 60.0** | **+0.9** |
| N15K | | | | IAmb | IAmb | 22 04 01.4 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **57.40** | **26** | P | **P** | **22 04 01.9** | **+0.6** |
| K15K | | | | IAmb | IAmb | 22 04 15.8 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **O16K** | **Kokwok River B** | **57.76** | **29** | P | **P** | **22 04 04.8** | **+0.9** |
| **M16K** | **Timber Creek** | **57.94** | **28** | P | **P** | **22 04 06.2** | **+1.0** |
| M16K | | | | IAmb | IAmb | 22 04 36.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **F15K** | **North Star Dit** | **57.94** | **21** | P | **P** | **22 04 05.0** | **-0.1** |
| F15K | | | | IAmb | IAmb | 22 04 05.7 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **L16K** | **Owhat River** | **58.00** | **27** | P | **P** | **22 04 06.2** | **+0.7** |
| L16K | | | | IAmb | IAmb | 22 04 11.9 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **J16K** | **Anvik River** | **58.23** | **25** | P | **P** | **22 04 08.4** | **+1.2** |
| J16K | | | | IAmb | IAmb | 22 04 10.6 | |
| | comp=Z,9.7nm,1.5s | | | | | | |
| **N17K** | **Nushagak Hills** | **58.54** | **29** | P | **P** | **22 04 11.2** | **+1.9** |
| N17K | | | | IAmb | IAmb | 22 04 20.4 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **G16K** | **Koyuk River** | **58.59** | **22** | P | **P** | **22 04 10.0** | **+0.4** |
| **SII** | **Sitkinak Islan** | **58.67** | **34** | P | **P** | **22 04 11.5** | **+1.1** |
| **M17K** | **Holitna River** | **58.76** | **28** | P | **P** | **22 04 12.1** | **+1.2** |
| M17K | | | | IAmb | IAmb | 22 04 14.0 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **J17K** | **VABM Dome** | **58.90** | **25** | P | **P** | **22 04 13.5** | **+1.7** |
| J17K | | | | IAmb | IAmb | 22 04 52.1 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **K17K** | **Iditarod** | **58.93** | **26** | P | **P** | **22 04 13.2** | **+1.2** |
| K17K | | | | IAmb | IAmb | 22 04 14.6 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **C16K** | **Lisburne Hills** | **59.15** | **19** | P | **P** | **22 04 13.4** | **0.0** |
| **N18K** | **Kilae Creek** | **59.19** | **29** | P | **P** | **22 04 15.0** | **+1.1** |
| N18K | | | | IAmb | IAmb | 22 04 29.3 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **O18K** | **Koktuh Hills** | **59.22** | **30** | P | **P** | **22 04 14.4** | **+0.3** |
| **H17K** | **Granite Mounta** | **59.27** | **23** | P | **P** | **22 04 15.1** | **+0.8** |
| H17K | | | | IAmb | IAmb | 22 04 40.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **OHAK** | **Old Harbor** | **59.34** | **33** | P | **P** | **22 04 14.2** | **-0.7** |
| OHAK | | | | IAmb | IAmb | 22 04 25.5 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **L18K** | **Granite Mounta** | **59.41** | **27** | P | **P** | **22 04 16.6** | **+1.2** |
| L18K | | | | IAmb | IAmb | 22 04 17.8 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **F17K** | **Baldwin Pennin** | **59.50** | **21** | P | **P** | **22 04 17.6** | **+1.7** |
| **Q19K** | **Cape Douglas,** | **59.67** | **31** | P | **P** | **22 04 16.4** | **-0.8** |
| **KDAK** | **Kodiak Island** | **59.86** | **33** | P | **P** | **22 04 19.5** | **+1.0** |
| **N19K** | **Bonanza Creek** | **59.88** | **29** | P | **P** | **22 04 19.8** | **+1.0** |
| N19K | | | | IAmb | IAmb | 22 04 21.1 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **H18K** | **Honhosa River** | **59.95** | **23** | P | **P** | **22 04 19.8** | **+0.8** |
| H18K | | | | IAmb | IAmb | 22 04 35.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **P19K** | **Oil Pt** | **60.09** | **30** | P | **P** | **22 04 20.2** | **0.0** |
| **ZAA0** | **Zalesovo Array** | **60.11** | **323** | P | **P** | **22 04 20.4** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **60.11** | **323** | P | **P** | **22 04 20.5** | **+0.2** |
| **ZALV** | **Zalesovo Beam** | **60.11** | **323** | P | **P** | **22 04 18.8** | **-1.5** |
| | comp=Z,1.3nm,0.6s,baz=103,slow=7.8,SNR=6.5 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **G18K** | **Tagagawik** | **60.17** | **23** | P | **P** | **22 04 21.9** | **+1.3** |
| G18K | | | | IAmb | IAmb | 22 04 22.4 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **L19K** | **White Mountain** | **60.20** | **27** | P | **P** | **22 04 21.9** | **+1.1** |
| **SYI** | **Shuyak Island** | **60.20** | **32** | P | **P** | **22 04 21.4** | **+0.6** |
| **E18K** | **Tukpahlearik C** | **60.21** | **21** | P | **P** | **22 04 22.0** | **+1.2** |
| E18K | | | | IAmb | IAmb | 22 04 22.9 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **J19K** | **Poorman** | **60.55** | **25** | P | **P** | **22 04 24.1** | **+0.9** |
| J19K | | | | IAmb | IAmb | 22 04 49.2 | |
| | comp=Z,7.9nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **60.57** | **314** | P | **P** | **22 04 23.1** | **-0.5** |
| **MKAR** | **Makanchi Array** | **60.57** | **314** | P | **P** | **22 04 23.6** | **0.0** |
| **MKAR** | **Makanchi Array** | **60.57** | **314** | P | **P** | **22 04 23.1** | **-0.5** |
| | comp=Z,1.6nm,0.6s,baz=89,slow=8.7,SNR=12 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **C18K** | **Utukok River** | **60.64** | **19** | P | **P** | **22 04 24.7** | **+0.9** |
| **K20K** | **Telida** | **60.95** | **26** | P | **P** | **22 04 27.2** | **+1.3** |
| K20K | | | | IAmb | IAmb | 22 04 28.4 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **J20K** | **Nowinta River** | **61.22** | **25** | P | **P** | **22 04 28.8** | **+1.2** |
| J20K | | | | IAmb | IAmb | 22 04 29.9 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **62.29** | **24** | P | **P** | **22 04 35.9** | **+1.0** |
| H21K | | | | IAmb | IAmb | 22 04 37.1 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **G21K** | **Allakaket** | **62.33** | **23** | P | **P** | **22 04 36.3** | **+1.1** |
| **BPAW** | **Bear Paw Mtn.** | **62.49** | **26** | P | **P** | **22 04 37.5** | **+1.2** |
| BPAW | | | | IAmb | IAmb | 22 04 38.1 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **B20K** | **Meade River** | **62.55** | **19** | P | **P** | **22 04 38.0** | **+1.5** |
| **F21K** | **Alatna River** | **62.61** | **22** | P | **P** | **22 04 38.7** | **+1.7** |
| **PWL** | **Port Wells** | **62.77** | **30** | P | **P** | **22 04 39.0** | **+0.8** |
| **MLY** | **Manley** | **62.89** | **25** | P | **P** | **22 04 40.3** | **+1.3** |
| MLY | | | | IAmb | IAmb | 22 04 40.9 | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **SML** | **Sawmill** | **63.01** | **29** | P | **P** | **22 04 40.6** | **+0.8** |
| **B21K** | **Ikpikpuk River** | **63.18** | **19** | P | **P** | **22 04 41.3** | **+0.6** |
| **RND** | **Reindeer** | **63.20** | **27** | P | **P** | **22 04 41.5** | **+0.5** |
| RND | | | | IAmb | IAmb | 22 04 43.0 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **63.38** | **319** | P | **P** | **22 04 41.6** | **-0.8** |
| KURK | | | | IAmb | IAmb | 22 04 42.9 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.43** | **318** | P | **P** | **22 04 41.4** | **-1.3** |
| | comp=Z,4.8nm,0.6s,baz=96,slow=7.3,SNR=42 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **63.48** | **25** | P | **P** | **22 04 43.8** | **+1.0** |
| I23K | | | | IAmb | IAmb | 22 04 44.9 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **D22K** | **Ayikyak River** | **63.52** | **21** | P | **P** | **22 04 44.7** | **+1.7** |
| D22K | | | | IAmb | IAmb | 22 04 45.4 | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **63.54** | **21** | P | **P** | **22 04 44.3** | **+1.1** |
| E22K | | | | IAmb | IAmb | 22 04 45.5 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **G23K** | **Bananza Creek** | **63.70** | **23** | P | **P** | **22 04 45.7** | **+1.4** |
| **DHY** | **Denali Highway** | **63.76** | **27** | P | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| N31M | | | | | IAmb | IAmb | 22 05 20.4 | | |
| | comp=Z,5.3nm,0.9s | | | | | | | | |
| **KBL** | **Kabul** | **70.90** | **301** | | P | **P** | **22 05 30.0** | **-0.7** | |
| KBL | | | | | IAmb | IAmb | 22 05 30.9 | | |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| **PPT** | **Papeete** | **71.14** | **116** | | LR | LR | 22 30 54.3 | | |
| | comp=Z,52nm,21.2s,baz=214,slow=31 | | | | | | | | |
| **PPT2** | **Papeete2** | **71.15** | **116** | | *e*LR | LR | 22 27 06.6 | | |
| | comp=Z,70nm,26.0s | | | | | | | | |
| PPT2 | | | | | *e*LR | LR | 22 27 08.7 | | |
| | comp=Z,64nm,24.2s | | | | | | | | |
| **R33M** | **Jennings River** | **71.25** | **32** | | P | **P** | **22 05 33.7** | **+1.5** | |
| **C36M** | **Paulatuk** | **73.64** | **22** | | P | **P** | **22 05 46.3** | **+0.3** | |
| **ARU** | **Arti** | **75.16** | **325** | | P | **P** | **22 05 54.6** | **-0.5** | |
| ARU | | | | | IAmb | IAmb | 22 05 56.3 | | |
| | comp=Z,5.5nm,0.7s | | | | | | | | |
| **CBB** | **Campbell River** | **75.41** | **42** | | P | **P** | **22 05 56.8** | **0.0** | |
| **ABKAR** | **Akbulak array** | **75.45** | **317** | | P | **P** | **22 05 55.9** | **-1.0** | |
| **ABKAR** | **Akbulak array** | **75.45** | **317** | | IAmb | IAmb | 22 05 57.6 | | |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **HRA** | **Herat** | **76.46** | **302** | | P | **P** | **22 06 01.9** | **-1.4** | |
| **YKA** | **Yellowknife Ar** | **78.67** | **28** | | P | **P** | **22 06 14.6** | **-0.2** | |
| | comp=Z,1.8nm,0.7s,baz=278,slow=13,SNR=7.4 | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| **PINE** | **Pine Mountain** | **79.64** | **47** | | P | **P** | **22 06 22.3** | **+1.6** | |
| PINE | | | | | IAmb | IAmb | 22 06 23.4 | | |
| | comp=Z,7.8nm,0.8s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **80.92** | **351** | | P | **P** | **22 06 26.3** | **-0.4** | |
| | comp=Z,3.7nm,0.8s,baz=63,slow=14,SNR=1.6 | | | | | | | | |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **81.48** | **47** | | P | **P** | **22 06 32.4** | **+1.9** | |
| J08A | | | | | IAmb | IAmb | 22 06 32.7 | | |
| | comp=Z,4.2nm,0.8s | | | | | | | | |
| **PNTR** | **Pine Nut** | **81.79** | **52** | | P | **P** | **22 06 32.5** | **+0.1** | |
| PNTR | | | | | IAmb | IAmb | 22 06 48.7 | | |
| | comp=Z,4.4nm,0.8s | | | | | | | | |
| **WAKR** | **Walker** | **82.07** | **52** | | | **P** | **22 06 35.0** | **+1.2** | |
| **WAKR** | **Walker** | **82.07** | **52** | | | **P** | **22 06 35.0** | **+1.2** | |
| **LHV** | **Little Huntoon** | **82.84** | **52** | | P | **P** | **22 06 39.5** | **+1.9** | |
| **KVN** | **Kaiserville** | **82.92** | **51** | | P | **P** | **22 06 37.7** | **-0.5** | |
| **NVAR** | **Mina Array Bea** | **82.94** | **52** | | P | **P** | **22 06 39.6** | **+1.2** | |
| **NVAR** | **Mina Array Bea** | **82.94** | **52** | | P | **P** | **22 06 39.8** | **+1.4** | |
| | comp=Z,0.5nm,0.4s,baz=240,slow=6.0,SNR=5.6 | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| **ELK** | **Elko** | **84.53** | **49** | | P | **P** | **22 06 48.2** | **+1.7** | |
| **R11B** | **Troy Canyon, C** | **85.01** | **52** | | P | **P** | **22 06 49.4** | **+0.5** | |
| **YHL** | **Hebgen Lake** | **86.03** | **44** | | P | **P** | **22 06 54.1** | **+0.1** | |
| YHL | | | | | IAmb | IAmb | 22 06 56.7 | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **PSUT** | **Pine Spring** | **86.24** | **51** | | P | **P** | **22 06 54.7** | **-0.3** | |
| PSUT | | | | | IAmb | IAmb | 22 06 57.1 | | |
| | comp=Z,3.6nm,0.9s | | | | | | | | |
| **TCUT** | **Toone Canyon** | **87.16** | **48** | | P | **P** | **22 06 57.6** | **-2.0** | |
| **GNI** | **Garni** | **88.28** | **312** | | LR | LR | 22 50 09.4 | | |
| | comp=Z,19nm,18.3s,baz=97,slow=38 | | | | | | | | |
| **FINES** | **FINESS Array B** | **88.88** | **336** | | P | **P** | **22 07 05.6** | **-1.3** | |
| | comp=Z,0.7nm,0.3s,baz=59,slow=4.8,SNR=9.5 | | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | | |
| **LPIG** | **La Paz** | **93.99** | **63** | | LR | LR | 22 41 46.1 | | |
| | comp=Z,25nm,20.2s,baz=214,slow=30 | | | | | | | | |
| **CLL** | **Collm** | **100.97** | **333** | | *e*PP | **PP** | **22 12 13.0** | **+2.9** | |
| **TORD** | **Torodi Ar. Bea** | **134.55** | **309** | | PKP | **PKPdf** | **22 13 32.4** | **+0.4** | |
| | comp=Z,0.4nm,0.8s,baz=37,slow=3.9,SNR=2.8 | | | | | | | | |
| **LPAZ** | **La Paz** | **146.16** | **94** | | PKPbc | **PKPab** | **22 13 56.6** | **+1.3** | |
| | comp=Z,1.4nm,0.6s,baz=253,slow=4.8,SNR=7.4 | | | | | | | | |

*IDC* ***23*** *21:55:33.3±1.1, 21°.63S×66°.54W, h190km±15km, mb3.5/2, mbtmp4.0/5, MS2.2/1, Error ellipse: s-maj=29.6km s-min=11.1km az=122.0*

*SCB* ***23*** *21:55:35.0±1.1, 21°.60S×66°.79W, h213km±8km, ML3.7/3, MW4.1, Error ellipse: s-maj=6.3km s-min=4.2km az=0.0*

**ISC 23 21:55:34.4±0.8, 21°.57S±0'.05×66°.76W±0'.05, h200km, n23, σ2§05/35, 1C, Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MOCB** | **Mochara** | **1.10** | **73** | Pg | **Pn** | **21 56 08.3** | **+2.9** |
| MOCB | | | | Sg | **Sn** | **21 56 32.4** | **+3.1** |
| MOCB | | | | IAML | | 21 56 33.0 | |
| | 2μm,0.7s | | | | | | |
| **LVC** | **Limon Verde** | **2.24** | **242** | P | **Pn** | **21 56 17.0** | **+1.1** |
| | 32nm,0.4s,baz=58,slow=6.3,SNR=64 | | | | | | |
| LVC | | | | S | **Sn** | **21 56 48.8** | **+0.6** |
| | 34nm,0.4s,baz=105,slow=20,SNR=54 | | | | | | |
| LVC | | | | LR | LR | 21 57 08.3 | |
| | comp=Z,46nm,18.2s,baz=203,slow=40 | | | | | | |
| **LVC** | **Limon Verde** | **2.24** | **242** | *e*P | **Pn** | **21 56 17.3** | **+1.4** |
| LVC | | | | *i* S | **Sn** | **21 56 48.8** | **+0.6** |
| LVC | | | | IAML | | 21 56 49.8 | |
| | 366nm,0.5s | | | | | | |
| **PB09** | **IPOC Station P** | **2.32** | **264** | *e*P | **Pn** | **21 56 18.2** | **+1.7** |
| PB09 | | | | *e*S | **Sn** | **21 56 50.5** | **+1.3** |
| PB09 | | | | IAML | | 21 56 53.6 | |
| | comp=E,87nm,0.1s | | | | | | |
| **PB09** | **IPOC Station P** | **2.32** | **264** | Pg | **Pn** | **21 56 18.2** | **+1.7** |
| **GO01** | **Chusmiza** | **2.96** | **309** | Pg | **Pn** | **21 56 25.7** | **+1.5** |
| GO01 | | | | Sg | **Sn** | **21 57 04.1** | **+1.2** |
| GO01 | | | | IAML | | 21 57 10.7 | |
| | comp=E,91nm,0.2s | | | | | | |
| **SOEO** | **Opoqueri** | **3.18** | **340** | Pg | **Pn** | **21 56 29.5** | **+2.8** |
| **PB04** | **IPOC Station P** | **3.23** | **256** | *e*P | **Pn** | **21 56 27.6** | **+0.6** |
| PB04 | | | | *e*S | **Sn** | **21 57 05.8** | **-2.4** |
| PB04 | | | | IAML | | 21 57 08.7 | |
| | comp=N,189nm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **3.25** | **283** | *e*P | **Pn** | **21 56 27.6** | **+0.4** |
| PATCX | | | | *i* S | **Sn** | **21 57 06.1** | **-2.2** |
| PATCX | | | | IAML | | 21 57 08.6 | |
| | comp=N,236nm,0.2s | | | | | | |
| **SOTI** | **Planta Incahua** | **3.39** | **60** | Pg | **Pn** | **21 56 31.0** | **+2.1** |
| **AOEA** | **Aiquile** | **3.67** | **23** | Pg | **Pn** | **21 56 33.8** | **+1.3** |
| AOEA | | | | Sg | **Sn** | **21 57 19.5** | **+1.5** |
| AOEA | | | | IAML | | 21 57 21.5 | |
| | comp=N,38nm,0.5s | | | | | | |
| **GO02** | **Mina Guanaco** | **4.42** | **215⇑** | *e*P | **Pn** | **21 56 42.4** | **+0.6** |
| GO02 | | | | *e*S | **Sn** | **21 57 32.8** | **-1.9** |
| **PB14** | **IPOC Station P** | **4.52** | **227** | *e*P | **Pn** | **21 56 43.1** | **0.0** |
| PB14 | | | | *i* S | **Sn** | **21 57 33.0** | **-4.1** |
| **SOEJ** | **Jacaque** | **4.77** | **343** | Pg | **Pn** | **21 56 48.8** | **+2.3** |
| **BBOE** | **La Paz, Chanca** | **4.87** | **346** | Pg | **Pn** | **21 56 49.6** | **+1.7** |
| **BBOD** | **La Paz, Gloria** | **5.21** | **340** | Pg | **Pn** | **21 56 53.7** | **+1.6** |
| **LPAZ** | **La Paz** | **5.42** | **346** | P | **Pn** | **21 56 55.9** | **+1.1** |
| | comp=N,8.3nm,0.3s,baz=151,slow=7.4,SNR=57 | | | | | | |
| LPAZ | | | | S | **Sn** | **21 57 59.6** | **+1.4** |
| | comp=N,3.1nm,0.6s,baz=51,slow=13,SNR=1.3 | | | | | | |
| **LPAZ** | **La Paz** | **5.42** | **346** | Pg | **Pn** | **21 56 56.4** | **+1.6** |
| **SIV** | **San Ignacio** | **7.74** | **45** | P | **Pn** | **21 57 23.2** | **-1.2** |
| | comp=N,8.1nm,0.3s,baz=230,slow=12,SNR=35 | | | | | | |
| SIV | | | | S | **Sn** | **21 58 46.2** | **-5.7** |
| | comp=N,1.2nm,0.4s,baz=294,slow=20,SNR=2.0 | | | | | | |
| **QSPA** | **South Pole Qui** | **68.62** | **180** | P | | **P** | **22 06 16.0** | **+0.3** |
| | comp=N,0.4nm,0.5s,baz=15,slow=1.4,SNR=6.4 | | | | | | | | |
| | comp=N,0.4nm,0.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.50** | **69** | P | | **P** | **22 06 55.9** | **-1.4** | |
| | comp=N,1.2nm,0.5s,baz=261,slow=5.1,SNR=31 | | | | | | | | |
| | comp=N,1.2nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **133.87** | **208** | PKP | | **PKPdf** | **22 14 27.2** | **-1.3** | |
| | comp=N,0.6nm,1.1s,baz=153,slow=2.0,SNR=2.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.50** | **37** | PKP | | **PKPab** | **22 14 45.9** | **0.0** | |
| | comp=N,1.3nm,0.6s,baz=320,slow=3.5,SNR=13 | | | | | | | | |

*MOS* ***23*** *21:56:07.3±1.4, 45°.59N×147°.41E, h193km, mb4.3/5, Error ellipse: s-maj=13.8km s-min=8.8km az=74.7*

*SKHL* ***23*** *21:56:07.3±0.1, 45°.50N×147°.60E, h179km±3km, mb4.8/6, msha5.2/4*

*IDC* ***23*** *21:56:09.2±1.8, 45°.79N×147°.19E, h191km±17km, mb3.4/11, mbtmp3.9/15, MS2.7/1, Error ellipse: s-maj=15.8km s-min=12.0km az=124.0*

*NEIC* ***23*** *21:56:09.4±1.3, 45°.9N±0°.2×147°.1E±0°.3, h184km±3km, mb4.1/8, Error ellipse: s-maj=33.6km s-min=14.2km az=134.0*

*JMA* ***23*** *21:56:09.7±0.5, 45°.N±2'×14°.8E±', h173km, MV4.2/24, NEAR ETOROFU ISLAND*

**ISC 23 21:56:08.2±0.6, 45°.45N±0'.05×147°.46E±0'.06, h187km±6km, n84, σ1§87/92, mb3.9/16, 4C-4D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **0.35** | **127** | *e*P | **Pn** | **21 56 32.7** | **-0.6** |
| KUR | | | | AMB | AMB | 21 56 33.4 | |
| | 780nm,0.5s | | | | | | |
| KUR | | | | *i* S | **Sn** | **21 56 51.8** | **-0.8** |
| KUR | | | | A | A | 21 56 52.6 | |
| | 410nm,0.5s | | | | | | |
| KUR | | | | A | A | 21 56 52.6 | |
| | 230nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **0.35** | **127** | *d i* PN | **Pn** | **21 56 32.7** | **-0.6** |
| KUR | | | | *i* S | **Sn** | **21 56 51.7** | **-0.8** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,693nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,96nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,189nm,0.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,250nm,0.7s | | | | | | |
| **SHO** | **Shikotan** | **1.64** | **196** | *e*P | **Pn** | **21 56 41.6** | **-0.6** |
| SHO | | | | AMB | AMB | 21 56 43.0 | |
| | comp=E,140nm,0.2s | | | | | | |
| SHO | | | | *e*S | **Sn** | **21 57 06.9** | **-1.4** |
| SHO | | | | A | A | 21 57 07.9 | |
| | comp=E,840nm,0.5s | | | | | | |
| SHO | | | | A | A | 21 57 07.9 | |
| | comp=E,2μm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.64** | **196** | *e*PN | **Pn** | **21 56 41.5** | **-0.6** |
| SHO | | | | *e*S | **Sn** | **21 57 06.3** | **-2.0** |
| SHO | | | | pmax | pmax | | |
| | comp=N,127nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,92nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,178nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.82** | **220** | *e*P | **Pn** | **21 56 45.2** | **+1.4** |
| YUK | | | | AMB | AMB | 21 56 45.5 | |
| | comp=E,240nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **21 57 13.5** | **+2.1** |
| YUK | | | | A | A | 21 57 17.5 | |
| | comp=E,920nm,0.6s | | | | | | |
| YUK | | | | A | A | 21 57 17.5 | |
| | comp=E,720nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.82** | **220** | *c i* PN | **Pn** | **21 56 45.2** | **+1.4** |
| **NEM2** | **Nemuro 2** | **2.42** | **211** | P | **Pn** | **21 56 50.2** | **-0.2** |
| NEM2 | | | | S | **Sn** | **21 57 20.3** | **-2.8** |
| **JNK** | **Nakash** | **2.71** | **227** | P | **Pn** | **21 56 55.1** | **+1.4** |
| **JKHN** | **Kushirohamanak** | **2.89** | **216** | *e*P | **Pn** | **21 56 56.1** | **+0.3** |
| JKHN | | | | *e*S | **Sn** | **21 57 31.4** | **-1.5** |
| **JAK** | **Akkeshi** | **3.16** | **220** | P | **Pn** | **21 56 59.6** | **+0.6** |
| JAK | | | | S | **Sn** | **21 57 37.6** | **-1.1** |
| **JAR** | **Ashorobuto** | **3.41** | **232** | P | **Pn** | **21 57 04.1** | **+1.9** |
| JAR | | | | S | **Sn** | **21 57 47.5** | **+3.1** |
| **YSS** | **Yuzh-Sakhalins** | **3.60** | **296** | *e*P | **Pn** | **21 57 05.0** | **+0.6** |
| YSS | | | | AMB | AMB | 21 57 05.2 | |
| | comp=E,50nm,0.6s | | | | | | |
| YSS | | | | *e*S | **Sn** | **21 57 48.2** | **-0.3** |
| YSS | | | | A | A | 21 57 50.8 | |
| | comp=E,20nm,0.3s | | | | | | |
| YSS | | | | A | A | 21 57 50.8 | |
| | comp=E,40nm,0.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **3.60** | **296** | *e*PN | **Pn** | **21 57 05.0** | **+0.6** |
| YSS | | | | *e*S | **Sn** | **21 57 48.0** | **-0.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,50nm,0.6s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,60nm,0.4s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **3.71** | **251** | | **Pn** | **21 57 06.8** | **+0.9** |
| **JKA** | **Kamikawa-asahi** | **3.71** | **251** | *e*P | **Pn** | **21 57 06.9** | **+1.0** |
| **ASAJ** | **Asahikawa** | **3.71** | **251** | P | **Pn** | **21 57 06.8** | **+1.0** |
| | comp=E,12nm,0.4s,baz=64,slow=14,SNR=15 | | | | | | |
| **JKK2** | **Kamakawa 2** | **3.71** | **247** | *e*P | **Pn** | **21 57 08.0** | **+2.1** |
| **JCH** | **Churui** | **4.09** | **228** | P | **Pn** | **21 57 11.7** | **+0.9** |
| JCH | | | | *e*S | **Sn** | **21 57 57.6** | **-2.1** |
| **ERM** | **Erimo** | **4.64** | **224** | | **Pn** | **21 57 19.1** | **+1.5** |
| **ERM** | **Erimo** | **4.64** | **224** | *d i* PN | **Pn** | **21 57 19.1** | **+1.5** |
| **JNBK** | **Urakawa-nobuka** | **4.65** | **229** | P | **Pn** | **21 57 17.5** | **-0.2** |
| **UGL** | **Uglegorsk** | **5.17** | **317** | *e*P | **Pn** | **21 57 25.2** | **+0.9** |
| UGL | | | | AMB | AMB | 21 57 27.6 | |
| | comp=E,30nm,0.6s | | | | | | |
| **JOT** | **Ohata** | **6.19** | **231** | P | **Pn** | **21 57 36.9** | **-0.8** |
| JOT | | | | S | **Sn** | **21 58 43.2** | **-5.1** |
| **TYV** | **Tymovskoe** | **6.30** | **331** | *e*P | **Pn** | **21 57 38.4** | **-0.6** |
| TYV | | | | AMB | AMB | 21 57 39.3 | |
| | comp=E,20nm,0.7s | | | | | | |
| **TYV** | **Tymovskoe** | **6.30** | **331** | *e*PN | **Pn** | **21 57 38.2** | **-0.8** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,3.1s | | | | | | |
| **JOSM** | **Okushiri--Mats** | **6.69** | **243** | *e*P | **Pn** | **21 57 45.1** | **+0.9** |
| **JANG** | **Nango** | **6.69** | **223** | *e*P | **Pn** | **21 57 43.1** | **-1.2** |
| JANG | | | | *e*S | **Sn** | **21 58 52.5** | **-7.7** |
| **JOMM** | **Oshimamatsumae** | **6.69** | **237** | *e*P | **Pn** | **21 57 44.6** | **+0.4** |
| **SKR** | **Severo-Kuril's** | **7.81** | **45** | *e*P | **Pn** | **21 57 57.4** | **-1.4** |
| SKR | | | | AMB | AMB | 21 57 59.2 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **JMK** | **Ichinoseki** | **7.97** | **218** | *e*P | **Pn** | **21 58 00.4** | **-0.7** |
| JMK | | | | *e*S | **Sn** | **21 59 24.3** | **-6.4** |
| **KDTR** | **Khodutka, Kamc** | **9.47** | **44** | *e*P | **Pn** | **21 58 18.3** | **-2.3** |
| KDTR | | | | AMB | AMB | 21 58 19.6 | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **10.16** | **37** | Pn | **Pn** | **21 58 28.5** | **-1.2** |
| **PEA0B** | **Petropavlovsk-** | **10.16** | **37⇑** | *e*PN | **Pn** | **21 58 28.4** | **-1.2** |
| **PETK** | **Petropavlovsk-** | **10.16** | **37** | Pn | **Pn** | **21 58 28.9** | **-0.7** |
| **PETK** | **Petropavlovsk-** | **10.16** | **37** | P | **Pn** | **21 58 28.2** | **-1.4** |
| | comp=Z,1.9nm,0.4s,baz=218,slow=8.9,SNR=13 | | | | | | |
| **PETK** | **Petropavlovsk-** | **10.16** | **37** | PN | **Pn** | **21 58 28.9** | **-0.7** |
| **USRK** | **Ussuriysk Ar.** | **11.07** | **269** | P | **Pn** | **21 58 40.6** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=76,slow=14,SNR=4.4 | | | | | | |
| **MAJO** | **Matsushiro** | **11.31** | **221⇑** | *e*PN | **P** | **21 58 55.4** | **+4.5** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,57nm,2.4s | | | | | | |
| **KLR** | **Kul'dur** | **11.31** | **295** | LR | LR | 22 03 35.5 | |
| | comp=Z,42nm,20.0s,baz=200,slow=41 | | | | | | |
| **KSRS** | **Korea Array** | **16.66** | **248** | P | **P** | **21 59 50.4** | **+0.3** |
| | comp=Z,2.5nm,0.6s,baz=58,slow=12,SNR=8.0 | | | | | | |
| **KSRS** | **Korea Array** | **16.66** | **248** | *e*P | **Pn** | **21 59 53.8** | **+2.9** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **SEY** | **Seymchan** | **17.75** | **7** | *e*P | **Pn** | **22 00 03.2** | **-0.3** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **YAK** | **Yakutsk** | **19.54** | **335** | *e*P | **P** | **22 00 19.0** | **-2.2** |
| **YAK** | **Yakutsk** | **19.54** | **335⇓** | *e*P | **P** | **22 00 19.0** | **-2.2** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.26** | **142** | T | T | 22 33 35.1 | |
| | baz=334,slow=76,SNR=38 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.28** | **142** | T | T | 22 33 36.2 | |
| | baz=334,slow=76,SNR=32 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.28** | **142** | T | T | 22 33 36.4 | |
| | baz=334,slow=76,SNR=35 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.26** | **143** | T | T | 22 34 47.3 | |
| | baz=324,slow=80,SNR=67 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.27** | **143** | T | T | 22 34 47.1 | |
| | baz=324,slow=80,SNR=51 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.28** | **143** | T | T | 22 34 48.5 | |
| | baz=324,slow=80,SNR=47 | | | | | | |
| **SYI** | **Shuyak Island** | **37.94** | **48** | P | **P** | **22 03 07.2** | **0.0** |
| **KDAK** | **Kodiak Island** | **37.95** | **49** | P | **P** | **22 03 07.1** | **-0.2** |
| **KDAK** | **Kodiak Island** | **37.95** | **49** | P | **P** | **22 03 07.1** | **-0.2** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **38.05** | **32** | P | **P** | **22 03 07.8** | **-0.3** |
| E22K | | | | IAmb | IAmb | 22 03 09.6 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **39.99** | **37** | P | **P** | **22 03 23.6** | **-0.6** |
| | comp=Z,1.0nm,0.7s,baz=256,slow=6.6,SNR=11 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **39.99** | **37** | *e*P | **P** | **22 03 23.9** | **-0.3** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **L27K** | **Beaver Creek,** | **42.42** | **40** | P | **P** | **22 03 45.1** | **+1.2** |
| L27K | | | | IAmb | IAmb | 22 03 45.6 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **BCAR** | **Beaver Creek A** | **42.44** | **40** | P | **P** | **22 03 45.5** | **+1.4** |
| **I28M** | **Miner Creek** | **42.84** | **36** | P | **P** | **22 03 48.0** | **+0.5** |
| **MK31** | **Makanchi Array** | **44.02** | **296⇓** | *e*P | **P** | **22 03 55.9** | **-1.1** |
| **MKAR** | **Makanchi Array** | **44.02** | **296** | P | **P** | **22 03 55.5** | **-1.5** |
| | comp=Z,0.4nm,0.7s,baz=75,slow=6.6,SNR=5.7 | | | | | | |
| MKAR | | | | PcP | **PcP** | **22 05 40.1** | **+1.1** |
| | comp=Z,0.7nm,0.7s,baz=69,slow=7.3,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **44.78** | **303** | *e*P | **P** | **22 04 02.1** | **-0.8** |
| **KURK** | **Kurchatov** | **44.78** | **303** | P | **P** | **22 04 02.1** | **-0.8** |
| **KURBB** | **Kurchatov Arra** | **44.87** | **303** | P | **P** | **22 04 02.1** | **-1.5** |
| | comp=Z,0.5nm,0.4s,baz=73,slow=8.1,SNR=5.7 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.27** | **35** | P | **P** | **22 05 14.4** | **0.0** |
| | comp=Z,0.6nm,0.7s,baz=305,slow=7.7,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **63.47** | **333** | P | **P** | **22 06 15.1** | **-2.5** |
| | comp=Z,1.7nm,0.5s,baz=44,slow=7.8,SNR=20 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **63.47** | **333** | *i* P | **P** | **22 06 15.6** | **-2.0** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **BOZ** | **Bozeman (W)** | **65.65** | **49** | P | **P** | **22 06 33.8** | **+1.5** |
| BOZ | | | | IAmb | IAmb | 22 06 34.5 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **65.65** | **49** | P | **P** | **22 06 33.8** | **+1.5** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **66.16** | **194** | P | **P** | **22 06 36.8** | **+1.2** |
| | comp=Z,1.3nm,0.6s,baz=12,slow=6.6,SNR=14 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **66.16** | **194** | *i* P | **P** | **22 06 36.2** | **+0.7** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **NB2** | **NORSAR Subarra** | **68.10** | **339** | P | **P** | **22 06 45.4** | **-1.9** |
| | comp=Z,0.5nm,0.4s,baz=31,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **68.10** | **339** | P | **P** | **22 06 45.1** | **-2.3** |
| | comp=Z,0.7nm,0.6s,baz=30,slow=6.7,SNR=13 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **68.10** | **339** | *e*P | **P** | **22 06 45.6** | **-1.7** |
| **HFS** | **Hagfors** | **68.21** | **337** | P | **P** | **22 06 45.4** | **-2.6** |
| | comp=Z,0.6nm,0.3s,baz=18,slow=4.0,SNR=11 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **PD31** | **Pinedale Array** | **68.65** | **50** | P | **P** | **22 06 52.4** | **+1.2** |
| PD31 | | | | IAmb | IAmb | 22 06 53.1 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **68.65** | **50** | P | **P** | **22 06 52.5** | **+1.2** |
| **PDAR** | **Pinedale Array** | **68.65** | **50** | P | **P** | **22 06 51.5** | **+0.2** |
| | comp=Z,1.3nm,0.6s,baz=338,slow=0.2,SNR=16 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **68.85** | **311⇑** | *e*P | P | 22 07 04.4 | +12 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.8s | | | | | | |
| **ASAR** | **Alice Springs** | **69.88** | **193** | P | **P** | **22 07 01.2** | **+2.6** |
| | comp=Z,1.0nm,0.6s,baz=9.3,slow=5.4,SNR=13 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.52** | **57** | P | **P** | **22 08 05.8** | **+0.9** |
| | comp=Z,0.9nm,0.5s,baz=296,slow=3.8,SNR=8.4 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **113.98** | **323** | PKiKP | **PKiKP** | **22 14 25.0** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=32,slow=1.5,SNR=5.3 | | | | | | |
| **QSPA** | **South Pole Qui** | **135.18** | **180** | PKP | **PKiKP** | **22 15 06.6** | **+1.0** |
| | comp=Z,0.4nm,0.5s,baz=268,slow=0.2,SNR=9.7 | | | | | | |
| **PLCA** | **Paso Flores** | **152.02** | **94** | PKPbc | **PKiKP** | **22 15 42.2** | **+1.2** |
| | comp=Z,1.4nm,0.4s,baz=264,slow=3.5,SNR=6.5 | | | | | | |

**IDC 23 22:02:03.9±3.3, 17°.26N×147°.45E, h0km, mb3.6/5, mbtmp3.6/5, Error ellipse: s-maj=100.1km s-min=28.0km az=78.0, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **39.14** | **200** | P | P | 22 09 33.5 | 0.0 |
| | 0.9nm,0.7s,baz=23,slow=9.0,SNR=8.0 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **42.77** | **198** | P | P | 22 10 03.1 | -0.3 |
| | 0.4nm,0.7s,baz=20,slow=11,SNR=2.4 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **46.07** | **279** | P | P | 22 10 29.8 | -0.2 |
| | 0.6nm,0.5s,baz=71,slow=7.3,SNR=5.0 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.66** | **314** | P | P | 22 12 17.0 | +0.1 |
| | 0.2nm,0.6s,baz=92,slow=7.5,SNR=1.9 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **68.64** | **321** | P | P | 22 13 08.9 | -0.1 |
| | 0.7nm,0.5s,baz=103,slow=6.4,SNR=2.0 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

*BJI* ***23*** *22:12:18.8±0.0, 36°.62N×70°.18E, h211km, mb4.4/19, mB4.9/6*

*MOS* ***23*** *22:12:18.6±0.9, 36°.52N×70°.21E, h219km, mb4.2/17, Error ellipse: s-maj=7.3km s-min=4.5km az=77.0*

*NEIC* ***23*** *22:12:19.8±1.7, 36°.52N±0°.06×70°.18E±0°.09, h216km±5km, mb4.3/50, Error ellipse: s-maj=10.5km s-min=8.1km az=100.0*

*IDC* ***23*** *22:12:20.8±1.9, 36°.46N×70°.30E, h237km±19km, mb3.6/23, mbtmp4.2/29, Error ellipse: s-maj=10.6km s-min=8.7km az=164.0*

*NNC* ***23*** *22:12:22.4±5.6, 36°.91N×69°.98E, h204km±63km, mb3.9, mpv5.1, Error ellipse: s-maj=55.1km s-min=31.6km az=11

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| FRU1 | **Bishkek** | **7.15** | **27** | PN | | **Pn** | **22 14 01.6** | **+1.4** |
| CHMS | **Chumysh** | **7.35** | **27** | P | | **Pn** | **22 14 04.5** | **+1.7** |
| | SNR=33 | | | | | | | |
| ULHL | **Ulahol** | **7.37** | **37** | P | | **Pn** | **22 14 04.7** | **+1.5** |
| | SNR=82 | | | | | | | |
| BOOM | **Boomskoye usch** | **7.42** | **34** | | | **Pn** | **22 14 05.1** | **+1.3** |
| BOOM | **Boomskoye usch** | **7.42** | **34** | PN | | **Pn** | **22 14 05.1** | **+1.3** |
| USP | **Ospenovka** | **7.50** | **24** | P | | **Pn** | **22 14 06.3** | **+1.5** |
| | SNR=77 | | | | | | | |
| TKM2 | **Tokmak 2** | **7.62** | **31** | P | | **Pn** | **22 14 07.9** | **+1.4** |
| | SNR=88 | | | | | | | |
| TKM2 | **Tokmak 2** | **7.62** | **31** | ⇑P | | **Pn** | **22 14 07.7** | **+1.2** |
| | comp=Z,100nm,0.8s | | | | | | | |
| TKM2 | | | | ⇑S | | **Sn** | **22 15 31.6** | **-1.0** |
| | comp=Z,16nm,0.8s | | | | | | | |
| TKM2 | **Tokmak 2** | **7.62** | **31** | *i* PN | | **Pn** | **22 14 07.6** | **+1.2** |
| TKM2 | | | | pmax | pmax | | | |
| | comp=Z,100nm,0.8s | | | | | | | |
| SMLA | **Simla** | **7.84** | **131** | *e*P | | **Pn** | **22 14 10.8** | **+1.6** |
| SMLA | | | | *e*S | | **Sn** | **22 15 34.7** | **-2.9** |
| SMLA | | | | IAML | | | 22 15 42.8 | |
| | comp=Z,200nm,0.5s | | | | | | | |
| TARG | **Taragay, Kyrgy** | **7.84** | **46** | Pn | | **Pn** | **22 14 10.7** | **+1.1** |
| TARG | **Taragay, Kyrgy** | **7.84** | **46** | PN | | **Pn** | **22 14 10.7** | **+1.1** |
| MDOK | **Medeo** | **8.45** | **36** | ⇓P | | **Pn** | **22 14 18.6** | **+1.3** |
| | comp=Z,145nm,1.0s | | | | | | | |
| MDOK | **Medeo** | **8.45** | **36** | PN | | **Pn** | **22 14 18.6** | **+1.3** |
| KNDC | **Almaty** | **8.46** | **35** | ⇑P | | **Pn** | **22 14 19.2** | **+2.0** |
| | comp=Z,373nm,0.9s | | | | | | | |
| KNDC | **Almaty** | **8.46** | **35** | PN | | **Pn** | **22 14 19.2** | **+2.0** |
| PRZ | **Przheval'sk** | **8.67** | **44** | Pn | | **Pn** | **22 14 22.1** | **+2.0** |
| PRZ | **Przheval'sk** | **8.67** | **44** | PN | | **Pn** | **22 14 22.1** | **+2.0** |
| ARXS | **Arharly** | **9.62** | **34** | *e*P | | **Pn** | **22 14 32.3** | **-0.1** |
| NDI | **New Delhi** | **9.73** | **141** | *e*S | | **Sn** | **22 16 15.9** | **-6.9** |
| PDGK | **Podgornoye** | **9.83** | **43** | ⇑P | | **Pn** | **22 14 35.2** | **+0.1** |
| | comp=Z,28nm,0.7s | | | | | | | |
| PDGK | **Podgornoye** | **9.83** | **43** | P | | **Pn** | **22 14 35.2** | **+0.1** |
| SONA | **Sohna** | **10.03** | **143** | *e*S | | Sn | 22 16 21.7 | -8.0 |
| LGTI | **Lohaghat** | **10.92** | **127** | *e*P | | **Pn** | **22 14 48.6** | **-0.5** |
| LGTI | | | | *e*S | | **Sn** | **22 16 44.0** | **-6.9** |
| LGTI | | | | IAML | | | 22 16 49.6 | |
| | comp=N,18nm,0.5s | | | | | | | |
| LGTI | | | | IAML | | | 22 16 51.5 | |
| | comp=E,18nm,0.6s | | | | | | | |
| OTUK | **Ortayu** | **11.84** | **7** | ⇓P | | **Pn** | **22 15 00.7** | **-0.1** |
| | comp=E,21nm,0.7s | | | | | | | |
| OTUK | **Ortayu** | **11.84** | **7** | P | | **Pn** | **22 15 00.7** | **-0.1** |
| MAKZ | **Makanchi** | **13.50** | **37** | | | **Pn** | **22 15 22.5** | **+0.8** |
| MAKZ | **Makanchi** | **13.50** | **37** | P | | **Pn** | **22 15 22.5** | **+0.8** |
| MK31 | **Makanchi Array** | **13.64** | **37** | | | **Pn** | **22 15 23.7** | **+0.2** |
| MK31 | **Makanchi Array** | **13.64** | **37** | P | | **Pn** | **22 15 24.0** | **+0.5** |
| | comp=E,11nm,0.6s,baz=215,slow=12,SNR=146 | | | | | | | |
| MK31 | **Makanchi Array** | **13.64** | **37** | *d* iP | | **Pn** | **22 15 23.9** | **+0.5** |
| MKAR | **Makanchi Array** | **13.64** | **37** | Pn | | **Pn** | **22 15 23.9** | **+0.5** |
| MKAR | **Makanchi Array** | **13.64** | **37** | P | | **Pn** | **22 15 24.1** | **+0.7** |
| | comp=E,11nm,0.6s,baz=229,slow=11,SNR=89 | | | | | | | |
| BHPL | **Bhopal** | **14.58** | **153** | *e*P | | **P** | **22 15 37.8** | **+1.4** |
| BHPL | | | | *e*S | | S | 22 18 09.4 | -8.0 |
| AB31 | **Akbulak array** | **14.82** | **333** | ⇑P | | **Pn** | **22 15 36.8** | **-1.1** |
| | comp=E,1.9nm,0.4s,baz=152,slow=12,SNR=94 | | | | | | | |
| AB31 | **Akbulak array** | **14.82** | **333** | P | | **Pn** | **22 15 36.8** | **-1.1** |
| ABKAR | **Akbulak array** | **14.82** | **333** | | | **Pn** | **22 15 36.8** | **-1.0** |
| WMQ | **Urumqi** | **15.18** | **56** | *e*P | | **P** | **22 15 43.8** | **+0.9** |
| WMQ | | | | pmax | pmax | | | |
| | comp=E,11nm,0.9s | | | | | | | |
| KURBB | **Kurchatov Array** | **15.32** | **20** | P | | **Pn** | **22 15 43.5** | **-0.5** |
| | comp=E,10nm,0.7s,baz=209,slow=11,SNR=41 | | | | | | | |
| KURK | **Kurchatov** | **15.43** | **20** | | | **Pn** | **22 15 45.0** | **-0.3** |
| KURK | | | | IAmb | | IAmb | 22 15 45.9 | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| KURK | **Kurchatov** | **15.43** | **20** | ⇓P | | **Pn** | **22 15 45.1** | **-0.3** |
| | comp=Z,5.3nm,0.6s | | | | | | | |
| KURK | **Kurchatov** | **15.43** | **20** | *d* iP | | **Pn** | **22 15 44.6** | **-0.7** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| AKTO | **Aktyubinsk** | **16.50** | **331** | P | | **Pn** | **22 15 58.7** | **+0.4** |
| | comp=Z,4.4nm,0.3s,baz=157,slow=8.1,SNR=16 | | | | | | | |
| AKTO | | | | S | | **S** | **22 18 54.1** | **-5.6** |
| | comp=Z,2.0nm,0.7s,baz=145,slow=13,SNR=1.9 | | | | | | | |
| BVAR | **Borovoye Array** | **16.53** | **0** | P | | **Pn** | **22 15 59.0** | **+0.4** |
| | comp=Z,9.8nm,0.5s,baz=163,slow=12,SNR=19 | | | | | | | |
| BVAR | | | | S | | **S** | **22 18 56.6** | **-3.5** |
| | comp=Z,0.6nm,0.5s,baz=167,slow=21,SNR=2.0 | | | | | | | |
| BVAR | **Borovoye Array** | **16.53** | **0** | P | | **Pn** | **22 15 59.0** | **+0.4** |
| BRVK | **Borovoye** | **16.57** | **0** | | | **P** | **22 15 58.4** | **+0.4** |
| BRVK | **Borovoye** | **16.57** | **0** | ⇑P | | **Pn** | **22 15 59.7** | **+0.8** |
| | comp=Z,12nm,0.6s | | | | | | | |
| BRVK | **Borovoye** | **16.57** | **0** | *d* iP | | **Pn** | **22 15 59.2** | **+0.3** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.3s | | | | | | | |
| WSAR | **Wadi Sarin** | **16.61** | **221** | P | | **P** | **22 15 59.2** | **+0.5** |
| | comp=Z,3.9nm,0.5s,baz=73,slow=10,SNR=9.6 | | | | | | | |
| LKRN | **Lenkeran, Azer** | **17.18** | **284** | P | | **P** | **22 16 04.3** | **-0.6** |
| DGZ | **Jazzator, Alta** | **18.14** | **38** | *d* iP | | **Pn** | **22 16 17.7** | **0.0** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,40nm,0.6s | | | | | | | |
| SEKA | **Sheki** | **18.57** | **292** | P | | **P** | **22 16 18.8** | **-1.2** |
| MNGR | **Mingechevir, A** | **18.61** | **290** | P | | **P** | **22 16 20.0** | **-0.3** |
| LSA | **Lhasa** | **18.73** | **105** | P | | **Pn** | **22 16 26.3** | **+1.1** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| LSA | **Lhasa** | **18.73** | **105** | P | | **P** | **22 16 24.3** | **+1.9** |
| LSA | | | | IAmb | IAmb | | 22 16 30.7 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| LSA | **Lhasa** | **18.73** | **105** | P | | **P** | **22 16 24.3** | **+1.9** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| GANJ | **Ganja** | **19.17** | **290** | P | | **P** | **22 16 26.0** | **-0.5** |
| ZAA0 | **Zalesovo Array** | **20.17** | **25** | P | | **P** | **22 16 37.5** | **+0.5** |
| ZALV | **Zalesovo Beam** | **20.17** | **25** | P | | **P** | **22 16 37.5** | **+0.5** |
| ZALV | **Zalesovo Beam** | **20.17** | **25** | P | | **P** | **22 16 37.7** | **+0.8** |
| | comp=Z,8.5nm,0.5s,baz=215,slow=10,SNR=52 | | | | | | | |
| ZALV | | | | S | | **S** | **22 20 09.5** | **-2.5** |
| | comp=Z,0.8nm,0.6s,baz=207,slow=11,SNR=5.5 | | | | | | | |
| | comp=Z,8.5nm,0.5s | | | | | | | |
| GNI | **Garni** | **20.35** | **288** | P | | **P** | **22 16 39.8** | **+0.6** |
| | comp=Z,7.3nm,0.7s,baz=0.0,slow=2.0,SNR=6.8 | | | | | | | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| GNI | **Garni** | **20.35** | **288** | *de*P | | **P** | **22 16 42.3** | **+3.1** |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.3s | | | | | | | |
| ARU | **Arti** | **21.46** | **342** | P | | **P** | **22 16 50.4** | **-0.1** |
| ARU | | | | IAmb | IAmb | | 22 16 53.8 | |
| | comp=Z,8.7nm,0.7s | | | | | | | |
| ARU | **Arti** | **21.46** | **342** | P | | **P** | **22 16 51.1** | **+0.5** |
| | comp=Z,8.3nm,0.7s,baz=155,slow=6.8,SNR=14 | | | | | | | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| ARU | **Arti** | **21.46** | **342** | *c* iP | | **P** | **22 16 51.4** | **+0.9** |
| ARU | | | | | | | 22 17 34.3 | |
| ARU | | | | S | | **S** | **22 20 37.9** | **+2.6** |
| NCK | **Nalchik** | **21.55** | **297** | ⇑iP | | **P** | **22 16 52.3** | **+0.6** |
| NCK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| KBZ | **Khabaz** | **22.09** | **298** | P | | **P** | **22 16 56.8** | **-0.1** |
| | comp=Z,1.4nm,0.7s,baz=137,slow=9.3,SNR=4.1 | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| BELG | **Belogornoye** | **22.54** | **322** | ⇑*i*P | | **P** | **22 17 01.6** | **+0.6** |
| BELG | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| KNGR | **Kungurtug, Tuv** | **24.09** | **46** | ⇓*e*P | | **P** | **22 17 18.2** | **+3.0** |
| KNGR | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| RAYN | **Ar Rayn** | **24.96** | **246** | P | | **P** | **22 17 23.2** | **-0.1** |
| RAYN | | | | IAmb | IAmb | | 22 17 25.6 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| RAYN | **Ar Rayn** | **24.96** | **246** | P | | **P** | **22 17 23.3** | **-0.1** |
| RAYN | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| KIRV | **Kirov** | **26.00** | **335** | *c* iP | | **P** | **22 17 32.9** | **+0.7** |
| ANN | **Anapa** | **26.13** | **299** | *e*P | | **P** | **22 17 33.7** | **+0.2** |
| ANN | | | | *e**PP | | **pP** | **22 18 15.9** | **+2.1** |
| ANN | | | | *e*S | | **S** | **22 21 49.7** | **-0.3** |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,29nm,0.9s | | | | | | | |
| TNCH | **TengChong** | **26.73** | **107** | P | | **P** | **22 17 40.9** | **+1.6** |
| TNCH | | | | pP | pP | | 22 18 23.3 | +2.5 |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| PZH | **PanZhiHua** | **28.50** | **101** | P | | **P** | **22 17 56.4** | **+1.4** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,180nm,5.3s | | | | | | | |
| SONM | **Songino Array** | **28.82** | **55** | P | | **P** | **22 17 57.2** | **-0.3** |
| | comp=Z,1.3nm,0.7s,baz=258,slow=9.9,SNR=7.1 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| BR131 | **Keskin Array S** | **28.89** | **288** | P | | **P** | **22 17 59.0** | **+0.7** |
| BR131 | **Keskin Array S** | **28.89** | **288** | ⇓*e*P | | **P** | **22 17 59.0** | **+0.7** |
| BRTR | **Keskin Array B** | **28.89** | **288** | P | | **P** | **22 17 58.4** | **+0.1** |
| | comp=Z,0.6nm,0.6s,baz=97,slow=9.8,SNR=6.3 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| ULN | **Ulaanbaatar** | **29.26** | **56** | ⇓*e*P | | **P** | **22 18 03.6** | **+2.1** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| CMAR | **Chiang Mai Arr** | **30.96** | **118** | P | | **P** | **22 18 15.5** | **-1.1** |
| | comp=Z,1.3nm,0.3s,baz=294,slow=7.8,SNR=7.0 | | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | | |
| CMAR | **Chiang Mai Arr** | **30.96** | **118** | *i* P | | **P** | **22 18 17.8** | **+1.2** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| PHRA | **Phrae** | **31.86** | **116** | P | | **P** | **22 18 25.1** | **+0.7** |
| ELL | **Elmali** | **32.24** | **283** | P | | **P** | **22 18 27.8** | **+0.1** |
| ELL | **Elmali** | **32.24** | **283** | P | | **P** | **22 18 27.8** | **+0.1** |
| ELL | | | | pmax | pmax | | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| HHC | **Hu-ho-hao-te** | **32.31** | **69** | ⇓*i*P | | **P** | **22 18 30.0** | **+1.7** |
| HHC | | | | pP | pP | | 22 19 13.3 | +2.6 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,110nm,4.2s | | | | | | | |
| AKASG | **Malin Array Be** | **32.50** | **309** | P | | **P** | **22 18 28.5** | **-1.1** |
| | comp=Z,1.0nm,0.6s,baz=83,slow=7.2,SNR=2.4 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| MNK | **Minsk** | **34.10** | **315** | *i* P | | **P** | **22 18 43.1** | **-0.3** |
| | comp=E,12nm,1.0s | | | | | | | |
| MNK | | | | *i* P | | **P** | **22 18 43.1** | **-0.3** |
| | comp=N,14nm,1.2s | | | | | | | |
| MNK | | | | *i* P | | **P** | **22 18 43.1** | **-0.3** |
| | comp=Z,4.0nm,0.8s,baz=104 | | | | | | | |
| MNK | | | | *i* pP | | **pP** | **22 19 26.0** | **+1.1** |
| MNK | | | | *i* PP | | **PP** | **22 20 04.8** | **-0.1** |
| MNK | | | | *i* S | | **S** | **22 23 53.6** | **-0.5** |
| MNK | | | | *i* sS | | **sS** | **22 25 09.9** | **+0.8** |
| MNK | | | | *i* SS | | **SS** | **22 26 25.4** | **-1.8** |
| MNK | | | | *i* LRM | | MLR | 22 33 56.1 | |
| | comp=Z,21nm,15.1s | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 22 34 09.2 | |
| | comp=N,34nm,19.4s | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 22 34 44.0 | |
| | comp=E,30nm,14.8s | | | | | | | |
| MNK | **Minsk** | **34.10** | **315** | *i* P | | **P** | **22 18 43.1** | **-0.3** |
| MNK | | | | *i* *PP | | **pP** | **22 19 25.9** | **+1.1** |
| MNK | | | | *i* | | | 22 20 04.7 | |
| MNK | | | | *i* S | | **S** | **22 23 53.6** | **-0.5** |
| MNK | | | | *i* *SS | | **sS** | **22 25 09.8** | **+0.8** |
| MNK | | | | pmax | pmax | | | |
| | comp=E,12nm,1.0s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,14nm,1.2s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,21nm,15.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,34nm,19.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,30nm,15.0s | | | | | | | |
| VALR | **Valaam** | **35.03** | **328** | ⇓*e*P | | **P** | **22 18 52.3** | **+1.0** |
| VALR | | | | pmax | pmax | | | |
| | comp=Z,47nm,1.2s | | | | | | | |
| FINES | **FINESS Array B** | **37.17** | **326** | P | | **P** | **22 19 09.4** | **0.0** |
| | comp=Z,3.0nm,0.7s,baz=101,slow=9.9,SNR=11 | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| FINES | **FINESS Array B** | **37.17** | **326** | *i* P | | **P** | **22 19 10.1** | **+0.7** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| CRVS | **Cervenica-Dubn** | **37.34** | **305** | *e*P | | **P** | **22 19 10.9** | **-0.2** |
| CRVS | **Cervenica-Dubn** | **37.34** | **305** | *e*P | | **P** | **22 19 10.9** | **-0.2** |
| ARCES | **ARCESS Array B** | **40.93** | **338** | P | | **P** | **22 19 40.5** | **0.0** |
| | comp=Z,4.2nm,0.6s,baz=115,slow=8.6,SNR=28 | | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | | |
| ZEA | **Zeya** | **42.50** | **47** | *e*P | | **P** | **22 19 57.1** | **+3.7** |
| HEH | **HeiHe** | **42.71** | **53** | *e*P | | **P** | **22 19 57.0** | **+1.8** |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| HFS | **Hagfors** | **42.72** | **322** | P | | **P** | **22 19 54.2** | **-0.9** |
| | comp=Z,1.6nm,0.5s,baz=108,slow=9.5,SNR=7.8 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| NC303 | **NORSAR Array S** | **43.98** | **323** | P | | **P** | **22 20 05.4** | **+0.2** |
| NB2 | **NORSAR Subarra** | **44.04** | **323** | P | | **P** | **22 20 05.0** | **-0.7** |
| | comp=Z,2.7nm,0.7s,baz=97,slow=7.9 | | | | | | | |
| NOA | **NORSAR Array B** | **44.04** | **323** | P | | **P** | **22 20 04.8** | **-0.9** |
| | comp=Z,3.7nm,1.0s,baz=96,slow=7.8,SNR=9.5 | | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| NBO00 | **NORSAR Array S** | **44.25** | **323** | P | | **P** | **22 20 07.0** | **-0.4** |
| NBO00 | | | | IAmb | IAmb | | 22 20 31.0 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| NC204 | **NORSAR Array S** | **44.28** | **323** | P | | **P** | **22 20 07.6** | **0.0** |
| YAK | **Yakutsk** | **44.31** | **36** | *de*P | | **P** | **22 20 09.2** | **+1.5** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| KSRS | **Korea Array** | **45.43** | **71** | P | | **P** | **22 20 16.6** | **-0.3** |
| | comp=Z,0.8nm,0.4s,baz=273,slow=7.8,SNR=4.2 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| KLR | **Kul'dur** | **45.62** | **54** | P | | **P** | **22 20 17.1** | **-1.2** |
| | comp=Z,2.1nm,0.5s,baz=276,slow=7.8,SNR=6.6 | | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| KLR | **Kul'dur** | **45.62** | **54** | ⇓*i*P | | **P** | **22 20 19.6** | **+1.4** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,14nm,2.2s | | | | | | | |
| KMBO | **Kilima Mbogo** | **48.40** | **227** | P | | **P** | **22 20 40.3** | **-0.1** |
| | comp=Z,1.5nm,0.5s,baz=35,slow=15,SNR=6.4 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| KMBO | **Kilima Mbogo** | **48.40** | **227** | *i* P | | **P** | **22 20 42.2** | **+1.8** |
| KMBO | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| MJAR | **Matsushiro Arr** | **53.49** | **68** | P | | **P** | **22 21 17.9** | **0.0** |
| | comp=Z,1.4nm,0.4s,baz=256,slow=2.7,SNR=3.4 | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| SEY | **Seymchan** | **54.75** | **34** | ⇓*e*P | | **P** | **22 21 27.8** | **+1.3** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | |
| ESDC | **Sonseca Array** | **56.95** | **298** | P | | **P** | **22 21 41.4** | **-1.2** |
| | comp=Z,0.6nm,1.0s,baz=68,slow=8.6,SNR=4.6 | | | | | | | |
| | comp=Z,0.6nm,1.0s | | | | | | | |
| TORD | **Torodi Ar. Bea** | **65.14** | **268** | P | | **P** | **22 22 35.6** | **-2.3** |
| | comp=Z,1.9nm,0.6s,baz=41,slow=5.9,SNR=27 | | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| COLA | **College** | **74.64** | **16** | *de*P | | **P** | **22 23 35.6** | **+0.7** |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| G29M | **Pine Creek** | **74.67** | **11** | P | | **P** | **22 23 36.1** | **+1.0** |
| M16K | **Timber Creek** | **74.87** | **22** | P | | **P** | **22 23 37.2** | **+0.9** |
| M16K | | | | IAmb | IAmb | | 22 23 40.1 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| G30M | **tAoh Zraii Nji** | **74.88** | **10** | P | | **P** | **22 23 36.6** | **+0.3** |
| G30M | | | | IAmb | IAmb | | 22 23 38.1 | |
| | comp=Z,5.7nm,1.0s | | | | | | | |
| ILAR | **Eielson Array** | **74.94** | **16** | P | | **P** | **22 23 35.9** | **-0.8** |
| ILAR | **Eielson Array** | **74.94** | **16** | P | | **P** | **22 23 36.0** | **-0.6** |
| | comp=Z,1.3nm,0.8s,baz=319,slow=4.9,SNR=13 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| M17K | **Holitna River** | **75.04** | **22** | P | | **P** | **22 23 38.6** | **+1.3** |
| M17K | | | | IAmb | IAmb | | 22 24 07.3 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| G31M | **Satah River** | **75.21** | **10** | P | | **P** | **22 23 38.6** | **+0.4** |
| G31M | | | | IAmb | IAmb | | 22 23 47.4 | |
| | comp=Z,7.7nm,1.1s | | | | | | | |
| H29M | **Whitestone** | **75.26** | **12** | P | | **P** | **22 23 39.3** | **+0.8** |
| H29M | | | | IAmb | IAmb | | 22 23 40.0 | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| RND | **Reindeer** | **75.67** | **17** | P | | **P** | **22 23 40.8** | **-0.2** |
| RND | **Reindeer** | **75.67** | **17** | P | | **P** | **22 23 40.8** | **-0.2** |
| RND | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| I28M | **Miner Creek** | **75.70** | **13** | P | | **P** | **22 23 41.1** | **0.0** |
| KNRA | **Kununurra** | **75.71** | **122** | P | | **P** | **22 23 41.0** | **-0.8** |
| N17K | **Nushagak Hills** | **75.80** | **22** | P | | **P** | **22 23 42.4** | **+0.8** |
| N17K | | | | IAmb | IAmb | | 22 24 25.4 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| J26L | **Joseph Creek** | **75.87** | **14** | P | | **P** | **22 23 42.5** | **+0.4** |
| N18K | **Kilae Creek** | **76.07** | **21** | P | | **P** | **22 23 42.8** | **-0.4** |
| N18K | | | | IAmb | IAmb | | 22 24 17.3 | |
| | comp=Z,10nm,1.5s | | | | | | | |
| SKT | **Skwentna** | **76.21** | **19** | P | | **P** | **22 23 43.7** | **-0.2** |
| SCRK | **Sand Creek** | **76.25** | **15** | P | | **P** | **22 23 44.3** | **0.0** |
| O16K | **Kokwok River B** | **76.26** | **23** | P | | **P** | **22 23 44.9** | **+0.7** |
| O16K | | | | IAmb | IAmb | | 22 23 46.6 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| DHY | **Denali Highway** | **76.30** | **17** | P | | **P** | **22 23 44.5** | **-0.1** |
| DHY | | | | IAmb | IAmb | | 22 23 46.0 | |
| | comp=Z,3.9nm,0.7s | | | | | | | |
| I30M | **Mount Dempster** | **76.50** | **11** | P | | **P** | **22 23 46.1** | **+0.5** |
| I30M | | | | IAmb | IAmb | | 22 23 46.7 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| K27K | **Chicken** | **76.59** | **14** | P | | **P** | **22 23 46.5** | **+0.5** |
| O18K | **Koktuh Hills** | **76.94** | **22** | P | | **P** | **22 23 48.7** | **+0.6** |
| O18K | | | | IAmb | IAmb | | 22 24 16.2 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| J30M | **Hart River** | **77.11** | **11** | P | | **P** | **22 23 48.5** | **-0.6** |
| SML | **Sawmill** | **77.17** | **18** | P | | **P** | **22 23 49.3** | **-0.1** |
| SML | | | | IAmb | IAmb | | 22 23 50.0 | |
| | comp=Z,5.9nm,0.6s | | | | | | | |
| BOSA | **Boshof** | **77.37** | **220** | P | | **P** | **22 23 50.4** | **-0.5** |
| BOSA | | | | IAmb | IAmb | | 22 24 06.4 | |
| | comp=Z,10nm,1.4s | | | | | | | |
| BOSA | **Boshof** | **77.37** | **220** | P | | **P** | **22 23 49.4** | **-1.5** |
| | comp=Z,2.5nm,0.8s,baz=30,slow=2.9,SNR=5.3 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| BOSA | **Boshof** | **77.37** | **220** | P | | **P** | **22 23 50.4** | **-0.5** |
| BOSA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| SCM | **Sheep Creek Mo** | **77.39** | **17** | P | | **P** | **22 23 50.3** | **-0.3** |
| SCM | | | | IAmb | IAmb | | 22 23 51.4 | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| SCM | **Sheep Creek Mo** | **77.39** | **17** | P | | **P** | **22 23 50.3** | **-0.3** |
| SCM | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| M24K | **Tolsona, Glenn** | **77.42** | **17** | P | | **P** | **22 23 51.5** | **+0.8** |
| BCAR | **Beaver Creek A** | **77.52** | **14** | | | **P** | **22 23 52.2** | **+0.9** |
| K29M | **Barlow Dome** | **77.59** | **12** | P | | **P** | **22 23 51.9** | **+0.1** |
| K29M | | | | IAmb | IAmb | | 22 23 53.1 | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| M27K | **Edge Creek, AK** | **78.14** | **15** | P | | **P** | **22 23 55.3** | **+0.5** |
| M27K | | | | IAmb | IAmb | | 22 23 56.5 | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| KDAK | **Kodiak Island** | **79.42** | **22** | P | | **P** | **22 24 01.0** | **-0.7** |
| KDAK | **Kodiak Island** | **79.42** | **22** | P | | **P** | **22 24 01.0** | **-0.7** |
| KDAK | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.5s | | | | | | | |
| YKA | **Yellowknife Ar** | **81.28** | **2** | P | | **P** | **22 24 11.1** | **-0.3** |
| | comp=Z,1.8nm,0.7s,baz=345,slow=5.5,SNR=7.0 | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| YKA | **Yellowknife Ar** | **81.28** | **2** | *i* P | | **P** | **22 24 11.6** | **+0.1** |
| YKA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| P33M | **Teslin, Yukon** | **81.78** | **11** | P | | **P** | **22 24 13.7** | **-0.6** |
| P33M | | | | IAmb | IAmb | | 22 24 15.5 | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| WB0 | **Warramunga Arr** | **82.40** | **121** | P | | **P** | **22 24 16.2** | **-1.8** |
| WRA | **Warramunga Arr** | **82.48** | **121** | P | | **P** | **22 24 16.5** | **-1.9** |
| | comp=Z,2.0nm,0.8s,baz=321,slow=4.7,SNR=19 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| WB2 | **Warramunga Arr** | **82.49** | **121** | P | | **P** | **22 24 17.1** | **-1.3** |
| WB2 | | | | IAmb | IAmb | | 22 24 56.7 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| R33M | **Jennings River** | **82.85** | **11** | P | | **P** | **22 24 19.7** | **-0.2** |
| Q32M | **Nakina River** | **83.06** | **12** | P | | **P** | **22 24 21.8** | **+0.8** |
| Q32M | | | | IAmb | IAmb | | 22 25 03.0 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| ASAR | **Alice Springs** | **84.73** | **124** | P | | **P** | **22 24 28.7** | **-1.1** |
| ASAR | **Alice Springs** | **84.73** | **124** | P | | **P** | **22 24 27.6** | **-2.2** |
| | comp=Z,1.6nm,0.6s,baz=313,slow=5.1,SNR=20 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| ASAR | **Alice Springs** | **84.73** | **124** | P | | **P** | **22 24 28.7** | **-1.1** |
| COEN | **Coen** | **84.94** | **111** | P | | **P** | **22 24 29.2** | **-1.7** |
| FORT | **Forrest** | **86.08** | **133** | P | | **P** | **22 24 35.2** | **-1.0** |
| QSPA | **South Pole Qui** | **126.29** | **180** | PKP | | **PKPdf** | **22 30 54.0** | **-1.9** |
| | comp=Z,1.3nm,1.0s,baz=271,slow=4.0,SNR=6.3 | | | | | | | |

*IDC **23** 22:35:55.3±1.9, 9.°35S×76.°09W, h56km±18km, mb3.8/12, mbtmp4.2/18, ML3.5/6, MS3.4/8, Error ellipse: s-maj=24.1km s-min=12.0km az=66.0*

*NEIC **23** 22:35:56.2±1.2, 9.°35S±0.°07×76.°03W±0.°08, h59km±10km, mb4.5/57, Error ellipse: s-maj=12.1km s-min=9.2km az=124.0*

*VAO **23** 22:35:58.2±0.7, 9.°16S×75.°63W, h42km±8km, mb4.3*

**ISC 23 22:35:53.6**±0.4, **9.°26S**±0.°05×**75.°95W**±0.°05, **h35**km, **n109,** σ1**832**/111, **mb4.5**/39, **MS3.6**/3, **3C**, **Central Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NNA | **Nana** | **2.85** | **198** | Pn | **Pn** | **22 36 37.3** | **+0.6** |
| NNA | | | | Sn | **Sn** | **22 37 11.7** | **+1.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **T25A** | **Trinidad** | **53.31** | **332** | P | **P** | **22 45 09.6** | **0.0** |
| T25A | | | | IAmb | IAmb | 22 45 10.7 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **54.32** | **331** | P | **P** | **22 45 16.0** | **-1.0** |
| SDCO | | | | IAmb | IAmb | 22 45 17.9 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **54.93** | **324** | P | **P** | **22 45 20.4** | **-1.0** |
| **Q24A** | **Divide** | **55.13** | **332** | P | **P** | **22 45 21.5** | **-1.4** |
| Q24A | | | | IAmb | IAmb | 22 45 23.6 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **U15A** | **North Rim** | **56.85** | **325** | P | **P** | **22 45 34.9** | **-0.4** |
| U15A | | | | IAmb | IAmb | 22 45 36.6 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **HMU** | **Henry Mountain** | **57.10** | **327** | P | **P** | **22 45 36.8** | **-0.2** |
| HMU | | | | IAmb | IAmb | 22 45 38.1 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KNB** | **Kanab** | **57.57** | **325** | P | **P** | **22 45 40.5** | **+0.3** |
| KNB | | | | IAmb | IAmb | 22 45 41.7 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **LCMT** | **Little Creek M** | **57.81** | **325** | P | **P** | **22 45 41.9** | **+0.1** |
| LCMT | | | | IAmb | IAmb | 22 45 43.1 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **V12A** | **Nelson** | **57.85** | **323** | P | **P** | **22 45 41.8** | **-0.3** |
| **SRU** | **San Rafael Swe** | **57.86** | **329** | P | **P** | **22 45 41.5** | **-0.7** |
| SRU | | | | IAmb | IAmb | 22 45 42.9 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **MVU** | **Marysvale** | **58.30** | **327** | P | **P** | **22 45 45.2** | **-0.2** |
| **RDMU** | **Red Mountain** | **58.49** | **330** | P | **P** | **22 45 46.0** | **-0.7** |
| **PSUT** | **Pine Spring** | **59.22** | **326** | P | **P** | **22 45 51.8** | **+0.1** |
| PSUT | | | | IAmb | IAmb | 22 45 52.9 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **GWY** | **Greenwater Val** | **59.25** | **322** | P | **P** | **22 45 51.6** | **-0.2** |
| GWY | | | | IAmb | IAmb | 22 45 52.6 | |
| | comp=Z,3.1nm,1.1s | | | | | | |
| **WCT** | **Wildcat Mounta** | **59.63** | **323** | P | **P** | **22 45 53.9** | **-0.5** |
| **SPR3** | **Spring Creek 3** | **59.81** | **326** | P | **P** | **22 45 55.0** | **-0.9** |
| SPR3 | | | | IAmb | IAmb | 22 45 56.6 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **TCUT** | **Toone Canyon** | **59.81** | **330** | P | **P** | **22 45 55.6** | **-0.2** |
| **DUG** | **Dugway, Tooele** | **59.85** | **328** | P | **P** | **22 45 56.0** | **+0.1** |
| DUG | | | | IAmb | IAmb | 22 45 57.1 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **R11B** | **Troy Canyon, C** | **60.07** | **325** | P | **P** | **22 45 57.6** | **+0.1** |
| **PDAR** | **Pinedale Array** | **60.18** | **332** | P | **P** | **22 45 56.8** | **-1.5** |
| **PDAR** | **Pinedale Array** | **60.18** | **332** | P | **P** | **22 45 57.2** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=133,slow=10,SNR=8.3 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **HWUT** | **Hardware Ranch** | **60.26** | **330** | P | **P** | **22 45 57.7** | **-1.1** |
| **SPUT** | **South Promonto** | **60.48** | **329** | P | **P** | **22 46 00.3** | **0.0** |
| SPUT | | | | IAmb | IAmb | 22 46 01.6 | |
| | comp=Z,3.7nm,1.1s | | | | | | |
| **BGU** | **Big Grassy Mou** | **60.50** | **328** | P | **P** | **22 46 00.2** | **-0.2** |
| **FXWY** | **Fox Creek** | **61.54** | **332** | P | **P** | **22 46 06.7** | **-0.8** |
| **ELK** | **Elko** | **61.54** | **327** | P | **P** | **22 46 07.0** | **-0.5** |
| **OMMB** | **Old Mammoth Mi** | **61.59** | **322** | P | **P** | **22 46 08.2** | **+0.2** |
| OMMB | | | | IAmb | IAmb | 22 46 09.1 | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.70** | **323** | P | **P** | **22 46 07.7** | **-1.0** |
| | comp=Z,1.0nm,0.7s,baz=146,slow=7.4,SNR=7.1 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ULM** | **Lac du Bonnet** | **61.76** | **346** | P | **P** | **22 46 07.5** | **-1.0** |
| | comp=Z,4.3nm,0.7s,baz=180,slow=5.5,SNR=5.3 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **YHH** | **Holmes Hill** | **62.34** | **333** | P | **P** | **22 46 12.9** | **0.0** |
| **YHL** | **Hebgen Lake** | **62.54** | **332** | P | **P** | **22 46 14.7** | **+0.5** |
| **MFID** | **Camas Ranch** | **63.73** | **329** | P | **P** | **22 46 21.9** | **-0.1** |
| MFID | | | | IAmb | IAmb | 22 46 23.1 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **74.36** | **161** | ⇑P | **P** | **22 47 27.0** | **-0.3** |
| | comp=Z,3.3nm,0.6s,baz=294,slow=5.9 | | | | | | |
| **SNAA** | **Sanae** | **75.97** | **162** | ⇑P | **P** | **22 47 36.0** | **-0.8** |
| | comp=Z,48nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **75.97** | **162** | P | **P** | **22 47 36.3** | **-0.4** |
| | comp=Z,3.5nm,0.8s,baz=274,slow=5.1,SNR=17 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.50** | **343** | P | **P** | **22 47 44.1** | **-1.2** |
| | comp=Z,0.6nm,0.6s,baz=142,slow=5.1,SNR=3.4 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **77.69** | **162** | ⇑P | **P** | **22 47 46.3** | **-0.2** |
| | comp=Z,261nm,0.8s | | | | | | |
| **MDT** | **Midelt** | **79.64** | **54** | LR | LR | 23 22 08.2 | |
| | comp=Z,32nm,18.3s,baz=342,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.23** | **75** | P | **P** | **22 48 01.4** | **+0.1** |
| | comp=Z,1.3nm,0.7s,baz=271,slow=4.1,SNR=11 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **80.86** | **180** | P | **P** | **22 48 03.0** | **-0.9** |
| | comp=Z,3.9nm,0.9s,baz=167,slow=1.5,SNR=9.7 | | | | | | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **ESDC** | **Sonseca Array** | **82.30** | **48** | P | **P** | **22 48 12.9** | **+1.1** |
| | comp=Z,0.7nm,1.0s,baz=242,slow=6.2,SNR=4.7 | | | | | | |
| | comp=Z,0.7nm,1.0s | | | | | | |
| **M29M** | **Somme Creek** | **85.96** | **336** | P | **P** | **22 48 30.1** | **0.0** |
| M29M | | | | IAmb | IAmb | 22 48 30.6 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **I30M** | **Mount Dempster** | **86.54** | **338** | P | **P** | **22 48 32.8** | **0.0** |
| I30M | | | | IAmb | IAmb | 22 48 33.5 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **86.70** | **340** | P | **P** | **22 48 32.6** | **-0.8** |
| G31M | | | | IAmb | IAmb | 22 48 43.2 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **BCAR** | **Beaver Creek A** | **87.61** | **335** | P | **P** | **22 48 37.6** | **-0.5** |
| **L27K** | **Beaver Creek,** | **87.62** | **335** | P | **P** | **22 48 37.7** | **-0.3** |
| L27K | | | | IAmb | IAmb | 22 48 38.9 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **87.75** | **339** | P | **P** | **22 48 38.0** | **-0.6** |
| **I28M** | **Miner Creek** | **87.95** | **338** | P | **P** | **22 48 39.2** | **-0.5** |
| I28M | | | | IAmb | IAmb | 22 48 53.9 | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **87.97** | **340** | P | **P** | **22 48 39.3** | **-0.3** |
| **K27K** | **Chicken** | **88.14** | **336** | P | **P** | **22 48 40.2** | **-0.3** |
| K27K | | | | IAmb | IAmb | 22 48 42.2 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **88.65** | **341** | P | **P** | **22 48 42.7** | **-0.1** |
| **J26L** | **Joseph Creek** | **88.93** | **336** | P | **P** | **22 48 44.1** | **-0.2** |
| J26L | | | | IAmb | IAmb | 22 48 44.8 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **G27K** | **Doyon Strip** | **89.19** | **339** | P | **P** | **22 48 45.1** | **-0.3** |
| G27K | | | | IAmb | IAmb | 22 48 45.3 | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **J25K** | **Salcha River,** | **89.69** | **336** | P | **P** | **22 48 47.5** | **-0.3** |
| **ILAR** | **Eielson Array** | **90.36** | **336** | P | **P** | **22 48 50.3** | **-0.5** |
| | comp=Z,0.5nm,0.8s,baz=93,slow=3.2,SNR=4.4 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **RND** | **Reindeer** | **90.69** | **335** | P | **P** | **22 48 52.1** | **-0.4** |
| RND | | | | IAmb | IAmb | 22 48 53.9 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **91.48** | **336** | P | **P** | **22 48 55.8** | **-0.2** |
| I23K | | | | IAmb | IAmb | 22 48 57.7 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **Q19K** | **Cape Douglas,** | **91.58** | **330** | P | **P** | **22 48 56.9** | **+0.2** |
| **BPAW** | **Bear Paw Mtn.** | **91.81** | **335** | P | **P** | **22 48 56.5** | **-1.1** |
| BPAW | | | | IAmb | IAmb | 22 49 07.9 | |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **128.58** | **25** | PKP | **PKPdf** | **22 54 56.2** | **-0.7** |
| | comp=Z,0.3nm,0.5s,baz=258,slow=5.9,SNR=3.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **132.83** | **15** | PKP | **PKPdf** | **22 55 04.2** | **-0.7** |
| | comp=Z,1.4nm,0.8s,baz=259,slow=3.0,SNR=6.8 | | | | | | |
| **ASAR** | **Alice Springs** | **136.16** | **221** | PKP | **PKPdf** | **22 55 10.0** | **-2.2** |
| | comp=Z,1.6nm,0.8s,baz=135,slow=1.8,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **138.39** | **226** | PKP | **PKPdf** | **22 55 14.9** | **-1.5** |
| | comp=Z,1.6nm,0.6s,baz=127,slow=1.9,SNR=21 | | | | | | |
| **KSRS** | **Korea Array** | **144.60** | **326** | PKP | **PKPab** | **22 55 24.6** | **-0.9** |
| | comp=Z,4.3nm,0.7s,baz=58,slow=3.7,SNR=10.0 | | | | | | |

*IDC* ***23*** *22:36:04.0±9.1, 18°57S×177°.86W, h561km±100km, mb3.2/5, mbtmp4.2/5, Error ellipse: s-maj=45.7km s-min=34.2km az=43.0*

**ISC 23 22:36:03.4±1.2, 18°.5S±0°.3×177°.9W±0°.2, h557km, n6, σ0§44/7, mb3.9/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **STKA** | **Stephens Creek** | **38.80** | **242** | P | | **P** | **22 42 41.4** | **+0.3** |
| | 2.8nm,0.7s,baz=92,slow=9.5,SNR=5.5 | | | | | | | |
| | 2.8nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.04** | **260** | P | | **P** | **22 43 30.1** | **-0.2** |
| | 2.5nm,0.6s,baz=96,slow=7.8,SNR=31 | | | | | | | |
| | 2.5nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.13** | **255** | P | | **P** | **22 43 31.1** | **+0.2** |
| | 4.7nm,0.7s,baz=86,slow=8.5,SNR=39 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **22 44 58.9** | **-0.7** |
| | 0.4nm,0.6s,baz=93,slow=3.5,SNR=3.1 | | | | | | | |
| | 4.7nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.54** | **180** | P | | **P** | **22 46 28.2** | **-0.1** |
| | 1.0nm,0.7s,baz=45,slow=2.9,SNR=7.6 | | | | | | | |
| | 1.0nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.88** | **57** | P | | **P** | **22 47 45.3** | **+0.2** |
| | 0.7nm,0.7s,baz=231,slow=6.0,SNR=3.6 | | | | | | | |
| | 0.7nm,0.7s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.91** | **302** | PKPbc | | **PKPbc** | **22 54 44.3** | **0.0** |
| | 5.9nm,1.0s,baz=79,slow=7.6,SNR=2.1 | | | | | | | |

*SNET* ***23*** *22:42:16.5±1.6, 12°.42N×89°.58W, h6km±32km, ML3.9*
*IDC* ***23*** *22:42:17.1±1.5, 13°.31N×88°.58W, h0km, mb3.9/6, mbtmp3.8/8, ML2.9/3, MS3.2/8, Error ellipse: s-maj=62.6km s-min=16.7km az=38.0*
*CATAC* ***23*** *22:42:18.3±0.9, 12°.50N×89°.49W, h11km±7km, ML4.1*
*NEIC* ***23*** *22:42:23.2±2.3, 12°.87N±0°.08×89°.23W±0°.07, h35km±2km, mb4.4/39, Error ellipse: s-maj=15.5km s-min=9.0km az=220.0*
*GCG* ***23*** *22:42:46.8±0.3, 14°.86N×90°.45W, h50km, MD4.1*

**ISC 23 22:42:15.0±1.8, 12°.33N±0°.05×89°.38W±0°.05, h15km±10km, n104, σ1§34/104, mb4.4/27, MS3.2/8, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **LALI** | **Alcalde de L** | **1.16** | **3** | *eP* | | **Pb** | **22 42 37.4** | **+0.5** |
| LALI | | | | *eS* | | **Sn** | **22 42 52.7** | **+0.3** |
| **LALI** | **Alcalde de L** | **1.16** | **3** | *i P* | | **Pb** | **22 42 37.3** | **+0.5** |
| LALI | | | | IAML | | | 22 42 37.8 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **PANCS** | **Alcalde de** | **1.29** | **9** | *i P* | | **Pb** | **22 42 39.3** | **+0.1** |
| PANCS | | | | *i S* | | **Sn** | **22 42 55.9** | **+0.1** |
| PANCS | | | | IAML | | | 22 43 01.6 | |
| | comp=Z,5µm,1.0s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.32** | **357** | *eP* | | **Pn** | **22 42 39.4** | **+0.2** |
| JAYA | | | | *eS* | | **Sn** | **22 42 55.0** | **-1.7** |
| **JAYA** | **Jayaque - finc** | **1.32** | **357** | *i P* | | **Pn** | **22 42 39.6** | **+0.4** |
| JAYA | | | | *i S* | | **Sn** | **22 42 55.8** | **-0.9** |
| JAYA | | | | IAML | | | 22 42 56.7 | |
| | comp=Z,8µm,1.0s | | | | | | | |
| **LFRS** | **El Faro** | **1.33** | **14** | *eP* | | **Pn** | **22 42 39.6** | **+0.4** |
| **LOMA** | **Loma Larga** | **1.33** | **9** | *i P* | | **Pn** | **22 42 39.8** | **+0.6** |
| LOMA | | | | IAML | | | 22 43 01.4 | |
| | comp=Z,5µm,1.0s | | | | | | | |
| **TECO** | **Alcaldia de Te** | **1.34** | **26** | *i P* | | **Pb** | **22 42 40.3** | **+0.4** |
| TECO | | | | *i S* | | **Sg** | **22 42 58.1** | **-0.3** |
| TECO | | | | IAML | | | 22 43 02.7 | |
| | comp=Z,1µm,1.0s | | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.36** | **6** | | | **Pn** | **22 42 39.9** | **+0.3** |
| **COEG** | **Centro de Oper** | **1.38** | **21** | *eP* | | **Pb** | **22 42 40.6** | **0.0** |
| **COEG** | **Centro de Oper** | **1.38** | **21** | *i P* | | **Pb** | **22 42 41.4** | **+0.8** |
| COEG | | | | IAML | | | 22 43 10.6 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **1.38** | **3** | *i P* | | **Pb** | **22 42 40.8** | **+0.1** |
| PMON | | | | IAML | | | 22 43 01.2 | |
| | comp=Z,6µm,1.0s | | | | | | | |
| **BQQS** | **Boqueron** | **1.41** | **4** | *eP* | | **Pn** | **22 42 41.0** | **+0.7** |
| **UESV** | **Universidad de** | **1.43** | **24** | *i P* | | **Pb** | **22 42 41.8** | **+0.4** |
| UESV | | | | *i S* | | **Sb** | **22 43 00.0** | **+0.5** |
| UESV | | | | IAML | | | 22 43 06.0 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **JUCU** | **Jucuarįn** | **1.44** | **50** | *i P* | | **Pg** | **22 42 43.0** | **+0.2** |
| JUCU | | | | IAML | | | 22 43 13.4 | |
| | comp=Z,880nm,1.0s | | | | | | | |
| **CEDA** | **San Andres** | **1.47** | **360** | *eP* | | **Pn** | **22 42 41.6** | **+0.5** |
| **SCLA** | **Alcaldia de Sa** | **1.51** | **25** | *i P* | | **Pb** | **22 42 43.1** | **+0.3** |
| SCLA | | | | IAML | | | 22 43 24.2 | |
| | comp=Z,680nm,1.0s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.51** | **351** | *eP* | | **Pn** | **22 42 41.7** | **-0.2** |
| CEVE | | | | IAML | | | 22 43 07.3 | |
| | comp=Z,3µm,0.2s | | | | | | | |
| **CEVE** | **Cerro Verde** | **1.51** | **351** | *i P* | | **Pn** | **22 42 42.2** | **+0.3** |
| CEVE | | | | IAML | | | 22 43 11.2 | |
| | comp=Z,5µm,1.0s | | | | | | | |
| **RTR** | **El Retiro** | **1.58** | **351** | *eP* | | **Pn** | **22 42 42.8** | **0.0** |
| **NUBE** | **Las Nubes** | **1.61** | **346** | *eP* | | **Pn** | **22 42 42.9** | **-0.3** |
| **NUBE** | **Las Nubes** | **1.61** | **346** | *i P* | | **Pn** | **22 42 43.1** | **-0.1** |
| NUBE | | | | *i S* | | **Sn** | **22 43 01.1** | **-2.8** |
| NUBE | | | | IAML | | | 22 43 04.3 | |
| | comp=Z,3µm,1.0s | | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.71** | **347** | *i P* | | **Pb** | **22 42 46.0** | **-0.2** |
| LOAL | | | | IAML | | | 22 43 22.5 | |
| | comp=Z,5µm,1.0s | | | | | | | |
| **LCND** | **La Caada** | **1.75** | **56** | IAML | | | 22 43 19.4 | |
| | comp=Z,692nm,0.7s | | | | | | | |
| **LCND** | **La Caada** | **1.75** | **56** | *i P* | | **Pb** | **22 42 48.0** | **+1.0** |
| LCND | | | | IAML | | | 22 43 23.1 | |
| | comp=Z,920nm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **1.78** | **58** | *i P* | | **Pg** | **22 42 49.4** | **+0.1** |
| CNCH | | | | IAML | | | 22 43 21.3 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **LLGN** | **La Laguna** | **1.88** | **13** | *i P* | | **Pb** | **22 42 48.5** | **-0.6** |
| LLGN | | | | IAML | | | 22 43 14.8 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **MTO3** | **Montecristo** | **2.06** | **1** | | | **Pn** | **22 42 50.1** | **+0.7** |
| **MTO3** | **Montecristo** | **2.06** | **1** | *eP* | | **Pn** | **22 42 50.5** | **+1.1** |
| **MTO3** | **Montecristo** | **2.06** | **1** | *i P* | | **Pn** | **22 42 50.3** | **+0.9** |
| MTO3 | | | | IAML | | | 22 42 52.0 | |
| | comp=Z,1µm,1.0s | | | | | | | |
| **ESQI** | **Esquipulas** | **2.22** | **1** | | | **Pn** | **22 42 52.7** | **+1.2** |
| **ESQI** | **Esquipulas** | **2.22** | **1** | *eP* | | **Pn** | **22 42 53.0** | **+1.5** |
| **ESQI** | **Esquipulas** | **2.22** | **1** | *i P* | | **Pn** | **22 42 53.0** | **+1.5** |
| ESQI | | | | IAML | | | 22 43 03.1 | |
| | comp=Z,2µm,1.0s | | | | | | | |
| **CRIN** | **San Cristobal** | **2.31** | **80** | | | **Pb** | **22 42 57.4** | **+0.9** |
| **PKGN** | **Cerro Pekin** | **2.37** | **81** | *i P* | | **Pb** | **22 42 58.7** | **+1.2** |
| PKGN | | | | IAML | | | 22 43 38.2 | |
| | comp=Z,1µm,1.0s | | | | | | | |
| **NBG** | **Las Nubes** | **2.44** | **337** | *i P* | | **Pn** | **22 42 56.8** | **+2.2** |
| **FUG** | **Fuego 3** | **2.54** | **326** | *i P* | | **Pb** | **22 42 59.3** | **-1.2** |
| **CNGN** | **Cerro Negro** | **2.63** | **86** | Pn | | **Pb** | **22 43 02.6** | **+0.7** |
| **TGUH** | **Tegucigalpa,Un** | **2.68** | **50** | | | **Pn** | **22 42 59.5** | **+1.7** |
| **MRL** | **Marmol** | **2.76** | **354** | *i P* | | **Pb** | **22 43 02.3** | **-1.9** |
| **APG** | **El Apazote** | **2.86** | **339** | Pn | | **Pn** | **22 43 00.5** | **0.0** |
| | comp=Z,0.6nm,0.3s,baz=118,slow=10,SNR=17 | | | | | | | |
| APG | | | | | Lg | Lg | 22 43 36.6 | |
| | comp=Z,0.8nm,0.3s,baz=53,slow=20,SNR=4.1 | | | | | | | |
| **RTAL** | **Retalhuleu** | **3.14** | **314** | Pn | | **Pn** | **22 43 07.6** | **+3.6** |
| **BOAB** | **BOACO BROADBAN** | **3.63** | **88** | | | **Pb** | **22 43 15.0** | **-4.0** |
| **PETF** | **Flores** | **4.59** | **354** | | | **Pn** | **22 43 24.6** | **+0.6** |
| **CCIG** | **Comitan** | **4.75** | **326** | | | **Pn** | **22 43 28.9** | **+2.5** |
| **JTS** | **Las Juntas de** | **4.79** | **115** | Pn | | **Pn** | **22 43 28.7** | **+1.9** |
| | comp=Z,0.5nm,0.3s,baz=248,slow=20,SNR=1.8 | | | | | | | |
| JTS | | | | | Lg | Lg | 22 44 41.8 | |
| | comp=Z,1.0nm,0.3s,baz=237,slow=16,SNR=1.5 | | | | | | | |
| | comp=Z,1.9nm,0.2s | | | | | | | |
| **SOCE** | **Pocosol** | **5.05** | **112** | Pn | | **Pb** | **22 43 40.6** | **-2.7** |
| **LCR2** | **La Lucha 2** | **5.87** | **115** | | | Pb | 22 43 51.9 | -5.4 |
| **CMIG** | **Matias Romero** | **7.13** | **312** | Pn | | **Pn** | **22 44 00.9** | **+2.1** |
| | comp=Z,0.8nm,0.3s,baz=132,slow=8.5,SNR=7.1 | | | | | | | |
| CMIG | | | | | Sn | **Sn** | **22 45 17.8** | **-1.9** |
| | comp=Z,0.6nm,0.3s,baz=144,slow=19,SNR=1.2 | | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | | |
| **TLIG** | **Tlapa** | **10.29** | **302** | Pn | | Pn | 22 44 47.5 | +5.2 |
| **JCT** | **Junction City** | **20.48** | **333** | P | | **P** | **22 46 52.7** | **+0.2** |
| **BRDY** | **Brady** | **20.85** | **336** | P | | **P** | **22 46 56.4** | **-0.1** |
| **WHTX** | **Lake Whitney,** | **20.94** | **340** | P | | **P** | **22 46 57.6** | **+0.3** |
| **FW14** | **Alvarado** | **21.23** | **341** | P | | **P** | **22 47 00.5** | **0.0** |
| **TXAR** | **Lajitas Array** | **21.52** | **324** | P | | **P** | **22 47 05.2** | **+1.5** |
| **TXAR** | **Lajitas Array** | **21.52** | **324** | P | | **P** | **22 47 05.9** | **+2.2** |
| | comp=Z,3.0nm,0.6s,baz=136,slow=9.6,SNR=24 | | | | | | | |
| TXAR | | | | | LR | LR | 22 57 34.3 | |
| | comp=Z,22nm,18.1s,baz=49,slow=43 | | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **21.52** | **324** | P | | **P** | **22 47 05.6** | **+1.8** |
| **PLPT** | **Palo Pinto** | **21.98** | **340** | P | | **P** | **22 47 07.7** | **-0.8** |
| PLPT | | | | IAmb | | IAmb | 22 47 09.3 | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **OXF** | **Oxford** | **22.09** | **360** | P | | **P** | **22 47 09.3** | **-0.4** |
| OXF | | | | IAmb | | IAmb | 22 47 11.5 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **FW03** | **Perrin-Whitt E** | **22.10** | **340** | P | | **P** | **22 47 09.2** | **-0.7** |
| FW03 | | | | IAmb | | IAmb | 22 47 10.5 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **ATAH** | **Atahualpa** | **22.20** | **150** | LR | | LR | 22 55 14.6 | |
| | comp=Z,61nm,19.0s,baz=294,slow=34 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **22.29** | **337** | P | | **P** | **22 47 11.6** | **-0.4** |
| ABTX | | | | IAmb | | IAmb | 22 47 14.0 | |
| | comp=Z,7.4nm,0.6s | | | | | | | |
| **SGCY** | **Sterling City** | **22.29** | **333** | P | | **P** | **22 47 11.2** | **-0.9** |
| **MIAR** | **Mount Ida** | **22.45** | **351** | P | | **P** | **22 47 14.2** | **+0.6** |
| MIAR | | | | IAmb | | IAmb | 22 47 17.0 | |
| | comp=Z,9.8nm,0.9s | | | | | | | |
| **UALR** | **University of** | **22.51** | **354** | P | | **P** | **22 47 13.8** | **-0.5** |
| UALR | | | | IAmb | | IAmb | 22 47 17.3 | |
| **WTFS** | **Witchita Falls** | **22.90** | **340** | P | | **P** | **22 47 17.1** | **-1.2** |
| **SN05** | **Snyder 5** | **23.01** | **335** | P | | **P** | **22 47 19.4** | **-0.3** |
| SN05 | | | | IAmb | | IAmb | 22 47 21.3 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **APMT** | **Aspermont** | **23.10** | **337** | P | | **P** | **22 47 19.2** | **-1.2** |
| APMT | | | | IAmb | | IAmb | 22 47 21.0 | |
| | comp=Z,7.9nm,0.6s | | | | | | | |
| **SN07** | **Snyder 07** | **23.20** | **335** | P | | **P** | **22 47 20.3** | **-1.2** |
| SN07 | | | | IAmb | | IAmb | 22 47 23.0 | |
| | comp=Z,6.6nm,0.6s | | | | | | | |
| **VHRN** | **Van Horn** | **23.36** | **324** | P | | **P** | **22 47 24.5** | **+1.2** |
| **POST** | **Post** | **23.44** | **334** | P | | **P** | **22 47 23.1** | **-0.9** |
| POST | | | | IAmb | | IAmb | 22 47 25.6 | |
| | comp=Z,7.6nm,0.5s | | | | | | | |
| **X34A** | **Smith Ranch, M** | **23.47** | **342** | P | | **P** | **22 47 23.9** | **-0.3** |
| X34A | | | | IAmb | | IAmb | 22 47 26.8 | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **23.59** | **354** | P | | **P** | **22 47 25.4** | **+0.1** |
| **LCAR** | **Lake Charles** | **23.70** | **356** | P | | **P** | **22 47 25.9** | **-0.5** |
| **DKNS** | **Dickens** | **23.71** | **335** | P | | **P** | **22 47 27.0** | **+0.3** |
| DKNS | | | | IAmb | | IAmb | 22 47 28.5 | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.78** | **11** | LR | | LR | 22 56 30.4 | |
| | comp=Z,72nm,21.9s,baz=189,slow=38 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **23.89** | **341** | P | | **P** | **22 47 27.0** | **-1.3** |
| WMOK | | | | IAmb | | IAmb | 22 47 28.1 | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **24.37** | **358** | P | | **P** | **22 47 32.5** | **-0.2** |
| PBMO | | | | IAmb | | IAmb | 22 47 34.5 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **T42A** | **Van Buren** | **24.65** | **357** | P | | **P** | **22 47 34.7** | **-0.4** |
| T42A | | | | IAmb | | IAmb | 22 47 37.0 | |
| | comp=Z,6.8nm,0.7s | | | | | | | |
| **SMWD** | **Samnorwood** | **24.73** | **338** | P | | **P** | **22 47 35.8** | **-0.2** |
| **MGMO** | **Mountain Grove** | **24.86** | **355** | P | | **P** | **22 47 38.0** | **+0.8** |
| MGMO | | | | IAmb | | IAmb | 22 47 39.9 | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **CGM3** | **Cape Girardeau** | **24.87** | **359** | P | | **P** | **22 47 37.0** | **-0.2** |
| CGM3 | | | | IAmb | | IAmb | 22 47 38.1 | |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **25.50** | **353** | P | | **P** | **22 47 42.7** | **-0.3** |
| S39A | | | | IAmb | | IAmb | 22 47 43.9 | |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **KAN13** | **South Haven SW** | **25.64** | **345** | P | | **P** | **22 47 43.0** | **-1.1** |
| **CCM** | **Cathedral Cave** | **25.68** | **357** | P | | **P** | **22 47 44.1** | **-0.4** |
| CCM | | | | IAmb | | IAmb | 22 47 46.9 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| **NOKA** | **Waynoka** | **25.69** | **342** | P | | **P** | **22 47 44.4** | **-0.3** |
| **KAN14** | **Manchester OK** | **25.71** | **344** | P | | **P** | **22 47 46.1** | **+1.3** |
| **121A** | **Cookes Peak, D** | **26.26** | **323** | P | | **P** | **22 47 52.0** | **+1.9** |
| **TUC** | **Tucson** | **27.96** | **319** | P | | **P** | **22 48 07.7** | **+2.4** |
| **T25A** | **Trinidad** | **28.15** | **334** | P | | **P** | **22 48 07.3** | **+0.3** |
| T25A | | | | IAmb | | IAmb | 22 48 10.2 | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **32.54** | **315** | LR | | LR | 23 04 29.3 | |
| | comp=Z,60nm,18.6s,baz=120,slow=41 | | | | | | | |
| **SADO** | **Sadowa** | **33.50** | **13** | LR | | LR | 23 02 29.8 | |
| | comp=Z,51nm,19.4s,baz=145,slow=38 | | | | | | | |
| **COWI** | **Conover** | **33.66** | **0** | P | | **P** | **22 48 54.2** | **-1.2** |
| **NVAR** | **Mina Array Bea** | **36.57** | **320** | P | | **P** | **22 49 22.2** | **+1.5** |
| | comp=Z,1.1nm,0.7s,baz=139,slow=7.4,SNR=7.7 | | | | | | | |
| NVAR | | | | | PcP | **PcP** | **22 51 48.6** | **+4.5** |
| | comp=Z,0.5nm,0.6s,baz=112,slow=2.5,SNR=3.9 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **YPP** | **Pitchstone Pla** | **36.77** | **334** | P | | **P** | **22 49 20.6** | **-1.8** |
| **ULM** | **Lac du Bonnet** | **38.19** | **353** | P | | **P** | **22 49 31.2** | **-2.8** |
| | comp=Z,3.1nm,0.5s,baz=176,slow=8.3,SNR=5.2 | | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | | |
| **LVC** | **Limon Verde** | **40.10** | **150** | LR | | LR | 23 06 52.3 | |
| | comp=Z,33nm,20.9s,baz=224,slow=36 | | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | baz=222 | | | | | | | | | | baz=345 | | | | | | | | |
| TWP | | | | | *e*S | | **Sn** | **22 49 53.5 +5.1** | WTK | | | | | S | | **Sb** | **22 50 07.7 +1.7** |
| | baz=222 | | | | | | | | | | baz=345 | | | | | | | | |
| **TWG** | **Pinlang** | **0.42** | **65** | ⇓ | *i*P | | **Pb** | **22 49 42.1 +0.4** | **HGSD** | **Ruisui** | **1.10** | **40** | | P | | **Pb** | **22 49 53.9 +1.0** |
| | baz=70 | | | | | | | | | baz=23 | | | | | | | | |
| TWG | | | | | *i* S | | **Sn** | **22 49 48.7 -0.2** | HGSD | | | | | S | | **Sb** | **22 50 09.0 +2.0** |
| | baz=70 | | | | | | | | | baz=23 | | | | | | | | |
| **TWGBT** | **Beinan** | **0.43** | **66** | | P | | **Pn** | **22 49 42.4 +0.1** | **WDGT** | **Dungji** | **1.11** | **304** | | *e*P | | **Pn** | **22 49 51.6 0.0** |
| **TWGBT** | **Beinan** | **0.43** | **66** | ⇓ | *i*P | | **Pb** | **22 49 42.1 +0.4** | | baz=304 | | | | | | | | |
| | baz=70 | | | | | | | | **SSLB** | **Suanglung** | **1.17** | **13** | | *e*P | | **Pb** | **22 49 53.7 -0.4** |
| TWGBT | | | | | *i* S | | **Sn** | **22 49 49.2 +0.2** | SSLB | baz=11 | | | | *i* S | | **Sb** | **22 50 09.9 +0.9** |
| | baz=70 | | | | | | | | | | | | | | | | | | |
| **SGST** | **Jiashian** | **0.44** | **351** | | *e*P | | **Pb** | **22 49 42.5 +0.4** | **WJS** | **Zhushan** | **1.18** | **3** | | *e*P | | **Pn** | **22 49 53.0 +0.4** |
| | baz=351 | | | | | | | | | baz=346 | | | | | | | | |
| SGST | | | | | *e*S | | **Sn** | **22 49 49.9 +0.4** | WJS | | | | | *e*S | | **Sb** | **22 50 08.8 -0.3** |
| | baz=351 | | | | | | | | | baz=346 | | | | | | | | |
| **SLIU** | **Shizi** | **0.44** | **163** | ⇓ | P | | **Pb** | **22 49 42.6 +0.5** | **VWDT** | **VWDT** | **1.19** | **22** | | *e*P | | **Pb** | **22 49 54.5 +0.1** |
| | baz=161 | | | | | | | | | baz=20 | | | | | | | | |
| SLIU | | | | | *i* S | | **Sn** | **22 49 49.5 +0.1** | VWDT | | | | | *e*S | | **Sn** | **22 50 08.4 +0.5** |
| | baz=161 | | | | | | | | | baz=20 | | | | | | | | |
| **TTN** | **Taitung** | **0.46** | **76** | ⇓ | P | | **Pn** | **22 49 43.6 +0.9** | **WNT** | **Mingjian** | **1.23** | **1** | | *e*P | | **Pn** | **22 49 54.2 +0.9** |
| | baz=77 | | | | | | | | | baz=359 | | | | | | | | |
| TTN | | | | | *i* S | | **Sn** | **22 49 51.9 +2.0** | WNT | | | | | *e*S | | **Sb** | **22 50 10.7 +0.1** |
| | baz=77 | | | | | | | | | baz=359 | | | | | | | | |
| **LONT** | **Longtian** | **0.51** | **59** | ⇓ | P | | **Pn** | **22 49 43.6 +0.2** | **WARBT** | **Fenglin Townsh** | **1.26** | **32** | | *e*P | | **Pb** | **22 49 56.0 +0.3** |
| | baz=59 | | | | | | | | | baz=30 | | | | | | | | |
| LONT | | | | | *e*S | | **Sn** | **22 49 51.2 +0.2** | WARBT | | | | | *e*S | | **Sb** | **22 50 12.4 +0.8** |
| | baz=59 | | | | | | | | | baz=30 | | | | | | | | |
| **STYH** | **Taoyuan** | **0.54** | **12** | | *e*P | | **Pn** | **22 49 44.5 +0.7** | **VCHM** | **Qimei** | **1.27** | **297** | | *e*P | | **Pn** | **22 49 53.4 -0.4** |
| | baz=17 | | | | | | | | | baz=297 | | | | | | | | |
| STYH | | | | | *e*S | | **Sn** | **22 49 52.8 +1.1** | **TYC** | **Yuchr** | **1.27** | **8** | | *e*P | | **Pb** | **22 49 55.2 -0.5** |
| | baz=17 | | | | | | | | | baz=351 | | | | | | | | |
| **CHN1** | **Nanshi** | **0.55** | **347** | | *e*P | | **Pn** | **22 49 45.0 +1.0** | TYC | | | | | *i* S | | **Sb** | **22 50 12.9 +1.2** |
| | baz=347 | | | | | | | | | baz=351 | | | | | | | | |
| CHN1 | | | | | S | | **Sn** | **22 49 54.1 +1.9** | **PHUB** | **P'eng-hu** | **1.32** | **311** | | *e*P | | **Pn** | **22 49 54.0 -0.6** |
| | baz=347 | | | | | | | | | baz=312 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.56** | **315** | | *e*P | | **Pn** | **22 49 45.4 +1.4** | PHUB | | | | | *e*S | | **Sn** | **22 50 10.2 -0.9** |
| | baz=315 | | | | | | | | | baz=312 | | | | | | | | |
| TAI1 | | | | | *e*S | | **Sn** | **22 49 54.7 +2.5** | **ESL** | **Shilin** | **1.37** | **31** | | *e*P | | **Pb** | **22 49 57.6 +0.2** |
| | baz=315 | | | | | | | | | baz=29 | | | | | | | | |
| **SNST** | **Tainan City** | **0.59** | **346** | | *e*P | | **Pn** | **22 49 45.9 +1.3** | ESL | | | | | S | | **Sb** | **22 50 15.2 +0.7** |
| | baz=345 | | | | | | | | | baz=29 | | | | | | | | |
| SNST | | | | | S | | **Sn** | **22 49 55.1 +2.0** | **PNG** | **Penghu** | **1.37** | **312** | | P | | **Pn** | **22 49 55.1 -0.1** |
| | baz=345 | | | | | | | | | baz=313 | | | | | | | | |
| **SSHA** | **Shanhua** | **0.60** | **325** | | *e*P | | **Pn** | **22 49 46.1 +1.5** | **OWD** | **Renai** | **1.39** | **20** | | *e*P | | **Pb** | **22 49 57.2 -0.7** |
| | baz=325 | | | | | | | | | baz=18 | | | | | | | | |
| SSHA | | | | | *e*S | | **Sn** | **22 49 56.4 +3.1** | **WUSB** | **Renai** | **1.41** | **17** | | *e*P | | **Pb** | **22 49 57.4 -0.7** |
| | baz=325 | | | | | | | | | baz=15 | | | | | | | | |
| **WTP** | **Ta-pu** | **0.60** | **356** | ⇑ | P | | **Pn** | **22 49 45.5 +0.8** | WUSB | | | | | *e*S | | **Sn** | **22 50 14.4 +1.0** |
| | baz=356 | | | | | | | | | baz=15 | | | | | | | | |
| WTP | | | | | *e*S | | **Sn** | **22 49 55.1 +1.7** | **SHUL** | **Shoufeng** | **1.41** | **36** | | *e*P | | **Pb** | **22 49 58.2 +0.1** |
| | baz=356 | | | | | | | | | baz=33 | | | | | | | | |
| **ELDTW** | **Lidau** | **0.64** | **31** | | *e*P | | **Pn** | **22 49 45.8 +0.5** | SHUL | | | | | S | | **Sb** | **22 50 17.9 +2.1** |
| | baz=31 | | | | | | | | | baz=33 | | | | | | | | |
| ELDTW | | | | | *i* S | | **Sn** | **22 49 55.7 +1.3** | **WCS** | **Beigang Elemen** | **1.43** | **9** | | P | | **Pn** | **22 49 57.2 +1.1** |
| | baz=31 | | | | | | | | | baz=7.0 | | | | | | | | |
| **HEN** | **Hengchun** | **0.64** | **173** | | *e*P | | **Pn** | **22 49 46.6 +1.4** | WCS | | | | | S | | **Sb** | **22 50 15.9 -0.3** |
| | baz=161 | | | | | | | | | baz=7.0 | | | | | | | | |
| HEN | | | | | *e*S | | **Sn** | **22 49 56.7 +2.5** | **WCHH** | **Zhanghua** | **1.43** | **356** | | *e*P | | **Pn** | **22 49 57.4 +1.3** |
| | baz=161 | | | | | | | | | baz=354 | | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.64** | **165** | | *e*P | | **Pn** | **22 49 46.2 +0.9** | WCHH | | | | | S | | **Sb** | **22 50 16.7 +0.3** |
| | baz=166 | | | | | | | | | baz=354 | | | | | | | | |
| SMST | | | | | *e*S | | **Sn** | **22 49 55.4 +1.1** | **CHGB** | **Renai** | **1.49** | **18** | | *e*P | | **Pb** | **22 49 59.0 -0.6** |
| | baz=166 | | | | | | | | | baz=3.0 | | | | | | | | |
| **TPUB** | **Ta-pu** | **0.66** | **358** | | *e*P | | **Pn** | **22 49 46.1 +0.7** | CHGB | | | | | *e*S | | **Sb** | **22 50 17.4 -0.8** |
| | baz=357 | | | | | | | | | baz=3.0 | | | | | | | | |
| TPUB | | | | | S | | **Sn** | **22 49 56.5 +1.8** | **TEYL** | **Yanliau Villag** | **1.50** | **35** | | *e*P | | **Pb** | **22 49 59.8 +0.3** |
| | baz=357 | | | | | | | | | baz=33 | | | | | | | | |
| **EDH** | **Donghe** | **0.68** | **61** | | *e*P | | **Pn** | **22 49 46.7 +0.9** | **ETM** | **Tongmen** | **1.52** | **30** | | *e*P | | **Pn** | **22 49 58.8 +1.4** |
| | baz=61 | | | | | | | | | baz=27 | | | | | | | | |
| EDH | | | | | *e*S | | **Sn** | **22 49 57.0 +1.7** | ETM | | | | | *e*S | | **Sb** | **22 50 18.0 -1.0** |
| | baz=61 | | | | | | | | | baz=27 | | | | | | | | |
| **SCLT** | **Jiali** | **0.68** | **321** | | *i*P | | **Pn** | **22 49 47.0 +1.2** | **LXIB** | **Xiulin Townshi** | **1.54** | **27** | | P | | **Pn** | **22 49 59.2 +1.5** |
| | baz=321 | | | | | | | | | baz=24 | | | | | | | | |
| SCLT | | | | | *e*S | | **Sn** | **22 49 57.9 +2.6** | LXIB | | | | | *e*S | | **Sb** | **22 50 18.5 -1.0** |
| | baz=321 | | | | | | | | | baz=24 | | | | | | | | |
| **ECS** | **Chishang** | **0.69** | **49** | | P | | **Pn** | **22 49 47.0 +1.2** | **WHF** | **Hehuan Shan** | **1.60** | **20** | | *e*P | | **Pb** | **22 50 01.1 -0.4** |
| | baz=53 | | | | | | | | | baz=3.0 | | | | | | | | |
| ECS | | | | | *e*S | | **Sn** | **22 49 56.7 +1.3** | **WHP** | **Taichung City** | **1.65** | **9** | | *e*P | | **Pn** | **22 50 01.0 +1.8** |
| | baz=53 | | | | | | | | | baz=353 | | | | | | | | |
| **EHD** | **Haiduan** | **0.71** | **45** | | *e*P | | **Pn** | **22 49 47.1 +0.9** | **TDCB** | **Techi** | **1.67** | **16** | | P | | **Pn** | **22 50 00.9 +1.4** |
| | baz=51 | | | | | | | | | baz=13 | | | | | | | | |
| EHD | | | | | *e*S | | **Sn** | **22 49 57.0 +0.9** | TDCB | | | | | *i* S | | **Sb** | **22 50 22.4 -0.9** |
| | baz=51 | | | | | | | | | baz=13 | | | | | | | | |
| **TSCK** | **Chigu Township** | **0.73** | **314** | | P | | **Pn** | **22 49 47.1 +0.7** | **TWD** | **Chiawan** | **1.67** | **31** | | *e*P | | **Pn** | **22 50 00.7 +1.4** |
| | baz=296 | | | | | | | | | baz=29 | | | | | | | | |
| TSCK | | | | | *e*S | | **Sn** | **22 49 58.9 +2.5** | **TWT** | **Tachien** | **1.67** | **16** | | *e*P | | **Pn** | **22 50 01.4 +1.8** |
| | baz=296 | | | | | | | | | baz=14 | | | | | | | | |
| **LDUT** | **Ludao** | **0.75** | **88** | | *e*P | | **Pn** | **22 49 47.6 +0.9** | TWT | | | | | *e*S | | **Sb** | **22 50 22.1 -1.4** |
| | baz=88 | | | | | | | | | baz=14 | | | | | | | | |
| LDUT | | | | | *e*S | | **Sn** | **22 49 58.8 +1.8** | **FUSS** | **Fushou** | **1.69** | **18** | | *e*P | | **Pn** | **22 50 01.3 +1.5** |
| | baz=88 | | | | | | | | | baz=4.0 | | | | | | | | |
| **CHKT** | **Chengkung** | **0.80** | **55** | | P | | **Pn** | **22 49 49.4 +2.0** | **WDJ** | **Dajia District** | **1.70** | **359** | | *e*P | | **Pn** | **22 50 00.8 +1.0** |
| | baz=64 | | | | | | | | | baz=356 | | | | | | | | |
| CHKT | | | | | *e*S | | **Sn** | **22 49 59.8 +1.7** | WDJ | | | | | *e*S | | **Sb** | **22 50 23.3 -0.7** |
| | baz=64 | | | | | | | | | baz=356 | | | | | | | | |
| **ICHU** | **Yijhu** | **0.80** | **334** | | *i*P | | **Pn** | **22 49 48.2 +0.9** | **TWQ1** | **Liyutan** | **1.70** | **4** | | *e*P | | **Pn** | **22 50 01.7 +1.9** |
| | baz=333 | | | | | | | | | baz=345 | | | | | | | | |
| ICHU | | | | | *e*S | | **Sn** | **22 50 00.6 +2.4** | TWQ1 | | | | | *e*S | | **Sb** | **22 50 22.8 -1.3** |
| | baz=333 | | | | | | | | | baz=345 | | | | | | | | |
| **FULB** | **Fuli** | **0.81** | **47** | | *e*P | | **Pn** | **22 49 49.3 +1.8** | **ETLH** | **Xiulin Townshi** | **1.73** | **26** | | *e*P | | **Pb** | **22 50 02.3 -1.3** |
| | baz=41 | | | | | | | | | baz=11 | | | | | | | | |
| FULB | | | | | *e*S | | **Sn** | **22 50 00.5 +2.1** | ETLH | | | | | S | | **Sb** | **22 50 25.6 +0.6** |
| | baz=41 | | | | | | | | | baz=11 | | | | | | | | |
| **CHN8** | **Yiju** | **0.81** | **330** | | *e*P | | **Pn** | **22 49 48.4 +0.8** | **NACB** | **Ninganchiao** | **1.75** | **29** | | P | | **Pn** | **22 50 01.8 +1.3** |
| | baz=330 | | | | | | | | **NACB** | **Ninganchiao** | **1.75** | **29** | | P | | **Pn** | **22 50 01.7 +1.2** |
| CHN8 | | | | | *e*S | | **Sn** | **22 50 00.9 +2.4** | | baz=26 | | | | | | | | |
| | baz=330 | | | | | | | | NACB | | | | | *e*S | | **Sn** | **22 50 23.0 +1.3** |
| **CHKH** | **Chenggong** | **0.87** | **51** | | *e*P | | **Pb** | **22 49 50.5 +1.4** | | baz=26 | | | | | | | | |
| | baz=64 | | | | | | | | **NSY** | **Sanyi** | **1.77** | **3** | | *e*P | | **Pn** | **22 50 02.6 +1.9** |
| CHKH | | | | | *e*S | | **Sn** | **22 50 01.7 +1.7** | | baz=345 | | | | | | | | |
| | baz=64 | | | | | | | | NSY | | | | | *e*S | | **Sb** | **22 50 24.5 -1.5** |
| **CHY** | **Chiayi** | **0.88** | **346** | | *e*P | | **Pb** | **22 49 49.9 +0.8** | | baz=345 | | | | | | | | |
| | baz=345 | | | | | | | | **NNSB** | **Datong** | **1.90** | **20** | | P | | **Pb** | **22 50 05.0 -1.4** |
| CHY | | | | | S | | **Sn** | **22 50 01.8 +1.7** | | baz=3.0 | | | | | | | | |
| | baz=345 | | | | | | | | **NNS** | **Nan Shan** | **1.91** | **20** | | P | | **Pb** | **22 50 05.2 -1.4** |
| **CHN2** | **Minshiung** | **0.90** | **349** | | P | | **Pb** | **22 49 50.2 +0.7** | | baz=3.0 | | | | | | | | |
| | baz=348 | | | | | | | | **LIOB** | **Emei** | **2.02** | **9** | | *e*P | | **Pn** | **22 50 06.0 +1.7** |
| CHN2 | | | | | S | | **Sn** | **22 50 03.2 +2.4** | | baz=351 | | | | | | | | |
| | baz=348 | | | | | | | | **NFF** | **Wufeng Townshi** | **2.02** | **12** | | *e*P | | **Pn** | **22 50 06.4 +2.1** |
| **TWF1** | **Yuli** | **0.92** | **40** | | P | | **Pb** | **22 49 50.3 +0.4** | | baz=354 | | | | | | | | |
| | baz=40 | | | | | | | | **ENA** | **Nanau** | **2.04** | **29** | | *e*P | | **Pn** | **22 50 05.9 +1.5** |
| TWF1 | | | | | S | | **Sn** | **22 50 02.9 +1.7** | | baz=27 | | | | | | | | |
| | baz=40 | | | | | | | | **LATG** | **Datong** | **2.04** | **23** | | *e*P | | **Pn** | **22 50 06.8 +2.1** |
| **EYUL** | **Yuli** | **0.93** | **41** | | *e*P | | **Pb** | **22 49 50.6 +0.6** | | baz=5.0 | | | | | | | | |
| | baz=40 | | | | | | | | LATG | | | | | *e*S | | **Sb** | **22 50 33.1 -1.0** |
| EYUL | | | | | *e*S | | **Sn** | **22 50 03.3 +1.9** | | baz=5.0 | | | | | | | | |
| | baz=40 | | | | | | | | **EWUT** | **Wuta** | **2.07** | **30** | | *e*P | | **Pn** | **22 50 06.9 +2.1** |
| **YULB** | **Yu-li** | **0.95** | **38** | | P | | **Pb** | **22 49 51.1 +0.7** | | baz=27 | | | | | | | | |
| **YULB** | **Yu-li** | **0.95** | **38** | | *e*P | | **Pb** | **22 49 50.8 +0.4** | **NDT** | **Datong Townshi** | **2.10** | **22** | | *e*P | | **Pb** | **22 50 08.3 -1.6** |
| | baz=38 | | | | | | | | | baz=5.0 | | | | | | | | |
| YULB | | | | | *e*S | | **Sn** | **22 50 03.2 +1.2** | NDT | | | | | *i* S | | **Sb** | **22 50 34.0 -1.6** |
| | baz=38 | | | | | | | | | baz=5.0 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.96** | **336** | | *e*P | | **Pn** | **22 49 50.2 +0.6** | **EOS4** | **EOS4** | **2.12** | **46** | | *e*P | | **Pn** | **22 50 07.3 +2.1** |
| | baz=335 | | | | | | | | | baz=57 | | | | | | | | |
| WSL | | | | | *e*S | | **Sn** | **22 50 04.1 +1.9** | EOS4 | | | | | *e*S | | **Sn** | **22 50 32.1 +1.8** |
| | baz=335 | | | | | | | | | baz=57 | | | | | | | | |
| **ECBN** | **Changbin** | **0.99** | **47** | | *e*P | | **Pn** | **22 49 50.5 +0.4** | **YHNB** | **Yeheng** | **2.12** | **18** | | P | | **Pn** | **22 50 07.7 +2.1** |
| | baz=61 | | | | | | | | **YHNB** | **Yeheng** | **2.12** | **18** | | *e*P | | **Pn** | **22 50 07.8 +2.1** |
| **LAY** | **Lan-yu** | **1.02** | **126** | | P | | **Pn** | **22 49 50.6 +0.1** | | baz=15 | | | | | | | | |
| | baz=126 | | | | | | | | YHNB | | | | | *e*S | | **Sn** | **22 50 33.8 +2.8** |
| LAY | | | | | *e*S | | **Sn** | **22 50 04.1 +0.3** | | baz=15 | | | | | | | | |
| | baz=126 | | | | | | | | **NSK** | **Sanguang** | **2.12** | **17** | | *e*P | | **Pn** | **22 50 07.8 +2.2** |
| **WDLH** | **Douliu** | **1.05** | **354** | | P | | **Pb** | **22 49 52.1 +0.1** | | baz=15 | | | | | | | | |
| | baz=338 | | | | | | | | NSK | | | | | *e*S | | **Sb** | **22 50 34.2 -2.0** |
| WDLH | | | | | *i* S | | **Sb** | **22 50 06.5 +1.1** | | baz=15 | | | | | | | | |
| | baz=338 | | | | | | | | **ENTT** | **Nioudou** | **2.15** | **23** | | *e*P | | **Pb** | **22 50 09.0 -1.7** |
| **EHY** | **Hungye** | **1.05** | **35** | | *e*P | | **Pb** | **22 49 52.9 +0.8** | | baz=7.0 | | | | | | | | |
| | baz=34 | | | | | | | | ENTT | | | | | S | | **Sb** | **22 50 36.1 -1.0** |
| EHY | | | | | *i* S | | **Sb** | **22 50 07.0 +1.4** | | baz=7.0 | | | | | | | | |
| | baz=34 | | | | | | | | **NDS** | **Dongshan** | **2.21** | **26** | | *e*P | | **Pn** | **22 50 09.1 +2.4** |
| **EHYH** | **Wanrong** | **1.06** | **37** | | *e*P | | **Pb** | **22 49 53.0 +0.9** | | baz=37 | | | | | | | | |
| | baz=35 | | | | | | | | **EOS3** | **EOS3** | **2.24** | **43** | | *e*P | | **Pn** | **22 50 07.9 +0.9** |
| EHYH | | | | | S | | **Sb** | **22 50 07.2 +1.5** | | baz=38 | | | | | | | | |
| | baz=35 | | | | | | | | **TWC** | **Suao** | **2.24** | **29** | | *e*P | | **Pn** | **22 50 08.9 +1.7** |
| **WHYT** | **Xinyi Township** | **1.06** | **10** | | *e*P | | **Pb** | **22 49 52.4 +0.1** | | baz=26 | | | | | | | | |
| | baz=354 | | | | | | | | TWC | | | | | *e*S | | **Sn** | **22 50 36.8 +3.0** |
| WHYT | | | | | *i* S | | **Sb** | **22 50 07.4 +1.4** | | baz=26 | | | | | | | | |
| | baz=354 | | | | | | | | **NWLT** | **Wulai** | **2.26** | **20** | | *e*P | | **Pn** | **22 50 09.2 +1.7** |
| **LYUB** | **Lan-yu** | **1.07** | **126** | | *e*P | | **Pn** | **22 49 50.2 -0.9** | | baz=2.0 | | | | | | | | |
| | baz=127 | | | | | | | | **TWE** | **Neicheng** | **2.27** | **24** | | *e*P | | **Pb** | **22 50 10.6 -2.0** |
| LYUB | | | | | *e*S | | **Sn** | **22 50 03.9 -0.9** | | baz=36 | | | | | | | | |
| | baz=127 | | | | | | | | **FUSB** | **Fushanzhiwuyua** | **2.27** | **22** | | *e*P | | **Pb** | **22 50 10.6 -2.2** |
| **WSF** | **Szhu** | **1.07** | **338** | | P | | **Pn** | **22 49 51.9 +0.8** | | baz=3.0 | | | | | | | | |
| | baz=337 | | | | | | | | FUSB | | | | | *i* S | | **Sb** | **22 50 39.7 -0.8** |
| WSF | | | | | *i* S | | **Sb** | **22 50 06.4 +0.4** | | baz=3.0 | | | | | | | | |
| | baz=337 | | | | | | | | **EOS2** | **EOS2** | **2.28** | **39** | | *e*P | | **Pn** | **22 50 10.2 +2.5** |
| **WTK** | **Tuku** | **1.07** | **347** | | *e*P | | **Pb** | **22 49 52.2 -0.1** | | baz=47 | | | | | | | | |
| | | | | | | | | | **TIPB** | **Shuangxi** | **2.55** | **25** | | *e*P | | **Pn** | **22 50 13.1 +1.5** |
| | | | | | | | | | | baz=34 | | | | | | | | |
| | | | | | | | | | **SXI1** | **Grass Mountain** | **2.68** | **24** | | *e*P | | **Pn** | **22 50 16.5 +3.1** |
| | | | | | | | | | | baz=5.0 | | | | | | | | |
| | | | | | | | | | **KNM** | **Kinmen** | **2.70** | **311** | | *e*P | | **Pn** | **22 50 14.9 +1.4** |
| | | | | | | | | | | baz=311 | | | | | | | | |
| | | | | | | | | | **KNMB** | **Chin-men Tao** | **2.76** | **311** | | *e*P | | **Pn** | **22 50 13.2 -1.2** |
| | | | | | | | | | | baz=314 | | | | | | | | |
| | | | | | | | | | **JYNG** | **Yonagunijimaku** | **2.77** | **49** | | *e*P | | **Pn** | **22 50 17.7 +3.2** |
| | | | | | | | | | JYNG | | | | | *e*S | | **Sn** | **22 50 50.2 +3.5** |
| | | | | | | | | | **PTMZ** | **Houxiangcun** | **2.77** | **330** | | *e*P | | **Pn** | **22 50 14.2 -0.3** |
| | | | | | | | | | | baz=340 | | | | | | | | |
| | | | | | | | | | **YOJ** | **Yonaguni jima** | **2.82** | **50** | | P | | **Pn** | **22 50 18.4 +3.3** |
| | | | | | | | | | **YOJ** | **Yonaguni jima** | **2.82** | **50** | | *e*P | | **Pn** | **22 50 17.3 +2.2** |
| | | | | | | | | | | baz=46 | | | | | | | | |
| | | | | | | | | | **YOJ** | **Yonaguni jima** | **2.82** | **50** | | *e*P | | **Pn** | **22 50 18.5 +3.3** |
| | | | | | | | | | YOJ | | | | | *e*S | | **Sn** | **22 50 51.8 +3.8** |
| | | | | | | | | | **ZPLA** | **Ao Xicun** | **2.96** | **296** | | *e*P | | **Pn** | **22 50 16.4 -0.8** |
| | | | | | | | | | | baz=296 | | | | | | | | |
| | | | | | | | | | **IRIF** | **Iriomote-Funau** | **3.29** | **59** | | *e*P | | **Pn** | **22 50 24.2 +2.6** |
| | | | | | | | | | IRIF | | | | | *e*S | | **Sn** | **22 51 02.8 +3.2** |
| | | | | | | | | | **JKRS** | **Kuro-shima** | **3.46** | **62** | | *e*P | | **Pn** | **22 50 26.6 +2.6** |
| | | | | | | | | | JKRS | | | | | *e*S | | **Sn** | **22 51 07.3 +3.4** |
| | | | | | | | | | **JIJ** | **Ishigaki jima** | **3.63** | **61** | | *e*P | | **Pn** | **22 50 28.9 +2.6** |
| | | | | | | | | | JIJ | | | | | *e*S | | **Sn** | **22 51 09.8 +1.8** |
| | | | | | | | | | **MHZQ** | **Yeshan** | **3.75** | **337** | | *e*P | | **Pn** | **22 50 27.7 -0.3** |
| | | | | | | | | | | baz=336 | | | | | | | | |
| | | | | | | | | | **JISG** | **Ishigakijimahi** | **3.87** | **59** | | *e*P | | **Pn** | **22 50 31.1 +1.5** |
| | | | | | | | | | JISG | | | | | *e*S | | **Sn** | **22 51 15.6 +1.7** |
| | | | | | | | | | **LYJJ** | **Jianjiangzhen** | **3.98** | **348** | | *e*P | | **Pn** | **22 50 30.9 -0.2** |
| | | | | | | | | | | baz=344 | | | | | | | | |
| | | | | | | | | | **KSRS** | **Korea Array** | **16.04** | **21** | | LR | | LR | 22 59 38.9 |
| | | | | | | | | | | comp=Z,35nm,18.8s,baz=155,slow=40 | | | | | | | | |
| | | | | | | | | | **MJAR** | **Matsushiro Arr** | **20.56** | **44** | | LR | | LR | 23 00 31.8 |
| | | | | | | | | | | comp=Z,34nm,18.8s,baz=175,slow=34 | | | | | | | | |
| | | | | | | | | | **ASAJ** | **Asahikawa** | **28.02** | **35** | | LR | | LR | 23 05 10.1 |
| | | | | | | | | | | comp=Z,29nm,20.9s,baz=345,slow=35 | | | | | | | | |
| | | | | | | | | | **MKAR** | **Makanchi Array** | **39.12** | **317** | | P | | P | 22 57 04.6 +7.8 |
| | | | | | | | | | | 0.2nm,0.6s,baz=123,slow=7.1,SNR=1.6 | | | | | | | | |
| | | | | | | | | | | 0.2nm,0.6s | | | | | | | | |
| | | | | | | | | | **ZALV** | **Zalesovo Beam** | **41.28** | **328** | | P | | P | 22 57 20.1 +5.6 |
| | | | | | | | | | | 0.5nm,0.5s,baz=112,slow=6.4,SNR=3.7 | | | | | | | | |
| | | | | | | | | | | 0.5nm,0.5s | | | | | | | | |
| | | | | | | | | | **WRA** | **Warramunga Arr** | **44.38** | **161** | | P | | **P** | **22 57 39.2 -0.8** |
| | | | | | | | | | | 1.7nm,0.6s,baz=344,slow=8.7,SNR=14 | | | | | | | | |
| | | | | | | | | | | 1.7nm,0.6s | | | | | | | | |
| | | | | | | | | | **ASAR** | **Alice Springs** | **47.80** | **164** | | P | | **P** | **22 58 07.0 +0.1** |
| | | | | | | | | | | 0.4nm,0.5s,baz=347,slow=6.2,SNR=8.8 | | | | | | | | |
| | | | | | | | | | | 0.4nm,0.5s | | | | | | | | |
| | | | | | | | | | **ILAR** | **Eielson Array** | **70.80** | **27** | | P | | **P** | **23 00 42.1 -3.3** |
| | | | | | | | | | | 0.2nm,0.6s,baz=298,slow=6.0,SNR=2.0 | | | | | | | | |
| | | | | | | | | | | 0.2nm,0.6s | | | | | | | | |
| | | | | | | | | | **ASF** | **Jabal al Asfar** | **73.26** | **298** | | LR | | LR | 23 39 15.1 |
| | | | | | | | | | | comp=Z,226nm,20.9s,baz=332,slow=40 | | | | | | | | |

**DJA 23 23:08:15.0±0.3, 8°S±3′×11°7E±, h10km, M3.6/9, MLv3.6/9,**
**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.29** | **193** | P | | P | Pb | 23 08 21.8 | -0.6 |
| TWSI | | | | S | | S | Sb | 23 08 26.5 | -0.8 |
| **PLAI** | **Plampang** | **0.90** | **115** | P | | P | Pg | 23 08 32.2 | -0.1 |
| PLAI | | | | S | | S | Sg | 23 08 44.3 | +0.2 |
| **DNP** | **Denpasar** | **1.73** | **262** | P | | P | Pn | 23 08 46.1 | +0.9 |
| **SRBI** | **Singaraja** | **1.76** | **282** | P | | P | Pn | 23 08 45.8 | +0.3 |
| **WBSI** | **Waikabubak, Su** | **2.69** | **116** | P | | P | Pn | 23 08 58.7 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.77** | **269** | P | | P | Pn | 23 08 59.7 | +0.2 |
| **BSSI** | **Bau Bau, Buton** | **4.19** | **57** | P | | P | Pn | 23 09 19.3 | +0.2 |
| **EDFI** | **Ende, Flores** | **4.70** | **94** | P | | P | Pn | 23 09 26.6 | +0.5 |
| **PWJI** | **Pagerwojo** | **5.11** | **274** | P | | P | Pn | 23 09 31.0 | -0.7 |

*IDC **23**23:14:24.6±1.1,60.°60N×55.°53W, h0km, mb3.7/5,*
*mbtmp3.9/7, ML3.4/2, MS3.6/1, Error ellipse: s-maj=25.4km*
*s-min=20.3km az=169.0*
*OTT **23**23:14:30.2±0.4,60.°37N×56.°23W, h18km, ML4.3/7, 459km*
*northeast from Nutak, NI*
*DNK **23**23:14:31.5±3.3,60.°62N×55.°74W, h36km±22km, ML2.6*

**ISC 23 23:14:24.3±0.7, 60.°59N±0.°05×55.°86W±0.°06, h10km, n35,**
**σ3°14/46, mb3.8/6, Davis Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IVI** | **Ivigtut** | **3.81** | **77** | *i* P | | **Pn** | | **23 15 24.0** | **+1.2** |
| IVI | | | | *i* S | | **Sn** | | **23 16 04.0** | **-3.6** |
| IVI | | | | IAML | | | | 23 16 05.0 | |
| | comp=Z,74nm,0.6s | | | | | | | | |
| **NUUK** | **Nuuk** | **4.09** | **26** | *i* P | | **Pn** | | **23 15 28.0** | **+1.3** |
| NUUK | | | | *i* S | | **Sn** | | **23 16 10.4** | **-4.1** |
| NUUK | | | | IAML | | | | 23 16 13.0 | |
| | comp=Z,37nm,0.2s | | | | | | | | |
| **NANL** | **Nain** | **5.08** | **219** | PN | | **Pn** | | **23 15 40.9** | **+0.6** |
| NANL | | | | SN | | **Sn** | | **23 16 33.5** | **-5.4** |
| NANL | | | | Trac | | | | 23 16 36.4 | |
| | comp=Z,19nm,0.1s | | | | | | | | |
| **FRB** | **Frobisher Bay** | **6.73** | **304** | Pn | | **Pn** | | **23 16 05.5** | **+2.5** |
| | comp=Z,1.0nm,0.3s,baz=121,slow=12,SNR=2.3 | | | | | | | | |
| FRB | | | | Sn | | **Sn** | | **23 17 14.9** | **-4.7** |
| | comp=Z,3.4nm,0.3s,baz=124,slow=8.7,SNR=1.8 | | | | | | | | |
| | comp=Z,55nm,1.2s | | | | | | | | |
| **FRB** | **Frobisher Bay** | **6.73** | **304** | PN | | **Pn** | | **23 16 06.3** | **+3.3** |
| FRB | | | | SN | | **Sn** | | **23 17 15.6** | **-4.0** |
| FRB | | | | Trac | | | | 23 17 24.8 | |
| | comp=Z,42nm,0.5s | | | | | | | | |
| **FRB** | **Frobisher Bay** | **6.73** | **304** | *i* P | | **Pn** | | **23 16 04.7** | **+1.7** |
| FRB | | | | *i* S | | **Sn** | | **23 17 15.6** | **-4.0** |
| **SFJD** | **Kangerlussuaq** | **6.84** | **18** | Pn | | **Pn** | | **23 16 05.3** | **+0.8** |
| | comp=Z,18nm,0.3s,baz=196,slow=14,SNR=124 | | | | | | | | |
| SFJD | | | | Sn | | **Sn** | | **23 17 17.6** | **-4.6** |
| | comp=Z,1.6nm,0.3s,baz=283,slow=20,SNR=1.2 | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **6.84** | **18** | *i* P | | **Pn** | | **23 16 06.0** | **+1.6** |
| SFJD | | | | *e*S | | **Sn** | | **23 17 17.2** | **-5.0** |
| SFJD | | | | IAML | | | | 23 17 26.3 | |
| | comp=Z,13nm,0.6s | | | | | | | | |
| **DY2G** | **Dye2** | **7.29** | **32** | *i* P | | **Pn** | | **23 16 13.7** | **+2.7** |
| DY2G | | | | *i* S | | **Sn** | | **23 17 28.1** | **-5.7** |
| DY2G | | | | IAML | | | | 23 17 30.3 | |
| | comp=Z,10nm,0.5s | | | | | | | | |
| **SCHQ** | **Schefferville** | **8.23** | **230** | Pn | | **Pn** | | **23 16 25.5** | **+1.9** |
| | comp=Z,3.5nm,0.3s,baz=51,slow=11,SNR=25 | | | | | | | | |
| SCHQ | | | | Sn | | **Sn** | | **23 17 49.6** | **-6.8** |
| | comp=Z,6.5nm,0.3s,baz=41,slow=19,SNR=12 | | | | | | | | |
| | comp=Z,8.2nm,0.3s | | | | | | | | |
| **SCHQ** | **Schefferville** | **8.23** | **230** | PN | | **Pn** | | **23 16 25.6** | **+2.1** |
| SCHQ | | | | SN | | **Sn** | | **23 17 48.0** | **-8.5** |
| S

comp=Z,2.5nm,0.2s
**SUMG Summit 13.79 22** *i* **Pn 23 17 39.5 -0.3**
**CHEG Cheticamp, Nov 14.09 194** PN **Pn 23 17 44.0 +0.3**
CHEG SN Sn 23 20 07.2 -13
CHEG Trac 23 20 18.7
comp=Z,450nm,2.5s
**NMSQ Nemaska Statio 14.27 240** PN **Pn 23 17 45.1 -1.0**
NMSQ SN Sn 23 20 11.1 -13
NMSQ Trac 23 20 13.7
comp=Z,3.0nm,0.2s
**HSNB Heath Steele M 14.60 209** PN **Pn 23 17 49.8 -0.8**
HSNB SN Sn 23 20 18.8 -14
HSNB Trac 23 20 36.6
comp=Z,204nm,2.2s
**SADO Sadowa 21.03 232** P **P 23 19 09.2 +1.3**
comp=Z,4.1nm,0.9s,baz=356,slow=18,SNR=1.6
comp=Z,4.1nm,0.9s
**ULM Lac du Bonnet 24.56 263** P **P 23 19 45.8 +1.9**
comp=Z,1.2nm,0.4s,baz=346,slow=9.1,SNR=1.7
comp=Z,1.2nm,0.4s
**SPITS Spitsbergen Ar 28.11 25** P **P 23 20 14.3 -1.4**
comp=Z,3.5nm,0.8s,baz=353,slow=11,SNR=1.6
**PDAR Pinedale Array 36.53 266** P **P 23 21 33.6 +3.7**
comp=Z,0.5nm,0.6s,baz=54,slow=10.0,SNR=5.0
comp=Z,0.5nm,0.6s
**ILAR Eielson Array 38.56 317** P **P 23 21 49.2 +2.6**
comp=Z,0.2nm,0.8s,baz=54,slow=9.1,SNR=1.8
comp=Z,0.2nm,0.8s
**KVAR Kislovodsk Arr 56.73 59** LR LR 23 47 55.9
comp=Z,57nm,21.2s,baz=197,slow=36
**TORD Torodi Ar. Bea 62.96 113** P **P 23 24 51.7 +0.8**
comp=Z,1.1nm,0.6s,baz=331,slow=7.7,SNR=10
comp=Z,1.1nm,0.6s
**QSPA South Pole Qui 150.49 180** PKPbc **PKiKP 23 34 16.7 +1.6**
comp=Z,2.3nm,1.1s,baz=168,slow=4.7,SNR=5.3

**IDC 23 23:18:48.6±1.6, 17°99S×177°.04W, h0km, mb3.9/5, mbtmp3.9/5, Error ellipse: s-maj=43.5km s-min=35.6km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **39.73** | **242** | P | P | 23 26 24.9 | +1.8 |
| | 1.4nm,0.4s,baz=81,slow=8.5,SNR=4.8 | | | | | | |
| | 1.4nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.90** | **259** | P | P | 23 27 12.3 | -0.9 |
| | 0.5nm,0.4s,baz=96,slow=7.3,SNR=15 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **46.02** | **254** | P | P | 23 27 13.7 | -0.6 |
| | 2.8nm,0.6s,baz=87,slow=9.0,SNR=42 | | | | | | |
| | 2.8nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.07** | **180** | P | P | 23 30 14.3 | -0.2 |
| | 0.9nm,0.6s,baz=18,slow=5.0,SNR=8.0 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.68** | **12** | P | P | 23 31 29.1 | +0.3 |
| | 0.1nm,0.4s,baz=213,slow=6.0,SNR=4.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **23** 23:30:15.4±1.0, 35°.37S×74°.26W, h0km, mb3.7/6, mbtmp3.7/8, ML4.2/2, MS3.1/4, Error ellipse: s-maj=52.4km s-min=21.7km az=74.0*
*GUC **23** 23:30:18.3±0.5, 35°.18S×74°.01W, h28km±3km, ML4.0*
**ISC 23 23:30:19.7±0.8, 35°.33S±0°.05×74°.08W±0°.08, h35km, n43, σ1§96/61, mb3.8/6, MS3.5/3, 2C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GO05** | **Huala** | **1.79** | **80** | ⇑*eP* | **Pn** | **23 30 46.8** | **-1.3** |
| GO05 | | | | *eS* | **Sn** | **23 31 08.0** | **-1.6** |
| GO05 | | | | IAML | | 23 31 09.1 | |
| | comp=N,2μm,0.2s | | | | | | |
| **BO03** | **Pichilemu** | **1.93** | **65** | *eP* | **Pn** | **23 30 48.4** | **-1.6** |
| BO03 | | | | *eS* | **Sn** | **23 31 11.2** | **-1.9** |
| **VA05** | **Santo Domingo** | **2.63** | **51** | *eP* | **Pn** | **23 30 57.6** | **-2.1** |
| VA05 | | | | *eS* | **Sn** | **23 31 27.7** | **-2.6** |
| VA05 | | | | IAML | | 23 31 29.5 | |
| | comp=E,808nm,0.3s | | | | | | |
| **BO01** | **Tunca** | **2.63** | **70** | *eP* | **Pn** | **23 30 58.5** | **-1.2** |
| BO01 | | | | *eS* | **Sn** | **23 31 28.8** | **-1.6** |
| **BI02** | **San Fabin de** | **2.64** | **121** | *eP* | **Pn** | **23 30 59.4** | **-0.4** |
| **MT01** | **Popeta** | **2.75** | **59** | ⇑*eP* | **Pn** | **23 30 59.2** | **-2.1** |
| MT01 | | | | *eS* | **Sn** | **23 31 30.2** | **-3.2** |
| MT01 | | | | IAML | | 23 31 32.5 | |
| | comp=E,276nm,0.4s | | | | | | |
| **MT09** | **Talagante** | **2.98** | **60** | *eP* | **Pn** | **23 31 02.8** | **-1.8** |
| MT09 | | | | *eS* | **Sn** | **23 31 37.4** | **-1.9** |
| MT09 | | | | IAML | | 23 31 40.4 | |
| | comp=N,491nm,0.2s | | | | | | |
| **BO04** | **La Punta** | **3.16** | **66** | *eP* | **Pn** | **23 31 06.1** | **-0.8** |
| BO04 | | | | *eS* | **Sn** | **23 31 43.2** | **-0.2** |
| **MT02** | **Curacav** | **3.19** | **51** | *eP* | **Pn** | **23 31 05.3** | **-2.1** |
| MT02 | | | | *eS* | **Sn** | **23 31 41.3** | **-2.9** |
| MT02 | | | | IAML | | 23 31 43.3 | |
| | comp=N,164nm,0.6s | | | | | | |
| **MT12** | **Pirque** | **3.32** | **62** | *eP* | **Pn** | **23 31 08.1** | **-1.1** |
| MT12 | | | | *eS* | **Sn** | **23 31 45.3** | **-2.2** |
| MT12 | | | | IAML | | 23 31 49.7 | |
| | comp=N,524nm,0.3s | | | | | | |
| **MT05** | **Renca** | **3.37** | **56** | *eS* | **Sn** | **23 31 48.5** | **-0.3** |
| **MT15** | **Las Vizcachas** | **3.42** | **61** | *eS* | **Sn** | **23 31 49.4** | **-0.5** |
| **ROCH** | **El Roble** | **3.46** | **48** | *eP* | **Pn** | **23 31 09.3** | **-1.7** |
| ROCH | | | | *eS* | **Sn** | **23 31 48.7** | **-2.6** |
| ROCH | | | | IAML | | 23 31 54.7 | |
| | comp=N,162nm,0.2s | | | | | | |
| **MT03** | **Universidad Ad** | **3.47** | **59** | *eP* | **Pn** | **23 31 10.0** | **-1.3** |
| MT03 | | | | *eS* | **Sn** | **23 31 49.8** | **-1.4** |
| MT03 | | | | IAML | | 23 31 57.1 | |
| | comp=N,316nm,0.2s | | | | | | |
| **LC02** | **Puerto Saavedr** | **3.50** | **171** | *eP* | **Pn** | **23 31 09.3** | **-2.3** |
| **MT16** | **CCHEN** | **3.50** | **58** | *i*S | **Sn** | **23 31 51.2** | **-0.7** |
| **MT13** | **San Alfonso** | **3.51** | **64** | *eP* | **Pn** | **23 31 11.1** | **-0.8** |
| MT13 | | | | *eS* | **Sn** | **23 31 51.5** | **-0.6** |
| MT13 | | | | IAML | | 23 31 55.3 | |
| | comp=E,231nm,0.4s | | | | | | |
| **MT14** | **Cerro Cal¡n** | **3.51** | **58** | *eP* | **Pn** | **23 31 10.4** | **-1.4** |
| MT14 | | | | *eS* | **Sn** | **23 31 50.0** | **-2.1** |
| MT14 | | | | IAML | | 23 31 57.2 | |
| | comp=N,355nm,0.6s | | | | | | |
| **LMEL** | **Las Melosas** | **3.52** | **66** | *eP* | **Pn** | **23 31 11.2** | **-0.9** |
| LMEL | | | | *i*S | **Sn** | **23 31 53.1** | **+0.5** |
| LMEL | | | | IAML | | 23 31 59.8 | |
| | comp=N,349nm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **3.56** | **53** | *eP* | **Pn** | **23 31 11.2** | **-1.2** |
| PEL | | | | *eS* | **Sn** | **23 31 51.9** | **-1.4** |
| PEL | | | | IAML | | 23 31 54.5 | |
| | comp=N,342nm,0.2s | | | | | | |
| **MT10** | **Hacienda Santa** | **3.58** | **56** | *eP* | **Pn** | **23 31 11.6** | **-1.2** |
| MT10 | | | | *eS* | **Sn** | **23 31 51.7** | **-2.2** |
| MT10 | | | | IAML | | 23 31 56.5 | |
| | comp=E,478nm,0.6s | | | | | | |
| **VA06** | **Catapilco** | **3.60** | **41** | *eP* | **Pn** | **23 31 10.6** | **-2.4** |
| VA06 | | | | *eS* | **Sn** | **23 31 50.5** | **-3.8** |
| **FCH** | **Farellones** | **3.72** | **59** | *eP* | **Pn** | **23 31 13.5** | **-1.4** |
| FCH | | | | *i*S | **Sn** | **23 31 55.2** | **-2.5** |
| **MT04** | **Ro Olivares** | **3.78** | **61** | *eP* | **Pn** | **23 31 14.6** | **-1.1** |
| MT04 | | | | *i*S | **Sn** | **23 31 58.0** | **-1.1** |
| **MT08** | **Bocatoma Ro** | **3.85** | **62** | *eP* | **Pn** | **23 31 16.4** | **-0.2** |
| MT08 | | | | *eS* | **Sn** | **23 32 00.6** | **-0.2** |
| **VA03** | **San Esteban** | **3.89** | **50** | *eP* | **Pn** | **23 31 15.9** | **-1.2** |
| VA03 | | | | *eS* | **Sn** | **23 31 59.9** | **-1.6** |
| **CO04** | **Los Peladeros** | **4.18** | **39** | *eP* | **Pn** | **23 31 18.9** | **-2.2** |
| CO04 | | | | *i*S | **Sn** | **23 32 04.5** | **-4.4** |
| **H03S1** | **Juan Fernandez** | **4.25** | **289** | T | T | 23 35 38.9 | |
| | baz=111,slow=72,SNR=21 | | | | | | |
| **H03S3** | **Juan Fernandez** | **4.26** | **289** | T | T | 23 35 28.3 | |
| | baz=111,slow=72,SNR=15 | | | | | | |
| **H03S2** | **Juan Fernandez** | **4.27** | **289** | T | T | 23 35 32.7 | |
| | baz=111,slow=72,SNR=12 | | | | | | |
| **LR04** | **Corral** | **4.57** | **174** | *eP* | **Pn** | **23 31 23.3** | **-2.9** |
| **GO06** | **Curarrehue** | **4.73** | **155** | *eP* | **Pn** | **23 31 28.2** | **-0.4** |
| **LR05** | **Currie** | **5.16** | **162** | *eP* | **Pn** | **23 31 33.8** | **-0.6** |
| **PLCA** | **Paso Flores** | **6.07** | **154** | Pn | **Pn** | **23 31 46.9** | **-0.1** |
| | comp=E,2.5nm,0.3s,baz=323,slow=11,SNR=68 | | | | | | |
| PLCA | | | | Sn | **Sn** | **23 32 48.7** | **-6.5** |
| | comp=E,0.2nm,0.3s,baz=28,slow=19,SNR=1.5 | | | | | | |
| PLCA | | | | LR | LR | 23 34 13.6 | |
| | comp=E,181nm,19.4s,baz=326,slow=39 | | | | | | |
| | comp=E,8.2nm,0.4s | | | | | | |
| **LPAZ** | **La Paz** | **19.70** | **17** | P | **Pn** | **23 34 48.8** | **+0.6** |
| | comp=E,0.1nm,0.3s,baz=218,slow=8.9,SNR=4.4 | | | | | | |
| | comp=E,1.1nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **51.00** | **157** | P | **P** | **23 39 18.0** | **+0.4** |
| | comp=E,0.8nm,1.1s,baz=279,slow=9.5,SNR=1.3 | | | | | | |
| **APG** | **El Apazote** | **52.41** | **340** | LR | LR | 23 55 39.7 | |
| | comp=E,5.4nm,20.7s,baz=69,slow=29 | | | | | | |
| **QSPA** | **South Pole Qui** | **54.91** | **180** | P | **P** | **23 39 48.1** | **+1.5** |
| | comp=E,1.2nm,1.0s,baz=216,slow=8.7,SNR=2.3 | | | | | | |
| | comp=E,1.2nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **70.11** | **333** | P | **P** | **23 41 29.4** | **+1.0** |
| | comp=E,0.8nm,0.7s,baz=151,slow=8.3,SNR=6.9 | | | | | | |
| TXAR | | | | LR | LR | 00 07 18.7 | |
| | comp=E,27nm,20.0s,baz=260,slow=32 | | | | | | |
| | comp=E,0.8nm,0.7s | | | | | | |
| **TSUM** | **Tsumeb** | **80.46** | **107** | LR | LR | 00 11 49.7 | |
| | comp=E,27nm,21.6s,baz=79,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.04** | **327** | P | **P** | **23 42 48.3** | **+1.6** |
| | comp=E,0.5nm,0.8s,baz=132,slow=4.0,SNR=3.1 | | | | | | |
| | comp=E,0.5nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **84.21** | **335** | P | **P** | **23 42 47.6** | **+0.1** |
| | comp=E,0.2nm,0.3s,baz=133,slow=8.0,SNR=2.1 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.24** | **71** | P | **P** | **23 42 59.8** | **+1.8** |
| | comp=E,0.7nm,1.1s,baz=251,slow=4.4,SNR=2.0 | | | | | | |
| | comp=E,0.7nm,1.1s | | | | | | |

*IDC **23** 23:31:29.0±2.5, 8°.40S×117°.06E, h0km, mb3.8/3, mbtmp3.8/4, ML3.5/1, Error ellipse: s-maj=49.4km s-min=31.6km az=102.0*
*DJA **23** 23:31:30.1±0.3, 8°.3S±3°×117°.7E±°, h10km, M3.9/8, mb4.0/1, MLv3.9/8*
**ISC 23 23:31:30.0±0.9, 8°.40S±0°.06×116°.98E±0°.04, h10km, n14, σ0§67/18, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.35** | **196** | P | **Pg** | **23 31 36.8** | **-0.2** |
| TWSI | | | | S | **Sg** | **23 31 41.6** | **0.0** |
| **PLAI** | **Plampang** | **0.90** | **118** | P | **Pg** | **23 31 47.5** | **+0.2** |
| PLAI | | | | S | **Sg** | **23 31 59.4** | **+0.4** |
| **DNP** | **Denpasar** | **1.77** | **261** | P | **Pn** | **23 32 01.3** | **+0.6** |
| **SRBI** | **Singaraja** | **1.77** | **280** | P | **Pn** | **23 32 01.9** | **+1.2** |
| SRBI | | | | S | **Sn** | **23 32 23.6** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **2.69** | **118** | P | **Pn** | **23 32 13.6** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.80** | **268** | P | **Pn** | **23 32 14.7** | **-0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.14** | **57** | P | **Pn** | **23 32 33.9** | **+0.5** |
| **KAPI** | **Kappang** | **4.35** | **40** | Pn | **Pn** | **23 32 36.5** | **+0.3** |
| | 2.9nm,0.3s,baz=202,slow=19,SNR=1.9 | | | | | | |
| KAPI | | | | Sn | **Sn** | **23 33 26.1** | **-0.8** |
| | 4.7nm,0.3s,baz=227,slow=22,SNR=2.2 | | | | | | |
| | 6.6nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.67** | **95** | P | **Pn** | **23 32 40.6** | **-0.2** |
| **PWJI** | **Pagerwojo** | **5.13** | **274** | P | **Pn** | **23 32 45.6** | **-1.4** |
| **WRA** | **Warramunga Arr** | **20.35** | **126** | P | **P** | **23 36 06.6** | **-0.1** |
| | 2.5nm,0.5s,baz=301,slow=12,SNR=42 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.21** | **135** | P | **P** | **23 36 25.7** | **-1.2** |
| | 1.3nm,0.8s,baz=312,slow=8.2,SNR=12 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **32.70** | **139** | P | **P** | **23 38 03.2** | **+0.5** |
| | 1.2nm,0.4s,baz=310,slow=9.1,SNR=3.0 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **CPUP** | **Villa Florida** | **145.04** | **189** | PKPbc | **PKPab** | **23 51 07.7** | **0.0** |
| | 2.4nm,0.8s,baz=196,slow=2.3,SNR=6.0 | | | | | | |

*DNK **23** 23:36:06.7±2.8, 50°.26N×13°.19E, h7km±156km, ML2.4*
*IPEC **23** 23:36:07.6±0.1, 50°.24N×12°.47E, h9km, ML3.4/9, Error ellipse: s-maj=0.9km s-min=0.7km az=146.0*
*BUG **23** 23:36:07.8, 50°.15N×12°.31E, h0km±15km, MD4.4/9, ML3.8/10*
*BGR **23** 23:36:07.8±0.3, 50°.24N×12°.45E, h8km±3km, ML3.4/6, Error ellipse: s-maj=3.3km s-min=2.2km az=99.0*
*WBNET **23** 23:36:08.0, 50°.23N×12°.46E, h7km, Ml3.4*
*PRU **23** 23:36:07.4, 50°.23N×12°.48E, h10km, West Bohemia-felt*
*MCSM **23** 23:36:07.3±1.2, 50°N±5°×1°2E±°, h5km±14km, mb3.8, MLv3.9*
*BNS **23** 23:36:08.7±0.8, 50°.22N×12°.43E, h10km±8km, ML3.2*
*CLL **23** 23:36:08.5±0.4, 50°.24N×12°.45E, h5km±2km, ML3.3*
*LDG **23** 23:36:09.1±0.3, 50°.20N×12°.47E, h10km, Ml3.6/34, Error ellipse: s-maj=5.3km s-min=4.4km az=144.0*
*STR **23** 23:36:12.0±1.2, 50°N±10°×1°2E±°, h9km, MLv4.0/18, Error ellipse: s-maj=0.0km s-min=0.0km az=136.0, preliminary*
**ISC 23 23:36:05.8±0.6, 50°.22N±0°.01×12°.44E±0°.01, h17km±3km, n212, σ1§81/320, 3C-18D, Germany**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NKC** | **Novy Kostel** | **0.02** | **17** | ⇓P | **Pg** | **23 36 09.3** | **+0.4** |
| NKC | | | | S | **Sg** | **23 36 10.2** | **-0.8** |
| **VAC** | **Vackov** | **0.04** | **291** | ⇓P | **Pg** | **23 36 09.6** | **+0.7** |
| VAC | | | | S | **Sg** | **23 36 10.7** | **-0.4** |
| **KVC** | **Kvetna** | **0.05** | **105** | ⇓P | **Pg** | **23 36 09.5** | **+0.5** |
| KVC | | | | S | **Sg** | **23 36 10.5** | **-0.7** |
| **LBCW** | **Luby** | **0.05** | **339** | ⇓P | **Pg** | **23 36 09.6** | **+0.6** |
| LBCW | | | | S | **Sg** | **23 36 10.8** | **-0.4** |
| **STCW** | **Studenec** | **0.07** | **51** | ⇑P | **Pg** | **23 36 09.6** | **+0.4** |
| STCW | | | | S | **Sg** | **23 36 10.6** | **-0.8** |
| **SKC** | **Skalna** | **0.07** | **227** | ⇑P | **Pg** | **23 36 10.1** | **+1.0** |
| SKC | | | | S | **Sg** | **23 36 11.6** | **+0.3** |
| **ROHR** | **Rohrbach** | **0.08** | **281** | *i*Pg | **Pg** | **23 36 10.2** | **+1.0** |
| ROHR | | | | *i*Sg | **Sg** | **23 36 11.6** | **0.0** |
| ROHR | | | | IAML | | 23 36 11.9 | |
| | comp=N,24μm,0.2s | | | | | | |
| **ROHR** | **Rohrbach** | **0.08** | **281** | *i*Pg | **Pg** | **23 36 10.2** | **+1.0** |
| ROHR | | | | *i*Sg | **Sg** | **23 36 11.6** | **0.0** |
| | comp=N,24μm,0.2s | | | | | | |
| **WERN** | **Wernitzgruen** | **0.08** | **329** | *i*Pg | **Pg** | **23 36 10.1** | **+0.8** |
| WERN | | | | *i*Sg | **Sg** | **23 36 11.4** | **-0.2** |
| WERN | | | | IAML | | 23 36 11.7 | |
| | comp=E,10μm,0.4s | | | | | | |
| **WERN** | **Wernitzgruen** | **0.08** | **329** | *i*Pg | **Pg** | **23 36 10.1** | **+0.8** |
| WERN | | | | *i*Sg | **Sg** | **23 36 11.4** | **-0.2** |
| | comp=E,10μm,0.4s | | | | | | |
| **POCW** | **Potky** | **0.10** | **355** | ⇓P | **Pb** | **23 36 10.3** | **+0.9** |
| POCW | | | | S | **Sg** | **23 36 11.7** | **-0.3** |
| **KOCW** | **Kopaniny** | **0.14** | **290** | ⇓P | **Pb** | **23 36 11.1** | **+1.2** |
| KOCW | | | | S | **Sb** | **23 36 13.2** | **+0.4** |
| **GUNZ** | **Gunzen** | **0.16** | **334** | *i*Pg | **Pb** | **23 36 11.3** | **+1.0** |
| GUNZ | | | | *i*Sg | **Sg** | **23 36 13.4** | **+0.3** |
| GUNZ | | | | IAML | | 23 36 15.3 | |
| | comp=E,4μm,0.5s | | | | | | |
| **GUNZ** | **Gunzen** | **0.16** | **334** | *i*Pg | **Pb** | **23 36 11.3** | **+1.0** |
| GUNZ | | | | *i*Sg | **Sg** | **23 36 13.4** | **+0.3** |
| | comp=E,4μm,0.5s | | | | | | |
| **ZHC** | **Zelena Hora** | **0.17** | **210** | ⇑P | **Pb** | **23 36 11.9** | **+1.4** |
| ZHC | | | | S | **Sb** | **23 36 14.5** | **+0.9** |
| **MULD** | **Muldenberg** | **0.20** | **353** | *i*Pg | **Pb** | **23 36 11.8** | **+0.9** |
| MULD | | | | *e*Sg | **Sg** | **23 36 14.1** | **+0.2** |
| MULD | | | | IAML | | 23 36 14.7 | |
| | comp=N,9μm,0.2s | | | | | | |
| **MULD** | **Muldenberg** | **0.20** | **353** | *i*Pg | **Pb** | **23 36 11.8** | **+0.9** |
| MULD | | | | *e*Sg | **Sg** | **23 36 14.1** | **+0.2** |
| | comp=N,9μm,0.2s | | | | | | |
| **TANN** | **Tannenbergstha** | **0.20** | **4** | *i*Pg | **Pb** | **23 36 11.7** | **+0.8** |
| TANN | | | | *i*Sg | **Sg** | **23 36 14.1** | **0.0** |
| TANN | | | | IAML | | 23 36 14.8 | |
| | comp=N,6μm,0.2s | | | | | | |
| **TANN** | **Tannenbergstha** | **0.20** | **4** | *i*Pg | **Pb** | **23 36 11.7** | **+0.8** |
| TANN | | | | *i*Sg | **Sg** | **23 36 14.1** | **0.0** |
| | comp=N,6μm,0.2s | | | | | | |
| **LACW** | **Lazy** | **0.20** | **145** | ⇓P | **Pb** | **23 36 12.4** | **+1.3** |
| LACW | | | | S | **Sb** | **23 36 15.3** | **+0.7** |
| **TRCW** | **Trojmez** | **0.21** | **294** | ⇓P | **Pb** | **23 36 12.3** | **+1.2** |
| TRCW | | | | S | **Sb** | **23 36 15.2** | **+0.5** |
| **VIEL** | **Selb-Vielitz** | **0.22** | **262** | *i*Pg | **Pb** | **23 36 12.6** | **+1.3** |
| VIEL | | | | *i*Sg | **Sb** | **23 36 15.6** | **+0.6** |
| **VIEL** | **Selb-Vielitz** | **0.22** | **262** | *i*Pg | **Pb** | **23 36 12.6** | **+1.3** |
| VIEL | | | | *i*Sg | **Sb** | **23 36 15.6** | **+0.6** |
| **TRIB** | **Obertriebel** | **0.24** | **305** | *i*Pg | **Pb** | **23 36 12.7** | **+1.2** |
| TRIB | | | | *i*Sg | **Sb** | **23 36 16.1** | **+0.6** |
| TRIB | | | | IAML | | 23 36 16.4 | |
| | comp=E,3μm,0.1s | | | | | | |
| **TRIB** | **Obertriebel** | **0.24** | **305** | *i*Pg | **Pb** | **23 36 12.7** | **+1.2** |
| TRIB | | | | *i*Sg | **Sb** | **23 36 16.1** | **+0.6** |
| | comp=E,3μm,0.1s | | | | | | |
| **WERD** | **Werda** | **0.24** | **339** | *i*Pg | **Pb** | **23 36 12.7** | **+1.0** |
| WERD | | | | *e*Sg | **Sg** | **23 36 15.6** | **+0.4** |
| WERD | | | | IAML | | 23 36 16.2 | |
| | comp=E,2μm,0.5s | | | | | | |
| **WERD** | **Werda** | **0.24** | **339** | *i*Pg | **Pb** | **23 36 12.7** | **+1.0** |
| WERD | | | | *e*Sg | **Sg** | **23 36 15.6** | **+0.4** |
| | comp=E,2μm,0.5s | | | | | | |
| **MANZ** | **Manzenberg** | **0.32** | **223** | *e*Pg | **Pb** | **23 36 14.5** | **+1.5** |
| **PLN** | **Plauen** | **0.32** | **326** | *i*Pg | **Pb** | **23 36 14.3** | **+1.2** |
| PLN | | | | *i*Sg | **Sb** | **23 36 18.4** | **+0.4** |
| PLN | | | | IAML | | 23 36 18.7 | |
| | comp=N,2μm,0.2s | | | | | | |
| **PLN** | **Plauen** | **0.32** | **326** | *i*Pg | **Pb** | **23 36 14.3** | **+1.2** |
| PLN | | | | *i*Sg | **Sb** | **23 36 18.4** | **+0.4** |
| | comp=N,2μm,0.2s | | | | | | |
| **SCHF** | **Schoenfels** | **0.46** | **357** | *i*Pg | **Pb** | **23 36 16.6** | **+1.2** |
| SCHF | | | | *i*Sg | **Sg** | **23 36 22.5** | **+1.1** |
| SCHF | | | | IAML | | 23 36 22.9 | |
| | comp=E,6μm,0.2s | | | | | | |
| **SCHF** | **Schoenfels** | **0.46** | **357** | *i*Pg | **Pb** | **23 36 16.6** | **+1.2** |
| SCHF | | | | *i*Sg | **Sg** | **23 36 22.5** | **+1.1** |
| | comp=E,6μm,0.2s | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **0.48** | **199** | *e*Pg | **Pn** | **23 36 17.5** | **-0.3** |
| ROTZ | | | | *e*Sg | **Sb** | **23 36 23.8** | **+1.5** |
| **GRZ1** | **Mausoleum Wald** | **0.49** | **343** | *i*Pg | **Pb** | **23 36 17.3** | **+1.3** |
| GRZ1 | | | | *i*Sg | **Sg** | **23 36 23.3** | **+0.9** |
| GRZ1 | | | | IAML | | 23 36 25.1 | |
| | comp=N,2μm,0.3s | | | | | | |
| **GRZ1** | **Mausoleum Wald** | **0.49** | **343** | *i*Pg | **Pb** | **23 36 17.3** | **+1.3** |
| GRZ1 | | | | *i*Sg | **Sg** | **23 36 23.3** | **+0.9** |
| | comp=N,2μm,0.3s | | | | | | |
| **ZEU** | **Talsperre Zeul** | **0.54** | **327** | *i*Pg | **Pb** | **23 36 18.3** | **+1.5** |
| ZEU | | | | *i*Sg | **Sb** | **23 36 25.1** | **+0.9** |
| **ZEU** | **Talsperre Zeul** | **0.54** | **327** | *i*Pg | **Pb** | **23 36 18.3** | **+1.5** |
| ZEU | | | | *i*Sg | **Sb** | **23 36 25.1** | **+0.9** |
| **MOX** | **Moxa** | **0.68** | **309** | *e*Pg | **Pn** | **23 36 20.9** | **+0.3** |
| MOX | | | | *e*Sg | **Sb** | **23 36 29.8** | **+1.6** |
| **HSKC** | **Hora Svate Kat** | **0.74** | **58** | *e*PG | **Pb** | **23 36 21.7** | **+1.5** |
| HSKC | | | | *e*SG | **Sb** | **23 36 31.2** | **+1.1** |
| | comp=N,1μm,0.4s | | | | | | |
| **FBE** | **Freiberg** | **0.91** | **39** | *e*Pg | **Pn** | **23 36 25.1** | **+1.3** |
| **GRF** | **Grafenberg Arr** | **0.95** | **237** | *e*Pg | **Pn** | **23 36 26.4** | **+2.1** |
| **GRFO** | **Grafenberg** | **0.95** | **237** | *e*Pg | **Pn** | **23 36 26.0** | **+1.8** |
| **WET** | **Wettzell** | **1.11** | **165** | *e*Pg | **Pg** | **23 36 28.9** | **+1.7** |
| WET | | | | Sg | **Sn** | **23 36 43.2** | **+1.8** |
| **CLL** | **Collm** | **1.15** | **18** | *i*Pg | **Pg** | **23 36 29.2** | **+1.3** |
| | comp=Z,519nm,0.5s | | | | | | |
| CLL | | | | *i*x | x | 23 36 31.9 | |
| CLL | | | | *i*Sg | **Sg** | **23 36 43.9** | **+0.9** |
| | comp=Z,607nm,0.4s | | | | | | |
| CLL | | | | *i*x | x | 23 36 47.3 | |
| **CLL** | **Collm** | **1.15** | **18** | *e*Pg | **Pg** | **23 36 28.8** | **+0.8** |
| **CLL** | **Collm** | **1.15** | **18** | P | **Pg** | **23 36 28.9** | **+1.0** |
| **BRG** | **Berggiesshubel** | **1.16** | **55** | Pn | **Pg** | **23 36 28.9** | **+0.7** |
| BRG | | | | Pg | **Pb** | **23 36 29.5** | **+2.2** |
| BRG | | | | Sg | **Sg** | **23 36 44.4** | **+1.0** |
| BRG | | | | Amp | | 23 36 45.6 | |
| | comp=Z,498nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.16** | **55** | *e*Pg | **Pg** | **23 36 28.9** | **+0.7** |
| **PRA** | **Prague** | **1.29** | **96** | *e*SG | **Sg** | **23 36 48.0** | **+0.5** |
| | comp=Z,436nm,0.7s | | | | | | |
| **KHC** | **Kasperske Hory** | **1.32** | **145** | *e*PG | **Pg** | **23 36 32.0** | **+0.9** |
| KHC | | | | *e*SG | **Sg** | **23 36 49.4** | **+1.1** |
| | comp=Z,1μm,2.1s | | | | | | |
| **KHC** | **Kasperske Hory** | **1.32** | **145** | P | **Pg** | **23 36 32.0** | **+0.9** |
| **PRU** | **Pruhonice** | **1.37** | **99** | *e*PG | **Pg** | **23 36 32.5** | **+0.3** |
| PRU | | | | *e*SG | **Sg** | **23 36 51.2** | **+1.1** |
| | comp=Z,450nm,0.5s | | | | | | |
| **ZVC** | **Zvikov** | **1.38** | **124** | *e*PG | **Pg** | **23 36 32.9** | **+0.6** |
| ZVC | | | | *e*SG | **Sg** | **23 36 50.9** | **+0.7** |
| | comp=Z,319nm,0.7s | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **76** | *e*SG | **Sg** | **23 36 52.4** | **+1.5** |
| | comp=Z,658nm,0.4s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.54** | **100** | *e*SG | **Sg** | **23 36 56.0** | **+0.5** |
| | comp=Z,403nm,0.3s | | | | | | |
| **GEC2** | **GERESS Array S** | **1.60** | **149** | *e*Pg | **Pb** | **23 36 36.1** | **+1.2** |
| **UBBA** | **Unterbreizbach** | **1.67** | **292** | Pg | **Pg** | **23 36 38.9** | **+1.1** |
| UBBA | | | | Sg | **Sg** | **23 36 59.8** | **+0.3** |
| **CKRC** | **Cesky Krumlov** | **1.85** | **138** | *e*PG | **Pb** | **23 36 39.9** | **+0.7** |
| CKRC | | | | *e*SG | **Sg** | **23 37 05.4** | **-0.1** |
| | comp=Z,120nm,0.4s | | | | | | |
| **CLZ** | **Clausthal** | **2.08** | **322** | *e*Pn | **Pb** | **23 36 42.8** | **-0.3** |
| CLZ | | | | Pg | **Pg** | **23 36 47.2** | **+1.4** |
| CLZ | | | | Sg | **Sg** | **23 37 12.9** | **+0.1** |
| **TREC** | **Trest** | **2.18** | **114** | *e*SG | **Sg** | **23 37 15.0** | **-0.9** |
| | comp=Z,110nm,0.3s | | | | | | |
| **UPC** | **Upice** | **2.31** | **81** | *e*SG | **Sg** | **23 37 19.0** | **-0.9** |
| | comp=Z,240nm,0.4s | | | | | | |
| **CHVC** | **Chvalec** | **2.34** | **80** | *e*SG | **Sg** | **23 37 21.1** | **+0.1** |
| | comp=Z,288nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **2.49** | **85** | *e*SG | **Sg** | **23 37 24.6** | **-1.3** |
| | comp=Z,184nm,0.4s | | | | | | |
| **KSP** | **Ksiaz** | **2.54** | **74** | *e*Pn | **Pb** | **23 36 49.6** | **-1.2** |
| KSP | | | | *e*Pg | **Pg** | **23 36 54.8** | **+0.5** |
| KSP | | | | *e*Sg | **Sg** | **23 37 27.1** | **-0.1** |
| **KSP** | **Ksiaz** | **2.54** | **74** | P | **Pb** | **23 36 49.5** | **-1.2** |
| **TNS** | **Taunus Mts** | **2.56** | **272** | Pn | **Pb** | **23 36 50.6** | **-0.7** |
| **BIOA** | **Bad Ischl, Aus** | **2.65** | **162** | Pn | **Pn** | **23 36 50.3** | **+2.6** |
| | comp=Z,2.3nm,0.2s,SNR=11 | | | | | | |
| **MO

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ENDD** | **Endenburg** | **3.98** | **233** | Sn | **Sg** | **23 38 12.5** | **-1.1** |
| **ENDD** | **Endenburg** | **3.98** | **233** | Pg | **Pg** | **23 37 22.2** | **+0.2** |
| **DREG** | **Dreilaegerbach** | **3.99** | **279** | *e*Pn | **Pn** | **23 37 08.9** | **+2.8** |
| **RAST** | **Rastdorf** | **3.99** | **314** | Pn | Pn | 23 37 01.9 | -4.1 |
| **GORS** | **Gorjuse** | **4.04** | **165** | *e*Pn | **Pn** | **23 37 10.9** | **+4.1** |
| GORS | | | | *i* Pg | **Pg** | **23 37 24.3** | **+1.2** |
| GORS | | | | *i* Sn | **Sb** | **23 38 02.1** | **-2.9** |
| GORS | | | | *e*Sg | **Sg** | **23 38 15.2** | **-0.2** |
| GORS | | | | IAML | | 23 38 32.4 | |
| | comp=Z,56nm,0.9s | | | | | | |
| **BTNL** | **Ternell** | **4.05** | **278** | *d*P | **Pn** | **23 37 10.8** | **+3.9** |
| BTNL | | | | *d*S | **Sg** | **23 38 17.1** | **+1.3** |
| **BHOU** | **Houvegnez** | **4.13** | **274** | *d*P | Pn | 23 37 13.0 | +5.0 |
| BHOU | | | | *d*S | **Sb** | **23 38 09.9** | **+2.4** |
| **STHE** | **Hesingue, 6813** | **4.17** | **233** | Pg | **Pg** | **23 37 26.4** | **+0.9** |
| **ILLF** | **Illfurth** | **4.26** | **235** | P | **Pg** | **23 37 27.7** | **+0.5** |
| ILLF | | | | S | **Sg** | **23 38 21.9** | **-0.4** |
| **BALST** | **Balsthal** | **4.26** | **229** | S | **Sg** | **23 38 23.6** | **+1.1** |
| **BALST** | **Balsthal** | **4.26** | **229** | P | **Pg** | **23 37 27.8** | **+0.4** |
| **HINF** | **Hinteralfeld** | **4.39** | **239** | *e*Pn | **Pn** | **23 37 12.0** | **+0.4** |
| **HINF** | **Hinteralfeld** | **4.39** | **239** | *e*Pg | **Pg** | **23 37 30.3** | **+0.5** |
| HINF | | | | *e*Sn | **Sn** | **23 38 02.2** | **-0.1** |
| HINF | | | | *e*Sg | **Sg** | **23 38 25.0** | **-1.7** |
| | comp=Z,60nm,0.6s | | | | | | |
| **BOURR** | **Bourrignon** | **4.45** | **233** | S | **Sg** | **23 38 27.4** | **-1.3** |
| **BOURR** | **Bourrignon** | **4.45** | **233** | P | **Pg** | **23 37 31.2** | **+0.2** |
| **VYHS** | **Vyhne** | **4.52** | **110** | *e*SN | **Sn** | **23 38 07.9** | **+2.4** |
| VYHS | | | | *e*SG | **Sg** | **23 38 30.4** | **-0.4** |
| **MPLH** | **Magyarpolny** | **4.55** | **130** | P | **Pn** | **23 37 16.5** | **+2.8** |
| **SRO** | **Srobarova** | **4.55** | **120** | *e*PN | **Pn** | **23 37 18.3** | **+4.6** |
| SRO | | | | *e*SG | **Sg** | **23 38 30.2** | **-1.6** |
| **RONF** | **Ronchamp** | **4.57** | **239** | P | **Pg** | **23 37 33.5** | **+0.3** |
| RONF | | | | S | **Sg** | **23 38 31.8** | **-0.5** |
| **HAU** | **Haudompre** | **4.57** | **243** | *e*Pn | **Pn** | **23 37 16.4** | **+2.3** |
| **HAU** | **Haudompre** | **4.57** | **243** | *e*Pg | **Pg** | **23 37 32.5** | **-0.8** |
| HAU | | | | *e*Sg | **Sg** | **23 38 32.6** | **+0.1** |
| | comp=Z,124nm,0.6s | | | | | | |
| **BCLA** | **Clavier** | **4.58** | **275** | *d*P | **Pg** | **23 37 33.7** | **+0.4** |
| BCLA | | | | *d*S | **Sg** | **23 38 32.8** | **+0.1** |
| **RCHB** | **Rochefort** | **4.63** | **272** | *d*P | **Pn** | **23 37 18.3** | **+3.4** |
| RCHB | | | | *d*S | **Sn** | **23 38 11.2** | **+2.9** |
| **LANS** | **Liptovska Anna** | **4.69** | **100** | *e*PN | **Pn** | **23 37 19.0** | **+3.4** |
| LANS | | | | *e*SG | **Sg** | **23 38 34.4** | **-1.7** |
| **PAGF** | **Fort de Pagny** | **4.69** | **252** | *e*Pn | **Pn** | **23 37 18.1** | **+2.4** |
| **PAGF** | **Fort de Pagny** | **4.69** | **252** | *e*Pg | **Pg** | **23 37 35.8** | **+0.3** |
| PAGF | | | | *e*Sg | **Sg** | **23 38 37.1** | **+0.8** |
| | comp=Z,85nm,0.8s | | | | | | |
| **BGES** | **Gesves** | **4.72** | **275** | *d*S | **Sg** | **23 38 38.6** | **+1.5** |
| **OJC** | **Ojcow** | **4.72** | **87** | *e*Pg | **Pg** | **23 37 35.2** | **-1.0** |
| OJC | | | | *e*Sg | **Sg** | **23 38 32.3** | **-5.0** |
| **CHMF** | **Charmoille** | **4.85** | **234** | P | **Pg** | **23 37 38.2** | **-0.3** |
| CHMF | | | | S | **Sg** | **23 38 40.1** | **-1.2** |
| **GIVF** | **Givet** | **4.90** | **272** | *e*Pg | **Pg** | **23 37 39.9** | **+0.4** |
| GIVF | | | | *e*Sn | **Sn** | **23 38 15.1** | **+0.4** |
| GIVF | | | | *e*Sg | **Sg** | **23 38 42.0** | **-0.9** |
| | comp=Z,34nm,0.4s | | | | | | |
| **STFL** | **Fournets-Luisa** | **4.98** | **234** | P | **Pg** | **23 37 40.6** | **-0.5** |
| **TORNY** | **Torny/Romont** | **5.02** | **229** | S | **Sg** | **23 38 49.1** | **+2.4** |
| **TORNY** | **Torny/Romont** | **5.02** | **229** | P | **Pg** | **23 37 42.0** | **+0.3** |
| **SAVF** | **Savonnieres en** | **5.04** | **254** | *e*Pn | **Pg** | **23 37 23.3** | **+2.9** |
| **SAVF** | **Savonnieres en** | **5.04** | **254** | *e*Pg | **Pg** | **23 37 43.2** | **+1.0** |
| SAVF | | | | *e*Sg | **Sg** | **23 38 47.8** | **+0.4** |
| | comp=Z,36nm,0.7s | | | | | | |
| **DOU** | **Dourbes** | **5.05** | **272** | *d*S | **Sg** | **23 38 46.5** | **-1.1** |
| **EMBD** | **Embd, Matterta** | **5.05** | **219** | S | **Sg** | **23 38 51.0** | **+3.1** |
| **EMBD** | **Embd, Matterta** | **5.05** | **219** | P | **Pg** | **23 37 43.6** | **+1.1** |
| **BOUC** | **Bouclans** | **5.06** | **236** | P | **Pg** | **23 37 42.5** | **0.0** |
| BOUC | | | | S | **Sg** | **23 38 46.4** | **-1.6** |
| **MEZF** | **Maizieres J'vi** | **5.12** | **253** | *e*Pn | **Pn** | **23 37 25.1** | **+3.5** |
| **MEZF** | **Maizieres J'vi** | **5.12** | **253** | *e*Pg | **Pg** | **23 37 46.2** | **+2.4** |
| MEZF | | | | *e*Sg | **Sg** | **23 38 50.6** | **+0.5** |
| | comp=Z,44nm,0.8s | | | | | | |
| **BSD** | **Bornholm Skovb** | **5.13** | **16** | *i* P | **Pn** | **23 37 24.4** | **+2.7** |
| BSD | | | | *i* S | **Sn** | **23 38 16.3** | **-4.1** |
| BSD | | | | IAML | | 23 38 21.6 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| **BRANT** | **Les Verrieres** | **5.14** | **233** | S | **Sg** | **23 38 51.1** | **+0.3** |
| **BRANT** | **Les Verrieres** | **5.14** | **233** | P | **Pg** | **23 37 43.6** | **-0.6** |
| **SFTF** | **Sexfontaines** | **5.25** | **250** | *e*Pn | **Pn** | **23 37 26.4** | **+3.0** |
| **SFTF** | **Sexfontaines** | **5.25** | **250** | *e*Pg | **Pg** | **23 37 45.4** | **-0.9** |
| SFTF | | | | *e*Sn | **Sn** | **23 38 23.0** | **-0.5** |
| SFTF | | | | *e*Sg | **Sg** | **23 38 53.5** | **-0.8** |
| | comp=Z,105nm,0.9s | | | | | | |
| **BAIF** | **Baives** | **5.30** | **271** | *e*Pn | **Pn** | **23 37 26.3** | **+2.3** |
| **BAIF** | **Baives** | **5.30** | **271** | *e*Pg | **Pg** | **23 37 44.2** | **-2.9** |
| BAIF | | | | *e*Sg | **Sg** | **23 38 51.8** | **-3.9** |
| | comp=Z,62nm,1.0s | | | | | | |
| **AIGLE** | **Aigle** | **5.33** | **225** | S | **Sg** | **23 39 00.7** | **+3.8** |
| **AIGLE** | **Aigle** | **5.33** | **225** | P | **Pg** | **23 37 46.7** | **-1.1** |
| **DIX** | **Grande Dixence** | **5.34** | **221** | S | **Sg** | **23 38 59.7** | **+2.7** |
| **DIX** | **Grande Dixence** | **5.34** | **221** | P | **Pg** | **23 37 49.6** | **+1.7** |
| **LUNU** | **Lund** | **5.46** | **6** | *i* P | **Pn** | **23 37 27.4** | **+1.3** |
| LUNU | | | | *i* S | **Sn** | **23 38 25.7** | **-2.7** |
| **A173A** | **Vacheresse, 74** | **5.47** | **227** | P | **Pg** | **23 37 51.8** | **+1.3** |
| A173A | | | | S | **Sg** | **23 39 04.9** | **+3.7** |
| **GIMEL** | **St. Georges /** | **5.52** | **230** | P | **Pg** | **23 37 51.3** | **-0.2** |
| **KECS** | **Kecovo** | **5.54** | **105** | *e*PN | Pn | 23 37 32.6 | +5.3 |
| **RIVEL** | **MONT RIVEL** | **5.54** | **234** | P | **Pg** | **23 37 51.2** | **-0.7** |
| **CABF** | **La Chapelle** | **5.56** | **232** | *e*Pn | **Pn** | **23 37 26.8** | **-0.9** |
| **CABF** | **La Chapelle** | **5.56** | **232** | *e*Pg | **Pg** | **23 37 51.5** | **-0.6** |
| CABF | | | | *e*Sg | **Sg** | **23 39 04.7** | **+0.6** |
| | comp=Z,43nm,0.7s | | | | | | |
| **OGSI** | **Sixt** | **5.63** | **225** | P | **Pg** | **23 37 54.6** | **+1.1** |
| **REMY** | **Saint-Rhmy-en** | **5.64** | **221** | P | **Pg** | **23 37 53.5** | **-0.1** |
| **REMY** | **Saint-Rhmy-en** | **5.64** | **221** | S | **Sg** | **23 39 09.9** | **+3.3** |
| **MORH** | **Mrgy, Hungar** | **5.76** | **132** | P | **Pn** | **23 37 33.1** | **+2.7** |
| **BJUU** | **Bjuv** | **5.88** | **3** | *i* P | **Pn** | **23 37 32.0** | **+0.1** |
| BJUU | | | | *i* S | **Sn** | **23 38 36.7** | **-2.0** |
| **RSL** | **Roselend** | **5.98** | **223** | P | **Pg** | **23 37 59.7** | **-0.6** |
| **LPL** | **La Plagne** | **6.07** | **221** | *e*Pn | **Pn** | **23 37 36.0** | **+1.2** |
| **LPL** | **La Plagne** | **6.07** | **221** | *e*Pg | **Pg** | **23 38 01.4** | **-0.5** |
| LPL | | | | *e*Sg | **Sg** | **23 39 18.3** | **-2.2** |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **LPG** | **La Plagne** | **6.08** | **221** | *e*Pn | **Pn** | **23 37 36.2** | **+1.2** |
| **LPG** | **La Plagne** | **6.08** | **221** | *e*Pg | **Pg** | **23 38 01.5** | **-0.6** |
| LPG | | | | *e*Sn | **Sn** | **23 38 43.0** | **-1.2** |
| LPG | | | | *e*Sg | **Sg** | **23 39 20.9** | **+0.1** |
| | comp=Z,6.9nm,0.5s | | | | | | |
| **OG35** | **Corcelles** | **6.21** | **230** | P | **Pg** | **23 38 03.3** | **-1.3** |
| OG35 | | | | S | **Sg** | **23 39 26.4** | **+1.5** |
| **DEL** | **Delary** | **6.32** | **7** | *i* P | **Pn** | **23 37 37.0** | **-1.0** |
| DEL | | | | *i* S | **Sn** | **23 38 46.4** | **-3.3** |
| **LOR** | **Lormes** | **6.40** | **246** | *e*Pn | **Pn** | **23 37 41.1** | **+2.0** |
| **LOR** | **Lormes** | **6.40** | **246** | *e*Pg | **Pg** | **23 38 07.9** | **-0.2** |
| LOR | | | | *e*Sn | **Sn** | **23 38 51.7** | **0.0** |
| LOR | | | | *e*Sg | **Sg** | **23 39 28.1** | **-2.8** |
| | comp=Z,29nm,0.7s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **6.52** | **98** | *e*PN | **Pn** | **23 37 43.7** | **+2.9** |
| KOLS | | | | *e*SG | **Sg** | **23 39 34.7** | **-0.2** |
| **MBDF** | **Montbardon** | **6.70** | **217** | *e*Pn | **Pn** | **23 37 46.5** | **+3.1** |
| **MBDF** | **Montbardon** | **6.70** | **217** | *e*Pg | **Pg** | **23 38 11.4** | **-2.6** |
| MBDF | | | | *e*Sn | **Sn** | **23 38 59.5** | **+0.1** |
| | comp=Z,7.7nm,0.7s | | | | | | |
| **SSF** | **Saint Saulge** | **6.71** | **245** | *e*Pn | **Pn** | **23 37 45.0** | **+1.6** |
| **SSF** | **Saint Saulge** | **6.71** | **245** | *e*Pg | **Pg** | **23 38 13.0** | **-1.1** |
| SSF | | | | *e*Sn | **Sn** | **23 38 57.9** | **-1.4** |
| SSF | | | | *e*Sg | **Sg** | **23 39 38.7** | **-2.2** |
| | comp=Z,21nm,0.5s | | | | | | |
| **SMF** | **Signal de Mont** | **6.75** | **241** | *e*Pn | **Pn** | **23 37 45.5** | **+1.6** |
| **SMF** | **Signal de Mont** | **6.75** | **241** | *e*Pg | **Pg** | **23 38 12.8** | **-2.0** |
| SMF | | | | *e*Sn | **Sn** | **23 38 59.0** | **-1.3** |
| SMF | | | | *e*Sg | **Sg** | **23 39 40.3** | **-1.8** |
| | comp=Z,7.3nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **6.91** | **222** | *e*Pn | **Pn** | **23 37 49.4** | **+3.1** |
| **ORIF** | **Oris-en-Rattie** | **6.91** | **222** | *e*Pg | **Pg** | **23 38 16.9** | **-1.1** |
| ORIF | | | | *e*Sn | **Sn** | **23 39 03.1** | **-1.4** |
| ORIF | | | | *e*Sg | **Sg** | **23 39 44.7** | **-2.7** |
| | comp=Z,11nm,0.5s | | | | | | |
| **AVF** | **Avril sur Loir** | **6.94** | **244** | *e*Pn | **Pn** | **23 37 49.3** | **+2.7** |
| **AVF** | **Avril sur Loir** | **6.94** | **244** | *e*Pg | **Pg** | **23 38 16.8** | **-1.8** |
| AVF | | | | *e*Sn | **Sn** | **23 39 03.8** | **-1.3** |
| AVF | | | | *e*Sg | **Sg** | **23 39 44.8** | **-3.6** |
| | comp=Z,60nm,1.1s | | | | | | |
| **HYF** | **Humbligny** | **7.12** | **249** | *e*Sg | **Sg** | **23 39 54.6** | **+0.5** |
| **ONAU** | **Onsala** | **7.20** | **358** | *i* S | **Sn** | **23 39 08.4** | **-2.8** |
| **SBF** | **Sospel** | **7.22** | **210** | *e*Pn | **Pn** | **23 37 52.9** | **+2.5** |
| SBF | | | | *e*Sn | **Sn** | **23 39 11.5** | **-0.4** |
| SBF | | | | *e*Sg | **Sg** | **23 39 54.3** | **-2.9** |
| | comp=Z,9.5nm,0.5s | | | | | | |
| **BGF** | **Bois d'Agland** | **7.36** | **244** | *e*Pn | **Pn** | **23 37 53.1** | **+0.8** |
| **BGF** | **Bois d'Agland** | **7.36** | **244** | *e*Pg | **Pg** | **23 38 25.6** | **-1.0** |
| BGF | | | | *e*Sg | **Sg** | **23 39 59.1** | **-2.7** |
| | comp=Z,44nm,0.8s | | | | | | |
| **BORU** | **Boraas** | **7.43** | **1** | *i* S | **Sn** | **23 39 13.0** | **-4.0** |
| **VIVF** | **Saint-Julien-l** | **7.51** | **227** | *e*Pn | **Pn** | **23 37 58.2** | **+3.8** |
| **VIVF** | **Saint-Julien-l** | **7.51** | **227** | *e*Pg | | 23 38 28.5 | |
| VIVF | | | | *e*Sn | **Sn** | **23 39 17.0** | **-2.1** |
| VIVF | | | | *e*Sg | | 23 40 04.6 | |
| | comp=Z,2.6nm,0.3s | | | | | | |
| **SMRF** | **Simiane la Rot** | **7.80** | **219** | *e*Pn | **Pn** | **23 37 59.5** | **+1.1** |
| **SMRF** | **Simiane la Rot** | **7.80** | **219** | *e*Pg | Pb | 23 38 35.8 | +15 |
| SMRF | | | | *e*Sn | **Sn** | **23 39 24.2** | **-2.1** |
| | comp=Z,1.5nm,0.3s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **7.88** | **244** | *e*Pn | **Pn** | **23 38 01.8** | **+2.4** |
| **TCF** | **Toulx Ste Croi** | **7.88** | **244** | *e*Pg | Pb | 23 38 34.9 | +13 |
| TCF | | | | *e*Sg | Sb | 23 40 14.9 | +20 |
| | comp=Z,16nm,0.6s | | | | | | |
| **LMR** | **La Mourre** | **8.00** | **213** | *e*Pn | **Pn** | **23 38 04.0** | **+3.0** |
| LMR | | | | *e*Sn | **Sn** | **23 39 29.3** | **-1.7** |
| | comp=Z,3.1nm,0.4s | | | | | | |
| **LDF** | **La Druitiere** | **8.36** | **264** | *e*Pn | **Pn** | **23 38 08.6** | **+2.7** |
| LDF | | | | *e*Sg | Sb | 23 40 30.6 | +22 |
| | comp=Z,13nm,0.8s | | | | | | |
| **FLN** | **La Foliniere** | **8.54** | **265** | *e*Pn | **Pn** | **23 38 11.0** | **+2.5** |
| FLN | | | | *e*Sn | **Sn** | **23 39 42.3** | **-2.0** |
| | comp=Z,38nm,1.2s | | | | | | |
| **CAF** | **Calviac** | **8.79** | **237** | *e*Pn | **Pn** | **23 38 14.1** | **+2.2** |
| CAF | | | | *e*Sg | Sn | 23 40 43.1 | +53 |
| | comp=Z,2.5nm,0.4s | | | | | | |
| **RJF** | **Les Rejaudoux** | **8.85** | **240** | *e*Pn | **Pn** | **23 38 14.7** | **+2.0** |
| **RJF** | **Les Rejaudoux** | **8.85** | **240** | *e*Pg | Pn | 23 38 52.7 | +40 |
| RJF | | | | *e*Sg | Sn | 23 40 45.3 | +53 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **GRR** | **Gorron** | **8.88** | **263** | *e*Pn | **Pn** | **23 38 15.6** | **+2.4** |
| GRR | | | | *e*Sn | **Sn** | **23 39 50.2** | **-2.5** |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **MFF** | **Saint Martin d** | **9.12** | **251** | *e*Pn | **Pn** | **23 38 18.1** | **+1.7** |
| **MFF** | **Saint Martin d** | **9.12** | **251** | *e*Pg | Pn | 23 39 00.2 | +44 |
| MFF | | | | *e*Sg | Sn | 23 40 57.1 | +59 |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **LFF** | **La Frestale** | **9.50** | **241** | *e*Pn | **Pn** | **23 38 23.6** | **+1.9** |
| **SGMF** | **Saint Gilles** | **10.01** | **264** | *e*Pn | **Pn** | **23 38 30.1** | **+1.5** |
| SGMF | | | | *e*Sn | **Sn** | **23 40 17.5** | **-2.8** |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **QUIF** | **Quistinic** | **10.50** | **263** | *e*Pn | **Pn** | **23 38 37.5** | **+2.2** |

*IDC* ***23*** *23:43:41.8±1.4, 8°.34S×116°.98E, h0km, mb3.6/5, mbtmp3.7/6, ML3.3/1, Error ellipse: s-maj=46.1km s-min=22.6km az=63.0*

**ISC 23 23:43:43.1±1.2, 8.4S±0.1×117.0E±0.2, h10km, n7, σ1s 10/8, mb3.7/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **4.32** | **40** | Pn | **Pn** | **23 44 50.4** | **+1.5** |
| | 1.6nm,0.3s,baz=225,slow=16,SNR=2.5 | | | | | | |
| KAPI | | | | Sn | **Sn** | **23 45 38.2** | **-1.1** |
| | 2.4nm,0.3s,baz=221,slow=22,SNR=2.3 | | | | | | |
| | 3.9nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.38** | **126** | P | **P** | **23 48 20.5** | **+0.2** |
| | 1.5nm,0.5s,baz=302,slow=12,SNR=20 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.25** | **135** | P | **P** | **23 48 39.8** | **-0.7** |
| | 0.9nm,0.8s,baz=305,slow=7.8,SNR=8.3 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.04** | **13** | P | **P** | **23 53 07.1** | **-0.7** |
| | 2.9nm,0.9s,baz=145,slow=10,SNR=3.0 | | | | | | |
| | 2.9nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.72** | **351** | P | **P** | **23 53 26.2** | **-0.9** |
| | 0.3nm,0.3s,baz=166,slow=3.0,SNR=1.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.98** | **334** | P | **P** | **23 54 10.9** | **+0.8** |
| | 0.4nm,0.7s,baz=143,slow=12,SNR=3.7 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **CPUP** | **Villa Florida** | **145.08** | **189** | PKPbc | **PKPbc** | **00 03 21.2** | **+0.2** |
| | 1.7nm,0.6s,baz=182,slow=4.3,SNR=5.4 | | | | | | |

*CATAC* ***23*** *23:51:33.9±1.3, 13°.52N×90°.81W, h6km±9km, ML3.0*
*GCG* ***23*** *23:51:39.5±0.7, 13°.97N×90°.91W, h56km±19km, MD3.4*

**ISC 23 23:51:33.4±2.6, 13.5N±0.1×90.96W±0.08, h26km±17km, n8, σ0s 91/14, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FUG** | **Fuego 3** | **0.93** | **7** | *i* P | **Pn** | **23 51 51.6** | **+0.7** |
| **PCG** | **Pacaya** | **0.93** | **22** | *i* P | **Pn** | **23 51 51.7** | **+0.7** |
| PCG | | | | *i* S | **Sb** | **23 52 02.2** | **-0.9** |
| **NUBE** | **Las Nubes** | **1.21** | **72** | *i* P | **Pn** | **23 51 54.7** | **0.0** |
| NUBE | | | | *i* S | **Sn** | **23 52 08.9** | **-1.4** |
| NUBE | | | | IAML | | 23 52 10.2 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.21** | **29** | *i* P | **Pb** | **23 51 56.0** | **+0.1** |
| NBG | | | | *i* S | **Sn** | **23 52 10.9** | **+0.3** |
| **STG3** | **Santiaguito 3,** | **1.32** | **333** | *i* P | **Pb** | **23 51 58.0** | **+0.3** |
| STG3 | | | | *i* S | **Sn** | **23 52 11.7** | **-1.5** |
| **CEVE** | **Cerro Verde** | **1.33** | **77** | *i* P | Pn | 23 51 54.6 | -1.9 |
| CEVE | | | | *i* S | **Sn** | **23 52 13.5** | **-0.1** |
| CEVE | | | | IAML | | 23 52 14.8 | |
| | comp=Z,480nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.48** | **85** | *i* P | **Pn** | **23 51 58.8** | **+0.4** |
| JAYA | | | | *i* S | **Sn** | **23 52 16.1** | **-0.8** |
| JAYA | | | | IAML | | 23 52 19.2 | |
| | comp=Z,880nm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **1.78** | **61** | *i* P | **Pn** | **23 52 03.7** | **+1.0** |
| MTO3 | | | | IAML | | 23 52 06.1 | |
| | comp=Z,36nm,1.0s | | | | | | |
| MTO3 | | | | *i* S | **Sn** | **23 52 25.0** | **+0.4** |

**TIR 24 00:07:02.3, 41.50N×19.71E, h17km±1km, Md2.5, Ml1.3, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.19** | **142** | P | Pg | 00 07 07.1 | +0.1 |
| | baz=141 | | | | | | |
| TIR | | | | S | Sb | 00 07 10.9 | +0.1 |
| | baz=141 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=N,0.4nm,0.1s,baz=141 | | | | | | |
| **PUK** | **Puka** | **0.56** | **14** | P | Pg | 00 07 13.3 | -0.2 |
| | baz=14 | | | | | | |
| PUK | | | | S | Sb | 00 07 22.8 | +1.2 |
| | baz=14 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.1nm,0.3s,baz=14 | | | | | | |
| **BCI** | **Bajram Curri** | **0.91** | **17** | P | Pn | 00 07 20.3 | -0.1 |
| | baz=17 | | | | | | |
| BCI | | | | S | Sn | 00 07 33.2 | +0.1 |
| | baz=17 | | | | | | |
| **FNA** | **Florina** | **1.45** | **119** | P | Pg | 00 07 30.2 | -0.1 |
| | baz=118 | | | | | | |
| FNA | | | | S | Sg | 00 07 50.4 | +1.3 |
| | baz=118 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=N,0.0nm,0.7s,baz=118 | | | | | | |
| **DBRK** | **Dubrovnik** | **1.65** | **316** | *e*Pg | Pb | 00 07 31.5 | -0.8 |
| DBRK | | | | Sg | Sb | 00 07 52.5 | -0.2 |
| **STON** | **Ston** | **2.03** | **313** | Sn | Sn | 00 07 59.2 | -1.4 |
| **MAKA** | **Makarska** | **2.67** | **313** | Sn | Sn | 00 08 13.6 | -3.1 |
| **RICI** | **Ricice** | **2.76** | **317** | Sn | Sn | 00 08 17.5 | -1.2 |

*CATAC* ***24*** *00:14:31.6±0.5, 12°.80N×88°.62W, h34km±5km, ML3.7*
*SNET* ***24*** *00:14:33.2±1.4, 12°.91N×88°.62W, h43km, ML3.6*

**ISC 24 00:14:31.3±1.6, 12.77N±0.07×88.65W±0.04, h32km±12km, n39, σ0s 33/65, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JUCU** | **Jucuarįn** | **0.62** | **39** | *i* P | **Pb** | **00 14 44.0** | **+0.1** |
| JUCU | | | | *e*S | **Sn** | **00 14 53.8** | **+0.8** |
| **JUCU** | **Jucuarįn** | **0.62** | **39** | *i* P | **Pb** | **00 14 44.0** | **+0.1** |
| JUCU | | | | IAML | | 00 14 44.2 | |
| | comp=Z,2µm,1.0s | | | | | | |
| JUCU | | | | *i* S | **Sn** | **00 14 53.7** | **+0.8** |
| **RANC** | **El Ranchito** | **0.75** | **28** | *i* P | **Pb** | **00 14 45.9** | **-0.2** |
| RANC | | | | IAML | | 00 15 03.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **PACA** | **Pacayal** | **0.77** | **24** | *e*P | **Pb** | **00 14 46.3** | **0.0** |
| **PACA** | **Pacayal** | **0.77** | **24** | *i* P | **Pb** | **00 14 46.4** | **0.0** |
| PACA | | | | *i* S | **Sb** | **00 14 57.1** | **+0.6** |
| PACA | | | | IAML | | 00 14 59.5 | |
| | comp=Z,13µm,1.0s | | | | | | |
| **TECO** | **Alcaldia de Te** | **0.78** | **350** | *i* P | **Pn** | **00 14 46.0** | **-0.1** |
| TECO | | | | *i* S | **Sb** | **00 14 57.0** | **+0.2** |
| TECO | | | | IAML | | 00 14 59.3 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **0.78** | **31** | *e*P | **Pb** | **00 14 46.1** | **-0.4** |
| **UESV** | **Universidad de** | **0.88** | **351** | *i* P | **Pn** | **00 14 47.4** | **-0.1** |
| UESV | | | | *i* S | **Sb** | **00 14 59.5** | **-0.1** |
| UESV | | | | IAML | | 00 15 00.8 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **0.88** | **345** | *e*P | **Pn** | **00 14 47.5** | **-0.1** |
| COEG | | | | *e*S | **Sb** | **00 14 59.7** | **0.0** |
| **COEG** | **Centro de Oper** | **0.88** | **345** | *i* P | **Pn** | **00 14 47.3** | **-0.3** |
| COEG | | | | *i* S | **Sb** | **00 14 59.3** | **-0.4** |
| COEG | | | | IAML | | 00 15 04.0 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **LCND** | **La Caada** | **0.91** | **54** | *e*P | **Pn** | **00 14 47.8** | **-0.2** |
| LCND | | | | *e*S | **Sb** | **00 15 00.3** | **-0.3** |
| **LCND** | **La Caada** | **0.91** | **54** | *i* P | **Pn** | **00 14 47.7** | **-0.2** |
| LCND | | | | *i* P | **Pn** | **00 14 47.8** | **-0.2** |
| LCND | | | | *i* S | **Sb** | **00 15 00.2** | **-0.3** |
| LCND | | | | IAML | | 00 15 01.5 | |
| | comp=Z,2µm,1.0s | | | | | | |
| LCND | | | | IAML | | 00 15 03.9 | |
| | comp=Z,9µm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.93** | **355** | *i* P | **Pb** | **00 14 48.5** | **-0.6** |
| SCLA | | | | *i* S | **Sb** | **00 15 01.6** | **+0.4** |
| SCLA | | | | IAML | | 00 15 02.2 | |
| | comp=Z,600nm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **0.94** | **57** | *e*P | **Pn** | **00 14 48.2** | **-0.2** |
| CNCH | | | | *e*S | **Sb** | **00 15 02.1** | **+0.7** |
| **CNCH** | **Conchagua** | **0.94** | **57** | *i* P | **Pn** | **00 14 48.2** | **-0.2** |
| CNCH | | | | IAML | | 00 15 07.3 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **LFRS** | **El Faro** | **0.94** | **335** | *e*P | **Pn** | **00 14 48.5** | **0.0** |
| **LALI** | **Alcalda de L** | **0.97** | **318** | *i* P | **Pn** | **00 14 48.7** | **-0.1** |
| LALI | | | | *i* S | **Sn** | **00 15 01.2** | **-0.3** |
| LALI | | | | IAML | | 00 15 04.3 | |
| | comp=Z,340nm,1.0s | | | | | | |
| **PANCS** | **Alcalda de** | **0.99** | **328** | *i* P | **Pn** | **00 14 49.1** | **0.0** |
| PANCS | | | | IAML | | 00 15 03.6 | |
| | comp=Z,5µm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **1.01** | **330** | *i* P | **Pn** | **00 14 49.4** | **-0.1** |
| LOMA | | | | *i* S | **Sn** | **00 15 02.5** | **-0.2** |
| LOMA | | | | IAML | | 00 15 04.8 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **1.07** | **332** | *i* P | **Pn** | **00 14 50.1** | **0.0** |
| UDBS | | | | *i* S | **Sn** | **00 15 03.7** | **-0.2** |
| UDBS | | | | IAML | | 00 15 07.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **IGN** | **Direccin Gen** | **1.07** | **332** | *i* P | **Pn** | **00 14 50.3** | **+0.1** |
| IGN | | | | *i* S | **Sn** | **00 15 04.2** | **+0.1** |
| IGN | | | | IAML | | 00 15 05.6 | |
| | comp=Z,7µm,1.0s | | | | | | |
| **LFU** | **La Fuente** | **1.08** | **335** | *e*P | **Pn** | **00 14 50.5** | **+0.2** |
| **CAHU** | **Cacacuatique** | **1.08** | **23** | *e*P | **Pn** | **00 14 50.4** | **-0.2** |
| **ITCA** | **Escuela Especi** | **1.09** | **326** | *i* P | **Pn** | **00 14 50.5** | **0.0** |
| ITCA | | | | *i* S | **Sn** | **00 15 04.5** | **-0.1** |
| ITCA | | | | IAML | | 00 15 10.7 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **UEES** | **Universidad Ev** | **1.11** | **329** | *i* P | **Pn** | **00 14 50.5** | **-0.2** |
| UEES | | | | *i* S | **Sn** | **00 15 05.2** | **+0.2** |
| UEES | | | | IAML | | 00 15 05.6 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **1.14** | **327** | *e*P | **Pn** | **00 14 51.5** | **+0.2** |
| **PMON** | **Piamonte** | **1.14** | **325** | *i* P | **Pn** | **00 14 51.4** | **+0.1** |
| PMON | | | | *i* S | **Sn** | **00 15 06.2** | **+0.3** |
| PMON | | | | IAML | | 00 15 09.9 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.18** | **319** | *e*P | **Pn** | **00 14 51.7** | **-0.1** |
| JAYA | | | | *e*S | **Sn** | **00 15 06.8** | **0.0** |
| **JAYA** | **Jayaque - finc** | **1.18** | **319** | *i* P | **Pn** | **00 14 

**ISC 24 00:25:49.5±1.3, 24°17N±0°05×122°88E±0°03, h57km±9km, n49, σ0s74/98, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.29** | **12** | P | **Pn** | **00 25 58.8** | **-0.4** |
| JYNG | | | | S | **Sn** | **00 26 05.3** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **0.32** | **22** | *i* P | **Pn** | **00 25 59.0** | **-0.4** |
| | baz=32 | | | | | | |
| YOJ | | | | *i* S | **Sn** | **00 26 05.8** | **-0.8** |
| | baz=32 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.32** | **22** | P | **Pn** | **00 25 59.0** | **-0.4** |
| YOJ | | | | S | **Sn** | **00 26 05.7** | **-0.8** |
| **EOS4** | **EOS4** | **0.52** | **265** | P | **Pn** | **00 26 01.6** | **+0.7** |
| | baz=254 | | | | | | |
| EOS4 | | | | S | **Sn** | **00 26 09.9** | **+0.6** |
| | baz=254 | | | | | | |
| **EOS3** | **EOS3** | **0.53** | **283** | *i* P | **Pn** | **00 26 02.3** | **+1.0** |
| | baz=267 | | | | | | |
| EOS3 | | | | *i* S | **Sn** | **00 26 11.7** | **+1.8** |
| | baz=267 | | | | | | |
| **EOS2** | **EOS2** | **0.64** | **293** | *i* P | **Pn** | **00 26 03.1** | **+0.4** |
| | baz=283 | | | | | | |
| EOS2 | | | | S | **Sn** | **00 26 13.4** | **+1.1** |
| | baz=283 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.79** | **78** | P | **Pn** | **00 26 04.8** | **+0.1** |
| IRIF | | | | eS | **Sn** | **00 26 16.5** | **+0.6** |
| **JKRS** | **Kuro-shima** | **1.03** | **86** | P | **Pn** | **00 26 08.7** | **+0.9** |
| JKRS | | | | S | **Sn** | **00 26 22.5** | **+1.1** |
| **EWUT** | **Wuta** | **1.04** | **286** | P | **Pn** | **00 26 07.5** | **-0.4** |
| | baz=280 | | | | | | |
| EWUT | | | | *i* S | **Sn** | **00 26 21.7** | **+0.1** |
| | baz=280 | | | | | | |
| **ENA** | **Nanau** | **1.07** | **284** | *i* P | **Pn** | **00 26 08.3** | **0.0** |
| | baz=279 | | | | | | |
| ENA | | | | *i* S | **Sn** | **00 26 22.3** | **0.0** |
| | baz=279 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.17** | **80** | P | **Pn** | **00 26 09.8** | **+0.2** |
| JIJ | | | | S | **Sn** | **00 26 24.5** | **-0.2** |
| **NACB** | **Ninganchiao** | **1.17** | **271** | *i* P | **Pn** | **00 26 09.4** | **-0.3** |
| | baz=254 | | | | | | |
| NACB | | | | *i* S | **Sn** | **00 26 24.4** | **-0.4** |
| | baz=254 | | | | | | |
| **TIPB** | **Shuangxi** | **1.25** | **310** | P | **Pn** | **00 26 10.3** | **-0.4** |
| | baz=307 | | | | | | |
| TIPB | | | | eS | **Sn** | **00 26 24.4** | **-2.2** |
| | baz=307 | | | | | | |
| **SHUL** | **Shoufeng** | **1.26** | **253** | *e*P | **Pn** | **00 26 11.9** | **+1.1** |
| | baz=248 | | | | | | |
| SHUL | | | | *i* S | **Sn** | **00 26 26.7** | **-0.1** |
| | baz=248 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.28** | **272** | *i* P | **Pn** | **00 26 11.4** | **+0.2** |
| | baz=267 | | | | | | |
| ETLH | | | | S | **Sn** | **00 26 26.7** | **-0.7** |
| | baz=267 | | | | | | |
| **ETM** | **Tongmen** | **1.28** | **261** | *i* P | **Pn** | **00 26 11.1** | **-0.1** |
| | baz=248 | | | | | | |
| ETM | | | | *i* S | **Sn** | **00 26 26.9** | **-0.5** |
| | baz=248 | | | | | | |
| **ENTT** | **Nioudou** | **1.29** | **292** | P | **Pn** | **00 26 12.2** | **+1.0** |
| | baz=297 | | | | | | |
| ENTT | | | | S | **Sn** | **00 26 27.2** | **-0.3** |
| | baz=297 | | | | | | |
| **LATG** | **Datong** | **1.29** | **287** | *i* P | **Pn** | **00 26 11.8** | **+0.4** |
| | baz=271 | | | | | | |
| LATG | | | | *i* S | **Sn** | **00 26 28.2** | **+0.5** |
| | baz=271 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.32** | **297** | P | **Pn** | **00 26 12.4** | **+0.7** |
| | baz=298 | | | | | | |
| FUSB | | | | *i* S | **Sn** | **00 26 28.4** | **+0.1** |
| | baz=298 | | | | | | |
| **NDT** | **Datong Townshi** | **1.32** | **289** | *e*P | **Pn** | **00 26 12.1** | **+0.5** |
| | baz=294 | | | | | | |
| NDT | | | | eS | **Sn** | **00 26 29.0** | **+0.7** |
| | baz=294 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.35** | **264** | *i* P | **Pn** | **00 26 11.9** | **-0.3** |
| | baz=251 | | | | | | |
| LXIB | | | | *i* S | **Sn** | **00 26 28.1** | **-1.1** |
| | baz=251 | | | | | | |
| **ESL** | **Shilin** | **1.37** | **255** | *e*P | **Pn** | **00 26 11.9** | **-0.4** |
| | baz=250 | | | | | | |
| ESL | | | | eS | **Sn** | **00 26 28.8** | **-0.6** |
| | baz=250 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.37** | **72** | P | **Pn** | **00 26 12.3** | **0.0** |
| JISG | | | | S | **Sn** | **00 26 29.2** | **-0.3** |
| **NNSB** | **Datong** | **1.39** | **281** | *i* P | **Pn** | **00 26 12.8** | **0.0** |
| | baz=266 | | | | | | |
| NNSB | | | | *i* S | **Sn** | **00 26 29.7** | **-0.5** |
| | baz=266 | | | | | | |
| **NNSH** | **Datong** | **1.39** | **281** | *i* P | **Pn** | **00 26 12.9** | **+0.2** |
| | baz=267 | | | | | | |
| NNSH | | | | *i* S | **Sn** | **00 26 29.6** | **-0.5** |
| | baz=267 | | | | | | |
| **NWLT** | **Wulai** | **1.39** | **296** | P | **Pn** | **00 26 13.9** | **+1.2** |
| | baz=302 | | | | | | |
| NWLT | | | | *i* S | **Sn** | **00 26 29.1** | **-1.0** |
| | baz=302 | | | | | | |
| **NNS** | **Nan Shan** | **1.40** | **281** | *e*P | **Pn** | **00 26 13.2** | **+0.4** |
| | baz=267 | | | | | | |
| NNS | | | | S | **Sn** | **00 26 29.7** | **-0.7** |
| | baz=267 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.44** | **252** | *i* P | **Pn** | **00 26 13.1** | **-0.2** |
| | baz=247 | | | | | | |
| WARBT | | | | S | **Sn** | **00 26 30.4** | **-0.7** |
| | baz=247 | | | | | | |
| **YHNB** | **Yeheng** | **1.46** | **290** | *e*P | **Pn** | **00 26 13.1** | **-0.5** |
| | baz=275 | | | | | | |
| YHNB | | | | *i* S | **Sn** | **00 26 31.6** | **-0.2** |
| | baz=275 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.48** | **269** | *i* P | **Pn** | **00 26 14.2** | **+0.1** |
| | baz=254 | | | | | | |
| WHF | | | | S | **Sn** | **00 26 32.4** | **-0.2** |
| | baz=254 | | | | | | |
| **HGSD** | **Ruisui** | **1.49** | **244** | *i* P | **Pn** | **00 26 13.8** | **-0.1** |
| | baz=239 | | | | | | |
| HGSD | | | | S | **Sn** | **00 26 31.2** | **-1.3** |
| | baz=239 | | | | | | |
| **FUSS** | **Fushou** | **1.50** | **273** | P | **Pn** | **00 26 14.7** | **+0.5** |
| | baz=269 | | | | | | |
| FUSS | | | | S | **Sn** | **00 26 32.2** | **-0.6** |
| | baz=269 | | | | | | |
| **CHGB** | **Renai** | **1.56** | **266** | *i* P | **Pn** | **00 26 15.6** | **+0.4** |
| | baz=252 | | | | | | |
| CHGB | | | | *i* S | **Sn** | **00 26 33.9** | **-0.5** |
| | baz=252 | | | | | | |
| **EHY** | **Hungye** | **1.57** | **246** | *e*P | **Pn** | **00 26 15.3** | **+0.3** |
| | baz=252 | | | | | | |
| EHY | | | | eS | **Sn** | **00 26 34.3** | **-0.1** |
| | baz=252 | | | | | | |
| **OWD** | **Renai** | **1.57** | **263** | P | **Pn** | **00 26 15.2** | **+0.1** |
| | baz=258 | | | | | | |
| OWD | | | | S | **Sn** | **00 26 33.9** | **-0.7** |
| | baz=258 | | | | | | |
| **WUSB** | **Renai** | **1.62** | **264** | *i* P | **Pn** | **00 26 16.6** | **+0.7** |
| | baz=260 | | | | | | |
| WUSB | | | | *i* S | **Sn** | **00 26 35.2** | **-0.5** |
| | baz=260 | | | | | | |
| **YULB** | **Yu-li** | **1.64** | **242** | *i* P | **Pn** | **00 26 16.0** | **0.0** |
| | baz=230 | | | | | | |
| YULB | | | | *i* S | **Sn** | **00 26 35.4** | **-0.7** |
| | baz=230 | | | | | | |
| **VWDT** | **VWDT** | **1.64** | **256** | *i* P | **Pn** | **00 26 16.7** | **+0.7** |
| | baz=251 | | | | | | |
| VWDT | | | | S | **Sn** | **00 26 35.8** | **-0.3** |
| | baz=251 | | | | | | |
| **EYUL** | **Yuli** | **1.65** | **241** | *e*P | **Pn** | **00 26 16.3** | **+0.2** |
| | baz=236 | | | | | | |
| EYUL | | | | S | **Sn** | **00 26 35.8** | **-0.4** |
| | baz=236 | | | | | | |
| **TWF1** | **Yuli** | **1.66** | **241** | *i* P | **Pn** | **00 26 16.4** | **+0.1** |
| | baz=236 | | | | | | |
| TWF1 | | | | *i* S | **Sn** | **00 26 36.9** | **+0.3** |
| | baz=236 | | | | | | |
| **FULB** | **Fuli** | **1.74** | **237** | *e*P | **Pn** | **00 26 18.9** | **+1.4** |
| | baz=223 | | | | | | |
| FULB | | | | *i* S | **Sn** | **00 26 38.0** | **-0.7** |
| | baz=223 | | | | | | |
| **WHP** | **Taichung City** | **1.77** | **274** | *e*P | **Pn** | **00 26 19.8** | **+2.0** |
| | baz=270 | | | | | | |
| WHP | | | | *i* S | **Sn** | **00 26 39.8** | **+0.5** |
| | baz=270 | | | | | | |
| **SSLB** | **Suanglung** | **1.80** | **258** | *e*P | **Pn** | **00 26 18.6** | **+0.4** |
| | baz=254 | | | | | | |
| SSLB | | | | eS | **Sn** | **00 26 39.5** | **-0.5** |
| | baz=254 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.83** | **262** | *i* P | **Pn** | **00 26 18.2** | **-0.5** |
| | baz=251 | | | | | | |
| SMLT | | | | eS | **Sn** | **00 26 41.5** | **+0.7** |
| | baz=251 | | | | | | |
| **TYC** | **Yuchr** | **1.87** | **262** | *e*P | **Pn** | **00 26 20.2** | **+1.2** |
| | baz=258 | | | | | | |
| TYC | | | | eS | **Sn** | **00 26 42.0** | **+0.5** |
| | baz=258 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.91** | **256** | *e*P | **Pn** | **00 26 20.6** | **+0.8** |
| | baz=245 | | | | | | |
| WHYT | | | | eS | **Sn** | **00 26 43.9** | **+1.2** |
| | baz=245 | | | | | | |
| **ELDTW** | **Lidau** | **1.97** | **241** | *i* P | **Pn** | **00 26 20.4** | **-0.1** |
| | baz=236 | | | | | | |
| ELDTW | | | | *i* S | **Sn** | **00 26 41.9** | **-2.2** |
| | baz=236 | | | | | | |
| **TWGBT** | **Beinan** | **2.13** | **231** | *e*P | **Pn** | **00 26 21.4** | **-1.2** |
| | baz=221 | | | | | | |
| TWGBT | | | | eS | **Sn** | **00 26 48.1** | **+0.1** |
| | baz=221 | | | | | | |
| **TWG** | **Pinlang** | **2.13** | **231** | P | **Pn** | **00 26 22.3** | **-0.4** |
| | baz=221 | | | | | | |
| TWG | | | | S | **Sn** | **00 26 47.7** | **-0.4** |
| | baz=221 | | | | | | |

*IDC **24** 00:28:29.1±6.5, 16°38S×176°12W, h378km±66km, mb3.3/7, mbtmp4.0/8, Error ellipse: s-maj=39.6km s-min=24.4km az=148.0*

**ISC 24 00:28:27.6±0.8, 16°3S±0°2×176°1W±0°2, h364km, n18, σ0s50/18, mb3.6/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **17.42** | **248** | P | **P** | **00 32 08.0** | **+0.2** |
| | 3.3nm,0.5s,baz=74,slow=18,SNR=1.5 | | | | | | |
| **STKA** | **Stephens Creek** | **41.30** | **240** | P | **P** | **00 35 39.3** | **+0.1** |
| | 2.2nm,0.6s,baz=81,slow=9.9,SNR=4.0 | | | | | | |
| | 2.2nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.08** | **258** | P | **P** | **00 36 24.7** | **0.0** |
| | 0.8nm,0.4s,baz=91,slow=7.3,SNR=15 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **47.33** | **253** | P | **P** | **00 36 26.9** | **+0.3** |
| | 7.0nm,0.5s,baz=87,slow=8.1,SNR=106 | | | | | | |
| | 7.0nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.72** | **180** | P | **P** | **00 39 22.0** | **-0.5** |
| | 0.7nm,0.8s,baz=325,slow=8.0,SNR=1.7 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.79** | **43** | P | **P** | **00 39 40.7** | **+0.3** |
| | 1.1nm,1.0s,baz=226,slow=6.2,SNR=3.1 | | | | | | |
| | 1.1nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **83.31** | **57** | P | **P** | **00 40 15.6** | **+0.6** |
| | 0.7nm,0.9s,baz=207,slow=7.9,SNR=6.1 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **83.88** | **12** | P | **P** | **00 40 16.6** | **-0.3** |
| | 1.0nm,0.9s,baz=227,slow=6.3,SNR=9.7 | | | | | | |
| | 1.0nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.15** | **318** | PKPbc | **PKPdf** | **00 47 23.0** | **+0.2** |
| | 1.7nm,0.9s,baz=42,slow=2.9,SNR=7.6 | | | | | | |
| **CONA** | **Conrad Observa** | **146.98** | **345** | *e*PKP | **PKPbc** | **00 47 28.7** | **+0.6** |
| | 1.2nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.05** | **306** | PKPbc | **PKPdf** | **00 47 26.6** | **+0.6** |
| | 1.0nm,0.6s,baz=92,slow=7.2,SNR=2.4 | | | | | | |
| **SOKA** | **Soboth** | **148.35** | **345** | *e*PKP | **PKPbc** | **00 47 32.2** | **+0.5** |
| | 3.0nm,1.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.35** | **348** | *e*PKP | **PKPbc** | **00 47 32.0** | **+0.2** |
| | 1.1nm,0.6s | | | | | | |
| **RETA** | **Reutte** | **148.41** | **351** | *e*PKP | **PKPbc** | **00 47 31.4** | **-0.4** |
| | 2.6nm,1.1s | | | | | | |
| **MOTA** | **Moosalm** | **148.50** | **351** | *e*PKP | **PKPbc** | **00 47 32.1** | **-0.1** |
| | 2.3nm,1.1s | | | | | | |
| **OBKA** | **Obir** | **148.62** | **346** | *e*PKP | **PKPab** | **00 47 35.9** | **-1.3** |
| | 2.4nm,1.0s | | | | | | |
| **ABTA** | **Abfaltersbach** | **148.83** | **348** | *e*PKP | **PKPbc** | **00 47 32.7** | **-0.2** |
| | 2.9nm,1.0s | | | | | | |
| **FETA** | **Feichten** | **148.87** | **351** | *e*PKP | **PKiKP** | **00 47 33.9** | **-0.3** |
| | 1.6nm,1.0s | | | | | | |

**UPA 24 00:32:15.1±0.6, 7°42N×82°83W, h12km±20km, MW2.7, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BCO2** | **Palmira** | **1.32** | **13** | *e*P | Pn | 00 32 38.7 | -0.9 |
| BCO2 | | | | eS | Sb | 00 32 56.7 | -0.3 |
| **BRU2** | **Volcan** | **1.37** | **6** | *e*P | Pn | 00 32 38.9 | -1.3 |
| BRU2 | | | | eS | Sb | 00 32 58.0 | -0.3 |
| **GMAL** | **Guarumal, Vera** | **1.62** | **78** | *e*P | Pb | 00 32 45.0 | +0.1 |
| **GMAL** | **Guarumal, Vera** | **1.62** | **78** | *e*P | Pn | 00 32 42.4 | -1.1 |
| **CHGR2** | **Aguacate** | **1.65** | **24** | *e*P | Pn | 00 32 43.1 | -0.9 |
| **CHIT3** | **Chitre** | **2.45** | **77** | *e*P | Pn | 00 32 54.6 | -0.3 |
| **AZU** | **Azuero** | **2.56** | **82** | *e*P | Pn | 00 32 56.1 | -0.3 |
| AZU | | | | eS | Sn | 00 33 26.8 | -0.8 |

**IDC 24 00:33:17.9±2.0, 16°68S×176°47W, h0km, mb4.2/4, mbtmp4.2/4, Error ellipse: s-maj=54.0km s-min=47.4km az=176.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **40.84** | **240** | P | P | 00 41 01.9 | +0.3 |
| | 2.8nm,0.8s,baz=81,slow=8.6,SNR=3.8 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.69** | **258** | P | P | 00 41 48.6 | -0.2 |
| | 1.4nm,0.5s,baz=95,slow=7.2,SNR=23 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.91** | **253** | P | P | 00 41 50.2 | -0.3 |
| | 8.8nm,0.6s,baz=88,slow=8.4,SNR=118 | | | | | | |
| | 8.8nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.37** | **180** | P | P | 00 44 51.7 | +0.1 |
| | 0.5nm,0.8s,baz=45,slow=1.4,SNR=1.2 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.19** | **317** | PKPbc | PKPbc | 00 52 57.0 | -0.5 |
| | 0.3nm,0.7s,baz=51,slow=4.7,SNR=1.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.99** | **305** | PKPbc | PKPdf | 00 53 02.0 | +0.8 |
| | 0.7nm,0.6s,baz=74,slow=5.1,SNR=1.6 | | | | | | |

*NORS **24** 00:50:41.4, 42°04N×47°44E, h7km, MPVA3.8*
*MOS **24** 00:50:41.0, 41°96N×47°44E, h19km, MPVA3.9*
*AZER **24** 00:50:41.4, 41°89N×47°41E, h15km, ml2.5*
*DRS **24** 00:50:42.5, 41°92N×47°41E, h18km*

**ISC 24 00:50:42.5±1.0, 41°94N±0°02×47°39E±0°02, h6km±9km, n39, σ0s67/76, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMKR** | **Kumukh** | **0.29** | **312** | *e*Pg | **Pb** | **00 50 49.4** | **-0.8** |
| KMKR | | | | eSg | **Sb** | **00 50 54.6** | **-0.8** |
| **URKR** | **Urkarakh** | **0.29** | **39** | *e*Pg | **Pg** | **00 50 48.6** | **+0.4** |
| URKR | | | | eSg | **Sg** | **00 50 53.1** | **+1.0** |
| **AKT** | **Akhty** | **0.53** | **151** | *e*Pg | **Pg** | **00 50 52.7** | **0.0** |
| AKT | | | | eSg | **Sg** | **00 50 59.4** | **-0.2** |
| **GNBR** | **Gunib** | **0.55** | **325** | *i* Pg | **Pg** | **00 50 53.5** | **+0.4** |
| GNBR | | | | eSg | **Sb** | **00 51 01.6** | **-1.0** |
| **SGKR** | **Sergokala** | **0.56** | **21** | *e*Pg | **Pg** | **00 50 53.4** | **+0.1** |
| SGKR | | | | eSg | **Sg** | **00 51 01.3** | **+0.7** |
| **ZKTA** | **Zakatala** | **0.65** | **242** | P | **Pg** | **00 50 55.3** | **+0.3** |
| ZKTA | | | | S | **Sb** | **00 51 05.0** | **-0.4** |
| **KSMR** | **Kasumkent** | **0.65** | **121** | *e*Pg | **Pg** | **00 50 54.8** | **-0.2** |
| KSMR | | | | eSg | **Sg** | **00 51 03.9** | **+0.5** |
| **DRN** | **Derbent** | **0.71** | **82** | *i* Pg | **Pg** | **00 50 56.1** | **0.0** |
| DRN | | | | eSg | **Sb** | **00 51 06.5** | **-0.6** |
| **ARKR** | **Arakani** | **0.72** | **336** | *e*Pg | **Pg** | **00 50 56.5** | **+0.1** |
| ARKR | | | | eSg | **Sg** | **00 51 06.5** | **+0.7** |
| **SEKA** | **Sheki** | **0.74** | **191** | P | **Pg** | **00 50 57.0** | **+0.2** |
| SEKA | | | | S | **Sg** | **00 51 07.0** | **+0.5** |
| **QSAR** | **Qusar** | **0.78** | **123** | P | **Pg** | **00 50 57.3** | **-0.2** |
| QSAR | | | | S | **Sb** | **00 51 08.8** | **-0.6** |
| **XNZR** | **Khunzakh** | **0.79** | **320** | *e*Pg | **Pg** | **00 50 58.2** | **+0.5** |
| XNZR | | | | eSg | **Sb** | **00 51 09.1** | **-0.5** |
| **UNCR** | **Uncukul** | **0.89** | **331** | *e*Pg | **Pg** | **00 50 59.8** | **+0.2** |
| UNCR | | | | eSg | **Sb** | **00 51 12.7** | **+0.2** |
| **BUJR** | **Buynaksk** | **0.91** | **347** | *e*Pg | **Pg** | **00 50 59.7** | **-0.2** |
| BUJR | | | | eSg | **Sb** | **00 51 12.4** | **-0.6** |
| **XNQ** | **Khinaliq** | **0.95** | **143** | P | **Pg** | **00 51 00.3** | **-0.5** |
| XNQ | | | | S | **Sg** | **00 51 12.5** | **-0.7** |
| **KRNR** | **Karanay** | **0.95** | **338** | *e*Pg | **Pg** | **00 51 00.3** | **-0.5** |
| KRNR | | | | eSg | **Sb** | **00 51 14.3** | **-0.1** |
| **QUBA** | **Quba, Azerbaij** | **1.01** | **125** | P | **Pg** | **00 51 01.6** | **-0.3** |
| QUBA | | | | S | **Sb** | **00 51 15.6** | **-0.4** |
| **QBL** | **Gabala** | **1.05** | **161** | P | **Pg** | **00 51 02.3** | **-0.3** |
| QBL | | | | S | **Sb** | **00 51 17.5** | **+0.4** |
| **BTLR** | **Botlikh** | **1.13** | **310** | *e*Pg | **Pg** | **00 51 03.5** | **-0.6** |
| BTLR | | | | eSg | **Sg** | **00 51 18.5** | **-0.2** |
| **DBC** | **Dubki** | **1.16** | **339** | *i* Pg | **Pg** | **00 51 04.1** | **-0.6** |
| DBC | | | | eSg | **Sb** | **00 51 20.9** | **+0.7** |
| **DLMR** | **Dylym** | **1.26** | **334** | *i* Pg | **Pg** | **00 51 06.1** | **-0.6** |
| DLMR | | | | eSg | **Sn** | **00 51 24.5** | **+0.6** |
| **IML** | **Ismayilli** | **1.29** | **152** | P | **Pn** | **00 51 07.0** | **-0.1** |
| IML | | | | S | **Sn** | **00 51 24.7** | **0.0** |
| **DVE** | **Vedeno** | **1.38** | **318** | *e*Pg | **Pn** | **00 51 08.0** | **-0.4** |
| DVE | | | | eSg | **Sn** | **00 51 27.1** | **+0.2** |
| **SIZA** | **Siyzn** | **1.43** | **127** | Pn | **Pg** | **00 51 10.1** | **+0.3** |
| SIZA | | | | Sn | **Sn** | **00 51 28.4** | **+0.4** |
| **PQL** | **Pirkuli** | **1.47** | **141** | Pn | **Pb** | **00 51 10.0** | **-0.2** |
| PQL | | | | Sn | **Sg** | **00 51 29.8** | **+0.2** |
| **GANJ** | **Ganja** | **1.52** | **212** | Pn | **Pn** | **00 51 10.1** | **-0.2** |
| GANJ | | | | Sn | **Sg** | **00 51 31.4** | **-0.1** |
| **ATGJ** | **Altiaghaj** | **1.59** | **132** | Pn | **Pb** | **00 51 11.8** | **-0.5** |
| ATGJ | | | | Sn | **Sb** | **00 51 32.5** | **-0.1** |
| **ZRD** | **Zardab** | **1.68** | **172** | Pn | **Pn** | **00 51 12.5** | **+0.2** |
| ZRD | | | | Sn | **Sg** | **00 51 36.9** | **+0.6** |
| **BRDA** | **Brd** | **1.68** | **185** | Pn | **Pn** | **00 51 12.7** | **+0.3** |
| BRDA | | | | Sn | **Sg** | **00 51 38.0** | **+1.4** |
| **GDB** | **GEDABAY** | **1.73** | **226** | Pn | **Pn** | **00 51 13.2** | **0.0** |
| GDB | | | | Sn | **Sb** | **00 51 36.8** | **0.0** |
| **QZX** | **Qazax, Azerbai** | **1.75** | **240** | Pn | **Pn** | **00 51 13.8** | **+0.4** |
| QZX | | | | Sn | **Sb** | **00 51 37.9** | **+0.6** |
| **GBS** | **Qobustan** | **1.83** | **140** | Pn | **Pn** | **00 51 15.4** | **+0.9** |
| GBS | | | | Sn | **Sg** | **00 51 40.8** | **-0.5** |
| **AGDM** | **Agdam** | **1.84** | **187** | Pn | **Pb** | **00 51 15.8** | **-0.7** |
| AGDM | | | | Sn | **Sg** | **00 51 41.1** | **-0.6** |
| **GUDG** | **Gudauri** | **2.23** | **285** | *e*Pn | **Pb** | **00 51 23.3** | **0.0** |
| GUDG | | | | eSn | **Sb** | **00 51 50.4** | **-0.7** |
| **QRD** | **Qoradiz** | **2.48** | **181** | Sn | **Sn** | **00 51 54.8** | **+1.0** |
| **SBZ** | **Shahbuz** | **2.90** | **209** | Pn | **Pb** | **00 51 32.2** | **-2.5** |
| SBZ | | | | Sn | **Sn** | **00 52 06.9** | **+2.5** |
| **YRD** | **Yardimli** | **3.09** | **168** | Pn | **Pn** | **00 51 32.4** | **+0.5** |
| YRD | | | | Sn | **Sn** | **00 52 09.8** | **+0.6** |
| **ORD** | **Ordubad** | **3.19** | **200** | Pn | **Pn** | **00 51 34.5** | **+1.2** |
| **LRK** | **Lerik** | **3.37** | **167** | Pn | **Pn** | **00 51 36.3** | **+0.5** |
| LRK | | | | Sn | **Sn** | **00 52 16.4** | **+0.2** |

*IDC **24** 01:25:22.6±0.9, 5°99S×143°32E, h0km, mb4.1/8, mbtmp4.2/10, ML2.0/1, MS3.0/3, Error ellipse: s-maj=30.8km s-min=19.3km az=72.0*
*NEIC **24** 01:25:23.6±2.2, 5°74S±0°06×142°8E±0°1, h10km±1km, mb4.4/25, Error ellipse: s-maj=21.5km s-min=9.6km az=260.0*

**ISC 24 01:25:24.2±0.7, 6°06S±0°09×143°1E±0°1, h10km, n42, σ1s73/40, mb4.3/18, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.23** | **130** | Pn | Pb | 01 26 46.2 | -10 |
| **PMG** | **Port Moresby** | **5.23** | **130** | Pn | **Pn** | **01 26 41.0** | **-1.6** |
| | 3.5nm,0.3s,baz=305,slow=22,SNR=2.3 | | | | | | |
| PMG | | | | Sn | **Sn** | **01 27 40.9** | **-2.1** |
| | 1.9nm,0.3s,baz=294,slow=8.7,SNR=3.8 | | | | | | |
| | 8.0nm,0.3s | | | | | | |
| **COEN** | **Coen** | **7.85** | **179** | Pn | **Pn** | **01 27 21.9** | **+3.3** |
| **WB0** | **Warramunga Arr** | **16.03** | **211** | Pn | **Pn** | **01 29 08.4** | **-1.6** |
| **WR0** | **Warramunga Arr** | **16.12** | **210** | Pn | **Pn** | **01 29 08.9** | **-2.2** |
| **WRAB** | **Tennant Creek** | **16.19** | **211** | | **Pn** | **01 29 11.7** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 01 29 25.3 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **16.20** | **211** | Pn | **Pn** | **01 29 10.2** | **-1.9** |
| **WRA** | **Warramunga Arr** | **16.21** | **211** | Pn | **Pn** | **01 29 09.0** | **-3.2** |
| **WRA** | **Warramunga Arr** | **16.21** | **211** | Pn | **Pn** | **01 29 09.2** | **-3.0** |
| | comp=Z,1.2nm,0.3s,baz=31,slow=13,SNR=35 | | | | | | |
| WRA | | | | Sn | Sn | 01 32 01.2 | -11 |
| | comp=Z,0.4nm,0.3s,baz=25,slow=22,SNR=4.3 | | | | | | |
| WRA | | | | Lg | Lg | 01 34 00.4 | |
| | comp=Z,0.3nm,0.3s,baz=31,slow=28,SNR=4.9 | | | | | | |
| **KNRA** | **Kununurra** | **16.99** | **235** | Pn | **Pn** | **01 29 18.8** | **-3.4** |
| KNRA | | | | IAmb | IAmb | 01 29 28.1 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **19.60** | **5** | LR | LR | 01 37 29.8 | |
| | comp=Z,12nm,18.2s,baz=142,slow=37 | | | | | | |
| **AS31** | **Alice Springs** | **19.61** | **206** | | **Pn** | **01 29 54.7** | **+0.5** |
| **ASAR** | **Alice Springs** | **19.61** | **206** | | **P** | **01 29 53.5** | **+0.7** |
| **ASAR** | **Alice Springs** | **19.61** | **206** | P | **Pn** | **01 29 54.5** | **+0.2** |
| | comp=Z,23nm,0.8s,baz=37,slow=9.9,SNR=125 | | | | | | |
| ASAR | | | | S | S | 01 33 25.3 | -9.1 |
| | comp=Z,1.8nm,0.7s,baz=16,slow=28,SNR=5.7 | | | | | | |
| ASAR | | | | Lg | Lg | 01 35 46.4 | |
| | baz=18,slow=29,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 01 37 48.3 | |
| | comp=Z,46nm,19.1s,baz=1.0,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.81** | **233** | | **P** | **01 30 04.3** | **-1.6** |
| **KAPI** | **Kappang** | **23.25** | **271** | P | **P** | **01 30 33.7** | **+1.7** |
| | comp=Z,11nm,0.8s,baz=65,slow=14,SNR=4.7 | | | | | | |
| KAPI | | | | LR | LR | 01 41 50.6 | |
| | comp=Z,111nm,18.0s,baz=142,slow=42 | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **25.72** | **183** | P | **P** | **01 30 56.2** | **+1.3** |
| | comp=Z,0.8nm,0.4s,baz=352,slow=15,SNR=1.7 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.26** | **233** | P | **P** | **01 31 08.4** | **-0.5** |
| **BBOO** | **Buckleboo** | **27.41** | **193** | P | **P** | **01 31 10.8** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **51.02** | **350** | P | **P** | **01 34 27.3** | **+0.9** |
| | comp=Z,4.2nm,1.0s,baz=181,slow=8.6,SNR=3.1 | | | | | | |
| | comp=Z,4.2nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **72.82** | **175** | P | **P** | **01 36 55.2** | **+2.6** |
| SBA | | | | IAmb | IAmb | 01 37 09.8 | |
| | comp=Z,3.7nm,1.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **75.10** | **322** | P | **P** | **01 37 07.9** | **+1.4** |
| | comp=Z,1.1nm,0.8s,baz=100,slow=7.5,SNR=8.0 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **78.97** | **324** | P | **P** | **01 37 27.4** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=120,slow=5.2,SNR=3.2 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **H18K** | **Honhosa River** | **82.87** | **21** | P | **P** | **01 37 47.8** | **-0.9** |
| H18K | | | | IAmb | IAmb | 01 38 06.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **E18K** | **Tukpahlearik C** | **83.32** | **19** | P | **P** | **01 37 49.6** | **-1.4** |
| E18K | | | | IAmb | IAmb | 01 38 04.6 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.91**

*M$_0$5.55500×10$^{16}$ NP1.$\phi_0$87.00000°, $\delta$85.00000°, $\lambda$175.00000°. NP2.$\phi_0$177.00000°, $\delta$85.00000°, $\lambda$5.00000°. Principal axes: T 6.3170, Plg7.0000°, Azm42.0000°; N -1.5180, Plg83.0000°, Azm224.0000°; P -4.7920, Plg0.0000°, Azm132.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **24** 01:33:35.9±1.4, 41.3°S±0.1×87.5°W±0.6, h10$^{km}$±1$^{km}$, mb4.8/64 Error ellipse: s-maj=19.3km s-min=4.4km az=156.0*

**ISC 24 01:33:37.1±0.5, 41.23°S±0.08×87.29°W±0.07, h10$^{km}$, n148, σ1♀36/109, mb4.7/37, MS4.3/40, 5C-1D, West Chile Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H03S2** | **Juan Fernandez** | **9.92** | **45** | T | T | 01 46 43.3 | |
| | baz=220,slow=73,SNR=2065 | | | | | | |
| **H03S1** | **Juan Fernandez** | **9.93** | **45** | T | T | 01 46 44.8 | |
| | baz=220,slow=73,SNR=3134 | | | | | | |
| **H03S3** | **Juan Fernandez** | **9.94** | **45** | T | T | 01 46 39.3 | |
| | baz=220,slow=73,SNR=3074 | | | | | | |
| **H03N3** | **Juan Fernandez** | **10.22** | **43** | T | T | 01 46 58.2 | |
| | baz=218,slow=72,SNR=2537 | | | | | | |
| **H03N2** | **Juan Fernandez** | **10.23** | **43** | T | T | 01 47 01.1 | |
| | baz=218,slow=72,SNR=3842 | | | | | | |
| **H03N1** | **Juan Fernandez** | **10.24** | **43** | T | T | 01 46 56.8 | |
| | baz=218,slow=72,SNR=1839 | | | | | | |
| **AY03** | **Cochrane** | **12.14** | **125** | | **Pn** | **01 36 29.4** | **-0.6** |
| **PLCA** | **Paso Flores** | **12.67** | **93** | Pn | **Pn** | **01 36 41.4** | **+4.0** |
| | baz=258,slow=13,SNR=2.8 | | | | | | |
| PLCA | | | | LR | LR | 01 40 26.9 | |
| | comp=Z,704nm,19.5s,baz=262,slow=32 5.0nm,1.2s | | | | | | |
| **MT09** | **Talagante** | **14.91** | **65** | Pn | **Pn** | **01 37 11.1** | **+2.9** |
| MT09 | | | | IAmb | IAmb | 01 37 17.0 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **BO04** | **La Punta** | **15.05** | **67** | Pn | **Pn** | **01 37 12.0** | **+2.1** |
| BO04 | | | | IAmb | IAmb | 01 37 18.9 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **MT02** | **Curacav** | **15.11** | **63** | Pn | **Pn** | **01 37 13.2** | **+2.6** |
| **MT03** | **Universidad Ad** | **15.40** | **65** | Pn | **Pn** | **01 37 16.5** | **+2.0** |
| MT03 | | | | IAmb | IAmb | 01 37 23.7 | |
| | comp=Z,58nm,0.9s | | | | | | |
| **LMEL** | **Las Melosas** | **15.41** | **67** | Pn | **Pn** | **01 37 15.7** | **+0.9** |
| **MT13** | **San Alfonso** | **15.41** | **66** | P | **Pn** | **01 37 16.3** | **+1.6** |
| **MT16** | **CCHEN** | **15.43** | **65** | Pn | **Pn** | **01 37 16.8** | **+1.9** |
| MT16 | | | | IAmb | IAmb | 01 37 23.0 | |
| | comp=Z,51nm,0.8s | | | | | | |
| **MT08** | **Bocatoma Ro** | **15.77** | **66** | Pn | **Pn** | **01 37 20.8** | **+1.3** |
| **VA03** | **San Esteban** | **15.80** | **63** | Pn | **Pn** | **01 37 18.8** | **-1.0** |
| VA03 | | | | IAmb | IAmb | 01 37 27.2 | |
| | comp=Z,65nm,0.9s | | | | | | |
| **CO02** | **Combarbal** | **16.49** | **58** | Pn | **Pn** | **01 37 28.1** | **-0.6** |
| CO02 | | | | IAmb | IAmb | 01 37 36.2 | |
| | comp=Z,52nm,1.0s | | | | | | |
| **AC06** | **Mina Casimiro** | **19.63** | **50** | P | **Pn** | **01 38 08.4** | **+1.2** |
| **TRQA** | **Tornquist** | **19.73** | **89** | P | **Pn** | **01 38 09.0** | **+0.6** |
| **PB14** | **IPOC Station P** | **21.73** | **46** | P | **P** | **01 38 29.8** | **+0.9** |
| PB14 | | | | IAmb | IAmb | 01 38 36.2 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **GO02** | **Mina Guanaco** | **21.75** | **48** | P | **P** | **01 38 29.7** | **+0.6** |
| GO02 | | | | IAmb | IAmb | 01 38 34.3 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **RPN** | **Rapa Nui** | **22.94** | **301** | LR | LR | 01 45 00.9 | |
| | comp=Z,1μm,20.6s,baz=134,slow=30 | | | | | | |
| **LVC** | **Limon Verde** | **24.16** | **45** | P | **P** | **01 38 53.9** | **0.0** |
| LVC | | | | IAmb | IAmb | 01 38 56.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **24.16** | **45** | LR | LR | 01 46 07.8 | |
| | comp=Z,1μm,19.4s,baz=231,slow=31 | | | | | | |
| **LVC** | **Limon Verde** | **24.16** | **45** | *e*P | **P** | **01 38 54.9** | **+1.0** |
| **AF01** | **San Pedro de A** | **24.28** | **47** | P | **P** | **01 38 54.6** | **-0.4** |
| **HMBC** | **Humberstone** | **25.59** | **41** | P | **P** | **01 39 06.9** | **+0.3** |
| HMBC | | | | IAmb | IAmb | 01 39 10.6 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **TBOT** | **Tacuaremb** | **26.84** | **79** | *e*P | **P** | **01 39 19.4** | **+1.7** |
| **PMSA** | **Palmer Station** | **27.10** | **158** | LR | LR | 01 46 44.6 | |
| | comp=Z,515nm,22.0s,baz=312,slow=29 | | | | | | |
| **CPUP** | **Villa Florida** | **28.83** | **68** | P | **P** | **01 39 36.2** | **+0.7** |
| | comp=Z,2.7nm,0.9s,baz=265,slow=5.0,SNR=4.8 | | | | | | |
| CPUP | | | | LR | LR | 01 50 12.8 | |
| | comp=Z,958nm,20.3s,baz=240,slow=34 comp=Z,2.7nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **29.86** | **39** | P | **P** | **01 39 45.3** | **-0.1** |
| **LPAZ** | **La Paz** | **29.86** | **39** | P | **P** | **01 39 46.1** | **+0.7** |
| | comp=Z,2.3nm,0.7s,baz=161,slow=4.6,SNR=13 | | | | | | |
| LPAZ | | | | LR | LR | 01 49 19.4 | |
| | comp=Z,678nm,18.2s,baz=197,slow=32 comp=Z,2.3nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **29.86** | **39** | *e*P | **P** | **01 39 45.5** | **+0.1** |
| **NNA** | **Nana** | **30.54** | **20** | LR | LR | 01 49 06.4 | |
| | comp=Z,575nm,19.2s,baz=199,slow=30 | | | | | | |
| **BBSD** | **Serra de San D** | **33.17** | **52** | *e*P | **P** | **01 40 14.1** | **+0.2** |
| **AQDB** | **Aquidauana** | **33.83** | **62** | P | **P** | **01 40 20.3** | **+0.7** |
| **SIV** | **San Ignacio** | **33.84** | **50** | LR | LR | 01 53 02.2 | |
| | comp=Z,693nm,20.1s,baz=274,slow=34 | | | | | | |
| **ATAH** | **Atahualpa** | **34.86** | **16** | LR | LR | 01 51 15.1 | |
| | comp=Z,915nm,21.8s,baz=207,slow=30 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **35.40** | **52** | P | **P** | **01 40 33.7** | **+0.5** |
| **PTLB** | **Pontes e Lacer** | **35.40** | **52** | *e*P | **P** | **01 40 33.6** | **+0.3** |
| **CZSB** | **Cruzeiro do Su** | **35.79** | **25** | P | **P** | **01 40 36.9** | **+0.3** |
| **CZSB** | **Cruzeiro do Su** | **35.79** | **25** | *e*P | **P** | **01 40 36.8** | **+0.2** |
| **ETMB** | **Extrema** | **36.40** | **37** | P | **P** | **01 40 41.7** | **-0.1** |
| ETMB | | | | IAmb | IAmb | 01 40 43.1 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **ETMB** | **Extrema** | **36.40** | **37** | *e*P | **P** | **01 40 41.9** | **+0.1** |
| **VILB** | **Vilhena** | **36.78** | **48** | P | **P** | **01 40 45.5** | **+0.3** |
| VILB | | | | IAmb | IAmb | 01 40 46.1 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **VILB** | **Vilhena** | **36.78** | **48** | *e*P | **P** | **01 40 45.4** | **+0.3** |
| **SALV** | **Santo Antonio** | **37.16** | **57** | *e*P | **P** | **01 40 49.1** | **+0.9** |
| **ITRB** | **Iturama** | **37.99** | **67** | *e*P | **P** | **01 40 56.7** | **+1.4** |
| **SAML** | **Samuel** | **38.58** | **40** | P | **P** | **01 41 00.7** | **+0.4** |
| **SAML** | **Samuel** | **38.58** | **40** | *e*P | **P** | **01 41 00.2** | **-0.1** |
| **PDRB** | **Porto dos Gac** | **39.85** | **51** | *e*P | **P** | **01 41 11.1** | **+0.1** |
| **IPMB** | **Ipameri, GO** | **40.65** | **67** | *e*P | **P** | **01 41 18.4** | **+0.8** |
| **PULU** | **Pululahua** | **41.82** | **13** | P | **P** | **01 41 27.0** | **-0.6** |
| **OTAV** | **Otavalo** | **42.04** | **13** | P | **P** | **01 41 27.5** | **-1.9** |
| **OTAV** | **Otavalo** | **42.04** | **13** | *e*P | **P** | **01 41 30.3** | **+0.9** |
| **BDFB** | **Brasilia** | **42.40** | **65** | P | **P** | **01 41 32.6** | **+0.5** |
| **BDFB** | **Brasilia** | **42.40** | **65** | P | **P** | **01 41 32.5** | **+0.5** |
| | comp=Z,5.9nm,1.0s,baz=212,slow=8.1,SNR=7.1 | | | | | | |
| BDFB | | | | LR | LR | 01 58 59.4 | |
| | comp=Z,663nm,19.2s,baz=221,slow=36 comp=Z,5.9nm,1.0s | | | | | | |
| **BELA** | **Belgrano 2** | **42.41** | **166** | P | **P** | **01 41 29.8** | **-1.5** |
| **TULM** | **Tulcn-Chalpat** | **42.63** | **14** | P | **P** | **01 41 33.5** | **-0.8** |
| **TEFE** | **Tefe** | **42.72** | **35** | *e*P | **P** | **01 41 34.0** | **-0.4** |
| **SNDB** | **Serra Nova Dou** | **42.90** | **58** | *e*P | **P** | **01 41 36.2** | **+0.2** |
| **RKT** | **Rikitea** | **43.62** | **279** | *e*SS | SS | 01 51 34.8 | +8.6 |
| | comp=Z,618nm,30.0s | | | | | | |
| RKT | | | | eLR | LR | 01 53 45.6 | |
| | comp=Z,2μm,40.8s | | | | | | |
| **NPGB** | **Novo Progresso** | **44.33** | **49** | *e*P | **P** | **01 41 47.0** | **-0.4** |
| **JANB** | **Januaria** | **45.36** | **68** | *e*P | **P** | **01 41 56.7** | **+0.9** |
| **SDBA** | **SAO DESIDERIO** | **46.81** | **65** | *e*P | **P** | **01 42 08.1** | **+0.9** |
| **ROSC** | **El Rosal** | **47.35** | **18** | LR | LR | 01 59 32.5 | |
| | comp=Z,896nm,22.0s,baz=204,slow=33 | | | | | | |
| **SMTB** | **Santa Maria do** | **47.63** | **59** | *e*P | **P** | **01 42 14.5** | **+1.0** |
| **VNA3** | **Neumayer Olymp** | **47.66** | **155** | ⇑P | **P** | **01 42 11.6** | **-1.5** |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **48.18** | **154** | ⇑P | **P** | **01 42 16.0** | **-1.1** |
| | comp=Z,11nm,1.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.43** | **154** | ⇑P | **P** | **01 42 17.8** | **-1.3** |
| | comp=Z,8.4nm,0.6s,baz=267,slow=8.0 | | | | | | |
| **QSPA** | **South Pole Qui** | **49.01** | **180** | P | **P** | **01 42 22.9** | **-0.8** |
| | comp=Z,1.8nm,1.0s,baz=161,slow=2.4,SNR=6.1 | | | | | | |
| QSPA | | | | LR | LR | 01 59 37.9 | |
| | comp=Z,264nm,20.9s,baz=135,slow=32 comp=Z,1.8nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **49.77** | **156** | P | **P** | **01 42 27.8** | **-1.6** |
| SNAA | | | | IAmb | IAmb | 01 42 32.6 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **49.77** | **156** | ⇑P | **P** | **01 42 27.7** | **-1.7** |
| | comp=Z,81nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **49.77** | **156** | P | **P** | **01 42 28.0** | **-1.4** |
| | comp=Z,4.1nm,0.8s,baz=261,slow=6.8,SNR=17 | | | | | | |
| SNAA | | | | LR | LR | 02 00 51.3 | |
| | comp=Z,159nm,18.1s,baz=263,slow=33 comp=Z,4.1nm,0.8s | | | | | | |
| **BOAV** | **Boa Vista** | **49.79** | **36** | P | **P** | **01 42 29.4** | **-0.7** |
| BOAV | | | | IAmb | IAmb | 01 42 30.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **BOAV** | **Boa Vista** | **49.79** | **36** | *e*P | **P** | **01 42 29.1** | **-1.0** |
| **JTS** | **Las Juntas de** | **51.30** | **3** | LR | LR | 01 59 19.2 | |
| | comp=Z,271nm,19.1s,baz=177,slow=30 | | | | | | |
| **TROLL** | **Troll, Antarti** | **51.34** | **157** | ⇑P | **P** | **01 42 39.6** | **-1.7** |
| | comp=Z,313nm,0.7s | | | | | | |
| **MCPB** | **Macapa, AP** | **51.67** | **47** | *e*P | **P** | **01 42 44.6** | **+0.3** |
| **SDV** | **Santo Domingo** | **52.17** | **21** | LR | LR | 02 02 46.2 | |
| | comp=Z,416nm,21.5s,baz=216,slow=34 | | | | | | |
| **TBI** | **Tubuai** | **54.38** | **269** | *e*LR | LR | 01 58 17.4 | |
| | comp=Z,1μm,28.2s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **55.24** | **27** | LR | LR | 02 04 25.5 | |
| | comp=Z,411nm,21.9s,slow=33 | | | | | | |
| **MDP** | **Montagnes des** | **55.94** | **43** | LR | LR | 02 05 44.7 | |
| | comp=Z,356nm,21.3s,baz=230,slow=34 | | | | | | |
| **APG** | **El Apazote** | **56.02** | **356** | LR | LR | 02 01 29.8 | |
| | comp=Z,17nm,20.9s,baz=230,slow=30 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **56.60** | **289** | *e*S | **S** | **01 51 13.6** | **+1.0** |
| | comp=Z,162nm,26.0s | | | | | | |
| TAOE | | | | eLR | LR | 01 59 53.6 | |
| | comp=Z,297nm,27.2s | | | | | | |
| **ELIB** | **Princess Elisa** | **57.26** | **160** | *d*P | **P** | **01 43 22.5** | **-1.9** |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **RCBR** | **Riachuelo** | **57.69** | **67** | LR | LR | 02 08 36.4 | |
| | comp=Z,215nm,18.3s,baz=260,slow=36 | | | | | | |
| **PPT2** | **Papeete2** | **57.87** | **274** | *e*S | **S** | **01 51 30.9** | **+1.6** |
| | comp=Z,70nm,26.5s | | | | | | |
| PPT2 | | | | *e*SS | **SS** | **01 55 22.1** | **+2.2** |
| | comp=Z,15nm,19.8s | | | | | | |
| PPT2 | | | | eLR | LR | 02 00 12.8 | |
| | comp=Z,310nm,27.5s | | | | | | |
| PPT2 | | | | eLR | LR | 02 00 14.7 | |
| | comp=Z,184nm,31.8s | | | | | | |
| **PPT** | **Papeete** | **57.88** | **274** | LR | LR | 02 01 40.9 | |
| | comp=Z,80nm,18.7s,baz=168,slow=29 | | | | | | |
| **RAR** | **Rarotonga** | **63.38** | **264** | LR | LR | 02 02 41.6 | |
| | comp=Z,132nm,21.8s,baz=124,slow=28 | | | | | | |
| **LPIG** | **La Paz** | **68.42** | **337** | LR | LR | 02 07 52.3 | |
| | comp=Z,42nm,19.4s,baz=184,slow=30 | | | | | | |
| **MAW** | **Mawson** | **69.17** | **168** | P | **P** | **01 44 44.0** | **+0.8** |
| | comp=Z,2.2nm,0.8s,baz=260,slow=9.3,SNR=4.2 | | | | | | |
| MAW | | | | LR | LR | 02 12 27.8 | |
| | comp=Z,112nm,20.1s,baz=194,slow=34 comp=Z,2.2nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **69.70** | **237** | LR | LR | 02 07 35.9 | |
| | comp=Z,337nm,20.8s,baz=226,slow=29 | | | | | | |
| **RPZ** | **Rata Peaks** | **70.02** | **229** | LR | LR | 02 07 26.3 | |
| | comp=Z,418nm,20.3s,baz=142,slow=29 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.82** | **345** | | **P** | **01 44 59.0** | **-1.0** |
| **TXAR** | **Lajitas Array** | **71.82** | **345** | P | **P** | **01 44 58.6** | **-1.4** |
| | comp=Z,1.7nm,0.8s,baz=171,slow=9.0,SNR=19 | | | | | | |
| TXAR | | | | LR | LR | 02 10 42.0 | |
| | comp=Z,90nm,19.7s,baz=162,slow=31 comp=Z,1.7nm,0.8s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **71.82** | **345** | P | **P** | **01 44 58.7** | **-1.2** |
| TX31 | | | | IAmb | IAmb | 01 45 08.5 | |
| | comp=Z,19nm,1.8s | | | | | | |
| **ALPN** | **Alpine** | **72.83** | **345** | P | **P** | **01 45 05.3** | **-0.7** |
| **OZNA** | **Ozona** | **72.92** | **348** | P | **P** | **01 45 05.6** | **-0.8** |
| **152A** | **Waverly Hall** | **73.57** | **2** | P | **P** | **01 45 09.3** | **-0.8** |
| 152A | | | | IAmb | IAmb | 01 45 09.4 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **MNHN** | **Monahans** | **73.61** | **346** | P | **P** | **01 45 09.8** | **-0.6** |
| **APMT** | **Aspermont** | **75.12** | **349** | P | **P** | **01 45 17.7** | **-1.5** |
| APMT | | | | IAmb | IAmb | 01 45 33.1 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **X48A** | **Hartselle** | **75.31** | **0** | IAmb | IAmb | 01 45 19.6 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| X48A | | | | P | **P** | **01 45 19.6** | **-0.5** |
| **PAULI** | **Pauline** | **75.84** | **5** | P | **P** | **01 45 22.4** | **-0.9** |
| **MSTX** | **Muleshoe** | **76.17** | **347** | P | **P** | **01 45 23.8** | **-1.5** |
| MSTX | | | | IAmb | IAmb | 01 45 44.0 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **WHAR** | **Wooly Hollow** | **76.28** | **356** | | **P** | **01 45 24.6** | **-1.1** |
| **CPCT** | **Cooper Cave** | **76.34** | **2** | P | **P** | **01 45 25.1** | **-1.0** |
| CPCT | | | | IAmb | IAmb | 01 45 25.8 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **TKL** | **Tuckaleechee C** | **76.58** | **3** | LR | LR | 02 15 16.8 | |
| | comp=Z,117nm,19.0s,baz=178,slow=33 | | | | | | |
| **V48A** | **Smith Brothers** | **76.59** | **0** | P | **P** | **01 45 25.4** | **-2.1** |
| V48A | | | | IAmb | IAmb | 01 45 26.3 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **U49A** | **Red Boiling Sp** | **77.38** | **1** | P | **P** | **01 45 30.7** | **-1.2** |
| **U38A** | **Gravette** | **77.56** | **354** | | **P** | **01 45 31.2** | **-1.7** |
| U38A | | | | IAmb | IAmb | 01 45 32.1 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **77.68** | **357** | P | **P** | **01 45 31.7** | **-1.8** |
| PBMO | | | | IAmb | IAmb | 01 45 33.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ANMO** | **Albuquerque** | **77.82** | **344** | | **P** | **01 45 33.6** | **-1.1** |
| **S51A** | **Beattyville** | **78.56** | **3** | P | **P** | **01 45 36.8** | **-1.6** |
| S51A | | | | IAmb | IAmb | 01 45 37.3 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **78.73** | **355** | | **P** | **01 45 37.9** | **-1.5** |
| **CCM** | **Cathedral Cave** | **78.99** | **357** | P | **P** | **01 45 39.5** | **-1.3** |
| CCM | | | | IAmb | IAmb | 01 45 40.1 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **PFO** | **Pinyon Flats O** | **79.17** | **336** | LR | LR | 02 12 28.0 | |
| | comp=Z,69nm,18.5s,baz=173,slow=30 | | | | | | |
| **P52A** | **Corning** | **80.62** | **4** | P | **P** | **01 45 48.2** | **-1.3** |
| **P38A** | **Dawn** | **80.67** | **355** | | **P** | **01 45 48.1** | **-1.8** |
| P38A | | | | IAmb | IAmb | 01 45 48.7 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **SUR** | **Sutherland** | **81.28** | **126** | LR | LR | 02 15 20.7 | |
| | comp=Z,203nm,19.7s,baz=216,slow=31 | | | | | | |
| **MSVF** | **Nonsavu** | **81.93** | **254** | LR | LR | 02 17 51.1 | |
| | comp=Z,33nm,18.8s,baz=126,slow=32 | | | | | | |
| **PRN** | **Pahroc Range** | **82.27** | **338** | P | **P** | **01 45 57.9** | **-0.7** |
| PRN | | | | IAmb | IAmb | 01 46 10.8 | |
| | comp=Z,7.5nm,1.2s | | | | | | |
| **GRAC** | **Grapevine Rang** | **82.57** | **336** | P | **P** | **01 45 59.5** | **-0.6** |
| **TCRU** | **Three Creeks R** | **82.71** | **340** | P | **P** | **01 46 00.1** | **-0.9** |
| **PSUT** | **Pine Spring** | **83.00** | **339** | P | **P** | **01 46 01.4** | **-1.0** |
| **R11B** | **Troy Canyon, C** | **83.30** | **338** | P | **P** | **01 46 02.6** | **-1.4** |
| R11B | | | | IAmb | IAmb | 01 46 21.3 | |
| | comp=Z,7.8nm,1.6s | | | | | | |
| **SPR3** | **Spring Creek 3** | **83.56** | **339** | P | **P** | **01 46 04.5** | **-1.0** |
| SPR3 | | | | IAmb | IAmb | 01 46 32.4 | |
| | comp=Z,6.6nm,1.3s | | | | | | |
| **NLU** | **North Lily Min** | **83.89** | **341** | P | **P** | **01 46 06.2** | **-0.8** |
| NLU | | | | IAmb | IAmb | 01 46 20.2 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.18** | **336** | P | **P** | **01 46 08.0** | **-0.6** |
| | comp=Z,0.7nm,0.7s,baz=190,slow=5.7,SNR=5.0 | | | | | | |
| NVAR | | | | LR | LR | 02 16 06.6 | |
| | comp=Z,59nm,21.5s,baz=102,slow=30 comp=Z,0.7nm,0.7s | | | | | | |
| **DUG** | **Dugway, Tooele** | **84.30** | **341** | | **P** | **01 46 08.7** | **-0.3** |
| DUG | | | | IAmb | IAmb | 01 46 23.1 | |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **84.99** | **353** | | **P** | **01 46 11.0** | **-1.2** |
| **K22A** | **Casper** | **85.28** | **346** | P | **P** | **01 46 13.1** | **-0.9** |
| **BBTS** | **Babate** | **85.67** | **66** | LR | LR | 02 21 19.3 | |
| | comp=Z,193nm,22.0s,baz=134,slow=33 | | | | | | |
| **SADO** | **Sadowa** | **85.92** | **6** | LR | LR | 02 21 46.9 | |
| | comp=Z,74nm,18.2s,baz=244,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **85.99** | **344** | P | **P** | **01 46 16.3** | **-1.2** |
| | comp=Z,0.3nm,0.4s,baz=149,slow=3.5,SNR=4.2 comp=Z,0.3nm,0.4s | | | | | | |
| **BOSA** | **Boshof** | **86.65** | **126** | LR | LR | 02 18 03.0 | |
| | comp=Z,188nm,19.4s,baz=210,slow=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **87.17** | **243** | *e*S | **SKSac** | **01 56 52.3** | **+0.6** |
| | comp=Z,104nm,28.6s | | | | | | |
| DZM | | | | *e*SS | **SS** | **02 02 52.2** | **+5.6** |
| | comp=Z,132nm,39.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **87.17** | **243** | eLR | LR | 02 13 59.9 | |
| | comp=Z,504nm,24.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **87.17** | **243** | LR | LR | 02 15 54.5 | |
| | comp=Z,192nm,20.4s,baz=138,slow=29 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **88.58** | **334** | LR | LR | 02 19 05.8 | |
| | comp=Z,35nm,18.0s,baz=158,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **89.43** | **123** | LR | LR | 02 20 42.4 | |
| | comp=Z,122nm,19.5s,baz=181,slow=32 | | | | | | |
| **ULM** | **Lac du Bonnet** | **91.41** | **355** | LR | LR | 02 23 17.4 | |
| | comp=Z,55nm,20.6s,baz=163,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **94.41** | **220** | LR | LR | 02 21 35.1 | |
| | comp=Z,203nm,19.5s,baz=195,slow=31 | | | | | | |
| **SCHQ** | **Schefferville** | **97.27** | **12** | LR | LR | 02 27 19.6 | |
| | comp=Z,84nm,21.2s,baz=233,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **97.78** | **79** | LR | LR | 02 29 44.6 | |
| | comp=Z,42nm,19.3s,baz=225,slow=34 | | | | | | |
| **KBZ** | **Khabaz** | **143.62** | **69** | PKP | **PKPdf** | **01 53 09.7** | **-2.0** |
| | comp=Z,3.4nm,0.9s,baz=283,slow=2.6,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **170.66** | **50** | PKPab | **PKPab** | **01 55 05.0** | **+2.3** |
| | comp=Z,0.5nm,0.7s,baz=294,slow=4.6,SNR=4.1 | | | | | | |

*AFAD **24** 01:40:46.5±0.0, 41.38°N×43.52E, h10$^{km}$±3$^{km}$, ML2.1*

*NORS **24** 01:40:48.9, 41.45°N×43.69E, h1km, MPVA3.4*

**ISC 24 01:40:46.3±1.0, 41.39°N±0.02×43.58°E±0.03, h12$^{km}$±10$^{km}$, n19, σ0♀88/38, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EPOS** | **Posof** | **0.65** | **281** | P | **Pg** | **01 40 58.6** | **-0.4** |
| EPOS | | | | S | **Sg** | **01 41 07.6** | **0.0** |
| EPOS | | | | *i* AML | AML | 01 41 13.0 | |
| | comp=N,117nm,1.0s | | | | | | |
| **EAK** | **Akyaka** | **0.70** | **178** | P | **Pg** | **01 40 59.5** | **-0.4** |
| EAK | | | | S | **Sg** | **01 41 09.2** | **+0.1** |
| EAK | | | | *i* AML | AML | 01 41 12.0 | |
| | comp=N,88nm,0.5s | | | | | | |
| EAK | | | | *i* AML | AML | 01 41 21.0 | |
| | comp=E,90nm,0.5s | | | | | | |
| **AHAN** | **Ardahan-Merkez** | **0.76** | **253** | P | **Pg** | **01 41 00.8** | **-0.1** |
| AHAN | | | | S | **Sg** | **01 41 11.2** | **+0.3** |
| AHAN | | | | *i* AML | AML | 01 41 12.0 | |
| | comp=E,89nm,0.4s | | | | | | |
| **BOZK** | **Kars-Merkez-Bo** | **0.92** | **210** | P | **Pg** | **01 41 04.0** | **0.0** |
| BOZK | | | | S | **Sg** | **01 41 16.4** | **+0.4** |
| BOZK | | | | *i* AML | AML | 01 41 17.0 | |
| | comp=N,56nm,0.3s | | | | | | |
| BOZK | | | | *i* AML | AML | 01 41 20.0 | |
| | comp=E,73nm,0.5s | | | | | | |
| **GOLE** | **Ardahan-Gℍle** | **0.93** | **234** | P | **Pg** | **01 41 03.9** | **-0.3** |
| GOLE | | | | S | **Sg** | **01 41 17.0** | **+0.7** |
| GOLE | | | | *i* AML | AML | 01 41 17.0 | |
| | comp=N,139nm,0.3s | | | | | | |
| GOLE | | | | *i* AML | AML | 01 41 18.0 | |
| | comp=E,122nm,0.2s | | | | | | |
| **DIGO** | **Kars** | **0.98** | **189** | P | **Pg** | **01 41 04.7** | **-0.6** |
| DIGO | | | | S | **Sb** | **01 41 18.9** | **+0.5** |
| DIGO | | | | *i* AML | AML | 01 41 21.0 | |
| | comp=N,77nm,0.4s | | | | | | |
| DIGO | | | | *i* AML | AML | 01 41 25.0 | |
| | comp=E,92nm,0.8s | | | | | | |
| **DAGI** | **Agillar** | **1.29** | **257** | P | **Pn** | **01 41 10.2** | **-0.1** |
| DAGI | | | | S | **Sb** | **01 41 28.1** | **+0.8** |
| **DBOC** | **Borcka** | **1.44** | **269** | P | **Pn** | **01 41 12.1** | **-0.2** |
| DBOC | | | | S | **Sn** | **01 41 30.6** | **-0.5** |
| DBOC | | | | *i* AML | AML | 01 41 36.0 | |
| | comp=E,35nm,0.6s | | | | | | |
| **DDEM** | **Demirkent** | **1.47** | **251** | P | **Pn** | **01 41 13.1** | **+0.4** |
| DDEM | | | | S | **Sn** | **01 41 32.1** | **+0.3** |
| DDEM | | | | *i* AML | AML | 01 41 39.0 | |
| | comp=E,65nm,0.6s | | | | | | |
| **DBAD** | **Bademkaya** | **1.47** | **256** | P | **Pn** | **01 41 13.1** | **+0.3** |
| DBAD | | | | S | **Sn** | **01 41 31.3** | **-0.6** |
| DBAD | | | | *i* AML | AML | 01 41 33.0 | |
| | comp=E,51nm,0.6s | | | | | | |
| DBAD | | | | *i* AML | AML | 01 41 37.0 | |
| | comp=N,33nm,0.5s | | | | | | |
| **LACR** | **Lac** | **1.54** | **20** | *e*Pg | **Pg** | **01 41 14.4** | **-1.3** |
| LACR | | | | *e*Sg | **Sg** | **01 41 35.6** | **-0.1** |
| **IGDI** | **IGDIR** | **1.56** | **166** | P | **Pn** | **01 41 14.1** | **+0.2** |
| IGDI | | | | S | **Sb** | **01 41 35.9** | **+1.0** |
| **KORR** | **Kora** | **1.74** | **12** | *e*Pg | **Pb** | **01 41 16.7** | **-1.4** |
| KORR | | | | *e*Sg | **Sg** | **01 41 43.9** | **+1.7** |
| **ARNR** | **Ardon** | **1.87** | **16** | *e*Pg | **Pg** | **01 41 21.8** | **-0.2** |
| ARNR | | | | *e*Sg | **Sg** | **01 41 47.9** | **+1.6** |
| **LSNR** | **Lesken** | **1.90** | **5** | *e*Pg | **Pg** | **01 41 21.9** | **-0.8** |
| LSNR | | | | *e*Sg | **Sg** | **01 41 48.1** | **+0.8** |
| **KMGR** | **Komgaron** | **1.92** | **29** | *e*Pg | **Pg** | **01 41 22.2** | **-1.0** |
| KMGR | | | | *e*Sg | **Sg** | **01 41 48.9** | **+0.8** |
| **STDR** | **Stavd-Durt** | **2.01** | **10** | *e*Pg | **Pg** | **01 41 24.9** | **0.0** |
| STDR | | | | *e*Sg | **Sg** | **01 41 54.0** | **+3.0** |
| **BTLR** | **Botlikh** | **2.34** | **56** | *e*Pg | **Pb** | **01 41 28.1** | **-0.4** |
| BTLR | | | | *e*Sg | **Sb** | **01 41 57.8** | **+0.4** |
| **IZDR** | **Rize** | **2.36** | **256** | P | **Pb** | **01 41 28.3** | **-0.5** |
| IZDR | | | | S | **Sb** | **01 41 58.2** | **+0.3** |

**TRN 24 01:54:22.4, 17.87N×59.78W, h38$^{km}$, MD3.7, Far North-east of Barbuda., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANWB** | **Willy Bob** | **1.92** | **264** | *e*P | Pn | 01 54 53.8 | +1.2 |
| ANWB | | | | *e*S | Sn | 01 55 17.4 | +1.9 |
| **ANBD** | **Bethesda, Anti** | **2.06** | **247** | *e*P | Pn | 01 54 56.0 | +1.4 |
| ANBD | | | | *e*S | Sn | 01 55 19.9 | +0.9 |
| **MBWH** | | **2.56** | **245** | *e*P | Pn | 01 55 04.0 | +2.5 |
| MBWH | | | | *e*S | Sn | 01 55 33.5 | +2.1 |
| **MBFL** | **Flemmings, Mon** | **2.58** | **245** | *e*P | Pn | 01

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **J18K** | **Innoko River** | **82.83** | **10** | P | **P** | **02 11 19.2** | **+0.2** |
| J18K | | | | IAmb | IAmb | 02 11 20.1 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **K20K** | **Telida** | **83.18** | **11** | P | **P** | **02 11 20.7** | **0.0** |
| K20K | | | | IAmb | IAmb | 02 11 21.5 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **RND** | **Reindeer** | **84.25** | **13** | P | **P** | **02 11 26.1** | **0.0** |
| **M26K** | **Nabesna, AK** | **84.77** | **16** | P | **P** | **02 11 27.9** | **-0.8** |
| M26K | | | | IAmb | IAmb | 02 11 30.0 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| **WRH** | **Wood River Hil** | **85.35** | **13** | P | **P** | **02 11 31.3** | **0.0** |
| WRH | | | | IAmb | IAmb | 02 11 31.5 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.56** | **13** | P | **P** | **02 11 31.7** | **-0.7** |
| CCB | | | | IAmb | IAmb | 02 11 33.5 | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **85.87** | **13** | P | **P** | **02 11 33.0** | **-0.8** |
| | comp=Z,0.9nm,0.4s,baz=222,slow=5.1,SNR=20 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **86.05** | **58** | P | **P** | **02 11 35.9** | **+0.3** |
| **TXAR** | **Lajitas Array** | **86.05** | **58** | P | **P** | **02 11 35.4** | **-0.2** |
| | comp=Z,1.5nm,0.8s,baz=217,slow=6.1,SNR=23 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **86.39** | **14** | P | **P** | **02 11 37.0** | **+0.6** |
| J26L | | | | IAmb | IAmb | 02 11 37.2 | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.38** | **43** | P | **P** | **02 11 41.0** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=251,slow=2.8,SNR=7.0 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **F31M** | **Tsiigehtchic** | **91.17** | **16** | P | **P** | **02 11 58.2** | **-0.2** |
| **BRTR** | **Keskin Array B** | **144.69** | **315** | PKP | **PKPab** | **02 18 27.8** | **-0.5** |
| | comp=Z,0.6nm,0.5s,baz=104,slow=3.0,SNR=7.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.05** | **303** | PKPbc | **PKPbc** | **02 18 31.4** | **-0.3** |
| | comp=Z,1.3nm,0.5s,baz=90,slow=5.0,SNR=3.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.55** | **345** | PKPbc | **PKPbc** | **02 18 35.1** | **-0.1** |
| | comp=Z,1.1nm,0.7s,baz=27,slow=0.3,SNR=6.2 | | | | | | |

*IDC **24** 02:03:19.1±0.8, 37.°53N×144.°43E, h0km, mb3.8/8, mbtmp3.8/10, ML3.6/2, MS4.0/5, Error ellipse: s-maj=25.2km s-min=18.8km az=129.0*
*NIED **24** 02:03:23.8, 37.°67N×144.°24E, h64km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-2.65; Mθθ-0.03; Mϕϕ2.67; Mrθ-1.19; Mθϕ0.20; Mϕr1.76; Fault plane solution: M₀3.39000×10¹⁴ NP1: ϕs163.00000°, δ64.00000°, λ-109.00000°. NP2: ϕs21.00000°, δ31.00000°, λ-56.00000°.*
*NEIC **24** 02:03:23.6±1.8, 37.°78N±0.°10×144.°5E±0.°1, h35km±2km, mb4.5/15 Error ellipse: s-maj=19.8km s-min=13.1km az=129.0*
*JMA **24** 02:03:23.8±0.2, 37.°7N±0.°9×14.°4E±.°, h64km, MV4.1/28, FAR E OFF NORTH HONSHU*

**ISC 24 02:03:23.8±0.7, 37.76N±0.°06×144.°43E±0.°07, h35km, n57, σ1§68/57, mb4.4/16, MS4.0/5, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIO** | **Ouri** | **2.53** | **287** | P | **Pn** | **02 04 02.1** | **-0.3** |
| JIO | | | | S | **Sn** | **02 04 30.4** | **-1.5** |
| **OFUJ** | **Ofunato** | **2.54** | **302** | P | **Pn** | **02 04 02.4** | **-0.1** |
| OFUJ | | | | *eS* | **Sn** | **02 04 31.4** | **-0.8** |
| **JKMT** | **Kesennumamotoy** | **2.55** | **295** | P | **Pn** | **02 04 02.5** | **-0.2** |
| JKMT | | | | S | **Sn** | **02 04 31.3** | **-1.2** |
| **JMK** | **Ichinoseki** | **2.79** | **296** | P | **Pn** | **02 04 06.1** | **+0.2** |
| JMK | | | | *eS* | **Sn** | **02 04 37.7** | **-0.7** |
| **JMM** | **Marumori** | **2.88** | **273** | | **Pn** | **02 04 06.4** | **-0.9** |
| **JOM** | **Ohasama** | **2.99** | **306** | P | **Pn** | **02 04 09.2** | **+0.4** |
| JOM | | | | *eS* | **Sn** | **02 04 43.3** | **-0.1** |
| **JOTO** | **OTAMA OYAMA** | **3.26** | **268** | S | **Sn** | **02 04 48.7** | **-1.3** |
| **JYK** | **Kaneyama** | **3.40** | **291** | P | **Pn** | **02 04 14.9** | **+0.5** |
| JYK | | | | *eS* | **Sn** | **02 04 53.2** | **-0.3** |
| **JANG** | **Nango** | **3.46** | **320** | *eP* | **Pn** | **02 04 15.3** | **+0.1** |
| JANG | | | | *eS* | **Sn** | **02 04 53.8** | **-1.1** |
| **JTM** | **Tenmabayashi** | **3.99** | **320** | Pn | **Pn** | **02 04 23.0** | **+0.5** |
| **BSO1** | **Boso 1** | **4.17** | **223** | *eP* | **Pn** | **02 04 22.1** | **-2.4** |
| **ERM** | **Erimo** | **4.36** | **347** | Pn | **Pn** | **02 04 26.4** | **-1.1** |
| **JRY** | **Ryogami san** | **4.76** | **250** | P | **Pn** | **02 04 31.8** | **-1.3** |
| JRY | | | | S | **Sn** | **02 05 22.3** | **-4.8** |
| **JCH** | **Churui** | **4.92** | **351** | *eP* | **Pn** | **02 04 35.2** | **+0.1** |
| JCH | | | | *eS* | **Sn** | **02 05 27.8** | **-3.0** |
| **MJAR** | **Matsushiro Arr** | **5.12** | **258** | Pn | **Pn** | **02 04 37.1** | **-0.9** |
| | 1.3nm,0.3s,baz=90,slow=16,SNR=22 | | | | | | |
| MJAR | | | | Sn | **Sn** | **02 05 37.0** | **+1.2** |
| | 0.4nm,0.3s,baz=105,slow=22,SNR=5.4 | | | | | | |
| | 9.5nm,0.4s | | | | | | |
| **MAJO** | **Matsushiro** | **5.12** | **258** | | **Pn** | **02 04 38.9** | **+0.9** |
| **MJB9** | **Matsu-Tunnel** | **5.12** | **258** | | **Pn** | **02 04 38.7** | **+0.7** |
| **NEM2** | **Nemuro 2** | **5.69** | **10** | *eP* | **Pn** | **02 04 43.9** | **-1.9** |
| NEM2 | | | | *eS* | **Sn** | **02 05 45.1** | **-4.7** |
| **JHJ2** | **Mitsune** | **5.97** | **220** | Pn | **Pn** | **02 04 47.1** | **-2.7** |
| **JHJ** | **Hachijo jima 2** | **5.99** | **221** | Pn | **Pn** | **02 04 46.5** | **-3.5** |
| | 8.8nm,0.3s,baz=346,slow=18,SNR=6.9 | | | | | | |
| JHJ | | | | Sn | Sn | 02 05 48.4 | -8.8 |
| | 23nm,0.3s,baz=84,slow=23,SNR=2.0 | | | | | | |
| | 29nm,0.3s | | | | | | |
| **JGF** | **Kuroka** | **6.08** | **251** | Pn | **Pn** | **02 04 52.0** | **+0.8** |
| **JTKR** | **Abashiri--Toko** | **6.22** | **357** | *eP* | **Pn** | **02 04 53.1** | **+0.1** |
| JTKR | | | | *eS* | **Sn** | **02 05 59.3** | **-3.5** |
| **KSRS** | **Korea Array** | **13.10** | **274** | LR | LR | 02 10 39.9 | |
| | comp=Z,22nm,18.8s,baz=115,slow=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **26.55** | **126** | T | T | 02 36 38.4 | |
| | baz=317,slow=75,SNR=15 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.55** | **126** | T | T | 02 36 33.6 | |
| | baz=317,slow=75,SNR=7.1 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.56** | **126** | T | T | 02 36 34.7 | |
| | baz=317,slow=75,SNR=15 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.33** | **128** | T | T | 02 37 13.8 | |
| | baz=319 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.33** | **128** | T | T | 02 36 54.8 | |
| | baz=319 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.35** | **128** | T | T | 02 37 02.9 | |
| | baz=319 | | | | | | |
| **L16K** | **Owhat River** | **41.69** | **36** | P | **P** | **02 11 08.8** | **+0.1** |
| **RDOG** | **Red Dog Mine** | **41.77** | **27** | P | **P** | **02 11 08.1** | **-1.3** |
| **K17K** | **Iditarod** | **42.38** | **35** | P | **P** | **02 11 14.9** | **+0.5** |
| K17K | | | | IAmb | IAmb | 02 11 58.6 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **43.61** | **27** | P | **P** | **02 11 21.8** | **-2.5** |
| D19K | | | | IAmb | IAmb | 02 11 22.4 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **J19K** | **Poorman** | **43.75** | **33** | P | **P** | **02 11 22.8** | **-2.7** |
| **KDAK** | **Kodiak Island** | **44.95** | **42** | P | **P** | **02 11 34.8** | **-0.3** |
| KDAK | | | | IAmb | IAmb | 02 12 12.2 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **KDAK** | **Kodiak Island** | **44.95** | **42** | LR | LR | 02 28 44.8 | |
| | comp=Z,175nm,18.5s,baz=155,slow=34 | | | | | | |
| **G21K** | **Allakaket** | **44.97** | **30** | P | **P** | **02 11 34.4** | **-0.7** |
| G21K | | | | IAmb | IAmb | 02 12 17.0 | |
| | comp=Z,6.9nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.77** | **302** | P | **P** | **02 11 43.3** | **+1.5** |
| | comp=Z,0.3nm,0.7s,baz=84,slow=8.4,SNR=2.8 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **46.99** | **176** | LR | LR | 02 27 31.2 | |
| | comp=Z,248nm,21.9s,baz=126,slow=31 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.45** | **308** | P | **P** | **02 11 56.1** | **+1.2** |
| | comp=Z,0.8nm,0.5s,baz=81,slow=7.5,SNR=4.9 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **47.59** | **33** | P | **P** | **02 11 57.5** | **+1.7** |
| | comp=Z,1.0nm,0.7s,baz=264,slow=6.6,SNR=8.5 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **G29M** | **Pine Creek** | **51.11** | **30** | P | **P** | **02 12 22.0** | **-0.6** |
| G29M | | | | IAmb | IAmb | 02 12 42.4 | |
| | comp=Z,7.4nm,1.5s | | | | | | |
| **G31M** | **Satah River** | **52.58** | **29** | P | **P** | **02 12 32.9** | **-0.6** |
| **WB0** | **Warramunga Arr** | **57.99** | **191** | P | **P** | **02 13 11.9** | **-1.1** |
| WB0 | | | | IAmb | IAmb | 02 13 12.2 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **58.16** | **191** | P | **P** | **02 13 13.1** | **-1.1** |
| WR0 | | | | IAmb | IAmb | 02 13 13.4 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **58.17** | **191** | P | **P** | **02 13 12.6** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 02 13 24.8 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.18** | **191** | P | **P** | **02 13 13.2** | **-1.1** |
| **WRA** | **Warramunga Arr** | **58.18** | **191** | P | **P** | **02 13 13.0** | **-1.2** |
| | comp=Z,2.9nm,0.6s,baz=11,slow=7.2,SNR=40 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **59.30** | **311** | P | **P** | **02 13 21.5** | **-0.3** |
| **KBS** | **Kingsbay** | **60.34** | **351** | P | **P** | **02 13 28.4** | **-0.2** |
| **ASAR** | **Alice Springs** | **61.90** | **191** | P | **P** | **02 13 38.8** | **-1.0** |
| | comp=Z,0.6nm,0.6s,baz=17,slow=7.4,SNR=5.9 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **69.27** | **333** | LR | LR | 02 49 10.9 | |
| | comp=Z,70nm,19.4s,baz=248,slow=40 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **72.62** | **55** | P | **P** | **02 14 50.2** | **+2.2** |
| | comp=Z,0.5nm,0.7s,baz=292,slow=6.4,SNR=6.4 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **74.39** | **337** | P | **P** | **02 14 59.2** | **+1.5** |
| | comp=Z,1.4nm,1.0s,baz=54,slow=9.6,SNR=1.4 | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **75.17** | **323** | LR | LR | 02 50 54.5 | |
| | comp=Z,89nm,20.4s,baz=251,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **80.14** | **313** | LR | LR | 02 55 16.4 | |
| | comp=Z,64nm,20.3s,baz=264,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.76** | **54** | P | **P** | **02 16 10.9** | **+1.5** |
| | comp=Z,0.1nm,0.4s,baz=287,slow=4.4,SNR=2.7 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |

**IDC 24 02:05:13.0±1.6, 31.°67N×89.°29E, h0km, mb3.3/5, mbtmp3.3/6, ML3.1/1, MS3.5/5, Error ellipse: s-maj=43.6km s-min=28.7km az=71.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **16.04** | **342** | Pn | Pn | 02 08 58.3 | -1.5 |
| | 0.1nm,0.3s,baz=164,slow=12,SNR=2.0 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.56** | **340** | P | P | 02 09 53.0 | -0.1 |
| | 0.4nm,0.4s,baz=147,slow=9.2,SNR=2.2 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **20.75** | **34** | P | P | 02 09 55.5 | +0.1 |
| | 0.9nm,0.5s,baz=220,slow=12,SNR=6.7 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.50** | **353** | P | P | 02 10 13.2 | -0.7 |
| | 0.5nm,0.4s,baz=182,slow=9.8,SNR=2.5 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **52.70** | **45** | LR | LR | 02 39 21.9 | |
| | comp=Z,52nm,18.6s,baz=100,slow=39 | | | | | | |
| **GUMO** | **Guam** | **53.80** | **96** | LR | LR | 02 37 09.6 | |
| | comp=Z,26nm,20.7s,baz=114,slow=36 | | | | | | |
| **VRAC** | **Vranov** | **55.88** | **311** | LR | LR | 02 42 45.2 | |
| | comp=Z,30nm,18.3s,baz=243,slow=40 | | | | | | |
| **HFS** | **Hagfors** | **56.05** | **324** | LR | LR | 02 41 18.7 | |
| | comp=Z,110nm,21.9s,baz=244,slow=39 | | | | | | |
| **NOA** | **NORSAR Array B** | **57.17** | **325** | LR | LR | 02 41 24.6 | |
| | comp=Z,49nm,21.1s,baz=250,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **67.07** | **134** | P | P | 02 16 08.3 | 0.0 |
| | 0.4nm,0.8s,baz=324,slow=6.1,SNR=3.0 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.20** | **280** | P | P | 02 17 31.3 | +0.1 |
| | 0.1nm,0.4s,baz=47,slow=5.8,SNR=2.4 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*IDC **24** 02:22:19.9±1.2, 21.°14S×68.°47W, h102km±11km, mb3.8/11, mbtmp4.1/14, MS2.8/1, Error ellipse: s-maj=18.4km s-min=13.9km az=110.0*
*SJA **24** 02:22:20.4±1.9, 21.°26S×68.°70W, h100km, ML4.2, MW4.1*
*NEIC **24** 02:22:20.6±1.7, 21.°23S±0.°04×68.°76W±0.°08, h112km±4km, mb4.4/10, Mwr4.2/10, ML4.2(GUC), Error ellipse: s-maj=11.0km s-min=5.8km az=77.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁵Nm; Mrr-2.15; Mθθ0.45; Mϕϕ1.69; Mrθ0.60; Mθϕ-1.09; Mϕr-0.79; Fault plane solution: M₀2.45000×10¹⁵ NP1: ϕs152.97000°, δ33.23000°, λ-84.84000°. NP2: ϕs326.82000°, δ56.92000°, λ-93.37000°. Principal axes: T 2.5366, Plg12.0000°, Azm59.0000°; N -0.1777, Plg3.0000°, Azm329.0000°; P -2.3588, Plg78.0000°, Azm225.0000°;*
*NEIC **24** 02:22:20.6, 21.°27S×68.°81W, h119km*
*GUC **24** 02:22:20.5±0.8, 21.°22S×68.°62W, h108km±11km, ML4.2*
*VAO **24** 02:22:24.9±1.6, 20.°74S×67.°89W, h10km, mb4.4*

**ISC 24 02:22:19.9±0.6, 21.°20S±0.°03×68.°65W±0.°05, h109km±6km, n92, σ1§63/113, mb4.3/15, 7C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.81** | **223** | | **Pn** | **02 22 39.9** | **+0.6** |
| PB09 | | | | Sn | **Sn** | **02 22 53.8** | **-0.1** |
| **PX03** | **IPOC Station P** | **1.22** | **311** | *eP* | **Pn** | **02 22 43.2** | **-0.2** |
| PX03 | | | | *eS* | **Sn** | **02 23 01.6** | **+0.3** |
| **LVC** | **Limon Verde** | **1.42** | **190** | Pn | **Pn** | **02 22 46.8** | **+0.7** |
| LVC | | | | Sn | **Sn** | **02 23 06.0** | **0.0** |
| **LVC** | **Limon Verde** | **1.42** | **190** | *eP* | **Pn** | **02 22 46.9** | **+0.7** |
| LVC | | | | *eS* | **Sn** | **02 23 07.5** | **+1.6** |
| **LVC** | **Limon Verde** | **1.42** | **190** | P | **Pn** | **02 22 46.9** | **+0.7** |
| | 2µm,0.4s,baz=14,slow=9.7,SNR=4407 | | | | | | |
| LVC | | | | S | **Sn** | **02 23 07.1** | **+1.2** |
| | 1µm,0.4s,baz=262,slow=20,SNR=47 | | | | | | |
| LVC | | | | LR | LR | 02 23 24.4 | |
| | comp=Z,220nm,18.8s,baz=278,slow=42 | | | | | | |
| **LVC** | **Limon Verde** | **1.42** | **190** | *eP* | **Pn** | **02 22 46.4** | **+0.3** |
| LVC | | | | *eS* | **Sn** | **02 23 06.6** | **+0.6** |
| **PATCX** | **Punta Patache** | **1.46** | **285** | | **Pn** | **02 22 46.8** | **+0.6** |
| PATCX | | | | | **Sn** | **02 23 05.5** | **-0.6** |
| **HMBC** | **Humberstone** | **1.48** | **308** | | **Pn** | **02 22 46.9** | **+0.3** |
| HMBC | | | | Sn | **Sn** | **02 23 06.6** | **-0.2** |
| **HMBC** | **Humberstone** | **1.48** | **308** | *eP* | **Pn** | **02 22 47.1** | **+0.5** |
| HMBC | | | | *eS* | **Sn** | **02 23 08.8** | **+2.0** |
| HMBC | | | | IAML | | 02 23 10.8 | |
| | comp=Z,3µm,0.5s | | | | | | |
| **HMBC** | **Humberstone** | **1.48** | **308** | ⇑*iP* | **Pn** | **02 22 46.9** | **+0.3** |
| HMBC | | | | *eS* | **Sn** | **02 23 07.0** | **+0.3** |
| HMBC | | | | IAML | | 02 23 09.2 | |
| | comp=N,6µm,0.4s | | | | | | |
| **TA01** | **Diego Aracena** | **1.57** | **294** | | **Pn** | **02 22 47.7** | **+0.2** |
| TA01 | | | | Sn | **Sn** | **02 23 08.2** | **-0.2** |
| **TA01** | **Diego Aracena** | **1.57** | **294** | *eP* | **Pn** | **02 22 47.8** | **+0.3** |
| TA01 | | | | *eS* | **Sn** | **02 23 09.6** | **+1.2** |
| TA01 | | | | IAML | | 02 23 10.0 | |
| | comp=Z,2µm,0.6s | | | | | | |
| **TA01** | **Diego Aracena** | **1.57** | **294** | ⇑*iP* | **Pn** | **02 22 47.7** | **+0.2** |
| TA01 | | | | *eS* | **Sn** | **02 23 08.3** | **-0.2** |
| **GO01** | **Chusmiza** | **1.61** | **341** | Pn | **Pn** | **02 22 49.7** | **+1.2** |
| **GO01** | **Chusmiza** | **1.61** | **341** | *eP* | **Pn** | **02 22 50.1** | **+1.6** |
| GO01 | | | | *eS* | **Sn** | **02 23 13.3** | **+3.1** |
| GO01 | | | | IAML | | 02 23 20.3 | |
| | comp=Z,1µm,0.1s | | | | | | |
| **GO01** | **Chusmiza** | **1.61** | **341** | *eP* | **Pn** | **02 22 49.5** | **+1.0** |
| GO01 | | | | IAML | | 02 23 20.3 | |
| | comp=N,2µm,0.1s | | | | | | |
| **TA02** | **Huaiquique** | **1.67** | **304** | | **Pn** | **02 22 49.0** | **+0.3** |
| **TA02** | **Huaiquique** | **1.67** | **304** | *eP* | **Pn** | **02 22 49.3** | **+0.5** |
| TA02 | | | | *eS* | **Sn** | **02 23 11.6** | **+0.9** |
| TA02 | | | | IAML | | 02 23 16.9 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **TA02** | **Huaiquique** | **1.67** | **304** | *eP* | **Pn** | **02 22 49.0** | **+0.3** |
| TA02 | | | | *eS* | **Sn** | **02 23 10.7** | **+0.1** |
| **PB04** | **IPOC Station P** | **1.79** | **231** | | **Pn** | **02 22 49.7** | **-0.7** |
| **PB04** | **IPOC Station P** | **1.79** | **231** | *eP* | **Pn** | **02 22 50.1** | **-0.3** |
| PB04 | | | | *eS* | **Sn** | **02 23 17.7** | **+4.1** |
| PB04 | | | | IAML | | 02 23 22.6 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **1.79** | **231** | *eP* | **Pn** | **02 22 49.9** | **-0.5** |
| PB04 | | | | *eS* | **Sn** | **02 23 13.7** | **+0.1** |
| PB04 | | | | IAML | | 02 23 23.9 | |
| | comp=E,3µm,0.4s | | | | | | |
| **AF01** | **San Pedro de A** | **1.79** | **166** | | **Pn** | **02 22 52.1** | **+1.5** |
| **AF01** | **San Pedro de A** | **1.79** | **166** | *eP* | **Pn** | **02 22 51.9** | **+1.3** |
| AF01 | | | | IAML | | 02 23 31.7 | |
| | comp=Z,2µm,1.3s | | | | | | |
| **AF01** | **San Pedro de A** | **1.79** | **166** | *eP* | **Pn** | **02 22 52.4** | **+1.8** |
| AF01 | | | | IAML | | 02 23 49.1 | |
| | comp=E,3µm,0.7s | | | | | | |
| **YJA** | **Yavi** | **3.07** | **109** | *eP* | **Pn** | **02 23 09.9** | **+2.6** |
| YJA | | | | *eS* | Sn | 02 24 04.3 | +21 |
| **AP01** | **Chacalluta** | **3.24** | **330** | | **Pn** | **02 23 08.9** | **-0.1** |
| **AP01** | **Chacalluta** | **3.24** | **330** | *eP* | **Pn** | **02 23 09.8** | **+0.7** |
| AP01 | | | | *eP* | | 02 23 12.2 | |
| AP01 | | | | *eS* | **Sn** | **02 23 44.5** | **-2.5** |
| AP01 | | | | IAML | | 02 24 22.9 | |
| | comp=Z,435nm,0.5s | | | | | | |
| **AP01** | **Chacalluta** | **3.24** | **330** | *eP* | **Pn** | **02 23 08.8** | **-0.3** |
| **PB18** | **Visviri** | **3.68** | **348** | Pn | **Pn** | **02 23 17.1** | **+1.7** |
| **PB18** | **Visviri** | **3.68** | **348** | *eP* | **Pn** | **02 23 19.2** | **+3.7** |
| **PB14** | **IPOC Station P** | **3.77** | **205** | Pn | **Pn** | **02 23 15.6** | **-0.9** |
| **GO02** | **Mina Guanaco** | **4.04** | **192** | Pn | **Pn** | **02 23 18.2** | **-1.8** |
| **GO02** | **Mina Guanaco** | **4.04** | **192** | *eP* | **Pn** | **02 23 19.7** | **-0.3** |
| GO02 | | | | *eS* | **Sn** | **02 24 05.5** | **-1.0** |
| GO02 | | | | IAML | | 02 24 37.3 | |
| | comp=Z,479nm,0.9s | | | | | | |
| **GO02** | **Mina Guanaco** | **4.04** | **192** | *eP* | **Pn** | **02 23 18.8** | **-1.2** |
| **AZAP** | **Zapla** | **4.47** | **133** | *eP* | **Pn** | **02 23 27.3** | **+1.5** |
| **LPAZ** | **La Paz** | **4.91** | **6** | | **Pn** | **02 23 34.3** | **+2.1** |
| **LPAZ** | **La Paz** | **4.91** | **6** | *eP* | **Pn** | **02 23 34.7** | **+2.5** |
| LPAZ | | | | *eS* | Sn | 02 24 12.2 | -16 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **4.91** | **6** | P | **Pn** | **02 23 34.7** | **+2.5** |
| | comp=Z,42nm,0.5s,baz=190,slow=5.8,SNR=121 | | | | | | |
| LPAZ | | | | S | **Sn** | **02 24 22.9** | **-5.4** |
| | comp=Z,13nm,0.6s,baz=215,slow=16,SNR=1.5 | | | | | | |
| LPAZ | | | | LR | LR | 02 25 59.9 | |
| | comp=Z,107nm,19.9s,baz=200,slow=46 | | | | | | |
| **AC01** | **Pan de Azucar** | **5.24** | **200** | | **Pn** | **02 23 33.3** | **-2.6** |
| **AC01** | **Pan de Azucar** | **5.24** | **200** | *eP* | **Pn** | **02 23 33.3** | **-2.6** |
| AC01 | | | | *eS* | **Sn** | **02 24 31.5** | **-3.6** |
| **AC01** | **Pan de Azucar** | **5.24** | **200** | *eP* | **Pn** | **02 23 32.7** | **-3.2** |
| **AC06** | **Mina Casimiro** | **6.32** | **194** | | **Pn** | **02 23 47.9** | **-2.7** |
| **GO03** | **Copiap** | **6.52** | **192** | | **Pn** | **02 23 50.2** | **-3.2** |
| **AC04** | **Llanos de Chal** | **7.31** | **197** | Pn | Pn | 02 23 59.1 | -5.0 |
| **AC05** | **El Transito** | **7.74** | **191** | | **Pn** | **02 24 06.4** | **-3.6** |
| **SIV** | **San Ignacio** | **8.86** | **55** | P | **Pn** | **02 24 22.8** | **-2.3** |
| | comp=Z,83nm,0.6s,baz=240,slow=12,SNR=323 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **10.69** | **59** | | **Pn** | **02 24 47.8** | **-2.2** |
| **PTLB** | **Pontes e Lacer** | **10.69** | **59** | *eP* | **Pn** | **02 24 47.2** | **-2.8** |
| **VILB** | **Vilhena** | **11.51** | **46** | | **Pn** | **02 24 59.2** | **-1.8** |
| **CPUP** | **Villa Florida** | **11.55** | **118** | P | **Pn** | **02 24 59.6** | **-1.9** |
| | comp=Z,1.4nm,0.7s,baz=304,slow=12,SNR=5.9 | | | | | | |
| **ETMB** | **Extrema** | **11.56** | **12** | | **Pn** | **02 25 00.2** | **-1.5** |
| **AQDB** | **Aquidauana** | **12.13** | **89** | | **Pn** | **02 25 08.4** | **-0.7** |
| **AQDB** | **Aquidauana** | **12.13** | **89** | *eP* | **Pn** | **02 25 06.3** | **-2.9** |
| **SAML** | **Samuel** | **13.27** | **24** | | **Pn** | **02 25 22.3** | **-1.9** |
| **CZSB** | **Cruzeiro do Su** | **13.96** | **343** | Pn | **Pn** | **02 25 32.6** | **-0.4** |
| **CZSB** | **Cruzeiro do Su** | **13.96** | **343** | *eP* | **P** | **02 25 38.7** | **+1.2** |
| **PDRB** | **Porto dos Gac** | **14.88** | **52** | *eP* | **Pn** | **02 25 41.7** | **-3.1** |
| **PCMB** | **Pacaembu** | **16.20** | **95** | *eP* | **Pn** | **02 26 02.4** | **+1.1** |
| **ARAG** | **Araguaiana, MT** | **16.88** | **74** | *eP* | **Pn** | **02 26 08.7** | **-1.0** |
| **ITRB** | **Iturama** | **17.21** | **88** | *eP* | **P** | **02 26 15.8** | **+2.3** |
| **PLCA** | **Paso Flores** | **19.54** | **184** | P | **P** | **02 26 39.7** | **+0.8** |
| | comp=Z,4.4nm,1.1s,baz=351,slow=13,SNR=2.1 | | | | | | |
| **MACA** | **Manacapuru-AM** | **19.54** | **24** | | **P** | **02 26 37.0** | **-2.0** |
| MACA | | | | IAmb | IAmb | 02 26 40.3 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **VAO** | **Valinhos** | **20.17** | **99** | P | **P** | **02 26 45.4** | **-0.6** |
| VAO | | | | IAmb | IAmb | 02 26 45.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **BDFB** | **Brasilia** | **20.34** | **78** | P | **P** | **02 26 46.6** | **-1.2** |
| **BDFB** | **Brasilia** | **20.34** | **78** | P | **P** | **02 26 46.3** | **-1.5** |
| | comp=Z,4.1nm,0.4s,baz=253,slow=9.6,SNR=12 | | | | | | |
| | comp=Z,4.1nm,0.4s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **60.28** | **161** | ⇑P | **P** | **02 32 17.1** | **+0.6** |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **60.48** | **161** | ⇑P | **P** | **02 32 18.3** | **+0.5** |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **60.53** | **325** | P | **P** | **02 32 19.2** | **+0.3** |
| | comp=Z,0.2nm,0.5s,baz=152,slow=8.2,SNR=3.6 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **60.85** | **161** | ⇑P | **P** | **02 32 21.1** | **+0.7** |
| | comp=Z,4.2nm,0.7s,baz=276,slow=7.2 | | | | | | |
| **SNAA** | **Sanae** | **62.48** | **161** | P | **P** | **02 32 32.1** | **+0.6** |
| SNAA | | | | IAmb | IAmb | 02 32 32.7 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **62.48** | **161** | ⇑P | **P** | **02 32 31.8** | **+0.3** |
| | comp=Z,80nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **62.48** | **161** | *eP* | **P** | **02 32 32.0** | **+0.6** |
| | comp=Z,3.0nm,0.6s,baz=274,slow=8.2,SNR=33 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **64.19** | **161** | ⇑P | **P** | **02 32 43.6** | **+0.8** |
| | comp=Z,172nm,0.6s | | | | | | |
| **DBIC** | **Dimbokro** | **68.42** | **73** | P | **P** | **02 33 09.8** | **-0.7** |
| **QSPA** | **South Pole Qui** | **68.99** | **180** | P | **P** | **02 33 14.9** | **+1.6** |
| QSPA | | | | IAmb | IAmb | 02 33 15.9 | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.99** | **180** | P | **P** | **02 33 14.8** | **+1.4** |
| | comp=Z,3.4nm,0.7s,baz=291,slow=1.0,SNR=34 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **P18A** | **Preston Nutter** | **71.91** | **327** | P | **P** | **02 

*ATH **24** 02:58:59.4, 39°.58N×21°.52E, h5km±1km, ML3.2/17, Error ellipse: s-maj=1.1km s-min=0.5km az=229.0*
*BEO **24** 02:59:00.4±0.9, 39°.54N×21°.62E, h15km±3km, ML3.0/10*
*NAO **24** 02:59:03.2, 39°.55N×21°.56E, h0km, mb3.5*
*PDG **24** 02:59:03.0±0.9, 39°.41N×21°.43E, h5km±3km, ML3.4/11, Error ellipse: s-maj=1.4km s-min=2.0km az=0.0*

**ISC 24 02:58:59.6±1.0, 39°.56N±0°.01×21°.55E±0°.02, h13km±7km, n142, σ1§40/204, mb3.5/5, 12C-4D, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TYRN** | **Tyrnavos** | **0.55** | **73** | P | **Pg** | **02 59 09.7** | **-0.7** |
| TYRN | | | | S | **Sb** | **02 59 18.9** | **0.0** |
| **TYRN** | **Tyrnavos** | **0.55** | **73** | P | **Pg** | **02 59 09.9** | **-0.4** |
| TYRN | | | | S | **Sb** | **02 59 17.9** | **-1.0** |
| **LRSO** | **Larissa Observ** | **0.66** | **80** | P | **Pb** | **02 59 12.5** | **-0.5** |
| LRSO | | | | S | **Sn** | **02 59 22.7** | **-2.2** |
| | 3μm,0.2s | | | | | | |
| **LRSO** | **Larissa Observ** | **0.66** | **80** | P | **Pb** | **02 59 12.3** | **-0.6** |
| LRSO | | | | S | **Sb** | **02 59 21.9** | **-0.1** |
| **EVR** | **Evrytania** | **0.67** | **162** | P | **Pb** | **02 59 12.8** | **-0.3** |
| EVR | | | | S | **Sb** | **02 59 22.8** | **+0.4** |
| | 10μm,0.1s | | | | | | |
| **EVR** | **Evrytania** | **0.67** | **162** | P | **Pb** | **02 59 12.9** | **-0.3** |
| EVR | | | | S | **Sb** | **02 59 22.5** | **+0.2** |
| EVR | | | | AML | AML | 02 59 25.1 | |
| | comp=N,17824μm,0.1s | | | | | | |
| EVR | | | | AML | AML | 02 59 25.3 | |
| | comp=E,22434μm,0.2s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.70** | **140** | P | **Pg** | **02 59 13.1** | **-0.2** |
| MAKR | | | | S | **Sb** | **02 59 24.0** | **+0.7** |
| **MAKR** | **Makrakomi, Fth** | **0.70** | **140** | P | **Pb** | **02 59 13.3** | **-0.4** |
| MAKR | | | | S | **Sb** | **02 59 24.1** | **+0.7** |
| MAKR | | | | AML | AML | 02 59 27.8 | |
| | comp=E,23332μm,0.4s | | | | | | |
| MAKR | | | | AML | AML | 02 59 28.2 | |
| | comp=N,21791μm,0.3s | | | | | | |
| **PENT** | **Pentalofos** | **0.71** | **334** | P | **Pg** | **02 59 12.0** | **-1.4** |
| PENT | | | | S | **Sg** | **02 59 23.1** | **+0.2** |
| **PENT** | **Pentalofos** | **0.71** | **334** | P | **Pg** | **02 59 12.1** | **-1.4** |
| PENT | | | | S | **Sg** | **02 59 21.6** | **-1.3** |
| PENT | | | | AML | AML | 02 59 24.8 | |
| | comp=N,896μm,0.2s | | | | | | |
| PENT | | | | AML | AML | 02 59 27.4 | |
| | comp=E,2823μm,0.4s | | | | | | |
| **PVO** | **Paravola** | **0.94** | **181** | P | **Pb** | **02 59 16.4** | **-1.3** |
| PVO | | | | S | **Sn** | **02 59 30.8** | **-0.9** |
| | comp=E,4μm,0.7s | | | | | | |
| **PVO** | **Paravola** | **0.94** | **181** | P | **Pb** | **02 59 17.0** | **-0.6** |
| PVO | | | | S | **Sn** | **02 59 31.1** | **-0.6** |
| **IGT** | **Igoumenitsa** | **0.94** | **269** | P | **Pb** | **02 59 16.7** | **-1.0** |
| | baz=270 | | | | | | |
| IGT | | | | S | **Sg** | **02 59 31.1** | **+1.1** |
| | baz=270 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=N,4.6nm,0.2s,baz=270 | | | | | | |
| **IGT** | **Igoumenitsa** | **0.94** | **269** | P | **Pb** | **02 59 16.2** | **-1.5** |
| IGT | | | | S | **Sb** | **02 59 30.2** | **+0.1** |
| | comp=N,2μm,0.5s | | | | | | |
| **IGT** | **Igoumenitsa** | **0.94** | **269** | P | **Pb** | **02 59 16.9** | **-0.8** |
| IGT | | | | S | **Sb** | **02 59 29.6** | **-0.5** |
| IGT | | | | AML | AML | 02 59 37.3 | |
| | comp=E,5150μm,0.4s | | | | | | |
| IGT | | | | AML | AML | 02 59 37.9 | |
| | comp=N,2351μm,0.6s | | | | | | |
| **NEST** | **Nestorio** | **0.94** | **336** | P | **Pb** | **02 59 16.2** | **-1.6** |
| NEST | | | | S | **Sb** | **02 59 29.4** | **-0.8** |
| **NEST** | **Nestorio** | **0.94** | **336** | P | **Pb** | **02 59 16.8** | **-1.0** |
| NEST | | | | S | **Sb** | **02 59 29.3** | **-1.0** |
| **KTI** | **Kastanea** | **0.94** | **27** | P | **Pb** | **02 59 16.9** | **-1.0** |
| **ANX** | **Ano Chora** | **1.00** | **163** | P | **Pb** | **02 59 17.8** | **-1.1** |
| ANX | | | | S | **Sn** | **02 59 33.1** | **-0.4** |
| | comp=N,3μm,0.4s | | | | | | |
| **ANX** | **Ano Chora** | **1.00** | **163** | P | **Pb** | **02 59 18.1** | **-0.7** |
| ANX | | | | S | **Sn** | **02 59 32.6** | **-0.8** |
| ANX | | | | AML | AML | 02 59 36.8 | |
| | comp=N,5505μm,0.5s | | | | | | |
| ANX | | | | AML | AML | 02 59 37.8 | |
| | comp=E,7463μm,0.4s | | | | | | |
| **TSLK** | **Tsoukalades, L** | **1.01** | **224** | P | **Pb** | **02 59 18.1** | **-0.7** |
| **TSLK** | **Tsoukalades, L** | **1.01** | **224** | P | **Pb** | **02 59 18.4** | **-0.4** |
| TSLK | | | | S | **Sg** | **02 59 32.4** | **+0.3** |
| TSLK | | | | AML | AML | 02 59 41.3 | |
| | comp=E,3743μm,0.5s | | | | | | |
| TSLK | | | | AML | AML | 02 59 41.5 | |
| | comp=N,3118μm,0.4s | | | | | | |
| **LKD2** | **Lefkada island** | **1.03** | **222** | P | **Pb** | **02 59 18.5** | **-0.8** |
| | baz=224 | | | | | | |
| LKD2 | | | | S | **Sn** | **02 59 33.8** | **-0.2** |
| | baz=224 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=N,5.4nm,0.5s,baz=224 | | | | | | |
| **LKD2** | **Lefkada island** | **1.03** | **222** | P | **Pb** | **02 59 18.3** | **-1.0** |
| **LKD2** | **Lefkada island** | **1.03** | **222** | P | **Pb** | **02 59 18.7** | **-0.6** |
| LKD2 | | | | S | **Sb** | **02 59 33.0** | **+0.3** |
| LKD2 | | | | AML | AML | 02 59 41.4 | |
| | comp=E,3104μm,0.6s | | | | | | |
| LKD2 | | | | AML | AML | 02 59 42.4 | |
| | comp=N,3194μm,0.5s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **1.07** | **218** | P | **Pb** | **02 59 18.7** | **-1.2** |
| **NYDR** | **Nydri-Lefkada** | **1.07** | **218** | P | **Pb** | **02 59 19.2** | **-0.7** |
| NYDR | | | | S | **Sg** | **02 59 34.3** | **+0.2** |
| **EFP** | **Efpalio** | **1.16** | **166** | P | **Pn** | **02 59 20.5** | **-1.0** |
| **EFP** | **Efpalio** | **1.16** | **166** | P | **Pb** | **02 59 21.2** | **-0.2** |
| EFP | | | | S | **Sg** | **02 59 38.0** | **+1.0** |
| EFP | | | | AML | AML | 02 59 41.8 | |
| | comp=N,4390μm,0.3s | | | | | | |
| EFP | | | | AML | AML | 02 59 42.7 | |
| | comp=E,4151μm,0.3s | | | | | | |
| **EVGI** | **Lefkada island** | **1.16** | **217** | P | **Pn** | **02 59 20.6** | **-0.9** |
| **EVGI** | **Lefkada island** | **1.16** | **217** | P | **Pn** | **02 59 20.6** | **-0.9** |
| EVGI | | | | S | **Sg** | **02 59 38.2** | **+1.1** |
| **AXAR** | **Agios Charalam** | **1.17** | **132** | P | **Pn** | **02 59 21.0** | **-0.6** |
| **AXAR** | **Agios Charalam** | **1.17** | **132** | P | **Pg** | **02 59 21.7** | **-0.4** |
| AXAR | | | | S | **Sg** | **02 59 38.3** | **+1.0** |
| AXAR | | | | AML | AML | 02 59 43.2 | |
| | comp=N,3946μm,0.5s | | | | | | |
| AXAR | | | | AML | AML | 02 59 43.8 | |
| | comp=E,4241μm,0.4s | | | | | | |
| **KBN** | **Korca** | **1.22** | **332** | P | **Pg** | **02 59 22.8** | **-0.2** |
| | baz=332 | | | | | | |
| KBN | | | | S | **Sg** | **02 59 39.8** | **+0.9** |
| | baz=332 | | | | | | |
| KBN | | | | AMP | | | |
| | comp=E,2.5nm,0.5s,baz=332 | | | | | | |
| **FNA** | **Florina** | **1.23** | **354** | P | **Pn** | **02 59 21.4** | **-1.2** |
| | baz=354 | | | | | | |
| FNA | | | | S | **Sg** | **02 59 40.2** | **+0.8** |
| | baz=354 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,1.5nm,0.4s,baz=354 | | | | | | |
| **FNA** | **Florina** | **1.23** | **354** | P | **Pn** | **02 59 21.4** | **-1.2** |
| **FNA** | **Florina** | **1.23** | **354** | *e*Pg | **Pn** | **02 59 21.5** | **-1.2** |
| FNA | | | | *e*Sg | **Sg** | **02 59 41.3** | **+1.9** |
| **FNA** | **Florina** | **1.23** | **354** | P | **Pn** | **02 59 21.4** | **-1.2** |
| FNA | | | | S | **Sn** | **02 59 38.6** | **-0.5** |
| FNA | | | | AML | AML | 02 59 44.1 | |
| | comp=N,2070μm,0.3s | | | | | | |
| FNA | | | | AML | AML | 02 59 45.5 | |
| | comp=E,1853μm,0.4s | | | | | | |
| **SRN** | **Sarande** | **1.24** | **286** | P | **Pb** | **02 59 22.7** | **-0.1** |
| | baz=286 | | | | | | |
| SRN | | | | S | **Sg** | **02 59 39.8** | **+0.3** |
| | baz=286 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=N,2.9nm,0.4s,baz=286 | | | | | | |
| **KASA** | **Kassiopi** | **1.26** | **279** | P | **Pn** | **02 59 22.5** | **-0.3** |
| KASA | | | | S | **Sb** | **02 59 38.6** | **-0.6** |
| **UPR** | **University Cam** | **1.28** | **172** | P | **Pb** | **02 59 23.6** | **+0.1** |
| UPR | | | | S | **Sg** | **02 59 41.5** | **+0.6** |
| **DLFA** | **Delphi** | **1.30** | **145** | P | **Pn** | **02 59 23.3** | **-0.2** |
| DLFA | | | | S | **Sg** | **02 59 42.3** | **+0.7** |
| **FSK** | **Fiskardo** | **1.34** | **215** | P | **Pn** | **02 59 23.4** | **-0.6** |
| FSK | | | | S | **Sb** | **02 59 42.0** | **+0.5** |
| FSK | | | | AML | AML | 02 59 46.4 | |
| | comp=N,1620μm,0.3s | | | | | | |
| FSK | | | | AML | AML | 02 59 50.2 | |
| | comp=E,1564μm,0.5s | | | | | | |
| **KEK** | **Kerkira** | **1.36** | **277** | P | **Pn** | **02 59 24.3** | **0.0** |
| KEK | | | | S | **Sn** | **02 59 42.2** | **0.0** |
| KEK | | | | AML | AML | 02 59 51.0 | |
| | comp=E,1442μm,0.6s | | | | | | |
| KEK | | | | AML | AML | 02 59 51.2 | |
| | comp=N,1314μm,0.4s | | | | | | |
| **THE** | **Thessaloniki** | **1.53** | **45** | P | **Pn** | **02 59 26.5** | **-0.1** |
| THE | | | | S | **Sb** | **02 59 46.1** | **-1.0** |
| THE | | | | AML | AML | 02 59 59.5 | |
| | comp=E,190μm,0.4s | | | | | | |
| THE | | | | AML | AML | 02 59 59.9 | |
| | comp=N,251μm,0.6s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **1.58** | **162** | P | **Pb** | **02 59 28.2** | **-0.5** |
| KLV | | | | S | **Sb** | **02 59 49.1** | **+0.5** |
| **HORT** | **Hortiatis** | **1.58** | **48** | P | **Pn** | **02 59 26.9** | **-0.5** |
| HORT | | | | S | **Sb** | **02 59 47.5** | **-1.2** |
| HORT | | | | AML | AML | 02 59 59.4 | |
| | comp=N,258μm,0.4s | | | | | | |
| HORT | | | | AML | AML | 02 59 59.8 | |
| | comp=E,294μm,0.5s | | | | | | |
| **OHR** | **Ohrid** | **1.66** | **340** | *e*Pg | **Pg** | **02 59 31.6** | **+0.2** |
| OHR | | | | *e*Sg | **Sg** | **02 59 53.3** | **+0.4** |
| **OHR** | **Ohrid** | **1.66** | **340** | *i* Pn | **Pb** | **02 59 29.8** | **-0.2** |
| OHR | | | | *i* Sn | **Sg** | **02 59 53.9** | **+1.0** |
| **GUR** | **Goura** | **1.73** | **159** | P | **Pb** | **02 59 30.5** | **-0.8** |
| GUR | | | | S | **Sb** | **02 59 52.5** | **-0.5** |
| GUR | | | | AML | AML | 03 00 02.4 | |
| | comp=N,1339μm,0.6s | | | | | | |
| GUR | | | | AML | AML | 03 00 04.2 | |
| | comp=E,1478μm,0.5s | | | | | | |
| **VLO** | **Vlora** | **1.82** | **301** | P | **Pg** | **02 59 34.6** | **+0.1** |
| | baz=301 | | | | | | |
| VLO | | | | S | **Sg** | **02 59 58.1** | **0.0** |
| | baz=301 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=N,3.1nm,0.4s,baz=301 | | | | | | |
| **SOH** | **Sokhos** | **1.88** | **47** | P | **Pn** | **02 59 31.2** | **-0.1** |
| SOH | | | | S | **Sn** | **02 59 54.0** | **-1.0** |
| SOH | | | | AML | AML | 03 00 05.0 | |
| | comp=N,316μm,0.5s | | | | | | |
| SOH | | | | AML | AML | 03 00 05.6 | |
| | comp=E,500μm,0.4s | | | | | | |
| **VIL2** | **Platees** | **1.90** | **134** | P | **Pb** | **02 59 33.2** | **-0.9** |
| **LTHK** | **Lithakia** | **1.93** | **197** | P | **Pb** | **02 59 33.1** | **-1.4** |
| **VAY** | **Valandovo** | **1.93** | **24** | *e*Pg | **Pg** | **02 59 35.9** | **-0.7** |
| **VAY** | **Valandovo** | **1.93** | **24** | *i* Pn | **Pg** | **02 59 36.1** | **-0.5** |
| VAY | | | | *i* Sn | **Sg** | **03 00 06.9** | **+5.3** |
| **OUR** | **Ouranopolis** | **2.03** | **67** | P | **Pn** | **02 59 33.3** | **-0.1** |
| **KYMI** | **Kymi, Euboea I** | **2.19** | **114** | P | **Pn** | **02 59 35.5** | **-0.1** |
| **TIR** | **Tirane** | **2.20** | **325** | P | **Pb** | **02 59 39.3** | **0.0** |
| | baz=325 | | | | | | |
| TIR | | | | S | **Sb** | **03 00 08.0** | **+1.5** |
| | baz=325 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,0.5nm,0.6s,baz=325 | | | | | | |
| **TIR** | **Tirane** | **2.20** | **325** | *e*Pn | **Pn** | **02 59 36.4** | **+0.5** |
| **TIR** | **Tirane** | **2.20** | **325** | ⇓P | **Pb** | **02 59 39.3** | **0.0** |
| **SRS** | **Serrai** | **2.21** | **44** | *e*Pn | **Pn** | **02 59 35.6** | **-0.3** |
| **SRS** | **Serrai** | **2.21** | **44** | P | **Pn** | **02 59 35.8** | **-0.2** |
| SRS | | | | S | **Sn** | **03 00 02.1** | **-1.1** |
| SRS | | | | AML | AML | 03 00 18.0 | |
| | comp=N,136μm,0.5s | | | | | | |
| SRS | | | | AML | AML | 03 00 20.3 | |
| | comp=E,166μm,0.7s | | | | | | |
| **KOKK** | **Kokkinochori,** | **2.26** | **55** | P | **Pn** | **02 59 36.2** | **-0.5** |
| **ATHU** | **Athens Univers** | **2.36** | **132** | P | **Pn** | **02 59 38.2** | **+0.2** |
| **SCTE** | **Santa Cesarea** | **2.43** | **283** | P | **Pn** | **02 59 40.0** | **+1.0** |
| | baz=284 | | | | | | |
| SCTE | | | | S | **Sb** | **03 00 15.4** | **+2.5** |
| | baz=284 | | | | | | |
| **KRND** | **KRANIDI** | **2.51** | **149** | P | **Pn** | **02 59 39.9** | **-0.1** |
| **PYL** | **PYLOS** | **2.66** | **177** | P | **Pn** | **02 59 43.9** | **+1.8** |
| **PUK** | **Puka** | **2.79** | **334** | P | **Pb** | **02 59 46.4** | **-2.9** |
| | baz=334 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=E,0.5nm,0.6s,baz=334 | | | | | | |
| **BCI** | **Bajram Curri** | **3.02** | **339** | P | **Pn** | **02 59 49.6** | **+2.4** |
| | baz=339 | | | | | | |
| BCI | | | | S | **Sb** | **03 00 29.0** | **-1.2** |
| | baz=339 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,0.6nm,0.8s,baz=339 | | | | | | |
| **DRME** | **Dracevica, Mon** | **3.18** | **326** | *e*Pn | **Pn** | **02 59 50.7** | **+1.4** |
| **DRME** | **Dracevica, Mon** | **3.18** | **326** | *e*Pn | **Pn** | **02 59 51.2** | **+1.9** |
| DRME | | | | *i* Sn | **Sn** | **03 00 27.9** | **+0.8** |
| **BARS** | **Barje** | **3.27** | **3** | *e*Pn | **Pn** | **02 59 50.7** | **+0.2** |
| **PVY** | **Plav** | **3.27** | **339** | *e*Pn | **Pn** | **02 59 52.9** | **+2.3** |
| PVY | | | | *i* Sn | **Sn** | **03 00 30.5** | **+1.1** |
| **VTS** | **Vitosha** | **3.31** | **22** | *e*Pn | **Pn** | **02 59 51.4** | **+0.1** |
| VTS | | | | *e*Sn | **Sn** | **03 00 29.8** | **-0.8** |
| **PDG** | **Podgorica** | **3.36** | **330** | *e*Pn | **Pn** | **02 59 53.4** | **+1.8** |
| **PDG** | **Podgorica** | **3.36** | **330** | *e*Pn | **Pn** | **02 59 52.9** | **+1.2** |
| **PDG** | **Podgorica** | **3.36** | **330** | ⇑P | **Pn** | **02 59 53.7** | **+2.1** |
| **PDG** | **Podgorica** | **3.36** | **330** | *e*Pn | **Pn** | **02 59 53.5** | **+1.8** |
| PDG | | | | *i* Sn | **Sn** | **03 00 32.2** | **+0.8** |
| **BUM** | **Brajici-Budva** | **3.40** | **325** | ⇑ *i* Pn | **Pn** | **02 59 53.2** | **+0.8** |
| BUM | | | | *i* Sn | **Sn** | **03 00 33.1** | **+0.5** |
| **IVA** | **Berane** | **3.54** | **340** | *e*Pn | **Pn** | **02 59 56.7** | **+2.4** |
| IVA | | | | *i* Sn | **Sn** | **03 00 37.1** | **+1.0** |
| **CEME** | **Cevo** | **3.59** | **327** | *e*Pn | **Pn** | **02 59 56.2** | **+1.2** |
| CEME | | | | *i* Sn | **Sn** | **03 00 37.7** | **+0.4** |
| **KOME** | **Kolasin** | **3.63** | **336** | *e*Pn | **Pn** | **02 59 57.7** | **+2.1** |
| KOME | | | | *i* Sn | **Sn** | **03 00 39.2** | **+0.8** |
| **SELS** | **Selova** | **3.68** | **355** | *e*Pn | **Pn** | **02 59 56.3** | **+0.2** |
| **TIP** | **Timpagrande** | **3.73** | **266** | ⇑P | **Pn** | **02 59 57.9** | **+0.9** |
| **NKME** | **Niksic** | **3.76** | **329** | *e*Pn | **Pn** | **02 59 59.3** | **+2.0** |
| NKME | | | | *i* Sn | **Sn** | **03 00 41.8** | **+0.4** |
| **ZAPS** | **Zavoj** | **3.80** | **12** | *e*Pn | **Pn** | **02 59 59.7** | **+1.8** |
| **MATE** | **Matera** | **3.87** | **288** | ⇑P | **Pn** | **03 00 00.4** | **+1.6** |
| **SJES** | **Sjenica** | **3.89** | **343** | *e*Pn | **Pn** | **03 00 01.1** | **+2.0** |
| **SJES** | **Sjenica** | **3.89** | **343** | *e*Pn | **Pn** | **02 59 59.2** | **+0.1** |
| **TREB** | **Trebinje** | **3.98** | **324** | *e*Pn | **Pn** | **03 00 01.4** | **+1.2** |
| TREB | | | | *e*Sn | **Sn** | **03 00 47.6** | **+0.9** |
| **TREB** | **Trebinje** | **3.98** | **324** | *e*Pn | **Pn** | **03 00 00.1** | **-0.1** |
| **BRY** | **Bratogost** | **4.04** | **327** | *e*Pn | **Pn** | **03 00 02.4** | **+1.2** |
| **BRY** | **Bratogost** | **4.04** | **327** | *e*Pn | **Pn** | **03 00 03.1** | **+1.9** |
| BRY | | | | *i* Sn | **Sn** | **03 00 48.3** | **-0.2** |
| **BOVS** | **Bovan** | **4.08** | **2** | *e*Pn | **Pn** | **03 00 01.0** | **-0.6** |
| **PLE** | **Pljevlja** | **4.11** | **337** | *e*Pn | **Pn** | **03 00 04.3** | **+2.2** |
| PLE | | | | *i* Sn | **Sn** | **03 00 50.4** | **+0.3** |
| **UPM** | **Unac-Piva** | **4.15** | **332** | *e*Pn | **Pn** | **03 00 03.5** | **+0.7** |
| **UPM** | **Unac-Piva** | **4.15** | **332** | *e*Pn | **Pn** | **03 00 04.7** | **+1.9** |
| UPM | | | | *i* Sn | **Sn** | **03 00 51.3** | **0.0** |
| **IVAS** | **Ivanjica** | **4.15** | **346** | *e*Pn | **Pn** | **03 00 02.7** | **0.0** |
| **ZAGS** | **Zajecar** | **4.29** | **7** | *e*Pn | **Pn** | **03 00 04.1** | **-0.4** |
| **GRUS** | **Gruza** | **4.38** | **352** | *e*Pn | **Pn** | **03 00 06.0** | **+0.3** |
| **RUDO** | **Rudo** | **4.38** | **339** | *e*Pn | **Pn** | **03 00 07.5** | **+1.8** |
| **STON** | **Ston** | **4.41** | **320** | *e*Pn | **Pn** | **03 00 06.9** | **+0.8** |
| STON | | | | *e*Sn | **Sn** | **03 00 56.9** | **-0.3** |
| **STON** | **Ston** | **4.41** | **320** | *e*Pn | **Pn** | **03 00 06.0** | **-0.1** |
| **BBLS** | **Lazi&#263i** | **4.60** | **340** | *e*Pn | **Pn** | **03 00 11.2** | **+2.4** |
| **BBLS** | **Lazi&#263i** | **4.60** | **340** | *e*Pn | **Pn** | **03 00 10.8** | **+2.0** |
| **ELND** | **Elena** | **4.69** | **43** | ⇑P | **Pn** | **03 00 13.8** | **+3.7** |
| **TRUS** | **Trudelj** | **4.74** | **350** | *e*Pn | **Pn** | **03 00 10.8** | **0.0** |
| **HAPS** | **Han Pijesak,Bl** | **4.93** | **338** | *e*Pn | **Pn** | **03 00 15.7** | **+2.3** |
| **HAPS** | **Han Pijesak,Bl** | **4.93** | **338** | *e*Pn | **Pn** | **03 00 15.2** | **+1.8** |
| **VLAD** | **Vladila** | **4.93** | **25** | ⇑P | **Pn** | 03 00 17.6 | +4.4 |
| **IDI** | **Anoyia** | **5.02** | **147** | Pn | **Pn** | **03 00 14.2** | **-0.5** |
| | comp=N,5.8nm,1.0s,baz=220,slow=14,SNR=1.6 | | | | | | |
| IDI | | | | Sn | **Sn** | **03 01 12.1** | **-0.5** |
| | comp=N,0.8nm,0.3s,baz=294,slow=22,SNR=2.0 | | | | | | |
| **TEKS** | **Tekeris** | **5.21** | **344** | *e*Pn | **Pn** | **03 00 17.7** | **+0.5** |
| **HERR** | **Herculane** | **5.36** | **7** | ⇓P | **Pn** | **03 00 23.2** | **+3.9** |
| **GZR** | **Gura Zlata** | **5.91** | **8** | ⇑P | **Pn** | **03 00 30.5** | **+3.7** |
| **BLY** | **Banja Luka** | **6.12** | **329** | *e*Pn | **Pn** | **03 00 28.5** | **-1.2** |
| **VOIR** | | **6.42** | **23** | ⇑P | **Pn** | **03 00 37.4** | **+3.5** |
| **A051A** | **Mrakovica** | **6.45** | **329** | *e*Pn | **Pn** | **03 00 34.7** | **+0.5** |
| **MLR** | **Muntele Rosu** | **6.76** | **27** | Pn | **Pn** | **03 00 37.7** | **-0.9** |
| | comp=N,0.2nm,0.3s,baz=155,slow=22,SNR=1.9 | | | | | | |
| | comp=N,1.3nm,0.5s | | | | | | |
| **MLR** | **Muntele Rosu** | **6.76** | **27** | ⇓P | **Pn** | **03 00 42.7** | **+4.1** |
| **MORH** | **Mrgy, Hungar** | **6.99** | **343** | ⇑P | **Pn** | **03 00 45.0** | **+3.5** |
| **TURR** | **Turia** | **7.28** | **25** | ⇑P | **Pn** | **03 00 49.5** | **+3.9** |
| **PLOR** | **Plostina** | **7.33** | **29** | ⇑P | **Pn** | **03 00 50.0** | **+3.7** |
| **VRI** | **Vrincioaia** | **7.37** | **29** | ⇑P | **Pn** | **03 00 51.1** | **+4.2** |
| **PSZ** | **Piszkesteto** | **8.45** | **352** | ⇓P | **Pn** | **03 01 05.5** | **+3.8** |
| **OBKA** | **Obir** | **8.63** | **326** | *e*Pn | **Pn** | **03 01 04.5** | **+0.2** |
| | comp=N,0.6nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **8.63** | **326** | *e*Pn | Pn | 03 00 55.9 | -8.3 |
| **ABTA** | **Abfaltersbach** | **9.76** | **320** | *e*Pn | **Pn** | **03 01 20.1** | **+0.5** |
| | comp=N,0.3nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **10.55** | **320** | *e*Pn | **Pn** | **03 01 30.7** | **+0.2** |
| | comp=N,0.4nm,0.2s | | | | | | |
| **WATA** | **Walderalm** | **10.62** | **320** | *e*Pn | **Pn** | **03 01 31.6** | **+0.1** |
| | comp=N,1.7nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **10.73** | **319** | *e*Pn | **Pn** | **03 01 33.0** | **0.0** |
| | comp=N,0.7nm,0.3s | | | | | | |
| **FETA** | **Feichten** | **10.85** | **317** | *e*Pn | **Pn** | **03 01 34.6** | **-0.1** |
| | comp=N,0.2nm,0.3s | | | | | | |
| **GERES** | **GERESS Array B** | **10.86** | **331** | Pn | **Pn** | **03 01 37.9** | **+3.3** |
| | comp=N,0.1nm,0.3s,baz=150,slow=12,SNR=2.0 | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **10.87** | **319** | *e*Pn | **Pn** | **03 01 34.7** | **-0.2** |
| | comp=N,2.2nm,0.7s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **11.16** | **314** | Pn | **Pn** | **03 01 41.8** | **+2.9** |
| | comp=N,0.2nm,0.3s,baz=168,slow=19,SNR=3.6 | | | | | | |
| | comp=N,1.1nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **19.64** | **279** | P | **Pn** | **03 03 29.8** | **+0.5** |
| | comp=N,0.1nm,0.3s,baz=64,slow=13,SNR=5.5 | | | | | | |
| | comp=N,0.4nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **21.18** | **349** | P | **P** | **03 03 43.7** | **-0.8** |
| | comp=N,0.4nm,0.4s,baz=150,slow=12,SNR=5.9 | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | |
| **NB2** | **NORSAR Subarra** | **22.45** | **347** | P | **P** | **03 03 56.6** | **-1.4** |
| | comp=Z,3.1nm,1.4s,baz=159,slow=11 | | | | | | |
| **NOA** | **NORSAR Array B** | **22.45** | **347** | P | **P** | **03 03 57.4** | **-0.6** |
| | comp=Z,0.7nm,0.9s,baz=161,slow=11,SNR=2.7 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.60** | **219** | P | **P** | **03 05 23.0** | **+0.9** |
| | comp=Z,1.1nm,0.7s,baz=30,slow=9.8,SNR=10 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.91** | **60** | P | **P** | **03 07 05.2** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=278,slow=7.7,SNR=2.8 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.18** | **49** | P | **P** | **03 07 06.6** | **-1.2** |
| | comp=Z,0.5nm,0.3s,baz=278,slow=11,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |

**PRU 24 03:01:46.4, 50°.23N×19°.14E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LANS** | **Liptovska Anna** | **1.10** | **169** | *e*PG | Pg | 03 02 04.6 | -2.9 |
| LANS | | | | *e*SG | Sg | 03 02 18.7 | -3.0 |
| LANS | | | | *e*LG | Lg | 03 02 19.1 | |
| **MORC** | **Moravsky Berou** | **1.13** | **247** | *e*PG | Pg | 03 02 06.8 | -1.2 |
| MORC | | | | *e*SG | Sg | 03 02 21.8 | -0.7 |
| **KRLC** | **Kraliky** | **1.52** | **265** | *e*SG | Sg | 03 02 34.3 | -1.1 |
| | comp=Z,2.6nm,0.3s | | | | | | |
| **VYHS** | **Vyhne** | **1.75** | **187** | *e*PN | Pn | 03 02 14.9 | -3.1 |
| VYHS | | | | *e*SN | Sn | 03 02 36.8 | -4.2 |
| **DPC** | **Dobruska-Polom** | **1.81** | **275** | *e*PG | Pn | 03 02 19.3 | +0.4 |
| DPC | | | | *e*SG | Sb | 03 02 43.6 | -0.1 |

**WBNET 24 03:02:59.5, 50°.25N×12°.45E, h9km, MI0.6, 4C-6D, Germany**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NKC** | **Novy Kostel** | **0.02** | **180** | ⇓P | Pg | 03 03 01.3 | +0.1 |
| NKC | | | | S | Sg | 03 03 02.6 | +0.1 |
| **LBCW** | **Luby** | **0.03** | **297** | ⇓P | Pg | 03 03 01.4 | +0.1 |
| LBCW | | | | S | Sg | 03 03 02.7 | +0.2 |
| **STCW** | **Studenec** | **0.05** | **84** | ⇑P | Pg | 03 03 01.5 | 0.0 |
| STCW | | | | S | Sg | 03 03 02.7 | -0.1 |
| **VAC** | **Vackov** | **0.05** | **247** | ⇓P | Pg | 03 03 01.5 | 0.0 |
| VAC | | | | S | Sg | 03 03 02.8 | -0.1 |
| **KVC** | **Kvetna** | **0.07** | **138** | ⇑P | Pg | 03 03 01.6 | 0.0 |
| KVC | | | | S | Sg | 03 03 03.0 | -0.1 |
| **POCW** | **Potky** | **0.07** | **348** | ⇓P | Pg | 03 03 01.7 | +0.1 |
| POCW | | | | S | Sg | 03 03 03.3 | 0.0 |
| **SKC** | **Skalna** | **0.10** | **214** | ⇑P | Pg | 03 03 02.1 | +0.1 |
| SKC | | | | S | Sg | 03 03 03.9 | +0.1 |
| **KOCW** | **Kopaniny** | **0.14** | **275** | ⇓P | Pg | 03 03 02.6 | 0.0 |
| KOCW | | | | S | Sg | 03 03 04.7 | -0.1 |
| **TRCW** | **Trojmez** | **0.20** | **284** | ⇓P | Pg | 03 03 03.6 | 0.0 |
| TRCW | | | | S | Sg | 03 03 06.4 | -0.1 |
| **ZHC** | **Zelena Hora** | **0.20** | **206** | ⇑P | Pg | 03 03 03.8 | +0.1 |
| ZHC | | | | S | Sg | 03 03 06.7 | +0.1 |

*PRU **24** 03:03:26.6, 50°.26N×12°.42E, h10km, West Bohemia*

**WBNET 24 03:03:27.4, 50°.25N×12°.45E, h9km, MI1.5, 4C-7D, Germany**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NKC** | **Novy Kostel** | **0.02** | **180** | ⇓P | Pg | 03 03 29.3 | +0.1 |
| NKC | | | | S | Sg | 03 03 30.5 | +0.1 |
| **LBCW** | **Luby** | **0.03** | **299** | ⇓P | Pg | 03 03 29.3 | +0.1 |
| LBCW | | | | S | Sg | 03 03 30.6 | +0.2 |
| **STCW** | **Studenec** | **0.05** | **82** | ⇑P | Pg | 03 03 29.4 | 0.0 |
| STCW | | | | S | Sg | 03 03 30.7 | -0.1 |
| **VAC** | **Vackov** | **0.05** | **248** | ⇓P | Pg | 03 03 29.4 | 0.0 |
| VAC | | | | S | Sg | 03 03 30.7 | 0.0 |
| **KVC** | **Kvetna** | **0.06** | **138** | ⇑P | Pg | 03 03 29.6 | +0.1 |
| KVC | | | | S | Sg | 03 03 31.0

AKLV Sn 03 12 23.7 +1.3
AKGG Akutan Green G 1.69 39 Pn 03 12 01.4 -0.5
AHB Akutan Harbor 1.69 43 Pn 03 12 00.8 -1.3
AKSA Akutan Strait 1.76 44 Pn 03 12 01.3 -1.7
WECS Westdahl Cape 2.42 46 Pn 03 12 11.9 -0.2
WESE West Dahl East 2.47 49 Pn 03 12 12.1 -0.7
WEBT Westdahl Beart 2.47 45 Pn 03 12 12.4 -0.4
SSLS Shishaldin Sou 2.89 49 Pn 03 12 18.1 -0.5
ISLZ Isanotski Laza 3.03 51 Pn 03 12 19.9 -0.5
ISNN Isanotski Nort 3.06 49 Pn 03 12 20.9 0.0
FALS False Pass 3.24 51 P Pn 03 12 24.6 +1.3
FALS False Pass 3.24 51 Pn 03 12 23.3 0.0
KOFP Korovin Flat P 3.90 263 Pn 03 12 33.2 +0.7
PN7A Pavlof North-7 4.24 51 Pn 03 12 38.1 +1.0
PS1A Pavlof South-1 4.36 52 Pn 03 12 39.5 +0.8
S12K Black Hills 4.37 48 Pn 03 12 38.3 -0.6
S12K IAML 03 13 49.3
comp=E,310nm,1.1s
S12K IAML 03 13 53.6
comp=N,242nm,0.8s
SPIA Saint Paul Isl 4.52 343 P Pn 03 12 42.1 +1.3
SPIA Saint Paul Isl 4.52 343 Pn 03 12 41.8 +1.0
SDPT Sand Point 4.95 57 Pn Pn 03 12 47.3 +0.5
SDPT IAML 03 13 59.6
comp=E,384nm,0.8s
SDPT IAML 03 14 06.1
comp=N,386nm,1.0s
GSMY Great Sitkin M 5.13 264 Pn 03 12 50.7 +1.4
GSCK Great Sitkin C 5.20 264 Pn 03 12 51.8 +1.5
CNBA Chernabura Isl 5.22 65 Pn Pn 03 12 49.8 -0.6
KIWB Kanaga Island 5.83 263 Pn 03 12 58.3 -0.7
TAFP Tanaga Falls P 6.33 265 Pn 03 13 06.5 +0.8
TASE Tanaga Southea 6.37 264 Pn 03 13 07.1 +0.8
GANE Gareloi Northe 6.82 265 Pn 03 13 14.2 +1.7
O14K Tigyukauivet M 7.34 27 Pn 03 13 21.2 +1.7
O15K Ungalikthiuk R 7.71 32 Pn 03 13 25.5 +0.9
N14K Kuskokwak Cree 7.81 23 Pn 03 13 27.6 +1.6
M13K Dall Lake 7.92 16 Pn Pn 03 13 28.8 +1.3
PLK4 Peulik 4 8.06 49 Pn Pn 03 13 30.4 +0.8
AMKA Amchitka 8.09 264 Pn Pn 03 13 31.2 +1.3
N15K Kwethluk River 8.43 27 Pn Pn 03 13 36.4 +1.8
M14K Bethel 8.49 20 Pn Pn 03 13 34.9 -0.4
O16K Kokwok River B 8.60 35 Pn 03 13 37.5 +0.6
CNTC Contact Creek 8.62 47 Pn 03 13 38.4 +1.3
M15K Kasigluk River 8.73 24 Pn 03 13 39.8 +1.3
ACHA Angle Creek He 8.83 48 Pn 03 13 45.5 ÷5.4
L14K Kuka Creek 8.90 16 Pn 03 13 45.4 +4.4
N16K Nishlik Lake 9.06 30 Pn 03 13 44.0 +0.8
O17K Koliganek Bris 9.08 36 Pn 03 13 44.6 +1.1
KAHC Katmai Hardscr 9.21 46 Pn 03 13 46.8 +1.5
K13K Kusilvak Mount 9.21 9 Pn 03 13 48.5 +3.2
OHAK Old Harbor 9.37 57 P Pn 03 13 46.1 -1.3
OHAK Old Harbor 9.37 57 Pn Pn 03 13 46.3 -1.1
L15K Ungalak Mounta 9.43 19 Pn 03 13 49.1 +0.9
M16K Timber Creek 9.45 27 Pn Pn 03 13 51.7 +3.2
P18K Big Mountain, 9.55 42 Pn 03 13 50.7 +0.8
N17K Nushagak Hills 9.60 33 Pn 03 13 51.6 +1.0
O18K Koktuh Hills 9.85 40 Pn Pn 03 13 55.6 +1.6
L16K Owhat River 9.90 24 Pn 03 13 56.0 +1.4
KDAK Kodiak Island 9.94 54 Pn Pn 03 13 53.5 -1.6
KDAK Kodiak Island 9.94 54 Pn Pn 03 13 53.4 -1.7
comp=N,1.4nm,0.3s,baz=257,slow=8.6,SNR=23
KDAK Sn Sn 03 15 38.4 -7.2
baz=346,slow=17
Q19K Cape Douglas, 9.96 47 Pn 03 13 55.9 +0.3
K15K Wolf Creek Mou 9.99 17 Pn Pn 03 13 58.6 +2.7
N18K Kilae Creek 10.15 35 Pn Pn 03 14 02.7 +4.6
SYI Shuyak Island 10.38 50 Pn Pn 03 14 01.7 +0.6
SHEM Shemya Is, Ala 10.97 276 LR LR 03 18 19.5
comp=N,103nm,19.5s,baz=94,slow=38
CNPM China Poot 11.33 48 Pn 03 14 13.2 -1.1
J17K VABM Dome 11.47 20 Pn 03 14 17.8 +1.7
H17K Granite Mounta 12.72 15 Pn Pn 03 14 38.3 +5.1
H18K Honhosa River 13.19 18 Pn 03 14 39.8 +0.2
EYAK Cordova Ski Ar 14.26 49 P Pn 03 14 54.6 +0.5
KAIM Kayak Island 14.66 52 Pn Pn 03 14 59.6 0.0
F19K Shaleruckik Mo 14.82 16 P P 03 15 07.9 +0.5
WRH Wood River Hil 15.38 33 IAmb IAmb 03 15 21.4
comp=Z,14nm,1.2s
I23K Minto, Yukon-K 15.43 30 IAmb IAmb 03 15 33.8
comp=Z,11nm,0.9s
GLB Gilahina Butte 15.48 47 IAmb IAmb 03 15 26.5
comp=Z,9.6nm,0.7s
E19K Redstone River 15.48 15 IAmb IAmb 03 15 39.1
comp=Z,13nm,1.1s
VRDI Verde Repeater 15.56 48 IAmb IAmb 03 15 25.8
comp=Z,11nm,0.8s
MCARA McCarthy VSAT 15.81 48 IAmb IAmb 03 15 28.5
comp=Z,18nm,0.8s
ILAR Eielson Array 15.97 34 P P 03 15 23.0 +2.8
ILAR Eielson Array 15.97 34 Pn Pn 03 15 14.1 -2.8
baz=228,slow=13,SNR=7.9
comp=Z,0.7nm,0.8s
POKR Poker Plat Res 16.01 32 IAmb IAmb 03 15 34.3
comp=Z,20nm,1.4s
RIDG Independent Ri 16.11 39 IAmb IAmb 03 15 35.0
comp=Z,25nm,1.1s
J25K Salcha River, 16.40 36 IAmb IAmb 03 15 38.5
comp=Z,23nm,1.2s
LOGN Logan Glacier 16.55 51 IAmb IAmb 03 15 29.5
comp=Z,27nm,0.9s
M27K Edge Creek, AK 16.68 45 IAmb IAmb 03 15 36.0
comp=Z,13nm,0.8s
J26L Joseph Creek 16.99 37 IAmb IAmb 03 15 32.2
comp=Z,9.4nm,0.8s
BCPM Bancas Point 16.99 54 IAmb IAmb 03 15 34.4
comp=Z,26nm,0.8s
PNL Peninsula 17.05 55 P Pn 03 15 30.9 +0.3
G24K Hadweenzic Riv 17.07 28 IAmb IAmb 03 15 50.9
comp=Z,10.0nm,0.8s
F24K Squaw Lake 17.54 26 IAmb IAmb 03 16 08.6
comp=Z,20nm,1.5s
O29M Mount Kennedy 17.59 54 IAmb IAmb 03 15 41.2
comp=Z,18nm,0.8s
FYU Fort Yukon 17.64 30 IAmb IAmb 03 15 57.9
comp=Z,34nm,1.4s
P29M Windy Craggy 17.88 56 IAmb IAmb 03 16 02.6
comp=Z,22nm,0.8s
M29M Somme Creek 18.20 47 IAmb IAmb 03 15 51.2
comp=Z,12nm,0.7s
D24K Happy Valley 18.56 21 IAmb IAmb 03 16 11.1
comp=Z,19nm,1.2s
C23K Itkillik River 18.75 19 IAmb IAmb 03 15 59.7
comp=Z,14nm,0.9s
I28M Miner Creek 18.80 37 P P 03 15 50.8 -0.7
I28M IAmb IAmb 03 16 06.7
comp=Z,7.2nm,0.7s
J29N Klondike Camp 19.02 41 IAmb IAmb 03 15 56.8
comp=Z,13nm,0.6s
I29M Ogilvie Camp, 19.37 38 IAmb IAmb 03 16 12.7
comp=Z,8.7nm,1.0s
R32K Eaglecrest 19.41 61 IAmb IAmb 03 16 01.2
comp=Z,18nm,0.9s
WHY Whitehorse 19.45 53 IAmb IAmb 03 16 04.0
comp=Z,29nm,1.1s
JIS Juneau Island 19.49 61 P P 03 15 59.8 +1.0
H29M Whitestone 19.74 36 IAmb IAmb 03 16 08.7
comp=Z,17nm,0.7s
J30M Hart River 19.82 42 P P 03 16 03.5 +0.8
P32M Atlin 19.90 57 IAmb IAmb 03 16 06.5
comp=Z,18nm,0.8s
F28M Old Crow 19.95 32 IAmb IAmb 03 16 16.5
comp=Z,5.5nm,0.7s
M31M Drury Creek, Y 19.97 49 Pn 03 16 05.8 -0.2
I30M Mount Dempster 20.05 40 P P 03 16 04.3 -0.8
G29M Pine Creek 20.19 35 P P 03 16 06.0 -0.6
CRAG Craig 20.32 69 P Pn 03 16 09.9 -0.1
EPYK Eagle Plains 20.40 37 P P 03 16 08.0 -0.8
P33M Teslin, Yukon 20.41 55 P Pn 03 16 10.5 -0.7
Q32M Nakina River 20.61 59 IAmb IAmb 03 16 16.1
comp=Z,14nm,0.8s
WRAK Wrangell Islan 20.65 66 Pn 03 16 14.4 +0.5
WRAK IAmb IAmb 03 16 24.6
comp=Z,12nm,0.9s
PETK Petropavlovsk- 20.66 284 P P 03 16 11.4 -0.3
comp=Z,3.9nm,0.5s,baz=85,slow=18,SNR=12
PETK LR LR 03 24 15.3
comp=Z,50nm,20.5s,baz=84,slow=37
comp=Z,3.9nm,0.5s
G30M tAoh Zrail Nji 20.85 35 P P 03 16 11.8 -1.9
G30M IAmb IAmb 03 16 32.5
comp=Z,11nm,0.9s
E29M Blow River 21.00 31 P P 03 16 14.9 -0.3
E29M IAmb IAmb 03 16 25.2
comp=Z,7.4nm,0.8s
S34M Telegraph Cree 21.21 62 P P 03 16 20.0 +2.4
S34M IAmb IAmb 03 16 29.5
comp=Z,18nm,1.0s
R33M Jennings River 21.29 58 P P 03 16 20.5 +1.9
G31M Satah River 21.52 36 P P 03 16 18.4 -2.3
G31M IAmb IAmb 03 16 44.5
comp=Z,17nm,0.9s
T35M Bob Quinn 21.75 64 IAmb IAmb 03 16 43.7
comp=Z,26nm,1.4s
DLBC Dease Lake 21.78 60 P P 03 16 25.2 +1.4
DLBC IAmb IAmb 03 16 31.1
comp=Z,11nm,0.8s
DLBC Dease Lake 21.78 60 LR LR 03 25 19.6
comp=Z,63nm,18.0s,baz=276,slow=38
INK Inuvik 22.37 33 P P 03 16 28.9 -1.0
INK IAmb IAmb 03 16 43.7
comp=Z,16nm,1.1s
WTLY Watson Lake, Y 22.41 56 IAmb IAmb 03 16 43.4
comp=Z,19nm,1.1s
WRGLY Wrigley 25.09 48 P P 03 17 01.0 +4.8
YKA Yellowknife Ar 29.16 50 P P 03 17 33.1 +0.3
comp=Z,0.8nm,0.5s,baz=286,slow=15,SNR=10
YKA PcP PcP 03 20 38.8 -0.7
comp=Z,0.5nm,0.5s,baz=333,slow=1.1,SNR=5.4
YKA LR LR 03 30 23.6
comp=Z,148nm,19.7s,baz=260,slow=39
comp=Z,0.8nm,0.5s
NEW Newport 31.95 78 LR LR 03 30 13.7
comp=Z,50nm,18.2s,baz=300,slow=35
YBH Yreka Blue Hor 32.02 92 P P 03 18 01.8 +3.4
YBH IAmb IAmb 03 18 04.9
comp=Z,2.6nm,0.8s
YBH Yreka Blue Hor 32.02 92 LR LR 03 28 56.1
comp=Z,70nm,18.9s,baz=306,slow=33
TIXI Tiksi 32.79 328 LR LR 03 31 22.3
comp=Z,56nm,18.7s,baz=174,slow=36
ASAJ Asahikawa 33.43 275 LR LR 03 30 51.1
comp=Z,48nm,21.2s,baz=323,slow=35
LRDM Redding Peak 33.54 93 P P 03 18 16.8 +5.2
YAK Yakutsk 33.56 311 LR LR 03 33 15.1
comp=Z,68nm,18.1s,baz=84,slow=39
WAKR Walker 35.98 94 P P 03 18 35.9 +3.0
WAKR IAmb IAmb 03 18 43.8
comp=Z,3.2nm,0.7s
NVAR Mina Array Bea 36.71 93 P P 03 18 39.9 +0.8
comp=Z,0.8nm,0.6s,baz=311,slow=8.2,SNR=6.2
NVAR PcP PcP 03 21 00.4 -0.9
comp=Z,0.6nm,0.5s,baz=329,slow=3.4,SNR=4.0
comp=Z,0.8nm,0.6s
MDPB Devils Postpil 36.76 95 P P 03 18 42.3 +2.7
MDPB IAmb IAmb 03 18 54.5
comp=Z,3.6nm,0.8s
OMMB Old Mammoth Mi 36.82 95 P P 03 18 42.9 +2.7
OMMB IAmb IAmb 03 19 09.0
comp=Z,4.1nm,1.1s
YHH Holmes Hill 37.44 79 P P 03 18 47.0 +1.7
R11B Troy Canyon, C 38.41 91 P P 03 18 55.1 +1.6
H11N2 WAKE ISLAND Hy 38.48 220 T T 04 00 02.5
baz=24,slow=76
H11N3 WAKE ISLAND Hy 38.48 220 T T 03 59 56.6
baz=24,slow=76
H11N1 WAKE ISLAND Hy 38.50 220 T T 04 00 03.7
baz=24,slow=76,SNR=7272
DUG Dugway, Tooele 38.94 86 P P 03 19 02.5 +4.7
DUG IAmb IAmb 03 19 09.4
comp=Z,3.6nm,1.1s
PDAR Pinedale Array 39.36 81 P P 03 19 02.1 +0.7
comp=Z,0.9nm,0.7s,baz=282,slow=4.5,SNR=10.0
PDAR LR LR 03 35 02.4
comp=Z,22nm,18.0s,baz=320,slow=36
comp=Z,0.9nm,0.7s
H11S1 WAKE ISLAND Hy 39.66 220 T T 04 01 26.1
baz=23,slow=76
H11S2 WAKE ISLAND Hy 39.68 220 T T 04 01 24.1
baz=23,slow=76,SNR=1557
H11S3 WAKE ISLAND Hy 39.68 220 T T 04 01 26.5
baz=23,slow=76,SNR=1241
USRK Ussuriysk Ar. 39.73 282 P P 03 19 02.6 -1.5
comp=Z,1.0nm,0.6s,baz=54,slow=11,SNR=1.9
comp=Z,1.0nm,0.6s
TMUT Trail Mountain 40.46 86 P P 03 19 13.0 +2.3
TMUT IAmb IAmb 03 19 23.3
comp=Z,4.4nm,0.8s
RDMU Red Mountain 40.66 84 IAmb IAmb 03 19 24.0
comp=Z,6.3nm,1.1s
MJAR Matsushiro Arr 40.68 268 P P 03 19 12.3 +0.1
comp=Z,1.3nm,0.5s,baz=39,slow=8.3,SNR=4.5
MJAR LR LR 03 35 57.5
comp=Z,38nm,21.4s,baz=50,slow=36
comp=Z,1.3nm,0.5s
U15A North Rim 41.65 90 IAmb IAmb 03 19 33.6
comp=Z,4.2nm,1.1s
JHJ Hachijo jima 2 42.05 263 LR LR 03 35 53.2
comp=Z,96nm,20.7s,baz=88,slow=35
WUAZ Wupatki 42.81 91 P P 03 19 31.9 +2.0
WUAZ IAmb IAmb 03 19 42.1
comp=Z,3.8nm,0.8s
ULM Lac du Bonnet 43.05 63 LR LR 03 37 10.2
comp=Z,48nm,20.6s,baz=359,slow=36
ANMO Albuquerque 46.17 87 LR LR 03 37 04.0
comp=Z,36nm,18.4s,baz=62,slow=33
KSRS Korea Array 46.30 277 P P 03 19 56.5 -0.9
comp=Z,0.9nm,0.5s,baz=57,slow=8.5,SNR=4.7
KSRS LR LR 03 39 20.7
comp=Z,17nm,20.4s,baz=60,slow=36
comp=Z,0.9nm,0.5s
JNU Nakatsue 47.43 271 LR LR 03 39 45.0
comp=Z,46nm,20.3s,baz=42,slow=36
SPITS Spitsbergen Ar 49.16 359 P P 03 20 18.4 -0.8
comp=Z,1.5nm,0.7s,baz=6.3,slow=9.2,SNR=1.0
SPITS PcP PcP 03 21 42.0 0.0
comp=Z,1.8nm,0.5s,baz=34,slow=3.1,SNR=7.2
comp=Z,1.5nm,0.7s
SFJD Kangerlussuaq 51.47 27 LR LR 03 44 47.1
comp=Z,46nm,18.7s,baz=322,slow=39
P40A Paris 51.70 73 P P 03 20 38.1 -0.7
TXAR Lajitas Array 51.78 91 P P 03 20 40.6 +1.0
comp=Z,3.2nm,0.6s,baz=300,slow=5.2,SNR=65
comp=Z,3.2nm,0.6s
SONM Songino Array 51.86 301 P P 03 20 39.3 -0.7
comp=Z,0.4nm,0.4s,baz=71,slow=6.2,SNR=3.8
SONM PcP PcP 03 21 52.5 -0.1
comp=Z,4.1nm,0.8s,baz=57,slow=1.3,SNR=17
comp=Z,0.4nm,0.4s
HHC Hu-ho-hao-te 53.63 292 eP P 03 20 51.8 -1.4
HHC pP pP 03 21 00.0 -1.2
HHC sP sP 03 21 02.3 -2.1
HHC pmax pmax
comp=Z,11nm,0.6s
HHC pmax pmax
comp=Z,150nm,4.9s
SCHQ Schefferville 54.38 44 P P 03 20 59.3 +0.9
comp=Z,3.9nm,0.8s,baz=352,slow=9.2,SNR=1.7
comp=Z,3.9nm,0.8s
ARCES ARCESS Array B 57.49 354 P P 03 21 19.9 -0.5
comp=Z,1.0nm,0.7s,baz=2.1,slow=4.9,SNR=2.3
ARCES PcP PcP 03 22 13.5 -0.2
comp=Z,3.0nm,0.6s,baz=26,slow=4.9,SNR=15
ARCES LR LR 03 47 06.1
comp=Z,28nm,18.2s,baz=328,slow=37
comp=Z,1.0nm,0.7s
ZALV Zalesovo Beam 57.68 318 P P 03 21 20.9 -0.9
comp=Z,1.1nm,0.7s,baz=41,slow=4.6,SNR=4.7
ZALV PcP PcP 03 22 14.1 -0.6
comp=Z,1.2nm,0.4s,baz=50,slow=3.8,SNR=4.9
ZALV LR LR 03 47 52.7
comp=Z,32nm,19.3s,baz=40,slow=38
comp=Z,1.1nm,0.7s
TKL Tuckaleechee C 59.12 71 LR LR 03 44 30.0
comp=Z,41nm,21.3s,baz=340,slow=34
KURK Kurchatov 62.62 319 P P 03 21 55.8 +0.1
KURK IAmb IAmb 03 21 56.9
comp=Z,2.7nm,0.7s
KURBB Kurchatov Arra 62.72 319 P P 03 21 55.2 -1.2
comp=Z,1.3nm,0.7s,baz=40,slow=6.9,SNR=13
KURBB PcP PcP 03 22 34.2 -0.7
comp=Z,0.5nm,0.5s,baz=44,slow=3.7,SNR=4.7
comp=Z,1.3nm,0.7s
BVAR Borovoye Array 63.83 325 P P 03 22 03.6 -0.2
comp=Z,1.9nm,0.5s,baz=35,slow=5.4,SNR=6.8
BVAR PcP PcP 03 22 38.8 -0.6
comp=Z,1.8nm,0.4s,baz=22,slow=4.8,SNR=4.0
comp=Z,1.9nm,0.5s
WMQ Urumqi 63.96 309 eP P 03 22 05.9 +1.0
WMQ pmax pmax
comp=Z,35nm,0.7s
MKAR Makanchi Array 64.14 314 P P 03 22 04.8 -1.1
comp=Z,0.7nm,0.6s,baz=43,slow=5.2,SNR=7.4
comp=Z,0.7nm,0.6s
KIRV Kirov 64.85 340 LR LR 03 52 58.3
comp=Z,45nm,18.3s,baz=9.4,slow=38
FINES FINESS Array B 65.47 353 P P 03 22 13.3 -1.0
comp=Z,2.6nm,0.5s,baz=25,slow=6.9,SNR=23
comp=Z,2.6nm,0.5s
TAOE Nuku Hiva Isla 65.87 150 eLR LR 03 42 09.0
comp=Z,51nm,27.3s
NOA NORSAR Array B 66.41 1 P P 03 22 19.4 -1.0
comp=Z,0.4nm,0.6s,baz=350,slow=5.4,SNR=2.4
NOA LR LR 03 52 37.0
comp=Z,18nm,19.9s,baz=60,slow=37
comp=Z,0.4nm,0.6s
HFS Hagfors 67.31 359 P P 03 22 24.7 -1.4
comp=Z,2.4nm,0.4s,baz=28,slow=3.5,SNR=27
comp=Z,2.4nm,0.4s
PZH PanZhiHua 69.60 287 P P 03 22 41.8 +0.7
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,180nm,5.3s
ABKAR Akbulak array 70.49 329 P P 03 22 45.8 -0.2
ABKAR Akbulak array 70.49 329 P P 03 22 45.9 -0.2
ABKAR IAmb IAmb 03 22 46.5
comp=Z,2.3nm,0.7s
BELG Belogornoye 70.97 338 LR LR 03 56 37.9
comp=Z,23nm,18.7s,baz=71,slow=38
PPT2 Papeete2 71.94 162 eLR LR 03 44 56.6
comp=Z,53nm,25.8s
AKASG Malin Array Be 75.78 349 P P 03 23 15.6 -1.7
comp=Z,1.4nm,0.4s,baz=15,slow=5.8,SNR=6.3
comp=Z,1.4nm,0.4s
CMAR Chiang Mai Arr 77.44 284 P P 03 23 27.4 +0.3
CMAR Chiang Mai Arr 77.44 284 P P 03 23 27.3 +0.2
comp=Z,11nm,0.7s,baz=27,slow=6.5,SNR=32
GERES GERESS Array B 78.62 359 P P 03 23 33.1 -0.3
comp=Z,0.6nm,0.6s,baz=14,slow=7.2,SNR=2.5
comp=Z,0.6nm,0.6s
VYHS Vyhne 78.83 356 eP P 03 23 35.3 +0.9
CONA Conrad Observa 79.50 358 eP P 03 23 38.3 0.0
comp=Z,2.2nm,0.7s
WATA Walderalm 80.14 0 eP P 03 23 42.0 +0.3
comp=Z,1.9nm,0.5s
SQTA Sankt Quirin 80.25 1 eP P 03 23 42.8 +0.5
comp=Z,3.9nm,1.2s
KBA Koelnbreinsper 80.40 359 eP P 03 23 43.7 +0.5
comp=Z,2.8nm,0.6s
FETA Feichten 80.45 1 eP P 03 23 43.7 +0.3
comp=Z,3.2nm,0.9s
ABTA Abfaltersbach 80.73 360 eP P 03 23 45.1 +0.3
comp=Z,4.2nm,0.9s
SOKA Soboth 80.77 358 eP P 03 23 45.3 +0.2
comp=Z,2.6nm,1.0s
FUORN Ofenpass-Fuorn 80.84 1 P P 03 23 46.1 +0.5
FUORN IAmb IAmb 03 23 50.4
comp=Z,5.9nm,1.4s
OBKA Obir 80.95 358 eP P 03 23 46.1 +0.1
comp=Z,3.9nm,0.8s
MLR Muntele Rosu 81.28 350 LR LR 04 06 08.7
comp=Z,22nm,18.1s,baz=5.0,slow=40
GNI Garni 83.14 335 LR LR 04 06 39.8
comp=Z,24nm,18.2s,baz=74,slow=40
INTR Introdacqua 85.46 359 P P 03 24 10.2 +0.8
BRTR Keskin Array B 85.90 344 P P 03 24 11.8 +0.2
comp=Z,1.6nm,0.7s,baz=38,slow=2.2,SNR=11
comp=Z,1.6nm,0.7s
ESDC Sonseca Array 86.74 12 P P 03 24 15.1 -0.6
comp=Z,1.5nm,0.6s,baz=345,slow=4.8,SNR=34
comp=Z,1.5nm,0.6s
WRA Warramunga Arr 88.09 233 P P 03 24 21.8 -0.4
comp=Z,2.0nm,0.7s,baz=38,slow=6.1,SNR=7.1
comp=Z,2.0nm,0.7s
ASAR Alice Springs 91.48 231 P P 03 24 38.2 +0.2
comp=Z,1.9nm,0.8s,baz=41,slow=4.3,SNR=17
ASAR LR LR 04 08 16.7
comp=Z,24nm,19.1s,baz=344,slow=37
comp=Z,1.9nm,0.8s
STKA Stephens Creek 95.23 221 LR LR 04 04 44.8
comp=Z,51nm,19.2s,baz=320,slow=34
TORD Torodi Ar. Bea 113.60 11 PKiKP PKiKP 03 30 09.7 -0.5
comp=Z,0.2nm,0.6s,baz=8.2,slow=3.0,SNR=4.2
H03N2 Juan Fernandez 115.23 112 T T 05 35 59.3
baz=322,slow=77,SNR=179
H03N1 Juan Fernandez 115.24 112 T T 05 36 03.2
baz=322,slow=77,SNR=155
H03N3 Juan Fernandez 115.24 112 T T 05 36 05.0
baz=322,slow=77,SNR=182
QSPA South Pole Qui 142.66 180 PKhKP PKPpre 03 31 00.4
comp=Z,1.1nm,0.5s,baz=274,slow=1.5,SNR=20
MAW Mawson 151.89 219 PKPbc PKiKP 03 31 25.6 +0.2
comp=Z,2.2nm,0.5s,baz=76,slow=4.8,SNR=7.4
MAW PKPab PKPab 03 31 34.6 +0.2
comp=Z,2.8nm,0.7s,baz=107,slow=8.3,SNR=7.0
BOSA Boshof 153.89 333 PKPbc PKiKP 03 31 31.2 +0.2
comp=Z,1.7nm,0.5s,baz=28,slow=3.8,SNR=15
BOSA PKPab sPKPbc 03 31 42.4 +0.7
comp=Z,3.6nm,1.0s,baz=29,slow=6.6,SNR=4.0

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*MOS* ***24*** *03:20:28.8±1.2,44.˚51N×148.˚34E,h60km,mb4.1/4,Error ellipse: s-maj=12.3km s-min=11.2km az=81.8*
*SKHL* ***24*** *03:20:29.0±0.3,44.˚40N×148.˚40E,h63km±3km,mb4.8/3*
*JMA* ***24*** *03:20:30.0±0.3,44.˚N±1.˚×14.˚8E±.˚,h0km,MV4.2/24,SE OFF ETOROFU*
*NIED* ***24*** *03:20:30.0,44.˚04N×148.˚05E,h0km,MW3.9,Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-1.43; $M_{\theta\theta}$3.26; $M_{\phi\phi}$-1.84; $M_{r\theta}$5.94; $M_{r\phi}$-2.27; $M_{\theta\phi}$6.09; Fault plane solution: $M_0$8.97000×$10^{14}$ NP1: $\phi_s$234.00000°,$\delta$88.00000°,$\lambda$-111.00000°. NP2: $\phi_s$138.00000°,$\delta$21.00000°,$\lambda$-6.00000°.*
*IDC* ***24*** *03:20:33.8±2.6,44.˚53N×148.˚16E,h86km±23km,mb3.3/14, mbtmp3.7/17,MS3.5/1 Error ellipse: s-maj=21.1km s-min=16.7km az=149.0*

**ISC 24 03:20:30.3±1.2,44.˚40N±0.˚05×148.˚31E±0.˚08,h56km±10km, n59,σ1.˚52/67,mb3.6/16,2C-3D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KUR | **Kuril'sk** | **0.89** | **339** | *i* P | **Pn** | **03 20 45.9** | **-0.9** |
| KUR | | | | AMB | AMB | 03 20 49.2 | |
| | 650nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **03 20 57.5** | **-1.4** |
| KUR | | | | A | A | 03 20 59.0 | |
| | 2μm,0.5s | | | | | | |
| KUR | | | | A | A | 03 20 59.0 | |
| | 2μm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **0.89** | **339** | *d* iPN | **Pn** | **03 20 45.9** | **-0.9** |
| KUR | | | | *i* S | **Sn** | **03 20 57.5** | **-1.4** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,646nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,97nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,339nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,3μm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **1.19** | **244** | *e*P | **Pn** | **03 20 49.8** | **-1.0** |
| SHO | | | | AMB | AMB | 03 20 50.1 | |
| | comp=N,260nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **03 21 03.4** | **-2.6** |
| SHO | | | | A | A | 03 21 06.0 | |
| | comp=N,920nm,0.3s | | | | | | |
| SHO | | | | A | A | 03 21 06.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.19** | **244** | *e*PN | **Pn** | **03 20 49.7** | **-1.0** |
| SHO | | | | *e*S | **Sn** | **03 21 03.3** | **-2.7** |
| SHO | | | | smax | smax | | |
| | comp=N,583nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,830nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.80** | **259** | *e*P | **Pn** | **03 20 58.0** | **-1.0** |
| YUK | | | | AMB | AMB | 03 20 59.2 | |
| | comp=E,330nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **03 21 19.5** | **-1.2** |
| YUK | | | | A | A | 03 21 25.2 | |
| | comp=E,740nm,0.6s | | | | | | |
| YUK | | | | A | A | 03 21 25.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.80** | **259** | *e*PN | **Pn** | **03 20 58.8** | **-0.2** |
| YUK | | | | *e*S | **Sn** | **03 21 19.4** | **-1.2** |
| YUK | | | | pmax | pmax | | |
| | comp=N,56nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,314nm,0.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=E,112nm,0.3s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=N,672nm,0.2s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=E,1μm,0.4s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.13** | **242** | *e*P | **Pn** | **03 21 02.6** | **-0.9** |
| NEM2 | | | | *e*S | **Sn** | **03 21 26.8** | **-1.9** |
| **JRA** | **Rausu** | **2.34** | **260** | P | **Pn** | **03 21 07.2** | **+0.9** |
| JRA | | | | *e*S | **Sn** | **03 21 35.2** | **+1.3** |
| **JNSB** | **Nemuroshibetsu** | **2.46** | **256** | *e*P | **Pn** | **03 21 09.3** | **+1.2** |
| **JKHN** | **Kushirohamanak** | **2.64** | **241** | *e*P | **Pn** | **03 21 10.2** | **-0.2** |
| JKHN | | | | *e*S | **Sn** | **03 21 39.7** | **-1.5** |
| **JNK** | **Nakash** | **2.72** | **254** | P | **Pn** | **03 21 11.9** | **+0.4** |
| JNK | | | | *e*S | **Sn** | **03 21 42.6** | **-0.6** |
| **JAK** | **Akkeshi** | **2.97** | **243** | *e*P | **Pn** | **03 21 14.8** | **-0.3** |
| JAK | | | | *e*S | **Sn** | **03 21 47.7** | **-1.7** |
| **JTKR** | **Abashiri--Toko** | **3.20** | **264** | *e*P | **Pn** | **03 21 19.1** | **+1.0** |
| **JAR** | **Ashorobuto** | **3.47** | **253** | *e*P | **Pn** | **03 21 22.9** | **+1.2** |
| **JOB** | **Onbets** | **3.58** | **247** | *e*P | **Pn** | **03 21 24.0** | **+0.7** |
| JOB | | | | *e*S | **Sn** | **03 22 03.6** | **-0.7** |
| **JMP** | **Maruseppu** | **3.58** | **265** | *e*P | **Pn** | **03 21 24.9** | **+1.6** |
| **JKA** | **Kamikawa-asahi** | **4.11** | **268** | *e*P | **Pn** | **03 21 32.4** | **+1.8** |
| **ASAJ** | **Asahikawa** | **4.12** | **268** | P | **Pn** | **03 21 32.4** | **+1.7** |
| | comp=E,6.4nm,0.5s,baz=74,slow=11,SNR=8.8 | | | | | | | |
| ASAJ | | | | S | **Sn** | **03 22 23.8** | **+6.3** |
| | comp=E,10nm,0.6s,baz=182,slow=24,SNR=1.2 | | | | | | | |
| **ERM** | **Erimo** | **4.46** | **239** | ⇓*e*PN | **Pn** | **03 21 37.6** | **+2.2** |
| **YSS** | **Yuzh-Sakhalins** | **4.66** | **305** | *e*P | **Pn** | **03 21 38.0** | **0.0** |
| YSS | | | | AMB | AMB | 03 21 40.3 | | |
| | comp=E,10.0nm,0.4s | | | | | | | |
| YSS | | | | *e*S | **Sn** | **03 22 30.0** | **-0.7** |
| YSS | | | | A | A | 03 22 32.9 | | |
| | comp=E,20nm,0.4s | | | | | | | |
| YSS | | | | A | A | 03 22 32.9 | | |
| | comp=E,20nm,0.4s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.66** | **305** | *e*PN | **Pn** | **03 21 38.0** | **0.0** |
| YSS | | | | *e*S | **Sn** | **03 22 30.0** | **-0.7** |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| YSS | | | | smax | smax | | | |
| | comp=N,30nm,0.8s | | | | | | | |
| **JOT** | **Ohata** | **6.13** | **243** | *e*P | **Pn** | **03 21 58.3** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **10.68** | **32** | P | **Pn** | **03 23 04.8** | **+4.3** |
| | comp=N,0.7nm,0.5s,baz=203,slow=11,SNR=2.1 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.70** | **275** | P | **Pn** | **03 23 15.0** | **+0.6** |
| | comp=N,3.9nm,0.8s,baz=78,slow=13,SNR=5.9 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.70** | **275** | PN | **Pn** | **03 23 15.0** | **+0.6** |
| **SEY** | **Seymchan** | **18.72** | **6** | ⇑*e*P | **P** | **03 24 41.3** | **-2.6** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.6s | | | | | | | |
| **BILL** | **Bilibino** | **25.50** | **16** | *e*P | **P** | **03 25 53.9** | **+0.9** |
| **BILL** | **Bilibino** | **25.50** | **16** | *i* P | **P** | **03 25 53.9** | **+0.9** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,13nm,2.0s | | | | | | | |
| **SONM** | **Songino Array** | **29.00** | **292** | P | **P** | **03 26 24.9** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=79,slow=7.5,SNR=3.1 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.07** | **142** | T | T | 03 57 10.9 | | |
| | baz=333 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.08** | **142** | T | T | 03 57 11.9 | | |
| | baz=333 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.09** | **142** | T | T | 03 57 13.8 | | |
| | baz=333 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.07** | **143** | T | T | 03 58 27.6 | | |
| | baz=333,slow=76,SNR=30 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.07** | **143** | T | T | 03 58 27.9 | | |
| | baz=333,slow=76,SNR=271 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.08** | **143** | T | T | 03 58 26.1 | | |
| | baz=333,slow=76,SNR=188 | | | | | | | |
| **ILAR** | **Eielson Array** | **40.47** | **37** | P | **P** | **03 28 03.1** | **+0.1** |
| | comp=Z,0.4nm,0.9s,baz=297,slow=6.0,SNR=3.6 | | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.28** | **307** | P | **P** | **03 28 10.6** | **+0.8** |
| | comp=Z,0.5nm,0.4s,baz=75,slow=8.4,SNR=1.8 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **MK31** | **Makanchi Array** | **45.03** | **297** | ⇑*e*P | **P** | **03 28 41.5** | **+1.3** |
| **MKAR** | **Makanchi Array** | **45.03** | **297** | P | **P** | **03 28 39.5** | **-0.7** |
| | comp=Z,0.5nm,0.7s,baz=73,slow=8.4,SNR=4.9 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **03 30 20.0** | **-0.2** |
| | comp=Z,0.6nm,0.7s,baz=62,slow=3.9,SNR=5.8 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.03** | **297** | *e*P | **P** | **03 28 40.1** | **-0.1** |
| **MKAR** | **Makanchi Array** | **45.03** | **297** | *e*P | **P** | **03 28 40.1** | **-0.1** |
| **KURK** | **Kurchatov** | **45.86** | **304** | *e*P | **P** | **03 28 46.5** | **-0.2** |
| **KURK** | **Kurchatov** | **45.86** | **304** | ⇓*e*P | **P** | **03 28 46.5** | **-0.2** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.95** | **304** | P | **P** | **03 28 45.8** | **-1.5** |
| | comp=Z,0.4nm,0.6s,baz=75,slow=8.2,SNR=3.7 | | | | | | | |
| KURBB | | | | PcP | **PcP** | **03 30 22.2** | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=65,slow=3.4,SNR=6.2 | | | | | | | |
| KURBB | | | | LR | LR | 03 50 05.2 | | |
| | comp=Z,58nm,18.9s,baz=170,slow=39 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.79** | **34** | P | **P** | **03 29 52.6** | **-1.3** |
| | comp=Z,0.6nm,0.9s,baz=305,slow=8.5,SNR=1.6 | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **64.67** | **333** | P | **P** | **03 31 00.4** | **-1.3** |
| | comp=Z,1.4nm,0.8s,baz=35,slow=7.6,SNR=5.3 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.29** | **194** | P | **P** | **03 31 07.0** | **+0.7** |
| | comp=Z,0.4nm,0.6s,baz=12,slow=6.5,SNR=5.5 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.29** | **194** | *i* P | **P** | **03 31 07.0** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **66.52** | **59** | P | **P** | **03 31 14.7** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=295,slow=6.9,SNR=2.9 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **69.01** | **194** | P | **P** | **03 31 30.2** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=15,slow=6.6,SNR=4.7 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.29** | **339** | P | **P** | **03 31 30.2** | **-1.0** |
| | comp=Z,6.9nm,1.4s,baz=30,slow=6.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.29** | **339** | P | **P** | **03 31 29.4** | **-1.8** |
| | comp=Z,0.4nm,0.7s,baz=31,slow=6.6,SNR=4.4 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.29** | **339** | *e*P | **P** | **03 31 30.2** | **-1.0** |
| **EKA** | **Eskdalemuir Ar** | **77.74** | **344** | P | **P** | **03 32 18.6** | **-2.2** |
| | comp=Z,2.2nm,0.9s,baz=24,slow=5.5,SNR=2.2 | | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **81.59** | **57** | P | **P** | **03 32 43.5** | **+1.2** |
| | comp=Z,0.4nm,0.5s,baz=309,slow=4.0,SNR=7.9 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **81.74** | **309** | P | **P** | **03 32 43.0** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=47,slow=6.3,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **142.12** | **90** | T | T | 06 18 45.8 | | |
| | baz=304,slow=77,SNR=8.8 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **142.14** | **90** | T | T | 06 18 34.8 | | |
| | baz=304,slow=77,SNR=11 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **142.14** | **90** | T | T | 06 18 32.0 | | |
| | baz=304,slow=77,SNR=8.6 | | | | | | | |

*IDC* ***24*** *03:27:43.3±0.8,31.10N×130.23E,h148km±8km,mb3.5/17, mbtmp3.9/21,MS2.7/1,Error ellipse: s-maj=18.7km s-min=8.6km az=104.0*

*JMA* ***24*** *03:27:45.7±0.1,31.1N±0.4×130.4E±0.9,h151km±1km, MV3.7/34,SATSUMA PENINSULA REGION*

*NIED* ***24*** *03:27:45.7,31.1N×130.41E,h151km,MW3.9,Moment Tensor Solution. s2 Moment tensor: Scale 10¹⁴Nm; Mrr2.65; Mϑϑ-1.17; Mϕϕ-1.48; Mrϑ0.04; Mrϕ-3.00; Mϑϕ6.87; Fault plane solution: M07.83000×10¹⁴ NP1:ϕs254.00000°, δ80.00000°, λ68.00000°. NP2:ϕs254.00000°, δ24.00000°, λ155.00000°.*

*NEIC* ***24*** *03:27:45.7±1.3,31.1N±0.06×130.47E±0.05, h160km±8km,mb4.3/12 Error ellipse: s-maj=9.9km s-min=2.8km az=215.0*

**ISC 24 03:27:44.5±0.6,31.09N±0.04×130.37E±0.05,h159km±5km, n60,σ1s08/74,mb4.0/28,2D,Kyushu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **JSU** | **Suzuyama** | **0.42** | **10** | P | | **Pn** | **03 28 06.9** | **+0.4** |
| JSU | | | | *e*S | | **Sn** | **03 28 22.8** | **-0.7** |
| **JTSR** | **Tashiro 2** | **0.48** | **81** | P | | **Pn** | **03 28 06.9** | **+0.2** |
| JTSR | | | | *e*S | | **Sn** | **03 28 22.7** | **-1.1** |
| **JKC** | **Kuchinoerabu** | **0.65** | **194** | P | | **Pn** | **03 28 08.1** | **+0.5** |
| JKC | | | | *e*S | | **Sn** | **03 28 25.0** | **-0.2** |
| **JTN** | **Tanegashima 3** | **0.68** | **130** | P | | **Pn** | **03 28 08.3** | **+0.5** |
| JTN | | | | *e*S | | **Sn** | **03 28 25.2** | **-0.5** |
| **JSJ** | **Shimokoshiki** | **0.81** | **316** | ⇓P | | **Pn** | **03 28 08.8** | **+0.1** |
| JSJ | | | | ⇓*e*S | | **Sn** | **03 28 26.6** | **-0.6** |
| **JMTN** | **Minamitane** | **0.83** | **147** | P | | **Pn** | **03 28 09.2** | **+0.4** |
| JMTN | | | | *e*S | | **Sn** | **03 28 27.1** | **-0.2** |
| **JYAK** | **Yakushimahirau** | **0.86** | **172** | P | | **Pn** | **03 28 09.4** | **+0.4** |
| JYAK | | | | *e*S | | **Sn** | **03 28 27.0** | **-0.8** |
| **JTZ** | **Takazaki** | **1.01** | **37** | P | | **Pn** | **03 28 10.5** | **+0.3** |
| JTZ | | | | *e*S | | **Sn** | **03 28 28.4** | **-1.6** |
| **JNN** | **Nakanoshima** | **1.32** | **199** | *e*P | | **Pn** | **03 28 13.8** | **+0.8** |
| JNN | | | | *e*S | | **Sn** | **03 28 35.2** | **+0.4** |
| **JIU3** | **Izumi3** | **1.50** | **14** | P | | **Pn** | **03 28 15.3** | **+0.6** |
| JIU3 | | | | *e*S | | **Sn** | **03 28 37.4** | **-0.7** |
| **JNU** | **Nakatsue** | **2.07** | **12** | | | **Pn** | **03 28 21.5** | **+0.6** |
| **JNU** | **Nakatsue** | **2.07** | **12** | P | | **Pn** | **03 28 21.2** | **+0.2** |
| | 32nm,0.3s,baz=207,slow=11,SNR=85 | | | | | | | |
| JNU | | | | S | | **Sn** | **03 28 46.9** | **-2.3** |
| | 116nm,1.0s,baz=250,slow=20,SNR=4.6 | | | | | | | |
| **JMN** | **Monobe** | **3.96** | **48** | | | **Pn** | **03 28 44.7** | **+0.2** |
| **JOW** | **Kunigami** | **4.62** | **204** | P | | **Pn** | **03 28 53.1** | **0.0** |
| | 4.6nm,0.3s,baz=126,slow=21,SNR=12 | | | | | | | |
| JOW | | | | S | | **Sn** | **03 29 42.2** | **-4.5** |
| | 14nm,0.3s,baz=109,slow=27,SNR=9.5 | | | | | | | |
| JOW | | | | LR | | LR | 03 30 42.4 | |
| | comp=Z,84nm,21.8s,baz=122,slow=39 | | | | | | | |
| **JMZ** | **Minamidaito 2** | **5.30** | **172** | Pn | | **Pn** | **03 29 03.3** | **+1.2** |
| **TJN** | **Taejon** | **5.84** | **335** | Pn | | **Pn** | **03 29 11.2** | **+2.2** |
| **KSRS** | **Korea Array** | **6.66** | **343** | P | | **Pn** | **03 29 20.7** | **+0.7** |
| | 4.3nm,0.8s,baz=171,slow=14,SNR=8.1 | | | | | | | |
| **INU** | **Inuyama** | **7.00** | **51** | Pn | | **Pn** | **03 29 26.1** | **+1.6** |
| **JGF** | **Kuroka** | **7.37** | **51** | Pn | | **Pn** | **03 29 30.8** | **+1.3** |
| **JHJ** | **Hachijo jima 2** | **8.23** | **73** | P | | Pn | 03 29 45.4 | +4.4 |
| | 40nm,0.3s,baz=135,slow=11,SNR=5.0 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **8.49** | **48** | P | | **Pn** | **03 29 46.0** | **+1.7** |
| | 1.7nm,0.4s,baz=240,slow=15,SNR=4.5 | | | | | | | |
| MJAR | | | | S | | **Sn** | **03 31 18.3** | **-0.5** |
| | 3.2nm,0.6s,baz=234,slow=39,SNR=6.4 | | | | | | | |
| **JCJ** | **Chichijima** | **11.07** | **108** | Pn | | **Pn** | **03 30 17.5** | **-0.9** |
| **ENH** | **Enshi** | **17.99** | **273** | P | | **Pn** | **03 31 45.4** | **+0.7** |
| **KLR** | **Kul'dur** | **18.15** | **3** | P | | **P** | **03 31 44.0** | **-0.5** |
| | 0.8nm,0.5s,baz=169,slow=16,SNR=2.3 | | | | | | | |
| **SONM** | **Songino Array** | **24.79** | **319** | P | | **P** | **03 32 50.2** | **-1.5** |
| | 1.1nm,0.5s,baz=133,slow=8.7,SNR=1.4 | | | | | | | |
| | 1.1nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.07** | **254** | P | | **P** | **03 33 48.3** | **+0.5** |
| | 0.9nm,0.2s,baz=63,slow=6.3,SNR=2.0 | | | | | | | |
| | 0.9nm,0.2s | | | | | | | |
| **KULM** | **Kulim** | **37.91** | **233** | P | | **P** | **03 34 48.3** | **+1.7** |
| KULM | | | | IAmb | | IAmb | 03 34 48.8 | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.90** | **307** | P | | **P** | **03 35 01.9** | **-1.0** |
| | comp=Z,0.2nm,0.4s,baz=89,slow=9.2,SNR=2.8 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **42.76** | **313** | P | | **P** | **03 35 26.7** | **+0.8** |
| **KURBB** | **Kurchatov Arra** | **42.80** | **313** | P | | **P** | **03 35 26.2** | **-0.1** |
| | comp=Z,0.4nm,0.4s,baz=96,slow=9.5,SNR=4.3 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.03** | **315** | P | | **P** | **03 36 08.2** | **+0.7** |
| | comp=Z,1.0nm,0.3s,baz=101,slow=7.9,SNR=3.9 | | | | | | | |
| BVAR | | | | PcP | | **PcP** | **03 37 32.6** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=177,slow=2.9,SNR=3.6 | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **BRVK** | **Borovoye** | **48.10** | **315** | P | | **P** | **03 36 08.9** | **+1.0** |
| BRVK | | | | IAmb | | IAmb | 03 36 11.0 | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **KKAR** | **Karatay Array** | **48.29** | **302** | P | | **P** | **03 36 11.3** | **+1.7** |
| **WB0** | **Warramunga Arr** | **50.71** | **175** | P | | **P** | **03 36 28.6** | **+0.6** |
| WB0 | | | | IAmb | | IAmb | 03 36 31.7 | |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.88** | **175** | P | | **P** | **03 36 29.6** | **+0.2** |
| | comp=Z,0.2nm,0.7s,baz=354,slow=7.9,SNR=2.0 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **03 37 43.2** | **-0.4** |
| | comp=Z,0.4nm,1.1s,baz=357,slow=5.2,SNR=1.4 | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | |
| **F17K** | **Baldwin Pennin** | **53.30** | **28** | P | | **P** | **03 36 46.9** | **+0.3** |
| **SDPT** | **Sand Point** | **53.40** | **42** | P | | **P** | **03 36 47.6** | **+0.1** |
| **C19K** | **Lookout Ridge** | **54.22** | **25** | P | | **P** | **03 36 53.8** | **+0.4** |
| C19K | | | | IAmb | | IAmb | 03 37 13.5 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **O16K** | **Kokwok River B** | **54.51** | **36** | P | | **P** | **03 36 55.7** | **+0.2** |
| O16K | | | | IAmb | | IAmb | 03 36 59.2 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **54.55** | **176** | P | | **P** | **03 36 56.9** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=360,slow=6.6,SNR=5.8 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **ABKAR** | **Akbulak array** | **54.80** | **311** | P | | **P** | **03 36 59.2** | **+1.5** |
| **ABKAR** | **Akbulak array** | **54.80** | **311** | P | | **P** | **03 36 59.0** | **+1.2** |
| ABKAR | | | | IAmb | | IAmb | 03 36 59.7 | |
| | comp=Z,2.5nm,1.1s | | | | | | | |
| **J19K** | **Poorman** | **55.57** | **31** | P | | **P** | **03 37 04.0** | **+0.9** |
| J19K | | | | IAmb | | IAmb | 03 37 07.0 | |
| | comp=Z,4.3nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **59.29** | **30** | P | | **P** | **03 37 30.3** | **+1.2** |
| | comp=Z,0.3nm,0.7s,baz=276,slow=8.1,SNR=2.5 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **66.20** | **338** | P | | **P** | **03 38 13.9** | **-0.8** |
| | comp=Z,0.9nm,0.5s,baz=59,slow=8.8,SNR=9.2 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **KBZ** | **Khabaz** | **67.58** | **308** | P | | **P** | **03 38 23.6** | **-0.2** |
| | comp=Z,4.4nm,0.8s,baz=52,slow=3.0,SNR=12 | | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **69.58** | **330** | P | | **P** | **03 38 35.2** | **-0.7** |
| | comp=Z,2.7nm,0.3s,baz=64,slow=5.6,SNR=39 | | | | | | | |
| | comp=Z,2.7nm,0.3s | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.08** | **319** | P | | **P** | **03 38 56.9** | **-0.2** |
| | comp=Z,1.6nm,0.4s,baz=60,slow=6.0,SNR=5.3 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **HFS** | **Hagfors** | **75.40** | **332** | P | | **P** | **03 39 09.3** | **-1.0** |
| | comp=Z,1.0nm,0.6s,baz=52,slow=2.4,SNR=7.6 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.55** | **308** | P | | **P** | **03 39 11.1** | **-0.7** |
| | comp=Z,0.8nm,0.8s,baz=91,slow=4.0,SNR=19 | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.79** | **334** | P | | **P** | **03 39 11.9** | **-0.7** |
| | comp=Z,2.0nm,1.5s,baz=59,slow=5.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **75.79** | **334** | P | | **P** | **03 39 12.0** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=50,slow=5.6,SNR=3.6 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **CONA** | **Conrad Observa** | **81.90** | **322** | *e*PcP | | **P** | **03 39 47.6** | **+1.3** |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **GERES** | **GERESS Array B** | **82.45** | **323** | P | | **P** | **03 39 47.2** | **-1.9** |
| | comp=Z,0.5nm,0.7s,baz=21,slow=6.3,SNR=3.4 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **SOKA** | **Soboth** | **83.12** | **321** | *e*PcP | | **P** | **03 39 53.2** | **+0.6** |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| **LESA** | **Schwarzleotal** | **83.89** | **323** | *e*PcP | | **P** | **03 39 56.8** | **+0.3** |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **84.41** | **322** | *e*PcP | | **P** | **03 39 59.3** | **+0.1** |
| | comp=Z,2.1nm,0.9s | | | | | | | |
| **WTTA** | **Wattenberg** | **84.53** | **323** | *e*PcP | | **P** | **03 40 00.6** | **+0.7** |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **85.18** | **335** | P | | **P** | **03 40 00.9** | **-1.8** |
| | comp=Z,0.6nm,0.6s,baz=52,slow=4.7,SNR=1.6 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **CTI** | **Castel Tesino** | **85.32** | **322** | P | | **P** | **03 40 04.3** | **+0.6** |

**NEIC 24 03:30:55.3±1.8,37.36N±0.03×97.96W±0.04,h5km±2km, mb_Lg2.6/64,ML3.0/36,Error ellipse: s-maj=5.9km s-min=4.9km az=45.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.07** | **206** | | | Pg | 03 30 57.8 | +0.8 |
| KAN12 | | | | Sg | | Sg | 03 30 58.9 | +0.7 |
| KAN12 | | | | IAML | | | 03 30 59.9 | |
| | comp=N,10μm,0.3s | | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.14** | **185** | | | Pg | 03 30 59.0 | +0.9 |
| KAN08 | | | | Sg | | Sg | 03 31 01.1 | +1.2 |
| KAN08 | | | | IAML | | | 03 31 01.3 | |
| | comp=E,5μm,0.3s | | | | | | | |
| **KS21** | **Milan North St** | **0.25** | **108** | | | Pg | 03 31 01.5 | +1.4 |
| KS21 | | | | Sg | | Sg | 03 31 05.4 | +2.0 |
| **KS21** | **Milan North St** | **0.25** | **108** | IAML | | | 03 31 05.9 | |
| | comp=E,2μm,0.1s | | | | | | | |
| KS21 | | | | IAML | | | 03 31 07.3 | |
| | comp=E,3μm,0.3s | | | | | | | |
| **KAN01** | **Argonia South** | **0.26** | **143** | | | Pg | 03 31 01.7 | -0.9 |
| KAN01 | | | | Sg | | Sg | 03 31 05.6 | +1.7 |
| **KAN09** | **Caldwell North** | **0.35** | **130** | Pg | | Pb | 03 31 03.4 | -0.7 |
| KAN09 | | | | Sg | | Sb | 03 31 08.6 | -1.4 |
| KAN09 | | | | IAML | | | 03 31 08.9 | |
| | comp=N,2μm,0.2s | | | | | | | |
| KAN09 | | | | IAML | | | 03 31 12.7 | |
| | comp=E,3μm,0.2s | | | | | | | |
| **KAN17** | **Caldwell West** | **0.35** | **154** | | | Pb | 03 31 03.2 | -0.9 |
| KAN17 | | | | Sg | | Sg | 03 31 08.3 | +1.5 |
| **KAN14** | **Manchester OK** | **0.41** | **181** | | | Pg | 03 31 04.0 | +0.8 |
| KAN14 | | | | Sg | | Sg | 03 31 09.6 | +1.1 |
| KAN14 | | | | IAML | | | 03 31 09.8 | |
| **GC02** | **Grant County #** | **0.52** | **171** | Pg | | Pg | 03 31 06.0 | +0.7 |
| **KAN13** | **South Haven SW** | **0.52** | **132** | | | Pb | 03 31 06.4 | -0.5 |
| KAN13 | | | | IAML | | | 03 31 14.0 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **OK032** | **Salt Plains WL** | **0.59** | **200** | Pg | | Pg | 03 31 07.1 | +0.3 |
| **BLOK** | **Blackwell** | **0.84** | **135** | Pg | | Pg | 03 31 11.5 | 0.0 |
| **CROK** | **Carrier** | **0.86** | **181** | | | Pg | 03 31 12.1 | +0.3 |
| CROK | | | | IAML | | | 03 31 30.6 | |
| | comp=E,692nm,0.3s | | | | | | | |
| CROK | | | | IAML | | | 03 31 32.0 | |
| | comp=N,459nm,0.3s | | | | | | | |
| **NOKA** | **Waynoka** | **1.07** | **227** | Pg | | Pg | 03 31 15.5 | -0.3 |
| NOKA | | | | IAML | | | 03 31 37.6 | |
| | comp=N,392nm,0.2s | | | | | | | |
| NOKA | | | | IAML | | | 03 31 38.6 | |
| | comp=E,338nm,0.3s | | | | | | | |
| **OK038** | **West end E0370** | **1.09** | **216** | Pg | | Pg | 03 31 16.0 | -0.2 |
| **R32A** | **Long Quarter,** | **1.21** | **331** | Pg | | Pg | 03 31 18.3 | -0.3 |
| R32A | | | | IAML | | | 03 31 39.7 | |
| | comp=N,360nm,0.3s | | | | | | | |
| R32A | | | | IAML | | | 03 31 39.8 | |
| | comp=E,331nm,0.2s | | | | | | | |
| **T35A** | **Sooner Cattle** | **1.24** | **111** | Pn | | Pn | 03 31 19.6 | +0.3 |
| T35A | | | | IAML | | | 03 31 38.5 | |
| | comp=E,333nm,0.3s | | | | | | | |
| **OK051** | **E0350 and S346** | **1.24** | **133** | | | Pn | 03 31 19.5 | +0.2 |
| **OK048** | **Pawnee Station** | **1.25** | **139** | Pg | | Pn | 03 31 19.5 | +0.1 |
| OK048 | | | | IAML | | | 03 31 40.4 | |
| | comp=E,278nm,0.3s | | | | | | | |
| OK048 | | | | IAML | | | 03 31 40.5 | |
| | comp=E,230nm,0.3s | | | | | | | |
| **QUOK** | **Quay** | **1.56** | **140** | | | Pn | 03 31 24.1 | +0.4 |
| **OK029** | **Liberty Lake** | **1.62** | **165** | | | Pn | 03 31 24.9 | +0.5 |
| **OK052** | **Battle Ridge R** | **1.65** | **146** | | | Pn | 03 31 25.5 | +0.5 |
| **OK031** | **S. Brethren Rd** | **1.67** | **147** | | | Pn | 03 31 25.8 | +0.6 |
| **ELIS** | **Ellis County** | **1.75** | **223** | | | Pn | 03 31 26.7 | +0.3 |
| **ADOK** | **Arcadia Dam** | **1.77** | **164** | | | Pn | 03 31 27.1 | +0.4 |
| **CSTR** | **Hydro, Custer** | **1.81** | **199** | Pn | | Pn | 03 31 27.2 | 0.0 |
| **DEOK** | **Depew** | **1.92** | **142** | Pn | | Pn | 03 31 29.1 | +0.5 |
| **OKCSW** | **OKLAHOMA CITY** | **2.00** | **168** | | | Pn | 03 31 30.8 | +1.1 |
| **CBKS** | **Cedar Bluff** | **2.02** | **316** | | | Pn | 03 31 30.6 | +0.5 |
| **KSU1** | **Kansas State U** | **2.03** | **31** | | | Pb | 03 31 31.8 | -0.9 |
| **TUL3** | **Leonard** | **2.27** | **129** | Pn | | Pn | 03 31 34.1 | +0.7 |
| **RLO** | **Rose Lookout** | **2.64** | **116** | Pn | | Pn | 03 31 39.6 | +1.0 |
| **WMOK** | **Wichita Mounta** | **2.71** | **195** | Pn | | Pn | 03 31 40.0 | +0.5 |
| **X34A** | **Smith Ranch, M** | **2.76** | **178** | Pn | | Pn | 03 31 40.5 | +0.3 |
| **U38A** | **Gravette** | **3.01** | **107** | | | Pn | 03 31 44.5 | +0.8 |
| **HHAR** | **Hobbs** | **3.40** | **107** | | | Pn | 03 31 49.8 | +0.7 |
| **X37A** | **Clayton** | **3.47** | **142** | Pn | | Pn | 03 31 51.0 | +1.0 |
| X37A | | | | IAmb_Lg | | | 03 32 53.2 | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **S39A** | **Bolivar** | **3.70** | **84** | Pn | | Pn | 03 31 54.1 | +1.0 |
| S39A | | | | IAmb_Lg | | | 03 32 56.2 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **RTBA** | **Rita Blanca** | **3.94** | **258** | Pn | | Pn | 03 31 57.4 | +0.8 |
| **P38A** | **Dawn** | **4.14** | **56** | IAmb_Lg | | | 03 33 14.0 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **DKNS** | **Dickens** | **4.41** | **214** | IAmb_Lg | | | 03 33 21.3 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.53** | **127** | IAmb_Lg | | | 03 33 29.1 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.54** | **91** | | | Pn | 03 32 05.3 | +0.6 |
| MGMO | | | | IAmb_Lg | | | 03 33 27.8 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **R40A** | **Maddies Statio** | **4.60** | **77** | | | Pn | 03 32 06.3 | +0.8 |
| R40A | | | | IAmb_Lg

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PB04 | | | | | *e*S | | **Sn** | **03 40 03.9** | **+1.0** |
| PB04 | | | | | IAML | | | 03 40 04.3 | |
| | comp=Z,20μm,0.1s | | | | | | | | |
| **PB04** | **IPOC Station P** | **0.33** | **95** | ⇓*i*P | | | **Pn** | **03 39 56.3** | **+1.0** |
| PB04 | | | | | *e*S | | **Sn** | **03 40 03.6** | **+0.7** |
| PB04 | | | | | IAML | | | 03 40 04.0 | |
| | comp=E,27μm,0.2s | | | | | | | | |
| **PB09** | **IPOC Station P** | **1.27** | **67** | | | | **Pn** | **03 40 07.0** | **+0.4** |
| PB09 | | | | | Sn | | **Sn** | **03 40 21.6** | **-1.3** |
| **LVC** | **Limon Verde** | **1.50** | **102** | | | | **Pn** | **03 40 10.6** | **+0.8** |
| LVC | | | | | Sn | | **Sn** | **03 40 28.2** | **-0.5** |
| **LVC** | **Limon Verde** | **1.50** | **102** | *e*P | | | **Pn** | **03 40 10.5** | **+0.6** |
| LVC | | | | | *e*S | | **Sn** | **03 40 28.7** | **0.0** |
| **LVC** | **Limon Verde** | **1.50** | **102** | P | | | **Pn** | **03 40 10.4** | **+0.6** |
| | comp=E,502nm,0.3s,baz=301,slow=10,SNR=4866 | | | | | | | | |
| LVC | | | | | LR | | LR | 03 40 22.9 | |
| | comp=E,66nm,20.2s,baz=330,slow=31 | | | | | | | | |
| LVC | | | | | S | | **Sn** | **03 40 24.9** | **-3.7** |
| | comp=E,2μm,0.4s,baz=275,slow=12,SNR=16 | | | | | | | | |
| **LVC** | **Limon Verde** | **1.50** | **102** | *e*P | | | **Pn** | **03 40 10.6** | **+0.8** |
| LVC | | | | | *e*S | | **Sn** | **03 40 27.7** | **-1.0** |
| **LVC** | **Limon Verde** | **1.50** | **102** | *e*P | | | **Pn** | **03 40 10.0** | **+0.2** |
| **PATCX** | **Punta Patache** | **1.51** | **12** | | | | **Pn** | **03 40 10.1** | **+0.3** |
| PATCX | | | | | Sn | | **Sn** | **03 40 27.8** | **-0.7** |
| **TA01** | **Diego Aracena** | **1.76** | **10** | | | | **Pn** | **03 40 13.2** | **+0.3** |
| **TA01** | **Diego Aracena** | **1.76** | **10** | *e*P | | | **Pn** | **03 40 13.3** | **+0.3** |
| TA01 | | | | | *e*S | | **Sn** | **03 40 29.2** | **-5.1** |
| **TA01** | **Diego Aracena** | **1.76** | **10** | ⇑*i*P | | | **Pn** | **03 40 13.3** | **+0.3** |
| TA01 | | | | | *e*S | | **Sn** | **03 40 33.9** | **-0.3** |
| TA01 | | | | | IAML | | | 03 40 39.5 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| **TA02** | **Huaiquique** | **2.05** | **10** | | | | **Pn** | **03 40 17.4** | **+0.5** |
| **TA02** | **Huaiquique** | **2.05** | **10** | *e*P | | | **Pn** | **03 40 17.5** | **+0.5** |
| TA02 | | | | | *e*S | | Sn | 03 40 23.9 | -18 |
| **TA02** | **Huaiquique** | **2.05** | **10** | ⇓*i*P | | | **Pn** | **03 40 17.4** | **+0.5** |
| **PX03** | **IPOC Station P** | **2.06** | **23** | *e*P | | | **Pn** | **03 40 17.3** | **+0.1** |
| PX03 | | | | | IAML | | | 03 40 42.9 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| **HMBC** | **Humberstone** | **2.10** | **16** | | | | **Pn** | **03 40 18.3** | **+0.6** |
| **AF01** | **San Pedro de A** | **2.24** | **107** | | | | **Pn** | **03 40 22.3** | **+2.5** |
| **AF01** | **San Pedro de A** | **2.24** | **107** | *e*P | | | **Pn** | **03 40 21.7** | **+1.9** |
| AF01 | | | | | IAML | | | 03 41 08.0 | |
| | comp=Z,2μm,0.5s | | | | | | | | |
| **AF01** | **San Pedro de A** | **2.24** | **107** | ⇑*i*P | | | **Pn** | **03 40 22.4** | **+2.5** |
| **PB14** | **IPOC Station P** | **2.31** | **178** | | | | **Pn** | **03 40 21.0** | **+0.1** |
| **PB14** | **IPOC Station P** | **2.31** | **178** | *e*P | | | **Pn** | **03 40 20.9** | **+0.1** |
| PB14 | | | | | *e*S | | **Sn** | **03 40 47.6** | **-0.7** |
| **PB14** | **IPOC Station P** | **2.31** | **178** | ⇑*i*P | | | **Pn** | **03 40 21.2** | **+0.4** |
| PB14 | | | | | *e*S | | **Sn** | **03 40 47.1** | **-1.2** |
| PB14 | | | | | IAML | | | 03 40 47.8 | |
| | comp=E,436nm,0.2s | | | | | | | | |
| **GO01** | **Chusmiza** | **2.89** | **25** | | | | **Pn** | **03 40 29.7** | **+0.8** |
| **GO01** | **Chusmiza** | **2.89** | **25** | *e*P | | | **Pn** | **03 40 29.9** | **+0.9** |
| GO01 | | | | | *e*S | | **Sn** | **03 41 03.5** | **+0.7** |
| GO01 | | | | | IAML | | | 03 41 06.0 | |
| | comp=Z,917nm,0.1s | | | | | | | | |
| **GO01** | **Chusmiza** | **2.89** | **25** | *e*P | | | **Pn** | **03 40 29.8** | **+0.9** |
| **GO02** | **Mina Guanaco** | **2.96** | **164** | | | | **Pn** | **03 40 30.6** | **+1.0** |
| **GO02** | **Mina Guanaco** | **2.96** | **164** | *e*P | | | **Pn** | **03 40 30.8** | **+1.1** |
| GO02 | | | | | *e*S | | **Sn** | **03 41 05.9** | **+1.7** |
| GO02 | | | | | IAML | | | 03 41 06.5 | |
| | comp=Z,686nm,0.5s | | | | | | | | |
| **GO02** | **Mina Guanaco** | **2.96** | **164** | ⇑*i*P | | | **Pn** | **03 40 30.7** | **+1.0** |
| GO02 | | | | | IAML | | | 03 41 25.0 | |
| | comp=N,918nm,0.2s | | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.83** | **181** | | | | **Pn** | **03 40 40.6** | **-0.7** |
| **AC01** | **Pan de Azucar** | **3.83** | **181** | *e*P | | | **Pn** | **03 40 40.8** | **-0.5** |
| AC01 | | | | | *e*S | | **Sn** | **03 41 23.0** | **-2.0** |
| **AP01** | **Chacalluta** | **3.92** | **2** | | | | **Pn** | **03 40 43.2** | **+0.7** |
| **AP01** | **Chacalluta** | **3.92** | **2** | *e*P | | | **Pn** | **03 40 42.6** | **+0.1** |
| AP01 | | | | | *e*S | | **Sn** | **03 41 27.7** | **+0.5** |
| AP01 | | | | | IAML | | | 03 41 29.2 | |
| | comp=Z,660nm,0.1s | | | | | | | | |
| **AP01** | **Chacalluta** | **3.92** | **2** | *e*P | | | **Pn** | **03 40 43.2** | **+0.7** |
| AP01 | | | | | *e*S | | **Sn** | **03 41 27.4** | **+0.3** |
| **PB18** | **Visviri** | **4.79** | **12** | | | | **Pn** | **03 40 57.9** | **+3.0** |
| **PB18** | **Visviri** | **4.79** | **12** | *e*P | | | **Pn** | **03 40 58.2** | **+3.3** |
| **AC06** | **Mina Casimiro** | **5.03** | **179** | | | | **Pn** | **03 40 56.5** | **-1.2** |
| **AC06** | **Mina Casimiro** | **5.03** | **179** | *e*P | | | **Pn** | **03 40 57.0** | **-0.8** |
| **GO03** | **Copiap** | **5.27** | **177** | | | | **Pn** | **03 40 60.0** | **-1.1** |
| **GO03** | **Copiap** | **5.27** | **177** | *e*P | | | **Pn** | **03 41 00.4** | **-0.7** |
| GO03 | | | | | *e*S | | **Sn** | **03 41 59.8** | **-0.8** |
| **LPAZ** | **La Paz** | **6.39** | **21** | | | | **Pn** | **03 41 19.1** | **+2.2** |
| **LPAZ** | **La Paz** | **6.39** | **21** | P | | | **Pn** | **03 41 20.0** | **+3.1** |
| | comp=Z,5.6nm,0.3s,baz=182,slow=3.6,SNR=70 | | | | | | | | |
| LPAZ | | | | | LR | | LR | 03 43 37.4 | |
| | comp=Z,28nm,19.1s,baz=234,slow=37 | | | | | | | | |
| **AC05** | **El Transito** | **6.51** | **178** | | | | **Pn** | **03 41 17.5** | **-0.6** |
| **SIV** | **San Ignacio** | **10.90** | **56** | P | | | **Pn** | **03 42 15.3** | **-2.8** |
| | comp=Z,3.1nm,0.3s,baz=255,slow=10,SNR=38 | | | | | | | | |
| SIV | | | | | LR | | LR | 03 47 15.2 | |
| | comp=Z,66nm,18.4s,baz=290,slow=42 | | | | | | | | |
| **NNA** | **Nana** | **11.91** | **328** | LR | | | LR | 03 46 59.2 | |
| | comp=Z,18nm,19.3s,baz=149,slow=36 | | | | | | | | |
| **CPUP** | **Villa Florida** | **12.66** | **111** | P | | | **Pn** | **03 42 40.0** | **-2.1** |
| | comp=Z,0.8nm,0.7s,baz=289,slow=15,SNR=2.5 | | | | | | | | |
| CPUP | | | | | LR | | LR | 03 47 57.5 | |
| | comp=Z,42nm,18.9s,baz=219,slow=40 | | | | | | | | |
| **ETMB** | **Extrema** | **13.08** | **19** | Pn | | | **Pn** | **03 42 45.7** | **-2.2** |
| **H03N1** | **Juan Fernandez** | **13.35** | **212** | T | | | T | 03 57 08.3 | |
| | baz=37,slow=72,SNR=67 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **13.36** | **212** | T | | | T | 03 57 07.7 | |
| | baz=37,slow=72,SNR=135 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **13.37** | **212** | T | | | T | 03 57 07.2 | |
| | baz=37,slow=72,SNR=77 | | | | | | | | |
| **VILB** | **Vilhena** | **13.52** | **48** | | | | **Pn** | **03 42 53.4** | **-0.4** |
| **AQDB** | **Aquidauana** | **13.91** | **85** | *e*P | | | **Pn** | **03 42 59.8** | **+0.8** |
| **ITQB** | **Itaqui** | **14.47** | **123** | *e*P | | | Pn | 03 42 59.1 | -7.2 |
| **SAML** | **Samuel** | **15.03** | **29** | P | | | **P** | **03 43 19.4** | **+1.6** |
| **SALV** | **Santo Antonio** | **15.37** | **68** | *e*P | | | **P** | **03 43 21.6** | **0.0** |
| **TRCB** | **Terra Rica** | **16.52** | **95** | | | | **P** | **03 43 34.6** | **+0.3** |
| TRCB | | | | | IAmb | | IAmb | 03 43 35.3 | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **GO06** | **Curarrehue** | **17.25** | **183** | | | | **Pn** | **03 43 41.8** | **+0.1** |
| **CPSB** | **Cacapava Do Su** | **17.27** | **121** | *e*P | | | **Pn** | **03 43 36.7** | **-5.3** |
| **TRQA** | **Tornquist** | **17.33** | **157** | | | | **Pn** | **03 43 43.2** | **+0.6** |
| TRQA | | | | | IAmb | | IAmb | 03 44 10.3 | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **ITAB** | **Concordia** | **17.39** | **110** | | | | **Pn** | **03 43 44.1** | **+0.7** |
| ITAB | | | | | IAmb | | IAmb | 03 43 57.5 | |
| | comp=Z,9.2nm,0.9s | | | | | | | | |
| **PLCA** | **Paso Flores** | **18.37** | **180** | | | | **P** | **03 43 55.4** | **+0.6** |
| PLCA | | | | | IAmb | | IAmb | 03 44 06.5 | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **FRTB** | **Fartura** | **19.33** | **97** | *e*P | | | **P** | **03 44 05.3** | **-0.1** |
| **TEFE** | **Tefe** | **19.53** | **18** | *e*P | | | **P** | **03 44 08.5** | **+1.0** |
| **MACA** | **Manacapuru-AM** | **21.28** | **28** | P | | | **P** | **03 44 26.1** | **-0.3** |
| **MACA** | **Manacapuru-AM** | **21.28** | **28** | *e*P | | | **P** | **03 44 26.1** | **-0.3** |
| **IPMB** | **Ipameri, GO** | **21.36** | **82** | *e*P | | | **P** | **03 44 27.5** | **+0.1** |
| **VAO** | **Valinhos** | **21.73** | **96** | P | | | **P** | **03 44 31.3** | **-0.1** |
| **BDFB** | **Brasilia** | **22.26** | **77** | P | | | **P** | **03 44 37.0** | **-0.1** |
| BDFB | | | | | IAmb | | IAmb | 03 44 48.3 | |
| | comp=Z,6.1nm,1.2s | | | | | | | | |
| **BDFB** | **Brasilia** | **22.26** | **77** | P | | | **P** | **03 44 36.3** | **-0.8** |
| | comp=Z,2.4nm,0.5s,baz=235,slow=14,SNR=6.2 | | | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | | | |
| **BSCB** | **Bom Sucesso** | **23.94** | **92** | *e*P | | | **P** | **03 44 51.2** | **-2.4** |
| **DIAM** | **Diamantina, MG** | **25.46** | **86** | *e*P | | | **P** | **03 45 06.2** | **-1.4** |
| **VNA3** | **Neumayer Olymp** | **59.80** | **161** | ⇑P | | | **P** | **03 49 44.6** | **+1.1** |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **60.39** | **160** | ⇑P | | | **P** | **03 49 47.9** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=300,slow=11 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **60.46** | **327** | P | | | **P** | **03 49 50.5** | **+1.9** |
| | comp=Z,0.4nm,0.8s,baz=149,slow=9.5,SNR=6.1 | | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | | |
| **SNAA** | **Sanae** | **62.01** | **161** | P | | | **P** | **03 49 59.7** | **+1.2** |
| SNAA | | | | | IAmb | | IAmb | 03 50 28.6 | |
| | comp=Z,3.2nm,1.2s | | | | | | | | |
| **SNAA** | **Sanae** | **62.01** | **161** | ⇑P | | | **P** | **03 49 58.4** | **-0.1** |
| | comp=Z,18nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **62.01** | **161** | P | | | **P** | **03 49 59.3** | **+0.8** |
| | comp=Z,1.0nm,0.6s,baz=298,slow=8.3,SNR=8.5 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **63.73** | **161** | ⇑P | | | **P** | **03 50 10.5** | **+0.5** |
| | comp=Z,48nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.89** | **180** | P | | | **P** | **03 50 38.5** | **+1.7** |
| | comp=Z,1.4nm,0.8s,baz=172,slow=1.2,SNR=18 | | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **74.08** | **331** | P | | | **P** | **03 51 16.6** | **+1.8** |
| | comp=Z,0.3nm,0.5s,baz=143,slow=9.1,SNR=5.6 | | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.23** | **323** | P | | | **P** | **03 51 23.2** | **+1.8** |
| | comp=Z,0.7nm,0.7s,baz=146,slow=5.1,SNR=6.7 | | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **79.02** | **71** | P | | | **P** | **03 51 41.8** | **-1.2** |
| | comp=Z,1.6nm,0.6s,baz=259,slow=5.2,SNR=23 | | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.51** | **277** | T | | | T | 06 18 27.2 | |
| | baz=105,slow=75,SNR=154 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.52** | **277** | T | | | T | 06 18 28.1 | |
| | baz=105,slow=75,SNR=237 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.53** | **277** | T | | | T | 06 18 28.6 | |
| | baz=105,slow=75,SNR=198 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.62** | **279** | T | | | T | 06 18 34.3 | |
| | baz=104,slow=75,SNR=276 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **26.63** | **279** | T | | | T | 06 18 35.3 | |
| | baz=104,slow=75,SNR=211 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.63** | **279** | T | | | T | 06 18 35.5 | |
| | baz=104,slow=75,SNR=192 | | | | | | | | |
| **ASAR** | **Alice Springs** | **128.51** | **209** | PKP | | | **PKPdf** | **03 58 45.2** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=149,slow=2.0,SNR=5.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **131.50** | **212** | PKP | | | **PKPdf** | **03 58 52.5** | **+1.0** |
| | comp=Z,0.5nm,0.6s,baz=153,slow=1.8,SNR=6.8 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **142.82** | **33** | PKP | | | **PKPdf** | **03 59 08.9** | **-2.3** |
| | comp=Z,0.3nm,0.5s,baz=311,slow=2.8,SNR=2.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.30** | **24** | PKP | | | **PKPdf** | **03 59 11.3** | **-0.7** |
| | comp=Z,1.0nm,0.4s,baz=270,slow=1.4,SNR=5.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **147.15** | **35** | PKPbc | | | **PKPdf** | **03 59 19.9** | **+0.9** |
| | comp=Z,2.8nm,0.7s,baz=286,slow=2.1,SNR=21 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **151.35** | **325** | PKPbc | | | **PKiKP** | **03 59 32.9** | **+0.6** |
| | comp=Z,2.1nm,0.8s,baz=114,slow=2.0,SNR=2.3 | | | | | | | | |

**IDC 24 03:41:19.2±2.9, 4°.59S×135°.25E, h0km, mb3.4/1, mbtmp3.8/3, ML3.9/2, Error ellipse: s-maj=107.4km s-min=18.4km az=85.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **15.28** | **183** | Pn | Pn | 03 44 56.0 | -0.4 |
| | 0.3nm,0.3s,baz=0.1,slow=13,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 03 47 46.1 | -0.4 |
| | 0.2nm,0.3s,baz=9.2,slow=22,SNR=3.9 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **19.01** | **184** | P | Pn | 03 45 43.9 | +0.5 |
| | 1.1nm,0.3s,baz=9.4,slow=11,SNR=75 | | | | | | |
| ASAR | | | | S | Sn | 03 49 17.8 | +0.8 |
| | 0.1nm,0.3s,baz=5.9,slow=28,SNR=1.8 | | | | | | |
| | 6.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **69.22** | **324** | P | P | 03 52 27.7 | -0.2 |
| | 0.3nm,0.6s,baz=121,slow=7.1,SNR=2.4 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*IDC **24** 03:47:23.0±2.4, 38°.00N×142°.34E, h0km, mb3.9/3, mbtmp3.7/7, ML3.0/4, MS2.6/2, Error ellipse: s-maj=57.8km s-min=23.5km az=75.0*
*JMA **24** 03:47:30.6±0.1, 37°.8N±0°.3×141°.8E±0°.7, h40km±1km, MV3.7/39, SE OFF MIYAGI PREF*
*JMA Felt I J1 at SE OFF MIYAGI PREF .*
*NEIC **24** 03:47:32.8±0.9, 37°.81N±0°.06×141°.66E±0°.09, h52km±6km, mb4.1/9, Error ellipse: s-maj=10.8km s-min=8.5km az=91.0*

**ISC 24 03:47:30.6±0.9, 37°.77N±0°.04×141°.84E±0°.08, h36km±4km, n48, σ1s14/48, mb4.0/7, 20D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **0.61** | **331** | ⇓P | **Pn** | **03 47 42.7** | **-0.2** |
| JIKH | | | | ⇓*e*S | **Sn** | **03 47 50.9** | **-0.6** |
| **JMST** | **Minamisoumatoc** | **0.76** | **267** | ⇓P | **Pn** | **03 47 44.5** | **-0.2** |
| JMST | | | | ⇓*e*S | **Sn** | **03 47 54.6** | **-0.4** |
| **JIO** | **Ouri** | **0.78** | **331** | ⇓P | **Pn** | **03 47 45.1** | **0.0** |
| JIO | | | | ⇓*e*S | **Sn** | **03 47 55.1** | **-0.6** |
| **JMM** | **Marumori** | **0.83** | **277** | Pn | **Pn** | **03 47 45.8** | **0.0** |
| JMM | | | | Sn | **Sn** | **03 47 56.3** | **-0.6** |
| **JMM** | **Marumori** | **0.83** | **277** | ⇓P | **Pn** | **03 47 45.8** | **0.0** |
| JMM | | | | ⇓*e*S | **Sn** | **03 47 56.6** | **-0.3** |
| **JFK** | **Kawauchi** | **0.87** | **243** | ⇓P | **Pn** | **03 47 46.0** | **-0.4** |
| JFK | | | | ⇓*e*S | **Sn** | **03 47 57.0** | **-0.9** |
| **ONAJ** | **Iwakimizuishiy** | **1.07** | **231** | ⇓P | **Pn** | **03 47 48.7** | **-0.4** |
| ONAJ | | | | ⇓*e*S | **Sn** | **03 48 01.6** | **-1.1** |
| **JKMT** | **Kesennumamotoy** | **1.08** | **345** | ⇓*i*P | **Pn** | **03 47 49.2** | **+0.1** |
| JKMT | | | | ⇓*e*S | **Sn** | **03 48 02.2** | **-0.7** |
| **JOU** | **Okura** | **1.10** | **303** | ⇓P | **Pn** | **03 47 50.0** | **+0.4** |
| **JOTO** | **OTAMA OYAMA** | **1.21** | **260** | *e*P | **Pn** | **03 47 51.9** | **+0.8** |
| **JMK** | **Ichinoseki** | **1.27** | **338** | ⇓P | **Pn** | **03 47 52.2** | **+0.3** |
| JMK | | | | ⇓*e*S | **Sn** | **03 48 08.3** | **+0.6** |
| **JYS** | **Shirataka** | **1.47** | **288** | ⇓P | **Pn** | **03 47 55.2** | **+0.6** |
| **JYK** | **Kaneyama** | **1.63** | **315** | ⇓P | **Pn** | **03 47 57.4** | **+0.6** |
| **JFY** | **Yanaizu** | **1.73** | **259** | *e*P | **Pn** | **03 47 58.9** | **+0.6** |
| **JOM** | **Ohasama** | **1.75** | **346** | ⇓P | **Pn** | **03 47 59.2** | **+0.7** |
| **JSD** | **Sado** | **2.84** | **276** | Pn | **Pn** | **03 48 13.9** | **+0.4** |
| **JTM** | **Tenmabayashi** | **3.07** | **349** | | **Pn** | **03 48 18.1** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **3.15** | **248** | Pn | **Pn** | **03 48 19.4** | **+1.7** |
| | 0.5nm,0.3s,baz=309,slow=26,SNR=14 | | | | | | |
| MJAR | | | | Sn | **Sn** | **03 48 57.5** | **+3.4** |
| | 0.5nm,0.3s,baz=90,slow=9.1,SNR=7.6 | | | | | | |
| MJAR | | | | LR | LR | 03 49 49.6 | |
| | comp=Z,85nm,18.3s,baz=98,slow=41 | | | | | | |
| | 2.7nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **3.15** | **248** | | **Pn** | **03 48 18.4** | **+0.7** |
| **MJB9** | **Matsu-Tunnel** | **3.15** | **248** | Pn | **Pn** | **03 48 18.5** | **+0.8** |
| **JGF** | **Kuroka** | **4.20** | **240** | Pn | **Pn** | **03 48 32.9** | **+0.7** |
| **JHJ** | **Hachijo jima 2** | **4.94** | **200** | Pn | **Pn** | **03 48 44.4** | **+2.2** |
| | 10nm,0.3s,baz=60,slow=21,SNR=2.0 | | | | | | |
| JHJ | | | | Sn | **Sn** | **03 49 34.5** | **-3.6** |
| | 2.2nm,0.3s,baz=264,slow=20,SNR=2.0 | | | | | | |
| | 124nm,0.8s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **9.83** | **314** | Pn | **Pn** | **03 49 50.7** | **+1.4** |
| **USRK** | **Ussuriysk Ar.** | **9.83** | **314** | Pn | **Pn** | **03 49 46.8** | **-2.5** |
| | 0.1nm,0.3s,baz=104,slow=40,SNR=1.3 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **11.05** | **273** | LR | LR | 03 53 52.9 | |
| | comp=Z,23nm,21.0s,baz=235,slow=34 | | | | | | |
| **KLR** | **Kul'dur** | **13.58** | **331** | Pn | Pn | 03 50 35.6 | -4.9 |
| | 0.1nm,0.3s,baz=120,slow=11,SNR=1.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.25** | **123** | T | T | 04 22 52.6 | |
| | baz=315,slow=75,SNR=106 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.25** | **123** | T | T | 04 22 54.1 | |
| | baz=315,slow=75,SNR=3.8 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.26** | **123** | T | T | 04 22 55.2 | |
| | baz=315,slow=75,SNR=19 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.99** | **125** | T | T | 04 23 53.4 | |
| | baz=316,slow=76,SNR=17 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.99** | **125** | T | T | 04 23 49.9 | |
| | baz=316,slow=76,SNR=20 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.00** | **125** | T | T | 04 23 55.4 | |
| | baz=316,slow=76,SNR=20 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.67** | **312** | P | **P** | **03 55 14.5** | **-0.9** |
| | 1.1nm,0.5s,baz=94,slow=8.7,SNR=4.0 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.67** | **312** | P | **P** | **03 55 14.5** | **-0.9** |
| **KURBB** | **Kurchatov Arra** | **45.82** | **307** | P | **P** | **03 55 48.1** | **-0.7** |
| | 1.6nm,0.6s,baz=84,slow=8.3,SNR=15 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **VRDI** | **Verde Repeater** | **50.59** | **37** | P | **P** | **03 56 26.6** | **+0.9** |
| VRDI | | | | IAmb | IAmb | 03 56 35.4 | |
| | comp=Z,4.1nm,1.2s | | | | | | |
| **I30M** | **Mount Dempster** | **53.07** | **31** | P | **P** | **03 56 44.5** | **+0.4** |
| **WB0** | **Warramunga Arr** | **57.66** | **188** | P | **P** | **03 57 17.0** | **-0.4** |
| **ABKAR** | **Akbulak array** | **57.73** | **310** | P | **P** | **03 57 17.4** | **-0.2** |
| ABKAR | | | | IAmb | IAmb | 03 57 21.1 | |
| | comp=Z,1.5nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **57.83** | **188** | P | **P** | **03 57 17.8** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 03 57 25.0 | |
| | comp=Z,2.6nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.84** | **188** | P | **P** | **03 57 18.3** | **-0.3** |
| **WRA** | **Warramunga Arr** | **57.84** | **188** | P | **P** | **03 57 17.9** | **-0.8** |
| | comp=Z,0.5nm,0.5s,baz=5.1,slow=7.0,SNR=7.6 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **69.40** | **193** | P | **P** | **03 58 35.5** | **+0.8** |
| **DUG** | **Dugway, Tooele** | **76.62** | **49** | P | **P** | **03 59 17.8** | **+0.1** |
| DUG | | | | IAmb | IAmb | 03 59 22.7 | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **83.85** | **50** | P | **P** | **03 59 56.6** | **-0.3** |
| **H03N2** | **Juan Fernandez** | **146.76** | **95** | T | T | 06 51 20.1 | |
| | baz=289 | | | | | | |
| **H03N3** | **Juan Fernandez** | **146.77** | **95** | T | T | 06 51 25.0 | |
| | baz=289 | | | | | | |
| **H03N1** | **Juan Fernandez** | **146.77** | **95** | T | T | 06 51 21.7 | |
| | baz=289 | | | | | | |

*MOS **24** 03:47:38.9±1.8, 43°.35N×145°.19E, h101km, mb3.8/4, Error ellipse: s-maj=13.7km s-min=11.9km az=62.7*

*SKHL **24** 03:47:39.6±0.3, 43°.20N×145°.40E, h110km±4km, mb4.8/4, msha5.5/3*
*JMA **24** 03:47:39.7±0.2, 43°.2N±0°.5×145°.3E±0°.8, h100km±1km, MV3.4/40, NEMURO REGION*
*JMA Felt I J1 at NEMURO REGION .*
*IDC **24** 03:47:41.8±4.4, 43°.37N×145°.15E, h121km±21km, mb3.4/8, mbtmp3.7/9, Error ellipse: s-maj=71.3km s-min=23.9km az=175.0*

**ISC 24 03:47:39.6±0.8, 43°.23N±0°.05×145°.31E±0°.04, h99km±5km, n45, σ1s17/57, mb3.5/11, 2C-1D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKHN** | **Kushirohamanak** | **0.18** | **216** | *i* P | **Pn** | **03 47 54.0** | **+0.4** |
| JKHN | | | | *e*S | **Sn** | **03 48 04.7** | **+0.6** |
| **NEM2** | **Nemuro 2** | **0.35** | **67** | P | **Pn** | **03 47 54.4** | **+0.1** |
| NEM2 | | | | S | **Sn** | **03 48 05.2** | **-0.1** |
| **JAK** | **Akkeshi** | **0.51** | **243** | P | **Pn** | **03 47 55.5** | **+0.2** |
| JAK | | | | S | **Sn** | **03 48 07.2** | **+0.2** |
| **JNK** | **Nakash** | **0.56** | **310** | P | **Pn** | **03 47 55.6** | **-0.1** |
| JNK | | | | *e*S | **Sn** | **03 48 07.5** | **-0.2** |
| **JNSB** | **Nemuroshibetsu** | **0.59** | **338** | P | **Pn** | **03 47 56.2** | **+0.3** |
| JNSB | | | | *e*S | **Sn** | **03 48 08.7** | **+0.5** |
| **JRA** | **Rausu** | **0.72** | **349** | P | **Pn** | **03 47 57.4** | **+0.3** |
| JRA | | | | *e*S | **Sn** | **03 48 10.7** | **+0.5** |
| **YUK** | **Yuzh-Kuril'sk** | **0.90** | **26** | *e*P | **Pn** | **03 47 59.1** | **+0.3** |
| YUK | | | | AMB | AMB | 03 47 59.7 | |
| | 1μm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **03 48 13.5** | **+0.2** |
| YUK | | | | A | A | 03 48 14.3 | |
| | 2μm,0.6s | | | | | | |
| YUK | | | | A | A | 03 48 14.3 | |
| | 5μm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.90** | **26** | *d* iPN | **Pn** | **03 47 59.1** | **+0.3** |
| YUK | | | | *i* S | **Sn** | **03 48 11.6** | **-1.7** |
| **JAR** | **Ashorobuto** | **1.12** | **274** | P | **Pn** | **03 48 01.7** | **+0.4** |
| JAR | | | | *e*S | **Sn** | **03 48 17.8** | **+0.1** |
| **JOB** | **Onbets** | **1.13** | **254** | P | **Pn** | **03 48 01.6** | **+0.3** |
| JOB | | | | *e*S | **Sn** | **03 48 17.8** | **+0.1** |
| **JTKR** | **Abashiri--Toko** | **1.26** | **307** | P | **Pn** | **03 48 03.1** | **+0.3** |
| JTKR | | | | *e*S | **Sn** | **03 48 20.7** | **+0.3** |
| **SHO** | **Shikotan** | **1.28** | **59** | *e*P | **Pn** | **03 48 03.1** | **0.0** |
| SHO | | | | AMB | AMB | 03 48 03.4 | |
| | 40nm,0.1s | | | | | | |
| SHO | | | | *e*S | **Sn** | **03 48 20.0** | **-0.9** |
| SHO | | | | A | A | 03 48 20.5 | |
| | 870nm,0.3s | | | | | | |
| SHO | | | | A | A | 03 48 20.5 | |
| | 610nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.28** | **59** | *e*PN | **Pn** | **03 48 03.0** | **0.0** |
| SHO | | | | *e*S | **Sn** | **03 48 19.9** | **-0.9** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,42nm,0.1s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,16nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,832nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,806nm,0.3s | | | | | | |
| **JCH** | **Churui** | **1.56** | **247** | P | **Pn** | **03 48 06.7** | **+0.2** |
| JCH | | | | *e*S | **Sn** | **03 48 25.9** | **-0.9** |
| **JMP** | **Maruseppu** | **1.61** | **299** | P | **Pn** | **03 48 07.5** | **+0.2

comp=Z,174nm,18.7s,baz=151,slow=33
**ILAR Eielson Array 82.72 22** P P 04 11 53.0 +0.1
1.4nm,0.7s,baz=247,slow=5.6,SNR=16
1.4nm,0.7s
**TORD Torodi Ar. Bea 149.45 287** PKPbc PKPbc 04 19 19.4 -0.4
0.3nm,0.7s,baz=90,slow=2.9,SNR=1.7

*MAN* ***24*** *04:33:25.3, 11.˚15N×126.˚29E, h7km, mb5.9, ML4.9, MS5.3*
*BJI* ***24*** *04:33:25.5±0.0, 10.˚73N×126.˚19E, h34km, mb5.1/86, mB5.5/66, Ms5.2/86, Ms7 4.9/83*
*MOS* ***24*** *04:33:26.1±0.8, 11.˚02N×125.˚95E, h21km, mb5.5/64, MS4.7/13, Error ellipse: s-maj=9.9km s-min=4.2km az=117.7*
*NEIC* ***24*** *04:33:27.1, 11.˚15N×126.˚06E, h26km*
*NEIC* ***24*** *04:33:27.1±1.8, 11.˚15N±0.˚05×126.˚06E±0.˚08, h10km±1km, mb5.2/202, Mww5.4/26, Error ellipse: s-maj=12.9km s-min=8.0km az=106.0*
*NEIC* ***24*** *04:33:27.1, 11.˚05N×126.˚26E, h26km, Moment Tensor Solution. Duration: 2s3 Moment tensor: Scale 10¹⁷Nm; Mrr 1.21; Mθθ 0.31; Mϕϕ -1.52; Mrθ -0.26; Mθϕ 0.16; Mϕr 0.14; Fault plane solution: M0 1.41000×10¹⁷ NP1: ϕs 341.29000°, δ 50.20000°, λ 70.89000°. NP2: ϕs 189.72000°, δ 43.45000°, λ 111.45000°. Principal axes: T 1.2810, Plg75.0000°, Azm188.0000°; N 0.2599, Plg15.0000°, Azm354.0000°; P -1.5409, Plg3.0000°, Azm85.0000°;*
*IDC* ***24*** *04:33:28.1±3.1, 11.˚02N×125.˚96E, h22km±19km, mb4.7/30, mbtmp4.8/32, ML4.0/2, MS4.6/68 Error ellipse: s-maj=17.8km s-min=10.3km az=78.0*
*GCMT* ***24*** *04:33:31.1±0.1, 11.˚08N±0.˚01×126.˚20E±0.˚01, h19km, MW5.4/136, Moment Tensor Solution. s128,c212; s136,c257; Duration: 1s3 Moment tensor: Scale 10¹⁷ Nm; Mrr 1.30±.02; Mθθ 0.07±.01; Mϕϕ -1.37±.02; Mrθ -0.06±.03; Mθϕ 0.12±.01; Mϕr 1.24±.04; Best double couple: M0 1.82700×10¹⁷ NP1: ϕs 357.00000°, δ 66.00000°, λ 91.00000°. NP2: ϕs 174.00000°, δ 24.00000°, λ 87.00000°. Principal axes: T 1.7870, Plg69.0000°, Azm269.0000°; N 0.0730, Plg1.0000°, Azm176.0000°; P -1.8660, Plg21.0000°, Azm86.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA* ***24*** *04:33:31.6±0.4, 11.˚N±3.˚×12.˚6E±.˚, h47km±4km, M5.2/48, mb5.2/48, mB5.6/31, MLv6.0/1, Mw(mB)5.1/31, MwMwp5.0/11, Mwp5.3/11*

**ISC 24 04:33:29.3**±0.4, **11.˚07N**±0.˚02×**126.˚17E**±0.˚03, **h28**km±2km, **h28**km:**pP-P, n888,** σ1s**90**/919, **mb5.2**/241, **MS4.7**/102, **71C-43D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LDIP** | **Loreto** | **0.86** | **219** | ⇓*eP* | **Pb** | **04 33 43.0** | **-2.7** |
| LDIP | | | | *eS* | **Sb** | **04 33 58.0** | **+1.1** |
| **BESP** | **Borongan** | **0.89** | **306** | ⇓*eP* | **Pb** | **04 33 44.5** | **-1.6** |
| BESP | | | | *eS* | **Sb** | **04 33 53.8** | **-3.7** |
| **PLP** | **Palo** | **1.17** | **275** | ⇓*eP* | **Pn** | **04 33 48.4** | **-1.4** |
| PLP | | | | *eS* | **Sb** | **04 34 07.9** | **+2.3** |
| **GLSP** | **General Luna,** | **1.28** | **182** | ⇓*eP* | **Pn** | **04 33 49.4** | **-1.9** |
| GLSP | | | | *eS* | **Sn** | **04 34 04.8** | **-2.8** |
| **SCPH** | **Surigao** | **1.44** | **207** | *eP* | **Pn** | **04 33 52.0** | **-1.5** |
| SCPH | | | | *i* S | Sn | 04 34 01.4 | -10 |
| **OCLP** | **Ormoc** | **1.53** | **269** | ⇑*eP* | **Pn** | **04 33 55.7** | **+1.0** |
| OCLP | | | | *eS* | **Sb** | **04 34 17.6** | **+1.7** |
| **MSLP** | **Maasin** | **1.59** | **234** | ⇓*eP* | **Pn** | **04 33 55.2** | **-0.3** |
| MSLP | | | | *eS* | **Sn** | **04 34 18.0** | **+2.8** |
| **SFCP** | **San Francisco,** | **1.82** | **256** | ⇓*eP* | **Pn** | **04 33 59.6** | **+0.8** |
| SFCP | | | | *eS* | **Sb** | **04 34 25.4** | **+0.9** |
| **TABP** | **Talibon, Bohol** | **2.05** | **242** | ⇓*eP* | **Pn** | **04 34 02.6** | **+0.7** |
| TABP | | | | *eS* | **Sn** | **04 34 28.6** | **+2.0** |
| **MECP** | **Medelin, Cebu** | **2.16** | **273** | ⇓*eP* | **Pn** | **04 34 04.3** | **+1.0** |
| MECP | | | | *eS* | **Sb** | **04 34 35.7** | **+1.7** |
| **BUTP** | **Butuan** | **2.16** | **194** | ⇑*eP* | **Pn** | **04 34 04.3** | **+0.9** |
| BUTP | | | | *eS* | **Sn** | **04 34 32.3** | **+3.0** |
| **LLP** | **Lapu-Lapu** | **2.29** | **251** | ⇑*iP* | **Pn** | **04 34 05.7** | **+0.5** |
| LLP | | | | *i* S | **Sb** | **04 34 39.2** | **+1.4** |
| **GHBP** | **Garcia Hernand** | **2.31** | **232** | ⇑*eP* | **Pn** | **04 34 06.4** | **+0.9** |
| GHBP | | | | *eS* | **Sn** | **04 34 36.3** | **+3.2** |
| **TASP** | **Talacogon, Agu** | **2.63** | **188** | ⇓*eP* | **Pn** | **04 34 11.6** | **+1.7** |
| TASP | | | | *eS* | **Sb** | **04 34 51.4** | **+3.8** |
| **TBP** | **Tagbilaran** | **2.65** | **239** | ⇑*iP* | **Pn** | **04 34 11.4** | **+1.2** |
| TBP | | | | *i* S | **Sn** | **04 34 45.3** | **+3.9** |
| **MMPH** | **Masbate** | **2.80** | **297** | ⇑*eP* | **Pn** | **04 34 14.1** | **+1.9** |
| MMPH | | | | *i* S | **Sb** | **04 34 54.2** | **+1.8** |
| **CADP** | **Cadiz City** | **2.82** | **267** | ⇑*eP* | **Pn** | **04 34 13.6** | **+1.1** |
| CADP | | | | *eS* | **Sn** | **04 34 49.2** | **+3.5** |
| **BIPH** | **Bislig** | **2.88** | **176** | ⇓*iP* | **Pn** | **04 34 12.0** | **-1.3** |
| BIPH | | | | *eS* | **Sn** | **04 34 42.2** | **-4.8** |
| **DACP** | **Dalaguete, Ceb** | **2.90** | **244** | *eP* | **Pn** | **04 34 14.9** | **+1.3** |
| DACP | | | | *eS* | **Sn** | **04 34 51.6** | **+4.0** |
| **CGP** | **Cagayan de Oro** | **2.98** | **209** | ⇓*eP* | **Pn** | **04 34 15.7** | **+1.0** |
| CGP | | | | *eS* | **Sn** | **04 34 50.4** | **+0.9** |
| **GNOP** | **Guihulngan Cit** | **2.98** | **254** | ⇑*eP* | **Pn** | **04 34 15.9** | **+1.1** |
| GNOP | | | | *eS* | **Sn** | **04 34 53.9** | **+4.1** |
| **LSIP** | **Lazi, Siquijor** | **3.15** | **233** | ⇑*eP* | **Pn** | **04 34 17.7** | **+0.6** |
| LSIP | | | | *eS* | **Sn** | **04 34 54.5** | **+0.7** |
| **PVCP** | **Virac** | **3.19** | **322** | ⇑*eP* | **Pn** | **04 34 18.0** | **+0.4** |
| PVCP | | | | *eS* | **Sb** | **04 35 05.5** | **+1.8** |
| **CDOP** | **Cateel, Davao** | **3.28** | **175** | ⇓*eP* | **Pn** | **04 34 18.4** | **-0.4** |
| CDOP | | | | *eS* | **Sn** | **04 34 56.3** | **-0.7** |
| **BUKP** | **Musuan** | **3.35** | **199** | ⇑*eP* | **Pn** | **04 34 20.4** | **+0.4** |
| BUKP | | | | *eS* | **Sn** | **04 35 02.2** | **+3.3** |
| **RCP** | **Roxas** | **3.39** | **279** | ⇑*eP* | **Pn** | **04 34 21.8** | **+1.5** |
| RCP | | | | *eS* | **Sn** | **04 35 02.8** | **+3.1** |
| **GUIM** | **Jordan** | **3.54** | **263** | ⇑*eP* | **Pn** | **04 34 23.5** | **+1.1** |
| GUIM | | | | *eS* | **Sn** | **04 35 05.8** | **+2.4** |
| **MARW** | **Marawi** | **3.57** | **212** | ⇑*eP* | **Pn** | **04 34 24.2** | **+1.3** |
| MARW | | | | *eS* | **Sn** | **04 35 06.3** | **+2.1** |
| **BLNP** | **Bacolod Lanao** | **3.58** | **216** | ⇑*eP* | **Pn** | **04 34 23.7** | **+0.6** |
| BLNP | | | | *eS* | **Sn** | **04 35 07.5** | **+3.0** |
| **SCSP** | **San Jose Seism** | **3.64** | **315** | ⇑*eP* | **Pn** | **04 34 24.5** | **+0.7** |
| SCSP | | | | *eS* | **Sb** | **04 35 18.6** | **+1.9** |
| **DCPH** | **Dipolog City** | **3.71** | **228** | ⇑*eP* | **Pn** | **04 34 24.6** | **-0.2** |
| DCPH | | | | *i* S | **Sn** | **04 35 10.1** | **+2.4** |
| **IBAJ** | **Ibajay, Aklan** | **3.98** | **281** | ⇑*eP* | **Pn** | **04 34 30.1** | **+1.6** |
| IBAJ | | | | *eS* | Sn | 04 35 07.6 | -6.8 |
| **DMPH** | **Davao City--Mi** | **4.02** | **189** | ⇓*eP* | Pn | 04 34 34.9 | +5.9 |
| DMPH | | | | *eS* | **Sn** | **04 35 20.0** | **+4.8** |
| **DAV** | **Davao City (W)** | **4.02** | **188** | P | **Pb** | **04 34 36.4** | **-3.0** |
| **DAV** | **Davao City (W)** | **4.02** | **188** | Pn | **Pn** | **04 34 31.8** | **+2.8** |
| **DAV** | **Davao City (W)** | **4.02** | **188** | Pn | **Pn** | **04 34 28.8** | **-0.2** |
| | 32nm,0.3s,baz=318,slow=15,SNR=1.4 | | | | | | |
| DAV | | | | Sn | **Sn** | **04 35 13.6** | **-1.6** |
| | 73nm,0.3s,baz=100,slow=19,SNR=6.1 | | | | | | |
| DAV | | | | LR | LR | 04 36 32.7 | |
| | comp=Z,26µm,18.7s,baz=348,slow=47 128nm,0.4s | | | | | | |
| **DAV** | **Davao City (W)** | **4.02** | **188** | P | **Pb** | **04 34 40.0** | **+0.6** |
| **AUQP** | **San Andres** | **4.08** | **304** | ⇓*eP* | **Pn** | **04 34 32.4** | **+2.5** |
| AUQP | | | | *eS* | **Sn** | **04 35 23.2** | **+6.5** |
| **MATI** | **Mati** | **4.10** | **179** | ⇓*eP* | **Pb** | **04 34 36.8** | **-4.0** |
| MATI | | | | *eS* | **Sn** | **04 35 21.3** | **+4.0** |
| **JAP** | **San Jose, Anti** | **4.16** | **266** | ⇑*eP* | **Pn** | **04 34 35.7** | **+4.8** |
| **KCP** | **Kidapawan** | **4.17** | **195** | ⇑*eP* | **Pn** | **04 34 33.1** | **+1.9** |
| KCP | | | | *i* S | **Sn** | **04 35 22.1** | **+3.0** |
| **PAGZ** | **Pagadian** | **4.22** | **221** | ⇓*eP* | **Pn** | **04 34 33.5** | **+1.7** |
| PAGZ | | | | *eS* | **Sn** | **04 35 21.0** | **+0.9** |
| **PICP** | **Pikit** | **4.25** | **200** | ⇓*eP* | **Pn** | **04 34 34.0** | **+1.8** |
| PICP | | | | *eS* | **Sb** | **04 35 34.8** | **+0.6** |
| **OTRP** | **Odiongan** | **4.26** | **288** | ⇓*eP* | **Pn** | **04 34 33.6** | **+1.3** |
| OTRP | | | | *eS* | **Sn** | **04 35 20.1** | **-1.0** |
| **CTBH** | **Cotabato--PC H** | **4.27** | **206** | ⇑*eP* | **Pn** | **04 34 34.4** | **+1.9** |
| CTBH | | | | *i* S | **Sn** | **04 35 25.3** | **+3.9** |
| **GQP** | **Guinayangan** | **4.59** | **308** | ⇑*eP* | **Pn** | **04 34 36.8** | **-0.2** |
| GQP | | | | *eS* | **Sn** | **04 35 31.8** | **+2.4** |
| **JCNP** | **Jose Panganiba** | **4.66** | **314** | ⇑*eP* | **Pn** | **04 34 37.3** | **-0.5** |
| JCNP | | | | *eS* | **Sb** | **04 35 40.6** | **-5.3** |
| **SKMP** | **Bagumbayan, Su** | **4.80** | **200** | ⇓*eP* | **Pn** | **04 34 42.6** | **+2.8** |
| SKMP | | | | *eS* | **Sn** | **04 35 35.8** | **+1.3** |
| **BOAC** | **Boac** | **4.84** | **300** | ⇑*eP* | **Pn** | **04 34 42.1** | **+1.7** |
| BOAC | | | | *eS* | **Sb** | **04 35 50.7** | **-0.6** |
| **DDMP** | **Don Marcelino,** | **4.96** | **185** | ⇓*eP* | **Pn** | **04 34 43.2** | **+1.3** |
| DDMP | | | | *eS* | **Sn** | **04 35 46.7** | **+8.3** |
| **CUYO** | **Cuyo Island** | **5.06** | **268** | ⇓*eP* | **Pn** | **04 34 44.9** | **+1.5** |
| CUYO | | | | *eS* | **Sn** | **04 35 36.2** | **-4.7** |
| **GSPH** | **General Santos** | **5.10** | **194** | ⇑*iP* | Pn | 04 34 50.3 | +6.3 |
| **SJMP** | **San Jose** | **5.13** | **286** | ⇓*eP* | **Pn** | **04 34 45.8** | **+1.5** |
| SJMP | | | | *eS* | **Sb** | **04 35 53.4** | **-6.1** |
| **LQP** | **Lukban** | **5.43** | **304** | ⇑*eP* | **Pn** | **04 34 49.5** | **+0.8** |
| **POLP** | **Polilio Island** | **5.49** | **312** | ⇑*eP* | **Pn** | **04 34 49.8** | **+0.5** |
| POLP | | | | *eS* | **Sn** | **04 35 55.8** | **+4.2** |
| **PGP** | **Puerto Galera** | **5.64** | **296** | ⇓*iP* | **Pn** | **04 34 49.6** | **-1.7** |
| PGP | | | | *eS* | Sn | 04 35 15.5 | -40 |
| **LBLP** | **Los Banos, Lag** | **5.72** | **303** | ⇑*eP* | **Pn** | **04 34 53.7** | **+1.2** |
| LBLP | | | | *eS* | **Sb** | **04 36 09.3** | **-7.3** |
| **ZCP** | **Zamboanga City** | **5.76** | **225** | ⇓*eP* | **Pb** | **04 35 07.8** | **-1.4** |
| ZCP | | | | *eS* | **Sb** | **04 36 12.3** | **-5.5** |
| **TGY** | **Tagaytay City** | **5.92** | **301** | ⇑*eP* | **Pn** | **04 34 57.8** | **+2.5** |
| TGY | | | | *eS* | **Sb** | **04 36 17.1** | **-5.4** |
| **QVP** | **Quezon City--P** | **6.15** | **306** | ⇑*eP* | **Pn** | **04 34 58.9** | **+0.7** |
| QVP | | | | *eS* | **Sb** | **04 36 23.3** | **-5.5** |
| **MACP** | **Maragondon, Ca** | **6.19** | **301** | ⇓*eP* | **Pn** | **04 35 00.5** | **+1.7** |
| MACP | | | | *eS* | Sb | 04 36 22.5 | -7.5 |
| **RTBP** | **Dona Remedios** | **6.30** | **309** | *eP* | **Pn** | **04 35 00.6** | **+0.2** |
| RTBP | | | | *eS* | **Sn** | **04 36 20.0** | **+8.6** |
| **BALP** | **Baler** | **6.44** | **317** | ⇑*eP* | **Pn** | **04 35 04.0** | **+1.7** |
| BALP | | | | *eS* | **Sn** | **04 36 14.2** | **-0.8** |
| **CAAP** | **Casiguran, Aur** | **6.49** | **322** | ⇑*eP* | **Pn** | **04 35 03.0** | **0.0** |
| CAAP | | | | *eS* | **Sn** | **04 36 08.9** | **-7.3** |
| **ENPP** | **El Nido** | **6.62** | **272** | ⇑*eP* | **Pn** | **04 35 07.7** | **+3.0** |
| ENPP | | | | *eS* | **Sn** | **04 36 24.4** | **+5.2** |
| **ABPP** | **Abucay Bataan** | **6.66** | **304** | ⇓*eP* | **Pn** | **04 35 06.9** | **+1.6** |
| ABPP | | | | *eS* | Sn | 04 36 33.5 | +13 |
| **CAUP** | **Cauayan** | **7.20** | **325** | ⇓*eP* | **Pn** | **04 35 12.9** | **+0.2** |
| CAUP | | | | *eS* | **Sn** | **04 36 36.5** | **+2.8** |
| **SMPP** | **San Manuel, Pa** | **7.34** | **314** | ⇓*eP* | **Pn** | **04 35 15.7** | **+1.0** |
| SMPP | | | | *eS* | **Sn** | **04 36 38.1** | **+0.9** |
| **IBZP** | **Iba, Zambales** | **7.36** | **306** | ⇓*eP* | **Pn** | **04 35 17.1** | **+2.1** |
| IBZP | | | | *eS* | **Sb** | **04 37 01.2** | **-2.5** |
| **PPR** | **Puerto Princes** | **7.43** | **261** | ⇓*iP* | **Pn** | **04 35 19.0** | **+3.1** |
| **SAMP** | **Sagada Mountai** | **7.86** | **320** | ⇓*eP* | **Pn** | **04 35 23.0** | **+1.2** |
| SAMP | | | | *eS* | **Sn** | **04 36 49.4** | **-0.4** |
| **SGCP** | **Gonzaga** | **8.16** | **331** | ⇓*eP* | Pn | 04 35 31.2 | +5.2 |
| **APYP** | **Conner** | **8.26** | **325** | ⇓*eP* | **Pn** | **04 35 28.2** | **+0.8** |
| APYP | | | | *eS* | **Sn** | **04 36 56.6** | **-3.2** |
| **PACPP** | **Pamplona Cagay** | **8.69** | **328** | ⇑*eP* | **Pn** | **04 35 33.5** | **+0.3** |
| **BTTP** | **Bongao, Tawi-T** | **8.73** | **227** | ⇑*eP* | **Pn** | **04 35 37.0** | **+3.2** |
| BTTP | | | | *eS* | Sn | 04 37 29.7 | +18 |
| **PIP** | **Pasuquin** | **8.99** | **324** | ⇑*eP* | Pn | 04 36 12.7 | +35 |
| **MYLDM** | **Lahad Datu** | **9.58** | **233** | Pn | **Pn** | **04 35 45.6** | **+0.1** |
| **TNTI** | **Ternate** | **10.30** | **173** | P | Pn | 04 36 04.6 | +9.2 |
| **TNTI** | **Ternate** | **10.30** | **173** | Pn | **Pn** | **04 35 56.8** | **+1.5** |
| **TNTI** | **Ternate** | **10.30** | **173** | P | **Pn** | **04 35 58.5** | **+3.1** |
| | 63nm,1.3s,1µm | | | | | | |
| **GTOI** | **Gorontalo** | **10.83** | **197** | P | **Pn** | **04 36 02.6** | **0.0** |
| **KKM** | **Kota Kinabalu** | **11.03** | **244** | P | **Pn** | **04 36 08.8** | **+3.3** |
| **KKM** | **Kota Kinabalu** | **11.03** | **244** | Pn | **Pn** | **04 36 04.8** | **-0.7** |
| **TOLI2** | **Tolitoli** | **11.25** | **209** | P | Pn | 04 36 13.6 | +5.3 |
| **TOLI2** | **Tolitoli** | **11.25** | **209** | Pn | **Pn** | **04 36 09.0** | **+0.7** |
| **MPSI** | **Mapaga** | **12.35** | **211** | P | **Pn** | **04 36 26.6** | **+3.2** |
| **LUWI** | **Luwuk** | **12.50** | **196** | P | **P** | **04 36 33.4** | **-3.5** |
| **LUWI** | **Luwuk** | **12.50** | **196** | Pn | **Pn** | **04 36 27.2** | **+1.8** |
| **LUWI** | **Luwuk** | **12.50** | **196** | P | **Pn** | **04 36 29.1** | **+3.7** |
| | 157nm,1.4s,4µm | | | | | | |
| **SANI** | **Sanana** | **13.04** | **181** | P | Pn | 04 36 38.7 | +5.9 |
| **SANI** | **Sanana** | **13.04** | **181** | P | **P** | **04 36 43.8** | **+1.0** |
| **YHNB** | **Yeheng** | **14.27** | **342** | P | **P** | **04 36 58.5** | **+1.9** |
| **SMKI** | **Samarinda** | **14.50** | **218** | P | **Pn** | **04 36 55.9** | **+3.1** |
| **MSAI** | **Masohi** | **14.59** | **169** | P | **Pn** | **04 36 55.0** | **+1.1** |
| | 107.0.9s,3µm | | | | | | |
| **FAKI** | **Fak Fak** | **15.16** | **156** | P | **P** | **04 37 05.9** | **-0.6** |
| **FAKI** | **Fak Fak** | **15.16** | **156** | Pn | **Pn** | **04 37 03.9** | **+2.2** |
| FAKI | | | | IAmb | IAmb | 04 37 10.5 | |
| | comp=Z,107nm,1.3s | | | | | | |
| **FAKI** | **Fak Fak** | **15.16** | **156** | P | **Pn** | **04 37 00.5** | **-1.2** |
| **BKB** | **Balikpapan** | **15.33** | **218** | Pn | **Pn** | **04 37 04.0** | **+0.1** |
| **QZH** | **Quanzhou** | **15.55** | **334** | P | **P** | **04 37 10.8** | **0.0** |
| QZH | | | | S | **Sn** | **04 40 05.8** | **+7.5** |
| QZH | | | | LR | LR | | |
| | comp=Z,4µm,11.3s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,3µm,10.2s | | | | | | |
| QZH | | | | LR | LR | | |
| | comp=Z,4µm,13.9s | | | | | | |
| **JOW** | **Kunigami** | **15.80** | **7** | P | **P** | **04 37 15.9** | **+2.3** |
| **JOW** | **Kunigami** | **15.80** | **7** | | **Pn** | **04 37 09.7** | **-0.3** |
| **JOW** | **Kunigami** | **15.80** | **7** | Pn | **Pn** | **04 37 11.6** | **+1.6** |
| | comp=Z,0.7nm,0.3s,baz=188,slow=10,SNR=3.6 | | | | | | |
| JOW | | | | Sn | **Sn** | **04 40 09.7** | **+5.4** |
| | comp=Z,0.9nm,0.3s,baz=221,slow=26,SNR=1.7 | | | | | | |
| JOW | | | | LR | LR | 04 42 35.3 | |
| | comp=Z,3µm,20.1s,baz=158,slow=34 comp=Z,23nm,0.8s | | | | | | |
| **HKPS** | **Hong Kong Po S** | **16.01** | **316** | P | **P** | **04 37 18.2** | **+2.3** |
| **HKPS** | **Hong Kong Po S** | **16.01** | **316** | Pn | **Pn** | **04 37 11.4** | **-1.2** |
| **SBUM** | **Sibu** | **16.27** | **239** | | **Pn** | **04 37 17.5** | **+1.4** |
| **BNSI** | **Bone** | **16.51** | **202** | P | **Pn** | **04 37 20.7** | **+1.6** |
| | comp=Z,84nm,1.3s,comp=Z,3µmcomp=Z,4µm | | | | | | |
| **KAPI** | **Kappang** | **17.21** | **202** | P | **P** | **04 37 30.1** | **+0.9** |
| **KAPI** | **Kappang** | **17.21** | **202** | P | **Pn** | **04 37 29.8** | **+2.0** |
| | comp=Z,5.9nm,0.3s,baz=36,slow=10,SNR=5.3 | | | | | | |
| KAPI | | | | S | **Sn** | **04 40 34.9** | **-3.6** |
| | comp=Z,4.6nm,0.9s,baz=238,slow=19,SNR=0.7 | | | | | | |
| KAPI | | | | LR | LR | 04 44 20.0 | |
| | comp=Z,3µm,20.1s,baz=18,slow=38 | | | | | | |
| **KAPI** | **Kappang** | **17.21** | **202** | P | **P** | **04 37 30.1** | **+0.9** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,83nm,1.6s | | | | | | |
| **QIZ** | **Qiongzhong** | **17.62** | **299** | P | **P** | **04 37 35.9** | **+2.1** |
| **QIZ** | **Qiongzhong** | **17.62** | **299** | P | **Pn** | **04 37 34.3** | **+1.3** |
| QIZ | | | | S | **Sn** | **04 40 48.3** | **-0.4** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,47nm,1.5s | | | | | | |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,2µm,8.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,2µm,14.1s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,2µm,15.9s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,3µm,17.1s | | | | | | |
| **QIZ** | **Qiongzhong** | **17.62** | **299** | | **Pn** | **04 37 32.4** | **-0.6** |
| **STKI** | **Sintang** | **18.24** | **234** | P | **P** | **04 37 40.9** | **+0.3** |
| **KSM** | **Kuching** | **18.41** | **240** | P | **P** | **04 37 43.7** | **+1.3** |
| **KSM** | **Kuching** | **18.41** | **240** | P | **P** | **04 37 42.6** | **+0.1** |
| KSM | | | | IAmb | IAmb | 04 37 51.5 | |
| | comp=Z,337nm,1.9s | | | | | | |
| **GUMO** | **Guam** | **18.44** | **80** | LR | LR | 04 45 21.9 | |
| | comp=Z,2µm,19.3s,baz=256,slow=38 | | | | | | |
| **GENI** | **Genyem** | **19.45** | **133** | P | **Pn** | **04 38 00.8** | **+5.6** |
| **GENI** | **Genyem** | **19.45** | **133** | P | **P** | **04 37 54.9** | **+1.0** |
| | comp=Z,166nm,1.6s,comp=Z,5µmcomp=Z,5µm | | | | | | |
| **SAUI** | **Saumlaki** | **19.61** | **165** | P | **Pn** | **04 37 57.7** | **+0.6** |
| **JAY** | **Jayapura** | **19.79** | **132** | P | **P** | **04 37 57.0** | **-0.6** |
| **MMRI** | **Maumere** | **19.96** | **191** | P | Pn | 04 38 02.5 | +1.2 |
| **MMRI** | **Maumere** | **19.96** | **191** | | **P** | **04 38 00.9** | **+1.5** |
| MMRI | | | | IAmb | IAmb | 04 38 11.1 | |
| | comp=Z,152nm,0.9s | | | | | | |
| **MMRI** | **Maumere** | **19.96** | **191** | P | **P** | **04 38 00.1** | **+0.6** |
| | comp=Z,174nm,0.8s | | | | | | |
| **EDFI** | **Ende, Flores** | **20.19** | **193** | P | Pn | 04 38 05.0 | +0.9 |
| | comp=Z,56nm,1.1s,comp=Z,1µm | | | | | | |
| **SSE** | **Sheshan** | **20.45** | **348** | P | **P** | **04 38 05.6** | **+0.9** |
| SSE | | | | S | **S** | **04 41 51.9** | **-0.4** |
| SSE | | | | pmax | pmax | | |
| | comp=Z,45nm,1.2s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,990nm,6.0s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,1µm,16.7s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,900nm,14.8s | | | | | | |
| **SOEI** | **Soe** | **20.78** | **185** | P | **P** | **04 38 08.8** | **+0.4** |
| SOEI | | | | IAmb | IAmb | 04 38 22.8 | |
| | comp=Z,88nm,0.6s | | | | | | |
| **SOEI** | **Soe** | **20.78** | **185** | P | **P** | **04 38 09.1** | **+0.7** |
| | comp=Z,222nm,0.8s,comp=Z,2µm | | | | | | |
| **CNSH** | **ChangSha** | **21.06** | **326** | P | **P** | **04 38 11.4** | **+0.1** |
| CNSH | | | | S | **S** | **04 42 03.4** | **-1.1** |
| CNSH | | | | pmax | pmax | | |
| | comp=Z,68nm,1.3s | | | | | | |
| CNSH | | | | LR | LR | | |
| | comp=Z,2µm,13.9s | | | | | | |
| CNSH | | | | LR | LR | | |
| | comp=Z,3µm,13.4s | | | | | | |
| CNSH | | | | LR | LR | | |
| | comp=Z,3µm,14.2s | | | | | | |
| **BATI** | **Baumata** | **21.29** | **187** | P | **P** | **04 38 13.4** | **-0.4** |
| | comp=Z,293nm,0.9s,comp=Z,2µm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **21.74** | **206** | P | **P** | **04 38 19.7** | **+1.0** |
| | comp=Z,63nm,0.8s,comp=Z,2µm | | | | | | |
| **JCJ** | **Chichijima** | **21.94** | **41** | | **P** | **04 38 19.8** | **-1.0** |
| **JCJ** | **Chichijima** | **21.94** | **41** | LR | LR | 04 46 27.3 | |
| | comp=Z,2µm,18.8s,baz=244,slow=35 | | | | | | |
| **NJ2** | **Nanjing** | **21.94** | **343** | *eP* | **P** | **04 38 22.6** | **+1.9** |
| NJ2 | | | | S | **S** | **04 42 28.0** | **+6.4** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,58nm,1.4s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,960nm,4.5s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2µm,9.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2µm,8.5s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,1µm,15.6s | | | | | | |
| **WHN** | **Wuhan** | **22.27** | **332** | P | **P** | **04 38 24.9** | **+0.7** |
| WHN | | | | S | **S** | **04 42 28.8** | **+1.0** |
| WHN | | | | pmax | pmax | | |
| | comp=Z,730nm,1.3s | | | | | | |
| WHN | | | | pmax | pmax | | |
| | comp=Z,4µm,6.7s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,10µm,27.9s | | | | | | |
| **JNU** | **Nakatsue** | **22.37** | **10** | P | **P** | **04 38 30.6** | **+5.2** |
| **JNU** | **Nakatsue** | **22.37** | **10** | P | **P** | **04 38 24.6** | **-0.8** |
| JNU | | | | IAmb | IAmb | 04 38 28.3 | |
| | comp=Z,116nm,1.5s | | | | | | |
| **JNU** | **Nakatsue** | **22.37** | **10** | LR | LR | 04 48 26.6 | |
| | comp=Z,963nm,18.6s,baz=166,slow=40 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **22.80** | **212** | P | **P** | **04 38 32.5** | **+2.5** |
| **JAGI** | **Jajag, Banyuwa** | **22.80** | **212** | P | **P** | **04 38 29.8** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **22.80** | **212** | P | **P** | **04 38 29.8** | **-0.2** |
| | comp=Z,176nm,1.1s | | | | | | |
| **NGJI** | **Ngawi** | **23.45** | **219** | P | **P** | **04 38 36.3** | **-0.3** |
| | comp=Z,96nm,1.1s | | | | | | |
| **JMN** | **Monobe** | **23.63** | **16** | P | **P** | **04 38 42.9** | **+4.6** |
| **JMN** | **Monobe** | **23.63** | **16** | P | **P** | **04 38 37.5** | **-0.8** |
| **SLVN** | **Son La** | **23.65** | **298** | P | **P** | **04 38 36.4** | **-2.3** |
| SLVN | | | | IAmb | IAmb | 04 38 39.0 | |
| | comp=Z,217nm,2.0s | | | | | | |
| **DRS** | **Darwin Rock St** | **23.82** | **168** | P | **P** | **04 38 42.9** | **+2.8** |
| **SMRI** | **Semarang** | **23.85** | **222** | P | **P** | **04 38 39.3** | **-1.2** |
| **SMRI** | **Semarang** | **23.85** | **222** | P | P | 04 38 48.0 | +7.5 |
| **PPBI** | **Pangkal Pinang** | **23.87** | **238** | P | **P** | **04 38 38.8** | **-1.9** |
| | comp=Z,24nm,0.9s | | | | | | |
| **GYA** | **Guiyang** | **23.93** | **312** | ⇓P | **P** | **04 38 41.3** | **0.0** |
| GYA | | | | sP | pwP | 04 38 55.4 | +1.5 |
| GYA | | | | S | **S** | **04 42 51.4** | **-4.9** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,44nm,1.7s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,1µm,7.2s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,2µm,16.7s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,3µm,17.0s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,4µm,19.2s | | | | | | |
| **BTDF** | **Bukit Timah Da** | **24.24** | **248** | P | **P** | **04 38 44.4** | **+0.3** |
| **MTN** | **Manton Dam** | **24.27** | **168** | P | **P** | **04 38 46.7** | **+2.4** |
| **MTN** | **Manton Dam** | **24.27** | **168** | P | **P** | **04 38 44.5** | **+0.3** |
| MTN | | | | IAmb | IAmb | 04 38 51.1 | |
| | comp=Z,64nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **24.27** | **168** | P | **P** | **04 38 44.9** | **+0.6** |
| | comp=Z,93nm,1.1s | | | | | | |
| **KDU** | **Kakadu** | **24.42** | **165** | P | **P** | **04 38 46.0** | **+0.3** |
| **KDU** | **Kakadu** | **24.42** | **165** | P | **P** | **04 38 45.6** | **-0.1** |
| | comp=Z,224nm,1.0s | | | | | | |
| **ENH** | **Enshi** | **24.61** | **323** | P | **P** | **04 38 48.1** | **+0.8** |
| **ENH** | **Enshi** | **24.61** | **323** | IAmb | IAmb | 04 38 49.0 | |
| | comp=Z,83nm,1.0s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **25.26** | **28** | LR | LR | 04 49 44.5 | |
| | comp=Z,2µm,18.5s,baz=88,slow=38 | | | | | | |
| **IPM** | **Ipoh** | **25.74** | **257** | P | **P** | **04 38 58.3** | **+0.5** |
| **IPM** | **Ipoh** | **25.74** | **257** | P | **P** | **

comp=Z,1μm,18.0s
PZH LR LR
comp=Z,2μm,17.6s
PZH LR LR
comp=Z,2μm,15.1s
**XAN Xi'an 27.77 328 ⇑P P 04 39 15.3 -0.6**
XAN pP sP 04 39 24.4 -0.8
XAN S **S 04 43 56.5 -0.6**
XAN sS sS 04 44 17.0 +8.5
XAN pmax pmax
comp=Z,120nm,1.6s
XAN pmax pmax
comp=Z,950nm,5.3s
XAN LR LR
comp=Z,2μm,10.6s
XAN LR LR
comp=Z,3μm,11.0s
XAN LR LR
comp=Z,3μm,13.7s
**DL2 Dalian 28.01 352 P P 04 39 19.3 +1.4**
DL2 S **S 04 44 03.6 +3.0**
DL2 pmax pmax
comp=Z,82nm,1.6s
DL2 pmax pmax
comp=Z,810nm,5.4s
DL2 LR LR
comp=Z,3μm,17.8s
DL2 LR LR
comp=Z,2μm,20.2s
DL2 LR LR
comp=Z,2μm,16.1s
**HNS HongShan 28.17 340 ⇑P P 04 39 19.8 +0.5**
HNS S **S 04 44 03.4 +0.3**
HNS pmax pmax
comp=Z,70nm,1.3s
HNS LR LR
comp=Z,1μm,17.7s
HNS LR LR
comp=Z,1μm,19.6s
HNS LR LR
comp=Z,1μm,19.1s
**PSI Prapat 28.24 255 P P 04 39 19.7 -0.7**
**PSI Prapat 28.24 255 P P 04 39 19.3 -1.1**
PSI pmax pmax
comp=Z,17nm,1.0s
**RPSI Rantau Prapat 28.27 255 P P 04 39 19.3 -1.3**
**CD2 Chengdu 28.65 317 P P 04 39 23.3 -0.5**
CD2 S **S 04 44 10.5 -0.6**
CD2 pmax pmax
comp=Z,20nm,0.5s
CD2 pmax pmax
comp=Z,460nm,9.2s
CD2 LR LR
comp=Z,5μm,16.5s
CD2 LR LR
comp=Z,4μm,17.1s
CD2 LR LR
comp=Z,7μm,16.5s
**FITZ Fitzroy Crossi 28.99 181 P P 04 39 28.0 +1.2**
**TIY Taiyuan 29.25 337 P P 04 39 29.9 +0.8**
TIY pP **pwP 04 39 42.0 -1.0**
TIY S **S 04 44 20.6 +0.2**
TIY sS **sS 04 44 35.0 +4.1**
TIY pmax pmax
comp=Z,390nm,4.7s
TIY LR LR
comp=Z,2μm,11.7s
TIY LR LR
comp=Z,1μm,13.9s
TIY LR LR
comp=Z,1μm,16.5s
**LHMI Lhok Sumawe 29.48 261 P P 04 39 30.2 -1.1**
**TNCH TengChong 29.64 302 P P 04 39 32.3 -0.5**
TNCH PP **PP 04 40 33.4 -6.6**
TNCH S **S 04 44 27.5 +0.5**
TNCH pmax pmax
comp=Z,44nm,0.8s
TNCH pmax pmax
comp=Z,250nm,4.8s
TNCH LR LR
comp=Z,820nm,13.6s
TNCH LR LR
comp=Z,730nm,13.4s
TNCH LR LR
comp=Z,2μm,14.1s
**JMM Marumori 29.73 24 P P 04 39 39.4 +6.2**
**JMM Marumori 29.73 24 P P 04 39 32.4 -0.9**
JMM IAmb IAmb 04 39 39.6
comp=Z,60nm,1.0s
**COEN Coen 30.05 145 P P 04 39 39.4 +3.1**
**COEN Coen 30.05 145 P P 04 39 36.7 +0.5**
COEN IAmb IAmb 04 39 47.7
comp=Z,65nm,1.2s
**COEN Coen 30.05 145 P P 04 39 35.6 -0.6**
comp=Z,45nm,1.8s
**BJT Baijiatuan 30.16 345 P P 04 39 38.1 +1.1**
**BJT Baijiatuan 30.16 345 P P 04 39 37.9 +0.9**
BJT IAmb IAmb 04 39 38.8
comp=Z,102nm,1.7s
**BJT Baijiatuan 30.16 345 P P 04 39 37.9 +0.9**
BJT pmax pmax
comp=Z,102nm,1.7s
**BJI Beijing 30.18 345 P P 04 39 37.3 +0.2**
BJI sP **pwP 04 39 50.3 -0.6**
BJI PcP **PcP 04 42 38.9 +1.0**
BJI S **S 04 44 34.3 -0.4**
BJI pmax pmax
comp=Z,16nm,1.5s
BJI LR LR
comp=Z,610nm,15.9s
BJI LR LR
comp=Z,430nm,18.0s
BJI LR LR
comp=Z,460nm,16.6s
**WRAB Tennant Creek 31.85 165 P P 04 39 50.9 -1.1**
WRAB IAmb IAmb 04 39 54.2
comp=Z,60nm,1.8s
**WRAB Tennant Creek 31.85 165 ⇑*i*P P 04 39 50.9 -1.1**
WRAB pmax pmax
comp=Z,18nm,1.1s
**WRA Warramunga Arr 31.85 165 P P 04 39 51.1 -1.0**
**WRA Warramunga Arr 31.85 165 P P 04 39 50.7 -1.5**
comp=Z,6.8nm,0.7s,baz=343,slow=9.5,SNR=50
WRA PcP **PcP 04 42 42.4 -0.4**
comp=Z,2.1nm,0.6s,baz=345,slow=3.2,SNR=6.4
WRA S **S 04 44 58.6 -2.6**
comp=Z,2.2nm,1.0s,baz=339,slow=14,SNR=3.5
WRA LR LR 04 55 47.3
comp=Z,578nm,18.8s,baz=352,slow=42
comp=Z,6.8nm,0.7s
**WRA Warramunga Arr 31.85 165 *ce*P P 04 39 50.5 -1.6**
WRA pmax pmax
comp=Z,8.0nm,0.7s
**WB2 Warramunga Arr 31.86 165 IAmb IAmb 04 40 04.5**
comp=Z,29nm,1.3s
**LZH Lanzhou 32.07 325 ⇑P P 04 39 54.8 +0.7**
LZH sP pwP 04 40 08.8 +0.4
LZH PcP **PcP 04 42 44.5 +1.2**
LZH S **S 04 45 07.8 +3.1**
LZH ScP **ScP 04 46 26.3 +1.2**
LZH SS **SnSn 04 47 04.6 +9.0**
LZH pmax pmax
comp=Z,68nm,1.2s
LZH pmax pmax
comp=Z,630nm,4.1s
LZH LR LR
comp=Z,2μm,13.6s
LZH LR LR
comp=Z,3μm,14.8s
LZH LR LR
comp=Z,3μm,15.5s
**HHC Hu-ho-hao-te 32.34 339 ⇑*i*P P 04 39 57.4 +1.1**
HHC sP pwP 04 40 11.6 +1.4
HHC PP **PP 04 41 10.0 +0.4**
HHC S **S 04 45 11.1 +2.5**
HHC sS sS 04 45 22.8 +3.5
HHC SS **SnSn 04 47 08.5 +6.6**
HHC pmax pmax
comp=Z,24nm,0.9s
HHC pmax pmax
comp=Z,360nm,5.8s
HHC LR LR
comp=Z,1μm,15.9s
HHC LR LR
comp=Z,670nm,12.8s
HHC LR LR
comp=Z,1μm,14.9s
**CN2 Changchun 32.62 359 *e*P P 04 40 01.0 +2.4**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**BTO Baotou 32.69 337 *e*P P 04 40 00.8 +1.4**
BTO pP **sP 04 40 10.6 +1.8**
BTO sP **pwP 04 40 14.3 +0.9**
BTO PP **PP 04 41 10.8 -2.8**
BTO S **S 04 45 15.0 +0.8**
BTO sS **sS 04 45 28.0 +3.3**
BTO SS **SnSn 04 47 13.8 +3.3**
BTO pmax pmax
comp=Z,52nm,2.3s
BTO pmax pmax
comp=Z,860nm,7.2s
BTO LR LR
comp=Z,2μm,16.9s
BTO LR LR
comp=Z,3μm,17.3s
BTO LR LR
comp=Z,3μm,19.0s
**PSA00 Pilbara Seismi 33.03 191 P P 04 40 02.2 -0.2**
**USA0B Ussuriysk Arra 33.39 8 P P 04 40 03.4 -1.9**
USA0B IAmb IAmb 04 40 21.4
comp=Z,23nm,0.8s
**USA0B Ussuriysk Arra 33.39 8‖ *e*P P 04 40 05.2 -0.1**
**USRK Ussuriysk Ar. 33.39 8 P P 04 40 05.0 -0.3**
**USRK Ussuriysk Ar. 33.39 8 P P 04 40 05.7 +0.4**
comp=Z,13nm,0.7s,baz=189,slow=7.7,SNR=24
USRK PcP **PcP 04 42 47.2 +0.6**
comp=Z,2.0nm,0.8s,baz=198,slow=4.1,SNR=2.3
USRK LR LR 04 53 16.6
comp=Z,870nm,20.2s,baz=181,slow=36
comp=Z,13nm,0.7s
**MDJ Mudanjiang 33.55 4 P P 04 40 08.5 +1.7**
MDJ S **S 04 45 30.8 +3.6**
MDJ PcS **PcS 04 46 30.3 -2.3**
MDJ ScS **ScS 04 50 31.3 +0.4**
MDJ pmax pmax
comp=Z,39nm,0.6s
MDJ pmax pmax
comp=Z,480nm,5.1s
MDJ LR LR
comp=Z,490nm,7.7s
MDJ LR LR
comp=Z,810nm,3.9s
MDJ LR LR
comp=Z,1μm,7.4s
**XLT XiLinHaoTe 33.85 347 *e*P P 04 40 09.6 +0.1**
XLT sP pwP 04 40 23.8 +0.6
XLT S **S 04 45 32.3 +0.2**
XLT pmax pmax
comp=Z,41nm,1.1s
XLT pmax pmax
comp=Z,410nm,5.5s
XLT LR LR
comp=Z,95nm,15.3s
XLT LR LR
comp=Z,740nm,12.2s
XLT LR LR
comp=Z,2μm,19.4s
**QIS Mount Isa 34.10 157 P P 04 40 12.5 +0.7**
**MTSU Mount Surprise 34.11 148 P P 04 40 15.5 +3.6**
**BNX BinXian 34.56 2 ⇓P P 04 40 16.0 +0.5**
BNX S **S 04 45 43.8 +1.0**
BNX pmax pmax
comp=Z,19nm,1.2s
BNX pmax pmax
comp=Z,360nm,8.2s
BNX LR LR
comp=Z,1μm,16.9s
BNX LR LR
comp=Z,1μm,16.7s
BNX LR LR
comp=Z,2μm,17.1s
**ASAR Alice Springs 35.35 168 P P 04 40 22.1 -0.4**
**ASAR Alice Springs 35.35 168 P P 04 40 21.2 -1.3**
comp=Z,6.9nm,0.4s,baz=357,slow=7.2,SNR=36
ASAR PcP **PcP 04 42 52.4 -0.2**
comp=Z,3.0nm,0.7s,baz=0.0,slow=3.7,SNR=4.3
ASAR ScP **ScP 04 46 35.9 -0.8**
comp=Z,3.3nm,0.8s,baz=349,slow=3.3,SNR=10
ASAR LR LR 04 57 24.5
comp=Z,480nm,19.7s,baz=343,slow=41
comp=Z,6.9nm,0.4s
**ASAR Alice Springs 35.35 168 P P 04 40 22.1 -0.4**
**AS01 Alice Springs 35.35 168 P P 04 40 24.1 +1.5**
**ASAJ Asahikawa 35.85 20 LR LR 04 56 11.5**
comp=Z,924nm,18.8s,baz=212,slow=38
**WRKA Warakurna 35.95 177 P P 04 40 29.0 +1.3**
**TV1H Townsville Har 36.36 146 P P 04 40 35.4 +4.2**
**GTA Gaotai 36.67 325 P P 04 40 34.3 +0.4**
GTA pP sP 04 40 44.1 +0.9
GTA PP **PP 04 42 04.8 +7.2**
GTA PcP **PcP 04 42 56.8 +0.4**
GTA S **S 04 46 17.0 +1.4**
GTA sS ScP 04 46 35.9 -5.5
GTA ScP ScP 04 46 42.8 +1.4
GTA pmax pmax
comp=Z,74nm,1.4s
GTA pmax pmax
comp=Z,550nm,8.0s
GTA LR LR
comp=Z,1μm,18.9s
GTA LR LR
comp=Z,2μm,17.5s
GTA LR LR
comp=Z,2μm,17.8s
**CTA Charters Tower 36.74 147 LR LR 04 58 02.4**
comp=Z,105nm,18.5s,baz=326,slow=40
**CTAO Charters Tower 36.74 147 P P 04 40 39.4 +4.9**
**CTAO Charters Tower 36.74 147 P P 04 40 35.0 +0.5**
**CTAO Charters Tower 36.74 147 P P 04 40 35.0 +0.5**
CTAO pmax pmax
comp=Z,28nm,1.1s
**LSA Lhasa 37.48 305 P P 04 40 41.4 +0.1**
**LSA Lhasa 37.48 305 IAmb IAmb 04 40 42.3**
comp=Z,83nm,1.4s
**GOMU GeErMu 37.79 317 P P 04 40 43.8 +0.1**
GOMU pmax pmax
comp=Z,25nm,1.5s
GOMU LR LR
comp=Z,4μm,15.1s
GOMU LR LR
comp=Z,4μm,15.8s
GOMU LR LR
comp=Z,8μm,16.1s
**MEEK Meekatharra 38.20 191 P P 04 40 46.0 -0.7**
**KLR Kul'dur 38.32 6 LR LR 04 56 52.0**
comp=Z,755nm,20.2s,baz=188,slow=37
**KLR Kul'dur 38.32 6*c i*P P 04 40 47.9 +0.4**
KLR pmax pmax
comp=Z,23nm,1.2s
**YSS Yuzh-Sakhalins 38.42 18 P P 04 40 52.5 +4.1**
**YSS Yuzh-Sakhalins 38.42 18 P P 04 40 48.5 +0.1**
YSS IAmb IAmb 04 41 09.2
comp=Z,44nm,1.1s
**YSS Yuzh-Sakhalins 38.42 18 *e*P P 04 40 49.7 +1.3**
YSS *e* 04 42 23.5
YSS *e*S **S 04 46 40.2 -1.5**
YSS pmax pmax
comp=Z,30nm,1.0s
YSS pmax pmax
comp=Z,200nm,2.8s
YSS MLR MLR
comp=Z,600nm,18.0s
YSS MLR MLR
comp=N,600nm,17.0s
**HIA Hailar 38.45 353 P P 04 40 50.1 +1.4**
**HEH HeiHe 39.08 1 *e*P P 04 40 54.3 +0.5**
HEH PcP **PcP 04 43 03.6 +0.2**
HEH S **S 04 46 51.5 0.0**
HEH pmax pmax
comp=N,21nm,1.3s
HEH pmax pmax
comp=N,500nm,5.7s
HEH LR LR
comp=N,1μm,18.0s
HEH LR LR
comp=N,1μm,19.0s
HEH LR LR
comp=N,2μm,19.6s
**HNR Honiara 39.29 120 LR LR 04 55 16.1**
comp=N,13μm,21.6s,baz=308,slow=33
**OOD Oodnadatta 39.72 167 P P 04 41 01.4 +1.9**
**H11S3 WAKE ISLAND Hy 39.80 74 T T 05 23 52.0**
baz=265,slow=78
**H11S1 WAKE ISLAND Hy 39.81 74 T T 05 23 57.7**
baz=265,slow=78
**H11S2 WAKE ISLAND Hy 39.82 74 T T 05 23 53.3**
baz=265,slow=78
**ULN Ulaanbaatar 40.04 340 P P 04 41 02.1 0.0**
ULN lAmb lAmb 04 41 03.9
comp=Z,56nm,1.2s
**ULN Ulaanbaatar 40.04 340*c i*P P 04 41 02.9 +0.8**
ULN pmax pmax
comp=Z,94nm,2.0s
**H11N1 WAKE ISLAND Hy 40.11 73 T T 05 24 18.2**
baz=265,slow=75
**H11N2 WAKE ISLAND Hy 40.12 73 T T 05 24 32.1**
baz=265,slow=75
**H11N3 WAKE ISLAND Hy 40.13 73 T T 05 24 19.6**
baz=265,slow=75
**SONM Songino Array 40.24 339 P P 04 41 03.6 -0.1**
SONM lAmb lAmb 04 41 06.0
comp=Z,58nm,1.2s
**SONM Songino Array 40.24 339 P P 04 41 04.2 +0.4**
comp=Z,27nm,1.0s,baz=160,slow=9.0,SNR=97
SONM PcP **PcP 04 43 07.3 0.0**
comp=Z,5.0nm,0.7s,baz=168,slow=2.2,SNR=4.9
SONM ScP **ScP 04 46 55.4 +0.5**
comp=Z,0.4nm,0.4s,baz=176,slow=3.2,SNR=5.0
SONM LR LR 04 59 36.9
comp=Z,1μm,18.4s,baz=152,slow=39
comp=Z,27nm,1.0s
**GRNR Gornyy 40.47 10 *e*P P 04 41 00.5 -4.9**
GRNR MLR MLR
comp=E,530nm,15.0s
GRNR MLR MLR
comp=N,500nm,16.0s
GRNR MLR MLR
comp=Z,690nm,16.0s
**MORW Morawa 41.09 194 P P 04 41 11.0 +0.2**
**MORW Morawa 41.09 194 P P 04 41 09.6 -1.2**
MORW lAmb lAmb 04 41 15.2
comp=Z,41nm,1.1s
**INKA Innaminka 41.09 160 P P 04 41 14.2 +3.4**
**QLP Quilpie 41.34 155 P P 04 41 14.7 +1.8**
**FORT Forrest 41.65 178 P P 04 41 17.2 +1.9**
**FORT Forrest 41.65 178 P P 04 41 15.2 -0.1**
FORT lAmb lAmb 04 41 18.3
comp=Z,46nm,0.8s
**MULG Mulgathing 41.81 170 P P 04 41 20.2 +3.5**
**CIT Chita 42.10 348 *e*P P 04 41 20.0 +1.1**
CIT *e* 04 41 29.4
CIT *e* 04 43 14.2
CIT pmax pmax
comp=Z,168nm,2.5s
**KMBL Kambalda 42.40 185 P P 04 41 21.7 +0.2**
**BLDU Ballidu 42.43 192 P P 04 41 22.1 +0.4**
**ZEA Zeya 42.56 1 *e*P P 04 41 23.3 +0.8**
ZEA *e* 04 51 15.1
ZEA pmax pmax
comp=Z,10.0nm,1.2s
ZEA MLR MLR
comp=N,500nm,15.0s
ZEA MLR MLR
comp=Z,600nm,14.0s
**LCRK Leigh Creek 42.88 165 P P 04 41 28.5 +3.1**
**KLBR Kellerberrin 43.18 191 P P 04 41 27.1 -0.7**
**ZAK Zakamensk 43.48 339 *e*P P 04 41 29.4 -0.8**
ZAK pmax pmax
comp=Z,19nm,1.7s
**EIDS Eidsvold 43.61 146 P P 04 41 34.3 +2.9**
**EIDS Eidsvold 43.61 146 P P 04 41 32.2 +0.8**
**MUN Mundaring 43.85 192 P P 04 41 33.6 +0.4**
**NWAO Narrogin (SRO) 44.58 191 P P 04 41 38.4 -0.6**
**NWAO Narrogin (SRO) 44.58 191 P P 04 41 38.0 -1.0**
**NWAO Narrogin (SRO) 44.58 191 P P 04 41 38.0 -1.0**
NWAO pmax pmax
comp=Z,114nm,1.0s
**BBOO Buckleboo 44.65 168 P P 04 41 42.7 +3.1**
**BBOO Buckleboo 44.65 168 lAmb lAmb 04 41 42.3**
comp=Z,30nm,0.8s
**IRK Irkutsk 44.72 341 *e*P P 04 41 38.8 -1.2**
IRK pmax pmax
comp=Z,130nm,2.2s
**PALK Pallekele 45.01 269 LR LR 05 01 38.2**
comp=Z,687nm,19.2s,baz=194,slow=38
**WHYH Whyalla 45.19 166 P P 04 41 46.0 +2.2**
**STKA Stephens Creek 45.19 161 P P 04 41 47.4 +3.5**
**STKA Stephens Creek 45.19 161 P P 04 41 43.5 -0.4**
comp=Z,25nm,0.8s,baz=351,slow=8.3,SNR=24
STKA LR LR 05 03 16.8
comp=Z,413nm,21.4s,baz=339,slow=40
comp=Z,25nm,0.8s
**STKA Stephens Creek 45.19 161‖ *e*P P 04 41 44.4 +0.5**
**MOY Mondy 45.37 338 *e*P P 04 41 46.0 +0.8**
MOY pmax pmax
comp=Z,148nm,2.3s
**AULRC Lightning Ridg 45.43 153 P P 04 41 49.8 +3.9**
**HTT Hallett 45.89 165 P P 04 41 51.7 +2.2**
**KNGR Kungurtug, Tuv 45.89 335*d i*P P 04 41 50.9 +1.5**
KNGR pmax pmax
comp=Z,65nm,1.5s
**RKGY Rocky Gully 46.26 191 P P 04 41 53.9 +1.6**
**CMSA Cobar Meteorol 46.32 157 P P 04 41 55.1 +2.3**
**AUALB St Joseph's Co 46.48 189 P P 04 41 54.8 +0.8**
**SKR Severo-Kuril's 46.51 26 *e*P P 04 41 44.9 -9.2**
SKR *e*SSS SSS 04 51 46.5
SKR pmax pmax
comp=Z,300nm,4.6s
SKR MLR MLR
comp=Z,700nm,18.0s
**WMQ Urumqi 46.53 322 ⇑P P 04 41 54.8 +0.3**
WMQ PcP **PcP 04 43 29.6 +1.0**
WMQ ScP **ScP 04 47 20.6 +0.2**
WMQ S **S 04 48 43.3 +1.9**
WMQ ScS **ScS 04 51 47.3 -0.5**
WMQ pmax pmax
comp=Z,42nm,1.9s
WMQ pmax pmax
comp=Z,260nm,3.8s
WMQ LR LR
comp=Z,2μm,16.7s
WMQ LR LR
comp=Z,2μm,14.3s
WMQ LR LR
comp=Z,1μm,15.9s
**BOD Bodaibo 47.57 351 *e*P P 04 42 02.5 +0.3**
BOD pmax pmax
comp=Z,52nm,1.6s
**ARMA Armidale 47.98 150 P P 04 42 09.4 +3.5**
**ARMA Armidale 47.98 150 P P 04 42 06.3 +0.4**
ARMA lAmb lAmb 04 42 16.6
comp=Z,30nm,1.3s
**AUDCS Dubbo College 48.12 154 P P 04 42 10.1 +3.2**
**PETK Petropavlovsk- 48.95 25 P P 04 42 13.6 +0.5**
**PETK Petropavlovsk- 48.95 25 P P 04 42 13.0 -0.1**
comp=Z,4.3nm,0.7s,baz=175,slow=3.6,SNR=9.5
PETK PcP **PcP 04 43 37.6 +0.7**
comp=Z,3.5nm,0.8s,baz=190,slow=7.2,SNR=1.7
PETK LR LR 05 02 43.7
comp=Z,806nm,19.8s,baz=220,slow=36
comp=Z,4.3nm,0.7s
**PETK Petropavlovsk- 48.95 25 P P 04 42 13.6 +0.5**
**PET Petropavlovsk 49.29 25 *e*P P 04 42 15.3 -0.3**
PET *e*S **S 04 49 20.4 +0.4**
PET *e*SS **SS 04 52 55.1 +3.4**
PET pmax pmax
comp=Z,59nm,1.0s
PET pmax pmax
comp=Z,100nm,11.8s
PET MLR MLR
comp=Z,600nm,14.0s
PET MLR MLR
comp=Z,500nm,18.0s
**YNG Young 49.82 156 P P 04 42 22.5 +2.6**
**ARPS Mount Arapiles 49.82 164 P P 04 42 20.9 +1.1**
**DGZ Jazzator, Alta 50.03 328*c i*P P 04 42 21.8 +0.2**
DGZ pmax pmax
comp=Z,93nm,1.6s
**ZSN Zaisan 50.16 324 *e*P P 04 42 21.8 -0.6**
comp=Z,17nm,0.7s,baz=324
**ZSN Zaisan 50.16 324 *e*P P 04 42 21.8 -0.6**
ZSN pmax pmax
comp=Z,17nm,0.7s
**YAK Yakutsk 50.94 2 LR LR 05 05 55.8**
comp=Z,634nm,18.6s,baz=173,slow=38
**YAK Yakutsk 50.94 2 *e*P P 04 42 28.3 +0.4**
YAK *e**PP **pwP 04 42 39.8 -4.1**

YAK *e* 04 43 44.2
YAK *eS* **S** **04 49 42.7 0.0**
YAK *e**SS sS 04 50 02.6 +10
YAK *e* 04 52 09.8
YAK *eSS* **SS** **04 53 15.2 -2.5**
YAK pmax pmax
comp=Z,31nm,0.8s
YAK pmax pmax
comp=N,14nm,0.9s
YAK pmax pmax
comp=E,3.0nm,0.9s
YAK smax smax
comp=N,135nm,3.4s
YAK smax smax
comp=E,86nm,3.0s
YAK MLR MLR
comp=Z,901nm,22.0s
YAK MLR MLR
comp=N,658nm,19.0s
**CAN Canberra 50.95 156** P **P** **04 42 31.0 +2.5**
**CAN Canberra 50.95 156** P **P** **04 42 29.9 +1.4**
**CAN Canberra 50.95 156** P **P** **04 42 29.9 +1.4**
CAN pmax pmax
comp=Z,120nm,1.5s
**CNB Canberra Magne 51.09 156** P **P** **04 42 31.8 +2.2**
**BRAT Ballarat 51.16 162** P **P** **04 42 32.4 +2.5**
**LIFNC LIFOU 51.31 128** P **P** **04 42 31.4 +0.1**
**MK31 Makanchi Array 51.33 322** IAmb IAmb 04 42 32.7
comp=Z,22nm,0.8s
**MK31 Makanchi Array 51.33 322** *c iP* **P** **04 42 31.0 -0.2**
**MKAR Makanchi Array 51.33 322** P **P** **04 42 30.9 -0.3**
**MKAR Makanchi Array 51.33 322** P **P** **04 42 31.1 -0.1**
comp=Z,26nm,0.8s,baz=120,slow=7.7,SNR=154
MKAR ScP **ScP** **04 47 39.5 -1.2**
comp=Z,4.3nm,1.0s,baz=98,slow=5.2,SNR=8.2
MKAR LR LR 05 04 34.4
comp=Z,1µm,19.3s,baz=137,slow=36
comp=Z,26nm,0.8s
**NOUC Port Laguerre 51.35 130** P **P** **04 42 35.1 +3.5**
**DZM Mont Dzumac 51.44 130** P **P** **04 42 35.4 +3.0**
**DZM Mont Dzumac 51.44 130** *eP* **P** **04 42 31.0 -1.4**
comp=Z,79nm,1.2s
**DZM Mont Dzumac 51.44 130** *ePP* **PP** **04 44 23.0 -6.9**
comp=Z,89nm,23.1s
DZM *eS* **S** **04 49 46.8 -4.1**
comp=Z,279nm,27.9s
DZM *eSS* **SS** **04 53 28.5 +1.2**
comp=Z,274nm,26.3s
DZM *e*LQ LQ 04 55 16.5
comp=Z,780nm,31.6s
DZM *e*LR LR 04 57 23.3
comp=Z,924nm,27.9s
**DZM Mont Dzumac 51.44 130** P **P** **04 42 33.0 +0.5**
DZM IAmb IAmb 04 42 44.9
comp=Z,36nm,1.2s
**DZM Mont Dzumac 51.44 130** LR LR 05 05 51.7
comp=Z,350nm,18.2s,baz=332,slow=38
**SHLS Shalkode 51.49 317** *eP* **P** **04 42 29.6 -3.0**
comp=Z,25nm,0.9s,baz=317
**SHLS Shalkode 51.49 317** *eP* **P** **04 42 29.6 -3.0**
SHLS pmax pmax
comp=Z,25nm,0.9s
**MAKZ Makanchi 51.53 322** P **P** **04 42 32.5 -0.2**
MAKZ IAmb IAmb 04 42 33.6
comp=Z,72nm,1.4s
**MAKZ Makanchi 51.53 322** P **P** **04 42 32.5 -0.2**
MAKZ pmax pmax
comp=Z,72nm,1.4s
**TOO Toolangi 51.67 160** P **P** **04 42 35.5 +1.7**
**TOO Toolangi 51.67 160** IAmb IAmb 04 42 40.4
comp=Z,38nm,1.2s
**YATNC Mamie plateau, 51.77 130** P **P** **04 42 39.2 +4.4**
**UZB Uzynbulak 51.78 317** *eP* **P** **04 42 33.9 -0.9**
comp=Z,22nm,0.9s,baz=317
**UZB Uzynbulak 51.78 317** *eP* **P** **04 42 33.9 -0.9**
UZB pmax pmax
comp=Z,22nm,0.9s
**MA2 Magadan 51.80 16** LR LR 05 03 53.7
comp=Z,373nm,20.9s,baz=182,slow=35
**TARG Taragay, Kyrgy 52.07 315** P **P** **04 42 36.0 -1.3**
TARG IAmb IAmb 04 42 39.0
comp=Z,63nm,1.6s
**TARG Taragay, Kyrgy 52.07 315** P **P** **04 42 36.0 -1.3**
TARG pmax pmax
comp=Z,63nm,1.6s
**KPKS Kokpek 52.13 317** *eP* **P** **04 42 36.4 -1.0**
comp=Z,24nm,1.0s,baz=317
**KPKS Kokpek 52.13 317** *eP* **P** **04 42 36.4 -1.0**
KPKS pmax pmax
comp=Z,23nm,1.0s
**SATY Saty 52.16 317** *eP* **P** **04 42 36.8 -0.9**
comp=Z,29nm,1.1s,baz=317
**SATY Saty 52.16 317** *eP* **P** **04 42 36.7 -0.9**
SATY pmax pmax
comp=Z,29nm,1.1s
**ZHN Zhinishke 52.18 317** *eP* **P** **04 42 36.8 -1.0**
comp=Z,17nm,0.8s,baz=317
**ZHN Zhinishke 52.18 317** *eP* **P** **04 42 36.7 -1.0**
ZHN pmax pmax
comp=Z,17nm,0.8s
**PINNC Pines Island, 52.51 130** P **P** **04 42 40.2 0.0**
**MILA Mila 52.52 157** P **P** **04 42 42.7 +2.5**
**KSH Kashi 52.62 312** P **P** **04 42 42.0 +0.9**
KSH pP pwP 04 42 53.4 +0.6
KSH pmax pmax
comp=Z,33nm,1.5s
KSH pmax pmax
comp=Z,390nm,6.9s
KSH LR LR
comp=Z,850nm,15.1s
KSH LR LR
comp=Z,1µm,17.9s
KSH LR LR
comp=Z,2µm,20.6s
**TDK Taldyqorghan 52.94 319** *eP* **P** **04 42 42.4 -0.8**
baz=319
**TDK Taldyqorghan 52.94 319** *eP* **P** **04 42 42.4 -0.8**
**ARXS Arharly 53.00 318** *eP* **P** **04 42 42.1 -1.7**
**MDOK Medeo 53.12 316** *eP* **P** **04 42 43.8 -1.0**
baz=316
**MDOK Medeo 53.12 316** *eP* **P** **04 42 43.7 -1.0**
**TNSS Tian-Shan 53.14 316** *eP* **P** **04 42 43.8 -1.4**
baz=316
**TNSS Tian-Shan 53.14 316** *eP* **P** **04 42 43.8 -1.4**
**NIL Nilore 53.20 304** P **P** **04 42 43.7 -1.7**
**NIL Nilore 53.20 304** P **P** **04 42 43.7 -1.7**
NIL pmax pmax
comp=Z,76nm,0.9s
**AAA Alma-Ata 53.23 316** *eP* **P** **04 42 44.6 -0.9**
comp=Z,15nm,0.4s,baz=316
**AAA Alma-Ata 53.23 316** *eP* **P** **04 42 44.5 -0.9**
AAA pmax pmax
comp=Z,15nm,0.4s
**NRN Naryn 53.23 314** IAmb IAmb 04 42 46.8
comp=Z,32nm,1.0s
**ULHL Ulahol 53.34 315** P **P** **04 42 46.4 -0.1**
SNR=14
**CHKK Chushkaly 53.42 317** *eP* **P** **04 42 45.8 -1.0**
baz=317
**CHKK Chushkaly 53.42 317** *eP* **P** **04 42 45.8 -1.0**
**BOOM Boomskoye usch 53.63 315** IAmb IAmb 04 42 49.8
comp=Z,43nm,1.4s
**KUU Kurty 53.87 317** *eP* **P** **04 42 49.2 -0.9**
baz=317
**KUU Kurty 53.87 317** *eP* **P** **04 42 49.1 -0.9**
**ZAA0 Zalesovo Array 53.88 331** P **P** **04 42 49.3 -0.6**
**ZALV Zalesovo Beam 53.88 331** P **P** **04 42 49.5 -0.4**
comp=Z,30nm,0.6s,baz=120,slow=7.0,SNR=118
ZALV LR LR 05 06 50.4
comp=Z,731nm,19.1s,baz=128,slow=37
comp=Z,30nm,0.6s
**TKM2 Tokmak 2 54.02 315** P **P** **04 42 51.2 -0.2**
SNR=19
**TKM2 Tokmak 2 54.02 315** P **P** **04 42 50.3 -1.2**
**SEM Semipalatinsk 54.29 326** *eP* **P** **04 42 52.7 -0.6**
comp=Z,32nm,1.1s,baz=326
**SEM Semipalatinsk 54.29 326** *eP* **P** **04 42 52.7 -0.6**
SEM pmax pmax
comp=Z,33nm,1.1s
**KBK Karagaybulak 54.38 315** P **P** **04 42 54.4 +0.4**
SNR=9.1
**UCH Uchtor 54.54 314** P **P** **04 42 56.5 +0.9**
SNR=7.8
**CHMS Chumysh 54.63 315** P **P** **04 42 55.7 0.0**
SNR=12
**AAK Ala-Archa 54.69 315** P **P** **04 42 55.4 -0.9**
**AAK Ala-Archa 54.69 315** *c* LR LR 05 09 08.8
comp=Z,2µm,18.0s,baz=89,slow=39
**AAK Ala-Arcba 54.69 315** *c iP* **P** **04 42 55.8 -0.5**
AAK pmax pmax
comp=Z,41nm,1.7s
**SGDS Sogindy 54.87 316** *eP* **P** **04 42 56.7 -0.7**
baz=316
**SGDS Sogindy 54.87 316** *eP* **P** **04 42 56.6 -0.8**
**USP Ospenovka 54.90 316** P **P** **04 42 57.2 -0.4**
SNR=24
**SEY Seymchan 55.07 14** LR LR 05 05 01.0
comp=Z,378nm,21.3s,baz=158,slow=34
**SEY Seymchan 55.07 14** *ceP* **P** **04 42 59.8 +1.4**
SEY pmax pmax
comp=Z,35nm,1.9s
**AML Almayashu 55.09 314** P **P** **04 42 59.6 +0.2**
SNR=15
**EKS2 Erkin-Say 55.20 315** P **P** **04 42 59.9 0.0**
SNR=25
**KURK Kurchatov 55.35 325** P **P** **04 43 00.3 -0.3**
**KURK Kurchatov 55.35 325** *c iP* **P** **04 43 00.4 -0.3**
KURK pmax pmax
comp=Z,207nm,1.3s
**KURBB Kurchatov Arra 55.36 325** P **P** **04 43 00.6 -0.1**
comp=Z,21nm,0.6s,baz=122,slow=7.3,SNR=162
KURBB LR LR 05 07 03.5
comp=Z,617nm,19.6s,baz=172,slow=36
comp=Z,21nm,0.6s
**KURBB Kurchatov Arra 55.36 325** P **P** **04 43 00.0 -0.7**
**GLAD Gladstone 55.59 160** P **P** **04 43 04.8 +2.4**
**BTLS Baital 55.81 317⇑** *iP* **P** **04 43 03.5 -0.6**
comp=Z,13nm,0.7s,baz=318
**BTLS Baital 55.81 317** *c iP* **P** **04 43 03.5 -0.6**
BTLS pmax pmax
comp=Z,13nm,0.7s
**FUNA Funafuti 56.24 108** P **P** **04 43 07.2 -0.3**
**DGAR Diego Garcia 56.51 253** P **P** **04 43 07.9 -1.7**
**DGAR Diego Garcia 56.51 253** P **P** **04 43 07.9 -1.7**
DGAR pmax pmax
comp=Z,837nm,1.6s
**SHEM Shemya Is, Ala 56.53 33** LR LR 05 03 23.0
comp=Z,342nm,21.4s,baz=230,slow=32
**KBL Kabul 56.80 304** P **P** **04 43 09.6 -2.0**
KBL IAmb IAmb 04 43 11.3
comp=Z,25nm,0.7s
**KBL Kabul 56.80 304** P **P** **04 43 09.6 -2.0**
KBL pmax pmax
comp=Z,25nm,0.7s
**TAU Tasmania Unive 57.10 162** P **P** **04 43 13.0 -0.2**
**TAU Tasmania Unive 57.10 162** P **P** **04 43 13.0 -0.2**
TAU pmax pmax
comp=Z,107nm,1.6s
**KK31 Karatay Array 57.62 314** P **P** **04 43 15.6 -1.4**
**KK31 Karatay Array 57.62 314** *eP* **P** **04 43 16.0 -1.0**
**KKAR Karatay Array 57.62 314** P **P** **04 43 15.9 -1.1**
**KKAR Karatay Array 57.62 314** IAmb IAmb 04 43 17.6
comp=Z,43nm,0.8s
**KKAR Karatay Array 57.62 314** P **P** **04 43 15.9 -1.1**
**SIMJ Simiganj 57.62 309** P **P** **04 43 15.7 -1.6**
SIMJ IAmb IAmb 04 43 17.2
comp=Z,25nm,0.9s
**OTUK Ortayu 58.05 321** P **P** **04 43 18.9 -1.0**
**BRLS Boroldaу 58.07 314⇑** *iP* **P** **04 43 19.8 -0.5**
comp=Z,12nm,0.6s,baz=314
**BRLS Boroldaу 58.07 314** *c iP* **P** **04 43 19.7 -0.5**
BRLS pmax pmax
comp=Z,12nm,0.6s
**MSVF Nonsavu 58.69 119** LR LR 05 05 08.8
comp=Z,754nm,21.9s,baz=301,slow=32
**TIXI Tiksi 60.56 1** P **P** **04 43 36.3 -0.5**
TIXI IAmb IAmb 04 43 56.5
comp=Z,18nm,0.8s
**TIXI Tiksi 60.56 1** *c iP* **P** **04 43 36.1 -0.7**
TIXI pmax pmax
comp=Z,40nm,1.7s
**BVAR Borovoye Array 60.95 325** P **P** **04 43 39.5 -0.3**
comp=Z,27nm,0.9s,baz=111,slow=7.9,SNR=85
comp=Z,27nm,0.9s
**BRVK Borovoye 61.02 325** P **P** **04 43 40.1 -0.2**
**BRVK Borovoye 61.02 325** *c iP* **P** **04 43 39.7 -0.6**
BRVK pmax pmax
comp=Z,106nm,1.3s
**BILL Bilibino 62.66 16** *i* P **P** **04 43 51.4 +0.3**
BILL *i* 04 44 27.2
BILL *i* 04 46 09.4
BILL pmax pmax
comp=Z,14nm,1.3s
**WSAR Wadi Sarin 65.17 291** LR LR 05 16 35.0
comp=Z,269nm,18.2s,baz=102,slow=40
**AB31 Akbulak array 66.20 319** *i* P **P** **04 44 13.3 -1.3**
**ABKAR Akbulak array 66.20 319** P **P** **04 44 13.7 -0.9**
**ABKAR Akbulak array 66.20 319** P **P** **04 44 14.4 -0.2**
**SPIA Saint Paul Isl 66.56 32** P **P** **04 44 16.4 -0.3**
baz=254
**SVE Sverdlovsk 67.48 327** *d iP* **P** **04 44 22.3 -0.3**
SVE *eS* **S** **04 53 16.4 -0.6**
SVE pmax pmax
comp=Z,163nm,1.5s
SVE MLR MLR
comp=Z,714nm,21.0s
**AKTO Aktyubinsk 67.64 320** LR LR 05 16 05.0
comp=Z,1µm,20.3s,baz=91,slow=38
**UNV Unalaska Valle 67.80 36** P **P** **04 44 25.0 +0.4**
baz=258
**LBZ Lake Benmore 68.09 148** P **P** **04 44 27.6 +1.0**
**RPZ Rata Peaks 68.11 147** P **P** **04 44 29.5 +2.8**
**RPZ Rata Peaks 68.11 147** LR LR 05 16 16.5
comp=Z,399nm,18.9s,baz=308,slow=38
**URZ Urewera 68.33 139** LR LR 05 17 05.2
comp=Z,350nm,18.7s,baz=33,slow=38
**BKZ Black Stump Fm 68.46 140** P **P** **04 44 32.8 +3.8**
**BKZ Black Stump Fm 68.46 140** P **P** **04 44 30.4 +1.3**
**ARU Arti 68.50 326** P **P** **04 44 27.6 -1.4**
**ARU Arti 68.50 326** LR LR 05 14 40.9
comp=Z,512nm,18.7s,baz=109,slow=36
**ARU Arti 68.50 326** *c iP* **P** **04 44 27.9 -1.1**
ARU 04 44 56.5
ARU 04 46 56.4
ARU S **S** **04 53 26.8 -2.4**
ARU SS **SS** **04 57 51.2 -2.0**
ARU pmax pmax
comp=Z,145nm,1.8s
ARU MLR MLR
comp=Z,525nm,19.0s
**ARU Arti 68.50 326** P **P** **04 44 28.2 -0.8**
comp=Z,83nm,1.6s,comp=Z,1µm
**K13K Kusilvak Mount 70.54 28** P **P** **04 44 40.3 -1.2**
baz=257
**F14K Arctic Creek 70.72 24** P **P** **04 44 43.1 +0.6**
baz=254
**ANM Nome 70.87 25** P **P** **04 44 44.2 +0.8**
baz=255
**L14K Kuka Creek 71.33 29** P **P** **04 44 47.1 +0.9**
L14K IAmb IAmb 04 44 53.8
comp=Z,27nm,1.1s
**L14K Kuka Creek 71.33 29** P **P** **04 44 47.4 +1.1**
baz=259
**F15K North Star Dit 71.46 24** P **P** **04 44 47.6 +0.6**
baz=256
**G15K Niukluk 71.53 25** P **P** **04 44 48.2 +0.8**
baz=256
**N14K Kuskokwak Cree 71.56 30** P **P** **04 44 48.6 +1.0**
baz=260
**M14K Bethel 71.57 29** P **P** **04 44 48.1 +0.4**
baz=260
**O14K Tigyukauivet M 71.65 31** P **P** **04 44 49.2 +1.0**
baz=261
**C16K Lisburne Hills 71.88 21** P **P** **04 44 50.1 +0.7**
baz=254
**L15K Ungalak Mounta 71.96 29** P **P** **04 44 50.1 0.0**
baz=260
**K15K Wolf Creek Mou 72.05 28** P **P** **04 44 51.2 +0.6**
baz=260
**S14K Fog Glacier 72.14 34** P **P** **04 44 51.9 +0.6**
baz=263
**M15K Kasigluk River 72.17 30** P **P** **04 44 52.4 +1.1**
baz=261
**H16K Elim 72.20 25** P **P** **04 44 51.9 +0.4**
baz=258
**G16K Koyuk River 72.31 25** P **P** **04 44 53.2 +1.1**
baz=258
**O15K Ungalikthiuk R 72.37 31** P **P** **04 44 53.5 +0.9**
baz=262
**N15K Kwethluk River 72.38 30** P **P** **04 44 53.0 +0.3**
N15K IAmb IAmb 04 45 06.3
comp=Z,24nm,1.1s
**N15K Kwethluk River 72.38 30** P **P** **04 44 53.8 +1.1**
baz=262
**D17K Noatak River 72.55 22** P **P** **04 44 54.5 +1.0**
baz=256
**J16K Anvik River 72.65 27** P **P** **04 44 55.6 +1.4**
baz=260
**C17K DeLong Mountai 72.70 21** P **P** **04 44 55.6 +1.1**
baz=256
**I17K Unalakleet 72.72 26** P **P** **04 44 55.6 +1.1**
baz=260
**E17K Hotham Inlet 72.88 23** P **P** **04 44 56.4 +1.0**
baz=258
**L16K Owhat River 72.91 29** P **P** **04 44 56.6 +0.8**
baz=262
**F17K Baldwin Pennin 72.97 24** P **P** **04 44 57.2 +1.2**
baz=259
**G17K Kiwalik Mounta 73.03 25** P **P** **04 44 57.5 +1.1**
baz=259
**M16K Timber Creek 73.06 29** P **P** **04 44 57.3 +0.7**
baz=262
**N16K Nishlik Lake 73.08 30** P **P** **04 44 57.8 +1.0**
baz=263
**H17K Granite Mounta 73.24 25** P **P** **04 44 58.7 +1.0**
baz=260
**P16K Nushagak River 73.30 32** P **P** **04 44 59.1 +1.1**
baz=264
**O16K Kokwok River B 73.31 31** IAmb IAmb 04 45 11.7
comp=Z,22nm,1.1s
**O16K Kokwok River B 73.31 31** P **P** **04 44 58.9 +0.8**
baz=264
**J17K VABM Dome 73.35 27** IAmb IAmb 04 45 11.6
comp=Z,28nm,1.4s
**J17K VABM Dome 73.35 27** P **P** **04 44 59.7 +1.4**
baz=262
**B18K Kokolik River 73.40 21** P **P** **04 44 59.5 +1.1**
baz=257
**E18K Tukpahlearik C 73.42 23** IAmb IAmb 04 45 12.6
comp=Z,21nm,1.2s
**E18K Tukpahlearik C 73.42 23** P **P** **04 44 59.5 +0.8**
baz=259
**C18K Utukok River 73.45 21** P **P** **04 44 59.9 +1.0**
baz=258
**L17K Donlin 73.52 28** P **P** **04 45 00.3 +0.9**
baz=263
**K17K Iditarod 73.60 28** P **P** **04 45 00.7 +0.9**
baz=262
**F18K Selawik 73.63 24** P **P** **04 45 00.6 +0.8**
baz=260
**KIRV Kirov 73.72 328** LR LR 05 18 06.8
comp=Z,588nm,20.5s,baz=104,slow=36
**KIRV Kirov 73.72 328** *c iP* **P** **04 44 59.7 -0.8**
**A19K Wainwright 73.83 20** P **P** **04 45 01.8 +0.9**
baz=258
**O17K Koliganek Bris 73.83 31** P **P** **04 45 02.3 +1.1**
baz=264
**M17K Holitna River 73.84 29** P **P** **04 45 02.7 +1.5**
baz=264
**N17K Nushagak Hills 73.86 30** IAmb IAmb 04 45 15.7
comp=Z,26nm,1.1s
**N17K Nushagak Hills 73.86 30** P **P** **04 45 02.7 +1.3**
baz=264
**G18K Tagagawik 73.91 24** P **P** **04 45 02.2 +0.6**
baz=261
**H18K Honhosa River 73.92 25** P **P** **04 45 02.3 +0.7**
baz=262
**P17K Kvichak River 74.11 31** P **P** **04 45 03.2 +0.4**
baz=265
**C19K Lookout Ridge 74.11 21** P **P** **04 45 03.5 +0.7**
baz=259
**MAK Makhachkala 74.26 312** *eP* **P** **04 45 02.2 -1.8**
MAK *e* 04 47 50.2
MAK *ePPP* PPP 04 49 28.4
MAK *eS* **SKiKP** **04 54 32.1 +2.4**
MAK *eSS* **SS** **04 59 13.9 -8.1**
MAK *eSSS* SSS 05 02 39.4
MAK pmax pmax
comp=Z,269nm,1.0s
**L18K Granite Mounta 74.28 28** IAmb IAmb 04 45 40.6
comp=Z,41nm,1.7s
**L18K Granite Mounta 74.28 28** P **P** **04 45 05.1 +1.3**
baz=264
**CHIR Chirikof Islan 74.30 35** P **P** **04 45 04.4 +0.4**
baz=267
**BELG Belogornoye 74.32 321** LR LR 05 20 04.4
comp=Z,461nm,18.9s,baz=91,slow=38
**BELG Belogornoye 74.32 321** *c iP* **P** **04 45 02.9 -1.2**
BELG pmax pmax
comp=Z,21nm,0.9s
**Q17K Contact Creek 74.32 32** P **P** **04 45 04.4 +0.2**
baz=266
**F19K Shaleruckik Mo 74.41 23** P **P** **04 45 04.8 +0.4**
baz=262
**J18K Innoko River 74.41 27** P **P** **04 45 05.1 +0.5**
baz=264
**N18K Kilae Creek 74.51 30** IAmb IAmb 04 45 26.9
comp=Z,35nm,1.7s
**N18K Kilae Creek 74.51 30** P **P** **04 45 06.5 +1.3**
baz=265
**D19K Kuna River 74.54 22** P **P** **04 45 05.3 +0.1**
D19K IAmb IAmb 04 45 25.3
comp=Z,20nm,1.1s
**D19K Kuna River 74.54 22** P **P** **04 45 06.3 +1.1**
baz=261
**G19K Purcell Mounta 74.58 24** IAmb IAmb 04 45 25.4
comp=Z,27nm,1.5s
**G19K Purcell Mounta 74.58 24** P **P** **04 45 06.0 +0.6**
baz=262
**M18K Stony River 74.62 29** P **P** **04 45 06.9 +1.1**
baz=265
**E19K Redstone River 74.71 23** IAmb IAmb 04 45 20.1
comp=Z,40nm,1.4s
**E19K Redstone River 74.71 23** P **P** **04 45 06.8 +0.7**
baz=262,SNR=9.6
**P18K Big Mountain, 74.74 31** P **P** **04 45 06.7 +0.1**
P18K IAmb IAmb 04 45 18.9
comp=Z,22nm,1.2s
**P18K Big Mountain, 74.74 31** P **P** **04 45 06.9 +0.4**
baz=266
**H19K Roundabout Mou 74.77 25** IAmb IAmb 04 45 27.4
comp=Z,22nm,1.1s
**H19K Roundabout Mou 74.77 25** P **P** **04 45 07.5 +1.0**
baz=263
**O18K Koktuh Hills 74.79 31** IAmb IAmb 04 45 22.3
comp=Z,31nm,0.8s
**O18K Koktuh Hills 74.79 31** P **P** **04 45 07.4 +0.6**
baz=266,SNR=8.4
**J19K Poorman 74.95 27** P **P** **04 45 08.1 +0.4**
baz=264
**R18K Karluk 75.04 33** P **P** **04 45 08.3 +0.1**
baz=267
**B20K Meade River 75.11 20** P **P** **04 45 08.3 -0.1**
baz=261
**D20K Etivluk River 75.11 22** P **P** **04 45 09.3 +0.7**
baz=262
**L19K White Mountain 75.14 28** P **P** **04 45 09.5 +0.7**
baz=266
**E20K Nigu River 75.21 22** P **P** **04 45 09.7 +0.6**
baz=263
**N19K Bonanza Creek 75.21 30** IAmb IAmb 04 45 24.5
comp=Z,19nm,1.0s
**N19K Bonanza Creek 75.21 30** P **P** **04 45 10.2 +0.9**
baz=266
**F20K Avaraart Lake 75.24 23** IAmb IAmb 04 45 23.1
comp=Z,38nm,1.9s
**F20K Avaraart Lake 75.24 23** P **P** **04 45 10.0 +0.8**
baz=264
**O19K Port Alsworth 75.25 31** P **P** **04 45 10.0 +0.6**
baz=267
**M19K Big River Lodg 75.33 29** P **P** **04 45 10.6 +0.7**
baz=266
**H20K Anofleneega Mo 75.41 25** P **P** **04 45 10.8 +0.5**
baz=265,SNR=5.9
**I20K Naaghedeneel 75.52 26** P **P** **04 45 12.0 +1.2**
baz=265
**Q19K Cape Douglas, 75.53 32** P **P** **04 45 11.1 0.0**
baz=268
**K20K Telida 75.58 27** P **P** **04 45 12.4 +1.0**
baz=266
**L20K Farewell, AK 75.61 28** P **P** **04 45 11.9 +0.4**
baz=266
**J20K Nowinta River 75.61 26** IAmb IAmb 04 45 40.1
comp=Z,28nm,1.6s
**J20K Nowinta River 75.61 26** P **P** **04 45 12.5 +1.1**
baz=266
**OHAK Old Harbor 75.65 34** P **P** **04 45 11.7 -0.1**
OHAK IAmb IAmb 04 45 25.0
comp=Z,21nm,1.1s
**OHAK Old Harbor 75.65 34** P **P** **04 45 12.6 +0.8**

baz=268
**C21K Knifeblade Rid** 75.83 21 P P 04 45 13.2 +0.6
baz=264
**M20K Styx River** 75.93 29 P P 04 45 13.8 +0.4
baz=267
**B21K Ikpikpuk River** 75.94 21 P P 04 45 14.3 +1.1
baz=264
**A22K Sinclair Lake** 75.97 19 P P 04 45 14.2 +0.8
baz=263
**E21K Killik River** 76.05 22 IAmb IAmb 04 45 27.5
comp=Z,57nm,1.7s
**E21K Killik River** 76.05 22 P P 04 45 14.2 +0.3
baz=265
**KDAK Kodiak Island** 76.05 33 P P 04 45 14.8 +0.8
comp=Z,6.3nm,0.6s,baz=273,slow=5.7,SNR=17
KDAK LR LR 05 17 37.1
comp=Z,455nm,19.7s,baz=274,slow=35
comp=Z,6.3nm,0.6s
**KDAK Kodiak Island** 76.05 33 P P 04 45 14.4 +0.4
baz=269
**G21K Allakaket** 76.06 24 IAmb IAmb 04 45 27.8
comp=Z,20nm,1.1s
**G21K Allakaket** 76.06 24 P P 04 45 14.8 +0.8
baz=266,SNR=7.1
**F21K Alatna River** 76.12 23 P P 04 45 14.6 +0.2
baz=266
**Q20K Shuyak Island** 76.17 32 P P 04 45 15.5 +0.8
baz=269
**H21K Melozitna Rive** 76.29 25 IAmb IAmb 04 45 40.5
comp=Z,36nm,1.6s
**H21K Melozitna Rive** 76.29 25 P P 04 45 16.0 +0.7
baz=267
**B22K Teshekpuk Lake** 76.42 20 P P 04 45 17.0 +1.1
baz=265
**GNI Garni** 76.42 309 LR LR 05 22 42.6
comp=Z,424nm,21.8s,baz=86,slow=39
**GNI Garni** 76.42 309*c* *i*P P 04 45 16.3 -0.5
GNI pmax pmax
comp=Z,35nm,1.6s
**D22K Ayikyak River** 76.55 22 P P 04 45 18.0 +1.3
baz=266
**F22K John River** 76.65 23 P P 04 45 18.3 +0.9
baz=267
**SKT Skwentna** 76.69 29 P P 04 45 18.4 +0.8
baz=269
**E22K Anaktuvuk Pass** 76.82 22 IAmb IAmb 04 45 32.3
comp=Z,44nm,1.6s
**E22K Anaktuvuk Pass** 76.82 22 P P 04 45 19.3 +1.0
baz=267
**G22K Bettles** 76.88 24 P P 04 45 19.1 +0.5
baz=268
**H22K Ishtalitna Cre** 76.89 25 P P 04 45 19.8 +1.1
baz=268
**BPAW Bear Paw Mtn.** 76.99 27 IAmb IAmb 04 45 39.7
comp=Z,30nm,1.1s
**BPAW Bear Paw Mtn.** 76.99 27 P P 04 45 19.3 0.0
baz=269,SNR=12
**BRSE Bradley Lake S** 77.04 31 P P 04 45 20.4 +0.7
baz=270
**SUA Susitna One** 77.05 29 IAmb IAmb 04 45 33.3
comp=Z,16nm,0.9s
**SUA Susitna One** 77.05 29 P P 04 45 19.6 -0.2
baz=269
**NCK Nalchik** 77.10 312⇑ *e*P P 04 45 20.1 -0.2
NCK pmax pmax
comp=Z,6.0nm,0.6s
**MLY Manley** 77.12 26 P P 04 45 20.6 +0.5
baz=269,SNR=9.7
**RAYN Ar Rayn** 77.18 292 P P 04 45 19.3 -1.9
**RAYN Ar Rayn** 77.18 292 P P 04 45 19.3 -1.9
RAYN pmax pmax
comp=Z,13nm,0.9s
**D23K Nanushuk River** 77.28 22 IAmb IAmb 04 45 35.1
comp=Z,48nm,1.4s
**D23K Nanushuk River** 77.28 22 P P 04 45 21.8 +1.0
baz=268
**CUT Chulitna** 77.29 28 P P 04 45 21.8 +0.9
baz=270
**C23K Itkillik River** 77.34 21 P P 04 45 21.5 +0.4
baz=268
**M22K Willow** 77.35 29 P P 04 45 21.0 -0.3
M22K IAmb IAmb 04 45 52.0
comp=Z,21nm,0.9s
**M22K Willow** 77.35 29 P P 04 45 21.5 +0.2
baz=270
**COLD Coldfoot** 77.40 23 P P 04 45 22.1 +0.6
baz=269
**G23K Bananza Creek** 77.46 24 IAmb IAmb 04 45 37.1
comp=Z,40nm,1.6s
**G23K Bananza Creek** 77.46 24 P P 04 45 22.7 +0.8
baz=269,SNR=6.8
**KBZ Khabaz** 77.59 313 P P 04 45 22.0 -1.0
comp=Z,4.3nm,0.9s,baz=71,slow=4.9,SNR=13
KBZ LR LR 05 24 25.4
comp=Z,974nm,18.3s,baz=82,slow=40
comp=Z,4.3nm,0.9s
**KBZ Khabaz** 77.59 313*c* *i*P P 04 45 21.6 -1.4
KBZ pmax pmax
comp=Z,20nm,1.4s
**H23K Yukon River** 77.64 25 IAmb IAmb 04 45 38.0
comp=Z,20nm,1.2s
**H23K Yukon River** 77.64 25 P P 04 45 24.5 +1.6
baz=270
**E23K Chandalar** 77.64 23 IAmb IAmb 04 45 43.7
comp=Z,29nm,1.2s
**E23K Chandalar** 77.64 23 P P 04 45 23.6 +0.6
baz=269,SNR=7.5
**TOLK Toolik Lake Re** 77.67 22 P P 04 45 23.8 +0.8
baz=269
**SEW Seward** 77.69 31 P P 04 45 24.3 +1.1
baz=271
**I23K Minto, Yukon-K** 77.71 26 P P 04 45 24.2 +1.0
baz=270
**KIV Kislovodsk** 77.73 313 *e*P P 04 45 22.3 -1.7
KIV *e*S S 04 55 11.7 -3.0
KIV pmax pmax
comp=Z,17nm,1.1s
**SHA1 Shidzhatmaz** 77.77 313*ce*P P 04 45 22.6 -1.7
**PMR Palmer** 77.83 29 P P 04 45 24.3 +0.4
baz=271
**NEA2 Nenana** 77.83 26 P P 04 45 24.7 +0.7
baz=270
**MCK McKinley** 77.89 27 P P 04 45 24.9 +0.5
baz=271
**RND Reindeer** 77.93 27 IAmb IAmb 04 45 43.5
comp=Z,26nm,1.4s
**D24K Happy Valley** 77.95 21 P P 04 45 25.0 +0.5
baz=270
**VRH Novokhopyorsk** 77.99 320 *e*P P 04 45 23.1 -2.0
VRH pmax pmax
comp=Z,50nm,1.0s
**CASY Casey** 78.00 186 P P 04 45 24.6 -0.1
CASY IAmb IAmb 04 45 36.4
comp=Z,15nm,0.8s
**C24K Franklin Bluff** 78.00 21 P P 04 45 25.4 +0.6
baz=270
**E24K Your Creek** 78.07 22 IAmb IAmb 04 45 31.8
comp=Z,25nm,1.4s
**E24K Your Creek** 78.07 22 P P 04 45 26.2 +0.8
baz=270
**WAT1 Susitna Watana** 78.08 28 P P 04 45 25.6 +0.2
baz=271
**KNK Knik Glacier** 78.15 29 IAmb IAmb 04 45 45.3
comp=Z,26nm,1.2s
**KNK Knik Glacier** 78.15 29 P P 04 45 26.5 +0.7
baz=272
**SML Sawmill** 78.20 29 IAmb IAmb 04 45 56.0
comp=Z,18nm,1.0s
**SML Sawmill** 78.20 29 P P 04 45 26.4 +0.3
baz=272
**PWL Port Wells** 78.22 30 P P 04 45 26.4 +0.1
PWL IAmb IAmb 04 45 40.6
comp=Z,25nm,1.0s
**PWL Port Wells** 78.22 30 P P 04 45 26.4 +0.1
baz=272
**F24K Squaw Lake** 78.30 23 P P 04 45 27.0 +0.4
baz=271,SNR=6.0
**H24K Noodor Dome** 78.32 25 P P 04 45 27.1 +0.4
baz=271
**CCB Clear Creek Bu** 78.38 26 IAmb IAmb 04 45 32.9
comp=Z,32nm,1.8s
**WAT6 Susitna Watana** 78.46 28 P P 04 45 27.9 +0.2
baz=272
**G24K Hadweenzic Riv** 78.47 24 IAmb IAmb 04 45 47.9
comp=Z,36nm,1.3s
**G24K Hadweenzic Riv** 78.47 24 P P 04 45 27.7 +0.2
baz=271,SNR=8.4
**M23K Glacier View** 78.49 29 P P 04 45 28.6 +0.9
baz=272
**POKR Poker Plat Res** 78.52 26 P P 04 45 28.3 +0.4
baz=272
**DHY Denali Highway** 78.61 28 P P 04 45 28.5 0.0
baz=272
**GURO Guroymak-BITLI** 78.63 307 IAmb IAmb 04 45 31.0
comp=Z,18nm,0.7s
**SCM Sheep Creek Mo** 78.68 29 IAmb IAmb 04 45 53.2
comp=Z,24nm,1.0s
**SCM Sheep Creek Mo** 78.68 29 P P 04 45 29.1 +0.3
baz=272
**P23K Montague Islan** 78.72 31 P P 04 45 29.1 +0.2
baz=273
**HDA Harding Lake** 78.75 26 IAmb IAmb 04 45 34.7
comp=Z,48nm,2.0s
**HDA Harding Lake** 78.75 26 P P 04 45 29.8 +0.7
baz=272
**ILAR Eielson Array** 78.77 26 P P 04 45 28.8 -0.4
comp=Z,0.9nm,0.7s,baz=235,slow=4.9,SNR=12
ILAR LR LR 05 21 31.4
comp=Z,140nm,19.7s,baz=258,slow=36
comp=Z,0.9nm,0.7s
**ILAR Eielson Array** 78.77 26 P P 04 45 28.9 -0.3
**D25K Kavik River** 78.82 21 P P 04 45 30.2 +0.7
baz=272
**G25K Bearman Lake** 79.02 24 P P 04 45 31.4 +1.0
baz=272
**H25L Birch Creek** 79.15 24 P P 04 45 31.5 +0.3
baz=273,SNR=5.5
**F25K Christian Rive** 79.16 23 P P 04 45 32.1 +0.8
baz=273
**M24K Tolsona, Glenn** 79.21 29 P P 04 45 31.9 +0.2
baz=273
**ADZR Andozero** 79.21 333 *e*P P 04 45 29.0 -2.5
ADZR pmax pmax
comp=Z,66nm,1.3s
**K24K Donnelly Dome** 79.30 27 P P 04 45 32.6 +0.5
baz=273
**PRP Porcupine Dome** 79.31 25 P P 04 45 32.8 +0.5
baz=273
**KLU Klutina** 79.36 29 IAmb IAmb 04 46 09.2
comp=Z,39nm,1.8s
**KLU Klutina** 79.36 29 P P 04 45 33.0 +0.4
baz=274
**J25K Salcha River,** 79.43 26 P P 04 45 30.9 -2.0
**J25K Salcha River,** 79.43 26 P P 04 45 32.8 0.0
baz=274
**RAR Rarotonga** 79.46 114 LR LR 05 14 06.3
comp=Z,618nm,21.2s,baz=280,slow=31
**PAX Paxson** 79.48 28 P P 04 45 33.5 +0.3
baz=274
**EYAK Cordova Ski Ar** 79.51 30 P P 04 45 33.9 +0.7
baz=274
**VORR Voronezh** 79.53 321 *e*P P 04 45 30.9 -2.6
VORR pmax pmax
comp=Z,76nm,0.4s
**VORD Divnogorie** 79.53 320 *e*P P 04 45 31.3 -2.3
VORD pmax pmax
comp=Z,20nm,0.6s
**BMAR Burnt Mountain** 79.58 23 P P 04 45 34.6 +1.0
**VSR Storozhevoye** 79.59 320 *e*P P 04 45 30.3 -3.6
VSR pmax pmax
comp=Z,30nm,1.0s
**LPSR Galich'ya Gora** 79.63 322 *e*P P 04 45 31.3 -2.7
LPSR pmax pmax
comp=Z,50nm,0.9s
**VSLR Vesyoloye** 79.69 312⇓ *i*P P 04 45 33.4 -1.2
VSLR pmax pmax
comp=Z,41nm,1.6s
**RIDG Independent Ri** 79.71 27 IAmb IAmb 04 45 54.1
comp=Z,24nm,1.0s
**RIDG Independent Ri** 79.71 27 P P 04 45 34.4 0.0
baz=274,SNR=6.1
**F26K Sheenjek River** 79.72 23 P P 04 45 34.9 +0.5
baz=274
**G26K Porcupine Rive** 79.92 24 P P 04 45 36.2 +0.9
baz=275
**N25K Chitina, Valde** 79.99 29 P P 04 45 36.6 +0.6
baz=275
**BMRM Bremner River** 80.04 30 P P 04 45 36.2 0.0
baz=275
**SCRK Sand Creek** 80.07 27 P P 04 45 36.2 -0.2
baz=275,SNR=7.2
**MOS Moscow** 80.12 325 *e*P P 04 45 33.3 -3.4
MOS *e* 04 48 34.1
MOS pmax pmax
comp=Z,40nm,0.7s
MOS MLR MLR
comp=Z,800nm,20.0s
**J26L Joseph Creek** 80.21 26 P P 04 45 36.0 -1.1
**J26L Joseph Creek** 80.21 26 P P 04 45 37.0 -0.2
baz=275
**KAIM Kayak Island** 80.22 31 P P 04 45 37.2 0.0
baz=275
**I26K Coal Creek Min** 80.31 25 P P 04 45 37.3 -0.3
baz=275
**LVZ Lovozero** 80.40 337*c* *i*P P 04 45 37.4 -0.6
LVZ pmax pmax
comp=Z,36nm,1.4s
**L26K Log Cabin Wild** 80.44 28 P P 04 45 38.4 +0.1
baz=276
**E27K Coleen River** 80.64 22 P P 04 45 38.8 -0.6
E27K **pP** 04 45 40.8 -5.2
E27K IAmb IAmb 04 45 59.7
comp=Z,25nm,1.4s
**E27K Coleen River** 80.64 22 P P 04 45 39.4 +0.1
baz=276
**M26K Nabesna, AK** 80.67 28 P P 04 45 40.3 +0.7
baz=276
**D27M Malcolm River** 80.75 21 IAmb IAmb 04 45 46.3
comp=Z,29nm,1.3s
**D27M Malcolm River** 80.75 21 P P 04 45 40.2 +0.3
baz=277
**G27K Doyon Strip** 80.77 24 P P 04 45 40.4 +0.3
G27K **pP** 04 45 42.3 -4.5
**G27K Doyon Strip** 80.77 24 P P 04 45 40.3 +0.3
baz=277
**OBN Obninsk** 80.78 324 LR LR 05 24 03.5
comp=Z,721nm,19.6s,baz=72,slow=38
**OBN Obninsk** 80.78 324*c* *i*P P 04 45 38.8 -1.4
OBN *i* 04 45 48.7
OBN *i* 04 48 45.4
OBN *i* S S 04 55 35.7 -11
OBN pmax pmax
comp=Z,109nm,1.5s
OBN MLR MLR
comp=Z,666nm,20.0s
**CRQE Cirque** 80.80 30 P P 04 45 41.1 +0.7
baz=276
**H27K Steamboat Moun** 80.89 24 P P 04 45 41.5 +0.9
baz=277
**APA Apatity** 80.91 337⇓ *i*P P 04 45 38.1 -2.6
APA *i* 04 45 47.4
APA *i* S S 04 55 37.0 -10
APA *i* SS **SS** **05 01 00.0 -1.0**
APA pmax pmax
comp=Z,21nm,0.8s
**K27K Chicken** 80.91 26 IAmb IAmb 04 45 56.0
comp=Z,22nm,1.1s
**K27K Chicken** 80.91 26 P P 04 45 41.6 +0.8
baz=277
**I27K Kandik River** 80.92 25 P P 04 45 41.9 +1.0
baz=277,SNR=8.7
**L27K Beaver Creek,** 81.13 27 P P 04 45 42.0 0.0
baz=277
**BCAR Beaver Creek A** 81.15 27 P P 04 45 43.5 +1.4
**M27K Edge Creek, AK** 81.19 28 P P 04 45 42.4 -0.1
baz=277
**EGAK Eagle** 81.21 26 P P 04 45 42.5 +0.1
baz=277
**E28M Babbage River** 81.34 22 IAmb IAmb 04 45 56.9
comp=Z,72nm,1.9s
**E28M Babbage River** 81.34 22 P P 04 45 43.5 +0.5
baz=278
**F28M Old Crow** 81.36 23 P P 04 45 43.6 +0.4
baz=278
**ATD Arta Tunnel** 81.38 280 LR LR 05 19 20.4
comp=Z,9.6nm,19.9s,baz=82,slow=34
**ATD Arta Tunnel** 81.38 280 *e*P P 04 45 45.2 +0.9
**ARPR Arapgir-MALATY** 81.44 308 IAmb IAmb 04 46 16.8
comp=Z,32nm,1.5s
**CTG Chitna Glacier** 81.62 30 P P 04 45 45.5 +0.7
baz=278
**CTGM Chitina Glacie** 81.62 30 IAmb IAmb 04 46 05.9
comp=Z,26nm,1.1s
**I28M Miner Creek** 81.64 25 IAmb IAmb 04 45 59.7
comp=Z,18nm,1.1s
**I28M Miner Creek** 81.64 25 P P 04 45 45.9 +1.1
baz=278
**YUK3 Moose Creek** 81.93 29 P P 04 45 46.5 0.0
baz=278
**E29M Blow River** 81.97 22 P P 04 45 46.7 +0.3
baz=280
**VADS Vadso** 81.98 340 *e*P P 04 45 46.1 -0.2
VADS IAmb IAmb 04 45 58.4
comp=Z,106nm,1.5s
**DAWY Dawson** 82.07 26 P P 04 45 47.6 +0.6
baz=279
**H29M Whitestone** 82.16 24 IAmb IAmb 04 46 19.4
comp=Z,42nm,1.6s
**H29M Whitestone** 82.16 24 P P 04 45 47.8 +0.4
baz=280
**G29M Pine Creek** 82.18 23 IAmb IAmb 04 46 08.2
comp=Z,20nm,1.0s
**G29M Pine Creek** 82.18 23 P P 04 45 48.3 +0.9
baz=280
**O28M Mount Upton** 82.21 30 P P 04 45 48.8 +0.7
baz=279
**I29M Ogilvie Camp,** 82.32 25 P P 04 45 48.3 +0.1
baz=280
**YUK8 Steele Glacier** 82.33 29 P P 04 45 48.4 -0.3
baz=279
**JOF Joensuu** 82.44 333 *e*P P 04 45 48.0 -0.8
**M29M Somme Creek** 82.75 28 P P 04 45 51.1 +0.5
baz=280
**PNL Peninsula** 82.77 31 P P 04 45 51.0 +0.4
baz=280
**EPYK Eagle Plains** 82.78 24 IAmb IAmb 04 45 56.3
comp=Z,32nm,1.4s
**EPYK Eagle Plains** 82.78 24 P P 04 45 51.0 +0.4
baz=281
**KEV Kevo** 82.85 340 P P 04 45 50.0 -0.8
**KEV Kevo** 82.85 340 P P 04 45 50.0 -0.8
KEV pmax pmax
comp=Z,134nm,2.0s
**YUK4 Talbot Arm** 82.86 29 P P 04 45 52.1 +0.8
baz=280
**G30M tAoh Zraii Nji** 82.86 23 P P 04 45 51.6 +0.6
baz=282
**VALR Valaam** 82.90 331*c* *i*P P 04 45 50.3 -0.9
VALR pmax pmax
comp=Z,114nm,1.6s
**F30M Barrier River** 82.90 22 P P 04 45 52.3 +1.1
baz=282
**K29M Barlow Dome** 82.92 26 IAmb IAmb 04 46 11.4
comp=Z,44nm,1.9s
**K29M Barlow Dome** 82.92 26 P P 04 45 52.1 +0.6
baz=281
**YUK6 Outpost Mounta** 83.06 29 P P 04 45 53.0 +0.5
baz=280
**O29M Mount Kennedy** 83.07 30 P P 04 45 52.6 +0.2
baz=280
**I30M Mount Dempster** 83.15 25 P P 04 45 53.0 +0.3
baz=282
**SPA0 Spitsbergen Ar** 83.21 349 *e*P P 04 45 53.0 +0.3
SPA0 IAmb IAmb 04 45 57.2
comp=Z,162nm,2.0s
**SPITS Spitsbergen Ar** 83.21 349 P P 04 45 52.6 0.0
comp=Z,11nm,0.8s,baz=95,slow=11,SNR=7.1
SPITS LR LR 05 28 18.1
comp=Z,435nm,19.1s,baz=34,slow=40
comp=Z,11nm,0.8s
**J30M Hart River** 83.29 26 IAmb IAmb 04 46 14.0
comp=Z,18nm,1.4s
**J30M Hart River** 83.29 26 P P 04 45 54.0 +0.6
baz=282
**ARA0 ARCESS Array S** 83.41 340 *e*P P 04 45 53.4 -0.3
**ARCES ARCESS Array B** 83.41 340 P P 04 45 53.8 0.0
comp=Z,6.4nm,0.5s,baz=81,slow=6.5,SNR=44
ARCES LR LR 05 28 57.0
comp=Z,333nm,18.6s,baz=94,slow=40
comp=Z,6.4nm,0.5s
**PUL Pulkovo** 83.45 330*ce*P P 04 45 52.6 -1.5
PUL pmax pmax
comp=Z,62nm,0.4s
**N30M Aishikik Lake** 83.57 29 IAmb IAmb 04 46 09.3
comp=Z,53nm,2.0s
**N30M Aishikik Lake** 83.57 29 P P 04 45 55.4 +0.5
baz=281
**INK Inuvik** 83.58 22 IAmb IAmb 04 46 09.4
comp=Z,33nm,1.8s
**INK Inuvik** 83.58 22 P P 04 45 55.2 +0.6
comp=Z,1.9nm,0.6s,baz=271,slow=4.0,SNR=4.6
INK LR LR 05 27 33.9
comp=Z,152nm,18.5s,baz=284,slow=39
comp=Z,1.9nm,0.6s
**INK Inuvik** 83.58 22 P P 04 45 54.7 +0.1
baz=284
**P29M Windy Craggy** 83.61 31 P P 04 45 56.0 +1.0
baz=281
**G31M Satah River** 83.62 23 P P 04 45 56.0 +1.1
baz=283
**F31M Tsiigehtchic** 83.70 22 P P 04 45 55.5 +0.2
baz=284
**SIM Simferopol'** 83.72 314 *e*P P 04 45 55.3 -0.5
SIM *e*S S 04 56 12.0 -5.0
SIM pmax pmax
comp=Z,60nm,10.0s
SIM smax smax
comp=N,160nm,16.0s
**KBS Kingsbay** 83.72 350 *e*P P 04 45 55.6 +0.4
**HAMF Hammerfest** 83.73 341 *e*P P 04 45 54.4 -1.0
HAMF IAmb IAmb 04 45 55.4
comp=Z,79nm,1.5s
**HSPB Hornsund (broa** 83.83 348 *e*P P 04 45 57.6 +1.8
**P30M Million Dollar** 83.90 30 P P 04 45 56.7 +0.2
baz=282
**O30N Mendenhall** 84.19 29 P P 04 45 58.0 +0.1
baz=282
**KTK1 Kautokeino** 84.33 339 *e*P P 04 45 58.6 +0.2
KTK1 IAmb IAmb 04 46 00.7
comp=Z,51nm,1.5s
**PLBC Pleasant Camp** 84.33 31 P P 04 45 58.8 +0.1
baz=282
**M31M Drury Creek, Y** 84.66 28 IAmb IAmb 04 46 06.5
comp=Z,26nm,1.5s
**M31M Drury Creek, Y** 84.66 28 P P 04 46 00.9 +0.5
baz=284
**MMAI Mount Meron Ar** 84.69 302 P P 04 46 00.1 -1.1
comp=Z,2.0nm,0.6s,baz=105,slow=9.1,SNR=2.7
MMAI LR LR 05 29 20.3
comp=Z,107nm,18.8s,baz=20,slow=40
comp=Z,2.0nm,0.6s
**WHY Whitehorse** 84.79 29 IAmb IAmb 04 46 07.9
comp=Z,28nm,1.3s
**WHY Whitehorse** 84.79 29 P P 04 46 01.9 +0.7
baz=283
**SKAG Skagway** 84.84 30 P P 04 46 01.7 +0.5
baz=283
**GHAJ Ghor Haditha** 84.84 301 IAmb IAmb 04 46 46.2
comp=Z,13nm,0.8s
**BR131 Keskin Array S** 84.94 309*d* *i*P P 04 46 00.9 -1.5
**BRTR Keskin Array B** 84.95 309 P P 04 46 00.7 -1.7
comp=Z,2.9nm,0.7s,baz=122,slow=4.4,SNR=24
BRTR LR LR 05 28 54.8
comp=Z,193nm,19.4s,baz=82,slow=39
comp=Z,2.9nm,0.7s
**BR106 Keskin Array S** 84.96 309 P P 04 46 00.9 -1.6
comp=Z,6.6nm,0.7s,comp=Z,61nm
**BR105 Keskin Array S** 84.96 309 P P 04 45 59.6 -2.9
comp=Z,5.5nm,0.8s,comp=Z,56nm
**FARO Faro, Yukon** 85.13 28 P P 04 46 02.9 +0.2
baz=284
**FINES FINESS Array B** 85.14 332 P P 04 46 02.1 -0.6
comp=Z,24nm,0.7s,baz=64,slow=5.2,SNR=86
FINES LR LR 05 28 40.0
comp=Z,755nm,18.5s,baz=88,slow=39
comp=Z,24nm,0.7s
**KEF Keuruu** 85.51 333 *e*P P 04 46 03.4 -1.1
**N32M Quiet Lake** 85.52 29 IAmb IAmb 04 46 18.5
comp=Z,25nm,0.9s
**N32M Quiet Lake** 85.52 29 P P 04 46 05.1 +0.4
baz=285
**R32K Eaglecrest** 85.53 32 P P 04 46 05.5 +0.8
baz=284
**VSU Vasula** 85.54 329*c* *i*P P 04 46 03.8 -0.9
VSU pmax pmax
comp=Z,89nm,1.2s
**ANTO Ankara** 85.56 310 P P 04 46 03.9 -1.5
ANTO IAmb IAmb 04 46 05.5
comp=Z,9.3nm,0.6s
**ANTO Ankara** 85.56 310 P P 04 46 03.9 -1.5
ANTO pmax pmax
comp=Z,9.0nm,0.6s
**P32M Atlin** 85.61 30 P P 04 46 05.9 +0.7

baz=284
EIL Elat 85.65 299 LR LR 05 32 10.4
comp=Z,263nm,18.4s,baz=68,slow=41
ARBE Arbavere 85.68 330 eP P 04 46 05.2 -0.2
MNK Minsk 85.84 325 i P P 04 46 04.7 -1.6
MNK i 04 49 24.0
MNK i PPP PPP 04 51 17.8
MNK i S SKSac 04 56 26.8 -3.3
MNK i SSS SSS 05 05 45.8
MNK pmax pmax
comp=E,9.0nm,0.8s
MNK pmax pmax
comp=Z,45nm,0.9s
MNK pmax pmax
comp=N,35nm,1.1s
MNK MLR MLR
comp=Z,568nm,19.0s
MNK MLR MLR
comp=E,314nm,16.0s
MNK MLR MLR
comp=N,244nm,17.0s
AK09 Malin Array Si 85.86 321 P P 04 46 05.1 -1.4
AK08 Malin Array Si 85.88 321 P P 04 46 05.1 -1.5
AK03 Malin Array Si 85.88 321 P P 04 46 04.8 -1.8
FURI Furi 85.88 278 LR LR 05 22 58.5
comp=N,490nm,19.7s,baz=63,slow=35
FURI Furi 85.88 278 eP P 04 46 08.5 +0.8
FURI IAMs_20 IAMs_20 05 27 45.4
comp=N,332nm,19.3s
AKASG Malin Array Be 85.88 321 P P 04 46 04.9 -1.7
comp=N,11nm,0.8s,baz=69,slow=4.2,SNR=46
comp=N,11nm,0.8s
AKBB Malin Array Si 85.88 321 c i P P 04 46 04.7 -1.8
AKBB i 04 46 07.2
AKBB pmax pmax
comp=Z,58nm,1.3s
AKBB Malin Array Si 85.88 321 P P 04 46 04.8 -1.8
AK10 Malin Array Si 85.89 321 P P 04 46 05.2 -1.4
AK01 Malin Array Si 85.89 321 P P 04 46 05.1 -1.5
KIEV Kiev 85.89 321 P P 04 46 05.1 -1.5
KIEV Kiev 85.89 321 P P 04 46 05.1 -1.5
KIEV pmax pmax
comp=Z,49nm,1.2s
KIEV Kiev 85.89 321 P P 04 46 04.9 -1.7
comp=Z,164nm,1.3s,comp=Z,2µm
P33M Teslin, Yukon 85.89 29 P P 04 46 07.2 +0.6
baz=285
AK21 Malin Array Si 85.98 321 P P 04 46 05.3 -1.8
AK20 Malin Array Si 86.00 321 P P 04 46 05.4 -1.8
VAF Ylistaro 86.25 334 eP P 04 46 08.1 -0.1
MEF Metsahovi 86.25 331 eP P 04 46 07.5 -0.7
C36M Paulatuk 86.52 20 P P 04 46 09.9 +0.5
baz=292
MI28 MI28,Pidlybu 86.79 321 P P 04 46 09.4 -1.7
LUBAR Lubar, Ukraine 86.97 320 P P 04 46 11.0 -1.0
MILM Milestii Mici 86.97 317 eP P 04 46 10.0 -2.0
comp=Z,210nm,4.7s
MILM eL L 05 25 21.0
MILM LRM MLR 05 28 58.0
comp=Z,300nm,18.5s
MILM Milestii Mici 86.97 317 eP P 04 46 10.0 -2.0
MILM pmax pmax
comp=Z,210nm,4.7s
MILM MLR MLR
comp=Z,300nm,18.5s
R33M Jennings River 87.01 30 P P 04 46 12.5 +0.3
baz=287
STEI Steigen 87.47 339 eP P 04 46 13.4 -0.6
STEI IAmb IAmb 04 46 15.5
comp=Z,24nm,1.0s
FAUS Fauske 87.67 339 eP P 04 46 13.8 -1.2
RNPP9 Sopachiv 87.76 322 P P 04 46 14.3 -1.4
DLBC Dease Lake 87.76 31 P P 04 46 16.6 +0.8
comp=Z,1.3nm,0.7s,baz=187,slow=14,SNR=3.1
DLBC LR LR 05 21 18.4
comp=Z,294nm,21.8s,baz=298,slow=33
comp=Z,1.3nm,0.7s
DLBC Dease Lake 87.76 31 P P 04 46 16.2 +0.5
baz=288
RNPP5 Staryi Chortor 87.81 322 P P 04 46 14.9 -1.1
PPT Papeete 87.91 108 LR LR 05 19 46.2
comp=Z,226nm,20.4s,baz=289,slow=32
PPT2 Papeete2 87.92 108 ePKIKP P 04 46 16.2 -1.0
comp=Z,51nm,22.2s
PPT2 Papeete2 87.92 108 ePP PP 04 49 37.1 -6.7
comp=Z,36nm,21.8s
PPT2 eS S 04 56 53.8 -5.4
comp=Z,496nm,25.2s
PPT2 eSS SS 05 02 48.8 +1.5
comp=Z,195nm,26.2s
PPT2 eLQ LQ 05 10 30.9
comp=Z,434nm,27.5s
PPT2 eLR LR 05 13 53.7
comp=Z,881nm,33.0s
KMPD K-Podol'skiy 88.13 319 P P 04 46 16.1 -1.4
SUW Suwalki 88.63 325 eP P 04 46 18.0 -1.9
SUW Suwalki 88.63 325 eP P 04 46 18.6 -1.2
KMBO Kilima Mbogo 89.15 269 P P 04 46 21.9 -1.5
KMBO IAmb IAmb 04 46 23.9
comp=Z,21nm,1.2s
KMBO Kilima Mbogo 89.15 269 P P 04 46 22.5 -0.9
comp=Z,9.3nm,1.1s,baz=45,slow=2.9,SNR=11
KMBO LR LR 05 25 10.9
comp=Z,679nm,19.4s,baz=87,slow=35
comp=Z,9.3nm,1.1s
KMBO Kilima Mbogo 89.15 269 eP P 04 46 17.1 -6.3
BURAR Bucovina Array 89.18 318 P P 04 46 21.2 -1.5
TBI Tubuai 89.24 114 eP P 04 46 25.0 +1.7
comp=Z,495nm,39.5s
TBI Tubuai 89.24 114 eS S 04 57 01.4 -10
comp=Z,2µm,26.0s
TBI eSS SS 05 03 07.8 +1.5
comp=Z,1µm,31.2s
TBI eLQ LQ 05 11 02.5
comp=Z,2µm,36.2s
TBI eLR LR 05 14 51.2
comp=Z,3µm,25.0s
TBI eLR LR 05 14 55.2
comp=Z,1µm,27.0s
MLR Muntele Rosu 89.25 316 LR LR 05 29 13.8
comp=Z,474nm,21.8s,baz=60,slow=38
LVV L'vov 89.33 321 eP P 04 46 21.3 -1.9
LVV e 04 49 53.3
LVV e 04 56 44.1
LVV eS S 04 57 06.0 -5.3
LVV ePS PnS 04 58 15.9 -2.7
LVV eSS SS 05 03 06.0 +0.3
LVV pmax pmax
comp=Z,50nm,1.5s
UPP Uppsala 89.59 331 eP P 04 46 23.2 -1.0
MORS Morshin 89.61 320 P P 04 46 23.4 -1.1
TOAD Toad River Com 89.99 30 P P 04 46 26.7 +0.5
baz=292
NSS Namsos 90.11 337 eP P 04 46 25.6 -1.0
LODK Lodwar 90.14 273 eP P 04 46 14.4 -13
KWP Kalwaria Pacla 90.20 321 eP P 04 46 25.9 -1.4
MAW Mawson 90.41 200 P P 04 46 27.0 -0.7
comp=Z,2.1nm,0.7s,baz=53,slow=11,SNR=6.4
MAW LR LR 05 22 47.7
comp=Z,159nm,20.8s,baz=59,slow=33
comp=Z,2.1nm,0.7s
KOLS Kolonicke sedl 90.69 320 eP P 04 46 29.6 0.0
KOLS pmax pmax
comp=Z,5.0nm,0.7s
KOLS Kolonicke sedl 90.69 320 eP P 04 46 29.6 0.0
BBB Bella Bella 90.77 36 LR LR 05 21 36.6
comp=Z,137nm,21.2s,baz=257,slow=32
CRVS Cervenica-Dubn 91.20 320 eP P 04 46 31.6 -0.4
CRVS pmax pmax
comp=Z,61nm,1.2s
CRVS Cervenica-Dubn 91.20 320 eP P 04 46 31.6 -0.4
HFS Hagfors 91.29 332 P P 04 46 30.4 -1.8
comp=Z,9.7nm,0.6s,baz=99,slow=4.5,SNR=26
HFS LR LR 05 30 39.1
comp=Z,859nm,19.8s,baz=69,slow=38
comp=Z,9.7nm,0.6s
TBLU Trondheim 91.37 336 eP P 04 46 31.6 -0.9
TBLU IAmb IAmb 04 46 36.5
comp=Z,16nm,0.8s
SBA Scott Base 91.64 172 P P 04 46 33.7 +0.4
SBA Scott Base 91.64 172 P P 04 46 33.7 +0.4
SBA pmax pmax
comp=Z,45nm,2.0s
NIE Niedzica 91.76 321 eP P 04 46 33.1 -1.5
OJC Ojcow 91.80 322 eP P 04 46 33.4 -1.4
NB2 NORSAR Subarra 92.00 334 P P 04 46 33.5 -2.0
comp=Z,16nm,1.1s,baz=65,slow=4.6
NB2 NORSAR Subarra 92.00 334 P P 04 46 33.5 -2.0
baz=65,slow=4.6
NOA NORSAR Array B 92.00 334 P P 04 46 33.4 -2.0
comp=Z,3.6nm,0.6s,baz=64,slow=4.6,SNR=31
NOA PP PP 04 50 14.0 -0.7
comp=Z,0.7nm,0.8s,baz=67,slow=8.6,SNR=3.3
NOA LR LR 05 31 21.5
comp=Z,490nm,19.8s,baz=50,slow=38
comp=Z,3.6nm,0.6s
LANS Liptovska Anna 92.36 321 eP P 04 46 37.9 +0.5
LANS pmax pmax
comp=Z,6.0nm,1.6s
LANS Liptovska Anna 92.36 321 eP P 04 46 37.9 +0.5
DOMB Dombas 92.43 335 eP P 04 46 35.7 -1.8
JMIC Jan Mayen 92.63 347 LR LR 05 33 31.5
comp=Z,364nm,19.4s,baz=44,slow=39
IDI Anoyia 92.71 307 LR LR 05 34 51.0
comp=Z,194nm,18.9s,baz=88,slow=40
OSL Oslo 92.72 333 eP P 04 46 38.5 -0.2
VYHS Vyhne 92.98 321 eP P 04 46 39.3 -0.9
VYHS pmax pmax
comp=Z,25nm,1.9s
VYHS Vyhne 92.98 321 eP P 04 46 39.3 -0.9
YKA Yellowknife Ar 93.07 24 P P 04 46 40.5 +0.2
comp=Z,0.9nm,0.7s,baz=297,slow=4.8,SNR=4.4
YKA LR LR 05 30 37.3
comp=Z,151nm,20.9s,baz=304,slow=37
comp=Z,0.9nm,0.7s
MORC Moravsky Berou 93.32 322 eP P 04 46 40.6 -1.2
JAVC Velka Javorina 93.58 321 eP P 04 46 43.0 0.0
KSP Ksiaz 93.67 323 eP P 04 46 42.2 -1.1
MORH Mrgy, Hungar 93.89 318 P P 04 46 43.1 -1.3
comp=Z,4.4nm,1.7s
HYA Hoyanger 94.06 335 eP P 04 46 44.6 -0.3
HYA IAmb IAmb 04 46 55.6
comp=Z,36nm,1.3s
VRAC Vranov 94.07 322 eP P 04 46 44.4 -0.8
VRAC Vranov 94.07 322 LR LR 05 33 14.6
comp=Z,426nm,18.8s,baz=80,slow=38
MPLH Magyarpolny 94.27 320 P P 04 46 45.7 -0.5
KRUC Moravsky 94.28 322 eP P 04 46 44.9 -1.3
RONA Rosalia, Austr 94.86 320 eP P 04 46 47.4 -1.5
comp=Z,6.1nm,1.4s
BLS5 Blasjo 94.86 334 eP P 04 46 48.6 -0.1
BRG Berggiesshubel 95.03 324 eP P 04 46 49.0 -0.5
BRG Amp 04 46 51.0
comp=Z,7.8nm,1.2s
BRG Berggiesshubel 95.03 324 eP P 04 46 49.0 -0.5
BRG pmax pmax
comp=Z,8.0nm,1.2s
CONA Conrad Observa 95.04 321 eP P 04 46 48.6 -1.2
comp=Z,9.3nm,1.5s,SNR=6.5
TAOE Nuku Hiva Isla 95.25 98 ePKIKP P 04 46 50.6 -0.8
comp=Z,26nm,22.3s
TAOE Nuku Hiva Isla 95.25 98 ePP PP 04 50 41.9 0.0
comp=Z,34nm,21.5s
TAOE eS S 04 57 54.6 -11
comp=Z,426nm,26.8s
TAOE eSS SS 05 04 31.2 -2.1
comp=Z,127nm,24.2s
TAOE Nuku Hiva Isla 95.25 98 eLR LR 05 17 34.8
comp=Z,1µm,28.7s
CLL Collm 95.38 325 i P P 04 46 50.2 -1.0
CLL i *PP sP 04 46 58.8 -2.3
CLL eS S 04 58 05.0 -0.5
CLL pmax pmax
comp=Z,27nm,1.8s
CLL MLR MLR
comp=Z,600nm,18.4s
ARSA Arzberg 95.51 320 eP P 04 46 50.5 -1.4
comp=Z,4.9nm,1.1s
KHC Kasperske Hory 95.96 322 eP P 04 46 52.5 -1.4
KHC Kasperske Hory 95.96 322 ceP P 04 46 52.7 -1.2
KHC pmax pmax
comp=Z,18nm,1.7s
GEC2 GERESS Array S 96.00 322 IAmb IAmb 04 46 53.9
comp=Z,13nm,1.4s
GERES GERESS Array B 96.00 322 P P 04 46 53.0 -1.2
comp=Z,1.2nm,0.7s,baz=32,slow=5.8,SNR=8.2
GERES LR LR 05 34 14.4
comp=Z,470nm,18.6s,baz=78,slow=38
comp=Z,1.2nm,0.7s
GERES GERESS Array B 96.00 322 P P 04 46 53.0 -1.2
SOKA Soboth 96.04 320 eP P 04 46 53.0 -1.4
comp=Z,7.2nm,1.2s,SNR=5.1
MOA Molln 96.06 321 eP P 04 46 53.4 -1.0
comp=Z,13nm,1.1s,SNR=7.1
KBA Koelnbreinsper 96.94 321 eP P 04 46 56.1 -2.5
comp=Z,9.8nm,1.5s,SNR=5.2
LESA Schwarzleotal 97.21 321 eP P 04 46 57.7 -2.0
comp=Z,4.5nm,0.7s
ABTA Abfaltersbach 97.60 321 eP P 04 46 58.9 -2.5
comp=Z,6.9nm,1.2s
WTTA Wattenberg 97.92 321 eP P 04 47 01.2 -1.8
comp=Z,13nm,1.4s
WATA Walderalm 97.93 321 eP P 04 47 01.3 -1.7
comp=Z,4.4nm,0.9s
YBH Yreka Blue Hor 97.95 45 LR LR 05 24 36.5
comp=Z,250nm,20.7s,baz=298,slow=31
SQTA Sankt Quirin 98.20 321 eP P 04 47 02.4 -1.8
comp=Z,3.3nm,0.5s
MOTA Moosalm 98.21 322 eP P 04 47 02.4 -1.9
comp=Z,7.7nm,1.4s
FETA Feichten 98.59 321 ePcP P 04 47 04.1 -1.8
comp=Z,4.9nm,0.9s
NEW Newport 98.79 37 LR LR 05 37 44.4
comp=Z,50nm,18.5s,baz=304,slow=39
DAVOX Davos/Dischmat 99.21 321 LR LR 05 36 38.7
comp=Z,496nm,19.5s,baz=66,slow=38
VAE Valguarnera 100.01 311 LR LR 05 37 59.9
comp=Z,177nm,21.5s,baz=69,slow=39
EKA Eskdalemuir Ar 101.47 333 P Pdif 04 47 17.6 -0.8
comp=Z,1.5nm,0.6s,baz=50,slow=3.8,SNR=5.2
RKT Rikitea 102.34 111 eLR LR 05 20 47.0
comp=Z,2µm,27.0s
ESDC Sonseca Array 111.53 321 PP PP 04 52 43.5 +1.4
comp=Z,0.9nm,0.9s,baz=42,slow=6.3,SNR=6.1
121A Cookes Peak, D 112.70 48 P PKiKP 04 52 04.1 0.0
baz=301
TXAR Lajitas Array 117.38 49 PKP PKPdf 04 52 12.8 -0.3
comp=Z,0.5nm,0.9s,baz=257,slow=1.1,SNR=4.2
L44A Lake County Fo 118.47 28 P PKPdf 04 52 14.9 +0.2
baz=322
S39A Bolivar 119.00 35 PKPdf PKPdf 04 52 14.9 -1.0
TORD Torodi Ar. Bea 119.87 292 PKP PKPdf 04 52 16.8 -1.3
comp=Z,1.1nm,0.7s,baz=64,slow=1.8,SNR=8.6
833A Chaparral WMA, 121.06 47 P PKPdf 04 52 19.7 -0.4
baz=305
O53A New Philadelph 122.98 25 P PKPdf 04 52 22.8 -0.6
baz=328
P52A Corning 123.11 26 P PKPdf 04 52 22.9 -0.9
baz=326
WVT Waverly 123.15 33 PKPdf 04 52 23.4 -0.5
WVT Waverly 123.15 33 PKIKP PKPdf 04 52 23.4 -0.5
LL02 Futaleuf 144.38 157 PKPdf PKPab 04 53 01.9 +0.6
PLCA Paso Flores 146.98 156 PKPbc PKPbc 04 53 10.4 +0.6
comp=Z,9.4nm,0.7s,baz=238,slow=2.6,SNR=31
UUPR Utuado, UPR, P 148.21 24 PKPbc 04 53 14.2 +0.6
ITAB Concordia 163.84 185 eP PKPdf 04 53 32.9 +2.4
CPUP Villa Florida 164.47 168 PKP PKPdf 04 53 31.7 +0.6
comp=Z,1.9nm,0.8s,baz=172,slow=12,SNR=5.4
CPUP PKPab PKPab 04 54 25.0 -0.5
comp=Z,0.8nm,0.6s,baz=166,slow=4.2,SNR=1.7
LPAZ La Paz 165.18 112 PKP PKPdf 04 53 33.6 +0.8
comp=Z,3.9nm,1.1s,baz=272,slow=4.5,SNR=7.3
LPAZ PKPab PKPab 04 54 31.9 +1.9
comp=Z,1.5nm,0.8s,baz=207,slow=2.3,SNR=2.0
PCMB Pacaembu 169.24 193 eP PKPdf 04 53 37.2 +2.3

**IDC 24 05:05:38.6±11.0, 21°57S×147°70E, h0km, mbtmp2.8/1, ML2.5/1, Error ellipse: s-maj=82.1km s-min=82.0km az=19.0, Queensland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 12.60 | 275 | Pn | Pn | 05 08 38.8 | -0.5 |
| | baz=96,slow=12,SNR=0.9 | | | | | | |
| WRA | | | | Lg | Lg | 05 12 20.8 | |
| | 0.1nm,0.3s,baz=103,slow=27,SNR=7.0 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| I07AU | WARRAMUNGA INI | 12.61 | 275 | I | I | 06 12 45.0 | |
| | 0.1nm,1.0s,baz=103,slow=313,SNR=13 | | | | | | |
| ASAR | Alice Springs | 12.91 | 258 | Lg | Lg | 05 12 27.7 | |
| | baz=86,slow=29 | | | | | | |
| I22FR | PORTLAGUERRE I | 17.79 | 96 | I | I | 06 50 00.0 | |
| | 0.1nm,1.4s,baz=269,slow=298,SNR=3.0 | | | | | | |

*IDC 24 05:09:03.5±1.1, 14°.57N×146°.95E, h0km, mb4.1/7, mbtmp4.1/8, ML3.9/1, Error ellipse: s-maj=29.2km s-min=22.4km az=119.0*
*NEIC 24 05:09:05.9±2.3, 14°.38N±0°.08×146°.88E±0°.10, h10km±1km, mb4.3/17, Error ellipse: s-maj=16.3km s-min=12.7km az=85.0*

**ISC 24 05:09:05.5±0.9, 14°.5N±0°.1×146°.8E±0°.1, h10km, n35, σ1s01/35, mb4.3/16, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GUMO | Guam | 2.10 | 246 | Pn | Pn | 05 09 42.0 | +1.3 |
| GUMO | Guam | 2.10 | 246 | Pn | Pb | 05 09 43.1 | -0.6 |
| | 36nm,0.3s,baz=126,slow=6.4,SNR=7.5 | | | | | | |
| GUMO | | | | Sn | Sb | 05 10 11.2 | +1.3 |
| | 31nm,0.3s,baz=21,slow=22,SNR=4.1 | | | | | | |
| | 114nm,0.5s | | | | | | |
| PATS | Pohnpei | 13.58 | 123 | | Pn | 05 12 12.8 | -5.5 |
| WB0 | Warramunga Arr | 36.16 | 200 | P | P | 05 16 08.3 | +0.1 |
| WRA | Warramunga Arr | 36.34 | 200 | P | P | 05 16 08.3 | -1.5 |
| WRA | Warramunga Arr | 36.34 | 200 | P | P | 05 16 09.9 | +0.1 |
| | 1.2nm,0.8s,baz=23,slow=9.5,SNR=5.4 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| PETK | Petropavlovsk- | 39.50 | 10 | P | P | 05 16 38.0 | +1.9 |
| SONM | Songino Array | 47.14 | 323 | P | P | 05 17 38.1 | 0.0 |
| | 0.6nm,0.4s,baz=125,slow=9.2,SNR=3.3 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| TIXI | Tiksi | 58.17 | 353 | P | P | 05 18 59.2 | 0.0 |
| ZALV | Zalesovo Beam | 62.04 | 324 | P | P | 05 19 24.8 | -1.2 |
| | 0.6nm,0.4s,baz=90,slow=8.4,SNR=2.7 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| MK31 | Makanchi Array | 62.20 | 315 | P | P | 05 19 27.1 | -0.2 |
| MK31 | | | | IAmb | IAmb | 05 19 27.6 | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 62.20 | 315 | P | P | 05 19 26.6 | -0.7 |
| MKAR | Makanchi Array | 62.20 | 315 | P | P | 05 19 26.9 | -0.4 |
| | comp=Z,1.9nm,0.5s,baz=92,slow=7.9,SNR=25 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| KURK | Kurchatov | 65.15 | 319 | P | P | 05 19 45.4 | -1.3 |
| KURBB | Kurchatov Arra | 65.20 | 319 | P | P | 05 19 46.4 | -0.6 |
| | comp=Z,6.8nm,0.7s,baz=98,slow=6.8,SNR=48 | | | | | | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| SCM | Sheep Creek Mo | 66.00 | 28 | P | P | 05 19 53.6 | +1.5 |
| E22K | Anaktuvuk Pass | 66.16 | 21 | P | P | 05 19 53.7 | +0.8 |
| E22K | | | | IAmb | IAmb | 05 19 55.3 | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| H23K | Yukon River | 66.20 | 24 | P | P | 05 19 54.2 | +0.9 |
| H23K | | | | IAmb | IAmb | 05 20 07.8 | |
| | comp=Z,1.8nm,1.1s | | | | | | |
| WRH | Wood River Hil | 66.38 | 25 | P | P | 05 19 54.0 | -0.3 |
| WRH | | | | IAmb | IAmb | 05 19 57.5 | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| D23K | Nanushuk River | 66.85 | 20 | P | P | 05 19 58.6 | +1.3 |
| ILAR | Eielson Array | 66.96 | 25 | P | P | 05 19 57.0 | -1.1 |
| | comp=Z,0.7nm,0.8s,baz=254,slow=4.8,SNR=5.4 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| G24K | Hadweenzic Riv | 67.26 | 23 | P | P | 05 20 00.7 | +0.7 |
| G24K | | | | IAmb | IAmb | 05 20 04.7 | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| E24K | Your Creek | 67.31 | 22 | P | P | 05 20 01.8 | +1.5 |
| E24K | | | | IAmb | IAmb | 05 20 03.7 | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| J26L | Joseph Creek | 68.28 | 26 | P | P | 05 20 07.5 | +0.9 |
| J26L | | | | IAmb | IAmb | 05 20 10.1 | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| BMAR | Burnt Mountain | 68.55 | 23 | P | P | 05 20 09.7 | +1.5 |
| BCAR | Beaver Creek A | 68.78 | 28 | P | P | 05 20 10.0 | +0.4 |
| KKAR | Karatay Array | 70.32 | 311 | P | P | 05 20 18.4 | -1.1 |
| BVAR | Borovoye Array | 70.43 | 321 | P | P | 05 20 19.6 | -0.3 |
| | comp=Z,2.0nm,0.6s,baz=100,slow=8.1,SNR=10 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| H29M | Whitestone | 70.73 | 24 | P | P | 05 20 22.1 | +0.6 |
| H29M | | | | IAmb | IAmb | 05 20 23.4 | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| I30M | Mount Dempster | 71.43 | 26 | P | P | 05 20 25.9 | 0.0 |
| G31M | Satah River | 72.44 | 24 | P | P | 05 20 31.8 | +0.1 |
| G31M | | | | IAmb | IAmb | 05 20 57.0 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| ABKAR | Akbulak array | 77.18 | 318 | P | P | 05 20 58.2 | -1.3 |
| ABKAR | Akbulak array | 77.18 | 318 | P | P | 05 20 58.1 | -1.5 |
| ABKAR | | | | IAmb | IAmb | 05 21 02.1 | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| DBIC | Dimbokro | 144.94 | 305 | PKP | PKPbc | 05 28 42.5 | -0.6 |
| | comp=Z,3.9nm,0.7s,baz=34,slow=3.4,SNR=8.6 | | | | | | |
| LPAZ | La Paz | 146.26 | 98 | PKPbc | PKPdf | 05 28 47.3 | +0.3 |
| | comp=Z,0.9nm,0.8s,baz=324,slow=2.5,SNR=4.4 | | | | | | |

*NNC 24 05:23:42.7±4.4, 38°.27N×69°.47E, h0km, mb4.3, mpv3.9, Error ellipse: s-maj=31.4km s-min=27.7km az=29.0*
*IDC 24 05:23:52.7±5.4, 38°.35N×70°.23E, h104km±55km, mb3.4/3, mbtmp3.7/8, Error ellipse: s-maj=56.5km s-min=38.7km az=130.0*

**ISC 24 05:23:44.7±1.5, 38°.4N±0°.1×69°.39E±0°.09, h10km, n14, σ2s61/20, mb3.7/3, 1C-5D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BRLS | Borolday | 4.69 | 4 | Pg | Pb | 05 25 05.2 | -1.8 |
| | 9.5nm,0.7s | | | | | | |
| BRLS | | | | Lg | Lg | 05 26 03.0 | |
| | 49nm,0.9s | | | | | | |
| KK31 | Karatay Array | 4.83 | 10 | Pn | Pn | 05 24 57.2 | -0.3 |
| | 9.2nm,0.9s,baz=205,slow=30,SNR=42 | | | | | | |
| KK31 | | | | ⇓Pg | Pb | 05 25 11.0 | +1.6 |
| | 8.2nm,0.5s,baz=188,slow=17,SNR=13 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 05 25 57.0 | +3.6 |
| | 9.0nm,0.5s | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 05 26 16.6 | |
| | 36nm,0.7s,baz=196,slow=26,SNR=7.0 | | | | | | |
| MRKS | Merke | 5.28 | 32 | Pg | Pb | 05 25 17.8 | +0.8 |
| | 24nm,0.7s | | | | | | |
| MRKS | | | | Lg | Lg | 05 26 25.2 | |
| | 26nm,1.0s | | | | | | |
| AAK | Ala-Archa | 5.79 | 41 | P | Pn | 05 25 11.4 | +0.6 |
| | 4.5nm,0.3s,baz=215,slow=6.7,SNR=5.3 | | | | | | |
| AAK | | | | S | Sn | 05 26 12.5 | -4.8 |
| | 5.6nm,0.5s,baz=58,slow=15,SNR=1.4 | | | | | | |
| AAK | Ala-Archa | 5.79 | 41 | Pn | Pn | 05 25 11.3 | +0.6 |
| | 12nm,0.7s | | | | | | |
| AAK | | | | Pg | Pb | 05 25 28.3 | +2.5 |
| | 13nm,0.7s | | | | | | |
| AAK | | | | Sn | Sn | 05 26 22.4 | +5.1 |
| | 16nm,1.1s | | | | | | |
| TKM2 | Tokmak 2 | 6.57 | 44 | ⇓Pn | Pn | 05 25 19.8 | -1.8 |
| | 13nm,0.9s | | | | | | |
| TKM2 | | | | ⇓Sn | Sn | 05 26 35.4 | -1.1 |
| | 19nm,0.8s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 05 27 14.3 | |
| | 12nm,0.7s | | | | | | |
| KST | Kastek | 6.85 | 45 | Pg | Pb | 05 25 46.4 | +2.5 |
| | 4.2nm,0.6s | | | | | | |
| KST | | | | Lg | Lg | 05 27 13.4 | |
| | 13nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 12.70 | 44 | P | Pn | 05 26 42.8 | -2.5 |
| | 0.7nm,0.6s,baz=222,slow=13,SNR=4.4 | | | | | | |
| KURBB | Kurchatov Arra | 13.88 | 25 | P | Pn | 05 26 59.3 | -2.1 |
| | 0.2nm,0.4s,baz=228,slow=8.3,SNR=1.7 | | | | | | |
| AKTO | Aktyubinsk | 14.54 | 330 | P | P | 05 27 17.1 | 0.0 |
| | 2.7nm,0.4s,baz=124,slow=11,SNR=7.8 | | | | | | |
| ZALV | Zalesovo Beam | 18.84 | 29 | P | P | 05 28 00.5 | -4.1 |
| | 1.0nm,0.5s,baz=228,slow=12,SNR=6.7 | | | | | | |
| ARCES | ARCESS Array B | 38.95 | 337 | P | P | 05 31 11.1 | +0.7 |
| | 1.1nm,0.9s,baz=98,slow=6.5,SNR=4.9 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| HFS | Hagfors | 40.83 | 321 | P | P | 05 31 26.2 | +0.1 |
| | 0.7nm,0.4s,baz=108,slow=14,SNR=5.8 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| TORD | Torodi Ar. Bea | 64.51 | 267 | P | P | 05 34 23.1 | +1.2 |
| | 0.5nm,0.5s,baz=49,slow=6.0,SNR=8.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

**IDC 24 05:28:34.3±6.0, 28°.06N×139°.17E, h317km±82km, mb3.1/4, mbtmp3.8/5, Error ellipse: s-maj=160.6km s-min=18.2km az=86.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JCJ | Chichijima | 2.85 | 109 | P | Pn | 05 29 30.8 | +1.0 |
| | 57nm,0.4s,baz=0.2,slow=20,SNR=8.6 | | | | | | |
| JCJ | | | | S | S | 05 30 14.3 | 0.0 |
| | 125nm,0.3s,baz=300,slow=23,SNR=13 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **47.95** | **186** | P | | P | 05 36 41.8 | -0.1 |
| | 0.5nm,0.4s,baz=2.6,slow=7.6,SNR=27 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **51.68** | **186** | P | | P | 05 37 09.4 | -0.3 |
| | 0.2nm,0.5s,baz=360,slow=4.8,SNR=6.1 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **71.74** | **340** | P | | P | 05 39 20.6 | -1.4 |
| | 1.4nm,0.9s,baz=74,slow=7.6,SNR=3.6 | | | | | | | |
| | 1.4nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **75.89** | **333** | P | | P | 05 39 46.8 | +0.7 |
| | 0.8nm,0.4s,baz=65,slow=5.8,SNR=10 | | | | | | | |
| | 0.8nm,0.4s | | | | | | | |

*NEIC **24** 05:49:21.1±0.9, 69°.57N±0°.07×144°.36W±0°.03, h5km±7km, Error ellipse: s-maj=10.9km s-min=0.5km az=188.0*

**AEIC 24 05:49:19.6±2.1, 69°.47N±0°.05×144°.37W±0°.08, h5km±6km, ML2.8, ML2.9**/82(NEIC), **Error ellipse: s-maj=8.3km s-min=3.1km az=201.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **55** | | Pg | 05 49 25.2 | +0.2 |
| **C26K** | **Camden Bay** | **0.49** | **337** | | Pg | 05 49 29.3 | +0.3 |
| C26K | | | | | Sg | 05 49 36.0 | +0.7 |
| **D25K** | **Kavik River** | **0.73** | **259** | | Pg | 05 49 33.4 | -0.1 |
| **D25K** | **Kavik River** | **0.73** | **259** | | Sg | 05 49 43.7 | +0.8 |
| **D27M** | **Malcolm River** | **1.23** | **99** | | Pb | 05 49 43.2 | 0.0 |
| **D27M** | **Malcolm River** | **1.23** | **99** | | Sn | 05 50 01.1 | +0.6 |
| **C24K** | **Franklin Bluff** | **1.54** | **281** | | Pg | 05 49 49.2 | +0.2 |
| C24K | | | | | Sg | 05 50 09.5 | +0.6 |
| **D24K** | **Happy Valley** | **1.61** | **261** | | Pg | 05 49 51.1 | +0.7 |
| **D24K** | **Happy Valley** | **1.61** | **261** | IAML | | 05 50 34.3 | |
| | comp=E,156nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **141** | | Pg | 05 49 51.3 | +0.4 |
| **E27K** | **Coleen River** | **1.64** | **141** | | Sg | 05 50 14.9 | +2.9 |
| **F26K** | **Sheenjek River** | **1.78** | **177** | | Pg | 05 49 53.8 | +0.1 |
| **F25K** | **Christian Rive** | **1.94** | **195** | | Pb | 05 49 56.0 | +0.6 |
| F25K | | | | IAML | | 05 51 07.1 | |
| | comp=N,104nm,0.6s | | | | | | |
| F25K | | | | IAML | | 05 51 07.8 | |
| | comp=E,108nm,0.8s | | | | | | |
| **E28M** | **Babbage River** | **1.94** | **114** | Pn | Pb | 05 49 56.0 | +0.6 |
| **TOLK** | **Toolik Lake Re** | **2.05** | **248** | | Pb | 05 49 58.0 | +0.7 |
| TOLK | | | | IAML | | 05 51 12.8 | |
| | comp=N,103nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.05** | **248** | | Sg | 05 50 26.8 | +1.6 |
| **BMAR** | **Burnt Mountain** | **2.05** | **182** | | Pb | 05 49 57.8 | +0.5 |
| **E24K** | **Your Creek** | **2.05** | **229** | | Pb | 05 49 56.8 | -0.5 |
| E24K | | | | IAML | | 05 51 12.7 | |
| | comp=N,76nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **2.21** | **283** | | Pn | 05 49 57.9 | +1.0 |
| **D23K** | **Nanushuk River** | **2.31** | **260** | | Pn | 05 49 59.6 | +1.4 |
| D23K | | | | IAML | | 05 51 24.5 | |
| | comp=N,50nm,0.5s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **215** | | Pb | 05 50 01.1 | -1.3 |
| F24K | | | | IAML | | 05 51 21.5 | |
| | comp=N,48nm,0.8s | | | | | | |
| F24K | | | | IAML | | 05 51 23.4 | |
| | comp=E,52nm,0.3s | | | | | | |
| **E23K** | **Chandalar** | **2.38** | **236** | | Pb | 05 50 03.7 | +0.8 |
| E23K | | | | IAML | | 05 51 21.2 | |
| | comp=E,53nm,0.5s | | | | | | |
| E23K | | | | IAML | | 05 51 22.3 | |
| | comp=N,49nm,0.3s | | | | | | |
| **F28M** | **Old Crow** | **2.49** | **136** | Pn | Pb | 05 50 02.8 | -1.9 |
| **G26K** | **Porcupine Rive** | **2.54** | **175** | | Pb | 05 50 04.0 | -1.6 |
| **E29M** | **Blow River** | **2.58** | **112** | Pn | Pb | 05 50 04.1 | -2.1 |
| E29M | | | | IAML | | 05 51 27.7 | |
| | comp=E,36nm,0.6s | | | | | | |
| **G25K** | **Bearman Lake** | **2.79** | **194** | | Pb | 05 50 07.9 | -2.0 |
| **G27K** | **Doyon Strip** | **2.86** | **158** | Pn | Pb | 05 50 08.6 | -2.4 |
| **FYU** | **Fort Yukon** | **2.94** | **187** | Pn | Pb | 05 50 10.0 | -2.3 |
| **G24K** | **Hadweenzic Riv** | **3.02** | **204** | | Pn | 05 50 10.1 | +2.1 |
| **E22K** | **Anaktuvuk Pass** | **3.02** | **247** | Pn | Pn | 05 50 09.5 | +1.5 |
| E22K | | | | IAML | | 05 51 39.8 | |
| | comp=N,27nm,0.9s | | | | | | |
| E22K | | | | IAML | | 05 51 46.3 | |
| | comp=E,26nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **3.03** | **263** | Pn | Pn | 05 50 09.3 | +1.1 |
| **F22K** | **John River** | **3.49** | **239** | | Pn | 05 50 17.7 | +3.3 |
| **G23K** | **Bananza Creek** | **3.49** | **220** | Pn | Pn | 05 50 17.3 | +2.8 |
| G23K | | | | IAML | | 05 52 01.0 | |
| | comp=N,19nm,0.6s | | | | | | |
| **G29M** | **Pine Creek** | **3.49** | **134** | Pn | Pn | 05 50 16.8 | +2.2 |
| G29M | | | | IAML | | 05 51 59.0 | |
| | comp=N,28nm,0.6s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.60** | **277** | Pn | Pn | 05 50 17.2 | +1.2 |
| **E21K** | **Killik River** | **3.62** | **258** | Pn | Pn | 05 50 17.3 | +1.1 |
| **F30M** | **Barrier River** | **3.66** | **117** | | Pn | 05 50 20.2 | +3.3 |
| **C21K** | **Knifeblade Rid** | **3.71** | **270** | | Pn | 05 50 19.3 | +1.8 |
| **H24K** | **Noodor Dome** | **3.89** | **202** | Pn | Pn | 05 50 22.7 | +2.7 |
| H24K | | | | IAML | | 05 52 12.5 | |
| | comp=E,14nm,1.0s | | | | | | |
| H24K | | | | IAML | | 05 52 18.6 | |
| | comp=N,15nm,0.8s | | | | | | |
| **H29M** | **Whitestone** | **3.98** | **142** | Pn | Pn | 05 50 23.5 | +2.4 |
| **PRP** | **Porcupine Dome** | **4.00** | **187** | | Pn | 05 50 24.6 | +3.1 |
| PRP | | | | IAML | | 05 51 59.8 | |
| | comp=E,12nm,0.5s | | | | | | |
| **I27K** | **Kandik River** | **4.02** | **163** | | Pn | 05 50 24.9 | +3.0 |
| **F21K** | **Alatna River** | **4.06** | **241** | Pn | Pn | 05 50 24.0 | +1.7 |
| **H23K** | **Yukon River** | **4.16** | **211** | | Pn | 05 50 25.8 | +2.1 |
| **I28M** | **Miner Creek** | **4.38** | **155** | Pn | Pn | 05 50 29.6 | +2.8 |
| I28M | | | | IAML | | 05 52 05.3 | |
| | comp=E,12nm,0.7s | | | | | | |
| **E20K** | **Nigu River** | **4.45** | **260** | | Pn | 05 50 29.2 | +1.6 |
| **D20K** | **Etivluk River** | **4.45** | **266** | | Pn | 05 50 29.7 | +2.0 |
| **B20K** | **Meade River** | **4.48** | **283** | Pn | Pn | 05 50 29.3 | +1.3 |
| **MDM** | **Murphy Dome** | **4.77** | **200** | Pn | Pn | 05 50 34.8 | +2.7 |
| **IL31** | | **4.82** | **193** | Pn | Pn | 05 50 35.7 | +3.1 |
| **CCB** | **Clear Creek Bu** | **5.03** | **197** | Pn | Pn | 05 50 38.3 | +2.8 |
| CCB | | | | IAML | | 05 51 21.5 | |
| | comp=N,6.8nm,0.3s | | | | | | |
| **D19K** | **Kuna River** | **5.04** | **265** | Pn | Pn | 05 50 37.3 | +1.4 |
| **MLY** | **Manley** | **5.09** | **212** | | Pn | 05 50 39.2 | +2.7 |
| **MLY** | **Manley** | **5.09** | **212** | IAML | | 05 52 56.1 | |
| | comp=E,5.0nm,1.4s | | | | | | |
| MLY | | | | IAML | | 05 53 00.8 | |
| | comp=N,4.7nm,1.7s | | | | | | |
| **E19K** | **Redstone River** | **5.15** | **253** | | Pn | 05 50 39.5 | +2.2 |
| **WRH** | **Wood River Hil** | **5.23** | **198** | | Pn | 05 50 40.9 | +2.6 |
| **I30M** | **Mount Dempster** | **5.26** | **140** | | Pn | 05 50 41.3 | +2.4 |
| **C19K** | **Lookout Ridge** | **5.41** | **273** | Pn | Pn | 05 50 41.6 | +0.8 |

*NEIC **24** 05:50:02.2±1.5, 69°.56N±0°.05×144°.30W±0°.06, h10km±1km, Error ellipse: s-maj=8.5km s-min=3.4km az=345.0*

**AEIC 24 05:50:00.8±1.4, 69°.47N±0°.04×144°.39W±0°.06, h4km±5km, ML2.8, ML3.0**/112(NEIC), **Error ellipse: s-maj=5.3km s-min=2.9km az=166.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.28** | **56** | Pg | Pg | 05 50 05.9 | -0.4 |
| C27K | | | | Sg | Sg | 05 50 09.7 | -0.3 |
| C27K | | | | IAML | | 05 50 10.6 | |
| | comp=E,3µm,0.2s | | | | | | |
| **C26K** | **Camden Bay** | **0.49** | **338** | | Pg | 05 50 10.3 | +0.2 |
| C26K | | | | | Sb | 05 50 18.1 | -1.3 |
| **C26K** | **Camden Bay** | **0.49** | **338** | IAML | | 05 50 18.9 | |
| | comp=E,502nm,0.5s | | | | | | |
| C26K | | | | IAML | | 05 50 19.9 | |
| | comp=N,966nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.72** | **259** | | Pg | 05 50 14.1 | -0.5 |
| D25K | | | | Sg | Sg | 05 50 24.5 | +0.6 |
| **D27M** | **Malcolm River** | **1.23** | **99** | Pn | Pg | 05 50 23.1 | -1.4 |
| D27M | | | | | Sn | 05 50 42.0 | -0.1 |
| D27M | | | | IAML | | 05 50 44.9 | |
| | comp=N,224nm,0.2s | | | | | | |
| D27M | | | | IAML | | 05 50 45.6 | |
| | comp=E,208nm,0.3s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.53** | **281** | Pn | Pb | 05 50 29.9 | +0.1 |
| C24K | | | | IAML | | 05 50 52.0 | |
| | comp=N,256nm,0.5s | | | | | | |
| C24K | | | | IAML | | 05 50 55.4 | |
| | comp=E,265nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.53** | **281** | | Sg | 05 50 51.3 | +1.3 |
| **D24K** | **Happy Valley** | **1.61** | **261** | Pn | Pb | 05 50 31.0 | -0.1 |
| D24K | | | | IAML | | 05 50 55.2 | |
| | comp=E,318nm,0.6s | | | | | | |
| D24K | | | | IAML | | 05 50 56.0 | |
| | comp=N,303nm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.61** | **261** | | Sg | 05 50 54.8 | +2.4 |
| **E27K** | **Coleen River** | **1.64** | **141** | Pn | Pb | 05 50 31.9 | +0.3 |
| E27K | | | | Sn | Sg | 05 50 53.6 | +0.2 |
| **F26K** | **Sheenjek River** | **1.79** | **177** | Pn | Pb | 05 50 33.8 | -0.3 |
| F26K | | | | Sn | Sb | 05 50 57.0 | +0.2 |
| F26K | | | | IAML | | 05 51 02.3 | |
| | comp=N,170nm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **1.94** | **194** | Pn | Pb | 05 50 36.8 | 0.0 |
| F25K | | | | IAML | | 05 51 08.1 | |
| | comp=N,131nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.95** | **114** | Pn | Pb | 05 50 36.6 | -0.2 |
| **E28M** | **Babbage River** | **1.95** | **114** | | Sg | 05 51 04.2 | +0.9 |
| **D28M** | **Stokes Point** | **2.00** | **91** | | Pg | 05 50 38.6 | -0.6 |
| **D28M** | **Stokes Point** | **2.00** | **91** | IAML | | 05 51 08.5 | |
| | comp=N,97nm,0.9s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **2.04** | **248** | Pn | Pb | 05 50 38.8 | +0.3 |
| **TOLK** | **Toolik Lake Re** | **2.04** | **248** | | Sg | 05 51 06.4 | +0.1 |
| **E24K** | **Your Creek** | **2.05** | **229** | Pn | Pb | 05 50 38.0 | -0.6 |
| E24K | | | | IAML | | 05 51 14.4 | |
| | comp=E,74nm,0.8s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.05** | **182** | Pn | Pb | 05 50 37.6 | -1.0 |
| **C23K** | **Itkillik River** | **2.21** | **282** | Pn | Pb | 05 50 39.9 | -1.4 |
| **C23K** | **Itkillik River** | **2.21** | **282** | | Sg | 05 51 11.5 | -0.2 |
| **C23K** | **Itkillik River** | **2.21** | **282** | IAML | | 05 51 15.7 | |
| | comp=N,171nm,0.7s | | | | | | |
| C23K | | | | IAML | | 05 51 19.0 | |
| | comp=E,176nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **2.30** | **260** | | Pb | 05 50 42.0 | -0.8 |
| **D23K** | **Nanushuk River** | **2.30** | **260** | IAML | | 05 51 25.9 | |
| | comp=E,75nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.35** | **215** | Pn | Pn | 05 50 41.4 | +1.2 |
| **E23K** | **Chandalar** | **2.38** | **236** | | Pb | 05 50 43.9 | -0.2 |
| **F28M** | **Old Crow** | **2.50** | **136** | Pn | Pn | 05 50 43.2 | +1.0 |
| F28M | | | | IAML | | 05 51 28.0 | |
| | comp=N,59nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.54** | **175** | | Pn | 05 50 44.6 | +1.8 |
| **E29M** | **Blow River** | **2.58** | **112** | | Pb | 05 50 46.5 | -1.2 |
| E29M | | | | IAML | | 05 51 31.3 | |
| | comp=N,47nm,0.7s | | | | | | |
| **G25K** | **Bearman Lake** | **2.79** | **194** | | Pn | 05 50 48.4 | +2.2 |
| **FYU** | **Fort Yukon** | **2.94** | **187** | Pn | Pn | 05 50 49.6 | +1.4 |
| **E22K** | **Anaktuvuk Pass** | **3.01** | **247** | Pn | Pn | 05 50 49.7 | +0.3 |
| **G24K** | **Hadweenzic Riv** | **3.01** | **204** | | Pn | 05 50 50.1 | +0.7 |
| G24K | | | | IAML | | 05 51 41.2 | |
| | comp=E,36nm,1.0s | | | | | | |
| **D22K** | **Ayikyak River** | **3.02** | **263** | | Pn | 05 50 50.7 | +1.2 |
| **COLD** | **Coldfoot** | **3.12** | **226** | | Pn | 05 50 52.2 | +1.5 |
| **B22K** | **Teshekpuk Lake** | **3.24** | **290** | Pn | Pn | 05 50 53.0 | +0.6 |
| **H25L** | **Birch Creek** | **3.26** | **190** | | Pn | 05 50 54.5 | +1.8 |
| **F22K** | **John River** | **3.48** | **239** | | Pn | 05 50 57.5 | +1.7 |
| **G23K** | **Bananza Creek** | **3.48** | **220** | Pn | Pn | 05 50 56.8 | +1.0 |
| G23K | | | | IAML | | 05 52 00.5 | |
| | comp=E,25nm,0.7s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.59** | **277** | | Pn | 05 50 58.6 | +1.3 |
| B21K | | | | IAML | | 05 52 13.3 | |
| | comp=E,29nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.61** | **258** | | Pn | 05 50 58.0 | +0.5 |
| E21K | | | | IAML | | 05 51 58.5 | |
| | comp=N,30nm,0.8s | | | | | | |
| E21K | | | | IAML | | 05 52 08.3 | |
| | comp=E,24nm,0.9s | | | | | | |
| **F30M** | **Barrier River** | **3.67** | **117** | | Pn | 05 50 59.6 | +1.3 |
| **C21K** | **Knifeblade Rid** | **3.70** | **270** | | Pn | 05 51 00.7 | +1.9 |
| **H24K** | **Noodor Dome** | **3.88** | **202** | | Pn | 05 51 02.2 | +0.9 |
| **G30M** | **tAoh Zraii Nji** | **3.94** | **126** | Pn | Pn | 05 51 03.2 | +1.2 |
| **G30M** | **tAoh Zraii Nji** | **3.94** | **126** | IAML | | 05 52 18.1 | |
| | comp=N,16nm,0.9s | | | | | | |
| **H29M** | **Whitestone** | **3.98** | **142** | | Pn | 05 51 04.4 | +1.8 |
| H29M | | | | IAML | | 05 52 02.6 | |
| | comp=E,25nm,0.8s | | | | | | |
| H29M | | | | IAML | | 05 52 18.4 | |
| | comp=N,18nm,0.8s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.00** | **187** | | Pn | 05 51 04.7 | +1.8 |
| PRP | | | | IAML | | 05 51 54.6 | |
| | comp=N,21nm,0.4s | | | | | | |
| **I27K** | **Kandik River** | **4.03** | **163** | | Pn | 05 51 05.5 | +2.2 |
| **F21K** | **Alatna River** | **4.06** | **241** | | Pn | 05 51 04.7 | +1.1 |
| F21K | | | | IAML | | 05 52 13.6 | |
| | comp=E,17nm,0.6s | | | | | | |
| F21K | | | | IAML | | 05 52 22.5 | |
| | comp=N,19nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **4.10** | **101** | | Pn | 05 51 05.4 | +1.3 |
| **H23K** | **Yukon River** | **4.16** | **211** | | Pn | 05 51 06.6 | +1.5 |
| **H23K** | **Yukon River** | **4.16** | **211** | IAML | | 05 52 22.2 | |
| | comp=E,20nm,0.8s | | | | | | |
| H23K | | | | IAML | | 05 52 26.1 | |
| | comp=N,18nm,0.7s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.21** | **173** | | Pn | 05 51 07.6 | +1.9 |
| I26K | | | | IAML | | 05 52 22.3 | |
| | comp=E,20nm,1.2s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.25** | **133** | | Pn | 05 51 07.6 | +1.3 |
| **I28M** | **Miner Creek** | **4.39** | **155** | Pn | Pn | 05 51 10.2 | +2.0 |
| I28M | | | | IAML | | 05 52 03.0 | |
| | comp=N,17nm,0.6s | | | | | | |
| **E20K** | **Nigu River** | **4.44** | **260** | | Pn | 05 51 10.7 | +1.7 |
| **D20K** | **Etivluk River** | **4.45** | **266** | | Pn | 05 51 10.7 | +1.6 |
| **POKR** | **Poker Plat Res** | **4.53** | **197** | | Pn | 05 51 11.9 | +1.8 |
| **POKR** | **Poker Plat Res** | **4.53** | **197** | IAML | | 05 52 08.9 | |
| | comp=N,16nm,0.5s | | | | | | |
| **G21K** | **Allakaket** | **4.53** | **233** | Pn | Pn | 05 51 10.8 | +0.7 |
| G21K | | | | IAML | | 05 52 35.4 | |
| | comp=N,14nm,0.7s | | | | | | |
| **G31M** | **Satah River** | **4.55** | **119** | | Pn | 05 51 11.6 | +1.1 |
| **G31M** | **Satah River** | **4.55** | **119** | IAML | | 05 52 16.8 | |
| | comp=N,12nm,2.6s | | | | | | |
| G31M | | | | IAML | | 05 52 44.0 | |
| | comp=E,16nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.75** | **206** | | Pn | 05 51 14.4 | +1.4 |
| I23K | | | | IAML | | 05 52 45.6 | |
| | comp=N,9.5nm,1.1s | | | | | | |
| I23K | | | | IAML | | 05 52 46.5 | |
| | comp=E,11nm,1.0s | | | | | | |
| **MDM** | **Murphy Dome** | **4.77** | **200** | | Pn | 05 51 14.8 | +1.3 |
| MDM | | | | IAML | | 05 52 37.6 | |
| | comp=N,10nm,0.7s | | | | | | |
| MDM | | | | IAML | | 05 52 46.7 | |
| | comp=E,9.1nm,0.9s | | | | | | |
| **COLA** | **College** | **4.81** | **198** | | Pn | 05 51 15.8 | +1.9 |
| **IL31** | | **4.82** | **193** | | Pn | 05 51 15.9 | +1.9 |
| **ILAR** | **Eielson Array** | **4.82** | **193** | Pn | Pn | 05 51 15.9 | +1.8 |
| **F20K** | **Avaraart Lake** | **4.87** | **245** | | Pn | 05 51 15.4 | +0.7 |
| F20K | | | | IAML | | 05 52 17.6 | |
| | comp=E,8.1nm,0.6s | | | | | | |
| F20K | | | | IAML | | 05 52 48.9 | |
| | comp=N,8.4nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **4.88** | **164** | | Pn | 05 51 15.6 | +0.7 |
| EGAK | | | | IAML | | 05 52 17.0 | |
| | comp=N,9.4nm,0.7s | | | | | | |
| EGAK | | | | IAML | | 05 52 54.0 | |
| | comp=N,9.5nm,1.3s | | | | | | |
| **J25K** | **Salcha River,** | **4.89** | **185** | | Pn | 05 51 17.1 | +1.9 |
| J25K | | | | IAML | | 05 52 46.2 | |
| | comp=E,8.1nm,1.2s | | | | | | |
| **J26L** | **Joseph Creek** | **5.00** | **176** | | Pn | 05 51 18.4 | +1.7 |
| J26L | | | | IAML | | 05 52 22.0 | |
| | comp=N,8.6nm,0.6s | | | | | | |
| J26L | | | | IAML | | 05 52 46.8 | |
| | comp=E,10nm,2.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.00** | **224** | | Pn | 05 51 18.3 | +1.7 |
| H21K | | | | IAML | | 05 52 47.3 | |
| | comp=E,9.2nm,1.5s | | | | | | |
| H21K | | | | IAML | | 05 52 53.0 | |
| | comp=N,7.1nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.03** | **197** | | Pn | 05 51 18.4 | +1.4 |
| CCB | | | | IAML | | 05 52 24.5 | |
| | comp=E,7.7nm,3.5s | | | | | | |
| **D19K** | **Kuna River** | **5.04** | **265** | Pn | Pn | 05 51 18.4 | +1.3 |
| **MLY** | **Manley** | **5.09** | **212** | | Pn | 05 51 19.6 | +1.7 |
| **E19K** | **Redstone River** | **5.14** | **253** | | Pn | 05 51 20.0 | +1.4 |
| E19K | | | | IAML | | 05 52 50.4 | |
| | comp=E,8.2nm,0.6s | | | | | | |
| **HDA** | **Harding Lake** | **5.18** | **192** | | Pn | 05 51 20.9 | +1.8 |
| HDA | | | | IAML | | 05 52 47.1 | |
| | comp=E,9.8nm,0.8s | | | | | | |
| HDA | | | | IAML | | 05 52 50.8 | |
| | comp=N,9.1nm,0.7s | | | | | | |
| **WRH** | **Wood River Hil** | **5.23** | **198** | | Pn | 05 51 20.9 | +1.3 |
| WRH | | | | IAML | | 05 52 30.8 | |
| | comp=N,7.2nm,3.8s | | | | | | |
| WRH | | | | IAML | | 05 53 04.5 | |
| | comp=E,6.4nm,1.0s | | | | | | |
| **NEA2** | **Nenana** | **5.23** | **203** | | Pn | 05 51 21.4 | +1.7 |
| **NEA2** | **Nenana** | **5.23** | **203** | IAML | | 05 52 56.0 | |
| | comp=E,5.9nm,1.0s | | | | | | |
| **I30M** | **Mount Dempster** | **5.27** | **140** | | Pn | 05 51 21.6 | +1.2 |
| I30M | | | | IAML | | 05 52 24.5 | |
| | comp=N,7.1nm,0.4s | | | | | | |
| I30M | | | | IAML | | 05 52 25.6 | |
| | comp=E,9.5nm,0.4s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.41** | **273** | Pn | Pn | 05 51 22.8 | +0.7 |
| **SCRK** | **Sand Creek** | **5.52** | **178** | Pn | Pn | 05 51 25.6 | +1.8 |
| **K27K** | **Chicken** | **5.54** | **169** | | Pn | 05 51 26.6 | +2.6 |
| **F19K** | **Shaleruckik Mo** | **5.65** | **248** | Pn | Pn | 05 51 27.2 | +1.7 |
| **RIDG** | **Independent Ri** | **5.76** | **182** | | Pn | 05 51 27.9 | +0.9 |
| **DAWY** | **Dawson** | **5.78** | **158** | | Pn | 05 51 29.5 | +2.3 |
| **J30M** | **Hart River** | **5.84** | **143** | | Pn | 05 51 29.8 | +1.7 |
| **G19K** | **Purcell Mounta** | **5.85** | **241** | Pn | Pn | 05 51 28.1 | -0.2 |
| **BPAW** | **Bear Paw Mtn.** | **5.99** | **209** | Pn | Pn | 05 51 31.2 | +1.0 |
| **C18K** | **Utukok River** | **6.08** | **270** | Pn | Pn | 05 51 32.0 | +0.6 |
| **B18K** | **Kokolik River** | **6.14** | **277** | | Pn | 05 51 34.3 | +2.1 |
| **K29M** | **Barlow Dome** | **6.27** | **151** | | Pn | 05 51 36.6 | +2.5 |
| **E18K** | **Tukpahlearik C** | **6.31** | **259** | Pn | Pn | 05 51 36.0 | +1.4 |
| **L26K** | **Log Cabin Wild** | **6.49** | **176** | | Pn | 05 51 38.5 | +1.5 |
| **L27K** | **Beaver Creek,** | **6.52** | **170** | | Pn | 05 51 40.0 | +2.6 |
| **DHY** | **Denali Highway** | **6.54** | **192** | Pn | Pn | 05 51 40.6 | +2.9 |
| **PAX** | **Paxson** | **6.54** | **184** | | Pn | 05 51 40.6 | +2.7 |
| **J20K** | **Nowinta River** | **6.56** | **221** | Pn | Pn | 05 51 38.9 | +0.9 |
| **H18K** | **Honhosa River** | **6.92** | **238** | Pn | Pn | 05 51 43.2 | +0.4 |
| **M27K** | **Edge Creek, AK** | **7.22** | **171** | Pn | Pn | 05 51 49.6 | +2.5 |
| **K20K** | **Telida** | **7.25** | **217** | Pn | Pn | 05 51 47.9 | +0.4 |
| **H17K** | **Granite Mounta** | **7.54** | **240** | Pn | Pn | 05 51 52.3 | +0.9 |
| **C16K** | **Lisburne Hills** | **7.65** | **271** | Pn | Pn | 05 51 52.9 | 0.0 |

**IDC 24 05:55:09.6±4.0, 18°.33S×178°.38W, h0km, mb3.7**/4, **mbtmp3.7**/4, **Error ellipse: s-maj=307.9km s-min=26.6km az=154.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.58** | **260** | P | P | 06 03 23.1 | -0.8 |
| | 0.3nm,0.8s,baz=97,slow=6.9,SNR=8.1 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **44.70** | **255** | P | P | 06 03 25.1 | +0.3 |
| | 1.6nm,0.5s,baz=88,slow=8.2,SNR=30 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.71** | **44** | P | P | 06 07 18.8 | -0.8 |
| | 0.5nm,0.8s,baz=242,slow=7.8,SNR=4.6 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.64** | **43** | P | P | 06 08 01.4 | +1.1 |
| | 0.4nm,0.8s,baz=196,slow=3.8,SNR=4.6 | | | | | | |
| | 0.4nm,0.6s | | | | | | |

**WBNET 24 06:00:12.8, 50°.23N×12°.46E, h6km, MlI0.1, 4C-6D, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NKC** | **Novy Kostel** | **0.01** | **263** | ⇓P | Pg | 06 00 14.2 | +0.1 |
| NKC | | | | S | Sg | 06 00 15.0 | +0.1 |
| **LBCW** | **Luby** | **0.04** | **316** | ⇓P | Pg | 06 00 14.5 | +0.2 |
| LBCW | | | | S | Sg | 06 00 15.6 | +0.2 |
| **KVC** | **Kvetna** | **0.05** | **128** | ⇑P | Pg | 06 00 14.4 | +0.1 |
| KVC | | | | S | Sg | 06 00 15.3 | 0.0 |
| **STCW** | **Studenec** | **0.05** | **57** | ⇑P | Pg | 06 00 14.4 | +0.1 |
| STCW | | | | S | Sg | 06 00 15.4 | 0.0 |
| **VAC** | **Vackov** | **0.05** | **271** | ⇓P | Pg | 06 00 14.5 | +0.1 |
| VAC | | | | S | Sg | 06 00 15.5 | 0.0 |
| **POCW** | **Potky** | **0.09** | **347** | ⇓P | Pg | 06 00 15.1 | +0.2 |
| POCW | | | | S | Sg | 06 00 16.5 | +0.1 |
| **SKC** | **Skalna** | **0.09** | **224** | ⇑P | Pg | 06 00 15.0 | +0.2 |
| SKC | | | | S | Sg | 06 00 16.5 | +0.2 |
| **KOCW** | **Kopaniny** | **0.15** | **282** | ⇓P | Pg | 06 00 16.0 | +0.1 |
| **ZHC** | **Zelena Hora** | **0.19** | **211** | ⇑P | Pg | 06 00 16.8 | +0.2 |
| **LACW** | **Lazy** | **0.21** | **150** | S | Sg | 06 00 20.3 | +0.5 |
| **TRCW** | **Trojmez** | **0.21** | **289** | ⇓P | Pg | 06 00 17.2 | +0.1 |
| TRCW | | | | S | Sg | 06 00 20.1 | +0.1 |

*HEL **24** 06:00:25.8±0.1, 67°.72N×27°.00E, h0km, ML1.1, Suspected explosion*
*KOLA **24** 06:00:26.4, 67°.66N×26°.82E, h0km, ML2.4, Error ellipse: s-maj=16.0km s-min=3.6km az=40.0, Finland, Lapland*
*IDC **24** 06:00:27.3±1.4, 67°.76N×27°.00E, h0km, mbtmp3.0/1, ML1.8/1, Error ellipse: s-maj=31.2km s-min=7.7km az=82.0*

**ISC 24 06:00:23.9±0.9, 67°.74N±0°.02×27°.04E±0°.03, h0km, n22, σ0°.58/31, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGF** | **Sodankyl** | **0.35** | **214** | *e*P | **Pg** | **06 00 31.4** | **+0.8** |
| SGF | | | | MSG | | 06 00 31.9 | |
| | comp=Z,4.9nm,0.1s | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **0.88** | **32** | *e*P | **Pb** | **06 00 42.0** | **-0.1** |
| RAJF | | | | *e*SB | **Sn** | **06 00 55.9** | **-1.1** |
| **VRF** | **Varrio** | **0.98** | **88** | *e*P | **Pb** | **06 00 43.6** | **-0.1** |
| **RNF** | **Rovaniemi** | **1.20** | **200** | *e*P | **Pb** | **06 00 47.1** | **-0.3** |
| **KLF** | **Kolari** | **1.29** | **248** | *e*P | **Pg** | **06 00 47.9** | **-0.6** |
| KLF | | | | *e*S | **Sg** | **06 01 05.1** | **-0.1** |
| KLF | | | | MSG | | 06 01 07.2 | |
| | comp=Z,1.7nm,0.1s | | | | | | |
| **HEF** | **Hetta** | **1.44** | **300** | *e*P | **Pb** | **06 00 51.8** | **+0.3** |
| **HEF** | **Hetta** | **1.44** | **300** | *e*PG | **Pb** | **06 00 51.6** | **+0.1** |
| HEF | | | | *e*S | **Sn** | **06 01 10.7** | **-0.1** |
| HEF | | | | MSG | | 06 01 12.3 | |
| | comp=Z,1.3nm,0.1s | | | | | | |
| **OLKF** | **Oulanka, Finla** | **1.70** | **146** | *e*P | **Pb** | **06 00 55.9** | **-0.1** |
| **RANF** | **Ranua** | **1.73** | **183** | *e*P | **Pb** | **06 00 56.0** | **-0.5** |
| RANF | | | | *e*S | **Sg** | **06 01 19.0** | **-0.4** |
| **ARA0** | **ARCESS Array S** | **1.89** | **343** | *e*P | **Pb** | **06 00 59.2** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **1.89** | **343** | P | **Pg** | **06 00 59.9** | **-0.2** |
| ARCES | | | | S | **Sg** | **06 01 25.3** | **+0.7** |
| **ARCES** | **ARCESS Array B** | **1.89** | **343** | Pn | **Pb** | **06 00 59.1** | **-0.2** |
| | comp=Z,1.2nm,0.3s,baz=161,slow=19,SNR=56 | | | | | | |
| ARCES | | | | Lg | Lg | 06 01 26.9 | |
| | comp=Z,2.3nm,0.3s,baz=166,slow=27,SNR=21

**ISC 24 06:14:35.7±1.1, 33°.65N±0°.03×35°.55E±0°.06, h9km±8km, n29, σ0°.56/31, Jordan-Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DQRL | Deir Qamar | 0.06 | 20 | eP | Pg | 06 14 37.8 | 0.0 |
| QRWL | Qaraoun | 0.15 | 131 | eP | Pg | 06 14 38.9 | -0.1 |
| BHL | Bhannes | 0.27 | 19 | eP | Pg | 06 14 41.2 | +0.1 |
| RCY | Rachaya | 0.29 | 122 | eP | Pg | 06 14 41.4 | 0.0 |
| GEM | Giv'at Ha'Em | 0.45 | 167 | S | Sb | 06 14 51.7 | -0.8 |
| GEM | Giv'at Ha'Em | 0.45 | 167 | P | Pg | 06 14 44.1 | -0.3 |
| MMC7 | Mount Meron ar | 0.64 | 192 | P | Pg | 06 14 47.9 | -0.1 |
| MMA0B | Mount Meron ar | 0.64 | 191 | P | Pg | 06 14 48.3 | +0.2 |
| MMA0B | Mount Meron ar | 0.64 | 191 | S | Sb | 06 14 58.2 | 0.0 |
| HNTI | Hanita | 0.64 | 209 | S | Sb | 06 14 57.4 | -0.8 |
| HNTI | Hanita | 0.64 | 209 | P | Pg | 06 14 48.3 | +0.2 |
| KSHT | Keshet | 0.70 | 161 | S | Sb | 06 14 59.9 | 0.0 |
| KSHT | Keshet | 0.70 | 161 | P | Pg | 06 14 48.9 | -0.3 |
| HWQ | Hawqa | 0.71 | 28 | eP | Pg | 06 14 49.2 | -0.2 |
| HWQ | | | | eS | Sg | 06 14 59.1 | +0.4 |
| BEIL | Beino | 1.04 | 31 | eP | Pg | 06 14 55.0 | -0.7 |
| BEIL | | | | eS | Sg | 06 15 09.1 | 0.0 |
| OFRI | `Ofer | 1.13 | 205 | S | Sn | 06 15 13.3 | 0.0 |
| OFRI | `Ofer | 1.13 | 205 | P | Pg | 06 14 56.9 | -0.4 |
| MMLI | Mount Malkishu | 1.21 | 185 | P | Pg | 06 14 58.3 | -0.6 |
| MMLI | Mount Malkishu | 1.21 | 185 | S | Sn | 06 15 15.8 | +0.4 |
| HMDT | Nahal Hemdat | 1.39 | 181 | P | Pn | 06 15 00.8 | -0.4 |
| HMDT | Nahal Hemdat | 1.39 | 181 | S | Sn | 06 15 20.7 | +0.9 |
| SLTI | Sal'it | 1.47 | 197 | P | Pn | 06 15 02.1 | -0.2 |
| SLTI | Sal'it | 1.47 | 197 | S | Sg | 06 15 22.8 | -0.1 |
| YTIR | Yattir | 2.31 | 189 | P | Pn | 06 15 13.7 | -0.2 |
| YTIR | Yattir | 2.31 | 189 | S | Sn | 06 15 43.7 | +1.1 |
| MSBI | Mazada | 2.33 | 184 | P | Pn | 06 15 13.9 | -0.3 |
| MSBI | Mazada | 2.33 | 184 | S | Sn | 06 15 44.1 | +1.1 |
| PRNI | Paran | 3.32 | 188 | P | Pn | 06 15 27.9 | 0.0 |
| PRNI | Paran | 3.32 | 188 | S | Sn | 06 16 08.8 | +1.4 |

*IDC 24 06:32:47.5±0.9, 36°.30N×34°.00W, h0km, mb3.8/9, mbtmp3.8/9, MS3.4/18, Error ellipse: s-maj=29.4km s-min=22.1km az=172.0*
*NEIC 24 06:32:50.6±1.3, 36°.10N±0°.05×34°.3W±0°.1, h10km±1km, mb4.5/21, Error ellipse: s-maj=17.1km s-min=6.6km az=114.0*

**ISC 24 06:32:50.9±0.6, 36°.2N±0°.1×34°.22W±0°.07, h18km, n47, σ1°.04/32, mb4.4/19, MS3.5/18, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMLA | Cha da Macela | 7.14 | 75 | Pn | Pn | 06 34 35.9 | +1.5 |
| PMOZ | Porto Moniz, M | 14.43 | 98 | Pn | Pn | 06 36 15.4 | +1.1 |
| MACI | Morro de la Ar | 16.92 | 113 | Pn | Pn | 06 36 46.4 | -0.6 |
| MACI | | | | IAmb | IAmb | 06 37 16.8 | |
| | comp=Z,79nm,1.0s | | | | | | |
| MESJ | Messejana | 20.81 | 78 | P | P | 06 37 31.8 | +0.5 |
| ESDC | Sonseca Array | 24.07 | 72 | P | P | 06 38 05.5 | +0.3 |
| ESDC | Sonseca Array | 24.07 | 72 | P | P | 06 38 05.7 | +0.5 |
| | comp=Z,0.5nm,0.7s,baz=260,slow=7.7,SNR=6.2 | | | | | | |
| ESDC | | | | LR | LR | 06 45 03.4 | |
| | comp=Z,52nm,21.5s,baz=253,slow=31 | | | | | | |
| D62A | Allapoint, All | 28.01 | 304 | P | P | 06 38 40.6 | 0.0 |
| D62A | | | | IAmb | IAmb | 06 38 41.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| SCHQ | Schefferville | 29.12 | 320 | LR | LR | 06 49 06.8 | |
| | comp=Z,89nm,21.0s,baz=160,slow=34 | | | | | | |
| M63A | Gales Ferry | 29.78 | 292 | P | P | 06 38 56.3 | -0.2 |
| GDSD | La Dsirade Is | 30.99 | 237 | P | P | 06 39 06.3 | -1.0 |
| SFJD | Kangerlussuaq | 32.29 | 348 | LR | LR | 06 49 12.8 | |
| | comp=Z,45nm,21.3s,baz=177,slow=31 | | | | | | |
| T57A | Hurt | 35.92 | 285 | P | P | 06 39 50.8 | +0.7 |
| TAM | Tamanrasset | 36.82 | 100 | P | P | 06 39 59.6 | +1.5 |
| PCRV | Puerto La Cruz | 37.81 | 234 | LR | LR | 06 54 08.4 | |
| | comp=Z,53nm,18.2s,slow=34 | | | | | | |
| TORD | Torodi Ar. Bea | 39.54 | 116 | P | P | 06 40 19.6 | -1.3 |
| | comp=Z,0.5nm,0.8s,baz=310,slow=7.8,SNR=2.2 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| TKL | Tuckaleechee C | 39.78 | 284 | LR | LR | 06 53 42.2 | |
| | comp=Z,46nm,20.3s,baz=133,slow=31 | | | | | | |
| DBIC | Dimbokro | 39.80 | 130 | LR | LR | 06 54 29.9 | |
| | comp=Z,71nm,19.2s,baz=270,slow=33 | | | | | | |
| PBMO | Poplar Bluff | 44.64 | 288 | P | P | 06 41 02.4 | 0.0 |
| PBMO | | | | IAmb | IAmb | 06 41 09.0 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| T42A | Van Buren | 45.07 | 289 | P | P | 06 41 06.3 | +0.5 |
| T42A | | | | IAmb | IAmb | 06 41 12.4 | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| ULM | Lac du Bonnet | 45.80 | 308 | LR | LR | 06 58 50.4 | |
| | comp=Z,84nm,21.3s,baz=82,slow=34 | | | | | | |
| S39A | Bolivar | 46.58 | 290 | P | P | 06 41 18.8 | +1.1 |
| S39A | | | | IAmb | IAmb | 06 41 23.8 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 46.88 | 51 | LR | LR | 06 59 36.4 | |
| | comp=Z,34nm,18.4s,baz=235,slow=34 | | | | | | |
| MIAR | Mount Ida | 47.77 | 286 | P | P | 06 41 27.8 | +0.7 |
| MIAR | | | | IAmb | IAmb | 06 41 33.9 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| JTS | Las Juntas de | 52.53 | 254 | LR | LR | 07 00 55.7 | |
| | comp=Z,22nm,21.4s,baz=82,slow=32 | | | | | | |
| BDFB | Brasilia | 53.15 | 197 | LR | LR | 07 00 58.3 | |
| | comp=Z,53nm,19.3s,baz=326,slow=32 | | | | | | |
| BRDY | Brady | 53.22 | 285 | P | P | 06 42 08.5 | +0.2 |
| BRDY | | | | IAmb | IAmb | 06 42 09.1 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| CMIG | Matias Romero | 56.58 | 267 | LR | LR | 07 07 19.9 | |
| | comp=Z,16nm,18.2s,baz=85,slow=36 | | | | | | |
| PDAR | Pinedale Array | 56.75 | 302 | P | P | 06 42 33.5 | -0.4 |
| | comp=Z,0.3nm,0.6s,baz=80,slow=9.3,SNR=4.5 | | | | | | |
| PDAR | | | | LR | LR | 07 05 59.3 | |
| | comp=Z,25nm,19.2s,baz=57,slow=35 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| IMW | Indian Meadow | 57.29 | 303 | P | P | 06 42 38.4 | +0.6 |
| REDW | Red Top Meadow | 57.42 | 303 | P | P | 06 42 39.0 | +0.3 |
| ANMO | Albuquerque | 57.47 | 292 | LR | LR | 07 05 24.7 | |
| | comp=Z,43nm,20.0s,baz=130,slow=34 | | | | | | |
| TX31 | Lajitas Ar. Si | 57.70 | 285 | P | P | 06 42 40.8 | +0.1 |
| TXAR | Lajitas Array | 57.70 | 285 | P | P | 06 42 41.1 | +0.4 |
| | comp=Z,0.8nm,0.8s,baz=87,slow=6.3,SNR=10 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| DLMT | Dillon | 57.88 | 305 | P | P | 06 42 42.9 | +1.0 |
| DLMT | | | | IAmb | IAmb | 06 42 43.5 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| NEW | Newport | 59.74 | 310 | LR | LR | 07 08 31.1 | |
| | comp=Z,44nm,19.6s,baz=76,slow=36 | | | | | | |
| DUG | Dugway, Tooele | 59.98 | 300 | P | P | 06 42 56.8 | +0.4 |
| DUG | | | | IAmb | IAmb | 06 42 58.4 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| LPAZ | La Paz | 61.24 | 218 | P | P | 06 43 06.5 | +0.9 |
| | comp=Z,1.5nm,0.7s,baz=353,slow=8.2,SNR=9.1 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| ELK | Elko | 61.45 | 301 | LR | LR | 07 10 09.2 | |
| | comp=Z,38nm,18.9s,baz=90,slow=36 | | | | | | |
| PINE | Pine Mountain | 63.98 | 306 | P | P | 06 43 24.6 | +1.2 |
| AKTO | Aktyubinsk | 64.43 | 45 | P | P | 06 43 24.7 | -1.2 |
| | comp=Z,1.6nm,0.5s,baz=287,slow=5.5,SNR=4.5 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 64.58 | 300 | P | P | 06 43 27.4 | 0.0 |
| | comp=Z,0.6nm,0.8s,baz=91,slow=5.9,SNR=4.9 | | | | | | |
| NVAR | | | | LR | LR | 07 12 18.8 | |
| | comp=Z,34nm,18.1s,baz=93,slow=37 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| BBB | Bella Bella | 64.59 | 317 | LR | LR | 07 10 35.0 | |
| | comp=Z,50nm,20.3s,baz=62,slow=35 | | | | | | |
| M29M | Somme Creek | 64.69 | 330 | P | P | 06 43 28.6 | +1.1 |
| M29M | | | | IAmb | IAmb | 06 43 35.0 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| YBH | Yreka Blue Hor | 66.07 | 305 | LR | LR | 07 12 09.1 | |
| | comp=Z,39nm,19.4s,baz=48,slow=36 | | | | | | |
| ILAR | Eielson Array | 66.60 | 334 | P | P | 06 43 39.6 | -0.1 |
| | comp=Z,0.5nm,0.8s,baz=56,slow=4.5,SNR=5.8 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 75.31 | 37 | P | P | 06 44 31.2 | -1.5 |
| | comp=Z,1.3nm,0.3s,baz=312,slow=6.5,SNR=4.8 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 79.70 | 39 | P | P | 06 44 54.2 | -3.3 |
| | comp=Z,0.8nm,0.9s,baz=324,slow=1.6,SNR=4.6 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |

*IDC 24 06:40:56.6±1.6, 29°.86N×139°.16E, h380km±21km, mb3.1/8, mbtmp3.8/10, Error ellipse: s-maj=54.6km s-min=15.3km az=77.0*
*JMA 24 06:40:56.1±0.3, 30°.N±2°.×14°.0E±°, h396km, NEAR TORISHIMA IS*

**ISC 24 06:40:56.3±0.8, 29°.86N±0°.08×139°.6E±0°.2, h388km, n15, σ0°.93/17, mb3.5/7, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHJ | Hachijo jima 2 | 3.25 | 3 | P | Pn | 06 42 00.9 | +0.4 |
| | 65nm,0.6s,baz=253,slow=23,SNR=5.4 | | | | | | |
| CBIJ | Chichi jima | 3.60 | 139 | eP | Pn | 06 42 04.1 | +0.2 |
| CBIJ | | | | eS | S | 06 42 56.9 | -1.7 |
| BSO1 | Boso 1 | 4.93 | 14 | eP | Pn | 06 42 17.1 | +0.9 |
| BSO1 | | | | eS | S | 06 43 20.5 | -0.7 |
| JIE | Ise | 5.12 | 333 | eP | Pn | 06 42 20.1 | +1.2 |
| JRY | Ryogami san | 6.16 | 355 | eP | Pn | 06 42 29.8 | -0.3 |
| MJAR | Matsushiro Arr | 6.76 | 351 | P | Pn | 06 42 35.5 | -1.3 |
| | 3.0nm,0.4s,baz=169,slow=11,SNR=8.7 | | | | | | |
| JMK | Ichinoseki | 9.17 | 8 | eP | P | 06 43 05.4 | +0.6 |
| KLR | Kul'dur | 20.24 | 345 | P | P | 06 45 03.6 | +0.2 |
| | 0.7nm,0.5s,baz=203,slow=7.7,SNR=2.4 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 46.95 | 308 | P | P | 06 48 49.0 | -0.7 |
| | 0.4nm,0.6s,baz=79,slow=7.8,SNR=3.6 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 49.46 | 313 | P | P | 06 49 07.3 | -1.3 |
| | 0.7nm,0.4s,baz=91,slow=7.9,SNR=9.0 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 49.77 | 186 | P | P | 06 49 11.9 | +0.6 |
| | 0.3nm,0.3s,baz=2.5,slow=7.8,SNR=18 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| BVAR | Borovoye Array | 54.45 | 316 | P | P | 06 49 44.6 | -0.3 |
| | 1.0nm,0.4s,baz=98,slow=7.7,SNR=6.2 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| ARCES | ARCESS Array B | 70.17 | 340 | P | P | 06 51 28.7 | +1.1 |
| | 0.7nm,0.6s,baz=71,slow=9.1,SNR=5.0 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| FINES | FINESS Array B | 74.44 | 333 | P | P | 06 51 52.6 | -0.2 |
| | 1.7nm,0.9s,baz=90,slow=4.2,SNR=1.9 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| HFS | Hagfors | 79.97 | 336 | P | P | 06 52 22.7 | -0.4 |
| | 0.7nm,0.4s,baz=108,slow=4.7,SNR=4.7 | | | | | | |
| | 0.7nm,0.4s | | | | | | |

**IDC 24 06:40:59.6±1.6, 18°.14S×177°.97W, h0km, mb3.8/4, mbtmp3.8/4, Error ellipse: s-maj=52.2km s-min=33.7km az=176.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 45.01 | 260 | P | P | 06 49 16.3 | -1.0 |
| | 0.2nm,0.3s,baz=96,slow=7.3,SNR=5.9 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| ASAR | Alice Springs | 45.13 | 254 | P | P | 06 49 18.9 | +0.5 |
| | 1.2nm,0.4s,baz=89,slow=7.9,SNR=21 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| QSPA | South Pole Qui | 71.91 | 180 | P | P | 06 52 24.7 | 0.0 |
| | 4.4nm,1.0s,baz=19,slow=0.5,SNR=19 | | | | | | |
| | 4.4nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 85.76 | 57 | P | P | 06 53 41.3 | 0.0 |
| | 0.1nm,0.6s,baz=222,slow=4.9,SNR=1.8 | | | | | | |
| | 0.1nm,0.6s | | | | | | |

*IDC 24 06:56:51.9±1.3, 37°.02N×104°.93W, h0km, mbtmp3.3/4, ML3.5/4, Error ellipse: s-maj=20.3km s-min=10.5km az=73.0*
*NEIC 24 06:56:52.0±1.5, 36°.95N±0°.03×104°.85W±0°.02, h7km±3km, mb3.7/5, mb_Lg3.6/165, ML3.8/66, Mwr3.6/16, Error ellipse: s-maj=4.3km s-min=2.4km az=207.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=2.08; $M_{\theta\theta}$=0.92; $M_{\phi\phi}$=1.16; $M_{r\theta}$=0.20; $M_{r\phi}$=-0.92; $M_{\theta\phi}$=2.44; Fault plane solution: $M_o$=3.18000×$10^{14}$ NP1:$\phi_s$=304.25000°, $\delta$=26.20000°, $\lambda$=-132.50000°. NP2:$\phi_s$=169.86000°, $\delta$=71.00000°, $\lambda$=-71.61000°. Principal axes: T 2.7553, Plg24.0000°, Azm246.0000°; N 0.7181, Plg17.0000°, Azm344.0000°; P -3.4733, Plg60.0000°, Azm106.0000°;*
*NEIC 24 06:56:52.3, 36°.97N×104°.86W, h7km*

**ISC 24 06:56:53.3±0.9, 37°.01N±0°.06×104°.83W±0°.04, h10km, n94, σ1°.13/68, Colorado**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| T25A | Trinidad | 0.36 | 69 | Pg | Pg | 06 57 00.5 | -0.1 |
| T25A | | | | Sg | Sg | 06 57 05.3 | 0.0 |
| SDCO | Great Sand Dun | 0.91 | 324 | | Pg | 06 57 09.7 | -1.2 |
| SDCO | | | | Sg | Sg | 06 57 21.4 | -1.3 |
| S22A | 4UR Ranch, Cre | 1.75 | 295 | | Pn | 06 57 24.8 | +0.7 |
| S22A | | | | IAML | | 06 57 53.0 | |
| | comp=E,583nm,0.6s | | | | | | |
| S22A | | | | IAML | | 06 57 56.1 | |
| | comp=N,498nm,0.6s | | | | | | |
| RTBA | Rita Blanca | 1.78 | 108 | Pn | Pn | 06 57 24.9 | +0.8 |
| Q24A | Divide | 1.97 | 353 | | Pn | 06 57 28.5 | +1.5 |
| Q24A | | | | IAML | | 06 57 55.4 | |
| | comp=E,571nm,0.7s | | | | | | |
| ANMO | Albuquerque | 2.44 | 213 | | Pn | 06 57 33.8 | +0.4 |
| ANMO | Albuquerque | 2.44 | 213 | Pn | Pn | 06 57 33.4 | -0.1 |
| ANMO | | | | IAmb_Lg | | 06 58 08.8 | |
| | comp=Z,65nm,1.0s | | | | | | |
| ANMO | | | | IAmb_Lg | | 06 58 08.8 | |
| | comp=Z,64nm,1.0s | | | | | | |
| ANMO | Albuquerque | 2.44 | 213 | Pn | Pn | 06 57 34.1 | +0.6 |
| | comp=Z,5.8nm,0.3s,baz=115,slow=13,SNR=204 | | | | | | |
| ANMO | | | | Lg | Lg | 06 58 06.4 | |
| | comp=Z,16nm,0.3s,baz=211,slow=19,SNR=10 | | | | | | |
| | comp=Z,22nm,0.4s | | | | | | |
| KSCO | Kaye Shedlock' | 2.65 | 40 | | Pn | 06 57 38.2 | +2.0 |
| SMCO | Snowmass | 2.75 | 323 | Pn | Pn | 06 57 38.6 | +0.8 |
| SMCO | | | | IAML | | 06 58 21.0 | |
| | comp=Z,369nm,0.3s | | | | | | |
| SMCO | | | | IAML | | 06 58 22.0 | |
| | comp=Z,309nm,0.4s | | | | | | |
| MVCO | Mesa Verde | 2.94 | 275 | Pn | Pn | 06 57 41.6 | +1.3 |
| AMTX | Amarillo | 3.32 | 129 | Pn | Pn | 06 57 45.6 | +0.2 |
| AMTX | | | | IAmb_Lg | | 06 58 39.1 | |
| | comp=Z,198nm,1.0s | | | | | | |
| MSTX | Muleshoe | 3.47 | 150 | | Pn | 06 57 47.0 | -0.4 |
| BRIGG | Briggsdale | 3.59 | 6 | IAmb_Lg | | 06 58 54.8 | |
| | comp=Z,102nm,0.8s | | | | | | |
| O20A | White River Ci | 4.11 | 320 | | Pn | 06 57 58.5 | +2.1 |
| SMWD | Samnorwood | 4.17 | 116 | | Pn | 06 57 57.6 | +0.5 |
| CBKS | Cedar Bluff | 4.41 | 64 | Pn | Pn | 06 58 01.2 | +0.8 |
| ELIS | Ellis County | 4.46 | 101 | Pn | Pn | 06 58 02.5 | +1.5 |
| ELIS | | | | IAmb_Lg | | 06 59 16.5 | |
| | comp=Z,156nm,0.7s | | | | | | |
| OGNE | Ogallala | 4.50 | 28 | | Pn | 06 58 03.1 | +1.5 |
| OGNE | | | | IAmb_Lg | | 06 59 20.7 | |
| | comp=Z,108nm,0.8s | | | | | | |
| DKNS | Dickens | 4.62 | 135 | Pn | Pn | 06 58 03.8 | +0.6 |
| DKNS | | | | IAmb_Lg | | 06 59 19.8 | |
| | comp=Z,136nm,0.9s | | | | | | |
| NOKA | Waynoka | 4.75 | 93 | | Pn | 06 58 06.0 | +1.0 |
| POST | Post | 4.79 | 144 | IAmb_Lg | | 06 59 28.1 | |
| | comp=Z,101nm,0.8s | | | | | | |
| HMU | Henry Mountain | 4.79 | 283 | | Pn | 06 58 06.7 | +0.9 |
| X18A | Snowflake | 4.84 | 241 | | Pn | 06 58 07.4 | +1.0 |
| X18A | | | | IAML | | 06 59 31.3 | |
| | comp=E,67nm,1.0s | | | | | | |
| X18A | | | | IAML | | 06 59 31.5 | |
| | comp=N,90nm,0.9s | | | | | | |
| OK038 | West end E0370 | 4.92 | 94 | | Pn | 06 58 08.2 | +0.9 |
| SRU | San Rafael Swe | 4.96 | 297 | | Pn | 06 58 09.5 | +1.5 |
| SRU | | | | IAML | | 06 59 30.9 | |
| | comp=N,86nm,1.4s | | | | | | |
| SRU | | | | IAML | | 06 59 36.9 | |
| | comp=E,86nm,0.8s | | | | | | |
| P18A | Preston Nutter | 5.00 | 303 | | Pn | 06 58 09.4 | +0.7 |
| P18A | | | | IAML | | 06 59 34.8 | |
| | comp=E,57nm,0.7s | | | | | | |
| P18A | | | | IAML | | 06 59 44.5 | |
| | comp=N,32nm,1.5s | | | | | | |
| R32A | Long Quarter, | 5.05 | 72 | | Pn | 06 58 09.4 | +0.3 |
| R32A | | | | IAmb_Lg | | 06 59 35.9 | |
| | comp=Z,120nm,0.8s | | | | | | |
| SN07 | Snyder 07 | 5.07 | 139 | | Pn | 06 58 09.8 | +0.4 |
| SN07 | | | | IAmb_Lg | | 06 59 37.3 | |
| | comp=Z,124nm,0.8s | | | | | | |
| 121A | Cookes Peak, D | 5.08 | 209 | | Pn | 06 58 09.9 | +0.2 |
| 121A | | | | IAML | | 06 59 49.2 | |
| | comp=E,36nm,1.1s | | | | | | |
| CSTR | Hydro, Custer | 5.14 | 104 | | Pn | 06 58 11.9 | +1.5 |
| ODSA | Odessa | 5.23 | 158 | Pn | Pn | 06 58 13.1 | +1.5 |
| SN05 | Snyder 5 | 5.24 | 141 | | Pn | 06 58 12.7 | +0.9 |
| P17A | Butcher Ranch, | 5.26 | 300 | Pn | Pn | 06 58 15.3 | +3.2 |
| P17A | | | | IAML | | 06 59 39.2 | |
| | comp=N,40nm,0.7s | | | | | | |
| P17A | | | | IAML | | 06 59 43.0 | |
| OK032 | Salt Plains WL | 5.31 | 90 | | Pn | 06 58 13.2 | +0.5 |
| OK032 | | | | IAmb_Lg | | 06 59 52.1 | |
| | comp=Z,94nm,0.7s | | | | | | |
| APMT | Aspermont | 5.33 | 132 | | Pn | 06 58 13.2 | +0.2 |
| Q16A | Castle Valley | 5.36 | 293 | | Pn | 06 58 14.9 | +1.4 |
| Q16A | | | | IAML | | 06 59 42.0 | |
| | comp=E,65nm,1.1s | | | | | | |
| Q16A | | | | IAML | | 06 59 42.3 | |
| | comp=N,57nm,0.6s | | | | | | |
| WMOK | Wichita Mounta | 5.41 | 113 | | Pn | 06 58 13.8 | -0.3 |
| WMOK | | | | IAmb_Lg | | 06 59 49.2 | |
| | comp=Z,91nm,1.2s | | | | | | |
| KAN12 | Harper NE Stat | 5.47 | 85 | IAmb_Lg | | 06 59 50.6 | |
| | comp=Z,112nm,0.8s | | | | | | |
| WUAZ | Wupatki | 5.49 | 256 | Pn | Pn | 06 58 16.1 | +0.8 |
| KAN14 | Manchester OK | 5.50 | 88 | IAmb_Lg | | 07 00 00.2 | |
| | comp=Z,95nm,1.0s | | | | | | |
| CROK | Carrier | 5.52 | 93 | | Pn | 06 58 15.9 | +0.4 |
| CROK | | | | IAmb_Lg | | 06 59 48.4 | |
| | comp=Z,86nm,0.7s | | | | | | |
| KAN17 | Caldwell West | 5.65 | 88 | IAmb_Lg | | 06 59 58.6 | |
| | comp=Z,123nm,1.1s | | | | | | |
| KAN01 | Argonia South | 5.66 | 86 | | Pn | 06 58 18.2 | +0.8 |
| KAN01 | | | | IAmb_Lg | | 07 00 01.2 | |
| | comp=Z,117nm,1.0s | | | | | | |
| DUN6 | Lazy B Ranch | 5.66 | 219 | | Pn | 06 58 16.9 | -0.7 |
| PECS | Pecos | 5.68 | 172 | IAmb_Lg | | 07 00 02.5 | |
| | comp=Z,66nm,1.0s | | | | | | |
| KAN09 | Caldwell North | 5.77 | 87 | | Pn | 06 58 18.8 | -0.2 |
| KAN09 | | | | IAmb_Lg | | 06 59 58.2 | |
| | comp=Z,106nm,0.9s | | | | | | |
| KAN13 | South Haven SW | 5.88 | 88 | IAmb_Lg | | 06 59 59.0 | |
| | comp=Z,114nm,1.1s | | | | | | |
| SGCY | Sterling City | 5.93 | 148 | IAmb_Lg | | 07 00 05.5 | |
| | comp=Z,56nm,0.8s | | | | | | |
| MTPU | Mount Pierson | 5.94 | 282 | | Pn | 06 58 23.6 | +2.0 |
| X16A | Lo Mia Camp, P | 5.97 | 246 | | Pn | 06 58 22.6 | +0.8 |
| PKCU | Pink Cliffs | 5.99 | 276 | | Pn | 06 58 23.0 | +0.8 |
| MSU | Marysvale | 6.01 | 287 | Pn | Pn | 06 58 24.4 | +1.9 |
| OK029 | Liberty Lake | 6.07 | 99 | Pn | Pn | 06 58 23.9 | +0.8 |
| OK029 | | | | IAmb_Lg | | 07 00 14.6 | |
| | comp=Z,52nm,0.8s | | | | | | |
| X34A | Smith Ranch, M | 6.17 | 111 | IAmb_Lg | | 07 00 15.2 | |
| | comp=Z,63nm,0.7s | | | | | | |
| OK048 | Pawnee Station | 6.36 | 93 | Pn | Pn | 06 58 28.0 | +0.9 |
| KNB | Kanab | 6.39 | 272 | | Pn | 06 58 28.1 | +0.4 |
| OK031 | S. Brethren Rd | 6.53 | 97 | IAmb_Lg | | 07 00 38.4 | |
| | comp=Z,56nm,0.8s | | | | | | |
| OK052 | Battle Ridge R | 6.55 | 97 | | Pn | 06 58 29.6 | 0.0 |
| QUOK | Quay | 6.59 | 95 | IAmb_Lg | | 07 00 35.1 | |
| | comp=Z,56nm,1.0s | | | | | | |
| ALPN | Alpine | 6.69 | 171 | IAmb_Lg | | 07 00 27.5 | |
| | comp=Z,103nm,1.1s | | | | | | |
| TUC | Tucson | 6.78 | 228 | IAmb_Lg | | 07 00 41.2 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| PDAR | Pinedale Array | 6.80 | 329 | Pn | Pn | 06 58 35.2 | +1.8 |
| | comp=Z,0.1nm,0.3s,baz=138,slow=11,SNR=4.6 | | | | | | |
| PDAR | | | | Lg | Lg | 07 00 24.9 | |
| | comp=Z,0.8nm,0.3s,baz=137,slow=28,SNR=5.7 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| OZNA | Ozona | 6.80 | 152 | IAmb_Lg | | 07 00 34.4 | |
| | comp=Z,79nm,1.1s | | | | | | |
| KSU1 | Kansas State U | 6.81 | 70 | IAmb_Lg | | 07 00 35.4 | |
| | comp=Z,77nm,0.8s | | | | | | |
| DEOK | Depew | 6.82 | 97 | | Pn | 06 58 33.2 | -0.2 |
| DEOK | | | | IAmb_Lg | | 07 00 38.1 | |
| | comp=Z,52nm,1.0s | | | | | | |
| LOOK | Love County | 6.93 | 113 | IAmb_Lg | | 07 00 44.5 | |
| | comp=Z,55nm,0.8s | | | | | | |
| FW06 | Azle | 7.20 | 122 | IAmb_Lg | | 07 00 56.7 | |
| | comp=Z,45nm,0.8s | | | | | | |
| Z35A | Perchaven, San | 7.21 | 118 | IAmb_Lg | | 07 00 47.2 | |
| | comp=Z,50nm,0.8s | | | | | | |
| TUL3 | Leonard | 7.37 | 96 | | Pn | 06 58 40.4 | -0.5 |
| SAND | Sanderson | 7.39 | 161 | | Pn | 06 58 41.3 | 0.0 |
| SAND | | | | IAmb_Lg | | 07 00 57.5 | |
| | comp=Z,47nm,0.8s | | | | | | |
| BRDY | Brady | 7.48 | 138 | | Pn | 06 58 41.2 | -1.3 |
| BRDY | | | | IAmb_Lg | | 07 00 53.3 | |
| | comp=Z,68nm,1.1s | | | | | | |
| TXAR | Lajitas Array | 7.72 | 172 | Pn | Pn | 06 58 47.3 | +1.5 |
| | comp=Z,0.3nm,0.3s,baz=359,slow=11,SNR=23 | | | | | | |
| TXAR | | | | Lg | Lg | 07 00 51.2 | |
| | comp=Z,1.9nm,0.3s,baz=348,slow=25,SNR=15 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| JCT | Junction City | 7.74 | 146 | IAmb_Lg | | 07 01 08.8 | |
| | comp=Z,56nm,0.8s | | | | | | |
| SPR3 | Spring Creek 3 | 7.76 | 288 | | Pn | 06 58 48.9 | +2.3 |
| FW14 | Alvarado | 7.79 | 124 | IAmb_Lg | | 07 01 14.9 | |
| | comp=Z,50nm,1.0s | | | | | | |
| RLO | Rose Lookout | 7.94 | 93 | IAmb_Lg | | 07 01 06.6 | |
| | comp=Z,71nm,1.0s | | | | | | |
| FW16 | Waxahatchie | 7.94 | 122 | IAmb_Lg | | 07 01 19.1 | |
| | comp=Z,66nm,1.0s | | | | | | |
| DRIO | Del Rio | 8.35 | 154 | IAmb_Lg | | 07 01 36.4 | |
| | comp=Z,43nm,0.8s | | | | | | |
| TREL | Terrell | 8.35 | 118 | IAmb_Lg | | 07 01 29.2 | |
| | comp=Z,66nm,0.9s | | | | | | |
| HHAR | Hobbs | 8.79 | 91 | | Pn | 06 58 59.5 | -0.9 |
| HNDO | Hondo | 8.79 | 147 | IAmb_Lg | | 07 01 36.9 | |
| | comp=Z,58nm,0.9s | | | | | | |
| Z38A | Mt. Pleasant | 8.89 | 112 | IAmb_Lg | | 07 01 49.2 | |
| | comp=Z,35nm,0.9s | | | | | | |
| ECSD | EROS Data Cent | 9.19 | 40 | | Pn | 06 59 06.0 | +0.1 |
| ECSD | | | | IAmb_Lg | | 07 01 43.2 | |
| | comp=Z,35nm,1.0s | | | | | | |
| S39A | Bolivar | 9.19 | 82 | | Pn | 06 59 05.5 | -0.4 |
| PFO | Pinyon Flats O | 10.09 | 254 | Lg | Lg | 07 02 12.9 | |
| | comp=Z,0.1nm,0.3s,baz=188,slow=7.1,SNR=2.8 | | | | | | |
| P40A | Paris | 10.36 | 72 | | Pn | 06 59 20.5 | -1.5 |
| NVAR | Mina Array Bea | 10.77 | 282 | Pg | Pn | 07 00 13.5 | +46 |
| | comp=Z,0.3nm,0.3s,baz=107,slow=18,SNR=5.2 | | | | | | |
| NVAR | | | | Lg | Lg | 07 02 29.1 | |
| | baz=91,slow=33,SNR=2.6 | | | | | | |
| U49A | Red Boiling Sp | 15.28 | 86 | Pn | Pn | 07 00 27.7 | -1.3 |
| T50A | Nancy | 15.97 | 84 | Pn | Pn | 07 00 37.6 | -0.5 |
| CPCT | Cooper Cave | 16.46 | 89 | Pn | Pn | 07 00 44.0 | -0.4 |
| CPCT | | | | IAmb | IA

*az=106.0*

**ISC 24 07:11:39.1±0.5,5°05S±0.08×151°3E±0.1,h129km,n48, σ0s90/50,mb4.3/22,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | **Rabaul** | **1.23** | **46** | Pn | **Pn** | **07 12 05.2** | **+0.9** |
| PMG | **Port Moresby** | **5.95** | **223** | | **Pn** | **07 13 05.7** | **+0.7** |
| PMG | **Port Moresby** | **5.95** | **223** | P | **Pn** | **07 13 05.8** | **+0.8** |
| | 115nm,0.8s,baz=40,slow=6.1,SNR=20 | | | | | | |
| COEN | **Coen** | **11.92** | **221** | Pn | **Pn** | **07 14 25.3** | **+0.3** |
| CTA | **Charters Tower** | **15.72** | **198** | P | **P** | **07 15 17.3** | **+2.4** |
| | 0.3nm,0.5s,baz=34,slow=10,SNR=5.9 | | | | | | |
| CTAO | **Charters Tower** | **15.72** | **198** | | **P** | **07 15 16.4** | **+1.5** |
| EIDS | **Eidsvold** | **20.20** | **181** | P | **P** | **07 16 04.2** | **+0.4** |
| MTN | **Manton Dam** | **21.34** | **247** | P | **P** | **07 16 16.1** | **0.0** |
| MTN | | | | IAmb | IAmb | 07 16 49.0 | |
| | comp=Z,19nm,1.4s | | | | | | |
| WB0 | **Warramunga Arr** | **22.00** | **227** | P | **P** | **07 16 23.4** | **+0.2** |
| WB0 | | | | IAmb | IAmb | 07 16 46.5 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| WB2 | **Warramunga Arr** | **22.14** | **227** | P | **P** | **07 16 24.0** | **-0.7** |
| WRA | **Warramunga Arr** | **22.15** | **227** | P | **P** | **07 16 23.8** | **-0.9** |
| WRA | **Warramunga Arr** | **22.15** | **227** | P | **P** | **07 16 24.1** | **-0.6** |
| | comp=Z,2.3nm,0.5s,baz=50,slow=10,SNR=27 | | | | | | |
| WRA | | | | ScP | **ScP** | **07 23 41.5** | **-1.2** |
| | comp=Z,1.5nm,0.7s,baz=51,slow=2.7,SNR=17 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| DZM | **Mont Dzumac** | **22.40** | **140** | P | **P** | **07 16 26.1** | **-1.1** |
| DZM | | | | IAmb | IAmb | 07 16 31.6 | |
| | comp=Z,32nm,1.5s | | | | | | |
| DZM | **Mont Dzumac** | **22.40** | **140** | P | **P** | **07 16 27.3** | **0.0** |
| | comp=Z,5.9nm,0.5s,baz=306,slow=12,SNR=14 | | | | | | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| KNRA | **Kununurra** | **24.50** | **243** | P | **P** | **07 16 46.5** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 07 16 53.2 | |
| | comp=Z,18nm,1.4s | | | | | | |
| AS31 | **Alice Springs** | **24.95** | **220** | P | **P** | **07 16 50.4** | **-0.4** |
| ASAR | **Alice Springs** | **24.96** | **220** | P | **P** | **07 16 50.0** | **-0.8** |
| ASAR | **Alice Springs** | **24.96** | **220** | P | **P** | **07 16 50.9** | **+0.1** |
| | comp=Z,2.2nm,0.5s,baz=56,slow=8.9,SNR=32 | | | | | | |
| ASAR | | | | ScP | **ScP** | **07 23 48.2** | **-2.0** |
| | comp=Z,1.1nm,0.9s,baz=48,slow=1.9,SNR=6.4 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| ARMA | **Armidale** | **25.23** | **179** | P | **P** | **07 16 52.6** | **-0.6** |
| ARMA | | | | IAmb | IAmb | 07 16 56.4 | |
| | comp=Z,15nm,1.2s | | | | | | |
| FITZ | **Fitzroy Crossi** | **28.21** | **241** | P | **P** | **07 17 19.5** | **-0.5** |
| MBWA | **Marble Bar** | **34.53** | **239** | P | **P** | **07 18 14.5** | **-0.9** |
| RTZ | **Ruatahuna** | **40.75** | **149** | P | **P** | **07 19 08.0** | **+0.4** |
| TKNZ | **Takaka Hill** | **40.76** | **155** | P | **P** | **07 19 08.1** | **+0.6** |
| TUWZ | **Tuamarina** | **41.50** | **154** | P | **P** | **07 19 14.2** | **+0.6** |
| USRK | **Ussuriysk Ar.** | **52.01** | **342** | P | **P** | **07 20 37.2** | **+1.9** |
| | comp=Z,1.5nm,0.7s,baz=186,slow=6.7,SNR=4.0 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| PEA0B | **Petropavlovsk-** | **58.20** | **5** | P | **P** | **07 21 18.2** | **-1.4** |
| PETK | **Petropavlovsk-** | **58.20** | **5** | P | **P** | **07 21 18.0** | **-1.5** |
| PETK | **Petropavlovsk-** | **58.20** | **5** | P | **P** | **07 21 18.9** | **-0.6** |
| | comp=Z,2.9nm,0.5s,baz=175,slow=6.9,SNR=11 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| KIWB | **Kanaga Island** | **62.76** | **21** | P | **P** | **07 21 50.3** | **-0.2** |
| SONM | **Songino Array** | **65.74** | **329** | P | **P** | **07 22 10.7** | **+0.5** |
| | comp=Z,0.7nm,0.5s,baz=121,slow=5.7,SNR=4.4 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| O14K | **Tigyukauivet M** | **74.28** | **23** | P | **P** | **07 23 02.4** | **+0.5** |
| M14K | **Bethel** | **75.00** | **22** | P | **P** | **07 23 05.8** | **-0.2** |
| M14K | | | | IAmb | IAmb | 07 23 08.0 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| L14K | **Kuka Creek** | **75.13** | **21** | P | **P** | **07 23 07.2** | **+0.5** |
| L14K | | | | IAmb | IAmb | 07 23 08.6 | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| K15K | **Wolf Creek Mou** | **76.17** | **21** | P | **P** | **07 23 12.6** | **-0.2** |
| M16K | **Timber Creek** | **76.30** | **22** | P | **P** | **07 23 13.5** | **0.0** |
| M16K | | | | IAmb | IAmb | 07 23 16.1 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| L16K | **Owhat River** | **76.53** | **22** | P | **P** | **07 23 14.7** | **-0.1** |
| L16K | | | | IAmb | IAmb | 07 23 38.0 | |
| | comp=Z,6.7nm,1.2s | | | | | | |
| J16K | **Anvik River** | **77.14** | **20** | P | **P** | **07 23 18.6** | **+0.4** |
| J16K | | | | IAmb | IAmb | 07 23 45.8 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| L19K | **White Mountain** | **78.56** | **23** | P | **P** | **07 23 26.3** | **+0.2** |
| L19K | | | | IAmb | IAmb | 07 23 28.5 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| CNPM | **China Poot** | **78.60** | **26** | P | **P** | **07 23 26.2** | **-0.1** |
| K20K | **Telida** | **79.53** | **22** | P | **P** | **07 23 31.8** | **+0.5** |
| E18K | **Tukpahlearik C** | **79.86** | **17** | P | **P** | **07 23 32.5** | **-0.5** |
| E18K | | | | IAmb | IAmb | 07 24 06.7 | |
| | comp=Z,6.9nm,1.2s | | | | | | |
| J20K | **Nowinta River** | **79.97** | **21** | P | **P** | **07 23 33.9** | **+0.2** |
| J20K | | | | IAmb | IAmb | 07 24 06.4 | |
| | comp=Z,6.9nm,1.5s | | | | | | |
| MLY | **Manley** | **81.67** | **21** | P | **P** | **07 23 41.6** | **-1.2** |
| MLY | | | | IAmb | IAmb | 07 23 43.5 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| ILAR | **Eielson Array** | **82.97** | **22** | P | **P** | **07 23 47.8** | **-1.7** |
| | comp=Z,1.3nm,0.5s,baz=249,slow=5.2,SNR=38 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| QSPA | **South Pole Qui** | **84.91** | **180** | P | **P** | **07 23 58.9** | **-0.6** |
| QSPA | **South Pole Qui** | **84.91** | **180** | P | **P** | **07 23 59.1** | **-0.4** |
| | comp=Z,0.7nm,0.7s,baz=282,slow=2.4,SNR=5.4 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| NVAR | **Mina Array Bea** | **93.43** | **52** | P | **P** | **07 24 41.2** | **+0.6** |
| | comp=Z,0.8nm,0.7s,baz=252,slow=6.8,SNR=7.4 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| TORD | **Torodi Ar. Bea** | **148.94** | **287** | PKPbc | **PKPbc** | **07 31 11.9** | **-1.0** |
| | comp=Z,0.6nm,0.6s,baz=33,slow=3.3,SNR=4.3 | | | | | | |

*IDC **24** 07:12:47.6±0.7,25°.40N×45°.40W,h0km,mb4.0/14, mbtmp4.0/14,MS3.5/52,Error ellipse: s-maj=23.5km s-min=18.0km az=155.0*

*NEIC **24** 07:12:50.9±1.4,25°.7N±0°.2×45°.40W±0°.07,h10km±1km, mb4.6/31,Error ellipse: s-maj=26.8km s-min=6.9km az=199.0*

**ISC 24 07:12:49.9±0.5,25°5N±0°.1×45°42W±0°.08,h11km,n99, σ0s81/51,mb4.5/29,MS3.5/52,Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SMRT | **St. Maarten** | **17.98** | **249** | | **P** | **07 17 01.4** | **+0.9** |
| SMRT | | | | IAmb | IAmb | 07 17 27.0 | |
| | comp=Z,57nm,1.5s | | | | | | |
| BBSR | **BB Station** | **18.21** | **297** | P | **Pn** | **07 17 02.3** | **-0.4** |
| PDPR | **Patillas Dam,** | **20.51** | **253** | P | **P** | **07 17 27.9** | **-0.3** |
| MDP | **Montagnes des** | **21.40** | **200** | LR | LR | 07 23 54.7 | |
| | comp=Z,68nm,19.3s,baz=22,slow=31 | | | | | | |
| PCRV | **Puerto La Cruz** | **23.74** | **234** | LR | LR | 07 27 45.3 | |
| | comp=Z,60nm,18.6s,slow=38 | | | | | | |
| SDDR | **Presa de Saban** | **24.78** | **260** | P | **P** | **07 18 12.3** | **+0.4** |
| SDV | **Santo Domingo** | **29.10** | **240** | LR | LR | 07 28 46.7 | |
| | comp=Z,74nm,21.5s,baz=74,slow=33 | | | | | | |
| BBTS | **Babate** | **29.12** | **106** | LR | LR | 07 27 14.9 | |
| | comp=Z,100nm,18.3s,baz=146,slow=30 | | | | | | |
| N58A | **Sunbury** | **30.16** | **308** | P | **P** | **07 19 01.4** | **+1.4** |
| N58A | | | | IAmb | IAmb | 07 19 32.1 | |
| | comp=Z,12nm,1.4s | | | | | | |
| SADO | **Sadowa** | **33.31** | **314** | LR | LR | 07 30 39.4 | |
| | comp=Z,88nm,21.0s,baz=85,slow=32 | | | | | | |
| TKL | **Tuckaleechee C** | **34.37** | **296** | LR | LR | 07 30 56.1 | |
| | comp=Z,96nm,21.1s,baz=100,slow=32 | | | | | | |
| ROSC | **El Rosal** | **34.47** | **238** | LR | LR | 07 33 09.3 | |
| | comp=Z,96nm,21.6s,baz=46,slow=36 | | | | | | |
| MDT | **Midelt** | **36.22** | **69** | LR | LR | 07 31 27.4 | |
| | comp=Z,72nm,19.5s,baz=291,slow=31 | | | | | | |
| CLTN | **Cedars of Leba** | **36.48** | **297** | P | **P** | **07 19 56.3** | **+1.2** |
| ESDC | **Sonseca Array** | **37.36** | **57** | LR | LR | 07 31 23.9 | |
| | comp=Z,46nm,19.8s,baz=236,slow=30 | | | | | | |
| JTS | **Las Juntas de** | **40.36** | **255** | LR | LR | 07 35 42.7 | |
| | comp=Z,28nm,20.1s,baz=94,slow=34 | | | | | | |
| BDFB | **Brasilia** | **40.94** | **184** | LR | LR | 07 34 59.2 | |
| | comp=Z,54nm,20.0s,baz=166,slow=33 | | | | | | |
| FRB | **Frobisher Bay** | **41.17** | **345** | LR | LR | 07 35 15.1 | |
| | comp=Z,54nm,21.5s,baz=2.0,slow=33 | | | | | | |
| WHAR | **Wooly Hollow** | **41.28** | **295** | P | **P** | **07 20 35.7** | **+0.3** |
| WHAR | | | | IAmb | IAmb | 07 20 37.8 | |
| | comp=Z,16nm,1.4s | | | | | | |
| DBIC | **Dimbokro** | **42.99** | **109** | P | **P** | **07 20 50.0** | **+0.5** |
| DBIC | **Dimbokro** | **42.99** | **109** | LR | LR | 07 35 45.9 | |
| | comp=Z,95nm,20.2s,baz=310,slow=32 | | | | | | |
| SIV | **San Ignacio** | **43.94** | **202** | LR | LR | 07 37 41.5 | |
| | comp=Z,58nm,18.8s,baz=111,slow=34 | | | | | | |
| H10N2 | **ASCENSION HYDR** | **44.73** | **134** | T | T | 08 08 31.2 | |
| | baz=319,slow=74,SNR=117 | | | | | | |
| H10N3 | **ASCENSION HYDR** | **44.73** | **134** | T | T | 08 08 28.2 | |
| | baz=319,slow=74,SNR=117 | | | | | | |
| H10N1 | **ASCENSION HYDR** | **44.75** | **134** | T | T | 08 08 32.0 | |
| | baz=319,slow=74,SNR=142 | | | | | | |
| H10S3 | **ASCENSION HYDR** | **45.46** | **135** | T | T | 08 09 27.5 | |
| | baz=262,slow=74,SNR=47 | | | | | | |
| H10S2 | **ASCENSION HYDR** | **45.48** | **135** | T | T | 08 09 25.0 | |
| | baz=318,slow=74,SNR=44 | | | | | | |
| ATAH | **Atahualpa** | **45.59** | **229** | LR | LR | 07 41 27.3 | |
| | comp=Z,32nm,20.3s,baz=60,slow=38 | | | | | | |
| ULM | **Lac du Bonnet** | **45.79** | **316** | LR | LR | 07 38 30.7 | |
| | comp=Z,57nm,19.1s,baz=74,slow=34 | | | | | | |
| TORD | **Torodi Ar. Bea** | **45.90** | **96** | P | **P** | **07 21 11.3** | **-1.5** |
| TORD | **Torodi Ar. Bea** | **45.90** | **96** | P | **P** | **07 21 11.5** | **-1.3** |
| | comp=Z,2.0nm,0.9s,baz=310,slow=7.6,SNR=8.3 | | | | | | |
| TORD | | | | LR | LR | 07 39 00.9 | |
| | comp=Z,111nm,19.2s,baz=301,slow=34 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| WMOK | **Wichita Mounta** | **46.62** | **295** | P | **P** | **07 21 18.3** | **0.0** |
| WMOK | | | | IAmb | IAmb | 07 21 27.1 | |
| | comp=Z,8.8nm,1.2s | | | | | | |
| CMIG | **Matias Romero** | **46.63** | **270** | LR | LR | 07 40 20.3 | |
| | comp=Z,40nm,19.2s,baz=4.5,slow=35 | | | | | | |
| LPAZ | **La Paz** | **47.03** | **210** | P | **P** | **07 21 21.5** | **-0.8** |
| | comp=Z,3.1nm,0.9s,baz=41,slow=15,SNR=4.1 | | | | | | |
| LPAZ | | | | LR | LR | 07 40 10.6 | |
| | comp=Z,35nm,20.5s,baz=34,slow=35 | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | |
| BRDY | **Brady** | **47.12** | **290** | P | **P** | **07 21 21.3** | **-1.0** |
| BRDY | | | | IAmb | IAmb | 07 21 23.0 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| SMWD | **Samnorwood** | **47.80** | **295** | P | **P** | **07 21 27.7** | **+0.2** |
| APMT | **Aspermont** | **47.85** | **293** | P | **P** | **07 21 28.5** | **+0.6** |
| APMT | | | | IAmb | IAmb | 07 21 35.4 | |
| | comp=Z,5.7nm,0.8s | | | | | | |
| NNA | **Nana** | **48.20** | **223** | LR | LR | 07 41 08.2 | |
| | comp=Z,17nm,20.2s,baz=342,slow=35 | | | | | | |
| DAVOX | **Davos/Dischmat** | **48.37** | **49** | LR | LR | 07 38 48.0 | |
| | comp=Z,42nm,20.1s,baz=266,slow=32 | | | | | | |
| TXAR | **Lajitas Array** | **51.41** | **288** | P | **P** | **07 21 54.9** | **-0.3** |
| | comp=Z,0.7nm,0.8s,baz=96,slow=8.0,SNR=7.9 | | | | | | |
| TXAR | | | | PcP | **PcP** | **07 23 09.4** | **-0.4** |
| | comp=Z,0.5nm,0.9s,baz=99,slow=5.8,SNR=3.8 | | | | | | |
| TXAR | | | | LR | LR | 07 43 31.5 | |
| | comp=Z,16nm,20.0s,baz=38,slow=36 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| Q24A | **Divide** | **51.46** | **301** | P | **P** | **07 21 56.3** | **+0.5** |
| NOA | **NORSAR Array B** | **52.01** | **31** | P | **P** | **07 21 59.5** | **+0.4** |
| | comp=Z,0.9nm,0.7s,baz=253,slow=7.7,SNR=3.6 | | | | | | |
| NOA | | | | LR | LR | 07 40 49.5 | |
| | comp=Z,25nm,18.3s,baz=250,slow=32 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| ANMO | **Albuquerque** | **52.89** | **296** | LR | LR | 07 41 57.6 | |
| | comp=Z,56nm,21.7s,baz=184,slow=33 | | | | | | |
| LVC | **Limon Verde** | **52.94** | **207** | LR | LR | 07 43 02.0 | |
| | comp=Z,43nm,20.2s,baz=340,slow=34 | | | | | | |
| HFS | **Hagfors** | **52.95** | **33** | P | **P** | **07 22 05.8** | **-0.3** |
| | comp=Z,2.6nm,0.6s,baz=209,slow=11,SNR=5.1 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| VRAC | **Vranov** | **53.06** | **46** | LR | LR | 07 42 09.0 | |
| | comp=Z,22nm,18.4s,baz=287,slow=33 | | | | | | |
| 121A | **Cookes Peak, D** | **54.34** | **293** | P | **P** | **07 22 17.7** | **+0.7** |
| 121A | | | | IAmb | IAmb | 07 22 25.5 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| PD31 | **Pinedale Array** | **54.58** | **306** | P | **P** | **07 22 18.0** | **-0.6** |
| PD31 | | | | IAmb | IAmb | 07 22 25.9 | |
| | comp=Z,5.6nm,1.1s | | | | | | |
| PDAR | **Pinedale Array** | **54.58** | **306** | P | **P** | **07 22 18.0** | **-0.6** |
| PDAR | **Pinedale Array** | **54.58** | **306** | P | **P** | **07 22 18.4** | **-0.1** |
| | comp=Z,1.9nm,0.9s,baz=80,slow=8.3,SNR=11 | | | | | | |
| PDAR | | | | LR | LR | 07 44 57.2 | |
| | comp=Z,28nm,18.3s,baz=83,slow=35 | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| RES | **Resolute Bay** | **55.37** | **346** | LR | LR | 07 44 52.7 | |
| | comp=Z,32nm,20.3s,baz=354,slow=35 | | | | | | |
| IMW | **Indian Meadow** | **55.51** | **307** | P | **P** | **07 22 25.5** | **+0.1** |
| IMW | | | | IAmb | IAmb | 07 22 34.1 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| SRU | **San Rafael Swe** | **55.62** | **301** | P | **P** | **07 22 25.6** | **-0.6** |
| SRU | | | | IAmb | IAmb | 07 22 34.6 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| MPU | **Maple Canyon** | **56.37** | **302** | P | **P** | **07 22 32.0** | **+0.5** |
| BGU | **Big Grassy Mou** | **57.32** | **304** | P | **P** | **07 22 38.1** | **-0.1** |
| BGU | | | | IAmb | IAmb | 07 22 46.5 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| U15A | **North Rim** | **57.38** | **298** | | **P** | **07 22 40.2** | **+1.5** |
| U15A | | | | IAmb | IAmb | 07 22 48.2 | |
| | comp=Z,6.9nm,1.3s | | | | | | |
| YKA | **Yellowknife Ar** | **58.14** | **329** | LR | LR | 07 47 24.3 | |
| | comp=Z,21nm,19.4s,baz=49,slow=36 | | | | | | |
| LPIG | **La Paz** | **58.39** | **284** | LR | LR | 07 48 03.2 | |
| | comp=Z,21nm,20.4s,baz=144,slow=36 | | | | | | |
| ELK | **Elko** | **59.01** | **304** | P | **P** | **07 22 49.3** | **-0.8** |
| ELK | **Elko** | **59.01** | **304** | LR | LR | 07 46 19.7 | |
| | comp=Z,50nm,20.7s,baz=74,slow=34 | | | | | | |
| MFID | **Camas Ranch** | **59.09** | **307** | P | **P** | **07 22 50.2** | **-0.3** |
| MFID | | | | IAmb | IAmb | 07 22 58.9 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| FINES | **FINESS Array B** | **59.14** | **32** | P | **P** | **07 22 49.5** | **-0.8** |
| FINES | **FINESS Array B** | **59.14** | **32** | LR | LR | 07 45 25.2 | |
| | comp=Z,32nm,18.9s,baz=39,slow=33 | | | | | | |
| 113A | **Mohawk Valley,** | **59.25** | **294** | P | **P** | **07 22 49.5** | **-2.1** |
| 113A | | | | IAmb | IAmb | 07 22 52.2 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| NEW | **Newport** | **59.49** | **313** | P | **P** | **07 22 52.9** | **-0.2** |
| NEW | | | | IAmb | IAmb | 07 23 00.7 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| NEW | **Newport** | **59.49** | **313** | LR | LR | 07 47 49.6 | |
| | comp=Z,75nm,18.7s,baz=85,slow=35 | | | | | | |
| MLR | **Muntele Rosu** | **59.52** | **51** | LR | LR | 07 45 06.8 | |
| | comp=Z,37nm,21.3s,baz=242,slow=33 | | | | | | |
| ARCES | **ARCESS Array B** | **59.72** | **23** | P | **P** | **07 22 53.2** | **-1.0** |
| | comp=Z,1.4nm,0.8s,baz=258,slow=4.8,SNR=5.7 | | | | | | |
| ARCES | | | | LR | LR | 07 44 48.1 | |
| | comp=Z,22nm,20.5s,baz=55,slow=32 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| AKASG | **Malin Array Be** | **61.16** | **44** | LR | LR | 07 47 58.0 | |
| | comp=Z,24nm,18.2s,baz=238,slow=34 | | | | | | |
| PFO | **Pinyon Flats O** | **61.27** | **296** | LR | LR | 07 47 38.8 | |
| | comp=Z,27nm,21.7s,baz=68,slow=34 | | | | | | |
| NVAR | **Mina Array Bea** | **61.73** | **302** | P | **P** | **07 23 08.5** | **-0.2** |
| | comp=Z,0.3nm,0.7s,baz=48,slow=10,SNR=3.5 | | | | | | |
| NVAR | | | | LR | LR | 07 48 31.4 | |
| | comp=Z,86nm,19.6s,baz=92,slow=35 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| ISA | **Isabella, Lake** | **62.44** | **299** | P | **P** | **07 23 13.3** | **-0.1** |
| ISA | | | | IAmb | IAmb | 07 23 15.5 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| YBH | **Yreka Blue Hor** | **64.38** | **306** | LR | LR | 07 51 00.0 | |
| | comp=Z,30nm,18.8s,baz=84,slow=36 | | | | | | |
| DLBC | **Dease Lake** | **65.90** | **325** | LR | LR | 07 52 27.4 | |
| | comp=Z,32nm,18.2s,baz=129,slow=36 | | | | | | |
| INK | **Inuvik** | **65.92** | **336** | LR | LR | 07 51 25.1 | |
| | comp=Z,34nm,19.6s,baz=316,slow=35 | | | | | | |
| BBB | **Bella Bella** | **65.94** | **318** | LR | LR | 07 51 54.0 | |
| | comp=Z,29nm,18.6s,baz=44,slow=36 | | | | | | |
| BRTR | **Keskin Array B** | **66.14** | **56** | P | **P** | **07 23 36.9** | **-0.7** |
| BRTR | **Keskin Array B** | **66.14** | **56** | P | **P** | **07 23 37.4** | **-0.3** |
| | comp=Z,2.2nm,1.0s,baz=268,slow=6.1,SNR=6.7 | | | | | | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| N31M | **Braeburn, Yuko** | **68.14** | **329** | P | **P** | **07 23 49.5** | **-0.3** |
| PLCA | **Paso Flores** | **69.88** | **200** | P | **P** | **07 23 60.0** | **-0.8** |
| | comp=Z,3.0nm,0.8s,baz=19,slow=7.0,SNR=6.7 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| EIL | **Elat** | **69.98** | **66** | LR | LR | 07 53 54.6 | |
| | comp=Z,35nm,20.7s,baz=249,slow=35 | | | | | | |
| BCAR | **Beaver Creek A** | **70.42** | **331** | P | **P** | **07 24 03.2** | **-0.7** |
| KBZ | **Khabaz** | **71.71** | **50** | P | **P** | **07 24 12.8** | **+0.8** |
| | comp=Z,2.8nm,0.9s,baz=348,slow=5.7,SNR=4.1 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| ILAR | **Eielson Array** | **71.98** | **334** | P | **P** | **07 24 13.2** | **-0.1** |
| | comp=Z,1.7nm,0.8s,baz=69,slow=4.7,SNR=17 | | | | | | |
| ILAR | | | | LR | LR | 07 56 27.9 | |
| | comp=Z,55nm,18.2s,baz=60,slow=36 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| BELG | **Belogornoye** | **72.03** | **40** | LR | LR | 07 52 05.0 | |
| | comp=Z,37nm,21.9s,baz=293,slow=33 | | | | | | |
| KDAK | **Kodiak Island** | **77.40** | **328** | LR | LR | 08 00 04.8 | |
| | comp=Z,34nm,18.2s,baz=81,slow=37 | | | | | | |
| MBAR | **Mbarara** | **77.77** | **97** | LR | LR | 07 57 10.3 | |
| | comp=Z,74nm,20.4s,baz=293,slow=34 | | | | | | |
| FURI | **Furi** | **80.93** | **84** | LR | LR | 08 00 48.8 | |
| | comp=Z,35nm,19.0s,baz=265,slow=36 | | | | | | |
| TIXI | **Tiksi** | **83.07** | **2** | LR | LR | 07 59 25.1 | |
| | comp=Z,25nm,19.5s,baz=139,slow=34 | | | | | | |
| KMBO | **Kilima Mbogo** | **83.86** | **94** | LR | LR | 08 01 55.6 | |
| | comp=Z,60nm,19.9s,baz=268,slow=35 | | | | | | |
| BVAR | **Borovoye Array** | **84.08** | **33** | P | **P** | **07 25 20.9** | **+0.2** |
| | comp=Z,0.8nm,0.6s,baz=245,slow=3.0,SNR=5.0 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| LBTB | **Lobatse** | **85.01** | **121** | P | **P** | **07 25 26.8** | **+0.9** |
| LBTB | | | | IAmb | IAmb | 07 25 29.7 | |
| | comp=Z,6.9nm,1.2s | | | | | | |
| KIBK | **Kibwezi** | **85.09** | **95** | P | **P** | **07 25 28.2** | **+1.6** |
| SUR | **Sutherland** | **85.39** | **129** | P | **P** | **07 25 29.2** | **+1.5** |
| SUR | **Sutherland** | **85.39** | **129** | LR | LR | 07 55 00.5 | |
| | comp=Z,27nm,20.1s,baz=114,slow=30 | | | | | | |
| BOSA | **Boshof** | **86.60** | **124** | LR | LR | 07 54 38.9 | |
| | comp=Z,47nm,21.0s,baz=185,slow=29 | | | | | | |
| CLES | **Cleveland East** | **88.32** | **330** | P | **P** | **07 25 41.9** | **+0.4** |
| ZALV | **Zalesovo Beam** | **90.01** | **27** | P | **P** | **07 25 49.1** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=332,slow=12,SNR=3.7 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| QRZ | **Quartz Range** | **145.03** | **235** | PKPbc | **PKPbc** | **07 32 26.7** | **0.0** |

**IDC 24 07:17:30.2±42.0,18°23S×178°50W,h652km±356km, mb3.1/3,mbtmp4.2/3,Error ellipse: s-maj=387.0km s-min=108.5km az=70.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CTA | **Charters Tower** | **33.31** | **261** | P | P | 07 23 17.6 | +0.2 |
| | 0.1nm,0.6s,baz=90,slow=9.1,SNR=2.3 | | | | | | |
| STKA | **Stephens Creek** | **38.40** | **241** | P | P | 07 23 59.0 | +0.1 |
| | 2.4nm,0.5s,baz=82,slow=7.1,SNR=5.2 | | | | | | |
| | 2.4nm,0.5s | | | | | | |
| WRA | **Warramunga Arr** | **44.49** | **260** | P | P | 07 24 46.5 | -0.2 |
| | 0.9nm,0.4s,baz=96,slow=6.9,SNR=46 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| ASAR | **Alice Springs** | **44.62** | **255** | P | P | 07 24 47.9 | +0.2 |
| | 2.5nm,0.4s,baz=89,slow=8.4,SNR=40 | | | | | | |
| ASAR | | | | PcP | PcP | 07 26 15.6 | -0.1 |
| | 0.5nm,0.5s,baz=106,slow=3.7,SNR=5.4 | | | | | | |
| | 2.5nm,0.4s | | | | | | |

*OSPL **24** 07:21:21.8±1.9,18°.36N×72°.96W,h0km±12km,ML2.6*
*SSNC **24** 07:21:23.7±1.2,18°.40N×72°.94W,h7km±10km,MD3.6, ML2.5,MW2.9*

**ISC 24 07:21:22.0±1.8,18°5N±0°.1×72°92W±0°.05,h10km,n11, σ0s90/20,1D,Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PODR | **Polo** | **1.59** | **103** | *i* P | **Pn** | **07 21 49.6** | **-0.8** |
| PODR | | | | IAML | | 07 22 19.4 | |
| | comp=Z,96nm,0.4s | | | | | | |
| SDDR | **Presa de Saban** | **1.61** | **73** | *e*P | **Pn** | **07 21 50.3** | **-0.2** |
| SDDR | | | | *e*S | **Sn** | **07 22 11.2** | **-0.2** |
| SDDR | | | | IAML | | 07 22 16.6 | |
| | comp=Z,33nm,0.3s | | | | | | |
| SDDR | | | | IAML | | 07 22 17.5 | |
| | comp=Z,48nm,0.5s | | | | | | |
| SDDR | **Presa de Saban** | **1.61** | **73** | *i* P | **Pn** | **07 21 50.5** | **0.0** |
| SDDR | | | | *e*S | **Sn** | **07 22 12.9** | **+1.5** |
| SDDR | | | | IAML | | 07 22 17.3 | |
| | comp=Z,44nm,0.5s | | | | | | |
| MASC | **Masc** | **2.06** | **323** | *e*P | **Pn** | **07 21 56.7** | **+0.1** |
| MASC | | | | *e*S | **Sn** | **07 22 22.1** | **-0.3** |
| MASC | | | | IAML | | 07 22 22.9 | |
| | comp=E,33nm,0.3s | | | | | | |
| MASC | | | | IAML | | 07 22 28.4 | |
| | comp=N,15nm,0.4s | | | | | | |
| MASC | **Masc** | **2.06** | **323** | *i* P | **Pn** | **07 21 56.8** | **+0.1** |
| MASC | | | | *e*S | **Sn** | **07 22 22.3** | **-0.1** |
| MASC | | | | IAML | | 07 22 29.8 | |
| | comp=Z,13nm,2.6s | | | | | | |
| SC01 | **Santiago de lo** | **2.26** | **66** | *i* P | **Pn** | **07 21 59.7** | **+0.3** |
| SC01 | | | | IAML | | 07 22 53.0 | |
| | comp=Z,40nm,1.4s | | | | | | |
| QMBU | **Quimbuelo** | **2.45** | **313** | *e*P | **Pn** | **07 22 00.6** | **-1.4** |
| QMBU | | | | *e*S | **Sn** | **07 22 30.9** | **-1.1** |
| QMBU | | | | IAML | | 07 22 35.7 | |
| | comp=N,8.8nm,0.2s | | | | | | |
| QMBU | | | | *e*Sg | **Sb** | **07 22 36.1** | **-0.2** |
| QMBU | | | | IAML | | 07 22 37.1 | |
| | comp=E,25nm,0.2s | | | | | | |
| GTBY | **Guantanamo Bay** | **2.50** | **304** | *e*P | **Pn** | **07 22 03.2** | **+0.5** |
| GTBY | | | | *e*S | **Sn** | **07 22 33.9** | **+0.7** |
| GTBY | | | | IAML | | 07 22 40.2 | |
| | comp=E,26nm,0.2s | | | | | | |
| GTBY | | | | IAML | | 07 22 40.4 | |
| | comp=E,23nm,0.3s | | | | | | |
| GTBY | **Guantanamo Bay** | **2.50** | **304** | *i* P | **Pn** | **07 22 03.6** | **+0.9** |
| GTBY | | | | *e*S | **Sn** | **07 22 34.0** | **+0.7** |
| GTBY | | | | IAML | | 07 22 35.5 | |
| | comp=Z,9.5nm,1.2s | | | | | | |
| RCC | **Rio Carpintero** | **3.01** | **300** | *e*P | **Pn** | **07 22 09.0** | **-0.7** |
| RCC | | | | *e*S | **Sn** | **07 22 44.7** | **-1.0** |
| RCC | | | | IAML | | 07 22 53.9 | |
| | comp=N,9.7nm,0.3s | | | | | | |
| RCC | | | | IAML | | 07 22 54.4 | |
| | comp=E,11nm,0.3s | | | | | | |
| MARVS | **Santiago de Cu** | **3.18** | **298** | *e*P | **Pn** | **07 22 14.0** | **+1.9** |

*IDC **24** 07:23:19.3±1.1,8°.27S×116°.97E,h0km,mb3.9/6, mbtmp3.9/7,ML3.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FORT** | **Forest** | **24.77** | **156** | P | **P** | **07** | **28** | **42.1 -0.2** |
| **FORT** | **Forest** | **24.77** | **156** | P | **P** | **07** | **28** | **41.5 -0.7** |
| **QIS** | **Mount Isa** | **25.22** | **121** | P | **P** | **07** | **28** | **47.9 +1.4** |
| **RKGY** | **Rocky Gully** | **26.23** | **180** | P | **P** | **07** | **28** | **55.3 -0.2** |
| **OOD** | **Oodnadatta** | **26.40** | **140** | P | **P** | **07** | **28** | **56.5 -0.6** |
| **BBOO** | **Buckleboo** | **30.27** | **147** | P | **P** | **07** | **29** | **30.1 -1.5** |
| BBOO | | | | IAmb | IAmb | 07 | 29 | 36.2 |
| | comp=Z,43nm,1.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **32.94** | **139** | P | **P** | **07** | **29** | **53.6 -1.5** |
| STKA | | | | IAmb | IAmb | 07 | 30 | 03.2 |
| | comp=Z,2.0nm,1.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **32.94** | **139** | P | **P** | **07** | **29** | **53.9 -1.2** |
| | comp=Z,2.1nm,0.6s,baz=319,slow=8.2,SNR=4.9 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **49.64** | **112** | P | **P** | **07** | **32** | **11.7 -0.9** |
| DZM | | | | IAmb | IAmb | 07 | 32 | 20.4 |
| | comp=Z,13nm,1.2s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **53.99** | **13** | P | **P** | **07** | **32** | **44.8 +0.4** |
| **SONM** | **Songino Array** | **56.59** | **352** | P | **P** | **07** | **33** | **03.8 +0.5** |
| | comp=Z,0.3nm,0.3s,baz=163,slow=10,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.81** | **334** | P | **P** | **07** | **33** | **48.3 +2.3** |
| | comp=Z,0.3nm,0.5s,baz=128,slow=9.8,SNR=3.0 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.74** | **180** | P | **P** | **07** | **35** | **38.1 -1.0** |
| QSPA | | | | IAmb | IAmb | 07 | 35 | 41.3 |
| | comp=Z,3.2nm,1.3s | | | | | | | |
| **SNAA** | **Sanae** | **91.12** | **196** | P | **P** | **07** | **36** | **25.0 0.0** |
| | comp=Z,0.4nm,0.5s,baz=195,slow=3.8,SNR=11 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **CPUP** | **Villa Florida** | **145.15** | **189** | PKPbc | **PKPbc** | **07** | **42** | **58.3 -0.1** |
| | comp=Z,1.8nm,0.5s,baz=124,slow=2.5,SNR=8.3 | | | | | | | |

*IDC **24** 07:26:57.5±1.2,20°.11N×144°.31E, h0km, mb3.8/5, mbtmp3.8/5, MS2.9/3, Error ellipse: s-maj=52.0km s-min=22.5km az=95.0*
*NEIC **24** 07:27:00.7±0.8, 19°.94N±0°.09×144°.1E±0°.2, h10km±1km, mb4.5/12, Error ellipse: s-maj=39.5km s-min=13.5km az=259.0*

**ISC 24 07:27:03.0**±1.1,**20°.0N**±0°.1×**144°.0E**±0°.3,**h31km**,**n28**, σ1§**15**/22,**mb4.2**/10,**MS2.9**/3,**Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **7.25** | **347** | Pn | **Pn** | **07** | **28** | **47.3 +0.5** |
| **JSD** | **Sado** | **18.64** | **346** | P | **P** | **07** | **31** | **15.4 -2.8** |
| JSD | | | | IAmb | IAmb | 07 | 31 | 17.5 |
| | comp=Z,76nm,1.5s | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.54** | **87** | T | T | 07 | 52 | 30.8 |
| | baz=275,slow=75,SNR=329 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.55** | **87** | T | T | 07 | 52 | 31.1 |
| | baz=275,slow=75,SNR=263 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.56** | **87** | T | T | 07 | 52 | 32.1 |
| | baz=275,slow=75,SNR=192 | | | | | | | |
| **ASAJ** | **Asahikawa** | **24.07** | **358** | LR | LR | 07 | 42 | 26.1 |
| | comp=Z,22nm,19.6s,baz=269,slow=39 | | | | | | | |
| **KLR** | **Kul'dur** | **30.76** | **344** | LR | LR | 07 | 46 | 47.1 |
| | comp=Z,31nm,18.2s,baz=208,slow=39 | | | | | | | |
| **WB0** | **Warramunga Arr** | **40.63** | **194** | P | **P** | **07** | **34** | **40.4 0.0** |
| **WB2** | **Warramunga Arr** | **40.81** | **194** | P | **P** | **07** | **34** | **41.4 -0.5** |
| WB2 | | | | IAmb | IAmb | 07 | 34 | 42.6 |
| | comp=Z,11nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **40.81** | **194** | P | **P** | **07** | **34** | **41.7 -0.2** |
| **WRA** | **Warramunga Arr** | **40.81** | **194** | P | **P** | **07** | **34** | **42.4 +0.5** |
| | comp=Z,2.9nm,0.7s,baz=15,slow=9.0,SNR=17 | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **44.51** | **193** | P | **P** | **07** | **35** | **11.2 -0.6** |
| **ASAR** | **Alice Springs** | **44.51** | **193** | P | **P** | **07** | **35** | **10.7 -1.2** |
| **ASAR** | **Alice Springs** | **44.51** | **193** | P | **P** | **07** | **35** | **12.2 +0.3** |
| | comp=Z,1.1nm,0.7s,baz=17,slow=7.9,SNR=11 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **TIXI** | **Tiksi** | **52.40** | **354** | LR | LR | 08 | 08 | 45.7 |
| | comp=Z,9.3nm,18.1s,baz=168,slow=48 | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.40** | **313** | P | **P** | **07** | **36** | **42.9 +1.3** |
| **MKAR** | **Makanchi Array** | **56.40** | **313** | P | **P** | **07** | **36** | **42.0 +0.5** |
| | comp=Z,0.4nm,0.7s,baz=110,slow=7.8,SNR=3.0 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **N18K** | **Kilae Creek** | **58.22** | **30** | P | **P** | **07** | **36** | **54.8 +0.6** |
| **H19K** | **Roundabout Mou** | **59.49** | **25** | P | **P** | **07** | **37** | **03.2 +0.4** |
| H19K | | | | IAmb | IAmb | 07 | 37 | 28.2 |
| | comp=Z,6.8nm,1.4s | | | | | | | |
| **K20K** | **Telida** | **59.80** | **27** | P | **P** | **07** | **37** | **05.5 +0.4** |
| K20K | | | | IAmb | IAmb | 07 | 37 | 27.0 |
| | comp=Z,6.2nm,1.5s | | | | | | | |
| **D19K** | **Kuna River** | **59.97** | **21** | P | **P** | **07** | **37** | **07.5 +1.3** |
| **J20K** | **Nowinta River** | **60.00** | **26** | P | **P** | **07** | **37** | **07.0 +0.6** |
| J20K | | | | IAmb | IAmb | 07 | 37 | 51.2 |
| | comp=Z,3.1nm,1.2s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **61.32** | **27** | P | **P** | **07** | **37** | **16.0 +0.6** |
| BPAW | | | | IAmb | IAmb | 07 | 37 | 17.2 |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **62.99** | **22** | P | **P** | **07** | **37** | **27.4 +0.8** |
| **ILAR** | **Eielson Array** | **63.20** | **27** | P | **P** | **07** | **37** | **25.6 -2.3** |
| | comp=Z,0.7nm,0.7s,baz=250,slow=5.0,SNR=7.1 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **64.44** | **320** | P | **P** | **07** | **37** | **36.3 -0.1** |
| | comp=Z,0.5nm,0.5s,baz=102,slow=6.2,SNR=2.6 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **64.57** | **24** | P | **P** | **07** | **37** | **38.9 +1.8** |
| **BCAR** | **Beaver Creek A** | **65.22** | **29** | P | **P** | **07** | **37** | **41.3 0.0** |

*TEH **24** 07:32:14.3,34°.93N×45°.14E, h8km±28km, ML2.8*
*ISN **24** 07:32:15.1±1.2,34°.99N×45°.08E, h30km±42km, ML2.8*

**ISC 24 07:32:14.0**±1.0,**34°.95N**±0°.08×**45°.14E**±0°.07,**h10km**,**n10**, σ0§**79**/13,**Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KGS1** | **Ghasr-e-Shirin** | **0.58** | **140** | Pg | **Pg** | **07** | **32** | **25.3 +0.1** |
| KGS1 | | | | Sg | **Sb** | **07** | **32** | **33.8 -0.7** |
| **IKRK** | **Kirkuk** | **0.79** | **304** | *e*Pg | **Pg** | **07** | **32** | **29.0 -0.3** |
| | baz=125 | | | | | | | |
| IKRK | | | | *e*Sg | **Sg** | **07** | **32** | **40.0 +0.3** |
| **GLG1** | **Gilan-e-Gharb** | **1.05** | **143** | Pg | **Pg** | **07** | **32** | **34.2 0.0** |
| **IDHR** | **Dehrash** | **1.05** | **103** | Pg | **Pb** | **07** | **32** | **34.7 +0.2** |
| **IGHG** | **Ghaleghazi** | **1.33** | **117** | Pg | **Pn** | **07** | **32** | **39.0 +0.1** |
| **ILIN** | **Lien** | **1.50** | **91** | Pg | **Pb** | **07** | **32** | **42.4 +0.4** |
| **ILBA** | **Ilam Banvizeh** | **1.59** | **146** | Pg | **Pb** | **07** | **32** | **43.7 +0.2** |
| **KCHF** | **Cheshme Sefid,** | **1.71** | **113** | Pg | **Pb** | **07** | **32** | **45.9 +0.3** |
| **IBDR** | **Badra** | **1.95** | **160** | *e*Pn | **Pn** | **07** | **32** | **48.0 +0.8** |
| IBDR | | | | *e*Sn | **Sb** | **07** | **33** | **14.0 0.0** |
| **IKFM** | **Kafar-mosalman** | **2.66** | **122** | Pn | **Pb** | **07** | **32** | **59.5 -2.1** |

*NEIC **24** 07:57:58.5±1.3, 17°.9S×0°.2×178°.0W±0°.1, h585km±8km, mb4.2/28, Error ellipse: s-maj=24.4km s-min=16.4km az=143.0*
*IDC **24** 07:57:59.5±4.3, 17°.88S×178°.05W, h592km±51km, mb3.4/9, mbtmp4.4/10, Error ellipse: s-maj=27.6km s-min=20.1km az=139.0*

**ISC 24 07:57:58.7**±0.6,**17°.9S**±0°.1×**178°.0W**±0°.1,**h590km**,**n43**, σ0§**75**/44,**mb4.1**/21,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.76** | **272** | P | **P** | **07** | **59** | **23.6 +1.6** |
| **AFI** | **Afiamalu** | **7.19** | **57** | P | **P** | **07** | **59** | **48.1 -2.1** |
| **PINNC** | **Pines Island,** | **14.43** | **249** | P | **P** | **08** | **01** | **01.4 -0.5** |
| **DZM** | **Mont Dzumac** | **15.19** | **252** | P | **P** | **08** | **01** | **07.9 -1.3** |
| DZM | | | | IAmb | IAmb | 08 | 01 | 39.5 |
| | comp=Z,19nm,1.3s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.19** | **252** | P | **P** | **08** | **01** | **09.2 0.0** |
| | comp=Z,4.9nm,0.6s,baz=102,slow=20,SNR=9.9 | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.55** | **199** | P | **P** | **08** | **02** | **58.7 -0.9** |
| **EIDS** | **Eidsvold** | **29.63** | **250** | P | **P** | **08** | **03** | **17.3 -0.6** |
| EIDS | | | | IAmb | IAmb | 08 | 03 | 18.6 |
| | comp=Z,7.8nm,0.7s | | | | | | | |
| **DCZ** | **Deep Cove** | **30.14** | **201** | P | **P** | **08** | **03** | **21.6 -0.3** |
| **CTAO** | **Charters Tower** | **33.83** | **260** | P | **P** | **08** | **03** | **53.2 -0.4** |
| CTAO | | | | IAmb | IAmb | 08 | 03 | 54.5 |
| | comp=Z,12nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **34.01** | **233** | P | **P** | **08** | **03** | **55.2 +0.2** |
| CAN | | | | IAmb | IAmb | 08 | 03 | 57.0 |
| | comp=Z,20nm,1.2s | | | | | | | |
| **TOO** | **Toolangi** | **37.47** | **231** | P | **P** | **08** | **04** | **23.8 +0.3** |
| TOO | | | | IAmb | IAmb | 08 | 04 | 25.1 |
| | comp=Z,11nm,0.8s | | | | | | | |
| **COEN** | **Coen** | **37.49** | **270** | P | **P** | **08** | **04** | **24.2 +0.4** |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **08** | **04** | **36.1 +0.5** |
| STKA | | | | IAmb | IAmb | 08 | 04 | 37.3 |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.97** | **241** | P | **P** | **08** | **04** | **36.6 +1.0** |
| | comp=Z,10.0nm,0.5s,baz=90,slow=9.7,SNR=36 | | | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.82** | **259** | P | **P** | **08** | **05** | **20.8 -1.0** |
| WR0 | | | | IAmb | IAmb | 08 | 05 | 22.8 |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **45.00** | **259** | P | **P** | **08** | **05** | **22.2 -0.8** |
| **WRA** | **Warramunga Arr** | **45.01** | **259** | P | **P** | **08** | **05** | **22.1 -1.1** |
| **WRA** | **Warramunga Arr** | **45.01** | **259** | P | **P** | **08** | **05** | **22.8 -0.3** |
| | comp=Z,7.3nm,0.3s,baz=94,slow=7.4,SNR=532 | | | | | | | |
| | comp=Z,7.3nm,0.3s | | | | | | | |
| **AS31** | **Alice Springs** | **45.16** | **254** | P | **P** | **08** | **05** | **24.1 -0.2** |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | **P** | **08** | **05** | **24.2 -0.1** |
| **ASAR** | **Alice Springs** | **45.16** | **254** | P | **P** | **08** | **05** | **24.4 +0.1** |
| | comp=Z,34nm,0.5s,baz=86,slow=8.9,SNR=524 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **08** | **06** | **51.9 0.0** |
| | comp=Z,1.2nm,0.5s,baz=106,slow=3.6,SNR=4.2 | | | | | | | |
| | comp=Z,34nm,0.5s | | | | | | | |
| **MTN** | **Manton Dam** | **49.18** | **268** | P | **P** | **08** | **05** | **53.4 -1.1** |
| MTN | | | | IAmb | IAmb | 08 | 05 | 54.9 |
| | comp=Z,13nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **50.87** | **264** | P | **P** | **08** | **06** | **05.9 -0.8** |
| KNRA | | | | IAmb | IAmb | 08 | 06 | 07.3 |
| | comp=Z,5.9nm,0.7s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.28** | **255** | P | **P** | **08** | **06** | **57.5 -0.9** |
| PSA00 | | | | IAmb | IAmb | 08 | 07 | 01.6 |
| | comp=Z,14nm,1.5s | | | | | | | |
| **TOLI2** | **Tolitoli** | **63.09** | **281** | P | **P** | **08** | **07** | **30.0 -0.1** |
| TOLI2 | | | | IAmb | IAmb | 08 | 07 | 35.7 |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **GIRL** | **Giralia** | **63.26** | **253** | P | **P** | **08** | **07** | **31.8 +0.7** |
| **CASY** | **Casey** | **66.30** | **205** | P | **P** | **08** | **07** | **49.3 0.0** |
| CASY | | | | IAmb | IAmb | 08 | 07 | 51.3 |
| | comp=Z,5.7nm,1.3s | | | | | | | |
| **UGM** | **Wanagama** | **70.03** | **268** | P | **P** | **08** | **08** | **12.4 -0.5** |
| **QSPA** | **South Pole Qui** | **72.15** | **180** | P | **P** | **08** | **08** | **24.7 +0.3** |
| **QSPA** | **South Pole Qui** | **72.15** | **180** | P | **P** | **08** | **08** | **25.2 +0.8** |
| | comp=Z,1.2nm,1.0s,baz=190,slow=1.4,SNR=9.9 | | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | | |
| **DSP** | **Deep Springs** | **78.80** | **45** | P | **P** | **08** | **09** | **02.2 +0.7** |
| **YERR** | **Yerington** | **78.85** | **43** | P | **P** | **08** | **09** | **01.9 -0.1** |
| **NVAR** | **Mina Array Bea** | **79.16** | **44** | P | **P** | **08** | **09** | **04.1 +0.4** |
| | comp=Z,0.7nm,0.6s,baz=224,slow=9.2,SNR=5.2 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.08** | **38** | P | **P** | **08** | **09** | **08.4 +0.1** |
| **I07A** | **Izee** | **81.56** | **38** | P | **P** | **08** | **09** | **15.7 -0.2** |
| **L18K** | **Granite Mounta** | **81.62** | **10** | P | **P** | **08** | **09** | **15.8 +0.2** |
| L18K | | | | IAmb | IAmb | 08 | 09 | 48.8 |
| | comp=Z,8.3nm,1.4s | | | | | | | |
| **U15A** | **North Rim** | **82.23** | **48** | P | **P** | **08** | **09** | **20.0 +0.4** |
| U15A | | | | IAmb | IAmb | 08 | 09 | 21.6 |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **ELK** | **Elko** | **82.39** | **43** | P | **P** | **08** | **09** | **20.9 +0.6** |
| | comp=Z,0.8nm,0.7s,baz=301,slow=3.8,SNR=5.0 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.67** | **57** | P | **P** | **08** | **09** | **37.9 +1.4** |
| | comp=Z,1.5nm,0.8s,baz=222,slow=7.0,SNR=11 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.08** | **43** | P | **P** | **08** | **09** | **43.1 +0.1** |
| | comp=Z,0.6nm,0.7s,baz=224,slow=2.5,SNR=4.6 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.59** | **178** | P | **P** | **08** | **09** | **58.7 +0.1** |
| | comp=Z,1.5nm,1.2s,baz=282,slow=6.2,SNR=5.7 | | | | | | | |
| | comp=Z,1.5nm,1.2s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.05** | **315** | PKPbc | **PKPdf** | **08** | **16** | **30.9 +0.8** |
| | comp=Z,0.7nm,0.5s,baz=110,slow=2.1,SNR=4.3 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.46** | **303** | PKPbc | **PKPbc** | **08** | **16** | **35.2 +0.1** |
| | comp=Z,2.0nm,0.6s,baz=61,slow=5.8,SNR=4.8 | | | | | | | |

*NEIC **24** 07:59:19.4±0.6, 36°.98N±0°.04×104°.86W±0°.02, h8km±5km, mb_Lg3.2/147, ML3.3/10, Error ellipse: s-maj=5.4km s-min=2.4km az=196.0*
*IDC **24** 07:59:24.1±1.8, 36°.73N×104°.95W, h0km, mb4.1/1, mbtmp3.4/3, ML3.2/2, Error ellipse: s-maj=25.3km s-min=17.6km az=103.0*

**ISC 24 07:59:21.1**±0.9,**37°.02N**±0°.06×**104°.85W**±0°.04,**h10km**,**n69**, σ1§**55**/41,**Colorado**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T25A** | **Trinidad** | **0.37** | **72** | Pg | **Pg** | **07** | **59** | **26.9 -1.7** |
| T25A | | | | Sg | **Sg** | **07** | **59** | **32.5 -1.0** |
| **SDCO** | **Great Sand Dun** | **0.89** | **325** | | **Pg** | **07** | **59** | **36.2 -2.0** |
| SDCO | | | | Sg | **Sg** | **07** | **59** | **48.1 -1.7** |
| SDCO | | | | IAML | | 07 | 59 | 48.4 |
| | 630nm,0.3s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **1.73** | **295** | | **Pn** | **07** | **59** | **51.6 0.0** |
| S22A | | | | IAML | | 08 | 00 | 17.0 |
| | comp=N,330nm,0.1s | | | | | | | |
| S22A | | | | IAML | | 08 | 00 | 17.7 |
| | comp=E,398nm,0.1s | | | | | | | |
| **RTBA** | **Rita Blanca** | **1.80** | **108** | | **Pn** | **07** | **59** | **51.8 -0.5** |
| RTBA | | | | IAmb_Lg | | 08 | 00 | 19.6 |
| | comp=Z,118nm,1.1s | | | | | | | |
| **Q24A** | **Divide** | **1.95** | **353** | | **Pn** | **07** | **59** | **55.8 +1.1** |
| Q24A | | | | IAML | | 08 | 00 | 22.6 |
| | comp=N,269nm,0.4s | | | | | | | |
| **ANMO** | **Albuquerque** | **2.45** | **213** | | **Pn** | **08** | **00** | **00.6 -0.7** |
| **ANMO** | **Albuquerque** | **2.45** | **213** | Pn | **Pn** | **08** | **00** | **00.9 -0.4** |
| | comp=N,3.2nm,0.3s,baz=117,slow=13,SNR=79 | | | | | | | |
| ANMO | | | | Lg | Lg | 08 | 00 | 33.5 |
| | comp=N,13nm,0.3s,baz=324,slow=7.4,SNR=17 | | | | | | | |
| | comp=N,10nm,0.3s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **2.65** | **41** | | **Pn** | **08** | **00** | **05.6 +1.6** |
| **AMTX** | **Amarillo** | **3.34** | **129** | | **Pn** | **08** | **00** | **12.8 -0.8** |
| AMTX | | | | IAmb_Lg | | 08 | 01 | 13.6 |
| | comp=Z,57nm,0.8s | | | | | | | |
| **MSTX** | **Muleshoe** | **3.49** | **150** | Pn | **Pn** | **08** | **00** | **15.7 +0.1** |
| **BRIGG** | **Briggsdale** | **3.58** | **7** | IAmb_Lg | | 08 | 01 | 17.9 |
| | comp=Z,44nm,0.8s | | | | | | | |
| **O20A** | **White River Ci** | **4.09** | **321** | | **Pn** | **08** | **00** | **25.0 +1.2** |
| **SMWD** | **Samnorwood** | **4.20** | **116** | | **Pn** | **08** | **00** | **25.7 +0.5** |
| SMWD | | | | IAmb_Lg | | 08 | 01 | 41.1 |
| | comp=Z,67nm,0.7s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **4.42** | **65** | Pn | **Pn** | **08** | **00** | **27.8 -0.5** |
| **ELIS** | **Ellis County** | **4.48** | **101** | | **Pn** | **08** | **00** | **28.8 -0.3** |
| ELIS | | | | IAmb_Lg | | 08 | 01 | 43.0 |
| | comp=Z,66nm,0.7s | | | | | | | |
| **OGNE** | **Ogallala** | **4.49** | **28** | Pn | **Pn** | **08** | **00** | **28.5 -0.8** |
| OGNE | | | | IAmb_Lg | | 08 | 01 | 47.4 |
| | comp=Z,44nm,0.8s | | | | | | | |
| **DKNS** | **Dickens** | **4.64** | **135** | IAmb_Lg | | 08 | 01 | 46.7 |
| | comp=Z,58nm,1.0s | | | | | | | |
| **HMU** | **Henry Mountain** | **4.77** | **283** | | **Pn** | **08** | **00** | **35.1 +1.7** |
| **POST** | **Post** | **4.81** | **144** | | **Pn** | **08** | **00** | **32.6 -1.1** |
| POST | | | | IAmb_Lg | | 08 | 01 | 57.0 |
| | comp=Z,39nm,0.7s | | | | | | | |
| **SRU** | **San Rafael Swe** | **4.94** | **297** | | **Pn** | **08** | **00** | **35.6 0.0** |
| **P18A** | **Preston Nutter** | **4.97** | **303** | Pn | **Pn** | **08** | **00** | **37.9 +1.8** |
| **R32A** | **Long Quarter,** | **5.07** | **72** | | **Pn** | **08** | **00** | **37.1 0.0** |
| R32A | | | | IAmb_Lg | | 08 | 02 | 02.6 |
| | comp=Z,50nm,0.7s | | | | | | | |
| **121A** | **Cookes Peak, D** | **5.09** | **209** | | **Pn** | **08** | **00** | **35.3 -2.3** |
| **SN07** | **Snyder 07** | **5.09** | **139** | IAmb_Lg | | 08 | 02 | 04.2 |
| | comp=Z,49nm,0.8s | | | | | | | |
| **RDMU** | **Red Mountain** | **5.11** | **315** | | **Pn** | **08** | **00** | **39.4 +1.4** |
| **OK032** | **Salt Plains WL** | **5.33** | **90** | IAmb_Lg | | 08 | 02 | 09.3 |
| | comp=Z,37nm,0.8s | | | | | | | |
| **APMT** | **Aspermont** | **5.35** | **132** | Pn | **Pn** | **08** | **00** | **39.2 -1.8** |
| **WMOK** | **Wichita Mounta** | **5.43** | **113** | Pn | **Pn** | **08** | **00** | **40.9 -1.3** |
| WMOK | | | | IAmb_Lg | | 08 | 02 | 16.0 |
| | comp=Z,35nm,1.1s | | | | | | | |
| **WUAZ** | **Wupatki** | **5.48** | **256** | Pn | **Pn** | **08** | **00** | **42.2 -0.8** |
| **KAN08** | **Anthony NE Sta** | **5.50** | **86** | IAmb_Lg | | 08 | 02 | 24.1 |
| | comp=Z,40nm,0.8s | | | | | | | |
| **KAN14** | **Manchester OK** | **5.51** | **89** | Pn | **Pn** | **08** | **00** | **43.0 -0.3** |
| KAN14 | | | | IAmb_Lg | | 08 | 02 | 25.5 |
| | comp=Z,47nm,1.1s | | | | | | | |
| **CROK** | **Carrier** | **5.54** | **93** | IAmb_Lg | | 08 | 02 | 15.2 |
| | comp=Z,41nm,0.8s | | | | | | | |
| **KAN17** | **Caldwell West** | **5.67** | **88** | IAmb_Lg | | 08 | 02 | 24.3 |
| | comp=Z,36nm,0.8s | | | | | | | |
| **KAN01** | **Argonia South** | **5.67** | **87** | IAmb_Lg | | 08 | 02 | 28.6 |
| | comp=Z,47nm,1.0s | | | | | | | |
| **KAN13** | **South Haven SW** | **5.90** | **88** | IAmb_Lg | | 08 | 02 | 33.3 |
| | comp=Z,35nm,0.9s | | | | | | | |
| **MTPU** | **Mount Pierson** | **5.92** | **282** | Pn | **Pn** | **08** | **00** | **50.6 +1.5** |
| **MNHN** | **Monahans** | **5.93** | **162** | IAmb_Lg | | 08 | 02 | 29.9 |
| | comp=Z,31nm,0.9s | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **5.96** | **246** | | **Pn** | **08** | **00** | **49.1 -0.5** |
| **X34A** | **Smith Ranch, M** | **6.19** | **111** | IAmb_Lg | | 08 | 02 | 49.5 |
| | comp=Z,32nm,0.9s | | | | | | | |
| **JLU** | **Jordanelle** | **6.27** | **307** | | **Pn** | **08** | **00** | **56.3 +2.4** |
| **KNB** | **Kanab** | **6.38** | **272** | Pn | **Pn** | **08** | **00** | **55.5 +0.2** |
| **OK052** | **Battle Ridge R** | **6.56** | **97** | Pn | **Pn** | **08** | **00** | **56.3 -1.4** |
| OK052 | | | | IAmb_Lg | | 08 | 02 | 53.5 |
| | comp=Z,21nm,0.8s | | | | | | | |
| **T35A** | **Sooner Cattle** | **6.68** | **88** | Pn | **Pn** | **08** | **00** | **58.9 -0.4** |
| **ALPN** | **Alpine** | **6.71** | **171** | IAmb_Lg | | 08 | 02 | 54.3 |
| | comp=Z,37nm,1.1s | | | | | | | |
| **PDAR** | **Pinedale Array** | **6.78** | **329** | Pg | Pg | 08 | 01 | 27.0 -3.9 |
| | comp=Z,0.3nm,0.3s,baz=132,slow=15,SNR=13 | | | | | | | |
| PDAR | | | | Lg | Lg | 08 | 02 | 52.6 |
| | comp=Z,0.5nm,0.3s,baz=128,slow=29,SNR=5.6 | | | | | | | |
| **TUC** | **Tucson** | **6.78** | **228** | IAmb_Lg | | 08 | 02 | 52.7 |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **TUC** | **Tucson** | **6.78** | **228** | IAmb_Lg | | 08 | 02 | 52.7 |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **PLPT** | **Palo Pinto** | **6.82** | **126** | IAmb_Lg | | 08 | 03 | 04.3 |
| | comp=Z,20nm,0.8s | | | | | | | |
| **KSU1** | **Kansas State U** | **6.83** | **70** | IAmb_Lg | | 08 | 03 | 02.2 |
| | comp=Z,30nm,0.8s | | | | | | | |
| **LOOK** | **Love County** | **6.95** | **114** | IAmb_Lg | | 08 | 03 | 09.8 |
| | comp=Z,21nm,0.7s | | | | | | | |
| **RSSD** | **Black Hills** | **7.12** | **5** | IAmb_Lg | | 08 | 03 | 20.8 |
| | comp=Z,22nm,1.1s | | | | | | | |
| **Z35A** | **Perchaven, San** | **7.23** | **118** | IAmb_Lg | | 08 | 03 | 20.3 |
| | comp=Z,35nm,1.1s | | | | | | | |
| **FW07** | **Weatherford** | **7.23** | **125** | IAmb_Lg | | 08 | 03 | 13.5 |
| | comp=Z,32nm,1.3s | | | | | | | |
| **SAND** | **Sanderson** | **7.41** | **161** | Pn | **Pn** | **08** | **01** | **08.1 -1.3** |
| SAND | | | | IAmb_Lg | | 08 | 03 | 23.5 |
| | comp=Z,20nm,0.9s | | | | | | | |
| **BRDY** | **Brady** | **7.50** | **138** | Pn | **Pn** | **08** | **01** | **07.9 -2.7** |
| BRDY | | | | IAmb_Lg | | 08 | 03 | 20.1 |
| | comp=Z,24nm,1.1s | | | | | | | |
| **FW13** | **Cleburne** | **7.69** | **125** | IAmb_Lg | | 08 | 03 | 33.6 |
| | comp=Z,22nm,1.1s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **7.73** | **172** | | **Pn** | **08** | **01** | **13.9 0.0** |
| **TXAR** | **Lajitas Array** | **7.73** | **172** | | **Pn** | **08** | **01** | **10.9 -2.9** |
| **TXAR** | **Lajitas Array** | **7.73** | **172** | Pn | **Pn** | **08** | **01** | **14.5 +0.6** |
| | comp=Z,0.2nm,0.3s,baz=359,slow=11,SNR=13 | | | | | | | |
| TXAR | | | | Lg | Lg | 08 | 03 | 17.8 |
| | comp=Z,1.3nm,0.3s,baz=351,slow=24,SNR=14 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **JCT** | **Junction City** | **7.76** | **146** | IAmb_Lg | | 08 | 03 | 37.7 |
| | comp=Z,28nm,0.9s | | | | | | | |
| **RLO** | **Rose Lookout** | **7.95** | **93** | IAmb_Lg | | 08 | 03 | 37.3 |
| | comp=Z,25nm,0.9s | | | | | | | |
| **X37A** | **Clayton** | **8.08** | **105** | IAmb_Lg | | 08 | 03 | 45.4 |
| | comp=Z,31nm,0.8s | | | | | | | |
| **DRIO** | **Del Rio** | **8.37** | **154** | IAmb_Lg | | 08 | 03 | 50.9 |
| | comp=Z,18nm,0.8s | | | | | | | |
| **HNDO** | **Hondo** | **8.81** | **146** | IAmb_Lg | | 08 | 04 | 03.8 |
| | comp=Z,23nm,0.9s | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **8.91** | **112** | IAmb_Lg | | 08 | 04 | 22.1 |
| | comp=Z,17nm,0.9s | | | | | | | |
| **237A** | **Washetta, Mont** | **8.99** | **121** | IAmb_Lg | | 08 | 04 | 13.4 |
| | comp=Z,24nm,0.8s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **9.19** | **41** | IAmb_Lg | | 08 | 04 | 09.8 |
| | comp=Z,14nm,1.0s | | | | | | | |
| **MIAR** | **Mount Ida** | **9.49** | **102** | | **Pn** | **08** | **01** | **35.7 -2.1** |
| **LPAZ** | **La Paz** | **63.32** | **140** | P | **P** | **08** | **09** | **55.6 +4.4** |
| | comp=Z,1.5nm,0.8s,baz=338,slow=6.3,SNR=7.3 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |

*IDC **24** 08:20:41.8±0.6, 36°.28N×33°.96W, h0km, mb4.1/21, mbtmp4.1/21, MS3.6/30, Error ellipse: s-maj=18.5km s-min=14.2km az=167.0*
*NEIC **24** 08:20:45.2±1.1, 36°.29N±0°.03×34°.2W±0°.1, h10km±1km, mb4.8/124, Error ellipse: s-maj=14.1km s-min=5.0km az=272.0*

**ISC 24 08:20:44.4**±0.4,**36°.30N**±0°.08×**34°.13W**±0°.06,**h10km**,**n374**, σ0§**83**/343,**mb4.8**/82,**MS3.5**/

TAM Tamanrasset 36.78 100 P P 08 27 55.2 +2.7
GERES GERESS Array B 36.80 55 LR LR 08 42 14.9
comp=Z,39nm,18.7s,baz=241,slow=35
O53A New Philadelph 36.83 291 P P 08 27 52.9 +0.3
baz=81
O52A Adamsville 37.33 291 P P 08 27 57.8 +0.9
O52A IAmb IAmb 08 27 59.3
comp=Z,22nm,1.1s
P52A Corning 37.63 290 P P 08 27 59.9 +0.4
baz=79
NB2 NORSAR Subarra 37.70 34 P P 08 27 58.9 -0.9
comp=Z,0.7nm,0.7s,baz=250,slow=9.3
NOA NORSAR Array B 37.70 34 P P 08 27 59.5 -0.2
comp=Z,2.3nm,0.9s,baz=251,slow=8.5,SNR=4.3
NOA LR LR 08 40 49.6
comp=Z,52nm,21.4s,baz=245,slow=32
comp=Z,2.3nm,0.9s
PCRV Puerto La Cruz 37.94 234 LR LR 08 40 53.9
comp=Z,24nm,20.4s,slow=32
ACSO Alum Creek Sta 38.17 291 P P 08 28 04.3 +0.4
ACSO IAmb IAmb 08 28 11.2
comp=Z,14nm,0.8s
VAE Valguarnera 38.50 73 LR LR 08 42 26.6
comp=Z,77nm,18.5s,baz=262,slow=34
HFS Hagfors 38.58 37 LR LR 08 42 06.8
comp=Z,102nm,18.9s,baz=246,slow=33
VRAC Vranov 38.71 54 LR LR 08 42 52.4
comp=Z,25nm,19.1s,baz=267,slow=34
V53A Saluda 39.06 284 P P 08 28 11.9 +0.3
V53A IAmb IAmb 08 28 18.9
comp=Z,44nm,1.8s
O49A Covington 39.20 291 P P 08 28 13.5 +0.9
TORD Torodi Ar. Bea 39.54 116 P P 08 28 16.4 +0.8
TORD Torodi Ar. Bea 39.54 116 P P 08 28 14.0 -1.6
comp=Z,0.9nm,0.6s,baz=312,slow=7.7,SNR=6.2
TORD LR LR 08 43 41.2
comp=Z,124nm,18.7s,baz=332,slow=35
comp=Z,0.9nm,0.6s
R50A Paris 39.59 288 P P 08 28 15.9 0.0
P49A Miami Univ. Ec 39.61 290 P P 08 28 16.0 0.0
P49A IAmb IAmb 08 28 23.1
comp=Z,44nm,1.8s
P49A Miami Univ. Ec 39.61 290 P P 08 28 16.5 +0.4
baz=78
TKL Tuckaleechee C 39.82 284 P P 08 28 18.1 +0.3
TKL Tuckaleechee C 39.82 284 LR LR 08 41 35.8
comp=Z,119nm,21.4s,baz=72,slow=31
DBIC Dimbokro 39.83 131 P P 08 28 16.7 -1.4
DBIC IAmb IAmb 08 28 53.3
comp=Z,38nm,1.6s
DBIC Dimbokro 39.83 131 P P 08 28 15.2 -2.8
comp=Z,5.1nm,0.8s,baz=305,slow=8.6,SNR=4.3
DBIC LR LR 08 42 25.7
comp=Z,154nm,21.6s,baz=294,slow=33
comp=Z,5.1nm,0.8s
VYHS Vyhne 40.20 55 eP P 08 28 24.9 +4.0
OJC Ojcow 40.78 53 P P 08 28 25.9 +0.3
BAUV El Baul 41.11 237 P P 08 28 27.6 -1.0
U49A Red Boiling Sp 41.15 286 P P 08 28 28.7 -0.1
L44A Lake County Fo 41.49 295 P P 08 28 32.1 +0.6
baz=80
BOAV Boa Vista 41.63 222 P P 08 28 32.4 -0.5
CLTN Cedars of Leba 41.69 286 P P 08 28 34.4 +1.1
SDV Santo Domingo 42.94 240 LR LR 08 43 45.4
comp=Z,50nm,21.2s,baz=50,slow=32
E38A The Farm, Brul 43.38 302 P P 08 28 46.9 +0.1
PLAL Pickwick Lake 43.38 285 P P 08 28 47.6 +0.6
SIUC Southern Illin 43.47 289 P P 08 28 47.4 -0.3
SIUC IAmb IAmb 08 28 54.8
comp=Z,20nm,0.8s
S44A Carbondale 43.50 289 P P 08 28 48.4 +0.4
S44A IAmb IAmb 08 28 55.0
comp=Z,17nm,0.8s
CGM3 Cape Girardeau 43.92 289 P P 08 28 51.7 +0.4
L40A Anamosa 43.92 296 P P 08 28 51.3 0.0
L40A IAmb IAmb 08 28 58.3
comp=Z,12nm,0.9s
FVM French Village 44.32 290 P P 08 28 54.1 -0.4
FVM IAmb IAmb 08 29 00.7
comp=Z,11nm,0.9s
SPMN Marine on St. 44.45 300 P P 08 28 56.1 +0.6
OXF Oxford 44.57 285 P P 08 28 56.6 0.0
PBMO Poplar Bluff 44.66 288 P P 08 28 57.2 0.0
FINES FINESS Array B 44.78 36 LR LR 08 45 19.1
comp=Z,88nm,19.8s,baz=241,slow=33
Y45A Yeager Farm, C 44.88 284 P P 08 28 59.4 +0.3
CCM Cathedral Cave 44.92 290 P P 08 28 59.7 +0.4
MLR Muntele Rosu 45.38 59 LR LR 08 46 37.8
comp=Z,49nm,21.1s,baz=248,slow=34
N38A Joes South For 45.69 294 P P 08 29 05.9 +0.5
ULM Lac du Bonnet 45.77 308 LR LR 08 48 18.4
comp=Z,200nm,18.2s,baz=80,slow=36
ARCES ARCESS Array B 45.94 25 P P 08 29 04.4 -2.6
comp=Z,4.3nm,0.9s,baz=268,slow=9.0,SNR=5.8
ARCES LR LR 08 45 39.7
comp=Z,29nm,20.2s,baz=160,slow=33
comp=Z,4.3nm,0.9s
MGMO Mountain Grove 45.96 289 P P 08 29 07.9 +0.3
MGMO IAmb IAmb 08 29 14.1
comp=Z,11nm,0.9s
AGMN Agassiz Nation 46.03 305 P P 08 29 08.2 +0.2
AGMN IAmb IAmb 08 29 14.8
comp=Z,11nm,0.8s
P38A Dawn 46.21 293 P P 08 29 10.4 +0.9
P38A IAmb IAmb 08 29 16.2
comp=Z,12nm,1.0s
KIEV Kiev 46.73 51 P P 08 29 16.4 +2.9
KIEV IAmb IAmb 08 29 18.5
comp=Z,10nm,1.1s
AKASG Malin Array Be 46.74 51 P P 08 29 10.6 -2.9
comp=Z,2.1nm,0.7s,baz=276,slow=7.6,SNR=7.8
AKASG LR LR 08 47 57.6
comp=Z,73nm,18.0s,baz=238,slow=35
comp=Z,2.1nm,0.7s
AKBB Malin Array Si 46.74 51 P P 08 29 16.9 +3.4
AKBB IAmb IAmb 08 29 18.5
comp=Z,12nm,1.1s
X40A Basin Creek Fa 47.24 286 P P 08 29 17.6 -0.1
ECSD EROS Data Cent 47.42 299 P P 08 29 19.1 +0.2
Z41A Richland Creek 47.65 284 P P 08 29 20.5 -0.4
L34A Svendsen Farm, 47.68 297 P P 08 29 20.9 -0.2
U38A Gravette 47.79 289 P P 08 29 21.6 -0.3
U38A IAmb IAmb 08 30 34.5
comp=Z,24nm,1.9s
MIAR Mount Ida 47.80 286 P P 08 29 21.9 -0.1
KSU1 Kansas State U 48.65 293 P P 08 29 28.0 -0.5
TUL3 Leonard 49.04 289 P P 08 29 31.1 -0.4
TUL3 IAmb IAmb 08 29 32.1
comp=Z,18nm,1.2s
OK052 Battle Ridge R 49.78 289 P P 08 29 37.2 0.0
OK052 IAmb IAmb 08 29 37.7
comp=Z,17nm,1.2s
OK031 S. Brethren Rd 49.83 289 P P 08 29 37.4 -0.2
KAN14 Manchester OK 50.34 291 P P 08 29 41.3 -0.1
FW13 Cleburne 51.60 285 P P 08 29 50.9 -0.1
ACON Acoyapa 51.80 256 P P 08 29 53.2 +0.6
ACON IAmb IAmb 08 29 54.9
comp=Z,19nm,1.1s
PLPT Palo Pinto 52.11 286 P P 08 29 55.4 +0.6
PLPT IAmb IAmb 08 30 01.1
comp=Z,16nm,1.1s
BRTR Keskin Array B 52.34 64 P P 08 29 54.8 -1.9
comp=Z,0.6nm,1.0s,baz=345,slow=10,SNR=2.0
BRTR LR LR 08 51 08.2
comp=Z,29nm,21.4s,baz=300,slow=35
comp=Z,0.6nm,1.0s
SMWD Samnorwood 52.72 290 P P 08 29 59.4 +0.1
BRDY Brady 53.25 285 P P 08 30 02.7 -0.5
RTBA Rita Blanca 54.11 292 P P 08 30 10.6 +1.0
RTBA IAmb IAmb 08 30 13.4
comp=Z,20nm,1.6s
JCT Junction City 54.21 284 P P 08 30 09.7 -0.7
JCT IAmb IAmb 08 30 10.9
comp=Z,7.3nm,0.9s
YKA Yellowknife Ar 54.26 326 P P 08 30 09.9 -0.2
comp=Z,3.7nm,1.0s,baz=81,slow=7.3,SNR=9.3
YKA LR LR 08 52 27.8
comp=Z,69nm,19.1s,baz=342,slow=35
comp=Z,3.7nm,1.0s
833A Chaparral WMA, 54.81 282 P P 08 30 15.0 +0.3
baz=64
ANTS Antisana-Sarah 54.86 238 P P 08 30 16.5 +0.6
N23A Red Feather La 54.86 298 P P 08 30 15.5 +0.2
N23A IAmb IAmb 08 30 22.1
comp=Z,17nm,1.2s
N23A Red Feather La 54.86 298 P P 08 30 15.4 +0.2
baz=70
Q24A Divide 54.97 296 P P 08 30 16.3 +0.2
baz=69
T25A Trinidad 55.10 293 P P 08 30 16.8 -0.2
baz=68
YMP Mirror Lake Pl 56.46 304 P P 08 30 27.6 +0.9
S22A 4UR Ranch, Cre 56.65 295 P P 08 30 28.2 0.0
baz=67
KIRV Kirov 56.66 39 LR LR 08 53 35.6
comp=Z,68nm,19.0s,baz=276,slow=35
PDAR Pinedale Array 56.74 302 P P 08 30 27.9 -0.7
comp=Z,2.4nm,1.1s,baz=66,slow=7.2,SNR=14
comp=Z,2.4nm,1.1s
ANMO Albuquerque 57.48 292 P P 08 30 34.7 +0.7
KBZ Khabaz 57.49 57 P P 08 30 32.4 -1.2
comp=Z,0.9nm,0.4s,baz=243,slow=9.0,SNR=2.5
comp=Z,0.9nm,0.4s
BELG Belogornoye 57.53 46 LR LR 08 54 04.6
comp=Z,134nm,20.0s,baz=261,slow=35
TXAR Lajitas Array 57.73 285 P P 08 30 35.1 -0.5
TXAR Lajitas Array 57.73 285 P P 08 30 35.6 0.0
comp=Z,2.1nm,0.8s,baz=88,slow=6.9,SNR=27
comp=Z,2.1nm,0.8s
AHID Auburn Hatcher 57.80 302 P P 08 30 36.5 +0.4
AHID IAmb IAmb 08 30 43.6
comp=Z,14nm,1.2s
WRGLY Wrigley 58.00 328 P P 08 30 37.7 +0.8
baz=72
BPMT Black Pine Rid 58.04 307 P P 08 30 38.1 +0.3
TMUT Trail Mountain 59.20 298 P P 08 30 47.3 +1.3
TMUT IAmb IAmb 08 30 53.7
comp=Z,8.2nm,1.3s
KOTAN Kotaneelee Air 59.28 324 P P 08 30 46.9 +1.1
baz=70
HVU Hansel Valley 59.32 302 P P 08 30 46.8 +0.2
HVU IAmb IAmb 08 30 53.3
comp=Z,11nm,1.3s
NLU North Lily Min 59.55 299 P P 08 30 49.1 +0.7
NEW Newport 59.71 310 P P 08 30 48.9 -0.2
BGU Big Grassy Mou 59.83 301 P P 08 30 50.4 +0.2
BGU IAmb IAmb 08 30 51.5
comp=Z,9.4nm,1.1s
DUG Dugway, Tooele 59.97 300 P P 08 30 51.0 -0.1
DUG IAmb IAmb 08 30 53.0
comp=Z,12nm,1.1s
INK Inuvik 60.12 335 P P 08 30 51.9 +0.4
baz=67
MSU Marysvale 60.21 298 P P 08 30 53.6 +0.7
TOAD Toad River Com 60.30 323 P P 08 30 53.5 +0.5
baz=68
F31M Tsiigehtchic 60.54 334 P P 08 30 54.9 +0.5
baz=66
TGTN Hyland Airport 60.70 327 P P 08 30 56.4 +0.8
baz=68
WUAZ Wupatki 60.89 294 P P 08 30 58.4 +0.8
WUAZ IAmb IAmb 08 30 59.9
comp=Z,8.9nm,1.2s
G31M Satah River 60.94 334 P P 08 30 57.7 +0.6
baz=66
F30M Barrier River 61.19 335 P P 08 30 59.6 +0.8
baz=65
LPAZ La Paz 61.39 218 P P 08 31 01.1 -0.3
comp=Z,4.7nm,0.8s,baz=20,slow=4.9,SNR=23
comp=Z,4.7nm,0.8s
PSUT Pine Spring 61.40 298 P P 08 31 01.6 +0.6
PSUT IAmb IAmb 08 31 08.4
comp=Z,9.8nm,1.0s
X16A Lo Mia Camp, P 61.42 293 P P 08 31 01.8 +0.6
WTLY Watson Lake, Y 61.49 325 P P 08 31 01.7 +0.6
baz=66
SPR3 Spring Creek 3 61.54 299 P P 08 31 03.0 +1.0
SPR3 IAmb IAmb 08 31 09.8
comp=Z,8.0nm,1.3s
E29M Blow River 61.55 336 P P 08 31 01.8 +0.5
baz=63
G30M tAoh Zraii Nji 61.61 334 P P 08 31 02.3 +0.5
baz=64
Q12A Willow Creek R 61.87 299 P P 08 31 04.1 0.0
E28M Babbage River 61.99 336 P P 08 31 04.7 +0.4
baz=62
EPYK Eagle Plains 62.06 334 P P 08 31 05.4 +0.6
baz=63
D27M Malcolm River 62.14 337 P P 08 31 05.9 +0.7
baz=61
G29M Pine Creek 62.28 334 P P 08 31 06.5 +0.3
baz=62
I30M Mount Dempster 62.46 332 P P 08 31 07.9 +0.3
baz=63
F28M Old Crow 62.58 335 P P 08 31 08.0 -0.2
F28M IAmb IAmb 08 31 09.1
comp=Z,8.9nm,0.9s
F28M Old Crow 62.58 335 P P 08 31 08.0 -0.2
baz=61,SNR=6.6
FARO Faro, Yukon 62.60 329 P P 08 31 08.8 +0.3
baz=64
R11B Troy Canyon, C 62.70 299 P P 08 31 09.8 +0.1
baz=64
H29M Whitestone 62.73 334 P P 08 31 09.6 +0.4
baz=62
PRN Pahroc Range 62.74 298 P P 08 31 10.7 +0.8
PRN IAmb IAmb 08 31 17.5
comp=Z,8.6nm,1.0s
J30M Hart River 62.74 332 P P 08 31 10.0 +0.5
J30M IAmb IAmb 08 31 11.7
comp=Z,9.1nm,1.1s
J30M Hart River 62.74 332 P P 08 31 10.4 +1.0
baz=63,SNR=9.1
DLBC Dease Lake 62.76 324 P P 08 31 10.6 +1.0
baz=65
C27K Jago River 62.78 338 P P 08 31 09.7 +0.1
baz=59
R33M Jennings River 62.79 325 P P 08 31 11.0 +1.1
R33M IAmb IAmb 08 31 17.1
comp=Z,9.9nm,1.2s
R33M Jennings River 62.79 325 P P 08 31 10.9 +1.0
baz=64
E27K Coleen River 62.86 336 P P 08 31 10.4 +0.3
baz=60
N32M Quiet Lake 62.96 327 P P 08 31 11.8 +0.9
baz=64
M31M Drury Creek, Y 63.05 329 P P 08 31 12.4 +1.0
M31M IAmb IAmb 08 31 14.1
comp=Z,9.8nm,1.3s
M31M Drury Creek, Y 63.05 329 P P 08 31 12.3 +0.9
baz=63,SNR=6.1
I29M Ogilvie Camp, 63.11 333 P P 08 31 12.2 +0.4
I29M Ogilvie Camp, 63.11 333 P P 08 31 12.6 +0.8
baz=61,SNR=7.6
SHPR Sheep Range 63.21 297 P P 08 31 14.1 +1.0
P33M Teslin, Yukon 63.27 326 P P 08 31 13.7 +0.7
baz=63
T35M Bob Quinn 63.50 323 P P 08 31 15.2 +0.7
baz=64
S34M Telegraph Cree 63.52 324 P P 08 31 14.9 +0.3
baz=64
K29M Barlow Dome 63.54 331 P P 08 31 15.7 +0.9
baz=61,SNR=9.6
214A Organ Pipe Nat 63.56 291 P P 08 31 15.9 +0.6
baz=62
G27K Doyon Strip 63.58 335 P P 08 31 15.0 +0.1
baz=59,SNR=7.0
I28M Miner Creek 63.66 333 P P 08 31 15.7 +0.2
I28M IAmb IAmb 08 31 21.7
comp=Z,5.3nm,0.9s
I28M Miner Creek 63.66 333 P P 08 31 16.1 +0.6
baz=60,SNR=5.8
H27K Steamboat Moun 63.83 334 P P 08 31 17.2 +0.6
baz=59
F26K Sheenjek River 63.94 336 P P 08 31 18.1 +0.8
baz=58
P32M Atlin 63.95 326 P P 08 31 17.9 +0.4
baz=62
PINE Pine Mountain 63.95 306 P P 08 31 18.7 +0.7
N31M Braeburn, Yuko 63.97 328 P P 08 31 18.3 +0.8
baz=62
WHY Whitehorse 63.97 327 P P 08 31 19.2 +1.6
WHY Whitehorse 63.97 327 P P 08 31 18.2 +0.6
baz=62
DAWY Dawson 64.16 332 P P 08 31 19.7 +0.9
baz=60,SNR=11
I27K Kandik River 64.19 334 P P 08 31 19.1 +0.2
baz=59
G26K Porcupine Rive 64.22 336 P P 08 31 19.8 +0.8
baz=58,SNR=5.7
O30N Mendenhall 64.44 328 P P 08 31 21.5 +0.8
O30N IAmb IAmb 08 31 22.7
comp=Z,11nm,1.3s
O30N Mendenhall 64.44 328 P P 08 31 21.4 +0.7
baz=61,SNR=5.5
EGAK Eagle 64.45 333 P P 08 31 21.2 +0.7
baz=59
NV11 Mina Array Sit 64.47 300 P P 08 31 21.3 -0.1
NV11 IAmb IAmb 08 31 22.4
comp=Z,5.8nm,1.1s
F25K Christian Rive 64.48 337 P P 08 31 21.6 +0.8
baz=56
N30M Aishikik Lake 64.53 329 P P 08 31 21.8 +0.6
N30M IAmb IAmb 08 31 23.5
comp=Z,12nm,1.1s
N30M Aishikik Lake 64.53 329 P P 08 31 22.3 +1.1
baz=61
D24K Happy Valley 64.56 339 P P 08 31 21.6 +0.4
baz=54
NVAR Mina Array Bea 64.58 300 P P 08 31 21.7 -0.4
NVAR Mina Array Bea 64.58 300 P P 08 31 22.2 +0.1
comp=Z,2.0nm,0.9s,baz=71,slow=6.7,SNR=13
comp=Z,2.0nm,0.9s
M29M Somme Creek 64.61 330 P P 08 31 22.3 +0.5
M29M IAmb IAmb 08 31 24.3
comp=Z,10nm,1.1s
M29M Somme Creek 64.61 330 P P 08 31 22.9 +1.1
baz=60,SNR=8.0
C23K Itkillik River 64.66 340 P P 08 31 22.5 +0.6
baz=53
PAHR Pah Rah Range 64.74 302 P P 08 31 23.2 +0.1
PAHR IAmb IAmb 08 31 29.3
comp=Z,7.9nm,1.2s
WRAK Wrangell Islan 64.79 323 P P 08 31 23.7 +0.8
baz=62
I26K Coal Creek Min 64.89 334 P P 08 31 24.2 +0.8
baz=58
A22K Sinclair Lake 65.08 342 P P 08 31 25.9 +1.4
baz=50
E24K Your Creek 65.09 338 P P 08 31 25.4 +0.6
baz=54
G25K Bearman Lake 65.09 336 P P 08 31 25.5 +0.8
baz=56,SNR=8.5
K27K Chicken 65.19 333 P P 08 31 26.4 +1.0
baz=58
H25L Birch Creek 65.28 336 P P 08 31 26.7 +0.8
baz=56
YUK6 Outpost Mounta 65.32 329 P P 08 31 27.4 +0.7
baz=60
S32K Killisnoo 65.36 324 P P 08 31 27.4 +0.8
baz=61
J26L Joseph Creek 65.48 333 P P 08 31 28.2 +0.8
baz=57
TPFO Pinon Flats 65.49 295 P P 08 31 29.1 +1.1
baz=62
G24K Hadweenzic Riv 65.58 336 P P 08 31 28.6 +0.7
baz=54,SNR=8.3
PRP Porcupine Dome 65.60 335 P P 08 31 29.1 +0.8
PRP IAmb IAmb 08 31 30.2
comp=Z,8.4nm,1.0s
PRP Porcupine Dome 65.60 335 P P 08 31 29.0 +0.7
baz=56,SNR=9.8
L27K Beaver Creek, 65.61 332 P P 08 31 29.1 +0.9
baz=58
HATC Hat Creek Radi 65.64 304 P P 08 31 29.1 +0.2
P29M Windy Craggy 65.72 327 P P 08 31 29.8 +0.8
baz=60
O29M Mount Kennedy 65.74 328 P P 08 31 30.1 +0.9
baz=59
YUK3 Moose Creek 65.75 330 P P 08 31 30.0 +0.6
baz=58,SNR=8.3
LRDM Redding Peak 65.81 303 P P 08 31 30.8 +0.9
LRDM IAmb IAmb 08 31 48.1
comp=Z,10nm,1.1s
D22K Ayikyak River 65.83 340 P P 08 31 30.0 +0.5
baz=51
B21K Ikpikpuk River 65.88 341 P P 08 31 30.6 +0.8
baz=50
SCRK Sand Creek 65.92 333 P P 08 31 31.4 +1.1
baz=56,SNR=7.3
M27K Edge Creek, AK 66.01 331 P P 08 31 31.7 +0.8
M27K Edge Creek, AK 66.01 331 P P 08 31 32.2 +1.3
baz=57,SNR=9.1
E22K Anaktuvuk Pass 66.05 339 P P 08 31 31.3 +0.4
baz=52
J25K Salcha River, 66.06 334 P P 08 31 31.8 +0.6
J25K IAmb IAmb 08 31 32.7
comp=Z,5.5nm,1.1s
J25K Salcha River, 66.06 334 P P 08 31 31.8 +0.6
baz=56,SNR=5.6
COLD Coldfoot 66.12 338 P P 08 31 32.2 +0.8
baz=52
O28M Mount Upton 66.18 329 P P 08 31 32.8 +0.6
baz=58
L26K Log Cabin Wild 66.21 332 P P 08 31 33.1 +1.0
baz=56
H24K Noodor Dome 66.21 336 P P 08 31 32.9 +0.9
baz=54,SNR=7.6
C21K Knifeblade Rid 66.23 340 P P 08 31 32.9 +0.8
baz=49
B20K Meade River 66.29 342 P P 08 31 33.3 +0.9
baz=48
RIDG Independent Ri 66.37 333 P P 08 31 33.9 +0.8
RIDG Independent Ri 66.37 333 P P 08 31 33.7 +0.6
baz=56,SNR=7.2
G23K Bananza Creek 66.38 337 P P 08 31 34.1 +1.0
baz=52,SNR=7.0
E21K Killik River 66.47 340 P P 08 31 34.2 +0.5
baz=50
POKR Poker Plat Res 66.49 335 P P 08 31 34.3 +0.5
baz=54
ILAR Eielson Array 66.50 334 P P 08 31 34.0 +0.1
comp=Z,1.6nm,0.9s,baz=48,slow=5.6,SNR=12
comp=Z,1.6nm,0.9s
CTG Chitna Glacier 66.55 329 P P 08 31 34.9 +0.5
baz=57
F22K John River 66.55 338 P P 08 31 34.7 +0.6
baz=51
K24K Donnelly Dome 66.67 333 P P 08 31 35.5 +0.5
baz=55
G22K Bettles 66.72 338 P P 08 31 35.8 +0.6
baz=51
HDA Harding Lake 66.74 334 P P 08 31 35.7 +0.3
HDA IAmb IAmb 08 31 42.2
comp=Z,6.2nm,1.0s
HDA Harding Lake 66.74 334 P P 08 31 35.8 +0.4
baz=54
H23K Yukon River 66.77 336 P P 08 31 36.6 +1.0
baz=53
MDM Murphy Dome 66.86 335 P P 08 31 36.7 +0.6
MDM IAmb IAmb 08 31 37.9
comp=Z,9.8nm,1.4s
MCARA McCarthy VSAT 67.00 330 P P 08 31 37.8 +0.7
baz=56
D20K Etivluk River 67.02 340 P P 08 31 37.2 +0.1
baz=48
PAX Paxson 67.04 332 P P 08 31 38.1 +0.7
baz=55
WRH Wood River Hil 67.10 335 P P 08 31 37.8 +0.1
WRH IAmb IAmb 08 31 39.1
comp=Z,8.1nm,1.0s
F21K Alatna River 67.12 338 P P 08 31 38.4 +0.6
F21K IAmb IAmb 08 31 40.0
comp=Z,10nm,1.4s
F21K Alatna River 67.12 338 P P 08 31 38.1 +0.3
baz=50
I23K Minto, Yukon-K 67.12 335 P P 08 31 38.5 +0.8
baz=52,SNR=6.5
E20K Nigu River 67.22 340 P P 08 31 38.8 +0.4
baz=48
MESA MESA 67.23 329 P P 08 31 38.3 -0.5
baz=56
VRDI Verde Repeater 67.26 330 P P 08 31 39.8 +0.9
VRDI IAmb IAmb 08 31 40.9
comp=Z,8.9nm,1.0s
H22K Ishtalitna Cre 67.32 337 P P 08 31 39.8 +0.7
baz=51
NEA2 Nenana 67.36 335 P P 08 31 39.3 -0.1
NEA2 IAmb IAmb 08 31 40.8
comp=Z,7.6nm,0.9s
NEA2 Nenana 67.36 335 P P 08 31 39.7 +0.3
baz=52,SNR=9.1
CRQE Cirque 67.38 330 P P 08 31 40.1 +0.5
baz=56
N25K Chitina, Valde 67.50 331 P P 08 31 40.7 +0.3
baz=55
C19K Lookout Ridge 67.53 342 P P 08 31 40.8 +0.4
baz=45
D19K Kuna River 67.58 341 P P 08 31 41.3 +0.6
baz=46
G21K Allakaket 67.59 338 P P 08 31 41.0 +0.3

baz=50
**MLY Manley 67.66 336 P P 08 31 41.7 +0.5**
baz=51,SNR=5.3
**DHY Denali Highway 67.68 333 P P 08 31 41.8 +0.2**
baz=53
**M24K Tolsona, Glenn 67.81 332 P P 08 31 42.8 +0.5**
baz=54
**BGLC Bering Glacier 67.82 329 P P 08 31 42.7 +0.5**
baz=56
**MCK McKinley 67.84 334 P P 08 31 43.1 +0.7**
baz=52
**BMRM Bremner River 67.87 330 P P 08 31 43.5 +0.8**
baz=55
**F20K Avaraart Lake 67.90 339 P P 08 31 43.2 +0.6**
baz=48
**B18K Kokolik River 67.90 342 P P 08 31 43.0 +0.3**
baz=44
**H21K Melozitna Rive 67.93 337 P P 08 31 43.5 +0.6**
baz=50
**E19K Redstone River 68.05 340 P P 08 31 43.9 +0.3**
baz=47
**KLU Klutina 68.08 331 P P 08 31 44.9 +0.9**
baz=54
**WAT6 Susitna Watana 68.11 333 P P 08 31 45.2 +0.8**
baz=53,SNR=6.7
**BPAW Bear Paw Mtn. 68.33 335 P P 08 31 45.3 -0.1**
baz=51,SNR=7.6
**KAIM Kayak Island 68.39 329 P P 08 31 45.5 -0.4**
baz=55
**EYAK Cordova Ski Ar 68.57 330 P P 08 31 46.8 -0.2**
baz=54
**F19K Shaleruckik Mo 68.64 339 P P 08 31 47.4 +0.2**
baz=46
**H20K Anotleneega Mo 68.69 337 P P 08 31 48.1 +0.5**
baz=48,SNR=5.4
**SML Sawmill 68.81 332 P P 08 31 48.9 +0.4**
baz=52
**C17K DeLong Mountai 68.90 342 P P 08 31 49.5 +0.6**
baz=42
**G19K Purcell Mounta 68.91 339 P P 08 31 49.8 +0.7**
baz=47
**E18K Tukpahlearik C 69.00 341 P P 08 31 49.8 +0.2**
baz=44
**I20K Naaghedeneel 69.03 337 P P 08 31 50.4 +0.7**
baz=48
**KNK Knik Glacier 69.10 332 P P 08 31 51.3 +1.0**
baz=52
**RDOG Red Dog Mine 69.14 342 P P 08 31 51.1 +0.7**
baz=42
**H19K Roundabout Mou 69.15 338 P P 08 31 50.9 +0.4**
baz=47
**PMR Palmer 69.24 332 P P 08 31 51.7 +0.6**
baz=52
**F18K Selawik 69.33 340 P P 08 31 52.1 +0.5**
baz=45
**J20K Nowinta River 69.33 336 P P 08 31 52.0 +0.3**
**J20K Nowinta River 69.33 336 P P 08 31 52.0 +0.3**
baz=48,SNR=16
**PWL Port Wells 69.39 332 P P 08 31 52.7 +0.6**
baz=52
**M22K Willow 69.51 333 P P 08 31 53.2 +0.5**
baz=51
**G18K Tagagawik 69.55 339 P P 08 31 53.3 +0.4**
baz=45
**C16K Lisburne Hills 69.58 343 P P 08 31 53.5 +0.4**
baz=40
**BVAR Borovoye Array 69.67 39 P P 08 31 53.1 -0.8**
comp=Z,1.1nm,0.8s,baz=305,slow=5.1,SNR=4.2
comp=Z,1.1nm,0.8s
**K20K Telida 69.85 335 P P 08 31 55.4 +0.5**
baz=48
**SKT Skwentna 69.88 333 P P 08 31 55.9 +0.8**
baz=50
**F17K Baldwin Pennin 69.89 340 P P 08 31 55.2 +0.2**
baz=43
**SUA Susitna One 69.92 333 P P 08 31 55.7 +0.1**
baz=50
**J19K Poorman 69.94 336 P P 08 31 55.7 +0.4**
baz=47
**H18K Honhosa River 69.98 338 P P 08 31 56.0 +0.4**
baz=45
**L20K Farewell, AK 70.38 335 P P 08 31 57.8 -0.3**
baz=48
**G17K Kiwalik Mounta 70.41 339 P P 08 31 58.6 +0.3**
baz=44
**M20K Styx River 70.51 334 P P 08 31 58.9 -0.1**
baz=48
**H17K Granite Mounta 70.60 339 P P 08 31 59.8 +0.4**
baz=44
**J18K Innoko River 70.65 336 P P 08 32 00.2 +0.4**
baz=46
**L19K White Mountain 70.92 335 P P 08 32 01.1 -0.4**
baz=47
**M19K Big River Lodg 70.94 334 P P 08 32 01.4 -0.2**
baz=48
**G16K Koyuk River 70.97 340 P P 08 32 01.6 0.0**
baz=42
**BRSE Bradley Lake S 71.03 331 P P 08 32 01.8 -0.4**
baz=50
**F15K North Star Dit 71.36 341 P P 08 32 04.0 0.0**
baz=40
**J17K VABM Dome 71.46 337 P P 08 32 04.4 -0.3**
baz=44
**H16K Elim 71.50 339 P P 08 32 05.7 +0.8**
baz=42
**L18K Granite Mounta 71.51 335 P P 08 32 05.9 +0.9**
baz=46
**I17K Unalakleet 71.60 338 P P 08 32 05.7 +0.2**
baz=43
**K17K Iditarod 71.69 336 P P 08 32 06.3 +0.2**
baz=45
**N19K Bonanza Creek 71.72 334 P P 08 32 06.2 -0.2**
baz=47
**M18K Stony River 71.72 335 P P 08 32 06.3 0.0**
baz=46
**G15K Niukluk 71.74 340 P P 08 32 07.3 +0.9**
baz=41
**J16K Anvik River 72.01 338 P P 08 32 08.0 0.0**
baz=43
**L17K Donlin 72.11 336 P P 08 32 09.2 +0.6**
baz=45
**O18K Koktuh Hills 72.64 333 P P 08 32 11.1 -0.7**
baz=46
**Q19K Cape Douglas, 72.69 332 P P 08 32 12.2 0.0**
baz=47
**L16K Owhat River 72.80 336 P P 08 32 13.4 +0.7**
baz=44
**K15K Wolf Creek Mou 73.03 337 P P 08 32 14.5 +0.4**
baz=42
**KDAK Kodiak Island 73.05 331 P P 08 32 14.7 +0.5**
baz=48
**M16K Timber Creek 73.13 335 P P 08 32 15.1 +0.4**
baz=44
**J14K Nanvaranak Lak 73.31 338 P P 08 32 16.1 +0.4**
baz=41
**Q18K Katmai Hardscr 73.40 332 P P 08 32 17.0 +0.6**
baz=46
**N16K Nishlik Lake 73.46 335 P P 08 32 17.7 +1.0**
baz=44
**L15K Ungalak Mounta 73.48 337 P P 08 32 17.8 +1.1**
baz=42
**P17K Kvichak River 73.55 333 P P 08 32 17.4 +0.3**
baz=45
**OHAK Old Harbor 73.71 330 P P 08 32 18.5 +0.4**
baz=47
**L14K Kuka Creek 74.11 337 P P 08 32 21.6 +1.2**
**L14K Kuka Creek 74.11 337 P P 08 32 20.6 +0.2**
baz=41
**K13K Kusilvak Mount 74.27 338 P P 08 32 21.4 0.0**
baz=40
**M14K Bethel 74.32 336 P P 08 32 22.3 +0.6**
baz=42
**SII Sitkinak Islan 74.52 330 P P 08 32 24.3 +1.3**
baz=46
**R17L Mt. Peulik Vol 74.62 332 P P 08 32 24.1 +0.6**
baz=45
**GAMB Gambell 74.74 342 P P 08 32 24.3 +0.3**
baz=34
**O15K Ungalikthiuk R 74.77 334 P P 08 32 24.3 -0.1**
baz=43
**KURBB Kurchatov Arra 75.16 37 P P 08 32 25.8 -1.0**
comp=Z,3.5nm,1.0s,baz=311,slow=6.2,SNR=24
comp=Z,3.5nm,1.0s
**ZALV Zalesovo Beam 75.86 32 P P 08 32 29.5 -1.2**
comp=Z,0.5nm,0.3s,baz=322,slow=11,SNR=3.8
comp=Z,0.5nm,0.3s
**MAKZ Makanchi 79.39 39 P P 08 32 49.7 -0.9**
**MK31 Makanchi Array 79.55 39 P P 08 32 50.2 -1.3**
**MKAR Makanchi Array 79.55 39 P P 08 32 50.4 -1.1**
comp=Z,1.5nm,0.8s,baz=323,slow=5.0,SNR=12
comp=Z,1.5nm,0.8s
**NRN Naryn 79.66 46 P P 08 32 52.8 +0.3**
**TARG Taragay, Kyrgy 80.50 45 P P 08 32 57.9 +0.7**
**KSH Kashi 80.86 47 P P 08 32 58.9 +0.1**
KSH pmax pmax
comp=Z,8.0nm,1.1s
**PLCA Paso Flores 83.64 207 P P 08 33 12.0 -0.9**
comp=Z,1.4nm,0.7s,baz=46,slow=5.7,SNR=4.9
comp=Z,1.4nm,0.7s
**WMQ Urumqi 84.36 38 eP P 08 33 18.9 +2.1**
WMQ LR LR
comp=N,320nm,22.5s
WMQ LR LR
comp=E,260nm,17.5s
WMQ LR LR
comp=Z,60nm,24.3s
**SONM Songino Array 89.11 25 P P 08 33 39.2 -0.9**
comp=Z,0.3nm,0.4s,baz=294,slow=1.4,SNR=4.0
comp=Z,0.3nm,0.4s
**ULN Ulaanbaatar 89.31 25 P P 08 33 41.3 +0.3**
**HHC Hu-ho-hao-te 97.02 26 eP P 08 34 17.3 +0.7**
HHC pP pwP 08 34 22.4 +0.4
HHC sP sP 08 34 25.5 +5.3
HHC pmax pmax
comp=Z,17nm,0.5s
HHC pmax pmax
comp=Z,100nm,5.4s
**LZH Lanzhou 98.07 33 P P 08 34 16.0 -5.5**
LZH sP pwP 08 34 30.4 +3.5
LZH pmax pmax
comp=Z,20nm,0.9s

*NOU **24** 08:31:49.1, 13.80S×174.00W, h637km, mb4.4/12, Samoa Islands Region*
*NEIC **24** 08:32:39.6±2.0, 18.6S±0.1×178.3W±0.1, h620km±10km, mb4.2/38, Error ellipse: s-maj=21.6km s-min=15.5km az=145.0*
*IDC **24** 08:32:39.6±2.0, 18.56S×178.44W, h625km±26km, mb3.5/13, mbtmp4.4/14, Error ellipse: s-maj=17.9km s-min=10.8km az=155.0*
**ISC 24 08:32:38.1±0.5, 18.58S±0.1×178.30W±0.08, h600km, n86, σ1.34/88, mb4.2/37, 5C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.57** | **283** | P | P | **08 34 05.5** | **+4.7** |
| **AFI** | **Afiamalu** | **7.80** | **54** | P | P | **08 34 36.3** | **+0.6** |
| **LIFNC** | **LIFOU** | **13.79** | **259** | P | P | **08 35 34.2** | **-0.7** |
| **PINNC** | **Pines Island,** | **13.93** | **251** | P | P | **08 35 36.5** | **+0.1** |
| **YATNC** | **Mamie plateau,** | **14.31** | **254** | P | P | **08 35 41.1** | **+1.1** |
| **DZM** | **Mont Dzumac** | **14.72** | **254** | P | P | **08 35 45.5** | **+1.6** |
| **DZM** | **Mont Dzumac** | **14.72** | **254** | P | P | **08 35 43.8** | **-0.1** |
| **DZM** | **Mont Dzumac** | **14.72** | **254** | P | P | **08 35 45.1** | **+1.2** |
| | 2.9nm,0.4s,baz=259,slow=22,SNR=11 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.53** | **260** | P | P | **08 36 03.5** | **+3.2** |
| **OUZ** | **Omahuta** | **18.07** | **202** | P | P | **08 36 17.7** | **+3.5** |
| **KUZ** | **Kuaotunu** | **18.85** | **195** | P | P | **08 36 23.6** | **+2.4** |
| **MKAZ** | **Moumakai** | **19.33** | **196** | P | P | **08 36 28.1** | **+2.5** |
| **AWAZ** | **Awhitu Peninsu** | **19.43** | **197** | P | P | **08 36 29.4** | **+2.9** |
| **URZ** | **Urewera** | **20.01** | **191** | P | P | **08 36 31.3** | **-0.5** |
| **URZ** | **Urewera** | **20.01** | **191** | P | P | **08 36 30.9** | **-0.9** |
| | 5.5nm,0.3s,baz=36,slow=1.8,SNR=14 | | | | | | |
| | 5.5nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **20.01** | **191** | P | P | **08 36 30.9** | **-0.9** |
| **MWZ** | **Matawai** | **20.02** | **190** | P | P | **08 36 32.5** | **+0.6** |
| **BKZ** | **Black Stump Fm** | **21.00** | **191** | P | P | **08 36 39.8** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **21.00** | **191** | P | P | **08 36 38.8** | **-1.9** |
| **MRZ** | **Mangatainoka R** | **22.63** | **192** | P | P | **08 36 53.1** | **-2.1** |
| **QRZ** | **Quartz Range** | **23.53** | **198** | P | P | **08 37 03.7** | **+0.6** |
| **THZ** | **Tophouse** | **24.30** | **196** | P | P | **08 37 09.2** | **-0.8** |
| **KHZ** | **Kahutara** | **24.75** | **195** | P | P | **08 37 13.1** | **-0.8** |
| **RPZ** | **Rata Peaks** | **26.61** | **197** | P | P | **08 37 29.7** | **-0.6** |
| **PPT** | **Papeete** | **27.32** | **92** | P | P | **08 37 37.7** | **+0.9** |
| | 29nm,0.7s,baz=238,slow=22,SNR=4.3 | | | | | | |
| | 29nm,0.7s | | | | | | |
| **JCZ** | **Jackson Bay** | **27.64** | **200** | P | P | **08 37 39.2** | **-0.1** |
| **ODZ** | **Otahua Downs** | **27.95** | **197** | P | P | **08 37 41.2** | **-0.7** |
| **MLZ** | **Mavora Lakes** | **29.00** | **200** | P | P | **08 37 51.4** | **+0.3** |
| **CAN** | **Canberra** | **33.38** | **233** | P | P | **08 38 28.8** | **+0.2** |
| CAN | | | | IAmb | IAmb | 08 38 30.3 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **36.83** | **232** | P | P | **08 38 57.2** | **+0.2** |
| TOO | | | | IAmb | IAmb | 08 38 58.8 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.22** | **271** | P | P | **08 39 00.7** | **+0.2** |
| COEN | | | | IAmb | IAmb | 08 39 40.1 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.40** | **242** | P | P | **08 39 10.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.40** | **242** | P | P | **08 39 10.4** | **+0.6** |
| | comp=Z,3.5nm,0.8s,baz=88,slow=12,SNR=6.5 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **43.17** | **242** | P | P | **08 39 47.0** | **-0.5** |
| **WR0** | **Warramunga Arr** | **44.42** | **260** | P | P | **08 39 56.8** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 08 40 17.3 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.61** | **260** | P | P | **08 39 57.5** | **-1.3** |
| **WRA** | **Warramunga Arr** | **44.61** | **260** | P | P | **08 39 58.1** | **-0.7** |
| | comp=Z,1.2nm,0.4s,baz=98,slow=7.0,SNR=61 | | | | | | |
| WRA | | | | PcP | PcP | **08 41 27.2** | **-1.1** |
| | comp=Z,0.6nm,0.9s,baz=89,slow=3.6,SNR=4.6 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **44.71** | **255** | P | P | **08 39 58.5** | **-1.1** |
| **ASAR** | **Alice Springs** | **44.71** | **255** | P | P | **08 39 57.9** | **-1.6** |
| **ASAR** | **Alice Springs** | **44.71** | **255** | P | P | **08 39 58.0** | **-1.5** |
| | comp=Z,3.3nm,0.4s,baz=92,slow=7.6,SNR=52 | | | | | | |
| ASAR | | | | PcP | PcP | **08 41 27.6** | **-1.1** |
| | comp=Z,0.4nm,0.4s,baz=104,slow=3.9,SNR=4.7 | | | | | | |
| ASAR | | | | S | S | **08 45 50.5** | **-3.5** |
| | comp=Z,2.1nm,0.7s,baz=91,slow=16,SNR=20 | | | | | | |
| | comp=Z,3.3nm,0.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.02** | **261** | P | P | **08 40 59.7** | **-1.1** |
| **SBA** | **Scott Base** | **59.76** | **184** | P | P | **08 41 47.7** | **+1.8** |
| **QSPA** | **South Pole Qui** | **71.48** | **180** | P | P | **08 42 59.5** | **+0.4** |
| | comp=Z,5.6nm,0.8s,baz=315,slow=0.6,SNR=23 | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.35** | **345** | P | P | **08 43 14.2** | **-1.2** |
| | comp=Z,1.3nm,0.6s,baz=123,slow=8.8,SNR=3.8 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **78.00** | **40** | P | P | **08 43 34.1** | **-1.7** |
| O02D | | | | IAmb | IAmb | 08 43 58.5 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **PLK4** | **Peulik 4** | **78.09** | **12** | P | P | **08 43 34.6** | **-1.3** |
| **OHAK** | **Old Harbor** | **78.36** | **14** | P | P | **08 43 35.6** | **-1.5** |
| **SLBS** | **Sierra La Lagu** | **78.80** | **60** | P | P | **08 43 41.2** | **+0.8** |
| SLBS | | | | IAmb | IAmb | 08 43 43.6 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **MDPB** | **Devils Postpil** | **78.89** | **44** | P | P | **08 43 41.0** | **+0.2** |
| **YBH** | **Yreka Blue Hor** | **78.98** | **39** | P | P | **08 43 40.6** | **-0.4** |
| **WAKR** | **Walker** | **79.14** | **43** | P | P | **08 43 41.9** | **-0.1** |
| WAKR | | | | IAmb | IAmb | 08 43 43.4 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **PNTR** | **Pine Nut** | **79.36** | **43** | P | P | **08 43 43.5** | **+0.3** |
| PNTR | | | | IAmb | IAmb | 08 43 44.5 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.84** | **44** | P | P | **08 43 45.9** | **+0.2** |
| | comp=Z,2.7nm,0.8s,baz=224,slow=8.7,SNR=22 | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **NV11** | **Mina Array Sit** | **79.94** | **44** | P | P | **08 43 46.1** | **-0.1** |
| **KVN** | **Kaiserville** | **80.31** | **43** | P | P | **08 43 48.1** | **0.0** |
| KVN | | | | IAmb | IAmb | 08 43 49.0 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.78** | **38** | P | P | **08 43 50.5** | **+0.1** |
| J05D | | | | IAmb | IAmb | 08 43 51.7 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **PINE** | **Pine Mountain** | **81.25** | **38** | P | P | **08 43 52.9** | **0.0** |
| PINE | | | | IAmb | IAmb | 08 43 54.3 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **M17K** | **Holitna River** | **81.44** | **10** | P | P | **08 43 53.5** | **+0.3** |
| M17K | | | | IAmb | IAmb | 08 43 54.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **PRN** | **Pahroc Range** | **81.47** | **46** | P | P | **08 43 53.8** | **-0.2** |
| **BELA** | **Belgrano 2** | **81.49** | **173** | P | P | **08 43 52.5** | **-0.8** |
| BELA | | | | IAmb | IAmb | 08 43 53.5 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **I07A** | **Izee** | **82.27** | **38** | P | P | **08 43 57.6** | **-0.3** |
| I07A | | | | IAmb | IAmb | 08 43 58.6 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **LCMT** | **Little Creek M** | **82.51** | **47** | P | P | **08 43 59.7** | **+0.3** |
| **MAW** | **Mawson** | **83.27** | **200** | P | P | **08 44 02.3** | **-0.1** |
| | comp=Z,2.2nm,0.8s,baz=180,slow=1.0,SNR=2.9 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
**F10A Beach Ranch, E 84.67 38 P P 08 44 08.8 -1.0**
F10A IAmb IAmb 08 44 10.0
comp=Z,4.1nm,0.8s
**HLID Hailey 85.07 41 P P 08 44 11.6 -0.3**
**CCB Clear Creek Bu 86.21 13 P P 08 44 14.4 -2.1**
CCB IAmb IAmb 08 44 15.0
comp=Z,3.2nm,0.6s
**TX31 Lajitas Ar. Si 86.27 58 P P 08 44 18.5 +0.7**
TX31 IAmb IAmb 08 44 19.8
comp=Z,6.4nm,1.0s
**TXAR Lajitas Array 86.27 58 P P 08 44 18.3 +0.5**
**TXAR Lajitas Array 86.27 58 P P 08 44 18.9 +1.2**
comp=Z,4.0nm,0.8s,baz=220,slow=6.3,SNR=46
comp=Z,4.0nm,0.8s
**MDM Murphy Dome 86.40 12 P P 08 44 15.2 -2.3**
MDM IAmb IAmb 08 44 16.3
comp=Z,3.8nm,0.9s
**ILAR Eielson Array 86.52 13 P P 08 44 16.1 -1.8**
comp=Z,1.3nm,0.7s,baz=231,slow=5.6,SNR=16
comp=Z,1.3nm,0.7s
**J26L Joseph Creek 87.03 14 P P 08 44 19.3 -1.2**
J26L IAmb IAmb 08 44 20.3
comp=Z,2.7nm,0.8s
**PD31 Pinedale Array 87.77 43 P P 08 44 24.1 -0.6**
PD31 IAmb IAmb 08 44 25.4
comp=Z,6.8nm,1.4s
**PDAR Pinedale Array 87.77 43 P P 08 44 24.0 -0.7**
**PDAR Pinedale Array 87.77 43 P P 08 44 24.3 -0.4**
comp=Z,1.8nm,0.6s,baz=221,slow=3.4,SNR=22
comp=Z,1.8nm,0.6s
**HHC Hu-ho-hao-te 87.81 314 eP P 08 44 25.1 +0.3**
HHC pmax pmax
comp=Z,9.0nm,0.7s
HHC pmax pmax
comp=Z,150nm,4.1s
**ELIB Princess Elisa 88.51 187 dP P 08 44 26.8 -0.7**
comp=Z,4.3nm,0.7s
**PZH PanZhiHua 89.56 298 P P 08 44 34.3 +1.1**
PZH pmax pmax
comp=Z,20nm,0.5s
PZH pmax pmax
comp=Z,160nm,5.8s
**TROLL Troll, Antarti 89.64 180 ⇑P P 08 44 31.9 -0.9**
comp=Z,103nm,0.5s
**SNAA Sanae 89.93 179 ⇑P P 08 44 32.3 -1.7**
comp=Z,26nm,0.6s
**SNAA Sanae 89.93 179 P P 08 44 32.8 -1.2**
comp=Z,1.1nm,0.6s,baz=216,slow=8.4,SNR=17
comp=Z,1.1nm,0.6s
**VNA3 Neumayer Olymp 90.07 176 ⇑P P 08 44 33.9 -0.7**
comp=Z,5.2nm,0.6s
**VNA2 Neumayer--Watz 90.51 177 ⇑P P 08 44 36.3 -0.3**
comp=Z,3.6nm,0.6s,baz=183,slow=4.4
**VNA1 Neumayer--Stat 90.73 177 ⇑P P 08 44 36.8 -0.8**
comp=Z,4.5nm,1.0s
**ARCES ARCESS Array B 126.99 350 PKP PKPdf 08 50 32.6 -1.6**
comp=Z,1.3nm,0.9s,baz=0.0,slow=4.3,SNR=4.4
**EKA Eskdalemuir Ar 143.12 5 PKP PKPab 08 51 00.6 -1.9**
comp=Z,2.9nm,0.8s,baz=347,slow=2.9,SNR=3.9

**WEL 24 08:36:04.2, 39.5S±5.5°×17.6E±.4°, h5km±2km, M1.2/4, ML1.2/4, MLv1.2/4, Error ellipse: s-maj=0.0km s-min=0.0km az=8.5, confirmed, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FWVZ** | **Far West T-bar** | **0.05** | **145** | P | Pg | 08 36 05.9 | +0.1 |
| FWVZ | | | | S | Sg | 08 36 07.3 | +0.4 |
| **MAVZ** | **Matarangi** | **0.06** | **147** | P | Pg | 08 36 05.9 | -0.1 |
| **NGZ** | **Ngauruhoe** | **0.08** | **59** | P | Pg | 08 36 03.7 | -2.3 |
| **TRVZ** | **Turoa** | **0.09** | **164** | P | Pg | 08 36 07.3 | +1.0 |
| TRVZ | | | | S | Sg | 08 36 08.7 | +0.9 |
| **WHVZ** | **Whangaehu Hut** | **0.09** | **141** | P | Pg | 08 36 07.0 | +0.7 |
| WHVZ | | | | S | Sg | 08 36 08.4 | +0.6 |
| **WNVZ** | **Wahianoa** | **0.13** | **151** | P | Pg | 08 36 10.1 | +3.2 |
| WNVZ | | | | S | Sg | 08 36 11.1 | +2.3 |
| **RTZ** | **Ruatahuna** | **1.29** | **63** | P | Pg | 08 36 25.8 | -3.2 |
| RTZ | | | | S | Pg | 08 36 26.6 | -2.3 |

**IDC 24 08:48:41.1±7.9, 21.00S×178.77W, h0km, mb4.0/4, mbtmp4.0/4, Error ellipse: s-maj=202.7km s-min=39.0km az=30.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **36.93** | **245** | P | P | 08 55 51.2 | -0.8 |
| | 0.7nm,0.4s,baz=73,slow=14,SNR=3.0 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **43.71** | **257** | P | P | 08 56 48.2 | -0.2 |
| | 1.6nm,0.7s,baz=92,slow=7.8,SNR=20 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.83** | **263** | P | P | 08 56 49.6 | +0.3 |
| | 0.8nm,0.2s,baz=96,slow=8.3,SNR=81 | | | | | | |
| | 0.8nm,0.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.08** | **180** | P | P | 08 59 48.8 | +0.1 |
| | 1.2nm,0.8s,baz=96,slow=1.2,SNR=7.6 | | | | | | |
| | 1.2nm,0.8s | | | | | | |

**IDC 24 08:57:30.7±6.5, 5.05S×146.74E, h181km±106km, mb2.7/2, mbtmp3.3/4, Error ellipse: s-maj=165.5km s-min=39.9km az=111.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.35** | **174** | P | Pn | 08 58 37.6 | +1.3 |
| | 16nm,0.3s,baz=303,slow=14,SNR=14 | | | | | | |
| PMG | | | | S | Sn | 08 59 27.3 | -0.5 |
| | 11nm,0.6s,baz=0.0,slow=15,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.10** | **218** | P | P | 09 01 40.2 | +0.3 |
| | 0.3nm,0.6s,baz=40,slow=12,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **22.26** | **213** | P | P | 09 02 13.2 | 0.0 |
| | 0.3nm,0.6s,baz=42,slow=7.2,SNR=1.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **76.60** | **320** | P | P | 09 09 01.1 | -0.3 |
| | 0.2nm,0.5s,baz=132,slow=6.8,SNR=2.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*NEIC **24** 09:04:06.5, 11.06S×70.79W, h640km*
*NEIC **24** 09:04:06.5, 10.96S×70.99W, h640km, Moment Tensor Solution. Duration: 17s6 Moment tensor: Scale 10^19Nm; Mrr-4.93; Mθθ0.98; Mφφ3.95; Mrθ-0.56; Mrφ-1.75; Mθφ1.89; Fault plane solution: M0 5.23000×10^19 NP1: φs158.20000°, δ56.06000°, λ-86.73000°. NP2: φs332.36000°, δ34.08000°, λ-94.85000°. Principal axes: T 5.1376, Plg11.0000°, Azm246.0000°; N 0.1839, Plg3.0000°, Azm336.0000°; P -5.3215, Plg79.0000°, Azm80.0000°;*
*IPGP **24** 09:04:06.0, 11.04S×70.82W, h634km, Mw7.1, Fault plane solution: NP1:φs168.00000°, δ56.00000°, λ-86.00000°. NP2:φs341.00000°, δ34.00000°, λ-97.00000°.*
*BJI **24** 09:04:06.0±0.0, 10.95S×70.75W, h630km, mB7.0/70*
*VAO **24** 09:04:07.1±0.2, 11.12S×70.88W, h632km±2km, mb6.7*
*IDC **24** 09:04:07.3±0.3, 11.02S×70.77W, h626km±2km, mb5.8/32, mbtmp6.7/40, Error ellipse: s-maj=7.5km s-min=5.2km az=58.0*
*GUC **24** 09:04:07.0, 11.07S×70.79W, h624km, MW7.1*
*OSUNB **24** 09:04:07.2±0.2, 11.14S×70.81W, h626km, mb6.7/64, Error ellipse: s-maj=1.7km s-min=2.3km az=0.0*
*MOS **24** 09:04:07.0±0.8, 11.05S×70.82W, h632km, mb6.7/23, Error ellipse: s-maj=7.6km s-min=5.6km az=82.4*
*NEIC **24** 09:04:07.6, 11.03S×70.73W, h626km*
*NEIC **24** 09:04:08.2±2.0, 11.04S±0.08×70.83W±0.09, h630km±1km, mb6.9/336, Mwb7.1/91, Mww7.1/32, Error ellipse: s-maj=14.6km s-min=13.0km az=69.0, Moment Tensor Solution. Moment tensor: Scale 10^19Nm; Mrr-5.33; Mθθ0.49; Mφφ4.84; Mrθ-0.69; Mθφ-2.12; Mrφ2.17; Fault plane solution: M0 5.97000×10^19 NP1:φs335.95000°, δ33.85000°, λ-93.06000°. NP2:φs159.64000°, δ56.20000°, λ-87.95000°. Principal axes: T 6.1480, Plg11.0000°, Azm248.0000°; N -0.3668, Plg2.0000°, Azm338.0000°; P -5.7812, Plg79.0000°, Azm77.0000°;*
*GCMT **24** 09:04:10.2±0.1, 11.18S±0.01×70.82W±0.01, h628km, MW7.1/168, Moment Tensor Solution. s168,c481; s167,c384; Duration: 8s6 Moment tensor: Scale 10^19 Nm; Mrr-4.95±.02; Mθθ0.68±.02; Mφφ4.27±.03; Mrθ-0.60±.01; Mθφ-1.77±.02; Mφr2.10±.02; Best double*

*couple: M≈5.43200×10^19 NP1:ϕ≈160.00000°,δ57.00000°, λ-87.00000°. NP2:ϕ≈335.00000°,δ33.00000°, λ-94.00000°. Principal axes: T 5.4490, Plg12.0000°, Azm248.0000°; N -0.0380, Plg2.0000°, Azm339.0000°; P -5.4140, Plg78.0000°, Azm80.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to mantle waves, cutoff=150s. Triangular moment-rate function*

*BGR* **24** *09:04:10.4, 10°.84S×70°.29W, h643km±6km, mb7.2, mB_BB7.5*

**ISC 24 09:04:06.5±0.2, 11°.07S±0°.02×70°.86W±0°.03, h625km±1km, h627km:pP-P,n2509,σ1s75/3401, mb6.8/431, 60C-426D, Peru-Brazil border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CZSB** | **Cruzeiro do Su** | **3.79** | **331** | P | | **P** | **09 05 32.6** | **0.0** |
| **CZSB** | **Cruzeiro do Su** | **3.79** | **331** | *eP* | | **P** | **09 05 32.6** | **0.0** |
| **CZSB** | **Cruzeiro do Su** | **3.79** | **331** | P | | **P** | **09 05 32.6** | **0.0** |
| CZSB | | | | S | | **S** | **09 06 40.9** | **-1.7** |
| **ETMB** | **Extrema** | **4.73** | **75** | P | | **P** | **09 05 40.0** | **+0.9** |
| **ETMB** | **Extrema** | **4.73** | **75** | *eP* | | **P** | **09 05 40.0** | **+0.9** |
| **ETMB** | **Extrema** | **4.73** | **75** | P | | **P** | **09 05 40.0** | **+0.9** |
| ETMB | | | | S | | **S** | **09 06 55.5** | **+1.0** |
| **I08BO** | **LAS PENAS INFR** | **5.62** | **156** | P | | **P** | **09 05 47.5** | **+1.0** |
| | baz=336,slow=11,SNR=4.2 | | | | | | | |
| **LPAZ** | **La Paz** | **5.82** | **153** | ⇑P | | **P** | **09 05 48.8** | **+0.5** |
| **LPAZ** | **La Paz** | **5.82** | **153** | P | | **P** | **09 05 49.0** | **+0.8** |
| | 29µm,0.7s,baz=335,slow=7.5 | | | | | | | |
| LPAZ | | | | S | | **S** | **09 07 06.7** | **-4.7** |
| | 8µm,1.0s,baz=17,slow=19,SNR=1.2 | | | | | | | |
| LPAZ | | | | P3KPbc | | | 09 42 22.0 | |
| | 17nm,0.8s,baz=333,slow=3.6,SNR=5.9 | | | | | | | |
| **LPAZ** | **La Paz** | **5.82** | **153** | *eP* | | **P** | **09 05 49.1** | **+0.9** |
| **LPAZ** | **La Paz** | **5.82** | **153** | P | | **P** | **09 05 49.2** | **+0.9** |
| LPAZ | | | | S | | **S** | **09 07 10.0** | **-1.3** |
| **NNA** | **Nana** | **5.94** | **261** | ⇑P | | **P** | **09 05 49.2** | **+0.6** |
| **NNA** | **Nana** | **5.94** | **261** | P | | **P** | **09 05 49.3** | **+0.8** |
| | 5µm,0.3s,baz=88,slow=7.9,SNR=1162 | | | | | | | |
| NNA | | | | S | | **S** | **09 07 11.2** | **-0.8** |
| | 3µm,0.6s,baz=198,slow=20,SNR=1.4 | | | | | | | |
| NNA | | | | P3KPbc | | | 09 42 15.4 | |
| | 9.0nm,0.7s,baz=170,slow=6.1,SNR=3.8 | | | | | | | |
| **NNA** | **Nana** | **5.94** | **261** | *cP* | | **P** | **09 05 48.7** | **+0.1** |
| **PB18** | **Visviri** | **6.62** | **169** | P | | **P** | **09 05 55.5** | **+0.6** |
| **TBTG** | **Tabatinga, AM** | **6.90** | **8** | P | | **P** | **09 05 58.4** | **+1.4** |
| **TBTG** | **Tabatinga, AM** | **6.90** | **8** | *eP* | | **P** | **09 05 58.4** | **+1.4** |
| **TBTG** | **Tabatinga, AM** | **6.90** | **8** | P | | **P** | **09 05 58.4** | **+1.4** |
| TBTG | | | | S | | **S** | **09 07 28.4** | **+1.3** |
| **AP01** | **Chacalluta** | **7.27** | **176** | P | | **P** | **09 05 59.0** | **-1.1** |
| **SAML** | **Samuel** | **7.85** | **75** | P | | **P** | **09 06 06.1** | **+0.7** |
| **SAML** | **Samuel** | **7.85** | **75** | P | | **P** | **09 06 06.1** | **+0.7** |
| **SAML** | **Samuel** | **7.85** | **75** | *eP* | | **P** | **09 06 06.3** | **+0.9** |
| **ATAH** | **Atahualpa** | **8.41** | **297** | P | | **P** | **09 06 13.1** | **+2.0** |
| | 3µm,0.5s,baz=66,slow=4.5,SNR=1153 | | | | | | | |
| ATAH | | | | S | | **S** | **09 07 56.9** | **+3.8** |
| | 7µm,0.9s,baz=120,slow=18,SNR=4.9 | | | | | | | |
| ATAH | | | | P3KPbc | | | 09 42 17.3 | |
| | 18nm,0.9s,baz=355,slow=3.3,SNR=5.5 | | | | | | | |
| **GO01** | **Chusmiza** | **8.70** | **170** | P | | **P** | **09 06 14.0** | **+0.2** |
| **TA02** | **Huaiquique** | **9.17** | **176** | P | | **P** | **09 06 17.8** | **0.0** |
| **HMBC** | **Humberstone** | **9.20** | **174** | P | | **P** | **09 06 18.1** | **-0.1** |
| **TA01** | **Diego Aracena** | **9.46** | **176** | P | | **P** | **09 06 20.7** | **+0.2** |
| **PATCX** | **Punta Patache** | **9.72** | **176** | P | | **P** | **09 06 23.3** | **+0.2** |
| **TEFE** | **Tefe** | **9.72** | **40** | *eP* | | **P** | **09 06 24.3** | **+1.1** |
| **TEFE** | **Tefe** | **9.72** | **40** | P | | **P** | **09 06 24.3** | **+1.1** |
| TEFE | | | | S | | **S** | **09 08 16.7** | **+1.4** |
| **VILB** | **Vilhena** | **10.59** | **101** | P | | **P** | **09 06 33.0** | **+1.2** |
| **VILB** | **Vilhena** | **10.59** | **101** | *eP* | | **P** | **09 06 33.0** | **+1.2** |
| **VILB** | **Vilhena** | **10.59** | **101** | P | | **P** | **09 06 33.0** | **+1.2** |
| **SIV** | **San Ignacio** | **10.70** | **118** | P | | **P** | **09 06 33.5** | **+0.8** |
| | 8µm,0.5s,baz=296,slow=9.7 | | | | | | | |
| SIV | | | | S | | **S** | **09 08 33.6** | **+0.9** |
| | 7µm,0.9s,baz=273,slow=20,SNR=9.4 | | | | | | | |
| SIV | | | | P3KPbc | | | 09 41 59.3 | |
| | 6.5nm,0.9s,baz=222,slow=2.3,SNR=4.0 | | | | | | | |
| **PB09** | **IPOC Station P** | **10.78** | **172** | P | | **P** | **09 06 34.2** | **+0.6** |
| **PB04** | **IPOC Station P** | **11.22** | **177** | P | | **P** | **09 06 37.8** | **-0.1** |
| **LVC** | **Limon Verde** | **11.62** | **171** | ⇑P | | **P** | **09 06 42.6** | **+0.6** |
| **LVC** | **Limon Verde** | **11.62** | **171** | P | | **P** | **09 06 42.7** | **+0.6** |
| | 3µm,0.7s,baz=354,slow=7.3,SNR=1197 | | | | | | | |
| LVC | | | | S | | **S** | **09 08 49.2** | **-0.2** |
| | 6µm,0.8s,baz=114,slow=23,SNR=14 | | | | | | | |
| LVC | | | | P3KPbc | | | 09 42 01.9 | |
| | 3.2nm,0.7s,baz=147,slow=3.3,SNR=3.9 | | | | | | | |
| **LVC** | **Limon Verde** | **11.62** | **171** | *eP* | | **P** | **09 06 42.8** | **+0.8** |
| **LVC** | **Limon Verde** | **11.62** | **171** | P | | **P** | **09 06 42.7** | **+0.7** |
| LVC | | | | S | | **S** | **09 08 50.6** | **+1.2** |
| **BBSD** | **Serra de San D** | **11.65** | **123** | *eP* | | **P** | **09 06 42.9** | **+0.9** |
| **ARNL** | **Arenillas** | **11.80** | **309** | P | | **P** | **09 06 44.3** | **+0.9** |
| **AF01** | **San Pedro de A** | **12.09** | **168** | P | | **P** | **09 06 48.0** | **+1.6** |
| **PTLB** | **Pontes e Lacer** | **12.21** | **112** | P | | **P** | **09 06 48.5** | **+1.2** |
| **PTLB** | **Pontes e Lacer** | **12.21** | **112** | *eP* | | **P** | **09 06 48.6** | **+1.2** |
| **PTLB** | **Pontes e Lacer** | **12.21** | **112** | P | | **P** | **09 06 48.7** | **+1.4** |
| **ANTS** | **Antisana-Sarah** | **12.77** | **325** | P | | **P** | **09 06 56.1** | **+2.7** |
| **MACA** | **Manacapuru-AM** | **12.79** | **53** | P | | **P** | **09 06 53.7** | **+0.8** |
| **MACA** | **Manacapuru-AM** | **12.79** | **53** | *eP* | | **P** | **09 06 53.8** | **+0.8** |
| **MACA** | **Manacapuru-AM** | **12.79** | **53** | P | | **P** | **09 06 53.8** | **+0.8** |
| MACA | | | | S | | **S** | **09 09 11.1** | **+1.8** |
| **PULU** | **Pululahua** | **13.39** | **325** | P | | **P** | **09 07 01.5** | **+2.3** |
| **IMBA** | **Imbabura, San** | **13.43** | **327** | P | | **P** | **09 07 02.6** | **+2.9** |
| **PB14** | **IPOC Station P** | **13.49** | **178** | P | | **P** | **09 07 00.7** | **+0.8** |
| **PB14** | **IPOC Station P** | **13.49** | **178** | S | | S | 09 09 02.4 | -19 |
| PB14 | | | | P | | P | 09 06 48.3 | -12 |
| **OTAV** | **Otavalo** | **13.54** | **326** | P | | **P** | **09 07 02.3** | **+1.6** |
| **OTAV** | **Otavalo** | **13.54** | **326** | ⇑P | | **P** | **09 07 02.3** | **+1.6** |
| **OTAV** | **Otavalo** | **13.54** | **326** | P | | **P** | **09 07 02.3** | **+1.6** |
| **OTAV** | **Otavalo** | **13.54** | **326** | *eP* | | **P** | **09 07 02.3** | **+1.6** |
| **OTAV** | **Otavalo** | **13.54** | **326** | P | | **P** | **09 07 02.3** | **+1.6** |
| **TULM** | **Tulcn-Chalpat** | **13.59** | **329** | P | | **P** | **09 07 03.4** | **+2.2** |
| **PDRB** | **Porto dos Gac** | **13.86** | **94** | *eP* | | **P** | **09 07 04.8** | **+1.5** |
| **PDRB** | **Porto dos Gac** | **13.86** | **94** | P | | **P** | **09 07 04.8** | **+1.5** |
| PDRB | | | | S | | **S** | **09 09 31.1** | **+3.3** |
| **GO02** | **Mina Guanaco** | **14.07** | **175** | P | | **P** | **09 07 06.7** | **+1.3** |
| **GO02** | **Mina Guanaco** | **14.07** | **175** | ⇑P | | **P** | **09 07 06.7** | **+1.3** |
| **CLDB** | **Colider** | **14.79** | **91** | *eP* | | **P** | **09 07 13.2** | **+1.3** |
| **CLDB** | **Colider** | **14.79** | **91** | P | | **P** | **09 07 13.3** | **+1.3** |
| CLDB | | | | S | | **S** | **09 09 44.4** | **+1.5** |
| **AC01** | **Pan de Azucar** | **15.00** | **179** | P | | **P** | **09 07 14.5** | **+0.9** |
| **SNP1** | **Sinop** | **15.11** | **92** | P | | **P** | **09 07 16.5** | **+1.6** |
| **MAS01** | **UHE Manso** | **15.14** | **106** | P | | **P** | **09 07 17.4** | **+2.4** |
| **FDPY** | **Filadelfia** | **15.27** | **138** | *eP* | | **P** | **09 07 17.8** | **+1.7** |
| **SALV** | **Santo Antonio** | **15.51** | **110** | *eP* | | **P** | **09 07 20.2** | **+1.8** |
| **SALV** | **Santo Antonio** | **15.51** | **110** | P | | **P** | **09 07 20.1** | **+1.8** |
| SALV | | | | S | | **S** | **09 09 58.0** | **+3.4** |
| **NPGB** | **Novo Progresso** | **15.82** | **77** | *eP* | | **P** | **09 07 22.3** | **+1.0** |
| **NPGB** | **Novo Progresso** | **15.82** | **77** | P | | **P** | **09 07 22.2** | **+0.9** |
| NPGB | | | | S | | **S** | **09 10 01.2** | **+1.4** |
| **ROSC** | **El Rosal** | **16.18** | **348** | P | | **P** | **09 07 27.3** | **+2.3** |
| **ROSC** | **El Rosal** | **16.18** | **348** | P | | **P** | **09 07 27.4** | **+2.5** |
| | 2µm,0.5s,baz=178,slow=5.1,SNR=225 | | | | | | | |
| ROSC | | | | S | | **S** | **09 10 09.5** | **+3.1** |
| | 2µm,0.8s,baz=217,slow=20,SNR=3.3 | | | | | | | |
| ROSC | | | | P3KPbc | | | 09 41 44.2 | |
| | 9.9nm,0.6s,baz=137,slow=11,SNR=4.3 | | | | | | | |
| **AC06** | **Mina Casimiro** | **16.21** | **178** | P | | **P** | **09 07 25.5** | **+0.8** |
| **GO03** | **Copiap** | **16.45** | **178** | P | | **P** | **09 07 27.9** | **+1.0** |
| **GO03** | **Copiap** | **16.45** | **178** | ⇑P | | **P** | **09 07 27.9** | **+1.0** |
| **MURT** | **Porto Murtinho** | **16.49** | **131** | P | | **P** | **09 07 28.2** | **+0.9** |
| **BOAV** | **Boa Vista** | **16.87** | **38** | P | | **P** | **09 07 32.7** | **+1.8** |
| **BOAV** | **Boa Vista** | **16.87** | **38** | *eP* | | **P** | **09 07 32.7** | **+1.8** |
| **BOAV** | **Boa Vista** | **16.87** | **38** | P | | **P** | **09 07 32.7** | **+1.8** |
| **AC04** | **Llanos de Chal** | **17.05** | **181** | P | | **P** | **09 07 33.1** | **+0.8** |
| **AQDB** | **Aquidauana** | **17.31** | **125** | P | | **P** | **09 07 36.2** | **+1.4** |
| **AQDB** | **Aquidauana** | **17.31** | **125** | *eP* | | **P** | **09 07 36.3** | **+1.4** |
| **AQDB** | **Aquidauana** | **17.31** | **125** | P | | **P** | **09 07 36.2** | **+1.4** |
| AQDB | | | | S | | **S** | **09 10 23.9** | **-0.1** |
| **PAPY** | **Pozo Azul** | **17.66** | **139** | *eP* | | **P** | **09 07 39.2** | **+1.3** |
| **AC05** | **El Transito** | **17.68** | **178** | P | | **P** | **09 07 39.4** | **+1.2** |
| **LCO** | **Las Campanas** | **17.85** | **180** | P | | **P** | **09 07 41.0** | **+1.1** |
| **LCO** | **Las Campanas** | **17.85** | **180** | ⇑P | | **P** | **09 07 41.0** | **+1.1** |
| **LCO** | **Las Campanas** | **17.85** | **180** | P | | **P** | **09 07 41.0** | **+1.1** |
| **CO05** | **La Serena** | **18.76** | **181** | P | | **P** | **09 07 48.5** | **+0.7** |
| **CO01** | **Juntas del Tor** | **18.82** | **178** | P | | **P** | **09 07 50.4** | **+1.7** |
| **MAL2** | **Monte Alegre,** | **18.84** | **63** | P | | **P** | **09 07 50.4** | **+1.6** |
| **MAL2** | **Monte Alegre,** | **18.84** | **63** | P | | **P** | **09 07 50.3** | **+1.6** |
| **GO04** | **Tololo Observa** | **19.01** | **180** | P | | **P** | **09 07 51.5** | **+1.2** |
| **ARAG** | **Araguaiana, MT** | **19.09** | **106** | *eP* | | **P** | **09 07 52.3** | **+1.3** |
| **ARAG** | **Araguaiana, MT** | **19.09** | **106** | P | | **P** | **09 07 52.1** | **+1.1** |
| **SNDB** | **Serra Nova Dou** | **19.19** | **95** | *eP* | | **P** | **09 07 53.7** | **+1.7** |
| **SNDB** | **Serra Nova Dou** | **19.19** | **95** | P | | **P** | **09 07 53.6** | **+1.7** |
| SNDB | | | | S | | **S** | **09 10 53.7** | **-0.5** |
| **UREC** | **San Jos de Ur** | **19.27** | **346** | *eP* | | **P** | **09 07 52.6** | **0.0** |
| **CO06** | **Fray Jorge** | **19.52** | **182** | P | | **P** | **09 07 55.8** | **+1.1** |
| **CO03** | **El Pedregal** | **19.67** | **180** | P | | **P** | **09 07 57.4** | **+1.3** |
| **SJPY** | **San Joaquin** | **19.69** | **137** | *eP* | | **P** | **09 07 57.1** | **+0.8** |
| **SDV** | **Santo Domingo** | **19.83** | **1** | P | | **P** | **09 07 58.2** | **+0.4** |
| | 166nm,0.4s,baz=183,slow=7.1,SNR=150 | | | | | | | |
| SDV | | | | S | | **S** | **09 11 08.9** | **+4.3** |
| | 911nm,0.8s,baz=70,slow=19,SNR=6.1 | | | | | | | |
| **SDV** | **Santo Domingo** | **19.83** | **1** | *eP* | | **P** | **09 07 58.3** | **+0.4** |
| **SDV** | **Santo Domingo** | **19.83** | **1** | P | | **P** | **09 07 58.3** | **+0.4** |
| SDV | | | | S | | **S** | **09 11 11.5** | **+6.9** |
| **CPUP** | **Villa Florida** | **19.84** | **142** | ⇓P | | **P** | **09 07 57.7** | **+0.2** |
| **CPUP** | **Villa Florida** | **19.84** | **142** | P | | **P** | **09 07 57.8** | **+0.2** |
| | 2µm,0.8s,baz=326,slow=8.5,SNR=1541 | | | | | | | |
| CPUP | | | | S | | **S** | **09 10 59.6** | **-4.4** |
| | 2µm,1.0s,baz=215,slow=19,SNR=2.5 | | | | | | | |
| CPUP | | | | P3KPbc | | | 09 41 40.8 | |
| | 10nm,0.8s,baz=128,slow=3.8,SNR=11 | | | | | | | |
| **CPUP** | **Villa Florida** | **19.84** | **142** | P | | **P** | **09 07 57.8** | **+0.2** |
| **CO02** | **Combarbal** | **20.04** | **180** | P | | **P** | **09 08 00.5** | **+1.0** |
| **CO02** | **Combarbal** | **20.04** | **180** | ⇑P | | **P** | **09 08 00.5** | **+1.0** |
| **BAUV** | **El Baul** | **20.08** | **8** | P | | **P** | **09 08 01.1** | **+1.2** |
| **BMO2** | **UHE Belo Monte** | **20.22** | **69** | P | | **P** | **09 08 02.5** | **+1.3** |
| **ZON** | **Zonda** | **20.48** | **175** | P | | **P** | **09 08 04.7** | **+1.4** |
| **ZON** | **Zonda** | **20.48** | **175** | ⇓P | | **P** | **09 08 04.8** | **+1.4** |
| **ZON** | **Zonda** | **20.48** | **175** | P | | **P** | **09 08 04.7** | **+1.4** |
| **ACHO3** | **Achotines, Los** | **20.57** | **333** | ⇓P | | **P** | **09 08 07.2** | **+2.8** |
| **PEDA3** | **Pedasi** | **20.61** | **333** | ⇓P | | **P** | **09 08 07.4** | **+2.8** |
| **UPD2** | **Meteti** | **20.75** | **340** | ⇓P | | **P** | **09 08 07.8** | **+1.8** |
| **PCRI3** | **Pocri, Los San** | **20.77** | **333** | ⇓P | | **P** | **09 08 09.2** | **+3.1** |
| **CACAO** | **El Cacao, Vera** | **20.83** | **331** | ⇓P | | **P** | **09 08 09.0** | **+2.4** |
| CACAO | | | | *eS* | | S | 09 11 00.3 | -20 |
| **TRCB** | **Terra Rica** | **20.94** | **126** | P | | **P** | **09 08 08.3** | **+0.6** |
| **TRCB** | **Terra Rica** | **20.94** | **126** | P | | **P** | **09 08 08.1** | **+0.5** |
| **AZU** | **Azuero** | **20.95** | **333** | ⇓P | | **P** | **09 08 10.5** | **+2.8** |
| AZU | | | | *eS* | | S | 09 11 04.9 | -17 |
| **MARI3** | **Mariato, Verag** | **21.16** | **331** | ⇓P | | **P** | **09 08 12.6** | **+3.0** |
| **CHIT3** | **Chitre** | **21.16** | **333** | ⇓P | | **P** | **09 08 12.4** | **+2.7** |
| **PESE3** | **Pese, Herrera** | **21.21** | **332** | ⇓P | | **P** | **09 08 13.0** | **+2.9** |
| **TOTI** | **Torti** | **21.21** | **332** | ⇓P | | **P** | **09 08 11.9** | **+1.9** |
| **PRPB** | **Parauapebas** | **21.36** | **79** | *eP* | | **P** | **09 08 12.3** | **+0.8** |
| **PRPB** | **Parauapebas** | **21.36** | **79** | P | | **P** | **09 08 12.2** | **+0.8** |
| **GMAL** | **Guarumal, Vera** | **21.37** | **331** | ⇓*eP* | | **P** | **09 08 13.2** | **+1.6** |
| **VA06** | **Catapilco** | **21.39** | **181** | P | | **P** | **09 08 12.8** | **+1.3** |
| **MCPB** | **Macapa, AP** | **21.50** | **62** | *eP* | | **P** | **09 08 14.4** | **+1.7** |
| **MCPB** | **Macapa, AP** | **21.50** | **62** | P | | **P** | **09 08 14.4** | **+1.7** |
| **PCMB** | **Pacaembu** | **21.50** | **122** | *eP* | | **P** | **09 08 13.2** | **+0.6** |
| **PCMB** | **Pacaembu** | **21.50** | **122** | P | | **P** | **09 08 13.1** | **+0.5** |
| **CRIS3** | **El Cristo, Coc** | **21.52** | **333** | ⇓P | | **P** | **09 08 15.6** | **+2.8** |
| **ITRB** | **Iturama** | **21.53** | **116** | *eP* | | **P** | **09 08 13.8** | **+0.8** |
| **ITRB** | **Iturama** | **21.53** | **116** | P | | **P** | **09 08 13.7** | **+0.8** |
| ITRB | | | | S | | **S** | **09 11 28.8** | **-2.3** |
| **RSUS3** | **Rio de Jesus,** | **21.53** | **331** | *eP* | | **P** | **09 08 16.2** | **+3.3** |
| **STIA3** | **Santiago, Vera** | **21.54** | **332** | ⇓*eP* | | **P** | **09 08 16.1** | **+3.1** |
| **VA03** | **San Esteban** | **21.59** | **179** | P | | **P** | **09 08 15.1** | **+1.8** |
| **PNME** | **Penonome** | **21.59** | **334** | ⇓P | | **P** | **09 08 16.3** | **+2.8** |
| **MESA3** | **La Mesa, Verag** | **21.68** | **331** | ⇓*eP* | | **P** | **09 08 17.2** | **+2.9** |
| **CNTA3** | **Canitas, Panam** | **21.68** | **338** | ⇓P | | **P** | **09 08 16.4** | **+2.1** |
| **UPA** | **Univ. de Panam** | **21.71** | **336** | ⇓P | | **P** | **09 08 16.9** | **+2.4** |
| UPA | | | | *i* S | | S | 09 11 01.1 | -33 |
| **ARRA3** | **Arraijan, Pana** | **21.75** | **336** | *eP* | | **P** | **09 08 17.1** | **+2.3** |
| **ZANG** | **Zanguenga, Cho** | **21.82** | **335** | ⇓P | | **P** | **09 08 17.9** | **+2.4** |
| **VA01** | **Torpederas** | **21.86** | **182** | P | | **P** | **09 08 17.2** | **+1.6** |
| **PAYG** | **Puerto Ayora** | **21.89** | **297** | P | | **P** | **09 08 18.6** | **+2.4** |
| **PEL** | **Peldehue** | **21.97** | **180** | P | | **P** | **09 08 18.2** | **+1.5** |
| **PEL** | **Peldehue** | **21.97** | **180** | ⇑P | | **P** | **09 08 18.1** | **+1.5** |
| **PEL** | **Peldehue** | **21.97** | **180** | P | | **P** | **09 08 18.2** | **+1.5** |
| **PCRV** | **Puerto La Cruz** | **22.00** | **17** | P | | **P** | **09 08 18.4** | **+1.3** |
| | 341nm,0.8s,baz=171,slow=2.4,SNR=126 | | | | | | | |
| | 341nm,0.8s | | | | | | | |
| **BCIP** | **Isla Barro Col** | **22.00** | **336** | P | | **P** | **09 08 19.4** | **+2.3** |
| **BCIP** | **Isla Barro Col** | **22.00** | **336** | ⇓P | | **P** | **09 08 19.4** | **+2.3** |
| **BCIP** | **Isla Barro Col** | **22.00** | **336** | P | | **P** | **09 08 19.4** | **+2.3** |
| **BCIP** | **Isla Barro Col** | **22.00** | **336** | ⇓P | | **P** | **09 08 19.3** | **+2.3** |
| **I20EC** | **Galapagos** | **22.00** | **297** | P | | **P** | **09 08 20.0** | **+2.8** |
| | baz=86,slow=3.1,SNR=9.5 | | | | | | | |
| **FRIJ** | **El Hiral** | **22.01** | **336** | ⇓P | | **P** | **09 08 19.3** | **+2.2** |
| **MLIR** | **Monte Lirio** | **22.07** | **336** | ⇓P | | **P** | **09 08 20.1** | **+2.4** |
| **MT02** | **Curacav** | **22.09** | **181** | P | | **P** | **09 08 18.9** | **+1.3** |
| **TUC4** | **UHE Tucurui** | **22.18** | **74** | P | | **P** | **09 08 19.6** | **+0.9** |
| **LAJE** | **UHE Lajeado** | **22.18** | **89** | P | | **P** | **09 08 20.1** | **+1.3** |
| **MT05** | **Renca** | **22.22** | **180** | P | | **P** | **09 08 21.8** | **+3.0** |
| **MT16** | **CCHEN** | **22.25** | **179** | P | | **P** | **09 08 20.8** | **+1.6** |
| **MT08** | **Bocatoma Ro** | **22.28** | **178** | P | | **P** | **09 08 22.3** | **+2.7** |
| **MT03** | **Universidad Ad** | **22.32** | **179** | P | | **P** | **09 08 21.6** | **+1.8** |
| **PTGB** | **Pitanga** | **22.41** | **130** | P | | **P** | **09 08 21.2** | **+0.5** |
| **ITU3** | **Corumbazu** | **22.41** | **111** | P | | **P** | **09 08 21.0** | **+0.2** |
| **LDASE** | **Londrina, Braz** | **22.45** | **126** | *eP* | | **P** | **09 08 21.5** | **+0.5** |
| **LIMO3** | **Limes** | **22.48** | **327** | *eP* | | **P** | **09 08 25.2** | **+3.8** |
| **VA05** | **Santo Domingo** | **22.49** | **182** | P | | **P** | **09 08 22.3** | **+1.1** |
| **PEDE3** | **Pedregal, Chir** | **22.49** | **329** | *eP* | | **P** | **09 08 24.0** | **+2.5** |
| **LOCO3** | **Loma Colorada,** | **22.51** | **329** | *eP* | | **P** | **09 08 24.5** | **+2.8** |
| **LOMA3** | **Las Lomas, Chi** | **22.52** | **329** | *eP* | | **P** | **09 08 24.9** | **+3.2** |
| **DVD** | **David** | **22.55** | **329** | ⇑*eP* | | **P** | **09 08 25.6** | **+3.6** |
| **MT13** | **San Alfonso** | **22.57** | **179** | P | | **P** | **09 08 24.2** | **+2.1** |
| **PTPM** | **Petroterminale** | **22.58** | **328** | ⇓P | | **P** | **09 08 25.4** | **+3.2** |
| **MT09** | **Talagante** | **22.60** | **180** | P | | **P** | **09 08 23.7** | **+1.4** |
| **COR01** | **UHE Corumbį** | **22.63** | **110** | P | | **P** | **09 08 23.1** | **+0.3** |
| **BDFB** | **Brasilia** | **22.68** | **104** | P | | **P** | **09 08 24.7** | **+1.4** |
| | 977nm,0.7s,baz=273,slow=11,SNR=616 | | | | | | | |
| BDFB | | | | S | | **S** | **09 11 48.7** | **-0.7** |
| | 2µm,1.1s,baz=135,slow=21,SNR=4.3 | | | | | | | |
| BDFB | | | | P3KPbc | | | 09 41 42.5 | |
| | 7.4nm,0.6s,baz=102,slow=5.8,SNR=8.8 | | | | | | | |
| | 977nm,0.7s | | | | | | | |
| **BDFB** | **Brasilia** | **22.68** | **104** | P | | **P** | **09 08 24.6** | **+1.4** |
| **LMEL** | **Las Melosas** | **22.68** | **179** | P | | **P** | **09 08 25.2** | **+2.2** |
| **MT01** | **Popeta** | **22.69** | **181** | P | | **P** | **09 08 23.8** | **+0.8** |
| **CRSM** | **Crissiumal (Br** | **22.73** | **138** | *eP* | | **P** | **09 08 23.2** | **-0.3** |
| **CRSM** | **Crissiumal (Br** | **22.73** | **138** | P | | **P** | **09 08 23.1** | **-0.3** |
| **ITQB** | **Itaqui** | **22.77** | **146** | P | | **P** | **09 08 24.2** | **+0.5** |
| **ITQB** | **Itaqui** | **22.77** | **146** | *eP* | | **P** | **09 08 24.3** | **+0.5** |
| **ITQB** | **Itaqui** | **22.77** | **146** | P | | **P** | **09 08 24.2** | **+0.5** |
| **BO04** | **La Punta** | **22.81** | **179** | P | | **P** | **09 08 25.6** | **+1.5** |
| **CHGR2** | **Aguacate** | **22.83** | **330** | P | | **P** | **09 08 27.2** | **+2.7** |
| **BCO2** | **Palmira** | **22.83** | **329** | *eP* | | **P** | **09 08 27.1** | **+2.4** |
| **CN01** | **Coaracy Nunes** | **22.84** | **60** | P | | **P** | **09 08 25.7** | **+1.0** |
| **LNBQ3** | **Los Naranjos,** | **22.85** | **329** | *eP* | | **P** | **09 08 26.8** | **+2.0** |
| **IPMB** | **Ipameri, GO** | **22.96** | **110** | *eP* | | **P** | **09 08 26.3** | **+0.6** |
| **IPMB** | **Ipameri, GO** | **22.96** | **110** | P | | **P** | **09 08 26.2** | **+0.5** |
| **BRU2** | **Volcan** | **22.98** | **329** | P | | **P** | **09 08 28.7** | **+2.8** |
| **BRU2** | **Volcan** | **22.98** | **329** | ⇓P | | **P** | **09 08 28.8** | **+2.8** |
| **SMTB** | **Santa Maria do** | **23.02** | **87** | *eP* | | **P** | **09 08 28.2** | **+2.0** |
| **SMTB** | **Santa Maria do** | **23.02** | **87** | P | | **P** | **09 08 28.1** | **+1.9** |
| **MLIR3** | **Monte Lirio, C** | **23.05** | **328** | ⇓P | | **P** | **09 08 29.9** | **+3.4** |
| **HATO** | **Hato, Curacao** | **23.18** | **5** | P | | **P** | **09 08 26.5** | **-1.0** |
| **UNIS** | **Unistalda (Bra** | **23.20** | **143** | P | | **P** | **09 08 27.9** | **+0.4** |
| **BO01** | **Tunca** | **23.21** | **180** | P | | **P** | **09 08 28.8** | **+1.2** |
| **PSAL** | **Palomas, Salto** | **23.39** | **150** | *eP* | | **P** | **09 08 29.8** | **+0.6** |
| **CNI2** | **El Empalme, Bo** | **23.41** | **330** | *eP* | | **P** | **09 08 32.3** | **+2.7** |
| **EDP2** | **Potrero Grande** | **23.42** | **328** | *eP* | | **P** | **09 08 33.0** | **+3.3** |
| **AUA1** | **Aruba** | **23.44** | **2** | P | | **P** | **09 08 29.5** | **-0.3** |
| **BAT3** | **Ipameri** | **23.45** | **108** | P | | **P** | **09 08 30.8** | **+0.8** |
| **H03N1** | **Juan Fernandez** | **23.46** | **197** | P | | **P** | **09 08 31.3** | **+1.8** |
| | baz=127,slow=14,SNR=322 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **23.46** | **197** | P | | **P** | **09 08 31.5** | **+2.0** |
| | baz=127,slow=14,SNR=349 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **23.48** | **197** | P | | **P** | **09 08 31.3** | **+1.7** |
| | baz=127,slow=14,SNR=485 | | | | | | | |
| **BAT2** | **UHE Batalha** | **23.50** | **108** | P | | **P** | **09 08 31.3** | **+0.8** |
| **EDBA** | **Buenos Aires** | **23.59** | **328** | *eP* | | **P** | **09 08 34.5** | **+3.2** |
| **BO02** | **Sierra Bellavi** | **23.61** | **180** | P | | **P** | **09 08 32.7** | **+1.5** |
| **BB19B** | **Bebedouro** | **23.62** | **118** | *eP* | | **P** | **09 08 31.7** | **+0.2** |
| **BB19B** | **Bebedouro** | **23.62** | **118** | P | | **P** | **09 08 31.7** | **+0.2** |
| **RGM0** | **Gandoca** | **23.62** | **330** | ⇓*eP* | | **P** | **09 08 33.9** | **+3.5** |
| **VA04** | **Juan Fernndez** | **23.62** | **197** | P | | **P** | **09 08 32.6** | **+1.4** |
| **VA04** | **Juan Fernndez** | **23.62** | **197** | ⇑P | | **P** | **09 08 32.7** | **+1.4** |
| **BURE** | **Buenos Aires** | **23.64** | **328** | *eP* | | **P** | **09 08 35.0** | **+3.3** |
| **DRK0** | **Durika** | **23.66** | **328** | ⇓P | | **P** | **09 08 34.8** | **+2.8** |
| **FRTB** | **Fartura** | **23.68** | **124** | *eP* | | **P** | **09 08 31.7** | **-0.2** |
| **FRTB** | **Fartura** | **23.68** | **124** | P | | **P** | **09 08 31.7** | **-0.2** |
| FRTB | | | | S | | **S** | **09 12 05.1** | **+0.2** |
| **H03S3** | **Juan Fernandez** | **23.82** | **197** | P | | **P** | **09 08 34.1** | **+1.5** |
| | baz=8.5,slow=16,SNR=719 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **23.84** | **197** | P | | **P** | **09 08 34.1** | **+1.3** |
| | baz=8.5,slow=16,SNR=456 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **23.84** | **197** | P | | **P** | **09 08 34.4** | **+1.6** |
| | baz=8.5,slow=16,SNR=686 | | | | | | | |
| **ITAB** | **Concordia** | **23.85** | **135** | P | | **P** | **09 08 33.7** | **+0.3** |
| **ITAB** | **Concordia** | **23.85** | **135** | *eP* | | **P** | **09 08 33.8** | **+0.5** |
| **ITAB** | **Concordia** | **23.85** | **135** | P | | **P** | **09 08 33.7** | **+0.3** |
| ITAB | | | | S | | **S** | **09 12 04.4** | **-2.9** |
| **GO05** | **Huala** | **23.85** | **182** | P | | **P** | **09 08 34.4** | **+1.1** |
| **GO05** | **Huala** | **23.85** | **182** | ⇑P | | **P** | **09 08 34.4** | **+1.1** |
| **RODS** | **Rosario do Sul** | **24.08** | **145** | *eP* | | **P** | **09 08 35.4** | **+0.1** |
| **RODS** | **Rosario do Sul** | **24.08** | **145** | P | | **P** | **09 08 35.2** | **-0.1** |
| **BUS1** | **Rivas** | **24.17** | **327** | *eP* | | **P** | **09 08 39.8** | **+3.0** |
| **TMAB** | **Tom-Au,PA,Br** | **24.18** | **71** | *eP* | | **P** | **09 08 38.6** | **+2.1** |
| **TMAB** | **Tom-Au,PA,Br** | **24.18** | **71** | P | | **P** | **09 08 38.6** | **+2.1** |
| **ALGR** | **Alto Alegre (B** | **24.27** | **139** | *eP* | | **P** | **09 08 36.5** | **-0.6** |
| **ALGR** | **Alto Alegre (B** | **24.27** | **139** | P | | **P** | **09 08 36.4** | **-0.7** |

LR03 **Panguipulli** 28.48 182 P **P** 09 09 14.5 +0.9
LR03 IAmb IAmb 09 09 15.9
comp=Z,3µm,1.3s
CBE **Ff, Capester** 28.48 19 P **P** 09 09 13.0 -1.0
CBE IAmb IAmb 09 09 23.8
comp=Z,3µm,1.0s
CRIN **San Cristobal** 28.57 325 P **P** 09 09 15.6 +0.7
CRIN IAmb IAmb 09 09 18.8
comp=Z,2µm,0.5s
GDHS **Morne Mazeau,** 28.62 18 P **P** 09 09 14.2 -1.0
LR04 **Corral** 28.78 184 P **P** 09 09 17.5 +1.2
GDSD **La Dsirade Is** 28.88 20 P **P** 09 09 14.8 -2.6
GDSD IAmb IAmb 09 09 22.1
comp=Z,2µm,0.9s
H05N1 **Guadeloupe/Mar** 28.89 20 P **P** 09 09 15.3 -2.2
H05N1 S **S** 09 13 19.8 -6.2
ABD **La Joyeuse, An** 28.90 19 P **P** 09 09 15.9 -1.6
ABD IAmb IAmb 09 09 22.6
comp=Z,3µm,1.1s
MLYT **Lee's Yard** 28.91 17 *e*P **P** 09 09 15.0 -2.7
MBFL **Flemmings, Mon** 28.93 17 *e*P **P** 09 09 18.1 +0.3
MBWH 28.93 17 *e*P **P** 09 09 16.6 -1.3
LR05 **Currie** 29.06 182 P **P** 09 09 19.8 +1.2
MLPR **Magueyes Islan** 29.10 7 P **P** 09 09 18.4 -0.8
CRPR **Cabo Rojo, PR** 29.13 7 P **P** 09 09 19.8 +0.3
CRPR IAmb IAmb 09 09 32.4
comp=Z,4µm,1.1s
IGPR **InterUniversit** 29.23 9 P **P** 09 09 19.9 -0.5
OBIP **Obispado Ponce** 29.23 8 P **P** 09 09 19.5 -0.9
PDPR **Patillas Dam,** 29.30 9 P **P** 09 09 20.6 -0.3
PDPR IAmb IAmb 09 09 28.2
comp=Z,2µm,1.0s
PRSN **Puerto Rico Se** 29.33 7 P **P** 09 09 21.5 +0.2
ANBD **Bethesda, Anti** 29.35 18 *e*P **P** 09 09 19.7 -1.7
DUB01 **Friburgo-RJ** 29.36 116 *e*P **P** 09 09 22.1 +0.6
DUB01 **Friburgo-RJ** 29.36 116 P **P** 09 09 22.2 +0.6
SDD **Santo Domingo** 29.36 2 P **P** 09 09 21.8 +0.4
UUPR **Utuado, UPR, P** 29.42 8 P **P** 09 09 22.0 0.0
SEUS **St. Eustatius** 29.43 15 P **P** 09 09 22.0 -0.1
HUMP **Col San Antoni** 29.45 10 P **P** 09 09 21.5 -0.8
HUMP IAmb IAmb 09 09 31.0
comp=Z,3µm,1.0s
HOJ **Hope** 29.47 349 *i* P **P** 09 09 22.9 +0.5
SABA **Saba** 29.48 15 P **P** 09 09 22.4 -0.2
PCDR **Punta Cana, DR** 29.50 5 P **P** 09 09 23.1 +0.4
AOPR **Arecibo Observ** 29.51 8 P **P** 09 09 22.5 -0.3
AOPR **Arecibo Observ** 29.51 8 *e*P **P** 09 09 22.7 -0.1
PLCA **Paso Flores** 29.55 180 P **P** 09 09 24.1 +1.2
PLCA IAmb IAmb 09 09 26.2
comp=Z,5µm,1.6s
PLCA **Paso Flores** 29.55 180 ⇓P **P** 09 09 24.0 +1.1
PLCA **Paso Flores** 29.55 180 P **P** 09 09 24.1 +1.2
comp=Z,727nm,0.6s,baz=354,slow=9.4,SNR=1932
PLCA PcP **PcP** 09 12 08.5 +1.3
comp=Z,590nm,0.8s,baz=358,slow=3.8,SNR=5.1
PLCA S **S** 09 13 35.1 -0.6
comp=Z,511nm,0.9s,baz=114,slow=18,SNR=5.5
PLCA ScP **ScP** 09 14 51.6 +0.6
comp=Z,392nm,0.9s,baz=9.7,slow=4.2,SNR=4.6
PLCA P3KPbc 09 41 09.9
comp=Z,36nm,0.8s,baz=190,slow=4.6,SNR=30
PLCA PKP2ab **P'P'ab** 09 45 08.9 +3.5
comp=Z,15nm,1.0s,baz=234,slow=2.9,SNR=3.8
comp=Z,727nm,0.6s
**PLCA Paso Flores** 29.55 180 *e*P **P** 09 09 24.2 +1.2
**PLCA Paso Flores** 29.55 180 P **P** 09 09 24.1 +1.2
**STH Stony Hill** 29.55 348 ⇓*i*P **P** 09 09 23.6 +0.4
**GCPR Guaynabo City** 29.57 9 P **P** 09 09 22.8 -0.5
**SJMB Sao Joao De Ma** 29.63 108 *e*P **P** 09 09 24.2 +0.3
**SJMB Sao Joao De Ma** 29.63 108 P **P** 09 09 24.2 +0.3
**EMPR Esperanza - Ma** 29.67 8 P **P** 09 09 23.2 -0.9
**LL04 Puerto Octay** 29.75 182 P **P** 09 09 25.4 +0.8
LL04 IAmb IAmb 09 09 26.8
comp=Z,4µm,1.6s
**TGUH Tegucigalpa,Un** 29.80 327 P **P** 09 09 26.8 +1.3
**TGUH Tegucigalpa,Un** 29.80 327 ⇓P **P** 09 09 26.9 +1.3
**MTDJ Mount Denham** 29.85 347 P **P** 09 09 26.4 +0.6
**MTDJ Mount Denham** 29.85 347 ⇓*i*P **P** 09 09 26.9 +1.1
**MTDJ Mount Denham** 29.85 347 ⇑P **P** 09 09 26.4 +0.6
**SDDR Presa de Saban** 29.87 359 P **P** 09 09 25.7 -0.2
SDDR IAmb IAmb 09 09 49.3
comp=Z,2µm,1.2s
**SDDR Presa de Saban** 29.87 359 ⇓*i*P **P** 09 09 26.6 +0.7
**SDDR Presa de Saban** 29.87 359 ⇓P **P** 09 09 25.7 -0.2
**SDDR Presa de Saban** 29.87 359 *e*P **P** 09 09 26.2 +0.3
**CAM01 Campos-RJ** 29.92 115 *e*P **P** 09 09 26.6 +0.4
**CAM01 Campos-RJ** 29.92 115 P **P** 09 09 26.7 +0.4
**ANWB Willy Bob** 29.93 18 P **P** 09 09 24.8 -1.6
**ANWB Willy Bob** 29.93 18 *e*P **P** 09 09 24.7 -1.6
**SMRT St. Maarten** 29.94 15 P **P** 09 09 25.2 -1.3
**LL03 Petrohue** 29.98 182 P **P** 09 09 27.5 +1.0
LL03 IAmb IAmb 09 09 38.9
comp=Z,1µm,0.8s
**LL05 Los Muermos** 30.30 184 P **P** 09 09 30.1 +0.8
**SC01 Santiago de lo** 30.31 0 P **P** 09 09 30.5 +0.9
**ALF01 Guarapari-ES** 30.45 112 *e*P **P** 09 09 31.5 +0.7
**ALF01 Guarapari-ES** 30.45 112 P **P** 09 09 31.5 +0.7
**RIB01 Linhares ES** 30.48 109 *e*P **P** 09 09 31.6 +0.5
**RIB01 Linhares ES** 30.48 109 P **P** 09 09 31.6 +0.5
**NAN01 Guarapari, ES** 30.48 106 *e*P **P** 09 09 32.0 +0.9
**NAN01 Guarapari, ES** 30.48 106 P **P** 09 09 32.1 +0.9
**SNET Serv Nac Est T** 30.61 323 P **P** 09 09 33.2 +0.8
SNET IAmb IAmb 09 09 39.1
comp=Z,1µm,0.4s
**GUA01 Guaratinga, BA** 30.62 104 *e*P **P** 09 09 33.2 +0.8
**GUA01 Guaratinga, BA** 30.62 104 P **P** 09 09 33.2 +0.8
**GDU01 Guandu, BA** 30.65 98 *e*P **P** 09 09 33.9 +1.2
**GDU01 Guandu, BA** 30.65 98 P **P** 09 09 33.9 +1.2
**CMC01 Camacan, BA** 30.79 101 *e*P **P** 09 09 34.7 +1.0
**CMC01 Camacan, BA** 30.79 101 P **P** 09 09 34.8 +1.0
**GTBY Guantanamo Bay** 31.09 352 P **P** 09 09 36.5 +0.2
GTBY IAmb IAmb 09 09 44.2
comp=Z,2µm,0.9s
**GTBY Guantanamo Bay** 31.09 352 ⇓*i*P **P** 09 09 36.8 +0.6
**GTBY Guantanamo Bay** 31.09 352 ⇓P **P** 09 09 36.5 +0.2
**LL06 Loncomilla** 31.12 184 P **P** 09 09 37.3 +1.1
LL06 IAmb IAmb 09 09 38.5
comp=Z,5µm,1.4s
**LL01 San Ignacio de** 31.22 182 P **P** 09 09 37.6 +0.5
LL01 IAmb IAmb 09 09 42.0
comp=Z,1µm,0.7s
**LL01 San Ignacio de** 31.22 182 ⇓P **P** 09 09 37.5 +0.5
**MTO3 Montecristo** 31.25 324 P **P** 09 09 39.9 +1.9
**CHIV Chivirico** 31.33 350 P **P** 09 09 37.8 -0.5
CHIV IAmb IAmb 09 09 59.4
comp=Z,730nm,0.9s
**ESQI Esquipulas** 31.37 324 P **P** 09 09 41.1 +2.3
ESQI IAmb IAmb 09 09 50.4
comp=Z,4µm,1.5s
**NBPB Pedra_Branca-C** 31.41 82 *e*P **P** 09 09 40.7 +1.5
**NBPB Pedra_Branca-C** 31.41 82 P **P** 09 09 40.7 +1.5
**NMDO Nuevo Mundo** 31.69 353 P **P** 09 09 41.1 -0.3
NMDO IAmb IAmb 09 09 48.8
comp=Z,1µm,1.1s
**LL07 Hotel Espejo d** 31.72 184 P **P** 09 09 41.6 +0.3
LL07 IAmb IAmb 09 10 17.3
comp=Z,7µm,1.5s
**ABR01 Abrolhos, BA** 31.84 106 *e*P **P** 09 09 43.6 +0.8
**ABR01 Abrolhos, BA** 31.84 106 P **P** 09 09 43.4 +0.7
**MRL Marmol** 31.98 324 *e*S pP 09 11 24.5 +1.0
**MRL Marmol** 31.98 324 *e*P **P** 09 09 46.7 +2.6
**NBG Las Nubes** 31.98 322 *e*S pP 09 11 27.3 +3.7
**NBG Las Nubes** 31.98 322 *e*P **P** 09 09 47.6 +3.3
**PCG Pacaya** 31.99 322 *e*S pP 09 11 23.1 -0.5
**LL02 Futaleuf** 32.01 181 P **P** 09 09 44.4 +0.6
**GO07 Milladeo Hill,** 32.02 184 P **P** 09 09 44.8 +1.0
**FUG Fuego 3** 32.18 322 *e*S pP 09 11 28.0 +2.8
**FUG Fuego 3** 32.18 322 *e*P **P** 09 09 49.0 +3.3
**GRTK Grand Turk** 32.38 360 P **P** 09 09 47.4 +0.2
**GRTK Grand Turk** 32.38 360 ⇓P **P** 09 09 47.4 +0.2
**SULM Suchitepequez,** 32.51 320 *e*S pP 09 11 29.4 +1.3
**SULM Suchitepequez,** 32.51 320 *e*P P 09 09 53.2 +4.9
**RTAL Retalhuleu** 32.76 320 P **P** 09 09 52.1 +1.6
RTAL IAmb IAmb 09 10 00.5
comp=Z,4µm,1.5s
**STG3 Santiaguito 3,** 32.83 321 *e*P **P** 09 09 53.6 +2.4
**NBCL Cascavel-CE** 32.96 81 *e*P **P** 09 09 53.6 +1.4
**NBCL Cascavel-CE** 32.96 81 P **P** 09 09 53.7 +1.5
**HUEH Huehuetenango** 33.25 322 P **P** 09 09 56.9 +2.1
HUEH IAmb IAmb 09 10 04.0
comp=Z,2µm,0.7s
**PETF Flores** 33.56 326 P **P** 09 09 59.0 +1.9

**CCIG Comitan** 34.38 322 P **P** 09 10 05.7 +1.5
CCIG IAmb IAmb 09 10 13.0
comp=Z,1µm,0.6s
**COYC Coyhaique** 34.40 182 P **P** 09 10 04.7 +1.0
COYC IAmb IAmb 09 10 06.8
comp=Z,2µm,0.8s
**RCBR Riachuelo** 34.95 84 P **P** 09 10 10.4 +1.6
**RCBR Riachuelo** 34.95 84 P **P** 09 10 10.4 +1.6
RCBR pmax pmax
comp=Z,577nm,0.9s
**RCBR Riachuelo** 34.95 84 *e*P **P** 09 10 10.4 +1.6
**RCBR Riachuelo** 34.95 84 P **P** 09 10 10.3 +1.6
RCBR pP **pP** 09 11 51.5 +1.2
RCBR PcP **PcP** 09 12 23.5 +0.6
RCBR sP **sP** 09 13 01.6 -0.5
**RCBR Riachuelo** 34.95 84 P **P** 09 10 10.4 +1.6
**AY02 Valle Explorad** 35.35 183 P **P** 09 10 12.3 +0.8
AY02 IAmb IAmb 09 10 32.1
comp=Z,4µm,0.8s
**CAMR Camarioca** 35.45 343 P **P** 09 10 14.0 +1.3
CAMR IAmb IAmb 09 10 21.7
comp=Z,14µm,0.9s
**GO08 Villa O'Higgin** 37.30 182 P **P** 09 10 29.5 +2.0
**061Z Ochoppi** 37.99 345 P **P** 09 10 34.7 +1.3
**060A Indiantown** 38.99 346 P **P** 09 10 42.5 +1.2
**TLIG Tlapa** 39.48 316 P **P** 09 10 47.8 +2.2
**TLIG Tlapa** 39.48 316 ⇓P **P** 09 10 47.9 +2.3
**RPN Rapa Nui** 39.52 241 P **P** 09 10 47.2 +1.5
**RPN Rapa Nui** 39.52 241 ⇑P **P** 09 10 47.4 +1.7
**RPN Rapa Nui** 39.52 241 P **P** 09 10 47.2 +1.5
**RPN Rapa Nui** 39.52 241 P **P** 09 10 47.2 +1.5
RPN PcP **PcP** 09 12 37.2 +0.2
**VA02 Isla de Pascua** 39.61 241 P **P** 09 10 48.0 +1.6
**VA02 Isla de Pascua** 39.61 241 ⇑P **P** 09 10 48.0 +1.6
**GO09 Cerro Castillo** 40.10 181 P **P** 09 10 51.5 +1.6
**DWPF Disney Wildern** 40.27 345 P **P** 09 10 52.5 +0.9
**DWPF Disney Wildern** 40.27 345 ⇓P **P** 09 10 52.4 +0.8
**MG05 Puerto Natales** 40.51 182 P **P** 09 10 54.8 +1.7
**UNM Universidad Na** 41.13 317 P **P** 09 11 00.9 +2.1
**UNM Universidad Na** 41.13 317 ⇓P **P** 09 11 01.7 +2.9
**UNM Universidad Na** 41.13 317 P **P** 09 11 00.9 +2.1
UNM pmax pmax
comp=Z,1µm,1.1s
**MG04 Isla Riesco** 41.68 181 P **P** 09 11 04.9 +2.7
**656A Willston** 41.75 345 P **P** 09 11 04.1 +0.9
**EFI East Falkland** 41.81 168 P **P** 09 11 04.9 +1.6
EFI IAmb IAmb 09 11 05.6
comp=Z,8µm,1.4s
**EFI East Falkland** 41.81 168*d* *i*P **P** 09 11 04.9 +1.6
EFI pmax pmax
comp=Z,3µm,1.5s
**EFI East Falkland** 41.81 168 ⇓P **P** 09 11 04.9 +1.6
EFI PcP **PcP** 09 12 44.8 +0.8
EFI ScP **ScP** 09 15 36.6 +0.7
**GO10 Punta Arenas** 41.97 180 P **P** 09 11 07.3 +2.7
**GO10 Punta Arenas** 41.97 180 ⇓P **P** 09 11 07.5 +2.9
**MOIG Morelia** 42.73 315 P **P** 09 11 13.2 +1.9
**MOIG Morelia** 42.73 315 ⇓P **P** 09 11 13.5 +2.2
**456A Hilliard** 42.92 346 P **P** 09 11 13.5 +1.3
**JRQG Juriquilla Cam** 42.94 317 P **P** 09 11 14.8 +1.9
**553A Crawfordville** 43.05 343 P **P** 09 11 14.6 +1.3
**BBSR BB Station** 43.60 8 P **P** 09 11 17.3 -0.1
BBSR IAmb IAmb 09 11 24.7
comp=Z,4µm,0.9s
**BBSR BB Station** 43.60 8 ⇓P **P** 09 11 17.3 -0.1
**BBSR BB Station** 43.60 8 ⇓P **P** 09 11 17.3 -0.1
BBSR PP **PP** 09 13 11.1 -1.0
**MG01 Puerto William** 43.83 177 P **P** 09 11 20.3 +1.4
**257A Skidaway Islan** 43.90 348 P **P** 09 11 20.5 +0.8
**255A Hazlehurst** 44.18 346 P **P** 09 11 22.8 +0.9
**352A Blakely** 44.41 343 P **P** 09 11 24.3 +0.6
**BRAL Brewton** 44.78 340 P **P** 09 11 27.4 +0.8
**BRAL Brewton** 44.78 340 ⇓P **P** 09 11 27.3 +0.8
**NHSC New Hope** 44.82 349 P **P** 09 11 27.6 +0.8
**154A Montrose** 44.99 345 P **P** 09 11 28.7 +0.6
**250A Grady** 45.28 341 P **P** 09 11 30.6 +0.3
**152A Waverly Hall** 45.47 344 P **P** 09 11 32.0 +0.3
**ZAIG Zacatecas** 45.78 317 ⇓P **P** 09 11 36.6 +2.0
**GOGA Godfrey** 45.84 345 ⇑P **P** 09 11 33.1 -1.4
**JSC Jenkinsville** 46.17 348 P **P** 09 11 37.7 +0.7
JSC IAmb IAmb 09 11 45.1
comp=Z,4µm,1.0s
**JSC Jenkinsville** 46.17 348 P **P** 09 11 37.7 +0.7
JSC pmax pmax
comp=Z,4µm,1.0s
**HODGE Hodges** 46.34 347 P **P** 09 11 38.8 +0.5
HODGE IAmb IAmb 09 11 46.3
comp=Z,5µm,0.9s
**Y52A Lilburn** 46.42 345 P **P** 09 11 39.0 +0.1
Y52A IAmb IAmb 09 11 46.5
comp=Z,5µm,0.9s
**KVTX Kingsville** 46.48 326 ⇓P **P** 09 11 41.6 +2.1
**CNNC Cliffs of the** 46.54 352 P **P** 09 11 40.0 +0.2
CNNC IAmb IAmb 09 11 47.4
comp=Z,3µm,0.9s
**CNNC Cliffs of the** 46.54 352 ⇓P **P** 09 11 39.9 +0.2
**W57A Gilead** 46.78 350 P **P** 09 11 42.0 +0.4
**VBMS Vicksburg** 46.98 337 ⇓P **P** 09 11 43.4 +0.3
**KMSC Kings Mountain** 47.02 348 P **P** 09 11 44.1 +0.7
**Y49A Blount Mountai** 47.07 342 P **P** 09 11 43.6 -0.2
Y49A IAmb IAmb 09 11 51.0
comp=Z,4µm,0.8s
**BG3 Lake Jocassee** 47.22 346 P **P** 09 11 45.6 +0.7
BG3 IAmb IAmb 09 11 53.0
comp=Z,4µm,0.9s
**X51A Calhoun** 47.29 344 P **P** 09 11 45.5 +0.1
**HKT Hockley** 47.35 330 ⇓P **P** 09 11 47.3 +1.4
**HKT Hockley** 47.35 330*d* *i*P **P** 09 11 47.2 +1.4
HKT pmax pmax
comp=Z,2µm,1.1s
**W52A Murphy** 47.55 345 P **P** 09 11 47.7 +0.3
W52A IAmb IAmb 09 11 55.2
comp=Z,6µm,0.9s
**833A Chaparral WMA,** 47.92 325 P **P** 09 11 51.4 +1.3
833A IAmb IAmb 09 11 58.9
comp=Z,3µm,0.9s
**833A Chaparral WMA,** 47.92 325 P **P** 09 11 51.5 +1.3
baz=141,SNR=395
833A S **S** 09 18 02.1 -1.2
baz=141
**U56A King** 48.01 350 P **P** 09 11 51.9 +1.1
**W50A Signal Mountai** 48.01 344 P **P** 09 11 50.9 +0.1
**CPCT Cooper Cave** 48.04 345 P **P** 09 11 51.1 +0.1
CPCT IAmb IAmb 09 11 58.5
comp=Z,5µm,1.0s
**TKL Tuckaleechee C** 48.05 346 P **P** 09 11 51.1 0.0
**TKL Tuckaleechee C** 48.05 346 P **P** 09 11 51.1 0.0
comp=Z,533nm,0.4s
comp=Z,533nm,0.4s
**Y45A Yeager Farm, C** 48.09 339 P **P** 09 11 51.5 +0.1
**NATX Nacogdoches** 48.31 333 ⇓P **P** 09 11 54.6 +1.6
**U54A Nelsons Funny** 48.45 348 P **P** 09 11 54.7 +0.6
**OXF Oxford** 48.63 340 P **P** 09 11 54.5 -0.8
**OXF Oxford** 48.63 340 ⇓P **P** 09 11 54.2 -1.1
**OXF Oxford** 48.63 340 P **P** 09 11 54.5 -0.8
OXF pmax pmax
comp=Z,12µm,1.3s
**TZTN Tazewell** 48.85 346 ⇓P **P** 09 11 56.9 0.0
**435B Jarrell** 48.90 329 P **P** 09 11 58.5 +1.1
baz=144
435B S **S** 09 18 17.0 +0.4
baz=144
**237A Washetta, Mont** 49.04 332 P **P** 09 11 59.8 +1.4
**CLTN Cedars of Leba** 49.13 343 P **P** 09 11 58.6 -0.3
**CBN Corbin Frederi** 49.40 353 ⇓P **P** 09 12 01.1 +0.2
**H06E1 SOCORRO T-PHAS** 49.41 307 P **P** 09 12 03.3 +1.9
**H06S1 SOCORRO T** 49.41 306 P **P** 09 12 03.5 +2.2
**WVT Waverly** 49.60 342 ⇑P **P** 09 12 00.3 -2.1
**WVT Waverly** 49.60 342 ⇓P **P** 09 12 01.4 -1.1
WVT PcP **PcP** 09 13 12.1 +0.1
WVT pP **pP** 09 13 53.6 -1.5
**JCT Junction City** 49.81 327 ⇓P **P** 09 12 04.7 +0.5
**X40A Basin Creek Fa** 49.88 336 P **P** 09 12 04.9 +0.4
**UALR University of** 49.94 337 P **P** 09 12 04.7 -0.3
UALR IAmb IAmb 09 12 12.2
comp=Z,6µm,1.0s
**FW14 Alvarado** 50.02 331 P **P** 09 12 06.2 +0.7
FW14 IAmb IAmb 09 14 07.0
comp=Z,6µm,1.3s
**BRDY Brady** 50.02 328 P **P** 09 12 06.0 +0.3
**FW13 Cleburne** 50.10 330 P **P** 09 12 07.1 +1.0
FW13 IAmb IAmb 09 14 07.6

comp=Z,6µm,1.2s
**LNXT Lenox** 50.10 340 P **P** 09 12 05.7 -0.4
**MIAR Mount Ida** 50.23 335 ⇓P **P** 09 12 06.8 -0.2
**HPIG** 50.69 319 ⇓P **P** 09 12 11.6 +0.8
**FCAR Ozark Folk Cen** 50.84 338 P **P** 09 12 10.9 -0.5
FCAR IAmb IAmb 09 12 18.2
comp=Z,5µm,1.0s
**HOPE Hope Point** 50.98 155 ⇓P **P** 09 12 13.8 +1.7
**X37A Clayton** 51.02 334 P **P** 09 12 13.8 +1.0
X37A IAmb IAmb 09 12 21.1
comp=Z,3µm,0.8s
**PBMO Poplar Bluff** 51.03 340 P **P** 09 12 12.6 -0.2
**MVL Millersville** 51.06 355 P **P** 09 12 13.2 +0.3
MVL IAmb IAmb 09 12 20.7
comp=Z,4µm,0.9s
**WCI Wyandotte Cave** 51.12 344 ⇓P **P** 09 12 12.8 -0.6
**TXAR Lajitas Array** 51.14 323 P **P** 09 12 14.5 +0.7
comp=Z,169nm,0.5s,baz=156,slow=8.5,SNR=1959
TXAR PcP **PcP** 09 13 20.6 +2.4
comp=Z,176nm,0.5s,baz=136,slow=5.2,SNR=9.0
TXAR pP **pP** 09 14 08.9 +1.2
comp=Z,189nm,0.9s,baz=133,slow=8.8,SNR=2.9
TXAR S **S** 09 18 46.8 -0.2
comp=Z,22nm,1.0s,baz=99,slow=5.6,SNR=0.9
TXAR P3KP 09 41 26.5
comp=Z,2.7nm,0.9s,baz=259,slow=0.5,SNR=3.7
TXAR PKPPKP P'P'df 09 42 27.5 -14
comp=Z,8.0nm,1.0s,baz=337,slow=1.2,SNR=4.5
TXAR P4KPbc 09 49 34.7
comp=Z,2.9nm,0.5s,baz=136,slow=6.9,SNR=32
comp=Z,169nm,0.5s
**MCWV Mont Chateau** 51.16 351 ⇓P **P** 09 12 14.4 +0.8
**Q51A Peebles** 51.18 348 P **P** 09 12 13.7 -0.1
Q51A IAmb IAmb 09 12 21.0
comp=Z,5µm,0.9s
**P53A Whipple** 51.24 350 P **P** 09 12 15.0 +0.7
**SLBS Sierra La Lagu** 51.52 312 ⇓P **P** 09 12 18.2 +1.6
SLBS PcP **PcP** 09 13 22.0 +2.4
SLBS pP **pP** 09 14 12.8 +2.1
**P52A Corning** 51.52 349 P **P** 09 12 16.1 -0.1
baz=166,SNR=1000
P52A S **S** 09 18 47.1 -4.5
baz=166
**SSPA Standing Stone** 51.85 353 ⇓P **P** 09 12 19.0 +0.4
**O53A New Philadelph** 51.95 350 P **P** 09 12 19.8 +0.4
baz=167,SNR=908
O53A S **S** 09 18 54.7 -2.6
baz=167
**P49A Miami Univ. Ec** 51.97 346 P **P** 09 12 18.6 -0.8
baz=163,SNR=1000
P49A S **S** 09 18 52.4 -5.1
baz=163
**MGMO Mountain Grove** 52.02 338 P **P** 09 12 19.5 -0.4
**WSPT Westport, CT** 52.03 358 P **P** 09 12 19.9 +0.1
WSPT IAmb IAmb 09 12 27.2
comp=Z,7µm,0.9s
**LPIG La Paz** 52.03 313 P **P** 09 12 20.9 +0.7
comp=Z,538nm,0.9s,baz=244,slow=0.9,SNR=47
comp=Z,538nm,0.9s
**TRNY Table Rock, Ra** 52.05 357 P **P** 09 12 19.8 -0.2
**ACSO Alum Creek Sta** 52.27 348 ⇓P **P** 09 12 21.4 -0.1
**M65A Busby, Falmout** 52.37 0 P **P** 09 12 22.4 +0.2
baz=180
M65A S **S** 09 19 00.1 -2.6
baz=180
**WMOK Wichita Mounta** 52.69 331 ⇓P **P** 09 12 24.6 -0.1
**VHRN Van Horn** 52.98 323 P **P** 09 12 27.7 +0.7
**M53A WI Miller and** 53.03 351 P **P** 09 12 27.4 +0.5
**M53A WI Miller and** 53.03 351 P **P** 09 12 27.5 +0.5
baz=168,SNR=948
M53A S **S** 09 19 08.6 -2.8
baz=168
**R40A Maddies Statio** 53.03 339 P **P** 09 12 26.6 -0.4
R40A IAmb IAmb 09 12 34.0
comp=Z,7µm,1.1s
**L59A Walton** 53.14 356 P **P** 09 12 28.1 +0.4
L59A IAmb IAmb 09 12 35.6
comp=Z,6µm,0.9s
**ALLY Alegheny Colle** 53.15 351 P **P** 09 12 28.2 +0.4
**BINY Binghamton** 53.22 355 ⇑P **P** 09 12 28.4 +0.1
**L61B Northampton** 53.28 358 P **P** 09 12 28.8 +0.1
baz=178,SNR=364
L61B S **S** 09 19 11.8 -2.9
baz=178
**HRV Adam Dziewonsk** 53.32 359 ⇓P **P** 09 12 29.2 +0.3
**T35A Sooner Cattle** 53.48 334 P **P** 09 12 30.6 +0.4
T35A IAmb IAmb 09 12 38.0
comp=Z,4µm,0.9s
**SACV Santiago Islan** 53.48 62 ⇓P **P** 09 12 31.4 +0.8
**PMSA Palmer Station** 53.84 176 ⇓P **P** 09 12 34.2 +2.0
**PMSA Palmer Station** 53.84 176 *e*P **P** 09 12 34.2 +2.0
**PMSA Palmer Station** 53.84 176 ⇓P **P** 09 12 34.1 +2.0
PMSA pP **pP** 09 14 28.1 -1.1
PMSA sP **sP** 09 15 35.4 -1.9
PMSA ScP **ScP** 09 16 28.1 +1.5
**MNTX Cornudas Mount** 53.87 323 ⇑P **P** 09 12 32.6 -0.5
**GC02 Grant County #** 54.01 333 P **P** 09 12 34.4 +0.4
**P40A Paris** 54.06 340 P **P** 09 12 33.9 -0.4
P40A IAmb IAmb 09 12 41.2
comp=Z,8µm,0.9s
**ELIS Ellis County** 54.08 331 P **P** 09 12 35.4 +0.9
ELIS IAmb IAmb 09 12 42.9
comp=Z,11µm,1.2s
**OK038 West end E0370** 54.10 332 P **P** 09 12 35.1 +0.5
OK038 IAmb IAmb 09 14 37.4
comp=Z,10µm,1.5s
**MSTX Muleshoe** 54.10 327 P **P** 09 12 35.1 +0.3
MSTX IAmb IAmb 09 12 42.5
comp=Z,5µm,1.4s
**HDIL Hopedale** 54.13 343 P **P** 09 12 33.6 -1.1
HDIL IAmb IAmb 09 12 40.8
comp=Z,8µm,1.1s
**HDIL Hopedale** 54.13 343 ⇓P **P** 09 12 33.5 -1.1
**AMTX Amarillo** 54.24 329 ⇓P **P** 09 12 36.0 +0.3
**AAM Ann Arbor** 54.39 348 ⇑P **P** 09 12 36.0 -0.4
**PECO Prince Edward** 55.02 355 P **P** 09 12 40.8 0.0
PECO IAmb IAmb 09 12 48.3
comp=Z,8µm,1.1s
**LBNH Lisbon** 55.05 359 P **P** 09 12 41.5 +0.4
LBNH IAmb IAmb 09 12 49.2
comp=Z,5µm,1.0s
**LBNH Lisbon** 55.05 359 ⇓P **P** 09 12 41.6 +0.6
**LBNH Lisbon** 55.05 359 P **P** 09 12 41.5 +0.4
LBNH pmax pmax
comp=Z,5µm,1.0s
**VT1 Waterbury** 55.16 358 P **P** 09 12 42.3 +0.5
**L44A Lake County Fo** 55.26 345 P **P** 09 12 41.4 -1.1
L44A IAmb IAmb 09 12 48.6
comp=Z,7µm,0.9s
**L44A Lake County Fo** 55.26 345 P **P** 09 12 41.4 -1.1
baz=160,SNR=76
L44A S **S** 09 19 33.8 -6.6
baz=160
**H10S3 ASCENSION HYDR** 55.31 93 P **P** 09 12 44.0 +0.9
**H10S2 ASCENSION HYDR** 55.33 93 P **P** 09 12 44.2 +0.9
**SRIG Santa Rosalia** 55.38 314 ⇓P **P** 09 12 44.7 +1.1
**KSU1 Kansas State U** 55.38 336 ⇓P **P** 09 12 43.2 -0.2
**WVL Waterville** 55.38 1 P **P** 09 12 44.1 +0.9
WVL IAmb IAmb 09 12 51.5
comp=Z,4µm,1.1s
**LONY Lake Ozonia** 55.53 357 ⇓P **P** 09 12 44.6 +0.2
**H10N3 ASCENSION HYDR** 55.62 92 P **P** 09 12 46.1 +0.8
baz=255,slow=7.2,SNR=148
**H10N2 ASCENSION HYDR** 55.63 92 P **P** 09 12 46.1 +0.8
baz=255,slow=7.2,SNR=217
**H10N1 ASCENSION HYDR** 55.64 92 P **P** 09 12 46.1 +0.7
baz=255,slow=7.2,SNR=245
**121A Cookes Peak, D** 55.89 322 P **P** 09 12 48.9 +1.6
baz=135,SNR=558
121A S **S** 09 19 50.7 +1.3
baz=135
**RTBA Rita Blanca** 55.99 329 P **P** 09 12 48.5 +0.6
**319A Douglas** 56.02 320 P **P** 09 12 49.5 +1.4
**G62A West of Eustis** 56.03 0 P **P** 09 12 48.8 +1.1
**GGN Saint George** 56.04 3 P **P** 09 12 48.3 +0.5
GGN IAmb IAmb 09 12 56.0
comp=Z,7µm,1.2s
**SADO Sadowa** 56.08 353 ⇓P **P** 09 12 47.9 -0.2
**SADO Sadowa** 56.08 353 P **P** 09 12 47.9 -0.2
comp=Z,704nm,0.4s,baz=186,slow=7.7,SNR=1056
comp=Z,704nm,0.4s
**G65A Princeton** 56.09 3 P **P** 09 12 49.0 +0.9
G65A IAmb IAmb 09 12 56.2
comp=Z,7µm,0.9s
**PKME Peaks-Kenny Pk** 56.09 1 ⇓P **P** 09 12 48.9 +0.7

**CBKS Cedar Bluff 56.47 333 ⇓P P 09 12 51.7 +0.8**
**Y22D IRIS PASSCAL I 56.48 324 P P 09 12 52.8 +1.6**
baz=136,SNR=61
Y22D S S 09 19 57.5 +0.8
baz=136
**JFWS Jewell Farm 56.58 343 ⇓P P 09 12 51.0 -0.5**
**SCIA State Center 56.59 340 ⇓P P 09 12 51.1 -0.5**
**ANMO Albuquerque 56.85 325** *i*P P 09 12 54.5 +0.7
ANMO pmax pmax
comp=Z,1μm,2.2s
**ANMO Albuquerque 56.85 325 ⇓P P 09 12 54.7 +0.9**
ANMO PcP PcP 09 13 41.7 +1.4
ANMO pP pP 09 14 51.1 -0.4
ANMO PP PP 09 15 11.4 +0.8
ANMO sP sP 09 15 58.3 0.0
**GLMI Grayling 57.01 348 P P 09 12 53.9 -0.6**
GLMI lAmb lAmb 09 13 01.9
comp=Z,9μm,0.9s
**GLMI Grayling 57.01 348 ⇓P P 09 12 53.8 -0.7**
**SMAI San Martin Ant 57.05 178 P P 09 12 56.2 +1.8**
**I42A Draeger Farm, 57.12 345 P P 09 12 54.9 -0.3**
I42A lAmb lAmb 09 13 02.2
comp=Z,7μm,1.1s
**TRQ Mont Tremblant 57.13 357 P P 09 12 55.2 -0.1**
TRQ lAmb lAmb 09 13 02.8
comp=Z,7μm,1.1s
**T25A Trinidad 57.38 328 P P 09 12 58.8 +1.3**
baz=140,SNR=718
T25A S S 09 20 09.3 +1.0
baz=140
**TUC Tucson 57.59 320 ⇓P P 09 12 59.8 +1.0**
**TUC Tucson 57.59 320 ⇓P P 09 12 59.8 +1.0**
TUC PcP PcP 09 13 44.4 +1.2
TUC pP pP 09 14 56.0 -1.0
TUC sP sP 09 16 01.8 -1.8
**KSCO Kaye Shedlock' 57.96 331 P P 09 13 02.1 +1.0**
KSCO lAmb lAmb 09 13 09.7
comp=Z,7μm,1.2s
**BATG Bathurst New B 58.24 4 P P 09 13 03.4 +0.7**
BATG lAmb lAmb 09 13 10.6
comp=Z,6μm,0.9s
**LMQ La Malbaie 58.36 0 P P 09 13 03.9 +0.4**
**H09W1 TRISTAN DA CUN 58.37 127 P P 09 13 04.7 +0.9**
SNR=52
**H09N1 TRISTAN DA CUN 58.38 127 P P 09 13 04.8 +0.9**
SNR=28
**TRIS Tristan da Cun 58.38 127 P P 09 13 04.7 +0.8**
**TRIS Tristan da Cun 58.38 127** ⇓*i*P P 09 13 04.4 +0.5
TRIS lAmb lAmb 09 13 08.4
comp=Z,3μm,0.8s
**TRIS Tristan da Cun 58.38 127 P P 09 13 04.4 +0.5**
TRIS pP pP 09 15 04.6 +2.1
**SDCO Great Sand Dun 58.41 328 ⇓P P 09 13 05.7 +1.3**
**E46A Sault Ste Mari 58.44 349 P P 09 13 03.4 -0.6**
E46A lAmb lAmb 09 13 10.7
comp=Z,7μm,0.8s
**214A Organ Pipe Nat 58.66 318 P P 09 13 07.6 +1.7**
baz=130
214A S S 09 20 27.1 +2.8
baz=130
**F42A Maple Grove Fa 58.67 346 P P 09 13 05.0 -0.6**
F42A lAmb lAmb 09 13 12.4
comp=Z,10μm,1.6s
**LDAQ Lac Daran 58.77 360 P P 09 13 07.0 +0.7**
LDAQ lAmb lAmb 09 13 14.2
comp=Z,8μm,0.9s
**W18A Petrified Fore 58.86 323 P P 09 13 08.8 +1.5**
baz=134,SNR=98
W18A S S 09 20 28.4 +1.6
baz=134
**S22A 4UR Ranch, Cre 59.11 327 P P 09 13 10.2 +1.1**
**S22A 4UR Ranch, Cre 59.11 327 P P 09 13 10.5 +1.4**
baz=138
S22A S S 09 20 30.9 +0.7
baz=138
**MBO M'Bour 59.12 66 P P 09 13 11.1 +2.0**
**Q24A Divide 59.15 329 P P 09 13 10.3 +1.0**
**Q24A Divide 59.15 329 P P 09 13 10.5 +1.1**
baz=140,SNR=442
Q24A S S 09 20 32.6 +1.9
baz=140
**VLDQ Val d'Or 59.21 355 P P 09 13 09.6 +0.5**
VLDQ lAmb lAmb 09 13 16.9
comp=Z,5μm,0.9s
**OGNE Ogallala 59.23 333 ⇓P P 09 13 10.7 +1.2**
**COWI Conover 59.23 345 ⇓P P 09 13 09.0 -0.4**
**ECSD EROS Data Cent 59.37 339 P P 09 13 10.3 0.0**
ECSD lAmb lAmb 09 13 17.8
comp=Z,10μm,1.4s
**ECSD EROS Data Cent 59.37 339 ⇓P P 09 13 10.2 -0.2**
**X16A Lo Mia Camp, P 59.41 321 P P 09 13 12.8 +1.8**
**SPMN Marine on St. 59.44 342 P P 09 13 10.2 -0.5**
SPMN lAmb lAmb 09 13 17.6
comp=Z,4μm,0.8s
**SFX San Felipe 59.45 316 P P 09 13 12.3 +1.3**
**MVCO Mesa Verde 59.62 326 P P 09 13 13.6 +1.2**
**MVCO Mesa Verde 59.62 326 ⇓P P 09 13 13.6 +1.2**
**BRIGG Briggsdale 59.99 331 P P 09 13 16.4 +1.8**
BRIGG lAmb lAmb 09 15 23.1
comp=Z,9μm,1.4s
**Y14A Wickenburg 60.06 320 P P 09 13 16.7 +1.5**
**WUAZ Wupatki 60.10 322 ⇓P P 09 13 17.2 +1.7**
**SMCO Snowmass 60.24 328 ⇓P P 09 13 18.0 +1.4**
**PV01 Paradox Valley 60.33 326 P P 09 13 18.6 +1.5**
**ICQ Pointe Anglais 60.41 3 P P 09 13 17.4 +0.4**
ICQ lAmb lAmb 09 13 24.6
comp=Z,10μm,0.9s
**PV17 East Wray Mesa 60.65 326 P P 09 13 20.2 +1.1**
**BLYC Blythe 60.91 319 P P 09 13 22.3 +1.6**
**N23A Red Feather La 61.02 330 P P 09 13 22.6 +1.0**
**N23A Red Feather La 61.02 330 P P 09 13 22.7 +1.2**
baz=140,SNR=343
N23A S S 09 20 54.3 +0.6
baz=140
**DRLN Deer Lake 61.21 10 ⇓P P 09 13 22.4 +0.1**
**RMX La Rumorosa 61.23 317 P P 09 13 24.2 +1.3**
**EYMN Ely 61.55 344 ⇓P P 09 13 24.0 -0.6**
**O20A White River Ci 61.61 328 P P 09 13 26.6 +1.2**
**KNB Kanab 61.98 323 P P 09 13 29.9 +2.2**
**KNB Kanab 61.98 323 P P 09 13 30.0 +2.2**
KNB pmax pmax
comp=Z,11μm,1.1s
**RKT Rikitea 62.03 250** *e*P P 09 13 25.6 -2.6
comp=Z,31μm,28.8s
**RKT Rikitea 62.03 250** *e*P P 09 13 27.3 -0.9
comp=Z,3μm,1.5s
RKT *e*pP **pP 09 15 25.3 -5.0**
comp=Z,53μm,36.2s
RKT *e*pP **pP 09 15 33.2 +2.9**
comp=Z,2μm,1.4s
RKT *e*S **S 09 21 05.7 -0.5**
comp=Z,34μm,22.5s
RKT *e*S S 09 21 07.2 +1.0
comp=Z,177μm,25.0s
RKT *e*sS **sS 09 24 39.5 -3.0**
comp=Z,197μm,31.2s
RKT *e*SS **SS 09 25 18.5 -6.3**
comp=Z,24μm,24.7s
RKT *e*LR LR 09 32 57.4
comp=Z,95μm,33.2s
**TPFO Pinon Flats 62.09 318 P P 09 13 30.2 +1.7**
baz=128,SNR=290
TPFO S S 09 21 11.4 +4.6
baz=128
**PFO Pinyon Flats O 62.09 318 P P 09 13 30.1 +1.6**
**PFO Pinyon Flats O 62.09 318** *i*P P 09 13 29.8 +1.3
PFO *i* *PP **pP 09 15 28.4 -1.2**
PFO pmax pmax
comp=Z,1μm,1.3s
**PFO Pinyon Flats O 62.09 318 ⇓P P 09 13 30.1 +1.6**
PFO PcP PcP 09 14 02.1 +0.7
PFO pP pP 09 15 29.4 -0.1
**SRU San Rafael Swe 62.09 326 P P 09 13 29.7 +1.2**
**SRU San Rafael Swe 62.09 326 P P 09 13 29.7 +1.2**
SRU pmax pmax
comp=Z,3μm,1.1s
**H07S1 FLORES T-PHASE 62.27 34** *e*P P 09 13 29.5 +0.1
comp=Z,8μm,1.2s
**H07S1 FLORES T-PHASE 62.27 34** *e*P **P'P'bc 09 42 28.5 -5.2**
**H07S1 FLORES T-PHASE 62.27 34 P P 09 13 30.5 +1.1**
**V12A Nelson 62.37 320 P P 09 13 31.9 +1.6**
**H07N1 FLORES T-PHASE 62.54 34** *e*S S 09 21 13.3 +1.5
**H07N1 FLORES T-PHASE 62.54 34** *e*P **P'P'bc 09 42 35.2 +2.2**
**H07N1 FLORES T-PHASE 62.54 34 P P 09 13 32.1 +1.0**

**RSSD Black Hills 62.66 334 ⇓P P 09 13 33.1 +1.1**
**RSSD Black Hills 62.66 334 ⇓P P 09 13 33.2 +1.2**
RSSD PcP PcP 09 14 04.5 +0.9
RSSD pP pP 09 15 32.4 -0.9
RSSD PP PP 09 16 01.9 +0.6
**ELS Elsinore Mount 62.76 317 P P 09 13 34.2 +1.5**
**SHPR Sheep Range 63.06 321 P P 09 13 36.6 +1.9**
**PFCBR Castelo Branco 63.09 36** *e*P **P 09 13 36.4 +1.8**
comp=Z,3μm,1.5s
PFCBR *e*S **S 09 21 24.6 +6.2**
PFCBR *e*P **sS 09 24 57.9 +2.1**
**PFCBR Castelo Branco 63.09 36** *e*P **P'P'bc 09 42 27.8 -3.9**
**AGMN Agassiz Nation 63.13 342 P P 09 13 34.8 +0.2**
AGMN lAmb lAmb 09 13 41.9
comp=Z,6μm,0.9s
**AGMN Agassiz Nation 63.13 342 ⇓P P 09 13 34.7 0.0**
**CALA Caldeira 63.14 36** *e*P **P 09 13 35.7 +0.7**
comp=Z,12μm,1.5s
CALA *e*P **sP 09 16 42.0 -0.2**
CALA *e*S **S 09 21 23.2 +4.0**
CALA *e*P **sS 09 24 49.8 -6.8**
**CALA Caldeira 63.14 36** *e*P **P'P'bc 09 42 33.9 +2.2**
**HOR Horta 63.14 36** *e*P **P 09 13 36.0 +1.1**
comp=Z,8μm,1.5s
HOR *e*pP **pP 09 15 38.0 +1.5**
HOR *e*S **S 09 21 17.6 -1.4**
**HOR Horta 63.14 36** *e*P **P'P'bc 09 42 31.2 -0.4**
**PCED Cedros 63.17 36** *e*P **P 09 13 36.9 +1.8**
comp=Z,12μm,1.5s
PCED *e*P **sP 09 16 39.3 -3.0**
PCED *e*S **S 09 21 26.1 +6.7**
**PCED Cedros 63.17 36** *e*P **P'P'bc 09 42 27.8 -3.7**
**PCAN Candelaria 63.18 36** *e*P **P 09 13 35.7 +0.5**
comp=Z,6μm,1.3s
PCAN *e*S **S 09 21 21.3 +1.7**
**PCAN Candelaria 63.18 36** *e*P **P'P'bc 09 42 29.9 -1.7**
**PICO Pico 63.24 36** *e*P **P 09 13 38.0 +2.3**
comp=Z,9μm,1.7s
PICO *e*P **sP 09 16 39.3 -3.6**
PICO *e*S **S 09 21 20.0 -0.4**
PICO *e*P **sS 09 24 51.1 -6.9**
**PICO Pico 63.24 36** *e*P **P'P'bc 09 42 33.2 +1.7**
**SHEL Horse Pasture 63.29 102 P P 09 13 37.1 +0.7**
**SHEL Horse Pasture 63.29 102** ⇓*i*P P 09 13 36.5 +0.1
SHEL lAmb lAmb 09 13 42.0
comp=Z,18μm,2.4s
**SHEL Horse Pasture 63.29 102 ⇓P P 09 13 37.1 +0.7**
**SHEL Horse Pasture 63.29 102 P P 09 13 37.1 +0.7**
SHEL pmax pmax
comp=Z,1μm,0.9s
**E28A Huff 63.30 337 P P 09 13 37.2 +1.3**
**PPNO Prainha do Nor 63.32 36** *e*P **P 09 13 37.4 +1.3**
comp=Z,7μm,1.3s
PPNO *e*S **S 09 21 22.7 +1.4**
**PPNO Prainha do Nor 63.32 36** *e*P **P'P'bc 09 42 28.5 -2.8**
**MPU Maple Canyon 63.34 326 P P 09 13 38.0 +1.6**
MPU lAmb lAmb 09 13 45.3
comp=Z,4μm,1.2s
**PID Ribeirinha 63.38 37** *e*P **P 09 13 38.3 +1.8**
comp=Z,10μm,1.7s
PID *e*P **sP 09 16 39.3 -4.5**
PID *e*S **S 09 21 24.0 +2.0**
**PID Ribeirinha 63.38 37** *e*P **P'P'bc 09 42 31.9 +0.8**
**ROSA Rosais 63.50 36** *e*P **P 09 13 35.1 -2.1**
comp=Z,14μm,1.4s
ROSA *e*S **S 09 21 25.3 +1.9**
ROSA *e*P **sS 09 25 01.9 +0.7**
ROSA *e*P **sS 09 25 05.9 +4.7**
**ROSA Rosais 63.50 36** *e*P **P'P'bc 09 42 31.9 +1.2**
**ROSA Rosais 63.50 36 ⇓P P 09 13 38.7 +1.5**
**PMAN Manadas 63.53 36** *e*P **P 09 13 38.8 +1.4**
comp=Z,10μm,1.3s
**PMAN Manadas 63.53 36** *e*P **P'P'bc 09 42 29.9 -0.8**
**PRN Pahroc Range 63.57 322 ⇓P P 09 13 40.0 +2.1**
**SRBC Serra Branca 63.83 36** *e*P P 09 13 22.2 -17
comp=Z,27μm,1.2s
SRBC *e*S S 09 21 10.6 -17
**SRBC Serra Branca 63.83 36** *e*P P'P'bc 09 42 09.7 -20
**I42PT GRACIOSA ISLAN 63.85 36 P P 09 13 40.0 +0.6**
baz=157,slow=4.0,SNR=5.0
**PGRA Graciosa 63.85 36** *e*P P 09 13 50.9 +11
comp=Z,17μm,0.8s
PGRA *e*P sP 09 16 56.7 +10
PGRA *e*S S 09 21 37.4 +10
PGRA *e*P sS 09 25 17.9 +12
**MDND Maddock 63.98 339 P P 09 13 41.3 +1.2**
**TCUT Toone Canyon 63.99 327 P P 09 13 42.0 +1.4**
TCUT lAmb lAmb 09 13 49.4
comp=Z,8μm,1.2s
**TPNV Topopah Spring 64.02 321 P P 09 13 43.0 +2.2**
**TPNV Topopah Spring 64.02 321 P P 09 13 43.0 +2.2**
TPNV pmax pmax
comp=Z,3μm,1.0s
**ADH Angra Heroismo 64.04 37** *e*P **P 09 13 41.0 +0.4**
comp=Z,12μm,1.4s
ADH *e*pP **pP 09 15 42.5 -0.3**
ADH *e*S **S 09 21 30.7 +0.8**
**ADH Angra Heroismo 64.04 37** *e*P **P'P'bc 09 42 27.2 -2.2**
**CCAC Calif City Air 64.05 318 P P 09 13 42.6 +1.8**
**PSBA Serra de Santa 64.06 37** *e*P **P 09 13 42.2 +1.4**
comp=Z,16μm,1.2s
PSBA *e*pP **pP 09 15 44.5 +1.5**
PSBA *e*P **sP 09 16 48.1 -0.3**
PSBA *e*S **S 09 21 30.7 +0.5**
**PSBA Serra de Santa 64.06 37** *e*P **P'P'bc 09 42 27.2 -2.1**
**DUG Dugway, Tooele 64.12 325 P P 09 13 43.2 +1.9**
DUG lAmb lAmb 09 13 50.4
comp=Z,5μm,1.1s
**DUG Dugway, Tooele 64.12 325** ⇑P **P 09 13 43.0 +1.6**
**DUG Dugway, Tooele 64.12 325 P P 09 13 43.2 +1.9**
DUG pmax pmax
comp=Z,5μm,1.1s
**PSCM Serra do Cume 64.14 37** *e*P **P 09 13 42.2 +0.9**
comp=Z,9μm,1.2s
PSCM *e*pP **pP 09 15 44.3 +0.8**
PSCM *e*P **sP 09 16 42.0 -6.9**
PSCM *e*S **S 09 21 32.0 +0.9**
**PSCM Serra do Cume 64.14 37** *e*P **P'P'bc 09 42 25.8 -3.3**
**PAGU Agualva, Azore 64.15 37** *e*P **P 09 13 42.2 +0.9**
comp=Z,12μm,1.5s
PAGU *e*pP **pP 09 15 45.4 +1.9**
PAGU *e*P **sP 09 16 48.7 -0.2**
PAGU *e*S **S 09 21 30.7 -0.4**
**PAGU Agualva, Azore 64.15 37** *e*P **P'P'bc 09 42 28.5 -0.6**
**BW06 Boulder Array 64.21 329 P P 09 13 42.6 +0.7**
BW06 lAmb lAmb 09 13 50.0
comp=Z,5μm,1.5s
**BW06 Boulder Array 64.21 329 ⇓P P 09 13 42.5 +0.5**
**PD31 Pinedale Array 64.21 329 P P 09 13 42.6 +0.6**
PD31 lAmb lAmb 09 13 50.0
comp=Z,5μm,1.5s
**PDAR Pinedale Array 64.21 329 P P 09 13 42.5 +0.5**
comp=Z,314nm,0.4s,baz=124,slow=9.1,SNR=3578
PDAR pP **pP 09 15 44.6 +0.4**
comp=Z,579nm,1.1s,baz=140,slow=7.2,SNR=5.5
PDAR S **S 09 21 30.9 -1.4**
comp=Z,14nm,1.1s,baz=54,slow=41,SNR=1.3
PDAR PKPPKP P'P'df 09 42 12.2 -10
comp=Z,8.5nm,0.8s,baz=76,slow=1.8,SNR=6.0
PDAR P4KPbc 09 50 31.1
comp=Z,7.9nm,0.8s,baz=123,slow=6.6,SNR=19
comp=Z,314nm,0.4s
**PSMA Santa Maria 64.26 40** *e*P **P 09 13 42.8 +0.8**
comp=Z,5μm,1.1s
PSMA *e*P **sP 09 16 44.7 -5.0**
PSMA *e*S **S 09 21 30.7 -1.8**
**PSMA Santa Maria 64.26 40** *e*P P'P'bc 09 42 20.4 -8.6
**PSMN Pico do Norte, 64.30 40** *e*P **P 09 13 42.9 +0.6**
comp=Z,7μm,1.8s
PSMN *e*P **sP 09 16 48.7 -1.3**
PSMN *e*S **S 09 21 32.0 -1.1**
**PSMN Pico do Norte, 64.30 40** *e*P P'P'bc 09 42 19.8 -9.1
**PSET Sete Cidades 64.42 38** *e*P **P 09 13 44.8 +1.7**
PSET *e*pP **pP 09 15 48.7 +3.3**
PSET *e*P **sP 09 16 50.0 -0.8**
PSET *e*S **S 09 21 37.4 +3.0**
**PSET Sete Cidades 64.42 38** *e*P **P'P'bc 09 42 29.9 +1.3**
**HWUT Hardware Ranch 64.42 327 ⇓P P 09 13 44.1 +0.9**
**CMLA Cha da Macela 64.50 39 P P 09 13 45.0 +1.4**
CMLA lAmb lAmb 09 13 51.8
comp=Z,9μm,1.1s
**CMLA Cha da Macela 64.50 39** *e*P **P 09 13 45.5 +1.9**
comp=Z,10μm,0.6s

CMLA *e*pP **pP 09 15 49.2 +3.2**
CMLA *e*P **sP 09 16 48.7 -2.6**
**CMLA Cha da Macela 64.50 39 ⇓P P 09 13 45.0 +1.4**
**CMLA Cha da Macela 64.50 39** *e*P **P 09 13 45.1 +1.5**
**CMLA Cha da Macela 64.50 39 ⇓P P 09 13 44.9 +1.4**
CMLA PcP **PcP 09 14 12.7 +1.6**
CMLA pP **pP 09 15 46.0 +0.1**
**Q12A Willow Creek R 64.50 323 P P 09 13 45.7 +1.9**
**R11B Troy Canyon, C 64.50 322 P P 09 13 45.9 +2.1**
baz=130,SNR=1000
R11B S S 09 21 39.6 +3.8
baz=130
**PCALD Caldeiras da R 64.54 39** *e*P **P 09 13 45.6 +1.8**
comp=Z,12μm,1.4s
PCALD *e*pP **pP 09 15 48.9 +2.7**
PCALD *e*P **sP 09 16 51.4 -0.2**
PCALD *e*S **S 09 21 37.4 +1.5**
**PCALD Caldeiras da R 64.54 39** *e*P P'P'bc 09 42 18.4 -10
**PGRON Lagoa das Cont 64.59 39** *e*P **P 09 13 45.6 +1.4**
comp=Z,15μm,1.2s
PGRON *e*pP **pP 09 15 46.4 -0.3**
PGRON *e*P **sP 09 16 52.7 +0.7**
PGRON *e*S S 09 21 38.7 +2.1
**PGRON Lagoa das Cont 64.59 39** *e*P P'P'bc 09 42 17.1 -11
**BART Pico Bartolome 64.72 39** *e*P **P 09 13 46.9 +1.8**
comp=Z,21μm,0.9s
BART *e*pP **pP 09 15 49.4 +1.8**
BART *e*P **sP 09 16 52.7 -0.2**
BART *e*S **S 09 21 34.7 -3.5**
**BART Pico Bartolome 64.72 39** *e*P **P'P'bc 09 42 27.2 -0.7**
**ULM Lac du Bonnet 64.86 343 P P 09 13 45.2 -0.3**
ULM lAmb lAmb 09 13 52.5
comp=Z,5μm,0.8s
**ULM Lac du Bonnet 64.86 343 ⇓P P 09 13 45.2 -0.3**
**ULM Lac du Bonnet 64.86 343 P P 09 13 45.3 -0.3**
comp=Z,2μm,0.4s,baz=152,slow=5.8,SNR=3157
ULM pP **pP 09 15 48.4 +0.2**
comp=Z,376nm,0.8s,baz=146,slow=7.1,SNR=2.5
ULM S S 09 21 30.0 -9.2
comp=Z,335nm,1.1s,baz=126,slow=10,SNR=11
ULM PKPPKP **P'P'df 09 42 20.1 +0.3**
comp=Z,28nm,0.7s,baz=351,slow=2.1,SNR=8.8
ULM P4KPbc 09 50 33.2
comp=Z,14nm,0.8s,baz=152,slow=4.3,SNR=12
comp=Z,2μm,0.4s
**I10CA LAC DU BONNET 64.87 342 P P 09 13 45.2 -0.4**
baz=152,slow=6.0,SNR=4.5
**AHID Auburn Hatcher 65.00 328 P P 09 13 47.8 +0.9**
**AHID Auburn Hatcher 65.00 328 ⇓P P 09 13 47.8 +0.9**
**HVU Hansel Valley 65.19 327 P P 09 13 49.0 +1.0**
HVU lAmb lAmb 09 13 56.3
comp=Z,4μm,1.2s
**HVU Hansel Valley 65.19 327 P P 09 13 49.0 +1.0**
HVU pmax pmax
comp=Z,4μm,1.2s
**LAO LASA Array 65.63 334 ⇓P P 09 13 51.6 +1.1**
**SCHQ Schefferville 65.74 3 P P 09 13 51.0 +0.1**
SCHQ lAmb lAmb 09 13 58.2
comp=Z,4μm,1.1s
**SCHQ Schefferville 65.74 3 P P 09 13 50.9 +0.1**
comp=Z,562nm,0.6s,baz=196,slow=5.8,SNR=337
SCHQ pP **pP 09 15 55.5 +1.5**
comp=Z,514nm,0.8s,baz=188,slow=8.6,SNR=2.0
SCHQ S S 09 21 46.0 -3.4
comp=Z,36nm,0.8s,baz=37,slow=20,SNR=1.3
SCHQ PKPPKP P'P'df 09 42 05.4 -13
comp=Z,17nm,0.9s,baz=34,slow=7.5,SNR=4.1
SCHQ P4KPbc 09 50 35.2
comp=Z,7.3nm,0.9s,baz=189,slow=5.6,SNR=3.1
comp=Z,562nm,0.6s
**RLMT Red Lodge 65.81 331** ⇑P **P 09 13 52.8 +1.0**
**ELK Elko 65.86 324 ⇓P P 09 13 53.4 +1.1**
**H17A Grant Village 65.90 330 P P 09 13 54.7 +2.2**
baz=137
H17A S S 09 21 55.4 +3.1
baz=137
**LKWY Lake 65.94 330 ⇓P P 09 13 55.2 +2.5**
**YFT Old Faithful 66.07 330 P P 09 13 56.1 +2.6**
YFT lAmb lAmb 09 14 03.6
comp=Z,5μm,1.1s
**NV11 Mina Array Sit 66.12 321 P P 09 13 55.2 +1.3**
**EOSO Osorio 66.14 53 S S 09 21 59.1 +3.7**
EOSO P P 09 13 55.4 +1.4
**DGMT Dagmar 66.21 336 ⇓P P 09 13 55.5 +1.5**
**NVAR Mina Array Bea 66.22 321 P P 09 13 56.1 +1.6**
comp=Z,241nm,0.7s,baz=127,slow=6.1,SNR=798
NVAR PcP **PcP 09 14 20.2 +1.6**
comp=Z,229nm,0.5s,baz=133,slow=4.8,SNR=25
NVAR pP **pP 09 15 58.1 +0.2**
comp=Z,199nm,1.0s,baz=144,slow=6.7,SNR=4.3
NVAR S S 09 21 57.0 +0.8
comp=Z,12nm,1.0s,baz=160,slow=2.9,SNR=1.2
NVAR PKPPKP P'P'df 09 42 10.7 -8.4
comp=Z,0.8nm,0.7s,baz=339,slow=28,SNR=9.2
NVAR P4KPbc 09 50 41.1
comp=Z,2.1nm,0.9s,baz=136,slow=5.6,SNR=6.6
comp=Z,241nm,0.7s
**YERR Yerington 67.14 321 P P 09 14 02.1 +1.9**
YERR lAmb lAmb 09 14 09.3
comp=Z,3μm,1.1s
**PMOZ Porto Moniz, M 67.24 47 P P 09 14 02.0 +1.2**
**PMOZ Porto Moniz, M 67.24 47** ⇓*i*P **P 09 14 02.1 +1.3**
comp=Z,6μm,1.6s
PMOZ *e*pP **pP 09 16 07.7 +3.0**
PMOZ *i* S **S 09 22 11.2 +3.1**
**PMOZ Porto Moniz, M 67.24 47 P P 09 14 02.1 +1.3**
**PMOZ Porto Moniz, M 67.24 47 ⇓P P 09 14 02.0 +1.3**
**SAO San Andreas Ge 67.25 318 P P 09 14 01.9 +1.3**
**SAO San Andreas Ge 67.25 318 ⇓P P 09 14 02.0 +1.3**
**SAO San Andreas Ge 67.25 318 P P 09 14 01.9 +1.3**
SAO pmax pmax
comp=Z,1μm,1.2s
**HLID Hailey 67.29 327 ⇓P P 09 14 02.6 +1.7**
**BOZ Bozeman (W) 67.29 330 ⇓P P 09 14 02.2 +1.4**
**MCMT McKenzie Canyo 67.35 329 P P 09 14 03.2 +1.9**
**FUL Funchal 67.37 48** ⇓*i*P **P 09 14 02.5 +1.1**
comp=Z,6μm,1.9s
FUL *e*pP **pP 09 16 09.1 +3.7**
FUL *e*S **S 09 22 12.0 +2.6**
**PMAR Madeira 67.39 48** ⇓*i*P **P 09 14 03.0 +1.2**
comp=Z,7μm,1.7s
PMAR *e*pP **pP 09 16 08.7 +2.9**
PMAR *e*S **S 09 22 11.8 +1.8**
**LRM Limekiln Ridge 67.85 330 P P 09 14 05.8 +1.4**
**PMPS Porto Santo 67.98 48** ⇓*i*P **P 09 14 06.3 +1.2**
comp=Z,13μm,1.6s
PMPS *e*pP **pP 09 16 12.1 +2.7**
PMPS *e*S **S 09 22 20.1 +3.7**
**PMPST Porto Santo, M 68.00 48** ⇓*i*P **P 09 14 06.8 +1.6**
comp=Z,14μm,1.7s
PMPST *e*pP **pP 09 16 12.8 +3.3**
PMPST *e*S **S 09 22 19.2 +2.6**
**DBIC Dimbokro 68.00 78** ⇓*i*P **P 09 14 06.4 +0.8**
**DBIC Dimbokro 68.00 78 ⇓P P 09 14 06.2 +0.7**
**DBIC Dimbokro 68.00 78 P P 09 14 06.3 +0.7**
comp=Z,2μm,0.4s,baz=247,slow=4.7,SNR=2526
DBIC S **S 09 22 15.8 -1.5**
comp=Z,198nm,1.1s,baz=81,slow=19,SNR=20
DBIC PKPPKP **P'P'df 09 42 11.2 -7.0**
comp=Z,19nm,0.8s,baz=80,slow=2.0,SNR=5.7
DBIC PKP2bc **P'P'df 09 42 18.1 -0.1**
comp=Z,16nm,0.8s,baz=93,slow=5.4,SNR=6.9
comp=Z,2μm,0.4s
**DBIC Dimbokro 68.00 78 ⇓P P 09 14 06.3 +0.7**
DBIC pP **pP 09 16 10.3 +0.4**
**DBIC Dimbokro 68.00 78 P P 09 14 06.3 +0.7**
**I17CI DIMBOKRO INFRA 68.00 78 P P 09 14 06.3 +0.7**
baz=254,slow=5.3,SNR=7.4
**TAOE Nuku Hiva Isla 68.15 265 P P 09 14 08.9 +2.3**
**TAOE Nuku Hiva Isla 68.15 265** *e*P **P 09 14 07.1 +0.5**
comp=Z,4μm,1.5s
TAOE *e*pP **pP 09 16 12.1 +0.1**
comp=Z,3μm,1.5s
TAOE *e*S **S 09 22 23.8 +4.5**
comp=Z,68μm,29.9s
TAOE *e*SS SS 09 26 35.2 -24
comp=Z,26μm,23.7s
TAOE *e*LQ LQ 09 32 47.2
comp=Z,31μm,26.5s
TAOE *e*LR LR 09 35 41.0
comp=Z,27μm,25.5s
**TAOE Nuku Hiva Isla 68.15 265 P P 09 14 08.7 +2.1**
TAOE lAmb lAmb 09 14 14.6
comp=Z,4μm,1.7s
**TAOE Nuku Hiva Isla 68.15 265** ⇑P **P 09 14 08.5 +1.9**

EGMT **Eagleton** 68.19 333 P **P** 09 14 07.4 +1.2
EGMT **Eagleton** 68.19 333 ⇓P **P** 09 14 07.3 +1.2
AFDM **Forest Hills D** 68.20 320 P **P** 09 14 07.6 +1.2
WVOR **Wild Horse Val** 68.89 324 ⇓P **P** 09 14 11.6 +1.0
MCCM **Marconi Confer** 68.97 318 ⇓P **P** 09 14 12.4 +1.5
OVMT **Ovando** 69.00 331 P **P** 09 14 12.7 +1.6
BELA **Belgrano 2** 69.28 172 P **P** 09 14 13.5 +1.4
BELA IAmb IAmb 09 14 15.4
comp=Z,5µm,1.5s
MSO **Missoula** 69.30 330 ⇓P **P** 09 14 14.5 +1.7
HOPS **Hopland Field** 69.57 319 P **P** 09 14 16.3 +1.8
BMO **Blue Mountains** 69.70 327 ⇓P **P** 09 14 16.4 +1.1
O02D **Mt. Diablo Mer** 70.05 320 P **P** 09 14 18.1 +0.6
KCPM **Cahto Peak** 70.28 319 P **P** 09 14 21.0 +2.1
F10A **Beach Ranch, E** 70.39 328 ⇓P **P** 09 14 20.7 +1.4
VNA3 **Neumayer Olymp** 70.51 163 ⇓P **P** 09 14 20.9 +1.4
comp=Z,925nm,0.6s
VNA3 ⇑S **S** 09 22 45.5 +1.4
comp=Z,47nm,0.8s
FFC **Flin Flon** 70.61 341 P **P** 09 14 20.7 +0.4
FFC IAmb IAmb 09 14 27.9
comp=Z,3µm,1.1s
FFC **Flin Flon** 70.61 341 *e*P **P** 09 14 20.6 +0.4
FFC **Flin Flon** 70.61 341 ⇓P **P** 09 14 20.5 +0.3
KMRM **Mail Ridge** 70.66 320 P **P** 09 14 23.0 +1.9
KMRM IAmb IAmb 09 14 30.3
comp=Z,4µm,1.2s
VNA1 **Neumayer--Stat** 70.70 162 ⇓P **P** 09 14 22.3 +1.7
comp=Z,2µm,0.8s
VNA1 ⇑S **S** 09 22 51.1 +5.0
comp=Z,131nm,1.2s
KMPM **Mount Pierce** 71.03 320 P **P** 09 14 25.3 +2.1
KMPM IAmb IAmb 09 14 32.5
comp=Z,3µm,1.1s
KHMM **Horse Mountain** 71.04 320 P **P** 09 14 25.2 +1.9
KHMM IAmb IAmb 09 14 32.3
comp=Z,2µm,1.0s
VNA2 **Neumayer--Watz** 71.07 162 ⇓P **P** 09 14 24.5 +1.8
comp=Z,893nm,0.6s,baz=294,slow=5.3
VNA2 ⇑S **S** 09 22 50.7 +0.4
comp=Z,90nm,1.7s,baz=264,slow=1.2
JCC **Jacoby Creek,** 71.20 320 P **P** 09 14 26.0 +2.0
JCC IAmb IAmb 09 14 33.2
comp=Z,4µm,1.2s
E09A **Wood Farm, Sta** 71.22 328 P **P** 09 14 25.3 +1.3
E09A IAmb IAmb 09 14 32.6
comp=Z,4µm,1.1s
KRPM **Rodgers** 71.38 320 P **P** 09 14 27.2 +2.1
KRPM IAmb IAmb 09 14 36.7
comp=Z,4µm,1.2s
HUMO **Hull Mountain** 71.55 322 P **P** 09 14 26.5 +0.4
HUMO **Hull Mountain** 71.55 322 ⇓P **P** 09 14 26.4 +0.4
NEW **Newport** 71.85 329 ⇓P **P** 09 14 28.4 +0.7
HAWA **Hanford** 71.89 327 ⇓P **P** 09 14 29.6 +1.7
D08A **Wollman Farm,** 71.98 328 P **P** 09 14 30.2 +1.7
D08A IAmb IAmb 09 14 37.5
comp=Z,6µm,1.3s
DBO **Dodson Butte** 72.02 322 P **P** 09 14 30.2 +1.4
K02D **Willamette Mer** 72.03 322 P **P** 09 14 30.7 +1.8
K02D IAmb IAmb 09 14 37.9
comp=Z,5µm,1.3s
E07A **Sunnyside** 72.16 327 P **P** 09 14 31.4 +1.9
E07A IAmb IAmb 09 14 38.8
comp=Z,5µm,1.3s
SNAA **Sanae** 72.71 162 P **P** 09 14 33.6 +1.2
SNAA **Sanae** 72.71 162 ⇓*i*P **P** 09 14 33.5 +1.2
SNAA IAmb IAmb 09 14 34.9
comp=Z,507µm,1.4s
SNAA **Sanae** 72.71 162 ⇓P **P** 09 14 33.5 +1.2
comp=Z,37µm,0.6s
SNAA ⇑S **S** 09 23 08.6 0.0
comp=Z,2µm,1.0s
SNAA **Sanae** 72.71 162 ⇓P **P** 09 14 33.4 +1.1
SNAA **Sanae** 72.71 162 P **P** 09 14 33.4 +1.1
comp=Z,936nm,0.5s,baz=280,slow=5.6
SNAA pP **pP** 09 16 41.8 +1.4
comp=Z,637nm,1.1s,baz=320,slow=4.4,SNR=3.1
SNAA S **S** 09 23 09.0 +0.4
comp=Z,218nm,1.2s,baz=50,slow=23,SNR=36
SNAA PKPPKP **P'P'df** 09 42 02.3 -5.6
comp=Z,92nm,1.2s,baz=137,slow=2.7,SNR=13
comp=Z,936nm,0.5s
SNAA **Sanae** 72.71 162*d* *i*P **P** 09 14 33.3 +1.1
SNAA pmax pmax
comp=Z,7µm,1.4s
COR **Corvallis** 72.90 324 ⇓P **P** 09 14 35.8 +2.1
LTY **Liberty** 73.04 327 P **P** 09 14 36.1 +1.5
LTY IAmb IAmb 09 14 43.5
comp=Z,3µm,1.2s
F04A **Amboy** 73.19 325 P **P** 09 14 36.9 +1.5
F04A IAmb IAmb 09 14 43.9
comp=Z,7µm,1.3s
HEBO **Mount Hebo** 73.52 324 P **P** 09 14 39.8 +2.4
HEBO IAmb IAmb 09 14 46.9
comp=Z,6µm,1.2s
TIO **Tiouine** 73.89 53 S **S** 09 23 24.4 +1.3
TIO P **P** 09 14 42.2 +2.4
E03A **Lebam** 74.19 325 P **P** 09 14 43.0 +2.0
E03A IAmb IAmb 09 14 50.2
comp=Z,6µm,1.2s
IVI **Ivigtut** 74.24 11 P **P** 09 14 41.5 +0.6
IVI **Ivigtut** 74.24 11 ⇓P **P** 09 14 41.3 +0.4
IVI **Ivigtut** 74.24 11 *i*P **P** 09 14 40.7 -0.2
IVI IAmb IAmb 09 14 48.2
comp=Z,8µm,1.1s
RADR **Rader Ridge** 74.25 325 P **P** 09 14 43.6 +2.2
RADR IAmb IAmb 09 14 50.8
comp=Z,8µm,1.4s
GNW **Green Mountain** 74.38 326 P **P** 09 14 43.2 +1.2
GNW IAmb IAmb 09 14 50.4
comp=Z,3µm,1.3s
TROLL **Troll, Antarti** 74.42 162 ⇓P **P** 09 14 43.7 +1.6
comp=Z,55µm,0.7s
TROLL ⇑S **S** 09 23 28.5 +1.1
comp=Z,3µm,1.1s
VAH **Vaihoa** 74.53 257 *e*P **P** 09 14 44.6 +1.0
comp=Z,2µm,1.4s
VAH *e*pP **pP** 09 16 52.9 +0.9
comp=Z,2µm,1.5s
VAH *e*S **S** 09 23 29.0 -1.2
comp=Z,42µm,26.1s
VAH *e*SS SS 09 28 07.8 -28
comp=Z,56µm,25.5s
VAH *e*LQ LQ 09 35 18.3
comp=Z,11µm,23.4s
VAH *e*LR LR 09 38 39.8
comp=Z,30µm,22.9s
MEH **Mehetia** 74.62 254 *e*LR LR 09 38 44.8
comp=Z,265µm,31.2s
AVE **Averroes** 74.73 51 S **S** 09 23 34.5 +2.7
AVE P **P** 09 14 46.6 +2.3
PMOR **Pomariorio Ree** 74.82 257 *e*P **P** 09 14 46.6 +1.4
comp=Z,3µm,1.5s
PMOR *e*pP **pP** 09 16 55.6 +2.4
comp=Z,3µm,1.5s
PMOR *e*S **S** 09 23 32.6 -0.7
comp=Z,26µm,24.2s
PMOR *e*SS SS 09 28 11.2 -29
comp=Z,42µm,26.7s
PMOR *e*LQ LQ 09 35 23.0
comp=Z,9µm,23.9s
PMOR *e*LR LR 09 38 42.6
comp=Z,31µm,23.1s
NLWA **Neilton Lookou** 74.85 326 ⇓P **P** 09 14 46.8 +2.1
B04A **Port Angeles** 75.05 326 P **P** 09 14 47.8 +2.1
B04A IAmb IAmb 09 14 55.1
comp=Z,4µm,1.2s
TBI **Tubuai** 75.32 249 *e*P **P** 09 14 44.4 -3.4
comp=Z,13µm,28.5s
TBI **Tubuai** 75.32 249 *e*P **P** 09 14 50.4 +2.6
comp=Z,590nm,0.9s
TBI *e*pP **pP** 09 16 52.1 -4.0
comp=Z,37µm,26.8s
TBI *e*pP **pP** 09 17 00.9 +4.8
comp=Z,1µm,1.3s
TBI *e*S **S** 09 23 35.9 -2.6
comp=Z,33µm,23.8s
TBI *e*S **S** 09 23 37.5 -1.0
comp=Z,342µm,39.0s
TBI *e*sS **sS** 09 27 22.6 -4.1
comp=Z,218µm,35.0s
TBI *e*LQ LQ 09 35 19.3
comp=Z,74µm,33.0s
TBI *e*LQ LQ 09 35 28.4
comp=Z,28µm,23.5s
TBI *e*LR LR 09 38 59.3
comp=Z,13µm,22.7s
TBI *e*LR LR 09 38 59.4
comp=Z,16µm,34.0s
TBI *e*LR LR 09 39 03.0
comp=Z,71µm,27.8s
PFVI **Vila Bisbo** 75.33 47 P **P** 09 14 49.6 +2.1
PFVI **Vila Bisbo** 75.33 47 ⇓*i*P **P** 09 14 49.7 +2.1
comp=Z,10µm,1.7s
PFVI *e*pP **pP** 09 16 56.8 +1.2
PFVI *i*S **S** 09 23 41.5 +3.5
PGC **Sidney** 75.37 327 P **P** 09 14 49.2 +1.8
PGC IAmb IAmb 09 14 56.5
comp=Z,7µm,1.3s
RTC **Rabat Centre** 75.44 50 S **S** 09 23 42.1 +2.8
RTC P **P** 09 14 50.2 +2.0
MORF **Marmelete** 75.53 47 ⇓*i*P **P** 09 14 51.1 +2.3
MORF *e*pP **pP** 09 16 57.5 +0.6
MORF *i*S **S** 09 23 43.6 +3.3
MORF **Marmelete** 75.53 47 *e*P **P** 09 14 51.0 +2.3
MORF IAmb IAmb 09 14 58.1
comp=Z,12µm,1.3s
MORF *e*S **S** 09 23 43.5 +3.3
MORF **Marmelete** 75.53 47 *e*P **P** 09 14 51.0 +2.3
MORF *e*S **S** 09 23 43.5 +3.3
PTEO **Sao Teotonio** 75.59 47 ⇓*i*P **P** 09 14 51.4 +2.5
comp=Z,16µm,1.7s
PTEO *e*pP **pP** 09 16 59.7 +2.6
PTEO *e*S **S** 09 23 44.1 +3.4
TVO **Taravao** 75.75 254 *e*P **P** 09 14 53.7 +3.3
comp=Z,534nm,1.4s
TVO *e*pP **pP** 09 17 00.4 +1.5
comp=Z,397nm,1.4s
TVO *e*S **S** 09 23 42.1 -1.4
comp=Z,7µm,23.2s
TVO **Taravao** 75.75 254 *e*LQ LQ 09 35 41.7
comp=Z,4µm,24.1s
TVO *e*LR LR 09 39 10.1
comp=Z,3µm,25.2s
LIS **Lisbon** 75.81 45 ⇓*i*P **P** 09 14 52.2 +2.1
comp=Z,6µm,2.1s
LIS *e*pP **pP** 09 17 00.1 +1.7
LIS *i*S **S** 09 23 46.3 +3.2
LIS **Lisbon** 75.81 45 *e*P **P** 09 14 52.2 +2.1
LIS IAmb IAmb 09 14 58.6
comp=Z,4µm,1.3s
LIS *e*S **S** 09 23 46.3 +3.2
LIS **Lisbon** 75.81 45 *e*P **P** 09 14 52.2 +2.1
LIS *e*S **S** 09 23 46.3 +3.2
PMAFR **Mafra** 75.83 45 S **S** 09 23 46.0 +2.7
PMAFR P **P** 09 14 52.2 +1.9
CLRS **Cowichan Lake** 75.83 327 P **P** 09 14 51.6 +1.6
TORD **Torodi Ar. Bea** 75.90 73 P **P** 09 14 51.7 +0.5
TORD **Torodi Ar. Bea** 75.90 73 P **P** 09 14 51.6 +0.5
comp=Z,1µm,0.5s,baz=275,slow=5.2,SNR=6415
TORD pP **pP** 09 17 00.8 +1.4
comp=Z,907nm,1.0s,baz=272,slow=4.6,SNR=7.2
TORD PKiKP **PKiKP** 09 20 30.4 -0.3
comp=Z,80nm,1.1s,baz=298,slow=1.8,SNR=7.5
TORD S **S** 09 23 42.4 -2.6
comp=Z,78nm,0.7s,baz=259,slow=8.3,SNR=14
comp=Z,1µm,0.5s
PNCL **Nicolau / Gran** 75.98 46 ⇓*i*P **P** 09 14 53.2 +2.1
comp=Z,5µm,1.8s
PNCL *e*pP **pP** 09 17 00.9 +1.5
PNCL *i*S **S** 09 23 48.4 +3.5
PBDV **Barranco-do-Ve** 76.02 47 ⇓*i*P **P** 09 14 53.8 +2.4
comp=Z,9µm,1.6s
PBDV *e*pP **pP** 09 17 01.8 +2.0
PBDV *i*S **S** 09 23 49.5 +4.0
MESJ **Messejana** 76.07 46 ⇓*i*P **P** 09 14 53.9 +2.3
comp=Z,5µm,1.8s
MESJ *e*pP **pP** 09 17 01.3 +1.2
MESJ *e*S **S** 09 23 47.2 +1.2
MESJ **Messejana** 76.07 46 *e*P **P** 09 14 53.7 +2.1
MESJ IAmb IAmb 09 15 00.1
comp=Z,3µm,1.1s
MESJ *e*S **S** 09 23 49.1 +3.1
MESJ **Messejana** 76.07 46 *e*P **P** 09 14 53.7 +2.1
MESJ *e*S **S** 09 23 49.1 +3.1
PPTF **Pamatai, Papee** 76.08 255 P **P** 09 14 55.7 +3.5
PPTF **Pamatai, Papee** 76.08 255 ⇓P **P** 09 14 55.7 +3.5
PAE **Paea** 76.08 254 *e*P **P** 09 14 53.9 +1.8
comp=Z,803nm,1.4s
PAE *e*pP **pP** 09 17 04.4 +3.6
comp=Z,432nm,1.4s
PAE *e*S **S** 09 23 45.8 -1.0
comp=Z,6µm,23.3s
PAE *e*SS SS 09 28 18.4 -40
comp=Z,3µm,24.0s
PAE *e*LQ LQ 09 35 48.1
comp=Z,2µm,22.3s
PAE *e*LR LR 09 39 13.5
comp=Z,3µm,25.3s
PPT2 **Papeete2** 76.09 255 *e*P **P** 09 14 50.4 -1.8
comp=Z,3µm,27.0s
PPT2 **Papeete2** 76.09 255 *e*P **P** 09 14 53.6 +1.4
comp=Z,1µm,1.4s
PPT2 *e*pP pP 09 16 52.0 -9.0
comp=Z,12µm,26.5s
PPT2 *e*pP **pP** 09 17 04.3 +3.3
comp=Z,648nm,1.4s
PPT2 *e*S **S** 09 23 45.3 -1.7
comp=Z,10µm,23.2s
PPT2 *e*S **S** 09 23 47.3 +0.3
comp=Z,138µm,40.8s
PPT2 *e*sS **sS** 09 27 31.0 -4.9
comp=Z,69µm,33.0s
PPT2 *e*SS SS 09 28 18.4 -40
comp=Z,6µm,24.0s
PPT2 *e*LQ LQ 09 35 47.6
comp=Z,6µm,23.4s
PPT2 *e*LQ LQ 09 35 50.1
comp=Z,13µm,30.2s
PPT2 *e*LR LR 09 39 14.4
comp=Z,4µm,25.6s
PPT2 *e*LR LR 09 39 18.4
comp=Z,38µm,37.2s
PPT **Papeete** 76.09 255 P **P** 09 14 55.4 +3.2
comp=Z,234nm,0.5s,baz=118,slow=3.0,SNR=26
PPT pP **pP** 09 17 05.3 +4.4
comp=Z,313nm,1.1s,baz=60,slow=7.2,SNR=3.9
PPT PKPPKP **P'P'df** 09 42 04.4 0.0
comp=Z,101nm,1.2s,baz=8.1,slow=0.7,SNR=3.8
comp=Z,234nm,0.5s
PCVE **Castro Verde** 76.11 47 ⇓*i*P **P** 09 14 54.1 +2.2
PCVE *e*pP **pP** 09 17 01.9 +1.6
PCVE *i*S **S** 09 23 50.0 +3.6
PVAQ **Vaqueiros** 76.24 47 P **P** 09 14 54.6 +2.0
PVAQ **Vaqueiros** 76.24 47 ⇓*i*P **P** 09 14 54.8 +2.2
comp=Z,5µm,2.1s
PVAQ *e*pP **pP** 09 17 02.6 +1.5
PVAQ *e*S **S** 09 23 49.0 +1.2
PBEJ **Beja** 76.41 46 ⇓*i*P **P** 09 14 55.5 +2.0
comp=Z,6µm,1.7s
PBEJ *e*pP **pP** 09 17 03.3 +1.3
PBEJ *e*S **S** 09 23 51.7 +2.2
PSBE **So Bento** 76.42 45 ⇓*i*P **P** 09 14 55.4 +1.9
comp=Z,5µm,2.0s
PSBE *e*pP **pP** 09 17 02.7 +0.6
PSBE *i*S **S** 09 23 52.1 +2.5
NUUK **Nuuk** 76.43 8 *i*P **P** 09 14 53.4 +0.5
NUUK IAmb IAmb 09 15 00.5
comp=Z,6µm,1.1s
EGRO **El Granado** 76.47 47 S **S** 09 23 52.4 +2.3
EGRO P **P** 09 14 55.9 +2.1
EVO **Evora** 76.53 46 ⇓*i*P **P** 09 14 55.8 +1.7
comp=Z,5µm,1.7s
EVO *e*pP **pP** 09 17 03.6 +0.9
EVO *i*S **S** 09 23 53.9 +3.2
IFR **Ifrane** 76.57 52 S **S** 09 23 53.5 +1.7
IFR P **P** 09 14 56.8 +2.1
PMTG **Montargil** 76.61 45 ⇓*i*P **P** 09 14 56.0 +1.5
comp=Z,8µm,1.6s
PMTG *e*pP **pP** 09 17 04.3 +1.1
PMTG *i*S **S** 09 23 54.0 +2.4
OZB **Mount Ozzard** 76.65 326 P **P** 09 14 56.5 +2.0
OZB IAmb IAmb 09 15 03.7
comp=Z,5µm,1.2s
ARNO **Arenosillo** 76.83 48 P **P** 09 14 58.0 +2.2
PCAS **Casmilo, Conde** 76.86 44 ⇓*i*P **P** 09 14 57.6 +1.7
comp=Z,4µm,1.5s
PCAS *e*pP **pP** 09 17 05.4 +0.7
PCAS *i*S **S** 09 23 55.7 +1.5
SFS **San Fernando** 76.95 48 P **P** 09 14 59.0 +2.6
SFS **San Fernando** 76.95 48 S **S** 09 23 58.0 +2.8
SFS P **P** 09 14 59.0 +2.6
SFS **San Fernando** 76.95 48 P **P** 09 14 59.0 +2.6
SFS pmax pmax
comp=Z,10µm,1.2s
PESTR **Estremoz** 76.97 46 P **P** 09 14 58.1 +1.6
PESTR IAmb IAmb 09 15 05.2
comp=Z,7µm,1.4s
PESTR **Estremoz** 76.97 46 ⇓*i*P **P** 09 14 58.3 +1.8
comp=Z,7µm,1.6s
PESTR *e*pP **pP** 09 17 06.8 +1.4
PESTR *i*S **S** 09 23 58.4 +3.0
COI **Coimbra** 76.99 44 P **P** 09 14 58.8 +2.2
COI **Coimbra** 76.99 44 ⇓*i*P **P** 09 14 58.9 +2.3
comp=Z,12µm,1.5s
COI *e*pP **pP** 09 17 06.5 +1.1
COI *i*S **S** 09 23 57.9 +2.4
COI **Coimbra** 76.99 44 P **P** 09 14 58.8 +2.2
COI pmax pmax
comp=Z,12µm,1.3s
PBAR **Barrancos** 77.06 47 ⇓*i*P **P** 09 14 58.7 +1.7
comp=Z,5µm,1.6s
PBAR *e*pP **pP** 09 17 07.0 +1.1
PBAR *e*S **S** 09 23 59.5 +3.1
PBAR **Barrancos** 77.06 47 S **S** 09 23 58.6 +2.2
PBAR P **P** 09 14 58.8 +1.7
EMIN **Mina Concepcio** 77.15 47 S **S** 09 24 00.3 +2.9
EMIN P **P** 09 14 59.3 +1.8
CBB **Campbell River** 77.19 327 P **P** 09 14 59.2 +1.8
CBB IAmb IAmb 09 15 06.3
comp=Z,5µm,1.3s
NVL **N'lazarevskaya** 77.21 160 *e*P P 09 14 52.0 -5.2
NVL *e* 09 14 59.8
NVL *e*PPP PPP 09 20 05.7
NVL *e*SSS SSS 09 32 41.8
NVL pmax pmax
comp=Z,7µm,1.2s
EBAD **Badajoz** 77.33 46 S **S** 09 24 00.1 +1.0
EBAD P **P** 09 15 00.2 +1.7
ECEU **Ceuta** 77.33 49 S **SKSac** 09 24 03.5 -9.4
ECEU P **P** 09 15 00.9 +2.4
CEU **Ceuta** 77.33 49 S **SKSac** 09 24 02.2 -11
CEU P **P** 09 15 01.1 +2.6
PMRV **Marv??o** 77.35 45 ⇓*i*P **P** 09 14 59.7 +1.1
comp=Z,2µm,1.4s
PMRV *e*pP **pP** 09 17 08.4 +0.8
PMRV *e*S **S** 09 23 57.5 -1.9
ESPR **Espera** 77.37 48 P **P** 09 15 00.9 +2.2
ALJ **Aljibe** 77.38 49 P **P** 09 15 01.2 +2.4
PCBR **Castelo Branco** 77.47 45 ⇓*i*P **P** 09 15 00.4 +1.2
comp=Z,4µm,1.4s
PCBR *e*pP **pP** 09 17 08.3 0.0
PCBR *e*S **S** 09 24 02.6 +2.0
PVIS **Viseu** 77.57 44 ⇓*i*P **P** 09 15 01.0 +1.2
comp=Z,5µm,1.7s
PVIS *e*pP **pP** 09 17 09.4 +0.5
PVIS *e*S **S** 09 24 02.6 +0.8
MTE **Manteigas** 77.67 44 P **P** 09 15 01.4 +1.2
MTE IAmb IAmb 09 15 08.4
comp=Z,3µm,1.1s
MTE **Manteigas** 77.67 44 ⇓*i*P **P** 09 15 01.6 +1.2
comp=Z,4µm,1.3s
MTE *e*pP **pP** 09 17 11.9 +2.4
MTE *e*S **S** 09 24 03.7 +0.9
MTE **Manteigas** 77.67 44 ⇓P **P** 09 15 01.6 +1.2
LIJA **Lijar** 77.71 48 P **P** 09 15 02.8 +2.2
PVLZ **Peæn de** 77.85 50 S **S** 09 24 06.3 +1.6
PVLZ P **P** 09 15 02.7 +1.4
PGAV **Gavieira, Arco** 77.88 43 ⇓*i*P **P** 09 15 02.9 +1.4
comp=Z,7µm,1.7s
PGAV *e*pP **pP** 09 17 09.4 -1.3
PGAV *e*S **S** 09 24 05.8 +0.8
PCAB **Cabril** 77.93 43 ⇓*i*P **P** 09 15 02.9 +1.3
comp=Z,7µm,1.9s
PCAB *e*pP **pP** 09 17 11.5 +0.6
PCAB *e*S **S** 09 24 04.9 -0.5
POLO **Lamas de Olo** 77.93 43 ⇓*i*P **P** 09 15 03.2 +1.4
comp=Z,2µm,1.3s
POLO *e*pP **pP** 09 17 11.1 +0.1
POLO *e*S **S** 09 24 06.5 +0.9
PVRL **Vila Real** 77.94 43 ⇓*i*P **P** 09 15 03.1 +1.4
comp=Z,5µm,2.2s
PVRL *e*pP **pP** 09 17 12.3 +1.3
PVRL *e*S **S** 09 24 06.0 +0.4
ECAB **El Cabril** 78.18 47 P **P** 09 15 04.5 +1.4
MVO **Moncorvo** 78.36 44 ⇓*i*P **P** 09 15 05.4 +1.4
comp=Z,6µm,1.8s
MVO *e*pP **pP** 09 17 14.4 +0.9
MVO *i*S **S** 09 24 09.9 -0.1
EMAL **Malaga-Limoner** 78.37 49 P **P** 09 15 06.5 +2.5
EGOR **Sierra Gorda,** 78.75 48 P **P** 09 15 08.5 +2.3
HILA **High Level** 78.82 337 P **P** 09 15 06.8 +0.8
EADA **Adamuz** 78.82 47 P **P** 09 15 07.9 +1.4
PBRG **Braganca** 78.83 43 ⇓*i*P **P** 09 15 08.1 +1.6
comp=Z,10µm,1.8s
PBRG *e*pP **pP** 09 17 16.7 +0.5
PBRG *e*S **S** 09 24 13.7 -1.1
ECAL **Calabor** 78.89 43 P **P** 09 15 08.4 +1.5
EMLI **Melilla** 78.92 51 P **P** 09 15 08.5 +1.5
HOLB **Holberg** 79.00 327 P **P** 09 15 08.5 +1.4
HOLB IAmb IAmb 09 15 15.7
comp=Z,5µm,1.3s
ELGU **Los Guajares,** 79.01 49 P **P** 09 15 08.5 +1.0
QSPA **South Pole Qui** 79.06 180 P **P** 09 15 08.8 +1.5
QSPA **South Pole Qui** 79.06 180 P **P** 09 15 08.8 +1.5
comp=Z,1µm,0.7s,baz=161,slow=1.6,SNR=4346
QSPA pP **pP** 09 17 21.7 +3.2
comp=Z,918nm,1.1s,baz=194,slow=4.6,SNR=5.0
QSPA PKiKP **PKiKP** 09 20 34.7 +0.6
comp=Z,96nm,1.1s,baz=152,slow=4.8,SNR=1.4
QSPA S **S** 09 24 15.5 -1.0
comp=Z,50nm,1.1s,baz=270,slow=20,SNR=1.7
QSPA PKiKPbc **PKKPbc** 09 33 52.0 -4.9
comp=Z,14nm,0.5s,baz=348,slow=4.5,SNR=24
QSPA PKPPKP 09 41 52.5
comp=Z,45nm,0.9s,baz=315,slow=2.5,SNR=12
comp=Z,1µm,0.7s
EALB **Alboran** 79.09 50 P **P** 09 15 08.9 +1.1
SFJD **Kangerlussuaq** 79.25 8 P **P** 09 15 07.7 -0.3
SFJD IAmb IAmb 09 15 14.8
comp=Z,5µm,1.4s
SFJD **Kangerlussuaq** 79.25 8 P **P** 09 15 07.7 -0.3
SFJD pmax pmax
comp=Z,5µm,1.4s
SFJD **Kangerlussuaq** 79.25 8 *i*P **P** 09 15 07.3 -0.6
SFJD IAmb IAmb 09 15 14.4
comp=Z,5µm,1.4s
SFJD **Kangerlussuaq** 79.25 8 *i*P **PKKPbc** 09 33 52.6 -3.6
CHAS **Isla Isabel II** 79.27 51 P **P** 09 15 10.1 +1.3
EQTA **Presa de Quent** 79.27 49 P **P** 09 15 10.6 +1.6
DY2G **Dye2** 79.42 10 *i*P **P** 09 15 09.5 +0.3
DY2G IAmb IAmb 09 15 16.2
comp=Z,18µm,1.2s
DY2G **Dye2** 79.42 10 *i*P **PKKPbc** 09 33 52.2 -3.9
PAB **San Pablo** 79.54 46 P **P** 09 15 11.8 +1.5
PAB IAmb IAmb 09 15 18.6
comp=Z,8µm,1.4s
PAB **San Pablo** 79.54 46 ⇓P **P** 09 15 11.8 +1.5
PAB **San Pablo** 79.54 46 P **P** 09 15 11.3 +1.0
EBER **Berja** 79.56 49 P **P** 09 15 11.9 +1.3
BBB **Bella Bella** 79.83 328 P **P** 09 15 12.6 +1.3
BBB IAmb IAmb 09 15 19.9
comp=Z,4µm,1.1s
BBB **Bella Bella** 79.83 328 P **P** 09 15 12.7 +1.4
comp=Z,803nm,0.7s,baz=116,slow=4.9,SNR=402
BBB pP **pP** 09 17 20.8 -0.7
comp=Z,542nm,1.1s,baz=134,slow=5.4,SNR=7.2
BBB S **S** 09 24 22.9 -1.5
comp=Z,14nm,1.0s,baz=30,slow=20,SNR=0.7
BBB PKKPbc **PKKPbc** 09 33 53.2 -0.9
comp=Z,29nm,0.7s,baz=343,slow=3.4,SNR=13
comp=Z,803nm,0.7s
ESDC **Sonseca Array** 79.86 46 P **P** 09 15 13.7 +1.7
ESDC IAmb IAmb 09 15 20.4
comp=Z,10µm,1.4s
ESDC **Sonseca Array** 79.86 46 P **P** 09 15 13.6 +1.6
comp=Z,841nm,1.0s,baz=250,slow=5.7,SNR=1521
ESDC pP **pP** 09 17 23.4 +1.2
comp=Z,529nm,1.2s,baz=251,slow=5.6,SNR=11
ESDC S **SKSac** 09 24 25.9 -4.5
comp=Z,4.5nm,1.1s,baz=183,slow=3.6,SNR=0.9
ESDC PKKPbc **PKKPbc** 09 33 54.5 +0.9
comp=Z,5.2nm,0.7s,baz=26,slow=2.6,SNR=6.6
ESDC PKPPKP 09 41 44.1
comp=Z,2.4nm,0.8s,baz=47,slow=2.8,SNR=4.3

comp=Z,841nm,1.0s
**ESBB Sonseca Array 79.86 46** P **P** **09 15 13.7 +1.8**
**ISOG Isortoq, Green 80.01 13** *i* P **P** **09 15 12.2 +0.3**
ISOG IAmb IAmb 09 15 18.3
comp=Z,5μm,1.0s
**ISOG Isortoq, Green 80.01 13** *i* P **PKKPbc** **09 33 50.4 -4.0**
**ENIJ Nijar 80.10 49** P **P** **09 15 13.8 +0.7**
**ANGG Ammassalik, Gr 80.37 13** P **P** **09 15 13.7 -0.1**
ANGG IAmb IAmb 09 15 20.8
comp=Z,4μm,1.2s
**ANGG Ammassalik, Gr 80.37 13** *i* P **P** **09 15 13.4 -0.4**
ANGG IAmb IAmb 09 15 20.5
comp=Z,3μm,1.1s
**ANGG Ammassalik, Gr 80.37 13** *i* P **PKKPbc** **09 33 49.4 -4.1**
**YKAB2 New Yellowknif 80.73 341** P **P** **09 15 16.6 +0.8**
**TLOR Lorca, Murcia 80.73 49** P **P** **09 15 16.6 +0.1**
**YKA Yellowknife Ar 80.78 341** P **P** **09 15 16.6 +0.6**
**YKA Yellowknife Ar 80.78 341** P **P** **09 15 14.8 -1.2**
comp=Z,2μm,0.8s,baz=102,slow=18,SNR=3370
YKA pP **pP** **09 17 24.3 -2.4**
comp=Z,256nm,0.9s,baz=136,slow=5.5,SNR=5.0
YKA S **S** **09 24 30.0 -3.6**
comp=Z,32nm,1.2s,baz=126,slow=22,SNR=2.9
YKA PKKPbc **PKKPbc** **09 33 49.4 -3.1**
comp=Z,6.7nm,0.6s,baz=348,slow=10,SNR=17
YKA SKKP **SKKPdf** **09 36 13.5 -4.2**
comp=Z,5.6nm,1.0s,baz=310,slow=2.8,SNR=3.9
comp=Z,2μm,0.8s
**YKA Yellowknife Ar 80.78 341** *i* P **P** **09 15 14.5 -1.5**
YKA pmax pmax
comp=Z,871nm,0.7s
**ELIB Princess Elisa 80.86 162** *d* P **P** **09 15 17.9 +1.3**
comp=Z,870nm,0.7s
ELIB *d* pP **pP** **09 17 32.0 +3.5**
**USTO Oran 80.90 51** P **P** **09 15 20.0 +2.8**
**ODJA Bouhanifia 81.06 51** P **P** **09 15 23.0 +4.8**
**EMUR La Murta 81.13 49** P **P** **09 15 18.8 +0.3**
**ETOB Tobarra 81.20 48** P **P** **09 15 20.5 +1.6**
**EKNA AfricaArray - 81.20 84** ⇓ *i* P **P** **09 15 21.2 +1.8**
**CART Cartagena 81.22 49** P **P** **09 15 18.7 -0.2**
**CART Cartagena 81.22 49** ⇓ P **P** **09 15 18.5 -0.4**
**VAL Valentia 81.47 33** P **P** **09 15 20.4 +0.6**
VAL PP **pP** **09 17 29.9 -0.8**
**VAL Valentia 81.47 33** P **P** **09 15 20.8 +1.1**
**HG4B Hotspring 81.50 327** P **P** **09 15 21.1 +1.2**
**OJBR Djebel Berber 81.53 51** P **P** **09 15 24.0 +3.4**
**GRNB Grenville Isla 81.66 329** P **P** **09 15 22.2 +1.4**
GRNB IAmb IAmb 09 15 29.2
comp=Z,4μm,1.2s
**OKGL Djebel Kef Gue 81.91 51** P **P** **09 15 26.0 +3.5**
**ECHE Chera 81.97 47** P **P** **09 15 24.4 +1.6**
**RUBB Prince Rupert 82.06 329** P **P** **09 15 23.9 +1.2**
**TOAD Toad River Com 82.29 335** P **P** **09 15 24.3 +0.5**
baz=126,SNR=699
**UMMG Uummannaq 82.56 6** *i* P **P** **09 15 24.9 0.0**
UMMG IAmb IAmb 09 15 31.7
comp=Z,6μm,1.3s
**UMMG Uummannaq 82.56 6** *i* P **PKKPbc** **09 33 45.6 -3.1**
**AUSN Aus 82.57 116** *e* P **P** **09 15 26.7 +0.5**
AUSN IAmb IAmb 09 15 31.9
comp=Z,9μm,1.9s
**KOTAN Kotaneelee Air 82.58 336** P **P** **09 15 26.7 +1.5**
baz=128,SNR=384
**DIB Dawson Inlet, 82.63 328** P **P** **09 15 26.6 +1.1**
**H02S1 DAWSON INLET T 82.63 328** P **P** **09 15 26.9 +1.3**
**IGLA Glengowla, Co 82.67 32** P **P** **09 15 26.1 +0.3**
IGLA PP **pP** **09 17 36.4 -0.8**
**IGLA Glengowla, Co 82.67 32** ⇓ *e* P **P** **09 15 26.4 +0.6**
IGLA IAmb IAmb 09 15 32.8
comp=Z,4μm,1.2s
**U35K Hyder 82.79 331** P **P** **09 15 27.2 +1.0**
U35K IAmb IAmb 09 15 35.4
comp=Z,1μm,0.6s
**U35K Hyder 82.79 331** P **P** **09 15 27.3 +1.0**
baz=122,SNR=48
**ICESG Greenland Ices 82.92 11** *i* P **P** **09 15 27.1 -0.1**
ICESG IAmb IAmb 09 15 34.2
comp=Z,7μm,1.0s
**ICESG Greenland Ices 82.92 11** *i* P **PKKPbc** **09 33 44.9 -3.4**
**LIRD Liard River Hi 82.98 335** P **P** **09 15 28.1 +0.9**
baz=126,SNR=427
**KOMG Komaggas 83.16 119** ⇓ *i* P **P** **09 15 30.0 +1.1**
KOMG IAmb IAmb 09 15 35.0
comp=Z,13μm,1.9s
**V35K Ketchikan 83.25 330** P **P** **09 15 29.8 +1.1**
V35K IAmb IAmb 09 15 37.0
comp=Z,3μm,1.2s
**V35K Ketchikan 83.25 330** P **P** **09 15 30.1 +1.4**
baz=120,SNR=363
**NUUG Nuugaatsiaq 83.27 6** *i* P **P** **09 15 28.8 +0.4**
NUUG IAmb IAmb 09 15 35.7
comp=Z,4μm,1.3s
**NUUG Nuugaatsiaq 83.27 6** *i* P **PKKPbc** **09 33 44.1 -3.0**
**CCA1 Carnmenellis 83.44 36** ⇓ *e* P **P** **09 15 30.5 +0.8**
CCA1 IAmb IAmb 09 15 38.0
comp=Z,2μm,1.0s
**EIBI Ibiza 83.45 48** P **P** **09 15 30.6 +0.5**
**T35M Bob Quinn 83.45 332** P **P** **09 15 31.3 +1.6**
T35M IAmb IAmb 09 15 38.4
comp=Z,3μm,1.2s
**T35M Bob Quinn 83.45 332** P **P** **09 15 31.4 +1.6**
baz=122,SNR=1000
**IWEX Carrickbyrne, 83.55 34** P **P** **09 15 30.2 0.0**
IWEX PP **pP** **09 17 40.7 -1.4**
**IWEX Carrickbyrne, 83.55 34** ⇓ *e* P **P** **09 15 30.5 +0.3**
IWEX IAmb IAmb 09 15 36.8
comp=Z,5μm,1.8s
**ROSF Rostrenen 83.82 38** ⇓ *e* P **P** **09 15 32.2 +0.6**
**SOEG Soedalen 83.92 14** *i* P **P** **09 15 32.7 +1.1**
SOEG IAmb IAmb 09 15 39.5
comp=Z,8μm,1.8s
**SOEG Soedalen 83.92 14** *i* P **PKKPbc** **09 33 41.9 -3.5**
**SBD Saint Breward 83.92 36** ⇓ *e* P **P** **09 15 32.5 +0.4**
**PRTV Porterville,We 84.01 122** ⇓ *i* P **P** **09 15 32.3 -0.8**
PRTV IAML 09 17 54.3
comp=Z,87nm,0.9s
**CRAG Craig 84.07 330** P **P** **09 15 33.3 +0.6**
**CRAG Craig 84.07 330** P **P** **09 15 33.7 +1.0**
**CRAG Craig 84.07 330** P **P** **09 15 33.8 +1.2**
baz=119,SNR=40
**DLBC Dease Lake 84.13 333** P **P** **09 15 34.6 +1.5**
DLBC IAmb IAmb 09 15 41.7
comp=Z,4μm,1.4s
**DLBC Dease Lake 84.13 333** P **P** **09 15 34.5 +1.5**
comp=Z,1μm,0.8s,baz=93,slow=2.2,SNR=971
DLBC pP **pP** **09 17 44.3 -0.8**
comp=Z,449nm,1.1s,baz=356,slow=3.5,SNR=4.2
DLBC PKKPbc **PKKPbc** **09 33 42.1 -2.6**
comp=Z,20nm,0.8s,baz=301,slow=0.8,SNR=14
DLBC PKPPKP P'P'df 09 41 34.7 -12
comp=Z,7.1nm,1.1s,baz=56,slow=3.4,SNR=3.9
comp=Z,1μm,0.8s
**DLBC Dease Lake 84.13 333** P **P** **09 15 34.6 +1.5**
baz=122,SNR=1000
**CER Ceres 84.13 123** ⇓ *i* P **P** **09 15 34.1 +0.5**
CER IAmb IAmb 09 15 39.0
comp=Z,6μm,2.1s
**WRAK Wrangell Islan 84.16 331** P **P** **09 15 34.2 +1.1**
WRAK IAmb IAmb 09 15 41.4
comp=Z,2μm,1.1s
**WRAK Wrangell Islan 84.16 331** P **P** **09 15 34.4 +1.3**
baz=120
**DSB Dublin 84.17 33** P **P** **09 15 33.3 +0.1**
DSB PP **pP** **09 17 44.5 -0.8**
**DSB Dublin 84.17 33** P **P** **09 15 33.6 +0.4**
**DSB Dublin 84.17 33** ⇓ *e* P **P** **09 15 33.5 +0.2**
**DSB Dublin 84.17 33** P **P** **09 15 32.2 -1.0**
**BORG Borgarnes 84.21 19** P **P** **09 15 35.4 +2.3**
**BORG Borgarnes 84.21 19** P **P** **09 15 35.4 +2.3**
BORG pmax pmax
comp=Z,8μm,1.2s
**HTL Hartland 84.22 36** ⇓ *e* P **P** **09 15 34.1 +0.6**
HTL IAmb IAmb 09 15 40.4
comp=Z,12μm,2.6s
HTL *e* 09 17 45.0
**UPNV Upernavik 84.23 4** *i* P **P** **09 15 33.2 +0.1**
UPNV IAmb IAmb 09 15 40.1
comp=Z,5μm,1.4s
**UPNV Upernavik 84.23 4** *i* P **PKKPbc** **09 33 41.2 -3.6**
**WRGLY Wrigley 84.27 339** P **P** **09 15 34.2 +0.8**
WRGLY IAmb IAmb 09 15 41.6
comp=Z,7μm,1.5s
**WRGLY Wrigley 84.27 339** P **P** **09 15 34.5 +1.0**
baz=128,SNR=168

**DYA Yadsworthy 84.30 36** ⇓ *e* P **P** **09 15 34.0 +0.1**
DYA IAmb IAmb 09 15 40.0
comp=Z,3μm,1.4s
DYA *e* 09 17 44.3
**ELIM Elim 84.30 124** ⇓ *i* P **P** **09 15 34.2 -0.3**
ELIM IAmb IAmb 09 15 39.5
comp=Z,8μm,2.1s
**S34M Telegraph Cree 84.35 332** P **P** **09 15 35.4 +1.4**
S34M IAmb IAmb 09 15 42.7
comp=Z,3μm,1.3s
**S34M Telegraph Cree 84.35 332** P **P** **09 15 35.8 +1.8**
baz=121,SNR=542
**U33K Whale Pass 84.39 330** P **P** **09 15 35.3 +1.1**
**U33K Whale Pass 84.39 330** P **P** **09 15 35.4 +1.2**
baz=119,SNR=131
**IDGL Inch Island, C 84.42 31** P **P** **09 15 34.5 +0.1**
IDGL PP **pP** **09 17 45.4 -1.2**
**IDGL Inch Island, C 84.42 31** ⇓ *e* P **P** **09 15 34.8 +0.3**
IDGL IAmb IAmb 09 15 41.0
comp=Z,2μm,1.2s
IDGL *e* 09 17 44.0
**RSBS Rosebush, Pemb 84.48 35** ⇓ *e* P **P** **09 15 34.9 +0.1**
RSBS IAmb IAmb 09 15 41.4
comp=Z,7μm,2.2s
**WTLY Watson Lake, Y 84.50 335** P **P** **09 15 36.1 +1.3**
WTLY IAmb IAmb 09 15 43.3
comp=Z,5μm,1.1s
**WTLY Watson Lake, Y 84.50 335** P **P** **09 15 36.3 +1.5**
baz=123,SNR=37
**ILTH Belurgan, Co L 84.54 32** P **P** **09 15 34.9 -0.1**
ILTH PP **pP** **09 17 46.3 -1.0**
**ILTH Belurgan, Co L 84.54 32** ⇓ *e* P **P** **09 15 35.2 +0.2**
**CEST Esterri de Car 84.61 45** P **P** **09 15 36.0 +0.2**
CEST IAmb IAmb 09 15 43.9
comp=Z,2μm,1.3s
**T33K Petersburg 84.65 331** P **P** **09 15 36.8 +1.4**
baz=119,SNR=43
T33K S **S** **09 25 13.5 +1.7**
baz=119
**ETOS Mallorca 84.77 48** P **P** **09 15 37.2 +0.7**
**JSA Saint Aubin 84.83 38** ⇓ *e* P **P** **09 15 36.8 +0.3**
JSA IAmb IAmb 09 15 43.2
comp=Z,2μm,1.3s
JSA *e* 09 17 47.2
**CVNA Calvinia 84.83 121** ⇓ *i* P **P** **09 15 37.8 +0.6**
CVNA IAmb IAmb 09 15 43.1
comp=Z,16μm,1.9s
**TSUM Tsumeb 84.97 108** P **P** **09 15 38.4 +0.3**
**TSUM Tsumeb 84.97 108** ⇓ *i* P **P** **09 15 38.8 +0.7**
TSUM IAmb IAmb 09 15 40.9
comp=Z,843nm,0.7s
**R33M Jennings River 85.05 334** P **P** **09 15 39.0 +1.5**
R33M IAmb IAmb 09 15 46.3
comp=Z,4μm,1.4s
**R33M Jennings River 85.05 334** P **P** **09 15 39.1 +1.5**
baz=121,SNR=288
R33M S **S** **09 25 17.4 +1.5**
baz=121
**RAR Rarotonga 85.07 249** P **P** **09 15 40.8 +2.4**
**RAR Rarotonga 85.07 249** P **P** **09 15 39.6 +1.3**
**RAR Rarotonga 85.07 249** P **P** **09 15 40.1 +1.7**
comp=Z,141nm,0.9s,baz=234,slow=7.0,SNR=24
comp=Z,141nm,0.9s
**TGTN Hyland Airport 85.07 336** P **P** **09 15 39.6 +2.1**
baz=124,SNR=1000
TGTN S **S** **09 25 16.7 +0.7**
baz=124
**CLGH Cloghs, Cushen 85.14 31** ⇓ *e* P **P** **09 15 38.1 +0.2**
CLGH IAmb IAmb 09 15 44.7
comp=Z,2μm,1.2s
**MATJ Matjiesfontein 85.21 123** ⇓ *i* P **P** **09 15 39.6 +0.6**
MATJ IAmb IAmb 09 15 44.8
comp=Z,16μm,2.5s
**WPS Cemaes, Angles 85.24 33** ⇓ *e* P **P** **09 15 38.4 0.0**
WPS IAmb IAmb 09 15 44.9
comp=Z,2μm,1.6s
WPS *e* 09 17 48.9
**WLF1 Llynfaes 85.25 34** *e* P **P** **09 15 38.4 0.0**
WLF1 IAmb IAmb 09 15 45.1
comp=Z,4μm,1.3s
WLF1 *e* 09 17 49.2
**YLL Llanberis 85.31 34** *e* P **P** **09 15 38.6 -0.2**
**WME Myndd Eilian 85.35 33** *e* P **P** **09 15 39.0 +0.1**
**Q32M Nakina River 85.40 333** P **P** **09 15 40.8 +1.4**
Q32M IAmb IAmb 09 15 48.1
comp=Z,3μm,1.2s
**Q32M Nakina River 85.40 333** P **P** **09 15 41.1 +1.8**
baz=120,SNR=366
Q32M S **S** **09 25 21.2 +1.8**
baz=120
**ARMS Ukamas 85.40 118** *e* P **P** **09 15 40.2 +0.2**
ARMS IAmb IAmb 09 15 45.3
comp=Z,6μm,1.8s
**LLW Llanuwychllyn 85.46 34** ⇓ *e* P **P** **09 15 39.4 -0.1**
**WIM Isle of Man 85.47 33** ⇓ *e* P **P** **09 15 39.9 +0.4**
**MCH1 Michaelchurch 85.48 35** ⇓ *e* P **P** **09 15 39.5 -0.1**
MCH1 IAmb IAmb 09 15 46.1
comp=Z,2μm,1.6s
**MONM Monmouth 85.53 35** ⇓ *e* P **P** **09 15 39.9 +0.1**
MONM IAmb IAmb 09 15 46.2
comp=Z,3μm,1.1s
**SUR Sutherland 85.56 122** P **P** **09 15 41.4 +0.7**
SUR IAmb IAmb 09 15 47.1
comp=Z,3μm,1.5s
**SUR Sutherland 85.56 122** ⇓ *i* P **P** **09 15 41.5 +0.7**
SUR IAmb IAmb 09 15 43.1
comp=Z,10μm,2.1s
**SUR Sutherland 85.56 122** P **P** **09 15 41.7 +0.9**
SUR S **SKSac** **09 25 10.5 +2.6**
**IOMK Kirk Michael 85.58 33** ⇓ *e* P **P** **09 15 40.5 +0.4**
IOMK IAmb IAmb 09 15 46.9
comp=Z,6μm,1.2s
**OLDB Oldbury-Upon-S 85.60 35** ⇓ *e* P **P** **09 15 40.1 0.0**
OLDB IAmb IAmb 09 15 46.4
comp=Z,2μm,1.2s
**SET Setif 85.62 52** P **P** **09 15 42.0 +1.2**
**CKHR Kef el Ahmar 85.65 52** P **P** **09 15 41.8 +0.8**
**SBA Scott Base 85.69 190** P **P** **09 15 42.0 +1.9**
SBA IAmb IAmb 09 15 43.2
comp=Z,4μm,1.9s
**SBA Scott Base 85.69 190** P **P** **09 15 42.1 +1.9**
SBA pmax pmax
comp=Z,4μm,2.0s
**EJON La Jonquera 85.69 45** P **P** **09 15 41.5 +0.6**
**FOEL Foel Wylfa 85.74 34** ⇓ *e* P **P** **09 15 40.8 -0.1**
FOEL IAmb IAmb 09 15 47.4
comp=Z,2μm,1.4s
**S32K Killisnoo 85.74 331** P **P** **09 15 42.1 +1.4**
S32K IAmb IAmb 09 15 49.2
comp=Z,4μm,1.3s
**S32K Killisnoo 85.74 331** P **P** **09 15 42.2 +1.6**
baz=118,SNR=642
S32K S **S** **09 25 22.8 +0.6**
baz=118
S32K S **S** **09 25 22.8 +0.6**
baz=118
**HLM1 Long Mynd 85.76 35** ⇓ *e* P **P** **09 15 41.0 +0.1**
HLM1 IAmb IAmb 09 15 47.5
comp=Z,3μm,1.1s
HLM1 *e* 09 17 51.9
**GAL1 Galloway 85.77 32** ⇓ *e* P **P** **09 15 41.0 +0.2**
GAL1 IAmb IAmb 09 15 47.4
comp=Z,2μm,1.1s
**AUGR Augrabies 85.82 118** ⇓ *i* P **P** **09 15 42.0 +0.1**
AUGR IAmb IAmb 09 15 47.3
comp=Z,6μm,2.0s
**STRD Stroud 85.86 35** ⇓ *e* P **P** **09 15 41.5 +0.1**
STRD IAmb IAmb 09 15 47.7
comp=Z,4μm,1.3s
**KULLO Kullorsuaq 85.91 4** *i* P **P** **09 15 41.5 +0.4**
KULLO IAmb IAmb 09 15 48.4
comp=Z,6μm,1.1s
**KULLO Kullorsuaq 85.91 4** *i* P **PKKPbc** **09 33 36.7 -4.2**
**SIT Sitka 85.91 330** P **P** **09 15 42.3 +0.8**
**SIT Sitka 85.91 330** P **P** **09 15 42.4 +1.0**
SIT IAmb IAmb 09 15 49.9
comp=Z,2μm,1.4s
**SIT Sitka 85.91 330** P **P** **09 15 42.7 +1.3**
baz=117,SNR=32
SIT S **S** **09 25 24.2 +0.5**
baz=117
**SIT Sitka 85.91 330** P **P** **09 15 42.4 +1.0**
**SWN1 Swindon 85.97 36** ⇓ *e* P **P** **09 15 42.1 +0.2**
SWN1 IAmb IAmb 09 15 48.5
comp=Z,5μm,1.3s

**JIS Juneau Island 86.03 332** P **P** **09 15 43.2 +1.2**
**LAWE Loch Awe, Argy 86.03 31** ⇓ *e* P **P** **09 15 42.2 +0.1**
LAWE IAmb IAmb 09 15 48.6
comp=Z,3μm,1.3s
LAWE *e* 09 17 52.3
**R32K Eaglecrest 86.09 332** P **P** **09 15 44.0 +1.7**
R32K IAmb IAmb 09 15 51.2
comp=Z,4μm,1.2s
**R32K Eaglecrest 86.09 332** P **P** **09 15 44.0 +1.7**
baz=118,SNR=284
R32K S **S** **09 25 26.8 +1.3**
baz=118
R32K S **S** **09 25 26.8 +1.3**
baz=118
**MERW Merweville 86.09 122** ⇓ *i* P **P** **09 15 43.4 +0.2**
MERW IAmb IAmb 09 15 45.1
comp=Z,7μm,2.3s
**SUMG Summit 86.11 9** P **P** **09 15 43.8 +1.2**
**SUMG Summit 86.11 9** P **P** **09 15 43.8 +1.2**
SUMG pmax pmax
comp=Z,9μm,1.1s
**SUMG Summit 86.11 9** *i* P **P** **09 15 43.9 +1.2**
SUMG IAmb IAmb 09 15 50.6
comp=Z,9μm,1.1s
**SUMG Summit 86.11 9** *i* P **PKKPbc** **09 33 38.0 -2.9**
**NEWG New Galloway 86.13 32** ⇓ *e* P **P** **09 15 42.8 +0.3**
NEWG IAmb IAmb 09 15 49.2
comp=Z,3μm,1.2s
**FRAZ Fraserburg 86.13 122** ⇓ *i* P **P** **09 15 44.1 +0.7**
FRAZ IAmb IAmb 09 15 44.6
comp=Z,9μm,2.1s
**LEWI Lewis, Hebride 86.18 29** ⇓ *e* P **P** **09 15 43.0 +0.3**
LEWI IAmb IAmb 09 15 49.7
comp=Z,2μm,1.3s
**WOL Wolverton 86.22 36** ⇓ *e* P **P** **09 15 43.0 -0.1**
WOL IAmb IAmb 09 15 49.4
comp=Z,2μm,1.1s
WOL *e* 09 17 54.6
**BUW Bucklebury Wes 86.26 36** ⇓ *e* P **P** **09 15 43.1 -0.2**
**P33M Teslin, Yukon 86.27 334** P **P** **09 15 44.6 +1.3**
P33M IAmb IAmb 09 15 51.7
comp=Z,4μm,1.2s
**P33M Teslin, Yukon 86.27 334** P **P** **09 15 44.7 +1.5**
baz=120,SNR=909
P33M S **S** **09 25 27.2 -0.1**
baz=120
**PGBU Glenifferbraes 86.30 31** ⇓ *e* P **P** **09 15 43.5 +0.2**
PGBU IAmb IAmb 09 15 49.4
comp=Z,1μm,1.0s
**KEIM Keimoes 86.35 118** ⇓ *i* P **P** **09 15 45.0 +0.6**
KEIM IAmb IAmb 09 15 50.1
comp=Z,6μm,1.7s
**P32M Atlin 86.36 333** P **P** **09 15 45.0 +1.4**
P32M IAmb IAmb 09 15 52.1
comp=Z,4μm,1.2s
**P32M Atlin 86.36 333** P **P** **09 15 45.1 +1.5**
baz=119,SNR=384
P32M S **S** **09 25 28.3 +0.2**
baz=119
**CTEI Djebel Teioual 86.36 52** P **P** **09 15 44.8 +0.5**
**STNC Stoke 86.37 34** ⇓ *e* P **P** **09 15 44.4 +0.6**
STNC IAmb IAmb 09 15 50.8
comp=Z,4μm,1.2s
STNC *e* 09 17 55.0
**BESE Bessie Mountai 86.39 332** P **P** **09 15 45.4 +1.6**
**KPL Plockton 86.39 30** ⇓ *e* P **P** **09 15 43.9 +0.1**
KPL IAmb IAmb 09 15 50.3
comp=Z,2μm,1.4s
**CASM Ain Smara 86.48 52** P **P** **09 15 47.3 +2.5**
**KESW Keswick, Cumbr 86.49 33** ⇓ *e* P **P** **09 15 44.8 +0.5**
KESW IAmb IAmb 09 15 51.1
comp=Z,4μm,1.1s
KESW *e* 09 17 56.3
**UPI Upington 86.66 118** ⇓ *i* P **P** **09 15 46.2 +0.3**
UPI IAmb IAmb 09 15 51.4
comp=Z,5μm,1.6s
**CKFL Kef-Lekhel 86.69 52** P **P** **09 15 46.5 +0.6**
**R31K City Hall, Gus 86.73 331** P **P** **09 15 46.7 +1.4**
baz=117,SNR=40
R31K S **S** **09 25 32.0 +0.5**
baz=117
**CWF Charnwood Fore 86.73 35** ⇓ *e* P **P** **09 15 45.6 +0.1**
CWF IAmb IAmb 09 15 52.1
comp=Z,3μm,1.4s
CWF *e* 09 17 56.4
**ESK Eskdalemuir 86.74 32** P **P** **09 15 45.6 +0.1**
ESK IAmb IAmb 09 15 52.3
comp=Z,2μm,1.2s
**ESK Eskdalemuir 86.74 32** ⇓ *e* P **P** **09 15 45.6 +0.1**
ESK IAmb IAmb 09 15 52.0
comp=Z,2μm,1.2s
ESK *e* 09 17 55.7
**ESK Eskdalemuir 86.74 32** P **P** **09 15 45.6 +0.1**
ESK pmax pmax
comp=Z,2μm,1.2s
**S31K Pelican 86.75 331** P **P** **09 15 46.9 +1.5**
**S31K Pelican 86.75 331** P **P** **09 15 47.1 +1.6**
baz=117,SNR=164
S31K S **S** **09 25 32.5 +0.8**
baz=117
S31K S **S** **09 25 32.5 +0.8**
baz=117
**EKB Eskdalemuir 86.76 32** P **P** **09 15 45.6 0.0**
EKB IAmb IAmb 09 15 52.4
comp=Z,2μm,1.1s
**LBWR Ladybower, Pea 86.76 34** ⇓ *e* P **P** **09 15 46.1 +0.5**
LBWR IAmb IAmb 09 15 52.6
comp=Z,3μm,1.1s
LBWR *e* 09 17 57.2
**EKA Eskdalemuir Ar 86.77 32** P **P** **09 15 45.6 0.0**
comp=Z,201nm,0.5s,baz=237,slow=5.6,SNR=292
EKA pP **pP** **09 17 58.5 -0.4**
comp=Z,54nm,0.7s,baz=238,slow=4.8,SNR=4.6
EKA PKKPbc **PKKPbc** **09 33 37.0 -1.2**
comp=Z,4.3nm,0.3s,baz=32,slow=3.4,SNR=27
EKA SKKP **SKKPdf** **09 35 59.2 -8.4**
comp=Z,12nm,0.9s,baz=51,slow=2.8,SNR=4.6
EKA PKPPKP **P'P'df** **09 41 36.3 -5.5**
comp=Z,10.0nm,0.9s,baz=39,slow=3.2,SNR=5.6
comp=Z,201nm,0.5s
**INVG Invergeldie, C 86.78 31** ⇓ *e* P **P** **09 15 45.7 +0.1**
**N32M Quiet Lake 86.85 335** P **P** **09 15 47.3 +1.4**
N32M IAmb IAmb 09 15 54.4
comp=Z,4μm,1.2s
**N32M Quiet Lake 86.85 335** P **P** **09 15 47.6 +1.7**
baz=120
**RES Resolute Bay 86.89 354** P **P** **09 15 46.8 +1.0**
**RES Resolute Bay 86.89 354** P **P** **09 15 47.4 +1.7**
comp=Z,587nm,0.8s,baz=180,slow=12,SNR=74
RES S **SKSac** **09 25 12.2 -1.2**
comp=Z,22nm,0.9s,baz=329,slow=19,SNR=1.2
comp=Z,587nm,0.8s
**CAEH 'Ain El Ouahch 86.90 52** P **P** **09 15 47.3 +0.6**
**HMNX Herstmonceux 86.97 37** ⇓ *e* P **P** **09 15 47.4 +0.8**
HMNX IAmb IAmb 09 15 53.6
comp=Z,9μm,1.2s
HMNX *e* 09 17 59.2
**LINV Loch Inver, As 86.97 29** ⇓ *e* P **P** **09 15 46.4 -0.1**
LINV IAmb IAmb 09 15 53.2
comp=Z,1μm,1.2s
LINV *e* 09 17 57.8
**EDI Edinburgh 87.00 31** ⇓ *e* P **P** **09 15 46.6 0.0**
EDI IAmb IAmb 09 15 53.2
comp=Z,2μm,1.4s
EDI *e* 09 17 57.0
**SKAG Skagway 87.02 333** P **P** **09 15 48.1 +1.4**
**SKAG Skagway 87.02 333** P **P** **09 15 48.3 +1.7**
SKAG IAmb IAmb 09 15 55.3
comp=Z,4μm,1.4s
**SKAG Skagway 87.02 333** P **P** **09 15 48.5 +1.8**
baz=118,SNR=85
SKAG S **S** **09 25 34.4 +0.3**
baz=118
**HPK Haverah Park 87.03 34** ⇓ *e* P **P** **09 15 47.2 +0.3**
HPK IAmb IAmb 09 15 53.7
comp=Z,4μm,1.4s
HPK *e* 09 17 58.0
**XMAS Kiritimati 87.04 273** P **P** **09 15 48.1 +0.2**
XMAS IAmb IAmb 09 18 08.8
comp=Z,6μm,1.9s
**CLF Chambon-Foret 87.14 40** P **P** **09 15 47.6 +0.1**
**EDMD Edmundbyers 87.20 33** ⇓ *e* P **P** **09 15 48.0 +0.3**
EDMD IAmb IAmb 09 15 54.4
comp=Z,5μm,1.3s
EDMD *e* 09 17 58.8

**ABSA Djebel Ababsia** 87.25 52 P **P** 09 15 49.0 +0.6
**ESY Stoneypath** 87.30 32⇓ *e*P **P** 09 15 48.2 +0.1
**CMAH Djebel Manchou** 87.30 52 P **P** 09 15 49.1 +0.5
**WHY Whitehorse** 87.38 334 P **P** 09 15 49.5 +1.0
WHY IAmb IAmb 09 15 57.9
comp=Z,5μm,2.0s
**WHY Whitehorse** 87.38 334 P **P** 09 15 49.6 +1.1
baz=118,SNR=80
WHY S **S** 09 25 37.4 -0.4
baz=118
**BRAK Brakfontein** 87.40 122⇓ *i*P **P** 09 15 49.1 -0.3
BRAK IAmb IAmb 09 15 50.1
comp=Z,5μm,2.3s
**TULEG Thule** 87.46 0 P **P** 09 15 49.4 +1.0
**TULEG Thule** 87.46 0 *i*P **P** 09 15 49.5 +1.1
TULEG IAmb IAmb 09 15 56.1
comp=Z,10μm,1.2s
**TULEG Thule** 87.46 0 *i*P **PKKPbc** 09 33 33.8 -3.4
**PLBC Pleasant Camp** 87.49 332 P **P** 09 15 50.8 +1.9
baz=117,SNR=597
PLBC S **S** 09 25 40.0 +1.5
baz=117
**FARO Faro, Yukon** 87.49 335 P **P** 09 15 50.5 +1.6
FARO IAmb IAmb 09 15 57.5
comp=Z,4μm,1.2s
**FARO Faro, Yukon** 87.49 335 P **P** 09 15 50.6 +1.8
baz=119,SNR=1000
FARO S **S** 09 25 38.3 -0.2
baz=119
**ELSH Elham, Standar** 87.54 37⇓ *e*P **P** 09 15 49.9 +0.6
ELSH IAmb IAmb 09 15 56.0
comp=Z,7μm,1.2s
ELSH *e* 09 18 00.1
**LMK Market Rasen** 87.55 34⇓ *e*P **P** 09 15 49.6 +0.3
LMK IAmb IAmb 09 15 56.1
comp=Z,7μm,1.2s
LMK *e* 09 18 00.6
**DOV Dover Castle,** 87.64 37⇓ *e*P **P** 09 15 50.4 +0.6
**GDLE Glaisdale, N Y** 87.65 33⇓ *e*P **P** 09 15 50.2 +0.5
GDLE IAmb IAmb 09 15 56.5
comp=Z,3μm,1.2s
GDLE *e* 09 18 01.1
**MCD Coleburn Disti** 87.67 30⇓ *e*P **P** 09 15 50.0 +0.2
**BIGH Upper Bighouse** 87.74 29⇓ *e*P **P** 09 15 50.6 +0.6
BIGH IAmb IAmb 09 15 56.9
comp=Z,3μm,1.2s
**DRUM Mains of Drumt** 87.77 31⇓ *e*P **P** 09 15 50.4 +0.2
DRUM IAmb IAmb 09 15 56.9
comp=Z,2μm,1.3s
**ELMS Elmsett, Ipswi** 87.79 36⇓ *e*P **P** 09 15 50.5 +0.1
ELMS IAmb IAmb 09 15 56.8
comp=Z,4μm,1.3s
ELMS *e* 09 18 01.0
**ROOI Rooidraai Farm** 87.81 123⇓ *i*P **P** 09 15 51.3 +0.1
**WACR West Acre** 87.81 35⇓ *e*P **P** 09 15 50.2 -0.3
WACR IAmb IAmb 09 15 56.9
comp=Z,5μm,1.2s
**SCO Scoresbysund** 87.87 15 *i*P **P** 09 15 51.7 +1.3
SCO IAmb IAmb 09 15 58.7
comp=Z,3μm,1.0s
**SCO Scoresbysund** 87.87 15 *i*P **PKKPbc** 09 33 33.1 -2.9
**M31M Drury Creek, Y** 87.90 335 P **P** 09 15 52.3 +1.5
baz=118,SNR=527
M31M S **S** 09 25 41.3 -1.0
baz=118
**GRTLG Ghanzi** 87.94 111 *i*P **P** 09 15 52.2 +0.2
**O30N Mendenhall** 87.96 334 P **P** 09 15 52.9 +1.8
baz=117,SNR=565
O30N S **S** 09 25 43.1 +0.1
baz=117
**P30M Million Dollar** 88.06 333 P **P** 09 15 53.3 +1.7
baz=116
P30M S **S** 09 25 43.3 -0.6
baz=116
**BFON Badsfontein, M** 88.06 122⇓ *i*P **P** 09 15 52.9 +0.4
BFON IAmb IAmb 09 15 54.6
comp=Z,11μm,2.5s
**N31M Braeburn, Yuko** 88.15 334 P **P** 09 15 53.3 +1.4
baz=117,SNR=240
N31M S **S** 09 25 44.2 -0.5
baz=117
**P29M Windy Craggy** 88.19 332 P **P** 09 15 53.5 +1.2
**P29M Windy Craggy** 88.19 332 P **P** 09 15 53.6 +1.4
baz=115,SNR=919
P29M S **S** 09 25 45.7 +0.6
baz=115
**C36M Paulatuk** 88.27 343 P **P** 09 15 51.7 -0.6
**C36M Paulatuk** 88.27 343 P **P** 09 15 52.0 -0.3
baz=128,SNR=36
C36M S **S** 09 25 41.3 -4.0
baz=128
**KNHH Kane Nui o Ham** 88.34 290 P **P** 09 15 54.4 +0.5
**BUFB Buffelsbos** 88.44 124 *e*P **P** 09 15 53.7 -0.3
BUFB IAmb IAmb 09 15 58.2
comp=Z,485nm,0.9s
**UWE Uwekahuna** 88.47 290 P **P** 09 15 54.2 -0.3
**KEST Kesra** 88.57 53 P **P** 09 15 54.8 +0.2
KEST IAmb IAmb 09 16 01.6
comp=Z,3μm,1.9s
**KEST Kesra** 88.57 53 P **P** 09 15 54.9 +0.3
comp=Z,231nm,0.6s,baz=166,slow=1.7,SNR=93
KEST pP **pP** 09 18 09.8 +1.3
comp=Z,250nm,1.0s,baz=86,slow=3.5,SNR=3.3
KEST S **SKSac** 09 25 25.9 +0.6
comp=Z,18nm,0.9s,baz=90,slow=20,SNR=1.5
KEST PKKP **PKKPbc** 09 33 31.1 -2.0
comp=Z,30nm,0.7s,baz=86,slow=2.0,SNR=8.2
KEST SKKP **SKKPdf** 09 35 56.1 -7.8
comp=Z,28nm,0.9s,baz=307,slow=2.0,SNR=6.0
KEST PKPPKP P'P'df 09 41 28.6 -11
comp=Z,7.7nm,1.0s,baz=252,slow=6.4,SNR=3.4
comp=Z,231nm,0.6s
**PHPEN Phepeng** 88.62 116 *i*P **P** 09 15 54.8 -0.3
**GRAF Camdeboo Natio** 88.63 122⇓ *i*P **P** 09 15 55.4 +0.4
**N30M Aishikik Lake** 88.70 334 P **P** 09 15 56.4 +1.8
baz=116,SNR=540
N30M S **S** 09 25 50.8 +1.1
baz=116
**O29M Mount Kennedy** 88.86 333 P **P** 09 15 56.7 +1.3
baz=115,SNR=223
O29M S **S** 09 25 52.6 +1.3
baz=115
**PNL Peninsula** 88.98 332 P **P** 09 15 56.8 +1.0
**PNL Peninsula** 88.98 332 P **P** 09 15 57.2 +1.4
baz=114,SNR=64
PNL S **S** 09 25 52.7 +0.5
baz=114
**YUK6 Outpost Mounta** 89.04 333 P **P** 09 15 57.9 +1.6
baz=115,SNR=240
YUK6 S **S** 09 25 54.3 +1.2
baz=115
**YKU2 Yakutat** 89.04 332 P **P** 09 15 58.6 +2.6
**NEEM North Greenlan** 89.09 4 *i*P **P** 09 15 57.1 +0.7
NEEM IAmb IAmb 09 16 04.3
comp=Z,12μm,1.0s
**NEEM North Greenlan** 89.09 4 *i*P **PKKPbc** 09 33 30.4 -3.2
**NMMU Nelson Mandela** 89.22 124⇓ *i*P **P** 09 15 57.5 -0.1
**DOU Dourbes** 89.26 39 *d*P **P** 09 15 57.5 +0.2
comp=Z,1μm,1.3s
DOU *dp*P **pP** 09 18 08.9 -2.5
**YUK4 Talbot Arm** 89.33 333 P **P** 09 15 59.2 +1.6
baz=115,SNR=330
YUK4 S **S** 09 25 55.6 -0.1
baz=115
**SOE Somerset East** 89.42 123 *e*P **P** 09 15 58.8 +0.1
SOE IAmb IAmb 09 16 03.4
comp=Z,6μm,1.9s
**BMRD Maredsous** 89.43 38 *d*P **P** 09 15 58.2 +0.1
comp=Z,1μm,1.3s
BMRD *dp*P **pP** 09 18 10.0 -2.3
**BGES Gesves** 89.65 38 *d*P **P** 09 15 59.4 +0.2
comp=Z,775nm,1.4s
BGES *dx* **PcP** 09 16 04.2 +4.2
**RCHB Rochefort** 89.67 39 *d*P **P** 09 15 59.4 +0.2
RCHB *dp*P **pP** 09 18 11.7 -1.7
RCHB *ds*P **sP** 09 19 10.3 -5.2
RCHB *d*SKS **SKSac** 09 25 30.3 -0.4
RCHB *d*S S 09 25 53.6 -5.1
RCHB *d*SP **SP** 09 27 10.3 +0.4
**LRW Lerwick** 89.69 28⇓ *e*P **P** 09 15 59.5 +0.5
LRW IAmb IAmb 09 16 06.1
comp=Z,2μm,1.5s
**M29M Somme Creek** 89.71 335 P **P** 09 16 00.8 +1.5
baz=115,SNR=801
M29M S **S** 09 25 59.8 +0.9
baz=115

**SKOMA Sekoma** 89.77 115 *i*P **P** 09 16 00.6 +0.1
**J30M Hart River** 89.78 337 P **P** 09 16 01.1 +1.5
baz=117,SNR=847
J30M S **S** 09 26 00.7 +1.3
baz=117
**O28M Mount Upton** 89.78 333 P **P** 09 16 01.4 +1.5
baz=113,SNR=194
O28M S **S** 09 26 00.5 +0.6
baz=113
**BCLA Clavier** 89.80 38 *d*P **P** 09 15 59.8 -0.1
comp=Z,460nm,1.6s
BCLA *dp*P **pP** 09 18 13.8 -0.2
**YUK8 Steele Glacier** 89.80 333 P **P** 09 16 01.2 +1.3
baz=114,SNR=205
YUK8 S **S** 09 26 00.8 +0.8
baz=114
**HVD Gariep Dam** 89.83 121⇓ *i*P **P** 09 16 01.1 +0.4
HVD IAmb IAmb 09 16 06.5
comp=Z,2μm,1.2s
**K29M Barlow Dome** 89.92 336 P **P** 09 16 01.0 +0.8
K29M IAmb IAmb 09 16 08.3
comp=Z,2μm,1.3s
**K29M Barlow Dome** 89.92 336 P **P** 09 16 01.3 +1.0
baz=116,SNR=384
K29M S **S** 09 26 00.3 -0.4
baz=116
**GRHM Grahamstown, E** 89.96 124 P **P** 09 16 01.4 +0.2
GRHM IAmb IAmb 09 16 02.2
comp=Z,4μm,1.9s
**GRHM Grahamstown, E** 89.96 124⇓ *i*P **P** 09 16 01.0 -0.1
GRHM IAmb IAmb 09 16 02.9
comp=Z,8μm,2.1s
**BSTI Sart Tilman** 90.01 38 *d*P **P** 09 16 01.2 +0.5
comp=Z,186nm,1.4s
**BOSA Boshof** 90.06 119 P **P** 09 16 01.6 -0.1
**BOSA Boshof** 90.06 119⇓ *i*P **P** 09 16 01.7 -0.1
BOSA IAmb IAmb 09 16 06.8
comp=Z,6μm,1.9s
**BOSA Boshof** 90.06 119 P **P** 09 16 01.7 -0.1
comp=Z,241nm,0.7s,baz=263,slow=4.2,SNR=218
BOSA pP **pP** 09 18 16.0 0.0
comp=Z,450nm,1.1s,baz=256,slow=4.0,SNR=6.4
BOSA S **SKSac** 09 25 35.7 +1.4
comp=Z,57nm,1.3s,baz=14,slow=20,SNR=5.7
BOSA PKKP **PKKPbc** 09 33 27.3 -1.9
comp=Z,63nm,0.7s,baz=104,slow=2.1,SNR=33
BOSA SKKP **SKKPdf** 09 35 50.2 -10
comp=Z,43nm,1.1s,baz=98,slow=3.1,SNR=6.7
comp=Z,241nm,0.7s
**BOSA Boshof** 90.06 119 *i*P **P** 09 16 02.9 +1.1
**BOSA Boshof** 90.06 119 *i*P **P** 09 16 02.9 +1.1
**I30M Mount Dempster** 90.09 337 P **P** 09 16 02.3 +1.2
baz=117,SNR=1000
I30M S **S** 09 26 02.4 +0.2
baz=117
**WLF Walferdange** 90.09 39 P **P** 09 16 01.7 +0.5
**WLF Walferdange** 90.09 39 P **P** 09 16 01.7 +0.5
**WLF Walferdange** 90.09 39 *d*P **P** 09 16 01.8 +0.5
comp=Z,965nm,1.4s
**WLF Walferdange** 90.09 39 P **P** 09 16 01.7 +0.5
WLF pmax pmax
comp=Z,6μm,1.6s
**WLF Walferdange** 90.09 39 *e*P **P** 09 16 01.7 +0.5
comp=Z,3μm,1.3s,baz=256,slow=4.7
**G31M Satah River** 90.12 339 P **P** 09 16 01.8 +0.9
baz=119,SNR=1000
G31M S **S** 09 26 01.5 -0.6
baz=119
**BEBN Eben Emael** 90.14 38 *d*P **P** 09 16 01.6 +0.2
comp=Z,953nm,1.3s
BEBN *dp*P **pP** 09 18 13.9 -1.7
**F31M Tsiigehtchic** 90.19 340 P **P** 09 16 02.2 +0.9
baz=119,SNR=587
F31M S **S** 09 26 02.2 -0.5
baz=119
**A36M Sachs Harbour** 90.20 345 P **P** 09 16 01.8 +0.6
baz=127,SNR=103
A36M S **S** 09 26 01.6 -1.0
baz=127
**BHOU Houvegnez** 90.20 39 *d*P **P** 09 16 02.3 +0.6
comp=Z,726nm,1.4s
BHOU *dp*P **pP** 09 18 15.1 -1.0
**MAKGR Makgori** 90.26 116 *i*P **P** 09 16 03.1 +0.3
**MEM Membach** 90.28 38 *d*P **P** 09 16 02.2 +0.1
comp=Z,537nm,1.5s
MEM *dp*P **pP** 09 18 14.4 -1.9
**YUK3 Moose Creek** 90.30 334 P **P** 09 16 03.3 +1.1
baz=113,SNR=447
YUK3 S **S** 09 26 03.5 -0.8
baz=113
**ECH Echery** 90.32 41 P **P** 09 16 02.4 +0.1
ECH IAmb IAmb 09 16 09.4
comp=Z,3μm,1.5s
**ECH Echery** 90.32 41 P **P** 09 16 02.4 +0.1
ECH pmax pmax
comp=Z,3μm,1.5s
**BTNL Ternell** 90.35 38 *d*P **P** 09 16 02.6 +0.2
comp=Z,501nm,1.5s
**MESA MESA** 90.36 332 P **P** 09 16 03.6 +1.1
MESA IAmb IAmb 09 16 12.3
comp=Z,2μm,1.2s
**MESA MESA** 90.36 332 P **P** 09 16 03.6 +1.1
baz=112,SNR=32
MESA S **S** 09 26 05.8 +0.8
baz=112
**CTG Chitna Glacier** 90.38 333 P **P** 09 16 03.6 +1.1
baz=112,SNR=289
CTG S **S** 09 26 06.3 +1.3
baz=112
**SWZ Schweizer** 90.43 118 *e*P **P** 09 16 03.4 -0.1
SWZ IAmb IAmb 09 16 08.7
comp=Z,2μm,1.3s
**J29N Klondike Camp** 90.46 336 P **P** 09 16 04.0 +1.3
J29N IAmb IAmb 09 16 10.9
comp=Z,2μm,1.4s
**J29N Klondike Camp** 90.46 336 P **P** 09 16 04.1 +1.4
baz=115,SNR=87
J29N S **S** 09 26 05.2 -0.3
baz=115
**INK Inuvik** 90.55 341 P **P** 09 16 03.6 +0.8
comp=Z,1μm,0.8s,baz=105,slow=3.2,SNR=1322
INK pP **pP** 09 18 18.9 +1.6
comp=Z,272nm,1.0s,baz=84,slow=6.2,SNR=2.3
INK PKKP **PKKPdf** 09 33 26.6 +1.7
comp=Z,17nm,0.5s,baz=163,slow=1.7,SNR=8.8
INK PKPPKP P'P'df 09 41 21.5 -12
comp=Z,4.5nm,0.9s,baz=6.9,slow=3.2,SNR=3.1
comp=Z,1μm,0.8s
**INK Inuvik** 90.55 341 P **P** 09 16 03.7 +0.8
baz=119,SNR=1000
INK S **S** 09 26 04.5 -1.3
baz=119
**EPYK Eagle Plains** 90.73 338 P **P** 09 16 04.6 +0.8
baz=116,SNR=285
EPYK S **S** 09 26 05.7 -1.9
baz=116
**DAWY Dawson** 90.77 336 P **P** 09 16 04.7 +0.6
baz=114,SNR=398
DAWY S **S** 09 26 07.8 -0.2
baz=114
**DBG Daneborg** 90.81 12 *i*P **P** 09 16 04.4 +0.4
DBG IAmb IAmb 09 16 11.8
comp=Z,1μm,1.3s
**DBG Daneborg** 90.81 12 *i*P **PKKPbc** 09 33 25.8 -3.1
**G30M tAoh Zrail Nji** 90.83 339 P **P** 09 16 04.5 +0.2
**G30M tAoh Zrail Nji** 90.83 339 P **P** 09 16 04.6 +0.3
baz=117,SNR=237
G30M S **S** 09 26 07.9 -0.6
baz=117
**I29M Ogilvie Camp,** 90.88 337 P **P** 09 16 05.3 +0.8
baz=115,SNR=1000
I29M S **S** 09 26 08.8 -0.2
baz=115
**AHRW Bad Neuenahr-A** 90.92 39 *e*P **P** 09 16 05.6 +0.7
comp=Z,2μm,1.2s,baz=256,slow=4.7
AHRW *ep*P **pP** 09 18 21.6 +2.2
**BGLC Bering Glacier** 90.96 331 P **P** 09 16 06.3 +1.4
baz=111
BGLC S **S** 09 26 11.3 +1.6
baz=111
**F30M Barrier River** 90.97 340 P **P** 09 16 05.7 +0.8
baz=117,SNR=1000
F30M S **S** 09 26 08.8 -0.8
baz=117
**CRQE Cirque** 91.10 332 P **P** 09 16 06.6 +0.8
baz=111,SNR=160
CRQE S **S** 09 26 10.6 -0.6
baz=111

**BFO Black Forest** 91.10 41 *e*P **P** 09 16 05.6 -0.3
comp=Z,416nm,1.1s,baz=256,slow=4.7
**LBTB Lobatse** 91.14 116⇓ *i*P **P** 09 16 07.1 +0.3
LBTB IAmb IAmb 09 16 08.6
comp=Z,7μm,2.1s
**LBTB Lobatse** 91.14 116 *i*P **P** 09 16 07.7 +0.9
**LBTB Lobatse** 91.14 116 *i*P **P** 09 16 07.7 +0.9
**M27K Edge Creek, AK** 91.14 334 P **P** 09 16 06.8 +0.8
baz=112,SNR=311
M27K S **S** 09 26 11.5 -0.1
baz=112
M27K S **S** 09 26 11.5 -0.1
baz=112
**SUCK Suckling Hills** 91.17 331 P **P** 09 16 07.5 +1.5
SUCK IAmb IAmb 09 16 14.3
comp=Z,806nm,0.8s
**PHDHD Phuduhudu** 91.22 111 *i*P **P** 09 16 07.7 +0.5
**H29M Whitestone** 91.27 338 P **P** 09 16 07.1 +0.8
baz=115,SNR=752
H29M S **S** 09 26 12.1 -0.2
baz=115
**BUG Bochum--Univer** 91.28 38 *e*P **P** 09 16 06.9 +0.3
comp=Z,5μm,1.5s,baz=256,slow=4.7
**MCARA McCarthy VSAT** 91.29 333 P **P** 09 16 07.5 +1.1
baz=111,SNR=187
MCARA S **S** 09 26 12.6 -0.1
baz=111
**KIP Kipapa** 91.37 291 P **P** 09 16 09.1 +1.3
**KIP Kipapa** 91.37 291 *i*P **P** 09 16 09.0 +1.3
KIP pmax pmax
comp=Z,215nm,1.4s
**L27K Beaver Creek,** 91.38 334 P **P** 09 16 07.9 +1.0
baz=112,SNR=618
L27K S **S** 09 26 13.9 +0.4
baz=112
**VLC Villacollemand** 91.43 45 P **P** 09 16 07.0 -0.5
**KAIM Kayak Island** 91.43 331 P **P** 09 16 08.3 +1.2
baz=110,SNR=26
KAIM S **S** 09 26 14.1 +0.2
baz=110
**G29M Pine Creek** 91.44 339 P **P** 09 16 07.7 +0.6
baz=115,SNR=663
G29M S **S** 09 26 13.3 -0.5
baz=115
**I28M Miner Creek** 91.54 337 P **P** 09 16 08.2 +0.6
baz=114,SNR=434
I28M S **S** 09 26 15.0 +0.1
baz=114
**M26K Nabesna, AK** 91.64 334 P **P** 09 16 08.4 +0.3
baz=111,SNR=79
M26K S **S** 09 26 15.7 -0.1
baz=111
M26K S **S** 09 26 15.7 -0.1
baz=111
**TNS Taunus Mts** 91.67 39 *e*P **P** 09 16 08.9 +0.3
comp=Z,2μm,1.3s,baz=256,slow=4.7
TNS *ep*P **pP** 09 18 25.1 +2.0
**JMI Jan Mayen** 91.68 17 *e*P **P** 09 16 09.6 +1.6
JMI IVmB_BB 09 16 12.6
comp=Z,19μm,6.4s
JMI *ep*P **pP** 09 18 21.7 -0.9
JMI *es*P **sP** 09 19 21.9 -2.5
JMI *e*SKSac **SKSac** 09 25 45.5 +4.3
JMI *i* 09 26 17.7
**EGAK Eagle** 91.75 336 P **P** 09 16 08.9 +0.4
baz=112,SNR=341
EGAK S **S** 09 26 15.1 -1.4
baz=112
**STU Stuttgart** 91.77 41 *e*P **P** 09 16 09.0 0.0
comp=Z,8μm,1.5s,baz=256,slow=4.7
**JMIC Jan Mayen** 91.77 17 *ep*P **pP** 09 18 22.1 -0.9
JMIC *e*SKSac **SKSac** 09 25 45.5 +3.8
JMIC *e*ScS **ScS** 09 26 21.2 +3.5
JMIC *e*SS **SS** 09 32 46.5 +1.9
**IBBN Ibbenburen** 91.81 37 *e*P **P** 09 16 09.4 +0.4
comp=Z,5μm,1.4s,baz=256,slow=4.7
**K27K Chicken** 91.84 335 P **P** 09 16 10.2 +1.2
**K27K Chicken** 91.84 335 P **P** 09 16 10.2 +1.2
baz=112
**DAVA Damuels** 91.84 42 *e*P **P** 09 16 09.9 +0.3
comp=Z,221nm,1.0s,SNR=176
DAVA *ep*P **pP** 09 18 23.2 -0.9
comp=Z,451nm,1.1s
DAVA *e*PP **PP** 09 19 60.0 -0.5
comp=Z,180nm,1.1s
DAVA S **S** 09 26 18.4 -0.1
comp=Z,38nm,1.3s
DAVA *e*PKKP **PKKPbc** 09 33 24.8 -0.8
comp=Z,13nm,0.4s
DAVA *e*P'P' **P'P'df** 09 41 33.7 +0.4
comp=Z,132nm,1.8s
**BMRM Bremner River** 91.86 332 P **P** 09 16 09.6 +0.4
baz=109,SNR=97
**KASTN Kahler Asten** 91.91 38 *e*P **P** 09 16 09.8 +0.2
comp=Z,1μm,1.4s,baz=256,slow=4.7
KASTN *ep*P **pP** 09 18 25.7 +1.6
**L26K Log Cabin Wild** 92.01 334 P **P** 09 16 10.2 +0.4
baz=110,SNR=223
L26K S **S** 09 26 17.6 -1.4
baz=110
L26K S **S** 09 26 17.6 -1.4
baz=110
**E29M Blow River** 92.03 340 P **P** 09 16 10.3 +0.6
baz=115,SNR=309
E29M S **S** 09 26 18.8 -0.1
baz=115
**N25K Chitina, Valde** 92.08 333 P **P** 09 16 10.6 +0.4
baz=109,SNR=94
N25K S **S** 09 26 18.3 -1.4
baz=109
**UBR Ueberruh** 92.09 42 *e*P **P** 09 16 11.0 +0.5
comp=Z,2μm,1.2s,baz=256,slow=4.7
**MID Middleton Isla** 92.19 330 P **P** 09 16 11.4 +0.8
**Q23K Middleton Isla** 92.19 330 P **P** 09 16 10.7 +0.1
baz=108,SNR=5.5
**I27K Kandik River** 92.25 337 P **P** 09 16 11.2 +0.4
baz=112,SNR=305
I27K S **S** 09 26 19.7 -1.2
baz=112
I27K S **S** 09 26 19.7 -1.2
baz=112
**PRYS Parys** 92.25 118⇓ *i*P **P** 09 16 11.9 -0.1
PRYS IAmb IAmb 09 16 16.9
comp=Z,5μm,2.0s
**EYAK Cordova Ski Ar** 92.26 331 P **P** 09 16 11.1 +0.2
**EYAK Cordova Ski Ar** 92.26 331 P **P** 09 16 11.3 +0.4
baz=108,SNR=96
**SNKL Senekal, Frees** 92.29 119⇓ *i*P **P** 09 16 12.5 +0.4
SNKL IAmb IAmb 09 16 17.4
comp=Z,12μm,2.0s
**KSANE Kasane** 92.30 109 *i*P **P** 09 16 13.7 +1.5
**FETA Feichten** 92.34 43 *e*P **P** 09 16 12.1 +0.3
comp=Z,98nm,0.9s,SNR=231
FETA *ep*P **pP** 09 18 25.1 -1.4
comp=Z,172nm,1.3s
FETA *e*PP **PP** 09 20 04.0 -0.4
comp=Z,181nm,1.1s
FETA S **S** 09 26 23.8 +1.0
comp=Z,92nm,1.4s
FETA *e*PKKP **PKKPbc** 09 33 23.6 -0.7
comp=Z,9.5nm,0.6s
FETA *e*P'P' **P'P'df** 09 41 33.0 +0.7
comp=Z,96nm,2.2s
**F28M Old Crow** 92.38 339 P **P** 09 16 11.9 +0.5
baz=113,SNR=471
F28M S **S** 09 26 21.0 -1.0
baz=113
**HLG Helgoland** 92.39 35 *e*P **P** 09 16 12.3 +0.6
comp=Z,3μm,1.3s,baz=256,slow=4.7
**WDLM Western Deep L** 92.42 117⇓ *i*P **P** 09 16 13.0 +0.2
WDLM IAmb IAmb 09 16 18.0
comp=Z,8μm,2.0s
**KMY Karmoy** 92.43 30 *e*P **P** 09 16 12.2 +0.5
KMY IVmB_BB 09 16 18.2
comp=Z,19μm,2.0s
KMY *ep*P **pP** 09 18 24.3 -2.0
KMY *es*P **sP** 09 19 24.7 -3.5
KMY *e*PP **PP** 09 20 05.9 +1.5
KMY *e*SKSac **SKSac** 09 25 44.8 -0.8
KMY *i* 09 26 21.4
KMY *e*SP **SP** 09 27 35.9 -3.9
**H27K Steamboat Moun** 92.45 337 P **P** 09 16 12.1 +0.3
baz=112,SNR=203
H27K S **S** 09 26 22.2 -0.5
baz=112
**RETA Reutte** 92.47 42 *e*P **P** 09 16 12.6 +0.2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,156nm,0.7s,SNR=213 | | | | | | | | |
| RETA | | | | | *e*PP | **PP** | 09 18 24.7 | -2.2 | |
| | comp=Z,260nm,1.3s | | | | | | | | |
| RETA | | | | | *e*PP | **PP** | 09 20 06.9 | +1.6 | |
| | comp=Z,222nm,2.0s | | | | | | | | |
| RETA | | | | | S | **S** | 09 26 20.6 | -3.2 | |
| | comp=Z,46nm,1.5s | | | | | | | | |
| RETA | | | | | *e*PKKP | **PKKPbc** | 09 33 22.7 | -1.1 | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| RETA | | | | | *e*P'P' | **P'P'df** | 09 41 32.5 | +0.6 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **HARP** | **HAARP** | **92.59** | **333** | | P | **P** | **09 16 12.5** | **+0.1** | |
| | baz=109,SNR=23 | | | | | | | | |
| **SCRK** | **Sand Creek** | **92.61** | **335** | | P | **P** | **09 16 13.2** | **+0.5** | |
| | baz=110,SNR=740 | | | | | | | | |
| SCRK | | | | | S | **S** | 09 26 23.4 | -1.0 | |
| | baz=110 | | | | | | | | |
| **J26L** | **Joseph Creek** | **92.62** | **336** | | P | **P** | **09 16 13.2** | **+0.6** | |
| | baz=110,SNR=539 | | | | | | | | |
| J26L | | | | | S | **S** | 09 26 23.4 | -1.0 | |
| | baz=110 | | | | | | | | |
| J26L | | | | | S | **S** | 09 26 23.4 | -1.0 | |
| | baz=110 | | | | | | | | |
| **KLU** | **Klutina** | **92.64** | **332** | | P | **P** | **09 16 13.2** | **+0.5** | |
| | baz=108,SNR=574 | | | | | | | | |
| **E28M** | **Babbage River** | **92.67** | **340** | | P | **P** | **09 16 12.8** | **+0.1** | |
| | baz=114,SNR=140 | | | | | | | | |
| E28M | | | | | S | **S** | 09 26 22.9 | -1.5 | |
| | baz=114 | | | | | | | | |
| **MOTA** | **Moosalm** | **92.67** | **42** | *i* | P | **P** | **09 16 13.5** | **+0.2** | |
| | comp=Z,358nm,0.9s | | | | | | | | |
| MOTA | | | | | *e*pP | **pP** | 09 18 26.5 | -1.4 | |
| | comp=Z,400nm,1.2s | | | | | | | | |
| MOTA | | | | | *e*PP | **PP** | 09 20 08.1 | +1.2 | |
| | comp=Z,240nm,1.3s | | | | | | | | |
| MOTA | | | | | *e*S | **S** | 09 26 21.0 | -4.6 | |
| | comp=Z,72nm,2.0s | | | | | | | | |
| MOTA | | | | | *e*PKKP | **PKKPdf** | 09 33 22.0 | +1.2 | |
| | comp=Z,27nm,0.7s | | | | | | | | |
| MOTA | | | | | *e*P'P' | **P'P'df** | 09 41 32.0 | +0.3 | |
| | comp=Z,140nm,2.3s | | | | | | | | |
| **SOOWA** | **Sowa** | **92.67** | **111** | *i* | P | **P** | **09 16 14.2** | **+0.3** | |
| **NHAM** | **Northam, North** | **92.68** | **116** | ⇓*i* | P | **P** | **09 16 14.2** | **+0.3** | |
| NHAM | | | | | IAmb | IAmb | 09 16 16.9 | | |
| | comp=Z,750nm,0.8s | | | | | | | | |
| **D28M** | **Stokes Point** | **92.70** | **341** | | P | **P** | **09 16 13.5** | **+0.8** | |
| | baz=114,SNR=21 | | | | | | | | |
| D28M | | | | | S | **S** | 09 26 24.8 | +0.2 | |
| | baz=114 | | | | | | | | |
| **DAG** | **Danmarks Havn** | **92.70** | **10** | | P | **P** | **09 16 11.5** | **-1.1** | |
| **DAG** | **Danmarks Havn** | **92.70** | **10** | *i* | P | **P** | **09 16 12.5** | **-0.2** | |
| DAG | | | | | IAmb | IAmb | 09 16 19.3 | | |
| | comp=Z,5μm,2.2s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **92.70** | **10** | *i* | P | **PKKPbc** | **09 33 20.0** | **-4.1** | |
| **MTLB** | **Matlabas, Limp** | **92.70** | **115** | ⇓*i* | P | **P** | **09 16 14.5** | **+0.5** | |
| MTLB | | | | | IAmb | IAmb | 09 16 18.8 | | |
| | comp=Z,976nm,0.9s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **92.71** | **43** | *e*P | | **P** | **09 16 13.9** | **+0.4** | |
| | comp=Z,891nm,1.6s,SNR=237 | | | | | | | | |
| SQTA | | | | | *e*pP | **pP** | 09 18 26.4 | -1.7 | |
| | comp=Z,290nm,1.3s | | | | | | | | |
| SQTA | | | | | *e*PP | **PP** | 09 20 05.7 | -1.4 | |
| | comp=Z,450nm,1.3s | | | | | | | | |
| SQTA | | | | | S | **S** | 09 26 19.1 | -6.8 | |
| | comp=Z,42nm,1.5s | | | | | | | | |
| SQTA | | | | | *e*PKKP | **PKKPbc** | 09 33 22.1 | -1.3 | |
| | comp=Z,22nm,0.6s | | | | | | | | |
| SQTA | | | | | *e*P'P' | **P'P'df** | 09 41 32.0 | +0.3 | |
| | comp=Z,160nm,1.9s | | | | | | | | |
| **G27K** | **Doyon Strip** | **92.71** | **338** | | P | **P** | **09 16 13.2** | **+0.3** | |
| | baz=112,SNR=222 | | | | | | | | |
| **I26K** | **Coal Creek Min** | **92.74** | **336** | | P | **P** | **09 16 13.1** | **0.0** | |
| I26K | | | | | IAmb | IAmb | 09 16 20.3 | | |
| | comp=Z,1μm,1.5s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **92.74** | **336** | | P | **P** | **09 16 13.2** | **+0.2** | |
| | baz=110 | | | | | | | | |
| **SUE** | **Sulen** | **92.76** | **28** | *e*P | | **P** | **09 16 13.8** | **+0.7** | |
| SUE | | | | | IVmB_BB | | 09 16 16.9 | | |
| | comp=Z,19μm,6.4s | | | | | | | | |
| SUE | | | | | *e*pP | **pP** | **09 18 25.3** | **-2.5** | |
| SUE | | | | | *e*sP | **sP** | **09 19 26.3** | **-3.3** | |
| SUE | | | | | *e*PP | **PP** | **09 20 06.4** | **-0.5** | |
| SUE | | | | | *e*SKSac | **SKSac** | **09 25 47.5** | **+0.1** | |
| SUE | | | | | *i* | | 09 26 26.4 | | |
| SUE | | | | | *e*SP | SPn | 09 27 45.3 | -1.4 | |
| SUE | | | | | *e*SS | **SS** | **09 33 00.9** | **+2.1** | |
| **HRAO** | **HartRAO** | **92.78** | **117** | ⇓*i* | P | **P** | **09 16 13.7** | **-0.7** | |
| **UBBA** | **Unterbreizbach** | **92.78** | **39** | *e*P | | **P** | **09 16 14.0** | **+0.6** | |
| | comp=Z,1μm,1.3s,baz=256,slow=4.7 | | | | | | | | |
| **ASK** | **Askoy** | **92.78** | **29** | *e*P | | **P** | **09 16 14.0** | **+0.8** | |
| ASK | | | | | IVmB_BB | | 09 16 20.2 | | |
| | comp=Z,17μm,1.7s | | | | | | | | |
| ASK | | | | | *e*pP | **pP** | **09 18 26.9** | **-1.0** | |
| ASK | | | | | *e*PP | **PP** | **09 20 08.1** | **+1.0** | |
| ASK | | | | | *e*SKSac | **SKSac** | **09 25 46.9** | **-0.6** | |
| ASK | | | | | *i* | | 09 26 26.7 | | |
| **NYAT** | **Nyati, Northwe** | **92.80** | **116** | ⇓*i* | P | **P** | **09 16 14.5** | **+0.1** | |
| NYAT | | | | | IAmb | IAmb | 09 16 17.1 | | |
| | comp=Z,423nm,0.8s | | | | | | | | |
| **BER** | **Bergen** | **92.82** | **29** | *e*P | | **P** | **09 16 14.3** | **+0.9** | |
| BER | | | | | IVmB_BB | | 09 16 20.3 | | |
| | comp=Z,18μm,1.6s | | | | | | | | |
| BER | | | | | *e*pP | **pP** | **09 18 27.0** | **-1.1** | |
| BER | | | | | *e*sP | **sP** | **09 19 27.0** | **-3.0** | |
| BER | | | | | *e*SKSac | **SKSac** | **09 25 48.4** | **+0.6** | |
| BER | | | | | *i* | | 09 26 26.2 | | |
| **RETH** | **Rethem/Aller,** | **92.87** | **37** | *e*P | | **P** | **09 16 14.8** | **+0.9** | |
| | comp=Z,3μm,1.4s,baz=256,slow=4.7 | | | | | | | | |
| **P23K** | **Montague Islan** | **92.88** | **331** | | P | **P** | **09 16 13.5** | **-0.3** | |
| | baz=107,SNR=56 | | | | | | | | |
| **RIDG** | **Independent Ri** | **92.89** | **335** | | P | **P** | **09 16 14.5** | **+0.7** | |
| | baz=109,SNR=256 | | | | | | | | |
| **PAX** | **Paxson** | **92.91** | **334** | | P | **P** | **09 16 13.8** | **-0.1** | |
| | baz=109,SNR=298 | | | | | | | | |
| **GTTG** | **Gottingen** | **92.94** | **38** | *e*P | | **P** | **09 16 14.9** | **+0.6** | |
| | comp=Z,2μm,1.1s,baz=256,slow=4.7 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **92.94** | **333** | | P | **P** | **09 16 14.7** | **+0.6** | |
| | baz=108,SNR=372 | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **92.97** | **42** | *e*P | | **P** | **09 16 14.7** | **+0.2** | |
| | comp=Z,2μm,1.1s,baz=256,slow=4.7 | | | | | | | | |
| **WATA** | **Walderalm** | **92.98** | **42** | *e*P | | **P** | **09 16 15.0** | **+0.2** | |
| | comp=Z,136nm,0.6s,SNR=171 | | | | | | | | |
| WATA | | | | | *e*pP | **pP** | **09 18 27.8** | **-1.6** | |
| | comp=Z,304nm,1.4s | | | | | | | | |
| WATA | | | | | *e*PP | **PP** | **09 20 07.0** | **-2.2** | |
| | comp=Z,274nm,1.3s | | | | | | | | |
| WATA | | | | | *e*S | **S** | **09 26 21.9** | **-6.4** | |
| | comp=Z,28nm,1.6s | | | | | | | | |
| WATA | | | | | *e*PKKP | **PKKPdf** | **09 33 20.7** | **+0.5** | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| WATA | | | | | *e*P'P' | **P'P'df** | **09 41 32.5** | **+1.3** | |
| | comp=Z,67nm,1.2s | | | | | | | | |
| **GLI** | **Glacier Island** | **92.99** | **332** | | P | **P** | **09 16 14.1** | **-0.2** | |
| | baz=107,SNR=93 | | | | | | | | |
| **WTTA** | **Wattenberg** | **93.00** | **43** | *e*P | | **P** | **09 16 15.3** | **+0.4** | |
| | comp=Z,518nm,0.9s,SNR=353 | | | | | | | | |
| WTTA | | | | | *e*pP | **pP** | **09 18 28.4** | **-1.1** | |
| | comp=Z,277nm,1.2s | | | | | | | | |
| WTTA | | | | | *e*PP | **PP** | **09 20 07.5** | **-1.9** | |
| | comp=Z,297nm,1.3s | | | | | | | | |
| WTTA | | | | | S | **S** | **09 26 23.0** | **-5.6** | |
| | comp=Z,62nm,1.3s | | | | | | | | |
| WTTA | | | | | *e*PKKP | **PKKPdf** | **09 33 21.2** | **+1.0** | |
| | comp=Z,17nm,0.5s | | | | | | | | |
| WTTA | | | | | *e*P'P' | **P'P'df** | **09 41 32.6** | **+1.4** | |
| | comp=Z,183nm,1.5s | | | | | | | | |
| **KSTD** | **Kokstad** | **93.02** | **122** | ⇓*i* | P | **P** | **09 16 16.1** | **+0.7** | |
| KSTD | | | | | IAmb | IAmb | 09 16 18.1 | | |
| | comp=Z,4μm,2.3s | | | | | | | | |
| **FOO** | **Floro** | **93.05** | **28** | *e*P | | **P** | **09 16 15.2** | **+0.7** | |
| FOO | | | | | IVmB_BB | | 09 16 18.1 | | |
| | comp=Z,14μm,6.1s | | | | | | | | |
| FOO | | | | | *e*pP | **pP** | **09 18 27.8** | **-1.4** | |
| FOO | | | | | *e*sP | **sP** | **09 19 27.9** | **-3.1** | |
| FOO | | | | | *e*PP | **PP** | **09 20 08.2** | **-0.9** | |
| FOO | | | | | *e*SKSac | **SKSac** | **09 25 46.5** | **-2.5** | |
| FOO | | | | | *i* | | 09 26 29.2 | | |
| FOO | | | | | *e*SP | **SP** | **09 27 48.7** | **+2.2** | |
| **BLS5** | **Blasjo** | **93.08** | **30** | *e*P | | **P** | **09 16 15.4** | **+0.7** | |
| BLS5 | | | | | IVmB_BB | | 09 16 18.5 | | |
| | comp=Z,17μm,6.6s | | | | | | | | |
| BLS5 | | | | | *e*pP | **pP** | **09 18 27.2** | **-2.2** | |
| BLS5 | | | | | *e*SKSac | **SKSac** | **09 25 49.7** | **+0.4** | |
| BLS5 | | | | | *i* | | 09 26 29.7 | | |
| BLS5 | | | | | *e*SP | **SP** | **09 27 43.8** | **-3.1** | |
| BLS5 | | | | | *e*SS | **SS** | **09 33 04.2** | **+0.6** | |
| **SNART** | **Snartemo** | **93.16** | **31** | *e*P | | **P** | **09 16 15.8** | **+0.7** | |
| SNART | | | | | IVmB_BB | | 09 16 18.6 | | |
| | comp=Z,21μm,6.4s | | | | | | | | |
| SNART | | | | | *e*pP | **pP** | **09 18 27.2** | **-2.5** | |
| SNART | | | | | *e*sP | **sP** | **09 19 28.8** | **-2.7** | |
| SNART | | | | | *e*PP | **PP** | **09 20 10.5** | **+0.5** | |
| SNART | | | | | *e*SKSac | **SKSac** | **09 25 51.2** | **+1.6** | |
| SNART | | | | | *i* | | 09 26 30.8 | | |
| SNART | | | | | *e*SP | **SP** | **09 27 50.9** | **+3.2** | |
| **E27K** | **Coleen River** | **93.21** | **339** | | P | **P** | **09 16 15.9** | **+0.8** | |
| | baz=112,SNR=269 | | | | | | | | |
| E27K | | | | | S | **S** | 09 26 29.5 | +0.3 | |
| | baz=112 | | | | | | | | |
| **TSWA** | **Tswaing Meteor** | **93.24** | **117** | ⇓*i* | P | **P** | **09 16 17.3** | **+0.8** | |
| TSWA | | | | | IAmb | IAmb | 09 16 22.1 | | |
| | comp=Z,8μm,1.9s | | | | | | | | |
| **NRDL** | **Niedersach Rie** | **93.25** | **37** | *e*P | | **P** | **09 16 16.6** | **+1.0** | |
| | comp=Z,1μm,1.3s,baz=256,slow=4.7 | | | | | | | | |
| NRDL | | | | | *e*pP | **pP** | **09 18 32.5** | **+2.3** | |
| **CLZ** | **Clausthal** | **93.25** | **38** | *e*P | | **P** | **09 16 16.5** | **+0.7** | |
| | comp=Z,1μm,1.1s,baz=256,slow=4.7 | | | | | | | | |
| CLZ | | | | | *e*pP | **pP** | **09 18 32.6** | **+2.2** | |
| **GRF** | **Grafenberg Arr** | **93.28** | **40** | *e*P | | **P** | **09 16 16.5** | **+0.6** | |
| | comp=Z,2μm,1.3s,baz=256,slow=4.7 | | | | | | | | |
| **K24K** | **Donnelly Dome** | **93.30** | **335** | | P | **P** | **09 16 16.1** | **+0.4** | |
| | baz=108,SNR=63 | | | | | | | | |
| **ODD1** | **Odda** | **93.30** | **30** | *e*P | | **P** | **09 16 16.6** | **+0.9** | |
| ODD1 | | | | | IVmB_BB | | 09 16 22.9 | | |
| | comp=Z,15μm,2.8s | | | | | | | | |
| ODD1 | | | | | *e*pP | **pP** | **09 18 29.2** | **-1.3** | |
| ODD1 | | | | | *e*sP | **sP** | **09 19 29.0** | **-3.3** | |
| ODD1 | | | | | *e*PP | **PP** | **09 20 11.7** | **+0.5** | |
| ODD1 | | | | | *e*SKSac | **SKSac** | **09 25 52.3** | **+1.7** | |
| ODD1 | | | | | *i* | | 09 26 31.6 | | |
| ODD1 | | | | | *e*SP | **SP** | **09 27 49.2** | **-0.2** | |
| **LEPH** | **Lephalale, Lim** | **93.35** | **115** | ⇓*i* | P | **P** | **09 16 17.1** | **+0.2** | |
| LEPH | | | | | IAmb | IAmb | 09 16 19.7 | | |
| | comp=Z,588nm,0.6s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **93.38** | **332** | | P | **P** | **09 16 16.5** | **+0.4** | |
| | baz=107,SNR=148 | | | | | | | | |
| **J25K** | **Salcha River,** | **93.39** | **335** | | P | **P** | **09 16 16.6** | **+0.5** | |
| | baz=109,SNR=611 | | | | | | | | |
| J25K | | | | | S | **S** | **09 26 30.1** | **-0.9** | |
| | baz=109 | | | | | | | | |
| J25K | | | | | S | **S** | **09 26 30.1** | **-0.9** | |
| | baz=109 | | | | | | | | |
| **D27M** | **Malcolm River** | **93.39** | **340** | | P | **P** | **09 16 17.1** | **+1.1** | |
| | baz=112,SNR=231 | | | | | | | | |
| D27M | | | | | S | **S** | **09 26 30.5** | **-0.3** | |
| | baz=112 | | | | | | | | |
| **HYA** | **Hoyanger** | **93.45** | **28** | *e*P | | **P** | **09 16 17.1** | **+0.8** | |
| HYA | | | | | IVmB_BB | | 09 16 23.3 | | |
| | comp=Z,15μm,1.6s | | | | | | | | |
| HYA | | | | | *e*pP | **pP** | **09 18 28.7** | **-2.3** | |
| HYA | | | | | *e*sP | **sP** | **09 19 29.8** | **-3.0** | |
| HYA | | | | | *e*PP | **PP** | **09 20 12.4** | **+0.2** | |
| HYA | | | | | *e*SKSac | **SKSac** | **09 25 50.3** | **-0.8** | |
| HYA | | | | | *i* | | 09 26 33.0 | | |
| HYA | | | | | *e*SP | **SP** | **09 27 46.2** | **-4.6** | |
| **ABTA** | **Abfaltersbach** | **93.47** | **43** | *e*P | | **P** | **09 16 17.2** | **+0.3** | |
| | comp=Z,265nm,0.9s,SNR=394 | | | | | | | | |
| ABTA | | | | | *e*pP | **pP** | **09 18 30.0** | **-1.6** | |
| | comp=Z,286nm,1.1s | | | | | | | | |
| ABTA | | | | | *e*PP | **PP** | **09 20 16.0** | **+3.1** | |
| | comp=Z,331nm,1.8s | | | | | | | | |
| ABTA | | | | | S | **S** | **09 26 28.2** | **-4.3** | |
| | comp=Z,28nm,1.2s | | | | | | | | |
| ABTA | | | | | *e*PKKP | **PKKPdf** | **09 33 19.6** | **+0.3** | |
| | comp=Z,6.5nm,0.6s | | | | | | | | |
| ABTA | | | | | *e*P'P' | **P'P'df** | **09 41 30.7** | **+0.5** | |
| | comp=Z,56nm,1.4s | | | | | | | | |
| **G26K** | **Porcupine Rive** | **93.55** | **338** | | P | **P** | **09 16 17.2** | **+0.6** | |
| | baz=110,SNR=92 | | | | | | | | |
| G26K | | | | | S | **S** | **09 26 31.7** | **-0.4** | |
| | baz=110 | | | | | | | | |
| **M23K** | **Glacier View** | **93.55** | **332** | | P | **P** | **09 16 17.1** | **+0.3** | |
| | baz=107,SNR=169 | | | | | | | | |
| **PWL** | **Port Wells** | **93.57** | **331** | | P | **P** | **09 16 16.7** | **-0.2** | |
| | baz=106,SNR=137 | | | | | | | | |
| **BROLN** | **Tlhalogang** | **93.57** | **112** | *i* | P | **P** | **09 16 18.4** | **+0.4** | |
| **RUST** | **Rust De Winter** | **93.67** | **116** | ⇓*i* | P | **P** | **09 16 18.6** | **+0.2** | |
| **MUD** | **Monsted U'grnd** | **93.69** | **33** | *i* | P | **P** | **09 16 19.1** | **+1.6** | |
| MUD | | | | | IAmb | IAmb | 09 16 25.1 | | |
| | comp=Z,3μm,1.3s | | | | | | | | |
| **SSRD** | **Sdr. Stenderup** | **93.70** | **34** | *i* | P | **P** | **09 16 18.6** | **+1.0** | |
| SSRD | | | | | IAmb | IAmb | 09 16 25.0 | | |
| | comp=Z,5μm,1.6s | | | | | | | | |
| **BSEG** | **Bad Segeberg** | **93.72** | **36** | *e*P | | **P** | **09 16 18.1** | **+0.4** | |
| | comp=Z,2μm,1.4s,baz=256,slow=4.7 | | | | | | | | |
| BSEG | | | | | *e*pP | **pP** | **09 18 34.4** | **+2.0** | |
| **LESA** | **Schwarzleotal** | **93.73** | **43** | *e*P | | **P** | **09 16 18.3** | **+0.2** | |
| | comp=Z,96nm,0.8s | | | | | | | | |
| LESA | | | | | *e*pP | **pP** | **09 18 31.6** | **-1.2** | |
| | comp=Z,226nm,1.1s | | | | | | | | |
| LESA | | | | | S | **S** | **09 26 31.6** | **-3.1** | |
| | comp=Z,92nm,2.5s | | | | | | | | |
| LESA | | | | | *e*PKKP | **PKKPdf** | **09 33 18.4** | **-0.4** | |
| | comp=Z,2.7nm,0.3s | | | | | | | | |
| LESA | | | | | *e*P'P' | **P'P'df** | **09 41 30.8** | **+1.2** | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| **MOX** | **Moxa** | **93.74** | **39** | *e*P | | **P** | **09 16 18.6** | **+0.7** | |
| | comp=Z,906nm,1.4s,baz=256,slow=4.7 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **93.74** | **336** | | P | **P** | **09 16 18.3** | **+0.5** | |
| | baz=108,SNR=231 | | | | | | | | |
| PRP | | | | | S | **S** | **09 26 32.5** | **-1.6** | |
| | baz=108 | | | | | | | | |
| **DHY** | **Denali Highway** | **93.77** | **334** | | P | **P** | **09 16 17.9** | **-0.1** | |
| | baz=107,SNR=237 | | | | | | | | |
| **KNK** | **Knik Glacier** | **93.78** | **332** | | P | **P** | **09 16 18.0** | **+0.1** | |
| | baz=106,SNR=91 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **93.78** | **333** | | P | **P** | **09 16 18.2** | **+0.2** | |
| | baz=107,SNR=523 | | | | | | | | |
| **HOMB** | **Homborsund** | **93.80** | **31** | *e*P | | **P** | **09 16 18.4** | **+0.4** | |
| HOMB | | | | | IVmB_BB | | 09 16 21.8 | | |
| | comp=Z,11μm,6.0s | | | | | | | | |
| HOMB | | | | | *e*pP | **pP** | **09 18 31.1** | **-1.6** | |
| HOMB | | | | | *e*sP | **sP** | **09 19 31.1** | **-3.3** | |
| HOMB | | | | | *e*PP | **PP** | **09 20 15.7** | **+0.7** | |
| HOMB | | | | | *e*SKSac | **SKSac** | **09 25 53.7** | **+0.7** | |
| HOMB | | | | | *i* | **S** | **09 26 34.5** | **0.0** | |
| HOMB | | | | | *e*SP | SP | 09 27 54.0 | -0.7 | |
| **SML** | **Sawmill** | **93.83** | **332** | | P | **P** | **09 16 18.3** | **+0.1** | |
| | baz=106,SNR=527 | | | | | | | | |
| **RJOB** | **Jochberg** | **93.87** | **42** | *e*P | | **P** | **09 16 18.8** | **+0.1** | |
| | comp=Z,2μm,1.5s,baz=256,slow=4.7 | | | | | | | | |
| **FLTG** | **Flechtingen** | **93.89** | **38** | *e*P | | **P** | **09 16 18.7** | **+0.2** | |
| | comp=Z,1μm,1.3s,baz=256,slow=4.7 | | | | | | | | |
| **SEW** | **Seward** | **93.89** | **331** | | P | **P** | **09 16 18.2** | **-0.1** | |
| | baz=105,SNR=79 | | | | | | | | |
| **MANZ** | **Manzenberg** | **93.91** | **40** | *e*P | | **P** | **09 16 19.5** | **+0.7** | |
| | comp=Z,441nm,1.2s,baz=256,slow=4.7 | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **93.92** | **40** | *e*P | | **P** | **09 16 19.4** | **+0.6** | |
| | comp=Z,392nm,1.2s,baz=256,slow=4.7 | | | | | | | | |
| **F26K** | **Sheenjek River** | **93.93** | **339** | | P | **P** | **09 16 19.8** | **+1.3** | |
| | baz=110,SNR=217 | | | | | | | | |
| F26K | | | | | S | **S** | **09 26 34.9** | **-0.6** | |
| | baz=110 | | | | | | | | |
| **NEUB** | **Neuenburg** | **93.96** | **39** | *e*P | | **P** | **09 16 19.6** | **+0.7** | |
| | comp=Z,1μm,1.1s,baz=256,slow=4.7 | | | | | | | | |
| **HDA** | **Harding Lake** | **93.98** | **335** | | P | **P** | **09 16 18.7** | **0.0** | |
| | baz=107,SNR=207 | | | | | | | | |
| **CRAIL** | **Swartwater, Li** | **94.00** | **114** | ⇓*i* | P | **P** | **09 16 20.0** | **+0.1** | |
| **ROBS** | **Robic** | **94.04** | **44** | *i* | P | **P** | **09 16 19.7** | **+0.3** | |
| ROBS | | | | | *e*pP | **pP** | **09 18 32.3** | **-1.8** | |
| ROBS | | | | | *i* | **PP** | **09 20 19.7** | **+2.5** | |
| ROBS | | | | | *e*PKKPbc | **PKKPbc** | **09 33 20.8** | **+1.1** | |
| ROBS | | | | | *e*P'P'df | **P'P'df** | **09 41 29.6** | **+0.6** | |
| **PLN** | **Plauen** | **94.04** | **39** | *e*P | | **P** | **09 16 20.1** | **+0.7** | |
| | comp=Z,2μm,1.5s,baz=256,slow=4.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **94.06** | **335** | | P | **P** | **09 16 18.9** | **-0.2** | |
| | comp=Z,75nm,0.7s,baz=135,slow=3.6,SNR=206 | | | | | | | | |
| ILAR | | | | | pP | **pP** | **09 18 36.3** | **+2.4** | |
| | comp=Z,103nm,1.1s,baz=135,slow=3.8,SNR=6.6 | | | | | | | | |
| ILAR | | | | | PP | **PP** | **09 20 14.2** | **-2.6** | |
| | comp=Z,67nm,0.9s,baz=117,slow=6.2,SNR=5.3 | | | | | | | | |
| ILAR | | | | | S | **SKSac** | **09 25 53.3** | **-1.0** | |
| | comp=Z,7.9nm,1.0s,baz=123,slow=3.3,SNR=1.2 | | | | | | | | |
| ILAR | | | | | PKKP | **PKKPdf** | **09 33 16.1** | **-2.5** | |
| | comp=Z,4.8nm,0.5s,baz=302,slow=3.6,SNR=11 | | | | | | | | |
| | comp=Z,75nm,0.7s | | | | | | | | |
| **GORT1** | **Trebel** | **94.08** | **37** | *e*P | | **P** | **09 16 20.0** | **+0.7** | |
| | comp=Z,2μm,1.4s,baz=256,slow=4.7 | | | | | | | | |
| **H25L** | **Birch Creek** | **94.09** | **337** | | P | **P** | **09 16 20.5** | **+1.3** | |
| | baz=108,SNR=352 | | | | | | | | |
| H25L | | | | | S | **S** | **09 26 37.3** | **+0.6** | |
| | baz=108 | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **94.10** | **43** | *e*P | | **P** | **09 16 19.9** | **0.0** | |
| | comp=Z,152nm,0.8s,SNR=160 | | | | | | | | |
| KBA | | | | | *e*pP | **pP** | **09 18 33.0** | **-1.6** | |
| KBA | comp=Z,138nm,1.0s | | | | S | S | 09 26 28.0 | -10 | |
| | comp=Z,64nm,1.6s | | | | | | | | |
| KBA | | | | | *e*PKKP | **PKKPdf** | **09 33 18.7** | **+0.4** | |
| | comp=Z,6.1nm,0.6s | | | | | | | | |
| KBA | | | | | *e*P'P' | **P'P'df** | **09 41 30.1** | **+1.0** | |
| | comp=Z,31nm,1.4s | | | | | | | | |
| **O22K** | **Cooper Landing** | **94.12** | **331** | | P | **P** | **09 16 19.5** | **+0.1** | |
| | baz=105,SNR=82 | | | | | | | | |
| **PMR** | **Palmer** | **94.14** | **332** | | P | **P** | **09 16 19.2** | **-0.2** | |
| **PMR** | **Palmer** | **94.14** | **332** | | P | **P** | **09 16 19.4** | **0.0** | |
| | baz=106,SNR=133 | | | | | | | | |
| **MYKA** | **Terra Mystica** | **94.21** | **43** | *i* | P | **P** | **09 16 20.6** | **+0.3** | |
| | comp=Z,140nm,0.7s,SNR=266 | | | | | | | | |
| MYKA | | | | | *e*pP | **pP** | **09 18 33.2** | **-1.9** | |
| | comp=Z,99nm,0.9s | | | | | | | | |
| MYKA | | | | | *e*PP | **PP** | **09 20 17.2** | **-1.3** | |
| | comp=Z,548nm,1.7s | | | | | | | | |
| MYKA | | | | | *e*S | S | 09 26 29.1 | -10 | |
| | comp=Z,64nm,2.0s | | | | | | | | |
| MYKA | | | | | *e*P'P' | **P'P'df** | **09 41 29.9** | **+1.1** | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **WAT1** | **Susitna Watana** | **94.21** | **333** | | P | **P** | **09 16 19.8** | **-0.1** | |
| | baz=106 | | | | | | | | |
| **WET** | **Wettzell** | **94.22** | **41** | *e*P | | **P** | **09 16 20.6** | **+0.4** | |
| | comp=Z,2μm,1.3s,baz=256,slow=4.7 | | | | | | | | |
| **TANN** | **Tannenbergstha** | **94.22** | **40** | *e*P | | **P** | **09 16 21.0** | **+0.8** | |
| | comp=Z,1μm,1.2s,baz=256,slow=4.7 | | | | | | | | |
| **WTBG** | **Waterberg Wild** | **94.23** | **116** | ⇓*i* | P | **P** | **09 16 20.5** | **-0.5** | |
| WTBG | | | | | IAmb | IAmb | 09 16 25.4 | | |
| | comp=Z,909nm,1.6s | | | | | | | | |
| **NWCL** | **Newcastle** | **94.24** | **119** | ⇓*i* | P | **P** | **09 16 21.4** | **+0.4** | |
| NWCL | | | | | IAmb | IAmb | 09 16 25.8 | | |
| | comp=Z,748nm,0.7s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **94.29** | **331** | | P | **P** | **09 16 20.5** | **+0.3** | |
| | baz=105,SNR=162 | | | | | | | | |
| **PMBG** | **Pietermaritzbu** | **94.31** | **121** | ⇓*i* | P | **P** | **09 16 21.8** | **+0.7** | |
| PMBG | | | | | IAmb | IAmb | 09 16 23.7 | | |
| | comp=Z,5μm,2.4s | | | | | | | | |
| **G25K** | **Bearman Lake** | **94.36** | **337** | | P | **P** | **09 16 21.8** | **+1.5** | |
| | baz=108,SNR=289 | | | | | | | | |
| G25K | | | | | S | **S** | **09 26 40.9** | **+1.9** | |
| | baz=108 | | | | | | | | |
| **POKR** | **Poker Plat Res** | **94.39** | **336** | | P | **P** | **09 16 21.1** | **+0.6** | |
| | baz=107,SNR=228 | | | | | | | | |
| POKR | | | | | S | **S** | **09 26 38.2** | **-1.2** | |
| | baz=107 | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **94.42** | **42** | *e*P | | **P** | **09 16 21.3** | **+0.1** | |
| | comp=Z,103nm,0.5s,SNR=156 | | | | | | | | |
| BIOA | | | | | *e*pP | **pP** | **09 18 34.8** | **-1.1** | |
| | comp=Z,101nm,1.1s | | | | | | | | |
| BIOA | | | | | PP | **PP** | **09 20 24.7** | **+4.7** | |
| | comp=Z,238nm,1.5s | | | | | | | | |
| BIOA | | | | | S | **S** | **09 26 37.0** | **-3.5** | |
| | comp=Z,40nm,1.4s | | | | | | | | |
| BIOA | | | | | *i* P'P' | **P'P'df** | **09 41 28.6** | **+0.3** | |
| | comp=Z,32nm,1.1s | | | | | | | | |
| **BRSE** | **Bradley Lake S** | **94.43** | **330** | | P | **P** | **09 16 20.8** | **0.0** | |
| | baz=104,SNR=198 | | | | | | | | |
| **C27K** | **Jago River** | **94.44** | **340** | | P | **P** | **09 16 21.9** | **+1.3** | |
| | baz=110,SNR=158 | | | | | | | | |
| C27K | | | | | S | **S** | **09 26 39.7** | **+0.1** | |
| | baz=110 | | | | | | | | |
| **F25K** | **Christian Rive** | **94.44** | **338** | | P | **P** | **09 16 22.1** | **+1.3** | |
| | baz=108,SNR=281 | | | | | | | | |
| F25K | | | | | S | **S** | **09 26 40.8** | **+0.9** | |
| | baz=108 | | | | | | | | |
| **MOL** | **Molde** | **94.46** | **27** | *e*P | | **P** | **09 16 21.5** | **+0.7** | |
| MOL | | | | | IVmB_BB | | 09 16 24.6 | | |
| | comp=Z,12μm,6.2s | | | | | | | | |
| MOL | | | | | *e*pP | **pP** | **09 18 34.3** | **-1.4** | |
| MOL | | | | | *e*PP | **PP** | **09 20 20.3** | **+0.4** | |
| MOL | | | | | *e*SKSac | **SKSac** | **09 25 56.4** | **0.0** | |
| MOL | | | | | *i* | | 09 26 40.6 | | |
| MOL | | | | | *e*SP | **SP** | **09 28 00.9** | **-0.8** | |
| **COLA** | **College** | **94.48** | **335** | | P | **P** | **09 16 21.0** | **+0.1** | |
| **COLA** | **College** | **94.48** | **335** | | P | **P** | **09 16 21.3** | **+0.4** | |
| | baz=106 | | | | | | | | |
| **COLA** | **College** | **94.48** | **335** | *d* | *i*P | **P** | **09 16 21.1** | **+0.1** | |
| COLA | | | | | pmax | pmax | | | |
| | comp=Z,346nm,0.9s | | | | | | | | |
| **I53US** | **FAIRBANKS INFR** | **94.49** | **335** | | P | **P** | **09 16 21.9** | **+0.9** | |
| | baz=99,slow=9.8,SNR=2.2 | | | | | | | | |
| **CUC** | **Castrocucco** | **94.50** | **50** | | P | **P** | **09 16 21.2** | **-0.5** | |
| CUC | | | | | IAmb | IAmb | 09 16 27.9 | | |
| | comp=Z,1μm,1.4s | | | | | | | | |
| **MCK** | **McKinley** | **94.62** | **334** | | P | **P** | **09 16 21.9** | **+0.2** | |
| | baz=106,SNR=196 | | | | | | | | |
| **M22K** | **Willow** | **94.64** | **332** | | P | **P** | **09 16 21.8** | **

CLL *i* PKPPKPdf 09 41 30.1
comp=Z,168nm,1.9s
CLL *ep*SKKSacr 09 43 12.0
**CLL Collm 94.74 39** ⇓*i* P **P 09 16 23.4 +1.0**
CLL *i* *PP **pP 09 18 36.9 -0.3**
CLL *e* 09 26 00.0
CLL *eS* **S 09 26 40.0 -3.0**
CLL pmax pmax
comp=Z,2µm,1.7s
**CLL Collm 94.74 39** *eP* **P 09 16 22.8 +0.4**
comp=Z,963nm,1.5s,comp=Z,17µm
**CLL Collm 94.74 39** *eP* **P 09 16 23.0 +0.6**
comp=Z,2µm,1.4s,baz=256,slow=4.7
**SGRT San Giovanni R 94.76 49** *i* P **P 09 16 21.6 -1.3**
**H24K Noodor Dome 94.77 336** P **P 09 16 22.8 +0.5**
baz=106,SNR=397
H24K S **S 09 26 41.2 -1.5**
baz=106
H24K S **S 09 26 41.2 -1.5**
baz=106
**MATP Matopo 94.79 112** *i* P **P 09 16 25.8 +2.2**
**MATP Matopo 94.79 112** *i* P **P 09 16 25.8 +2.2**
**CRLN Carolina, Mapu 94.79 118** ⇓*i* P **P 09 16 24.0 +0.4**
CRLN IAmb IAmb 09 16 29.5
comp=Z,681nm,1.4s
**OBKA Obir 94.80 44** *eP* **P 09 16 23.4 +0.4**
comp=Z,122nm,0.7s,SNR=184
OBKA *ep*P **pP 09 18 36.3 -1.5**
comp=Z,118nm,1.2s
OBKA *e*PP **PP 09 20 21.3 -1.8**
comp=Z,88nm,1.1s
OBKA S S 09 26 32.5 -11
comp=Z,50nm,1.6s
OBKA *e*P'P' **P'P'df 09 41 28.7 +1.0**
comp=Z,33nm,1.4s
**OBKA Obir 94.80 44** ⇓*i* P **P 09 16 23.2 +0.2**
**MAW Mawson 94.81 164** P **P 09 16 23.6 +1.1**
**MAW Mawson 94.81 164** P **P 09 16 23.5 +1.1**
comp=Z,312nm,0.7s,baz=222,slow=5.8,SNR=660
MAW pP **pP 09 18 38.4 +1.0**
comp=Z,188nm,1.0s,baz=216,slow=1.8,SNR=3.2
MAW S **SKSac 09 25 57.6 -0.7**
comp=Z,17nm,0.8s,baz=285,slow=9.5,SNR=6.7
MAW PKKP **PKKPdf 09 33 14.7 -1.1**
comp=Z,21nm,0.5s,baz=86,slow=2.3,SNR=20
MAW PKPPKP P'P'df 09 41 15.3 -12
comp=Z,9.2nm,0.9s,baz=47,slow=3.5,SNR=6.5
comp=Z,312nm,0.7s
**HOM Homer 94.85 330** P **P 09 16 23.0 +0.2**
baz=104,SNR=24
**SUA Susitna One 94.85 332** P **P 09 16 23.2 +0.3**
baz=104,SNR=168
**G24K Hadweenzic Riv 94.86 337** P **P 09 16 23.8 +1.2**
baz=106,SNR=201
G24K S **S 09 26 43.1 -0.3**
baz=106
**HSKC Hora Svate Kat 94.86 40** *eP* **P 09 16 23.9 +0.8**
HSKC *ep*P **pP 09 18 36.9 -1.0**
HSKC *e*PKKP **PKKPdf 09 33 16.5 -0.3**
**MOA Molln 94.86 42** *i* P **P 09 16 23.4 +0.3**
comp=Z,79nm,0.6s,SNR=288
MOA *ep*P **pP 09 18 36.2 -1.8**
comp=Z,306nm,1.3s
MOA *e*PP **PP 09 20 23.2 -0.2**
comp=Z,122nm,1.1s
MOA *eS* **S 09 26 41.3 -3.0**
comp=Z,37nm,1.2s
MOA *e*PKKP **PKKPdf 09 33 14.7 -2.0**
comp=Z,6.0nm,0.7s
MOA *i* P'P' **P'P'df 09 41 28.9 +1.4**
comp=Z,58nm,2.0s
**VISS Visnje 94.86 44** *i* P **P 09 16 23.4 +0.2**
**CUT Chulitna 94.87 333** P **P 09 16 22.8 +0.1**
baz=104,SNR=60
**CAPN Captain Cook N 94.88 331** P **P 09 16 24.1 +1.3**
baz=104,SNR=11
**KDAK Kodiak Island 94.90 328** P **P 09 16 22.9 0.0**
comp=Z,211nm,0.7s,baz=130,slow=2.2,SNR=117
KDAK pP **pP 09 18 38.1 +0.3**
comp=Z,100nm,0.6s,baz=132,slow=3.2,SNR=7.7
KDAK PKKP **PKKPdf 09 33 15.9 -0.9**
comp=Z,38nm,0.7s,baz=181,slow=2.7,SNR=34
comp=Z,211nm,0.7s
**KDAK Kodiak Island 94.90 328** P **P 09 16 23.2 +0.2**
baz=103
KDAK S **S 09 26 41.4 -2.7**
baz=103
**KDAK Kodiak Island 94.90 328** *d* *i*P **P 09 16 22.6 -0.4**
KDAK pmax pmax
comp=Z,316nm,0.9s
**NEA2 Nenana 94.91 335** P **P 09 16 23.1 +0.2**
baz=105,SNR=595
NEA2 S **S 09 26 41.6 -2.3**
baz=105
**C26K Camden Bay 94.93 341** P **P 09 16 24.3 +1.4**
baz=109,SNR=112
C26K S **S 09 26 44.7 +0.9**
baz=109
**BLWY Bulawayo 94.96 112** ⇓*i* P **P 09 16 24.7 +0.3**
BLWY IAmb IAmb 09 16 29.6
comp=Z,13µm,1.9s
**BLWY Bulawayo 94.96 112** *i* P **P 09 16 25.6 +1.2**
**BLWY Bulawayo 94.96 112** *i* P **P 09 16 25.6 +1.2**
**Q20K Shuyak Island 94.99 329** P **P 09 16 23.8 +0.4**
baz=103,SNR=42
**DOMB Dombas 95.01 28** *eP* **P 09 16 24.4 +1.0**
DOMB IVmB_BB 09 16 27.1
comp=Z,11µm,6.8s
DOMB *ep*P **pP 09 18 36.9 -1.4**
DOMB *e*SKSac **SKSac 09 25 57.8 -1.7**
DOMB *i* 09 26 45.4
DOMB *eS*P **SP 09 28 00.7 -7.1**
**TIP Timpagrande 95.07 51** ⇑P **P 09 16 23.7 -0.6**
**TIP Timpagrande 95.07 51** P **P 09 16 23.3 -1.0**
comp=Z,425nm,1.6s,comp=Z,6µm
**CKRC Cesky Krumlov 95.08 41** *eP* **P 09 16 24.5 +0.4**
CKRC *ep*P **pP 09 18 38.3 -0.6**
CKRC *e*SKS **SKSac 09 26 01.5 +1.1**
**CKRC Cesky Krumlov 95.08 41** *eP* **P 09 16 24.5 +0.4**
CKRC *e**PP **pP 09 18 38.3 -0.6**
CKRC *e* 09 26 01.5
**ZVC Zvikov 95.12 41** *eP* **P 09 16 24.8 +0.6**
ZVC *e*SKS **SKSac 09 26 02.9 +2.4**
ZVC *e*PKKP **PKKPdf 09 33 16.4 +0.1**
**OHAK Old Harbor 95.15 327** P **P 09 16 24.0 -0.1**
**OHAK Old Harbor 95.15 327** P **P 09 16 24.3 +0.2**
baz=102,SNR=66
**SOKA Soboth 95.16 44** *i* P **P 09 16 24.5 0.0**
comp=Z,26nm,0.5s,SNR=123
SOKA *ep*P **pP 09 18 37.5 -2.0**
comp=Z,50nm,1.0s
SOKA PP **PP 09 20 23.6 -2.2**
comp=Z,106nm,1.6s
SOKA S S 09 26 37.2 -10
comp=Z,42nm,1.6s
SOKA *e*PKKP **PKKPdf 09 33 16.3 +0.1**
comp=Z,6.0nm,0.7s
SOKA *e*P'P' **P'P'df 09 41 28.1 +1.1**
comp=Z,81nm,1.6s
**I23K Minto, Yukon-K 95.18 335** P **P 09 16 24.2 +0.1**
baz=105,SNR=293
**D25K Kavik River 95.23 340** P **P 09 16 25.3 +0.9**
baz=107,SNR=155
**BRG Berggiesshubel 95.23 39** ⇓*i* P **P 09 16 25.7 +0.9**
BRG Amp 09 16 27.2
comp=Z,272nm,0.9s
**BRG Berggiesshubel 95.23 39** P P 09 16 31.4 +6.7
BRG Amp 09 16 33.1
comp=Z,2µm,1.3s
BRG pP pP 09 18 40.5 +1.0
BRG Amp 09 18 45.2
comp=Z,258nm,1.3s
**BRG Berggiesshubel 95.23 39** ⇓*i* P **P 09 16 25.6 +0.9**
BRG SP **sP 09 19 39.0 -2.4**
BRG 09 20 29.1
BRG 09 26 04.0
BRG SP SP 09 28 08.0 -2.8
BRG pmax pmax
comp=Z,272nm,0.9s
BRG pmax pmax
comp=Z,308nm,1.5s
**BRG Berggiesshubel 95.23 39** *eP* **P 09 16 25.4 +0.7**
comp=Z,1µm,1.1s,baz=256,slow=4.7
**F24K Squaw Lake 95.24 338** P **P 09 16 25.6 +1.2**
baz=106,SNR=228
**RICC Richard 95.27 40** *eP* **P 09 16 25.9 +1.1**
RICC *ep*P **pP 09 18 38.3 -1.4**
**MATE Matera 95.28 50** ⇓P **P 09 16 24.6 -0.5**
**CRES Cresnjev 95.29 44** *i* P **P 09 16 25.7 +0.6**
CRES *ep*P **pP 09 18 39.2 -0.8**
CRES *e*SKSac **SKSac 09 26 02.5 +0.9**
CRES *e*SP SP 09 28 14.4 +2.7
**COP Copenhagen 95.30 34** *i* P **P 09 16 26.1 +1.3**
COP IAmb IAmb 09 16 32.4
comp=Z,3µm,1.2s
**OSL Oslo 95.31 30** *eP* **P 09 16 24.4 -0.4**
OSL IVmB_BB 09 16 31.6
comp=Z,17µm,1.4s
OSL *ep*P **pP 09 18 37.2 -2.5**
OSL *e*SKSac **SKSac 09 25 59.5 -1.5**
OSL *i* 09 26 48.7
OSL *eS*P SP 09 28 07.3 -3.7
OSL *e* 09 29 33.4
OSL *eSS* **SS 09 33 37.2 +2.6**
**SKT Skwentna 95.34 332** P **P 09 16 25.0 0.0**
baz=103,SNR=743
**PRA Prague 95.39 40** *eP* **P 09 16 26.4 +1.0**
PRA *ep*P **pP 09 18 39.5 -0.8**
**PRA Prague 95.39 40** *eP* **P 09 16 26.4 +1.0**
PRA *e**PP **pP 09 18 39.5 -0.8**
**H23K Yukon River 95.43 336** P **P 09 16 25.1 -0.1**
**H23K Yukon River 95.43 336** P **P 09 16 25.5 +0.2**
baz=105
**O20K Slope Mountain 95.43 330** P **P 09 16 25.5 +0.1**
baz=103,SNR=47
**RUE Ruedersdorf 95.44 38** *eP* **P 09 16 25.8 +0.2**
**PRU Pruhonice 95.44 40** *eP* **P 09 16 26.4 +0.7**
PRU *ep*P **pP 09 18 39.0 -1.5**
PRU *e*SKS **SKSac 09 26 04.2 +2.0**
PRU *e*PKKP **PKKPdf 09 33 15.4 -0.3**
**PRU Pruhonice 95.44 40** *eP* **P 09 16 26.4 +0.7**
PRU *e**PP **pP 09 18 39.0 -1.5**
PRU *e* 09 26 04.2
**N20K Mount Spurr 95.48 331** P **P 09 16 25.3 -0.4**
baz=103,SNR=53
**SPCR Spurr Chakacha 95.48 331** P **P 09 16 25.4 -0.3**
baz=103,SNR=46
**SII Sitkinak Islan 95.49 326** P **P 09 16 26.0 +0.2**
**SII Sitkinak Islan 95.49 326** P **P 09 16 25.9 +0.2**
baz=102,SNR=17
**PVCC Panska Ves 95.56 40** *eP* **P 09 16 27.0 +0.8**
PVCC *ep*P **pP 09 18 38.9 -2.2**
**PVCC Panska Ves 95.56 40** *eP* **P 09 16 27.0 +0.8**
PVCC *e**PP **pP 09 18 38.9 -2.2**
**RGN Rugen 95.57 36** *eP* **P 09 16 26.9 +0.9**
**GOPC GO Pecny, Ondr 95.59 40** *eP* **P 09 16 27.2 +0.9**
GOPC *ep*P **pP 09 18 40.1 -1.1**
GOPC *e*SKS **SKSac 09 26 04.3 +1.3**
**GOPC GO Pecny, Ondr 95.59 40** *eP* **P 09 16 27.2 +0.9**
GOPC *e**PP **pP 09 18 40.1 -1.1**
GOPC *e* 09 26 04.3
**ARSA Arzberg 95.59 43** *eP* **P 09 16 26.6 +0.1**
comp=Z,32nm,0.5s,SNR=134
ARSA *ep*P **pP 09 18 39.6 -1.7**
comp=Z,92nm,1.3s
ARSA *e*PP **PP 09 20 22.4 -6.6**
comp=Z,89nm,1.1s
ARSA *e*P'P' **P'P'df 09 41 27.0 +0.9**
comp=Z,48nm,2.0s
**BPAW Bear Paw Mtn. 95.60 334** P **P 09 16 26.0 0.0**
baz=104,SNR=556
**E24K Your Creek 95.61 338** P **P 09 16 27.2 +1.1**
baz=106,SNR=205
**P19K Oil Pt 95.64 330** P **P 09 16 26.1 -0.3**
baz=102,SNR=29
**ILSW Iliamna Southw 95.66 330** P **P 09 16 26.0 -0.6**
ILSW IAmb IAmb 09 16 33.1
comp=Z,594nm,1.0s
**PILG Pilgrimsrest, 95.66 117** ⇓*i* P **P 09 16 28.0 +0.4**
PILG IAmb IAmb 09 16 33.6
comp=Z,2µm,1.8s
**LSZ Lusaka 95.68 107** ⇓*i* P **P 09 16 28.8 +1.1**
LSZ IAmb IAmb 09 16 34.2
comp=Z,4µm,1.9s
**LSZ Lusaka 95.68 107** P **P 09 16 29.6 +1.9**
LSZ S **SKSac 09 26 10.5 +5.3**
**Q19K Cape Douglas, 95.69 329** P **P 09 16 26.5 -0.1**
baz=102,SNR=80
**MPHEP Siloam, Limpop 95.70 115** ⇓*i* P **P 09 16 28.5 +0.9**
MPHEP IAmb IAmb 09 16 33.0
comp=Z,646nm,1.1s
**MLY Manley 95.71 335** P **P 09 16 26.3 -0.3**
baz=104,SNR=220
**NB2 NORSAR Subarra 95.78 29** P **P 09 16 27.8 +0.8**
comp=Z,2µm,1.4s,baz=258,slow=4.6
NB2 pP **pP 09 18 41.4 -0.5**
comp=Z,6µm,5.0s,baz=259,slow=4.6
NB2 PKKP **PKKPdf 09 33 13.0 -2.4**
comp=Z,10nm,0.6s,baz=76,slow=4.3
NB2 SKKP SKKPdf 09 35 34.1 -18
comp=Z,163nm,1.7s,baz=73,slow=4.0
NB2 P'P' **P'P'df 09 41 21.6 -3.2**
comp=Z,2µm,3.3s,baz=78,slow=3.4
NB2 P3KP 09 43 44.6
comp=Z,2µm,3.3s,baz=76,slow=2.2
NB2 P7KP 10 15 46.3
comp=Z,1.9nm,0.8s,baz=73,slow=4.6
**NB2 NORSAR Subarra 95.78 29** P **P 09 16 27.8 +0.8**
baz=258,slow=4.6
**NOA NORSAR Array B 95.78 29** P **P 09 16 27.7 +0.8**
comp=Z,78nm,1.0s,baz=256,slow=4.3,SNR=115
NOA pP **pP 09 18 42.5 +0.6**
comp=Z,100nm,1.0s,baz=257,slow=4.4,SNR=9.7
NOA PKKP **PKKPdf 09 33 13.5 -1.9**
comp=Z,16nm,0.7s,baz=257,slow=3.0,SNR=21
NOA PKPPKP **P'P'df 09 41 22.0 -2.8**
comp=Z,8.6nm,0.9s,baz=261,slow=3.2,SNR=16
comp=Z,78nm,1.0s
**TBLU Trondheim 95.83 27** *eP* **P 09 16 28.6 +1.5**
TBLU IVmB_BB 09 16 34.6
comp=Z,12µm,2.3s
TBLU *ep*P **pP 09 18 39.9 -2.1**
TBLU *e*PP **PP 09 20 31.3 +1.1**
TBLU *e*SKSac **SKSac 09 26 02.7 -0.9**
TBLU *i* 09 26 53.6
TBLU *eS*P SP 09 28 17.2 +0.7
**G23K Bananza Creek 95.84 337** P **P 09 16 28.2 +1.1**
baz=104,SNR=135
**R18K Karluk 95.84 327** P **P 09 16 27.5 +0.3**
baz=101
**NC602 NORSAR Array S 95.88 29** *eP* **P 09 16 27.6 +0.2**
NC602 IVmB_BB 09 16 31.2
comp=Z,9µm,6.0s
NC602 *ep*P **pP 09 18 40.7 -1.6**
NC602 *e*PP **PP 09 20 31.9 +1.2**
NC602 *e*SKSac **SKSac 09 26 02.1 -1.8**
NC602 *i* 09 26 52.0
NC602 *eS*P SP 09 28 13.6 -3.6
**POGA Pongola 95.90 119** ⇓*i* P **P 09 16 29.3 +1.0**
POGA IAmb IAmb 09 16 30.9
comp=Z,3µm,2.1s
**TREC Trest 95.93 41** *eP* **P 09 16 29.0 +1.1**
**TREC Trest 95.93 41** *eP* **P 09 16 29.0 +1.1**
**CONA Conrad Observa 95.94 42** *eP* **P 09 16 28.4 +0.3**
comp=Z,90nm,0.9s,SNR=248
CONA *ep*P **pP 09 18 41.5 -1.5**
comp=Z,125nm,1.4s
CONA *e*PP **PP 09 20 33.2 +1.5**
comp=Z,174nm,1.5s
CONA *eS* **S 09 26 50.7 -2.8**
comp=Z,23nm,1.2s
CONA *e*PKKP **PKKPbc 09 33 13.4 -1.4**
comp=Z,5.5nm,0.8s
CONA *i* P'P' **P'P'df 09 41 26.3 +0.8**
comp=Z,47nm,2.0s
**NOR Nord 95.98 7** *i* P **P 09 16 27.8 +0.4**
NOR IAmb IAmb 09 16 34.6
comp=Z,1µm,1.2s
**NOR Nord 95.98 7** *i* P **PKKPbc 09 33 11.7 -3.9**
**HOED Hoedspruit, Li 95.99 116** ⇓*i* P **P 09 16 29.2 +0.3**
HOED IAmb IAmb 09 16 34.7
comp=Z,2µm,1.8s
**D24K Happy Valley 96.02 339** Pdiff **P 09 16 28.5 +0.7**
baz=105
**E23K Chandalar 96.02 338** Pdiff **P 09 16 28.8 +0.8**
baz=104
**COLD Coldfoot 96.03 337** Pdiff **P 09 16 29.3 +1.3**
baz=104
**M20K Styx River 96.06 332** Pdiff **P 09 16 27.8 -0.4**
baz=102
**C24K Franklin Bluff 96.13 340** Pdiff **P 09 16 29.5 +1.2**
baz=105
**CHIR Chirikof Islan 96.14 326** **P 09 16 29.4 +0.8**
CHIR IAmb IAmb 09 16 36.0
comp=Z,662nm,1.2s
**CHIR Chirikof Islan 96.14 326** Pdiff **P 09 16 29.0 +0.4**
baz=100
**TOLK Toolik Lake Re 96.15 339** Pdiff **P 09 16 29.1 +0.6**
baz=104
**H22K Ishtalitna Cre 96.17 336** Pdiff **P 09 16 28.8 +0.2**
baz=103
**RONA Rosalia, Austr 96.19 43** *e*Pdiff **P 09 16 29.5 +0.4**
comp=Z,68nm,0.8s,SNR=141
RONA *ep*P **pP 09 18 42.8 -1.2**
comp=Z,131nm,1.2s
RONA *e*PP **PP 09 20 31.2 -2.3**
comp=Z,208nm,1.9s
RONA S **S 09 26 51.4 -4.2**
comp=Z,40nm,2.0s
RONA *e*PKKP **PKKPbc 09 33 13.6 -0.5**
comp=Z,6.8nm,0.7s
RONA *i* P'P' **P'P'df 09 41 25.6 +0.6**
comp=Z,48nm,1.7s
**DEL Delary 96.24 34** *eP* **P 09 16 30.1 +1.0**
**I21K Tanana 96.26 335** P **P 09 16 28.3 -0.7**
**I21K Tanana 96.26 335** Pdiff **P 09 16 28.2 -0.7**
baz=103
**O19K Port Alsworth 96.28 330** Pdiff **P 09 16 28.6 -0.6**
baz=101
**BLY Banja Luka 96.31 46** ⇓*i* P **P 09 16 30.2 +0.5**
**Q18K Katmai Hardscr 96.33 328** Pdiff **P 09 16 29.5 -0.1**
baz=101
**STON Ston 96.38 48** ⇓*i* P **P 09 16 30.2 +0.2**
**G22K Bettles 96.46 337** Pdiff **P 09 16 30.6 +0.8**
baz=103
**UPC Upice 96.47 40** *eP* **P 09 16 31.3 +1.1**
UPC *e*SKS **SKSac 09 26 10.0 +2.6**
UPC *e*PKKP **PKKPbc 09 33 12.9 -0.5**
**UPC Upice 96.47 40** *eP* **P 09 16 31.3 +1.1**
UPC *e* 09 26 10.0
**KRUC Moravsky 96.47 41** *e*PDIFF **P 09 16 30.9 +0.6**
KRUC *ep*P **pP 09 18 44.4 -0.9**
KRUC *e*SKS S 09 26 08.2 -50
KRUC *e*PKPPKP **P'P'df 09 41 25.6 +1.3**
**N19K Bonanza Creek 96.48 331** Pdiff **P 09 16 29.5 -0.7**
baz=101
**CHVC Chvalec 96.50 40** *eP* **P 09 16 31.6 +1.2**
CHVC *ep*P **pP 09 18 43.2 -2.3**
CHVC *e*PKPPKP **P'P'df 09 41 23.9 -0.3**
**CHVC Chvalec 96.50 40** *eP* **P 09 16 31.6 +1.2**
CHVC *e**PP **pP 09 18 43.2 -2.3**
**SCTE Santa Cesarea 96.52 51** *i* P **P 09 16 31.0 +0.3**
**L20K Farewell, AK 96.52 332** Pdiff **P 09 16 29.8 -0.4**
baz=101
**BSD Bornholm Skovb 96.58 35** *eP* **P 09 16 31.3 +0.7**
**BSD Bornholm Skovb 96.58 35** *i* P **P 09 16 31.0 +0.4**
BSD IAmb IAmb 09 16 37.6
comp=Z,1µm,1.4s
**BSD Bornholm Skovb 96.58 35** *i* P **PKKPbc 09 33 11.9 -1.3**
**P18K Big Mountain, 96.58 329** Pdiff **P 09 16 29.9 -0.7**
baz=100
**TEMBE Tembe Elephant 96.60 119** ⇓*i* P **P 09 16 32.8 +1.3**
TEMBE IAmb IAmb 09 16 34.5
comp=Z,7µm,2.2s
**OSTC Ostas 96.60 40** *eP* **P 09 16 32.0 +1.1**
OSTC *ep*P **pP 09 18 44.7 -1.2**
OSTC *e*SKS **SKSac 09 26 10.2 +2.1**
**OSTC Ostas 96.60 40** *eP* **P 09 16 32.0 +1.1**
OSTC *e**PP **pP 09 18 44.7 -1.2**
OSTC *e* 09 26 10.2
**D23K Nanushuk River 96.62 339** Pdiff **P 09 16 31.8 +1.3**
baz=103
**DPC Dobruska-Polom 96.64 40** *eP* **P 09 16 32.2 +1.1**
DPC *ep*P **pP 09 18 45.7 -0.4**
DPC *e*PKPPKP **P'P'df 09 41 23.2 -0.8**
**DPC Dobruska-Polom 96.64 40** *eP* **P 09 16 32.2 +1.1**
DPC *e**PP **pP 09 18 45.7 -0.4**
**DPC Dobruska-Polom 96.64 40** P **P 09 16 32.2 +1.1**
comp=Z,1µm,1.3s,comp=Z,18µm
**MOPA Mopani 96.64 115** ⇓*i* P **P 09 16 32.7 +1.0**
MOPA IAmb IAmb 09 16 37.7
comp=Z,8µm,2.1s
**VRAC Vranov 96.64 41** *e*PDIFF **P 09 16 31.8 +0.7**
VRAC *ep*P **pP 09 18 44.8 -1.3**
VRAC *e*SKS S 09 26 09.9 -49
**VRAC Vranov 96.64 41** ⇓P **P 09 16 32.0 +0.9**
**VRAC Vranov 96.64 41** P **P 09 16 32.0 +0.9**
**M19K Big River Lodg 96.65 332** **P 09 16 30.5 -0.3**
**M19K Big River Lodg 96.65 332** Pdiff **P 09 16 30.7 -0.1**
baz=101
**O18K Koktuh Hills 96.66 330** Pdiff **P 09 16 30.6 -0.3**
baz=100
**KRI Karoi 96.66 109** ⇓*i* P **P 09 16 32.4 +0.4**
**KSP Ksiaz 96.70 40** *i* P **P 09 16 32.6 +1.4**
KSP *ep*P **pP 09 18 43.6 -2.7**
KSP *e*PP **PP 09 20 38.7 +1.6**
KSP *e*SKSac **SKSac 09 26 08.0 -0.5**
KSP *e*SKSac SKKSac 09 26 10.7 -28
KSP *eS*P **SP 09 28 20.2 -6.3**
**H21K Melozitna Rive 96.70 336** Pdiff **P 09 16 30.8 -0.1**
baz=102
**Q17K Contact Creek 96.72 328** Pdiff **P 09 16 31.4 +0.1**
baz=100
**K20K Telida 96.78 333** Pdiff **P 09 16 31.2 -0.2**
baz=101
**ZST Bratislava 96.80 42** *eP* **P 09 16 32.4 +0.6**
ZST *e* 09 18 46.6
**ZST Bratislava 96.80 42** *e*PDIFF **P 09 16 32.4 +0.6**
**C23K Itkillik River 96.80 340** **P 09 16 32.2 +1.0**
**C23K Itkillik River 96.80 340** Pdiff **P 09 16 32.3 +1.0**
baz=103
**HFS Hagfors 96.81 30** P **P 09 16 31.5 0.0**
comp=Z,41nm,0.7s,baz=257,slow=2.0,SNR=42
HFS pP **pP 09 18 47.5 +0.9**
comp=Z,119nm,1.1s,baz=45,slow=0.4,SNR=6.0
HFS PP **PP 09 20 36.4 -1.3**
comp=Z,64nm,1.0s,baz=282,slow=6.8,SNR=2.6
HFS PKKPbc **PKKPbc 09 33 10.7 -2.1**
comp=Z,23nm,0.8s,baz=119,slow=1.9,SNR=7.6
HFS PKPPKP **P'P'df 09 41 19.5 -3.3**
comp=Z,12nm,0.8s,baz=116,slow=3.4,SNR=5.3
comp=Z,41nm,0.7s
**TREB Trebinje 96.83 48** *eP* **P 09 16 32.5 +0.4**
**NSS Namsos 96.83 26** *eP* **P 09 16 32.6 +1.1**
NSS IVmB_BB 09 16 38.7
comp=Z,18µm,1.5s
NSS *ep*P **pP 09 18 45.7 -0.9**
NSS *ep*P **pP 09 18 45.7 -0.9**
NSS *e*PP **PP 09 20 37.6 -0.2**
NSS *e*SKSac **SKSac 09 26 08.2 -0.4**
NSS *i* 09 27 00.6
NSS *eS*P **SP 09 28 24.1 -3.2**
NSS *e* 09 29 50.3
NSS *eSS* **SS 09 33 57.3 +1.7**
**E22K Anaktuvuk Pass 96.84 338** Pdiff **P 09 16 32.3 +0.7**
baz=102
**F22K John River 96.84 337** Pdiff **P 09 16 32.4 +0.8**
baz=102
**R17L Mt. Peulik Vol 96.86 327** Pdiff **P 09 16 32.2 +0.4**
baz=100
**KRLC Kraliky 96.88 40** *eP* **P 09 16 33.7 +1.5**
KRLC *ep*P **pP 09 18 46.7 -0.5**
KRLC *e*SKS **SKSac 09 26 11.7 +2.0**
KRLC *e*PKKP **PKKPbc 09 33 11.4 -1.0**
**KRLC Kraliky 96.88 40** *eP* **P 09 16 33.7 +1.5**
KRLC *e**PP **pP 09 18 46.7 -0.5**
KRLC *e* 09 26 11.7
**L19K White Mountain 96.91 332** Pdiff **P 09 16 31.5 -0.4**
baz=100
**MPLH Magyarpolny 96.94 43** P **P 09 16 33.3 +0.9**
comp=Z,3µm,1.4s,comp=Z,46µm
**DOB Doboj 96.95 46** *eP* **P 09 16 34.1 +1.6**
**J20K Nowinta River 96.97 334** Pdiff **P 09 16 31.9 -0.3**
baz=101
**BRY Bratogost 97.00 48** ⇓*i* P **P 09 16 33.5 +0.5**
**BRY Bratogost 97.00 48** ⇓*i* P **P 09 16 33.5 +0.5**
**SVW2 Sparrevohn 97.06 331** P Pdif 09 16 32.1 -0.5
**SMOL Smolenice 97.06 42** *eP* **P 09 16 33.8 +0.8**
SMOL *e* 09 18 47.5
**N18K Kilae Creek 97.14 330** Pdiff Pdif 09 16 32.6 -0.4
baz=100
**G21K Allakaket 97.15 336** Pdiff **P 09 16 33.2 +0.3**
baz=101
**P17K Kvichak River 97.16 329** Pdiff Pdif 09 16 32.9 -0.1
baz=99

BUM Brajici-Budva 97.17 48 ⇓ iP P 09 16 34.6 +0.9
Q16K King Salmon 97.19 328 Pdiff P 09 16 33.3 +0.1
baz=99
CEME Cevo 97.22 48 ⇓ iP P 09 16 34.9 +1.0
I20K Naaghedeneel 97.22 335 Pdiff Pdif 09 16 33.1 -0.1
baz=100
M18K Stony River 97.24 331 Pdiff Pdif 09 16 32.9 -0.5
baz=100
F21K Alatna River 97.28 337 Pdiff P 09 16 34.3 +0.8
baz=101
NKME Niksic 97.28 48 ⇓ iP P 09 16 34.7 +0.6
UPM Unac-Piva 97.31 47 ⇓ iP P 09 16 35.1 +0.7
UPM Unac-Piva 97.31 47 ⇓ iP P 09 16 35.2 +0.8
D22K Ayikyak River 97.31 339 Pdiff P 09 16 34.5 +0.8
baz=102
MORC Moravsky Berou 97.33 41 ePDIFF P 09 16 35.3 +1.2
MORC epP pP 09 18 48.5 -0.8
MORC eSKS S 09 26 13.1 -52
MORC ePKPPKP P'P'df 09 41 24.3 +1.6
DRME Dracevica, Mon 97.36 49 ⇓ iP P 09 16 35.6 +1.1
DRME Dracevica, Mon 97.36 49 ⇓ iP P 09 16 35.5 +1.1
MAUC Maruska 97.45 41 eP P 09 16 36.1 +1.4
MAUC eP Pdif 09 16 36.2 +1.5
MAUC epP pP 09 18 48.6 -1.2
MAUC eSKS SKSac 09 26 15.2 +2.7
MAUC ePKKP PKKPdf 09 33 11.8 -0.3
MAUC ePKPPKP P'P'df 09 41 21.2 -1.3
PDG Podgorica 97.45 48 ⇓ iP P 09 16 35.6 +0.8
PDG Podgorica 97.45 48 ⇓ P P 09 16 35.8 +1.1
PDG Podgorica 97.45 48 ⇓ iP P 09 16 35.9 +1.1
HAPS Han Pijesak,BI 97.46 47 ⇓ iP P 09 16 36.0 +1.0
KEK Kerkira 97.47 51 P P 09 16 35.6 +0.6
H20K Anotleneega Mo 97.51 335 Pdiff P 09 16 34.9 +0.3
baz=100
MORH Mrgy, Hungar 97.55 44 ⇓ P P 09 16 35.9 +0.7
MORH Mrgy, Hungar 97.55 44 P P 09 16 35.7 +0.6
comp=Z,703nm,1.4s,comp=Z,13µm
J19K Poorman 97.57 334 Pdiff Pdif 09 16 34.5 -0.3
baz=100
O17K Koliganek Bris 97.58 329 Pdiff Pdif 09 16 34.8 -0.1
baz=99
STOK Stokkvaagen 97.60 24 ePdif P 09 16 35.0 +0.2
STOK IVmB_BB 09 16 42.1
comp=Z,12µm,1.7s
STOK epP pP 09 18 47.2 -2.8
STOK eSP sP 09 19 48.8 -3.1
STOK ePP PP 09 20 43.9 +0.4
STOK eSKSac SKSac 09 26 13.0 +0.7
STOK eSP SP 09 28 37.2 +1.8
STOK ePS PS 09 29 58.6 +0.2
STOK eSS SS 09 34 07.6 +1.6
GKP Gorka Klasztor 97.64 37 eP P 09 16 36.6 +1.2
GKP Gorka Klasztor 97.64 37 eP P 09 16 36.5 +1.2
SRN Sarande 97.65 51 iP P 09 16 36.8 +1.1
SRN Sarande 97.65 51 P P 09 16 36.2 +0.5
KONS Konsvik 97.67 24 ePdif Pdif 09 16 34.5 -0.7
KONS IVmB_BB 09 16 40.7
comp=Z,11µm,1.8s
KONS epP pP 09 18 49.0 -1.3
KONS eSKSac SKSac 09 26 11.4 -1.3
E21K Killik River 97.69 338 Pdiff P 09 16 36.0 +0.7
baz=100
KOME Kolasin 97.70 48 ⇓ iP P 09 16 37.2 +1.2
RUDO Rudo 97.70 47 eP Pdif 09 16 34.3 -1.6
OKC Ostrava-Krasne 97.72 41 eP P 09 16 37.4 +1.6
OKC epP pP 09 18 51.0 0.0
OKC Ostrava-Krasne 97.72 41 eP P 09 16 37.4 +1.6
OKC e*PP pP 09 18 51.0 0.0
N17K Nushagak Hills 97.74 330 Pdiff Pdif 09 16 35.5 -0.2
baz=99
TIR Tirane 97.75 49 iP P 09 16 37.4 +1.2
TIR Tirane 97.75 49 P P 09 16 37.5 +1.3
TIR Tirane 97.75 49 ⇑ P P 09 16 37.5 +1.2
TIR Tirane 97.75 49 P P 09 16 37.4 +1.2
TIR Tirane 97.75 49 P P 09 16 37.3 +1.2
comp=Z,592nm,1.5s,comp=Z,11µm
BBLS Lazi&#263i 97.76 47 ⇓ iP P 09 16 37.2 +0.9
CHGN Chignik 97.76 326 Pdiff Pdif 09 16 35.8 0.0
baz=98
L18K Granite Mounta 97.77 332 Pdiff P 09 16 35.8 +0.1
baz=99
B22K Teshekpuk Lake 97.85 340 P 09 16 36.8 +0.9
B22K IAmb IAmb 09 16 43.7
comp=Z,895nm,1.1s
B22K Teshekpuk Lake 97.85 340 Pdiff P 09 16 36.7 +0.9
baz=101
IGT Igoumenitsa 97.86 51 iP P 09 16 37.1 +0.4
IGT Igoumenitsa 97.86 51 P P 09 16 37.2 +0.4
PSDA Pessada-Kefalo 97.86 53 P Pdif 09 16 36.4 -0.3
PUK Puka 97.87 49 iP P 09 16 37.6 +0.8
FSK Fiskardo 97.89 52 P Pdif 09 16 36.8 0.0
P16K Nushagak River 97.93 329 Pdiff Pdif 09 16 36.4 -0.1
baz=98
TEKS Tekeris 97.94 46 ⇓ iP P 09 16 37.6 +0.6
J18K Innoko River 97.97 333 Pdiff P 09 16 36.8 +0.1
baz=99
IVA Berane 97.98 48 ⇓ iP P 09 16 38.1 +0.8
EVGI Lefkada island 97.98 52 P P 09 16 37.5 +0.2
VYHS Vyhne 97.99 42 eP P 09 16 37.7 +0.6
VYHS e 09 18 51.3
VYHS Vyhne 97.99 42 ePDIFF P 09 16 37.6 +0.5
M17K Holitna River 98.00 331 Pdiff P 09 16 37.1 +0.3
baz=98
RTZL Ratzakli, Kefa 98.00 53 P Pdif 09 16 37.3 0.0
LTHK Lithakia 98.00 53 P Pdif 09 16 37.1 -0.3
LKD2 Lefkada island 98.01 52 P Pdif 09 16 37.1 -0.3
TSLK Tsoukalades, L 98.01 52 P P 09 16 37.7 +0.3
NYDR Nydri-Lefkada 98.03 52 P P 09 16 37.7 +0.2
BCI Bajram Curri 98.04 48 iP P 09 16 38.1 +0.6
O16K Kokwok River B 98.06 329 Pdiff Pdif 09 16 36.5 -0.6
baz=98
SJES Sjenica 98.09 48 ⇓ iP P 09 16 38.5 +0.7
C21K Knifeblade Rid 98.11 339 Pdiff P 09 16 38.2 +1.0
baz=100
LOF Lofoten 98.11 22 ePdif P 09 16 37.6 +0.5
LOF IVmB_BB 09 16 39.0
comp=Z,6µm,3.1s
LOF eSKSac SKSac 09 26 14.1 -0.8
LOF eSP SP 09 28 40.5 -0.2
LOF ePS PS 09 30 02.9 -1.1
LOF eSS SS 09 34 16.2 +3.3
F20K Avaraart Lake 98.11 337 Pdiff P 09 16 37.8 +0.6
baz=99
B21K Ikpikpuk River 98.12 339 Pdif P 09 16 37.9 +0.8
B21K IAmb IAmb 09 16 45.0
comp=Z,928nm,1.2s
B21K Ikpikpuk River 98.12 339 Pdiff P 09 16 38.0 +0.9
baz=100
MOR8 Moi Rana 98.14 24 ePdif P 09 16 38.7 +1.4
MOR8 IVmB_BB 09 16 41.7
comp=Z,8µm,6.4s
MOR8 epP pP 09 18 51.8 -0.8
MOR8 eSP sP 09 19 51.5 -2.8
MOR8 ePP PP 09 20 47.4 -0.2
MOR8 eSKSac SKSac 09 26 15.6 +0.4
MOR8 eSP SP 09 28 40.9 -0.3
MOR8 ePS PS 09 30 05.1 +0.6
MOR8 eSS SS 09 34 16.9 +3.3
H19K Roundabout Mou 98.17 335 Pdiff P 09 16 38.2 +0.7
baz=99
FRGS Fruska Gora 98.22 46 ⇓ iP P 09 16 38.6 +0.4
CHNA Chernabura Isl 98.22 324 Pdiff P 09 16 38.1 +0.2
baz=97
GCSA Galena City Sc 98.23 334 Pdiff P 09 16 38.6 +0.9
baz=98
KBN Korca 98.35 50 iP P 09 16 40.1 +1.1
KBN Korca 98.35 50 P P 09 16 39.9 +0.9
S14K Fog Glacier 98.39 326 Pdiff P 09 16 39.0 +0.2
baz=97
OHR Ohrid 98.42 50 iP P 09 16 40.9 +1.6
E20K Nigu River 98.47 338 Pdiff P 09 16 39.7 +0.8
baz=98
A22K Sinclair Lake 98.47 341 Pdiff P 09 16 39.3 +0.6
baz=99
LANS Liptovska Anna 98.48 42 eP P 09 16 41.0 +1.6
LANS Liptovska Anna 98.48 42 ePDIFF P 09 16 41.0 +1.6
L17K Donlin 98.50 332 Pdiff P 09 16 39.8 +0.8
baz=97
N16K Nishlik Lake 98.51 330 Pdiff P 09 16 39.6 +0.4
baz=97
G19K Purcell Mounta 98.51 336 Pdiff P 09 16 39.6 +0.5
baz=98
NEST Nestorio 98.52 50 P P 09 16 40.9 +1.1

PENT Pentalofos 98.56 51 P P 09 16 40.9 +0.9
K17K Iditarod 98.58 332 Pdiff P 09 16 39.9 +0.5
baz=97
CHIPN CHIPINGE 98.61 113 ⇓ iP P 09 16 41.5 +0.8
CHIPN CHIPINGE 98.61 113 i P P 09 16 42.9 +2.2
CHIPN CHIPINGE 98.61 113 i P P 09 16 42.9 +2.2
PYL PYLOS 98.61 54 P Pdif 09 16 40.0 -0.1
PSZ Piszkesteto 98.62 43 ⇑ P P 09 16 41.1 +1.1
PSZ Piszkesteto 98.62 43 P P 09 16 41.1 +1.1
FAUS Fauske 98.65 23 ePdif P 09 16 40.4 +0.8
FAUS IVmB_BB 09 16 46.7
comp=Z,7µm,2.5s
FAUS epP pP 09 18 52.9 -1.9
FAUS eSP sP 09 19 53.4 -3.2
FAUS ePP PP 09 20 52.0 +0.7
FAUS eSKSac SKSac 09 26 17.8 +0.2
FAUS eSP SP 09 28 47.9 +1.3
FAUS ePS PS 09 30 07.3 -2.1
FAUS eSS SS 09 34 23.1 +2.6
PVO Paravola 98.66 52 P P 09 16 41.0 +0.7
M16K Timber Creek 98.67 331 IAmb IAmb 09 16 47.8
comp=Z,510nm,1.3s
M16K Timber Creek 98.67 331 Pdiff P 09 16 40.7 +0.9
baz=97
D20K Etivluk River 98.69 338 Pdiff P 09 16 40.6 +0.8
baz=98
STEI Steigen 98.71 22 ePdif P 09 16 40.3 +0.5
STEI IVmB_BB 09 16 41.3
comp=Z,5µm,4.1s
STEI epP pP 09 18 53.4 -1.7
STEI eSP sP 09 19 53.8 -3.0
STEI eSKSac SKSac 09 26 19.3 +1.5
STEI eSP SP 09 28 45.7 -1.4
STEI ePS PS 09 30 09.2 -0.7
STEI eSS SS 09 34 23.2 +2.0
UPP Uppsala 98.72 31 eP P 09 16 40.1 +0.1
E19K Redstone River 98.75 337 Pdiff P 09 16 40.3 +0.2
baz=98
SDPT Sand Point 98.79 325 P P 09 16 41.4 +0.9
SDPT Sand Point 98.79 325 Pdiff P 09 16 40.8 +0.3
baz=97
FNA Florina 98.81 50 P P 09 16 41.3 +0.3
OJC Ojcow 98.83 41 i P P 09 16 41.9 +1.1
OJC epP pP 09 18 54.8 -1.2
OJC ePP PP 09 20 52.6 -0.6
OJC eSKSac SKSac 09 26 19.3 0.0
OJC eSKSKSac SKSKSac 09 26 54.0 +0.4
OJC eSP SP 09 28 40.0 -9.2
OJC Ojcow 98.83 41 P P 09 16 41.7 +0.9
comp=Z,619nm,1.7s,comp=Z,12µm
F19K Shaleruckik Mo 98.88 336 Pdiff P 09 16 40.9 +0.3
baz=99
O15K Ungalikthiuk R 98.89 329 Pdiff Pdif 09 16 39.5 -1.3
baz=96
H18K Honhosa River 98.91 335 IAmb IAmb 09 16 49.2
comp=Z,916nm,1.4s
H18K Honhosa River 98.91 335 Pdiff P 09 16 42.2 +1.3
baz=97
EVR Evrytania 98.92 52 P P 09 16 43.7 +2.1
EFP Efpalio 98.93 53 P P 09 16 42.2 +0.7
ANX Ano Chora 98.96 52 P P 09 16 42.6 +0.8
L16K Owhat River 99.00 331 Pdiff Pdif 09 16 42.3 +1.1
baz=96
J17K VABM Dome 99.01 333 Pdif 09 16 42.3 +1.0
J17K VABM Dome 99.01 333 Pdiff Pdif 09 16 42.3 +1.0
baz=96
A21K Barrow 99.05 341 Pdiff Pdif 09 16 42.2 +1.0
baz=98
B20K Meade River 99.06 340 Pdiff Pdif 09 16 42.3 +1.0
baz=97
NIE Niedzica 99.06 41 i P Pdif 09 16 43.7 +1.8
NIE epP pP 09 18 57.7 +0.5
NIE ePP PP 09 20 53.9 -1.1
NIE eSKSac SKSac 09 26 21.5 +1.1
NIE eSKKSac SKKSac 09 26 53.5 -1.9
NIE eSP SP 09 28 43.4 -8.4
NIE Niedzica 99.06 41 P Pdif 09 16 43.3 +1.5
comp=Z,228nm,1.6s,comp=Z,5µm
KECS Kecovo 99.08 42 eP Pdif 09 16 42.9 +1.0
KECS e 09 19 00.6
KECS Kecovo 99.08 42 ePDIFF Pdif 09 16 42.9 +1.0
KLV Kalavryta, Ach 99.08 53 P Pdif 09 16 42.7 +0.5
G18K Tagagawik 99.12 335 Pdiff Pdif 09 16 42.6 +0.9
baz=96
N15K Kwethluk River 99.13 330 IAmb IAmb 09 16 49.7
comp=Z,542nm,1.4s
N15K Kwethluk River 99.13 330 Pdiff Pdif 09 16 42.5 +0.6
baz=96
RAO Raoul Island 99.14 238 P Pdif 09 16 46.0 +3.3
comp=Z,457nm,0.4s,baz=284,slow=23,SNR=4.4
PUZ Puketiti 99.15 228 PKiKP PKiKP 09 21 13.1 +4.4
PUZ P PKKPbc 09 33 03.9 -2.0
BANR Banloc 99.17 46 ⇓ P Pdif 09 16 43.8 +1.4
MAKR Makrakomi, Fth 99.18 52 P Pdif 09 16 43.1 +0.5
D19K Kuna River 99.21 338 Pdif 09 16 43.0 +0.9
D19K IAmb IAmb 09 16 50.2
comp=Z,735nm,1.2s
D19K Kuna River 99.21 338 Pdiff Pdif 09 16 43.0 +0.9
baz=97
GUR Goura 99.21 53 P Pdif 09 16 43.1 +0.2
RIGZ Rimuhau 99.28 228 P PKKPbc 09 33 04.9 -0.7
MXZ Matakaoa Point 99.30 229 P PKKPbc 09 33 03.9 -1.4
TKGZ Te Karaka 99.31 228 P PKKPbc 09 33 03.6 -1.8
TYRN Tyrnavos 99.34 51 P Pdif 09 16 43.3 0.0
BOVS Bovan 99.39 47 ⇓ P Pdif 09 16 43.6 +0.2
KBS Kingsbay 99.40 11 ePdif Pdif 09 16 43.9 +1.2
KBS IVmB_BB 09 16 47.4
comp=Z,4µm,5.9s
KBS epP pP 09 18 56.4 -1.7
KBS ePP PP 09 20 55.4 -1.3
KBS eSKSac SKSac 09 26 24.5 +3.6
KBS eSP SP 09 28 53.4 -0.7
KBS ePS PS 09 30 18.0 +1.5
KBS eSS SS 09 34 32.8 +2.3
KBS Kingsbay 99.40 11 i P Pdif 09 16 44.8 +2.1
KBS pmax pmax
comp=Z,146nm,1.4s
KBS Kingsbay 99.40 11 i P Pdif 09 16 44.2 +1.5
PXZ Pawanui 99.41 226 P PKKPbc 09 33 05.5 +0.3
M15K Kasigluk River 99.48 330 Pdiff Pdif 09 16 44.1 +0.7
baz=96
MDVR Moldovita 99.51 46 ⇑ P Pdif 09 16 44.8 +0.8
ANWZ Angora Road 99.52 226 P PKKPbc 09 33 04.2 -0.7
BZS Buzias 99.53 45 ⇓ P Pdif 09 16 45.0 +0.9
BZS Buzias 99.53 45 P Pdif 09 16 44.9 +0.9
H17K Granite Mounta 99.54 334 IAmb IAmb 09 16 51.5
comp=Z,436nm,1.4s
H17K Granite Mounta 99.54 334 Pdiff Pdif 09 16 44.5 +0.9
baz=96
SNGZ Shannon Statio 99.55 227 P PKKPbc 09 33 03.0 -1.8
AXAR Agios Charalam 99.56 52 P Pdif 09 16 44.5 +0.2
MWZ Matawai 99.59 228 Pdiff Pdif 09 16 48.5 +3.9
MWZ P PKKPbc 09 33 03.4 -1.2
KTHA Kythira Island 99.59 55 P Pdif 09 16 44.9 +0.4
F18K Selawik 99.59 336 Pdiff Pdif 09 16 44.5 +0.8
baz=96
RAGZ Rawiri 99.61 228 P PKKPbc 09 33 03.4 -1.3
BEL Belsk 99.62 39 eP Pdif 09 16 45.6 +1.4
BEL epP pP 09 18 58.3 -1.3
BEL eSKSac SKSac 09 26 24.2 +1.2
BEL eSKKSac SKKSac 09 26 59.0 -0.2
BEL eSP SP 09 28 48.6 -8.9
O14K Tigyukauivet M 99.63 329 Pdiff Pdif 09 16 44.1 0.0
baz=95
SIRR Siria 99.63 45 ⇑ P Pdif 09 16 45.4 +0.9
TMWZ Te Maipa 99.67 225 P PKKPbc 09 33 03.9 -0.6
J16K Anvik River 99.68 333 Pdiff Pdif 09 16 45.5 +1.2
baz=95
TRWZ Traveller 99.69 224 P PKKPbc 09 33 04.3 -0.2
S12K Black Hills 99.73 325 Pdiff Pdif 09 16 44.7 +0.1
baz=95
ANKY Antikythira Is 99.74 55 P Pdif 09 16 45.5 +0.4
MCHZ McNeill Hill 99.76 227 P PKKPbc 09 33 03.0 -1.2
CRVS Cervenica-Dubn 99.76 42 ⇑ eP Pdif 09 16 46.1 +1.1
CRVS e 09 18 59.6
CRVS e 09 26 18.9
CRVS eS S 09 27 26.0 0.0
CRVS Cervenica-Dubn 99.76 42 ePDIFF Pdif 09 16 46.1 +1.1
CRVS Cervenica-Dubn 99.76 42 e 09 28 50.8
CRVS Cervenica-Dubn 99.76 42 ⇑ eSKSp SKSac 09 26 18.9 -5.0
CRVS Cervenica-Dubn 99.76 42 eSDIFF S 09 27 26.0 0.0
VAY Valandovo 99.77 50 iP Pdif 09 16 46.0 +0.9
I17K Unalakleet 99.78 333 Pdiff Pdif 09 16 45.8 +1.2
baz=95
KRND KRANIDI 99.79 54 P Pdif 09 16 45.0 -0.3
DVHZ Dannevirke 99.80 226 Pdiff Pdif 09 16 49.2 +3.8
DVHZ P PKKPbc 09 33 02.3 -1.9
C19K Lookout Ridge 99.81 339 Pdiff Pdif 09 16 46.0 +1.2
baz=95
NMHZ Naumai 99.81 227 P PKKPbc 09 33 03.3 -0.8
PRWZ Pori Road 99.83 225 P PKKPbc 09 33 02.6 -1.5
PAWZ Paruwai Farm 99.87 224 P PKKPbc 09 33 03.5 -0.5
RTZ Ruatahuna 99.88 227 P PKKPbc 09 33 02.5 -1.4
MTHZ Maungataniwha 99.89 227 Pdiff Pdif 09 16 49.4 +3.5
MTHZ P PKKPbc 09 33 02.5 -1.3
HSPB Hornsund (broa 99.89 13 i P Pdif 09 16 46.2 +1.3
HSPB epP pP 09 18 58.0 -2.3
HSPB ePP PP 09 20 57.9 -2.5
HSPB eSKSac SKSac 09 26 25.1 +1.8
HSPB eSKKSac SKKSac 09 26 60.0 -0.2
HSPB eSP SP 09 28 54.1 -5.2
G17K Kiwalik Mounta 99.90 335 Pdiff Pdif 09 16 46.2 +1.0
baz=95
N14K Kuskokwak Cree 99.90 329 Pdiff Pdif 09 16 46.1 +0.8
baz=95
SURR Surduc 99.90 45 ⇓ P Pdif 09 16 46.4 +0.8
KRHZ Kereru 99.91 226 P PKKPbc 09 33 02.1 -1.7
MTW Mount Morrison 99.91 225 P PKKPbc 09 33 02.7 -1.1
PLWZ Palliser 99.91 224 P PKKPbc 09 33 03.1 -0.8
URZ Urewera 99.92 228 Pdiff Pdif 09 16 49.8 +3.9
URZ P PKKPbc 09 33 01.0 -2.6
PNHZ Pukenui 99.93 226 P PKKPbc 09 33 02.2 -1.6
AAL Aland 99.94 30 eP Pdif 09 16 45.4 0.0
L15K Ungalak Mounta 99.95 331 Pdiff Pdif 09 16 46.4 +0.9
baz=95
MSWZ Moikau Station 99.98 224 P PKKPbc 09 33 02.9 -0.7
THE Thessaloniki 100.00 50 P Pdif 09 16 45.9 -0.2
KNT Kendrikon 100.00 50 P Pdif 09 16 46.7 +0.5
VILL Villia 100.00 53 P Pdif 09 16 46.1 -0.2
HOWZ Holdsworth Sta 100.01 225 P PKKPbc 09 33 02.0 -1.5
BKZ Black Stump Fm 100.01 227 P PKKPbc 09 33 01.7 -1.8
HERR Herculane 100.02 46 ⇓ P Pdif 09 16 46.9 +0.7
K15K Wolf Creek Mou 100.02 332 Pdif 09 16 47.0 +1.2
K15K Wolf Creek Mou 100.02 332 Pdiff Pdif 09 16 47.2 +1.4
baz=95
TSZ Takapari Road 100.04 226 P PKKPbc 09 33 01.0 -2.5
POWZ Post Office Ro 100.04 225 P PKKPbc 09 33 02.1 -1.4
E18K Tukpahlearik C 100.04 337 Pdiff Pdif 09 16 46.3 +0.5
baz=94
MRZ Mangatainoka R 100.06 225 Pdiff Pdif 09 16 57.0 +10
MRZ P PKKPbc 09 33 02.3 -1.1
DJES Djerdap 100.07 46 ⇓ P Pdif 09 16 47.5 +1.1
HORT Hortiatis 100.09 50 P Pdif 09 16 46.9 +0.2
M14K Bethel 100.11 330 Pdiff Pdif 09 16 47.2 +1.1
baz=94
SPA0 Spitsbergen Ar 100.19 12 ePdif Pdif 09 16 46.0 -0.2
SPA0 epP pPdif 09 18 59.3 -2.2
SPA0 eSKSac SKSac 09 26 25.3 +0.4
SPITS Spitsbergen Ar 100.19 12 P Pdif 09 16 47.2 +0.9
comp=Z,32nm,0.7s,baz=165,slow=3.5,SNR=19
SPITS pP pPdif 09 19 01.2 -0.3
comp=Z,53nm,1.0s,baz=248,slow=8.8,SNR=4.1
SPITS PKKPbc PKKPbc 09 33 01.5 -2.5
comp=Z,12nm,0.5s,baz=117,slow=6.7,SNR=6.0
MRHZ Matea Rd 100.20 227 Pdiff Pdif 09 16 52.2 +5.0
MRHZ P PKKPbc 09 33 00.5 -2.5
F17K Baldwin Pennin 100.22 336 Pdiff Pdif 09 16 47.4 +0.9
baz=94
TRO Tromso 100.22 21 ePdif Pdif 09 16 47.3 +0.9
TRO IVmB_BB 09 16 53.5
comp=Z,9µm,1.5s
TRO epP pPdif 09 19 00.5 -1.2
TRO eSKSac SKSac 09 26 26.5 +1.4
TRO eSP SP 09 29 03.3 +0.3
TRO ePS PS 09 30 22.8 -1.7
TRO eSS SS 09 34 43.2 +1.3
CAW Cannon Point 100.23 225 P PKKPbc 09 33 01.0 -1.9
IMMV Iera Moni Meta 100.24 56 P Pdif 09 16 47.3 -0.1
KKB Krupnik 100.24 49 ⇓ P Pdif 09 16 48.0 +0.7
OGWZ Otaki Gorge 100.28 225 P PKKPbc 09 33 01.3 -1.4
ATH Athens Observa 100.30 53 P Pdif 09 16 47.6 0.0
KOLS Kolonicke sedl 100.30 42 eP Pdif 09 16 48.7 +1.4
KOLS Kolonicke sedl 100.30 42 ePDIFF Pdif 09 16 48.7 +1.4
SOH Sokhos 100.31 50 P Pdif 09 16 48.1 +0.5
GZR Gura Zlata 100.32 46 ⇓ P Pdif 09 16 48.6 +0.9
GZR Gura Zlata 100.32 46 P Pdif 09 16 48.5 +0.9
ATHU Athens Univers 100.35 53 P Pdif 09 16 47.9 +0.1
C18K Utukok River 100.35 338 Pdiff Pdif 09 16 47.7 +0.5
baz=94
VTS Vitosha 100.39 48 ⇓ P Pdif 09 16 48.0 -0.1
DRGR 100.41 44 ⇓ P Pdif 09 16 48.7 +0.7
DRGR 100.41 44 P Pdif 09 16 48.7 +0.7
A19K Wainwright 100.41 340 Pdiff Pdif 09 16 48.5 +1.3
baz=94
FALS False Pass 100.43 324 P Pdif 09 16 48.2 +0.5
FALS False Pass 100.43 324 Pdiff Pdif 09 16 47.9 +0.2
baz=94
KIW Kapiti Island 100.44 225 P PKKPbc 09 33 00.8 -1.6
MOVZ Moawhango 100.44 226 Pdiff Pdif 09 16 53.0 +4.6
MOVZ P PKKPbc 09 33 00.4 -2.0
DEV Deva 100.46 45 ⇓ P Pdif 09 16 49.2 +1.1
DEV Deva 100.46 45 P Pdif 09 16 49.1 +1.1
PAIG Paliouri 100.47 51 P Pdif 09 16 48.3 0.0
DION Dionisos Attik 100.48 53 P Pdif 09 16 49.4 +1.0
E17K Hotham Inlet 100.49 337 Pdiff Pdif 09 16 48.3 +0.6
baz=93
L14K Kuka Creek 100.50 331 Pdif 09 16 48.3 +0.5
L14K Kuka Creek 100.50 331 Pdiff Pdif 09 16 48.4 +0.5
baz=94
H16K Elim 100.51 334 Pdiff Pdif 09 16 48.9 +1.0
baz=94
SRS Serrai 100.52 50 P Pdif 09 16 48.7 +0.2
PLNA Plana 100.52 49 ⇓ P Pdif 09 16 50.0 +1.4
BJO1 Bjornoya 100.55 16 ePdif Pdif 09 16 49.1 +1.2
BJO1 IVmB_BB 09 16 49.5
comp=Z,4µm,4.3s
BJO1 epP pPdif 09 19 01.3 -1.8
BJO1 ePP PP 09 21 04.8 -0.5
BJO1 eSKSac SKSac 09 26 28.0 +1.4
BJO1 eSP SP 09 29 04.7 -1.6
BJO1 ePS PS 09 30 27.3 -0.3
BJO1 eSS SS 09 34 49.2 +2.9
SRE Strehaia 100.56 46 ⇑ P Pdif 09 16 49.6 +1.0
SRE Strehaia 100.56 46 P Pdif 09 16 49.6 +1.0
WNVZ Wahianoa 100.59 226 Pdiff Pdif 09 16 54.3 +5.2
WNVZ P PKKPbc 09 33 00.6 -1.4
TMVZ Te Maari 100.60 227 P PKKPbc 09 33 00.8 -1.2
MESR Meseseni 100.60 44 ⇑ P Pdif 09 16 49.6 +0.9
G16K Koyuk River 100.60 335 Pdiff Pdif 09 16 49.4 +1.2
baz=93
B18K Kokolik River 100.61 339 Pdiff Pdif 09 16 49.7 +1.5
baz=93
KWP Kalwaria Pacla 100.64 41 i P Pdif 09 16 50.4 +1.5
KWP epP pPdif 09 19 02.9 -1.2
KWP eSKSac SKSac 09 27 26.7 -0.5
KWP eSP SP 09 29 03.9 -4.5
KWP Kalwaria Pacla 100.64 41 P Pdif 09 16 50.0 +1.2
comp=Z,434nm,1.8s,comp=Z,11µm
PBUR Paburge 100.64 35 eP Pdif 09 16 49.0 +0.4
NGZ Ngauruhoe 100.64 226 P PKKPbc 09 33 01.1 -0.8
NNVZ North Ngauruho 100.65 227 P PKKPbc 09 33 01.7 -0.2
KYMI Kymi, Euboea I 100.67 53 P Pdif 09 16 48.7 -0.5
MARR Marisel-Cluj 100.67 44 ⇓ P Pdif 09 16 50.0 +0.8
MARR Marisel-Cluj 100.67 44 ⇑ P PKiKP 09 21 09.1 -2.1
MMB Musomishta 100.67 50 ⇓ P Pdif 09 16 49.0 -0.2
WTVZ West Tongariro 100.68 227 P PKKPbc 09 33 00.8 -0.9
TCW Tory Channel 100.73 224 P PKKPbc 09 33 00.1 -1.4
OUR Ouranopolis 100.74 51 P Pdif 09 16 49.8 +0.3
NVR Nevrokopi 100.74 50 P Pdif 09 16 50.7 +1.2
M13K Dall Lake 100.77 330 Pdiff Pdif 09 16 50.3 +1.2
baz=93
PKVZ Pokaka 100.78 226 Pdiff Pdif 09 16 53.7 +3.8
PKVZ P PKKPbc 09 33 00.3 -1.1
KOKK Kokkinochori, 100.80 50 P Pdif 09 16 49.8 +0.1
TWVZ Taurewa 100.80 227 P PKKPbc 09 33 00.5 -0.9
MPEP Malo Peshtene 100.83 48 ⇓ P Pdif 09 16 50.0 +0.2
WAZ Wanganui 100.85 226 P PKKPbc 09 33 00.2 -0.9
RAF Rauma 100.86 30 eP Pdif 09 16 49.5 0.0
TUWZ Tuamarina 100.87 224 P PKKPbc 09 32 58.7 -2.4
SLIT Slitere, Latvi 100.94 33 eP Pdif 09 16 49.5 -0.4
RDOG Red Dog Mine 100.95 338 Pdiff Pdif 09 16 50.5 +0.6
baz=92
IDI Anoyia 100.96 56 P Pdif 09 16 51.3 +0.6
IDI Anoyia 100.96 56 P Pdif 09 16 51.4 +0.7
J14K Nanvaranak Lak 100.99 332 Pdiff Pdif 09 16 51.4 +1.4

baz=93
D17K Noatak River 101.00 337 Pdiff Pdif 09 16 50.9 +0.9
baz=92
CJR Cluj-Napoca 101.01 44 ⇓P Pdif 09 16 51.7 +1.1
CJR Cluj-Napoca 101.01 44 ⇑P PKiKP 09 21 09.3 -2.4
CJR Cluj-Napoca 101.01 44 P Pdif 09 16 51.7 +1.1
BMR Baia Mare 101.01 43 ⇑P Pdif 09 16 51.4 +0.9
BMR Baia Mare 101.01 43 P Pdif 09 16 51.4 +0.9
LOT Lotru 101.03 46 ⇑P Pdif 09 16 51.0 +0.2
TLZ Tolley Road 101.03 227 Pdiff Pdif 09 16 55.2 +4.2
TLZ P PKKPbc 09 32 59.3 -1.4
C17K DeLong Mountai 101.07 338 Pdiff Pdif 09 16 51.2 +0.8
baz=92
PGB Panagyurishte 101.08 49 ⇓P Pdif 09 16 51.0 0.0
DUWZ D'Urville Isla 101.15 224 P PKKPbc 09 32 58.3 -2.0
KAVA Kavala 101.20 50 P Pdif 09 16 51.3 -0.2
SUW Suwalki 101.23 37 *i* P Pdif 09 16 52.4 +1.1
SUW *e*pP **pPdif** 09 19 04.4 -2.1
SUW *e*PP **PP** 09 21 06.7 -4.1
SUW *e*SKSac **SKSac** 09 26 27.2 -3.4
SUW *e*SKKSac **SKKSac** 09 27 08.9 -1.7
SUW *e*SP **SP** 09 29 06.0 -8.4
SUW Suwalki 101.23 37 *e*P Pdif 09 16 52.6 +1.3
MBAR Mbarara 101.26 93 ⇓*i*P Pdif 09 16 53.6 +0.9
MBAR Mbarara 101.26 93 P Pdif 09 16 54.6 +1.9
MBAR S **SKSac** 09 26 38.8 +5.9
MBAR Mbarara 101.26 93 *e*P Pdif 09 16 54.2 +1.5
MBAR Mbarara 101.26 93 *i* P Pdif 09 16 53.0 +0.3
MBAR pmax pmax
comp=Z,142nm,1.5s
VRZ Vera Road 101.26 226 Pdiff Pdif 09 16 55.0 +3.0
VRZ P PKKPbc 09 32 58.5 -1.4
TOZ Tahuroa Road 101.29 228 P PKKPbc 09 32 60.0 +0.2
G15K Niukluk 101.30 334 Pdiff Pdif 09 16 52.4 +1.0
baz=92
THAS Thassos island 101.32 51 P Pdif 09 16 52.1 +0.1
NNZ Nelson 101.34 224 Pdiff Pdif 09 16 54.0 +1.8
NNZ P PKKPbc 09 32 57.7 -2.1
LREZ Lake Rotokare 101.38 226 P PKKPbc 09 32 57.8 -1.8
VAF Ylistaro 101.38 28 P Pdif 09 16 52.4 +0.6
TNR Turnu Rosu 101.39 45 ⇑P Pdif 09 16 52.4 +0.1
TNR Turnu Rosu 101.39 45 P Pdif 09 16 52.4 +0.1
RZN Rozhen 101.43 50 ⇓P Pdif 09 16 52.0 -0.8
HIZ Hauiti 101.44 227 Pdiff Pdif 09 16 54.5 +1.7
HIZ P PKKPbc 09 32 59.0 -0.4
K13K Kusilvak Mount 101.47 331 Pdiff Pdif 09 16 53.2 +1.0
baz=92
PLD Plovdiv 101.47 49 ⇓P Pdif 09 16 53.0 +0.3
SNT1 Gialos, Santor 101.50 55 P Pdif 09 16 52.6 -0.4
LVV L'vov 101.51 41 *e*P Pdif 09 16 52.9 +0.2
LVV *e* 09 21 10.6
LVV *e* 09 26 27.8
LVV *e*S **Sdif** 09 27 33.7 -6.2
LVV *e* 09 29 17.3
LVV MLR MLR
comp=E,2μm,21.0s
LVV MLR MLR
comp=N,2μm,19.0s
LVV MLR MLR
comp=Z,3μm,20.0s
SANT Santorini 101.53 55 P Pdif 09 16 54.1 +1.0
ARCR ARCALIA 101.55 44 ⇑P Pdif 09 16 54.0 +1.0
F15K North Star Dit 101.57 335 Pdiff Pdif 09 16 53.9 +1.3
baz=91
ARR Arges 101.63 46 ⇑P Pdif 09 16 54.2 +0.8
NEZ North Egmont 101.67 226 P PKKPbc 09 32 58.2 -0.7
MRNZ Matariki Terra 101.68 223 Pdiff Pdif 09 16 58.9 +5.2
MRNZ P PKKPbc 09 32 57.0 -1.9
TKNZ Takaka Hill 101.71 224 P PKKPbc 09 32 56.2 -2.6
KHEZ Kahui Hut 101.72 226 P PKKPbc 09 32 57.3 -1.4
KTK1 Kautokeino 101.73 22 *e*Pdif Pdif 09 16 53.9 +0.7
KTK1 IVmB_BB 09 17 00.1
comp=Z,8μm,1.4s
KTK1 *e*SKSac **SKSac** 09 26 34.0 +1.6
KTK1 *e*SP SP 09 29 22.4 +3.6
KTK1 *e*PS PS 09 30 39.7 +0.9
KTK1 *e*SS **SS** 09 35 05.4 +2.9
VSVD Vaisvydziai 101.76 35 *e*P Pdif 09 16 55.7 +2.1
PABE Paberze 101.76 35 *e*P Pdif 09 16 54.8 +1.1
PKE Pukeiti 101.78 226 P PKKPbc 09 32 55.9 -2.6
MTSE Matsula 101.80 32 *e*P Pdif 09 16 53.8 +0.1
HUMR Humele 101.81 47 ⇓P Pdif 09 16 54.9 +0.8
NBEZ Newall Road No 101.83 226 P PKKPbc 09 32 58.7 +0.4
ANM Nome 101.86 334 Pdiff Pdif 09 16 54.5 +0.6
baz=91
C16K Lisburne Hills 101.87 338 Pdiff Pdif 09 16 54.8 +1.0
baz=90
KDZ Kurdzhali 101.87 50 ⇓P Pdif 09 16 53.0 -1.5
HAMF Hammerfest 101.88 20 *e*Pdif Pdif 09 16 54.1 +0.3
HAMF IVmB_BB 09 16 57.4
comp=Z,4μm,6.2s
HAMF *e*PP **PKiKP** 09 21 09.8 -2.7
HAMF *e*SKSac **SKSac** 09 26 34.8 +1.9
HAMF *e*SP SP 09 29 21.1 +0.8
HAMF *e*PS PS 09 30 39.8 -0.3
HAMF *e*PS PS 09 30 41.0 +0.8
HAMF *e* 09 33 09.7
HAMF *e*SS **SS** 09 35 04.8 +0.4
MTUR Matau 101.92 46 ⇓P Pdif 09 16 56.1 +1.4
MTUR Matau 101.92 46 P Pdif 09 16 56.1 +1.4
VOIR 101.92 46 ⇓P Pdif 09 16 55.2 +0.4
VOIR 101.92 46 P Pdif 09 16 55.1 +0.4
SMTH Samothraki Isl 101.93 51 P Pdif 09 16 54.5 -0.3
ZKR Zakros 102.03 56 P Pdif 09 16 55.7 +0.3
HOPEN Hopen 102.06 14 *e*Pdif Pdif 09 16 55.5 +0.9
HOPEN IVmB_BB 09 16 57.9
comp=Z,3μm,6.0s
HOPEN *e*PP **PP** 09 21 16.1 -0.3
HOPEN *e*SKSac **SKSac** 09 26 34.2 +0.6
HOPEN *e*SP **SP** 09 29 17.3 -4.7
HOPEN *e*PS PS 09 30 39.7 -2.1
HOPEN *e*SS **SS** 09 35 09.8 +3.1
QRZ Quartz Range 102.09 224 Pdiff Pdif 09 16 57.2 +1.7
QRZ P PKKPbc 09 32 56.2 -1.4
MEF Metsahovi 102.13 31 *e*P Pdif 09 16 54.8 -0.4
BURAR Bucovina Array 102.17 43 ⇓P Pdif 09 16 57.2 +1.3
BURAR Bucovina Array 102.17 43 P Pdif 09 16 57.1 +1.3
CHOS Chios island 102.17 53 P Pdif 09 16 56.2 +0.2
UNV Unalaska Valle 102.18 323 P Pdif 09 16 55.5 0.0
UNV Unalaska Valle 102.18 323 Pdiff Pdif 09 16 55.8 +0.3
baz=92
M11K Mekoryuk 102.18 330 Pdiff Pdif 09 16 56.6 +1.3
baz=91
DOPR Dopca 102.19 45 ⇓P Pdif 09 16 56.7 +0.8
F14K Arctic Creek 102.27 335 Pdiff Pdif 09 16 57.0 +1.3
baz=90
ALN Alexandroupoli 102.35 50 P Pdif 09 16 56.7 +0.1
KEF Keuruu 102.38 29 *e*P Pdif 09 16 56.9 +0.6
PRK Paraskevi 102.40 52 P Pdif 09 16 56.6 -0.3
ENEZ Enez 102.42 51 P Pdif 09 16 57.0 +0.1
OZUR 102.48 45 ⇑P Pdif 09 16 58.0 +0.8
EZN Ezine 102.49 51 P Pdif 09 16 56.9 -0.3
ARA0 ARCESS Array S 102.53 21 *e*Pdif Pdif 09 16 57.1 +0.3
ARA0 *e*PP **PP** 09 21 18.9 -1.1
ARA0 *e*SKSac **SKSac** 09 26 38.0 +2.0
ARA0 *e*SP **SP** 09 29 26.8 -0.3
ARA0 *e*PS **PS** 09 30 44.5 -1.7
ARA0 *e* 09 33 18.8
ARA0 *e*SS **SS** 09 35 09.7 -3.6
ARCES ARCESS Array B 102.53 21 P Pdif 09 16 57.4 +0.6
comp=Z,66nm,0.6s,baz=275,slow=3.2,SNR=182
ARCES pP **pPdif** 09 19 13.7 +1.7
comp=Z,24nm,0.9s,baz=284,slow=3.6,SNR=2.6
ARCES PKiKP **PKiKP** 09 21 14.4 +0.6
comp=Z,63nm,1.0s,baz=248,slow=4.0,SNR=2.7
ARCES PKKPbc **PKKPbc** 09 32 54.7 -2.4
comp=Z,34nm,0.6s,baz=85,slow=2.8,SNR=16
ARCES PKPPKP 09 41 03.8
comp=Z,8.2nm,0.9s,baz=90,slow=1.2,SNR=4.3
MLR Muntele Rosu 102.56 46 ⇑P Pdif 09 16 58.1 +0.4
MLR Muntele Rosu 102.56 46 ⇓P PKiKP 09 21 15.7 +1.0
MLR Muntele Rosu 102.56 46 P Pdif 09 16 58.0 +0.4
TURR Turia 102.63 45 ⇓P Pdif 09 16 58.7 +0.9
RNPP8 Varash 102.74 40 P Pdif 09 16 59.0 +0.9
COVR Voineasa-Covas 102.75 45 ⇓P Pdif 09 16 59.3 +0.9
COVR Voineasa-Covas 102.75 45 ⇓P PKiKP 09 21 20.0 +5.1
RNPP5 Staryi Chortor 102.76 40 P Pdif 09 16 58.9 +0.7
NEHR Nehoiu 102.80 46 ⇑P PKiKP 09 21 15.2 +0.2
KARP Karpathos 102.83 56 P Pdif 09 16 59.1 +0.1
ONER Baraj Valea Uz 102.91 45 ⇓P Pdif 09 17 00.1 +1.0
ARBE Arbavere 102.93 31 *e*P Pdif 09 16 57.6 -1.1
TNA Tin City 102.93 335 Pdiff Pdif 09 16 59.9 +1.3
baz=88
EDRB Edirne 102.93 49 P Pdif 09 16 58.9 -0.3
ISR Istrita 102.96 46 ⇑P Pdif 09 16 59.2 -0.2
ISR Istrita 102.96 46 P Pdif 09 16 59.1 -0.2
FINES FINESS Array B 102.96 29 P Pdif 09 16 59.5 +0.7
comp=Z,20nm,0.9s,baz=251,slow=4.3,SNR=14
FINES PKiKP **PKiKP** 09 21 15.5 +0.8
comp=Z,12nm,0.5s,baz=169,slow=2.0,SNR=10
FINES PKKPbc **PKKPbc** 09 32 53.1 -2.4
comp=Z,38nm,0.5s,baz=100,slow=3.6,SNR=30
FINES PKPPKP 09 41 09.3
comp=Z,9.9nm,0.7s,baz=96,slow=3.8,SNR=12
KMPD K-Podol'skiy 103.04 43 P Pdif 09 16 58.1 -1.4
BODT Bodrum 103.06 54 P Pdif 09 16 59.1 -0.8
PLOR Plostina 103.07 45 ⇓P Pdif 09 17 00.4 +0.6
PLOR Plostina 103.07 45 P Pdif 09 17 00.3 +0.6
VRI Vrincioaia 103.12 45 ⇑P Pdif 09 17 00.7 +0.7
VRI Vrincioaia 103.12 45 P Pdif 09 17 00.6 +0.7
SPBR Spulber 103.13 45 ⇓P PKiKP 09 21 20.6 +5.0
DAT Datca 103.25 55 P Pdif 09 16 59.5 -1.4
NACGM Naroch 103.36 36 *e*P Pdif 09 17 01.8 +1.0
comp=E,11μm,1.4s
PRD Provadia 103.49 48 ⇓P Pdif 09 17 01.0 -0.6
NIKH Nikolski High 103.56 322 P Pdif 09 17 03.9 +2.2
NIKH Nikolski High 103.56 322 Pdiff Pdif 09 17 01.9 +0.2
baz=90
ICOR Ion Corvin 103.81 47 ⇓P Pdif 09 17 03.6 +0.6
VADS Vadso 103.82 20 *e*Pdif Pdif 09 17 03.3 +0.8
VADS IVmB_BB 09 17 09.4
comp=Z,4μm,1.9s
VADS *e*PP **PP** 09 21 27.7 -1.6
VADS *e*SKSac **SKSac** 09 26 44.2 +2.4
VADS *e*SKSdf **SKKSac** 09 27 25.8 -2.5
VADS *e*SP SP 09 29 35.0 -5.4
VADS *e* 09 33 29.7
VADS *e*SS **SS** 09 35 32.7 +2.0
YER Yerkesik 103.84 54 P Pdif 09 17 02.4 -1.1
LUBAR Lubar, Ukraine 103.92 41 P Pdif 09 17 03.7 +0.3
HARR Harsova 103.93 47 ⇑P Pdif 09 17 04.0 +0.4
HARR Harsova 103.93 47 P Pdif 09 17 03.9 +0.4
P08K Saint George I 103.94 326 Pdiff Pdif 09 17 04.6 +1.3
baz=89
MI29 MI29, Kamyanyy 103.99 41 P Pdif 09 17 03.7 0.0
MNK Minsk 104.00 36 *i* P Pdif 09 17 04.7 +1.0
comp=E,40nm,0.9s
MNK *i* P Pdif 09 17 04.7 +1.0
comp=N,162nm,1.3s
MNK *i* P Pdif 09 17 04.7 +1.0
comp=Z,304nm,1.2s,baz=271
MNK *i* pP **pPdif** 09 19 18.7 -0.2
MNK *i* PP **PP** 09 21 31.8 +0.6
MNK *i* PPP PPP 09 23 50.6
MNK *i* S 09 26 44.7
MNK *i* SS **SKKPbc** 09 35 35.9 -0.6
MNK *i* SSS SSS 09 39 42.6
MNK Minsk 104.00 36 *i* P Pdif 09 17 04.6 +1.0
MNK *i* 09 21 31.7
MNK *i* PPP PPP 09 23 50.5
MNK *i* S **SKSac** 09 26 44.6 +1.3
MNK *i* SS **SKKPbc** 09 35 35.9 -0.6
MNK *i* SSS SSS 09 39 42.5
MNK pmax pmax
comp=E,40nm,0.9s
MNK pmax pmax
comp=Z,304nm,1.2s
MNK pmax pmax
comp=N,162nm,1.3s
VLDR Vladesti 104.07 45 ⇓P PKiKP 09 21 18.5 +1.3
CFR Carcaliu 104.09 46 ⇓P Pdif 09 17 03.8 -0.4
CFR Carcaliu 104.09 46 ⇑P PKiKP 09 21 17.9 +0.6
CFR Carcaliu 104.09 46 P Pdif 09 17 03.8 -0.4
MI30 MI30,Zelenitsa 104.20 40 P Pdif 09 17 05.0 +0.4
KULA Kula-Manisa 104.22 53 P Pdif 09 17 04.8 -0.3
TPGR Topolog 104.28 46 ⇓P Pdif 09 17 05.5 +0.4
SORM Soroca 104.29 43 ⇑P PKiKP 09 21 35.4 +18
SPIA Saint Paul Isl 104.31 326 Pdiff Pdif 09 17 05.3 +0.4
baz=88
MILM Milestii Mici 104.59 44 ⇓*i*P Pdif 09 17 06.0 -0.4
comp=N,2μm,3.9s
MILM *i* pP **pPdif** 09 19 20.0 -1.6
MILM Milestii Mici 104.59 44 *i* PP PKiKP 09 21 33.0 +15
MILM Milestii Mici 104.59 44 *i* PKS 09 24 32.0
MILM *i* SKS 09 27 27.0
MILM *i* S SKKSac 09 28 04.0 +29
MILM *i* SKSP 09 29 52.0
MILM Milestii Mici 104.59 44 ⇑P PKiKP 09 21 18.4 +0.2
MILM Milestii Mici 104.59 44 *d*P Pdif 09 17 06.0 -0.4
MILM *i* 09 21 33.0
MILM *i* 09 26 44.0
MILM *i* 09 27 27.0
MILM *i* S **Sdif** 09 28 04.0 -1.7
MILM *i* 09 29 52.0
MILM pmax pmax
comp=Z,2μm,3.9s
KIS Kishinev 104.60 44 *e*P Pdif 09 17 06.5 0.0
comp=Z,2μm,2.4s
KIS *i* pP **pPdif** 09 19 20.0 -1.7
KIS Kishinev 104.60 44 *i* PP PKiKP 09 21 32.0 +14
KIS Kishinev 104.60 44 *i* PKS 09 24 32.0
KIS *i* SKS 09 26 44.5
KIS *i* SKKS **SKKSac** 09 27 30.0 -4.7
KIS *i* S 09 28 05.0
KIS *i* SKSP 09 29 34.0
KIS Kishinev 104.60 44 *e*P Pdif 09 17 06.5 0.0
KIS *i* 09 26 44.5
KIS *i* 09 27 30.0
KIS *i* S **Sdif** 09 28 05.0 -0.7
KIS *i* pmax pmax
comp=Z,3μm,2.4s
ISK Istanbul-Kandi 104.64 50 P Pdif 09 17 05.9 -0.9
GAMB Gambell 104.66 333 Pdiff Pdif 09 17 07.1 +0.8
baz=85
AK21 Malin Array Si 104.75 40 P Pdif 09 17 07.2 +0.2
AKASG Malin Array Be 104.86 40 Pdiff Pdif 09 17 06.7 -0.9
comp=Z,3.8nm,0.5s,baz=271,slow=4.8,SNR=10
AKASG PKiKP **PKiKP** 09 21 18.4 -0.2
comp=Z,17nm,0.4s,baz=277,slow=2.7,SNR=20
AKASG PP **PP** 09 21 38.4 +0.8
comp=Z,157nm,1.0s,baz=267,slow=7.3,SNR=15
AKASG PKKPbc **PKKPbc** 09 32 47.8 -1.9
comp=Z,10nm,0.5s,baz=71,slow=3.6,SNR=11
AKASG PKPPKP 09 41 01.0
comp=Z,1.6nm,0.5s,baz=82,slow=2.0,SNR=3.2
AKBB Malin Array Si 104.86 40 P Pdif 09 17 07.4 -0.2
JOF Joensuu 105.33 28 *e*P Pdif 09 17 09.1 -0.2
APA Apatity 105.60 23 ⇓*i*P Pdif 09 17 10.8 +0.3
APA *i* 09 26 48.0
APA *i* 09 27 31.0
APA pmax pmax
comp=Z,60nm,1.0s
LODK Lodwar 106.56 90 *e*P Pdif 09 17 16.6 +0.5
ANTO Ankara 107.47 52 P PKiKP 09 21 24.2 +0.4
KMBO Kilima Mbogo 107.54 95 ⇓*i*P Pdif 09 17 23.2 +2.6
KMBO Kilima Mbogo 107.54 95 Pdiff Pdif 09 17 22.9 +2.2
comp=Z,1.2nm,0.3s,baz=281,slow=3.4,SNR=12
KMBO PKiKP **PKiKP** 09 21 25.9 +1.0
comp=Z,7.2nm,0.7s,baz=200,slow=7.1,SNR=3.4
KMBO PKKPbc **PKKPbc** 09 32 42.1 +1.3
comp=Z,18nm,0.9s,baz=36,slow=5.1,SNR=12
KMBO Kilima Mbogo 107.54 95 *e*P Pdif 09 17 22.6 +1.9
BRTR Keskin Array B 108.12 52 Pdiff Pdif 09 17 22.6 +0.1
comp=Z,3.8nm,0.9s,baz=258,slow=3.1,SNR=17
BRTR PKiKP **PKiKP** 09 21 25.6 +0.5
comp=Z,39nm,1.1s,baz=226,slow=2.3,SNR=23
BRTR PKKPbc **PKKPbc** 09 32 38.1 -1.4
comp=Z,6.0nm,0.6s,baz=122,slow=2.7,SNR=4.3
BRTR PKKP **PKKPab** 09 32 54.6 0.0
comp=Z,15nm,0.8s,baz=112,slow=4.5,SNR=7.2
BRTR PKPPKP **P'P'df** 09 40 58.0 -5.1
comp=Z,3.5nm,0.8s,baz=148,slow=4.4,SNR=5.6
ADZR Andozero 108.26 26 *e*P Pdif 09 17 21.0 -1.4
ADZR *e* 09 21 59.5
ADZR *e* 09 27 00.5
ADZR pmax pmax
comp=Z,75nm,1.4s
SIM Simferopol' 108.33 46 *i* P Pdif 09 17 24.3 +1.2
SIM *e* 09 22 03.0
SIM *e*SP SP 09 30 28.0 +1.6
SIM pmax pmax
comp=Z,630μm,1.7s
SIM pmax pmax
comp=Z,2μm,2.7s
OBN Obninsk 108.97 35 ⇓P PKiKP 09 21 26.6 +0.6
OBN Obninsk 108.97 35 *d* *i*P Pdif 09 17 23.4 -2.3
OBN *i* 09 27 42.0
OBN pmax pmax
comp=Z,94nm,1.3s
DIKM Dikmen 109.30 50 ⇓P PKiKP 09 21 28.8 +1.7
MOS Moscow 109.47 35 *e*P Pdif 09 17 26.8 -1.1
MOS pmax pmax
comp=Z,173nm,1.5s
MMAI Mount Meron Ar 109.54 59 Pdiff Pdif 09 17 29.9 +1.0
comp=Z,0.8nm,0.3s,baz=211,slow=1.7,SNR=2.9
MMAI PKiKP **PKiKP** 09 21 28.9 +0.9
comp=Z,52nm,0.5s,baz=83,slow=2.6,SNR=82
MMAI PKKPbc **PKKPbc** 09 32 31.1 -3.7
comp=Z,5.4nm,0.5s,baz=72,slow=6.2,SNR=3.0
MMAI PKKP **PKKPdf** 09 32 49.8 +0.4
comp=Z,16nm,0.7s,baz=84,slow=7.6,SNR=5.5
ANN Anapa 110.69 46 *d* *i*PKIKP PKiKP 09 21 29.8 +0.2
ANN *i* 09 22 18.7
ANN *i* PPP PPP 09 24 45.1
ANN *i* 09 27 10.6
ANN *i* SP SP 09 30 45.0 -3.1
ANN *i* PS **PS** 09 31 59.0 -2.6
ANN *i* SS **SS** 09 36 59.9 -3.6
ANN *i* SSS SSS 09 41 23.9
ANN pmax pmax
comp=E,20nm,0.6s
ANN pmax pmax
comp=Z,419nm,1.3s
ANN pmax pmax
comp=N,116nm,1.4s
ANN pmax pmax
comp=E,49nm,1.1s
ANN pmax pmax
comp=Z,1μm,2.0s
ANN pmax pmax
comp=N,126nm,1.2s
FURI Furi 110.71 85 *e*P Pdif 09 17 38.1 +3.3
FURI IAMs_20 IAMs_20 09 41 33.0
comp=N,9μm,20.3s
LPSR Galich'ya Gora 110.72 38 *e*P Pdif 09 17 33.8 +0.2
LPSR *e* 09 21 29.6
LPSR *e*SP SP 09 30 43.3 -4.6
LPSR pmax pmax
comp=Z,290nm,1.0s
VORR Voronezh 111.04 39 *e*P Pdif 09 17 34.6 -0.4
VORR *e* 09 21 29.6
VORR *e*SP SP 09 30 45.2 -5.7
VORR pmax pmax
comp=Z,310nm,1.2s
VSR Storozhevoye 111.08 39 *e*P Pdif 09 17 34.6 -0.6
VSR *e* 09 21 29.1
VSR *e*SP SP 09 30 47.1 -4.2
VSR pmax pmax
comp=Z,190nm,1.1s
VORD Divnogorie 111.20 40 *e*P Pdif 09 17 36.2 +0.5
VORD *e* 09 21 28.5
VORD pmax pmax
comp=Z,120nm,1.1s
ABPO Ambohimpanom 112.05 116 *e*P Pdif 09 17 43.2 +2.7
BILL Bilibino 112.16 340 *i* P Pdif 09 17 41.2 +1.6
BILL *i* 09 30 54.7
BILL *i* PS **PKKPbc** 09 32 20.5 -6.8
BILL pmax pmax
comp=Z,29nm,1.0s
SOC Sochi 112.44 47 *i* P Pdif 09 17 42.0 +0.6
SOC *i* 09 21 33.6
SOC *e* 09 22 31.4
SOC *e*PPP PPP 09 25 03.7
SOC *e*PS PKKPbc 09 32 14.8 -11
SOC *e*SSS SSS 09 41 50.4
SOC pmax pmax
comp=Z,184nm,0.6s
VRH Novokhopyorsk 112.67 39 *e*P Pdif 09 17 34.3 -8.0
VRH *e* 09 21 32.1
VRH pmax pmax
comp=Z,260nm,1.1s
ERBR Yeremizino-Bor 112.73 45 *d* *i*PKIKP PKiKP 09 21 34.4 +0.9
ERBR *i* 09 22 32.0
ERBR *i* 09 23 50.8
ERBR *e* 09 27 20.1
ERBR *i* SP SP 09 31 07.9 +1.1
ERBR *i* PS **PKKPbc** 09 32 22.9 -1.9
ERBR *i* SS **SS** 09 37 27.3 -2.9
ERBR *i* SSS SSS 09 41 53.4
ERBR pmax pmax
comp=Z,1μm,1.7s
ERBR pmax pmax
comp=N,213nm,0.7s
ERBR pmax pmax
comp=E,104nm,0.6s
ERBR pmax pmax
comp=N,170nm,0.6s
ERBR pmax pmax
comp=E,95nm,0.6s
ERBR pmax pmax
comp=Z,3μm,2.3s
LABN Labinsk 113.04 46 *i* PKIKP PKiKP 09 21 33.7 -0.5
LABN *e* 09 22 35.6
LABN *e* 09 27 21.9
LABN *e*SP SP 09 31 10.8 +1.2
LABN *e*PS **PKKPbc** 09 32 27.6 +3.8
LABN *e*SS **SS** 09 37 29.9 -4.4
LABN pmax pmax
comp=N,30nm,0.5s
LABN pmax pmax
comp=E,38nm,0.7s
LABN pmax pmax
comp=Z,386nm,1.1s
LABN pmax pmax
comp=Z,1μm,1.8s
LABN pmax pmax
comp=E,50nm,0.6s
LABN pmax pmax
comp=N,141nm,1.0s
SHEM Shemya Is, Ala 113.84 323 PKKPbc PKKPbc 09 32 20.3 -1.1
comp=N,159nm,0.7s,baz=296,slow=4.0,SNR=17
BCA Borcka 114.08 50 ⇑P PKiKP 09 21 36.7 +0.5
KIV Kislovodsk 114.53 47 PKiKP 09 21 37.3 +0.2
KIV Kislovodsk 114.53 47 *i* PKiKP PKiKP 09 21 37.6 +0.5
SNR=10
KIV Kislovodsk 114.53 47 P PKPdf 09 21 36.5 -0.7
KIV Kislovodsk 114.53 47 ⇓P PKiKP 09 21 38.0 +0.8
KIV Kislovodsk 114.53 47 *e*P Pdif 09 17 52.2 +1.3
KIV *e* 09 21 36.4
KIV *e* 09 22 45.4
KIV *e*PPP PPP 09 25 19.2
KIV *e*PS **PKKPdf** 09 32 35.2 -5.1
KIV *e*SS SS 09 37 52.1 -1.7
KIV pmax pmax
comp=Z,238nm,1.1s
GURO Guroymak-BITLI 114.69 53 PKiKP 09 21 39.1 +1.4
KBZ Khabaz 114.71 47 Pdiff Pdif 09 17 51.8 +0.2
comp=Z,5.0nm,0.7s,baz=315,slow=4.8,SNR=5.4
KBZ PKP PKiKP 09 21 38.3 +1.0
comp=Z,202nm,0.6s,baz=246,slow=1.8,SNR=99
KBZ Khabaz 114.71 47 ⇓*i*PKIKP PKiKP 09 21 38.4 +1.1
KBZ pmax pmax
comp=Z,187nm,0.6s
LIFNC LIFOU 114.72 241 PKiKP 09 21 39.2 +1.2
DZM Mont Dzumac 114.87 239 *e*P PKPdf 09 21 37.2 -1.3
comp=Z,159nm,0.8s
DZM *e*S **SKSdf** 09 28 03.2 +10
comp=Z,5μm,27.2s
DZM *e*SP **SP** 09 31 25.8 -1.6
comp=Z,59μm,26.1s
DZM Mont Dzumac 114.87 239 PKiKP 09 21 39.0 +0.5
DZM Mont Dzumac 114.87 239 PKP PKiKP 09 21 39.7 +1.2
comp=Z,94nm,0.7s,baz=165,slow=4.0,SNR=50
DZM SKP **SKPdf** 09 24 17.3 +1.6
comp=Z,48nm,0.8s,baz=132,slow=16,SNR=5.3
ATD Arta Tunnel 115.13 82 *e*P Pdif 09 17 54.5 +0.4
TAU Tasmania Unive 115.94 210 PKiKP 09 21 40.7 +0.9
TAU Tasmania Unive 115.94 210 PKIKP PKiKP 09 21 40.7 +0.9
BELG Belogornoye 115.95 37 *d* *i*PKIKP PKiKP 09 21 39.6 +0.1
BELG pmax pmax
comp=Z,54nm,0.9s
TARA Tarawa 115.98 266 PKPdf 09 21 40.5 -0.2
LHI Lord Howe Isla 116.14 227 PKiKP 09 21 40.8 +0.2
GNI Garni 116.59 51 PKiKP 09 21 41.5 +0.1
GNI Garni 116.59 51 PKiKP PKiKP 09 21 42.0 +0.7
GNI Garni 116.59 51 P PKiKP 09 21 42.6 +1.2
GNI Garni 116.59 51 *d* *i*PKIKP PKiKP 09 21 42.3 +0.9
GNI pmax pmax
comp=Z,141nm,0.6s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MAK | Makhachkala | 118.16 | 47 | *de* | P | Pdif | 09 17 59.3 | -7.5 |
| MAK | | | | *i* | | | 09 21 45.2 | |
| MAK | | | | *e* | | | 09 23 09.7 | |
| MAK | | | | *e* | | | 09 27 41.0 | |
| MAK | | | | *e* | PS | PKKPdf | 09 33 11.7 | +39 |
| MAK | | | | *e* | SSS | SSS | 09 43 17.2 | |
| MAK | | | | | pmax | pmax | | |
| | comp=Z,1μm,1.4s | | | | | | | |
| TIXI | Tiksi | 118.27 | 353 | | | PKPdf | 09 21 43.4 | 0.0 |
| TIXI | Tiksi | 118.27 | 353 | | PKKPbc | PKKPbc | 09 32 03.1 | -3.5 |
| | comp=Z,66nm,0.7s,baz=105,slow=0.7,SNR=20 | | | | | | | |
| TIXI | Tiksi | 118.27 | 353 | *d* | PKiKP | PKPdf | 09 21 42.8 | -0.6 |
| TIXI | | | | | pmax | pmax | | |
| | comp=Z,94nm,0.9s | | | | | | | |
| RAYN | Ar Rayn | 118.41 | 69 | | | PKiKP | 09 21 45.9 | +0.7 |
| RAYN | Ar Rayn | 118.41 | 69 | *i* | PKiKP | PKiKP | 09 21 46.0 | +0.7 |
| | SNR=47 | | | | | | | |
| RAYN | Ar Rayn | 118.41 | 69 | | P | PKiKP | 09 21 46.0 | +0.8 |
| RAYN | Ar Rayn | 118.41 | 69 | | PKIKP | PKiKP | 09 21 45.9 | +0.8 |
| SEY | Seymchan | 119.79 | 339 | | PKKPbc | PKKPbc | 09 31 58.4 | -2.7 |
| | comp=Z,137nm,1.1s,baz=237,slow=7.3,SNR=34 | | | | | | | |
| SEY | | | | | SKKPbc | SKKPbc | 09 34 46.0 | -4.3 |
| | comp=Z,25nm,0.8s,baz=220,slow=6.6,SNR=3.1 | | | | | | | |
| SEY | Seymchan | 119.79 | 339 | *d* | PKiKP | PKiKP | 09 21 47.5 | +0.8 |
| SEY | | | | | pmax | pmax | | |
| | comp=Z,300nm,0.7s | | | | | | | |
| KBD | Kabd | 120.19 | 63 | | P | PKPdf | 09 21 48.3 | -0.1 |
| ARU | Arti | 120.33 | 30 | | | PKiKP | 09 21 48.6 | +0.8 |
| ARU | Arti | 120.33 | 30 | *i* | PKiKP | PKiKP | 09 21 48.7 | +0.8 |
| ARU | | | | | | | 09 23 25.0 | |
| ARU | | | | | PPP | PPP | 09 26 04.1 | |
| ARU | | | | | | | 09 28 02.3 | |
| CAN | Canberra | 120.42 | 217 | | | PKiKP | 09 21 49.0 | +0.1 |
| CAN | Canberra | 120.42 | 217 | | PKIKP | PKiKP | 09 21 49.0 | +0.1 |
| SVE | Sverdlovsk | 121.12 | 29 | *c* | PKiKP | PKiKP | 09 21 50.0 | +0.5 |
| SVE | | | | | pmax | pmax | | |
| | comp=Z,722nm,1.5s | | | | | | | |
| PET | Petropavlovsk | 122.48 | 327 | *e* | P | Pdif | 09 18 24.1 | -1.8 |
| PET | | | | *i* | | | 09 21 52.3 | |
| PET | | | | *i* | | | 09 23 39.9 | |
| PET | | | | *e* | SS | SS | 09 39 37.1 | +3.4 |
| PET | | | | | pmax | pmax | | |
| | comp=Z,285nm,0.6s | | | | | | | |
| PET | | | | | pmax | pmax | | |
| | comp=Z,1μm,15.0s | | | | | | | |
| MA2 | Magadan | 122.53 | 336 | | | PKiKP | 09 21 52.2 | 0.0 |
| MA2 | Magadan | 122.53 | 336 | | PKKPbc | PKKPbc | 09 31 48.9 | -2.0 |
| | comp=Z,80nm,0.8s,baz=173,slow=4.5,SNR=20 | | | | | | | |
| MA2 | Magadan | 122.53 | 336 | | PKIKP | PKiKP | 09 21 52.2 | 0.0 |
| SAKB | Bahrain | 122.91 | 66 | | P | PKiKP | 09 21 54.0 | 0.0 |
| PEA0B | Petropavlovsk- | 122.95 | 327 | | PKPdf | PKiKP | 09 21 53.6 | +0.4 |
| PEA0B | Petropavlovsk- | 122.95 | 327 | | PKIKP | PKiKP | 09 21 53.6 | +0.4 |
| PETK | Petropavlovsk- | 122.95 | 327 | | PKPdf | PKiKP | 09 21 53.5 | +0.3 |
| PETK | Petropavlovsk- | 122.95 | 327 | | PKhKP | PKPpre | 09 21 46.2 | |
| | comp=Z,7.5nm,0.5s,baz=48,slow=5.4,SNR=7.4 | | | | | | | |
| PETK | | | | | PKP | PKPdf | 09 21 52.8 | -0.1 |
| | comp=Z,205nm,0.9s,baz=103,slow=3.2,SNR=50 | | | | | | | |
| PETK | | | | | pPKP | pPKPdf | 09 24 15.3 | -1.4 |
| | comp=Z,117nm,0.9s,baz=94,slow=3.2,SNR=3.5 | | | | | | | |
| PETK | | | | | PKKPbc | PKKPab | 09 31 40.8 | -8.0 |
| | comp=Z,13nm,0.8s,baz=222,slow=5.6,SNR=4.9 | | | | | | | |
| PETK | Petropavlovsk- | 122.95 | 327 | | PKIKP | PKiKP | 09 21 53.5 | +0.3 |
| SMRA | Abu-Samra | 123.24 | 68 | | P | PKiKP | 09 21 54.8 | +0.2 |
| | SNR=72 | | | | | | | |
| SHMA | Al-Shehemyia | 123.31 | 66 | | P | PKiKP | 09 21 54.8 | +0.1 |
| | SNR=29 | | | | | | | |
| TRNA | Turayna | 123.59 | 68 | | P | PKiKP | 09 21 55.5 | +0.1 |
| | SNR=42 | | | | | | | |
| H11N3 | WAKE ISLAND Hyd | 123.86 | 286 | | PKP | PKiKP | 09 21 57.9 | +2.2 |
| | baz=221,slow=6.1,SNR=42 | | | | | | | |
| H11N2 | WAKE ISLAND Hyd | 123.88 | 286 | | PKP | PKiKP | 09 21 58.5 | +2.8 |
| | baz=221,slow=6.1,SNR=18 | | | | | | | |
| H11N1 | WAKE ISLAND Hyd | 123.88 | 286 | | PKP | PKiKP | 09 21 57.9 | +2.1 |
| | baz=221,slow=6.1,SNR=79 | | | | | | | |
| H11S2 | WAKE ISLAND Hyd | 124.04 | 285 | | PKP | PKiKP | 09 21 58.0 | +1.8 |
| | baz=229,slow=5.3,SNR=11 | | | | | | | |
| H11S1 | WAKE ISLAND Hyd | 124.05 | 285 | | PKP | PKiKP | 09 21 58.0 | +1.9 |
| | baz=229,slow=5.3,SNR=9.9 | | | | | | | |
| H11S3 | WAKE ISLAND Hyd | 124.06 | 285 | | PKP | PKiKP | 09 21 57.4 | +1.2 |
| | baz=229,slow=5.3,SNR=7.1 | | | | | | | |
| SLWR | Sila | 124.06 | 68 | | P | PKiKP | 09 21 56.6 | +0.4 |
| WAKE | Wake Island | 124.10 | 286 | | | PKiKP | 09 21 57.0 | +0.5 |
| MSEY | Mahe Island | 124.35 | 103 | | | PKPdf | 09 21 56.8 | -0.1 |
| MSEY | Mahe Island | 124.35 | 103 | *i* | PKiKP | PKiKP | 09 21 57.9 | +0.7 |
| | SNR=28 | | | | | | | |
| MSEY | Mahe Island | 124.35 | 103 | *i* | P | PKPdf | 09 21 56.5 | -0.3 |
| MSEY | Mahe Island | 124.35 | 103 | | PKIKP | PKPdf | 09 21 56.8 | -0.1 |
| AB31 | Akbulak array | 124.36 | 37 | | PKIKP | PKPpre | 09 21 37.3 | |
| ABKAR | Akbulak array | 124.36 | 37 | | PKPdf | PKiKP | 09 21 56.7 | +0.6 |
| SKR | Severo-Kuril's | 124.98 | 325 | *i* | PKiKP | PKiKP | 09 21 57.2 | -0.1 |
| SKR | | | | *e* | | | 09 23 55.8 | |
| SKR | | | | | MLR | MLR | | |
| | comp=Z,3μm,19.0s | | | | | | | |
| JRN | Qarnain Island | 125.07 | 67 | | P | PKiKP | 09 21 58.5 | +0.3 |
| | SNR=48 | | | | | | | |
| GHWR | Ruwais | 125.15 | 69 | | P | PKiKP | 09 21 58.9 | +0.5 |
| EIDS | Eidsvold | 125.40 | 228 | | PKPdf | PKiKP | 09 21 58.8 | -0.1 |
| ROCAM | Rodrigues Isla | 125.50 | 124 | | | PKPdf | 09 21 58.6 | -0.2 |
| HNR | Honiara | 125.52 | 250 | | | PKPdf | 09 21 58.9 | -0.1 |
| HNR | Honiara | 125.52 | 250 | | PKIKP | PKPdf | 09 21 58.9 | -0.1 |
| ABTO | Aybut | 125.65 | 77 | | P | PKiKP | 09 22 00.2 | +0.5 |
| | SNR=28 | | | | | | | |
| MZR | Muzera | 125.75 | 70 | *i* | PKiKP | PKiKP | 09 22 00.0 | +0.3 |
| | SNR=56 | | | | | | | |
| MZR | Muzera | 125.75 | 70 | | P | PKiKP | 09 22 00.6 | +0.9 |
| | SNR=34 | | | | | | | |
| MZWR | Madinat Zayed | 126.08 | 69 | | P | PKiKP | 09 22 00.8 | +0.5 |
| WHFO | Wadi Hawf | 126.12 | 76 | | P | PKiKP | 09 22 00.6 | 0.0 |
| | SNR=16 | | | | | | | |
| DOK | Doka | 126.46 | 75 | | P | PKiKP | 09 22 01.2 | 0.0 |
| | SNR=27 | | | | | | | |
| RBK | Rabkut | 126.52 | 76 | | P | PKiKP | 09 22 01.7 | +0.3 |
| | SNR=28 | | | | | | | |
| YAK | Yakutsk | 126.99 | 348 | | PKPdf | PKiKP | 09 22 00.8 | -0.1 |
| YAK | Yakutsk | 126.99 | 348 | | PKKPbc | PKKPbc | 09 31 30.6 | -3.0 |
| | comp=Z,53nm,0.7s,baz=197,slow=1.5,SNR=4.6 | | | | | | | |
| YAK | Yakutsk | 126.99 | 348 | *e* | PKIKP | PKPdf | 09 21 57.7 | -2.7 |
| YAK | | | | *e* | | | 09 24 06.7 | |
| YAK | | | | *e* | | | 09 25 18.2 | |
| YAK | | | | *e* | | | 09 28 07.0 | |
| YAK | | | | *e* | PS | SKKPdf | 09 34 48.6 | -5.2 |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,2μm,1.2s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,233nm,1.1s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,289nm,1.0s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,3μm,2.3s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,1μm,2.0s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,443nm,1.9s | | | | | | | |
| AJN | Ajban | 127.03 | 68 | *i* | PKiKP | PKiKP | 09 22 02.1 | -0.1 |
| | SNR=41 | | | | | | | |
| AJN | Ajban | 127.03 | 68 | | P | PKiKP | 09 22 02.5 | +0.4 |
| | SNR=72 | | | | | | | |
| STKA | Stephens Creek | 127.19 | 215 | | PKPdf | PKPdf | 09 22 01.4 | -0.4 |
| STKA | Stephens Creek | 127.19 | 215 | | PKP | PKiKP | 09 22 02.6 | +0.3 |
| | baz=92,slow=3.7 | | | | | | | |
| STKA | | | | | pPKP | pPKPdf | 09 24 24.9 | -0.7 |
| | comp=E,150nm,0.6s,baz=89,slow=2.8,SNR=9.1 | | | | | | | |
| STKA | | | | | PKKPbc | PKKPdf | 09 31 32.3 | -43 |
| | comp=E,28nm,0.7s,baz=338,slow=4.8,SNR=7.5 | | | | | | | |
| STKA | | | | | PKKP | PKKPdf | 09 32 15.0 | -0.3 |
| | comp=E,16nm,0.6s,baz=354,slow=4.2,SNR=3.8 | | | | | | | |
| STKA | | | | | SKKPbc | SKKPbc | 09 34 22.9 | -0.5 |
| | comp=E,15nm,0.6s,baz=319,slow=5.5,SNR=4.8 | | | | | | | |
| DMTO | DMTO | 127.23 | 76 | | P | PKiKP | 09 22 03.0 | +0.2 |
| | SNR=28 | | | | | | | |
| UMZA | Um Al Zommool | 127.32 | 70 | | P | PKiKP | 09 22 03.6 | +0.8 |
| ASUD | Al Ashush, Dub | 127.34 | 68 | *i* | PKiKP | PKiKP | 09 22 03.0 | +0.2 |
| | SNR=34 | | | | | | | |
| ASUD | Al Ashush, Dub | 127.34 | 68 | | P | PKiKP | 09 22 03.8 | +1.0 |
| | SNR=34 | | | | | | | |
| UMQ | Umm Al-Quwin | 127.56 | 66 | *i* | PKiKP | PKiKP | 09 22 03.7 | +0.5 |
| | SNR=27 | | | | | | | |
| UMQ | Umm Al-Quwin | 127.56 | 66 | | P | PKiKP | 09 22 04.6 | +1.4 |
| | SNR=9.1 | | | | | | | |
| FAQ | Al Faqa, Dubai | 127.57 | 67 | *i* | PKiKP | PKPdf | 09 22 03.0 | +0.3 |
| | SNR=65 | | | | | | | |
| FAQ | Al Faqa, Dubai | 127.57 | 67 | | P | PKiKP | 09 22 04.0 | +0.7 |
| | SNR=20 | | | | | | | |
| NAZ | Nazwa, Dubai | 127.61 | 67 | *i* | PKiKP | PKPdf | 09 22 03.0 | +0.3 |
| | SNR=45 | | | | | | | |
| NAZ | Nazwa, Dubai | 127.61 | 67 | | P | PKiKP | 09 22 04.0 | +0.6 |
| | SNR=14 | | | | | | | |
| ALNE | Al Ain | 127.77 | 68 | *i* | PKiKP | PKiKP | 09 22 03.5 | -0.2 |
| | SNR=11 | | | | | | | |
| ALNE | Al Ain | 127.77 | 68 | | P | PKiKP | 09 22 04.3 | +0.6 |
| | SNR=11 | | | | | | | |
| BRVK | Borovoye | 127.84 | 29 | | PKPdf | PKiKP | 09 22 03.0 | +0.1 |
| BRVK | Borovoye | 127.84 | 29 | | P | PKiKP | 09 22 03.6 | +0.6 |
| BRVK | Borovoye | 127.84 | 29 | *d* | PKIKP | PKiKP | 09 22 03.6 | +0.6 |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,233nm,0.9s | | | | | | | |
| SHAO | Shalim | 127.88 | 76 | *i* | PKiKP | PKPdf | 09 22 03.8 | +0.4 |
| | SNR=16 | | | | | | | |
| SHAO | Shalim | 127.88 | 76 | | P | PKPdf | 09 22 03.8 | +0.4 |
| | SNR=9.4 | | | | | | | |
| BVA0 | Borovoye Array | 127.91 | 29 | *i* | PKHKP | PKPpre | 09 21 47.6 | |
| BVAR | Borovoye Array | 127.91 | 29 | | PKP | PKiKP | 09 22 04.1 | +1.0 |
| | comp=Z,342nm,0.7s,baz=276,slow=1.2,SNR=48 | | | | | | | |
| BVAR | | | | | pPKP | pPKPdf | 09 24 24.9 | -1.3 |
| | comp=Z,161nm,0.7s,baz=303,slow=5.2,SNR=10.0 | | | | | | | |
| BVAR | | | | | PKKP | PKKPdf | 09 32 13.2 | -1.5 |
| | comp=Z,18nm,0.6s,baz=137,slow=1.3,SNR=8.1 | | | | | | | |
| BVAR | | | | | SKKPbc | SKKPbc | 09 34 18.8 | -4.3 |
| | comp=Z,22nm,0.7s,baz=169,slow=2.6,SNR=7.7 | | | | | | | |
| SHME | Shamm | 127.93 | 66 | *i* | PKiKP | PKPdf | 09 22 03.5 | +0.2 |
| | SNR=57 | | | | | | | |
| SHME | Shamm | 127.93 | 66 | | P | PKiKP | 09 22 04.5 | +0.6 |
| | SNR=56 | | | | | | | |
| ASHO | Ashiyiah | 128.00 | 67 | *i* | PKiKP | PKPdf | 09 22 03.2 | -0.3 |
| | SNR=10 | | | | | | | |
| ASHO | Ashiyiah | 128.00 | 67 | | P | PKiKP | 09 22 04.3 | +0.1 |
| | SNR=69 | | | | | | | |
| MASF | Masafi | 128.02 | 66 | | P | PKiKP | 09 22 04.8 | +0.6 |
| | SNR=112 | | | | | | | |
| MSFE | Esma-Masafi | 128.02 | 66 | *i* | PKiKP | PKPdf | 09 22 03.4 | -0.1 |
| | SNR=58 | | | | | | | |
| HATD | Hatta, Dubai | 128.05 | 67 | *i* | PKiKP | PKPdf | 09 22 03.6 | 0.0 |
| | SNR=35 | | | | | | | |
| HATD | Hatta, Dubai | 128.05 | 67 | | P | PKiKP | 09 22 04.3 | 0.0 |
| | SNR=72 | | | | | | | |
| BANOM | Banah | 128.09 | 66 | *i* | PKiKP | PKiKP | 09 22 04.1 | -0.3 |
| | SNR=24 | | | | | | | |
| BANOM | Banah | 128.09 | 66 | | P | PKiKP | 09 22 04.6 | +0.3 |
| UOSS | Minazif | 128.10 | 67 | | PKPdf | PKPdf | 09 22 03.0 | -0.6 |
| UOSS | Minazif | 128.10 | 67 | *i* | PKiKP | PKPdf | 09 22 03.3 | -0.4 |
| | SNR=59 | | | | | | | |
| UOSS | Minazif | 128.10 | 67 | | P | PKPdf | 09 22 03.9 | +0.2 |
| MDH | Madha | 128.15 | 67 | *i* | PKiKP | PKPdf | 09 22 03.4 | -0.3 |
| | SNR=40 | | | | | | | |
| MDH | Madha | 128.15 | 67 | | P | PKiKP | 09 22 04.0 | +0.2 |
| | SNR=46 | | | | | | | |
| SOHO | SOHO | 128.47 | 68 | *i* | PKiKP | PKPdf | 09 22 04.0 | -0.3 |
| | SNR=36 | | | | | | | |
| SOHO | SOHO | 128.47 | 68 | | P | PKiKP | 09 22 05.0 | -0.1 |
| ARQ | Araqi | 128.53 | 69 | | P | PKiKP | 09 22 05.4 | +0.1 |
| | SNR=50 | | | | | | | |
| BSY | Bisya | 129.19 | 70 | | P | PKiKP | 09 22 06.5 | -0.1 |
| | SNR=91 | | | | | | | |
| HOQ | Hofain | 129.23 | 69 | | P | PKPdf | 09 22 06.0 | +0.1 |
| | SNR=57 | | | | | | | |
| BBOO | Buckleboo | 129.36 | 210 | | PKPdf | PKPdf | 09 22 06.1 | +0.2 |
| JASK | Jask - Hormozg | 129.50 | 66 | | P | PKiKP | 09 22 08.4 | +1.3 |
| | SNR=67 | | | | | | | |
| DQM | DQM | 129.66 | 73 | | P | PKiKP | 09 22 08.0 | +0.4 |
| | SNR=76 | | | | | | | |
| SMDO | Samad | 129.95 | 69 | | P | PKiKP | 09 22 08.0 | -0.3 |
| | SNR=168 | | | | | | | |
| BIDO | Bidbid | 129.98 | 69 | | P | PKiKP | 09 22 08.3 | +0.1 |
| | SNR=109 | | | | | | | |
| MHTO | MHTO | 130.02 | 72 | | P | PKiKP | 09 22 08.0 | -0.2 |
| | SNR=57 | | | | | | | |
| JMDO | Jabal Madar | 130.06 | 70 | | P | PKiKP | 09 22 08.0 | -0.4 |
| | SNR=47 | | | | | | | |
| WBK | Wadi Bani Khal | 130.84 | 70 | | P | PKiKP | 09 22 10.0 | +0.1 |
| | SNR=105 | | | | | | | |
| NKL | Nikolayevsk | 131.01 | 335 | *i* | PKIKP | PKPdf | 09 22 08.5 | +0.2 |
| NKL | | | | *e* | | | 09 24 34.0 | |
| NKL | | | | *e* | SS | SS | 09 41 21.3 | +3.7 |
| JLN | Jalan Bani Buh | 131.28 | 70 | | P | PKiKP | 09 22 11.0 | +0.2 |
| | SNR=121 | | | | | | | |
| HRA | Herat | 131.45 | 54 | | PKPdf | PKPdf | 09 22 10.4 | +0.4 |
| TYV | Tymovskoe | 131.78 | 332 | *e* | PKIKP | PKPdf | 09 22 08.3 | -1.5 |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,6μm,5.5s | | | | | | | |
| TYV | | | | | pmax | pmax | | |
| | comp=Z,578nm,1.6s | | | | | | | |
| CTA | Charters Tower | 132.12 | 230 | | PKhKP | PKPpre | 09 22 02.4 | |
| | comp=Z,2.3nm,0.8s,baz=158,slow=4.6,SNR=12 | | | | | | | |
| CTA | | | | | PKP | PKiKP | 09 22 12.5 | -0.1 |
| | comp=Z,14nm,0.6s,baz=108,slow=3.4,SNR=32 | | | | | | | |
| CTA | | | | | pPKP | pPKPdf | 09 24 35.5 | +0.2 |
| | comp=Z,13nm,0.6s,baz=111,slow=2.9,SNR=11 | | | | | | | |
| CTA | | | | | PKKP | PKKPdf | 09 32 06.4 | +0.5 |
| | comp=Z,2.1nm,1.0s,baz=178,slow=3.3,SNR=5.1 | | | | | | | |
| CTA | | | | | SKKPbc | SKKPbc | 09 34 07.8 | +1.8 |
| | comp=Z,1.0nm,0.6s,baz=341,slow=4.0,SNR=7.7 | | | | | | | |
| CTA | | | | | SKKP | SKKPdf | 09 34 33.7 | -9.2 |
| | comp=Z,3.1nm,1.1s,baz=279,slow=7.3,SNR=3.3 | | | | | | | |
| NGCH | Negor - Chabah | 132.49 | 66 | | P | PKiKP | 09 22 14.1 | +1.0 |
| | SNR=29 | | | | | | | |
| KUR | Kuril'sk | 132.54 | 323 | *d* | PKIKP | PKiKP | 09 22 12.1 | -0.6 |
| KUR | | | | *i* | | | 09 24 44.6 | |
| KUR | | | | *e* | PPP | PPP | 09 27 45.1 | |
| KUR | | | | *e* | SSS | SSS | 09 46 39.5 | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,11μm,3.9s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=N,570nm,1.6s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,3μm,1.6s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,701nm,1.3s | | | | | | | |
| I46RU | ZALESOVO INFRA | 133.05 | 19 | | PKP | PKiKP | 09 22 13.0 | -0.4 |
| | baz=285,slow=2.4,SNR=6.1 | | | | | | | |
| ZAA0 | Zalesovo Array | 133.05 | 19 | | PKPdf | PKiKP | 09 22 13.3 | -0.1 |
| ZALV | Zalesovo Beam | 133.05 | 19 | | PKP | PKiKP | 09 22 13.2 | -0.2 |
| | comp=E,2μm,0.6s,baz=305,slow=2.5,SNR=81 | | | | | | | |
| ZALV | | | | | pPKP | pPKPdf | 09 24 35.2 | -0.7 |
| | comp=E,361nm,0.8s,baz=297,slow=2.7,SNR=7.8 | | | | | | | |
| ZALV | | | | | SKPbc | SKPbc | 09 24 43.5 | +0.9 |
| | comp=E,224nm,0.6s,baz=340,slow=5.6,SNR=5.2 | | | | | | | |
| ZALV | | | | | SKKPbc | SKKPbc | 09 33 59.2 | -5.7 |
| | comp=E,16nm,0.7s,baz=171,slow=3.5,SNR=4.2 | | | | | | | |
| BOD | Bodaibo | 133.21 | 356 | *e* | PKIKP | PKPdf | 09 22 12.3 | 0.0 |
| BOD | | | | | pmax | pmax | | |
| | comp=Z,2μm,1.7s | | | | | | | |
| KURK | Kurchatov | 133.22 | 26 | | PKPdf | PKiKP | 09 22 13.5 | -0.3 |
| KURK | Kurchatov | 133.22 | 26 | | PKIKP | PKiKP | 09 22 13.4 | -0.5 |
| KURK | | | | | | | 09 24 34.9 | |
| KURBB | Kurchatov Arra | 133.25 | 26 | | PKP | PKiKP | 09 22 13.4 | -0.6 |
| | comp=Z,346nm,0.6s,baz=305,slow=2.3,SNR=51 | | | | | | | |
| KURBB | | | | | pPKP | pPKPdf | 09 24 34.9 | -1.5 |
| | comp=Z,122nm,1.0s,baz=316,slow=3.1,SNR=8.1 | | | | | | | |
| KURBB | | | | | SKPbc | SKPbc | 09 24 44.9 | +1.5 |
| | comp=Z,144nm,0.8s,baz=315,slow=3.6,SNR=11 | | | | | | | |
| KURBB | | | | | PKKP | PKKPdf | 09 32 01.0 | -3.3 |
| | comp=Z,9.1nm,0.7s,baz=127,slow=2.7,SNR=8.0 | | | | | | | |
| KURBB | | | | | SKKPbc | SKKPbc | 09 34 00.1 | -3.8 |
| | comp=Z,13nm,0.7s,baz=135,slow=3.4,SNR=9.3 | | | | | | | |
| KURBB | | | | | SKKP | SKKPdf | 09 34 46.7 | +5.1 |
| | comp=Z,17nm,0.9s,baz=139,slow=4.8,SNR=4.3 | | | | | | | |
| KURBB | Kurchatov Arra | 133.25 | 26 | | PKHKP | PKPpre | 09 22 00.7 | |
| UGL | Uglegorsk | 133.28 | 331 | *e* | PKIKP | PKiKP | 09 22 13.7 | -0.3 |
| UGL | | | | *e* | | | 09 35 56.5 | |
| UGL | | | | *e* | | | 09 41 46.0 | |
| BRLS | Borolday | 133.37 | 40 | *e* | PKP | PKPdf | 09 22 13.8 | +0.6 |
| | baz=40 | | | | | | | |
| BRLS | Borolday | 133.37 | 40 | *e* | PKIKP | PKPdf | 09 22 13.7 | +0.6 |
| CHM | Chimkent | 133.58 | 41 | *e* | PKP | PKPdf | 09 22 14.1 | +0.5 |
| | SNR=28 | | | | | | | |
| CHM | Chimkent | 133.58 | 41 | *e* | PKIKP | PKPdf | 09 22 14.0 | +0.5 |
| KK31 | Karatay Array | 133.75 | 39 | | PKPdf | PKiKP | 09 22 14.8 | -0.4 |
| KK31 | Karatay Array | 133.75 | 39 | | PKIKP | PKiKP | 09 22 14.8 | -0.4 |
| KKAR | Karatay Array | 133.75 | 39 | | PKPdf | PKiKP | 09 22 14.8 | -0.4 |
| KKAR | Karatay Array | 133.75 | 39 | | PKIKP | PKiKP | 09 22 14.8 | -0.4 |
| H01W2 | Cape Leeuwin H | 134.04 | 186 | | PKP | PKiKP | 09 22 15.9 | +0.1 |
| H01W1 | Cape Leeuwin H | 134.04 | 186 | | PKP | PKiKP | 09 22 15.7 | -0.1 |
| H01W3 | Cape Leeuwin H | 134.05 | 186 | | PKP | PKiKP | 09 22 15.9 | +0.1 |
| SEM | Semipalatinsk | 134.15 | 26 | *e* | PKP | PKPdf | 09 22 15.2 | +0.6 |
| | baz=26 | | | | | | | |
| SEM | Semipalatinsk | 134.15 | 26 | *e* | PKIKP | PKPdf | 09 22 15.2 | +0.6 |
| YSS | Yuzh-Sakhalins | 134.35 | 328 | | PKPdf | PKPdf | 09 22 15.4 | +0.7 |
| YSS | Yuzh-Sakhalins | 134.35 | 328 | *ke* | PKHKP | PKPpre | 09 22 02.4 | |
| YSS | | | | *i* | | | 09 22 16.0 | |
| YSS | | | | *e* | | | 09 24 34.9 | |
| YSS | | | | *e* | | | 09 25 40.4 | |
| YSS | | | | *e* | | | 09 28 06.6 | |
| YSS | | | | *e* | SS | SS | 09 41 54.2 | -3.7 |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,700nm,1.0s | | | | | | | |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,9μm,4.7s | | | | | | | |
| RABL | Rabaul | 134.58 | 253 | | PKPdf | PKPdf | 09 22 16.7 | +0.4 |
| BTLS | Baital | 134.75 | 35 | *e* | PKP | PKPdf | 09 22 16.2 | +0.6 |
| | baz=35 | | | | | | | |
| BTLS | Baital | 134.75 | 35 | *e* | PKIKP | PKPdf | 09 22 16.2 | +0.6 |
| SIMJ | Simiganj | 134.93 | 45 | | PKPdf | PKPdf | 09 22 16.8 | +0.5 |
| ZEA | Zeya | 135.05 | 345 | *e* | PKHKP | PKPpre | 09 22 02.8 | |
| ZEA | | | | *e* | | | 09 28 05.5 | |
| ZEA | | | | *e* | | | 09 36 08.8 | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,90nm,1.0s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,6μm,4.1s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=E,2μm,5.8s | | | | | | | |
| ZEA | | | | | pmax | pmax | | |
| | comp=Z,10μm,5.8s | | | | | | | |
| NWAO | Narrogin (SRO) | 135.57 | 190 | | PKhKP | PKPpre | 09 22 03.7 | |
| | comp=Z,62nm,0.7s,baz=155,slow=5.5,SNR=26 | | | | | | | |
| NWAO | | | | | PKP | PKPdf | 09 22 18.1 | +0.5 |
| | comp=Z,181nm,0.7s,baz=180,slow=2.9,SNR=20 | | | | | | | |
| NWAO | | | | | pPKP | pPKPdf | 09 24 41.5 | +0.1 |
| | comp=Z,268nm,1.1s,baz=212,slow=1.4,SNR=9.1 | | | | | | | |
| NWAO | | | | | SKPbc | SKPbc | 09 24 51.5 | +0.1 |
| | comp=Z,169nm,0.6s,baz=156,slow=4.7,SNR=9.9 | | | | | | | |
| NWAO | | | | | SKKPbc | SKKPbc | 09 33 47.6 | -6.1 |
| | comp=Z,46nm,1.0s,baz=20,slow=3.5,SNR=3.0 | | | | | | | |
| EKS2 | Erkin-Say | 136.00 | 38 | | P | PKPpre | 09 22 06.9 | |
| | SNR=15 | | | | | | | |
| SGDS | Sogindy | 136.04 | 36 | *e* | PKP | PKPdf | 09 22 18.6 | +0.5 |
| | baz=36 | | | | | | | |
| SGDS | Sogindy | 136.04 | 36 | *e* | PKIKP | PKPdf | 09 22 18.6 | +0.5 |
| USP | Ospenovka | 136.07 | 37 | | P | PKPpre | 09 22 06.7 | |
| | SNR=15 | | | | | | | |
| JKA | Kamikawa-asahi | 136.24 | 325 | | PKPdf | PKPdf | 09 22 19.1 | +0.7 |
| ASAJ | Asahikawa | 136.24 | 325 | | PKhKP | PKPpre | 09 22 07.5 | |
| | comp=Z,60nm,0.8s,baz=96,slow=7.2,SNR=16 | | | | | | | |
| ASAJ | | | | | PKP | PKPdf | 09 22 19.0 | +0.6 |
| | comp=Z,433nm,0.8s,baz=37,slow=10,SNR=26 | | | | | | | |
| ASAJ | | | | | pPKP | pPKPdf | 09 24 42.9 | +0.6 |
| | comp=Z,137nm,0.9s,baz=276,slow=16,SNR=4.6 | | | | | | | |
| ASAJ | | | | | SKP | SKPdf | 09 24 54.2 | -0.9 |
| | comp=Z,336nm,0.9s,baz=280,slow=6.4,SNR=7.8 | | | | | | | |
| AML | Almayashu | 136.25 | 39 | | P | PKPpre | 09 22 08.1 | |
| | SNR=14 | | | | | | | |
| CHMS | Chumysh | 136.38 | 37 | | P | PKPpre | 09 22 08.5 | |
| | SNR=9.4 | | | | | | | |
| AAK | Ala-Archa | 136.44 | 38 | *i* | PKPdf | PKPpre | 09 22 09.5 | |
| | SNR=34 | | | | | | | |
| AAK | Ala-Archa | 136.44 | 38 | | PKhKP | PKPpre | 09 22 09.1 | |
| | comp=Z,77nm,0.8s,baz=10,slow=0.2,SNR=11 | | | | | | | |
| AAK | | | | | PKP | PKiKP | 09 22 20.3 | -0.6 |
| | comp=Z,255nm,0.7s,baz=166,slow=1.2,SNR=22 | | | | | | | |
| AAK | | | | | pPKP | pPKPdf | 09 24 43.2 | +0.3 |
| | comp=Z,128nm,0.9s,baz=240,slow=1.7,SNR=3.9 | | | | | | | |
| AAK | | | | | SKP | SKPdf | 09 24 55.6 | -0.2 |
| | comp=Z,400nm,0.9s,baz=225,slow=1.2,SNR=8.5 | | | | | | | |
| AAK | | | | | SKKPbc | SKKPbc | 09 33 50.0 | -2.0 |
| | comp=Z,64nm,0.9s,baz=105,slow=2.4,SNR=6.6 | | | | | | | |
| KBL | Kabul | 136.68 | 51 | | P | PKPdf | 09 22 20.8 | +1.0 |
| | SNR=100 | | | | | | | |
| UCH | Uchtor | 136.69 | 38 | | P | PKPpre | 09 22 16.2 | |
| | SNR=7.4 | | | | | | | |
| KBK | Karagaybulak | 136.70 | 37 | | P | PKPpre | 09 22 09.9 | |
| | SNR=6.9 | | | | | | | |
| KUU | Kurty | 136.75 | 35 | *e* | PKP | PKPdf | 09 22 20.0 | +0.5 |
| | baz=35 | | | | | | | |
| KUU | Kurty | 136.75 | 35 | *e* | PKIKP | PKPdf | 09 22 19.9 | +0.5 |
| TKM2 | Tokmak 2 | 136.92 | 36 | | P | PKPpre | 09 22 10.0 | |
| | SNR=10.0 | | | | | | | |
| TKM2 | Tokmak 2 | 136.92 | 36 | | PKHKP | PKPpre | 09 22 09.3 | |
| CHKK | Chushkaly | 137.13 | 34 | *e* | PKP | PKPdf | 09 22 20.6 | +0.5 |
| | baz=34 | | | | | | | |
| CHKK | Chushkaly | 137.13 | 34 | *e* | PKIKP | PKPdf | 09 22 20.6 | +0.5 |
| TDK | Taldyqorghan | 137.14 | 32 | *e* | PKP | PKPdf | 09 22 20.7 | +0.6 |
| | baz=32 | | | | | | | |
| TDK | Taldyqorghan | 137.14 | 32 | *e* | PKIKP | PKPdf | 09 22 20.7 | +0.6 |
| ARXS | Arharly | 137.36 | 33 | *e* | PKIKP | PKPpre | 09 22 15.5 | |
| AAA | Alma-Ata | 137.50 | 35 | *e* | PKP | PKPdf | 09 22 21.5 | +0.6 |
| | baz=35 | | | | | | | |
| AAA | | | | *e* | PP | PP | 09 25 15.9 | +0.5 |
| | baz=35 | | | | | | | |
| AAA | Alma-Ata | 137.50 | 35 | *e* | P

UZB e 09 25 23.2
**IRK Irkutsk 138.75 5** ePKHKP PKPpre 09 22 15.0
IRK pmax pmax
comp=Z,3μm,2.3s
**TEY Ternei 138.78 330** ePKHKP PKPpre 09 22 12.2
TEY pmax pmax
comp=E,200nm,4.9s
TEY pmax pmax
comp=N,200nm,4.8s
TEY pmax pmax
comp=Z,200nm,4.8s
**PDGK Podgornoye 138.85 33** PKHKP PKPpre 09 22 10.2
**SHLS Shalkode 138.95 33** ePKP **PKPdf 09 22 24.4 +0.8**
baz=33
SHLS ePP **PP 09 25 26.4 +2.2**
baz=33
**SHLS Shalkode 138.95 33** ePKIKP **PKPdf 09 22 24.4 +0.8**
SHLS e 09 25 26.4
**CIT Chita 139.01 356** ePKHKP PKPpre 09 22 15.4
CIT e 09 25 23.3
CIT pmax pmax
comp=Z,4μm,1.5s
**DGAR Diego Garcia 139.13 115 PKPdf 09 22 22.3 -2.3**
**DGAR Diego Garcia 139.13 115** PKIKP **PKPdf 09 22 22.3 -2.3**
**KSH Kashi 139.16 40** PKP **PKPdf 09 22 17.3 -6.8**
KSH PP **PP 09 25 28.3 +2.6**
KSH PKS **PKSdf 09 26 00.6 +0.4**
KSH SKKS **SKKSac 09 31 16.5 -0.9**
KSH AMB AMB
comp=Z,7μm,5.2s
**WRA Warramunga Arr 140.44 219** PKhKP PKPpre 09 22 18.9
comp=Z,94nm,0.5s,baz=145,slow=3.1,SNR=520
WRA PKP **PKPdf 09 22 27.4 +0.6**
comp=Z,943nm,0.6s,baz=136,slow=2.0,SNR=40
WRA pPKP pPKPdf 09 24 50.4 -0.4
comp=Z,114nm,0.5s,baz=131,slow=1.5,SNR=4.8
WRA SKPbc **SKPbc 09 25 05.6 +0.2**
comp=Z,596nm,0.8s,baz=143,slow=2.2,SNR=12
WRA PKKP **PKKPdf 09 31 49.1 -0.7**
comp=Z,7.9nm,0.7s,baz=325,slow=1.7,SNR=10
WRA SKKPbc **SKKPbc 09 33 33.0 -2.0**
comp=Z,23nm,0.8s,baz=343,slow=2.7,SNR=4.8
WRA P4KP 09 54 24.9
comp=Z,0.5nm,0.9s,baz=134,slow=2.6,SNR=6.7
**I07AU WARRAMUNGA INT 140.45 219** PKP **PKPdf 09 22 28.1 +1.3**
baz=214,slow=0.8,SNR=3.4
**BHUJ Bhuj 140.50 67** eP **PKPdf 09 22 23.1 -3.6**
BHUJ IAmb IAmb 09 22 33.4
comp=Z,2μm,1.0s
**ZAK Zakamensk 140.51 6** ePKHKP PKPpre 09 22 21.0
ZAK pmax pmax
comp=Z,635nm,1.2s
**JASL Jaisalmer 140.74 61** eP **PKPdf 09 22 27.4 +0.3**
**USRK Ussuriysk Ar. 141.56 333** PKhKP PKPpre 09 22 24.7
comp=Z,220nm,0.5s,baz=26,slow=3.5,SNR=380
USRK pPKP pPKPdf 09 24 51.4 -0.6
comp=Z,151nm,0.9s,baz=29,slow=1.1,SNR=4.5
USRK SKPbc **SKiKP 09 25 08.3 -0.6**
comp=Z,568nm,1.0s,baz=24,slow=1.2,SNR=8.7
USRK SKKPbc **SKKPbc 09 33 30.3 -1.9**
comp=Z,18nm,0.8s,baz=195,slow=4.3,SNR=5.2
**JMU Jammu 141.88 50** eP **PKPdf 09 22 29.5 +0.5**
**BNX BinXian 142.09 339** ↑PKP **PKPdf 09 22 26.4 -2.5**
BNX PKPab **PKiKP 09 22 31.5 -0.7**
BNX PP **PP 09 25 42.1 -0.4**
BNX AMB AMB
comp=Z,12μm,6.3s
**MDJ Mudanjiang 142.23 336** PKP **PKPdf 09 22 25.8 -3.4**
MDJ PP **PP 09 25 43.9 +0.6**
MDJ AMB AMB
comp=Z,11μm,10.4s
**SRGN SRI GANGA NAGA 142.24 55** eP **PKPdf 09 22 27.4 -2.3**
SRGN IAmb IAmb 09 22 34.8
comp=Z,2μm,1.0s
**BKNR BIKANER 142.42 58** eP **PKPdf 09 22 28.2 -1.9**
**WMQ Urumqi 142.46 26** ⇓PKP **PKPdf 09 22 27.4 -2.4**
WMQ pPKP pPKPdf 09 24 53.9 +0.1
WMQ PKS **PKSdf 09 26 06.6 +1.1**
WMQ SKS **SKSdf 09 28 38.3 -3.1**
**KAAM Kaadhehdhoo 142.59 104** P **PKPdf 09 22 28.9 -1.9**
SNR=20
**THN Thein Dam 142.62 50** eP **PKPdf 09 22 30.2 -0.1**
**BHV Bhavnagar 143.05 69** eP PKPbc 09 22 30.4 +0.6
**DHRM DHARAMSHALA 143.14 50** eP PKPbc 09 22 30.1 0.0
DHRM IAmb IAmb 09 22 37.5
comp=Z,27μm,2.0s
**SONM Songino Array 143.28 3** PKPbc PKPbc 09 22 30.3 +0.4
**SONM Songino Array 143.28 3** PKP **PKPdf 09 22 30.8 -0.3**
comp=Z,2μm,0.5s,baz=328,slow=3.1,SNR=1142
SONM pPKP **pPKPdf 09 24 56.8 +1.6**
comp=Z,233nm,1.1s,baz=230,slow=3.6,SNR=3.2
SONM SKKPbc SKKPbc 09 33 23.2 -2.6
comp=Z,69nm,0.8s,baz=171,slow=2.9,SNR=16
**ULN Ulaanbaatar 143.28 2 PKPdf 09 22 31.1 -0.1**
**ULN Ulaanbaatar 143.28 2** P **PKiKP 09 22 33.5 -1.3**
**ULN Ulaanbaatar 143.28 2** PKIKP **PKPdf 09 22 31.1 -0.1**
**MJAR Matsushiro Arr 143.52 319** PKP PKPbc 09 22 30.9 +0.1
comp=Z,4μm,0.9s,baz=61,slow=2.9,SNR=995
MJAR pPKP pPKPdf 09 24 54.7 -1.1
comp=Z,218nm,1.1s,baz=66,slow=1.4,SNR=5.7
MJAR SKKPbc SKKPbc 09 33 22.9 -1.2
comp=Z,53nm,1.2s,baz=214,slow=4.0,SNR=6.8
**MAJO Matsushiro 143.52 319** PKPbc 09 22 31.0 +0.2
**MAJO Matsushiro 143.52 319** PKIKP PKPbc 09 22 31.0 +0.2
**MAT Matsushiro 143.52 319** P **PKPdf 09 22 31.3 -0.4**
**BHK Bhakra 143.61 51** eP PKPab 09 22 31.6 +0.3
BHK IAmb IAmb 09 22 38.4
comp=Z,15μm,1.6s
**JOD2 Odawara 2 143.68 316** P PKPbc 09 22 31.3 0.0
**AJM Ajmer 144.07 60** eP **PKPab 09 22 33.2 0.0**
**BOM Bombay 144.11 73** eP **PKPab 09 22 33.5 0.0**
**HMDM Hanimaadhoo 144.24 94** P **PKPab 09 22 35.0 +0.9**
SNR=296
**JGN Niukaw 144.29 319** P **PKPab 09 22 33.8 +0.1**
**SMLA Simla 144.31 51** eP **PKPab 09 22 34.3 +0.4**
SMLA IAmb IAmb 09 22 40.8
comp=Z,13μm,0.9s
**JHJ2 Mitsune 144.32 313 PKPdf 09 22 33.3 0.0**
**JHJ2 Mitsune 144.32 313** P **PKPdf 09 22 33.2 0.0**
**JHJ Hachijo jima 2 144.34 313** PKP **PKPdf 09 22 33.2 0.0**
comp=Z,6μm,0.8s,baz=43,slow=23,SNR=76
**CN2 Changchun 144.47 340** PKP **PKPdf 09 22 32.8 -0.4**
CN2 ePP **PP 09 26 01.1 +4.6**
CN2 eSS SS 09 43 55.8 +1.8
CN2 AMB AMB
comp=Z,10μm,8.0s
**KKR Kurukshetra 144.56 53** eP **PKPab 09 22 35.3 +0.3**
**RTK Rohtak 144.61 55** eP **PKPab 09 22 35.1 0.0**
RTK IAmb IAmb 09 22 41.9
comp=Z,24μm,1.0s
**JSG Sagara 144.62 316** PKPbc **PKPab 09 22 35.3 +0.3**
**JSG Sagara 144.62 316** P **PKPab 09 22 35.2 +0.3**
**JGF Kuroka 144.64 318** P PKPbc 09 22 34.2 -0.1
**HNLY HANLEY 144.86 47** eP **PKPab 09 22 36.9 +0.2**
**KLP Kalpa 144.94 50** eP PKPbc 09 22 35.6 -0.1
**KUDL Kundal 145.02 56** eP **PKPbc 09 22 35.6 0.0**
KUDL IAmb IAmb 09 22 43.2
comp=Z,18μm,1.2s
**GUMO Guam 145.03 278 PKPdf 09 22 35.4 +0.5**
**GUMO Guam 145.03 278** PKIKP **PKPdf 09 22 35.4 +0.5**
**GNR GANAUR 145.06 54** eP **PKPab 09 22 36.5 -0.4**
**CBIJ Chichi jima 145.09 302** P **PKPdf 09 22 35.3 +0.6**
**JCJ Chichijima 145.09 302** PKPbc **PKPdf 09 22 29.9 -4.9**
comp=Z,3μm,0.7s,baz=285,slow=3.1,SNR=96
**POO Poona 145.13 74** eP **PKPbc 09 22 35.9 -0.3**
POO IAmb IAmb 09 22 43.7
comp=Z,16μm,1.6s
**BHGR Bahadurgarh 145.17 55** eP **PKPbc 09 22 36.6 +0.6**
**DDI Dehra Dun 145.36 52** eP **PKPbc 09 22 36.9 +0.3**
DDI IAmb IAmb 09 22 44.5
comp=Z,20μm,1.4s
**GOA Goa 145.37 79** eP **PKPdf 09 22 35.8 +0.4**
GOA IAmb IAmb 09 22 42.8
comp=Z,4μm,1.1s
**NPLP NPLP New Delhi 145.38 55** eP **PKPbc 09 22 36.1 -0.5**
NPLP IAmb IAmb 09 22 43.6
comp=Z,5μm,1.4s
**NDI New Delhi 145.40 55** eP **PKPbc 09 22 36.4 -0.3**
NDI IAmb IAmb 09 22 42.7
comp=Z,12μm,1.5s
**SONA Sohna 145.46 56** eP **PKPbc 09 22 36.2 -0.6**
SONA IAmb IAmb 09 22 43.9
comp=Z,8μm,1.3s
**JMIU JAMIA UNIVERSI 145.51 55** eP **PKPbc 09 22 36.8 -0.2**

**KAD Karad 145.58 76** eP **PKPdf 09 22 36.2 +0.4**
**BISR Bishrakh 145.62 55** eP **PKPbc 09 22 37.1 -0.2**
BISR IAmb IAmb 09 22 44.7
comp=Z,7μm,0.7s
**MERT Meerut 145.69 54** eP **PKPbc 09 22 37.0 -0.4**
MERT IAmb IAmb 09 22 46.4
comp=Z,22μm,1.2s
**PSA00 Pilbara Seismi 145.90 198 PKPdf 09 22 36.9 +0.6**
**JWT Wachi 146.09 320** P **PKPbc 09 22 37.4 -1.0**
**UGON Onchagaon 146.11 55** eP **PKPdf 09 22 37.5 +1.1**
UGON IAmb IAmb 09 22 46.3
comp=Z,19μm,1.5s
**MBWA Marble Bar 146.32 198** PKPbc **PKPdf 09 22 37.6 +0.6**
**MNGI Mangalore 146.39 83** eP **PKPdf 09 22 37.9 +0.7**
MNGI IAmb IAmb 09 22 45.8
comp=Z,9μm,1.3s
**TKRD Thakurdwara 146.50 53** eP **PKPbc 09 22 38.7 -1.0**
**XLT XiLinHaoTe 146.75 351** ePKPbc **PKPdf 09 22 38.3 +1.2**
XLT pPKP pPKPab 09 25 00.4 -0.9
XLT PKS **PP 09 26 07.5 -2.1**
XLT SS SS 09 44 23.3 +4.0
**FITZ Fitzroy Crossi 146.75 210** PKPbc **PKPdf 09 22 38.9 +1.1**
**GUNA GUNA 146.95 62** eP **PKPdf 09 22 38.8 +0.9**
**JAD Aida 147.09 320** P **PKPdf 09 22 39.1 +1.3**
**PTH Pithoragarh 147.38 51** eP **PKPdf 09 22 39.9 +1.1**
PTH IAmb IAmb 09 22 49.7
comp=Z,6μm,1.0s
**LGTI Lohaghat 147.45 52** eP **PKPdf 09 22 39.9 +1.4**
LGTI IAmb IAmb 09 22 49.6
comp=Z,9μm,1.3s
**BHPL Bhopal 147.45 64** eP **PKPdf 09 22 39.4 +0.6**
**LATR Latur 147.69 73** eP **PKPdf 09 22 39.7 +0.4**
LATR IAmb IAmb 09 22 50.4
comp=Z,9μm,1.3s
**AKL Akola 147.71 69** eP **PKPdf 09 22 39.0 -0.2**
**JHNI Jhansi 147.71 59** eP **PKPdf 09 22 39.8 +0.6**
**FRKB FARRUKHABAD 147.82 55** eP **PKPdf 09 22 40.7 +1.4**
**JMN Monobe 148.05 319** P **PKPdf 09 22 41.5 +1.9**
**SUJ Sinuiju 148.05 337** PKPbc **PKPdf 09 22 39.2 0.0**
SUJ AmB
comp=Z,9μm,4.7s
SUJ AMS AMS
comp=Z,3μm,3.3s
**TRD Trivandrum 148.19 92** eP **PKPdf 09 22 41.5 +1.3**
TRD IAmb IAmb 09 22 52.1
comp=Z,15μm,1.4s
**PYAG Pyongyang 148.45 335** PKPbc **PKPdf 09 22 40.1 +0.2**
PYAG PP **PP 09 26 16.0 -3.6**
PYAG AmB
comp=Z,11μm,5.3s
PYAG AMS AMS
comp=Z,1μm,4.8s
**KSRS Korea Array 148.78 330** PKP **PKPdf 09 22 41.5 +1.0**
comp=Z,530nm,0.8s,baz=32,slow=1.3,SNR=205
KSRS PKPbc **PKiKP 09 22 46.4 +0.3**
comp=Z,1μm,0.7s,baz=18,slow=1.9,SNR=82
KSRS pPKPbc **pPKPdf 09 25 04.2 -0.5**
comp=Z,239nm,0.9s,baz=15,slow=1.5,SNR=4.7
KSRS P5KP 10 01 29.4
comp=Z,5.4nm,1.0s,baz=54,slow=3.7,SNR=5.2
**KSAR Wonju Array Be 148.80 330** PKPdf **PKPdf 09 22 41.5 +1.0**
KSAR PKPbc **PKiKP 09 22 46.3 +0.1**
**KSAR Wonju Array Be 148.80 330** PKHKP PKPpre 09 22 41.5
**KOD Kodaikanal 148.87 89** eP **PKPdf 09 22 43.0 +1.4**
KOD IAmb IAmb 09 22 54.1
comp=Z,9μm,1.5s
**BNDA BANDA 149.21 58** eP **PKPdf 09 22 42.2 +0.6**
**HJU Haeju 149.31 334** PKPbc **PKPdf 09 22 41.5 +0.2**
HJU AMS AMS
comp=Z,548nm,3.8s
**INCN Inchon 149.36 332** PKPdf **PKPdf 09 22 41.8 +0.3**
INCN PKPbc **PKiKP 09 22 47.2 -0.3**
**INCN Inchon 149.36 332** P **PKPdf 09 22 43.2 +1.7**
**INCN Inchon 149.36 332** PKIKP **PKPdf 09 22 41.8 +0.3**
**NGP Nagpur 149.46 67** eP **PKPdf 09 22 42.8 +0.7**
NGP IAmb IAmb 09 22 54.9
comp=Z,16μm,1.4s
**SALM Salem 149.66 86** eP **PKPdf 09 22 43.9 +1.4**
SALM IAmb IAmb 09 22 55.5
comp=Z,5μm,1.0s
**HYB Hyderabad 149.71 74** ePKPdf **PKPdf 09 22 43.2 +0.6**
HYB ePKIKP **PKiKP 09 22 49.1 +0.3**
HYB epPKPdf **pPKPdf 09 25 06.0 -0.9**
HYB esPKPdf **sPKPdf 09 26 06.8 +0.3**
HYB ePP **PP 09 26 28.1 -0.7**
HYB eSKKSac SKKSac 09 32 15.2 -2.7
HYB eSS **SS 09 44 51.1 -4.9**
**TJN Taejon 149.90 330** PKPdf **PKPdf 09 22 42.7 +0.4**
TJN PKPbc **PKiKP 09 22 48.5 -0.1**
TJN PKPab **PKPab 09 22 56.5 +0.2**
**TJN Taejon 149.90 330** PKIKP **PKPdf 09 22 42.7 +0.4**
TJN 09 22 56.5
**DL2 Dalian 150.13 340** PKPbc **PKPdf 09 22 42.8 +0.2**
DL2 PKPab **PKPab 09 22 57.3 +0.2**
DL2 pPKP **pPKPdf 09 25 04.8 -2.1**
DL2 PP **PP 09 26 28.1 -0.9**
DL2 SS SS 09 44 56.0 -0.8
DL2 AMB AMB
comp=Z,14μm,5.7s
**HHC Hu-ho-hao-te 150.26 356** ↓iPKPbc **PKPdf 09 22 44.8 +1.9**
HHC pPKP pPKPdf 09 25 05.4 -1.9
HHC PP **PP 09 26 30.4 +0.7**
HHC SKS **SKSdf 09 28 51.8 -0.9**
HHC SKKS **SKKSac 09 32 17.5 -2.1**
HHC AMB AMB
comp=Z,9μm,8.8s
**JNU Nakatsue 150.34 321** PKPdf **PKPdf 09 22 43.4 +0.2**
JNU PKPbc **PKiKP 09 22 49.6 0.0**
JNU PKPab **PKPab 09 22 57.2 -1.1**
**JNU Nakatsue 150.34 321** PKP **PKPdf 09 22 43.5 +0.3**
comp=Z,886nm,0.8s,baz=308,slow=2.0,SNR=22
JNU PKPbc **PKPbc 09 22 49.0 -0.1**
comp=Z,960nm,0.8s,baz=56,slow=6.6,SNR=70
JNU pPKP **pPKPdf 09 25 06.2 -1.3**
comp=Z,420nm,1.1s,baz=89,slow=3.6,SNR=3.3
**BJI Beijing 150.48 349** PKPbc **PKPdf 09 22 44.3 +1.2**
BJI PP **PP 09 26 30.4 -0.4**
BJI SS SS 09 45 01.1 +0.8
BJI AMB AMB
comp=Z,4μm,8.1s
**ALBI Allahabad 150.50 58** eP **PKPdf 09 22 44.3 +0.8**
**BJT Baijiatuan 150.50 349** PKPdf **PKPdf 09 22 44.3 +1.2**
BJT PKPbc **PKiKP 09 22 50.3 +0.7**
**BJT Baijiatuan 150.50 349** PKIKP **PKPdf 09 22 44.3 +1.2**
**BTO Baotou 150.57 359** ↓iPKPbc **PKPdf 09 22 44.6 +1.2**
BTO PP **PP 09 26 36.9 +5.5**
BTO SS SS 09 45 03.3 +1.9
**GTA Gaotai 150.58 15** PKPbc **PKPdf 09 22 44.8 +1.3**
GTA PKPab **PKPab 09 22 55.3 -3.9**
GTA pPKP pPKPbc 09 25 10.9 -1.5
GTA sPKP sPKPdf 09 26 07.3 -0.1
GTA PP **PP 09 26 34.9 +3.3**
GTA SKKS **SKKSac 09 32 20.4 -1.1**
GTA SS **SS 09 44 57.8 -4.0**
GTA AMB AMB
comp=Z,10μm,6.2s
**VLK Valmikinagar 151.27 52** eP **PKPdf 09 22 45.8 +1.1**
**VAR Varanasi 151.50 57** eP **PKPdf 09 22 45.6 +0.5**
**PALK Pallekele 151.68 95 PKPdf 09 22 45.8 0.0**
**PALK Pallekele 151.68 95** PKP **PKPdf 09 22 46.3 +0.6**
comp=Z,183nm,0.8s,baz=15,slow=2.3,SNR=66
PALK PKPbc **PKiKP 09 22 54.0 +1.1**
comp=Z,803nm,1.0s,baz=36,slow=2.5,SNR=21
PALK pPKP **pPKPdf 09 25 10.3 +0.1**
comp=Z,301nm,1.2s,baz=312,slow=1.4,SNR=3.2
**PALK Pallekele 151.68 95** P **PKPdf 09 22 46.7 +1.0**
**MDRS Chennai 151.68 83** eP **PKPdf 09 22 46.8 +1.2**
MDRS IAmb IAmb 09 22 53.1
comp=Z,3μm,1.3s
**MALK Mahakanadarawa 151.69 93** PKP **PKPdf 09 22 39.5 -6.1**
**GOMU GeErMu 151.82 25** PKPbc **PKPdf 09 22 47.0 +1.3**
GOMU SKKS **SKKSac 09 32 21.5 -7.5**
GOMU SS **SS 09 45 18.5 +2.2**
GOMU AMB AMB
comp=Z,29μm,5.7s
**BLSP Bilaspur 151.93 63** eP **PKPdf 09 22 46.7 +0.9**
**FAKI Fak Fak 153.13 240 PKPdf 09 22 48.7 +0.9**
FAKI PKPbc **PKiKP 09 22 57.0 +1.1**
FAKI PKPab **PKPab 09 23 10.7 -0.1**
**TIY Taiyuan 153.31 354** PKPbc **PKPdf 09 22 48.5 +1.1**
TIY PKPab **PKPab 09 23 11.8 +1.1**
TIY pPKP **pPKPdf 09 25 08.8 -3.2**
TIY PP **PP 09 26 46.3 -0.4**

TIY SS SS 09 45 35.3 +4.3
TIY AMB AMB
comp=Z,15μm,5.9s
**HNS HongShan 153.31 350** ⇓PKPbc **PKPdf 09 22 48.5 +1.2**
HNS PKPab **PKPab 09 23 12.8 +2.2**
HNS pPKP **pPKPdf 09 25 09.5 -2.4**
HNS PP **PP 09 26 44.5 -2.1**
HNS SKKS **SKKSac 09 32 36.9 +0.9**
HNS SS **SS 09 45 33.3 +2.4**
HNS AMB AMB
comp=Z,11μm,6.3s
**JHSG JHARSUGUGA 153.49 63** eP **PKPdf 09 22 48.5 +0.4**
**COCO West Island 153.86 152** P **PKPdf 09 22 49.6 +0.9**
**RAGD RAYAGADA 153.94 69** IAmb IAmb 09 23 04.5
comp=Z,3μm,1.7s
**TIA Tai'an 153.95 345** PKPbc **PKPdf 09 22 49.1 +0.8**
TIA pPKP **pPKPdf 09 25 13.8 +0.9**
TIA PP **PP 09 26 55.8 +5.5**
TIA SKS **SKSdf 09 28 59.1 +2.0**
TIA SKKS **SKKSac 09 32 38.4 -1.1**
TIA SS **SS 09 45 34.9 -3.0**
**JAM Amami Oshima 154.22 315** P **PKPdf 09 22 50.6 +1.7**
**SOEI Soe 154.42 217** PKP PKPpre 09 22 40.8
**BOK Bokaro 154.51 57** eP **PKPdf 09 22 50.2 +0.8**
BOK IAmb IAmb 09 23 06.0
comp=Z,3μm,1.3s
**LZH Lanzhou 154.64 10** ⇓iPKPbc **PKPdf 09 22 51.3 +1.8**
LZH PKPab **PKPab 09 23 17.5 +0.9**
LZH pPKP pPKPdf 09 25 13.0 -1.1
LZH PP **PP 09 26 53.0 -1.2**
LZH SKKS **SKKSac 09 32 43.8 +0.3**
LZH SS **SS 09 45 45.8 +0.3**
LZH AMB AMB
comp=Z,10μm,6.4s
**GTK Tadong 154.81 47** eP **PKPdf 09 22 51.3 +1.4**
GTK IAmb IAmb 09 22 56.6
comp=Z,2μm,1.3s
**LSA Lhasa 155.01 40** PKPbc **PKPdf 09 22 52.6 +2.1**
**LSA Lhasa 155.01 40** P **PKPdf 09 22 52.8 +2.2**
**JOW Kunigami 156.11 314** PKP **PKPdf 09 22 52.7 +1.3**
comp=Z,256nm,0.8s,baz=122,slow=0.9,SNR=32
JOW PKPab **PKPab 09 23 23.6 +0.4**
comp=Z,529nm,0.6s,baz=62,slow=2.5,SNR=15
JOW pPKP **pPKPdf 09 25 16.5 +0.3**
comp=Z,421nm,1.2s,baz=127,slow=3.0,SNR=5.5
**LYN LuoYang 156.43 353** ⇓iPKP **PKPdf 09 22 52.4 +0.8**
LYN PKPab **PKPab 09 23 24.6 +0.4**
LYN pPKP pPKPdf 09 25 12.9 -3.5
LYN PP **PP 09 27 08.4 +4.7**
LYN SKKS **SKKSac 09 32 49.8 -2.9**
LYN AMB AMB
comp=Z,18μm,8.3s
**PASG PASIGHAT 156.87 42** eP **PKPdf 09 22 56.4 +4.0**
PASG IAmb IAmb 09 23 01.7
comp=Z,4μm,1.2s
**XAN Xi'an 157.14 0** ⇓PKP **PKPdf 09 22 53.4 +0.8**
XAN pPKP pPKPdf 09 25 14.5 -2.9
XAN PP **PP 09 27 07.3 -0.3**
XAN SKKS **SKKSac 09 32 55.0 -1.5**
XAN SS **SS 09 46 08.8 -2.8**
XAN AMB AMB
comp=Z,23μm,8.0s
**SSE Sheshan 157.16 333** PKP **PKPdf 09 22 52.8 +0.2**
SSE PP **PP 09 27 07.5 -0.6**
SSE SS SS 09 46 10.3 -2.3
SSE AMB AMB
comp=Z,7μm,5.4s
**NJ2 Nanjing 157.28 338** *i* PKP **PKPdf 09 22 53.3 +0.6**
NJ2 PKPab **PKPab 09 23 27.6 -0.3**
NJ2 pPKP **pPKPdf 09 25 14.9 -2.6**
NJ2 PP **PP 09 27 06.8 -1.8**
NJ2 AMB AMB
comp=Z,14μm,3.8s
**SHL Shillong 158.21 46** eP **PKPdf 09 22 54.7 +0.4**
SHL IAmb IAmb 09 23 01.5
comp=Z,4μm,1.6s
**SHL Shillong 158.21 46** P **PKPdf 09 22 54.7 +0.4**
SNR=638
**ZIRO ZIRO 158.22 39** eP **PKPdf 09 22 55.2 +0.9**
ZIRO IAmb IAmb 09 23 02.1
comp=Z,2μm,1.3s
**ITAN ITANAGAR 158.41 40** eP **PKPdf 09 22 55.8 +1.5**
ITAN IAmb IAmb 09 23 02.5
comp=Z,6μm,1.6s
**AGT Agartala 158.74 51** eP **PKPdf 09 22 57.0 +2.3**
**SANI Sanana 158.77 233** PKP **PKPdf 09 22 47.3 -7.8**
**DIBR DIBRUGARH 158.90 37** eP **PKPdf 09 22 56.9 +2.0**
DIBR IAmb IAmb 09 23 03.5
comp=Z,13μm,1.5s
**JORH JORHAT 159.02 40** eP **PKPdf 09 22 56.6 +1.7**
JORH IAmb IAmb 09 23 03.4
comp=Z,18μm,1.8s
**MOKO MOKOCHONG 159.49 40** eP **PKPdf 09 22 57.4 +1.7**
MOKO IAmb IAmb 09 23 04.2
comp=Z,7μm,1.5s
**LKP Lekhapani 159.55 36** eP **PKPdf 09 22 57.3 +1.7**
**CD2 Chengdu 159.64 13** PKP **PKPdf 09 22 56.5 +0.8**
CD2 PKPab **PKPab 09 23 39.8 +1.5**
CD2 pPKP pPKPdf 09 25 17.6 -3.0
CD2 PP **PP 09 27 21.1 0.0**
CD2 SKKS **SKKSac 09 33 07.0 -2.6**
**KOHI KOHIMA 159.64 42** eP **PKPdf 09 22 57.4 +1.5**
KOHI IAmb IAmb 09 23 04.2
comp=Z,6μm,1.5s
**JAGI Jajag, Banyuwa 159.96 195 PKPdf 09 22 56.2 -0.2**
JAGI PKPab **PKPab 09 23 40.3 +0.3**
**WHN Wuhan 160.03 347** PKP **PKPdf 09 22 56.8 +0.8**
WHN PKPab **PKPab 09 23 39.8 -0.1**
WHN pPKP **pPKPdf 09 25 17.9 -3.1**
**IMP Imphal 160.12 44** eP **PKPdf 09 22 57.5 +1.2**
IMP IAmb IAmb 09 23 04.4
comp=Z,2μm,1.4s
**KAPI Kappang 160.85 214** PKP **PKPdf 09 22 58.4 +1.1**
comp=Z,286nm,0.9s,baz=158,slow=1.2,SNR=66
KAPI PKPab **PKPab 09 23 45.2 +1.2**
comp=Z,344nm,0.9s,baz=167,slow=3.3,SNR=7.7
KAPI pPKP **pPKPdf 09 25 23.7 +1.3**
comp=Z,243nm,1.0s,baz=202,slow=2.9,SNR=5.2
**YOJ Yonaguni jima 161.27 317 PKPdf 09 22 55.1 -2.4**
YOJ PKPab **PKPab 09 23 44.2 -1.5**
**YOJ Yonaguni jima 161.27 317** PKP2 **PKPab 09 23 44.2 -1.5**
YOJ 10 22 55.1
**LUWI Luwuk 161.88 229** PKPdf **PKPdf 09 22 59.6 +1.1**
LUWI PKPab **PKPab 09 23 45.0 -3.6**
**LUWI Luwuk 161.88 229** PKP PKPdf 09 22 49.8 -8.7
**NACB Ninganchiao 162.39 319 PKPdf 09 22 56.6 -2.0**
NACB PKPab **PKPab 09 23 50.0 -0.6**
**CNSH ChangSha 162.61 349** PKP **PKPdf 09 23 00.0 +1.3**
CNSH PP **PP 09 27 36.6 0.0**
CNSH SKS **SKSdf 09 29 05.1 -0.5**
CNSH SS **SS 09 47 10.3 +2.0**
**BIPH Bislig 162.78 262** ↑eP **PKPdf 09 22 57.4 -1.9**
**TNCH TengChong 162.85 35** ⇓PKP **PKPdf 09 23 00.3 +1.0**
TNCH PKPab **PKPab 09 23 54.1 +1.3**
TNCH PKS **sPKPdf 09 26 26.9 +3.1**
TNCH PP **PP 09 27 42.3 +3.5**
TNCH SKKS **SKKSac 09 33 27.3 +0.6**
TNCH SS **SS 09 47 12.3 -0.1**
TNCH AMB AMB
comp=Z,8μm,4.1s
**PZH PanZhiHua 163.14 23** PKP **PKPdf 09 22 59.8 +0.3**
PZH PKPab **PKPab 09 23 53.9 0.0**
PZH pPKP **pPKPdf 09 25 21.9 -2.7**
PZH PP **PP 09 27 39.3 -0.5**
PZH SKKS **SKKSac 09 33 24.3 -3.6**
PZH AMB AMB
comp=Z,11μm,7.1s
**YULB Yu-li 163.14 318 PKPdf 09 22 57.1 -2.3**
YULB PKPab **PKPab 09 23 56.3 +2.4**
**DAV Davao City (W) 163.29 258** P **PKPdf 09 22 58.9 -0.9**
**DAV Davao City (W) 163.29 258** P **PKPdf 09 23 01.0 +1.2**
**QZH Quanzhou 163.55 328** ⇓iPKP **PKPdf 09 23 00.9 +1.2**
QZH PKPab **PKPab 09 23 53.3 -2.3**
QZH pPKP **pPKPdf 09 25 23.4 -1.5**
QZH PP **PP 09 27 41.4 -0.7**
QZH SS SS 09 47 24.3 +5.4
QZH AMB AMB
comp=Z,26μm,4.4s
**TWG Pinlang 163.68 317 PKPdf 09 23 00.2 +0.3**
TWG PKPab **PKPab 09 23 55.7 -0.7**
**KCP Kidapawan 163.74 257** ⇓*i*P **PKPdf 09 23 00.9 +0.7**
**PBA Port Blair 163.91 86** eP **PKPdf 09 23 01.0 +0.7**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBA | | | | | IAmb | IAmb | 09 23 07.5 | | | | |
| | comp=Z,8μm,1.5s | | | | | | | | | | |
| **PBA** | **Port Blair** | **163.91** | **86** | P | | **PKPdf** | **09 23 01.3** | **+1.0** | | | |
| | SNR=46 | | | | | | | | | | |
| **CMBY** | **CAMPBELL BAY** | **164.44** | **104** | *e*P | | **PKPdf** | **09 23 00.9** | **+0.1** | | | |
| CMBY | | | | | IAmb | IAmb | 09 23 07.6 | | | | |
| | comp=Z,3μm,1.2s | | | | | | | | | | |
| **CGP** | **Cagayan de Oro** | **164.46** | **262**⇓ | *e*P | | **PKPdf** | **09 23 01.7** | **+0.9** | | | |
| **PLP** | **Palo** | **164.46** | **272**⇓ | *e*P | | **PKPdf** | **09 23 00.3** | **-0.4** | | | |
| **GYA** | **Guiyang** | **164.52** | **8** | ⇓PKP | | **PKPdf** | **09 23 01.3** | **+0.6** | | | |
| GYA | | | | PKPab | | **PKPab** | **09 24 01.5** | **+1.6** | | | |
| GYA | | | | pPKP | | pPKPdf | 09 25 24.4 | -1.5 | | | |
| GYA | | | | PP | | **PP** | **09 27 47.5** | **+0.9** | | | |
| GYA | | | | SKKS | | **SKKSac** | **09 33 35.8** | **+1.1** | | | |
| GYA | | | | SS | | **SS** | **09 47 26.3** | **-1.5** | | | |
| GYA | | | | AMB | | AMB | | | | | |
| | comp=Z,12μm,11.6s | | | | | | | | | | |
| **KMI** | **Kunming** | **164.76** | **23** | ⇓PKP | | **PKPdf** | **09 23 01.9** | **+0.8** | | | |
| **TOLI2** | **Tolitoli** | **164.78** | **230** | | | **PKPdf** | **09 23 01.0** | **-0.1** | | | |
| TOLI2 | | | | PKPab | | **PKPab** | **09 24 01.6** | **+0.1** | | | |
| **GSI** | **Gunungsitoli** | **164.96** | **129** | PKPdf | | **PKPdf** | **09 23 02.1** | **+0.8** | | | |
| GSI | | | | PKPab | | **PKPab** | **09 24 02.6** | **+0.4** | | | |
| **TBP** | **Tagbilaran** | **165.46** | **266**⇓ | *i*P | | **PKPdf** | **09 23 00.7** | **-0.9** | | | |
| **DCPH** | **Dipolog City** | **165.78** | **261**⇓ | *e*P | | **PKPdf** | **09 23 00.5** | **-1.4** | | | |
| **GULI** | **GuiLin** | **165.81** | **355** | ⇓PKP | | **PKPdf** | **09 23 03.3** | **+1.7** | | | |
| GULI | | | | PKPab | | **PKPab** | **09 24 06.4** | **+0.9** | | | |
| GULI | | | | pPKP | | **pPKPdf** | **09 25 23.8** | **-3.1** | | | |
| GULI | | | | PP | | **PP** | **09 27 52.8** | **-0.2** | | | |
| GULI | | | | SS | | SS | 09 47 43.8 | +3.4 | | | |
| **LHMI** | **Lhok Sumawe** | **166.61** | **115** | | | **PKPdf** | **09 23 01.4** | **-1.1** | | | |
| LHMI | | | | PKPab | | **PKPab** | **09 24 06.1** | **-3.5** | | | |
| **BKNI** | **Bangkinang** | **166.63** | **142** | PKP | | **PKPdf** | **09 22 55.2** | **-7.3** | | | |
| **RCP** | **Roxas** | **166.65** | **273**⇓ | *i*P | | **PKPdf** | **09 23 03.3** | **+0.7** | | | |
| **GQP** | **Guinayangan** | **166.71** | **284**⇓ | *i*P | | **PKPdf** | **09 23 03.2** | **+0.7** | | | |
| **IBAJ** | **Ibajay, Aklan** | **167.21** | **275**⇓ | *i*P | | **PKPdf** | **09 23 04.3** | **+1.4** | | | |
| **LQP** | **Lukban** | **167.53** | **285**⇓ | *e*P | | **PKPdf** | **09 23 04.8** | **+1.4** | | | |
| **CRAI** | **Chiangrai** | **167.59** | **42** | | | **PKPdf** | **09 23 03.5** | **+0.4** | | | |
| CRAI | | | | PKPab | | **PKPab** | **09 24 14.2** | **+0.5** | | | |
| **CMAR** | **Chiang Mai Arr** | **167.71** | **52** | PKP | | **PKPdf** | **09 23 03.9** | **+0.7** | | | |
| | comp=Z,176nm,0.7s,baz=275,slow=1.8,SNR=403 | | | | | | | | | | |
| CMAR | | | | PKPab | | **PKPab** | **09 24 14.4** | **+0.1** | | | |
| | comp=Z,119nm,0.9s,baz=294,slow=5.2,SNR=12 | | | | | | | | | | |
| CMAR | | | | pPKP | | **pPKPdf** | **09 25 27.4** | **-1.1** | | | |
| | comp=Z,90nm,1.0s,baz=287,slow=1.1,SNR=3.8 | | | | | | | | | | |
| CMAR | | | | pPKPab | | **pPKPab** | **09 26 29.4** | **-0.5** | | | |
| | comp=Z,138nm,1.0s,baz=298,slow=6.2,SNR=6.3 | | | | | | | | | | |
| CMAR | | | | PP | | **PP** | **09 28 04.8** | **+0.6** | | | |
| | comp=Z,109nm,1.1s,baz=294,slow=7.0,SNR=4.2 | | | | | | | | | | |
| **SLVN** | **Son La** | **168.63** | **26** | PKPdf | | **PKPdf** | **09 23 05.2** | **+1.4** | | | |
| SLVN | | | | PKPab | | **PKPab** | **09 24 17.9** | **-0.3** | | | |
| **IPM** | **Ipoh** | **169.63** | **129** | | | **PKPdf** | **09 23 04.4** | **-0.2** | | | |
| IPM | | | | PKPab | | **PKPab** | **09 24 23.7** | **+0.7** | | | |
| **KULM** | **Kulim** | **169.82** | **124** | | | **PKPdf** | **09 23 04.5** | **-0.2** | | | |
| KULM | | | | PKPab | | **PKPab** | **09 24 23.4** | **-0.4** | | | |
| **KSM** | **Kuching** | **170.40** | **187** | | | **PKPdf** | **09 23 05.5** | **+0.5** | | | |
| KSM | | | | PKPab | | **PKPab** | **09 24 27.4** | **+1.4** | | | |
| **PPR** | **Puerto Princes** | **170.48** | **263**⇓ | *i*P | | **PKPdf** | **09 23 06.7** | **+1.7** | | | |
| **KKM** | **Kota Kinabalu** | **171.41** | **235** | | | **PKPdf** | **09 23 06.2** | **+0.6** | | | |
| KKM | | | | PKPab | | **PKPab** | **09 24 30.4** | **-0.6** | | | |
| **QIZ** | **Qiongzhong** | **172.06** | **355** | PKP | | **PKPdf** | **09 23 07.3** | **+1.7** | | | |
| QIZ | | | | PKPab | | **PKPab** | **09 24 33.6** | **+0.3** | | | |
| QIZ | | | | pPKP | | **pPKPdf** | **09 25 29.4** | **-1.7** | | | |
| QIZ | | | | PP | | **PP** | **09 28 24.3** | **+0.3** | | | |
| QIZ | | | | SS | | SS | 09 48 36.1 | -5.5 | | | |
| QIZ | | | | AMB | | AMB | | | | | |
| | comp=Z,18μm,5.5s | | | | | | | | | | |
| **UBPT** | **Khong Chiam** | **174.50** | **40** | | | **PKPdf** | **09 23 06.8** | **+0.2** | | | |
| UBPT | | | | | | **PKPab** | **09 24 44.6** | **+0.2** | | | |

*IDC **24** 09:06:28.4±1.1,49°.92S×126°.77E,h0km,mb4.1/5, mbtmp4.2/5,MS4.4/1,Error ellipse: s-maj=74.1km s-min=18.8km az=109.0*
*NEIC **24** 09:06:30.1±1.3,50°.0S±0°.1×127°.0E±0°.2,h10km±2km, mb4.4/14,Error ellipse: s-maj=23.3km s-min=18.1km az=235.0*

**ISC 24 09:06:29.8±0.7,50°.0S±0°.1×127°.0E±0°.2,h10km,n29, σ0s82/22,mb4.3/12,Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W1** | **Cape Leeuwin H** | **17.75** | **323** | T | T | 09 28 45.2 | |
| | baz=151,slow=76,SNR=22 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **17.75** | **323** | T | T | 09 28 45.8 | |
| | baz=151,slow=76,SNR=25 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **17.77** | **323** | T | T | 09 28 47.3 | |
| | baz=151,slow=76,SNR=14 | | | | | | |
| **CASY** | **Casey** | **18.39** | **201** | | **Pn** | **09 10 44.8** | **+0.2** |
| **STKA** | **Stephens Creek** | **21.13** | **37** | P | **P** | **09 11 15.9** | **+1.3** |
| **STKA** | **Stephens Creek** | **21.13** | **37** | P | **P** | **09 11 15.6** | **+0.9** |
| | 12nm,1.0s,baz=197,slow=11,SNR=16 | | | | | | |
| | 12nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **26.82** | **14** | P | **P** | **09 12 10.5** | **+0.3** |
| **ASAR** | **Alice Springs** | **26.82** | **14** | P | **P** | **09 12 10.1** | **-0.2** |
| | 5.3nm,0.8s,baz=191,slow=10,SNR=25 | | | | | | |
| | 5.3nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **26.82** | **14** | P | **P** | **09 12 09.8** | **-0.4** |
| AS31 | | | | IAmb | IAmb | 09 12 13.8 | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **28.90** | **346** | P | **P** | **09 12 28.8** | **0.0** |
| PSA00 | | | | IAmb | IAmb | 09 12 29.3 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **30.54** | **14** | P | **P** | **09 12 43.8** | **+0.4** |
| **WRA** | **Warramunga Arr** | **30.54** | **14** | P | **P** | **09 12 42.7** | **-0.6** |
| | comp=Z,0.8nm,0.8s,baz=193,slow=8.2,SNR=8.7 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **30.54** | **14** | P | **P** | **09 12 42.6** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 09 13 06.6 | |
| | comp=Z,7.7nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **30.55** | **14** | P | **P** | **09 12 43.6** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 09 12 59.5 | |
| | comp=Z,2.6nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **30.55** | **14** | P | **P** | **09 12 42.0** | **-1.4** |
| WR0 | | | | IAmb | IAmb | 09 12 59.7 | |
| | comp=Z,6.8nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **30.72** | **14** | P | **P** | **09 12 44.8** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 09 12 46.6 | |
| | comp=Z,9.4nm,1.5s | | | | | | |
| **CTA** | **Charters Tower** | **33.54** | **34** | LR | LR | 09 24 58.3 | |
| | comp=Z,708nm,21.7s,baz=244,slow=33 | | | | | | |
| **MAW** | **Mawson** | **35.56** | **216** | P | **P** | **09 13 26.8** | **+0.1** |
| | comp=Z,2.1nm,0.8s,baz=80,slow=9.9,SNR=4.7 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **40.14** | **180** | P | **P** | **09 14 05.8** | **+0.3** |
| QSPA | | | | IAmb | IAmb | 09 14 07.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **40.14** | **180** | P | **P** | **09 14 05.9** | **+0.3** |
| | comp=Z,4.6nm,1.0s,baz=359,slow=0.8,SNR=13 | | | | | | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **AFI** | **Afiamalu** | **61.06** | **77** | P | **P** | **09 16 43.6** | **-0.4** |
| **H08S2** | **Diego Garcia H** | **61.78** | **294** | T | T | 10 23 47.0 | |
| | baz=144 | | | | | | |
| **H08S1** | **Diego Garcia H** | **61.79** | **294** | T | T | 10 23 48.0 | |
| | baz=144 | | | | | | |
| **H08S3** | **Diego Garcia H** | **61.80** | **294** | T | T | 10 23 48.4 | |
| | baz=144,SNR=6.0 | | | | | | |
| **JGF** | **Kuroka** | **85.70** | **8** | P | **P** | **09 19 08.2** | **-0.3** |
| **TRQA** | **Tornquist** | **91.99** | **173** | P | **P** | **09 19 38.2** | **-0.5** |
| **USA0B** | **Ussuriysk Arra** | **93.90** | **4** | P | **P** | **09 19 45.3** | **-1.5** |
| USA0B | | | | IAmb | IAmb | 09 19 45.5 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **93.90** | **4** | P | **P** | **09 19 47.8** | **+0.9** |
| **BRG** | **Berggiesshubel** | **138.66** | **298** | P | **Pdif** | **09 23 08.0** | **+1.8** |

**VIE 24 09:22:21.3±0.4,47°.04N×10°.97E,h0km,ml0.8/1,Error ellipse: s-maj=7.2km s-min=1.5km az=153.0,Suspected Mining explosion.,Austria**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FETA** | **Feichten** | **0.17** | **262** | *e*Pg | Pg | 09 22 24.7 | +0.1 |
| | 0.5nm,0.1s | | | | | | |
| FETA | | | | *e*Sg | Sg | 09 22 27.2 | +0.5 |
| | 0.8nm,0.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **0.24** | **42** | *e*Pg | Pg | 09 22 26.1 | +0.2 |
| | 4.8nm,0.1s | | | | | | |
| SQTA | | | | *e*Sg | Sg | 09 22 29.3 | +0.3 |
| | 1.6nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.31** | **16** | *e*Pg | Pg | 09 22 27.7 | +0.3 |
| | 0.9nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.50** | **64** | *e*Pg | Pg | 09 22 31.1 | +0.2 |
| | 0.4nm,0.1s | | | | | | |

*CNRM **24** 09:40:26.0,35°.68N×3°.54W,h7km,ML2.6*
*MDD **24** 09:40:29.3±0.7,35°.40N×3°.58W,h32km±6km,mb_Lg2.4/5, Error ellipse: s-maj=5.5km s-min=4.5km az=157.0*

**ISC 24 09:40:28.3±1.2,35°.55N±0°.04×3°.56W±0°.04,h13km±10km, n18,σ1s00/24,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALE** | **Palemas** | **0.46** | **223** | P | **Pg** | **09 40 36.4** | **-1.0** |
| **PALE** | **Palemas** | **0.46** | **223** | S | **Sg** | **09 40 43.9** | **+0.5** |
| **EMEL** | **Melilla** | **0.55** | **117** | Pg | **Pg** | **09 40 39.6** | **+0.4** |
| EMEL | | | | Sg | **Sg** | **09 40 47.0** | **+0.6** |
| **GOG** | **Mont Gurugu** | **0.57** | **126** | P | **Pg** | **09 40 39.4** | **0.0** |
| **GOG** | **Mont Gurugu** | **0.57** | **126** | S | **Sg** | **09 40 46.9** | **0.0** |
| **EALB** | **Alboran** | **0.57** | **48** | Pg | **Pn** | **09 40 42.2** | **+0.1** |
| EALB | | | | Sg | **Sn** | **09 40 51.5** | **+0.1** |
| EALB | | | | *i* Vmb_Lg | | 09 40 53.3 | |
| **AKLM** | **AKL** | **1.07** | **194** | P | **Pb** | **09 40 48.7** | **0.0** |
| **AKLM** | **AKL** | **1.07** | **194** | S | **Sn** | **09 41 04.6** | **+0.9** |
| **TAF** | **Taforalt** | **1.19** | **128** | P | **Pn** | **09 40 49.2** | **-1.4** |
| **TAF** | **Taforalt** | **1.19** | **128** | S | **Sg** | **09 41 07.7** | **+0.9** |
| **ELGU** | **Los Guajares,** | **1.31** | **358** | Pn | **Pn** | **09 40 52.7** | **+0.4** |
| ELGU | | | | Sn | **Sn** | **09 41 09.1** | **-0.7** |
| ELGU | | | | *i* Vmb_Lg | | 09 41 13.8 | |
| **EBER** | **Berja** | **1.45** | **22** | Pn | **Pn** | **09 40 54.7** | **+0.4** |
| EBER | | | | Sn | **Sn** | **09 41 13.9** | **+0.7** |
| EBER | | | | *i* Vmb_Lg | | 09 41 17.9 | |
| **ENIJ** | **Nijar** | **1.79** | **37** | Pn | **Pn** | **09 40 59.0** | **+0.2** |
| ENIJ | | | | Sn | **Sn** | **09 41 20.7** | **-0.7** |
| ENIJ | | | | *i* Vmb_Lg | | 09 41 22.2 | |
| **EADA** | **Adamuz** | **2.73** | **343** | Pn | **Pn** | **09 41 12.7** | **+0.9** |
| EADA | | | | Sn | **Sn** | **09 41 44.5** | **-0.2** |
| EADA | | | | *i* Vmb_Lg | | 09 41 52.6 | |
| **MD31** | **MD31** | **2.86** | **201** | P | **Pn** | **09 41 13.6** | **0.0** |
| **MD31** | **MD31** | **2.86** | **201** | S | **Sn** | **09 41 50.3** | **+2.4** |
| **MDT** | **Midelt** | **2.87** | **198** | P | **Pn** | **09 41 14.8** | **+1.0** |
| **MDT** | **Midelt** | **2.87** | **198** | S | **Sb** | **09 41 52.1** | **-2.3** |

*NNC **24** 09:41:40.4±2.5,53°.69N×90°.67E,h0km,mb4.0,mpv3.7, Error ellipse: s-maj=19.2km s-min=15.0km az=51.0, Suspected Mining explosion.*
*IDC **24** 09:41:40.8±3.3,53°.71N×90°.84E,h0km,mbtmp3.6/3, ML2.8/3,Error ellipse: s-maj=29.1km s-min=23.6km az=43.0*

**ISC 24 09:41:42.2±4.0,53°.7N±0°.1×90°.6E±0°.2,h0km,n8,σ1s03/12, 5C-6D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.43** | **277** | I | I | 10 04 20.0 | |
| | 0.3nm,1.1s,baz=90,slow=318,SNR=23 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.43** | **277** | ⇑Pg | **Pb** | **09 42 43.0** | **-0.9** |
| | 3.0nm,0.7s | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | 09 43 32.7 | |
| | 28nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.43** | **277** | Pn | **Pn** | **09 42 38.3** | **+1.4** |
| | 0.5nm,0.3s,baz=90,slow=11,SNR=4.7 | | | | | | |
| ZALV | | | | Lg | Lg | 09 43 33.5 | |
| | 2.7nm,0.3s,baz=94,slow=26,SNR=5.4 | | | | | | |
| | 8.2nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **7.93** | **253** | ⇑Pn | **Pn** | **09 43 38.2** | **-0.5** |
| | 15nm,1.3s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **09 45 09.5** | **+0.4** |
| | 23nm,1.3s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 09 45 57.3 | |
| | 78nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.03** | **252** | Pn | **Pn** | **09 43 40.5** | **+0.5** |
| | 0.2nm,0.3s,baz=66,slow=15,SNR=14 | | | | | | |
| KURBB | | | | Sn | **Sn** | **09 45 11.7** | **+0.3** |
| | 0.1nm,0.3s,baz=68,slow=24,SNR=5.1 | | | | | | |
| KURBB | | | | Lg | Lg | 09 46 00.5 | |
| | 0.1nm,0.3s,baz=67,slow=33,SNR=11 | | | | | | |
| | 4.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.03** | **252** | ⇑Pn | **Pn** | **09 43 39.6** | **-0.3** |
| | 8.6nm,0.7s | | | | | | |
| KURBB | | | | ⇓Sn | **Sn** | **09 45 10.4** | **-1.0** |
| | 76nm,0.9s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 45 59.4 | |
| | 41nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **8.70** | **221** | ⇓Pn | **Pn** | **09 43 48.0** | **-1.3** |
| | 1.3nm,0.6s,baz=34,slow=12,SNR=13 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **09 45 29.1** | **+1.1** |
| | 2.2nm,0.6s,baz=42,slow=24,SNR=3.6 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 09 46 14.8 | |
| | 36nm,1.1s,baz=36,slow=30,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.70** | **221** | Pn | **Pn** | **09 43 50.0** | **+0.7** |
| | 0.3nm,0.3s,baz=37,slow=14,SNR=12 | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 45 29.4** | **+1.4** |
| | 0.2nm,0.3s,baz=38,slow=22,SNR=1.5 | | | | | | |
| MKAR | | | | Lg | Lg | 09 46 16.6 | |
| | 0.1nm,0.3s,baz=38,slow=31,SNR=5.5 | | | | | | |
| | 1.3nm,0.6s | | | | | | |

*CNRM **24** 09:48:53.1,36°.70N×8°.93W,h3km,ML2.6*
*MDD **24** 09:48:56.2±0.6,36°.94N×8°.85W,h18km±2km,mb_Lg2.9/12, Error ellipse: s-maj=4.2km s-min=3.5km az=69.0*
*IGIL **24** 09:48:57.6,36°.97N×8°.90W,h24km,ML2.6*
*SFS **24** 09:48:57.2,37°.02N×8°.88W,h23km,ML2.8/14,ML3.0/12, MLv2.7/14*
*INMG **24** 09:48:57.5±1.6,36°.96N×8°.89W,h23km±1km,ML2.5,Error ellipse: s-maj=3.7km s-min=2.2km az=76.0*

**ISC 24 09:48:55.2±1.0,36°.89N±0°.03×8°.90W±0°.03,h24km±6km, n89,σ1s93/157,4C-1D,West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSVI** | **Cabo S. Vicent** | **0.15** | **331**⇓ | *e*Pg | **Pb** | **09 49 01.3** | **+1.0** |
| PSVI | | | | *e*Sg | **Sb** | **09 49 04.4** | **+0.7** |
| **PFVI** | **Vila Bisbo** | **0.25** | **14**⇑ | *i*Pg | **Pb** | **09 49 02.4** | **+0.9** |
| PFVI | | | | *i* Sg | **Sb** | **09 49 06.2** | **+0.4** |
| PFVI | | | | A | A | 09 49 06.6 | |
| | 646nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.25** | **14** | Pg | **Pb** | **09 49 02.4** | **+0.9** |
| PFVI | | | | Sg | **Sb** | **09 49 05.2** | **-0.6** |
| **PFVI** | **Vila Bisbo** | **0.25** | **14** | P | **Pb** | **09 49 02.2** | **+0.7** |
| **PFVI** | **Vila Bisbo** | **0.25** | **14** | S | **Sb** | **09 49 06.6** | **+0.8** |
| **PLAGO** | **Lagos** | **0.27** | **40** | *e*Pg | **Pb** | **09 49 02.9** | **+1.2** |
| PLAGO | | | | *e*Sg | **Sb** | **09 49 06.6** | **+0.4** |
| PLAGO | | | | A | A | 09 49 07.5 | |
| | 493nm,0.1s | | | | | | |
| **PPOR** | **Portimao** | **0.38** | **51** | *e*Pg | **Pn** | **09 49 04.6** | **-0.6** |
| PPOR | | | | *e*Sg | **Sb** | **09 49 09.8** | **+0.7** |
| **PALJ** | **Aljezur** | **0.43** | **11** | *e*Pg | **Pb** | **09 49 05.0** | **+0.6** |
| PALJ | | | | *e*Sg | **Sb** | **09 49 10.5** | **-0.1** |
| **MORF** | **Marmelete** | **0.46** | **26**⇑ | *i*Pg | **Pb** | **09 49 05.4** | **+0.6** |
| MORF | | | | *e*Sg | **Sb** | **09 49 11.4** | **+0.1** |
| MORF | | | | A | A | 09 49 11.7 | |
| | 312nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **0.46** | **26** | *e*P | **Pb** | **09 49 05.4** | **+0.6** |
| MORF | | | | *e*S | **Sb** | **09 49 10.9** | **-0.4** |
| MORF | | | | IAML | | 09 49 11.7 | |
| | comp=N,469nm,0.2s | | | | | | |
| **PALBU** | **Albufeira** | **0.56** | **68** | *e*Pg | **Pn** | **09 49 07.9** | **+0.2** |
| PALBU | | | | *e*Sg | **Sb** | **09 49 15.1** | **+1.0** |
| PALBU | | | | A | A | 09 49 17.1 | |
| | comp=N,469nm,0.1s | | | | | | |
| **PTEO** | **Sao Teotonio** | **0.67** | **12**⇑ | *e*Pg | **Pb** | **09 49 08.7** | **+0.4** |
| PTEO | | | | *e*Sg | **Sb** | **09 49 17.0** | **-0.2** |
| PTEO | | | | A | A | 09 49 17.9 | |
| | comp=N,270nm,0.2s | | | | | | |
| **PFARO** | **Faro** | **0.80** | **80** | *e*P | **Pb** | **09 49 12.3** | **+1.9** |
| PFARO | | | | *e*S | **Sn** | **09 49 22.7** | **+0.7** |
| **PBDV** | **Barranco-do-Ve** | **0.85** | **65**⇑ | *e*P | **Pb** | **09 49 12.2** | **+0.8** |
| PBDV | | | | *e*S | **Sb** | **09 49 23.3** | **+0.8** |
| PBDV | | | | A | A | 09 49 25.5 | |
| | comp=N,136nm,0.5s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.85** | **65** | Pg | **Pb** | **09 49 12.0** | **+0.6** |
| PBDV | | | | Sg | **Sn** | **09 49 22.8** | **-0.8** |
| **PCVE** | **Castro Verde** | **1.01** | **43** | *e*P | **Pn** | **09 49 13.9** | **0.0** |
| PCVE | | | | *e*S | **Sn** | **09 49 26.5** | **-0.9** |
| PCVE | | | | A | A | 09 49 29.1 | |
| | comp=N,43nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **1.01** | **43** | Pg | **Pn** | **09 49 13.9** | **0.0** |
| **PSINE** | **Sines** | **1.07** | **2** | *e*P | **Pb** | **09 49 15.6** | **+0.6** |
| PSINE | | | | *e*S | **Sn** | **09 49 28.1** | **-0.6** |
| PSINE | | | | A | A | 09 49 28.7 | |
| | comp=N,350nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.08** | **61** | *e*P | **Pn** | **09 49 15.0** | **+0.2** |
| PVAQ | | | | *e*S | **Sn** | **09 49 28.2** | **-0.8** |
| PVAQ | | | | A | A | 09 49 30.5 | |
| | comp=N,93nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.08** | **61** | Pg | **Pn** | **09 49 15.0** | **+0.2** |
| PVAQ | | | | Sg | **Sn** | **09 49 27.6** | **-1.4** |
| **PVAQ** | **Vaqueiros** | **1.08** | **61** | P | **Pb** | **09 49 15.3** | **0.0** |
| **PVAQ** | **Vaqueiros** | **1.08** | **61** | S | **Sb** | **09 49 32.5** | **+3.6** |
| **MESJ** | **Messejana** | **1.09** | **30** | *e*P | **Pn** | **09 49 14.8** | **-0.3** |
| MESJ | | | | *e*S | **Sn** | **09 49 28.6** | **-0.8** |
| MESJ | | | | A | A | 09 49 30.3 | |
| | comp=N,63nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **1.09** | **30** | *e*P | **Pn** | **09 49 14.7** | **-0.3** |
| MESJ | | | | *e*S | **Sn** | **09 49 27.6** | **-1.7** |
| MESJ | | | | IAML | | 09 49 32.1 | |
| | comp=N,90nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.25** | **14** | *e*P | **Pn** | **09 49 16.5** | **-0.8** |
| PNCL | | | | *e*S | **Sb** | **09 49 33.6** | **-0.4** |
| PNCL | | | | A | A | 09 49 35.2 | |
| | comp=N,105nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.25** | **14** | Pg | **Pn** | **09 49 16.4** | **-0.8** |
| **EGRO** | **El Granado** | **1.30** | **60** | Pn | **Pn** | **09 49 17.9** | **0.0** |
| EGRO | | | | Sn | **Sn** | **09 49 33.1** | **-1.5** |
| **EGRO** | **El Granado** | **1.30** | **60** | Pn | **Pn** | **09 49 17.9** | **0.0** |
| EGRO | | | | Sn | **Sn** | **09 49 34.7** | **+0.1** |
| EGRO | | | | Sg | **Sb** | **09 49 35.9** | **+0.6** |
| EGRO | | | | *i* Vmb_Lg | | 09 49 37.9 | |
| **PBEJ** | **Beja** | **1.40** | **36** | *e*Pn | **Pn** | **09 49 18.9** | **-0.4** |
| **PBEJ** | **Beja** | **1.40** | **36** | *e*Pg | **Pb** | **09 49 21.4** | **+0.6** |
| PBEJ | | | | *e*Sn | **Sn** | **09 49 35.7** | **-1.3** |
| PBEJ | | | | *e*Sg | **Sb** | **09 49 39.3** | **+1.1** |
| PBEJ | | | | A | A | 09 49 43.5 | |
| | comp=N,22nm,0.1s | | | | | | |
| **EVO** | **Evora** | **1.78** | **23** | *e*Pn | **Pn** | **09 49 23.8** | **-0.8** |
| **EVO** | **Evora** | **1.78** | **23** | *e*Pg | **Pb** | **09 49 29.3** | **+2.0** |
| EVO | | | | *e*Sn | **Sn** | **09 49 44.6** | **-1.8** |
| EVO | | | | *e*Sg | **Sb** | **09 49 50.6** | **+1.4** |
| EVO | | | | A | A | 09 49 55.3 | |
| | comp=N,52nm,0.1s | | | | | | |
| **EVO** | **Evora** | **1.78** | **23** | Pn | **Pn** | **09 49 23.8** | **-0.8** |
| EVO | | | | Sn | **Sn** | **09 49 44.3** | **-2.1** |
| **PBAR** | **Barrancos** | **1.96** | **49** | *e*Pn | **Pn** | **09 49 26.8** | **-0.1** |
| **PBAR** | **Barrancos** | **1.96** | **49** | *e*Pg | **Pb** | **09 49 33.8** | **+3.6** |
| PBAR | | | | *e*Sn | **Sn** | **09 49 49.1** | **-1.7** |
| PBAR | | | | *e*Sg | **Sb** | **09 49 56.2** | **+2.0** |
| PBAR | | | | A | A | 09 50 03.1 | |
| | comp=N,17nm,0.2s | | | | | | |
| **PBAR** | **Barrancos** | **1.96** | **49** | Pn | **Pn** | **09 49 26.7** | **-0.3** |
| **EMIN** | **Mina Concepcio** | **1.98** | **63** | Pn | **Pn** | **09 49 27.0** | **-0.2** |
| **EMIN** | **Mina Concepcio** | **1.98** | **63** | Pn | **Pn** | **09 49 27.0** | **-0.2** |
| EMIN | | | | Pg | **Pb** | **09 49 30.0** | **-0.6** |
| EMIN | | | | Sn | **Sn** | **09 49 49.2** | **-2.1** |
| EMIN | | | | Sg | **Sb** | **09 49 55.3** | **+0.4** |
| EMIN | | | | *i* Vmb_Lg | | 09 50 00.2 | |
| **PMAFR** | **Mafra** | **2.08** | **352** | *e*Pn | **Pn** | **09 49 28.9** | **+0.2** |
| PMAFR | | | | *e*Sn | **Sn** | **09 49 52.6** | **-1.2** |
| PMAFR | | | | *e*Sg | **Sb** | **09 49 59.9** | **+2.1** |
| PMAFR | | | | A | A | 09 50 10.9 | |
| | comp=N,33nm,0.3s | | | | | | |
| **PMAFR** | **Mafra** | **2.08** | **352** | Pn | **Pn** | **09 49 28.5** | **-0.2** |
| **PESTR** | **Estremoz** | **2.23** | **27** | *e*Pn | **Pn** | **09 49 29.1** | **-1.6** |
| PESTR | | | | *e*Sn | **Sn** | **09 49 54.6** | **-2.9** |
| PESTR | | | | *e*Sg | **Sb** | **09 50 05.3** | **+3.3** |
| PESTR | | | | A | A | 09 50 10.3 | |
| | comp=N,11nm,0.7s | | | | | | |
| **PESTR** | **Estremoz** | **2.23** | **27** | Pn | **Pn** | **09 49 28.6** | **-2.1** |
| **PESTR** | **Estremoz** | **2.23** | **27** | P | **Pb** | **09 49 33.4** | **-1.4** |
| **PESTR** | **Estremoz** | **2.23** | **27** | S | **Sb** | **09 50 04.9** | **+2.9** |
| **PMTG** | **Montargil** | **2.24** | **14** | *e*Pn | **Pn** | **09 49 30.1** | **-0.7** |
| **PMTG** | **Montargil** | **2.24** | **14** | *e*Pg | **Pb** | **09 49 38.1** | **+3.1** |
| PMTG | | | | *e*Sn | **Sn** | **09 49 54.9** | **-2.8** |
| PMTG | | | | *e*Sg | **Sb** | **09 50 04.1** | **+1.8** |
| PMTG | | | | A | A | 09 50 05.0 | |
| | comp=N,28nm,0.2s | | | | | | |
| **EBAD** | **Badajoz** | **2.39** | **38** | Pn | **Pn** | **09 49 31.9** | **-1.0** |
| **EBAD** | **Badajoz** | **2.39** | **38** | Pn | **Pn** | **09 49 32.1** | **-0.8** |
| EBAD | | | | Pg | **Pb** | **09 49 37.1** | **-0.5** |
| EBAD | | | | Sn | **Sn** | **09 49 59.8** | **-1.6** |
| EBAD | | | | Sg | **Sb** | **09 50 09.0** | **+2.4** |
| EBAD | | | | *i* Vmb_Lg | | 09 50 12.9 | |
| **ESPR** | **Espera** | **2.44** | **90** | Pn | **Pn** | **09 49 33.5** | **-0.1** |
| ESPR | | | | Sn | **Sn** | **09 50 01.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OUK | Oukaimeden | 5.73 | 171 | P | Pn | 09 50 17.0 | -2.2 |
| OUK | Oukaimeden | 5.73 | 171 | S | Sn | 09 51 22.9 | -1.5 |
| TIO | Tiouine | 6.10 | 167 | P | Pn | 09 50 22.1 | -1.9 |
| TIO | Tiouine | 6.10 | 167 | S | Sn | 09 51 31.7 | -1.5 |
| OUZM | OUZ | 6.23 | 163 | P | Pn | 09 50 25.0 | -0.7 |
| OUZM | OUZ | 6.23 | 163 | S | Sn | 09 51 35.5 | -0.7 |
| TTIG | Tnine Tigouga, | 6.34 | 176 | P | Pn | 09 50 24.8 | -2.5 |

*NEIC* ***24*** *09:51:39.5±2.0, 15°.41S±0°.05×172°.92W±0°.08, h10km±1km, mb4.6/20, Error ellipse: s-maj=13.1km s-min=8.0km az=286.0*

*IDC* ***24*** *09:51:40.4±1.7, 15°.89S×172°.95W, h0km, mb3.9/6, mbtmp3.9/6, Error ellipse: s-maj=122.8km s-min=24.4km az=151.0*

**ISC 24 09:51:42.1**±0.5,**15°.45S**±0°.07×**172°.94W**±0°.09,**h29**km,**n33,** σ1**$**47/33,**mb4.5**/16,**Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **1.91** | **37** | Pn | **Pn** | | **Pn** | **09 52 11.9** | **-0.9** |
| AFI | | | | Sn | **Sn** | | **Sn** | **09 52 33.8** | **-2.0** |
| **NIUE** | **Niue** | **4.61** | **142** | Pn | **Pn** | | **Pn** | **09 52 47.7** | **-2.3** |
| **MSVF** | **Nonsavu** | **8.93** | **254** | Pn | **Pn** | | **Pn** | **09 53 46.7** | **-2.6** |
| **TAOE** | **Nuku Hiva Isla** | **32.70** | **82** | P | **P** | | **P** | **09 58 11.3** | **-1.1** |
| **ARMA** | **Armidale** | **35.69** | **239** | P | **P** | | **P** | **09 58 38.4** | **+0.2** |
| ARMA | comp=Z,19nm,1.5s | | | IAmb | IAmb | | IAmb | 09 58 53.2 | |
| **COEN** | **Coen** | **42.42** | **266** | P | **P** | | **P** | **09 59 34.8** | **+0.2** |
| **TOO** | **Toolangi** | **42.77** | **231** | P | **P** | | **P** | **09 59 36.6** | **-0.7** |
| TOO | comp=Z,7.7nm,1.4s | | | IAmb | IAmb | | IAmb | 09 59 47.9 | |
| **TAU** | **Tasmania Unive** | **43.58** | **223** | P | **P** | | **P** | **09 59 42.7** | **-0.9** |
| **STKA** | **Stephens Creek** | **44.39** | **240** | P | **P** | | **P** | **09 59 49.0** | **-1.3** |
| **STKA** | **Stephens Creek** | **44.39** | **240** | P | **P** | | **P** | **09 59 52.3** | **+1.9** |
| | comp=Z,1.6nm,0.9s,baz=80,slow=12,SNR=3.0 comp=Z,1.6nm,0.9s | | | | | | | | |
| **MCQ** | **Macquarie Isla** | **44.66** | **203** | P | **P** | | **P** | **09 59 52.8** | **+0.8** |
| **BBOO** | **Buckleboo** | **49.16** | **240** | P | **P** | | **P** | **10 00 27.9** | **+0.2** |
| **WR0** | **Warramunga Arr** | **50.07** | **257** | P | **P** | | **P** | **10 00 34.6** | **-0.2** |
| WR0 | comp=Z,14nm,1.4s | | | IAmb | IAmb | | IAmb | 10 01 01.5 | |
| **WB0** | **Warramunga Arr** | **50.22** | **257** | P | **P** | | **P** | **10 00 35.8** | **-0.2** |
| WB0 | comp=Z,9.2nm,1.3s | | | IAmb | IAmb | | IAmb | 10 01 01.9 | |
| **WB2** | **Warramunga Arr** | **50.25** | **257** | P | **P** | | **P** | **10 00 34.7** | **-1.4** |
| WB2 | comp=Z,3.7nm,0.9s | | | IAmb | IAmb | | IAmb | 10 01 01.3 | |
| **WRAB** | **Tennant Creek** | **50.25** | **257** | P | **P** | | **P** | **10 00 35.4** | **-0.8** |
| WRAB | comp=Z,10nm,1.3s | | | IAmb | IAmb | | IAmb | 10 01 02.0 | |
| **WRA** | **Warramunga Arr** | **50.26** | **257** | P | **P** | | **P** | **10 00 34.8** | **-1.4** |
| **WRA** | **Warramunga Arr** | **50.26** | **257** | P | **P** | | **P** | **10 00 36.9** | **+0.7** |
| | comp=Z,0.7nm,0.7s,baz=96,slow=7.8,SNR=15 comp=Z,0.7nm,0.7s | | | | | | | | |
| **AS31** | **Alice Springs** | **50.51** | **252** | P | **P** | | **P** | **10 00 37.5** | **-0.7** |
| **ASAR** | **Alice Springs** | **50.51** | **252** | P | **P** | | **P** | **10 00 36.9** | **-1.2** |
| **ASAR** | **Alice Springs** | **50.51** | **252** | P | **P** | | **P** | **10 00 39.1** | **+1.0** |
| ASAR | comp=Z,1.4nm,0.5s,baz=87,slow=8.1,SNR=29 | | | PcP | PcP | | PcP | 10 01 58.9 | +2.9 |
| | comp=Z,2.8nm,1.2s,baz=88,slow=3.2,SNR=4.8 comp=Z,1.4nm,0.5s | | | | | | | | |
| **SBA** | **Scott Base** | **63.23** | **185** | P | **P** | | **P** | **10 02 08.4** | **+1.1** |
| **AMKA** | **Amchitka** | **66.89** | **355** | P | **P** | | **P** | **10 02 31.4** | **+0.1** |
| **MAJO** | **Matsushiro** | **69.27** | **320** | P | **P** | | **P** | **10 02 47.1** | **+0.4** |
| MAJO | comp=Z,6.0nm,0.9s | | | IAmb | IAmb | | IAmb | 10 03 01.4 | |
| **MJB9** | **Matsu-Tunnel** | **69.27** | **320** | P | **P** | | **P** | **10 02 46.1** | **-0.6** |
| MJB9 | comp=Z,6.2nm,1.0s | | | IAmb | IAmb | | IAmb | 10 03 02.8 | |
| **NVAR** | **Mina Array Bea** | **74.07** | **42** | P | P | | P | 10 03 20.6 | +4.7 |
| | comp=Z,0.2nm,0.6s,baz=230,slow=8.1,SNR=2.7 comp=Z,0.2nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.59** | **180** | P | **P** | | **P** | **10 03 20.4** | **+2.0** |
| QSPA | comp=Z,8.5nm,1.2s | | | IAmb | IAmb | | IAmb | 10 03 26.3 | |
| **CNPM** | **China Poot** | **76.77** | **11** | P | **P** | | **P** | **10 03 31.0** | **+0.4** |
| **CRAG** | **Craig** | **78.22** | **22** | P | **P** | | **P** | **10 03 36.9** | **-1.8** |
| CRAG | comp=Z,11nm,1.1s | | | IAmb | IAmb | | IAmb | 10 03 50.2 | |
| **TXAR** | **Lajitas Array** | **80.28** | **56** | P | **P** | | **P** | **10 03 54.5** | **+3.7** |
| | comp=Z,0.7nm,1.0s,baz=218,slow=5.7,SNR=3.5 comp=Z,0.7nm,1.0s | | | | | | | | |
| **BELA** | **Belgrano 2** | **83.88** | **172** | P | **P** | | **P** | **10 04 08.5** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** | **93.05** | **288** | P | P | | P | 10 04 58.8 | +5.1 |
| | comp=Z,0.6nm,0.4s,baz=132,slow=2.7,SNR=1.8 comp=Z,0.6nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.47** | **321** | PKPbc | **PKiKP** | | **PKiKP** | **10 11 24.4** | **+0.4** |
| | comp=Z,0.9nm,0.7s,baz=354,slow=1.4,SNR=6.1 | | | | | | | | |

*IDC* ***24*** *10:02:36.5±0.5, 39°.92N×108°.38W, h0km, mb4.2/13, mbtmp4.0/23, ML3.4/9, Error ellipse: s-maj=9.3km s-min=8.0km az=69.0*

*NEIC* ***24*** *10:02:37.6±1.5, 39°.75N±0°.03×108°.39W±0°.03, h6km±5km, mb4.3/27, ML4.8/153, Mwr4.1/18, Error ellipse: s-maj=4.0km s-min=2.9km az=203.0, Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr=0.96; Mθθ=1.38; Mφφ=0.42; Mrθ=-0.88; Mrφ=-0.20; Mθφ=0.31; Fault plane solution: M0=1.56000×10^15 NP1:φs=76.43000°, δ=66.04000°, λ=-112.24000°. NP2:φs=301.64000°, δ=32.24000°, λ=-49.57000°. Principal axes: T 1.6814, Plg18.0000°, Azm183.0000°; N -0.2923, Plg20.0000°, Azm86.0000°; P -1.3891, Plg62.0000°, Azm311.0000°;*

*NEIC* ***24*** *10:02:37.5, 39°.75N×108°.40W, h4km*

*ANF* ***24*** *10:02:40.6±0.8, 39°.77N×108°.35W, h19km±5km, ML4.5/16, Error ellipse: s-maj=1.8km s-min=1.7km az=10.0*

**ISC 24 10:02:37.8**±1.2,**39°.84N**±0°.03×**108°.34W**±0°.03,**h5**km±8km, **n357,** σ1**$28/**359,**mb4.3**/26,**Colorado**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **O20A** | **White River Ci** | **0.30** | **14** | | | | **Pb** | **10 02 45.8** | **0.0** |
| O20A | | | | | Sg | | **Sb** | **10 02 51.3** | **+0.1** |
| **RDMU** | **Red Mountain** | **1.19** | **308** | | | | **Pg** | **10 03 00.1** | **-0.5** |
| RDMU | | | | | Sg | | **Sg** | **10 03 14.7** | **-1.4** |
| **SMCO** | **Snowmass** | **1.25** | **122** | | | | **Pg** | **10 03 01.0** | **-0.7** |
| SMCO | | | | | Sg | | **Sg** | **10 03 16.5** | **-1.4** |
| **PV21** | **Cone Mtn., Par** | **1.37** | **201** | Pg | Pg | | **Pg** | **10 03 01.4** | **-2.7** |
| PV21 | comp=N,27µm,0.3s | | | IAML | | | | 10 03 21.2 | |
| PV21 | comp=E,25µm,0.3s | | | IAML | | | | 10 03 22.8 | |
| **P18A** | **Preston Nutter** | **1.49** | **262** | | | | **Pn** | **10 03 04.1** | **-1.3** |
| P18A | | | | | Sg | | **Sg** | **10 03 23.1** | **-2.5** |
| P18A | comp=E,26µm,0.5s | | | IAML | | | | 10 03 27.2 | |
| P18A | comp=N,27µm,0.4s | | | IAML | | | | 10 03 28.0 | |
| **PV15** | **Paradox Valley** | **1.50** | **184** | Pg | Pn | | **Pn** | **10 03 03.7** | **-1.9** |
| PV15 | comp=N,14µm,0.8s | | | IAML | | | | 10 03 27.8 | |
| PV15 | comp=E,13µm,0.7s | | | IAML | | | | 10 03 28.6 | |
| **SRU** | **San Rafael Swe** | **1.84** | **247** | Pn | **Pn** | | **Pn** | **10 03 09.7** | **-0.5** |
| SRU | comp=N,10µm,0.7s | | | IAML | | | | 10 03 34.9 | |
| SRU | comp=E,12µm,0.6s | | | IAML | | | | 10 03 36.9 | |
| **P17A** | **Butcher Ranch,** | **1.89** | **259** | | | | **Pn** | **10 03 10.9** | **0.0** |
| **RWWY** | **Rawlins** | **2.03** | **25** | | | | **Pb** | **10 03 16.1** | **+0.7** |
| **N23A** | **Red Feather La** | **2.11** | **59** | | | | **Pb** | **10 03 17.3** | **+0.6** |
| **N23A** | **Red Feather La** | **2.11** | **59** | P | | Pb | **10 03 17.2** | **+0.5** |
| N23A | baz=240,SNR=1000 baz=240 | | | | Sb | | **Sg** | **10 03 46.5** | **+0.9** |
| **TMUT** | **Trail Mountain** | **2.29** | **257** | | | | **Pn** | **10 03 16.6** | **+0.2** |
| **Q16A** | **Castle Valley** | **2.38** | **248** | | | | **Pn** | **10 03 17.2** | **-0.5** |
| **S22A** | **4UR Ranch, Cre** | **2.40** | **150** | Pn | | | **Pn** | **10 03 18.8** | **+0.8** |
| **S22A** | **4UR Ranch, Cre** | **2.40** | **150** | P | | | **Pn** | **10 03 18.9** | **+0.8** |
| S22A | baz=329,SNR=1000 baz=329 | | | | Sb | | **Sb** | **10 03 51.4** | **-0.3** |
| **JLU** | **Jordanelle** | **2.50** | **289** | | | | **Pn** | **10 03 20.8** | **+1.4** |
| JLU | comp=E,3µm,0.9s | | | IAML | | | | 10 03 55.0 | |
| JLU | comp=N,5µm,0.8s | | | IAML | | | | 10 03 56.5 | |
| **MPU** | **Maple Canyon** | **2.54** | **275** | | | | **Pn** | **10 03 20.6** | **+0.7** |
| **Q24A** | **Divide** | **2.62** | **109** | | | | **Pn** | **10 03 23.2** | **+2.1** |
| **Q24A** | **Divide** | **2.62** | **109** | P | | | **Pn** | **10 03 23.2** | **+2.1** |
| Q24A | baz=289,SNR=126 baz=289 | | | | | Sb | **Sb** | **10 04 00.1** | **+2.1** |
| **MVCO** | **Mesa Verde** | **2.63** | **183** | Pn | | | **Pn** | **10 03 20.9** | **-0.2** |
| MVCO | comp=N,4µm,0.7s | | | IAML | | | | 10 03 60.0 | |
| MVCO | comp=N,5µm,0.5s | | | IAML | | | | 10 04 01.1 | |
| **PHWY** | **Pilot Hill** | **2.63** | **55** | | | | **Pn** | **10 03 23.7** | **+2.5** |
| **TCUT** | **Toone Canyon** | **2.67** | **300** | | | | **Pn** | **10 03 23.3** | **+1.7** |
| **HMU** | **Henry Mountain** | **2.67** | **225** | Pn | | | **Pn** | **10 03 20.9** | **-0.9** |
| **CTU** | **Camp Tracy** | **2.75** | **289** | | | | **Pn** | **10 03 23.3** | **+0.6** |
| **NLU** | **North Lily Min** | **2.88** | **273** | | | | **Pn** | **10 03 24.6** | **+0.1** |
| **HWUT** | **Hardware Ranch** | **3.02** | **307** | Pn | | | **Pn** | **10 03 27.4** | **+1.0** |
| HWUT | comp=N,2µm,0.8s | | | IAML | | | | 10 04 11.7 | |
| HWUT | comp=N,3µm,0.9s | | | IAML | | | | 10 04 16.6 | |
| **SDCO** | **Great Sand Dun** | **3.05** | **132** | | | | **Pn** | **10 03 28.0** | **+1.1** |
| **PD31** | **Pinedale Array** | **3.06** | **343** | Pn | | | **Pn** | **10 03 28.8** | **+1.8** |
| **PDAR** | **Pinedale Array** | **3.06** | **343** | | | | **Pn** | **10 03 28.9** | **+1.8** |
| **PDAR** | **Pinedale Array** | **3.06** | **343** | Pn | | | **Pn** | **10 03 28.6** | **+1.6** |
| PDAR | comp=N,226nm,0.5s,baz=151,slow=13,SNR=2266 comp=N,123nm,0.3s,baz=143,slow=15,SNR=7.0 | | | Lg | Lg | | | 10 04 08.5 | |
| **K22A** | **Casper** | **3.12** | **25** | | | | **Pn** | **10 03 30.9** | **+3.1** |
| **BRIGG** | **Briggsdale** | **3.16** | **75** | Pn | | | **Pn** | **10 03 29.3** | **+0.9** |
| BRIGG | comp=E,4µm,0.9s | | | IAML | | | | 10 04 21.1 | |
| BRIGG | comp=N,3µm,0.8s | | | IAML | | | | 10 04 22.4 | |
| **MSU** | **Marysvale** | **3.27** | **247** | Pn | | | **Pn** | **10 03 29.6** | **-0.3** |
| **MVU** | **Marysvale** | **3.29** | **247** | | | | **Pn** | **10 03 30.1** | **-0.2** |
| **TCRU** | **Three Creeks R** | **3.42** | **250** | | | | **Pn** | **10 03 32.3** | **+0.2** |
| TCRU | comp=N,2µm,0.9s | | | IAML | | | | 10 04 26.8 | |
| TCRU | comp=E,2µm,0.6s | | | IAML | | | | 10 04 32.2 | |
| **DUG** | **Dugway, Tooele** | **3.46** | **277** | Pn | | | **Pn** | **10 03 32.1** | **-0.3** |
| **SPUT** | **South Promonto** | **3.46** | **296** | | | | **Pn** | **10 03 32.7** | **+0.3** |
| SPUT | comp=N,3µm,0.8s | | | IAML | | | | 10 04 24.5 | |
| SPUT | comp=E,1µm,0.9s | | | IAML | | | | 10 04 27.9 | |
| **MTPU** | **Mount Pierson** | **3.50** | **240** | | | | **Pn** | **10 03 31.6** | **-1.5** |
| MTPU | comp=N,1µm,0.4s | | | IAML | | | | 10 04 26.2 | |
| MTPU | comp=E,1µm,0.5s | | | IAML | | | | 10 04 29.0 | |
| **AHID** | **Auburn Hatcher** | **3.58** | **325** | | | | **Pn** | **10 03 35.2** | **+1.0** |
| **BGU** | **Big Grassy Mou** | **3.74** | **288** | | | | **Pn** | **10 03 36.1** | **-0.3** |
| **HVU** | **Hansel Valley** | **3.88** | **301** | Pn | | | **Pn** | **10 03 38.6** | **+0.3** |
| HVU | comp=N,1µm,0.8s | | | IAML | | | | 10 04 46.7 | |
| HVU | comp=E,1µm,0.6s | | | IAML | | | | 10 04 47.5 | |
| **PKCU** | **Pink Cliffs** | **3.93** | **234** | | | | **Pn** | **10 03 38.3** | **-0.7** |
| **REDW** | **Red Top Meadow** | **3.99** | **333** | | | | **Pn** | **10 03 41.0** | **+1.2** |
| **T25A** | **Trinidad** | **4.10** | **130** | | | | **Pn** | **10 03 41.6** | **+0.4** |
| **T25A** | **Trinidad** | **4.10** | **130** | P | | | **Pn** | **10 03 42.9** | **+1.6** |
| **LOHW** | **Long Hollow** | **4.13** | **336** | | | | **Pn** | **10 03 43.0** | **+1.3** |
| **TPAW** | **Teton Pass** | **4.14** | **333** | | | | **Pn** | **10 03 42.4** | **+0.5** |
| TPAW | comp=E,1µm,1.0s | | | IAML | | | | 10 04 53.8 | |
| **FXWY** | **Fox Creek** | **4.29** | **333** | | | | **Pn** | **10 03 45.0** | **+1.0** |
| FXWY | comp=E,925nm,0.7s | | | IAML | | | | 10 05 00.6 | |
| **SZCU** | **Shurtz Canyon** | **4.34** | **240** | | | | **Pn** | **10 03 43.9** | **-0.8** |
| SZCU | comp=N,1µm,0.5s | | | IAML | | | | 10 04 52.5 | |
| SZCU | comp=E,1µm,0.3s | | | IAML | | | | 10 04 57.5 | |
| **PSUT** | **Pine Spring** | **4.48** | **255** | | | | **Pn** | **10 03 47.0** | **+0.4** |
| **KNB** | **Kanab** | **4.51** | **233** | | | | **Pn** | **10 03 47.2** | **+0.2** |
| KNB | comp=N,1µm,0.7s | | | IAML | | | | 10 05 01.5 | |
| KNB | comp=E,2µm,1.0s | | | IAML | | | | 10 05 03.6 | |
| **CCUT** | **Cedar City** | **4.55** | **241** | | | | **Pn** | **10 03 48.0** | **+0.5** |
| **FLWY** | **Flagg Ranch** | **4.59** | **338** | | | | **Pn** | **10 03 49.1** | **+1.1** |
| FLWY | comp=E,2µm,1.1s | | | IAML | | | | 10 05 12.4 | |
| FLWY | comp=E,1µm,0.9s | | | IAML | | | | 10 05 15.1 | |
| **U15A** | **North Rim** | **4.62** | **224** | | | | **Pn** | **10 03 48.4** | **-0.1** |
| **SPR3** | **Spring Creek 3** | **4.72** | **262** | IAML | | | | 10 05 06.3 | |
| **LCMT** | comp=N,501nm,0.7s **Little Creek M** | **4.78** | **235** | IAML | | | | 10 05 06.3 | |
| LCMT | comp=E,811nm,0.9s comp=N,715nm,1.2s | | | IAML | | | | 10 05 10.3 | |
| **YPP** | **Pitchstone Pla** | **4.79** | **338** | IAML | | | | 10 05 12.6 | |
| YPP | comp=E,613nm,1.2s comp=N,546nm,0.8s | | | IAML | | | | 10 05 14.1 | |
| **H17A** | **Grant Village** | **4.84** | **341** | IAML | | | | 10 05 09.8 | |
| H17A | comp=N,520nm,0.5s comp=E,479nm,0.7s | | | IAML | | | | 10 05 16.4 | |
| **H17A** | **Grant Village** | **4.84** | **341** | P | | | **Pn** | **10 03 53.6** | **+2.0** |
| H17A | baz=160,SNR=17 baz=160 | | | | Sb | | **Sb** | **10 05 07.8** | **+5.8** |
| **W18A** | **Petrified Fore** | **4.85** | **194** | P | | | **Pn** | **10 03 51.0** | **-0.5** |
| W18A | baz=12,SNR=18 baz=12 | | | | Sb | | **Sb** | **10 05 02.9** | **+0.9** |
| **OGNE** | **Ogallala** | **4.94** | **75** | Pn | | | **Pn** | **10 03 54.3** | **+1.6** |
| **LKWY** | **Lake** | **4.96** | **343** | IAML | | | | 10 05 23.4 | |
| LKWY | comp=E,342nm,0.5s comp=E,809nm,0.8s | | | IAML | | | | 10 05 24.0 | |
| **YFT** | **Old Faithful** | **4.96** | **339** | IAML | | | | 10 05 22.2 | |
| **YMP** | comp=E,408nm,1.3s **Mirror Lake Pl** | **5.08** | **345** | IAML | | | | 10 05 25.1 | |
| YMP | comp=N,340nm,0.5s comp=E,405nm,1.3s | | | IAML | | | | 10 05 45.0 | |
| **Q12A** | **Willow Creek R** | **5.09** | **263** | IAML | | | | 10 05 16.9 | |
| Q12A | comp=N,948nm,0.8s comp=E,638nm,1.3s | | | IAML | | | | 10 05 26.3 | |
| **ANMO** | **Albuquerque** | **5.11** | **162** | | | | **Pn** | **10 03 54.8** | **-0.4** |
| **ANMO** | **Albuquerque** | **5.11** | **162** | Pn | | | **Pn** | **10 03 54.5** | **-0.7** |
| ANMO | comp=E,164nm,0.7s | | | IAML | | | | 10 05 15.3 | |
| ANMO | comp=E,103nm,0.6s | | | IAML | | | | 10 05 16.8 | |
| **ANMO** | **Albuquerque** | **5.11** | **162** | Pn | | | **Pn** | **10 03 56.0** | **+0.8** |
| ANMO | comp=E,0.5nm,0.3s,baz=66,slow=12,SNR=13 comp=E,18nm,0.3s,baz=80,slow=17,SNR=109 | | | Pg | | | **Pb** | **10 04 10.1** | **+2.3** |
| ANMO | comp=E,33nm,0.3s,baz=355,slow=9.9,SNR=13 comp=E,1.7nm,0.4s | | | Lg | Lg | | | 10 05 12.5 | |
| **RLMT** | **Red Lodge** | **5.32** | **353** | Pn | | | **Pn** | **10 04 00.7** | **+2.6** |
| **ELK** | **Elko** | **5.35** | **282** | | | | **Pn** | **10 03 59.1** | **+0.5** |
| **ELK** | **Elko** | **5.35** | **282** | Pn | | | **Pn** | **10 03 60.0** | **+1.4** |
| ELK | comp=E,1.2nm,0.3s,baz=97,slow=12,SNR=23 comp=E,3.6nm,0.3s,baz=88,slow=7.4,SNR=3.3 comp=E,4.2nm,0.4s | | | Lg | Lg | | | 10 05 19.5 | |
| **X18A** | **Snowflake** | **5.46** | **194** | IAML | | | | 10 05 33.2 | |
| X18A | comp=E,873nm,0.9s comp=N,768nm,0.6s | | | IAML | | | | 10 05 36.9 | |
| **R11B** | **Troy Canyon, C** | **5.83** | **257** | | | | **Pn** | **10 04 06.0** | **+0.9** |
| **R11B** | **Troy Canyon, C** | **5.83** | **257** | P | | | **Pn** | **10 04 05.4** | **+0.3** |
| R11B | baz=74,SNR=14 baz=74 | | | | Sb | | **Sb** | **10 05 34.0** | **+3.6** |
| **Y22D** | **IRIS PASSCAL I** | **5.87** | **168** | P | | | **Pn** | **10 04 05.7** | **+0.1** |
| Y22D | baz=349 baz=349 | | | | Sb | | **Sb** | **10 05 36.2** | **+4.8** |
| **HLID** | **Hailey** | **5.87** | **311** | | | | **Pn** | **10 04 07.8** | **+2.2** |
| **BOZ** | **Bozeman (W)** | **6.24** | **338** | | | | **Pn** | **10 04 13.8** | **+3.2** |
| **SHPR** | **Sheep Range** | **6.32** | **240** | Pn | | | **Pn** | **10 04 12.7** | **+0.9** |
| **DLMT** | **Dillon** | **6.35** | **332** | | | | **Pn** | **10 04 15.4** | **+3.3** |
| **V12A** | **Nelson** | **6.59** | **233** | Pn | | | **Pn** | **10 04 14.0** | **-1.5** |
| **MFID** | **Camas Ranch** | **6.65** | **305** | Pn | | | **Pn** | **10 04 18.2** | **+1.9** |
| **CBKS** | **Cedar Bluff** | **6.75** | **96** | Pn | | | **Pn** | **10 04 18.9** | **+1.4** |
| **BMN** | **Battle Mountai** | **6.83** | **278** | | | | **Pn** | **10 04 18.9** | **+0.1** |
| **Q09A** | **Carvers** | **6.93** | **264** | Pn | | | **Pn** | **10 04 18.5** | **-1.6** |
| **Y14A** | **Wickenburg** | **6.98** | **214** | | | | **Pn** | **10 04 19.6** | **-1.1** |
| **LAO** | **LASA Array** | **7.01** | **12** | Pn | | | **Pn** | **10 04 22.3** | **+1.2** |
| **TPH** | **Tonopah** | **7.14** | **259** | | | | **Pn** | **10 04 23.9** | **+0.7** |
| **WCT** | **Wildcat Mounta** | **7.19** | **248** | | | | **Pn** | **10 04 22.4** | **-1.3** |
| **AMTX** | **Amarillo** | **7.25** | **131** | | | | **Pn** | **10 04 22.5** | **-2.0** |
| **121A** | **Cookes Peak, D** | **7.31** | **176** | P | | | **Pn** | **10 04 24.8** | **-0.5** |
| 121A | baz=356 baz=356 | | | | Sb | | **Sb** | **10 06 18.9** | **+6.1** |
| **GMN** | **Gold Mountain** | **7.44** | **253** | | | | **Pn** | **10 04 27.5** | **+0.3** |
| **GWY** | **Greenwater Val** | **7.52** | **244** | | | | **Pn** | **10 04 28.6** | **+0.4** |
| **KVI** | **Kaiserville** | **7.60** | **267** | Pn | | | **Pn** | **10 04 29.3** | **0.0** |
| **NV11** | **Mina Array Sit** | **7.76** | **263** | Pn | | | **Pn** | **10 04 30.9** | **-0.6** |
| **NVAR** | **Mina Array Bea** | **7.87** | **263** | Pn | | | **Pn** | **10 04 34.6** | **+1.4** |
| NVAR | comp=N,0.9nm,0.3s,baz=73,slow=13,SNR=29 baz=72,slow=35 comp=N,3.1nm,0.6s | | | Lg | Lg | | | 10 06 36.1 | |
| **ELIS** | **Ellis County** | **7.99** | **115** | Pn | | | **Pn** | **10 04 32.2** | **-2.4** |
| **RYN** | **Ryan** | **8.00** | **265** | Pn | | | **Pn** | **10 04 31.8** | **-3.0** |
| **NOKA** | **Waynoka** | **8.06** | **110** | Pn | | | **Pn** | **10 04 32.7** | **-2.8** |
| **MSO** | **Missoula** | **8.09** | **332** | Pn | | | **Pn** | **10 04 34.4** | **-1.5** |
| **EGMT** | **Eagleton** | **8.24** | **353** | Pn | | | **Pn** | **10 04 37.8** | **-0.3** |
| **OK032** | **Salt Plains WL** | **8.52** | **108** | Pn | | | **Pn** | **10 04 41.1** | **-0.7** |
| **GLA** | **Glamis** | **8.56** | **220** | Pn | | | **Pn** | **10 04 38.9** | **-3.5** |
| **KAN14** | **Manchester OK** | **8.64** | **106** | Pn | | | **Pn** | **10 04 42.5** | **-0.9** |
| **214A** | **Organ Pipe Nat** | **8.66** | **206** | P | | | **Pn** | **10 04 44.1** | **+0.3** |
| **E28A** | **Huff** | **8.74** | **37** | Pn | | | **Pn** | **10 04 46.6** | **+1.8** |
| **PFO** | **Pinyon Flats O** | **9.01** | **229** | Pn | | | **Pn** | **10 04 48.9** | **+0.3** |
| **PFO** | **Pinyon Flats O** | **9.01** | **229** | Pn | | | **Pn** | **10 04 50.3** | **+1.7** |
| PFO | comp=N,0.3nm,0.3s,baz=59,slow=4.8,SNR=1.6 comp=N,0.5nm,0.3s,baz=117,slow=9.6,SNR=1.2 comp=N,0.7nm,0.4s | | | Lg | Lg | | | 10 07 14.1 | |
| **TPFO** | **Pinon Flats** baz=44 | **9.01** | **229** | P | | | **Pn** | **10 04 48.9** | **+0.2** |
| **MPK** | **Martis Peak** | **9.05** | **270** | Pn | | | **Pn** | **10 04 50.7** | **+1.4** |
| **DGMT** | **Dagmar** | **9.12** | **18** | Pn | | | **Pn** | **10 04 51.6** | **+1.6** |
| **WMOK** | **Wichita Mounta** | **9.16** | **121** | Pn | | | **Pn** | **10 04 51.9** | **+1.3** |
| **SN05** | **Snyder 5** | **9.19** | **137** | Pn | | | **Pn** | **10 04 51.5** | **+0.6** |
| **PIX** | **Pinacate** | **9.25** | **208** | Pn | | | **Pn** | **10 04 50.1** | **-1.7** |
| **APMT** | **Aspermont** | **9.27** | **132** | | | | **Pn** | **10 04 52.7** | **+0.6** |
| **I07A** | **Izee** | **9.33** | **301** | | | | **Pn** | **10 04 55.1** | **+2.0** |
| **YUH** | **Yuha Desert** | **9.44** | **223** | | | | **Pn** | **10 04 54.3** | **0.0** |
| **G08A** | **Pilot Rock** | **9.54** | **308** | Pn | | | **Pn** | **10 04 57.9** | **+2.0** |
| **ELS** | **Elsinore Mount** | **9.56** | **233** | Pn | | | **Pn** | **10 04 55.8** | **-0.3** |
| **ECSD** | **EROS Data Cent** | **9.58** | **62** | Pn | | | **Pn** | **10 04 56.2** | **-0.1** |
| **OK048** | **Pawnee Station** | **9.61** | **107** | Pn | | | **Pn** | **10 04 55.2** | **-1.5** |
| **MNHN** | **Monahans** | **9.62** | **150** | Pn | | | **Pn** | **10 04 56.7** | **-0.3** |
| **AFDM** | **Forest Hills D** | **9.82** | **269** | Pn | | | **Pn** | **10 05 01.5** | **+1.8** |
| **QUOK** | **Quay** | **9.88** | **108** | Pn | | | **Pn** | **10 05 00.8** | **+0.3** |
| **ESJX** | **Sierra Juarez** | **9.96** | **221** | | | | **Pn** | **10 05 01.6** | **-0.1** |
| **WTFS** | **Witchita Falls** | **9.97** | **124** | Pn | | | **Pn** | **10 05 01.4** | **-0.3** |
| **LRDM** | **Redding Peak** | **10.07** | **278** | | | | **Pn** | **10 05 04.1** | **+1.0** |
| **ORV** | **Oroville** | **10.15** | **273** | Pn | | | **Pn** | **10 05 05.4** | **+1.3** |
| **PINE** | **Pine Mountain** | **10.20** | **297** | Pn | | | **Pn** | **10 05 06.5** | **+1.5** |
| **NEW** | **Newport** | **10.52** | **326** | Pn | | | **Pn** | **10 05 12.2** | **+3.0** |
| **NEW** | **Newport** | **10.52** | **326** | Pn | | | **Pn** | **10 05 09.1** | **-0.1** |
| NEW | comp=N,0.1nm,0.3s,baz=166,slow=24,SNR=2.5 comp=N,0.1nm,0.3s,baz=66,slow=20,SNR=1.8 comp=N,1.1nm,0.5s | | | Lg | Lg | | | 10 07 59.4 | |
| **OZNA** | **Ozona** | **10.67** | **144** | Pn | | | **Pn** | **10 05 12.8** | **+1.6** |
| **FW03** | **Perrin-Whitt E** | **10.70** | **126** | Pn | | | **Pn** | **10 05 09.5** | **-2.2** |
| **E07A** | **Sunnyside** | **10.75** | **312** | Pn | | | **Pn** | **10 05 13.7** | **+1.4** |
| **MXC** | **Moxie City** | **11.01** | **312** | Pn | | | **Pn** | **10 05 16.8** | **+0.9** |
| **YBH** | **Yreka Blue Hor** | **11.06** | **284** | Pn | | | **Pn** | **10 05 18.4** | **+1.8** |
| YBH | comp=N,0.1nm,0.3s,baz=87,slow=12,SNR=8.1 comp=N,0.1nm,0.3s,baz=154,slow=8.9,SNR=2.1 comp=N,1.6nm,0.7s | | | Lg | Lg | | | 10 08 22.7 | |
| **TX31** | **Lajitas Ar. Si** | **11.16** | **158** | Pn | | | **Pn** | **10 05 17.9** | **-0.2** |
| **TXAR** | **Lajitas Array** | **11.16** | **158** | Pn | | | **Pn** | **10 05 17.9** | **-0.2** |
| **TXAR** | **Lajitas Array** | **11.16** | **158** | Pn | | | **Pn** | **10 05 20.8** | **+2.6** |
| TXAR | comp=N,0.4nm,0.3s,baz=342,slow=12,SNR=29 comp=N,0.4nm,0.3s,baz=353,slow=27,SNR=2.2 comp=N,2.5nm,0.7s | | | Lg | Lg | | | 10 08 25.0 | |
| **U38A** | **Gravette** | **11.50** | **103** | Pn | | | **Pn** | **10 05 24.3** | **+1.6** |
| **JCT** | **Junction City** | **11.66** | **141** | Pn | | | **Pn** | **10 05 25.3** | **+0.5** |
| **K02D** | **Willamette Mer** | **11.88** | **289** | Pn | | | **Pn** | **10 05 25.1** | **-2.7** |
| **S39A** | **Bolivar** | **11.92** | **96** | Pn | | | **Pn** | **10 05 29.8** | **+1.5** |
| **DRIO** | **Del Rio** | **12.18** | **146** | Pn | | | **Pn** | **10 05 32.5** | **+0.6** |
| **AGMN** | **Agassiz Nation** | **12.31** | **43** | | | | **Pn** | **10 05 36.6** | **+2.9** |
| **R40A** | **Maddies Statio** | **12.59** | **92** | Pn | | | **Pn** | **10 05 40.2** | **+2.7** |
| **MIAR** | **Mount Ida** | **12.90** | **110** | Pn | | | **Pn** | **10 05 41.6** | **-0.1** |
| **ULM** | **Lac du Bonnet** | **13.61** | **36** | Pn | | | **Pn** | **10 05 49.2** | **-2.2** |
| ULM | comp=N,1.2nm,0.3s,baz=229,slow=13,SNR=11 comp=N,0.5nm,0.3s,baz=318,slow=22,SNR=3.1 comp=N,2.8nm,0.3s | | | Lg | Lg | | | 10 09 35.0 | |
| **FVM** | **French Village** | **14.07** | **92** | | | | **Pn** | **10 06 00.1** | **+2.4** |
| **HKT** | **Hockley** | **14.22** | **130** | Pn | | | **Pn** | **10 06 00.7** |

| | | | | | | |
|---|---|---|---|---|---|---|
| R31K | City Hall, Gus | 25.53 326 | P | P | 10 08 07.9 | +0.9 |
| | baz=125 | | | | | |
| N32M | Quiet Lake | 26.21 333 | P | P | 10 08 14.7 | +1.4 |
| | baz=133 | | | | | |
| WHY | Whitehorse | 26.54 330 | P | P | 10 08 16.4 | +0.1 |
| | baz=130 | | | | | |
| FARO | Faro, Yukon | 27.05 334 | P | P | 10 08 22.3 | +1.5 |
| | baz=134 | | | | | |
| P29M | Windy Craggy | 27.07 327 | P | P | 10 08 22.5 | +1.5 |
| | baz=124 | | | | | |
| O30N | Mendenhall | 27.07 330 | P | P | 10 08 22.1 | +1.1 |
| | baz=128 | | | | | |
| M31M | Drury Creek, Y | 27.38 333 | P | P | 10 08 24.7 | +0.9 |
| | baz=133 | | | | | |
| N31M | Braeburn, Yuko | 27.41 331 | P | P | 10 08 24.4 | +0.3 |
| | baz=130 | | | | | |
| O29M | Mount Kennedy | 27.80 327 | P | P | 10 08 28.0 | +0.4 |
| | baz=124 | | | | | |
| N30M | Aishikik Lake | 27.88 330 | P | P | 10 08 28.6 | +0.2 |
| N30M | | | IAmb | IAmb | 10 08 30.4 | |
| | comp=Z,4.8nm,1.0s | | | | | |
| N30M | Aishikik Lake | 27.88 330 | P | P | 10 08 29.4 | +1.1 |
| | baz=128 | | | | | |
| YUK8 | Steele Glacier | 28.83 329 | P | P | 10 08 36.6 | -0.3 |
| | baz=124 | | | | | |
| M29M | Somme Creek | 29.00 331 | P | P | 10 08 38.8 | +0.5 |
| M29M | Somme Creek | 29.00 331 | P | P | 10 08 39.5 | +1.2 |
| | baz=127 | | | | | |
| YUK3 | Moose Creek | 29.38 329 | P | P | 10 08 42.4 | +0.6 |
| | baz=124 | | | | | |
| K29M | Barlow Dome | 29.55 334 | P | P | 10 08 44.1 | +1.0 |
| | baz=131 | | | | | |
| J30M | Hart River | 29.65 336 | P | P | 10 08 45.3 | +1.3 |
| J30M | | | IAmb | IAmb | 10 09 14.5 | |
| | comp=Z,5.3nm,1.3s | | | | | |
| J30M | Hart River | 29.65 336 | P | P | 10 08 45.3 | +1.3 |
| | baz=133 | | | | | |
| CRQE | Cirque | 29.94 326 | P | P | 10 08 46.8 | +0.1 |
| | baz=119 | | | | | |
| M27K | Edge Creek, AK | 30.26 329 | P | P | 10 08 50.8 | +1.3 |
| M27K | | | IAmb | IAmb | 10 08 51.6 | |
| | comp=Z,3.9nm,0.8s | | | | | |
| M27K | Edge Creek, AK | 30.26 329 | P | P | 10 08 50.2 | +0.7 |
| | baz=123 | | | | | |
| DAWY | Dawson | 30.32 333 | P | P | 10 08 50.9 | +0.9 |
| DAWY | | | IAmb | IAmb | 10 08 53.3 | |
| | comp=Z,5.4nm,1.3s | | | | | |
| DAWY | Dawson | 30.32 333 | P | P | 10 08 50.4 | +0.4 |
| | baz=128 | | | | | |
| BCAR | Beaver Creek A | 30.61 330 | P | P | 10 08 52.9 | +0.4 |
| L27K | Beaver Creek, | 30.62 330 | P | P | 10 08 53.2 | +0.6 |
| | baz=124 | | | | | |
| BMRM | Bremner River | 30.70 326 | P | P | 10 08 53.9 | +0.6 |
| | baz=117 | | | | | |
| M26K | Nabesna, AK | 30.72 329 | P | P | 10 08 53.6 | +0.2 |
| | baz=121 | | | | | |
| G31M | Satah River | 30.75 340 | P | P | 10 08 54.2 | +0.6 |
| | baz=139 | | | | | |
| I29M | Ogilvie Camp, | 30.80 336 | P | P | 10 08 54.5 | +0.5 |
| | baz=132 | | | | | |
| N25K | Chitina, Valde | 30.99 327 | P | P | 10 08 57.2 | +1.3 |
| | baz=118 | | | | | |
| F31M | Tsiigehtchic | 31.01 341 | P | P | 10 08 55.0 | -0.9 |
| | baz=140 | | | | | |
| EPYK | Eagle Plains | 31.01 338 | P | P | 10 08 56.9 | +0.9 |
| | baz=135 | | | | | |
| EYAK | Cordova Ski Ar | 31.02 324 | P | P | 10 08 56.0 | 0.0 |
| | baz=115 | | | | | |
| L26K | Log Cabin Wild | 31.18 330 | P | P | 10 08 58.5 | +1.0 |
| | baz=122 | | | | | |
| K27K | Chicken | 31.26 332 | P | P | 10 08 58.7 | +0.6 |
| | baz=125 | | | | | |
| G30M | tAoh Zraii Nji | 31.31 339 | P | P | 10 08 59.6 | +1.0 |
| | baz=136 | | | | | |
| EGAK | Eagle | 31.37 334 | P | P | 10 08 59.6 | +0.6 |
| | baz=127 | | | | | |
| I28M | Miner Creek | 31.38 335 | P | P | 10 08 59.2 | -0.1 |
| I28M | Miner Creek | 31.38 335 | P | P | 10 08 59.6 | +0.3 |
| | baz=129 | | | | | |
| H29M | Whitestone | 31.39 337 | P | P | 10 09 00.2 | +0.9 |
| | baz=132 | | | | | |
| KLU | Klutina | 31.50 326 | P | P | 10 09 01.2 | +0.8 |
| | baz=116 | | | | | |
| P23K | Montague Islan | 31.56 323 | P | P | 10 09 00.9 | +0.1 |
| | baz=112 | | | | | |
| GLI | Glacier Island | 31.76 324 | P | P | 10 09 03.0 | +0.5 |
| | baz=114 | | | | | |
| SCRK | Sand Creek | 31.93 331 | P | P | 10 09 04.7 | +0.5 |
| | baz=122 | | | | | |
| PAX | Paxson | 32.00 329 | P | P | 10 09 04.8 | +0.1 |
| | baz=119 | | | | | |
| J26L | Joseph Creek | 32.06 332 | P | P | 10 09 06.0 | +0.8 |
| J26L | | | IAmb | IAmb | 10 09 07.8 | |
| | comp=Z,3.8nm,0.8s | | | | | |
| J26L | Joseph Creek | 32.06 332 | P | P | 10 09 05.8 | +0.5 |
| | baz=123,SNR=6.2 | | | | | |
| RIDG | Independent Ri | 32.13 330 | P | P | 10 09 06.4 | +0.5 |
| | baz=121 | | | | | |
| SCM | Sheep Creek Mo | 32.26 326 | P | P | 10 09 07.8 | +0.8 |
| | baz=115 | | | | | |
| PWL | Port Wells | 32.31 324 | P | P | 10 09 08.5 | +1.1 |
| | baz=112 | | | | | |
| I26K | Coal Creek Min | 32.37 333 | P | P | 10 09 08.7 | +0.8 |
| | baz=125 | | | | | |
| M23K | Glacier View | 32.41 326 | P | P | 10 09 09.5 | +1.2 |
| | baz=114 | | | | | |
| K24K | Donnelly Dome | 32.52 330 | P | P | 10 09 10.3 | +1.1 |
| | baz=120 | | | | | |
| SEW | Seward | 32.55 322 | P | P | 10 09 10.3 | +0.8 |
| | baz=110 | | | | | |
| KNK | Knik Glacier | 32.58 325 | P | P | 10 09 10.3 | +0.5 |
| | baz=113 | | | | | |
| WAT6 | Susitna Watana | 32.75 327 | P | P | 10 09 12.5 | +1.1 |
| | baz=116 | | | | | |
| F28M | Old Crow | 32.77 338 | P | P | 10 09 12.2 | +0.8 |
| F28M | | | IAmb | IAmb | 10 09 50.1 | |
| | comp=Z,4.6nm,1.1s | | | | | |
| F28M | Old Crow | 32.77 338 | P | P | 10 09 11.7 | +0.3 |
| | baz=132 | | | | | |
| G27K | Doyon Strip | 32.78 336 | P | P | 10 09 11.7 | +0.2 |
| | baz=129 | | | | | |
| J25K | Salcha River, | 32.78 331 | P | P | 10 09 12.9 | +1.4 |
| | baz=121 | | | | | |
| DHY | Denali Highway | 32.81 328 | P | P | 10 09 12.4 | +0.4 |
| | baz=117 | | | | | |
| PMR | Palmer | 32.95 325 | P | P | 10 09 13.6 | +0.7 |
| | baz=112 | | | | | |
| RC01 | Rabbit Creek A | 33.03 324 | P | P | 10 09 14.6 | +0.9 |
| | baz=111 | | | | | |
| BRSE | Bradley Lake S | 33.05 321 | P | P | 10 09 14.5 | +0.5 |
| | baz=108 | | | | | |
| HDA | Harding Lake | 33.27 330 | P | P | 10 09 16.5 | +0.7 |
| | baz=119 | | | | | |
| PRP | Porcupine Dome | 33.31 333 | P | P | 10 09 17.2 | +1.0 |
| | baz=122 | | | | | |
| IL31 | | 33.42 331 | P | P | 10 09 17.1 | +0.1 |
| ILAR | Eielson Array | 33.42 331 | P | P | 10 09 16.6 | -0.5 |
| | comp=Z,0.9nm,0.6s,baz=136,slow=8.1,SNR=13 | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | |
| M22K | Willow | 33.44 325 | P | P | 10 09 18.4 | +1.1 |
| | baz=112 | | | | | |
| KDAK | Kodiak Island | 33.46 317 | P | P | 10 09 18.0 | +0.6 |
| | baz=103 | | | | | |
| G26K | Porcupine Rive | 33.53 336 | P | P | 10 09 18.9 | +0.9 |
| | baz=126 | | | | | |
| SUA | Susitna One | 33.62 324 | P | P | 10 09 19.4 | +0.5 |
| | baz=110 | | | | | |
| CUT | Chulitna | 33.75 326 | P | P | 10 09 20.8 | +0.9 |
| | baz=112 | | | | | |
| POKR | Poker Flat Res | 33.80 331 | P | P | 10 09 21.2 | +0.8 |
| | baz=119 | | | | | |
| H25L | Birch Creek | 33.82 334 | P | P | 10 09 21.2 | +0.7 |
| | baz=123 | | | | | |
| COLA | College | 33.83 331 | P | P | 10 09 21.5 | +0.9 |
| | baz=118 | | | | | |
| SKT | Skwentna | 34.15 325 | P | P | 10 09 24.2 | +0.8 |
| | baz=110 | | | | | |
| D27M | Malcolm River | 34.17 340 | P | P | 10 09 24.8 | +1.2 |
| | baz=132 | | | | | |
| G25K | Bearman Lake | 34.18 334 | P | P | 10 09 24.6 | +0.9 |
| | baz=123 | | | | | |
| N20K | Mount Spurr | 34.20 323 | P | P | 10 09 24.4 | +0.5 |
| | baz=108 | | | | | |
| SPCR | Spurr Chakacha | 34.20 323 | P | P | 10 09 23.8 | -0.1 |
| | baz=108 | | | | | |
| P19K | Oil Pt | 34.24 320 | P | P | 10 09 24.7 | +0.4 |
| | baz=105 | | | | | |
| H24K | Noodor Dome | 34.31 332 | P | P | 10 09 25.5 | +0.7 |
| | baz=120 | | | | | |
| F25K | Christian Rive | 34.50 336 | P | P | 10 09 26.4 | 0.0 |
| | baz=125 | | | | | |
| I23K | Minto, Yukon-K | 34.53 331 | P | P | 10 09 27.4 | +0.7 |
| | baz=117 | | | | | |
| G24K | Hadweenzic Riv | 34.61 334 | P | P | 10 09 27.8 | +0.4 |
| | baz=121 | | | | | |
| BPAW | Bear Paw Mtn. | 34.71 328 | P | P | 10 09 29.0 | +0.7 |
| BPAW | | | IAmb | IAmb | 10 09 31.0 | |
| | comp=Z,4.4nm,1.0s | | | | | |
| BPAW | Bear Paw Mtn. | 34.71 328 | P | P | 10 09 28.8 | +0.5 |
| | baz=114 | | | | | |
| CHIR | Chirikof Islan | 34.76 313 | P | P | 10 09 29.4 | +0.7 |
| | baz=97 | | | | | |
| M20K | Styx River | 34.83 324 | P | P | 10 09 29.9 | +0.4 |
| | baz=108 | | | | | |
| Q18K | Katmai Hardscr | 34.90 318 | P | P | 10 09 29.9 | -0.2 |
| | baz=102 | | | | | |
| O19K | Port Alsworth | 34.91 321 | P | P | 10 09 30.5 | +0.5 |
| | baz=105 | | | | | |
| H23K | Yukon River | 34.91 332 | P | P | 10 09 31.1 | +1.1 |
| | baz=118 | | | | | |
| MLY | Manley | 35.00 330 | P | P | 10 09 31.6 | +0.7 |
| | baz=115 | | | | | |
| N19K | Bonanza Creek | 35.15 322 | P | P | 10 09 32.5 | +0.4 |
| | baz=106 | | | | | |
| C27K | Jago River | 35.16 339 | P | P | 10 09 32.6 | +0.5 |
| | baz=129 | | | | | |
| P18K | Big Mountain, | 35.16 320 | P | P | 10 09 32.3 | +0.1 |
| | baz=103 | | | | | |
| F24K | Squaw Lake | 35.18 335 | P | P | 10 09 33.2 | +0.9 |
| | baz=122 | | | | | |
| Q17K | Contact Creek | 35.27 318 | P | P | 10 09 33.8 | +0.5 |
| | baz=100 | | | | | |
| L20K | Farewell, AK | 35.35 325 | P | P | 10 09 34.6 | +0.7 |
| | baz=108 | | | | | |
| M19K | Big River Lodg | 35.41 324 | P | P | 10 09 35.0 | +0.7 |
| | baz=107 | | | | | |
| L19K | White Mountain | 35.70 324 | P | P | 10 09 37.8 | +1.0 |
| | baz=107 | | | | | |
| D25K | Kavik River | 35.72 338 | P | P | 10 09 38.1 | +1.2 |
| | baz=126 | | | | | |
| K20K | Telida | 35.72 326 | P | P | 10 09 37.6 | +0.6 |
| | baz=109 | | | | | |
| P17K | Kvichak River | 35.73 319 | P | P | 10 09 38.1 | +1.0 |
| | baz=101 | | | | | |
| N18K | Kilae Creek | 35.78 322 | P | P | 10 09 38.2 | +0.6 |
| | baz=104 | | | | | |
| COLD | Coldfoot | 35.80 334 | P | P | 10 09 38.5 | +0.8 |
| | baz=119 | | | | | |
| M18K | Stony River | 35.95 323 | P | P | 10 09 39.5 | +0.6 |
| | baz=105 | | | | | |
| E23K | Chandalar | 36.02 335 | P | P | 10 09 40.8 | +1.2 |
| | baz=120 | | | | | |
| J20K | Nowinta River | 36.03 328 | P | P | 10 09 40.5 | +0.9 |
| | baz=110 | | | | | |
| H21K | Melozitna Rive | 36.05 330 | P | P | 10 09 40.4 | +0.6 |
| | baz=114 | | | | | |
| G22K | Bettles | 36.12 333 | P | P | 10 09 40.9 | +0.6 |
| | baz=117 | | | | | |
| O17K | Koliganek Bris | 36.17 320 | P | P | 10 09 41.4 | +0.5 |
| | baz=101 | | | | | |
| TOLK | Toolik Lake Re | 36.30 336 | P | P | 10 09 42.6 | +0.6 |
| | baz=121 | | | | | |
| D24K | Happy Valley | 36.34 337 | P | P | 10 09 42.8 | +0.6 |
| | baz=123 | | | | | |
| N17K | Nushagak Hills | 36.37 321 | P | P | 10 09 43.3 | +0.7 |
| | baz=102 | | | | | |
| I20K | Naaghedeneel | 36.38 329 | P | P | 10 09 43.4 | +0.8 |
| | baz=111 | | | | | |
| L18K | Granite Mounta | 36.53 324 | P | P | 10 09 44.0 | +0.1 |
| L18K | | | IAmb | IAmb | 10 09 46.0 | |
| | comp=Z,4.4nm,0.8s | | | | | |
| L18K | Granite Mounta | 36.53 324 | P | P | 10 09 44.6 | +0.7 |
| | baz=105 | | | | | |
| J19K | Poorman | 36.58 327 | P | P | 10 09 44.9 | +0.6 |
| | baz=108 | | | | | |
| F22K | John River | 36.61 333 | P | P | 10 09 45.8 | +1.2 |
| | baz=117 | | | | | |
| C24K | Franklin Bluff | 36.62 338 | P | P | 10 09 45.4 | +0.9 |
| | baz=123 | | | | | |
| O16K | Kokwok River B | 36.64 319 | P | P | 10 09 45.5 | +0.7 |
| | baz=100 | | | | | |
| G21K | Allakaket | 36.66 332 | P | P | 10 09 45.8 | +0.8 |
| | baz=114 | | | | | |
| M17K | Holitna River | 36.68 322 | P | P | 10 09 46.2 | +1.0 |
| | baz=103 | | | | | |
| E22K | Anaktuvuk Pass | 36.78 335 | P | P | 10 09 46.9 | +0.9 |
| | baz=118 | | | | | |
| H20K | Anotleneega Mo | 36.79 330 | P | P | 10 09 47.2 | +1.1 |
| | baz=111 | | | | | |
| J18K | Innoko River | 36.88 326 | P | P | 10 09 47.4 | +0.5 |
| | baz=107,SNR=6.5 | | | | | |
| F21K | Alatna River | 36.94 333 | P | P | 10 09 48.8 | +1.4 |
| | baz=115 | | | | | |
| N16K | Nishlik Lake | 37.13 321 | P | P | 10 09 50.2 | +1.1 |
| | baz=101 | | | | | |
| C23K | Itkillik River | 37.24 337 | P | P | 10 09 50.6 | +0.7 |
| | baz=121 | | | | | |
| L17K | Donlin | 37.25 324 | P | P | 10 09 50.4 | +0.4 |
| | baz=103,SNR=5.6 | | | | | |
| M16K | Timber Creek | 37.32 322 | P | P | 10 09 51.7 | +1.1 |
| | baz=101 | | | | | |
| K17K | Iditarod | 37.38 324 | P | P | 10 09 51.5 | +0.4 |
| | baz=104,SNR=5.0 | | | | | |
| D22K | Ayikyak River | 37.41 335 | P | P | 10 09 52.4 | +1.0 |
| | baz=118 | | | | | |
| H19K | Roundabout Mou | 37.41 329 | P | P | 10 09 52.3 | +0.9 |
| | baz=110 | | | | | |
| O15K | Ungalikthiuk R | 37.45 318 | P | P | 10 09 52.1 | +0.3 |
| | baz=98 | | | | | |
| F20K | Avaraart Lake | 37.68 332 | P | P | 10 09 54.6 | +1.1 |
| | baz=112 | | | | | |
| L16K | Owhat River | 37.70 323 | P | P | 10 09 53.9 | +0.1 |
| L16K | | | IAmb | IAmb | 10 09 55.6 | |
| | comp=Z,5.6nm,0.9s | | | | | |
| L16K | Owhat River | 37.70 323 | P | P | 10 09 54.8 | +1.0 |
| | baz=102 | | | | | |
| N15K | Kwethluk River | 37.73 320 | P | P | 10 09 54.4 | +0.3 |
| N15K | Kwethluk River | 37.73 320 | P | P | 10 09 54.9 | +0.8 |
| | baz=99 | | | | | |
| C21K | Knifeblade Rid | 38.21 335 | P | P | 10 09 58.2 | +0.2 |
| | baz=116 | | | | | |
| E20K | Nigu River | 38.31 334 | P | P | 10 09 59.9 | +1.0 |
| | baz=113 | | | | | |
| B22K | Teshekpuk Lake | 38.33 337 | P | P | 10 10 01.7 | +2.7 |
| | baz=119 | | | | | |
| D20K | Etivluk River | 38.63 334 | P | P | 10 10 02.1 | +0.4 |
| | baz=113 | | | | | |
| H17K | Granite Mounta | 38.63 328 | P | P | 10 10 00.8 | -0.8 |
| | baz=105 | | | | | |
| L15K | Ungalak Mounta | 38.64 322 | P | P | 10 10 02.2 | +0.5 |
| | baz=100 | | | | | |
| M14K | Bethel | 38.73 321 | P | P | 10 10 02.9 | +0.5 |
| | baz=98 | | | | | |
| F18K | Selawik | 38.99 330 | P | P | 10 10 05.2 | +0.6 |
| | baz=107 | | | | | |
| D19K | Kuna River | 39.06 333 | P | P | 10 10 06.1 | +0.9 |
| | baz=111 | | | | | |
| L14K | Kuka Creek | 39.15 322 | P | P | 10 10 05.8 | -0.2 |
| L14K | Kuka Creek | 39.15 322 | P | P | 10 10 06.3 | +0.2 |
| | baz=98 | | | | | |
| M13K | Dall Lake | 39.37 320 | P | P | 10 10 07.4 | -0.4 |
| | baz=96 | | | | | |
| H16K | Elim | 39.53 327 | P | P | 10 10 09.7 | +0.5 |
| | baz=102 | | | | | |
| J14K | Nanvaranak Lak | 39.76 324 | P | P | 10 10 10.9 | -0.2 |
| | baz=99 | | | | | |
| C18K | Utukok River | 40.18 333 | P | P | 10 10 15.2 | +0.6 |
| | baz=108 | | | | | |
| G15K | Niukluk | 40.35 327 | P | P | 10 10 16.9 | +0.9 |
| | baz=101 | | | | | |
| PETK | Petropavlovsk- | 61.51 317 | P | P | 10 12 54.7 | -0.6 |
| | comp=Z,2.4nm,0.9s,baz=79,slow=15,SNR=4.1 | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | |
| ARCES | ARCESS Array B | 65.81 16 | P | P | 10 13 22.4 | -1.1 |
| | comp=Z,1.3nm,0.6s,baz=332,slow=6.9,SNR=8.0 | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | |
| FINES | FINESS Array B | 72.50 21 | P | P | 10 14 04.0 | -1.0 |
| | comp=Z,1.7nm,0.6s,baz=313,slow=6.2,SNR=9.0 | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | |
| GERES | GERESS Array B | 77.92 35 | P | P | 10 14 35.9 | -0.8 |
| | comp=Z,0.5nm,0.2s,baz=344,slow=6.1,SNR=2.4 | | | | | |
| | comp=Z,0.5nm,0.2s | | | | | |
| USRK | Ussuriysk Ar. | 80.26 321 | P | P | 10 14 47.6 | -1.9 |
| | comp=Z,1.1nm,0.5s,baz=5.1,slow=3.9,SNR=4.4 | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | |
| AKASG | Malin Array Be | 82.46 26 | P | P | 10 14 59.6 | -1.4 |
| | comp=Z,1.0nm,0.5s,baz=326,slow=4.8,SNR=1.7 | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | |
| ZALV | Zalesovo Beam | 85.89 352 | P | P | 10 15 17.2 | -1.2 |
| | comp=Z,0.9nm,0.5s,baz=350,slow=3.5,SNR=3.7 | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | |
| SONM | Songino Array | 87.41 337 | P | P | 10 15 25.9 | -0.3 |
| | comp=Z,0.6nm,0.6s,baz=34,slow=5.4,SNR=2.2 | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | |
| BVAR | Borovoye Array | 87.50 1 | P | P | 10 15 25.2 | -1.1 |
| | comp=Z,1.7nm,0.5s,baz=4.4,slow=3.2,SNR=6.9 | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | |
| KURBB | Kurchatov Arra | 89.71 356 | P | P | 10 15 35.2 | -1.6 |
| | comp=Z,0.8nm,0.5s,baz=1.9,slow=5.0,SNR=6.3 | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | |
| HHC | Hu-ho-hao-te | 91.85 331 | eP | P | 10 15 46.8 | -0.3 |
| HHC | | | sP | sP | 10 15 53.0 | +2.8 |
| HHC | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | |
| MKAR | Makanchi Array | 93.22 353 | P | P | 10 15 52.1 | -1.1 |
| | comp=Z,1.0nm,0.7s,baz=19,slow=4.1,SNR=7.7 | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | |
| WRA | Warramunga Arr | 123.29 271 | PKP | PKPdf | 10 21 34.9 | -1.2 |
| | comp=Z,0.6nm,1.1s,baz=53,slow=1.8,SNR=5.4 | | | | | |
| ASAR | Alice Springs | 125.70 268 | PKP | PKPdf | 10 21 39.1 | -1.6 |
| | comp=Z,0.3nm,0.9s,baz=72,slow=5.9,SNR=2.0 | | | | | |

*SEA* ***24*** *10:48:58.3±3.4, 44°.33N±0°.05×125°.00W±0°.08, h42km±2km, Error ellipse: s-maj=10.2km s-min=8.0km az=69.0*

**NEIC 24 10:48:50.3±1.9, 44°.23N±0°.03×125°.40W±0°.08, h10km±2km, ML2.8/86, ML2.7/20(SEA), Error ellipse: s-maj=10.0km s-min=5.6km az=266.0, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I02E | **Swisshome, OR** | **1.13** | **96** | | Pn | 10 49 13.4 | +1.3 |
| I02E | | | | | Sb | 10 49 25.5 | -1.0 |
| MPOR | **Mary's Peak** | **1.36** | **78** | | Pg | 10 49 17.8 | +1.4 |
| COR | **Corvallis** | **1.55** | **76** | Pn | Pn | 10 49 18.1 | +0.3 |
| BUCK | **Buck Mountain** | **1.74** | **90** | | Pn | 10 49 20.1 | -0.5 |
| G03D | **McMinnville, O** | **1.81** | **56** | Pn | Pn | 10 49 22.0 | +0.4 |
| G03D | | | | IAML | | 10 49 31.2 | |
| | comp=N,62nm,0.6s | | | | | | |
| G03D | | | | IAML | | 10 49 37.4 | |
| | comp=E,54nm,0.5s | | | | | | |
| DBO | **Dodson Butte** | **1.92** | **125** | Pn | Pn | 10 49 19.9 | -3.2 |
| H04D | **Lebanon** | **1.93** | **80** | Pn | Pn | 10 49 23.0 | -0.2 |
| KMOR | **Kings Mountain** | **1.96** | **43** | | Pb | 10 49 25.6 | -0.5 |
| K02D | **Willamette Mer** | **1.99** | **140** | Pn | Pb | 10 49 25.4 | -1.1 |
| BROR | **Big Rock Looko** | **2.12** | **88** | | Pb | 10 49 28.9 | +0.1 |
| F03A | **Seaside** | **2.15** | **37** | | Pn | 10 49 26.9 | +0.8 |
| I04A | **Tendick Farm,** | **2.20** | **100** | Pn | Pn | 10 49 26.6 | -0.3 |
| I04A | | | | IAML | | 10 49 41.6 | |
| | comp=N,37nm,0.2s | | | | | | |
| I04A | | | | IAML | | 10 49 42.0 | |
| | comp=E,47nm,0.2s | | | | | | |
| HBO | **Huckleberry Mo** | **2.26** | **99** | | Pb | 10 49 29.9 | -1.3 |
| G04A | **Mulino** | **2.30** | **64** | | Pb | 10 49 32.5 | +0.6 |
| H04A | **Detroit Lake** | **2.35** | **78** | | Pn | 10 49 28.1 | -0.8 |
| H04A | | | | IAML | | 10 49 44.9 | |
| | comp=E,40nm,0.4s | | | | | | |
| H04A | | | | IAML | | 10 49 46.5 | |
| | comp=N,29nm,0.6s | | | | | | |
| HUMO | **Hull Mountain** | **2.41** | **131** | Pn | Pn | 10 49 29.8 | 0.0 |
| RADR | **Rader Ridge** | **2.47** | **27** | Pn | Pn | 10 49 31.3 | +0.7 |
| RADR | | | | IAML | | 10 50 34.5 | |
| | comp=E,49nm,1.6s | | | | | | |
| RADR | | | | IAML | | 10 50 38.1 | |
| | comp=N,58nm,1.5s | | | | | | |
| PRLK | **Prince Lake** | **2.47** | **89** | | Pn | 10 49 31.0 | +0.2 |
| PRLK | | | | IAML | | 10 49 48.2 | |
| | comp=E,30nm,0.4s | | | | | | |
| L02F | **Cave Junction** | **2.50** | **147** | Pn | Pn | 10 49 31.3 | +0.3 |
| B023 | **Clatskanie** | **2.50** | **40** | | Pn | 10 49 33.0 | +2.1 |
| F04D | **Rainier, OR** | **2.51** | **42** | Pn | Pn | 10 49 30.1 | -0.7 |
| E03A | **Lebam** | **2.66** | **29** | Pn | Pn | 10 49 32.9 | -0.2 |
| E03A | | | | IAML | | 10 50 22.8 | |
| | comp=N,40nm,0.4s | | | | | | |
| E03A | | | | IAML | | 10 50 35.4 | |
| | comp=E,59nm,1.1s | | | | | | |
| F04A | **Amboy** | **2.71** | **50** | Pn | Pn | 10 49 33.7 | -0.2 |
| F04A | | | | IAML | | 10 49 58.1 | |
| | comp=N,50nm,0.6s | | | | | | |
| HOOD | **Mount Hood Mea** | **2.89** | **66** | Pn | Pb | 10 49 41.0 | -0.9 |
| HOOD | | | | IAML | | 10 49 55.2 | |
| | comp=E,47nm,0.6s | | | | | | |
| HOOD | | | | IAML | | 10 49 56.6 | |
| | comp=N,50nm,0.7s | | | | | | |
| MTMW | **Mount Mitchell** | **2.89** | **50** | | Pb | 10 49 40.2 | -1.7 |
| B203 | **Quarry, Mount** | **2.91** | **47** | | Pb | 10 49 40.2 | -2.1 |
| FL2 | **Flat Top 2** | **2.92** | **47** | | Pb | 10 49 40.2 | -2.3 |
| I05D | **Terrebonne, OR** | **2.92** | **86** | | Pn | 10 49 36.8 | 0.0 |
| I05D | | | | IAML | | 10 50 00.0 | |
| | comp=N,20nm,2.5s | | | | | | |
| I05D | | | | IAML | | 10 50 56.0 | |
| | comp=E,16nm,3.5s | | | | | | |
| STD | **Studebaker Rid** | **3.01** | **47** | | Pb | 10 49 41.7 | -2.4 |
| CDFW | **Cedar Flats** | **3.03** | **50** | | Pb | 10 49 42.2 | -2.2 |
| G05A | **Wamic** | **3.08** | **69** | Pn | Pn | 10 49 40.4 | +1.3 |
| G05A | | | | IAML | | 10 50 00.7 | |
| | comp=E,36nm,0.7s | | | | | | |
| G05A | | | | IAML | | 10 50 19.4 | |
| | comp=N,32nm,3.8s | | | | | | |
| K04D | **Chiloquin, OR** | **3.10** | **120** | Pn | Pn | 10 49 37.9 | -1.5 |
| K04D | | | | IAML | | 10 50 52.7 | |
| | comp=N,37nm,1.5s | | | | | | |
| K04D | | | | IAML | | 10 50 53.3 | |
| | comp=E,36nm,1.2s | | | | | | |
| WISH | **Wishkah** | **3.11** | **21** | Pn | Pn | 10 49 37.8 | -1.5 |
| J05D | **Fort Rock, OR** | **3.16** | **106** | Pn | Pn | 10 49 40.4 | +0.2 |
| J05D | | | | IAML | | 10 50 52.7 | |
| | comp=E,13nm,3.6s | | | | | | |
| PINE | **Pine Mountain** | **3.25** | **96** | Pn | Pn | 10 49 44.0 | +2.5 |
| NLWA | **Neilton Lookou** | **3.34** | **18** | Pn | Pn | 10 49 40.5 | -2.1 |
| NLWA | | | | IAML | | 10 50 35.6 | |
| | comp=E,30nm,0.6s | | | | | | |
| NLWA | | | | IAML | | 10 51 05.3 | |
| | comp=E,23nm,3.4s | | | | | | |
| G06A | **Carlson Farm,** | **3.54** | **72** | Pn | Pn | 10 49 45.1 | -0.3 |
| G06A | | | | IAML | | 10 50 08.8 | |
| | comp=N,10nm,4.8s | | | | | | |
| G06A | | | | IAML | | 10 50 12.3 | |
| | comp=E,11nm,2.9s | | | | | | |
| LON | **Longmire** | **3.57** | **44** | | Pn | 10 49 48.2 | +2.5 |
| LON | | | | IAML | | 10 50 52.5 | |
| | comp=E,9.8nm,0.3s | | | | | | |
| LON | | | | IAML | | 10 51 30.4 | |
| | comp=N,8.8nm,3.5s | | | | | | |
| C03A | **Quillayute Air** | **3.77** | **9** | Pn | Pn | 10 49 48.2 | -0.1 |
| GNW | **Green Mountain** | **3.79** | **27** | | Pn | 10 49 48.3 | -0.4 |
| GNW | | | | IAML | | 10 50 49.5 | |
| | comp=E,18nm,0.6s | | | | | | |
| D05A | **Enumclaw** | **3.81** | **38** | | Pn | 10 49 48.6 | -0.3 |
| D05A | | | | IAML | | 10 50 57.2 | |
| | comp=E,23nm,0.9s | | | | | | |
| D05A | | | | IAML | | 10 51 07.5 | |
| | comp=N,24nm,0.8s | | | | | | |
| KMPM | **Mount Pierce** | **3.92** | **166** | Pn | Pn | 10 49 50.5 | -0.2 |
| B04A | **Port Angeles** | **4.05** | **18** | Pn | Pn | 10 49 51.1 | -1.2 |
| B04A | | | | IAML | | 10 50 53.5 | |
| | comp=E,20nm,0.3s | | | | | | |
| F07A | **Phinny Hill Vi** | **4.22** | **65** | Pn | Pn | 10 49 54.1 | -0.5 |
| F07A | | | | IAML | | 10 50 29.0 | |
| | comp=E,12nm,0.7s | | | | | | |
| F07A | | | | IAML | | 10 50 40.6 | |
| | comp=N,9.8nm,0.6s | | | | | | |
| I07A | **Izee** | **4.25** | **90** | | Pn | 10 49 54.3 | -0.8 |
| I07A | | | | IAML | | 10 51 54.8 | |
| | comp=E,6.9nm,3.5s | | | | | | |
| HATC | **Hat Creek Radi** | **4.48** | **138** | Pn | Pn | 10 49 58.5 | +0.2 |
| LTY | **Liberty** | **4.49** | **46** | Pn | Pn | 10 49 58.5 | +0.1 |
| LTY | | | | IAML | | 10 50 39.9 | |
| | comp=N,5.7nm,2.9s | | | | | | |
| LTY | | | | IAML | | 10 52 30.1 | |
| | comp=E,6.0nm,4.5s | | | | | | |
| E07A | **Sunnyside** | **4.55** | **57** | Pn | Pn | 10 49 57.9 | -1.3 |
| E07A | | | | IAML | | 10 50 34.3 | |
| | comp=N,7.8nm,0.6s | | | | | | |
| E07A | | | | IAML | | 10 50 46.2 | |
| | comp=E,7.8nm,2.5s | | | | | | |
| QZB | **Mount Ozzard** | **4.73** | **359** | Pn | Pn | 10 50 01.8 | +0.1 |
| KCPM | **Cahto Peak** | **4.74** | **163** | Pn | Pn | 10 50 01.3 | -0.6 |
| J08A | **Circle Bar Ran** | **5.09** | **97** | Pn | Pn | 10 50 04.9 | -1.8 |
| J08A | | | | IAML | | 10 50 57.5 | |
| | comp=N,5.4nm,4.7s | | | | | | |
| J08A | | | | IAML | | 10 51 01.6 | |

comp=E,4.9nm,3.1s
**WVOR Wild Horse Val 5.25 108** Pn Pn 10 50 08.2 -0.7
WVOR IAML 10 52 10.5
comp=E,5.3nm,5.0s
WVOR IAML 10 53 23.0
comp=E,4.9nm,4.6s
**D08A Wollman Farm, 5.35 56** Pn Pn 10 50 10.7 +0.5
D08A IAML 10 52 22.5
comp=E,7.1nm,4.3s
D08A IAML 10 53 28.2
comp=N,5.2nm,4.2s
**ORV Oroville 5.50 147** Pn Pn 10 50 11.8 -0.4
**E09A Wood Farm, Sta 5.60 63** Pn Pn 10 50 13.7 +0.2
**CBB Campbell River 5.81 0** Pn Pn 10 50 15.3 -1.1
**BMO Blue Mountains 5.82 81** Pn Pn 10 50 16.6 -0.2
**B08A Colville Reser 5.89 43** Pn Pn 10 50 16.7 -0.9
**F10A Beach Ranch, E 6.04 70** Pn Pn 10 50 18.6 -1.1
**C09A Chrisman Ranch 6.12 52** Pn Pn 10 50 18.7 -2.0
**PNTR Pine Nut 6.72 138** Pn Pn 10 50 26.5 -2.8
**NEW Newport 7.02 52** Pn Pn 10 50 33.2 +0.2
**V35K Ketchikan 11.81 342** Pn Pn 10 51 41.0 +2.5
**SNCC San Nicolas Is 11.88 155** Pn Pn 10 51 41.1 +1.4

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*BJI* ***24*** *10:49:22.5±0.0, 10°.29N×91°.67E, h5km, mb5.4/80, mB5.6/29, Ms5.1/38, Ms7 4.8/35*
*IDC* ***24*** *10:49:24.3±0.3, 10°.46N×91°.76E, h0km, mb5.1/37, mbtmp5.0/39, ML4.6/2, MS4.8/5, Error ellipse: s-maj=11.7km s-min=9.3km az=46.0*
*MOS* ***24*** *10:49:24.9±0.9, 10°.49N×91°.67E, h12km, mb5.6/101, MS4.8/5, Error ellipse: s-maj=5.9km s-min=3.3km az=111.0*
*NEIC* ***24*** *10:49:27.5±1.9, 10°.54N±0°.06×91°.71E±0°.06, h10km±1km, mb5.5/337, Ms_20 5.2/32, Error ellipse: s-maj=10.7km s-min=9.6km az=116.0*
*DJA* ***24*** *10:49:27.3±0.3, 10°.N±4°×9°.2E±°, h10km, M5.6/19, mB5.9/8, mb5.5/19, MLv5.7/4, Mw(mB)5.5/8*
*BGR* ***24*** *10:49:28.9, 9°.93N×91°.24E, h22km±1km, mb5.1*
*NDI* ***24*** *10:49:28.2±3.2, 10°.63N×91°.60E, h10km, mb5.5, ML4.8, mb5.5(NEIC)*
**ISC 24 10:49:27.6±0.3, 10°.50N±0°.03×91°.65E±0°.03, h17km±1km, h18km; pP-P, n1461, σ1§02/1478, mb5.5/383, MS5.1/32, 73C-20D, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **PBA** | **Port Blair** | **1.57** | **43** | Pn | **Pn** | **10 49 55.2** | **+0.5** |
| **PBA** | **Port Blair** | **1.57** | **43** | *eP* | **Pb** | **10 49 55.8** | **-0.4** |
| PBA | | | | eS | **Sg** | **10 50 19.4** | **+1.0** |
| PBA | | | | IAML | | 10 50 27.7 | |
| | comp=E,21μm,0.7s | | | | | | |
| PBA | | | | IAML | | 10 50 30.2 | |
| | comp=N,12μm,0.9s | | | | | | |
| **CMBY** | **CAMPBELL BAY** | **4.13** | **147** | *eP* | **Pn** | **10 50 30.3** | **+0.3** |
| CMBY | | | | IAML | | 10 51 21.1 | |
| | comp=N,1μm,0.9s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **7.42** | **135** | P | **Pn** | **10 51 15.5** | **+0.4** |
| **LHMI** | **Lhok Sumawe** | **7.42** | **135** | Pn | **Pn** | **10 51 15.3** | **+0.3** |
| **LHMI** | **Lhok Sumawe** | **7.42** | **135** | P | **Pn** | **10 51 15.0** | **-0.1** |
| | comp=N,429nm,0.9s,comp=N,6μmcomp=N,2.1nm | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **7.78** | **142** | P | **Pn** | **10 51 19.6** | **-0.5** |
| | comp=N,190nm,0.9s,comp=N,5μmcomp=N,0.8nm | | | | | | |
| **SURA** | **Surathani** | **7.98** | **99** | P | **Pn** | **10 51 24.2** | **+1.4** |
| **SRIT** | **Nakonsritamara** | **8.07** | **103** | P | **Pn** | **10 51 25.3** | **+1.2** |
| **SRIT** | **Nakonsritamara** | **8.07** | **103** | | **Pn** | **10 51 25.7** | **+1.6** |
| **SRDT** | **SRDT** | **8.24** | **62** | P | **Pn** | **10 51 28.7** | **+2.3** |
| **KULM** | **Kulim** | **10.31** | **119** | | **Pn** | **10 51 54.3** | **-0.5** |
| **PSI** | **Prapat** | **10.52** | **136** | P | **Pn** | **10 51 57.8** | **0.0** |
| **PSI** | **Prapat** | **10.52** | **136** | P | **Pn** | **10 51 57.4** | **-0.4** |
| **RPSI** | **Rantau Prapat** | **10.60** | **137** | Pn | **Pn** | **10 51 57.4** | **-1.4** |
| **CM31** | **Chiang Mai Arr** | **10.60** | **41** | Pn | **Pn** | **10 51 57.8** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **10.60** | **41** | Pn | **Pn** | **10 51 58.9** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **10.60** | **41** | Pn | **Pn** | **10 51 58.7** | **-0.1** |
| | comp=N,1.4nm,0.3s,baz=235,slow=15,SNR=39 | | | | | | |
| CMAR | | | | LR | LR | 10 55 07.4 | |
| | comp=N,1μm,21.4s,baz=235,slow=32 | | | | | | |
| | comp=N,25nm,0.8s | | | | | | |
| **GSI** | **Gunungsitoli** | **10.87** | **147** | Pn | **Pn** | **10 52 02.9** | **+0.4** |
| **IPM** | **Ipoh** | **11.05** | **122** | P | **Pn** | **10 52 03.9** | **-1.1** |
| **IPM** | **Ipoh** | **11.05** | **122** | Pn | **Pn** | **10 52 03.8** | **-1.2** |
| **PALK** | **Pallekele** | **11.28** | **254** | | **Pn** | **10 52 09.2** | **+1.1** |
| **PALK** | **Pallekele** | **11.28** | **254** | Pn | **Pn** | **10 52 07.4** | **-0.7** |
| | comp=N,2.9nm,0.3s,baz=171,slow=14,SNR=8.9 | | | | | | |
| PALK | | | | Sn | Sn | 10 54 00.1 | -14 |
| | comp=N,10.0nm,0.3s,baz=82,slow=22,SNR=11 | | | | | | |
| PALK | | | | LR | LR | 10 56 10.6 | |
| | comp=N,6μm,19.6s,baz=158,slow=36 | | | | | | |
| | comp=N,32nm,0.9s | | | | | | |
| **PALK** | **Pallekele** | **11.28** | **254** | *eP* | **Pn** | **10 52 07.8** | **-0.3** |
| **MDRS** | **Chennai** | **11.45** | **284** | *eP* | **Pn** | **10 52 10.5** | **+0.1** |
| MDRS | | | | *ex* | x | 10 54 06.1 | |
| MDRS | | | | IAML | | 10 54 11.4 | |
| | comp=E,230nm,0.9s | | | | | | |
| MDRS | | | | IAML | | 10 54 13.3 | |
| | comp=N,498nm,1.2s | | | | | | |
| **PHRA** | **Phrae** | **11.50** | **45** | | **Pn** | **10 52 11.8** | **+0.7** |
| **CRAI** | **Chiangrai** | **12.81** | **40** | | **Pn** | **10 52 30.1** | **+1.0** |
| **SALM** | **Salem** | **13.25** | **276** | *eP* | **Pn** | **10 52 35.2** | **+0.2** |
| **JHSG** | **JHARSUGUGA** | **13.51** | **327** | *eP* | **Pn** | **10 52 37.9** | **-0.7** |
| JHSG | | | | IAmb | IAmb | 10 52 49.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **BKNI** | **Bangkinang** | **13.76** | **137** | Pn | **Pn** | **10 52 43.0** | **+1.0** |
| **SISI** | **Saibi** | **13.89** | **147** | P | **Pn** | **10 52 43.8** | **0.0** |
| | comp=Z,141nm,1.2s | | | | | | |
| **KOD** | **Kodaikanal** | **13.95** | **270** | *eP* | **Pn** | **10 52 44.7** | **-0.2** |
| KOD | | | | IAmb | IAmb | 10 52 51.7 | |
| | comp=Z,180nm,1.2s | | | | | | |
| **UBPT** | **Khong Chiam** | **14.29** | **69** | P | **Pn** | **10 52 51.0** | **+1.8** |
| **UBPT** | **Khong Chiam** | **14.29** | **69** | Pn | **Pn** | **10 52 47.5** | **-1.7** |
| **BOK** | **Bokaro** | **14.32** | **338** | *eP* | **Pn** | **10 52 48.5** | **-1.1** |
| BOK | | | | IAmb | IAmb | 10 53 00.1 | |
| | comp=Z,179nm,0.9s | | | | | | |
| **PDSI** | **Padang** | **14.33** | **142** | P | **Pn** | **10 52 50.2** | **+0.3** |
| **IMP** | **Imphal** | **14.42** | **8** | *eP* | **Pn** | **10 52 47.9** | **-3.2** |
| IMP | | | | IAmb | IAmb | 10 53 18.3 | |
| | comp=Z,62nm,0.9s | | | | | | |
| **HYB** | **Hyderabad** | **14.44** | **300** | *eP* | **Pn** | **10 52 50.4** | **-1.1** |
| HYB | | | | eS | **Sn** | **10 55 31.0** | **-0.3** |
| **TRD** | **Trivandrum** | **14.62** | **263** | *eP* | **Pn** | **10 52 54.6** | **+0.8** |
| **BLSP** | **Bilaspur** | **14.72** | **323** | *eP* | **Pn** | **10 52 51.6** | **-3.6** |
| BLSP | | | | IAmb | IAmb | 10 53 00.5 | |
| | comp=Z,111nm,0.8s | | | | | | |
| **SHL** | **Shillong** | **14.99** | **1** | Pn | **Pn** | **10 52 56.9** | **-2.0** |
| **SHL** | **Shillong** | **14.99** | **1** | *eP* | **Pn** | **10 52 57.7** | **-1.2** |
| **SHL** | **Shillong** | **14.99** | **1** | P | **Pn** | **10 52 57.3** | **-1.6** |
| | SNR=48 | | | | | | |
| **SHL** | **Shillong** | **14.99** | **1** | P | **Pn** | **10 52 56.9** | **-2.0** |
| **KOHI** | **KOHIMA** | **15.32** | **8** | *eP* | **Pn** | **10 52 59.1** | **-4.1** |
| KOHI | | | | IAmb | IAmb | 10 53 14.6 | |
| | comp=Z,364nm,1.1s | | | | | | |
| **PPSI** | **Pulau Pagai** | **15.59** | **147** | P | **Pn** | **10 53 05.7** | **-0.9** |
| **TNCH** | **TengChong** | **15.86** | **23** | ⇑*iP* | **Pn** | **10 53 10.3** | **0.0** |
| TNCH | | | | pP | P | 10 53 15.4 | +1.4 |
| TNCH | | | | sP | pP | 10 53 18.5 | +0.2 |
| TNCH | | | | PP | **pwP** | **10 53 24.9** | **+4.3** |
| TNCH | | | | S | **Sn** | **10 56 02.8** | **-3.0** |
| TNCH | | | | sS | S | 10 56 12.1 | -8.0 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,120nm,2.0s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,1μm,4.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,1μm,18.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,2μm,15.7s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,3μm,17.4s | | | | | | |
| **TPRI** | **Tanjung Pinang** | **15.95** | **126** | P | **P** | **10 53 19.8** | **+4.9** |
| **SLVN** | **Son La** | **15.96** | **46** | | **Pn** | **10 53 10.7** | **-0.7** |
| SLVN | | | | IAmb | IAmb | 10 53 17.6 | |
| | comp=Z,322nm,0.9s | | | | | | |
| **MOKO** | **MOKOCHONG** | **15.97** | **9** | *eP* | **Pn** | **10 53 09.5** | **-2.2** |
| **NGP** | **Nagpur** | **16.08** | **313** | *eP* | **Pn** | **10 53 13.6** | **+0.6** |
| NGP | | | | IAmb | IAmb | 10 53 20.6 | |
| | comp=Z,170nm,0.6s | | | | | | |
| **GTK** | **Tadong** | **16.98** | **351** | *eP* | **Pn** | **10 53 25.3** | **+0.8** |
| GTK | | | | IAmb | IAmb | 10 53 35.8 | |
| | comp=Z,562nm,1.4s | | | | | | |
| **ZIRO** | **ZIRO** | **17.06** | **7** | *eP* | **Pn** | **10 53 23.5** | **-2.1** |
| ZIRO | | | | IAmb | IAmb | 10 53 40.7 | |
| | comp=Z,198nm,1.1s | | | | | | |
| **AKL** | **Akola** | **17.35** | **308** | *eP* | **Pn** | **10 53 28.9** | **-0.1** |
| AKL | | | | IAmb | IAmb | 10 53 37.6 | |
| | comp=Z,182nm,0.8s | | | | | | |
| **ALBI** | **Allahabad** | **17.44** | **329** | *eP* | **Pn** | **10 53 30.0** | **-0.1** |
| ALBI | | | | IAmb | IAmb | 10 53 39.8 | |
| | comp=Z,280nm,1.1s | | | | | | |
| **KMI** | **Kunming** | **17.95** | **34** | ⇑P | **P** | **10 53 38.0** | **+0.7** |
| KMI | | | | sP | pwP | 10 53 46.5 | +2.4 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,100nm,1.1s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,1μm,7.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,2μm,19.4s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,3μm,16.3s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,3μm,16.0s | | | | | | |
| **KAD** | **Karad** | **18.25** | **294** | *eP* | **P** | **10 53 40.9** | **+0.6** |
| KAD | | | | IAmb | IAmb | 10 53 47.7 | |
| | comp=Z,46nm,0.9s | | | | | | |
| **VLK** | **Valmikinagar** | **18.26** | **337** | *eP* | **P** | **10 53 42.5** | **+2.1** |
| **PZH** | **PanZhiHua** | **18.56** | **30** | P | **Pn** | **10 53 45.8** | **+1.8** |
| PZH | | | | S | **S** | **10 57 14.5** | **-0.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,1.2s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,1μm,9.4s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2μm,14.2s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2μm,13.7s | | | | | | |
| PZH | | | | LR | LR | | |
| | comp=Z,2μm,17.7s | | | | | | |
| **BHPL** | **Bhopal** | **18.57** | **315** | *eP* | **Pn** | **10 53 44.3** | **+0.1** |
| BHPL | | | | IAmb | IAmb | 10 54 06.5 | |
| | comp=Z,104nm,0.8s | | | | | | |
| **HMDM** | **Hanimaadhoo** | **18.62** | **260** | P | **P** | **10 53 43.1** | **-1.3** |
| **POO** | **Poona** | **18.98** | **297** | *eP* | **Pn** | **10 53 49.5** | **+0.4** |
| **LSA** | **Lhasa** | **19.11** | **359** | P | **P** | **10 53 49.9** | **-0.3** |
| **LSA** | **Lhasa** | **19.11** | **359** | P | **Pn** | **10 53 51.4** | **+0.4** |
| **LSA** | **Lhasa** | **19.11** | **359** | P | **P** | **10 53 49.9** | **-0.3** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,901nm,1.7s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **19.14** | **130** | P | **P** | **10 53 48.9** | **-1.2** |
| **JHNI** | **Jhansi** | **19.39** | **322** | *eP* | **P** | **10 53 52.7** | **-0.1** |
| **QIZ** | **Qiongzhong** | **19.52** | **62** | P | **P** | **10 53 54.8** | **+0.6** |
| **QIZ** | **Qiongzhong** | **19.52** | **62** | P | **P** | **10 53 54.5** | **+0.2** |
| QIZ | | | | S | **S** | **10 57 34.1** | **-0.2** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,55nm,0.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **19.52** | **62** | P | **P** | **10 53 54.5** | **+0.2** |
| **GUNA** | **GUNA** | **19.57** | **318** | *eP* | **Pn** | **10 53 55.7** | **-0.5** |
| GUNA | | | | IAmb | IAmb | 10 54 04.8 | |
| | comp=Z,180nm,0.9s | | | | | | |
| **LWLI** | **Liwa** | **19.76** | **141** | P | **P** | **10 53 57.3** | **+0.3** |
| | comp=Z,377nm,0.8s | | | | | | |
| **KASI** | **Kota Agung** | **20.42** | **141** | P | **P** | **10 54 04.5** | **+0.4** |
| | comp=Z,228nm,0.9s | | | | | | |
| **KSM** | **Kuching** | **20.59** | **115** | P | **P** | **10 54 05.0** | **-1.0** |
| **KSM** | **Kuching** | **20.59** | **115** | P | **P** | **10 54 04.8** | **-1.3** |
| **KAAM** | **Kaadhehdhoo** | **21.04** | **243** | P | **P** | **10 54 12.7** | **+1.8** |
| KAAM | | | | IAmb | IAmb | 10 54 20.0 | |
| | comp=Z,334nm,1.4s | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **21.04** | **243** | P | **P** | **10 54 17.6** | **+6.8** |
| **GYA** | **Guiyang** | **21.29** | **40** | ⇓P | **P** | **10 54 14.8** | **+1.2** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,200nm,0.9s | | | | | | |
| **PTH** | **Pithoragarh** | **21.75** | **332** | *eP* | **P** | **10 54 19.7** | **+1.1** |
| PTH | | | | IAmb | IAmb | 10 54 28.6 | |
| | comp=Z,272nm,1.1s | | | | | | |
| **SBUM** | **Sibu** | **21.93** | **110** | P | **P** | **10 54 19.6** | **-0.9** |
| **STKI** | **Sintang** | **22.28** | **117** | P | **P** | **10 54 23.8** | **-0.3** |
| | comp=Z,179nm,0.9s | | | | | | |
| **SONA** | **Sohna** | **22.33** | **324** | *eP* | **P** | **10 54 25.3** | **+0.7** |
| SONA | | | | IAmb | IAmb | 10 54 32.7 | |
| | comp=Z,548nm,0.9s | | | | | | |
| **NPLP** | **NPLP New Delhi** | **22.58** | **325** | *eP* | **P** | **10 54 27.9** | **+0.7** |
| NPLP | | | | IAmb | IAmb | 10 54 38.5 | |
| | comp=Z,162nm,1.2s | | | | | | |
| **NDI** | **New Delhi** | **22.59** | **325** | *eP* | **P** | **10 54 27.7** | **+0.4** |
| NDI | | | | IAmb | IAmb | 10 54 37.8 | |
| | comp=Z,225nm,1.1s | | | | | | |
| **AJM** | **Ajmer** | **22.60** | **317** | *eP* | **P** | **10 54 28.4** | **+0.9** |
| AJM | | | | IAmb | IAmb | 10 54 36.1 | |
| | comp=Z,365nm,1.4s | | | | | | |
| **KUDL** | **Kundal** | **22.60** | **323** | *eP* | **P** | **10 54 27.6** | **+0.2** |
| KUDL | | | | IAmb | IAmb | 10 54 35.1 | |
| | comp=Z,178nm,1.0s | | | | | | |
| **COCO** | **West Island** | **23.12** | **167** | P | **P** | **10 54 34.9** | **+1.9** |
| **COCO** | **West Island** | **23.12** | **167** | P | **P** | **10 54 32.7** | **-0.3** |
| **COCO** | **West Island** | **23.12** | **167** | P | **P** | **10 54 32.7** | **-0.3** |
| COCO | | | | pmax | pmax | | |
| | comp=Z,319nm,1.0s | | | | | | |
| **CD2** | **Chengdu** | **23.22** | **27** | ⇑P | **P** | **10 54 33.6** | **-0.3** |
| CD2 | | | | S | **S** | **10 58 49.0** | **+3.7** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,100nm,1.0s | | | | | | |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,2μm,3.5s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,3μm,14.1s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,2μm,10.6s | | | | | | |
| CD2 | | | | LR | LR | | |
| | comp=Z,3μm,13.1s | | | | | | |
| **DDI** | **Dehra Dun** | **23.43** | **329** | *eP* | **P** | **10 54 37.7** | **+1.6** |
| DDI | | | | IAmb | IAmb | 10 54 50.2 | |
| | comp=Z,379nm,0.8s | | | | | | |
| **KLP** | **Kalpa** | **24.33** | **331** | *eP* | **P** | **10 54 46.0** | **+1.1** |
| KLP | | | | IAmb | IAmb | 10 54 51.4 | |
| | comp=Z,348nm,1.0s | | | | | | |
| **HKPS** | **Hong Kong Po S** | **24.51** | **59** | P | **P** | **10 54 47.7** | **+1.4** |
| **HKPS** | **Hong Kong Po S** | **24.51** | **59** | P | **P** | **10 54 45.2** | **-1.1** |
| HKPS | | | | IAmb | IAmb | 10 54 48.2 | |
| | comp=Z,167nm,1.2s | | | | | | |
| **SMLA** | **Simla** | **24.53** | **329** | *eP* | **P** | **10 54 47.8** | **+1.4** |
| SMLA | | | | IAmb | IAmb | 10 54 56.1 | |
| | comp=Z,297nm,1.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **24.70** | **98** | P | **P** | **10 54 49.9** | **+1.7** |
| **KKM** | **Kota Kinabalu** | **24.70** | **98** | P | **P** | **10 54 48.7** | **+0.4** |
| KKM | | | | IAmb | IAmb | 10 54 51.2 | |
| | comp=Z,99nm,1.1s | | | | | | |
| **HNLY** | **HANLEY** | **25.06** | **334** | *eP* | **P** | **10 54 52.8** | **+1.0** |
| **XMIS** | **Christmas Isla** | **25.07** | **146** | P | **P** | **10 54 52.0** | **+0.6** |
| XMIS | | | | IAmb | IAmb | 10 55 08.6 | |
| | comp=Z,144nm,0.9s | | | | | | |
| **BHK** | **Bhakra** | **25.15** | **328** | *eP* | **P** | **10 54 53.2** | **+1.2** |
| **SMRI** | **Semarang** | **25.57** | **132** | P | **P** | **10 54 56.5** | **+0.5** |
| **GOMU** | **GeErMu** | **25.74** | **6** | P | **P** | **10 54 58.5** | **+0.8** |
| GOMU | | | | pP | pP | 10 55 02.0 | -0.1 |
| GOMU | | | | sP | pwP | 10 55 05.3 | -0.7 |
| GOMU | | | | pmax | pmax | | |
| | comp=Z,90nm,0.9s | | | | | | |
| **ENH** | **Enshi** | **25.75** | **38** | P | **P** | **10 54 57.1** | **-0.3** |
| **ENH** | **Enshi** | **25.75** | **38** | P | **P** | **10 54 57.2** | **-0.2** |
| **DHRM** | **DHARAMSHALA** | **25.87** | **329** | *eP* | **P** | **10 54 59.5** | **+0.7** |
| DHRM | | | | IAmb | IAmb | 10 55 11.9 | |
| | comp=Z,94nm,1.1s | | | | | | |
| **DGAR** | **Diego Garcia** | **26.11** | **228** | P | **P** | **10 55 01.2** | **+0.4** |
| **DGAR** | **Diego Garcia** | **26.11** | **228** | P | **P** | **10 55 01.3** | **+0.4** |
| DGAR | | | | pmax | pmax | | |
| | comp=Z,293nm,1.1s | | | | | | |
| **UGM** | **Wanagama** | **26.22** | **134** | P | **P** | **10 55 00.7** | **-1.2** |
| **H08S3** | **Diego Garcia H** | **26.23** | **227** | T | T | 11 22 17.4 | |
| | baz=47,slow=75,SNR=4215 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.24** | **227** | T | T | 11 22 09.8 | |
| | baz=47,slow=75,SNR=2136 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.25** | **227** | T | T | 11 22 15.8 | |
| | baz=47,slow=75,SNR=1877 | | | | | | |
| **THN** | **Thein Dam** | **26.32** | **328** | *eP* | **P** | **10 55 03.4** | **+0.9** |
| **CNSH** | **ChangSha** | **26.62** | **46** | P | **P** | **10 55 05.8** | **+0.5** |
| CNSH | | | | S | **S** | **10 59 41.3** | **+1.7** |
| CNSH | | | | pmax | pmax | | |
| | comp=Z,46nm,0.8s | | | | | | |
| **MYLDM** | **Lahad Datu** | **27.11** | **99** | P | **P** | **10 55 10.6** | **+0.7** |
| MYLDM | | | | IAmb | IAmb | 10 55 22.7 | |
| | comp=Z,134nm,1.1s | | | | | | |
| **LZH** | **Lanzhou** | **27.77** | **22** | ⇑*iP* | **P** | **10 55 16.8** | **+1.0** |
| LZH | | | | sP | sP | 10 55 22.1 | 0.0 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,90nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,2μm,13.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,2μm,16.3s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,3μm,16.7s | | | | | | |
| **XAN** | **Xi'an** | **28.27** | **31** | ⇑P | **P** | **10 55 19.1** | **-1.0** |
| XAN | | | | pP | pP | 10 55 24.3 | -0.5 |
| XAN | | | | S | **S** | **11 00 04.9** | **-0.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,110nm,0.9s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,2μm,11.7s | | | | | | |
| **NIL** | **Nilore** | **28.56** | **327** | P | **P** | **10 55 23.6** | **+0.9** |
| NIL | | | | IAmb | IAmb | 10 55 30.1 | |
| | comp=Z,61nm,0.9s | | | | | | |
| **NIL** | **Nilore** | **28.56** | **327** | P | **P** | **10 55 23.3** | **+0.6** |
| **NIL** | **Nilore** | **28.56** | **327** | P | **P** | **10 55 23.6** | **+0.9** |
| NIL | | | | pmax | pmax | | |
| | comp=Z,61nm,0.9s | | | | | | |
| **WHN** | **Wuhan** | **29.04** | **43** | P | **P** | **10 55 26.9** | **0.0** |
| **GTA** | **Gaotai** | **29.70** | **13** | P | **P** | **10 55 34.3** | **+1.5** |
| GTA | | | | pP | pwP | 10 55 40.8 | 0.0 |
| GTA | | | | PcP | **PcP** | **10 58 38.3** | **+1.4** |
| GTA | | | | PcS | **PcS** | **11 02 20.8** | **+0.7** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,100nm,1.2s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,350nm,4.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,720nm,13.1s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,1μm,14.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,1μm,14.2s | | | | | | |
| **TOLI2** | **Tolitoli** | **30.42** | **106** | P | **P** | **10 55 39.8** | **+0.5** |
| **TOLI2** | **Tolitoli** | **30.42** | **106** | P | **P** | **10 55 39.0** | **-0.4** |
| TOLI2 | | | | IAmb | IAmb | 10 55 40.7 | |
| | comp=Z,102nm,1.4s | | | | | | |
| TOLI2 | | | | | **PcP** | **10 58 38.5** | **-0.6** |
| **LYN** | **LuoYang** | **30.57** | **35** | ⇑*iP* | **P** | **10 55 40.9** | **+0.4** |
| LYN | | | | pP | sP | 10 55 46.5 | -0.7 |
| LYN | | | | sP | pwP | 10 55 49.0 | +1.3 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,150nm,2.2s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,3μm,18.2s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,3μm,17.9s | | | | | | |
| LYN | | | | LR | LR | | |
| | comp=Z,4μm,15.8s | | | | | | |
| **TWG** | **Pinlang** | **30.66** | **63** | P | **P** | **10 55 41.8** | **+0.3** |
| **SSLB** | **Suanglung** | **30.88** | **61** | P | **P** | **10 55 43.4** | **-0.1** |
| SSLB | | | | IAmb | IAmb | 10 56 12.8 | |
| | comp=Z,192nm,1.8s | | | | | | |
| **YULB** | **Yu-li** | **31.05** | **62** | P | **P** | **10 55 46.7** | **+1.9** |
| **YULB** | **Yu-li** | **31.05** | **62** | P | **P** | **10 55 43.8** | **-1.0** |
| YULB | | | | IAmb | IAmb | 10 55 48.0 | |
| | comp=Z,69nm,1.0s | | | | | | |
| **YHNB** | **Yeheng** | **31.55** | **60** | P | **P** | **10 55 49.5** | **+0.1** |
| **YHNB** | **Yeheng** | **31.55** | **60** | P | **P** | **10 55 49.8** | **+0.4** |
| **KBL** | **Kabul** | **31.61** | **323** | P | **P** | **10 55 50.7** | **+0.8** |
| **KBL** | **Kabul** | **31.61** | **323** | P | **P** | **10 55 50.9** | **+1.1** |
| | SNR=19 | | | | | | |
| **KBL** | **Kabul** | **31.61** | **323** | P | **P** | **10 55 50.7** | **+0.8** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | |
| **KAPI** | **Kappang** | **31.95** | **118** | P | **P** | **10 55 53.2** | **+0.4** |
| **KAPI** | **Kappang** | **31.95** | **118** | P | **P** | **10 55 53.2** | **+0.4** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,156nm,1.1s | | | | | | |
| **KSH** | **Kashi** | **32.09** | **337** | P | **P** | **10 55 53.3** | **-0.7** |
| KSH | | | | sP | sP | 10 55 59.8 | -0.5 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,33nm,0.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,1μm,17.5s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,3μm,15.5s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,2μm,18.9s | | | | | | |
| **TIY** | **Taiyuan** | **32.91** | **31** | P | **P** | **10 56 03.3** | **+2.2** |
| **JLN** | **Jalan Bani Buh** | **32.96** | **295** | P | **P** | **10 56 04.6** | **+3.0** |
| **LUWI** | **Luwuk** | **33.02** | **108** | P | **P** | **10 56 02.7** | **+0.5** |
| **LUWI** | **Luwuk** | **33.02** | **108** | P | **P** | **10 56 02.7** | **+0.5** |
| **NJ2** | **Nanjing** | **33.03** | **45** | ⇓*iP* | **P** | **10 56 03.3** | **+1.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,72nm,0.8s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,1μm,4.0s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2μm,14.7s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,2μm,13.7s | | | | | | |
| NJ2 | | | | LR | LR | | |
| | comp=Z,1μm,13.3s | | | | | | |
| **WMQ** | **Urumqi** | **33.37** | **355** | *eP* | **P** | **10 56 05.4** | **+0.3** |
| WMQ | | | | sP | pwP | 10 56 13.4 | +0.5 |
| WMQ | | | | PcP | **PcP** | **10 58 47.1** | **+0.5** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,90nm,1.5s | | | | | | |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,650nm,3.6s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,3μm,13.9s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **33.40** | **341** | P | **P** | **10 56 07.2** | **+1.4** |
| **TARG** | **Taragay, Kyrgy** | **33.40** | **341** | P | **P** | **10 56 07.2** | **+1.4** |
| TARG | | | | pmax | pmax | | |
| | comp=Z,29nm,0.8s | | | | | | |
| **WBK** | **Wadi Bani Khal** | **33.47** | **295** | P | **P** | **10 56 09.1** | **+2.9** |
| **NRN** | **Naryn** | **33.75** | **339** | P | **P** | **10 56 10.0** | **+1.3** |
| NRN | | | | IAmb | IAmb | 10 56 11.2 | |
| | comp=Z,55nm,1.1s | | | | | | |
| **NRN** | **Naryn** | **33.75** | **339** | P | **P** | **10 56 10.0** | **+1.3** |
| NRN | | | | pmax | pmax | | |
| | comp=Z,55nm,1.1s | | | | | | |
| **DRK** | **Karamyk** | **33.84** | **332** | P | **P** | **10 56 10.3** | **+0.8** |
| DRK | | | | IAmb | IAmb | 10 56 31.7 | |
| | comp=Z,56nm,0.8s | | | | | | |
| **DRK** | **Karamyk** | **33.84** | **332** | P | **P** | **10 56 10.3** | **+0.8** |
| DRK | | | | pmax | pmax | | |
| | comp=Z,56nm,0.8s | | | | | | |
| **HNS** | **HongShan** | **33.89** | **34** | ⇑P | **P** | **10 56 10.4** | **+0.9** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,160nm,1.0s | | | | | | |
| **MHTO** | **MHTO** | **33.98** | **292** | P | P | 10 56 15.9 | +5.4 |
| **BTO** | **Baotou** | **34.11** | **25** | ⇑*iP* | **P** | **10 56 12.0** | **+0.5** |
| BTO | | | | pP | **pP** | **10 56 16.6** | **+0.4** |
| BTO | | | | sP | **pwP** | **10 56 18.9** | **+0.2** |
| BTO | | | | PP | **PnPn** | **10 57 26.8** | **+1.5** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,130nm,0.9s | | | | | | |
| **DQM** | **DQM** | **34.16** | **290** | P | **P** | **10 56 15.6** | **+3.4** |
| **JMDO** | **Jabal Madar** | **34.18** | **294** | P | **P** | **10 56 15.1** | **+2.7** |
| **SHLS** | **Shalkode** | **34.22** | **344** | *eP* | **P** | **10 56 11.6** | **-1.0** |
| | comp=Z,43nm,0.9s,baz=344 | | | | | | |

ARSB IAmb IAmb 10 56 20.8
comp=Z,88nm,1.4s
**ARSB Arslanbob 34.83 335** P **P** **10 56 19.1 +1.3**
ARSB pmax pmax
comp=Z,88nm,1.4s
**TNSS Tian-Shan 34.85 341** *e*P **P** **10 56 17.8 -0.5**
baz=341
**TNSS Tian-Shan 34.85 341** *e*P **P** **10 56 17.8 -0.5**
**MDOK Medeo 34.94 341** *e*P **P** **10 56 18.4 -0.3**
baz=341
**MDOK Medeo 34.94 341** P **P** **10 56 19.6 +0.9**
**HHC Hu-ho-hao-te 34.97 27**⇑*i*P **P** **10 56 19.6 +0.6**
HHC pP pP 10 56 23.8 0.0
HHC sP pwP 10 56 26.8 +0.5
HHC pmax pmax
comp=Z,64nm,1.3s
HHC pmax pmax
comp=Z,180nm,4.3s
**AAA Alma-Ata 35.02 341** *e*P **P** **10 56 19.3 -0.1**
baz=341
**AAA Alma-Ata 35.02 341** *e*P **P** **10 56 19.2 -0.1**
**BSY Bisya 35.09 295** P **P** **10 56 23.3 +3.2**
SNR=7.2
**KBK Karagaybulak 35.20 338** P **P** **10 56 23.2 +2.2**
SNR=6.8
**TKM2 Tokmak 2 35.20 339** P **P** **10 56 22.3 +1.2**
SNR=16
**TKM2 Tokmak 2 35.20 339** P **P** **10 56 21.7 +0.6**
**HOQ Hoqain 35.20 296** P **P** **10 56 24.3 +3.2**
**AML Almayashu 35.22 337** P **P** **10 56 23.3 +1.8**
SNR=47
**AAK Ala-Archa 35.35 338** P **P** **10 56 24.2 +1.9**
SNR=16
**AAK Ala-Archa 35.35 338** P **P** **10 56 22.9 +0.6**
AAK IAmb IAmb 10 56 25.6
comp=Z,112nm,1.3s
**AAK Ala-Archa 35.35 338** *i* P **P** **10 56 24.0 +1.7**
SNR=22
**AAK Ala-Archa 35.35 338** P **P** **10 56 24.2 +1.9**
**AAK Ala-Archa 35.35 338***c i*P **P** **10 56 24.2 +1.9**
AAK pmax pmax
comp=Z,130nm,1.7s
**JASK Jask - Hormozg 35.41 300** P **P** **10 56 23.9 +1.1**
**FRU1 Bishkek 35.45 338** P **P** **10 56 25.0 +1.9**
FRU1 IAmb IAmb 10 56 33.0
comp=Z,67nm,1.0s
**FRU1 Bishkek 35.45 338** P **P** **10 56 25.0 +1.9**
FRU1 pmax pmax
comp=Z,67nm,1.0s
**CHMS Chumysh 35.57 338** P **P** **10 56 25.4 +1.4**
SNR=11
**CHKK Chushkaly 35.58 342** *e*P **P** **10 56 23.9 -0.3**
baz=342
**CHKK Chushkaly 35.58 342** *e*P **P** **10 56 23.8 -0.3**
**EKS2 Erkin-Say 35.64 337** P **P** **10 56 26.9 +2.1**
SNR=28
**ARXS Arharly 35.65 343** *i* P **P** **10 56 25.8 +1.0**
**ARQ Araqi 35.84 295** P **P** **10 56 29.6 +2.9**
**HRA Herat 35.87 316** P **P** **10 56 26.7 -0.3**
**MMRI Maumere 35.89 121** P **P** **10 56 25.9 -1.2**
**MMRI Maumere 35.89 121** P **P** **10 56 25.1 -2.0**
**USP Ospenovka 35.89 338** P **P** **10 56 28.2 +1.4**
SNR=27
**SGDS Sogindy 36.01 339** *e*P **P** **10 56 27.7 -0.2**
comp=Z,30nm,1.1s,baz=339
**SGDS Sogindy 36.01 339** *e*P **P** **10 56 27.6 -0.2**
SGDS pmax pmax
comp=Z,30nm,1.1s
**SOHO SOHO 36.04 297** *i* P **P** **10 56 30.6 +2.3**
SNR=7.9
**SOHO SOHO 36.04 297** P **P** **10 56 30.9 +2.6**
**TDK Taldyqorghan 36.22 344** *e*P **P** **10 56 29.8 +0.2**
comp=Z,43nm,1.1s,baz=344
**TDK Taldyqorghan 36.22 344** *e*P **P** **10 56 29.7 +0.2**
TDK pmax pmax
comp=Z,43nm,1.1s
**SANI Sanana 36.38 108** P **P** **10 56 30.3 -1.0**
**UOSS Minazif 36.55 298** P **P** **10 56 33.4 +0.7**
**UOSS Minazif 36.55 298** P **P** **10 56 35.4 +2.7**
**BJT Baijiatuau 36.57 32** P **P** **10 56 33.9 +1.2**
**BJT Baijiatuau 36.57 32** P **P** **10 56 33.8 +1.2**
BJT IAmb IAmb 10 56 35.0
comp=Z,80nm,0.8s
**BJT Baijiatuau 36.57 32** P **P** **10 56 33.8 +1.2**
BJT pmax pmax
comp=Z,80nm,0.8s
**MDH Madha 36.58 298** P **P** **10 56 34.4 +1.5**
**MDH Madha 36.58 298** P **P** **10 56 35.4 +2.6**
**HATD Hatta, Dubai 36.58 298** P **P** **10 56 35.2 +2.2**
**HATD Hatta, Dubai 36.58 298** P **P** **10 56 35.7 +2.7**
HATD P **P** **10 56 35.7 +2.7**
**BJI Beijing 36.59 32** P **P** **10 56 33.8 +1.0**
BJI pmax pmax
comp=Z,50nm,0.8s
BJI LR LR
comp=Z,520nm,12.1s
BJI LR LR
comp=Z,640nm,16.6s
BJI LR LR
comp=Z,900nm,22.5s
**ASHO Ashiyiah 36.61 297** *i* P **P** **10 56 35.8 +2.5**
SNR=9.4
**ASHO Ashiyiah 36.61 297** P **P** **10 56 36.4 +3.2**
**ALNE Al Ain 36.71 296** *i* P **P** **10 56 37.0 +2.9**
SNR=8.1
**ALNE Al Ain 36.71 296** P **P** **10 56 36.9 +2.8**
SNR=6.2
**TNTI Ternate 36.79 103** P **P** **10 56 33.2 -1.6**
**TNTI Ternate 36.79 103** P **P** **10 56 33.5 -1.4**
**UMZA Um Al Zommool 36.91 294** P **P** **10 56 38.0 +2.3**
**FAQ Al Faqa, Dubai 37.03 297** P **P** **10 56 39.3 +2.6**
**FAQ Al Faqa, Dubai 37.03 297** P **P** **10 56 39.6 +2.8**
**MK31 Makanchi Array 37.03 349** P **P** **10 56 37.3 +0.8**
MK31 IAmb IAmb 10 56 38.5
comp=Z,57nm,0.9s
**MK31 Makanchi Array 37.03 349***c i*P **P** **10 56 37.1 +0.6**
**MKAR Makanchi Array 37.03 349** P **P** **10 56 37.3 +0.8**
**MKAR Makanchi Array 37.03 349** P **P** **10 56 37.0 +0.5**
comp=Z,68nm,0.9s,baz=169,slow=8.4,SNR=410
MKAR PcP **PcP** **10 58 57.1 -0.1**
comp=Z,14nm,0.9s,baz=200,slow=3.9,SNR=5.1
comp=Z,68nm,0.9s
**CHM Chimkent 37.11 333** *e*P **P** **10 56 37.5 +0.3**
baz=332
**CHM Chimkent 37.11 333** *e*P **P** **10 56 37.4 +0.3**
**MAKZ Makanchi 37.11 349** P **P** **10 56 37.8 +0.6**
**MAKZ Makanchi 37.11 349** P **P** **10 56 37.7 +0.6**
**DOK Doka 37.14 287** P **P** **10 56 39.8 +2.1**
**ASUD Al Ashush, Dub 37.23 297** P **P** **10 56 41.2 +2.7**
**ASUD Al Ashush, Dub 37.23 297** P **P** **10 56 41.7 +3.3**
**ZSN Zaisan 37.27 352** *e*P **P** **10 56 38.8 +0.3**
comp=Z,38nm,1.1s,baz=352
**ZSN Zaisan 37.27 352** *e*P **P** **10 56 38.8 +0.3**
ZSN pmax pmax
comp=Z,37nm,1.1s
**KK31 Karatay Array 37.33 334** P **P** **10 56 40.1 +1.0**
KK31 IAmb IAmb 10 56 41.4
comp=Z,82nm,1.3s
**KK31 Karatay Array 37.33 334** *i* P **P** **10 56 39.4 +0.3**
**KKAR Karatay Array 37.33 334** P **P** **10 56 40.1 +1.0**
KKAR IAmb IAmb 10 56 41.4
comp=Z,82nm,1.3s
**KKAR Karatay Array 37.33 334** P **P** **10 56 39.9 +0.8**
**KKAR Karatay Array 37.33 334** P **P** **10 56 39.9 +0.8**
**WHFO Wadi Hawf 37.40 286** P **P** **10 56 41.9 +1.9**
**AJN Ajban 37.51 297** P **P** **10 56 43.4 +2.5**
**BRLS Boroldday 37.57 333** *e*P **P** **10 56 40.0 -1.2**
baz=333
**BRLS Boroldday 37.57 333** *e*P **P** **10 56 39.9 -1.2**
**BTLS Baital 37.60 339** *e*P **P** **10 56 41.5 +0.1**
baz=339
**BTLS Baital 37.60 339** *e*P **P** **10 56 41.4 +0.1**
**ABTO Aybut 37.79 285** P **P** **10 56 48.1 +4.7**
**JOW Kunigami 38.14 60** P **P** **10 56 43.5 -2.6**
JOW IAmb IAmb 10 56 50.0
comp=Z,154nm,1.6s
**SOEI Soe 38.18 121** P **P** **10 56 47.4 +0.7**
**SOEI Soe 38.18 121** P **P** **10 56 47.5 +0.7**
SOEI IAmb IAmb 10 57 09.9
comp=Z,132nm,1.0s
**MZR Muzera 38.48 294** *i* P **P** **10 56 51.5 +2.4**
SNR=13
**MZR Muzera 38.48 294** P **P** **10 56 51.2 +2.2**
SNR=11
**SONM Songino Array 39.23 16** P **P** **10 56 56.0 +0.9**

SONM IAmb IAmb 10 56 57.4
comp=Z,102nm,1.0s
**SONM Songino Array 39.23 16** P **P** **10 56 55.8 +0.6**
comp=Z,61nm,0.9s,baz=200,slow=9.0,SNR=202
SONM PcP **PcP** **10 59 04.5 +0.4**
comp=Z,3.9nm,0.8s,baz=181,slow=5.8,SNR=1.9
comp=Z,61nm,0.9s
**DGZ Jazzator, Alta 39.24 356***c i*P **P** **10 56 56.1 +0.9**
DGZ pmax pmax
comp=Z,42nm,0.9s
**XLT XiLinHaoTe 39.43 28** *e*P **P** **10 56 57.6 +0.8**
XLT sP pwP 10 57 04.8 +0.7
XLT PcP **PcP** **10 59 06.0 +1.2**
XLT pmax pmax
comp=Z,100nm,1.1s
**ULN Ulaanbaatar 39.44 16** P **P** **10 56 57.3 +0.4**
**ULN Ulaanbaatar 39.44 16** P **P** **10 56 56.5 -0.4**
**ULN Ulaanbaatar 39.44 16***c i*P **P** **10 56 57.4 +0.4**
ULN pmax pmax
comp=Z,54nm,1.0s
**GIRL Giralia 39.69 146** P **P** **10 56 58.6 -0.4**
comp=Z,216nm,2.0s
**KNGR Kungurtug, Tuv 40.28 6** *i* P **P** **10 57 05.1 +1.3**
KNGR pmax pmax
comp=Z,96nm,1.2s
**SEM Semipalatinsk 40.89 349** *e*P **P** **10 57 08.4 -0.5**
comp=Z,37nm,1.0s,baz=349
**SEM Semipalatinsk 40.89 349** *e*P **P** **10 57 08.4 -0.5**
SEM pmax pmax
comp=Z,37nm,1.0s
**ZAK Zakamensk 40.91 11** *e*P **P** **10 57 09.5 +0.5**
ZAK pmax pmax
comp=Z,29nm,1.4s
**TJN Taejon 41.30 46** P **P** **10 57 12.5 +0.3**
**TJN Taejon 41.30 46** P **P** **10 57 12.3 +0.1**
**TJN Taejon 41.30 46**‖*e*P **P** **10 57 11.6 -0.6**
**KURBB Kurchatov Arra 41.44 347** P **P** **10 57 13.9 +0.8**
comp=Z,40nm,1.0s,baz=166,slow=7.5,SNR=204
KURBB PcP **PcP** **10 59 11.0 0.0**
comp=Z,10nm,1.0s,baz=175,slow=5.5,SNR=3.7
comp=Z,40nm,1.0s
**KURBB Kurchatov Arra 41.44 347** P **P** **10 57 13.2 0.0**
**KURK Kurchatov 41.51 348** P **P** **10 57 14.3 +0.5**
KURK IAmb IAmb 10 57 22.0
comp=Z,99nm,1.1s
**KURK Kurchatov 41.51 348** P **P** **10 57 14.5 +0.8**
**KURK Kurchatov 41.51 348***ce*P **P** **10 57 14.5 +0.8**
KURK pmax pmax
comp=Z,106nm,1.2s
**MBWA Marble Bar 41.85 139** P **P** **10 57 16.2 -0.7**
**MBWA Marble Bar 41.85 139** P **P** **10 57 16.4 -0.6**
**MBWA Marble Bar 41.85 139** P **P** **10 57 15.8 -1.2**
comp=Z,52nm,1.3s
**PSAD1 Pilbara Seismi 42.12 139** P **P** **10 57 17.9 -1.3**
comp=Z,51nm,1.1s
**KSAR Wonju Array Be 42.19 44** P **P** **10 57 19.3 -0.2**
**KSAR Wonju Array Be 42.19 44** P **P** **10 57 19.3 -0.2**
**KSRS Korea Array 42.22 44** P **P** **10 57 19.4 -0.3**
comp=Z,7.9nm,0.8s,baz=244,slow=8.9,SNR=14
KSRS LR LR 11 14 32.9
comp=Z,1μm,19.9s,baz=195,slow=36
comp=Z,9nm,0.8s
**PSA00 Pilbara Seismi 42.22 139** P **P** **10 57 19.0 -1.0**
**PSA00 Pilbara Seismi 42.22 139** P **P** **10 57 19.3 -0.7**
**PSA00 Pilbara Seismi 42.22 139** P **P** **10 57 18.8 -1.1**
comp=Z,65nm,1.2s
**PSAC2 Pilbara Seismi 42.25 139** P **P** **10 57 19.0 -1.2**
comp=Z,59nm,1.2s
**JNU Nakatsue 42.46 52** P **P** **10 57 23.4 +1.5**
**JNU Nakatsue 42.46 52** P **P** **10 57 21.0 -0.9**
JNU IAmb IAmb 10 57 24.0
comp=Z,101nm,1.4s
**FAKI Fak Fak 42.56 106** P **P** **10 57 22.6 -0.3**
**FAKI Fak Fak 42.56 106** P **P** **10 57 22.3 -0.6**
**IRK Irkutsk 42.87 11** *e*P **P** **10 57 26.3 +1.4**
IRK pmax pmax
comp=Z,101nm,2.3s
**ZAA0 Zalesovo Array 43.68 354** P **P** **10 57 31.6 +0.3**
ZAA0 IAmb IAmb 10 57 39.3
comp=Z,84nm,0.9s
**ZALV Zalesovo Beam 43.68 354** P **P** **10 57 31.8 +0.5**
**ZALV Zalesovo Beam 43.68 354** P **P** **10 57 31.7 +0.3**
comp=Z,58nm,0.8s,baz=176,slow=9.8,SNR=109
comp=Z,58nm,0.8s
**FITZ Fitzroy Crossi 43.97 130** P **P** **10 57 33.2 -1.0**
**FITZ Fitzroy Crossi 43.97 130** P **P** **10 57 33.0 -1.3**
**FITZ Fitzroy Crossi 43.97 130** P **P** **10 57 32.9 -1.3**
comp=Z,1μm,0.8s
**CN2 Changchun 44.22 35** ⇑P **P** **10 57 36.3 +0.4**
CN2 *es*P pwP 10 57 43.0 -0.2
CN2 *e*S **S** **11 04 09.3 +0.6**
CN2 pmax pmax
comp=Z,70nm,1.0s
CN2 pmax pmax
comp=Z,700nm,5.0s
CN2 LR LR
comp=Z,500nm,13.0s
CN2 LR LR
comp=Z,800nm,13.0s
CN2 LR LR
comp=Z,1μm,13.0s
**KBD Kabd 45.01 301** P **P** **10 57 43.8 +1.4**
**KNRA Kununurra 45.02 125** P **P** **10 57 41.5 -1.1**
KNRA IAmb IAmb 10 57 49.8
comp=Z,45nm,0.8s
**KNRA Kununurra 45.02 125** P **P** **10 57 41.3 -1.4**
comp=Z,56nm,0.9s
**CIT Chita 45.07 19** *e*P **P** **10 57 43.4 +0.8**
CIT *e* 10 57 50.0
CIT pmax pmax
comp=Z,193nm,2.3s
**DRS Darwin Rock St 45.15 119** P **P** **10 57 43.9 +0.2**
**HIA Hailar 45.16 26** P **P** **10 57 43.4 0.0**
**HIA Hailar 45.16 26** P **P** **10 57 43.6 +0.3**
HIA IAmb IAmb 10 57 46.3
comp=Z,167nm,1.9s
**HIA Hailar 45.16 26** P **P** **10 57 43.7 +0.3**
HIA pmax pmax
comp=Z,167nm,1.9s
**MEEK Meekatharra 45.27 145** P **P** **10 57 43.9 -0.6**
**MEEK Meekatharra 45.27 145** P **P** **10 57 43.7 -0.7**
comp=Z,129nm,1.1s
**MTN Manton Dam 45.55 120** P **P** **10 57 47.4 +0.5**
**MTN Manton Dam 45.55 120** P **P** **10 57 46.0 -0.9**
**BVA0 Borovoye Array 45.74 342** *i* P **P** **10 57 46.7 -1.1**
**BVAR Borovoye Array 45.74 342** P **P** **10 57 47.6 -0.2**
comp=Z,14nm,0.8s,baz=142,slow=7.5,SNR=56
BVAR PcP **PcP** **10 59 25.9 +0.4**
comp=Z,12nm,0.8s,baz=150,slow=6.3,SNR=5.8
comp=Z,14nm,0.8s
**RAYN Ar Rayn 45.79 293** P **P** **10 57 50.2 +1.5**
RAYN IAmb IAmb 10 57 57.5
comp=Z,81nm,1.1s
**RAYN Ar Rayn 45.79 293** *i* P **P** **10 57 50.3 +1.5**
SNR=43
**RAYN Ar Rayn 45.79 293** P **P** **10 57 50.2 +1.5**
**RAYN Ar Rayn 45.79 293** P **P** **10 57 50.2 +1.5**
**BRVK Borovoye 45.80 342** P **P** **10 57 48.6 +0.3**
**BRVK Borovoye 45.80 342** P **P** **10 57 48.4 +0.1**
**BRVK Borovoye 45.80 342**⇑*i*P **P** **10 57 49.1 +0.8**
BRVK *i* *PP **sP** **10 57 54.5 -0.3**
BRVK pmax pmax
comp=Z,26nm,1.0s
**MORW Morawa 45.85 150** P **P** **10 57 49.5 +0.5**
**MORW Morawa 45.85 150** P **P** **10 57 49.2 +0.2**
MORW IAmb IAmb 10 57 56.2
comp=Z,62nm,1.2s
**MORW Morawa 45.85 150** P **P** **10 57 48.9 -0.1**
comp=Z,54nm,1.2s
**BNX BinXian 46.52 34** ⇑P **P** **10 57 53.8 -0.3**
BNX pmax pmax
comp=Z,71nm,1.0s
**KDU Kakadu 46.63 119** P **P** **10 57 54.2 -1.1**
**KDU Kakadu 46.63 119** P **P** **10 57 53.7 -1.6**
comp=Z,38nm,1.7s
**AB31 Akbulak array 46.77 332** *i* P **P** **10 57 55.6 -0.4**
**ABKAR Akbulak array 46.77 332** P **P** **10 57 56.4 +0.5**
**RER Riviere de l'E 47.27 228** P **P** **10 58 01.6 +1.2**
**BLDU Ballidu 47.45 150** P **P** **10 58 00.7 -0.8**
**BLDU Ballidu 47.45 150** P **P** **10 58 00.7 -0.8**
comp=Z,40nm,1.3s
**ATD Arta Tunnel 47.87 276** P **P** **10 58 05.1 0.0**
ATD IAmb IAmb 10 58 14.6
comp=Z,78nm,1.2s
**USA0B Ussuriysk Arra 48.32 39** P **P** **10 58 08.2 +0.1**

USA0B IAmb IAmb 10 58 42.2
comp=Z,75nm,1.9s
**USA0B Ussuriysk Arra 48.32 39** *i* P **P** **10 58 07.2 -1.0**
**USRK Ussuriysk Ar. 48.32 39** P **P** **10 58 08.0 -0.2**
comp=Z,11nm,0.8s,baz=243,slow=9.1,SNR=18
USRK PcP **PcP** **10 59 34.1 -0.7**
comp=Z,2.6nm,0.8s,baz=226,slow=6.5,SNR=1.2
comp=Z,11nm,0.8s
**MUN Mundaring 48.34 152** P **P** **10 58 08.9 +0.5**
**MUN Mundaring 48.34 152** P **P** **10 58 08.1 -0.3**
comp=Z,103nm,0.8s
**JGF Kuroka 48.35 51** P **P** **10 58 09.1 +0.5**
**JGF Kuroka 48.35 51** P **P** **10 58 08.4 -0.2**
**KLBR Kellerberrin 48.76 150** P **P** **10 58 11.2 -0.5**
**KLBR Kellerberrin 48.76 150** P **P** **10 58 11.1 -0.5**
comp=Z,111nm,0.8s
**MJB9 Matsu-Tunnel 49.31 50** P **P** **10 58 16.9 +1.0**
**MAJO Matsushiro 49.31 50** P **P** **10 58 16.5 +0.6**
**MAJO Matsushiro 49.31 50** P **P** **10 58 16.2 +0.3**
**MAJO Matsushiro 49.31 50***c i*P **P** **10 58 16.0 +0.1**
MAJO pmax pmax
comp=Z,39nm,1.2s
**MJAR Matsushiro Arr 49.31 50** P **P** **10 58 15.4 -0.6**
comp=Z,8.7nm,0.9s,baz=228,slow=6.3,SNR=18
MJAR PcP **PcP** **10 59 38.8 +0.2**
comp=Z,7.5nm,0.9s,baz=238,slow=3.0,SNR=5.3
comp=Z,8.7nm,0.9s
**HEH HeiHe 49.38 30** *e*P **P** **10 58 16.3 +0.2**
HEH pmax pmax
comp=Z,48nm,1.0s
**NWAO Narrogin (SRO) 49.60 152** P **P** **10 58 18.1 0.0**
**NWAO Narrogin (SRO) 49.60 152** P **P** **10 58 17.8 -0.3**
**NWAO Narrogin (SRO) 49.60 152** P **P** **10 58 17.7 -0.3**
**NWAO Narrogin (SRO) 49.60 152** P **P** **10 58 17.8 -0.3**
NWAO pmax pmax
comp=Z,109nm,1.0s
**H01W3 Cape Leeuwin H 49.91 156** T T 11 51 56.3
baz=330
**H01W2 Cape Leeuwin H 49.92 156** T T 11 52 10.8
baz=330
**H01W1 Cape Leeuwin H 49.93 156** T T 11 51 56.9
baz=330
**GENI Genyem 50.01 102** P **P** **10 58 20.7 -0.9**
**MAK Makhachkala 50.13 318** *e*P **P** **10 58 17.3 -4.7**
MAK *e*S **S** **11 05 26.8 -6.1**
MAK *e*SS **SS** **11 09 00.6 -5.7**
MAK pmax pmax
comp=Z,161nm,0.8s
**BOD Bodaibo 50.23 15** *e*P **P** **10 58 22.6 +0.1**
BOD pmax pmax
comp=Z,84nm,1.2s
**WRKA Warakurna 50.24 135** P **P** **10 58 22.2 -0.9**
**WRKA Warakurna 50.24 135** P **P** **10 58 22.0 -1.1**
comp=Z,37nm,1.1s
**KMBL Kambalda 50.73 146** P **P** **10 58 26.4 -0.2**
**KMBL Kambalda 50.73 146** P **P** **10 58 26.0 -0.7**
comp=Z,67nm,1.2s
**GNI Garni 50.85 314** P **P** **10 58 29.0 +1.3**
**GNI Garni 50.85 314** P **P** **10 58 29.4 +1.7**
**GNI Garni 50.85 314** P **P** **10 58 29.8 +2.0**
**GNI Garni 50.85 314***c i*P **P** **10 58 29.2 +1.4**
GNI pmax pmax
comp=Z,268nm,1.7s
**GNI Garni 50.85 314** P **P** **10 58 28.9 +1.1**
comp=Z,154nm,1.1s,comp=Z,2μm
**RKGY Rocky Gully 50.89 153** P **P** **10 58 28.3 +0.5**
**RKGY Rocky Gully 50.89 153** P **P** **10 58 27.9 +0.1**
comp=Z,199nm,1.0s
**KLR Kul'dur 50.96 33***c i*P **P** **10 58 28.4 +0.2**
KLR pmax pmax
comp=Z,47nm,1.7s
**AUALB St Joseph's Co 51.63 152** P **P** **10 58 33.5 +0.2**
**ZEA Zeya 51.63 26** *e*P **P** **10 58 33.6 +0.4**
ZEA *e* 10 58 39.3
ZEA pmax pmax
comp=N,20nm,1.3s
ZEA pmax pmax
comp=Z,20nm,1.5s
**JMM Marumori 51.70 50** P **P** **10 58 34.5 +0.6**
**JMM Marumori 51.70 50** P **P** **10 58 34.2 +0.4**
**WB0 Warramunga Arr 51.73 125** P **P** **10 58 33.5 -0.9**
WB0 IAmb IAmb 10 58 40.8
comp=Z,74nm,1.0s
**WRA Warramunga Arr 51.78 126** P **P** **10 58 33.7 -1.1**
WRA PcP **PcP** **10 59 48.1 +0.1**
**WRA Warramunga Arr 51.78 126** P **P** **10 58 33.9 -0.9**
comp=Z,34nm,0.9s,baz=304,slow=8.5,SNR=216
WRA PcP **PcP** **10 59 47.9 0.0**
comp=Z,13nm,1.0s,baz=303,slow=4.1,SNR=3.5
WRA S **S** **11 05 51.8 -4.7**
comp=Z,6.7nm,1.3s,baz=300,slow=16,SNR=8.0
comp=Z,34nm,0.9s
**WRAB Tennant Creek 51.79 126** P **P** **10 58 34.0 -0.8**
WRAB IAmb IAmb 10 58 41.3
comp=Z,74nm,0.9s
**WRAB Tennant Creek 51.79 126***d i*P **P** **10 58 33.1 -1.7**
WRAB pmax pmax
comp=Z,126nm,1.7s
**WB2 Warramunga Arr 51.79 126** P **P** **10 58 34.2 -0.7**
WB2 IAmb IAmb 10 58 41.3
comp=Z,81nm,0.9s
WB2 PcP **PcP** **10 59 48.3 +0.3**
**WR0 Warramunga Arr 51.95 126** P **P** **10 58 35.5 -0.5**
**SVE Sverdlovsk 52.08 339**‖*e*P **P** **10 58 37.5 +1.1**
SVE pmax pmax
comp=Z,130nm,1.3s
**FURI Furi 52.19 273** LR LR 11 19 48.0
comp=Z,2μm,18.0s,baz=116,slow=35
**KARS Kars 52.21 314** P **P** **10 58 39.4 +1.5**
**KARS Kars 52.21 314** P **P** **10 58 39.4 +1.5**
KARS pmax pmax
comp=Z,1μm,1.7s
**GURO Guroymak-BITLI 52.27 311** P **P** **10 58 39.2 +0.9**
GURO IAmb IAmb 10 58 46.5
comp=Z,49nm,1.1s
**ARU Arti 52.53 338** P **P** **10 58 40.4 +0.6**
ARU IAmb IAmb 10 58 47.6
comp=Z,50nm,1.0s
**ARU Arti 52.53 338***c i*P **P** **10 58 40.2 +0.4**
ARU 10 59 50.5
ARU 11 00 38.9
ARU S **S** **11 06 06.8 +1.1**
ARU SS **SS** **11 09 43.7 -0.2**
ARU pmax pmax
comp=Z,92nm,1.7s
**ARU Arti 52.53 338** P **P** **10 58 40.6 +0.8**
comp=Z,62nm,1.2s
**ABPO Ambohimpanom 52.70 236** P **P** **10 58 42.8 +1.0**
ABPO IAmb IAmb 10 58 50.7
comp=Z,58nm,1.1s
**ABPO Ambohimpanom 52.70 236** P **P** **10 58 42.8 +1.0**
ABPO pmax pmax
comp=Z,58nm,1.2s
**JTM Tenmabayashi 52.87 46** P **P** **10 58 43.2 +0.6**
**JTM Tenmabayashi 52.87 46** P **P** **10 58 43.4 +0.8**
**AS31 Alice Springs 53.48 130** P **P** **10 58 47.1 -0.2**
**AS31 Alice Springs 53.48 130** P **P** **10 58 46.5 -0.8**
comp=Z,26nm,0.9s
**ASAR Alice Springs 53.48 130** P **P** **10 58 46.5 -0.8**
comp=Z,40nm,0.9s,baz=306,slow=7.2,SNR=220
ASAR PcP **PcP** **10 59 54.2 -0.1**
comp=Z,14nm,1.0s,baz=304,slow=3.8,SNR=5.8
comp=Z,40nm,0.9s
**KBZ Khabaz 53.50 317** P **P** **10 58 48.1 +0.9**
comp=Z,38nm,1.0s,baz=112,slow=6.1,SNR=43
comp=Z,38nm,1.0s
**KBZ Khabaz 53.50 317***ce*P **P** **10 58 47.9 +0.8**
KBZ pmax pmax
comp=Z,74nm,1.2s
**AS01 Alice Springs 53.51 130** P **P** **10 58 46.9 -0.7**
**BCA Borcka 53.53 314** ⇑P **P** **10 58 48.2 +0.7**
**SHA1 Shidzhatmaz 53.66 317***ce*P **P** **10 58 49.7 +1.0**
**KIV Kislovodsk 53.73 317** P **P** **10 58 49.7 +0.8**
**KIV Kislovodsk 53.73 317** *i* P **P** **10 58 50.3 +1.3**
SNR=13
**KIV Kislovodsk 53.73 317** P **P** **10 58 50.3 +1.3**
**KIV Kislovodsk 53.73 317** ⇑P **P** **10 58 50.2 +1.3**
**KIV Kislovodsk 53.73 317** *e*P **P** **10 58 49.8 +0.8**
KIV *e*S **S** **11 06 23.6 +0.9**
KIV pmax pmax
comp=Z,214nm,1.1s
KIV pmax pmax
comp=Z,42nm,4.1s
**KIV Kislovodsk 53.73 317** P **P** **10 58 49.5 +0.5**
comp=Z,212nm,1.1s,comp=Z,2μm

FORT Forrest 53.91 141 P P 10 58 50.8 +0.5
FORT Forrest 53.91 141 P P 10 58 50.4 +0.1
GRNR Gornyy 54.33 33⇑ iP P 10 58 53.7 +0.6
GRNR pmax pmax
comp=Z,40nm,1.1s
VOI Vohitsoka 54.53 234 P P 10 58 56.3 +1.2
VOI IAmb IAmb 10 59 03.5
comp=Z,70nm,1.2s
VOI Vohitsoka 54.53 234 P P 10 58 57.5 +2.4
SNR=6.8
BELG Belogornoye 54.80 329 ciP P 10 58 56.5 +0.1
BELG pmax pmax
comp=Z,18nm,1.3s
KIBK Kibwezi 54.85 260 P P 10 58 58.2 +0.7
KIBK Kibwezi 54.85 260 P P 10 58 59.5 +1.9
ARPR Arapgir-MALATY 55.18 311 P P 10 58 58.1 -1.6
ARPR IAmb IAmb 10 59 20.5
comp=Z,52nm,1.0s
KMBO Kilima Mbogo 55.33 261 P P 10 59 00.7 -0.6
KMBO Kilima Mbogo 55.33 261 P P 10 59 02.6 +1.4
KMBO Kilima Mbogo 55.33 261 P P 10 59 01.9 +0.7
comp=Z,2.5nm,0.4s,baz=49,slow=7.7,SNR=8.6
comp=Z,2.5nm,0.4s
KMBO Kilima Mbogo 55.33 261 P P 10 59 03.3 +2.0
GAZ Gaziantep 55.54 308 P P 10 59 02.7 +0.4
SOC Sochi 55.59 316 eP P 10 59 02.1 -0.3
SOC e*PP sP 10 59 07.7 -1.2
SOC e 11 01 08.2
SOC eS S 11 06 48.3 +0.8
SOC eSS SS 11 10 28.6 -4.1
SOC pmax pmax
comp=Z,48nm,0.9s
SOC MLR MLR
comp=Z,1μm,23.0s
GHAJ Ghor Haditha 55.71 301 P P 10 59 03.7 +0.3
GHAJ IAmb IAmb 10 59 11.8
comp=Z,44nm,1.0s
FOMA Nahampoana Res 56.03 230 P P 10 59 05.8 +0.1
FOMA IAmb IAmb 10 59 14.0
comp=Z,69nm,1.1s
FOMA Nahampoana Res 56.03 230 P P 10 59 08.0 +2.2
MMAI Mount Meron Ar 56.13 303 P P 10 59 06.2 -0.3
comp=Z,7.8nm,0.8s,baz=96,slow=6.0,SNR=10
MMAI PcP PcP 11 00 04.3 -0.1
comp=Z,6.6nm,0.9s,baz=58,slow=3.6,SNR=2.4
comp=Z,7.8nm,0.8s
LODK Lodwar 56.24 267 P P 10 59 08.0 +0.4
LODK Lodwar 56.24 267 P P 10 59 09.8 +2.2
SNR=11
YSS Yuzh-Sakhalins 56.30 40 P P 10 59 08.0 +0.6
YSS Yuzh-Sakhalins 56.30 40 P P 10 59 07.1 -0.3
YSS IAmb IAmb 10 59 09.0
comp=Z,66nm,0.9s
YSS Yuzh-Sakhalins 56.30 40⇑ eP P 10 59 07.9 +0.6
YSS e 11 00 03.3
YSS pmax pmax
comp=Z,70nm,0.9s
QIS Mount Isa 56.36 123 P P 10 59 07.9 -0.3
MANU Manus Island 56.83 99 P P 10 59 10.2 -1.5
MANU IAmb IAmb 10 59 13.8
comp=Z,76nm,1.4s
BNN Bunyan 56.99 310 P P 10 59 12.5 -0.2
OOD Oodnadatta 57.16 133 P P 10 59 13.2 -0.5
VRH Novokhopyorsk 57.38 325 eP P 10 59 14.8 -0.1
VRH eS S 11 07 09.6 -1.3
VRH pmax pmax
comp=Z,169nm,0.9s
VRH smax smax
comp=E,200nm,1.4s
MULG Mulgathing 57.50 136 P P 10 59 15.7 -0.4
KIRV Kirov 57.61 335 ciP P 10 59 17.0 +0.6
NKL Nikolayevsk 57.80 33 eP P 10 59 16.1 -1.7
NKL pmax pmax
comp=E,29nm,0.8s
NKL pmax pmax
comp=N,70nm,1.4s
NKL pmax pmax
comp=Z,266nm,1.4s
TYV Tymovskoe 57.84 36 eP P 10 59 19.5 +1.3
TYV eS S 11 07 19.0 +2.0
TYV pmax pmax
comp=Z,400nm,5.3s
TYV pmax pmax
comp=Z,24nm,1.4s
TYV smax smax
comp=N,200nm,6.3s
TYV smax smax
comp=E,100nm,6.3s
DIKM Dikmen 58.14 313 P P 10 59 20.6 +0.1
comp=E,36nm,1.4s
CSS Mathiatis 58.16 305 P P 10 59 20.7 -0.1
CSS IAmb IAmb 10 59 29.6
comp=Z,48nm,1.0s
CSS Mathiatis 58.16 305 P P 10 59 20.4 -0.4
comp=Z,51nm,1.0s
SNOP Sinop 58.27 313 P P 10 59 21.4 0.0
YAK Yakutsk 58.34 20 P P 10 59 21.3 -0.2
YAK Yakutsk 58.34 20 P P 10 59 19.9 -1.6
comp=Z,84nm,0.8s,baz=230,slow=3.7,SNR=23
comp=Z,84nm,0.8s
YAK Yakutsk 58.34 20 eP P 10 59 21.3 -0.2
YAK e*PP pP 10 59 26.2 -0.2
YAK eS S 11 07 23.9 +0.8
YAK e*SS sS 11 07 33.0 +1.8
YAK e 11 09 04.4
YAK pmax pmax
comp=Z,121nm,1.0s
YAK pmax pmax
comp=N,44nm,1.1s
YAK pmax pmax
comp=E,40nm,1.1s
YAK smax smax
comp=E,149nm,3.4s
KIRS Kirsehir-Merke 58.52 310 ⇑P P 10 59 23.4 0.0
VORD Divnogorie 58.66 324 eP P 10 59 22.3 -1.6
VORD e*PP pP 10 59 28.8 +0.1
VORD pmax pmax
comp=Z,50nm,0.9s
PMG Port Moresby 58.66 108 P P 10 59 23.7 -0.8
PMG IAmb IAmb 10 59 43.2
comp=Z,37nm,1.0s
PMG Port Moresby 58.66 108 P P 10 59 22.4 -2.1
comp=Z,16nm,0.8s,baz=273,slow=7.1,SNR=4.1
comp=Z,16nm,0.8s
PMG Port Moresby 58.66 108 P P 10 59 23.7 -0.8
PMG pmax pmax
comp=Z,37nm,1.0s
VSR Storozhevoye 58.84 324 eP P 10 59 22.9 -2.3
VSR e*PP pP 10 59 29.2 -0.7
VSR pmax pmax
comp=Z,40nm,1.0s
BR104 Keskin Array S 58.86 310 P P 10 59 24.8 -0.9
comp=Z,36nm,1.0s,comp=Z,272nm
BR131 Keskin Array S 58.86 310 P P 10 59 24.8 -0.9
BR131 IAmb IAmb 10 59 32.1
comp=Z,51nm,0.9s
BR131 Keskin Array S 58.86 310 ci P P 10 59 24.8 -0.9
BRTR Keskin Array B 58.86 310 P P 10 59 25.0 -0.8
BRTR Keskin Array B 58.86 310 P P 10 59 24.9 -0.9
comp=Z,17nm,0.8s,baz=124,slow=7.8,SNR=113
comp=Z,17nm,0.8s
BRTR Keskin Array B 58.86 310 P P 10 59 25.0 -0.8
BR105 Keskin Array S 58.88 310 P P 10 59 25.0 -0.9
comp=Z,45nm,0.9s,comp=Z,340nm
BR106 Keskin Array S 58.88 310 P P 10 59 25.2 -0.7
comp=Z,44nm,0.9s,comp=Z,322nm
VORR Voronezh 59.00 325 eP P 10 59 24.7 -1.6
VORR e*PP pP 10 59 30.8 -0.3
VORR pmax pmax
comp=Z,70nm,0.9s
BZK Bozkurt 59.12 313 P P 10 59 27.5 +0.2
MTSU Mount Surprise 59.26 118 P P 10 59 29.0 +0.3
ANTO Ankara 59.53 310 P P 10 59 29.9 -0.4
ANTO Ankara 59.53 310 P P 10 59 30.5 +0.2
ANTO Ankara 59.53 310 ⇑P P 10 59 29.8 -0.5
ANTO Ankara 59.53 310 P P 10 59 29.9 -0.4
ANTO pmax pmax
comp=Z,85nm,1.3s
ANTO Ankara 59.53 310 P P 10 59 29.3 -1.0
comp=Z,24nm,1.2s
BR231 Keskin MP Arra 59.54 310 P P 10 59 30.4 0.0
BR231 IAmb IAmb 10 59 37.0
comp=Z,42nm,1.1s
LPSR Galich'ya Gora 59.55 326 eP P 10 59 28.2 -1.8
LPSR e*PP pP 10 59 34.9 +0.1
LPSR pmax pmax
comp=Z,90nm,0.9s
SIM Simferopol' 59.84 316 eP P 10 59 32.8 +0.6
SIM e 11 01 46.0
SIM pmax pmax
comp=Z,130nm,1.5s
KAVG Kavieng 60.29 99 P P 10 59 36.8 +1.0
BBOO Buckleboo 60.40 137 P P 10 59 36.9 +0.7
BBOO Buckleboo 60.40 137 P P 10 59 35.8 -0.4
LCRK Leigh Creek 60.49 134 P P 10 59 36.9 0.0
MDUB Mudurnu 60.85 311 P P 10 59 38.9 -0.5
INKA Innaminka 60.86 130 P P 10 59 40.2 +0.8
ELL Elmali 61.19 306 P P 10 59 41.6 -0.2
ELL Elmali 61.19 306 P P 10 59 41.6 -0.2
ELL pmax pmax
comp=Z,643nm,0.9s
WHYH Whyalla 61.55 137 P P 10 59 44.5 +0.5
MBAR Mbarara 61.56 264 P P 10 59 43.7 -1.0
MBAR IAmb IAmb 10 59 53.7
comp=Z,46nm,1.4s
MBAR Mbarara 61.56 264 LR LR 11 26 01.5
comp=Z,774nm,18.7s,baz=77,slow=36
MBAR Mbarara 61.56 264 P P 10 59 46.6 +1.9
MBAR Mbarara 61.56 264 ci P P 10 59 46.4 +1.7
MBAR pmax pmax
comp=Z,32nm,1.5s
MOS Moscow 61.57 329 eP P 10 59 43.0 -0.8
MOS e 11 00 23.1
MOS e 11 01 59.7
MOS eS S 11 08 03.9 -1.0
MOS pmax pmax
comp=Z,161nm,1.4s
CTA Charters Tower 61.73 120 P P 10 59 45.5 0.0
comp=Z,2.3nm,1.0s,baz=300,slow=5.9,SNR=20
comp=Z,2.3nm,1.0s
CTAO Charters Tower 61.73 120 P P 10 59 45.8 +0.3
CTAO Charters Tower 61.73 120 P P 10 59 45.3 -0.2
CTAO Charters Tower 61.73 120 P P 10 59 45.3 -0.2
CTAO pmax pmax
comp=Z,60nm,1.0s
OBN Obninsk 61.86 328 P P 10 59 45.9 +0.2
OBN Obninsk 61.86 328 ci P P 10 59 45.7 0.0
OBN i 10 59 50.1
OBN i 11 00 25.6
OBN pmax pmax
comp=Z,198nm,1.9s
OBN Obninsk 61.86 328 P P 10 59 45.0 -0.7
comp=Z,97nm,1.3s,comp=Z,2μm
TV1H Townsville Har 61.86 118 P P 10 59 47.4 +1.0
RABL Rabaul 61.99 100 P P 10 59 46.5 -1.0
AUAYR Ayr State High 62.52 119 P P 10 59 51.0 +0.2
HTT Hallett 62.70 136 P P 10 59 51.9 +0.1
QLP Quilpie 62.97 127 P P 10 59 54.6 +0.9
KARP Karpathos 63.24 304 P P 10 59 55.3 -0.1
KARP Karpathos 63.24 304 P P 10 59 55.3 -0.1
comp=Z,656nm,0.9s,comp=Z,5μm
STKA Stephens Creek 63.69 133 P P 10 59 58.5 +0.2
STKA Stephens Creek 63.69 133 P P 10 59 58.3 0.0
STKA Stephens Creek 63.69 133 P P 10 59 57.9 -0.5
comp=Z,30nm,1.2s,baz=298,slow=7.4,SNR=18
comp=Z,30nm,1.2s
MILM Milestii Mici 63.92 317⇑ iP P 10 59 58.9 -0.7
comp=Z,140nm,1.0s
MILM M M 11 00 05.6
comp=Z,200nm,1.2s
MILM Milestii Mici 63.92 317 ci P P 10 59 58.9 -0.7
MILM i 11 00 04.8
MILM pmax pmax
comp=Z,140nm,1.0s
MILM pmax pmax
comp=Z,200nm,1.2s
CFR Carcaliu 64.01 315 ⇓P P 11 00 00.2 0.0
SORM Soroca 64.50 318 ⇑P P 11 00 03.0 -0.5
SORM Soroca 64.50 318 P P 11 00 02.9 -0.5
SORM Soroca 64.50 318 P P 11 00 02.3 -1.1
comp=Z,59nm,1.1s
AK09 Malin Array Si 64.52 321 P P 11 00 02.5 -1.0
AK10 Malin Array Si 64.54 321 P P 11 00 02.7 -0.9
AK08 Malin Array Si 64.54 321 P P 11 00 02.4 -1.2
AK07 Malin Array Si 64.55 321 P P 11 00 02.6 -1.1
AK05 Malin Array Si 64.57 321 P P 11 00 02.6 -1.2
AKASG Malin Array Be 64.58 321 P P 11 00 03.2 -0.7
AKASG Malin Array Be 64.58 321 P P 11 00 02.3 -1.6
comp=Z,4.5nm,0.7s,baz=90,slow=4.9,SNR=34
comp=Z,4.5nm,0.7s
AKASG Malin Array Be 64.58 321 P P 11 00 03.2 -0.7
AKASG pmax pmax
comp=Z,24nm,1.1s
AKBB Malin Array Si 64.58 321 P P 11 00 02.9 -1.0
AKBB IAmb IAmb 11 00 10.1
comp=Z,27nm,0.9s
AKBB Malin Array Si 64.58 321 ce P P 11 00 03.1 -0.8
AKBB Malin Array Si 64.58 321 P P 11 00 02.4 -1.5
KIEV Kiev 64.59 321 P P 11 00 02.9 -1.0
KIEV IAmb IAmb 11 00 10.1
comp=Z,24nm,0.9s
KIEV Kiev 64.59 321 i P P 11 00 02.9 -1.0
SNR=11
KIEV Kiev 64.59 321 ⇑P P 11 00 03.1 -0.9
KIEV Kiev 64.59 321 P P 11 00 03.0 -1.0
KIEV Kiev 64.59 321 P P 11 00 02.6 -1.3
comp=Z,123nm,0.9s
ALN Alexandroupoli 64.78 310 P P 11 00 05.0 -0.4
ALN IAmb IAmb 11 00 12.3
comp=Z,49nm,1.0s
ALN Alexandroupoli 64.78 310 P P 11 00 05.0 -0.4
ALN pmax pmax
comp=Z,49nm,1.0s
PANC Panciu 64.83 316 ⇓P P 11 00 06.8 +1.2
ADZR Andozero 65.06 337⇑ iP P 11 00 07.2 +0.5
ADZR e*PP sP 11 00 13.2 -0.1
ADZR 11 00 47.0
ADZR pmax pmax
comp=Z,79nm,1.1s
IDI Anoyia 65.06 304 P P 11 00 07.2 -0.3
ISR Istrita 65.10 315 ⇑P P 11 00 08.3 +0.7
ISR Istrita 65.10 315 P P 11 00 08.2 +0.7
VRI Vrincioaia 65.11 316 ⇓P P 11 00 08.7 +1.1
VRI Vrincioaia 65.11 316 P P 11 00 08.6 +1.1
PLOR Plostina 65.16 316 ⇑P P 11 00 08.8 +0.9
PLOR Plostina 65.16 316 P P 11 00 08.8 +0.9
TIXI Tiksi 65.18 12 P P 11 00 07.1 -0.3
TIXI Tiksi 65.18 12 P P 11 00 06.5 -0.9
comp=Z,57nm,1.1s,baz=220,slow=3.4,SNR=24
comp=Z,57nm,1.1s
TIXI Tiksi 65.18 12 P P 11 00 07.3 -0.1
MI30 MI30,Zelenitsa 65.23 321 P P 11 00 06.4 -1.7
TESR Tescani 65.29 316 ⇑P P 11 00 08.8 +0.2
LUBAR Lubar, Ukraine 65.30 320 P P 11 00 07.7 -0.9
MI29 MI29, Kamyanyy 65.36 321 P P 11 00 07.8 -1.2
KDZ Kurdzhali 65.41 311 P P 11 00 08.0 -1.5
ONRR Baraj Valea Uz 65.43 316 ⇓P P 11 00 10.5 +1.0
COVR Voineasa-Covas 65.47 316 ⇓P P 11 00 10.2 +0.3
MLR Muntele Rosu 65.58 315 P P 11 00 11.1 +0.4
MLR Muntele Rosu 65.58 315 ⇓P P 11 00 11.7 +1.0
MLR Muntele Rosu 65.58 315 P P 11 00 11.7 +1.0
MA2 Magadan 65.62 29 P P 11 00 10.9 +0.4
MA2 Magadan 65.62 29 P P 11 00 10.3 -0.3
MA2 Magadan 65.62 29 P P 11 00 10.2 -0.3
comp=Z,38nm,0.8s,baz=239,slow=5.5,SNR=26
comp=Z,38nm,0.8s
MA2 Magadan 65.62 29 ce P P 11 00 11.0 +0.4
MA2 pmax pmax
comp=Z,118nm,1.7s
MA2 MLR MLR
comp=Z,606nm,18.0s
MA2 Magadan 65.62 29 P P 11 00 10.2 -0.3
comp=Z,94nm,0.9s,comp=Z,2μm
TURR Turia 65.64 316 ⇑P P 11 00 11.4 +0.4
OZUR 65.80 316 ⇓P P 11 00 12.2 +0.2
KMPD K-Podol'skiy 65.83 319 P P 11 00 10.9 -1.1
KMPD P pP 11 00 11.1 -5.8
SKR Severo-Kuril's 65.84 39 ce P P 11 00 13.6 +1.6
RZN Rozhen 65.87 311 P P 11 00 12.0 -0.7
DOPR Dopca 66.05 316 ⇓P P 11 00 13.9 +0.3
VOIR 66.20 315 ⇑P P 11 00 13.9 -0.8
VOIR 66.20 315 P P 11 00 13.8 -0.8
MNK Minsk 66.38 325 i P P 11 00 14.8 -0.7
MNK i *PP sP 11 00 21.1 -1.0
MNK i 11 00 44.2
MNK i 11 02 40.9
MNK i PPP PPP 11 04 15.7
MNK i S S 11 09 04.4 -0.3
MNK i 11 10 10.2
MNK i SS SS 11 13 22.2 +1.0
MNK pmax pmax
comp=Z,83nm,0.9s
MNK pmax pmax
comp=N,60nm,1.0s
MNK pmax pmax
comp=E,14nm,0.8s
MNK MLR MLR
comp=N,672nm,18.0s
MNK MLR MLR
comp=E,859nm,22.0s
MNK MLR MLR
comp=Z,550nm,21.0s
BURAR Bucovina Array 66.46 317 P P 11 00 16.4 +0.1
BURAR IAmb IAmb 11 00 24.0
comp=Z,22nm,0.9s
BURAR Bucovina Array 66.46 317 ⇓P P 11 00 17.1 +0.8
BUR08 Bucovina Ar. S 66.48 317 P P 11 00 16.6 +0.3
CMSA Cobar Meteorol 66.50 131 P P 11 00 17.0 +0.4
ARPS Mount Arapiles 66.57 138 P P 11 00 17.8 +0.9
RK1H Rockhampton Ha 66.67 121 P P 11 00 18.9 +1.1
KSV Kosov 66.69 318 P P 11 00 16.2 -1.4
PUL Pulkovo 66.74 331 ce P P 11 00 18.3 +0.7
PUL pmax pmax
comp=Z,91nm,0.4s
RNPP5 Staryi Chortor 66.76 321 P P 11 00 17.4 -0.5
H04N2 CROZET ISLANDS 66.76 209 T T 12 13 11.7
baz=44,slow=75,SNR=720
H04N1 CROZET ISLANDS 66.77 209 T T 12 13 03.5
baz=44,slow=75,SNR=649
H04N3 CROZET ISLANDS 66.78 209 T T 12 13 02.2
baz=44,slow=75,SNR=604
RNPP9 Sopachiv 66.79 322 P P 11 00 17.4 -0.8
MPEP Malo Peshtene 66.82 313 P P 11 00 17.5 -1.0
VALR Valaam 67.04 333 i P P 11 00 20.2 +0.7
VALR pmax pmax
comp=Z,96nm,0.9s
VALR MLR MLR
comp=Z,26nm,3.0s
LOT Lotru 67.09 315 ⇓P P 11 00 20.0 -0.4
VTS Vitosha 67.09 312 P P 11 00 20.0 -0.5
AULRC Lightning Ridg 67.23 128 P P 11 00 21.6 +0.3
PEA0B Petropavlovsk- 67.35 37 i P P 11 00 22.4 +0.7
PETK Petropavlovsk- 67.35 37 P P 11 00 20.5 -1.2
PETK Petropavlovsk- 67.35 37 P P 11 00 20.3 -1.5
comp=Z,4.9nm,0.9s,baz=220,slow=3.9,SNR=7.0
comp=Z,4.9nm,0.9s
PETK Petropavlovsk- 67.35 37 P P 11 00 20.5 -1.2
JOF Joensuu 67.43 334 eP P 11 00 22.7 +0.7
MORS Morshin 67.60 319 P P 11 00 22.8 -0.6
SEY Seymchan 67.61 26 P P 11 00 22.2 -0.9
comp=Z,32nm,1.0s,baz=275,slow=4.8,SNR=46
comp=Z,32nm,1.0s
SEY Seymchan 67.61 26 ce P P 11 00 22.7 -0.4
SEY pmax pmax
comp=Z,91nm,1.7s
SEY MLR MLR
comp=Z,1μm,22.0s
LVV L'vov 67.63 320 eP P 11 00 22.9 -0.7
MARR Marisel-Cluj 67.72 316 ⇑P P 11 00 24.7 +0.4
MEZ Mezhgor'ye 67.74 318 P P 11 00 24.7 +0.4
GZR Gura Zlata 67.77 315 ⇑P P 11 00 24.0 -0.7
GZR Gura Zlata 67.77 315 P P 11 00 23.9 -0.7
LSZ Lusaka 67.87 249 P P 11 00 26.1 +0.4
LSZ IAmb IAmb 11 00 34.1
comp=Z,38nm,1.0s
LSZ Lusaka 67.87 249 P P 11 00 27.0 +1.2
LSZ Lusaka 67.87 249 P P 11 00 26.1 +0.4
LSZ pmax pmax
comp=Z,38nm,1.0s
PET Petropavlovsk 67.89 37 P P 11 00 24.7 -0.4
PET Petropavlovsk 67.89 37 P P 11 00 23.9 -1.2
PET Petropavlovsk 67.89 37 ce P P 11 00 25.5 +0.4
PET pmax pmax
comp=Z,16nm,1.0s
PET MLR MLR
comp=Z,647nm,18.0s
PET Petropavlovsk 67.89 37 P P 11 00 24.1 -1.0
comp=Z,17nm,0.9s
EIDS Eidsvold 67.96 123 P P 11 00 26.8 +0.8
EIDS Eidsvold 67.96 123 P P 11 00 25.5 -0.5
EIDS IAmb IAmb 11 00 27.7
comp=Z,49nm,1.4s
SHIU Shidnytsya 67.96 319 P P 11 00 26.0 +0.3
HERR Herculane 67.96 314 ⇑P P 11 00 25.6 -0.2
DRGR 68.01 316 ⇓P P 11 00 26.7 +0.6
DRGR 68.01 316 P P 11 00 26.7 +0.6
BRIU Brid 68.04 318 P P 11 00 26.0 -0.1
VSU Vasula 68.09 329 ce P P 11 00 26.4 +0.2
VSU pmax pmax
comp=Z,105nm,1.7s
AUMAG Moama Anglican 68.16 136 P P 11 00 27.6 +0.6
LVZ Lovozero 68.27 340 P P 11 00 27.0 -0.2
LVZ IAmb IAmb 11 00 34.1
comp=Z,50nm,1.0s
LVZ Lovozero 68.27 340 ce P P 11 00 27.6 +0.4
LVZ pmax pmax
comp=Z,54nm,1.7s
LVZ Lovozero 68.27 340 P P 11 00 26.8 -0.4
comp=Z,62nm,1.1s
BERU Beregovo 68.27 318 P P 11 00 26.7 -0.9
SURR Surduc 68.27 315 ⇑P P 11 00 28.1 +0.4
FNA Florina 68.29 310 P P 11 00 26.4 -1.5
FNA IAmb IAmb 11 00 33.7
comp=Z,35nm,1.1s
FNA Florina 68.29 310 P P 11 00 26.5 -1.5
FNA pmax pmax
comp=Z,35nm,1.1s
BOVS Bovan 68.32 313 ⇑P P 11 00 27.1 -0.9
BRAT Ballarat 68.39 137 P P 11 00 29.3 +0.9
KWP Kalwaria Pacla 68.45 319 eP P 11 00 28.6 -0.1
KWP Kalwaria Pacla 68.45 319 P P 11 00 28.8 +0.1
KWP Kalwaria Pacla 68.45 319 P P 11 00 28.8 +0.1
KWP pmax pmax
comp=Z,69nm,1.1s
KWP Kalwaria Pacla 68.45 319 P P 11 00 28.8 +0.1
comp=Z,62nm,1.3s
HOLU Holmets 68.48 318 P P 11 00 28.8 -0.1
APA Apatity 68.54 339 ⇓ i P P 11 00 27.4 -1.5
APA i 11 00 54.3
APA pmax pmax
comp=Z,35nm,0.9s
BZS Buzias 68.61 315 ⇑P P 11 00 30.1 +0.3
BZS Buzias 68.61 315 P P 11 00 30.1 +0.3
KOLS Kolonicke sedl 68.62 318 eP P 11 00 30.0 +0.2
KOLS pmax pmax
comp=Z,13nm,0.9s
KOLS Kolonicke sedl 68.62 318 eP P 11 00 30.0 +0.2
SIRR Siria 68.66 316 ⇑P P 11 00 30.1 0.0
ARBE Arbavere 68.73 330 eP P 11 00 30.8 +0.6
OHR Ohrid 68.75 310 i P P 11 00 29.9 -0.9
PABE Paberze 68.81 326 P P 11 00 30.0 -0.8
PABE IAmb IAmb 11 00 37.7
comp=Z,36nm,0.8s
PABE Paberze 68.81 326 eP P 11 00 30.8 0.0
SUW Suwalki 68.95 324 eP P 11 00 31.0 -0.7
SUW Suwalki 68.95 324 P P 11 00 31.3 -0.4
SUW Suwalki 68.95 324 eP P 11 00 31.0 -0.7
SUW Suwalki 68.95 324 P P 11 00 31.3 -0.4
SUW pmax pmax
comp=Z,132nm,0.9s
GEXS Deakin Univers 68.98 138 P P 11 00 33.5 +1.4
AUDCS Dubbo College 69.02 130 P P 11 00 33.2 +0.7
CRVS Cervenica-Dubn 69.14 318 eP P 11 00 33.6 +0.5
CRVS e 11 00 40.0
CRVS pmax pmax
comp=Z,68nm,1.3s
CRVS Cervenica-Dubn 69.14 318 eP P 11 00 33.6 +0.5
CRVS e 11 00 40.0
POGA Pongola 69.18 235 P P 11 00 34.5 +0.9
FIA1 FINESS Array S 69.25 332 P P 11 00 33.5 +0.1
FINES FINESS Array B 69.25 332 P P 11 00 33.7 +0.2
FINES FINESS Array B 69.25 332 P P 11 00 33.5 0.0
comp=Z,27nm,0.8s,baz=114,slow=8.5,SNR=55
comp=Z,27nm,0.8s
FINES FINESS Array B 69.25 332 P P 11 00 33.7 +0.2
KEK Kerkira 69.42 308 P P 11 00 33.8 -1.1
TOO Toolangi 69.44 137 P P 11 00 36.5 +1.4
TOO Toolangi 69.44 137 P P 11 00 36.0 +0.9
TOO IAmb IAmb 11 00 57.5
comp=Z,35nm,1.0s
TOO Toolangi 69.44 137 P P 11 00 36.0 +0.9
TOO pmax pmax

comp=Z,35nm,1.0s
**TIR Tirane 69.47 310** P **P** **11 00 33.7 -1.5**
TIR IAmb IAmb 11 01 09.7
comp=Z,26nm,0.9s
**TIR Tirane 69.47 310** P **P** **11 00 33.7 -1.5**
TIR pmax pmax
comp=Z,26nm,0.9s
**PUK Puka 69.50 311** P **P** **11 00 34.3 -1.2**
**IVA Berane 69.57 312**⇑ *i*P **P** **11 00 34.8 -1.1**
**MTSE Matsula 69.63 329** *e*P **P** **11 00 36.0 +0.2**
**MEF Metsahovi 69.71 331** *e*P **P** **11 00 36.4 +0.2**
**YNG Young 69.83 132** P **P** **11 00 37.3 -0.2**
**KOME Kolasin 69.84 312**⇑ *i*P **P** **11 00 36.5 -1.1**
**NIE Niedzica 69.97 319** *e*P **P** **11 00 38.1 -0.1**
**NIE Niedzica 69.97 319** P **P** **11 00 38.1 -0.1**
comp=Z,9.9nm,1.3s
**PLE Pljevlja 69.97 312**⇑ *i*P **P** **11 00 37.3 -1.1**
**PDG Podgorica 70.00 311** P **P** **11 00 37.3 -1.1**
PDG IAmb IAmb 11 00 44.6
comp=Z,45nm,1.2s
**PDG Podgorica 70.00 311**⇓ P **P** **11 00 37.7 -0.7**
**PDG Podgorica 70.00 311**⇑ *i*P **P** **11 00 37.0 -1.4**
**KEF Keuruu 70.01 333** *e*P **P** **11 00 38.0 0.0**
**DRME Dracevica, Mon 70.04 311**⇑ *i*P **P** **11 00 37.2 -1.5**
**PBUR Paburge 70.05 326** *e*P **P** **11 00 38.9 +0.4**
**PSZ Piszkesteto 70.06 317** P **P** **11 00 38.2 -0.6**
**PSZ Piszkesteto 70.06 317** P **P** **11 00 38.2 -0.6**
PSZ pmax pmax
comp=Z,21nm,1.0s
**AUPHS Peel High Scho 70.22 128** P **P** **11 00 40.5 +0.5**
**NKME Niksic 70.25 312**⇑ *i*P **P** **11 00 38.9 -1.1**
**CEME Cevo 70.26 311**⇑ *i*P **P** **11 00 38.9 -1.2**
**BUM Brajici-Budva 70.26 311**⇑ *i*P **P** **11 00 38.9 -1.3**
**AUWSH Wavell State H 70.38 124** P **P** **11 00 42.3 +1.3**
**OJC Ojcow 70.39 320** *e*P **P** **11 00 40.1 -0.5**
**OJC Ojcow 70.39 320** P **P** **11 00 40.0 -0.7**
OJC IAmb IAmb 11 00 47.8
comp=Z,36nm,1.0s
**OJC Ojcow 70.39 320** P **P** **11 00 40.0 -0.7**
OJC pmax pmax
comp=Z,36nm,1.0s
**OJC Ojcow 70.39 320** P **P** **11 00 40.2 -0.5**
comp=Z,38nm,1.1s,comp=Z,719nm
**SCTE Santa Cesarea 70.46 309** P **P** **11 00 40.5 -0.8**
**LANS Liptovska Anna 70.48 318** *e*P **P** **11 00 41.6 +0.3**
LANS pmax pmax
comp=Z,4.0nm,1.0s
**LANS Liptovska Anna 70.48 318** *e*P **P** **11 00 41.6 +0.3**
**ARMA Armidale 70.50 127** P **P** **11 00 43.9 +2.1**
**ARMA Armidale 70.50 127** P **P** **11 00 41.3 -0.5**
ARMA IAmb IAmb 11 00 51.3
comp=Z,64nm,1.1s
**BRY Bratogost 70.56 312**⇑ *i*P **P** **11 00 40.8 -1.3**
**MORH Mrgy, Hungar 70.74 315**⇓ P **P** **11 00 42.8 -0.1**
**MORH Mrgy, Hungar 70.74 315** P **P** **11 00 41.9 -1.0**
comp=Z,28nm,1.3s
**CAN Canberra 70.75 133** P **P** **11 00 43.8 +0.6**
**CAN Canberra 70.75 133** P **P** **11 00 43.0 -0.2**
CAN IAmb IAmb 11 00 52.2
comp=Z,42nm,0.9s
**CAN Canberra 70.75 133** P **P** **11 00 43.0 -0.2**
CAN pmax pmax
comp=Z,42nm,0.9s
**VYHS Vyhne 70.82 318** *e*P **P** **11 00 42.8 -0.6**
VYHS *e* 11 00 49.4
VYHS pmax pmax
comp=Z,16nm,1.1s
**VYHS Vyhne 70.82 318** *e*P **P** **11 00 42.8 -0.6**
VYHS *e* 11 00 49.4
**CNB Canberra Magne 71.01 133** P **P** **11 00 45.1 +0.3**
**RAF Rauma 71.16 331** *e*P **P** **11 00 44.9 -0.2**
**VAF Ylistaro 71.22 333** *e*P **P** **11 00 46.1 +0.7**
**SYDH Sydney Hard Ro 71.30 131** P **P** **11 00 48.4 +2.0**
**KEV Kevo 71.56 341** P **P** **11 00 47.1 -0.3**
KEV IAmb IAmb 11 00 55.4
comp=Z,48nm,1.1s
**KEV Kevo 71.56 341** P **P** **11 00 47.1 -0.3**
KEV pmax pmax
comp=Z,48nm,1.1s
**MPLH Magyarpolny 71.57 316** P **P** **11 00 47.7 -0.2**
comp=Z,129nm,1.3s
**JAVC Velka Javorina 71.62 318** *e*P **P** **11 00 48.8 +0.5**
**TIP Timpagrande 71.75 308** P **P** **11 00 49.0 -0.3**
TIP IAmb IAmb 11 00 56.4
comp=Z,66nm,1.4s
**MORC Moravsky Berou 71.79 319** P **P** **11 00 49.3 0.0**
MORC IAmb IAmb 11 00 56.7
comp=Z,35nm,1.1s
**MORC Moravsky Berou 71.79 319** *e*P **P** **11 00 49.0 -0.3**
**MORC Moravsky Berou 71.79 319**⇑ P **P** **11 00 49.6 +0.3**
**MORC Moravsky Berou 71.79 319** P **P** **11 00 49.5 +0.3**
**AAL Aland 71.85 330** *e*P **P** **11 00 49.0 -0.3**
**ZST Bratislava 71.95 317** *e*P **P** **11 00 50.4 +0.3**
ZST *e* 11 00 56.9
ZST pmax pmax
comp=Z,96nm,1.2s
**ZST Bratislava 71.95 317** *e*P **P** **11 00 50.4 +0.3**
ZST *e* 11 00 56.9
**ARCES ARCESS Array B 71.98 340** P **P** **11 00 50.7 +0.8**
ARCES IAmb IAmb 11 00 57.5
comp=Z,50nm,1.1s
**ARCES ARCESS Array B 71.98 340** P **P** **11 00 50.2 +0.3**
comp=Z,25nm,1.0s,baz=95,slow=6.1,SNR=28
comp=Z,25nm,1.0s
**KRLC Kraliky 72.31 319** *e*P **P** **11 00 52.8 +0.4**
**KRLC Kraliky 72.31 319** *e*P **P** **11 00 52.8 +0.4**
**VRAC Vranov 72.37 318** *e*P **P** **11 00 52.3 -0.4**
**KOGS Kog 72.41 315** *i*P **P** **11 00 52.6 -0.4**
**CEL Celeste 72.41 307** P **P** **11 00 53.2 0.0**
**CEL Celeste 72.41 307** P **P** **11 00 53.6 +0.4**
comp=Z,98nm,1.2s
**RONA Rosalia, Austr 72.45 317** *e*P **P** **11 00 52.6 -0.7**
comp=Z,9.1nm,1.3s,SNR=5.3
**KRUC Moravsky 72.48 318** *e*P **P** **11 00 52.9 -0.4**
**CUC Castrocucco 72.49 309** P **P** **11 00 53.5 -0.1**
**SGRT San Giovanni R 72.58 310** P **P** **11 00 53.1 -1.1**
**DPC Dobruska-Polom 72.62 320** *e*P **P** **11 00 54.6 +0.4**
**DPC Dobruska-Polom 72.62 320** *e*P **P** **11 00 54.6 +0.4**
**DPC Dobruska-Polom 72.62 320** P **P** **11 00 54.3 +0.1**
comp=Z,27nm,1.2s
**KSP Ksiaz 72.68 320** *e*P **P** **11 00 54.5 0.0**
**KSP Ksiaz 72.68 320** P **P** **11 00 54.5 0.0**
comp=Z,41nm,1.1s
**CONA Conrad Observa 72.76 317** *e*P **P** **11 00 54.7 -0.4**
comp=Z,5.5nm,1.1s,SNR=6.3
**CHVC Chvalec 72.81 320** *e*P **P** **11 00 55.8 +0.5**
**CHVC Chvalec 72.81 320** *e*P **P** **11 00 55.8 +0.5**
**GLAD Gladstone 72.89 139** P **P** **11 00 56.7 +0.9**
**ARSA Arzberg 72.95 316** *e*P **P** **11 00 56.1 -0.1**
comp=Z,10.0nm,1.0s,SNR=8.9
**UPP Uppsala 72.97 330** *e*P **P** **11 00 56.0 +0.1**
**SOKA Soboth 73.26 316** *i*P **P** **11 00 57.9 -0.2**
comp=Z,30nm,1.2s,SNR=20
**LBTB Lobatse 73.38 240** P **P** **11 00 59.8 +0.6**
LBTB IAmb IAmb 11 01 07.5
comp=Z,64nm,1.1s
**LBTB Lobatse 73.38 240** P **P** **11 00 59.8 +0.6**
LBTB pmax pmax
comp=Z,64nm,1.1s
**TAU Tasmania Unive 73.46 141** P **P** **11 00 59.9 +0.8**
**GOPC GO Pecny, Ondr 73.58 319** *e*P **P** **11 01 00.4 +0.5**
GOPC *ep*P **sP** **11 01 06.4 -0.1**
**GOPC GO Pecny, Ondr 73.58 319** *e*P **P** **11 01 00.4 +0.5**
GOPC *e**PP **sP** **11 01 06.4 -0.1**
**OBKA Obir 73.58 315** *e*P **P** **11 00 59.8 -0.3**
comp=Z,27nm,1.3s,SNR=9.8
**PRU Pruhonice 73.74 319** *e*P **P** **11 01 01.3 +0.5**
PRU *ep*P **sP** **11 01 07.2 -0.2**
**PRU Pruhonice 73.74 319** *e*P **P** **11 01 01.3 +0.5**
PRU *e* **sP** **11 01 07.2 -0.2**
PRU *e**PP **sP** **11 01 07.2 -0.2**
**CRNS Crni Vrh 73.77 315** *i*P **P** **11 01 00.6 -0.5**
**MOA Molln 73.83 317** *e*P **P** **11 01 00.7 -0.7**
comp=Z,13nm,1.1s
**CKRC Cesky Krumlov 73.84 318** *e*P **P** **11 01 02.0 +0.6**
**CKRC Cesky Krumlov 73.84 318** *e*P **P** **11 01 02.0 +0.6**
**BSD Bornholm Skovb 73.87 324** *e*P **P** **11 01 05.1 +3.7**
**ZVC Zvikov 73.94 318** *e*P **P** **11 01 02.2 +0.2**
**INTR Introdacqua 73.96 311** P **P** **11 01 02.0 -0.3**
**CADS Cadrg 74.14 315** *i*P **P** **11 01 02.5 -0.8**
**BRG Berggiesshubel 74.17 320** *i*P **P** **11 01 03.9 +0.6**
BRG Amp 11 01 04.7
comp=Z,20nm,1.0s
**BRG Berggiesshubel 74.17 320** P **P** **11 01 10.0 +6.7**
BRG Amp 11 01 10.8
comp=Z,31nm,1.0s
**BRG Berggiesshubel 74.17 320** *i*P **P** **11 01 03.8 +0.6**
BRG pmax pmax
comp=Z,20nm,1.0s
**BRG Berggiesshubel 74.17 320** *e*P **P** **11 01 03.2 -0.1**
comp=Z,20nm,0.9s,baz=91,slow=5.7
**MYKA Terra Mystica 74.21 316** *e*P **P** **11 01 02.9 -0.8**
comp=Z,6.8nm,1.0s
**SABO M.te Sabotino 74.23 315** P **P** **11 01 03.3 -0.4**
SABO IAmb IAmb 11 01 10.0
comp=Z,25nm,1.0s
**GEC2 GERESS Array S 74.24 318** P **P** **11 01 03.8 -0.1**
**GEC2 GERESS Array S 74.24 318** *e*P **P** **11 01 03.8 -0.1**
comp=Z,21nm,1.0s,baz=91,slow=5.7
GEC2 *ep*P **sP** **11 01 09.7 -0.8**
**GERES GERESS Array B 74.24 318** P **P** **11 01 03.6 -0.2**
**GERES GERESS Array B 74.24 318** P **P** **11 01 03.4 -0.4**
comp=Z,5nm,0.9s,baz=90,slow=5.3,SNR=20
comp=Z,9.5nm,0.9s
**GERES GERESS Array B 74.24 318** P **P** **11 01 03.6 -0.2**
**BIOA Bad Ischl, Aus 74.25 317** *e*P **P** **11 01 03.1 -0.7**
comp=Z,14nm,1.3s
**PRED Cave del Predi 74.26 315** P **P** **11 01 03.6 -0.4**
PRED IAmb IAmb 11 01 10.8
comp=Z,30nm,0.9s
**CAMP Campotosto 74.33 311** P **P** **11 01 03.4 -1.2**
**KHC Kasperske Hory 74.33 318** P **P** **11 01 04.2 -0.2**
**KHC Kasperske Hory 74.33 318** *e*P **P** **11 01 04.1 -0.2**
KHC *ep*P **sP** **11 01 10.1 -0.8**
**KHC Kasperske Hory 74.33 318** *ce*P **P** **11 01 04.5 +0.2**
KHC pmax pmax
comp=Z,28nm,1.3s
**KHC Kasperske Hory 74.33 318** P **P** **11 01 03.5 -0.8**
comp=Z,16nm,1.1s
**RUE Ruedersdorf 74.36 322** *e*P **P** **11 01 04.5 +0.2**
**RUE Ruedersdorf 74.36 322** *e*P **P** **11 01 04.2 -0.1**
comp=Z,136nm,1.5s,baz=91,slow=5.7
**KBA Koelnbreinsper 74.43 316** *e*P **P** **11 01 04.1 -0.9**
comp=Z,12nm,1.1s,SNR=9.0
**NRCA Norcia 74.55 312** P **P** **11 01 05.2 -0.5**
**DEL Delary 74.56 326** *e*P **P** **11 01 05.1 -0.3**
**FDMO Fiordimonte 74.56 312** P **P** **11 01 05.2 -0.6**
**BILL Bilibino 74.58 22** P **P** **11 01 05.9 +0.5**
BILL IAmb IAmb 11 01 19.7
comp=Z,30nm,0.4s
**BILL Bilibino 74.58 22** *i*P **P** **11 01 05.6 +0.3**
BILL *i* 11 01 11.3
BILL pmax pmax
comp=Z,21nm,1.1s
**CLL Collm 74.78 320** P **P** **11 01 06.6 -0.2**
**CLL Collm 74.78 320**⇑ *i*P **P** **11 01 06.3 -0.5**
comp=Z,23nm,1.1s
CLL *i* pP **pP** **11 01 12.1 +0.4**
comp=Z,28nm,1.1s
**CLL Collm 74.78 320**⇑ *i*P **P** **11 01 06.3 -0.5**
CLL *i* *PP **pP** **11 01 12.1 +0.4**
CLL pmax pmax
comp=Z,23nm,1.1s
**CLL Collm 74.78 320** P **P** **11 01 06.4 -0.4**
comp=Z,23nm,1.1s
**CLL Collm 74.78 320** *e*P **P** **11 01 06.3 -0.4**
comp=Z,30nm,1.3s,baz=91,slow=5.7
CLL *ep*P **sP** **11 01 12.7 -0.7**
**WET Wettzell 74.79 318** *e*P **P** **11 01 07.0 +0.1**
comp=Z,22nm,1.2s,baz=91,slow=5.7
WET *ep*P **sP** **11 01 13.0 -0.6**
**RJOB Jochberg 74.81 317** *e*P **P** **11 01 06.4 -0.8**
comp=Z,16nm,1.2s,baz=91,slow=5.7
**STAL STALIGIAL 74.85 315** P **P** **11 01 07.3 0.0**
STAL IAmb IAmb 11 01 13.9
comp=Z,55nm,1.3s
**LESA Schwarzleotal 74.89 316** *e*P **P** **11 01 06.7 -1.0**
comp=Z,13nm,0.9s
**BOSA Boshof 74.93 237** P **P** **11 01 08.5 +0.3**
**BOSA Boshof 74.93 237** P **P** **11 01 08.8 +0.6**
comp=Z,27nm,0.9s,baz=76,slow=6.3,SNR=31
comp=Z,27nm,0.9s
**HFS Hagfors 74.96 330** P **P** **11 01 07.2 -0.4**
comp=Z,11nm,0.7s,baz=91,slow=7.4,SNR=15
comp=Z,11nm,0.7s
**ABTA Abfaltersbach 74.99 316** *e*P **P** **11 01 07.0 -1.2**
comp=Z,8.5nm,0.9s,SNR=6.7
**CIMO Cimolais 75.04 315** P **P** **11 01 08.0 -0.5**
CIMO IAmb IAmb 11 01 15.2
comp=Z,53nm,1.0s
**TANN Tannenbergstha 75.09 319** *e*P **P** **11 01 08.7 0.0**
comp=Z,20nm,1.3s,baz=91,slow=5.7
**ROTZ Rotzenmuhle 75.24 319** *e*P **P** **11 01 10.1 +0.5**
comp=Z,7.4nm,1.1s,baz=91,slow=5.7
**PLN Plauen 75.29 320** *e*P **P** **11 01 09.7 -0.1**
comp=Z,13nm,0.9s,baz=91,slow=5.7
**MANZ Manzenberg 75.31 319** *e*P **P** **11 01 10.3 +0.4**
comp=Z,13nm,1.3s,baz=91,slow=5.7
MANZ *ep*P **sP** **11 01 16.7 +0.1**
**CTI Castel Tesino 75.59 315** P **P** **11 01 11.6 -0.1**
CTI IAmb IAmb 11 01 18.6
comp=Z,40nm,1.0s
CTI IAMs_20 IAMs_20 11 26 13.7
comp=Z,1µm,21.0s
**CTI Castel Tesino 75.59 315** P **P** **11 01 11.6 -0.1**
CTI pmax pmax
comp=Z,40nm,1.0s
**WTTA Wattenberg 75.60 316** *e*P **P** **11 01 10.7 -1.1**
comp=Z,14nm,1.0s,SNR=9.2
**WATA Walderalm 75.64 316** *e*P **P** **11 01 10.7 -1.3**
comp=Z,20nm,1.1s,SNR=5.6
**MOX Moxa 75.64 320** *e*P **P** **11 01 11.8 0.0**
comp=Z,12nm,1.0s,baz=91,slow=5.7
**GORT1 Trebel 75.88 322** *e*P **P** **11 01 12.8 -0.2**
comp=Z,50nm,1.4s,baz=91,slow=5.7
**GRA1 Grafenberg Arr 75.88 319** P **P** **11 01 13.7 +0.5**
GRA1 IAmb IAmb 11 01 20.9
comp=Z,45nm,1.1s
**GRF Grafenberg Arr 75.88 319** P **P** **11 01 13.7 +0.5**
GRF pmax pmax
comp=Z,45nm,1.1s
**GRF Grafenberg Arr 75.88 319** *e*pP pP 11 01 19.6 +1.5
**GRFO Grafenberg 75.88 319** P **P** **11 01 13.7 +0.5**
GRFO IAmb IAmb 11 01 20.9
comp=Z,53nm,1.2s
**GRFO Grafenberg 75.88 319** P **P** **11 01 13.7 +0.5**
GRFO pmax pmax
comp=Z,53nm,1.2s
**SQTA Sankt Quirin 75.89 316** *e*P **P** **11 01 12.2 -1.2**
comp=Z,18nm,0.8s,SNR=7.2
**MOTA Moosalm 75.96 316** *e*P **P** **11 01 12.5 -1.4**
comp=Z,18nm,0.9s
**NC405 NORSAR Array S 76.01 330** P **P** **11 01 13.8 +0.1**
NC405 IAmb IAmb 11 01 20.7
comp=Z,49nm,1.1s
**NC602 NORSAR Array S 76.07 330** P **P** **11 01 13.8 -0.2**
**ZCCA Zocca 76.08 313** P **P** **11 01 14.3 -0.2**
ZCCA IAmb IAmb 11 01 27.1
comp=Z,47nm,1.1s
**NC303 NORSAR Array S 76.18 331** P **P** **11 01 14.6 -0.1**
**RETA Reutte 76.19 316** *e*P **P** **11 01 14.2 -0.9**
comp=Z,29nm,1.1s,SNR=11
**NB201 NORSAR Array S 76.21 330** P **P** **11 01 14.8 -0.1**
NB201 IAmb IAmb 11 01 21.6
comp=Z,37nm,1.2s
**FETA Feichten 76.22 316** *e*P **P** **11 01 14.5 -0.8**
comp=Z,18nm,1.0s,SNR=9.7
**NB2 NORSAR Subarra 76.25 330** P **P** **11 01 14.3 -0.8**
comp=Z,52nm,1.2s,baz=93,slow=6.2
**NB2 NORSAR Subarra 76.25 330** P **P** **11 01 14.3 -0.8**
baz=93,slow=6.2
**NOA NORSAR Array B 76.25 330** P **P** **11 01 14.2 -0.9**
comp=Z,11nm,0.9s,baz=94,slow=5.7,SNR=23
comp=Z,11nm,0.9s
**NAO01 NORSAR Array S 76.40 330** P **P** **11 01 15.7 -0.2**
NAO01 IAmb IAmb 11 01 22.6
comp=Z,35nm,1.1s
**CLZ Clausthal 76.43 321** *e*P **P** **11 01 16.4 0.0**
comp=Z,20nm,0.9s,baz=91,slow=5.7
**NBO00 NORSAR Array S 76.46 330** P **P** **11 01 16.2 -0.1**
NBO00 IAmb IAmb 11 01 23.1
comp=Z,46nm,1.2s
**NC204 NORSAR Array S 76.48 331** P **P** **11 01 16.0 -0.5**
NC204 IAmb IAmb 11 01 23.5
comp=Z,39nm,1.2s
**BSEG Bad Segeberg 76.49 323** *e*P **P** **11 01 16.7 +0.3**
comp=Z,36nm,1.0s,baz=91,slow=5.7
BSEG *ep*P **sP** **11 01 23.0 -0.1**
**FUORN Ofenpass-Fuorn 76.54 316** P **P** **11 01 16.1 -1.3**
**UBR Ueberruh 76.63 317** *e*P **P** **11 01 16.9 -0.7**
comp=Z,15nm,0.8s,baz=91,slow=5.7
UBR *ep*P **sP** **11 01 23.2 -1.0**
**SPB1 Spitsbergen Ar 76.78 348** P **P** **11 01 17.8 0.0**
**SPB2 Spitsbergen Ar 76.78 348** P **P** **11 01 17.9 +0.1**
SPB2 IAmb IAmb 11 01 25.7
comp=Z,51nm,1.0s
**SPA2 Spitsbergen Ar 76.78 348** P **P** **11 01 17.9 +0.1**
**SPITS Spitsbergen Ar 76.78 348** P **P** **11 01 16.2 -1.5**
comp=Z,23nm,0.7s,baz=129,slow=16,SNR=13
comp=Z,23nm,0.7s
**SPITS Spitsbergen Ar 76.78 348** P **P** **11 01 18.8 +1.0**
SPITS pmax pmax
comp=Z,84nm,1.1s
**DAVA Damuels 76.79 316** *e*P **P** **11 01 18.2 -0.4**
comp=Z,18nm,0.9s,SNR=9.1
**TATN Tataouine 76.98 301** P **P** **11 01 20.8 +0.9**
TATN IAmb IAmb 11 01 28.1
comp=Z,63nm,1.0s
**KONO Kongsberg 76.99 329** P **P** **11 01 19.3 +0.1**
KONO IAmb IAmb 11 01 20.4
comp=Z,44nm,1.2s
**KONO Kongsberg 76.99 329** P **P** **11 01 19.3 +0.1**
KONO pmax pmax
comp=Z,44nm,1.3s
**SHEM Shemya Is, Ala 77.16 38** P **P** **11 01 19.6 -0.7**
comp=Z,82nm,0.8s,baz=265,slow=17,SNR=8.0
comp=Z,82nm,0.8s
**STU Stuttgart 77.22 318** P **P** **11 01 20.6 -0.2**
**STU Stuttgart 77.22 318** P **P** **11 01 20.6 -0.2**
STU pmax pmax
comp=Z,18nm,0.8s
**VSL Villasalto 77.46 308** P **P** **11 01 21.5 -0.9**
**TNS Taunus Mts 77.67 319** *e*P **P** **11 01 23.3 0.0**
comp=Z,20nm,1.1s,baz=91,slow=5.7
TNS *ep*P **sP** **11 01 29.4 -0.6**
**KEST Kesra 77.73 304** P **P** **11 01 24.5 +0.5**
KEST IAmb IAmb 11 01 31.6
comp=Z,54nm,1.0s
**KEST Kesra 77.73 304** P **P** **11 01 24.4 +0.3**
comp=Z,29nm,0.9s,baz=294,slow=2.5,SNR=17
comp=Z,29nm,0.9s
**KOUNC Koumac, New Ca 77.77 114** P **P** **11 01 21.9 -2.4**
**KBS Kingsbay 77.78 349** P **P** **11 01 23.7 +0.4**
KBS IAmb IAmb 11 01 30.4
comp=Z,37nm,1.1s
**KBS Kingsbay 77.78 349** *ce*P **P** **11 01 24.1 +0.7**
KBS pmax pmax
comp=Z,44nm,2.5s
**KBS Kingsbay 77.78 349** *i*P **P** **11 01 22.9 -0.5**
**BFO Black Forest 77.81 317** P **P** **11 01 23.6 -0.5**
**BFO Black Forest 77.81 317** P **P** **11 01 23.6 -0.5**
BFO pmax pmax
comp=Z,24nm,1.0s
**BFO Black Forest 77.81 317** *e*P **P** **11 01 23.4 -0.7**
comp=Z,18nm,1.1s,baz=91,slow=5.7
**CASY Casey 77.83 172** P **P** **11 01 23.7 +0.1**
**AHRW Bad Neuenahr-A 78.53 320** *e*P **P** **11 01 28.4 +0.4**
comp=Z,46nm,1.4s,baz=91,slow=5.7
**SENIN Lac Senin/Sane 78.60 315** P **P** **11 01 28.7 -0.1**
**TSUM Tsumeb 78.70 248** P **P** **11 01 28.9 -0.8**
**BNI Bardonecchia 79.11 314** P **P** **11 01 31.1 -0.5**
**BNI Bardonecchia 79.11 314** P **P** **11 01 31.1 -0.5**
BNI pmax pmax
comp=Z,25nm,1.0s
**WLF Walferdange 79.17 319** P **P** **11 01 31.2 -0.4**
**WLF Walferdange 79.17 319** P **P** **11 01 31.2 -0.4**
WLF pmax pmax
comp=Z,33nm,1.1s
**SUR Sutherland 79.82 234** P **P** **11 01 37.1 +1.4**
SUR IAmb IAmb 11 01 44.7
comp=Z,38nm,1.0s
**SUR Sutherland 79.82 234** P **P** **11 01 37.5 +1.9**
**YATNC Mamie plateau, 80.52 115** P **P** **11 01 39.8 +0.4**
**SSB Saint Sauveur 80.60 314** P **P** **11 01 39.0 -0.5**
SSB IAmb IAmb 11 01 46.7
comp=Z,42nm,1.0s
**SSB Saint Sauveur 80.60 314** P **P** **11 01 39.0 -0.5**
SSB pmax pmax
comp=Z,42nm,1.0s
**MAW Mawson 80.61 191** P **P** **11 01 38.4 -0.4**
comp=Z,8.2nm,1.0s,baz=19,slow=7.0,SNR=12
comp=Z,8.2nm,1.0s
**CLF Chambon-Foret 81.88 317** P **P** **11 01 46.7 +0.6**
CLF IAmb IAmb 11 01 53.4
comp=Z,40nm,0.8s
**NOR Nord 82.32 352** *i*P **P** **11 01 47.2 -0.6**
NOR IAmb IAmb 11 01 55.2
comp=Z,71nm,1.2s
**TAM Tamanrasset 82.47 292** P **P** **11 01 51.4 +1.5**
TAM IAmb IAmb 11 01 58.7
comp=Z,40nm,1.1s
**TAM Tamanrasset 82.47 292** P **P** **11 01 51.4 +1.5**
TAM pmax pmax
comp=Z,40nm,1.1s
**CEST Esterri de Car 83.27 312** P **P** **11 01 54.2 +0.4**
CEST IAmb IAmb 11 02 01.2
comp=Z,47nm,1.1s
**GAMB Gambell 83.59 26** P **P** **11 01 54.7 +0.1**
baz=281
**EKA Eskdalemuir Ar 84.17 325** P **P** **11 01 57.7 -0.2**
comp=Z,6.2nm,0.7s,baz=98,slow=5.4,SNR=11
comp=Z,6.2nm,0.7s
**DAG Danmarks Havn 84.40 347** *i*P **P** **11 01 57.9 -0.7**
DAG IAmb IAmb 11 02 05.0
comp=Z,53nm,1.3s
**TNA Tin City 84.80 24** P **P** **11 02 00.7 -0.1**
baz=284
**C16K Lisburne Hills 85.09 21** P **P** **11 02 02.8 +0.6**
**C16K Lisburne Hills 85.09 21** P **P** **11 02 02.9 +0.6**
baz=286
**F14K Arctic Creek 85.47 24** P **P** **11 02 04.7 +0.6**
baz=285
**SPIA Saint Paul Isl 85.62 33** P **P** **11 02 04.6 -0.5**
baz=282
**C17K DeLong Mountai 85.80 21** P **P** **11 02 06.2 +0.4**
baz=286
**A19K Wainwright 85.95 19** P **P** **11 02 06.4 0.0**
baz=290
**B18K Kokolik River 85.99 20** P **P** **11 02 07.7 +1.0**
baz=289
**RDOG Red Dog Mine 86.02 21** P **P** **11 02 07.5 +0.5**
RDOG IAmb IAmb 11 02 08.1
comp=Z,39nm,1.4s
**RDOG Red Dog Mine 86.02 21** P **P** **11 02 07.8 +0.9**
baz=288
**D17K Noatak River 86.07 22** P **P** **11 02 08.0 +0.8**
baz=288
**F15K North Star Dit 86.08 24** P **P** **11 02 08.2 +1.0**
F15K IAmb IAmb 11 02 15.2
comp=Z,38nm,1.2s
**F15K North Star Dit 86.08 24** P **P** **11 02 07.5 +0.3**
baz=287
**ANM Nome 86.11 25** P **P** **11 02 07.7 +0.3**
baz=286
**P08K Saint George I 86.12 33** P **P** **11 02 08.2 +0.7**
baz=283
**C18K Utukok River 86.43 21** IAmb IAmb 11 02 17.0
comp=Z,37nm,1.1s
**C18K Utukok River 86.43 21** P **P** **11 02 09.7 +0.7**
baz=290
**G15K Niukluk 86.53 24** P **P** **11 02 09.7 +0.3**
baz=287
**E17K Hotham Inlet 86.73 22** P **P** **11 02 11.1 +0.7**
baz=289
**C19K Lookout Ridge 86.82 20** IAmb IAmb 11 02 19.4
comp=Z,34nm,1.1s
**C19K Lookout Ridge 86.82 20** P **P** **11 02 11.4 +0.5**
baz=291
**M11K Mekoryuk 86.89 29** P **P** **11 02 10.1 -1.1**
baz=286
**E18K Tukpahlearik C 87.06 22** P **P** **11 02 13.1 +1.0**
**E18K Tukpahlearik C 87.06 22** P **P** **11 02 12.6 +0.6**
baz=290
**G16K Koyuk River 87.08 24** IAmb IAmb 11 02 20.3
comp=Z,36nm,1.1s
**G16K Koyuk River 87.08 24** P **P** **11 02 12.7 +0.6**
baz=289,SNR=10
**F17K Baldwin Pennin 87.16 23** P **P** **11 02 13.4 +0.9**
baz=290
**K13K Kusilvak Mount 87.17 27** IAmb IAmb 11 02 21.2
comp=Z,60nm,1.4s
**K13K Kusilvak Mount 87.17 27** P **P** **11 02 12.9 +0.3**
baz=287,SNR=8.1
**B20K Meade River 87.26 19** P **P** **11 02 13.4 +0.5**
B20K IAmb IAmb 11 02 20.9

B20K **Meade River** 87.26 19 P P 11 02 13.3 +0.5
baz=293
NIKH **Nikolski High** 87.36 37 P P 11 02 13.8 +0.1
baz=284
H16K **Elim** 87.37 24 P P 11 02 14.3 +0.8
baz=289,SNR=7.7
J14K **Nanvaranak Lak** 87.42 26 P P 11 02 14.4 +0.6
J14K IAmb IAmb 11 02 21.8
comp=Z,40nm,1.1s
J14K **Nanvaranak Lak** 87.42 26 P P 11 02 14.2 +0.4
baz=288,SNR=6.0
A22K **Sinclair Lake** 87.52 18 P P 11 02 14.9 +0.8
baz=295
D19K **Kuna River** 87.54 20 P P 11 02 15.0 +0.6
D19K IAmb IAmb 11 02 22.3
comp=Z,45nm,1.1s
D19K **Kuna River** 87.54 20 P P 11 02 14.9 +0.5
baz=292
TORD **Torodi Ar. Bea** 87.61 283 P P 11 02 16.4 +0.7
TORD IAmb IAmb 11 05 17.4
comp=Z,14nm,0.8s
TORD **Torodi Ar. Bea** 87.61 283 P P 11 02 16.3 +0.6
comp=Z,8.0nm,0.9s,baz=68,slow=4.9,SNR=38
comp=Z,8.0nm,0.9s
ESBB **Sonseca Array** 87.65 310 P P 11 02 16.1 +0.6
ESDC **Sonseca Array** 87.65 310 P P 11 02 15.6 +0.1
comp=Z,5.0nm,0.9s,baz=59,slow=4.3,SNR=11
comp=Z,5.0nm,0.9s
F18K **Selawik** 87.70 22 P P 11 02 16.1 +1.0
baz=291,SNR=23
G17K **Kiwalik Mounta** 87.72 23 P P 11 02 16.1 +0.9
baz=290,SNR=7.9
SCO **Scoresbysund** 87.81 342 *i* P P 11 02 21.6 +6.0
SCO IAmb IAmb 11 02 23.4
comp=Z,43nm,1.3s
D20K **Etivluk River** 87.96 20 P P 11 02 17.1 +0.7
baz=294
PAB **San Pablo** 87.97 310 P P 11 02 16.7 -0.4
PAB **San Pablo** 87.97 310 P P 11 02 16.7 -0.4
PAB pmax pmax
comp=Z,11nm,0.8s
H17K **Granite Mounta** 88.21 24 P P 11 02 18.6 +1.0
H17K **Granite Mounta** 88.21 24 P P 11 02 18.7 +1.2
baz=291,SNR=17
B21K **Ikpikpuk River** 88.23 19 P P 11 02 18.6 +1.1
B21K IAmb IAmb 11 02 25.6
comp=Z,38nm,1.0s
B21K **Ikpikpuk River** 88.23 19 P P 11 02 18.0 +0.5
baz=296,SNR=6.8
M13K **Dall Lake** 88.23 29 P P 11 02 18.6 +0.9
baz=288
L14K **Kuka Creek** 88.25 28 IAmb IAmb 11 02 19.9
comp=Z,39nm,1.2s
L14K **Kuka Creek** 88.25 28 P P 11 02 18.2 +0.5
baz=289,SNR=6.2
E19K **Redstone River** 88.26 21 P P 11 02 18.4 +0.6
E19K IAmb IAmb 11 02 25.6
comp=Z,34nm,0.9s
E19K **Redstone River** 88.26 21 P P 11 02 18.4 +0.6
baz=293
I17K **Unalakleet** 88.26 25 P P 11 02 18.5 +0.7
baz=290
B22K **Teshekpuk Lake** 88.28 18 P P 11 02 17.8 +0.1
baz=297
E20K **Nigu River** 88.29 20 P P 11 02 18.6 +0.6
baz=294
F19K **Shaleruckik Mo** 88.31 22 P P 11 02 18.3 +0.4
F19K **Shaleruckik Mo** 88.31 22 P P 11 02 18.4 +0.4
baz=293,SNR=26
G18K **Tagagawik** 88.34 23 P P 11 02 18.5 +0.4
G18K IAmb IAmb 11 02 25.9
comp=Z,28nm,1.1s
G18K **Tagagawik** 88.34 23 P P 11 02 18.2 0.0
baz=292,SNR=11
C21K **Knifeblade Rid** 88.38 19 P P 11 02 19.3 +1.0
baz=296,SNR=8.2
K15K **Wolf Creek Mou** 88.45 27 P P 11 02 19.7 +1.0
K15K IAmb IAmb 11 02 27.3
comp=Z,37nm,1.1s
K15K **Wolf Creek Mou** 88.45 27 P P 11 02 19.3 +0.6
baz=290,SNR=6.6
UNV **Unalaska Valle** 88.50 35 P P 11 02 18.6 -0.5
baz=286
J16K **Anvik River** 88.51 26 P P 11 02 20.0 +1.0
J16K **Anvik River** 88.51 26 P P 11 02 19.6 +0.6
baz=290,SNR=14
L15K **Ungalak Mounta** 88.68 27 P P 11 02 20.7 +0.9
baz=290,SNR=9.6
H18K **Honhosa River** 88.74 23 P P 11 02 20.9 +0.8
H18K IAmb IAmb 11 02 28.3
comp=Z,40nm,1.1s
H18K **Honhosa River** 88.74 23 P P 11 02 20.6 +0.6
baz=292
M14K **Bethel** 88.77 28 P P 11 02 21.5 +1.3
M14K IAmb IAmb 11 02 28.8
comp=Z,36nm,0.9s
M14K **Bethel** 88.77 28 P P 11 02 20.8 +0.6
baz=289,SNR=5.6
G19K **Purcell Mounta** 88.83 22 P P 11 02 21.7 +1.2
G19K **Purcell Mounta** 88.83 22 P P 11 02 21.5 +1.0
baz=294,SNR=26
E21K **Killik River** 88.96 20 P P 11 02 21.4 +0.4
E21K IAmb IAmb 11 02 28.8
comp=Z,47nm,1.1s
E21K **Killik River** 88.96 20 P P 11 02 21.4 +0.4
baz=296
F20K **Avaraart Lake** 88.96 21 P P 11 02 21.5 +0.5
F20K IAmb IAmb 11 02 28.9
comp=Z,34nm,1.1s
F20K **Avaraart Lake** 88.96 21 P P 11 02 21.6 +0.6
baz=295,SNR=30
J17K **VABM Dome** 89.11 25 P P 11 02 22.8 +1.0
baz=292,SNR=16
N14K **Kuskokwak Cree** 89.18 29 P P 11 02 23.1 +0.9
baz=290,SNR=5.6
D22K **Ayikyak River** 89.18 19 P P 11 02 22.8 +0.7
D22K IAmb IAmb 11 02 30.1
comp=Z,33nm,1.1s
D22K **Ayikyak River** 89.18 19 P P 11 02 22.9 +0.8
baz=298,SNR=8.5
H19K **Roundabout Mou** 89.33 23 P P 11 02 24.1 +1.3
H19K **Roundabout Mou** 89.33 23 P P 11 02 24.2 +1.4
baz=294,SNR=40
C23K **Itkillik River** 89.36 18 P P 11 02 23.4 +0.6
C23K IAmb IAmb 11 02 30.8
comp=Z,24nm,1.0s
C23K **Itkillik River** 89.36 18 P P 11 02 23.2 +0.3
baz=300,SNR=6.5
M15K **Kasigluk River** 89.38 28 P P 11 02 23.4 +0.3
baz=290,SNR=14
GCSA **Galena City Sc** 89.48 24 P P 11 02 24.8 +1.4
baz=294,SNR=22
L16K **Owhat River** 89.56 27 P P 11 02 25.1 +1.2
L16K IAmb IAmb 11 02 32.4
comp=Z,27nm,1.1s
L16K **Owhat River** 89.56 27 P P 11 02 24.8 +0.9
baz=292,SNR=5.9
EUNU **Eureka** 89.58 360 P P 11 02 24.4 +0.6
EUNU IAMs_20 IAMs_20 11 29 05.0
comp=Z,1µm,21.0s
O14K **Tigyukauivet M** 89.61 29 P P 11 02 24.8 +0.6
baz=290
MVO **Moncorvo** 89.61 312 *e*P P 11 02 25.4 +0.6
comp=Z,23nm,1.8s
F21K **Alatna River** 89.67 21 P P 11 02 24.9 +0.5
baz=297,SNR=19
NEEM **North Greenlan** 89.69 352 *i* P P 11 02 24.5 -0.2
NEEM IAmb IAmb 11 02 31.9
comp=Z,49nm,1.2s
K17K **Iditarod** 89.70 26 P P 11 02 25.7 +1.1
baz=292
D23K **Nanushuk River** 89.77 19 IAmb IAmb 11 02 33.1
comp=Z,36nm,1.1s
D23K **Nanushuk River** 89.77 19 P P 11 02 25.1 +0.3
baz=299,SNR=9.0
E22K **Anaktuvuk Pass** 89.81 20 P P 11 02 25.9 +0.8
E22K **Anaktuvuk Pass** 89.81 20 P P 11 02 25.3 +0.2
baz=298,SNR=6.7
N15K **Kwethluk River** 89.84 28 P P 11 02 26.6 +1.2
baz=291,SNR=10.0
L17K **Donlin** 89.92 26 P P 11 02 27.3 +1.6
baz=292,SNR=7.8
FALS **False Pass** 89.93 34 P P 11 02 26.2 +0.4
baz=288
H20K **Anotleneega Mo** 89.93 22 P P 11 02 26.8 +1.1
baz=296,SNR=24

G21K **Allakaket** 89.98 21 IAmb IAmb 11 02 33.6
comp=Z,30nm,1.1s
G21K **Allakaket** 89.98 21 P P 11 02 26.2 +0.3
baz=297
F22K **John River** 89.99 20 P P 11 02 26.4 +0.5
baz=298,SNR=13
C24K **Franklin Bluff** 90.00 18 P P 11 02 26.1 +0.2
M16K **Timber Creek** 90.05 27 IAmb IAmb 11 02 35.2
comp=Z,31nm,0.9s
M16K **Timber Creek** 90.05 27 P P 11 02 26.7 +0.4
baz=292,SNR=7.4
J18K **Innoko River** 90.06 25 P P 11 02 27.2 +0.9
J18K IAmb IAmb 11 02 28.7
comp=Z,64nm,1.4s
J18K **Innoko River** 90.06 25 P P 11 02 27.3 +1.0
baz=294,SNR=23
MTE **Manteigas** 90.18 311 P P 11 02 27.5 +0.1
MTE IAmb IAmb 11 02 35.6
comp=Z,24nm,1.1s
MTE **Manteigas** 90.18 311 *e*P P 11 02 28.0 +0.6
comp=Z,34nm,1.4s
D24K **Happy Valley** 90.25 18 P P 11 02 27.8 +0.7
baz=301
PCBR **Castelo Branco** 90.26 311 *e*P P 11 02 28.3 +0.6
comp=Z,33nm,1.6s
TOLK **Toolik Lake Re** 90.29 19 IAmb IAmb 11 02 35.2
comp=Z,33nm,1.5s
TOLK **Toolik Lake Re** 90.29 19 P P 11 02 27.9 +0.6
baz=300,SNR=7.7
J19K **Poorman** 90.29 24 P P 11 02 28.5 +1.2
baz=295,SNR=34
PMRV **Marv??o** 90.29 310 *e*P P 11 02 28.3 +0.4
comp=Z,25nm,1.5s
PBAR **Barrancos** 90.32 309 *e*P P 11 02 28.8 +0.8
comp=Z,73nm,1.3s
PGAV **Gaviral, Arco** 90.33 313 *e*P P 11 02 28.1 0.0
comp=Z,34nm,2.1s
O15K **Ungalikthiuk R** 90.33 29 P P 11 02 27.9 +0.3
baz=291
N16K **Nishlik Lake** 90.34 28 P P 11 02 29.1 +1.4
baz=292,SNR=22
PVIS **Viseu** 90.36 311 *e*P P 11 02 28.9 +0.7
I20K **Naaghedeneel** 90.39 23 P P 11 02 29.1 +1.4
baz=296,SNR=17
S12K **Black Hills** 90.40 33 P P 11 02 26.5 -1.6
baz=289
G22K **Bettles** 90.50 21 P P 11 02 28.7 +0.5
baz=299
E23K **Chandalar** 90.57 19 P P 11 02 28.9 +0.2
baz=300,SNR=5.9
PESTR **Estremoz** 90.58 310 *e*P P 11 02 29.5 +0.2
comp=Z,19nm,1.6s
L18K **Granite Mounta** 90.58 26 IAmb IAmb 11 02 38.0
comp=Z,38nm,1.1s
L18K **Granite Mounta** 90.58 26 P P 11 02 30.2 +1.4
baz=294,SNR=17
M17K **Holitna River** 90.58 27 P P 11 02 30.3 +1.5
M17K IAmb IAmb 11 02 37.8
comp=Z,36nm,1.1s
M17K **Holitna River** 90.58 27 P P 11 02 30.2 +1.4
baz=293,SNR=7.4
H21K **Melozitna Rive** 90.63 22 P P 11 02 29.9 +1.0
H21K IAmb IAmb 11 02 37.4
comp=Z,26nm,1.1s
H21K **Melozitna Rive** 90.63 22 P P 11 02 29.9 +1.0
baz=297,SNR=19
J20K **Nowinta River** 90.79 24 P P 11 02 30.4 +0.8
baz=296,SNR=29
COLD **Coldfoot** 90.79 20 P P 11 02 29.9 +0.2
baz=300
D25K **Kavik River** 90.90 18 IAmb IAmb 11 02 38.0
comp=Z,32nm,1.1s
D25K **Kavik River** 90.90 18 P P 11 02 30.4 +0.2
baz=303,SNR=9.1
E24K **Your Creek** 90.92 19 P P 11 02 31.0 +0.7
E24K **Your Creek** 90.92 19 P P 11 02 31.1 +0.8
baz=301,SNR=7.9
EVO **Evora** 90.98 309 *e*P P 11 02 31.4 +0.3
comp=Z,29nm,2.2s
C26K **Camden Bay** 90.99 17 P P 11 02 30.4 0.0
baz=305
PBEJ **Beja** 90.99 309 *e*P P 11 02 31.7 +0.5
comp=Z,35nm,1.5s
O16K **Kokwok River B** 90.99 29 P P 11 02 31.7 +1.1
O16K IAmb IAmb 11 02 39.1
comp=Z,34nm,1.1s
O16K **Kokwok River B** 90.99 29 P P 11 02 31.1 +0.5
baz=293,SNR=7.5
PMTG **Montargil** 91.01 310 *e*P P 11 02 31.6 +0.4
comp=Z,27nm,1.6s
PVAQ **Vaqueiros** 91.03 308 IAmb IAmb 11 02 39.4
comp=Z,32nm,1.1s
PVAQ **Vaqueiros** 91.03 308 *e*P P 11 02 31.9 +0.6
comp=Z,56nm,1.3s
SUMG **Summit** 91.04 347 P P 11 02 31.2 0.0
SUMG **Summit** 91.04 347 P P 11 02 31.2 0.0
SUMG pmax pmax
comp=Z,44nm,1.1s
SUMG **Summit** 91.04 347 *i* P P 11 02 31.8 +0.6
SUMG IAmb IAmb 11 02 39.5
comp=Z,59nm,1.3s
N17K **Nushagak Hills** 91.05 27 P P 11 02 32.3 +1.3
N17K **Nushagak Hills** 91.05 27 P P 11 02 31.4 +0.5
baz=294,SNR=13
G23K **Bananza Creek** 91.11 20 P P 11 02 32.0 +0.8
baz=300,SNR=12
K20K **Telida** 91.19 24 P P 11 02 32.9 +1.4
baz=296
PCVE **Castro Verde** 91.22 308 *e*P P 11 02 32.7 +0.5
comp=Z,33nm,1.3s
PBDV **Barranco-do-Ve** 91.23 308 *e*P P 11 02 33.1 +0.8
comp=Z,76nm,1.3s
M18K **Stony River** 91.26 26 P P 11 02 32.9 +1.0
baz=295,SNR=13
P16K **Nushagak River** 91.26 29 P P 11 02 31.9 0.0
baz=293
MESJ **Messejana** 91.31 309 *e*P P 11 02 33.4 +0.8
comp=Z,37nm,1.3s
PSBE **So Bento** 91.33 310 *e*P P 11 02 33.5 +0.8
comp=Z,53nm,1.6s
SDPT **Sand Point** 91.36 33 P P 11 02 33.4 +1.0
baz=291
L19K **White Mountain** 91.38 25 P P 11 02 33.9 +1.4
L19K **White Mountain** 91.38 25 P P 11 02 33.5 +1.0
baz=296,SNR=20
O17K **Koliganek Bris** 91.39 28 P P 11 02 32.7 +0.2
baz=294,SNR=11
F24K **Squaw Lake** 91.41 19 P P 11 02 33.3 +0.7
F24K **Squaw Lake** 91.41 19 P P 11 02 33.5 +1.0
baz=302
PNCL **Nicolau / Gran** 91.48 309 *e*P P 11 02 34.1 +0.7
comp=Z,30nm,1.5s
C27K **Jago River** 91.50 17 P P 11 02 33.5 +0.6
baz=306
S14K **Fog Glacier** 91.52 32 P P 11 02 34.4 +1.0
baz=291
SVW2 **Sparrevohn** 91.53 27 P P 11 02 34.7 +1.5
SVW2 **Sparrevohn** 91.53 27 P P 11 02 34.9 +1.8
N18K **Kilae Creek** 91.57 27 P P 11 02 34.7 +1.3
baz=295,SNR=9.0
L20K **Farewell, AK** 91.66 25 P P 11 02 33.8 +0.1
baz=296,SNR=22
MLY **Manley** 91.69 22 IAmb IAmb 11 02 41.9
comp=Z,20nm,1.0s
MLY **Manley** 91.69 22 P P 11 02 34.6 +0.7
baz=299,SNR=14
M19K **Big River Lodg** 91.70 26 IAmb IAmb 11 02 43.1
comp=Z,33nm,1.1s
M19K **Big River Lodg** 91.70 26 P P 11 02 35.6 +1.7
baz=296
H23K **Yukon River** 91.73 21 P P 11 02 35.1 +1.1
H23K IAmb IAmb 11 02 42.4
comp=Z,23nm,1.1s
H23K **Yukon River** 91.73 21 P P 11 02 35.2 +1.1
baz=300
PTEO **Sao Teotonio** 91.77 309 *e*P P 11 02 35.7 +0.9
comp=Z,58nm,1.5s
MORF **Marmelete** 91.77 308 *e*P P 11 02 36.8 +1.9
comp=Z,50nm,1.5s
SOEG **Soedalen** 91.85 342 *i* P P 11 02 34.9 +0.5
SOEG IAmb IAmb 11 02 35.8
comp=Z,28nm,1.2s
P17K **Kvichak River** 91.93 29 P P 11 02 36.2 +1.2
baz=294
G24K **Hadweenzic Riv** 91.99 20 P P 11 02 36.0 +0.8
G24K IAmb IAmb 11 02 43.4

comp=Z,19nm,1.1s
G24K **Hadweenzic Riv** 91.99 20 P P 11 02 36.1 +0.9
baz=302,SNR=13
BPAW **Bear Paw Mtn.** 92.06 23 P P 11 02 36.2 +0.7
BPAW IAmb IAmb 11 02 43.6
comp=Z,38nm,1.1s
BPAW **Bear Paw Mtn.** 92.06 23 P P 11 02 36.3 +0.7
baz=295,SNR=25
F25K **Christian Rive** 92.09 19 P P 11 02 37.0 +1.3
F25K IAmb IAmb 11 02 44.3
comp=Z,18nm,1.1s
F25K **Christian Rive** 92.09 19 P P 11 02 37.0 +1.3
baz=304,SNR=11
N19K **Bonanza Creek** 92.14 27 P P 11 02 37.3 +1.2
N19K **Bonanza Creek** 92.14 27 P P 11 02 37.6 +1.5
baz=296,SNR=35
I23K **Minto, Yukon-K** 92.14 22 P P 11 02 36.5 +0.6
I23K **Minto, Yukon-K** 92.14 22 P P 11 02 36.2 +0.3
baz=301,SNR=11
O18K **Koktuh Hills** 92.22 28 P P 11 02 38.0 +1.5
baz=295,SNR=17
M20K **Styx River** 92.24 25 P P 11 02 37.7 +1.2
M20K IAmb IAmb 11 02 49.9
comp=Z,24nm,0.9s
M20K **Styx River** 92.24 25 P P 11 02 37.8 +1.2
baz=297,SNR=16
H24K **Noodor Dome** 92.31 21 P P 11 02 37.9 +1.1
H24K **Noodor Dome** 92.31 21 P P 11 02 37.3 +0.5
baz=302,SNR=9.6
TULEG **Thule** 92.36 356 *i* P P 11 02 35.4 -1.2
TULEG IAmb IAmb 11 02 37.4
comp=Z,170nm,1.8s
G25K **Bearman Lake** 92.41 20 P P 11 02 38.1 +1.0
baz=304,SNR=6.6
P18K **Big Mountain,** 92.41 28 P P 11 02 37.7 +0.3
baz=295
O19K **Port Alsworth** 92.48 27 P P 11 02 37.9 +0.4
O19K **Port Alsworth** 92.48 27 P P 11 02 38.5 +1.0
baz=296,SNR=8.6
F26K **Sheenjek River** 92.50 18 P P 11 02 38.5 +0.9
F26K IAmb IAmb 11 02 39.8
comp=Z,45nm,1.6s
F26K **Sheenjek River** 92.50 18 P P 11 02 38.0 +0.4
baz=306,SNR=10.0
D27M **Malcolm River** 92.51 16 P P 11 02 38.1 +0.5
baz=308
BMAR **Burnt Mountain** 92.52 19 P P 11 02 38.5 +0.8
NEA2 **Nenana** 92.53 22 P P 11 02 37.9 +0.1
baz=301,SNR=10
Q17K **Contact Creek** 92.58 29 P P 11 02 37.3 -0.9
baz=294
R17L **Mt. Peulik Vol** 92.61 30 P P 11 02 38.0 -0.2
baz=294
PLK4 **Peulik 4** 92.61 30 P P 11 02 38.0 -0.3
MDM **Murphy Dome** 92.65 22 P P 11 02 38.7 +0.4
H25L **Birch Creek** 92.78 20 P P 11 02 37.6 -1.2
baz=304
COLA **College** 92.83 22 P P 11 02 40.2 +1.1
Q18K **Katmai Hardscr** 92.83 29 P P 11 02 38.7 -0.7
baz=295
POKR **Poker Plat Res** 92.85 21 P P 11 02 38.7 -0.5
POKR IAmb IAmb 11 02 40.8
comp=Z,36nm,1.6s
POKR **Poker Plat Res** 92.85 21 P P 11 02 39.3 +0.1
baz=302
SKT **Skwentna** 92.86 25 P P 11 02 39.2 -0.1
SKT **Skwentna** 92.86 25 P P 11 02 39.3 -0.1
baz=298,SNR=17
ACHA **Angle Creek He** 92.87 29 P P 11 02 38.8 -0.7
ACHA IAmb IAmb 11 02 46.7
comp=Z,22nm,1.0s
N20K **Mount Spurr** 92.95 26 P P 11 02 40.2 +0.4
baz=298
SPCR **Spurr Chakacha** 92.95 26 P P 11 02 39.8 0.0
baz=298
WRH **Wood River Hil** 92.96 22 P P 11 02 39.1 -0.6
E27K **Coleen River** 92.98 17 P P 11 02 40.0 +0.2
E27K **Coleen River** 92.98 17 P P 11 02 40.4 +0.6
baz=308
SPU **Mount Spurr** 93.02 26 IAmb IAmb 11 02 48.2
comp=Z,18nm,1.0s
MCK **McKinley** 93.03 23 P P 11 02 40.1 0.0
MCK IAmb IAmb 11 02 48.0
comp=Z,36nm,1.2s
MCK **McKinley** 93.03 23 P P 11 02 40.0 0.0
baz=301,SNR=9.9
MCK **McKinley** 93.03 23 P P 11 02 40.1 0.0
MCK pmax pmax
comp=Z,36nm,1.2s
G26K **Porcupine Rive** 93.06 19 P P 11 02 40.9 +0.9
baz=306,SNR=12
ILSW **Iliamna Southw** 93.10 27 P P 11 02 40.3 -0.3
ILSW IAmb IAmb 11 02 47.6
comp=Z,30nm,1.0s
CUT **Chulitna** 93.17 24 P P 11 02 40.4 -0.3
baz=300
P19K **Oil Pt** 93.21 27 P P 11 02 40.2 -0.8
baz=297
RND **Reindeer** 93.23 23 IAmb IAmb 11 02 48.8
comp=Z,28nm,1.2s
IL31 **Mount Spurr** 93.23 21 P P 11 02 39.8 -1.1
ILAR **Eielson Array** 93.23 21 P P 11 02 39.9 -1.1
comp=Z,2.5nm,0.7s,baz=300,slow=4.2,SNR=29
ILAR PKKP **PKKPdf** 11 19 48.5 -0.3
comp=Z,0.8nm,1.0s,baz=174,slow=2.6,SNR=4.7
comp=Z,2.5nm,0.7s
IL03 **Eielson Array** 93.25 21 P P 11 02 39.6 -1.4
O20K **Slope Mountain** 93.29 27 P P 11 02 40.3 -1.1
baz=298
PRP **Porcupine Dome** 93.30 21 P P 11 02 42.1 +0.7
PRP IAmb IAmb 11 02 49.4
comp=Z,26nm,1.1s
PRP **Porcupine Dome** 93.30 21 P P 11 02 41.5 0.0
baz=304,SNR=20
E28M **Babbage River** 93.31 17 P P 11 02 41.8 +0.5
baz=310
ELIB **Princess Elisa** 93.36 197 *d*P P 11 02 42.9 +1.4
comp=Z,7.3nm,1.2s
HDA **Harding Lake** 93.41 22 P P 11 02 40.9 -0.9
HDA **Harding Lake** 93.41 22 P P 11 02 41.2 -0.6
baz=303,SNR=5.8
SUA **Susitna One** 93.44 25 P P 11 02 42.8 +0.6
SUA IAmb IAmb 11 02 50.3
comp=Z,32nm,1.0s
SUA **Susitna One** 93.44 25 P P 11 02 41.9 -0.2
baz=299,SNR=6.6
M22K **Willow** 93.56 25 P P 11 02 42.7 +0.2
M22K **Willow** 93.56 25 P P 11 02 42.7 +0.2
baz=300,SNR=13
R18K **Karluk** 93.57 30 P P 11 02 42.0 -0.5
baz=296
CAPN **Captain Cook N** 93.61 26 P P 11 02 41.9 -0.8
baz=299
WAT1 **Susitna Watana** 93.64 24 P P 11 02 42.1 -0.8
baz=301
ICESG **Greenland Ices** 93.67 344 *i* P P 11 02 43.7 +0.4
ICESG IAmb IAmb 11 02 51.0
comp=Z,48nm,1.0s
CHIR **Chirikof Islan** 93.73 31 P P 11 02 42.2 -1.2
baz=295
G27K **Doyon Strip** 93.81 19 P P 11 02 44.0 +0.3
G27K **Doyon Strip** 93.81 19 P P 11 02 43.9 +0.3
baz=308
F28M **Old Crow** 93.85 17 P P 11 02 43.3 -0.5
baz=310
J25K **Salcha River,** 93.87 21 P P 11 02 42.9 -1.0
baz=304,SNR=9.9
E29M **Blow River** 93.91 16 IAmb IAmb 11 02 45.9
comp=Z,41nm,1.5s
E29M **Blow River** 93.91 16 P P 11 02 44.6 +0.6
baz=311,SNR=5.0
DHY **Denali Highway** 93.97 23 P P 11 02 43.6 -0.9
baz=302
PMR **Palmer** 94.05 25 P P 11 02 45.2 +0.5
PMR **Palmer** 94.05 25 P P 11 02 45.0 +0.3
PMR **Palmer** 94.05 25 P P 11 02 44.8 +0.1
baz=301
PMR **Palmer** 94.05 25 P P 11 02 45.0 +0.3
PMR pmax pmax
comp=Z,14nm,1.0s
RC01 **Rabbit Creek A** 94.05 25 P P 11 02 45.0 +0.3
RC01 IAmb IAmb 11 02 52.4
comp=Z,35nm,1.1s
RC01 **Rabbit Creek A** 94.05 25 P P 11 02 45.1 +0.3
baz=300,SNR=7.6
Q20K **Shuyak Island** 94.07 28 P P 11 02 44.8 -0.1
baz=298

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WAT6 | Susitna Watana | 94.09 | 24 | P | | P | 11 02 45.0 | -0.2 | |
| | baz=302,SNR=15 | | | | | | | | |
| A36M | Sachs Harbour | 94.17 | 11 | P | | P | 11 02 45.0 | -0.1 | |
| | baz=324 | | | | | | | | |
| K24K | Donnelly Dome | 94.17 | 22 | P | | P | 11 02 45.4 | 0.0 | |
| | baz=304,SNR=6.0 | | | | | | | | |
| BRLK | Bradley Lake | 94.21 | 27 | P | | P | 11 02 45.5 | -0.1 | |
| H27K | Steamboat Moun | 94.21 | 19 | P | | P | 11 02 46.2 | +0.7 | |
| | baz=308,SNR=9.3 | | | | | | | | |
| I26K | Coal Creek Min | 94.23 | 20 | P | | P | 11 02 45.7 | +0.2 | |
| | baz=306 | | | | | | | | |
| SML | Sawmill | 94.26 | 24 | P | | P | 11 02 46.3 | +0.4 | |
| SML | | | | IAmb | | IAmb | 11 02 53.6 | | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| SML | Sawmill | 94.26 | 24 | P | | P | 11 02 46.2 | +0.4 | |
| | baz=301 | | | | | | | | |
| OHAK | Old Harbor | 94.28 | 30 | P | | P | 11 02 47.8 | +1.9 | |
| OHAK | Old Harbor | 94.28 | 30 | IAmb | | IAmb | 11 02 54.1 | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| OHAK | Old Harbor | 94.28 | 30 | P | | P | 11 02 45.9 | 0.0 | |
| | baz=297 | | | | | | | | |
| BRSE | Bradley Lake S | 94.28 | 27 | P | | P | 11 02 46.0 | +0.1 | |
| | baz=299 | | | | | | | | |
| UPNV | Upernavik | 94.30 | 351 | *i* P | | P | 11 02 44.1 | -1.6 | |
| UPNV | | | | IAmb | | IAmb | 11 02 46.7 | | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| O22K | Cooper Landing | 94.36 | 26 | P | | P | 11 02 45.8 | -0.4 | |
| | baz=300 | | | | | | | | |
| KDAK | Kodiak Island | 94.37 | 29 | P | | P | 11 02 46.7 | +0.4 | |
| KDAK | Kodiak Island | 94.37 | 29 | P | | P | 11 02 46.7 | +0.4 | |
| | baz=297 | | | | | | | | |
| KDAK | Kodiak Island | 94.37 | 29 | P | | P | 11 02 46.7 | +0.4 | |
| KDAK | | | | pmax | | pmax | | | |
| | comp=Z,45nm,1.2s | | | | | | | | |
| KNK | Knik Glacier | 94.42 | 25 | P | | P | 11 02 45.8 | -0.7 | |
| KNK | | | | IAmb | | IAmb | 11 02 54.3 | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| KNK | Knik Glacier | 94.42 | 25 | P | | P | 11 02 46.9 | +0.4 | |
| | baz=301 | | | | | | | | |
| M23K | Glacier View | 94.52 | 24 | P | | P | 11 02 47.3 | +0.3 | |
| | baz=302 | | | | | | | | |
| RIDG | Independent Ri | 94.55 | 22 | P | | P | 11 02 46.4 | -0.7 | |
| RIDG | | | | IAmb | | IAmb | 11 02 54.8 | | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| RIDG | Independent Ri | 94.55 | 22 | P | | P | 11 02 46.7 | -0.4 | |
| | baz=305,SNR=7.5 | | | | | | | | |
| I27K | Kandik River | 94.57 | 20 | P | | P | 11 02 47.3 | +0.1 | |
| | baz=308,SNR=9.2 | | | | | | | | |
| J26L | Joseph Creek | 94.57 | 21 | IAmb | | IAmb | 11 02 54.8 | | |
| | comp=Z,19nm,1.1s | | | | | | | | |
| J26L | Joseph Creek | 94.57 | 21 | P | | P | 11 02 47.5 | +0.2 | |
| | baz=306,SNR=17 | | | | | | | | |
| SCM | Sheep Creek Mo | 94.65 | 24 | P | | P | 11 02 47.1 | -0.5 | |
| SCM | | | | IAmb | | IAmb | 11 03 10.0 | | |
| | comp=Z,43nm,1.5s | | | | | | | | |
| SCM | Sheep Creek Mo | 94.65 | 24 | P | | P | 11 02 48.1 | +0.5 | |
| | baz=302 | | | | | | | | |
| SCM | Sheep Creek Mo | 94.65 | 24 | P | | P | 11 02 47.2 | -0.5 | |
| SCM | | | | pmax | | pmax | | | |
| | comp=Z,43nm,1.5s | | | | | | | | |
| SEW | Seward | 94.67 | 26 | P | | P | 11 02 47.9 | +0.3 | |
| | baz=300 | | | | | | | | |
| SCRK | Sand Creek | 94.73 | 21 | P | | P | 11 02 48.3 | +0.3 | |
| | baz=305,SNR=9.8 | | | | | | | | |
| PAX | Paxson | 94.75 | 23 | P | | P | 11 02 48.1 | 0.0 | |
| | baz=304 | | | | | | | | |
| PWL | Port Wells | 94.76 | 25 | IAmb | | IAmb | 11 02 56.9 | | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| PWL | Port Wells | 94.76 | 25 | P | | P | 11 02 48.5 | +0.4 | |
| | baz=301 | | | | | | | | |
| G29M | Pine Creek | 94.86 | 18 | IAmb | | IAmb | 11 02 56.0 | | |
| | comp=Z,34nm,1.4s | | | | | | | | |
| G29M | Pine Creek | 94.86 | 18 | P | | P | 11 02 48.5 | +0.1 | |
| | baz=311 | | | | | | | | |
| M24K | Tolsona, Glenn | 94.96 | 24 | P | | P | 11 02 49.0 | 0.0 | |
| M24K | | | | IAmb | | IAmb | 11 02 57.4 | | |
| | comp=Z,33nm,1.4s | | | | | | | | |
| M24K | Tolsona, Glenn | 94.96 | 24 | P | | P | 11 02 49.8 | +0.7 | |
| | baz=303 | | | | | | | | |
| F30M | Barrier River | 95.03 | 16 | P | | P | 11 02 49.1 | 0.0 | |
| | baz=313 | | | | | | | | |
| INK | Inuvik | 95.15 | 15 | P | | P | 11 02 48.9 | -0.7 | |
| INK | | | | IAmb | | IAmb | 11 02 56.9 | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| INK | Inuvik | 95.15 | 15 | P | | P | 11 02 49.7 | +0.1 | |
| | baz=316,SNR=6.0 | | | | | | | | |
| INK | Inuvik | 95.15 | 15 | P | | P | 11 02 48.9 | -0.7 | |
| INK | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| HARP | HAARP | 95.20 | 23 | P | | P | 11 02 50.6 | +0.5 | |
| | baz=304 | | | | | | | | |
| H29M | Whitestone | 95.21 | 18 | IAmb | | IAmb | 11 02 57.8 | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| H29M | Whitestone | 95.21 | 18 | P | | P | 11 02 49.8 | -0.2 | |
| | baz=311,SNR=5.6 | | | | | | | | |
| I28M | Miner Creek | 95.21 | 19 | P | | P | 11 02 50.7 | +0.5 | |
| I28M | Miner Creek | 95.21 | 19 | P | | P | 11 02 50.1 | -0.1 | |
| | baz=309,SNR=7.8 | | | | | | | | |
| EGAK | Eagle | 95.23 | 20 | P | | P | 11 02 50.2 | +0.1 | |
| EGAK | Eagle | 95.23 | 20 | P | | P | 11 02 49.6 | -0.5 | |
| | baz=308 | | | | | | | | |
| G30M | tAoh Zraii Nji | 95.33 | 17 | IAmb | | IAmb | 11 02 57.6 | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| G30M | tAoh Zraii Nji | 95.33 | 17 | P | | P | 11 02 49.9 | -0.7 | |
| | baz=313,SNR=5.4 | | | | | | | | |
| K27K | Chicken | 95.37 | 21 | IAmb | | IAmb | 11 02 53.3 | | |
| | comp=Z,42nm,1.9s | | | | | | | | |
| K27K | Chicken | 95.37 | 21 | P | | P | 11 02 50.8 | 0.0 | |
| | baz=307 | | | | | | | | |
| ANGG | Ammassalik, Gr | 95.38 | 341 | | | P | 11 02 50.7 | 0.0 | |
| KLU | Klutina | 95.40 | 24 | P | | P | 11 02 51.2 | +0.1 | |
| KLU | Klutina | 95.40 | 24 | P | | P | 11 02 50.4 | -0.7 | |
| | baz=304 | | | | | | | | |
| L26K | Log Cabin Wild | 95.52 | 22 | P | | P | 11 02 50.6 | -0.9 | |
| L26K | | | | IAmb | | IAmb | 11 02 54.0 | | |
| | comp=Z,32nm,1.6s | | | | | | | | |
| L26K | Log Cabin Wild | 95.52 | 22 | P | | P | 11 02 52.0 | +0.5 | |
| | baz=306,SNR=6.1 | | | | | | | | |
| P23K | Montague Islan | 95.60 | 26 | P | | P | 11 02 52.2 | +0.3 | |
| | baz=302 | | | | | | | | |
| EPYK | Eagle Plains | 95.61 | 18 | P | | P | 11 02 51.7 | -0.2 | |
| EPYK | | | | IAmb | | IAmb | 11 02 58.9 | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| EPYK | Eagle Plains | 95.61 | 18 | P | | P | 11 02 51.5 | -0.4 | |
| | baz=312 | | | | | | | | |
| F31M | Tsiigehtchic | 95.71 | 16 | P | | P | 11 02 51.9 | -0.3 | |
| | baz=315 | | | | | | | | |
| I29M | Ogilvie Camp, | 95.79 | 19 | P | | P | 11 02 52.3 | -0.4 | |
| | baz=311 | | | | | | | | |
| N25K | Chitina, Valde | 95.86 | 24 | IAmb | | IAmb | 11 03 01.4 | | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| N25K | Chitina, Valde | 95.86 | 24 | P | | P | 11 02 54.2 | +1.0 | |
| | baz=305 | | | | | | | | |
| G31M | Satah River | 95.93 | 17 | P | | P | 11 02 52.5 | -0.7 | |
| G31M | | | | IAmb | | IAmb | 11 03 00.3 | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| G31M | Satah River | 95.93 | 17 | P | | P | 11 02 53.0 | -0.3 | |
| | baz=315 | | | | | | | | |
| EYAK | Cordova Ski Ar | 96.00 | 25 | P | | P | 11 02 53.1 | -0.6 | |
| | baz=304 | | | | | | | | |
| M26K | Nabesna, AK | 96.02 | 22 | IAmb | | IAmb | 11 03 02.7 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| M26K | Nabesna, AK | 96.02 | 22 | P | | P | 11 02 53.5 | -0.4 | |
| | baz=306,SNR=7.7 | | | | | | | | |
| L27K | Beaver Creek, | 96.05 | 22 | P | | P | 11 02 54.5 | +0.6 | |
| | baz=307 | | | | | | | | |
| BCAR | Beaver Creek A | 96.06 | 22 | P | | P | 11 02 54.5 | +0.5 | |
| BMRM | Bremner River | 96.23 | 24 | P | | P | 11 02 55.5 | +0.6 | |
| | baz=305 | | | | | | | | |
| DAWY | Dawson | 96.28 | 20 | P | | P | 11 02 55.0 | 0.0 | |
| | baz=310,SNR=7.9 | | | | | | | | |
| I30M | Mount Dempster | 96.49 | 18 | IAmb | | IAmb | 11 03 03.3 | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| I30M | Mount Dempster | 96.49 | 18 | P | | P | 11 02 56.1 | +0.1 | |
| | baz=313,SNR=10 | | | | | | | | |
| C36M | Paulatuk | 96.55 | 12 | P | | P | 11 02 56.0 | 0.0 | |
| | baz=325 | | | | | | | | |
| MCARA | McCarthy VSAT | 96.61 | 23 | P | | P | 11 02 56.9 | +0.5 | |
| MCARA | | | | IAmb | | IAmb | 11 03 05.4 | | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| MCARA | McCarthy VSAT | 96.61 | 23 | P | | P | 11 02 57.3 | +0.8 | |
| | baz=306 | | | | | | | | |
| KAIM | Kayak Island | 96.90 | 25 | P | | P | 11 02 57.8 | 0.0 | |
| | baz=305 | | | | | | | | |
| J30M | Hart River | 96.94 | 19 | P | | P | 11 02 58.4 | +0.3 | |
| J30M | Hart River | 96.94 | 19 | P | | P | 11 02 58.6 | +0.5 | |
| | baz=313,SNR=5.4 | | | | | | | | |
| CRQE | Cirque | 96.95 | 24 | P | | P | 11 02 59.0 | +0.7 | |
| | baz=306 | | | | | | | | |
| K29M | Barlow Dome | 97.05 | 20 | P | | Pdif | 11 02 59.0 | +0.4 | |
| | baz=311 | | | | | | | | |
| SBA | Scott Base | 97.09 | 168 | P | | Pdif | 11 02 59.1 | +0.9 | |
| SBA | Scott Base | 97.09 | 168 | P | | Pdif | 11 02 59.1 | +0.8 | |
| SBA | | | | pmax | | pmax | | | |
| | comp=Z,34nm,1.5s | | | | | | | | |
| BGLC | Bering Glacier | 97.25 | 24 | P | | P | 11 02 59.3 | -0.1 | |
| | baz=306 | | | | | | | | |
| CTG | Chitna Glacier | 97.51 | 23 | P | | P | 11 03 00.4 | -0.3 | |
| | baz=308 | | | | | | | | |
| M29M | Somme Creek | 97.64 | 21 | P | | Pdif | 11 03 01.6 | +0.2 | |
| M29M | Somme Creek | 97.64 | 21 | P | | Pdif | 11 03 01.7 | +0.4 | |
| | baz=310 | | | | | | | | |
| MESA | MESA | 97.75 | 24 | P | | Pdif | 11 03 01.9 | 0.0 | |
| | baz=307 | | | | | | | | |
| O28M | Mount Upton | 98.08 | 23 | P | | Pdif | 11 03 03.6 | +0.1 | |
| | baz=309 | | | | | | | | |
| YUK4 | Talbot Arm | 98.29 | 22 | P | | P | 11 03 04.2 | -0.1 | |
| | baz=310 | | | | | | | | |
| YUK6 | Outpost Mounta | 98.66 | 22 | P | | Pdif | 11 03 06.4 | +0.4 | |
| | baz=310 | | | | | | | | |
| N30M | Aishikik Lake | 98.78 | 21 | P | | Pdif | 11 03 06.7 | +0.4 | |
| | baz=312 | | | | | | | | |
| YKU2 | Yakutat | 99.07 | 24 | IAMs_20 | | IAMs_20 | 11 39 44.1 | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| M31M | Drury Creek, Y | 99.21 | 20 | P | | Pdif | 11 03 08.6 | +0.4 | |
| | baz=314 | | | | | | | | |
| N31M | Braeburn, Yuko | 99.23 | 21 | | | Pdif | 11 03 09.0 | +0.6 | |
| N31M | | | | IAmb | | IAmb | 11 03 16.5 | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| N31M | Braeburn, Yuko | 99.23 | 21 | P | | Pdif | 11 03 08.7 | +0.4 | |
| | baz=313 | | | | | | | | |
| FARO | Faro, Yukon | 99.54 | 20 | P | | Pdif | 11 03 10.2 | +0.5 | |
| | baz=315 | | | | | | | | |
| O30N | Mendenhall | 99.61 | 22 | P | | Pdif | 11 03 10.1 | +0.1 | |
| O30N | Mendenhall | 99.61 | 22 | P | | Pdif | 11 03 10.1 | +0.1 | |
| | baz=312 | | | | | | | | |
| P29M | Windy Craggy | 99.75 | 23 | P | | Pdif | 11 03 11.4 | +0.7 | |
| | baz=311 | | | | | | | | |
| PLBC | Pleasant Camp | 100.39 | 23 | P | | Pdif | 11 03 12.7 | -0.7 | |
| | baz=312 | | | | | | | | |
| N32M | Quiet Lake | 100.40 | 20 | P | | Pdif | 11 03 13.3 | -0.2 | |
| | baz=315 | | | | | | | | |
| SKAG | Skagway | 100.78 | 22 | P | | Pdif | 11 03 14.5 | -0.6 | |
| | baz=313 | | | | | | | | |
| P33M | Teslin, Yukon | 101.16 | 21 | P | | Pdif | 11 03 15.8 | -1.2 | |
| | baz=315 | | | | | | | | |
| P32M | Atlin | 101.28 | 22 | P | | Pdif | 11 03 16.3 | -1.2 | |
| | baz=314 | | | | | | | | |
| S31K | Pelican | 101.44 | 24 | P | | Pdif | 11 03 16.9 | -1.2 | |
| | baz=312 | | | | | | | | |
| WRGLY | Wrigley | 101.71 | 15 | P | | Pdif | 11 03 19.2 | 0.0 | |
| | baz=325 | | | | | | | | |
| R32K | Eaglecrest | 101.90 | 23 | P | | Pdif | 11 03 19.4 | -0.8 | |
| | baz=314 | | | | | | | | |
| Q32M | Nakina River | 102.25 | 22 | P | | Pdif | 11 03 21.4 | -0.6 | |
| | baz=316 | | | | | | | | |
| KOTAN | Kotaneelee Air | 104.06 | 18 | P | | Pdif | 11 03 29.8 | 0.0 | |
| | baz=324 | | | | | | | | |
| CRAG | Craig | 104.40 | 24 | P | | Pdif | 11 03 30.6 | -0.8 | |
| | baz=314 | | | | | | | | |
| T35M | Bob Quinn | 104.44 | 22 | P | | Pdif | 11 03 31.3 | -0.3 | |
| | baz=317 | | | | | | | | |
| BELA | Belgrano 2 | 107.46 | 190 | IAMs_20 | | IAMs_20 | 11 43 24.0 | | |
| | comp=Z,784nm,20.0s | | | | | | | | |
| HAWA | Hanford | 116.85 | 24 | PKPdf | | PKPdf | 11 08 10.9 | -0.5 | |
| E08A | Dider Farm, El | 116.96 | 23 | PKPdf | | PKPdf | 11 08 11.4 | -0.2 | |
| I04A | Tendick Farm, | 117.72 | 27 | | | PKiKP | 11 08 13.9 | +0.6 | |
| G08A | Pilot Rock | 117.99 | 24 | PKPdf | | PKPdf | 11 08 13.2 | -0.6 | |
| F10A | Beach Ranch, E | 118.09 | 22 | PKPdf | | PKPdf | 11 08 13.7 | -0.3 | |
| PINE | Pine Mountain | 118.37 | 26 | PKPdf | | PKPdf | 11 08 14.0 | -0.8 | |
| HUMO | Hull Mountain | 118.39 | 28 | PKPdf | | PKiKP | 11 08 15.2 | +0.6 | |
| MSO | Missoula | 118.52 | 20 | PKPdf | | PKPdf | 11 08 13.7 | -1.1 | |
| J05D | Fort Rock, OR | 118.65 | 27 | PKPdf | | PKPdf | 11 08 14.8 | -0.4 | |
| EGMT | Eagleton | 118.72 | 16 | PKPdf | | PKPdf | 11 08 14.7 | -0.5 | |
| I07A | Izee | 118.75 | 25 | PKPdf | | PKiKP | 11 08 15.4 | 0.0 | |
| BMO | Blue Mountains | 119.00 | 23 | PKPdf | | PKPdf | 11 08 14.1 | -1.7 | |
| BMO | Blue Mountains | 119.00 | 23 | PKiKP | | PKPdf | 11 08 14.1 | -1.7 | |
| BPMT | Black Pine Rid | 119.02 | 20 | PKPdf | | PKPdf | 11 08 15.8 | -0.2 | |
| J08A | Circle Bar Ran | 119.78 | 25 | PKPdf | | PKPdf | 11 08 17.4 | 0.0 | |
| O02D | Mt. Diablo Mer | 120.34 | 30 | PKPdf | | PKPdf | 11 08 17.2 | -1.3 | |
| BOZ | Bozeman (W) | 120.36 | 19 | | | PKPdf | 11 08 17.8 | -0.6 | |
| BOZ | Bozeman (W) | 120.36 | 19 | PKIKP | | PKPdf | 11 08 17.8 | -0.6 | |
| WVOR | Wild Horse Val | 120.46 | 26 | | | PKPdf | 11 08 18.0 | -0.7 | |
| WVOR | Wild Horse Val | 120.46 | 26 | PKIKP | | PKPdf | 11 08 18.0 | -0.7 | |
| HATC | Hat Creek Radi | 120.49 | 29 | PKPdf | | PKPdf | 11 08 17.9 | -0.8 | |
| LRDM | Redding Peak | 120.76 | 29 | PKPdf | | PKiKP | 11 08 19.5 | +0.2 | |
| MFID | Camas Ranch | 120.78 | 23 | PKPdf | | PKPdf | 11 08 19.3 | 0.0 | |
| LAO | LASA Array | 120.87 | 14 | PKPdf | | PKiKP | 11 08 20.2 | +0.8 | |
| HLID | Hailey | 121.19 | 22 | PKPdf | | PKiKP | 11 08 20.5 | +0.2 | |
| RLMT | Red Lodge | 121.50 | 17 | PKPdf | | PKiKP | 11 08 21.1 | +0.2 | |
| H17A | Grant Village | 121.76 | 19 | P | | PKPdf | 11 08 21.1 | -0.2 | |
| | baz=334 | | | | | | | | |
| AFDM | Forest Hills D | 122.18 | 30 | | | PKPdf | 11 08 21.8 | -0.1 | |
| PNTR | Pine Nut | 122.73 | 29 | PKPdf | | PKiKP | 11 08 24.1 | +0.6 | |
| YERR | Yerington | 122.98 | 28 | | | PKiKP | 11 08 23.9 | 0.0 | |
| WAKR | Walker | 123.27 | 29 | PKPdf | | PKiKP | 11 08 25.2 | +0.6 | |
| E46A | Sault Ste Mari | 123.28 | 357 | | | PKPdf | 11 08 23.2 | -0.6 | |
| ELK | Elko | 123.28 | 24 | PKPdf | | PKiKP | 11 08 25.2 | +0.6 | |
| ELK | Elko | 123.28 | 24 | PKIKP | | PKiKP | 11 08 25.2 | +0.6 | |
| HVU | Hansel Valley | 123.34 | 22 | PKPdf | | PKPdf | 11 08 23.8 | -0.5 | |
| HVU | Hansel Valley | 123.34 | 22 | PKIKP | | PKPdf | 11 08 23.8 | -0.5 | |
| BW06 | Boulder Array | 123.55 | 19 | PKPdf | | PKPdf | 11 08 24.4 | -0.4 | |
| PD31 | Pinedale Array | 123.55 | 19 | PKPdf | | PKPdf | 11 08 24.1 | -0.7 | |
| PDAR | Pinedale Array | 123.55 | 19 | PKPdf | | PKPdf | 11 08 24.5 | -0.3 | |
| PDAR | Pinedale Array | 123.55 | 19 | PKP | | PKPdf | 11 08 24.7 | -0.1 | |
| | comp=Z,4.3nm,0.9s,baz=11,slow=1.5,SNR=23 | | | | | | | | |
| RYN | Ryan | 123.60 | 28 | PKPdf | | PKiKP | 11 08 25.8 | +0.7 | |
| RSSD | Black Hills | 123.80 | 14 | PKPdf | | PKPdf | 11 08 24.7 | -0.5 | |
| RSSD | Black Hills | 123.80 | 14 | PKIKP | | PKPdf | 11 08 24.7 | -0.5 | |
| NVAR | Mina Array Bea | 123.86 | 28 | | | PKiKP | 11 08 26.3 | +0.6 | |
| NVAR | Mina Array Bea | 123.86 | 28 | PKP | | PKiKP | 11 08 26.4 | +0.7 | |
| | comp=Z,7.5nm,0.9s,baz=287,slow=1.5,SNR=41 | | | | | | | | |
| NVAR | | | | PKKPbc | | PKKPbc | 11 18 12.7 | -0.2 | |
| | comp=Z,0.8nm,0.9s,baz=170,slow=5.5,SNR=4.7 | | | | | | | | |
| HWUT | Hardware Ranch | 123.92 | 21 | PKPdf | | PKPdf | 11 08 25.3 | -0.1 | |
| NV11 | Mina Array Sit | 123.93 | 28 | | | PKiKP | 11 08 26.4 | +0.6 | |
| G40A | Rib Lake | 124.47 | 2 | | | PKPdf | 11 08 26.1 | -0.1 | |
| SUSD | Miller | 124.48 | 9 | | | PKPdf | 11 08 26.3 | +0.1 | |
| K22A | Casper | 124.55 | 16 | | | PKPdf | 11 08 26.4 | -0.2 | |
| J59A | Piesco | 124.83 | 348 | PKPdf | | PKiKP | 11 08 27.1 | -0.1 | |
| DSP | Deep Springs | 124.87 | 29 | PKPdf | | PKiKP | 11 08 28.8 | +1.4 | |
| Q12A | Willow Creek R | 124.89 | 25 | PKPdf | | PKiKP | 11 08 28.0 | +0.3 | |
| R11B | Troy Canyon, C | 125.15 | 26 | P | | PKPdf | 11 08 27.5 | -0.4 | |
| | baz=327 | | | | | | | | |
| NLU | North Lily Min | 125.19 | 22 | PKPdf | | PKiKP | 11 08 28.4 | +0.1 | |
| RWWY | Rawlins | 125.25 | 17 | | | PKPdf | 11 08 28.1 | 0.0 | |
| L61B | Northampton | 125.39 | 346 | P | | PKiKP | 11 08 28.4 | +0.1 | |
| | baz=19 | | | | | | | | |
| ECSD | EROS Data Cent | 125.50 | 7 | PKPdf | | PKiKP | 11 08 28.5 | -0.1 | |
| RDMU | Red Mountain | 125.53 | 20 | | | PKPdf | 11 08 28.3 | -0.3 | |
| I37A | Lemond, Waseca | 125.55 | 4 | | | PKPdf | 11 08 28.1 | -0.2 | |
| K57A | Scipio Center | 125.93 | 349 | | | PKPdf | 11 08 27.7 | -1.4 | |
| ISA | Isabella, Lake | 125.99 | 30 | PKPdf | | PKPdf | 11 08 29.3 | -0.2 | |
| ISA | Isabella, Lake | 125.99 | 30 | PKIKP | | PKPdf | 11 08 29.3 | -0.2 | |
| K30B | Basset | 126.09 | 10 | PKPdf | | PKPdf | 11 08 29.4 | 0.0 | |
| PHWY | Pilot Hill | 126.10 | 16 | | | PKPdf | 11 08 29.4 | -0.4 | |
| P18A | Preston Nutter | 126.14 | 21 | | | PKPdf | 11 08 30.1 | +0.2 | |
| L59A | Walton | 126.16 | 348 | PKPdf | | PKiKP | 11 08 30.1 | +0.1 | |
| MMNY | Mt. Morris Dam | 126.17 | 350 | | | PKPdf | 11 08 29.3 | -0.2 | |
| N23A | Red Feather La | 126.34 | 17 | P | | PKPdf | 11 08 29.9 | -0.3 | |
| | baz=338 | | | | | | | | |
| BINY | Binghamton | 126.34 | 349 | PKPdf | | PKiKP | 11 08 30.2 | -0.1 | |
| Q16A | Castle Valley | 126.43 | 22 | PKPdf | | PKPdf | 11 08 29.9 | -0.5 | |
| GWY | Greenwater Val | 126.44 | 28 | PKPdf | | PKPdf | 11 08 28.6 | -1.8 | |
| GWY | | | | IAMs_20 | | IAMs_20 | 12 01 00.6 | | |
| | comp=Z,426nm,20.0s | | | | | | | | |
| JFWS | Jewell Farm | 126.82 | 2 | PKPdf | | PKPdf | 11 08 30.4 | -0.2 | |
| JFWS | Jewell Farm | 126.82 | 2 | PKIKP | | PKPdf | 11 08 30.5 | -0.2 | |
| SHPR | Sheep Range | 126.87 | 27 | PKPdf | | PKPdf | 11 08 31.1 | -0.1 | |
| KSPA | Keystone Colle | 126.92 | 348 | | | PKPdf | 11 08 29.9 | -1.0 | |
| ODNJ | Ogdensburg | 127.13 | 347 | | | PKPdf | 11 08 30.9 | -0.5 | |
| L34A | Svendsen Farm, | 127.28 | 8 | PKPdf | | PKPdf | 11 08 30.4 | -1.2 | |
| L44A | Lake County Fo | 127.58 | 360 | P | | PKiKP | 11 08 32.5 | -0.2 | |
| | baz=0.5 | | | | | | | | |
| SMCO | Snowmass | 127.62 | 18 | PKPdf | | PKiKP | 11 08 33.6 | +0.2 | |
| L40A | Anamosa | 127.63 | 3 | PKPdf | | PKPdf | 11 08 31.1 | -1.2 | |
| M53A | WI Miller and | 127.84 | 353 | P | | PKPdf | 11 08 31.8 | -0.9 | |
| | baz=9.4 | | | | | | | | |
| RCBR | Riachuelo | 127.92 | 271 | *e*P | | PKiKP | 11 08 34.2 | +0.1 | |
| PV05 | Paradox Valley | 127.92 | 21 | PKPdf | | PKPdf | 11 08 33.1 | -0.2 | |
| PV13 | Radium Mtn., P | 127.95 | 20 | PKPdf | | PKPdf | 11 08 33.2 | -0.2 | |
| Q24A | Divide | 128.36 | 17 | P | | PKPdf | 11 08 33.8 | -0.4 | |
| | baz=339 | | | | | | | | |
| N53A | Lisbon | 128.48 | 353 | | | PKPdf | 11 08 33.2 | -0.8 | |
| TPFO | Pinon Flats | 128.63 | 30 | P | | PKiKP | 11 08 35.4 | +0.1 | |
| | baz=324 | | | | | | | | |
| KSCO | Kaye Shedlock' | 128.98 | 14 | | | PKPdf | 11 08 35.4 | +0.2 | |
| S22A | 4UR Ranch, Cre | 128.98 | 19 | P | | PKPdf | 11 08 35.0 | -0.4 | |
| | baz=336 | | | | | | | | |
| O54A | Avella | 129.04 | 352 | | | PKPdf | 11 08 34.9 | -0.2 | |
| O53A | New Philadelph | 129.08 | 353 | | | PKPdf | 11 08 35.2 | +0.1 | |
| O53A | New Philadelph | 129.08 | 353 | P | | PKPdf | 11 08 34.9 | -0.2 | |
| | baz=8.9 | | | | | | | | |
| CBX | Cerro Bola | 129.56 | 31 | IAMs_20 | | IAMs_20 | 12 12 29.4 | | |
| | comp=Z,418nm,18.0s | | | | | | | | |
| RMX | La Rumorosa | 129.62 | 31 | IAMs_20 | | IAMs_20 | 12 08 18.7 | | |
| | comp=Z,432nm,18.0s | | | | | | | | |
| P52A | Corning | 129.79 | 354 | P | | PKPdf | 11 08 35.9 | -0.6 | |
| | baz=7.8 | | | | | | | | |
| P38A | Dawn | 129.90 | 5 | | | PKPdf | 11 08 35.6 | -1.0 | |
| UABX | UABC, Campus M | 129.91 | 30 | IAMs_20 | | IAMs_20 | 11 54 00.7 | | |
| | comp=Z,327nm,18.0s | | | | | | | | |
| NBCL | Cascavel-CE | 130.01 | 273 | *e*P | | PKiKP | 11 08 38.3 | 0.0 | |
| P51A | Williamsport | 130.03 | 355 | PKPdf | | PKPdf | 11 08 36.8 | -0.2 | |
| P49A | Miami Univ. Ec | 130.11 | 356 | P | | PKPdf | 11 08 37.1 | 0.0 | |
| | baz=4.6 | | | | | | | | |
| P48A | Milroy | 130.22 | 357 | | | PKPdf | 11 08 36.2 | -1.1 | |
| T25A | Trinidad | 130.27 | 17 | P | | PKPdf | 11 08 37.8 | +0.1 | |
| | baz=339 | | | | | | | | |
| W18A | Petrified Fore | 130.32 | 23 | P | | PKiKP | 11 08 38.7 | +0.1 | |
| | baz=332 | | | | | | | | |
| R32A | Long Quarter, | 130.38 | 11 | PKPdf | | PKPdf | 11 08 37.7 | 0.0 | |
| BLO | Bloomington | 130.56 | 358 | IAMs_20 | | IAMs_20 | 12 08 19.7 | | |
| | comp=Z,653nm,22.0s | | | | | | | | |
| ANMO | Albuquerque | 131.66 | 20 | | | PKPdf | 11 08 40.4 | 0.0 | |
| ANMO | Albuquerque | 131.66 | 20 | PKIKP | | PKPdf | 11 08 40.4 | 0.0 | |
| 214A | Organ Pipe Nat | 131.73 | 28 | P | | PKiKP | 11 08 41.3 | -0.1 | |
| | baz=327 | | | | | | | | |
| Y22D | IRIS PASSCAL I | 132.29 | 21 | P | | PKiKP | 11 08 42.6 | -0.1 | |
| | baz=335 | | | | | | | | |
| T42A | Van Buren | 132.65 | 3 | PKPdf | | PKPdf | 11 08 41.5 | -0.5 | |
| T47A | Sharon Grove | 132.75 | 359 | PKPdf | | PKPdf | 11 08 42.6 | +0.4 | |
| RIB01 | Linhares ES | 132.96 | 253 | *e*P | | PKiKP | 11 08 44.1 | 0.0 | |
| 121A | Cookes Peak, D | 133.36 | 23 | P | | PKiKP | 11 08 44.6 | -0.3 | |
| | baz=333 | | | | | | | | |
| LCAR | Lake Charles | 133.61 | 3 | | | PKPdf | 11 08 43.1 | -0.7 | |
| CLTN | Cedars of Leba | 133.62 | 358 | | | PKPdf | 11 08 43.4 | -0.4 | |
| DUB01 | Friburgo-RJ | 134.55 | 249 | *e*P | | PKiKP | 11 08 46.8 | -0.6 | |
| X37A | Clayton | 134.67 | 8 | | | PKPdf | 11 08 44.4 | -1.5 | |
| PLAL | Pickwick Lake | 134.77 | 360 | PKPdf | | PKPdf | 11 08 44.7 | -1.3 | |
| UALR | University of | 134.81 | 5 | PKPdf | | PKPdf | 11 08 45.1 | -1.0 | |
| OXF | Oxford | 135.22 | 1 | IAMs_20 | | IAMs_20 | 11 56 40.2 | | |
| | comp=Z,743nm,22.0s | | | | | | | | |
| ABTX | Abilene, Hawle | 135.78 | 14 | | | PKPdf | 11 08 45.9 | -2.1 | |
| WLAR | White Oak Lake | 135.83 | 6 | PKPdf | | PKPdf | 11 08 47.6 | -0.3 | |
| DIAM | Diamantina, MG | 136.13 | 255 | *e*P | | PKPdf | 11 08 49.1 | +0.4 | |
| JANB | Januaria | 136.86 | 259 | *e*P | | PKPdf | 11 08 50.5 | +0.1 | |
| TX31 | Lajitas Ar. Si | 137.73 | 20 | PKPdf | | PKPdf | 11 08 51.6 | -0.2 | |
| TXAR | Lajitas Array | 137.73 | 20 | PKhKP | | PKPpre | 11 08 43.8 | | |
| | comp=Z,0.8nm,0.9s,baz=204,slow=2.7,SNR=3.8 | | | | | | | | |
| TXAR | | | | PKP | | PKPdf | 11 08 51.4 | -0.4 | |
| | comp=Z,6.7nm,1.1s,baz=252,slow=0.4,SNR=23 | | | | | | | | |
| JCT | Junction City | 137.79 | 15 | PKPdf | | PKPdf | 11 08 51.3 | -0.5 | |
| JCT | Junction City | 137.79 | 15 | PKIKP | | PKPdf | 11 08 51.3 | -0.5 | |
| VAO | Valinhos | 138.61 | 247 | *e*P | | PKPdf | 11 08 54.2 | +0.7 | |
| PET01 | Itanhaem-SP | 138.64 | 245 | *e*P | | PKiKP | 11 08 54.6 | -1.0 | |
| PMNB | Patos De Minas | 138.72 | 254 | *e*P | | PKPdf | 11 08 54.4 | +0.6 | |
| TMAB | Tom-Au,PA,Br | 139.23 | 279 | *e*P | | PKPdf | 11 08 55.6 | +0.8 | |
| 833A | Chaparral WMA, | 139.95 | 15 | P | | PKPdf | 11 08 56.1 | +0.4 | |
| | baz=343 | | | | | | | | |
| BB19B | Bebedouro | 140.37 | 250 | *e*P | | PKiKP | 11 08 58.2 | -1.0 | |
| BDFB | Brasilia | 140.42 | 258 | PKP | | PKPdf | 11 08 56.5 | -0.4 | |
| | comp=Z,3.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **159.51 252** | PKP | | **PKPdf** | **11 09 27.2** | **+0.1** |
| | comp=Z,6.0nm,1.1s,baz=62,slow=2.4,SNR=12 | | | | | | |
| LPAZ | | | PKPab | | **PKPab** | **11 10 05.1** | **0.0** |
| | comp=Z,12nm,1.2s,baz=12,slow=4.5,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **159.51 252** | PKIKP | | **PKPdf** | **11 09 24.7** | **-2.4** |
| **LPAZ** | **La Paz** | **159.51 252** | *eP* | | **PKPdf** | **11 09 27.4** | **+0.3** |
| **TBTG** | **Tabatinga, AM** | **160.67 288** | *eP* | | **PKPdf** | **11 09 26.6** | **-1.1** |
| **OTAV** | **Otavalo** | **165.48 317** | *eP* | | **PKPdf** | **11 09 33.1** | **+0.2** |

**GII 24 10:57:30.1±0.3, 29°.733N±0°.010×36°.38E±0°.01, h0km, confirmed, Western Arabian Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HRFI** | **Mount Harif** | **1.20 285** | | P | Pg | 10 57 53.5 | +0.3 |
| **HRFI** | **Mount Harif** | **1.20 285** | | S | Sn | 10 58 11.6 | +0.3 |
| **EIL** | **Elat** | **1.24 267** | | P | Pb | 10 57 54.3 | -0.2 |
| **EIL** | **Elat** | **1.24 267** | | S | Sn | 10 58 12.4 | +0.2 |
| **MBRI** | **Mt Berech** | **1.27 273** | | P | Pb | 10 57 55.1 | 0.0 |
| **MBRI** | **Mt Berech** | **1.27 273** | | S | Sn | 10 58 14.0 | +0.9 |
| **ZFRI** | **Zfri** | **1.32 309** | | P | Pb | 10 57 55.8 | 0.0 |
| **ZFRI** | **Zfri** | **1.32 309** | | S | Sn | 10 58 14.9 | +0.7 |
| **PRNI** | **Paran** | **1.34 298** | | P | Pg | 10 57 55.8 | 0.0 |
| **PRNI** | **Paran** | **1.34 298** | | S | Sn | 10 58 16.1 | +1.4 |
| **KRMI** | **Paran Flat** | **1.48 285** | | P | Pn | 10 57 58.3 | +0.1 |
| **KRMI** | **Paran Flat** | **1.48 285** | | S | Sn | 10 58 19.1 | +0.8 |
| **GHAJ** | **Ghor Haditha** | **1.71 336** | | P | Pn | 10 58 01.5 | +0.2 |
| **GHAJ** | **Ghor Haditha** | **1.71 336** | | S | Sb | 10 58 24.7 | +0.1 |
| **MSBI** | **Mazada** | **1.80 331** | | P | Pn | 10 58 02.8 | +0.3 |
| **MSBI** | **Mazada** | **1.80 331** | | S | Sb | 10 58 27.5 | +0.3 |
| **YTIR** | **Yattir** | **1.96 327** | | P | Pn | 10 58 05.4 | +0.7 |
| **YTIR** | **Yattir** | **1.96 327** | | S | Sb | 10 58 31.5 | -0.2 |
| **KZIT** | **Kziot** | **2.07 305** | | P | Pn | 10 58 06.5 | +0.3 |
| **KZIT** | **Kziot** | **2.07 305** | | S | Sb | 10 58 34.1 | -0.9 |

**HEL 24 10:58:41.6±0.0, 60°.28N×22°.32E, h0km, ML0.7, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAF** | **Rauma** | **0.80 340** | | *eP* | Pg | 10 58 56.0 | -0.9 |
| RAF | | | | *eS* | Sg | 10 59 06.0 | -1.1 |
| RAF | | | | MSG | | 10 59 06.3 | |
| | comp=Z,0.6nm,0.1s | | | | | | |
| **MEF** | **Metsahovi** | **1.03 93** | | *eP* | Pg | 10 59 00.2 | -1.2 |
| **NRTU** | **Norrtaelje** | **1.95 254** | | *eP* | Pn | 10 59 15.9 | -0.1 |
| NRTU | | | | *eS* | Sn | 10 59 41.9 | +0.8 |

*IDC **24** 11:17:16.5±3.4, 10°.43N×124°.84E, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=289.1km s-min=29.9km az=64.0*

**ISC 24 11:17:18.4±1.3, 10°.27N±0°.08×124°.4E±0°.1, h10km, n5, σ1s83/7, mb3.4/3, 1D, Leyte**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLP** | **Palo** | **1.07** | **33** | *eP* | **Pn** | **11 17 37.4** | **-2.0** |
| PLP | | | | *eS* | **Sn** | **11 17 57.0** | **+2.6** |
| **SCPH** | **Surigao** | **1.19 114** | | *eP* | **Pn** | **11 17 41.7** | **+0.6** |
| SCPH | | | | *i* S | **Sn** | **11 17 56.2** | **-1.2** |
| **WRA** | **Warramunga Arr** | **31.58 162** | | P | **P** | **11 23 40.9** | **-0.6** |
| | 0.5nm,1.1s,baz=344,slow=9.2,SNR=2.2 0.5nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **34.98 165** | | P | **P** | **11 24 11.3** | **+0.2** |
| | 0.2nm,0.3s,baz=341,slow=7.6,SNR=9.8 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.92 324** | | P | **P** | **11 26 20.5** | **+0.6** |
| | 0.3nm,0.5s,baz=138,slow=6.9,SNR=2.7 0.3nm,0.5s | | | | | | |

**NEIC 24 11:21:43.0±0.8, 39°.73N±0°.04×108°.43W±0°.04, h2km±5km, ML2.8/118, Error ellipse: s-maj=6.8km s-min=1.5km az=216.0, Colorado**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **O20A** | **White River Ci** | **0.43** | **19** | Pg | Pg | 11 21 51.3 | +0.1 |
| **RDMU** | **Red Mountain** | **1.21 314** | | | Pg | 11 22 05.4 | -0.8 |
| RDMU | | | | Sg | Sg | 11 22 21.4 | -0.6 |
| RDMU | | | | IAML | | 11 22 21.6 | |
| | comp=E,164nm,0.3s | | | | | | |
| RDMU | | | | IAML | | 11 22 29.1 | |
| | comp=N,124nm,0.1s | | | | | | |
| **SMCO** | **Snowmass** | **1.25 116** | | | Pg | 11 22 06.5 | -0.5 |
| SMCO | | | | Sg | Sg | 11 22 22.8 | -0.4 |
| SMCO | | | | IAML | | 11 22 23.6 | |
| | comp=N,198nm,0.3s | | | | | | |
| SMCO | | | | IAML | | 11 22 28.7 | |
| | comp=N,174nm,0.4s | | | | | | |
| **P18A** | **Preston Nutter** | **1.41 266** | | | Pn | 11 22 09.9 | 0.0 |
| P18A | | | | IAML | | 11 22 32.4 | |
| | comp=E,226nm,0.3s | | | | | | |
| P18A | | | | IAML | | 11 22 33.3 | |
| | comp=N,275nm,0.3s | | | | | | |
| **SRU** | **San Rafael Swe** | **1.74 250** | | Pg | Pb | 11 22 15.3 | -0.4 |
| SRU | | | | IAML | | 11 22 41.1 | |
| | comp=N,112nm,0.2s | | | | | | |
| SRU | | | | IAML | | 11 22 42.2 | |
| | comp=E,138nm,0.3s | | | | | | |
| **P17A** | **Butcher Ranch,** | **1.81 263** | | | Pb | 11 22 16.4 | -0.4 |
| P17A | | | | IAML | | 11 22 40.8 | |
| | comp=N,141nm,0.3s | | | | | | |
| **RWWY** | **Rawlins** | **2.17** | **25** | | Pn | 11 22 21.6 | +1.3 |
| RWWY | | | | IAML | | 11 22 56.2 | |
| | comp=N,124nm,0.4s | | | | | | |
| **TMUT** | **Trail Mountain** | **2.19 260** | | | Pb | 11 22 22.2 | -1.4 |
| **N23A** | **Red Feather La** | **2.23** | **58** | | Pb | 11 22 23.2 | -0.9 |
| N23A | | | | IAML | | 11 22 56.0 | |
| | comp=N,61nm,0.3s | | | | | | |
| N23A | | | | IAML | | 11 23 01.9 | |
| | comp=E,54nm,0.6s | | | | | | |
| **Q16A** | **Castle Valley** | **2.28 250** | | | Pn | 11 22 23.3 | +1.5 |
| **S22A** | **4UR Ranch, Cre** | **2.34 147** | | Pn | Pn | 11 22 24.2 | +1.5 |
| S22A | | | | IAML | | 11 22 58.5 | |
| | comp=E,70nm,0.1s | | | | | | |
| **JLU** | **Jordanelle** | **2.48 292** | | | Pn | 11 22 26.0 | +1.5 |
| JLU | | | | IAML | | 11 23 00.9 | |
| | comp=N,41nm,0.7s | | | | | | |
| JLU | | | | IAML | | 11 23 01.2 | |
| | comp=E,32nm,0.5s | | | | | | |
| **MPU** | **Maple Canyon** | **2.48 278** | | Pn | Pn | 11 22 25.5 | +0.9 |
| MPU | | | | IAML | | 11 23 02.6 | |
| | comp=N,26nm,0.8s | | | | | | |
| **MVCO** | **Mesa Verde** | **2.52 181** | | Pn | Pn | 11 22 26.6 | +1.5 |
| **HMU** | **Henry Mountain** | **2.54 226** | | | Pn | 11 22 26.7 | +1.2 |
| **Q24A** | **Divide** | **2.65 106** | | | Pn | 11 22 28.9 | +1.8 |
| **TCUT** | **Toone Canyon** | **2.67 302** | | | Pn | 11 22 29.4 | +2.2 |
| **CTU** | **Camp Tracy** | **2.72 292** | | | Pn | 11 22 28.9 | +1.1 |
| CTU | | | | IAML | | 11 23 10.0 | |
| | comp=E,28nm,0.4s | | | | | | |
| **PHWY** | **Pilot Hill** | **2.75** | **54** | | Pn | 11 22 29.4 | +0.9 |
| **NLU** | **North Lily Min** | **2.82 276** | | | Pn | 11 22 30.2 | +1.0 |
| **SDCO** | **Great Sand Dun** | **3.03 130** | | | Pn | 11 22 32.8 | +0.6 |
| **HWUT** | **Hardware Ranch** | **3.04 309** | | | Pn | 11 22 33.1 | +0.8 |
| HWUT | | | | IAML | | 11 23 18.8 | |
| | comp=E,24nm,1.2s | | | | | | |
| HWUT | | | | IAML | | 11 23 25.9 | |
| | comp=E,28nm,0.9s | | | | | | |
| **PD31** | **Pinedale Array** | **3.15 345** | | Pn | Pn | 11 22 34.3 | +0.5 |
| **PDAR** | **Pinedale Array** | **3.15 345** | | | Pn | 11 22 34.5 | +0.6 |
| **MSU** | **Marysvale** | **3.16 249** | | Pn | Pn | 11 22 35.6 | +1.6 |
| **MVU** | **Marysvale** | **3.19 249** | | Pn | Pn | 11 22 35.0 | +0.7 |
| **K22A** | **Casper** | **3.25** | **26** | Pn | Pn | 11 22 36.3 | +1.1 |
| K22A | | | | IAML | | 11 23 24.5 | |
| | comp=N,41nm,0.2s | | | | | | |
| **TCRU** | **Three Creeks R** | **3.32 252** | | Pn | Pn | 11 22 37.5 | +1.4 |
| TCRU | | | | IAML | | 11 23 35.6 | |
| | comp=E,13nm,0.7s | | | | | | |
| **MTPU** | **Mount Pierson** | **3.38 241** | | Pn | Pn | 11 22 37.7 | +0.6 |
| **DUG** | **Dugway, Tooele** | **3.40 279** | | Pn | Pn | 11 22 37.4 | +0.2 |
| **SPUT** | **South Promonto** | **3.45 299** | | Pn | Pn | 11 22 38.1 | +0.2 |
| SPUT | | | | IAML | | 11 23 29.7 | |
| | comp=N,18nm,0.7s | | | | | | |
| SPUT | | | | IAML | | 11 23 29.9 | |
| | comp=E,13nm,0.8s | | | | | | |
| **AHID** | **Auburn Hatcher** | **3.64 327** | | Pn | Pn | 11 22 40.9 | +0.3 |
| AHID | | | | IAML | | 11 23 45.5 | |
| | comp=E,34nm,0.5s | | | | | | |
| **BGU** | **Big Grassy Mou** | **3.72 290** | | Pn | Pn | 11 22 42.1 | +0.6 |
| **PKCU** | **Pink Cliffs** | **3.80 234** | | Pn | Pn | 11 22 43.8 | +0.9 |
| **HVU** | **Hansel Valley** | **3.89 303** | | Pn | Pn | 11 22 43.0 | -0.8 |
| HVU | | | | IAML | | 11 23 53.1 | |
| | comp=E,9.2nm,0.5s | | | | | | |
| HVU | | | | IAML | | 11 23 58.0 | |
| | comp=N,10nm,0.5s | | | | | | |
| **REDW** | **Red Top Meadow** | **4.06 334** | | Pn | Pn | 11 22 46.7 | +0.4 |
| **T25A** | **Trinidad** | **4.08 128** | | Pn | Pn | 11 22 48.3 | +1.7 |
| T25A | | | | IAML | | 11 23 55.0 | |
| | comp=E,8.7nm,0.7s | | | | | | |
| **TPAW** | **Teton Pass** | **4.21 334** | | Pn | Pn | 11 22 48.4 | 0.0 |
| TPAW | | | | IAML | | 11 24 00.7 | |
| | comp=E,20nm,1.1s | | | | | | |
| TPAW | | | | IAML | | 11 24 03.3 | |
| | comp=E,12nm,0.7s | | | | | | |
| **LOHW** | **Long Hollow** | **4.21 338** | | | Pn | 11 22 49.0 | +0.6 |
| LOHW | | | | IAML | | 11 23 54.5 | |
| | comp=E,11nm,0.8s | | | | | | |
| LOHW | | | | IAML | | 11 24 00.1 | |
| | comp=E,21nm,0.4s | | | | | | |
| **SZCU** | **Shurtz Canyon** | **4.22 241** | | Pn | Pn | 11 22 49.4 | +0.8 |
| SZCU | | | | IAML | | 11 23 57.8 | |
| | comp=N,12nm,0.4s | | | | | | |
| SZCU | | | | IAML | | 11 24 01.2 | |
| | comp=E,18nm,0.3s | | | | | | |
| **FXWY** | **Fox Creek** | **4.36 334** | | | Pn | 11 22 50.3 | -0.2 |
| FXWY | | | | IAML | | 11 24 05.7 | |
| | comp=E,6.3nm,1.3s | | | | | | |
| FXWY | | | | IAML | | 11 24 16.3 | |
| | comp=E,5.3nm,3.3s | | | | | | |
| **PSUT** | **Pine Spring** | **4.39 256** | | Pn | Pn | 11 22 50.3 | -0.5 |
| **KNB** | **Kanab** | **4.39 233** | | Pn | Pn | 11 22 49.3 | -1.5 |
| KNB | | | | IAML | | 11 24 01.5 | |
| | comp=N,13nm,0.6s | | | | | | |
| KNB | | | | IAML | | 11 24 05.8 | |
| | comp=E,14nm,0.9s | | | | | | |
| **CCUT** | **Cedar City** | **4.43 242** | | Pn | Pn | 11 22 52.9 | +1.4 |
| **U15A** | **North Rim** | **4.49 224** | | | Pn | 11 22 54.8 | +2.5 |
| **IMW** | **Indian Meadow** | **4.57 337** | | Pn | Pn | 11 22 53.2 | -0.1 |
| **SPR3** | **Spring Creek 3** | **4.63 263** | | Pn | Pn | 11 22 52.9 | -1.4 |
| **LCMT** | **Little Creek M** | **4.66 236** | | Pn | Pn | 11 22 54.4 | -0.1 |
| LCMT | | | | IAML | | 11 24 10.0 | |
| | comp=E,9.3nm,0.8s | | | | | | |
| LCMT | | | | IAML | | 11 24 10.0 | |
| | comp=N,10nm,0.8s | | | | | | |
| **FLWY** | **Flagg Ranch** | **4.67 339** | | Pn | Pn | 11 22 54.1 | -0.6 |
| FLWY | | | | IAML | | 11 24 19.6 | |
| | comp=N,12nm,3.0s | | | | | | |
| FLWY | | | | IAML | | 11 25 40.6 | |
| | comp=N,10nm,3.0s | | | | | | |
| **W18A** | **Petrified Fore** | **4.72 193** | | Pn | Pn | 11 22 56.4 | +1.0 |
| **WUAZ** | **Wupatki** | **4.81 210** | | Pn | Pn | 11 22 56.9 | +0.3 |
| **YPP** | **Pitchstone Pla** | **4.87 339** | | Pn | Pn | 11 22 57.1 | -0.4 |
| YPP | | | | IAML | | 11 23 52.8 | |
| | comp=E,8.7nm,4.0s | | | | | | |
| YPP | | | | IAML | | 11 24 26.1 | |
| | comp=N,6.4nm,2.8s | | | | | | |
| **Q12A** | **Willow Creek R** | **5.01 264** | | Pn | Pn | 11 22 58.0 | -1.3 |
| Q12A | | | | IAML | | 11 24 17.0 | |
| | comp=E,5.7nm,0.3s | | | | | | |
| Q12A | | | | IAML | | 11 24 46.3 | |
| | comp=N,6.4nm,0.1s | | | | | | |
| **ANMO** | **Albuquerque** | **5.03 161** | | Pn | Pn | 11 22 59.6 | 0.0 |
| ANMO | | | | IAML | | 11 23 44.4 | |
| | comp=N,3.2nm,4.0s | | | | | | |
| ANMO | | | | IAML | | 11 24 20.1 | |
| | comp=N,3.2nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **5.04** | **74** | Pn | Pn | 11 22 59.5 | -0.1 |
| **RLMT** | **Red Lodge** | **5.42 354** | | Pn | Pn | 11 23 03.7 | -1.4 |
| **RSSD** | **Black Hills** | **5.47** | **35** | Pn | Pn | 11 23 04.1 | -1.6 |
| **X16A** | **Lo Mia Camp, P** | **5.82 205** | | Pn | Pn | 11 23 08.8 | -1.8 |
| **S11A** | **Rachel** | **6.09 252** | | Pn | Pn | 11 23 13.7 | -0.5 |
| **W13A** | **Hualapai Mount** | **6.34 225** | | Pn | Pn | 11 23 17.5 | -0.2 |

*FUNV **24** 11:24:56.0, 10°.32N×63°.32W, h6km, MW3.2*

**ISC 24 11:24:54.6±1.0, 9°.65N±0°.07×63°.19W±0°.05, h10km, n5, σ1s98/10, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCRV** | **Puerto La Cruz** | **1.52 290** | | *eP* | **Pg** | **11 25 24.2** | **+0.5** |
| PCRV | | | | *eS* | **Sg** | **11 25 45.6** | **+2.2** |
| **TRN** | **Trinidad (W)** | **2.02** | **61** | *eP* | **Pn** | **11 25 28.6** | **-0.1** |
| TRN | | | | *eS* | **Sn** | **11 25 52.5** | **-1.5** |
| **CACV** | **CAICARA DEL OR** | **3.91 238** | | *eP* | **Pn** | **11 25 55.4** | **+0.7** |
| CACV | | | | *eS* | **Sn** | **11 26 38.0** | **-2.7** |
| **LUEV** | **Luepa** | **4.16 156** | | *eP* | **Pb** | **11 26 07.3** | **-0.7** |
| LUEV | | | | *eS* | **Sb** | **11 27 00.7** | **+2.3** |
| **BAUV** | **El Baul** | **4.84 262** | | *eP* | **Pn** | **11 26 07.4** | **-0.2** |
| BAUV | | | | *eS* | **Sn** | **11 27 01.2** | **-2.5** |

*IDC **24** 11:29:26.4±0.8, 10°.39N×91°.62E, h0km, mb4.0/11, mbtmp4.0/13, ML3.9/2, MS4.4/1, Error ellipse: s-maj=30.0km s-min=15.6km az=58.0*
*NDI **24** 11:29:32.0±2.1, 10°.97N×91°.51E, h10km, ML4.1, mb4.4(NEIC)*
*NEIC **24** 11:29:32.6±2.4, 11°.00N±0°.05×91°.58E±0°.08, h10km±1km, mb4.4/21, Error ellipse: s-maj=12.8km s-min=8.8km az=286.0*

**ISC 24 11:29:32.5±0.6, 10°.92N±0°.08×91°.53E±0°.06, h20km, n58, σ1s43/51, mb4.1/19, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBA** | **Port Blair** | **1.40** | **58** | | **Pb** | **11 29 57.3** | **-0.7** |
| **PBA** | **Port Blair** | **1.40** | **58** | *eP* | **Pn** | **11 29 56.9** | **-0.1** |
| PBA | | | | *eS* | **Sb** | **11 30 16.9** | **+1.5** |
| PBA | | | | IAML | | 11 30 27.3 | |
| | comp=N,936nm,0.6s | | | | | | |
| PBA | | | | IAML | | 11 30 31.5 | |
| | comp=E,736nm,0.7s | | | | | | |
| **SRIT** | **Nakonsritamara** | **8.29 105** | | Pn | **Pn** | **11 31 31.4** | **-0.2** |
| **CM31** | **Chiang Mai Arr** | **10.37** | **43** | Pn | **Pn** | **11 31 57.6** | **-2.7** |
| **CMAR** | **Chiang Mai Arr** | **10.37** | **43** | Pn | **Pn** | **11 31 58.6** | **-1.7** |
| **CMAR** | **Chiang Mai Arr** | **10.37** | **43** | Pn | **Pn** | **11 32 01.9** | **+1.6** |
| | comp=E,0.3nm,0.3s,baz=233,slow=14,SNR=7.5 comp=E,0.8nm,0.3s | | | | | | |
| **KULM** | **Kulim** | **10.62 121** | | Pn | **Pn** | **11 32 03.8** | **+0.2** |
| **RPSI** | **Rantau Prapat** | **10.98 138** | | Pn | **Pn** | **11 32 10.3** | **+1.7** |
| **MDRS** | **Chennai** | **11.24 282** | | *eP* | **Pn** | **11 32 13.4** | **+1.3** |
| MDRS | | | | *eS* | Sn | 11 34 09.0 | -8.4 |
| MDRS | | | | IAML | | 11 34 15.6 | |
| | comp=E,139nm,0.4s | | | | | | |
| MDRS | | | | IAML | | 11 34 15.6 | |
| | comp=N,340nm,0.4s | | | | | | |
| **PALK** | **Pallekele** | **11.29 252** | | Pn | **Pn** | **11 32 15.4** | **+2.6** |
| **PALK** | **Pallekele** | **11.29 252** | | Pn | **Pn** | **11 32 10.1** | **-2.7** |
| | comp=N,0.6nm,0.3s,baz=13,slow=18,SNR=1.6 | | | | | | |
| PALK | | | | Sn | Sn | 11 34 02.3 | -16 |
| | comp=N,1.6nm,0.3s,baz=170,slow=5.4,SNR=3.2 comp=N,4.5nm,0.7s | | | | | | |
| **SALM** | **Salem** | **13.09 274** | | *eP* | **Pn** | **11 32 35.9** | **-1.6** |
| SALM | | | | *eS* | Sn | 11 34 53.8 | -8.9 |
| **SLVN** | **Son La** | **15.76** | **47** | | **Pn** | **11 33 13.9** | **+0.4** |
| SLVN | | | | IAmb | IAmb | 11 33 19.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **HMDM** | **Hanimaadhoo** | **18.59 259** | | P | **P** | **11 33 48.8** | **+0.2** |
| **LSA** | **Lhasa** | **18.69 359** | | P | **P** | **11 33 48.8** | **-1.3** |
| LSA | | | | IAmb | IAmb | 11 33 56.3 | |
| | comp=Z,8.3nm,0.6s | | | | | | |
| **ENH** | **Enshi** | **25.49** | **38** | P | **P** | **11 34 59.8** | **+0.1** |
| ENH | | | | IAmb | IAmb | 11 34 59.9 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.43 227** | | T | T | 12 02 14.4 | |
| | baz=46,slow=75,SNR=786 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.44 227** | | T | T | 12 02 15.7 | |
| | baz=46,slow=75,SNR=438 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.45 227** | | T | T | 12 02 13.5 | |
| | baz=46,slow=75,SNR=342 | | | | | | |
| **ARSB** | **Arslanbob** | **34.40 335** | | P | **P** | **11 36 17.9** | **-0.8** |
| **MK31** | **Makanchi Array** | **36.61 349** | | P | **P** | **11 36 39.2** | **+1.9** |
| **MKAR** | **Makanchi Array** | **36.61 349** | | P | **P** | **11 36 38.9** | **+1.5** |
| **MKAR** | **Makanchi Array** | **36.61 349** | | P | **P** | **11 36 39.1** | **+1.7** |
| | comp=Z,2.5nm,0.8s,baz=171,slow=8.5,SNR=18 | | | | | | |
| MKAR | | | | PcP | **PcP** | **11 38 58.3** | **-2.0** |
| | comp=Z,0.5nm,0.6s,baz=173,slow=2.1,SNR=4.1 comp=Z,2.5nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **36.91 334** | | P | **P** | **11 36 39.6** | **-0.4** |
| **SONM** | **Songino Array** | **38.87** | **16** | P | **P** | **11 36 58.4** | **+1.8** |
| SONM | | | | IAmb | IAmb | 11 36 59.5 | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **38.87** | **16** | P | **P** | **11 36 57.1** | **+0.5** |
| | comp=Z,2.8nm,0.8s,baz=202,slow=8.2,SNR=11 comp=Z,2.8nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **41.01 347** | | P | **P** | **11 37 15.6** | **+1.4** |
| | comp=Z,0.6nm,0.2s,baz=167,slow=7.4,SNR=8.3 comp=Z,0.6nm,0.2s | | | | | | |
| **KURK** | **Kurchatov** | **41.08 348** | | P | **P** | **11 37 14.8** | **+0.1** |
| **ZAA0** | **Zalesovo Array** | **43.25 354** | | P | **P** | **11 37 34.1** | **+1.7** |
| ZAA0 | | | | IAmb | IAmb | 11 37 34.7 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.25 354** | | P | **P** | **11 37 33.8** | **+1.4** |
| **ZALV** | **Zalesovo Beam** | **43.25 354** | | P | **P** | **11 37 33.9** | **+1.5** |
| | comp=Z,2.5nm,0.6s,baz=179,slow=10,SNR=11 comp=Z,2.5nm,0.6s | | | | | | |
| **JMN** | **Monobe** | **44.85 53** | | P | **P** | **11 37 46.1** | **+0.4** |
| **KNRA** | **Kununurra** | **45.35 125** | | P | **P** | **11 37 51.3** | **+1.6** |
| KNRA | | | | IAmb | IAmb | 11 38 19.9 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **45.86 120** | | P | **P** | **11 37 53.9** | **+0.1** |
| MTN | | | | IAmb | IAmb | 11 38 10.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **46.35 332** | | P | **P** | **11 37 57.9** | **+0.7** |
| **WB0** | **Warramunga Arr** | **52.07 126** | | P | **P** | **11 38 41.7** | **+0.3** |
| WB0 | | | | IAmb | IAmb | 11 38 52.6 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **52.12 126** | | P | **P** | **11 38 42.5** | **+0.7** |
| **WRA** | **Warramunga Arr** | **52.12 126** | | P | P | 11 38 36.3 | -5.5 |
| | comp=Z,1.7nm,0.6s,baz=305,slow=8.6,SNR=31 comp=Z,1.7nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **52.13 126** | | P | **P** | **11 38 42.3** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 11 39 24.6 | |
| | comp=Z,10nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **52.29 126** | | P | **P** | **11 38 42.9** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 11 38 51.5 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **53.83 130** | | P | **P** | **11 38 55.6** | **+1.2** |
| **ASAR** | **Alice Springs** | **53.83 130** | | P | **P** | **11 38 56.7** | **+2.3** |
| **ASAR** | **Alice Springs** | **53.83 130** | | P | P | 11 38 48.6 | -5.7 |
| | comp=Z,1.8nm,0.8s,baz=308,slow=7.5,SNR=20 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 39 56.1** | **-4.0** |
| | comp=Z,0.7nm,0.6s,baz=317,slow=3.5,SNR=6.9 comp=Z,1.8nm,0.8s | | | | | | |
| **ERM** | **Erimo** | **54.56** | **46** | P | **P** | **11 38 58.6** | **-0.8** |
| **YAK** | **Yakutsk** | **57.99** | **20** | LR | LR | 12 07 11.6 | |
| | comp=Z,364nm,21.9s,baz=295,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **58.51 310** | | P | **P** | **11 39 26.9** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=115,slow=8.8,SNR=5.4 comp=Z,0.7nm,0.6s | | | | | | |
| **ELL** | **Elmali** | **60.85 306** | | P | **P** | **11 39 44.0** | **0.0** |
| **STKA** | **Stephens Creek** | **64.06 133** | | P | P | 11 39 57.8 | -7.5 |
| | comp=Z,1.2nm,0.7s,baz=316,slow=5.5,SNR=3.4 comp=Z,1.2nm,0.7s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **67.06 209** | | T | T | 12 53 08.2 | |
| | baz=44,slow=75,SNR=229 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **67.07 209** | | T | T | 12 53 08.9 | |
| | baz=44,slow=75,SNR=235 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **67.08 209** | | T | T | 12 53 07.6 | |
| | baz=44,slow=75,SNR=209 | | | | | | |
| **FINES** | **FINESS Array B** | **68.83 332** | | P | **P** | **11 40 35.6** | **+0.3** |
| **FINES** | **FINESS Array B** | **68.83 332** | | P | **P** | **11 40 35.2** | **-0.1** |
| | comp=Z,1.1nm,0.7s,baz=122,slow=27,SNR=4.2 comp=Z,1.1nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **71.55 340** | | P | **P** | **11 40 52.7** | **+0.8** |
| **ARCES** | **ARCESS Array B** | **71.55 340** | | P | **P** | **11 40 52.1** | **+0.3** |
| | comp=Z,0.7nm,0.6s,baz=52,slow=2.0,SNR=4.3 comp=Z,0.7nm,0.6s | | | | | | |
| **STAL** | **STALIGIAL** | **74.48 315** | | P | **P** | **11 41 11.4** | **+1.8** |
| STAL | | | | IAmb | IAmb | 11 41 36.9 | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **92.89** | **21** | P | **P** | **11 42 42.9** | **-0.9** |
| | comp=Z,0.3nm,0.6s,baz=316,slow=3.8,SNR=2.3 comp=Z,0.3nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **123.55** | **28** | PKP | **PKPdf** | **11 48 28.2** | **-1.1** |
| | comp=Z,0.6nm,0.8s,baz=270,slow=0.8,SNR=4.0 | | | | | | |

*MIRAS **24** 11:31:11.4, 57°.06N×61°.50E, h0km, ML2.8/6, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*

**ISC 24 11:31:10.8±1.4, 57°.01N±0°.04×61°.52E±0°.08, h10km, n7, σ1s52/14, 1C-2D, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVE** | **Sverdlovsk** | **0.52 250** | | *i* P | **Pg** | **11 31 21.3** | **+0.5** |
| SVE | 32nm,0.3s | | | *i* S | **Sg** | **11 31 28.7** | **+1.1** |
| | 107nm,0.6s | | | | | | |
| SVE | | | | *i* AML | AML | 11 31 29.7 | |
| | 289nm,0.7s | | | | | | |
| **ARU** | **Arti** | **1.73 252** | | *i* P | **Pb** | **11 31 42.9** | **+0.3** |
| ARU | 44nm,0.5s | | | *i* S | **Sg** | **11 32 06.4** | **+0.1** |
| | 122nm,0.4s | | | | | | |
| ARU | | | | *i* AML | AML | 11 32 07.1 | |
| | 165nm,0.8s | | | | | | |
| **PR7R** | **Sarany** | **2.14 317** | | *i* P | **Pb** | **11 31 49.7** | **+0.1** |
| PR7R | 34nm,0.3s | | | *i* S | **Sg** | **11 32 17.6** | **-2.0** |
| | 151nm,0.6s | | | | | | |
| PR7R | | | | *i* AML | AML | 11 32 18.9 | |
| | 141nm,0.5s | | | | | | |
| **PR3R** | **Kungur** | **2.49 282** | | *i* P | **Pb** | **11 31 54.7** | **-0.9** |
| PR3R | 9.5nm,0.2s | | | *i* S | **Sb** | **11 32 26.7** | **+0.4** |
| | 37nm,0.7s | | | | | | |
| PR3R | | | | *i* AML | AML | 11 32 26.9 | |
| | 19nm,0.6s | | | | | | |
| **SVUR** | **Severouralsk** | **3.30 346** | | *i* P | **Pn** | **11 32 03.6** | **+1.1** |
| SVUR | 4.7nm,0.2s | | | *i* S | **Sn** | **11 32 44.0** | **+2.2** |
| | 2.7nm,0.7s | | | | | | |
| SVUR | | | | *i* AML | AML | 11 32 50.3 | |
| | 11nm,0.8s | | | | | | |
| **PR1R** | **Pomanovo** | **3.35 313** | | *i* P | **Pg** | **11 32 14.8** | **0.0** |
| PR1R | 3.9nm,0.4s | | | *i* S | **Sg** | **11 32 55.8** | **-2.3** |
| | 15nm,0.2s | | | | | | |
| PR1R | | | | *i* AML | AML | 11 32 56.9 | |
| | 17nm,0.2s | | | | | | |
| **AB31** | **Akbulak array** | **7.82 188** | | ⇑Pn | **Pn** | **11 33 04.3** | **-0.2** |
| | 0.5nm,0.7s,baz=360,slow=13,SNR=3.9 | | | | | | |
| AB31 | 0.3nm,0.5s | | | ⇓Sn | **Sn** | **11 34 30.4** | **-2.7** |
| AB31 | | | | ⇓Lg | Lg | 11 35 11.4 | |
| | 1.2nm,0.6s,baz=357,slow=26,SNR=3.9 | | | | | | |

**NNC 24 11:44:45.3±0.4, 50°.95N×73°.75E, h0km, mb3.5, mpv3.2, 6C-8D, Error ellipse: s-maj=5.4km s-min=2.7km az=32.0, Suspected Mining explosion., Central

*az=120.0*

**ISC 24 11:59:55.2±0.6, 13°28N±0°09×143°35E±0°10, h200km, n36,**
**σ1°33/37, mb4.0/19, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.51** | **78** | Pn | **Pn** | **12 00 32.7** | **+3.7** |
| **GUMO** | **Guam** | **1.51** | **78** | **P** | **Pn** | **12 00 31.2** | **+2.1** |
| | 14nm,0.3s,baz=339,slow=3.5,SNR=9.7 | | | | | | |
| GUMO | | | | S | **Sn** | **12 00 56.4** | **+1.2** |
| | 42nm,0.3s,baz=151,slow=22,SNR=8.2 | | | | | | |
| **MANU** | **Manus Island** | **15.74** | **165** | P | **P** | **12 03 26.1** | **-0.3** |
| MANU | | | | IAmb | IAmb | 12 04 04.8 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **PATS** | **Pohnpei** | **16.06** | **112** | P | **P** | **12 03 26.5** | **-3.4** |
| **JMZ** | **Minamidaito 2** | **16.90** | **319** | P | **P** | **12 03 39.6** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **22.20** | **303** | P | **P** | **12 04 35.3** | **-0.1** |
| **WB0** | **Warramunga Arr** | **34.00** | **195** | P | **P** | **12 06 20.2** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 12 06 52.3 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **34.15** | **195** | P | **P** | **12 06 21.2** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 12 06 28.0 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **34.17** | **195** | P | **P** | **12 06 21.7** | **0.0** |
| WRAB | | | | IAmb | IAmb | 12 06 59.3 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **34.18** | **195** | P | **P** | **12 06 21.2** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 12 06 23.8 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **34.18** | **195** | P | **P** | **12 06 21.8** | **0.0** |
| **WRA** | **Warramunga Arr** | **34.18** | **195** | P | **P** | **12 06 21.5** | **-0.3** |
| | comp=Z,1.1nm,0.6s,baz=17,slow=9.5,SNR=30 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **37.86** | **194** | P | **P** | **12 06 53.5** | **+0.5** |
| **ASAR** | **Alice Springs** | **37.86** | **194** | P | **P** | **12 06 53.1** | **+0.1** |
| **ASAR** | **Alice Springs** | **37.86** | **194** | P | **P** | **12 06 52.7** | **-0.4** |
| | comp=Z,0.3nm,0.7s,baz=16,slow=11,SNR=7.3 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **46.21** | **198** | P | **P** | **12 08 00.8** | **+0.5** |
| FORT | | | | IAmb | IAmb | 12 08 15.7 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **MORW** | **Morawa** | **49.68** | **212** | P | **P** | **12 08 27.3** | **+0.2** |
| MORW | | | | IAmb | IAmb | 12 09 06.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **KIWB** | **Kanaga Island** | **49.84** | **31** | P | **P** | **12 08 26.6** | **-1.2** |
| **TOO** | **Toolangi** | **50.62** | **178** | P | **P** | **12 08 34.3** | **+0.4** |
| TOO | | | | IAmb | IAmb | 12 08 50.8 | |
| | comp=Z,9.1nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **60.69** | **316** | P | **P** | **12 09 47.1** | **+1.5** |
| **MKAR** | **Makanchi Array** | **60.69** | **316** | P | **P** | **12 09 45.3** | **-0.2** |
| **MKAR** | **Makanchi Array** | **60.69** | **316** | P | **P** | **12 09 47.3** | **+1.8** |
| | comp=Z,0.4nm,0.5s,baz=91,slow=7.5,SNR=4.3 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **61.02** | **325** | P | **P** | **12 09 47.0** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **61.02** | **325** | P | **P** | **12 09 46.3** | **-1.3** |
| **KURBB** | **Kurchatov Arra** | **63.91** | **320** | P | **P** | **12 10 08.5** | **+1.7** |
| | comp=Z,0.6nm,0.3s,baz=104,slow=6.9,SNR=6.6 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.25** | **322** | P | **P** | **12 10 42.5** | **+1.9** |
| | comp=Z,2.0nm,0.5s,baz=108,slow=8.3,SNR=7.5 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **69.32** | **322** | P | **P** | **12 10 40.2** | **-0.7** |
| BRVK | | | | IAmb | IAmb | 12 11 06.1 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **69.48** | **25** | P | **P** | **12 10 41.0** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=246,slow=6.1,SNR=5.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **MCARA** | **McCarthy VSAT** | **70.60** | **29** | P | **P** | **12 10 46.4** | **-2.2** |
| MCARA | | | | IAmb | IAmb | 12 11 02.9 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.78** | **318** | P | **P** | **12 11 19.3** | **+0.2** |
| **EUNU** | **Eureka** | **83.37** | **8** | P | **P** | **12 11 58.0** | **-1.5** |
| EUNU | | | | IAmb | IAmb | 12 12 02.8 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.92** | **342** | P | **P** | **12 12 16.2** | **-1.0** |
| **ARCES** | **ARCESS Array B** | **86.92** | **342** | P | **P** | **12 12 17.1** | **-0.1** |
| | comp=Z,0.7nm,0.8s,baz=67,slow=6.9,SNR=1.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.27** | **51** | P | **P** | **12 12 26.0** | **+1.5** |
| | comp=Z,0.3nm,0.7s,baz=289,slow=5.4,SNR=4.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **FIA1** | **FINESS Array S** | **90.81** | **335** | P | **P** | **12 12 35.1** | **-0.5** |
| **FINES** | **FINESS Array B** | **90.81** | **335** | P | **P** | **12 12 35.4** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=74,slow=4.9,SNR=5.6 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |

*IDC **24** 12:18:03.7±0.6, 10°44N×91°57E, h0km, mb4.2/18, mbtmp4.2/20, ML3.7/2, MS4.3/1, Error ellipse: s-maj=21.3km s-min=13.5km az=51.0*
*NDI **24** 12:18:06.6±3.6, 10°42N×91°60E, h10km, ML4.4, mb4.6(NEIC)*
*NEIC **24** 12:18:07.2±2.1, 10°70N±0°06×91°58E±0°07, h10km±1km, mb4.6/39, Error ellipse: s-maj=12.7km s-min=9.1km az=128.0*
*DJA **24** 12:18:08.5±0.4, 11°N±6°×9°1E±°, h10km, M4.8/8, mb4.8/8*

**ISC 24 12:18:06.2±0.4, 10°61N±0°05×91°54E±0°05, h10km, n104,**
**σ1°37/100, mb4.5/43, 3C-1D, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PBA** | **Port Blair** | **1.58** | **49** | | **Pn** | **12 18 33.8** | **-0.5** |
| **PBA** | **Port Blair** | **1.58** | **49** | *e*P | **Pn** | **12 18 34.4** | **+0.1** |
| PBA | | | | *e*S | **Sg** | **12 18 58.8** | **+1.8** |
| PBA | | | | IAML | | 12 19 06.6 | |
| | comp=N,5μm,0.9s | | | | | | |
| PBA | | | | IAML | | 12 19 10.2 | |
| | comp=E,6μm,1.5s | | | | | | |
| **SRIT** | **Nakonsritamara** | **8.20** | **103** | Pn | **Pn** | **12 20 06.5** | **+1.1** |
| **KULM** | **Kulim** | **10.46** | **120** | Pn | **Pn** | **12 20 37.6** | **+1.3** |
| **CM31** | **Chiang Mai Arr** | **10.60** | **42** | Pn | **Pn** | **12 20 37.0** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **10.60** | **42** | Pn | **Pn** | **12 20 36.5** | **-1.7** |
| **CMAR** | **Chiang Mai Arr** | **10.60** | **42** | Pn | **Pn** | **12 20 37.0** | **-1.2** |
| | comp=E,0.3nm,0.3s,baz=232,slow=16,SNR=13 | | | | | | |
| | comp=E,3.8nm,0.9s | | | | | | |
| **RPSI** | **Rantau Prapat** | **10.75** | **136** | Pn | **Pn** | **12 20 40.8** | **+0.5** |
| **IPM** | **Ipoh** | **11.20** | **122** | Pn | **Pn** | **12 20 45.7** | **-0.9** |
| **PALK** | **Pallekele** | **11.20** | **254** | Pn | **Pn** | **12 20 49.1** | **+2.5** |
| **PALK** | **Pallekele** | **11.20** | **254** | Pn | **Pn** | **12 20 45.1** | **-1.5** |
| | comp=E,0.3nm,0.3s,baz=144,slow=15,SNR=2.0 | | | | | | |
| PALK | | | | Sn | Sn | 12 22 42.9 | -9.1 |
| | comp=E,2.8nm,0.3s,baz=263,slow=7.9,SNR=7.7 | | | | | | |
| | comp=E,9.4nm,1.0s | | | | | | |
| **MDRS** | **Chennai** | **11.32** | **284** | *e*P | **Pn** | **12 20 50.0** | **+1.9** |
| MDRS | | | | *e*S | Sn | 12 22 46.3 | -8.5 |
| MDRS | | | | IAML | | 12 22 52.1 | |
| | comp=E,89nm,0.5s | | | | | | |
| MDRS | | | | IAML | | 12 22 52.4 | |
| | comp=N,97nm,0.0s | | | | | | |
| **SALM** | **Salem** | **13.13** | **276** | *e*P | **Pn** | **12 21 15.7** | **+2.8** |
| **BOK** | **Bokaro** | **14.18** | **338** | *e*P | **Pn** | **12 21 27.5** | **+0.3** |
| BOK | | | | *e*S | **Sn** | **12 23 59.0** | **-5.8** |
| **PDSI** | **Padang** | **14.48** | **142** | P | **P** | **12 21 37.8** | **-0.4** |
| **SHL** | **Shillong** | **14.88** | **1** | P | **P** | **12 21 41.9** | **-0.9** |
| **SHL** | **Shillong** | **14.88** | **1** | *e*P | **Pn** | **12 21 39.9** | **+2.9** |
| SHL | | | | *e*S | Sn | 12 24 11.1 | -11 |
| **TNCH** | **TengChong** | **15.80** | **24** | ⇑P | **Pn** | **12 21 48.9** | **-0.2** |
| TNCH | | | | sP | P | 12 21 54.3 | +1.3 |
| TNCH | | | | PP | **PnPn** | **12 21 58.8** | **+1.0** |
| TNCH | | | | S | **Sn** | **12 24 42.3** | **-2.2** |
| TNCH | | | | sS | S | 12 24 48.5 | -11 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,14nm,0.4s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,180nm,5.1s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=N,340nm,3.8s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,280nm,4.0s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,660nm,27.0s | | | | | | |
| **SLVN** | **Son La** | **15.96** | **47** | | **Pn** | **12 21 51.2** | **+0.1** |
| SLVN | | | | IAmb | IAmb | 12 21 56.4 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **17.93** | **35** | ⇑P | **P** | **12 22 17.3** | **+0.7** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| **PZH** | **PanZhiHua** | **18.52** | **30** | P | **Pn** | **12 22 24.8** | **+1.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,150nm,5.7s | | | | | | |
| **KSM** | **Kuching** | **20.74** | **115** | P | **P** | **12 22 47.9** | **+0.7** |
| KSM | | | | IAmb | IAmb | 12 22 56.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **SBUM** | **Sibu** | **22.07** | **110** | P | **P** | **12 23 00.5** | **-1.1** |
| **CD2** | **Chengdu** | **23.17** | **28** | P | **P** | **12 23 14.3** | **+1.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| **ENH** | **Enshi** | **25.73** | **38** | P | **P** | **12 23 36.2** | **-0.9** |
| **H08S3** | **Diego Garcia H** | **26.23** | **227** | T | T | 12 51 03.5 | |
| | baz=47,slow=75,SNR=1296 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.23** | **227** | T | T | 12 50 56.7 | |
| | baz=47,slow=75,SNR=1014 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.25** | **227** | T | T | 12 50 54.3 | |
| | baz=47,slow=75,SNR=702 | | | | | | |
| **MYLDM** | **Lahad Datu** | **27.23** | **99** | P | **P** | **12 23 50.5** | **-0.2** |
| MYLDM | | | | IAmb | IAmb | 12 24 00.1 | |
| | comp=Z,29nm,1.0s | | | | | | |
| **LZH** | **Lanzhou** | **27.71** | **22** | *e*P | **P** | **12 23 55.4** | **+0.4** |
| LZH | | | | sP | pwP | 12 24 02.0 | +0.7 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **29.62** | **13** | P | **P** | **12 24 13.6** | **+1.7** |
| GTA | | | | pP | pwP | 12 24 20.1 | +2.0 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **YULB** | **Yu-li** | **31.09** | **62** | P | **P** | **12 24 25.3** | **+0.3** |
| **KSH** | **Kashi** | **31.95** | **337** | P | **P** | **12 24 32.3** | **-0.2** |
| KSH | | | | sP | pwP | 12 24 39.3 | +0.8 |
| **KAPI** | **Kappang** | **32.09** | **118** | P | **P** | **12 24 32.1** | **-1.8** |
| | comp=Z,2.7nm,0.4s,baz=258,slow=13,SNR=1.9 | | | | | | |
| | comp=Z,2.7nm,0.4s | | | | | | |
| **GTOI** | **Gorontalo** | **32.81** | **106** | P | **P** | **12 24 43.8** | **+3.6** |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **YOJ** | **Yonaguni jima** | **32.92** | **61** | P | **P** | **12 24 40.0** | **-1.0** |
| **NJ2** | **Nanjing** | **33.04** | **46** | *e*P | **P** | **12 24 42.8** | **+0.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **LUWI** | **Luwuk** | **33.16** | **109** | P | **P** | **12 24 43.8** | **+0.6** |
| **LUWI** | **Luwuk** | **33.16** | **109** | P | **P** | **12 24 46.2** | **+3.0** |
| | comp=Z,42nm,1.1s | | | | | | |
| **WMQ** | **Urumqi** | **33.26** | **355** | *e*P | **P** | **12 24 46.3** | **+2.5** |
| **TARG** | **Taragay, Kyrgy** | **33.27** | **341** | P | **P** | **12 24 42.8** | **-1.5** |
| TARG | | | | IAmb | IAmb | 12 24 59.5 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **HNS** | **HongShan** | **33.86** | **34** | ⇓P | **P** | **12 24 49.8** | **+0.8** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **ARSB** | **Arslanbob** | **34.69** | **335** | P | **P** | **12 24 55.9** | **-0.5** |
| **HHC** | **Hu-ho-hao-te** | **34.93** | **27** | *e*P | **P** | **12 24 57.4** | **-1.0** |
| HHC | | | | pP | pP | 12 25 01.1 | +0.6 |
| HHC | | | | sP | sP | 12 25 04.0 | +2.7 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,230nm,5.5s | | | | | | |
| **AAK** | **Ala-Archa** | **35.21** | **338** | P | **P** | **12 24 59.8** | **-1.1** |
| AAK | | | | IAmb | IAmb | 12 25 20.9 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **MK31** | **Makanchi Array** | **36.91** | **349** | P | **P** | **12 25 14.9** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 12 25 17.2 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **36.91** | **349** | P | **P** | **12 25 15.5** | **+0.3** |
| **MKAR** | **Makanchi Array** | **36.91** | **349** | P | **P** | **12 25 16.3** | **+1.1** |
| | comp=Z,6.2nm,0.7s,baz=170,slow=8.4,SNR=53 | | | | | | |
| MKAR | | | | PcP | **PcP** | **12 27 36.2** | **-0.4** |
| | comp=Z,1.2nm,0.7s,baz=186,slow=4.0,SNR=3.8 | | | | | | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **36.98** | **349** | P | **P** | **12 25 15.5** | **-0.3** |
| MAKZ | | | | IAmb | IAmb | 12 25 17.7 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **37.19** | **334** | P | **P** | **12 25 17.6** | **-0.1** |
| KK31 | | | | IAmb | IAmb | 12 25 34.8 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **37.19** | **334** | P | **P** | **12 25 17.7** | **+0.1** |
| **KKAR** | **Karatay Array** | **37.19** | **334** | P | **P** | **12 25 17.6** | **-0.1** |
| **JOW** | **Kunigami** | **38.18** | **60** | P | **P** | **12 25 25.0** | **-1.2** |
| **SOEI** | **Soe** | **38.33** | **121** | P | **P** | **12 25 29.2** | **+1.5** |
| **SONM** | **Songino Array** | **39.16** | **16** | P | **P** | **12 25 34.3** | **0.0** |
| SONM | | | | IAmb | IAmb | 12 25 36.2 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **39.16** | **16** | P | **P** | **12 25 34.0** | **-0.3** |
| | comp=Z,6.7nm,0.8s,baz=200,slow=8.6,SNR=26 | | | | | | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.31** | **347** | P | **P** | **12 25 52.8** | **+0.9** |
| | comp=Z,3.9nm,0.9s,baz=165,slow=7.5,SNR=29 | | | | | | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **41.38** | **348** | P | **P** | **12 25 52.6** | **+0.2** |
| **KSRS** | **Korea Array** | **42.22** | **45** | P | **P** | **12 25 59.8** | **+0.3** |
| | comp=Z,0.9nm,0.5s,baz=234,slow=9.2,SNR=2.1 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **43.56** | **354** | P | **P** | **12 26 10.8** | **+0.6** |
| ZAA0 | | | | IAmb | IAmb | 12 26 11.9 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.56** | **354** | P | **P** | **12 26 10.9** | **+0.8** |
| | comp=Z,5.4nm,0.7s,baz=177,slow=9.9,SNR=22 | | | | | | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **45.60** | **342** | P | **P** | **12 26 26.3** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=155,slow=7.8,SNR=7.1 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **RAYN** | **Ar Rayn** | **45.65** | **292** | P | **P** | **12 26 28.5** | **+1.1** |
| RAYN | | | | IAmb | IAmb | 12 26 43.6 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **45.66** | **342** | P | **P** | **12 26 27.2** | **+0.2** |
| **BNX** | **BinXian** | **46.49** | **34** | ⇑P | **P** | **12 26 33.6** | **0.0** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **46.62** | **332** | P | **P** | **12 26 35.6** | **+1.0** |
| **USA0B** | **Ussuriysk Arra** | **48.31** | **39** | P | **P** | **12 26 47.9** | **+0.1** |
| USA0B | | | | IAmb | IAmb | 12 26 48.4 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **HEH** | **HeiHe** | **49.34** | **30** | *e*P | **P** | **12 26 55.4** | **-0.2** |
| **H01W3** | **Cape Leeuwin H** | **50.05** | **156** | T | T | 13 20 30.2 | |
| | baz=331 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **50.07** | **156** | T | T | 13 20 38.8 | |
| | baz=331 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **50.07** | **156** | T | T | 13 20 39.6 | |
| | baz=331 | | | | | | |
| **WB0** | **Warramunga Arr** | **51.88** | **125** | P | **P** | **12 27 13.4** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 12 27 21.3 | |
| | comp=Z,7.7nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.93** | **126** | P | **P** | **12 27 13.0** | **-2.7** |
| **WRA** | **Warramunga Arr** | **51.93** | **126** | P | **P** | **12 27 13.4** | **-2.3** |
| | comp=Z,1.1nm,0.5s,baz=300,slow=10,SNR=31 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **51.94** | **126** | P | **P** | **12 27 15.3** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 12 27 22.0 | |
| | comp=Z,8.6nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **51.94** | **126** | P | **P** | **12 27 13.6** | **-2.2** |
| WB2 | | | | IAmb | IAmb | 12 27 21.9 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **FURI** | **Furi** | **52.07** | **273** | LR | LR | 12 48 53.0 | |
| | comp=Z,241nm,18.0s,baz=211,slow=36 | | | | | | |
| **WR0** | **Warramunga Arr** | **52.10** | **126** | P | **P** | **12 27 15.3** | **-1.6** |
| WR0 | | | | IAmb | IAmb | 12 27 23.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **53.35** | **317** | P | **P** | **12 27 26.9** | **+1.1** |
| | comp=Z,1.8nm,0.6s,baz=172,slow=8.7,SNR=3.9 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **53.63** | **130** | P | **P** | **12 27 28.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **53.63** | **130** | P | **P** | **12 27 25.8** | **-2.5** |
| | comp=Z,3.1nm,0.8s,baz=310,slow=7.8,SNR=20 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 28 34.2** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=300,slow=4.8,SNR=1.1 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **53.63** | **130** | P | **P** | **12 27 27.6** | **-0.6** |
| **BR131** | **Keskin Array S** | **58.71** | **310** | P | **P** | **12 28 04.5** | **0.0** |
| BR131 | | | | IAmb | IAmb | 12 28 05.2 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **58.71** | **310** | P | **P** | **12 28 04.5** | **0.0** |
| **BRTR** | **Keskin Array B** | **58.71** | **310** | P | **P** | **12 28 04.1** | **-0.4** |
| | comp=Z,1.5nm,0.8s,baz=123,slow=7.7,SNR=12 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **ELL** | **Elmali** | **61.04** | **306** | P | **P** | **12 28 20.1** | **-0.5** |
| **STKA** | **Stephens Creek** | **63.84** | **133** | P | **P** | **12 28 38.4** | **-0.8** |
| **STKA** | **Stephens Creek** | **63.84** | **133** | P | **P** | **12 28 37.6** | **-1.6** |
| | comp=Z,1.4nm,0.7s,baz=290,slow=6.0,SNR=3.1 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Bo** | **64.43** | **321** | P | **P** | **12 28 41.8** | **-0.9** |
| | comp=Z,0.4nm,0.4s,baz=90,slow=5.4,SNR=5.1 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **65.43** | **315** | P | **P** | **12 28 48.8** | **-0.7** |
| | comp=Z,5.1nm,0.8s,baz=165,slow=15,SNR=4.3 | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.80** | **209** | T | T | 13 41 44.5 | |
| | baz=44,slow=75,SNR=419 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.81** | **209** | T | T | 13 41 47.0 | |
| | baz=44,slow=75,SNR=463 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.82** | **209** | T | T | 13 41 44.0 | |
| | baz=44,slow=75,SNR=482 | | | | | | |
| **FINES** | **FINESS Array B** | **69.11** | **332** | P | **P** | **12 29 11.7** | **-0.7** |
| **FINES** | **FINESS Array B** | **69.11** | **332** | P | **P** | **12 29 12.5** | **+0.1** |
| | comp=Z,2.2nm,0.7s,baz=129,slow=15,SNR=6.6 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **70.90** | **133** | P | **P** | **12 29 24.9** | **+1.0** |
| **ARCES** | **ARCESS Array B** | **71.84** | **340** | P | **P** | **12 29 29.4** | **+0.4** |
| | comp=Z,1.3nm,0.8s,baz=116,slow=8.1,SNR=3.7 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **74.90** | **236** | P | **P** | **12 29 47.2** | **-0.7** |
| | comp=Z,3.2nm,1.1s,baz=196,slow=13,SNR=2.3 | | | | | | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.48** | **283** | P | **P** | **12 30 54.7** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=77,slow=5.5,SNR=3.0 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **G19K** | **Purcell Mounta** | **88.78** | **22** | P | **P** | **12 30 59.7** | **-0.4** |
| G19K | | | | IAmb | IAmb | 12 31 08.0 | |
| | comp=Z,8.4nm,1.2s | | | | | | |
| **K20K** | **Telida** | **91.14** | **24** | P | **P** | **12 31 12.0** | **+0.9** |
| K20K | | | | IAmb | IAmb | 12 31 21.4 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **MLY** | **Manley** | **91.64** | **22** | P | **P** | **12 31 14.3** | **+0.8** |
| MLY | | | | IAmb | IAmb | 12 31 21.0 | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **N19K** | **Bonanza Creek** | **92.09** | **27** | P | **P** | **12 31 16.3** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **123.82** | **28** | PKP | **PKPdf** | **12 37 03.9** | **-1.4** |
| | comp=Z,0.5nm,0.7s,baz=288,slow=1.4,SNR=5.5 | | | | | | |

*DJA **24** 12:27:34.6±0.3, 1°N±5°×12°6E±°, h10km, M4.3/11, mb4.4/2, mB5.1/1, MLv4.2/11, Mw(mB)4.4/1*
*NEIC **24** 12:27:37.7±1.8, 1°07N±0°02×126°21E±0°05, h54km±8km, mb4.3/28, Error ellipse: s-maj=6.8km s-min=3.0km az=86.0*
*IDC **24** 12:27:40.7±2.8, 0°91N×126°01E, h92km±25km, mb3.8/12, mbtmp4.1/13, Error ellipse: s-maj=33.8km s-min=9.8km az=76.0*

**ISC 24 12:27:36.6±0.4, 0°94N±0°04×126°15E±0°04, h44km, n82,**
**σ1°82/90, mb4.3/27, 1C-3D, Northern Moluca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.23** | **98** | P | **Pn** | **12 27 58.6** | **+1.3** |
| **TNTI** | **Ternate** | **1.23** | **98** | Pn | **Pn** | **12 27 58.4** | **+1.1** |
| TNTI | | | | Sn | **Sn** | **12 28 14.4** | **+1.7** |
| **TNTI** | **Ternate** | **1.23** | **98** | P | **Pn** | **12 27 58.4** | **+1.1** |
| TNTI | | | | S | **Sn** | **12 28 16.5** | **+3.8** |
| **LBMI** | **Labuha** | **2.07** | **139** | P | **Pn** | **12 28 11.4** | **+2.5** |
| **KMSI** | **Cibinong** | **2.20** | **260** | P | **Pn** | **12 28 11.3** | **+0.6** |
| KMSI | | | | S | **Sn** | **12 28 39.3** | **+2.5** |
| **SANI** | **Sanana** | **2.98** | **183** | P | **Pn** | **12 28 22.2** | **+0.8** |
| **SANI** | **Sanana** | **2.98** | **183** | P | **Pn** | **12 28 22.1** | **+0.7** |
| SANI | | | | S | **Sn** | **12 28 55.8** | **-0.1** |
| **GTOI** | **Gorontalo** | **3.16** | **264** | P | **Pn** | **12 28 26.1** | **+2.3** |
| **LUWI** | **Luwuk** | **3.91** | **240** | P | **Pn** | **12 28 37.5** | **+3.2** |
| **LUWI** | **Luwuk** | **3.91** | **240** | Pn | **Pn** | **12 28 37.4** | **+3.1** |
| LUWI | | | | Sn | **Sn** | **12 29 24.4** | **+5.5** |
| **LUWI** | **Luwuk** | **3.91** | **240** | P | **Pn** | **12 28 36.0** | **+1.8** |
| **MRSI** | **Marisa** | **4.24** | **264** | P | **Pn** | **12 28 39.4** | **+0.7** |
| **NLAI** | **Namlea** | **4.26** | **167** | P | **Pn** | **12 28 40.8** | **+1.8** |
| **GSPH** | **General Santos** | **5.25** | **347** | ⇓*i*P | **Pn** | **12 28 50.5** | **-2.3** |
| **TOLI2** | **Tolitoli** | **5.37** | **272** | Pn | **Pn** | **12 28 53.6** | **-0.7** |
| **KCP** | **Kidapawan** | **6.12** | **350** | ⇓*i*P | **Pn** | **12 29 08.9** | **+4.3** |
| **MPSI** | **Mapaga** | **6.28** | **265** | P | **Pn** | **12 29 07.6** | **+0.8** |
| **BIPH** | **Bislig** | **7.20** | **2** | ⇓*i*P | **Pn** | **12 29 23.2** | **+3.8** |
| BIPH | | | | *i* S | **Sn** | **12 30 43.9** | **+4.0** |
| **FAKI** | **Fak Fak** | **7.20** | **122** | Pn | **Pn** | **12 29 19.3** | **-0.1** |
| **KAPI** | **Kappang** | **8.71** | **227** | Pn | **Pn** | **12 29 43.1** | **+3.0** |
| **KAPI** | **Kappang** | **8.71** | **227** | P | **Pn** | **12 29 42.6** | **+2.4** |
| | 12nm,0.4s,baz=42,slow=6.4,SNR=6.4 | | | | | | |
| **MYLDM** | **Lahad Datu** | **8.72** | **299** | Pn | **Pn** | **12 29 40.2** | **-0.1** |
| **SOEI** | **Soe** | **10.79** | **190** | Pn | **Pn** | **12 30 12.3** | **+3.5** |
| **MTN** | **Manton Dam** | **14.56** | **160** | Pn | **Pn** | **12 31 00.2** | **+0.2** |
| **KDU** | **Kakadu** | **14.92** | **155** | P | **Pn** | **12 31 04.6** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **15.18** | **232** | Pn | **P** | **12 31 10.5** | **-2.1** |
| JAGI | | | | IAmb | IAmb | 12 31 35.2 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **KSM** | **Kuching** | **15.85** | **272** | Pn | **Pn** | **12 31 16.7** | **-0.2** |
| KSM | | | | IAmb | IAmb | 12 31 22.9 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **16.71** | **171** | Pn | **Pn** | **12 31 28.7** | **+1.0** |
| **SMRI** | **Semarang** | **17.57** | **243** | P | **P** | **12 31 41.2** | **+2.1** |
| **FITZ** | **Fitzroy Crossi** | **18.93** | **182** | P | **P** | **12 31 54.1** | **+0.2**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **59.52** | **326** | P | **P** | **12 37 33.9** | **-1.7** |
| **MKAR** | **Makanchi Array** | **59.52** | **326** | P | **P** | **12 37 33.5** | **-2.0** |
| | comp=Z,0.8nm,0.4s,baz=122,slow=7.3,SNR=10 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **KSH** | **Kashi** | **59.63** | **316** | P | **P** | **12 37 39.8** | **+3.3** |
| KSH | | | | pP | sP | 12 37 54.1 | +0.5 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **59.71** | **326** | P | **P** | **12 37 35.9** | **-0.9** |
| MAKZ | | | | IAmb | IAmb | 12 37 45.0 | |
| | comp=Z,2.8nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.78** | **328** | P | **P** | **12 38 02.5** | **-1.5** |
| | comp=Z,1.6nm,0.7s,baz=127,slow=6.1,SNR=16 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **63.78** | **328** | P | **P** | **12 38 02.7** | **-1.4** |
| KURK | | | | IAmb | IAmb | 12 38 17.7 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **64.89** | **318** | P | **P** | **12 38 08.3** | **-3.2** |
| **KKAR** | **Karatay Array** | **64.89** | **318** | P | **P** | **12 38 08.3** | **-3.2** |
| **CASY** | **Casey** | **68.00** | **187** | P | **P** | **12 38 31.1** | **+0.2** |
| CASY | | | | IAmb | IAmb | 12 38 53.4 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.34** | **328** | P | **P** | **12 38 36.9** | **-2.7** |
| | comp=Z,0.9nm,0.6s,baz=126,slow=7.3,SNR=3.8 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.94** | **321** | P | **P** | **12 39 05.8** | **-1.5** |
| **RAYN** | **Ar Rayn** | **81.05** | **294** | P | **P** | **12 39 46.8** | **-0.9** |
| **ILAR** | **Eielson Array** | **87.85** | **25** | P | **P** | **12 40 19.9** | **-1.3** |
| | comp=Z,0.1nm,0.4s,baz=258,slow=4.2,SNR=5.5 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **90.87** | **180** | P | **P** | **12 40 34.7** | **-0.7** |
| | comp=Z,0.4nm,0.6s,baz=280,slow=14,SNR=1.3 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.19** | **286** | PKP | **PKPdf** | **12 46 28.9** | **-0.8** |
| | comp=Z,0.8nm,0.7s,baz=24,slow=2.5,SNR=4.5 | | | | | | |

*NOU **24** 12:27:49.2, 41.61°S × 173.31°E, h83 km, MLv4.6/16, South Island, New Zealand*
*NEIC **24** 12:27:49.4 ± 1.9, 41.49°S ± 0.04° × 173.15° E ± 0.03, h76 km ± 5 km, mb4.4/8, Error ellipse: s-maj=6.5km s-min=3.5km az=165.0*
*WEL **24** 12:27:50.2 ± 0.3, 42°S ± 3° × 17°3E ± °, h56 km ± 4 km, M4.5/141, ML4.5/37, MLv4.5/141, Error ellipse: s-maj=0.0km s-min=0.0km az=136.0, confirmed*

**ISC 24 12:27:49.1** ± 0.8, **41°57S** ± 0.03° × **173°18E** ± 0.03, **h78** km ± 5 km, **n203**, σ 1.9 **s26**/211, **mb4.4**/4, **South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **THZ** | **Tophouse** | **0.28** | **228** | | | **Pn** | **12 28 01.4** | **+0.2** |
| THZ | | | | Sn | | **Sn** | **12 28 09.7** | **-0.3** |
| **THZ** | **Tophouse** | **0.28** | **228** | P | | **Pn** | **12 28 01.4** | **+0.2** |
| THZ | | | | S | | **Sn** | **12 28 09.8** | **-0.3** |
| **MRNZ** | **Matariki Terra** | **0.36** | **298** | | | **Pn** | **12 28 01.8** | **+0.2** |
| MRNZ | | | | Sn | | **Sn** | **12 28 10.2** | **-0.7** |
| **MRNZ** | **Matariki Terra** | **0.36** | **298** | P | | **Pn** | **12 28 01.8** | **+0.2** |
| MRNZ | | | | S | | **Sn** | **12 28 10.3** | **-0.5** |
| **NNZ** | **Nelson** | **0.39** | **23** | | | **Pn** | **12 28 01.4** | **-0.3** |
| **NNZ** | **Nelson** | **0.39** | **23** | P | | **Pn** | **12 28 01.5** | **-0.3** |
| NNZ | | | | S | | **Sn** | **12 28 10.2** | **-0.9** |
| **BSWZ** | **Blackbirch Sta** | **0.54** | **106** | | | **Pn** | **12 28 03.7** | **+0.7** |
| **BSWZ** | **Blackbirch Sta** | **0.54** | **106** | P | | **Pn** | **12 28 03.8** | **+0.7** |
| BSWZ | | | | S | | **Sn** | **12 28 14.6** | **+1.3** |
| **TKNZ** | **Takaka Hill** | **0.56** | **343** | | | **Pn** | **12 28 03.5** | **+0.1** |
| **TKNZ** | **Takaka Hill** | **0.56** | **343** | P | | **Pn** | **12 28 03.5** | **+0.1** |
| TKNZ | | | | S | | **Sn** | **12 28 13.3** | **-0.4** |
| **TUWZ** | **Tuamarina** | **0.59** | **76** | | | **Pn** | **12 28 04.0** | **+0.6** |
| **TUWZ** | **Tuamarina** | **0.59** | **76** | P | | **Pn** | **12 28 04.1** | **+0.6** |
| TUWZ | | | | S | | **Sn** | **12 28 14.1** | **-0.1** |
| **CMWZ** | **Cape Campbell** | **0.79** | **103** | | | **Pn** | **12 28 06.5** | **+0.9** |
| **CMWZ** | **Cape Campbell** | **0.79** | **103** | P | | **Pn** | **12 28 06.8** | **+1.1** |
| CMWZ | | | | S | | **Sn** | **12 28 23.0** | **+5.0** |
| **KHZ** | **Kahutara** | **0.88** | **163** | P | | **Pn** | **12 28 07.8** | **+1.2** |
| **KHZ** | **Kahutara** | **0.88** | **163** | | | **Pn** | **12 28 07.8** | **+1.2** |
| **KHZ** | **Kahutara** | **0.88** | **163** | P | | **Pn** | **12 28 07.9** | **+1.2** |
| KHZ | | | | S | | **Sn** | **12 28 21.2** | **+1.5** |
| **QRZ** | **Quartz Range** | **0.90** | **326** | P | | **Pn** | **12 28 06.9** | **+0.1** |
| **QRZ** | **Quartz Range** | **0.90** | **326** | Pn | | **Pn** | **12 28 07.0** | **+0.2** |
| **QRZ** | **Quartz Range** | **0.90** | **326** | P | | **Pn** | **12 28 07.0** | **+0.2** |
| QRZ | | | | S | | **Sn** | **12 28 19.1** | **-0.9** |
| **TCW** | **Tory Channel** | **0.90** | **67** | | | **Pn** | **12 28 07.4** | **+0.6** |
| **TCW** | **Tory Channel** | **0.90** | **67** | P | | **Pn** | **12 28 07.4** | **+0.6** |
| TCW | | | | S | | **Sn** | **12 28 20.8** | **+0.8** |
| **DUWZ** | **D'Urville Isla** | **0.95** | **36** | P | | **Pn** | **12 28 08.1** | **+0.6** |
| DUWZ | | | | S | | **Sn** | **12 28 22.2** | **+1.0** |
| **DSZ** | **Denniston Nort** | **1.05** | **260** | | | **Pn** | **12 28 09.3** | **+0.6** |
| **DSZ** | **Denniston Nort** | **1.05** | **260** | P | | **Pn** | **12 28 09.2** | **+0.6** |
| DSZ | | | | S | | **Sn** | **12 28 23.3** | **0.0** |
| **SNZO** | **South Karori** | **1.17** | **78** | P | | **Pn** | **12 28 10.3** | **+0.2** |
| **SNZO** | **South Karori** | **1.17** | **78** | | | **Pn** | **12 28 10.4** | **+0.2** |
| **WEL** | **Wellington** | **1.23** | **77** | P | | **Pn** | **12 28 11.2** | **+0.4** |
| **BHW** | **Baring Head** | **1.28** | **83** | Pn | | **Pn** | **12 28 11.5** | **0.0** |
| **BHW** | **Baring Head** | **1.28** | **83** | P | | **Pn** | **12 28 11.5** | **0.0** |
| **LTZ** | **Lake Taylor** | **1.39** | **209** | Pn | | **Pn** | **12 28 14.0** | **+1.1** |
| **LTZ** | **Lake Taylor** | **1.39** | **209** | P | | **Pn** | **12 28 14.1** | **+1.1** |
| **GVZ** | **Greta Valley S** | **1.40** | **184** | | | **Pn** | **12 28 13.9** | **+0.9** |
| **GVZ** | **Greta Valley S** | **1.40** | **184** | P | | **Pn** | **12 28 13.9** | **+0.9** |
| **KIW** | **Kapiti Island** | **1.48** | **62** | P | | **Pn** | **12 28 07.0** | **+0.5** |
| **CAW** | **Cannon Point** | **1.49** | **72** | P | | **Pn** | **12 28 14.3** | **0.0** |
| **PLWZ** | **Palliser** | **1.56** | **91** | | | **Pn** | **12 28 14.5** | **-0.6** |
| **PLWZ** | **Palliser** | **1.56** | **91** | P | | **Pn** | **12 28 14.6** | **-0.6** |
| **MSWZ** | **Moikau Station** | **1.56** | **85** | | | **Pn** | **12 28 14.7** | **-0.5** |
| **MSWZ** | **Moikau Station** | **1.56** | **85** | P | | **Pn** | **12 28 14.7** | **-0.5** |
| **AMCZ** | **Amberley** | **1.65** | **194** | | | **Pn** | **12 28 17.0** | **+0.7** |
| **AMCZ** | **Amberley** | **1.65** | **194** | P | | **Pn** | **12 28 17.1** | **+0.8** |
| **OGWZ** | **Otaki Gorge** | **1.68** | **64** | P | | **Pn** | **12 28 16.9** | **+0.2** |
| **PAWZ** | **Paruwai Farm** | **1.70** | **84** | P | | **Pn** | **12 28 16.2** | **-0.8** |
| **INZ** | **Inchbonnie** | **1.73** | **228** | Pn | | **Pn** | **12 28 18.7** | **+1.4** |
| **INZ** | **Inchbonnie** | **1.73** | **228** | P | | **Pn** | **12 28 18.8** | **+1.4** |
| **MTW** | **Mount Morrison** | **1.79** | **77** | P | | **Pn** | **12 28 17.5** | **-0.7** |
| **HOWZ** | **Holdsworth Sta** | **1.88** | **70** | P | | **Pn** | **12 28 18.8** | **-0.6** |
| **TRWZ** | **Traveller** | **1.89** | **86** | P | | **Pn** | **12 28 18.8** | **-0.7** |
| **OXZ** | **Oxford** | **1.95** | **205** | | | **Pn** | **12 28 20.1** | **-0.2** |
| **OXZ** | **Oxford** | **1.95** | **205** | P | | **Pn** | **12 28 20.2** | **-0.1** |
| **MRZ** | **Mangatainoka R** | **2.03** | **64** | | | **Pn** | **12 28 20.8** | **-0.5** |
| **MRZ** | **Mangatainoka R** | **2.03** | **64** | P | | **Pn** | **12 28 20.8** | **-0.5** |
| **TMWZ** | **Te Maipa** | **2.09** | **78** | P | | **Pn** | **12 28 21.2** | **-1.0** |
| **OHWZ** | **Ohakea** | **2.12** | **51** | P | | **Pn** | **12 28 23.4** | **+0.9** |
| **OKCZ** | **Okains Bay** | **2.15** | **182** | P | | **Pn** | **12 28 23.1** | **+0.1** |
| **MQZ** | **McQueen's Vall** | **2.17** | **190** | | | **Pn** | **12 28 22.4** | **-0.8** |
| **MQZ** | **McQueen's Vall** | **2.17** | **190** | P | | **Pn** | **12 28 22.3** | **-0.8** |
| **TIWZ** | **Tintock** | **2.19** | **70** | P | | **Pn** | **12 28 22.6** | **-0.9** |
| **NMEZ** | **Namu Road** | **2.22** | **14** | P | | **Pn** | **12 28 25.4** | **+1.5** |
| **WAZ** | **Wanganui** | **2.28** | **38** | P | | **Pn** | **12 28 26.9** | **+2.2** |
| **POWZ** | **Post Office Ro** | **2.29** | **60** | P | | **Pn** | **12 28 24.1** | **-0.7** |
| **RACZ** | **Rakaia** | **2.29** | **199** | P | | **Pn** | **12 28 24.4** | **-0.3** |
| **MHCZ** | **Mount Hutt** | **2.29** | **211** | P | | **Pn** | **12 28 25.2** | **+0.3** |
| **LREZ** | **Lake Rotokare** | **2.31** | **24** | P | | **Pn** | **12 28 27.1** | **+2.0** |
| **AKCZ** | **Akaroa Harbour** | **2.31** | **185** | P | | **Pn** | **12 28 25.8** | **+0.7** |
| **PRWZ** | **Pori Road** | **2.34** | **65** | P | | **Pn** | **12 28 24.8** | **-0.7** |
| **PREZ** | **Palmer Road** | **2.35** | **19** | P | | **Pn** | **12 28 27.3** | **+1.6** |
| **WVZ** | **Waitaha Valley** | **2.35** | **230** | P | | **Pn** | **12 28 27.8** | **+1.2** |
| **NBEZ** | **Newall Road No** | **2.36** | **13** | P | | **Pn** | **12 28 27.4** | **+1.6** |
| **KHEZ** | **Kahui Hut** | **2.36** | **16** | P | | **Pn** | **12 28 27.3** | **+1.4** |
| **KHEZ** | **Kahui Hut** | **2.36** | **16** | P | | **Pn** | **12 28 27.3** | **+1.4** |
| **NEZ** | **North Egmont** | **2.40** | **17** | P | | **Pn** | **12 28 27.5** | **+1.1** |
| **PKE** | **Pukeiti** | **2.45** | **15** | P | | **Pn** | **12 28 28.8** | **+1.8** |
| **BFZ** | **Birch Farm** | **2.48** | **70** | P | | **Pn** | **12 28 25.9** | **-1.4** |
| **BFZ** | **Birch Farm** | **2.48** | **70** | | | **Pn** | **12 28 26.0** | **-1.4** |
| **BFZ** | **Birch Farm** | **2.48** | **70** | P | | **Pn** | **12 28 26.0** | **-1.4** |
| **DREZ** | **Durham Road** | **2.50** | **18** | P | | **Pn** | **12 28 29.2** | **+1.5** |
| **WACZ** | **Wakanui South** | **2.57** | **202** | P | | **Pn** | **12 28 29.1** | **+0.5** |
| **DVHZ** | **Dannevirke** | **2.59** | **62** | P | | **Pn** | **12 28 27.6** | **-1.3** |
| **MHEZ** | **Mangahewa** | **2.64** | **20** | P | | **Pn** | **12 28 31.3** | **+1.7** |
| **RPZ** | **Rata Peaks** | **2.66** | **216** | P | | **Pn** | **12 28 30.2** | **+0.5** |
| **RPZ** | **Rata Peaks** | **2.66** | **216** | | | **Pn** | **12 28 30.2** | **+0.5** |
| **RPZ** | **Rata Peaks** | **2.66** | **216** | P | | **Pn** | **12 28 30.2** | **+0.5** |
| **VRZ** | **Vera Road** | **2.73** | **27** | P | | **Pn** | **12 28 32.4** | **+1.7** |
| **ANWZ** | **Angora Road** | **2.73** | **67** | P | | **Pn** | **12 28 29.1** | **-1.6** |
| **GCSZ** | **Gaunt Creek Bo** | **2.74** | **230** | P | | **Pn** | **12 28 32.1** | **+1.3** |
| **ARCZ** | **Arundel** | **2.79** | **211** | P | | **Pn** | **12 28 32.0** | **+0.3** |
| **MTVZ** | **Mangateitei** | **2.80** | **39** | P | | **Pn** | **12 28 33.6** | **+1.8** |
| **PKVZ** | **Pokaka** | **2.82** | **37** | P | | **Pn** | **12 28 33.7** | **+1.7** |
| **PNHZ** | **Pukenui** | **2.83** | **55** | P | | **Pn** | **12 28 31.0** | **-1.1** |
| **WPHZ** | **Waipukurau** | **2.90** | **60** | P | | **Pn** | **12 28 31.8** | **-1.2** |
| **TRVZ** | **Turoa** | **2.90** | **39** | P | | **Pn** | **12 28 34.3** | **+1.0** |
| **WNVZ** | **Wahianoa** | **2.90** | **40** | P | | **Pn** | **12 28 34.2** | **+0.9** |
| **MOVZ** | **Moawhango** | **2.92** | **43** | P | | **Pn** | **12 28 33.6** | **+0.2** |
| **PRHZ** | **Porangahau** | **2.92** | **65** | P | | **Pn** | **12 28 31.9** | **-1.5** |
| **MAVZ** | **Matarangi** | **2.93** | **39** | P | | **Pn** | **12 28 38.0** | **+4.2** |
| **WHVZ** | **Whangaehu Hut** | **2.93** | **40** | P | | **Pn** | **12 28 34.6** | **+0.9** |
| **FWVZ** | **Far West T-bar** | **2.94** | **39** | P | | **Pn** | **12 28 35.1** | **+1.3** |
| **TUVZ** | **Tukino** | **2.98** | **40** | P | | **Pn** | **12 28 35.3** | **+1.0** |
| **COVZ** | **Chateau Observ** | **2.98** | **38** | P | | **Pn** | **12 28 35.1** | **+0.9** |
| **NGZ** | **Ngauruhoe** | **3.02** | **38** | P | | **Pn** | **12 28 35.8** | **+0.9** |
| **SNVZ** | **South Ngauruho** | **3.03** | **39** | P | | **Pn** | **12 28 35.9** | **+0.9** |
| **TWVZ** | **Taurewa** | **3.04** | **35** | P | | **Pn** | **12 28 36.5** | **+1.5** |
| **OTVZ** | **Oturere** | **3.06** | **39** | P | | **Pn** | **12 28 36.7** | **+1.2** |
| **NNVZ** | **North Ngauruho** | **3.07** | **38** | P | | **Pn** | **12 28 36.1** | **+0.7** |
| **WTVZ** | **West Tongariro** | **3.07** | **38** | P | | **Pn** | **12 28 36.2** | **+0.8** |
| **KRHZ** | **Kereru** | **3.10** | **53** | P | | **Pn** | **12 28 34.7** | **-1.1** |
| **ETVZ** | **East Tongariro** | **3.11** | **39** | P | | **Pn** | **12 28 36.8** | **+0.8** |
| **KRTZ** | **Karewarewa** | **3.11** | **38** | P | | **Pn** | **12 28 36.9** | **+0.9** |
| **TMVZ** | **Te Maari** | **3.12** | **39** | P | | **Pn** | **12 28 37.2** | **+1.0** |
| **NTVZ** | **North Tongarir** | **3.12** | **38** | P | | **Pn** | **12 28 37.8** | **+1.6** |
| **FOZ** | **Fox Glacier** | **3.17** | **231** | | | **Pn** | **12 28 37.4** | **+0.8** |
| **FOZ** | **Fox Glacier** | **3.17** | **231** | P | | **Pn** | **12 28 37.5** | **+0.8** |
| **PXZ** | **Pawanui** | **3.19** | **62** | P | | **Pn** | **12 28 35.4** | **-1.6** |
| **KATZ** | **Kakaramea** | **3.23** | **37** | P | | **Pn** | **12 28 40.0** | **+2.4** |
| **TMZ** | **Timaru** | **3.23** | **209** | P | | **Pn** | **12 28 37.3** | **-0.2** |
| **KWHZ** | **Kaweka Forest** | **3.27** | **50** | P | | **Pn** | **12 28 37.7** | **-0.5** |
| **HIZ** | **Hauiti** | **3.31** | **23** | P | | **Pn** | **12 28 39.6** | **+0.9** |
| **HIZ** | **Hauiti** | **3.31** | **23** | | | **Pn** | **12 28 39.3** | **+0.6** |
| **HIZ** | **Hauiti** | **3.31** | **23** | P | | **Pn** | **12 28 39.6** | **+0.9** |
| **KAHZ** | **Kahuranaki** | **3.32** | **59** | P | | **Pn** | **12 28 37.5** | **-1.3** |
| **RATZ** | **Rangitukua** | **3.35** | **37** | P | | **Pn** | **12 28 42.1** | **+2.9** |
| **MCHZ** | **McNeill Hill** | **3.42** | **53** | P | | **Pn** | **12 28 39.4** | **-0.7** |
| **WATZ** | **Wairara** | **3.46** | **35** | P | | **Pn** | **12 28 43.6** | **+2.8** |
| **BKZ** | **Black Stump Fm** | **3.49** | **48** | P | | **Pn** | **12 28 40.1** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **3.49** | **48** | | | **Pn** | **12 28 40.1** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **3.49** | **48** | P | | **Pn** | **12 28 40.1** | **-1.0** |
| **LBZ** | **Lake Benmore** | **3.57** | **217** | | | **Pn** | **12 28 42.4** | **+0.2** |
| **LBZ** | **Lake Benmore** | **3.57** | **217** | P | | **Pn** | **12 28 42.3** | **+0.2** |
| **KUTZ** | **Kaahu Road** | **3.69** | **34** | P | | **Pn** | **12 28 46.5** | **+2.7** |
| **MRHZ** | **Matea Rd** | **3.69** | **43** | P | | **Pn** | **12 28 42.6** | **-1.3** |
| **TLZ** | **Tolley Road** | **3.71** | **30** | P | | **Pn** | **12 28 45.5** | **+1.4** |
| **NMHZ** | **Naumai** | **3.71** | **49** | P | | **Pn** | **12 28 43.1** | **-1.1** |
| **ALRZ** | **Allen Road** | **3.86** | **40** | P | | **Pn** | **12 28 45.6** | **-0.5** |
| **MTHZ** | **Maungataniwha** | **3.90** | **47** | P | | **Pn** | **12 28 45.3** | **-1.4** |
| **GRRZ** | **Galatos Road** | **3.93** | **36** | P | | **Pn** | **12 28 51.3** | **+4.3** |
| **ODZ** | **Otahua Downs** | **3.93** | **207** | P | | **Pn** | **12 28 47.2** | **+0.1** |
| **ODZ** | **Otahua Downs** | **3.93** | **207** | | | **Pn** | **12 28 47.3** | **+0.3** |
| **ODZ** | **Otahua Downs** | **3.93** | **207** | P | | **Pn** | **12 28 47.1** | **+0.1** |
| **HRRZ** | **Handcock Road** | **3.97** | **38** | P | | Pn | 12 28 52.7 | +5.0 |
| **HSRZ** | **Hossack Road** | **4.02** | **37** | P | | Pn | 12 28 55.0 | +6.7 |
| **JCZ** | **Jackson Bay** | **4.09** | **231** | P | | **Pn** | **12 28 50.0** | **+0.7** |
| **JCZ** | **Jackson Bay** | **4.09** | **231** | P | | **Pn** | **12 28 49.5** | **+0.3** |
| **UTU** | **Utuhina** | **4.11** | **35** | P | | Pn | 12 28 56.1 | +6.6 |
| **HLRZ** | **Highlands Stat** | **4.12** | **37** | P | | Pn | 12 28 56.9 | +7.2 |
| **RRRZ** | **Republican Roa** | **4.12** | **39** | P | | **Pn** | **12 28 53.3** | **+3.6** |
| **RTZ** | **Ruatahuna** | **4.15** | **46** | Pn | | **Pn** | **12 28 49.0** | **-1.1** |
| **RTZ** | **Ruatahuna** | **4.15** | **46** | P | | **Pn** | **12 28 50.2** | **+0.1** |
| **NGRZ** | **Ngongotaha** | **4.17** | **35** | P | | **Pn** | **12 28 53.4** | **+3.0** |
| **SNGZ** | **Shannon Statio** | **4.23** | **50** | P | | **Pn** | **12 28 49.3** | **-1.9** |
| **TOZ** | **Tahuroa Road** | **4.23** | **26** | | | **Pn** | **12 28 51.8** | **+0.6** |
| **TOZ** | **Tahuroa Road** | **4.23** | **26** | P | | **Pn** | **12 28 52.2** | **+1.0** |
| **OMRZ** | **Omania** | **4.24** | **36** | P | | Pn | 12 28 57.3 | +6.0 |
| **KARZ** | **Kaharoa** | **4.26** | **35** | P | | Pn | 12 28 58.0 | +6.4 |
| **KMRZ** | **Kaimai** | **4.29** | **31** | P | | **Pn** | **12 28 53.1** | **+1.2** |
| **WKZ** | **Wanaka** | **4.46** | **222** | | | **Pn** | **12 28 53.2** | **-1.0** |
| **WKZ** | **Wanaka** | **4.46** | **222** | P | | **Pn** | **12 28 52.9** | **-1.3** |
| **RAGZ** | **Rawiri** | **4.47** | **48** | P | | **Pn** | **12 28 53.1** | **-1.4** |
| **URZ** | **Urewera** | **4.48** | **44** | P | | **Pn** | **12 28 52.6** | **-1.9** |
| **TGRZ** | **Tauranga** | **4.51** | **33** | P | | **Pn** | **12 28 57.1** | **+2.1** |
| **OPRZ** | **Ohinepanea** | **4.54** | **36** | P | | **Pn** | **12 28 58.2** | **+2.8** |
| **EAZ** | **Earnscleugh** | **4.62** | **216** | P | | **Pn** | **12 28 55.5** | **-0.9** |
| **AWAZ** | **Awatuna Peninsu** | **4.64** | **15** | P | | **Pn** | **12 28 57.8** | **+1.1** |
| **MKAZ** | **Moumakai** | **4.72** | **20** | P | | **Pn** | **12 28 58.8** | **+1.0** |
| **WTAZ** | **Waiatarua** | **4.76** | **14** | P | | **Pn** | **12 28 59.8** | **+1.4** |
| **ETAZ** | **East Tamaki Re** | **4.81** | **17** | P | | **Pn** | **12 28 60.0** | **+1.0** |
| **HBAZ** | **Herne Bay Bore** | **4.87** | **15** | P | | **Pn** | **12 29 01.2** | **+1.4** |
| **RVAZ** | **Riverhead Bore** | **4.92** | **13** | P | | **Pn** | **12 29 01.7** | **+1.2** |
| **MSZ** | **Milford Sound** | **4.94** | **229** | P | | **Pn** | **12 29 01.7** | **+0.9** |
| **MBAZ** | **Motutapu North** | **4.98** | **16** | P | | **Pn** | **12 29 02.6** | **+1.3** |
| **WIAZ** | **Waiheke Island** | **5.01** | **18** | P | | **Pn** | **12 29 02.9** | **+1.2** |
| **TUZ** | **Tuapeka** | **5.08** | **209** | P | | **Pn** | **12 29 03.4** | **+0.7** |
| **ABAZ** | **Army Bay** | **5.13** | **15** | P | | **Pn** | **12 29 04.7** | **+1.3** |
| **KUZ** | **Kuaotunu** | **5.21** | **23** | P | | **Pn** | **12 29 04.8** | **+0.3** |
| **KUZ** | **Kuaotunu** | **5.21** | **23** | P | | **Pn** | **12 29 05.0** | **+0.5** |
| **MLZ** | **Mavora Lakes** | **5.29** | **222** | Pn | | **Pn** | **12 29 05.0** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **5.29** | **222** | P | | **Pn** | **12 29 05.1** | **-0.5** |
| **GRZ** | **Great Barrier** | **5.60** | **19** | P | | **Pn** | **12 29 10.4** | **+0.6** |
| **MXZ** | **Matakaoa Point** | **5.63** | **46** | P | | **Pn** | **12 29 09.5** | **-0.7** |
| **MXZ** | **Matakaoa Point** | **5.63** | **46** | Pn | | **Pn** | **12 29 09.8** | **-2.0** |
| **WCZ** | **Waipu Caves** | **5.70** | **10** | P | | **Pn** | **12 29 12.2** | **+1.0** |
| **WHZ** | **Wether Hill Ro** | **5.75** | **220** | Pn | | **Pn** | **12 29 09.6** | **-2.2** |
| **WHZ** | **Wether Hill Ro** | **5.75** | **220** | P | | **Pn** | **12 29 12.2** | **+0.4** |
| **SYZ** | **Scrubby Hill** | **5.75** | **209** | P | | **Pn** | **12 29 12.1** | **+0.3** |
| **SYZ** | **Scrubby Hill** | **5.75** | **209** | P | | **Pn** | **12 29 12.6** | **+0.7** |
| **DCZ** | **Deep Cove** | **5.86** | **226** | Pn | | **Pn** | **12 29 13.0** | **-0.3** |
| **DCZ** | **Deep Cove** | **5.86** | **226** | P | | **Pn** | **12 29 15.8** | **+2.5** |
| **OUZ** | **Omahuta** | **6.35** | **3** | P | | **Pn** | **12 29 21.4** | **+1.3** |
| **OUZ** | **Omahuta** | **6.35** | **3** | P | | **Pn** | **12 29 20.8** | **+0.7** |
| **APZ** | **The Paps** | **6.45** | **214** | P | | **Pn** | **12 29 22.8** | **+1.5** |
| **PYZ** | **Puysegur Point** | **6.57** | **223** | Pn | | **Pn** | **12 29 22.7** | **-0.2** |
| **CTZ** | **Chatham Island** | **7.82** | **109** | P | | **Pn** | **12 29 39.2** | **-0.9** |
| **CTZ** | **Chatham Island** | **7.82** | **109** | Pn | | **Pn** | **12 29 39.4** | **-0.7** |
| **CTZ** | **Chatham Island** | **7.82** | **109** | P | | **Pn** | **12 29 39.2** | **-0.9** |
| **BBOO** | **Buckleboo** | **30.65** | **274** | P | | **P** | **12 33 56.2** | **+0.2** |
| **CTAO** | **Charters Tower** | **31.30** | **305** | P | | **P** | **12 34 00.5** | **-1.3** |
| CTAO | | | | IAmb | | IAmb | 12 34 17.3 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **AS31** | **Alice Springs** | **37.21** | **286** | P | | **P** | **12 34 52.6** | **-0.4** |
| **WRAB** | **Tennant Creek** | **39.29** | **291** | P | | **P** | **12 35 09.8** | **-0.6** |
| **WRA** | **Warramunga Arr** | **39.29** | **291** | P | | **P** | **12 35 10.8** | **+0.4** |
| **WB0** | **Warramunga Arr** | **39.37** | **292** | P | | **P** | **12 35 11.9** | **+0.8** |
| WB0 | | | | IAmb | | IAmb | 12 35 20.8 | |
| | comp=Z,6.8nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **48.55** | **180** | P | | **P** | **12 36 26.2** | **+2.1** |
| QSPA | | | | IAmb | | IAmb | 12 36 29.7 | |
| | comp=Z,6.6nm,1.5s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **48.80** | **277** | P | | **P** | **12 36 24.0** | **-2.4** |
| PSA00 | | | | IAmb | | IAmb | 12 36 25.0 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |

*HEL **24** 12:28:49.4 ± 0.3, 67.71°N × 34.35°E, h0 km, ML2.2, Suspected explosion*
*KOLA **24** 12:28:50.7, 67.63°N × 34.27°E, h0 km, ML2.4, Error ellipse: s-maj=5.2km s-min=1.4km az=140.0, Murmansk region, Kirovsk district*
*IDC **24** 12:28:53.6 ± 2.8, 67.64°N × 33.63°E, h0 km, mbtmp3.0/2, ML2.1/2, Error ellipse: s-maj=31.3km s-min=11.2km az=73.0*

**ISC 24 12:28:48.7** ± 1.0, **67.62N** ± 0.03° × **34.42E** ± 0.04, **h0** km, **n32**, σ 1.9 **s37**/52, **Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **LVZ** | **Lovozero** | **0.29** | **17** | P | | **Pb** | **12 28 56.3** | **-0.6** |
| LVZ | | | | S | | **Sg** | **12 29 00.5** | **+2.4** |
| **LVZ** | **Lovozero** | **0.29** | **17** | PG | | **Pg** | **12 28 53.9** | **-0.5** |
| LVZ | | | | SG | | **Sg** | **12 28 55.4** | **-2.7** |
| **APA** | **Apatity** | **0.39** | **263** | P | | **Pg** | **12 28 56.8** | **+0.5** |
| APA | | | | S | | **Sg** | **12 29 00.8** | **-0.6** |
| **APA0** | **Apatity Array** | **0.55** | **269** | P | | **Pg** | **12 28 58.9** | **-0.3** |
| APA0 | | | | S | | **Sg** | **12 29 05.6** | **-0.7** |
| **TERR** | **Teriberka** | **1.61** | **9** | P | | **Pb** | **12 29 19.3** | **+0.1** |
| TERR | | | | S | | **Sn** | **12 29 39.4** | **-0.4** |
| **VRF** | **Varrio** | **1.84** | **276** | PG | | **Pn** | **12 29 21.6** | **0.0** |
| | baz=88 | | | | | | | |
| VRF | | | | MSG | | | 12 29 43.3 | |
| | comp=Z,28nm,0.2s | | | | | | | |
| VRF | | | | SG | | **Sn** | **12 29 44.8** | **-0.7** |
| **OLKF** | **Oulanka, Finla** | **2.37** | **239** | PG | | **Pb** | **12 29 31.0** | **-1.2** |
| OLKF | | | | MSG | | | 12 29 59.9 | |
| | comp=Z,11nm,0.2s | | | | | | | |
| OLKF | | | | SG | | **Sb** | **12 30 02.0** | **+0.2** |
| **KU6** | **Riekki** | **2.40** | **230** | PG | | **Pb** | **12 29 31.5** | **-1.3** |
| | baz=48 | | | | | | | |
| KU6 | | | | MSG | | | 12 30 01.4 | |
| | comp=Z,7.6nm,0.2s | | | | | | | |
| KU6 | | | | SG | | **Sb** | **12 30 03.7** | **+0.8** |
| **RAJF** | **Raja-Jooseppi** | **2.45** | **293** | PB | | **Pn** | **12 29 30.6** | **+0.7** |
| RAJF | | | | SB | | **Sn** | **12 30 01.0** | **+0.5** |
| **MSF** | **Maaselka** | **2.74** | **234** | PB | | **Pn** | **12 29 36.5** | **+2.6** |
| MSF | | | | SG | | **Sb** | **12 30 13.4** | **+0.8** |
| **SGF** | **Sodankyl** | **3.04** | **270** | PN | | **Pn** | **12 29 36.5** | **-1.5** |
| SGF | | | | SN | | **Sn** | **12 30 14.4** | **-0.6** |
| **VADS** | **Vadso** | **3.11** | **326** | P | | **Pn** | **12 29 39.5** | **+0.5** |
| VADS | | | | S | | **Sn** | **12 30 16.4** | **-0.3** |
| **VADS** | **Vadso** | **3.11** | **326** | *eP* | | **Pn** | **12 29 38.9** | **0.0** |
| **RANF** | **Ranua** | **3.42** | **245** | PB | | **Pn** | **12 29 45.6** | **+2.4** |
| RANF | | | | SG | | **Sb** | **12 30 32.5** | **+0.3** |
| **RNF** | **Rovaniemi** | **3.44** | **257** | PN | | **Pn** | **12 29 44.1** | **+0.6** |
| **KEV** | **Kevo** | **3.46** | **312** | PN | | **Pn** | **12 29 44.9** | **+1.3** |
| KEV | | | | SN | | **Sn** | **12 30 24.6** | **-0.6** |
| **ARA0** | **ARCESS Array S** | **3.79** | **305** | PN | | **Pn** | **12 29 48.8** | **+0.4** |
| ARA0 | | | | SN | | **Sn** | **12 30 32.4** | **-1.2** |
| **ARCES** | **ARCESS Array B** | **3.79** | **305** | P | | **Pn** | **12 29 48.7** | **+0.3** |
| ARCES | | | | S | | **Sn** | **12 30 33.0** | **-0.6** |
| **ARCES** | **ARCESS Array B** | **3.79** | **305** | Pn | | **Pn** | **12 29 48.7** | **+0.3** |
| | comp=Z,0.3nm,0.3s,baz=120,slow=14,SNR=47 | | | | | | | |
| ARCES | | | | Pg | | **P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FINES** | **FINES Array B** | **52.89** | **328** | P | **P** | **12 40 24.4** | **+0.1** |
| | comp=N,1.9nm,0.6s,baz=108,slow=8.0,SNR=12 | | | | | | |
| | comp=N,1.9nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **54.99** | **338** | P | **P** | **12 40 40.5** | **+1.0** |
| | comp=N,1.1nm,0.8s,baz=101,slow=6.3,SNR=4.0 | | | | | | |
| | comp=N,1.1nm,0.8s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **56.36** | **248** | LR | LR | 13 06 00.8 | |
| | comp=N,100nm,18.5s,baz=250,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **58.83** | **326** | P | **P** | **12 41 06.8** | **-0.2** |
| | comp=N,2.0nm,0.7s,baz=104,slow=9.3,SNR=5.8 | | | | | | |
| | comp=N,2.0nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **60.02** | **327** | P | **P** | **12 41 14.9** | **-0.3** |
| | comp=N,0.4nm,0.4s,baz=99,slow=9.6,SNR=1.9 | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **67.45** | **134** | P | **P** | **12 42 05.5** | **+0.8** |
| | comp=N,0.5nm,0.6s,baz=312,slow=6.5,SNR=10 | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.78** | **280** | P | **P** | **12 43 21.6** | **-1.2** |
| | comp=N,0.1nm,0.5s,baz=70,slow=6.4,SNR=1.8 | | | | | | |
| | comp=N,0.1nm,0.5s | | | | | | |

*IDC **24** 12:36:01.4±1.5,5°.63N×126°.30E,h0km,mb3.8/5,*
*mbtmp3.8/5,Error ellipse: s-maj=169.5km s-min=18.4km az=65.0*
*NEIC **24** 12:36:03.1±2.1,5°.87N±0°.04×126°.7E±0°.1,h10km±1km,*
*mb4.2/23,Error ellipse: s-maj=20.2km s-min=5.7km az=76.0*

**ISC 24 12:36:01.8**±0.6,**5°.87N**±0°.06×**126°.72E**±0°.07,**h10**km,**n41,**
**σ1§44/44,mb4.1/14,1C-3D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **1.64** | **317** | Pn | | **Pn** | | **12 36 30.5** | **-0.2** |
| **GSPH** | **General Santos** | **1.77** | **277** | ⇓*i* | P | **Pg** | | **12 36 38.0** | **+2.2** |
| GSPH | | | | *i* | S | **Sg** | | **12 36 58.0** | **-0.9** |
| **KCP** | **Kidapawan** | **1.97** | **305** | ⇑*i* | P | Pg | | 12 36 45.7 | +6.0 |
| KCP | | | | *i* | S | **Sg** | | **12 37 10.1** | **+4.8** |
| **BIPH** | **Bislig** | **2.33** | **351** | ⇓*e* | P | Pg | | 12 36 55.1 | +8.7 |
| BIPH | | | | *e* | S | Sg | | 12 37 29.2 | +13 |
| **ZCP** | **Zamboanga City** | **4.73** | **283** | ⇓*e* | P | **Pb** | | **12 37 20.9** | **-4.0** |
| **TNTI** | **Ternate** | **5.11** | **173** | Pn | | **Pn** | | **12 37 17.8** | **-0.7** |
| TNTI | | | | Sn | | **Sn** | | **12 38 18.6** | **+1.1** |
| **TOLI2** | **Tolitoli** | **7.58** | **232** | Pn | | **Pn** | | **12 37 52.2** | **-0.2** |
| **LUWI** | **Luwuk** | **7.92** | **210** | Pn | | **Pn** | | **12 37 56.6** | **-0.5** |
| **MYLDM** | **Lahad Datu** | **8.21** | **266** | Pn | | **Pn** | | **12 38 02.0** | **+0.9** |
| **SOEI** | **Soe** | **15.71** | **189** | Pn | | **Pn** | | **12 39 44.8** | **+1.2** |
| SOEI | | | | IAmb | | IAmb | | 12 40 25.3 | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **TWG** | **Pinlang** | **17.71** | **343** | | | **Pn** | | **12 40 09.1** | **+0.3** |
| **YULB** | **Yu-li** | **18.19** | **344** | Pn | | **Pn** | | **12 40 12.0** | **-2.6** |
| YULB | | | | IAmb | | IAmb | | 12 40 12.1 | |
| | comp=Z,57nm,1.5s | | | | | | | | |
| **NACB** | **Ninganchiao** | **18.85** | **345** | P | | **P** | | **12 40 21.7** | **-0.4** |
| NACB | | | | IAmb | | IAmb | | 12 40 47.7 | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| **MTN** | **Manton Dam** | **19.10** | **167** | P | | **P** | | **12 40 25.6** | **+0.6** |
| MTN | | | | IAmb | | IAmb | | 12 40 59.3 | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| **KNRA** | **Kununurra** | **21.50** | **175** | P | | **P** | | **12 40 52.7** | **+1.7** |
| KNRA | | | | IAmb | | IAmb | | 12 41 10.2 | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.84** | **183** | P | | **P** | | **12 41 15.9** | **+0.6** |
| **WB0** | **Warramunga Arr** | **26.57** | **164** | P | | **P** | | **12 41 41.4** | **+1.0** |
| WB0 | | | | IAmb | | IAmb | | 12 41 57.6 | |
| | comp=Z,9.6nm,1.4s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **26.72** | **164** | P | | **P** | | **12 41 42.7** | **+1.0** |
| **WRA** | **Warramunga Arr** | **26.73** | **164** | P | | **P** | | **12 41 42.8** | **+1.1** |
| **WRA** | **Warramunga Arr** | **26.73** | **164** | P | | **P** | | **12 41 42.1** | **+0.4** |
| | comp=Z,0.4nm,0.5s,baz=342,slow=10,SNR=8.8 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **12 45 05.6** | **+0.4** |
| | comp=Z,0.1nm,0.5s,baz=342,slow=2.5,SNR=1.5 | | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **26.73** | **164** | P | | **P** | | **12 41 42.5** | **+0.8** |
| **WR0** | **Warramunga Arr** | **26.80** | **163** | P | | **P** | | **12 41 44.5** | **+2.1** |
| WR0 | | | | IAmb | | IAmb | | 12 42 03.9 | |
| | comp=Z,5.3nm,1.2s | | | | | | | | |
| **SLVN** | **Son La** | **26.91** | **307** | P | | **P** | | **12 41 42.3** | **-1.2** |
| SLVN | | | | IAmb | | IAmb | | 12 42 15.0 | |
| | comp=Z,2.5nm,0.6s | | | | | | | | |
| **AS31** | **Alice Springs** | **30.18** | **167** | P | | **P** | | **12 42 12.1** | **-0.5** |
| **ASAR** | **Alice Springs** | **30.18** | **167** | P | | **P** | | **12 42 12.0** | **-0.5** |
| **ASAR** | **Alice Springs** | **30.18** | **167** | P | | **P** | | **12 42 13.2** | **+0.7** |
| | comp=Z,0.6nm,0.5s,baz=346,slow=7.2,SNR=16 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **12 45 14.1** | **+0.3** |
| | comp=Z,0.3nm,0.6s,baz=346,slow=2.3,SNR=7.0 | | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | | |
| **BBOO** | **Buckleboo** | **39.48** | **168** | P | | **P** | | **12 43 33.2** | **+0.6** |
| **STKA** | **Stephens Creek** | **40.13** | **160** | P | | **P** | | **12 43 39.3** | **+1.3** |
| **STKA** | **Stephens Creek** | **40.18** | **162** | P | | **P** | | **12 43 38.3** | **+0.3** |
| | comp=Z,1.0nm,0.4s,baz=322,slow=12,SNR=3.1 | | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **PALK** | **Pallekele** | **45.72** | **274** | P | | **P** | | **12 44 23.6** | **-0.2** |
| **MK31** | **Makanchi Array** | **55.81** | **324** | P | | **P** | | **12 45 40.0** | **+0.6** |
| MK31 | | | | IAmb | | IAmb | | 12 45 41.7 | |
| | comp=Z,3.0nm,1.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.81** | **324** | P | | **P** | | **12 45 40.7** | **+1.4** |
| **MKAR** | **Makanchi Array** | **55.81** | **324** | P | | **P** | | **12 45 41.0** | **+1.7** |
| | comp=Z,0.6nm,0.3s,baz=120,slow=7.3,SNR=17 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| **MAKZ** | **Makanchi** | **56.00** | **324** | P | | **P** | | **12 45 40.9** | **+0.2** |
| MAKZ | | | | IAmb | | IAmb | | 12 46 22.1 | |
| | comp=Z,1.6nm,1.1s | | | | | | | | |
| **KURK** | **Kurchatov** | **59.95** | **327** | P | | **P** | | **12 46 07.6** | **-0.7** |
| KURK | | | | IAmb | | IAmb | | 12 46 11.4 | |
| | comp=Z,1.8nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.95** | **327** | P | | **P** | | **12 46 09.3** | **+1.1** |
| | comp=Z,0.7nm,0.5s,baz=126,slow=6.8,SNR=13 | | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | | |
| **SIMJ** | **Simiganj** | **61.36** | **311** | P | | **P** | | **12 46 17.2** | **-1.1** |
| SIMJ | | | | IAmb | | IAmb | | 12 46 31.3 | |
| | comp=Z,7.6nm,1.5s | | | | | | | | |
| **KKAR** | **Karatay Array** | **61.67** | **316** | P | | **P** | | **12 46 19.8** | **-0.4** |
| **OXZ** | **Oxford** | **63.83** | **145** | P | | **P** | | **12 46 35.2** | **+0.7** |
| **BRVK** | **Borovoye** | **65.61** | **326** | P | | **P** | | **12 46 47.0** | **+1.1** |
| BRVK | | | | IAmb | | IAmb | | 12 46 55.9 | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.22** | **289** | PKP | | **PKPdf** | | **12 54 56.6** | **-1.5** |
| | comp=Z,0.3nm,0.4s,baz=46,slow=2.3,SNR=5.1 | | | | | | | | |

*IDC **24** 12:47:01.0±1.7,8°.35S×116°.97E,h0km,mb3.7/3,*
*mbtmp3.8/4,ML3.6/1,MS4.0/2,Error ellipse: s-maj=33.6km s-min=21.4km az=103.0*
*DJA **24** 12:47:02.4±0.3,8°.S±3°×11°.7E±°,h10km,M4.0/9,mb4.2/2,*
*MLv3.9/9*
*NEIC **24** 12:47:02.3±1.5,8°.35S±0°.07×116°.87E±0°.08,h10km±1km,*
*mb4.1/14,Error ellipse: s-maj=13.7km s-min=11.0km az=307.0*

**ISC 24 12:47:02.0**±0.7,**8°.39S**±0°.05×**116°.93E**±0°.05,**h10**km,**n40,**
**σ0§73/39,mb4.3/5,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.35** | **188** | P | | **Pg** | | **12 47 08.7** | **-0.3** |
| TWSI | | | | S | | **Sg** | | **12 47 14.1** | **+0.4** |
| **PLAI** | **Plampang** | **0.94** | **118** | P | | **Pg** | | **12 47 20.1** | **-0.1** |
| PLAI | | | | S | | **Sg** | | **12 47 33.5** | **+1.0** |
| **DNP** | **Denpasar** | **1.73** | **260** | P | | **Pn** | | **12 47 31.8** | **-0.3** |
| **SRBI** | **Singaraja** | **1.73** | **280** | P | | **Pn** | | **12 47 32.0** | **-0.1** |
| **WBSI** | **Waikabubak, Su** | **2.73** | **117** | P | | **Pn** | | **12 47 46.6** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **268** | | | **Pn** | | **12 47 46.1** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **268** | P | | **Pn** | | **12 47 46.2** | **-0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.18** | **58** | P | | **Pn** | | **12 48 06.0** | **+0.1** |
| **KAPI** | **Kappang** | **4.37** | **40** | Pn | | **Pn** | | **12 48 09.0** | **+0.4** |
| **KAPI** | **Kappang** | **4.37** | **40** | Pn | | **Pn** | | **12 48 08.3** | **-0.2** |
| | 3.0nm,0.3s,baz=215,slow=5.7,SNR=2.3 | | | | | | | | |
| KAPI | | | | Sn | | **Sn** | | **12 48 58.9** | **-0.6** |
| | 6.2nm,0.3s,baz=55,slow=23,SNR=14 | | | | | | | | |
| KAPI | | | | Lg | | Lg | | 12 49 18.5 | |
| | 2.3nm,0.3s,baz=118,slow=24,SNR=2.4 | | | | | | | | |
| | 7.4nm,0.2s | | | | | | | | |
| **EDFI** | **Ende, Flores** | **4.72** | **95** | P | | **Pn** | | **12 48 13.6** | **+0.1** |
| **BNSI** | **Bone** | **5.07** | **39** | P | | **Pn** | | **12 48 20.2** | **+2.1** |
| **PWJI** | **Pagerwojo** | **5.09** | **274** | P | | **Pn** | | **12 48 20.0** | **+1.6** |
| | 24nm,1.0s | | | | | | | | |
| **MMRI** | **Maumere** | **5.25** | **93** | Pn | | **Pn** | | **12 48 21.1** | **+0.3** |
| **SOEI** | **Soe** | **7.37** | **101** | Pn | | **Pn** | | **12 48 49.6** | **-0.3** |
| **FITZ** | **Fitzroy Crossi** | **12.84** | **140** | Pn | | **Pn** | | **12 50 04.2** | **-0.5** |
| **MBWA** | **Marble Bar** | **12.98** | **168** | Pn | | **Pn** | | **12 50 05.5** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **13.40** | **168** | Pn | | **Pn** | | **12 50 12.7** | **+0.2** |
| **KNRA** | **Kununurra** | **13.65** | **123** | Pn | | **Pn** | | **12 50 15.6** | **-0.2** |
| **FAKI** | **Fak Fak** | **16.18** | **71** | Pn | | **Pn** | | **12 50 47.6** | **-2.0** |
| FAKI | | | | IAmb | | IAmb | | 12 51 09.6 | |
| | comp=Z,23nm,1.3s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.34** | **126** | P | | **P** | | **12 51 39.1** | **+0.4** |
| WB0 | | | | IAmb | | IAmb | | 12 51 39.7 | |
| | comp=Z,4.5nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.39** | **126** | P | | **P** | | **12 51 39.6** | **+0.4** |
| **WRA** | **Warramunga Arr** | **20.39** | **126** | P | | **P** | | **12 51 39.3** | **0.0** |
| | comp=Z,3.9nm,0.8s,baz=300,slow=12,SNR=69 | | | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.39** | **126** | P | | **P** | | **12 51 40.0** | **+0.7** |
| WRAB | | | | IAmb | | IAmb | | 12 51 40.8 | |
| | comp=Z,4.1nm,0.7s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **20.40** | **126** | P | | **P** | | **12 51 39.6** | **+0.3** |
| WB2 | | | | IAmb | | IAmb | | 12 51 40.4 | |
| | comp=Z,5.2nm,0.9s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **20.56** | **126** | P | | **P** | | **12 51 41.5** | **+0.4** |
| WR0 | | | | IAmb | | IAmb | | 12 51 42.2 | |
| | comp=Z,5.9nm,0.8s | | | | | | | | |
| **AS31** | **Alice Springs** | **22.25** | **135** | P | | **P** | | **12 52 00.1** | **+0.8** |
| **ASAR** | **Alice Springs** | **22.25** | **135** | P | | **P** | | **12 51 58.9** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.25** | **135** | P | | **P** | | **12 51 59.7** | **+0.4** |
| | comp=Z,1.7nm,0.7s,baz=310,slow=8.9,SNR=25 | | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | |
| **COEN** | **Coen** | **26.32** | **104** | P | | **P** | | **12 52 38.6** | **+0.2** |
| COEN | | | | IAmb | | IAmb | | 12 52 56.2 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **BBOO** | **Buckleboo** | **30.07** | **147** | P | | **P** | | **12 53 11.9** | **+0.2** |
| **STKA** | **Stephens Creek** | **32.74** | **139** | P | | **P** | | **12 53 35.9** | **+0.8** |
| **JOW** | **Kunigami** | **36.70** | **17** | LR | | LR | | 13 11 37.7 | |
| | comp=Z,137nm,18.5s,baz=347,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **56.75** | **352** | P | | **P** | | **12 56 46.3** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=152,slow=6.5,SNR=2.2 | | | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | | | |
| **KK31** | **Karatay Array** | **66.37** | **325** | P | | P | | 12 57 49.1 | -2.1 |
| **KKAR** | **Karatay Array** | **66.37** | **325** | P | | P | | 12 57 49.1 | -2.1 |
| KKAR | | | | IAmb | | IAmb | | 12 58 13.2 | |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| **SEY** | **Seymchan** | **76.12** | **16** | LR | | LR | | 13 35 09.8 | |
| | comp=Z,134nm,19.9s,baz=331,slow=38 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.60** | **180** | P | | **P** | | **12 59 19.5** | **-0.6** |
| QSPA | | | | IAmb | | IAmb | | 12 59 30.6 | |
| | comp=Z,3.9nm,1.4s | | | | | | | | |
| **SNAA** | **Sanae** | **91.03** | **196** | P | | **P** | | **13 00 07.1** | **+0.7** |
| **CPUP** | **Villa Florida** | **145.04** | **189** | PKPbc | | **PKPab** | | **13 06 40.1** | **+0.4** |
| | comp=Z,2.0nm,0.7s,baz=135,slow=2.9,SNR=5.0 | | | | | | | | |

*SOME **24** 12:52:24.3,41°.70N×70°.52E,h5km*
*NNC **24** 12:52:24.6±3.7,41°.74N×70°.54E,h0km,mb2.9,mpv3.0,*
*Error ellipse: s-maj=24.2km s-min=21.2km az=44.0*
*KRNET **24** 12:52:25.9±0.1,41°.80N×70°.25E,h13km,mb2.5*

**ISC 24 12:52:25.1**±2.3,**41°.83N**±0°.08×**70°.17E**±0°.07,**h9**km±14km,
**n14,σ1§95/26,10C-4D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TRKS** | **Terek-Say** | **0.79** | **112** | ⇑*i* | P | **Pb** | | **12 52 40.6** | **-0.4** |
| | baz=16 | | | | | | | | |
| TRKS | | | | ⇑*i* | S | **Sb** | | **12 52 51.1** | **-0.7** |
| | baz=16 | | | | | | | | |
| **BRLS** | **Boroldav** | **1.23** | **349** | *e* | P | **Pn** | | **12 52 47.5** | **-1.0** |
| | 20nm,0.1s | | | | | | | | |
| BRLS | | | | *e* | S | **Sb** | | **12 53 04.6** | **+0.1** |
| | 18nm,0.2s | | | | | | | | |
| **BRLS** | **Boroldav** | **1.23** | **349** | | P | **Pn** | | **12 52 47.5** | **-1.0** |
| | 20nm,0.1s | | | | | | | | |
| BRLS | | | | | S | **Sb** | | **12 53 04.6** | **+0.1** |
| | 18nm,0.2s | | | | | | | | |
| **KK31** | **Karatay Array** | **1.30** | **11** | ⇑ | P | **Pg** | | **12 52 50.6** | **+0.5** |
| | 0.6nm,0.2s,baz=191,slow=18,SNR=28 | | | | | | | | |
| KK31 | | | | ⇑ | S | **Sg** | | **12 53 08.8** | **+1.8** |
| | 0.9nm,0.3s,baz=190,slow=32,SNR=4.9 | | | | | | | | |
| **KKAR** | **Karatay Array** | **1.30** | **11** | ⇑*i* | P | **Pg** | | **12 52 50.4** | **+0.3** |
| | baz=8.0 | | | | | | | | |
| KKAR | | | | ⇑*i* | S | **Sg** | | **12 53 08.6** | **+1.6** |
| | baz=8.0 | | | | | | | | |
| **ARK** | **Arkit** | **1.34** | **91** | ⇑*e* | P | **Pn** | | **12 52 50.1** | **0.0** |
| | baz=90 | | | | | | | | |
| ARK | | | | ⇑*e* | S | **Sb** | | **12 53 07.5** | **-0.3** |
| | baz=90 | | | | | | | | |
| **MNAS** | **Manas** | **1.86** | **68** | ⇑*i* | P | **Pb** | | **12 52 59.3** | **0.0** |
| | baz=67 | | | | | | | | |
| MNAS | | | | ⇑*i* | S | **Sg** | | **12 53 24.0** | **-0.9** |
| | baz=67 | | | | | | | | |
| **MRKS** | **Merke** | **2.45** | **67** | *e* | P | **Pn** | | **12 53 07.1** | **+1.8** |
| | 0.5nm,0.1s | | | | | | | | |
| MRKS | | | | *e* | S | **Sb** | | **12 53 39.2** | **-0.4** |
| | 1.4nm,0.1s | | | | | | | | |
| **MRKS** | **Merke** | **2.45** | **67** | Pg | | **Pb** | | **12 53 10.1** | **+0.7** |
| | 3.2nm,0.3s | | | | | | | | |
| MRKS | | | | Lg | | Lg | | 12 53 44.0 | |
| | 5.9nm,0.5s | | | | | | | | |
| **AML** | **Almayashu** | **2.65** | **82** | ⇓*e* | P | **Pb** | | **12 53 10.9** | **-2.0** |
| | baz=82 | | | | | | | | |
| AML | | | | ⇓*i* | S | **Sb** | | **12 53 43.5** | **-2.1** |
| | baz=82 | | | | | | | | |
| **ARLS** | **Aral** | **3.11** | **88** | ⇓*e* | P | **Pn** | | **12 53 17.0** | **+2.6** |
| | baz=88 | | | | | | | | |
| ARLS | | | | ⇓*e* | S | **Sn** | | **12 53 54.1** | **+2.4** |
| | baz=88 | | | | | | | | |
| **DGS** | **Degeres** | **4.38** | **69** | *e* | P | **Pb** | | **12 53 38.1** | **-4.1** |
| | 1.6nm,0.5s | | | | | | | | |
| DGS | | | | *e* | S | **Sb** | | **12 54 31.5** | **-3.6** |
| | 8.1nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **4.38** | **69** | Pg | | **Pb** | | **12 53 38.1** | **-4.1** |
| | 1.6nm,0.5s | | | | | | | | |
| DGS | | | | Lg | | Lg | | 12 54 31.5 | |
| | 8.1nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **4.46** | **72** | *e* | P | **Pb** | | **12 53 42.2** | **-1.4** |
| | 2.0nm,0.4s | | | | | | | | |
| KST | | | | *e* | S | **Sb** | | **12 54 38.6** | **+1.1** |
| | 7.2nm,0.5s | | | | | | | | |

*SOME **24** 12:55:57.7,39°.75N×73°.35E,h0km*
*NNC **24** 12:56:14.8±10.0,40°.40N×73°.80E,h0km,mb3.1,mpv2.8,*
*Error ellipse: s-maj=79.6km s-min=39.4km az=175.0*

**KRNET 24 12:56:03.9**±0.1,**39°.80N×73°.55E,mb2.4,16C-5D,**
**Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.22** | **350** | ⇓*e* | P | Pg | | 12 56 08.4 | +0.3 |
| | baz=50 | | | | | | | | |
| SFK | | | | ⇓*i* | S | Sg | | 12 56 11.5 | +0.6 |
| | baz=50 | | | | | | | | |
| **DRK** | **Karamyk** | **1.39** | **257** | ⇑*e* | P | Pg | | 12 56 29.8 | -0.7 |
| | baz=57 | | | | | | | | |
| DRK | | | | ⇑*e* | S | Sb | | 12 56 49.2 | -0.1 |
| | baz=57 | | | | | | | | |
| **BTK** | **Batken** | **2.12** | **278** | ⇑*e* | P | Pb | | 12 56 42.0 | -1.2 |
| | baz=78 | | | | | | | | |
| BTK | | | | ⇑*i* | S | Sb | | 12 57 10.0 | -0.1 |
| | baz=78 | | | | | | | | |
| **ARLS** | **Aral** | **2.14** | **16** | ⇑*e* | P | Pb | | 12 56 42.7 | -1.0 |
| | baz=16 | | | | | | | | |
| ARLS | | | | ⇑*e* | S | Sb | | 12 57 10.7 | -0.1 |
| | baz=16 | | | | | | | | |
| **AML** | **Almayashu** | **2.33** | **3** | ⇓*e* | P | Pn | | 12 56 45.3 | +1.4 |
| | baz=3.0 | | | | | | | | |
| AML | | | | ⇓*i* | S | Sb | | 12 57 15.5 | -1.1 |
| | baz=3.0 | | | | | | | | |
| **TRKS** | **Terek-Say** | **2.52** | **314** | ⇑*i* | P | Pn | | 12 56 47.4 | +1.1 |
| | baz=13 | | | | | | | | |
| TRKS | | | | ⇑*i* | S | Sn | | 12 57 18.6 | +0.8 |
| | baz=13 | | | | | | | | |
| **MNAS** | **Manas** | **2.80** | **344** | ⇑*e* | P | Pn | | 12 56 51.9 | +1.8 |
| | baz=44 | | | | | | | | |
| MNAS | | | | ⇑*e* | S | Sn | | 12 57 27.0 | +2.4 |
| | baz=44 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.86** | **3** | ⇑*e* | P | Pn | | 12 56 52.4 | +1.4 |
| | baz=3.0 | | | | | | | | |
| EKS2 | | | | ⇑*i* | S | Sn | | 12 57 27.8 | +1.6 |
| | baz=3.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **2.92** | **14** | ⇑*i* | P | Pn | | 12 56 53.2 | +1.4 |
| | baz=14 | | | | | | | | |
| AAK | | | | ⇑*i* | S | Sn | | 12 57 29.0 | +1.3 |
| | baz=14 | | | | | | | | |
| **MRKS** | **Merke** | **2.95** | **355** | *e* | P | Pn | | 12 56 53.9 | +1.7 |
| | 1.8nm,0.2s | | | | | | | | |
| MRKS | | | | *e* | S | Sb | | 12 57 34.3 | +0.2 |
| | 12nm,0.5s | | | | | | | | |
| **MRKS** | **Merke** | **2.95** | **355** | Pg | | Pn | | 12 56 53.4 | +1.3 |
| | 2.0nm,0.4s | | | | | | | | |
| MRKS | | | | Lg | | Lg | | 12 57 34.3 | |
| | 12nm,0.5s | | | | | | | | |
| **KST** | **Kastek** | **3.71** | **28** | *e* | P | Pb | | 12 57 09.1 | -1.3 |
| | 4.1nm,0.8s | | | | | | | | |
| KST | | | | *e* | S | Sg | | 12 58 00.5 | -2.6 |
| | 4.6nm,0.7s | | | | | | | | |
| **KST** | **Kastek** | **3.71** | **28** | Pg | | Pb | | 12 57 09.1 | -1.3 |
| | 4.1nm,0.8s | | | | | | | | |
| KST | | | | Lg | | Lg | | 12 58 00.5 | |
| | 6.2nm,1.0s | | | | | | | | |
| **DGS** | **Degeres** | **3.82** | **25** | *e* | P | Pb | | 12 57 11.1 | -1.2 |
| | 2.4nm,0.6s | | | | | | | | |
| DGS | | | | *e* | S | Sg | | 12 58 04.3 | -2.4 |
| | 6.9nm,0.7s | | | | | | | | |
| **DGS** | **Degeres** | **3.82** | **25** | Pg | | Pb | | 12 57 11.1 | -1.2 |
| | 2.4nm,0.6s | | | | | | | | |
| DGS | | | | Lg | | Lg | | 12 58 04.3 | |
| | 4.8nm,0.6s | | | | | | | | |
| **KK31** | **Karatay Array** | **4.01** | **326** | ⇓ | Pn | Pb | | 12 57 17.3 | +1.8 |
| | 0.9nm,0.6s,baz=139,slow=15,SNR=3.7 | | | | | | | | |
| KK31 | | | | ⇑ | Sn | Sn | | 12 57 56.8 | +2.4 |
| | 0.5nm,0.2s | | | | | | | | |
| KK31 | | | | ⇑ | Lg | Lg | | 12 58 08.8 | |
| | 1.5nm,0.5s,baz=131,slow=29,SNR=5.0 | | | | | | | | |
| **KRBS** | **Karabastau** | **4.20** | **21** | *e* | P | Pb | | 12 57 18.7 | 0.0 |
| | 2.0nm,0.3s | | | | | | | | |
| KRBS | | | | *e* | S | Sg | | 12 58 16.8 | -2.1 |
| | 3.4nm,0.6s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.20** | **21** | Pg | | Pb | | 12 57 18.7 | 0.0 |
| | 2.0nm,0.3s | | | | | | | | |
| KRBS | | | | Lg | | Lg | | 12 58 16.8 | |
| | 3.4nm,0.6s | | | | | | | | |
| **BRLS** | **Boroldav** | **4.27** | **320** | *e* | P | Pb | | 12 57 15.1 | -4.7 |
| | 0.9nm,0.2s | | | | | | | | |
| BRLS | | | | *e* | S | Sb | | 12 58 10.9 | -1.0 |
| | 1.3nm,0.3s | | | | | | | | |
| **BRLS** | **Boroldav** | **4.27** | **320** | Pg | | Pb | | 12 57 15.1 | -4.7 |
| | 1.0nm,0.3s | | | | | | | | |
| BRLS | | | | Lg | | Lg | | 12 58 10.9 | |
| | 1.3nm,0.3s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.56** | **30** | *e* | P | Pb | | 12 57 24.2 | -0.5 |
| | 0.4nm,0.3s | | | | | | | | |
| KTBS | | | | *e* | S | Sg | | 12 58 26.4 | -3.8 |
| | 5.9nm,0.8s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.56** | **30** | Pg | | Pb | | 12 57 24.3 | -0.5 |
| | 0.9nm,0.5s | | | | | | | | |
| KTBS | | | | Lg | | Lg | | 12 58 26.4 | |
| | 5.9nm,0.8s | | | | | | | | |

*IDC **24** 12:58:14.2±0.6,14°.70N×147°.02E,h0km,mb4.3/20,*
*mbtmp4.3/21,ML4.3/1,Error ellipse: s-maj=17.4km s-min=13.9km az=82.0*
*NEIC **24** 12:58:18.4±2.1,14°.70N±0°.06×146°.6E±0°.1,h10km±1km,*
*mb4.6/67,Error ellipse: s-maj=17.9km s-min=8.8km az=106.0*

**ISC 24 12:58:17.4**±0.6,**14°.70N**±0°.07×**146°.65E**±0°.09,**h10**km,**n108,**
**σ1§11/101,mb4.6/52,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **2.05** | **238** | Pn | | **Pn** | | **12 58 53.9** | **+1.8** |
| **GUMO** | **Guam** | **2.05** | **238** | Pn | | **Pb** | | **12 58 54.0** | **-0.8** |
| | 83nm,0.3s,baz=82,slow=3.7,SNR=28 | | | | | | | | |
| GUMO | | | | Sn | | **Sg** | | **12 59 23.9** | **+0.5** |
| | 128nm,0.3s,baz=37,slow=23,SNR=9.0 | | | | | | | | |
| | 211nm,0.4s | | | | | | | | |
| **JCJ** | **Chichijima** | **13.02** | **342** | Pn | | **Pn** | | **13 01 21.6** | **-1.0** |
| **H11S3** | **WAKE ISLAND Hy** | **19.57** | **76** | T | | T | | 13 23 00.7 | |
| | baz=252 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.58** | **76** | T | | T | | 13 22 59.2 | |
| | baz=252 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.58** | **76** | T | | T | | 13 23 05.6 | |
| | baz=252 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.96** | **73** | T | | T | | 13 23 05.1 | |
| | baz=258 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.97** | **73** | T | | T | | 13 23 06.5 | |
| | baz=258 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.98** | **73** | T | | T | | 13 23 06.5 | |
| | baz=258 | | | | | | | | |
| **JOW** | **Kunigami** | **20.97** | **308** | P | | **P** | | **13 02 59.3** | **-1.6** |
| JOW | | | | IAmb | | IAmb | | 13 03 16.0 | |
| | comp=Z,31nm,1.0s | | | | | | | | |
| **JOW** | **Kunigami** | **20.97** | **308** | P | | Pn | | 13 03 03.5 | +0.1 |
| | comp=Z,12nm,0.6s,baz=160,slow=29,SNR=3.6 | | | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **FAKI** | **Fak Fak** | **22.58** | **220** | P | | **P** | | **13 03 20.0** | **+1.7** |
| FAKI | | | | IAmb | | IAmb | | 13 03 21.2 | |
| | comp=Z,34nm,1.0s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **23.03** | **342** | P | | **P** | | **13 03 23.9** | **+1.1** |
| | comp=Z,1.6nm,0.5s,baz=164,slow=9.6,SNR=6.0 | | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| **JNU** | **Nakatsue** | **23.28** | **325** | P | | **P** | | **13 03 26.2** | **+0.8** |
| JNU | | | | IAmb | | IAmb | | 13 04 01.7 | |
| | comp=Z,44nm,1.4s | | | | | | | | |
| **JNU** | **Nakatsue** | **23.28** | **325** | P | | **P** | | **13 03 26.9** | **+1.5** |
| | comp=Z,12nm,0.9s,baz=90,slow=4.4,SNR=5.8 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,7.4nm,1.5s | | | | | | | |
| **RAR** | **Rarotonga** | **63.55** | **123** | P | | P | 13 08 44.2 | -4.3 |
| | comp=Z,10.0nm,0.4s,baz=335,slow=12,SNR=9.7 | | | | | | | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| **E19K** | **Redstone River** | **63.86** | **21** | P | | **P** | **13 08 51.4** | **+1.4** |
| E19K | | | | IAmb | | IAmb | 13 08 55.2 | |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| **KURK** | **Kurchatov** | **64.87** | **319** | P | | **P** | **13 08 57.1** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **64.91** | **319** | P | | **P** | **13 08 57.3** | **+0.2** |
| | comp=Z,18nm,0.7s,baz=99,slow=6.7,SNR=195 | | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| **PWL** | **Port Wells** | **65.17** | **29** | P | | **P** | **13 08 59.6** | **+1.0** |
| **MLY** | **Manley** | **65.34** | **24** | P | | **P** | **13 09 01.5** | **+1.8** |
| MLY | | | | IAmb | | IAmb | 13 09 25.8 | |
| | comp=Z,4.2nm,1.2s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **66.01** | **21** | P | | **P** | **13 09 05.7** | **+1.7** |
| E22K | | | | IAmb | | IAmb | 13 09 14.1 | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **G23K** | **Bananza Creek** | **66.17** | **23** | P | | **P** | **13 09 05.3** | **+0.3** |
| G23K | | | | IAmb | | IAmb | 13 09 45.9 | |
| | comp=Z,3.7nm,1.1s | | | | | | | |
| **WRH** | **Wood River Hil** | **66.25** | **25** | P | | **P** | **13 09 05.0** | **-0.5** |
| WRH | | | | IAmb | | IAmb | 13 09 07.4 | |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **MDM** | **Murphy Dome** | **66.33** | **25** | P | | **P** | **13 09 06.4** | **+0.3** |
| **D23K** | **Nanushuk River** | **66.70** | **20** | P | | **P** | **13 09 10.3** | **+2.0** |
| **POKR** | **Poker Plat Res** | **66.70** | **25** | P | | **P** | **13 09 08.7** | **+0.3** |
| POKR | | | | IAmb | | IAmb | 13 09 27.6 | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **HDA** | **Harding Lake** | **66.71** | **26** | P | | **P** | **13 09 08.9** | **+0.5** |
| **H24K** | **Noodor Dome** | **66.73** | **24** | P | | **P** | **13 09 09.6** | **+1.0** |
| **E23K** | **Chandalar** | **66.76** | **22** | P | | **P** | **13 09 11.1** | **+2.3** |
| E23K | | | | IAmb | | IAmb | 13 09 23.6 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| **IL31** | | **66.83** | **25** | P | | **P** | **13 09 09.0** | **-0.1** |
| **ILAR** | **Eielson Array** | **66.83** | **25** | P | | **P** | **13 09 08.5** | **-0.8** |
| **ILAR** | **Eielson Array** | **66.83** | **25** | P | | **P** | **13 09 06.8** | **-2.4** |
| | comp=Z,1.3nm,0.8s,baz=252,slow=5.9,SNR=15 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **E24K** | **Your Creek** | **67.17** | **22** | P | | **P** | **13 09 13.6** | **+2.2** |
| E24K | | | | IAmb | | IAmb | 13 09 46.1 | |
| | comp=Z,5.8nm,1.3s | | | | | | | |
| **D24K** | **Happy Valley** | **67.39** | **20** | P | | **P** | **13 09 14.6** | **+1.9** |
| **J25K** | **Salcha River,** | **67.43** | **26** | P | | **P** | **13 09 14.4** | **+1.3** |
| **RIDG** | **Independent Ri** | **67.45** | **27** | P | | **P** | **13 09 13.9** | **+0.7** |
| RIDG | | | | IAmb | | IAmb | 13 09 35.3 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **C24K** | **Franklin Bluff** | **67.62** | **20** | P | | **P** | **13 09 15.0** | **+0.9** |
| C24K | | | | IAmb | | IAmb | 13 09 42.4 | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **L26K** | **Log Cabin Wild** | **67.96** | **28** | P | | **P** | **13 09 18.3** | **+1.9** |
| **F25K** | **Christian Rive** | **68.06** | **22** | P | | **P** | **13 09 17.0** | **0.0** |
| F25K | | | | IAmb | | IAmb | 13 09 29.5 | |
| | comp=Z,4.4nm,1.1s | | | | | | | |
| **J26L** | **Joseph Creek** | **68.16** | **26** | P | | **P** | **13 09 17.6** | **-0.2** |
| J26L | | | | IAmb | | IAmb | 13 09 50.0 | |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| **GRNC** | **Granite Creek** | **68.30** | **30** | P | | **P** | **13 09 18.9** | **0.0** |
| GRNC | | | | IAmb | | IAmb | 13 09 23.1 | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **NIL** | **Nilore** | **68.31** | **301** | P | | **P** | **13 09 18.1** | **-1.1** |
| **BMAR** | **Burnt Mountain** | **68.42** | **23** | P | | **P** | **13 09 20.1** | **+0.8** |
| **L27K** | **Beaver Creek,** | **68.65** | **28** | P | | **P** | **13 09 21.0** | **+0.3** |
| L27K | | | | IAmb | | IAmb | 13 09 44.5 | |
| | comp=Z,5.4nm,1.3s | | | | | | | |
| **BCAR** | **Beaver Creek A** | **68.67** | **28** | P | | **P** | **13 09 19.9** | **-1.0** |
| **LOGN** | **Logan Glacier** | **68.68** | **30** | P | | **P** | **13 09 21.2** | **+0.1** |
| **EGAK** | **Eagle** | **69.23** | **26** | P | | **P** | **13 09 25.9** | **+1.6** |
| EGAK | | | | IAmb | | IAmb | 13 10 04.8 | |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| **I28M** | **Miner Creek** | **69.85** | **25** | P | | **P** | **13 09 29.7** | **+1.4** |
| **DAWY** | **Dawson** | **69.88** | **27** | P | | **P** | **13 09 30.1** | **+1.7** |
| DAWY | | | | IAmb | | IAmb | 13 09 31.5 | |
| | comp=Z,5.6nm,1.3s | | | | | | | |
| **KK31** | **Karatay Array** | **70.04** | **311** | P | | **P** | **13 09 30.1** | **+0.4** |
| KK31 | | | | IAmb | | IAmb | 13 09 30.7 | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **70.04** | **311** | P | | **P** | **13 09 30.0** | **+0.3** |
| **M29M** | **Somme Creek** | **70.09** | **29** | P | | **P** | **13 09 31.4** | **+1.7** |
| M29M | | | | IAmb | | IAmb | 13 09 37.6 | |
| | comp=Z,9.1nm,1.5s | | | | | | | |
| **D27M** | **Malcolm River** | **70.13** | **21** | P | | **P** | **13 09 29.6** | **-0.2** |
| D27M | | | | IAmb | | IAmb | 13 09 30.2 | |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **70.14** | **321** | P | | **P** | **13 09 30.4** | **+0.3** |
| | comp=Z,6.0nm,0.6s,baz=100,slow=7.3,SNR=25 | | | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **P29M** | **Windy Craggy** | **70.16** | **32** | P | | **P** | **13 09 31.1** | **+0.9** |
| **BRVK** | **Borovoye** | **70.21** | **321** | P | | **P** | **13 09 30.9** | **+0.4** |
| BRVK | | | | IAmb | | IAmb | 13 09 31.7 | |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **N30M** | **Aishikik Lake** | **70.64** | **30** | P | | **P** | **13 09 33.5** | **+0.3** |
| N30M | | | | IAmb | | IAmb | 13 09 35.6 | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **K29M** | **Barlow Dome** | **70.67** | **27** | P | | **P** | **13 09 34.8** | **+1.5** |
| K29M | | | | IAmb | | IAmb | 13 09 54.3 | |
| | comp=Z,5.5nm,1.2s | | | | | | | |
| **J30M** | **Hart River** | **71.26** | **26** | P | | **P** | **13 09 37.5** | **+0.5** |
| J30M | | | | IAmb | | IAmb | 13 09 47.9 | |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| **SIMJ** | **Simiganj** | **71.40** | **306** | P | | **P** | **13 09 38.5** | **+0.2** |
| SIMJ | | | | IAmb | | IAmb | 13 09 41.9 | |
| | comp=Z,7.2nm,1.2s | | | | | | | |
| **ABKAR** | **Akbulak array** | **76.89** | **318** | P | | **P** | **13 10 09.7** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **84.88** | **52** | P | | **P** | **13 10 51.1** | **-2.0** |
| | comp=Z,0.7nm,0.7s,baz=270,slow=5.9,SNR=8.1 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **ELK** | **Elko** | **86.55** | **49** | P | | **P** | **13 11 02.5** | **+1.1** |
| **PSUT** | **Pine Spring** | **88.21** | **51** | P | | **P** | **13 11 09.8** | **+0.4** |
| PSUT | | | | IAmb | | IAmb | 13 11 41.1 | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **U15A** | **North Rim** | **90.04** | **52** | P | | **P** | **13 11 19.6** | **+1.4** |
| **FINES** | **FINESS Array B** | **90.89** | **336** | P | | **P** | **13 11 19.7** | **-1.4** |
| | comp=Z,1.7nm,0.6s,baz=48,slow=2.1,SNR=8.0 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **135.63** | **307** | PKP | | **PKPdf** | **13 17 38.5** | **-0.7** |
| | comp=Z,0.4nm,0.8s,baz=80,slow=3.0,SNR=2.2 | | | | | | | |
| **DBIC** | **Dimbokro** | **144.66** | **305** | PKPbc | | **PKPab** | **13 17 53.9** | **-0.2** |
| | comp=Z,9.5nm,0.6s,baz=29,slow=3.0,SNR=16 | | | | | | | |
| **LPAZ** | **La Paz** | **146.47** | **97** | PKPbc | | **PKPdf** | **13 17 58.4** | **-0.8** |
| | comp=Z,1.9nm,0.8s,baz=3.0,slow=7.6,SNR=4.2 | | | | | | | |

*IDC **24** 13:01:41.0±5.8, 18°.11S×178°.15W, h488km±62km, mb3.2/10, mbtmp4.0/10, Error ellipse: s-maj=27.8km s-min=21.8km az=108.0*
*NEIC **24** 13:01:43.8±1.3, 18°.1S×178°.1W±0°.2, h525km±9km, mb4.2/23, Error ellipse: s-maj=21.7km s-min=15.8km az=114.0*

**ISC 24 13:01:45.3±0.6, 18°.0S±0°.1×178°.3W±0°.1, h550km, n47, σ1°39/47, mb4.1/22, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **MSVF** | **Nonsavu** | **3.50** | **273** | P | | **P** | **13 03 02.5** | **-1.3** |
| **AFI** | **Afiamalu** | **7.44** | **58** | P | | **P** | **13 03 34.2** | **-3.5** |
| **LIFNC** | **LIFOU** | **13.95** | **256** | P | | **P** | **13 04 41.5** | **-2.5** |
| **KOUNC** | **Koumac, New Ca** | **16.66** | **258** | P | | **P** | **13 05 09.7** | **-1.4** |
| **EIDS** | **Eidsvold** | **29.36** | **250** | P | | **P** | **13 07 04.1** | **-0.3** |
| EIDS | | | | IAmb | | IAmb | 13 07 12.7 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **ARMA** | **Armidale** | **30.02** | **240** | P | | **P** | **13 07 10.7** | **+0.5** |
| ARMA | | | | IAmb | | IAmb | 13 07 16.7 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.71** | **241** | P | | **P** | **13 08 22.2** | **-0.4** |
| **STKA** | **Stephens Creek** | **38.71** | **241** | P | | **P** | **13 08 22.5** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=83,slow=8.1,SNR=3.3 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.49** | **241** | P | | **P** | **13 09 01.1** | **+0.6** |
| **WR0** | **Warramunga Arr** | **44.55** | **260** | P | | **P** | **13 09 09.4** | **+0.5** |
| **WB0** | **Warramunga Arr** | **44.71** | **260** | P | | **P** | **13 09 10.5** | **+0.4** |
| WB0 | | | | IAmb | | IAmb | 13 09 16.1 | |
| | comp=Z,4.9nm,1.3s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.73** | **260** | P | | **P** | **13 09 10.0** | **-0.3** |
| WB2 | | | | IAmb | | IAmb | 13 09 40.9 | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.73** | **260** | P | | **P** | **13 09 10.6** | **+0.3** |
| WRAB | | | | IAmb | | IAmb | 13 09 31.5 | |
| | comp=Z,5.1nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.74** | **260** | P | | **P** | **13 09 10.3** | **-0.1** |
| **WRA** | **Warramunga Arr** | **44.74** | **260** | P | | **P** | **13 09 10.8** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=93,slow=6.3,SNR=30 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **13 10 42.2** | **+1.4** |
| | comp=Z,0.3nm,0.4s,baz=89,slow=3.7,SNR=3.0 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **AS31** | **Alice Springs** | **44.89** | **254** | P | | **P** | **13 09 12.3** | **+0.7** |
| **ASAR** | **Alice Springs** | **44.89** | **254** | P | | **P** | **13 09 11.2** | **-0.4** |
| **ASAR** | **Alice Springs** | **44.89** | **254** | P | | **P** | **13 09 12.2** | **+0.7** |
| | comp=Z,2.1nm,0.5s,baz=88,slow=8.8,SNR=26 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **13 10 42.5** | **+1.2** |
| | comp=Z,0.7nm,0.6s,baz=93,slow=5.3,SNR=4.4 | | | | | | | |
| ASAR | | | | S | | **S** | **13 15 08.5** | **-1.3** |
| | comp=Z,0.6nm,0.7s,baz=86,slow=16,SNR=6.1 | | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| **MTN** | **Manton Dam** | **48.92** | **268** | P | | **P** | **13 09 41.9** | **0.0** |
| MTN | | | | IAmb | | IAmb | 13 10 17.8 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **KNRA** | **Kununurra** | **50.60** | **264** | P | | **P** | **13 09 54.7** | **+0.5** |
| KNRA | | | | IAmb | | IAmb | 13 09 59.5 | |
| | comp=Z,8.9nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.14** | **261** | P | | **P** | **13 10 13.2** | **+0.7** |
| **GIRL** | **Giralia** | **62.99** | **253** | P | | **P** | **13 11 20.7** | **+1.7** |
| **MJAR** | **Matsushiro Arr** | **68.02** | **323** | P | | **P** | **13 11 51.7** | **+1.5** |
| | comp=Z,1.0nm,0.6s,baz=125,slow=6.4,SNR=1.8 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **ASAJ** | **Asahikawa** | **71.38** | **331** | P | | **P** | **13 12 13.2** | **+3.2** |
| | comp=Z,7.9nm,1.0s,baz=45,slow=14,SNR=1.4 | | | | | | | |
| | comp=Z,7.9nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.09** | **180** | P | | **P** | **13 12 13.8** | **-0.2** |
| **QSPA** | **South Pole Qui** | **72.09** | **180** | P | | **P** | **13 12 14.8** | **+0.7** |
| | comp=Z,1.3nm,0.9s,baz=164,slow=1.0,SNR=5.8 | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **73.76** | **345** | P | | **P** | **13 12 21.5** | **-2.0** |
| PEA0B | | | | IAmb | | IAmb | 13 12 26.1 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.76** | **345** | P | | **P** | **13 12 21.5** | **-2.0** |
| **PLK4** | **Peulik 4** | **77.49** | **12** | P | | **P** | **13 12 45.6** | **+1.5** |
| PLK4 | | | | IAmb | | IAmb | 13 13 17.5 | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.38** | **44** | P | | **P** | **13 12 56.2** | **+1.3** |
| | comp=Z,0.5nm,0.7s,baz=221,slow=8.9,SNR=4.9 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **RND** | **Reindeer** | **84.29** | **13** | P | | **P** | **13 13 20.9** | **+1.8** |
| RND | | | | IAmb | | IAmb | 13 13 21.6 | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.61** | **13** | P | | **P** | **13 13 26.2** | **+0.8** |
| CCB | | | | IAmb | | IAmb | 13 13 27.2 | |
| | comp=Z,4.7nm,1.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.91** | **13** | P | | **P** | **13 13 27.8** | **+0.9** |
| | comp=Z,0.7nm,0.4s,baz=232,slow=6.0,SNR=8.7 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.31** | **43** | P | | **P** | **13 13 35.7** | **+1.5** |
| | comp=Z,0.3nm,0.5s,baz=221,slow=3.6,SNR=2.3 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **90.54** | **179** | P | | **P** | **13 13 48.5** | **-0.1** |
| SNAA | | | | IAmb | | IAmb | 13 13 49.3 | |
| | comp=Z,5.9nm,1.5s | | | | | | | |
| **SNAA** | **Sanae** | **90.54** | **179** | P | | **P** | **13 13 48.5** | **-0.1** |
| | comp=Z,2.1nm,1.3s,baz=53,slow=11,SNR=1.6 | | | | | | | |
| | comp=Z,2.1nm,1.3s | | | | | | | |
| **G31M** | **Satah River** | **90.68** | **16** | P | | **P** | **13 13 50.5** | **+1.5** |
| G31M | | | | IAmb | | IAmb | 13 13 51.7 | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **F31M** | **Tsiigehtchic** | **91.20** | **16** | P | | **P** | **13 13 52.9** | **+1.5** |
| **BVAR** | **Borovoye Array** | **116.96** | **321** | PKP | | **PKiKP** | **13 19 29.0** | **+1.3** |
| | comp=Z,0.6nm,0.4s,baz=127,slow=4.3,SNR=3.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.39** | **350** | PKP | | **PKiKP** | **13 19 47.3** | **+1.5** |
| | comp=Z,1.0nm,0.7s,baz=20,slow=2.9,SNR=1.8 | | | | | | | |
| **FINES** | **FINESS Array B** | **133.27** | **344** | PKhKP | | PKPpre | 13 19 58.5 | |
| | comp=Z,0.8nm,0.7s,baz=225,slow=3.3,SNR=1.8 | | | | | | | |
| **HFS** | **Hagfors** | **137.00** | **351** | PKhKP | | PKPpre | 13 20 00.6 | |
| | comp=Z,1.8nm,0.8s,baz=32,slow=5.6,SNR=2.0 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **142.51** | **5** | PKhKP | | PKPpre | 13 20 14.0 | |
| | comp=Z,1.0nm,0.6s,baz=320,slow=2.1,SNR=1.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.91** | **315** | PKPbc | | **PKiKP** | **13 20 22.8** | **-1.8** |
| **BRTR** | **Keskin Array B** | **144.91** | **315** | PKPbc | | **PKiKP** | **13 20 22.9** | **-1.6** |
| | comp=Z,0.9nm,0.4s,baz=96,slow=3.1,SNR=8.8 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.27** | **303** | PKPbc | | **PKPab** | **13 20 27.3** | **-0.1** |
| | comp=Z,1.6nm,0.4s,baz=85,slow=3.2,SNR=1.8 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.69** | **345** | PKPbc | | **PKPab** | **13 20 30.5** | **-2.2** |
| | comp=Z,0.4nm,0.3s,baz=157,slow=18,SNR=5.0 | | | | | | | |

*IDC **24** 13:02:53.8±0.8, 34°.44N×139°.69E, h111km±6km, mb3.4/9, mbtmp3.8/12, Error ellipse: s-maj=26.4km s-min=6.1km az=70.0*
*JMA **24** 13:02:54.5±0.2, 34°.5N±0°.5×139°.8E±0°.8, h100km±1km, MV3.3/35, FAR S OFF BOSO PENINSULA*

**ISC 24 13:02:53.8±0.8, 34°.45N±0°.05×139°.72E±0°.07, h110km±6km, n30, σ0°68/36, mb3.8/9, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **JIM2** | **Oshima 3** | **0.36** | **318** | P | | **Pn** | **13 03 09.4** | **-0.5** |
| JIM2 | | | | S | | **Sn** | **13 03 20.5** | **-1.5** |
| **JTHY** | **Toshimahigashi** | **0.37** | **282** | *i* P | | **Pn** | **13 03 10.0** | **+0.2** |
| JTHY | | | | S | | **Sn** | **13 03 22.1** | **+0.2** |
| **JNIO** | **Niijimaoohara** | **0.38** | **256** | *e*P | | **Pn** | **13 03 09.9** | **0.0** |
| **JMYK** | **Miyake Tsubota** | **0.41** | **201** | P | | **Pn** | **13 03 10.2** | **+0.1** |
| JMYK | | | | *e*S | | **Sn** | **13 03 22.3** | **+0.1** |
| **JMKN** | **Mikurajimanish** | **0.56** | **191** | *i* P | | **Pn** | **13 03 11.1** | **0.0** |
| JMKN | | | | S | | **Sn** | **13 03 24.1** | **0.0** |
| **BSO3** | **Boso 3** | **0.74** | **61** | *i* P | | **Pn** | **13 03 12.8** | **+0.7** |
| **JIZS** | **Izushimoda** | **0.75** | **291** | *i* P | | **Pn** | **13 03 12.7** | **+0.2** |
| JIZS | | | | S | | **Sn** | **13 03 26.5** | **-0.1** |
| **JOD2** | **Odawara 2** | **0.97** | **328** | *i* P | | **Pn** | **13 03 14.7** | **0.0** |
| JOD2 | | | | S | | **Sn** | **13 03 30.0** | **-0.4** |
| **BSO1** | **Boso 1** | **1.06** | **78** | P | | **Pn** | **13 03 15.3** | **+0.4** |
| **JFNN** | **Fujinakano** | **1.13** | **311** | P | | **Pn** | **13 03 16.9** | **+0.6** |
| JFNN | | | | S | | **Sn** | **13 03 34.2** | **+0.7** |
| **JHJ** | **Hachijo jima 2** | **1.32** | **178** | P | | **Pn** | **13 03 19.4** | **+0.8** |
| | 1μm,0.3s,baz=72,slow=3.7,SNR=224 | | | | | | | |
| JHJ | | | | S | | **Sn** | **13 03 37.2** | **0.0** |
| | 570nm,0.3s,baz=79,slow=21,SNR=23 | | | | | | | |
| **JHJ2** | **Mitsune** | **1.33** | **177** | P | | **Pn** | **13 03 19.3** | **+0.7** |
| **SHZ3** | **Shizuoka 3** | **1.39** | **297** | P | | **Pn** | **13 03 20.1** | **+0.7** |
| **JYN** | **Shimob** | **1.43** | **318** | *i* P | | **Pn** | **13 03 20.5** | **+0.7** |
| JYN | | | | S | | **Sn** | **13 03 40.6** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **2.43** | **330** | P | | **Pn** | **13 03 32.7** | **+0.4** |
| | 49nm,0.6s,baz=148,slow=12,SNR=56 | | | | | | | |
| MJAR | | | | S | | **Sn** | **13 04 01.3** | **-0.6** |
| | 34nm,0.6s,baz=126,slow=30,SNR=15 | | | | | | | |
| **JNU** | **Nakatsue** | **7.48** | **262** | P | | **Pn** | **13 04 40.5** | **+0.3** |
| | 7.5nm,0.6s,baz=146,slow=14,SNR=7.6 | | | | | | | |
| **JCJ** | **Chichijima** | **7.63** | **163** | S | | Sn | 13 05 52.0 | -15 |
| | 56nm,0.8s,baz=285,slow=20,SNR=2.3 | | | | | | | |
| **KSRS** | **Korea Array** | **10.03** | **291** | P | | **Pn** | **13 05 16.4** | **+1.7** |
| | 1.6nm,0.7s,baz=112,slow=14,SNR=4.1 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.17** | **114** | T | | T | 13 37 49.1 | |
| | baz=306,slow=75,SNR=15 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.18** | **114** | T | | T | 13 37 52.5 | |
| | baz=306,slow=75,SNR=15 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.19** | **114** | T | | T | 13 37 53.8 | |
| | baz=306,slow=75,SNR=15 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.69** | **314** | P | | **P** | **13 10 40.1** | **+0.6** |
| | 0.6nm,0.4s,baz=97,slow=4.9,SNR=3.3 | | | | | | | |
| | 0.6nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.38** | **304** | P | | **P** | **13 10 52.7** | **-0.5** |
| | 0.4nm,0.7s,baz=99,slow=8.0,SNR=2.2 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.55** | **310** | P | | **P** | **13 11 10.3** | **+0.1** |
| | 0.9nm,0.5s,baz=84,slow=7.0,SNR=3.7 | | | | | | | |
| | 0.9nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **51.33** | **314** | P | | **P** | **13 11 46.0** | **-0.6** |
| | 0.5nm,0.3s,baz=93,slow=9.1,SNR=2.5 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **ILAR** | **Eielson Array** | **52.41** | **31** | P | | **P** | **13 11 55.5** | **+1.0** |
| | 0.2nm,0.5s,baz=271,slow=7.0,SNR=2.3 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.33** | **186** | P | | **P** | **13 12 08.0** | **-1.0** |
| | 0.6nm,0.6s,baz=0.7,slow=7.5,SNR=9.5 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **70.46** | **332** | P | | **P** | **13 13 56.0** | **+0.1** |
| | 1.6nm,0.9s,baz=129,slow=5.2,SNR=4.4 | | | | | | | |
| | 1.6nm,0.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **75.49** | **322** | P | | **P** | **13 14 25.0** | **-0.8** |
| | 0.7nm,0.4s,baz=52,slow=6.1,SNR=4.7 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **82.42** | **32** | P | | **P** | **13 15 03.0** | **-0.7** |
| | 2.1nm,1.0s,baz=194,slow=5.4,SNR=1.5 | | | | | | | |
| | 2.1nm,1.0s | | | | | | | |

*GCG **24** 13:41:52.2±1.3, 16°.74N×90°.88W, h49km±999km, MD3.9*
*CATAC **24** 13:41:59.0±0.5, 13°.17N×89°.54W, h31km±3km, ML4.0*
*SNET **24** 13:42:00.0±0.8, 13°.19N×89°.53W, h44km±8km, ML4.0*

**ISC 24 13:42:00.3±1.6, 13°.20N±0°.08×89°.50W±0°.05, h48km±10km, n76, σ0°76/100, 4C-11D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **LALI** | **Alcalda de L** | **0.34** | **31** | *i*P | | **Pn** | **13 42 09.3** | **-0.4** |
| LALI | | | | *e*S | | **Sn** | **13 42 17.1** | **+0.9** |
| **LALI** | **Alcalda de L** | **0.34** | **31** | *i* P | | **Pn** | **13 42 09.2** | **-0.4** |
| LALI | | | | IAML | | | 13 42 09.6 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| LALI | | | | *i* S | | **Sn** | **13 42 16.6** | **+0.3** |
| **JAYA** | **Jayaque - finc** | **0.46** | **7** | *i*P | | **Pn** | **13 42 10.4** | **-0.7** |
| **JAYA** | **Jayaque - finc** | **0.46** | **7** | *i* P | | **Pn** | **13 42 10.5** | **-0.7** |
| JAYA | | | | *i* S | | **Sn** | **13 42 19.2** | **+0.4** |
| JAYA | | | | IAML | | | 13 42 19.7 | |
| | comp=Z,28μm,1.0s | | | | | | | |
| **PANCS** | **Alcalda de** | **0.52** | **37** | *e*P | | **Pn** | **13 42 11.1** | **-0.7** |
| **PANCS** | **Alcalda de** | **0.52** | **37** | *i* P | | **Pn** | **13 42 11.1** | **-0.7** |
| PANCS | | | | *i* S | | **Sn** | **13 42 20.0** | **+0.1** |
| PANCS | | | | IAML | | | 13 42 22.2 | |
| | comp=Z,13μm,1.0s | | | | | | | |
| **ITCA** | **Escuela Especi** | **0.52** | **25** | *i* P | | **Pn** | **13 42 11.2** | **-0.6** |
| ITCA | | | | IAML | | | 13 42 11.3 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| ITCA | | | | *i* S | | **Sn** | **13 42 20.5** | **+0.4** |
| **PMON** | **Piamonte** | **0.54** | **20** | *i*P | | **Pn** | **13 42 11.6** | **-0.6** |
| **PMON** | **Piamonte** | **0.54** | **20** | *i* P | | **Pn** | **13 42 11.5** | **-0.6** |
| PMON | | | | *i* S | | **Sn** | **13 42 21.2** | **+0.6** |
| PMON | | | | IAML | | | 13 42 28.5 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **LOMA** | **Loma Larga** | **0.55** | **36** | *i*P | | **Pn** | **13 42 11.7** | **-0.5** |
| **LOMA** | **Loma Larga** | **0.55** | **36** | *i* P | | **Pn** | **13 42 11.7** | **-0.5** |
| LOMA | | | | *i* S | | **Sn** | **13 42 21.2** | **+0.5** |
| LOMA | | | | IAML | | | 13 42 24.7 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.55** | **28** | *e*P | | **Pn** | **13 42 11.7** | **-0.6** |
| **SNET** | **Serv Nac Est T** | **0.55** | **28** | *i* P | | **Pn** | **13 42 11.6** | **-0.6** |
| SNET | | | | IAML | | | 13 42 12.1 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| SNET | | | | *i* S | | **Sn** | **13 42 21.3** | **+0.6** |
| **BOQS** | **Boqueron** | **0.58** | **22** | *i*P | | **Pn** | **13 42 12.2** | **-0.4** |
| **UEES** | **Universidad Ev** | **0.58** | **26** | *i*P | | **Pn** | **13 42 12.0** | **-0.5** |
| **UEES** | **Universidad Ev** | **0.58** | **26** | *i* P | | **Pn** | **13 42 12.0** | **-0.5** |
| UEES | | | | *i* S | | **Sn** | **13 42 22.2** | **+1.0** |
| UEES | | | | IAML | | | 13 42 23.9 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **UTEC** | **Universidad Te** | **0.58** | **30** | *i* P | | **Pn** | **13 42 12.0** | **-0.5** |
| UTEC | | | | *i* S | | **Sn** | **13 42 22.5** | **+1.2** |
| UTEC | | | | IAML | | | 13 42 25.5 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **LFRS** | **El Faro** | **0.60** | **45** | *e*P | | **Pn** | **13 42 12.4** | **-0.4** |
| LFRS | | | | *e*S | | **Sn** | **13 42 24.4** | **+2.5** |
| **IGN** | **Direccin Gen** | **0.61** | **32** | *e*P | | **Pn** | **13 42 12.4** | **-0.4** |
| **IGN** | **Direccin Gen** | **0.61** | **32** | *i* P | | **Pn** | **13 42 12.4** | **-0.4** |
| IGN | | | | *i* S | | **Sn** | **13 42 23.0** | **+1.1** |
| IGN | | | | IAML | | | 13 42 26.0 | |
| | comp=Z,22μm,1.0s | | | | | | | |
| **CEDA** | **San Andres** | **0.61** | **10** | *i*P | | **Pn** | **13 42 12.4** | **-0.5** |
| **CEDA** | **San Andres** | **0.61** | **10** | *i* P | | **Pn** | **13 42 12.4** | **-0.5** |
| CEDA | | | | IAML | | | 13 42 12.5 | |
| | comp=Z,17μm,1.0s | | | | | | | |
| CEDA | | | | *i* S | | **Sn** | **13 42 22.4** | **+0.5** |
| **UDBS** | **Universidad Do** | **0.62** | **33** | *e*P | | **Pn** | **13 42 12.6** | **-0.5** |
| **UDBS** | **Universidad Do** | **0.62** | **33** | *i* P | | **Pn** | **13 42 12.5** | **-0.5** |
| UDBS | | | | *i* S | | **Sn** | **13 42 23.3** | **+1.2** |
| UDBS | | | | IAML | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CRIN** | **San Cristobal** | **2.44** | **101** | *i* P | **Pn** | **13 42 36.8** | **-1.0** |
| CRIN | | | | IAML | | 13 43 12.2 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **STG3** | **Santiaguito 3,** | **2.51** | **307** | *i* P | Pn | 13 42 25.4 | -13 |

**IDC 24 13:45:27.2±39.0, 17.75S×178.08W, h529km±351km, mb3.1/4, mbtmp4.1/4, Error ellipse: s-maj=308.6km s-min=49.0km az=45.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.98** | **241** | P | P | 13 52 07.9 | -0.2 |
| | 0.6nm,0.3s,baz=101,slow=10,SNR=3.7 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | P | 13 52 55.1 | -0.4 |
| | 0.8nm,0.5s,baz=95,slow=7.3,SNR=31 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.14** | **254** | P | P | 13 52 56.9 | +0.1 |
| | 8.5nm,0.5s,baz=88,slow=8.2,SNR=218 | | | | | | |
| ASAR | | | | PcP | PcP | 13 54 25.8 | -0.3 |
| | 0.2nm,0.6s,baz=110,slow=3.7,SNR=2.2 | | | | | | |
| | 8.5nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.30** | **180** | P | P | 13 55 59.0 | 0.0 |
| | 0.6nm,1.0s,baz=34,slow=12,SNR=1.0 | | | | | | |
| | 0.6nm,1.0s | | | | | | |

*BJI **24** 14:15:53.6±0.0, 41.12N×142.58E, h51km, mb5.2/81, mB5.3/39, Ms4.6/62, Ms7 4.5/63*
*MOS **24** 14:15:54.2±1.0, 41.22N×142.56E, h45km, mb5.5/63, MS4.7/21, Error ellipse: s-maj=6.1km s-min=3.7km az=113.8*
*NIED **24** 14:15:54.6, 41.09N×142.63E, h32km, MW5.0, Moment Tensor Solution. s3 Moment tensor: Scale 10^16^Nm; Mrr2.03; Mθθ0.25; Mφφ -2.28; Mrθ1.72; Mθφ -0.13; Mφr3.12; Fault plane solution: M0 4.17000×10^16^ NP1:φs25.00000°, δ75.00000°, λ103.00000°. NP2:φs163.00000°, δ19.00000°, λ50.00000°.*
*JMA **24** 14:15:54.6±0.2, 41.1N±0.5×142.6E±0.6, h32km±4km, MD5.1/37, MW5.1/37, E OFF AOMORI PREF*
*JMA Felt III J1 at E OFF AOMORI PREF .*
*NEIC **24** 14:15:55.9±2.0, 41.13N±0.06×142.63E±0.08, h43km±6km, mb5.3/131, Error ellipse: s-maj=10.9km s-min=5.6km az=128.0*
*IDC **24** 14:15:56.4±1.4, 41.22N×142.58E, h49km±11km, mb4.7/31, mbtmp4.9/39, ML4.4/7, MS4.3/74, Error ellipse: s-maj=12.2km s-min=8.5km az=108.0*
*BGR **24** 14:15:58.0, 41.68N×142.58E, h62km±4km, mb5.1, Ms4.6*
**ISC 24 14:15:56.2±0.3, 41.18N±0.03×142.61E±0.03, h50km±2km, h50km:pP-P, n1162, σ1919/1179, mb5.2/219, MS4.6/107, 81C-49D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ERM** | **Erimo** | **0.93** | **26** | P | **Pn** | **14 16 13.1** | **+0.1** |
| **ERM** | **Erimo** | **0.93** | **26** | | **Pn** | **14 16 12.7** | **-0.3** |
| ERM | | | | Sn | **Sn** | **14 16 26.5** | **+1.2** |
| **ERM** | **Erimo** | **0.93** | **26** | P | **Pn** | **14 16 12.7** | **-0.3** |
| ERM | | | | | | 14 16 26.5 | |
| **JEM** | **Erimo** | **0.94** | **26** | P | **Pn** | **14 16 13.1** | **+0.1** |
| **JEM** | **Erimo** | **0.94** | **26** | *i* P | **Pn** | **14 16 12.6** | **-0.4** |
| JEM | | | | S | **Sn** | **14 16 26.4** | **+1.1** |
| **JEM** | **Erimo** | **0.94** | **26** | A | A | 14 16 12.6 | |
| | comp=E,52nm,1.9s,comp=N,49nm,2.1s | | | | | | |
| **JARK** | **Aomorirokkasho** | **0.95** | **260** | ⇓*i* P | **Pn** | **14 16 12.0** | **-1.2** |
| JARK | | | | ⇓S | **Sn** | **14 16 24.4** | **-1.4** |
| **JARK** | **Aomorirokkasho** | **0.95** | **260** | A | A | 14 16 12.0 | |
| | comp=E,58nm,1.2s,comp=N,124nm,0.8s | | | | | | |
| **JAHD** | **Aomorihigashid** | **0.96** | **276** | ⇓*i* P | **Pn** | **14 16 12.3** | **-1.0** |
| JAHD | | | | ⇓S | **Sn** | **14 16 25.2** | **-0.7** |
| **JAHD** | **Aomorihigashid** | **0.96** | **276** | A | A | 14 16 12.3 | |
| | comp=E,136nm,1.1s,comp=N,133nm,1.1s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **1.11** | **6** | ⇓*i* P | **Pn** | **14 16 15.8** | **+0.4** |
| **JNBK** | **Urakawa-nobuka** | **1.11** | **6** | A | A | 14 16 15.8 | |
| | comp=E,76nm,3.0s,comp=N,97nm,4.1s | | | | | | |
| **JANG** | **Nango** | **1.15** | **226** | ⇓*i* P | **Pn** | **14 16 14.1** | **-1.9** |
| JANG | | | | ⇓S | **Sn** | **14 16 28.2** | **-2.5** |
| **JANG** | **Nango** | **1.15** | **226** | A | A | 14 16 14.1 | |
| | comp=E,67nm,0.5s,comp=N,85nm,0.8s | | | | | | |
| **JKEN** | **Kujiedanarisaw** | **1.19** | **215** | A | A | 14 16 14.5 | |
| | comp=E,106nm,0.4s,comp=N,115nm,0.8s | | | | | | |
| **JOT** | **Ohata** | **1.19** | **280** | ⇓P | **Pn** | **14 16 15.8** | **-0.6** |
| JOT | | | | ⇓*e*S | **Sn** | **14 16 30.9** | **-0.6** |
| **JOT** | **Ohata** | **1.19** | **280** | A | A | 14 16 15.8 | |
| | comp=E,55nm,1.4s,comp=N,56nm,1.4s | | | | | | |
| **JTM** | **Tenmabayashi** | **1.23** | **252** | P | **Pn** | **14 16 16.4** | **-0.5** |
| **JTM** | **Tenmabayashi** | **1.23** | **252** | Pn | **Pn** | **14 16 16.4** | **-0.5** |
| JTM | | | | Sn | **Sn** | **14 16 32.6** | **+0.2** |
| **JTM** | **Tenmabayashi** | **1.23** | **252** | ⇓P | **Pn** | **14 16 16.5** | **-0.5** |
| JTM | | | | ⇓S | **Sn** | **14 16 31.9** | **-0.5** |
| **JTM** | **Tenmabayashi** | **1.23** | **252** | A | A | 14 16 16.5 | |
| | comp=E,107nm,1.5s,comp=N,214nm,1.0s | | | | | | |
| **JTHR** | **Tokachihiroo** | **1.23** | **25** | A | A | 14 16 17.1 | |
| | comp=E,64nm,2.7s,comp=N,49nm,1.5s | | | | | | |
| **JSHD** | **Hidakashinhida** | **1.24** | **355** | A | A | 14 16 17.4 | |
| | comp=E,127nm,1.5s,comp=N,102nm,4.5s | | | | | | |
| **JTH** | **Tanohata** | **1.36** | **205** | A | A | 14 16 17.0 | |
| | comp=E,19nm,0.9s,comp=N,21nm,1.3s | | | | | | |
| **JKB** | **Kayabe** | **1.38** | **302** | ⇓*i* P | **Pn** | **14 16 18.6** | **-0.4** |
| **JKB** | **Kayabe** | **1.38** | **302** | A | A | 14 16 18.6 | |
| | comp=E,43nm,1.8s,comp=N,48nm,4.5s | | | | | | |
| **JIAM** | **Iburiatsuma** | **1.53** | **341** | ⇓*i* P | **Pn** | **14 16 22.6** | **+1.5** |
| **JIAM** | **Iburiatsuma** | **1.53** | **341** | A | A | 14 16 22.6 | |
| | comp=E,106nm,3.9s,comp=N,121nm,1.9s | | | | | | |
| **JKZ** | **Kuzumaki** | **1.54** | **220** | A | A | 14 16 19.9 | |
| | comp=E,89nm,1.7s,comp=N,116nm,0.7s | | | | | | |
| **JCH** | **Churui** | **1.54** | **21** | *i* P | **Pn** | **14 16 21.4** | **+0.1** |
| **JCH** | **Churui** | **1.54** | **21** | A | A | 14 16 21.4 | |
| | comp=E,31nm,2.2s,comp=N,28nm,2.1s | | | | | | |
| **JBT2** | **Biratori 2** | **1.61** | **354** | P | **Pn** | **14 16 22.8** | **+0.6** |
| **JBT2** | **Biratori 2** | **1.61** | **354** | A | A | 14 16 22.8 | |
| | comp=E,27nm,2.9s,comp=N,28nm,1.2s | | | | | | |
| **JSI2** | **Shiura 2** | **1.66** | **267** | A | A | 14 16 22.7 | |
| | comp=E,58nm,1.6s,comp=N,95nm,0.7s | | | | | | |
| **JSR** | **Shiriuchi** | **1.68** | **283** | ⇓*i* P | **Pn** | **14 16 23.4** | **+0.3** |
| JSR | | | | ⇓S | **Sn** | **14 16 44.6** | **+1.1** |
| **JSR** | **Shiriuchi** | **1.68** | **283** | A | A | 14 16 23.4 | |
| | comp=E,89nm,3.1s,comp=N,36nm,1.5s | | | | | | |
| **MIYJ** | **Miyakonagasawa** | **1.71** | **201** | A | A | 14 16 22.1 | |
| | comp=E,28nm,0.8s,comp=N,32nm,1.3s | | | | | | |
| **JNB** | **Noboribetsu** | **1.74** | **318** | A | A | 14 16 24.7 | |
| | comp=E,18nm,1.5s,comp=N,19nm,1.1s | | | | | | |
| **JHHS** | **Hirosakihyakuz** | **1.78** | **254** | A | A | 14 16 24.1 | |
| | comp=E,85nm,1.7s,comp=N,120nm,0.8s | | | | | | |
| **JAH** | **Hinai** | **1.79** | **237** | ⇓*i* P | **Pn** | **14 16 24.4** | **-0.2** |
| JAH | | | | ⇓S | **Sn** | **14 16 46.6** | **+0.3** |
| **JAH** | **Hinai** | **1.79** | **237** | A | A | 14 16 24.4 | |
| | comp=E,52nm,1.0s,comp=N,77nm,1.9s | | | | | | |
| **JEW** | **Eniwo** | **1.87** | **333** | ⇓*i* P | **Pn** | **14 16 26.8** | **+1.0** |
| **JEW** | **Eniwo** | **1.87** | **333** | A | A | 14 16 26.8 | |
| | comp=E,180nm,1.6s,comp=N,134nm,1.6s | | | | | | |
| **JSZI** | **Iwateshizukuis** | **1.91** | **222** | A | A | 14 16 25.3 | |
| | comp=E,111nm,1.9s,comp=N,118nm,1.7s | | | | | | |
| **JYM2** | **Yakumo 2** | **1.92** | **300** | A | A | 14 16 27.1 | |
| | comp=E,31nm,2.4s,comp=N,50nm,2.2s | | | | | | |
| **JOB** | **Onbets** | **1.95** | **28** | A | A | 14 16 27.7 | |
| | comp=E,27nm,1.2s,comp=N,37nm,1.5s | | | | | | |
| **JOM** | **Ohasama** | **1.98** | **211** | ⇓*i* P | **Pn** | **14 16 26.2** | **-1.0** |
| **JOM** | **Ohasama** | **1.98** | **211** | A | A | 14 16 26.2 | |
| | comp=E,81nm,1.0s,comp=N,87nm,0.4s | | | | | | |
| **JFR** | **Furan** | **1.98** | **360** | A | A | 14 16 28.4 | |
| | comp=E,22nm,1.7s,comp=N,21nm,3.0s | | | | | | |
| **JOMM** | **Oshimamatsumae** | **1.99** | **281** | P | **Pn** | **14 16 28.1** | **+0.8** |
| JOMM | | | | *e*S | **Sn** | **14 16 53.1** | **+2.1** |
| **JOMM** | **Oshimamatsumae** | **1.99** | **281** | A | A | 14 16 28.1 | |
| | comp=E,29nm,1.6s,comp=N,17nm,2.8s | | | | | | |
| **JIW** | **Iwasaki** | **2.06** | **254** | A | A | 14 16 28.1 | |
| | comp=E,40nm,0.7s,comp=N,70nm,0.8s | | | | | | |
| **JNTW** | **Noshirotokiwa** | **2.07** | **245** | A | A | 14 16 28.0 | |
| | comp=E,118nm,1.5s,comp=N,137nm,2.7s | | | | | | |
| **OFUJ** | **Ofunato** | **2.21** | **199** | A | A | 14 16 29.4 | |
| | comp=E,35nm,1.4s,comp=N,21nm,2.4s | | | | | | |
| **JISS** | **Ishikarishitsu** | **2.27** | **338** | A | A | 14 16 32.5 | |
| | comp=E,65nm,2.9s,comp=N,63nm,2.7s | | | | | | |
| **JAR** | **Ashorobuto** | **2.29** | **22** | A | A | 14 16 32.5 | |
| | comp=E,19nm,2.6s,comp=N,16nm,1.8s | | | | | | |
| **JRG** | **Rokugo** | **2.33** | **221** | A | A | 14 16 31.4 | |
| | comp=E,47nm,0.5s,comp=N,60nm,1.7s | | | | | | |
| **JAB** | **Ashibetsu** | **2.34** | **353** | A | A | 14 16 33.5 | |
| | comp=E,34nm,2.7s,comp=N,47nm,2.9s | | | | | | |
| **JHST** | **Hiyamasetana** | **2.39** | **302** | A | A | 14 16 33.8 | |
| | comp=E,22nm,3.1s,comp=N,16nm,4.7s | | | | | | |
| **JAK** | **Akkeshi** | **2.39** | **40** | A | A | 14 16 33.8 | |
| | comp=E,19nm,1.4s,comp=N,24nm,2.1s | | | | | | |
| **JYW** | **Yuwa** | **2.46** | **229** | A | A | 14 16 33.3 | |
| | comp=E,52nm,1.1s,comp=N,70nm,1.3s | | | | | | |
| **JMK** | **Ichinoseki** | **2.46** | **206** | A | A | 14 16 33.0 | |
| | comp=E,31nm,3.2s,comp=N,26nm,1.8s | | | | | | |
| **JOSM** | **Okushiri--Mats** | **2.52** | **292** | A | A | 14 16 35.5 | |
| | comp=E,13nm,2.5s,comp=N,10.0nm,7.0s | | | | | | |
| **JKMT** | **Kesennumamotoy** | **2.52** | **201** | A | A | 14 16 33.8 | |
| | comp=E,29nm,1.8s,comp=N,15nm,1.2s | | | | | | |
| **JHR** | **Hokuryu** | **2.65** | **346** | A | A | 14 16 37.9 | |
| | comp=E,45nm,2.5s,comp=N,31nm,1.9s | | | | | | |
| **JSK** | **Shakotan** | **2.69** | **325** | A | A | 14 16 38.4 | |
| | comp=E,12nm,2.3s,comp=N,9.0nm,3.2s | | | | | | |
| **JKHN** | **Kushirohamanak** | **2.69** | **44** | A | A | 14 16 38.0 | |
| | comp=E,19nm,3.3s,comp=N,17nm,1.3s | | | | | | |
| **JKK2** | **Kamakawa 2** | **2.70** | **2** | A | A | 14 16 38.5 | |
| | comp=E,12nm,2.1s,comp=N,16nm,2.6s | | | | | | |
| **JYK** | **Kaneyama** | **2.84** | **218** | A | A | 14 16 38.6 | |
| | comp=E,15nm,2.1s,comp=N,20nm,1.1s | | | | | | |
| **JNK** | **Nakash** | **2.87** | **32** | A | A | 14 16 40.7 | |
| | comp=E,10.0nm,1.3s,comp=N,14nm,1.3s | | | | | | |
| **JMP** | **Maruseppu** | **2.88** | **11** | A | A | 14 16 41.1 | |
| | comp=E,13nm,2.6s,comp=N,10.0nm,1.6s | | | | | | |
| **JOFO** | **Osakifurukawao** | **2.88** | **207** | A | A | 14 16 39.1 | |
| | comp=E,111nm,1.6s,comp=N,68nm,1.8s | | | | | | |
| **JIO** | **Ouri** | **2.89** | **200** | A | A | 14 16 39.0 | |
| | comp=E,16nm,0.6s,comp=N,17nm,1.0s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.94** | **360** | Pn | **Pn** | **14 16 41.4** | **+1.0** |
| **ASAJ** | **Asahikawa** | **2.94** | **360** | P | **Pn** | **14 16 41.1** | **+0.8** |
| | comp=N,200nm,0.3s,baz=217,slow=9.7,SNR=1072 | | | | | | |
| ASAJ | | | | S | **Sn** | **14 17 13.3** | **-1.1** |
| | comp=N,1μm,0.8s,baz=316,slow=12,SNR=8.3 | | | | | | |
| | comp=N,410nm,0.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **2.94** | **360** | A | A | 14 16 42.0 | |
| | comp=E,11nm,5.5s,comp=N,10.0nm,2.9s | | | | | | |
| **JTKR** | **Abashiri--Toko** | **2.95** | **19** | A | A | 14 16 42.1 | |
| | comp=E,8.0nm,2.3s,comp=N,7.0nm,2.8s | | | | | | |
| **JYYZ** | **Yamagatayuza** | **2.98** | **224** | A | A | 14 16 40.7 | |
| | comp=E,44nm,2.3s,comp=N,38nm,1.9s | | | | | | |
| **JTB** | **Tobi-shima** | **3.06** | **231** | A | A | 14 16 42.0 | |
| | comp=E,24nm,3.3s,comp=N,29nm,3.0s | | | | | | |
| **JNSB** | **Nemuroshibetsu** | **3.15** | **34** | A | A | 14 16 44.6 | |
| | comp=E,17nm,1.4s,comp=N,17nm,3.3s | | | | | | |
| **JOU** | **Okura** | **3.18** | **209** | A | A | 14 16 43.3 | |
| | comp=E,19nm,0.6s,comp=N,21nm,0.6s | | | | | | |
| **JSS** | **Shosan** | **3.27** | **350** | A | A | 14 16 46.7 | |
| | comp=E,19nm,5.0s,comp=N,21nm,4.2s | | | | | | |
| **JRA** | **Rausu** | **3.33** | **33** | A | A | 14 16 47.2 | |
| | comp=E,8.0nm,2.0s,comp=N,11nm,2.0s | | | | | | |
| **JYA** | **Atsumi** | **3.41** | **222** | A | A | 14 16 46.7 | |
| | comp=E,33nm,1.4s,comp=N,35nm,1.7s | | | | | | |
| **JYS** | **Shirataka** | **3.54** | **214** | A | A | 14 16 48.5 | |
| | comp=E,32nm,2.2s,comp=N,43nm,3.0s | | | | | | |
| **JMM** | **Marumori** | **3.59** | **204** | P | **Pn** | **14 16 49.4** | **+0.1** |
| **JMM** | **Marumori** | **3.59** | **204** | | **Pn** | **14 16 48.7** | **-0.6** |
| **JMM** | **Marumori** | **3.59** | **204** | A | A | 14 16 49.0 | |
| | comp=E,25nm,1.6s,comp=N,17nm,2.1s | | | | | | |
| **JMST** | **Minamisoumatoc** | **3.69** | **202** | A | A | 14 16 50.5 | |
| | comp=E,20nm,0.9s,comp=N,19nm,1.9s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.73** | **39** | *d i* P | **Pn** | **14 16 50.2** | **-1.0** |
| YUK | | | | *i* S | **Sn** | **14 17 31.6** | **-2.3** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,2μm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,386nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,8μm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,7μm,0.4s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=N,2μm,13.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=E,2μm,13.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,2μm,13.0s | | | | | | |
| **JYAR** | **Yonezawaarcadi** | **3.77** | **211** | A | A | 14 16 51.7 | |
| | comp=E,46nm,1.2s,comp=N,43nm,1.3s | | | | | | |
| **JOTO** | **OTAMA OYAMA** | **4.02** | **207** | A | A | 14 16 55.1 | |
| | comp=E,21nm,1.8s,comp=N,23nm,2.9s | | | | | | |
| **JFK** | **Kawauchi** | **4.04** | **200** | A | A | 14 16 55.3 | |
| | comp=E,13nm,1.7s,comp=N,9.0nm,1.4s | | | | | | |
| **SHO** | **Shikotan** | **4.12** | **48** | *d i* P | **Pn** | **14 16 54.4** | **-2.1** |
| SHO | | | | *i* S | **Sn** | **14 17 38.0** | **-5.4** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,169nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,83nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,181nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| **JNS** | **Sasagawa** | **4.21** | **218** | A | A | 14 16 58.0 | |
| | comp=E,5.0nm,1.6s,comp=N,5.0nm,1.7s | | | | | | |
| **ONAJ** | **Iwakimizuishiy** | **4.30** | **200** | A | A | 14 16 59.0 | |
| | comp=E,14nm,2.4s,comp=N,12nm,1.5s | | | | | | |
| **JFFD** | **Fukushimafurud** | **4.38** | **202** | A | A | 14 17 00.1 | |
| | comp=E,8.0nm,5.5s,comp=N,8.0nm,0.8s | | | | | | |
| **JSD** | **Sado** | **4.59** | **228** | P | **Pn** | **14 17 04.5** | **+1.5** |
| **JSD** | **Sado** | **4.59** | **228** | Pn | **Pn** | **14 17 03.7** | **+0.7** |
| **JSB** | **Shiboa** | **4.69** | **207** | A | A | 14 17 04.6 | |
| | comp=E,19nm,3.2s,comp=N,14nm,2.0s | | | | | | |
| **JYT** | **Yasato** | **5.29** | **202** | A | A | 14 17 12.9 | |
| | comp=E,8.0nm,4.4s,comp=N,6.0nm,0.5s | | | | | | |
| **JIHU** | **Itakohorinouch** | **5.45** | **198** | A | A | 14 17 15.2 | |
| | comp=E,29nm,1.4s,comp=N,32nm,2.1s | | | | | | |
| **KUR** | **Kuril'sk** | **5.59** | **42** | *d i* P | **Pn** | **14 17 16.4** | **-0.2** |
| KUR | | | | *e*S | **Sn** | **14 18 18.1** | **-1.3** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,801nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,86nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,125nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,674nm,0.8s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,316nm,0.4s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **5.76** | **218** | Pn | **Pn** | **14 17 20.1** | **+1.0** |
| **MAJO** | **Matsushiro** | **5.76** | **218** | P | **Pn** | **14 17 20.9** | **+1.8** |
| **MAJO** | **Matsushiro** | **5.76** | **218** | Pn | **Pn** | **14 17 18.7** | **-0.4** |
| **MAJO** | **Matsushiro** | **5.76** | **218** | *d i* P | **Pn** | **14 17 20.6** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **5.76** | **218** | P | **Pn** | **14 17 20.7** | **+1.6** |
| | comp=N,3.6nm,0.3s,baz=37,slow=12,SNR=164 | | | | | | |
| MJAR | | | | S | **Sn** | **14 18 31.8** | **+7.9** |
| | comp=N,42nm,0.7s,baz=37,slow=12,SNR=0.9 | | | | | | |
| MJAR | | | | LR | LR | 14 19 57.7 | |
| | comp=N,3μm,20.7s,baz=39,slow=42 | | | | | | |
| | comp=N,158nm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.78** | **1** | P | **Pn** | **14 17 20.8** | **+1.6** |
| **YSS** | **Yuzh-Sakhalins** | **5.78** | **1** | Pn | **Pn** | **14 17 19.9** | **+0.6** |
| **YSS** | **Yuzh-Sakhalins** | **5.78** | **1** | *e*P | **Pn** | **14 17 20.3** | **+1.1** |
| YSS | | | | *e*S | **Sn** | **14 18 26.9** | **+2.8** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,800nm,5.2s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,320nm,1.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,400nm,1.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,140nm,0.8s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,2μm,17.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,2μm,15.0s | | | | | | |
| **TEY** | **Ternei** | **5.84** | **313** | ⇑*e*P | **Pn** | **14 17 20.5** | **+0.3** |
| TEY | | | | pmax | pmax | | |
| | comp=E,70nm,0.9s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=N,70nm,0.8s | | | | | | |
| TEY | | | | pmax | pmax | | |
| | comp=Z,80nm,0.7s | | | | | | |
| **JHU** | **Hanno** | **5.92** | **207** | A | A | 14 17 21.8 | |
| | comp=E,5.0nm,2.8s,comp=N,5.0nm,3.4s | | | | | | |
| **JGF** | **Kuroka** | **6.93** | **218** | P | **Pn** | **14 17 37.7** | **+2.6** |
| **JGF** | **Kuroka** | **6.93** | **218** | Pn | **Pn** | **14 17 36.5** | **+1.4** |
| **INU** | **Inuyama** | **7.29** | **219** | P | **Pn** | **14 17 42.4** | **+2.4** |
| **INU** | **Inuyama** | **7.29** | **219** | Pn | **Pn** | **14 17 42.1** | **+2.1** |
| **UGL** | **Uglegorsk** | **7.91** | **357** | *e*P | **Pn** | **14 17 48.9** | **+0.5** |
| UGL | | | | *e*S | **Sn** | **14 19 19.6** | **+3.1** |
| UGL | | | | pmax | pmax | | |
| | comp=Z,103nm,1.1s | | | | | | |
| UGL | | | | pmax | pmax | | |
| | comp=Z,600nm,5.2s | | | | | | |
| UGL | | | | MLR | MLR | | |
| | comp=Z,2μm,13.0s | | | | | | |
| UGL | | | | MLR | MLR | | |
| | comp=N,3μm,14.0s | | | | | | |
| UGL | | | | MLR | MLR | | |
| | comp=E,4μm,19.0s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **8.35** | **197** | P | **Pn** | **14 17 51.5** | **-3.1** |
| | comp=E,108nm,0.3s,baz=48,slow=7.3,SNR=20 | | | | | | |
| JHJ | | | | S | **Sn** | **14 19 19.4** | **-8.0** |
| | comp=E,173nm,0.3s,baz=91,slow=24,SNR=2.4 | | | | | | |
| **JHJ2** | **Mitsune** | **8.35** | **196** | Pn | **Pn** | **14 17 51.7** | **-2.9** |
| **USA0B** | **Ussuriysk Arra** | **8.38** | **295** | Pn | **Pn** | **14 17 56.5** | **+1.6** |
| **USA0B** | **Ussuriysk Arra** | **8.38** | **295** | *i* P | **Pn** | **14 17 55.4** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **8.38** | **295** | Pn | **Pn** | **14 17 56.2** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **8.38** | **295** | P | **Pn** | **14 17 55.5** | **+0.6** |
| | comp=E,4.3nm,0.3s,baz=101,slow=14,SNR=110 | | | | | | |
| USRK | | | | S | **Sn** | **14 19 29.8** | **+1.6** |
| | comp=E,13nm,0.7s,baz=112,slow=17,SNR=0.7 | | | | | | |
| USRK | | | | LR | LR | 14 21 09.8 | |
| | comp=E,3μm,19.9s,baz=109,slow=38 | | | | | | |
| | comp=E,144nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.38** | **295** | P | **Pn** | **14 17 56.2** | **+1.3** |
| **MSHR** | **Mys Shultsa** | **8.66** | **283** | *ce*P | **Pn** | **14 17 58.4** | **-0.3** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,196nm,1.3s | | | | | | |
| **PSTR** | **Posyet** | **8.92** | **283** | *i* P | **Pn** | **14 18 02.7** | **+0.4** |
| **TYV** | **Tymovskoe** | **9.69** | **0** | *e*P | **Pn** | **14 18 13.4** | **+0.6** |
| TYV | | | | *e*S | **Sn** | **14 20 02.3** | **+2.2** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,4.1s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,50nm,0.9s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,200nm,5.5s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,400nm,5.5s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,8.0nm,1.2s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,9.0nm,1.2s | | | | | | |
| TYV | | | | MLR | MLR | | |
| | comp=Z,2μm,18.0s | | | | | | |
| TYV | | | | MLR | MLR | | |
| | comp=N,2μm,18.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **10.15** | **294** | P | **Pn** | **14 18 20.1** | **+1.0** |
| **MDJ** | **Mudanjiang** | **10.15** | **294** | P | **Pn** | **14 18 22.6** | **+3.5** |
| MDJ | | | | sP | | 14 18 33.0 | |
| MDJ | | | | pmax | pmax | | |
| | comp=N,110nm,0.9s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=N,820nm,5.2s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=N,4μm,15.7s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=N,4μm,13.8s | | | | | | |
| **MDJ** | **Mudanjiang** | **10.15** | **294** | Pn | **Pn** | **14 18 21.6** | **+2.5** |
| **GRNR** | **Gornyy** | **10.51** | **338** | ⇑*i* P | **Pn** | **14 18 24.4** | **+0.4** |
| GRNR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=E,850nm,16.0s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=N,1μm,20.0s | | | | | | |
| GRNR | | | | MLR | MLR | | |
| | comp=Z,1μm,18.0s | | | | | | |
| **KLR** | **Kul'dur** | **11.10** | **320** | P | **Pn** | **14 18 33.7** | **+1.5** |
| | comp=Z,0.4nm,0.3s,baz=127,slow=13,SNR=25 | | | | | | |
| KLR | | | | LR | LR | 14 23 10.7 | |
| | comp=Z,2μm,18.7s,baz=138,slow=39 | | | | | | |
| | comp=Z,22nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **11.10** | **320** | *ce*P | **Pn** | **14 18 33.6** | **+1.5** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,28nm,1.0s | | | | | | |
| **BNX** | **BinXian** | **11.95** | **297** | ⇑P | **Pn** | **14 18 45.3** | **+1.6** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,130nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **11.96** | **257** | P | **Pn** | **14 18 45.4** | **+1.5** |
| | comp=Z,1.7nm,0.3s,baz=71,slow=11,SNR=30 | | | | | | |
| KSRS | | | | S | **Sn** | **14 20 58.1** | **+2.2** |
| | comp=Z,11nm,0.9s,baz=63,slow=25,SNR=4.6 | | | | | | |
| KSRS | | | | LR | LR | 14 23 03.3 | |
| | comp=Z,2μm,18.5s,baz=65,slow=36 | | | | | | |
| | comp=Z,60nm,1.0s | | | | | | |
| **KSAR** | **Wonju Array Be** | **12.00** | **257** | Pn | **Pn** | **14 18 47.5** | **+3.1** |
| **KSAR** | **Wonju Array Be** | **12.00** | **257** | P | **Pn** | **14 18 47.5** | **+3.1** |
| **NKL** | **Nikolayevsk** | **12.05** | **354** | *e*P | **Pn** | **14 18 46.1** | **+1.1** |
| NKL | | | | pmax | pmax | | |
| | comp=N,137nm,1.1s | | | | | | |
| NKL | | | | pmax | pmax | | |
| | comp=E,331nm,1.1s | | | | | | |
| NKL | | | | pmax | pmax | | |
| | comp=Z,254nm,1.1s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=E,5μm,12.0s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=N,11μm,20.0s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=Z,9μm,26.0s | | | | | | |
| **JNU** | **Nakatsue** | **12.33** | **233** | P | **Pn** | **14 18 49.5** | **+0.5** |
| **JNU** | **Nakatsue** | **12.33** | **233** | P | **Pn** | **14 18 49.1** | **+0.1** |
| | comp=Z,1.3nm,0.3s,baz=110,slow=1.3,SNR=13 | | | | | | |
| JNU | | | | LR | LR | 14 23 45.7 | |
| | comp=Z,1μm,20.3s,baz=56,slow=38 | | | | | | |
| | comp=Z,24nm,1.0s | | | | | | |
| **OKH** | **Okha** | **12.38** | **1** | *de*P | Pn | 14 18 33.3 | -16 |
| OKH | | | | pmax | pmax | | |
| | comp=Z,100nm,14.0s | | | | | | |
| OKH | | | | MLR | MLR | | |
| | comp=N,3μm,17.0s | | | | | | |
| OKH | | | | MLR | MLR | | |
| | comp=E,2μm,15.0s | | | | | | |
| OKH | | | | MLR | MLR | | |
| | comp=Z,1μm,18.0s | | | | | | |
| **TJN** | **Taejon** | **12.82** | **253** | P | **Pn** | **14 18 53.3** | **-2.3** |
| **TJN** | **Taejon** | **12.82** | **253** | *i* P | **Pn** | **14 18 55.5** | **-0.1** |
| **INCN** | **Inchon** | **12.90** | **259** | P | **Pn** | **14 18 58.3** | **+1.5** |
| **CN2** | **Changchun** | **12.93** | **287** | ⇓

DL2 LR LR
comp=Z,2µm,25.0s
**ZEA Zeya 16.25 326** *e*P **Pn 14 19 38.4 -2.4**
ZEA pmax pmax
comp=N,70nm,0.8s
ZEA pmax pmax
comp=E,50nm,0.8s
ZEA pmax pmax
comp=Z,100nm,0.9s
ZEA MLR MLR
comp=E,700nm,14.0s
ZEA MLR MLR
comp=N,400nm,16.0s
ZEA MLR MLR
comp=Z,800nm,19.0s
**HIA Hailar 17.97 304** P **Pn 14 20 00.3 -1.9**
**HIA Hailar 17.97 304** **Pn 14 19 59.7 -2.6**
**HIA Hailar 17.97 304** P **Pn 14 19 59.7 -2.6**
HIA pmax pmax
comp=Z,74nm,0.9s
**JOW Kunigami 18.56 224** P **P 14 20 08.1 -0.7**
**JOW Kunigami 18.56 224** P **P 14 20 07.7 -1.2**
comp=Z,2.9nm,0.3s,baz=30,slow=14,SNR=4.7
JOW LR LR 14 28 19.1
comp=Z,766nm,19.3s,baz=130,slow=40
comp=Z,14nm,0.4s
**MA2 Magadan 19.11 13** P **P 14 20 13.8 -0.8**
**MA2 Magadan 19.11 13** P **P 14 20 12.8 -1.8**
**MA2 Magadan 19.11 13** P **P 14 20 12.7 -2.0**
comp=Z,22nm,0.8s,baz=204,slow=11,SNR=16
MA2 LR LR 14 28 54.7
comp=Z,660nm,19.0s,baz=202,slow=41
**MA2 Magadan 19.11 13***ce*P **P 14 20 13.4 -1.2**
MA2 pmax pmax
comp=Z,21nm,0.7s
**MA2 Magadan 19.11 13** P **P 14 20 13.0 -1.6**
comp=Z,56nm,0.9s,comp=Z,686nm
**XLT XiLinHaoTe 19.71 287** *e*P **P 14 20 19.4 -1.9**
XLT pmax pmax
comp=Z,50nm,1.0s
XLT LR LR
comp=Z,860nm,22.6s
XLT LR LR
comp=Z,1µm,21.8s
**BJI Beijing 20.08 275** P **P 14 20 23.1 -2.2**
BJI pmax pmax
comp=Z,33nm,1.3s
BJI LR LR
comp=Z,170nm,12.2s
BJI LR LR
comp=Z,590nm,16.3s
BJI LR LR
comp=Z,740nm,16.4s
**BJT Baijiatuau 20.09 275** P **P 14 20 23.7 -1.7**
**BJT Baijiatuau 20.09 275** P **P 14 20 23.4 -2.0**
BJT IAmb IAmb 14 20 24.5
comp=Z,200nm,1.7s
**BJT Baijiatuau 20.09 275** P **P 14 20 23.4 -2.0**
BJT pmax pmax
comp=Z,200nm,1.7s
**TIA Tai'an 20.47 264** P **P 14 20 27.6 -2.0**
TIA pmax pmax
comp=Z,120nm,0.8s
TIA pmax pmax
comp=Z,580nm,5.2s
TIA LR LR
comp=Z,670nm,17.5s
TIA LR LR
comp=Z,830nm,18.2s
TIA LR LR
comp=Z,1µm,17.5s
**NJ2 Nanjing 21.08 252** ⇑P **P 14 20 34.8 -1.3**
NJ2 pmax pmax
comp=Z,130nm,0.8s
NJ2 LR LR
comp=Z,1µm,15.6s
NJ2 LR LR
comp=Z,2µm,16.1s
NJ2 LR LR
comp=Z,2µm,14.7s
**HNS HongShan 21.88 269** ⇓P **P 14 20 41.9 -2.8**
HNS S **S 14 24 38.3 -5.3**
HNS pmax pmax
comp=Z,120nm,1.0s
HNS LR LR
comp=Z,770nm,16.7s
HNS LR LR
comp=Z,490nm,16.7s
HNS LR LR
comp=Z,810nm,16.7s
**YAK Yakutsk 22.29 344** P **P 14 20 45.5 -3.3**
comp=Z,101nm,0.7s,baz=164,slow=2.8,SNR=17
YAK LR LR 14 29 54.1
comp=Z,735nm,20.8s,baz=152,slow=38
**YAK Yakutsk 22.29 344** *e*P **P 14 20 45.2 -3.7**
YAK *e**PP **pP 14 21 01.2 +1.0**
YAK *e*S **S 14 24 44.6 -6.0**
YAK pmax pmax
comp=Z,110nm,0.8s
YAK pmax pmax
comp=N,32nm,0.9s
YAK pmax pmax
comp=E,11nm,1.0s
YAK smax smax
comp=N,340nm,2.4s
YAK smax smax
comp=E,206nm,2.2s
YAK MLR MLR
comp=Z,937nm,21.0s
YAK MLR MLR
comp=N,522nm,19.0s
YAK MLR MLR
comp=E,621nm,21.0s
**SEY Seymchan 22.55 12** P **P 14 20 48.2 -3.4**
comp=E,25nm,0.8s,baz=197,slow=8.3,SNR=44
**SEY Seymchan 22.55 12***ce*P **P 14 20 49.0 -2.7**
SEY pmax pmax
comp=Z,21nm,0.7s
**CIT Chita 22.57 309** *e*P **P 14 20 48.8 -3.2**
CIT *e* 14 21 06.0
CIT *e* 14 21 20.4
CIT *e* 14 21 33.2
CIT *e*S **S 14 24 48.0 -7.9**
CIT pmax pmax
comp=Z,237nm,2.3s
**HHC Hu-ho-hao-te 23.37 280** *e*P **P 14 20 57.4 -2.9**
HHC pP pP 14 21 08.8 -3.3
HHC sP sP 14 21 16.3 -1.8
HHC *e*S **S 14 25 05.6 -3.9**
HHC sS sS 14 25 26.3 -3.9
HHC SS **SnSn 14 25 51.8 +3.8**
HHC pmax pmax
comp=Z,38nm,1.0s
HHC pmax pmax
comp=Z,130nm,4.6s
HHC LR LR
comp=Z,400nm,13.5s
HHC LR LR
comp=Z,1µm,15.3s
HHC LR LR
comp=Z,2µm,17.2s
**TIY Taiyuan 23.50 271** P **P 14 21 02.4 +0.9**
**TATO Taipei 23.87 234** P **P 14 21 03.2 -1.7**
**YHNB Yeheng 24.16 234** P **P 14 21 05.2 -2.5**
YHNB IAmb IAmb 14 21 28.4
comp=Z,107nm,1.2s
**NACB Ninganchiao 24.40 232** P **P 14 21 05.8 -4.0**
NACB IAmb IAmb 14 21 08.3
comp=Z,221nm,2.0s
**BTO Baotou 24.57 280** *e*P **P 14 21 10.0 -1.3**
BTO pP **pP 14 21 24.3 +0.5**
BTO sP **sP 14 21 31.8 +2.1**
BTO S **S 14 25 27.0 -1.8**
BTO sS **sS 14 25 50.3 +0.7**
BTO SS **SnSn 14 26 24.6 +7.3**
BTO pmax pmax
comp=Z,170nm,1.4s
BTO pmax pmax
comp=Z,630nm,5.6s
BTO LR LR
comp=Z,1µm,15.1s
BTO LR LR
comp=Z,3µm,19.0s
BTO LR LR
comp=Z,4µm,19.6s

**LYN LuoYang 24.62 264** P **P 14 21 09.8 -1.9**
LYN pP pP 14 21 26.6 +2.4
LYN sP sP 14 21 30.5 +0.5
LYN pmax pmax
comp=Z,62nm,0.8s
LYN LR LR
comp=Z,1µm,15.1s
LYN LR LR
comp=Z,950nm,20.3s
LYN LR LR
comp=Z,1µm,23.4s
**BOD Bodaibo 24.67 322** *e*P **P 14 21 09.3 -2.7**
BOD pmax pmax
comp=Z,89nm,0.9s
**SSLB Suanglung 25.07 233** P **P 14 21 14.2 -1.8**
SSLB IAmb IAmb 14 21 28.8
comp=Z,258nm,1.9s
**WHN Wuhan 25.14 254** P **P 14 21 15.9 -0.5**
WHN pmax pmax
comp=Z,110nm,0.8s
**YULB Yu-li 25.17 232** P **P 14 21 13.7 -3.1**
**TWG Pinlang 25.74 231** P **P 14 21 21.1 -0.8**
TWG IAmb IAmb 14 21 22.7
comp=Z,47nm,0.6s
**ULN Ulaanbaatar 26.05 297** P **P 14 21 23.8 -0.9**
ULN IAmb IAmb 14 21 26.2
comp=Z,95nm,1.1s
**ULN Ulaanbaatar 26.05 297** P **P 14 21 23.7 -1.1**
ULN P **P 14 21 23.7 -1.1**
**ULN Ulaanbaatar 26.05 297***ce*P **P 14 21 24.3 -0.5**
ULN pmax pmax
comp=Z,117nm,1.3s
**SONM Songino Array 26.49 297** P **P 14 21 28.0 -0.7**
SONM IAmb IAmb 14 21 30.4
comp=Z,112nm,1.2s
**SONM Songino Array 26.49 297** P **P 14 21 28.7 0.0**
comp=Z,104nm,1.1s,baz=96,slow=7.3,SNR=134
SONM PcP **PcP 14 24 52.1 -0.4**
comp=Z,1.8nm,0.7s,baz=64,slow=3.4,SNR=1.8
SONM LR LR 14 32 46.5
comp=Z,1µm,18.2s,baz=94,slow=38
comp=Z,104nm,1.1s
**CNSH ChangSha 27.49 251** P **P 14 21 38.3 +0.6**
CNSH S **S 14 26 16.5 +1.5**
CNSH pmax pmax
comp=Z,35nm,0.9s
CNSH LR LR
comp=Z,960nm,4.2s
CNSH LR LR
comp=Z,870nm,19.0s
**XAN Xi'an 27.50 266** ⇑P **P 14 21 35.9 -1.9**
XAN pP pP 14 21 45.6 -4.7
XAN sP sP 14 21 54.0 -2.1
XAN pmax pmax
comp=Z,21nm,0.7s
**GUMO Guam 27.56 175** LR LR 14 31 43.8
comp=Z,584nm,21.5s,baz=19,slow=34
**ZAK Zakamensk 28.64 302** *e*P **P 14 21 47.1 -0.8**
ZAK pmax pmax
comp=Z,40nm,1.3s
**ENH Enshi 28.84 258** P **P 14 21 49.6 -0.2**
**ENH Enshi 28.84 258** P **P 14 21 48.9 -0.9**
ENH IAmb IAmb 14 21 51.5
comp=Z,68nm,0.7s
**H11N2 WAKE ISLAND Hy 29.75 129** T T 14 53 11.5
baz=318,slow=75,SNR=2101
**H11N1 WAKE ISLAND Hy 29.75 129** T T 14 53 12.2
baz=318,slow=75,SNR=1320
**H11N3 WAKE ISLAND Hy 29.76 129** T T 14 53 16.3
baz=318,slow=75,SNR=1307
**BILL Bilibino 29.80 18***d i*P **P 14 21 57.7 -0.1**
BILL *i* 14 22 54.8
BILL *i* 14 25 00.0
BILL pmax pmax
comp=Z,31nm,1.3s
BILL MLR MLR
comp=Z,446nm,20.0s
**MOY Mondy 30.16 305** *e*P **P 14 22 01.4 +0.1**
MOY pmax pmax
comp=Z,79nm,2.3s
**LZH Lanzhou 30.52 273** *e*P **P 14 22 04.6 -0.2**
LZH pP pP 14 22 13.8 -3.6
LZH pmax pmax
comp=Z,51nm,1.1s
LZH LR LR
comp=Z,490nm,13.6s
LZH LR LR
comp=Z,520nm,12.9s
LZH LR LR
comp=Z,830nm,15.5s
**H11S1 WAKE ISLAND Hy 30.59 130** T T 14 54 40.4
baz=323,slow=76,SNR=448
**H11S3 WAKE ISLAND Hy 30.59 130** T T 14 54 36.0
baz=323,slow=76,SNR=449
**H11S2 WAKE ISLAND Hy 30.61 130** T T 14 54 18.6
baz=323,slow=76,SNR=432
**TIXI Tiksi 31.31 352** LR LR 14 35 48.8
comp=Z,457nm,21.9s,baz=162,slow=38
**KNGR Kungurtug, Tuv 32.32 302** *i* P **P 14 22 20.6 +0.2**
KNGR pmax pmax
comp=Z,54nm,1.0s
**GTA Gaotai 32.45 281** P **P 14 22 21.4 -0.3**
GTA pP pP 14 22 29.6 -4.7
GTA sP sP 14 22 34.9 -5.2
GTA PcP **PcP 14 25 09.1 +1.3**
GTA PcS **PcS 14 28 53.5 +0.5**
GTA pmax pmax
comp=Z,31nm,1.0s
GTA pmax pmax
comp=Z,170nm,4.0s
GTA LR LR
comp=Z,600nm,18.2s
GTA LR LR
comp=Z,1µm,18.9s
GTA LR LR
comp=Z,2µm,20.0s
**CD2 Chengdu 32.80 264** P **P 14 22 23.5 -1.2**
CD2 pmax pmax
comp=Z,50nm,0.8s
CD2 LR LR
comp=Z,390nm,12.7s
**GYA Guiyang 33.02 255** ⇓P **P 14 22 26.3 -0.4**
GYA sP sP 14 22 45.9 +0.8
GYA S **S 14 27 40.9 -1.0**
GYA pmax pmax
comp=Z,69nm,0.8s
GYA pmax pmax
comp=Z,350nm,4.5s
GYA LR LR
comp=Z,800nm,14.8s
GYA LR LR
comp=Z,540nm,11.9s
GYA LR LR
comp=Z,1µm,20.8s
**P08K Saint George I 34.25 47** P **P 14 22 37.2 +0.3**
baz=264
**GAMB Gambell 34.73 34** P **P 14 22 41.2 +0.2**
baz=251
**QIZ Qiongzhong 35.60 242** P **P 14 22 51.3 +2.3**
QIZ S **S 14 28 23.9 +2.3**
QIZ PcS **PcS 14 29 05.0 +0.6**
QIZ pmax pmax
comp=Z,430nm,7.1s
QIZ LR LR
comp=Z,400nm,16.3s
QIZ LR LR
comp=Z,590nm,18.4s
QIZ LR LR
comp=Z,570nm,17.8s
**UNV Unalaska Valle 35.86 52** P **P 14 22 50.6 -0.2**
baz=270
**M11K Mekoryuk 36.47 41** P **P 14 22 55.7 -0.2**
baz=262
**PZH PanZhiHua 36.61 259** P **P 14 22 57.1 -0.6**
PZH S **S 14 28 34.9 -2.3**
PZH pmax pmax
comp=Z,60nm,0.6s
PZH pmax pmax
comp=Z,200nm,5.4s
PZH LR LR
comp=Z,360nm,15.9s
PZH LR LR
comp=Z,290nm,15.1s
PZH LR LR
comp=Z,350nm,19.6s
**KMI Kunming 36.66 257** ⇑P **P 14 22 58.3 0.0**

KMI pmax pmax
comp=Z,26nm,1.6s
KMI pmax pmax
comp=Z,340nm,4.1s
KMI LR LR
comp=Z,650nm,17.6s
KMI LR LR
comp=Z,690nm,18.5s
KMI LR LR
comp=Z,1µm,20.8s
**TNA Tin City 36.82 32** P **P 14 22 57.7 -1.1**
baz=253
**DAV Davao City (W) 37.20 209** LR LR 14 36 40.2
comp=Z,220nm,21.8s,baz=356,slow=33
**GOMU GeErMu 37.26 278** P **P 14 23 02.8 -0.7**
GOMU pmax pmax
comp=Z,75nm,0.8s
GOMU LR LR
comp=Z,590nm,18.6s
GOMU LR LR
comp=Z,840nm,18.3s
GOMU LR LR
comp=Z,1µm,18.3s
**K13K Kusilvak Mount 37.44 38** P **P 14 23 02.9 -1.3**
baz=261
**F14K Arctic Creek 37.44 32** P **P 14 23 04.1 -0.1**
baz=255
**ANM Nome 37.61 34** P **P 14 23 05.5 -0.1**
baz=257
**FALS False Pass 37.64 50** P **P 14 23 05.2 -0.8**
baz=272
**M13K Dall Lake 37.87 41** P **P 14 23 07.4 -0.4**
baz=264
**J14K Nanvaranak Lak 38.07 37** P **P 14 23 08.9 -0.6**
baz=261
**SLVN Son La 38.14 251** P **P 14 23 11.7 +1.1**
SLVN IAmb IAmb 14 23 14.1
comp=Z,40nm,1.0s
**F15K North Star Dit 38.17 32** P **P 14 23 09.7 -0.7**
baz=256
**G15K Niukluk 38.26 33** P **P 14 23 10.8 -0.3**
baz=258
**L14K Kuka Creek 38.29 39** P **P 14 23 10.8 -0.5**
baz=264
**S12K Black Hills 38.40 49** P **P 14 23 12.2 -0.2**
baz=272
**M14K Bethel 38.59 40** P **P 14 23 14.1 +0.2**
baz=265
**C16K Lisburne Hills 38.60 28** P **P 14 23 13.6 -0.3**
C16K IAmb IAmb 14 23 16.1
comp=Z,20nm,0.8s
**C16K Lisburne Hills 38.60 28** P **P 14 23 14.3 +0.5**
baz=252
**N14K Kuskokwak Cree 38.66 42** P **P 14 23 13.1 -1.4**
baz=266
**O14K Tigyukuuivet M 38.85 43** P **P 14 23 15.2 -0.8**
baz=268
**DGZ Jazzator, Alta 38.86 302** *i* P **P 14 23 17.4 +0.9**
DGZ pmax pmax
comp=Z,174nm,0.8s
**L15K Ungalak Mounta 38.90 39** P **P 14 23 15.4 -1.0**
baz=264
**K15K Wolf Creek Mou 38.94 38** P **P 14 23 18.9 +2.1**
**K15K Wolf Creek Mou 38.94 38** P **P 14 23 16.0 -0.8**
baz=264
**H16K Elim 38.95 34** P **P 14 23 16.3 -0.6**
baz=260
**G16K Koyuk River 39.04 33** P **P 14 23 18.5 +1.0**
**G16K Koyuk River 39.04 33** P **P 14 23 16.9 -0.7**
baz=259
**M15K Kasigluk River 39.21 41** P **P 14 23 18.6 -0.5**
baz=266
**D17K Noatak River 39.26 29** P **P 14 23 19.2 -0.2**
baz=256,SNR=6.3
**SDPT Sand Point 39.31 49** P **P 14 23 19.2 -0.7**
baz=273
**RDOG Red Dog Mine 39.41 29** P **P 14 23 20.4 -0.3**
baz=255
**C17K DeLong Mountai 39.42 28** P **P 14 23 20.5 -0.3**
baz=255
**J16K Anvik River 39.47 37** P **P 14 23 20.7 -0.5**
baz=263
**N15K Kwethluk River 39.48 41** P **P 14 23 23.2 +1.9**
N15K IAmb IAmb 14 23 30.0
comp=Z,29nm,1.0s
**N15K Kwethluk River 39.48 41** P **P 14 23 20.6 -0.8**
baz=268
**I17K Unalakleet 39.51 36** P **P 14 23 21.3 -0.2**
baz=263
**O15K Ungalikthiuk R 39.58 43** P **P 14 23 21.7 -0.5**
baz=269
**E17K Hotham Inlet 39.59 30** P **P 14 23 22.1 -0.1**
baz=258,SNR=5.8
**F17K Baldwin Pennin 39.68 32** P **P 14 23 23.0 +0.1**
baz=259
**G17K Kiwalik Mounta 39.76 33** P **P 14 23 22.5 -1.1**
baz=261,SNR=10
**TNCH TengChong 39.84 260** ⇑P **P 14 23 25.5 +0.5**
TNCH pP pP 14 23 38.0 +0.2
TNCH sP sP 14 23 43.8 +0.3
TNCH S **S 14 29 29.5 +3.4**
TNCH sS sS 14 29 42.8 -4.8
TNCH pmax pmax
comp=Z,200nm,1.1s
TNCH LR LR
comp=Z,220nm,13.3s
TNCH LR LR
comp=Z,300nm,18.3s
TNCH LR LR
comp=Z,300nm,22.1s
**CHNA Chernabura Isl 39.86 50** P **P 14 23 23.2 -1.3**
baz=274
**L16K Owhat River 39.86 39** P **P 14 23 25.9 +1.4**
**L16K Owhat River 39.86 39** P **P 14 23 23.3 -1.2**
baz=266,SNR=7.1
**ZAA0 Zalesovo Array 39.92 309** P **P 14 23 24.7 -0.4**
**ZALV Zalesovo Beam 39.92 309** P **P 14 23 25.3 +0.2**
**ZALV Zalesovo Beam 39.92 309** P **P 14 23 25.0 -0.1**
comp=Z,79nm,0.7s,baz=88,slow=7.9,SNR=290
ZALV PcP **PcP 14 25 29.9 +0.3**
comp=Z,6.5nm,0.5s,baz=87,slow=3.3,SNR=4.2
ZALV LR LR 14 40 53.3
comp=Z,921nm,19.5s,baz=78,slow=38
comp=Z,79nm,0.7s
**ZALV Zalesovo Beam 39.92 309** P **P 14 23 25.3 +0.2**
**WMQ Urumqi 39.95 293** ⇑P **P 14 23 26.3 +0.8**
WMQ pP sP 14 23 41.9 -2.2
WMQ PP **PnPn 14 25 00.4 -1.2**
WMQ PcP **PcP 14 25 31.3 +1.3**
WMQ pmax pmax
comp=Z,150nm,1.1s
WMQ pmax pmax
comp=Z,370nm,3.8s
WMQ LR LR
comp=Z,430nm,19.5s
WMQ LR LR
comp=Z,1µm,20.7s
WMQ LR LR
comp=Z,850nm,18.3s
**WMQ Urumqi 39.95 293** ⇑P **P 14 23 26.3 +0.8**
**H17K Granite Mounta 39.98 34** P **P 14 23 27.2 +1.8**
**H17K Granite Mounta 39.98 34** P **P 14 23 24.5 -1.0**
baz=262,SNR=6.0
**M16K Timber Creek 40.07 40** P **P 14 23 26.7 +0.5**
**M16K Timber Creek 40.07 40** P **P 14 23 24.9 -1.3**
baz=268
**E18K Tukpahlearik C 40.12 30** P **P 14 23 27.6 +1.1**
**E18K Tukpahlearik C 40.12 30** P **P 14 23 27.2 +0.6**
baz=258,SNR=6.2
**B18K Kokolik River 40.14 27** P **P 14 23 26.7 +0.1**
baz=255
**N16K Nishlik Lake 40.14 41** P **P 14 23 27.1 +0.2**
baz=268
**J17K VABM Dome 40.17 36** P **P 14 23 29.0 +2.0**
J17K IAmb IAmb 14 23 38.5
comp=Z,32nm,1.0s
**J17K VABM Dome 40.17 36** P **P 14 23 27.5 +0.5**
baz=265
**C18K Utukok River 40.17 28** P **P 14 23 27.2 +0.2**
**C18K Utukok River 40.17 28** P **P 14 23 26.6 -0.5**
baz=256,SNR=8.0
**F18K Selawik 40.34 31** P **P 14 23 28.9 +0.6**
baz=260
**L17K Donlin 40.44 38** P **P 14 23 29.5 +0.3**
baz=267
**K17K Iditarod 40.47 38** P **P 14 23 31.8 +2.3**
K17K IAmb IAmb 14 24 00.2

K17K **Iditarod** 40.47 38 P P 14 23 29.5 0.0
baz=266,SNR=6.1
O16K **Kokwok River B** 40.47 42 P P 14 23 30.7 +1.1
O16K **Kokwok River B** 40.47 42 P P 14 23 29.7 +0.1
baz=270
P16K **Nushagak River** 40.53 43 P P 14 23 29.0 -1.0
baz=271
A19K **Wainwright** 40.60 26 P P 14 23 29.5 -1.0
baz=255
G18K **Tagagawik** 40.63 33 P P 14 23 30.2 -0.7
baz=262
H18K **Honhosa River** 40.66 34 P P 14 23 32.7 +1.6
H18K IAmb IAmb 14 23 33.1
comp=Z,23nm,0.6s
H18K **Honhosa River** 40.66 34 P P 14 23 30.5 -0.6
baz=263,SNR=14
R16K **Pilot Point** 40.80 45 P P 14 23 32.1 -0.1
baz=273
M17K **Holitna River** 40.82 40 P P 14 23 32.4 0.0
baz=268
C19K **Lookout Ridge** 40.84 28 P P 14 23 32.6 +0.1
baz=258,SNR=5.2
N17K **Nushagak Hills** 40.93 41 P P 14 23 32.7 -0.6
baz=270
ZSN **Zaisan** 40.96 299 *eP* P 14 23 33.9 0.0
comp=Z,35nm,0.8s,baz=299
ZSN **Zaisan** 40.96 299 *eP* P 14 23 33.8 0.0
ZSN pmax pmax
comp=Z,35nm,0.8s
O17K **Koliganek Bris** 40.98 42 P P 14 23 33.0 -0.7
baz=271
F19K **Shaleruckik Mo** 41.12 31 P P 14 23 34.1 -0.6
baz=262,SNR=11
UBPT **Khong Chiam** 41.19 242 P P 14 23 37.0 +1.1
UBPT **Khong Chiam** 41.19 242 P P 14 23 36.5 +0.6
L18K **Granite Mounta** 41.19 38 P P 14 23 35.7 +0.3
baz=268
J18K **Innoko River** 41.23 36 P P 14 23 37.2 +1.4
J18K **Innoko River** 41.23 36 P P 14 23 35.5 -0.3
baz=267
D19K **Kuna River** 41.25 29 P P 14 23 36.4 +0.5
baz=260
GCSA **Galena City Sc** 41.25 34 P P 14 23 35.6 -0.3
baz=265
G19K **Purcell Mounta** 41.30 32 P P 14 23 37.1 +0.8
G19K **Purcell Mounta** 41.30 32 P P 14 23 36.3 0.0
baz=263,SNR=6.9
P17K **Kvichak River** 41.33 43 P P 14 23 35.8 -0.8
baz=272
CRAI **Chiangrai** 41.38 253 P P 14 23 38.0 +0.4
CRAI IAmb IAmb 14 23 42.1
comp=Z,72nm,0.8s
E19K **Redstone River** 41.41 30 P P 14 23 37.8 +0.6
baz=262
R17L **Mt. Peulik Vol** 41.45 45 P P 14 23 37.0 -0.7
baz=274
H19K **Roundabout Mou** 41.50 33 P P 14 23 38.3 +0.4
H19K IAmb IAmb 14 23 40.5
comp=Z,48nm,0.7s
H19K **Roundabout Mou** 41.50 33 P P 14 23 38.3 +0.4
baz=265,SNR=40
N18K **Kilae Creek** 41.57 41 P P 14 23 40.5 +1.9
N18K **Kilae Creek** 41.57 41 P P 14 23 38.9 +0.3
baz=271
M18K **Stony River** 41.59 39 P P 14 23 38.5 -0.2
baz=270
Q17K **Contact Creek** 41.66 44 P P 14 23 39.3 -0.2
baz=273
J19K **Poorman** 41.75 36 P P 14 23 41.1 +1.2
J19K IAmb IAmb 14 23 50.7
comp=Z,36nm,0.9s
J19K **Poorman** 41.75 36 P P 14 23 40.3 +0.3
baz=267,SNR=26
D20K **Etivluk River** 41.83 29 P P 14 23 40.6 -0.1
baz=261
B20K **Meade River** 41.86 27 P P 14 23 41.3 +0.5
B20K IAmb IAmb 14 23 45.7
comp=Z,34nm,0.8s
B20K **Meade River** 41.86 27 P P 14 23 40.5 -0.3
baz=259,SNR=6.6
E20K **Nigu River** 41.92 29 P P 14 23 41.5 +0.1
baz=262
O18K **Koktuh Hills** 41.93 42 P P 14 23 41.5 -0.1
baz=272
F20K **Avaraart Lake** 41.94 31 P P 14 23 42.4 +0.9
F20K **Avaraart Lake** 41.94 31 P P 14 23 41.5 0.0
baz=264
CHIR **Chirikof Islan** 42.02 48 P P 14 23 41.6 -0.7
baz=276
L19K **White Mountain** 42.05 38 P P 14 23 42.6 +0.1
baz=270
Q18K **Katmai Hardscr** 42.10 44 P P 14 23 42.9 -0.1
baz=274
H20K **Anotleneega Mo** 42.15 33 P P 14 23 43.8 +0.5
baz=266,SNR=22
N19K **Bonanza Creek** 42.25 40 P P 14 23 44.5 +0.2
baz=272
M19K **Big River Lodg** 42.27 39 P P 14 23 44.8 +0.4
baz=271
I20K **Naaghedeneel** 42.28 35 P P 14 23 45.2 +0.9
baz=267,SNR=5.3
J20K **Nowinta River** 42.40 35 P P 14 23 45.8 +0.5
baz=268,SNR=13
K20K **Telida** 42.42 37 P P 14 23 46.2 +0.7
baz=269,SNR=8.1
R18K **Karluk** 42.48 45 P P 14 23 45.9 -0.1
baz=275
L20K **Farewell, AK** 42.51 38 P P 14 23 46.6 +0.4
baz=270
C21K **Knifeblade Rid** 42.55 28 P P 14 23 47.4 +1.0
baz=262,SNR=7.8
PHRA **Phrae** 42.60 251 P P 14 23 48.2 +0.8
B21K **Ikpikpuk River** 42.67 27 P P 14 23 47.9 +0.6
baz=262,SNR=15
SII **Sitkinak Islan** 42.73 47 P P 14 23 48.1 0.0
baz=277
E21K **Killik River** 42.76 29 P P 14 23 48.8 +0.7
E21K **Killik River** 42.76 29 P P 14 23 48.4 +0.2
baz=264,SNR=6.0
G21K **Allakaket** 42.77 32 P P 14 23 48.6 +0.3
baz=266
Q19K **Cape Douglas,** 42.78 43 P P 14 23 48.4 -0.1
baz=274
MK31 **Makanchi Array** 42.83 299 P P 14 23 49.2 +0.1
MK31 **Makanchi Array** 42.83 299 *ceP* P 14 23 48.5 -0.5
MKAR **Makanchi Array** 42.83 299 P P 14 23 49.0 0.0
MKAR **Makanchi Array** 42.83 299 P P 14 23 49.1 +0.1
comp=Z,78nm,0.9s,baz=83,slow=9.3,SNR=477
MKAR PcP PcP 14 25 39.6 +0.2
comp=Z,3.4nm,0.6s,baz=62,slow=1.8,SNR=1.5
MKAR LR LR 14 42 53.2
comp=Z,1µm,19.1s,baz=81,slow=38
comp=Z,78nm,0.9s
F21K **Alatna River** 42.83 31 P P 14 23 49.6 +0.9
F21K **Alatna River** 42.83 31 P P 14 23 48.9 +0.1
baz=266,SNR=9.8
M20K **Styx River** 42.87 39 P P 14 23 49.2 0.0
baz=272
LSA **Lhasa** 42.90 271 P P 14 23 51.8 +1.5
LSA **Lhasa** 42.90 271 P P 14 23 51.4 +1.1
P19K **Oil Pt** 42.94 42 P P 14 23 49.1 -0.7
baz=274
H21K **Melozitna Rive** 43.02 33 P P 14 23 51.6 +1.3
H21K **Melozitna Rive** 43.02 33 P P 14 23 50.5 +0.2
baz=268,SNR=13
MAKZ **Makanchi** 43.03 299 P P 14 23 50.8 +0.1
MAKZ **Makanchi** 43.03 299 ⇑P P 14 23 50.8 +0.1
MAKZ pP pP 14 24 04.2 +0.6
OHAK **Old Harbor** 43.14 46 P P 14 23 50.7 -0.7
baz=277
B22K **Teshekpuk Lake** 43.17 26 P P 14 23 51.2 -0.2
baz=262
O20K **Slope Mountain** 43.21 41 P P 14 23 52.2 +0.2
baz=274
D22K **Ayikyak River** 43.27 29 P P 14 23 53.1 +0.8
D22K **Ayikyak River** 43.27 29 P P 14 23 52.2 -0.1
baz=265,SNR=10
SEM **Semipalatinsk** 43.27 304 *eP* P 14 23 52.3 -0.5
comp=Z,28nm,1.0s,baz=304
SEM **Semipalatinsk** 43.27 304 *eP* P 14 23 52.2 -0.5
SEM pmax pmax
comp=Z,28nm,1.0s
N20K **Mount Spurr** 43.34 40 P P 14 23 52.8 -0.3
baz=273
SPCR **Spurr Chakacha** 43.34 40 P P 14 23 52.7 -0.4
baz=273

F22K **John River** 43.35 31 P P 14 23 53.1 +0.1
baz=267,SNR=11
KDAK **Kodiak Island** 43.45 45 P P 14 23 54.7 +0.8
KDAK IAmb IAmb 14 24 31.2
comp=Z,33nm,1.1s
KDAK **Kodiak Island** 43.45 45 LR LR 14 41 44.4
comp=Z,402nm,21.8s,baz=270,slow=36
KDAK **Kodiak Island** 43.45 45 P P 14 23 53.2 -0.7
baz=277
KDAK **Kodiak Island** 43.45 45 P P 14 23 54.7 +0.8
KDAK pmax pmax
comp=Z,33nm,1.1s
Q20K **Shuyak Island** 43.46 44 P P 14 23 53.4 -0.5
baz=276
E22K **Anaktuvuk Pass** 43.53 30 P P 14 23 55.5 +1.1
E22K **Anaktuvuk Pass** 43.53 30 P P 14 23 53.7 -0.7
baz=266,SNR=25
CMAR **Chiang Mai Arr** 43.55 252 P P 14 23 55.7 +0.5
comp=Z,8.1nm,0.6s,baz=45,slow=7.0,SNR=29
CMAR LR LR 14 43 49.2
comp=Z,330nm,18.1s,baz=60,slow=38
comp=Z,8.1nm,0.6s
G22K **Bettles** 43.59 31 P P 14 23 54.3 -0.6
baz=268
H22K **Ishtalitna Cre** 43.61 33 P P 14 23 55.0 -0.1
baz=269,SNR=14
GENI **Genyem** 43.62 184 P P 14 23 57.2 +1.6
SKT **Skwentna** 43.62 39 P P 14 23 54.9 -0.3
baz=273
BPAW **Bear Paw Mtn.** 43.79 36 P P 14 23 57.0 +0.4
baz=271,SNR=10
MLY **Manley** 43.88 34 P P 14 23 58.9 +1.7
MLY **Manley** 43.88 34 P P 14 23 57.3 +0.1
baz=270,SNR=28
D23K **Nanushuk River** 44.00 29 P P 14 23 58.9 +0.7
D23K **Nanushuk River** 44.00 29 P P 14 23 58.1 0.0
baz=266,SNR=8.6
SUA **Susitna One** 44.03 39 P P 14 23 58.1 -0.5
baz=272
C23K **Itkillik River** 44.08 27 P P 14 23 58.6 -0.2
baz=266,SNR=8.7
COLD **Coldfoot** 44.11 31 P P 14 23 59.4 +0.4
baz=269,SNR=13
G23K **Bananza Creek** 44.17 32 P P 14 23 59.6 0.0
baz=269,SNR=22
BRSE **Bradley Lake S** 44.19 42 P P 14 23 58.6 -1.2
baz=276
KURK **Kurchatov** 44.21 305 P P 14 24 00.0 -0.1
KURK **Kurchatov** 44.21 305 P P 14 24 00.0 -0.1
KURK P P 14 24 00.0 -0.1
KURK **Kurchatov** 44.21 305 *ceP* P 14 23 59.9 -0.1
KURK pmax pmax
comp=Z,147nm,0.7s
KURBB **Kurchatov Arra** 44.29 305 P P 14 24 00.7 0.0
comp=Z,124nm,0.7s,baz=78,slow=8.6,SNR=761
KURBB PcP PcP 14 25 44.1 -0.1
comp=Z,10nm,0.8s,baz=70,slow=3.5,SNR=3.6
KURBB LR LR 14 43 18.3
comp=Z,376nm,19.1s,baz=266,slow=37
comp=Z,124nm,0.7s
E23K **Chandalar** 44.35 30 P P 14 24 01.3 +0.2
baz=268,SNR=12
H23K **Yukon River** 44.37 33 P P 14 24 01.1 0.0
baz=271
TOLK **Toolik Lake Re** 44.38 29 P P 14 24 00.4 -0.9
baz=268
I23K **Mio, Yukon-K** 44.46 34 P P 14 24 01.4 -0.4
baz=272,SNR=13
SHL **Shillong** 44.51 266 P P 14 24 03.0 0.0
SNR=9.6
RC01 **Rabbit Creek A** 44.55 40 P P 14 24 01.3 -1.3
baz=276
NEA2 **Nenana** 44.60 35 P P 14 24 02.9 -0.1
baz=272,SNR=29
O22K **Cooper Landing** 44.62 41 P P 14 24 02.4 -0.7
baz=276
MCK **McKinley** 44.71 36 P P 14 24 04.2 +0.3
baz=274,SNR=6.7
C24K **Franklin Bluff** 44.74 27 P P 14 24 03.8 -0.2
baz=268
E24K **Your Creek** 44.77 30 P P 14 24 04.1 -0.3
baz=270,SNR=16
PMR **Palmer** 44.79 39 P P 14 24 05.0 +0.5
PMR **Palmer** 44.79 39 P P 14 24 05.0 +0.5
baz=276
SEW **Seward** 44.79 41 P P 14 24 04.5 -0.1
baz=277
FAKI **Fak Fak** 44.89 195 P P 14 24 05.4 -0.4
FAKI **Fak Fak** 44.89 195 P P 14 24 04.3 -1.5
WAT1 **Susitna Watana** 44.95 37 P P 14 24 05.7 -0.1
baz=275
F24K **Squaw Lake** 45.00 31 P P 14 24 07.5 +1.3
F24K **Squaw Lake** 45.00 31 P P 14 24 06.3 +0.1
baz=271,SNR=11
H24K **Noodor Dome** 45.05 33 P P 14 24 08.1 +1.5
H24K IAmb IAmb 14 24 34.9
comp=Z,24nm,0.8s
H24K **Noodor Dome** 45.05 33 P P 14 24 06.5 -0.2
baz=272,SNR=18
COLA **College** 45.11 34 P P 14 24 07.7 +0.7
COLA **College** 45.11 34 P P 14 24 07.1 +0.1
baz=273
COLA **College** 45.11 34 P P 14 24 08.5 +1.5
COLA **College** 45.11 34 P P 14 24 08.3 +1.3
KNK **Knik Glacier** 45.13 39 P P 14 24 06.7 -0.6
baz=276
SML **Sawmill** 45.15 39 P P 14 24 07.4 0.0
baz=276,SNR=10
G24K **Hadweenzic Riv** 45.18 32 P P 14 24 07.5 -0.1
baz=272,SNR=19
PWL **Port Wells** 45.25 40 P P 14 24 08.2 0.0
baz=277
POKR **Poker Plat Res** 45.27 34 P P 14 24 08.6 +0.2
baz=273,SNR=12
WAT6 **Susitna Watana** 45.34 38 P P 14 24 09.2 +0.1
baz=276,SNR=7.0
M23K **Glacier View** 45.43 39 P P 14 24 09.8 +0.1
baz=276
DHY **Denali Highway** 45.46 37 P P 14 24 10.0 0.0
baz=276,SNR=14
ILAR **Eielson Array** 45.53 34 P P 14 24 11.0 +0.6
comp=Z,11nm,0.8s,baz=265,slow=5.8,SNR=113
ILAR LR LR 14 44 46.7
comp=Z,168nm,20.5s,baz=280,slow=38
comp=Z,11nm,0.8s
HDA **Harding Lake** 45.53 35 P P 14 24 10.4 0.0
baz=274,SNR=12
D25K **Kavik River** 45.55 28 P P 14 24 10.1 -0.4
baz=270,SNR=14
SANI **Sanana** 45.61 204 P P 14 24 10.7 -0.8
SCM **Sheep Creek Mo** 45.62 39 P P 14 24 10.9 -0.3
baz=277
G25K **Bearman Lake** 45.73 32 P P 14 24 11.9 +0.1
baz=273,SNR=13
P23K **Montague Islan** 45.83 41 P P 14 24 12.2 -0.6
baz=278
SHLS **Shalkode** 45.85 295 ⇑*iP* P 14 24 10.9 -2.4
baz=294
SHLS **Shalkode** 45.85 295 *ciP* P 14 24 10.9 -2.4
GLI **Glacier Island** 45.85 40 P P 14 24 11.8 -1.2
baz=278
F25K **Christian Rive** 45.86 30 P P 14 24 13.0 0.0
baz=273,SNR=11
H25L **Birch Creek** 45.87 32 P P 14 24 13.4 +0.4
baz=274,SNR=20
TDK **Taldyqorghan** 45.95 297 *eP* P 14 24 14.1 +0.1
baz=297
TDK **Taldyqorghan** 45.95 297 *eP* P 14 24 14.0 +0.1
PRP **Porcupine Dome** 46.04 33 P P 14 24 14.6 0.0
baz=275,SNR=34
C26K **Camden Bay** 46.05 27 P P 14 24 14.3 -0.1
baz=271
FYU **Fort Yukon** 46.08 32 P P 14 24 16.6 +1.9
FYU IAmb IAmb 14 24 17.5
comp=Z,30nm,0.7s
K24K **Donnelly Dome** 46.10 36 P P 14 24 14.6 -0.3
baz=276,SNR=8.6
M24K **Tolsona, Glenn** 46.12 38 P P 14 24 14.4 -0.8
baz=277
UZB **Uzynbulak** 46.15 295 ⇑*iP* P 14 24 15.6 -0.2
comp=Z,15nm,0.6s,baz=295
UZB **Uzynbulak** 46.15 295 *ciP* P 14 24 15.5 -0.2
UZB pmax pmax
comp=Z,15nm,0.6s
J25K **Salcha River,** 46.19 35 P P 14 24 15.6 0.0
baz=276
KPKS **Kokpek** 46.27 295 ⇑*iP* P 14 24 16.7 0.0

comp=Z,21nm,1.1s,baz=295
KPKS **Kokpek** 46.27 295 *ciP* P 14 24 16.7 0.0
KPKS pmax pmax
comp=Z,21nm,1.1s
KLU **Klutina** 46.33 39 P P 14 24 16.4 -0.3
baz=278,SNR=6.7
PAX **Paxson** 46.34 37 P P 14 24 17.0 +0.1
baz=277
F26K **Sheenjek River** 46.43 30 P P 14 24 17.6 +0.2
baz=274,SNR=21
Q23K **Middleton Isla** 46.44 42 P P 14 24 17.5 -0.1
baz=280
C27K **Jago River** 46.48 28 P P 14 24 17.9 +0.2
baz=272,SNR=10
RIDG **Independent Ri** 46.52 36 P P 14 24 18.0 -0.3
baz=277,SNR=9.6
ZHN **Zhinishke** 46.55 295 *eP* P 14 24 18.7 -0.1
comp=Z,22nm,0.9s,baz=295
ZHN **Zhinishke** 46.55 295 *eP* P 14 24 18.7 -0.1
ZHN pmax pmax
comp=Z,22nm,0.9s
EYAK **Cordova Ski Ar** 46.55 40 P P 14 24 20.2 +1.8
EYAK **Cordova Ski Ar** 46.55 40 P P 14 24 18.5 0.0
baz=279
HARP **HAARP** 46.55 38 P P 14 24 18.7 +0.2
baz=278
ARXS **Arharly** 46.60 296 *i* P P 14 24 19.0 -0.2
SATY **Saty** 46.61 295 *eP* P 14 24 19.1 -0.2
comp=Z,18nm,0.7s,baz=295
SATY **Saty** 46.61 295 *eP* P 14 24 19.1 -0.2
SATY pmax pmax
comp=Z,18nm,0.7s
G26K **Porcupine Rive** 46.62 31 P P 14 24 19.9 +0.9
baz=275,SNR=32
SCRK **Sand Creek** 46.87 35 P P 14 24 21.7 +0.6
SCRK IAmb IAmb 14 24 39.8
comp=Z,32nm,1.0s
SCRK **Sand Creek** 46.87 35 P P 14 24 20.9 -0.1
baz=278,SNR=32
N25K **Chitina, Valde** 46.94 39 P P 14 24 21.3 -0.2
baz=279
J26L **Joseph Creek** 46.98 35 P P 14 24 22.0 +0.1
J26L **Joseph Creek** 46.98 35 P P 14 24 22.0 +0.1
baz=277,SNR=11
BMRM **Bremner River** 47.04 40 P P 14 24 22.2 -0.1
baz=280
I26K **Coal Creek Min** 47.05 34 P P 14 24 22.1 -0.2
baz=277
L26K **Log Cabin Wild** 47.29 37 P P 14 24 23.8 -0.4
baz=279,SNR=15
CHKK **Chushkaly** 47.29 296 *eP* P 14 24 24.4 -0.2
baz=296
CHKK **Chushkaly** 47.29 296 *eP* P 14 24 24.3 -0.2
KAIM **Kayak Island** 47.32 41 P P 14 24 24.3 -0.2
baz=281
E27K **Coleen River** 47.35 30 P P 14 24 24.7 +0.1
baz=276
D27M **Malcolm River** 47.47 28 P P 14 24 25.8 +0.2
baz=275,SNR=6.2
G27K **Doyon Strip** 47.48 31 P P 14 24 25.1 -0.5
baz=277,SNR=24
MDOK **Medeo** 47.50 295 *eP* P 14 24 26.1 -0.2
baz=295
MDOK **Medeo** 47.50 295 *eP* P 14 24 26.1 -0.2
M26K **Nabesna, AK** 47.55 37 P P 14 24 25.3 -1.0
baz=280,SNR=11
AAA **Alma-Ata** 47.57 295 *eP* P 14 24 26.8 0.0
baz=296
AAA **Alma-Ata** 47.57 295 *eP* P 14 24 26.7 0.0
H27K **Steamboat Moun** 47.60 32 P P 14 24 27.3 +0.7
baz=278,SNR=20
TNSS **Tian-Shan** 47.61 295 *eP* P 14 24 27.0 -0.5
baz=295
TNSS **Tian-Shan** 47.61 295 *eP* P 14 24 26.9 -0.5
I27K **Kandik River** 47.65 33 P P 14 24 26.3 -0.7
baz=278
K27K **Chicken** 47.69 35 P P 14 24 28.0 +0.7
baz=279
KUU **Kurty** 47.72 297 *eP* P 14 24 27.8 0.0
baz=297
KUU **Kurty** 47.72 297 *eP* P 14 24 27.8 0.0
MCARA **McCarthy VSAT** 47.72 39 P P 14 24 27.2 -0.4
baz=281
CRQE **Cirque** 47.81 40 P P 14 24 28.2 -0.2
baz=281
L27K **Beaver Creek,** 47.96 36 P P 14 24 31.1 +1.6
L27K IAmb IAmb 14 24 54.1
comp=Z,35nm,0.9s
L27K **Beaver Creek,** 47.96 36 P P 14 24 29.7 +0.3
baz=280,SNR=29
EGAK **Eagle** 47.97 34 P P 14 24 29.1 -0.3
baz=279,SNR=17
BCAR **Beaver Creek A** 47.98 36 P P 14 24 31.2 +1.6
E28M **Babbage River** 48.06 29 P P 14 24 31.8 +1.8
E28M IAmb IAmb 14 24 34.7
comp=Z,14nm,0.8s
E28M **Babbage River** 48.06 29 P P 14 24 30.2 +0.1
baz=277,SNR=11
F28M **Old Crow** 48.06 30 P P 14 24 32.3 +2.1
F28M IAmb IAmb 14 24 33.3
comp=Z,18nm,0.8s
F28M **Old Crow** 48.06 30 P P 14 24 30.2 +0.1
baz=278,SNR=19
M27K **Edge Creek, AK** 48.07 37 P P 14 24 30.3 -0.1
baz=281,SNR=14
D28M **Stokes Point** 48.25 28 P P 14 24 31.7 +0.2
baz=277
I28M **Miner Creek** 48.37 33 P P 14 24 34.5 +1.9
I28M **Miner Creek** 48.37 33 P P 14 24 33.2 +0.6
baz=280,SNR=19
BVAR **Borovoye Array** 48.55 310 P P 14 24 35.1 +1.0
comp=Z,31nm,0.6s,baz=78,slow=9.3,SNR=86
BVAR PcP PcP 14 25 59.8 +0.6
comp=Z,7.9nm,0.7s,baz=29,slow=3.3,SNR=1.3
BVAR LR LR 14 46 20.3
comp=Z,804nm,19.2s,baz=75,slow=38
comp=Z,31nm,0.6s
TKM2 **Tokmak 2** 48.58 296 P P 14 24 35.4 +0.7
SNR=99
BRVK **Borovoye** 48.60 310 P P 14 24 34.9 +0.3
BRVK **Borovoye** 48.60 310 P P 14 24 34.8 +0.3
BRVK P P 14 24 34.8 +0.3
BRVK **Borovoye** 48.60 310 *ceP* P 14 24 34.7 +0.2
BRVK pmax pmax
comp=Z,55nm,1.1s
BRVK **Borovoye** 48.60 310 P P 14 24 34.6 +0.1
BRVK pP pP 14 24 48.4 +0.8
CTG **Chitna Glacier** 48.60 39 P P 14 24 35.0 +0.4
baz=282
E29M **Blow River** 48.69 29 P P 14 24 36.5 +1.6
E29M IAmb IAmb 14 24 45.8
comp=Z,45nm,1.0s
E29M **Blow River** 48.69 29 P P 14 24 35.2 +0.3
baz=279,SNR=16
BTLS **Baital** 48.84 299 ⇑*iP* P 14 24 36.1 -0.3
comp=Z,20nm,1.2s,baz=299
BTLS **Baital** 48.84 299 *ciP* P 14 24 36.1 -0.3
BTLS pmax pmax
comp=Z,20nm,1.2s
YUK3 **Moose Creek** 48.84 38 P P 14 24 36.1 -0.3
baz=282,SNR=5.7
DAWY **Dawson** 48.85 35 P P 14 24 36.3 0.0
baz=281
H29M **Whitestone** 48.87 32 P P 14 24 38.4 +2.0
H29M **Whitestone** 48.87 32 P P 14 24 36.8 +0.5
baz=280,SNR=7.7
G29M **Pine Creek** 48.88 31 P P 14 24 38.5 +2.0
G29M **Pine Creek** 48.88 31 P P 14 24 36.8 +0.4
baz=280,SNR=13
SGDS **Sogindy** 49.03 297 ⇑*iP* P 14 24 37.9 -0.1
comp=Z,17nm,1.1s,baz=297
SGDS **Sogindy** 49.03 297 *ciP* P 14 24 37.9 -0.1
SGDS pmax pmax
comp=Z,17nm,1.1s
I29M **Ogilvie Camp,** 49.05 33 P P 14 24 38.2 +0.4
baz=281,SNR=18
KSM **Kuching** 49.11 225 P P 14 24 39.5 +0.8
KBK **Karagaybulak** 49.12 296 P P 14 24 39.4 +0.6
SNR=27
CHMS **Chumysh** 49.12 296 P P 14 24 38.8 +0.1
SNR=11
USP **Ospenovka** 49.19 296 P P 14 24 39.4 +0.3
SNR=21
O28M **Mount Upton** 49.19 39 P P 14 24 38.9 -0.3
baz=283
YUK8 **Steele Glacier** 49.28 38 P P 14 24 39.7 -0.2
baz=283

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **49.44** | **296** | P | | **P** | **14 24 41.4** | **+0.2** |
| | SNR=11 | | | | | | | | |
| **AAK** | **Ala-Archa** | **49.44** | **296** | P | | **P** | **14 24 41.3** | **+0.1** |
| AAK | | | | IAmb | | IAmb | 14 24 56.5 | | |
| | comp=Z,42nm,1.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | **49.44** | **296** | *i* P | | **P** | **14 24 41.3** | **+0.1** |
| | SNR=11 | | | | | | | | |
| **AAK** | **Ala-Archa** | **49.44** | **296** | LR | | LR | 14 47 26.6 | | |
| | comp=Z,712nm,20.1s,baz=72,slow=38 | | | | | | | | |
| **AAK** | **Ala-Archa** | **49.44** | **296** | P | | **P** | **14 24 41.0** | **-0.2** |
| AAK | | | | P | | **P** | **14 24 41.0** | **-0.2** |
| **AAK** | **Ala-Archa** | **49.44** | **296** | *ce*P | | **P** | **14 24 41.3** | **+0.1** |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,54nm,1.4s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **49.49** | **32** | P | | **P** | **14 24 40.6** | **-0.6** |
| | baz=282,SNR=27 | | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **49.56** | **31** | P | | **P** | **14 24 43.2** | **+1.6** |
| **G30M** | **tAoh Zraii Nji** | **49.56** | **31** | P | | **P** | **14 24 41.6** | **-0.1** |
| | baz=281,SNR=22 | | | | | | | | |
| **F30M** | **Barrier River** | **49.60** | **30** | P | | **P** | **14 24 42.2** | **+0.3** |
| | baz=281,SNR=21 | | | | | | | | |
| **M29M** | **Somme Creek** | **49.61** | **37** | P | | **P** | **14 24 44.2** | **+2.0** |
| **M29M** | **Somme Creek** | **49.61** | **37** | P | | **P** | **14 24 42.2** | **0.0** |
| | baz=283 | | | | | | | | |
| **KSH** | **Kashi** | **49.66** | **291** | P | | **P** | **14 24 47.0** | **+4.1** |
| KSH | | | | pP | | sP | 14 25 00.5 | -1.3 | |
| KSH | | | | pmax | | pmax | | | |
| | comp=Z,43nm,0.9s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=Z,770nm,15.5s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=Z,400nm,14.1s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=Z,1μm,16.5s | | | | | | | | |
| **K29M** | **Barlow Dome** | **49.70** | **35** | P | | **P** | **14 24 44.5** | **+1.6** |
| K29M | | | | IAmb | | IAmb | 14 25 03.0 | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| **K29M** | **Barlow Dome** | **49.70** | **35** | P | | **P** | **14 24 43.0** | **+0.2** |
| | baz=283,SNR=13 | | | | | | | | |
| **YUK4** | **Talbot Arm** | **49.78** | **38** | P | | **P** | **14 24 43.8** | **+0.2** |
| | baz=284 | | | | | | | | |
| **PNL** | **Peninsula** | **49.85** | **41** | P | | **P** | **14 24 43.8** | **-0.2** |
| | baz=285 | | | | | | | | |
| **I30M** | **Mount Dempster** | **49.88** | **33** | P | | **P** | **14 24 44.7** | **+0.5** |
| | baz=283,SNR=52 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **49.91** | **296** | P | | **P** | **14 24 45.0** | **+0.3** |
| | SNR=34 | | | | | | | | |
| **SRIT** | **Nakonsritamara** | **49.96** | **242** | P | | **P** | **14 24 46.8** | **+1.5** |
| **YUK6** | **Outpost Mounta** | **50.02** | **39** | P | | **P** | **14 24 44.6** | **-0.8** |
| | baz=285 | | | | | | | | |
| **J30M** | **Hart River** | **50.04** | **34** | P | | **P** | **14 24 47.1** | **+1.6** |
| J30M | | | | IAmb | | IAmb | 14 25 09.1 | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **J30M** | **Hart River** | **50.04** | **34** | P | | **P** | **14 24 45.1** | **-0.3** |
| | baz=283,SNR=8.2 | | | | | | | | |
| **O29M** | **Mount Kennedy** | **50.08** | **40** | P | | **P** | **14 24 45.2** | **-0.6** |
| | baz=285 | | | | | | | | |
| **AML** | **Almayashu** | **50.18** | **295** | P | | **P** | **14 24 47.8** | **+0.7** |
| | SNR=48 | | | | | | | | |
| **INK** | **Inuvik** | **50.30** | **29** | P | | **P** | **14 24 48.5** | **+1.4** |
| INK | | | | IAmb | | IAmb | 14 25 04.8 | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **INK** | **Inuvik** | **50.30** | **29** | LR | | LR | 14 48 11.3 | | |
| | comp=Z,302nm,20.4s,baz=276,slow=38 | | | | | | | | |
| **INK** | **Inuvik** | **50.30** | **29** | P | | **P** | **14 24 47.2** | **+0.1** |
| | baz=283,SNR=15 | | | | | | | | |
| **INK** | **Inuvik** | **50.30** | **29** | P | | **P** | **14 24 48.5** | **+1.4** |
| INK | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| **G31M** | **Satah River** | **50.33** | **31** | P | | **P** | **14 24 48.8** | **+1.4** |
| G31M | | | | IAmb | | IAmb | 14 24 49.6 | | |
| | comp=Z,33nm,0.9s | | | | | | | | |
| **G31M** | **Satah River** | **50.33** | **31** | P | | **P** | **14 24 48.2** | **+0.9** |
| | baz=283,SNR=17 | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **50.41** | **30** | P | | **P** | **14 24 48.7** | **+0.8** |
| | baz=283,SNR=11 | | | | | | | | |
| **N30M** | **Aishikik Lake** | **50.48** | **38** | P | | **P** | **14 24 49.0** | **+0.3** |
| | baz=285 | | | | | | | | |
| **KAPI** | **Kappang** | **50.50** | **210** | LR | | LR | 14 46 53.6 | | |
| | comp=Z,99nm,20.8s,baz=10,slow=37 | | | | | | | | |
| **PMG** | **Port Moresby** | **50.51** | **174** | P | | **P** | **14 24 49.9** | **+0.7** |
| | comp=Z,4.1nm,0.5s,baz=331,slow=15,SNR=1.6 | | | | | | | | |
| PMG | | | | LR | | LR | 14 44 21.2 | | |
| | comp=Z,90nm,21.0s,baz=325,slow=34 | | | | | | | | |
| | comp=Z,4.1nm,0.5s | | | | | | | | |
| **P29M** | **Windy Craggy** | **50.67** | **40** | P | | **P** | **14 24 50.1** | **0.0** |
| | baz=286,SNR=11 | | | | | | | | |
| **P30M** | **Million Dollar** | **50.91** | **40** | P | | **P** | **14 24 52.3** | **+0.4** |
| | baz=286 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **51.08** | **38** | P | | **P** | **14 24 54.4** | **+1.2** |
| | baz=286,SNR=7.2 | | | | | | | | |
| **O30N** | **Mendenhall** | **51.14** | **39** | P | | **P** | **14 24 53.8** | **+0.2** |
| | baz=287 | | | | | | | | |
| **PLBC** | **Pleasant Camp** | **51.39** | **40** | P | | **P** | **14 24 55.8** | **+0.3** |
| | baz=287 | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **51.51** | **36** | P | | **P** | **14 24 57.5** | **+1.1** |
| | baz=287,SNR=10 | | | | | | | | |
| **WHY** | **Whitehorse** | **51.74** | **38** | P | | **P** | **14 24 59.6** | **+1.3** |
| | baz=288 | | | | | | | | |
| **KULM** | **Kulim** | **51.75** | **238** | P | | **P** | **14 24 58.6** | **-0.2** |
| **SKAG** | **Skagway** | **51.89** | **40** | P | | **P** | **14 25 00.3** | **+1.0** |
| | baz=288 | | | | | | | | |
| **S31K** | **Pelican** | **51.92** | **42** | P | | **P** | **14 24 59.5** | **+0.1** |
| | baz=289 | | | | | | | | |
| **KK31** | **Karatay Array** | **51.94** | **298** | P | | **P** | **14 24 59.2** | **-0.6** |
| KK31 | | | | IAmb | | IAmb | 14 25 14.9 | | |
| | comp=Z,51nm,0.9s | | | | | | | | |
| **KK31** | **Karatay Array** | **51.94** | **298** | P | | **P** | **14 24 59.3** | **-0.6** |
| KK31 | | | | pmax | | pmax | | | |
| | comp=Z,51nm,1.0s | | | | | | | | |
| **KKAR** | **Karatay Array** | **51.94** | **298** | P | | **P** | **14 24 59.5** | **-0.3** |
| **KKAR** | **Karatay Array** | **51.94** | **298** | P | | **P** | **14 24 59.6** | **-0.3** |
| **FARO** | **Faro, Yukon** | **51.96** | **36** | P | | **P** | **14 25 00.4** | **+0.7** |
| | baz=288,SNR=9.7 | | | | | | | | |
| **A36M** | **Sachs Harbour** | **52.08** | **23** | P | | **P** | **14 24 59.9** | **-0.6** |
| | baz=287 | | | | | | | | |
| **IPM** | **Ipoh** | **52.13** | **237** | P | | **P** | **14 25 01.6** | **0.0** |
| **IPM** | **Ipoh** | **52.13** | **237** | P | | **P** | **14 25 01.2** | **-0.4** |
| IPM | | | | IAmb | | IAmb | 14 25 02.6 | | |
| | comp=Z,36nm,0.9s | | | | | | | | |
| **BRLS** | **Borolday** | **52.42** | **298** | *e*P | | **P** | **14 25 04.7** | **+1.2** |
| | comp=Z,13nm,1.0s,baz=298 | | | | | | | | |
| **BRLS** | **Borolday** | **52.42** | **298** | *e*P | | **P** | **14 25 04.6** | **+1.2** |
| BRLS | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **P32M** | **Atlin** | **52.63** | **40** | P | | **P** | **14 25 04.4** | **-0.4** |
| | baz=289 | | | | | | | | |
| **R32K** | **Eaglecrest** | **52.68** | **41** | P | | **P** | **14 25 04.4** | **-0.6** |
| | baz=290 | | | | | | | | |
| **SIT** | **Sitka** | **52.68** | **43** | P | | **P** | **14 25 05.9** | **+0.8** |
| | baz=290 | | | | | | | | |
| **SVE** | **Sverdlovsk** | **52.71** | **317** | *e*P | | **P** | **14 25 06.2** | **+0.9** |
| SVE | | | | pmax | | pmax | | | |
| | comp=Z,151nm,1.5s | | | | | | | | |
| SVE | | | | MLR | | MLR | | | |
| | comp=Z,1μm,19.0s | | | | | | | | |
| **HNR** | **Honiara** | **52.83** | **158** | LR | | LR | 14 44 11.6 | | |
| | comp=Z,2μm,21.6s,baz=339,slow=32 | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **52.85** | **39** | P | | **P** | **14 25 07.7** | **+1.3** |
| P33M | | | | IAmb | | IAmb | 14 25 25.1 | | |
| | comp=Z,35nm,1.1s | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **52.85** | **39** | P | | **P** | **14 25 06.9** | **+0.4** |
| | baz=289,SNR=8.2 | | | | | | | | |
| **BTDF** | **Bukit Timah Da** | **52.89** | **232** | P | | **P** | **14 25 08.2** | **+1.0** |
| **S32K** | **Killisnoo** | **52.92** | **42** | P | | **P** | **14 25 07.4** | **+0.6** |
| | baz=290 | | | | | | | | |
| **BTK** | **Batken** | **53.02** | **294** | P | | **P** | **14 25 07.7** | **-0.3** |
| BTK | | | | IAmb | | IAmb | 14 25 13.2 | | |
| | comp=Z,48nm,1.1s | | | | | | | | |
| **BTK** | **Batken** | **53.02** | **294** | P | | **P** | **14 25 07.7** | **-0.3** |
| BTK | | | | pmax | | pmax | | | |
| | comp=Z,49nm,1.1s | | | | | | | | |
| **C36M** | **Paulatuk** | **53.30** | **26** | P | | **P** | **14 25 10.4** | **+0.9** |
| **C36M** | **Paulatuk** | **53.30** | **26** | P | | **P** | **14 25 09.6** | **+0.2** |
| | baz=290,SNR=5.1 | | | | | | | | |
| **SOEI** | **Soe** | **53.42** | **203** | P | | **P** | **14 25 12.5** | **+1.4** |
| **Q32M** | **Nakina River** | **53.55** | **40** | P | | **P** | **14 25 10.8** | **-0.9** |
| | baz=291 | | | | | | | | |
| **ARU** | **Arti** | **53.92** | **317** | LR | | LR | 14 51 01.3 | | |
| | comp=Z,1μm,18.4s,baz=56,slow=39 | | | | | | | | |
| **ARU** | **Arti** | **53.92** | **317** | *c i*P | | **P** | **14 25 14.4** | **+0.2** |
| ARU | | | | *PP | | **pP** | **14 25 27.9** | **+0.3** |
| ARU | | | | | | | 14 26 17.8 | | |
| ARU | | | | | | | 14 27 13.9 | | |
| ARU | | | | S | | **S** | **14 32 47.5** | **+1.8** |
| ARU | | | | SS | | **SS** | **14 36 24.6** | **-2.2** |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,70nm,1.7s | | | | | | | | |
| ARU | | | | MLR | | MLR | | | |
| | comp=Z,1μm,17.0s | | | | | | | | |
| **ARU** | **Arti** | **53.92** | **317** | P | | **P** | **14 25 13.9** | **-0.3** |
| | comp=Z,102nm,1.3s,comp=Z,1μm | | | | | | | | |
| **R33M** | **Jennings River** | **54.01** | **39** | P | | **P** | **14 25 13.9** | **-1.1** |
| | baz=291 | | | | | | | | |
| **U33K** | **Whale Pass** | **54.16** | **43** | P | | **P** | **14 25 16.3** | **+0.4** |
| | baz=292 | | | | | | | | |
| **NIL** | **Nilore** | **54.28** | **286** | P | | **P** | **14 25 18.0** | **+0.8** |
| **NIL** | **Nilore** | **54.28** | **286** | P | | **P** | **14 25 18.0** | **+0.8** |
| NIL | | | | P | | **P** | **14 25 18.0** | **+0.8** |
| **NIL** | **Nilore** | **54.28** | **286** | P | | **P** | **14 25 18.0** | **+0.8** |
| NIL | | | | pmax | | pmax | | | |
| | comp=Z,165nm,0.9s | | | | | | | | |
| **NIL** | **Nilore** | **54.28** | **286** | P | | **P** | **14 25 18.1** | **+0.8** |
| NIL | | | | PcP | | **PcP** | **14 26 19.2** | **-1.7** |
| **CRAG** | **Craig** | **54.40** | **44** | P | | **P** | **14 25 18.0** | **+0.3** |
| | baz=292 | | | | | | | | |
| **KDU** | **Kakadu** | **54.41** | **192** | P | | **P** | **14 25 18.1** | **0.0** |
| **TGTN** | **Hyland Airport** | **54.47** | **36** | P | | **P** | **14 25 19.2** | **+1.0** |
| | baz=292 | | | | | | | | |
| **S34M** | **Telegraph Cree** | **54.49** | **41** | P | | **P** | **14 25 19.2** | **+0.8** |
| | baz=292 | | | | | | | | |
| **PSI** | **Prapat** | **54.75** | **238** | P | | **P** | **14 25 21.2** | **+0.3** |
| **MTN** | **Manton Dam** | **54.78** | **194** | P | | **P** | **14 25 21.2** | **+0.3** |
| **MTN** | **Manton Dam** | **54.78** | **194** | P | | **P** | **14 25 20.7** | **-0.1** |
| MTN | | | | IAmb | | IAmb | 14 25 38.0 | | |
| | comp=Z,42nm,1.1s | | | | | | | | |
| **CHGR** | **Chuyangaron** | **54.80** | **293** | P | | **P** | **14 25 20.8** | **-0.2** |
| **CHGR** | **Chuyangaron** | **54.80** | **293** | P | | **P** | **14 25 20.8** | **-0.2** |
| CHGR | | | | pmax | | pmax | | | |
| | comp=Z,187nm,0.9s | | | | | | | | |
| **DLBC** | **Dease Lake** | **54.83** | **40** | LR | | LR | 14 49 16.2 | | |
| | comp=Z,118nm,21.9s,baz=286,slow=36 | | | | | | | | |
| **DLBC** | **Dease Lake** | **54.83** | **40** | P | | **P** | **14 25 20.3** | **-0.5** |
| | baz=293 | | | | | | | | |
| **COEN** | **Coen** | **54.86** | **179** | P | | **P** | **14 25 22.4** | **+1.0** |
| **SIMJ** | **Simiganj** | **54.91** | **293** | P | | **P** | **14 25 21.4** | **-0.4** |
| **SIMJ** | **Simiganj** | **54.91** | **293** | P | | **P** | **14 25 21.3** | **-0.5** |
| SIMJ | | | | pP | | **pP** | **14 25 35.5** | **+0.3** |
| **V35K** | **Ketchikan** | **55.25** | **44** | P | | **P** | **14 25 24.1** | **+0.3** |
| | baz=294 | | | | | | | | |
| **T35M** | **Bob Quinn** | **55.29** | **42** | P | | **P** | **14 25 24.4** | **+0.2** |
| | baz=294,SNR=6.4 | | | | | | | | |
| **WRGLY** | **Wrigley** | **55.85** | **33** | P | | **P** | **14 25 29.2** | **+1.2** |
| | baz=294 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **56.04** | **308** | P | | **P** | **14 25 29.6** | **-0.1** |
| **ABKAR** | **Akbulak array** | **56.04** | **308** | P | | **P** | **14 25 29.8** | **+0.2** |
| ABKAR | | | | IAmb | | IAmb | 14 25 45.3 | | |
| | comp=Z,83nm,0.7s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **56.65** | **349** | P | | **P** | **14 25 33.6** | **0.0** |
| | comp=Z,8.4nm,0.7s,baz=90,slow=6.7,SNR=16 | | | | | | | | |
| SPITS | | | | LR | | LR | 14 50 53.8 | | |
| | comp=Z,402nm,21.8s,baz=356,slow=37 | | | | | | | | |
| | comp=Z,8.4nm,0.7s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **56.65** | **310** | LR | | LR | 14 51 18.3 | | |
| | comp=Z,740nm,21.1s,baz=66,slow=38 | | | | | | | | |
| **KBS** | **Kingsbay** | **56.74** | **350** | *ce*P | | **P** | **14 25 34.9** | **+0.7** |
| KBS | | | | pmax | | pmax | | | |
| | comp=Z,54nm,1.0s | | | | | | | | |
| **KBS** | **Kingsbay** | **56.74** | **350** | *e*P | | **P** | **14 25 33.5** | **-0.7** |
| **GSI** | **Gunungsitoli** | **56.76** | **238** | P | | **P** | **14 25 35.3** | **+0.2** |
| **KBL** | **Kabul** | **56.87** | **289** | P | | **P** | **14 25 34.4** | **-1.6** |
| **KBL** | **Kabul** | **56.87** | **289** | P | | **P** | **14 25 35.1** | **-0.9** |
| | SNR=22 | | | | | | | | |
| KBL | | | | P | | **P** | **14 25 35.1** | **-0.9** |
| | SNR=22 | | | | | | | | |
| **KBL** | **Kabul** | **56.87** | **289** | P | | **P** | **14 25 34.4** | **-1.6** |
| KBL | | | | pmax | | pmax | | | |
| | comp=Z,65nm,1.0s | | | | | | | | |
| **KOTAN** | **Kotaneelee Air** | **56.92** | **37** | P | | **P** | **14 25 37.4** | **+1.7** |
| | baz=296 | | | | | | | | |
| **TOAD** | **Toad River Com** | **56.94** | **38** | P | | **P** | **14 25 37.5** | **+1.6** |
| | baz=296 | | | | | | | | |
| **NOR** | **Nord** | **56.98** | **356** | *i* P | | **P** | **14 25 35.5** | **-0.4** |
| **KIRV** | **Kirov** | **57.54** | **322** | LR | | LR | 14 53 13.5 | | |
| | comp=Z,448nm,18.1s,baz=49,slow=39 | | | | | | | | |
| **KIRV** | **Kirov** | **57.54** | **322** | *ce*P | | **P** | **14 25 39.8** | **-0.3** |
| **HSPB** | **Hornsund (broa** | **57.60** | **348** | *e*P | | **P** | **14 25 40.9** | **+0.6** |
| **KNRA** | **Kununurra** | **58.00** | **196** | P | | **P** | **14 25 43.7** | **0.0** |
| KNRA | | | | IAmb | | IAmb | 14 26 02.3 | | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| **BBB** | **Bella Bella** | **58.49** | **46** | LR | | LR | 14 49 19.4 | | |
| | comp=Z,122nm,21.4s,baz=263,slow=34 | | | | | | | | |
| **LVZ** | **Lovozero** | **58.73** | **335** | *ce*P | | **P** | **14 25 47.9** | **-0.5** |
| LVZ | | | | pmax | | pmax | | | |
| | comp=Z,52nm,2.5s | | | | | | | | |
| **LVZ** | **Lovozero** | **58.73** | **335** | P | | **P** | **14 25 47.9** | **-0.5** |
| | comp=Z,25nm,2.7s | | | | | | | | |
| **MTSU** | **Mount Surprise** | **59.03** | **178** | P | | **P** | **14 25 52.1** | **+1.2** |
| **HYB** | **Hyderabad** | **59.30** | **267** | *e*P | | **P** | **14 25 52.4** | **-0.7** |
| **APA** | **Apatity** | **59.31** | **335** | ⇓*i*P | | **P** | **14 25 50.6** | **-1.7** |
| APA | | | | *i* | | | 14 26 34.0 | | |
| APA | | | | *i* | | | 14 28 02.0 | | |
| APA | | | | *i* S | | S | 14 33 46.0 | -11 | |
| APA | | | | *i* SS | | **SS** | **14 37 55.0** | **+4.0** |
| APA | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| APA | | | | MLR | | MLR | | | |
| | comp=Z,800nm,25.0s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.78** | **32** | P | | **P** | **14 25 56.2** | **+0.6** |
| | comp=Z,6.4nm,1.0s,baz=304,slow=7.4,SNR=8.9 | | | | | | | | |
| YKA | | | | LR | | LR | 14 54 41.9 | | |
| | comp=Z,79nm,21.8s,baz=308,slow=39 | | | | | | | | |
| | comp=Z,6.4nm,1.0s | | | | | | | | |
| **KEV** | **Kevo** | **59.91** | **339** | P | | **P** | **14 25 56.2** | **-0.2** |
| KEV | | | | IAmb | | IAmb | 14 25 57.4 | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **KEV** | **Kevo** | **59.91** | **339** | P | | **P** | **14 25 56.2** | **-0.2** |
| KEV | | | | pmax | | pmax | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **60.46** | **339** | P | | **P** | **14 25 58.7** | **-1.5** |
| ARCES | | | | IAmb | | IAmb | 14 26 20.2 | | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **60.46** | **339** | P | | **P** | **14 26 00.0** | **-0.2** |
| | comp=Z,8.7nm,0.8s,baz=46,slow=7.4,SNR=15 | | | | | | | | |
| ARCES | | | | LR | | LR | 14 56 44.6 | | |
| | comp=Z,309nm,19.1s,baz=38,slow=40 | | | | | | | | |
| | comp=Z,8.7nm,0.8s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **61.11** | **189** | P | | **P** | **14 26 04.3** | **-0.8** |
| **WRAB** | **Tennant Creek** | **61.28** | **189** | P | | **P** | **14 26 05.4** | **-0.8** |
| WRAB | | | | IAmb | | IAmb | 14 26 21.0 | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **61.28** | **189** | P | | **P** | **14 26 05.4** | **-0.8** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **61.28** | **189** | P | | **P** | **14 26 05.4** | **-0.8** |
| WR0 | | | | IAmb | | IAmb | 14 26 21.0 | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **61.29** | **189** | P | | **P** | **14 26 05.5** | **-0.8** |
| WB2 | | | | IAmb | | IAmb | 14 26 21.1 | | |
| | comp=Z,29nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **61.29** | **189** | P | | **P** | **14 26 05.1** | **-1.2** |
| **WRA** | **Warramunga Arr** | **61.29** | **189** | P | | **P** | **14 26 05.4** | **-0.9** |
| | comp=Z,4.8nm,0.5s,baz=5.0,slow=6.9,SNR=118 | | | | | | | | |
| WRA | | | | LR | | LR | 14 52 18.2 | | |
| | comp=Z,113nm,20.8s,baz=24,slow=36 | | | | | | | | |
| WRA | | | | PKP2ab | | | 14 55 38.4 | | |
| | comp=Z,0.7nm,0.9s,baz=172,slow=3.0,SNR=4.6 | | | | | | | | |
| | comp=Z,4.8nm,0.5s | | | | | | | | |
| **NEEM** | **North Greenlan** | **61.34** | **3** | *e*P | | **P** | **14 26 08.4** | **+2.0** |
| **BELG** | **Belogornoye** | **61.44** | **316** | LR | | LR | 14 55 25.0 | | |
| | comp=Z,1μm,19.1s,baz=60,slow=39 | | | | | | | | |
| **BELG** | **Belogornoye** | **61.44** | **316** | *i* P | | **P** | **14 26 07.5** | **+0.5** |
| BELG | | | | pmax | | pmax | | | |
| | comp=Z,14nm,2.0s | | | | | | | | |
| **QIS** | **Mount Isa** | **61.48** | **183** | P | | **P** | **14 26 08.8** | **+1.2** |
| **DAG** | **Danmarks Havn** | **61.73** | **355** | *i* P | | **P** | **14 26 07.9** | **-0.7** |
| **JOF** | **Joensuu** | **62.76** | **331** | *e*P | | **P** | **14 26 15.0** | **-0.7** |
| **PALK** | **Pallekele** | **64.20** | **256** | LR | | LR | 14 55 32.1 | | |
| | comp=Z,250nm,20.9s,baz=156,slow=37 | | | | | | | | |
| **PALK** | **Pallekele** | **64.20** | **256** | P | | **P** | **14 26 25.1** | **-0.9** |
| **MOS** | **Moscow** | **64.50** | **323** | *e*P | | **P** | **14 26 25.7** | **-1.6** |
| **RK1H** | **Rockhampton Ha** | **64.65** | **172** | P | | **P** | **14 26 31.3** | **+2.8** |
| **AS01** | **Alice Springs** | **65.01** | **189** | P | | **P** | **14 26 31.3** | **+0.3** |
| **AS31** | **Alice Springs** | **65.02** | **189** | P | | **P** | **14 26 30.6** | **-0.3** |
| **ASAR** | **Alice Springs** | **65.02** | **189** | P | | **P** | **14 26 30.7** | **-0.3** |
| | comp=Z,3.0nm,0.4s,baz=4.3,slow=7.1,SNR=90 | | | | | | | | |
| ASAR | | | | PKP2bc | | | 14 55 19.3 | | |
| | comp=Z,1.1nm,1.0s,baz=174,slow=3.7,SNR=6.2 | | | | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **65.16** | **317** | *e*P | | **P** | **14 26 31.4** | **-0.2** |
| VRH | | | | pmax | | pmax | | | |
| | comp=Z,42nm,0.8s | | | | | | | | |
| **OBN** | **Obninsk** | **65.35** | **323** | LR | | LR | 14 57 08.8 | | |
| | comp=Z,338nm,18.4s,baz=24,slow=38 | | | | | | | | |
| **OBN** | **Obninsk** | **65.35** | **323** | *c i*P | | **P** | **14 26 32.5** | **-0.3** |
| OBN | | | | *i* | | | 14 26 46.2 | | |
| OBN | | | | *e* | | | 14 27 08.1 | | |
| OBN | | | | *i* | | | 14 28 53.4 | | |
| OBN | | | | *i* SS | | SS | 14 39 31.8 | +6.1 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| OBN | | | | MLR | | MLR | | | |
| | comp=Z,665nm,17.0s | | | | | | | | |
| **KEF** | **Keuruu** | **65.53** | **333** | *e*P | | **P** | **14 26 33.2** | **-0.7** |
| **MBWA** | **Marble Bar** | **65.56** | **203** | P | | **P** | **14 26 35.4** | **+0.9** |
| **MBWA** | **Marble Bar** | **65.56** | **203** | P | | **P** | **14 26 33.8** | **-0.6** |
| MBWA | | | | IAmb | | IAmb | 14 26 49.7 | | |
| | comp=Z,24nm,0.7s | | | | | | | | |
| **FIA1** | **FINESS Array S** | **65.59** | **332** | P | | **P** | **14 26 34.2** | **-0.1** |
| **FINES** | **FINESS Array B** | **65.59** | **332** | P | | **P** | **14 26 34.1** | **-0.2** |
| | comp=Z,55nm,0.7s,baz=46,slow=8.2,SNR=132 | | | | | | | | |
| FINES | | | | LR | | LR | 14 57 06.9 | | |
| | comp=Z,835nm,21.9s,baz=46,slow=38 | | | | | | | | |
| | comp=Z,55nm,0.7s | | | | | | | | |
| **VAF** | **Ylistaro** | **65.66** | **334** | *e*P | | **P** | **14 26 35.0** | **+0.3** |
| **LPSR** | **Galich'ya Gora** | **65.74** | **319** | *e*P | | **P** | **14 26 33.4** | **-2.0** |
| LPSR | | | | *e*SP | | **pP** | **14 26 48.5** | **-0.5** |
| LPSR | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **VORR** | **Voronezh** | **66.15** | **319** | *e*P | | **P** | **14 26 37.3** | **-0.8** |
| VORR | | | | pmax | | pmax | | | |
| | comp=Z,34nm,0.3s | | | | | | | | |
| **JMIC** | **Jan Mayen** | **66.23** | **350** | LR | | LR | 14 57 57.1 | | |
| | comp=Z,51nm,18.4s,baz=327,slow=38 | | | | | | | | |
| **VSR** | **Storozhevoye** | **66.45** | **318** | *e*P | | **P** | **14 26 38.3** | **-1.7** |
| VSR | | | | *e*SP | | **pP** | **14 26 53.9** | **+0.3** |
| VSR | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **VORD** | **Divnogorie** | **66.53** | **318** | *e*P | | **P** | **14 26 38.3** | **-2.2** |
| VORD | | | | *e*SP | | **pP** | **14 26 54.9** | **+0.7** |
| VORD | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **NEW** | **Newport** | **66.55** | **46** | LR | | LR | 14 53 58.9 | | |
| | comp=Z,204nm,21.9s,baz=306,slow=34 | | | | | | | | |
| **SUMG** | **Summit** | **66.55** | **0** | P | | **P** | **14 26 41.4** | **+0.6** |
| **SUMG** | **Summit** | **66.55** | **0** | P | | **P** | **14 26 41.4** | **+0.6** |
| SUMG | | | | pmax | | pmax | | | |
| | comp=Z,70nm,0.9s | | | | | | | | |
| **SUMG** | **Summit** | **66.55** | **0** | *i* P | | **P** | **14 26 41.0** | **+0.2** |
| SUMG | | | | IAmb | | IAmb | 14 26 42.6 | | |
| | comp=Z,60nm,0.8s | | | | | | | | |
| **MAK** | **Makhachkala** | **66.67** | **307** | *c i*P | | **P** | **14 26 40.4** | **-1.1** |
| MAK | | | | *e*PP | | **pP** | **14 26 55.1** | **-0.1** |
| MAK | | | | *e*SP | | **sP** | **14 27 00.3** | **-0.4** |
| MAK | | | | *e* | | | 14 29 05.9 | | |
| MAK | | | | *e*S | | **S** | **14 35 29.5** | **+0.3** |
| MAK | | | | *e*SS | | **sS** | **14 35 53.6** | **+1.3** |
| MAK | | | | *e*SS | | **SS** | **14 39 47.3** | **+0.6** |
| MAK | | | | pmax | | pmax | | | |
| | comp=Z,372nm,1.9s | | | | | | | | |
| MAK | | | | MLR | | MLR | | | |
| | comp=Z,311nm,17.0s | | | | | | | | |
| **EIDS** | **Eidsvold** | **66.67** | **172** | P | | **P** | **14 26 42.3** | **+0.7** |
| **DZM** | **Mont Dzumac** | **66.71** | **156** | *e*LR | | LR | 14 46 46.0 | | |
| | comp=Z,624nm,23.1s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **66.71** | **156** | P | | **P** | **14 26 43.5** | **+1.6** |
| | comp=Z,3.8nm,0.8s,baz=293,slow=22,SNR=1.2 | | | | | | | | |
| DZM | | | | LR | | LR | 14 51 44.4 | | |
| | comp=Z,251nm,21.8s,baz=354,slow=32 | | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | |
| **ARBE** | **Arbavere** | **66.99** | **330** | *e*P | | **P** | **14 26 43.0** | **-0.3** |
| **MEF** | **Metsahovi** | **67.03** | **331** | *e*P | | **P** | **14 26 43.8** | **+0.2** |
| **MSVF** | **Nonsavu** | **67.20** | **143** | LR | | LR | 14 51 52.4 | | |
| | comp=Z,132nm,19.9s,baz=351,slow=32 | | | | | | | | |
| **WRKA** | **Warakurna** | **67.20** | **194** | P | | **P** | **14 26 46.3** | **+1.3** |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **VSU** | **Vasula** | **67.37** | **329** | *ce*P | | **P** | **14 26 46.1** | **+0.4** |
| VSU | | | | pmax | | pmax | | | |
| | comp=Z,91nm,1.3s | | | | | | | | |
| **RAF** | **Rauma** | **67.39** | **333** | *e*P | | **P** | **14 26 45.9** | **+0.1** |
| **QLP** | **Quilpie** | **67.43** | **178** | P | | **P** | **14 26 48.0** | **+1.6** |
| **MTSE** | **Matsula** | **68.30** | **331** | *e*P | | **P** | **14 26 52.2** | **+0.7** |
| **INKA** | **Innaminka** | **68.59** | **182** | P | | **P** | **14 26 54.8** | **+1.2** |
| **AAL** | **Aland** | **68.61** | **333** | *e*P | | **P** | **14 26 52.7** | **-0.7** |
| **KVAR** | **Kislovodsk Arr** | **68.91** | **310** | LR | | LR | 15 02 22.4 | | |
| | comp=Z,343nm,18.2s,baz=266,slow=40 | | | | | | | | |
| **KIV** | **Kislovodsk** | **68.92** | **310** | *i* P | | **P** | **14 26 57.2** | **+1.4** |
| | SNR=15 | | | | | | | | |
| **KIV** | **Kislovodsk** | **68.92** | **310** | ⇑P | | **P** | **14 26 56.6** | **+0.8** |
| **KIV** | **Kislovodsk** | **68.92** | **310** | *e*P | | **P** | **14 26 56.1** | **+0.3** |
| KIV | | | | *e*S | | **S** | **14 35 57.4** | **+1.1** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,74nm

WSAR **Wadi Sarin** 70.72 284 LR LR 15 01 18.5
comp=Z,206nm,20.9s,baz=116,slow=38
NB2 **NORSAR Subarra** 70.73 337 P P 14 27 06.2 -0.4
comp=Z,38nm,0.8s,baz=37,slow=6.2
NB2 **NORSAR Subarra** 70.73 337 P P 14 27 06.2 -0.4
baz=37,slow=6.2
NOA **NORSAR Array B** 70.73 337 P P 14 27 06.4 -0.1
comp=Z,27nm,0.8s,baz=37,slow=6.1,SNR=110
NOA LR LR 15 01 21.3
comp=Z,278nm,21.8s,baz=30,slow=38
comp=Z,27nm,0.8s
JLN **Jalan Bani Buh** 70.80 283 P P 14 27 07.5 -0.1
SHME **Shamm** 70.83 288 *i* P P 14 27 07.8 +0.1
SNR=16
SHME **Shamm** 70.83 288 P P 14 27 08.1 +0.4
SNR=6.5
SHME P P 14 27 08.1 +0.4
SNR=6.5
SOC **Sochi** 70.84 311 *e*P P 14 27 07.0 -0.5
SOC *e**PP **pP** 14 27 22.2 +1.0
SOC *e* 14 29 42.0
SOC *e*S **S** 14 36 20.7 +2.0
SOC pmax pmax
comp=Z,35nm,1.7s
SOC MLR MLR
comp=Z,283nm,16.0s
WBK **Wadi Bani Khal** 70.85 284 P P 14 27 08.3 +0.4
WBK P P 14 27 08.3 +0.4
BIDO **Bidbid** 70.92 285 P P 14 27 08.7 +0.4
BCA **Borcka** 71.07 309 ⇓P P 14 27 09.3 +0.4
MDH **Madha** 71.17 287 P P 14 27 10.1 +0.3
MDH **Madha** 71.17 287 P P 14 27 09.7 -0.1
MDH P P 14 27 09.7 -0.1
MASF **Masafi** 71.23 288 P P 14 27 10.1 -0.1
MASF P P 14 27 10.1 -0.1
MSFE **Esma-Masafi** 71.23 288 *i* P P 14 27 10.5 +0.3
SNR=7.4
SMDO **Samad** 71.25 284 P P 14 27 10.5 0.0
SMDO P P 14 27 10.5 0.0
ANN **Anapa** 71.34 314 *e*P P 14 27 09.8 -0.7
ANN *e**PP **pP** 14 27 25.5 +1.3
ANN *e*S **S** 14 36 26.5 +2.1
ANN pmax pmax
comp=Z,32nm,1.1s
ANN MLR MLR
comp=Z,274nm,22.0s
LCRK **Leigh Creek** 71.38 184 P P 14 27 11.9 +1.2
UOSS **Minazif** 71.45 287 P P 14 27 11.7 +0.2
UOSS **Minazif** 71.45 287 *i* P P 14 27 11.6 +0.1
SNR=7.2
UOSS **Minazif** 71.45 287 P P 14 27 11.4 -0.1
UOSS P P 14 27 11.4 -0.1
HOQ **Hoqain** 71.47 285 P P 14 27 11.7 0.0
SNR=6.7
KVN **Kaiserville** 71.54 54 P P 14 27 13.7 +1.6
KVN IAmb IAmb 14 27 29.9
comp=Z,36nm,0.9s
KVN **Kaiserville** 71.54 54 P P 14 27 13.7 +1.6
KVN pmax pmax
comp=Z,36nm,0.9s
HATD **Hatta, Dubai** 71.58 287 *i* P P 14 27 12.6 +0.3
SNR=12
HATD **Hatta, Dubai** 71.58 287 P P 14 27 12.6 +0.3
AK03 **Malin Array Si** 71.58 322 P P 14 27 11.3 -0.5
AKASG **Malin Array Be** 71.60 322 P P 14 27 11.7 -0.2
comp=Z,22nm,0.8s,baz=44,slow=6.2,SNR=59
AKASG PP **PP** 14 29 51.1 +0.5
comp=Z,2.3nm,0.7s,baz=44,slow=9.1,SNR=4.7
AKASG LR LR 15 02 25.6
comp=Z,398nm,18.1s,baz=38,slow=39
comp=Z,22nm,0.8s
AKBB **Malin Array Si** 71.60 322 P P 14 27 11.6 -0.3
AKBB IAmb IAmb 14 27 12.7
comp=Z,39nm,0.9s
AKBB **Malin Array Si** 71.60 322 P P 14 27 11.6 -0.3
AKBB pmax pmax
comp=Z,39nm,0.9s
AKBB **Malin Array Si** 71.60 322 P P 14 27 11.6 -0.3
AK23 **Malin Array Si** 71.60 322 P P 14 27 11.6 -0.3
KIEV **Kiev** 71.61 322 P P 14 27 12.0 0.0
KIEV IAmb IAmb 14 27 12.7
comp=Z,38nm,0.9s
KIEV **Kiev** 71.61 322 *i* P P 14 27 11.7 -0.3
SNR=29
KIEV **Kiev** 71.61 322 ⇑P P 14 27 11.6 -0.3
KIEV **Kiev** 71.61 322 P P 14 27 12.0 0.0
KIEV pmax pmax
comp=Z,38nm,1.0s
KIEV **Kiev** 71.61 322 P P 14 27 11.4 -0.6
comp=Z,180nm,1.0s,comp=Z,2µm
KIEV **Kiev** 71.61 322 P P 14 27 11.7 -0.3
KIEV pP **pP** 14 27 26.8 +1.1
KIEV sP **PcP** 14 27 33.5 +2.5
JMDO **Jabal Madar** 71.63 284 P P 14 27 12.6 0.0
SFJD **Kangerlussuaq** 71.68 5 LR LR 15 00 15.3
comp=Z,351nm,21.7s,baz=342,slow=37
SOHO **SOHO** 71.70 286 *i* P P 14 27 12.9 -0.1
SNR=13
SOHO **SOHO** 71.70 286 P P 14 27 13.0 0.0
ASHO **Ashiyiah** 71.72 287 *i* P P 14 27 13.2 0.0
SNR=9.4
ASHO **Ashiyiah** 71.72 287 P P 14 27 13.1 0.0
ARMA **Armidale** 71.72 172 P P 14 27 13.9 +1.0
NVAR **Mina Array Bea** 71.80 55 P P 14 27 15.2 +1.5
comp=Z,3.0nm,0.8s,baz=289,slow=6.4,SNR=13
NVAR LR LR 14 53 10.0
comp=Z,70nm,20.6s,baz=305,slow=31
comp=Z,3.0nm,0.8s
NAZ **Nazwa, Dubai** 71.82 287 P P 14 27 13.5 -0.2
NAZ **Nazwa, Dubai** 71.82 287 P P 14 27 13.4 -0.2
NAZ P P 14 27 13.4 -0.2
SUW **Suwalki** 71.91 327 *e*P P 14 27 13.4 -0.3
SUW **Suwalki** 71.91 327 *e*P P 14 27 13.6 -0.1
FAQ **Al Faqa, Dubai** 72.01 287 *i* P P 14 27 14.8 -0.1
SNR=11
FAQ **Al Faqa, Dubai** 72.01 287 P P 14 27 14.4 -0.5
FAQ P P 14 27 14.4 -0.5
MI30 **MI30,Zelenitsa** 72.05 323 P P 14 27 14.2 -0.4
BSY **Bisya** 72.06 285 P P 14 27 15.3 +0.1
BSY P P 14 27 15.3 +0.1
ARQ **Araqi** 72.20 286 P P 14 27 16.1 +0.1
ELK **Elko** 72.20 51 LR LR 14 54 22.0
comp=Z,386nm,20.0s,baz=52,slow=32
ASUD **Al Ashush, Dub** 72.28 287 P P 14 27 16.6 +0.2
ASUD **Al Ashush, Dub** 72.28 287 P P 14 27 16.6 +0.2
ALNE **Al Ain** 72.32 287 *i* P P 14 27 16.6 -0.1
SNR=13
ALNE **Al Ain** 72.32 287 P P 14 27 17.0 +0.3
SNR=8.2
ALNE P P 14 27 17.0 +0.3
SNR=8.2
CMSA **Cobar Meteorol** 72.41 177 P P 14 27 17.8 +1.0
MI29 **MI29, Kamyanyy** 72.43 322 P P 14 27 16.5 -0.4
DY2G **Dye2** 72.46 4 *e*P P 14 27 17.2 0.0
DY2G IAmb IAmb 14 27 18.9
comp=Z,47nm,0.9s
H17A **Grant Village** 72.50 46 P P 14 27 18.4 +0.6
baz=311
MHTO **MHTO** 72.58 283 P P 14 27 18.7 +0.5
SNR=8.5
RNPP9 **Sopachiv** 72.61 324 P P 14 27 18.0 0.0
STKA **Stephens Creek** 72.70 181 P P 14 27 18.8 +0.3
STKA **Stephens Creek** 72.70 181 P P 14 27 20.8 +2.3
comp=Z,1.9nm,0.6s,baz=2.8,slow=5.9,SNR=2.9
STKA LR LR 14 58 35.1
comp=Z,104nm,21.9s,baz=23,slow=35
comp=Z,1.9nm,0.6s
RNPP5 **Staryi Chortor** 72.75 324 P P 14 27 18.7 -0.1
LUBAR **Lubar, Ukraine** 72.82 322 P P 14 27 19.1 -0.1
SIM **Simferopol'** 73.03 315 *e*P P 14 27 21.0 +0.4
SIM *e* 14 27 37.1
SIM pmax pmax
comp=Z,51nm,1.1s
SIM MLR MLR
comp=Z,300nm,19.0s
R11B **Troy Canyon, C** 73.51 53 P P 14 27 24.9 +1.1
R11B **Troy Canyon, C** 73.51 53 P P 14 27 24.0 +0.2
baz=310
DEL **Delary** 73.53 333 *i* P P 14 27 23.0 -0.3
DQM **DQM** 73.54 282 P P 14 27 24.6 +0.6
UMZA **Um Al Zommool** 73.57 286 P P 14 27 23.4 -0.7
SORM **Soroca** 73.78 321 ⇓P P 14 27 24.9 0.0
SORM **Soroca** 73.78 321 P P 14 27 25.0 0.0
MZWR **Madinat Zayed** 73.85 288 P P 14 27 24.8 -0.9
MZWR P P 14 27 24.8 -0.9

JRN **Qarnain Island** 73.86 289 P P 14 27 24.7 -1.1
JRN P P 14 27 24.7 -1.1
BBOO **Buckleboo** 73.87 186 P P 14 27 26.0 +0.6
NDNU **Novodnistrovsk** 73.93 321 P P 14 27 26.0 +0.2
MORW **Morawa** 74.09 204 P P 14 27 27.5 +0.7
MORW **Morawa** 74.09 204 P P 14 27 26.9 +0.1
MORW IAmb IAmb 14 27 43.0
comp=Z,16nm,0.8s
SNART **Snartemo** 74.11 337 *i* P P 14 27 25.0 -1.7
PD31 **Pinedale Array** 74.13 47 P P 14 27 27.9 +0.5
PD31 IAmb IAmb 14 27 44.6
comp=Z,20nm,1.1s
PDAR **Pinedale Array** 74.13 47 P P 14 27 28.3 +0.9
PDAR **Pinedale Array** 74.13 47 P P 14 27 27.9 +0.6
comp=Z,1.9nm,0.7s,baz=256,slow=1.7,SNR=12
comp=Z,1.9nm,0.7s
BSD **Bornholm Skovb** 74.24 332 *i* P P 14 27 27.1 -0.3
BSD IAmb IAmb 14 27 28.1
comp=Z,46nm,0.9s
HTT **Hallett** 74.32 183 P P 14 27 29.5 +1.4
KMPD **K-Podol'skiy** 74.38 322 P pP 14 27 27.9 -14
KMPD P P 14 27 27.6 -0.8
KAAM **Kaadhehdhoo** 74.42 257 P P 14 27 30.0 +0.9
GHWR **Ruwais** 74.44 288 P P 14 27 28.4 -0.8
GHWR P P 14 27 28.4 -0.8
BEL **Belsk** 74.49 327 *e*P P 14 27 29.8 +0.9
BEL *e*pP **sP** 14 27 46.0 -2.4
LVV **L'vov** 74.58 324 *e*P P 14 27 29.4 -0.2
LVV MLR MLR
comp=N,300nm,17.0s
LVV MLR MLR
comp=E,300nm,17.0s
LVV MLR MLR
comp=Z,500nm,16.0s
DIKM **Dikmen** 74.60 312 ⇑P P 14 27 29.9 +0.1
MZR **Muzera** 74.61 287 *i* P P 14 27 29.8 -0.3
SNR=15
MZR **Muzera** 74.61 287 P P 14 27 29.9 -0.3
SNR=9.3
MZR P P 14 27 29.9 -0.3
SNR=9.3
SHMA **Al-Shehemyia** 74.63 291 P P 14 27 29.6 -0.7
GKP **Gorka Klasztor** 74.81 330 *e*P P 14 27 31.2 +0.4
GKP *e*pP **PcP** 14 27 46.4 +1.7
KBD **Kabd** 74.84 295 P P 14 27 30.7 -0.7
SAKB **Bahrain** 74.86 291 P P 14 27 30.9 -0.6
MORS **Morshin** 75.14 323 P P 14 27 33.0 +0.2
TRNA **Turayna** 75.15 290 P P 14 27 32.4 -0.8
STNU **Starunia** 75.18 323 P P 14 27 33.0 0.0
KSV **Kosov** 75.20 322 P P 14 27 32.1 -1.1
SLWR **Sila** 75.23 289 P P 14 27 33.2 -0.4
SLWR P P 14 27 33.2 -0.4
KWP **Kalwaria Pacla** 75.31 324 *e*P P 14 27 34.6 +0.8
KWP **Kalwaria Pacla** 75.31 324 P P 14 27 34.2 +0.4
comp=Z,51nm,0.6s
SHIU **Shidnytsya** 75.32 324 P P 14 27 34.7 +0.8
SMRA **Abu-Samra** 75.42 290 P P 14 27 34.2 -0.7
ULM **Lac du Bonnet** 75.55 34 P P 14 27 35.2 +0.1
ULM IAmb IAmb 14 28 22.5
comp=Z,30nm,1.5s
ULM **Lac du Bonnet** 75.55 34 P P 14 27 34.8 -0.4
comp=Z,4.8nm,0.6s,baz=304,slow=6.5,SNR=8.0
comp=Z,4.8nm,0.6s
ULM **Lac du Bonnet** 75.55 34 P P 14 27 35.2 +0.1
ULM pmax pmax
comp=Z,30nm,1.5s
BUR08 **Bucovina Ar. S** 75.63 322 P P 14 27 36.3 +0.5
BUR08 IAmb IAmb 14 27 37.3
comp=Z,22nm,0.8s
BURAR **Bucovina Array** 75.64 322 ⇓P P 14 27 36.4 +0.6
TESR **Testgor'ye** 75.75 320 ⇑P P 14 27 36.8 +0.5
MEZ **Mezhgor'ye** 75.77 323 P P 14 27 36.5 +0.1
RAKU **Rahkiv** 75.83 322 P P 14 27 36.1 -0.7
CFR **Carcaliu** 75.97 318 ⇓P P 14 27 37.9 +0.3
CFR **Carcaliu** 75.97 318 P P 14 27 37.9 +0.3
PFO **Pinyon Flats O** 76.00 58 LR LR 14 54 55.6
comp=Z,181nm,22.0s,baz=286,slow=31
TPFO **Pinon Flats** 76.01 58 P P 14 27 39.2 +0.9
baz=310
KOLS **Kolonicke sedl** 76.02 324 *e*P P 14 27 38.4 +0.6
KOLS *e* 14 27 58.4
KOLS pmax pmax
comp=Z,25nm,0.9s
KOLS **Kolonicke sedl** 76.02 324 *e*P P 14 27 38.4 +0.6
KOLS *e* 14 27 58.4
TPGR **Topolog** 76.05 318 ⇑P P 14 27 38.7 +0.6
OJC **Ojcow** 76.12 326 *e*P P 14 27 39.1 +0.7
OJC *e*pP **sP** 14 27 54.8 -3.0
OJC **Ojcow** 76.12 326 P P 14 27 38.9 +0.5
comp=Z,75nm,1.0s
BRIU **Brid** 76.12 323 P P 14 27 38.3 -0.1
VRI **Vrincioaia** 76.17 320 ⇑P P 14 27 38.6 -0.3
VRI **Vrincioaia** 76.17 320 P P 14 27 38.5 -0.3
KORU **Korolevo** 76.20 323 P P 14 27 40.0 +1.1
PLOR **Plostina** 76.22 320 ⇓P P 14 27 38.7 -0.4
PLOR **Plostina** 76.22 320 P P 14 27 38.7 -0.4
HOLU **Holmets** 76.27 324 P P 14 27 39.7 +0.5
TRSU **Trosnyk** 76.33 323 P P 14 27 40.5 +0.9
BERU **Beregovo** 76.37 323 P P 14 27 39.9 +0.1
CRVS **Cervenica-Dubn** 76.40 324 *e*P P 14 27 40.7 +0.7
CRVS *e* 14 27 57.2
CRVS pmax pmax
comp=Z,25nm,0.9s
CRVS **Cervenica-Dubn** 76.40 324 *e*P P 14 27 40.7 +0.7
CRVS *e* 14 27 57.2
COVR **Voineasa-Covas** 76.44 320 ⇑P P 14 27 41.5 +1.1
OZUR 76.47 320 ⇓P P 14 27 42.0 +1.5
NIE **Niedzica** 76.51 325 *e*P P 14 27 41.8 +1.2
NIE **Niedzica** 76.51 325 P P 14 27 41.4 +0.7
comp=Z,16nm,1.0s
DOPR **Dopca** 76.75 320 ⇑P P 14 27 43.1 +1.0
BSEG **Bad Segeberg** 76.78 333 *e*P P 14 27 42.6 +0.6
comp=Z,38nm,0.9s,baz=35,slow=5.5
ISR **Istrita** 76.80 319 ⇓P P 14 27 43.4 +0.9
ISR **Istrita** 76.80 319 P P 14 27 43.3 +0.9
BR131 **Keskin Array S** 76.80 311 P P 14 27 42.5 -0.1
BR131 IAmb IAmb 14 27 59.6
comp=Z,40nm,1.1s
BR131 **Keskin Array S** 76.80 311 *i* P P 14 27 42.7 +0.1
BRTR **Keskin Array B** 76.80 311 P P 14 27 42.6 -0.1
BRTR **Keskin Array B** 76.80 311 P P 14 27 43.0 +0.3
comp=Z,2.1nm,0.6s,baz=81,slow=3.9,SNR=17
BRTR PP **PP** 14 30 34.0 -1.4
comp=Z,1.6nm,0.8s,baz=60,slow=7.7,SNR=4.1
BRTR LR LR 15 06 19.5
comp=Z,201nm,19.9s,baz=30,slow=39
comp=Z,2.1nm,0.6s
BRTR **Keskin Array B** 76.80 311 P P 14 27 43.0 +0.3
BR106 **Keskin Array S** 76.81 312 P P 14 27 43.4 +0.7
comp=Z,23nm,1.1s,comp=Z,207nm
BR105 **Keskin Array S** 76.82 311 P P 14 27 43.1 +0.4
comp=Z,29nm,1.1s,comp=Z,255nm
MLR **Muntele Rosu** 76.82 320 LR LR 15 05 37.0
comp=Z,373nm,18.6s,baz=50,slow=39
MLR **Muntele Rosu** 76.82 320 ⇑P P 14 27 43.2 +0.5
MLR **Muntele Rosu** 76.82 320 P P 14 27 43.1 +0.5
DMTO **DMTO** 76.83 282 P P 14 27 42.0 -0.9
DOK **Doka** 76.87 283 P P 14 27 42.7 -0.4
KSP **Ksiaz** 77.07 328 *e*P P 14 27 44.5 +0.7
KSP *e*pP **pP** 14 27 59.6 +1.9
KSP **Ksiaz** 77.07 328 P P 14 27 44.0 +0.3
comp=Z,39nm,1.1s
LANS **Liptovska Anna** 77.07 326 *e*P P 14 27 45.2 +1.4
LANS *e* 14 28 00.9
LANS pmax pmax
comp=Z,14nm,1.1s
LANS **Liptovska Anna** 77.07 326 *e*P P 14 27 45.2 +1.4
LANS *e* 14 28 00.9
ANTO **Ankara** 77.18 312 P P 14 27 45.2 +0.5
ANTO **Ankara** 77.18 312 ⇓P P 14 27 45.2 +0.5
ANTO **Ankara** 77.18 312 P P 14 27 45.2 +0.5
ANTO **Ankara** 77.18 312 P P 14 27 45.2 +0.5
comp=Z,35nm,1.3s,comp=Z,306nm
VOIR 77.30 320 ⇑P P 14 27 46.0 +0.8
VOIR 77.30 320 P P 14 27 46.0 +0.8
MARR **Marisel-Cluj** 77.30 322 ⇑P P 14 27 45.0 -0.3
OSTC **Ostas** 77.32 328 *e*P P 14 27 46.0 +0.8
OSTC AMS AMS 15 04 40.0
comp=Z,400nm,20.1s
OSTC **Ostas** 77.32 328 *e*P P 14 27 46.0 +0.8
OSTC MLR MLR
comp=Z,400nm,20.1s
CHVC **Chvalec** 77.36 328 *e*P P 14 27 46.2 +0.8

CHVC AMS AMS 15 04 50.0
comp=Z,300nm,16.7s
CHVC **Chvalec** 77.36 328 *e*P P 14 27 46.2 +0.8
CHVC MLR MLR
comp=Z,300nm,16.7s
NWAO **Narrogin (SRO)** 77.36 202 P P 14 27 45.2 -0.2
NWAO IAmb IAmb 14 27 46.1
comp=Z,23nm,1.2s
NWAO **Narrogin (SRO)** 77.36 202 P P 14 27 45.2 -0.2
NWAO pmax pmax
comp=Z,23nm,1.3s
N23A **Red Feather La** 77.38 46 P P 14 27 46.7 +0.7
baz=314
MORC **Moravsky Berou** 77.39 327 P P 14 27 46.3 +0.7
MORC IAmb IAmb 14 27 47.5
comp=Z,36nm,0.9s
MORC **Moravsky Berou** 77.39 327 *e*P P 14 27 46.1 +0.4
MORC **Moravsky Berou** 77.39 327 ⇓P P 14 27 46.0 +0.3
MORC **Moravsky Berou** 77.39 327 P P 14 27 46.4 +0.7
DRGR 77.41 322 ⇓P P 14 27 46.3 +0.5
DRGR 77.41 322 P P 14 27 46.3 +0.5
DPC **Dobruska-Polom** 77.44 328 *e*P P 14 27 46.9 +1.0
DPC AMS AMS 15 05 00.0
comp=Z,200nm,17.4s
DPC **Dobruska-Polom** 77.44 328 *e*P P 14 27 46.9 +1.0
DPC MLR MLR
comp=Z,200nm,17.4s
DPC **Dobruska-Polom** 77.44 328 P P 14 27 46.8 +0.9
comp=Z,30nm,1.3s,comp=Z,448nm
UPC **Upice** 77.44 328 AMS AMS 15 05 00.0
comp=Z,400nm,16.9s
KRLC **Kraliky** 77.47 328 AMS AMS 15 03 30.0
comp=Z,500nm,27.2s
RBK **Rabkut** 77.52 282 P P 14 27 46.2 -0.6
ARR **Arges** 77.55 320 ⇓P P 14 27 47.6 +1.0
WHFO **Wadi Hawf** 77.57 283 P P 14 27 46.0 -1.2
ARPS **Mount Arapiles** 77.58 181 P P 14 27 47.9 +1.4
FLTG **Flechtingen** 77.78 332 *e*P P 14 27 47.7 +0.1
comp=Z,40nm,0.9s,baz=35,slow=5.5
FLTG *e*pP **sP** 14 28 03.8 -3.2
PSZ **Piszkesteto** 77.82 325 ⇑P P 14 27 48.7 +0.6
PSZ **Piszkesteto** 77.82 325 P P 14 27 48.7 +0.6
VYHS **Vyhne** 77.84 326 *e*P P 14 27 49.0 +0.9
VYHS *e* 14 28 04.9
VYHS pmax pmax
comp=Z,20nm,1.0s
VYHS **Vyhne** 77.84 326 *e*P P 14 27 49.0 +0.9
VYHS *e* 14 28 04.9
BRG **Berggiesshubel** 77.96 330 *e*P P 14 27 49.1 +0.4
BRG Amp 14 27 50.2
comp=Z,14nm,1.0s
BRG **Berggiesshubel** 77.96 330 P P 14 27 58.3 +10
BRG Amp 14 27 59.2
comp=Z,8.3nm,0.9s
BRG **Berggiesshubel** 77.96 330 *e*P P 14 27 49.1 +0.4
BRG pmax pmax
comp=Z,14nm,1.0s
BRG MLR MLR
comp=Z,293nm,11.3s
BRG MLR MLR
comp=N,187nm,14.4s
BRG MLR MLR
comp=E,207nm,14.7s
BRG **Berggiesshubel** 77.96 330 *e*P P 14 27 48.9 +0.2
comp=E,14nm,1.0s,baz=35,slow=5.5
CLL **Collm** 77.96 330 P P 14 27 48.7 0.0
CLL IAmb IAmb 14 27 49.9
comp=Z,34nm,0.9s
CLL **Collm** 77.96 330 *i* P P 14 27 48.4 -0.3
comp=Z,39nm,1.0s
CLL *e*PcP **PcP** 14 27 57.0 -1.3
CLL *e*pP **sP** 14 28 05.0 -3.1
CLL *e*sP pP 14 28 10.0 +7.3
CLL *e*PP **PP** 14 30 43.0 -1.5
CLL *e*Sx Sx 14 37 30.0
CLL *e*SS **SS** 14 42 42.0 +3.4
CLL AMS AMS 15 04 00.0
comp=N,400nm,19.8s
CLL AMS AMS 15 04 00.0
comp=E,300nm,20.5s
CLL AMS AMS 15 04 00.0
comp=Z,400nm,21.7s
CLL **Collm** 77.96 330 *i* P P 14 27 48.4 -0.3
CLL *e**PP **sP** 14 28 05.0 -3.1
CLL pmax pmax
comp=Z,39nm,1.0s
CLL MLR MLR
comp=Z,400nm,21.7s
CLL **Collm** 77.96 330 P P 14 27 48.6 0.0
comp=Z,43nm,1.0s
CLL **Collm** 77.96 330 *e*P P 14 27 48.7 0.0
comp=Z,35nm,0.9s,baz=35,slow=5.5
PVCC **Panska Ves** 77.99 329 *e*P P 14 27 49.5 +0.6
PVCC AMS AMS 15 05 20.0
comp=Z,400nm,16.9s
PVCC **Panska Ves** 77.99 329 *e*P P 14 27 49.5 +0.6
PVCC MLR MLR
comp=Z,400nm,16.9s
NRDL **Niedersach Rie** 78.04 333 *e*P P 14 27 49.5 +0.4
comp=Z,16nm,1.0s,baz=35,slow=5.5
JAVC **Velka Javorina** 78.05 326 *e*P P 14 27 50.8 +1.5
RETH **Rethem/Aller,** 78.10 333 *e*P P 14 27 50.0 +0.6
comp=Z,26nm,1.0s,baz=35,slow=5.5
VRAC **Vranov** 78.15 327 *e*P P 14 27 50.5 +0.7
VRAC **Vranov** 78.15 327 LR LR 15 05 05.1
comp=Z,441nm,20.6s,baz=32,slow=38
VRAC **Vranov** 78.15 327 ⇑P P 14 27 50.7 +0.9
VRAC **Vranov** 78.15 327 P P 14 27 51.5 +1.7
RICC **Richard** 78.16 329 *e*P P 14 27 51.2 +1.4
ABTO **Aybut** 78.28 283 P P 14 27 50.5 -0.6
BRAT **Ballarat** 78.36 179 P P 14 27 52.5 +1.7
HSKC **Hora Svate Kat** 78.36 330 *e*P P 14 27 51.6 +0.6
HSKC AMS AMS 15 03 40.0
comp=Z,400nm,21.6s
GOPC **GO Pecny, Ondr** 78.39 329 *e*P P 14 27 51.9 +0.7
GOPC **GO Pecny, Ondr** 78.39 329 *e*P P 14 27 51.9 +0.7
GZR **Gura Zlata** 78.41 321 ⇑P P 14 27 51.8 +0.4
GZR **Gura Zlata** 78.41 321 P P 14 27 51.8 +0.4
TOO **Toolangi** 78.42 178 P P 14 27 52.6 +1.4
KRUC **Moravsky** 78.42 327 *e*P P 14 27 51.9 +0.6
SMOL **Smolenice** 78.42 326 *e*P P 14 27 52.7 +1.4
SMOL pmax pmax
comp=Z,11nm,0.9s
PRU **Pruhonice** 78.43 329 *e*P P 14 27 52.1 +0.8
PRU AMS AMS 15 05 40.0
comp=Z,300nm,17.2s
PRU **Pruhonice** 78.43 329 *e*P P 14 27 52.1 +0.8
PRU MLR MLR
comp=Z,300nm,17.2s
SURR **Surduc** 78.45 322 ⇑P P 14 27 52.1 +0.6
CLZ **Clausthal** 78.48 332 *e*P P 14 27 52.3 +0.7
comp=Z,300nm,0.9s,baz=35,slow=5.5
NEUB **Neuenburg** 78.50 331 *e*pP pP 14 28 08.2 +2.6
SRO **Srobarova** 78.59 325 *e*P P 14 27 54.3 +2.1
SRO pmax pmax
comp=Z,17nm,0.8s
SRO **Srobarova** 78.59 325 *e*P P 14 27 54.3 +2.1
ELND **Elena** 78.71 318 ⇑P P 14 27 53.6 +0.6
BZS **Buzias** 78.79 322 ⇑P P 14 27 53.7 +0.2
BZS **Buzias** 78.79 322 P P 14 27 53.6 +0.2
TANN **Tannenbergstha** 78.89 330 *e*P P 14 27 54.1 +0.2
comp=Z,8.0nm,1.0s,baz=35,slow=5.5
PLN **Plauen** 78.94 330 *e*P P 14 27 54.3 +0.1
comp=Z,9.6nm,0.9s,baz=35,slow=5.5
IBBN **Ibbenburen** 79.00 334 *e*P P 14 27 54.7 +0.4
comp=Z,47nm,1.0s,baz=35,slow=5.5
ZVC **Zvikov** 79.01 329 *e*P P 14 27 54.8 +0.3
MOX **Moxa** 79.02 331 *e*P P 14 27 54.8 +0.3
comp=Z,15nm,1.0s,baz=35,slow=5.5
MOX *e*L L 15 05 42.2
comp=Z,266nm,20.7s
RAO **Raoul Island** 79.03 146 LR LR 14 59 06.5
comp=Z,253nm,18.6s,baz=316,slow=33
S22A **4UR Ranch, Cre** 79.07 49 P P 14 27 55.2 -0.3
baz=314
W18A **Petrified Fore** 79.17 53 P P 14 27 56.1 +0.1
baz=313
MANZ **Manzenberg** 79.37 330 *e*P P 14 27 56.7 +0.2
comp=Z,3.4nm,0.9s,baz=35,slow=5.5
MDVR **Moldovita** 79.37 322 ⇑P P 14 27 57.0 +0.4
214A **Organ Pipe Nat** 79.40 57 P P 14 27 57.2 +0.1
baz=312
CKRC **Cesky Krumlov** 79.45 328 *e*P P 14 27 57.5 +0.5
CKRC AMS AMS 15 07 20.0
comp=Z,300nm,16.1s

**CKRC Cesky Krumlov 79.45 328** *e*P **P** **14 27 57.5 +0.5**
CKRC MLR MLR
comp=Z,300nm,16.1s
**MPEP Malo Peshtene 79.46 319** P **P** **14 27 57.0 -0.1**
**KHC Kasperske Hory 79.49 329** P **P** **14 27 58.0 +0.8**
KHC IAmb IAmb 14 27 59.0
comp=Z,24nm,0.7s
**KHC Kasperske Hory 79.49 329** *e*P **P** **14 27 57.6 +0.4**
KHC *e*pP **sP** **14 28 14.2 -2.5**
KHC AMS AMS 15 06 20.0
comp=Z,300nm,18.0s
**KHC Kasperske Hory 79.49 329** *ce*P **P** **14 27 57.0 -0.2**
KHC pmax pmax
comp=Z,73nm,1.0s
**ROTZ Rotzenmuhle 79.51 330** *e*P **P** **14 27 58.0 +0.7**
comp=Z,4.4nm,1.0s,baz=35,slow=5.5
**RONA Rosalia, Austr 79.53 326** *i* P **P** **14 27 58.6 +1.1**
comp=Z,33nm,0.9s,SNR=18
RONA *i* sP **sP** **14 28 15.0 -1.9**
comp=Z,16nm,0.7s
RONA *i* PP **PP** **14 30 59.0 +1.3**
comp=Z,9.9nm,1.1s
**CONA Conrad Observa 79.53 327** *i* P **P** **14 27 58.6 +1.0**
comp=Z,23nm,1.1s,SNR=12
CONA *i* sP **sP** **14 28 15.0 -2.0**
comp=Z,19nm,1.1s
CONA *e*PP **PP** **14 30 58.7 +1.0**
comp=Z,8.5nm,1.2s
**EKA Eskdalemuir Ar 79.53 341** P **P** **14 27 57.5 +0.2**
comp=Z,5.6nm,0.5s,baz=30,slow=4.7,SNR=23
EKA PP **PP** **14 30 58.0 +0.7**
comp=Z,6.0nm,1.0s,baz=28,slow=9.1,SNR=4.8
comp=Z,5.6nm,0.5s
**EKB Eskdalemuir 79.54 341** P **P** **14 27 57.1 -0.2**
EKB IAmb IAmb 14 27 57.6
comp=Z,106nm,1.8s
**GEC2 GERESS Array S 79.67 328** P **P** **14 27 58.5 +0.2**
**GEC2 GERESS Array S 79.67 328** *e*P **P** **14 27 58.6 +0.3**
comp=Z,11nm,0.8s,baz=35,slow=5.5
**GERES GERESS Array B 79.67 328** P **P** **14 27 58.5 +0.2**
**GERES GERESS Array B 79.67 328** P **P** **14 27 58.6 +0.3**
comp=Z,6.2nm,0.7s,baz=38,slow=6.8,SNR=24
GERES PP **PP** **14 30 58.6 -0.3**
comp=Z,1.2nm,0.8s,baz=52,slow=6.4,SNR=2.7
GERES LR LR 15 06 58.3
comp=Z,219nm,18.3s,baz=40,slow=38
comp=Z,6.2nm,0.7s
**MORH Mrgy, Hungar 79.68 324** ⇑P **P** **14 27 58.1 -0.1**
**KASTN Kahler Asten 79.70 333** *e*P **P** **14 27 58.6 +0.3**
comp=Z,15nm,0.9s,baz=35,slow=5.5
**WET Wettzell 79.76 329** *e*P **P** **14 27 59.2 +0.6**
comp=Z,25nm,1.0s,baz=35,slow=5.5
**BUG Bochum--Univer 79.89 333** *e*P **P** **14 27 59.2 0.0**
comp=Z,61nm,1.3s,baz=35,slow=5.5
**KDZ Kurdzhali 79.93 317** P **P** **14 28 01.0 +1.3**
**GRF Grafenberg Arr 79.94 330** *e*L L 15 06 09.8
comp=Z,315nm,22.0s
**RAYN Ar Rayn 79.94 292** P **P** **14 28 00.0 -0.1**
**RAYN Ar Rayn 79.94 292** *i* P **P** **14 28 00.2 0.0**
SNR=12
**RAYN Ar Rayn 79.94 292** P **P** **14 28 00.1 0.0**
**RAYN Ar Rayn 79.94 292** P **P** **14 28 00.0 -0.1**
RAYN pmax pmax
comp=Z,254nm,1.9s
**FRGS Fruska Gora 79.97 323** ⇑*i*P **P** **14 28 00.0 +0.2**
**RZN Rozhen 80.19 318** P **P** **14 28 02.0 +0.7**
**ARSA Arzberg 80.21 327** *i* P **P** **14 28 01.8 +0.7**
comp=Z,16nm,1.1s,SNR=7.5
ARSA *i* sP **sP** **14 28 18.2 -2.4**
comp=Z,11nm,1.0s
**MOA Molln 80.25 328** *i* P **P** **14 28 01.8 +0.5**
comp=Z,7.0nm,0.9s,SNR=5.7
MOA *i* sP **sP** **14 28 19.2 -1.6**
comp=Z,7.5nm,0.9s
MOA *i* PP **PP** **14 31 04.0 +0.4**
comp=Z,12nm,1.8s
**VTS Vitosha 80.26 319** P **P** **14 28 02.0 +0.4**
**PLNA Plana 80.27 319** P **P** **14 28 03.0 +1.3**
**MMAI Mount Meron Ar 80.32 305** P **P** **14 28 02.1 +0.1**
comp=Z,22nm,0.8s,baz=41,slow=6.6,SNR=27
MMAI LR LR 15 07 09.8
comp=Z,303nm,21.3s,baz=332,slow=38
comp=Z,22nm,0.8s
**TEKS Tekeris 80.56 323** *e*P **P** **14 28 01.0 -2.1**
**BIOA Bad Ischl, Aus 80.63 328** *i* P **P** **14 28 04.0 +0.7**
comp=Z,31nm,1.1s,SNR=13
BIOA *i* sP **sP** **14 28 21.4 -1.4**
comp=Z,19nm,0.9s
BIOA *i* PP **PP** **14 31 07.1 +0.3**
comp=Z,4.1nm,0.8s
**AHRW Bad Neuenahr-A 80.72 333** *e*P **P** **14 28 04.0 +0.3**
comp=Z,29nm,1.1s,baz=35,slow=5.5
**MMB Musomishta 80.80 318** P **P** **14 28 04.0 -0.4**
**GROS Grobnik 80.84 326** *i* P **P** **14 28 04.8 +0.2**
**PERS Pernice 80.87 326** *i* P **P** **14 28 05.1 +0.4**
**T25A Trinidad 80.87 48** P **P** **14 28 05.1 +0.1**
baz=315
**SOKA Soboth 80.87 326** *i* P **P** **14 28 05.2 +0.5**
comp=Z,59nm,1.0s,SNR=33
SOKA *i* sP **sP** **14 28 21.8 -2.4**
comp=Z,37nm,1.0s
SOKA *i* PP **PP** **14 31 09.1 +0.2**
comp=Z,3.1nm,1.2s
**KKB Krupnik 80.89 319** P **P** **14 28 06.0 +1.1**
**RJOB Jochberg 80.93 328** *e*P **P** **14 28 05.7 +0.7**
comp=Z,29nm,0.9s,baz=35,slow=5.5
**ELL Elmali 80.98 311** P **P** **14 28 05.5 -0.1**
**ELL Elmali 80.98 311** P **P** **14 28 05.5 -0.1**
ELL pmax pmax
comp=Z,219nm,1.1s
**BTNL Ternell 81.00 334** *d*P **P** **14 28 05.3 0.0**
comp=Z,13nm,1.0s
**MEM Membach 81.02 334** *d*P **P** **14 28 05.1 -0.3**
comp=Z,15nm,1.0s
**SCHQ Schefferville 81.11 17** P **P** **14 28 05.9 +0.2**
SCHQ IAmb IAmb 14 28 34.7
comp=Z,27nm,1.2s
**SCHQ Schefferville 81.11 17** P **P** **14 28 06.1 +0.4**
comp=Z,11nm,0.7s,baz=355,slow=7.0,SNR=6.1
SCHQ LR LR 15 06 49.8
comp=Z,75nm,21.2s,baz=279,slow=38
comp=Z,11nm,0.7s
**BBLS Lazi&#263i 81.14 322** ⇑*i*P **P** **14 28 06.7 +0.5**
**HAPS Han Pijesak,BI 81.18 323** ⇑*i*P **P** **14 28 07.1 +0.6**
**BSTI Sart Tilman 81.19 334** *d*P **P** **14 28 06.8 +0.5**
**OBKA Obir 81.20 327** *i* P **P** **14 28 06.7 +0.2**
comp=Z,20nm,0.7s,SNR=15
OBKA *i* sP **sP** **14 28 23.2 -2.8**
comp=Z,14nm,0.9s
OBKA *e*PP **PP** **14 31 10.5 -1.1**
comp=Z,13nm,1.3s
**OBKA Obir 81.20 327** ⇑*i*P **P** **14 28 06.6 +0.1**
**LESA Schwarzleotal 81.23 328** *i* P **P** **14 28 07.4 +0.7**
comp=Z,30nm,1.2s
LESA *i* sP **sP** **14 28 24.7 -1.4**
comp=Z,44nm,1.3s
LESA *i* PP **PP** **14 31 10.8 -1.0**
comp=Z,7.6nm,1.0s
**KBA Koelnbreinsper 81.24 328** *i* P **P** **14 28 07.1 +0.3**
comp=Z,32nm,0.8s,SNR=29
KBA *es*P **sP** **14 28 24.7 -1.6**
comp=Z,26nm,0.8s
**SJES Sjenica 81.34 322** ⇑*i*P **P** **14 28 07.8 +0.4**
**RUDO Rudo 81.35 322** *e*P **P** **14 28 06.3 -1.0**
**A051A Mrakovica 81.38 324** ⇑*i*P **P** **14 28 07.2 -0.3**
**BCLA Clavier 81.42 334** *d*P **P** **14 28 07.6 +0.2**
comp=Z,12nm,1.1s
**BLY Banja Luka 81.46 324** *e*P **P** **14 28 07.9 +0.1**
**MYKA Terra Mystica 81.48 327** *i* P **P** **14 28 07.8 -0.1**
comp=Z,27nm,1.1s,SNR=12
MYKA *e*PP **PP** **14 31 11.5 -2.4**
comp=Z,9.9nm,1.1s
**BGES Gesves 81.52 334** *d*P **P** **14 28 07.5 -0.5**
comp=Z,12nm,1.1s
**RCHB Rochefort 81.67 334** *d*P **P** **14 28 08.8 0.0**
comp=Z,14nm,1.1s
**IVA Berane 81.68 321** ⇑*i*P **P** **14 28 09.7 +0.6**
**BMRD Maredsous 81.69 334** *d*P **P** **14 28 08.9 0.0**
comp=Z,24nm,1.0s
**WATA Walderalm 81.73 329** *i* P **P** **14 28 09.8 +0.5**
comp=Z,29nm,1.1s,SNR=11
WATA *i* sP **sP** **14 28 27.1 -1.8**
comp=Z,22nm,0.9s
WATA *i* PP **PP** **14 31 12.6 -3.4**
comp=Z,6.6nm,1.1s
**CADS Cadrg 81.77 327** *i* P **P** **14 28 08.6 -0.9**
**WTTA Wattenberg 81.77 329** *i* P **P** **14 28 10.1 +0.5**
comp=Z,23nm,0.7s,SNR=13
WTTA *i* PP **PP** **14 31 14.0 -2.3**
comp=Z,8.0nm,0.9s
**WLF Walferdange 81.78 333** *d*P **P** **14 28 10.9 +1.5**
**ABTA Abfaltersbach 81.84 328** *i* P **P** **14 28 09.4 -0.5**
comp=Z,15nm,1.0s,SNR=8.4
ABTA *i* sP **sP** **14 28 27.1 -2.3**
comp=Z,14nm,1.0s
ABTA *i* PP **PP** **14 31 14.9 -2.0**
comp=Z,3.0nm,1.1s
**KOME Kolasin 81.87 322** ⇑*i*P **P** **14 28 10.3 +0.2**
**GBRS Gornja Briga 81.88 326** *i* P **P** **14 28 10.1 0.0**
**RAR Rarotonga 81.88 127** LR LR 14 58 51.6
comp=Z,182nm,19.3s,baz=300,slow=31
**UPM Unac-Piva 81.89 322** *e*P **P** **14 28 09.5 -0.8**
**UPM Unac-Piva 81.89 322** ⇑*i*P **P** **14 28 10.1 -0.2**
**MOTA Moosalm 81.91 329** *i* P **P** **14 28 10.8 +0.4**
comp=Z,52nm,0.9s
MOTA *i* sP **sP** **14 28 28.3 -1.5**
comp=Z,33nm,0.9s
MOTA *i* PP **PP** **14 31 16.0 -1.5**
comp=Z,6.3nm,0.9s
**RETA Reutte 81.93 329** *i* P **P** **14 28 10.9 +0.5**
comp=Z,38nm,0.9s,SNR=20
RETA *i* sP **sP** **14 28 28.3 -1.4**
comp=Z,45nm,1.4s
RETA *i* PP **PP** **14 31 15.7 -1.8**
comp=Z,7.9nm,1.9s
**SQTA Sankt Quirin 81.97 329** *i* P **P** **14 28 11.1 +0.5**
comp=Z,26nm,0.9s,SNR=9.2
SQTA *i* sP **sP** **14 28 28.5 -1.6**
comp=Z,19nm,0.9s
SQTA *i* PP **PP** **14 31 16.0 -1.9**
comp=Z,3.4nm,0.7s
**121A Cookes Peak, D 82.12 53** P **P** **14 28 11.4 -0.3**
baz=314
**BFO Black Forest 82.14 331** *e*P **P** **14 28 11.4 +0.1**
comp=Z,37nm,1.3s,baz=35,slow=5.5
BFO *ep*P **sP** **14 28 29.6 -1.2**
**NKME Niksic 82.20 322** ⇑*i*P **P** **14 28 11.5 -0.3**
**CIMO Cimolais 82.23 328** P **P** **14 28 10.9 -0.9**
CIMO IAmb IAmb 14 28 11.9
comp=Z,20nm,1.2s
**BRY Bratogost 82.29 322** *e*P **P** **14 28 11.7 -0.7**
**BRY Bratogost 82.29 322** ⇑*i*P **P** **14 28 11.9 -0.5**
**PUK Puka 82.31 321** P **P** **14 28 12.7 +0.3**
PUK IAmb IAmb 14 28 20.2
comp=Z,17nm,0.9s
**PDG Podgorica 82.32 321** ⇑*i*P **P** **14 28 09.9 -2.4**
**PDG Podgorica 82.32 321** ⇑*i*P **P** **14 28 12.4 +0.1**
**FETA Feichten 82.32 329** *i* P **P** **14 28 12.8 +0.3**
comp=Z,26nm,0.9s,SNR=20
FETA *i* sP **sP** **14 28 30.3 -1.7**
comp=Z,16nm,0.8s
FETA *i* PP **PP** **14 31 19.6 -1.3**
comp=Z,5.2nm,1.2s
**CEME Cevo 82.39 322** ⇑*i*P **P** **14 28 12.5 -0.3**
**DAVA Damuels 82.43 330** *i* P **P** **14 28 13.4 +0.4**
comp=Z,54nm,0.9s,SNR=13
DAVA *i* sP **sP** **14 28 31.0 -1.5**
comp=Z,26nm,0.8s
DAVA *i* PP **PP** **14 31 19.9 -1.8**
comp=Z,2.1nm,0.4s
**DRME Dracevica, Mon 82.54 321** ⇑*i*P **P** **14 28 13.8 +0.3**
**BUM Brajici-Budva 82.59 322** ⇑*i*P **P** **14 28 13.6 -0.3**
**OHR Ohrid 82.59 320** *i* P **P** **14 28 14.5 +0.7**
**ECH Echery 82.66 332** P **P** **14 28 13.6 -0.4**
ECH IAmb IAmb 14 28 15.2
comp=Z,19nm,1.0s
**ECH Echery 82.66 332** P **P** **14 28 13.6 -0.4**
ECH pmax pmax
comp=Z,19nm,1.0s
**STON Ston 82.70 323** ⇑*i*P **P** **14 28 13.4 -0.9**
**CTI Castel Tesino 82.76 328** P **P** **14 28 13.9 -0.8**
CTI IAmb IAmb 14 28 14.9
comp=Z,27nm,1.0s
**CTI Castel Tesino 82.76 328** P **P** **14 28 13.9 -0.8**
CTI pmax pmax
comp=Z,27nm,1.0s
**FUORN Ofenpass-Fuorn 82.83 329** P **P** **14 28 16.4 +1.1**
**DAVOX Davos/Dischmat 82.85 329** LR LR 15 09 51.6
comp=Z,268nm,18.0s,baz=56,slow=39
**EIL Elat 82.89 303** LR LR 15 10 06.3
comp=Z,124nm,18.6s,baz=70,slow=39
**KEK Kerkira 84.15 319** P **P** **14 28 21.5 -0.4**
**SENIN Lac Senin/Sane 84.17 331** P **P** **14 28 22.3 +0.2**
**SGRT San Giovanni R 84.47 323** P **P** **14 28 23.3 -0.2**
**FDMO Fiordimonte 84.62 325** P **P** **14 28 24.4 +0.3**
**IDI Anoyia 84.84 313** P **P** **14 28 24.2 -1.3**
**IDI Anoyia 84.84 313** LR LR 15 11 36.8
comp=Z,121nm,18.7s,baz=8.5,slow=39
**URZ Urewera 85.11 153** LR LR 15 03 00.5
comp=Z,190nm,19.1s,baz=38,slow=33
**L44A Lake County Fo 85.30 35** P **P** **14 28 28.2 +0.7**
baz=324
**BNI Bardonecchia 85.51 330** P **P** **14 28 29.5 +0.7**
BNI IAmb IAmb 14 28 30.2
comp=Z,18nm,0.8s
**BNI Bardonecchia 85.51 330** P **P** **14 28 29.5 +0.7**
BNI pmax pmax
comp=Z,18nm,0.9s
**PPT Papeete 85.69 118** LR LR 15 01 23.2
comp=Z,401nm,19.4s,baz=324,slow=32
**PPT2 Papeete2 85.71 118** *e*P **P** **14 28 28.9 -1.0**
comp=Z,448nm,36.0s
**TIP Timpagrande 86.04 321** P **P** **14 28 31.8 +0.4**
TIP IAmb IAmb 14 28 51.0
comp=Z,30nm,1.1s
**TIP Timpagrande 86.04 321** P **P** **14 28 32.0 +0.6**
comp=Z,25nm,1.3s,comp=Z,310nm
**SSB Saint Sauveur 86.10 332** P **P** **14 28 32.1 +0.5**
SSB IAmb IAmb 14 28 33.0
comp=Z,20nm,0.8s
**SSB Saint Sauveur 86.10 332** P **P** **14 28 32.1 +0.5**
SSB pmax pmax
comp=Z,20nm,0.8s
**TAOE Nuku Hiva Isla 86.31 105** *e*LR LR 14 55 52.3
comp=Z,558nm,21.8s
**LPIG La Paz 86.35 61** LR LR 15 05 40.3
comp=Z,42nm,18.2s,baz=242,slow=35
**TXAR Lajitas Array 86.88 53** P **P** **14 28 35.9 +0.2**
**TXAR Lajitas Array 86.88 53** P **P** **14 28 36.5 +0.8**
comp=Z,1.3nm,0.7s,baz=295,slow=3.6,SNR=12
TXAR LR LR 15 03 26.6
comp=Z,69nm,21.2s,baz=324,slow=33
comp=Z,1.3nm,0.7s
**VAE Valguarnera 88.51 321** LR LR 15 12 06.5
comp=Z,351nm,19.6s,baz=104,slow=38
**P49A Miami Univ. Ec 88.85 35** P **P** **14 28 44.8 -0.1**
baz=326
**M53A WI Miller and 88.90 31** P **P** **14 28 45.1 0.0**
baz=329
**O53A New Philadelph 89.70 32** P **P** **14 28 49.1 +0.3**
baz=328
**P52A Corning 89.85 33** P **P** **14 28 49.2 -0.3**
baz=328
**TBI Tubuai 89.88 122** *e*LR LR 14 57 19.5
comp=Z,2μm,24.8s
TBI *e*LR LR 14 57 22.4
comp=Z,1μm,32.0s
**833A Chaparral WMA, 90.17 51** P **P** **14 28 51.1 -0.1**
baz=318
**L61B Northampton 90.86 25** P **P** **14 28 53.4 -0.8**
baz=334
**KEST Kesra 92.27 324** P **P** **14 29 01.3 +0.4**
comp=Z,7.2nm,1.0s,baz=19,slow=8.5,SNR=4.0
KEST LR LR 15 15 25.7
comp=Z,289nm,19.7s,baz=324,slow=39
comp=Z,7.2nm,1.0s
**TKL Tuckaleechee C 92.49 36** LR LR 15 11 18.2
comp=Z,240nm,21.9s,baz=332,slow=36
**PBRG Braganca 92.86 338** *e*P **P** **14 29 03.2 -0.3**
comp=Z,20nm,1.5s
**PGAV Gavieira, Arco 93.14 339** *e*P **P** **14 29 05.0 +0.1**
comp=Z,30nm,1.4s
**PGAV Gavieira, Arco 93.14 339** A A 15 16 09.3
comp=Z,152nm,20.0s
**MVO Moncorvo 93.54 338** *e*P **P** **14 29 06.9 +0.3**
comp=Z,18nm,1.1s
**MVO Moncorvo 93.54 338** A A 15 15 52.0
comp=Z,186nm,22.0s
**POLO Lamas de Olo 93.56 338** *e*P **P** **14 29 06.8 0.0**
comp=Z,9.0nm,1.2s
**ESDC Sonseca Array 93.96 335** P **P** **14 29 08.0 -0.6**
comp=Z,3.2nm,0.8s,baz=16,slow=4.0,SNR=25
ESDC PP **PP** **14 32 54.3 +0.3**
comp=Z,2.8nm,1.1s,baz=18,slow=8.0,SNR=7.8
ESDC LR LR 15 15 08.8
comp=Z,114nm,21.7s,baz=18,slow=38
comp=Z,3.2nm,0.8s
**MTE Manteigas 94.39 338** *e*P **P** **14 29 10.5 -0.1**
comp=Z,28nm,1.7s
**MTE Manteigas 94.39 338** *e*SS SS 14 47 06.5 +27
**MTE Manteigas 94.39 338** *e*LR LR 15 06 24.8
comp=Z,148nm,20.0s
**PMRV Marv??o 95.25 337** *e*LR LR 15 05 46.5
comp=Z,160nm,20.0s
**PVAQ Vaqueiros 97.21 337** A A 15 18 13.2
comp=Z,400nm,22.0s
**RKT Rikitea 99.46 112** *e*LR LR 15 01 49.0
comp=Z,2μm,32.0s
**KMBO Kilima Mbogo 102.28 279** P **Pdif** **14 29 47.0 +0.3**
comp=Z,0.6nm,0.3s,baz=20,slow=4.7,SNR=4.0
**KMBO Kilima Mbogo 102.28 279** P **Pdif** **14 29 47.0 +0.3**
**PMOZ Porto Moniz, M 104.05 343** A A 15 15 45.8
comp=Z,74nm,22.0s
**TORD Torodi Ar. Bea 114.99 317** PKP **PKiKP** **14 34 31.0 -1.0**
comp=Z,1.2nm,0.7s,baz=2.4,slow=2.9,SNR=6.0
TORD PP **PP** **14 35 28.9 -1.8**
comp=Z,1.8nm,0.9s,baz=25,slow=9.1,SNR=5.5
**MATP Matopo 121.11 269** PKP **PKPdf** **14 34 43.2 -0.4**
comp=Z,1.1nm,0.4s,baz=13,slow=1.9,SNR=7.6
**MAW Mawson 123.66 207** PKP **PKPdf** **14 34 46.0 -0.8**
comp=Z,3.4nm,0.7s,baz=285,slow=4.8,SNR=9.3
**DBIC Dimbokro 123.81 320** PKP **PKPdf** **14 34 48.0 -0.9**
comp=Z,4.1nm,0.7s,baz=158,slow=1.3,SNR=3.9
**LBTB Lobatse 125.93 267** PKP **PKiKP** **14 34 53.1 -0.1**
comp=Z,9.4nm,1.0s,baz=55,slow=1.4,SNR=9.2
**QSPA South Pole Qui 130.91 180** PKPdf **PKPdf** **14 35 00.7 -0.2**
**QSPA South Pole Qui 130.91 180** PKP **PKPdf** **14 35 00.3 -0.6**
comp=Z,2.8nm,0.8s,baz=232,slow=1.6,SNR=16
**ELIB Princess Elisa 137.58 204** *d*PKPdf **PKPdf** **14 35 13.4 +0.1**
**SAML Samuel 140.61 43** *e*P **PKPdf** **14 35 20.9 +0.5**
**NVL N'lazarevskaya 141.46 204** *e*PKHKP PKPpre 14 35 13.7
NVL pmax pmax
comp=Z,9.0nm,1.0s
**TROLL Troll, Antarti 143.45 200** ⇑P PKPab 14 35 20.3 0.0
comp=Z,333nm,0.7s
**LPAZ La Paz 143.70 56** PKP PKPbc 14 35 24.5 +0.3
comp=Z,1.8nm,0.7s,baz=338,slow=1.5,SNR=6.0
**NBPB Pedra_Branca-C 144.47 4** *e*P **PKPdf** **14 35 26.4 -0.9**
**SNAA Sanae 144.97 198** ⇑P **PKPbc** **14 35 25.5 -0.4**
comp=Z,324nm,0.8s
**SNAA Sanae 144.97 198** PKPbc **PKPbc** **14 35 25.6 -0.4**
comp=Z,15nm,0.8s,baz=165,slow=3.3,SNR=72
**VILB Vilhena 145.53 42** *e*P **PKPab** **14 35 30.0 +0.4**
**CLDB Colider 145.74 33** *e*P **PKPab** **14 35 30.9 +0.6**
**PDRB Porto dos Gac 146.00 35** *e*P **PKPbc** **14 35 30.4 -0.3**
**H03N2 Juan Fernandez 146.32 90** T T 17 18 53.4
baz=307,slow=75,SNR=5.2
**H03N1 Juan Fernandez 146.34 90** T T 17 18 53.1
baz=315,slow=75,SNR=3.6
**VNA2 Neumayer--Watz 146.55 197** ⇑P **PKPdf** **14 35 29.7 +0.5**
comp=Z,12nm,0.6s,baz=130,slow=2.7
**SMTB Santa Maria do 146.57 19** *e*P **PKPdf** **14 35 31.1 +0.2**
**VNA3 Neumayer Olymp 146.80 196** ⇑P **PKPdf** **14 35 29.6 0.0**
comp=Z,2.2nm,0.8s
**VNA1 Neumayer--Stat 146.95 197** ⇑P **PKPbc** **14 35 31.5 -0.3**
comp=Z,12nm,1.1s
**PTLB Pontes e Lacer 148.19 43** *e*P **PKPdf** **14 35 33.9 +0.4**
**SNDB Serra Nova Dou 148.46 27** *e*P **PKPdf** **14 35 35.3 +1.3**
**BBSD Serra de San D 148.85 47** *e*P **PKPdf** **14 35 35.1 +0.6**
**BDFB Brasilia 152.94 23** PKPbc **PKiKP** **14 35 49.1 +0.6**
comp=Z,2.4nm,0.5s,baz=176,slow=6.2,SNR=4.0
BDFB PKPab **PKPab** **14 35 59.6 +0.1**
comp=Z,5.5nm,0.8s,baz=301,slow=2.0,SNR=4.8
**PLCA Paso Flores 155.04 100** PKPab **PKPab** **14 36 07.8 -0.2**
comp=Z,2.3nm,0.9s,baz=179,slow=13,SNR=2.5
**PMNB Patos De Minas 156.14 22** *e*P **PKPdf** **14 35 47.0 +1.6**
**DIAM Diamantina, MG 156.57 15** *e*P **PKPdf** **14 35 48.6 +2.6**
**PCMB Pacaembu 157.24 35** *e*P **PKPdf** **14 35 47.2 +0.6**

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**IDC 24 14:24:05.9±12.0, 15°.53S×164°.89E, h0km, mb3.7/3, mbtmp3.7/4, ML2.9/1, Error ellipse: s-maj=226.1km s-min=35.3km az=50.0, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **6.67** | **168** | Pn | Pn | | 14 25 45.3 | 0.0 |
| | 0.3nm,0.3s,baz=16,slow=4.8,SNR=11 | | | | | | | |
| DZM | | | | Sn | Sn | | 14 27 02.6 | +0.5 |
| | baz=46,slow=12,SNR=4.0 | | | | | | | |
| | 5.5nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.74** | **228** | P | P | | 14 29 47.9 | +0.5 |
| | 0.7nm,0.3s,baz=45,slow=8.6,SNR=3.8 | | | | | | | |
| | 0.7nm,0.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **29.41** | **257** | P | P | | 14 30 11.1 | -0.2 |
| | 0.6nm,1.0s,baz=84,slow=7.9,SNR=1.5 | | | | | | | |
| | 0.6nm,1.0s | | | | | | | |
| **ASAR** | **Alice Springs** | **30.24** | **250** | P | P | | 14 30 18.4 | -0.3 |
| | 0.5nm,0.4s,baz=78,slow=9.3,SNR=5.2 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |

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**IDC 24 14:48:49.5±14.0, 32°.41N×104°.93E, h0km, mb3.2/2, mbtmp3.2/3, ML3.4/1, Error ellipse: s-maj=303.4km s-min=81.5km az=145.0, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **14.90** | **203** | Pn | Pn | | 14 52 21.7 | +0.1 |
| | 0.1nm,0.3s,baz=13,slow=17,SNR=1.8 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **59.18** | **147** | P | P | | 14 58 51.3 | -1.1 |
| | 0.2nm,0.7s,baz=337,slow=8.2,SNR=5.5 | | | | | | | |
| | 0.2nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **62.26** | **150** | P | P | | 14 59 14.4 | +1.0 |
| | 0.3nm,0.8s,baz=327,slow=6.6,SNR=4.8 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |

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*SOME **24** 14:51:00.9, 39°.62N×75°.60E, h0km*
*NNC **24** 14:51:05.1±1.9, 39°.77N×75°.73E, h0km, mb3.7, mpv3.4, Error ellipse: s-maj=13.8km s-min=9.8km az=141.0*
*KRNET **24** 14:51:12.0±0.1, 39°.69N×75°.48E, mb3.1*

**ISC 24 14:51:12.6±1.7, 39°.73N±0°.08×75°.46E±0°.05, h10km, n42, σ1°.77/68, 16C-16D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.53** | **281** | ⇓*i*P | Pn | | 14 51 40.3 | +0.1 |
| | baz=83 | | | | | | | |
| SFK | | | | ⇓*i*S | Sb | | 14 52 00.9 | +0.2 |
| | baz=83 | | | | | | | |
| **OHH** | **Osh** | **2.20** | **292** | ⇓*e*P | Pn | | 14 51 49.4 | +0.2 |
| | baz=93 | | | | | | | |
| OHH | | | | ⇓*e*S | Sn | | 14 52 16.9 | +0.4 |
| | baz=93 | | | | | | | |
| **ARLS** | **Aral** | **2.30** | **338** | ⇑*i*P | Pn | | 14 51 51.2 | +0.5 |
| | baz=38 | | | | | | | |
| ARLS | | | | ⇑*i*S | Sn | | 14 52 20.2 | +1.1 |
| | baz=38 | | | | | | | |
| **KDJ** | **Kajisay** | **2.73** | **28** | ⇓*e*P | Pn | | 14 51 57.1 | +0.4 |
| | baz=28 | | | | | | | |
| KDJ | | | | ⇓*e*S | Sn | | 14 52 30.3 | +0.5 |
| | baz=28 | | | | | | | |
| **AML** | **Almayashu** | **2.75** | **331** | ⇑*e*P | Pn | | 14 51 57.6 | +0.5 |
| | baz=31 | | | | | | | |
| AML | | | | ⇑*i*S | Sn | | 14 52 31.1 | +0.6 |
| | baz=31 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.78** | **7** | ⇓*e*P | Pn | | 14 51 57.8 | +0.4 |
| | baz=7.0 | | | | | | | |
| BOOM | | | | ⇓*e*S | Sn | | 14 52 31.8 | +0.7 |
| | baz=7.0 | | | | | | | |
| **DRK** | **Karamyk** | **2.83** | **266** | ⇑*e*P | Pn | | 14 51 58.6 | +0.4 |
| | baz=67 | | | | | | | |
| DRK | | | | ⇑*e*S | Sn | | 14 52 32.6 | 0.0 |
| | baz=67 | | | | | | | |
| **KBK** | **Karagaybulak** | **2.95** | **353** | ⇑*e*P | Pn | | 14 52 00.2 | +0.5 |
| | baz=52 | | | | | | | |
| KBK | | | | ⇑*i*S | Sn | | 14 52 35.6 | +0.4 |
| | baz=52 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.99** | **346** | ⇓Pg | Pn | | 14 52 00.3 | 0.0 |
| | 16nm,0.8s | | | | | | | |
| AAK | | | | ⇑Lg | Lg | | 14 52 40.0 | |
| | 39nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.19** | **2** | ⇑Pg | Pn | | 14 52 02.1 | -0.9 |
| | 5.2nm,0.5s | | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | | 14 52 46.4 | |
| | 27nm,0.7s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.19** | **2** | ⇓*e*P | Pn | | 14 52 03.4 | +0.4 |
| | baz=2.0 | | | | | | | |
| TKM2 | | | | ⇓*i*S | Sn | | 14 52 40.6 | -0.6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=2.0 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.19** | **337** | ⇑*e*P | **Pn** | **14 52 03.9** | **+1.0** | |
| | baz=37 | | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **14 52 41.6** | **+0.5** | |
| | baz=37 | | | | | | | |
| **CHMS** | **Chumysh** | **3.31** | **351** | ⇓Pg | **Pn** | **14 52 04.2** | **-0.3** | |
| | 5.6nm,0.6s | | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 14 52 49.8 | | |
| | 53nm,1.1s | | | | | | | |
| **KST** | **Kastek** | **3.33** | **6** | *e*P | **Pn** | **14 52 04.9** | **0.0** | |
| | 12nm,0.7s | | | | | | | |
| KST | | | | *e*S | **Sb** | **14 52 51.2** | **-1.3** | |
| | 88nm,0.7s | | | | | | | |
| **KST** | **Kastek** | **3.33** | **6** | Pg | **Pn** | **14 52 04.9** | **0.0** | |
| | 12nm,0.7s | | | | | | | |
| KST | | | | Lg | Lg | 14 52 51.6 | | |
| | 88nm,0.7s | | | | | | | |
| **IZV** | **Izvestkoviy** | **3.42** | **14** | *e*P | **Pn** | **14 52 03.8** | **-2.2** | |
| | 0.1nm,0.2s | | | | | | | |
| IZV | | | | *e*S | **Sn** | **14 52 49.0** | **+2.3** | |
| | 29nm,0.8s | | | | | | | |
| **MRKS** | **Merke** | **3.45** | **332** | *e*P | **Pn** | **14 52 07.0** | **+0.6** | |
| | 3.9nm,0.5s | | | | | | | |
| MRKS | | | | *e*S | **Sb** | **14 52 54.8** | **-1.0** | |
| | 38nm,0.8s | | | | | | | |
| **MRKS** | **Merke** | **3.45** | **332** | Pg | **Pn** | **14 52 07.0** | **+0.6** | |
| | 3.9nm,0.5s | | | | | | | |
| MRKS | | | | Lg | Lg | 14 52 54.8 | | |
| | 38nm,0.8s | | | | | | | |
| **MTBS** | **Maitube** | **3.48** | **12** | *e*P | **Pn** | **14 52 07.2** | **+0.4** | |
| | 11nm,0.5s | | | | | | | |
| MTBS | | | | *e*S | **Sb** | **14 52 55.1** | **-1.4** | |
| | 11nm,0.6s | | | | | | | |
| **MTBS** | **Maitube** | **3.48** | **12** | Pg | **Pn** | **14 52 07.0** | **+0.2** | |
| | 11nm,0.6s | | | | | | | |
| MTBS | | | | Lg | Lg | 14 52 55.3 | | |
| | 16nm,0.5s | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.49** | **18** | *e*P | **Pn** | **14 52 07.0** | **-0.2** | |
| | 10nm,0.5s | | | | | | | |
| TNSS | | | | *e*S | **Sb** | **14 52 54.9** | **-2.4** | |
| | 16nm,1.1s | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.49** | **18** | Pg | **Pn** | **14 52 07.0** | **-0.2** | |
| | 9.8nm,0.6s | | | | | | | |
| TNSS | | | | Lg | Lg | 14 52 55.4 | | |
| | 16nm,1.1s | | | | | | | |
| **DGS** | **Degeres** | **3.52** | **4** | *e*P | **Pn** | **14 52 07.5** | **+0.1** | |
| | 13nm,0.6s | | | | | | | |
| DGS | | | | *e*S | **Sb** | **14 52 55.5** | **-2.3** | |
| | 15nm,0.9s | | | | | | | |
| **DGS** | **Degeres** | **3.52** | **4** | Pg | **Pn** | **14 52 07.7** | **+0.3** | |
| | 13nm,0.7s | | | | | | | |
| DGS | | | | Lg | Lg | 14 52 56.3 | | |
| | 15nm,0.7s | | | | | | | |
| **MNAS** | **Manas** | **3.54** | **322** | ⇓*e*P | **Pn** | **14 52 08.6** | **+0.8** | |
| | baz=22 | | | | | | | |
| MNAS | | | | ⇓*e*S | **Sn** | **14 52 49.7** | **-0.1** | |
| | baz=22 | | | | | | | |
| **BTK** | **Batken** | **3.58** | **277** | ⇓*e*P | **Pn** | **14 52 08.9** | **+0.6** | |
| | baz=77 | | | | | | | |
| BTK | | | | ⇓*e*S | **Sn** | **14 52 50.3** | **-0.4** | |
| | baz=77 | | | | | | | |
| **MDOK** | **Medeo** | **3.63** | **19** | *e*P | **Pn** | **14 52 09.6** | **+0.6** | |
| | 3.2nm,0.5s | | | | | | | |
| MDOK | | | | *e*S | **Sb** | **14 52 59.2** | **-1.9** | |
| | 32nm,0.8s | | | | | | | |
| **MDOK** | **Medeo** | **3.63** | **19** | Pg | **Pn** | **14 52 08.0** | **-1.0** | |
| | 9.6nm,1.2s | | | | | | | |
| MDOK | | | | Pg | Pb | 14 52 09.6 | -7.4 | |
| | 3.6nm,0.6s | | | | | | | |
| MDOK | | | | Lg | Lg | 14 52 57.3 | | |
| | 37nm,1.0s | | | | | | | |
| MDOK | | | | Lg | Lg | 14 52 59.2 | | |
| | 32nm,0.8s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.72** | **19** | *e*P | **Pn** | **14 52 11.8** | **+1.6** | |
| | 4.9nm,0.6s | | | | | | | |
| KOTS | | | | *e*S | **Sb** | **14 53 02.7** | **-0.8** | |
| | 76nm,0.8s | | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.72** | **19** | Pg | **Pn** | **14 52 11.3** | **+1.2** | |
| | 5.1nm,0.6s | | | | | | | |
| KOTS | | | | Lg | Lg | 14 53 02.7 | | |
| | 60nm,0.9s | | | | | | | |
| **SGDS** | **Sogindy** | **3.77** | **351** | Pg | **Pn** | **14 52 13.0** | **+2.2** | |
| | 4.1nm,0.9s | | | | | | | |
| SGDS | | | | Lg | Lg | 14 53 04.9 | | |
| | 23nm,0.9s | | | | | | | |
| **KRBS** | **Karabastau** | **3.97** | **2** | *e*P | **Pn** | **14 52 16.4** | **+2.9** | |
| | 3.3nm,0.5s | | | | | | | |
| KRBS | | | | *e*S | **Sb** | **14 53 10.6** | **-0.1** | |
| | 13nm,0.6s | | | | | | | |
| **KRBS** | **Karabastau** | **3.97** | **2** | Pg | **Pn** | **14 52 16.4** | **+2.9** | |
| | 3.3nm,0.5s | | | | | | | |
| KRBS | | | | Lg | Lg | 14 53 10.6 | | |
| | 13nm,0.7s | | | | | | | |
| **KTBS** | **Karatobe** | **4.08** | **13** | *e*P | **Pn** | **14 52 18.2** | **+3.1** | |
| | 5.6nm,0.6s | | | | | | | |
| KTBS | | | | *e*S | **Sb** | **14 53 13.8** | **-0.3** | |
| | 30nm,0.7s | | | | | | | |
| **KTBS** | **Karatobe** | **4.08** | **13** | Pg | **Pn** | **14 52 18.7** | **+3.5** | |
| | 5.6nm,0.6s | | | | | | | |
| KTBS | | | | Lg | Lg | 14 53 13.8 | | |
| | 30nm,0.7s | | | | | | | |
| **KUU** | **Kurty** | **4.21** | **9** | Pg | **Pn** | **14 52 20.0** | **+3.1** | |
| | 5.7nm,0.1s | | | | | | | |
| KUU | | | | Lg | Lg | 14 53 16.7 | | |
| | 25nm,0.1s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.28** | **15** | *e*P | **Pn** | **14 52 21.4** | **+3.7** | |
| | 4.7nm,0.6s | | | | | | | |
| CHKK | | | | *e*S | **Sb** | **14 53 19.3** | **-0.3** | |
| | 30nm,0.8s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.28** | **15** | Pg | **Pn** | **14 52 21.4** | **+3.7** | |
| | 4.7nm,0.6s | | | | | | | |
| CHKK | | | | Lg | Lg | 14 53 19.3 | | |
| | 31nm,0.9s | | | | | | | |
| **KPKS** | **Kokpek** | **4.45** | **32** | *e*P | **Pn** | **14 52 23.9** | **+3.7** | |
| | 2.7nm,0.2s | | | | | | | |
| KPKS | | | | *e*S | **Sb** | **14 53 23.4** | **-1.2** | |
| | 10nm,0.9s | | | | | | | |
| **KK31** | **Karatay Array** | **5.02** | **314** | Pn | **Pn** | **14 52 27.1** | **-0.8** | |
| | 0.5nm,0.5s,baz=127,slow=13,SNR=9.8 | | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **14 52 42.2** | **+1.7** | |
| | 1.7nm,0.7s,baz=133,slow=16,SNR=9.6 | | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 14 53 48.3 | | |
| | 4.2nm,0.7s,baz=124,slow=28,SNR=4.7 | | | | | | | |
| **BRLS** | **Boroldaу** | **5.36** | **310** | *e*P | **Pb** | **14 52 43.1** | **-3.2** | |
| | 0.7nm,0.2s | | | | | | | |
| BRLS | | | | *e*S | **Sb** | **14 53 56.7** | **+6.0** | |
| | 2.4nm,0.6s | | | | | | | |
| **BRLS** | **Boroldaу** | **5.36** | **310** | Pg | **Pb** | **14 52 42.7** | **-3.6** | |
| | 1.1nm,0.5s | | | | | | | |
| BRLS | | | | Lg | Lg | 14 53 56.7 | | |
| | 2.4nm,0.6s | | | | | | | |

**IDC 24 15:13:19.3±3.3, 18°.12S×178°.54W, h0km, mb3.6/3, mbtmp3.6/3, MS3.4/1, Error ellipse: s-maj=165.0km s-min=36.9km az=143.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **14.64** | **252** | LR | LR | 15 21 37.4 | |
| | comp=Z,137nm,19.1s,baz=38,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.47** | **260** | P | P | 15 21 32.3 | -0.3 |
| | 0.3nm,0.9s,baz=96,slow=7.2,SNR=1.7 | | | | | | |
| WRA | | | | PcP | PP | 15 23 16.1 | -0.2 |
| | 0.3nm,1.0s,baz=93,slow=3.4,SNR=1.8 | | | | | | |
| | 0.3nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **44.61** | **254** | P | P | 15 21 33.8 | 0.0 |
| | 0.7nm,0.5s,baz=88,slow=8.8,SNR=29 | | | | | | |
| ASAR | | | | PcP | PcP | 15 23 16.6 | -0.2 |
| | 0.2nm,0.4s,baz=96,slow=4.2,SNR=4.8 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **86.12** | **13** | P | P | 15 26 01.8 | 0.0 |
| | 0.3nm,0.3s,baz=221,slow=5.6,SNR=7.2 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **H03S2** | **Juan Fernandez** | **87.76** | **125** | T | T | 17 03 42.3 | |
| | baz=246,slow=75,SNR=14 | | | | | | |
| **H03S1** | **Juan Fernandez** | **87.77** | **125** | T | T | 17 03 43.6 | |
| | baz=246,slow=75,SNR=16 | | | | | | |
| **H03S3** | **Juan Fernandez** | **87.77** | **125** | T | T | 17 03 42.1 | |
| | baz=246,slow=75,SNR=13 | | | | | | |

*IDC **24** 15:21:20.3±10.0, 5°.64S×128°.03E, h386km±135km, mb3.0/2, mbtmp3.8/4, Error ellipse: s-maj=126.6km s-min=45.1km az=60.0*
**ISC 24 15:21:21.2±0.8, 5°.7S±0°.1×127°.9E±0°.1, h400km, n12, σ0°32/12, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **4.06** | **124** | P | **Pn** | **15 22 34.2** | **+0.3** |
| **FAKI** | **Fak Fak** | **5.17** | **57** | P | **Pn** | **15 22 44.7** | **-0.4** |
| **SOEI** | **Soe** | **5.37** | **222** | P | **Pn** | **15 22 47.2** | **-0.1** |
| **DRS** | **Darwin Rock St** | **7.29** | **156** | P | **P** | **15 23 08.9** | **+0.1** |
| **MTN** | **Manton Dam** | **7.76** | **156** | P | **P** | **15 23 13.4** | **-0.6** |
| **KDU** | **Kakadu** | **8.26** | **147** | P | **P** | **15 23 19.4** | **-0.1** |
| **TOLI2** | **Tolitoli** | **9.83** | **314** | P | **Pn** | **15 23 37.3** | **-0.1** |
| | 11nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.46** | **157** | P | **P** | **15 24 38.7** | **-0.1** |
| | 2.0nm,0.3s,baz=336,slow=11,SNR=67 | | | | | | |
| **COEN** | **Coen** | **17.13** | **120** | P | **P** | **15 24 56.4** | **-0.3** |
| **ASAR** | **Alice Springs** | **18.75** | **163** | P | **P** | **15 25 14.1** | **+0.3** |
| | 0.4nm,0.3s,baz=344,slow=12,SNR=34 | | | | | | |
| **STKA** | **Stephens Creek** | **29.00** | **155** | P | **P** | **15 26 46.5** | **+0.2** |
| | 0.8nm,0.5s,baz=321,slow=6.5,SNR=3.4 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.03** | **328** | P | **P** | **15 31 26.9** | **+0.4** |
| | 0.3nm,0.3s,baz=117,slow=8.0,SNR=8.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

**IDC 24 15:30:13.1±54.0, 20°.60S×179°.43E, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=960.5km s-min=146.3km az=82.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **35.58** | **244** | P | P | 15 37 11.4 | -1.0 |
| | 1.2nm,0.4s,baz=86,slow=15,SNR=5.8 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **42.15** | **257** | P | P | 15 38 07.8 | +0.1 |
| | 1.7nm,0.8s,baz=93,slow=8.2,SNR=26 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.20** | **263** | P | P | 15 38 08.4 | +0.3 |
| | 0.8nm,0.6s,baz=95,slow=7.9,SNR=16 | | | | | | |
| | 0.8nm,0.6s | | | | | | |

**IDC 24 15:35:14.9±3.5, 17°.90S×178°.39W, h582km±44km, mb3.0/4, mbtmp4.0/4, Error ellipse: s-maj=91.9km s-min=22.6km az=148.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **38.65** | **241** | P | P | 15 41 49.5 | -0.2 |
| | 2.4nm,0.6s,baz=85,slow=9.9,SNR=5.8 | | | | | | |
| | 2.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.65** | **260** | P | P | 15 42 36.8 | -0.3 |
| | 0.5nm,0.5s,baz=98,slow=6.9,SNR=13 | | | | | | |
| WRA | | | | PcP | PcP | 15 44 07.2 | +0.2 |
| | 0.5nm,1.0s,baz=95,slow=3.7,SNR=2.9 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.81** | **254** | P | P | 15 42 38.2 | 0.0 |
| | 1.8nm,0.5s,baz=89,slow=9.6,SNR=62 | | | | | | |
| ASAR | | | | PcP | PcP | 15 44 07.1 | -0.4 |
| | 0.2nm,0.5s,baz=94,slow=4.3,SNR=1.7 | | | | | | |
| ASAR | | | | S | S | 15 48 34.4 | +0.2 |
| | 0.5nm,0.7s,baz=86,slow=16,SNR=4.7 | | | | | | |
| | 1.8nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.88** | **13** | P | P | 15 46 53.0 | -0.3 |
| | 0.3nm,0.4s,baz=228,slow=4.9,SNR=7.5 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

*JMA **24** 15:38:08.6±0.2, 24°.5N±0°.9×122°.3E±0°.3, h77km±2km, MV2.2/15, TAIWAN REGION*
*TAP **24** 15:38:08.8, 24°.62N×122°.24E, h80km, ML3.1, C*
**ISC 24 15:38:08.4±1.3, 24°.57N±0°.03×122°.30E±0°.02, h79km±6km, n97, σ0°73/180, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS2** | **EOS2** | **0.16** | **204** | P | **Pn** | **15 38 20.4** | **+0.6** |
| | baz=211 | | | | | | |
| EOS2 | | | | S | **Sn** | **15 38 29.4** | **+1.2** |
| | baz=211 | | | | | | |
| **EOS3** | **EOS3** | **0.28** | **177** | P | **Pn** | **15 38 21.3** | **+1.0** |
| | baz=188 | | | | | | |
| EOS3 | | | | S | **Sn** | **15 38 30.4** | **+1.3** |
| | baz=188 | | | | | | |
| **TWC** | **Suao** | **0.41** | **276** | *i* P | **Pn** | **15 38 21.1** | **-0.3** |
| | baz=268 | | | | | | |
| TWC | | | | S | **Sn** | **15 38 29.6** | **-1.3** |
| | baz=268 | | | | | | |
| **ESAO** | **Su ao** | **0.42** | **271** | *e*P | **Pn** | **15 38 21.4** | **0.0** |
| | baz=263 | | | | | | |
| ESAO | | | | *e*S | **Sn** | **15 38 30.0** | **-1.0** |
| | baz=263 | | | | | | |
| **EOS4** | **EOS4** | **0.44** | **178** | *e*P | **Pn** | **15 38 21.9** | **+0.7** |
| | baz=179 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **15 38 31.1** | **+0.4** |
| | baz=179 | | | | | | |
| **EWUT** | **Wuta** | **0.49** | **256** | *e*P | **Pn** | **15 38 22.3** | **+0.3** |
| | baz=247 | | | | | | |
| EWUT | | | | *e*S | **Sn** | **15 38 32.4** | **+0.4** |
| | baz=247 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.53** | **327** | *e*P | **Pn** | **15 38 21.8** | **-0.5** |
| | baz=327 | | | | | | |
| TWB1 | | | | *e*S | **Sn** | **15 38 31.3** | **-1.3** |
| | baz=327 | | | | | | |
| **ENA** | **Nanau** | **0.53** | **255** | *e*P | **Pn** | **15 38 22.7** | **+0.4** |
| | baz=246 | | | | | | |
| ENA | | | | *e*S | **Sn** | **15 38 33.0** | **+0.3** |
| | baz=246 | | | | | | |
| **NDS** | **Dongshan** | **0.54** | **277** | *e*P | **Pn** | **15 38 22.5** | **0.0** |
| | baz=271 | | | | | | |
| NDS | | | | *e*S | **Sn** | **15 38 32.4** | **-0.4** |
| | baz=271 | | | | | | |
| **ILA** | **Ilan** | **0.54** | **292** | *e*S | **Sn** | **15 38 32.8** | **-0.1** |
| | baz=287 | | | | | | |
| **EAHA** | **Aohua** | **0.56** | **245** | *e*P | **Pn** | **15 38 22.9** | **+0.2** |
| | baz=237 | | | | | | |
| **TIPB** | **Shuangxi** | **0.59** | **313** | *e*P | **Pn** | **15 38 22.8** | **-0.2** |
| | baz=313 | | | | | | |
| TIPB | | | | *e*S | **Sn** | **15 38 32.6** | **-1.2** |
| | baz=313 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.60** | **101** | P | **Pn** | **15 38 23.0** | **+0.1** |
| JYNG | | | | S | **Sn** | **15 38 33.5** | **-0.3** |
| **TWE** | **Neicheng** | **0.60** | **285** | P | **Pn** | **15 38 23.2** | **+0.2** |
| | baz=280 | | | | | | |
| TWE | | | | *e*S | **Sn** | **15 38 33.4** | **-0.4** |
| | baz=280 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.65** | **324** | P | **Pn** | **15 38 23.5** | **-0.2** |
| | baz=325 | | | | | | |
| SXI1 | | | | *e*S | **Sn** | **15 38 34.3** | **-0.6** |
| | baz=325 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.65** | **99** | P | **Pn** | **15 38 23.5** | **0.0** |
| | baz=102 | | | | | | |
| YOJ | | | | S | **Sn** | **15 38 34.4** | **-0.3** |
| | baz=102 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.65** | **99** | P | **Pn** | **15 38 23.6** | **0.0** |
| YOJ | | | | S | **Sn** | **15 38 34.3** | **-0.4** |
| **ENTT** | **Nioudou** | **0.68** | **276** | *e*P | **Pn** | **15 38 24.5** | **+0.7** |
| | baz=271 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **15 38 35.5** | **+0.3** |
| | baz=271 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.68** | **287** | P | **Pn** | **15 38 24.2** | **+0.3** |
| | baz=289 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **15 38 34.8** | **-0.6** |
| | baz=289 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.69** | **317** | P | **Pn** | **15 38 24.1** | **0.0** |
| | baz=311 | | | | | | |
| NWF | | | | *e*S | **Sn** | **15 38 34.7** | **-0.9** |
| | baz=311 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.69** | **317** | *e*P | **Pn** | **15 38 23.9** | **0.0** |
| | baz=311 | | | | | | |
| WFSB | | | | S | **Sn** | **15 38 34.8** | **-0.7** |
| | baz=311 | | | | | | |
| **LATG** | **Datong** | **0.71** | **268** | P | **Pn** | **15 38 24.7** | **+0.5** |
| | baz=258 | | | | | | |
| LATG | | | | *e*S | **Sn** | **15 38 36.2** | **+0.3** |
| | baz=258 | | | | | | |
| **NDT** | **Datong Townshi** | **0.72** | **273** | P | **Pn** | **15 38 25.1** | **+0.9** |
| | baz=270 | | | | | | |
| NDT | | | | *e*S | **Sn** | **15 38 36.4** | **+0.4** |
| | baz=270 | | | | | | |
| **ETL** | **Fush Village** | **0.74** | **237** | *e*P | **Pn** | **15 38 24.4** | **-0.1** |
| | baz=225 | | | | | | |
| **TNOU** | **National Taiwa** | **0.75** | **320** | *e*S | **Sn** | **15 38 35.8** | **-0.8** |
| | baz=317 | | | | | | |
| **NACB** | **Ninganchiao** | **0.76** | **239** | *e*P | **Pn** | **15 38 24.2** | **-0.4** |
| | baz=227 | | | | | | |
| NACB | | | | *e*S | **Sn** | **15 38 36.8** | **+0.1** |
| | baz=227 | | | | | | |
| **NWLT** | **Wulai** | **0.76** | **286** | *e*P | **Pn** | **15 38 24.8** | **+0.1** |
| | baz=291 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **15 38 36.4** | **-0.4** |
| | baz=291 | | | | | | |
| **TWA** | **Mucha** | **0.77** | **302** | *e*P | **Pn** | **15 38 24.9** | **+0.1** |
| | baz=301 | | | | | | |
| TWA | | | | *e*S | **Sn** | **15 38 36.3** | **-0.7** |
| | baz=301 | | | | | | |
| **TWD** | **Chiawan** | **0.81** | **233** | P | **Pn** | **15 38 25.1** | **-0.1** |
| | baz=226 | | | | | | |
| TWD | | | | *e*S | **Sn** | **15 38 37.4** | **-0.2** |
| | baz=226 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.81** | **299** | *e*P | **Pn** | **15 38 25.6** | **+0.4** |
| | baz=297 | | | | | | |
| NHDH | | | | *e*S | **Sn** | **15 38 36.9** | **-0.8** |
| | baz=297 | | | | | | |
| **NHY** | **Taipei** | **0.82** | **305** | *e*P | **Pn** | **15 38 25.0** | **-0.3** |
| | baz=304 | | | | | | |
| NHY | | | | *e*S | **Sn** | **15 38 37.3** | **-0.6** |
| | baz=304 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.83** | **245** | P | **Pn** | **15 38 25.5** | **0.0** |
| | baz=232 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **15 38 37.9** | **-0.3** |
| | baz=232 | | | | | | |
| **TATO** | **Taipei** | **0.84** | **299** | P | **Pn** | **15 38 25.7** | **0.0** |
| | baz=297 | | | | | | |
| TATO | | | | S | **Sn** | **15 38 37.2** | **-1.2** |
| | baz=297 | | | | | | |
| **NNSB** | **Datong** | **0.85** | **261** | *e*P | **Pn** | **15 38 26.1** | **+0.3** |
| | baz=249 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **15 38 39.3** | **+0.5** |
| | baz=249 | | | | | | |
| **NNSH** | **Datong** | **0.85** | **261** | *e*P | **Pn** | **15 38 25.9** | **+0.1** |
| | baz=249 | | | | | | |
| NNSH | | | | *e*S | **Sn** | **15 38 38.7** | **0.0** |
| | baz=249 | | | | | | |
| **YHNB** | **Yeheng** | **0.85** | **277** | P | **Pn** | **15 38 26.3** | **+0.6** |
| | baz=273 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **15 38 38.8** | **+0.1** |
| | baz=273 | | | | | | |
| **NNS** | **Nan Shan** | **0.86** | **262** | *e*P | **Pn** | **15 38 26.2** | **+0.3** |
| | baz=251 | | | | | | |
| NNS | | | | *e*S | **Sn** | **15 38 38.8** | **-0.1** |
| | baz=251 | | | | | | |
| **HWA** | **Hwalien** | **0.87** | **227** | *e*P | **Pn** | **15 38 25.9** | **+0.1** |
| | baz=221 | | | | | | |
| **NSK** | **Sanguang** | **0.87** | **277** | *e*P | **Pn** | **15 38 26.5** | **+0.6** |
| | baz=273 | | | | | | |
| NSK | | | | *e*S | **Sn** | **15 38 39.0** | **0.0** |
| | baz=273 | | | | | | |
| **YM01** | **YM01** | **0.88** | **311** | P | **Pn** | **15 38 26.0** | **-0.1** |
| | baz=304 | | | | | | |
| YM01 | | | | *e*S | **Sn** | **15 38 38.5** | **-0.7** |
| | baz=304 | | | | | | |
| **YM08** | **YM08** | **0.90** | **314** | *e*P | **Pn** | **15 38 25.7** | **-0.5** |
| | baz=307 | | | | | | |
| YM08 | | | | *e*S | **Sn** | **15 38 38.0** | **-1.5** |
| | baz=307 | | | | | | |
| **ANP** | **Anpu** | **0.94** | **311** | *e*P | **Pn** | **15 38 26.7** | **-0.1** |
| | baz=304 | | | | | | |
| ANP | | | | *e*S | **Sn** | **15 38 39.5** | **-1.1** |
| | baz=304 | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.95** | **223** | *e*P | **Pn** | **15 38 26.9** | **+0.1** |
| | baz=214 | | | | | | |
| TEYL | | | | *e*S | **Sn** | **15 38 41.1** | **+0.6** |
| | baz=214 | | | | | | |
| **ETM** | **Tongmen** | **0.95** | **231** | *e*P | **Pn** | **15 38 26.8** | **-0.1** |
| | baz=225 | | | | | | |
| ETM | | | | *e*S | **Sn** | **15 38 40.4** | **-0.2** |
| | baz=225 | | | | | | |
| **TWY** | **Chenhua** | **0.95** | **318** | *e*P | **Pn** | **15 38 27.1** | **+0.2** |
| | baz=311 | | | | | | |
| TWY | | | | *e*S | **Sn** | **15 38 40.3** | **-0.3** |
| | baz=311 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.96** | **304** | P | **Pn** | **15 38 26.2** | **-0.8** |
| | baz=307 | | | | | | |
| TWS1 | | | | S | **Sn** | **15 38 39.7** | **-1.1** |
| | baz=307 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.98** | **236** | *e*P | **Pn** | **15 38 27.3** | **0.0** |
| | baz=231 | | | | | | |
| LXIB | | | | *e*S | **Sn** | **15 38 40.9** | **-0.5** |
| | baz=231 | | | | | | |
| **NTST** | **Danshui** | **0.98** | **308** | *e*P | **Pn** | **15 38 27.3** | **+0.1** |
| | baz=307 | | | | | | |
| NTST | | | | *e*S | **Sn** | **15 38 40.9** | **-0.2** |
| | baz=307 | | | | | | |
| **FUSS** | **Fushou** | **1.02** | **252** | *e*P | **Pn** | **15 38 28.5** | **+0.6** |
| | baz=241 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **15 38 42.6** | **+0.2** |
| | baz=241 | | | | | | |
| **SHUL** | **Shoufeng** | **1.03** | **221** | *e*P | **Pn** | **15 38 27.9** | **+0.1** |
| | baz=207 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **15 38 42.4** | **+0.2** |
| | baz=207 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.04** | **246** | *e*P | **Pn** | **15 38 28.7** | **+0.4** |
| | baz=241 | | | | | | |
| WHF | | | | *e*S | **Sn** | **15 38 42.7** | **-0.4** |
| | baz=241 | | | | | | |
| **TWT** | **Tachien** | **1.07** | **253** | *e*P | **Pn** | **15 38 29.3** | **+0.8** |
| | baz=241 | | | | | | |
| TWT | | | | *e*S | **Sn** | **15 38 44.1** | **+0.6** |
| | baz=241 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.08** | **274** | *e*P | **Pn** | **15 38 29.2** | **+0.7** |
| | baz=277 | | | | | | |
| NFF | | | | *e*S | **Sn** | **15 38 44.1** | **+0.6** |
| | baz=277 | | | | | | |
| **TDCB** | **Techi** | **1.09** | **254** | *e*P | **Pn** | **15 38 29.1** | **+0.5** |
| | baz=241 | | | | | | |
| TDCB | | | | *e*S | **Sn** | **15 38 43.8** | **0.0** |
| | baz=241 | | | | | | |
| **NCU** | **National Centr** | **1.09** | **292** | *e*S | **Sn** | **15 38 42.5** | **-1.1** |
| | baz=290 | | | | | | |
| **ESL** | **Shilin** | **1.09** | **227** | *e*P | **Pn** | **15 38 28.2** | **-0.3** |
| | baz=230 | | | | | | |
| ESL | | | | *e*S | **Sn** | **15 38 42.8** | **-0.8** |
| | baz=230 | | | | | | |
| **NCUH** | **Zhongli** | **1.09** | **292** | *e*P | **Pn** | **15 38 29.2** | **+0.6** |
| | baz=290 | | | | | | |
| NCUH | | | | *e*S | **Sn** | **15 38 44.0** | **+0.4** |
| | baz=290 | | | | | | |
| **CHGB** | **Renai** | **1.15** | **244** | P | **Pn** | **15 38 30.1** | **+0.7** |
| | baz=232 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **15 38 45.4** | **+0.2** |
| | baz=232 | | | | | | |
| **LIOB** | **Emei** | **1.17** | **274** | *e*P | **Pn** | **15 38 30.7** | **+1.1** |
| | baz=271 | | | | | | |
| LIOB | | | | *e*S | **Sn** | **15 38 46.3** | **+0.9** |
| | baz=271 | | | | | | |
| **NSTT** | **Nanjuang** | **1.19** | **273** | *e*P | **Pn** | **15 38 30.7** | **+1.0** |
| | baz=270 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **15 38 46.1** | **+0.4** |
| | baz=270 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.19** | **225** | P | **Pn** | **15 38 29.3** | **-0.5** |
| | baz=227 | | | | | | |
| WARBT | | | | *e*S | **Sn** | **15 38 44.6** | **-1.2** |
| | baz=227 | | | | | | |
| **OWD** | **Renai** | **1.20** | **240** | *e*P | **Pn** | **15 38 30.4** | **+0.4** |
| | baz=230 | | | | | | |
| OWD | | | | *e*S | **Sn** | **15 38 46.2** | **+0.1** |
| | baz=230 | | | | | | |
| **EGFH** | **Guangfu** | **1.20** | **222** | *e*P | **Pn** | **15 38 29.7** | **-0.2** |
| | baz=227 | | | | | | |
| EGFH | | | | *e*S | **Sn** | **15 38 45.2** | **-0.8** |
| | baz=227 | | | | | | |
| **WUSB** | **Renai** | **1.22** | **242** | *e*P | **Pn** | **15 38 31.1** | **+0.8** |
| | baz=232 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **15 38 47.2** | **+0.5** |
| | baz=232 | | | | | | |
| **WHP** | **Taichung City** | **1.27** | **257** | *e*P | **Pn** | **15 38 32.5** | **+1.6** |
| | baz=253 | | | | | | |
| WHP | | | | *e*S | **Sn** | **15 38 48.9** | **+1.2** |
| | baz=253 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.32** | **100** | P | **Pn** | **15 38 31.4** | **0.0** |
| IRIF | | | | S | **Sn** | **15 38 48.4** | **-0.2** |
| **VWDT** | **VWDT** | **1.33** | **233** | P | **Pn** | **15 38 32.3** | **+0.7** |
| | baz=223 | | | | | | |
| VWDT | | | | *e*S | **Sn** | **15 38 48.7** | **-0.3** |
| | baz=223 | | | | | | |
| **HGSD** | **Ruisui** | **1.34** | **217** | *e*P | **Pn** | **15 38 31.6** | **-0.1** |
| | baz=206 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **15 38 48.7** | **-0.4** |
| | baz=206 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.37** | **249** | *e*P | **Pn** | **15 38 33.2** | **+1.2** |
| | baz=238 | | | | | | |
| WCS | | | | *e*S | **Sn** | **15 38 51.1** | **+1.3** |
| | baz=238 | | | | | | |
| **NMLH** | **Miaoli** | **1.38** | **269** | *e*P | **Pn** | **15 38 31.7** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| EHY | **Hungye** | 1.39 | 221 | *e*P | | Pn | 15 38 31.6 | -0.7 |
| | baz=225 | | | | | | | |
| EHY | | | | *e*S | | Sn | 15 38 48.5 | -1.7 |
| | baz=225 | | | | | | | |
| TWQ1 | **Liyutan** | 1.41 | 261 | *e*P | | Pn | 15 38 33.3 | +0.7 |
| | baz=258 | | | | | | | |
| TWQ1 | | | | *e*S | | Sn | 15 38 51.7 | +0.9 |
| | baz=258 | | | | | | | |
| SMLT | **Sun Moon Lake** | 1.45 | 242 | *e*P | | Pn | 15 38 32.5 | -0.7 |
| | baz=231 | | | | | | | |
| SSLB | **Suanglung** | 1.46 | 238 | *e*P | | Pn | 15 38 34.1 | +0.9 |
| | baz=234 | | | | | | | |
| HATJ | **Hateruma jima** | 1.46 | 110 | *e*P | | Pn | 15 38 33.0 | -0.3 |
| ECBN | **Changbin** | 1.47 | 212 | *e*P | | Pn | 15 38 32.9 | -0.4 |
| | baz=200 | | | | | | | |
| ECBN | | | | *e*S | | Sn | 15 38 51.6 | -0.5 |
| | baz=200 | | | | | | | |
| TYC | **Yuchr** | 1.48 | 244 | *e*P | | Pn | 15 38 34.9 | +1.5 |
| | baz=240 | | | | | | | |
| TYC | | | | *e*S | | Sn | 15 38 54.0 | +1.7 |
| | baz=240 | | | | | | | |
| YULB | **Yu-li** | 1.49 | 218 | *e*P | | Pn | 15 38 33.1 | -0.5 |
| | baz=223 | | | | | | | |
| YULB | | | | *e*S | | Sn | 15 38 50.8 | -1.8 |
| | baz=223 | | | | | | | |
| EYUL | **Yuli** | 1.51 | 217 | *e*P | | Pn | 15 38 33.8 | -0.1 |
| | baz=221 | | | | | | | |
| EYUL | | | | *e*S | | Sn | 15 38 53.1 | 0.0 |
| | baz=221 | | | | | | | |
| TWF1 | **Yuli** | 1.52 | 217 | *e*P | | Pn | 15 38 33.5 | -0.5 |
| | baz=222 | | | | | | | |
| TWF1 | | | | *e*S | | Sn | 15 38 51.5 | -1.8 |
| | baz=222 | | | | | | | |
| WHYT | **Xinyi Township** | 1.58 | 237 | *e*P | | Pn | 15 38 35.8 | +0.9 |
| | baz=233 | | | | | | | |
| JKRS | **Kuro-shima** | 1.59 | 102 | P | | Pn | 15 38 35.7 | +0.8 |
| JKRS | | | | S | | Sn | 15 38 55.5 | +0.6 |
| CHKH | **Chenggong** | 1.60 | 211 | *e*P | | Pn | 15 38 35.2 | +0.1 |
| | baz=200 | | | | | | | |
| WNT | **Mingjian** | 1.63 | 245 | *e*P | | Pn | 15 38 37.4 | +2.0 |
| | baz=253 | | | | | | | |
| YUS | **Yu-Shan** | 1.64 | 229 | *e*P | | Pn | 15 38 36.8 | +0.8 |
| | baz=218 | | | | | | | |
| YUS | | | | *e*S | | Sn | 15 38 56.7 | -0.1 |
| | baz=218 | | | | | | | |
| FULB | **Fuli** | 1.65 | 214 | *e*P | | Pn | 15 38 35.6 | -0.1 |
| | baz=220 | | | | | | | |
| WCHH | **Zhanghua** | 1.66 | 253 | *e*P | | Pn | 15 38 36.4 | +0.6 |
| | baz=260 | | | | | | | |
| WCHH | | | | *e*S | | Sn | 15 38 57.0 | +0.4 |
| | baz=260 | | | | | | | |
| JIJ | **Ishigaki jima** | 1.69 | 96 | P | | Pn | 15 38 36.5 | +0.4 |
| JIJ | | | | S | | Sn | 15 38 56.6 | -0.6 |
| EHD | **Haiduan** | 1.73 | 216 | *e*P | | Pn | 15 38 36.3 | -0.5 |
| | baz=220 | | | | | | | |
| EHD | | | | *e*S | | Sn | 15 38 57.0 | -1.3 |
| | baz=220 | | | | | | | |
| ELDTW | **Lidau** | 1.81 | 221 | *e*P | | Pn | 15 38 37.7 | -0.1 |
| | baz=211 | | | | | | | |
| ELDTW | | | | *e*S | | Sn | 15 38 59.2 | -1.0 |
| | baz=211 | | | | | | | |
| JISG | **Ishigakijimahi** | 1.83 | 89 | P | | Pn | 15 38 38.5 | +0.5 |
| JISG | | | | *e*S | | Sn | 15 39 00.7 | +0.2 |
| EDH | **Donghe** | 1.83 | 210 | *e*P | | Pn | 15 38 37.6 | -0.4 |
| | baz=216 | | | | | | | |
| WTK | **Tuku** | 1.96 | 244 | *e*P | | Pn | 15 38 40.8 | +1.1 |
| | baz=241 | | | | | | | |
| WTK | | | | *e*S | | Sn | 15 39 04.3 | +0.8 |
| | baz=241 | | | | | | | |
| LDUT | **Ludao** | 2.03 | 202 | *e*P | | Pn | 15 38 40.3 | -0.5 |
| | baz=199 | | | | | | | |
| LDUT | | | | *e*S | | Sn | 15 39 03.4 | -2.0 |
| | baz=199 | | | | | | | |
| TWGBT | **Beinan** | 2.07 | 213 | *e*P | | Pn | 15 38 40.6 | -0.7 |
| | baz=210 | | | | | | | |
| TWGBT | | | | *e*S | | Sn | 15 39 04.6 | -1.7 |
| | baz=210 | | | | | | | |
| TWG | **Pinlang** | 2.07 | 213 | *e*P | | Pn | 15 38 41.1 | -0.2 |
| | baz=210 | | | | | | | |
| TWG | | | | *e*S | | Sn | 15 39 05.0 | -1.4 |
| | baz=210 | | | | | | | |
| JTJ | **Tarama** | 2.19 | 88 | *e*P | | Pn | 15 38 43.3 | +0.6 |
| JTJ | | | | S | | Sn | 15 39 10.6 | +1.6 |

**IDC 24 16:01:03.2±6.2, 28°.35S×23°.21E, h0km, Error ellipse: s-maj=37.6km s-min=36.9km az=104.0, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I47ZA** | **BOSHOF INFRASO** | **1.81** | **99** | I | I | 16 11 40.0 | |
| | 0.1nm,0.8s,baz=278,slow=317,SNR=2.5 | | | | | | |
| **BOSA** | **Boshof** | **1.82** | **99** | Pn | Pn | 16 01 36.0 | -0.1 |
| | 0.6nm,0.3s,baz=281,slow=14,SNR=12 | | | | | | |
| BOSA | | | | Lg | Lg | 16 02 01.2 | |
| | 1.4nm,0.3s,baz=26,slow=22,SNR=6.2 | | | | | | |
| **I35NA** | **TSUMEB INFRASO** | **10.47** | **329** | I | I | 17 03 40.0 | |
| | baz=152,slow=318,SNR=8.3 | | | | | | |

*SSNC **24** 16:10:39.7±3.9, 17°.25N×72°.70W, h120km±81km, MD4.2, ML3.6, MW3.6*
*OSPL **24** 16:10:42.1±1.5, 17°.28N×72°.77W, h31km±41km, ML3.3*
*SDD **24** 16:10:48.7±1.6, 18°.40N×72°.47W, h112km±10km, MD3.8, ML3.3, MW3.7*

**ISC 24 16:10:39.5±2.1, 17°.54N±0°.09×72°.72W±0°.04, h7km±13km, n23, σ1°.78/34, 4C-1D, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIDR** | **Jimani** | **1.26** | **41** | ⇑*e*Pg | **Pg** | **16 11 04.2** | **+0.6** |
| JIDR | | | | *e*Sg | **Sg** | **16 11 18.3** | **-1.7** |
| JIDR | | | | IAML | | 16 11 23.2 | |
| | comp=N,1μm,0.8s | | | | | | |
| **PODR** | **Polo** | **1.51** | **65** | *i* P | **Pn** | **16 11 07.5** | **+0.3** |
| PODR | | | | *e*S | **Sg** | **16 11 27.1** | **-0.9** |
| PODR | | | | IAML | | 16 11 28.1 | |
| | comp=Z,648nm,0.5s | | | | | | |
| **NEDR** | **Neiba UASD** | **1.56** | **53** | ⇓*e*Pg | **Pn** | **16 11 08.9** | **+1.3** |
| NEDR | | | | *e*Sg | **Sn** | **16 11 23.9** | **-4.1** |
| NEDR | | | | IAML | | 16 11 35.3 | |
| | comp=N,739nm,0.5s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **1.64** | **71** | *e*Sg | **Sn** | **16 11 29.9** | **-0.3** |
| LOBA2 | | | | IAML | | 16 11 35.6 | |
| | comp=N,77nm,0.8s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.98** | **43** | *e*P | **Pn** | **16 11 15.2** | **+1.8** |
| SDDR | | | | *e*S | **Sn** | **16 11 41.1** | **+2.5** |
| SDDR | | | | IAML | | 16 11 44.2 | |
| | comp=N,329nm,0.0s | | | | | | |
| SDDR | | | | IAML | | 16 11 47.2 | |
| | comp=N,246nm,0.0s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.98** | **43** | *i* P | **Pn** | **16 11 15.3** | **+1.8** |
| SDDR | | | | IAML | | 16 11 44.8 | |
| | comp=Z,141nm,0.7s | | | | | | |
| **ABDR** | **Alto Bandera** | **2.36** | **57** | ⇑*e*Pg | **Pn** | **16 11 18.9** | **-0.1** |
| ABDR | | | | ⇑*e*Sg | Sn | 16 11 39.9 | -8.5 |
| ABDR | | | | IAML | | 16 12 02.8 | |
| | comp=N,276nm,0.7s | | | | | | |
| **BANI** | **BANI** | **2.41** | **69** | ⇑*e*Pg | **Pn** | **16 11 21.2** | **+1.8** |
| BANI | | | | *e*Sg | Sn | 16 11 43.5 | -5.7 |
| BANI | | | | IAML | | 16 11 53.8 | |
| | comp=N,384nm,0.7s | | | | | | |
| **MCDR** | **Montecristi** | **2.55** | **23** | IAML | | 16 11 31.4 | |
| | comp=E,71nm,1.6s | | | | | | |
| MCDR | | | | *e*Sg | Sn | 16 11 36.8 | -16 |
| MCDR | | | | IAML | | 16 12 10.3 | |
| | comp=N,181nm,0.3s | | | | | | |
| **MASC** | **Masc** | **2.98** | **332** | *e*P | **Pn** | **16 11 27.8** | **+0.5** |
| MASC | | | | *e*S | **Sn** | **16 11 59.8** | **-3.5** |
| MASC | | | | IAML | | 16 12 05.3 | |
| | comp=N,50nm,0.6s | | | | | | |
| MASC | | | | IAML | | 16 12 09.5 | |
| | comp=E,59nm,0.4s | | | | | | |
| **MASC** | **Masc** | **2.98** | **332** | *i* P | **Pn** | **16 11 28.1** | **+0.8** |
| MASC | | | | *e*S | **Sn** | **16 12 02.1** | **-1.2** |
| MASC | | | | IAML | | 16 12 16.7 | |
| | comp=Z,36nm,0.5s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **3.28** | **317** | *e*P | **Pn** | **16 11 32.0** | **+0.7** |
| GTBY | | | | *e*S | **Sn** | **16 12 09.8** | **-0.8** |
| GTBY | | | | IAML | | 16 12 24.2 | |
| | comp=Z,44nm,0.6s | | | | | | |
| GTBY | | | | IAML | | 16 12 28.1 | |
| | comp=Z,99nm,0.5s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **3.28** | **317** | *i* P | **Pn** | **16 11 31.9** | **+0.7** |
| GTBY | | | | IAML | | 16 12 37.0 | |
| | comp=Z,28nm,1.3s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **QMBU** | **Quimbuelo** | **3.30** | **324** | *e*P | | **Pn** | **16 11 31.3** | **-0.4** |
| QMBU | | | | *e*S | | **Sn** | **16 12 10.4** | **-0.8** |
| QMBU | | | | IAML | | | 16 12 19.7 | |
| | comp=N,73nm,0.4s | | | | | | | |
| QMBU | | | | IAML | | | 16 12 20.6 | |
| | comp=E,64nm,0.7s | | | | | | | |
| **NMDO** | **Nuevo Mundo** | **3.69** | **325** | *e*P | | **Pn** | **16 11 39.2** | **+2.3** |
| NMDO | | | | *e*S | | **Sn** | **16 12 22.5** | **+1.9** |
| **MOAC** | **Moa** | **3.76** | **326** | *e*P | | **Pn** | **16 11 41.7** | **+3.8** |
| MOAC | | | | *e*S | | **Sn** | **16 12 23.8** | **+1.4** |
| **MARVS** | **Santiago de Cu** | **3.88** | **310** | *e*P | | **Pn** | **16 11 39.3** | **-0.2** |
| MARVS | | | | *e*S | | **Sn** | **16 12 26.6** | **+1.2** |
| **STH** | **Stony Hill** | **3.93** | **278** | *e*P | | **Pn** | **16 11 40.5** | **+0.2** |
| STH | | | | *e*S | | **Sn** | **16 12 24.4** | **-2.3** |
| **CHIV** | **Chivirico** | **4.25** | **305** | *e*P | | **Pn** | **16 11 43.2** | **-1.5** |
| **HLGC** | **Holguin** | **4.59** | **317** | *e*P | | Pn | 16 11 46.2 | -3.1 |
| **MTDJ** | **Mount Denham** | **4.63** | **279** | *e*P | | **Pn** | **16 11 50.8** | **+0.8** |
| MTDJ | | | | *e*S | | **Sn** | **16 12 42.5** | **-1.6** |
| **LMGC** | **Las Mercedes** | **4.77** | **302** | *e*P | | **Pn** | **16 11 50.5** | **-1.3** |
| LMGC | | | | *e*S | | Sn | 16 12 41.6 | -5.8 |
| **CELP** | **Cerrillos** | **5.88** | **84** | *e*Pg | | **Pn** | **16 12 06.8** | **-0.2** |
| CELP | | | | IAML | | | 16 13 26.2 | |
| | comp=N,18nm,2.4s | | | | | | | |

*SJA **24** 16:14:43.2±0.7, 24°.14S×66°.85W, h200km±10km, ML3.0, MW3.5*
*IDC **24** 16:14:45.1±1.0, 23°.86S×66°.95W, h216km±17km, mb3.4/3, mbtmp3.9/9, Error ellipse: s-maj=23.4km s-min=14.3km az=131.0*

**ISC 24 16:14:43.8±0.8, 24°.09S±0°.05×66°.86W±0°.05, h202km±7km, n24, σ1°.34/35, mb3.5/3, 5C, Salta Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLA** | **San Lorenzo** | **1.39** | **117** | *e*P | **Pn** | **16 15 16.6** | **-0.3** |
| SLA | | | | *e*S | **S** | **16 15 41.2** | **-1.1** |
| SLA | | | | IAML | | 16 15 43.5 | |
| | comp=Z,71nm,1.0s | | | | | | |
| **AZAP** | **Zapla** | **1.64** | **95** | *e*P | **Pn** | **16 15 19.3** | **0.0** |
| AZAP | | | | *e*S | **S** | **16 15 45.9** | **-0.5** |
| AZAP | | | | IAML | | 16 15 54.8 | |
| | comp=Z,94nm,0.9s | | | | | | |
| **AF01** | **San Pedro de A** | **1.66** | **313** | *e*P | **Pn** | **16 15 21.2** | **+1.7** |
| AF01 | | | | *i* S | **S** | **16 15 50.0** | **+3.3** |
| AF01 | | | | IAML | | 16 15 56.1 | |
| | comp=N,387nm,0.3s | | | | | | |
| **FSA** | **Cafayete** | **2.16** | **159** | *e*P | **Pn** | **16 15 24.2** | **-0.1** |
| FSA | | | | *e*S | **S** | **16 15 53.4** | **-2.1** |
| **YJA** | **Yavi** | **2.27** | **33** | *e*P | **Pn** | **16 15 26.2** | **+0.4** |
| **LVC** | **Limon Verde** | **2.39** | **308** | *e*P | **Pn** | **16 15 27.5** | **+0.4** |
| **LVC** | **Limon Verde** | **2.39** | **308** | P | **Pn** | **16 15 27.5** | **+0.4** |
| | comp=N,83nm,0.3s,baz=117,slow=8.4,SNR=438 | | | | | | |
| LVC | | | | S | **S** | **16 16 00.1** | **0.0** |
| | comp=N,92nm,0.4s,baz=283,slow=20,SNR=45 | | | | | | |
| **LVC** | **Limon Verde** | **2.39** | **308** | ⇑*i* P | **Pn** | **16 15 27.5** | **+0.4** |
| LVC | | | | *i* S | **S** | **16 16 00.6** | **+0.5** |
| LVC | | | | IAML | | 16 16 01.6 | |
| | comp=N,1μm,0.4s | | | | | | |
| **GO02** | **Mina Guanaco** | **2.70** | **246** | ⇑*i* P | **Pn** | **16 15 30.7** | **+0.2** |
| GO02 | | | | *i* S | **S** | **16 16 06.2** | **0.0** |
| GO02 | | | | IAML | | 16 16 06.7 | |
| | comp=N,897nm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **3.17** | **316** | ⇑*i* P | **Pn** | **16 15 36.4** | **+0.7** |
| PB09 | | | | *i* S | **S** | **16 16 15.5** | **-0.2** |
| **PB14** | **IPOC Station P** | **3.27** | **260** | ⇑*i* P | **Pn** | **16 15 36.8** | **-0.4** |
| PB14 | | | | *i* S | **S** | **16 16 16.1** | **-2.1** |
| **PB04** | **IPOC Station P** | **3.50** | **299** | ⇑*i* P | **Pn** | **16 15 39.3** | **-0.4** |
| PB04 | | | | *i* S | **S** | **16 16 20.7** | **-2.0** |
| **PB01** | **IPOC Station P** | **3.89** | **321** | *e*P | **Pn** | **16 15 44.1** | **-0.3** |
| PB01 | | | | *i* S | **S** | **16 16 28.7** | **-2.6** |
| **AC01** | **Pan de Azucar** | **3.96** | **238** | *e*P | **Pn** | **16 15 44.0** | **-1.2** |
| **GO03** | **Copiap** | **4.63** | **220** | *e*P | **Pn** | **16 15 52.3** | **-1.2** |
| **ACLC** | **CERRO LA CRUZ** | **5.31** | **181** | *e*P | **Pn** | **16 16 01.9** | **-0.5** |
| **LPAZ** | **La Paz** | **7.86** | **351** | P | **Pn** | **16 16 35.7** | **-0.1** |
| | comp=N,3.0nm,0.3s,baz=165,slow=7.1,SNR=16 | | | | | | |
| LPAZ | | | | S | **S** | **16 18 02.3** | **-2.6** |
| | comp=N,2.9nm,0.7s,baz=0.7,slow=20,SNR=3.2 | | | | | | |
| **CPUP** | **Villa Florida** | **8.91** | **106** | P | Pn | 16 16 53.8 | +4.8 |
| | comp=N,1.0nm,0.3s,baz=279,slow=13,SNR=3.2 | | | | | | |
| **SIV** | **San Ignacio** | **9.72** | **35** | P | **Pn** | **16 16 57.6** | **-2.0** |
| | comp=N,2.2nm,0.3s,baz=217,slow=12,SNR=14 | | | | | | |
| **PLCA** | **Paso Flores** | **16.88** | **190** | P | **Pn** | **16 18 29.6** | **+1.0** |
| | comp=N,1.0nm,0.5s,baz=6.0,slow=12,SNR=4.4 | | | | | | |
| **BDFB** | **Brasilia** | **19.60** | **68** | P | **P** | **16 18 57.0** | **-0.1** |
| | comp=N,6.1nm,0.7s,baz=228,slow=9.2,SNR=8.3 | | | | | | |
| **SNAA** | **Sanae** | **59.22** | **161** | P | **P** | **16 24 24.0** | **+0.6** |
| | comp=N,0.9nm,1.0s,baz=282,slow=7.0,SNR=2.3 | | | | | | |
| | comp=N,0.9nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.11** | **180** | P | **P** | **16 25 11.0** | **+1.9** |
| | comp=N,1.5nm,0.5s,baz=319,slow=1.1,SNR=43 | | | | | | |
| | comp=N,1.5nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.48** | **69** | P | **P** | **16 26 11.5** | **-0.4** |
| | comp=N,0.3nm,0.4s,baz=258,slow=5.4,SNR=4.1 | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | |

*IDC **24** 16:25:05.8±0.7, 13°.23N×124°.87E, h0km, mb4.1/13, mbtmp4.2/15, ML4.4/2, MS3.7/3, Error ellipse: s-maj=28.9km s-min=13.2km az=77.0*
*NEIC **24** 16:25:11.4±2.3, 13°.29N±0°.08×124°.8E±0°.2, h35km±2km, mb4.6/23, Error ellipse: s-maj=26.9km s-min=13.9km az=270.0*

**ISC 24 16:25:11.3±0.5, 13°.29N±0°.04×124°.85E±0°.05, h33km, n77, σ1°.96/76, mb4.5/30, MS3.5/3, 7C-13D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MMPH** | **Masbate** | **1.51** | **232** | ⇑*e*P | **Pn** | **16 25 34.9** | **-1.2** |
| MMPH | | | | *i* S | **Sn** | **16 25 54.1** | **-0.5** |
| **PLP** | **Palo** | **2.12** | **177** | ⇑*e*P | **Pb** | **16 25 46.3** | **-2.8** |
| PLP | | | | *e*S | **Sb** | **16 26 12.0** | **-3.0** |
| **GQP** | **Guinayangan** | **2.41** | **285** | ⇓*e*P | **Pn** | **16 25 46.7** | **-1.8** |
| GQP | | | | *e*S | **Sn** | **16 26 14.6** | **-2.3** |
| **RCP** | **Roxas** | **2.68** | **230** | ⇓*e*P | **Pn** | **16 25 51.3** | **-0.8** |
| RCP | | | | *i* S | **Sn** | **16 26 24.1** | **+0.6** |
| **IBAJ** | **Ibajay, Aklan** | **3.00** | **241** | ⇑*i* P | **Pn** | **16 25 55.7** | **-0.8** |
| **LLP** | **Lapu-Lapu** | **3.08** | **196** | ⇓*e*P | **Pn** | **16 25 58.2** | **+0.5** |
| LLP | | | | *e*S | **Sn** | **16 26 31.8** | **-1.6** |
| **LQP** | **Lukban** | **3.32** | **285** | ⇓*e*P | **Pn** | **16 25 59.1** | **-2.0** |
| **TBP** | **Tagbilaran** | **3.71** | **195** | ⇓*e*P | **Pn** | **16 26 07.0** | **+0.7** |
| TBP | | | | *e*S | **Sn** | **16 26 51.5** | **+2.6** |
| **PGP** | **Puerto Galera** | **3.80** | **274** | ⇓*i*P | **Pn** | **16 26 06.2** | **-1.3** |
| PGP | | | | *e*S | Sn | 16 26 25.8 | -25 |
| **JAP** | **San Jose, Anti** | **3.80** | **229** | ⇓*e*P | **Pn** | **16 26 09.7** | **+2.0** |
| **TGY** | **Tagaytay City** | **3.88** | **282** | ⇓*e*P | **Pb** | **16 26 18.1** | **-1.2** |
| TGY | | | | *i* S | **Sb** | **16 27 13.5** | **+7.6** |
| **CGP** | **Cagayan de Oro** | **4.81** | **182** | ⇓*e*P | **Pn** | **16 26 24.3** | **+2.8** |
| CGP | | | | *e*S | **Sn** | **16 27 20.4** | **+4.3** |
| **DCPH** | **Dipolog City** | **4.90** | **198** | ⇑*i*P | **Pn** | **16 26 22.6** | **-0.2** |
| DCPH | | | | *i* S | **Sn** | **16 27 21.7** | **+3.2** |
| **BIPH** | **Bislig** | **5.29** | **164** | ⇑*e*P | **Pn** | **16 26 28.1** | **0.0** |
| BIPH | | | | *e*S | **Sn** | **16 27 32.5** | **+4.5** |
| **DAV** | **Davao City (W)** | **6.22** | **173** | LR | LR | 16 29 52.7 | |
| | comp=Z,1μm,18.1s,baz=350,slow=47 | | | | | | |
| **KCP** | **Kidapawan** | **6.25** | **178** | ⇓*e*P | Pn | 16 26 47.2 | +5.9 |
| **KCP** | **Kidapawan** | **6.25** | **178** | ⇓*i*P | Pn | 16 26 47.3 | +6.0 |
| **ZCP** | **Zamboanga City** | **6.88** | **204** | ⇓*e*P | Pn | 16 26 57.4 | +7.4 |
| **PPR** | **Puerto Princes** | **6.94** | **240** | ⇓*i*P | **Pn** | **16 26 51.4** | **+0.6** |
| **MYLDM** | **Lahad Datu** | **10.21** | **218** | Pn | **Pn** | **16 27 38.7** | **+3.1** |
| **YULB** | **Yu-li** | **10.60** | **342** | Pn | **Pn** | **16 27 38.7** | **-2.2** |
| **KKM** | **Kota Kinabalu** | **11.14** | **231** | Pn | **Pn** | **16 27 46.3** | **-2.2** |
| **JOW** | **Kunigami** | **13.85** | **13** | Pn | **Pn** | **16 28 25.6** | **+0.2** |
| | 2.5nm,0.3s,baz=160,slow=12,SNR=6.6 | | | | | | |
| | 6.2nm,0.3s | | | | | | |
| **FAKI** | **Fak Fak** | **17.70** | **155** | P | **P** | **16 29 17.1** | **+1.0** |
| **KAPI** | **Kappang** | **18.88** | **196** | P | **Pn** | **16 29 29.1** | **-0.7** |
| | 3.4nm,0.3s,baz=94,slow=12,SNR=4.7 | | | | | | |
| | 12nm,0.5s | | | | | | |
| **NJ2** | **Nanjing** | **19.47** | **345** | *e*P | **Pn** | **16 29 38.3** | **+1.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,19nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **24.22** | **6** | P | **P** | **16 30 25.8** | **+0.8** |
| | comp=Z,1.6nm,0.5s,baz=180,slow=10.0,SNR=9.5 | | | | | | |
| KSRS | | | | LR | LR | 16 39 29.3 | |
| | comp=Z,102nm,21.2s,baz=180,slow=36 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **KS19** | **Wonju Array Si** | **24.26** | **6** | P | **P** | **16 30 25.1** | **-0.3** |
| KS19 | | | | IAmb | IAmb | 16 30 26.9 | |
| | comp=Z,24nm,1.2s | | | | | | |
| **XAN** | **Xi'an** | **25.22** | **328** | ⇑P | **P** | **16 30 38.8** | **+4.5** |
| **PZH** | **PanZhiHua** | **25.34** | **305** | P | **P** | **16 30 36.8** | **+1.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,200nm,5.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.43** | **285** | P | **P** | **16 30 37.8** | **+1.5** |
| | comp=Z,1.0nm,0.6s,baz=91,slow=7.3,SNR=3.5 | | | | | | |
| CMAR | | | | LR | LR | 16 41 42.8 | |
| | comp=Z,119nm,18.1s,baz=110,slow=39 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **HNS** | **HongShan** | **25.66** | **341** | ⇓P | P | 16 30 45.8 | +7.7 |
| HNS | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **26.70** | **166** | P | **P** | **16 30 48.1** | **+0.3** |
| MTN | | | | IAmb | IAmb | 16 31 14.1 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **29.04** | **172** | P | **P** | **16 31 07.7** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 16 31 33.1 | |
| | comp=Z,21nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **29.82** | **339** | *e*P | **P** | **16 31 17.6** | **+2.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,210nm,5.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **31.20** | **179** | P | **P** | **16 31 25.7** | **-2.0** |
| **USA0B** | **Ussuriysk Arra** | **31.41** | **10** | P | **P** | **16 31 29.0** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **31.41** | **10** | P | **P** | **16 31 29.4** | **+0.1** |
| | comp=Z,2.2nm,0.6s,baz=189,slow=8.2,SNR=14 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **34.17** | **164** | P | **P** | **16 31 51.8** | **-2.0** |
| **WRAB** | **Tennant Creek** | **34.31** | **164** | P | **P** | **16 31 53.2** | **-1.8** |
| WRAB | | | | IAmb | IAmb | 16 32 11.1 | |
| | comp=Z,8.7nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **34.32** | **164** | P | **P** | **16 31 52.6** | **-2.5** |
| | comp=Z,1.1nm,0.6s,baz=342,slow=9.0,SNR=24 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **34.32** | **164** | P | **P** | **16 31 53.1** | **-1.9** |
| WB2 | | | | IAmb | IAmb | 16 32 11.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **34.39** | **164** | P | **P** | **16 31 53.7** | **-2.0** |
| WR0 | | | | IAmb | IAmb | 16 32 26.8 | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **37.72** | **340** | P | **P** | **16 32 23.1** | **-0.9** |
| | comp=Z,0.5nm,0.5s,baz=167,slow=10,SNR=3.8 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **37.78** | **166** | P | **P** | **16 32 23.6** | **-1.1** |
| **ASAR** | **Alice Springs** | **37.78** | **166** | P | **P** | **16 32 23.6** | **-1.0** |
| | comp=Z,3.9nm,0.5s,baz=349,slow=7.7,SNR=194 | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.51** | **77** | T | T | 17 16 24.1 | |
| | baz=269,slow=75,SNR=230 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.52** | **77** | T | T | 17 16 26.8 | |
| | baz=269,slow=75,SNR=141 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.73** | **77** | T | T | 17 16 14.9 | |
| | baz=269,slow=75,SNR=174 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.73** | **75** | T | T | 17 16 34.1 | |
| | baz=267,slow=74,SNR=450 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.74** | **75** | T | T | 17 16 52.7 | |
| | baz=267,slow=74,SNR=358 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.75** | **75** | T | T | 17 16 45.7 | |
| | baz=267,slow=74,SNR=544 | | | | | | |
| **WMQ** | **Urumqi** | **44.01** | **321** | *e*P | **P** | **16 33 17.9** | **+2.1** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=N,410nm,9.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,380nm,17.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,170nm,15.1s | | | | | | |
| **BBOO** | **Buckleboo** | **47.08** | **167** | P | **P** | **16 33 39.1** | **-1.0** |
| **PEA0B** | **Petropavlovsk-** | **47.52** | **26** | P | **P** | **16 33 44.0** | **+0.7** |
| PEA0B | | | | IAmb | IAmb | 16 34 08.1 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **47.52** | **26** | P | **P** | **16 33 44.0** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **47.52** | **26** | P | **P** | **16 33 43.9** | **+0.5** |
| | comp=Z,1.9nm,0.8s,baz=208,slow=9.0,SNR=8.4 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **47.69** | **161** | P | **P** | **16 33 44.1** | **-0.8** |
| **STKA** | **Stephens Creek** | **47.69** | **161** | P | **P** | **16 33 43.7** | **-1.2** |
| | comp=Z,3.9nm,0.8s,baz=335,slow=7.3,SNR=11 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **48.80** | **322** | P | **P** | **16 33 52.2** | **-1.2** |
| MK31 | | | | IAmb | IAmb | 16 34 03.9 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.80** | **322** | P | **P** | **16 33 52.9** | **-0.5** |
| **MKAR** | **Makanchi Array** | **48.80** | **322** | P | **P** | **16 33 53.2** | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=116,slow=8.6,SNR=11 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **48.99** | **322** | P | **P** | **16 33 53.2** | **-1.6** |
| MAKZ | | | | IAmb | IAmb | 16 34 04.9 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| **KSH** | **Kashi** | **50.20** | **311** | P | **P** | **16 34 04.3** | **0.0** |
| **ZAA0** | **Zalesovo Array** | **51.32** | **331** | P | **P** | **16 34 11.6** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **51.32** | **331** | P | **P** | **16 34 11.3** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **51.32** | **331** | P | **P** | **16 34 11.7** | **-0.6** |
| | comp=Z,0.9nm,0.6s,baz=120,slow=8.4,SNR=4.5 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **52.81** | **325** | P | **P** | **16 34 22.4** | **-1.0** |
| KURK | | | | IAmb | IAmb | 16 34 34.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **52.81** | **325** | P | **P** | **16 34 22.5** | **-1.0** |
| | comp=Z,4.3nm,0.2s,baz=121,slow=8.0,SNR=12 | | | | | | |
| | comp=Z,4.3nm,0.2s | | | | | | |
| **TOO** | **Toolangi** | **54.18** | **160** | P | **P** | **16 34 32.2

*ellipse: s-maj=10.7km s-min=6.0km az=94.4*

*IDC* ***24*** *16:29:01.9±0.9,6˚.00S×147˚.11E,h84km±7km,mb4.5/24, mbtmp4.9/26,MS4.2/38,Error ellipse: s-maj=13.3km s-min=6.5km az=99.0*

*NEIC* ***24*** *16:29:02.7,5˚.91S×147˚.17E,h90km,Moment Tensor Solution. Duration: 2s6 Moment tensor: Scale 10¹⁷Nm; Mrr=0.01; Mθθ=0.81; Mφφ=-0.80; Mrθ=0.30; Mθφ=-1.17; Mφr=0.78; Fault plane solution: M₀1.65000×10¹⁷ NP1: φs162.73000˚,δ89.35000˚,λ30.51000˚. NP2:φs72.35000˚, δ59.49000˚,λ179.25000˚. Principal axes: T 1.6724, Plg22.0000˚, Azm32.0000˚; N -0.0528, Plg59.0000˚, Azm164.0000˚; P -1.6196, Plg21.0000˚, Azm293.0000˚;*

*BJI* ***24*** *16:29:02.3±0.0,5˚.77S×147˚.01E,h88km,mb4.9/66, mB5.2/23,Ms4.9/17,Ms7 4.6/22*

*NEIC* ***24*** *16:29:02.7,5˚.91S×147˚.17E,h90km*

*NEIC* ***24*** *16:29:03.1±1.5,5˚.92S±0˚.07×147˚.18E±0˚.01,h82km±5km, mb5.2/165,Mww5.4/18,Error ellipse: s-maj=11.7km s-min=10.3km az=120.0*

*DJA* ***24*** *16:29:04.9±0.5,6˚S±3˚×14˚7E±˚,h112km±5km,M5.5/42, mb5.5/42,mB5.8/33,MLv6.3/4,Mw(mB)5.4/33, MwMwp5.3/2,Mwp5.5/2*

*GCMT* ***24*** *16:29:07.1±0.2,5˚.96S±0˚.01×147˚.27E±0˚.01,h105km±2km, MW5.5/134,Moment Tensor Solution. s60,c74; s134,c226; Duration: 1s4 Moment tensor: Scale 10¹⁷ Nm; Mrr=0.07±.06; Mθθ=0.92±.05; Mφφ-0.84±.05; Mrθ=0.37±.04; Mθφ=-1.87±.04; Mφr-1.13±.03; Best double couple: M₀2.38200×10¹⁷ NP1:φs167.00000˚,δ90.00000˚, λ30.00000˚. NP2:φs77.00000˚,δ60.00000˚,λ180.00000˚. Principal axes: T 2.4520, Plg21.0000˚, Azm36.0000˚; N -0.1420, Plg60.0000˚, Azm168.0000˚; P -2.3110, Plg20.0000˚, Azm298.0000˚; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 24 16:29:03.4±0.4,6˚.00S±0˚.03×147˚.22E±0˚.04,h95km±3km, h96km:pP-P,n667,σ1§10/616,mb5.2/156,25C-4D,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BULU** | **Kimbe** | **3.11** | **82** | P | **Pn** | **16 29 50.4** | **-0.1** |
| **PMG** | **Port Moresby** | **3.38** | **181** | P | **Pn** | **16 29 53.5** | **-0.7** |
| **PMG** | **Port Moresby** | **3.38** | **181** | P | **Pn** | **16 29 53.3** | **-0.9** |
| | 754nm,0.4s,baz=359,slow=6.5,SNR=585 | | | | | | |
| PMG | | | | S | **Sn** | **16 30 31.1** | **-2.4** |
| | 7µm,0.5s,baz=224,slow=22,SNR=26 | | | | | | |
| **MANU** | **Manus Island** | **3.93** | **2** | | **Pn** | **16 30 01.1** | **-0.6** |
| **KAVG** | **Kavieng** | **4.93** | **47** | P | **Pn** | **16 30 16.4** | **+1.3** |
| **RABL** | **Rabaul** | **5.24** | **70** | | **Pn** | **16 30 19.5** | **+0.2** |
| **ALOT** | **Alotau** | **5.34** | **143** | P | **Pn** | **16 30 19.8** | **-0.9** |
| **MMPI** | **Merauke** | **7.22** | **250** | P | **Pn** | **16 30 48.0** | **+1.8** |
| **JAY** | **Jayapura** | **7.37** | **298** | P | **Pn** | **16 30 49.8** | **+1.5** |
| | 843nm,1.1s,8µm2.6nm | | | | | | |
| **GENI** | **Genyem** | **7.81** | **295** | P | **Pn** | **16 30 55.3** | **+1.0** |
| **GENI** | **Genyem** | **7.81** | **295** | P | **Pn** | **16 30 54.6** | **+0.3** |
| **COEN** | **Coen** | **8.86** | **206** | P | **Pn** | **16 31 09.0** | **+0.4** |
| **COEN** | **Coen** | **8.86** | **206** | Pn | **Pn** | **16 31 08.0** | **-0.6** |
| **MTSU** | **Mount Surprise** | **12.39** | **193** | P | **Pn** | **16 31 56.9** | **+0.4** |
| **HNR** | **Honiara** | **13.06** | **106** | P | **Pn** | **16 32 06.7** | **+1.4** |
| | 326nm,1.0s | | | | | | |
| **HNR** | **Honiara** | **13.06** | **106** | Pn | **Pn** | **16 32 05.3** | **-0.1** |
| **HNR** | **Honiara** | **13.06** | **106** | LR | LR | 16 36 28.3 | |
| | comp=Z,17µm,18.9s,baz=272,slow=34 | | | | | | |
| **HNR** | **Honiara** | **13.06** | **106** | P | **Pn** | **16 32 05.3** | **-0.1** |
| **TV1H** | **Townsville Har** | **13.19** | **182** | P | **Pn** | **16 32 08.9** | **+1.9** |
| **AUAYR** | **Ayr State High** | **13.50** | **179** | P | **Pn** | **16 32 12.1** | **+1.0** |
| **KMPI** | **Kaimana, Papua** | **13.67** | **279** | P | **Pn** | **16 32 15.6** | **+2.3** |
| | 284nm,0.9s,5µm | | | | | | |
| **CTA** | **Charters Tower** | **14.04** | **184** | P | **P** | **16 32 20.9** | **-2.0** |
| **CTA** | **Charters Tower** | **14.04** | **184** | P | **Pn** | **16 32 17.7** | **-0.4** |
| | 0.9nm,0.3s,baz=360,slow=14,SNR=29 | | | | | | |
| CTA | | | | S | **Sn** | **16 34 50.3** | **-2.4** |
| | 1.3nm,0.6s,baz=240,slow=23,SNR=2.6 | | | | | | |
| CTA | | | | LR | LR | 16 38 55.1 | |
| | comp=Z,113nm,18.6s,baz=6.0,slow=42 | | | | | | |
| **CTAO** | **Charters Tower** | **14.04** | **184** | P | **P** | **16 32 21.1** | **-1.8** |
| **CTAO** | **Charters Tower** | **14.04** | **184** | Pn | **Pn** | **16 32 20.6** | **+2.5** |
| **CTAO** | **Charters Tower** | **14.04** | **184** | P | **Pn** | **16 32 20.6** | **+2.5** |
| **FAKI** | **Fak Fak** | **15.24** | **281** | P | **Pn** | **16 32 32.2** | **-1.3** |
| **FAKI** | **Fak Fak** | **15.24** | **281** | | **Pn** | **16 32 32.0** | **-1.5** |
| **FAKI** | **Fak Fak** | **15.24** | **281** | P | **Pn** | **16 32 31.9** | **-1.6** |
| | 215nm,2.2s,4µm | | | | | | |
| **SAUI** | **Saumlaki** | **15.93** | **262** | P | **P** | **16 32 43.7** | **-0.2** |
| **SAUI** | **Saumlaki** | **15.93** | **262** | P | **P** | **16 32 43.6** | **-0.4** |
| **SAUI** | **Saumlaki** | **15.93** | **262** | P | **P** | **16 32 43.7** | **-0.2** |
| **KDU** | **Kakadu** | **15.99** | **244** | P | **Pn** | **16 32 42.2** | **-0.8** |
| **SWI** | **Sorong** | **16.73** | **287** | P | **Pn** | **16 32 51.4** | **-0.7** |
| | 574nm,1.3s,6µm | | | | | | |
| **PATS** | **Pohnpei** | **16.88** | **41** | P | **P** | **16 32 55.4** | **+0.9** |
| **PATS** | **Pohnpei** | **16.88** | **41** | P | **P** | **16 32 54.1** | **-0.3** |
| **MTN** | **Manton Dam** | **17.26** | **246** | P | **Pn** | **16 32 58.0** | **-0.6** |
| **MTN** | **Manton Dam** | **17.26** | **246** | P | **Pn** | **16 32 58.1** | **-0.5** |
| **BNDI** | **Bandanaira** | **17.31** | **274** | P | **P** | **16 32 59.6** | **+0.4** |
| **BNDI** | **Bandanaira** | **17.31** | **274** | P | **Pn** | **16 32 59.1** | **-0.1** |
| **DRS** | **Darwin Rock St** | **17.33** | **247** | P | **Pn** | **16 32 59.8** | **+0.4** |
| **RK1H** | **Rockhampton Ha** | **17.57** | **170** | P | **Pn** | **16 33 03.6** | **+1.3** |
| **MSAI** | **Masohi** | **18.42** | **277** | P | **Pn** | **16 33 12.7** | **0.0** |
| | 252nm,1.1s,3µm | | | | | | |
| **WB0** | **Warramunga Arr** | **18.52** | **221** | P | **P** | **16 33 12.8** | **+0.3** |
| **WR0** | **Warramunga Arr** | **18.56** | **220** | P | **P** | **16 33 13.3** | **+0.3** |
| **WRAB** | **Tennant Creek** | **18.67** | **221** | P | **P** | **16 33 14.2** | **+0.1** |
| **WRAB** | **Tennant Creek** | **18.67** | **221** | *i* P | **P** | **16 33 13.9** | **-0.2** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,156nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **18.67** | **221** | P | **P** | **16 33 14.2** | **+0.1** |
| **WRA** | **Warramunga Arr** | **18.68** | **221** | P | **P** | **16 33 14.6** | **+0.3** |
| **WRA** | **Warramunga Arr** | **18.68** | **221** | P | **P** | **16 33 14.4** | **+0.1** |
| | comp=Z,247nm,0.6s,baz=40,slow=12,SNR=209 | | | | | | |
| WRA | | | | S | **S** | **16 36 39.0** | **-3.1** |
| | comp=Z,38nm,0.7s,baz=43,slow=21,SNR=7.2 | | | | | | |
| WRA | | | | ScP | **ScP** | **16 41 06.8** | **+0.6** |
| | comp=Z,25nm,1.1s,baz=50,slow=2.4,SNR=5.2 | | | | | | |
| WRA | | | | ScS | **ScS** | **16 44 50.3** | **+2.6** |
| | comp=Z,14nm,1.0s,baz=23,slow=2.8,SNR=11 | | | | | | |
| **GUMO** | **Guam** | **19.60** | **353** | P | **P** | **16 33 24.0** | **-0.3** |
| | comp=Z,107nm,1.0s,baz=163,slow=10.0,SNR=3.6 | | | | | | |
| GUMO | | | | LR | LR | 16 40 06.9 | |
| | comp=Z,495nm,20.2s,baz=173,slow=34 | | | | | | |
| **GUMO** | **Guam** | **19.60** | **353** | P | **P** | **16 33 24.0** | **-0.3** |
| **EIDS** | **Eidsvold** | **19.61** | **170** | P | **Pn** | **16 33 26.2** | **-0.4** |
| **EIDS** | **Eidsvold** | **19.61** | **170** | | **Pn** | **16 33 25.8** | **-0.7** |
| **NLAI** | **Namlea** | **20.24** | **277** | P | **P** | **16 33 32.3** | **+1.0** |
| | comp=Z,220nm,1.5s,comp=Z,3µm | | | | | | |
| **LBMI** | **Labuha** | **20.39** | **284** | P | Pn | 16 33 47.1 | +11 |
| **KNRA** | **Kununurra** | **20.50** | **241** | P | **P** | **16 33 33.9** | **-0.2** |
| **QLP** | **Quilpie** | **20.67** | **188** | P | **P** | **16 33 36.4** | **+0.7** |
| **TNTI** | **Ternate** | **20.94** | **288** | P | **P** | **16 33 39.6** | **+0.9** |
| **TNTI** | **Ternate** | **20.94** | **288** | P | **P** | **16 33 39.8** | **+1.0** |
| **TNTI** | **Ternate** | **20.94** | **288** | P | Pn | 16 33 40.7 | -1.5 |
| | comp=Z,216nm,1.6s,comp=Z,3µm | | | | | | |
| **SANI** | **Sanana** | **21.54** | **280** | P | **P** | **16 33 44.2** | **-1.0** |
| **SANI** | **Sanana** | **21.54** | **280** | P | **P** | **16 33 45.0** | **-0.2** |
| | comp=Z,261nm,1.0s,comp=Z,4µm | | | | | | |
| **AS01** | **Alice Springs** | **21.72** | **215** | P | **P** | **16 33 47.4** | **+0.4** |
| **ASAR** | **Alice Springs** | **21.75** | **215** | P | **P** | **16 33 47.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **21.75** | **215** | P | **P** | **16 33 47.8** | **+0.4** |
| | comp=Z,64nm,0.5s,baz=47,slow=9.5,SNR=162 | | | | | | |
| ASAR | | | | S | **S** | **16 37 41.3** | **-1.3** |
| | comp=Z,100nm,1.0s,baz=30,slow=21,SNR=12 | | | | | | |
| ASAR | | | | ScP | **ScP** | **16 41 14.8** | **+1.4** |
| | comp=Z,17nm,1.0s,baz=22,slow=3.0,SNR=5.7 | | | | | | |
| ASAR | | | | LR | LR | 16 43 18.6 | |
| | comp=Z,3µm,18.9s,baz=42,slow=40 | | | | | | |
| | comp=Z,64nm,0.5s | | | | | | |
| **AUWSH** | **Wavell State H** | **21.99** | **166** | P | **P** | **16 33 50.6** | **+0.8** |
| **INKA** | **Innaminka** | **22.48** | **195** | P | **P** | **16 33 55.7** | **+0.7** |
| **SOEI** | **Soe** | **23.04** | **259** | P | **P** | **16 34 01.7** | **+0.8** |
| **SOEI** | **Soe** | **23.04** | **259** | P | **P** | **16 34 01.6** | **+0.7** |
| | comp=Z,656nm,1.1s,comp=Z,8µm | | | | | | |
| **AULRC** | **Lightning Ridg** | **23.32** | **178** | P | **P** | **16 34 03.1** | **-0.1** |
| **OOD** | **Oodnadatta** | **24.29** | **206** | P | **P** | **16 34 13.1** | **+1.1** |
| **NOUC** | **Port Laguerre** | **24.42** | **133** | P | **P** | **16 34 14.5** | **+1.3** |
| **DZM** | **Mont Dzumac** | **24.50** | **133** | P | **P** | **16 34 14.3** | **+0.2** |
| **DZM** | **Mont Dzumac** | **24.50** | **133** | *e*Pn | **P** | **16 34 14.1** | **0.0** |
| | comp=Z,299nm,1.2s | | | | | | |
| DZM | | | | *e*S | **S** | **16 38 28.6** | **+0.6** |
| | comp=Z,737nm,32.5s | | | | | | |
| DZM | | | | *e*LR | LR | 16 40 20.7 | |
| | comp=Z,3µm,33.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **24.50** | **133** | P | **P** | **16 34 14.3** | **+0.2** |
| **DZM** | **Mont Dzumac** | **24.50** | **133** | LR | LR | 16 42 58.4 | |
| | comp=Z,2µm,20.4s,baz=322,slow=34 | | | | | | |
| **BBSI** | **Bau Bau** | **24.54** | **270** | P | **P** | **16 34 15.1** | **+0.7** |
| | comp=Z,329nm,1.3s,comp=Z,7µm | | | | | | |
| **ARMA** | **Armidale** | **24.64** | **171** | P | **P** | **16 34 17.0** | **+1.7** |
| **ARMA** | **Armidale** | **24.64** | **171** | IAmb | IAmb | 16 34 40.6 | |
| | comp=Z,102nm,1.4s | | | | | | |
| **YATNC** | **Mamie plateau,** | **24.82** | **132** | P | **P** | **16 34 17.1** | **+0.2** |
| **LUWI** | **Luwuk** | **24.89** | **280** | P | **P** | **16 34 18.4** | **+0.8** |
| **LUWI** | **Luwuk** | **24.89** | **280** | P | **P** | **16 34 17.7** | **+0.1** |
| **MMRI** | **Maumere** | **24.92** | **262** | P | **P** | **16 34 18.7** | **+0.8** |
| **MMRI** | **Maumere** | **24.92** | **262** | P | **P** | **16 34 17.5** | **-0.4** |
| **GTOI** | **Gorontalo** | **25.06** | **284** | P | **P** | **16 34 19.9** | **+0.8** |
| | comp=Z,273nm,1.0s,comp=Z,3µm | | | | | | |
| **DAV** | **Davao City (W)** | **25.20** | **301** | LR | LR | 16 42 46.5 | |
| | comp=Z,291nm,20.9s,baz=114,slow=33 | | | | | | |
| **AUPHS** | **Peel High Scho** | **25.21** | **173** | P | **P** | **16 34 22.0** | **+1.7** |
| **CMSA** | **Cobar Meteorol** | **25.45** | **183** | P | **P** | **16 34 24.6** | **+2.1** |
| **EDFI** | **Ende, Flores** | **25.47** | **262** | P | **P** | **16 34 20.9** | **-2.1** |
| | comp=Z,116nm,0.7s,comp=Z,2µm | | | | | | |
| **LCRK** | **Leigh Creek** | **25.75** | **198** | P | **P** | **16 34 26.2** | **+0.9** |
| **MRSI** | **Marisa** | **26.05** | **283** | P | **P** | **16 34 28.0** | **-0.1** |
| | comp=Z,117nm,0.9s,comp=Z,2µm | | | | | | |
| **WRKA** | **Warakurna** | **26.22** | **222** | P | **P** | **16 34 30.0** | **+0.4** |
| **STKA** | **Stephens Creek** | **26.28** | **191** | P | **P** | **16 34 30.9** | **+0.9** |
| **STKA** | **Stephens Creek** | **26.28** | **191** | P | **P** | **16 34 30.9** | **+0.9** |
| **STKA** | **Stephens Creek** | **26.28** | **191** | P | **P** | **16 34 30.3** | **+0.3** |
| | comp=Z,20nm,0.6s,baz=359,slow=8.4,SNR=18 | | | | | | |
| STKA | | | | ScP | **ScP** | **16 41 28.3** | **+2.7** |
| | comp=Z,28nm,1.0s,baz=327,slow=4.6,SNR=8.0 | | | | | | |
| STKA | | | | LR | LR | 16 45 51.2 | |
| | comp=Z,2µm,18.5s,baz=3.2,slow=38 | | | | | | |
| | comp=Z,20nm,0.6s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **26.58** | **268** | P | **P** | **16 34 33.0** | **0.0** |
| | comp=Z,333nm,1.4s,comp=Z,5µm | | | | | | |
| **MULG** | **Mulgathing** | **27.15** | **206** | P | **P** | **16 34 38.9** | **+1.1** |
| **TOLI2** | **Tolitoli** | **27.33** | **284** | P | **P** | **16 34 40.7** | **+1.0** |
| **TOLI2** | **Tolitoli** | **27.33** | **284** | P | **P** | **16 34 39.2** | **-0.5** |
| TOLI2 | | | | IAmb | IAmb | 16 35 10.6 | |
| | comp=Z,117nm,1.0s | | | | | | |
| **KAPI** | **Kappang** | **27.36** | **271** | P | **P** | **16 34 40.2** | **+0.2** |
| **KAPI** | **Kappang** | **27.36** | **271** | P | **P** | **16 34 39.6** | **-0.4** |
| | comp=Z,93nm,1.0s,baz=82,slow=6.6,SNR=35 | | | | | | |
| KAPI | | | | S | **S** | **16 39 13.8** | **+0.6** |
| | comp=Z,19nm,1.1s,baz=210,slow=21,SNR=2.5 | | | | | | |
| KAPI | | | | LR | LR | 16 47 29.6 | |
| | comp=Z,434nm,19.0s,baz=103,slow=41 | | | | | | |
| | comp=Z,93nm,1.0s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **27.80** | **261** | P | **P** | **16 34 42.6** | **-1.3** |
| | comp=Z,238nm,0.9s,comp=Z,4µm | | | | | | |
| **MPSI** | **Mapaga** | **28.00** | **282** | P | **P** | **16 34 44.9** | **-0.7** |
| | comp=Z,35nm,1.0s,comp=Z,886nm | | | | | | |
| **YNG** | **Yong** | **28.18** | **178** | P | **P** | **16 34 48.5** | **+1.5** |
| **WHYH** | **Whyalla** | **28.36** | **197** | P | **P** | **16 34 49.8** | **+1.2** |
| **HTT** | **Hallett** | **28.36** | **195** | P | **P** | **16 34 50.0** | **+1.3** |
| **BBOO** | **Buckleboo** | **28.63** | **200** | P | **P** | **16 34 52.0** | **+1.0** |
| **BBOO** | **Buckleboo** | **28.63** | **200** | P | **P** | **16 34 52.2** | **+1.2** |
| BBOO | | | | IAmb | IAmb | 16 35 19.4 | |
| | comp=Z,140nm,1.5s | | | | | | |
| **CAN** | **Canberra** | **29.23** | **177** | P | **P** | **16 34 57.4** | **+1.1** |
| **CAN** | **Canberra** | **29.23** | **177** | P | **P** | **16 34 57.4** | **+1.1** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,23nm,1.0s | | | | | | |
| **PLAI** | **Plampang** | **29.33** | **263** | P | **P** | **16 34 55.7** | **-1.8** |
| | comp=Z,83nm,0.8s | | | | | | |
| **AUMAG** | **Moama Anglican** | **30.04** | **184** | P | **P** | **16 35 05.2** | **+1.7** |
| **TWSI** | **Taliwang, Sumb** | **30.21** | **263** | P | **P** | **16 35 03.2** | **-2.0** |
| | comp=Z,46nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **30.52** | **214** | P | **P** | **16 35 08.9** | **+1.1** |
| **FORT** | **Forrest** | **30.52** | **214** | P | **P** | **16 35 08.5** | **+0.8** |
| **MBWA** | **Marble Bar** | **30.60** | **238** | P | **P** | **16 35 08.9** | **+0.3** |
| **MBWA** | **Marble Bar** | **30.60** | **238** | P | **P** | **16 35 08.9** | **+0.3** |
| **MBWA** | **Marble Bar** | **30.60** | **238** | P | **P** | **16 35 08.9** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **30.68** | **237** | P | **P** | **16 35 09.7** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **30.68** | **237** | P | **P** | **16 35 10.2** | **+0.9** |
| PSA00 | | | | IAmb | IAmb | 16 35 11.2 | |
| | comp=Z,70nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **30.68** | **237** | IAmb | IAmb | 16 35 11.2 | |
| | comp=Z,124nm,0.9s | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.02** | **188** | P | **P** | **16 35 14.0** | **+1.9** |
| **TOO** | **Toolangi** | **31.47** | **183** | P | **P** | **16 35 17.9** | **+1.9** |
| **TOO** | **Toolangi** | **31.47** | **183** | P | **P** | **16 35 17.9** | **+1.9** |
| TOO | | | | IAmb | IAmb | 16 35 43.4 | |
| | comp=Z,52nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **31.47** | **183** | P | **P** | **16 35 17.9** | **+1.9** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,52nm,1.2s | | | | | | |
| **BRAT** | **Ballarat** | **31.55** | **185** | P | **P** | **16 35 19.0** | **+2.3** |
| **H11N1** | **WAKE ISLAND Hy** | **32.05** | **37** | T | T | 17 09 37.5 | |
| | baz=219,slow=76,SNR=6.8 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.07** | **37** | T | T | 17 09 37.2 | |
| | baz=219,slow=76,SNR=7.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.07** | **37** | T | T | 17 09 42.2 | |
| | baz=219,slow=76,SNR=14 | | | | | | |
| **AUHPC** | **Hawkesdale P12** | **32.27** | **187** | P | **P** | **16 35 24.9** | **+1.9** |
| **MSVF** | **Nonsavu** | **32.28** | **114** | P | **P** | **16 35 24.8** | **+1.3** |
| **MSVF** | **Nonsavu** | **32.28** | **114** | LR | LR | 16 47 26.4 | |
| | comp=Z,476nm,20.6s,baz=328,slow=34 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **32.89** | **264** | P | **P** | **16 35 27.1** | **-1.7** |
| **JAGI** | **Jajag, Banyuwa** | **32.89** | **264** | P | **P** | **16 35 26.6** | **-2.2** |
| **JAGI** | **Jajag, Banyuwa** | **32.89** | **264** | P | **P** | **16 35 26.6** | **-2.2** |
| **KKM** | **Kota Kinabalu** | **33.19** | **291** | P | **P** | **16 35 29.8** | **-1.7** |
| **MEEK** | **Meekatharra** | **34.12** | **230** | P | **P** | **16 35 40.1** | **+0.7** |
| **KMBL** | **Kambalda** | **34.65** | **220** | P | **P** | **16 35 44.4** | **+0.6** |
| **GIRL** | **Giralia** | **35.86** | **239** | P | **P** | **16 35 55.9** | **+1.6** |
| **MOO** | **Moorlands** | **36.29** | **180** | P | **P** | **16 35 59.6** | **+1.9** |
| **SMRI** | **Semarang** | **36.55** | **266** | P | **P** | **16 36 00.8** | **+0.4** |
| **MORW** | **Morawa** | **37.34** | **228** | P | **P** | **16 36 07.6** | **+0.8** |
| **JOW** | **Kunigami** | **37.45** | **331** | P | **P** | **16 36 07.4** | **-0.3** |
| **JOW** | **Kunigami** | **37.45** | **331** | P | **P** | **16 36 07.8** | **+0.1** |
| **JOW** | **Kunigami** | **37.45** | **331** | P | **P** | **16 36 05.9** | **-1.8** |
| | comp=Z,47nm,1.1s,baz=166,slow=8.8,SNR=5.5 | | | | | | |
| | comp=Z,47nm,1.1s | | | | | | |
| **KLBR** | **Kelberrin** | **37.53** | **224** | P | **P** | **16 36 08.4** | **0.0** |
| **KSM** | **Kuching** | **37.60** | **280** | P | **P** | **16 36 09.8** | **+0.6** |
| **KSM** | **Kuching** | **37.60** | **280** | P | **P** | **16 36 09.2** | **0.0** |
| KSM | | | | IAmb | IAmb | 16 36 38.1 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **BLDU** | **Ballidu** | **37.69** | **226** | P | **P** | **16 36 10.2** | **+0.4** |
| **YULB** | **Yu-li** | **38.66** | **320** | P | **P** | **16 36 16.7** | **-1.3** |
| YULB | | | | IAmb | IAmb | 16 36 27.1 | |
| | comp=Z,37nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **38.68** | **222** | P | **P** | **16 36 19.2** | **+1.2** |
| **NWAO** | **Narrogin (SRO)** | **38.68** | **222** | P | **P** | **16 36 18.9** | **+0.9** |
| **NWAO** | **Narrogin (SRO)** | **38.68** | **222** | P | **P** | **16 36 18.2** | **+0.2** |
| NWAO | | | | IAmb | IAmb | 16 36 19.8 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **38.68** | **222** | P | **P** | **16 36 18.2** | **+0.2** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **38.68** | **222** | P | **P** | **16 36 18.7** | **+0.6** |
| NWAO | | | | pP | **pP** | **16 36 41.9** | **+1.6** |
| **MUN** | **Mundaring** | **38.82** | **224** | P | **P** | **16 36 20.2** | **+1.0** |
| **NACB** | **Ninganchiao** | **39.04** | **321** | P | **P** | **16 36 20.7** | **-0.4** |
| **NACB** | **Ninganchiao** | **39.04** | **321** | P | **P** | **16 36 20.5** | **-0.6** |
| **BBJI** | **Bungbulang** | **39.32** | **266** | P | **P** | **16 36 22.9** | **-0.8** |
| **YHNB** | **Yeheng** | **39.53** | **321** | P | **P** | **16 36 25.8** | **+0.4** |
| **YHNB** | **Yeheng** | **39.53** | **321** | P | **P** | **16 36 25.7** | **+0.4** |
| **TATO** | **Taipei** | **39.69** | **322** | P | **P** | **16 36 26.1** | **-0.4** |
| **RKGY** | **Rocky Gully** | **39.88** | **220** | P | **P** | **16 36 29.3** | **+1.3** |
| **RAO** | **Raoul Island** | **40.21** | **129** | LR | LR | 16 50 33.6 | |
| | comp=Z,154nm,19.4s,baz=281,slow=32 | | | | | | |
| **AFI** | **Afiamalu** | **41.09** | **104** | P | **P** | **16 36 37.9** | **-0.4** |
| **AFI** | **Afiamalu** | **41.09** | **104** | P | **P** | **16 36 37.9** | **-0.4** |
| AFI | | | | pmax | pmax | | |
| | comp=Z,127nm,1.2s | | | | | | |
| **XMI** | **Christmas Isla** | **41.32** | **261** | P | **P** | **16 36 41.7** | **+1.5** |
| **JNU** | **Nakatsue** | **41.89** | **339** | P | **P** | **16 36 44.1** | **-0.4** |
| **JNU** | **Nakatsue** | **41.89** | **339** | P | **P** | **16 36 44.1** | **-0.4** |
| JNU | | | | IAmb | IAmb | 16 36 51.7 | |
| | comp=Z,50nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **41.89** | **339** | P | **P** | **16 36 42.7** | **-1.8** |
| | comp=Z,29nm,1.0s,baz=134,slow=4.9,SNR=8.9 | | | | | | |
| | comp=Z,29nm,1.0s | | | | | | |
| **MRNZ** | **Matariki Terra** | **41.96** | **151** | P | **P** | **16 36 47.2** | **+2.2** |
| **URZ** | **Urewera** | **42.02** | **144** | LR | LR | 16 54 14.6 | |
| | comp=Z,717nm,18.4s,baz=38,slow=36 | | | | | | |
| **JGF** | **Kuroka** | **42.41** | **348** | P | **P** | **16 36 50.2** | **+1.5** |
| **PMBI** | **Palembang** | **42.42** | **272** | P | **P** | **16 36 50.5** | **+1.3** |
| **MRZ** | **Mangatainoka R** | **42.84** | **148** | P | **P** | **16 36 53.2** | **+1.1** |
| **RPZ** | **Rata Peaks** | **43.01** | **155** | LR | LR | 16 52 21.6 | |
| | comp=Z,604nm,19.2s,baz=322,slow=32 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.15** | **349** | P | **P** | **16 36 52.6** | **-2.1** |
| | comp=Z,15nm,1.1s,baz=173,slow=8.2,SNR=16 | | | | | | |
| MJAR | | | | ScP | **ScP** | **16 42 23.6** | **-1.9** |
| | comp=Z,12nm,1.0s,baz=175,slow=4.7,SNR=12 | | | | | | |
| | comp=Z,15nm,1.1s | | | | | | |
| **MAJO** | **Matsushiro** | **43.15** | **349** | P | **P** | **16 36 53.8** | **-0.9** |
| **MAJO** | **Matsushiro** | **43.15** | **349** | P | **P** | **16 36 54.5** | **-0.2** |
| **MAJO** | **Matsushiro** | **43.15** | **349** | *i* P | **P** | **16 36 54.1** | **-0.6** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,38nm,1.3s | | | | | | |
| **MAJO** | **Matsushiro** | **43.15** | **349** | P | **P** | **16 36 53.5** | **-1.1** |
| MAJO | | | | ScP | **ScP** | **16 42 24.1** | **-1.5** |
| **QIZ** | **Qiongzhong** | **44.44** | **305** | P | **P** | **16 37 04.3** | **-0.9** |
| QIZ | | | | S | **S** | **16 43 36.0** | **+2.6** |
| QIZ | | | | LR | LR | | |
| | comp=Z,430nm,17.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,450nm,17.4s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,480nm,19.6s | | | | | | |
| **NJ2** | **Nanjing** | **46.50** | **326** | *e*P | **P** | **16 37 24.8** | **+3.5** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,27nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **46.83** | **339** | P | **P** | **16 37 23.4** | **-0.4** |
| | comp=Z,14nm,1.0s,baz=158,slow=9.4,SNR=22 | | | | | | |
| KSRS | | | | LR | LR | 16 53 55.9 | |
| | comp=Z,320nm,20.5s,baz=155,slow=32 | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **IPM** | **Ipoh** | **47.29** | **282** | P | **P** | **16 37 28.3** | **+0.5** |
| **IPM** | **Ipoh** | **47.29** | **282** | P | **P** | **16 37 27.1** | **-0.7** |
| **KULM** | **Kulim** | **47.83** | **283** | P | **P** | **16 37 31.7** | **-0.3** |
| **WHN** | **Wuhan** | **48.08** | **321** | P | **P** | **16 37 34.1** | **+0.6** |
| WHN | | | | S | **S** | **16 44 26.0** | **+0.9** |
| **PSI** | **Prapat** | **49.02** | **279** | P | **P** | **16 37 40.8** | **-0.5** |
| **SRIT** | **Nakonsritamara** | **49.65** | **287** | P | **P** | **16 37 46.6** | **+0.7** |
| **ASAJ** | **Asahikawa** | **50.06** | **356** | LR | LR | 16 54 29.1 | |
| | comp=Z,326nm,22.0s,baz=165,slow=30 | | | | | | |
| **GSI** | **Gunungsitoli** | **50.10** | **277** | P | **P** | **16 37 49.1** | **-0.2** |
| **GSI** | **Gunungsitoli** | **50.10** | **277** | P | **P** | **16 37 49.1** | **-0.2** |
| **MSHR** | **Mys Shultsa** | **50.51** | **345** | *i* P | **P** | **16 37 52.1** | **+0.2** |
| MSHR | | | | pmax | pmax | | |
| | comp=Z,36nm,1.1s | | | | | | |
| **TIA** | **Tai'an** | **50.59** | **328** | P | **P** | **16 37 51.5** | **-1.2** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| **ENH** | **Enshi** | **51.07** | **317** | P | **P** | **16 37 56.3** | **-0.1** |
| **USA0B** | **Ussuriysk Arra** | **51.82** | **346** | *i* P | **P** | **16 38 00.8** | **-0.9** |
| **USRK** | **Ussuriysk Ar.** | **51.82** | **346** | P | **P** | **16 38 01.3** | **-0.4** |
| | comp=Z,4.6nm,0.6s,baz=160,slow=7.4,SNR=18 | | | | | | |
| USRK | | | | ScP | **ScP** | **16 42 60.0** | **-1.9** |
| | comp=Z,7.7nm,1.0s,baz=191,slow=3.7,SNR=5.0 | | | | | | |
| USRK | | | | LR | LR | 16 58 56.9 | |
| | comp=Z,158nm,19.5s,baz=143,slow=35 | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **LYN** | **LuoYang** | **51.99** | **323** | P | **P** | **16 38 02.6** | **-0.5** |
| LYN | | | | sP | pP | 16 38 30.0 | +4.3 |
| LYN | | | | S | **S** | **16 45 16.3** | **-3.1** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,41nm,0.9s | | | | | | |
| **HNS** | **HongShan** | **52.76** | **327** | ⇓P | **P** | **16 38 07.9** | **-0.8** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **52.87** | **356** | *e*P | **P

BTO pmax pmax
comp=Z,24nm,0.9s
BTO pmax pmax
comp=Z,320nm,4.8s
BTO LR LR
comp=Z,1µm,16.4s
BTO LR LR
comp=Z,900nm,19.9s
BTO LR LR
comp=Z,940nm,22.5s
**LZH Lanzhou 58.35 319** *e*P **P 16 38 49.4 +0.3**
LZH S **S 16 46 44.4 -0.3**
LZH pmax pmax
comp=Z,30nm,1.1s
**HEH HeiHe 58.60 345** *e*P **P 16 38 50.0 -0.2**
HEH PcP **PcP 16 39 40.8 +1.3**
HEH pmax pmax
comp=Z,11nm,1.2s
**PEA0B Petropavlovsk- 59.55 7***ce*P **P 16 38 54.8 -2.0**
**PETK Petropavlovsk- 59.55 7** P **P 16 38 56.9 +0.1**
comp=Z,7.2nm,0.8s,baz=154,slow=4.4,SNR=14
PETK LR LR 17 00 55.6
comp=Z,495nm,21.9s,baz=198,slow=32
comp=Z,7.2nm,0.8s
**PET Petropavlovsk 59.59 8** *e*P P 16 38 51.8 -5.2
PET *e*S **S 16 47 00.3 +0.6**
PET MLR MLR
comp=Z,100nm,18.0s
**HIA Hailar 60.03 340** P **P 16 39 00.2 0.0**
**HIA Hailar 60.03 340** P **P 16 38 59.5 -0.7**
HIA IAmb IAmb 16 39 15.2
comp=Z,20nm,0.9s
**HIA Hailar 60.03 340** P **P 16 38 59.5 -0.7**
HIA pmax pmax
comp=Z,20nm,0.9s
**ZEA Zeya 61.85 347** *e*P **P 16 39 13.0 +0.6**
ZEA *e**SP **sP 16 39 43.5 -2.5**
ZEA *e*S **S 16 47 32.8 +4.3**
ZEA *e* 16 54 19.8
ZEA pmax pmax
comp=N,10.0nm,1.0s
ZEA pmax pmax
comp=Z,20nm,1.2s
ZEA smax smax
comp=E,200nm,5.9s
**PPT Papeete 62.68 107** LR LR 17 02 50.8
comp=E,86nm,20.7s,baz=264,slow=32
**PPT2 Papeete2 62.68 107** *e*P **P 16 39 18.1 -0.7**
comp=E,181nm,24.5s
PPT2 *e*S **S 16 47 39.7 -0.7**
comp=E,311nm,24.8s
PPT2 *e*LQ LQ 16 55 12.3
comp=E,783nm,28.2s
PPT2 *e*LR LR 16 58 05.2
comp=E,518nm,29.0s
PPT2 *e*LR LR 16 58 07.1
comp=E,304nm,34.2s
**SHEM Shemya Is, Ala 62.80 18** P **P 16 39 18.5 -0.1**
comp=E,58nm,0.9s,baz=280,slow=6.1,SNR=5.2
SHEM LR LR 17 04 24.7
comp=E,147nm,19.1s,baz=228,slow=34
comp=E,58nm,0.9s
**GTA Gaotai 62.88 320** *e*P **P 16 39 20.3 +0.5**
GTA S **S 16 47 41.1 -1.2**
GTA pmax pmax
comp=E,8.0nm,1.2s
GTA LR LR
comp=E,320nm,18.5s
GTA LR LR
comp=E,170nm,16.7s
GTA LR LR
comp=E,160nm,18.2s
**TBI Tubuai 63.16 113** *e*P **P 16 39 19.5 -2.3**
comp=E,911nm,29.8s
TBI *e*S **S 16 47 47.4 +1.3**
comp=E,1µm,25.8s
TBI *e*LQ LQ 16 55 35.3
comp=E,2µm,36.8s
TBI *e*LR LR 16 58 19.8
comp=E,1µm,32.8s
TBI *e*LR LR 16 58 24.2
comp=E,5µm,35.8s
**ULN Ulaanbaatar 64.22 331***ce*P **P 16 39 28.3 -0.1**
ULN pmax pmax
comp=Z,26nm,1.7s
**LSA Lhasa 64.42 307** P **P 16 39 30.1 -0.4**
**SONM Songino Array 64.51 331** P **P 16 39 30.6 +0.4**
**SONM Songino Array 64.51 331** P **P 16 39 30.3 0.0**
comp=Z,11nm,1.1s,baz=149,slow=6.6,SNR=33
SONM LR LR 17 07 58.3
comp=Z,245nm,20.1s,baz=134,slow=36
SONM PKP2bc 17 08 23.2
comp=Z,1.9nm,0.9s,baz=325,slow=2.3,SNR=9.3
comp=Z,11nm,1.1s
**SONM Songino Array 64.51 331** P **P 16 39 30.7 +0.4**
SONM pmax pmax
comp=Z,17nm,1.2s
**CIT Chita 64.54 338** *e*P **P 16 39 29.8 -0.5**
CIT *e* 16 39 48.6
CIT *e* 16 40 05.6
**GOMU GeErMu 64.55 315** P **P 16 39 31.1 0.0**
GOMU pmax pmax
comp=Z,5.0nm,0.6s
GOMU LR LR
comp=Z,190nm,17.9s
GOMU LR LR
comp=Z,470nm,17.6s
GOMU LR LR
comp=Z,710nm,17.0s
**KIWB Kanaga Island 65.17 23** P **P 16 39 35.0 +0.8**
**CASY Casey 65.32 195** P **P 16 39 35.8 +0.8**
**CASY Casey 65.32 195** P **P 16 39 35.4 +0.4**
CASY pP **pP 16 39 59.6 -0.3**
CASY sP **sP 16 40 11.9 +1.1**
**MA2 Magadan 65.43 2** P **P 16 39 35.5 -0.3**
comp=Z,6.4nm,0.8s,baz=198,slow=4.3,SNR=4.2
comp=Z,6.4nm,0.8s
**MA2 Magadan 65.43 2** *i* P **P 16 39 34.6 -1.2**
MA2 pmax pmax
comp=Z,14nm,1.1s
**MA2 Magadan 65.43 2** P **P 16 39 35.9 +0.1**
comp=Z,23nm,0.9s
**ZAK Zakamensk 67.75 331** *e*P **P 16 39 49.1 -1.8**
ZAK pmax pmax
comp=Z,31nm,1.3s
**SEY Seymchan 68.85 3** P **P 16 39 56.8 -0.5**
comp=Z,4.9nm,0.9s,baz=175,slow=4.8,SNR=11
comp=Z,4.9nm,0.9s
**SEY Seymchan 68.85 3***ce*P **P 16 39 57.6 +0.2**
SEY pmax pmax
comp=Z,20nm,1.5s
**YAK Yakutsk 69.17 351** P **P 16 39 59.4 +0.1**
YAK IAmb IAmb 16 40 48.4
comp=Z,47nm,1.2s
**YAK Yakutsk 69.17 351** P **P 16 39 59.4 +0.1**
comp=Z,9.4nm,0.5s,baz=185,slow=2.8,SNR=12
YAK LR LR 17 06 36.5
comp=Z,231nm,20.9s,baz=153,slow=33
comp=Z,9.4nm,0.5s
**YAK Yakutsk 69.17 351** *e*P **P 16 39 59.2 -0.2**
YAK *e**PP **sP 16 40 31.7 -1.6**
YAK *e*S **S 16 48 56.6 -0.8**
YAK *e**SS **SKiKP 16 49 43.6 +3.2**
YAK pmax pmax
comp=Z,32nm,1.2s
YAK pmax pmax
comp=N,14nm,1.2s
YAK pmax pmax
comp=Z,109nm,2.5s
YAK pmax pmax
comp=N,77nm,2.8s
YAK pmax pmax
comp=E,56nm,2.5s
YAK smax smax
comp=E,150nm,1.9s
YAK smax smax
comp=N,61nm,2.0s
**NIKH Nikolski High 69.48 27** P **P 16 40 00.8 -0.6**
baz=228
**MOY Mondy 69.68 331** *e*P **P 16 40 02.5 -0.4**
MOY pmax pmax
comp=Z,22nm,1.6s
**CCD Concordia, Ant 70.40 186** P **P 16 40 08.1 +0.8**
CCD pP **pP 16 40 34.2 +1.8**
**KNGR Kungurtug, Tuv 70.74 329** *i* P **P 16 40 09.1 -0.3**
KNGR pmax pmax
comp=Z,16nm,1.2s
**P08K Saint George I 71.68 24** P **P 16 40 14.7 0.0**
baz=226
**SPIA Saint Paul Isl 71.81 23** P **P 16 40 15.1 -0.4**
baz=225
**TAOE Nuku Hiva Isla 71.98 97** *e*S **S 16 49 25.9 -6.2**
comp=Z,173nm,27.4s
**TAOE Nuku Hiva Isla 71.98 97** *e*LR LR 17 02 19.7
comp=Z,300nm,40.3s
**SBA Scott Base 72.54 176** P **P 16 40 21.7 +2.1**
SBA IAmb IAmb 16 41 07.9
comp=Z,62nm,1.7s
**SBA Scott Base 72.54 176** P **P 16 40 21.7 +2.1**
SBA pmax pmax
comp=Z,62nm,1.7s
**WMQ Urumqi 72.94 319** *e*P **P 16 40 24.9 +2.2**
**S12K Black Hills 74.28 27** P **P 16 40 30.4 +0.2**
baz=233
**SDPT Sand Point 74.80 28** P **P 16 40 33.8 +0.7**
baz=235
**CHNA Chernabura Isl 74.92 29** P **P 16 40 34.6 +0.8**
baz=236
**BILL Bilibino 75.08 7***c i* P **P 16 40 34.4 -0.1**
BILL pmax pmax
comp=Z,13nm,1.0s
**M11K Mekoryuk 75.55 22** P **P 16 40 36.9 -0.5**
baz=228
**DGZ Jazzator, Alta 75.76 325** *i* P **P 16 40 38.7 -0.3**
DGZ pmax pmax
comp=Z,4.0nm,1.0s
**GAMB Gambell 76.11 17** P **P 16 40 40.3 -0.1**
baz=222
**CHGN Chignik 76.30 28** P **P 16 40 41.9 +0.3**
baz=236
**RKT Rikitea 76.47 112** *e*LR LR 17 04 32.4
comp=Z,852nm,27.8s
RKT *e*LR LR 17 04 33.2
comp=Z,6µm,36.5s
**M13K Dall Lake 76.65 23** P **P 16 40 44.1 +0.5**
baz=231
**O14K Tigyukauivet M 76.77 24** P **P 16 40 43.9 -0.4**
O14K IAmb IAmb 16 40 46.6
comp=Z,51nm,1.3s
**O14K Tigyukauivet M 76.77 24** P **P 16 40 43.7 -0.5**
baz=233
**N14K Kuskokwak Cree 77.00 24** P **P 16 40 45.3 -0.2**
baz=233
**K13K Kusilvak Mount 77.14 21** IAmb IAmb 16 40 49.1
comp=Z,63nm,1.6s
**K13K Kusilvak Mount 77.14 21** P **P 16 40 46.6 +0.3**
baz=230
**O15K Ungalikthiuk R 77.32 25** P **P 16 40 47.6 +0.3**
baz=234
**R16K Pilot Point 77.38 27** P **P 16 40 47.4 -0.4**
baz=237
**M14K Bethel 77.40 23** P **P 16 40 47.9 +0.1**
baz=232
**L14K Kuka Creek 77.49 22** IAmb IAmb 16 40 50.8
comp=Z,62nm,1.5s
**L14K Kuka Creek 77.49 22** P **P 16 40 48.4 +0.2**
baz=231
**MK31 Makanchi Array 77.64 320** IAmb IAmb 16 42 13.8
comp=Z,45nm,1.6s
**MK31 Makanchi Array 77.64 320***ce*P **P 16 40 48.1 -1.4**
**MKAR Makanchi Array 77.64 320** P **P 16 40 48.1 -1.3**
**MKAR Makanchi Array 77.64 320** P **P 16 40 48.5 -1.0**
comp=Z,0.8nm,0.4s,baz=101,slow=6.4,SNR=13
MKAR LR LR 17 14 24.2
comp=Z,89nm,21.1s,baz=93,slow=35
comp=Z,0.8nm,0.4s
**N15K Kwethluk River 77.79 24** P **P 16 40 49.9 -0.1**
baz=234
**MAKZ Makanchi 77.84 320** P **P 16 40 50.0 -0.5**
MAKZ IAmb IAmb 16 41 24.9
comp=Z,38nm,1.2s
**MAKZ Makanchi 77.84 320** P **P 16 40 50.1 -0.5**
MAKZ pmax pmax
comp=Z,38nm,1.2s
**M15K Kasigluk River 77.86 23** P **P 16 40 50.2 -0.1**
baz=233
**R17L Mt. Peulik Vol 77.97 27** P **P 16 40 50.8 -0.2**
baz=238
**P16K Nushagak River 78.01 26** P **P 16 40 50.3 -0.9**
baz=236
**J14K Nanvaranak Lak 78.06 21** P **P 16 40 51.2 -0.2**
baz=230
**L15K Ungalak Mounta 78.15 22** P **P 16 40 52.2 +0.2**
baz=232
**O16K Kokwok River B 78.28 25** P **P 16 40 52.8 +0.1**
baz=236,SNR=5.5
**SII Sitkinak Islan 78.43 29** P **P 16 40 53.5 -0.1**
baz=240
**TIXI Tiksi 78.43 354** *i* P **P 16 40 52.4 -0.9**
TIXI pmax pmax
comp=Z,6.0nm,0.8s
**N16K Nishlik Lake 78.50 24** P **P 16 40 54.6 +0.6**
baz=235,SNR=6.4
**K15K Wolf Creek Mou 78.51 22** P **P 16 40 54.2 +0.2**
baz=232,SNR=5.3
**Q17K Contact Creek 78.52 27** P **P 16 40 53.5 -0.7**
baz=238,SNR=8.4
**M16K Timber Creek 78.74 24** IAmb IAmb 16 40 57.8
comp=Z,41nm,1.2s
**M16K Timber Creek 78.74 24** P **P 16 40 55.4 +0.2**
baz=235,SNR=7.3
**P17K Kvichak River 78.77 26** P **P 16 40 54.5 -0.9**
baz=238
**O17K Koliganek Bris 78.81 25** P **P 16 40 55.6 0.0**
baz=237,SNR=12
**R18K Karluk 78.81 28** P **P 16 40 54.6 -1.0**
baz=240
**L16K Owhat River 78.94 23** IAmb IAmb 16 40 58.6
comp=Z,55nm,1.6s
**L16K Owhat River 78.94 23** P **P 16 40 56.1 -0.2**
baz=234,SNR=6.5
**F14K Arctic Creek 78.95 18** P **P 16 40 55.9 -0.3**
baz=227
**Q18K Katmai Hardscr 79.11 27** P **P 16 40 56.3 -1.2**
baz=239,SNR=5.4
**ZALV Zalesovo Beam 79.13 328** P **P 16 40 56.0 -1.5**
**ZALV Zalesovo Beam 79.13 328** P **P 16 40 55.7 -1.8**
comp=Z,3.0nm,0.5s,baz=103,slow=5.3,SNR=13
ZALV LR LR 17 16 18.6
comp=Z,266nm,20.1s,baz=116,slow=36
comp=Z,3.0nm,0.5s
**ZALV Zalesovo Beam 79.13 328** *i* P **P 16 40 55.5 -2.0**
ZALV pmax pmax
comp=Z,3.0nm,0.4s
**N17K Nushagak Hills 79.18 25** P **P 16 40 57.4 -0.2**
baz=237,SNR=5.3
**OHAK Old Harbor 79.19 28** P **P 16 40 57.3 -0.4**
baz=241
**G15K Niukluk 79.35 19** P **P 16 40 58.8 +0.3**
baz=230
**P18K Big Mountain, 79.40 26** P **P 16 40 58.3 -0.6**
baz=239
**J16K Anvik River 79.45 21** IAmb IAmb 16 42 18.8
comp=Z,40nm,1.2s
**J16K Anvik River 79.45 21** P **P 16 40 59.4 +0.4**
baz=233
**KSH Kashi 79.54 312** P **P 16 41 04.4 +4.1**
KSH pP pP 16 41 20.8 -3.9
KSH pmax pmax
comp=Z,5.0nm,1.1s
**M17K Holitna River 79.56 24** P **P 16 41 00.6 +0.9**
baz=236
**F15K North Star Dit 79.62 18** P **P 16 41 00.3 +0.3**
baz=229
**L17K Donlin 79.64 23** P **P 16 41 00.2 +0.2**
baz=235,SNR=5.3
**O18K Koktuh Hills 79.65 26** P **P 16 41 00.6 +0.4**
baz=239
**H16K Elim 79.71 20** P **P 16 40 59.8 -0.7**
baz=231
**I17K Unalakleet 79.78 21** P **P 16 41 00.1 -0.7**
baz=233
**KDAK Kodiak Island 79.80 28** LR LR 17 09 32.9
comp=Z,167nm,21.9s,baz=256,slow=30
**KDAK Kodiak Island 79.80 28** P **P 16 41 00.8 -0.2**
baz=241
**N18K Kilae Creek 79.80 25** IAmb IAmb 16 41 03.1
comp=Z,47nm,1.5s
**N18K Kilae Creek 79.80 25** P **P 16 41 01.3 +0.3**
baz=238
**Q19K Cape Douglas, 79.87 27** P **P 16 41 00.3 -1.1**
baz=240
**K17K Iditarod 79.97 22** IAmb IAmb 16 41 04.6
comp=Z,47nm,1.2s
**K17K Iditarod 79.97 22** P **P 16 41 02.3 +0.4**
baz=235,SNR=8.9
**J17K VABM Dome 80.07 22** P **P 16 41 02.8 +0.4**
baz=234
**G16K Koyuk River 80.15 19** IAmb IAmb 16 41 05.3
comp=Z,40nm,1.4s
**G16K Koyuk River 80.15 19** P **P 16 41 02.9 +0.2**
baz=231
**M18K Stony River 80.26 24** P **P 16 41 04.1 +0.7**
baz=238,SNR=9.0
**Q20K Shuyak Island 80.28 27** P **P 16 41 04.6 +1.0**
baz=241
**L18K Granite Mounta 80.31 23** IAmb IAmb 16 41 06.5
comp=Z,30nm,1.2s
**L18K Granite Mounta 80.31 23** P **P 16 41 04.3 +0.6**
baz=237,SNR=10
**P19K Oil Pt 80.41 26** P **P 16 41 03.9 -0.4**
baz=240
**N19K Bonanza Creek 80.46 25** IAmb IAmb 16 41 05.9
comp=Z,35nm,1.4s
**N19K Bonanza Creek 80.46 25** P **P 16 41 04.7 +0.1**
baz=239,SNR=6.8
**H17K Granite Mounta 80.69 20** P **P 16 41 05.6 0.0**
baz=234
**G17K Kiwalik Mounta 80.78 19** P **P 16 41 05.9 -0.2**
baz=233
**J18K Innoko River 80.99 22** P **P 16 41 06.8 -0.5**
baz=237
**L19K White Mountain 81.02 24** IAmb IAmb 16 41 09.9
comp=Z,39nm,1.2s
**L19K White Mountain 81.02 24** P **P 16 41 07.6 +0.1**
baz=239,SNR=15
**M19K Big River Lodg 81.06 24** P **P 16 41 08.0 +0.3**
baz=239,SNR=6.1
**HOM Homer 81.12 27** P **P 16 41 08.1 +0.1**
baz=242
**C16K Lisburne Hills 81.13 16** P **P 16 41 07.3 -0.6**
baz=228
**F17K Baldwin Pennin 81.16 19** P **P 16 41 08.1 0.0**
baz=232
**KURK Kurchatov 81.34 323***ce*P **P 16 41 08.4 -1.0**
KURK pmax pmax
comp=Z,12nm,1.7s
**H18K Honhosa River 81.35 20** P **P 16 41 08.5 -0.6**
baz=235
**KURBB Kurchatov Arra 81.36 323** P **P 16 41 07.9 -1.7**
comp=Z,2.3nm,0.2s,baz=114,slow=4.1,SNR=8.4
KURBB PKPPKP **P'P'df 17 07 49.6 +1.7**
comp=Z,0.5nm,0.3s,baz=289,slow=2.4,SNR=4.6
KURBB LR LR 17 18 31.6
comp=Z,104nm,20.2s,baz=164,slow=36
comp=Z,2.3nm,0.2s
**E17K Hotham Inlet 81.38 18** P **P 16 41 09.2 -0.1**
baz=231
**D17K Noatak River 81.40 17** P **P 16 41 09.1 -0.3**
baz=230
**AAK Ala-Archa 81.50 315** LR LR 17 19 58.5
comp=Z,91nm,19.0s,baz=96,slow=38
**AAK Ala-Archa 81.50 315** *i* P **P 16 41 10.1 -0.6**
AAK pmax pmax
comp=Z,5.0nm,0.8s
**L20K Farewell, AK 81.56 24** P **P 16 41 10.1 -0.3**
baz=240,SNR=8.1
**M20K Styx River 81.56 24** P **P 16 41 10.0 -0.5**
baz=240
**BRSE Bradley Lake S 81.57 27** P **P 16 41 10.4 -0.1**
baz=243
**N20K Mount Spurr 81.61 25** P **P 16 41 09.7 -1.1**
baz=241
**SPCR Spurr Chakacha 81.61 25** P **P 16 41 10.4 -0.3**
baz=241
**GCSA Galena City Sc 81.64 21** P **P 16 41 10.4 -0.2**
baz=236
**RDOG Red Dog Mine 81.68 17** P **P 16 41 10.3 -0.6**
baz=230
**G18K Tagagawik 81.68 20** P **P 16 41 10.2 -0.7**
baz=235,SNR=7.2
**J19K Poorman 81.69 22** P **P 16 41 10.8 -0.2**
baz=238,SNR=5.6
**F18K Selawik 81.77 19** P **P 16 41 10.7 -0.6**
baz=234
**C17K DeLong Mountai 81.87 16** P **P 16 41 11.5 -0.4**
baz=230
**K20K Telida 81.94 23** IAmb IAmb 16 41 14.8
comp=Z,45nm,1.5s
**K20K Telida 81.94 23** P **P 16 41 11.9 -0.5**
baz=239
**E18K Tukpahlearik C 81.97 18** P **P 16 41 11.7 -0.7**
baz=233
**H19K Roundabout Mou 82.22 20** IAmb IAmb 16 41 16.0
comp=Z,59nm,1.6s
**H19K Roundabout Mou 82.22 20** P **P 16 41 13.3 -0.4**
baz=237,SNR=11
**SKT Skwentna 82.27 25** P **P 16 41 13.8 -0.3**
baz=242
**SEW Seward 82.31 27** P **P 16 41 13.8 -0.5**
baz=244
**J20K Nowinta River 82.33 22** IAmb IAmb 16 41 16.9
comp=Z,62nm,1.6s
**J20K Nowinta River 82.33 22** P **P 16 41 13.7 -0.6**
baz=239,SNR=11
**MAW Mawson 82.33 203** P **P 16 41 13.3 -1.0**
comp=Z,7.7nm,0.9s,baz=70,slow=6.1,SNR=13
comp=Z,7.7nm,0.9s
**G19K Purcell Mounta 82.35 20** IAmb IAmb 16 41 16.9
comp=Z,60nm,1.6s
**G19K Purcell Mounta 82.35 20** P **P 16 41 14.1 -0.3**
baz=236
**SUA Susitna One 82.36 25** P **P 16 41 13.7 -1.0**
baz=242
**F19K Shaleruckik Mo 82.51 19** IAmb IAmb 16 42 32.7
comp=Z,66nm,1.9s
**F19K Shaleruckik Mo 82.51 19** P **P 16 41 13.9 -1.3**
baz=235
**I20K Naaghedeneel 82.53 22** IAmb IAmb 16 42 11.8
comp=Z,23nm,0.9s
**I20K Naaghedeneel 82.53 22** P **P 16 41 14.2 -1.1**
baz=239
**C18K Utukok River 82.55 17** P **P 16 41 14.2 -1.3**
baz=232
**RC01 Rabbit Creek A 82.62 26** IAmb IAmb 16 41 17.1
comp=Z,48nm,1.3s
**RC01 Rabbit Creek A 82.62 26** P **P 16 41 15.5 -0.4**
baz=243
**H20K Anotleneega Mo 82.75 21** P **P 16 41 16.0 -0.6**
baz=238
**M22K Willow 82.76 25** IAmb IAmb 16 42 31.9
comp=Z,56nm,1.1s
**M22K Willow 82.76 25** P **P 16 41 15.7 -0.9**
baz=243
**CUT Chulitna 83.00 25** P **P 16 41 17.8 0.0**
baz=243
**E19K Redstone River 83.04 19** IAmb IAmb 16 42 34.1
comp=Z,23nm,0.9s
**E19K Redstone River 83.04 19** P **P 16 41 17.2 -0.7**
baz=236,SNR=12
**PMR Palmer 83.11 26** IAmb IAmb 16 41 19.4
comp=Z,53nm,1.6s
**PWL Port Wells 83.14 26** IAmb IAmb 16 41 19.9
comp=Z,41nm,1.0s
**PWL Port Wells 83.14 26** P **P 16 41 18.0 -0.7**
baz=245
**GHO Glory Hole Cre 83.28 25** IAmb IAmb 16 41 20.6
comp=Z,30nm,1.3s
**C19K Lookout Ridge 83.29 17** IAmb IAmb 16 41 21.8
comp=Z,41nm,1.4s
**C19K Lookout Ridge 83.29 17** P **P 16 41 18.8 -0.5**
baz=233
**F20K Avaraart Lake 83.30 19** P **P 16 41 18.5 -0.8**
baz=237,SNR=8.2
**KNK Knik Glacier 83.32 26** IAmb IAmb 16 41 21.1
comp=Z,41nm,1.2s
**KNK Knik Glacier 83.32 26** P **P 16 41 18.7 -0.8**
baz=245
**D19K Kuna River 83.36 18** P **P 16 41 18.9 -0.7**
baz=235,SNR=7.9
**Q23K Middleton Isla 83.45 28** P **P 16 41 19.9 -0.3**
baz=247
**BPAW Bear Paw Mtn. 83.50 23** P **P 16 41 20.2 -0.2**
baz=242
**SML Sawmill 83.55 26** P **P 16 41 19.9 -0.8**
baz=245
**H21K Melozitna Rive 83.58 21** P **P 16 41 19.9 -0.9**
baz=240,SNR=7.6
**GLI Glacier Island 83.70 27** IAmb IAmb 16 41 22.7
comp=Z,37nm,1.2s
**GLI Glacier Island 83.70 27** P **P 16 41 20.5 -1.0**
baz=246

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| G21K | **Allakaket** | 83.77 | 20 | P | P | 16 41 20.7 | -1.0 | | |
| | baz=239,SNR=6.4 | | | | | | | | |
| M23K | **Glacier View** | 83.80 | 26 | P | P | 16 41 20.7 | -1.3 | | |
| | baz=245 | | | | | | | | |
| E20K | **Nigu River** | 83.82 | 18 | P | P | 16 41 21.3 | -0.8 | | |
| | baz=237,SNR=5.9 | | | | | | | | |
| WAT1 | **Susitna Watana** | 83.90 | 25 | P | P | 16 41 20.9 | -1.6 | | |
| | baz=244 | | | | | | | | |
| D20K | **Etivluk River** | 83.94 | 18 | P | P | 16 41 21.7 | -0.9 | | |
| | baz=236 | | | | | | | | |
| QSPA | **South Pole Qui** | 83.97 | 180 | P | P | 16 41 23.2 | +0.2 | | |
| QSPA | | | | IAmb | IAmb | 16 41 52.2 | | | |
| | comp=Z,34nm,0.8s | | | | | | | | |
| QSPA | **South Pole Qui** | 83.97 | 180 | P | P | 16 41 23.2 | +0.2 | | |
| | comp=Z,14nm,0.6s,baz=309,slow=0.9,SNR=165 | | | | | | | | |
| QSPA | | | | LR | LR | 17 18 30.5 | | | |
| | comp=Z,179nm,18.5s,baz=9.0,slow=35 | | | | | | | | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| SCM | **Sheep Creek Mo** | 83.99 | 26 | IAmb | IAmb | 16 41 24.6 | | | |
| | comp=Z,52nm,1.2s | | | | | | | | |
| SCM | **Sheep Creek Mo** | 83.99 | 26 | P | P | 16 41 22.3 | -0.8 | | |
| | baz=246,SNR=6.5 | | | | | | | | |
| RND | **Reindeer** | 84.03 | 24 | IAmb | IAmb | 16 41 23.7 | | | |
| | comp=Z,50nm,1.4s | | | | | | | | |
| MLY | **Manley** | 84.03 | 22 | IAmb | IAmb | 16 41 24.7 | | | |
| | comp=Z,35nm,1.3s | | | | | | | | |
| MLY | **Manley** | 84.03 | 22 | P | P | 16 41 21.8 | -1.4 | | |
| | baz=242,SNR=21 | | | | | | | | |
| WAT6 | **Susitna Watana** | 84.13 | 25 | P | P | 16 41 22.5 | -1.4 | | |
| | baz=245,SNR=10 | | | | | | | | |
| F21K | **Alatna River** | 84.14 | 20 | P | P | 16 41 23.0 | -0.6 | | |
| | baz=239 | | | | | | | | |
| MCK | **McKinley** | 84.14 | 24 | P | P | 16 41 22.0 | -1.6 | | |
| | baz=244,SNR=9.3 | | | | | | | | |
| EYAK | **Cordova Ski Ar** | 84.17 | 27 | P | P | 16 41 23.3 | -0.6 | | |
| | baz=247 | | | | | | | | |
| H22K | **Ishtalitna Cre** | 84.21 | 21 | P | P | 16 41 22.9 | -1.1 | | |
| | baz=241 | | | | | | | | |
| KKAR | **Karatay Array** | 84.45 | 314 | P | P | 16 41 25.9 | +0.2 | | |
| KKAR | **Karatay Array** | 84.45 | 314 | P | P | 16 41 25.9 | +0.2 | | |
| KLU | **Klutina** | 84.46 | 26 | IAmb | IAmb | 16 41 27.3 | | | |
| | comp=Z,32nm,1.2s | | | | | | | | |
| KLU | **Klutina** | 84.46 | 26 | P | P | 16 41 25.1 | -0.4 | | |
| | baz=247,SNR=13 | | | | | | | | |
| NEA2 | **Nenana** | 84.47 | 23 | IAmb | IAmb | 16 41 26.0 | | | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| NEA2 | **Nenana** | 84.47 | 23 | P | P | 16 41 23.7 | -1.6 | | |
| | baz=244,SNR=13 | | | | | | | | |
| DHY | **Denali Highway** | 84.49 | 25 | IAmb | IAmb | 16 41 27.0 | | | |
| | comp=Z,45nm,1.5s | | | | | | | | |
| DHY | **Denali Highway** | 84.49 | 25 | P | P | 16 41 24.4 | -1.3 | | |
| | baz=245,SNR=12 | | | | | | | | |
| B20K | **Meade River** | 84.51 | 17 | P | P | 16 41 23.6 | -1.8 | | |
| | baz=236 | | | | | | | | |
| M24K | **Tolsona, Glenn** | 84.60 | 26 | P | P | 16 41 25.7 | -0.4 | | |
| | baz=246 | | | | | | | | |
| I23K | **Minto, Yukon-K** | 84.61 | 22 | P | P | 16 41 25.1 | -0.8 | | |
| | baz=243,SNR=7.8 | | | | | | | | |
| E21K | **Killik River** | 84.61 | 19 | P | P | 16 41 25.4 | -0.6 | | |
| | baz=239,SNR=6.2 | | | | | | | | |
| G22K | **Bettles** | 84.66 | 20 | P | P | 16 41 25.5 | -0.7 | | |
| | baz=241 | | | | | | | | |
| F22K | **John River** | 84.72 | 20 | P | P | 16 41 25.8 | -0.7 | | |
| | baz=241 | | | | | | | | |
| C21K | **Kniefelbade Rid** | 84.74 | 18 | P | P | 16 41 26.1 | -0.5 | | |
| | baz=238 | | | | | | | | |
| WRH | **Wood River Hil** | 84.80 | 23 | IAmb | IAmb | 16 41 27.5 | | | |
| | comp=Z,33nm,1.2s | | | | | | | | |
| H23K | **Yukon River** | 84.84 | 22 | P | P | 16 41 26.5 | -0.7 | | |
| | baz=243 | | | | | | | | |
| BMRM | **Bremner River** | 84.85 | 27 | P | P | 16 41 27.0 | -0.4 | | |
| | baz=248,SNR=5.1 | | | | | | | | |
| CCB | **Clear Creek Bu** | 84.98 | 23 | IAmb | IAmb | 16 41 28.3 | | | |
| | comp=Z,41nm,1.3s | | | | | | | | |
| B21K | **Ikpikpuk River** | 85.04 | 17 | P | P | 16 41 27.8 | -0.2 | | |
| | baz=238 | | | | | | | | |
| COLA | **College** | 85.06 | 23 | P | P | 16 41 26.7 | -1.5 | | |
| | baz=245 | | | | | | | | |
| COLA | **College** | 85.06 | 23 | *i* P | P | 16 41 27.3 | -0.9 | | |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,33nm,1.4s | | | | | | | | |
| G23K | **Bananza Creek** | 85.08 | 21 | P | P | 16 41 27.2 | -1.2 | | |
| | baz=243,SNR=12 | | | | | | | | |
| N25K | **Chitina, Valde** | 85.09 | 26 | IAmb | IAmb | 16 41 30.7 | | | |
| | comp=Z,35nm,1.5s | | | | | | | | |
| N25K | **Chitina, Valde** | 85.09 | 26 | P | P | 16 41 27.6 | -1.0 | | |
| | baz=248,SNR=5.3 | | | | | | | | |
| E22K | **Anaktuvuk Pass** | 85.15 | 19 | P | P | 16 41 28.1 | -0.6 | | |
| | baz=241 | | | | | | | | |
| HDA | **Harding Lake** | 85.22 | 23 | P | P | 16 41 28.3 | -0.7 | | |
| | baz=246 | | | | | | | | |
| D22K | **Ayikyak River** | 85.24 | 18 | P | P | 16 41 28.8 | -0.3 | | |
| | baz=240 | | | | | | | | |
| PAX | **Paxson** | 85.24 | 25 | P | P | 16 41 28.2 | -1.1 | | |
| | baz=247,SNR=6.0 | | | | | | | | |
| COLD | **Coldfoot** | 85.26 | 20 | P | P | 16 41 28.8 | -0.4 | | |
| | baz=242,SNR=8.6 | | | | | | | | |
| POKR | **Poker Plat Res** | 85.33 | 23 | P | P | 16 41 28.2 | -1.4 | | |
| | baz=245 | | | | | | | | |
| GLB | **Gilahina Butte** | 85.38 | 27 | IAmb | IAmb | 16 41 31.7 | | | |
| | comp=Z,37nm,1.4s | | | | | | | | |
| IL31 | | 85.39 | 23 | IAmb | IAmb | 16 41 29.8 | | | |
| | comp=Z,29nm,1.3s | | | | | | | | |
| ILAR | **Eielson Array** | 85.39 | 23 | P | P | 16 41 27.5 | -2.4 | | |
| | comp=Z,9.7nm,0.7s,baz=253,slow=4.2,SNR=46 | | | | | | | | |
| ILAR | | | | LR | LR | 17 16 10.4 | | | |
| | comp=Z,140nm,20.4s,baz=254,slow=33 | | | | | | | | |
| CRQM | **Cirque** | 85.44 | 28 | IAmb | IAmb | 16 42 34.3 | | | |
| | comp=Z,31nm,1.1s | | | | | | | | |
| K24K | **Donnelly Dome** | 85.44 | 24 | P | P | 16 41 29.2 | -1.0 | | |
| | baz=247 | | | | | | | | |
| CRQE | **Cirque** | 85.46 | 28 | P | P | 16 41 29.8 | -0.7 | | |
| | baz=249 | | | | | | | | |
| H24K | **Noodor Dome** | 85.47 | 22 | P | P | 16 41 29.2 | -1.1 | | |
| | baz=245,SNR=8.3 | | | | | | | | |
| VRDI | **Verde Repeater** | 85.47 | 27 | IAmb | IAmb | 16 41 32.3 | | | |
| | comp=Z,26nm,1.4s | | | | | | | | |
| A22K | **Sinclair Lake** | 85.67 | 16 | P | P | 16 41 30.3 | -0.8 | | |
| | baz=238 | | | | | | | | |
| MCARA | **McCarthy VSAT** | 85.72 | 27 | P | P | 16 41 30.6 | -1.0 | | |
| | baz=249 | | | | | | | | |
| B22K | **Teshekpuk Lake** | 85.76 | 17 | P | P | 16 41 30.6 | -1.0 | | |
| | baz=239 | | | | | | | | |
| MESA | **MESA** | 85.79 | 28 | P | P | 16 41 31.8 | -0.5 | | |
| | baz=250 | | | | | | | | |
| RIDG | **Independent Ri** | 85.80 | 24 | P | P | 16 41 31.1 | -0.9 | | |
| | baz=248,SNR=10 | | | | | | | | |
| E23K | **Chandalar** | 85.84 | 20 | IAmb | IAmb | 16 41 34.5 | | | |
| | comp=Z,42nm,1.4s | | | | | | | | |
| E23K | **Chandalar** | 85.84 | 20 | P | P | 16 41 31.3 | -0.9 | | |
| | baz=243,SNR=9.2 | | | | | | | | |
| D23K | **Nanushuk River** | 85.92 | 19 | IAmb | IAmb | 16 42 50.0 | | | |
| | comp=Z,46nm,1.4s | | | | | | | | |
| D23K | **Nanushuk River** | 85.92 | 19 | P | P | 16 41 31.2 | -1.3 | | |
| | baz=242,SNR=14 | | | | | | | | |
| J25K | **Salcha River,** | 85.93 | 24 | P | P | 16 41 31.4 | -1.3 | | |
| | baz=247,SNR=29 | | | | | | | | |
| G24K | **Hadweenzic Riv** | 85.98 | 21 | P | P | 16 41 32.2 | -0.7 | | |
| | baz=245,SNR=10 | | | | | | | | |
| GRNC | **Granite Creek** | 86.07 | 28 | IAmb | IAmb | 16 41 35.6 | | | |
| | comp=Z,67nm,1.8s | | | | | | | | |
| M26K | **Nabesna, AK** | 86.09 | 26 | IAmb | IAmb | 16 41 34.6 | | | |
| | comp=Z,50nm,2.0s | | | | | | | | |
| M26K | **Nabesna, AK** | 86.09 | 26 | P | P | 16 41 32.5 | -1.0 | | |
| | baz=249 | | | | | | | | |
| TOLK | **Toolik Lake Re** | 86.12 | 19 | P | P | 16 41 33.1 | -0.4 | | |
| | baz=243 | | | | | | | | |
| L26K | **Log Cabin Wild** | 86.16 | 25 | IAmb | IAmb | 16 41 35.6 | | | |
| | comp=Z,36nm,1.4s | | | | | | | | |
| L26K | **Log Cabin Wild** | 86.16 | 25 | P | P | 16 41 33.1 | -0.7 | | |
| | baz=249,SNR=8.4 | | | | | | | | |
| F24K | **Squaw Lake** | 86.19 | 20 | P | P | 16 41 33.9 | 0.0 | | |
| | baz=245,SNR=10.0 | | | | | | | | |
| PRP | **Porcupine Dome** | 86.22 | 23 | P | P | 16 41 33.7 | -0.5 | | |
| | baz=247 | | | | | | | | |
| E24K | **Your Creek** | 86.23 | 20 | P | P | 16 41 33.6 | -0.5 | | |
| | baz=244 | | | | | | | | |
| SCRK | **Sand Creek** | 86.24 | 24 | P | P | 16 41 33.6 | -0.7 | | |
| | baz=248,SNR=9.5 | | | | | | | | |
| TABL | **Table Mountain** | 86.26 | 28 | IAmb | IAmb | 16 41 38.7 | | | |
| | comp=Z,31nm,1.2s | | | | | | | | |
| CTG | **Chitna Glacier** | 86.34 | 28 | P | P | 16 41 34.7 | -0.2 | | |
| | baz=251,SNR=9.0 | | | | | | | | |
| C23K | **Itkillik River** | 86.35 | 18 | IAmb | IAmb | 16 42 25.7 | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| C23K | **Itkillik River** | 86.35 | 18 | P | P | 16 41 34.1 | -0.4 | | |
| | baz=242 | | | | | | | | |
| H25L | **Birch Creek** | 86.41 | 22 | P | P | 16 41 34.4 | -0.5 | | |
| | baz=247 | | | | | | | | |
| G25K | **Bearman Lake** | 86.51 | 21 | P | P | 16 41 34.8 | -0.5 | | |
| | baz=246,SNR=5.2 | | | | | | | | |
| M27K | **Edge Creek, AK** | 86.56 | 26 | P | P | 16 41 35.2 | -0.7 | | |
| | baz=250,SNR=17 | | | | | | | | |
| D24K | **Happy Valley** | 86.59 | 19 | IAmb | IAmb | 16 42 24.7 | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| D24K | **Happy Valley** | 86.59 | 19 | P | P | 16 41 35.7 | 0.0 | | |
| | baz=244 | | | | | | | | |
| J26L | **Joseph Creek** | 86.61 | 24 | IAmb | IAmb | 16 41 37.8 | | | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| J26L | **Joseph Creek** | 86.61 | 24 | P | P | 16 41 35.7 | -0.4 | | |
| | baz=249,SNR=11 | | | | | | | | |
| O28M | **Mount Upton** | 86.81 | 28 | P | P | 16 41 37.0 | -0.4 | | |
| | baz=252 | | | | | | | | |
| L27K | **Beaver Creek,** | 86.82 | 26 | IAmb | IAmb | 16 41 39.1 | | | |
| | comp=Z,31nm,1.3s | | | | | | | | |
| L27K | **Beaver Creek,** | 86.82 | 26 | P | P | 16 41 36.5 | -0.6 | | |
| | baz=250,SNR=17 | | | | | | | | |
| BCAR | **Beaver Creek A** | 86.84 | 26 | P | P | 16 41 37.6 | +0.4 | | |
| PNL | **Peninsula** | 86.85 | 29 | P | P | 16 41 37.2 | -0.1 | | |
| | baz=253 | | | | | | | | |
| C24K | **Franklin Bluff** | 86.89 | 18 | P | P | 16 41 36.8 | -0.3 | | |
| | baz=244 | | | | | | | | |
| BVAR | **Borovoye Array** | 86.90 | 324 | P | P | 16 41 35.7 | -1.9 | | |
| | comp=Z,2.3nm,0.5s,baz=101,slow=6.2,SNR=10 | | | | | | | | |
| BVAR | | | | LR | LR | 17 21 52.7 | | | |
| | comp=Z,132nm,19.1s,baz=90,slow=36 | | | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | | | |
| BRVK | **Borovoye** | 86.97 | 324 | *ce* P | P | 16 41 36.2 | -1.7 | | |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| F25K | **Christian Rive** | 87.00 | 21 | P | P | 16 41 38.1 | +0.2 | | |
| | baz=247 | | | | | | | | |
| YUK3 | **Moose Creek** | 87.00 | 27 | P | P | 16 41 37.7 | -0.5 | | |
| | baz=252,SNR=9.8 | | | | | | | | |
| K27K | **Chicken** | 87.05 | 25 | P | P | 16 41 38.2 | +0.1 | | |
| | baz=250 | | | | | | | | |
| I26K | **Coal Creek Min** | 87.06 | 23 | IAmb | IAmb | 16 43 06.4 | | | |
| | comp=Z,29nm,1.6s | | | | | | | | |
| I26K | **Coal Creek Min** | 87.06 | 23 | P | P | 16 41 36.9 | -1.2 | | |
| | baz=249 | | | | | | | | |
| YUK8 | **Steele Glacier** | 87.17 | 28 | P | P | 16 41 38.7 | -0.3 | | |
| | baz=252,SNR=6.2 | | | | | | | | |
| BMAR | **Burnt Mountain** | 87.32 | 21 | P | P | 16 41 39.6 | +0.3 | | |
| G26K | **Porcupine Rive** | 87.42 | 22 | P | P | 16 41 39.6 | -0.2 | | |
| | baz=248,SNR=16 | | | | | | | | |
| O29M | **Mount Kennedy** | 87.43 | 29 | IAmb | IAmb | 16 41 41.8 | | | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| O29M | **Mount Kennedy** | 87.43 | 29 | P | P | 16 41 39.9 | -0.3 | | |
| | baz=253,SNR=6.7 | | | | | | | | |
| D25K | **Kavik River** | 87.46 | 19 | IAmb | IAmb | 16 42 28.2 | | | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| D25K | **Kavik River** | 87.46 | 19 | P | P | 16 41 39.1 | -0.9 | | |
| | baz=246 | | | | | | | | |
| F26K | **Sheenjek River** | 87.57 | 21 | IAmb | IAmb | 16 41 43.2 | | | |
| | comp=Z,39nm,1.4s | | | | | | | | |
| F26K | **Sheenjek River** | 87.57 | 21 | P | P | 16 41 40.4 | -0.1 | | |
| | baz=248 | | | | | | | | |
| P29M | **Windy Craggy** | 87.65 | 29 | IAmb | IAmb | 16 41 42.6 | | | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| P29M | **Windy Craggy** | 87.65 | 29 | P | P | 16 41 41.0 | -0.1 | | |
| | baz=254 | | | | | | | | |
| EGAK | **Eagle** | 87.67 | 24 | IAmb | IAmb | 16 41 42.8 | | | |
| | comp=Z,50nm,1.4s | | | | | | | | |
| EGAK | **Eagle** | 87.67 | 24 | P | P | 16 41 40.3 | -0.7 | | |
| | baz=251,SNR=14 | | | | | | | | |
| YUK4 | **Talbot Arm** | 87.70 | 28 | P | P | 16 41 41.6 | +0.1 | | |
| | baz=253,SNR=6.5 | | | | | | | | |
| YUK6 | **Outpost Mounta** | 87.72 | 28 | P | P | 16 41 41.3 | -0.4 | | |
| | baz=254 | | | | | | | | |
| I27K | **Kandik River** | 87.77 | 23 | P | P | 16 41 40.7 | -0.9 | | |
| | baz=250,SNR=17 | | | | | | | | |
| S31K | **Pelican** | 87.96 | 31 | P | P | 16 41 42.9 | +0.4 | | |
| | baz=256 | | | | | | | | |
| H27K | **Steamboat Moun** | 88.01 | 23 | P | P | 16 41 42.4 | -0.3 | | |
| | baz=250 | | | | | | | | |
| M29M | **Somme Creek** | 88.10 | 27 | IAmb | IAmb | 16 41 45.4 | | | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| M29M | **Somme Creek** | 88.10 | 27 | P | P | 16 41 43.2 | -0.1 | | |
| | baz=253,SNR=6.9 | | | | | | | | |
| P30M | **Million Dollar** | 88.16 | 29 | P | P | 16 41 43.6 | 0.0 | | |
| | baz=255 | | | | | | | | |
| G27K | **Doyon Strip** | 88.16 | 22 | P | P | 16 41 42.7 | -0.6 | | |
| | baz=250 | | | | | | | | |
| C26K | **Camden Bay** | 88.17 | 19 | P | P | 16 41 43.6 | +0.4 | | |
| | baz=247 | | | | | | | | |
| DAWY | **Dawson** | 88.18 | 25 | P | P | 16 41 42.8 | -0.8 | | |
| | baz=252,SNR=12 | | | | | | | | |
| SIT | **Sitka** | 88.22 | 32 | P | P | 16 41 43.7 | 0.0 | | |
| | baz=256 | | | | | | | | |
| PLBC | **Pleasant Camp** | 88.28 | 30 | P | P | 16 41 44.0 | 0.0 | | |
| | baz=255 | | | | | | | | |
| I28M | **Miner Creek** | 88.38 | 24 | IAmb | IAmb | 16 41 46.3 | | | |
| | comp=Z,35nm,1.6s | | | | | | | | |
| I28M | **Miner Creek** | 88.38 | 24 | P | P | 16 41 43.6 | -0.9 | | |
| | baz=252 | | | | | | | | |
| C27K | **Jago River** | 88.44 | 19 | P | P | 16 41 44.4 | -0.2 | | |
| | baz=248 | | | | | | | | |
| N30M | **Aishikik Lake** | 88.45 | 28 | IAmb | IAmb | 16 41 46.3 | | | |
| | comp=Z,21nm,1.4s | | | | | | | | |
| N30M | **Aishikik Lake** | 88.45 | 28 | P | P | 16 41 44.5 | -0.4 | | |
| | baz=255 | | | | | | | | |
| E27K | **Coleen River** | 88.65 | 21 | IAmb | IAmb | 16 41 48.1 | | | |
| | comp=Z,44nm,1.6s | | | | | | | | |
| E27K | **Coleen River** | 88.65 | 21 | P | P | 16 41 45.0 | -0.6 | | |
| | baz=250 | | | | | | | | |
| S32K | **Killisnoo** | 88.71 | 32 | P | P | 16 41 46.3 | +0.2 | | |
| | baz=257 | | | | | | | | |
| O30N | **Mendenhall** | 88.74 | 29 | IAmb | IAmb | 16 41 48.4 | | | |
| | comp=Z,40nm,1.6s | | | | | | | | |
| O30N | **Mendenhall** | 88.74 | 29 | P | P | 16 41 45.5 | -0.8 | | |
| | baz=256 | | | | | | | | |
| SKAG | **Skagway** | 88.79 | 30 | P | P | 16 41 46.4 | 0.0 | | |
| | baz=256 | | | | | | | | |
| K29M | **Barlow Dome** | 88.90 | 25 | IAmb | IAmb | 16 42 38.7 | | | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| K29M | **Barlow Dome** | 88.90 | 25 | P | P | 16 41 46.6 | -0.5 | | |
| | baz=254 | | | | | | | | |
| R32K | **Eaglecrest** | 88.92 | 31 | P | P | 16 41 46.6 | -0.5 | | |
| | baz=257 | | | | | | | | |
| I29M | **Ogilvie Camp,** | 89.00 | 24 | P | P | 16 41 46.6 | -0.7 | | |
| | baz=254 | | | | | | | | |
| CRAG | **Craig** | 89.06 | 34 | P | P | 16 41 47.8 | 0.0 | | |
| | baz=258 | | | | | | | | |
| N31M | **Braeburn, Yuko** | 89.07 | 28 | P | P | 16 41 47.4 | -0.4 | | |
| | baz=256 | | | | | | | | |
| F28M | **Old Crow** | 89.08 | 21 | IAmb | IAmb | 16 41 49.9 | | | |
| | comp=Z,24nm,1.6s | | | | | | | | |
| F28M | **Old Crow** | 89.08 | 21 | P | P | 16 41 47.3 | -0.3 | | |
| | baz=252 | | | | | | | | |
| U33K | **Whale Pass** | 89.20 | 33 | P | P | 16 41 48.3 | 0.0 | | |
| | baz=258 | | | | | | | | |
| D27M | **Malcolm River** | 89.22 | 20 | P | P | 16 41 48.0 | -0.3 | | |
| | baz=251 | | | | | | | | |
| H29M | **Whitestone** | 89.23 | 23 | P | P | 16 41 48.0 | -0.3 | | |
| | baz=255 | | | | | | | | |
| WHY | **Whitehorse** | 89.29 | 29 | P | P | 16 41 48.7 | -0.2 | | |
| | baz=257 | | | | | | | | |
| E28M | **Babbage River** | 89.50 | 21 | IAmb | IAmb | 16 42 44.4 | | | |
| | comp=Z,29nm,1.6s | | | | | | | | |
| E28M | **Babbage River** | 89.50 | 21 | P | P | 16 41 49.1 | -0.5 | | |
| | baz=252 | | | | | | | | |
| G29M | **Pine Creek** | 89.56 | 22 | P | P | 16 41 49.5 | -0.4 | | |
| | baz=254 | | | | | | | | |
| J30M | **Hart River** | 89.60 | 25 | IAmb | IAmb | 16 42 41.8 | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| J30M | **Hart River** | 89.60 | 25 | P | P | 16 41 49.9 | -0.5 | | |
| | baz=255 | | | | | | | | |
| P32M | **Atlin** | 89.62 | 30 | P | P | 16 41 49.7 | -0.7 | | |
| | baz=258 | | | | | | | | |
| I30M | **Mount Dempster** | 89.75 | 24 | P | P | 16 41 50.4 | -0.6 | | |
| | baz=255 | | | | | | | | |
| M31M | **Drury Creek, Y** | 89.88 | 27 | P | P | 16 41 50.9 | -0.6 | | |
| | baz=257 | | | | | | | | |
| V35K | **Ketchikan** | 89.88 | 34 | P | P | 16 41 50.9 | -0.7 | | |
| | baz=259 | | | | | | | | |
| EPYK | **Eagle Plains** | 89.91 | 23 | P | P | 16 41 51.1 | -0.5 | | |
| | baz=255 | | | | | | | | |
| D28M | **Stokes Point** | 90.00 | 20 | P | P | 16 41 51.0 | -0.8 | | |
| | baz=253 | | | | | | | | |
| E29M | **Blow River** | 90.02 | 21 | P | P | 16 41 51.4 | -0.6 | | |
| | baz=254 | | | | | | | | |
| P33M | **Teslin, Yukon** | 90.19 | 29 | P | P | 16 41 53.0 | -0.1 | | |
| | baz=258 | | | | | | | | |
| Q32M | **Nakina River** | 90.22 | 31 | P | P | 16 41 52.9 | -0.5 | | |
| | baz=259 | | | | | | | | |
| G30M | **tAoh Zraii Nji** | 90.26 | 22 | IAmb | IAmb | 16 42 57.8 | | | |
| | comp=Z,33nm,1.4s | | | | | | | | |
| G30M | **tAoh Zraii Nji** | 90.26 | 22 | P | P | 16 41 52.0 | -1.2 | | |
| | baz=255 | | | | | | | | |
| FARO | **Faro, Yukon** | 90.36 | 27 | P | P | 16 41 53.8 | 0.0 | | |
| | baz=258 | | | | | | | | |
| F30M | **Barrier River** | 90.58 | 22 | P | P | 16 41 54.0 | -0.7 | | |
| | baz=256 | | | | | | | | |
| S34M | **Telegraph Cree** | 90.61 | 32 | P | P | 16 41 55.1 | +0.1 | | |
| | baz=260 | | | | | | | | |
| T35M | **Bob Quinn** | 90.92 | 33 | P | P | 16 41 56.5 | +0.1 | | |
| | baz=261 | | | | | | | | |
| R33M | **Jennings River** | 90.96 | 30 | P | P | 16 41 56.5 | -0.2 | | |
| | baz=260 | | | | | | | | |
| G31M | **Satah River** | 90.99 | 23 | P | P | 16 41 55.8 | -0.7 | | |
| | baz=257 | | | | | | | | |
| WSAR | **Wadi Sarin** | 91.05 | 293 | LR | LR | 17 26 17.9 | | | |
| | comp=Z,52nm,20.3s,baz=124,slow=38 | | | | | | | | |
| DLBC | **Dease Lake** | 91.28 | 31 | IAmb | IAmb | 16 42 59.2 | | | |
| | comp=Z,26nm,1.6s | | | | | | | | |
| DLBC | **Dease Lake** | 91.28 | 31 | LR | LR | 17 14 20.9 | | | |
| | comp=Z,114nm,20.4s,baz=292,slow=30 | | | | | | | | |
| DLBC | **Dease Lake** | 91.28 | 31 | P | P | 16 41 58.1 | -0.1 | | |
| | baz=261 | | | | | | | | |
| F31M | **Tsiigehtchic** | 91.31 | 22 | P | P | 16 41 57.5 | -0.5 | | |
| | baz=258 | | | | | | | | |
| INK | **Inuvik** | 91.57 | 21 | LR | LR | 17 18 15.8 | | | |
| | comp=Z,124nm,21.1s,baz=258,slow=32 | | | | | | | | |
| INK | **Inuvik** | 91.57 | 21 | P | P | 16 41 58.5 | -0.7 | | |
| | baz=258 | | | | | | | | |
| TGTN | **Hyland Airport** | 92.61 | 29 | P | P | 16 42 03.6 | -0.6 | | |
| | baz=262 | | | | | | | | |
| ABKAR | **Akbulak array** | 92.72 | 319 | P | P | 16 42 03.5 | -1.4 | | |
| TOAD | **Toad River Com** | 93.81 | 31 | P | P | 16 42 10.0 | +0.2 | | |
| | baz=265 | | | | | | | | |
| AKTO | **Aktyubinsk** | 94.07 | 320 | LR | LR | 17 26 12.9 | | | |
| | comp=Z,95nm,19.6s,baz=24,slow=36 | | | | | | | | |
| ARU | **Arti** | 94.21 | 326 | LR | LR | 17 23 19.2 | | | |
| | comp=Z,129nm,21.6s,baz=81,slow=35 | | | | | | | | |
| ARU | **Arti** | 94.21 | 326 | P | P | 16 42 09.4 | -2.2 | | |
| ARU | | | | | | 16 45 56.9 | | | |
| ARU | | | | S | SKSac | 16 52 35.6 | -2.3 | | |
| ELIB | **Princess Elisa** | 94.25 | 195 | *d* P | P | 16 42 12.6 | +0.8 | | |
| | comp=Z,4.6nm,1.1s | | | | | | | | |
| C36M | **Paulatuk** | 95.11 | 21 | P | P | 16 42 16.2 | +0.7 | | |
| | baz=267 | | | | | | | | |
| BELA | **Belgrano 2** | 96.24 | 180 | P | P | 16 42 19.8 | -0.8 | | |
| BELA | | | | IAmb | IAmb | 16 43 07.5 | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| NVAR | **Mina Array Bea** | 97.19 | 52 | P | P | 16 42 24.6 | -1.4 | | |
| | comp=Z,0.2nm,0.3s,baz=242,slow=5.9,SNR=6.1 | | | | | | | | |
| NVAR | | | | PP | PP | 16 46 22.8 | -0.6 | | |
| | comp=Z,1.0nm,0.9s,baz=251,slow=4.8,SNR=5.8 | | | | | | | | |
| NVAR | | | | LR | LR | 17 23 42.0 | | | |
| | comp=Z,150nm,18.1s,baz=274,slow=34 | | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | | |
| NVL | **N'lazarevskaya** | 97.86 | 194 | *e* P | Pdif | 16 42 35.6 | +7.6 | | |
| NVL | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| NVL | | | | MLR | MLR | | | | |
| | comp=Z,262nm,18.0s | | | | | | | | |
| PFO | **Pinyon Flats O** | 98.54 | 57 | LR | LR | 17 22 19.4 | | | |
| | comp=Z,150nm,18.5s,baz=250,slow=32 | | | | | | | | |
| TPFO | **Pinon Flats** | 98.55 | 57 | P | P | 16 42 31.3 | -0.7 | | |
| | baz=269 | | | | | | | | |
| TROLL | **Troll, Antarti** | 98.83 | 190 | ⇑PKiKP | PKiKP | 16 46 56.0 | -7.0 | | |
| | comp=Z,132nm,1.2s | | | | | | | | |
| TROLL | | | | ⇑Pdiff | P | 16 42 31.8 | -0.7 | | |
| | comp=Z,67nm,0.6s | | | | | | | | |
| TROLL | | | | ⇑SKSac | SKSac | 16 53 03.6 | +1.7 | | |
| | comp=Z,93nm,0.9s | | | | | | | | |
| YKA | **Yellowknife Ar** | 99.07 | 28 | P | Pdif | 16 42 33.1 | -0.4 | | |
| | comp=Z,3.9nm,1.1s,baz=286,slow=5.0,SNR=5.4 | | | | | | | | |
| | comp=Z,3.9nm,1.1s | | | | | | | | |
| YKA | **Yellowknife Ar** | 99.07 | 28 | *ce* P | Pdif | 16 42 33.4 | -0.1 | | |
| YKA | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| KIRV | **Kirov** | 99.16 | 328 | LR | LR | 17 29 32.2 | | | |
| | comp=Z,129nm,19.3s,baz=85,slow=37 | | | | | | | | |
| R11B | **Troy Canyon, C** | 99.33 | 52 | P | Pdif | 16 42 34.6 | -0.9 | | |
| | baz=270 | | | | | | | | |
| SNAA | **Sanae** | 100.03 | 189 | ⇑PKiKP | PKiKP | 16 47 04.1 | -1.0 | | |
| | comp=Z,113nm,1.2s | | | | | | | | |
| SNAA | | | | ⇑Pdiff | Pdif | 16 42 37.4 | -0.4 | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| SNAA | | | | ⇑SKSac | SKSac | 16 53 07.1 | -0.5 | | |
| | comp=Z,28nm,1.1s | | | | | | | | |
| SNAA | **Sanae** | 100.03 | 189 | PP | PP | 16 46 44.4 | +0.9 | | |
| | comp=Z,3.2nm,1.1s,baz=153,slow=10,SNR=4.3 | | | | | | | | |
| SNAA | **Sanae** | 100.03 | 189 | *i* P | Pdif | 16 42 38.0 | +0.2 | | |
| SNAA | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,2.3s | | | | | | | | |
| VNA2 | **Neumayer--Watz** | 101.38 | 188 | ⇑PKiKP | PKiKP | 16 47 05.0 | -2.4 | | |
| | comp=Z,2.6nm,0.7s,baz=4.5,slow=28 | | | | | | | | |
| VNA2 | | | | ⇑Pdiff | Pdif | 16 42 44.7 | +1.0 | | |
| | comp=Z,1.2nm,0.8s,baz=183,slow=2.9 | | | | | | | | |
| VNA2 | | | | ⇑SKSac | SKSac | 16 53 14.0 | -0.1 | | |
| | comp=Z,0.4nm,0.8s,baz=116,slow=11 | | | | | | | | |
| VNA3 | **Neumayer Olymp** | 101.40 | 187 | ⇑PKiKP | PKiKP | 16 47 04.9 | -2.5 | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| VNA3 | | | | ⇑Pdiff | Pdif | 16 42 43.4 | -0.4 | | |
| | comp=Z,1.6nm,0.8s | | | | | | | | |
| VNA3 | | | | ⇑SKSac | SKSac | 16 53 14.3 | +0.1 | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| 214A | **Organ Pipe Nat** | 101.59 | 59 | P | Pdif | 16 42 44.6 | -0.9 | | |
| | baz=270 | | | | | | | | |
| VNA1 | **Neumayer--Stat** | 101.76 | 188 | ⇑Pdiff | Pdif | 16 42 45.4 | +0.1 | | |
| | comp=Z,3.1nm,1.4s | | | | | | | | |
| PDAR | **Pinedale Array** | 103.75 | 48 | Pdiff | Pdif | 16 42 53.0 | -2.1 | | |
| | comp=Z,1.0nm,1.0s,baz=193,slow=3.7,SNR=5.9 | | | | | | | | |
| PDAR | | | | PKiKP | PKiKP | 16 47 11.4 | -1.4 | | |
| | comp=Z,1.1nm,1.0s,baz=256,slow=4.4,SNR=6.4 | | | | | | | | |
| ARCES | **ARCESS Array B** | 106.33 | 342 | PKKPbc | PKKPbc | 16 58 38.7 | -1.7 | | |
| | comp=Z,2.6nm

comp=E,17nm,1.1s,baz=276,slow=3.7,SNR=16
LPAZ SKPbc **SKPbc** **16 51 47.2 +0.9**
comp=E,7.8nm,0.9s,baz=8.3,slow=3.4,SNR=6.1
**PVIS Viseu** 138.88 331 *e*SKP **SKPbc** **16 51 45.6 -0.1**
**MTE Manteigas** 138.95 330 *e*SKP **SKPbc** **16 51 46.3 +0.4**
**MTE Manteigas** 138.95 330 A A 17 54 43.6
comp=E,138nm,20.0s
**PCBR Castelo Branco** 139.34 330 *e*SKP **SKPbc** **16 51 46.8 -0.1**
**PMRV Marv??o** 139.61 329 *e*SKP **SKPbc** **16 51 47.7 0.0**
**PMRV Marv??o** 139.61 329 A A 17 57 40.5
comp=E,85nm,20.0s
**CPUP Villa Florida** 140.00 145 PKP **PKPdf** **16 48 22.2 +0.7**
comp=E,14nm,1.2s,baz=222,slow=1.2,SNR=7.9
CPUP SKPbc **SKiKP** **16 51 50.6 -1.1**
comp=E,7.0nm,0.9s,baz=232,slow=6.6,SNR=6.1
**PESTR Estremoz** 140.13 329 *e*SKP **SKPbc** **16 51 49.3 +0.2**
**PMTG Montargil** 140.30 330 *e*SKP **SKPbc** **16 51 49.3 -0.2**
**PBAR Barrancos** 140.36 328 *e*SKP **SKPbc** **16 51 48.9 -0.8**
**EVO Evora** 140.60 329 *e*SKP **SKPbc** **16 51 50.4 +0.1**
**PBEJ Beja** 140.90 328 *e*SKP **SKPbc** **16 51 51.1 0.0**
**PNCL Nicolau / Gran** 141.18 329 *e*SKP **SKPbc** **16 51 50.5 -1.3**
**PVAQ Vaqueiros** 141.29 327 *e*LR LR 17 38 36.4
comp=E,87nm,18.0s
**PCVE Castro Verde** 141.29 328 *e*SKP **SKPbc** **16 51 52.5 +0.4**
**SIV San Ignacio** 144.47 128 PKP **PKPab** **16 48 28.3 +0.1**
comp=E,6.4nm,0.4s,baz=229,slow=3.3,SNR=37
SIV SKPbc **SKiKP** **16 52 01.4 +0.2**
comp=E,12nm,0.9s,baz=259,slow=1.2,SNR=4.7
**BAUV El Baul** 144.92 83 PKPbc 16 48 28.6 -1.4
**TORD Torodi Ar. Bea** 145.31 284 PKPbc **PKPbc** **16 48 30.6 -0.6**
comp=E,9.1nm,0.6s,baz=65,slow=4.0,SNR=37
TORD SKPbc **SKPbc** **16 52 00.3 -2.1**
comp=E,5.6nm,0.9s,baz=48,slow=3.2,SNR=4.9
**SAML Samuel** 146.25 116 PKPdf **PKPbc** **16 48 33.9 -0.2**
**SAML Samuel** 146.25 116 PKP2 **PKPbc** **16 48 33.9 -0.2**
**PTLB Pontes e Lacer** 146.29 130 PKPdf **PKPbc** **16 48 33.6 -0.5**
**BOAV Boa Vista** 152.10 96 **PKPbc** **16 48 48.8 -0.1**
**DBIC Dimbokro** 152.24 273 PKP **PKPdf** **16 48 43.0 +0.5**
comp=E,3.9nm,0.7s,baz=81,slow=3.1,SNR=1.6
**DBIC Dimbokro** 152.24 273 PKIKP **PKPdf** **16 48 43.0 +0.5**
**BDFB Brasilia** 153.73 145 PKP **PKPdf** **16 48 45.0 +0.3**
comp=E,3.0nm,0.6s,baz=225,slow=1.4,SNR=3.7
**BDFB Brasilia** 153.73 145 PKIKP **PKPdf** **16 48 45.0 +0.3**

*TAP* ***24*** *16:34:00.2, 22°.41N×120°.84E, h42km, ML3.5, B*
**ISC 24 16:34:00.7±1.2, 22°.39N±0°.03×120°.85E±0°.02, h46km±5km, n139, σ1°08/261, 19C-8D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EAST** | **Anshuo** | **0.01** | **228** | ⇑P | | **Pn** | **16 34 07.5** | **-0.4** |
| | baz=148 | | | | | | | |
| EAST | | | | S | | **Sn** | **16 34 12.5** | **-0.4** |
| | baz=148 | | | | | | | |
| **TAW** | **Tawu** | **0.05** | **125** | ⇑P | | **Pn** | **16 34 07.8** | **-0.1** |
| | baz=122 | | | | | | | |
| TAW | | | | *e*S | | **Sn** | **16 34 13.0** | **+0.1** |
| | baz=122 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.06** | **144** | ⇑ *i*P | | **Pn** | **16 34 07.7** | **-0.2** |
| | baz=136 | | | | | | | |
| TAWH | | | | *e*S | | **Sn** | **16 34 13.1** | **+0.2** |
| | baz=136 | | | | | | | |
| **SLIU** | **Shizi** | **0.18** | **196** | ⇑P | | **Pn** | **16 34 08.3** | **-0.1** |
| | baz=190 | | | | | | | |
| SLIU | | | | *e*S | | **Sn** | **16 34 14.0** | **+0.1** |
| | baz=190 | | | | | | | |
| **SCZT** | **Fangliau** | **0.21** | **266** | *e*P | | **Pn** | **16 34 08.4** | **-0.3** |
| | baz=259 | | | | | | | |
| SCZT | | | | *e*S | | **Sn** | **16 34 14.0** | **-0.4** |
| | baz=259 | | | | | | | |
| **ECL** | **Taimali** | **0.23** | **24** | ⇓P | | **Pn** | **16 34 08.2** | **-0.7** |
| | baz=38 | | | | | | | |
| ECL | | | | *e*S | | **Sn** | **16 34 14.3** | **-0.3** |
| | baz=38 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.30** | **318** | ⇓ *i*P | | **Pn** | **16 34 09.0** | **-0.5** |
| | baz=317 | | | | | | | |
| MASBT | | | | *i* S | | **Sn** | **16 34 14.8** | **-0.9** |
| | baz=317 | | | | | | | |
| **SMST** | **Manzhou Townsh** | **0.36** | **182** | ⇑ *i*P | | **Pn** | **16 34 10.4** | **+0.3** |
| | baz=173 | | | | | | | |
| SMST | | | | *e*S | | **Sn** | **16 34 17.8** | **+1.1** |
| | baz=173 | | | | | | | |
| **TSMG** | **Majia** | **0.37** | **329** | ⇓P | | **Pn** | **16 34 09.6** | **-0.6** |
| | baz=329 | | | | | | | |
| TSMG | | | | *e*S | | **Sn** | **16 34 15.8** | **-1.1** |
| | baz=329 | | | | | | | |
| **HEN** | **Hengchun** | **0.39** | **196** | ⇓P | | **Pn** | **16 34 11.4** | **+1.0** |
| | baz=195 | | | | | | | |
| HEN | | | | *e*S | | **Sn** | **16 34 19.6** | **+2.3** |
| | baz=195 | | | | | | | |
| **SSD** | **Sandimen** | **0.41** | **330** | *e*P | | **Pn** | **16 34 10.1** | **-0.5** |
| | baz=332 | | | | | | | |
| SSD | | | | *e*S | | **Sn** | **16 34 17.0** | **-0.7** |
| | baz=332 | | | | | | | |
| **SNW** | **Nanwan** | **0.43** | **193** | *e*P | | **Pn** | **16 34 11.6** | **+0.6** |
| | baz=184 | | | | | | | |
| SNW | | | | *e*S | | **Sn** | **16 34 20.9** | **+2.8** |
| | baz=184 | | | | | | | |
| **TSPT** | **Pingtung City** | **0.44** | **311** | ⇓P | | **Pn** | **16 34 11.7** | **+0.7** |
| | baz=314 | | | | | | | |
| TSPT | | | | *e*S | | **Sn** | **16 34 20.9** | **+2.7** |
| | baz=314 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.46** | **265** | *e*P | | **Pn** | **16 34 13.3** | **+2.2** |
| | baz=252 | | | | | | | |
| **TTN** | **Taitung** | **0.46** | **37** | P | | **Pn** | **16 34 11.6** | **+0.4** |
| | baz=41 | | | | | | | |
| TTN | | | | *e*S | | **Sn** | **16 34 18.8** | **+0.2** |
| | baz=41 | | | | | | | |
| **SGLT** | **Jiouru** | **0.47** | **315** | ⇑*e*P | | **Pn** | **16 34 12.2** | **+0.9** |
| | baz=321 | | | | | | | |
| **TWG** | **Pinlang** | **0.48** | **25** | *i* P | | **Pn** | **16 34 10.7** | **-0.8** |
| | baz=37 | | | | | | | |
| TWG | | | | *e*S | | **Sn** | **16 34 18.8** | **-0.3** |
| | baz=37 | | | | | | | |
| **TWGBT** | **Beinan** | **0.48** | **26** | P | | **Pn** | **16 34 10.9** | **-0.5** |
| **TWGBT** | **Beinan** | **0.48** | **26** | *e*P | | **Pn** | **16 34 10.9** | **-0.5** |
| | baz=37 | | | | | | | |
| TWGBT | | | | *e*S | | **Sn** | **16 34 18.9** | **-0.3** |
| | baz=37 | | | | | | | |
| **KAU** | **Kaohsiung** | **0.53** | **290** | P | | **Pn** | **16 34 12.6** | **+0.4** |
| | baz=288 | | | | | | | |
| KAU | | | | *e*S | | **Sn** | **16 34 23.8** | **+3.5** |
| | baz=288 | | | | | | | |
| **LONT** | **Longtian** | **0.58** | **26** | ⇑P | | **Pn** | **16 34 12.1** | **-0.6** |
| | baz=36 | | | | | | | |
| LONT | | | | *e*S | | **Sn** | **16 34 21.4** | **0.0** |
| | baz=36 | | | | | | | |
| **TWM1** | **Shoushan** | **0.59** | **318** | ⇑*e*P | | **Pn** | **16 34 13.9** | **+1.1** |
| | baz=318 | | | | | | | |
| **SCST** | **Cishan** | **0.60** | **326** | ⇑P | | **Pn** | **16 34 13.4** | **+0.5** |
| | baz=327 | | | | | | | |
| SCST | | | | *i* S | | **Sn** | **16 34 23.3** | **+1.6** |
| | baz=327 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.60** | **308** | *e*P | | **Pn** | **16 34 13.9** | **+1.0** |
| | baz=307 | | | | | | | |
| SNJT | | | | *e*S | | **Sn** | **16 34 24.4** | **+2.6** |
| | baz=307 | | | | | | | |
| **SLGT** | **Liugui** | **0.63** | **343** | ⇑P | | **Pn** | **16 34 13.4** | **0.0** |
| | baz=350 | | | | | | | |
| SLGT | | | | *e*S | | **Sn** | **16 34 22.5** | **-0.1** |
| | baz=350 | | | | | | | |
| **LDUT** | **Ludao** | **0.64** | **63** | ⇑P | | **Pn** | **16 34 12.7** | **-0.8** |
| | baz=66 | | | | | | | |
| LDUT | | | | *e*S | | **Sn** | **16 34 22.5** | **-0.1** |
| | baz=66 | | | | | | | |
| **EDH** | **Donghe** | **0.72** | **36** | P | | **Pn** | **16 34 14.0** | **-0.5** |
| | baz=45 | | | | | | | |
| EDH | | | | *e*S | | **Sn** | **16 34 24.5** | **0.0** |
| | baz=45 | | | | | | | |
| **LAY** | **Lan-yu** | **0.73** | **118** | ⇑P | | **Pn** | **16 34 13.9** | **-0.8** |
| | baz=110 | | | | | | | |
| LAY | | | | *e*S | | **Sn** | **16 34 23.9** | **-1.1** |
| | baz=110 | | | | | | | |
| **SGST** | **Jiashian** | **0.74** | **340** | P | | **Pn** | **16 34 14.6** | **-0.2** |
| | baz=341 | | | | | | | |
| SGST | | | | *e*S | | **Sn** | **16 34 24.8** | **-0.2** |
| | baz=341 | | | | | | | |
| **LYUB** | **Lan-yu** | **0.78** | **119** | P | | **Pn** | **16 34 13.5** | **-1.8** |
| | baz=112 | | | | | | | |
| LYUB | | | | *e*S | | **Sn** | **16 34 23.6** | **-2.4** |
| | baz=112 | | | | | | | |
| **ECS** | **Chishang** | **0.78** | **26** | *i* P | | **Pn** | **16 34 15.4** | **0.0** |
| | baz=36 | | | | | | | |
| ECS | | | | *e*S | | **Sn** | **16 34 27.0** | **+0.9** |
| | baz=36 | | | | | | | |
| **STYH** | **Taoyuan** | **0.78** | **355** | *i* P | | **Pn** | **16 34 15.4** | **0.0** |
| | baz=3.0 | | | | | | | |
| STYH | | | | S | | **Sn** | **16 34 26.6** | **+0.5** |
| | baz=3.0 | | | | | | | |
| **ELDTW** | **Lidau** | **0.81** | **11** | ⇓ *i*P | | **Pn** | **16 34 16.1** | **+0.2** |
| | baz=4.0 | | | | | | | |
| ELDTW | | | | *e*S | | **Sn** | **16 34 27.1** | **+0.1** |
| | baz=4.0 | | | | | | | |
| **EHD** | **Haiduan** | **0.83** | **23** | *e*P | | **Pn** | **16 34 15.2** | **-0.8** |
| | baz=33 | | | | | | | |
| EHD | | | | *e*S | | **Sn** | **16 34 27.3** | **+0.2** |
| | baz=33 | | | | | | | |
| **CHN1** | **Nanshi** | **0.85** | **339** | ⇑P | | **Pn** | **16 34 16.4** | **+0.1** |
| | baz=340 | | | | | | | |
| CHN1 | | | | S | | **Sn** | **16 34 28.1** | **+0.3** |
| | baz=340 | | | | | | | |
| **WTP** | **Ta-pu** | **0.88** | **346** | P | | **Pn** | **16 34 16.8** | **0.0** |
| | baz=347 | | | | | | | |
| WTP | | | | S | | **Sn** | **16 34 29.5** | **+0.9** |
| | baz=347 | | | | | | | |
| **SNST** | **Tainan City** | **0.89** | **339** | *e*P | | **Pn** | **16 34 16.6** | **-0.3** |
| | baz=339 | | | | | | | |
| SNST | | | | *e*S | | **Sn** | **16 34 29.2** | **+0.6** |
| | baz=339 | | | | | | | |
| **FULB** | **Fuli** | **0.91** | **27** | P | | **Pn** | **16 34 17.1** | **0.0** |
| | baz=37 | | | | | | | |
| FULB | | | | *e*S | | **Sn** | **16 34 31.2** | **+2.2** |
| | baz=37 | | | | | | | |
| **SSHA** | **Shanhua** | **0.91** | **325** | *e*P | | **Pn** | **16 34 17.7** | **+0.6** |
| | baz=325 | | | | | | | |
| SSHA | | | | *e*S | | **Sn** | **16 34 30.5** | **+1.4** |
| | baz=325 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.93** | **347** | P | | **Pn** | **16 34 17.4** | **-0.1** |
| **TPUB** | **Ta-pu** | **0.93** | **347** | ⇑P | | **Pn** | **16 34 17.4** | **-0.1** |
| | baz=348 | | | | | | | |
| TPUB | | | | S | | **Sn** | **16 34 30.1** | **+0.4** |
| | baz=348 | | | | | | | |
| **TWK** | **Hsinying** | **0.94** | **339** | P | | **Pn** | **16 34 17.8** | **+0.2** |
| | baz=340 | | | | | | | |
| TWK | | | | *e*S | | **Sn** | **16 34 30.4** | **+0.5** |
| | baz=340 | | | | | | | |
| **CHKH** | **Chenggong** | **0.95** | **32** | P | | **Pn** | **16 34 17.0** | **-0.6** |
| | baz=39 | | | | | | | |
| CHKH | | | | *e*S | | **Sn** | **16 34 30.8** | **+0.8** |
| | baz=39 | | | | | | | |
| **SCLT** | **Jiali** | **0.99** | **322** | P | | **Pn** | **16 34 18.1** | **-0.1** |
| | baz=323 | | | | | | | |
| SCLT | | | | *e*S | | **Sn** | **16 34 31.6** | **+0.6** |
| | baz=323 | | | | | | | |
| **TSCK** | **Chigu Township** | **1.04** | **317** | ⇑P | | **Pn** | **16 34 18.7** | **-0.1** |
| | baz=304 | | | | | | | |
| TSCK | | | | *e*S | | **Sn** | **16 34 31.6** | **-0.6** |
| | baz=304 | | | | | | | |
| **TWF1** | **Yuli** | **1.05** | **23** | P | | **Pn** | **16 34 18.6** | **-0.3** |
| | baz=37 | | | | | | | |
| TWF1 | | | | *e*S | | **Sn** | **16 34 32.5** | **+0.1** |
| | baz=37 | | | | | | | |
| **EYUL** | **Yuli** | **1.05** | **24** | *i* P | | **Pn** | **16 34 19.0** | **0.0** |
| | baz=14 | | | | | | | |
| EYUL | | | | *e*S | | **Sn** | **16 34 32.6** | **+0.1** |
| | baz=14 | | | | | | | |
| **WCKO** | **Fanlu** | **1.07** | **348** | *i* P | | **Pn** | **16 34 19.2** | **-0.1** |
| | baz=349 | | | | | | | |
| WCKO | | | | *e*S | | **Sn** | **16 34 33.1** | **0.0** |
| | baz=349 | | | | | | | |
| **ECBN** | **Changbin** | **1.08** | **31** | P | | **Pn** | **16 34 19.6** | **+0.2** |
| | baz=43 | | | | | | | |
| ECBN | | | | *i* S | | **Sn** | **16 34 33.3** | **+0.1** |
| | baz=43 | | | | | | | |
| **YULB** | **Yu-li** | **1.08** | **22** | P | | **Pn** | **16 34 19.4** | **-0.1** |
| **YULB** | **Yu-li** | **1.08** | **22** | ⇑P | | **Pn** | **16 34 19.1** | **-0.4** |
| | baz=34 | | | | | | | |
| YULB | | | | *e*S | | **Sn** | **16 34 35.2** | **+1.9** |
| | baz=34 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.10** | **5** | *e*P | | **Pn** | **16 34 20.4** | **+0.2** |
| | baz=7.0 | | | | | | | |
| **ICHU** | **Yijhu** | **1.10** | **332** | ⇓P | | **Pn** | **16 34 19.3** | **-0.4** |
| | baz=332 | | | | | | | |
| ICHU | | | | *e*S | | **Sn** | **16 34 32.9** | **-1.0** |
| | baz=332 | | | | | | | |
| **CHN8** | **Yiju** | **1.12** | **328** | *e*P | | **Pn** | **16 34 19.6** | **-0.4** |
| | baz=329 | | | | | | | |
| CHN8 | | | | *e*S | | **Sn** | **16 34 34.4** | **+0.1** |
| | baz=329 | | | | | | | |
| **CHY** | **Chiayi** | **1.18** | **340** | *i* P | | **Pn** | **16 34 20.6** | **-0.1** |
| | baz=341 | | | | | | | |
| CHY | | | | S | | **Sn** | **16 34 35.5** | **0.0** |
| | baz=341 | | | | | | | |
| **CHN2** | **Minshiung** | **1.19** | **343** | P | | **Pn** | **16 34 21.0** | **0.0** |
| | baz=344 | | | | | | | |
| CHN2 | | | | S | | **Sn** | **16 34 36.5** | **+0.5** |
| | baz=344 | | | | | | | |
| **EHYH** | **Wanrong** | **1.19** | **22** | P | | **Pn** | **16 34 21.1** | **+0.1** |
| | baz=33 | | | | | | | |
| EHYH | | | | *e*S | | **Sn** | **16 34 37.9** | **+1.9** |
| | baz=33 | | | | | | | |
| **EHY** | **Hungye** | **1.20** | **21** | ⇑*e*P | | **Pn** | **16 34 20.8** | **-0.2** |
| | baz=33 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **16 34 36.2** | **+0.1** |
| | baz=33 | | | | | | | |
| **HGSD** | **Ruisui** | **1.22** | **25** | P | | **Pn** | **16 34 22.0** | **+0.7** |
| | baz=15 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **16 34 37.3** | **+0.7** |
| | baz=15 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.27** | **333** | *e*P | | **Pn** | **16 34 21.6** | **-0.3** |
| | baz=334 | | | | | | | |
| WSL | | | | *e*S | | **Sn** | **16 34 37.9** | **+0.1** |
| | baz=334 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.30** | **0** | P | | **Pn** | **16 34 22.9** | **+0.4** |
| | baz=1.0 | | | | | | | |
| WHYT | | | | *e*S | | **Sn** | **16 34 39.4** | **+0.6** |
| | baz=1.0 | | | | | | | |
| **WDLH** | **Douliu** | **1.33** | **348** | *i* P | | **Pn** | **16 34 22.9** | **+0.1** |
| | baz=348 | | | | | | | |
| WDLH | | | | *e*S | | **Sn** | **16 34 39.8** | **+0.5** |
| | baz=348 | | | | | | | |
| **WTK** | **Tuku** | **1.36** | **342** | *e*P | | **Pn** | **16 34 22.6** | **-0.7** |
| | baz=343 | | | | | | | |
| WTK | | | | *e*S | | **Sn** | **16 34 39.2** | **-0.9** |
| | baz=343 | | | | | | | |
| **WSF** | **Szhu** | **1.37** | **335** | ⇑P | | **Pn** | **16 34 22.9** | **-0.5** |
| | baz=336 | | | | | | | |
| WSF | | | | *e*S | | **Sn** | **16 34 40.0** | **-0.4** |
| | baz=336 | | | | | | | |
| **EGFH** | **Guangfu** | **1.38** | **22** | *e*P | | **Pn** | **16 34 24.1** | **+0.5** |
| | baz=36 | | | | | | | |
| EGFH | | | | *e*S | | **Sn** | **16 34 41.9** | **+1.2** |
| | baz=36 | | | | | | | |
| **VWDT** | **VWDT** | **1.39** | **11** | *e*P | | **Pn** | **16 34 24.5** | **+0.9** |
| | baz=22 | | | | | | | |
| VWDT | | | | S | | **Sn** | **16 34 41.9** | **+1.2** |
| | baz=22 | | | | | | | |
| **SSLB** | **Suanglung** | **1.40** | **4** | P | | **Pn** | **16 34 25.3** | **+1.5** |
| **SSLB** | **Suanglung** | **1.40** | **4** | *e*P | | **Pn** | **16 34 24.4** | **+0.6** |
| | baz=5.0 | | | | | | | |
| SSLB | | | | S | | **Sn** | **16 34 41.5** | **+0.4** |
| | baz=5.0 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.41** | **20** | *e*P | | **Pn** | **16 34 23.6** | **-0.4** |
| | baz=34 | | | | | | | |
| WARBT | | | | *e*S | | **Sn** | **16 34 43.2** | **+1.7** |
| | baz=34 | | | | | | | |
| **TEGC** | **Jichi Village** | **1.46** | **26** | *i* P | | **Pn** | **16 34 25.4** | **+0.8** |
| | baz=39 | | | | | | | |
| TEGC | | | | *e*S | | **Sn** | **16 34 43.1** | **+0.5** |
| | baz=39 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.49** | **2** | *e*P | | **Pn** | **16 34 23.4** | **-1.7** |
| | baz=3.0 | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | **16 34 42.2** | **-1.3** |
| | baz=3.0 | | | | | | | |
| **WNT** | **Mingjian** | **1.49** | **354** | *e*P | | **Pn** | **16 34 25.7** | **+0.7** |
| | baz=355 | | | | | | | |
| WNT | | | | *e*S | | **Sn** | **16 34 43.6** | **+0.2** |
| | baz=355 | | | | | | | |
| **TYC** | **Yuchr** | **1.51** | **0** | *e*P | | **Pn** | **16 34 25.6** | **+0.4** |
| | baz=1.0 | | | | | | | |
| TYC | | | | *e*S | | **Sn** | **16 34 44.9** | **+1.1** |
| | baz=1.0 | | | | | | | |
| **ESL** | **Shilin** | **1.52** | **21** | *e*P | | **Pn** | **16 34 27.0** | **+1.6** |
| | baz=34 | | | | | | | |
| ESL | | | | *e*S | | **Sn** | **16 34 44.8** | **+0.8** |
| | baz=34 | | | | | | | |
| **WNT1** | **Nantou City** | **1.52** | **354** | *e*P | | **Pn** | **16 34 25.9** | **+0.5** |
| | baz=355 | | | | | | | |
| WNT1 | | | | S | | **Sn** | **16 34 44.4** | **+0.3** |
| | baz=355 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.54** | **25** | *e*P | | **Pn** | **16 34 26.6** | **+0.9** |
| | baz=38 | | | | | | | |
| SHUL | | | | *e*S | | **Sn** | **16 34 46.1** | **+1.5** |
| | baz=38 | | | | | | | |
| **VCHM** | **Qimei** | **1.55** | **302** | P | | **Pn** | **16 34 24.7** | **-1.1** |
| | baz=302 | | | | | | | |
| VCHM | | | | S | | **Sn** | **16 34 44.1** | **-0.5** |
| | baz=302 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.56** | **340** | *i* P | | **Pn** | **16 34 25.6** | **-0.4** |
| | baz=341 | | | | | | | |
| WTCT | | | | *e*S | | **Sn** | **16 34 44.6** | **-0.4** |
| | baz=341 | | | | | | | |
| **RLNB** | **Erlin** | **1.56** | **343** | P | | **Pn** | **16 34 25.9** | **-0.1** |
| | baz=333 | | | | | | | |
| RLNB | | | | *e*S | | **Sn** | **16 34 45.1** | **0.0** |
| | baz=333 | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.57** | **344** | *e*P | | **Pn** | **16 34 26.6** | **+0.5** |
| | baz=334 | | | | | | | |
| WRL | | | | S | | **Sn** | **16 34 45.5** | **+0.3** |
| | baz=334 | | | | | | | |
| **OWD** | **Renai** | **1.59** | **11** | *e*P | | **Pn** | **16 34 26.9** | **+0.4** |
| | baz=12 | | | | | | | |
| OWD | | | | *i* S | | **Sn** | **16 34 46.9** | **+1.0** |
| | baz=12 | | | | | | | |
| **WUSB** | **Renai** | **1.62** | **9** | P | | **Pn** | **16 34 27.4** | **+0.6** |
| | baz=358 | | | | | | | |
| WUSB | | | | *e*S | | **Sn** | **16 34 46.8** | **+0.2** |
| | baz=358 | | | | | | | |
| **WPL** | **Puli Township** | **1.62** | **3** | *e*P | | **Pn** | **16 34 28.1** | **+1.3** |
| | baz=4.0 | | | | | | | |
| WPL | | | | *e*S | | **Sn** | **16 34 48.5** | **+2.0** |
| | baz=4.0 | | | | | | | |
| **DPDB** | **Guoxing** | **1.64** | **2** | *e*P | | **Pn** | **16 34 27.2** | **+0.1** |
| | baz=3.0 | | | | | | | |
| DPDB | | | | *e*S | | **Sn** | **16 34 47.1** | **0.0** |
| | baz=3.0 | | | | | | | |
| **WWF** | **Wufeng** | **1.66** | **355** | *e*P | | **Pn** | **16 34 27.4** | **+0.2** |
| | baz=345 | | | | | | | |
| WWF | | | | *e*S | | **Sn** | **16 34 47.4** | **+0.1** |
| | baz=345 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.66** | **2** | P | | **Pn** | **16 34 27.6** | **+0.3** |
| | baz=3.0 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **16 34 47.6** | **+0.1** |
| | baz=3.0 | | | | | | | |
| **PNG** | **Penghu** | **1.68** | **315** | ⇓ *i*P | | **Pn** | **16 34 26.4** | **-1.2** |
| | baz=315 | | | | | | | |
| PNG | | | | S | | **Sn** | **16 34 45.6** | **-2.2** |
| | baz=315 | | | | | | | |
| **ETM** | **Tongmen** | **1.68** | **20** | *i* P | | **Pn** | **16 34 28.2** | **+0.6** |
| | baz=33 | | | | | | | |
| ETM | | | | *e*S | | **Sn** | **16 34 49.1** | **+1.2** |
| | baz=33 | | | | | | | |
| **CHGB** | **Renai** | **1.69** | **10** | *e*P | | **Pn** | **16 34 28.6** | **+0.6** |
| | baz=11 | | | | | | | |
| CHGB | | | | *e*S | | **Sn** | **16 34 50.4** | **+1.8** |
| | baz=11 | | | | | | | |
| **WCHH** | **Zhanghua** | **1.71** | **351** | *e*P | | **Pn** | **16 34 28.2** | **+0.2** |
| | baz=352 | | | | | | | |
| WCHH | | | | *i* S | | **Sn** | **16 34 48.5** | **-0.1** |
| | baz=352 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.71** | **18** | ⇑*e*P | | **Pn** | **16 34 28.2** | **0.0** |
| | baz=6.0 | | | | | | | |
| LXIB | | | | *e*S | | **Sn** | **16 34 49.4** | **+0.5** |
| | baz=6.0 | | | | | | | |
| **TCU** | **Taichung** | **1.76** | **355** | *e*P | | **Pn** | **16 34 29.3** | **+0.6** |
| | baz=345 | | | | | | | |
| TCU | | | | *e*S | | **Sn** | **16 34 50.0** | **+0.1** |
| | baz=345 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.79** | **12** | *i* P | | **Pn** | **16 34 30.6** | **+1.0** |
| | baz=13 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **16 34 52.8** | **+1.5** |
| | baz=13 | | | | | | | |
| **TWD** | **Chiawan** | **1.82** | **22** | *e*P | | **Pn** | **16 34 30.5** | **+1.0** |
| | baz=23 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **16 34 52.8** | **+1.4** |
| | baz=23 | | | | | | | |
| **TDCB** | **Techi** | **1.88** | **9** | P | | **Pn** | **16 34 30.7** | **+0.2** |
| | baz=359 | | | | | | | |
| TDCB | | | | *e*S | | **Sn** | **16 34 53.0** | **-0.1** |
| | baz=359 | | | | | | | |
| **TWT** | **Tachien** | **1.88** | **9** | *i* P | | **Pn** | **16 34 31.6** | **+1.0** |
| | baz=359 | | | | | | | |
| TWT | | | | *i* S | | **Sn** | **16 34 53.9** | **+0.7** |
| | baz=359 | | | | | | | |
| **WHP** | **Taichung City** | **1.89** | **3** | *e*P | | **Pn** | **16 34 31.2** | **+0.6** |
| | baz=3.0 | | | | | | | |
| WHP | | | | *e*S | | **Sn** | **16 34 53.7** | **+0.6** |
| | baz=3.0 | | | | | | | |
| **FUSS** | **Fushou** | **1.89** | **11** | *e*P | | **Pn** | **16 34 31.4** | **+0.7** |
| | baz=12 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **16 34 52.9** | **-0.6** |
| | baz=12 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.90** | **18** | *i* P | | **Pn** | **16 34 32.0** | **+1.3** |
| | baz=30 | | | | | | | |
| ETLH | | | | *e*S | | **Sn** | **16 34 53.7** | **+0.1** |
| | baz=30 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.91** | **21** | P | | **Pn** | **16 34 32.1** | **+1.4** |
| **NACB** | **Ninganchiao** | **1.91** | **21** | *e*P | | **Pn** | **16 34 31.4** | **+0.7** |
| | baz=34 | | | | | | | |
| NACB | | | | S | | **Sn** | **16 34 53.7** | **+0.2** |
| | baz=34 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.95** | **358** | *e*P | | **Pn** | **16 34 32.5** | **+1.2** |
| | baz=359 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sn** | **16 34 56.3** | **+1.5** |
| | baz=359 | | | | | | | |
| **WDJ** | **Dajia District** | **1.96** | **354** | P | | **Pn** | **16 34 31.5** | **0.0** |
| | baz=355 | | | | | | | |
| WDJ | | | | *e*S | | **Sn** | **16 34 56.5** | **+1.6** |
| | baz=355 | | | | | | | |
| **NSY** | **Sanyi** | **2.02** | **358** | P | | **Pn** | **16 34 32.9** | **+0.5** |
| | baz=359 | | | | | | | |
| NSY | | | | *e*S | | **Sn** | **16 34 58.5** | **+2.1** |
| | baz=359 | | | | | | | |
| **NNSB** | **Datong** | **2.09** | **13** | P | | **Pn** | **16 34 34.4** | **+1.0** |
| | baz=3.0 | | | | | | | |
| NNSB | | | | *e*S | | **Sn** | **16 34 59.9** | **+1.6** |
| | baz=3.0 | | | | | | | |
| **NNSH** | **Datong** | **2.09** | **13** | *i* P | | **Pn** | **16 34 34.4** | **+1.0** |
| | baz=3.0 | | | | | | | |
| NNSH | | | | *e*S | | **Sn** | **16 35 00.0** | **+1.8** |
| | baz=3.0 | | | | | | | |
| **NNS** | **Nan Shan** | **2.10** | **13** | *i* P | | **Pn** | **16 34 34.9** | **+1.4** |
| | baz=3.0 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **16 35 00.3** | **+1.8** |
| | baz=3.0 | | | | | | | |
| **NMLH** | **Miaoli** | **2.14** | **359** | *e*P | | **Pn** | **16 34 33.3** | **-0.7** |
| | baz=359 | | | | | | | |
| NMLH | | | | *e*S | | **Sn** | **16 35 01.8** | **+2.5** |
| | baz=359 | | | | | | | |
| **EOS4** | **EOS4** | **2.19** | **38** | *e*P | | **Pn** | **16 34 34.8** | **+0.5** |
| | baz=38 | | | | | | | |
| EOS4 | | | | *e*S | | **Sn** | **16 35 00.6** | **+0.6** |
| | baz=38 | | | | | | | |
| **EWUT** | **Wuta** | **2.22** | **22** | *e*P | | **Pn** | **16 34 36.6** | **+1.6** |
| | baz=23 | | | | | | | |
| EWUT | | | | *i* S | | **Sn** | **16 35 01.2** | **0.0** |
| | baz=23 | | | | | | | |
| **LATG** | **Datong** | **2.23** | **16** | P | | **Pn** | **16 34 36.2** | **+0.9** |
| | baz=29 | | | | | | | |
| LATG | | | | *e*S | | **Sn** | **16 35 04.6** | **+3.0** |
| | baz=29 | | | | | | | |
| **NSTT** | **Nanjuang** | **2.24** | **3** | P | | **Pn** | **16 34 35.6** | **+0.3** |
| | baz=352 | | | | | | | |
| NSTT | | | | S | | **Sn** | **16 35 01.6** | **-0.1** |
| | baz=352 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **2.25** | **6** | P | | **Pn** | **16 34 37.2** | **+1.7** |
| | baz=355 | | | | | | | |
| NFF | | | | S | | **Sn** | **16 35 03.4** | **+1.3** |
| | baz=355 | | | | | | | |
| **LIOB** | **Emei** | **2.25** | **4** | P | | **Pn** | **16 34 35.9** | **+0.3** |
| | baz=352 | | | | | | | |
| LIOB | | | | *e*S | | **Sn** | **16 35 01.6** | **-0.5** |
| | baz=352 | | | | | | | |
| **NDT** | **Datong Townshi** | **2.29** | **15** | *i* P | | **Pn** | **16 34 37.6** | **+1.7** |
| | baz=29 | | | | | | | |
| NDT | | | | *e*S | | **Sn** | **16 35 03.3** | **+0.3** |
| | baz=29 | | | | | | | |
| **EOS3** | **EOS3** | **2.32** | **35** | *e*P | | **Pn** | **16 34 36.9** | **+0.6** |
| | baz=44 | | | | | | | |
| EOS3 | | | | *e*S | | **Sn** | **16 35 03.6** | **+0.1** |
| | baz=44 | | | | | | | |
| **YHNB** | **Yeheng** | **2.32** | **12** | P | | **Pn** | **16 34 38.5** | **+2.0** |
| **YHNB** | **Yeheng** | **2.32**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENTT | | | | | *e*S | | **Sn** | **16 35 06.9** | **+2.7** |
| | baz=29 | | | | | | | | |
| **EOS2** | **EOS2** | **2.39** | **32** | *e*P | | | **Pn** | **16 34 38.1** | **+0.9** |
| | baz=41 | | | | | | | | |
| EOS2 | | | | | *e*S | | **Sn** | **16 35 05.4** | **+0.2** |
| | baz=41 | | | | | | | | |
| **TWE** | **Neicheng** | **2.44** | **18** | P | | | **Pn** | **16 34 39.2** | **+1.2** |
| | baz=32 | | | | | | | | |
| **NWLT** | **Wulai** | **2.45** | **14** | *i* P | | | **Pn** | **16 34 40.0** | **+1.7** |
| | baz=5.0 | | | | | | | | |
| NWLT | | | | | S | | **Sn** | **16 35 08.3** | **+1.2** |
| | baz=5.0 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **2.46** | **16** | *e*P | | | **Pn** | **16 34 39.8** | **+1.4** |
| | baz=28 | | | | | | | | |
| FUSB | | | | | *e*S | | **Sn** | **16 35 07.4** | **+0.2** |
| | baz=28 | | | | | | | | |
| **TIPB** | **Shuangxi** | **2.72** | **19** | P | | | **Pn** | **16 34 43.1** | **+1.1** |
| | baz=29 | | | | | | | | |
| **YM01** | **YM01** | **2.83** | **13** | P | | | **Pn** | **16 34 44.2** | **+0.9** |
| | baz=1.0 | | | | | | | | |
| YM01 | | | | | *e*S | | **Sn** | **16 35 14.3** | **-1.9** |
| | baz=1.0 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **2.85** | **19** | *e*P | | | **Pn** | **16 34 46.7** | **+2.9** |
| | baz=19 | | | | | | | | |
| SXI1 | | | | | *e*S | | **Sn** | **16 35 16.9** | **-0.1** |
| | baz=19 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.86** | **43** | *e*P | | | **Pn** | **16 34 44.7** | **+0.8** |
| | baz=36 | | | | | | | | |
| YOJ | | | | | *e*S | | **Sn** | **16 35 16.5** | **-0.6** |
| | baz=36 | | | | | | | | |
| **TNOU** | **National Taiwa** | **2.88** | **17** | *e*P | | | **Pn** | **16 34 45.1** | **+1.1** |
| | baz=31 | | | | | | | | |
| **VWUC** | **VWUC** | **2.89** | **334** | *e*P | | | **Pn** | **16 34 43.0** | **-1.3** |
| | baz=344 | | | | | | | | |
| VWUC | | | | | *e*S | | **Sn** | **16 35 15.0** | **-2.8** |
| | baz=344 | | | | | | | | |
| **KNM** | **Kinmen** | **3.00** | **313** | *e*P | | | **Pn** | **16 34 46.1** | **+0.3** |
| | baz=311 | | | | | | | | |
| KNM | | | | | *e*S | | **Sn** | **16 35 21.5** | **+1.0** |
| | baz=311 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.06** | **313** | *e*P | | | **Pn** | **16 34 46.0** | **-0.7** |
| | baz=313 | | | | | | | | |
| KNMB | | | | | *e*S | | **Sn** | **16 35 20.4** | **-1.6** |
| | baz=313 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.08** | **329** | *e*P | | | **Pn** | **16 34 46.1** | **-0.8** |
| | baz=341 | | | | | | | | |
| **ZPLA** | **Ao Xicun** | **3.24** | **299** | *e*P | | | **Pn** | **16 34 48.1** | **-0.9** |
| | baz=299 | | | | | | | | |
| ZPLA | | | | | *e*S | | **Sn** | **16 35 25.3** | **-1.1** |
| | baz=299 | | | | | | | | |
| **MATB** | **Ma-tsu** | **3.84** | **348** | *e*P | | | **Pn** | **16 34 55.4** | **-1.8** |
| | baz=350 | | | | | | | | |
| MATB | | | | | *e*S | | **Sn** | **16 35 38.0** | **-3.1** |
| | baz=350 | | | | | | | | |
| **MHZQ** | **Yeshan** | **4.05** | **336** | *e*P | | | **Pn** | **16 34 59.1** | **-1.0** |
| | baz=349 | | | | | | | | |
| **VDOS** | **Pratas Island** | **4.19** | **247** | *e*P | | | **Pn** | **16 35 03.0** | **+0.9** |
| | baz=248 | | | | | | | | |
| VDOS | | | | | *e*S | | **Sn** | **16 35 47.6** | **-2.0** |
| | baz=248 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **4.26** | **347** | *e*P | | | **Pn** | **16 35 01.6** | **-1.5** |
| | baz=351 | | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.95** | **324** | *e*P | | | **Pn** | **16 35 11.2** | **-1.4** |
| | baz=326 | | | | | | | | |

*NNC **24** 17:11:49.1±1.1,42.°19N×72.°65E,h0km,mb2.9,mpv2.7, Error ellipse: s-maj=12.5km s-min=3.5km az=0.0*
*KRNET **24** 17:11:49.2±0.1,42.°17N×72.°62E,h20km,mb2.1*
*SOME **24** 17:11:49.1,42.°15N×72.°65E,h5km*
**ISC 24 17:11:48.5**±1.2,**42.°20N**±0.°03×**72.°67E**±0.°02,**h2**km±10km, **n34**,σ1§**90**/60,**29C-4D,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAS** | **Manas** | **0.31** | **336** | ⇑*i*P | **Pb** | **17 11 56.0** | **-0.8** |
| | baz=46 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **17 12 00.9** | **-1.5** |
| | baz=46 | | | | | | |
| **ARK** | **Arkit** | **0.67** | **233** | ⇑*i*P | **Pg** | **17 12 00.9** | **-0.3** |
| | baz=33 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **17 12 09.5** | **-0.4** |
| | baz=33 | | | | | | |
| **MRKS** | **Merke** | **0.68** | **37** | *e*P | **Pb** | **17 12 03.5** | **+0.4** |
| | 5.7nm,0.1s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **17 12 13.4** | **+0.4** |
| | 57nm,0.2s | | | | | | |
| **MRKS** | **Merke** | **0.68** | **37** | P | **Pb** | **17 12 03.5** | **+0.4** |
| | 5.7nm,0.1s | | | | | | |
| MRKS | | | | S | **Sb** | **17 12 13.4** | **+0.4** |
| | 57nm,0.2s | | | | | | |
| **AML** | **Almayashu** | **0.76** | **95** | ⇑*i*P | **Pb** | **17 12 04.3** | **-0.4** |
| | baz=92 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **17 12 15.4** | **-0.2** |
| | baz=92 | | | | | | |
| **EKS2** | **Erkin-Say** | **0.94** | **60** | ⇑*i*P | **Pn** | **17 12 07.8** | **-0.9** |
| | baz=60 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sn** | **17 12 21.1** | **-1.7** |
| | baz=60 | | | | | | |
| **ARLS** | **Aral** | **1.28** | **105** | ⇑*e*P | **Pn** | **17 12 13.3** | **-0.1** |
| | baz=3.0 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sn** | **17 12 31.2** | **0.0** |
| | baz=3.0 | | | | | | |
| **TRKS** | **Terek-Say** | **1.33** | **240** | ⇑*i*P | **Pn** | **17 12 13.0** | **-1.1** |
| | baz=37 | | | | | | |
| TRKS | | | | ⇑*i*S | **Sg** | **17 12 30.0** | **-1.1** |
| | baz=37 | | | | | | |
| **AAK** | **Ala-Archa** | **1.42** | **72** | ⇑P | **Pg** | **17 12 16.3** | **+0.6** |
| | 4.8nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **17 12 34.0** | **-0.6** |
| | 2.3nm,0.5s | | | | | | |
| **OHH** | **Osh** | **1.68** | **177** | ⇑*e*P | **Pn** | **17 12 19.5** | **+0.6** |
| | baz=75 | | | | | | |
| OHH | | | | ⇑*e*S | **Sn** | **17 12 40.6** | **-0.4** |
| | baz=75 | | | | | | |
| **USP** | **Ospenovka** | **1.71** | **51** | ⇑*i*P | **Pg** | **17 12 21.4** | **+0.1** |
| | baz=51 | | | | | | |
| USP | | | | ⇑*i*S | **Sg** | **17 12 44.8** | **+1.2** |
| | baz=51 | | | | | | |
| **CHMS** | **Chumysh** | **1.73** | **62** | ⇓P | **Pg** | **17 12 21.5** | **0.0** |
| | 2.6nm,0.5s | | | | | | |
| CHMS | | | | ⇑S | **Sg** | **17 12 45.0** | **+1.1** |
| | 2.5nm,0.3s | | | | | | |
| **CHMS** | **Chumysh** | **1.73** | **62** | ⇑*i*P | **Pg** | **17 12 21.6** | **0.0** |
| | baz=62 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sg** | **17 12 45.1** | **+1.1** |
| | baz=62 | | | | | | |
| **KBK** | **Karagaybulak** | **1.74** | **74** | ⇑*i*P | **Pg** | **17 12 21.9** | **0.0** |
| | baz=73 | | | | | | |
| KBK | | | | ⇑*i*S | **Sg** | **17 12 45.7** | **+1.2** |
| | baz=73 | | | | | | |
| **KK31** | **Karatay Array** | **1.83** | **300** | P | **Pb** | **17 12 22.6** | **-0.1** |
| | 2.0nm,0.5s,baz=22,slow=36,SNR=32 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **17 12 45.3** | **+0.6** |
| | 1.9nm,0.2s,baz=123,slow=30,SNR=14 | | | | | | |
| **SGDS** | **Sogindy** | **1.91** | **48** | Pg | **Pg** | **17 12 24.9** | **-0.1** |
| | 4.0nm,0.3s | | | | | | |
| SGDS | | | | Lg | Lg | 17 12 51.0 | |
| | 14nm,0.1s | | | | | | |
| **BRLS** | **Borolday** | **2.25** | **292** | *e*P | **Pb** | **17 12 30.8** | **+1.0** |
| | 0.7nm,0.3s | | | | | | |
| BRLS | | | | *e*S | **Sb** | **17 13 00.4** | **+2.3** |
| | 5.6nm,0.2s | | | | | | |
| **BRLS** | **Borolday** | **2.25** | **292** | Pg | **Pb** | **17 12 30.8** | **+1.0** |
| | 0.7nm,0.3s | | | | | | |
| BRLS | | | | Lg | Lg | 17 13 00.4 | |
| | 5.6nm,0.2s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.28** | **164** | ⇑*e*P | **Pn** | **17 12 27.9** | **+0.7** |
| | baz=62 | | | | | | |
| SFK | | | | ⇑*e*S | **Sn** | **17 12 56.7** | **+0.8** |
| | baz=62 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.28** | **71** | ⇑Pg | **Pg** | **17 12 31.3** | **-0.8** |
| | 1.3nm,0.3s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 17 13 01.9 | |
| | 5.2nm,0.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.44** | **82** | ⇓*e*P | **Pb** | **17 12 31.5** | **-1.6** |
| | baz=81 | | | | | | |
| BOOM | | | | ⇓*e*S | **Sb** | **17 13 02.5** | **-1.1** |
| | baz=81 | | | | | | |
| **DGS** | **Degeres** | **2.51** | **64** | *e*P | **Pg** | **17 12 36.2** | **-0.3** |
| | 1.6nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sg** | **17 13 09.6** | **+0.5** |
| | 9.9nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **2.51** | **64** | Pg | **Pg** | **17 12 36.2** | **-0.3** |
| | 1.6nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 17 13 10.2 | |
| | 7.8nm,0.7s | | | | | | |
| **KST** | **Kastek** | **2.57** | **70** | *e*P | **Pg** | **17 12 37.8** | **+0.1** |
| | 1.0nm,0.2s | | | | | | |
| KST | | | | *e*S | **Sg** | **17 13 12.3** | **+1.3** |
| | 14nm,0.5s | | | | | | |
| **KST** | **Kastek** | **2.57** | **70** | Pg | **Pg** | **17 12 37.8** | **+0.1** |
| | 1.0nm,0.2s | | | | | | |
| KST | | | | Lg | Lg | 17 13 12.3 | |
| | 13nm,0.6s | | | | | | |
| **NRN** | **Naryn** | **2.60** | **106** | ⇑*e*P | **Pn** | **17 12 33.4** | **+1.6** |
| | baz=5.0 | | | | | | |
| NRN | | | | ⇑*e*S | **Sn** | **17 13 05.0** | **+0.9** |
| | baz=5.0 | | | | | | |
| **KRBS** | **Karabastau** | **2.66** | **55** | *e*P | **Pg** | **17 12 39.2** | **-0.3** |
| | 0.9nm,0.2s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **17 13 14.6** | **+0.6** |
| | 8.0nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **2.66** | **55** | Pg | **Pg** | **17 12 39.2** | **-0.3** |
| | 0.9nm,0.2s | | | | | | |
| KRBS | | | | Lg | Lg | 17 13 14.6 | |
| | 8.0nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **2.92** | **70** | *e*P | **Pg** | **17 12 44.1** | **-0.3** |
| | 1.4nm,0.1s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **17 13 23.1** | **+0.9** |
| | 4.9nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **2.92** | **70** | Pg | **Pg** | **17 12 44.2** | **-0.3** |
| MTBS | | | | Lg | Lg | 17 13 23.1 | |
| **TNSS** | **Tian-Shan** | **3.26** | **74** | *e*P | **Pg** | **17 12 50.6** | **-0.4** |
| | 1.5nm,0.2s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **17 13 34.1** | **+0.9** |
| | 4.2nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.31** | **62** | *e*P | **Pg** | **17 12 50.3** | **-1.5** |
| | 0.5nm,0.2s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **17 13 33.8** | **-0.9** |
| | 10nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.31** | **62** | Pg | **Pg** | **17 12 50.3** | **-1.5** |
| | 1.5nm,0.7s | | | | | | |
| KTBS | | | | Lg | Lg | 17 13 33.8 | |
| | 10nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.37** | **72** | *e*P | **Pg** | **17 12 51.8** | **-1.2** |
| | 1.5nm,0.2s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **17 13 36.2** | **-0.3** |
| | 4.5nm,0.6s | | | | | | |

*IDC **24** 17:14:12.5±1.9, 10.°86N×125.°73E, h0km, mb3.8/7, mbtmp3.8/7, Error ellipse: s-maj=190.9km s-min=19.2km az=67.0*
**ISC 24 17:14:12.3**±2.5,**11.°02N**±0.°07×**126.°10E**±0.°07,**h2**km±15km, **n13**,σ1§**18**/19,**mb3.8/7,1C-4D,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLP** | **Palo** | **1.10** | **277** | ⇓*e*P | **Pn** | **17 14 34.8** | **+0.1** |
| PLP | | | | *e*S | **Sn** | **17 14 51.0** | **+0.4** |
| **LLP** | **Lapu-Lapu** | **2.21** | **252** | *e*P | **Pg** | **17 14 55.3** | **+0.7** |
| LLP | | | | *e*S | **Sg** | **17 15 24.2** | **+0.9** |
| **TBP** | **Tagbilaran** | **2.56** | **239** | ⇓*e*P | **Pb** | **17 14 59.0** | **0.0** |
| TBP | | | | *e*S | **Sg** | **17 15 35.5** | **+0.8** |
| **BIPH** | **Bislig** | **2.83** | **175** | ⇑*e*P | **Pn** | **17 14 59.7** | **+1.2** |
| BIPH | | | | *e*S | **Sg** | **17 15 42.0** | **-1.3** |
| **CGP** | **Cagayan de Oro** | **2.90** | **209** | ⇓*e*P | **Pb** | **17 15 04.0** | **-0.7** |
| CGP | | | | *e*S | **Sb** | **17 15 38.6** | **-2.0** |
| **RCP** | **Roxas** | **3.33** | **280** | ⇓*i*P | **Pb** | **17 15 09.6** | **-2.5** |
| RCP | | | | *e*S | **Sn** | **17 15 45.1** | **-0.4** |
| **WRA** | **Warramunga Arr** | **31.82** | **165** | P | **P** | **17 20 38.0** | **-0.6** |
| | 0.3nm,0.6s,baz=342,slow=9.5,SNR=2.5 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **35.31** | **168** | P | **P** | **17 21 09.3** | **+0.4** |
| | 0.2nm,0.3s,baz=345,slow=6.9,SNR=17 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.33** | **322** | P | **P** | **17 23 18.3** | **+0.2** |
| | 0.7nm,0.6s,baz=124,slow=8.0,SNR=11 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.89** | **331** | P | **P** | **17 23 36.4** | **-0.4** |
| | 1.0nm,0.5s,baz=112,slow=7.6,SNR=6.6 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.36** | **325** | P | **P** | **17 23 47.7** | **+0.1** |
| | 1.0nm,0.5s,baz=124,slow=7.0,SNR=8.7 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **60.95** | **325** | P | **P** | **17 24 28.6** | **+1.8** |
| | 0.5nm,0.6s,baz=93,slow=10,SNR=2.8 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **85.15** | **332** | P | **P** | **17 26 49.2** | **-0.6** |
| | 1.0nm,0.4s,baz=63,slow=6.3,SNR=10 | | | | | | |
| | 1.0nm,0.4s | | | | | | |

*IDC **24** 17:17:46.7±0.6,36.°85N×140.°32E,h0km,mb4.0/17, mbtmp4.0/19,ML4.2/2,MS3.1/2,Error ellipse: s-maj=16.0km s-min=13.6km az=100.0*
*JMA **24** 17:17:48.3±0.0,36.°8N±0.°1×140.°6E±0.°2,h8km,MD4.2/20, MV4.2/20,NORTHERN IBARAKI PREF*
*JMA Felt III J1 at NORTHERN IBARAKI PREF .*
*NIED **24** 17:17:48.3,36.°80N×140.°55E,h8km,MW3.9,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-7.23; Mθθ5.43; Mφφ1.80; Mrθ-1.72; Mθφ-2.34; Mφr2.01; Fault plane solution: M₀7.38000×10¹⁴ NP1: φs124.00000°,δ55.00000°,λ-82.00000°. NP2: φs290.00000°,δ36.00000°,λ-101.00000°.*
**ISC 24 17:17:47.7**±1.1,**36.°81N**±0.°03×**140.°44E**±0.°06,**h7**km±7km, **n52**,σ1§**25**/39,**mb4.0**/16,**Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.23** | **151** | P | **Pg** | **17 17 52.2** | **+0.1** |
| JHO | | | | S | **Sg** | **17 17 55.0** | **-0.2** |
| **JHO** | **Hitachi** | **0.23** | **151** | A | A | 17 17 52.2 | |
| | comp=E,54nm,0.7s,comp=N,107nm,0.7s | | | | | | |
| **JFFD** | **Fukushimafurud** | **0.30** | **20** | P | **Pg** | **17 17 54.1** | **+0.5** |
| JFFD | | | | S | **Sg** | **17 17 58.1** | **+0.6** |
| **JFFD** | **Fukushimafurud** | **0.30** | **20** | A | A | 17 17 54.1 | |
| | comp=E,22nm,1.2s,comp=N,13nm,1.8s | | | | | | |
| **ONAJ** | **Iwakimizuishiy** | **0.41** | **45** | P | **Pg** | **17 17 55.4** | **-0.3** |
| ONAJ | | | | *e*S | **Sg** | **17 18 00.7** | **-0.5** |
| **ONAJ** | **Iwakimizuishiy** | **0.41** | **45** | A | A | 17 17 55.4 | |
| | comp=E,24nm,0.3s,comp=N,18nm,0.3s | | | | | | |
| **JSB** | **Shiboa** | **0.44** | **291** | A | A | 17 17 58.7 | |
| | comp=E,15nm,5.0s,comp=N,12nm,5.2s | | | | | | |
| **JHYU** | **Hitachinakayam** | **0.48** | **165** | A | A | 17 17 57.3 | |
| | comp=E,27nm,0.5s,comp=N,26nm,0.4s | | | | | | |
| **JYT** | **Yasato** | **0.61** | **199** | P | **Pb** | **17 18 00.3** | **-0.4** |
| JYT | | | | S | **Sb** | **17 18 08.6** | **-1.0** |
| **JYT** | **Yasato** | **0.61** | **199** | A | A | 17 18 00.3 | |
| | comp=E,17nm,0.4s,comp=N,12nm,2.0s | | | | | | |
| **JFK** | **Kawauchi** | **0.66** | **32** | P | **Pg** | **17 17 59.9** | **-0.5** |
| JFK | | | | S | **Sg** | **17 18 08.2** | **-0.7** |
| **JOTO** | **OTAMA OYAMA** | **0.75** | **354** | P | **Pb** | **17 18 03.2** | **0.0** |
| JOTO | | | | S | **Sb** | **17 18 13.3** | **-0.4** |
| **JOTO** | **OTAMA OYAMA** | **0.75** | **354** | A | A | 17 18 03.2 | |
| | comp=E,26nm,0.7s,comp=N,18nm,0.4s | | | | | | |
| **JMST** | **Minamisoumatoc** | **0.98** | **21** | A | A | 17 18 06.5 | |
| | comp=E,11nm,0.4s,comp=N,8.0nm,0.4s | | | | | | |
| **JMM** | **Marumori** | **1.09** | **15** | A | A | 17 18 08.7 | |
| | comp=E,15nm,0.4s,comp=N,8.0nm,0.7s | | | | | | |
| **JYAR** | **Yonezawaarcadi** | **1.13** | **348** | A | A | 17 18 09.9 | |
| | comp=E,8.0nm,0.8s,comp=N,9.0nm,1.3s | | | | | | |
| **JSMT** | **Sammumatsuo** | **1.16** | **179** | A | A | 17 18 10.0 | |
| | comp=E,12nm,3.5s,comp=N,17nm,1.3s | | | | | | |
| **JYS** | **Shirataka** | **1.44** | **348** | A | A | 17 18 15.1 | |
| | comp=E,10.0nm,1.1s,comp=N,6.0nm,0.9s | | | | | | |
| **JGK** | **Kuni** | **1.46** | **261** | A | A | 17 18 16.3 | |
| | comp=E,4.0nm,1.5s,comp=N,3.0nm,3.5s | | | | | | |
| **JOU** | **Okura** | **1.56** | **7** | A | A | 17 18 16.5 | |
| | comp=E,15nm,0.7s,comp=N,15nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **1.81** | **262** | Pn | **Pn** | **17 18 17.5** | **-1.9** |
| | comp=N,3.7nm,0.3s,baz=86,slow=15,SNR=51 | | | | | | |
| MJAR | | | | Sn | **Sn** | **17 18 42.2** | **-0.3** |
| | comp=N,8.4nm,0.3s,baz=215,slow=44,SNR=3.4 | | | | | | |
| **JYA** | **Atsumi** | **1.87** | **342** | A | A | 17 18 21.7 | |
| | comp=E,6.0nm,1.1s,comp=N,6.0nm,0.9s | | | | | | |
| **JYK** | **Kaneyama** | **2.11** | **358** | A | A | 17 18 24.8 | |
| | comp=E,5.0nm,0.9s,comp=N,5.0nm,1.1s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **3.72** | **188** | Pn | **Pn** | **17 18 45.8** | **+0.2** |
| | comp=N,17nm,0.3s,baz=50,slow=17,SNR=2.0 | | | | | | |
| JHJ | | | | Sn | **Sn** | **17 19 31.6** | **+2.0** |
| | comp=N,17nm,0.3s,baz=80,slow=22,SNR=1.5 | | | | | | |
| | comp=N,48nm,0.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **7.48** | **12** | Pn | **Pn** | **17 19 37.3** | **+0.1** |
| | comp=N,6.4nm,0.3s,baz=214,slow=12,SNR=17 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **17 21 02.8** | **+0.4** |
| | comp=N,0.6nm,0.3s,baz=29,slow=3.6,SNR=1.0 | | | | | | |
| | comp=N,12nm,0.4s | | | | | | |
| **JNU** | **Nakatsue** | **8.66** | **248** | LR | LR | 17 23 15.8 | |
| | comp=N,103nm,20.1s,baz=128,slow=38 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.79** | **322** | Pn | **Pn** | **17 20 13.1** | **+4.3** |
| | comp=N,0.2nm,0.3s,baz=142,slow=13,SNR=3.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **20.28** | **31** | P | **P** | **17 22 24.4** | **+0.6** |
| | comp=N,2.4nm,0.8s,baz=217,slow=6.9,SNR=6.1 | | | | | | |
| | comp=N,2.4nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **23.46** | **169** | LR | LR | 17 30 37.7 | |
| | comp=N,61nm,20.9s,baz=262,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **27.26** | **305** | P | **P** | **17 23 31.6** | **-1.0** |
| | comp=N,1.0nm,0.7s,baz=104,slow=9.2,SNR=5.6 | | | | | | |
| | comp=N,1.0nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.71** | **119** | T | T | 17 53 29.2 | |
| | baz=313,slow=75,SNR=495 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.72** | **119** | T | T | 17 53 32.4 | |
| | baz=313,slow=75,SNR=655 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.73** | **119** | T | T | 17 53 31.0 | |
| | baz=313,slow=75,SNR=508 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.41** | **121** | T | T | 17 54 19.6 | |
| | baz=314,slow=76,SNR=1399 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.41** | **121** | T | T | 17 54 19.8 | |
| | baz=314,slow=76,SNR=689 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.42** | **121** | T | T | 17 54 20.8 | |
| | baz=314,slow=76,SNR=772 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.49** | **313** | P | **P** | **17 25 34.6** | **-0.5** |
| | comp=N,1.6nm,0.5s,baz=100,slow=7.2,SNR=8.4 | | | | | | |
| | comp=N,1.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.57** | **302** | P | **P** | **17 25 51.3** | **-1.0** |
| | comp=N,0.7nm,0.6s,baz=89,slow=9.2,SNR=6.2 | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.52** | **308** | P | **P** | **17 26 06.8** | **-0.9** |
| | comp=N,1.9nm,0.7s,baz=83,slow=8.1,SNR=17 | | | | | | |
| | comp=N,1.9nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **50.10** | **32** | P | **P** | **17 26 42.5** | **-0.5** |
| | comp=N,0.7nm,0.8s,baz=279,slow=7.2,SNR=6.8 | | | | | | |
| | comp=N,0.7nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **50.14** | **312** | P | **P** | **17 26 42.5** | **-1.0** |
| | comp=N,0.9nm,0.5s,baz=65,slow=8.4,SNR=5.7 | | | | | | |
| | comp=N,0.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **56.74** | **187** | P | **P** | **17 27 30.8** | **-1.4** |
| | comp=N,1.9nm,0.5s,baz=2.0,slow=7.4,SNR=26 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 28 30.5** | **+2.3** |
| | comp=N,0.6nm,0.5s,baz=360,slow=4.5,SNR=5.3 | | | | | | |
| | comp=N,1.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **60.47** | **187** | P | **P** | **17 27 58.0** | **-0.3** |
| | comp=N,0.9nm,0.7s,baz=0.9,slow=5.9,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 28 45.9** | **+3.0** |
| | comp=N,0.3nm,0.7s,baz=4.4,slow=5.0,SNR=1.6 | | | | | | |
| | comp=N,0.9nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **68.64** | **332** | P | **P** | **17 28 50.4** | **-0.8** |
| | comp=N,1.9nm,0.8s,baz=43,slow=8.4,SNR=2.0 | | | | | | |
| | comp=N,1.9nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **73.97** | **335** | P | **P** | **17 29 23.3** | **-0.2** |
| | comp=N,2.5nm,0.9s,baz=47,slow=8.5,SNR=5.2 | | | | | | |
| | comp=N,2.5nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **73.99** | **322** | P | **P** | **17 29 22.4** | **-1.3** |
| | comp=N,0.6nm,0.5s,baz=47,slow=7.6,SNR=1.7 | | | | | | |
| | comp=N,0.6nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **74.09** | **337** | P | **P** | **17 29 23.5** | **-0.7** |
| | comp=N,0.8nm,0.8s,baz=46,slow=5.3,SNR=1.8 | | | | | | |
| | comp=N,0.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.75** | **53** | P | **P** | **17 29 35.3** | **+0.8** |
| | comp=N,2.0nm,0.7s,baz=295,slow=6.2,SNR=3.9 | | | | | | |
| | comp=N,2.0nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **78.38** | **45** | P | **P** | **17 29 49.4** | **+0.1** |
| | comp=N,0.9nm,0.7s,baz=299,slow=3.1,SNR=5.9 | | | | | | |
| | comp=N,0.9nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **78.41** | **311** | P | **P** | **17 29 49.5** | **+0.2** |
| | comp=N,0.7nm,0.7s,baz=102,slow=4.2,SNR=5.6 | | | | | | |
| | comp=N,0.7nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.88** | **52** | P | **P** | **17 30 51.6** | **-0.9** |
| | comp=N,0.8nm,0.5s,baz=311,slow=4.2,SNR=5.2 | | | | | | |
| | comp=N,0.8nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **147.48** | **59** | PKPbc | **PKPbc** | **17 37 34.5** | **+0.7** |
| | comp=N,1.8nm,0.7s,baz=313,slow=4.0,SNR=7.0 | | | | | | |

*NEIC **24** 17:33:36.6±2.2,43.°60N±0.°07×127.°4W±0.°1,h10km±2km, mb3.9/9,ML3.3/78,Error ellipse: s-maj=16.0km s-min=10.8km az=247.0*
*IDC **24** 17:33:37.3±2.6,43.°69N×127.°07W,h0km,mb3.3/2, mbtmp3.6/9,ML3.4/6,MS3.2/5,Error ellipse: s-maj=38.6km s-min=14.0km az=62.0*
**ISC 24 17:33:36.1**±1.2,**43.°63N**±0.°08×**127.°5W**±0.°1,**h15**km,**n105**, σ1§**02**/98,**mb3.9/6,Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **J01E** | **Myrtle Point** | **2.62** | **99** | | **Pn** | **17 34 16.8** | **-1.1** |
| J01E | | | | | IAML | 17 34 52.5 | |
| | comp=N,177nm,0.4s | | | | | | |
| J01E | | | | | IAML | 17 34 53.2 | |
| | comp=E,169nm,0.3s | | | | | | |
| **KBO** | **Bosley Butte** | **2.77** | **120** | Pn | **Pn** | **17 34 17.9** | **-2.1** |
| **HEBO** | **Mount Hebo** | **3.10** | **58** | | **Pn** | **17 34 23.5** | **-1.0** |
| HEBO | | | | | IAML | 17 35 06.4 | |
| | comp=E,176nm,0.5s | | | | | | |
| HEBO | | | | | IAML | 17 35 08.5 | |
| | comp=N,130nm,0.7s | | | | | | |
| **DBO** | **Dodson Butte** | **3.13** | **98** | | **Pn** | **17 34 23.8** | **-1.1** |
| DBO | | | | | IAML | 17 35 07.3 | |
| | comp=E,78nm,0.8s | | | | | | |
| DBO | | | | | IAML | 17 35 13.3 | |
| | comp=N,49nm,1.0s | | | | | | |
| **COR** | **Corvallis** | **3.15** | **71** | | **Pn** | **17 34 24.5** | **-0.6** |
| COR | | | | | IAML | 17 35 11.8 | |
| | comp=N,58nm,0.9s | | | | | | |
| **KSXB** | **Camp Six Broad** | **3.20** | **123** | Pn | **Pn** | **17 34 24.1** | **-1.9** |
| **L02F** | **Cave Junction** | **3.24** | **116** | | **Pn** | **17 34 25.7** | **-0.6** |
| **BUCK** | **Buck Mountain** | **3.29** | **79** | | **Pn** | **17 34 26.7** | **-0.4** |
| BUCK | | | | | IAML | 17 35 09.0 | |
| | comp=E,53nm,2.4s | | | | | | |
| BUCK | | | | | IAML | 17 35 12.9 | |
| | comp=N,48nm,0.6s | | | | | | |
| **KRMB** | **Red Mountain** | **3.37** | **127** | Pn | **Pn** | **17 34 26.4** | **-1.8** |
| **G03D** | **McMinnville, O** | **3.41** | **61** | | **Pn** | **17 34 28.8** | **+0.2** |
| G03D | | | | | IAML | 17 35 14.4 | |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| I05D | | | | | IAML | | | 17 35 40.9 | |
| | comp=N,58nm,0.2s | | | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.50** | **66** | | | **Pn** | | **17 34 45.0** | **+1.2** |
| HOOD | | | | | IAML | | | 17 35 24.0 | |
| | comp=N,51nm,0.8s | | | | | | | | |
| HOOD | | | | | IAML | | | 17 35 55.3 | |
| | comp=E,34nm,1.6s | | | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.54** | **33** | | | **Pn** | | **17 34 43.7** | **-0.5** |
| **J05D** | **Fort Rock, OR** | **4.55** | **92** | | | **Pn** | | **17 34 44.3** | **-0.3** |
| J05D | | | | | IAML | | | 17 36 04.4 | |
| | comp=N,18nm,3.3s | | | | | | | | |
| **G05A** | **Wamic** | **4.69** | **68** | | | **Pn** | | **17 34 46.8** | **+0.5** |
| G05A | | | | | IAML | | | 17 35 20.7 | |
| | comp=N,28nm,0.8s | | | | | | | | |
| G05A | | | | | IAML | | | 17 35 31.8 | |
| | comp=E,28nm,1.5s | | | | | | | | |
| **PINE** | **Pine Mountain** | **4.74** | **86** | Pn | | **Pn** | | **17 34 47.3** | **+0.2** |
| PINE | | | | | IAML | | | 17 35 49.4 | |
| | comp=E,15nm,1.7s | | | | | | | | |
| PINE | | | | | IAML | | | 17 35 57.5 | |
| | comp=N,14nm,2.8s | | | | | | | | |
| **C03A** | **Quillayute Air** | **4.77** | **24** | Pn | | **Pn** | | **17 34 46.8** | **-0.6** |
| **O02D** | **Mt. Diablo Mer** | **4.91** | **133** | Pn | | **Pn** | | **17 34 50.2** | **+0.8** |
| **LON** | **Longmire** | **5.07** | **50** | | | **Pn** | | **17 34 52.0** | **+0.4** |
| LON | | | | | IAML | | | 17 35 55.5 | |
| | comp=N,28nm,0.3s | | | | | | | | |
| LON | | | | | IAML | | | 17 35 55.6 | |
| | comp=E,30nm,0.2s | | | | | | | | |
| **GNW** | **Green Mountain** | **5.11** | **38** | Pn | | **Pn** | | **17 34 50.9** | **-1.1** |
| **G06A** | **Carlson Farm,** | **5.15** | **69** | | | **Pn** | | **17 34 52.4** | **-0.3** |
| G06A | | | | | IAML | | | 17 35 40.9 | |
| | comp=E,12nm,3.3s | | | | | | | | |
| **B04A** | **Port Angeles** | **5.22** | **31** | Pn | | **Pn** | | **17 34 54.0** | **+0.4** |
| **D05A** | **Enumclaw** | **5.25** | **45** | | | **Pn** | | **17 34 54.3** | **+0.3** |
| **OZB** | **Mount Ozzard** | **5.50** | **14** | Pn | | **Pn** | | **17 34 57.3** | **-0.2** |
| **CLRS** | **Cowichan Lake** | **5.69** | **23** | Pn | | **Pn** | | **17 34 58.8** | **-1.2** |
| **HOPS** | **Hopland Field** | **5.69** | **143** | | | **Pn** | | **17 35 00.4** | **+0.3** |
| **PGC** | **Sidney** | **5.75** | **28** | | | **Pn** | | **17 34 59.9** | **-0.9** |
| **I07A** | **Izee** | **5.78** | **83** | Pn | | **Pn** | | **17 35 01.2** | **-0.1** |
| **MXC** | **Moxie City** | **5.87** | **57** | | | **Pn** | | **17 35 03.1** | **+0.6** |
| **GDXM** | **Geysers** | **5.97** | **142** | | | **Pn** | | **17 35 04.7** | **+0.7** |
| **LTY** | **Liberty** | **6.00** | **50** | | | **Pn** | | **17 35 05.3** | **+0.9** |
| **ORV** | **Oroville** | **6.05** | **130** | Pn | | **Pn** | | **17 35 07.0** | **+2.0** |
| **E07A** | **Sunnyside** | **6.14** | **59** | | | **Pn** | | **17 35 06.5** | **+0.4** |
| **HAWA** | **Hanford** | **6.27** | **61** | Pn | | **Pn** | | **17 35 08.5** | **+0.5** |
| **G08A** | **Pilot Rock** | **6.32** | **72** | Pn | | **Pn** | | **17 35 08.9** | **+0.2** |
| **J08A** | **Circle Bar Ran** | **6.55** | **89** | | | **Pn** | | **17 35 12.4** | **+0.5** |
| **CBB** | **Campbell River** | **6.57** | **12** | | | **Pn** | | **17 35 12.7** | **+0.7** |
| **E08A** | **Dider Farm, El** | **6.61** | **61** | | | **Pn** | | **17 35 13.0** | **+0.4** |
| **AFDM** | **Forest Hills D** | **6.77** | **131** | Pn | | **Pn** | | **17 35 16.0** | **+1.1** |
| **D08A** | **Wollman Farm,** | **6.93** | **57** | Pn | | **Pn** | | **17 35 16.6** | **-0.4** |
| **B08A** | **Colville Reser** | **7.38** | **47** | Pn | | **Pn** | | **17 35 23.1** | **-0.1** |
| **BMO** | **Blue Mountains** | **7.40** | **77** | Pn | | **Pn** | | **17 35 23.5** | **-0.2** |
| **F10A** | **Beach Ranch, E** | **7.65** | **69** | Pn | | **Pn** | | **17 35 26.9** | **-0.2** |
| **CMB** | **Columbia Colle** | **7.75** | **134** | Pn | | **Pn** | | **17 35 30.4** | **+2.1** |
| **NEW** | **Newport** | **8.57** | **54** | Pn | | **Pn** | | **17 35 38.9** | **-0.7** |
| **NEW** | **Newport** | **8.57** | **54** | Pn | | **Pn** | | **17 35 40.6** | **+1.1** |
| | comp=E,1.4nm,0.3s,baz=248,slow=13,SNR=8.8 | | | | | | | | |
| NEW | | | | | LR | LR | | 17 38 37.4 | |
| | comp=E,126nm,20.0s,baz=267,slow=36 comp=E,4.2nm,0.3s | | | | | | | | |
| **BBB** | **Bella Bella** | **8.57** | **357** | Pn | | **Pn** | | **17 35 40.6** | **+1.1** |
| | comp=E,0.3nm,0.3s,baz=190,slow=13,SNR=4.6 | | | | | | | | |
| BBB | | | | | LR | LR | | 17 38 22.9 | |
| | comp=E,77nm,18.3s,baz=177,slow=34 comp=E,9.8nm,0.8s | | | | | | | | |
| **LHV** | **Little Huntoon** | **8.65** | **125** | | | **Pn** | | **17 35 40.7** | **0.0** |
| **NVAR** | **Mina Array Bea** | **8.66** | **124** | Pn | | **Pn** | | **17 35 43.0** | **+2.1** |
| | comp=E,0.1nm,0.3s,baz=298,slow=14,SNR=7.7 | | | | | | | | |
| NVAR | | | | | LR | LR | | 17 39 05.7 | |
| | comp=E,110nm,19.0s,baz=280,slow=38 comp=E,1.1nm,0.7s | | | | | | | | |
| **NV11** | **Mina Array Sit** | **8.75** | **123** | | | **Pn** | | **17 35 42.6** | **+0.5** |
| **MDPB** | **Devils Postpil** | **8.75** | **130** | | | **Pn** | | **17 35 44.1** | **+1.8** |
| **OMMB** | **Old Mammoth Mi** | **8.81** | **130** | Pn | | **Pn** | | **17 35 45.6** | **+2.5** |
| **HG4B** | **Hotspring** | **9.02** | **345** | Pn | | **Pn** | | **17 35 48.0** | **+2.3** |
| **ELK** | **Elko** | **9.53** | **103** | Pn | | **Pn** | | **17 35 55.3** | **+2.4** |
| | comp=E,0.1nm,0.3s,baz=289,slow=12,SNR=3.3 comp=E,1.1nm,0.8s | | | | | | | | |
| **MSO** | **Missoula** | **10.07** | **67** | Pn | | **Pn** | | **17 36 00.4** | **+0.3** |
| **BPMT** | **Black Pine Rid** | **10.32** | **69** | | | **Pn** | | **17 36 02.9** | **-0.8** |
| **ISA** | **Isabella, Lake** | **10.55** | **136** | Pn | | **Pn** | | **17 36 07.8** | **+1.0** |
| **BOZ** | **Bozeman (W)** | **11.46** | **75** | Pn | | **Pn** | | **17 36 19.7** | **+0.4** |
| **YHL** | **Hebgen Lake** | **11.75** | **78** | Pn | | **Pn** | | **17 36 23.1** | **-0.3** |
| **SHPR** | **Sheep Range** | **11.81** | **123** | Pn | | **Pn** | | **17 36 24.8** | **+0.8** |
| **YHH** | **Holmes Hill** | **11.99** | **79** | Pn | | **Pn** | | **17 36 27.0** | **+0.4** |
| **TPAW** | **Teton Pass** | **11.99** | **85** | Pn | | **Pn** | | **17 36 26.4** | **-0.2** |
| **YPP** | **Pitchstone Pla** | **12.04** | **81** | Pn | | **Pn** | | **17 36 26.5** | **-0.7** |
| **H17A** | **Grant Village** | **12.19** | **81** | Pn | | **Pn** | | **17 36 28.2** | **-1.2** |
| **ELS** | **Elsinore Mount** | **12.68** | **138** | Pn | | **Pn** | | **17 36 36.2** | **+0.3** |
| **PD31** | **Pinedale Array** | **13.10** | **88** | Pn | | **Pn** | | **17 36 42.4** | **+0.7** |
| **PDAR** | **Pinedale Array** | **13.10** | **88** | Pn | | **Pn** | | **17 36 42.2** | **+0.4** |
| **PDAR** | **Pinedale Array** | **13.10** | **88** | Pn | | **Pn** | | **17 36 44.6** | **+2.8** |
| | comp=E,2.3nm,0.9s,baz=276,slow=13,SNR=6.2 | | | | | | | | |
| PDAR | | | | | LR | LR | | 17 41 30.5 | |
| | comp=E,94nm,21.0s,baz=284,slow=37 | | | | | | | | |
| **DLBC** | **Dease Lake** | **14.91** | **355** | Pn | | **P** | | **17 37 11.1** | **-0.8** |
| | comp=E,0.1nm,0.3s,baz=188,slow=14,SNR=4.7 comp=E,2.8nm,0.9s | | | | | | | | |
| **R32K** | **Eaglecrest** | **15.31** | **346** | Pn | | **P** | | **17 37 13.0** | **-3.2** |
| **Q24A** | **Divide** | **17.39** | **98** | P | | **Pn** | | **17 37 37.5** | **-1.0** |
| **FFC** | **Flin Flon** | **19.91** | **47** | P | | **P** | | **17 38 06.2** | **-0.6** |
| **YKA** | **Yellowknife Ar** | **20.34** | **17** | P | | Pn | | 17 38 14.1 | +0.5 |
| | comp=E,1.2nm,0.8s,baz=207,slow=10,SNR=4.2 comp=E,1.2nm,0.8s | | | | | | | | |
| **BCAR** | **Beaver Creek A** | **21.17** | **342** | P | | **P** | | **17 38 19.7** | **-0.8** |
| **DAWY** | **Dawson** | **21.57** | **346** | P | | **P** | | **17 38 24.4** | **-0.5** |
| DAWY | | | | | IAmb | IAmb | | 17 38 37.1 | |
| | comp=Z,7.6nm,1.4s | | | | | | | | |
| **J30M** | **Hart River** | **21.58** | **350** | P | | **P** | | **17 38 24.9** | **-0.1** |
| J30M | | | | | IAmb | IAmb | | 17 38 33.6 | |
| | comp=Z,5.6nm,1.3s | | | | | | | | |
| **I30M** | **Mount Dempster** | **22.20** | **350** | P | | **P** | | **17 38 31.5** | **-0.2** |
| **DHY** | **Denali Highway** | **22.63** | **336** | P | | **P** | | **17 38 35.2** | **-1.1** |
| DHY | | | | | IAmb | IAmb | | 17 38 38.0 | |
| | comp=Z,6.5nm,1.2s | | | | | | | | |
| **I26K** | **Coal Creek Min** | **23.42** | **343** | P | | **P** | | **17 38 44.3** | **+0.1** |
| **TXAR** | **Lajitas Array** | **23.76** | **119** | P | | **P** | | **17 38 49.2** | **+1.2** |
| | comp=Z,0.6nm,0.6s,baz=299,slow=10.0,SNR=1.6 comp=Z,0.6nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **23.83** | **339** | P | | **P** | | **17 38 47.7** | **-0.5** |
| **ILAR** | **Eielson Array** | **23.83** | **339** | P | | **P** | | **17 38 47.5** | **-0.7** |
| | comp=Z,0.3nm,0.7s,baz=144,slow=7.8,SNR=4.7 | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **23.85** | **102** | P | | **P** | | **17 38 47.5** | **-1.3** |
| WMOK | | | | | IAmb | IAmb | | 17 38 51.1 | |
| | comp=Z,4.5nm,0.9s | | | | | | | | |
| **SADO** | **Sadowa** | **34.27** | **71** | LR | | LR | | 17 54 37.0 | |
| | comp=Z,146nm,18.1s,baz=118,slow=37 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **59.14** | **268** | T | | T | | 18 47 33.3 | |
| | baz=50,slow=75,SNR=52 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **59.14** | **268** | T | | T | | 18 47 23.6 | |
| | baz=50,slow=75,SNR=46 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **59.15** | **268** | T | | T | | 18 47 26.0 | |
| | baz=50,slow=75,SNR=43 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **60.06** | **267** | T | | T | | 18 48 30.9 | |
| | baz=50,slow=75,SNR=101 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **60.07** | **267** | T | | T | | 18 48 31.3 | |
| | baz=50,slow=75,SNR=86 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **60.08** | **267** | T | | T | | 18 48 27.6 | |
| | baz=50,slow=75,SNR=77 | | | | | | | | |

*IDC **24** 17:42:03.6±1.2,39˚.39N×20˚.68E,h0km,mb3.4/8, mbtmp3.4/13,ML3.5/4,Error ellipse: s-maj=22.1km s-min=16.6km az=51.0*
*PDG **24** 17:42:06.5±0.6,39˚.48N×20˚.59E,h9km±1km,ML3.6/8, Error ellipse: s-maj=0.9km s-min=1.1km az=0.0*
*TIR **24** 17:42:07.2,39˚.41N×20˚.63E,h32km,Md3.0, Ml3.5*
*THE **24** 17:42:07.9,39˚.43N×20˚.75E,h9km±2km,ML3.3/5,Error ellipse: s-maj=2.5km s-min=0.9km az=248.0*
*BEO **24** 17:42:07.2±0.7,39˚.34N×20˚.52E,h12km±3km,ML3.6/4*
*ATH **24** 17:42:08.1,39˚.43N×20˚.72E,h12km±3km,ML3.2/1,Error ellipse: s-maj=3.8km s-min=1.1km az=266.0*

**ISC 24 17:42:07.8±0.9,39˚.40N±0˙.02×20˚.69E±0˙.03,h26km±7km, n128,σ1§44/167,mb3.5/8,3C-7D,Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **IGT** | **Igoumenitsa** | **0.30** | **295** | P | | **Pb** | **17 42 14.4** | | **-0.6** |
| | baz=298 | | | | | | | | |
| IGT | | | | S | | **Sb** | **17 42 20.2** | | **+0.3** |
| | baz=298 | | | | | | | | |
| IGT | | | | | AMP | | | | |
| | comp=N,23nm,0.3s,baz=298 | | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.30** | **295** | P | | **Pb** | **17 42 14.3** | | **-0.6** |
| IGT | | | | S | | **Sb** | **17 42 19.7** | | **-0.2** |
| | comp=N,6μm,0.3s | | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.30** | **295** | P | | **Pb** | **17 42 14.4** | | **-0.6** |
| IGT | | | | S | | **Sb** | **17 42 19.5** | | **-0.3** |
| IGT | | | | | AML | AML | 17 42 22.1 | | |
| | comp=E,11485μm,0.4s | | | | | | | | |
| IGT | | | | | AML | AML | 17 42 23.1 | | |
| | comp=N,12468μm,0.2s | | | | | | | | |
| **LKD2** | **Lefkada island** | **0.61** | **182** | P | | **Pb** | **17 42 20.1** | | **+0.1** |
| | baz=178 | | | | | | | | |
| LKD2 | | | | S | | **Sn** | **17 42 30.1** | | **+0.2** |
| | baz=178 | | | | | | | | |
| LKD2 | | | | | AMP | | | | |
| | comp=E,7.9nm,0.4s,baz=178 | | | | | | | | |
| **LKD2** | **Lefkada island** | **0.61** | **182** | P | | **Pb** | **17 42 20.0** | | **+0.1** |
| LKD2 | | | | S | | **Sn** | **17 42 30.3** | | **+0.4** |
| | comp=E,3μm,0.6s | | | | | | | | |
| **LKD2** | **Lefkada island** | **0.61** | **182** | P | | **Pb** | **17 42 20.4** | | **+0.4** |
| **KASA** | **Kassiopi** | **0.68** | **301** | P | | **Pb** | **17 42 20.7** | | **-0.3** |
| **NYDR** | **Nydri-Lefkada** | **0.69** | **179** | P | | **Pb** | **17 42 20.9** | | **-0.3** |
| **NYDR** | **Nydri-Lefkada** | **0.69** | **179** | P | | **Pb** | **17 42 21.1** | | **0.0** |
| **SRN** | **Sarande** | **0.71** | **312** | P | | **Pb** | **17 42 21.0** | | **-0.6** |
| | baz=315 | | | | | | | | |
| SRN | | | | S | | **Sn** | **17 42 32.1** | | **-0.2** |
| | baz=315 | | | | | | | | |
| SRN | | | | | AMP | | | | |
| | comp=E,3.3nm,0.4s,baz=315 | | | | | | | | |
| **DRAG** | **Dragano-Lefkad** | **0.72** | **187** | P | | **Pn** | **17 42 23.0** | | **+0.6** |
| **DRAG** | **Dragano-Lefkad** | **0.72** | **187** | P | | **Pn** | **17 42 23.0** | | **+0.6** |
| **KEK** | **Kerkira** | **0.75** | **294** | P | | **Pb** | **17 42 21.9** | | **-0.4** |
| KEK | | | | S | | **Sn** | **17 42 34.8** | | **+1.4** |
| | comp=E,2μm,0.5s | | | | | | | | |
| **KEK** | **Kerkira** | **0.75** | **294** | P | | **Pb** | **17 42 22.0** | | **-0.4** |
| **EVGI** | **Lefkada island** | **0.78** | **182** | P | | **Pb** | **17 42 23.0** | | **+0.2** |
| **PENT** | **Pentalofos** | **0.86** | **23** | P | | **Pb** | **17 42 23.0** | | **-1.3** |
| **FSK** | **Fiskardo** | **0.95** | **186** | P | | **Pb** | **17 42 25.8** | | **+0.2** |
| **EVR** | **Evrytania** | **1.00** | **119** | P | | **Pn** | **17 42 26.2** | | **0.0** |
| **EVR** | **Evrytania** | **1.00** | **119** | P | | **Pn** | **17 42 26.2** | | **0.0** |
| **PVO** | **Paravola** | **1.02** | **140** | P | | **Pn** | **17 42 26.4** | | **0.0** |
| **NEST** | **Nestorio** | **1.05** | **15** | P | | **Pn** | **17 42 26.7** | | **-0.2** |
| **MAKR** | **Makrakomi, Fth** | **1.19** | **109** | P | | **Pn** | **17 42 28.8** | | **0.0** |
| **DMLN** | **Damoulianata-K** | **1.19** | **192** | P | | **Pn** | **17 42 30.2** | | **+0.5** |
| **KBN** | **Korca** | **1.22** | **4** | P | | **Pb** | **17 42 30.3** | | **0.0** |
| | baz=5.0 | | | | | | | | |
| KBN | | | | S | | **Sb** | **17 42 47.9** | | **+2.2** |
| | baz=5.0 | | | | | | | | |
| KBN | | | | | AMP | | | | |
| | comp=N,3.9nm,0.9s,baz=5.0 | | | | | | | | |
| **TYRN** | **Tyrnavos** | **1.23** | **75** | P | | **Pn** | **17 42 28.2** | | **-1.2** |
| TYRN | | | | S | | **Sb** | **17 42 46.4** | | **+0.5** |
| **TYRN** | **Tyrnavos** | **1.23** | **75** | P | | **Pn** | **17 42 29.0** | | **-0.3** |
| **ANX** | **Ano Chora** | **1.25** | **130** | P | | **Pn** | **17 42 29.9** | | **+0.1** |
| **PSDA** | **Pessada-Kefalo** | **1.29** | **184** | P | | **Pb** | **17 42 30.9** | | **-0.5** |
| **PSDA** | **Pessada-Kefalo** | **1.29** | **184** | P | | **Pb** | **17 42 31.2** | | **-0.1** |
| **EFP** | **Efpalio** | **1.36** | **135** | P | | **Pb** | **17 42 33.3** | | **+0.7** |
| **VLO** | **Vlora** | **1.41** | **320** | P | | **Pb** | **17 42 33.6** | | **+0.2** |
| | baz=321 | | | | | | | | |
| VLO | | | | | AMP | | | | |
| | comp=N,6.7nm,0.4s,baz=321 | | | | | | | | |
| **UPR** | **University Cam** | **1.41** | **142** | P | | **Pb** | **17 42 34.1** | | **+0.7** |
| **FNA** | **Florina** | **1.48** | **21** | P | | **Pb** | **17 42 34.2** | | **-0.4** |
| | baz=22 | | | | | | | | |
| FNA | | | | S | | **Sb** | **17 42 55.7** | | **+2.7** |
| | baz=22 | | | | | | | | |
| FNA | | | | | AMP | | | | |
| | comp=N,2.4nm,0.5s,baz=22 | | | | | | | | |
| **FNA** | **Florina** | **1.48** | **21** | P | | **Pb** | **17 42 33.9** | | **-0.8** |
| **FNA** | **Florina** | **1.48** | **21** | *e*Pn | | **Pb** | **17 42 34.4** | | **-0.2** |
| FNA | | | | *e*Sn | | **Sb** | **17 42 56.0** | | **+3.0** |
| **FNA** | **Florina** | **1.48** | **21** | P | | **Pb** | **17 42 33.8** | | **-0.8** |
| **KTI** | **Kastanea** | **1.48** | **48** | P | | **Pn** | **17 42 33.6** | | **+0.7** |
| **AXAR** | **Agios Charalam** | **1.66** | **112** | P | | **Pb** | **17 42 37.3** | | **-0.4** |
| **LTHK** | **Lithakia** | **1.69** | **176** | P | | **Pb** | **17 42 37.9** | | **-0.4** |
| **OHR** | **Ohrid** | **1.71** | **3** | *e*Pn | | **Pb** | **17 42 39.5** | | **+0.9** |
| OHR | | | | *e*Sn | | **Sb** | **17 43 00.7** | | **+1.1** |
| **OHR** | **Ohrid** | **1.71** | **3** | *i* Pn | | **Pb** | **17 42 39.3** | | **+0.7** |
| **KLV** | **Kalavryta, Ach** | **1.77** | **139** | P | | **Pb** | **17 42 38.9** | | **-0.8** |
| **SCTE** | **Santa Cesarea** | **1.84** | **292** | P | | **Pn** | **17 42 38.9** | | **+1.3** |
| | baz=293 | | | | | | | | |
| SCTE | | | | S | | **Sb** | **17 43 03.6** | | **+0.3** |
| | baz=293 | | | | | | | | |
| SCTE | | | | | AMP | | | | |
| | comp=N,0.9nm,0.4s,baz=293 | | | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.84** | **292** | P | | **Pn** | **17 42 39.0** | | **+1.3** |
| **GUR** | **Goura** | **1.96** | **138** | P | | **Pb** | **17 42 41.6** | | **-1.2** |
| **TIR** | **Tirane** | **2.04** | **342** | P | | **Pb** | **17 42 42.6** | | **-1.5** |
| | baz=344 | | | | | | | | |
| TIR | | | | S | | **Sb** | **17 43 08.4** | | **-0.8** |
| | baz=344 | | | | | | | | |
| **TIR** | **Tirane** | **2.04** | **342** | *e*Pn | | **Pb** | **17 42 42.7** | | **-1.5** |
| **THE** | **Thessaloniki** | **2.14** | **54** | P | | **Pn** | **17 42 43.1** | | **+1.3** |
| **HORT** | **Hortiatis** | **2.20** | **56** | P | | **Pn** | **17 42 43.4** | | **+0.6** |
| **VIL2** | **Platees** | **2.34** | **120** | P | | **Pn** | **17 42 46.4** | | **+1.8** |
| **VAY** | **Valandovo** | **2.40** | **36** | *e*Pn | | **Pb** | **17 42 49.1** | | **-1.1** |
| VAY | | | | *e*Sn | | **Sb** | **17 43 18.5** | | **-0.8** |
| **VAY** | **Valandovo** | **2.40** | **36** | *i* Pn | | **Pb** | **17 42 48.9** | | **-1.3** |
| **KNT** | **Kendrikon** | **2.44** | **43** | P | | **Pn** | **17 42 47.0** | | **+1.0** |
| **SOH** | **Sokhos** | **2.49** | **54** | P | | **Pn** | **17 42 48.3** | | **+1.7** |
| **PYL** | **PYLOS** | **2.64** | **161** | P | | **Pn** | **17 42 50.0** | | **+1.3** |
| **OUR** | **Ouranopolis** | **2.70** | **69** | P | | **Pn** | **17 42 50.8** | | **+1.3** |
| **PUK** | **Puka** | **2.71** | **347** | P | | **Pn** | **17 42 51.7** | | **+2.0** |
| | baz=349 | | | | | | | | |
| **SRS** | **Serrai** | **2.81** | **51** | P | | **Pn** | **17 42 52.4** | | **+1.4** |
| **SRS** | **Serrai** | **2.81** | **51** | *e*Pn | | **Pn** | **17 42 52.4** | | **+1.4** |
| SRS | | | | *e*Sn | | **Sb** | **17 43 28.3** | | **-2.8** |
| **SRS** | **Serrai** | **2.81** | **51** | P | | **Pn** | **17 42 52.0** | | **+1.0** |
| **DION** | **Dionisos Attik** | **2.86** | **117** | P | | **Pn** | **17 42 53.9** | | **+2.1** |
| **KOKK** | **Kokkinochori,** | **2.91** | **60** | P | | **Pn** | **17 42 53.3** | | **+0.9** |
| **BCI** | **Bajram Curri** | **3.00** | **351** | P | | **Pn** | **17 42 56.2** | | **+2.5** |
| | baz=352 | | | | | | | | |
| **DRME** | **Dracevica, Mon** | **3.01** | **338** | *e*Pn | | **Pn** | **17 42 54.6** | | **+0.8** |
| **DRME** | **Dracevica, Mon** | **3.01** | **338** | *i* Pn | | **Pn** | **17 42 54.4** | | **+0.6** |
| DRME | | | | *i* Sn | | **Sn** | **17 43 30.8** | | **+1.9** |
| **BUM** | **Brajici-Budva** | **3.20** | **335** | *i* Pn | | **Pn** | **17 42 56.4** | | **-0.1** |
| **PDG** | **Podgorica** | **3.21** | **341** | *e*Pn | | **Pn** | **17 42 54.6** | | **-2.0** |
| **PDG** | **Podgorica** | **3.21** | **341** | *i* Pn | | **Pn** | **17 42 57.2** | | **+0.6** |
| PDG | | | | *i* Sn | | **Sn** | **17 43 36.5** | | **+2.5** |
| **PVY** | **Plav** | **3.24** | **350** | ⇓*i* Pn | | **Pn** | **17 42 57.6** | | **+0.6** |
| PVY | | | | *i* Sn | | **Sn** | **17 43 36.4** | | **+1.6** |
| **CEME** | **Cevo** | **3.41** | **337** | ⇑*i* Pn | | **Pn** | **17 42 59.9** | | **+0.5** |
| CEME | | | | *i* Sn | | **Sn** | **17 43 40.5** | | **+1.4** |
| **BARS** | **Barje** | **3.52** | **14** | *e*Pn | | **Pn** | **17 43 02.5** | | **+1.7** |
| BARS | | | | *e*Sg | | Sb | 17 44 03.1 | +12 | |
| **IVA** | **Berane** | **3.52** | **350** | ⇓*i* Pn | | **Pn** | **17 43 03.3** | | **+2.4** |
| IVA | | | | *i* Sn | | **Sn** | **17 43 44.7** | | **+3.0** |
| **KOME** | **Kolasin** | **3.56** | **346** | ⇑*i* Pn | | **Pn** | **17 43 01.8** | | **+0.4** |
| KOME | | | | *i* Sn | | **Sn** | **17 43 45.3** | | **+2.7** |
| **NKME** | **Niksic** | **3.61** | **339** | ⇓*i* Pn | | **Pn** | **17 43 03.6** | | **+1.5** |
| NKME | | | | *i* Sn | | **Sn** | **17 43 45.5** | | **+1.7** |
| **VTS** | **Vitosha** | **3.75** | **30** | *e*Pn | | **Pn** | **17 43 06.4** | | **+2.3** |
| VTS | | | | *e*Sg | | Sb | 17 44 09.0 | +11 | |
| **TREB** | **Trebinje** | **3.75** | **333** | *e*Pn | | **Pn** | **17 43 04.0** | | **0.0** |
| TREB | | | | *e*Sn | | **Sn** | **17 43 47.6** | | **+0.2** |
| TREB | | | | *e*Sg | | **Sb** | **17 44 06.0** | | **+7.6** |
| **TREB** | **Trebinje** | **3.75** | **333** | *e*Pn | | **Pn** | **17 43 03.6** | | **-0.4** |
| **SELS** | **Selova** | **3.83** | **5** | *e*Pn | | **Pn** | **17 43 06.7** | | **+1.6** |
| **BRY** | **Bratogost** | **3.85** | **336** | *e*Pn | | **Pn** | **17 43 05.5** | | **0.0** |
| **BRY** | **Bratogost** | **3.85** | **336** | ⇑*i* Pn | | **Pn** | **17 43 05.1** | | **-0.4** |
| **SJES** | **Sjenica** | **3.89** | **352** | *e*Pn | | **Pn** | **17 43 07.9** | | **+1.9** |
| **SJES** | **Sjenica** | **3.89** | **352** | *e*Pn | | **Pn** | **17 43 07.4** | | **+1.4** |
| **UPM** | **Unac-Piva** | **4.03** | **341** | *e*Pn | | **Pn** | **17 43 09.0** | | **+1.0** |
| **UPM** | **Unac-Piva** | **4.03** | **341** | *i* Pn | | **Pn** | **17 43 08.5** | | **+0.5** |
| UPM | | | | *i* Sn | | **Sn** | **17 43 55.6** | | **+1.2** |
| **ANKY** | **Antikythira Is** | **4.09** | **149** | P | | **Pn** | **17 43 11.0** | | **+2.3** |
| **STON** | **Ston** | **4.13** | **328** | *e*Pn | | **Pn** | **17 43 09.1** | | **-0.1** |
| STON | | | | *e*Sn | | **Sn** | **17 43 56.1** | | **-0.6** |
| STON | | | | *e*Lg | | Lg | 17 44 15.2 | | |
| **STON** | **Ston** | **4.13** | **328** | *e*Pn | | **Pn** | **17 43 08.9** | | **-0.3** |
| **ZAPS** | **Zavoj** | **4.13** | **20** | *e*Pn | | **Pn** | **17 43 11.5** | | **+2.2** |
| **RUDO** | **Rudo** | **4.33** | **347** | *e*Pn | | **Pn** | **17 43 12.6** | | **+0.7** |
| **GRUS** | **Gruza** | **4.48** | **0** | *e*Pn | | **Pn** | **17 43 15.2** | | **+1.2** |
| **BBLS** | **Lazi&#263i** | **4.56** | **348** | *e*Pn | | **Pn** | **17 43 16.2** | | **+1.0** |
| **BBLS** | **Lazi&#263i** | **4.56** | **348** | *e*Pn | | **Pn** | **17 43 16.1** | | **+0.9** |
| **DIVS** | **Divibare** | **4.72** | **354** | *e*Pn | | **Pn** | **17 43 18.2** | | **+0.8** |
| **TRUS** | **Trudelj** | **4.82** | **358** | *e*Pn | | **Pn** | **17 43 19.4** | | **+0.7** |
| **HAPS** | **Han Pijesak,Bl** | **4.86** | **345** | *e*Pn | | **Pn** | **17 43 20.2** | | **+0.9** |
| **TEKS** | **Tekeris** | **5.21** | **351** | *e*Pn | | **Pn** | **17 43 24.5** | | **+0.4** |
| TEKS | | | | *e*Sn | | **Sn** | **17 44 23.3** | | **-0.1** |
| **TEKS** | **Tekeris** | **5.21** | **351** | *e*Pn | | **Pn** | **17 43 23.9** | | **-0.2** |
| **IDI** | **Anoyia** | **5.30** | **140** | Pn | | **Pn** | **17 43 25.1** | | **-0.2** |
| | comp=N,3.7nm,0.6s,baz=299,slow=10,SNR=6.0 | | | | | | | | |
| IDI | | | | Sn | | **Sn** | **17 44 24.1** | | **-1.4** |
| | comp=N,1.3nm,0.3s,baz=116,slow=20,SNR=3.5 | | | | | | | | |
| **FRGS** | **Fruska Gora** | **5.79** | **354** | *e*Pn | | **Pn** | **17 43 32.3** | | **+0.3** |
| **BLY** | **Banja Luka** | **5.94** | **335** | *e*Pn | | **Pn** | **17 43 36.4** | | **+2.3** |
| **BLY** | **Banja Luka** | **5.94** | **335** | *e*Pn | | **Pn** | **17 43 35.9** | | **+1.8** |
| **A051A** | **Mrakovica** | **6.27** | **335** | *e*Pn | | **Pn** | **17 43 38.5** | | **-0.1** |
| **MLR** | **Muntele Rosu** | **7.22** | **31** | Pn | | **Pn** | **17 43 53.3** | | **+1.6** |
| | comp=N,0.5nm,0.3s,baz=114,slow=17,SNR=1.8 comp=N,1.5nm,0.4s | | | | | | | | |
| **SOKA** | **Soboth** | **8.37** | **332** | *i* Pn | | **Pn** | **17 44 07.1** | | **-0.3** |
| | comp=N,3.2nm,0.4s,SNR=8.9 | | | | | | | | |
| SOKA | | | | *i* Sn | | **Sn** | **17 45 39.7** | | **-1.4** |
| | comp=N,1.0nm,0.4s | | | | | | | | |
| **OBKA** | **Obir** | **8.41** | **330** | *i* Pn | | **Pn** | **17 44 08.5** | | **+0.5** |
| | comp=N,3.9nm,0.5s | | | | | | | | |
| OBKA | | | | *e*Sn | | **Sn** | **17 45 40.6** | | **-1.4** |
| | comp=N,6.2nm,0.6s | | | | | | | | |
| **OBKA** | **Obir** | **8.41** | **330** | *e*Pn | | **Pn** | **17 44 06.6** | | **-1.4** |
| **ARSA** | **Arzberg** | **8.70** | **336** | *i* Pn | | **Pn** | **17 44 12.4** | | **+0.5** |
| | comp=N,1.2nm,0.2s | | | | | | | | |
| ARSA | | | | *i* Sn | | **Sn** | **17 45 49.4** | | **+0.3** |
| | comp=N,0.8nm,0.3s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **9.35** | **327** | *i* Pn | | **Pn** | **17 44 21.0** | | **0.0** |
| | comp=N,1.3nm,0.3s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **9.46** | **324** | *i* Pn | | **Pn** | **17 44 22.3** | | **-0.2** |
| | comp=N,1.8nm,0.4s | | | | | | | | |
| ABTA | | | | *i* Sn | | **Sn** | **17 46 04.2** | | **-3.9** |
| | comp=N,1.9nm,0.5s | | | | | | | | |
| **MOA** | **Molln** | **9.64** | **333** | *i* Pn | | **Pn** | **17 44 25.9** | | **+1.2** |
| | comp=N,1.8nm,0.2s,SNR=4.3 | | | | | | | | |
| MOA | | | | *e*Sn | | **Sn** | **17 46 12.3** | | **+0.2** |
| | comp=N,1.3nm,0.4s | | | | | | | | |
| **MOA** | **Molln** | **9.64** | **333** | *e*Pn | | **Pn** | **17 44 25.8** | | **+1.0** |
| **BIOA** | **Bad Ischl, Aus** | **9.73** | **331** | *e*Pn | | **Pn** | **17 44 25.7** | | **-0.4** |
| | comp=N,1.4nm,0.3s | | | | | | | | |
| **LESA** | **Schwarzleotal** | **9.91** | **327** | *e*Pn | | **Pn** | **17 44 28.8** | | **+0.3** |
| | comp=N,2.3nm,0.4

| | | | | | | |
|---|---|---|---|---|---|---|
| SERG | Sergoula | 1.46 | 134 | P | Pn | 17 42 52.8 +0.4 |
| RLS | Riolos of Patr | 1.50 | 157 | P | Pb | 17 42 54.7 +0.5 |
| VERN | Vergina | 1.62 | 49 | P | Pn | 17 42 55.7 +1.1 |
| AXAR | Agios Charalam | 1.65 | 113 | P | Pb | 17 42 56.3 -0.6 |
| DLFA | Delphi | 1.68 | 124 | P | Pb | 17 42 57.5 0.0 |
| LTHK | Lithakia | 1.73 | 177 | P | Pb | 17 42 58.4 +0.2 |
| KLV | Kalavryta, Ach | 1.79 | 141 | P | Pb | 17 42 59.2 -0.1 |
| SCTE | Santa Cesarea | 1.85 | 291 | P | Pb | 17 42 59.3 -1.0 |
| GUR | Goura | 1.96 | 139 | P | Pb | 17 43 01.6 -0.7 |
| THE | Thessaloniki | 2.10 | 55 | P | Pn | 17 43 02.7 +1.6 |
| HORT | Hortiatis | 2.17 | 57 | P | Pn | 17 43 03.3 +1.1 |
| SOH | Sokhos | 2.45 | 55 | P | Pn | 17 43 07.7 +1.6 |
| SOH | Sokhos | 2.45 | 55 | P | Pn | 17 43 08.0 +2.0 |
| OUR | Ouranopolis | 2.67 | 69 | P | Pn | 17 43 10.2 +1.2 |
| ATHU | Athens Univers | 2.81 | 120 | P | Pn | 17 43 12.3 +1.3 |
| DION | Dionisos Attik | 2.86 | 117 | P | Pn | 17 43 13.6 +2.0 |
| KOKK | Kokkinochori, | 2.87 | 60 | P | Pn | 17 43 13.4 +1.6 |
| NVR | Nevrokopi | 3.07 | 50 | P | Pn | 17 43 16.5 +1.9 |
| THAS | Thassos island | 3.29 | 68 | P | Pn | 17 43 18.0 +0.4 |
| KAVA | Kavala | 3.30 | 61 | P | Pn | 17 43 18.8 +1.1 |
| LIA | Limnos Island | 3.48 | 81 | P | Pn | 17 43 21.3 +1.1 |
| KTHA | Kythira Island | 3.68 | 149 | P | Pn | 17 43 24.7 +1.8 |
| ALN | Alexandroupoli | 4.33 | 69 | P | Pn | 17 43 33.0 +1.1 |
| SOKA | Soboth | 8.35 | 332 | *i* Pn | Pn | 17 44 26.9 -0.2 |
| | 2.4nm,0.3s | | | | | |
| SOKA | | | | *i* Sn | Sn | 17 45 56.8 -4.0 |
| | 3.0nm,0.6s | | | | | |
| OBKA | Obir | 8.39 | 329 | *i* Pn | Pn | 17 44 28.3 +0.6 |
| | 2.6nm,0.2s | | | | | |
| OBKA | | | | *i* Sn | Sn | 17 46 00.3 -1.5 |
| | 8.9nm,0.5s | | | | | |
| ARSA | Arzberg | 8.68 | 336 | *i* Pn | Pn | 17 44 32.6 +1.0 |
| | 1.6nm,0.3s | | | | | |
| KBA | Koelnbreinsper | 9.34 | 327 | *i* Pn | Pn | 17 44 41.6 +0.8 |
| | 1.1nm,0.3s | | | | | |
| ABTA | Abfaltersbach | 9.45 | 323 | *i* Pn | Pn | 17 44 42.5 +0.3 |
| | 1.7nm,0.4s | | | | | |
| ABTA | | | | *i* Sn | Sn | 17 46 22.2 -5.8 |
| | 2.1nm,0.5s | | | | | |
| MOA | Molln | 9.62 | 333 | *i* Pn | Pn | 17 44 45.7 +1.3 |
| | 3.0nm,0.3s | | | | | |
| MOA | | | | *e*Sn | Sn | 17 46 30.4 -1.5 |
| | 1.1nm,0.3s | | | | | |
| BIOA | Bad Ischl, Aus | 9.72 | 330 | *e*Pn | Pn | 17 44 46.5 +0.7 |
| | 2.1nm,0.3s | | | | | |
| BIOA | | | | *i* Sn | Sn | 17 46 33.5 -0.8 |
| | 4.6nm,0.5s | | | | | |
| LESA | Schwarzleotal | 9.89 | 326 | *i* Pn | Pn | 17 44 50.5 +2.3 |
| | 1.8nm,0.3s | | | | | |
| LESA | | | | *e*Sn | Sn | 17 46 34.2 -4.5 |
| | 2.9nm,0.5s | | | | | |
| WTTA | Wattenberg | 10.24 | 323 | *i* Pn | Pn | 17 44 54.4 +1.3 |
| | 3.3nm,0.4s | | | | | |
| WTTA | | | | *e*Sn | Sn | 17 46 41.2 -6.1 |
| | 4.2nm,0.4s | | | | | |
| WATA | Walderalm | 10.32 | 323 | *i* Pn | Pn | 17 44 54.6 +0.5 |
| | 2.0nm,0.2s | | | | | |
| WATA | | | | *i* Sn | Sn | 17 46 43.6 -5.7 |
| | 3.6nm,0.4s | | | | | |
| SQTA | Sankt Quirin | 10.41 | 321 | *e*Pn | Pn | 17 44 56.1 +0.7 |
| | 1.4nm,0.2s | | | | | |
| MOTA | Moosalm | 10.55 | 322 | *i* Pn | Pn | 17 44 58.1 +0.8 |
| | 0.6nm,0.2s | | | | | |
| MOTA | | | | *e*Sn | Sn | 17 46 51.0 -4.0 |
| | 2.5nm,0.5s | | | | | |

*NOU **24** 17:48:55.6, 19°.97S×175°.25W, h220km, mb4.5/40, Tonga Islands*
*IDC **24** 17:48:58.9±5.3, 20°.28S×176°.16W, h199km±49km, mb3.6/7, mbtmp4.2/9, Error ellipse: s-maj=30.4km s-min=18.6km az=159.0*
*NEIC **24** 17:48:58.2±3.0, 20°.11S±0°.06×175°.6W±0°.1, h216km±11km, mb4.7/38, Error ellipse: s-maj=14.9km s-min=7.9km az=101.0*

**ISC 24 17:48:57.5±0.5, 20°.15S±0°.08×175°.64W±0°.06, h200km, n122, σ1°70/117, mb4.6/28, 3C-1D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NIUE | Niue | 5.49 | 80 | | Pn | 17 50 19.9 | +1.7 |
| NIUE | | | | Sn | Sn | 17 51 17.1 | -4.8 |
| MSVF | Nonsavu | 6.44 | 291 | P | Pn | 17 50 32.5 | +2.0 |
| MSVF | Nonsavu | 6.44 | 291 | | Pn | 17 50 32.2 | +1.6 |
| AFI | Afiamalu | 7.22 | 31 | Pn | Pn | 17 50 39.1 | -1.6 |
| AFI | | | | Sn | Sn | 17 51 58.1 | -4.6 |
| RAR | Rarotonga | 14.89 | 97 | P | P | 17 52 27.0 | +7.8 |
| | 16nm,0.9s,baz=283,slow=18,SNR=1.6 | | | | | | |
| PINNC | Pines Island, | 15.94 | 258 | P | Pn | 17 52 32.9 | +1.7 |
| PINNC | Pines Island, | 15.94 | 258 | Pn | Pn | 17 52 32.4 | +1.2 |
| LIFNC | LIFOU | 16.06 | 265 | P | P | 17 52 32.2 | +0.1 |
| LIFNC | LIFOU | 16.06 | 265 | P | P | 17 52 31.6 | -0.5 |
| YATNC | Mamie plateau, | 16.41 | 260 | P | Pn | 17 52 37.5 | +0.7 |
| DZM | Mont Dzumac | 16.83 | 260 | P | P | 17 52 41.5 | +0.8 |
| DZM | Mont Dzumac | 16.83 | 260 | | P | 17 52 40.9 | +0.2 |
| DZM | | | | IAmb | IAmb | 17 52 44.9 | |
| | comp=Z,39nm,0.8s | | | | | | |
| DZM | Mont Dzumac | 16.83 | 260 | P | P | 17 52 40.9 | +0.2 |
| | comp=Z,44nm,0.7s,baz=91,slow=18,SNR=29 | | | | | | |
| NOUC | Port Laguerre | 16.96 | 260 | P | P | 17 52 42.6 | +0.6 |
| KOUNC | Koumac, New Ca | 18.83 | 265 | P | Pn | 17 53 06.0 | +0.7 |
| KOUNC | Koumac, New Ca | 18.83 | 265 | P | P | 17 53 02.8 | +0.4 |
| KOUNC | | | | IAmb | IAmb | 17 53 08.2 | |
| | comp=Z,22nm,0.7s | | | | | | |
| URZ | Urewera | 19.11 | 198 | P | P | 17 53 03.2 | -2.0 |
| URZ | Urewera | 19.11 | 198 | P | P | 17 53 03.3 | -1.9 |
| | comp=Z,5.6nm,0.3s,baz=18,slow=1.8,SNR=14 | | | | | | |
| TOZ | Tahuroa Road | 19.14 | 202 | P | P | 17 53 05.3 | -0.3 |
| TOZ | | | | IAmb | IAmb | 17 53 23.8 | |
| | comp=Z,36nm,1.5s | | | | | | |
| RTZ | Ruatahuna | 19.48 | 198 | P | P | 17 53 07.7 | -1.6 |
| RTZ | | | | IAmb | IAmb | 17 53 48.3 | |
| | comp=Z,30nm,1.2s | | | | | | |
| RTZ | Ruatahuna | 19.48 | 198 | P | Pn | 17 53 44.8 | +32 |
| HIZ | Hauiti | 20.06 | 202 | P | P | 17 53 14.2 | -1.3 |
| BKZ | Black Stump Fm | 20.13 | 198 | P | P | 17 53 15.1 | -1.1 |
| MRZ | Mangatainoka R | 21.78 | 198 | P | P | 17 53 31.7 | -1.7 |
| OGWZ | Otaki Gorge | 22.04 | 199 | P | P | 17 53 33.2 | -2.8 |
| CAW | Cannon Point | 22.34 | 199 | P | P | 17 53 38.4 | -0.4 |
| DUWZ | D'Urville Isla | 22.43 | 201 | P | P | 17 53 38.7 | -0.9 |
| SNZO | South Karori | 22.64 | 199 | P | P | 17 53 39.0 | -2.4 |
| QRZ | Quartz Range | 22.95 | 204 | P | P | 17 53 44.8 | +0.5 |
| QRZ | Quartz Range | 22.95 | 204 | P | P | 17 53 43.4 | -0.8 |
| TKNZ | Takaka Hill | 22.97 | 203 | P | P | 17 53 41.5 | -3.0 |
| TKNZ | Takaka Hill | 22.97 | 203 | P | P | 17 53 44.3 | -0.2 |
| NNZ | Nelson | 22.98 | 202 | P | P | 17 53 41.3 | -3.2 |
| NNZ | | | | IAmb | IAmb | 17 54 02.5 | |
| | comp=Z,45nm,1.1s | | | | | | |
| NNZ | Nelson | 22.98 | 202 | P | P | 17 53 42.4 | -2.2 |
| TUWZ | Tuamarina | 22.98 | 200 | P | P | 17 53 45.2 | +0.6 |
| MRNZ | Matariki Terra | 23.36 | 202 | P | P | 17 53 48.3 | +0.3 |
| THZ | Tophouse | 23.63 | 202 | P | P | 17 53 49.3 | -1.2 |
| THZ | | | | IAmb | IAmb | 17 54 09.7 | |
| | comp=Z,56nm,1.4s | | | | | | |
| THZ | Tophouse | 23.63 | 202 | P | P | 17 53 49.9 | -0.7 |
| KHZ | Kahutara | 24.00 | 200 | P | P | 17 53 55.0 | +1.2 |
| KHZ | Kahutara | 24.00 | 200 | P | P | 17 53 55.1 | +1.3 |
| DSZ | Denniston Nort | 24.02 | 204 | P | P | 17 53 54.5 | +0.5 |
| LTZ | Lake Taylor | 24.75 | 202 | P | P | 17 53 59.9 | -0.8 |
| LTZ | | | | IAmb | IAmb | 17 54 04.0 | |
| | comp=Z,24nm,0.8s | | | | | | |
| OXZ | Oxford | 25.31 | 201 | P | P | 17 54 04.6 | -1.1 |
| OXZ | | | | IAmb | IAmb | 17 54 07.1 | |
| | comp=Z,28nm,1.0s | | | | | | |
| RPZ | Rata Peaks | 26.00 | 202 | P | P | 17 54 11.0 | -0.9 |
| FOZ | Fox Glacier | 26.30 | 204 | P | P | 17 54 12.6 | -1.9 |
| JCZ | Jackson Bay | 27.16 | 205 | P | P | 17 54 21.2 | -1.2 |
| WKZ | Wanaka | 27.70 | 204 | P | P | 17 54 25.2 | -1.8 |
| EIDS | Eidsvold | 31.07 | 254 | P | P | 17 54 55.8 | -1.2 |
| EIDS | Eidsvold | 31.07 | 254 | P | P | 17 54 55.3 | -1.7 |
| EIDS | | | | IAmb | IAmb | 17 54 56.0 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| ARMA | Armidale | 31.21 | 244 | P | P | 17 54 57.0 | -1.3 |
| ARMA | Armidale | 31.21 | 244 | P | P | 17 54 56.6 | -1.8 |
| ARMA | | | | IAmb | IAmb | 17 55 24.4 | |
| | comp=Z,24nm,1.4s | | | | | | |
| MGCD | Mangrove Creek | 32.29 | 239 | P | P | 17 55 07.8 | +0.2 |
| CNB | Canberra Magne | 34.26 | 236 | P | P | 17 55 23.1 | -1.6 |
| CAN | Canberra | 34.55 | 237 | P | P | 17 55 25.3 | -1.8 |
| CAN | Canberra | 34.55 | 237 | P | P | 17 55 24.8 | -2.3 |
| CAN | | | | IAmb | IAmb | 17 56 01.8 | |
| | comp=Z,21nm,1.4s | | | | | | |
| TV1H | Townsville Har | 35.33 | 265 | P | P | 17 55 32.9 | -1.0 |
| CTAO | Charters Tower | 35.73 | 263 | P | P | 17 55 35.8 | -1.6 |
| CTAO | Charters Tower | 35.73 | 263 | P | P | 17 55 35.9 | -1.4 |
| CMSA | Cobar Meteorol | 36.43 | 244 | P | P | 17 55 41.3 | -1.8 |
| PMG | Port Moresby | 37.44 | 281 | P | P | 17 55 50.6 | -1.2 |
| PMG | | | | IAmb | IAmb | 17 55 51.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| MTSU | Mount Surprise | 37.82 | 266 | P | P | 17 55 53.5 | -1.5 |
| TOO | Toolangi | 37.89 | 234 | P | P | 17 55 54.5 | -0.9 |
| TOO | Toolangi | 37.89 | 234 | P | P | 17 55 53.4 | -2.1 |
| BRAT | Ballarat | 39.08 | 235 | P | P | 17 56 07.1 | +1.9 |
| COEN | Coen | 39.78 | 272 | P | P | 17 56 10.3 | -1.0 |
| COEN | Coen | 39.78 | 272 | P | P | 17 56 09.8 | -1.5 |
| COEN | | | | IAmb | IAmb | 17 56 10.9 | |
| | comp=Z,12nm,0.7s | | | | | | |
| STKA | Stephens Creek | 39.93 | 244 | P | P | 17 56 13.8 | +1.4 |
| STKA | Stephens Creek | 39.93 | 244 | P | P | 17 56 10.1 | -2.3 |
| STKA | Stephens Creek | 39.93 | 244 | P | P | 17 56 09.3 | -3.0 |
| | comp=Z,2.5nm,0.5s,baz=100,slow=12,SNR=7.3 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| INKA | Innaminka | 40.41 | 251 | P | P | 17 56 16.9 | +0.6 |
| ARPS | Mount Arapiles | 40.52 | 237 | P | P | 17 56 17.6 | +0.4 |
| HTT | Hallett | 42.35 | 242 | P | P | 17 56 32.4 | +0.3 |
| LCRK | Leigh Creek | 42.71 | 247 | P | P | 17 56 35.7 | +0.7 |
| BBOO | Buckleboo | 44.68 | 243 | P | P | 17 56 51.0 | +0.3 |
| BBOO | Buckleboo | 44.68 | 243 | P | P | 17 56 47.9 | -2.8 |
| BBOO | | | | IAmb | IAmb | 17 57 21.6 | |
| | comp=Z,28nm,1.5s | | | | | | |
| OOD | Oodnadatta | 44.89 | 251 | P | P | 17 56 51.9 | -0.4 |
| MULG | Mulgathing | 46.30 | 247 | P | P | 17 57 00.9 | -2.5 |
| WR0 | Warramunga Arr | 46.65 | 261 | P | P | 17 57 03.7 | -2.5 |
| AS01 | Alice Springs | 46.71 | 256 | P | P | 17 57 04.9 | -1.8 |
| AS31 | Alice Springs | 46.75 | 256 | P | P | 17 57 04.9 | -2.2 |
| ASAR | Alice Springs | 46.75 | 256 | P | P | 17 57 04.3 | -2.8 |
| ASAR | Alice Springs | 46.75 | 256 | P | P | 17 57 04.8 | -2.2 |
| | comp=Z,5.5nm,0.6s,baz=96,slow=8.3,SNR=132 | | | | | | |
| | comp=Z,5.5nm,0.6s | | | | | | |
| WB0 | Warramunga Arr | 46.82 | 261 | | P | 17 57 05.0 | -2.6 |
| WB0 | | | | IAmb | IAmb | 17 57 06.3 | |
| | comp=Z,12nm,0.6s | | | | | | |
| WB2 | Warramunga Arr | 46.83 | 261 | | P | 17 57 04.8 | -2.9 |
| WRAB | Tennant Creek | 46.83 | 261 | P | P | 17 57 05.0 | -2.7 |
| WRA | Warramunga Arr | 46.84 | 261 | | P | 17 57 04.8 | -3.0 |
| WRA | Warramunga Arr | 46.84 | 261 | P | P | 17 57 05.2 | -2.5 |
| | comp=Z,5.1nm,0.6s,baz=95,slow=5.3,SNR=152 | | | | | | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| KDU | Kakadu | 50.16 | 270 | P | P | 17 57 31.2 | -1.9 |
| GUMO | Guam | 51.31 | 308 | P | P | 17 57 40.3 | -1.3 |
| MTN | Manton Dam | 51.38 | 269 | P | P | 17 57 40.5 | -1.7 |
| MTN | Manton Dam | 51.38 | 269 | P | P | 17 57 40.0 | -2.2 |
| FORT | Forrest | 51.46 | 246 | P | P | 17 57 41.6 | -1.0 |
| FORT | Forrest | 51.46 | 246 | P | P | 17 57 41.1 | -1.5 |
| FORT | | | | IAmb | IAmb | 17 57 50.7 | |
| | comp=Z,20nm,0.9s | | | | | | |
| KNRA | Kununurra | 52.89 | 265 | P | P | 17 57 51.5 | -1.9 |
| KNRA | | | | IAmb | IAmb | 17 57 53.2 | |
| | comp=Z,15nm,0.7s | | | | | | |
| FAKI | Fak Fak | 53.59 | 282 | P | P | 17 57 57.5 | -1.0 |
| FITZ | Fitzroy Crossi | 55.27 | 262 | P | P | 17 58 09.5 | -1.0 |
| SOEI | Soe | 58.71 | 271 | P | P | 17 58 34.2 | -0.6 |
| SOEI | | | | IAmb | IAmb | 17 58 40.7 | |
| | comp=Z,12nm,0.6s | | | | | | |
| MBWA | Marble Bar | 60.09 | 257 | P | P | 17 58 43.8 | -0.2 |
| MBWA | | | | IAmb | IAmb | 17 58 56.2 | |
| | comp=Z,21nm,1.3s | | | | | | |
| NWAO | Narrogin (SRO) | 60.50 | 243 | P | P | 17 58 46.9 | +0.3 |
| NWAO | | | | IAmb | IAmb | 17 59 07.1 | |
| | comp=Z,23nm,1.3s | | | | | | |
| QSPA | South Pole Qui | 69.92 | 180 | P | P | 17 59 47.6 | +0.8 |
| QSPA | South Pole Qui | 69.92 | 180 | P | P | 17 59 47.5 | +0.8 |
| | comp=Z,1.5nm,1.0s,baz=61,slow=9.2,SNR=2.7 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| PETK | Petropavlovsk- | 76.53 | 344 | P | P | 18 00 26.6 | +1.4 |
| | comp=Z,1.1nm,0.5s,baz=106,slow=8.9,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 79.27 | 42 | P | P | 18 00 45.0 | +4.0 |
| | comp=Z,0.3nm,0.5s,baz=221,slow=8.1,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| NJ2 | Nanjing | 81.38 | 309 | *e*P | P | 18 00 53.3 | +1.2 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,28nm,0.7s | | | | | | |
| H03S2 | Juan Fernandez | 84.35 | 124 | T | T | 19 34 08.1 | |
| | baz=248,slow=75,SNR=18 | | | | | | |
| H03S1 | Juan Fernandez | 84.37 | 124 | T | T | 19 34 03.6 | |
| | baz=248,slow=75,SNR=16 | | | | | | |
| H03S3 | Juan Fernandez | 84.37 | 124 | T | T | 19 34 00.8 | |
| | baz=248,slow=75,SNR=15 | | | | | | |
| ELIB | Princess Elisa | 87.23 | 186 | *d*P | P | 18 01 21.0 | -0.1 |
| ILAR | Eielson Array | 87.50 | 12 | P | P | 18 01 23.6 | +1.6 |
| | comp=Z,0.4nm,0.6s,baz=211,slow=6.0,SNR=5.8 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| SNAA | Sanae | 88.28 | 178 | ⇑P | P | 18 01 26.2 | +0.2 |
| | comp=Z,31nm,1.1s | | | | | | |
| VNA3 | Neumayer Olymp | 88.33 | 176 | ⇑P | P | 18 01 36.9 | +11 |
| | comp=Z,2.1nm,0.6s | | | | | | |
| VNA2 | Neumayer--Watz | 88.80 | 176 | ⇑P | P | 18 01 29.0 | +0.7 |
| | comp=Z,1.2nm,0.7s,baz=179,slow=6.5 | | | | | | |
| HHC | Hu-ho-hao-te | 90.71 | 314 | *e*P | P | 18 01 39.0 | +1.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,230nm,4.2s | | | | | | |
| PZH | PanZhiHua | 92.51 | 297 | P | P | 18 01 47.8 | +1.4 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,200nm,5.8s | | | | | | |
| KURBB | Kurchatov Arra | 115.29 | 317 | PKP | PKPdf | 18 07 14.7 | -0.2 |
| | comp=Z,0.2nm,0.2s,baz=103,slow=1.7,SNR=4.5 | | | | | | |
| BVAR | Borovoye Array | 120.23 | 320 | PKP | PKPdf | 18 07 24.2 | -0.2 |
| | comp=Z,0.4nm,0.3s,baz=108,slow=2.8,SNR=4.5 | | | | | | |
| ARCES | ARCESS Array B | 128.96 | 351 | PKP | PKiKP | 18 07 42.2 | +0.8 |
| | comp=Z,1.6nm,0.8s,baz=38,slow=1.6,SNR=4.9 | | | | | | |
| FINES | FINESS Array B | 136.03 | 345 | PKP | PKPdf | 18 07 55.5 | +1.4 |
| | comp=Z,2.3nm,1.0s,baz=31,slow=3.2,SNR=4.1 | | | | | | |
| AKASG | Malin Array Be | 143.74 | 333 | PKP | PKPab | 18 08 06.8 | +1.0 |
| | comp=Z,0.6nm,0.3s,baz=37,slow=3.4,SNR=4.3 | | | | | | |
| BRTR | Keskin Array B | 148.21 | 314 | PKPbc | PKPbc | 18 08 20.8 | +0.5 |
| | comp=Z,1.7nm,0.7s,baz=135,slow=4.5,SNR=12 | | | | | | |
| MMAI | Mount Meron Ar | 149.55 | 301 | PKPbc | PKiKP | 18 08 25.1 | +0.5 |
| | comp=Z,2.8nm,0.7s,baz=75,slow=6.3,SNR=6.3 | | | | | | |
| GERES | GERESS Array B | 150.40 | 347 | PKPbc | PKiKP | 18 08 26.9 | +1.0 |
| | comp=Z,0.9nm,0.6s,baz=64,slow=2.3,SNR=5.2 | | | | | | |

*NEIC **24** 17:51:19.4±1.5, 18°.6S±0°.1×179°.1W±0°.1, h558km±6km, mb4.5/94, Error ellipse: s-maj=15.8km s-min=14.9km az=127.0*
*IDC **24** 17:51:22.5±1.9, 18°.62S×179°.33W, h583km±21km, mb3.6/15, mbtmp4.5/15, Error ellipse: s-maj=15.4km s-min=11.0km az=142.0*

**ISC 24 17:51:19.2±0.4, 18°.65S±0°.07×179°.20W±0°.07, h550km, n156, σ0°99/159, mb4.4/68, 5C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 2.77 | 289 | P | P | 17 52 37.0 | +4.0 |
| AFI | Afiamalu | 8.54 | 58 | P | P | 17 53 23.8 | +1.3 |
| NIUE | Niue | 8.79 | 94 | P | P | 17 53 23.2 | -1.7 |
| LIFNC | LIFOU | 12.94 | 258 | P | P | 17 54 07.4 | -0.1 |
| PINNC | Pines Island, | 13.11 | 250 | P | P | 17 54 10.4 | +1.2 |
| DZM | Mont Dzumac | 13.89 | 253 | P | P | 17 54 18.2 | +0.9 |
| KOUNC | Koumac, New Ca | 15.68 | 260 | P | P | 17 54 36.6 | +0.9 |
| MXZ | Matakaoa Point | 18.97 | 186 | P | P | 17 55 04.8 | -0.9 |
| BKZ | Black Stump Fm | 20.79 | 189 | P | P | 17 55 20.6 | -1.7 |
| TKNZ | Takaka Hill | 23.30 | 195 | P | P | 17 55 44.5 | -0.2 |
| NNZ | Nelson | 23.38 | 194 | P | P | 17 55 44.5 | -0.8 |
| CMWZ | Cape Campbell | 23.70 | 192 | P | P | 17 55 49.6 | +1.3 |
| THZ | Tophouse | 24.01 | 195 | P | P | 17 55 50.8 | -0.3 |
| DSZ | Denniston Nort | 24.27 | 197 | P | P | 17 55 53.8 | +0.4 |
| LTZ | Lake Taylor | 25.12 | 195 | P | P | 17 56 00.0 | -0.9 |
| FOZ | Fox Glacier | 26.48 | 198 | P | P | 17 56 12.8 | 0.0 |
| LBZ | Lake Benmore | 27.16 | 197 | P | P | 17 56 17.2 | -1.6 |
| WKZ | Wanaka | 27.90 | 198 | P | P | 17 56 24.6 | -0.7 |
| EIDS | Eidsvold | 28.31 | 251 | P | P | 17 56 30.1 | +1.0 |
| EIDS | | | | IAmb | IAmb | 17 56 30.7 | |
| | comp=Z,6.8nm,0.7s | | | | | | |
| MLZ | Mavora Lakes | 28.66 | 199 | P | P | 17 56 32.6 | +0.8 |
| ARMA | Armidale | 28.92 | 241 | P | P | 17 56 35.8 | +1.3 |
| ARMA | | | | IAmb | IAmb | 17 57 11.1 | |
| | comp=Z,18nm,1.4s | | | | | | |
| CTAO | Charters Tower | 32.59 | 262 | P | P | 17 57 06.2 | +0.2 |
| PATS | Pohnpei | 33.66 | 317 | P | P | 17 57 15.4 | +0.4 |
| PMG | Port Moresby | 33.85 | 281 | P | P | 17 57 17.0 | +0.4 |
| PMG | | | | IAmb | IAmb | 17 57 18.7 | |
| | comp=Z,20nm,0.8s | | | | | | |
| TOO | Toolangi | 36.12 | 231 | P | P | 17 57 36.2 | +0.9 |
| COEN | Coen | 36.37 | 272 | P | P | 17 57 37.5 | -0.1 |
| COEN | | | | IAmb | IAmb | 17 57 39.2 | |
| | comp=Z,13nm,0.7s | | | | | | |
| MANU | Manus Island | 36.68 | 293 | P | P | 17 57 40.9 | +0.8 |
| STKA | Stephens Creek | 37.62 | 242 | P | P | 17 57 48.1 | +0.5 |
| STKA | Stephens Creek | 37.62 | 242 | P | P | 17 57 48.9 | +1.3 |
| | comp=Z,4.8nm,0.6s,baz=89,slow=10,SNR=10 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| BBOO | Buckleboo | 42.39 | 242 | | P | 17 58 25.9 | +0.1 |
| BBOO | | | | IAmb | IAmb | 17 59 02.9 | |
| | comp=Z,29nm,1.4s | | | | | | |
| WR0 | Warramunga Arr | 43.57 | 260 | P | P | 17 58 34.5 | -0.7 |
| WB0 | Warramunga Arr | 43.73 | 261 | P | P | 17 58 36.2 | -0.2 |
| WB2 | Warramunga Arr | 43.75 | 260 | P | P | 17 58 36.1 | -0.5 |
| WB2 | | | | IAmb | IAmb | 17 58 37.0 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 43.76 | 260 | P | P | 17 58 36.0 | -0.7 |
| WRA | Warramunga Arr | 43.76 | 260 | P | P | 17 58 36.5 | -0.2 |
| | comp=Z,3.7nm,0.5s,baz=96,slow=6.8,SNR=26 | | | | | | |
| WRA | | | | ScP | ScP | 18 03 09.8 | -0.9 |
| | comp=Z,0.4nm,0.9s,baz=86,slow=3.8,SNR=3.4 | | | | | | |
| WRA | | | | S | S | 18 04 22.5 | -5.2 |
| | comp=Z,0.6nm,0.8s,baz=98,slow=13,SNR=5.2 | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | |
| AS31 | Alice Springs | 43.87 | 255 | P | P | 17 58 37.5 | 0.0 |
| AS31 | | | | IAmb | IAmb | 17 58 38.5 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| ASAR | Alice Springs | 43.87 | 255 | P | P | 17 58 37.4 | -0.1 |
| ASAR | Alice Springs | 43.87 | 255 | P | P | 17 58 37.9 | +0.4 |
| | comp=Z,30nm,0.5s,baz=89,slow=8.5,SNR=125 | | | | | | |
| ASAR | | | | ScP | ScP | 18 03 10.1 | -1.1 |
| | comp=Z,0.7nm,0.8s,baz=100,slow=4.4,SNR=4.1 | | | | | | |
| ASAR | | | | S | S | 18 04 26.4 | -2.8 |
| | comp=Z,0.9nm,0.8s,baz=91,slow=16,SNR=6.7 | | | | | | |
| | comp=Z,30nm,0.5s | | | | | | |
| GUMO | Guam | 47.75 | 310 | P | P | 17 59 07.4 | +0.4 |
| MTN | Manton Dam | 48.03 | 269 | P | P | 17 59 09.1 | -0.1 |
| MTN | | | | IAmb | IAmb | 17 59 10.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| FORT | Forrest | 49.01 | 245 | P | P | 17 59 16.1 | -0.1 |
| FORT | | | | IAmb | IAmb | 17 59 20.4 | |
| | comp=Z,32nm,1.0s | | | | | | |
| KNRA | Kununurra | 49.67 | 265 | P | P | 17 59 21.0 | -0.2 |
| KNRA | | | | IAmb | IAmb | 17 59 22.5 | |
| | comp=Z,17nm,0.8s | | | | | | |
| FAKI | Fak Fak | 49.99 | 282 | P | P | 17 59 23.7 | 0.0 |
| FITZ | Fitzroy Crossi | 52.17 | 261 | P | P | 17 59 40.1 | +0.7 |
| SOEI | Soe | 55.33 | 271 | P | P | 18 00 01.5 | -0.4 |
| SOEI | | | | IAmb | IAmb | 18 00 04.5 | |
| | comp=Z,32nm,0.9s | | | | | | |
| PSA00 | Pilbara Seismi | 57.00 | 256 | P | P | 18 00 12.2 | -1.0 |
| PSA00 | | | | IAmb | IAmb | 18 00 26.8 | |
| | comp=Z,33nm,1.5s | | | | | | |
| PSA00 | Pilbara Seismi | 57.00 | 256 | P | P | 18 00 12.5 | -0.7 |
| PSA00 | | | | IAmb | IAmb | 18 00 14.4 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| MBWA | Marble Bar | 57.17 | 256 | P | P | 18 00 14.0 | -0.3 |
| SBA | Scott Base | 59.64 | 183 | P | P | 18 00 31.9 | +1.9 |
| GIRL | Giralia | 61.96 | 254 | P | P | 18 00 46.1 | -0.2 |
| MJAR | Matsushiro Arr | 68.05 | 324 | P | P | 18 01 23.6 | -0.6 |
| | comp=Z,3.8nm,0.6s,baz=151,slow=6.0,SNR=8.0 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| MAJO | Matsushiro | 68.06 | 324 | P | P | 18 01 24.0 | -0.2 |
| MAJO | | | | IAmb | IAmb | 18 01 24.3 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| MJB9 | Matsu-Tunnel | 68.06 | 324 | P | P | 18 01 25.1 | +0.8 |
| MJB9 | | | | IAmb | IAmb | 18 01 25.7 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| KKM | Kota Kinabalu | 68.19 | 285 | P | P | 18 01 25.2 | -0.4 |
| KKM | | | | IAmb | IAmb | 18 01 50.2 | |
| | comp=Z,23nm,1.3s | | | | | | |
| UGM | Wanagama | 68.87 | 269 | P | P | 18 01 29.5 | -0.2 |
| KIWB | Kanaga Island | 70.22 | 1 | P | P | 18 01 35.8 | -1.1 |
| QSPA | South Pole Qui | 71.41 | 180 | P | P | 18 01 44.2 | +0.3 |
| QSPA | | | | IAmb | IAmb | 18 01 45.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 71.41 | 180 | P | P | 18 01 44.7 | +0.8 |
| | comp=Z,12nm,0.7s,baz=24,slow=2.5,SNR=64 | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | |
| JKA | Kamikawa-asahi | 71.57 | 332 | P | P | 18 01 45.3 | +0.4 |
| NACB | Ninganchiao | 71.70 | 304 | P | P | 18 01 45.8 | -0.4 |
| NACB | | | | IAmb | IAmb | 18 02 01.0 | |
| | comp=Z,19nm,0.9s | | | | | | |
| KSM | Kuching | 72.04 | 278 | P | P | 18 01 48.3 | 0.0 |
| KSM | | | | IAmb | IAmb | 18 01 50.0 | |
| | comp=Z,12nm,0.8s | | | | | | |
| YHNB | Yeheng | 72.13 | 305 | P | P | 18 01 48.7 | 0.0 |
| LVA | Lava Point | 73.39 | 8 | P | P | 18 01 53.5 | -1.7 |
| YSS | Yuzh-Sakhalins | 73.74 | 334 | P | P | 18 01 56.9 | -0.4 |
| YSS | | | | IAmb | IAmb | 18 01 58.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| PEA0B | Petropavlovsk- | 74.20 | 346 | P | P | 18 01 59.2 | -0.6 |
| PEA0B | | | | IAmb | IAmb | 18 02 00.0 | |
| | comp=Z,7.5nm,0.8s | | | | | | |
| PETK | Petropavlovsk- | 74.20 | 346 | P | P | 18 01 58.8 | -1.0 |
| PETK | Petropavlovsk- | 74.20 | 346 | P | P | 18 01 59.5 | -0.4 |
| | comp=Z,6.7nm,0.8s,baz=130,slow=7.2,SN

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **J17K** | **VABM Dome** | **83.28** | **9** | P | | **P** | **18 02 47.1** | **-0.7** |
| J17K | | | | IAmb | | IAmb | 18 03 27.6 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **PMSA** | **Palmer Station** | **83.43** | **157** | P | | **P** | **18 02 49.2** | **+0.5** |
| PMSA | | | | IAmb | | IAmb | 18 02 59.8 | |
| | comp=Z,25nm,1.2s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **83.70** | **14** | P | | **P** | **18 02 49.1** | **-1.0** |
| GHO | | | | IAmb | | IAmb | 18 02 50.1 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **J18K** | **Innoko River** | **83.71** | **10** | P | | **P** | **18 02 49.5** | **-0.5** |
| **K20K** | **Telida** | **84.07** | **11** | P | | **P** | **18 02 51.4** | **-0.4** |
| **BMRM** | **Bremner River** | **84.07** | **16** | P | | **P** | **18 02 51.6** | **-0.3** |
| BMRM | | | | IAmb | | IAmb | 18 03 15.1 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **N25K** | **Chitina, Valde** | **84.61** | **16** | P | | **P** | **18 02 53.5** | **-1.1** |
| N25K | | | | IAmb | | IAmb | 18 02 54.8 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **GLB** | **Gilahina Butte** | **84.68** | **16** | P | | **P** | **18 02 54.6** | **-0.3** |
| GLB | | | | IAmb | | IAmb | 18 02 55.0 | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **MDM** | **Murphy Dome** | **86.65** | **13** | P | | **P** | **18 03 02.6** | **-1.7** |
| **F19K** | **Shaleruckik Mo** | **86.71** | **8** | P | | **P** | **18 03 02.6** | **-1.8** |
| F19K | | | | IAmb | | IAmb | 18 03 19.2 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.77** | **13** | P | | **P** | **18 03 03.9** | **-0.9** |
| **ILAR** | **Eielson Array** | **86.77** | **13** | P | | **P** | **18 03 03.2** | **-1.6** |
| | comp=Z,1.6nm,0.7s,baz=229,slow=5.6,SNR=18 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **J25K** | **Salcha River,** | **86.98** | **14** | P | | **P** | **18 03 05.2** | **-0.6** |
| **M29M** | **Somme Creek** | **86.98** | **18** | P | | **P** | **18 03 05.8** | **-0.1** |
| **TXAR** | **Lajitas Array** | **87.02** | **58** | P | | **P** | **18 03 08.5** | **+1.6** |
| | comp=Z,0.3nm,0.3s,baz=260,slow=5.4,SNR=5.6 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **G21K** | **Allakaket** | **87.06** | **10** | P | | **P** | **18 03 05.7** | **-0.5** |
| **F20K** | **Avaraart Lake** | **87.21** | **9** | P | | **P** | **18 03 05.9** | **-0.8** |
| **HHC** | **Hu-ho-hao-te** | **87.25** | **315** | *e*P | | **P** | **18 03 07.5** | **-0.2** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,110nm,4.7s | | | | | | | |
| **J26L** | **Joseph Creek** | **87.30** | **15** | P | | **P** | **18 03 07.0** | **-0.4** |
| J26L | | | | IAmb | | IAmb | 18 03 07.9 | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **E19K** | **Redstone River** | **87.38** | **8** | P | | **P** | **18 03 07.0** | **-0.5** |
| **D19K** | **Kuna River** | **88.24** | **8** | P | | **P** | **18 03 10.7** | **-0.8** |
| D19K | | | | IAmb | | IAmb | 18 03 27.2 | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **ELIB** | **Princess Elisa** | **88.34** | **187** | *d*P | | **P** | **18 03 11.9** | **-0.4** |
| | comp=Z,9.5nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **88.40** | **44** | P | | **P** | **18 03 13.1** | **-0.1** |
| | comp=Z,0.8nm,0.7s,baz=238,slow=2.8,SNR=5.4 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.42** | **290** | P | | **P** | **18 03 15.0** | **+1.4** |
| | comp=Z,1.4nm,0.9s,baz=104,slow=3.8,SNR=7.3 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **C19K** | **Lookout Ridge** | **88.64** | **7** | P | | **P** | **18 03 12.5** | **-1.0** |
| C19K | | | | IAmb | | IAmb | 18 03 17.6 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **PZH** | **PanZhiHua** | **88.84** | **298** | P | | **P** | **18 03 15.8** | **+0.3** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,180nm,4.7s | | | | | | | |
| **I28M** | **Miner Creek** | **88.97** | **15** | P | | **P** | **18 03 14.2** | **-0.9** |
| I28M | | | | IAmb | | IAmb | 18 03 31.7 | |
| | comp=Z,5.3nm,1.4s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **89.54** | **13** | P | | **P** | **18 03 17.1** | **-0.6** |
| **TROLL** | **Troll, Antarti** | **89.57** | **181** | ⇑P | | **P** | **18 03 17.6** | **-0.5** |
| | comp=Z,240nm,0.5s | | | | | | | |
| **I30M** | **Mount Dempster** | **89.72** | **17** | P | | **P** | **18 03 17.4** | **-1.2** |
| I30M | | | | IAmb | | IAmb | 18 03 19.6 | |
| | comp=Z,8.2nm,1.5s | | | | | | | |
| **SNAA** | **Sanae** | **89.88** | **179** | P | | **P** | **18 03 18.8** | **-0.6** |
| SNAA | | | | IAmb | | IAmb | 18 03 19.6 | |
| | comp=Z,7.0nm,1.4s | | | | | | | |
| **SNAA** | **Sanae** | **89.88** | **179** | ⇑P | | **P** | **18 03 18.0** | **-1.5** |
| | comp=Z,45nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **89.88** | **179** | P | | **P** | **18 03 18.4** | **-1.0** |
| | comp=Z,1.8nm,0.6s,baz=210,slow=8.4,SNR=29 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **H29M** | **Whitestone** | **89.98** | **15** | P | | **P** | **18 03 19.1** | **-0.6** |
| H29M | | | | IAmb | | IAmb | 18 03 30.8 | |
| | comp=Z,7.4nm,1.4s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.05** | **177** | ⇑P | | **P** | **18 03 19.8** | **-0.4** |
| | comp=Z,16nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.48** | **177** | ⇑P | | **P** | **18 03 21.3** | **-0.8** |
| | comp=Z,6.4nm,0.6s,baz=180,slow=4.6 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.71** | **177** | ⇑P | | **P** | **18 03 23.1** | **0.0** |
| | comp=Z,11nm,1.0s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.90** | **349** | PKP | | **PKPdf** | **18 09 19.4** | **-0.7** |
| | comp=Z,1.6nm,0.8s,baz=33,slow=2.9,SNR=4.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **133.68** | **344** | PP | | **PP** | **18 12 09.2** | **-0.7** |
| | comp=Z,1.8nm,0.6s,baz=52,slow=2.3,SNR=8.2 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **143.25** | **4** | PKP | | PKPab | 18 09 47.9 | -0.9 |
| | comp=Z,5.3nm,1.0s,baz=348,slow=2.8,SNR=6.1 | | | | | | | |
| **BNN** | **Bunyan** | **143.58** | **311** | | | PKPab | 18 09 50.5 | -0.2 |
| **BRTR** | **Keskin Array B** | **144.75** | **314** | | | **PKPdf** | **18 09 53.5** | **-0.6** |
| **BRTR** | **Keskin Array B** | **144.75** | **314** | PKP | | **PKPdf** | **18 09 54.0** | **-0.1** |
| | comp=Z,2.8nm,0.9s,baz=147,slow=2.3,SNR=14 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.90** | **302** | PKPbc | | **PKPbc** | **18 09 58.0** | **0.0** |
| | comp=Z,3.8nm,0.6s,baz=64,slow=5.7,SNR=8.7 | | | | | | | |
| **CLL** | **Collm** | **146.01** | **346** | | | **PKPdf** | **18 09 55.5** | **-0.1** |
| **GERES** | **GERESS Array B** | **148.12** | **344** | PKPbc | | **PKPbc** | **18 10 02.7** | **-0.7** |
| | comp=Z,1.6nm,0.7s,baz=12,slow=6.8,SNR=7.1 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.32** | **341** | *i* PKiKP | | **PKPbc** | **18 10 03.7** | **-0.2** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.38** | **340** | *i* PKiKP | | **PKPbc** | **18 10 03.8** | **-0.1** |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **ARSA** | **Arzberg** | **149.02** | **340** | *i* PKP | | **PKPbc** | **18 10 03.8** | **-1.7** |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.19** | **343** | *i* PKiKP | | **PKPbc** | **18 10 05.7** | **-0.3** |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **SOKA** | **Soboth** | **149.69** | **340** | *i* PKP | | **PKPbc** | **18 10 06.0** | **-1.2** |
| | comp=Z,2.7nm,1.1s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.69** | **344** | *i* PKiKP | | **PKPbc** | **18 10 07.0** | **-0.2** |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **WATA** | **Walderalm** | **150.05** | **345** | *i* PKP | | **PKPbc** | **18 10 07.1** | **-1.0** |
| | comp=Z,2.9nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **150.11** | **345** | *i* PKiKP | | **PKPbc** | **18 10 07.7** | **-0.6** |
| | comp=Z,5.9nm,0.6s | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.15** | **342** | *i* PKP | | **PKPbc** | **18 10 07.4** | **-0.9** |
| | comp=Z,2.6nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **150.16** | **346** | *i* PKP | | **PKPbc** | **18 10 07.3** | **-1.1** |
| | comp=Z,4.9nm,1.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.25** | **346** | *i* PKP | | **PKPbc** | **18 10 07.7** | **-0.9** |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **PRED** | **Cave del Predi** | **150.34** | **342** | PKPdf | | **PKPdf** | **18 10 00.8** | **-2.1** |
| PRED | | | | | | **PKPab** | **18 10 16.0** | **-1.5** |
| **ABTA** | **Abfaltersbach** | **150.36** | **344** | *i* PKP | | **PKPbc** | **18 10 07.4** | **-1.4** |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **DAVA** | **Damuels** | **150.48** | **347** | *i* PKiKP | | **PKPbc** | **18 10 09.4** | **+0.2** |
| | comp=Z,6.6nm,1.3s | | | | | | | |
| **FETA** | **Feichten** | **150.55** | **346** | *i* PKiKP | | **PKPbc** | **18 10 08.7** | **-0.6** |
| | comp=Z,1.5nm,0.6s | | | | | | | |

*IDC **24** 18:10:58.1±6.5,37°.43N×69°.86E,h0km,mb3.8/1, mbtmp3.5/4,ML2.9/3,MS3.5/1,Error ellipse: s-maj=98.7km s-min=35.7km az=168.0*

*NNC **24** 18:11:07.8±3.0,38°.51N×69°.20E,h0km,mb4.0,mpv3.6, Error ellipse: s-maj=23.3km s-min=17.1km az=178.0*

**ISC 24 18:11:07.0±2.3,38°.4N±0°.2×69°.27E±0°.08,h10km,n10, σ2s38/17,8C-6D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **4.82** | **11** | ⇑Pn | **Pn** | **18 12 20.3** | **+0.7** |
| | 2.2nm,0.4s,baz=198,slow=15,SNR=89 | | | | | | |
| KK31 | | | | ⇓Pg | **Pb** | **18 12 32.7** | **+1.1** |
| | 6.9nm,0.5s,baz=193,slow=18,SNR=21 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **18 13 17.4** | **+2.0** |
| | 8.0nm,0.5s | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 18 13 36.1 | |
| | 25nm,0.7s,baz=189,slow=30,SNR=6.5 | | | | | | |
| **AAK** | **Ala-Archa** | **5.83** | **41** | Pn | **Pn** | **18 12 37.2** | **+3.5** |
| | 14nm,1.1s | | | | | | |
| AAK | | | | Pg | **Pg** | **18 12 54.7** | **-4.0** |
| | 9.2nm,0.9s | | | | | | |
| AAK | | | | Sn | **Sn** | **18 13 44.8** | **+4.2** |
| | 8.5nm,0.7s | | | | | | |
| AAK | | | | Lg | Lg | 18 14 08.4 | |
| | 16nm,0.9s | | | | | | |
| **CHMS** | **Chumysh** | **6.22** | **40** | ⇓Pn | **Pn** | **18 12 40.2** | **+1.2** |
| | 1.9nm,0.5s | | | | | | |
| CHMS | | | | ⇑Pg | **Pb** | **18 12 57.8** | **+2.4** |
| | 3.7nm,0.6s | | | | | | |
| CHMS | | | | ⇑Sn | **Sn** | **18 13 50.6** | **+0.6** |
| | 8.6nm,0.7s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 18 14 23.5 | |
| | 9.5nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.62** | **45** | ⇓Pn | **Pn** | **18 12 43.4** | **-1.1** |
| | 3.1nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sn** | **18 14 00.9** | **+0.9** |
| | 17nm,0.7s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 18 14 34.4 | |
| | 9.7nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.75** | **45** | Pn | **Pn** | **18 14 06.2** | **-2.1** |
| | 0.1nm,0.3s,baz=229,slow=13,SNR=6.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **12.78** | **331** | ⇑Pn | **Pn** | **18 14 08.5** | **-0.2** |
| | 0.6nm,0.4s | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **18 16 28.4** | **-2.5** |
| | 1.3nm,0.6s | | | | | | |
| AB31 | | | | ⇓Lg | Lg | 18 17 45.7 | |
| | 2.1nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **14.67** | **3** | Pn | **Pn** | **18 14 34.6** | **0.0** |
| | 0.1nm,0.3s,baz=169,slow=9.9,SNR=9.6 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.87** | **29** | P | **P** | **18 15 25.0** | **-2.2** |
| | 0.1nm,0.3s,baz=219,slow=11,SNR=3.6 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **35.16** | **325** | P | **P** | **18 18 02.3** | **+1.6** |
| | 1.0nm,0.7s,baz=117,slow=8.1,SNR=6.9 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **53.75** | **59** | LR | LR | 18 47 14.0 | |
| | comp=Z,40nm,19.3s,baz=348,slow=40 | | | | | | |

*IDC **24** 18:18:42.1±0.7,27°.05N×54°.22E,h0km,mb3.9/17, mbtmp3.9/20,ML3.6/3,MS3.1/2,Error ellipse: s-maj=17.5km s-min=15.0km az=16.0*

*DSN **24** 18:18:42.1±1.3,27°.36N×54°.22E,h10km,ML3.8/12,Error ellipse: s-maj=19.6km s-min=4.5km az=12.0*

*TEH **24** 18:18:43.5,27°.15N×54°.36E,h9km±29km,ML3.8*

*NEIC **24** 18:18:44.1±2.8,27°.10N±0°.08×54°.24E±0°.08,h10km±1km, mb4.1/32,Error ellipse: s-maj=13.9km s-min=10.9km az=202.0*

*OMAN **24** 18:18:48.2±0.2,26°.81N×54°.31E,h10km,mb4.5/2, ml3.9/23,Mwp5.5/3,Error ellipse: s-maj=5.4km s-min=2.3km az=3.0*

**ISC 24 18:18:43.0±1.4,27°.06N±0°.03×54°.30E±0°.03,h6km±9km, n159,σ1s74/188,mb4.1/35,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAR1** | **LAR** | **0.61** | **6** | Pg | **Pb** | **18 18 54.5** | **-1.8** |
| **LMD1** | **Lamerd** | **1.05** | **286** | Pg | **Pn** | **18 19 05.4** | **+1.1** |
| **JHRM** | **Jahrom** | **1.58** | **336** | Pg | **Pg** | **18 19 13.1** | **-0.3** |
| **GENO** | **Geno** | **1.70** | **78** | Pg | **Pg** | **18 19 14.7** | **-1.0** |
| **QIR1** | **Qir** | **1.80** | **322** | Pg | **Pb** | **18 19 16.0** | **-0.5** |
| **SHME** | **Shamm** | **1.93** | **121** | *e*P | **Pn** | **18 19 17.7** | **+1.3** |
| | SNR=19 | | | | | | |
| SHME | | | | S | **Sg** | **18 19 46.6** | **+1.5** |
| **SHME** | **Shamm** | **1.93** | **121** | P | **Pb** | **18 19 18.0** | **-0.6** |
| SHME | | | | S | **Sb** | **18 19 43.2** | **+0.2** |
| **UMQ** | **Umm Al-Quwin** | **1.95** | **141** | P | **Pn** | **18 19 18.5** | **+1.7** |
| **UMQ** | **Umm Al-Quwin** | **1.95** | **141** | P | **Pn** | **18 19 18.3** | **+1.6** |
| **IBND** | **Bandar-abas** | **2.03** | **78** | Pn | **Pb** | **18 19 19.7** | **-0.7** |
| **BANOM** | **Banah** | **2.12** | **122** | P | **Pb** | **18 19 22.5** | **+0.6** |
| BANOM | | | | S | **Sb** | **18 19 47.8** | **-0.7** |
| **MASF** | **Masafi** | **2.37** | **135** | P | **Pb** | **18 19 25.6** | **-0.5** |
| | SNR=7.3 | | | | | | |
| MASF | | | | S | **Sn** | **18 19 54.5** | **+2.6** |
| **MSFE** | **Esma-Masafi** | **2.38** | **135** | P | **Pn** | **18 19 25.1** | **+2.4** |
| **NAZ** | **Nazwa, Dubai** | **2.40** | **149** | *e*P | **Pb** | **18 19 25.8** | **-0.9** |
| | SNR=12 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **2.40** | **149** | P | **Pb** | **18 19 26.6** | **-0.1** |
| | SNR=20 | | | | | | |
| **JRN** | **Qarnain Island** | **2.48** | **212** | P | **Pn** | **18 19 26.4** | **+2.5** |
| **MDH** | **Madha** | **2.51** | **134** | P | **Pb** | **18 19 27.1** | **-1.4** |
| **MDH** | **Madha** | **2.51** | **134** | P | **Pn** | **18 19 26.9** | **+2.5** |
| | SNR=9.7 | | | | | | |
| MDH | | | | S | **Sn** | **18 19 56.8** | **+1.5** |
| **AJN** | **Ajban** | **2.56** | **166** | P | **Pn** | **18 19 27.2** | **+2.1** |
| | SNR=6.7 | | | | | | |
| AJN | | | | S | **Sn** | **18 19 54.5** | **-2.1** |
| **FAQ** | **Al Faqa, Dubai** | **2.58** | **153** | *e*P | **Pb** | **18 19 29.2** | **-0.6** |
| | SNR=12 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.58** | **153** | P | **Pb** | **18 19 29.0** | **-0.8** |
| | SNR=6.8 | | | | | | |
| FAQ | | | | P | **Pb** | **18 19 29.0** | **-0.8** |
| | SNR=6.8 | | | | | | |
| FAQ | | | | S | **Sn** | **18 19 55.1** | **-2.0** |
| FAQ | | | | S | **Sn** | **18 19 55.1** | **-2.0** |
| **ASUD** | **Al Ashush, Dub** | **2.59** | **159** | *e*P | **Pb** | **18 19 29.4** | **-0.5** |
| | SNR=37 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.59** | **159** | P | **Pn** | **18 19 26.7** | **+1.2** |
| | SNR=37 | | | | | | |
| **UOSS** | **Minazif** | **2.71** | **140** | Pn | **Pn** | **18 19 29.0** | **+1.8** |
| **UOSS** | **Minazif** | **2.71** | **140** | P | **Pn** | **18 19 29.3** | **+2.1** |
| **UOSS** | **Minazif** | **2.71** | **140** | P | **Pn** | **18 19 29.9** | **+2.7** |
| **HATD** | **Hatta, Dubai** | **2.77** | **143** | P | **Pn** | **18 19 29.9** | **+2.0** |
| **HATD** | **Hatta, Dubai** | **2.77** | **143** | P | **Pn** | **18 19 30.0** | **+2.0** |
| **ASHO** | **Ashiyiah** | **2.84** | **146** | *i* P | **Pn** | **18 19 31.4** | **+2.3** |
| | SNR=26 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.84** | **146** | P | **Pn** | **18 19 32.0** | **+2.9** |
| | SNR=26 | | | | | | |
| ASHO | | | | S | **Sn** | **18 20 04.4** | **+0.8** |
| **DSBU** | **Dashti - Bushe** | **2.99** | **296** | Pn | **Pn** | **18 19 34.1** | **+3.0** |
| **KHNJ** | **Kahnooj** | **3.15** | **73** | Pn | **Pn** | **18 19 34.7** | **+1.4** |
| **SHMA** | **Al-Shehemyia** | **3.22** | **249** | P | **Pn** | **18 19 37.8** | **+3.7** |
| | SNR=5.6 | | | | | | |
| SHMA | | | | S | **Sn** | **18 20 16.9** | **+4.0** |
| **ALNE** | **Al Ain** | **3.26** | **156** | *i* P | **Sn** | **18 19 37.9** | **+3.1** |
| | SNR=17 | | | | | | |
| **ALNE** | **Al Ain** | **3.26** | **156** | P | **Pn** | **18 19 38.0** | **+3.1** |
| | SNR=17 | | | | | | |
| ALNE | | | | S | **Sn** | **18 20 15.0** | **+1.0** |
| **MZWR** | **Madinat Zayed** | **3.30** | **187** | P | **Pn** | **18 19 37.8** | **+2.5** |
| **GHWR** | **Ruwais** | **3.34** | **203** | P | **Pn** | **18 19 37.6** | **+1.8** |
| GHWR | | | | S | **Sn** | **18 20 17.7** | **+1.9** |
| **NGRK** | **Negar Kerman** | **3.35** | **39** | Pn | **Pn** | **18 19 38.2** | **+1.8** |
| **JASK** | **Jask - Hormozg** | **3.41** | **110** | Pn | **Pn** | **18 19 39.0** | **+2.2** |
| **JASK** | **Jask - Hormozg** | **3.41** | **110** | P | **Pn** | **18 19 39.5** | **+2.7** |
| JASK | | | | S | **Sn** | **18 20 20.2** | **+2.6** |
| **SAKB** | **Bahrain** | **3.54** | **253** | P | **Pn** | **18 19 41.5** | **+2.9** |
| SAKB | | | | S | **Sn** | **18 20 22.8** | **+2.1** |
| **TRNA** | **Turayna** | **3.62** | **231** | P | **Pn** | **18 19 42.1** | **+2.5** |
| | SNR=8.3 | | | | | | |
| TRNA | | | | S | **Sn** | **18 20 24.7** | **+2.0** |
| **SLWR** | **Sila** | **3.79** | **219** | P | **Pn** | **18 19 44.1** | **+2.0** |
| SLWR | | | | S | **Sn** | **18 20 26.4** | **-0.6** |
| **KHGB** | **Koh Gabri** | **3.82** | **30** | Pn | **Pn** | **18 19 44.4** | **+1.7** |
| **SMRA** | **Abu-Samra** | **3.88** | **234** | P | **Pn** | **18 19 45.8** | **+2.5** |
| **CHMN** | **Cheshme madani** | **3.99** | **45** | Pn | **Pn** | **18 19 46.6** | **+1.5** |
| **MZR** | **Muzera** | **4.10** | **191** | *i* P | **Pn** | **18 19 48.4** | **+2.0** |
| | SNR=8.1 | | | | | | |
| **MZR** | **Muzera** | **4.10** | **191** | P | **Pn** | **18 19 48.6** | **+2.2** |
| MZR | | | | S | **Sn** | **18 20 32.6** | **-2.1** |
| **KBAM** | **BAM** | **4.21** | **60** | Pn | **Pn** | **18 19 50.2** | **+2.3** |
| **ARQ** | **Araqi** | **4.21** | **151** | P | **Pn** | **18 19 51.0** | **+3.1** |
| | SNR=19 | | | | | | |
| **IMEH** | **Mehriz** | **4.33** | **4** | Pn | **Pn** | **18 19 51.7** | **+2.0** |
| **ZRDN** | **Zarand Kerman** | **4.36** | **26** | Pn | **Pn** | **18 19 51.4** | **+1.3** |
| **UMZA** | **Um Al Zommool** | **4.39** | **170** | P | **Pn** | **18 19 52.8** | **+2.5** |
| UMZA | | | | S | **Sn** | **18 20 41.0** | **-0.8** |
| **HOQ** | **Hoqain** | **4.40** | **141** | Pn | **Pn** | **18 19 53.8** | **+3.3** |
| **HOQ** | **Hoqain** | **4.40** | **141** | P | **Pn** | **18 19 53.2** | **+2.7** |
| | SNR=7.0 | | | | | | |
| HOQ | | | | S | **Sn** | **18 20 43.9** | **+1.8** |
| **KLNJ** | **Kolanjah** | **4.60** | **330** | Pn | **Pn** | **18 19 55.2** | **+1.7** |
| **IBAF** | **Bafgh** | **4.65** | **13** | Pn | **Pn** | **18 19 55.6** | **+1.5** |
| **ISAD** | **Sadrabad** | **4.87** | **354** | Pn | **Pn** | **18 19 58.8** | **+1.6** |
| **BIDO** | **Bidbid** | **4.94** | **135** | P | **Pn** | **18 20 00.8** | **+2.9** |
| BIDO | | | | P | **Pn** | **18 20 00.8** | **+2.9** |
| BIDO | | | | S | **Sn** | **18 20 55.8** | **+0.5** |
| BIDO | | | | S | **Sn** | **18 20 55.8** | **+0.5** |
| **IRAM** | **Ramesheh** | **5.02** | **341** | Pn | **Pn** | **18 20 00.8** | **+1.6** |
| **BSY** | **Bisya** | **5.04** | **148** | P | **Pn** | **18 20 02.6** | **+3.4** |
| BSY | | | | S | **Sn** | **18 20 56.5** | **-1.3** |
| **SMDO** | **Samad** | **5.23** | **139** | P | **Pn** | **18 20 04.7** | **+2.7** |
| SMDO | | | | S | **Sn** | **18 21 01.0** | **-1.7** |
| **WSAR** | **Wadi Sarin** | **5.46** | **133** | Pn | **Pn** | **18 20 07.2** | **+2.1** |
| | 2.6nm,0.3s,baz=312,slow=11,SNR=25 | | | | | | |
| WSAR | | | | Sn | **Sn** | **18 21 08.2** | **-0.1** |
| | 3.1nm,0.3s,baz=133,slow=19,SNR=6.4 | | | | | | |
| | 8.6nm,0.5s | | | | | | |
| **IGAR** | **Gharneh** | **5.68** | **340** | Pn | **Pn** | **18 20 09.9** | **+1.7** |
| **CHBR** | **Chabahar** | **5.74** | **103** | Pn | **Pn** | **18 20 10.9** | **+2.1** |
| **JMDO** | **Jabal Madar** | **5.81** | **143** | P | **Pn** | **18 20 12.8** | **+3.0** |
| JMDO | | | | S | **Sn** | **18 21 15.5** | **-1.3** |
| **ZNGN** | **Zangian** | **5.87** | **330** | Pn | **Pn** | **18 20 12.1** | **+1.2** |
| **JHBN** | **Jahan bin** | **6.05** | **329** | Pn | **Pn** | **18 20 15.7** | **+2.3** |
| **WBK** | **Wadi Bani Khal** | **6.13** | **135** | P | **Pn** | **18 20 15.7** | **+1.5** |
| | SNR=20 | | | | | | |
| WBK | | | | S | **Sn** | **18 21 26.0** | **+1.2** |
| **ANAR** | **Anarak** | **6.13** | **356** | Pn | **Pn** | **18 20 15.0** | **+0.6** |
| **ZHDN** | **Zahedan** | **6.20** | **66** | Pn | **Pn** | **18 20 17.6** | **+2.2** |
| **TPRV** | **Parvadeh(Tabas** | **6.30** | **19** | Pn | **Pn** | **18 20 18.0** | **+1.4** |
| **IPIR** | **Pirpir** | **6.34** | **333** | Pn | **Pn** | **18 20 18.6** | **+1.2** |
| **NGCH** | **Negor - Chabah** | **6.37** | **104** | P | **Pn** | **18 20 20.2** | **+2.8** |
| **NHDN** | **Nehbandan** | **6.63** | **48** | Pn | **Pn** | **18 20 23.2** | **+2.1** |
| **JLN** | **Jalan Bani Buh** | **6.74** | **135** | P | **Pn** | **18 20 23.5** | **+0.9** |
| JLN | | | | P | **Pn** | **18 20 23.5** | **+0.9** |
| JLN | | | | S | **Sn** | **18 21 37.1** | **-2.7** |
| JLN | | | | S | **Sn** | **18 21 37.1** | **-2.7** |
| **QAMS** | **Qamsar** | **7.11** | **340** | Pn | **Pn** | **18 20 29.2** | **+1.3** |
| **TNSJ** | **Nastanj** | **7.17** | **16** | Pn | **Pn** | **18 20 29.5** | **+0.9** |
| **SRVN** | **Saravan** | **7.22** | **85** | Pn | **Pn** | **18 20 31.7** | **+2.4** |
| **ISFB** | **Sefidab** | **7.49** | **347** | Pn | **Pn** | **18 20 34.4** | **+1.5** |
| **AFRZ** | **Afriz** | **7.54** | **32** | Pn | **Pn** | **18 20 35.3** | **+1.6** |
| **DQM** | **DQM** | **7.69** | **157** | P | **Pn** | **18 20 36.8** | **+1.1** |
| **DOK** | **Doka** | **8.40** | **181** | P | **Pn** | **18 20 47.0** | **+1.6** |
| **RAYN** | **Ar Rayn** | **8.70** | **248** | Pn | **Pn** | **18 20 49.7** | **+0.1** |
| **RAYN** | **Ar Rayn** | **8.70** | **248** | P | **Pn** | **18 20 49.3** | **-0.3** |
| **WHFO** | **Wadi Hawf** | **9.11** | **183** | P | **Pn** | **18 20 56.1** | **+0.9** |
| | SNR=10 | | | | | | |
| **DMTO** | **DMTO** | **9.31** | **176** | P | **Pn** | **18 21 00.8** | **+2.9** |
| **RBK** | **Rabkut** | **9.51** | **181** | P | **Pn** | **18 21 02.2** | **+1.5** |
| **ABTO** | **Aybut** | **9.70** | **186** | P | **Pn** | **18 21 03.8** | **+0.5** |
| **HRA** | **Herat** | **10.00** | **41** | Pn | **Pn** | **18 21 07.9** | **+0.3** |
| **KBL** | **Kabul** | **14.69** | **56** | P | **P** | **18 22 17.3** | **-0.7** |
| **GNI** | **Garni** | **15.28** | **331** | P | **P** | **18 22 22.0** | **-2.4** |
| **GNI** | **Garni** | **15.28** | **331** | LR | LR | 18 29 15.5 | |
| | comp=Z,83nm,20.4s,baz=156,slow=42 | | | | | | |
| **GURO** | **Guroymak-BITLI** | **15.40** | **321** | P | **P** | **18 22 23.9** | **-1.9** |
| GURO | | | | IAmb | IAmb | 18 22 32.9 | |
| | comp=Z,5.7nm,0.5s | | | | | | |
| **KOPT** | **Kop Dagi** | **17.28** | **322** | P | **Pn** | **18 22 44.1** | **-1.1** |
| **MMAI** | **Mount Meon Ar** | **17.40** | **294** | P | **Pn** | **18 22 45.5** | **-1.1** |
| | comp=Z,0.3nm,0.3s,baz=101,slow=15,SNR=3.5 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **NIL** | **Nilore** | **17.62** | **64** | P | **P** | **18 22 50.7** | **+0.4** |
| NIL | | | | IAmb | IAmb | 18 22 53.8 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **GAZ** | **Gaziantep** | **17.62** | **309** | | **Pn** | **18 22 48.2** | **-1.0** |
| **GAR** | **Garm** | **17.92** | **44** | P | **P** | **18 22 52.4** | **-1.3** |
| GAR | | | | IAmb | IAmb | 18 23 02.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **17.94** | **316** | P | **Pn** | **18 22 53.3** | **-0.1** |
| ARPR | | | | IAmb | IAmb | 18 23 03.5 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **BTK** | **Batken** | **18.87** | **42** | P | **P** | **18 23 02.0** | **-2.1** |
| **KBZ** | **Khabaz** | **19.02** | **334** | P | **P** | **18 23 05.1** | **-0.5** |
| | comp=Z,0.1nm,0.3s,baz=180,slow=10,SNR=2.9 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **KIV** | **Kislovodsk** | **19.30** | **334** | P | **P** | **18 23 08.3** | **-0.5** |
| KIV | | | | IAmb | IAmb | 18 23 19.8 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **BNN** | **Bunyan** | **19.41** | **312** | P | **P** | **18 23 09.9** | **-0.1** |
| BNN | | | | IAmb | IAmb | 18 23 51.5 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **KK31** | **Karatay Array** | **20.73** | **35** | P | **P** | **18 23 23.4** | **-1.0** |
| **KKAR** | **Karatay Array** | **20.73** | **35** | P | **P** | **18 23 22.9** | **-1.5** |
| **KKAR** | **

comp=Z,0.8nm,0.8s
**SONM Songino Array 45.29 48 P P 18 27 02.3 +0.6**
comp=Z,1.0nm,0.9s,baz=262,slow=7.2,SNR=4.7
comp=Z,1.0nm,0.9s
**ARCES ARCESS Array B 45.70 346 P P 18 27 04.9 +0.4**
comp=Z,0.9nm,0.7s,baz=155,slow=6.0,SNR=3.9
comp=Z,0.9nm,0.7s
**HHC Hu-ho-hao-te 48.65 58** *eP* **P 18 27 30.4 +2.3**
HHC sP sP 18 27 40.3 +9.5
HHC pmax pmax
comp=Z,21nm,0.6s
HHC pmax pmax
comp=Z,240nm,5.1s
**ESDC Sonseca Array 49.48 300 P P 18 27 33.6 -0.7**
comp=Z,0.7nm,0.9s,baz=63,slow=8.4,SNR=5.8
comp=Z,0.7nm,0.9s
**PAB San Pablo 49.78 300 P P 18 27 34.3 -2.5**
**TORD Torodi Ar. Bea 50.96 265 P P 18 27 44.1 -1.7**
TORD IAmb IAmb 18 27 47.9
comp=Z,3.7nm,1.4s
**TORD Torodi Ar. Bea 50.96 265 P P 18 27 45.2 -0.6**
comp=Z,2.0nm,0.9s,baz=43,slow=6.2,SNR=8.9
comp=Z,2.0nm,0.9s
**DBIC Dimbokro 59.58 261 P P 18 28 46.9 -1.1**
comp=Z,6.5nm,0.9s,baz=44,slow=7.0,SNR=3.6
comp=Z,6.5nm,0.9s
**BOSA Boshof 61.97 209 P P 18 29 04.4 +0.3**
comp=Z,1.8nm,0.7s,baz=49,slow=7.3,SNR=4.1
comp=Z,1.8nm,0.7s
**WRA Warramunga Arr 90.47 112 P P 18 31 45.3 -0.9**
comp=Z,0.5nm,0.7s,baz=316,slow=3.6,SNR=2.7
comp=Z,0.5nm,0.7s
**ASAR Alice Springs 91.89 116 P P 18 31 52.0 -0.7**
comp=Z,0.7nm,0.9s,baz=296,slow=5.1,SNR=2.6
comp=Z,0.7nm,0.9s

*IDC **24** 18:23:17.8±0.8, 12°.83N×121°.66E, h0km, mb3.9/10, mbtmp3.9/10, MS3.5/12, Error ellipse: s-maj=34.2km s-min=15.0km az=67.0*
*NEIC **24** 18:23:27.8±1.4, 12°.9N±0°.1×121°.6E±0°.2, h78km±10km, mb4.6/11, Error ellipse: s-maj=25.7km s-min=15.5km az=76.0*
**ISC 24 18:23:19.9**±1.8, **12°.86N**±0°.03×**121°.50E**±0°.04, **h16**km±12km, **n48**, σ1**°48**/47, **mb4.1**/15, **MS3.6**/11, **2C-8D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PGP** | **Puerto Galera** | **0.83** | **320** | ⇑*eP* | | **Pb** | **18 23 34.4** | **-1.6** |
| PGP | | | | *i* S | | **Sb** | **18 23 45.6** | **-1.4** |
| **IBAJ** | **Ibajay, Aklan** | **1.23** | **148** | ⇓*iP* | | **Pn** | **18 23 41.9** | **-0.5** |
| IBAJ | | | | *i* S | | **Sb** | **18 23 57.6** | **-0.7** |
| **LQP** | **Lukban** | **1.24** | **2** | ⇓*eP* | | **Pn** | **18 23 41.4** | **-1.4** |
| LQP | | | | *e*S | | **Sb** | **18 23 58.2** | **-0.8** |
| **TGY** | **Tagaytay City** | **1.35** | **336** | ⇑*eP* | | **Pg** | **18 23 46.1** | **+0.1** |
| TGY | | | | *e*S | | **Sn** | **18 24 01.6** | **-0.2** |
| **GQP** | **Guinayangan** | **1.39** | **41** | ⇓*eP* | | **Pn** | **18 23 44.8** | **+0.2** |
| GQP | | | | *i* S | | **Sb** | **18 24 03.6** | **+0.7** |
| **RCP** | **Roxas** | **1.77** | **137** | ⇓*eP* | | **Pn** | **18 23 49.9** | **-0.1** |
| RCP | | | | *e*S | | **Sn** | **18 24 08.5** | **-3.7** |
| **MMPH** | **Masbate** | **2.13** | **103** | ⇓*eP* | | **Pn** | **18 23 53.7** | **-1.1** |
| MMPH | | | | *i* S | | **Sn** | **18 24 20.0** | **-1.0** |
| **JAP** | **San Jose, Anti** | **2.15** | **168** | ⇓*eP* | | **Pn** | **18 23 55.6** | **+0.6** |
| **LLP** | **Lapu-Lapu** | **3.50** | **136** | *eP* | | **Pn** | **18 24 15.6** | **+2.0** |
| LLP | | | | *i* S | | **Sn** | **18 24 54.9** | **+0.2** |
| **PLP** | **Palo** | **3.79** | **116** | ⇓*eP* | | **Pn** | **18 24 18.0** | **+0.3** |
| **PPR** | **Puerto Princes** | **4.10** | **222** | ⇓*iP* | | **Pn** | **18 24 24.4** | **+2.4** |
| PPR | | | | *i* S | | **Sn** | **18 25 04.3** | **-5.2** |
| **MYLDM** | **Lahad Datu** | **8.19** | **201** | Pn | | Pn | 18 25 24.4 | +6.3 |
| **SBUM** | **Sibu** | **13.84** | **222** | | | **P** | **18 26 42.7** | **-1.1** |
| **KAPI** | **Kappang** | **17.84** | **186** | LR | | LR | 18 34 36.6 | |
| | comp=Z,106nm,18.8s,baz=341,slow=38 | | | | | | | |
| **PHRA** | **Phrae** | **21.23** | **288** | P | | **P** | **18 28 07.2** | **+1.9** |
| **CRAI** | **Chiangrai** | **21.52** | **293** | P | | **P** | **18 28 10.4** | **+1.9** |
| CRAI | | | | IAmb | | IAmb | 18 28 14.1 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.41** | **287** | P | | **P** | **18 28 20.5** | **+2.4** |
| **CMAR** | **Chiang Mai Arr** | **22.41** | **287** | P | | **P** | **18 28 20.9** | **+2.8** |
| | comp=Z,3.3nm,0.8s,baz=93,slow=7.6,SNR=22 | | | | | | | |
| CMAR | | | | LR | | LR | 18 36 17.6 | |
| | comp=Z,29nm,21.9s,baz=85,slow=35 | | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **25.16** | **12** | P | | **P** | **18 28 45.1** | **+0.8** |
| | comp=Z,1.3nm,0.8s,baz=191,slow=11,SNR=4.2 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **SHL** | **Shillong** | **30.61** | **299** | P | | **P** | **18 29 33.5** | **-0.2** |
| SHL | | | | IAmb | | IAmb | 18 29 35.0 | |
| | comp=Z,8.7nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.96** | **159** | P | | **P** | **18 30 10.3** | **-1.1** |
| | comp=Z,2.4nm,0.9s,baz=338,slow=9.7,SNR=12 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **18 32 42.7** | **-1.2** |
| | comp=Z,0.2nm,0.8s,baz=325,slow=2.9,SNR=1.5 | | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **37.08** | **343** | P | | **P** | **18 30 29.4** | **-0.1** |
| **SONM** | **Songino Array** | **37.08** | **343** | P | | **P** | **18 30 30.2** | **+0.7** |
| | comp=Z,2.4nm,0.7s,baz=160,slow=10,SNR=11 | | | | | | | |
| SONM | | | | LR | | LR | 18 47 28.5 | |
| | comp=Z,99nm,18.2s,baz=156,slow=39 | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **38.27** | **161** | P | | **P** | **18 30 39.2** | **-0.5** |
| **ASAR** | **Alice Springs** | **38.28** | **161** | P | | **P** | **18 30 39.1** | **-0.6** |
| **ASAR** | **Alice Springs** | **38.28** | **161** | P | | **P** | **18 30 39.9** | **+0.2** |
| | comp=Z,1.7nm,0.8s,baz=342,slow=7.1,SNR=18 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **MORW** | **Morawa** | **42.02** | **187** | P | | **P** | **18 31 11.0** | **+0.3** |
| MORW | | | | IAmb | | IAmb | 18 31 22.4 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **FORT** | **Forrest** | **43.84** | **172** | P | | **P** | **18 31 25.7** | **+0.2** |
| **NWAO** | **Narrogin (SRO)** | **45.71** | **185** | P | | **P** | **18 31 40.6** | **+0.3** |
| **MKAR** | **Makanchi Array** | **47.17** | **324** | P | | **P** | **18 31 52.4** | **+0.7** |
| | comp=Z,0.3nm,0.7s,baz=120,slow=8.5,SNR=3.7 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **47.50** | **163** | P | | **P** | **18 31 54.6** | **+0.3** |
| **STKA** | **Stephens Creek** | **48.47** | **157** | P | | **P** | **18 32 02.6** | **+0.7** |
| **STKA** | **Stephens Creek** | **48.47** | **157** | P | | **P** | **18 32 01.9** | **0.0** |
| | comp=Z,1.4nm,0.6s,baz=331,slow=12,SNR=4.3 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **49.39** | **28** | P | | **P** | **18 32 09.3** | **+0.6** |
| | comp=Z,1.9nm,1.0s,baz=198,slow=7.6,SNR=3.2 | | | | | | | |
| | comp=Z,1.9nm,1.0s | | | | | | | |
| **YAK** | **Yakutsk** | **49.45** | **5** | LR | | LR | 18 53 52.5 | |
| | comp=Z,19nm,19.5s,baz=230,slow=37 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.16** | **333** | P | | **P** | **18 32 14.3** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=142,slow=5.6,SNR=4.0 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **50.21** | **315** | LR | | LR | 18 54 42.0 | |
| | comp=Z,88nm,21.9s,baz=102,slow=37 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.32** | **326** | P | | **P** | **18 32 24.7** | **+1.4** |
| | comp=Z,1.9nm,0.9s,baz=119,slow=8.7,SNR=11 | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| **KURK** | **Kurchatov** | **51.32** | **326** | P | | **P** | **18 32 24.2** | **+0.9** |
| KURK | | | | IAmb | | IAmb | 18 32 26.0 | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **TOO** | **Toolangi** | **54.99** | **157** | P | | **P** | **18 32 51.6** | **+1.1** |
| TOO | | | | IAmb | | IAmb | 18 32 52.7 | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| **TIXI** | **Tiksi** | **58.93** | **3** | LR | | LR | 18 59 57.3 | |
| | comp=Z,44nm,18.2s,baz=210,slow=37 | | | | | | | |
| **ABKAR** | **Akbulak array** | **61.88** | **319** | P | | **P** | **18 33 38.4** | **-0.1** |
| **URZ** | **Urewera** | **72.71** | **137** | LR | | LR | 19 10 43.6 | |
| | comp=Z,70nm,18.5s,baz=26,slow=39 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.14** | **339** | LR | | LR | 19 18 06.4 | |
| | comp=Z,18nm,18.2s,baz=156,slow=41 | | | | | | | |
| **HFS** | **Hagfors** | **87.58** | **332** | LR | | LR | 19 20 11.4 | |
| | comp=Z,37nm,18.1s,baz=100,slow=39 | | | | | | | |
| **NOA** | **NORSAR Array B** | **88.36** | **333** | LR | | LR | 19 19 34.0 | |
| | comp=Z,27nm,18.2s,baz=105,slow=38 | | | | | | | |
| **GERES** | **GERESS Array B** | **91.77** | **321** | LR | | LR | 19 19 39.5 | |
| | comp=Z,44nm,21.9s,baz=188,slow=37 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **94.95** | **320** | LR | | LR | 19 22 51.2 | |
| | comp=Z,20nm,18.8s,baz=88,slow=38 | | | | | | | |

**IDC 24 18:23:54.4**±2.9, **7°.00S**×**128°.46E**, **h0**km, **mb3.3**/1, **mbtmp3.1**/3, **ML3.2**/2, **Error ellipse: s-maj=307.2km s-min=33.6km az=66.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.07** | **157** | Pn | | Pn | 18 27 14.8 | -0.4 |
| | 0.1nm,0.3s,baz=334,slow=13,SNR=2.4 | | | | | | | |
| WRA | | | | Sn | | Sn | 18 29 37.4 | -15 |
| | 0.1nm,0.3s,baz=338,slow=22,SNR=5.2 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **17.38** | **163** | P | | Pn | 18 27 58.8 | +0.3 |
| | 0.1nm,0.3s,baz=345,slow=10,SNR=9.4 | | | | | | | |
| | 0.3nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.40** | **328** | P | | P | 18 34 51.7 | 0.0 |
| | 0.1nm,0.4s,baz=110,slow=7.8,SNR=2.1 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |

*NNC **24** 18:28:38.0±0.5, 42°.95N×78°.23E, h0km, mpv2.5, Error ellipse: s-maj=7.0km s-min=1.3km az=174.0*
*SOME **24** 18:28:38.2, 42°.93N×78°.23E, h5km*
**ISC 24 18:28:38.6**±1.5, **42°.98N**±0°.08×**78°.22E**±0°.03, **h4**km±12km, **n11**, σ0**°55**/22, **2C-2D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SATY** | **Saty** | **0.16** | **61** | *eP* | | **Pg** | **18 28 41.9** | **+0.1** |
| | 3.5nm,0.1s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **18 28 44.6** | **+0.8** |
| | 36nm,0.2s | | | | | | | |
| **SATY** | **Saty** | **0.16** | **61** | P | | **Pg** | **18 28 41.9** | **+0.1** |
| | 3.5nm,0.1s | | | | | | | |
| SATY | | | | S | | **Sg** | **18 28 44.6** | **+0.8** |
| | 36nm,0.2s | | | | | | | |
| **KPKS** | **Kokpek** | **0.59** | **35** | *eP* | | **Pg** | **18 28 49.3** | **-0.6** |
| | 2.1nm,0.1s | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **18 28 57.4** | **-0.2** |
| | 1.6nm,0.2s | | | | | | | |
| **KPKS** | **Kokpek** | **0.59** | **35** | P | | **Pg** | **18 28 49.3** | **-0.6** |
| | 2.1nm,0.1s | | | | | | | |
| KPKS | | | | S | | **Sg** | **18 28 57.4** | **-0.2** |
| | 2.1nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **0.61** | **74** | *eP* | | **Pg** | **18 28 49.8** | **-0.5** |
| | 0.7nm,0.1s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **18 28 58.2** | **-0.1** |
| | 5.0nm,0.2s | | | | | | | |
| **UZB** | **Uzynbulak** | **0.61** | **74** | P | | **Pg** | **18 28 50.0** | **-0.3** |
| UZB | | | | S | | **Sg** | **18 28 58.3** | **0.0** |
| **KNDC** | **Almaty** | **0.95** | **285** | ⇓P | | **Pg** | **18 28 56.5** | **-0.2** |
| | 6.4nm,0.5s | | | | | | | |
| KNDC | | | | ⇑S | | **Sg** | **18 29 10.0** | **+0.9** |
| | 9.1nm,0.5s | | | | | | | |
| **PDGK** | **Podgornoye** | **0.99** | **69** | ⇑P | | **Pg** | **18 28 57.2** | **-0.4** |
| | 3.4nm,1.0s | | | | | | | |
| PDGK | | | | ⇓S | | **Sg** | **18 29 10.8** | **+0.3** |
| | 4.4nm,1.1s | | | | | | | |
| **ARXS** | **Arharly** | **1.26** | **347** | *eP* | | **Pn** | **18 29 03.4** | **+0.2** |
| | 0.3nm,0.2s | | | | | | | |
| ARXS | | | | *e*S | | **Sn** | **18 29 21.5** | **+0.9** |
| | 2.4nm,0.2s | | | | | | | |
| **KTBS** | **Karatobe** | **1.34** | **304** | *eP* | | **Pn** | **18 29 03.6** | **-0.6** |
| | 0.5nm,0.5s | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **18 29 21.5** | **-0.1** |
| | 0.9nm,0.5s | | | | | | | |
| **DJR** | **Jarkent** | **1.77** | **40** | *eP* | | **Pb** | **18 29 11.2** | **-0.4** |
| | 0.4nm,0.1s | | | | | | | |
| DJR | | | | *e*S | | **Sb** | **18 29 34.8** | **+0.6** |
| | 1.4nm,0.2s | | | | | | | |

*NEIC **24** 18:31:50.0±1.2, 18°.7S±0°.2×179°.1W±0°.1, h570km±6km, mb4.3/23, Error ellipse: s-maj=25.5km s-min=13.6km az=150.0*
*IDC **24** 18:31:52.3±2.8, 18°.56S×179°.31W, h594km±31km, mb3.2/9, mbtmp4.2/9, Error ellipse: s-maj=23.1km s-min=15.8km az=158.0*
**ISC 24 18:31:50.1**±0.9, **18°.6S**±0°.1×**179°.25W**±0°.09, **h576**km±10km, **n68**, σ0**°71**/74, **mb4.2**/22, **4C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **2.70** | **287** | P | | **P** | **18 33 05.9** | **+0.2** |
| **AFI** | **Afiamalu** | **8.54** | **58** | P | | **P** | **18 33 53.3** | **-0.7** |
| **PINNC** | **Pines Island,** | **13.09** | **250** | P | | **P** | **18 34 39.6** | **-0.3** |
| **DZM** | **Mont Dzumac** | **13.87** | **253** | P | | **P** | **18 34 47.3** | **-0.7** |
| **KOUNC** | **Koumac, New Ca** | **15.64** | **260** | P | | **P** | **18 35 04.4** | **-0.8** |
| **EIDS** | **Eidsvold** | **28.30** | **251** | P | | **P** | **18 36 58.7** | **+0.3** |
| EIDS | | | | IAmb | | IAmb | 18 36 59.7 | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **ARMA** | **Armidale** | **28.92** | **240** | P | | **P** | **18 37 05.0** | **+1.0** |
| ARMA | | | | IAmb | | IAmb | 18 37 06.0 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **CTA** | **Charters Tower** | **32.56** | **262** | P | | **P** | **18 37 35.8** | **+0.7** |
| | comp=Z,0.4nm,0.4s,baz=80,slow=10,SNR=22 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **CTAO** | **Charters Tower** | **32.56** | **262** | P | | **P** | **18 37 35.5** | **+0.5** |
| CTAO | | | | IAmb | | IAmb | 18 37 36.8 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **32.67** | **233** | P | | **P** | **18 37 36.6** | **+0.7** |
| **TOO** | **Toolangi** | **36.14** | **231** | P | | **P** | **18 38 06.0** | **+1.2** |
| TOO | | | | IAmb | | IAmb | 18 38 06.5 | |
| | comp=Z,6.5nm,0.7s | | | | | | | |
| **COEN** | **Coen** | **36.32** | **272** | P | | **P** | **18 38 07.2** | **+0.8** |
| **STKA** | **Stephens Creek** | **37.62** | **242** | P | | **P** | **18 38 17.9** | **+1.0** |
| **STKA** | **Stephens Creek** | **37.62** | **242** | P | | **P** | **18 38 18.2** | **+1.3** |
| | comp=Z,4.0nm,0.5s,baz=90,slow=8.1,SNR=17 | | | | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **42.39** | **241** | P | | **P** | **18 38 55.4** | **+0.4** |
| **WR0** | **Warramunga Arr** | **43.54** | **260** | P | | **P** | **18 39 03.4** | **-0.7** |
| WR0 | | | | PcP | | **PcP** | **18 40 39.0** | **+0.1** |
| **WB2** | **Warramunga Arr** | **43.72** | **260** | P | | **P** | **18 39 04.8** | **-0.7** |
| WB2 | | | | PcP | | **PcP** | **18 40 39.6** | **+0.1** |
| **WRA** | **Warramunga Arr** | **43.73** | **260** | P | | **P** | **18 39 05.2** | **-0.4** |
| | comp=Z,1.0nm,0.4s,baz=98,slow=6.3,SNR=38 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **18 40 40.0** | **+0.5** |
| | comp=Z,0.4nm,0.5s,baz=94,slow=3.4,SNR=1.5 | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **AS31** | **Alice Springs** | **43.85** | **255** | P | | **P** | **18 39 06.8** | **+0.3** |
| AS31 | | | | PcP | | **PcP** | **18 40 39.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **43.85** | **255** | P | | **P** | **18 39 06.1** | **-0.4** |
| ASAR | | | | PcP | | **PcP** | **18 40 39.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **43.85** | **255** | P | | **P** | **18 39 06.9** | **+0.4** |
| | comp=Z,8.7nm,0.4s,baz=89,slow=8.7,SNR=271 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **18 40 40.5** | **+0.5** |
| | comp=Z,0.8nm,0.4s,baz=104,slow=3.9,SNR=7.3 | | | | | | | |
| ASAR | | | | S | | **S** | **18 44 55.5** | **-1.1** |
| | comp=Z,0.9nm,1.0s,baz=84,slow=16,SNR=5.3 | | | | | | | |
| | comp=Z,8.7nm,0.4s | | | | | | | |
| **MTN** | **Manton Dam** | **47.99** | **269** | P | | **P** | **18 39 38.0** | **+0.1** |
| MTN | | | | IAmb | | IAmb | 18 40 01.2 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **FORT** | **Forrest** | **49.01** | **245** | P | | **P** | **18 39 45.2** | **0.0** |
| **KNRA** | **Kununurra** | **49.63** | **265** | P | | **P** | **18 39 50.2** | **+0.1** |
| KNRA | | | | IAmb | | IAmb | 18 40 16.7 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.14** | **261** | P | | **P** | **18 40 08.4** | **+0.3** |
| **MORW** | **Morawa** | **59.49** | **247** | P | | **P** | **18 40 58.0** | **-0.8** |
| MORW | | | | IAmb | | IAmb | 18 41 16.0 | |
| | comp=Z,21nm,1.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.49** | **180** | P | | **P** | **18 42 13.6** | **+0.4** |
| QSPA | | | | IAmb | | IAmb | 18 42 14.0 | |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.49** | **180** | P | | **P** | **18 42 13.5** | **+0.4** |
| | comp=Z,3.4nm,0.6s,baz=235,slow=0.9,SNR=45 | | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| **O18K** | **Koktuh Hills** | **80.56** | **12** | P | | **P** | **18 43 02.2** | **-0.5** |
| O18K | | | | IAmb | | IAmb | 18 43 45.7 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **SMAI** | **San Martin Ant** | **80.82** | **159** | P | | **P** | **18 43 04.3** | **+0.2** |
| **BELA** | **Belgrano 2** | **81.61** | **173** | P | | **P** | **18 43 07.3** | **-0.7** |
| BELA | | | | IAmb | | IAmb | 18 43 08.4 | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.81** | **8** | P | | **P** | **18 43 10.0** | **+0.9** |
| K15K | | | | IAmb | | IAmb | 18 43 13.2 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **MAW** | **Mawson** | **82.97** | **200** | P | | **P** | **18 43 15.7** | **+0.7** |
| | comp=Z,1.3nm,0.5s,baz=100,slow=4.7,SNR=4.2 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **GLI** | **Glacier Island** | **83.29** | **15** | P | | **P** | **18 43 16.0** | **-0.6** |
| GLI | | | | IAmb | | IAmb | 18 43 48.7 | |
| | comp=Z,9.3nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.71** | **13** | P | | **P** | **18 43 32.0** | **-0.9** |
| | comp=Z,0.7nm,0.7s,baz=234,slow=5.3,SNR=6.7 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.02** | **58** | P | | **P** | **18 43 36.9** | **+1.4** |
| | comp=Z,1.2nm,0.7s,baz=224,slow=5.2,SNR=5.9 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **88.38** | **44** | P | | **P** | **18 43 42.0** | **+0.4** |
| | comp=Z,0.2nm,0.4s,baz=225,slow=1.0,SNR=2.1 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.65** | **181** | ⇓P | | **P** | **18 43 46.7** | **-0.3** |
| | comp=Z,108nm,0.3s | | | | | | | |
| **SNAA** | **Sanae** | **89.96** | **179** | ⇑P | | **P** | **18 43 47.1** | **-1.2** |
| | comp=Z,24nm,0.5s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.13** | **177** | ⇑P | | **P** | **18 43 48.0** | **-1.1** |
| | comp=Z,6.6nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.56** | **177** | ⇑P | | **P** | **18 43 50.3** | **-0.7** |
| | comp=Z,2.9nm,0.6s,baz=180,slow=4.4 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **90.80** | **177** | ⇑P | | **P** | **18 43 51.7** | **-0.4** |
| | comp=Z,5.6nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **109.02** | **314** | PKiKP | | **PKiKP** | **18 49 13.7** | **-1.1** |
| | comp=Z,0.3nm,0.6s,baz=246,slow=1.5,SNR=4.5 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **111.83** | **318** | PKiKP | | **PKiKP** | **18 49 18.8** | **-1.1** |
| | comp=Z,0.3nm,0.2s,baz=84,slow=2.9,SNR=5.2 | | | | | | | |
| **BVAR** | **Borovoye Array** | **116.85** | **321** | PKP | | **PKPdf** | **18 49 28.9** | **-0.7** |
| | comp=Z,0.9nm,0.4s,baz=108,slow=2.4,SNR=6.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.81** | **349** | PKP | | **PKPdf** | **18 49 48.2** | **0.0** |
| | comp=Z,0.9nm,0.4s,baz=17,slow=1.3,SNR=12 | | | | | | | |
| **LODK** | **Lodwar** | **142.95** | **250** | | | **PKPdf** | **18 50 18.1** | **-1.8** |
| **BNN** | **Bunyan** | **143.49** | **311** | | | PKPab | 18 50 18.9 | +0.1 |
| **BR131** | **Keskin Array S** | **144.67** | **314** | | | **PKPdf** | **18 50 21.9** | **-0.3** |
| **BRTR** | **Keskin Array B** | **144.67** | **314** | PKP | | **PKPdf** | **18 50 22.6** | **+0.5** |
| | comp=Z,1.8nm,0.8s,baz=134,slow=4.2,SNR=10 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.82** | **302** | PKPbc | | **PKPbc** | **18 50 27.1** | **+1.0** |
| | comp=Z,3.6nm,0.6s,baz=74,slow=6.2,SNR=13 | | | | | | | |
| **CLL** | **Collm** | **145.92** | **346** | | | **PKPdf** | **18 50 24.9** | **+1.1** |
| **GERES** | **GERESS Array B** | **148.03** | **344** | PKPbc | | **PKPbc** | **18 50 31.8** | **+0.3** |
| | comp=Z,1.1nm,0.6s,baz=320,slow=3.5,SNR=6.7 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.23** | **341** | *i* PKiKP | | **PKPbc** | **18 50 32.8** | **+0.8** |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.29** | **340** | *i* PKP | | **PKPbc** | **18 50 32.8** | **+0.7** |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| **ARSA** | **Arzberg** | **148.93** | **340** | *i* PKP | | **PKPbc** | **18 50 34.2** | **+0.5** |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.10** | **343** | *i* PKP | | **PKPbc** | **18 50 34.4** | **+0.4** |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **SOKA** | **Soboth** | **149.59** | **340** | *i* PKP | | **PKPbc** | **18 50 35.2** | **-0.2** |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.60** | **344** | *i* PKP | | **PKPbc** | **18 50 35.5** | **+0.2** |
| | comp=Z,2.6nm,0.5s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.74** | **343** | *i* PKP | | **PKPbc** | **18 50 35.7** | **-0.1** |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| **WATA** | **Walderalm** | **149.97** | **345** | *i* PKP | | **PKPbc** | **18 50 36.4** | **+0.1** |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **150.02** | **345** | *i* PKP | | **PKPbc** | **18 50 36.7** | **+0.3** |
| | comp=Z,5.7nm,0.5s | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.06** | **342** | *i* PKP | | **PKPbc** | **18 50 36.0** | **-0.4** |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **150.07** | **346** | *i* PKP | | **PKPbc** | **18 50 36.6** | **+0.1** |
| | comp=Z,1.9nm,0.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **150.16** | **346** | *i* PKP | | **PKPbc** | **18 50 37.0** | **+0.3** |
| | comp=Z,4.5nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.27** | **344** | *i* PKP | | **PKPbc** | **18 50 36.6** | **-0.3** |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **150.46** | **346** | *i* PKP | | **PKPbc** | **18 50 37.8** | **+0.4** |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **CIMO** | **Cimolais** | **150.69** | **343** | | | **PKPbc** | **18 50 37.0** | **-0.9** |

**RSNC 24 18:39:03.2**±0.0, **7°.N**±1°×**7°.3W**±°, **h150**km±2km, **M3.2, mb3.6, mB5.9, ML3.2, Mw(mB)5.5, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.28** | **187** | P | | Pn | 18 39 23.0 | -1.0 |
| BARC | | | | S | | Sn | 18 39 38.1 | -1.7 |
| **BRJC** | **Barrancabermej** | **0.60** | **280** | P | | Pn | 18 39 24.6 | -0.5 |
| BRJC | | | | S | | Sn | 18 39 41.3 | -0.4 |
| **PAMC** | **Pamplona, Colo** | **0.65** | **44** | P | | Pn | 18 39 25.8 | -0.2 |
| PAMC | | | | S | | Sn | 18 39 42.7 | -0.6 |
| **RUSC** | **La Rusia** | **0.97** | **176** | P | | Pn | 18 39 27.0 | -1.4 |
| RUSC | | | | S | | Sn | 18 39 45.8 | -1.7 |
| **PTBC** | **PUERTO BERRIO,** | **1.34** | **256** | P | | Pn | 18 39 29.5 | -1.6 |
| PTBC | | | | S | | Sn | 18 39 50.8 | -1.7 |
| **TAMC** | **Tame, Arauca** | **1.42** | **108** | P | | Pn | 18 39 31.5 | -0.5 |
| TAMC | | | | S | | Sn | 18 39 53.2 | -0.7 |
| **SPBC** | **San Pablo de B** | **1.52** | **217** | P | | Pn | 18 39 31.9 | -1.2 |
| SPBC | | | | S | | Sn | 18 39 54.4 | -1.5 |
| **ZARC** | **Zaragoza, Cauc** | **1.80** | **290** | P | | Pn | 18 39 36.2 | +0.1 |
| ZARC | | | | S | | Sn | 18 40 00.9 | -0.4 |
| **NORC** | **Norcasia** | **2.15** | **233** | P | | Pn | 18 39 39.1 | -1.0 |
| NORC | | | | S | | Sn | 18 40 07.1 | -1.4 |
| **CHIC** | **Chingaza** | **2.30** | **195** | P | | Pn | 18 39 41.3 | -1.0 |
| CHIC | | | | S | | Sn | 18 40 10.7 | -1.7 |
| **ROSC** | **El Rosal** | **2.33** | **210** | P | | Pn | 18 39 43.0 | +0.3 |
| ROSC | | | | S | | Sn | 18 40 13.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,22nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **26.41** | **262** | P | **P** | **18 59 01.5** | **+1.1** |
| **EIDS** | **Eidsvold** | **26.41** | **262** | P | **P** | **18 59 01.0** | **+0.7** |
| EIDS | | | | IAmb | IAmb | 18 59 02.1 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.92** | **244** | P | **P** | **18 59 06.3** | **+1.6** |
| **CNB** | **Canberra Magne** | **28.79** | **240** | P | **P** | **18 59 22.8** | **+1.5** |
| | comp=Z,12nm,2.0s | | | | | | |
| **CAN** | **Canberra** | **29.08** | **241** | P | **P** | **18 59 25.0** | **+1.2** |
| **CAN** | **Canberra** | **29.08** | **241** | P | **P** | **18 59 23.9** | **+0.1** |
| CAN | | | | IAmb | IAmb | 19 00 01.0 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **YNG** | **Young** | **29.35** | **243** | P | **P** | **18 59 27.4** | **+1.4** |
| | comp=Z,19nm,2.6s | | | | | | |
| **MILA** | **Mila** | **29.42** | **237** | P | **P** | **18 59 28.5** | **+1.8** |
| **CMSA** | **Cobar Meteorol** | **31.22** | **249** | P | **P** | **18 59 43.2** | **+1.0** |
| **CTA** | **Charters Tower** | **31.64** | **271** | P | **P** | **18 59 46.6** | **+0.6** |
| **CTAO** | **Charters Tower** | **31.64** | **271** | P | **P** | **18 59 46.5** | **+0.6** |
| **CTAO** | **Charters Tower** | **31.64** | **271** | P | **P** | **18 59 46.6** | **+0.6** |
| **TOO** | **Toolangi** | **32.37** | **238** | P | **P** | **18 59 52.8** | **+0.8** |
| | comp=Z,7.0nm,2.5s | | | | | | |
| **TOO** | **Toolangi** | **32.37** | **238** | P | **P** | **18 59 52.3** | **+0.3** |
| TOO | | | | IAmb | IAmb | 18 59 55.6 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **QLP** | **Quilpie** | **32.47** | **258** | P | **P** | **18 59 53.6** | **+0.6** |
| | comp=Z,26nm,1.5s | | | | | | |
| **TAU** | **Tasmania Unive** | **32.78** | **227** | P | **P** | **18 59 56.3** | **+0.9** |
| | comp=Z,49nm,1.7s | | | | | | |
| **TAU** | **Tasmania Unive** | **32.78** | **227** | P | **P** | **18 59 56.0** | **+0.6** |
| **STKA** | **Stephens Creek** | **34.73** | **249** | P | **P** | **19 00 12.0** | **0.0** |
| **STKA** | **Stephens Creek** | **34.73** | **249** | P | **P** | **19 00 12.7** | **+0.7** |
| | comp=Z,4.2nm,0.5s,baz=93,slow=11,SNR=20 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **INKA** | **Innaminka** | **35.50** | **256** | P | **P** | **19 00 20.2** | **+1.8** |
| **COEN** | **Coen** | **36.34** | **280** | P | **P** | **19 00 25.5** | **-0.1** |
| COEN | | | | IAmb | IAmb | 19 00 27.1 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **QIS** | **Mount Isa** | **37.59** | **267** | P | **P** | **19 00 36.9** | **+1.0** |
| | comp=Z,6.8nm,1.5s | | | | | | |
| **LCRK** | **Leigh Creek** | **37.60** | **251** | P | **P** | **19 00 35.9** | **+0.1** |
| **BBOO** | **Buckleboo** | **39.44** | **247** | P | **P** | **19 00 50.8** | **+0.1** |
| **BBOO** | **Buckleboo** | **39.44** | **247** | P | **P** | **19 00 50.3** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 19 00 51.8 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **OOD** | **Oodnadatta** | **39.96** | **255** | P | **P** | **19 00 56.0** | **+1.0** |
| **MULG** | **Mulgathing** | **41.20** | **251** | P | **P** | **19 01 04.8** | **-0.1** |
| **AS31** | **Alice Springs** | **42.13** | **261** | P | **P** | **19 01 11.4** | **-1.0** |
| **ASAR** | **Alice Springs** | **42.13** | **261** | P | **P** | **19 01 11.5** | **-0.8** |
| **ASAR** | **Alice Springs** | **42.13** | **261** | P | **P** | **19 01 12.2** | **-0.1** |
| | comp=Z,3.1nm,0.4s,baz=94,slow=7.4,SNR=137 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 05 59.8** | **+2.1** |
| | comp=Z,1.4nm,0.9s,baz=109,slow=3.6,SNR=7.8 | | | | | | |
| ASAR | | | | S | **S** | **19 06 53.6** | **-1.7** |
| | comp=Z,0.8nm,1.0s,baz=100,slow=12,SNR=4.7 | | | | | | |
| | comp=Z,3.1nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.35** | **267** | P | **P** | **19 01 12.6** | **-1.5** |
| WR0 | | | | IAmb | IAmb | 19 01 14.5 | |
| | comp=Z,7.3nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.53** | **267** | P | **P** | **19 01 13.9** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 19 01 16.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.53** | **267** | P | **P** | **19 01 14.3** | **-1.2** |
| WRAB | | | | IAmb | IAmb | 19 01 15.9 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.54** | **267** | P | **P** | **19 01 14.4** | **-1.1** |
| **WRA** | **Warramunga Arr** | **42.54** | **267** | P | **P** | **19 01 14.4** | **-1.3** |
| **WRA** | **Warramunga Arr** | **42.54** | **267** | P | **P** | **19 01 15.0** | **-0.7** |
| | comp=Z,8.7nm,0.4s,baz=100,slow=8.2,SNR=274 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 06 01.7** | **+2.4** |
| | comp=Z,3.8nm,1.1s,baz=102,slow=4.0,SNR=12 | | | | | | |
| WRA | | | | S | **S** | **19 06 59.2** | **-2.1** |
| | comp=Z,1.1nm,1.1s,baz=111,slow=14,SNR=5.2 | | | | | | |
| | comp=Z,8.7nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **46.32** | **250** | P | **P** | **19 01 45.1** | **+0.4** |
| **FORT** | **Forrest** | **46.32** | **250** | P | **P** | **19 01 43.8** | **-0.9** |
| **WRKA** | **Warakurna** | **46.91** | **258** | P | **P** | **19 01 49.2** | **-0.1** |
| **MTN** | **Manton Dam** | **47.65** | **275** | P | **P** | **19 01 54.2** | **-0.7** |
| **MTN** | **Manton Dam** | **47.65** | **275** | P | **P** | **19 01 54.0** | **-0.9** |
| MTN | | | | IAmb | IAmb | 19 02 06.8 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **48.85** | **270** | P | **P** | **19 02 03.6** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 19 02 06.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **50.85** | **287** | P | **P** | **19 02 18.5** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **50.96** | **266** | P | **P** | **19 02 19.0** | **-0.4** |
| | comp=Z,36nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.96** | **266** | P | **P** | **19 02 19.3** | **-0.1** |
| **SBA** | **Scott Base** | **53.99** | **183** | P | **P** | **19 02 42.3** | **+2.1** |
| SBA | | | | PcP | **PcP** | **19 03 39.6** | **+2.2** |
| **SOEI** | **Soe** | **55.04** | **275** | P | **P** | **19 02 48.8** | **+0.1** |
| **MEEK** | **Meekatharra** | **55.15** | **254** | P | **P** | **19 02 49.7** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **55.22** | **246** | P | **P** | **19 02 48.8** | **-0.8** |
| NWAO | | | | IAmb | IAmb | 19 03 25.2 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **55.25** | **260** | P | **P** | **19 02 48.6** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **55.25** | **260** | P | **P** | **19 02 48.8** | **-1.2** |
| PSA00 | | | | IAmb | IAmb | 19 03 27.9 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **55.46** | **260** | P | **P** | **19 02 50.9** | **-0.6** |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **55.46** | **260** | P | **P** | **19 02 51.1** | **-0.4** |
| MBWA | | | | IAmb | IAmb | 19 03 01.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **BLDU** | **Ballidu** | **56.03** | **248** | P | **P** | **19 02 55.2** | **-0.1** |
| **MUN** | **Mundaring** | **56.22** | **247** | P | **P** | **19 02 55.4** | **-1.2** |
| **MORW** | **Morawa** | **56.89** | **250** | P | **P** | **19 02 59.8** | **-1.5** |
| **MORW** | **Morawa** | **56.89** | **250** | P | **P** | **19 03 00.8** | **-0.5** |
| MORW | | | | IAmb | IAmb | 19 03 02.0 | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| MORW | | | | PcP | **PcP** | **19 03 48.2** | **-1.5** |
| **MMRI** | **Maumere** | **57.32** | **275** | P | **P** | **19 03 04.2** | **-0.1** |
| **CASY** | **Casey** | **59.83** | **206** | P | **P** | **19 03 20.3** | **-0.1** |
| **GIRL** | **Giralia** | **59.98** | **257** | P | **P** | **19 03 20.0** | **-2.2** |
| **TOLI2** | **Tolitoli** | **62.83** | **285** | P | **P** | **19 03 40.2** | **-0.8** |
| TOLI2 | | | | IAmb | IAmb | 19 04 00.5 | |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.79** | **180** | P | **P** | **19 04 00.5** | **+1.4** |
| QSPA | | | | IAmb | IAmb | 19 04 01.9 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.79** | **180** | P | **P** | **19 04 00.5** | **+1.4** |
| | comp=Z,4.7nm,0.6s,baz=355,slow=0.8,SNR=54 | | | | | | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **KKM** | **Kota Kinabalu** | **69.17** | **287** | P | **P** | **19 04 20.8** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **72.31** | **326** | P | **P** | **19 04 37.6** | **-1.1** |
| | comp=Z,2.7nm,0.9s,baz=159,slow=6.3,SNR=4.9 | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **SMAI** | **San Martin Ant** | **75.68** | **159** | P | **P** | **19 04 54.1** | **-3.2** |
| **BELA** | **Belgrano 2** | **76.02** | **173** | P | **P** | **19 04 59.5** | **+0.4** |
| **MAW** | **Mawson** | **77.44** | **200** | P | **P** | **19 05 08.5** | **+1.5** |
| | comp=Z,2.9nm,0.5s,baz=144,slow=4.9,SNR=15 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **78.65** | **320** | P | **P** | **19 05 15.9** | **+2.0** |
| | comp=Z,1.1nm,0.7s,baz=126,slow=5.2,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **79.52** | **346** | P | **P** | **19 05 17.3** | **-0.9** |
| PEA0B | | | | IAmb | IAmb | 19 05 20.2 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.52** | **346** | P | **P** | **19 05 17.8** | **-0.4** |
| **PETK** | **Petropavlovsk-** | **79.52** | **346** | P | **P** | **19 05 18.3** | **+0.1** |
| | comp=Z,3.9nm,0.9s,baz=117,slow=8.5,SNR=8.0 | | | | | | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.18** | **327** | P | **P** | **19 05 28.1** | **+1.0** |
| **USRK** | **Ussuriysk Ar.** | **81.18** | **327** | P | **P** | **19 05 27.8** | **+0.7** |
| | comp=Z,3.7nm,0.9s,baz=136,slow=3.7,SNR=8.7 | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **IPM** | **Ipoh** | **81.98** | **279** | P | **P** | **19 05 31.9** | **0.0** |
| IPM | | | | IAmb | IAmb | 19 05 33.0 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **KULM** | **Kulim** | **82.66** | **279** | P | **P** | **19 05 35.7** | **+0.3** |
| KULM | | | | IAmb | IAmb | 19 06 04.6 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **SLBS** | **Sierra La Lagu** | **82.86** | **60** | P | **P** | **19 05 38.3** | **+2.1** |
| SLBS | | | | IAmb | IAmb | 19 05 57.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **GSI** | **Gunungsitoli** | **83.79** | **274** | P | **P** | **19 05 40.9** | **-0.1** |
| **TROLL** | **Troll, Antarti** | **83.94** | **181** | ⇑P | **P** | **19 05 41.5** | **+0.7** |
| | comp=Z,91nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **84.27** | **179** | P | **P** | **19 05 42.4** | **0.0** |
| **SNAA** | **Sanae** | **84.27** | **179** | ⇑P | **P** | **19 05 42.1** | **-0.3** |
| | comp=Z,15nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **84.27** | **179** | P | **P** | **19 05 42.3** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=201,slow=12,SNR=16 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **84.47** | **177** | ⇑P | **P** | **19 05 43.7** | **+0.4** |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **84.89** | **178** | ⇑P | **P** | **19 05 45.8** | **+0.4** |
| | comp=Z,2.3nm,0.6s,baz=180,slow=4.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.92** | **44** | P | **P** | **19 05 46.7** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=236,slow=6.2,SNR=1.1 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **PINE** | **Pine Mountain** | **86.60** | **38** | P | **P** | **19 05 53.5** | **-0.6** |
| PINE | | | | IAmb | IAmb | 19 05 56.9 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **U15A** | **North Rim** | **87.75** | **48** | P | **P** | **19 06 00.2** | **+0.3** |
| **G08A** | **Pilot Rock** | **88.64** | **38** | P | **P** | **19 06 04.3** | **+0.7** |
| G08A | | | | IAmb | IAmb | 19 06 06.5 | |
| | comp=Z,5.1nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.81** | **290** | P | **P** | **19 06 10.0** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **89.81** | **290** | P | **P** | **19 06 11.3** | **+1.8** |
| | comp=Z,1.3nm,0.6s,baz=135,slow=3.8,SNR=10 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.50** | **58** | P | **P** | **19 06 15.2** | **+2.6** |
| | comp=Z,1.2nm,0.7s,baz=216,slow=6.2,SNR=6.3 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **112.54** | **313** | PKiKP | **PKiKP** | **19 11 42.4** | **-0.7** |
| | comp=Z,0.4nm,0.5s,baz=238,slow=1.9,SNR=6.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **115.64** | **316** | PKP | **PKPdf** | **19 11 47.6** | **-1.2** |
| | comp=Z,0.5nm,0.5s,baz=105,slow=1.5,SNR=5.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **120.84** | **319** | PKP | **PKPdf** | **19 11 58.4** | **-0.4** |
| | comp=Z,0.9nm,0.4s,baz=115,slow=1.3,SNR=7.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **132.31** | **348** | PKP | **PKPdf** | **19 12 20.3** | **+0.1** |
| | comp=Z,1.0nm,0.6s,baz=48,slow=1.5,SNR=7.0 | | | | | | |
| **FINES** | **FINESS Array B** | **138.87** | **341** | PKhKP | PKPpre | 19 12 25.7 | |
| | comp=Z,1.0nm,0.5s,baz=20,slow=4.4,SNR=7.1 | | | | | | |
| FINES | | | | PKP | **PKPdf** | **19 12 33.8** | **+1.3** |
| | comp=Z,0.6nm,0.4s,baz=16,slow=1.0,SNR=6.0 | | | | | | |
| **HFS** | **Hagfors** | **142.96** | **349** | PKhKP | PKPpre | 19 12 37.1 | |
| | comp=Z,3.3nm,0.4s,baz=64,slow=3.4,SNR=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.39** | **327** | | **PKPdf** | **19 12 44.6** | **+0.2** |
| **AKASG** | **Malin Array Be** | **145.39** | **327** | PKPbc | **PKPdf** | **19 12 45.0** | **+0.6** |
| | comp=Z,2.3nm,0.6s,baz=44,slow=3.1,SNR=6.8 | | | | | | |
| **AKBB** | **Malin Array Si** | **145.39** | **327** | PKPdf | **PKPdf** | **19 12 44.4** | **-0.1** |
| **KIEV** | **Kiev** | **145.40** | **327** | PKPdf | **PKPdf** | **19 12 44.2** | **-0.2** |
| **SUW** | **Suwalki** | **145.69** | **336** | | **PKPdf** | **19 12 45.1** | **+0.3** |
| **GAZ** | **Gaziantep** | **145.89** | **301** | PKPdf | **PKPdf** | **19 12 46.3** | **+0.5** |
| **BR131** | **Keskin Array S** | **147.94** | **307** | | **PKPbc** | **19 12 52.2** | **-0.9** |
| **BRTR** | **Keskin Array B** | **147.94** | **307** | PKPdf | **PKPdf** | **19 12 50.2** | **+1.0** |
| **BRTR** | **Keskin Array B** | **147.94** | **307** | PKPbc | **PKPbc** | **19 12 53.0** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=127,slow=4.6,SNR=11 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **148.01** | **294** | PKPbc | **PKPbc** | **19 12 54.4** | **+1.0** |
| | comp=Z,5.3nm,0.5s,baz=76,slow=7.1,SNR=35 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **148.90** | **4** | PKPbc | **PKPbc** | **19 12 54.5** | **-0.3** |
| | comp=Z,0.6nm,0.4s,baz=345,slow=3.2,SNR=7.3 | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **149.38** | **326** | | **PKPbc** | **19 12 55.5** | **-0.8** |
| **BURAR** | **Bucovina Array** | **149.39** | **326** | | **PKPbc** | **19 12 56.8** | **+0.5** |
| **CLL** | **Collm** | **151.28** | **343** | | **PKPbc** | **19 13 00.3** | **-0.2** |
| **NRCA** | **Norcia** | **158.64** | **333** | PKPdf | **PKPdf** | **19 13 03.2** | **-1.0** |
| NRCA | | | | | **PKPab** | **19 13 42.2** | **-0.6** |
| **ESDC** | **Sonseca Array** | **164.27** | **12** | PKPab | **PKPab** | **19 14 06.8** | **-0.6** |
| | comp=Z,1.2nm,1.1s,baz=353,slow=6.7,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.82** | **188** | PKP | **PKPdf** | **19 13 13.3** | **-0.8** |
| | comp=Z,0.8nm,0.9s,baz=351,slow=3.4,SNR=3.9 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **19 14 27.2** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=169,slow=3.6,SNR=8.3 | | | | | | |

*ECX **24** 18:58:00.9±0.3,30.°61N×114.°35W, h10km±6km, ML2.9*
*MEX **24** 18:58:01.5±0.3,31.°03N×114.°19W, h8km±999km, MD3.9*

**ISC 24 18:57:58.2±1.9, 30.°54N±0.°09×114.°30W±0.°03, h9km±13km, n12, σ1°03/19, 1C-3D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFX** | **San Felipe** | **0.68** | **316** | *e*P | **Pg** | **18 58 11.8** | **+0.4** |
| SFX | | | | *e*S | **Sg** | **18 58 19.4** | **-0.9** |
| **SFX** | **San Felipe** | **0.68** | **316** | *e*P | **Pg** | **18 58 11.9** | **+0.5** |
| SFX | | | | *e*S | **Sg** | **18 58 19.9** | **-0.4** |
| SFX | | | | IAML | | 18 58 21.0 | |
| | comp=E,560nm,0.3s | | | | | | |
| SFX | | | | ⇑*e* | | 18 58 21.0 | |
| SFX | | | | IAML | | 18 58 21.7 | |
| | comp=N,450nm,0.4s | | | | | | |
| **PPXB** | **Puerto Peasco** | **0.98** | **36** | *e*P | **Pg** | **18 58 17.4** | **+0.5** |
| PPXB | | | | *e*S | **Sg** | **18 58 30.3** | **+0.7** |
| **SPIG** | **San Pedro Mart** | **1.12** | **297** | *e*P | **Pg** | **18 58 19.4** | **-0.3** |
| SPIG | | | | *e*S | **Sg** | **18 58 33.8** | **-0.5** |
| **SPIG** | **San Pedro Mart** | **1.12** | **297** | *e*P | **Pg** | **18 58 19.4** | **-0.3** |
| SPIG | | | | *e*S | **Sg** | **18 58 34.0** | **-0.3** |
| SPIG | | | | *e* | | 18 58 35.1 | |
| SPIG | | | | IAML | | 18 58 35.1 | |
| | comp=E,191nm,0.2s | | | | | | |
| SPIG | | | | IAML | | 18 58 35.1 | |
| | comp=N,194nm,0.5s | | | | | | |
| SPIG | | | | ⇓*e* | | 18 58 35.1 | |
| **ECBX** | **El Chinero** | **1.13** | **325** | *e*P | **Pg** | **18 58 18.0** | **-1.8** |
| ECBX | | | | *e*S | **Sg** | **18 58 32.5** | **-2.0** |
| **PIX** | **Pinacate** | **1.24** | **35** | *e*P | **Pn** | **18 58 21.7** | **-0.1** |
| **SQX** | **San Quintin** | **1.36** | **272** | *e*P | **Pn** | **18 58 23.6** | **+0.3** |
| SQX | | | | *e*S | **Sb** | **18 58 41.4** | **+0.1** |
| SQX | | | | ⇓*e* | | 18 58 43.2 | |
| SQX | | | | IAML | | 18 58 43.2 | |
| | comp=E,352nm,0.2s | | | | | | |
| SQX | | | | IAML | | 18 58 44.0 | |
| | comp=N,363nm,0.5s | | | | | | |
| SQX | | | | ⇓*e* | | 18 58 44.0 | |
| **LAPR** | **La Primavera** | **1.71** | **91** | *e*P | **Pn** | **18 58 28.0** | **-0.1** |
| LAPR | | | | *e*S | **Sn** | **18 58 48.2** | **-1.9** |
| **ALAMX** | **Rancho Alamar** | **1.89** | **321** | IAML | | 18 59 02.0 | |
| | comp=E,74nm,0.4s | | | | | | |
| **CBX** | **Cerro Bola** | **2.68** | **312** | *e*P | **Pb** | **18 58 47.9** | **+1.5** |
| CBX | | | | *e*S | **Sn** | **18 59 14.7** | **+0.4** |
| **TJIG** | **Tijuana** | **2.77** | **314** | *e*S | Sn | 18 59 06.9 | -9.4 |

*IDC **24** 19:18:28.2±2.6,35.°77N×140.°92E, h44km±20km, mb3.4/7, mbtmp3.7/11, ML3.2/4, MS2.6/1, Error ellipse: s-maj=38.6km s-min=11.6km az=84.0*
*JMA **24** 19:18:28.2±0.2,35.°9N±0.°5×140.°9E±0.°8, h43km±1km, MV3.1/33, NEAR CHOSHI CITY*

**ISC 24 19:18:27.5±1.6, 35.°90N±0.°04×140.°94E±0.°09, h32km±10km, n23, σ1°35/25, mb3.7/7, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIHU** | **Itakohorinouch** | **0.34** | **281** | *i* P | **Pn** | **19 18 36.9** | **+0.7** |
| JIHU | | | | *e*S | **Sn** | **19 18 43.5** | **+1.5** |
| **JSMT** | **Sammumatsuo** | **0.47** | **237** | P | **Pn** | **19 18 38.7** | **+0.6** |
| JSMT | | | | *e*S | **Sn** | **19 18 45.4** | **+0.2** |
| **JHYU** | **Hitachinakayam** | **0.52** | **327** | *i* P | **Pn** | **19 18 39.1** | **+0.4** |
| JHYU | | | | *e*S | **Sn** | **19 18 46.9** | **+0.4** |
| **JYT** | **Yasato** | **0.69** | **299** | *i* P | **Pb** | **19 18 40.6** | **-0.6** |
| JYT | | | | *e*S | **Sb** | **19 18 49.1** | **-1.2** |
| **JHO** | **Hitachi** | **0.77** | **337** | *i* P | **Pb** | **19 18 42.4** | **-0.1** |
| JHO | | | | S | **Sb** | **19 18 52.5** | **-0.2** |
| **BSO4** | **Boso 4** | **1.03** | **209** | P | **Pn** | **19 18 47.7** | **+0.9** |
| BSO4 | | | | S | **Sn** | **19 19 00.8** | **+2.0** |
| **MJAR** | **Matsushiro Arr** | **2.30** | **287** | P | **Pn** | **19 19 04.0** | **+0.8** |
| | 1.5nm,0.3s,baz=96,slow=8.8,SNR=62 | | | | | | |
| MJAR | | | | S | **Sb** | **19 19 34.7** | **-1.6** |
| | 3.5nm,0.3s,baz=201,slow=24,SNR=5.1 | | | | | | |
| MJAR | | | | LR | LR | 19 20 05.9 | |
| | comp=Z,119nm,18.6s,baz=154,slow=42 | | | | | | |
| | 9.9nm,0.4s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **2.93** | **199** | P | **Pn** | **19 19 12.4** | **+0.5** |
| | 9.9nm,0.3s,baz=358,slow=14,SNR=2.5 | | | | | | |
| JHJ | | | | S | **Sn** | **19 19 43.1** | **-2.9** |
| | 79nm,0.3s,baz=255,slow=20,SNR=10 | | | | | | |
| | 113nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **8.31** | **8** | P | **Pn** | **19 20 26.2** | **+0.5** |
| | 0.8nm,0.3s,baz=204,slow=3.6,SNR=6.3 | | | | | | |
| | 3.6nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.75** | **323** | P | **Pn** | **19 21 02.1** | **+2.9** |
| | 0.1nm,0.3s,baz=119,slow=12,SNR=1.5 | | | | | | |
| | 6.2nm,1.2s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.92** | **118** | T | T | 19 53 28.0 | |
| | baz=311,slow=75,SNR=15 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.93** | **118** | T | T | 19 53 28.1 | |
| | baz=311,slow=75,SNR=14 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.94** | **118** | T | T | 19 53 28.6 | |
| | baz=311,slow=75,SNR=17 | | | | | | |
| **SONM** | **Songino Array** | **28.12** | **306** | P | **P** | **19 24 15.8** | **-0.7** |
| | 0.4nm,0.6s,baz=94,slow=8.7,SNR=3.0 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.59** | **120** | T | T | 19 54 20.1 | |
| | baz=312,slow=75,SNR=12 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.59** | **121** | T | T | 19 54 11.3 | |
| | baz=312,slow=75,SNR=12 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.61** | **120** | T | T | 19 54 08.8 | |
| | baz=312,slow=75,SNR=9.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.40** | **313** | P | **P** | **19 26 19.9** | **+1.1** |
| | 0.3nm,0.3s,baz=105,slow=9.4,SNR=2.9 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.40** | **303** | P | **P** | **19 26 34.5** | **-0.5** |
| | 1.0nm,0.6s,baz=87,slow=9.8,SNR=13 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.40** | **309** | P | **P** | **19 26 50.0** | **-0.7** |
| | 1.0nm,0.4s,baz=85,slow=7.7,SNR=11 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **51.06** | **313** | P | **P** | **19 27 26.2** | **-0.3** |
| | 0.7nm,0.6s,baz=108,slow=7.7,SNR=4.0 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.89** | **188** | P | **P** | **19 28 01.0** | **-1.1** |
| | 0.7nm,0.9s,baz=1.6,slow=7.7,SNR=8.2 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **59.61** | **187** | P | **P** | **19 28 26.5** | **-1.8** |
| | 0.2nm,0.4s,baz=8.3,slow=7.0,SNR=2.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

**IDC 24 19:31:50.4±2.4, 3.°44N×128.°43E, h0km, mb3.3/3, mbtmp3.3/3, Error ellipse: s-maj=174.8km s-min=25.8km az=69.0, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.95** | **166** | P | P | 19 37 05.0 | -1.5 |
| | 0.4nm,0.4s,baz=344,slow=9.7,SNR=12 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **27.46** | **169** | P | P | 19 37 38.6 | +0.2 |
| | 0.1nm,0.4s,baz=345,slow=12,SNR=5.5 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.77** | **325** | P | P | 19 41 51.7 | +1.3 |
| | 0.1nm,0.5s,baz=123,slow=7.6,SNR=2.0 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

*IDC **24** 19:38:44.0±0.7,33.°24S×78.°10E, h0km, mb3.9/12, mbtmp3.9/12, MS3.6/19, Error ellipse: s-maj=28.3km s-min=20.0km az=97.0*
*NEIC **24** 19:38:45.2±2.5,33.°6S±0.°2×78.°01E±0.°07, h10km±1km, mb4.4/7, Error ellipse: s-maj=26.2km s-min=8.8km az=349.0*

**ISC 24 19:38:45.1±0.6, 33.°36S±0.°10×78.°1E±0.°1, h10km, n47, σ1°28/21, mb4.1/16, MS3.6/19, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AIS** | **Amsterdam Isla** | **4.45** | **185** | Pn | **Pn** | **19 39 50.5** | **-2.1** |
| **H04N2** | **CROZET ISLANDS** | **23.76** | **230** | T | T | 20 08 33.3 | |
| | baz=67,slow=74,SNR=3119 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **23.78** | **230** | T | T | 20 08 28.6 | |
| | baz=67,slow=74,SNR=2143 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **23.78** | **230** | T | T | 20 08 32.3 | |
| | baz=67,slow=74,SNR=2276 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **23.97** | **228** | T | T | 20 08 40.9 | |
| | baz=65,slow=76,SNR=151 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **23.98** | **228** | T | T | 20 08 42.2 | |
| | baz=65,slow=76,SNR=139 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **23.99** | **228** | T | T | 20 08 40.9 | |
| | baz=65,slow=76,SNR=166 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.10** | **347** | T | T | 20 11 14.2 | |
| | baz=170,slow=76,SNR=509 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.10** | **347** | T | T | 20 11 24.7 | |
| | baz=170,slow=76,SNR=745 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.12** | **347** | T | T | 20 11 15.6 | |
| | baz=170,slow=76,SNR=1116 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **29.81** | **103** | T | T | 20 16 13.7 | |
| | baz=263,slow=74,SNR=57 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **29.82** | **103** | T | T | 20 16 16.2 | |
| | baz=263,slow=74,SNR=45 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **29.83** | **103** | T | T | 20 16 16.0 | |
| | baz=263,slow=74,SNR=41 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **32.68** | **100** | LR | LR | 

*mbtmp3.4/6,ML2.6/1, Error ellipse: s-maj=236.0km s-min=22.3km az=75.0*

**ISC 24 19:46:00.3±9.4, 27.0N±0.7×14.5E±, h10km, n12, σ0s28/6, mb3.5/5, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **11.05** | **331** | Pn | **Pn** | **19 48 38.1** | **-0.3** |
| | baz=149,slow=15,SNR=2.5 0.9nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.46** | **105** | T | T | 20 14 02.8 | |
| | baz=297 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.46** | **105** | T | T | 20 14 09.4 | |
| | baz=297 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.48** | **105** | T | T | 20 14 03.2 | |
| | baz=297 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.81** | **108** | T | T | 20 14 23.3 | |
| | baz=294 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.82** | **108** | T | T | 20 14 27.0 | |
| | baz=294 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.83** | **108** | T | T | 20 14 22.5 | |
| | baz=294 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.79** | **193** | P | **P** | **19 54 37.9** | **-0.1** |
| | 1.1nm,0.7s,baz=13,slow=8.6,SNR=11 1.1nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **51.49** | **193** | P | **P** | **19 55 06.0** | **-0.1** |
| | 0.2nm,0.6s,baz=9.7,slow=6.6,SNR=6.1 0.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.37** | **310** | P | **P** | **19 55 12.7** | **+0.1** |
| | 0.2nm,0.5s,baz=95,slow=8.8,SNR=4.4 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.80** | **314** | P | **P** | **19 55 30.4** | **+0.1** |
| | 0.3nm,0.6s,baz=90,slow=8.1,SNR=6.2 0.3nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **59.71** | **318** | P | **P** | **19 56 05.4** | **+0.4** |
| | 0.3nm,0.5s,baz=94,slow=5.8,SNR=2.3 0.3nm,0.5s | | | | | | |

**IDC 24 19:52:45.8±1.2, 33.41S×78.07E, h0km, mb3.7/6, mbtmp3.7/6, MS3.4/5, Error ellipse: s-maj=37.6km s-min=30.9km az=28.0, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H04N2** | **CROZET ISLANDS** | **23.74** | **230** | T | T | 20 22 37.6 | |
| | baz=67,slow=74,SNR=1090 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **23.76** | **230** | T | T | 20 22 37.5 | |
| | baz=67,slow=74,SNR=1189 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **23.76** | **230** | T | T | 20 22 36.4 | |
| | baz=67,slow=74,SNR=1117 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **23.95** | **228** | T | T | 20 22 46.3 | |
| | baz=65,slow=76,SNR=50 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **23.96** | **228** | T | T | 20 22 46.4 | |
| | baz=65,slow=76,SNR=61 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **23.96** | **228** | T | T | 20 22 48.3 | |
| | baz=65,slow=76,SNR=60 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.16** | **347** | T | T | 20 25 14.7 | |
| | baz=170,slow=76,SNR=370 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.16** | **347** | T | T | 20 25 16.7 | |
| | baz=170,slow=76,SNR=480 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.17** | **347** | T | T | 20 25 18.6 | |
| | baz=170,slow=76,SNR=469 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **29.78** | **103** | T | T | 20 30 09.9 | |
| | baz=263,slow=74,SNR=61 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **29.79** | **103** | T | T | 20 30 12.0 | |
| | baz=263,slow=74,SNR=53 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **29.80** | **103** | T | T | 20 30 12.7 | |
| | baz=263,slow=74,SNR=57 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **32.66** | **100** | LR | LR | 20 10 06.7 | |
| | comp=Z,123nm,21.7s,baz=202,slow=32 | | | | | | |
| **PALK** | **Pallekele** | **40.54** | **4** | LR | LR | 20 14 56.7 | |
| | comp=Z,59nm,18.3s,baz=210,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **45.12** | **261** | LR | LR | 20 17 12.9 | |
| | comp=Z,42nm,18.7s,baz=182,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **46.15** | **266** | LR | LR | 20 18 00.4 | |
| | comp=Z,38nm,18.4s,baz=153,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **49.50** | **94** | P | P | 20 01 38.4 | +0.1 |
| | 0.8nm,0.8s,baz=248,slow=6.6,SNR=11 0.8nm,0.8s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **49.94** | **301** | LR | LR | 20 19 04.3 | |
| | comp=Z,20nm,19.3s,baz=92,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.48** | **90** | P | P | 20 01 53.1 | -0.1 |
| | 1.5nm,0.8s,baz=246,slow=7.4,SNR=11 1.5nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **56.74** | **180** | P | P | 20 02 30.5 | -0.6 |
| | 1.7nm,1.0s,baz=297,slow=1.6,SNR=3.7 1.7nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **79.93** | **3** | P | P | 20 04 55.7 | -0.5 |
| | 0.3nm,0.8s,baz=165,slow=6.0,SNR=1.8 0.3nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.67** | **0** | P | P | 20 05 16.3 | +0.5 |
| | 0.1nm,0.5s,baz=195,slow=5.7,SNR=1.8 0.1nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.10** | **288** | P | P | 20 05 29.3 | +0.4 |
| | 0.8nm,1.0s,baz=121,slow=3.5,SNR=2.5 0.8nm,1.0s | | | | | | |

*IDC 24 20:31:02.1±12.0, 17.72S×178.02W, h284km±121km, mb3.2/6, mbtmp3.8/6, Error ellipse: s-maj=37.7km s-min=29.3km az=80.0*
*NEIC 24 20:31:31.8±1.4, 18.8S±0.2×179.2W±0.2, h528km±13km, mb3.9/11, Error ellipse: s-maj=28.6km s-min=24.7km az=153.0*

**ISC 24 20:31:32.6±1.0, 18.8S±0.2×179.1W±0.1, h550km, n21, σ1s23/20, mb3.5/10, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.95** | **291** | | **P** | **20 32 50.0** | **+2.5** |
| **NIUE** | **Niue** | **8.64** | **93** | | **P** | **20 33 36.1** | **-0.7** |
| **CTAO** | **Charters Tower** | **32.70** | **262** | P | **P** | **20 37 20.4** | **+0.1** |
| **COEN** | **Coen** | **36.51** | **272** | P | **P** | **20 37 51.9** | **-0.2** |
| **TAU** | **Tasmania Unive** | **37.16** | **222** | P | **P** | **20 37 56.5** | **-0.5** |
| **STKA** | **Stephens Creek** | **37.66** | **242** | P | **P** | **20 38 00.0** | **-1.3** |
| **STKA** | **Stephens Creek** | **37.66** | **242** | P | **P** | **20 38 02.6** | **+1.3** |
| | 0.6nm,0.5s,baz=73,slow=11,SNR=1.7 0.6nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.86** | **261** | P | **P** | **20 38 49.9** | **-0.9** |
| WB2 | comp=Z,8.6nm,1.4s | | | IAmb | IAmb | 20 38 53.2 | |
| **WRA** | **Warramunga Arr** | **43.87** | **261** | P | **P** | **20 38 49.3** | **-1.6** |
| **WRA** | **Warramunga Arr** | **43.87** | **261** | P | **P** | **20 38 49.8** | **-1.1** |
| | comp=Z,0.5nm,0.5s,baz=97,slow=6.5,SNR=15 comp=Z,0.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **43.96** | **255** | P | **P** | **20 38 51.4** | **-0.1** |
| AS31 | comp=Z,1.0nm,0.7s | | | IAmb | IAmb | 20 38 52.1 | |
| **ASAR** | **Alice Springs** | **43.96** | **255** | P | **P** | **20 38 50.2** | **-1.4** |
| **ASAR** | **Alice Springs** | **43.96** | **255** | P | **P** | **20 38 51.6** | **0.0** |
| | comp=Z,2.9nm,0.4s,baz=90,slow=8.4,SNR=75 | | | | | | |
| ASAR | comp=Z,0.3nm,1.0s,baz=94,slow=4.2,SNR=1.0 comp=Z,2.9nm,0.4s | | | PcP | **PcP** | **20 40 24.8** | **-0.5** |
| **MTN** | **Manton Dam** | **48.17** | **269** | P | **P** | **20 39 22.8** | **-0.8** |
| MTN | comp=Z,9.3nm,1.3s | | | IAmb | IAmb | 20 39 28.7 | |
| **KNRA** | **Kununurra** | **49.79** | **265** | P | **P** | **20 39 34.7** | **-0.8** |
| KNRA | comp=Z,14nm,1.5s | | | IAmb | IAmb | 20 39 57.7 | |
| **FITZ** | **Fitzroy Crossi** | **52.28** | **261** | P | **P** | **20 39 52.3** | **-1.2** |
| **MJAR** | **Matsushiro Arr** | **68.27** | **324** | P | P | 20 41 31.3 | -7.6 |
| | comp=Z,0.5nm,0.4s,baz=135,slow=6.8,SNR=2.0 comp=Z,0.5nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.24** | **180** | P | **P** | **20 41 58.2** | **+1.9** |
| QSPA | comp=Z,4.0nm,1.4s | | | IAmb | IAmb | 20 42 01.5 | |
| **QSPA** | **South Pole Qui** | **71.24** | **180** | P | **P** | **20 41 57.4** | **+1.1** |
| | comp=Z,0.7nm,0.6s,baz=21,slow=7.9,SNR=7.4 comp=Z,0.7nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.50** | **44** | P | P | 20 42 34.8 | -13 |
| | comp=Z,0.2nm,0.6s,baz=205,slow=4.0,SNR=1.8 comp=Z,0.2nm,0.6s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.10** | **302** | PKPbc | **PKPbc** | **20 50 10.9** | **-1.0** |
| | comp=Z,1.2nm,0.8s,baz=54,slow=7.3,SNR=1.7 | | | | | | |

*IDC 24 20:37:15.4±1.2, 12.75N×145.70E, h0km, mb3.5/8, mbtmp3.5/8, MS2.9/1, Error ellipse: s-maj=42.9km s-min=19.7km az=74.0*

**ISC 24 20:37:20.6±1.2, 12.5N±0.1×145.7E±0.2, h35km, n10, σ0s56/10, mb3.6/8, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.30** | **324** | Pn | **Pn** | **20 37 41.6** | **-0.7** |
| | 70nm,0.3s,baz=131,slow=6.0,SNR=74 | | | | | | |
| GUMO | 115nm,0.3s,baz=163,slow=19,SNR=5.1 | | | Sn | **Sn** | **20 37 59.2** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **24.82** | **346** | LR | LR | 20 51 20.2 | |
| | comp=Z,28nm,20.7s,baz=202,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.15** | **199** | P | **P** | **20 44 02.3** | **-0.2** |
| | 0.3nm,0.8s,baz=28,slow=9.8,SNR=2.3 0.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **37.78** | **198** | P | **P** | **20 44 34.2** | **+0.5** |
| | 0.1nm,0.8s,baz=27,slow=7.3,SNR=2.1 0.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.78** | **316** | P | **P** | **20 47 42.6** | **0.0** |
| | 0.2nm,0.4s,baz=97,slow=8.6,SNR=5.9 0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.92** | **325** | P | **P** | **20 47 43.9** | **+0.5** |
| | 0.3nm,0.3s,baz=91,slow=6.2,SNR=2.1 0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.92** | **320** | P | **P** | **20 48 02.5** | **-0.5** |
| | 0.2nm,0.3s,baz=106,slow=6.8,SNR=1.6 0.2nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **69.18** | **25** | P | **P** | **20 48 23.6** | **+0.1** |
| | 0.4nm,0.6s,baz=259,slow=5.5,SNR=3.2 0.4nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **71.22** | **322** | P | **P** | **20 48 36.5** | **+0.4** |
| | 0.4nm,0.3s,baz=102,slow=7.5,SNR=5.4 0.4nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **92.43** | **335** | P | **P** | **20 50 27.5** | **-0.2** |
| | 0.5nm,0.6s,baz=44,slow=4.2,SNR=5.1 0.5nm,0.6s | | | | | | |

*IDC 24 20:43:12.9±0.8, 29.95N×139.65E, h408km±28km, mb2.9/4, mbtmp3.6/7, Error ellipse: s-maj=97.9km s-min=11.1km az=73.0*
*JMA 24 20:43:14.6±0.1, 30.1N×14.0E±, h419km, MV3.2/21, NEAR TORISHIMA IS*

**ISC 24 20:43:13.1±0.9, 29.97N±0.08×139.4E±0.2, h400km, n13, σ2s13/17, mb3.1/4, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ** | **Hachijo jima 2** | **3.16** | **6** | P | **Pn** | **20 44 19.9** | **+2.4** |
| | 74nm,0.8s,baz=127,slow=20,SNR=6.3 | | | | | | |
| JHJ | 92nm,0.8s,baz=269,slow=21,SNR=2.0 | | | S | **S** | **20 45 11.5** | **+1.8** |
| **CBIJ** | **Chichi jima** | **3.79** | **138** | *e*P | **Pn** | **20 44 25.6** | **+2.3** |
| CBIJ | | | | S | **S** | **20 45 22.1** | **+1.9** |
| **JCJ** | **Chichijima** | **3.79** | **138** | P | **Pn** | **20 44 20.7** | **-2.6** |
| | 23nm,0.6s,baz=307,slow=18,SNR=1.4 | | | | | | |
| JCJ | 78nm,0.4s,baz=288,slow=23,SNR=12 | | | S | **S** | **20 45 17.6** | **-2.6** |
| **JIE** | **Ise** | **4.95** | **334** | *e*P | **Pn** | **20 44 37.9** | **+3.4** |
| **JHU** | **Hanno** | **5.86** | **359** | *e*P | **Pn** | **20 44 45.0** | **+0.9** |
| **JRY** | **Ryogami san** | **6.04** | **356** | P | **Pn** | **20 44 47.5** | **+1.5** |
| **JAG** | **Ashikaga** | **6.43** | **1** | P | **Pn** | **20 44 50.6** | **+0.3** |
| JAG | | | | S | **S** | **20 46 05.9** | **-3.8** |
| **MJAR** | **Matsushiro Arr** | **6.62** | **352** | P | **Pn** | **20 44 53.0** | **+0.6** |
| | 1.1nm,0.5s,baz=160,slow=11,SNR=4.9 | | | | | | |
| **JHO** | **Hitachi** | **6.70** | **8** | *e*P | **P** | **20 44 54.4** | **+0.5** |
| **WRA** | **Warramunga Arr** | **49.86** | **186** | P | **P** | **20 51 27.5** | **-0.3** |
| | 0.2nm,0.3s,baz=360,slow=7.7,SNR=14 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **53.59** | **186** | P | **P** | **20 51 54.4** | **-0.5** |
| | 0.1nm,0.3s,baz=20,slow=11,SNR=5.3 0.1nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **54.25** | **316** | P | **P** | **20 51 58.7** | **-0.6** |
| | 0.7nm,0.5s,baz=94,slow=5.8,SNR=5.0 0.7nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **74.27** | **333** | P | **P** | **20 54 06.5** | **-0.9** |
| | 2.3nm,1.0s,baz=62,slow=6.6,SNR=1.7 2.3nm,1.0s | | | | | | |

*ISK 24 20:51:37.2, 38.64N×25.39E, h10km, ML2.5/22*
*ATH 24 20:51:39.9, 38.65N×25.58E, h18km±3km, ML2.4/8, Error ellipse: s-maj=3.2km s-min=0.8km az=45.0*
*AFAD 24 20:51:40.2±0.0, 38.72N×25.65E, h7km±3km, ML2.4*

**ISC 24 20:51:39.2±1.0, 38.66N±0.02×25.54E±0.02, h16km±8km, n53, σ0s73/70, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOS** | **Chios island** | **0.49** | **123** | Pg | **Pg** | **20 51 49.1** | **+0.1** |
| **CHOS** | **Chios island** | **0.49** | **123** | P | **Pg** | **20 51 49.1** | **+0.1** |
| CHOS | | | | S | **Sg** | **20 51 55.4** | **-0.2** |
| CHOS | comp=N,1248μm,0.2s | | | AML | AML | 20 51 57.1 | |
| CHOS | comp=E,2551μm,0.3s | | | AML | AML | 20 51 57.1 | |
| **SIGR** | **SIGRI** | **0.61** | **24** | Pg | **Pg** | **20 51 51.0** | **-0.3** |
| SIGR | | | | Sg | **Sb** | **20 52 00.6** | **+0.8** |
| **SIGR** | **SIGRI** | **0.61** | **24** | P | **Pg** | **20 51 50.9** | **-0.3** |
| SIGR | | | | S | **Sg** | **20 51 59.8** | **+0.4** |
| SIGR | comp=E,904μm,0.3s | | | AML | AML | 20 52 03.7 | |
| SIGR | comp=N,909μm,0.3s | | | AML | AML | 20 52 03.9 | |
| **CESE** | **eme** | **0.68** | **118** | Pg | **Pg** | **20 51 52.3** | **-0.3** |
| **KARB** | **zmir-Karabur** | **0.69** | **89** | P | **Pg** | **20 51 52.5** | **-0.1** |
| KARB | | | | S | **Sg** | **20 52 00.4** | **-1.4** |
| KARB | comp=N,202nm,0.3s | | | *i* AML | AML | 20 52 04.0 | |
| KARB | comp=N,207nm,0.4s | | | *i* AML | AML | 20 52 05.0 | |
| **SKY** | **Skiros Island** | **0.80** | **286** | P | **Pg** | **20 51 55.3** | **+0.4** |
| SKY | | | | S | **Sg** | **20 52 06.8** | **+1.3** |
| SKY | comp=N,350μm,0.2s | | | AML | AML | 20 52 08.9 | |
| SKY | comp=E,350μm,0.2s | | | AML | AML | 20 52 10.0 | |
| **PRK** | **Paraskevi** | **0.82** | **44** | P | **Pg** | **20 51 54.9** | **-0.4** |
| PRK | | | | S | **Sg** | **20 52 05.8** | **-0.4** |
| PRK | comp=E,562μm,0.5s | | | AML | AML | 20 52 09.1 | |
| PRK | comp=N,885μm,0.3s | | | AML | AML | 20 52 10.1 | |
| **URLA** | **Izmir** | **0.88** | **109** | Pg | **Pb** | **20 51 56.5** | **+0.4** |
| **URLA** | **Izmir** | **0.88** | **109** | P | **Pg** | **20 51 55.9** | **-0.5** |
| URLA | | | | S | **Sb** | **20 52 07.7** | **0.0** |
| URLA | comp=N,194nm,0.4s | | | *i* AML | AML | 20 52 11.0 | |
| **GPNR** | **Gulpinar-Canak** | **0.93** | **30** | Pg | **Pg** | **20 51 56.7** | **-0.5** |
| **FOCM** | **Foa** | **0.94** | **86** | Pg | **Pn** | **20 51 58.0** | **+0.3** |
| **KOCA** | **Canakkale, Ayv** | **0.97** | **29** | P | **Pg** | **20 51 57.7** | **-0.3** |
| KOCA | | | | S | **Sb** | **20 52 11.4** | **+1.3** |
| KOCA | comp=N,156nm,0.4s | | | *i* AML | AML | 20 52 16.0 | |
| KOCA | comp=N,182nm,0.6s | | | *i* AML | AML | 20 52 16.0 | |
| **EFSA** | **Agios Efstrati** | **0.98** | **334** | P | **Pg** | **20 51 58.3** | **0.0** |
| EFSA | | | | S | **Sg** | **20 52 11.3** | **+0.2** |
| **AYVA** | **Ayvalik** | **1.11** | **54** | P | **Pb** | **20 51 59.2** | **-0.9** |
| **KYMI** | **Kymi, Euboea I** | **1.13** | **269** | P | **Pb** | **20 52 00.6** | **+0.3** |
| KYMI | | | | S | **Sb** | **20 52 15.5** | **+0.9** |
| KYMI | comp=E,99μm,0.4s | | | AML | AML | 20 52 22.9 | |
| KYMI | comp=N,84μm,0.5s | | | AML | AML | 20 52 24.4 | |
| **IZMD** | **zmir-Dikili-** | **1.14** | **73** | P | **Pg** | **20 52 01.1** | **-0.1** |
| **DKL** | **Dikili** | **1.15** | **68** | Pn | **Pb** | **20 52 00.5** | **-0.1** |
| **TNSA** | **Tinos** | **1.15** | **195** | P | **Pb** | **20 52 00.0** | **-0.7** |
| TNSA | | | | S | **Sb** | **20 52 15.2** | **-0.2** |
| **DGB** | **zmir** | **1.22** | **119** | P | **Pb** | **20 52 02.1** | **+0.2** |
| **ZEDA** | **zmir-Bergama** | **1.24** | **75** | P | **Pn** | **20 52 01.6** | **-0.3** |
| ZEDA | | | | S | **Sb** | **20 52 18.0** | **-0.1** |
| ZEDA | comp=N,83nm,0.5s | | | *i* AML | AML | 20 52 21.0 | |
| **BOZC** | **Bozcaada** | **1.25** | **18** | P | **Pn** | **20 52 01.6** | **-0.4** |
| BOZC | | | | S | **Sb** | **20 52 18.4** | **+0.1** |
| BOZC | comp=N,80nm,0.4s | | | *i* AML | AML | 20 52 21.0 | |
| **LIA** | **Limnos Island** | **1.27** | **348** | P | **Pn** | **20 52 02.2** | **-0.1** |
| LIA | | | | S | **Sb** | **20 52 18.3** | **-0.5** |
| LIA | comp=E,589μm,0.4s | | | AML | AML | 20 52 21.6 | |
| LIA | comp=N,584μm,0.3s | | | AML | AML | 20 52 22.3 | |
| **EZNE** | **Ezine-Canakkal** | **1.27** | **30** | Pn | **Pn** | **20 52 02.7** | **+0.4** |
| **EZN** | **Ezine** | **1.32** | **27** | Pn | **Pn** | **20 52 02.4** | **-0.6** |
| **BAYC** | **CANAKKALE_Bayr** | **1.34** | **36** | P | **Pn** | **20 52 02.8** | **-0.5** |
| **DION** | **Dionisos Attik** | **1.39** | **246** | P | **Pn** | **20 52 04.6** | **+0.7** |
| DION | | | | S | **Sn** | **20 52 21.8** | **-0.1** |
| DION | comp=N,206μm,0.4s | | | AML | AML | 20 52 30.5 | |
| DION | comp=E,275μm,0.5s | | | AML | AML | 20 52 32.8 | |
| **BUHA** | **Balikesir, Bur** | **1.47** | **54** | P | **Pn** | **20 52 06.2** | **+1.2** |
| BUHA | | | | S | **Sn** | **20 52 23.6** | **-0.3** |
| BUHA | comp=E,66nm,0.8s | | | *i* AML | AML | 20 52 28.0 | |
| BUHA | comp=E,58nm,0.5s | | | *i* AML | AML | 20 52 30.0 | |
| **ATHU** | **Athens Univers** | **1.54** | **244** | P | **Pn** | **20 52 06.4** | **+0.4** |
| **GADA** | **Gvkgeada** | **1.56** | **10** | Pn | **Pn** | **20 52 06.1** | **-0.2** |
| **APE** | **Apeiranthos** | **1.58** | **180** | Pn | **Pn** | **20 52 05.8** | **-0.9** |
| **APE** | **Apeiranthos** | **1.58** | **180** | P | **Pn** | **20 52 05.7** | **-0.9** |
| APE | | | | S | **Sn** | **20 52 25.8** | **-1.0** |
| APE | comp=N,138μm,0.4s | | | AML | AML | 20 52 32.0 | |
| APE | comp=E,89μm,0.3s | | | AML | AML | 20 52 32.1 | |
| **COMU** | **Canakkale** | **1.61** | **26** | Pn | **Pn** | **20 52 07.2** | **+0.1** |
| **SOMA** | **Soma-Manisa** | **1.64** | **72** | Pn | **Pn** | **20 52 08.7** | **+1.4** |
| **GCAM** | **G?zelcaml?** | **1.64** | **125** | Pn | **Pn** | **20 52 08.3** | **+0.9** |
| **GCAM** | **G?zelcaml?** | **1.64** | **125** | P | **Pg** | **20 52 10.7** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **1.81** | **360** | P | **Pn** | **20 52 08.9** | **-0.9** |
| **VIL2** | **Platees** | **1.84** | **257** | P | **Pn** | **20 52 09.6** | **-0.5** |
| **STEP** | **BALIKESIR_Sava** | **1.85** | **66** | P | **Pn** | **20 52 09.1** | **-1.1** |
| **GELI** | **Tayfur-Gelibol** | **1.89** | **22** | Pn | **Pn** | **20 52 11.1** | **+0.4** |
| **LPK** | **Lapseki** | **1.96** | **28** | Pn | **Pn** | **20 52 12.6** | **+0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.98** | **110** | Pn | **Pn** | **20 52 13.4** | **+1.2** |
| **ODEM** | **Odemis-Izmir** | **2.03** | **100** | Pn | **Pn** | **20 52 13.9** | **+1.1** |
| **THAS** | **Thassos island** | **2.05** | **342** | P | **Pn** | **20 52 12.5** | **-0.5** |
| **OUR** | **Ouranopolis** | **2.06** | **325** | P | **Pn** | **20 52 13.2** | **+0.1** |
| **GORD** | **Gordes-Manisa** | **2.08** | **82** | Pn | **Pn** | **20 52 15.3** | **+1.8** |
| **BODT** | **Bodrum** | **2.12** | **138** | Pn | **Pn** | **20 52 14.3** | **+0.3** |
| **MHLO** | **Agia Marina, M** | **2.16** | **205** | P | **Pn** | **20 52 14.4** | **-0.1** |
| **KRBG** | **Karabiga-Canak** | **2.21** | **38** | Pn | **Pn** | **20 52 16.3** | **+1.2** |
| **ALN** | **Alexandroupoli** | **2.27** | **10** | P | **Pn** | **20 52 15.8** | **-0.3** |
| **NAZL** | **Nazilli-Aydin** | **2.27** | **107** | Pn | **Pn** | **20 52 17.8** | **+1.7** |
| **SUSR** | **Susurluk-Balik** | **2.37** | **56** | Pn | **Pn** | **20 52 19.0** | **+1.6** |
| **KOKK** | **Kokkinochori,** | **2.46** | **332** | P | **Pn** | **20 52 18.5** | **-0.2** |

*IDC 24 21:21:34.2±19.0, 17.96S×177.98W, h550km±190km, mb3.2/4, mbtmp4.2/4, Error ellipse: s-maj=127.4km s-min=40.2km az=53.0*
*NEIC 24 21:21:36.3±1.1, 17.8S±0.2×177.9W±0.2, h590km±17km, mb4.1/18, Error ellipse: s-maj=32.8km s-min=22.6km az=202.0*

**ISC 24 21:21:36.3±0.9, 17.8S±0.2×178.0W±0.1, h590km, n27, σ0s57/29, mb4.1/13, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.75** | **270** | P | **P** | **21 22 59.3** | **-0.1** |
| **NIUE** | **Niue** | **7.79** | **101** | P | **P** | **21 23 33.1** | **-0.1** |
| **DZM** | **Mont Dzumac** | **15.23** | **251** | P | **P** | **21 24 45.9** | **-1.2** |
| DZM | comp=Z,9.8nm,1.1s | | | IAmb | IAmb | 21 24 54.9 | |
| **EIDS** | **Eidsvold** | **29.67** | **250** | P | **P** | **21 26 55.4** | **-0.4** |
| EIDS | comp=Z,4.6nm,0.8s | | | IAmb | IAmb | 21 26 55.7 | |
| **ARMA** | **Armidale** | **30.34** | **240** | P | **P** | **21 27 01.9** | **+0.2** |
| **PATS** | **Pohnpei** | **33.82** | **314** | P | **P** | **21 27 30.5** | **-0.7** |
| **CTAO** | **Charters Tower** | **33.84** | **260** | P | **P** | **21 27 31.8** | **+0.5** |
| CTAO | comp=Z,6.4nm,1.1s | | | IAmb | IAmb | 21 27 50.4 | |
| **COEN** | **Coen** | **37.48** | **270** | P | **P** | **21 28 02.8** | **+1.4** |
| COEN | comp=Z,12nm,1.1s | | | IAmb | IAmb | 21 28 04.0 | |
| **TOO** | **Toolangi** | **37.56** | **231** | P | **P** | **21 28 02.2** | **+0.5** |
| TOO | comp=Z,5.3nm,0.8s | | | IAmb | IAmb | 21 28 02.7 | |
| **STKA** | **Stephens Creek** | **39.03** | **241** | P | **P** | **21 28 14.2** | **+0.5** |
| **STKA** | **Stephens Creek** | **39.03** | **241** | P | **P** | **21 28 14.2** | **+0.5** |
| | comp=Z,1.8nm,0.5s,baz=94,slow=11,SNR=7.1 comp=Z,1.8nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.81** | **241** | P | **P** | **21 28 51.2** | **-0.1** |
| **WB0** | **Warramunga Arr** | **45.00** | **260** | P | **P** | **21 29 00.8** | **+0.2** |
| WB0 | comp=Z,9.8nm,1.5s | | | IAmb | IAmb | 21 29 02.6 | |
| **WB2** | **Warramunga Arr** | **45.02** | **259** | P | **P** | **21 29 00.8** | **0.0** |
| **WRA** | **Warramunga Arr** | **45.03** | **259** | P | **P** | **21 29 00.5** | **-0.4** |
| **WRA** | **Warramunga Arr** | **45.03** | **259** | P | **P** | **21 29 00.6** | **-0.3** |
| | comp=Z,1.6nm,0.5s,baz=95,slow=7.4,SNR=65 | | | | | | |
| WRA | comp=Z,0.1nm,0.3s,baz=90,slow=3.6,SNR=1.4 comp=Z,1.6nm,0.5s | | | PcP | **PcP** | **21 30 30.1** | **+1.1** |
| **AS31** | **Alice Springs** | **45.20** | **254** | | **P** | **21 29 01.9** | **-0.2** |
| AS31 | comp=Z,2.3nm,0.5s | | | IAmb | IAmb | 21 29 03.4 | |
| **ASAR** | **Alice Springs** | **45.20** | **254** | P | **P** | **21 29 01.9** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.20** | **254** | P | **P** | **21 29 02.5** | **+0.3** |
| | comp=Z,6.6nm,0.6s,baz=87,slow=8.7,SNR=92 | | | | | | |
| ASAR | comp=Z,0.4nm,0.5s,baz=101,slow=3.6,SNR=3.0 comp=Z,6.6nm,0.6s | | | PcP | **PcP** | **21 30 30.2** | **+0.7** |
| **MTN** | **Manton Dam** | **49.18** | **268** | P | **P** | **21 29 32.3** | **+0.3** |
| MTN | comp=Z,7.1nm,1.1s | | | IAmb | IAmb | 21 29 47.5 | |
| **FORT** | **Forrest** | **50.41** | **245** | P | **P** | **21 29 39.9** | **-0.9** |
| FORT | comp=Z,14nm,1.1s | | | IAmb | IAmb | 21 29 57.8 | |
| **KNRA** | **Kununurra** | **50.88** | **264** | P | **P** | **21 29 44.1** | **-0.3** |
| KNRA | comp=Z,6.8nm,1.2s | | | IAmb | IAmb | 21 29 53.9 | |
| **FITZ** | **Fitzroy Crossi** | **53.43** | **260** | P | **P** | **21 30 02.6** | **0.0** |
| **QSPA** | **South Pole Qui** | **72.29** | **180** | P | **P** | **21 32 02.7** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.29** | **180** | P | **P** | **21 32 02.6** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=90,slow=3.0,SNR=1.5 comp=Z,0.4nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.95** | **315** | PKPbc | **PKPab** | **21 40 09.6** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=29,slow=2.4,SNR=4.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.38** | **303** | PKPbc | **PKiKP** | **21 40 14.5** | **-0.2** |
| | comp=Z,0.9nm,0.5s,baz=73,slow=5.6,SNR=6.4 | | | | | | |

*MOS 24 21:30:26.7±1.1, 40.44N×142.28E, h55km, mb4.9/22, Error ellipse: s-maj=9.0km s-min=5.6km az=102.9*
*NIED 24 21:30:27.7, 40.38N×142.28E, h40km, MW4.1, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr1.40; Mθθ-0.32; Mφφ-1.07; Mrθ0.46; Mrφ-0.38; Mθφ1.15; Fault plane solution: M₀1.81000×10¹⁵ NP1:φ22.00000°, δ67.00000°, λ90.00000°. NP2:φ203.00000°, δ23.00000°, λ91.00000°.*
*JMA 24 21:30:27.7±0.1, 40.4N±0.3×142.3E±0.6, h40km, MD4.2/40, MV4.5/40, NE OFF IWATE PREF*
*JMA Felt II J1 at NE OFF IWATE PREF .*
*IDC 24 21:30:29.1±1.8, 40.34N×142.27E, h63km±14km, mb4.0/19, mbtmp4.3/25, MS3.2/31, Error ellipse

comp=E,4.0nm,2.7s
**JAHD Aomorihigashid 1.12 321** A A 21 30 47.6
comp=E,14nm,1.3s,comp=N,11nm,1.5s
**JOM Ohasama 1.20 220** ⇓P **Pn 21 30 48.2 -0.3**
JOM ⇓*e*S **Sn 21 31 02.7 -1.1**
**JOM Ohasama 1.20 220** A A 21 30 48.2
comp=E,9.0nm,0.3s,comp=N,6.0nm,0.3s
**JSZI Iwateshizukuis 1.22 238** A A 21 30 48.5
comp=E,10.0nm,1.2s,comp=N,9.0nm,2.2s
**JAH Hinai 1.28 261** ⇓P **Pn 21 30 49.4 -0.2**
JAH ⇓*e*S **Sn 21 31 04.5 -1.1**
**JAH Hinai 1.28 261** A A 21 30 49.4
comp=E,11nm,0.5s,comp=N,6.0nm,0.4s
**JOT Ohata 1.36 317** P **Pn 21 30 50.0 -0.6**
**JOT Ohata 1.36 317** A A 21 30 50.0
comp=E,4.0nm,3.5s,comp=N,3.0nm,2.0s
**OFUJ Ofunato 1.40 200** A A 21 30 51.1
comp=E,4.0nm,1.5s,comp=N,4.0nm,1.5s
**JHHS Hirosakihyakuz 1.49 280** A A 21 30 52.8
comp=E,7.0nm,3.3s,comp=N,10.0nm,4.6s
**JSI2 Shiura 2 1.57 295** A A 21 30 54.0
comp=E,8.0nm,1.1s,comp=N,6.0nm,0.7s
**JRG Rokugo 1.62 232** A A 21 30 54.4
comp=E,4.0nm,0.4s,comp=N,4.0nm,0.3s
**JNTW Noshirotokiwa 1.63 266** A A 21 30 54.7
comp=E,12nm,2.3s,comp=N,11nm,2.6s
**JKMT Kesennumamotoy 1.71 202** A A 21 30 55.5
comp=E,3.0nm,3.6s
**ERM Erimo 1.74 22** **Pn 21 30 57.2 +1.4**
**ERM Erimo 1.74 22** *i* P **Pn 21 30 57.6 +1.7**
**JEM Erimo 1.74 22** A A 21 30 56.8
comp=N,3.0nm,3.9s
**JIW Iwasaki 1.75 277** A A 21 30 56.5
comp=E,4.0nm,3.2s,comp=N,4.0nm,6.1s
**JYW Yuwa 1.81 242** A A 21 30 57.2
comp=E,7.0nm,2.6s,comp=N,9.0nm,2.8s
**JNBK Urakawa-nobuka 1.91 10** A A 21 30 59.2
comp=E,4.0nm,2.5s,comp=N,5.0nm,2.7s
**JYK Kaneyama 2.10 226** A A 21 31 01.2
comp=E,3.0nm,2.8s
**JIAM Iburiatsuma 2.24 353** A A 21 31 03.8
comp=E,6.0nm,0.4s,comp=N,8.0nm,0.8s
**JEW Eniwo 2.52 346** A A 21 31 07.9
comp=E,4.0nm,3.3s,comp=N,5.0nm,3.3s
**JYA Atsumi 2.69 229** A A 21 31 09.7
comp=E,4.0nm,2.5s,comp=N,5.0nm,1.5s
**JYS Shirataka 2.77 219** A A 21 31 10.9
comp=E,4.0nm,3.1s,comp=N,4.0nm,2.7s
**JMM Marumori 2.78 205** **Pn 21 31 11.2 +1.1**
**JAB Ashibetsu 3.10 359** A A 21 31 16.2
comp=E,3.0nm,2.9s,comp=N,3.0nm,7.1s
**JKA Kamikawa-asahi 3.72 4** **Pn 21 31 23.5 +0.5**
**ASAJ Asahikawa 3.72 3** P **Pn 21 31 24.4 +1.4**
comp=N,27nm,0.3s,baz=206,slow=11,SNR=33
ASAJ S **Sn 21 32 09.7 +4.2**
comp=N,34nm,0.4s,baz=56,slow=6.6,SNR=4.3
ASAJ LR LR 21 33 05.2
comp=N,213nm,20.6s,baz=204,slow=41
**JSD Sado 3.92 234** Pn **Pn 21 31 26.0 +0.4**
**YUK Yuzh-Kuril'sk 4.50 35** *e*P **Pn 21 31 33.3 -0.3**
YUK S **Sn 21 32 21.1 -3.5**
YUK smax smax
comp=N,1μm,0.4s
YUK smax smax
comp=E,723nm,0.4s
**SHO Shikotan 4.84 43** *e*P **Pn 21 31 36.8 -1.5**
SHO *e*S **Sn 21 32 27.4 -5.6**
SHO smax smax
comp=E,445nm,0.3s
SHO smax smax
comp=N,432nm,0.2s
**MJAR Matsushiro Arr 5.01 221** P **Pn 21 31 42.6 +1.9**
comp=N,14nm,0.6s,baz=30,slow=14,SNR=43
MJAR S **Sn 21 32 44.0 +6.8**
comp=N,2.6nm,0.5s,baz=24,slow=40,SNR=1.5
MJAR LR LR 21 33 18.1
comp=N,36nm,20.4s,baz=48,slow=34
**MJB9 Matsu-Tunnel 5.01 221** Pn **Pn 21 31 43.7 +3.1**
**MAJO Matsushiro 5.01 221** Pn **Pn 21 31 42.5 +1.8**
**MAJO Matsushiro 5.01 221** P **Pn 21 31 42.5 +1.8**
**JGF Kuroka 6.17 221** Pn **Pn 21 31 59.2 +2.5**
**KUR Kuril'sk 6.34 39** *e*P **Pn 21 31 58.2 -0.6**
KUR *e*S **Sn 21 33 07.9 -1.9**
KUR pmax pmax
comp=N,40nm,0.4s
KUR pmax pmax
comp=E,74nm,0.4s
KUR pmax pmax
comp=E,31nm,0.2s
KUR smax smax
comp=N,120nm,0.3s
KUR smax smax
comp=E,82nm,0.3s
**INU Inuyama 6.54 221** Pn **Pn 21 32 04.7 +3.1**
**YSS Yuzh-Sakhalins 6.56 3** *e*P **Pn 21 32 02.3 +0.5**
YSS *e*S **Sn 21 33 10.8 -4.4**
YSS pmax pmax
comp=Z,20nm,1.1s
YSS smax smax
comp=N,20nm,0.4s
YSS smax smax
comp=E,20nm,0.3s
**JHJ Hachijo jima 2 7.54 196** P **Pn 21 32 13.8 -1.5**
comp=E,79nm,0.7s,baz=79,slow=17,SNR=1.0
JHJ S **Sn 21 33 35.2 -4.2**
comp=E,53nm,0.5s,baz=60,slow=20,SNR=1.2
**USA0B Ussuriysk Arra 8.52 300** *i* P **Pn 21 32 30.0 +1.3**
**USRK Ussuriysk Ar. 8.52 300** P **Pn 21 32 30.0 +1.3**
comp=E,10nm,0.5s,baz=107,slow=14,SNR=45
USRK LR LR 21 35 33.2
comp=E,161nm,20.9s,baz=167,slow=36
**USRK Ussuriysk Ar. 8.52 300** P **Pn 21 32 30.0 +1.3**
**MDJ Mudanjiang 10.27 298** P Pn 21 32 58.6 +5.9
MDJ pmax pmax
comp=Z,40nm,0.5s
MDJ pmax pmax
comp=Z,1μm,6.2s
**KLR Kul'dur 11.56 323** P **Pn 21 33 11.0 +0.7**
comp=Z,2.0nm,0.8s,baz=147,slow=7.4,SNR=5.9
KLR LR LR 21 37 42.2
comp=Z,125nm,19.9s,baz=134,slow=37
**KLR Kul'dur 11.56 323** *i* P **Pn 21 33 09.2 -1.1**
KLR pmax pmax
comp=Z,43nm,3.3s
**KSRS Korea Array 11.57 260** P **Pn 21 33 11.6 +1.2**
comp=Z,1.9nm,0.9s,baz=64,slow=13,SNR=2.1
KSRS LR LR 21 37 22.1
comp=Z,118nm,18.1s,baz=75,slow=36
**JNU Nakatsue 11.67 235** LR LR 21 38 07.1
comp=Z,51nm,20.3s,baz=64,slow=39
**PETK Petropavlovsk- 16.48 34** LR LR 21 40 06.9
comp=Z,44nm,20.1s,baz=226,slow=35
**ZEA Zeya 16.77 328** *e*P **Pn 21 34 16.7 -2.4**
ZEA pmax pmax
comp=Z,10.0nm,0.6s
**BJI Beijing 19.92 277** P **P 21 34 54.1 -1.3**
BJI pmax pmax
comp=Z,5.0nm,0.7s
**MA2 Magadan 19.92 13** LR LR 21 43 02.5
comp=Z,54nm,18.5s,baz=180,slow=38
**BJT Baijiatuau 19.93 277** **P 21 34 54.0 -1.5**
**BJT Baijiatuau 19.93 277** P **P 21 34 54.0 -1.5**
BJT pmax pmax
comp=Z,8.0nm,0.7s
**NJ2 Nanjing 20.61 254** *e*P **P 21 35 03.4 +0.5**
NJ2 pmax pmax
comp=Z,11nm,0.5s
**YAK Yakutsk 22.97 345** P **P 21 35 25.5 -2.3**
YAK IAmb IAmb 21 35 28.3
comp=Z,21nm,0.8s
**YAK Yakutsk 22.97 345** LR LR 21 45 53.0
comp=Z,32nm,18.4s,baz=155,slow=40
**YAK Yakutsk 22.97 345** *e*P **P 21 35 25.4 -2.3**
YAK pmax pmax
comp=Z,16nm,0.8s
YAK pmax pmax
comp=N,5.0nm,0.9s
**HHC Hu-ho-hao-te 23.27 281** *e*P **P 21 35 28.9 -2.2**
HHC sP sP 21 35 51.1 +1.3
HHC pmax pmax
comp=Z,9.0nm,0.5s
HHC pmax pmax
comp=Z,170nm,4.4s
**SEY Seymchan 23.36 12** P **P 21 35 31.7 +0.1**
comp=Z,2.2nm,0.2s,baz=205,slow=8.3,SNR=12
comp=Z,2.2nm,0.2s
**SEY Seymchan 23.36 12***ce*P **P 21 35 33.3 +1.7**
SEY pmax pmax
comp=Z,6.0nm,1.0s
**SHEM Shemya Is, Ala 24.89 50** LR LR 21 45 18.8
comp=Z,20nm,20.5s,baz=288,slow=36
**ULN Ulaanbaatar 26.19 298***ce*P **P 21 35 57.8 0.0**
ULN pmax pmax
comp=Z,10.0nm,2.5s
**SONM Songino Array 26.63 298** P **P 21 36 01.1 -0.6**
comp=Z,1.2nm,0.4s,baz=95,slow=8.4,SNR=7.5
SONM PcP **PcP 21 39 24.7 +0.2**
comp=Z,0.5nm,0.6s,baz=90,slow=5.8,SNR=2.4
SONM LR LR 21 47 08.7
comp=Z,78nm,19.6s,baz=74,slow=38
comp=Z,1.2nm,0.4s
**GUMO Guam 26.80 174** LR LR 21 46 29.5
comp=Z,20nm,19.5s,baz=54,slow=36
**H11N2 WAKE ISLAND Hy 29.46 127** T T 22 08 04.1
baz=320,slow=74
**H11N1 WAKE ISLAND Hy 29.47 127** T T 22 08 06.5
baz=320,slow=74
**H11N3 WAKE ISLAND Hy 29.48 127** T T 22 08 06.1
baz=320
**H11S1 WAKE ISLAND Hy 30.28 129** T T 22 08 59.9
baz=322,slow=76
**H11S3 WAKE ISLAND Hy 30.28 129** T T 22 09 08.0
baz=322,slow=76
**H11S2 WAKE ISLAND Hy 30.30 129** T T 22 09 08.2
baz=322,slow=76
**BILL Bilibino 30.61 17** *i* P **P 21 36 35.8 -1.0**
BILL pmax pmax
comp=Z,4.0nm,1.0s
**TIXI Tiksi 32.04 352** LR LR 21 51 14.2
comp=Z,24nm,18.6s,baz=204,slow=39
**GTA Gaotai 32.37 282** *e*P **P 21 36 52.8 +0.1**
GTA pP pP 21 36 58.8 -7.2
GTA pmax pmax
comp=Z,3.0nm,0.9s
**PZH PanZhiHua 36.24 260** P **P 21 37 27.8 +1.5**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,180nm,4.1s
**GOMU GeErMu 37.14 279** P **P 21 37 32.4 -1.8**
GOMU pP pP 21 37 34.5 -13
GOMU sP sP 21 37 38.3 -15
GOMU pmax pmax
comp=Z,3.0nm,0.5s
**DGZ Jazzator, Alta 39.06 303** *i* P **P 21 37 49.3 -0.6**
DGZ pmax pmax
comp=Z,16nm,0.8s
**WMQ Urumqi 40.03 293** *e*P **P 21 37 58.3 +0.4**
WMQ pmax pmax
comp=Z,20nm,0.7s
**ZAA0 Zalesovo Array 40.23 309** P **P 21 37 59.2 -0.1**
ZAA0 IAmb IAmb 21 37 59.9
comp=Z,6.5nm,0.9s
**ZALV Zalesovo Beam 40.23 309** P **P 21 37 58.5 -0.8**
**ZALV Zalesovo Beam 40.23 309** P **P 21 37 58.9 -0.5**
comp=Z,5.0nm,0.4s,baz=91,slow=9.5,SNR=29
ZALV PcP **PcP 21 40 02.6 +0.3**
comp=Z,1.2nm,0.5s,baz=81,slow=3.2,SNR=4.3
ZALV LR LR 21 55 38.5
comp=Z,47nm,18.1s,baz=60,slow=38
comp=Z,5.0nm,0.4s
**ZALV Zalesovo Beam 40.23 309** *i* P **P 21 37 59.4 +0.1**
ZALV pmax pmax
comp=Z,5.0nm,0.4s
**CRAI Chiangrai 40.92 253** P **P 21 38 05.7 +0.2**
CRAI IAmb IAmb 21 38 07.0
comp=Z,7.7nm,0.8s
**O16K Kokwok River B 41.21 42** P **P 21 38 09.4 +2.0**
**G18K Tagagawik 41.42 32** P **P 21 38 10.4 +1.4**
**D19K Kuna River 42.05 28** P **P 21 38 15.8 +1.7**
D19K IAmb IAmb 21 38 52.0
comp=Z,11nm,1.4s
**PHRA Phrae 42.12 251** P **P 21 38 16.0 +0.7**
**H19K Roundabout Mou 42.28 33** P **P 21 38 18.1 +2.1**
H19K IAmb IAmb 21 38 39.3
comp=Z,9.0nm,0.8s
**MK31 Makanchi Array 42.99 299** P **P 21 38 21.9 -0.2**
MK31 IAmb IAmb 21 38 24.6
comp=Z,5.0nm,0.7s
**MK31 Makanchi Array 42.99 299***ce*P **P 21 38 21.9 -0.2**
**MKAR Makanchi Array 42.99 299** P **P 21 38 22.2 +0.1**
**MKAR Makanchi Array 42.99 299** P **P 21 38 21.9 -0.1**
comp=Z,4.7nm,0.7s,baz=84,slow=9.9,SNR=45
MKAR PcP **PcP 21 40 11.9 +0.3**
comp=Z,0.7nm,0.7s,baz=69,slow=3.5,SNR=2.8
MKAR LR LR 21 57 06.5
comp=Z,58nm,18.7s,baz=80,slow=37
comp=Z,4.7nm,0.7s
**MKAR Makanchi Array 42.99 299** P **P 21 38 22.2 +0.1**
**CMAR Chiang Mai Arr 43.08 253** P **P 21 38 23.4 +0.2**
comp=Z,0.8nm,0.3s,baz=53,slow=6.6,SNR=6.4
CMAR LR LR 21 56 21.8
comp=Z,18nm,18.2s,baz=195,slow=36
comp=Z,0.8nm,0.3s
**MAKZ Makanchi 43.19 299** P **P 21 38 23.4 -0.3**
**MAKZ Makanchi 43.19 299** P **P 21 38 23.4 -0.3**
MAKZ pmax pmax
comp=Z,6.0nm,0.8s
**KURK Kurchatov 44.46 306** P **P 21 38 33.0 -0.8**
KURK IAmb IAmb 21 38 34.9
comp=Z,12nm,0.8s
**KURK Kurchatov 44.46 306***ce*P **P 21 38 33.8 0.0**
KURK pmax pmax
comp=Z,19nm,1.3s
**KURBB Kurchatov Arra 44.54 305** P **P 21 38 34.1 -0.3**
comp=Z,9.8nm,0.8s,baz=80,slow=8.7,SNR=8.2
KURBB PcP **PcP 21 40 17.1 +0.3**
comp=Z,0.7nm,0.3s,baz=64,slow=4.2,SNR=2.1
comp=Z,9.8nm,0.8s
**F25K Christian Rive 46.66 30** P **P 21 38 53.8 +2.8**
F25K IAmb IAmb 21 39 18.5
comp=Z,6.4nm,1.3s
**F26K Sheenjek River 47.22 30** P **P 21 38 57.1 +1.8**
F26K IAmb IAmb 21 39 13.7
comp=Z,4.6nm,0.7s
**BVAR Borovoye Array 48.86 310** P **P 21 39 08.3 +0.1**
comp=Z,6.0nm,0.4s,baz=73,slow=9.1,SNR=41
BVAR PcP **PcP 21 40 32.4 +0.3**
comp=Z,1.7nm,0.7s,baz=90,slow=4.3,SNR=3.9
comp=Z,6.0nm,0.4s
**AAK Ala-Archa 49.55 296** LR LR 22 02 14.7
comp=Z,36nm,18.2s,baz=96,slow=38
**I30M Mount Dempster 50.66 33** P **P 21 39 23.6 +1.8**
I30M IAmb IAmb 21 39 41.3
comp=Z,5.0nm,0.9s
**SVE Sverdlovsk 53.11 317** *e*P **P 21 39 40.7 +0.7**
SVE pmax pmax
comp=Z,9.0nm,0.9s
**ARU Arti 54.33 317** P **P 21 39 48.9 0.0**
ARU IAmb IAmb 21 39 49.9
comp=Z,5.5nm,0.7s
**ARU Arti 54.33 317** LR LR 22 05 29.9
comp=Z,64nm,18.2s,baz=74,slow=39
**ARU Arti 54.33 317***c i*P **P 21 39 49.1 +0.2**
ARU 21 41 48.3
ARU S **S 21 47 22.0 -0.7**
ARU SS **SS 21 51 04.9 +0.2**
ARU pmax pmax
comp=Z,6.0nm,0.7s
**ARU Arti 54.33 317** P **P 21 39 48.0 -0.9**
comp=Z,9.6nm,0.9s
**GSI Gunungsitoli 56.14 238** P **P 21 40 02.6 +0.1**
**ABKAR Akbulak array 56.33 309** P **P 21 40 03.1 -0.3**
**ABKAR Akbulak array 56.33 309** P **P 21 40 02.8 -0.6**
**EUNU Eureka 56.76 9** P **P 21 40 06.6 +0.4**
**KBL Kabul 56.90 289** P **P 21 40 07.0 -0.9**
KBL IAmb IAmb 21 40 08.1
comp=Z,5.4nm,0.9s
**KBL Kabul 56.90 289** P **P 21 40 07.1 -0.9**
KBL pmax pmax
comp=Z,5.0nm,0.9s
**AKTO Aktyubinsk 56.97 311** LR LR 22 03 53.0
comp=Z,37nm,18.1s,baz=348,slow=35
**KNRA Kunununrra 57.19 196** P **P 21 40 10.1 +0.4**
KNRA IAmb IAmb 21 40 49.1
comp=Z,8.8nm,1.1s
**SPITS Spitsbergen Ar 57.36 349** P **P 21 40 10.9 +0.6**
SPITS pmax pmax
comp=Z,35nm,1.3s
**KBS Kingsbay 57.46 350** P **P 21 40 11.8 +0.8**
**KBS Kingsbay 57.46 350** P **P 21 40 11.8 +0.8**
KBS pmax pmax
comp=Z,41nm,1.5s
**KIRV Kirov 58.00 322***ce*P **P 21 40 15.5 +0.5**
**BBB Bella Bella 59.20 46** LR LR 22 06 16.7
comp=Z,15nm,19.2s,baz=16,slow=36
**FITZ Fitzroy Crossi 60.23 198** P **P 21 40 31.0 +0.2**
**WB0 Warramunga Arr 60.31 189** P **P 21 40 30.8 -0.5**
WB0 IAmb IAmb 21 40 47.6
comp=Z,5.4nm,1.2s
**WR0 Warramunga Arr 60.48 188** P **P 21 40 32.7 +0.2**
WR0 IAmb IAmb 21 40 40.2
comp=Z,3.9nm,1.1s
**WB2 Warramunga Arr 60.48 189** P **P 21 40 31.9 -0.7**
WB2 IAmb IAmb 21 41 13.1
comp=Z,6.0nm,1.2s
**WRA Warramunga Arr 60.48 189** P **P 21 40 31.2 -1.4**
**WRA Warramunga Arr 60.48 189** P **P 21 40 31.6 -1.0**
comp=Z,1.1nm,0.7s,baz=6.3,slow=6.8,SNR=24
comp=Z,1.1nm,0.7s
**KEV Kevo 60.55 339** P **P 21 40 32.7 +0.3**
**KEV Kevo 60.55 339** P **P 21 40 32.7 +0.3**
KEV pmax pmax
comp=Z,49nm,1.5s
**ARCES ARCESS Array B 61.10 339** P **P 21 40 36.3 +0.1**
**ARCES ARCESS Array B 61.10 339** P **P 21 40 36.0 -0.2**
comp=Z,1.2nm,0.6s,baz=50,slow=8.1,SNR=9.9
ARCES LR LR 22 09 25.1
comp=Z,19nm,20.2s,baz=124,slow=38
comp=Z,1.2nm,0.6s
**ARCES ARCESS Array B 61.10 339** P **P 21 40 36.3 +0.1**
**BELG Belogorsnoye 61.83 316** LR LR 22 09 43.2
comp=Z,53nm,18.7s,baz=79,slow=38
**ASAR Alice Springs 64.21 189** P **P 21 40 57.0 -0.5**
comp=Z,1.0nm,0.6s,baz=3.5,slow=4.7,SNR=18
comp=Z,1.0nm,0.6s
**ASAR Alice Springs 64.21 189** P **P 21 40 57.0 -0.5**
**VRH Novokhopyorsk 65.56 317** *e*P **P 21 41 04.0 -2.0**
VRH pmax pmax
comp=Z,7.0nm,0.9s
**OBN Obninsk 65.82 323** *i* P **P 21 41 08.0 +0.4**
OBN pmax pmax
comp=Z,3.0nm,0.8s
**FINES FINESS Array B 66.16 332** P **P 21 41 09.3 -0.3**
comp=Z,4.9nm,0.7s,baz=41,slow=8.6,SNR=21
FINES LR LR 22 11 14.7
comp=Z,36nm,20.9s,baz=53,slow=37
comp=Z,4.9nm,0.7s
**FINES FINESS Array B 66.16 332***ce*P **P 21 41 09.6 -0.1**
FINES pmax pmax
comp=Z,5.0nm,0.7s
**LPSR Galich'ya Gora 66.17 320** *e*P **P 21 41 08.5 -1.4**
LPSR pmax pmax
comp=Z,8.0nm,0.9s
**VORR Voronezh 66.58 319** *e*P **P 21 41 11.2 -1.3**
VORR pmax pmax
comp=Z,8.0nm,0.9s
**VSR Storozhevoye 66.86 318** *e*P **P 21 41 12.1 -2.2**
VSR pmax pmax
comp=Z,6.0nm,0.8s
**KIV Kislovodsk 69.23 310** P **P 21 41 29.9 +0.5**
**KIV Kislovodsk 69.23 310** *e*P **P 21 41 30.8 +1.3**
KIV pmax pmax
comp=Z,12nm,1.0s
**KIV Kislovodsk 69.23 310** P **P 21 41 30.8 +1.3**
comp=Z,12nm,1.0s
**KBZ Khabaz 69.24 310** P **P 21 41 29.2 -0.2**
comp=Z,3.9nm,0.6s,baz=106,slow=4.3,SNR=9.8
comp=Z,3.9nm,0.6s
**KBZ Khabaz 69.24 310***ce*P **P 21 41 29.7 +0.3**
KBZ pmax pmax
comp=Z,4.0nm,0.9s
**MNK Minsk 70.10 326** *i* P **P 21 41 33.7 -0.8**
MNK *i* *PP **pP 21 41 50.1 +1.2**
MNK *i* 21 44 08.6
MNK *i* PPP PPP 21 45 50.7
MNK *i* S **S 21 50 39.2 -2.1**
MNK *i* *SS **sS 21 51 07.5 +1.8**
MNK *i* SS **SS 21 55 09.9 -0.8**
MNK pmax pmax
comp=N,8.0nm,0.8s
MNK pmax pmax
comp=Z,9.0nm,0.7s
MNK pmax pmax
comp=E,13nm,1.0s
MNK MLR MLR
comp=E,79nm,18.0s
MNK MLR MLR
comp=N,123nm,22.0s
MNK MLR MLR
comp=Z,16nm,13.0s
**HFS Hagfors 71.31 336** P **P 21 41 41.4 -0.3**
comp=Z,2.5nm,0.5s,baz=60,slow=7.0,SNR=18
HFS LR LR 22 15 27.4
comp=Z,19nm,19.4s,baz=49,slow=38
comp=Z,2.5nm,0.5s
**NB2 NORSAR Subarra 71.35 337** P **P 21 41 42.4 +0.4**
comp=Z,1.7nm,0.6s,baz=36,slow=6.2
**NOA NORSAR Array B 71.35 337** P **P 21 41 42.0 0.0**
comp=Z,2.4nm,0.6s,baz=38,slow=6.0,SNR=14
NOA LR LR 22 15 55.9
comp=Z,16nm,20.9s,baz=25,slow=38
comp=Z,2.4nm,0.6s
**AKASG Malin Array Be 72.06 322** P **P 21 41 46.4 0.0**
comp=Z,3.4nm,0.5s,baz=46,slow=5.9,SNR=10
comp=Z,3.4nm,0.5s
**AKBB Malin Array Si 72.06 322***ce*P **P 21 41 46.9 +0.5**
**MI30 MI30,Zelenitsa 72.51 323** P **P 21 41 48.8 -0.3**
**RNPP9 Sopachiv 73.10 324** P **P 21 41 51.7 -0.9**
**LUBAR Lubar, Ukraine 73.28 322** P **P 21 41 53.2 -0.5**
**SORM Soroca 74.23 320** P **P 21 41 58.8 -0.4**
**NDNU Novodnistrovsk 74.38 321** P **P 21 42 00.0 -0.1**
**KMPD K-Podol'skiy 74.84 322** P **P 21 42 02.4 -0.3**
KMPD P **P 21 42 02.0 -0.8**
**PSUT Pine Spring 75.11 52** P **P 21 42 06.1 +1.3**
**STNU Starunia 75.65 323** P **P 21 42 06.8 -0.7**
**KWP Kalwaria Pacla 75.80 324** P **P 21 42 08.7 +0.4**
KWP IAmb IAmb 21 42 10.1
comp=Z,11nm,1.2s
**KWP Kalwaria Pacla 75.80 324** P **P 21 42 08.7 +0.4**
KWP pmax pmax
comp=Z,11nm,1.2s
**BUR08 Bucovina Ar. S 76.08 322** P **P 21 42 10.2 +0.1**
**BURAR Bucovina Array 76.10 322** P **P 21 42 10.6 +0.4**
**OJC Ojcow 76.63 326** P **P 21 42 13.3 +0.3**
OJC IAmb IAmb 21 42 14.7
comp=Z,4.7nm,0.9s
**OJC Ojcow 76.63 326** P **P 21 42 13.3 +0.3**
OJC pmax pmax
comp=Z,5.0nm,0.9s
**BRTR Keskin Array B 77.13 311** P **P 21 42 16.6 +0.4**
comp=Z,0.7nm,0.6s,baz=102,slow=3.4,SNR=7.4
comp=Z,0.7nm,0.6s
**MLR Muntele Rosu 77.26 320** LR LR 22 19 57.6
comp=Z,26nm,18.0s,baz=72,slow=38
**LANS Liptovska Anna 77.57 326** *e*P **P 21 42 20.1 +1.7**
**LANS Liptovska Anna 77.57 326** *e*P **P 21 42 20.1 +1.7**
**MORC Moravsky Berou 77.91 327** P **P 21 42 20.5 +0.2**
MORC IAmb IAmb 21 42 22.2
comp=Z,4.5nm,1.0s
**MORC Moravsky Berou 77.91 327** P **P 21 42 20.5 +0.2**
MORC pmax pmax
comp=Z,5.0nm,1.0s
**VYHS Vyhne 78.34 325** *e*P **P 21 42 24.3 +1.7**
**VYHS Vyhne 78.34 325** *e*P **P 21 42 24.3 +1.7**
**CLL Collm 78.52 330** *i* P **P 21 42 23.2 -0.3**
**CLL Collm 78.52 330** *i* P **P 21 42 23.2 -0.3**
**VRAC Vranov 78.67 327** LR LR 22 20 17.8
comp=Z,32nm,18.8s,baz=51,slow=38
**KHC Kasperske Hory 80.03 329** P **P 21 42 32.7 +0.8**
**KHC Kasperske Hory 80.03 329** *e*P **P 21 42 32.7 +0.8**
**KHC Kasperske Hory 80.03 329***ce*P **P 21 42 32.2 +0.3**
KHC pmax pmax
comp=Z,8.0nm,1.3s
**RONA Rosalia, Austr 80.04 326** *i* P **P 21 42 28.1 -3.9**
comp=Z,2.1nm,0.9s
**CONA Conrad Observa 80.05 327** *e*P **P 21 42 27.8 -4.2**
comp=Z,4.4nm,1.3s
**EKA Eskdalemuir Ar 80.19 341** P **P 21 42 32.5 +0.1**
comp=Z,1.7nm,0.7s,baz=34,slow=5.2,SNR=2.4
comp=Z,1.7nm,0.7s
**GERES GERESS Array B 80.21 328** P **P 21 42 33.0 +0.1**
comp=Z,0.7nm,0.7s,baz=341,slow=2.8,SNR=4.1
GERES LR LR 22 21 11.9
comp=Z,19nm,19.7s,baz=232,slow=38
comp=Z,0.7nm,0.7s
**GERES GERESS Array B 80.21 328** P **P 21 42 33.0 +0.1**
**MMAI Mount Meron Ar 80.57 305** P **P 21 42 35.0 -0.1**

comp=Z,2.1nm,0.8s,baz=12,slow=7.4,SNR=2.0
comp=Z,2.1nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MOA** | **Molin** | **80.77** | **327** | *e*P | **P** | **21 42 32.7** | **-3.1** |
| | comp=Z,5.5nm,1.3s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **81.15** | **328** | *i* P | **P** | **21 42 38.8** | **+0.9** |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **SOKA** | **Soboth** | **81.38** | **326** | *e*P | **P** | **21 42 39.8** | **+0.6** |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **OBKA** | **Obir** | **81.72** | **326** | *i* P | **P** | **21 42 41.9** | **+1.0** |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **LESA** | **Schwarzleotal** | **81.76** | **328** | *i* P | **P** | **21 42 42.8** | **+1.6** |
| | comp=Z,3.4nm,1.1s | | | | | | |
| **WATA** | **Walderalm** | **82.27** | **329** | *i* P | **P** | **21 42 45.4** | **+1.5** |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **ABTA** | **Abfaltersbach** | **82.37** | **328** | *e*P | **P** | **21 42 43.1** | **-1.2** |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **MOTA** | **Moosalm** | **82.45** | **329** | *e*P | **P** | **21 42 44.1** | **-0.8** |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **RETA** | **Reutte** | **82.47** | **329** | *i* P | **P** | **21 42 45.7** | **+0.8** |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **DAVA** | **Damuels** | **82.98** | **330** | *i* P | **P** | **21 42 47.6** | **0.0** |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **EIL** | **Elat** | **83.11** | **303** | LR | LR | 22 23 59.2 | |
| | comp=Z,27nm,18.1s,baz=54,slow=39 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **83.39** | **329** | LR | LR | 22 22 20.9 | |
| | comp=Z,25nm,18.1s,baz=81,slow=37 | | | | | | |
| **NRCA** | **Norcia** | **85.27** | **325** | P | **P** | **21 42 59.1** | **-0.2** |
| NRCA | | | | IAmb | IAmb | 21 43 00.7 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **ESDC** | **Sonseca Array** | **94.56** | **335** | LR | LR | 22 35 02.9 | |
| | comp=Z,11nm,18.5s,baz=120,slow=41 | | | | | | |
| **SNAA** | **Sanae** | **144.16** | **198** | PKP | PKPbc | 21 49 55.1 | 0.0 |
| | comp=Z,1.8nm,0.7s,baz=204,slow=4.3,SNR=12 | | | | | | |

*IDC **24** 21:43:45.4±13.0, 40˚.40N×142˚.45E, h63km±82km, mb3.4/5, mbtmp3.6/7, ML2.7/2, MS2.8/1, Error ellipse: s-maj=171.9km s-min=26.1km az=70.0*
*JMA **24** 21:43:45.1±0.1, 40˚.4N±0˚.3×142˚.3E±0˚.7, h41km±1km, MV3.5/40, NE OFF IWATE PREF*
*JMA Felt I J1 at NE OFF IWATE PREF .*
**ISC 24 21:43:42.5±2.1, 40˚.41N±0˚.05×142˚.4E±0˚.1, h30**km±13km, **n23,** σ1¶13/23, **mb3.6/5, 12D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JKEN** | **Kujiedanarisaw** | **0.56** | **249** | ⇓*i* | P | | **Pn** | **21 43 55.2** | **+0.9** |
| JKEN | | | | ⇓ | S | | **Sn** | **21 44 02.3** | **-0.3** |
| **JTH** | **Tanohata** | **0.62** | **221** | *i* | P | | **Pn** | **21 43 56.3** | **+1.1** |
| JTH | | | | | S | | **Sn** | **21 44 04.1** | **0.0** |
| **JANG** | **Nango** | **0.67** | **267** | ⇓*i* | P | | **Pn** | **21 43 56.9** | **+1.0** |
| JANG | | | | ⇓ | S | | **Sn** | **21 44 05.1** | **-0.3** |
| **JKZ** | **Kuzumaki** | **0.91** | **243** | ⇓*i* | P | | **Pn** | **21 44 00.5** | **+1.2** |
| JKZ | | | | ⇓ | S | | **Sn** | **21 44 11.2** | **-0.3** |
| **JARK** | **Aomorirokkasho** | **0.98** | **308** | ⇓*i* | P | | **Pn** | **21 44 01.5** | **+1.3** |
| JAPK | | | | ⇓ | S | | **Sb** | **21 44 13.0** | **-0.5** |
| **JTM** | **Tenmabayashi** | **1.07** | **291** | *i* | P | | **Pb** | **21 44 02.5** | **0.0** |
| **JOM** | **Ohasama** | **1.26** | **222** | ⇓*i* | P | | **Pb** | **21 44 05.5** | **-0.1** |
| JOM | | | | ⇓ | S | | **Sn** | **21 44 19.8** | **-0.1** |
| **JAH** | **Hinai** | **1.36** | **261** | ⇓*i* | P | | **Pb** | **21 44 06.6** | **-0.7** |
| JAH | | | | ⇓ | S | | **Sn** | **21 44 21.7** | **-0.7** |
| **JOT** | **Ohata** | **1.40** | **314** | | P | | **Pb** | **21 44 07.5** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **5.07** | **222** | | P | | **Pn** | **21 44 59.1** | **+2.7** |
| | 0.1nm,0.3s,baz=30,slow=14,SNR=4.0 | | | | | | | | |
| | 1.2nm,0.6s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.58** | **300** | | P | | **Pn** | **21 45 47.4** | **+2.8** |
| | 0.3nm,0.3s,baz=100,slow=15,SNR=6.7 | | | | | | | | |
| | 1.7nm,0.5s | | | | | | | | |
| **MA2** | **Magadan** | **19.90** | **13** | | LR | | LR | 21 57 31.4 | |
| | comp=Z,27nm,19.2s,baz=178,slow=42 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.41** | **127** | | T | | T | 22 20 52.2 | |
| | baz=320,slow=76 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.41** | **127** | | T | | T | 22 21 08.1 | |
| | baz=320,slow=76 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.42** | **127** | | T | | T | 22 21 07.3 | |
| | baz=320,slow=76 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.23** | **129** | | T | | T | 22 22 15.0 | |
| | baz=322,slow=76 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.23** | **129** | | T | | T | 22 22 10.7 | |
| | baz=322,slow=76 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.24** | **129** | | T | | T | 22 22 11.7 | |
| | baz=322,slow=76 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.28** | **309** | | P | | **P** | **21 51 16.5** | **-0.1** |
| | 0.6nm,0.4s,baz=92,slow=9.2,SNR=3.7 | | | | | | | | |
| | 0.6nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.05** | **299** | | P | | **P** | **21 51 39.3** | **-0.1** |
| | 0.5nm,0.7s,baz=86,slow=9.4,SNR=5.5 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.59** | **305** | | P | | **P** | **21 51 51.0** | **-0.7** |
| | 0.4nm,0.4s,baz=79,slow=8.8,SNR=5.7 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.92** | **310** | | P | | **P** | **21 52 25.4** | **-0.1** |
| | 0.6nm,0.3s,baz=79,slow=8.5,SNR=7.2 | | | | | | | | |
| | 0.6nm,0.3s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.51** | **189** | | P | | **P** | **21 53 48.6** | **-1.1** |
| | 0.3nm,0.8s,baz=3.5,slow=7.0,SNR=2.7 | | | | | | | | |
| | 0.3nm,0.8s | | | | | | | | |

*IDC **24** 22:04:27.5±1.9, 2˚.24N×128˚.82E, h0km, mb3.7/8, mbtmp3.7/8, Error ellipse: s-maj=210.0km s-min=17.0km az=69.0*
**ISC 24 22:04:33.2±1.6, 2˚.2N±0˚.5×12˚.9E±˚, h40**km, **n8,** σ0¶82/8, **mb4.0/8, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.69** | **166** | | P | | **P** | **22 09 31.1** | **-0.4** |
| | 0.6nm,0.6s,baz=350,slow=10,SNR=5.3 | | | | | | | | |
| | 0.6nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.21** | **169** | | P | | **P** | **22 10 03.4** | **-1.1** |
| | 0.2nm,0.4s,baz=352,slow=8.1,SNR=5.6 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **STKA** | **Stephens Creek** | **36.03** | **161** | | P | | **P** | **22 11 31.5** | **+0.8** |
| | 1.3nm,0.5s,baz=321,slow=14,SNR=3.8 | | | | | | | | |
| | 1.3nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **49.39** | **340** | | P | | **P** | **22 13 18.9** | **-0.1** |
| | 0.4nm,0.4s,baz=155,slow=7.2,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.97** | **325** | | P | | **P** | **22 14 36.4** | **+0.8** |
| | 0.9nm,0.5s,baz=114,slow=7.5,SNR=20 | | | | | | | | |
| | 0.9nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.86** | **333** | | P | | **P** | **22 14 54.1** | **-0.8** |
| | 0.7nm,0.6s,baz=116,slow=6.6,SNR=3.7 | | | | | | | | |
| | 0.7nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.12** | **327** | | P | | **P** | **22 15 03.5** | **+0.2** |
| | 1.1nm,0.6s,baz=128,slow=6.1,SNR=11 | | | | | | | | |
| | 1.1nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **69.70** | **327** | | P | | **P** | **22 15 39.1** | **+0.3** |
| | 1.1nm,0.8s,baz=134,slow=6.4,SNR=5.7 | | | | | | | | |
| | 1.1nm,0.8s | | | | | | | | |

*IDC **24** 22:13:38.6±3.2, 24˚.26S×179˚.97E, h492km±31km, mb3.0/4, mbtmp3.9/5, Error ellipse: s-maj=28.0km s-min=23.4km az=32.0*
**ISC 24 22:13:40.7±0.9, 24˚.3S±0˚.3×179˚.9E±0˚.2, h517**km, **n11,** σ1¶13/11, **mb3.6/4, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **12.59** | **277** | | P | | **P** | **22 16 25.8** | **+0.2** |
| | 6.9nm,0.8s,baz=76,slow=19,SNR=3.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **41.90** | **261** | | P | | **P** | **22 20 45.8** | **-0.1** |
| | 0.3nm,0.4s,baz=94,slow=7.4,SNR=7.8 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.31** | **267** | | P | | **P** | **22 20 48.5** | **-0.6** |
| | 0.8nm,0.3s,baz=100,slow=8.1,SNR=27 | | | | | | | | |
| WRA | | | | | ScP | | **ScP** | **22 25 35.1** | **+2.8** |
| | 0.6nm,0.8s,baz=112,slow=3.9,SNR=3.7 | | | | | | | | |
| | 0.8nm,0.3s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **65.82** | **180** | | P | | **P** | **22 23 34.3** | **-0.1** |
| | 1.1nm,0.6s,baz=355,slow=0.6,SNR=16 | | | | | | | | |
| | 1.1nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **90.69** | **58** | | P | | **P** | **22 25 48.9** | **+0.5** |
| | 0.4nm,0.7s,baz=210,slow=6.6,SNR=5.5 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **120.66** | **319** | | PKP | | **PKPdf** | **22 31 32.6** | **-0.7** |
| | 0.4nm,0.4s,baz=116,slow=3.1,SNR=3.9 | | | | | | | | |
| **HFS** | **Hagfors** | **142.89** | **349** | | PKhKP | | PKPpre | 22 32 11.4 | |
| | 2.4nm,0.4s,baz=52,slow=2.4,SNR=24 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **145.24** | **327** | | PKPbc | | **PKPdf** | **22 32 19.2** | **+0.2** |
| | 0.2nm,0.3s,baz=47,slow=1.8,SNR=1.4 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.74** | **307** | | PKPbc | | **PKPbc** | **22 32 27.2** | **-0.2** |
| | 0.6nm,0.6s,baz=73,slow=2.8,SNR=5.3 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.78** | **294** | | PKPbc | | **PKiKP** | **22 32 28.4** | **-0.7** |
| | 1.9nm,0.6s,baz=79,slow=4.1,SNR=8.3 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **148.88** | **3** | | PKPbc | | **PKPbc** | **22 32 28.9** | **-0.7** |
| | 0.5nm,0.4s,baz=358,slow=2.9,SNR=4.6 | | | | | | | | |

*IDC **24** 22:17:18.6±1.0, 8˚.15S×116˚.36E, h0km, mb3.9/9, mbtmp3.9/10, ML3.4/1, MS3.1/4, Error ellipse: s-maj=41.5km s-min=17.3km az=55.0*
*DJA **24** 22:17:21.0±0.8, 8˚.S±6˚×11˚6E±˚, h13km±5km, M4.0/7, MLv4.0/7*
**ISC 24 22:17:20.6±0.7, 8˚.03S±0˚.06×116˚.45E±0˚.04, h10**km, **n21,** σ0¶96/22, **mb4.0/8, MS3.4/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.82** | **149** | | P | | **Pg** | **22 17 37.2** | **+0.7** |
| TWSI | | | | | S | | **Sn** | **22 17 51.3** | **+0.8** |
| **SRBI** | **Singaraja** | **1.23** | **268** | | P | | **Pn** | **22 17 43.3** | **-0.5** |
| SRBI | | | | | S | | **Sn** | **22 18 01.3** | **+0.9** |
| **PLAI** | **Plampang** | **1.53** | **121** | | P | | **Pn** | **22 17 48.9** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.31** | **259** | | P | | **Pn** | **22 17 58.1** | **-0.7** |
| JAGI | | | | | S | | **Sn** | **22 18 26.9** | **-0.5** |
| **WBSI** | **Waikabubak, Su** | **3.32** | **119** | | P | | **Pn** | **22 18 12.7** | **+0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.43** | **65** | | P | | **Pn** | **22 18 27.9** | **0.0** |
| **KAPI** | **Kappang** | **4.45** | **48** | | Pn | | **Pn** | **22 18 28.6** | **+0.5** |
| | 1.7nm,0.3s,baz=208,slow=7.5,SNR=4.4 | | | | | | | | |
| KAPI | | | | | Sn | | **Sn** | **22 19 19.6** | **-0.3** |
| | 2.5nm,0.3s,baz=232,slow=18,SNR=5.1 | | | | | | | | |
| KAPI | | | | | Lg | | Lg | 22 19 41.5 | |
| | 1.9nm,0.3s,baz=233,slow=22,SNR=1.8 | | | | | | | | |
| KAPI | | | | | LR | | LR | 22 19 51.4 | |
| | comp=Z,45nm,20.4s,baz=257,slow=33 | | | | | | | | |
| | 3.5nm,0.3s | | | | | | | | |
| **PWJI** | **Pagerwojo** | **4.60** | **270** | | P | | **Pn** | **22 18 32.5** | **+2.2** |
| **WRA** | **Warramunga Arr** | **20.98** | **126** | | P | | **P** | **22 22 04.2** | **-0.1** |
| | 7.6nm,1.0s,baz=299,slow=12,SNR=30 | | | | | | | | |
| | 7.6nm,1.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.84** | **135** | | P | | **P** | **22 22 23.9** | **-0.2** |
| | 4.9nm,0.9s,baz=314,slow=8.5,SNR=28 | | | | | | | | |
| | 4.9nm,0.9s | | | | | | | | |
| **STKA** | **Stephens Creek** | **33.32** | **139** | | P | | **P** | **22 23 56.6** | **-2.1** |
| | 0.6nm,0.2s,baz=324,slow=19,SNR=2.0 | | | | | | | | |
| | 0.6nm,0.2s | | | | | | | | |
| **SONM** | **Songino Array** | **56.33** | **352** | | P | | **P** | **22 27 02.1** | **+0.3** |
| | 0.9nm,0.7s,baz=161,slow=9.4,SNR=4.9 | | | | | | | | |
| | 0.9nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.47** | **334** | | P | | **P** | **22 27 44.9** | **+0.7** |
| | 0.9nm,0.6s,baz=152,slow=7.0,SNR=12 | | | | | | | | |
| | 0.9nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.01** | **335** | | P | | **P** | **22 28 13.2** | **-0.5** |
| | 0.3nm,0.3s,baz=134,slow=5.3,SNR=4.3 | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.27** | **340** | | P | | **P** | **22 28 14.7** | **-0.6** |
| | 0.6nm,0.5s,baz=158,slow=4.8,SNR=4.1 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |
| **MAW** | **Mawson** | **69.30** | **199** | | LR | | LR | 22 52 02.3 | |
| | comp=Z,42nm,21.4s,baz=112,slow=30 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.24** | **25** | | P | | **P** | **22 28 35.0** | **+1.3** |
| | 1.8nm,0.8s,baz=116,slow=6.8,SNR=4.6 | | | | | | | | |
| | 1.8nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | **70.61** | **7** | | LR | | LR | 23 05 14.6 | |
| | comp=Z,16nm,18.5s,baz=274,slow=41 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **72.28** | **333** | | P | | **P** | **22 28 45.9** | **-0.2** |
| | 0.7nm,0.9s,baz=110,slow=6.7,SNR=3.1 | | | | | | | | |
| | 0.7nm,0.9s | | | | | | | | |
| **FURI** | **Furi** | **79.28** | **281** | | LR | | LR | 23 03 27.4 | |
| | comp=Z,15nm,18.3s,baz=170,slow=35 | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.31** | **190** | | PKPbc | | **PKPbc** | **22 36 58.2** | **-1.0** |
| | 2.5nm,0.8s,baz=197,slow=11,SNR=3.4 | | | | | | | | |

*DJA **24** 22:44:46.8±2.2, 5˚.N±5˚×12˚.7E±2˚.2, h143km±21km, M4.3/6, mB4.5/3, mb4.4/4, MLv4.3/6, Mw(mB)3.6/3*
*IDC **24** 22:44:49.5±1.3, 5˚.50N×125˚.98E, h121km±10km, mb3.6/11, mbtmp3.9/11, MS3.2/1, Error ellipse: s-maj=44.2km s-min=12.9km az=70.0*
**ISC 24 22:44:47.2±0.7, 5˚.43N±0˚.06×126˚.21E±0˚.09, h100**km, **n27,** σ2¶17/32, **mb4.0/11, 2C-4D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GSPH** | **General Santos** | **1.42** | **298** | ⇓*i* | P | | **Pn** | **22 45 11.1** | **-1.5** |
| GSPH | | | | ⇓ | S | | **Sn** | **22 45 30.4** | **-1.4** |
| **DAV** | **Davao City (W)** | **1.75** | **339** | | P | | **Pn** | **22 45 18.9** | **+2.2** |
| | 172nm,0.3s,baz=356,slow=5.9,SNR=3.8 | | | | | | | | |
| DAV | | | | | S | | **Sn** | **22 45 40.2** | **+1.2** |
| | 344nm,0.4s,baz=4.5,slow=17,SNR=7.7 | | | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.79** | **337** | ⇓*i* | P | | **Pn** | **22 45 17.4** | **+0.2** |
| DMPH | | | | ⇓ | S | | **Sn** | **22 45 38.4** | **-1.5** |
| **CTBH** | **Cotabato--PC H** | **2.64** | **313** | *e* | P | | **Pn** | **22 45 32.0** | **+3.7** |
| CTBH | | | | *i* | S | | Sn | 22 46 11.1 | +11 |
| **BIPH** | **Bislig** | **2.74** | **3** | ⇑*e* | P | | **Pn** | **22 45 29.3** | **-0.3** |
| BIPH | | | | *e* | S | | **Sn** | **22 46 03.7** | **+1.5** |
| **CGP** | **Cagayan de Oro** | **3.37** | **334** | ⇓*e* | P | | **Pn** | **22 45 42.3** | **+4.4** |
| CGP | | | | *e* | S | | Sn | 22 46 27.8 | +11 |
| **SCPH** | **Surigao** | **4.39** | **351** | *e* | P | | **Pn** | **22 45 54.8** | **+3.1** |
| SCPH | | | | *i* | S | | Sn | 22 46 18.4 | -23 |
| **TBP** | **Tagbilaran** | **4.83** | **331** | *e* | P | | **Pn** | **22 45 59.5** | **+1.7** |
| **GTOI** | **Gorontalo** | **5.73** | **214** | | P | | **Pn** | **22 46 11.0** | **+1.1** |
| | 39nm,0.8s,344nm0.1nm | | | | | | | | |
| **PLP** | **Palo** | **5.83** | **348** | ⇓*e* | P | | **Pn** | **22 46 13.7** | **+2.4** |
| **MRSI** | **Marisa** | **6.51** | **221** | | P | | **Pn** | **22 46 23.0** | **+2.5** |
| | 78nm,0.7s,838nm | | | | | | | | |
| **RCP** | **Roxas** | **6.99** | **331** | ⇑*i* | P | | **Pn** | **22 46 30.1** | **+3.0** |
| **LUWI** | **Luwuk** | **7.29** | **208** | | P | | **Pn** | **22 46 35.8** | **+4.8** |
| **TPRI** | **Tanjung Pinang** | **22.10** | **259** | | P | | **P** | **22 49 32.3** | **-2.3** |
| **WRA** | **Warramunga Arr** | **26.45** | **163** | | P | | **P** | **22 50 17.8** | **+2.8** |
| | 2.4nm,1.1s,baz=344,slow=10,SNR=5.7 | | | | | | | | |
| WRA | | | | | LR | | LR | 23 01 04.7 | |
| | comp=Z,61nm,21.7s,baz=9.5,slow=37 | | | | | | | | |
| | 2.4nm,1.1s | | | | | | | | |
| **ASAR** | **Alice Springs** | **29.87** | **166** | | P | | **P** | **22 50 46.0** | **+0.4** |
| | 0.2nm,0.4s,baz=340,slow=6.8,SNR=5.0 | | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **22 53 46.2** | **-0.2** |
| | 0.4nm,0.6s,baz=330,slow=2.6,SNR=4.6 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **KSRS** | **Korea Array** | **31.92** | **3** | | P | | **P** | **22 51 04.5** | **+1.2** |
| | 1.1nm,0.8s,baz=186,slow=9.7,SNR=2.6 | | | | | | | | |
| | 1.1nm,0.8s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **38.95** | **7** | | P | | **P** | **22 52 01.9** | **-1.5** |
| | 1.4nm,0.7s,baz=182,slow=7.4,SNR=1.9 | | | | | | | | |
| | 1.4nm,0.7s | | | | | | | | |
| **STKA** | **Stephens Creek** | **39.89** | **159** | | P | | **P** | **22 52 12.1** | **+0.7** |
| | 1.1nm,0.2s,baz=302,slow=14,SNR=4.2 | | | | | | | | |
| | 1.1nm,0.2s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.88** | **325** | | P | | **P** | **22 54 13.6** | **-1.1** |
| | 1.1nm,0.4s,baz=119,slow=7.7,SNR=25 | | | | | | | | |
| | 1.1nm,0.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.85** | **333** | | P | | **P** | **22 54 33.7** | **-1.6** |
| | 0.4nm,0.3s,baz=122,slow=7.4,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.04** | **327** | | P | | **P** | **22 54 42.1** | **-1.5** |
| | 1.6nm,0.7s,baz=120,slow=8.0,SNR=16 | | | | | | | | |
| | 1.6nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.63** | **327** | | P | | **P** | **22 55 19.4** | **-1.2** |
| | 1.5nm,0.8s,baz=120,slow=8.8,SNR=9.6 | | | | | | | | |
| | 1.5nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.81** | **25** | | P | | **P** | **22 57 05.2** | **-0.1** |
| | 0.4nm,0.9s,baz=208,slow=6.9,SNR=2.8 | | | | | | | | |
| | 0.4nm,0.9s | | | | | | | | |
| **FINES** | **FINESS Array B** | **90.10** | **332** | | P | | **P** | **22 57 33.6** | **-2.2** |
| | 0.9nm,0.6s,baz=62,slow=6.5,SNR=1.4 | | | | | | | | |
| | 0.9nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **120.96** | **51** | | PKP | | **PKPdf** | **23 03 28.9** | **0.0** |
| | 0.1nm,0.5s,baz=150,slow=3.8,SNR=3.5 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.89** | **289** | | PKP | | **PKPdf** | **23 03 30.5** | **-0.4** |
| | 0.2nm,0.3s,baz=70,slow=2.3,SNR=6.4 | | | | | | | | |

*WEL **24** 22:47:37.3±0.3, 39˚.S±4˚×17˚.5E±˚, h17km±5km, M3.4/28, ML3.7/28, MLv3.4/28, Error ellipse: s-maj=0.0km s-min=0.0km az=176.4, confirmed*
*NOU **24** 22:47:38.1, 39˚.25S×174˚.73E, h29km, MLv3.5/11, North Island, New Zealand*
**ISC 24 22:47:37.9±0.9, 39˚.28S±0˚.02×174˚.79E±0˚.02, h28**km±7km, **n112,** σ0¶81/118, **North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VRZ** | **Vera Road** | **0.15** | **351** | | P | | **Pb** | **22 47 43.5** | **+0.1** |
| VRZ | | | | | S | | **Sb** | **22 47 48.1** | **+0.9** |
| **LREZ** | **Lake Rotokare** | **0.35** | **238** | | P | | **Pb** | **22 47 46.0** | **0.0** |
| LREZ | | | | | S | | **Sn** | **22 47 52.8** | **-0.5** |
| **MHEZ** | **Mangahewa** | **0.41** | **299** | | P | | **Pn** | **22 47 47.5** | **-0.5** |
| **PKVZ** | **Pokaka** | **0.43** | **92** | | P | | **Pb** | **22 47 46.4** | **-0.9** |
| PKVZ | | | | | S | | **Sb** | **22 47 52.8** | **-0.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DREZ** | **Durham Road** | **0.47** | **280** | | P | **Pn** | **22 47 48.3** | **-0.5** |
| DREZ | | | | | S | **Sn** | **22 47 56.4** | **+0.3** |
| **PREZ** | **Palmer Road** | **0.49** | **262** | | P | **Pn** | **22 47 48.7** | **-0.4** |
| PREZ | | | | | S | **Sn** | **22 47 57.4** | **+0.6** |
| **WAZ** | **Wanganui** | **0.50** | **163** | | P | **Pb** | **22 47 47.6** | **-0.7** |
| **MTVZ** | **Mangateitei** | **0.54** | **102** | | P | **Pb** | **22 47 47.8** | **-1.2** |
| **NEZ** | **North Egmont** | **0.54** | **270** | | P | **Pb** | **22 47 49.2** | **+0.3** |
| **TWVZ** | **Taurewa** | **0.54** | **68** | | P | **Pb** | **22 47 48.2** | **-0.9** |
| **COVZ** | **Chateau Observ** | **0.59** | **83** | | P | **Pb** | **22 47 48.9** | **-1.0** |
| **TRVZ** | **Turoa** | **0.59** | **93** | | P | **Pb** | **22 47 48.9** | **-1.0** |
| TRVZ | | | | | S | **Sb** | **22 47 57.4** | **-0.6** |
| **FWVZ** | **Far West T-bar** | **0.59** | **88** | | P | **Pb** | **22 47 49.0** | **-1.0** |
| **MAVZ** | **Matarangi** | **0.60** | **90** | | P | **Pb** | **22 47 49.2** | **-0.9** |
| **KHEZ** | **Kahui Hut** | **0.60** | **268** | | P | **Pb** | **22 47 50.8** | **+0.1** |
| **KHEZ** | **Kahui Hut** | **0.60** | **268** | | P | **Pn** | **22 47 50.5** | **-0.2** |
| **WHVZ** | **Whangaehu Hut** | **0.62** | **91** | | P | **Pb** | **22 47 49.7** | **-0.8** |
| **PKE** | **Pukeiti** | **0.63** | **277** | | P | **Pb** | **22 47 50.9** | **-0.1** |
| **WNVZ** | **Wahianoa** | **0.63** | **95** | | P | **Pb** | **22 47 49.6** | **-0.9** |
| **NGZ** | **Ngauruhoe** | **0.64** | **81** | | P | **Pb** | **22 47 49.7** | **-1.0** |
| **WTVZ** | **West Tongariro** | **0.64** | **76** | | P | **Pb** | **22 47 49.8** | **-1.0** |
| **NNVZ** | **North Ngauruho** | **0.66** | **78** | | P | **Pb** | **22 47 50.1** | **-0.9** |
| **SNVZ** | **South Ngauruho** | **0.67** | **83** | | P | **Pb** | **22 47 50.3** | **-0.9** |
| **TUVZ** | **Tukino** | **0.67** | **90** | | P | **Pb** | **22 47 50.6** | **-0.7** |
| **KRVZ** | **Karewarewa** | **0.69** | **75** | | P | **Pb** | **22 47 50.6** | **-0.9** |
| **OTVZ** | **Oturere** | **0.69** | **81** | | P | **Pb** | **22 47 50.7** | **-0.8** |
| **NTVZ** | **North Tongarir** | **0.71** | **76** | | P | **Pb** | **22 47 51.2** | **-0.6** |
| **NBEZ** | **Newall Road No** | **0.72** | **270** | | P | **Pn** | **22 47 52.2** | **+0.1** |
| **NMEZ** | **Namu Road** | **0.72** | **259** | | P | **Pn** | **22 47 52.0** | **-0.2** |
| **TMVZ** | **Te Maari** | **0.73** | **78** | | P | **Pb** | **22 47 51.4** | **-0.8** |
| **ETVZ** | **East Tongariro** | **0.73** | **79** | | P | **Pb** | **22 47 51.5** | **-0.6** |
| **MOVZ** | **Moawhango** | **0.76** | **100** | | P | **Pb** | **22 47 51.6** | **-1.1** |
| **HIZ** | **Hauiti** | **0.76** | **4** | | P | **Pb** | **22 47 52.1** | **-0.6** |
| **HIZ** | **Hauiti** | **0.76** | **4** | | P | **Pn** | **22 47 52.3** | **-0.3** |
| **KATZ** | **Kakaramea** | **0.77** | **67** | | P | **Pb** | **22 47 52.2** | **-0.6** |
| **RATZ** | **Rangitukua** | **0.87** | **62** | | P | **Pb** | **22 47 53.9** | **-0.5** |
| **WATZ** | **Wairara** | **0.93** | **53** | | P | **Pb** | **22 47 54.7** | **-0.7** |
| **OHWZ** | **Ohakea** | **1.01** | **157** | | P | **Pn** | **22 47 56.0** | **-0.2** |
| **TLZ** | **Tolley Road** | **1.11** | **32** | | P | **Pn** | **22 47 57.0** | **-0.6** |
| **KUTZ** | **Kaahu Road** | **1.12** | **46** | | P | **Pn** | **22 47 57.8** | **0.0** |
| **PNHZ** | **Pukenui** | **1.26** | **121** | | P | **Pn** | **22 47 59.2** | **-0.6** |
| **KWHZ** | **Kaweka Forest** | **1.27** | **97** | | P | **Pb** | **22 48 01.1** | **-0.3** |
| **KRHZ** | **Kereru** | **1.28** | **107** | | P | **Pn** | **22 48 00.0** | **+0.1** |
| **BKZ** | **Black Stump Fm** | **1.33** | **86** | | P | **Pn** | **22 48 01.0** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **1.33** | **86** | | P | **Pn** | **22 48 00.5** | **-0.1** |
| **MRHZ** | **Matea Rd** | **1.34** | **71** | | P | **Pn** | **22 48 00.5** | **-0.3** |
| **POWZ** | **Post Office Ro** | **1.35** | **146** | | P | **Pn** | **22 48 01.2** | **+0.3** |
| **DVHZ** | **Dannevirke** | **1.47** | **134** | | P | **Pn** | **22 48 03.6** | **+0.9** |
| **MCHZ** | **McNeill Hill** | **1.49** | **97** | | P | **Pn** | **22 48 06.2** | **+1.3** |
| **HSRZ** | **Hossack Road** | **1.49** | **50** | | P | **Pn** | **22 48 05.5** | **+0.5** |
| **WPHZ** | **Waipukurau** | **1.50** | **122** | | P | **Pn** | **22 48 04.5** | **+0.7** |
| **MRZ** | **Mangatainoka R** | **1.51** | **157** | | P | **Pn** | **22 48 03.4** | **+0.2** |
| **OGWZ** | **Otaki Gorge** | **1.57** | **169** | | P | **Pn** | **22 48 04.4** | **+0.5** |
| **PRWZ** | **Pori Road** | **1.57** | **145** | |

baz=56
**H04S3 CROZET ISLANDS** 61.43 216 T T 00 06 47.1
baz=56
**H04S2 CROZET ISLANDS** 61.44 216 T T 00 06 51.7
baz=56
**TXAR Lajitas Array** 144.34 39 PKP PKPbc 23 10 29.2 +0.5
0.8nm,0.6s,baz=310,slow=1.3,SNR=7.3

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*IDC **24** 22:53:14.8±1.6,26°14′N×128°50′E,h0km,mb3.5/6, mbtmp3.5/6,MS2.7/2,Error ellipse: s-maj=88.1km s-min=15.7km az=76.0*
*JMA **24** 22:53:18.6±0.3,26°1′N±0°9×12°9′E±°,h39km±3km, MV2.9/14,NEAR OKINAWAJIMA ISLAND*
**ISC 24 22:53:18.9±0.9,26°08′N±0°06×128°62′E±0°04,h35km,n21, σ1º15/28,mb3.4/6,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNTH** | **Nagotoyohara** | **0.69** | **309** | P | **Pn** | **22 53 30.6** | **-1.6** |
| JNTH | | | | *e*S | **Sn** | **22 53 39.7** | **-2.0** |
| **JJT3** | **Tamagusuku3** | **0.75** | **275** | P | **Pn** | **22 53 32.2** | **-0.9** |
| **JOW** | **Kunigami** | **0.81** | **338** | Pn | **Pn** | **22 53 33.0** | **-0.9** |
| | 146nm,0.3s,baz=125,slow=22,SNR=145 | | | | | | |
| JOW | | | | Sn | **Sn** | **22 53 43.2** | **-1.5** |
| | 262nm,0.3s,baz=6.0,slow=19,SNR=13 | | | | | | |
| **JOW** | **Kunigami** | **0.81** | **338** | P | **Pn** | **22 53 32.9** | **-0.9** |
| JOW | | | | *e*S | **Sn** | **22 53 43.4** | **-1.3** |
| **JYRO** | **Yoronjima** | **0.95** | **351** | *e*P | **Pn** | **22 53 35.0** | **-0.8** |
| JYRO | | | | *e*S | **Sn** | **22 53 46.6** | **-1.5** |
| **JIH** | **Iheya** | **1.12** | **329** | P | **Pn** | **22 53 37.7** | **-0.4** |
| JIH | | | | *e*S | **Sn** | **22 53 51.1** | **-1.1** |
| **JOKE** | **Okinoerabujima** | **1.28** | **358** | *e*P | **Pn** | **22 53 40.0** | **-0.3** |
| JOKE | | | | *e*S | **Sn** | **22 53 55.6** | **-0.6** |
| **JAGN** | **Aguni-jima** | **1.34** | **293** | P | **Pn** | **22 53 40.7** | **-0.4** |
| **JKE** | **Kume jima 2** | **1.67** | **279** | P | **Pn** | **22 53 44.5** | **-1.1** |
| JKE | | | | *e*S | **Sn** | **22 54 04.9** | **-0.8** |
| **JTK** | **Tokunoshima** | **1.73** | **10** | P | **Pn** | **22 53 46.2** | **-0.2** |
| **JAMN** | **Amaminishikomi** | **2.21** | **13** | P | **Pn** | **22 53 53.5** | **+0.5** |
| **JMZ** | **Minamidaito 2** | **2.36** | **96** | P | **Pn** | **22 54 04.0** | **-1.1** |
| JMZ | | | | S | **Sn** | **22 54 20.9** | **-2.0** |
| **JKDJ** | **Kitadaitoujima** | **2.41** | **92** | P | **Pn** | **22 53 55.0** | **-0.9** |
| JKDJ | | | | *e*S | **Sn** | **22 54 22.4** | **-1.8** |
| **MA2** | **Magadan** | **36.84** | **19** | LR | LR | 23 15 24.7 | |
| | comp=Z,9.4nm,18.0s,baz=269,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.90** | **312** | P | **P** | **23 01 06.1** | **+0.2** |
| | 0.2nm,0.5s,baz=110,slow=7.8,SNR=2.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.20** | **316** | P | **P** | **23 01 32.3** | **0.0** |
| | 0.3nm,0.5s,baz=103,slow=9.2,SNR=2.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.08** | **173** | P | **P** | **23 01 40.6** | **+1.0** |
| | 0.3nm,0.8s,baz=351,slow=8.4,SNR=2.5 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **49.72** | **174** | P | **P** | **23 02 09.2** | **+1.5** |
| | 0.2nm,0.7s,baz=10,slow=11,SNR=2.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **50.62** | **318** | P | **P** | **23 02 14.7** | **+0.4** |
| | 0.5nm,0.6s,baz=89,slow=9.0,SNR=2.5 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **73.17** | **331** | P | **P** | **23 04 46.7** | **+1.0** |
| | 1.9nm,0.9s,baz=74,slow=6.0,SNR=4.1 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **79.60** | **334** | LR | LR | 23 44 31.9 | |
| | comp=Z,5.4nm,20.2s,baz=55,slow=39 | | | | | | |

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**IDC 24 23:14:06.4±1.5,17°98S×177°15W,h0km,mb3.8/4, mbtmp3.8/4,Error ellipse: s-maj=54.9km s-min=33.4km az=171.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.80** | **259** | P | P | 23 22 29.8 | -0.6 |
| | 0.5nm,0.5s,baz=96,slow=7.1,SNR=7.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.93** | **254** | P | P | 23 22 31.6 | +0.3 |
| | 2.3nm,0.7s,baz=86,slow=8.6,SNR=22 | | | | | | |
| | 2.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.07** | **180** | P | P | 23 25 32.4 | 0.0 |
| | 0.5nm,0.6s,baz=357,slow=9.8,SNR=7.4 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.02** | **57** | P | P | 23 26 44.4 | +0.1 |
| | 0.3nm,0.8s,baz=212,slow=5.4,SNR=3.5 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

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**IDC 24 23:15:40.2±8.2,17°48S×173°44W,h0km,mb3.7/3, mbtmp3.7/3,Error ellipse: s-maj=357.1km s-min=41.6km az=140.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **49.36** | **258** | P | P | 23 24 31.5 | -0.4 |
| | 0.3nm,0.5s,baz=97,slow=6.9,SNR=6.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **49.46** | **254** | P | P | 23 24 32.7 | +0.1 |
| | 1.4nm,0.6s,baz=88,slow=8.7,SNR=15 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.49** | **11** | P | P | 23 28 14.5 | 0.0 |
| | 0.2nm,0.6s,baz=224,slow=5.0,SNR=1.9 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

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*IDC **24** 23:15:23.6±2.1,2°57′N×128°05′E,h0km,mb3.7/3, mbtmp3.7/3,MS3.8/1,Error ellipse: s-maj=142.4km s-min=25.9km az=67.0*
*DJA **24** 23:15:48.4±1.1,2°N±6°×12°8′E±°,h228km±10km,M4.1/7, mb4.3/3,mB5.4/1,MLv4.0/7,Mw(mB)4.9/1,MwMwp4.8/1, Mwp5.1/1*
**ISC 24 23:15:50.4±1.6,2°1′N±0°1×128°3′E±0°2,h250km,n7, σ2º25/7,mb3.8/3,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **1.64** | **215** | P | **Pn** | **23 16 30.2** | **+0.4** |
| **SANI** | **Sanana** | **4.75** | **209** | P | **Pn** | **23 17 03.9** | **+0.8** |
| | 133nm,0.5s,8µm1.2nm | | | | | | |
| SANI | | | | S | **S** | **23 17 58.5** | **-2.6** |
| | 133nm,0.5s,8µm1.2nm | | | | | | |
| **GTOI** | **Gorontalo** | **5.50** | **255** | P | **Pn** | **23 17 14.4** | **+2.1** |
| | 18nm,0.6s,0.1nm | | | | | | |
| **WRA** | **Warramunga Arr** | **22.71** | **165** | P | **P** | **23 20 32.3** | **+1.3** |
| | 1.2nm,0.3s,baz=344,slow=10,SNR=23 | | | | | | |
| | 1.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **26.20** | **168** | P | **P** | **23 21 04.3** | **+1.8** |
| | 1.2nm,0.5s,baz=354,slow=7.9,SNR=35 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **36.09** | **161** | LR | LR | 23 40 17.0 | |
| | comp=Z,145nm,20.5s,baz=216,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.77** | **325** | P | **P** | **23 25 27.4** | **-1.9** |
| | 0.2nm,0.4s,baz=116,slow=7.6,SNR=4.6 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

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*IDC **24** 23:32:45.0±1.3,18°11S×35°60E,h0km,mb3.7/4, mbtmp3.8/11,ML3.5/6,MS3.3/3,Error ellipse: s-maj=36.1km s-min=20.0km az=141.0*
*LSZ **24** 23:32:49.3±0.3,17°37S×36°00E,h10km,MD4.5*
*PRE **24** 23:32:50.3±1.0,17°83S×34°70E,h5km,ML3.4*
**ISC 24 23:32:45.6±0.7,18°07S±0°05×35°52E±0°06,h10km,n36, σ2º77/52,mb3.8/4,Mozambique**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZOMB** | **Zomba** | **2.67** | **357** | *i* PN | **Pn** | **23 33 28.7** | **-0.2** |
| ZOMB | | | | *i* SN | **Sn** | **23 33 56.4** | **-5.0** |
| **ZOMB** | **Zomba** | **2.67** | **357** | *i* PN | **Pn** | **23 33 28.7** | **-0.2** |
| ZOMB | | | | *i* SN | **Sn** | **23 33 56.4** | **-5.0** |
| **KRI** | **Karoi** | **5.76** | **281** | *i* P | **Pn** | **23 34 12.1** | **+0.6** |
| KRI | | | | *i* S | **Sn** | **23 35 15.4** | **-2.3** |
| **KRI** | **Karoi** | **5.76** | **281** | *i* P | **Pn** | **23 34 12.1** | **+0.6** |
| KRI | | | | *i* S | **Sn** | **23 35 15.4** | **-2.3** |
| **MOPA** | **Mopani** | **6.65** | **215** | *e*P | **Pn** | **23 34 27.7** | **+4.2** |
| MOPA | | | | *e*S | **Sn** | **23 35 38.5** | **-0.9** |
| MOPA | | | | IAML | | 23 36 29.2 | |
| | comp=Z,108nm,0.5s | | | | | | |
| **MOPA** | **Mopani** | **6.65** | **215** | *i* P | **Pn** | **23 34 25.2** | **+1.7** |
| MOPA | | | | *i* S | **Sn** | **23 35 34.6** | **-4.8** |
| **MOPA** | **Mopani** | **6.65** | **215** | *i* P | **Pn** | **23 34 25.2** | **+1.7** |
| MOPA | | | | *i* S | **Sn** | **23 35 34.6** | **-4.8** |
| **MUSN** | **Musina, Limpop** | **6.77** | **231** | *i* P | **Pn** | **23 34 26.3** | **+1.1** |
| MUSN | | | | *i* S | **Sn** | **23 35 36.9** | **-5.5** |
| **MUSN** | **Musina, Limpop** | **6.77** | **231** | *i* P | **Pn** | **23 34 26.3** | **+1.1** |
| MUSN | | | | *i* S | **Sn** | **23 35 36.9** | **-5.5** |
| **BLWY** | **Bulawayo** | **6.85** | **251** | *i* P | **Pn** | **23 34 29.7** | **+3.4** |
| **BLWY** | **Bulawayo** | **6.85** | **251** | *i* P | **Pn** | **23 34 29.7** | **+3.4** |
| **MATP** | **Matopo** | **7.03** | **249** | Pn | **Pn** | **23 34 31.4** | **+2.6** |
| | comp=Z,1.3nm,0.3s,baz=75,slow=13,SNR=50 | | | | | | |
| MATP | | | | Sn | **Sn** | **23 35 46.4** | **-2.6** |
| | comp=Z,2.7nm,0.3s,baz=358,slow=16,SNR=5.8 | | | | | | |
| MATP | | | | Lg | Lg | 23 36 23.8 | |
| | comp=Z,8.3nm,0.3s,baz=335,slow=13,SNR=7.0 | | | | | | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **MATP** | **Matopo** | **7.03** | **249** | *i* P | **Pn** | **23 34 31.9** | **+3.1** |
| MATP | | | | *i* S | **Sn** | **23 35 46.2** | **-2.8** |
| **MATP** | **Matopo** | **7.03** | **249** | *i* P | **Pn** | **23 34 31.9** | **+3.1** |
| MATP | | | | *i* S | **Sn** | **23 35 46.2** | **-2.8** |
| **PILG** | **Pilgrimsrest,** | **8.17** | **212** | *e*P | **Pn** | **23 34 47.9** | **+3.4** |
| PILG | | | | *e*S | **Sn** | **23 36 13.8** | **-3.2** |
| PILG | | | | IAML | | 23 36 36.9 | |
| | comp=Z,8.2nm,0.5s | | | | | | |
| **KSMZ** | **Kasama** | **8.88** | **332** | *i* P | **Pn** | **23 34 51.8** | **-2.5** |
| KSMZ | | | | *i* | | 23 34 51.9 | |
| | baz=148,slow=22 | | | | | | |
| KSMZ | | | | *i* S | Sn | 23 36 21.3 | -13 |
| **SOOWA** | **Sowa** | **9.12** | **253** | *i* P | Pn | 23 35 06.0 | +8.4 |
| SOOWA | | | | *i* S | Sn | 23 37 28.1 | +48 |
| SOOWA | | | | IAML | | 23 37 35.5 | |
| | comp=N,524nm,0.6s | | | | | | |
| **LEPH** | **Lephalale, Lim** | **9.23** | **230** | *e*P | **Pn** | **23 34 59.5** | **+0.6** |
| LEPH | | | | *e*S | Sn | 23 36 34.3 | -8.7 |
| LEPH | | | | IAML | | 23 37 44.8 | |
| | comp=Z,66nm,0.5s | | | | | | |
| **PHDHD** | **Phuduhudu** | **10.59** | **257** | *i* P | **Pn** | **23 35 18.4** | **+0.8** |
| PHDHD | | | | *i* S | Sn | 23 37 49.8 | +33 |
| PHDHD | | | | IAML | | 23 38 22.7 | |
| | comp=E,306nm,0.4s | | | | | | |
| **OPO** | **Ambohidratompo** | **11.10** | **94** | Pn | **Pn** | **23 35 23.7** | **-0.9** |
| | baz=276,slow=18,SNR=1.8 | | | | | | |
| OPO | | | | Sn | Sn | 23 37 23.5 | -5.5 |
| | baz=214,slow=18,SNR=1.5 | | | | | | |
| | comp=E,2.0nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **11.53** | **231** | Pn | **Pn** | **23 35 31.7** | **+1.2** |
| | comp=E,0.3nm,0.3s,baz=43,slow=12,SNR=4.3 | | | | | | |
| LBTB | | | | Sn | **Sn** | **23 37 36.0** | **-3.4** |
| | comp=E,0.6nm,0.3s,baz=23,slow=15,SNR=2.5 | | | | | | |
| LBTB | | | | Lg | Lg | 23 38 42.9 | |
| | comp=E,2.1nm,0.3s,baz=314,slow=23,SNR=10.0 | | | | | | |
| | comp=E,1.7nm,0.5s | | | | | | |
| **LBTB** | **Lobatse** | **11.53** | **231** | *i* P | **Pn** | **23 35 31.4** | **+0.9** |
| **LBTB** | **Lobatse** | **11.53** | **231** | *i* P | **Pn** | **23 35 31.4** | **+0.9** |
| **GRTLG** | **Ghanzi** | **13.86** | **254** | *i* P | **Pn** | **23 36 00.3** | **-2.1** |
| GRTLG | | | | *i* S | **S** | **23 39 02.6** | **+3.8** |
| GRTLG | | | | IAML | | 23 40 03.6 | |
| | comp=N,34nm,0.5s | | | | | | |
| **BOSA** | **Boshof** | **14.10** | **220** | Pn | **Pn** | **23 36 06.0** | **+0.4** |
| | comp=N,0.1nm,0.3s,baz=48,slow=14,SNR=4.3 | | | | | | |
| BOSA | | | | Sn | **Sn** | **23 38 36.3** | **-6.0** |
| | comp=N,0.2nm,0.3s,baz=24,slow=20,SNR=2.1 | | | | | | |
| BOSA | | | | Lg | Lg | 23 40 03.5 | |
| | comp=N,0.4nm,0.3s,baz=128,slow=20,SNR=4.2 | | | | | | |
| BOSA | | | | LR | LR | 23 41 24.1 | |
| | comp=N,67nm,19.0s,baz=27,slow=37 | | | | | | |
| | comp=N,1.6nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **14.10** | **220** | *i* P | **Pn** | **23 36 06.0** | **+0.4** |
| BOSA | | | | *i* S | **Sn** | **23 38 41.5** | **-0.7** |
| **BOSA** | **Boshof** | **14.10** | **220** | *i* P | **Pn** | **23 36 06.0** | **+0.4** |
| BOSA | | | | *i* S | **Sn** | **23 38 41.5** | **-0.7** |
| **KMBO** | **Kilima Mbogo** | **16.92** | **6** | Pn | **Pn** | **23 36 44.6** | **+1.7** |
| | comp=N,0.2nm,0.3s,baz=182,slow=15,SNR=2.5 | | | | | | |
| KMBO | | | | Lg | Lg | 23 41 28.4 | |
| | comp=N,0.1nm,0.3s,baz=265,slow=24,SNR=7.8 | | | | | | |
| | comp=N,0.5nm,0.3s | | | | | | |
| **TSUM** | **Tsumeb** | **17.03** | **263** | P | **P** | **23 36 46.3** | **+0.2** |
| | comp=N,1.3nm,0.3s,baz=131,slow=11,SNR=1.5 | | | | | | |
| TSUM | | | | S | **Sn** | **23 39 53.5** | **-0.3** |
| | comp=N,2.1nm,0.5s,baz=111,slow=8.6,SNR=1.7 | | | | | | |
| TSUM | | | | Lg | Lg | 23 41 34.8 | |
| | comp=N,0.5nm,0.3s,baz=120,slow=13,SNR=5.5 | | | | | | |
| **SUR** | **Sutherland** | **19.46** | **220** | P | **P** | **23 37 13.5** | **+0.7** |
| | comp=N,0.2nm,0.3s,baz=76,slow=12,SNR=1.7 | | | | | | |
| SUR | | | | Lg | Lg | 23 42 53.0 | |
| | comp=N,0.2nm,0.3s,baz=323,slow=5.1,SNR=2.8 | | | | | | |
| | comp=N,3.7nm,0.8s | | | | | | |
| **FURI** | **Furi** | **26.97** | **7** | LR | LR | 23 49 26.4 | |
| | comp=N,35nm,19.2s,baz=204,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.56** | **311** | P | **P** | **23 41 06.9** | **+0.9** |
| | comp=N,0.5nm,0.6s,baz=123,slow=7.7,SNR=2.6 | | | | | | |
| | comp=N,0.5nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **68.24** | **328** | P | **P** | **23 43 47.6** | **+1.0** |
| | comp=N,0.4nm,0.8s,baz=137,slow=4.8,SNR=2.6 | | | | | | |
| | comp=N,0.4nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **76.95** | **21** | P | **P** | **23 44 39.1** | **+1.0** |
| | comp=N,0.7nm,0.6s,baz=216,slow=4.6,SNR=3.3 | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **77.08** | **31** | P | **P** | **23 44 40.7** | **+1.7** |
| | comp=N,0.9nm,0.7s,baz=216,slow=6.6,SNR=10 | | | | | | |
| | comp=N,0.9nm,0.7s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **96.68** | **356** | LR | LR | 00 32 22.1 | |
| | comp=N,44nm,20.7s,baz=0.5,slow=37 | | | | | | |

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*IDC **24** 23:37:58.5±5.2,24°12S×67°54W,h134km±42km,mb3.5/2, mbtmp3.8/3,Error ellipse: s-maj=75.8km s-min=41.8km az=6.0*
*GUC **24** 23:38:00.8±0.6,24°10S×68°06W,h138km±6km,ML3.6*
**ISC 24 23:37:58.2±1.0,24°18S±0°05×67°86W±0°07, h157km±10km,n15,σ1º03/23,2C,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **1.26** | **346** | *e*P | **Pn** | **23 38 26.7** | **+0.3** |
| AF01 | | | | *i* S | **Sn** | **23 38 46.8** | **-1.0** |
| AF01 | | | | IAML | | 23 38 48.1 | |
| | comp=N,741nm,0.3s | | | | | | |
| **LVC** | **Limon Verde** | **1.84** | **328** | P | **Pn** | **23 38 33.2** | **+0.8** |
| | comp=N,20nm,0.2s,baz=160,slow=7.5,SNR=134 | | | | | | |
| LVC | | | | S | **Sn** | **23 38 58.7** | **+0.1** |
| | comp=N,99nm,0.4s,baz=225,slow=10.0,SNR=108 | | | | | | |
| **LVC** | **Limon Verde** | **1.84** | **328** | *e*P | **Pn** | **23 38 33.1** | **+0.7** |
| LVC | | | | *e*S | **Sn** | **23 38 58.0** | **-0.6** |
| LVC | | | | IAML | | 23 39 00.2 | |
| | comp=N,925nm,0.4s | | | | | | |
| **GO02** | **Mina Guanaco** | **1.85** | **238** | *i* P | **Pn** | **23 38 33.8** | **+1.3** |
| GO02 | | | | *i* S | **Sn** | **23 38 59.9** | **+1.2** |
| GO02 | | | | IAML | | 23 39 01.2 | |
| | comp=N,943nm,0.2s | | | | | | |
| **SLA** | **San Lorenzo** | **2.21** | **105** | *e*P | **Pn** | **23 38 37.3** | **+0.9** |
| **PB14** | **IPOC Station P** | **2.36** | **259** | *e*P | **Pn** | **23 38 39.1** | **+0.8** |
| PB14 | | | | *i* S | **Sn** | **23 39 08.6** | **-0.7** |
| PB14 | | | | IAML | | 23 39 14.6 | |
| | comp=E,123nm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **2.69** | **331** | *e*P | **Pn** | **23 38 43.4** | **+1.1** |
| **PB04** | **IPOC Station P** | **2.80** | **311** | *e*P | **Pn** | **23 38 44.0** | **+0.4** |
| PB04 | | | | *e*S | **Sn** | **23 39 17.1** | **-1.5** |
| PB04 | | | | IAML | | 23 39 18.9 | |
| | comp=E,212nm,0.4s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.16** | **231** | *e*P | **Pn** | **23 38 48.1** | **+0.2** |
| AC01 | | | | *e*S | **Sn** | **23 39 25.6** | **-0.9** |
| **AC06** | **Mina Casimiro** | **3.88** | **215** | *e*S | **Sn** | **23 39 41.1** | **-1.9** |
| **GO03** | **Copiap** | **4.02** | **212** | *e*P | **Pn** | **23 38 59.1** | **+0.2** |
| GO03 | | | | *i* S | **Sn** | **23 39 45.2** | **-1.1** |
| **LPAZ** | **La Paz** | **7.86** | **358** | P | **Pn** | **23 39 50.6** | **+0.2** |
| | comp=E,0.8nm,0.4s,baz=189,slow=7.0,SNR=7.4 | | | | | | |
| **BDFB** | **Brasilia** | **20.48** | **69** | P | **P** | **23 42 22.5** | **-1.6** |
| | comp=E,1.8nm,0.5s,baz=249,slow=16,SNR=3.1 | | | | | | |
| | comp=E,1.8nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.37** | **69** | P | **P** | **23 49 37.2** | **+1.0** |
| | comp=E,1.4nm,0.6s,baz=239,slow=5.9,SNR=17 | | | | | | |
| | comp=E,1.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **147.16** | **39** | PKPbc | **PKiKP** | **23 57 25.0** | **-0.1** |
| | comp=E,0.6nm,0.9s,baz=300,slow=4.3,SNR=3.1 | | | | | | |

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**IDC 24 23:41:01.6±1.7,17°59S×174°98W,h0km,mb3.6/4, mbtmp3.6/4,Error ellipse: s-maj=53.2km s-min=34.3km az=147.0,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **21.73** | **197** | P | P | 23 45 54.7 | +0.2 |
| | 7.7nm,0.8s,baz=17,slow=2.9,SNR=6.0 | | | | | | |
| | 7.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.90** | **259** | P | P | 23 49 42.5 | +0.4 |
| | 0.8nm,0.7s,baz=97,slow=7.1,SNR=12 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **48.02** | **254** | P | P | 23 49 42.1 | -0.8 |
| | 0.9nm,0.8s,baz=92,slow=7.8,SNR=8.4 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **83.08** | **56** | P | P | 23 53 29.7 | 0.0 |
| | 0.1nm,0.5s,baz=214,slow=3.1,SNR=1.3 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

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*IDC **24** 23:51:24.3±7.7,17°57S×178°02W,h440km±76km,mb3.3/5, mbtmp4.1/5,Error ellipse: s-maj=42.7km s-min=24.3km az=48.0*
**ISC 24 23:51:24.8±1.0,17°6S±0°2×178°0W±0°3,h450km,n13, σ0º53/15,mb4.2/8,5C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **21.03** | **191** | P | **P** | **23 55 35.4** | **0.0** |
| | 7.4nm,0.8s,baz=28,slow=17,SNR=1.9 | | | | | | |
| | 7.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.07** | **259** | P | **P** | **23 58 59.1** | **-0.3** |
| | 0.3nm,0.3s,baz=91,slow=7.7,SNR=11 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 00 31.0** | **-0.1** |
| | 0.3nm,0.4s,baz=89,slow=3.5,SNR=5.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.24** | **254** | P | **P** | **23 59 01.6** | **+0.7** |
| | 3.4nm,0.4s,baz=89,slow=8.2,SNR=82 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 00 31.5** | **-0.3** |
| | 1.0nm,0.5s,baz=104,slow=3.8,SNR=12 | | | | | | |
| | 3.4nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.46** | **180** | P | **P** | **00 02 04.9** | **+0.6** |
| | 2.4nm,0.6s,baz=6.7,slow=10,SNR=18 | | | | | | |
| | 2.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.49** | **13** | P | **P** | **00 03 14.0** | **+0.5** |
| | 0.3nm,0.7s,baz=224,slow=4.8,SNR=2.5 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.63** | **180** | ⇑P | **P** | **00 03 37.3** | **-0.6** |
| | comp=Z,80nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **178** | ⇑P | **P** | **00 03 38.4** | **-0.6** |
| | comp=Z,19nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.03** | **176** | ⇑P | **P** | **00 03 39.0** | **-0.6** |
| | comp=Z,2.5nm,0.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.48** | **177** | ⇑P | **P** | **00 03 41.4** | **-0.3** |
| | comp=Z,2.3nm,0.6s,baz=187,slow=5.0 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.70** | **177** | ⇑P | **P** | **00 03 42.4** | **-0.2** |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **144.83** | **315** | PKP | **PKPab** | **00 10 10.1** | **-0.6** |
| | comp=Z,1.4nm,1.2s,baz=86,slow=2.6,SNR=4.9 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.29** | **304** | PKPbc | **PKPbc** | **00 10 15.0** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=64,slow=6.6,SNR=6.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.40** | **346** | PKPbc | **PKPbc** | **00 10 16.8** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=39,slow=1.2,SNR=1.9 | | | | | | |

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*IDC **24** 23:57:10.2±0.8,24°44N×127°35E,h0km,mb4.1/15, mbtmp4.1/18,ML3.6/3,MS3.8/26,Error ellipse: s-maj=26.7km s-min=14.3km az=77.0*
*JMA **24** 23:57:14.7±0.3,25°N±2°×12°7E±°,h75km,MV4.1/29, NEAR MIYAKOJIMA ISLAND*
*NIED **24** 23:57:14.7,24°.53N×127°.21E,h75km,MW4.4,Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-2.77; $M_{θθ}$1.43; $M_{φφ}$ 1.34; $M_{rθ}$-3.29; $M_{θφ}$2.05; $M_{φr}$-2.29; Fault plane solution: $M_0$5.07000×$10^{15}$ NP1:φ₁54.00000°, δ71.00000°,λ-83.00000°. NP2:φ₂214.00000°,δ20.00000°, λ-109.00000°.*
*NEIC **24** 23:57:15.1±2.0,24°.35N±0°.08×127°.31E±0°.08,h32km±6km, mb4.7/44 Error ellipse: s-maj=13.9km s-min=8.1km az=142.0*
**ISC 24 23:57:13.5±0.9,24°34N±0°05×127°36E±0°04,h26km±5km, n134,σ2º32/143,mb4.5/41,MS3.9/27,2C,Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOGS** | **Gusukube** | **1.83** | **284** | P | **Pn** | **23 57 42.8** | **-0.5** |
| JOGS | | | | S | **Sn** | **23 58 03.1** | **-2.5** |
| **JJT3** | **Tamagusuku3** | **1.84** | **12** | P | **Pn** | **23 57 43.0** | **-0.4** |
| JJT3 | | | | S | **Sn** | **23 58 03.3** | **-2.6** |
| **JMJ2** | **Miyako jima3** | **1.89** | **283** | P | **Pn** | **23 57 43.3** | **-0.9** |
| JMJ2 | | | | S | **Sn** | **23 58 03.8** | **-3.4** |
| **JMJ** | **Miyako jima 2** | **1.94** | **285** | P | **Pn** | **23 57 43.8** | **-1.0** |
| **JIKM** | **Ikemajima** | **2.01** | **287** | P | **Pn** | **23 57 44.9** | **-0.9** |
| JIKM | | | | *e*S | **Sn** | **23 58 07.0** | **-3.1** |
| **JKE** | **Kume jima 2** | **2.04** | **345** | P | **Pn** | **23 57 45.3** | **-1.0** |
| JKE | | | | S | **Sn** | **23 58 07.6** | **-3.4** |
| **JIRB** | **Irabujima** | **2.05** | **284** | P | **Pn** | **23 57 45.3** | **-1.0** |
| JIRB | | | | S | **Sn** | **23 58 07.6** | **-3.5** |
| **JAGN** | **Aguni-jima** | **2.24** | **357** | P | **Pn** | **23 57 48.6** | **-0.4** |
| **JNTH** | **Nagotoyohara** | **2.25** | **15** | P | **Pn** | **23 57 48.1** | **-1.0** |
| JNTH | | | | *e*S | **Sn** | **23 58 12.4** | **-3.6** |
| **JTJ** | **Tarama** | **2.44** | **278** | P | **Pn** | **23 57 50.5** | **-1.2** |
| JTJ | | | | S | **Sn** | **23 58 16.8** | **-4.0** |
| **JOW** | **Kunigami** | **2.62** | **18** | P | **Pn** | **23 57 54.3** | **+0.1** |
| **JOW** | **Kunigami** | **2.62** | **18** | Pn | **Pn** | **23 57 54.2** | **0.0** |
| JOW | | | | Sn | **Sn** | **23 58 22.1** | **-3.1** |
| **JOW** | **Kunigami** | **2.62** | **18** | Pn | **Pn** | **23 57 53.4** | **-0.8** |
| | 21nm,0.3s,baz=132,slow=20,SNR=28 | | | | | | |
| JOW | | | | Sn | **Sn** | **23 58 20.7** | **-4.5** |
| | 141nm,0.3s,baz=119,slow=26,SNR=11 | | | | | | |
| | 45nm,0.3s | | | | | | |
| **JOW** | **Kunigami** | **2.62** | **18** | *e*S | **Sn** | **23 58 22.2** | **-2.9** |
| **JIH** | **Iheya** | **2.74** | **11** | S | **Sn** | **23 58 25.0** | **-3.2** |
| **JISG** | **Ishigakijimahi** | **2.79** | **276** | P | **Pn** | **23 57 55.3** | **-1.2** |
| JISG | | | | *e*S | **Sn** | **23 58 24.7** | **-4.7** |
| **JYRO** | **Yoronjima** | **2.85** | **20** | P | **Pn** | **23 57 57.8** | **+0.4** |
| **JIJ** | **Ishigaki jima** | **2.93** | **271** | P | **Pn** | **23 57 57.4** | **-1.1** |
| **JKR

LYN LR LR
comp=Z,1μm,16.2s
**HNS HongShan 16.93 323** ⇑P **P** **00 01 12.8 +2.4**
HNS pmax pmax
comp=Z,24nm,1.4s
**QIZ Qiongzhong 17.11 255** P **Pn** **00 01 11.1 0.0**
QIZ S **Sn** **00 04 19.5 -1.2**
QIZ LR LR
comp=N,230nm,12.2s
QIZ LR LR
comp=E,320nm,16.1s
QIZ LR LR
comp=Z,320nm,13.8s
**XAN Xi'an 18.75 305** ⇑P **Pn** **00 01 32.3 +1.1**
XAN pP pP 00 01 34.9 -0.8
XAN S **Sn** **00 04 58.8 -1.5**
XAN pmax pmax
comp=Z,11nm,0.9s
XAN pmax pmax
comp=Z,440nm,4.2s
XAN LR LR
comp=N,530nm,14.5s
XAN LR LR
comp=E,550nm,14.5s
XAN LR LR
comp=Z,990nm,13.7s
**GUMO Guam 19.69 120** LR LR 00 07 38.9
comp=Z,59nm,20.4s,baz=300,slow=32
**HHC Hu-ho-hao-te 21.11 325** *e*P **P** **00 01 58.4 +2.0**
HHC pP sP 00 02 06.3 +2.6
HHC pmax pmax
comp=Z,16nm,0.5s
HHC pmax pmax
comp=Z,280nm,4.2s
**BTO Baotou 21.78 322** *e*P **P** **00 02 06.3 +2.8**
BTO pP **sP** **00 02 10.4 -0.5**
BTO PP **PnPn** **00 02 31.9 +7.0**
BTO pmax pmax
comp=Z,16nm,0.5s
BTO pmax pmax
comp=Z,540nm,5.8s
**CD2 Chengdu 21.89 293** P **P** **00 02 04.3 -0.4**
CD2 pmax pmax
comp=Z,10.0nm,0.6s
CD2 LR LR
comp=Z,380nm,13.3s
**PZH PanZhiHua 23.23 281** P **P** **00 02 19.5 +0.5**
PZH S **S** **00 06 23.5 -6.2**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,200nm,5.3s
PZH LR LR
comp=N,210nm,17.2s
PZH LR LR
comp=E,190nm,17.3s
PZH LR LR
comp=Z,200nm,16.3s
**LZH Lanzhou 23.39 305** *e*P **P** **00 02 24.4 +3.9**
LZH pP pwP 00 02 34.8 +0.4
LZH pmax pmax
comp=Z,18nm,1.0s
LZH LR LR
comp=N,540nm,11.0s
LZH LR LR
comp=E,490nm,11.7s
LZH LR LR
comp=Z,550nm,13.6s
**KLR Kul'dur 25.08 7** LR LR 00 11 56.0
comp=Z,55nm,20.2s,baz=178,slow=35
**CMAR Chiang Mai Arr 27.07 263** P **P** **00 02 56.1 +1.9**
comp=Z,0.5nm,0.3s,baz=74,slow=7.0,SNR=4.3
CMAR LR LR 00 15 14.6
comp=Z,113nm,19.2s,baz=85,slow=40
comp=Z,0.5nm,0.3s
**GTA Gaotai 27.66 309** *e*P **P** **00 03 02.3 +2.8**
GTA pP pwP 00 03 12.0 -2.5
GTA sP sP 00 03 15.5 +8.1
GTA pmax pmax
comp=Z,5.0nm,1.5s
GTA LR LR
comp=N,320nm,13.8s
GTA LR LR
comp=E,230nm,14.5s
GTA LR LR
comp=Z,300nm,14.5s
**ULN Ulaanbaatar 28.47 331** P **P** **00 03 07.9 +1.2**
**SONM Songino Array 28.75 330** P **P** **00 03 08.7 -0.3**
**SONM Songino Array 28.75 330** P **P** **00 03 08.0 -1.1**
comp=Z,1.0nm,0.8s,baz=148,slow=8.4,SNR=2.7
SONM LR LR 00 16 24.1
comp=Z,182nm,19.1s,baz=140,slow=40
comp=Z,1.0nm,0.8s
**MTN Manton Dam 37.14 174** P **P** **00 04 21.5 -0.8**
MTN IAmb IAmb 00 04 24.2
comp=Z,18nm,1.5s
**WMQ Urumqi 37.72 311** *e*P **P** **00 04 29.3 +2.2**
WMQ LR LR
comp=N,310nm,14.1s
WMQ LR LR
comp=Z,110nm,16.3s
**PMG Port Moresby 38.71 148** LR LR 00 17 54.7
comp=Z,99nm,21.3s,baz=273,slow=32
**SEY Seymchan 42.05 17** P **P** **00 05 02.8 +0.1**
comp=Z,2.2nm,0.7s,baz=282,slow=2.4,SNR=5.9
comp=Z,2.2nm,0.7s
**MK31 Makanchi Array 42.23 314** P **P** **00 05 04.5 0.0**
**MKAR Makanchi Array 42.23 314** P **P** **00 05 04.2 -0.3**
comp=Z,1.1nm,0.6s,baz=98,slow=9.8,SNR=15
MKAR LR LR 00 24 09.4
comp=Z,90nm,18.6s,baz=126,slow=38
comp=Z,1.1nm,0.6s
**MAKZ Makanchi 42.45 314** P **P** **00 05 06.2 0.0**
**ZAA0 Zalesovo Array 43.29 324** P **P** **00 05 12.8 -0.2**
**ZALV Zalesovo Beam 43.29 324** P **P** **00 05 12.6 -0.4**
**ZALV Zalesovo Beam 43.29 324** P **P** **00 05 12.4 -0.6**
comp=Z,0.7nm,0.3s,baz=111,slow=6.5,SNR=5.6
ZALV LR LR 00 24 58.5
comp=Z,89nm,18.6s,baz=106,slow=39
comp=Z,0.7nm,0.3s
**WB0 Warramunga Arr 44.37 171** P **P** **00 05 22.6 +0.6**
WB0 IAmb IAmb 00 05 23.9
comp=Z,8.9nm,1.1s
**WRAB Tennant Creek 44.53 171** P **P** **00 05 23.3 +0.1**
**WRA Warramunga Arr 44.54 171** P **P** **00 05 23.6 +0.3**
**WRA Warramunga Arr 44.54 171** P **P** **00 05 24.3 +1.0**
comp=Z,5.8nm,0.9s,baz=352,slow=8.5,SNR=28
comp=Z,5.8nm,0.9s
**WB2 Warramunga Arr 44.54 171** P **P** **00 05 23.8 +0.5**
**WR0 Warramunga Arr 44.58 170** P **P** **00 05 24.1 +0.5**
WR0 IAmb IAmb 00 05 25.7
comp=Z,8.6nm,1.1s
**KSH Kashi 45.57 302** P **P** **00 05 34.3 +2.7**
KSH sP pwP 00 05 49.9 +3.7
KSH pmax pmax
comp=Z,6.0nm,1.6s
**KURK Kurchatov 45.67 318** P **P** **00 05 31.7 -0.3**
KURK IAmb IAmb 00 05 34.1
comp=Z,7.4nm,1.1s
**NRN Naryn 45.70 305** P **P** **00 05 33.1 +0.4**
NRN IAmb IAmb 00 05 38.8
comp=Z,8.3nm,1.3s
**KURBB Kurchatov Arra 45.70 318** P **P** **00 05 32.2 -0.1**
comp=Z,3.7nm,0.8s,baz=105,slow=8.0,SNR=14
comp=Z,3.7nm,0.8s
**AAK Ala-Archa 46.93 306** LR LR 00 28 24.7
comp=Z,171nm,18.2s,baz=92,slow=40
**TIXI Tiksi 47.35 1** LR LR 00 26 36.3
comp=Z,168nm,18.1s,baz=198,slow=37
**ARSB Arslanbob 47.95 304** P **P** **00 05 50.8 +0.5**
**AS31 Alice Springs 48.14 172** P **P** **00 05 51.4 -0.2**
**ASAR Alice Springs 48.14 172** P **P** **00 05 52.7 +1.1**
**ASAR Alice Springs 48.14 172** P **P** **00 05 53.1 +1.5**
comp=Z,1.8nm,0.8s,baz=358,slow=8.0,SNR=22
comp=Z,1.8nm,0.8s
**BTK Batken 49.56 303** P **P** **00 06 02.8 +0.3**
**KK31 Karatay Array 49.88 307** P **P** **00 06 05.8 +1.0**
KK31 IAmb IAmb 00 06 07.3
comp=Z,9.4nm,1.5s
**KKAR Karatay Array 49.88 307** P **P** **00 06 05.5 +0.7**
KKAR IAmb IAmb 00 06 07.3
comp=Z,9.3nm,1.5s
**GAR Garm 49.95 301** P **P** **00 06 06.2 +0.7**
**CHGR Chuyangaron 50.85 301** P **P** **00 06 12.4 0.0**
CHGR IAmb IAmb 00 06 52.1
comp=Z,8.0nm,0.9s

**SIMJ Simiganj 50.97 301** P **P** **00 06 13.4 +0.1**
SIMJ IAmb IAmb 00 06 29.6
comp=Z,7.8nm,1.1s
**BVAR Borovoye Array 51.17 319** P **P** **00 06 14.4 0.0**
comp=Z,1.2nm,0.8s,baz=104,slow=6.3,SNR=13
comp=Z,2.1nm,0.8s
**KBL Kabul 51.19 296** P **P** **00 06 15.3 +0.2**
**BRVK Borovoye 51.24 319** P **P** **00 06 14.9 0.0**
BRVK IAmb IAmb 00 06 20.4
comp=Z,9.1nm,1.0s
**HRA Herat 56.78 296** P **P** **00 06 56.0 +0.1**
HRA IAmb IAmb 00 06 58.3
comp=Z,6.4nm,1.2s
**ABKAR Akbulak array 57.38 314** P **P** **00 06 60.0 +0.4**
ABKAR IAmb IAmb 00 07 01.6
comp=Z,7.9nm,1.1s
**STKA Stephens Creek 57.53 166** P **P** **00 07 02.1 +1.4**
comp=Z,1.5nm,0.7s,baz=282,slow=6.8,SNR=4.0
comp=Z,1.5nm,0.7s
**ARU Arti 58.40 323** P **P** **00 07 06.3 -0.3**
ARU IAmb IAmb 00 07 08.1
comp=Z,11nm,1.2s
**ARU Arti 58.40 323** LR LR 00 34 15.9
comp=Z,76nm,21.4s,baz=322,slow=38
**AKTO Aktyubinsk 58.61 315** LR LR 00 34 42.8
comp=Z,47nm,18.6s,baz=234,slow=38
**D19K Kuna River 61.92 24** P **P** **00 07 30.4 -0.2**
**F19K Shaleruckik Mo 61.93 26** P **P** **00 07 29.3 -1.3**
F19K IAmb IAmb 00 07 45.6
comp=Z,6.7nm,1.0s
**G19K Purcell Mounta 62.16 26** P **P** **00 07 32.2 -0.1**
G19K IAmb IAmb 00 07 33.4
comp=Z,5.6nm,0.8s
**E19K Redstone River 62.18 25** **P** **00 07 33.7 +1.3**
**KIRV Kirov 63.33 325** LR LR 00 37 45.4
comp=Z,96nm,19.0s,baz=66,slow=38
**TOLK Toolik Lake Re 65.06 24** **P** **00 07 53.3 +1.9**
**E23K Chandalar 65.08 24** **P** **00 07 52.1 +0.5**
E23K IAmb IAmb 00 08 12.0
comp=Z,8.1nm,0.8s
**BWN Browne 65.42 29** P **P** **00 07 53.0 -0.8**
**F24K Squaw Lake 65.77 25** **P** **00 07 53.7 -2.4**
F24K IAmb IAmb 00 08 12.3
comp=Z,7.2nm,0.8s
**F25K Christian Rive 66.62 25** P **P** **00 07 59.3 -2.2**
**KBZ Khabaz 69.75 310** P **P** **00 08 22.0 +0.5**
comp=Z,3.6nm,1.0s,baz=102,slow=8.6,SNR=5.9
comp=Z,3.6nm,1.0s
**KIV Kislovodsk 69.84 310** P **P** **00 08 22.7 +0.5**
**G30M tAoh Zraii Nji 70.32 25** **P** **00 08 25.9 +1.2**
G30M IAmb IAmb 00 08 51.2
comp=Z,11nm,1.1s
**KARS Kars 70.43 307** P **P** **00 08 25.0 -0.9**
**ARCES ARCESS Array B 71.47 339** LR LR 00 46 47.5
comp=Z,52nm,18.1s,baz=58,slow=42
**FINES FINESS Array B 74.12 331** P **P** **00 08 48.3 +1.0**
comp=Z,1.6nm,0.7s,baz=64,slow=4.4,SNR=8.5
FINES LR LR 00 45 43.3
comp=Z,80nm,18.0s,baz=42,slow=39
comp=Z,1.6nm,0.7s
**RAO Raoul Island 74.86 132** LR LR 00 37 47.6
comp=Z,386nm,20.6s,baz=293,slow=32
**BR131 Keskin Array S 77.57 308** P **P** **00 09 07.7 +0.1**
BR131 IAmb IAmb 00 09 09.5
comp=Z,7.0nm,1.2s
**BRTR Keskin Array B 77.57 308** P **P** **00 09 07.8 +0.1**
**BRTR Keskin Array B 77.57 308** P **P** **00 09 08.2 +0.5**
comp=Z,1.6nm,0.9s,baz=103,slow=5.6,SNR=9.5
comp=Z,1.6nm,0.9s
**HFS Hagfors 80.12 332** LR LR 00 49 34.6
comp=Z,111nm,18.9s,baz=36,slow=39
**NB2 NORSAR Subarra 80.65 334** P **P** **00 09 24.2 +0.2**
comp=Z,0.8nm,0.8s,baz=59,slow=5.6
**NOA NORSAR Array B 80.65 334** P **P** **00 09 23.3 -0.7**
comp=Z,1.3nm,0.8s,baz=56,slow=5.2,SNR=4.2
NOA LR LR 00 49 23.9
comp=Z,58nm,18.7s,baz=50,slow=39
comp=Z,1.3nm,0.8s
**RAR Rarotonga 84.07 116** LR LR 00 41 06.0
comp=Z,48nm,18.9s,baz=118,slow=31
**VRAC Vranov 84.36 322** LR LR 00 51 22.2
comp=Z,43nm,19.0s,baz=65,slow=39
**BRG Berggiesshubel 84.99 324** *e*P **P** **00 09 48.8 +2.2**
BRG Amp 00 09 49.2
comp=Z,2.9nm,1.0s
**CLL Collm 85.24 325** *i* P **P** **00 09 48.9 +1.0**
comp=Z,14nm,1.7s
CLL *i* sP **pwP** **00 10 01.9 -1.4**
**GERES GERESS Array B 86.22 323** P **P** **00 09 52.3 -0.7**
comp=Z,0.9nm,0.6s,baz=15,slow=5.8,SNR=4.2
GERES LR LR 00 53 03.3
comp=Z,59nm,18.3s,baz=68,slow=39
comp=Z,0.9nm,0.6s
**DAVOX Davos/Dischmat 89.52 322** LR LR 00 55 10.9
comp=Z,79nm,18.0s,baz=83,slow=39
**VAE Valguarnera 91.98 313** LR LR 00 57 26.9
comp=Z,42nm,18.2s,baz=128,slow=39
**PFO Pinyon Flats O 96.32 49** LR LR 00 52 42.5
comp=Z,19nm,19.1s,baz=241,slow=35

*MOS **25** 00:04:02.7±1.0,53°.51N×163°.77W,h9km,mb4.6/17, Error ellipse: s-maj=13.2km s-min=6.9km az=89.9*
*IDC **25** 00:04:03.6±0.9,53°.62N×163°.79W,h0km,mb4.1/25, mbtmp4.1/28,ML3.5/3,MS3.4/29, Error ellipse: s-maj=25.3km s-min=12.5km az=174.0*
*NEIC **25** 00:04:04.5±2.8,53°.40N±0°.05×163°.68W±0°.07,h10km±1km, mb3.9/52,ML4.0/8,ML3.9(AEIC), Error ellipse: s-maj=9.3km s-min=6.2km az=157.0*
*AEIC **25** 00:04:09.9±3.2,53°.48N±0°.04×163°.79W±0°.06,h5km±5km, Error ellipse: s-maj=6.6km s-min=5.2km az=163.0*
**ISC 25 00:04:06.9±1.0,53°.45N±0°.06×163°.69W±0°.04,h29km±6km, n312,σ1§26/298,mb4.4/50,MS3.3/28,14C,Unimak Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WESE** | **West Dahl East** | **1.16** | **333** | | **Pn** | **00 04 26.6** | **-0.7** |
| **WECS** | **Westdahl Cape** | **1.27** | **330** | | **Pn** | **00 04 28.7** | **0.0** |
| **SSLS** | **Shishaldin Sou** | **1.28** | **352** | | **Pn** | **00 04 29.0** | **0.0** |
| SSLS | | | | | **Sn** | **00 04 45.1** | **-0.2** |
| **ISLZ** | **Isanotski Laza** | **1.28** | **359** | | **Pn** | **00 04 28.8** | **-0.2** |
| ISLZ | | | | | **Sb** | **00 04 46.1** | **-0.4** |
| **WEBT** | **Westdahl Beart** | **1.31** | **332** | | **Pn** | **00 04 29.6** | **+0.3** |
| **ISNN** | **Isanotski Nort** | **1.39** | **358** | | **Pb** | **00 04 31.2** | **-1.0** |
| ISNN | | | | | **Sn** | **00 04 48.1** | **+0.2** |
| **FALS** | **False Pass** | **1.42** | **6** | Pn | **Pn** | **00 04 31.0** | **+0.2** |
| FALS | | | | Sn | **Sb** | **00 04 50.6** | **+0.2** |
| **AKMO** | **Akutan Morgan** | **1.52** | **296** | | **Pn** | **00 04 32.1** | **-0.1** |
| **AKLV** | **Akutan Long Va** | **1.52** | **299** | | **Pn** | **00 04 32.0** | **-0.2** |
| **AKGG** | **Akutan Green G** | **1.56** | **300** | | **Pn** | **00 04 32.8** | **+0.1** |
| **AKRB** | **Akutan Reef Bi** | **1.57** | **297** | | **Pn** | **00 04 32.9** | **+0.1** |
| **UNV** | **Unalaska Valle** | **1.72** | **285** | Pn | **Pn** | **00 04 34.4** | **-0.6** |
| UNV | | | | Sn | **Sn** | **00 04 56.3** | **+0.3** |
| **MSW** | **Makushin Switc** | **1.90** | **286** | | **Sn** | **00 04 57.6** | **-2.7** |
| **HAG** | **Hague Volcano** | **2.15** | **28** | | **Pn** | **00 04 41.8** | **+1.0** |
| **HAG** | **Hague Volcano** | **2.15** | **28** | P | **Pn** | **00 04 41.8** | **+1.0** |
| **PN7A** | **Pavlof North-7** | **2.22** | **26** | | **Pn** | **00 04 43.0** | **+1.1** |
| **PVV** | **Pavlof Volcano** | **2.23** | **29** | | **Pn** | **00 04 42.9** | **+1.0** |
| PVV | | | | | **Sn** | **00 05 09.1** | **+0.6** |
| **S12K** | **Black Hills** | **2.45** | **22** | Pn | **Pn** | **00 04 46.9** | **+1.9** |
| S12K | | | | | **Sn** | **00 05 15.1** | **+1.1** |
| S12K | | | | IAML | | 00 05 33.1 | |
| | comp=N,661nm,0.5s | | | | | | |
| **OKFG** | **Magazine Ridge** | **2.53** | **271** | | **Pn** | **00 04 46.1** | **+0.2** |
| **SDPT** | **Sand Point** | **2.68** | **43** | Pn | **Pn** | **00 04 49.2** | **+1.2** |
| **SDPT** | **Sand Point** | **2.68** | **43** | | **Sn** | **00 05 19.2** | **-0.2** |
| **SDPT** | **Sand Point** | **2.68** | **43** | IAML | | 00 05 46.3 | |
| | comp=N,639nm,1.0s | | | | | | |
| **OKCE** | **Okmok Cone E** | **2.68** | **271** | | **Pn** | **00 04 48.0** | **-0.1** |
| **CNBA** | **Chernabura Isl** | **2.78** | **59** | Pn | **Pn** | **00 04 49.4** | **0.0** |
| CNBA | | | | Sn | **Sn** | **00 05 20.7** | **-1.2** |
| **NIKH** | **Nikolski High** | **3.14** | **263** | Pn | **Pn** | **00 04 54.3** | **-0.1** |
| **CLCO** | **Concord Point,** | **3.70** | **262** | | **Pn** | **00 05 02.3** | **+0.3** |
| **CLES** | **Cleveland East** | **3.79** | **263** | | **Pn** | **00 05 03.9** | **+0.6** |
| **CHGN** | **Chignik** | **4.18** | **45** | | **Sn** | **00 05 56.6** | **+0.2** |
| **ANPB** | **Aniakchak Plen** | **4.58** | **41** | | **Pn** | **00 05 15.1** | **+0.9** |
| **ANNW** | **Aniakchak Nort** | **4.72** | **39** | | **Pn** | **00 05 17.4** | **+1.2** |
| **CHIR** | **Chirikof Islan** | **5.25** | **60** | Pn | **Pn** | **00 05 23.5** | **+0.1** |
| CHIR | | | | IAML | | 00 06 23.7 | |
| | comp=N,83nm,0.9s | | | | | | |
| CHIR | | | | IAML | | 00 07 09.5 | |
| | comp=E,74nm,1.3s | | | | | | |
| **SPIA** | **Saint Paul Isl** | **5.29** | **318** | Pn | **Pn** | **00 05 24.9** | **+1.0** |

**R16K Pilot Point 5.40 38** Pn **Pn** **00 05 27.6 +2.2**
**PLBL Peulik Blue Cr 5.78 40** **Pn** **00 05 31.5 +1.0**
**PLK4 Peulik 4 5.91 42** Pn **Pn** **00 05 34.3 +1.8**
**PLK1 Peulik 1 5.93 40** **Pn** **00 05 33.4 +0.8**
**PLK5 Peulik 5 5.97 37** **Pn** **00 05 34.6 +1.5**
**O14K Tigyukauivet M 5.98 12** Pn **Pn** **00 05 35.5 +2.2**
**PLK3 Peulik 3 5.98 42** **Pn** **00 05 34.8 +1.3**
**PLK2 Peulik 2 6.01 41** **Pn** **00 05 35.5 +1.7**
**O15K Ungalikthiuk R 6.13 19** **Pn** **00 05 36.1 +0.6**
**SII Sitkinak Islan 6.29 56** Pn **Pn** **00 05 38.6 +0.8**
**KOFP Korovin Flat P 6.41 264** **Pn** **00 05 39.4 0.0**
**KJL Kejulik 6.50 42** **Pn** **00 05 41.8 +1.2**
**CNTC Contact Creek 6.53 39** **Pn** **00 05 42.0 +1.0**
**N14K Kuskokwak Cree 6.59 9** **Pn** **00 05 42.5 +0.8**
**ANCK Angle Creek 6.63 41** **Pn** **00 05 43.2 +0.8**
**KABU Katmai Buttres 6.76 41** **Pn** **00 05 45.2 +1.0**
**O16K Kokwok River B 6.90 24** **Pn** **00 05 47.1 +1.2**
**M13K Dall Lake 6.99 1** Pn **Pn** **00 05 46.6 -0.6**
**N15K Kwethluk River 7.02 15** Pn **Pn** **00 05 49.2 +1.5**
**OHAK Old Harbor 7.04 53** Pn **Pn** **00 05 47.7 -0.1**
**KAHC Katmai Hardscr 7.13 39** **Pn** **00 05 50.3 +1.1**
**O17K Koliganek Bris 7.31 27** **Pn** **00 05 52.4 +0.8**
**M14K Bethel 7.39 7** Pn **Pn** **00 05 54.8 +2.2**
**M15K Kasigluk River 7.45 11** **Pn** **00 05 54.4 +0.9**
**N16K Nishlik Lake 7.54 19** **Pn** **00 05 56.1 +1.3**
**P18K Big Mountain, 7.58 35** Pn **Pn** **00 05 56.5 +1.1**
**GSMY Great Sitkin M 7.64 264** **Pn** **00 05 56.2 +0.1**
**KDAK Kodiak Island 7.64 51** Pn **Pn** **00 05 55.9 -0.2**
**KDAK Kodiak Island 7.64 51** Pn **Pn** **00 05 54.7 -1.4**
comp=E,1.2nm,0.3s,baz=293,slow=7.7,SNR=34
KDAK Sn **Sn** **00 07 16.0 -5.6**
comp=E,1.1nm,0.3s,baz=162,slow=22,SNR=8.1
comp=E,5.2nm,0.5s
**KDAK Kodiak Island 7.64 51** *i* P **Pn** **00 05 56.1 0.0**
**GSCK Great Sitkin C 7.71 264** **Pn** **00 05 57.1 -0.1**
**Q19K Cape Douglas, 7.84 42** Pn **Pn** **00 05 59.8 +0.9**
**N17K Nushagak Hills 7.94 24** Pn **Pn** **00 06 02.1 +1.9**
**L14K Kuka Creek 7.94 4** Pn **Pn** **00 06 00.4 +0.2**
**O18K Koktuh Hills 7.94 33** Pn **Pn** **00 06 02.4 +2.2**
**ADAG Mount Adagdak 7.98 265** **Pn** **00 06 00.8 0.0**
**M16K Timber Creek 8.02 17** Pn **Pn** **00 06 02.9 +1.6**
**SYI Shuyak Island 8.17 46** Pn **Pn** **00 06 04.8 +1.4**
**L15K Ungalak Mounta 8.34 7** **Pn** **00 06 06.6 +0.9**
**KIWB Kanaga Island 8.34 264** **Pn** **00 06 06.2 +0.2**
**N18K Kilae Creek 8.40 27** Pn **Pn** **00 06 08.8 +2.2**
**KIMD Kanaga Island 8.42 264** **Pn** **00 06 07.1 +0.3**
**P19K Oil Pt 8.48 39** Pn **Pn** **00 06 10.3 +2.6**
**K13K Kusilvak Mount 8.53 357** **Pn** **00 06 09.7 +1.5**
**L16K Owhat River 8.59 14** Pn **Pn** **00 06 10.9 +1.7**
**M17K Holitna River 8.66 20** Pn **Pn** **00 06 11.0 +1.0**
**TASE Tanaga Southea 8.88 265** **Pn** **00 06 13.2 +0.1**
**N19K Bonanza Creek 8.91 30** Pn **Pn** **00 06 16.7 +3.0**
**K15K Wolf Creek Mou 8.95 6** Pn **Pn** **00 06 15.6 +1.5**
**M18K Stony River 9.11 25** **Pn** **00 06 16.6 +0.4**
**L17K Donlin 9.17 16** **Pn** **00 06 17.9 +0.8**
**CNPM China Poot 9.19 43** Pn **Pn** **00 06 18.4 +1.0**
**GANE Gareloi Northe 9.32 266** **Pn** **00 06 18.8 -0.4**
**J14K Nanvaranak Lak 9.33 0** Pn **Pn** **00 06 21.4 +2.2**
**L18K Granite Mounta 9.55 20** Pn **Pn** **00 06 25.0 +2.7**
**K17K Iditarod 9.72 15** Pn **Pn** **00 06 27.5 +2.9**
**M19K Big River Lodg 9.82 27** Pn **Pn** **00 06 28.6 +2.5**
**L19K White Mountain 9.94 25** **Pn** **00 06 29.2 +2.0**
**J16K Anvik River 10.00 8** Pn **Pn** **00 06 30.9 +2.5**
**J17K VABM Dome 10.27 12** Pn **Pn** **00 06 34.7 +2.6**
**I17K Unalakleet 10.59 7** Pn **Pn** **00 06 40.0 +3.6**
**SUA Susitna One 10.62 36** Pn **Pn** **00 06 37.1 +0.1**
**J18K Innoko River 10.68 17** Pn **Pn** **00 06 40.0 +2.2**
**SKT Skwentna 10.73 32** Pn **Pn** **00 06 40.1 +1.7**
**K20K Telida 11.13 23** Pn **Pn** **00 06 44.7 +0.8**
**PWL Port Wells 11.14 42** **Pn** **00 06 43.6 -0.5**
**GAMB Gambell 11.16 341** Pn **Pn** **00 06 44.7 +0.4**
**J19K Poorman 11.37 18** **Pn** **00 06 50.2 +3.1**
**GHO Glory Hole Cre 11.48 38** Pn **Pn** **00 06 48.8 +0.1**
**GLI Glacier Island 11.66 44** Pn **Pn** **00 06 50.0 -1.1**
**HIN Hinchinbrook I 11.66 47** Pn **Pn** **00 06 50.5 -0.7**
**H17K Granite Mounta 11.69 8** Pn **Pn** **00 06 54.7 +3.2**
**SML Sawmill 11.72 38** Pn **Pn** **00 06 52.4 +0.4**
**J20K Nowinta River 11.82 21** Pn **Pn** **00 06 54.9 +1.5**
**G16K Koyuk River 12.01 3** Pn **Pn** **00 06 57.5 +1.6**
**H18K Honhosa River 12.05 11** Pn **Pn** **00 06 59.0 +2.6**
**SCM Sheep Creek Mo 12.11 40** **Pn** **00 06 57.0 -0.4**
**SCM Sheep Creek Mo 12.11 40** P **Pn** **00 06 57.0 -0.4**
**F15K North Star Dit 12.31 358** Pn **Pn** **00 07 03.6 +3.6**
**KAIM Kayak Island 12.39 51** Pn **Pn** **00 07 01.7 +0.5**
**RAGM Ragged Mountai 12.47 49** Pn **Pn** **00 07 01.9 -0.3**
**KLU Klutina 12.47 43** Pn **Pn** **00 07 01.7 -0.6**
**BPAW Bear Paw Mtn. 12.52 26** **Pn** **00 07 03.2 +0.4**
**RND Reindeer 12.62 32** Pn **Pn** **00 07 04.9 +0.6**
**RND Reindeer 12.62 32** P **Pn** **00 07 04.9 +0.6**
**HMT Hamilton 12.63 49** Pn **Pn** **00 07 03.4 -1.1**
**H19K Roundabout Mou 12.65 14** Pn **Pn** **00 07 07.5 +2.9**
**M24K Tolsona, Glenn 12.71 40** Pn **Pn** **00 07 05.2 -0.3**
**G18K Tagagawik 12.74 9** Pn **Pn** **00 07 07.4 +1.5**
**SUCK Suckling Hills 12.75 51** Pn **Pn** **00 07 06.3 +0.3**
**DHY Denali Highway 12.87 35** **Pn** **00 07 05.9 -1.9**
**N25K Chitina, Valde 13.07 44** **Pn** **00 07 10.2 -0.3**
**F17K Baldwin Pennin 13.10 4** Pn **Pn** **00 07 12.1 +1.4**
**G19K Purcell Mounta 13.15 12** **Pn** **00 07 14.3 +2.8**
**SNH Sunshine Point 13.22 51** Pn **Pn** **00 07 11.8 -0.7**
**GLB Gilahina Butte 13.32 45** Pn **Pn** **00 07 14.0 +0.2**
**MLY Manley 13.34 24** Pn **Pn** **00 07 14.9 +0.9**
**SHEM Shemya Is, Ala 13.36 276** LR LR 00 11 56.6
comp=E,169nm,21.7s,baz=108,slow=36
**VRDI Verde Repeater 13.38 46** Pn **Pn** **00 07 14.6 -0.1**
**H21K Melozitna Rive 13.40 20** Pn **Pn** **00 07 17.5 +2.6**
**F19K Shaleruckik Mo 13.74 10** **Pn** **00 07 21.7 +2.2**
**I23K Minto, Yukon-K 13.78 26** Pn **Pn** **00 07 19.4 -0.6**
**CCB Clear Creek Bu 13.83 30** **Pn** **00 07 19.5 -1.3**
**HDA Harding Lake 13.92 31** Pn **Pn** **00 07 21.5 -0.5**
**GRNC Granite Creek 13.93 50** Pn **Pn** **00 07 21.7 -0.6**
**MDM Murphy Dome 13.94 28** Pn **Pn** **00 07 21.4 -0.9**
**COLA College 13.99 29** *i* P **Pn** **00 07 23.6 +0.8**
**G21K Alakaket 14.04 17** P **Pn** **00 07 31.3 +0.2**
**E18K Tukpahearik C 14.10 5** P **P** **00 07 29.8 -1.9**
**TABL Table Mountain 14.11 51** Pn **Pn** **00 07 25.6 +0.9**
**M26K Nabesna, AK 14.12 42** Pn **Pn** **00 07 24.4 -0.4**
**RIDG Independent Ri 14.18 36** **Pn** **00 07 24.9 -0.7**
**IL31 14.20 30** **Pn** **00 07 25.2 -0.5**
**ILAR Eielson Array 14.20 30** Pn **Pn** **00 07 25.5 -0.2**
**ILAR Eielson Array 14.20 30** Pn **Pn** **00 07 23.1 -2.6**
comp=E,0.1nm,0.3s,baz=227,slow=12,SNR=5.8
comp=E,0.4nm,0.6s
**ILAR Eielson Array 14.20 30** P **Pn** **00 07 25.5 -0.2**
**H23K Yukon River 14.28 24** **Pn** **00 07 26.4 -0.5**
**POKR Poker Plat Res 14.29 29** Pn **Pn** **00 07 27.1 +0.1**
**LOGN Logan Glacier 14.30 50** Pn **Pn** **00 07 27.8 +0.4**
**L26K Log Cabin Wild 14.31 40** **Pn** **00 07 27.6 +0.2**
**PCA Pinnacle 14.41 53** P **P** **00 07 33.1 -2.3**
**M27K Edge Creek, AK 14.56 44** **Pn** **00 07 31.6 +0.7**
**J25K Salcha River, 14.56 33** **Pn** **00 07 30.7 -0.1**
**SCRK Sand Creek 14.62 36** **P** **00 07 36.7 -1.0**
**BCPM Bancas Point 14.67 54** **Pn** **00 07 32.7 +0.4**
**F21K Alatna River 14.68 16** **P** **00 07 35.9 -2.4**
**H24K Noodor Dome 14.71 26** Pn **Pn** **00 07 31.7 -1.0**
**G23K Bananza Creek 14.89 21** Pn **Pn** **00 07 35.5 +0.3**
**C16K Lisburne Hills 14.90 358** Pn **Pn** **00 07 35.0 -0.2**
**L27K Beaver Creek, 14.92 41** **Pn** **00 07 35.7 +0.1**
**BCAR Beaver Creek A 14.94 41** Pn **Pn** **00 07 35.7 -0.2**
**J26L Joseph Creek 15.09 35** P **P** **00 07 41.5 -1.4**
**O29M Mount Kennedy 15.28 53** **Pn** **00 07 39.6 -0.8**
O29M IAmb IAmb 00 07 42.8
comp=Z,9.1nm,1.1s
**C18K Utukok River 15.30 3** P **P** **00 07 45.8 +0.7**
**D19K Kuna River 15.33 8** **P** **00 07 44.2 -1.3**
**K27K Chicken 15.34 38** P **P** **00 07 44.8 -0.8**
**G24K Hadweenzic Riv 15.48 25** **Pn** **00 07 40.2 -2.7**
G24K IAmb IAmb 00 07 57.9
comp=Z,5.4nm,0.9s
**P29M Windy Craggy 15.53 56** Pn **Pn** **00 07 44.2 +0.6**
P29M IAmb IAmb 00 07 57.0
comp=Z,6.8nm,0.7s
**I26K Coal Creek Min 15.73 33** P **Pn** **00 07 44.9 -1.2**
I26K IAmb IAmb 00 07 58.7
comp=Z,4.8nm,0.6s
**E22K Anaktuvuk Pass 15.78 16** P **Pn** **00 07 46.4 -0.5**
**C19K Lookout Ridge 15.83 5** Pn **Pn** **00 07 47.5 +0.1**
C19K IAmb IAmb 00 07 55.3
comp=Z,6.2nm,0.8s
**M29M Somme Creek 16.04 46** **Pn** **00 07 49.7 -0.5**
**F24K Squaw Lake 16.04 22** Pn **Pn** **00 07 49.2 -0.9**

F24K IAmb IAmb 00 07 59.8
comp=Z,4.9nm,1.0s
**S31K Pelican 16.06 63** Pn **Pn 00 07 48.9 -1.5**
**EGAK Eagle 16.09 36** Pn **Pn 00 07 51.3 +0.6**
**E23K Chandalar 16.12 19** Pn **Pn 00 07 50.2 -1.0**
E23K IAmb IAmb 00 07 57.0
comp=Z,6.5nm,0.7s
**N30M Aishikik Lake 16.31 50** Pn **Pn 00 07 54.3 +0.7**
N30M IAmb IAmb 00 08 10.2
comp=Z,9.3nm,0.8s
**D22K Ayikyak River 16.32 14** Pn **Pn 00 07 53.8 0.0**
D22K IAmb IAmb 00 08 00.3
comp=Z,10nm,0.8s
**DAWY Dawson 16.37 40** P **P 00 07 56.2 -0.8**
DAWY IAmb IAmb 00 08 13.5
comp=Z,6.7nm,0.6s
**O30N Mendenhall 16.59 53** P **P 00 08 00.1 +0.7**
**F25K Christian Rive 16.63 25** P **Pn 00 07 58.2 +0.6**
F25K IAmb IAmb 00 08 10.3
comp=Z,4.7nm,0.9s
**TOLK Toolik Lake Re 16.63 18** **Pn 00 07 58.6 +1.0**
TOLK IAmb IAmb 00 08 07.2
comp=Z,9.0nm,0.8s
**D23K Nanushuk River 16.72 16** **Pn 00 07 57.8 -0.9**
**BMAR Burnt Mountain 16.78 26** **Pn 00 07 58.9 -0.6**
**I28M Miner Creek 16.90 35** P **Pn 00 08 01.9 +0.9**
**K29M Barlow Dome 17.00 42** **P 00 08 04.3 +0.2**
K29M IAmb IAmb 00 08 10.1
comp=Z,8.1nm,0.8s
**J29N Klondike Camp 17.01 40** Pn **Pn 00 08 01.9 -0.5**
**F26K Sheenjek River 17.09 26** P **P 00 08 04.5 -0.4**
F26K IAmb IAmb 00 08 21.2
comp=Z,8.9nm,0.9s
**WHY Whitehorse 17.14 54** P **P 00 08 05.5 -0.2**
WHY IAmb IAmb 00 08 11.4
comp=Z,9.0nm,1.1s
**G27K Doyon Strip 17.17 30** Pn **Pn 00 08 04.4 0.0**
**D24K Happy Valley 17.21 18** **Pn 00 08 04.4 -0.5**
D24K IAmb IAmb 00 08 08.7
comp=Z,10.0nm,0.8s
**I29M Ogilvie Camp, 17.43 37** Pn **Pn 00 08 06.7 -0.9**
**C24K Franklin Bluff 17.72 17** Pn **Pn 00 08 08.1 -3.1**
**M31M Drury Creek, Y 17.75 49** P **Pn 00 08 11.2 -0.4**
M31M IAmb IAmb 00 08 29.4
comp=Z,7.1nm,0.7s
**J30M Hart River 17.79 40** **Pn 00 08 12.2 0.0**
**D25K Kavik River 17.83 20** P **Pn 00 08 11.8 -0.8**
D25K IAmb IAmb 00 08 15.0
comp=Z,9.8nm,1.1s
**H29M Whitestone 17.86 34** **Pn 00 08 12.8 -0.1**
H29M IAmb IAmb 00 08 30.9
comp=Z,9.1nm,1.1s
**I30M Mount Dempster 18.06 39** **Pn 00 08 15.4 -0.1**
I30M IAmb IAmb 00 08 32.1
comp=Z,8.2nm,0.8s
**P33M Teslin, Yukon 18.07 56** **Pn 00 08 14.8 -0.8**
**E27K Coleen River 18.11 27** P **Pn 00 08 13.3 -2.7**
**F28M Old Crow 18.22 30** **Pn 00 08 16.5 -0.9**
**FARO Faro, Yukon 18.23 49** P **P 00 08 17.9 +0.4**
**G29M Pine Creek 18.37 33** P **P 00 08 18.8 -0.2**
G29M IAmb IAmb 00 08 23.7
comp=Z,7.0nm,0.8s
**G29M Pine Creek 18.37 33** P **P 00 08 18.8 -0.2**
**EPYK Eagle Plains 18.51 35** P **P 00 08 19.9 -0.7**
EPYK IAmb IAmb 00 08 39.4
comp=Z,11nm,0.9s
**C27K Jago River 18.65 22** P **P 00 08 19.5 -2.5**
C27K IAmb IAmb 00 08 30.5
comp=Z,4.7nm,0.7s
**R33M Jennings River 18.91 59** **Pn 00 08 27.8 +1.9**
**E28M Babbage River 18.96 28** **P 00 08 25.1 -0.4**
E28M IAmb IAmb 00 08 30.8
comp=Z,6.1nm,0.8s
**G30M tAoh Zraii Nji 19.00 34** **P 00 08 24.6 -1.4**
G30M IAmb IAmb 00 08 41.6
comp=Z,7.0nm,0.8s
**DLBC Dease Lake 19.36 62** P **P 00 08 28.5 -1.5**
comp=Z,0.1nm,0.3s,baz=101,slow=24,SNR=1.4
comp=Z,1.3nm,1.1s
**G31M Satah River 19.63 35** P **P 00 08 31.1 -1.6**
G31M IAmb IAmb 00 08 47.7
comp=Z,7.1nm,0.9s
**F31M Tsiigehtchic 20.07 34** P **P 00 08 36.1 -1.4**
F31M IAmb IAmb 00 08 41.8
comp=Z,5.8nm,1.1s
**BILL Bilibino 20.40 327** *eP* **P 00 08 41.4 +0.3**
BILL *e* 00 08 58.0
BILL *e* 00 12 51.1
BILL pmax pmax
comp=Z,8.0nm,0.9s
**INK Inuvik 20.58 32** P **P 00 08 41.9 -1.1**
INK IAmb IAmb 00 08 53.9
comp=Z,6.9nm,0.8s
**INK Inuvik 20.58 32** P **P 00 08 42.0 -1.1**
comp=Z,2.0nm,0.3s,baz=355,slow=12,SNR=4.3
comp=Z,2.0nm,0.3s
**INK Inuvik 20.58 32** P **P 00 08 42.0 -1.1**
**BBB Bella Bella 21.41 79** LR LR 00 15 16.8
comp=Z,73nm,21.6s,baz=354,slow=31
**PET Petropavlovsk 22.38 284** *ceP* **P 00 09 03.0 +0.5**
PET pmax pmax
comp=Z,8.0nm,1.0s
**PEA0B Petropavlovsk- 22.91 285** P **P 00 09 06.7 -1.4**
**PEA0B Petropavlovsk- 22.91 285** *ceP* **P 00 09 06.9 -1.2**
**PETK Petropavlovsk- 22.91 285** P **P 00 09 06.7 -1.4**
**PETK Petropavlovsk- 22.91 285** P **P 00 09 07.5 -0.7**
comp=Z,6.2nm,0.5s,baz=76,slow=14,SNR=11
PETK LR LR 00 17 31.5
comp=Z,107nm,21.1s,baz=86,slow=35
comp=Z,6.2nm,0.5s
**C36M Paulatuk 24.12 34** P **P 00 09 19.2 -0.5**
**SEY Seymchan 24.54 310** P **P 00 09 22.9 -0.8**
comp=Z,1.5nm,0.3s,baz=35,slow=17,SNR=4.2
comp=Z,1.5nm,0.3s
**SKR Severo-Kuril's 24.64 280** *ceP* **P 00 09 24.8 +0.2**
**CLRS Cowichan Lake 25.02 84** P **P 00 09 26.3 -1.8**
**MA2 Magadan 25.44 302** LR LR 00 19 27.1
comp=Z,47nm,18.3s,baz=120,slow=36
**YKA Yellowknife Ar 26.92 51** P **P 00 09 46.0 +0.9**
**YKA Yellowknife Ar 26.92 51** P **P 00 09 46.7 +1.6**
comp=Z,2.0nm,0.9s,baz=278,slow=9.3,SNR=5.9
YKA LR LR 00 21 03.9
comp=Z,92nm,20.3s,baz=238,slow=38
comp=Z,2.0nm,0.9s
**YKA Yellowknife Ar 26.92 51** P **P 00 09 46.0 +0.9**
**NEW Newport 29.42 81** LR LR 00 19 43.5
comp=Z,56nm,20.4s,baz=319,slow=32
**YBH Yreka Blue Hor 29.61 97** LR LR 00 19 12.9
comp=Z,59nm,20.7s,baz=317,slow=31
**TIXI Tiksi 33.62 328** *i* P **P 00 10 44.5 +0.3**
TIXI pmax pmax
comp=Z,5.0nm,0.5s
**NVAR Mina Array Bea 34.31 97** P **P 00 10 54.0 +3.2**
comp=Z,0.2nm,0.3s,baz=305,slow=5.1,SNR=1.9
NVAR LR LR 00 22 35.8
comp=Z,40nm,21.4s,baz=272,slow=32
comp=Z,0.2nm,0.3s
**YAK Yakutsk 35.06 311** *i* P **P 00 10 54.7 -2.1**
YAK pmax pmax
comp=Z,6.0nm,0.7s
**ASAJ Asahikawa 35.82 277** LR LR 00 23 46.4
comp=Z,35nm,20.5s,baz=337,slow=33
**PDAR Pinedale Array 36.84 84** P **P 00 11 12.3 -0.3**
comp=Z,0.3nm,0.4s,baz=283,slow=5.5,SNR=1.6
PDAR LR LR 00 24 22.6
comp=Z,25nm,20.4s,baz=318,slow=33
comp=Z,0.3nm,0.4s
**PFO Pinyon Flats O 38.69 101** LR LR 00 24 40.3
comp=Z,69nm,19.2s,baz=230,slow=32
**KLR Kul'dur 39.32 291** LR LR 00 29 32.4
comp=Z,57nm,18.4s,baz=40,slow=39
**H11N2 WAKE ISLAND Hy 40.55 225** T T 00 55 16.9
baz=26,slow=76,SNR=82
**H11N3 WAKE ISLAND Hy 40.56 225** T T 00 55 19.8
baz=26,slow=76,SNR=93
**H11N1 WAKE ISLAND Hy 40.57 225** T T 00 55 20.4
baz=26,slow=76,SNR=88
**ULM Lac du Bonnet 40.59 66** LR LR 00 29 01.7
comp=Z,37nm,18.9s,baz=276,slow=37
**H11S1 WAKE ISLAND Hy 41.73 225** T T 00 56 53.9
baz=25,slow=76,SNR=78
**H11S2 WAKE ISLAND Hy 41.74 225** T T 00 56 41.0
baz=25,slow=76,SNR=74
**H11S3 WAKE ISLAND Hy 41.74 225** T T 00 56 40.2
baz=25,slow=76,SNR=102
**USRK Ussuriysk Ar. 42.00 284** LR LR 00 28 18.2
comp=Z,79nm,19.7s,baz=63,slow=35
**NEEM North Greenlan 42.98 17** *i* P **P 00 12 02.5 -0.6**
NEEM IAmb IAmb 00 12 05.2
comp=Z,4.7nm,0.7s
**MJAR Matsushiro Arr 43.15 271** P **P 00 12 04.3 -0.4**
comp=Z,1.2nm,0.4s,baz=32,slow=8.6,SNR=4.6
MJAR LR LR 00 29 13.3
comp=Z,38nm,19.7s,baz=46,slow=35
comp=Z,1.2nm,0.4s
**ANMO Albuquerque 43.70 91** LR LR 00 28 18.2
comp=Z,35nm,20.5s,baz=57,slow=33
**FRB Frobisher Bay 46.06 38** LR LR 00 34 39.9
comp=Z,124nm,18.7s,baz=279,slow=40
**DAG Danmarks Havn 48.17 10** *i* P **P 00 12 44.0 +0.2**
DAG IAmb IAmb 00 12 48.3
comp=Z,3.3nm,0.6s
**KSRS Korea Array 48.66 280** P **P 00 12 49.0 +0.9**
comp=Z,3.6nm,0.7s,baz=49,slow=7.2,SNR=14
KSRS LR LR 00 33 09.3
comp=Z,20nm,20.9s,baz=235,slow=36
comp=Z,3.6nm,0.7s
**KSRS Korea Array 48.66 280** P **P 00 12 49.0 +0.9**
**SUMG Summit 48.69 19** *i* P **P 00 12 48.4 0.0**
SUMG IAmb IAmb 00 12 55.4
comp=Z,5.7nm,0.8s
**TXAR Lajitas Array 49.34 94** P **P 00 12 54.9 +1.4**
comp=Z,0.3nm,0.4s,baz=298,slow=5.3,SNR=6.2
TXAR LR LR 00 32 22.2
comp=Z,18nm,18.8s,baz=312,slow=34
comp=Z,0.3nm,0.4s
**LPIG La Paz 49.35 105** LR LR 00 28 03.8
comp=Z,26nm,22.0s,baz=254,slow=29
**JNU Nakatsue 49.87 273** LR LR 00 34 40.8
comp=Z,38nm,20.1s,baz=94,slow=37
**ICESG Greenland Ices 51.12 22** *i* P **P 00 13 04.3 -2.4**
ICESG IAmb IAmb 00 13 10.3
comp=Z,8.0nm,0.9s
**SADO Sadowa 52.92 63** LR LR 00 36 52.6
comp=Z,42nm,18.6s,baz=294,slow=37
**ULN Ulaanbaatar 53.30 303** *ceP* **P 00 13 23.1 +0.1**
ULN pmax pmax
comp=Z,13nm,1.0s
**SONM Songino Array 53.65 303** P **P 00 13 26.0 +0.4**
comp=Z,4.4nm,0.7s,baz=41,slow=7.6,SNR=22
comp=Z,4.4nm,0.7s
**ISOG Isortoq, Green 54.07 25** *i* P **P 00 13 26.3 -1.9**
**ARCES ARCESS Array B 57.15 356** P **P 00 13 49.3 -0.9**
comp=Z,1.5nm,0.6s,baz=355,slow=5.6,SNR=4.2
comp=Z,1.5nm,0.6s
**LVZ Lovozero 58.20 352** *ceP* **P 00 13 57.2 -0.6**
LVZ pmax pmax
comp=Z,35nm,2.5s
**BORG Borgarnes 58.62 18** LR LR 00 41 27.8
comp=Z,36nm,19.0s,baz=344,slow=38
**ZALV Zalesovo Beam 58.88 320** P **P 00 14 02.4 -0.2**
comp=Z,1.3nm,0.4s,baz=22,slow=8.4,SNR=10
ZALV PcP **PcP 00 14 52.1 +0.4**
comp=Z,1.2nm,0.6s,baz=29,slow=4.5,SNR=5.1
ZALV LR LR 00 42 05.4
comp=Z,64nm,18.4s,baz=47,slow=39
comp=Z,1.3nm,0.4s
**DGZ Jazzator, Alta 61.07 315** *i* P **P 00 14 17.4 -0.5**
DGZ pmax pmax
comp=Z,3.0nm,0.7s
**KURK Kurchatov 63.78 321** *ceP* **P 00 14 35.0 -0.8**
KURK pmax pmax
comp=Z,11nm,1.7s
**KURBB Kurchatov Arra 63.89 321** P **P 00 14 36.7 +0.2**
comp=Z,2.5nm,0.8s,baz=42,slow=7.4,SNR=25
comp=Z,2.5nm,0.8s
**SVE Sverdlovsk 64.27 335** *eP* **P 00 14 39.2 +0.3**
**BVAR Borovoye Array 64.75 327** P **P 00 14 43.0 +0.9**
comp=Z,6.0nm,0.6s,baz=42,slow=7.7,SNR=36
comp=Z,6.0nm,0.6s
**BVAR Borovoye Array 64.75 327** P **P 00 14 43.0 +0.9**
**BRVK Borovoye 64.75 327** *ceP* **P 00 14 42.0 -0.1**
BRVK pmax pmax
comp=Z,4.0nm,0.6s
**ARU Arti 65.14 336** *c i*P **P 00 14 44.7 +0.1**
ARU 00 15 14.4
ARU S **S 00 23 26.1 +1.0**
ARU pmax pmax
comp=Z,8.0nm,1.0s
**KIRV Kirov 65.15 342** *ceP* **P 00 14 44.9 +0.3**
**FINES FINESS Array B 65.19 355** P **P 00 14 43.6 -1.2**
comp=Z,2.0nm,0.5s,baz=35,slow=7.6,SNR=14
comp=Z,2.0nm,0.5s
**FINES FINESS Array B 65.19 355** *ceP* **P 00 14 45.0 +0.2**
FINES pmax pmax
comp=Z,2.0nm,0.5s
**MK31 Makanchi Array 65.48 316** *ceP* **P 00 14 46.9 -0.1**
**MKAR Makanchi Array 65.48 316** P **P 00 14 46.4 -0.7**
comp=Z,1.5nm,0.6s,baz=43,slow=6.0,SNR=24
MKAR LR LR 00 44 47.8
comp=Z,59nm,18.7s,baz=58,slow=37
comp=Z,1.5nm,0.6s
**MKAR Makanchi Array 65.48 316** *ceP* **P 00 14 46.7 -0.3**
MKAR pmax pmax
comp=Z,2.0nm,0.6s
**NB2 NORSAR Subarra 65.79 3** P **P 00 14 49.1 +0.3**
comp=Z,0.8nm,0.6s,baz=358,slow=6.2
**NOA NORSAR Array B 65.79 3** P **P 00 14 48.7 -0.1**
comp=Z,1.5nm,0.8s,baz=360,slow=6.3,SNR=5.9
comp=Z,1.5nm,0.8s
**HFS Hagfors 66.75 1** P **P 00 14 54.8 -0.1**
comp=Z,4.4nm,0.6s,baz=25,slow=3.8,SNR=28
comp=Z,4.4nm,0.6s
**EKA Eskdalemuir Ar 70.40 12** P **P 00 15 18.7 +1.0**
comp=Z,0.7nm,0.6s,baz=336,slow=5.1,SNR=3.9
comp=Z,0.7nm,0.6s
**OBN Obninsk 70.52 348** *eP* **P 00 15 18.5 +0.1**
OBN *e* 00 15 39.3
OBN *e* 00 17 54.2
OBN *e*PPP PPP 00 19 38.6
OBN pmax pmax
comp=Z,3.0nm,0.8s
**BELG Belogornoye 71.33 340** LR LR 00 50 10.8
comp=Z,56nm,18.8s,baz=312,slow=39
**BELG Belogornoye 71.33 340** *i* P **P 00 15 23.4 0.0**
BELG pmax pmax
comp=Z,2.0nm,0.7s
**AAK Ala-Archa 72.05 319** LR LR 00 50 43.9
comp=Z,47nm,18.0s,baz=35,slow=39
**AAK Ala-Archa 72.05 319** *ceP* **P 00 15 29.0 +0.8**
AAK pmax pmax
comp=Z,9.0nm,1.7s
**AKASG Malin Array Be 75.66 352** P **P 00 15 48.6 -0.2**
comp=Z,3.3nm,0.6s,baz=11,slow=5.5,SNR=11
comp=Z,3.3nm,0.6s
**KOLS Kolonicke sedl 77.87 356** P **P 00 16 03.0 +1.5**
**GERES GERESS Array B 78.06 2** P **P 00 16 02.9 +0.3**
comp=Z,0.9nm,0.7s,baz=352,slow=6.7,SNR=3.8
comp=Z,0.9nm,0.7s
**CONA Conrad Observa 79.00 0** *eP* **P 00 16 08.7 +0.9**
comp=Z,2.7nm,0.9s
**RETA Reutte 79.33 4** *eP* **P 00 16 08.5 -1.1**
comp=Z,6.7nm,1.5s
**MOTA Moosalm 79.49 4** *i* PcP **P 00 16 12.3 +1.8**
comp=Z,5.3nm,1.0s
**WATA Walderalm 79.52 3** *i* sP sP 00 16 22.9 +0.9
comp=Z,4.9nm,1.3s
**SQTA Sankt Quirin 79.62 4** *i* PcP **P 00 16 12.6 +1.4**
comp=Z,4.2nm,0.8s
SQTA *i* sP **pwP 00 16 23.7 +0.8**
comp=Z,5.1nm,0.8s
**CMAR Chiang Mai Arr 79.67 287** P **P 00 16 12.0 +0.2**
comp=Z,1.0nm,0.3s,baz=23,slow=7.3,SNR=4.2
comp=Z,1.0nm,0.3s
**CMAR Chiang Mai Arr 79.67 287** *ceP* **P 00 16 10.3 -1.5**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**FETA Feichten 79.80 4** *i* P **P 00 16 12.0 -0.3**
comp=Z,4.9nm,1.0s
FETA *i* sP **pwP 00 16 24.7 +0.8**
comp=Z,4.5nm,0.8s
**ABTA Abfaltersbach 80.13 3** *i* P **P 00 16 13.6 -0.3**
comp=Z,8.3nm,1.3s
**SOKA Soboth 80.25 1** *i* P **P 00 16 15.1 +0.5**
comp=Z,4.8nm,1.2s
**KIV Kislovodsk 80.37 341** *eP* **P 00 16 14.0 -1.3**
KIV pmax pmax
comp=Z,4.0nm,1.0s
**OBKA Obir 80.41 1** *eP* **P 00 16 16.0 +0.5**
comp=Z,5.0nm,0.7s
OBKA *i* sP **pwP 00 16 27.1 -0.1**
comp=Z,7.4nm,0.7s
**KBZ Khabaz 80.55 341** P **P 00 16 17.3 +1.2**
comp=Z,2.5nm,0.8s,baz=342,slow=7.9,SNR=5.7
comp=Z,2.5nm,0.8s
**MLR Muntele Rosu 81.10 353** LR LR 00 54 35.2
comp=Z,29nm,18.8s,baz=56,slow=38
**ESDC Sonseca Array 85.61 16** P **P 00 16 42.7 +0.2**
comp=Z,0.3nm,0.6s,baz=344,slow=4.4,SNR=5.9
comp=Z,0.3nm,0.6s
**BRTR Keskin Array B 86.00 347** P **P 00 16 45.1 +0.6**
comp=Z,1.8nm,0.8s,baz=11,slow=2.6,SNR=12
comp=Z,1.8nm,0.8s
**MMAI Mount Meron Ar 92.31 344** LR LR 01 05 55.1
comp=Z,19nm,18.7s,baz=80,slow=40

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*SJA **25** 00:37:13.1±0.8, 32.97S×72.46W, h15km, ML3.5, MW3.9*
*GUC **25** 00:37:17.6±0.8, 33.13S×71.99W, h31km±6km, ML3.4*
**ISC 25 00:37:11.6**±1.6, **33.09S**±0.03×**72.28W**±0.06, **h12**km±10km, **n30**, σ1.9s**62**/59, **3C-6D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VA01** | **Torpederas** | **0.53** | **83** | *i*P | | **Pb** | **00 37 24.0** | **+1.2** |
| VA01 | | | | *e*S | | **Sb** | **00 37 30.1** | **-0.3** |
| **VA05** | **Santo Domingo** | **0.79** | **136** | *i*P | | **Pn** | **00 37 28.9** | **+0.3** |
| VA05 | | | | *e*S | | **Sg** | **00 37 37.5** | **+0.3** |
| VA05 | | | | IAML | | | 00 37 43.5 | |
| comp=E,3μm,0.3s | | | | | | | | |
| **MT02** | **Curacav** | **0.97** | **100** | *i*P | | **Pn** | **00 37 30.9** | **-0.1** |
| MT02 | | | | *e*S | | **Sg** | **00 37 41.5** | **-1.4** |
| **VA06** | **Catapilco** | **0.98** | **58** | *i*P | | **Pn** | **00 37 31.9** | **+0.8** |
| VA06 | | | | *e*S | | **Sb** | **00 37 43.4** | **0.0** |
| VA06 | | | | IAML | | | 00 37 45.6 | |
| comp=N,3μm,0.2s | | | | | | | | |
| **MT01** | **Popeta** | **1.15** | **132** | *i*P | | **Pg** | **00 37 34.4** | **+0.7** |
| MT01 | | | | *e*S | | **Sb** | **00 37 47.7** | **-0.7** |
| MT01 | | | | IAML | | | 00 37 49.2 | |
| comp=E,3μm,0.3s | | | | | | | | |
| **MT09** | **Talagante** | **1.27** | **123** | *i*P | | **Pg** | **00 37 36.3** | **+0.2** |
| MT09 | | | | *e*S | | **Sb** | **00 37 50.9** | **-1.1** |
| MT09 | | | | IAML | | | 00 37 54.0 | |
| comp=N,2μm,0.5s | | | | | | | | |
| **MT05** | **Renca** | **1.32** | **103** | *i*P | | **Pg** | **00 37 38.6** | **+1.6** |
| MT05 | | | | *e*S | | **Sb** | **00 37 48.9** | **-4.5** |
| MT05 | | | | IAML | | | 00 38 00.2 | |
| comp=E,1μm,0.3s | | | | | | | | |
| **PEL** | **Peldehue** | **1.33** | **93** | *e*P | | **Pg** | **00 37 37.3** | **+0.1** |
| PEL | | | | *e*S | | **Sb** | **00 37 51.3** | **-2.4** |
| PEL | | | | IAML | | | 00 37 54.9 | |
| comp=E,1μm,0.3s | | | | | | | | |
| **BO03** | **Pichilemu** | **1.43** | **170** | *e*P | | **Pg** | **00 37 39.6** | **+0.6** |
| BO03 | | | | *e*S | | **Sn** | **00 37 56.2** | **+0.3** |
| **MT10** | **Hacienda Santa** | **1.47** | **98** | *e*P | | **Pb** | **00 37 39.0** | **+0.1** |
| MT10 | | | | *e*S | | **Sn** | **00 37 55.2** | **-2.1** |
| MT10 | | | | IAML | | | 00 38 01.9 | |
| comp=E,4μm,0.6s | | | | | | | | |
| **VA03** | **San Esteban** | **1.49** | **78** | *i*P | | **Pb** | **00 37 39.5** | **+0.4** |
| VA03 | | | | *e*S | | **Sn** | **00 37 56.1** | **-1.6** |
| VA03 | | | | IAML | | | 00 38 01.1 | |
| comp=N,2μm,0.3s | | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **1.49** | **102** | *i*P | | **Pn** | **00 37 38.8** | **+0.5** |
| MT14 | | | | *e*S | | **Sn** | **00 37 55.7** | **-2.0** |
| **MT16** | **CCHEN** | **1.51** | **103** | *e*P | | **Pb** | **00 37 39.5** | **0.0** |
| MT16 | | | | *e*S | | **Sn** | **00 37 55.8** | **-2.2** |
| MT16 | | | | IAML | | | 00 38 04.9 | |
| comp=E,737nm,0.5s | | | | | | | | |
| **CO04** | **Los Peladeros** | **1.52** | **47** | *e*P | | **Pg** | **00 37 40.3** | **-0.4** |
| CO04 | | | | *e*S | | **Sn** | **00 37 58.2** | **-0.4** |
| CO04 | | | | IAML | | | 00 38 04.9 | |
| comp=E,1μm,0.4s | | | | | | | | |
| **MT03** | **Universidad Ad** | **1.53** | **106** | *e*P | | **Pb** | **00 37 40.5** | **+0.6** |
| MT03 | | | | *e*S | | **Sn** | **00 37 56.9** | **-1.8** |
| MT03 | | | | IAML | | | 00 38 07.6 | |
| comp=N,2μm,0.2s | | | | | | | | |
| **MT15** | **Las Vizcachas** | **1.56** | **109** | *e*P | | **Pb** | **00 37 40.8** | **+0.3** |
| MT15 | | | | *e*S | | **Sn** | **00 37 58.2** | **-1.3** |
| MT15 | | | | IAML | | | 00 38 05.8 | |
| comp=E,2μm,0.3s | | | | | | | | |
| **MT12** | **Pirque** | **1.58** | **114** | *e*P | | **Pb** | **00 37 40.9** | **+0.2** |
| MT12 | | | | *e*S | | **Sn** | **00 37 58.3** | **-1.6** |
| MT12 | | | | IAML | | | 00 38 05.5 | |
| comp=E,2μm,0.4s | | | | | | | | |
| **BO04** | **La Punta** | **1.65** | **123** | *e*P | | **Pb** | **00 37 42.2** | **+0.2** |
| BO04 | | | | *e*S | | **Sn** | **00 38 00.9** | **-0.8** |
| BO04 | | | | IAML | | | 00 38 11.2 | |
| comp=N,559nm,0.4s | | | | | | | | |
| **FCH** | **Farellones** | **1.68** | **99** | *i*P | | **Pb** | **00 37 42.9** | **+0.2** |
| FCH | | | | *i*S | | **Sn** | **00 38 02.3** | **-0.4** |
| FCH | | | | IAML | | | 00 38 09.7 | |
| comp=N,673nm,0.3s | | | | | | | | |
| **MT13** | **San Alfonso** | **1.79** | **112** | *i*P | | **Pb** | **00 37 44.6** | **+0.2** |
| MT13 | | | | *e*S | | **Sn** | **00 38 05.0** | **0.0** |
| MT13 | | | | IAML | | | 00 38 11.9 | |
| comp=E,1μm,0.3s | | | | | | | | |
| **MT04** | **Ro Olivares** | **1.82** | **100** | *e*P | | **Pb** | **00 37 45.0** | **0.0** |
| MT04 | | | | *e*S | | **Sn** | **00 38 05.1** | **-0.9** |
| MT04 | | | | IAML | | | 00 38 11.2 | |
| comp=E,928nm,0.4s | | | | | | | | |
| **LMEL** | **Las Melosas** | **1.89** | **114** | *e*P | | **Pb** | **00 37 46.1** | **0.0** |
| LMEL | | | | *e*S | | **Sn** | **00 38 07.6** | **-0.1** |
| LMEL | | | | IAML | | | 00 38 15.5 | |
| comp=N,956nm,0.2s | | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.92** | **101** | *e*P | | **Pb** | **00 37 46.7** | **0.0** |
| MT08 | | | | *i*S | | **Sn** | **00 38 08.5** | **-0.1** |
| MT08 | | | | IAML | | | 00 38 15.1 | |
| comp=E,513nm,0.5s | | | | | | | | |
| **CO02** | **Combarbal** | **2.17** | **30** | *e*P | | **Pb** | **00 37 50.0** | **-0.9** |
| CO02 | | | | *e*S | | **Sn** | **00 38 15.8** | **+1.3** |
| **AUSP** | **Uspallata** | **2.59** | **71** | *i*P | | **Pb** | **00 37 59.0** | **+1.0** |
| AUSP | | | | *i*S | | **Sg** | **00 38 33.6** | **-1.1** |
| **ARCO** | **CERRO ARCO** | **2.82** | **86** | *i*P | | **Pb** | **00 38 02.7** | **+0.7** |
| ARCO | | | | *i*S | | **Sb** | **00 38 39.5** | **+3.0** |
| ARCO | | | | IAML | | | 00 38 42.7 | |
| comp=Z,144nm,2.2s | | | | | | | | |
| **RTLS** | **Leoncito** | **2.83** | **64** | *i*P | | **Pb** | **00 38 02.6** | **+0.4** |
| RTLS | | | | *i*S | | **Sb** | **00 38 39.0** | **+2.1** |
| RTLS | | | | IAML | | | 00 38 41.0 | |
| comp=Z,230nm,1.0s | | | | | | | | |
| **AAGR** | **Agrelo** | **2.89** | **91** | *i*P | | **Pb** | **00 38 04.1** | **+0.9** |
| AAGR | | | | *i*S | | **Sb** | **00 38 41.2** | **+2.6** |
| AAGR | | | | IAML | | | 00 38 55.1 | |
| comp=Z,87nm,0.8s | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **3.70** | **48** | *i*P | | **Pb** | **00 38 14.2** | **-2.9** |
| ACCO | | | | *i*S | | **Sb** | **00 38 59.9** | **-2.2** |
| ACCO | | | | IAML | | | 00 39 12.6 | |
| comp=Z,85nm,0.4s | | | | | | | | |
| **ACHE** | **Chepes** | **5.13** | **69** | *i*P | | Pn | 00 38 34.5 | +6.1 |
| ACHE | | | | *i*S | | **Sn** | **00 39 34.4** | **+6.7** |

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*UPP **25** 00:45:00.9±0.1, 59.86N×19.43E, h0km, ML1.6, Unknown*
*HEL **25** 00:45:01.3±0.1, 59.83N×19.47E, h0km, ML1.4, Explosion*
*IDC **25** 00:45:01.2±1.9, 59.83N×19.60E, h0km, mbtmp2.6/4,*
*ML1.1/3, Error ellipse: s-maj=33.5km s-min=8.7km*
*az=168.0*
**ISC 25 00:44:59.7**±0.8, **59.86N**±0.03×**19.57E**±0.03, **h0**km, **n27**, σ**0.87**/38, **Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AAL** | **Aland** | **0.38** | **34** | *e*P | | **Pb** | **00 45 08.3** | **-1.0** |
| **AAL** | **Aland** | **0.38** | **34** | P | | **Pb** | **00 45 09.1** | **-0.2** |
| AAL | | | | S | | **Sb** | **00 45 14.8** | **-0.9** |
| **AAL** | **Aland** | **0.38** | **34** | *e*P | | **Pb** | **00 45 09.1** | **-0.2** |
| AAL | | | | *e*S | | **Sb** | **00 45 14.9** | **-0.9** |
| **NRTU** | **Norrtaelje** | **0.51** | **249** | P | | **Pg** | **00 45 09.4** | **-0.1** |
| **NRTU** | **Norrtaelje** | **0.51** | **249** | *e*P | | **Pg** | **00 45 09.3** | **-0.1** |
| **GRAU** | **Graesoe** | **0.70** | **313** | P | | **Pg** | **00 45 13.2** | **+0.1** |
| **FLYU** | **Flymyra** | **0.89** | **288** | P | | **Pg** | **00 45 16.5** | **-0.2** |
| **UPP** | **Uppsala** | **0.98** | **271** | P | | **Pg** | **00 45 18.2** | **-0.3** |
| **UPP** | **Uppsala** | **0.98** | **271** | *e*P | | **Pg** | **00 45 18.2** | **-0.3** |
| **FIBU** | **Brunna** | **1.12** | **273** | P | | **Pg** | **00 45 20.5** | **-0.6** |
| **OSTU** | **Oestervaala** | **1.28** | **288** | P | | **Pg** | **00 45 23.1** | **-1.0** |
| **IGGU** | **Iggoen** | **1.51** | **313** | P | | **Pn** | **00 45 27.6** | **-0.4** |
| **RAF** | **Rauma** | **1.59** | **42** | *e*P | | **Pn** | **00 45 27.3** | **-1.7** |
| **RAF** | **Rauma** | **1.59** | **42** | *e*P | | **Pg** | **00 45 30.4** | **+0.2** |
| RAF | | | | *e*S | | **Sg** | **00 45 52.3** | **+1.5** |
| RAF | | | | MSG | | | 00 45 54.8 | |
| comp=Z,2.2nm,0.1s | | | | | | | | |
| **ARNU** | **Arnoeviken** | **2.13** | **331** | *e*PB | | **Pb** | **00 45 38.5** | **-0.5** |
| ARNU | | | | *e*SG | | **Sg** | **00 46 07.4** | **-0.6** |
| **GOTU** | **Gotland** | **2.25** | **194** | *e*PG | | **Pb** | **00 45 40.7** | **-0.4** |
| GOTU | | | | *e*SG | | **Sb** | **00 46 09.3** | **0.0** |
| **KPF** | **Kankaanpaa** | **2.33** | **31** | *e*PB | | **Pb** | **00 45 42.7** | **+0.3** |
| KPF | | | | *e*SG | | **Sg** | **00 46 14.6** | **+0.4** |

KPF MSG 00 46 15.5
comp=Z,0.9nm,0.1s
**MEF Metsahovi 2.45 80** ePB **Pb 00 45 44.9 +0.4**
MEF eSG **Sg 00 46 18.1 -0.1**
MEF MSG 00 46 19.7
comp=Z,2.3nm,0.1s
**MTSE Matsula 2.46 116** ePB **Pb 00 45 44.9 +0.2**
MTSE eSG **Sg 00 46 17.7 -1.0**
**NUR Nurmijrvi 2.62 73** ePB **Pb 00 45 48.4 +1.0**
NUR eSG **Sg 00 46 23.0 -0.7**
**SLIT Slitere, Latvi 2.65 147** ePG **Pb 00 45 47.6 -0.3**
**HEL1 Helsinki 2.68 81** ePG **Pg 00 45 50.7 -0.4**
**HEMU Hemsoen 2.92 346** eP **Pn 00 45 49.1 +1.8**
**HFS Hagfors 2.97 278** Pn **Pn 00 45 49.0 +1.1**
comp=Z,0.1nm,0.3s,baz=94,slow=13,SNR=2.1
HFS Sn **Sn 00 46 25.7 +1.5**
comp=Z,0.1nm,0.3s,baz=92,slow=26,SNR=2.6
comp=Z,2.5nm,0.9s
**FINES FINESS Array B 3.57 61** Pn **Pn 00 45 58.3 +2.0**
comp=Z,0.1nm,0.3s,baz=249,slow=14,SNR=6.1
FINES Pg **Pb 00 46 03.7 +0.1**
comp=Z,0.1nm,0.3s,baz=244,slow=18,SNR=6.8
FINES Lg Lg 00 46 52.2
comp=Z,0.1nm,0.3s,baz=250,slow=28,SNR=2.1
comp=Z,0.9nm,0.8s
**NOA NORSAR Array B 4.30 290** Pn **Pn 00 46 05.9 -0.5**
baz=99,slow=12,SNR=1.0
comp=Z,0.5nm,0.8s
**ARCES ARCESS Array B 10.03 12** Pn **Pn 00 47 23.6 -1.2**
comp=Z,1.0nm,0.8s,baz=194,slow=14,SNR=7.6

*SCB **25** 01:00:34.4±1.1, 14°.39S×66°.47W, h48km±14km, ML3.7/2, MW3.4, Error ellipse: s-maj=5.6km s-min=3.1km az=0.0*
*NEIC **25** 01:00:34.9±2.7, 14°.40S±0°.06×66°.48W±0°.07, h16km±5km, mb4.1/13, Error ellipse: s-maj=10.9km s-min=6.6km az=132.0*
*VAO **25** 01:00:36.5±0.4, 14°.38S×66°.51W, h107km±15km, mb4.6*
*IDC **25** 01:00:36.5±3.2, 14°.29S×66°.51W, h35km±27km, mb3.6/6, mbtmp3.8/11, ML3.9/5, MS3.0/9, Error ellipse: s-maj=23.6km s-min=12.1km az=180.0*
**ISC 25 01:00:33.5**±0.5, **14°.32S**±0°.04×**66°.46W**±0°.04, **h10**km, **n73,** σ1**s48/81, mb4.0/7, MS3.0/3, Central Bolivia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **2.53** | **219** | | **Pn** | **01 01 15.7** | **+0.5** |
| LPAZ | | | | Sn | **Sn** | **01 01 45.2** | **-1.3** |
| **LPAZ** | **La Paz** | **2.53** | **219** | Pn | **Pn** | **01 01 15.8** | **+0.5** |
| | 14nm,0.3s,baz=346,slow=8.9,SNR=198 | | | | | | |
| LPAZ | | | | Pg | **Pg** | **01 01 24.8** | **+2.7** |
| | 79nm,0.3s,baz=23,slow=10,SNR=39 | | | | | | |
| LPAZ | | | | Sn | **Sn** | **01 01 46.2** | **-0.3** |
| | 48nm,0.3s,baz=350,slow=18,SNR=2.8 | | | | | | |
| LPAZ | | | | Lg | Lg | 01 01 56.1 | |
| | 102nm,0.3s,baz=330,slow=20,SNR=8.8 | | | | | | |
| | 43nm,0.3s | | | | | | |
| **LPAZ** | **La Paz** | **2.53** | **219** | Pn | **Pn** | **01 01 16.2** | **+1.0** |
| LPAZ | | | | Sn | **Sn** | **01 01 48.2** | **+1.8** |
| LPAZ | | | | IAML | | 01 02 04.1 | |
| | 462nm,0.3s | | | | | | |
| **LPAZ** | **La Paz** | **2.53** | **219** | eP | **Pn** | **01 01 15.8** | **+0.5** |
| LPAZ | | | | eS | **Sn** | **01 01 45.5** | **-1.0** |
| **BS00** | **La Paz** | **2.69** | **217** | Pn | **Pn** | **01 01 18.5** | **+1.2** |
| **BBOE** | **La Paz, Chanca** | **2.88** | **210** | Pn | **Pn** | **01 01 21.4** | **+1.5** |
| **BBOD** | **La Paz, Gloria** | **3.09** | **222** | Pn | **Pn** | **01 01 24.2** | **+1.4** |
| **SOEJ** | **Jacaque** | **3.12** | **212** | Pn | **Pn** | **01 01 24.8** | **+1.6** |
| SOEJ | | | | Sn | **Sn** | **01 02 02.3** | **+1.5** |
| SOEJ | | | | IAML | | 01 02 04.7 | |
| | 149nm,0.4s | | | | | | |
| **AOEA** | **Aiquile** | **4.01** | **163** | Pn | **Pn** | **01 01 35.7** | **+0.3** |
| **AOEA** | **Aiquile** | **4.01** | **163** | Pn | **Pn** | **01 01 36.1** | **+0.7** |
| **PB18** | **Visviri** | **4.35** | **221** | Pn | **Pn** | **01 01 39.9** | **-0.4** |
| **SOEO** | **Opoqueri** | **4.43** | **198** | Pn | **Pn** | **01 01 43.5** | **+2.2** |
| **ETMB** | **Extrema** | **4.49** | **3** | | **Pn** | **01 01 44.6** | **+3.0** |
| **ETMB** | **Extrema** | **4.49** | **3** | Pn | **Pn** | **01 01 44.4** | **+2.8** |
| **ETMB** | **Extrema** | **4.49** | **3** | eP | **Pn** | **01 01 43.2** | **+1.6** |
| ETMB | | | | eS | **Sn** | **01 02 35.3** | **+1.4** |
| **SIV** | **San Ignacio** | **5.46** | **108** | Pn | **Pn** | **01 01 56.7** | **+1.6** |
| | 0.5nm,0.3s,baz=284,slow=9.2,SNR=106 | | | | | | |
| SIV | | | | Sn | **Sn** | **01 02 57.0** | **-1.1** |
| | 2.1nm,0.3s,baz=21,slow=24,SNR=3.1 | | | | | | |
| SIV | | | | Lg | Lg | 01 03 23.6 | |
| | 12nm,0.3s,baz=230,slow=17,SNR=8.7 | | | | | | |
| SIV | | | | LR | LR | 01 04 09.5 | |
| | comp=Z,157nm,18.6s,baz=294,slow=39 | | | | | | |
| | 11nm,0.4s | | | | | | |
| **SIV** | **San Ignacio** | **5.46** | **108** | Pn | **Pn** | **01 01 57.2** | **+2.1** |
| **SOTI** | **Planta Incahua** | **6.09** | **154** | Pn | **Pn** | **01 02 05.7** | **+1.9** |
| **SAML** | **Samuel** | **6.23** | **31** | | **Pn** | **01 02 08.3** | **+2.7** |
| **SAML** | **Samuel** | **6.23** | **31** | eP | **Pn** | **01 02 06.9** | **+1.3** |
| **VILB** | **Vilhena** | **6.24** | **78** | | **Pn** | **01 02 08.3** | **+2.6** |
| **VILB** | **Vilhena** | **6.24** | **78** | Pn | **Pn** | **01 02 08.6** | **+2.9** |
| **VILB** | **Vilhena** | **6.24** | **78** | eP | **Pn** | **01 02 06.9** | **+1.2** |
| VILB | | | | eS | **Sn** | **01 03 18.1** | **+0.9** |
| **BBSD** | **Serra de San D** | **6.31** | **118** | Pn | **Pn** | **01 02 07.9** | **+1.2** |
| **BBSD** | **Serra de San D** | **6.31** | **118** | eP | **Pn** | **01 02 07.5** | **+0.8** |
| **MOCB** | **Mochara** | **6.93** | **174** | Pn | **Pn** | **01 02 17.2** | **+1.6** |
| **PTLB** | **Pontes e Lacer** | **7.17** | **100** | | **Pn** | **01 02 20.2** | **+1.8** |
| **PTLB** | **Pontes e Lacer** | **7.17** | **100** | Pn | **Pn** | **01 02 20.3** | **+1.8** |
| **PTLB** | **Pontes e Lacer** | **7.17** | **100** | eP | **Pn** | **01 02 19.1** | **+0.7** |
| PTLB | | | | eS | **Sn** | **01 03 38.6** | **-1.5** |
| **LVC** | **Limon Verde** | **8.56** | **195** | Pn | **Pn** | **01 02 40.1** | **+2.2** |
| | 0.4nm,0.3s,baz=71,slow=13,SNR=1.6 | | | | | | |
| LVC | | | | LR | LR | 01 07 00.4 | |
| | comp=Z,57nm,20.4s,baz=348,slow=45 | | | | | | |
| | 2.5nm,0.6s | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **8.97** | **316** | Pn | **Pn** | **01 02 43.7** | **+0.5** |
| **CZSB** | **Cruzeiro do Su** | **8.97** | **316** | eP | **Pn** | **01 02 43.4** | **+0.2** |
| **PDRB** | **Porto dos Gac** | **9.86** | **75** | eP | **Pn** | **01 02 55.4** | **-0.1** |
| PDRB | | | | eS | **Sn** | **01 04 47.3** | **+0.9** |
| **NNA** | **Nana** | **10.37** | **282** | LR | LR | 01 07 24.1 | |
| | comp=Z,49nm,20.2s,baz=110,slow=40 | | | | | | |
| **TBTG** | **Tabatinga, AM** | **10.63** | **341** | Pn | **Pn** | **01 03 06.0** | **0.0** |
| **TEFE** | **Tefe** | **10.90** | **10** | eP | **Pn** | **01 03 09.5** | **-0.1** |
| **CLDB** | **Colider** | **10.96** | **73** | eP | **Pn** | **01 03 11.5** | **+1.0** |
| **MACA** | **Manacapuru-AM** | **12.47** | **28** | | **Pn** | **01 03 31.4** | **+0.2** |
| **MACA** | **Manacapuru-AM** | **12.47** | **28** | eP | **Pn** | **01 03 31.0** | **-0.2** |
| **ATAH** | **Atahualpa** | **13.72** | **300** | Pn | **Pn** | **01 03 50.8** | **+2.2** |
| | 0.3nm,0.3s,baz=95,slow=13,SNR=2.1 | | | | | | |
| ATAH | | | | LR | LR | 01 09 46.8 | |
| | comp=Z,70nm,20.4s,baz=206,slow=40 | | | | | | |
| **CPUP** | **Villa Florida** | **14.69** | **146** | Pn | **Pn** | **01 04 04.3** | **+2.8** |
| | 0.2nm,0.3s,baz=330,slow=20,SNR=2.0 | | | | | | |
| CPUP | | | | LR | LR | 01 10 15.7 | |
| | comp=Z,30nm,18.2s,baz=16,slow=39 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **AC05** | **El Transito** | **14.87** | **193** | Pn | **Pn** | **01 04 05.0** | **+0.9** |
| **CO01** | **Juntas del Tor** | **15.94** | **192** | | **Pn** | **01 04 19.5** | **+1.3** |
| CO01 | | | | IAmb | IAmb | 01 04 34.9 | |
| | comp=Z,9.8nm,1.0s | | | | | | |
| **CO03** | **El Pedregal** | **16.89** | **193** | Pn | **Pn** | **01 04 28.7** | **-1.5** |
| CO03 | | | | IAmb | IAmb | 01 04 55.2 | |
| | comp=Z,29nm,1.5s | | | | | | |
| **BOAV** | **Boa Vista** | **17.62** | **20** | Pn | **Pn** | **01 04 38.2** | **-1.1** |
| **ITQB** | **Itaqui** | **17.77** | **151** | | **Pn** | **01 04 40.2** | **-0.9** |
| ITQB | | | | IAmb | IAmb | 01 04 59.3 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **BDFB** | **Brasilia** | **17.87** | **97** | | **Pn** | **01 04 42.1** | **-0.4** |
| **BDFB** | **Brasilia** | **17.87** | **97** | P | **Pn** | **01 04 42.5** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=310,slow=16,SNR=3.2 | | | | | | |
| BDFB | | | | S | **Sn** | **01 08 03.8** | **+1.7** |
| | comp=Z,3.5nm,0.6s,baz=167,slow=16,SNR=4.3 | | | | | | |
| BDFB | | | | LR | LR | 01 11 51.0 | |
| | comp=Z,67nm,18.5s,baz=292,slow=38 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| **OTAV** | **Otavalo** | **18.71** | **320** | P | **P** | **01 04 52.8** | **0.0** |
| **MCPB** | **Macapa, AP** | **19.89** | **47** | P | **P** | **01 05 06.5** | **+1.2** |
| MCPB | | | | IAmb | IAmb | 01 05 33.4 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **ROSC** | **El Rosal** | **20.57** | **337** | P | **P** | **01 05 13.6** | **+0.5** |
| ROSC | | | | IAmb | IAmb | 01 05 34.7 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **ROSC** | **El Rosal** | **20.57** | **337** | P | **P** | **01 05 15.5** | **+2.4** |
| | comp=Z,7.1nm,0.5s,baz=209,slow=13,SNR=3.7 | | | | | | |
| **BI02** | **San Fabin de** | **22.66** | **190** | P | **P** | **01 05 35.0** | **-0.1** |
| BI02 | | | | IAmb | IAmb | 01 05 47.4 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **BAUV** | **El Baul** | **23.17** | **356** | P | **P** | **01 05 41.2** | **+0.8** |
| **SDV** | **Santo Domingo** | **23.43** | **350** | LR | LR | 01 15 37.8 | |
| | comp=Z,51nm,18.9s,baz=190,slow=38 | | | | | | |
| **MDP** | **Montagnes des** | **23.67** | **36** | LR | LR | 01 15 13.2 | |
| | comp=Z,50nm,18.6s,baz=218,slow=37 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **24.41** | **4** | LR | LR | 01 16 45.6 | |
| | comp=Z,33nm,18.1s,slow=40 | | | | | | |
| **CELP** | **Cerrillos** | **32.19** | **360** | P | **P** | **01 07 02.6** | **+0.7** |
| **TXAR** | **Lajitas Array** | **56.34** | **321** | P | **P** | **01 10 14.1** | **-0.9** |
| | comp=Z,0.1nm,0.5s,baz=148,slow=10,SNR=3.9 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **68.32** | **162** | P | **P** | **01 11 32.9** | **-1.7** |
| | comp=Z,1.3nm,1.1s,baz=280,slow=6.1,SNR=2.4 | | | | | | |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **69.21** | **327** | P | **P** | **01 11 39.9** | **-0.9** |
| | comp=Z,0.8nm,0.5s,baz=122,slow=8.6,SNR=7.7 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.80** | **71** | P | **P** | **01 12 01.4** | **-1.6** |
| **TORD** | **Torodi Ar. Bea** | **72.80** | **71** | P | **P** | **01 12 01.3** | **-1.6** |
| | comp=Z,0.9nm,0.8s,baz=264,slow=5.2,SNR=6.3 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.83** | **180** | P | **P** | **01 12 18.9** | **-0.9** |
| QSPA | | | | IAmb | IAmb | 01 12 30.8 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.83** | **180** | P | **P** | **01 12 19.1** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=162,slow=7.4,SNR=2.2 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.26** | **340** | P | **P** | **01 13 08.4** | **-1.7** |
| | comp=Z,1.6nm,0.8s,baz=125,slow=4.5,SNR=7.6 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **128.54** | **32** | PKP | **PKPdf** | **01 19 39.5** | **-1.2** |
| | comp=Z,0.2nm,0.4s,baz=321,slow=5.9,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **134.49** | **23** | PKP | **PKPdf** | **01 19 50.1** | **-1.8** |
| | comp=Z,0.6nm,0.5s,baz=346,slow=0.6,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **137.31** | **208** | PKP | **PKPdf** | **01 19 56.0** | **-2.2** |
| | comp=Z,0.3nm,0.7s,baz=141,slow=1.9,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **138.42** | **32** | PKP | **PKPdf** | **01 19 58.0** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=327,slow=2.4,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **140.27** | **212** | PKP | **PKPdf** | **01 20 01.8** | **-1.9** |
| | comp=Z,0.2nm,0.7s,baz=157,slow=1.3,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **146.06** | **9** | PKPbc | **PKPdf** | **01 20 13.0** | **-0.2** |
| | comp=Z,0.8nm,0.6s,baz=333,slow=2.3,SNR=2.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **146.32** | **336** | PKPbc | **PKPdf** | **01 20 14.0** | **+0.5** |
| | comp=Z,1.8nm,0.7s,baz=77,slow=3.3,SNR=2.3 | | | | | | |

*IDC **25** 01:08:49.0±3.4, 14°.74S×167°.50E, h171km±29km, mb3.8/11, mbtmp4.2/12, MS3.5/2, Error ellipse: s-maj=23.0km s-min=20.5km az=97.0*
*NEIC **25** 01:08:49.1±1.5, 14°.6S±0°.1×167°.4E±0°.2, h167km±9km, mb4.2/17, Error ellipse: s-maj=22.1km s-min=17.6km az=95.0*
*NOU **25** 01:08:51.1, 14°.71S×167°.32E, h141km, MLv5.0/9, Vanuatu Islands*
**ISC 25 01:08:48.8**±0.6, **14°.68S**±0°.07×**167°.5E**±0°.1, **h170**km, **n53,** σ1**s04/56, mb4.2/22, 4C-1D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **3.09** | **168** | P | **Pn** | **01 09 38.8** | **+0.7** |
| **LIFNC** | **LIFOU** | **6.07** | **183** | P | **Pn** | **01 10 16.3** | **-0.3** |
| **LIFNC** | **LIFOU** | **6.07** | **183** | Pn | **Pn** | **01 10 16.2** | **-0.3** |
| **KOUNC** | **Koumac, New Ca** | **6.60** | **207** | P | **Pn** | **01 10 24.4** | **+0.7** |
| **KOUNC** | **Koumac, New Ca** | **6.60** | **207** | | **Pn** | **01 10 24.3** | **+0.7** |
| **YATNC** | **Mamie plateau,** | **7.36** | **185** | P | **Pn** | **01 10 34.5** | **+0.8** |
| **DZM** | **Mont Dzumac** | **7.42** | **188** | P | **Pn** | **01 10 36.2** | **+1.6** |
| **DZM** | **Mont Dzumac** | **7.42** | **188** | | **Pn** | **01 10 36.0** | **+1.4** |
| **DZM** | **Mont Dzumac** | **7.42** | **188** | P | **Pn** | **01 10 35.4** | **+0.9** |
| | 13nm,0.5s,baz=319,slow=9.3,SNR=28 | | | | | | |
| DZM | | | | S | **Sn** | **01 11 56.4** | **-1.6** |
| | 25nm,0.5s,baz=326,slow=23,SNR=6.7 | | | | | | |
| **NOUC** | **Port Laguerre** | **7.47** | **189** | P | **Pn** | **01 10 38.2** | **+3.1** |
| **PINNC** | **Pines Island,** | **7.89** | **181** | Pn | **Pn** | **01 10 41.8** | **+1.1** |
| **EIDS** | **Eidsvold** | **18.73** | **233** | P | **P** | **01 12 55.5** | **+0.8** |
| **CTA** | **Charters Tower** | **20.99** | **252** | P | **P** | **01 13 20.1** | **+1.1** |
| | 0.2nm,0.6s,baz=77,slow=14,SNR=2.4 | | | | | | |
| **CTAO** | **Charters Tower** | **20.99** | **252** | P | **P** | **01 13 18.4** | **-0.6** |
| CTAO | | | | IAmb | IAmb | 01 13 22.3 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **BKZ** | **Black Stump Fm** | **25.64** | **164** | P | **P** | **01 14 03.1** | **+0.4** |
| **STKA** | **Stephens Creek** | **29.21** | **230** | P | **P** | **01 14 35.2** | **+0.6** |
| **STKA** | **Stephens Creek** | **29.21** | **230** | P | **P** | **01 14 35.0** | **+0.4** |
| | comp=Z,2.7nm,0.6s,baz=47,slow=9.9,SNR=8.0 | | | | | | |
| STKA | | | | PcP | **PcP** | **01 17 37.6** | **0.0** |
| | comp=Z,0.8nm,0.5s,baz=14,slow=1.2,SNR=3.5 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.01** | **256** | P | **P** | **01 14 57.5** | **-1.9** |
| WB0 | | | | IAmb | IAmb | 01 15 19.4 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.07** | **256** | P | **P** | **01 14 59.0** | **-1.0** |
| **WRA** | **Warramunga Arr** | **32.07** | **256** | P | **P** | **01 14 58.4** | **-1.5** |
| | comp=Z,0.4nm,0.5s,baz=85,slow=9.1,SNR=8.2 | | | | | | |
| WRA | | | | PcP | **PcP** | **01 17 45.4** | **0.0** |
| | comp=Z,0.3nm,0.7s,baz=85,slow=3.1,SNR=1.5 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **32.92** | **249** | P | **P** | **01 15 06.0** | **-1.3** |
| **ASAR** | **Alice Springs** | **32.92** | **249** | P | **P** | **01 15 05.5** | **-1.8** |
| **ASAR** | **Alice Springs** | **32.92** | **249** | P | **P** | **01 15 05.8** | **-1.5** |
| | comp=Z,1.4nm,0.7s,baz=78,slow=9.0,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 17 47.5** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=69,slow=3.1,SNR=5.3 | | | | | | |
| ASAR | | | | LR | LR | 01 27 50.1 | |
| | comp=Z,85nm,18.9s,baz=142,slow=35 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **33.80** | **232** | P | **P** | **01 15 14.7** | **-0.1** |
| **FORT** | **Forrest** | **39.53** | **239** | P | **P** | **01 16 02.5** | **-0.7** |
| **MBWA** | **Marble Bar** | **45.79** | **255** | P | **P** | **01 16 52.8** | **-1.0** |
| MBWA | | | | IAmb | IAmb | 01 16 54.8 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **SBA** | **Scott Base** | **63.18** | **180** | P | **P** | **01 18 59.7** | **+1.4** |
| SBA | | | | IAmb | IAmb | 01 19 00.6 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **CASY** | **Casey** | **63.66** | **202** | P | **P** | **01 19 01.8** | **+0.3** |
| CASY | | | | IAmb | IAmb | 01 19 03.2 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **68.04** | **354** | P | **P** | **01 19 30.7** | **+1.0** |
| | comp=Z,1.4nm,0.6s,baz=159,slow=10,SNR=2.6 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.15** | **294** | P | **P** | **01 20 14.0** | **+1.1** |
| | comp=Z,0.9nm,0.3s,baz=118,slow=5.3,SNR=1.4 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.34** | **180** | P | **P** | **01 20 13.7** | **+0.3** |
| QSPA | | | | IAmb | IAmb | 01 20 17.0 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.34** | **180** | P | **P** | **01 20 13.2** | **-0.1** |
| | comp=Z,2.1nm,0.6s,baz=323,slow=6.4,SNR=6.2 | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **82.24** | **324** | P | **P** | **01 20 51.6** | **+0.4** |
| ULN | | | | IAmb | IAmb | 01 20 53.6 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **82.60** | **323** | P | **P** | **01 20 53.9** | **+0.8** |
| | comp=Z,0.6nm,0.5s,baz=124,slow=2.1,SNR=3.9 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **H21K** | **Melozitna Rive** | **85.44** | **15** | P | **P** | **01 21 07.5** | **+0.7** |
| H21K | | | | IAmb | IAmb | 01 21 32.6 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **85.85** | **13** | P | **P** | **01 21 09.6** | **+0.8** |
| E19K | | | | IAmb | IAmb | 01 21 25.0 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **G21K** | **Allakaket** | **85.94** | **15** | P | **P** | **01 21 09.4** | **+0.2** |
| **ILAR** | **Eielson Array** | **86.41** | **18** | P | **P** | **01 21 10.4** | **-1.1** |
| | comp=Z,0.9nm,0.7s,baz=236,slow=5.7,SNR=12 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.05** | **49** | P | **P** | **01 21 13.2** | **-2.4** |
| | comp=Z,0.6nm,0.8s,baz=257,slow=6.4,SNR=3.2 | | | | | | |
| **LPIG** | **La Paz** | **88.96** | **65** | LR | LR | 01 58 44.7 | |
| | comp=Z,16nm,18.3s,baz=248,slow=34 | | | | | | |
| **TROLL** | **Troll, Antarti** | **92.93** | **185** | ⇑P | **P** | **01 21 42.3** | **-0.1** |
| | comp=Z,202nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **93.61** | **183** | ⇑P | **P** | **01 21 44.9** | **-0.5** |
| | comp=Z,26nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **93.61** | **183** | P | **P** | **01 21 44.7** | **-0.7** |
| | comp=Z,1.2nm,0.5s,baz=213,slow=7.1,SNR=23 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **94.27** | **181** | ⇑P | **P** | **01 21 47.3** | **-1.1** |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **94.53** | **182** | ⇓P | **P** | **01 21 49.2** | **-0.3** |
| | comp=Z,4.5nm,0.5s,baz=181,slow=5.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **94.83** | **181** | ⇑P | **P** | **01 21 50.1** | **-0.8** |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **97.34** | **316** | P | **P** | **01 22 03.1** | **+0.4** |
| | comp=Z,0.9nm,0.6s,baz=92,slow=6.7,SNR=10.0 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **97.50** | **324** | P | **P** | **01 22 02.6** | **-0.6** |
| | comp=Z,0.7nm,0.6s,baz=112,slow=6.4,SNR=2.5 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.27** | **345** | PKP | **PKPdf** | **01 27 18.9** | **-0.2** |
| | comp=Z,1.7nm,0.7s,baz=346,slow=0.7,SNR=6.6 | | | | | | |
| **FINES** | **FINESS Array B** | **125.77** | **338** | PKP | **PKPdf** | **01 27 30.0** | **+0.1** |
| | comp=Z,2.1nm,0.9s,baz=49,slow=4.2,SNR=3.4 | | | | | | |
| **KEST** | **Kesra** | **151.33** | **321** | PKPbc | **PKPbc** | **01 28 23.5** | **+0.7** |
| | comp=Z,2.7nm,0.6s,baz=124,slow=2.9,SNR=6.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **154.00** | **345** | PKPab | **PKPab** | **01 28 42.7** | **+0.2** |
| | comp=Z,0.4nm,0.9s,baz=3.4,slow=4.7,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.16** | **265** | PKPab | **PKPab** | **01 29 36.0** | **-0.3** |
| | comp=Z,0.6nm,0.6s,baz=94,slow=4.8,SNR=9.4 | | | | | | |

*NEIC **25** 01:20:40.5±1.1, 7°.49S±0°.07×127°.79E±0°.08, h159km±4km, mb4.5/22, Error ellipse: s-maj=12.4km s-min=9.3km az=50.0*
*IDC **25** 01:20:41.0±2.3, 7°.51S×127°.78E, h166km±21km, mb3.8/14, mbtmp4.3/16, Error ellipse: s-maj=22.4km s-min=10.2km az=63.0*
*DJA **25** 01:20:43.8±1.4, 8°.3S±11°×12°.7E±1°.4, h181km±16km, M4.7/5, mb4.6/2, mB4.7/1, MLv4.8/5, Mw(mB)3.9/1*
**ISC 25 01:20:39.5**±0.4, **7°.53S**±0°.06×**127°.78E**±0°.06, **h150**km, **n90,** σ1**s30/93, mb4.2/22, 2C, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **3.52** | **98** | P | **Pn** | **01 21 35.4** | **+1.9** |
| **SAUI** | **Saumlaki** | **3.52** | **98** | Pn | **Pn** | **01 21 34.5** | **+1.0** |
| **SOEI** | **Soe** | **4.12** | **237** | Pn | **Pn** | **01 21 43.2** | **+1.8** |
| **SOEI** | **Soe** | **4.12** | **237** | P | **Pn** | **01 21 44.0** | **+2.5** |
| **BATI** | **Baumata** | **4.86** | **237** | P | **Pn** | **01 21 53.3** | **+2.2** |
| BATI | | | | S | **Sn** | **01 22 48.8** | **+1.8** |
| **MMRI** | **Maumere** | **5.60** | **258** | P | **Pn** | **01 22 03.7** | **+2.8** |
| **MMRI** | **Maumere** | **5.60** | **258** | Pn | **Pn** | **01 22 02.0** | **+1.1** |
| **SANI** | **Sanana** | **5.73** | **342** | P | Pn | 01 22 08.2 | +5.5 |
| **DRS** | **Darwin Rock St** | **5.76** | **148** | P | **Pn** | **01 22 02.4** | **-0.6** |
| **EDFI** | **Ende, Flores** | **6.15** | **258** | P | **Pn** | **01 22 10.4** | **+2.0** |
| | 117nm,0.8s,1µm0.4nm | | | | | | |
| **MTN** | **Manton Dam** | **6.23** | **148** | P | **Pn** | **01 22 09.5** | **+0.2** |
| **MTN** | **Manton Dam** | **6.23** | **148** | Pn | **Pn** | **01 22 08.5** | **-0.8** |
| **KDU** | **Kakadu** | **6.90** | **138** | P | **Pn** | **01 22 17.7** | **-0.6** |
| **KNRA** | **Kununurra** | **8.15** | **173** | Pn | **Pn** | **01 22 33.3** | **-1.7** |
| **LUWI** | **Luwuk** | **8.15** | **322** | Pn | **Pn** | **01 22 35.7** | **+0.6** |
| **KAPI** | **Kappang** | **8.36** | **287** | | **Pn** | **01 22 39.1** | **+1.2** |
| **KAPI** | **Kappang** | **8.36** | **287** | P | **Pn** | **01 22 40.2** | **+2.4** |
| | 6.8nm,0.5s,baz=127,slow=14,SNR=5.8 | | | | | | |
| **WBSI** | **Waikabubak, Su** | **8.56** | **255** | P | **Pn** | **01 22 39.4** | **-1.1** |
| **FITZ** | **Fitzroy Crossi** | **10.71** | **191** | Pn | **Pn** | **01 23 05.8** | **-3.2** |
| **TOLI2** | **Tolitoli** | **11.06** | **321** | Pn | **Pn** | **01 23 13.1** | **-0.6** |
| **WB0** | **Warramunga Arr** | **13.75** | **153** | Pn | **Pn** | **01 23 45.6** | **-2.8** |
| **WRA** | **Warramunga Arr** | **13.88** | **153** | Pn | **Pn** | **01 23 47.3** | **-2.7** |
| **WRA** | **Warramunga Arr** | **13.88** | **153** | P | **Pn** | **01 23 46.9** | **-3.1** |
| | 47nm,0.8s,baz=324,slow=14,SNR=218 | | | | | | |
| WRA | | | | S | Sn | 01 26 08.6 | -15 |
| | 36nm,1.1s,baz=325,slow=24,SNR=9.6 | | | | | | |
| **PSA00** | **Pilbara Seismi** | **15.92** | **208** | | **Pn** | **01 24 15.0** | **-0.5** |
| PSA00 | | | | IAmb | IAmb | 01 24 16.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **COEN** | **Coen** | **16.41** | **114** | P | **Pn** | **01 24 21.9** | **+0.5** |
| **COEN** | **Coen** | **16.41** | **114** | | **Pn** | **01 24 20.6** | **-0.9** |
| COEN | | | | IAmb | IAmb | 01 24 34.7 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **17.09** | **161** | | **Pn** | **01 24 29.6** | **+0.7** |
| AS31 | | | | IAmb | IAmb | 01 24 32.6 | |
| | comp=Z,15nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **17.09** | **161** | P | **P** | **01 24 29.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **17.09** | **161** | P | **P** | **01 24 29.4** | **+0.5** |
| | comp=Z,23nm,0.5s,baz=338,slow=12,SNR=192 | | | | | | |
| ASAR | | | | S | S | 01 27 28.4 | -11 |
| | comp=Z,5.6nm,0.7s,baz=336,slow=25,SNR=7.1 | | | |

comp=Z,0.7nm,0.4s,baz=124,slow=7.4,SNR=6.9
comp=Z,0.7nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ABKAR | **Akbulak array** | **81.56** | **322** | P | **P** | **01 32 39.6** | **-0.8** |
| QSPA | **South Pole Qui** | **82.45** | **180** | P | **P** | **01 32 45.0** | **0.0** |
| QSPA | | | | IAmb | IAmb | 01 32 45.7 | |

comp=Z,8.3nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| QSPA | **South Pole Qui** | **82.45** | **180** | P | **P** | **01 32 44.5** | **-0.5** |

comp=Z,9.3nm,0.7s,baz=160,slow=6.0,SNR=80
comp=Z,9.3nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RAYN | **Ar Rayn** | **85.95** | **294** | P | **P** | **01 33 01.8** | **-1.6** |
| TROLL | **Troll, Antarti** | **93.10** | **195** | ⇑P | **P** | **01 33 36.5** | **+0.3** |

comp=Z,82nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SNAA | **Sanae** | **94.63** | **194** | ⇑P | **P** | **01 33 42.9** | **-0.2** |

comp=Z,19nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TORD | **Torodi Ar. Bea** | **126.75** | **281** | PKP | **PKPdf** | **01 39 25.2** | **-1.1** |

comp=Z,1.0nm,0.6s,baz=70,slow=1.7,SNR=10

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TXAR | **Lajitas Array** | **127.09** | **59** | PKP | **PKPdf** | **01 39 26.4** | **-0.3** |

comp=Z,0.1nm,0.4s,baz=241,slow=1.7,SNR=3.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CPUP | **Villa Florida** | **145.98** | **172** | PKPbc | **PKPbc** | **01 40 01.9** | **+0.4** |

comp=Z,2.1nm,0.4s,baz=201,slow=2.4,SNR=10

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LPAZ | **La Paz** | **151.57** | **146** | PKPbc | **PKPbc** | **01 40 17.8** | **0.0** |

comp=Z,1.4nm,0.4s,baz=64,slow=2.3,SNR=10

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LPAZ | | | | PKPab | **PKPab** | **01 40 27.9** | **+1.2** |

comp=Z,6.9nm,0.6s,baz=197,slow=2.9,SNR=22

---

**IDC 25 01:24:17.4±2.3, 17°.09S×177°.88W, h0km, mb3.8/4, mbtmp3.8/4, Error ellipse: s-maj=133.0km s-min=29.3km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | **45.28** | **259** | P | P | 01 32 37.3 | 0.0 |

0.5nm,0.4s,baz=97,slow=6.9,SNR=5.9
0.5nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAR | **Alice Springs** | **45.50** | **253** | P | P | 01 32 38.8 | -0.2 |

4.4nm,0.5s,baz=88,slow=8.7,SNR=18
4.4nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ILAR | **Eielson Array** | **84.98** | **13** | P | P | 01 36 53.6 | -0.6 |

0.1nm,0.4s,baz=217,slow=5.0,SNR=5.7
0.1nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TXAR | **Lajitas Array** | **85.14** | **57** | P | P | 01 36 56.6 | +0.7 |

0.2nm,0.7s,baz=230,slow=7.0,SNR=3.2
0.2nm,0.7s

---

*IDC **25** 01:39:02.0±5.2, 1.°84S×102.°85E, h0km, mb3.4/4, mbtmp3.4/4, Error ellipse: s-maj=299.4km s-min=24.1km az=52.0*
*DJA **25** 01:39:11.4±0.5, 3.°3S±4.°×10.°2E±.°, h82km±6km, M4.2/7, mb4.8/1, MLv3.9/7*
**ISC 25 01:39:10.4±1.0, 2.°9S±0.°1×101.°72E±0.°09, h100km, n9, σ1s22/12, mb3.5/4, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPSI | **Pulau Pagai** | **1.71** | **274** | P | **Pn** | **01 39 40.6** | **+1.4** |
| PPSI | | | | S | **Sn** | **01 40 01.2** | **0.0** |
| PDSI | **Padang** | **2.33** | **327** | P | **Pn** | **01 39 48.8** | **+1.5** |
| PDSI | | | | S | **Sn** | **01 40 16.3** | **+0.7** |
| SISI | **Saibi** | **3.05** | **301** | P | **Pn** | **01 39 57.8** | **+1.0** |
| SISI | | | | S | **Sn** | **01 40 30.5** | **-2.1** |
| KASI | **Kota Agung** | **3.81** | **133** | P | **Pn** | **01 40 07.8** | **+0.7** |
| PBSI | **Pulau Batu** | **4.44** | **309** | P | **Pn** | **01 40 16.0** | **+0.5** |
| WRA | **Warramunga Arr** | **36.07** | **121** | P | **P** | **01 46 02.5** | **-0.2** |

0.2nm,0.4s,baz=302,slow=9.2,SNR=5.3
0.2nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAR | **Alice Springs** | **37.35** | **126** | P | **P** | **01 46 13.8** | **+0.3** |

0.3nm,0.4s,baz=300,slow=7.7,SNR=8.6
0.3nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | **Makanchi Array** | **52.35** | **343** | P | **P** | **01 48 10.6** | **-1.5** |

0.2nm,0.4s,baz=158,slow=8.2,SNR=4.2
0.2nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURBB | **Kurchatov Arra** | **56.89** | **343** | P | **P** | **01 48 44.4** | **-0.4** |

0.2nm,0.4s,baz=149,slow=6.5,SNR=2.1
0.2nm,0.4s

---

*IDC **25** 01:43:38.2±0.9, 18.°42N×146.°56E, h0km, mb4.1/13, mbtmp4.1/14, ML3.4/1, MS3.1/4, Error ellipse: s-maj=34.6km s-min=16.3km az=83.0*
**ISC 25 01:43:46.9±0.9, 18.°4N±0.°1×146.°4E±0.°2, h64km, n24, σ0s90/17, mb4.1/13, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H11S3 | **WAKE ISLAND Hy** | **19.23** | **87** | T | T | 02 06 47.4 | |

baz=274,slow=75,SNR=50

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H11S1 | **WAKE ISLAND Hy** | **19.24** | **87** | T | T | 02 06 50.6 | |

baz=274,slow=75,SNR=34

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H11S2 | **WAKE ISLAND Hy** | **19.25** | **87** | T | T | 02 06 49.1 | |

baz=274,slow=75,SNR=31

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H11N1 | **WAKE ISLAND Hy** | **19.40** | **83** | T | T | 02 07 07.8 | |

baz=1.7,slow=76,SNR=33

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H11N2 | **WAKE ISLAND Hy** | **19.40** | **83** | T | T | 02 07 06.0 | |

baz=1.7,slow=76,SNR=37

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H11N3 | **WAKE ISLAND Hy** | **19.41** | **83** | T | T | 02 07 07.3 | |

baz=1.7,slow=76,SNR=34

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MJAR | **Matsushiro Arr** | **19.44** | **340** | P | **P** | **01 48 07.4** | **-0.8** |

0.1nm,0.3s,baz=161,slow=8.7,SNR=4.4
0.9nm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KSRS | **Korea Array** | **24.94** | **323** | P | **P** | **01 49 05.2** | **+1.1** |

4.5nm,0.7s,baz=152,slow=8.6,SNR=19

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KSRS | | | | LR | LR | 01 57 51.0 | |

comp=Z,36nm,21.2s,baz=130,slow=34
4.5nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| USRK | **Ussuriysk Ar.** | **28.41** | **338** | P | **P** | **01 49 35.5** | **+0.2** |

3.2nm,0.8s,baz=146,slow=8.1,SNR=5.4
3.2nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | **39.93** | **198** | P | **P** | **01 51 14.5** | **-0.5** |

0.9nm,0.6s,baz=22,slow=8.3,SNR=20

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WRA | | | | PcP | **PcP** | **01 53 19.3** | **-0.2** |

0.2nm,0.5s,baz=15,slow=3.2,SNR=3.0
0.9nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAR | **Alice Springs** | **43.59** | **197** | P | **P** | **01 51 45.2** | **+0.3** |

0.5nm,0.5s,baz=18,slow=9.9,SNR=11

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAR | | | | PcP | **PcP** | **01 53 31.3** | **-0.2** |

0.4nm,0.6s,baz=24,slow=3.4,SNR=2.5
0.5nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SONM | **Songino Array** | **43.78** | **321** | P | **P** | **01 51 46.0** | **-0.3** |

1.0nm,0.5s,baz=145,slow=7.0,SNR=5.1
1.0nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CMAR | **Chiang Mai Arr** | **44.93** | **278** | LR | LR | 02 11 12.6 | |

comp=Z,9.5nm,18.1s,baz=120,slow=37

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ZALV | **Zalesovo Beam** | **58.64** | **322** | P | **P** | **01 53 36.7** | **-0.6** |

1.0nm,0.4s,baz=114,slow=6.8,SNR=5.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ZALV | | | | LR | LR | 02 19 13.4 | |

comp=Z,29nm,18.2s,baz=194,slow=36
1.0nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | **Makanchi Array** | **59.14** | **314** | P | **P** | **01 53 42.3** | **+1.3** |

1.0nm,0.7s,baz=93,slow=9.0,SNR=10.0
1.0nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURBB | **Kurchatov Arra** | **61.97** | **318** | P | **P** | **01 54 00.2** | **0.0** |

2.3nm,0.6s,baz=94,slow=7.4,SNR=31
2.3nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ILAR | **Eielson Array** | **63.59** | **26** | P | **P** | **01 54 09.9** | **-0.8** |

0.6nm,0.8s,baz=280,slow=5.3,SNR=5.8
0.6nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BVAR | **Borovoye Array** | **67.11** | **320** | P | **P** | **01 54 34.0** | **+0.3** |

4.4nm,0.5s,baz=93,slow=7.6,SNR=31
4.4nm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H02S1 | **DAWSON INLET T** | **70.17** | **39** | T | T | 03 12 37.3 | |

SNR=16

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BBB | **Bella Bella** | **72.92** | **40** | LR | LR | 02 20 56.0 | |

comp=Z,12nm,21.9s,baz=244,slow=31

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ARCES | **ARCESS Array B** | **82.96** | **342** | P | **P** | **01 56 06.7** | **+2.0** |

2.0nm,0.7s,baz=72,slow=8.6,SNR=5.8
2.0nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FINES | **FINESS Array B** | **87.41** | **335** | P | **P** | **01 56 26.0** | **-1.0** |

0.8nm,0.4s,baz=52,slow=5.4,SNR=15
0.8nm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PDAR | **Pinedale Array** | **87.53** | **46** | P | **P** | **01 56 29.2** | **+0.9** |

0.2nm,0.3s,baz=223,slow=3.3,SNR=1.8
0.2nm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TORD | **Torodi Ar. Bea** | **133.15** | **310** | PKP | **PKPdf** | **02 02 55.8** | **-0.5** |

0.4nm,1.0s,baz=41,slow=4.0,SNR=1.0

---

*IDC **25** 02:20:35.9±0.6, 33.°03S×71.°87W, h0km, mb4.4/10, mbtmp4.3/14, ML4.1/4, MS3.9/22, Error ellipse: s-maj=24.1km s-min=14.9km az=91.0*
*NEIC **25** 02:20:38.0±1.4, 33.°09S±0.°02×72.°14W±0.°05, h18km±4km, mb4.7/33, Mwr4.4/84, Mwr4.5(GUC), Error ellipse: s-maj=6.7km s-min=2.3km az=104.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$3.42; $M_{\theta\theta}$0.29; $M_{\phi\phi}$-3.71; $M_{r\theta}$1.03; $M_{\theta\phi}$-0.99; $M_{\phi r}$-3.55; Fault plane solution: M0 5.23000×$10^{15}$ NP1:ϕs 172.87000°, δ68.46000°, λ72.62000°. NP2:ϕs 33.32000°, δ27.41000°, λ127.12000°. Principal axes: T 5.2416, Plg63.0000°, Azm56.0000°; N -0.0138, Plg16.0000°, Azm179.0000°; P -5.2278, Plg22.0000°, Azm276.0000°;*
*GUC **25** 02:20:37.8, 33.°10S×72.°16W, h18km*
*GUC **25** 02:20:38.8±0.9, 33.°13S×72.°00W, h27km±4km, ML4.4*
*VAO **25** 02:20:46.5±2.2, 32.°94S×71.°65W, h76km±12km, mb4.6*
**ISC 25 02:20:36.5±1.3, 33.°07S±0.°03×72.°16W±0.°04, h9km±8km, n201, σ0s94/203, mb4.7/27, MS3.9/19, 13C-8D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VA01 | **Torpederas** | **0.43** | **84** | | **Pb** | **02 20 46.7** | **+0.4** |
| VA01 | **Torpederas** | **0.43** | **84** | ⇓*i*P | **Pb** | **02 20 46.7** | **+0.4** |
| VA05 | **Santo Domingo** | **0.74** | **142** | | **Pg** | **02 20 51.5** | **+0.6** |
| VA05 | | | | *e*S | **Sg** | **02 21 01.2** | **+0.7** |
| VA05 | **Santo Domingo** | **0.74** | **142** | *i*P | **Pg** | **02 20 51.3** | **+0.5** |
| VA05 | | | | *e*S | **Sg** | **02 21 01.2** | **+0.7** |
| VA05 | | | | IAML | | 02 21 02.4 | |

comp=E,28μm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT02 | **Curacav** | **0.88** | **103** | | **Pg** | **02 20 53.6** | **+0.2** |
| MT02 | **Curacav** | **0.88** | **103** | ⇓*i*P | **Pg** | **02 20 53.6** | **+0.2** |
| MT02 | | | | *e*S | **Sg** | **02 21 04.5** | **-0.3** |
| VA06 | **Catapilco** | **0.88** | **55** | Pg | **Pb** | **02 20 54.5** | **+0.5** |
| VA06 | | | | Sg | **Sb** | **02 21 06.3** | **+0.5** |
| VA06 | **Catapilco** | **0.88** | **55** | ⇓*i*P | **Pb** | **02 20 54.5** | **+0.5** |
| VA06 | | | | *e*S | **Sb** | **02 21 06.8** | **+0.9** |
| VA06 | | | | IAML | | 02 21 12.3 | |

comp=N,30μm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ROCH | **El Roble** | **0.97** | **85** | ⇓*i*P | **Pg** | **02 20 55.5** | **+0.4** |
| ROCH | | | | *e*S | **Sg** | **02 21 07.6** | **-0.1** |
| MT01 | **Popeta** | **1.10** | **137** | | **Pb** | **02 20 57.0** | **-0.6** |
| MT01 | | | | | **Sb** | **02 21 10.8** | **-1.2** |
| MT01 | **Popeta** | **1.10** | **137** | ⇓*i*P | **Pb** | **02 20 57.0** | **-0.6** |
| MT01 | | | | *e*S | **Sb** | **02 21 10.7** | **-1.4** |
| MT01 | | | | IAML | | 02 21 12.8 | |

comp=E,13μm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT09 | **Talagante** | **1.21** | **126** | | **Pn** | **02 20 59.0** | **-0.7** |
| MT09 | **Talagante** | **1.21** | **126** | ⇓*i*P | **Pn** | **02 20 58.9** | **-0.7** |
| MT09 | | | | *e*S | **Sb** | **02 21 14.1** | **-1.2** |
| MT09 | | | | IAML | | 02 21 16.9 | |

comp=N,21μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT05 | **Renca** | **1.23** | **106** | | **Pg** | **02 21 01.1** | **+1.0** |
| MT05 | **Renca** | **1.23** | **106** | *e*P | **Pg** | **02 21 01.1** | **+1.0** |
| MT05 | | | | *e*S | **Sn** | **02 21 17.2** | **+0.5** |
| MT05 | | | | IAML | | 02 21 23.0 | |

comp=E,12μm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PEL | **Peldehue** | **1.24** | **94** | Pn | **Pn** | **02 21 00.1** | **+0.1** |
| PEL | **Peldehue** | **1.24** | **94** | *i*P | **Pn** | **02 20 59.8** | **-0.2** |
| PEL | | | | *e*S | **Sb** | **02 21 15.6** | **-0.5** |
| PEL | | | | IAML | | 02 21 22.7 | |

comp=N,14μm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT10 | **Hacienda Santa** | **1.37** | **99** | ⇓*i*P | **Pn** | **02 21 02.2** | **+0.3** |
| MT10 | | | | *e*S | **Sb** | **02 21 20.2** | **+0.1** |
| VA03 | **San Esteban** | **1.38** | **78** | *e*P | **Pn** | **02 21 02.2** | **+0.2** |
| VA03 | **San Esteban** | **1.38** | **78** | *e*P | **Pn** | **02 21 02.1** | **0.0** |
| VA03 | | | | *e*S | **Sn** | **02 21 20.6** | **+0.1** |
| VA03 | | | | IAML | | 02 21 24.0 | |

comp=N,12μm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT14 | **Cerro Cal¡n** | **1.40** | **104** | *e*P | **Pn** | **02 21 02.2** | **0.0** |
| MT14 | | | | *e*S | **Sn** | **02 21 20.3** | **-0.5** |
| MT16 | **CCHEN** | **1.42** | **105** | | **Pn** | **02 21 02.6** | **+0.1** |
| MT16 | **CCHEN** | **1.42** | **105** | *e*P | **Pn** | **02 21 02.5** | **+0.1** |
| MT16 | | | | *e*S | **Sn** | **02 21 20.5** | **-0.7** |
| CO04 | **Los Peladeros** | **1.43** | **45** | ⇑*i*P | **Pn** | **02 21 02.7** | **-0.1** |
| CO04 | | | | *i*S | **Sn** | **02 21 21.6** | **-0.3** |
| CO04 | | | | IAML | | 02 21 26.9 | |

comp=E,7μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BO03 | **Pichilemu** | **1.44** | **174** | *e*P | **Pn** | **02 21 02.1** | **-0.5** |
| MT03 | **Universidad Ad** | **1.44** | **108** | | **Pn** | **02 21 03.0** | **+0.1** |
| MT03 | **Universidad Ad** | **1.44** | **108** | *i*P | **Pn** | **02 21 02.9** | **+0.1** |
| MT03 | | | | *e*S | **Sn** | **02 21 21.8** | **-0.2** |
| MT03 | | | | IAML | | 02 21 28.8 | |

comp=N,21μm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT15 | **Las Vizcachas** | **1.48** | **111** | *e*P | **Pn** | **02 21 03.2** | **-0.1** |
| MT15 | | | | *e*S | **Sn** | **02 21 23.4** | **+0.6** |
| MT15 | | | | IAML | | 02 21 28.2 | |

comp=E,10μm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT12 | **Pirque** | **1.50** | **117** | *i*P | **Pn** | **02 21 03.5** | **-0.1** |
| MT12 | | | | *e*S | **Sb** | **02 21 24.4** | **+0.7** |
| MT12 | | | | IAML | | 02 21 30.5 | |

comp=N,16μm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BO04 | **La Punta** | **1.59** | **126** | | **Pn** | **02 21 04.9** | **+0.1** |
| BO04 | **La Punta** | **1.59** | **126** | ⇑*i*P | **Pn** | **02 21 04.8** | **0.0** |
| BO04 | | | | *e*S | **Sn** | **02 21 25.0** | **-0.4** |
| BO04 | | | | IAML | | 02 21 34.0 | |

comp=N,6μm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FCH | **Farellones** | **1.59** | **100** | ⇓*i*P | **Pn** | **02 21 05.6** | **+0.5** |
| FCH | | | | *e*S | **Sn** | **02 21 25.9** | **+0.1** |
| FCH | | | | IAML | | 02 21 29.6 | |

comp=N,6μm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BO01 | **Tunca** | **1.59** | **146** | Pn | **Pn** | **02 21 03.8** | **-1.0** |
| BO01 | **Tunca** | **1.59** | **146** | *i*P | **Pn** | **02 21 04.3** | **-0.6** |
| BO01 | | | | *e*S | **Sn** | **02 21 24.8** | **-0.8** |
| MT13 | **San Alfonso** | **1.70** | **114** | | **Pn** | **02 21 07.4** | **+0.9** |
| MT13 | **San Alfonso** | **1.70** | **114** | *e*P | **Pn** | **02 21 07.0** | **+0.5** |
| MT13 | | | | IAML | | 02 21 34.5 | |

comp=E,9μm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT04 | **Ro Olivares** | **1.73** | **102** | ⇑*i*P | **Pn** | **02 21 07.6** | **+0.7** |
| LMEL | **Las Melosas** | **1.81** | **116** | | **Pn** | **02 21 08.9** | **+1.0** |
| LMEL | **Las Melosas** | **1.81** | **116** | ⇑*i*P | **Pn** | **02 21 08.9** | **+1.0** |
| LMEL | | | | IAML | | 02 21 36.3 | |

comp=N,7μm,0.3s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MT08 | **Bocatoma Ro** | **1.83** | **102** | | **Pn** | **02 21 09.7** | **+1.4** |
| MT08 | **Bocatoma Ro** | **1.83** | **102** | ⇑*i*P | **Pn** | **02 21 09.4** | **+1.0** |
| MT08 | | | | IAML | | 02 21 38.0 | |

comp=E,6μm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GO05 | **Huala** | **1.95** | **175** | Pn | **Pn** | **02 21 09.5** | **-0.2** |
| GO05 | **Huala** | **1.95** | **175** | *e*P | **Pn** | **02 21 09.3** | **-0.4** |
| BO02 | **Sierra Bellavi** | **2.07** | **147** | | **Pn** | **02 21 12.2** | **+0.7** |
| BO02 | **Sierra Bellavi** | **2.07** | **147** | ⇑*i*P | **Pn** | **02 21 11.8** | **+0.3** |
| BO02 | | | | IAML | | 02 21 44.2 | |

comp=E,5μm,0.4s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CO02 | **Combarbal** | **2.10** | **28** | Pn | **Pn** | **02 21 12.7** | **+0.8** |
| CO02 | **Combarbal** | **2.10** | **28** | ⇑*i*P | **Pn** | **02 21 12.5** | **+0.6** |
| CO06 | **Fray Jorge** | **2.43** | **11** | | **Pn** | **02 21 16.3** | **0.0** |
| CO06 | **Fray Jorge** | **2.43** | **11** | *i*P | **Pn** | **02 21 16.1** | **-0.2** |
| CO06 | | | | IAML | | 02 21 58.7 | |

comp=N,2μm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CO03 | **El Pedregal** | **2.55** | **30** | | **Pn** | **02 21 19.1** | **+1.1** |
| CO03 | **El Pedregal** | **2.55** | **30** | *e*P | **Pn** | **02 21 18.8** | **+0.7** |
| CO03 | | | | IAML | | 02 22 01.4 | |

comp=E,3μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GO04 | **Tololo Observa** | **3.11** | **22** | | **Pn** | **02 21 26.6** | **+0.6** |
| GO04 | **Tololo Observa** | **3.11** | **22** | *i*P | **Pn** | **02 21 26.2** | **+0.3** |
| CO05 | **La Serena** | **3.23** | **14** | | **Pn** | **02 21 27.6** | **+0.2** |
| CO05 | **La Serena** | **3.23** | **14** | *e*P | **Pn** | **02 21 27.7** | **+0.2** |
| CO05 | | | | IAML | | 02 22 25.2 | |

comp=E,2μm,0.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ZON | **Zonda** | **3.31** | **64** | Pn | **Pn** | **02 21 29.7** | **+1.1** |
| CO01 | **Juntas del Tor** | **3.55** | **30** | | **Pn** | **02 21 32.9** | **+0.9** |
| CO01 | **Juntas del Tor** | **3.55** | **30** | *e*P | **Pn** | **02 21 33.4** | **+1.4** |
| CO01 | | | | IAML | | 02 22 31.2 | |

comp=N,529nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BI02 | **San Fabin de** | **3.66** | **169** | Pn | **Pn** | **02 21 33.7** | **+0.3** |
| BI02 | **San Fabin de** | **3.66** | **169** | *e*P | **Pn** | **02 21 33.9** | **+0.6** |
| BI02 | | | | IAML | | 02 22 40.3 | |

comp=N,546nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BI05 | **Punta Hualpn** | **3.77** | **193** | Pn | **Pn** | **02 21 34.1** | **-0.7** |
| BI05 | **Punta Hualpn** | **3.77** | **193** | *e*P | **Pn** | **02 21 33.5** | **-1.2** |
| LCO | **Las Campanas** | **4.23** | **18** | | **Pn** | **02 21 41.8** | **+0.4** |
| LCO | **Las Campanas** | **4.23** | **18** | *i*P | **Pn** | **02 21 41.5** | **+0.1** |
| AC05 | **El Transito** | **4.52** | **21** | Pn | **Pn** | **02 21 46.3** | **+1.1** |
| AC05 | **El Transito** | **4.52** | **21** | ⇑*i*P | **Pn** | **02 21 46.1** | **+0.9** |
| AC04 | **Llanos de Chal** | **4.94** | **11** | Pn | **Pn** | **02 21 50.3** | **-0.5** |
| VA04 | **Juan Fernndez** | **5.61** | **262** | Pn | **Pn** | **02 21 59.2** | **-0.9** |
| H03N1 | **Juan Fernandez** | **5.67** | **264** | T | T | 02 28 46.3 | |

baz=88,slow=74,SNR=92

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H03N3 | **Juan Fernandez** | **5.68** | **264** | T | T | 02 28 53.3 | |

baz=88,slow=74,SNR=290

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H03N2 | **Juan Fernandez** | **5.69** | **264** | T | T | 02 28 50.0 | |

baz=88,slow=74,SNR=110

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H03S1 | **Juan Fernandez** | **5.69** | **260** | Pn | **Pn** | **02 22 01.4** | **+0.5** |

baz=52,slow=17

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H03S1 | | | | Sn | Sn | 02 22 57.9 | -8.4 |
| H03S1 | | | | T | T | 02 28 19.1 | |

baz=84,slow=75,SNR=944

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H03S3 | **Juan Fernandez** | **5.70** | **261** | Pn | **Pn** | **02 22 01.6** | **+0.6** |

baz=52,slow=17

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H03S3 | | | | Sn | Sn | 02 22 58.3 | -8.0 |
| H03S3 | | | | T | T | 02 28 20.5 | |

baz=84,slow=75,SNR=968

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GO03 | **Copiap** | **5.70** | **17** | | **Pn** | **02 22 00.6** | **-0.9** |
| H03S2 | **Juan Fernandez** | **5.71** | **260** | Pn | **Pn** | **02 22 01.7** | **+0.5** |

baz=52,slow=17

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H03S2 | | | | Sn | Sn | 02 22 59.2 | -7.5 |
| H03S2 | | | | T | T | 02 28 15.2 | |

baz=84,slow=75,SNR=1327

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AC06 | **Mina Casimiro** | **5.90** | **16** | | **Pn** | **02 22 03.4** | **-0.7** |
| GO06 | **Curarrehue** | **6.53** | **175** | Pn | **Pn** | **02 22 12.8** | **+0.1** |
| LR03 | **Panguipulli** | **6.55** | **181** | Pn | **Pn** | **02 22 13.6** | **+0.6** |
| LR04 | **Corral** | **6.88** | **188** | Pn | **Pn** | **02 22 16.1** | **-1.3** |
| LR05 | **Currie** | **7.15** | **179** | Pn | **Pn** | **02 22 20.9** | **-0.2** |
| PLCA | **Paso Flores** | **7.76** | **171** | Pn | **Pn** | **02 22 29.7** | **0.0** |
| PLCA | **Paso Flores** | **7.76** | **171** | Pn | **Pn** | **02 22 30.1** | **+0.4** |

comp=N,1.3nm,0.3s,baz=330,slow=10,SNR=19

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PLCA | | | | Sn | **Sn** | **02 24 02.5** | **+4.9** |

comp=N,0.2nm,0.3s,baz=62,slow=17,SNR=2.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PLCA | | | | Lg | Lg | 02 24 35.0 | |

comp=N,0.4nm,0.3s,baz=273,slow=23,SNR=1.1
comp=N,4.6nm,0.6s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LL04 | **Puerto Octay** | **7.83** | **181** | Pn | **Pn** | **02 22 30.5** | **-0.1** |
| GO02 | **Mina Guanaco** | **8.19** | **17** | Pn | **Pn** | **02 22 33.8** | **-2.0** |
| LL05 | **Los Muermos** | **8.39** | **187** | Pn | **Pn** | **02 22 36.5** | **-1.7** |
| TRQA | **Tornquist** | **9.67** | **124** | Pn | **Pn** | **02 22 55.9** | **+0.2** |
| LVC | **Limon Verde** | **10.80** | **16** | Pn | **Pn** | **02 23 08.2** | **-3.5** |

comp=N,0.4nm,0.3s,baz=130,slow=8.7,SNR=1.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LVC | | | | LR | LR | 02 27 22.1 | |

comp=N,421nm,20.0s,baz=208,slow=38

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ITQB | **Itaqui** | **13.70** | **80** | Pn | **Pn** | **02 23 50.2** | **-0.7** |
| ITQB | **Itaqui** | **13.70** | **80** | *e*P | **Pn** | **02 23 51.7** | **+0.8** |
| CPUP | **Villa Florida** | **14.52** | **66** | | **Pn** | **02 24 01.0** | **-1.2** |
| CPUP | **Villa Florida** | **14.52** | **66** | Pn | **Pn** | **02 24 00.7** | **-1.5** |

comp=N,0.1nm,0.3s,baz=231,slow=17,SNR=3.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CPUP | | | | Sn | **Sn** | **02 26 42.5** | **-0.9** |

comp=N,0.1nm,0.3s,baz=179,slow=18,SNR=1.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CPUP | | | | LR | LR | 02 29 51.4 | |

comp=N,382nm,21.7s,baz=246,slow=39
comp=N,3.5nm,0.9s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FDPY | **Filadelfia** | **15.24** | **48** | *e*P | **Pn** | **02 24 13.0** | **+1.1** |
| PB18 | **Visviri** | **15.60** | **10** | Pn | **Pn** | **02 24 17.4** | **+0.3** |
| PLTB | **Pedras Altas** | **15.73** | **90** | Pn | **Pn** | **02 24 18.4** | **+0.1** |
| CRSM | **Crissiumal (Br** | **16.60** | **75** | *e*P | **Pn** | **02 24 29.4** | **0.0** |
| LPAZ | **La Paz** | **17.10** | **13** | | **Pn** | **02 24 36.6** | **+0.2** |
| LPAZ | **La Paz** | **17.10** | **13** | Pn | **Pn** | **02 24 37.1** | **+0.7** |

comp=N,0.4nm,0.3s,baz=192,slow=8.4,SNR=14
comp=N,4.9nm,0.7s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LPAZ | **La Paz** | **17.10** | **13** | *e*P | **Pn** | **02 24 37.4** | **+1.0** |
| ITAB | **Concordia** | **18.26** | **77** | | **Pn** | **02 24 48.5** | **-1.6** |
| BBSD | **Serra de San D** | **18.93** | **36** | *e*P | **P** | **02 24 56.2** | **-1.5** |
| AQDB | **Aquidauana** | **19.29** | **54** | P | **P** | **02 25 01.1** | **-0.5** |
| AQDB | **Aquidauana** | **19.29** | **54** | *e*P | **Pn** | **02 25 02.7** | **+0.1** |
| SIV | **San Ignacio** | **19.74** | **33** | P | **P** | **02 25 05.3** | **-1.4** |

baz=217,slow=11,SNR=28

| | | | | | | | |
|---|---|---|---

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TXAR | | | | LR | LR | 02 57 49.9 | |
| | comp=Z,52nm,18.6s,baz=78,slow=32 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **PPT2** | **Papeete2** | **70.27** | **261** | *e*LR | LR | 02 53 06.3 | |
| | comp=Z,64nm,24.2s | | | | | | |
| **PPT** | **Papeete** | **70.28** | **262** | LR | LR | 02 56 15.4 | |
| | comp=Z,68nm,18.9s,baz=14,slow=30 | | | | | | |
| **MNHN** | **Monahans** | **70.29** | **332** | P | **P** | **02 31 50.0** | **-0.2** |
| MNHN | | | | IAmb | IAmb | 02 31 54.2 | |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **WVT** | **Waverly** | **70.38** | **347** | P | **P** | **02 31 50.8** | **+0.2** |
| **CCM** | **Cathedral Cave** | **72.96** | **344** | P | **P** | **02 32 05.5** | **-0.6** |
| CCM | | | | IAmb | IAmb | 02 32 09.5 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **73.42** | **344** | P | **P** | **02 32 08.8** | **0.0** |
| R40A | | | | IAmb | IAmb | 02 32 19.7 | |
| | comp=Z,8.9nm,1.0s | | | | | | |
| **MAW** | **Mawson** | **74.10** | **164** | P | **P** | **02 32 13.2** | **+0.7** |
| | comp=Z,3.9nm,0.9s,baz=222,slow=6.5,SNR=13 | | | | | | |
| MAW | | | | LR | LR | 03 06 58.0 | |
| | comp=Z,79nm,19.1s,baz=232,slow=38 | | | | | | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **74.92** | **331** | LR | LR | 03 01 18.8 | |
| | comp=Z,65nm,18.3s,baz=246,slow=33 | | | | | | |
| **DBIC** | **Dimbokro** | **74.98** | **72** | P | **P** | **02 32 17.9** | **-0.5** |
| **DBIC** | **Dimbokro** | **74.98** | **72** | P | **P** | **02 32 18.1** | **-0.4** |
| | comp=Z,10nm,0.9s,baz=218,slow=6.3,SNR=8.0 | | | | | | |
| DBIC | | | | LR | LR | 03 05 32.0 | |
| | comp=Z,50nm,18.0s,baz=218,slow=36 | | | | | | |
| | comp=Z,10nm,0.9s | | | | | | |
| **SUR** | **Sutherland** | **75.37** | **119** | LR | LR | 03 01 25.5 | |
| | comp=Z,37nm,18.4s,baz=186,slow=33 | | | | | | |
| **T25A** | **Trinidad** | **76.05** | **334** | P | **P** | **02 32 24.2** | **-0.1** |
| T25A | | | | IAmb | IAmb | 02 32 36.5 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **ECSD** | **EROS Data Cent** | **79.63** | **342** | P | **P** | **02 32 44.2** | **+0.3** |
| ECSD | | | | IAmb | IAmb | 02 32 47.3 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **80.59** | **118** | P | **P** | **02 32 49.4** | **-0.4** |
| BOSA | | | | IAmb | IAmb | 02 32 50.6 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **80.59** | **118** | P | **P** | **02 32 49.6** | **-0.2** |
| | comp=Z,6.9nm,0.7s,baz=242,slow=3.8,SNR=17 | | | | | | |
| BOSA | | | | LR | LR | 03 04 17.3 | |
| | comp=Z,41nm,19.6s,baz=206,slow=33 | | | | | | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **LBTB** | **Lobatse** | **82.79** | **115** | LR | LR | 03 05 54.4 | |
| | comp=Z,55nm,18.3s,baz=182,slow=33 | | | | | | |
| **PDAR** | **Pinedale Array** | **82.89** | **333** | P | **P** | **02 33 02.5** | **+1.0** |
| | comp=Z,0.1nm,0.3s,baz=149,slow=11,SNR=1.8 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.06** | **325** | P | **P** | **02 33 04.7** | **+2.2** |
| | comp=Z,0.6nm,0.7s,baz=148,slow=5.3,SNR=6.7 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.99** | **70** | P | **P** | **02 33 07.4** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** | **83.99** | **70** | P | **P** | **02 33 07.4** | **-0.1** |
| | comp=Z,7.2nm,0.8s,baz=276,slow=4.5,SNR=40 | | | | | | |
| TORD | | | | LR | LR | 03 07 50.8 | |
| | comp=Z,66nm,21.9s,baz=160,slow=34 | | | | | | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **MDT** | **Midelt** | **91.31** | **51** | LR | LR | 03 14 01.1 | |
| | comp=Z,59nm,20.6s,baz=220,slow=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **96.00** | **46** | LR | LR | 03 16 58.7 | |
| | comp=Z,56nm,18.2s,baz=216,slow=35 | | | | | | |
| **FRB** | **Frobisher Bay** | **96.53** | **2** | LR | LR | 03 22 21.1 | |
| | comp=Z,22nm,18.8s,baz=3.0,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **118.35** | **207** | PKP | **PKiKP** | **02 39 27.6** | **+2.7** |
| | comp=Z,0.3nm,0.7s,baz=128,slow=1.1,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **121.53** | **209** | PKP | **PKPdf** | **02 39 30.6** | **-0.4** |
| | comp=Z,0.5nm,0.9s,baz=151,slow=1.6,SNR=4.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **125.68** | **270** | T | T | 04 58 50.4 | |
| | baz=118,slow=76,SNR=32 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **125.69** | **270** | T | T | 04 58 47.2 | |
| | baz=118,slow=76,SNR=35 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **125.70** | **270** | T | T | 04 58 51.4 | |
| | baz=118,slow=76,SNR=26 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **126.07** | **271** | T | T | 04 58 58.7 | |
| | baz=118 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **126.08** | **271** | T | T | 04 59 03.5 | |
| | baz=118 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **126.09** | **271** | T | T | 04 58 59.5 | |
| | baz=118 | | | | | | |
| **BVAR** | **Borovoye Array** | **146.66** | **42** | PKPbc | **PKPbc** | **02 40 18.1** | **+0.1** |
| | comp=Z,2.7nm,0.7s,baz=322,slow=2.8,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **152.25** | **42** | PKPbc | **PKPbc** | **02 40 32.2** | **+0.1** |
| | comp=Z,2.3nm,0.8s,baz=299,slow=3.0,SNR=18 | | | | | | |
| KURBB | | | | PKPab | **PKPab** | **02 40 40.6** | **-1.4** |
| | comp=Z,1.7nm,0.8s,baz=300,slow=2.9,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **153.49** | **31** | PKP | **PKPdf** | **02 40 26.9** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=305,slow=5.1,SNR=4.2 | | | | | | |
| ZALV | | | | PKPbc | **PKiKP** | **02 40 35.1** | **+0.3** |
| | comp=Z,4.1nm,0.9s,baz=298,slow=3.1,SNR=9.9 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **02 40 47.3** | **+0.2** |
| | comp=Z,3.8nm,0.7s,baz=294,slow=4.4,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **156.22** | **47** | PKPab | **PKPab** | **02 40 58.5** | **-0.6** |
| | comp=Z,1.4nm,0.6s,baz=290,slow=4.2,SNR=9.9 | | | | | | |
| **SONM** | **Songino Array** | **165.21** | **4** | PKPab | **PKPab** | **02 41 38.5** | **+0.3** |
| | comp=Z,0.4nm,0.3s,baz=38,slow=7.3,SNR=2.6 | | | | | | |

*ISN **25** 02:30:16.2±1.1, 33.°11N×46.°04E, h14km±14km, ML2.7*
*TEH **25** 02:30:19.4, 33.°17N×46.°07E, h11km±58km, ML2.5*

**ISC 25 02:30:17.3±1.0, 33.°10N±0.°05×46.°01E±0.°07, h8km±10km, n11, σ1°§14/13, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.07** | **281** | *e*Pg | **Pg** | **02 30 18.6** | **-0.6** |
| | baz=90 | | | | | | |
| IBDR | | | | *e*Sg | **Sg** | **02 30 21.6** | **+1.1** |
| **ILBA** | **Ilam Banvizeh** | **0.55** | **18** | Pg | **Pb** | **02 30 28.4** | **-0.9** |
| **GLG1** | **Gilan-e-Gharb** | **1.02** | **355** | Pg | **Pn** | **02 30 38.2** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **1.31** | **21** | Pg | **Pg** | **02 30 44.1** | **+1.5** |
| **RAFI** | **Al-Rafai** | **1.37** | **176** | *e*Pn | **Pn** | **02 30 43.0** | **+0.2** |
| RAFI | | | | *e*Sn | **Sg** | **02 31 03.0** | **+1.5** |
| RAFI | | | | AML | AML | 02 31 07.0 | |
| | comp=N,119nm,0.5s | | | | | | |
| RAFI | | | | AML | AML | 02 31 09.2 | |
| | comp=E,139nm,0.4s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **1.46** | **36** | Pg | **Pg** | **02 30 45.7** | **+0.4** |
| **IKFM** | **Kafar-mosalman** | **1.60** | **74** | Pg | **Pg** | **02 30 48.6** | **+0.7** |
| **IDHR** | **Dehrash** | **1.63** | **11** | Pg | **Pg** | **02 30 48.5** | **-0.1** |
| **IDOB** | **Doab** | **1.94** | **69** | Pn | **Pg** | **02 30 53.9** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **2.21** | **37** | Pn | **Pb** | **02 30 57.1** | **-0.6** |
| **HSAM** | **Samen** | **2.43** | **62** | Pn | **Pb** | **02 30 59.7** | **-1.8** |

**IDC 25 02:43:32.5±8.6, 21.°36S×148.°42E, h0km, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=94.4km s-min=64.5km az=175.0, Queensland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.26** | **274** | Pn | Pn | 02 46 43.2 | +1.1 |
| | baz=94,slow=12,SNR=1.6 | | | | | | |
| WRA | | | | Sn | Sn | 02 49 06.8 | -3.6 |
| | baz=99,slow=23,SNR=2.2 | | | | | | |
| WRA | | | | Lg | Lg | 02 50 35.8 | |
| | 0.1nm,0.3s,baz=98,slow=29,SNR=5.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **I07AU** | **WARRAMUNGA INF** | **13.27** | **274** | I | I | 04 11 10.0 | |
| | 0.1nm,0.8s,baz=102,slow=317,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **13.61** | **258** | Pn | Pn | 02 46 46.4 | -0.6 |
| | 0.1nm,0.3s,baz=88,slow=14,SNR=4.7 | | | | | | |
| ASAR | | | | Sn | Sn | 02 49 15.5 | -3.5 |
| | baz=86,slow=23 | | | | | | |
| ASAR | | | | Lg | Lg | 02 50 40.6 | |
| | baz=78,slow=28 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**TRN 25 02:53:50.6, 16.°83N×61.°13W, h23km, MD3.6, East of Antigua., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANBD** | **Bethesda, Anti** | **0.65** | **289** | *e*P | Pn | 02 54 04.9 | +0.6 |
| ANBD | | | | *e*S | Sn | 02 54 14.2 | +0.3 |
| **MBWH** | | **1.02** | **265** | *e*P | Pb | 02 54 11.5 | +1.8 |
| MBWH | | | | *e*S | Sn | 02 54 25.9 | +2.6 |
| **ANWB** | **Willy Bob** | **1.04** | **323** | *e*P | Pb | 02 54 10.9 | +1.0 |
| ANWB | | | | *e*S | Sn | 02 54 26.4 | +2.8 |
| **MBFL** | **Flemmings, Mon** | **1.04** | **265** | *e*P | Pb | 02 54 11.8 | +1.8 |
| MBFL | | | | *e*S | Sn | 02 54 27.0 | +3.3 |
| **TBG** | **Guadaloupe-3** | **1.09** | **207** | *e*P | Pb | 02 54 13.1 | +2.2 |
| TBG | | | | *e*S | Sn | 02 54 29.1 | +4.1 |
| **SKOC** | **St. Kitts, UWI** | **1.60** | **287** | *e*P | Pb | 02 54 19.6 | +0.1 |
| SKOC | | | | *e*S | Sb | 02 54 40.4 | +1.1 |
| **SKI** | **Saint Kitts** | **1.62** | **288** | *e*P | Pb | 02 54 20.0 | +0.2 |
| SKI | | | | *e*S | Sb | 02 54 41.4 | +1.6 |
| **SVN** | **Savane Anatole** | **1.98** | **181** | *e*S | Sn | 02 54 40.5 | -6.5 |
| **BIM** | **Bigot** | **2.31** | **179** | *e*P | Pb | 02 54 30.0 | -1.6 |
| BIM | | | | *e*S | Sb | 02 54 57.6 | -2.0 |
| **SLBI** | **Saint Lucia, B** | **2.80** | **177** | *e*S | Sb | 02 55 11.2 | -2.6 |
| **SLAC** | **Saint Lucia, A** | **2.93** | **176** | *e*S | Sn | 02 55 13.8 | +3.5 |

*IDC **25** 03:18:31.9±0.6, 44.°87N×81.°03E, h0km, mb3.8/16, mbtmp3.9/24, ML3.8/7, MS3.4/9, Error ellipse: s-maj=10.6km s-min=8.9km az=105.0*
*MOS **25** 03:18:33.7±1.2, 45.°01N×80.°88E, h13km, mb4.4/4, Error ellipse: s-maj=8.8km s-min=5.8km az=56.3*
*NNC **25** 03:18:34.6±0.7, 44.°98N×80.°79E, h2km±4km, mb5.0, mpv4.8, Error ellipse: s-maj=6.6km s-min=2.4km az=122.0*
*BJI **25** 03:18:35.7±0.0, 44.°99N×80.°88E, h23km, mb4.5/11, mB4.5/3, ML4.4/11, Ms4.0/3*
*SOME **25** 03:18:36.9, 44.°95N×80.°73E, h20km, MS3.7*
*NEIC **25** 03:18:38.7±2.1, 44.°97N±0.°07×80.°8E±0.°1, h51km±9km, mb4.0/11, Error ellipse: s-maj=12.8km s-min=8.5km az=124.0*

**ISC 25 03:18:32.8±1.1, 44.°94N±0.°03×80.°98E±0.°03, h4km±7km, n176, σ1°§78/208, mb4.2/32, MS3.3/9, 20C-11D, Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DJR** | **Jarkent** | **1.04** | **235** | *e*P | **Pb** | **03 18 54.4** | **+0.8** |
| | 3μm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **03 19 07.0** | **+0.7** |
| | 5μm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **1.04** | **235** | P | **Pb** | **03 18 54.4** | **+0.8** |
| | 3μm,0.3s | | | | | | |
| DJR | | | | S | **Sg** | **03 19 07.3** | **+1.0** |
| | 5μm,0.4s | | | | | | |
| **KNOS** | **Konyrlen** | **1.41** | **246** | P | **Pn** | **03 19 00.1** | **+0.6** |
| | 2μm,0.4s | | | | | | |
| KNOS | | | | S | **Sn** | **03 19 16.9** | **-1.7** |
| | 2μm,0.4s | | | | | | |
| **TDK** | **Taldyqorghan** | **1.83** | **273** | *e*P | **Pb** | **03 19 07.2** | **+0.3** |
| | 8μm,0.5s | | | | | | |
| TDK | | | | *e*S | **Sn** | **03 19 29.1** | **+0.4** |
| | 8μm,0.3s | | | | | | |
| **TDK** | **Taldyqorghan** | **1.83** | **273** | P | **Pb** | **03 19 07.2** | **+0.3** |
| | 8μm,0.5s | | | | | | |
| TDK | | | | S | **Sn** | **03 19 28.9** | **+0.1** |
| | 13μm,0.5s | | | | | | |
| **PDGK** | **Podgornoye** | **1.93** | **214** | ⇓P | **Pb** | **03 19 08.7** | **0.0** |
| | 716nm,0.5s | | | | | | |
| PDGK | | | | ⇓S | **Sn** | **03 19 32.5** | **+1.1** |
| | 4μm,0.9s | | | | | | |
| **PDGK** | **Podgornoye** | **1.93** | **214** | PN | **Pb** | **03 19 08.7** | **0.0** |
| PDGK | | | | S | **Sn** | **03 19 32.5** | **+1.1** |
| **BLB** | **Baldybastay** | **1.98** | **246** | P | **Pb** | **03 19 10.1** | **+0.6** |
| BLB | | | | S | **Sn** | **03 19 34.3** | **+1.7** |
| **MAKZ** | **Makanchi** | **2.00** | **20** | | **Pb** | **03 19 09.9** | **+0.1** |
| MAKZ | | | | Sn | **Sb** | **03 19 34.9** | **-0.2** |
| **MAKZ** | **Makanchi** | **2.00** | **20** | ⇓Pn | **Pb** | **03 19 10.1** | **+0.3** |
| | 165nm,0.6s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sb** | **03 19 35.6** | **+0.6** |
| | 556nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **2.00** | **20** | PN | **Pg** | **03 19 10.7** | **-0.4** |
| MAKZ | | | | S | **Sb** | **03 19 35.6** | **+0.6** |
| **MK31** | **Makanchi Array** | **2.07** | **26** | Pn | **Pb** | **03 19 11.7** | **+0.6** |
| **MK31** | **Makanchi Array** | **2.07** | **26** | Pn | **Pb** | **03 19 11.6** | **+0.6** |
| | 58nm,0.2s,baz=205,slow=12,SNR=8133 | | | | | | |
| MK31 | | | | ⇑Sn | **Sg** | **03 19 37.9** | **-1.5** |
| | 498nm,0.4s,baz=214,slow=33,SNR=5.7 | | | | | | |
| **MK31** | **Makanchi Array** | **2.07** | **26** | PN | **Pb** | **03 19 11.6** | **+0.6** |
| MK31 | | | | S | **Sg** | **03 19 37.9** | **-1.5** |
| **MKAR** | **Makanchi Array** | **2.07** | **26** | Pn | **Pb** | **03 19 11.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **2.07** | **26** | Pn | **Pb** | **03 19 11.7** | **+0.7** |
| | 207nm,0.3s,baz=199,slow=14,SNR=6190 | | | | | | |
| MKAR | | | | Lg | Lg | 03 19 38.1 | |
| | 587nm,0.3s,baz=210,slow=26,SNR=34 | | | | | | |
| | 694nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.09** | **212** | *e*P | **Pn** | **03 19 10.7** | **+1.9** |
| | 546nm,0.2s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **03 19 35.1** | **-0.2** |
| | 11μm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **2.09** | **212** | P | **Pn** | **03 19 09.6** | **+0.8** |
| | 504nm,0.3s | | | | | | |
| SHLS | | | | S | **Sn** | **03 19 34.3** | **-1.0** |
| | 11μm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **2.09** | **212** | *e*PN | **Pn** | **03 19 09.5** | **+0.7** |
| **KPKS** | **Kokpek** | **2.21** | **229** | *e*P | **Pb** | **03 19 13.9** | **+0.5** |
| | 492nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sn** | **03 19 40.4** | **+2.2** |
| | 13μm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **2.21** | **229** | Pg | **Pb** | **03 19 13.9** | **+0.5** |
| KPKS | | | | Lg | Lg | 03 19 40.3 | |
| **KPKS** | **Kokpek** | **2.21** | **229** | *e*PN | **Pb** | **03 19 14.0** | **+0.5** |
| **UZB** | **Uzunbulak** | **2.28** | **219** | *e*P | **Pb** | **03 19 16.2** | **+1.5** |
| | 104nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sb** | **03 19 44.1** | **+0.9** |
| | 4μm,0.4s | | | | | | |
| **UZB** | **Uzunbulak** | **2.28** | **219** | Pg | **Pb** | **03 19 14.7** | **+0.1** |
| | 95nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 03 19 42.1 | |
| | 4μm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **2.37** | **253** | *e*P | **Pb** | **03 19 16.4** | **+0.3** |
| | 563nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **03 19 44.9** | **-0.8** |
| | 2μm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **2.37** | **253** | Pg | **Pb** | **03 19 16.3** | **+0.2** |
| | 538nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 03 19 44.9 | |
| | 2μm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **2.37** | **253** | *e*PN | **Pn** | **03 19 14.6** | **+2.0** |
| **KURS** | **Kuram** | **2.49** | **235** | *e*P | **Pb** | **03 19 19.4** | **+1.3** |
| | 345nm,0.4s | | | | | | |
| KURS | | | | *e*S | **Sb** | **03 19 49.8** | **+0.7** |
| | 2μm,0.5s | | | | | | |
| **KURS** | **Kuram** | **2.49** | **235** | Pg | **Pb** | **03 19 19.4** | **+1.3** |
| | 344nm,0.3s | | | | | | |
| KURS | | | | Lg | Lg | 03 19 49.8 | |
| | 2μm,0.5s | | | | | | |
| **ZHN** | **Zhinishke** | **2.55** | **227** | *e*P | **Pb** | **03 19 20.6** | **+1.4** |
| | 117nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **03 19 51.8** | **+0.8** |
| | 6μm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **2.55** | **227** | Pg | **Pb** | **03 19 20.6** | **+1.4** |
| | 88nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 03 19 51.8 | |
| | 6μm,0.3s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.27** | **240** | *e*P | **Pb** | **03 19 32.4** | **+1.0** |
| | 253nm,0.4s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **03 20 13.0** | **+1.3** |
| | 2μm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.27** | **240** | Pg | **Pb** | **03 19 32.4** | **+1.0** |
| | 253nm,0.4s | | | | | | |
| KOTS | | | | Lg | Lg | 03 20 13.0 | |
| | 2μm,0.4s | | | | | | |
| **KTBS** | **Karatobe** | **3.32** | **250** | *e*P | **Pb** | **03 19 33.5** | **+1.2** |
| | 152nm,0.2s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **03 20 14.0** | **+0.9** |
| | 2μm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.32** | **250** | Pg | **Pb** | **03 19 33.5** | **+1.2** |
| | 142nm,0.3s | | | | | | |
| KTBS | | | | Lg | Lg | 03 20 14.0 | |
| | 2μm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.34** | **239** | *e*P | **Pb** | **03 19 34.3** | **+1.5** |
| | 229nm,0.5s | | | | | | |
| MDOK | | | | *e*S | **Sb** | **03 20 14.9** | **+1.0** |
| **MDOK** | **Medeo** | **3.34** | **239** | ⇓Pg | **Pb** | **03 19 33.0** | **+0.1** |
| | 280nm,0.5s | | | | | | |
| MDOK | | | | Pg | **Pg** | **03 19 34.0** | **-2.9** |
| | 229nm,0.5s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 03 20 14.4 | |
| | 885nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 03 20 14.9 | |
| | 807nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **3.34** | **239** | PN | **Pb** | **03 19 32.9** | **+0.1** |
| **KNDC** | **Almaty** | **3.37** | **241** | ⇑Pg | **Pb** | **03 19 34.2** | **+1.0** |
| | 456nm,0.5s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 03 20 16.5 | |
| | 984nm,0.6s | | | | | | |
| **KNDC** | **Almaty** | **3.37** | **241** | PN | **Pb** | **03 19 34.1** | **+1.0** |
| **AAA** | **Alma-Ata** | **3.40** | **241** | *e*P | **Pb** | **03 19 35.3** | **+1.6** |
| | 238nm,0.3s | | | | | | |
| AAA | | | | *e*S | **Sb** | **03 20 17.0** | **+1.5** |
| | 856nm,0.4s | | | | | | |
| **AAA** | **Alma-Ata** | **3.40** | **241** | Pg | **Pb** | **03 19 34.7** | **+1.0** |
| | 168nm,0.3s | | | | | | |
| AAA | | | | Lg | Lg | 03 20 17.0 | |
| | 858nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.48** | **238** | *e*P | **Pb** | **03 19 37.0** | **+1.9** |
| | 130nm,0.3s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **03 20 20.0** | **+2.1** |
| | 368nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.48** | **238** | Pg | **Pb** | **03 19 37.0** | **+1.9** |
| | 123nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 03 20 20.0 | |
| | 368nm,0.3s | | | | | | |
| **KUU** | **Kurty** | **3.49** | **254** | *e*P | **Pb** | **03 19 37.3** | **+2.2** |
| | 137nm,0.5s | | | | | | |
| KUU | | | | *e*S | **Sb** | **03 20 20.6** | **+2.7** |
| | 769nm,0.6s | | | | | | |
| **KUU** | **Kurty** | **3.49** | **254** | Pg | **Pb** | **03 19 37.3** | **+2.2** |
| | 137nm,0.6s | | | | | | |
| KUU | | | | Lg | Lg | 03 20 20.6 | |
| | 702nm,0.5s | | | | | | |
| **KASK** | **Kaskelen** | **3.57** | **243** | ⇓Pg | **Pb** | **03 19 38.9** | **+2.3** |
| KASK | | | | ⇑Lg | Lg | 03 20 21.6 | |
| **ZSN** | **Zaisan** | **3.69** | **46** | *e*P | **Pg** | **03 19 42.0** | **-1.5** |
| | 364nm,0.5s | | | | | | |
| ZSN | | | | *e*S | **Sg** | **03 20 29.8** | **-1.5** |
| | 1μm,0.5s | | | | | | |
| **ZSN** | **Zaisan** | **3.69** | **46** | Pg | **Pg** | **03 19 43.3** | **-0.2** |
| | 364nm,0.6s | | | | | | |
| ZSN | | | | Lg | Lg | 03 20 30.8 | |
| | 1μm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **3.75** | **243** | *e*P | **Pb** | **03 19 40.7** | **+1.1** |
| | 138nm,0.3s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **03 20 26.4** | **+1.1** |
| | 2μm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **3.75** | **243** | Pg | **Pb** | **03 19 40.7** | **+1.1** |
| | 144nm,0.3s | | | | | | |
| MTBS | | | | Lg | Lg | 03 20 26.4 | |
| | 2μm,0.4s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **3.96** | **217** | | **Pn** | **03 19 37.3** | **+2.6** |
| **TARG** | **Taragay, Kyrgy** | **3.96** | **217** | PN | **Pn** | **03 19 37.3** | **+2.6** |
| **KRBS** | **Karabastau** | **4.00** | **254** | *e*P | **Pb** | **03 19 44.8** | **+0.8** |
| | 92nm,0.6s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **03 20 33.4** | **+0.6** |
| | 194nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **4.00** | **254** | Pg | **Pb** | **03 19 44.8** | **+0.8** |
| | 92nm,0.6s | | | | | | |
| KRBS | | | | Lg | Lg | 03 20 33.4 | |
| | 124nm,0.6s | | | | | | |
| **KST** | **Kastek** | **4.08** | **244** | *e*P | **Pb** | **03 19 46.8** | **+1.3** |
| | 170nm,0.7s | | | | | | |
| KST | | | | *e*S | **Sb** | **03 20 36.8** | **+1.6** |
| | 486nm,0.6s | | | | | | |
| **KST** | **Kastek** | **4.08** | **244** | Pg | **Pb** | **03 19 46.8** | **+1.3** |
| | 172nm,0.9s | | | | | | |
| KST | | | | Lg | Lg | 03 20 36.8 | |
| | 486nm,0.9s | | | | | | |
| **DGS** | **Degeres** | **4.12** | **248** | *e*P | **Pb** | **03 19 46.6** | **+0.6** |
| | 166nm,0.6s | | | | | | |
| DGS | | | | *e*S | **Sb** | **03 20 36.8** | **+0.7** |
| | 516nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.12** | **248** | Pg | **Pb** | **03 19 46.6** | **+0.6** |
| | 170nm,0.6s | | | | | | |
| DGS | | | | Lg | Lg | 03 20 36.8 | |
| | 516nm,0.8s | | | | | | |
| **ULHL** | **Ulahol** | **4.37** | **234** | P | **Pn** | **03 19 43.1** | **+2.9** |
| | SNR=6.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.38** | **245** | P | **Pn** | **03 19 42.5** | **+2.2** |
| | SNR=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.38** | **245** | ⇑Pn | **Pn** | **03 19 41.8** | **+1.5** |
| | 18nm,0.6s | | | | | | |
| TKM2 | | | | ⇓Pg | **Pb** | **03 19 53.3** | **+2.8** |
| | 137nm,0.7s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 03 20 49.0 | |
| | 591nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.38** | **245** | PN | **Pn** | **03 19 41.8** | **+1.5** |
| TKM2 | | | | | | 03 19 53.3 | |
| **SGDS** | **Sogindy** | **4.80** | **254** | Pg | **Pb** | **03 20 00.5** | **+2.9** |
| | 93nm,0.7s | | | | | | |
| SGDS | | | | Lg | Lg | 03 21 00.1 | |
| | 287nm,0.7s | | | | | | |
| **CHMS** | **Chumysh** | **4.90** | **249** | P | **Pn** | **03 19 49.5** | **+2.2** |
| | SNR=7.7 | | | | | | |
| **CHMS** | **Chumysh** | **4.90** | **249** | ⇓Pn | **Pn** | **03 19 49.0** | **+1.6** |
| | 3.5nm,0.3s | | | | | | |
| CHMS | | | | ⇑Pg | **Pb** | **03 20 02.0** | **+2.9** |
| | 147nm,0.7s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 03 21 04.8 | |
| | 249nm,0.8s | | | | | | |
| **CHMS** | **Chumysh** | **4.90** | **249** | PN | **Pn** | **03 19 48.9** | **+1.6** |
| CHMS | | | | P | **Pb** | **03 20 02.4** | **+3.2** |
| **BTLS** | **Baital** | **4.92** | **274** | *e*P | **Pb** | **03 20 01.9** | **+2.3** |
| | 30nm,0.5s | | | | | | |
| BTLS | | | | *e*S | **Sb** | **03 21 03.0** | **+3.9** |
| | 105nm,0.5s | | | | | | |
| **BTLS** | **Baital** | **4.92** | **274** | Pg | **Pb** | **03 20 01.9** | **+2.3** |
| | 17nm,0.5s | | | | | | |
| BTLS | | | | Lg | Lg | 03 21 03.0 | |
| | 106nm,0.8s | | | | | | |
| **BTLS** | **Baital** | **4.92** | **274** | *e*PN | **Pn** | **03 19 49.5** | **+1.9** |
| **KBK** | **Karagaybulak** | **4.93** | **245** | P | **Pn** | **03 19 50.9** | **+3.1** |
| | SNR=19 | | | | | | |
| **WMQ** | **Urumqi** | **4.94** | **101** | Pn | **Pn** | **03 19 52.3** | **+4.4** |
| WMQ | | | | Sn | **Sn** | **03 20 51.4** | **+5.9** |
| WMQ | | | | smax | smax | | |
| | comp=N,490nm,0.7s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,330nm,0.7s | | | | | | |
| **USP** | **Ospenovka** | **4.96** | **253** | P | **Pn** | **03 19 50.0** | **+1.9** |
| | SNR=10 | | | | | | |
| **NRN** | **Naryn** | **5.05** | **228** | | **Pn** | **03 19 51.1** | **+1.4** |
| **NRN** | **Naryn** | **5.05** | **228** | PN | **Pn** | **03 19 51.1** | **+1.4** |
| **FRU1** | **Bishkek** | **5.06** | **247** | | **Pn** | **03 19 51.9** | **+2.4** |
| **FRU1** | **Bishkek** | **5.06** | **247** | PN | **Pn** | **03 19 51.9** | **+2.4** |
| **AAK** | **Ala-Archa** | **5.23** | **246** | Pn | **Pn** | **03 19 53.8** | **+1.9** |
| **AAK** | **Ala-Archa** | **5.23** | **246** | Pn | **Pn** | **03 19 53.9** | **+2.0** |
| | 2.0nm,0.3s,baz=139,slow=3.5,SNR=4.3 | | | | | | |
| AAK | | | | Lg | Lg | 03 21 15.8 | |
| | 16nm,0.3s,baz=307,slow=19,SNR=9.2 | | | | | | |
| | 5.4nm,0.4s | | | | | | |
|

KK31 ⇑Lg Lg 03 22 34.6
comp=Z,83nm,0.6s,baz=63,slow=27,SNR=6.8
**KK31 Karatay Array 7.77 260** P **Pn** **03 20 27.9 +1.2**
**KKAR Karatay Array 7.77 260** **Pn** **03 20 27.9 +1.3**
**KKAR Karatay Array 7.77 260** Pn **Pn** **03 20 27.8 +1.1**
**KKAR Karatay Array 7.77 260** P **Pn** **03 20 27.8 +1.1**
**BRLS Borolday 8.26 261** *e*P **Pg** **03 21 09.6 -1.4**
comp=Z,12nm,0.8s
BRLS *e*S **Sg** **03 22 58.5 +0.6**
comp=Z,64nm,0.9s
**BRLS Boroldy 8.26 261** Pg Pg 03 21 06.5 -4.4
comp=Z,12nm,0.8s
BRLS Lg Lg 03 22 53.9
comp=Z,64nm,0.9s
**BTK Batken 8.95 241** **Pn** **03 20 44.6 +1.7**
**BTK Batken 8.95 241** P **Pn** **03 20 44.6 +1.7**
**ZAA0 Zalesovo Array 9.36 14** Pn **Pn** **03 20 49.5 +1.1**
**ZAA0 Zalesovo Array 9.36 14** ⇓Pn **Pn** **03 20 49.2 +0.8**
comp=Z,4.7nm,0.7s
ZAA0 ⇑Sn **Sn** **03 22 34.4 +0.3**
comp=Z,7.6nm,0.5s
ZAA0 ⇑Lg Lg 03 23 34.6
comp=Z,23nm,1.1s
**ZALV Zalesovo Beam 9.36 14** Pn **Pn** **03 20 49.6 +1.2**
comp=Z,7.2nm,0.3s,baz=196,slow=13,SNR=122
ZALV Sn **Sn** **03 22 32.5 -1.6**
comp=Z,13nm,0.3s,baz=180,slow=22,SNR=9.6
ZALV Lg Lg 03 23 30.4
comp=Z,4.6nm,0.3s,baz=199,slow=25,SNR=5.6
ZALV LR LR 03 24 42.4
comp=Z,160nm,20.9s,baz=194,slow=39
comp=Z,36nm,0.6s
**GAR Garm 9.91 237** Pn **Pn** **03 20 55.4 -0.8**
**BVAR Borovoye Array 10.67 323** Pn **Pn** **03 21 06.5 +0.2**
comp=Z,0.2nm,0.3s,baz=151,slow=10,SNR=5.6
BVAR Lg Lg 03 24 12.1
comp=Z,0.8nm,0.3s,baz=145,slow=31,SNR=6.4
comp=Z,0.7nm,0.3s
**BRVK Borovoye 10.73 323** **Pn** **03 21 04.4 -2.9**
**BRVK Borovoye 10.73 323** ⇑Pn **Pn** **03 21 06.8 -0.5**
comp=Z,3.5nm,0.4s
BRVK ⇑Lg Lg 03 24 08.5
comp=Z,95nm,0.9s
**BRVK Borovoye 10.73 323** P **Pn** **03 21 06.8 -0.5**
**CHGR Chuyangaron 10.82 239** Pn **Pn** **03 21 08.6 -0.1**
**CHGR Chuyangaron 10.82 239** P **Pn** **03 21 08.6 -0.1**
**SIMJ Simiganj 10.91 239** Pn **Pn** **03 21 10.9 +1.0**
**NIL Nilore 12.75 211** Pn **Pn** **03 21 35.2 +0.2**
**GOMU GeErMu 13.65 125** P **Pn** **03 21 48.0 +0.5**
**AB31 Akbulak array 14.95 294** P **Pn** **03 22 01.9 -3.0**
comp=Z,1.4nm,0.3s,baz=99,slow=8.3,SNR=144
**AB31 Akbulak array 14.95 294** P **Pn** **03 22 01.9 -3.0**
**ABKAR Akbulak array 14.95 294** **Pn** **03 22 01.5 -3.4**
**ABKAR Akbulak array 14.95 294** **Pn** **03 22 01.6 -3.2**
**GTA Gaotai 15.01 105** P **P** **03 22 13.9 +2.5**
GTA pP Pn 03 22 18.1 +12
GTA pmax pmax
comp=Z,12nm,1.2s
**ZAK Zakamensk 15.96 62** *e*P **Pn** **03 22 19.1 +0.9**
ZAK pmax pmax
comp=Z,14nm,1.0s
**AKTO Aktyubinsk 16.38 298** Pn **Pn** **03 22 21.6 -2.0**
comp=Z,0.6nm,0.3s,baz=98,slow=9.1,SNR=22
comp=Z,4.0nm,0.7s
**SONM Songino Array 17.75 72** **P** **03 22 42.7 +1.0**
SONM IAmb IAmb 03 22 54.4
comp=Z,4.2nm,0.9s
**SONM Songino Array 17.75 72** P **Pn** **03 22 39.4 -1.4**
comp=Z,0.8nm,0.3s,baz=268,slow=12,SNR=6.4
comp=Z,2.6nm,0.8s
**SONM Songino Array 17.75 72** P **P** **03 22 42.7 +1.0**
SONM pmax pmax
comp=Z,4.0nm,0.9s
**HRA Herat 17.82 240** **Pn** **03 22 40.8 -1.1**
**ARU Arti 18.18 317** **Pn** **03 22 45.0 -0.9**
ARU IAmb IAmb 03 23 04.3
comp=Z,4.6nm,0.7s
**ARU Arti 18.18 317** P **P** **03 22 47.0 +0.7**
comp=Z,1.1nm,0.3s,baz=111,slow=8.6,SNR=1.0
ARU LR LR 03 30 05.1
comp=Z,73nm,18.5s,baz=185,slow=38
**ULN Ulaanbaatar 18.19 71** *i*P **P** **03 22 48.2 +1.6**
ULN pmax pmax
comp=Z,3.0nm,1.0s
**SHL Shillong 21.24 152** P **P** **03 23 20.3 +0.3**
SHL IAmb IAmb 03 23 38.6
comp=Z,8.4nm,0.8s
**BTO Baotou 21.70 91** *e*P **P** **03 23 24.3 -0.5**
BTO PP **PnPn** **03 23 49.0 +3.7**
BTO pmax pmax
comp=Z,14nm,0.7s
**TNCH TengChong 24.42 139** P **P** **03 23 54.6 +1.9**
TNCH sP sP 03 24 07.9 +13
TNCH S **S** **03 28 05.4 -7.7**
TNCH sS sS 03 28 25.9 +10
TNCH LR LR
comp=Z,290nm,4.5s
TNCH LR LR
comp=Z,190nm,4.0s
**PZH PanZhiHua 24.83 131** P **P** **03 23 55.4 -0.9**
PZH pmax pmax
comp=Z,20nm,0.7s
PZH pmax pmax
comp=Z,110nm,4.5s
**KBZ Khabaz 27.11 281** P **P** **03 24 17.9 +1.3**
comp=Z,0.5nm,0.5s,baz=221,slow=22,SNR=1.6
KBZ LR LR 03 37 04.6
comp=Z,65nm,18.6s,baz=353,slow=41
comp=Z,0.5nm,0.5s
**KIV Kislovodsk 27.19 282** *e*P **P** **03 24 17.5 -0.1**
KIV pmax pmax
comp=Z,6.0nm,1.1s
KIV MLR MLR
comp=Z,22nm,15.0s
**OBN Obninsk 29.81 306** *e*P **P** **03 24 41.4 +0.8**
OBN *e* 03 25 37.5
OBN *e*PPP PPP 03 25 45.0
OBN *e* 03 27 45.7
OBN pmax pmax
comp=Z,3.0nm,0.9s
OBN MLR MLR
comp=Z,29nm,16.0s
**CMAR Chiang Mai Arr 30.36 145** P **P** **03 24 45.1 -0.7**
comp=Z,1.3nm,0.3s,baz=316,slow=8.4,SNR=6.0
comp=Z,1.3nm,0.3s
**YAK Yakutsk 32.67 41** LR LR 03 39 05.2
comp=Z,104nm,18.6s,baz=254,slow=38
**VALR Valaam 33.24 318** *i*P **P** **03 25 12.1 +1.4**
VALR pmax pmax
comp=Z,58nm,1.0s
**AKASG Malin Array Be 34.63 298** P **P** **03 25 24.3 +1.4**
comp=Z,0.2nm,0.3s,baz=68,slow=8.3,SNR=2.0
comp=Z,0.2nm,0.3s
**BRTR Keskin Array B 34.99 278** P **P** **03 25 23.8 -2.5**
**BRTR Keskin Array B 34.99 278** P **P** **03 25 25.6 -0.7**
comp=Z,0.3nm,0.8s,baz=53,slow=9.1,SNR=1.9
comp=Z,0.3nm,0.8s
**TIXI Tiksi 35.06 24** LR LR 03 40 39.6
comp=Z,65nm,18.4s,baz=262,slow=38
**FINES FINESS Array B 35.55 317** P **P** **03 25 31.1 +0.4**
comp=Z,3.0nm,0.9s,baz=113,slow=11,SNR=2.6
comp=Z,3.0nm,0.9s
**KSRS Korea Array 35.69 85** P **P** **03 25 29.6 -2.6**
comp=Z,0.8nm,0.5s,baz=284,slow=8.1,SNR=2.0
comp=Z,0.8nm,0.5s
**USRK Ussuriysk Ar. 35.85 73** LR LR 03 40 17.0
comp=Z,75nm,20.7s,baz=230,slow=36
**RAYN Ar Rayn 35.88 245** P **P** **03 25 32.6 -1.4**
**RAYN Ar Rayn 35.88 245** P **P** **03 25 32.6 -1.4**
RAYN pmax pmax
comp=Z,7.0nm,1.1s
**ARCES ARCESS Array B 36.82 331** P **P** **03 25 41.9 +0.4**
comp=Z,1.1nm,0.7s,baz=93,slow=10.0,SNR=1.3
comp=Z,1.1nm,0.7s
**HFS Hagfors 41.70 316** P **P** **03 26 22.3 0.0**
comp=Z,1.0nm,0.6s,baz=88,slow=13,SNR=1.8
comp=Z,1.0nm,0.6s
**NC303 NORSAR Array S 42.63 318** P **P** **03 26 29.6 -0.4**
NC303 IAmb IAmb 03 26 44.8
comp=Z,9.4nm,0.9s
**NB2 NORSAR Subarra 42.74 318** P **P** **03 26 30.4 -0.4**
comp=Z,1.4nm,0.5s,baz=80,slow=8.6
**NOA NORSAR Array B 42.74 318** P **P** **03 26 30.5 -0.4**
comp=Z,0.4nm,0.4s,baz=77,slow=7.9,SNR=4.2
NOA LR LR 03 44 37.8
comp=Z,28nm,18.7s,baz=270,slow=37
comp=Z,0.4nm,0.4s

**MA2 Magadan 43.04 44** LR LR 03 45 13.5
comp=Z,69nm,18.6s,baz=278,slow=37
**CLL Collm 44.34 304** *i*pP pP 03 26 54.0 +8.4
comp=Z,4.0nm,0.7s
**CLL Collm 44.34 304** *e*P P 03 26 51.0 +7.1
**GERES GERESS Array B 44.79 300** P **P** **03 26 48.4 +0.8**
comp=Z,0.1nm,0.3s,baz=50,slow=6.5,SNR=2.2
comp=Z,0.1nm,0.3s
**WTTA Wattenberg 46.68 299** *i*pP pP 03 27 12.5 +8.2
comp=Z,3.3nm,0.6s
**WATA Walderalm 46.69 299** *i*pP pP 03 27 12.3 +7.9
comp=Z,3.5nm,0.8s
**SQTA Sankt Quirin 46.96 299** *i*pP pP 03 27 14.5 +8.0
comp=Z,3.6nm,0.5s
**MOTA Moosalm 46.98 299** *i*pP pP 03 27 14.4 +7.8
comp=Z,2.5nm,0.8s
**FETA Feichten 47.34 299** *i*pP pP 03 27 17.2 +7.7
comp=Z,2.8nm,0.7s
**BILL Bilibino 47.61 31** *e*P **P** **03 27 12.7 +3.3**
BILL *e* 03 28 42.5
BILL *e* 03 29 03.2
BILL *e*PPP PPP 03 29 50.2
BILL pmax pmax
comp=Z,3.0nm,1.1s
**PETK Petropavlovsk-** **48.70 51** LR LR 03 48 47.7
comp=Z,30nm,20.5s,baz=329,slow=37
**ESDC Sonseca Array 60.27 298** P **P** **03 28 42.0 -0.4**
comp=Z,0.4nm,0.9s,baz=54,slow=6.6,SNR=2.3
comp=Z,0.4nm,0.9s
**ILAR Eielson Array 64.42 21** P **P** **03 29 09.5 -0.3**
comp=Z,1.5nm,0.7s,baz=319,slow=5.3,SNR=20
comp=Z,1.5nm,0.7s
**YKA Yellowknife Ar 72.19 8** P **P** **03 29 58.1 -0.3**
comp=Z,1.7nm,0.8s,baz=345,slow=6.8,SNR=8.3
comp=Z,1.7nm,0.8s
**TORD Torodi Ar. Bea 73.28 272** P **P** **03 30 03.6 -2.0**
TORD IAmb IAmb 03 30 13.6
comp=Z,1.3nm,0.8s
**TORD Torodi Ar. Bea 73.28 272** P **P** **03 30 04.6 -1.1**
comp=Z,0.6nm,0.5s,baz=42,slow=5.6,SNR=11
comp=Z,0.6nm,0.5s
**WB0 Warramunga Arr 80.67 130** P **P** **03 30 46.2 -0.9**
WB0 IAmb IAmb 03 31 01.1
comp=Z,6.3nm,1.4s
**WRA Warramunga Arr 80.79 130** P **P** **03 30 47.4 -0.2**
**WRA Warramunga Arr 80.79 130** P **P** **03 30 47.5 -0.2**
comp=Z,0.9nm,0.7s,baz=332,slow=4.7,SNR=15
comp=Z,0.9nm,0.7s
**DBIC Dimbokro 82.39 272** P **P** **03 30 54.7 -1.7**
**DBIC Dimbokro 82.39 272** P **P** **03 30 54.7 -1.7**
DBIC pmax pmax
comp=Z,10.0nm,1.1s
**ASAR Alice Springs 83.59 133** P **P** **03 31 02.2 -0.1**
**ASAR Alice Springs 83.59 133** P **P** **03 31 01.9 -0.4**
comp=Z,0.9nm,0.7s,baz=324,slow=5.1,SNR=12
comp=Z,0.9nm,0.7s

**NEIC 25 03:19:27.7±0.6,37.34N±0.03°×97.85W±0.04,h5km±2km, mb_Lg2.3/18,ML2.6/30, Error ellipse: s-maj=5.6km s-min=4.6km az=314.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.13** | **249** | Pg | Pg | 03 19 30.9 | +0.6 |
| KAN12 | | | | Sg | Sg | 03 19 32.9 | +0.8 |
| KAN12 | | | | IAML | | 03 19 33.1 | |
| | comp=E,2μm,0.2s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.15** | **220** | Pg | Pg | 03 19 31.4 | +0.6 |
| KAN08 | | | | Sg | Sg | 03 19 33.8 | +1.0 |
| KAN08 | | | | IAML | | 03 19 34.0 | |
| | comp=N,2μm,0.3s | | | | | | |
| **KS21** | **Milan North St** | **0.16** | **111** | Pg | Pg | 03 19 31.5 | +0.6 |
| KS21 | | | | Sg | Sg | 03 19 34.0 | +1.0 |
| **KAN01** | **Argonia South** | **0.20** | **159** | Pg | Pg | 03 19 32.4 | +0.7 |
| KAN01 | | | | Sg | Sg | 03 19 35.7 | +1.4 |
| KAN01 | | | | IAML | | 03 19 38.8 | |
| | comp=N,1μm,0.4s | | | | | | |
| **KAN09** | **Caldwell North** | **0.28** | **138** | Pg | Pg | 03 19 33.6 | +0.5 |
| KAN09 | | | | IAML | | 03 19 41.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 03 19 42.1 | |
| | comp=N,710nm,0.5s | | | | | | |
| **KAN17** | **Caldwell West** | **0.31** | **167** | Pg | Pg | 03 19 34.4 | +0.7 |
| KAN17 | | | | Sg | Sg | 03 19 39.1 | +1.4 |
| KAN17 | | | | IAML | | 03 19 43.9 | |
| | comp=N,1μm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 03 19 44.4 | |
| | comp=E,734nm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.40** | **193** | Pg | Pg | 03 19 36.0 | +0.6 |
| KAN14 | | | | Sg | Sg | 03 19 41.5 | +1.0 |
| KAN14 | | | | IAML | | 03 19 49.4 | |
| | comp=N,489nm,0.5s | | | | | | |
| **KAN13** | **South Haven SW** | **0.44** | **138** | | Pg | 03 19 36.7 | +0.5 |
| KAN13 | | | | IAML | | 03 19 45.3 | |
| | comp=E,430nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 03 19 49.5 | |
| | comp=N,374nm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.49** | **181** | | Pg | 03 19 37.6 | +0.5 |
| **OK032** | **Salt Plains WL** | **0.61** | **208** | | Pg | 03 19 39.7 | +0.3 |
| OK032 | | | | IAML | | 03 19 51.6 | |
| | comp=N,212nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.84** | **187** | Pg | Pg | 03 19 43.7 | -0.2 |
| CROK | | | | IAmb_Lg | | 03 19 56.3 | |
| | comp=Z,28nm,0.9s | | | | | | |
| CROK | | | | IAML | | 03 20 05.1 | |
| | comp=E,206nm,0.3s | | | | | | |
| **NOKA** | **Waynoka** | **1.12** | **231** | Pg | Pg | 03 19 48.7 | -0.5 |
| NOKA | | | | IAML | | 03 20 11.6 | |
| | comp=N,118nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 03 20 15.5 | |
| | comp=E,114nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.12** | **220** | Pg | Pb | 03 19 49.7 | +0.1 |
| **T35A** | **Sooner Cattle** | **1.15** | **111** | Pg | Pg | 03 19 49.5 | -0.3 |
| **OK051** | **E0350 and S346** | **1.17** | **136** | Pg | Pg | 03 19 50.0 | 0.0 |
| **QUOK** | **Quay** | **1.49** | **142** | | Pb | 03 19 55.5 | -0.3 |
| **OK029** | **Liberty Lake** | **1.58** | **168** | | Pb | 03 19 57.0 | -0.4 |
| **OK052** | **Battle Ridge R** | **1.59** | **148** | Pg | Pb | 03 19 57.1 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.61** | **149** | | Pn | 03 19 57.3 | +0.5 |
| **ELIS** | **Ellis County** | **1.79** | **225** | | Pb | 03 20 00.5 | -0.6 |
| **DEOK** | **Depew** | **1.85** | **144** | | Pn | 03 20 00.8 | +0.7 |
| **OKCSW** | **OKLAHOMA CITY** | **1.96** | **170** | Pn | Pn | 03 20 02.3 | +0.7 |
| OKCSW | | | | IAmb_Lg | | 03 20 30.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **2.01** | **29** | Pn | Pn | 03 20 03.5 | +1.2 |
| KSU1 | | | | IAmb_Lg | | 03 20 31.9 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.09** | **315** | Pn | Pb | 03 20 05.0 | -1.2 |
| **FNO** | **Franklin** | **2.11** | **170** | Pn | Pn | 03 20 04.9 | +1.1 |
| **TUL3** | **Leonard** | **2.19** | **130** | Pn | Pn | 03 20 06.1 | +1.4 |
| **RLO** | **Rose Lookout** | **2.56** | **117** | Pn | Pn | 03 20 11.9 | +2.1 |
| **WMOK** | **Wichita Mounta** | **2.71** | **196** | Pn | Pn | 03 20 12.3 | +0.3 |
| **X34A** | **Smith Ranch, M** | **2.74** | **180** | | Pn | 03 20 13.1 | +0.8 |
| **U38A** | **Gravette** | **2.92** | **107** | Pn | Pn | 03 20 15.8 | +1.0 |
| **SMWD** | **Samnorwood** | **2.96** | **222** | Pn | Pn | 03 20 16.2 | +0.8 |
| SMWD | | | | IAmb_Lg | | 03 21 03.6 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.31** | **107** | Pn | Pn | 03 20 21.4 | +1.2 |
| HHAR | | | | IAmb_Lg | | 03 21 17.1 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **X37A** | **Clayton** | **3.41** | **143** | IAmb_Lg | | 03 21 22.7 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.02** | **258** | Pn | Pn | 03 20 30.8 | +0.7 |
| **DKNS** | **Dickens** | **4.44** | **215** | IAmb_Lg | | 03 21 54.0 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **4.45** | **128** | Pn | Pn | 03 20 37.3 | +1.5 |
| **MGMO** | **Mountain Grove** | **4.46** | **91** | Pn | Pn | 03 20 36.9 | +1.0 |
| MGMO | | | | IAmb_Lg | | 03 21 49.9 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.52** | **76** | Pn | Pn | 03 20 37.0 | +0.3 |
| R40A | | | | IAmb_Lg | | 03 21 52.2 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.94** | **113** | Pn | Pn | 03 20 43.9 | +1.4 |
| WHAR | | | | IAmb_Lg | | 03 22 11.5 | |
| | comp=Z,7.3nm,0.8s | | | | | | |

*NEIC **25** 03:24:19.7±1.2,20.77S±0.1×177.8W±0.1,h480km±7km, mb4.3/30, Error ellipse: s-maj=20.0km s-min=16.9km az=163.0*
*IDC **25** 03:24:20.0±1.9,20.77S×177.93W,h481km±20km,mb3.5/8, mbtmp4.4/10, Error ellipse: s-maj=16.3km s-min=12.6km az=146.0*
*NOU **25** 03:24:22.9,20.99S×178.26W,h461km,mb4.4/9, Fiji*

*Islands Region*
**ISC 25 03:24:21.0±0.5,20.64S±0.08°×177.87W±0.08,h500km, n93,σ1840/100,mb4.3/29,3C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.82** | **306** | P | **P** | **03 25 45.6** | **-0.9** |
| **MSVF** | **Nonsavu** | **4.82** | **306** | P | **P** | **03 25 45.1** | **-1.4** |
| **NIUE** | **Niue** | **7.63** | **80** | P | **P** | **03 26 10.3** | **-3.4** |
| **PINNC** | **Pines Island,** | **13.80** | **259** | P | **P** | **03 27 18.1** | **-0.6** |
| **DZM** | **Mont Dzumac** | **14.69** | **262** | P | **P** | **03 27 27.1** | **-1.0** |
| **DZM** | **Mont Dzumac** | **14.69** | **262** | P | **P** | **03 27 27.3** | **-0.8** |
| | 7.7nm,0.5s,baz=310,slow=22,SNR=10 | | | | | | |
| **MXZ** | **Matakaoa Point** | **17.19** | **190** | P | **P** | **03 27 53.0** | **-0.6** |
| **MBAZ** | **Motutapu North** | **17.27** | **200** | P | **P** | **03 27 56.8** | **+2.4** |
| **ETAZ** | **East Tamaki Re** | **17.43** | **200** | P | **P** | **03 27 56.9** | **+1.0** |
| **HAZ** | **Te Kaha** | **17.47** | **192** | P | **P** | **03 27 51.5** | **-4.8** |
| HAZ | | | | S | **S** | **03 30 51.4** | **-0.9** |
| **MKAZ** | **Moumakai** | **17.50** | **199** | P | **P** | **03 27 56.6** | **0.0** |
| **WTAZ** | **Waiatarua** | **17.52** | **200** | P | **P** | **03 27 58.5** | **+1.6** |
| **PKGZ** | **Pakihiroa** | **17.53** | **191** | P | **P** | **03 27 59.7** | **+2.8** |
| **AWAZ** | **Awhitu Peninsu** | **17.62** | **200** | P | **P** | **03 27 58.4** | **+0.7** |
| **RUGZ** | **Raukumara Rang** | **17.70** | **192** | P | **P** | **03 27 58.3** | **-0.3** |
| RUGZ | | | | S | **S** | **03 30 56.4** | **+0.2** |
| **TWGZ** | **Tauwhareparae** | **17.85** | **191** | P | **P** | **03 28 02.2** | **+2.4** |
| TWGZ | | | | S | **S** | **03 31 00.1** | **+1.6** |
| **TOZ** | **Tahuroa Road** | **17.98** | **197** | P | **P** | **03 28 00.6** | **-0.4** |
| **TOZ** | **Tahuroa Road** | **17.98** | **197** | P | **P** | **03 28 01.1** | **+0.1** |
| **MWZ** | **Matawai** | **18.08** | **192** | P | **P** | **03 27 57.5** | **-4.5** |
| MWZ | | | | S | **S** | **03 31 05.8** | **+3.5** |
| **URZ** | **Urewera** | **18.09** | **193** | P | **P** | **03 28 01.1** | **-0.9** |
| **URZ** | **Urewera** | **18.09** | **193** | P | **P** | **03 28 00.9** | **-1.1** |
| | 5.9nm,0.3s,baz=337,slow=3.2,SNR=20 | | | | | | |
| URZ | | | | S | **S** | **03 31 00.3** | **-2.0** |
| | 5.8nm,0.6s,baz=208,slow=23,SNR=6.3 | | | | | | |
| **URZ** | **Urewera** | **18.09** | **193** | P | **P** | **03 27 57.6** | **-4.4** |
| URZ | | | | S | **S** | **03 31 01.5** | **-0.9** |
| **ANWZ** | **Angora Road** | **20.34** | **192** | P | **P** | **03 28 22.8** | **+0.2** |
| **POWZ** | **Post Office Ro** | **20.43** | **194** | P | **P** | **03 28 23.5** | **+0.2** |
| **PRWZ** | **Pori Road** | **20.54** | **193** | P | **P** | **03 28 26.5** | **+2.1** |
| **BFZ** | **Birch Farm** | **20.60** | **193** | P | **P** | **03 28 23.8** | **-1.1** |
| **HOWZ** | **Holdsworth Sta** | **20.97** | **194** | P | **P** | **03 28 28.7** | **+0.5** |
| **OGWZ** | **Otaki Gorge** | **20.97** | **195** | P | **P** | **03 28 28.7** | **+0.5** |
| **DUWZ** | **D'Urville Isla** | **21.28** | **197** | P | **P** | **03 28 32.5** | **+1.3** |
| **TRWZ** | **Traveller** | **21.41** | **193** | P | **P** | **03 28 31.7** | **-0.5** |
| **PAWZ** | **Paruwai Farm** | **21.45** | **194** | P | **P** | **03 28 33.2** | **+0.6** |
| **MSWZ** | **Moikau Station** | **21.52** | **194** | P | **P** | **03 28 31.7** | **-1.5** |
| **PLWZ** | **Palliser** | **21.67** | **194** | P | **P** | **03 28 34.7** | **+0.1** |
| **QRZ** | **Quartz Range** | **21.72** | **200** | P | **P** | **03 28 35.7** | **+0.6** |
| **TUWZ** | **Tuamarina** | **21.86** | **197** | P | **P** | **03 28 36.9** | **+0.7** |
| **BSWZ** | **Blackbirch Sta** | **22.15** | **197** | P | **P** | **03 28 40.7** | **+1.8** |
| **KHZ** | **Kahutara** | **22.89** | **197** | P | **P** | **03 28 45.3** | **-0.2** |
| **ODZ** | **Otahua Downs** | **26.13** | **199** | P | **P** | **03 29 14.5** | **+0.2** |
| **EIDS** | **Eidsvold** | **28.93** | **255** | P | **P** | **03 29 38.3** | **-0.9** |
| EIDS | | | | IAmb | IAmb | 03 29 40.3 | |
| | comp=Z,22nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **29.12** | **244** | P | **P** | **03 29 40.5** | **-0.4** |
| ARMA | | | | IAmb | IAmb | 03 29 42.1 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **CNB** | **Canberra Magne** | **32.25** | **236** | P | **P** | **03 30 08.1** | **+0.3** |
| **CAN** | **Canberra** | **32.54** | **236** | P | **P** | **03 30 10.2** | **0.0** |
| **CAN** | **Canberra** | **32.54** | **236** | P | **P** | **03 30 09.6** | **-0.5** |
| CAN | | | | IAmb | IAmb | 03 30 11.0 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **33.60** | **265** | P | **P** | **03 30 18.8** | **-0.6** |
| CTAO | | | | IAmb | IAmb | 03 30 41.4 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **34.34** | **244** | P | **P** | **03 30 24.9** | **-0.5** |
| **QLP** | **Quilpie** | **35.14** | **253** | P | **P** | **03 30 32.5** | **+0.4** |
| | comp=Z,20nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **35.92** | **234** | P | **P** | **03 30 38.3** | **-0.3** |
| **COEN** | **Coen** | **37.71** | **274** | P | **P** | **03 30 53.0** | **-0.6** |
| COEN | | | | IAmb | IAmb | 03 30 54.6 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **37.84** | **244** | P | **P** | **03 30 54.0** | **-0.4** |
| **STKA** | **Stephens Creek** | **37.84** | **244** | P | **P** | **03 30 54.3** | **-0.2** |
| | comp=Z,11nm,0.9s,baz=93,slow=9.2,SNR=20 | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **42.60** | **244** | P | **P** | **03 31 31.7** | **-0.9** |
| BBOO | | | | IAmb | IAmb | 03 31 32.8 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **44.61** | **257** | P | **P** | **03 31 46.8** | **-1.7** |
| AS31 | | | | IAmb | IAmb | 03 31 49.2 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.61** | **257** | P | **P** | **03 31 48.0** | **-0.5** |
| | comp=Z,8.9nm,0.5s,baz=93,slow=8.0,SNR=127 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 33 21.9** | **+1.1** |
| | comp=Z,1.3nm,0.5s,baz=100,slow=3.9,SNR=6.4 | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 36 28.7** | **+3.5** |
| | comp=Z,0.4nm,0.7s,baz=111,slow=5.1,SNR=3.1 | | | | | | |
| ASAR | | | | S | **S** | **03 37 47.6** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=93,slow=15,SNR=10 | | | | | | |
| | comp=Z,8.9nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.68** | **262** | P | **P** | **03 31 47.9** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 03 31 48.4 | |
| | comp=Z,5.2nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.70** | **262** | P | **P** | **03 31 47.7** | **-1.5** |
| **WRA** | **Warramunga Arr** | **44.70** | **262** | P | **P** | **03 31 48.0** | **-1.2** |
| | comp=Z,2.6nm,0.3s,baz=96,slow=7.7,SNR=206 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 33 22.1** | **+1.0** |
| | comp=Z,0.6nm,0.5s,baz=97,slow=3.6,SNR=3.2 | | | | | | |
| WRA | | | | S | **S** | **03 37 50.1** | **+1.0** |
| | comp=Z,0.5nm,0.9s,baz=106,slow=14,SNR=3.7 | | | | | | |
| | comp=Z,2.6nm,0.3s | | | | | | |
| **MTN** | **Manton Dam** | **49.29** | **271** | P | **P** | **03 32 22.8** | **-1.1** |
| MTN | | | | IAmb | IAmb | 03 32 23.7 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **49.35** | **247** | P | **P** | **03 32 23.6** | **-0.6** |
| **KNRA** | **Kununurra** | **50.77** | **266** | P | **P** | **03 32 33.9** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 03 32 34.9 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.13** | **262** | P | **P** | **03 32 51.6** | **-0.2** |
| **SBA** | **Scott Base** | **57.74** | **184** | P | **P** | **03 33 23.9** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **57.76** | **257** | P | **P** | **03 33 23.5** | **-0.6** |
| PSA00 | | | | IAmb | IAmb | 03 33 24.4 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **57.94** | **257** | P | **P** | **03 33 24.6** | **-0.7** |
| MBWA | | | | IAmb | IAmb | 03 33 25.6 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **58.42** | **243** | P | **P** | **03 33 27.6** | **-0.7** |
| **MORW** | **Morawa** | **59.89** | **248** | P | **P** | **03 33 37.8** | **-0.6** |
| MORW | | | | IAmb | IAmb | 03 33 38.7 | |
| | comp=Z,30nm,1.3s | | | | | | |
| **GIRL** | **Giralia** | **62.63** | **255** | P | **P** | **03 33 56.7** | **+0.3** |
| **QSPA** | **South Pole Qui** | **69.43** | **180** | P | **P** | **03 34 38.9** | **+0.6** |
| QSPA | | | | IAmb | IAmb | 03 34 44.7 | |
| | comp=Z,8.2nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.43** | **180** | P | **P** | **03 34 38.4** | **+0.2** |
| | comp=Z,2.4nm,0.7s,baz=52,slow=0.5,SNR=21 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **SMAI** | **San Martin Ant** | **78.44** | **159** | P | **P** | **03 35 29.3** | **+0.2** |
| SMAI | | | | IAmb | IAmb | 03 35 31.3 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **BELA** | **Belgrano 2** | **79.41** | **173** | P | **P** | **03 35 34.1** | **-0.1** |
| **M16K** | **Timber Creek** | **82.79** | **9** | | **P** | **03 35 52.9** | **+1.1** |
| M16K | | | | IAmb | IAmb | 03 36 20.1 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **U15A** | **North Rim** | **83.96** | **48** | P | **P** | **03 35 59.7** | **+1.2** |
| **L18K** | **Granite Mounta** | **84.28** | **10** | P | **P** | **03 35 59.9** | **+0.8** |
| **ELIB** | **Princess Elisa** | **86.52** | **186** | *d*P | **P** | **03 36 10.0** | **-0.2** |
| | comp=Z,1.5nm,0.9s | | | | | | |
| **VHRN** | **Van Horn** | **86.63** | **55** | P | **P** | **03 36 12.2** | **+0.7** |
| **TXAR** | **Lajitas Array** | **87.03** | **57** | P | **P** | **03 36 14.9** | **+1.6** |
| **TXAR** | **Lajitas Array** | **87.03** | **57** | P | **P** | **03 36 14.6** | **+1.3** |
| | comp=Z,0.5nm,0.7s,baz=215,slow=6.2,SNR=9.1 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **88.00** | **176** | ⇑P

comp=Z,1.3nm,0.3s
AKASG **Malin Array Be** **143.19 331** PKP PKPbc 03 42 55.8 +0.2
comp=Z,1.4nm,0.5s,baz=43,slow=3.9,SNR=12
AKBB **Malin Array Si** **143.19 331** PKPbc 03 42 56.0 +0.3
KIEV **Kiev** **143.20 331** PKPbc 03 42 56.0 +0.3
LODK **Lodwar** **143.40 247** PKPdf **PKPdf** **03 42 58.8 -0.4**
BR131 **Keskin Array S** **147.02 312** PKPbc **PKPbc** **03 43 07.9 +0.3**
BRTR **Keskin Array B** **147.02 312** PKPbc **PKPbc** **03 43 08.2 +0.5**
BRTR **Keskin Array B** **147.02 312** PKPbc **PKiKP** **03 43 08.4 -1.1**
comp=Z,0.6nm,0.4s,baz=27,slow=2.5,SNR=7.6
MMAI **Mount Meron Ar** **147.99 300** PKPbc **PKiKP** **03 43 11.6 0.0**
comp=Z,2.1nm,0.4s,baz=76,slow=7.0,SNR=18
GERES **GERESS Array B** **150.36 344** PKPbc **PKiKP** **03 43 16.5 +0.5**
comp=Z,0.4nm,0.5s,baz=36,slow=3.9,SNR=2.2

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*ISN **25** 03:25:57.4±1.7, 33.°11N×46.°09E, h8km±27km, ML2.6*
*TEH **25** 03:26:02.5, 33.°10N×46.°07E, h9km±49km, ML2.6*
**ISC 25 03:26:01.1±1.7, 32.°99N±0.°07×45.°98E±0.°08, h5km±15km, n11, σ0.°99/12, Iraq**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **0.13** | **341** | *e*Pg | | **Pg** | **03 26 03.7** | **0.0** |
| | baz=90 | | | | | | | |
| IBDR | | | | *e*Sg | | **Sg** | **03 26 06.0** | **+0.6** |
| **ILBA** | **Ilam Banvizeh** | **0.66** | **17** | Pg | | **Pg** | **03 26 13.2** | **-0.6** |
| **GLG1** | **Gilan-e-Gharb** | **1.12** | **357** | Pg | | **Pn** | **03 26 23.5** | **-0.1** |
| **RAFI** | **Al-Rafai** | **1.27** | **175** | *e*Pn | | Pn | 03 26 22.0 | -3.5 |
| RAFI | | | | *e*Sn | | **Sb** | **03 26 42.0** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **1.42** | **20** | Pg | | **Pg** | **03 26 28.7** | **+0.3** |
| **KCHF** | **Cheshme Sefid,** | **1.56** | **34** | Pg | | **Pg** | **03 26 31.2** | **+0.2** |
| **IKFM** | **Kafar-mosalman** | **1.65** | **71** | Pg | | **Pg** | **03 26 32.9** | **+0.1** |
| **IDHR** | **Dehrash** | **1.74** | **11** | Pg | | **Pg** | **03 26 33.6** | **-0.8** |
| **IDOB** | **Doab** | **2.00** | **66** | Pn | | **Pg** | **03 26 38.2** | **-1.4** |
| **SNQR** | **Sonqor, Kerman** | **2.31** | **36** | Pn | | **Pb** | **03 26 42.6** | **-0.9** |
| **HAGD** | **Aghdareh** | **3.20** | **54** | Pn | | **Pn** | **03 26 54.2** | **+1.9** |

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*NAO **25** 03:44:05.6±1.5, 78.°12N×7.°51E, ML3.0*
*DNK **25** 03:44:07.7±0.7, 78.°10N×7.°11E, h6km±18km, ML2.0*
*KOLA **25** 03:44:08.3, 78.°13N×8.°53E, h0km, ML2.9, Error ellipse: s-maj=15.1km s-min=9.4km az=80.0, Greenland sea,Knipovich ridge, middle*
*IDC **25** 03:44:09.3±1.1, 78.°08N×8.°02E, h0km, mb3.3/5, mbtmp3.3/6, ML2.8/1, MS3.0/21, Error ellipse: s-maj=20.6km s-min=14.2km az=178.0*
*BER **25** 03:44:09.5±3.5, 78.°07N×7.°65E, h18km±23km, mb(Pn)3.9, ML3.0(NAO), Confirmed Earthquake*
*FCIAR **25** 03:44:11.0, 78.°32N×9.°46E, h10km, station SPA0 has station magnitude of 3.10 station HOPEN has station magnitude of 6.80*
**ISC 25 03:44:06.9±1.8, 78.°05N±0.°05×8.°09E±0.°04, h1km±12km, n67, σ2.°82/73, mb3.2/5, MS3.1/16, 1C, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KBS** | **Kingsbay** | **1.17** | **39** | P | | **Pg** | **03 44 29.2** | **-0.1** |
| KBS | | | | S | | **Sg** | **03 44 42.8** | **-1.5** |
| **KBS** | **Kingsbay** | **1.17** | **39** | *i*P | | **Pg** | **03 44 29.5** | **+0.2** |
| KBS | | | | *e*S | | **Sg** | **03 44 43.0** | **-1.4** |
| KBS | | | | IAML | | | 03 44 45.4 | |
| | comp=Z,269nm,0.3s | | | | | | | |
| **KBS** | **Kingsbay** | **1.17** | **39** | Pn | | **Pg** | **03 44 29.5** | **+0.2** |
| KBS | | | | Sn | | **Sg** | **03 44 43.4** | **-1.0** |
| **KBS** | **Kingsbay** | **1.17** | **39** | *i*P | | **Pg** | **03 44 30.2** | **+1.0** |
| KBS | | | | *e*S | | **Sg** | **03 44 42.9** | **-1.5** |
| **BRBB** | **Barentsburg B** | **1.27** | **85** | P | | **Pn** | **03 44 31.5** | **-0.3** |
| BRBB | | | | S | | **Sb** | **03 44 47.6** | **-0.9** |
| **BRBB** | **Barentsburg B** | **1.27** | **85** | *e*P | | **Pn** | **03 44 32.0** | **+0.2** |
| BRBB | | | | *e*S | | **Sb** | **03 44 47.5** | **-0.9** |
| **BRBB** | **Barentsburg B** | **1.27** | **85** | Pn | | **Pn** | **03 44 32.0** | **+0.2** |
| BRBB | | | | Sn | | **Sb** | **03 44 47.6** | **-0.9** |
| **BRBA** | **Barentsburg A** | **1.27** | **87** | *e*P | | **Pn** | **03 44 32.0** | **+0.1** |
| BRBA | | | | *e*S | | **Sb** | **03 44 47.9** | **-0.6** |
| BRBA | | | | IAML | | | 03 44 52.0 | |
| | comp=Z,202nm,0.7s | | | | | | | |
| **BRBA** | **Barentsburg A** | **1.27** | **87** | Pn | | **Pn** | **03 44 32.0** | **+0.1** |
| BRBA | | | | Sn | | **Sb** | **03 44 47.9** | **-0.6** |
| **SPA0** | **Spitsbergen Ar** | **1.72** | **82** | Pn | | **Pn** | **03 44 39.4** | **+1.4** |
| | baz=248,slow=16 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **03 45 01.3** | **+0.7** |
| | baz=255,slow=16 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.72** | **82** | Pn | | **Pn** | **03 44 39.4** | **+1.4** |
| | baz=248,slow=16 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **03 45 01.3** | **+0.7** |
| | baz=255,slow=16 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.72** | **82** | *e*P | | **Pn** | **03 44 39.4** | **+1.4** |
| SPA0 | | | | *e*S | | **Sn** | **03 45 01.2** | **+0.7** |
| | comp=Z,224nm,0.2s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **1.72** | **82** | P | | **Pn** | **03 44 38.9** | **+0.9** |
| SPITS | | | | S | | **Sn** | **03 45 00.5** | **-0.1** |
| **SPITS** | **Spitsbergen Ar** | **1.72** | **82** | Pn | | **Pn** | **03 44 39.5** | **+1.4** |
| | baz=275,slow=8.4 | | | | | | | |
| SPITS | | | | Sn | | **Sn** | **03 45 01.2** | **+0.6** |
| | baz=274,slow=20 | | | | | | | |
| **HSPB** | **Hornsund (broa** | **1.93** | **120** | P | | **Pn** | **03 44 40.8** | **-0.1** |
| HSPB | | | | S | | **Sn** | **03 45 04.6** | **-1.1** |
| **HSPB** | **Hornsund (broa** | **1.93** | **120** | *e*P | | **Pn** | **03 44 40.9** | **+0.1** |
| HSPB | | | | *e*S | | **Sn** | **03 45 04.5** | **-1.1** |
| HSPB | | | | IAML | | | 03 45 05.0 | |
| | comp=Z,46nm,0.2s | | | | | | | |
| **HSPB** | **Hornsund (broa** | **1.93** | **120** | Pn | | **Pn** | **03 44 40.9** | **+0.1** |
| HSPB | | | | Sn | | **Sn** | **03 45 04.6** | **-1.1** |
| **HOPEN** | **Hopen** | **4.04** | **104** | *e*P | | **Pn** | **03 45 10.2** | **+0.4** |
| HOPEN | | | | *e*S | | **Sn** | **03 45 54.9** | **-2.7** |
| HOPEN | | | | IAML | | | 03 45 56.7 | |
| | comp=Z,28nm,0.3s | | | | | | | |
| **HOPEN** | **Hopen** | **4.04** | **104** | Pn | | **Pn** | **03 45 10.2** | **+0.4** |
| HOPEN | | | | Sn | | **Sn** | **03 45 55.0** | **-2.7** |
| **HOPEN** | **Hopen** | **4.04** | **104** | *e*P | | **Pn** | **03 45 08.5** | **-1.3** |
| HOPEN | | | | *e*S | | **Sn** | **03 45 53.9** | **-3.7** |
| | comp=Z,125μm,0.2s | | | | | | | |
| **BJO1** | **Bjornoya** | **4.41** | **139** | *e*S | | **Sn** | **03 46 02.5** | **-4.2** |
| BJO1 | | | | IAML | | | 03 46 08.8 | |
| | comp=Z,15nm,0.5s | | | | | | | |
| **NOR** | **Nord** | **5.59** | **321** | *i*P | | **Pn** | **03 45 28.0** | **-3.1** |
| NOR | | | | *i*S | | **Sn** | **03 46 27.8** | **-8.1** |
| NOR | | | | IAML | | | 03 46 37.1 | |
| | comp=Z,2.3nm,0.2s | | | | | | | |
| **NOR** | **Nord** | **5.59** | **321** | Pn | | **Pn** | **03 45 28.2** | **-2.9** |
| NOR | | | | Sn | | **Sn** | **03 46 28.9** | **-7.0** |
| **NOR** | **Nord** | **5.59** | **321** | *i*P | | **Pn** | **03 45 28.0** | **-3.1** |
| NOR | | | | *i*S | | **Sn** | **03 46 27.8** | **-8.1** |
| NOR | | | | IAML | | | 03 46 37.1 | |
| | comp=Z,2.3nm,0.2s | | | | | | | |
| **DAG** | **Danmarks Havn** | **5.95** | **271** | *i*P | | **Pn** | **03 45 32.6** | **-3.3** |
| DAG | | | | *i*S | | Sn | 03 46 34.6 | -10 |
| DAG | | | | IAML | | | 03 46 39.6 | |
| | comp=Z,9.3nm,0.5s | | | | | | | |
| **DAG** | **Danmarks Havn** | **5.95** | **271** | *i*P | | **Pn** | **03 45 32.6** | **-3.3** |
| DAG | | | | *i*S | | Sn | 03 46 34.6 | -10 |
| DAG | | | | IAML | | | 03 46 39.6 | |
| | comp=Z,9.3nm,0.5s | | | | | | | |
| **ZFI2** | **Zemlya Franca-** | **7.63** | **51** | *e*P | | **Pn** | **03 45 59.4** | **+0.5** |
| | comp=Z,11nm,0.2s | | | | | | | |
| ZFI2 | | | | *e*S | | **Sn** | **03 47 19.0** | **-6.8** |
| | comp=Z,71nm,2.7s | | | | | | | |
| **OMEGA** | **Omega** | **7.64** | **51** | *e*P | | **Pn** | **03 45 59.4** | **+0.3** |
| OMEGA | | | | *e*S | | **Sn** | **03 47 19.0** | **-7.1** |
| **DBG** | **Daneborg** | **7.67** | **255** | *i*P | | Pn | 03 45 55.7 | -3.8 |
| DBG | | | | *i*S | | Sn | 03 47 15.2 | -12 |
| DBG | | | | IAML | | | 03 47 25.4 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **DBG** | **Daneborg** | **7.67** | **255** | Pn | | Pn | 03 45 56.2 | -3.4 |
| DBG | | | | Sn | | Sn | 03 47 14.2 | -13 |
| **DBG** | **Daneborg** | **7.67** | **255** | *i*P | | Pn | 03 45 55.7 | -3.8 |
| DBG | | | | *i*S | | Sn | 03 47 15.2 | -12 |
| DBG | | | | IAML | | | 03 47 25.4 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **JMIC** | **Jan Mayen** | **8.32** | **220** | *e*P | | **Pn** | **03 46 08.4** | **-0.1** |
| **JMIC** | **Jan Mayen** | **8.32** | **220** | Pn | | **Pn** | **03 46 08.2** | **-0.3** |
| **TRO** | **Tromso** | **8.96** | **155** | Pn | | **Pn** | **03 46 17.0** | **-0.3** |
| **ARA0** | **ARCESS Array S** | **9.77** | **142** | Pn | | **Pn** | **03 46 28.1** | **-0.3** |
| | baz=330,slow=16 | | | | | | | |
| ARA0 | | | | Sn | | **Sn** | **03 48 12.8** | **-5.9** |
| | baz=343,slow=22 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.77** | **142** | Pn | | **Pn** | **03 46 28.1** | **-0.3** |
| | baz=330,slow=16 | | | | | | | |
| ARA0 | | | | Sn | | **Sn** | **03 48 12.8** | **-5.9** |
| | baz=343,slow=22 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.77** | **142** | Pn | | **Pn** | **03 46 29.6** | **+1.2** |
| | comp=Z,0.1nm,0.3s,baz=332,slow=13,SNR=6.7 | | | | | | | |
| ARCES | | | | LR | | LR | 03 50 13.1 | |
| | comp=Z,47nm,20.4s,baz=328,slow=37 | | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| **VADS** | **Vadso** | **9.78** | **133** | *e*P | | **Pn** | **03 46 29.8** | **+1.3** |
| VADS | | | | IAML | | | 03 48 10.7 | |
| | comp=Z,5.1nm,0.9s | | | | | | | |
| VADS | | | | *e*S | | **Sn** | **03 48 12.1** | **-6.6** |
| **LOF** | **Lofoten** | **10.09** | **168** | *e*P | | **Pn** | **03 46 33.0** | **+0.3** |
| **LOF** | **Lofoten** | **10.09** | **168** | Pn | | **Pn** | **03 46 33.8** | **+1.1** |
| **STEI** | **Steigen** | **10.38** | **165** | *e*P | | **Pn** | **03 46 38.5** | **+1.9** |
| **HEF** | **Hetta** | **10.62** | **147** | Pn | | **Pn** | **03 46 40.9** | **+0.9** |
| **HEF** | **Hetta** | **10.62** | **147** | Pn | | **Pn** | **03 46 40.9** | **+0.9** |
| **BORG** | **Borgarnes** | **15.98** | **230** | LR | | LR | 03 52 22.1 | |
| | comp=Z,33nm,19.7s,baz=358,slow=31 | | | | | | | |
| **NOA** | **NORSAR Array B** | **17.13** | **175** | LR | | LR | 03 53 51.8 | |
| | comp=Z,20nm,18.5s,baz=95,slow=34 | | | | | | | |
| **HFS** | **Hagfors** | **18.10** | **171** | LR | | LR | 03 54 34.1 | |
| | comp=Z,27nm,18.5s,baz=35,slow=34 | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **19.63** | **269** | LR | | LR | 03 55 55.9 | |
| | comp=Z,61nm,21.6s,baz=34,slow=36 | | | | | | | |
| **KIRV** | **Kirov** | **23.78** | **121** | LR | | LR | 03 59 44.0 | |
| | comp=Z,42nm,19.4s,baz=336,slow=39 | | | | | | | |
| **FRB** | **Frobisher Bay** | **26.18** | **281** | LR | | LR | 04 00 40.2 | |
| | comp=Z,47nm,18.4s,baz=20,slow=38 | | | | | | | |
| **ARU** | **Arti** | **27.51** | **112** | LR | | LR | 04 02 02.0 | |
| | comp=Z,22nm,20.0s,baz=298,slow=39 | | | | | | | |
| **AKASG** | **Malin Array Be** | **28.55** | **151** | LR | | LR | 04 04 20.1 | |
| | comp=Z,12nm,18.1s,baz=340,slow=42 | | | | | | | |
| **BELG** | **Belgornoye** | **29.38** | **127** | LR | | LR | 04 02 10.8 | |
| | comp=Z,55nm,19.2s,baz=353,slow=37 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **33.10** | **116** | LR | | LR | 04 05 57.5 | |
| | comp=Z,29nm,19.5s,baz=43,slow=40 | | | | | | | |
| **MLR** | **Muntele Rosu** | **33.42** | **157** | LR | | LR | 04 04 18.3 | |
| | comp=Z,31nm,20.0s,baz=357,slow=36 | | | | | | | |
| **SCHQ** | **Schefferville** | **33.99** | **272** | LR | | LR | 04 05 47.9 | |
| | comp=Z,54nm,18.1s,baz=52,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **36.60** | **342** | P | | **P** | **03 51 16.5** | **+2.5** |
| | comp=Z,0.3nm,0.9s,baz=359,slow=8.1,SNR=2.7 | | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **37.02** | **95** | P | | **P** | **03 51 19.3** | **+1.7** |
| | comp=Z,0.3nm,0.5s,baz=347,slow=7.8,SNR=3.5 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **BRTR** | **Keskin Array B** | **39.87** | **149** | LR | | LR | 04 09 52.8 | |
| | comp=Z,20nm,19.5s,baz=129,slow=39 | | | | | | | |
| **GNI** | **Garni** | **40.86** | **136** | LR | | LR | 04 09 02.3 | |
| | comp=Z,25nm,19.8s,baz=355,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.44** | **93** | P | | **P** | **03 51 56.9** | **+2.3** |
| | comp=Z,0.2nm,0.7s,baz=0.0,slow=7.2,SNR=2.0 | | | | | | | |
| MKAR | | | | LR | | LR | 04 13 52.8 | |
| | comp=Z,32nm,18.3s,baz=257,slow=43 | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **43.81** | **102** | LR | | LR | 04 14 03.0 | |
| | comp=Z,22nm,19.1s,baz=346,slow=41 | | | | | | | |
| **ULM** | **Lau Bonnet** | **44.14** | **297** | LR | | LR | 04 10 36.5 | |
| | comp=Z,34nm,19.1s,baz=40,slow=36 | | | | | | | |
| **NEW** | **Newport** | **49.65** | **314** | LR | | LR | 04 14 52.7 | |
| | comp=Z,23nm,19.6s,baz=27,slow=37 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **55.80** | **280** | LR | | LR | 04 17 09.7 | |
| | comp=Z,25nm,19.3s,baz=347,slow=36 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.99** | **187** | P | | **P** | **03 54 50.0** | **+1.8** |
| | comp=Z,0.3nm,0.6s,baz=358,slow=6.8,SNR=5.9 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **65.84** | **297** | P | | **P** | **03 54 56.3** | **+2.6** |
| | comp=Z,0.1nm,0.7s,baz=29,slow=6.2,SNR=2.2 | | | | | | | |
| | comp=Z,0.1nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.25** | **85** | LR | | LR | 04 34 26.2 | |
| | comp=Z,9.4nm,20.1s,baz=260,slow=42 | | | | | | | |

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*IDC **25** 04:28:19.3±2.0, 1.°89N×125.°95E, h0km, mb3.6/3, mbtmp3.7/3, Error ellipse: s-maj=173.6km s-min=25.0km az=65.0*
*DJA **25** 04:28:24.0±1.5, 2.°1N±3.°×12.°7E±.°, h26km±14km, M3.5/6, MLv3.5/6*
**ISC 25 04:28:23.3±1.3, 2.°25N±0.°10×126.°9E±0.°1, h35km, n7, σ1.°09/8, mb3.7/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.54** | **162** | P | | **Pn** | **04 28 49.0** | **+0.7** |
| **SGSI** | **Sangihe** | **1.97** | **317** | P | | **Pn** | **04 28 54.4** | **+0.2** |
| SGSI | | | | S | | **Sn** | **04 29 17.3** | **-0.4** |
| **GTOI** | **Gorontalo** | **4.19** | **248** | P | | **Pn** | **04 29 25.5** | **+0.7** |
| **SANI** | **Sanana** | **4.36** | **192** | P | | **Pn** | **04 29 26.1** | **-1.0** |
| **WRA** | **Warramunga Arr** | **23.23** | **162** | P | | **P** | **04 33 26.8** | **-0.8** |
| | 1.1nm,0.4s,baz=338,slow=11,SNR=30 | | | | | | | |
| | 1.1nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **26.65** | **166** | P | | **P** | **04 34 00.7** | **+1.7** |
| | 0.3nm,0.4s,baz=344,slow=7.1,SNR=4.5 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.86** | **326** | P | | **P** | **04 38 18.1** | **-0.5** |
| | 0.4nm,0.4s,baz=126,slow=7.9,SNR=7.3 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |

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**GCMT 25 04:30:38.0±0.5, 41.°45S±0.°03×88.°95W±0.°03, h24km±1km, MW4.8/69, Moment Tensor Solution. s16,c18; s69,c92; Duration: 0 Moment tensor: Scale $10^{16}$Nm;** $M_{rr}$-1.01±.21; $M_{\theta\theta}$0.73±.15; $M_{\phi\phi}$0.28±.14; $M_{r\theta}$-0.27±.17; $M_{\theta\phi}$-1.80±.08; $M_{r\phi}$0.52±.15; **Best double couple:** $M_0$1.92300×$10^{16}$ **NP1:**$\phi_s$170.00000°,δ75.00000°, λ-30.00000°. **NP2:**$\phi_b$269.00000°,δ61.00000°, λ-163.00000°. **Principal axes:** T 2.4060, Plg9.0000°, Azm222.0000°; N -0.9670, Plg57.0000°, Azm326.0000°; P -1.4400, Plg31.0000°, Azm126.0000°; **nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function West Chile Rise**

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*NEIC **25** 04:38:14.0±1.3, 69.°58N±0.°06×144.°17W±0.°07, h10km±2km Error ellipse: s-maj=9.6km s-min=3.7km az=11.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.23; $M_{\theta\theta}$-0.70; $M_{\phi\phi}$0.47; $M_{r\theta}$0.55; $M_{\theta\phi}$-1.59; $M_{r\phi}$-0.85; Fault plane solution: $M_0$1.98000×$10^{14}$ NP1: $\phi_s$193.61000°,δ71.43000°,λ21.58000°. NP2:$\phi_s$96.43000°, δ69.60000°,λ.160.13000°. Principal axes: T 2.1194, Plg28.0000°, Azm55.0000°; N -0.3075, Plg62.0000°, Azm232.0000°; P -1.8119, Plg1.0000°, Azm325.0000°;*
*NEIC **25** 04:38:14, 69.°57N×144.°17W, h10km*
**AEIC 25 04:38:12.3±1.2, 69.°51N±0.°06×144.°25W±0.°07, h7km±7km, ML3.2, ML3.3/120(NEIC), Mwr3.5/48(NEIC), Error ellipse: s-maj=8.8km s-min=2.9km az=193.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.22** | **57** | Pg | | Pg | 04 38 16.9 | +0.1 |
| **C26K** | **Camden Bay** | **0.47** | **331** | | | Pg | 04 38 22.2 | +0.7 |
| C26K | | | | | | Sg | 04 38 28.1 | +0.5 |
| **D25K** | **Kavik River** | **0.78** | **257** | | | Pg | 04 38 26.4 | -0.8 |
| D25K | | | | Sg | | Sg | 04 38 37.4 | +0.2 |
| **D27M** | **Malcolm River** | **1.19** | **101** | Pg | | Pg | 04 38 34.0 | -1.2 |
| D27M | | | | Sg | | Sg | 04 38 50.6 | -0.1 |
| D27M | | | | IAML | | | 04 38 57.6 | |
| | comp=N,475nm,0.6s | | | | | | | |
| **C24K** | **Franklin Bluff** | **1.57** | **280** | | | Pg | 04 38 42.6 | +0.2 |
| C24K | | | | IAML | | | 04 39 06.1 | |
| | comp=N,376nm,0.6s | | | | | | | |
| C24K | | | | IAML | | | 04 39 08.3 | |
| | comp=E,387nm,1.3s | | | | | | | |
| **E27K** | **Coleen River** | **1.64** | **143** | | | Pb | 04 38 42.7 | -0.1 |
| E27K | | | | Sg | | Sb | 04 39 04.1 | +0.4 |
| E27K | | | | IAML | | | 04 39 08.3 | |
| | comp=N,350nm,0.7s | | | | | | | |
| E27K | | | | IAML | | | 04 39 09.9 | |
| | comp=E,323nm,0.7s | | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **260** | | | Pg | 04 38 44.4 | +0.2 |
| **F26K** | **Sheenjek River** | **1.82** | **179** | | | Pb | 04 38 46.3 | +0.4 |
| F26K | | | | IAML | | | 04 39 12.8 | |
| | comp=N,354nm,0.4s | | | | | | | |
| **E28M** | **Babbage River** | **1.92** | **116** | | | Pb | 04 38 47.6 | -0.1 |
| **D28M** | **Stokes Point** | **1.96** | **93** | | | Pn | 04 38 46.3 | +0.5 |
| **F25K** | **Christian Rive** | **1.99** | **196** | | | Pb | 04 38 49.0 | +0.1 |
| F25K | | | | IAML | | | 04 39 17.5 | |
| | comp=E,292nm,0.7s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.09** | **184** | | | Pb | 04 38 50.1 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.10** | **248** | | | Pb | 04 38 50.7 | 0.0 |
| TOLK | | | | IAML | | | 04 39 25.1 | |
| | comp=E,240nm,0.8s | | | | | | | |
| **E24K** | **Your Creek** | **2.11** | **229** | | | Pb | 04 38 50.3 | -0.6 |
| **C23K** | **Itkillik River** | **2.25** | **281** | | | Pb | 04 38 51.8 | -1.4 |
| C23K | | | | IAML | | | 04 39 36.5 | |
| | comp=E,224nm,0.7s | | | | | | | |
| C23K | | | | IAML | | | 04 39 37.1 | |
| | comp=N,248nm,0.9s | | | | | | | |
| **D23K** | **Nanushuk River** | **2.36** | **260** | | | Pb | 04 38 53.7 | -1.4 |
| D23K | | | | IAML | | | 04 39 40.1 | |
| | comp=N,140nm,1.0s | | | | | | | |
| **F24K** | **Squaw Lake** | **2.41** | **216** | | | Pn | 04 38 53.8 | +1.7 |
| F24K | | | | IAML | | | 04 39 38.0 | |
| | comp=E,125nm,0.7s | | | | | | | |
| **E23K** | **Chandalar** | **2.44** | **236** | | | Pb | 04 38 54.9 | -1.6 |
| E23K | | | | IAML | | | 04 39 41.9 | |
| | comp=E,125nm,0.8s | | | | | | | |
| **F28M** | **Old Crow** | **2.49** | **138** | | | Pn | 04 38 54.9 | +1.7 |
| F28M | | | | IAML | | | 04 39 38.6 | |
| | comp=E,167nm,0.8s | | | | | | | |
| **E29M** | **Blow River** | **2.55** | **113** | | | Pb | 04 38 56.3 | -2.1 |
| E29M | | | | IAML | | | 04 39 34.5 | |
| | comp=E,121nm,0.6s | | | | | | | |
| E29M | | | | IAML | | | 04 39 37.9 | |
| | comp=N,119nm,0.9s | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.58** | **176** | | | Pn | 04 38 56.2 | +1.9 |
| **G25K** | **Bearman Lake** | **2.84** | **195** | | | Pn | 04 39 00.3 | +2.3 |
| **G27K** | **Doyon Strip** | **2.88** | **159** | Pn | | Pn | 04 39 00.5 | +1.9 |
| **FYU** | **Fort Yukon** | **2.98** | **188** | | | Pn | 04 39 02.2 | +2.4 |
| **G24K** | **Hadweenzic Riv** | **3.07** | **205** | | | Pn | 04 39 02.8 | +1.7 |
| G24K | | | | IAML | | | 04 39 55.8 | |
| | comp=E,103nm,0.8s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **247** | | | Pn | 04 39 02.5 | +1.3 |
| **D22K** | **Ayikyak River** | **3.08** | **262** | | | Pn | 04 39 03.3 | +2.0 |
| D22K | | | | IAML | | | 04 40 00.4 | |
| | comp=N,96nm,0.9s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.27** | **289** | Pn | | Pn | 04 39 06.2 | +2.2 |
| **H25L** | **Birch Creek** | **3.31** | **191** | | | Pn | 04 39 07.0 | +2.6 |
| **H27K** | **Steamboat Moun** | **3.45** | **161** | | | Pn | 04 39 08.8 | +2.3 |
| **G29M** | **Pine Creek** | **3.49** | **135** | | | Pn | 04 39 08.9 | +1.9 |
| G29M | | | | IAML | | | 04 40 15.2 | |
| | comp=N,74nm,1.0s | | | | | | | |
| **F22K** | **John River** | **3.54** | **239** | | | Pn | 04 39 10.2 | +2.5 |
| **G23K** | **Bananza Creek** | **3.54** | **220** | Pn | | Pn | 04 39 09.2 | +1.5 |
| G23K | | | | IAML | | | 04 40 10.5 | |
| | comp=N,52nm,1.2s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.64** | **277** | Pn | | Pn | 04 39 11.0 | +2.1 |
| B21K | | | | IAML | | | 04 40 33.0 | |
| | comp=E,60nm,1.1s | | | | | | | |
| **F30M** | **Barrier River** | **3.64** | **118** | | | Pn | 04 39 12.1 | +3.1 |
| **E21K** | **Killik River** | **3.66** | **258** | | | Pn | 04 39 11.1 | +1.7 |
| E21K | | | | IAML | | | 04 40 24.2 | |
| | comp=E,63nm,0.8s | | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.75** | **270** | | | Pn | 04 39 13.4 | +2.9 |
| **G30M** | **tAoh Zraii Nji** | **3.92** | **127** | Pn | | Pn | 04 39 15.2 | +2.3 |
| G30M | | | | IAML | | | 04 40 30.8 | |
| | comp=N,41nm,1.1s | | | | | | | |
| **H24K** | **Noodor Dome** | **3.94** | **202** | Pn | | Pn | 04 39 15.0 | +1.8 |
| H24K | | | | IAML | | | 04 40 23.4 | |
| | comp=E,49nm,0.8s | | | | | | | |
| H24K | | | | IAML | | | 04 40 32.7 | |
| | comp=N,40nm,0.8s | | | | | | | |
| **H29M** | **Whitestone** | **3.98** | **143** | Pn | | Pn | 04 39 15.7 | +2.0 |
| H29M | | | | IAML | | | 04 40 03.3 | |
| | comp=E,55nm,0.5s | | | | | | | |
| H29M | | | | IAML | | | 04 40 32.5 | |
| | comp=N,53nm,0.9s | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04** | **188** | | | Pn | 04 39 16.8 | +2.2 |
| PRP | | | | IAML | | | 04 40 25.3 | |
| | comp=E,38nm,0.7s | | | | | | | |
| **I27K** | **Kandik River** | **4.05** | **164** | | | Pn | 04 39 17.4 | +2.7 |
| **INK** | **Inuvik** | **4.06** | **102** | | | Pn | 04 39 16.1 | +1.4 |
| **F21K** | **Alatna River** | **4.12** | **241** | Pn | | Pn | 04 39 17.5 | +1.9 |
| F21K | | | | IAML | | | 04 40 31.7 | |
| | comp=N,34nm,0.7s | | | | | | | |
| F21K | | | | IAML | | | 04 40 34.4 | |
| | comp=E,33nm,0.8s | | | | | | | |
| **H23K** | **Yukon River** | **4.21** | **211** | Pn | | Pn | 04 39 19.0 | +2.1 |
| H23K | | | | IAML | | | 04 40 31.3 | |
| | comp=E,48nm,1.1s | | | | | | | |
| H23K | | | | IAML | | | 04 40 40.3 | |
| | comp=N,41nm,0.7s | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.24** | **134** | | | Pn | 04 39 19.5 | +2.2 |
| **I26K** | **Coal Creek Min** | **4.24** | **174** | | | Pn | 04 39 19.8 | +2.5 |
| **F31M** | **Tsiigehtchic** | **4.39** | **113** | Pn | | Pn | 04 39 21.8 | +2.5 |
| F31M | | | | IAML | | | 04 40 34.6 | |
| | comp=E,30nm,0.7s | | | | | | | |
| F31M | | | | IAML | | | 04 40 35.4 | |
| | comp=N,29nm,1.0s | | | | | | | |
| **I28M** | **Miner Creek** | **4.40** | **156** | Pn | | Pn | 04 39 22.1 | +2.6 |
| I28M | | | | IAML | | | 04 40 15.3 | |
| | comp=N,30nm,1.0s | | | | | | | |
| I28M | | | | IAML | | | 04 40 40.4 | |
| | comp=E,34nm,1.0s | | | | | | | |
| **D20K** | **Etivluk River** | **4.50** | **266** | | | Pn | 04 39 23.4 | +2.6 |
| **B20K** | **Meade River** | **4.51** | **282** | Pn | | Pn | 04 39 23.2 | +2.2 |
| **H22K** | **Ishtalitna Cre** | **4.53** | **220** | | | Pn | 04 39 22.7 | +1.4 |
| **G31M** | **Satah River** | **4.53** | **120** | Pn | | Pn | 04 39 23.2 | +2.0 |
| G31M | | | | IAML | | | 04 40 42.3 | |
| | comp=N,32nm,1.1s | | | | | | | |
| G31M | | | | IAML | | | 04 40 47.8 | |
| | comp=E,32nm,1.0s | | | | | | | |
| **A21K** | **Barrow** | **4.54** | **299** | | | Pn | 04 39 23.5 | +2.2 |
| **POKR** | **Poker Plat Res** | **4.58** | **197** | Pn | | Pn | 04 39 24.5 | +2.6 |
| POKR | | | | IAML | | | 04 40 20.3 | |
| | comp=N,36nm,0.7s | | | | | | | |
| **G21K** | **Allakaket** | **4.59** | **234** | Pn | | Pn | 04 39 23.5 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| K27K | Chicken | 5.57 | 170 | Pn | Pn | 04 39 37.3 | +1.8 | |
| J29N | Klondike Camp | 5.60 | 152 | Pn | Pn | 04 39 38.5 | +2.6 | |
| F19K | Shaleruckik Mo | 5.71 | 248 | Pn | Pn | 04 39 39.9 | +2.5 | |
| BWN | Browne | 5.74 | 203 | Pn | Pn | 04 39 39.9 | +2.1 | |
| DAWY | Dawson | 5.79 | 158 | Pn | Pn | 04 39 40.5 | +1.9 | |
| RIDG | Independent Ri | 5.80 | 183 | | Pn | 04 39 39.7 | +1.0 | |
| J30M | Hart River | 5.84 | 144 | Pn | Pn | 04 39 41.1 | +1.8 | |
| A19K | Wainwright | 5.85 | 285 | | Pn | 04 39 41.5 | +2.2 | |
| DOT | Dot Lake | 5.88 | 179 | | Pn | 04 39 42.3 | +2.4 | |
| G19K | Purcell Mounta | 5.91 | 241 | Pn | Pn | 04 39 41.7 | +1.5 | |
| BPAW | Bear Paw Mtn. | 6.04 | 209 | | Pn | 04 39 43.9 | +1.9 | |
| C18K | Utukok River | 6.13 | 270 | | Pn | 04 39 44.7 | +1.5 | |
| H19K | Roundabout Mou | 6.15 | 235 | Pn | Pn | 04 39 45.2 | +1.8 | |
| B18K | Kokolik River | 6.17 | 277 | | Pn | 04 39 45.4 | +1.5 | |
| K29M | Barlow Dome | 6.28 | 152 | Pn | Pn | 04 39 47.7 | +2.3 | |
| E18K | Tukpahlearik C | 6.37 | 259 | Pn | Pn | 04 39 48.4 | +2.0 | |
| RND | Reindeer | 6.40 | 199 | Pn | Pn | 04 39 49.4 | +2.5 | |
| F18K | Selawik | 6.46 | 251 | | Pn | 04 39 49.8 | +2.2 | |
| L27K | Beaver Creek, | 6.55 | 170 | Pn | Pn | 04 39 51.6 | +2.6 | |
| G18K | Tagagawik | 6.56 | 243 | Pn | Pn | 04 39 51.5 | +2.4 | |
| DHY | Denali Highway | 6.58 | 193 | Pn | Pn | 04 39 53.8 | +4.3 | |
| PAX | Paxson | 6.58 | 185 | | Pn | 04 39 51.9 | +2.4 | |
| J20K | Nowinta River | 6.62 | 221 | Pn | Pn | 04 39 51.1 | +1.2 | |
| A36M | Sachs Harbour | 6.74 | 60 | Pn | Pn | 04 39 51.3 | -0.2 | |
| C17K | DeLong Mountai | 6.88 | 270 | | Pn | 04 39 54.8 | +1.4 | |
| E17K | Hotham Inlet | 6.95 | 258 | | Pn | 04 39 56.1 | +1.7 | |
| H18K | Honhosa River | 6.98 | 238 | Pn | Pn | 04 39 57.1 | +2.3 | |
| F17K | Baldwin Pennin | 7.08 | 252 | Pn | Pn | 04 39 56.9 | +0.7 | |
| C36M | Paulatuk | 7.10 | 82 | Pn | Pn | 04 39 56.2 | -0.2 | |
| D17K | Noatak River | 7.11 | 264 | | Pn | 04 39 57.9 | +1.3 | |
| J19K | Poorman | 7.12 | 225 | Pn | Pn | 04 39 58.1 | +1.4 | |
| M27K | Edge Creek, AK | 7.25 | 171 | Pn | Pn | 04 40 01.7 | +3.1 | |
| K20K | Telida | 7.31 | 217 | Pn | Pn | 04 40 00.9 | +1.5 | |
| G17K | Kiwalik Mounta | 7.45 | 245 | | Pn | 04 40 03.4 | +2.1 | |
| M29M | Somme Creek | 7.47 | 159 | Pn | Pn | 04 40 04.1 | +2.4 | |
| H17K | Granite Mounta | 7.60 | 240 | Pn | Pn | 04 40 04.9 | +1.6 | |
| C16K | Lisburne Hills | 7.70 | 271 | Pn | Pn | 04 40 05.4 | +0.7 | |
| SCM | Sheep Creek Mo | 7.81 | 191 | Pn | Pn | 04 40 10.8 | +4.5 | |
| J18K | Innoko River | 7.83 | 225 | Pn | Pn | 04 40 09.0 | +2.5 | |
| YUK2 | White River | 7.88 | 168 | | Pn | 04 40 10.2 | +3.0 | |
| L20K | Farewell, AK | 8.06 | 214 | | Pn | 04 40 11.4 | +1.7 | |
| G16K | Koyuk River | 8.07 | 248 | Pn | Pn | 04 40 11.0 | +1.3 | |
| M20K | Styx River | 8.47 | 210 | Pn | Pn | 04 40 17.7 | +2.3 | |
| L19K | White Mountain | 8.53 | 216 | Pn | Pn | 04 40 17.4 | +1.4 | |
| FARO | Faro, Yukon | 8.55 | 143 | Pn | Pn | 04 40 17.0 | +0.7 | |
| N30M | Aishikik Lake | 8.60 | 156 | Pn | Pn | 04 40 19.6 | +2.4 | |
| F15K | North Star Dit | 8.64 | 254 | Pn | Pn | 04 40 19.3 | +1.7 | |
| CTGM | Chitina Glacie | 8.66 | 171 | Pn | Pn | 04 40 20.9 | +2.8 | |
| M19K | Big River Lodg | 8.69 | 213 | Pn | Pn | 04 40 20.5 | +2.2 | |
| N31M | Braeburn, Yuko | 8.78 | 152 | Pn | Pn | 04 40 21.3 | +1.8 | |
| GRNC | Granite Creek | 8.87 | 172 | Pn | Pn | 04 40 24.9 | +3.9 | |
| L18K | Granite Mounta | 8.89 | 221 | Pn | Pn | 04 40 21.6 | +0.6 | |
| O30N | Mendenhall | 9.41 | 155 | Pn | Pn | 04 40 29.5 | +1.3 | |

*AFAD **25** 04:42:09.7±0.0,34°.72N×32°.80E,h9km±2km,ML2.5*
*NIC **25** 04:42:09.9,34°.77N×33°.08E,h18km±1km,Ml2.4/10*
*GII **25** 04:42:09.9±0.6,34°.688N±0°.004×33°.283E±0°.001, h1km,Mws2.4,confirmed*
*ISK **25** 04:42:10.8,34°.88N×33°.06E,h16km,ML2.5/14*

**ISC 25 04:42:09.9±0.9,34°.77N±0°.03×33°.07E±0°.02,h20km±2km, n77,σ0s91/96,2C-3D,Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASGA | Asgata | 0.15 | 82 | ⇑*i*P | Pb | 04 42 14.7 | -0.2 |
| ASGA | | | | S | Sb | 04 42 17.7 | -0.8 |
| ASGA | | | | AML | AML | 04 42 19.0 | |
| | 12nm,0.1s | | | | | | |
| ASGA | | | | AML | AML | 04 42 19.2 | |
| | 7.3nm,0.2s | | | | | | |
| APOL | The Sanctuary | 0.19 | 241 | ⇑*i*P | Pb | 04 42 14.9 | -0.3 |
| APOL | | | | S | Sb | 04 42 18.8 | 0.0 |
| APOL | | | | AML | AML | 04 42 19.5 | |
| | 5.0nm,0.2s | | | | | | |
| APOL | | | | AML | AML | 04 42 20.8 | |
| | 3.0nm,0.1s | | | | | | |
| TROD | Troodos | 0.24 | 318 | ⇓*i*P | Pb | 04 42 16.0 | 0.0 |
| TROD | | | | S | Sb | 04 42 20.1 | -0.1 |
| TROD | | | | AML | AML | 04 42 23.2 | |
| | 2.3nm,0.4s | | | | | | |
| TROD | | | | AML | AML | 04 42 24.9 | |
| | 1.4nm,0.3s | | | | | | |
| CSS | Mathiatis | 0.29 | 48 | Pg | Pb | 04 42 16.5 | 0.0 |
| CSS | | | | Sg | Sb | 04 42 20.4 | -0.6 |
| CSS | Mathiatis | 0.29 | 48 | P | Pb | 04 42 16.3 | -0.2 |
| CSS | Mathiatis | 0.29 | 48 | ⇓*i*P | Pb | 04 42 16.4 | 0.0 |
| CSS | | | | S | Sb | 04 42 21.0 | 0.0 |
| CSS | | | | AML | AML | 04 42 23.1 | |
| | 1.4nm,0.4s | | | | | | |
| CSS | | | | AML | AML | 04 42 23.2 | |
| | 1.7nm,0.6s | | | | | | |
| LEF | Lefka | 0.38 | 338 | Pg | Pb | 04 42 17.5 | -0.4 |
| LEF | Lefka | 0.38 | 338 | P | Pb | 04 42 17.5 | -0.4 |
| NATA | Nata | 0.41 | 272 | P | Pb | 04 42 18.7 | +0.4 |
| NATA | | | | S | Sb | 04 42 25.1 | +1.0 |
| NATA | | | | AML | AML | 04 42 28.4 | |
| | 2.0nm,0.6s | | | | | | |
| NATA | | | | AML | AML | 04 42 28.9 | |
| | 1.7nm,0.6s | | | | | | |
| AKIN | Akıncılar- Kıb | 0.41 | 53 | Pg | Pb | 04 42 18.6 | +0.2 |
| AKIN | | | | Sg | Sb | 04 42 24.4 | +0.1 |
| ATHAL | Athalassa | 0.46 | 36 | P | Pb | 04 42 20.0 | +0.7 |
| ATHAL | | | | S | Sb | 04 42 26.5 | +0.8 |
| ATHAL | | | | AML | AML | 04 42 34.0 | |
| | 1.7nm,0.8s | | | | | | |
| ATHAL | | | | AML | AML | 04 42 35.7 | |
| | 1.1nm,0.6s | | | | | | |
| LAR1C | Larnaka City C | 0.48 | 71 | S | Sn | 04 42 28.0 | -1.3 |
| MVOU | Mavrovouni | 0.53 | 62 | P | Pb | 04 42 20.2 | -0.3 |
| MVOU | | | | S | Sb | 04 42 28.5 | +0.8 |
| MVOU | | | | AML | AML | 04 42 30.1 | |
| | 0.4nm,0.5s | | | | | | |
| MVOU | | | | AML | AML | 04 42 34.7 | |
| | 0.6nm,0.4s | | | | | | |
| ALFC | Alefka | 0.55 | 316 | ⇓*i*P | Pb | 04 42 20.7 | -0.1 |
| ALFC | | | | S | Sb | 04 42 29.4 | +1.1 |
| ALFC | | | | AML | AML | 04 42 31.9 | |
| | 4.1nm,0.6s | | | | | | |
| ALFC | | | | AML | AML | 04 42 32.6 | |
| | 1.7nm,0.4s | | | | | | |
| AKMS | Akamas | 0.65 | 293 | P | Pb | 04 42 23.0 | +0.4 |
| AKMS | | | | S | Sn | 04 42 33.1 | -0.6 |
| AKMS | | | | AML | AML | 04 42 38.4 | |
| | 0.5nm,0.3s | | | | | | |
| AKMS | | | | AML | AML | 04 42 38.4 | |
| | 0.5nm,0.5s | | | | | | |
| PARAL | Paralimni | 0.83 | 74 | S | Sn | 04 42 37.8 | -0.3 |
| PARAL | | | | AML | AML | 04 42 42.5 | |
| | 0.4nm,0.5s | | | | | | |
| PARAL | | | | AML | AML | 04 42 43.0 | |
| | 0.4nm,0.5s | | | | | | |
| EREN | Erenkoy | 1.18 | 50 | Pn | Pb | 04 42 32.4 | +0.8 |
| EREN | | | | Sn | Sn | 04 42 48.2 | +1.4 |
| EREN | Erenkoy | 1.18 | 50 | P | Pb | 04 42 33.4 | +1.8 |
| TEKE | Tekeli-Mersin | 1.38 | 2 | Pn | Pn | 04 42 34.0 | +0.1 |
| AKKU | Akkuyu-Mersin | 1.45 | 16 | Pn | Pn | 04 42 34.4 | -0.5 |
| GULN | MERSIN_Gulnar | 1.47 | 15 | P | Pn | 04 42 34.6 | -0.6 |
| GULN | | | | S | Sb | 04 42 54.9 | +0.2 |
| IKL | Isikli | 1.56 | 19 | Pn | Pn | 04 42 36.5 | +0.1 |
| GAZI | Gazipasa | 1.59 | 338 | Pn | Pn | 04 42 37.5 | +0.6 |
| GAZI | Gazipasa | 1.59 | 338 | P | Pn | 04 42 36.1 | -0.7 |
| GAZI | | | | S | Sn | 04 42 57.5 | +0.6 |
| GAZI | | | | *i* AML | AML | 04 43 01.0 | |
| | comp=N,58nm,0.5s | | | | | | |
| TEVE | Tevekalti-Mers | 1.69 | 10 | Pn | Pn | 04 42 38.8 | +0.4 |
| SILI | Silifke-Mersin | 1.75 | 23 | Pn | Pn | 04 42 39.8 | +0.8 |
| KEBE | Keben-Mersin | 1.76 | 17 | Pn | Pn | 04 42 39.9 | +0.6 |
| ERMK | Ermenek | 1.88 | 356 | P | Pn | 04 42 42.3 | +1.3 |
| KIZK | Mersin | 1.92 | 27 | Pn | Pn | 04 42 42.4 | +0.9 |
| KIZK | Mersin | 1.92 | 27 | P | Pn | 04 42 42.8 | +1.4 |
| KIZK | | | | S | Sn | 04 43 06.5 | +1.5 |
| HDMB | Hadim | 2.24 | 348 | Pn | Pn | 04 42 47.2 | +1.1 |
| KRMN | Karaman | 2.41 | 4 | Pn | Pn | 04 42 49.0 | +0.8 |
| HNTI | Hanita | 2.43 | 133 | P | Pn | 04 42 47.7 | -0.7 |
| HNTI | | | | S | Sn | 04 43 17.0 | -0.5 |
| HNTI | Hanita | 2.43 | 133 | P | Pn | 04 42 47.5 | -0.9 |
| HNTI | Hanita | 2.43 | 133 | S | Sn | 04 43 16.4 | -1.1 |
| KKBE | Karaman, Kazim | 2.45 | 358 | P | Pb | 04 42 51.9 | -1.4 |
| MMA0B | Mount Meron ar | 2.61 | 131 | S | Sn | 04 43 21.9 | -0.3 |
| MMA0B | Mount Meron ar | 2.61 | 131 | P | Pn | 04 42 50.7 | -0.3 |
| MMB1 | Mount Meron ar | 2.62 | 131 | P | Pn | 04 42 50.8 | -0.3 |
| GEM | Giv'at Ha'Em | 2.66 | 125 | P | Pn | 04 42 51.2 | -0.4 |
| GEM | Giv'at Ha'Em | 2.66 | 125 | S | Sn | 04 43 21.4 | -1.8 |
| GEM | Giv'at Ha'Em | 2.66 | 125 | P | Pn | 04 42 51.1 | -0.5 |
| OFRI | `Ofer | 2.67 | 143 | P | Pn | 04 42 50.8 | -1.0 |
| OFRI | `Ofer | 2.67 | 143 | P | Pn | 04 42 50.7 | -1.0 |
| OFRI | `Ofer | 2.67 | 143 | S | Sn | 04 43 21.9 | -1.7 |
| NATI | Neve Ativ | 2.68 | 123 | P | Pn | 04 42 51.7 | -0.1 |
| NATI | Neve Ativ | 2.68 | 123 | P | Pn | 04 42 52.4 | +0.6 |
| BLGI | Bet Lehem HaGe | 2.69 | 138 | P | Pn | 04 42 52.4 | +0.4 |
| KERG | Konya-Eregli | 2.78 | 18 | P | Pb | 04 42 56.5 | -2.5 |
| KERG | | | | *i* AML | AML | 04 43 26.0 | |
| | comp=N,55nm,1.4s | | | | | | |
| KERG | | | | S | Sb | 04 43 31.3 | -1.3 |
| KERG | | | | *i* AML | AML | 04 43 32.0 | |
| | comp=E,15nm,0.6s | | | | | | |
| GULE | Gulek | 2.87 | 28 | P | Pn | 04 42 57.2 | +2.6 |
| GULE | | | | S | Sb | 04 43 33.6 | -1.6 |
| GULE | | | | *i* AML | AML | 04 43 43.0 | |
| | comp=E,22nm,0.5s | | | | | | |
| SEDI | Konya, Seydise | 2.88 | 339 | P | Pb | 04 42 58.9 | -1.8 |
| SEDI | | | | S | Sb | 04 43 33.5 | -2.1 |
| KSHT | Keshet | 2.90 | 127 | P | Pn | 04 42 55.3 | +0.5 |
| KSHT | Keshet | 2.90 | 127 | S | Sn | 04 43 28.9 | -0.3 |
| SLTI | Sal'it | 3.01 | 146 | P | Pn | 04 42 57.4 | +1.0 |
| MMLI | Mount Malkishu | 3.04 | 139 | P | Pn | 04 42 57.2 | +0.3 |
| MMLI | Mount Malkishu | 3.04 | 139 | S | Sn | 04 43 32.9 | +0.2 |
| MMLI | Mount Malkishu | 3.04 | 139 | P | Pn | 04 42 56.5 | -0.4 |
| QRNJ | Al-Qirein | 3.20 | 138 | P | Pn | 04 42 59.6 | +0.6 |
| SALP | Salfit | 3.22 | 146 | P | Pn | 04 43 00.0 | +0.7 |
| SALP | Salfit | 3.22 | 146 | P | Pn | 04 43 00.1 | +0.7 |
| HMDT | Nahal Hemdat | 3.24 | 140 | P | Pn | 04 43 00.1 | +0.5 |
| HMDT | Nahal Hemdat | 3.24 | 140 | P | Pn | 04 42 59.9 | +0.4 |
| HMDT | Nahal Hemdat | 3.24 | 140 | S | Sn | 04 43 37.6 | +0.1 |
| AMAZ | Amatzia | 3.58 | 154 | S | Sn | 04 43 46.9 | +1.0 |
| AMAZ | Amatzia | 3.58 | 154 | P | Pn | 04 43 04.9 | +0.7 |
| DSI | Dead Sea | 3.73 | 148 | P | Pn | 04 43 06.5 | +0.2 |
| DSI | Dead Sea | 3.73 | 148 | P | Pn | 04 43 06.7 | +0.4 |
| MSBI | Mazada | 3.94 | 150 | P | Pn | 04 43 10.3 | +1.1 |
| KZIT | Kziot | 4.01 | 163 | P | Pn | 04 43 11.4 | +1.2 |
| ASF | Jabal al Asfar | 4.12 | 128 | P | Pn | 04 43 12.7 | +1.0 |
| PRNI | Paran | 4.70 | 159 | P | Pn | 04 43 19.7 | +0.1 |
| PRNI | Paran | 4.70 | 159 | P | Pn | 04 43 19.6 | 0.0 |
| KRMI | Paran Flat | 4.84 | 163 | P | Pn | 04 43 22.7 | +1.1 |
| KRMI | Paran Flat | 4.84 | 163 | P | Pn | 04 43 22.3 | +0.7 |
| HRFI | Mount Harif | 5.00 | 160 | P | Pn | 04 43 24.7 | +0.9 |
| MBRI | Mt Berech | 5.20 | 162 | P | Pn | 04 43 27.1 | +0.5 |
| EIL | Elat | 5.33 | 162 | P | Pn | 04 43 28.9 | +0.7 |

**TRN 25 04:43:39.6,18°.39N×62°.24W,h11km,MD3.5,Far North-west of Barbuda.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANWB | Willy Bob | 0.84 | 149 | *e*P | Pn | 04 43 59.5 | +2.3 |
| ANWB | | | | *e*S | Sn | 04 44 12.2 | +2.6 |
| SKI | Saint Kitts | 1.15 | 204 | *e*P | Pg | 04 44 04.3 | +2.6 |
| SKI | | | | *e*S | Sn | 04 44 21.9 | +4.5 |
| SKOC | St. Kitts, UWI | 1.18 | 203 | *e*P | Pg | 04 44 03.0 | +0.6 |
| SKOC | | | | *e*S | Sn | 04 44 20.8 | +2.7 |
| ANBD | Bethesda, Anti | 1.41 | 161 | *e*P | Pg | 04 44 07.1 | +0.5 |
| ANBD | | | | *e*S | Sg | 04 44 27.3 | +2.4 |
| MBFL | Flemmings, Mon | 1.63 | 179 | *e*P | Pb | 04 44 09.6 | 0.0 |
| MBFL | | | | *e*S | Sg | 04 44 33.1 | +1.1 |
| MBWH | | 1.64 | 178 | *e*P | Pb | 04 44 09.9 | +0.1 |
| MBWH | | | | *e*S | Sg | 04 44 32.4 | +0.1 |

*IDC **25** 04:48:47.7±5.5,38°.80N×73°.31E,h99km±50km,mb3.6/5, mbtmp3.8/9,Error ellipse: s-maj=55.7km s-min=42.8km az=95.0*
*SOME **25** 04:48:47.3,39°.63N×72°.35E,h5km*
*NNC **25** 04:49:03.6±2.3,40°.38N×72°.88E,h0km,mb3.2,mpv2.9, Error ellipse: s-maj=22.9km s-min=13.7km az=172.0*

**ISC 25 04:48:43.3±1.6,38°.7N±0°.1×72°.8E±0°.1,h35km,n16, σ2s15/19,mb4.0/5,3C-2D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MRKS | Merke | 4.07 | 5 | *e*P | Pn | 04 49 46.1 | +3.0 |
| | 3.9nm,0.2s | | | | | | |
| MRKS | | | | *e*S | Sn | 04 50 28.2 | -1.3 |
| | 34nm,0.3s | | | | | | |
| AAK | Ala-Archa | 4.16 | 18 | P | Pn | 04 49 47.0 | +2.6 |
| | 2.8nm,0.3s,baz=228,slow=23,SNR=1.7 | | | | | | |
| AAK | | | | S | Sn | 04 50 31.2 | -0.6 |
| | 11nm,0.3s,baz=328,slow=22,SNR=5.2 | | | | | | |
| CHMS | Chumysh | 4.56 | 19 | ⇓Pn | Pn | 04 49 52.4 | +2.6 |
| | 0.9nm,0.3s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 04 50 39.9 | |
| | 15nm,0.7s | | | | | | |
| KK31 | Karatay Array | 4.73 | 340 | Pn | Pn | 04 49 56.1 | +4.0 |
| | 2.6nm,0.3s,baz=145,slow=11,SNR=45 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 04 50 45.6 | |
| | 46nm,1.1s,baz=154,slow=23,SNR=11 | | | | | | |
| TKM2 | Tokmak 2 | 4.74 | 26 | ⇑Pn | Pn | 04 49 55.7 | +3.2 |
| | 1.2nm,0.3s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 04 50 45.6 | |
| | 7.3nm,0.7s | | | | | | |
| BRLS | Boroldoy | 4.87 | 334 | *e*P | Pn | 04 49 56.5 | +2.5 |
| | 12nm,0.1s | | | | | | |
| BRLS | | | | *e*S | Sn | 04 50 46.5 | -2.7 |
| | 6.1nm,0.2s | | | | | | |
| MKAR | Makanchi Array | 10.70 | 38 | P | Pn | 04 51 13.2 | -0.8 |
| | 0.7nm,0.5s,baz=232,slow=14,SNR=8.0 | | | | | | |
| BVAR | Borovoye Array | 14.43 | 354 | P | P | 04 52 09.9 | -1.3 |
| | 3.9nm,0.4s,baz=156,slow=9.2,SNR=17 | | | | | | |
| AKTO | Aktyubinsk | 15.72 | 323 | P | P | 04 52 27.3 | +1.7 |
| | 3.8nm,0.4s,baz=123,slow=9.8,SNR=13 | | | | | | |
| ZALV | Zalesovo Beam | 17.35 | 24 | P | Pn | 04 52 41.4 | -1.0 |
| | 0.9nm,0.6s,baz=215,slow=9.8,SNR=1.8 | | | | | | |
| FINES | FINESS Array B | 36.49 | 324 | P | P | 04 55 44.3 | -0.4 |
| | 5.3nm,1.0s,baz=123,slow=7.7,SNR=9.8 | | | | | | |
| | 5.3nm,1.0s | | | | | | |
| ARCES | ARCESS Array B | 39.69 | 336 | P | P | 04 56 10.3 | -1.2 |
| | 2.0nm,0.7s,baz=113,slow=8.9,SNR=9.0 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| HFS | Hagfors | 42.24 | 320 | P | P | 04 56 32.2 | -0.5 |
| | 1.7nm,0.6s,baz=87,slow=8.8,SNR=10 | | | | | | |
| | 1.7nm,0.6s | | | | | | |
| NB2 | NORSAR Subarra | 43.51 | 322 | P | P | 04 56 42.2 | -0.8 |
| | comp=Z,0.2nm,0.4s,baz=94,slow=7.9 | | | | | | |
| NOA | NORSAR Array B | 43.51 | 322 | P | P | 04 56 42.4 | -0.6 |
| | comp=Z,0.4nm,0.4s,baz=93,slow=7.6,SNR=2.9 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| TORD | Torodi Ar. Bea | 67.17 | 269 | P | P | 04 59 33.3 | -0.6 |
| | comp=Z,0.2nm,0.5s,baz=49,slow=6.2,SNR=4.0 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |

**IDC 25 05:01:26.9±5.3,19°.46S×176°.90W,h306km±46km, mb2.8/2,mbtmp3.8/3,Error ellipse: s-maj=45.9km s-min=20.0km az=88.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 19.45 | 194 | P | P | 05 05 31.4 | -0.1 |
| | 14nm,1.0s,baz=229,slow=2.8,SNR=3.1 | | | | | | |
| URZ | | | | S | S | 05 08 55.0 | +0.8 |
| | 6.3nm,1.0s,baz=105,slow=20,SNR=1.4 | | | | | | |
| ASAR | Alice Springs | 45.78 | 256 | P | P | 05 09 19.3 | +0.3 |
| | 0.3nm,0.4s,baz=95,slow=7.7,SNR=6.0 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 45.78 | 261 | P | P | 05 09 18.7 | -0.4 |
| | 0.4nm,0.7s,baz=96,slow=7.4,SNR=12 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| AKASG | Malin Array Be | 142.59 | 333 | PKP | PKPdf | 05 20 23.4 | 0.0 |
| | 0.7nm,0.4s,baz=46,slow=3.7,SNR=5.7 | | | | | | |
| BRTR | Keskin Array B | 146.88 | 314 | PKPbc | PKPdf | 05 20 32.6 | +1.1 |
| | 0.3nm,0.6s,baz=88,slow=3.3,SNR=2.3 | | | | | | |

*IDC **25** 05:08:04.2±3.9,6°.23S×132°.37E,h0km,mb4.0/1, mbtmp4.0/3,ML4.2/2,MS2.2/1,Error ellipse: s-maj=240.8km s-min=31.8km az=75.0*
*DJA **25** 05:08:10.7±0.5,6°.S±3°×13°.3E±°,h113km±14km,M4.4/9, mb4.6/6,mB4.8/4,MLv4.4/9,Mw(mB)4.0/4*

**ISC 25 05:08:09.1±0.8,5°.98S±0°.06×132°.68E±0°.08,h35km,n25, σ1s94/27,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SAUI | Saumlaki | 2.41 | 214 | P | Pn | 05 08 50.4 | +4.2 |
| KMPI | Kaimana, Papua | 2.52 | 24 | P | Pn | 05 08 50.4 | +2.8 |
| FAKI | Fak Fak | 3.07 | 352 | P | Pn | 05 08 57.1 | +1.9 |
| FAKI | Fak Fak | 3.07 | 352 | P | Pn | 05 08 56.9 | +1.7 |
| FAKI | | | | S | Sn | 05 09 29.3 | -1.5 |
| BNDI | Bandanaira | 3.12 | 298 | P | Pn | 05 08 57.9 | +2.0 |
| BNDI | Bandanaira | 3.12 | 298 | P | Pn | 05 08 57.5 | +1.6 |
| BNDI | | | | S | Sn | 05 09 32.7 | +0.8 |
| MSAI | Masohi | 4.56 | 305 | P | Pn | 05 09 17.1 | +1.4 |
| SWI | Sorong | 5.28 | 344 | P | Pn | 05 09 26.9 | +1.3 |
| | 37nm,0.6s,1μm0.8nm | | | | | | |
| SWI | | | | S | Sn | 05 10 22.7 | -2.5 |
| | 37nm,0.6s,1μm0.8nm | | | | | | |
| DRS | Darwin Rock St | 6.64 | 195 | P | Pn | 05 09 44.7 | +0.3 |
| KDU | Kakadu | 6.67 | 182 | P | Pn | 05 09 45.3 | +0.7 |
| MTN | Manton Dam | 6.99 | 192 | P | Pn | 05 09 50.1 | +1.0 |
| SANI | Sanana | 7.73 | 300 | P | Pn | 05 10 00.3 | +1.0 |
| SANI | Sanana | 7.73 | 300 | P | Pn | 05 09 57.5 | -1.8 |
| | 35nm,0.5s,795nm0.2nm | | | | | | |
| TNTI | Ternate | 8.55 | 321 | P | Pn | 05 10 11.6 | +1.0 |
| BBSI | Bau Bau | 10.07 | 272 | P | Pn | 05 10 31.4 | 0.0 |
| COEN | Coen | 13.02 | 128 | P | Pn | 05 11 12.5 | +0.7 |
| WRA | Warramunga Arr | 13.97 | 174 | Pn | Pn | 05 11 20.6 | -4.2 |
| | 1.5nm,0.3s,baz=355,slow=13,SNR=74 | | | | | | |
| WRA | | | | Sn | Sn | 05 13 45.8 | -13 |
| | 1.8nm,0.3s,baz=358,slow=23,SNR=5.6 | | | | | | |
| | 2.9nm,0.4s | | | | | | |
| ASAR | Alice Springs | 17.62 | 176 | P | Pn | 05 12 08.9 | -3.2 |
| | 0.5nm,0.3s,baz=358,slow=9.8,SNR=21 | | | | | | |
| ASAR | | | | S | Sn | 05 15 12.3 | -15 |
| | 1.2nm,0.4s,baz=2.8,slow=28,SNR=9.0 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| AS01 | Alice Springs | 17.62 | 176 | P | Pn | 05 12 11.5 | -0.6 |
| CTA | Charters Tower | 19.25 | 138 | LR | LR | 05 19 53.4 | |
| | comp=Z,6.1nm,19.2s,baz=187,slow=37 | | | | | | |
| WRKA | Warakurna | 19.41 | 192 | P | P | 05 12 32.6 | +0.2 |
| OOD | Oodnadatta | 21.88 | 173 | P | P | 05 12 59.5 | +0.4 |
| MEEK | Meekatharra | 24.53 | 212 | P | P | 05 13 25.5 | -0.2 |
| LCRK | Leigh Creek | 24.89 | 169 | P | P | 05 13 30.4 | +1.6 |
| MKAR | Makanchi Array | 68.87 | 325 | P | P | 05 19 10.9 | +0.6 |
| | 0.8nm,0.5s,baz=126,slow=7.5,SNR=6.7 | | | | | | |
| | 0.8nm,0.5s | | | | | | |

*JSN **25** 05:28:21.7±1.3,17°.70N×78°.94W,h0km±999km,MD3.8*
*SSNC **25** 05:28:25.6±1.4,17°.46N×78°.69W,h88km±16km,MD3.6, ML3.4,MW3.6*

**ISC 25 05:28:25.2±3.6,17°.6N±0°.1×78°.6W±0°.2,h10km,n12, σ1s92/24,2C-1D,Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MTDJ | Mount Denham | 1.20 | 61 | ⇑*e*P | Pn | 05 28 47.7 | -0.5 |
| MTDJ | | | | ⇑*i*S | Sn | 05 29 06.3 | +1.6 |
| MTDJ | | | | ⇓*i*S | Sb | 05 29 06.7 | +2.8 |
| MTDJ | Mount Denham | 1.20 | 61 | *e*P | Pn | 05 28 47.6 | -0.6 |
| MTDJ | | | | *e*Pg | Pb | 05 28 48.9 | +0.7 |
| MTDJ | | | | *e*S | Sn | 05 29 06.2 | +1.5 |
| MTDJ | | | | IAML | | 05 29 07.1 | |
| | comp=Z,802nm,0.5s | | | | | | |
| MTDJ | | | | IAML | | 05 29 07.5 | |
| | 928nm,0.2s | | | | | | |
| STH | Stony Hill | 1.80 | 76 | *e*P | Pn | 05 28 55.4 | -0.9 |
| STH | Stony Hill | 1.80 | 76 | *e*P | Pn | 05 28 55.4 | -0.9 |
| STH | | | | *e*S | Sn | 05 29 19.7 | +0.5 |
| STH | | | | IAML | | 05 29 23.6 | |
| | comp=E,38μm,0.2s | | | | | | |
| STH | | | | IAML | | 05 29 23.8 | |
| | comp=N,50μm,0.2s | | | | | | |
| LMGC | Las Mercedes | 2.87 | 32 | *e*P | Pn | 05 29 11.1 | +0.1 |
| LMGC | | | | *e*S | Sn | 05 29 44.0 | -1.6 |
| LMGC | | | | IAML | | 05 29 49.4 | |
| | comp=N,17nm,0.1s | | | | | | |
| LMGC | | | | IAML | | 05 29 49.5 | |
| | comp=E,22nm,0.0s | | | | | | |
| CHIV | Chivirico | 3.14 | 42 | *e*P | Pn | 05 29 13.9 | -0.8 |
| CHIV | | | | *e*S | Sn | 05 29 51.7 | -0.6 |
| CHIV | | | | IAML | | 05 29 55.7 | |
| | comp=N,3.4nm,0.4s | | | | | | |
| CHIV | | | | IAML | | 05 29 57.5 | |
| | comp=E,3.1nm,0.2s | | | | | | |
| MARVS | Santiago de Cu | 3.50 | 47 | *e*P | Pn | 05 29 19.3 | -0.4 |
| MARVS | | | | *e*S | Sn | 05 29 59.0 | -2.2 |
| MARVS | | | | IAML | | 05 30 05.8 | |
| | comp=N,6.3nm,0.2s | | | | | | |
| MARVS | | | | IAML | | 05 30 06.2 | |
| | comp=E,4.9nm,0.3s | | | | | | |
| RCC | Rio Carpintero | 3.64 | 49 | *e*P | Pn | 05 29 21.4 | -0.3 |
| RCC | | | | *e*S | Sn | 05 30 02.0 | -2.7 |
| GTBY | Guantanamo Bay | 4.04 | 55 | *e*P | Pn | 05 29 28.3 | +1.1 |
| GTBY | | | | *e*S | Sn | 05 30 10.6 | -4.1 |
| HLGC | Holguin | 4.05 | 37 | *e*P | Pn | 05 29 29.5 | +2.1 |
| QMBU | Quimbuelo | 4.43 | 54 | *e*P | Pn | 05 29 32.1 | -0.4 |
| QMBU | | | | *e*S | Sn | 05 30 21.0 | -3.2 |
| MASC | Masc | 4.88 | 58 | *e*P | Pn | 05 29 39.0 | +0.4 |
| MASC | | | | *e*S | Sn | 05 30 31.7 | -3.5 |

**IDC 25 05:39:00.0±7.1,27°.56S×23°.26E,h0km,mbtmp1.9/1, ML1.8/1,Error ellipse: s-maj=43.7km s-min=41.6km az=28.0,South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I47ZA | BOSHOF INFRASO | 2.04 | 122 | I | I | 05 51 25.0 | |
| | 0.5nm,1.1s,baz=301,slow=313,SNR=7.7 | | | | | | |
| BOSA | Boshof | 2.05 | 121 | Pn | Pn | 05 39 35.7 | -0.2 |
| | 0.2nm,0.3s,baz=301,slow=18,SNR=1.7 | | | | | | |
| BOSA | | | | Lg | Lg | 05 40 05.5 | |
| | 0.7nm,0.3s,baz=224,slow=18,SNR=9.7 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| I35NA | TSUMEB INFRASO | 9.83 | 327 | I | I | 06 41 00.0 | |
| | 0.1nm,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MOM2 | | | | *i* S | | Sn | 05 43 40.3 | +0.4 | |
| MOM2 | | | | IAML | | | 05 44 34.2 | | |
| | comp=Z,120nm,1.0s | | | | | | | | |
| **HUEN** | | **1.98** | **24** | *i* P | | Pn | 05 43 16.7 | +0.3 | |
| HUEN | | | | *i* S | | Sn | 05 43 40.2 | +0.2 | |
| HUEN | | | | IAML | | | 05 43 45.9 | | |
| | comp=Z,80nm,1.0s | | | | | | | | |
| **HUEN** | | **1.98** | **24** | *i* P | | Pn | 05 43 14.3 | -2.1 | |
| HUEN | | | | *i* S | | Sn | 05 43 31.3 | -8.7 | |
| HUEN | | | | IAML | | | 05 43 45.9 | | |
| | comp=Z,81nm,1.0s | | | | | | | | |
| **CNGA** | **Al SSO del Vol** | **1.99** | **8** | *i* P | | Pn | 05 43 17.0 | +0.4 | |
| CNGA | | | | IAML | | | 05 43 45.6 | | |
| | comp=Z,140nm,1.0s | | | | | | | | |
| **CNGA** | **Al SSO del Vol** | **1.99** | **8** | *i* S | | Sn | 05 43 38.4 | -1.9 | |
| **CNGN** | **Cerro Negro** | **2.00** | **8** | *i* P | | Pn | 05 43 17.0 | +0.3 | |
| CNGN | | | | *i* S | | Sn | 05 43 41.2 | +0.8 | |
| CNGN | | | | IAML | | | 05 43 48.5 | | |
| | comp=Z,120nm,1.0s | | | | | | | | |
| **CNGN** | **Cerro Negro** | **2.00** | **8** | *i* P | | Pn | 05 43 17.6 | +0.9 | |
| CNGN | | | | *i* S | | Sn | 05 43 41.2 | +0.8 | |
| CNGN | | | | IAML | | | 05 43 48.5 | | |
| | comp=Z,120nm,1.0s | | | | | | | | |
| **ROCN** | **Rota Cerro Neg** | **2.01** | **7** | *i* P | | Pn | 05 43 16.7 | -0.1 | |
| ROCN | | | | *i* S | | Sn | 05 43 41.3 | +0.6 | |
| ROCN | | | | IAML | | | 05 43 44.9 | | |
| | comp=Z,91nm,1.0s | | | | | | | | |
| **ILCN** | **San Idelfonso** | **2.07** | **8** | *i* P | | Pn | 05 43 17.6 | -0.1 | |
| ILCN | | | | *i* S | | Sn | 05 43 43.4 | +1.2 | |
| ILCN | | | | IAML | | | 05 43 48.8 | | |
| | comp=Z,49nm,1.0s | | | | | | | | |
| **TELN** | **Telica** | **2.09** | **4** | *i* P | | Pn | 05 43 17.4 | -0.5 | |
| TELN | | | | *i* S | | Sn | 05 43 43.6 | +0.9 | |
| TELN | | | | IAML | | | 05 44 48.3 | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **PKGN** | **Cerro Pekin** | **2.15** | **0** | *i* P | | Pn | 05 43 18.1 | -0.5 | |
| PKGN | | | | *i* S | | Sn | 05 43 44.9 | +0.9 | |
| PKGN | | | | IAML | | | 05 43 49.9 | | |
| | comp=Z,340nm,1.0s | | | | | | | | |
| **CRIN** | **San Cristobal** | **2.18** | **358** | *i* P | | Pn | 05 43 21.3 | +2.1 | |
| CRIN | | | | *i* S | | Sn | 05 43 43.2 | -1.7 | |
| CRIN | | | | IAML | | | 05 43 50.9 | | |
| | comp=Z,310nm,1.0s | | | | | | | | |
| **BRAN** | **Las Pilas** | **2.28** | **16** | *i* P | | Pn | 05 43 13.1 | -7.4 | |
| BRAN | | | | IAML | | | 05 43 13.5 | | |
| | comp=Z,350nm,1.0s | | | | | | | | |
| BRAN | | | | *i* S | | Sn | 05 43 35.8 | -12 | |
| **BOAB** | **BOACO BROADBAN** | **2.32** | **34** | *i* P | | Pn | 05 43 21.0 | -0.1 | |
| BOAB | | | | IAML | | | 05 43 41.4 | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| BOAB | | | | *i* S | | Sn | 05 43 48.4 | 0.0 | |
| **LCR2** | **La Lucha 2** | **3.04** | **104** | *i* P | | Pn | 05 43 31.1 | 0.0 | |
| LCR2 | | | | IAML | | | 05 43 33.0 | | |
| | comp=Z,46nm,1.0s | | | | | | | | |
| **RANC** | **El Ranchito** | **3.17** | **336** | *i* P | | Pn | 05 43 32.6 | -0.3 | |
| RANC | | | | IAML | | | 05 44 01.3 | | |
| | comp=Z,380nm,1.0s | | | | | | | | |
| **PACA** | **Pacayal** | **3.22** | **336** | *i* P | | Pn | 05 43 33.5 | 0.0 | |
| PACA | | | | IAML | | | 05 44 13.7 | | |
| | comp=Z,640nm,1.0s | | | | | | | | |
| **BLUN** | **Bluefields** | **3.48** | **64** | *i* P | | Pn | 05 43 37.2 | +0.1 | |
| BLUN | | | | *i* S | | Sn | 05 44 17.6 | +0.5 | |
| BLUN | | | | IAML | | | 05 44 28.8 | | |
| | comp=Z,350nm,1.0s | | | | | | | | |

*IDC* ***25*** *06:04:01.6±1.2, 19°.67N×70°.26W, h0km, mb3.9/8, mbtmp3.9/9, ML3.4/1, MS3.1/10, Error ellipse: s-maj=34.2km s-min=26.4km az=7.0*

*NEIC* ***25*** *06:04:05.0±1.6, 19°.61N±0°.02×69°.93W±0°.05, h10km±2km, mb4.0/12, Error ellipse: s-maj=8.3km s-min=3.7km az=100.0*

*SDD* ***25*** *06:04:04.1±2.7, 19°.64N×69°.80W, h18km±21km, MD4.0, ML4.1, MW4.2*

*OSPL* ***25*** *06:04:06.6±2.8, 19°.59N×69°.87W, h0km±11km, ML3.9*

**ISC 25 06:04:04.3±0.9, 19°.67N±0°.03×69°.90W±0°.02, h15km±6km, n106, σ2s02/129, mb4.0/11, MS3.1/7, 28C-2D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LONA1** | **Toro Cenizo, N** | **0.29** | **174** | *i* P | **Pg** | **06 04 09.9** | **-0.6** |
| LONA1 | | | | *e*S | **Sg** | **06 04 13.8** | **-0.9** |
| LONA1 | | | | IAML | | 06 04 21.4 | |
| | comp=Z,9μm,0.4s | | | | | | |
| **NADR** | **Nagua** | **0.32** | **173** | ⇓*e*Pg | **Pg** | **06 04 10.3** | **-0.6** |
| NADR | | | | IAML | | 06 04 14.8 | |
| | comp=E,22μm,0.9s | | | | | | |
| NADR | | | | ⇑*e*Sg | **Sg** | **06 04 15.4** | **+0.1** |
| NADR | | | | IAML | | 06 04 15.5 | |
| | comp=N,21μm,0.2s | | | | | | |
| **SODR** | **Sosua Marina B** | **0.64** | **278** | ⇑*e*Pg | **Pn** | **06 04 18.8** | **-0.1** |
| SODR | | | | IAML | | 06 04 32.7 | |
| | comp=E,9μm,0.3s | | | | | | |
| SODR | | | | IAML | | 06 04 38.3 | |
| | comp=N,17μm,1.4s | | | | | | |
| **SC01** | **Santiago de lo** | **0.82** | **253** | ⇑*e*Pg | **Pn** | **06 04 20.8** | **-0.6** |
| SC01 | | | | IAML | | 06 04 40.9 | |
| | comp=N,18μm,0.7s | | | | | | |
| **SC01** | **Santiago de lo** | **0.82** | **253** | *i* P | **Pn** | **06 04 20.8** | **-0.6** |
| SC01 | | | | *e*S | **Sn** | **06 04 33.7** | **+0.5** |
| SC01 | | | | IAML | | 06 04 41.8 | |
| | comp=Z,9μm,1.1s | | | | | | |
| **ABDR** | **Alto Bandera** | **1.10** | **219** | ⇑*e*Pg | **Pb** | **06 04 23.3** | **-1.9** |
| ABDR | | | | ⇑*e*Sg | **Sb** | **06 04 37.1** | **-2.4** |
| ABDR | | | | IAML | | 06 04 41.3 | |
| | comp=N,3μm,0.5s | | | | | | |
| ABDR | | | | IAML | | 06 04 43.3 | |
| | comp=E,4μm,0.8s | | | | | | |
| ABDR | | | | *e* | | 06 06 36.8 | |
| **SDD** | **Santo Domingo** | **1.21** | **181** | ⇑*e*Pg | **Pn** | **06 04 24.6** | **-2.1** |
| SDD | | | | ⇑*e*Sg | **Sb** | **06 04 40.1** | **-2.1** |
| SDD | | | | IAML | | 06 04 44.4 | |
| | comp=N,365nm,1.2s | | | | | | |
| SDD | | | | IAML | | 06 04 44.9 | |
| | comp=E,320nm,1.2s | | | | | | |
| **SDD** | **Santo Domingo** | **1.21** | **181** | *i* P | **Pn** | **06 04 25.2** | **-1.5** |
| SDD | | | | *e*S | **Sb** | **06 04 39.7** | **-2.5** |
| **LOPP1** | **Punta Rusia, P** | **1.24** | **279** | *i* P | **Pg** | **06 04 28.7** | **+0.5** |
| LOPP1 | | | | *e*S | **Sg** | **06 04 46.3** | **+1.9** |
| LOPP1 | | | | IAML | | 06 04 53.8 | |
| | comp=Z,3μm,0.6s | | | | | | |
| **BANI** | **BANI** | **1.34** | **199** | ⇑*e*Pg | **Pn** | **06 04 27.1** | **-1.6** |
| BANI | | | | ⇑*e*Sg | **Sn** | **06 04 44.8** | **-1.5** |
| BANI | | | | IAML | | 06 04 45.7 | |
| | comp=E,5μm,0.8s | | | | | | |
| BANI | | | | IAML | | 06 04 47.4 | |
| | comp=N,4μm,0.4s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.48** | **243** | Pn | **Pn** | **06 04 30.3** | **-0.1** |
| **SDDR** | **Presa de Saban** | **1.48** | **243** | ⇑*e*Pg | **Pn** | **06 04 30.4** | **-0.1** |
| SDDR | | | | ⇑*e*Sg | **Sn** | **06 04 49.7** | **0.0** |
| SDDR | | | | IAML | | 06 04 55.1 | |
| | comp=E,2μm,0.3s | | | | | | |
| SDDR | | | | IAML | | 06 04 58.4 | |
| | comp=N,2μm,1.1s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.48** | **243** | *e*P | **Pn** | **06 04 30.4** | **-0.1** |
| SDDR | | | | *e*S | **Sn** | **06 04 49.4** | **-0.2** |
| SDDR | | | | IAML | | 06 04 55.1 | |
| | comp=N,2μm,0.4s | | | | | | |
| SDDR | | | | IAML | | 06 04 59.0 | |
| | comp=N,2μm,0.8s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.48** | **243** | *i* P | **Pn** | **06 04 30.5** | **-0.1** |
| SDDR | | | | IAML | | 06 04 56.1 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **REDR** | **Restauracion** | **1.50** | **251** | ⇑*e*Pg | **Pg** | **06 04 34.9** | **+1.8** |
| REDR | | | | ⇑*e*Sg | **Sg** | **06 04 58.0** | **+5.3** |
| REDR | | | | IAML | | 06 04 59.2 | |
| | comp=N,9μm,0.2s | | | | | | |
| REDR | | | | IAML | | 06 04 59.8 | |
| | comp=E,7μm,0.3s | | | | | | |
| **HIDR** | **Higuey Centro** | **1.55** | **134** | ⇑*e*Pg | **Pn** | **06 04 32.0** | **+0.7** |
| HIDR | | | | IAML | | 06 04 56.0 | |
| | comp=E,3μm,0.5s | | | | | | |
| HIDR | | | | IAML | | 06 04 57.9 | |
| | comp=N,3μm,0.3s | | | | | | |
| **MCDR** | **Montecristi** | **1.67** | **278** | ⇑*e*Pg | **Pb** | **06 04 34.9** | **+0.1** |
| MCDR | | | | ⇑*e*Sg | **Sg** | **06 04 59.2** | **+1.0** |
| MCDR | | | | IAML | | 06 05 00.0 | |
| | comp=Z,2μm,0.4s | | | | | | |
| MCDR | | | | IAML | | 06 05 03.3 | |
| | comp=N,6μm,0.2s | | | | | | |
| **LODA1** | **ITESIL, Dajabo** | **1.71** | **266** | *i* P | **Pb** | **06 04 35.1** | **-0.3** |
| LODA1 | | | | *e*S | **Sb** | **06 04 57.6** | **+0.8** |
| LODA1 | | | | IAML | | 06 04 59.1 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **1.84** | **128** | Pn | **Pn** | **06 04 36.0** | **+0.6** |
| **PCDR** | **Punta Cana, DR** | **1.84** | **128** | *i* P | **Pb** | **06 04 36.8** | **-0.8** |
| PCDR | | | | IAML | | 06 05 08.0 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **NEDR** | **Neiba UASD** | **1.86** | **231** | ⇑*e*Pg | **Pb** | **06 04 38.1** | **+0.1** |
| NEDR | | | | ⇑*e*Sg | **Sg** | **06 05 03.1** | **-1.1** |
| NEDR | | | | IAML | | 06 05 07.4 | |
| | comp=N,2μm,0.5s | | | | | | |
| NEDR | | | | IAML | | 06 05 11.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **1.94** | **216** | ⇑*e*Pg | **Pn** | **06 04 38.2** | **+1.4** |
| LOBA2 | | | | IAML | | 06 05 07.3 | |
| | comp=N,393nm,0.5s | | | | | | |
| LOBA2 | | | | IAML | | 06 05 10.5 | |
| | comp=E,368nm,0.6s | | | | | | |
| **PODR** | **Polo** | **1.99** | **221** | ⇑*e*Pg | **Pn** | **06 04 38.9** | **+1.3** |
| PODR | | | | IAML | | 06 05 09.7 | |
| | comp=Z,820nm,0.6s | | | | | | |
| PODR | | | | IAML | | 06 05 14.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| **PODR** | **Polo** | **1.99** | **221** | *i* P | **Pn** | **06 04 39.2** | **+1.6** |
| PODR | | | | *e*S | **Sb** | **06 05 04.7** | **-0.3** |
| PODR | | | | IAML | | 06 05 08.3 | |
| | comp=Z,2μm,0.9s | | | | | | |
| **GRTK** | **Grand Turk** | **2.17** | **328** | | **Pb** | **06 04 41.9** | **-1.4** |
| **GRTK** | **Grand Turk** | **2.17** | **328** | ⇑*e*Pg | **Pb** | **06 04 42.0** | **-1.3** |
| GRTK | | | | ⇑*e*Sg | **Sg** | **06 05 11.2** | **-2.9** |
| GRTK | | | | IAML | | 06 05 14.8 | |
| | comp=E,2μm,0.3s | | | | | | |
| GRTK | | | | IAML | | 06 05 16.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| **GRTK** | **Grand Turk** | **2.17** | **328** | *e*P | **Pb** | **06 04 42.2** | **-1.1** |
| GRTK | | | | *e*S | **Sb** | **06 05 10.3** | **+0.3** |
| **GRTK** | **Grand Turk** | **2.17** | **328** | *i* P | **Pb** | **06 04 42.3** | **-1.0** |
| GRTK | | | | *e*S | **Sb** | **06 05 10.6** | **+0.6** |
| GRTK | | | | IAML | | 06 05 19.6 | |
| | comp=Z,584nm,0.4s | | | | | | |
| **JIDR** | **Jimani** | **2.19** | **238** | ⇑*e*Pg | **Pb** | **06 04 42.5** | **-1.1** |
| JIDR | | | | ⇑*e*Sg | **Sb** | **06 05 12.5** | **+1.9** |
| JIDR | | | | IAML | | 06 05 14.0 | |
| | comp=Z,2μm,0.4s | | | | | | |
| JIDR | | | | IAML | | 06 05 14.4 | |
| | comp=N,4μm,0.4s | | | | | | |
| **PAPH** | **Port-au-Prince** | **2.54** | **244** | | **Pn** | **06 04 47.4** | **+2.3** |
| **PAPH** | **Port-au-Prince** | **2.54** | **244** | ⇑*e*Pg | **Pb** | **06 04 47.5** | **-2.2** |
| PAPH | | | | IAML | | 06 05 27.4 | |
| | comp=E,2μm,0.5s | | | | | | |
| PAPH | | | | IAML | | 06 05 28.8 | |
| | comp=N,2μm,0.7s | | | | | | |
| **PAPH** | **Port-au-Prince** | **2.54** | **244** | *i* P | **Pb** | **06 04 47.9** | **-1.8** |
| PAPH | | | | IAML | | 06 05 34.4 | |
| | comp=Z,449nm,0.6s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.89** | **114** | | **Pn** | **06 04 51.0** | **+1.1** |
| **AGPR** | **Aguadilla, PR** | **2.89** | **114** | ⇓*e*Pg | **Pn** | **06 04 51.4** | **+1.5** |
| AGPR | | | | ⇑*e*Sg | **Sn** | **06 05 26.4** | **+1.9** |
| AGPR | | | | IAML | | 06 05 43.6 | |
| | comp=E,498nm,1.0s | | | | | | |
| AGPR | | | | IAML | | 06 05 46.3 | |
| | comp=N,436nm,0.6s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.89** | **114** | *i* P | **Pn** | **06 04 51.5** | **+1.5** |
| AGPR | | | | IAML | | 06 05 44.0 | |
| | comp=Z,262nm,0.8s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **2.98** | **119** | | **Pn** | **06 04 52.2** | **+1.1** |
| **CRPR** | **Cabo Rojo, PR** | **3.12** | **122** | | **Pn** | **06 04 55.1** | **+2.2** |
| **CRPR** | **Cabo Rojo, PR** | **3.12** | **122** | ⇑*e*Pg | **Pn** | **06 04 56.1** | **+3.2** |
| CRPR | | | | ⇑*e*Sg | **Sn** | **06 05 33.8** | **+3.8** |
| CRPR | | | | IAML | | 06 05 50.6 | |
| | comp=N,261nm,0.8s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **3.12** | **122** | *i* P | **Pn** | **06 04 55.8** | **+2.9** |
| CRPR | | | | IAML | | 06 05 54.4 | |
| | comp=Z,363nm,0.6s | | | | | | |
| **MLPR** | **Magueyes Islan** | **3.19** | **122** | Pn | **Pn** | **06 04 54.9** | **+1.0** |
| **AOPR** | **Arecibo Observ** | **3.25** | **113** | Pn | **Pn** | **06 04 56.5** | **+1.6** |
| **AOPR** | **Arecibo Observ** | **3.25** | **113** | *e*P | **Pn** | **06 04 56.7** | **+1.8** |
| AOPR | | | | *e*S | **Sb** | **06 05 41.6** | **+0.3** |
| **UUPR** | **Utuado, UPR, P** | **3.32** | **115** | | **Pn** | **06 04 56.7** | **+0.9** |
| **EMPR** | **Esperanza - Ma** | **3.40** | **110** | | **Pn** | **06 04 57.5** | **+0.7** |
| **OBIP** | **Obispado Ponce** | **3.51** | **117** | | **Pn** | **06 04 59.4** | **+1.0** |
| **CELP** | **Cerrillos** | **3.52** | **116** | Pn | **Pn** | **06 04 60.0** | **+1.4** |
| **GCPR** | **Guaynabo City** | **3.85** | **110** | | **Pn** | **06 05 04.2** | **+1.1** |
| **IGPR** | **InterUniversit** | **3.97** | **115** | Pn | **Pn** | **06 05 05.2** | **+0.4** |
| **PDPR** | **Patillas Dam,** | **4.02** | **113** | Pn | **Pn** | **06 05 06.5** | **+1.0** |
| **MASC** | **Masc** | **4.11** | **278** | *e*P | **Pn** | **06 05 05.8** | **-0.9** |
| MASC | | | | *e*S | **Sn** | **06 05 53.0** | **-1.5** |
| **HUMP** | **Col San Antoni** | **4.12** | **111** | | **Pn** | **06 05 07.3** | **+0.5** |
| **QMBU** | **Quimbuelo** | **4.65** | **277** | *e*P | **Pn** | **06 05 12.6** | **-1.5** |
| QMBU | | | | *e*S | **Sn** | **06 06 04.5** | **-3.5** |
| **MOAC** | **Moa** | **4.86** | **283** | *e*P | **Pn** | **06 05 15.2** | **-1.7** |
| MOAC | | | | *e*S | **Sn** | **06 06 10.5** | **-2.4** |
| **NMDO** | **Nuevo Mundo** | **4.86** | **281** | Pn | **Pn** | **06 05 14.8** | **-2.2** |
| **NMDO** | **Nuevo Mundo** | **4.86** | **281** | *e*P | **Pn** | **06 05 14.8** | **-2.2** |
| NMDO | | | | *e*S | **Sn** | **06 06 09.9** | **-3.1** |
| **GTBY** | **Guantanamo Bay** | **4.92** | **274** | Pn | **Pn** | **06 05 15.8** | **-1.9** |
| **GTBY** | **Guantanamo Bay** | **4.92** | **274** | *e*P | **Pn** | **06 05 16.4** | **-1.3** |
| GTBY | | | | *e*S | **Sn** | **06 06 09.5** | **-4.9** |
| GTBY | | | | *e*Sg | **Sn** | **06 06 14.1** | **-0.2** |
| **RCC** | **Rio Carpintero** | **5.47** | **274** | *e*P | **Pn** | **06 05 23.8** | **-1.5** |
| RCC | | | | *e*S | **Sn** | **06 06 23.8** | **-4.2** |
| **MARVS** | **Santiago de Cu** | **5.66** | **274** | *e*P | **Pn** | **06 05 25.7** | **-2.2** |
| MARVS | | | | *e*S | **Sn** | **06 06 29.5** | **-3.2** |
| **HLGC** | **Holguin** | **5.91** | **283** | *e*P | **Pn** | **06 05 31.0** | **-0.4** |
| HLGC | | | | *e*S | **Sn** | **06 06 38.2** | **-0.8** |
| **CHIV** | **Chivirico** | **6.14** | **274** | Pn | **Pn** | **06 05 32.3** | **-2.3** |
| **LMGC** | **Las Mercedes** | **6.70** | **275** | *e*P | **Pn** | **06 05 39.9** | **-2.4** |
| LMGC | | | | *e*S | **Sn** | **06 06 51.7** | **-6.6** |
| **STH** | **Stony Hill** | **6.73** | **258** | *e*P | **Pn** | **06 05 43.5** | **+0.7** |
| **AUA1** | **Aruba** | **7.12** | **181** | Pn | **Pn** | **06 05 48.1** | **0.0** |
| **MTDJ** | **Mount Denham** | **7.37** | **260** | Pn | **Pn** | **06 05 52.2** | **+0.7** |
| **MTDJ** | **Mount Denham** | **7.37** | **260** | *e*P | **Pn** | **06 05 51.8** | **+0.3** |
| MTDJ | | | | *e*S | **Sn** | **06 07 12.3** | **-2.7** |
| **ANWB** | **Willy Bob** | **7.94** | **103** | *e*P | **Pn** | **06 05 56.5** | **-2.9** |
| **ANWB** | **Willy Bob** | **7.94** | **103** | *e*S | **Sn** | **06 07 25.9** | **-3.1** |
| **ANBD** | **Bethesda, Anti** | **8.15** | **107** | *e*P | **Pn** | **06 06 02.4** | **+0.2** |
| **ANBD** | **Bethesda, Anti** | **8.15** | **107** | *e*S | **Sn** | **06 07 31.5** | **-2.6** |
| **MGV** | **Manicaragua** | **9.73** | **286** | *e*P | **Pn** | **06 06 20.6** | **-3.2** |
| MGV | | | | *e*S | **Sn** | **06 08 04.2** | **-8.8** |
| **PCRV** | **Puerto La Cruz** | **10.72** | **151** | Pn | **Pn** | **06 06 37.9** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=40,slow=7.9,SNR=1.6 | | | | | | |
| PCRV | | | | LR | LR | 06 10 39.4 | |
| | comp=Z,44nm,21.3s,slow=36 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **SDV** | **Santo Domingo** | **10.74** | **184** | LR | LR | 06 11 18.3 | |
| | comp=Z,91nm,18.6s,baz=243,slow=41 | | | | | | |
| **BAUV** | **El Baul** | **10.81** | **170** | | **Pn** | **06 06 40.5** | **+1.7** |
| **BBSR** | **BB Station** | **13.48** | **19** | Pn | **Pn** | **06 07 13.8** | **-1.4** |
| **Y60A** | **Bolivia** | **16.08** | **334** | Pn | **Pn** | **06 07 50.9** | **+1.0** |
| **Y58A** | **Scranton** | **16.63** | **330** | Pn | **Pn** | **06 07 57.4** | **+0.4** |
| **V61A** | **Roper** | **17.11** | **341** | Pn | **P** | **06 08 03.6** | **-0.9** |
| **JTS** | **Las Juntas de** | **17.26** | **239** | LR | LR | 06 15 12.5 | |
| | comp=Z,44nm,19.1s,baz=98,slow=40 | | | | | | |
| **JSC** | **Jenkinsville** | **17.71** | **328** | P | **P** | **06 08 11.9** | **+0.6** |
| **T59A** | **Double "B" Far** | **18.50** | **340** | P | **Pn** | **06 08 22.8** | **+2.7** |
| T59A | | | | IAmb | IAmb | 06 08 32.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **V55A** | **Taylorsville** | **18.95** | **331** | P | **Pn** | **06 08 26.5** | **+0.8** |
| V55A | | | | IAmb | IAmb | 06 08 44.8 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **BOAV** | **Boa Vista** | **19.46** | **151** | P | **P** | **06 08 30.6** | **0.0** |
| **SDMD** | **Soldier's Deli** | **20.57** | **345** | P | Pn | 06 08 44.0 | -0.8 |
| SDMD | | | | IAmb | IAmb | 06 09 04.2 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **TZTN** | **Tazewell** | **20.64** | **327** | P | Pn | 06 08 45.0 | -0.7 |
| TZTN | | | | IAmb | IAmb | 06 09 12.4 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **P52A** | **Corning** | **22.52** | **335** | P | **P** | **06 09 06.2** | **+2.7** |
| P52A | | | | IAmb | IAmb | 06 09 12.3 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **MGMO** | **Mountain Grove** | **26.17** | **316** | P | **P** | **06 09 40.5** | **+2.2** |
| MGMO | | | | IAmb | IAmb | 06 09 58.3 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **29.62** | **306** | P | **P** | **06 10 11.1** | **+1.9** |
| **TXAR** | **Lajitas Array** | **32.10** | **294** | P | P | 06 10 26.4 | -4.9 |
| | comp=Z,0.1nm,0.6s,baz=104,slow=10,SNR=1.8 | | | | | | |
| TXAR | | | | LR | LR | 06 27 06.4 | |
| | comp=Z,11nm,19.6s,baz=66,slow=44 | | | | | | |
| | comp=Z,0.1nm,0.6s | | | | | | |
| **NNA** | **Nana** | **32.19** | **193** | LR | LR | 06 24 26.5 | |
| | comp=Z,33nm,20.7s,baz=351,slow=38 | | | | | | |
| **SCHQ** | **Schefferville** | **35.18** | **3** | LR | LR | 06 24 09.5 | |
| | comp=Z,33nm,21.4s,baz=213,slow=34 | | | | | | |
| **PDAR** | **Pinedale Array** | **40.48** | **314** | PcP | **PcP** | **06 13 45.8** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=145,slow=6.6,SNR=2.4 | | | | | | |
| **FRB** | **Frobisher Bay** | **44.06** | **1** | LR | LR | 06 29 50.0 | |
| | comp=Z,38nm,20.4s,baz=342,slow=35 | | | | | | |
| **NVAR** | **Mina Array Bea** | **45.70** | **305** | P | **P** | **06 12 27.9** | **+2.7** |
| | comp=Z,0.6nm,0.8s,baz=88,slow=8.3,SNR=5.0 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **48.91** | **10** | LR | LR | 06 32 10.9 | |
| | comp=Z,21nm,20.4s,baz=224,slow=34 | | | | | | |
| **BORG** | **Borgarnes** | **55.27** | **23** | LR | LR | 06 32 55.7 | |
| | comp=Z,26nm,21.6s,baz=197,slow=31 | | | | | | |
| **ESDC** | **Sonseca Array** | **59.38** | **55** | P | **P** | **06 14 08.2** | **+1.8** |
| | comp=Z,1.5nm,0.8s,baz=280,slow=7.5,SNR=10 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **66.84** | **333** | P | **P** | **06 14 53.6** | **-1.8** |
| | comp=Z,0.2nm,0.5s,baz=95,slow=8.0,SNR=1.6 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.56** | **83** | P | **P** | **06 15 08.1** | **+1.1** |
| | comp=Z,0.9nm,0.8s,baz=300,slow=8.1,SNR=6.1 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **68.71** | **31** | P | **P** | **06 15 07.7** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=274,slow=6.3,SNR=3.5 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **69.98** | **32** | P | **P** | **06 15 14.7** | **-0.4** |
| | comp=Z,1.8nm,0.9s,baz=254,slow=10,SNR=1.5 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **73.62** | **21** | P | **P** | **06 15 37.5** | **+0.7** |
| | comp=Z,1.9nm,0.5s,baz=286,slow=3.9,SNR=18 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **75.74** | **30** | P | **P** | **06 15 51.0** | **+1.8** |
| | comp=Z,1.9nm,0.5s,baz=274,slow=1.9,SNR=15 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **89.18** | **327** | LR | LR | 06 58 01.1 | |
| | comp=Z,7.9nm,20.6s,baz=322,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **157.20** | **265** | PKP | **PKPdf** | **06 24 01.1** | **+0.6** |
| | comp=Z,0.3nm,1.1s,baz=137,slow=6.6,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **157.53** | **256** | PKPab | **PKPab** | **06 24 32.0** | **-0.7** |
| | comp=Z,0.4nm,0.9s,baz=95,slow=4.0,SNR=2.0 | | | | | | |

**IDC 25 06:04:55.4±3.5, 81°.42N×120°.06E, h0km, mb3.6/4, mbtmp3.6/4, MS3.2/5, Error ellipse: s-maj=174.1km s-min=27.7km az=170.0, East of Severnaya Zemlya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ILAR** | **Eielson Array** | **27.15** | **70** | P | P | 06 10 39.3 | -0.4 |
| | 0.5nm,0.8s,baz=344,slow=9.4,SNR=6.1 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ARU** | **Arti** | **30.48** | **254** | LR | LR | 06 25 34.1 | |
| | comp=Z,28nm,18.8s,baz=356,slow=41 | | | | | | |
| **NOA** | **NORSAR Array B** | **32.85** | **302** | LR | LR | 06 24 48.9 | |
| | comp=Z,6.6nm,20.2s,baz=110,slow=36 | | | | | | |
| **BELG** | **Belogornoye** | **36.00** | **264** | LR | LR | 06 28 05.7 | |
| | comp=Z,38nm,18.3s,baz=302,slow=39 | | | | | | |
| **GNI** | **Garni** | **48.38** | **263** | LR | LR | 06 38 40.8 | |
| | comp=Z,20nm,20.1s,baz=30,slow=42 | | | | | | |
| **BRTR** | **Keskin Array B** | **50.46** | **274** | P | P | 06 13 55.1 | +0.6 |
| | 0.8nm,0.7s,baz=15,slow=8.8,SNR=4.8 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **67.22** | **41** | P | P | 06 15 52.0 | +0.8 |
| | 0.2nm,0.7s,baz=346,slow=6.8,SNR=1.7 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **PALK** | **Pallekele** | **76.14** | **220** | LR | LR | 06 54 46.3 | |
| | comp=Z,101nm,19.4s,baz=165,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.14** | **300** | P | P | 06 17 11.5 | -0.9 |
| | 0.6nm,0.7s,baz=2.5,slow=5.1,SNR=4.7 | | | | | | |
| | 0.6nm,0.7s | | | | | | |

**IDC 25 06:09:20.9±7.3, 16°.92S×177°.94W, h0km, mb3.7/3, mbtmp3.7/3, MS4.0/2, Error ellipse: s-maj=319.5km s-min=39.9km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.26** | **259** | P | P | 06 17 40.5 | -0.1 |
| | 0.3nm,0.4s,baz=93,slow=7.2,SNR=26 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.49** | **253** | P | P | 06 17 42.2 | -0.2 |
| | 2.0nm,0.5s,baz=88,slow=8.6,SNR=68 | | | | | | |
| | 2.0nm,0.5s | | | | | | |
| **JCJ** | **Chichijima** | **58.40** | **318** | LR | LR | 06 38 28.6 | |
| | comp=Z,103nm,20.9s,baz=102,slow=30 | | | | | | |
| **MA2** | **Magadan** | **80.36** | **344** | LR | LR | 06 53 55.4 | |
| | comp=Z,107nm,20.5s,baz=227,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **84.83** | **13** | P | P | 06 21 56.9 | 0.0 |
| | 0.1nm,0.4s,baz=223,slow=5.4,SNR=1.3 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

**IDC 25 06:13:38.0±1.9, 2°.81N×127°.38E, h0km, mb3.3/4, mbtmp3.3/4, Error ellipse: s-maj=151.8km s-min=22.9km az=67.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.62** | **163** | P | P | 06 18 50.7 | -0.2 |
| | 0.3nm,0.4s,baz=344,slow=11,SNR=12 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **07 32 20.3** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.13** | **254** | P | **P** | **07 32 20.5** | **0.0** |
| | comp=Z,17nm,0.5s,baz=90,slow=8.3,SNR=345 | | | | | | |
| ASAR | | | | PcP | **PcP** | 07 33 50.2 | **+0.9** |
| | comp=Z,0.6nm,0.6s,baz=96,slow=4.3,SNR=4.5 | | | | | | |
| **FORT** | **Forrest** | **50.36** | **244** | P | **P** | **07 32 58.8** | **-0.6** |
| **KNRA** | **Kununurra** | **50.80** | **264** | P | **P** | **07 33 02.9** | **0.0** |
| KNRA | | | | IAmb | IAmb | 07 33 29.3 | |
| | comp=Z,5.9nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.35** | **260** | P | **P** | **07 33 21.7** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **58.24** | **255** | P | **P** | **07 33 54.4** | **-0.6** |
| PSA00 | | | | IAmb | IAmb | 07 34 24.5 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **SBA** | **Scott Base** | **60.63** | **184** | P | **P** | **07 34 07.2** | **-2.7** |
| **QSPA** | **South Pole Qui** | **72.34** | **180** | P | **P** | **07 35 22.8** | **+0.2** |
| QSPA | | | | IAmb | IAmb | 07 35 57.9 | |
| | comp=Z,6.4nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.34** | **180** | P | **P** | **07 35 23.6** | **+0.9** |
| | comp=Z,0.5nm,0.5s,baz=53,slow=2.0,SNR=5.2 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **L18K** | **Granite Mounta** | **81.45** | **10** | P | **P** | **07 36 14.4** | **+2.4** |
| L18K | | | | IAmb | IAmb | 07 36 33.7 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| **BELA** | **Belgrano 2** | **82.32** | **173** | P | **P** | **07 36 15.7** | **-0.7** |
| **BRTR** | **Keskin Array B** | **144.86** | **315** | PKP | **PKPab** | **07 43 30.1** | **+1.2** |
| | comp=Z,0.2nm,0.4s,baz=123,slow=4.8,SNR=3.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.29** | **303** | PKPbc | **PKPdf** | **07 43 31.6** | **+1.5** |
| | comp=Z,0.6nm,0.4s,baz=20,slow=4.6,SNR=2.4 | | | | | | |

*NOU* ***25*** *07:25:43.2, 38.46S×175.67E, h207km, MLv4.0/6, North Island, New Zealand*
*WEL* ***25*** *07:25:47.8±0.8, 39.5±4.1×17.6±1.1, h169km±6km, M2.4/13, MLv2.4/13, Error ellipse: s-maj=0.0km s-min=0.0km az=128.5, confirmed*
**ISC 25 07:25:41.7±1.8, 38.48S±0.06×175.71E±0.06, h213km±10km, n58, σ1§87/79, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TLZ** | **Tolley Road** | **0.20** | **317** | P | | **Pn** | | **07 26 11.3** | **+1.6** |
| **MRHZ** | **Matea Rd** | **0.66** | **123** | P | | **Pn** | | **07 26 12.2** | **+1.3** |
| **HIZ** | **Hauiti** | **0.68** | **267** | P | | **Pn** | | **07 26 12.8** | **+1.9** |
| **HIZ** | **Hauiti** | **0.68** | **267** | P | | **Pn** | | **07 26 12.8** | **+1.9** |
| **TOZ** | **Tahuroa Road** | **0.77** | **347** | P | | **Pn** | | **07 26 13.2** | **+1.7** |
| TOZ | | | | S | | **Sn** | | **07 26 33.4** | **-1.1** |
| **BKZ** | **Black Stump Fm** | **0.92** | **139** | P | | **Pn** | | **07 26 13.9** | **+1.6** |
| BKZ | | | | S | | **Sn** | | **07 26 32.8** | **-3.4** |
| **MOVZ** | **Moawhango** | **0.93** | **178** | P | | **Pn** | | **07 26 13.9** | **+1.6** |
| MOVZ | | | | S | | **Sn** | | **07 26 33.4** | **-3.1** |
| **MTHZ** | **Maungataniwha** | **0.96** | **113** | P | | **Pn** | | **07 26 14.2** | **+1.7** |
| MTHZ | | | | S | | **Sn** | | **07 26 34.6** | **-1.9** |
| **VRZ** | **Vera Road** | **0.99** | **229** | P | | **Pn** | | **07 26 14.8** | **+2.2** |
| VRZ | | | | S | | **Sn** | | **07 26 37.3** | **+0.5** |
| **NMHZ** | **Naumai** | **1.05** | **126** | P | | **Pn** | | **07 26 15.8** | **+2.6** |
| NMHZ | | | | S | | **Sn** | | **07 26 38.3** | **+0.6** |
| **KWHZ** | **Kaweka Forest** | **1.09** | **150** | P | | **Pn** | | **07 26 15.8** | **+2.3** |
| KWHZ | | | | S | | **Sn** | | **07 26 36.7** | **-1.6** |
| **URZ** | **Urewera** | **1.12** | **79** | P | | **Pn** | | **07 26 14.5** | **+1.0** |
| **URZ** | **Urewera** | **1.12** | **79** | P | | **Pn** | | **07 26 14.6** | **+1.0** |
| URZ | | | | S | | **Sn** | | **07 26 35.4** | **-2.9** |
| **MCHZ** | **McNeill Hill** | **1.23** | **142** | P | | **Pn** | | **07 26 17.0** | **+2.6** |
| MCHZ | | | | S | | **Sn** | | **07 26 39.8** | **-0.1** |
| **KRHZ** | **Kereru** | **1.27** | **156** | P | | **Pn** | | **07 26 16.7** | **+2.0** |
| KRHZ | | | | S | | **Sn** | | **07 26 38.9** | **-1.6** |
| **MWZ** | **Matawai** | **1.43** | **85** | P | | **Pn** | | **07 26 17.7** | **+1.7** |
| MWZ | | | | S | | **Sn** | | **07 26 40.2** | **-2.5** |
| **PNHZ** | **Pukenui** | **1.48** | **165** | P | | **Pn** | | **07 26 18.3** | **+2.0** |
| PNHZ | | | | S | | **Sn** | | **07 26 41.7** | **-1.8** |
| **KAHZ** | **Kahuranaki** | **1.59** | **146** | P | | **Pn** | | **07 26 19.8** | **+2.5** |
| **RIGZ** | **Rimuhau** | **1.62** | **99** | P | | **Pn** | | **07 26 19.8** | **+2.2** |
| RIGZ | | | | S | | **Sn** | | **07 26 44.3** | **-1.3** |
| **RUGZ** | **Raukumara Rang** | **1.63** | **72** | P | | **Pn** | | **07 26 18.6** | **+0.8** |
| RUGZ | | | | S | | **Sn** | | **07 26 42.8** | **-3.1** |
| **WPHZ** | **Waipukurau** | **1.68** | **161** | P | | **Pn** | | **07 26 20.2** | **+2.1** |
| WPHZ | | | | S | | **Sn** | | **07 26 44.7** | **-1.9** |
| **HAZ** | **Te Kaha** | **1.78** | **67** | P | | **Pn** | | **07 26 20.1** | **+1.1** |
| HAZ | | | | S | | **Sn** | | **07 26 44.8** | **-3.3** |
| **TWGZ** | **Tauwhareparae** | **1.81** | **81** | P | | **Pn** | | **07 26 22.1** | **+2.8** |
| TWGZ | | | | S | | **Sn** | | **07 26 47.9** | **-0.7** |
| **DVHZ** | **Dannevirke** | **1.85** | **169** | P | | **Pn** | | **07 26 21.4** | **+1.7** |
| **CNGZ** | **Carnagh Statio** | **1.96** | **91** | P | | **Pn** | | **07 26 23.4** | **+2.8** |
| **PKGZ** | **Pakihiroa** | **1.96** | **73** | P | | **Pn** | | **07 26 22.7** | **+1.9** |
| PKGZ | | | | S | | **Sn** | | **07 26 49.5** | **-1.8** |
| **ANWZ** | **Angora Road** | **2.06** | **164** | P | | **Pn** | | **07 26 23.8** | **+2.1** |
| ANWZ | | | | S | | **Sn** | | **07 26 51.5** | **-1.7** |
| **PRWZ** | **Pori Road** | **2.08** | **175** | P | | **Pn** | | **07 26 24.0** | **+2.1** |
| **MRZ** | **Mangatainoka R** | **2.18** | **183** | P | | **Pn** | | **07 26 24.6** | **+1.7** |
| **BFZ** | **Birch Farm** | **2.24** | **170** | P | | **Pn** | | **07 26 25.3** | **+1.7** |
| **OGWZ** | **Otaki Gorge** | **2.37** | **190** | P | | **Pn** | | **07 26 27.0** | **+2.1** |
| OGWZ | | | | S | | **Sn** | | **07 26 56.6** | **-2.3** |
| **HOWZ** | **Holdsworth Sta** | **2.42** | **184** | P | | **Pn** | | **07 26 26.9** | **+1.5** |
| HOWZ | | | | S | | **Sn** | | **07 26 57.5** | **-2.4** |
| **KIW** | **Kapiti Island** | **2.46** | **194** | P | | **Pn** | | **07 26 27.4** | **+1.5** |
| **TMWZ** | **Te Maipa** | **2.63** | **177** | P | | **Pn** | | **07 26 29.3** | **+1.5** |
| **CAW** | **Cannon Point** | **2.67** | **191** | P | | **Pn** | | **07 26 29.8** | **+1.6** |
| **MTW** | **Mount Morrison** | **2.68** | **183** | P | | **Pn** | | **07 26 29.4** | **+1.2** |
| **DUWZ** | **D'Urville Isla** | **2.70** | **210** | P | | **Pn** | | **07 26 30.2** | **+1.6** |
| **PAWZ** | **Paruwai Farm** | **2.91** | **184** | P | | **Pn** | | **07 26 31.9** | **+1.0** |
| **TRWZ** | **Traveller** | **2.92** | **180** | P | | **Pn** | | **07 26 32.5** | **+1.5** |
| **TCW** | **Tory Channel** | **2.94** | **202** | P | | **Pn** | | **07 26 32.5** | **+1.7** |
| **MSWZ** | **Moikau Station** | **2.96** | **187** | P | | **Pn** | | **07 26 32.9** | **+1.1** |
| **PLWZ** | **Palliser** | **3.11** | **186** | P | | **Pn** | | **07 26 34.2** | **+1.0** |
| **TUWZ** | **Tuamarina** | **3.25** | **204** | P | | **Pn** | | **07 26 36.7** | **+2.0** |
| **NNZ** | **Nelson** | **3.27** | **213** | P | | **Pn** | | **07 26 36.5** | **+1.5** |
| **TKNZ** | **Takaka Hill** | **3.32** | **219** | P | | **Pn** | | **07 26 36.9** | **+1.3** |
| **QRZ** | **Quartz Range** | **3.40** | **225** | P | | **Pn** | | **07 26 37.0** | **+0.4** |
| **BSWZ** | **Blackbirch Sta** | **3.53** | **203** | P | | **Pn** | | **07 26 39.7** | **+1.7** |
| **MRNZ** | **Matariki Terra** | **3.70** | **217** | P | | **Pn** | | **07 26 41.7** | **+1.6** |
| **THZ** | **Tophouse** | **3.92** | **212** | P | | **Pn** | | **07 26 44.4** | **+1.4** |
| **KHZ** | **Kahutara** | **4.27** | **202** | P | | **Pn** | | **07 26 48.7** | **+1.6** |
| **KHZ** | **Kahutara** | **4.27** | **202** | P | | **Pn** | | **07 26 48.8** | **+1.7** |
| **GVZ** | **Greta Valley S** | **4.92** | **204** | P | | **Pn** | | **07 26 56.5** | **+1.2** |
| **LTZ** | **Lake Taylor** | **5.03** | **210** | P | | **Pn** | | **07 26 57.9** | **+1.2** |
| **OXZ** | **Oxford** | **5.58** | **209** | P | | **Pn** | | **07 27 04.2** | **+0.4** |
| **MQZ** | **McQueen's Vall** | **5.71** | **203** | P | | **Pn** | | **07 27 05.6** | **+0.3** |
| **RPZ** | **Rata Peaks** | **6.30** | **212** | P | | **Pn** | | **07 27 14.3** | **+1.4** |
| **TMZ** | **Timaru** | **6.88** | **209** | P | | **Pn** | | **07 27 21.4** | **+1.1** |
| **ODZ** | **Otahua Downs** | **7.57** | **208** | P | | **Pn** | | **07 27 31.0** | **+1.7** |

*SDD* ***25*** *07:27:25.8±2.2, 17.91N×71.26W, h13km±22km, MD3.2, ML2.9, MW3.3*
*OSPL* ***25*** *07:27:27.9±2.0, 18.03N×71.24W, h0km±16km, ML2.8*
**ISC 25 07:27:25.5±1.5, 17.94N±0.07×71.24W±0.03, h13km±7km, n20, σ1§07/34, 18C-8D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LOBA2** | **Hotel Casa Bon** | **0.19** | **45** | ⇑*e*Pg | | **Pg** | | **07 27 30.2** | **+0.3** |
| **PODR** | **Polo** | **0.23** | **349** | ⇑*e*Pg | | **Pg** | | **07 27 30.2** | **-0.3** |
| PODR | | | | ⇑*e*Sg | | **Sg** | | **07 27 34.0** | **0.0** |
| PODR | | | | IAML | | | | 07 27 34.9 | |
| | comp=Z,4μm,0.2s | | | | | | | | |
| PODR | | | | IAML | | | | 07 27 35.0 | |
| | comp=N,7μm,0.2s | | | | | | | | |
| PODR | | | | IAML | | | | 07 27 35.0 | |
| | comp=N,8μm,0.3s | | | | | | | | |
| **PODR** | **Polo** | **0.23** | **349** | *i* P | | **Pg** | | **07 27 30.3** | **-0.3** |
| PODR | | | | *e*S | | **Sg** | | **07 27 33.8** | **-0.2** |
| PODR | | | | IAML | | | | 07 27 35.0 | |
| | comp=Z,6μm,0.2s | | | | | | | | |
| **BRH1** | **Barahona** | **0.30** | **28** | ⇑*e*Pg | | **Pg** | | **07 27 31.8** | **+0.1** |
| BRH1 | | | | ⇑*e*Sg | | **Sb** | | **07 27 36.6** | **-1.0** |
| **NEDR** | **Neiba UASD** | **0.56** | **342** | ⇓*e*Pg | | **Pg** | | **07 27 36.6** | **0.0** |
| NEDR | | | | IAML | | | | 07 27 41.7 | |
| | comp=Z,675nm,0.9s | | | | | | | | |
| NEDR | | | | IAML | | | | 07 27 47.8 | |
| | comp=N,117nm,0.1s | | | | | | | | |
| NEDR | | | | IAML | | | | 07 27 47.9 | |
| | comp=N,844nm,0.5s | | | | | | | | |
| **JIDR** | **Jimani** | **0.80** | **313** | ⇓*e*Pg | | **Pg** | | **07 27 39.5** | **-1.5** |
| JIDR | | | | ⇑*e*Sg | | **Sb** | | **07 27 52.5** | **+0.5** |
| JIDR | | | | IAML | | | | 07 27 56.9 | |
| | comp=Z,598nm,0.7s | | | | | | | | |
| JIDR | | | | IAML | | | | 07 28 02.4 | |
| | comp=N,249nm,0.5s | | | | | | | | |
| JIDR | | | | IAML | | | | 07 28 02.4 | |
| | comp=N,249nm,0.5s | | | | | | | | |
| **BANI** | **BANI** | **0.95** | **62** | ⇑*e*Pg | | **Pg** | | **07 27 43.8** | **-0.1** |
| BANI | | | | ⇑*e*Sg | | **Sb** | | **07 27 56.7** | **+0.3** |
| BANI | | | | IAML | | | | 07 27 59.2 | |
| | comp=N,737nm,0.2s | | | | | | | | |
| BANI | | | | IAML | | | | 07 27 59.3 | |
| | comp=N,737nm,0.2s | | | | | | | | |
| BANI | | | | IAML | | | | 07 27 59.7 | |
| | comp=E,399nm,0.3s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **1.03** | **357** | ⇑*e*Pg | | **Pb** | | **07 27 44.1** | **-1.2** |
| SDDR | | | | ⇑*e*Sg | | **Sn** | | **07 27 59.3** | **-0.9** |
| SDDR | | | | IAML | | | | 07 28 04.4 | |
| | comp=E,163nm,0.4s | | | | | | | | |
| SDDR | | | | IAML | | | | 07 28 04.6 | |
| | comp=N,149nm,0.7s | | | | | | | | |
| SDDR | | | | IAML | | | | 07 28 08.6 | |
| | comp=N,168nm,0.5s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **1.03** | **357** | *i* P | | **Pb** | | **07 27 44.1** | **-1.2** |
| SDDR | | | | IAML | | | | 07 28 04.1 | |
| | comp=Z,137nm,0.5s | | | | | | | | |
| **ABDR** | **Alto Bandera** | **1.04** | **34** | ⇑*e*Pg | | **Pg** | | **07 27 45.0** | **-0.6** |
| ABDR | | | | ⇓*e*Sg | | **Sg** | | **07 27 58.3** | **-1.0** |
| ABDR | | | | IAML | | | | 07 28 04.5 | |
| | comp=E,391nm,0.3s | | | | | | | | |
| ABDR | | | | IAML | | | | 07 28 06.3 | |
| | comp=N,381nm,0.4s | | | | | | | | |
| ABDR | | | | IAML | | | | 07 28 06.3 | |
| | comp=N,381nm,0.4s | | | | | | | | |
| **PAPH** | **Port-au-Prince** | **1.16** | **300** | *i* P | | **Pg** | | **07 27 48.4** | **+0.5** |
| PAPH | | | | *e*S | | **Sg** | | **07 28 03.3** | **+0.2** |
| PAPH | | | | IAML | | | | 07 28 15.6 | |
| | comp=Z,93nm,0.7s | | | | | | | | |
| **REDR** | **Restauracion** | **1.23** | **353** | ⇑*e*Pg | | **Pg** | | **07 27 49.9** | **+0.8** |
| REDR | | | | ⇑*e*Sg | | **Sg** | | **07 28 08.9** | **+3.8** |
| REDR | | | | IAML | | | | 07 28 11.5 | |
| | comp=N,198nm,0.2s | | | | | | | | |
| REDR | | | | IAML | | | | 07 28 11.6 | |
| | comp=N,221nm,0.2s | | | | | | | | |
| REDR | | | | IAML | | | | 07 28 14.4 | |
| | comp=E,327nm,0.2s | | | | | | | | |
| **SDD** | **Santo Domingo** | **1.36** | **68** | ⇓*e*Pg | | **Pb** | | **07 27 50.8** | **0.0** |
| SDD | | | | ⇑*e*Sg | | **Sg** | | **07 28 09.4** | **+0.1** |
| SDD | | | | IAML | | | | 07 28 11.7 | |
| | comp=N,35nm,0.3s | | | | | | | | |
| SDD | | | | IAML | | | | 07 28 13.2 | |
| | comp=E,22nm,0.5s | | | | | | | | |
| SDD | | | | IAML | | | | 07 28 17.2 | |
| | comp=N,35nm,1.1s | | | | | | | | |
| **SDD** | **Santo Domingo** | **1.36** | **68** | *i* P | | **Pb** | | **07 27 50.9** | **0.0** |
| SDD | | | | *e*S | | **Sg** | | **07 28 09.9** | **+0.5** |
| **SC01** | **Santiago de lo** | **1.55** | **18** | *i* P | | **Pb** | | **07 27 54.1** | **-0.1** |
| SC01 | | | | IAML | | | | 07 28 40.0 | |
| | comp=Z,100nm,0.7s | | | | | | | | |
| **SODR** | **Sosua Marina B** | **1.91** | **19** | ⇑*e*Pg | | **Pb** | | **07 27 59.4** | **-0.7** |
| SODR | | | | IAML | | | | 07 28 33.3 | |
| | comp=E,132nm,0.5s | | | | | | | | |
| SODR | | | | IAML | | | | 07 28 37.0 | |
| | comp=N,183nm,0.8s | | | | | | | | |
| SODR | | | | IAML | | | | 07 28 40.8 | |
| | comp=N,221nm,0.6s | | | | | | | | |
| **NADR** | **Nagua** | **1.92** | **43** | ⇓*e*Pg | | **Pb** | | **07 27 59.2** | **-1.2** |
| NADR | | | | IAML | | | | 07 28 34.7 | |
| | comp=N,232nm,0.3s | | | | | | | | |
| NADR | | | | IAML | | | | 07 28 37.9 | |
| | comp=N,279nm,0.5s | | | | | | | | |
| NADR | | | | IAML | | | | 07 28 41.6 | |
| | comp=E,185nm,0.4s | | | | | | | | |
| **MIDR** | **Miches** | **2.32** | **63** | ⇑*e*Pg | | **Pn** | | **07 28 04.9** | **+1.5** |
| MIDR | | | | ⇓*e*Sg | | **Sb** | | **07 28 34.5** | **-1.3** |
| MIDR | | | | IAML | | | | 07 28 38.9 | |
| | comp=E,56nm,0.7s | | | | | | | | |
| MIDR | | | | IAML | | | | 07 28 40.3 | |
| | comp=N,39nm,0.5s | | | | | | | | |
| MIDR | | | | IAML | | | | 07 28 40.3 | |
| | comp=N,39nm,0.5s | | | | | | | | |
| **HIDR** | **Higuey Centro** | **2.48** | **75** | ⇑*e*Pg | | **Pb** | | **07 28 09.0** | **-0.9** |
| HIDR | | | | ⇑*e*Sg | | **Sb** | | **07 28 40.0** | **-0.4** |
| HIDR | | | | IAML | | | | 07 28 43.1 | |
| | comp=E,64nm,0.2s | | | | | | | | |
| HIDR | | | | IAML | | | | 07 28 49.2 | |
| | comp=N,98nm,0.3s | | | | | | | | |
| HIDR | | | | IAML | | | | 07 28 50.1 | |
| | comp=N,94nm,0.2s | | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.77** | **78** | ⇓*e*Pg | | **Pb** | | **07 28 13.5** | **-1.4** |
| PCDR | | | | ⇑*e*Sg | | **Sb** | | **07 28 49.7** | **+0.8** |
| PCDR | | | | IAML | | | | 07 29 00.1 | |
| | comp=N,38nm,0.7s | | | | | | | | |
| PCDR | | | | IAML | | | | 07 29 11.1 | |
| | comp=N,87nm,1.0s | | | | | | | | |

*DRS* ***25*** *07:45:23.2, 42.88N×46.32E, h6km*
*NORS* ***25*** *07:45:23.6, 42.92N×46.25E, h3km, MPVA4.0*
**MOS 25 07:45:21.9, 42.90N×46.28E, h6km, MPVA4.0, 3C-3D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DVE** | **Vedeno** | **0.13** | **297** | *i* Pg | | Pg | | 07 45 25.1 | +0.5 |
| DVE | | | | *e*Sg | | Sg | | 07 45 26.7 | +0.3 |
| **BTLR** | **Botlikh** | **0.24** | **190** | *e*Pg | | Pg | | 07 45 28.3 | +1.7 |
| | 120nm,0.2s | | | | | | | | |
| BTLR | | | | *e*Sg | | Sg | | 07 45 32.2 | +2.5 |
| | 600nm,1.7s | | | | | | | | |
| **DLMR** | **Dylym** | **0.31** | **56** | *e*Pg | | Pb | | 07 45 30.5 | +0.6 |
| | 200nm,0.5s | | | | | | | | |
| DLMR | | | | *e*Sg | | Sb | | 07 45 36.0 | +0.8 |
| | 440nm,3.5s | | | | | | | | |
| **DLMR** | **Dylym** | **0.31** | **56** | *e*PG | | Pb | | 07 45 30.5 | +0.6 |
| DLMR | | | | *e*S | | Sb | | 07 45 36.0 | +0.8 |
| **UNCR** | **Uncukul** | **0.42** | **116** | *e*Pg | | Pb | | 07 45 32.4 | +0.6 |
| | 400nm,0.1s | | | | | | | | |
| UNCR | | | | *e*Sg | | Sb | | 07 45 39.6 | +1.2 |
| | 560nm,0.8s | | | | | | | | |
| **UNCR** | **Uncukul** | **0.42** | **116** | *e*PG | | Pb | | 07 45 32.4 | +0.6 |
| UNCR | | | | *i* S | | Sb | | 07 45 40.0 | +1.6 |
| UNCR | | | | pmax | pmax | | | | |
| | comp=Z,74nm,0.4s | | | | | | | | |
| UNCR | | | | smax | smax | | | | |
| | comp=N,691nm,0.3s | | | | | | | | |
| **DBC** | **Dubki** | **0.42** | **73** | *e*Pg | | Pb | | 07 45 32.5 | +0.7 |
| | comp=N,600nm,0.0s | | | | | | | | |
| DBC | | | | *e*Sg | | Sb | | 07 45 39.7 | +1.2 |
| | comp=N,250nm,0.4s | | | | | | | | |
| **DBC** | **Dubki** | **0.42** | **73** | *e*PG | | Pb | | 07 45 32.5 | +0.7 |
| DBC | | | | *e*S | | Sb | | 07 45 39.7 | +1.2 |
| DBC | | | | pmax | pmax | | | | |
| | comp=Z,28nm,0.6s | | | | | | | | |
| DBC | | | | smax | smax | | | | |
| | comp=E,387nm,0.3s | | | | | | | | |
| DBC | | | | smax | smax | | | | |
| | comp=N,282nm,0.3s | | | | | | | | |
| DBC | | | | smax | smax | | | | |
| | comp=E,368nm,1.1s | | | | | | | | |
| **KRNR** | **Karanay** | **0.47** | **99** | *e*Pg | | Pb | | 07 45 33.0 | +0.4 |
| KRNR | | | | *e*Sg | | Sb | | 07 45 40.7 | +0.9 |
| **KRNR** | **Karanay** | **0.47** | **99** | *e*PG | | Pb | | 07 45 33.0 | +0.4 |
| KRNR | | | | *e*S | | Sb | | 07 45 40.7 | +0.9 |
| **HNZR** | **Khunzah** | **0.47** | **136** | *e*PG | | Pb | | 07 45 33.6 | +0.9 |
| HNZR | | | | *e*S | | Sb | | 07 45 41.5 | +1.6 |
| **XNZR** | **Khunzakh** | **0.47** | **139** | *e*Pg | | Pb | | 07 45 33.6 | +0.9 |
| XNZR | | | | *e*Sg | | Sb | | 07 45 41.5 | +1.4 |
| **ARKR** | **Arakani** | **0.60** | **119** | *e*Pg | | Pn | | 07 45 36.1 | -1.0 |
| ARKR | | | | *e*Sg | | Sn | | 07 45 45.7 | -1.5 |
| **ARKR** | **Arakani** | **0.60** | **119** | *e*PG | | Pn | | 07 45 36.1 | -1.0 |
| ARKR | | | | *e*S | | Sn | | 07 45 45.7 | -1.5 |
| **BUJR** | **Buynaksk** | **0.61** | **97** | *e*Pg | | Pn | | 07 45 37.5 | +0.3 |
| BUJR | | | | *e*Sg | | Sn | | 07 45 47.0 | -0.4 |
| **BUJR** | **Buynaksk** | **0.61** | **97** | *e*PG | | Pn | | 07 45 37.4 | +0.2 |
| BUJR | | | | *e*S | | Sn | | 07 45 47.5 | +0.1 |
| BUJR | | | | pmax | pmax | | | | |
| | comp=Z,74nm,0.4s | | | | | | | | |
| BUJR | | | | smax | smax | | | | |
| | comp=E,1μm,0.7s | | | | | | | | |
| BUJR | | | | smax | smax | | | | |
| | comp=N,1μm,0.4s | | | | | | | | |
| BUJR | | | | smax | smax | | | | |
| | comp=E,1μm,0.7s | | | | | | | | |
| **GNBR** | **Gunib** | **0.72** | **135** | *e*Pg | | Pn | | 07 45 38.4 | -0.3 |
| GNBR | | | | *e*Sg | | Sn | | 07 45 49.9 | -0.1 |
| **GNBR** | **Gunib** | **0.72** | **135** | *e*PG | | Pn | | 07 45 38.4 | -0.2 |
| GNBR | | | | *e*S | | Sn | | 07 45 49.9 | -0.1 |
| **MAK** | **Makhachkala** | **0.90** | **86** | *e*Pg | | Pn | | 07 45 42.2 | +1.1 |
| MAK | | | | *e*Sg | | Sb | | 07 45 52.3 | +0.1 |
| **MAK** | **Makhachkala** | **0.90** | **86** | *e*PG | | Pn | | 07 45 42.2 | +1.1 |
| MAK | | | | *e*S | | Sb | | 07 45 52.3 | +0.1 |
| **KANR** | **Karaman** | **0.94** | **71** | *e*Pg | | Pn | | 07 45 41.1 | -0.5 |
| KANR | | | | *e*Sg | | Sn | | 07 45 54.9 | -0.4 |
| **KANR** | **Karaman** | **0.94** | **71** | *e*PG | | Pn | | 07 45 41.1 | -0.5 |
| KANR | | | | *e*S | | Sn | | 07 45 54.9 | -0.4 |
| **KMKR** | **Kumukh** | **0.98** | **141** | *e*Pg | | Pn | | 07 45 43.3 | +0.9 |
| KMKR | | | | *e*Sg | | Sn | | 07 45 57.7 | +1.1 |
| **KMKR** | **Kumukh** | **0.98** | **141** | *e*PG | | Pn | | 07 45 43.3 | +0.9 |
| KMKR | | | | *e*S | | Sn | | 07 45 57.7 | +1.1 |
| **KMGR** | **Komgaron** | **1.05** | **279** | *e*Pg | | Pn | | 07 45 44.3 | +1.0 |
| KMGR | | | | *e*Sg | | Sn | | 07 46 00.5 | +2.2 |
| **KMGR** | **Komgaron** | **1.05** | **279** | *e*PG | | Pn | | 07 45 44.3 | +1.1 |
| KMGR | | | | *e*S | | Sn | | 07 46 00.5 | +2.3 |
| **SGKR** | **Sergokala** | **1.11** | **113** | *e*Pg | | Pn | | 07 45 44.9 | +0.9 |
| SGKR | | | | *e*Sg | | Sn | | 07 46 01.5 | +1.9 |
| **SGKR** | **Sergokala** | **1.11** | **113** | *e*PG | | Pn | | 07 45 44.8 | +0.8 |
| SGKR | | | | *e*S | | Sn | | 07 46 01.5 | +1.9 |
| **VLKR** | **Vladikavkaz** | **1.19** | **278** | *e*Pg | | Pn | | 07 45 46.7 | +1.6 |
| VLKR | | | | *e*Sg | | Sn | | 07 46 04.4 | +2.8 |
| **VLKR** | **Vladikavkaz** | **1.19** | **278** | *e*PG | | Pn | | 07 45 46.7 | +1.6 |
| VLKR | | | | *e*S | | Sn | | 07 46 04.5 | +2.9 |
| **URKR** | **Urkarakh** | **1.24** | **126** | *e*Pg | | Pn | | 07 45 47.9 | +2.0 |
| URKR | | | | *e*Sg | | Sn | | 07 46 05.8 | +2.8 |
| **URKR** | **Urkarakh** | **1.24** | **126** | *e*PG | | Pn | | 07 45 47.9 | +2.0 |
| URKR | | | | *e*S | | Sn | | 07 46 05.8 | +2.8 |
| **BTKR** | **Batakoyurt** | **1.36** | **291** | *e*Pg | | Pg | | 07 45 49.4 | +1.5 |
| BTKR | | | | *e*Sg | | Sn | | 07 46 09.5 | +3.7 |
| **BTKR** | **Batakoyurt** | **1.36** | **291** | *e*PG | | Pg | | 07 45 49.4 | +1.5 |
| BTKR | | | | *e*S | | Sn | | 07 46 09.5 | +3.7 |
| **GUDG** | **Gudauri** | **1.40** | **253** | *e*Pg | | Pb | | 07 45 48.5 | -0.1 |
| GUDG | | | | *e*Sg | | Sn | | 07 46 07.1 | +0.1 |
| **GUDG** | **Gudauri** | **1.40** | **253** | *e*PG | | Pb | | 07 45 48.5 | -0.1 |
| GUDG | | | | *e*S | | Sn | | 07 46 07.1 | +0.1 |
| **TRKR** | **Terskaya** | **1.40** | **307** | *e*Pg | | Pg | | 07 45 50.4 | +1.7 |
| TRKR | | | | *e*Sg | | Sg | | 07 46 10.8 | +3.9 |
| **TRKR** | **Terskaya** | **1.40** | **307** | *e*PG | | Pg | | 07 45 50.4 | +1.7 |
| TRKR | | | | *e*S | | Sg | | 07 46 10.8 | +3.9 |
| **LACR** | **Lac** | **1.46** | **268** | *e*Pg | | Pg | | 07 45 49.9 | +0.1 |
| LACR | | | | *e*Sg | | Sg | | 07 46 09.6 | +0.8 |
| **LACR** | **Lac** | **1.46** | **268** | *e*PG | | Pg | | 07 45 49.9 | 0.0 |
| LACR | | | | *e*S | | Sg | | 07 46 09.6 | +0.8 |
| **ARNR** | **Ardon** | **1.49** | **282** | *e*Pg | | Pg | | 07 45 51.2 | +0.7 |
| ARNR | | | | *e*Sg | | Sg | | 07 46 12.6 | +2.9 |
| **ARNR** | **Ardon** | **1.49** | **282** | *e*PG | | Pg | | 07 45 51.2 | +0.7 |
| ARNR | | | | *e*S | | Sg | | 07 46 12.6 | +2.8 |
| **KORR** | **Kora** | **1.63** | **277** | *e*Pg | | Pg | | 07 45 54.5 | +1.3 |
| KORR | | | | *e*Sg | | Sg | | 07 46 15.4 | +1.0 |
| **KORR** | **Kora** | **1.63** | **277** | *e*PN | | Pg | | 07 45 54.5 | +1.3 |
| KORR | | | | *e*S | | Sg | | 07 46 15.4 | +1.0 |
| **PRTR** | **Priterechnaya** | **1.69** | **301** | *e*Pg | | Pg | | 07 45 55.0 | +0.7 |
| PRTR | | | | *e*Sg | | Sg | | 07 46 19.1 | +3.0 |
| **PRTR** | **Priterechnaya** | **1.69** | **301** | *e*PN | | Pg | | 07 45 55.0 | +0.7 |
| PRTR | | | | *e*S | | Sg | | 07 46 19.1 | +2.9 |
| **STDR** | **Stavd-Durt** | **1.69** | **287** | *e*Pg | | Pb | | 07 45 53.8 | +0.4 |
| STDR | | | | *e*Sg | | Sg | | 07 46 17.6 | +1.4 |
| **STDR** | **Stavd-Durt** | **1.69** | **287** | *e*PN | | Pb | | 07 45 53.8 | +0.4 |
| STDR | | | | *e*S | | Sg | | 07 46 17.6 | +1.4 |
| **DRN** | **Derbent** | **1.75** | **119** | *e*Pg | | Pg | | 07 45 55.3 | -0.1 |
| DRN | | | | *e*Sg | | Sg | | 07 46 19.6 | +1.6 |
| **DRN** | **Derbent** | **1.75** | **119** | *e*PN | | Pg | | 07 45 55.3 | -0.1 |
| DRN | | | | *e*S | | Sg | | 07 46 19.6 | +1.6 |
| **AKT** | **Akhty** | **1.78** | **142** | *e*Pg | | Pg | | 07 45 56.8 | +0.8 |
| AKT | | | | *e*Sg | | Sg | | 07 46 20.8 | +1.7 |
| **AKT** | **Akhty** | **1.78** | **142** | *e*PN | | Pg | | 07 45 56.8 | +0.8 |
| AKT | | | | *e*S | | Sg | | 07 46 20.8 | +1.7 |
| **LSNR** | **Lesken** | **1.84** | **283** | *e*Pg | | Pg | | 07 45 56.6 | -0.5 |
| LSNR | | | | *e*Sg | | Sg | | 07 46 21.8 | +0.9 |
| **LSNR** | **Lesken** | **1.84** | **283** | *e*PN | | Pg | | 07 45 56.6 | -0.5 |
| LSNR | | | | *e*S | | Sg | | 07 46 21.8 | +0.9 |
| **KSMR** | **Kasumkent** | **1.89** | **133** | *e*Pg | | Pg | | 07 45 59.8 | +1.8 |
| KSMR | | | | *i* Sg | | Sg | | 07 46 26.2 | +3.8 |
| **KSMR** | **Kasumkent** | **1.89** | **133** | *e*PN | | Pg | | 07 45 59.8 | +1.8 |
| KSMR | | | | *i* S | | Sg | | 07 46 26.2 | +3.7 |
| **NCK** | **Nalchik** | **2.05** | **288** | ⇑*e*PN | | Pn | | 07 45 56.9 | -0.1 |
| **AKH

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| URLA | | | | Sg | Sg | 08 10 49.9 | +0.3 | | |
| **CESE** | **eme** | **0.58** | **190** | Pg | Pg | **08 10 41.7** | **-1.1** | | |
| CESE | | | | Sg | Sg | **08 10 50.9** | **+0.5** | | |
| **CHOS** | **Chios island** | **0.59** | **210** | Pg | Pg | **08 10 42.7** | **-0.4** | | |
| **CHOS** | **Chios island** | **0.59** | **210** | P | Pg | **08 10 42.5** | **-0.5** | | |
| CHOS | comp=N,11μm,0.3s | | | S | Sg | **08 10 51.4** | **+0.6** | | |
| **CHOS** | **Chios island** | **0.59** | **210** | P | Pg | **08 10 42.6** | **-0.4** | | |
| CHOS | | | | S | Sb | **08 10 51.8** | **-0.5** | | |
| CHOS | comp=N,15990μm,0.3s | | | AML | AML | 08 10 55.1 | | | |
| CHOS | comp=E,27357μm,0.3s | | | AML | AML | 08 10 55.6 | | | |
| **GPNR** | **Gulpinar-Canak** | **0.60** | **337** | Pg | Pg | **08 10 43.1** | **-0.1** | | |
| **KOCA** | **Canakkale, Ayv** | **0.64** | **339** | P | Pg | **08 10 43.8** | **-0.2** | | |
| KOCA | | | | S | Sg | **08 10 53.4** | **+1.0** | | |
| KOCA | comp=E,8μm,0.4s | | | *i* AML | AML | 08 10 57.0 | | | |
| KOCA | comp=E,9μm,0.3s | | | *i* AML | AML | 08 10 58.0 | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **0.66** | **175** | P | Pg | **08 10 43.8** | **-0.6** | | |
| ZEYE | | | | S | Sb | **08 10 54.8** | **+0.5** | | |
| ZEYE | comp=E,1μm,0.3s | | | *i* AML | AML | 08 10 56.0 | | | |
| ZEYE | comp=E,1μm,0.5s | | | *i* AML | AML | 08 10 57.0 | | | |
| **PSRA** | **Psara** | **0.77** | **242** | P | Pg | **08 10 46.0** | **-0.4** | | |
| PSRA | | | | S | Sg | **08 10 56.2** | **-0.2** | | |
| **BUHA** | **Balikesir, Bur** | **0.78** | **40** | P | Pg | **08 10 45.5** | **-1.2** | | |
| BUHA | | | | S | Sb | **08 10 58.8** | **+0.9** | | |
| BUHA | comp=E,8μm,0.7s | | | *i* AML | AML | 08 11 00.0 | | | |
| BUHA | comp=E,5μm,0.4s | | | *i* AML | AML | 08 11 02.0 | | | |
| **BAYC** | **CANAKKALE_Bayr** | **0.84** | **6** | P | Pg | **08 10 47.0** | **-0.9** | | |
| BAYC | | | | S | Sb | **08 11 00.0** | **+0.4** | | |
| BAYC | comp=E,6μm,0.6s | | | *i* AML | AML | 08 11 01.0 | | | |
| BAYC | comp=E,5μm,0.2s | | | *i* AML | AML | 08 11 02.0 | | | |
| **EZNE** | **Ezine-Canakkal** | **0.86** | **357** | Pg | Pg | **08 10 47.6** | **-0.5** | | |
| **SOMA** | **Soma-Manisa** | **0.90** | **73** | Pg | Pg | **08 10 48.8** | **0.0** | | |
| **GMLD** | **Gumuldur** | **0.91** | **155** | Pg | Pg | **08 10 48.3** | **-0.7** | | |
| **DGB** | **zmir** | **0.92** | **157** | P | Pg | **08 10 47.8** | **-1.4** | | |
| DGB | | | | S | Sg | **08 11 00.9** | **-0.3** | | |
| DGB | comp=E,1μm,0.4s | | | *i* AML | AML | 08 11 02.0 | | | |
| DGB | comp=E,2μm,0.5s | | | *i* AML | AML | 08 11 03.0 | | | |
| **EZN** | **Ezine** | **0.93** | **355** | Pg | Pg | **08 10 48.4** | **-1.0** | | |
| **EZN** | **Ezine** | **0.93** | **355** | P | Pg | **08 10 48.4** | **-1.0** | | |
| EZN | comp=E,8μm,0.3s | | | S | Sb | **08 11 02.4** | **+0.4** | | |
| **AKS** | **Akhisar** | **1.08** | **91** | Pg | Pg | **08 10 51.2** | **-1.1** | | |
| **STEP** | **BALIKESIR_Sava** | **1.11** | **64** | P | Pg | **08 10 52.3** | **-0.5** | | |
| STEP | | | | S | Sg | **08 11 06.9** | **-0.4** | | |
| STEP | comp=E,6μm,0.4s | | | *i* AML | AML | 08 11 09.0 | | | |
| STEP | comp=E,4μm,0.3s | | | *i* AML | AML | 08 11 10.0 | | | |
| **GOMA** | **Golmarmara-Man** | **1.18** | **99** | Pn | Pg | **08 10 52.5** | **-1.6** | | |
| **COMU** | **Canakkale** | **1.20** | **2** | Pn | Pb | **08 10 53.4** | **-0.9** | | |
| **YENI** | **Yenice-Canakka** | **1.21** | **31** | Pn | Pb | **08 10 53.9** | **-0.6** | | |
| **EFSA** | **Agios Efstrati** | **1.29** | **300** | P | Pn | **08 10 54.7** | **-0.7** | | |
| EFSA | | | | S | Sb | **08 11 11.2** | **-1.1** | | |
| **GADA** | **Gvkgeada** | **1.35** | **342** | Pn | Pn | **08 10 55.8** | **-0.6** | | |
| **GCAM** | **G?zelcaml?** | **1.35** | **152** | Pn | Pn | **08 10 55.7** | **-0.7** | | |
| **GORD** | **Gordes-Manisa** | **1.36** | **89** | Pn | Pn | **08 10 55.9** | **-0.7** | | |
| **LIA** | **Limnos Island** | **1.39** | **316** | P | Pn | **08 10 56.2** | **-0.6** | | |
| LIA | comp=E,10μm,0.4s | | | S | Sb | **08 11 14.5** | **-0.7** | | |
| **LIA** | **Limnos Island** | **1.39** | **316** | P | Pn | **08 10 56.4** | **-0.4** | | |
| LIA | | | | S | Sb | **08 11 13.3** | **-1.9** | | |
| LIA | comp=E,28205μm,0.4s | | | AML | AML | 08 11 17.3 | | | |
| LIA | comp=N,13427μm,0.4s | | | AML | AML | 08 11 18.2 | | | |
| **BKES** | **Balkesir-Mer** | **1.43** | **54** | P | Pn | **08 10 56.8** | **-0.7** | | |
| BKES | | | | S | Sn | **08 11 15.9** | **-0.3** | | |
| BKES | comp=N,2μm,0.5s | | | *i* AML | AML | 08 11 18.0 | | | |
| BKES | comp=N,2μm,0.4s | | | *i* AML | AML | 08 11 20.0 | | | |
| **ODEM** | **Odemis-Izmir** | **1.43** | **115** | Pn | Pn | **08 10 57.1** | **-0.4** | | |
| **SKY** | **Skiros Island** | **1.47** | **270** | P | Pn | **08 10 57.6** | **-0.3** | | |
| SKY | | | | S | Sn | **08 11 15.4** | **-1.8** | | |
| SKY | comp=E,3470μm,0.5s | | | AML | AML | 08 11 21.5 | | | |
| SKY | comp=N,2661μm,0.5s | | | AML | AML | 08 11 21.9 | | | |
| **AYDB** | **Zeytinkoy-Aydi** | **1.49** | **129** | Pn | Pn | **08 10 57.6** | **-0.8** | | |
| **LPK** | **Lapseki** | **1.49** | **10** | Pn | Pn | **08 10 57.9** | **-0.4** | | |
| **GELI** | **Tayfur-Gelibol** | **1.50** | **1** | Pn | Pn | **08 10 57.5** | **-0.8** | | |
| **GONE** | **Goneen-Balikesi** | **1.50** | **40** | Pn | Pn | **08 10 57.9** | **-0.5** | | |
| **DDIM** | **Aydin, Didim** | **1.58** | **156** | P | Pb | **08 11 00.9** | **+0.2** | | |
| DDIM | | | | S | Sg | **08 11 23.0** | **+0.8** | | |
| DDIM | comp=N,804nm,0.5s | | | *i* AML | AML | 08 11 32.0 | | | |
| DDIM | comp=N,736nm,0.8s | | | *i* AML | AML | 08 11 35.0 | | | |
| **KRBG** | **Karabiga-Canak** | **1.63** | **24** | Pn | Pn | **08 10 59.7** | **-0.5** | | |
| **SUSR** | **Susurluk-Balik** | **1.66** | **50** | Pn | Pn | **08 11 00.3** | **-0.3** | | |
| **TNSA** | **Tinos** | **1.69** | **217** | P | Pn | **08 10 60.0** | **-0.9** | | |
| TNSA | | | | S | Sn | **08 11 20.8** | **-1.7** | | |
| **KIRA** | **zmir-Kiraz** | **1.70** | **114** | P | Pn | **08 11 00.7** | **-0.5** | | |
| KIRA | | | | S | Sg | **08 11 25.8** | **-0.3** | | |
| KIRA | comp=N,522nm,0.8s | | | *i* AML | AML | 08 11 28.0 | | | |
| KIRA | comp=N,400nm,0.3s | | | *i* AML | AML | 08 11 30.0 | | | |
| **MANT** | **Manisa** | **1.71** | **103** | P | Pn | **08 11 00.9** | **-0.6** | | |
| MANT | | | | S | Sg | **08 11 26.5** | **-0.1** | | |
| MANT | comp=N,216nm,0.3s | | | *i* AML | AML | 08 11 27.0 | | | |
| MANT | comp=N,312nm,0.5s | | | *i* AML | AML | 08 11 35.0 | | | |
| **SMTH** | **Samothraki Isl** | **1.72** | **336** | P | Pn | **08 11 00.6** | **-0.8** | | |
| SMTH | | | | S | Sn | **08 11 23.2** | **-0.1** | | |
| **SMTH** | **Samothraki Isl** | **1.72** | **336** | P | Pn | **08 11 01.2** | **-0.2** | | |
| SMTH | | | | S | Sn | **08 11 21.6** | **-1.7** | | |
| **NAZL** | **Nazilli-Aydin** | **1.73** | **122** | Pn | Pn | **08 11 01.3** | **-0.3** | | |
| **KULA** | **Kula-Manisa** | **1.79** | **102** | Pn | Pn | **08 11 01.9** | **-0.5** | | |
| **KULA** | **Kula-Manisa** | **1.79** | **102** | P | Pn | **08 11 01.6** | **-0.8** | | |
| KULA | | | | S | Sn | **08 11 25.6** | **+0.5** | | |
| **CAVK** | **Edirne/Enez-Ca** | **1.80** | **354** | ⇑P | Pn | **08 11 02.5** | **-0.1** | | |
| CAVK | | | | ⇑S | Sn | **08 11 26.4** | **+1.0** | | |
| **EDC** | **Edincik** | **1.82** | **37** | Pn | Pn | **08 11 02.2** | **-0.6** | | |
| **DST** | **Dursunbey** | **1.84** | **67** | Pn | Pn | **08 11 02.9** | **-0.2** | | |
| **KYMI** | **Kymi, Euboea I** | **1.84** | **262** | P | Pn | **08 11 02.0** | **-1.1** | | |
| **KYMI** | **Kymi, Euboea I** | **1.84** | **262** | P | Pn | **08 11 01.9** | **-1.1** | | |
| KYMI | | | | S | Sn | **08 11 24.4** | **-2.0** | | |
| KYMI | comp=E,641μm,0.4s | | | AML | AML | 08 11 36.5 | | | |
| KYMI | comp=N,654μm,0.4s | | | AML | AML | 08 11 38.6 | | | |
| **ENEZ** | **Enez** | **1.85** | **353** | P | Pn | **08 11 02.7** | **-0.4** | | |
| ENEZ | comp=N,3μm,0.5s | | | S | Sn | **08 11 27.1** | **+0.6** | | |
| **MLSB** | **Milas** | **1.92** | **146** | Pn | Pn | **08 11 03.6** | **-0.6** | | |
| **BAND** | **Balkesir-Ban** | **1.94** | **41** | ⇑P | Pn | **08 11 03.8** | **-0.7** | | |
| **APE** | **Apeiranthos** | **1.96** | **202** | Pn | Pn | **08 11 04.0** | **-0.8** | | |
| **APE** | **Apeiranthos** | **1.96** | **202** | P | Pn | **08 11 03.2** | **-1.6** | | |
| APE | | | | S | Sn | **08 11 28.6** | **-0.8** | | |
| **APE** | **Apeiranthos** | **1.96** | **202** | ⇑P | Pn | **08 11 03.0** | **-1.8** | | |
| **APE** | **Apeiranthos** | **1.96** | **202** | P | Pn | **08 11 03.3** | **-1.5** | | |
| APE | | | | S | Sn | **08 11 28.2** | **-1.2** | | |
| APE | comp=E,1972μm,0.5s | | | AML | AML | 08 11 38.7 | | | |
| APE | comp=N,1258μm,0.6s | | | AML | AML | 08 11 39.1 | | | |
| **BODT** | **Bodrum** | **1.96** | **159** | Pn | Pn | **08 11 03.6** | **-1.2** | | |
| **BODT** | **Bodrum** | **1.96** | **159** | P | Pn | **08 11 03.7** | **-1.1** | | |
| **SIMA** | **Simav-Kutahya** | **2.00** | **84** | Pn | Pn | **08 11 05.1** | **-0.2** | | |
| **SMAA** | **Simav-Kutahya** | **2.00** | **83** | Pn | Pn | **08 11 05.2** | **-0.1** | | |
| **ALN** | **Alexandroupoli** | **2.02** | **352** | P | Pn | **08 11 05.0** | **-0.5** | | |
| ALN | comp=N,2μm,0.6s | | | S | Sn | **08 11 30.6** | **-0.1** | | |
| **ALN** | **Alexandroupoli** | **2.02** | **352** | P | Pn | **08 11 05.0** | **-0.5** | | |
| ALN | | | | S | Sn | **08 11 29.8** | **-0.9** | | |
| ALN | comp=E,3855μm,0.6s | | | AML | AML | 08 11 36.7 | | | |
| ALN | comp=N,3520μm,0.6s | | | AML | AML | 08 11 37.1 | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DION** | **Dionisos Attik** | **2.12** | **248** | P | Pn | **08 11 06.5** | **-0.5** | | |
| DION | comp=N,802nm,0.5s | | | S | Sn | **08 11 32.3** | **-1.1** | | |
| **DION** | **Dionisos Attik** | **2.12** | **248** | P | Pn | **08 11 06.7** | **-0.3** | | |
| DION | | | | S | Sn | **08 11 31.5** | **-1.9** | | |
| DION | comp=E,1076μm,0.4s | | | AML | AML | 08 11 46.8 | | | |
| DION | comp=N,1278μm,0.9s | | | AML | AML | 08 11 48.2 | | | |
| **THAS** | **Thassos island** | **2.15** | **323** | P | Pn | **08 11 06.5** | **-0.9** | | |
| THAS | | | | S | Sn | **08 11 34.6** | **+0.5** | | |
| **THAS** | comp=N,900nm,0.4s **Thassos island** | **2.15** | **323** | P | Pn | **08 11 06.9** | **-0.5** | | |
| THAS | | | | S | Sn | **08 11 32.3** | **-1.8** | | |
| THAS | comp=N,1661μm,0.6s | | | AML | AML | 08 11 41.7 | | | |
| THAS | comp=E,1608μm,0.5s | | | AML | AML | 08 11 46.0 | | | |
| **SHAP** | **Saphane-Kutahy** | **2.18** | **86** | Pn | Pn | **08 11 08.3** | **+0.5** | | |
| **ATHU** | **Athens Univers** | **2.28** | **247** | P | Pn | **08 11 07.9** | **-1.2** | | |
| **ATHU** | **Athens Univers** | **2.28** | **247** | P | Pn | **08 11 07.8** | **-1.2** | | |
| ATHU | | | | S | Sn | **08 11 35.1** | **-2.0** | | |
| ATHU | comp=E,140μm,0.5s | | | AML | AML | 08 11 50.8 | | | |
| ATHU | comp=N,298μm,0.7s | | | AML | AML | 08 11 56.2 | | | |
| **YER** | **Yerkesik** | **2.29** | **140** | Pn | Pn | **08 11 08.9** | **-0.4** | | |
| **YER** | **Yerkesik** | **2.29** | **140** | P | Pn | **08 11 08.9** | **-0.4** | | |
| **DAT** | **Datca** | **2.35** | **157** | Pn | Pn | **08 11 10.1** | **-0.1** | | |
| **DAT** | **Datca** | **2.35** | **157** | P | Pn | **08 11 09.1** | **-1.1** | | |
| **PAIG** | **Paliouri** | **2.37** | **297** | P | Pn | **08 11 09.5** | **-0.8** | | |
| **OUR** | **Ouranopolis** | **2.37** | **308** | P | Pn | **08 11 09.6** | **-0.8** | | |
| **OUR** | **Ouranopolis** | **2.37** | **308** | P | Pn | **08 11 10.0** | **-0.4** | | |
| OUR | | | | S | Sn | **08 11 37.6** | **-1.9** | | |
| OUR | comp=N,1477μm,0.5s | | | AML | AML | 08 11 49.3 | | | |
| OUR | comp=E,1385μm,0.7s | | | AML | AML | 08 11 51.3 | | | |
| **KAVA** | **Kavala** | **2.56** | **325** | P | Pn | **08 11 12.6** | **-0.4** | | |
| **KAVA** | **Kavala** | **2.56** | **325** | P | Pn | **08 11 12.6** | **-0.4** | | |
| KAVA | | | | S | Sn | **08 11 41.3** | **-2.8** | | |
| **TURN** | **Turunc** | **2.56** | **145** | Pn | Pn | **08 11 12.8** | **-0.2** | | |
| **KVLA** | **Kavala** | **2.57** | **323** | P | Pn | **08 11 12.7** | **-0.4** | | |
| KVLA | | | | S | Sn | **08 11 41.7** | **-2.7** | | |
| **VIL2** | **Platees** | **2.57** | **255** | P | Pn | **08 11 12.2** | **-0.9** | | |
| **SANT** | **Santorini** | **2.64** | **197** | Pn | Pn | **08 11 14.1** | **0.0** | | |
| **KOKK** | **Kokkinochori,** | **2.68** | **316** | P | Pn | **08 11 14.2** | **-0.4** | | |
| **KOKK** | **Kokkinochori,** | **2.68** | **316** | P | Pn | **08 11 14.0** | **-0.5** | | |
| KOKK | | | | S | Sn | **08 11 45.0** | **-2.1** | | |
| KOKK | comp=N,1932μm,0.7s | | | AML | AML | 08 11 56.5 | | | |
| KOKK | comp=E,1644μm,0.7s | | | AML | AML | 08 11 58.1 | | | |
| **DALY** | **Dalyan (Mula)** | **2.72** | **139** | Pn | Pn | **08 11 15.7** | **+0.5** | | |
| **MHLO** | **Agia Marina, M** | **2.73** | **217** | P | Pn | **08 11 15.6** | **+0.3** | | |
| **KDZ** | **Kurdzhali** | **2.85** | **343** | P | Pn | **08 11 16.8** | **-0.2** | | |
| **LOUT** | **Loutraki** | **2.86** | **253** | P | Pn | **08 11 16.4** | **-0.7** | | |
| **EDRB** | **Edirne** | **2.95** | **5** | P | Pn | **08 11 17.6** | **-0.8** | | |
| **KRND** | **KRANIDI** | **3.00** | **241** | P | Pn | **08 11 18.3** | **-0.7** | | |
| **SOH** | **Sokhos** | **3.05** | **310** | P | Pn | **08 11 19.6** | **-0.1** | | |
| **SOH** | **Sokhos** | **3.05** | **310** | P | Pn | **08 11 20.0** | **+0.3** | | |
| **RZN** | **Rozhen** | **3.08** | **336** | P | Pn | **08 11 20.4** | **+0.2** | | |
| RZN | | | | S | Sn | **08 11 55.1** | **-2.0** | | |
| **HORT** | **Hortiatis** | **3.08** | **304** | P | Pn | **08 11 19.8** | **-0.4** | | |
| **HORT** | **Hortiatis** | **3.08** | **304** | P | Pn | **08 11 20.2** | **+0.1** | | |
| **SRS** | **Serrai** | **3.11** | **316** | P | Pn | **08 11 20.4** | **-0.1** | | |
| **SRS** | **Serrai** | **3.11** | **316** | *e*Pn | Pn | **08 11 20.5** | **-0.1** | | |
| **SRS** | **Serrai** | **3.11** | **316** | P | Pn | **08 11 20.3** | **-0.1** | | |
| **NVR** | **Nevrokopi** | **3.14** | **322** | P | Pn | **08 11 20.9** | **-0.1** | | |
| **DIM** | **Dimitrovgrad** | **3.21** | **349** | P | Pn | **08 11 21.9** | **0.0** | | |
| **MMB** | **Musomishta** | **3.35** | **323** | *e*P | Pn | **08 11 24.8** | **+1.0** | | |
| **GUR** | **Goura** | **3.35** | **255** | P | Pn | **08 11 23.2** | **-0.7** | | |
| **MAKR** | **Makrakomi, Fth** | **3.35** | **273** | P | Pn | **08 11 24.1** | **+0.2** | | |
| **TYRN** | **Tyrnavos** | **3.36** | **285** | P | Pn | **08 11 23.7** | **-0.2** | | |
| **TYRN** | **Tyrnavos** | **3.36** | **285** | P | Pn | **08 11 23.4** | **-0.5** | | |
| **KLV** | **Kalavryta, Ach** | **3.47** | **257** | P | Pn | **08 11 24.7** | **-0.8** | | |
| **PLD** | **Plovdiv** | **3.49** | **339** | P | Pn | **08 11 25.9** | **+0.2** | | |
| **PLD** | **Plovdiv** | **3.49** | **339** | *e*Pn | Pn | **08 11 26.0** | **+0.2** | | |
| PLD | | | | *e*Sn | Sn | **08 12 04.9** | **-2.1** | | |
| **ANX** | **Ano Chora** | **3.54** | **266** | P | Pn | **08 11 26.6** | **0.0** | | |
| **JMB** | **Yambol** | **3.59** | **1** | P | Pn | **08 11 26.2** | **-0.9** | | |
| **EVR** | **Evrytania** | **3.61** | **272** | P | Pn | **08 11 27.2** | **-0.2** | | |
| **KTHA** | **Kythira Island** | **3.76** | **226** | P | Pn | **08 11 28.7** | **-0.7** | | |
| **VAY** | **Valandovo** | **3.82** | **310** | *i* Pn | Pn | **08 11 33.6** | **+3.3** | | |
| **DRO** | **Drossia** | **3.83** | **257** | P | Pn | **08 11 30.5** | **+0.1** | | |
| **KKB** | **Krupnik** | **3.87** | **320** | *e*P | Pn | **08 11 32.5** | **+1.5** | | |
| **ELND** | **Elena** | **4.05** | **354** | ⇑P | Pn | **08 11 33.3** | **-0.1** | | |
| **PRD** | **Provadia** | **4.32** | **10** | P | Pn | **08 11 37.1** | **0.0** | | |
| **NEF** | **NEVSHA** | **4.41** | **8** | P | Pn | **08 11 38.7** | **+0.4** | | |
| **VTS** | **Vitosha** | **4.44** | **328** | P | Pn | **08 11 39.5** | **+0.6** | | |
| **VTS** | **Vitosha** | **4.44** | **328** | *e*Pn | Pn | **08 11 39.7** | **+0.8** | | |
| VTS | | | | *e*Sn | Sn | **08 12 28.6** | **-2.0** | | |
| **MPEP** | **Malo Peshtene** | **4.89** | **336** | P | Pn | **08 11 45.2** | **+0.2** | | |
| **ZAPS** | **Zavoj** | **5.23** | **328** | *e*Pn | Pn | **08 11 51.0** | **+1.4** | | |
| ZAPS | | | | *e*Sn | Sn | **08 12 48.0** | **-1.9** | | |
| **BARS** | **Barje** | **5.25** | **320** | *e*Pn | Pn | **08 11 50.9** | **+1.0** | | |
| **ICOR** | **Ion Corvin** | **5.31** | **11** | ⇓P | Pn | **08 11 51.1** | **+0.3** | | |
| **CVDA** | **Cernavoda** | **5.56** | **12** | ⇑P | Pn | **08 11 54.0** | **-0.2** | | |
| **BRTR** | **Keskin Array B** | **5.65** | **79** | Pn | Pn | **08 11 56.1** | **+0.6** | | |
| BRTR | comp=E,1.0nm,0.3s,baz=254,slow=13,SNR=16 | | | Sn | Sn | **08 12 57.2** | **-3.3** | | |
| **ZAGS** | baz=266,slow=20 comp=E,2.5nm,0.5s **Zajecar** | **5.84** | **329** | *e*Pn | Pn | **08 11 58.0** | **0.0** | | |
| ZAGS | | | | *e*Sn | Sn | **08 13 02.0** | **-2.8** | | |
| **HARR** | **Harsova** | **5.89** | **10** | ⇓P | Pn | **08 11 58.6** | **-0.1** | | |
| **SELS** | **Selova** | **5.89** | **319** | *e*Pn | Pn | **08 11 59.7** | **+0.9** | | |
| **BOVS** | **Bovan** | **5.92** | **325** | *e*Pn | Pn | **08 11 59.5** | **+0.4** | | |
| **BOVS** | **Bovan** | **5.92** | **325** | ⇓P | Pn | **08 11 59.3** | **+0.2** | | |
| **TPGR** | **Topolog** | **6.13** | **13** | ⇓P | Pn | **08 12 01.7** | **-0.4** | | |
| **CFR** | **Carcaliu** | **6.40** | **11** | ⇓P | Pn | **08 12 05.3** | **-0.4** | | |
| **NEHR** | **Nehoiu** | **6.52** | **359** | ⇓P | Pn | **08 12 07.6** | **+0.1** | | |
| **KUBS** | **Kucevo** | **6.56** | **329** | *e*Pn | Pn | **08 12 07.5** | **-0.4** | | |
| **GRUS** | **Gruza** | **6.58** | **321** | *e*Pn | Pn | **08 12 08.8** | **+0.6** | | |
| **MLR** | **Muntele Rosu** | **6.60** | **357** | LR | LR | 08 15 09.8 | | | |
| **MLR** | comp=E,101nm,18.8s,baz=182,slow=41 **Muntele Rosu** | **6.60** | **357** | ⇑P | Pn | **08 12 09.3** | **+0.8** | | |
| **ARR** | **Arges** | **6.60** | **349** | ⇓P | Pn | **08 12 09.6** | **+1.1** | | |
| **VOIR** | | **6.61** | **352** | ⇓P | Pn | **08 12 08.8** | **+0.1** | | |
| **HERR** | **Herculane** | **6.68** | **335** | ⇓P | Pn | **08 12 09.3** | **-0.3** | | |
| **MDVR** | **Moldovita** | **6.85** | **331** | *e*Pn | Pn | **08 12 12.0** | **+0.1** | | |
| **MDVR** | **Moldovita** | **6.85** | **331** | ⇓P | Pn | **08 12 12.2** | **+0.3** | | |
| **COVR** | **Voineasa-Covas** | **6.94** | **359** | ⇓P | Pn | **08 12 14.8** | **+1.6** | | |
| **PLOR** | **Plostina** | **6.95** | **1** | ⇓P | Pn | **08 12 14.2** | **+0.9** | | |
| **VRI** | **Vrincioaia** | **6.96** | **2** | ⇓P | Pn | **08 12 14.9** | **+1.5** | | |
| **TRUS** | **Trudelj** | **6.98** | **322** | *e*Pn | Pn | **08 12 12.8** | **-0.8** | | |
| **GZR** | **Gura Zlata** | **7.03** | **338** | ⇓P | Pn | **08 12 14.5** | **0.0** | | |
| **DOPR** | **Dopca** | **7.11** | **354** | ⇓P | Pn | **08 12 15.9** | **+0.5** | | |
| **TURR** | **Turia** | **7.16** | **358** | ⇓P | Pn | **08 12 17.2** | **+1.0** | | |
| **OZUR** | | **7.21** | **356** | ⇑P | Pn | **08 12 17.6** | **+0.8** | | |
| **MDB** | **Medias** | **7.39** | **349** | ⇑P | Pn | **08 12 20.9** | **+1.5** | | |
| **SURR** | **Surduc** | **7.55** | **336** | ⇑P | Pn | **08 12 21.7** | **+0.1** | | |
| **TESR** | **Tescani** | **7.61** | **1** | ⇓P | Pn | **08 12 22.9** | **+0.6** | | |
| **TEKS** | **Tekeris** | **7.65** | **320** | *e*Pn | Pn | **08 12 23.1** | **+0.3** | | |
| **SEV** | **Sevastopol'** | **7.81** | **41** | *e*P | Pn | **08 12 23.9** | **-1.2** | | |
| SEV | comp=Z,7.0nm,0.4s | | | Pm | | 08 12 27.5 | | | |
| SEV | | | | *ex* | x | 08 13 46.8 | | | |
| SEV | | | | *e*S | Sn | **08 13 51.4** | **-2.1** | | |
| SEV | comp=N,7.0nm,0.5s | | | Sm | | 08 14 52.2 | | | |
| SEV | comp=E,5.0nm,0.4s | | | Sm | | 08 14 52.2 | | | |
| **MARR** | **Marisel-Cluj** | **8.14** | **344** | ⇓P | Pn | **08 12 29.7** | **0.0** | | |
| **DRGR** | | **8.35** | **342** | *e*Pn | Pn | **08 12 31.8** | **-0.7** | | |
| **SUDU** | **Sudak** | **8.75** | **44** | *e*P | Pn | **08 12 37.6** | **-0.4** | | |
| SUDU | comp=Z,6.0nm,0.5s | | | Pm | | 08 12 39.8 | | | |
| SUDU | | | | *ex* | x | 08 14 08.0 | | | |
| SUDU | comp=N,18nm,0.5s | | | Sm | | 08 14 20.4 | | | |
| SUDU | comp=E,4.0nm,0.3s | | | Sm | | 08 14 20.4 | | | |
| **BURAR** | **Bucovina Array** | **8.76** | **355** | ⇓P | Pn | **08 12 39.8** | **+1.7** | | |
| **AKASG** | **Malin Array Be** | **11.96** | **9** | LR | LR | 08 18 29.4 | | | |
| **VRAC** | comp=E,21nm,20.7s,baz=236,slow=39 **Vranov** | **12.57** | **329** | LR | LR | 08 18 36.3 | | | |
| **GNI** | comp=E,9.2nm,20.8s,baz=110,slow=38 **Garni** | **14.19** | **79** | LR | LR | 08 19 19.7 | | | |
| **DAVOX** | comp=E,46nm,20.3s,baz=310,slow=38 **Davos/Dischmat** | **14.45** | **308** | LR | LR | 08 20 38.3 | | | |
| | comp=E,14nm,22.0s,baz=215,slow=41 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **22.57** | **360** | LR | LR | 08 24 13.8 | | | |
| **HFS** | comp=E,25nm,18.5s,baz=56,slow=36 **Hagfors** | **22.73** | **343** | LR | LR | 08 25 31.5 | | | |
| **ESDC** | comp=E,31nm,19.6s,baz=118,slow=39 **Sonseca Array** | **23.49** | **282** | P | **P** | **08 15 46.3** | **+5.0** | | |
| ESDC | comp=E,0.7nm,0.8s,baz=77,slow=9.5,SNR=4.2 | | | LR | LR | 08 25 34.9 | | | |
| **NB2** | comp=E,15nm,18.0s,baz=161,slow=38 comp=E,0.7nm,0.8s **NORSAR Subarra** | **24.11** | **342** | P | **P** | **08 15 45.8** | **-1.2** | | |
| **NOA** | comp=Z,1.2nm,0.7s,baz=144,slow=10 **NORSAR Array B** | **24.11** | **342** | LR | LR | 08 26 30.7 | | | |
| **TORD** | comp=Z,31nm,18.3s,baz=295,slow=39 **Torodi Ar. Bea** | **33.73** | **227** | P | **P** | **08 17 15.2** | **+2.2** | | |
| **MKAR** | comp=Z,0.2nm,0.6s,baz=29,slow=9.0,SNR=1.7 comp=Z,0.2nm,0.6s **Makanchi Array** | **40.95** | **60** | P | **P** | **08 18 13.8** | **-0.2** | | |
| | comp=Z,0.4nm,0.7s,baz=268,slow=8.7,SNR=3.1 comp=Z,0.4nm,0.7s | | | | | | | | |

*TAP* ***25*** *08:15:39.0,22.36N×119.73E,h45km,ML3.8,C*

**ISC 25 08:15:38.3±1.8, 22.33N±0.06×119.69E±0.06, h23km±14km, n93, σ0.64/111, 2C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KAU** | **Kaohsiung** | **0.62** | **67** | *e*P | | **Pn** | | **08 15 51.9** | **+0.2** |
| KAU | baz=69 | | | *e*S | | **Sn** | | **08 16 01.7** | **+0.8** |
| **TWP** | **Hsiaoliuchiu** | **0.63** | **88** | ⇑*i*P | | **Pn** | | **08 15 51.6** | **-0.1** |
| TWP | baz=91 | | | *i* S | | **Sn** | | **08 16 01.4** | **+0.3** |
| **SNJT** | **Kaohsiung City** | **0.74** | **54** | *e*S | | **Sn** | | **08 16 03.7** | **0.0** |
| **TWM1** | baz=55 **Shoushan** | **0.84** | **54** | *e*P | | **Pn** | | **08 15 55.7** | **+0.9** |
| **SGLT** | baz=64 **Jiouru** | **0.84** | **62** | *e*P | | **Pn** | | **08 15 55.2** | **+0.5** |
| SGLT | baz=53 | | | *e*S | | **Sn** | | **08 16 07.0** | **+0.6** |
| **SCZT** | **Fangliau** | **0.87** | **87** | *e*P | | **Pb** | | **08 15 54.7** | **+0.1** |
| **TAI1** | baz=89 **Yung-k'ang** | **0.87** | **35** | *e*P | | **Pn** | | **08 15 55.8** | **+0.7** |
| TAI1 | baz=35 | | | *i* S | | **Sn** | | **08 16 06.9** | **-0.1** |
| **TSCK** | baz=35 **Chigu Township** | **0.90** | **24** | *i* P | | **Pb** | | **08 15 55.1** | **-0.1** |
| TSCK | baz=23 | | | *e*S | | **Sn** | | **08 16 06.8** | **-0.9** |
| **VCHM** | baz=23 **Qimei** | **0.91** | **345** | *e*P | | **Pb** | | **08 15 55.4** | **-0.1** |
| VCHM | baz=342 | | | *e*S | | **Sb** | | **08 16 07.6** | **+0.5** |
| **MASBT** | **Mashibuluo** | **0.92** | **72** | *e*P | | **Pb** | | **08 15 55.5** | **-0.1** |
| **WDGT** | baz=73 **Dungji** | **0.93** | **359** | P | | **Pb** | | **08 15 55.5** | **-0.3** |
| WDGT | baz=357 | | | *e*S | | **Sb** | | **08 16 08.0** | **+0.3** |
| **SCST** | baz=357 **Cishan** | **0.93** | **53** | *e*P | | **Pn** | | **08 15 56.4** | **+0.5** |
| **TSMG** | baz=64 **Majia** | **0.96** | **67** | *e*P | | **Pb** | | **08 15 56.3** | **0.0** |
| TSMG | baz=81 | | | *e*S | | **Sn** | | **08 16 09.1** | **-0.2** |
| **SCLT** | baz=81 **Jiali** | **0.97** | **29** | *e*P | | **Pn** | | **08 15 56.7** | **+0.2** |
| **SSHA** | baz=18 **Shanhua** | **0.98** | **34** | *e*P | | **Pb** | | **08 15 56.7** | **+0.1** |
| SSHA | baz=34 | | | *e*S | | **Sn** | | **08 16 09.7** | **0.0** |
| **HEN** | baz=34 **Hengchun** | **1.03** | **108** | *e*P | | **Pn** | | **08 15 57.6** | **+0.4** |
| HEN | baz=100 | | | *e*S | | **Sn** | | **08 16 11.5** | **+0.7** |
| **SLIU** | baz=100 **Shizi** | **1.04** | **96** | *i* P | | **Pn** | | **08 15 57.0** | **-0.4** |
| **EAST** | baz=98 **Anshuo** | **1.08** | **87** | ⇑*i*P | | **Pn** | | **08 15 58.0** | **0.0** |
| **SLGT** | baz=89 **Liugui** | **1.11** | **53** | *e*P | | **Pb** | | **08 15 59.5** | **+0.7** |
| SLGT | baz=53 | | | *e*S | | **Sn** | | **08 16 12.5** | **-0.5** |
| **SMST** | baz=53 **Manzhou Townsh** | **1.11** | **106** | *e*P | | **Pn** | | **08 15 58.4** | **0.0** |
| **TAWH** | baz=98 **Dawu Township** | **1.11** | **89** | P | | **Pn** | | **08 15 58.2** | **-0.2** |
| **TAW** | baz=91 **Tawu** | **1.12** | **88** | *e*P | | **Pn** | | **08 15 58.3** | **-0.2** |
| **CHN8** | baz=90 **Yiju** | **1.13** | **25** | *e*P | | **Pb** | | **08 15 59.7** | **+0.6** |
| **CHN1** | baz=13 **Nanshi** | **1.16** | **42** | *e*P | | **Pn** | | **08 15 58.8** | **-0.3** |
| CHN1 | baz=42 | | | *e*S | | **Sb** | | **08 16 12.6** | **-1.6** |
| **SNST** | **T

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| EYUL | Yuli<br>baz=56 | 1.82 | 56 | *e*P | | Pn | 08 16 09.0 | +0.9 |
| YULB | Yu-li | 1.83 | 54 | P | | Pn | 08 16 08.6 | +0.3 |
| YULB | Yu-li<br>baz=54 | 1.83 | 54 | *e*P | | Pn | 08 16 08.5 | +0.2 |
| SSLB | Suanglung | 1.87 | 38 | P | | Pn | 08 16 09.9 | +1.1 |
| SSLB | Suanglung<br>baz=48 | 1.87 | 38 | *e*P | | Pn | 08 16 08.9 | +0.1 |
| TYC | Yuchr<br>baz=34 | 1.91 | 34 | *e*P | | Pn | 08 16 09.5 | +0.2 |
| EHY | Hungye<br>baz=52 | 1.91 | 52 | *e*P | | Pn | 08 16 09.9 | +0.5 |
| EHYH | Wanrong<br>baz=53 | 1.92 | 52 | *e*P | | Pn | 08 16 09.7 | +0.1 |
| WCHH | Zhanghua<br>baz=15 | 1.92 | 25 | *e*P | | Pn | 08 16 10.0 | +0.5 |
| VWDT | VWDT<br>baz=55 | 1.95 | 43 | *e*P | | Pn | 08 16 11.1 | +1.1 |
| HGSD | Ruisui<br>baz=43 | 1.98 | 54 | *e*P | | Pn | 08 16 11.5 | +1.2 |
| WCS | Beigang Elemen<br>baz=33 | 2.06 | 33 | *e*P | | Pn | 08 16 12.1 | +0.7 |
| WARBT | Fenglin Townsh<br>baz=48 | 2.09 | 48 | *e*P | | Pn | 08 16 12.1 | +0.2 |
| WUSB | Renai<br>baz=38 | 2.12 | 38 | *e*P | | Pn | 08 16 13.5 | +1.1 |
| OWD | Renai<br>baz=40 | 2.12 | 40 | *e*P | | Pn | 08 16 13.2 | +0.8 |
| ESL | Shilin<br>baz=47 | 2.19 | 47 | *e*P | | Pn | 08 16 13.9 | +0.7 |
| CHGB | Renai<br>baz=38 | 2.20 | 38 | *e*P | | Pn | 08 16 14.6 | +0.9 |
| SHUL | Shoufeng<br>baz=50 | 2.26 | 50 | *e*P | | Pn | 08 16 14.9 | +0.7 |
| WHP | Taichung City<br>baz=30 | 2.26 | 31 | *e*P | | Pn | 08 16 15.0 | +0.7 |
| LXIB | Xiulin Townshi<br>baz=34 | 2.32 | 43 | *e*P | | Pn | 08 16 16.0 | +0.8 |
| WHF | Hehuan Shan<br>baz=38 | 2.32 | 38 | *e*P | | Pn | 08 16 15.8 | +0.3 |
| ETM | Tongmen<br>baz=45 | 2.33 | 45 | *e*P | | Pn | 08 16 15.8 | +0.6 |
| FUSS | Fushou<br>baz=46 | 2.39 | 37 | *e*P | | Pn | 08 16 17.1 | +0.9 |
| ETLH | Xiulin Townshi<br>baz=41 | 2.50 | 41 | *e*P | | Pn | 08 16 18.8 | +1.2 |
| NACB | Ninganchiao | 2.54 | 43 | P | | Pn | 08 16 19.5 | +1.4 |
| NACB | Ninganchiao<br>baz=52 | 2.54 | 43 | *e*P | | Pn | 08 16 18.2 | +0.1 |
| NNSB | Datong<br>baz=43 | 2.61 | 36 | *e*P | | Pn | 08 16 20.1 | +0.9 |
| LIOB | Emei<br>baz=27 | 2.61 | 28 | *e*P | | Pn | 08 16 19.2 | +0.2 |
| NNS | Nan Shan<br>baz=43 | 2.62 | 36 | *e*P | | Pn | 08 16 20.7 | +1.5 |
| NFF | Wufeng Townshi<br>baz=29 | 2.65 | 30 | *e*P | | Pn | 08 16 20.1 | +0.6 |
| VWUC | VWUC<br>baz=355 | 2.66 | 355 | *e*P | | Pn | 08 16 20.2 | +0.5 |
| PTMZ | Houxiangcun<br>baz=349 | 2.75 | 349 | *e*P | | Pn | 08 16 21.7 | +0.7 |
| LATG | Datong<br>baz=37 | 2.77 | 37 | *e*P | | Pn | 08 16 22.8 | +1.3 |
| NSK | Sanguang<br>baz=24 | 2.80 | 33 | *e*P | | Pn | 08 16 22.2 | +0.5 |
| YHNB | Yeheng<br>baz=23 | 2.80 | 33 | *e*P | | Pn | 08 16 22.5 | +0.7 |
| NDT | Datong Townshi<br>baz=23 | 2.82 | 36 | *e*P | | Pn | 08 16 22.7 | +0.8 |
| ENTT | Nioudou<br>baz=37 | 2.88 | 36 | *e*P | | Pn | 08 16 23.6 | +0.9 |
| NWLT | Wulai<br>baz=23 | 2.96 | 34 | *e*P | | Pn | 08 16 23.9 | +0.1 |
| FUSB | Fushanzhiwuyua<br>baz=23 | 2.99 | 35 | *e*P | | Pn | 08 16 25.2 | +0.9 |

*NOU **25** 08:24:15.9, 37°.31S×179°.14E, h10km, MLv3.6/6, Off E. Coast of N. Island, N.Z.*
*WEL **25** 08:24:19.5±1.3, 37°.5±6°×17°.9E±°, h18km±5km, M3.0/18, ML3.3/26, MLv3.0/18, Error ellipse: s-maj=0.0km s-min=0.0km az=99.5, confirmed*

**ISC 25 08:24:18.3±2.9, 37°.35S±0°.06×179°.0E±0°.1, h18km±9km, n45, σ0948/54, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TDHS | **Te Araroa Dist** | **0.55** | **239** | P | **Pb** | **08 24 29.7** | **+0.2** |
| TDHS | | | | S | **Sb** | **08 24 37.5** | **+0.4** |
| MXZ | **Matakaoa Point** | **0.56** | **247** | P | **Pb** | **08 24 30.0** | **+0.3** |
| MXZ | **Matakaoa Point** | **0.56** | **247** | P | **Pb** | **08 24 29.9** | **+0.3** |
| MXZ | | | | S | **Sg** | **08 24 36.9** | **-0.2** |
| PKGZ | **Pakihiroa** | **0.87** | **233** | P | **Pn** | **08 24 35.7** | **-0.1** |
| PKGZ | | | | S | **Sb** | **08 24 46.9** | **+0.7** |
| PUZ | **Puketiti** | **0.91** | **217** | P | **Pn** | **08 24 36.5** | **+0.1** |
| PUZ | | | | S | **Sg** | **08 24 48.4** | **+0.2** |
| HAZ | **Te Kaha** | **1.02** | **246** | P | **Pb** | **08 24 37.7** | **+0.3** |
| HAZ | | | | S | **Sb** | **08 24 50.4** | **-0.2** |
| TWGZ | **Tauwhareparae** | **1.14** | **223** | P | **Pb** | **08 24 39.7** | **+0.2** |
| TWGZ | | | | S | **Sb** | **08 24 54.5** | **+0.6** |
| RUGZ | **Raukumara Rang** | **1.19** | **238** | P | **Pn** | **08 24 40.5** | **+0.2** |
| CNGZ | **Carnagh Statio** | **1.28** | **207** | P | **Pb** | **08 24 42.2** | **+0.3** |
| CNGZ | | | | S | **Sg** | **08 24 59.8** | **0.0** |
| TKGZ | **Te Karaka** | **1.40** | **219** | P | **Pn** | **08 24 42.9** | **-0.1** |
| TKGZ | | | | S | **Sn** | **08 25 00.5** | **-0.5** |
| MWZ | **Matawai** | **1.50** | **229** | P | **Pn** | **08 24 44.5** | **+0.1** |
| RIGZ | **Rimuhau** | **1.65** | **215** | P | **Pn** | **08 24 46.4** | **-0.2** |
| WHRZ | **Whale Island** | **1.66** | **252** | P | **Pn** | **08 24 47.0** | **+0.4** |
| RAGZ | **Rawiri** | **1.68** | **226** | P | **Pn** | **08 24 47.0** | **+0.2** |
| URZ | **Urewera** | **1.73** | **238** | P | **Pn** | **08 24 47.7** | **+0.3** |
| URZ | **Urewera** | **1.73** | **238** | P | **Pn** | **08 24 47.5** | **+0.1** |
| URZ | | | | S | **Sn** | **08 25 08.0** | **-1.0** |
| EDRZ | **Edgecumbe** | **1.92** | **246** | P | **Pn** | **08 24 50.3** | **+0.1** |
| SNGZ | **Shannon Statio** | **1.92** | **221** | P | **Pn** | **08 24 50.1** | **-0.1** |
| OPRZ | **Ohinepanea** | **1.97** | **255** | P | **Pn** | **08 24 50.4** | **-0.5** |
| RTZ | **Ruatahuna** | **2.01** | **230** | P | **Pn** | **08 24 51.5** | **0.0** |
| MUGZ | **Murupara** | **2.07** | **236** | P | **Pn** | **08 24 51.8** | **-0.4** |
| TARZ | **Mount Tarawera** | **2.14** | **245** | P | **Pn** | **08 24 53.6** | **+0.4** |
| RRRZ | **Republican Roa** | **2.17** | **242** | P | **Pn** | **08 24 53.7** | **0.0** |
| MTHZ | **Maungataniwha** | **2.25** | **227** | P | **Pn** | **08 24 54.9** | **+0.2** |
| NMHZ | **Naumai** | **2.44** | **223** | P | **Pn** | **08 24 57.6** | **+0.3** |
| MRHZ | **Matea Rd** | **2.50** | **233** | P | **Pn** | **08 24 57.6** | **-0.5** |
| BKZ | **Black Stump Fm** | **2.66** | **226** | P | **Pn** | **08 25 00.4** | **0.0** |
| BKZ | **Black Stump Fm** | **2.66** | **226** | P | **Pn** | **08 24 59.9** | **-0.5** |
| KUZ | **Kuaotunu** | **2.66** | **282** | P | **Pn** | **08 25 00.0** | **-0.3** |
| KUZ | **Kuaotunu** | **2.66** | **282** | P | **Pn** | **08 24 58.9** | **-1.4** |
| MCHZ | **McNeill Hill** | **2.75** | **220** | P | **Pn** | **08 25 01.1** | **-0.4** |
| TOZ | **Tahuroa Road** | **2.77** | **261** | P | **Pn** | **08 25 01.4** | **-0.5** |
| KWHZ | **Kaweka Forest** | **2.88** | **223** | P | **Pn** | **08 25 02.4** | **-1.0** |
| MKAZ | **Moumakai** | **3.04** | **273** | P | **Pn** | **08 25 05.5** | **-0.1** |
| KRHZ | **Kereru** | **3.06** | **221** | P | **Pn** | **08 25 05.7** | **-0.2** |
| TMVZ | **Te Maari** | **3.11** | **234** | P | **Pn** | **08 25 06.3** | **-0.4** |
| ETVZ | **East Tongariro** | **3.12** | **234** | P | **Pn** | **08 25 06.3** | **-0.4** |
| NTVZ | **North Tongarir** | **3.12** | **235** | P | **Pn** | **08 25 06.5** | **-0.3** |
| SNVZ | **South Ngauruho** | **3.19** | **234** | P | **Pn** | **08 25 07.2** | **-0.6** |
| HIZ | **Hauiti** | **3.45** | **249** | P | **Pn** | **08 25 12.3** | **+1.1** |
| HIZ | **Hauiti** | **3.45** | **249** | P | **Pn** | **08 25 11.9** | **+0.8** |
| WAZ | **Wanganui** | **3.94** | **231** | P | **Pn** | **08 25 17.8** | **0.0** |
| WCZ | **Waipu Caves** | **3.97** | **289** | P | **Pn** | **08 25 18.2** | **-0.1** |
| OUZ | **Omahuta** | **4.83** | **294** | P | **Pn** | **08 25 30.7** | **+0.6** |
| OUZ | **Omahuta** | **4.83** | **294** | P | **Pn** | **08 25 30.6** | **+0.6** |

**IDC 25 08:37:38.3±7.6, 17°.10S×177°.21W, h0km, mb3.4/3, mbtmp3.4/3, Error ellipse: s-maj=335.1km s-min=38.2km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr**<br>0.1nm,0.5s,baz=94,slow=7.3,SNR=9.1<br>0.1nm,0.5s | **45.91** | **259** | P | P | 08 46 03.0 | -0.1 |
| **ASAR** | **Alice Springs**<br>0.8nm,0.7s,baz=88,slow=8.0,SNR=17<br>0.8nm,0.7s | **46.11** | **253** | P | P | 08 46 04.6 | -0.1 |
| **ILAR** | **Eielson Array**<br>0.1nm,0.4s,baz=222,slow=4.8,SNR=4.3<br>0.1nm,0.4s | **84.85** | **13** | P | P | 08 50 14.4 | 0.0 |

*SOME **25** 08:39:36.6, 39°.90N×75°.12E, h10km*
*NNC **25** 08:39:37.7±2.5, 39°.94N×75°.14E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=18.0km s-min=14.9km az=152.0*
*KRNET **25** 08:39:39.2±0.1, 39°.96N×75°.33E, mb2.6*

**ISC 25 08:39:37.6±1.8, 39°.67N±0°.08×75°.34E±0°.04, h12km±13km, n34, σ1954/55, 20C, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan**<br>baz=73 | **1.46** | **284** | ↑*e*P | **Pg** | **08 40 05.7** | **0.0** |
| SFK | | | | ↑*i*S | **Sg** | **08 40 24.8** | **+0.2** |
| **NRN** | **Naryn**<br>baz=18 | **1.83** | **16** | ↑*e*P | **Pn** | **08 40 08.0** | **-1.3** |
| NRN | | | | ↑*e*S | **Sn** | **08 40 28.8** | **-3.8** |
| **OHH** | **Osh**<br>baz=87 | **2.14** | **294** | ↑*e*P | **Pb** | **08 40 16.1** | **-0.3** |
| OHH | | | | ↑*i*S | **Sb** | **08 40 42.8** | **-0.2** |
| **ARLS** | **Aral**<br>baz=38 | **2.32** | **341** | ↑*e*P | **Pn** | **08 40 16.3** | **+0.4** |
| ARLS | | | | ↑*e*S | **Sn** | **08 40 44.4** | **-0.1** |
| **ULHL** | **Ulahol**<br>baz=16 | **2.66** | **15** | ↑*e*P | **Pn** | **08 40 21.3** | **+0.7** |
| ULHL | | | | ↑*i*S | **Sn** | **08 40 51.8** | **-1.1** |
| **DRK** | **Karamyk**<br>baz=61 | **2.75** | **267** | ↑*e*P | **Pb** | **08 40 26.6** | **-0.3** |
| DRK | | | | ↑*i*S | **Sb** | **08 41 01.1** | **+0.5** |
| **TARG** | **Taragay, Kyrgy**<br>baz=46 | **2.78** | **41** | ↑*e*P | **Pb** | **08 40 24.1** | **-3.4** |
| TARG | | | | ↑*i*S | **Sn** | **08 40 56.6** | **+0.5** |
| **KDJ** | **Kajisay**<br>baz=32 | **2.82** | **29** | ↑*e*P | **Pn** | **08 40 24.1** | **+1.3** |
| KDJ | | | | ↑*e*S | **Sn** | **08 40 56.6** | **-0.3** |
| **BOOM** | **Boomskoye usch**<br>baz=10.0 | **2.85** | **9** | ↑*e*P | **Pn** | **08 40 23.9** | **+0.7** |
| BOOM | | | | ↑*i*S | **Sn** | **08 40 56.2** | **-1.4** |
| **KST** | **Kastek**<br>2.1nm,0.2s | **3.40** | **8** | *e*P | **Pb** | **08 40 37.5** | **-0.4** |
| KST | | | | *e*S | **Sb** | **08 41 21.1** | **+1.8** |
| **KST** | **Kastek**<br>2.1nm,0.2s | **3.40** | **8** | Pg | **Pb** | **08 40 37.5** | **-0.4** |
| KST | | | | Lg | Lg | 08 41 21.1 | |
| **MRKS** | **Merke**<br>3.7nm,0.4s | **3.46** | **333** | *e*P | **Pb** | **08 40 35.9** | **-3.1** |
| MRKS | | | | *e*S | **Sb** | **08 41 18.2** | **-2.8** |
| **MRKS** | **Merke**<br>4.6nm,0.6s | **3.46** | **333** | Pg | **Pn** | **08 40 33.6** | **+2.2** |
| MRKS | | | | Lg | Lg | 08 41 15.0 | |
| **MNAS** | **Manas**<br>baz=21 | **3.54** | **324** | ↑*e*P | **Pn** | **08 40 33.9** | **+1.3** |
| MNAS | | | | ↑*e*S | **Sn** | **08 41 14.3** | **-0.2** |
| **MTBS** | **Maitube**<br>2.5nm,0.4s | **3.55** | **13** | *e*P | **Pb** | **08 40 40.0** | **-0.5** |
| MTBS | | | | *e*S | **Sb** | **08 41 25.4** | **+1.8** |
| **MTBS** | **Maitube**<br>2.5nm,0.4s | **3.55** | **13** | Pg | **Pb** | **08 40 40.0** | **-0.5** |
| MTBS | | | | Lg | Lg | 08 41 25.4 | |
| **TNSS** | **Tian-Shan**<br>2.6nm,0.3s | **3.57** | **19** | *e*P | **Pb** | **08 40 40.0** | **-1.0** |
| TNSS | | | | *e*S | **Sb** | **08 41 25.4** | **+0.9** |
| **TNSS** | **Tian-Shan**<br>2.8nm,0.5s | **3.57** | **19** | Pg | **Pb** | **08 40 40.0** | **-1.0** |
| TNSS | | | | Lg | Lg | 08 41 25.4 | |
| **DGS** | **Degeres**<br>2.0nm,0.4s | **3.58** | **5** | *e*P | **Pb** | **08 40 40.4** | **-0.6** |
| DGS | | | | *e*S | **Sb** | **08 41 26.5** | **+2.0** |
| **DGS** | **Degeres**<br>1.6nm,0.3s | **3.58** | **5** | Pg | **Pb** | **08 40 40.4** | **-0.6** |
| DGS | | | | Lg | Lg | 08 41 26.5 | |
| **KOTS** | **Kotyrbulak**<br>4.2nm,0.4s | **3.80** | **20** | *e*P | **Pb** | **08 40 43.0** | **-1.7** |
| KOTS | | | | *e*S | **Sb** | **08 41 30.6** | **-0.2** |
| **KOTS** | **Kotyrbulak**<br>4.2nm,0.4s | **3.80** | **20** | Pg | **Pb** | **08 40 43.0** | **-1.7** |
| KOTS | | | | Lg | Lg | 08 41 30.6 | |
| **KRBS** | **Karabastau**<br>2.1nm,0.6s | **4.03** | **3** | Pg | **Pb** | **08 40 46.6** | **-2.0** |
| KRBS | | | | Lg | Lg | 08 41 36.7 | |
| **KTBS** | **Karatobe**<br>2.0nm,0.3s | **4.16** | **13** | *e*P | **Pb** | **08 40 50.4** | **-0.4** |
| KTBS | | | | *e*S | **Sb** | **08 41 43.4** | **+2.3** |
| **KTBS** | **Karatobe**<br>2.0nm,0.3s | **4.16** | **13** | Pg | **Pb** | **08 40 50.4** | **-0.4** |
| KTBS | | | | Lg | Lg | 08 41 43.4 | |
| **CHKK** | **Chushkaly**<br>37nm,0.6s | **4.36** | **16** | *e*P | **Pb** | **08 40 53.9** | **-0.2** |
| CHKK | | | | *e*S | **Sb** | **08 41 49.6** | **+2.9** |
| **CHKK** | **Chushkaly**<br>38nm,0.9s | **4.36** | **16** | Pg | **Pb** | **08 40 53.9** | **-0.2** |
| CHKK | | | | Lg | Lg | 08 41 49.6 | |
| **KURS** | **Kuram**<br>4.2nm,0.5s | **4.36** | **28** | *e*P | **Pb** | **08 40 53.4** | **-0.9** |
| KURS | | | | *e*S | **Sb** | **08 41 49.0** | **+2.1** |
| **KURS** | **Kuram**<br>4.2nm,0.5s | **4.36** | **28** | Pg | **Pb** | **08 40 53.4** | **-0.9** |
| KURS | | | | Lg | Lg | 08 41 49.0 | |
| **KPKS** | **Kokpek**<br>1.1nm,0.1s | **4.54** | **32** | *e*P | **Pb** | **08 40 55.8** | **-1.6** |
| KPKS | | | | *e*S | **Sb** | **08 41 53.0** | **+0.8** |
| **KPKS** | **Kokpek**<br>2.4nm,0.5s | **4.54** | **32** | Pg | **Pb** | **08 40 55.8** | **-1.6** |
| KPKS | | | | Lg | Lg | 08 41 53.0 | |
| **ARXS** | **Arharly**<br>2.2nm,0.5s | **4.90** | **21** | *e*P | **Pb** | **08 41 03.2** | **-0.3** |
| ARXS | | | | *e*S | **Sb** | **08 42 05.8** | **+3.4** |
| **ARXS** | **Arharly**<br>2.2nm,0.7s | **4.90** | **21** | Pg | **Pb** | **08 41 03.2** | **-0.3** |
| ARXS | | | | Lg | Lg | 08 42 05.8 | |
| **BLB** | **Baldybastay**<br>6.7nm,0.5s | **5.00** | **27** | Pg | **Pb** | **08 41 05.0** | **-0.3** |
| BLB | | | | Lg | Lg | 08 42 08.9 | |
| | 7.9nm,0.5s | | | | | | |

*IDC **25** 08:59:50.7±1.3, 6°.25S×142°.88E, h0km, mb3.8/4, mbtmp3.9/7, ML3.8/1, Error ellipse: s-maj=39.0km s-min=24.2km az=81.0*

**ISC 25 08:59:56.0±1.1, 6°.5S±0°.1×142°.88E±0°.10, h35km, n7, σ2903/10, mb3.7/4, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby**<br>6.1nm,0.3s,baz=312,slow=15,SNR=2.2 | **5.11** | **124** | Pn | **Pn** | **09 01 10.1** | **+0.1** |
| PMG | | | | Sn | **Sn** | **09 02 06.5** | **-1.3** |
| | 1.8nm,0.3s,baz=221,slow=20,SNR=1.4 | | | | | | |
| **WRA** | **Warramunga Arr**<br>0.4nm,0.3s,baz=30,slow=11,SNR=7.0 | **15.70** | **211** | Pn | **P** | **09 03 35.8** | **-2.5** |
| WRA | | | | Sn | **Sn** | **09 06 27.1** | **-0.4** |
| | 0.2nm,0.3s,baz=96,slow=31,SNR=4.6 | | | | | | |
| WRA | | | | Lg | Lg | 09 08 16.3 | |
| | 0.1nm,0.3s,baz=31,slow=23,SNR=2.1<br>0.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs**<br>8.1nm,0.6s,baz=31,slow=11,SNR=91 | **19.09** | **206** | P | **Pn** | **09 04 19.9** | **+3.1** |
| ASAR | | | | Sn | **S** | **09 07 48.4** | **-2.2** |
| | 0.1nm,0.3s,baz=16,slow=28,SNR=2.1 | | | | | | |
| ASAR | | | | Lg | Lg | 09 09 59.6 | |
| | baz=14,slow=27 | | | | | | |
| **STKA** | **Stephens Creek** | **25.24** | **183** | P | **P** | **09 05 20.7** | **+2.0** |
| | 1.0nm,0.7s,baz=18,slow=9.6,SNR=2.3<br>1.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array**<br>0.3nm,0.7s,baz=123,slow=5.6,SNR=1.9<br>0.3nm,0.7s | **75.34** | **322** | P | **P** | **09 11 35.5** | **-0.3** |
| **QSPA** | **South Pole Qui**<br>1.0nm,1.0s,baz=317,slow=6.7,SNR=7.6<br>1.0nm,1.0s | **83.43** | **180** | P | **P** | **09 12 20.8** | **+1.1** |
| **BVAR** | **Borovoye Array**<br>1.1nm,0.7s,baz=100,slow=6.0,SNR=4.0<br>1.1nm,0.7s | **84.81** | **325** | P | **P** | **09 12 25.8** | **-1.0** |

**IDC 25 09:02:28.4±58.0, 16°.61S×176°.72W, h0km, mb3.7/3, mbtmp3.7/3, MS3.4/1, Error ellipse: s-maj=1081.0km s-min=175.9km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby**<br>comp=Z,57nm,18.7s,baz=149,slow=32 | **35.87** | **277** | LR | LR | 09 21 25.2 | |
| **STKA** | **Stephens Creek**<br>1.2nm,0.7s,baz=76,slow=4.2,SNR=3.7<br>1.2nm,0.7s | **40.67** | **240** | P | P | 09 10 10.2 | -0.5 |
| **WRA** | **Warramunga Arr**<br>0.3nm,0.5s,baz=92,slow=7.4,SNR=4.9<br>0.3nm,0.5s | **46.46** | **258** | P | P | 09 10 57.7 | 0.0 |
| **ASAR** | **Alice Springs**<br>0.5nm,0.4s,baz=89,slow=8.3,SNR=6.9<br>0.5nm,0.4s | **46.70** | **253** | P | P | 09 10 59.5 | 0.0 |

*TRN **25** 09:04:55.8, 10°.66N×62°.87W, h123km, MD3.4, Paria peninsula.*
*FUNV **25** 09:04:58.6, 10°.54N×62°.88W, h26km, MW3.5*

**ISC 25 09:04:54.6±1.7, 10°.58N±0°.07×62°.87W±0°.04, h129km±17km, n11, σ1992/20, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TCE** | **Chacachacare** | **1.11** | **84** | *e*P | **Pn** | **09 05 18.9** | **+0.4** |
| TCE | | | | *e*S | **Sn** | **09 05 37.2** | **+0.7** |
| **TRN** | **Trinidad (W)** | **1.45** | **87** | *e*P | **Pn** | **09 05 23.0** | **+1.0** |
| TRN | | | | *e*S | **Sn** | **09 05 41.8** | **-1.1** |
| **PCRV** | **Puerto La Cruz** | **1.78** | **257** | *e*P | **Pn** | **09 05 27.5** | **+1.6** |
| PCRV | | | | *e*S | **Sn** | **09 05 47.3** | **-2.5** |
| **PCRV** | **Puerto La Cruz** | **1.78** | **257** | *e*P | **Pn** | **09 05 27.8** | **+1.9** |
| PCRV | | | | *e*S | **Sn** | **09 05 49.8** | **0.0** |
| **GRFF** | **Grenada Fort F** | **1.83** | **37** | *e*P | **Pn** | **09 05 27.0** | **+0.5** |
| GRFF | | | | *e*S | **Sn** | **09 05 48.9** | **-2.1** |
| **GCMP** | **Grenada, Carri** | **2.36** | **37** | *e*S | **Sn** | **09 06 01.1** | **-1.4** |
| **BENV** | **Beln** | **4.69** | **263** | *e*P | **Pn** | **09 06 06.4** | **+2.8** |
| BENV | | | | *e*S | **Sn** | **09 06 56.2** | **-1.1** |
| **CACV** | **CAICARA DEL OR** | **4.70** | **231** | *e*P | **Pn** | **09 06 01.0** | **-2.7** |
| CACV | | | | *e*S | Sn | 09 06 47.4 | -10 |
| **LUEV** | **Luepa** | **4.91** | **163** | *e*P | **Pn** | **09 06 09.0** | **+2.3** |
| LUEV | | | | *e*S | **Sn** | **09 07 01.2** | **-1.6** |
| **BAUV** | **El Baul** | **5.35** | **253** | *e*P | **Pn** | **09 06 14.3** | **+2.0** |
| BAUV | | | | *e*S | **Sn** | **09 07 11.6** | **-1.4** |
| **BAUV** | **El Baul** | **5.35** | **253** | *e*P | **Pn** | **09 06 13.9** | **+1.6** |
| BAUV | | | | *e*S | **Sn** | **09 07 10.8** | **-2.2** |

**ISK 25 09:18:17.6, 37°.13N×27°.88E, h0km, ML1.3/7, Suspected Mining explosion., Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MLSB** | **Milas** | **0.18** | **334** | Pg | Pg | 09 18 21.8 | +0.7 |
| MLSB | | | | Sg | Sg | 09 18 24.9 | +1.5 |
| **YER** | **Yerkesik** | **0.32** | **90** | Pg | Pg | 09 18 24.5 | +0.7 |
| YER | | | | Sg | Sb | 09 18 30.1 | -2.0 |
| **BODT** | **Bodrum** | **0.46** | **261** | Pg | Pb | 09 18 27.5 | -1.1 |
| **TURN** | **Turunc** | **0.46** | **140** | Pg | Pg | 09 18 27.2 | +0.7 |
| **DAT** | **Datca** | **0.47** | **211** | Pg | Pg | 09 18 27.4 | +0.8 |
| **AYDB** | **Zeytinkoy-Aydi** | **0.81** | **1** | Pg | Pb | 09 18 34.4 | -0.3 |
| **ODEM** | **Odemis-Izmir** | **1.15** | **8** | Pn | Pb | 09 18 40.3 | -0.1 |

**AFAD 25 09:18:37.8±0.0, 38°.51N×26°.67E, h7km±1km, ML1.3, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URLA** | **Izmir** | **0.16** | **201** | P | Pg | 09 18 41.7 | +0.7 |
| URLA | | | | S | Sg | 09 18 45.4 | +2.1 |
| URLA | | | | *i* AML | AML | 09 18 46.0 | |
| | comp=N,133nm,0.5s | | | | | | |
| URLA | | | | *i* AML | AML | 09 18 46.0 | |
| | comp=E,142nm,0.4s | | | | | | |
| **KARB** | **zmir-Karabur** | **0.25** | **308** | P | Pg | 09 18 43.2 | +0.4 |
| KARB | | | | *i* AML | AML | 09 18 47.0 | |
| | comp=N,79nm,0.3s | | | | | | |
| KARB | | | | *i* AML | AML | 09 18 47.0 | |
| | comp=E,65nm,0.7s | | | | | | |
| KARB | | | | S | Sg | 09 18 47.1 | +1.0 |
| **ZEYE** | **Izmir, Urla-Ze** | **0.30** | **206** | P | Pg | 09 18 44.2 | +0.5 |
| ZEYE | | | | *i* AML | AML | 09 18 49.0 | |
| | comp=E,70nm,0.3s | | | | | | |
| ZEYE | | | | S | Sb | 09 18 49.7 | -0.9 |
| ZEYE | | | | *i* AML | AML | 09 18 50.0 | |
| | comp=N,110nm,0.3s | | | | | | |
| **DGB** | **zmir** | **0.49** | **160** | P | Pg | 09 18 47.6 | +0.4 |
| DGB | | | | S | Sg | 09 18 54.6 | +1.1 |
| DGB | | | | *i* AML | AML | 09 18 55.0 | |
| | comp=N,20nm,0.7s | | | | | | |
| DGB | | | | *i* AML | AML | 09 18 55.0 | |
| | comp=E,20nm,0.3s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.56** | **35** | P | Pb | 09 18 50.6 | +0.7 |
| ZEDA | | | | S | Sg | 09 18 56.5 | +0.7 |
| **BUHA** | **Balikesir, Bur** | **1.04** | **18** | P | Pg | 09 18 57.5 | -0.3 |
| BUHA | | | | S | Sb | 09 19 12.5 | +0.5 |
| BUHA | | | | *i* AML | AML | 09 19 13.0 | |
| | comp=N,15nm,0.4s | | | | | | |
| BUHA | | | | *i* AML | AML | 09 19 15.0 | |
| | comp=E,23nm,0.5s | | | | | | |

*NEIC **25** 09:49:58.9±0.4, 17°.1S±0°.3×177°.96W±0°.10, h541km±12km, mb4.0/12, Error ellipse: s-maj=43.9km s-min=8.4km az=165.0*
*IDC **25** 09:50:08.5±7.7, 17°.53S×178°.48W, h625km±93km, mb3.0/6, mbtmp4.1/7, Error ellipse: s-maj=45.0km s-min=34.1km az=70.0*

**ISC 25 09:49:58.9±0.9, 17°.0S±0°.2×178°.0W±0°.1, h550km, n25, σ0967/24, mb3.9/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.87** | **259** | P | **P** | **09 51 19.0** | **-0.9** |
| **AFI** | **Afiamalu** | **6.72** | **64** | P | **P** | **09 51 43.9** | **-0.4** |
| **NIUE** | **Niue** | **7.92** | **106** | P | **P** | **09 51 54.9** | **-0.9** |
| **DZM** | **Mont Dzumac**<br>7.4nm,0.9s,baz=79,slow=19,SNR=2.4 | **15.53** | **249** | P | **P** | **09 53 15.1** | **+1.2** |
| **EIDS** | **Eidsvold** | **29.98** | **249** | P | **P** | **09 55 22.6** | **-0.6** |
| EIDS | | | | IAmb | IAmb | 09 55 46.8 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.76** | **239** | P | **P** | **09 55 29.5** | **-0.5** |
| **CTA** | **Charters Tower** | **34.02** | **259** | P | **P** | **09 55 58.1** | **+0.4** |
| | comp=Z,0.2nm,1.0s,baz=94,slow=8.6,SNR=1.9 | | | | | | |
| **CTAO** | **Charters Tower** | **34.02** | **259** | P | **P** | **09 55 57.4** | **-0.3** |
| CTAO | | | | IAmb | IAmb | 09 56 02.9 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **34.59** | **232** | P | **P** | **09 56 01.5** | **-0.7** |
| **TOO** | **Toolangi** | **38.06** | **230** | P | **P** | **09 56 30.5** | **-0.4** |
| TOO | | | | IAmb | IAmb | 09 56 30.5 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **39.43** | **240** | P | **P** | **09 56 41.5** | **-0.5** |
| **STKA** | **Stephens Creek** | **39.43** | **240** | P | **P** | **09 56 40.8** | **-1.2** |
| | comp=Z,1.3nm,0.5s,baz=83,slow=9.3,SNR=7.7<br>comp=Z,1.3nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **44.21** | **240** | P | **P** | **09 57 19.4** | **-0.2** |
| **WRA** | **Warramunga Arr**<br>comp=Z,0.5nm,0.5s,baz=98,slow=7.1,SNR=11<br>comp=Z,0.5nm,0.5s | **45.21** | **259** | P | **P** | **09 57 27.9** | **+0.4** |
| **AS31** | **Alice Springs** | **45.44** | **253** | P | **P** | **09 57 29.5** | **+0.2** |
| AS31 | | | | IAmb | IAmb | 09 57 30.1 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.44** | **253** | P | **P** | **09 57 29.3** | **0.0** |
| **ASAR** | **Alice Springs**<br>comp=Z,5.6nm,0.4s,baz=89,slow=8.2,SNR=141<br>comp=Z,5.6nm,0.4s | **45.44** | **253** | P | **P** | **09 57 29.5** | **+0.2** |
| **MTN** | **Manton Dam** | **49.25** | **268** | P | **P** | **09 57 57.6** | **-0.3** |
| MTN | | | | IAmb | IAmb | 09 57 59.4 | |
| | comp=Z,5.5nm,1.1s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FORT** | **Forrest** | **50.77** | **244** | P | **P** | **09 58 08.3** | **-0.5** |
| FORT | | | | IAmb | IAmb | 09 58 21.8 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.04** | **180** | P | **P** | **10 00 33.5** | **+0.5** |
| **QSPA** | **South Pole Qui** | **73.04** | **180** | P | **P** | **10 00 33.7** | **+0.7** |
| | comp=Z,2.8nm,0.8s,baz=28,slow=2.7,SNR=21 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **83.00** | **173** | P | **P** | **10 01 26.5** | **+0.4** |
| **TXAR** | **Lajitas Array** | **85.16** | **58** | P | P | 10 01 44.0 | +6.3 |
| | comp=Z,0.1nm,0.5s,baz=206,slow=6.0,SNR=3.4 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **91.48** | **178** | P | **P** | **10 02 07.1** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=202,slow=13,SNR=8.2 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **108.81** | **314** | PKiKP | **PKiKP** | **10 07 27.0** | **+1.2** |
| | comp=Z,0.1nm,0.3s,baz=94,slow=0.7,SNR=1.5 | | | | | | |

*IDC* ***25*** *09:52:45.0±0.9, 39°.42N×75°.31E, h0km, mb3.8/8, mbtmp3.7/13, ML3.1/4, MS2.8/6, Error ellipse: s-maj=20.5km s-min=13.1km az=88.0*
*SOME* ***25*** *09:52:47.1, 39°.63N×75°.42E, h15km*
*KRNET* ***25*** *09:52:48.3±0.1, 39°.61N×75°.29E, mb4.0*
*NNC* ***25*** *09:52:52.7±1.3, 39°.84N×75°.38E, h0km, mb4.6, mpv4.3, Error ellipse: s-maj=10.0km s-min=5.9km az=166.0*

**ISC 25 09:52:44.7±1.6, 39°.30N±0°.05×75°.31E±0°.03, h1km±10km, n92, σ1s85/135, mb3.8/8, 34C-16D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.57** | **298** | ⇓ | *iP* | | **Pg** | **09 53 15.5** | **+0.8** |
| SFK | baz=87 | | | ⇓ | *iS* | | **Sg** | **09 53 35.1** | **0.0** |
| | baz=87 | | | | | | | | |
| **NRN** | **Naryn** | **2.20** | **14** | ⇓ | *iP* | | **Pn** | **09 53 23.4** | **+0.7** |
| NRN | baz=16 | | | ⇓ | *iS* | | **Sn** | **09 53 49.0** | **-1.8** |
| | baz=16 | | | | | | | | |
| **OHH** | **Osh** | **2.30** | **303** | ⇑ | *eP* | | **Pb** | **09 53 27.1** | **+0.1** |
| OHH | baz=96 | | | ⇑ | *iS* | | **Sb** | **09 53 55.1** | **-0.8** |
| | baz=96 | | | | | | | | |
| **ARLS** | **Aral** | **2.67** | **344** | ⇓ | *iP* | | **Pn** | **09 53 30.0** | **+0.9** |
| ARLS | baz=42 | | | ⇓ | *iS* | | **Sn** | **09 54 00.5** | **-1.7** |
| | baz=42 | | | | | | | | |
| **DRK** | **Karamyk** | **2.72** | **275** | ⇑ | *iP* | | **Pb** | **09 53 35.0** | **+0.6** |
| DRK | baz=68 | | | ⇑ | *iS* | | **Sb** | **09 54 09.3** | **+0.8** |
| | baz=68 | | | | | | | | |
| **UCH** | **Uchtor** | **2.99** | **349** | P | | | **Pn** | **09 53 35.6** | **+1.9** |
| | SNR=30 | | | | | | | | |
| **ULHL** | **Ulahol** | **3.03** | **13** | P | | | **Pn** | **09 53 35.5** | **+1.4** |
| | SNR=22 | | | | | | | | |
| **ULHL** | **Ulahol** | **3.03** | **13** | ⇑ | *iP* | | **Pn** | **09 53 35.2** | **+1.1** |
| ULHL | baz=15 | | | ⇑ | *iS* | | **Sn** | **09 54 09.8** | **-1.4** |
| | baz=15 | | | | | | | | |
| **AML** | **Almayashu** | **3.09** | **337** | P | | | **Pn** | **09 53 36.3** | **+1.3** |
| | SNR=35 | | | | | | | | |
| **AML** | **Almayashu** | **3.09** | **337** | ⇑ | *iP* | | **Pn** | **09 53 36.4** | **+1.4** |
| AML | baz=35 | | | ⇑ | *iS* | | **Sn** | **09 54 11.6** | **-1.2** |
| | baz=35 | | | | | | | | |
| **KDJ** | **Kajisay** | **3.17** | **26** | ⇑ | *iP* | | **Pn** | **09 53 37.5** | **+1.6** |
| KDJ | baz=29 | | | ⇑ | *iS* | | **Sn** | **09 54 13.7** | **-0.8** |
| | baz=29 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.23** | **8** | ⇑ | *iP* | | **Pn** | **09 53 37.8** | **+1.1** |
| BOOM | baz=9.0 | | | ⇑ | *iS* | | **Sn** | **09 54 14.1** | **-1.8** |
| | baz=9.0 | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.37** | **355** | P | | | **Pn** | **09 53 40.9** | **+2.2** |
| | SNR=22 | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.37** | **355** | ⇑ | *iP* | | **Pn** | **09 53 39.8** | **+1.1** |
| KBK | baz=55 | | | ⇑ | *iS* | | **Sn** | **09 54 17.4** | **-2.0** |
| | baz=55 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.40** | **350** | P | | | **Pn** | **09 53 41.2** | **+2.2** |
| | SNR=52 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.40** | **350** | Pn | | | **Pn** | **09 53 41.0** | **+1.9** |
| | 16nm,0.3s,baz=175,slow=12,SNR=113 | | | | | | | | |
| AAK | | | | | | Sn | **Sn** | **09 54 19.8** | **-0.3** |
| | 35nm,0.3s,baz=314,slow=16,SNR=15 | | | | | | | | |
| AAK | | | | | | LR | LR | 09 54 22.0 | |
| | comp=Z,28nm,18.6s,baz=204,slow=30 | | | | | | | | |
| | 99nm,0.6s | | | | | | | | |
| **BTK** | **Batken** | **3.55** | **284** | ⇑ | *iP* | | **Pb** | **09 53 45.5** | **-2.8** |
| BTK | baz=79 | | | ⇑ | *iS* | | **Sb** | **09 54 27.3** | **-4.7** |
| | baz=79 | | | | | | | | |
| **FRU1** | **Bishkek** | **3.55** | **352** | ⇑ | *iP* | | **Pn** | **09 53 42.7** | **+1.7** |
| FRU1 | baz=51 | | | ⇑ | *iS* | | **Sn** | **09 54 22.4** | **-1.3** |
| | baz=51 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.56** | **341** | P | | | **Pn** | **09 53 43.9** | **+2.7** |
| | SNR=7.5 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.63** | **3** | P | | | **Pn** | **09 53 44.0** | **+1.8** |
| | SNR=164 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.63** | **3** | ⇓ | Pn | | **Pn** | **09 53 44.2** | **+1.9** |
| TKM2 | 71nm,0.4s | | | ⇓ | Lg | | Lg | 09 54 26.1 | |
| | 256nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.63** | **3** | ⇑ | *iP* | | **Pn** | **09 53 43.4** | **+1.1** |
| TKM2 | baz=4.0 | | | ⇑ | *iS* | | **Sn** | **09 54 23.5** | **-2.4** |
| | baz=4.0 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.72** | **354** | P | | | **Pn** | **09 53 45.5** | **+2.0** |
| | SNR=12 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.72** | **354** | ⇓ | Pn | | **Pn** | **09 53 45.4** | **+2.0** |
| | 65nm,0.7s | | | | | | | | |
| CHMS | | | | ⇓ | Lg | | Lg | 09 54 27.7 | |
| | 156nm,1.2s | | | | | | | | |
| **CHMS** | **Chumysh** | **3.72** | **354** | ⇑ | *iP* | | **Pn** | **09 53 44.7** | **+1.3** |
| CHMS | baz=53 | | | ⇑ | *iS* | | **Sn** | **09 54 25.7** | **-2.3** |
| | baz=53 | | | | | | | | |
| **KST** | **Kastek** | **3.78** | **7** | *e* | P | | **Pn** | **09 53 46.5** | **+2.3** |
| | 80nm,0.4s | | | | | | | | |
| KST | | | | *e* | S | | **Sn** | **09 54 30.2** | **+0.8** |
| | 323nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **3.78** | **7** | *e* | Pg | | **Pn** | **09 53 47.8** | **+3.6** |
| | 80nm,0.4s | | | | | | | | |
| KST | | | | | Lg | | Lg | 09 54 31.1 | |
| | 323nm,0.6s | | | | | | | | |
| **MRKS** | **Merke** | **3.79** | **336** | *e* | P | | **Pb** | **09 53 53.2** | **+0.7** |
| | 45nm,0.5s | | | | | | | | |
| MRKS | | | | *e* | S | | **Sb** | **09 54 41.0** | **+2.1** |
| | 134nm,0.4s | | | | | | | | |
| **MRKS** | **Merke** | **3.79** | **336** | | Pg | | **Pb** | **09 53 53.7** | **+1.2** |
| | 45nm,0.5s | | | | | | | | |
| MRKS | | | | | Lg | | Lg | 09 54 41.0 | |
| | 134nm,0.4s | | | | | | | | |
| **MNAS** | **Manas** | **3.83** | **327** | ⇑ | *iP* | | **Pn** | **09 53 47.0** | **+2.0** |
| | baz=25 | | | | | | | | |
| MNAS | | | | ⇑ | *iS* | | **Sn** | **09 54 29.8** | **-1.0** |
| | baz=25 | | | | | | | | |
| **IZV** | **Izvestkoviy** | **3.87** | **14** | *e* | P | | **Pb** | **09 53 52.1** | **-1.7** |
| | 85nm,0.5s | | | | | | | | |
| IZV | | | | *e* | S | | **Sb** | **09 54 39.3** | **-1.9** |
| | 93nm,0.7s | | | | | | | | |
| **IZV** | **Izvestkoviy** | **3.87** | **14** | | Pg | | **Pb** | **09 53 53.3** | **-0.5** |
| | 85nm,0.5s | | | | | | | | |
| IZV | | | | | Lg | | Lg | 09 54 40.2 | |
| | 93nm,0.7s | | | | | | | | |
| **TRKS** | **Terek-Say** | **3.89** | **306** | ⇑ | *iP* | | **Pn** | **09 53 47.8** | **+2.0** |
| | baz=2.0 | | | | | | | | |
| TRKS | | | | ⇑ | *iS* | | **Sn** | **09 54 31.5** | **-0.7** |
| | baz=2.0 | | | | | | | | |
| **ANVS** | **Anan'yevo** | **3.91** | **26** | ⇓ | *iP* | | **Pn** | **09 53 48.0** | **+1.8** |
| | baz=29 | | | | | | | | |
| ANVS | | | | ⇓ | *iS* | | **Sn** | **09 54 31.7** | **-1.2** |
| | baz=29 | | | | | | | | |
| **MTBS** | **Maitube** | **3.92** | **12** | *e* | P | | **Pb** | **09 53 52.5** | **-2.2** |
| | 41nm,0.6s | | | | | | | | |
| MTBS | | | | *e* | S | | **Sb** | **09 54 40.4** | **-2.3** |
| | 62nm,0.7s | | | | | | | | |
| **MTBS** | **Maitube** | **3.92** | **12** | | Pg | | **Pb** | **09 53 54.4** | **-0.4** |
| | 41nm,0.6s | | | | | | | | |
| MTBS | | | | | Lg | | Lg | 09 54 42.2 | |
| | 62nm,0.7s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.94** | **18** | *e* | P | | **Pb** | **09 53 54.1** | **-1.1** |
| | 114nm,0.5s | | | | | | | | |
| TNSS | | | | *e* | S | | **Sb** | **09 54 42.7** | **-0.8** |
| | 59nm,0.7s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **3.94** | **18** | | Pg | | **Pb** | **09 53 55.3** | **+0.2** |
| | 117nm,0.4s | | | | | | | | |
| TNSS | | | | | Lg | | Lg | 09 54 43.8 | |
| | 60nm,0.8s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **3.95** | **35** | ⇑ | *eP* | | **Pn** | **09 53 48.9** | **+2.2** |
| | baz=38 | | | | | | | | |
| PRZ | | | | ⇑ | *eS* | | **Sn** | **09 54 33.8** | **-0.1** |
| | baz=38 | | | | | | | | |
| **DGS** | **Degeres** | **3.96** | **5** | *e* | P | | **Pn** | **09 53 49.0** | **+2.2** |
| | 227nm,0.4s | | | | | | | | |
| DGS | | | | *e* | S | | **Sn** | **09 54 34.3** | **+0.4** |
| | 154nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **3.96** | **5** | | Pg | | **Pn** | **09 53 48.9** | **+2.2** |
| DGS | | | | | Lg | | Lg | 09 54 32.8 | |
| **USP** | **Ospenovka** | **4.01** | **352** | | P | | **Pn** | **09 53 49.4** | **+1.9** |
| | SNR=33 | | | | | | | | |
| **USP** | **Ospenovka** | **4.01** | **352** | ⇑ | *eP* | | **Pn** | **09 53 48.6** | **+1.2** |
| USP | baz=51 | | | ⇑ | *iS* | | **Sn** | **09 54 32.7** | **-2.5** |
| | baz=51 | | | | | | | | |
| **MDOK** | **Medeo** | **4.08** | **18** | | Pg | | **Pb** | **09 53 57.4** | **-0.1** |
| | 42nm,0.5s | | | | | | | | |
| MDOK | | | | | Pg | | **Pb** | **09 53 57.6** | **+0.1** |
| | 54nm,0.4s | | | | | | | | |
| MDOK | | | | | Lg | | Lg | 09 54 45.4 | |
| | 158nm,0.8s | | | | | | | | |
| MDOK | | | | | Lg | | Lg | 09 54 47.6 | |
| | 142nm,0.8s | | | | | | | | |
| **AAA** | **Alma-Ata** | **4.09** | **17** | *e* | P | | **Pb** | **09 53 58.3** | **+0.7** |
| | 168nm,0.4s | | | | | | | | |
| AAA | | | | *e* | S | | **Sb** | **09 54 49.1** | **+1.4** |
| | 258nm,0.7s | | | | | | | | |
| **KNDC** | **Almaty** | **4.11** | **17** | ⇑ | Pg | | **Pb** | **09 53 58.2** | **+0.2** |
| | 171nm,0.7s | | | | | | | | |
| KNDC | | | | ⇓ | Lg | | Lg | 09 54 45.2 | |
| | 392nm,0.7s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.16** | **18** | *e* | P | | **Pb** | **09 53 58.2** | **-0.7** |
| | 41nm,0.5s | | | | | | | | |
| KOTS | | | | *e* | S | | **Sb** | **09 54 49.8** | **0.0** |
| | 359nm,0.7s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.16** | **18** | | Pg | | **Pb** | **09 53 59.6** | **+0.7** |
| | 41nm,0.5s | | | | | | | | |
| KOTS | | | | | Lg | | Lg | 09 54 51.1 | |
| | 359nm,0.7s | | | | | | | | |
| **SGDS** | **Sogindy** | **4.18** | **353** | | Pg | | **Pb** | **09 53 59.5** | **+0.3** |
| | 35nm,0.6s | | | | | | | | |
| SGDS | | | | | Lg | | Lg | 09 54 50.0 | |
| | 50nm,0.6s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.41** | **3** | *e* | P | | **Pb** | **09 54 01.4** | **-1.6** |
| | 42nm,0.7s | | | | | | | | |
| KRBS | | | | *e* | S | | **Sb** | **09 54 55.6** | **-1.0** |
| | 66nm,0.9s | | | | | | | | |
| **KRBS** | **Karabastau** | **4.41** | **3** | | Pg | | **Pg** | **09 54 11.4** | **+2.2** |
| | 43nm,0.6s | | | | | | | | |
| KRBS | | | | | Lg | | Lg | 09 55 11.1 | |
| | 60nm,0.8s | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.53** | **30** | *e* | P | | **Pb** | **09 54 05.4** | **+0.2** |
| | 20nm,0.3s | | | | | | | | |
| ZHN | | | | *e* | S | | **Sb** | **09 55 02.1** | **+1.8** |
| | 56nm,0.4s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.53** | **13** | *e* | P | | **Pb** | **09 54 04.6** | **-0.5** |
| | 63nm,0.6s | | | | | | | | |
| KTBS | | | | *e* | S | | **Sb** | **09 55 00.9** | **+0.7** |
| | 164nm,0.7s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.53** | **13** | | Pg | | **Pb** | **09 54 05.3** | **+0.2** |
| | 63nm,0.6s | | | | | | | | |
| KTBS | | | | | Lg | | Lg | 09 55 02.2 | |
| | 164nm,0.7s | | | | | | | | |
| **KUU** | **Kurty** | **4.66** | **9** | *e* | P | | **Pb** | **09 54 07.1** | **-0.1** |
| | 25nm,0.7s | | | | | | | | |
| KUU | | | | *e* | S | | **Sb** | **09 55 04.9** | **+1.0** |
| | 96nm,1.0s | | | | | | | | |
| **KURS** | **Kuram** | **4.71** | **26** | *e* | P | | **Pb** | **09 54 08.4** | **+0.3** |
| | 58nm,0.6s | | | | | | | | |
| KURS | | | | *e* | S | | **Sb** | **09 55 07.3** | **+1.9** |
| | 58nm,0.9s | | | | | | | | |
| **KURS** | **Kuram** | **4.71** | **26** | | Pg | | **Pb** | **09 54 09.4** | **+1.3** |
| | 58nm,0.6s | | | | | | | | |
| KURS | | | | | Lg | | Lg | 09 55 07.5 | |
| | 58nm,0.9s | | | | | | | | |
| **CHKK** | **Chushkaly** | **4.73** | **15** | *e* | P | | **Pb** | **09 54 07.6** | **-0.8** |
| | 81nm,0.8s | | | | | | | | |
| CHKK | | | | *e* | S | | **Sb** | **09 55 05.8** | **0.0** |
| | 98nm,0.8s | | | | | | | | |
| **CHKK** | **Chushkaly** | **4.73** | **15** | | Pg | | **Pb** | **09 54 09.2** | **+0.8** |
| | 92nm,0.6s | | | | | | | | |
| CHKK | | | | | Lg | | Lg | 09 55 07.2 | |
| | 98nm,0.8s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.76** | **35** | *e* | P | | **Pb** | **09 54 09.1** | **+0.1** |
| | 39nm,0.9s | | | | | | | | |
| UZB | | | | *e* | S | | **Sb** | **09 55 08.4** | **+1.6** |
| | 45nm,1.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.76** | **35** | | Pg | | **Pb** | **09 54 10.4** | **+1.4** |
| | 39nm,0.9s | | | | | | | | |
| UZB | | | | | Lg | | Lg | 09 55 09.7 | |
| | 45nm,1.4s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.88** | **30** | *e* | P | | **Pb** | **09 54 11.5** | **+0.5** |
| | 51nm,0.6s | | | | | | | | |
| KPKS | | | | *e* | S | | **Sb** | **09 55 12.5** | **+2.2** |
| | 112nm,0.7s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.88** | **30** | | Pg | | **Pb** | **09 54 12.1** | **+1.1** |
| | 51nm,0.6s | | | | | | | | |
| KPKS | | | | | Lg | | Lg | 09 55 12.6 | |
| | 112nm,0.7s | | | | | | | | |
| **SHLS** | **Shalkode** | **4.97** | **38** | *e* | P | | **Pb** | **09 54 17.1** | **+4.5** |
| | 65nm,0.8s | | | | | | | | |
| SHLS | | | | *e* | S | | **Sg** | **09 55 22.4** | **-1.9** |
| | 75nm,0.9s | | | | | | | | |
| **SHLS** | **Shalkode** | **4.97** | **38** | | Pg | | **Pg** | **09 54 18.7** | **-1.3** |
| | 63nm,0.8s | | | | | | | | |
| SHLS | | | | | Lg | | Lg | 09 55 23.8 | |
| | 75nm,0.9s | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.11** | **37** | | Pg | | **Pb** | **09 54 16.1** | **+1.0** |
| | 16nm,0.8s | | | | | | | | |
| PDGK | | | | | Lg | | Lg | 09 55 19.4 | |
| | 46nm,0.9s | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.11** | **37** | ⇑ | Pg | | **Pb** | **09 54 15.8** | **+0.8** |
| | 21nm,0.6s | | | | | | | | |
| PDGK | | | | ⇓ | Lg | | Lg | 09 55 18.4 | |
| | 91nm,0.8s | | | | | | | | |
| **KK31** | **Karatay Array** | **5.25** | **318** | ⇑ | Pn | | **Pn** | **09 54 06.7** | **+2.3** |
| | 0.5nm,0.2s,baz=118,slow=14,SNR=20 | | | | | | | | |
| KK31 | | | | ⇓ | Pg | | **Pb** | **09 54 21.8** | **+4.5** |
| | 6.6nm,0.5s,baz=133,slow=15,SNR=24 | | | | | | | | |
| KK31 | | | | ⇑ | Sn | | **Sn** | **09 55 05.7** | **+0.1** |
| | 11nm,0.5s,baz=244,slow=46,SNR=5.1 | | | | | | | | |
| KK31 | | | | ⇓ | Lg | | Lg | 09 55 26.9 | |
| | 47nm,0.8s,baz=134,slow=28,SNR=4.3 | | | | | | | | |
| **ARXS** | **Arharly** | **5.26** | **20** | *e* | P | | **Pb** | **09 54 17.2** | **-0.3** |
| | 41nm,0.9s | | | | | | | | |
| ARXS | | | | *e* | S | | **Sb** | **09 55 22.4** | **+1.2** |
| | 48nm,0.8s | | | | | | | | |
| **ARXS** | **Arharly** | **5.26** | **20** | | Pg | | **Pb** | **09 54 18.3** | **+0.8** |
| | 41nm,0.9s | | | | | | | | |
| ARXS | | | | | Lg | | Lg | 09 55 22.8 | |
| | 48nm,0.8s | | | | | | | | |
| **BLB** | **Baldybastay** | **5.35** | **25** | | Pg | | **Pb** | **09 54 19.6** | **+0.5** |
| | 145nm,0.5s | | | | | | | | |
| BLB | | | | | Lg | | Lg | 09 55 25.0 | |
| | 67nm,0.8s | | | | | | | | |
| **BRLS** | **Borolday** | **5.56** | **314** | *e* | P | | **Pb** | **09 54 24.4** | **+1.7** |
| | 6.1nm,0.6s | | | | | | | | |
| BRLS | | | | *e* | S | | **Sb** | **09 55 34.4** | **+4.5** |
| | 18nm,0.6s | | | | | | | | |
| **KTMS** | **Ketmen** | **5.62** | **41** | *e* | P | | **Pb** | **09 54 24.9** | **+1.2** |
| | 5.1nm,0.6s | | | | | | | | |
| KTMS | | | | *e* | S | | **Sb** | **09 55 35.3** | **+3.7** |
| | 16nm,0.8s | | | | | | | | |
| **KTMS** | **Ketmen** | **5.62** | **41** | | Pg | | **Pb** | **09 54 25.7** | **+2.0** |
| | 8.9nm,0.7s | | | | | | | | |
| KTMS | | | | | Lg | | Lg | 09 55 36.7 | |
| | 16nm,0.8s | | | | | | | | |
| **BTLS** | **Baital** | **5.82** | **351** | *e* | P | | **Pb** | **09 54 28.1** | **+1.1** |
| | 6.7nm,0.5s | | | | | | | | |
| BTLS | | | | *e* | S | | **Sb** | **09 55 41.3** | **+4.1** |
| | 29nm,0.6s | | | | | | | | |
| **BTLS** | **Baital** | **5.82** | **351** | | Pg | | **Pb** | **09 54 31.3** | **+4.3** |
| | 9.7nm,0.4s | | | | | | | | |
| BTLS | | | | | Lg | | Lg | 09 55 45.9 | |
| | 29nm,0.6s | | | | | | | | |
| **DJR** | **Jarkent** | **6.04** | **32** | *e* | P | | **Pb** | **09 54 35.0** | **+4.2** |
| | 16nm,0.8s | | | | | | | | |
| DJR | | | | *e* | S | | **Sg** | **09 55 52.8** | **-6.0** |
| | 15nm,0.9s | | | | | | | | |
| **DJR** | **Jarkent** | **6.04** | **32** | | Pg | | **Pb** | **09 54 33.7** | **+2.9** |
| | 14nm,0.7s | | | | | | | | |
| DJR | | | | | Lg | | Lg | 09 55 49.2 | |
| | 14nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.07** | **32** | | Pn | | **Pn** | **09 54 57.0** | **+0.3** |
| | 0.1nm,0.3s,baz=216,slow=13,SNR=3.6 | | | | | | | | |
| MKAR | | | | | Lg | | Lg | 09 57 27.5 | |
| | 0.2nm,0.3s,baz=218,slow=26,SNR=3.2 | | | | | | | | |
| MKAR | | | | | LR | | LR | 09 58 44.9 | |
| | comp=Z,94nm,20.1s,baz=234,slow=40 | | | | | | | | |
| | 0.4nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **11.55** | **10** | | Pn | | **Pn** | **09 55 29.4** | **-1.3** |
| | 0.1nm,0.3s,baz=188,slow=12,SNR=2.4 | | | | | | | | |
| KURBB | | | | | Lg | | Lg | 09 58 45.2 | |
| | 0.1nm,0.3s,baz=192,slow=26,SNR=8.5 | | | | | | | | |
| KURBB | | | | | LR | | LR | 10 00 16.8 | |
| | comp=Z,76nm,20.6s,baz=206,slow=40 | | | | | | | | |
| | 1.3nm,0.2s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **14.14** | **348** | | Pn | | **Pn** | **09 56 03.7** | **-2.4** |
| | 0.7nm,0.7s,baz=165,slow=12,SNR=1.2 | | | | | | | | |
| BVAR | | | | | Lg | | Lg | 10 00 07.9 | |
| | baz=154,slow=27,SNR=1.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.02** | **21** | | Pn | | **Pn** | **09 56 29.5** | **-1.7** |
| | 0.1nm,0.3s,baz=212,slow=14,SNR=2.9 | | | | | | | | |
| ZALV | | | | | LR | | LR | 10 03 00.9 | |
| | comp=Z,40nm,21.2s,baz=190,slow=39 | | | | | | | | |
| | 0.9nm,0.6s | | | | | | | | |
| **KIRV** | **Kirov** | **25.45** | **328** | | LR | | LR | 10 08 56.0 | |
| | comp=Z,60nm,20.2s,baz=135,slow=38 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **31.94** | **284** | | P | | **P** | **09 59 13.3** | **+1.1** |
| | 0.5nm,0.7s,baz=74,slow=7.9,SNR=3.8 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.19** | **323** | | P | | **P** | **09 59 56.1** | **-1.0** |
| | 2.4nm,0.9s,baz=134,slow=12,SNR=5.1 | | | | | | | | |
| | 2.4nm,0.9s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.95** | **335** | | P | | **P** | **10 00 19.1** | **-1.1** |
| | 2.6nm,0.8s,baz=108,slow=9.0,SNR=4.5 | | | | | | | | |
| | 2.6nm,0.8s | | | | | | | | |
| **KSRS** | **Korea Array** | **40.81** | **75** | | LR | | LR | 10 21 13.1 | |
| | comp=Z,15nm,19.5s,baz=60,slow=42 | | | | | | | | |
| **HFS** | **Hagfors** | **43.05** | **320** | | P | | **P** | **10 00 45.0** | **-0.8** |
| | 0.7nm,0.4s,baz=88,slow=13,SNR=1.7 | | | | | | | | |
| | 0.7nm,0.4s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.27** | **321** | | P | | **P** | **10 00 54.8** | **-0.9** |
| | 0.3nm,0.5s,baz=90,slow=7.9,SNR=2.1 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.16** | **270** | | P | | **P** | **10 03 53.1** | **-0.1** |
| | 0.8nm,0.4s,baz=46,slow=5.8,SNR=13 | | | | | | | | |
| | 0.8nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **80.69** | **125** | | P | | **P** | **10 05 00.1** | **+0.4** |
| | 0.4nm,0.8s,baz=327,slow=5.1,SNR=5.3 | | | | | | | | |
| | 0.4nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **83.17** | **128** | | P | | **P** | **10 05 13.4** | **+0.7** |
| | 0.7nm,0.8s,baz=317,slow=5.2,SNR=8.0 | | | | | | | | |
| | 0.7nm,0.8s | | | | | | | | |

*IDC* ***25*** *09:57:23.4±2.5, 21°.84N×144°.23E, h275km±20km, mb3.2/9, mbtmp3.8/10, Error ellipse: s-maj=54.9km s-min=17.7km az=79.0*

**ISC 25 09:57:20.2±1.1, 21°.7N±0°.1×144°.4E±0°.3, h250km, n10, σ1s22/11, mb3.5/9, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **5.73** | **340** | P | | | **Pn** | **09 58 46.7** | **+1.8** |
| | 31nm,0.3s,baz=110,slow=13,SNR=12 | | | | | | | | |
| JCJ | | | | S | | | **S** | **09 59 53.9** | **+1.2** |
| | 40nm,0.6s,baz=205,slow=19,SNR=6.4 | | | | | | | | |
| **KSRS** | **Korea Array** | **21.19** | **321** | P | | | **P** | **10 01 46.3** | **-0.2** |
| | 0.8nm,0.7s,baz=150,slow=8.6,SNR=3.1 | | | | | | | | |
| | 0.8nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **40.04** | **320** | P | | | **P** | **10 04 29.6** | **-1.7** |
| | 0.3nm,0.4s,baz=107,slow=8.2,SNR=1.7 | | | | | | | | |
| | 0.3nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.53** | **194** | P | | | **P** | **10 04 53.3** | **+1.7** |
| | 0.3nm,0.5s,baz=16,slow=9.6,SNR=11 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.51** | **313** | P | | | **P** | **10 06 28.7** | **-0.8** |
| | 0.2nm,0.3s,baz=101,slow=7.1,SNR=2.4 | | | | | | | | |
| | 0.2nm,0.3s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.27** | **317** | P | | | **P** | **10 06 48.1** | **-0.7** |
| | 0.7nm,0.4s,baz=82,slow=13,SNR=0.8 | | | | | | | | |
| | 0.7nm,0.4s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **63.38** | **320** | P | | | **P** | **10 07 22.7** | **-0.4** |
| | 1.3nm,0.3s,baz=94,slow=8.3,SNR=6.4 | | | | | | | | |
| | 1.3nm,0.3s | | | | | | | | |
| **FINES** | **FINESS Array B** | **83.65** | **335** | P | | | **P** | **10 09 20.8** | **+0.2** |
| | 2.4nm,1.0s,baz=35,slow=4.7,SNR=7.2 | | | | | | | | |
| | 2.4nm,1.0s | | | | | | | | |
| **HFS** | **Hagfors** | **89.15** | **338** | P | | | **P** | **10 09 47.0** | **-0.2** |
| | 2.7nm,1.0s,baz=87,slow=15,SNR=1.9 | | | | | | | | |
| | 2.7nm,1.0s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **97.16** | **55** | P | | | **P** | **10 10 24.2** | **-0.6** |
| | 0.1nm,0.4s,baz=263,slow=3.6,SNR=1.4 | | | | | | | | |
| | 0.1nm,0.4s | | | | | | | | |

*SKO* ***25*** *10:03:32.8, 41°.93N×23°.11E, h20km, ML2.7*
*BEO* ***25*** *10:03:33.6±0.3, 41°.95N×23°.13E, h9km±2km, ML2.7/14*
*SOF* ***25*** *10:03:33.1, 41°.97N×23°.21E±0°.01, h6km±1km, MD3.1/6*
*THE* ***25*** *10:03:34.4, 41°.87N×23°.16E, h8km, ML2.8/6, Error ellipse: s-maj=1.3km s-min=0.9km az=167.0*
*ATH* ***25*** *10:03:34.3, 41°.88N×23°.13E, h7km±1km, ML2.7/7, Error ellipse: s-maj=2.2km s-min=1.5km az=175.0*

**ISC 25 10:03:33.0±0.8, 41°.95N±0°.01×23°.15E±0°.02, h13km±5km, n69, σ0s65/115, 5C-6D, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KKB** | **Krupnik** | **0.11** | **188** | ⇑ | *iP* | *i* | **Pg** | **10 03 36.3** | **+0.2** |
| KKB | | | | | | | Sg | **10 03 38.3** | **0.0** |
| **KKB** | **Krupnik** | **0.11** | **188** | | *iP* | *i* | **Pg** | **10 03 36.3** | **+0.2** |
| KKB | | | | | *iS* | *i* | **Sg** | **10 03 38.4** | **+0.1** |
| **MMB** | **Musomishta** | **0.60** | **132** | | Pg | | **Pg** | **10 03 44.6** | **-0.2** |
| MMB | | | | | Sg | | **Sg** | **10 03 52.8** | **0.0** |
| **MMB** | **Musomishta** | **0.60** | **132** | | *iP* | *i* | **Pg** | **10 03 44.6** | **-0.2** |
| MMB | | | | | *iS* | *i* | **Sg** | **10 03 52.4** | **-0.4** |
| **VTS** | **Vitosha** | **0.67** | **5** | | Pg | | **Pg** | **10 03 45.9** | **-0.2** |
| VTS | | | | | Sg | | **Sg** | **10 03 54.6** | **-0.4** |
| **VTS** | **Vitosha** | **0.67** | **5** | *e* | Pg | | **Pg** | **10 03 45.9** | **-0.2** |
| VTS | | | | *e* | Sg | | **Sg** | **10 03 54.5** | **-0.4** |
| **VAY** | **Valandovo** | **0.76** | **215** | *e* | Pg | | **Pg** | **10 03 47.6** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PLD** | **Plovdiv** | **1.21** | **80** | *i* Pg | | **Pg** | **10 03 56.2** | **0.0** |
| PLD | | | | *i* Sg | | **Sn** | **10 04 12.7** | **+0.8** |
| **RZN** | **Rozhen** | **1.22** | **102** | P | | **Pb** | **10 03 56.0** | **0.0** |
| RZN | | | | S | | **Sn** | **10 04 12.9** | **+0.5** |
| **KOKK** | **Kokkinochori,** | **1.30** | **150** | P | | **Pn** | **10 03 56.8** | **-0.1** |
| KOKK | | | | S | | **Sb** | **10 04 14.1** | **+0.1** |
| **KOKK** | **Kokkinochori,** | **1.30** | **150** | P | | **Pn** | **10 03 56.9** | **0.0** |
| KOKK | | | | S | | **Sb** | **10 04 13.3** | **-0.7** |
| KOKK | | | | AML | AML | | 10 04 15.0 | |
| | comp=E,685µm,0.5s | | | | | | | |
| KOKK | | | | AML | AML | | 10 04 16.8 | |
| | comp=N,713µm,0.2s | | | | | | | |
| **BARS** | **Barje** | **1.31** | **312** | *e*Pg | | **Pn** | **10 03 57.1** | **0.0** |
| BARS | | | | *e*Sg | | **Sg** | **10 04 15.9** | **+0.6** |
| **BARS** | **Barje** | **1.31** | **312** | *i* Pg | | **Pn** | **10 03 57.2** | **0.0** |
| BARS | | | | *i* Sg | | **Sg** | **10 04 16.5** | **+1.1** |
| **THE** | **Thessaloniki** | **1.32** | **186** | P | | **Pb** | **10 03 57.6** | **-0.1** |
| THE | | | | S | | **Sn** | **10 04 15.2** | **+0.5** |
| | comp=N,365nm,0.3s | | | | | | | |
| **THE** | **Thessaloniki** | **1.32** | **186** | *i* Pg | | **Pb** | **10 03 57.6** | **-0.1** |
| THE | | | | *i* Sg | | **Sg** | **10 04 15.9** | **+0.2** |
| **THE** | **Thessaloniki** | **1.32** | **186** | P | | **Pb** | **10 03 57.7** | **-0.1** |
| THE | | | | S | | **Sb** | **10 04 14.3** | **-0.3** |
| THE | | | | AML | AML | | 10 04 17.5 | |
| | comp=E,716µm,0.3s | | | | | | | |
| THE | | | | AML | AML | | 10 04 17.8 | |
| | comp=N,740µm,0.4s | | | | | | | |
| **HORT** | **Hortiatis** | **1.35** | **182** | P | | **Pn** | **10 03 58.0** | **+0.3** |
| HORT | | | | S | | **Sn** | **10 04 16.0** | **+0.4** |
| | comp=N,220nm,0.3s | | | | | | | |
| **HORT** | **Hortiatis** | **1.35** | **182** | P | | **Pn** | **10 03 58.0** | **+0.3** |
| HORT | | | | S | | **Sb** | **10 04 15.2** | **-0.3** |
| HORT | | | | AML | AML | | 10 04 18.0 | |
| | comp=N,404µm,0.3s | | | | | | | |
| HORT | | | | AML | AML | | 10 04 18.3 | |
| | comp=E,449µm,0.2s | | | | | | | |
| **ZAPS** | **Zavoj** | **1.38** | **344** | *e*Pg | | **Pn** | **10 03 58.1** | **+0.1** |
| ZAPS | | | | *e*Sg | | **Sg** | **10 04 17.3** | **-0.1** |
| **KAVA** | **Kavala** | **1.40** | **132** | P | | **Pn** | **10 03 58.5** | **+0.2** |
| KAVA | | | | S | | **Sn** | **10 04 16.9** | **+0.3** |
| | comp=E,395nm,0.3s | | | | | | | |
| **KAVA** | **Kavala** | **1.40** | **132** | P | | **Pn** | **10 03 58.5** | **+0.2** |
| KAVA | | | | S | | **Sn** | **10 04 16.4** | **-0.2** |
| **MPEP** | **Malo Peshtene** | **1.47** | **17** | P | | **Pg** | **10 04 01.2** | **-0.1** |
| MPEP | | | | S | | **Sg** | **10 04 20.6** | **+0.2** |
| **KDZ** | **Kurdzhali** | **1.67** | **100** | P | | **Pb** | **10 04 04.0** | **+0.4** |
| KDZ | | | | S | | **Sg** | **10 04 26.7** | **0.0** |
| **BLKB** | **Belogradchik** | **1.71** | **348** | ⇑S | | **Sb** | **10 04 25.2** | **-0.5** |
| **OUR** | **Ouranopolis** | **1.73** | **158** | P | | **Pn** | **10 04 02.8** | **-0.1** |
| **OUR** | **Ouranopolis** | **1.73** | **158** | P | | **Pn** | **10 04 03.3** | **+0.5** |
| **VALD** | **Valchedram** | **1.75** | **7** | P | | **Pg** | **10 04 05.9** | **-0.7** |
| VALD | | | | S | | **Sg** | **10 04 31.2** | **+1.9** |
| **FNA** | **Florina** | **1.77** | **229** | P | | **Pn** | **10 04 03.5** | **0.0** |
| **FNA** | **Florina** | **1.77** | **229** | *i* Pn | | **Pn** | **10 04 03.9** | **+0.4** |
| **FNA** | **Florina** | **1.77** | **229** | P | | **Pn** | **10 04 03.6** | **+0.2** |
| **THAS** | **Thassos island** | **1.79** | **138** | P | | **Pn** | **10 04 03.5** | **-0.1** |
| **THAS** | **Thassos island** | **1.79** | **138** | P | | **Pn** | **10 04 04.2** | **+0.6** |
| **SELS** | **Selova** | **1.96** | **311** | *e*Pn | | **Pn** | **10 04 07.0** | **+0.9** |
| SELS | | | | *e*Sn | | **Sb** | **10 04 32.1** | **-1.0** |
| **ZAGS** | **Zajecar** | **1.98** | **340** | *e*Pn | | **Pn** | **10 04 06.9** | **+0.7** |
| ZAGS | | | | *e*Sn | | **Sb** | **10 04 32.8** | **-0.7** |
| **BOVS** | **Bovan** | **1.99** | **328** | *e*Pn | | **Pn** | **10 04 07.1** | **+0.7** |
| BOVS | | | | *e*Sn | | **Sb** | **10 04 33.3** | **-0.5** |
| **BOVS** | **Bovan** | **1.99** | **328** | ⇓P | | **Pb** | **10 04 07.9** | **-1.2** |
| **NEST** | **Nestorio** | **2.21** | **227** | P | | **Pn** | **10 04 10.4** | **+0.9** |
| **ELND** | **Elena** | **2.24** | **63** | ⇓P | | **Pb** | **10 04 11.9** | **-1.5** |
| **SMTH** | **Samothraki Isl** | **2.33** | **129** | P | | **Pn** | **10 04 11.5** | **+0.4** |
| **SMTH** | **Samothraki Isl** | **2.33** | **129** | P | | **Pn** | **10 04 12.2** | **+1.1** |
| SMTH | | | | S | | **Sn** | **10 04 39.8** | **+0.3** |
| **ALN** | **Alexandroupoli** | **2.42** | **115** | P | | **Pn** | **10 04 13.4** | **+1.1** |
| **ALN** | **Alexandroupoli** | **2.42** | **115** | P | | **Pn** | **10 04 14.4** | **+2.1** |
| ALN | | | | S | | **Sn** | **10 04 42.2** | **+0.4** |
| ALN | | | | AML | AML | | 10 04 55.3 | |
| | comp=E,140µm,0.6s | | | | | | | |
| ALN | | | | AML | AML | | 10 04 58.3 | |
| | comp=N,87µm,0.6s | | | | | | | |
| **LIA** | **Limnos Island** | **2.57** | **142** | P | | **Pn** | **10 04 15.2** | **+0.9** |
| **GRUS** | **Gruza** | **2.63** | **318** | *e*Pn | | **Pn** | **10 04 16.3** | **+1.0** |
| GRUS | | | | *e*Sn | | **Sn** | **10 04 48.0** | **+0.9** |
| **SJES** | **Sjenica** | **2.69** | **300** | *e*Pn | | **Pn** | **10 04 18.4** | **+2.3** |
| SJES | | | | *e*Sn | | **Sn** | **10 04 49.9** | **+1.4** |
| **KUBS** | **Kucevo** | **2.69** | **337** | *e*Pn | | **Pn** | **10 04 15.3** | **-0.7** |
| **HERR** | **Herculane** | **2.98** | **350** | ⇑P | | **Pn** | **10 04 19.7** | **-0.3** |
| **MDVR** | **Moldovita** | **3.02** | **340** | ⇓P | | **Pn** | **10 04 18.8** | **-1.7** |
| **TRUS** | **Trudelj** | **3.03** | **319** | *e*Pn | | **Pn** | **10 04 21.3** | **+0.6** |
| TRUS | | | | *e*Sn | | **Sn** | **10 04 57.5** | **+0.6** |
| **GZR** | **Gura Zlata** | **3.45** | **356** | ⇓P | | **Pn** | **10 04 26.7** | **+0.1** |
| **ARR** | **Arges** | **3.58** | **17** | ⇓P | | **Pn** | **10 04 29.8** | **+1.4** |
| **VOIR** | | **3.75** | **21** | ⇑P | | **Pn** | **10 04 30.8** | **+0.1** |
| **BZS** | **Buzias** | **3.83** | **344** | ⇓P | | **Pn** | **10 04 31.2** | **-0.5** |
| **MLR** | **Muntele Rosu** | **4.08** | **29** | ⇑P | | **Pn** | **10 04 35.6** | **+0.3** |

*CNRM **25** 10:07:23.4, 36.˚44N×9.˚27W, h16km, ML1.4*
*MDD **25** 10:07:24.5±1.3, 36.˚71N×9.˚74W, h35km±4km, mb_Lg2.5/7, Error ellipse: s-maj=10.2km s-min=6.9km az=51.0*
*SFS **25** 10:07:24.9, 36.˚73N×9.˚76W, h36km, ML2.1/10, ML2.4/6, MLv2.0/10*
*IGIL **25** 10:07:25.0, 36.˚71N×9.˚69W, h21km, ML1.2*
*INMG **25** 10:07:25.0±1.5, 36.˚72N×9.˚69W, h22km±5km, ML1.8, Error ellipse: s-maj=6.8km s-min=4.7km az=60.0*

**ISC 25 10:07:23.3±2.9, 36.72N±0.˚10×9.72W±0.˚10, h33km±8km, n44, σ1§15/61, West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **0.83** | **60** | *e*P | **Pb** | **10 07 39.6** | **+0.4** |
| PFVI | | | | *e*S | **Sb** | **10 07 50.6** | **+0.5** |
| PFVI | | | | A | A | 10 07 51.5 | |
| | 14nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.83** | **60** | Pn | **Pb** | **10 07 39.6** | **+0.4** |
| PFVI | | | | Sn | **Sb** | **10 07 50.5** | **+0.5** |
| **PFVI** | **Vila Bisbo** | **0.83** | **60** | P | **Pb** | **10 07 38.0** | **-1.2** |
| **PFVI** | **Vila Bisbo** | **0.83** | **60** | S | **Sb** | **10 07 49.7** | **-0.3** |
| **MORF** | **Marmelete** | **1.03** | **56** | *e*P | **Pb** | **10 07 42.7** | **-0.1** |
| MORF | | | | *e*S | **Sb** | **10 07 55.5** | **-0.5** |
| MORF | | | | A | A | 10 07 57.9 | |
| | 11nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **1.03** | **56** | *e*P | **Pb** | **10 07 42.6** | **-0.1** |
| MORF | | | | *e*S | **Sb** | **10 07 55.3** | **-0.7** |
| MORF | | | | IAML | | 10 07 56.2 | |
| | comp=N,13nm,0.1s | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.15** | **44** | *e*P | **Pn** | **10 07 45.4** | **+2.4** |
| PTEO | | | | *e*S | **Sb** | **10 07 58.6** | **-0.5** |
| PTEO | | | | A | A | 10 07 59.3 | |
| | comp=N,8.8nm,0.9s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **1.52** | **70** | *e*P | **Pn** | **10 07 49.4** | **+1.1** |
| PBDV | | | | *e*S | **Sn** | **10 08 07.0** | **0.0** |
| PBDV | | | | A | A | 10 08 09.9 | |
| | comp=N,4.1nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **1.52** | **70** | Sn | **Sn** | **10 08 07.6** | **+0.5** |
| **PCVE** | **Castro Verde** | **1.62** | **55** | *e*P | **Pn** | **10 07 51.1** | **+1.5** |
| PCVE | | | | *e*S | **Sn** | **10 08 10.0** | **+0.7** |
| PCVE | | | | A | A | 10 08 11.9 | |
| | comp=N,3.6nm,0.3s | | | | | | |
| **PCVE** | **Castro Verde** | **1.62** | **55** | Pn | **Pn** | **10 07 51.1** | **+1.5** |
| PCVE | | | | Sn | **Sn** | **10 08 10.1** | **+0.7** |
| **MESJ** | **Messejana** | **1.64** | **47** | *e*S | **Sn** | **10 08 10.4** | **+0.7** |
| MESJ | | | | A | A | 10 08 23.1 | |
| | comp=N,4.4nm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **1.64** | **47** | *e*S | **Sn** | **10 08 09.8** | **+0.1** |
| MESJ | | | | IAML | | 10 08 10.4 | |
| | comp=E,0.8nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.68** | **34** | *e*P | **Pn** | **10 07 51.3** | **+0.9** |
| PNCL | | | | *e*S | **Sn** | **10 08 11.1** | **+0.3** |
| PNCL | | | | A | A | 10 08 11.6 | |
| | comp=E,3.0nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **1.68** | **34** | Pn | **Pn** | **10 07 51.6** | **+1.2** |
| **PVAQ** | **Vaqueiros** | **1.74** | **66** | *e*P | **Pn** | **10 07 52.3** | **+1.1** |
| PVAQ | | | | *e*S | **Sn** | **10 08 12.3** | **0.0** |
| PVAQ | | | | A | A | 10 08 16.5 | |
| | comp=E,4.5nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.74** | **66** | Pn | **Pn** | **10 07 52.3** | **+1.1** |
| PVAQ | | | | Sn | **Sn** | **10 08 12.1** | **-0.2** |
| **PVAQ** | **Vaqueiros** | **1.74** | **66** | P | **Pn** | **10 07 50.6** | **-0.6** |
| **PVAQ** | **Vaqueiros** | **1.74** | **66** | S | **Sn** | **10 08 11.4** | **-0.9** |
| **EGRO** | **El Granado** | **1.96** | **65** | Pn | **Pn** | **10 07 55.5** | **+1.3** |
| **EGRO** | **El Granado** | **1.96** | **65** | Pn | **Pn** | **10 07 54.2** | **0.0** |
| EGRO | | | | Sn | **Sn** | **10 08 18.0** | **+0.2** |
| EGRO | | | | *i* Vmb_Lg | | 10 08 21.7 | |
| **PBEJ** | **Beja** | **1.97** | **48** | *e*S | **Sn** | **10 08 18.2** | **+0.3** |
| **PMAFR** | **Mafra** | **2.26** | **9** | *e*P | **Pn** | **10 07 59.1** | **+0.8** |
| PMAFR | | | | *e*S | **Sn** | **10 08 25.3** | **+0.3** |
| PMAFR | | | | A | A | 10 08 27.6 | |
| | comp=E,12nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **2.26** | **9** | Pn | **Pn** | **10 07 58.7** | **+0.4** |
| PMAFR | | | | Sn | **Sn** | **10 08 24.4** | **-0.6** |
| **EVO** | **Evora** | **2.26** | **36** | *e*S | **Sn** | **10 08 24.8** | **-0.3** |
| EVO | | | | A | A | 10 08 28.6 | |
| | comp=E,5.0nm,0.1s | | | | | | |
| **EVO** | **Evora** | **2.26** | **36** | Sn | **Sn** | **10 08 24.6** | **-0.4** |
| **PBAR** | **Barrancos** | **2.58** | **55** | *e*P | **Pn** | **10 08 04.7** | **+1.9** |
| PBAR | | | | *e*S | **Sn** | **10 08 32.9** | **-0.1** |
| PBAR | | | | A | A | 10 08 35.4 | |
| | comp=E,1.6nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **2.58** | **55** | Sn | **Sn** | **10 08 32.9** | **-0.1** |
| **PMTG** | **Montargil** | **2.62** | **26** | *e*S | **Sn** | **10 08 33.4** | **-0.7** |
| PMTG | | | | A | A | 10 08 36.6 | |
| | comp=E,3.1nm,0.7s | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.65** | **66** | Pn | **Pn** | **10 08 04.4** | **+0.7** |
| EMIN | | | | Sn | **Sn** | **10 08 34.3** | **-0.4** |
| EMIN | | | | *i* Vmb_Lg | | 10 08 37.7 | |
| **PESTR** | **Estremoz** | **2.73** | **38** | *e*S | **Sn** | **10 08 36.1** | **-0.5** |
| **PSBE** | **So Bento** | **2.88** | **14** | *e*S | **Sn** | **10 08 40.9** | **+0.4** |
| PSBE | | | | A | A | 10 08 44.2 | |
| | comp=E,5.8nm,0.9s | | | | | | |
| **EBAD** | **Badajoz** | **2.96** | **46** | Pn | **Pn** | **10 08 08.9** | **+1.0** |
| EBAD | | | | Sn | **Sn** | **10 08 40.8** | **-1.4** |
| EBAD | | | | *i* Vmb_Lg | | 10 08 44.9 | |
| **ESPR** | **Espera** | **3.11** | **86** | Sn | **Sn** | **10 08 45.3** | **-0.6** |
| **ESPR** | **Espera** | **3.11** | **86** | Pn | **Pn** | **10 08 11.0** | **+1.0** |
| ESPR | | | | Sn | **Sn** | **10 08 43.7** | **-2.3** |
| ESPR | | | | *i* Vmb_Lg | | 10 08 47.0 | |
| **PMRV** | **Marv??o** | **3.27** | **34** | *e*P | **Pn** | **10 08 13.2** | **+1.0** |
| PMRV | | | | *e*S | **Sn** | **10 08 48.8** | **-1.2** |
| PMRV | | | | A | A | 10 08 54.9 | |
| | comp=E,2.0nm,0.6s | | | | | | |
| **ECAB** | **El Cabril** | **3.68** | **67** | Pn | **Pn** | **10 08 18.7** | **+0.8** |
| ECAB | | | | Sn | **Sn** | **10 08 58.2** | **-2.1** |
| ECAB | | | | *i* Vmb_Lg | | 10 09 00.7 | |
| **EADA** | **Adamuz** | **4.34** | **69** | Pn | **Pn** | **10 08 27.5** | **+0.5** |
| EADA | | | | Sn | **Sn** | **10 09 14.0** | **-2.4** |
| EADA | | | | *i* Vmb_Lg | | 10 09 21.5 | |
| **EPLA** | **Plasencia** | **4.39** | **40** | Sn | **Sn** | **10 09 15.7** | **-2.1** |
| EPLA | | | | *i* Vmb_Lg | | 10 09 19.6 | |
| **ELOB** | **Lobios** | **5.30** | **14** | Sn | **Sn** | **10 09 36.0** | **-4.1** |
| **MD31** | **MD31** | **5.61** | **132** | P | Pn | 10 08 41.6 | -2.9 |
| **MD31** | **MD31** | **5.61** | **132** | S | Sn | 10 09 40.4 | -7.4 |
| **MDT** | **Midelt** | **5.74** | **131** | P | Pn | 10 08 40.7 | -5.6 |
| **MDT** | **Midelt** | **5.74** | **131** | S | Sn | 10 09 43.0 | -8.0 |

*AEIC **25** 10:10:19.2±1.5, 69.˚50N±0.˚05×144.˚27W±0.˚05, h7km±5km, ML3.6, ML3.6/118(NEIC), Mwr3.6/20(NEIC), Error ellipse: s-maj=7.5km s-min=2.2km az=194.0*
*NEIC **25** 10:10:20.9±1.4, 69.˚57N±0.˚04×144.˚19W±0.˚06, h10km±2km, Error ellipse: s-maj=7.2km s-min=3.3km az=1.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-0.04; $M_{\theta\theta}$-2.03; $M_{\phi\phi}$2.08; $M_{r\theta}$0.62; $M_{\theta\phi}$-2.62; $M_{r\phi}$0.80; Fault plane solution: $M_o$3.48000×$10^{14}$ NP1: $\phi_s$289.80000°, δ74.16000°, λ-175.01000°. NP2: $\phi_s$198.44000°, δ85.20000°, λ-15.89000°. Principal axes: T 3.4135, Plg8.0000°, Azm245.0000°; N 0.1319, Plg73.0000°, Azm2.0000°; P -3.5454, Plg15.0000°, Azm153.0000°;*
*NEIC **25** 10:10:20.8, 69.˚59N×144.˚16W, h10km*
*IDC **25** 10:10:22.1±1.0, 69.˚62N×144.˚03W, h0km, mb3.6/7, mbtmp3.6/11, ML3.5/4, MS2.8/3, Error ellipse: s-maj=23.9km s-min=16.0km az=53.0*

**ISC 25 10:10:21.5±0.6, 69.˚50N±0.˚04×144.˚19W±0.˚02, h10km, n155, σ1§12/167, mb3.7/7, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.21** | **53** | Pg | **Pg** | **10 10 24.2** | **-1.7** |
| C27K | | | | | **Sg** | **10 10 27.4** | **-1.4** |
| C27K | | | | IAML | | 10 10 32.2 | |
| | comp=N,10µm,0.8s | | | | | | |
| **C26K** | **Camden Bay** | **0.49** | **329** | | **Pg** | **10 10 29.7** | **-1.2** |
| **D25K** | **Kavik River** | **0.79** | **258** | | **Pg** | **10 10 33.7** | **-3.1** |
| **D27M** | **Malcolm River** | **1.17** | **101** | | **Pb** | **10 10 41.2** | **-2.6** |
| D27M | | | | | **Sg** | **10 10 58.5** | **-0.7** |
| D27M | | | | IAML | | 10 11 04.6 | |
| | comp=N,974nm,0.6s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.60** | **280** | | **Pn** | **10 10 48.5** | **-1.2** |
| C24K | | | | | **Sb** | **10 11 09.8** | **-1.3** |
| C24K | | | | IAML | | 10 11 13.2 | |
| | comp=N,1µm,0.4s | | | | | | |
| C24K | | | | IAML | | 10 11 20.3 | |
| | comp=E,810nm,1.0s | | | | | | |
| **E27K** | **Coleen River** | **1.62** | **143** | | **Pn** | **10 10 49.7** | **-0.5** |
| E27K | | | | | **Sg** | **10 11 12.5** | **-1.2** |
| E27K | | | | IAML | | 10 11 15.4 | |
| | comp=N,658nm,0.7s | | | | | | |
| E27K | | | | IAML | | 10 11 16.9 | |
| | comp=E,866nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **1.68** | **260** | | **Pb** | **10 10 51.1** | **-1.4** |
| D24K | | | | | **Sg** | **10 11 15.0** | **-0.4** |
| D24K | | | | IAML | | 10 11 19.0 | |
| | comp=E,942nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.82** | **179** | | **Pb** | **10 10 53.1** | **-1.7** |
| F26K | | | | | **Sb** | **10 11 16.9** | **-0.8** |
| F26K | | | | IAML | | 10 11 22.0 | |
| | comp=N,634nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **1.90** | **116** | | **Pb** | **10 10 54.6** | **-1.6** |
| E28M | | | | | **Sb** | **10 11 20.0** | **0.0** |
| **D28M** | **Stokes Point** | **1.94** | **93** | | **Pb** | **10 10 54.9** | **-1.9** |
| D28M | | | | | **Sg** | **10 11 23.3** | **-0.3** |
| **F25K** | **Christian Rive** | **1.99** | **196** | | **Pb** | **10 10 56.2** | **-1.6** |
| F25K | | | | | **Sb** | **10 11 21.4** | **-1.3** |
| F25K | | | | IAML | | 10 11 25.9 | |
| | comp=N,504nm,0.7s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.09** | **184** | | **Pn** | **10 10 57.0** | **+0.4** |
| **TOLK** | **Toolik Lake Re** | **2.12** | **248** | | **Pn** | **10 10 56.8** | **-0.2** |
| TOLK | | | | IAML | | 10 11 33.9 | |
| | comp=E,390nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 10 11 35.8 | |
| | comp=N,338nm,0.8s | | | | | | |
| **E24K** | **Your Creek** | **2.12** | **229** | | **Pn** | **10 10 57.1** | **+0.1** |
| E24K | | | | | **Sb** | **10 11 26.4** | **+0.1** |
| **C23K** | **Itkillik River** | **2.27** | **281** | | **Pn** | **10 10 58.4** | **-0.6** |
| **D23K** | **Nanushuk River** | **2.38** | **260** | | **Pn** | **10 10 59.3** | **-1.2** |
| D23K | | | | | **Sb** | **10 11 32.6** | **-1.0** |
| D23K | | | | IAML | | 10 11 41.9 | |
| | comp=E,255nm,0.8s | | | | | | |
| **F24K** | **Squaw Lake** | **2.41** | **216** | Pn | **Pn** | **10 11 01.1** | **0.0** |
| **E23K** | **Chandalar** | **2.45** | **236** | | **Pn** | **10 11 01.5** | **-0.1** |
| E23K | | | | IAML | | 10 11 41.5 | |
| | comp=E,261nm,0.5s | | | | | | |
| E23K | | | | IAML | | 10 11 42.3 | |
| | comp=N,277nm,0.9s | | | | | | |
| **F28M** | **Old Crow** | **2.47** | **138** | Pn | **Pn** | **10 11 02.0** | **+0.2** |
| F28M | | | | | **Sn** | **10 11 32.7** | **+0.6** |
| F28M | | | | IAML | | 10 11 43.1 | |
| | comp=N,303nm,0.6s | | | | | | |
| F28M | | | | IAML | | 10 11 44.2 | |
| | comp=E,279nm,0.7s | | | | | | |
| **E29M** | **Blow River** | **2.53** | **113** | Pg | **Pb** | **10 11 04.0** | **-3.0** |
| E29M | | | | IAML | | 10 11 41.5 | |
| | comp=E,276nm,0.6s | | | | | | |
| E29M | | | | IAML | | 10 11 44.9 | |
| | comp=N,267nm,1.0s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.57** | **176** | | **Pn** | **10 11 03.9** | **+0.7** |
| **G25K** | **Bearman Lake** | **2.84** | **195** | | **Pn** | **10 11 07.5** | **+0.6** |
| **G27K** | **Doyon Strip** | **2.87** | **160** | | **Pn** | **10 11 07.2** | **-0.1** |
| **FYU** | **Fort Yukon** | **2.98** | **188** | | **Pn** | **10 11 08.9** | **+0.2** |
| **G24K** | **Hadweenzic Riv** | **3.07** | **205** | | **Pn** | **10 11 10.2** | **+0.2** |
| G24K | | | | IAML | | 10 12 00.6 | |
| | comp=N,198nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **247** | Pn | **Pn** | **10 11 09.6** | **-0.7** |
| **D22K** | **Ayikyak River** | **3.10** | **262** | | **Pn** | **10 11 10.1** | **-0.2** |
| D22K | | | | IAML | | 10 12 07.4 | |
| | comp=E,234nm,0.9s | | | | | | |
| D22K | | | | IAML | | 10 12 14.2 | |
| | comp=N,206nm,0.8s | | | | | | |
| **COLD** | **Coldfoot** | **3.19** | **227** | | **Pn** | **10 11 10.9** | **-0.7** |
| **B22K** | **Teshekpuk Lake** | **3.29** | **289** | Pn | **Pn** | **10 11 12.8** | **-0.2** |
| **H25L** | **Birch Creek** | **3.31** | **191** | | **Pn** | **10 11 13.6** | **+0.3** |
| **H27K** | **Steamboat Moun** | **3.44** | **162** | | **Pn** | **10 11 15.8** | **+0.6** |
| **G29M** | **Pine Creek** | **3.47** | **136** | | **Pn** | **10 11 16.2** | **+0.6** |
| G29M | | | | IAML | | 10 12 22.2 | |
| | comp=N,168nm,0.7s | | | | | | |
| **G23K** | **Bananza Creek** | **3.56** | **221** | | **Pn** | **10 11 16.3** | **-0.4** |
| G23K | | | | IAML | | 10 12 18.0 | |
| | comp=N,115nm,0.8s | | | | | | |
| G23K | | | | IAML | | 10 12 28.3 | |
| | comp=E,108nm,0.8s | | | | | | |
| **F22K** | **John River** | **3.56** | **240** | | **Pn** | **10 11 17.4** | **+0.6** |
| **B21K** | **Ikpikpuk River** | **3.66** | **277** | Pn | **Pn** | **10 11 18.0** | **-0.1** |
| B21K | | | | IAML | | 10 12 02.7 | |
| | comp=E,133nm,0.8s | | | | | | |
| **E21K** | **Killik River** | **3.68** | **258** | Pn | **Pn** | **10 11 16.9** | **-1.6** |
| E21K | | | | IAML | | 10 12 24.7 | |
| | comp=N,139nm,0.6s | | | | | | |
| E21K | | | | IAML | | 10 12 29.1 | |
| | comp=E,101nm,0.9s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.77** | **270** | | **Pn** | **10 11 20.5** | **+0.8** |
| **G30M** | **tAoh Zraii Nji** | **3.90** | **127** | Pn | **Pn** | **10 11 22.3** | **+0.9** |
| G30M | | | | IAML | | 10 12 42.1 | |
| | comp=N,90nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.94** | **203** | Pn | **Pn** | **10 11 22.1** | **+0.1** |
| H24K | | | | IAML | | 10 12 32.1 | |
| | comp=E,92nm,0.8s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.96** | **297** | | **Pn** | **10 11 22.0** | **-0.1** |
| **H29M** | **Whitestone** | **3.97** | **144** | Pn | **Pn** | **10 11 23.0** | **+0.7** |
| H29M | | | | IAML | | 10 12 34.4 | |
| | comp=N,97nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04** | **188** | | **Pn** | **10 11 24.3** | **+0.9** |
| PRP | | | | IAML | | 10 12 14.0 | |
| | comp=E,80nm,0.7s | | | | | | |
| PRP | | | | IAML | | 10 12 31.3 | |
| | comp=N,100nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **4.04** | **102** | | **Pn** | **10 11 23.2** | **0.0** |
| **INK** | **Inuvik** | **4.04** | **102** | Pn | **Pn** | **10 11 23.4** | **+0.2** |
| | comp=N,1.6nm,0.3s,baz=308,slow=9.4,SNR=24 | | | | | | |
| INK | | | | Sn | **Sn** | **10 12 09.3** | **-1.1** |
| | comp=N,3.2nm,0.3s,baz=292,slow=12,SNR=7.4 | | | | | | |
| | comp=N,8.3nm,0.4s | | | | | | |
| **F21K** | **Alatna River** | **4.13** | **241** | Pn | **Pn** | **10 11 24.6** | **-0.1** |
| **H23K** | **Yukon River** | **4.22** | **211** | | **Pn** | **10 11 26.0** | **+0.2** |
| **EPYK** | **Eagle Plains** | **4.22** | **135** | | **Pn** | **10 11 26.3** | **+0.5** |
| **I26K** | **Coal Creek Min** | **4.24** | **174** | Pn | **Pn** | **10 11 25.9** | **-0.1** |
| **F31M** | **Tsiigehtchic** | **4.37** | **113** | Pn | **Pn** | **10 11 28.0** | **+0.2** |
| F31M | | | | IAML | | 10 12 42.5 | |
| | comp=N,52nm,0.7s | | | | | | |
| F31M | | | | IAML | | 10 12 48.0 | |
| | comp=E,70nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.39** | **156** | | **Pn** | **10 11 29.5** | **+1.3** |
| I28M | | | | IAML | | 10 12 24.0 | |
| | comp=N,77nm,0.6s | | | | | | |
| I28M | | | | IAML | | 10 12 59.0 | |
| | comp=E,65nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.51** | **120** | Pn | **Pn** | **10 11 30.5** | **+0.7** |
| G31M | | | | IAML | | 10 12 52.8 | |
| | comp=E,77nm,0.8s | | | | | | |
| **E20K** | **Nigu River** | **4.52** | **260** | | **Pn** | **10 11 30.4** | **+0.5** |
| **D20K** | **Etivluk River** | **4.52** | **266** | | **Pn** | **10 11 30.4** | **+0.5** |
| **B20K** | **Meade River** | **4.53** | **282** | Pn | **Pn** | **10 11 29.9** | **-0.1** |
| **A21K** | **Barrow** | **4.56** | **299** | | **Pn** | **10 11 31.2** | **+0.8** |
| **POKR** | **Poker Plat Res** | **4.58** | **197** | | **Pn** | **10 11 31.6** | **+0.8** |
| POKR | | | | IAML | | 10 12 27.1 | |
| | comp=N,75nm,0.4s | | | | | | |
| **G21K** | **Allakaket** | **4.61** | **234** | | **Pn** | **10 11 31.1** | **0.0** |
| **I29M** | **Ogilvie Camp,** | **4.74** | **149** | Pn | **Pn** | **10 11 32.9** | **0.0** |
| I29M | | | | IAML | | 10 12 38.6 | |
| | comp=N,51nm,0.4s | | | | | | |
| I29M | | | | IAML | | 10 12 52.5 | |
| | comp=E,49nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.81** | **207** | | **Pn** | **10 11 33.8** | **0.0** |
| I23K | | | | IAML | | 10 12 58.6 | |
| | comp=E,50nm,0.8s | | | | | | |
| I23K | | | | IAML | | 10 13 12.8 | |
| | comp=N,49nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.83** | **201** | | **Pn** | **10 11 34.3** | **+0.1** |
| MDM | | | | IAML | | 10 12 55.3 | |
| | comp=E,48nm,0.9s | | | | | | |
| MDM | | | | IAML | | 10 12 58.2 | |
| | comp=N,52nm,0.7s | | | | | | |
| **COLA** | **College** | **4.86** | **199** | | **Pn** | **10 11 35.9** | **+1.3** |
| **IL31** | | **4.87** | **194** | | **Pn** | **10 11 35.2** | **+0.6** |
| **ILAR** | **Eielson Array** | **4.87** | **194** | Pn | **Pn** | **10 11 35.1** | **+0.5** |
| **ILAR** | **Eielson Array** | **4.87** | **194** | Pn | **Pn** | **10 11 35.4** | **+0.7** |
| | comp=N,1.4nm,0.3s,baz=8.8,slow=13,SNR=30 | | | | | | |
| ILAR | | | | Sn | **Sn** | **10 12 31.5** | **+0.5** |
| | comp=N,3.1nm,0.3s,baz=6.9,slow=26,SNR=11 | | | | | | |
| ILAR | | | | Lg | Lg | 10 12 53.3 | |
| | comp=N,4.9nm,0.3s,baz=7.7,slow=31,SNR=7.0 | | | | | | |
| ILAR | | | | LR | LR | 10 13 25.4 | |
| | comp=N,43nm,19.4s,baz=100,slow=37 | | | | | | |
| | comp=N,2.2nm,0.4s | | | | | | |
| **EGAK** | **Eagle** | **4.89** | **165** | | **Pn** | **10 11 35.3** | **+0.3** |
| EGAK | | | | IAML | | 10 12 34.6 | |
| | comp=N,46nm,1.0s | | | | | | |
| EGAK | | | | IAML | | 10 12 38.1 | |
| | comp=N,47nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **4.93** | **186** | | **Pn** | **10 11 36.2** | **+0.6** |
| J25K | | | | IAML |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **K20K** | **Telida** | **7.32** | **217** | Pn | | **Pn** | **10 12 07.2** | **-1.2** |
| **M29M** | **Somme Creek** | **7.46** | **159** | Pn | | **Pn** | **10 12 11.3** | **+0.9** |
| **WAZA** | **Wrangell Mount** | **7.46** | **180** | | | **Pn** | **10 12 09.0** | **-1.5** |
| **G17K** | **Kiwalik Mounta** | **7.47** | **245** | | | **Pn** | **10 12 09.7** | **-0.7** |
| **H17K** | **Granite Mounta** | **7.61** | **241** | Pn | | **Pn** | **10 12 12.1** | **-0.2** |
| **C16K** | **Lisburne Hills** | **7.72** | **271** | Pn | | **Pn** | **10 12 12.1** | **-1.7** |
| **YUK2** | **White River** | **7.87** | **168** | | | **Pn** | **10 12 17.1** | **+1.1** |
| **L20K** | **Farewell, AK** | **8.07** | **214** | | | **Pn** | **10 12 18.1** | **-0.5** |
| **G16K** | **Koyuk River** | **8.09** | **248** | Pn | | **Pn** | **10 12 17.8** | **-0.9** |
| **SKT** | **Skwentna** | **8.13** | **205** | | | **Pn** | **10 12 20.0** | **+0.6** |
| **M20K** | **Styx River** | **8.48** | **210** | Pn | | **Pn** | **10 12 24.4** | **+0.1** |
| **J17K** | **VABM Dome** | **8.53** | **231** | Pn | | **Pn** | **10 12 23.7** | **-1.1** |
| **L19K** | **White Mountain** | **8.54** | **216** | | | **Pn** | **10 12 24.8** | **-0.2** |
| **N30M** | **Aishikik Lake** | **8.59** | **157** | Pn | | **Pn** | **10 12 26.5** | **+0.7** |
| **I17K** | **Unalakleet** | **8.61** | **237** | Pn | | **Pn** | **10 12 25.7** | **-0.2** |
| **F15K** | **North Star Dit** | **8.66** | **254** | | | **Pn** | **10 12 25.1** | **-1.6** |
| **M19K** | **Big River Lodg** | **8.70** | **214** | Pn | | **Pn** | **10 12 27.7** | **+0.5** |
| **L18K** | **Granite Mounta** | **8.90** | **221** | | | **Pn** | **10 12 29.7** | **-0.3** |
| **YUK6** | **Outpost Mounta** | **8.93** | **161** | | | **Pn** | **10 12 32.3** | **+1.7** |
| **ISLE** | **Juniper Island** | **8.97** | **174** | Pn | | **Pn** | **10 12 30.4** | **-0.7** |
| **J16K** | **Anvik River** | **9.04** | **234** | Pn | | **Pn** | **10 12 32.2** | **+0.3** |
| **BAGL** | **Bagley Icefiel** | **9.09** | **173** | | | **Pn** | **10 12 35.4** | **+2.8** |
| **BARK** | **Barkley Ridge** | **9.17** | **175** | | | **Pn** | **10 12 36.5** | **+2.9** |
| **F14K** | **Arctic Creek** | **9.37** | **255** | | | **Pn** | **10 12 35.6** | **-0.7** |
| **O30N** | **Mendenhall** | **9.40** | **155** | Pn | | **Pn** | **10 12 36.7** | **-0.1** |
| **N32M** | **Quiet Lake** | **9.56** | **146** | Pn | | **Pn** | **10 12 39.6** | **+0.5** |
| **N19K** | **Bonanza Creek** | **9.72** | **211** | Pn | | **Pn** | **10 12 40.8** | **-0.5** |
| **M17K** | **Holitna River** | **9.80** | **220** | Pn | | **Pn** | **10 12 41.1** | **-1.1** |
| **L16K** | **Owhat River** | **10.02** | **226** | Pn | | **Pn** | **10 12 44.5** | **-0.8** |
| **N18K** | **Kilae Creek** | **10.11** | **215** | Pn | | **Pn** | **10 12 46.7** | **+0.1** |
| **J14K** | **Nanvaranak Lak** | **10.32** | **238** | Pn | | **Pn** | **10 12 48.7** | **-0.6** |
| **P39M** | **Teslin, Yukon** | **10.48** | **147** | Pn | | **Pn** | **10 12 51.8** | **+0.1** |
| **M16K** | **Timber Creek** | **10.48** | **223** | Pn | | **Pn** | **10 12 51.3** | **-0.3** |
| **N17K** | **Nushagak Hills** | **10.52** | **218** | Pn | | **Pn** | **10 12 52.1** | **0.0** |
| **P18K** | **Big Mountain,** | **11.19** | **210** | Pn | | **Pn** | **10 13 01.8** | **+0.6** |
| **DLBC** | **Dease Lake** | **12.68** | **144** | Pn | | **Pn** | **10 13 22.1** | **+0.4** |
| | comp=N,0.1nm,0.3s,baz=351,slow=14,SNR=3.1 comp=N,2.4nm,0.9s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.80** | **106** | Pn | | **Pn** | **10 13 33.7** | **-3.1** |
| **YKA** | **Yellowknife Ar** | **13.80** | **106** | Pn | | **Pn** | **10 13 33.1** | **-3.7** |
| | comp=N,0.4nm,0.3s,baz=317,slow=14,SNR=11 | | | | | | | |
| YKA | | | | Sn | | Sn | 10 15 57.8 | -12 |
| | comp=N,0.3nm,0.3s,baz=319,slow=22,SNR=5.5 comp=N,0.6nm,0.4s | | | | | | | |
| **BBB** | **Bella Bella** | **18.94** | **148** | LR | | LR | 10 21 56.8 | |
| | comp=N,34nm,18.3s,baz=226,slow=37 | | | | | | | |
| **NEW** | **Newport** | **25.06** | **134** | LR | | LR | 10 25 36.7 | |
| | comp=N,25nm,18.4s,baz=348,slow=36 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **29.78** | **105** | P | | **P** | **10 16 30.7** | **+2.8** |
| | comp=N,2.0nm,0.9s,baz=330,slow=8.1,SNR=1.4 comp=N,2.0nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.15** | **128** | P | | **P** | **10 16 51.8** | **+2.7** |
| | comp=N,0.3nm,0.6s,baz=349,slow=9.2,SNR=4.0 comp=N,0.3nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.09** | **142** | P | | **P** | **10 17 09.5** | **+3.4** |
| | comp=N,0.3nm,0.5s,baz=348,slow=7.8,SNR=4.7 comp=N,0.3nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.37** | **128** | P | | **P** | **10 18 49.5** | **+1.8** |
| | comp=N,0.4nm,0.5s,baz=355,slow=10.0,SNR=5.9 comp=N,0.4nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.80** | **325** | P | | **P** | **10 19 30.2** | **+1.4** |
| | comp=N,0.4nm,0.4s,baz=22,slow=8.0,SNR=2.4 comp=N,0.4nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.11** | **325** | P | | **P** | **10 20 23.5** | **+2.0** |
| | comp=N,0.3nm,0.6s,baz=28,slow=6.5,SNR=2.6 comp=N,0.3nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **60.01** | **5** | P | | **P** | **10 20 28.7** | **+1.1** |
| | comp=N,0.6nm,0.4s,baz=358,slow=6.8,SNR=4.1 comp=N,0.6nm,0.4s | | | | | | | |

*IDC* ***25*** *10:31:24.1±1.1,57.°72S×25.°72W,h0km,mb3.8/3, mbtmp3.8/4,ML3.8/1,MS2.7/2,Error ellipse: s-maj=50.2km s-min=29.8km az=79.0*

**ISC 25 10:31:29.3±1.0,57.8S±0.2×25.8W±0.3,h35km,n18, σ0.92/11,mb3.9/3,5C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **VNA1** | **Neumayer--Stat** | **14.87** | **157** | ⇑P | | **Pn** | **10 34 56.0** | **-0.6** |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **15.07** | **160** | ⇑P | | **Pn** | **10 34 57.7** | **-1.6** |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **15.27** | **157** | ⇑P | | **Pn** | **10 35 01.2** | **-0.6** |
| | comp=Z,0.6nm,0.2s,baz=314,slow=14 | | | | | | | |
| **SNAA** | **Sanae** | **16.82** | **155** | ⇑P | | **Pn** | **10 35 21.7** | **0.0** |
| | comp=Z,38nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **16.82** | **155** | Pn | | **Pn** | **10 35 21.9** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=319,slow=13,SNR=19 | | | | | | | |
| SNAA | | | | LR | | LR | 10 40 13.9 | |
| | comp=Z,29nm,19.6s,baz=299,slow=31 comp=Z,1.1nm,0.4s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **18.33** | **152** | ⇑P | | **Pn** | **10 35 42.0** | **+1.6** |
| | comp=Z,51nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **32.44** | **180** | P | | **P** | **10 37 56.4** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=191,slow=4.0,SNR=1.4 comp=Z,0.4nm,0.5s | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **46.16** | **112** | T | | T | 11 30 18.3 | |
| | baz=226,slow=74 | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **46.17** | **112** | T | | T | 11 30 17.2 | |
| | baz=226 | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **46.18** | **112** | T | | T | 11 30 21.3 | |
| | baz=226,slow=74 | | | | | | | |
| **SIV** | **San Ignacio** | **49.34** | **313** | LR | | LR | 10 57 59.2 | |
| | comp=Z,8.0nm,20.3s,baz=298,slow=32 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **50.61** | **15** | T | | T | 11 36 12.2 | |
| | baz=188,slow=76,SNR=4.8 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **50.61** | **15** | T | | T | 11 36 14.3 | |
| | baz=188,slow=76,SNR=9.2 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **50.62** | **15** | T | | T | 11 36 16.1 | |
| | baz=188,slow=76,SNR=8.6 | | | | | | | |
| **LPAZ** | **La Paz** | **52.02** | **305** | P | | **P** | **10 40 35.7** | **-0.1** |
| | comp=Z,0.7nm,0.5s,baz=141,slow=8.8,SNR=2.8 comp=Z,0.7nm,0.5s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.23** | **28** | P | | **P** | **10 43 02.2** | **-0.2** |
| | comp=Z,1.1nm,0.6s,baz=196,slow=5.7,SNR=7.4 comp=Z,1.1nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **125.59** | **28** | PKP | | **PKPdf** | **10 50 24.8** | **-0.4** |
| | comp=Z,1.7nm,0.9s,baz=158,slow=0.7,SNR=4.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **151.84** | **309** | PKPbc | | **PKPbc** | **10 51 19.1** | **+0.4** |
| | comp=Z,2.4nm,0.9s,baz=133,slow=3.0,SNR=18 | | | | | | | |

*BJI* ***25*** *10:31:44.0±0.0,27.°77N×139.°80E,h510km,mb5.0/63, mB4.9/16*

*IDC* ***25*** *10:31:44.9±0.5,27.°81N×139.°67E,h503km±4km,mb3.9/28, mbtmp4.9/36,Error ellipse: s-maj=8.1km s-min=5.4km az=77.0*

*NIED* ***25*** *10:31:44.3,28.°00N×140.°32E,h515km,MW4.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁶Nm; Mrr-1.24; Mθθ1.07; Mφφ0.16; Mrθ0.06; Mθφ0.72; Mφr-1.36; Fault plane solution: M₀1.89000×10¹⁶ NP1:φ28.00000°, δ67.00000°, λ-122.00000°. NP2:φ265.00000°, δ39.00000°, λ-39.00000°.*

*NEIC* ***25*** *10:31:45.0±1.6,27.°85N±0.°06×139.°7E±0.°1,h489km±6km, mb4.4/261 Error ellipse: s-maj=14.5km s-min=8.7km az=103.0*

*JMA* ***25*** *10:31:44.3±0.3,28.°1N±1.°4×14.°0E±.°,h515km±4km,MD5.3/54, MV5.1/54,W OFF OGASAWARA*

**ISC 25 10:31:45.1±0.4,27.81N±0.03×139.73E±0.04,h503km±3km, h504km:pP-P,n732,σ1.04/701,mb4.5/200,6C-2D,Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CBIJ** | **Chichi jima** | **2.30** | **108** | *eP* | | **P** | **10 32 50.5** | **-1.6** |
| CBIJ | | | | *eS* | | **S** | **10 33 42.1** | **-4.3** |
| **CBIJ** | **Chichi jima** | **2.30** | **108** | A | | A | 10 32 50.5 | |
| | comp=E,15nm,2.3s,comp=N,8.0nm,0.9s | | | | | | | |
| **JCJ** | **Chichijima** | **2.30** | **108** | P | | **P** | **10 32 50.9** | **-1.2** |
| **JCJ** | **Chichijima** | **2.30** | **108** | P | | **P** | **10 32 50.7** | **-1.3** |
| **JCJ** | **Chichijima** | **2.30** | **108** | P | | P | 10 32 46.2 | -5.9 |
| | comp=N,1μm,0.3s,baz=286,slow=18,SNR=268 | | | | | | | |
| JCJ | | | | | S | S | 10 33 37.4 | -9.0 |
| | comp=N,2μm,0.3s,baz=287,slow=19,SNR=20 | | | | | | | |
| **JHH2** | **Haha-jima-NKT2** | **2.48** | **118** | P | | **P** | **10 32 52.1** | **-1.0** |
| JHH2 | | | | *eS* | | **S** | **10 33 45.9** | **-2.4** |
| **JHH2** | **Haha-jima-NKT2** | **2.48** | **118** | A | | A | 10 32 52.1 | |
| | comp=E,25nm,0.4s,comp=N,39nm,0.4s | | | | | | | |
| **JAOM** | **Aogashimamukai** | **4.64** | **0** | A | | A | 10 33 08.3 | |
| | comp=E,12nm,2.8s,comp=N,9.0nm,6.1s | | | | | | | |
| **JHCJ** | **Hachijojimakas** | **5.24** | **1** | *eP* | | **P** | **10 33 13.5** | **-0.8** |
| JHCJ | | | | | S | **S** | **10 34 24.1** | **-3.2** |
| **JHJ2** | **Mitsune** | **5.28** | **1** | P | | **P** | **10 33 14.2** | **-0.4** |
| **JHJ2** | **Mitsune** | **5.28** | **1** | P | | **P** | **10 33 14.3** | **-0.4** |
| JHJ2 | | | | | S | **S** | **10 34 25.6** | **-2.3** |
| **JHJ2** | **Mitsune** | **5.28** | **1** | P | | **P** | **10 33 14.0** | **-0.6** |
| JHJ2 | | | | | S | **S** | **10 34 24.5** | **-3.4** |
| **JHJ2** | **Mitsune** | **5.28** | **1** | A | | A | 10 33 14.0 | |
| | comp=E,5.0nm,2.9s,comp=N,5.0nm,4.5s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **5.29** | **1** | P | | **P** | **10 33 14.1** | **-0.7** |
| | comp=N,385nm,0.6s,baz=189,slow=8.2,SNR=21 | | | | | | | |
| JHJ | | | | | S | **S** | **10 34 24.9** | **-3.2** |
| | comp=N,529nm,0.5s,baz=180,slow=20,SNR=11 | | | | | | | |
| **TTO1** | **TONANKAI O.B.S** | **6.32** | **337** | P | | **P** | **10 33 26.8** | **+2.6** |
| **BSO1** | **Boso 1** | **6.90** | **9** | P | | **P** | **10 33 29.8** | **+0.1** |
| **JSG** | **Sagara** | **6.97** | **349** | P | | **P** | **10 33 32.3** | **+1.4** |
| **BSO3** | **Boso 3** | **7.00** | **5** | P | | **P** | **10 33 30.2** | **-0.7** |
| BSO3 | | | | | *eS* | **S** | **10 34 53.5** | **-4.3** |
| **JIE** | **Ise** | **7.05** | **339** | P | | **P** | **10 33 33.5** | **+1.7** |
| JIE | | | | | *eS* | **S** | **10 35 00.2** | **+1.0** |
| **JKN2** | **Miekihoku** | **7.06** | **336** | *eP* | | **P** | **10 33 33.3** | **+1.5** |
| **JHMK** | **Hamakita** | **7.18** | **347** | *eP* | | **P** | **10 33 33.1** | **+0.2** |
| **HMMJ** | **Hamamatsu 2** | **7.23** | **347** | P | | **P** | **10 33 33.7** | **+0.2** |
| **JNY** | **Yasuok** | **7.69** | **349** | P | | **P** | **10 33 38.5** | **+0.1** |
| **JMN** | **Monobe** | **7.75** | **321** | P | | **P** | **10 33 41.0** | **+2.1** |
| **JMN** | **Monobe** | **7.75** | **321** | P | | **P** | **10 33 41.4** | **+2.5** |
| **JTO** | **Tosashimizu** | **7.82** | **312** | *eP* | | **P** | **10 33 41.6** | **+2.0** |
| **JEG** | **Eigenji** | **7.84** | **340** | P | | **P** | **10 33 42.5** | **+2.7** |
| **INU** | **Inuyama** | **7.86** | **344** | P | | **P** | **10 33 40.5** | **+0.5** |
| **INU** | **Inuyama** | **7.86** | **344** | P | | **P** | **10 33 40.7** | **+0.7** |
| **JGF** | **Kuroka** | **8.02** | **346** | P | | **P** | **10 33 42.6** | **+0.9** |
| **JGF** | **Kuroka** | **8.02** | **346** | P | | **P** | **10 33 42.3** | **+0.6** |
| **JHU** | **Hanno** | **8.02** | **357** | P | | **P** | **10 33 40.0** | **-1.7** |
| **JRY** | **Ryogami san** | **8.21** | **355** | P | | **P** | **10 33 42.8** | **-0.9** |
| JRY | | | | | *eS* | **S** | **10 35 16.5** | **-4.5** |
| **JYT** | **Yasato** | **8.40** | **3** | *eP* | | **P** | **10 33 44.4** | **-1.1** |
| JYT | | | | | *eS* | **S** | **10 35 19.3** | **-5.2** |
| **JAG** | **Ashikaga** | **8.59** | **359** | P | | **P** | **10 33 45.7** | **-1.8** |
| JAG | | | | | *eS* | **S** | **10 35 22.7** | **-5.5** |
| **MJAR** | **Matsushiro Arr** | **8.80** | **352** | P | | **P** | **10 33 48.8** | **-0.9** |
| | comp=N,75nm,0.8s,baz=176,slow=8.5,SNR=95 | | | | | | | |
| MJAR | | | | | S | **S** | **10 35 30.8** | **-1.4** |
| | comp=N,20nm,0.8s,baz=172,slow=13,SNR=5.3 | | | | | | | |
| **MAJO** | **Matsushiro** | **8.80** | **352** | P | | **P** | **10 33 49.3** | **-0.4** |
| **MAJO** | **Matsushiro** | **8.80** | **352** | P | | **P** | **10 33 49.0** | **-0.7** |
| **JHO** | **Hitachi** | **8.80** | **4** | *i* P | | **P** | **10 33 49.2** | **-0.5** |
| **MJB9** | **Matsu-Tunnel** | **8.80** | **352** | P | | **P** | **10 33 50.4** | **+0.6** |
| **JNU** | **Nakatsue** | **9.29** | **307** | P | | **P** | **10 33 57.0** | **+2.0** |
| **JNU** | **Nakatsue** | **9.29** | **307** | P | | **P** | **10 33 56.9** | **+2.0** |
| **JNU** | **Nakatsue** | **9.29** | **307** | P | | **P** | **10 33 56.1** | **+1.2** |
| | comp=N,162nm,0.9s,baz=133,slow=6.6,SNR=64 | | | | | | | |
| JNU | | | | | S | **S** | **10 35 42.4** | **+0.7** |
| | comp=N,24nm,0.9s,baz=191,slow=16,SNR=2.2 | | | | | | | |
| **JMM** | **Marumori** | **10.07** | **5** | P | | **P** | **10 34 03.3** | **+0.3** |
| **JMM** | **Marumori** | **10.07** | **5** | P | | **P** | **10 34 03.5** | **+0.5** |
| **JOW** | **Kunigami** | **10.23** | **267** | P | | **P** | **10 34 05.6** | **+0.6** |
| | comp=N,49nm,0.7s,baz=91,slow=11,SNR=7.9 | | | | | | | |
| JOW | | | | | S | **S** | **10 35 58.1** | **-1.9** |
| | comp=N,60nm,1.2s,baz=98,slow=19,SNR=2.7 | | | | | | | |
| **JSD** | **Sado** | **10.27** | **353** | P | | **P** | **10 34 04.4** | **-0.7** |
| **JSD** | **Sado** | **10.27** | **353** | P | | **P** | **10 34 04.2** | **-1.0** |
| **JTU** | **Tsushima** | **11.09** | **310** | P | | **P** | **10 34 15.2** | **+1.4** |
| **JTM** | **Tenmabayashi** | **12.99** | **5** | P | | **P** | **10 34 34.3** | **+0.4** |
| **JTM** | **Tenmabayashi** | **12.99** | **5** | P | | **P** | **10 34 34.3** | **+0.4** |
| **TJN** | **Taejon** | **13.51** | **312** | P | | **P** | **10 34 40.3** | **+0.9** |
| | comp=N,127nm,2.0s | | | | | | | |
| **TJN** | **Taejon** | **13.51** | **312** | P | | **P** | **10 34 38.6** | **-0.8** |
| **KSRS** | **Korea Array** | **13.82** | **317** | P | | **P** | **10 34 42.0** | **-0.7** |
| | comp=N,6.8nm,0.5s,baz=133,slow=10,SNR=29 | | | | | | | |
| KSRS | | | | | S | **S** | **10 37 09.7** | **+0.6** |
| | comp=N,4.7nm,1.0s,baz=135,slow=20,SNR=5.9 | | | | | | | |
| KSRS | | | | | ScP | **ScP** | **10 42 12.4** | **+0.6** |
| | comp=N,1.8nm,0.8s,baz=126,slow=1.8,SNR=8.6 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.84** | **317** | P | | **P** | **10 34 41.6** | **-1.3** |
| **KS19** | **Wonju Array Si** | **13.89** | **317** | P | | **P** | **10 34 42.0** | **-1.4** |
| **ERM** | **Erimo** | **14.44** | **10** | P | | **P** | **10 34 49.6** | **+0.5** |
| **GUMO** | **Guam** | **14.94** | **160** | P | | **P** | **10 34 54.7** | **-0.1** |
| **GUMO** | **Guam** | **14.94** | **160** | P | | **P** | **10 34 55.3** | **+0.5** |
| **GUMO** | **Guam** | **14.94** | **160** | P | | **P** | **10 34 54.8** | **-0.1** |
| | comp=N,118nm,0.5s,baz=302,slow=15,SNR=11 | | | | | | | |
| GUMO | | | | | S | **S** | **10 37 32.8** | **+1.5** |
| | comp=N,44nm,0.9s,baz=302,slow=19,SNR=1.5 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **15.38** | **261** | P | | **P** | **10 34 59.0** | **-0.3** |
| **ASAJ** | **Asahikawa** | **16.43** | **7** | P | | **P** | **10 35 10.1** | **+0.1** |
| | comp=N,29nm,0.8s,baz=204,slow=6.8,SNR=17 | | | | | | | |
| ASAJ | | | | | ScP | **ScP** | **10 42 16.7** | **+0.1** |
| | comp=N,9.6nm,0.8s,baz=190,slow=7.6,SNR=4.1 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **16.43** | **7** | P | | **P** | **10 35 10.2** | **+0.3** |
| **NACB** | **Ninganchiao** | **16.70** | **262** | P | | **P** | **10 35 11.6** | **-1.4** |
| **YHNB** | **Yeheng** | **16.76** | **263** | P | | **P** | **10 35 12.9** | **-0.8** |
| **YHNB** | **Yeheng** | **16.76** | **263** | P | | **P** | **10 35 12.8** | **-0.8** |
| **YULB** | **Yu-li** | **17.19** | **259** | P | | **P** | **10 35 18.9** | **+1.0** |
| **YULB** | **Yu-li** | **17.19** | **259** | P | | **P** | **10 35 18.0** | **+0.1** |
| **SSLB** | **Suanglung** | **17.37** | **261** | P | | **P** | **10 35 19.9** | **+0.3** |
| **SSLB** | **Suanglung** | **17.37** | **261** | P | | **P** | **10 35 19.4** | **-0.2** |
| **USA0B** | **Ussuriysk Arra** | **17.50** | **341** | P | | **P** | **10 35 20.8** | **+0.3** |
| **USRK** | **Ussuriysk Ar.** | **17.50** | **341** | P | | **P** | **10 35 21.0** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **17.50** | **341** | P | | **P** | **10 35 20.5** | **0.0** |
| | comp=N,42nm,0.6s,baz=150,slow=10,SNR=99 | | | | | | | |
| USRK | | | | | S | **S** | **10 38 17.4** | **+1.0** |
| | comp=N,1.7nm,0.9s,baz=142,slow=35,SNR=1.3 | | | | | | | |
| USRK | | | | | ScP | **ScP** | **10 42 18.9** | **+0.1** |
| | comp=N,3.8nm,0.8s,baz=163,slow=1.5,SNR=6.9 | | | | | | | |
| **TWGBT** | **Beinan** | **17.57** | **258** | P | | **P** | **10 35 21.1** | **-0.4** |
| **TPUB** | **Ta-pu** | **17.80** | **260** | P | | **P** | **10 35 25.7** | **+2.1** |
| **TPUB** | **Ta-pu** | **17.80** | **260** | P | | **P** | **10 35 23.4** | **-0.2** |
| **MDJ** | **Mudanjiang** | **18.63** | **337** | P | | **P** | **10 35 32.8** | **+2.0** |
| **MDJ** | **Mudanjiang** | **18.63** | **337** | P | | **P** | **10 35 32.8** | **+2.0** |
| MDJ | | | | | pmax | pmax | | |
| | comp=N,31nm,0.8s | | | | | | | |
| **MDJ** | **Mudanjiang** | **18.63** | **337** | P | | **P** | **10 35 30.8** | **0.0** |
| **SNY** | **Shenyang** | **19.22** | **321** | ⇑P | | **P** | **10 35 32.0** | **-4.3** |
| SNY | | | | | pmax | pmax | | |
| | comp=N,29nm,1.3s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **19.26** | **6** | P | | **P** | **10 35 36.9** | **+0.4** |
| **YSS** | **Yuzh-Sakhalins** | **19.26** | **6** | P | | **P** | **10 35 36.6** | **+0.1** |
| **KNMB** | **Chin-men Tao** | **19.44** | **265** | P | | **P** | **10 35 39.0** | **+0.5** |
| **CN2** | **Changchun** | **19.67** | **328** | *eP* | | **P** | **10 35 41.8** | **+1.5** |
| CN2 | | | | | pmax | pmax | | |
| | comp=N,20nm,0.8s | | | | | | | |
| **BNX** | **BinXian** | **20.39** | **335** | ⇑P | | **P** | **10 35 47.8** | **+0.9** |
| BNX | | | | | pmax | pmax | | |
| | comp=N,90nm,0.6s | | | | | | | |
| **TIA** | **Tai'an** | **20.88** | **299** | P | | **P** | **10 35 51.5** | **0.0** |
| TIA | | | | | pmax | pmax | | |
| | comp=N,61nm,0.7s | | | | | | | |
| **KLR** | **Kul'dur** | **22.25** | **346** | P | | **P** | **10 36 04.2** | **+0.5** |
| | comp=N,7.0nm,0.5s,baz=174,slow=7.5,SNR=40 | | | | | | | |
| KLR | | | | | S | **S** | **10 39 33.9** | **+1.3** |
| | comp=N,2.2nm,0.9s,baz=180,slow=20,SNR=2.0 | | | | | | | |
| KLR | | | | | ScP | **ScP** | **10 42 30.0** | **+0.1** |
| | comp=N,5.7nm,0.7s,baz=176,slow=3.3,SNR=10 comp=N,7.0nm,0.5s | | | | | | | |
| **WHN** | **Wuhan** | **22.31** | **283** | P | | **P** | **10 36 05.5** | **+1.1** |
| WHN | | | | | pmax | pmax | | |
| | comp=N,190nm,0.7s | | | | | | | |
| **BJT** | **Baijiatuan** | **22.96** | **308** | P | | **P** | **10 36 10.1** | **0.0** |
| BJT | | | | | lAmb | lAmb | 10 36 11.2 | |
| | comp=Z,7.6nm,0.5s | | | | | | | |
| **HNS** | **HongShan** | **23.09** | **301** | ⇓P | | **P** | **10 36 11.5** | **+0.2** |
| HNS | | | | | S | **S** | **10 39 45.5** | **-0.6** |
| HNS | | | | | pmax | pmax | | |
| | comp=Z,41nm,0.9s | | | | | | | |
| **LYN** | **LuoYang** | **24.23** | **293** | *eP* | | **P** | **10 36 21.5** | **0.0** |
| LYN | | | | | pmax | pmax | | |
| | comp=Z,25nm,0.7s | | | | | | | |
| **HEH** | **HeiHe** | **24.30** | **341** | *eP* | | **P** | **10 36 22.5** | **+0.6** |
| HEH | | | | | pmax | pmax | | |
| | comp=Z,31nm,0.7s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **24.87** | **316** | *eP* | | **P** | **10 36 28.0** | **+0.8** |
| XLT | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **ENH** | **Enshi** | **26.52** | **283** | P | | **P** | **10 36 42.4** | **+0.5** |
| **ENH** | **Enshi** | **26.52** | **283** | P | | **P** | **10 36 42.0** | **+0.1** |
| **HHC** | **Hu-ho-hao-te** | **26.52** | **307** | *eP* | | **P** | **10 36 42.0** | **+0.2** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,99nm,6.0s | | | | | | | |
| **BTO** | **Baotou** | **27.54** | **305** | *eP* | | **P** | **10 36 52.8** | **+2.0** |
| BTO | | | | | pmax | pmax | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| BTO | | | | | pmax | pmax | | |
| | comp=Z,270nm,6.6s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **28.57** | **23** | P | | **P** | **10 37 00.2** | **+0.7** |
| PEA0B | | | | | lAmb | lAmb | 10 37 13.1 | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **28.57** | **23** | P | | **P** | **10 36 59.8** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **28.57** | **23** | P | | **P** | **10 36 59.7** | **+0.2** |
| | comp=Z,4.3nm,0.5s,baz=205,slow=7.4,SNR=39 comp=Z,4.3nm,0.5s | | | | | | | |
| **PET** | **Petropavlovsk** | **28.84** | **24** | P | | **P** | **10 37 02.9** | **+1.2** |
| **PET** | **Petropavlovsk** | **28.84** | **24** | P | | **P** | **10 37 02.4** | **+0.6** |
| PET | | | | | lAmb | lAmb | 10 37 03.7 | |
| | comp=Z,33nm,1.1s | | | | | | | |
| **PET** | **Petropavlovsk** | **28.84** | **24** | P | | **P** | **10 37 03.0** | **+1.2** |
| | comp=Z,26nm,0.8s | | | | | | | |
| PET | | | | | pP | **pP** | **10 38 24.9** | **+0.3** |
| | comp=Z,26nm,0.8s | | | | | | | |
| **MANU** | **Manus Island** | **30.58** | **165** | P | | **P** | **10 37 17.3** | **-0.2** |
| MANU | | | | | lAmb | lAmb | 10 37 18.4 | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **31.09** | **230** | P | | **P** | **10 37 22.8** | **+0.8** |
| **KKM** | **Kota Kinabalu** | **31.09** | **230** | P | | **P** | **10 37 22.3** | **+0.3** |
| KKM | | | | | lAmb | lAmb | 10 37 24.6 | |
| | comp=Z,34nm,1.3s | | | | | | | |
| **FAKI** | **Fak Fak** | **31.39** | **194** | P | | **P** | **10 37 22.2** | **-2.2** |
| | comp=Z,32nm,0.9s,comp=Z,7μmcomp=Z,150μm | | | | | | | |
| **LZH** | **Lanzhou** | **31.41** | **294** | *eP* | | **P** | **10 37 25.0** | **+0.5** |
| LZH | | | | | pmax | pmax | | |
| | comp=Z,40nm,1.6s | | | | | | | |
| **GTOI** | **Gorontalo** | **31.42** | **213** | P | | **P** | **10 37 23.3** | **-1.3** |
| **CD2** | **Chengdu** | **31.42** | **284** | P | | **P** | **10 37 24.8** | **+0.2** |
| CD2 | | | | | S | **S** | **10 41 53.3** | **-3.0** |
| CD2 | | | | | pmax | pmax | | |
| | comp=Z,40nm,0.4s | | | | | | | |
| **KAVG** | **Kavieng** | **32.05** | **159** | P | | **P** | **10 37 29.2** | **-0.8** |
| **TOLI2** | **Tolitoli** | **32.16** | **218** | P | | **P** | **10 37 31.1** | **+0.1** |
| **TOLI2** | **Tolitoli** | **32.16** | **218** | P | | **P** | **10 37 30.8** | **-0.2** |
| TOLI2 | | | | | lAmb | lAmb | 10 37 32.2 | |
| | comp=Z,21nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **32.31** | **317** | P | | **P** | **10 37 32.4** | **+0.4** |
| ULN | | | | | lAmb | lAmb | 10 37 33.8 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **32.31** | **317** | P | | **P** | **10 37 32.7** | **+0.7** |
| **SANI** | **Sanana** | **32.50** | **206** | P | | **P** | **10 37 32.9** | **-1.0** |
| **SANI** | **Sanana** | **32.50** | **206** | P | | **P** | **10 37 31.7** | **-2.2** |
| | comp=Z,76nm,0.8s,comp=Z,698nm | | | | | | | |
| **MA2** | **Magadan** | **32.65** | **10** | P | | **P** | **10 37 35.0** | **+0.4** |
| **MA2** | **Magadan** | **32.65** | **10** | P | | **P** | **10 37 34.0** | **-0.5** |
| **MA2** | **Magadan** | **32.65** | **10** | P | | **P** | **10 37 34.8** | **+0.2** |
| | comp=Z,33nm,1.0s | | | | | | | |
| **MSAI** | **Masohi** | **32.68** | **200** | P | | **P** | **10 37 35.3** | **-0.1** |
| | comp=Z,39nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **32.69** | **317** | P | | **P** | **10 37 35.8** | **+0.6** |
| **SONM** | **Songino Array** | **32.69** | **317** | P | | **P** | **10 37 34.9** | **-0.4** |
| | comp=Z,4.8nm,0.8s,baz=124,slow=8.6,SNR=16 | | | | | | | |
| SONM | | | | | PcP | **PcP** | **10 40 06.3** | **+0.1** |
| | comp=Z,3.2nm,0.8s,baz=124,slow=3.0,SNR=4.6 | | | | | | | |
| SONM | | | | | S | **S** | **10 42 14.1** | **-1.5** |
| | comp=Z,0.4nm,0.3s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| WB0 | Warramunga Arr | 47.58 | 187 | P | P | 10 39 34.3 | -0.5 | PSA00 | | IAmb | IAmb | 10 40 13.8 | |
| FITZ | Fitzroy Crossi | 47.63 | 198 | P | P | 10 39 35.3 | +0.1 | | comp=Z,28nm,0.7s | | | | |
| WRAB | Tennant Creek | 47.75 | 187 | P | P | 10 39 35.7 | -0.4 | PSA00 | Pilbara Seismi | 52.72 | 203 | P | P | 10 40 12.0 | -0.5 |
| WRAB | | | | IAmb | IAmb | 10 39 37.4 | | PSA00 | | IAmb | IAmb | 10 40 13.8 | |
| | comp=Z,17nm,0.7s | | | | | | | | comp=Z,17nm,0.8s | | | | |
| WR0 | Warramunga Arr | 47.76 | 187 | P | P | 10 39 35.7 | -0.4 | L17K | Donlin | 52.75 | 31 | P | P | 10 40 13.2 | +1.0 |
| WB2 | Warramunga Arr | 47.76 | 187 | IAmb | IAmb | 10 39 37.1 | | | baz=259,SNR=8.1 | | | | | | |
| | comp=Z,21nm,0.9s | | | | | | | ULHL | Ulahol | 52.81 | 303 | P | P | 10 40 14.9 | +1.7 |
| WRA | Warramunga Arr | 47.76 | 187 | P | P | 10 39 35.2 | -0.9 | | SNR=7.5 | | | | | | |
| WRA | Warramunga Arr | 47.76 | 187 | P | P | 10 39 35.6 | -0.6 | K17K | Iditarod | 52.86 | 31 | IAmb | IAmb | 10 40 15.6 | |
| | comp=Z,14nm,0.4s,baz=2.2,slow=7.6,SNR=371 | | | | | | | | comp=Z,12nm,0.7s | | | | | | |
| WRA | | | | PcP | PcP | 10 40 55.7 | +0.2 | K17K | Iditarod | 52.86 | 31 | P | P | 10 40 14.4 | +1.4 |
| | comp=Z,5.2nm,0.7s,baz=0.6,slow=3.6,SNR=9.4 | | | | | | | | baz=259,SNR=6.2 | | | | | | |
| WRA | | | | ScP | ScP | 10 44 01.5 | -0.1 | O17K | Koliganek Bris | 52.95 | 34 | P | P | 10 40 14.1 | +0.5 |
| | comp=Z,4.2nm,0.7s,baz=5.3,slow=4.5,SNR=12 | | | | | | | | baz=262 | | | | | | |
| WRA | | | | S | S | 10 45 52.3 | -2.9 | N17K | Nushagak Hills | 53.01 | 34 | P | P | 10 40 14.9 | +0.8 |
| | comp=Z,6.3nm,0.8s,baz=6.1,slow=13,SNR=8.2 | | | | | | | | baz=261 | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | | M17K | Holitna River | 53.03 | 32 | IAmb | IAmb | 10 40 16.6 | |
| CTA | Charters Tower | 48.03 | 172 | P | P | 10 39 38.4 | +0.2 | | comp=Z,15nm,1.1s | | | | | | |
| | comp=Z,0.8nm,0.6s,baz=9.6,slow=7.2,SNR=16 | | | | | | | M17K | Holitna River | 53.03 | 32 | P | P | 10 40 15.2 | +1.1 |
| CTA | | | | ScP | ScP | 10 44 02.2 | -0.5 | | baz=260,SNR=5.4 | | | | | | |
| | comp=Z,0.4nm,0.9s,baz=342,slow=5.6,SNR=3.0 | | | | | | | E18K | Tukpahlearik C | 53.07 | 25 | P | P | 10 40 15.4 | +1.0 |
| QIS | Mount Isa | 48.09 | 180 | P | P | 10 39 38.5 | -0.1 | | baz=253 | | | | | | |
| GSI | Gunungsitoli | 48.16 | 244 | P | P | 10 39 39.6 | +0.2 | NRN | Naryn | 53.07 | 302 | IAmb | IAmb | 10 40 17.4 | |
| GSI | Gunungsitoli | 48.16 | 244 | P | P | 10 39 39.0 | -0.4 | | comp=Z,33nm,1.4s | | | | | | |
| MK31 | Makanchi Array | 48.33 | 309 | P | P | 10 39 40.6 | +0.4 | F18K | Selawik | 53.20 | 26 | P | P | 10 40 16.2 | +0.9 |
| MK31 | | | | IAmb | IAmb | 10 39 41.9 | | | baz=254,SNR=6.1 | | | | | | |
| | comp=Z,26nm,1.1s | | | | | | | P17K | Kvichak River | 53.20 | 35 | P | P | 10 40 16.4 | +0.9 |
| MKAR | Makanchi Array | 48.33 | 309 | P | P | 10 39 40.9 | +0.6 | | baz=263 | | | | | | |
| MKAR | Makanchi Array | 48.33 | 309 | P | P | 10 39 40.3 | +0.1 | TKM2 | Tokmak 2 | 53.22 | 304 | P | P | 10 40 17.3 | +1.1 |
| | comp=Z,8.3nm,0.4s,baz=93,slow=9.2,SNR=106 | | | | | | | | SNR=17 | | | | | | |
| MKAR | | | | PcP | PcP | 10 40 57.4 | 0.0 | C18K | Utukok River | 53.23 | 23 | IAmb | IAmb | 10 40 16.9 | |
| | comp=Z,6.7nm,0.8s,baz=92,slow=4.9,SNR=8.6 | | | | | | | | comp=Z,7.0nm,0.5s | | | | | | |
| MKAR | | | | pP | pP | 10 41 16.0 | +1.9 | C18K | Utukok River | 53.23 | 23 | P | P | 10 40 16.2 | +0.6 |
| | comp=Z,2.3nm,0.7s,baz=88,slow=8.6,SNR=2.2 | | | | | | | | baz=252 | | | | | | |
| MKAR | | | | ScP | ScP | 10 44 03.1 | -0.7 | B18K | Kokolik River | 53.26 | 22 | P | P | 10 40 16.7 | +1.0 |
| | comp=Z,4.7nm,0.6s,baz=85,slow=4.9,SNR=18 | | | | | | | | baz=250 | | | | | | |
| MKAR | | | | S | S | 10 46 01.5 | -1.2 | KSH | Kashi | 53.34 | 300 | P | P | 10 40 21.3 | +4.4 |
| | comp=Z,1.1nm,0.7s,baz=92,slow=19,SNR=5.8 | | | | | | | KSH | | | | pmax | pmax | | |
| MKAR | | | | ScS | ScS | 10 48 38.2 | 0.0 | | comp=Z,56nm,0.6s | | | | | | |
| | comp=Z,0.2nm,0.6s,baz=110,slow=7.8,SNR=1.7 | | | | | | | H18K | Honhosa River | 53.35 | 28 | P | P | 10 40 17.1 | +0.7 |
| | comp=Z,8.3nm,0.4s | | | | | | | | baz=257 | | | | | | |
| SNSI | Sinabang, Aceh | 48.52 | 246 | P | P | 10 39 40.2 | -1.8 | Q17K | Contact Creek | 53.39 | 36 | P | P | 10 40 17.2 | +0.3 |
| MAKZ | Makanchi | 48.55 | 309 | P | P | 10 39 42.5 | +0.7 | | baz=264 | | | | | | |
| MAKZ | | | | IAmb | IAmb | 10 39 44.2 | | G18K | Tagagawik | 53.41 | 27 | P | P | 10 40 17.5 | +0.7 |
| | comp=Z,25nm,0.9s | | | | | | | | baz=256,SNR=6.8 | | | | | | |
| TNA | Tin City | 49.67 | 26 | P | P | 10 39 50.9 | +1.2 | L18K | Granite Mounta | 53.51 | 31 | P | P | 10 40 18.7 | +1.1 |
| | baz=247 | | | | | | | | baz=261 | | | | | | |
| K13K | Kusilvak Mount | 49.80 | 31 | IAmb | IAmb | 10 39 53.9 | | N18K | Kilae Creek | 53.66 | 33 | P | P | 10 40 19.9 | +1.1 |
| | comp=Z,14nm,1.1s | | | | | | | | baz=262 | | | | | | |
| K13K | Kusilvak Mount | 49.80 | 31 | P | P | 10 39 51.4 | +0.7 | WRKA | Warakurna | 53.69 | 193 | P | P | 10 40 19.3 | -0.1 |
| | baz=253 | | | | | | | J18K | Innoko River | 53.71 | 30 | P | P | 10 40 19.9 | +0.9 |
| F14K | Arctic Creek | 50.26 | 26 | P | P | 10 39 55.3 | +1.2 | | baz=260 | | | | | | |
| | baz=249,SNR=8.3 | | | | | | | KBK | Karagaybulak | 53.72 | 304 | P | P | 10 40 21.4 | +1.7 |
| J14K | Nanvaranak Lak | 50.52 | 30 | P | P | 10 39 56.6 | +0.6 | | SNR=6.2 | | | | | | |
| | baz=254 | | | | | | | M18K | Stony River | 53.81 | 32 | P | P | 10 40 20.8 | +1.1 |
| L14K | Kuka Creek | 50.54 | 32 | IAmb | IAmb | 10 39 58.8 | | | baz=262 | | | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | CHMS | Chumysh | 53.82 | 305 | P | P | 10 40 21.6 | +1.3 |
| L14K | Kuka Creek | 50.54 | 32 | P | P | 10 39 56.8 | +0.6 | | SNR=6.0 | | | | | | |
| | baz=256 | | | | | | | P18K | Big Mountain, | 53.84 | 35 | P | P | 10 40 20.7 | +0.6 |
| SDPT | Sand Point | 50.54 | 40 | P | P | 10 39 56.3 | 0.0 | | baz=264,SNR=5.2 | | | | | | |
| | baz=262 | | | | | | | GCSA | Galena City Sc | 53.88 | 28 | P | P | 10 40 20.7 | +0.5 |
| N14K | Kuskokwak Cree | 50.69 | 34 | P | P | 10 39 57.8 | +0.5 | | baz=259 | | | | | | |
| | baz=258 | | | | | | | Q18K | Katmai Hardscr | 53.88 | 36 | P | P | 10 40 20.5 | +0.1 |
| M14K | Bethel | 50.74 | 33 | IAmb | IAmb | 10 39 59.6 | | | baz=265 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | O18K | Koktuh Hills | 53.90 | 35 | IAmb | IAmb | 10 40 23.4 | |
| M14K | Bethel | 50.74 | 33 | P | P | 10 39 58.7 | +1.0 | | comp=Z,16nm,0.8s | | | | | | |
| | baz=257 | | | | | | | O18K | Koktuh Hills | 53.90 | 35 | P | P | 10 40 21.1 | +0.7 |
| O14K | Tigyukauivet M | 50.76 | 35 | P | P | 10 39 58.7 | +0.9 | | baz=264,SNR=9.0 | | | | | | |
| | baz=259 | | | | | | | C19K | Lookout Ridge | 53.93 | 23 | IAmb | IAmb | 10 40 22.8 | |
| KURK | Kurchatov | 50.92 | 314 | P | P | 10 39 59.4 | +0.2 | | comp=Z,15nm,1.0s | | | | | | |
| KURK | Kurchatov | 50.92 | 314 | P | P | 10 39 59.4 | +0.2 | C19K | Lookout Ridge | 53.93 | 23 | P | P | 10 40 21.2 | +0.7 |
| KURBB | Kurchatov Arra | 50.98 | 314 | P | P | 10 39 59.3 | -0.3 | | baz=253,SNR=8.2 | | | | | | |
| | comp=Z,34nm,0.5s,baz=92,slow=7.7,SNR=236 | | | | | | | F19K | Shalaukik Mo | 53.98 | 26 | P | P | 10 40 21.3 | +0.5 |
| KURBB | | | | PcP | PcP | 10 41 06.6 | -0.4 | | baz=256,SNR=5.8 | | | | | | |
| | comp=Z,3.7nm,0.7s,baz=96,slow=4.1,SNR=4.7 | | | | | | | USP | Ospenovka | 53.98 | 305 | P | P | 10 40 21.9 | +0.6 |
| KURBB | | | | pP | pP | 10 41 35.7 | +0.8 | | SNR=6.3 | | | | | | |
| | comp=Z,3.1nm,1.0s,baz=92,slow=7.4,SNR=1.9 | | | | | | | AAK | Ala-Archa | 54.05 | 304 | P | P | 10 40 22.8 | +0.8 |
| KURBB | | | | ScP | ScP | 10 44 14.5 | -0.4 | AAK | | | | IAmb | IAmb | 10 40 23.8 | |
| | comp=Z,0.7nm,0.5s,baz=97,slow=4.1,SNR=3.4 | | | | | | | | comp=Z,16nm,0.8s | | | | | | |
| KURBB | | | | S | S | 10 46 36.6 | -1.8 | AAK | Ala-Archa | 54.05 | 304 | P | P | 10 40 23.3 | +1.3 |
| | comp=Z,1.8nm,0.7s,baz=90,slow=11,SNR=14 | | | | | | | G19K | Purcell Mounta | 54.09 | 27 | P | P | 10 40 22.0 | +0.4 |
| KURBB | | | | ScS | ScS | 10 48 53.1 | -3.1 | | baz=257 | | | | | | |
| | comp=Z,0.2nm,0.2s,baz=102,slow=7.7,SNR=1.8 | | | | | | | R18K | Karluk | 54.09 | 37 | P | P | 10 40 21.9 | +0.1 |
| | comp=Z,34nm,0.5s | | | | | | | | baz=266 | | | | | | |
| CHNA | Chernabura Isl | 50.99 | 40 | P | P | 10 39 59.5 | -0.1 | SII | Sitkinak Islan | 54.18 | 39 | P | P | 10 40 22.6 | +0.1 |
| | baz=264 | | | | | | | | baz=267 | | | | | | |
| F15K | North Star Dit | 50.99 | 26 | P | P | 10 40 00.1 | +0.6 | H19K | Roundabout Mou | 54.22 | 27 | IAmb | IAmb | 10 40 24.7 | |
| | baz=250,SNR=9.5 | | | | | | | | comp=Z,19nm,0.6s | | | | | | |
| G15K | Niukluk | 51.00 | 27 | P | P | 10 39 60.0 | +0.5 | H19K | Roundabout Mou | 54.22 | 27 | P | P | 10 40 23.0 | +0.5 |
| | baz=251 | | | | | | | | baz=258,SNR=20 | | | | | | |
| L15K | Ungalak Mounta | 51.18 | 32 | P | P | 10 40 01.6 | +0.8 | QLP | Quilpie | 54.26 | 175 | P | P | 10 40 23.0 | -0.3 |
| | baz=256 | | | | | | | D19K | Kuna River | 54.27 | 24 | P | P | 10 40 23.4 | +0.5 |
| K15K | Wolf Creek Mou | 51.31 | 31 | IAmb | IAmb | 10 40 04.2 | | | baz=255 | | | | | | |
| | comp=Z,24nm,1.2s | | | | | | | J19K | Poorman | 54.28 | 29 | P | P | 10 40 23.6 | +0.5 |
| K15K | Wolf Creek Mou | 51.31 | 31 | P | P | 10 40 02.9 | +1.1 | | baz=260,SNR=5.6 | | | | | | |
| | baz=256 | | | | | | | E19K | Redstone River | 54.33 | 25 | P | P | 10 40 24.4 | +1.1 |
| M15K | Kasigluk River | 51.34 | 33 | P | P | 10 40 02.8 | +0.8 | | baz=256 | | | | | | |
| | baz=258 | | | | | | | L19K | White Mountain | 54.36 | 32 | P | P | 10 40 24.7 | +1.0 |
| O15K | Ungalikthiuk R | 51.48 | 35 | P | P | 10 40 03.6 | +0.6 | | baz=262,SNR=6.3 | | | | | | |
| | baz=260 | | | | | | | N19K | Bonanza Creek | 54.37 | 33 | P | P | 10 40 24.5 | +0.7 |
| AS01 | Alice Springs | 51.48 | 187 | P | P | 10 40 03.2 | -0.4 | | baz=264 | | | | | | |
| AS31 | Alice Springs | 51.48 | 187 | P | P | 10 40 03.4 | -0.2 | O19K | Port Alsworth | 54.38 | 34 | IAmb | IAmb | 10 40 25.7 | |
| AS31 | | | | IAmb | IAmb | 10 40 06.1 | | | comp=Z,18nm,0.7s | | | | | | |
| | comp=Z,6.2nm,0.5s | | | | | | | O19K | Port Alsworth | 54.38 | 34 | P | P | 10 40 24.5 | +0.7 |
| ASAR | Alice Springs | 51.49 | 187 | P | P | 10 40 03.7 | +0.1 | | baz=264 | | | | | | |
| ASAR | Alice Springs | 51.49 | 187 | P | P | 10 40 03.1 | -0.5 | M19K | Big River Lodg | 54.54 | 32 | P | P | 10 40 25.7 | +0.8 |
| | comp=Z,7.3nm,0.5s,baz=7.7,slow=6.1,SNR=220 | | | | | | | | baz=263 | | | | | | |
| ASAR | | | | PcP | PcP | 10 41 10.2 | +0.9 | EKS2 | Erkin-Say | 54.57 | 304 | P | P | 10 40 26.1 | +0.5 |
| | comp=Z,4.7nm,0.8s,baz=9.9,slow=3.8,SNR=13 | | | | | | | | SNR=15 | | | | | | |
| ASAR | | | | ScP | ScP | 10 44 17.7 | +0.2 | Q19K | Cape Douglas, | 54.62 | 36 | P | P | 10 40 25.0 | -0.5 |
| | comp=Z,0.8nm,0.5s,baz=8.2,slow=4.5,SNR=4.7 | | | | | | | | baz=266 | | | | | | |
| ASAR | | | | S | S | 10 46 42.5 | -3.4 | OHAK | Old Harbor | 54.70 | 38 | P | P | 10 40 26.3 | +0.2 |
| | comp=Z,1.1nm,0.9s,baz=357,slow=12,SNR=9.2 | | | | | | | | baz=267 | | | | | | |
| ASAR | | | | ScS | ScS | 10 49 02.2 | +1.8 | F20K | Avaraart Lake | 54.81 | 26 | IAmb | IAmb | 10 40 28.3 | |
| | comp=Z,0.4nm,0.9s,baz=347,slow=3.8,SNR=2.5 | | | | | | | | comp=Z,7.4nm,0.5s | | | | | | |
| | comp=Z,7.3nm,0.5s | | | | | | | F20K | Avaraart Lake | 54.81 | 26 | P | P | 10 40 27.1 | +0.4 |
| N15K | Kwethluk River | 51.52 | 34 | P | P | 10 40 04.1 | +0.7 | | baz=258,SNR=12 | | | | | | |
| | baz=259 | | | | | | | L20K | Farewell, AK | 54.84 | 31 | P | P | 10 40 27.9 | +0.8 |
| H16K | Elim | 51.62 | 28 | P | P | 10 40 04.7 | +0.7 | | baz=263 | | | | | | |
| | baz=253 | | | | | | | H20K | Anolleneega Mo | 54.85 | 28 | P | P | 10 40 27.6 | +0.6 |
| C16K | Lisburne Hills | 51.67 | 23 | P | P | 10 40 05.0 | +0.7 | | baz=260,SNR=9.9 | | | | | | |
| | baz=248 | | | | | | | D20K | Etivluk River | 54.86 | 24 | P | P | 10 40 27.9 | +0.8 |
| TARG | Taragay, Kyrgy | 51.70 | 303 | IAmb | IAmb | 10 40 08.5 | | | baz=256 | | | | | | |
| | comp=Z,39nm,0.9s | | | | | | | K20K | Telida | 54.87 | 30 | IAmb | IAmb | 10 40 30.2 | |
| G16K | Koyuk River | 51.80 | 27 | P | P | 10 40 06.1 | +0.9 | | comp=Z,10nm,0.7s | | | | | | |
| | baz=253 | | | | | | | K20K | Telida | 54.87 | 30 | P | P | 10 40 28.7 | +1.4 |
| J16K | Anvik River | 51.96 | 30 | P | P | 10 40 07.3 | +0.8 | | baz=262 | | | | | | |
| | baz=256 | | | | | | | P19K | Oil Pt | 54.88 | 35 | P | P | 10 40 28.1 | +0.7 |
| I17K | Unalakleet | 52.07 | 29 | P | P | 10 40 08.1 | +0.8 | | baz=266 | | | | | | |
| | baz=256 | | | | | | | E20K | Nigu River | 54.90 | 24 | P | P | 10 40 28.2 | +0.8 |
| L16K | Owhat River | 52.12 | 32 | P | P | 10 40 08.2 | +0.5 | | baz=257 | | | | | | |
| | baz=258 | | | | | | | I20K | Naaghedeneel | 54.91 | 29 | IAmb | IAmb | 10 40 29.9 | |
| N16K | Nishlik Lake | 52.23 | 33 | P | P | 10 40 09.4 | +0.9 | | comp=Z,21nm,0.6s | | | | | | |
| | baz=260,SNR=5.9 | | | | | | | I20K | Naaghedeneel | 54.91 | 29 | P | P | 10 40 28.5 | +1.1 |
| M16K | Timber Creek | 52.23 | 33 | P | P | 10 40 09.1 | +0.6 | | baz=261,SNR=8.4 | | | | | | |
| | baz=259 | | | | | | | J20K | Nowinta River | 54.95 | 29 | IAmb | IAmb | 10 40 30.2 | |
| D17K | Noatak River | 52.25 | 24 | P | P | 10 40 09.3 | +0.8 | | comp=Z,16nm,0.6s | | | | | | |
| | baz=250,SNR=11 | | | | | | | J20K | Nowinta River | 54.95 | 29 | P | P | 10 40 28.9 | +1.2 |
| MBWA | Marble Bar | 52.38 | 204 | P | P | 10 40 10.3 | +0.2 | | baz=262,SNR=19 | | | | | | |
| MBWA | Marble Bar | 52.38 | 204 | P | P | 10 40 10.1 | +0.1 | B20K | Meade River | 55.00 | 22 | P | P | 10 40 28.9 | +1.0 |
| MBWA | | | | IAmb | IAmb | 10 40 11.4 | | | baz=255 | | | | | | |
| | comp=Z,33nm,0.8s | | | | | | | KDAK | Kodiak Island | 55.11 | 37 | P | P | 10 40 29.4 | +0.5 |
| P16K | Nushagak River | 52.39 | 35 | P | P | 10 40 10.1 | +0.5 | KDAK | | | | IAmb | IAmb | 10 40 30.4 | |
| | baz=262 | | | | | | | | comp=Z,43nm,1.5s | | | | | | |
| O16K | Kokwok River B | 52.42 | 35 | IAmb | IAmb | 10 40 11.7 | | KDAK | Kodiak Island | 55.11 | 37 | P | P | 10 40 28.8 | -0.1 |
| | comp=Z,9.9nm,0.7s | | | | | | | | comp=Z,5.4nm,0.4s,baz=263,slow=4.2,SNR=24 | | | | | | |
| O16K | Kokwok River B | 52.42 | 35 | P | P | 10 40 10.3 | +0.5 | | comp=Z,5.4nm,0.4s | | | | | | |
| | baz=261,SNR=5.3 | | | | | | | KDAK | Kodiak Island | 55.11 | 37 | P | P | 10 40 29.2 | +0.3 |
| RDOG | Red Dog Mine | 52.44 | 24 | P | P | 10 40 11.1 | +1.2 | | baz=268 | | | | | | |
| | baz=250 | | | | | | | M20K | Styx River | 55.13 | 32 | P | P | 10 40 30.0 | +0.9 |
| C17K | DeLong Mountai | 52.49 | 23 | P | P | 10 40 11.5 | +1.2 | | baz=264 | | | | | | |
| | baz=250,SNR=5.1 | | | | | | | O20K | Slope Mountain | 55.22 | 34 | P | P | 10 40 30.0 | +0.2 |
| G17K | Kiwalik Mounta | 52.51 | 27 | P | P | 10 40 11.2 | +0.8 | | baz=266 | | | | | | |
| | baz=254,SNR=6.3 | | | | | | | Q20K | Shuyak Island | 55.25 | 36 | P | P | 10 40 30.3 | +0.4 |
| E17K | Hotham Inlet | 52.51 | 25 | P | P | 10 40 11.6 | +1.2 | | baz=267 | | | | | | |
| | baz=252 | | | | | | | OOD | Oodnadatta | 55.42 | 184 | P | P | 10 40 31.5 | 0.0 |
| F17K | Baldwin Pennin | 52.54 | 26 | IAmb | IAmb | 10 40 13.3 | | N20K | Mount Spurr | 55.51 | 33 | P | P | 10 40 32.1 | +0.3 |
| | comp=Z,18nm,0.7s | | | | | | | | baz=265 | | | | | | |
| F17K | Baldwin Pennin | 52.54 | 26 | P | P | 10 40 11.7 | +1.1 | SPCR | Spurr Chakacha | 55.51 | 33 | P | P | 10 40 32.6 | +0.9 |
| | baz=253,SNR=5.8 | | | | | | | | baz=265 | | | | | | |
| J17K | VABM Dome | 52.66 | 30 | P | P | 10 40 12.5 | +1.0 | G21K | Allakaket | 55.58 | 27 | P | P | 10 40 32.9 | +0.8 |
| | baz=257 | | | | | | | | baz=261 | | | | | | |
| H17K | Granite Mounta | 52.66 | 28 | P | P | 10 40 12.8 | +1.3 | C21K | Kniveblade Rid | 55.60 | 23 | P | P | 10 40 33.2 | +1.0 |
| | baz=256,SNR=5.0 | | | | | | | | baz=258 | | | | | | |
| PSA00 | Pilbara Seismi | 52.72 | 203 | P | P | 10 40 12.8 | +0.3 | F21K | Alatna River | 55.71 | 26 | P | P | 10 40 33.7 | +0.7 |
| PSA00 | Pilbara Seismi | 52.72 | 203 | P | P | 10 40 12.2 | -0.4 | | baz=260 | | | | | | |
| | | | | | | | | H21K | Melozitna Rive | 55.73 | 28 | IAmb | IAmb | 10 40 35.6 | |
| | | | | | | | | | comp=Z,14nm,0.9s | | | | | | |
| | | | | | | | | H21K | Melozitna Rive | 55.73 | 28 | P | P | 10 40 34.2 | +1.0 |
| | | | | | | | | | baz=262,SNR=15 | | | | | | |
| | | | | | | | | E21K | Killik River | 55.75 | 24 | P | P | 10 40 33.9 | +0.6 |
| | | | | | | | | | baz=259 | | | | | | |
| | | | | | | | | B21K | Ikpikpuk River | 55.76 | 23 | P | P | 10 40 34.1 | +0.8 |
| | | | | | | | | | baz=257 | | | | | | |
| | | | | | | | | SKT | Skwentna | 55.89 | 32 | P | P | 10 40 34.9 | +0.5 |
| | | | | | | | | SKT | | | | IAmb | IAmb | 10 40 35.3 | |
| | | | | | | | | | comp=Z,6.5nm,0.5s | | | | | | |
| | | | | | | | | SKT | Skwentna | 55.89 | 32 | P | P | 10 40 34.6 | +0.3 |
| | | | | | | | | | baz=266,SNR=8.4 | | | | | | |
| | | | | | | | | DZM | Mont Dzumac | 55.91 | 150 | P | P | 10 40 36.0 | +0.9 |
| | | | | | | | | DZM | Mont Dzumac | 55.91 | 150 | P | P | 10 40 36.1 | +1.1 |
| | | | | | | | | DZM | | | | IAmb | IAmb | 10 40 37.6 | |
| | | | | | | | | | comp=Z,22nm,0.9s | | | | | | |
| | | | | | | | | A22K | Sinclair Lake | 55.96 | 21 | P | P | 10 40 35.3 | +0.7 |
| | | | | | | | | | baz=256 | | | | | | |
| | | | | | | | | BVAR | Borovoye Array | 56.04 | 317 | P | P | 10 40 35.6 | +0.1 |
| | | | | | | | | | comp=Z,59nm,0.4s,baz=88,slow=7.2,SNR=240 | | | | | | |
| | | | | | | | | BVAR | | | | PcP | PcP | 10 41 26.7 | +0.2 |
| | | | | | | | | | comp=Z,4.5nm,0.6s,baz=89,slow=3.2,SNR=1.5 | | | | | | |
| | | | | | | | | BVAR | | | | ScP | ScP | 10 44 36.2 | -0.9 |
| | | | | | | | | | comp=Z,3.7nm,0.6s,baz=97,slow=4.7,SNR=6.9 | | | | | | |
| | | | | | | | | BVAR | | | | S | S | 10 47 43.7 | -1.5 |
| | | | | | | | | | comp=Z,3.2nm,0.7s,baz=91,slow=13,SNR=9.2 | | | | | | |
| | | | | | | | | BRVK | Borovoye | 56.10 | 317 | P | P | 10 40 36.7 | +0.8 |
| | | | | | | | | BRVK | Borovoye | 56.10 | 317 | P | P | 10 40 36.4 | +0.5 |
| | | | | | | | | BRSE | Bradley Lake S | 56.15 | 35 | P | P | 10 40 36.8 | +0.6 |
| | | | | | | | | | baz=268 | | | | | | |
| | | | | | | | | SUA | Susitna One | 56.23 | 33 | P | P | 10 40 37.2 | +0.3 |
| | | | | | | | | | baz=267 | | | | | | |
| | | | | | | | | F22K | John River | 56.25 | 25 | P | P | 10 40 37.9 | +1.1 |
| | | | | | | | | | baz=261 | | | | | | |
| | | | | | | | | D22K | Ayikyak River | 56.29 | 24 | P | P | 10 40 38.5 | +1.4 |
| | | | | | | | | D22K | | | | IAmb | IAmb | 10 40 39.0 | |
| | | | | | | | | | comp=Z,10nm,0.5s | | | | | | |
| | | | | | | | | D22K | Ayikyak River | 56.29 | 24 | P | P | 10 40 38.0 | +0.9 |
| | | | | | | | | | baz=260,SNR=5.8 | | | | | | |
| | | | | | | | | BPAW | Bear Paw Mtn. | 56.32 | 30 | IAmb | IAmb | 10 40 39.4 | |
| | | | | | | | | | comp=Z,9.0nm,0.6s | | | | | | |
| | | | | | | | | BPAW | Bear Paw Mtn. | 56.32 | 30 | P | P | 10 40 38.1 | +0.8 |
| | | | | | | | | | baz=265,SNR=7.3 | | | | | | |
| | | | | | | | | H22K | Ishtalitna Cre | 56.35 | 27 | P | P | 10 40 38.4 | +1.0 |
| | | | | | | | | | baz=263,SNR=12 | | | | | | |
| | | | | | | | | G22K | Bettles | 56.43 | 26 | P | P | 10 40 38.8 | +0.9 |
| | | | | | | | | | baz=262 | | | | | | |
| | | | | | | | | E22K | Anaktuvuk Pass | 56.48 | 25 | P | P | 10 40 39.3 | +0.9 |
| | | | | | | | | | baz=261,SNR=6.0 | | | | | | |
| | | | | | | | | CUT | Chulitna | 56.51 | 32 | P | P | 10 40 39.0 | +0.4 |
| | | | | | | | | | baz=266 | | | | | | |
| | | | | | | | | MLY | Manley | 56.52 | 28 | P | P | 10 40 39.5 | +0.8 |
| | | | | | | | | | baz=264,SNR=17 | | | | | | |
| | | | | | | | | M22K | Willow | 56.54 | 32 | P | P | 10 40 38.7 | -0.1 |
| | | | | | | | | | baz=267 | | | | | | |
| | | | | | | | | NIL | Nilore | 56.57 | 294 | P | P | 10 40 41.2 | +1.6 |
| | | | | | | | | NIL | Nilore | 56.57 | 294 | P | P | 10 40 41.1 | +1.5 |
| | | | | | | | | O22K | Cooper Landing | 56.68 | 34 | P | P | 10 40 40.0 | +0.2 |
| | | | | | | | | | baz=268 | | | | | | |
| | | | | | | | | RC01 | Rabbit Creek A | 56.70 | 33 | P | P | 10 40 40.3 | +0.4 |
| | | | | | | | | RC01 | | | | IAmb | IAmb | 10 40 40.7 | |
| | | | | | | | | | comp=Z,13nm,0.4s | | | | | | |
| | | | | | | | | RC01 | Rabbit Creek A | 56.70 | 33 | P | P | 10 40 39.9 | 0.0 |
| | | | | | | | | | baz=268,SNR=5.9 | | | | | | |
| | | | | | | | | SEW | Seward | 56.81 | 34 | P | P | 10 40 41.1 | +0.4 |
| | | | | | | | | | baz=269 | | | | | | |
| | | | | | | | | KKAR | Karatay Array | 56.89 | 305 | P | P | 10 40 42.5 | +0.8 |
| | | | | | | | | COLD | Coldfoot | 56.97 | 26 | P | P | 10 40 42.6 | +0.8 |
| | | | | | | | | | baz=263,SNR=7.3 | | | | | | |
| | | | | | | | | G23K | Bananza Creek | 56.98 | 27 | IAmb | IAmb | 10 40 44.2 | |
| | | | | | | | | | comp=Z,13nm,0.8s | | | | | | |
| | | | | | | | | G23K | Bananza Creek | 56.98 | 27 | P | P | 10 40 42.4 | +0.5 |
| | | | | | | | | | baz=264,SNR=22 | | | | | | |
| | | | | | | | | PMR | Palmer | 57.01 | 33 | P | P | 10 40 41.9 | -0.1 |
| | | | | | | | | | baz=268,SNR=7.2 | | | | | | |
| | | | | | | | | D23K | Nanushuk River | 57.02 | 24 | IAmb | IAmb | 10 40 44.5 | |
| | | | | | | | | | comp=Z,12nm,0.7s | | | | | | |
| | | | | | | | | D23K | Nanushuk River | 57.02 | 24 | P | P | 10 40 43.0 | +1.0 |
| | | | | | | | | | baz=262,SNR=8.7 | | | | | | |
| | | | | | | | | H23K | Yukon River | 57.09 | 28 | P | P | 10 40 43.6 | +1.0 |
| | | | | | | | | | baz=265 | | | | | | |
| | | | | | | | | I23K | Minto, Yukon-K | 57.11 | 28 | IAmb | IAmb | 10 40 45.2 | |
| | | | | | | | | | comp=Z,21nm,1.4s | | | | | | |
| | | | | | | | | I23K | Minto, Yukon-K | 57.11 | 28 | P | P | 10 40 43.7 | +1.0 |
| | | | | | | | | | baz=265,SNR=9.4 | | | | | | |
| | | | | | | | | BTK | Batken | 57.17 | 302 | IAmb | IAmb | 10 40 45.1 | |
| | | | | | | | | | comp=Z,31nm,1.2s | | | | | | |
| | | | | | | | | C23K | Itkillik River | 57.17 | 23 | IAmb | IAmb | 10 40 45.1 | |
| | | | | | | | | | comp=Z,10nm,0.6s | | | | | | |
| | | | | | | | | C23K | Itkillik River | 57.17 | 23 | P | P | 10 40 44.0 | +1.0 |
| | | | | | | | | | baz=261,SNR=5.6 | | | | | | |
| | | | | | | | | NEA2 | Nenana | 57.19 | 29 | IAmb | IAmb | 10 40 45.5 | |
| | | | | | | | | | comp=Z,18nm,1.0s | | | | | | |
| | | | | | | | | NEA2 | Nenana | 57.19 | 29 | P | P | 10 40 43.7 | +0.5 |
| | | | | | | | | | baz=266,SNR=12 | | | | | | |
| | | | | | | | | MCK | McKinley | 57.20 | 30 | P | P | 10 40 43.8 | +0.4 |
| | | | | | | | | | baz=267,SNR=14 | | | | | | |
| | | | | | | | | RND | Reindeer | 57.22 | 30 | IAmb | IAmb | 10 40 44.5 | |
| | | | | | | | | | comp=Z,13nm,0.6s | | | | | | |
| | | | | | | | | E23K | Chandalar | 57.29 | 25 | P | P | 10 40 45.4 | +1.4 |
| | | | | | | | | | baz=263,SNR=8.5 | | | | | | |
| | | | | | | | | KNK | Knik Glacier | 57.32 | 33 | IAmb | IAmb | 10 40 45.4 | |
| | | | | | | | | | comp=Z,20nm,0.6s | | | | | | |
| | | | | | | | | KNK | Knik Glacier | 57.32 | 33 | P | P | 10 40 44.3 | 0.0 |
| | | | | | | | | | baz=269,SNR=7.1 | | | | | | |
| | | | | | | | | WAT1 | Susitna Watana | 57.33 | 31 | P | P | 10 40 44.5 | +0.2 |
| | | | | | | | | | baz=268 | | | | | | |
| | | | | | | | | PWL | Port Wells | 57.37 | 34 | IAmb | IAmb | 10 40 45.5 | |
| | | | | | | | | | comp=Z,18nm,0.7s | | | | | | |
| | | | | | | | | PWL | Port Wells | 57.37 | 34 | P | P | 10 40 44.9 | +0.3 |
| | | | | | | | | | baz=269,SNR=8.4 | | | | | | |
| | | | | | | | | TOLK | Toolik Lake Re | 57.38 | 24 | P | P | 10 40 45.5 | +0.9 |
| | | | | | | | | | baz=263 | | | | | | |
| | | | | | | | | SML | Sawmill | 57.39 | 32 | IAmb | IAmb | 10 40 46.4 | |
| | | | | | | | | | comp=Z,13nm,0.8s | | | | | | |
| | | | | | | | | SML | Sawmill | 57.39 | 32 | P | P | 10 40 44.8 | 0.0 |
| | | | | | | | | | baz=268,SNR=6.3 | | | | | | |
| | | | | | | | | MDM | Murphy Dome | 57.57 | 29 | IAmb | IAmb | 10 40 47.6 | |
| | | | | | | | | | comp=Z,10.0nm,0.5s | | | | | | |
| | | | | | | | | M23K | Glacier View | 57.68 | 32 | P | P | 10 40 46.9 | +0.2 |
| | | | | | | | | | baz=269 | | | | | | |
| | | | | | | | | WAT6 | Susitna Watana | 57.69 | 31 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,1.1s | | | | | | | | |
| HDA | Harding Lake | 58.10 | 29 | P | P | | 10 40 49.2 | -0.2 | |
| | baz=268,SNR=12 | | | | | | | | |
| ILAR | Eielson Array | 58.14 | 29 | P | P | | 10 40 49.2 | -0.5 | |
| ILAR | Eielson Array | 58.14 | 29 | P | P | | 10 40 48.9 | -0.9 | |
| | comp=Z,2.7nm,0.4s,baz=252,slow=5.4,SNR=44 | | | | | | | | |
| ILAR | | | | pP | pP | | 10 42 28.0 | -0.5 | |
| | comp=Z,0.5nm,0.7s,baz=271,slow=6.7,SNR=2.6 | | | | | | | | |
| ILAR | | | | S | S | | 10 48 10.9 | -0.9 | |
| | comp=Z,0.2nm,0.8s,baz=239,slow=16,SNR=2.3 | | | | | | | | |
| | comp=Z,2.7nm,0.4s | | | | | | | | |
| M24K | Tolsona, Glenn | 58.42 | 32 | P | P | | 10 40 53.1 | +1.4 | |
| | baz=270 | | | | | | | | |
| G25K | Bearman Lake | 58.54 | 27 | P | P | | 10 40 53.4 | +1.0 | |
| | baz=267,SNR=9.0 | | | | | | | | |
| KLU | Klutina | 58.54 | 33 | P | P | | 10 40 53.1 | +0.5 | |
| | baz=271 | | | | | | | | |
| D25K | Kavik River | 58.59 | 24 | IAmb | IAmb | | 10 40 54.8 | | |
| | comp=Z,9.4nm,0.6s | | | | | | | | |
| D25K | Kavik River | 58.59 | 24 | P | P | | 10 40 53.5 | +0.7 | |
| | baz=266,SNR=7.2 | | | | | | | | |
| K24K | Donnelly Dome | 58.60 | 30 | P | P | | 10 40 53.3 | +0.4 | |
| | baz=270,SNR=6.0 | | | | | | | | |
| H25L | Birch Creek | 58.63 | 27 | P | P | | 10 40 54.0 | +1.0 | |
| | baz=268 | | | | | | | | |
| EYAK | Cordova Ski Ar | 58.65 | 34 | P | P | | 10 40 53.7 | +0.5 | |
| | baz=272 | | | | | | | | |
| CHGR | Chuyangaron | 58.71 | 300 | P | P | | 10 40 54.7 | +0.5 | |
| PRP | Porcupine Dome | 58.73 | 28 | IAmb | IAmb | | 10 40 55.6 | | |
| | comp=Z,7.2nm,0.6s | | | | | | | | |
| PRP | Porcupine Dome | 58.73 | 28 | P | P | | 10 40 54.2 | +0.3 | |
| | baz=269,SNR=6.7 | | | | | | | | |
| PAX | Paxson | 58.74 | 31 | P | P | | 10 40 54.5 | +0.6 | |
| | baz=270,SNR=9.4 | | | | | | | | |
| F25K | Christian Rive | 58.76 | 26 | IAmb | IAmb | | 10 40 57.2 | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| F25K | Christian Rive | 58.76 | 26 | P | P | | 10 40 55.4 | +1.5 | |
| | baz=267,SNR=12 | | | | | | | | |
| J25K | Salcha River, | 58.79 | 29 | P | P | | 10 40 54.6 | +0.4 | |
| | baz=269 | | | | | | | | |
| SIMJ | Simiganj | 58.82 | 300 | P | P | | 10 40 55.3 | +0.3 | |
| FYU | Fort Yukon | 58.88 | 27 | IAmb | IAmb | | 10 40 57.1 | | |
| | comp=Z,24nm,1.2s | | | | | | | | |
| HARP | HAARP | 58.89 | 32 | P | P | | 10 40 55.4 | +0.5 | |
| | baz=271 | | | | | | | | |
| RIDG | Independent Ri | 59.01 | 30 | IAmb | IAmb | | 10 40 57.7 | | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| RIDG | Independent Ri | 59.01 | 30 | P | P | | 10 40 56.1 | +0.4 | |
| | baz=270,SNR=12 | | | | | | | | |
| C26K | Camden Bay | 59.14 | 23 | P | P | | 10 40 57.6 | +1.2 | |
| | baz=267 | | | | | | | | |
| BMAR | Burnt Mountain | 59.16 | 26 | P | P | | 10 40 58.2 | +1.6 | |
| N25K | Chitina, Valde | 59.17 | 33 | P | P | | 10 40 57.8 | +0.9 | |
| | baz=272 | | | | | | | | |
| BMRM | Bremner River | 59.20 | 33 | P | P | | 10 40 57.6 | +0.6 | |
| | baz=272,SNR=8.0 | | | | | | | | |
| PALK | Pallekele | 59.30 | 262 | P | P | | 10 40 58.7 | +0.3 | |
| FORT | Forrest | 59.32 | 192 | P | P | | 10 40 58.3 | +0.2 | |
| F26K | Sheenjek River | 59.33 | 26 | IAmb | IAmb | | 10 41 00.5 | | |
| | comp=Z,10nm,0.6s | | | | | | | | |
| F26K | Sheenjek River | 59.33 | 26 | P | P | | 10 40 59.0 | +1.3 | |
| | baz=269,SNR=18 | | | | | | | | |
| STKA | Stephens Creek | 59.38 | 178 | P | P | | 10 40 58.5 | 0.0 | |
| STKA | Stephens Creek | 59.38 | 178 | P | P | | 10 40 58.2 | -0.2 | |
| | comp=Z,2.8nm,0.5s,baz=354,slow=8.6,SNR=14 | | | | | | | | |
| STKA | | | | S | S | | 10 48 28.4 | +0.1 | |
| | comp=Z,0.6nm,0.4s,baz=324,slow=19,SNR=3.0 | | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | | |
| SCRK | Sand Creek | 59.39 | 30 | IAmb | IAmb | | 10 40 59.4 | | |
| | comp=Z,16nm,0.6s | | | | | | | | |
| SCRK | Sand Creek | 59.39 | 30 | P | P | | 10 40 58.2 | -0.1 | |
| | baz=271,SNR=21 | | | | | | | | |
| G26K | Porcupine Rive | 59.46 | 26 | P | P | | 10 40 59.6 | +1.1 | |
| | baz=270,SNR=7.5 | | | | | | | | |
| C27K | Jago River | 59.55 | 23 | IAmb | IAmb | | 10 41 21.7 | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| C27K | Jago River | 59.55 | 23 | P | P | | 10 41 00.0 | +0.9 | |
| | baz=268,SNR=7.6 | | | | | | | | |
| GLB | Gilahina Butte | 59.56 | 33 | IAmb | IAmb | | 10 41 01.1 | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| J26L | Joseph Creek | 59.57 | 29 | IAmb | IAmb | | 10 41 00.3 | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| J26L | Joseph Creek | 59.57 | 29 | P | P | | 10 40 59.0 | -0.4 | |
| | baz=271,SNR=30 | | | | | | | | |
| L26K | Log Cabin Wild | 59.71 | 31 | IAmb | IAmb | | 10 41 02.2 | | |
| | comp=Z,18nm,0.6s | | | | | | | | |
| L26K | Log Cabin Wild | 59.71 | 31 | P | P | | 10 41 01.1 | +0.8 | |
| | baz=272,SNR=20 | | | | | | | | |
| I26K | Coal Creek Min | 59.73 | 28 | P | P | | 10 41 00.1 | -0.3 | |
| | baz=271 | | | | | | | | |
| KBL | Kabul | 59.75 | 296 | P | P | | 10 41 02.0 | +0.7 | |
| KBL | Kabul | 59.75 | 296 | P | P | | 10 41 02.0 | +0.7 | |
| | SNR=13 | | | | | | | | |
| M26K | Nabesna, AK | 59.90 | 32 | P | P | | 10 41 02.2 | +0.6 | |
| | baz=273 | | | | | | | | |
| CRQM | Cirque | 59.92 | 34 | IAmb | IAmb | | 10 41 04.1 | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| MCARA | McCarthy VSAT | 59.94 | 33 | P | P | | 10 41 02.5 | +0.6 | |
| | baz=273 | | | | | | | | |
| CRQE | Cirque | 59.95 | 34 | P | P | | 10 41 02.6 | +0.5 | |
| | baz=274 | | | | | | | | |
| K27K | Chicken | 60.23 | 30 | P | P | | 10 41 04.3 | +0.6 | |
| | baz=273 | | | | | | | | |
| E27K | Coleen River | 60.30 | 25 | P | P | | 10 41 05.0 | +0.9 | |
| | baz=271,SNR=5.2 | | | | | | | | |
| G27K | Doyon Strip | 60.30 | 27 | P | P | | 10 41 05.1 | +0.9 | |
| | baz=272 | | | | | | | | |
| I27K | Kandik River | 60.36 | 28 | P | P | | 10 41 05.5 | +0.8 | |
| | baz=272,SNR=6.8 | | | | | | | | |
| H27K | Steamboat Moun | 60.37 | 27 | P | P | | 10 41 05.5 | +0.8 | |
| | baz=272,SNR=19 | | | | | | | | |
| BBOO | Buckleboo | 60.39 | 184 | P | P | | 10 41 05.1 | -0.1 | |
| BBOO | Buckleboo | 60.39 | 184 | P | P | | 10 41 05.5 | +0.3 | |
| BBOO | | | | IAmb | IAmb | | 10 41 07.0 | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| L27K | Beaver Creek, | 60.40 | 31 | P | P | | 10 41 05.8 | +0.9 | |
| | baz=274,SNR=9.3 | | | | | | | | |
| BCAR | Beaver Creek A | 60.41 | 31 | P | P | | 10 41 05.8 | +0.8 | |
| M27K | Edge Creek, AK | 60.42 | 32 | IAmb | IAmb | | 10 41 07.5 | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| M27K | Edge Creek, AK | 60.42 | 32 | P | P | | 10 41 06.1 | +0.9 | |
| | baz=274,SNR=11 | | | | | | | | |
| D27M | Malcolm River | 60.51 | 24 | P | P | | 10 41 06.2 | +0.5 | |
| | baz=271 | | | | | | | | |
| EGAK | Eagle | 60.59 | 29 | IAmb | IAmb | | 10 41 07.7 | | |
| | comp=Z,6.4nm,0.6s | | | | | | | | |
| EGAK | Eagle | 60.59 | 29 | P | P | | 10 41 06.2 | +0.1 | |
| | baz=273,SNR=11 | | | | | | | | |
| CTG | Chitna Glacier | 60.78 | 33 | P | P | | 10 41 08.2 | +0.6 | |
| | baz=275 | | | | | | | | |
| MORW | Morawa | 60.94 | 204 | P | P | | 10 41 08.8 | -0.1 | |
| MORW | Morawa | 60.94 | 204 | P | P | | 10 41 09.1 | +0.2 | |
| MORW | | | | IAmb | IAmb | | 10 41 10.1 | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| F28M | Old Crow | 60.97 | 26 | IAmb | IAmb | | 10 41 10.9 | | |
| | comp=Z,7.9nm,0.7s | | | | | | | | |
| F28M | Old Crow | 60.97 | 26 | P | P | | 10 41 09.7 | +1.1 | |
| | baz=273,SNR=11 | | | | | | | | |
| E28M | Babbage River | 61.05 | 24 | P | P | | 10 41 10.4 | +1.3 | |
| E28M | Babbage River | 61.05 | 24 | P | P | | 10 41 10.1 | +0.9 | |
| | baz=272,SNR=7.1 | | | | | | | | |
| I28M | Miner Creek | 61.07 | 28 | IAmb | IAmb | | 10 41 11.2 | | |
| | comp=Z,16nm,0.6s | | | | | | | | |
| I28M | Miner Creek | 61.07 | 28 | P | P | | 10 41 09.9 | +0.5 | |
| | baz=274,SNR=26 | | | | | | | | |
| YUK3 | Moose Creek | 61.13 | 32 | P | P | | 10 41 10.6 | +0.6 | |
| | baz=275,SNR=8.1 | | | | | | | | |
| KMBL | Kambalda | 61.26 | 197 | P | P | | 10 41 10.7 | -0.3 | |
| O28M | Mount Upton | 61.36 | 33 | P | P | | 10 41 12.3 | +0.7 | |
| | baz=276 | | | | | | | | |
| DAWY | Dawson | 61.41 | 30 | P | P | | 10 41 12.2 | +0.6 | |
| DAWY | Dawson | 61.41 | 30 | P | P | | 10 41 12.0 | +0.4 | |
| | baz=275,SNR=10 | | | | | | | | |
| PINM | Pinnacle | 61.41 | 34 | P | P | | 10 41 12.5 | +0.8 | |
| | baz=276 | | | | | | | | |
| YUK8 | Steele Glacier | 61.51 | 33 | P | P | | 10 41 13.4 | +0.8 | |
| | baz=276 | | | | | | | | |
| H29M | Whitestone | 61.65 | 27 | P | P | | 10 41 14.2 | +1.1 | |
| H29M | | | | IAmb | IAmb | | 10 41 15.3 | | |
| | comp=Z,9.1nm,1.1s | | | | | | | | |
| H29M | Whitestone | 61.65 | 27 | P | P | | 10 41 14.1 | +1.1 | |
| | baz=275 | | | | | | | | |
| E29M | Blow River | 61.66 | 25 | P | P | | 10 41 14.4 | +1.3 | |
| | baz=274 | | | | | | | | |
| G29M | Pine Creek | 61.73 | 26 | IAmb | IAmb | | 10 41 16.0 | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| G29M | Pine Creek | 61.73 | 26 | P | P | | 10 41 14.8 | +1.1 | |
| | baz=275,SNR=14 | | | | | | | | |
| I29M | Ogilvie Camp, | 61.75 | 28 | IAmb | IAmb | | 10 41 15.6 | | |
| | comp=Z,8.1nm,0.9s | | | | | | | | |
| I29M | Ogilvie Camp, | 61.75 | 28 | P | P | | 10 41 14.5 | +0.7 | |
| | baz=275,SNR=8.3 | | | | | | | | |
| J29N | Klondike Camp | 61.88 | 29 | P | P | | 10 41 15.5 | +0.8 | |
| | baz=276 | | | | | | | | |
| PNL | Peninsula | 61.89 | 35 | P | P | | 10 41 15.5 | +0.8 | |
| | baz=277 | | | | | | | | |
| M29M | Somme Creek | 61.99 | 31 | IAmb | IAmb | | 10 41 17.9 | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| M29M | Somme Creek | 61.99 | 31 | P | P | | 10 41 16.6 | +1.1 | |
| | baz=277,SNR=8.9 | | | | | | | | |
| YUK4 | Talbot Arm | 62.04 | 33 | P | P | | 10 41 17.1 | +1.1 | |
| | baz=277 | | | | | | | | |
| BLDU | Ballidu | 62.12 | 202 | P | P | | 10 41 16.8 | +0.2 | |
| O29M | Mount Kennedy | 62.21 | 34 | IAmb | IAmb | | 10 41 19.5 | | |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| O29M | Mount Kennedy | 62.21 | 34 | P | P | | 10 41 18.1 | +1.1 | |
| | baz=278 | | | | | | | | |
| YUK6 | Outpost Mounta | 62.23 | 33 | P | P | | 10 41 18.1 | +0.9 | |
| | baz=278 | | | | | | | | |
| K29M | Barlow Dome | 62.25 | 30 | IAmb | IAmb | | 10 41 19.3 | | |
| | comp=Z,8.1nm,0.8s | | | | | | | | |
| K29M | Barlow Dome | 62.25 | 30 | P | P | | 10 41 18.2 | +1.1 | |
| | baz=277,SNR=12 | | | | | | | | |
| EPYK | Eagle Plains | 62.30 | 27 | P | P | | 10 41 18.4 | +1.0 | |
| | baz=276,SNR=17 | | | | | | | | |
| G30M | tAoh Zraii Nji | 62.43 | 26 | IAmb | IAmb | | 10 41 19.8 | | |
| | comp=Z,15nm,1.2s | | | | | | | | |
| G30M | tAoh Zraii Nji | 62.43 | 26 | P | P | | 10 41 18.9 | +0.7 | |
| | baz=276,SNR=5.6 | | | | | | | | |
| ARU | Arti | 62.52 | 322 | P | P | | 10 41 18.9 | +0.1 | |
| ARU | Arti | 62.52 | 322 | P | P | | 10 41 18.3 | -0.6 | |
| | comp=Z,49nm,0.8s,comp=Z,483nm | | | | | | | | |
| F30M | Barrier River | 62.53 | 25 | P | P | | 10 41 19.7 | +0.9 | |
| | baz=276,SNR=6.3 | | | | | | | | |
| I30M | Mount Dempster | 62.58 | 28 | IAmb | IAmb | | 10 41 22.0 | | |
| | comp=Z,6.8nm,0.7s | | | | | | | | |
| I30M | Mount Dempster | 62.58 | 28 | P | P | | 10 41 19.9 | +0.7 | |
| | baz=277,SNR=13 | | | | | | | | |
| KLBR | Kellerberrin | 62.68 | 201 | P | P | | 10 41 20.1 | -0.1 | |
| J30M | Hart River | 62.68 | 29 | IAmb | IAmb | | 10 41 21.4 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| J30M | Hart River | 62.68 | 29 | P | P | | 10 41 20.7 | +0.8 | |
| | baz=278,SNR=7.7 | | | | | | | | |
| P29M | Windy Craggy | 62.73 | 35 | P | P | | 10 41 21.1 | +0.9 | |
| | baz=279 | | | | | | | | |
| N30M | Aishikik Lake | 62.77 | 32 | P | P | | 10 41 21.5 | +1.0 | |
| | baz=278 | | | | | | | | |
| ABKAR | Akbulak array | 63.03 | 314 | P | P | | 10 41 22.4 | 0.0 | |
| P30M | Million Dollar | 63.04 | 34 | P | P | | 10 41 23.3 | +1.0 | |
| | baz=279 | | | | | | | | |
| G31M | Satah River | 63.20 | 26 | P | P | | 10 41 23.2 | +0.2 | |
| G31M | Satah River | 63.20 | 26 | P | P | | 10 41 23.4 | +0.4 | |
| | baz=278 | | | | | | | | |
| INK | Inuvik | 63.29 | 25 | P | P | | 10 41 23.6 | 0.0 | |
| INK | Inuvik | 63.29 | 25 | P | P | | 10 41 23.6 | 0.0 | |
| | baz=278 | | | | | | | | |
| F31M | Tsiigehtchic | 63.33 | 26 | P | P | | 10 41 24.2 | +0.4 | |
| | baz=278 | | | | | | | | |
| H31M | Peel River | 63.33 | 27 | P | P | | 10 41 25.1 | +1.0 | |
| | baz=279 | | | | | | | | |
| O30N | Mendenhall | 63.36 | 33 | P | P | | 10 41 25.3 | +1.0 | |
| | baz=280 | | | | | | | | |
| N31M | Braeburn, Yuko | 63.38 | 32 | IAmb | IAmb | | 10 41 26.8 | | |
| | comp=Z,2nm,1.1s | | | | | | | | |
| N31M | Braeburn, Yuko | 63.38 | 32 | P | P | | 10 41 25.2 | +0.8 | |
| | baz=280,SNR=6.1 | | | | | | | | |
| PLBC | Pleasant Camp | 63.45 | 35 | P | P | | 10 41 25.8 | +1.0 | |
| | baz=280,SNR=5.8 | | | | | | | | |
| M31M | Drury Creek, Y | 63.91 | 31 | IAmb | IAmb | | 10 41 29.5 | | |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| M31M | Drury Creek, Y | 63.91 | 31 | P | P | | 10 41 28.6 | +0.8 | |
| | baz=280,SNR=10 | | | | | | | | |
| WHY | Whitehorse | 63.96 | 33 | P | P | | 10 41 29.1 | +0.9 | |
| | baz=281 | | | | | | | | |
| NWAO | Narrogin (SRO) | 64.08 | 201 | P | P | | 10 41 29.6 | +0.5 | |
| NWAO | Narrogin (SRO) | 64.08 | 201 | P | P | | 10 41 29.3 | +0.2 | |
| NWAO | Narrogin (SRO) | 64.08 | 201 | P | P | | 10 41 29.4 | +0.3 | |
| ARPS | Mount Arapiles | 64.27 | 178 | P | P | | 10 41 30.7 | +0.4 | |
| FARO | Faro, Yukon | 64.39 | 31 | P | P | | 10 41 31.6 | +0.8 | |
| FARO | | | | IAmb | IAmb | | 10 41 32.7 | | |
| | comp=Z,6.2nm,1.0s | | | | | | | | |
| FARO | Faro, Yukon | 64.39 | 31 | P | P | | 10 41 31.8 | +1.0 | |
| | baz=281 | | | | | | | | |
| R32K | Eaglecrest | 64.62 | 36 | P | P | | 10 41 33.5 | +1.2 | |
| | baz=282 | | | | | | | | |
| N32M | Quiet Lake | 64.73 | 32 | P | P | | 10 41 33.8 | +0.8 | |
| | baz=282 | | | | | | | | |
| P33M | Teslin, Yukon | 65.05 | 33 | P | P | | 10 41 36.0 | +0.9 | |
| | baz=283 | | | | | | | | |
| TOO | Toolangi | 65.26 | 175 | P | P | | 10 41 37.9 | +1.3 | |
| TOO | | | | IAmb | IAmb | | 10 41 38.9 | | |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| A36M | Sachs Harbour | 65.36 | 20 | P | P | | 10 41 37.8 | +1.1 | |
| | baz=284 | | | | | | | | |
| Q32M | Nakina River | 65.61 | 35 | P | P | | 10 41 39.6 | +0.8 | |
| | baz=284 | | | | | | | | |
| U33K | Whale Pass | 65.85 | 38 | P | P | | 10 41 40.5 | +0.5 | |
| | baz=284 | | | | | | | | |
| R33M | Jennings River | 66.16 | 34 | P | P | | 10 41 42.7 | +0.6 | |
| | baz=284 | | | | | | | | |
| C36M | Paulatuk | 66.42 | 23 | P | P | | 10 41 43.4 | 0.0 | |
| C36M | Paulatuk | 66.42 | 23 | P | P | | 10 41 43.9 | +0.5 | |
| | baz=286 | | | | | | | | |
| S34M | Telegraph Cree | 66.45 | 36 | P | P | | 10 41 45.2 | +1.4 | |
| | baz=285 | | | | | | | | |
| DLBC | Dease Lake | 66.88 | 35 | P | P | | 10 41 47.5 | +1.0 | |
| | baz=286 | | | | | | | | |
| TGTN | Hyland Airport | 66.89 | 31 | P | P | | 10 41 47.6 | +1.0 | |
| | baz=286,SNR=11 | | | | | | | | |
| WTLY | Watson Lake, Y | 67.03 | 33 | IAmb | IAmb | | 10 41 49.5 | | |
| | comp=Z,6.9nm,0.6s | | | | | | | | |
| WTLY | Watson Lake, Y | 67.03 | 33 | P | P | | 10 41 48.4 | +1.0 | |
| | baz=286,SNR=5.6 | | | | | | | | |
| T35M | Bob Quinn | 67.16 | 36 | P | P | | 10 41 49.6 | +1.3 | |
| | baz=286 | | | | | | | | |
| WRGLY | Wrigley | 68.52 | 29 | P | P | | 10 41 57.5 | +1.2 | |
| | baz=289 | | | | | | | | |
| LIRD | Liard River Hi | 68.54 | 33 | P | P | | 10 41 57.8 | +1.2 | |
| | baz=288 | | | | | | | | |
| NGCH | Negor - Chabah | 69.13 | 288 | P | P | | 10 42 01.6 | +0.8 | |
| TOAD | Toad River Com | 69.14 | 34 | P | P | | 10 42 01.2 | +0.9 | |
| | baz=289 | | | | | | | | |
| SPITS | Spitsbergen Ar | 69.28 | 349 | P | P | | 10 42 01.1 | +0.2 | |
| | comp=Z,1.6nm,0.5s,baz=58,slow=19,SNR=7.4 | | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| JASK | Jask - Hormozg | 71.68 | 290 | P | P | | 10 42 17.9 | +2.0 | |
| JLN | Jalan Bani Buh | 71.81 | 286 | P | P | | 10 42 17.0 | +0.2 | |
| WBK | Wadi Bani Khal | 72.01 | 286 | P | P | | 10 42 18.9 | +1.0 | |
| ARCES | ARCESS Array B | 72.14 | 340 | P | P | | 10 42 18.3 | +0.5 | |
| ARCES | ARCESS Array B | 72.14 | 340 | P | P | | 10 42 17.4 | -0.4 | |
| | comp=Z,4.4nm,0.6s,baz=58,slow=6.7,SNR=16 | | | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | | | |
| YKA | Yellowknife Ar | 72.54 | 28 | P | P | | 10 42 19.9 | -0.3 | |
| | comp=Z,2.0nm,0.6s,baz=302,slow=6.1,SNR=35 | | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| SMDO | Samad | 72.61 | 287 | P | P | | 10 42 22.5 | +0.9 | |
| JMDO | Jabal Madar | 72.84 | 287 | P | P | | 10 42 23.2 | +0.4 | |
| HOQ | Hoqain | 73.03 | 288 | P | P | | 10 42 24.8 | +1.0 | |
| SHME | Shamm | 73.04 | 291 | *i* P | P | | 10 42 25.1 | +1.4 | |
| | SNR=11 | | | | | | | | |
| SHME | Shamm | 73.04 | 291 | P | P | | 10 42 25.2 | +1.4 | |
| MDH | Madha | 73.20 | 290 | P | P | | 10 42 25.5 | +0.8 | |
| MASF | Masafi | 73.29 | 290 | P | P | | 10 42 25.9 | +0.6 | |
| MSFE | Esma-Masafi | 73.29 | 290 | P | P | | 10 42 26.4 | +1.1 | |
| UOSS | Minazif | 73.42 | 290 | P | P | | 10 42 26.1 | +0.1 | |
| UOSS | Minazif | 73.42 | 290 | *i* P | P | | 10 42 26.7 | +0.7 | |
| | SNR=6.0 | | | | | | | | |
| UOSS | Minazif | 73.42 | 290 | P | P | | 10 42 26.3 | +0.3 | |
| BSY | Bisya | 73.46 | 287 | P | P | | 10 42 27.0 | +0.7 | |
| SOHO | SOHO | 73.46 | 289 | *i* P | P | | 10 42 26.8 | +0.5 | |
| | SNR=18 | | | | | | | | |
| SOHO | SOHO | 73.46 | 289 | P | P | | 10 42 26.6 | +0.4 | |
| JOF | Joensuu | 73.47 | 333 | *e*P | P | | 10 42 25.5 | 0.0 | |
| MHTO | MHTO | 73.51 | 285 | P | P | | 10 42 27.0 | +0.5 | |
| | SNR=10.0 | | | | | | | | |
| HATD | Hatta, Dubai | 73.53 | 290 | *i* P | P | | 10 42 27.5 | +0.8 | |
| | SNR=11 | | | | | | | | |
| HATD | Hatta, Dubai | 73.53 | 290 | P | P | | 10 42 27.7 | +1.0 | |
| ASHO | Ashiyiah | 73.64 | 290 | *i* P | P | | 10 42 27.6 | +0.3 | |
| | SNR=7.1 | | | | | | | | |
| ASHO | Ashiyiah | 73.64 | 290 | P | P | | 10 42 27.9 | +0.6 | |
| ARQ | Araqi | 73.79 | 288 | P | P | | 10 42 28.9 | +0.7 | |
| NAZ | Nazwa, Dubai | 73.85 | 290 | P | P | | 10 42 29.1 | +0.6 | |
| FAQ | Al Faqa, Dubai | 74.01 | 290 | *i* P | P | | 10 42 29.4 | 0.0 | |
| | SNR=8.3 | | | | | | | | |
| FAQ | Al Faqa, Dubai | 74.01 | 290 | P | P | | 10 42 29.7 | +0.4 | |
| NLWA | Neilton Lookou | 74.13 | 45 | P | P | | 10 42 31.2 | +1.5 | |
| NLWA | | | | IAmb | IAmb | | 10 42 32.3 | | |
| | comp=Z,7.9nm,1.1s | | | | | | | | |
| ALNE | Al Ain | 74.15 | 289 | P | P | | 10 42 31.1 | +0.9 | |
| ALNE | Al Ain | 74.15 | 289 | P | P | | 10 42 31.0 | +0.9 | |
| ASUD | Al Ashush, Dub | 74.28 | 290 | P | P | | 10 42 31.5 | +0.6 | |
| ASUD | Al Ashush, Dub | 74.28 | 290 | P | P | | 10 42 31.5 | +0.6 | |
| DQM | DQM | 74.30 | 284 | P | P | | 10 42 31.2 | +0.1 | |
| AJN | Ajban | 74.59 | 290 | P | P | | 10 42 33.3 | +0.7 | |
| UMZA | Um Al Zommool | 75.19 | 288 | P | P | | 10 42 36.2 | +0.2 | |
| F04A | Amboy | 75.64 | 46 | IAmb | IAmb | | 10 42 40.4 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| KBZ | Khabaz | 75.92 | 312 | P | P | | 10 42 40.2 | +0.5 | |
| | comp=Z,18nm,0.8s,baz=54,slow=4.5,SNR=36 | | | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| JRN | Qarnain Island | 76.21 | 291 | P | P | | 10 42 41.7 | +0.1 | |
| H04A | Detroit Lake | 76.33 | 47 | IAmb | IAmb | | 10 42 44.5 | | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| FIA1 | FINESS Array S | 76.33 | 333 | P | P | | 10 42 41.2 | -0.4 | |
| FINES | FINESS Array B | 76.33 | 333 | P | P | | 10 42 41.3 | -0.3 | |
| | comp=Z,16nm,0.3s,baz=62,slow=5.3,SNR=275 | | | | | | | | |
| | comp=Z,16nm,0.3s | | | | | | | | |
| HOOD | Mount Hood Mea | 76.39 | 46 | IAmb | IAmb | | 10 42 45.3 | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| KEF | Keuruu | 76.40 | 334 | *e*P | P | | 10 42 41.8 | -0.2 | |
| MZR | Muzera | 76.48 | 289 | *i* P | P | | 10 42 43.5 | +0.3 | |
| | SNR=11 | | | | | | | | |
| MZR | Muzera | 76.48 | 289 | P | P | | 10 42 43.5 | +0.3 | |
| | SNR=11 | | | | | | | | |
| I04A | Tendick Farm, | 76.56 | 48 | IAmb | IAmb | | 10 42 45.2 | | |
| | comp=Z,7.9nm,0.8s | | | | | | | | |
| VAF | Ylistaro | 76.73 | 335 | *e*P | P | | 10 42 44.4 | +0.7 | |
| SHMA | Al-Shehemyia | 77.38 | 293 | P | P | | 10 42 48.1 | +0.1 | |
| PINE | Pine Mountain | 77.52 | 47 | IAmb | IAmb | | 10 42 51.3 | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| SLWR | Sila | 77.53 | 291 | P | P | | 10 42 49.2 | +0.3 | |
| J05D | Fort Rock, OR | 77.56 | 48 | IAmb | IAmb | | 10 42 51.3 | | |
| | comp=Z,8.6nm,0.9s | | | | | | | | |
| TRNA | Turayna | 77.64 | 291 | P | P | | 10 42 49.3 | -0.2 | |
| SAKB | Bahrain | 77.67 | 293 | P | P | | 10 42 50.0 | +0.4 | |
| MEF | Metsahovi | 77.70 | 332 | *e*P | P | | 10 42 49.0 | -0.1 | |
| SMRA | Abu-Samra | 77.96 | 292 | P | P | | 10 42 51.2 | 0.0 | |
| RAF | Rauma | 78.28 | 334 | *e*P | P | | 10 42 51.9 | -0.3 | |
| WHFO | Wadi Hawf | 78.38 | 284 | P | P | | 10 42 53.3 | -0.4 | |
| KBD | Kabd | 78.60 | 297 | P | P | | 10 42 54.9 | +0.3 | |
| LRDM | Redding Peak | 78.67 | 50 | IAmb | IAmb | | 10 42 59.5 | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| GURO | Guroymak-BITLI | 78.75 | 308 | IAmb | IAmb | | 10 42 57.4 | | |
| | comp=Z,8.1nm,0.7s | | | | | | | | |
| MTSE | Matsula | 78.82 | 331 | *e*P | P | | 10 42 55.6 | +0.5 | |
| ABTO | Aybut | 79.03 | 284 | P | P | | 10 42 57.1 | 0.0 | |
| MPK | Martis Peak | 80.18 | 51 | IAmb | IAmb | | 10 43 05.0 | | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| PNTR | Pine Nut | 80.57 | 51 | P | P | | 10 43 06.5 | +1.4 | |
| UPP | Uppsala | 80.61 | 334 | *e*P | P | | 10 43 03.5 | -1.0 | |
| AK03 | Malin Array Si | 80.73 | 323 | P | P | | 10 43 04.6 | -0.8 | |
| AKASG | Malin Array Be | 80.74 | 323 | P | P | | 10 43 05.5 | +0.1 | |
| AKASG | | | | IAmb | IAmb | | 10 43 06.3 | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| AKASG | Malin Array Be | 80.74 | 323 | P | P | | 10 43 04.7 | -0.8 | |
| | comp=Z,2.7nm,0.3s,baz=53,slow=5.4,SNR=28 | | | | | | | | |
| | comp=Z,2.7nm,0.3s | | | | | | | | |
| AKBB | Malin Array Si | 80.74 | 323 | IAmb | IAmb | | 10 43 06.0 | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| AKBB | Malin Array Si | 80.74 | 323 | P | P | | 10 43 04.7 | -0.7 | |
| AK01 | Malin Array Si | 80.75 | 323 | P | P | | 10 43 04.3 | -1.2 | |
| KIEV | Kiev | 80.75 | 323 | P | P | | 10 43 05.2 | -0.3 | |
| KIEV | | | | IAmb | IAmb | | 10 43 06.1 | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| KIEV | Kiev | 80.75 | 323 | *i* P | P | | 10 43 05.1 | -0.3 | |
| | SNR=10 | | | | | | | | |
| KIEV | Kiev | 80.75 | 323 | P | P | | 10 43 03.8 | -1.7 | |
| | comp=Z,77nm,1.2s | | | | | | | | |
| OVMT | Ovando | 80.86 | 41 | P | P | | 10 43 06.4 | 0.0 | |
| AK13 | Malin Array Si | 80.88 | 323 | P | P | | 10 43 05.9 | -0.2 | |
| MFID | Camas Ranch | 80.98 | 46 | IAmb | IAmb | | 10 43 09.1 | | |
| | comp=Z,6.5nm,0.8s | | | | | | | | |
| MI30 | MI30,Zelenitsa | 81.27 | 323 | P | P | | 10 43 06.8 | -1.4 | |
| MI28 | MI28,Pidlybu | 81.44 | 324 | P | P | | 10 43 08.4 | -0.6 | |
| MI29 | MI29, Kamyanyy | 81.63 | 323 | P | P | | 10 43 09.0 | -1.0 | |
| LHV | Little Huntoon | 81.72 | 51 | IAmb | IAmb | | 10 43 13.3 | | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| NVAR | Mina Array Bea | 81.78 | 51 | P | P | | 10 43 12.5 | +1.1 | |
| NVAR | Mina Array Bea | 81.78 | 51 | P | P | | 10 43 11.9 | +0.6 | |
| | comp=Z,2.2nm,0.5s,baz=296,slow=5.9,SNR=38 | | | | | | | | |
| NVAR | | | | pP | pP | | 10 45 01.1 | +1.2 | |
| | comp=Z,0.9nm,0.8s,baz=286,slow=6.4,SNR=3.3 | | | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | | | |
| HFS | Hagfors | 81.89 | 336 | P | P | | 10 43 10.1 | -1.1 | |
| | comp=Z,5.6nm,0.4s,baz=84,slow=4.5,SNR=48 | | | | | | | | |
| | comp=Z,5.6nm,0.4s | | | | | | | | |
| SUW | Suwalki | 81.89 | 328 | *e*P | P | | 10 43 11.2 | -0.1 | |
| NC303 | NORSAR Array S | 81.94 | 337 | IAmb | IAmb | | 10 43 11.9 | | |
| | comp=Z,18nm,0.9s | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KHC | Kasperske Hory | 89.61 | 328 | *e*P | P | 10 43 47.5 | -1.2 |
| GEC2 | GERESS Array S | 89.75 | 328 | IAmb | IAmb | 10 43 50.3 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| GERES | GERESS Array B | 89.75 | 328 | P | P | 10 43 49.3 | -0.2 |
| GERES | GERESS Array B | 89.75 | 328 | P | P | 10 43 48.8 | -0.7 |
| | comp=Z,1.2nm,0.5s,baz=32,slow=5.8,SNR=4.4 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| ARSA | Arzberg | 89.97 | 326 | *i* P | P | 10 43 50.4 | +0.1 |
| | comp=Z,5.4nm,1.1s | | | | | | |
| MOA | Molln | 90.18 | 327 | *i* P | P | 10 43 51.4 | +0.1 |
| | comp=Z,3.7nm,0.9s | | | | | | |
| BIOA | Bad Ischl, Aus | 90.59 | 327 | *i* P | P | 10 43 53.2 | -0.1 |
| | comp=Z,6.5nm,1.1s | | | | | | |
| SOKA | Soboth | 90.61 | 326 | *i* P | P | 10 43 52.9 | -0.5 |
| | comp=Z,11nm,1.2s | | | | | | |
| OBKA | Obir | 90.96 | 326 | *i* P | P | 10 43 53.8 | -1.3 |
| | comp=Z,12nm,1.9s | | | | | | |
| KBA | Koelnbreinsper | 91.16 | 327 | *i* P | P | 10 43 55.0 | -1.1 |
| | comp=Z,3.3nm,0.7s | | | | | | |
| LESA | Schwarzleotal | 91.24 | 327 | *i* P | P | 10 43 55.8 | -0.5 |
| | comp=Z,6.8nm,0.9s | | | | | | |
| EKA | Eskdalemuir Ar | 91.30 | 340 | P | P | 10 43 56.2 | -0.1 |
| | comp=Z,1.1nm,0.6s,baz=45,slow=4.9,SNR=3.7 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| MYKA | Terra Mystica | 91.33 | 326 | *i* P | P | 10 43 55.8 | -0.9 |
| | comp=Z,2.5nm,0.5s | | | | | | |
| ABTA | Abfaltersbach | 91.80 | 327 | *i* P | P | 10 43 57.6 | -1.4 |
| | comp=Z,5.0nm,0.8s | | | | | | |
| WATA | Walderalm | 91.83 | 328 | *i* P | P | 10 43 58.4 | -0.8 |
| | comp=Z,4.8nm,1.0s | | | | | | |
| WTTA | Wattenberg | 91.85 | 328 | *i* P | P | 10 43 58.6 | -0.7 |
| | comp=Z,10nm,1.4s | | | | | | |
| RETA | Reutte | 92.10 | 328 | *i* P | P | 10 43 59.8 | -0.5 |
| | comp=Z,6.6nm,1.2s | | | | | | |
| FUORN | Ofenpass-Fuorn | 92.97 | 328 | P | P | 10 44 04.5 | 0.0 |
| FUORN | | | | IAmb | IAmb | 10 44 05.1 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| TXAR | Lajitas Array | 96.90 | 52 | P | P | 10 44 23.5 | +1.0 |
| | comp=Z,0.7nm,0.6s,baz=298,slow=1.9,SNR=12 | | | | | | |
| TXAR | | | | pP | pP | 10 46 14.3 | +0.6 |
| | comp=Z,0.8nm,0.9s,baz=268,slow=3.6,SNR=4.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| P52A | Corning | 102.39 | 32 | P | Pdif | 10 44 46.9 | +0.4 |
| | baz=323 | | | | | | |
| QSPA | South Pole Qui | 117.58 | 180 | PKP | PKPdf | 10 49 32.1 | -0.7 |
| | comp=Z,2.3nm,0.5s,baz=295,slow=3.6,SNR=39 | | | | | | |
| QSPA | | | | SKP | SKPdf | 10 52 18.8 | -1.4 |
| | comp=Z,2.3nm,0.6s,baz=286,slow=1.6,SNR=12 | | | | | | |
| TORD | Torodi Ar. Bea | 122.46 | 309 | | PKPdf | 10 49 43.6 | -0.1 |
| TORD | Torodi Ar. Bea | 122.46 | 309 | PKP | PKPdf | 10 49 43.0 | -0.7 |
| | comp=Z,2.4nm,0.7s,baz=31,slow=1.5,SNR=11 | | | | | | |
| TORD | | | | PP | PP | 10 51 25.9 | -1.7 |
| | comp=Z,1.3nm,0.8s,baz=33,slow=7.8,SNR=5.9 | | | | | | |
| BOSA | Boshof | 122.94 | 252 | PKP | PKPdf | 10 49 44.1 | -0.2 |
| | comp=Z,2.7nm,0.9s,baz=135,slow=1.4,SNR=5.0 | | | | | | |
| BELA | Belgrano 2 | 129.79 | 182 | | PKPdf | 10 49 56.2 | +0.4 |
| TROLL | Troll, Antarti | 130.02 | 196 | ⇑PKPdf | PKPdf | 10 49 56.8 | +0.3 |
| | comp=Z,246nm,0.7s | | | | | | |
| SNAA | Sanae | 131.51 | 195 | ⇑PKPdf | PKPdf | 10 49 58.9 | -0.4 |
| | comp=Z,41nm,0.7s | | | | | | |
| SNAA | Sanae | 131.51 | 195 | PKP | PKPdf | 10 49 58.5 | -0.8 |
| | comp=Z,2.2nm,0.9s,baz=220,slow=1.6,SNR=8.2 | | | | | | |
| SNAA | | | | PP | PP | 10 52 25.4 | -0.7 |
| | comp=Z,1.6nm,1.0s,baz=142,slow=4.5,SNR=4.9 | | | | | | |
| SNAA | | | | SKPbc | SKPbc | 10 52 36.6 | -0.9 |
| | comp=Z,5.0nm,0.6s,baz=190,slow=4.7,SNR=25 | | | | | | |
| DBIC | Dimbokro | 131.57 | 310 | SKPbc | SKPbc | 10 52 39.1 | -0.2 |
| | comp=Z,8.0nm,0.5s,baz=38,slow=4.5,SNR=18 | | | | | | |
| VNA2 | Neumayer--Watz | 133.07 | 194 | ⇑PKPdf | PKPdf | 10 50 02.8 | +0.6 |
| | comp=Z,9.4nm,0.6s,baz=133,slow=1.7 | | | | | | |
| VNA3 | Neumayer Olymp | 133.30 | 193 | ⇑PKPdf | PKPdf | 10 50 02.7 | +0.1 |
| | comp=Z,5.4nm,0.6s | | | | | | |
| CZSB | Cruzeiro do Su | 143.41 | 63 | | PKPbc | 10 50 21.0 | -0.1 |
| ETMB | Extrema | 149.73 | 59 | | PKPbc | 10 50 38.0 | -0.6 |
| ETMB | | | | PKPab | PKPab | 10 50 45.0 | -0.8 |
| SAML | Samuel | 151.38 | 53 | | PKiKP | 10 50 43.1 | +0.4 |
| LPAZ | La Paz | 151.82 | 72 | PKPbc | PKPbc | 10 50 44.1 | +0.1 |
| | comp=Z,2.3nm,0.7s,baz=282,slow=3.1,SNR=9.1 | | | | | | |
| LPAZ | | | | PKPab | PKPab | 10 50 55.7 | +0.3 |
| | comp=Z,1.7nm,0.8s,baz=0.0,slow=4.0,SNR=5.7 | | | | | | |
| PLCA | Paso Flores | 152.00 | 125 | PKPbc | PKiKP | 10 50 43.5 | +0.2 |
| | comp=Z,2.5nm,0.5s,baz=246,slow=3.6,SNR=11 | | | | | | |
| PLCA | | | | PKPab | PKPab | 10 50 55.3 | +0.3 |
| | comp=Z,2.0nm,0.6s,baz=280,slow=2.2,SNR=4.8 | | | | | | |
| BDFB | Brasilia | 165.92 | 32 | | PKPdf | 10 50 51.8 | -0.9 |

**NEIC 25 10:42:10.7±1.6, 39.73N±0.02×108.43W±0.03, h3km±5km, ML3.4/96, Error ellipse: s-maj=3.8km s-min=2.3km az=213.0, Colorado**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| O20A | White River Ci | 0.43 | 19 | | Pg | 10 42 19.4 | +0.4 |
| O20A | | | | Sg | Sg | 10 42 25.4 | +0.7 |
| RDMU | Red Mountain | 1.21 | 314 | | Pg | 10 42 33.3 | -0.7 |
| RDMU | | | | Sg | Sg | 10 42 48.3 | -1.4 |
| RDMU | | | | IAML | | 10 42 49.9 | |
| | comp=N,578nm,0.1s | | | | | | |
| RDMU | | | | IAML | | 10 42 50.2 | |
| | comp=E,557nm,0.2s | | | | | | |
| PV21 | Cone Mtn., Par | 1.24 | 200 | Pg | Pg | 10 42 34.5 | +0.1 |
| PV21 | | | | IAML | | 10 42 56.4 | |
| | comp=E,627nm,0.3s | | | | | | |
| PV21 | | | | IAML | | 10 42 56.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| SMCO | Snowmass | 1.25 | 116 | | Pg | 10 42 34.1 | -0.6 |
| SMCO | | | | Sg | Sg | 10 42 49.7 | -1.2 |
| SMCO | | | | IAML | | 10 42 51.2 | |
| | comp=N,891nm,0.3s | | | | | | |
| SMCO | | | | IAML | | 10 42 52.2 | |
| | comp=N,390nm,0.3s | | | | | | |
| PV15 | Paradox Valley | 1.39 | 182 | Pg | Pn | 10 42 36.9 | -0.2 |
| PV15 | | | | IAML | | 10 42 56.4 | |
| | comp=E,620nm,0.3s | | | | | | |
| PV15 | | | | IAML | | 10 42 58.0 | |
| | comp=N,592nm,0.5s | | | | | | |
| P18A | Preston Nutter | 1.41 | 266 | | Pn | 10 42 37.3 | -0.2 |
| SRU | San Rafael Swe | 1.74 | 250 | Pg | Pb | 10 42 42.7 | -0.6 |
| SRU | | | | IAML | | 10 43 06.3 | |
| | comp=N,561nm,0.4s | | | | | | |
| SRU | | | | IAML | | 10 43 09.3 | |
| | comp=E,671nm,0.2s | | | | | | |
| P17A | Butcher Ranch, | 1.81 | 263 | | Pb | 10 42 44.2 | -0.3 |
| RWWY | Rawlins | 2.17 | 25 | Pn | Pb | 10 42 49.5 | -1.1 |
| RWWY | | | | IAML | | 10 43 18.3 | |
| | comp=E,453nm,0.6s | | | | | | |
| RWWY | | | | IAML | | 10 43 22.0 | |
| | comp=E,481nm,0.3s | | | | | | |
| TMUT | Trail Mountain | 2.19 | 260 | Pn | Pb | 10 42 50.8 | -0.4 |
| N23A | Red Feather La | 2.23 | 58 | | Pb | 10 42 50.9 | -0.8 |
| N23A | | | | IAML | | 10 43 21.8 | |
| | comp=N,214nm,0.4s | | | | | | |
| N23A | | | | IAML | | 10 43 29.5 | |
| | comp=E,265nm,0.6s | | | | | | |
| Q16A | Castle Valley | 2.28 | 250 | | Pb | 10 42 51.3 | -1.3 |
| S22A | 4UR Ranch, Cre | 2.34 | 147 | | Pn | 10 42 50.3 | 0.0 |
| S22A | | | | IAML | | 10 43 26.1 | |
| | comp=E,256nm,0.1s | | | | | | |
| S22A | | | | IAML | | 10 43 26.4 | |
| | comp=N,301nm,0.1s | | | | | | |
| JLU | Jordanelle | 2.48 | 292 | | Pn | 10 42 53.9 | +1.8 |
| JLU | | | | IAML | | 10 43 29.6 | |
| | comp=N,145nm,0.4s | | | | | | |
| JLU | | | | IAML | | 10 43 32.0 | |
| | comp=E,145nm,0.5s | | | | | | |
| MPU | Maple Canyon | 2.48 | 278 | | Pn | 10 42 52.5 | +0.3 |
| MPU | | | | IAML | | 10 43 32.3 | |
| | comp=N,102nm,0.4s | | | | | | |
| MVCO | Mesa Verde | 2.52 | 181 | | Pn | 10 42 53.0 | +0.3 |
| MVCO | | | | IAML | | 10 43 30.7 | |
| | comp=N,179nm,0.4s | | | | | | |
| MVCO | | | | IAML | | 10 43 34.0 | |
| | comp=N,183nm,0.3s | | | | | | |
| HMU | Henry Mountain | 2.54 | 226 | | Pn | 10 42 54.6 | +1.5 |
| Q24A | Divide | 2.65 | 106 | | Pn | 10 42 54.6 | 0.0 |
| TCUT | Toone Canyon | 2.67 | 302 | | Pn | 10 42 56.2 | +1.5 |
| CTU | Camp Tracy | 2.72 | 292 | | Pn | 10 42 56.6 | +1.1 |
| PHWY | Pilot Hill | 2.75 | 54 | | Pb | 10 42 58.4 | -2.3 |
| NLU | North Lily Min | 2.82 | 276 | | Pn | 10 42 57.3 | +0.5 |
| SDCO | Great Sand Dun | 3.02 | 130 | | Pn | 10 42 59.9 | +0.2 |
| HWUT | Hardware Ranch | 3.04 | 309 | | Pn | 10 42 58.9 | +0.1 |
| HWUT | | | | IAML | | 10 43 50.8 | |
| | comp=N,96nm,0.7s | | | | | | |
| HWUT | | | | IAML | | 10 43 54.3 | |
| | comp=N,115nm,0.9s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PD31 | Pinedale Array | 3.15 | 345 | | Pn | 10 43 01.9 | +0.5 |
| PDAR | Pinedale Array | 3.15 | 345 | | Pn | 10 43 01.3 | -0.1 |
| MSU | Marysvale | 3.16 | 249 | | Pn | 10 43 02.9 | +1.4 |
| K22A | Casper | 3.25 | 26 | Pn | Pn | 10 43 03.6 | +0.8 |
| DUG | Dugway, Tooele | 3.40 | 279 | | Pn | 10 43 06.4 | +1.7 |
| SPUT | South Promonto | 3.45 | 299 | Pn | Pn | 10 43 06.0 | +0.6 |
| SPUT | | | | IAML | | 10 43 57.6 | |
| | comp=N,82nm,0.8s | | | | | | |
| SPUT | | | | IAML | | 10 43 57.8 | |
| | comp=E,47nm,0.7s | | | | | | |
| AHID | Auburn Hatcher | 3.64 | 327 | | Pn | 10 43 08.4 | +0.3 |
| BGU | Big Grassy Mou | 3.72 | 290 | | Pn | 10 43 08.7 | -0.4 |
| HVU | Hansel Valley | 3.89 | 303 | | Pn | 10 43 11.5 | +0.1 |
| HVU | | | | IAML | | 10 44 17.1 | |
| | comp=N,49nm,0.3s | | | | | | |
| HVU | | | | IAML | | 10 44 19.2 | |
| | comp=E,43nm,0.4s | | | | | | |
| REDW | Red Top Meadow | 4.06 | 334 | | Pn | 10 43 14.8 | +0.9 |
| T25A | Trinidad | 4.08 | 128 | | Pn | 10 43 17.2 | +3.0 |
| T25A | | | | IAML | | 10 44 21.5 | |
| | comp=E,36nm,0.6s | | | | | | |
| T25A | | | | IAML | | 10 44 21.6 | |
| | comp=N,28nm,0.7s | | | | | | |
| SNOW | Snow King Moun | 4.12 | 336 | | Pn | 10 43 17.0 | +2.3 |
| TPAW | Teton Pass | 4.21 | 334 | | Pn | 10 43 15.8 | -0.1 |
| TPAW | | | | IAML | | 10 44 26.3 | |
| | comp=N,65nm,0.4s | | | | | | |
| FXWY | Fox Creek | 4.36 | 334 | | Pn | 10 43 18.2 | +0.2 |
| FXWY | | | | IAML | | 10 44 33.7 | |
| | comp=N,37nm,0.6s | | | | | | |
| CCUT | Cedar City | 4.43 | 242 | Pn | Pn | 10 43 18.8 | -0.3 |
| U15A | North Rim | 4.49 | 224 | | Pn | 10 43 22.8 | +2.9 |
| IMW | Indian Meadow | 4.57 | 337 | | Pn | 10 43 21.3 | +0.4 |
| FLWY | Flagg Ranch | 4.67 | 339 | | Pn | 10 43 23.4 | +1.2 |
| FLWY | | | | IAML | | 10 44 45.5 | |
| | comp=N,61nm,1.1s | | | | | | |
| FLWY | | | | IAML | | 10 44 48.2 | |
| | comp=N,43nm,0.8s | | | | | | |
| YPP | Pitchstone Pla | 4.87 | 339 | Pn | Pn | 10 43 23.6 | -1.5 |
| YPP | | | | IAML | | 10 44 47.3 | |
| | comp=E,32nm,0.5s | | | | | | |
| YPP | | | | IAML | | 10 44 47.5 | |
| | comp=N,22nm,0.5s | | | | | | |
| H17A | Grant Village | 4.93 | 342 | Pn | Pn | 10 43 24.8 | -1.1 |
| H17A | | | | IAML | | 10 44 45.5 | |
| | comp=N,31nm,0.3s | | | | | | |
| H17A | | | | IAML | | 10 44 49.5 | |
| | comp=E,22nm,0.6s | | | | | | |

*IDC **25** 10:54:24.2±1.7, 10°.21S×165°.67E, h0km, mb3.8/4, mbtmp3.9/5, ML4.6/1, Error ellipse: s-maj=52.6km s-min=29.5km az=124.0*
**ISC 25 10:54:26.0±1.3, 10°.2S±0°.1×165°.7E±0°.2, h10km, n10, σ1s06/10, mb3.8/4, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LIFNC | LIFOU | 10.66 | 172 | P | Pn | 10 56 57.7 | -1.1 |
| DZM | Mont Dzumac | 11.86 | 176 | P | Pn | 10 57 16.1 | +0.7 |
| DZM | Mont Dzumac | 11.86 | 176 | Pn | Pn | 10 57 15.8 | +0.4 |
| | 4.2nm,0.3s,baz=324,slow=19,SNR=124 | | | | | | |
| DZM | | | | Sn | Sn | 10 59 15.8 | -12 |
| | 0.1nm,0.3s,baz=40,slow=19,SNR=1.4 | | | | | | |
| | 9.2nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 11.88 | 177 | P | Pn | 10 57 17.2 | +1.6 |
| YATNC | Mamie plateau, | 11.89 | 174 | P | Pn | 10 57 14.8 | -0.8 |
| PINNC | Pines Island, | 12.50 | 172 | P | Pn | 10 57 24.8 | +0.9 |
| WRA | Warramunga Arr | 31.71 | 248 | P | P | 11 00 50.6 | +0.3 |
| | 0.6nm,0.8s,baz=83,slow=8.8,SNR=9.1 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| ASAR | Alice Springs | 33.12 | 242 | P | P | 11 01 01.3 | -1.3 |
| | 1.0nm,0.6s,baz=70,slow=9.7,SNR=20 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| ILAR | Eielson Array | 82.71 | 19 | P | P | 11 06 49.5 | -0.1 |
| | 0.3nm,0.7s,baz=224,slow=5.0,SNR=5.8 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 92.82 | 317 | P | P | 11 07 39.4 | +0.4 |
| | 0.5nm,0.7s,baz=101,slow=7.5,SNR=2.8 | | | | | | |
| | 0.5nm,0.7s | | | | | | |

*SKHL **25** 11:18:58.2±0.8, 44°.10N×149°.80E, h50km±5km, mb4.2/3*
*MOS **25** 11:19:00.0±1.4, 44°.24N×149°.65E, h47km, mb4.4/2, Error ellipse: s-maj=18.1km s-min=13.8km az=37.9*
*IDC **25** 11:19:05.4±5.6, 44°.22N×149°.52E, h75km±48km, mb3.4/10, mbtmp3.7/11, ML2.9/1, Error ellipse: s-maj=34.2km s-min=23.9km az=73.0*
**ISC 25 11:18:57.7±4.0, 44°.3N±0°.1×149°.59E±0°.09, h12km±22km, n31, σ0s89/30, mb3.9/12, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUR | Kuril'sk | 1.57 | 309 | *e*P | Pb | 11 19 26.8 | +0.2 |
| KUR | | | | AMB | AMB | 11 19 27.4 | |
| | 70nm,0.6s | | | | | | |
| KUR | | | | *e*S | Sg | 11 19 47.7 | -0.5 |
| KUR | | | | A | A | 11 19 52.7 | |
| | 260nm,0.5s | | | | | | |
| KUR | | | | A | A | 11 19 52.7 | |
| | 210nm,0.5s | | | | | | |
| KUR | Kuril'sk | 1.57 | 309 | *e*PN | Pb | 11 19 26.8 | +0.2 |
| KUR | | | | *e*S | Sg | 11 19 48.0 | -0.2 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,260nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,92nm,0.3s | | | | | | |
| SHO | Shikotan | 2.02 | 260 | *e*P | Pn | 11 19 32.3 | +0.8 |
| SHO | | | | AMB | AMB | 11 19 35.6 | |
| | comp=E,20nm,0.2s | | | | | | |
| SHO | | | | *e*S | Sn | 11 19 55.6 | -1.1 |
| SHO | | | | A | A | 11 19 57.4 | |
| | comp=E,200nm,0.6s | | | | | | |
| SHO | | | | A | A | 11 19 57.4 | |
| | comp=E,160nm,0.6s | | | | | | |
| SHO | Shikotan | 2.02 | 260 | *e*PN | Pn | 11 19 32.3 | +0.8 |
| SHO | | | | *e*S | Sn | 11 19 54.7 | -2.0 |
| SHO | | | | pmax | pmax | | |
| | comp=Z,13nm,0.1s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,166nm,0.5s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,114nm,0.4s | | | | | | |
| YUK | Yuzh-Kuril'sk | 2.69 | 267 | *e*P | Pn | 11 19 40.9 | +0.2 |
| YUK | | | | AMB | AMB | 11 19 41.9 | |
| | comp=E,80nm,0.4s | | | | | | |
| YUK | | | | *e*S | Sn | 11 20 13.5 | +0.3 |
| YUK | | | | A | A | 11 20 17.0 | |
| | comp=E,150nm,0.6s | | | | | | |
| YUK | | | | A | A | 11 20 17.0 | |
| | comp=E,260nm,0.6s | | | | | | |
| YUK | Yuzh-Kuril'sk | 2.69 | 267 | PN | Pn | 11 19 41.3 | +0.6 |
| YUK | | | | *e*S | Sn | 11 20 13.9 | +0.7 |
| YUK | | | | smax | smax | | |
| | comp=E,81nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,63nm,0.1s | | | | | | |
| ASAJ | Asahikawa | 5.03 | 271 | P | Pn | 11 20 18.1 | +5.3 |
| | comp=N,0.4nm,0.3s,baz=254,slow=20,SNR=1.1 | | | | | | |
| | comp=N,5.8nm,0.8s | | | | | | |
| BILL | Bilibino | 25.41 | 15 | *e*P | P | 11 24 23.7 | -0.9 |
| BILL | Bilibino | 25.41 | 15 | *e*P | P | 11 24 23.7 | -0.9 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.40 | 144 | T | T | 11 55 59.3 | |
| | baz=334,slow=75,SNR=11 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.41 | 144 | T | T | 11 56 00.5 | |
| | baz=334,slow=75,SNR=8.7 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.41 | 144 | T | T | 11 56 00.6 | |
| | baz=334,slow=75,SNR=12 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.41 | 145 | T | T | 11 57 13.0 | |
| | baz=334,slow=76,SNR=13 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.41 | 145 | T | T | 11 57 13.0 | |
| | baz=334,slow=76,SNR=10 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.43 | 145 | T | T | 11 57 16.7 | |
| | baz=334,slow=76,SNR=10 | | | | | | |
| SONM | Songino Array | 29.90 | 292 | P | P | 11 25 05.7 | +0.5 |
| | comp=Z,0.9nm,0.8s,baz=83,slow=12,SNR=2.7 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 45.91 | 298 | P | P | 11 27 20.2 | +0.3 |
| | comp=Z,1.1nm,0.7s,baz=74,slow=7.4,SNR=7.6 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| KURK | Kurchatov | 46.70 | 304 | *e*P | P | 11 27 25.3 | -0.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KURK | Kurchatov | 46.70 | 304 | P | P | 11 27 25.3 | -0.8 |
| KURBB | Kurchatov Arra | 46.79 | 304 | P | P | 11 27 25.3 | -1.5 |
| | comp=Z,0.2nm,0.4s,baz=56,slow=12,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| FINES | FINESS Array B | 65.22 | 334 | P | P | 11 29 37.2 | -1.2 |
| | comp=Z,2.7nm,0.9s,baz=356,slow=2.5,SNR=5.0 | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 65.39 | 196 | P | P | 11 29 38.5 | -1.4 |
| | comp=Z,0.2nm,1.0s,baz=11,slow=6.6,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,1.0s | | | | | | |
| OBN | Obninsk | 65.94 | 325 | *e*P | P | 11 29 43.4 | +0.2 |
| OBN | Obninsk | 65.94 | 325 | *e*P | P | 11 29 43.4 | +0.2 |
| OBN | | | | *e* | | 11 30 14.2 | |
| OBN | | | | *e* | | 11 32 07.6 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| ASAR | Alice Springs | 69.09 | 195 | P | P | 11 30 03.9 | +0.5 |
| | comp=Z,0.1nm,0.6s,baz=10,slow=5.7,SNR=1.8 | | | | | | |
| | comp=Z,0.1nm,0.6s | | | | | | |
| NB2 | NORSAR Subarra | 69.76 | 340 | P | P | 11 30 07.7 | +0.5 |
| | comp=Z,1.3nm,0.7s,baz=26,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 69.76 | 340 | P | P | 11 30 07.7 | +0.5 |
| | comp=Z,0.9nm,0.8s,baz=46,slow=4.9,SNR=4.0 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| HFS | Hagfors | 69.89 | 338 | P | P | 11 30 08.1 | +0.1 |
| | comp=Z,2.6nm,0.9s,baz=72,slow=9.8,SNR=4.2 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| KBZ | Khabaz | 70.77 | 313 | P | P | 11 30 15.3 | +1.7 |
| | comp=Z,1.7nm,0.8s,baz=49,slow=5.6,SNR=3.5 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 80.90 | 58 | P | P | 11 31 12.0 | +0.1 |
| | comp=Z,0.4nm,0.5s,baz=304,slow=4.6,SNR=9.0 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| TXAR | Lajitas Array | 80.90 | 58 | P | P | 11 31 12.0 | +0.1 |

*IDC **25** 11:24:42.9±1.1, 14°.22S×65°.87E, h0km, mb3.8/8, mbtmp3.8/8, MS3.5/16, Error ellipse: s-maj=43.0km s-min=24.8km az=34.0*
**ISC 25 11:24:46.3±1.0, 14°.1S±0°.2×66°.1E±0°.2, h15km, n33, σ1s81/11, mb4.0/9, MS3.5/16, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 8.94 | 45 | T | T | 11 35 52.7 | |
| | baz=226,slow=75,SNR=97 | | | | | | |
| H08S2 | Diego Garcia H | 8.95 | 45 | T | T | 11 35 55.7 | |
| | baz=226,slow=75,SNR=252 | | | | | | |
| H08S3 | Diego Garcia H | 8.96 | 45 | T | T | 11 35 53.2 | |
| | baz=226,slow=75,SNR=1326 | | | | | | |
| OPO | Ambohidratompo | 18.68 | 254 | P | Pn | 11 29 06.5 | +1.8 |
| | 3.1nm,0.3s,baz=80,slow=17,SNR=9.6 | | | | | | |
| PALK | Pallekele | 25.68 | 35 | LR | LR | 11 38 38.2 | |
| | comp=Z,58nm,18.4s,baz=306,slow=32 | | | | | | |
| KMBO | Kilima Mbogo | 31.27 | 292 | LR | LR | 11 40 41.7 | |
| | comp=Z,22nm,21.3s,baz=94,slow=31 | | | | | | |
| H04N2 | CROZET ISLANDS | 34.20 | 198 | T | T | 12 07 59.8 | |
| | baz=25,slow=75,SNR=64 | | | | | | |
| H04N1 | CROZET ISLANDS | 34.20 | 198 | T | T | 12 08 01.6 | |
| | baz=25,slow=75,SNR=58 | | | | | | |
| H04N3 | CROZET ISLANDS | 34.21 | 198 | T | T | 12 07 59.9 | |
| | baz=25,slow=75,SNR=57 | | | | | | |
| FURI | Furi | 35.49 | 308 | LR | LR | 11 44 00.4 | |
| | comp=Z,104nm,21.2s,baz=171,slow=33 | | | | | | |
| LBTB | Lobatse | 39.55 | 248 | LR | LR | 11 47 18.5 | |
| | comp=Z,105nm,18.0s,baz=96,slow=34 | | | | | | |
| H01W3 | Cape Leeuwin H | 47.88 | 124 | T | T | 12 24 54.7 | |
| | baz=284,slow=75,SNR=43 | | | | | | |
| H01W2 | Cape Leeuwin H | 47.88 | 124 | T | T | 12 24 55.7 | |
| | baz=284,slow=75,SNR=84 | | | | | | |
| H01W1 | Cape Leeuwin H | 47.90 | 124 | T | T | 12 24 54.5 | |
| | baz=284,slow=75,SNR=65 | | | | | | |
| NWAO | Narrogin (SRO) | 50.02 | 121 | LR | LR | 11 52 11.0 | |
| | comp=Z,43nm,18.0s,baz=208,slow=33 | | | | | | |
| MAW | Mawson | 53.55 | 182 | LR | LR | 11 53 41.1 | |
| | comp=Z,45nm,18.3s,baz=342,slow=33 | | | | | | |
| KAPI | Kappang | 53.58 | 86 | LR | LR | 11 53 42.1 | |
| | comp=Z,46nm,20.9s,baz=268,slow=32 | | | | | | |
| AAK | Ala-Archa | 56.94 | 7 | LR | LR | 11 57 04.4 | |
| | comp=Z,32nm,19.6s,baz=207,slow=34 | | | | | | |
| MKAR | Makanchi Array | 62.29 | 13 | P | P | 11 35 07.6 | -0.2 |
| | 0.3nm,0.7s,baz=210,slow=7.8,SNR=2.0 | | | | | | |
| MKAR | | | | LR | LR | 11 59 00.5 | |
| | comp=Z,54nm,19.5s,baz=102,slow=33 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| DAV | Davao City (W) | 62.65 | 74 | LR | LR | 11 59 38.2 | |
| | comp=Z,50nm,21.7s,baz=314,slow=33 | | | | | | |
| ASAR | Alice Springs | 64.39 | 110 | P | P | 11 35 22.4 | +0.1 |
| | 0.6nm,0.8s,baz=271,slow=6.0,SNR=7.7 | | | | | | |
| ASAR | | | | LR | LR | 12 01 00.8 | |
| | comp=Z,68nm,18.6s,baz=252,slow=34 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 65.16 | 106 | P | P | 11 35 27.6 | +0.2 |
| | 1.3nm,1.0s,baz=271,slow=5.8,SNR=8.8 | | | | | | |
| | 1.3nm,1.0s | | | | | | |
| KURBB | Kurchatov Arra | 65.32 | 9 | P | P | 11 35 29.6 | +2.0 |
| | 0.5nm,0.6s,baz=214,slow=6.5,SNR=2.1 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| BVAR | Borovoye Array | 66.91 | 3 | P | P | 11 35 41.1 | +3.3 |
| | 0.7nm,0.6s,baz=157,slow=8.0,SNR=4.4 | | | | | | |
| TORD | Torodi Ar. Bea | 69.26 | 290 | P | P | 11 35 52.3 | -1.1 |
| | 1.5nm,1.0s,baz=52,slow=3.5,SNR=4.7 | | | | | | |
| TORD | | | | LR | LR | 12 05 07.6 | |
| | comp=Z,26nm,18.0s,baz=134,slow=35 | | | | | | |
| | 1.5nm,1.0s | | | | | | |
| ZALV | Zalesovo Beam | 69.60 | 12 | P | P | 11 35 55.4 | +0.7 |
| | 0.5nm,0.5s,baz=190,slow=7.3,SNR=2.3 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| SONM | Songino Array | 71.32 | 27 | P | P | 11 36 05.3 | -0.2 |
| | 0.8nm,0.6s,baz=233,slow=7.0,SNR=4.1 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| DBIC | Dimbokro | 73.33 | 281 | LR | LR | 12 06 51.0 | |
| | comp=Z,27nm,18.7s,baz=52,slow=35 | | | | | | |
| QSPA | South Pole Qui | 76.02 | 180 | LR | LR | 12 05 25.3 | |
| | comp=Z,38nm,21.8s,baz=341,slow=32 | | | | | | |
| CTA | Charters Tower | 76.22 | 108 | LR | LR | 12 08 06.4 | |
| | comp=Z,6.6nm,19.2s,baz=264,slow=34 | | | | | | |
| MDT | Midelt | 81.95 | 307 | LR | LR | 12 11 49.2 | |
| | comp=Z,21nm,21.6s,baz=146,slow=34 | | | | | | |
| ESDC | Sonseca Array | 84.14 | 313 | P | P | 11 37 15.1 | -1.9 |
| | 1.6nm,1.1s,baz=64,slow=3.0,SNR=5.0 | | | | | | |
| | 1.6nm,1.1s | | | | | | |
| PDAR | Pinedale Array | 151.14 | 353 | PKPbc | PKPbc | 11 44 38.0 | -1.5 |
| | 0.8nm,0.7s,baz=79,slow=2.0,SNR=9.1 | | | | | | |

*RSPR **25** 11:26:48.9, 19°.70N×68°.10W, h125km±12km, MD3.4/4*
**NEIC 25 11:26:44.1±1.7, 19°.4N±0°.1×68°.90W±0°.07, h35km±2km, ML2.5/17, Md3.4/4(RSPR), 3C-1D, Error ellipse: s-maj=25.0km s-min=3.1km az=204.0, North Atlantic Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GCPR** | **Guaynabo City** | **2.87** | **111** | Pn | Pn | 11 27 27.2 | -0.2 |
| GCPR | | | | IAML | | 11 28 40.2 | |
| | comp=N,18nm,2.4s | | | | | | |
| GCPR | | | | IAML | | 11 28 44.3 | |
| | comp=E,17nm,2.2s | | | | | | |

*IDC **25** 11:36:35.7±23.0, 37°17'N×72°03'E, h130km±155km, mb3.5/2, mbtmp3.7/6, ML2.8/4, MS3.1/1, Error ellipse: s-maj=212.0km s-min=73.7km az=177.0*
*NNC **25** 11:36:43.5±3.0, 37°91'N×71°94'E, h227km±43km, mb2.4, mpv3.5, Error ellipse: s-maj=31.4km s-min=17.4km az=15.0*
**ISC 25 11:36:40.1±2.3, 37°6'N±0°2'×71°9'E±0°1, h150km, n11, σ0$99/13, 5C-3D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **5.61** | **350** | ⇓P | | | **Pn** | **11 38 03.1** | **+1.6** |
| | 3.2nm,0.3s,baz=172,slow=14,SNR=50 | | | | | | | | |
| KK31 | | | | ⇑S | | | **Sn** | **11 39 05.1** | **0.0** |
| | 38nm,0.6s,baz=173,slow=17,SNR=26 | | | | | | | | |
| **CHMS** | **Chumysh** | **5.83** | **21** | ⇑P | | | **Pn** | **11 38 03.5** | **-1.0** |
| | 3.5nm,0.5s | | | | | | | | |
| CHMS | | | | ⇓S | | | **Sn** | **11 39 10.7** | **+0.2** |
| | 13nm,0.9s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.04** | **27** | ⇓P | | | **Pn** | **11 38 08.2** | **+0.8** |
| | 2.9nm,0.7s | | | | | | | | |
| TKM2 | | | | ⇑S | | | **Sn** | **11 39 15.5** | **-0.2** |
| | 9.1nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **12.00** | **37** | P | | | **Pn** | **11 39 25.5** | **-0.7** |
| | baz=221,slow=13,SNR=1.9 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.87** | **18** | P | | | **P** | **11 39 53.1** | **-0.4** |
| | 0.1nm,0.3s,baz=209,slow=11,SNR=10 | | | | | | | | |
| | 0.9nm,0.4s | | | | | | | | |
| **AB31** | **Akbulak array** | **14.51** | **327** | ⇑P | | | **Pn** | **11 39 56.5** | **-1.7** |
| | 0.5nm,0.3s,baz=133,slow=15,SNR=28 | | | | | | | | |
| AB31 | | | | ⇑S | | | Sn | 11 42 33.4 | -5.6 |
| | 8.7nm,0.9s,baz=152,slow=23,SNR=11 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **15.47** | **357** | P | | | **Pn** | **11 40 10.6** | **+0.5** |
| | baz=166,slow=11,SNR=5.6 | | | | | | | | |
| | 1.1nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.64** | **24** | P | | | **P** | **11 40 46.3** | **+0.4** |
| | 0.3nm,0.3s,baz=220,slow=11,SNR=6.6 | | | | | | | | |
| | 1.2nm,0.4s | | | | | | | | |
| **FINES** | **FINESS Array B** | **36.98** | **325** | P | | | **P** | **11 43 35.7** | **+1.2** |
| | 2.4nm,1.0s,baz=128,slow=9.0,SNR=1.5 | | | | | | | | |
| | 2.4nm,1.0s | | | | | | | | |
| **HFS** | **Hagfors** | **42.65** | **321** | P | | | **P** | **11 44 21.8** | **+0.5** |
| | 1.0nm,0.7s,baz=86,slow=9.4,SNR=1.3 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **57.57** | **298** | LR | | LR | LR | 12 15 19.6 | |
| | comp=Z,17nm,19.4s,baz=217,slow=40 | | | | | | | | |

*SKHL **25** 11:38:45.8±0.5, 44°00'N×149°80'E, h33km±3km, mb4.2/3*
*IDC **25** 11:38:58.5±4.6, 46°48'N×148°37'E, h0km, mb3.7/3, mbtmp3.7/3, MS2.9/3, Error ellipse: s-maj=157.7km s-min=42.5km az=6.0*
**ISC 25 11:38:46.9±2.3, 44°0'N±0°1'×149°8'E±0°1, h35km, n15, σ0$52/8, mb3.8/3, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.84** | **313** | *e*P | | | **Pn** | **11 39 15.5** | **-0.3** |
| KUR | | | | | AMB | AMB | 11 39 19.5 | | |
| | 150nm,0.5s | | | | | | | | |
| KUR | | | | *e*S | | | **Sn** | **11 39 38.2** | **+0.4** |
| KUR | | | | A | | A | 11 39 42.2 | | |
| | 240nm,0.5s | | | | | | | | |
| KUR | | | | A | | A | 11 39 42.2 | | |
| | 200nm,0.5s | | | | | | | | |
| **SHO** | **Shikotan** | **2.13** | **267** | *e*P | | | **Pn** | **11 39 19.8** | **-0.1** |
| SHO | | | | | AMB | AMB | 11 39 20.7 | | |
| | 20nm,0.5s | | | | | | | | |
| SHO | | | | *i* S | | | **Sn** | **11 39 44.5** | **-0.6** |
| SHO | | | | A | | A | 11 39 46.3 | | |
| | 40nm,0.4s | | | | | | | | |
| SHO | | | | A | | A | 11 39 46.3 | | |
| | 100nm,0.4s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.82** | **272** | *e*P | | | **Pn** | **11 39 29.6** | **+0.2** |
| YUK | | | | | AMB | AMB | 11 39 31.4 | | |
| | 80nm,0.4s | | | | | | | | |
| YUK | | | | *e*S | | | **Sn** | **11 40 02.1** | **0.0** |
| YUK | | | | A | | A | 11 40 09.4 | | |
| | 170nm,0.6s | | | | | | | | |
| YUK | | | | A | | A | 11 40 09.4 | | |
| | 120nm,0.6s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.55** | **234** | LR | | LR | LR | 11 47 37.3 | |
| | comp=Z,12nm,18.5s,baz=20,slow=42 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.12** | **144** | T | | T | T | 12 15 46.0 | |
| | baz=334,slow=75,SNR=6.9 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.13** | **144** | T | | T | T | 12 15 45.8 | |
| | baz=334,slow=75,SNR=3.6 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.13** | **144** | T | | T | T | 12 15 48.1 | |
| | baz=334,slow=75,SNR=2.7 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.13** | **145** | T | | T | T | 12 17 03.5 | |
| | baz=334,slow=76,SNR=36 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.13** | **145** | T | | T | T | 12 16 58.3 | |
| | baz=334,slow=76,SNR=21 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.14** | **145** | T | | T | T | 12 17 00.0 | |
| | baz=334,slow=76,SNR=35 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.36** | **307** | LR | | LR | LR | 12 03 56.1 | |
| | comp=Z,28nm,19.8s,baz=206,slow=37 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.14** | **298** | P | | | **P** | **11 47 08.4** | **+0.7** |
| | 0.9nm,0.8s,baz=70,slow=7.9,SNR=6.0 | | | | | | | | |
| | 0.9nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.50** | **334** | P | | | **P** | **11 49 25.5** | **-0.5** |
| | 1.0nm,0.7s,baz=22,slow=7.7,SNR=5.0 | | | | | | | | |
| | 1.0nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.92** | **58** | P | | | P | 11 51 12.2 | +15 |
| | 0.3nm,0.8s,baz=328,slow=3.2,SNR=3.2 | | | | | | | | |
| | 0.3nm,0.8s | | | | | | | | |
| **MDT** | **Midelt** | **100.05** | **338** | LR | | LR | LR | 12 44 08.4 | |
| | comp=Z,12nm,18.5s,baz=336,slow=40 | | | | | | | | |

*IDC **25** 11:46:36.5±0.7, 53°34'N×166°82'W, h0km, mb4.2/29, mbtmp4.2/30, ML3.8/1, MS3.4/44, Error ellipse: s-maj=20.3km s-min=11.5km az=175.0*
*AEIC **25** 11:46:40.5±2.8, 53°08'N±0°05'×166°64'W±0°06, h26km±5km, Error ellipse: s-maj=7.3km s-min=4.0km az=153.0*
*NEIC **25** 11:46:42.5±2.9, 53°17'N±0°05'×166°73'W±0°06, h39km±9km, mb4.1/67, ML4.3/6, ML4.2(AEIC), Error ellipse: s-maj=7.8km s-min=4.3km az=146.0*
**ISC 25 11:46:42.6±1.1, 53°14'N±0°07'×166°67'W±0°05, h47km±9km, n275, σ1$39/250, mb4.2/47, MS3.5/42, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MGOD** | **Makushin Gods** | **0.67** | **350** | | | | **Pn** | **11 46 54.5** | **-1.4** |
| MGOD | | | | | | | **Sn** | **11 47 04.0** | **-1.4** |
| **MAPS** | **Pakushin South** | **0.69** | **347** | | | | **Pn** | **11 46 54.8** | **-1.3** |
| MAPS | | | | | | | **Sn** | **11 47 04.6** | **-1.3** |
| **UNV** | **Unalaska Valle** | **0.72** | **8** | P | | | **Pn** | **11 46 54.3** | **-2.0** |
| **UNV** | **Unalaska Valle** | **0.72** | **8** | | | | **Pn** | **11 46 54.4** | **-2.0** |
| **MSW** | **Makushin Switc** | **0.78** | **355** | | | | **Pn** | **11 46 56.1** | **-1.2** |
| MSW | | | | | | | **Sn** | **11 47 06.9** | **-1.1** |
| **OKFG** | **Magazine Ridge** | **0.79** | **291** | | | | **Pn** | **11 46 56.0** | **-1.4** |
| OKFG | | | | | | | **Sn** | **11 47 07.5** | **-0.7** |
| **OKTU** | **Okmok Mt. Tuli** | **0.86** | **287** | | | | **Pn** | **11 46 57.1** | **-1.2** |
| **OKNC** | **Okmok New Cone** | **0.93** | **291** | | | | **Pn** | **11 46 58.1** | **-1.2** |
| **OKCE** | **Okmok Cone E** | **0.94** | **289** | | | | **Pn** | **11 46 58.5** | **-0.9** |
| OKCE | | | | | | | **Sn** | **11 47 11.9** | **0.0** |
| **OKWE** | **Okmok W'ng Wal** | **1.00** | **290** | | | | **Pn** | **11 46 59.1** | **-1.1** |
| **AKMO** | **Akutan Morgan** | **1.03** | **22** | | | | **Pn** | **11 46 59.5** | **-1.2** |
| AKMO | | | | | | | **Sn** | **11 47 14.1** | **+0.1** |
| **AKRB** | **Akutan Reef Bi** | **1.06** | **20** | | | | **Pn** | **11 47 00.5** | **-0.5** |
| AKRB | | | | | | | **Sn** | **11 47 14.6** | **0.0** |
| **AKV** | **Akutan Volcano** | **1.08** | **23** | | | | **Pn** | **11 47 00.1** | **-1.2** |
| AKV | | | | | | | **Sn** | **11 47 15.5** | **+0.3** |
| **LVA** | **Lava Point** | **1.09** | **20** | | | | **Pn** | **11 47 00.5** | **-1.0** |
| **AKLV** | **Akutan Long Va** | **1.11** | **22** | | | | **Pn** | **11 47 00.4** | **-1.3** |
| **AKGG** | **Akutan Green G** | **1.14** | **21** | | | | **Pn** | **11 47 01.1** | **-1.0** |
| **AKSA** | **Akutan Strait** | **1.16** | **30** | | | | **Pn** | **11 47 00.7** | **-1.7** |
| **NIKH** | **Nikolski High** | **1.33** | **264** | P | | | **Pn** | **11 47 03.1** | **-1.6** |
| **NIKH** | **Nikolski High** | **1.33** | **264** | | | | **Pn** | **11 47 03.0** | **-1.6** |
| NIKH | | | | | | | **Sn** | **11 47 20.2** | **-0.9** |
| **WESE** | **West Dahl East** | **1.82** | **42** | | | | **Pn** | **11 47 11.4** | **-0.1** |
| **WEBT** | **Westdahl Beart** | **1.85** | **37** | | | | **Pn** | **11 47 11.6** | **-0.2** |
| **CLCO** | **Concord Point,** | **1.88** | **260** | | | | **Pn** | **11 47 11.0** | **-1.2** |
| **CLES** | **Cleveland East** | **1.97** | **262** | | | | **Pn** | **11 47 12.3** | **-1.2** |
| CLES | | | | | | | **Sn** | **11 47 37.2** | **+0.2** |
| **ISLZ** | **Isanotski Laza** | **2.37** | **47** | | | | **Pn** | **11 47 18.5** | **-0.4** |
| **ISNN** | **Isanotski Nort** | **2.41** | **44** | | | | **Pn** | **11 47 19.6** | **+0.2** |
| **FALS** | **False Pass** | **2.58** | **47** | P | | | **Pn** | **11 47 23.5** | **+1.7** |
| **FALS** | **False Pass** | **2.58** | **47** | | | | **Pn** | **11 47 21.6** | **-0.2** |
| **PS4A** | **Pavlof South-4** | **3.59** | **50** | | | | **Pn** | **11 47 35.4** | **-0.2** |
| **PS1A** | **Pavlof South-1** | **3.69** | **50** | | | | **Pn** | **11 47 37.3** | **+0.3** |
| **S12K** | **Black Hills** | **3.72** | **44** | Pn | | | **Pn** | **11 47 37.7** | **+0.2** |
| S12K | | | | IAML | | | | 11 48 41.8 | |
| | comp=N,429nm,0.7s | | | | | | | | |
| S12K | | | | IAML | | | | 11 48 44.9 | |
| | comp=E,440nm,0.8s | | | | | | | | |
| **P08K** | **Saint George I** | **3.85** | **336** | | | | **Pn** | **11 47 39.5** | **+0.3** |
| **SDPT** | **Sand Point** | **4.26** | **56** | P | | | **Pn** | **11 47 46.5** | **+1.7** |
| **SDPT** | **Sand Point** | **4.26** | **56** | | | | **Pn** | **11 47 45.9** | **+1.1** |
| SDPT | | | | IAML | | | | 11 48 59.5 | |
| | comp=E,694nm,0.7s | | | | | | | | |
| **CNBA** | **Chernabura Isl** | **4.51** | **65** | Pn | | | **Pn** | **11 47 47.2** | **-1.0** |
| CNBA | | | | IAML | | | | 11 49 03.0 | |
| | comp=E,152nm,0.9s | | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **4.54** | **335** | P | | | **Pn** | **11 47 50.7** | **+2.1** |
| **SPIA** | **Saint Paul Isl** | **4.54** | **335** | | | | **Pn** | **11 47 49.5** | **+0.9** |
| **KOFP** | **Korovin Flat P** | **4.60** | **262** | | | | **Pn** | **11 47 50.1** | **+0.6** |
| **KOKL** | **Mount Kliuchef** | **4.65** | **263** | | | | **Pn** | **11 47 51.0** | **+0.8** |
| **CHGN** | **Chignik** | **5.74** | **53** | Pn | | | **Pn** | **11 48 05.0** | **-0.1** |
| **GSMY** | **Great Sitkin M** | **5.83** | **263** | | | | **Pn** | **11 48 07.3** | **+0.9** |
| **GSCK** | **Great Sitkin C** | **5.90** | **263** | | | | **Pn** | **11 48 08.2** | **+1.0** |
| **KIRH** | **Kanaga Island** | **6.48** | **263** | | | | **Pn** | **11 48 16.8** | **+1.5** |
| **KIMD** | **Kanaga Island** | **6.60** | **262** | | | | **Pn** | **11 48 18.2** | **+1.3** |
| **O14K** | **Tigyukauivet M** | **6.83** | **24** | Pn | | | **Pn** | **11 48 21.2** | **+1.1** |
| **TASE** | **Tanaga Southea** | **7.06** | **264** | | | | **Pn** | **11 48 24.7** | **+1.4** |
| **O15K** | **Ungalikthiuk R** | **7.16** | **30** | | | | **Pn** | **11 48 25.4** | **+0.9** |
| **M11K** | **Mekoryuk** | **7.27** | **2** | | | | **Pn** | **11 48 27.6** | **+1.6** |
| **N14K** | **Kuskokwak Cree** | **7.34** | **20** | | | | **Pn** | **11 48 29.4** | **+2.4** |
| **PLK4** | **Peulik 4** | **7.40** | **48** | | | | **Pn** | **11 48 30.3** | **+2.4** |
| **GANE** | **Gareloi Northe** | **7.51** | **265** | | | | **Pn** | **11 48 30.7** | **+1.3** |
| **M13K** | **Dall Lake** | **7.52** | **13** | | | | **Pn** | **11 48 31.9** | **+2.4** |
| **N15K** | **Kwethluk River** | **7.92** | **25** | Pn | | | **Pn** | **11 48 36.9** | **+1.9** |
| **SII** | **Sitkinak Islan** | **7.98** | **60** | Pn | | | **Pn** | **11 48 35.5** | **-0.3** |
| **O16K** | **Kokwok River B** | **8.03** | **33** | Pn | | | **Pn** | **11 48 37.8** | **+1.4** |
| **M14K** | **Bethel** | **8.05** | **17** | Pn | | | **Pn** | **11 48 39.0** | **+2.2** |
| **M15K** | **Kasigluk River** | **8.25** | **21** | | | | **Pn** | **11 48 41.3** | **+1.8** |
| **P17K** | **Kvichak River** | **8.33** | **39** | | | | **Pn** | **11 48 42.9** | **+2.3** |
| **O17K** | **Koliganek Bris** | **8.50** | **35** | | | | **Pn** | **11 48 43.9** | **+1.0** |
| **L14K** | **Kuka Creek** | **8.51** | **13** | Pn | | | **Pn** | **11 48 44.8** | **+1.9** |
| **N16K** | **Nishlik Lake** | **8.53** | **27** | | | | **Pn** | **11 48 45.3** | **+1.9** |
| **OHAK** | **Old Harbor** | **8.68** | **57** | Pn | | | **Pn** | **11 48 44.6** | **-0.8** |
| **AMKA** | **Amchitka** | **8.79** | **264** | | | | **Pn** | **11 48 47.9** | **+1.0** |
| **K13K** | **Kusilvak Mount** | **8.89** | **6** | | | | **Pn** | **11 48 50.6** | **+2.5** |
| **P18K** | **Big Mountain,** | **8.93** | **41** | | | | **Pn** | **11 48 49.8** | **+1.1** |
| **M16K** | **Timber Creek** | **8.95** | **25** | Pn | | | **Pn** | **11 48 51.0** | **+2.0** |
| **L15K** | **Ungalak Mounta** | **9.01** | **16** | | | | **Pn** | **11 48 51.8** | **+2.0** |
| **N17K** | **Nushagak Hills** | **9.04** | **31** | Pn | | | **Pn** | **11 48 52.7** | **+2.4** |
| **O18K** | **Koktuli Hills** | **9.24** | **39** | Pn | | | **Pn** | **11 48 54.7** | **+1.7** |
| **KDAK** | **Kodiak Island** | **9.25** | **54** | Pn | | | **Pn** | **11 48 51.2** | **-2.0** |
| **KDAK** | **Kodiak Island** | **9.25** | **54** | Pn | | | **Pn** | **11 48 51.4** | **-1.8** |
| | comp=E,1.0nm,0.3s,baz=272,slow=6.1,SNR=38 | | | | | | | | |
| KDAK | | | | | | Sn | Sn | 11 50 25.5 | -10 |
| | comp=E,0.4nm,0.3s,baz=337,slow=15,SNR=1.0 | | | | | | | | |
| | comp=E,3.2nm,0.3s | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **9.31** | **46** | | | | **Pn** | **11 48 54.8** | **+0.7** |
| **L16K** | **Owhat River** | **9.43** | **21** | Pn | | | **Pn** | **11 48 57.7** | **+2.2** |
| **N18K** | **Kilae Creek** | **9.58** | **34** | | | | **Pn** | **11 48 59.1** | **+1.5** |
| **K15K** | **Wolf Creek Mou** | **9.58** | **15** | Pn | | | **Pn** | **11 48 59.8** | **+2.2** |
| **M17K** | **Holitna River** | **9.67** | **27** | Pn | | | **Pn** | **11 49 00.5** | **+1.7** |
| **SYI** | **Shuyak Island** | **9.71** | **50** | | | | **Pn** | **11 48 58.9** | **-0.5** |
| **J14K** | **Nanvaranak Lak** | **9.78** | **8** | | | | **Pn** | **11 49 02.7** | **+2.3** |
| **O19K** | **Port Alsworth** | **9.80** | **39** | | | | **Pn** | **11 48 57.8** | **-2.8** |
| **N19K** | **Bonanza Creek** | **10.15** | **36** | | | | **Pn** | **11 49 07.6** | **+1.9** |
| **L18K** | **Granite Mounta** | **10.54** | **26** | | | | **Pn** | **11 49 13.0** | **+2.2** |
| **K17K** | **Iditarod** | **10.57** | **21** | | | | **Pn** | **11 49 12.5** | **+1.2** |
| **J16K** | **Anvik River** | **10.66** | **15** | Pn | | | **Pn** | **11 49 14.3** | **+1.9** |
| **CNPM** | **Chinitna Pnt** | **10.68** | **47** | Pn | | | **Pn** | **11 49 15.8** | **-0.9** |
| **M19K** | **Big River Lodg** | **10.97** | **32** | | | | **Pn** | **11 49 17.9** | **+1.2** |
| **J17K** | **VABM Dome** | **11.03** | **18** | Pn | | | **Pn** | **11 49 19.9** | **+2.5** |
| **L19K** | **White Mountain** | **11.04** | **30** | | | | **Pn** | **11 49 18.4** | **+0.8** |
| **ANM** | **Nome** | **11.48** | **3** | Pn | | | **Pn** | **11 49 24.9** | **+1.2** |
| **J18K** | **Innoko River** | **11.59** | **23** | Pn | | | **Pn** | **11 49 27.1** | **+2.0** |
| **SHEM** | **Shemya Is, Ala** | **11.61** | **276** | LR | | | LR | 11 53 54.2 | |
| | comp=E,114nm,18.3s,baz=96,slow=38 | | | | | | | | |
| **O22K** | **Cooper Landing** | **11.82** | **45** | | | | **Pn** | **11 49 28.0** | **-0.3** |
| **SUA** | **Susitna One** | **11.96** | **39** | Pn | | | **Pn** | **11 49 29.9** | **-0.4** |
| **SKT** | **Skwentna** | **11.99** | **36** | | | | **Pn** | **11 49 31.4** | **+0.7** |
| **RC01** | **Rabbit Creek A** | **12.14** | **42** | Pn | | | **Pn** | **11 49 30.9** | **-1.7** |
| **K20K** | **Telida** | **12.18** | **28** | Pn | | | **Pn** | **11 49 32.2** | **-0.9** |
| **J19K** | **Poorman** | **12.29** | **23** | Pn | | | **Pn** | **11 49 36.6** | **+1.9** |
| **H17K** | **Granite Mounta** | **12.33** | **14** | | | | **Pn** | **11 49 38.0** | **+2.8** |
| **G16K** | **Koyuk River** | **12.49** | **8** | | | | **Pn** | **11 49 40.1** | **+2.8** |
| **PWL** | **Port Wells** | **12.60** | **45** | | | | **Pn** | **11 49 35.7** | **-3.3** |
| **F15K** | **North Star Dit** | **12.65** | **4** | Pn | | | **Pn** | **11 49 42.1** | **+2.5** |
| **PMR** | **Palmer** | **12.66** | **41** | Pn | | | **Pn** | **11 49 37.3** | **-2.4** |
| **J20K** | **Nowinta River** | **12.81** | **25** | | | | **Pn** | **11 49 42.5** | **+0.8** |
| **GLI** | **Glacier Island** | **13.14** | **46** | Pn | | | **Pn** | **11 49 47.5** | **+1.2** |
| **HIN** | **Hinchinbrook I** | **13.20** | **49** | Pn | | | **Pn** | **11 49 44.7** | **-2.4** |
| **I20K** | **Naaghedeneel** | **13.24** | **23** | | | | **Pn** | **11 49 49.0** | **+1.4** |
| **FID** | **Port Fidalgo** | **13.36** | **47** | Pn | | | **Pn** | **11 49 45.7** | **-3.6** |
| **G18K** | **Tagagawik** | **13.41** | **14** | Pn | | | **Pn** | **11 49 52.6** | **+2.7** |
| **H19K** | **Roundabout Mou** | **13.45** | **19** | | | | **Pn** | **11 49 52.3** | **+1.9** |
| **SCM** | **Sheep Creek Mo** | **13.52** | **42** | | | | **Pn** | **11 49 49.5** | **-2.0** |
| **BPAW** | **Bear Paw Mtn.** | **13.64** | **30** | | | | **Pn** | **11 49 53.2** | **0.0** |
| **KLU** | **Klutina** | **13.93** | **45** | | | | **Pn** | **11 49 53.8** | **-3.3** |
| **RAGM** | **Ragged Mountai** | **14.03** | **50** | | | | **Pn** | **11 49 57.9** | **-0.5** |
| **M24K** | **Tolsona, Glenn** | **14.12** | **42** | Pn | | | **Pn** | **11 49 59.0** | **-0.8** |
| **DHY** | **Denali Highway** | **14.19** | **38** | | | | **Pn** | **11 49 58.5** | **-2.1** |
| **HMT** | **Hamilton** | **14.20** | **51** | | | | **Pn** | **11 49 58.2** | **-2.5** |
| **N25K** | **Chitina, Valde** | **14.55** | **46** | | | | **Pn** | **11 50 03.8** | **-1.6** |
| **NEA2** | **Nenana** | **14.58** | **31** | | | | **Pn** | **11 50 06.4** | **+0.7** |
| **GLB** | **Gilahina Butte** | **14.82** | **47** | Pn | | | **Pn** | **11 50 07.0** | **-2.0** |
| **CRQM** | **Cirque** | **14.87** | **50** | | | | **Pn** | **11 50 07.6** | **-2.1** |
| **I23K** | **Minto, Yukon-K** | **14.89** | **29** | | | | **Pn** | **11 50 10.8** | **+1.1** |
| **WAX** | **Waxell Ridge** | **14.90** | **51** | | | | **Pn** | **11 50 08.3** | **-1.7** |
| **VRDI** | **Verde Repeater** | **14.90** | **48** | Pn | | | **Pn** | **11 50 07.8** | **-2.3** |
| **F20K** | **Avaraart Lake** | **14.95** | **17** | Pn | | | **Pn** | **11 50 11.6** | **+1.2** |
| **TGL** | **Tana Glacier** | **15.01** | **50** | | | | **Pn** | **11 50 09.6** | **-1.9** |
| **MCARA** | **McCarthy VSAT** | **15.15** | **48** | | | | **Pn** | **11 50 11.7** | **-1.5** |
| MCARA | | | | | | IAmb | IAmb | 11 50 50.4 | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **ISLE** | **Juniper Island** | **15.19** | **51** | | | | **Pn** | **11 50 12.2** | **-1.6** |
| ISLE | | | | | | IAmb | IAmb | 11 50 31.6 | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **C16K** | **Lisburne Hills** | **15.20** | **2** | | | | **P** | **11 50 16.9** | **-1.2** |
| C16K | | | | | | IAmb | IAmb | 11 50 31.1 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **15.40** | **33** | Pn | | Pn | **Pn** | **11 50 14.7** | **-1.7** |
| | baz=241,slow=11 | | | | | | | | |
| ILAR | | | | | | LR | LR | 11 56 51.0 | |
| | comp=Z,229nm,18.9s,baz=191,slow=40 | | | | | | | | |
| **GRNC** | **Granite Creek** | **15.50** | **51** | | | | **Pn** | **11 50 16.1** | **-1.8** |
| GRNC | | | | | | IAmb | IAmb | 11 50 25.8 | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **15.58** | **44** | Pn | | Pn | **Pn** | **11 50 17.0** | **-1.8** |
| M26K | | | | | | IAmb | IAmb | 11 50 32.8 | |
| | comp=Z,5.9nm,0.6s | | | | | | | | |
| **TABL** | **Table Mountain** | **15.70** | **52** | | | | **Pn** | **11 50 18.5** | **-2.0** |
| **L26K** | **Log Cabin Wild** | **15.72** | **42** | P | | P | **P** | **11 50 22.9** | **-0.9** |
| L26K | | | | | | IAmb | IAmb | 11 50 24.3 | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| **CTGM** | **Chitina Glacie** | **15.77** | **50** | P | | P | **Pn** | **11 50 22.3** | **+1.0** |
| CTGM | | | | | | IAmb | IAmb | 11 50 45.2 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **H24K** | **Noodor Dome** | **15.81** | **29** | | | | **Pn** | **11 50 22.6** | **+0.8** |
| **SCRK** | **Sand Creek** | **15.95** | **38** | | | | **Pn** | **11 50 25.0** | **+1.4** |
| **M27K** | **Edge Creek, AK** | **16.03** | **45** | | | | **Pn** | **11 50 24.6** | **-0.1** |
| **BCPM** | **Bancas Point** | **16.31** | **55** | | | | **Pn** | **11 50 27.8** | **-0.3** |
| **L27K** | **Beaver Creek,** | **16.35** | **43** | | | | **Pn** | **11 50 29.0** | **+0.4** |
| **PNL** | **Peninsula** | **16.37** | **56** | P | | | **Pn** | **11 50 29.3** | **+0.5** |
| **J26L** | **Joseph Creek** | **16.39** | **37** | Pn | | | **Pn** | **11 50 29.7** | **+0.6** |
| **G24K** | **Hadweenzic Riv** | **16.54** | **27** | P | | | **Pn** | **11 50 31.6** | **+0.6** |
| **E22K** | **Anaktuvuk Pass** | **16.63** | **20** | | | | **P** | **11 50 33.6** | **-0.3** |
| E22K | | | | | | IAmb | IAmb | 11 50 49.7 | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **O29M** | **Mount Kennedy** | **16.90** | **54** | | | | **Pn** | **11 50 36.1** | **+0.5** |
| O29M | | | | | | IAmb | IAmb | 11 50 41.5 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **P29M** | **Windy Craggy** | **17.19** | **56** | Pn | | | **Pn** | **11 50 39.2** | **+0.2** |
| P29M | | | | | | IAmb | IAmb | 11 50 54.4 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **EGAK** | **Eagle** | **17.42** | **38** | | | | **P** | **11 50 42.3** | **-0.3** |
| **B21K** | **Ikpikpuk River** | **17.46** | **14** | P | | P | **P** | **11 50 44.5** | **+1.6** |
| B21K | | | | | | IAmb | IAmb | 11 51 02.5 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **M29M** | **Somme Creek** | **17.55** | **47** | P | | | **Pn** | **11 50 43.4** | **-0.1** |
| M29M | | | | | | IAmb | IAmb | 11 50 57.0 | |
| | comp=Z,7.9nm,0.7s | | | | | | | | |
| **F25K** | **Christian Rive** | **17.68** | **27** | P | | P | **P** | **11 50 46.7** | **+1.1** |
| **DAWY** | **Dawson** | **17.77** | **41** | P | | P | **P** | **11 50 46.7** | **+0.2** |
| **S31K** | **Pelican** | **17.79** | **62** | P | | P | **Pn** | **11 50 46.0** | **-0.4** |
| **N30M** | **Aishikik Lake** | **17.88** | **51** | | | | **Pn** | **11 50 47.0** | **-0.6** |
| **O30N** | **Mendenhall** | **18.20** | **53** | P | | P | **Pn** | **11 50 52.4** | **+0.9** |
| O30N | | | | | | IAmb | IAmb | 11 50 55.8 | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **I28M** | **Miner Creek** | **18.20** | **37** | | | | **P** | **11 50 51.0** | **-0.3** |
| **C23K** | **Itkillik River** | **18.31** | **18** | P | | P | **Pn** | **11 50 53.3** | **+0.7** |
| C23K | | | | | | IAmb | IAmb | 11 50 56.9 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **G27K** | **Doyon Strip** | **18.36** | **32** | P | | P | **Pn** | **11 50 53.4** | **0.0** |
| **K29M** | **Barlow Dome** | **18.44** | **43** | | | | **Pn** | **11 50 54.2** | **-0.2** |
| K29M | | | | | | IAmb | IAmb | 11 50 55.5 | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **18.50** | **51** | P | | P | **Pn** | **11 50 56.0** | **+0.9** |
| N31M | | | | | | IAmb | IAmb | 11 51 14.0 | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **S32K** | **Killisnoo** | **18.67** | **64** | | | | **Pn** | **11 50 58.5** | **+1.4** |
| S32K | | | | | | IAmb | IAmb | 11 50 60.0 | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **18.76** | **38** | P | | P | **P** | **11 50 55.6** | **-1.8** |
| **WHY** | **Whitehorse** | **18.77** | **54** | P | | P | **Pn** | **11 50 58.8** | **+0.4** |
| WHY | | | | | | IAmb | IAmb | 11 51 13.5 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **H29M** | **Whitestone** | **19.15** | **36** | | | | **P** | **11 51 01.9** | **+0.3** |
| H29M | | | | | | IAmb | IAmb | 11 51 33.8 | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **J30M** | **Hart River** | **19.20** | **42** | | | | **P** | **11 51 02.0** | **-0.3** |
| **P32M** | **Atlin** | **19.21** | **57** | | | | **Pn** | **11 51 04.5** | **+0.8** |
| P32M | | | | | | IAmb | IAmb | 11 51 19.4 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **F28M** | **Old Crow** | **19.40** | **31** | P | | P | **Pn** | **11 51 05.0** | **-0.8** |
| **I30M** | **Mount Dempster** | **19.43** | **40** | P | | P | **P** | **11 51 04.4** | **-0.4** |
| **CRAG** | **Craig** | **19.61** | **70** | P | | P | **Pn** | **11 51 09.6** | **+1.3** |
| **CRAG** | **Craig** | **19.61** | **70** | P | | P | **Pn** | **11 51 08.4** | **+0.2** |
| **G29M** | **Pine Creek** | **19.62** | **34** | P | | P | **P** | **11 51 05.6** | **-1.1** |
| G29M | | | | | | IAmb | IAmb | 11 51 06.7 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **N32M** | **Quiet Lake** | **19.71** | **53** | P | | P | **Pn** | **11 51 09.3** | **-0.3** |
| **P33M** | **Teslin, Yukon** | **19.72** | **56** | | | | **Pn** | **11 51 09.7** | **-0.1** |
| P33M | | | | | | IAmb | IAmb | 11 51 11.8 | |
| | comp=Z,11nm,0.8s | | | | | | | | |

comp=Z,20nm,18.5s,baz=92,slow=41
**KSRS Korea Array 46.93 278** P **P** **11 55 09.0 +0.7**
comp=Z,2.6nm,0.9s,baz=48,slow=8.0,SNR=7.5
KSRS LR LR 12 13 25.0
comp=Z,12nm,20.9s,baz=75,slow=34
comp=Z,2.6nm,0.9s
**JNU Nakatsue 48.09 271** LR LR 12 13 43.4
comp=Z,51nm,21.8s,baz=36,slow=34
**TXAR Lajitas Array 51.11 92** P **P** **11 55 41.2 +0.6**
comp=Z,1.6nm,0.7s,baz=300,slow=5.0,SNR=20
comp=Z,1.6nm,0.7s
**SONM Songino Array 52.30 302** P **P** **11 55 48.2 -1.1**
comp=Z,0.7nm,0.4s,baz=57,slow=8.4,SNR=4.7
SONM PcP **PcP** **11 57 00.0 +0.1**
comp=Z,1.7nm,0.5s,baz=103,slow=2.0,SNR=7.8
SONM LR LR 12 20 36.8
comp=Z,39nm,18.1s,baz=295,slow=39
comp=Z,0.7nm,0.4s
**SCHQ Schefferville 53.74 45** P **P** **11 55 59.6 0.0**
comp=Z,8.0nm,0.8s,baz=316,slow=10,SNR=6.7
SCHQ LR LR 12 21 22.0
comp=Z,48nm,19.4s,baz=256,slow=39
comp=Z,8.0nm,0.8s
**HHC Hu-ho-hao-te 54.16 292** *eP* **P** **11 56 06.0 +3.0**
HHC pmax pmax
comp=Z,7.0nm,0.5s
HHC pmax pmax
comp=Z,130nm,4.9s
**ARCES ARCESS Array B 57.32 355** P **P** **11 56 23.2 -1.8**
comp=Z,1.6nm,0.7s,baz=26,slow=11,SNR=5.9
ARCES PcP **PcP** **11 57 18.2 -0.4**
comp=Z,1.9nm,0.7s,baz=60,slow=5.8,SNR=4.5
ARCES LR LR 12 23 03.1
comp=Z,44nm,18.4s,baz=334,slow=38
comp=Z,1.6nm,0.7s
**ZALV Zalesovo Beam 57.95 319** P **P** **11 56 28.4 -1.3**
comp=Z,1.1nm,0.4s,baz=43,slow=6.5,SNR=5.3
ZALV PcP **PcP** **11 57 20.5 -0.9**
comp=Z,1.8nm,0.6s,baz=48,slow=2.2,SNR=8.5
ZALV LR LR 12 23 33.8
comp=Z,45nm,19.0s,baz=47,slow=38
comp=Z,1.1nm,0.4s
**TKL Tuckaleechee C 58.41 72** LR LR 12 21 09.4
comp=Z,26nm,19.4s,baz=341,slow=36
**BORG Borgarnes 59.44 16** LR LR 12 24 11.6
comp=Z,33nm,19.6s,baz=331,slow=38
**KURBB Kurchatov Arra 62.98 320** P **P** **11 57 03.5 -0.5**
comp=Z,1.1nm,0.6s,baz=47,slow=7.6,SNR=15
KURBB PcP **PcP** **11 57 40.8 -0.8**
comp=Z,0.8nm,0.6s,baz=25,slow=3.3,SNR=4.8
KURBB LR LR 12 26 06.2
comp=Z,87nm,19.4s,baz=182,slow=38
comp=Z,1.1nm,0.6s
**BVAR Borovoye Array 64.01 326** P **P** **11 57 10.5 -0.3**
comp=Z,5.8nm,0.5s,baz=50,slow=7.4,SNR=27
BVAR PcP **PcP** **11 57 45.5 -0.3**
comp=Z,3.2nm,0.6s,baz=38,slow=2.8,SNR=7.0
comp=Z,5.8nm,0.5s
**MKAR Makanchi Array 64.45 315** P **P** **11 57 12.5 -1.3**
comp=Z,0.5nm,0.3s,baz=46,slow=5.6,SNR=8.2
MKAR LR LR 12 25 50.5
comp=Z,32nm,20.9s,baz=74,slow=37
comp=Z,0.5nm,0.3s
**ARU Arti 64.66 334** LR LR 12 27 55.5
comp=Z,60nm,19.1s,baz=318,slow=38
**FINES FINESS Array B 65.32 353** P **P** **11 57 16.4 -2.7**
comp=Z,1.0nm,0.5s,baz=6.5,slow=5.9,SNR=6.7
FINES LR LR 12 27 26.3
comp=Z,31nm,19.0s,baz=48,slow=38
comp=Z,1.0nm,0.5s
**TAOE Nuku Hiva Isla 65.75 151** *eLR* LR 12 17 02.7
comp=Z,104nm,26.4s
**NOA NORSAR Array B 66.16 1** P **P** **11 57 22.9 -1.8**
comp=Z,1.5nm,0.9s,baz=356,slow=5.8,SNR=3.3
NOA LR LR 12 27 42.8
comp=Z,9.4nm,18.1s,baz=5.0,slow=37
comp=Z,1.5nm,0.9s
**HFS Hagfors 67.08 360** P **P** **11 57 29.0 -1.5**
comp=Z,2.2nm,0.5s,baz=35,slow=5.4,SNR=15
HFS LR LR 12 29 11.5
comp=Z,12nm,18.3s,baz=10,slow=38
comp=Z,2.2nm,0.5s
**AKTO Aktyubinsk 70.14 331** LR LR 12 30 49.7
comp=Z,34nm,18.4s,baz=306,slow=38
**PZH PanZhiHua 70.17 288** P **P** **11 57 50.0 -0.4**
PZH pmax pmax
comp=Z,10.0nm,1.0s
PZH pmax pmax
comp=Z,120nm,4.7s
**EKA Eskdalemuir Ar 71.04 10** P **P** **11 57 55.1 0.0**
comp=Z,4.1nm,0.7s,baz=343,slow=5.1,SNR=12
comp=Z,4.1nm,0.7s
**AAK Ala-Archa 71.08 317** LR LR 12 30 49.8
comp=Z,45nm,18.8s,baz=34,slow=37
**MSVF Nonsavu 71.80 195** LR LR 12 21 16.2
comp=Z,54nm,21.8s,baz=77,slow=29
**PPT2 Papeete2 71.97 163** *eLR* LR 12 19 43.9
comp=Z,94nm,44.8s
PPT2 *eLR* LR 12 19 50.3
comp=Z,79nm,26.5s
**KSH Kashi 73.04 314** P **P** **11 58 10.8 +3.3**
KSH pmax pmax
comp=Z,6.0nm,1.0s
**PMG Port Moresby 73.61 228** LR LR 12 24 18.1
comp=Z,54nm,20.9s,baz=14,slow=31
**AKASG Malin Array Be 75.67 350** P **P** **11 58 21.0 -1.4**
comp=Z,0.6nm,0.4s,baz=12,slow=5.5,SNR=5.5
comp=Z,0.6nm,0.4s
**TBI Tubuai 77.62 164** *eLR* LR 12 22 27.6
comp=Z,480nm,26.5s
**VRAC Vranov 77.89 358** LR LR 12 33 16.4
comp=Z,18nm,19.2s,baz=355,slow=36
**CMAR Chiang Mai Arr 78.03 285** P **P** **11 58 36.4 +0.2**
comp=Z,6.7nm,0.9s,baz=22,slow=5.9,SNR=32
CMAR LR LR 12 36 24.9
comp=Z,15nm,18.1s,baz=190,slow=38
comp=Z,6.7nm,0.9s
**GERES GERESS Array B 78.39 360** P **P** **11 58 37.4 -0.4**
comp=Z,0.5nm,0.5s,baz=23,slow=5.3,SNR=1.8
comp=Z,0.5nm,0.5s
**CONA Conrad Observa 79.29 358** *eP* **P** **11 58 43.7 +0.9**
comp=Z,3.1nm,0.9s
**RONA Rosalia, Austr 79.51 358** *iP* **P** **11 58 44.9 +1.0**
comp=Z,1.8nm,0.6s
**BIOA Bad Ischl, Aus 79.55 360** *iP* **P** **11 58 44.5 +0.4**
comp=Z,4.4nm,1.2s
**WTTA Wattenberg 79.97 1** *iP* **P** **11 58 46.7 +0.1**
comp=Z,4.0nm,0.6s
**ARSA Arzberg 79.97 358** *eP* **P** **11 58 47.5 +1.1**
comp=Z,3.7nm,1.0s
**SQTA Sankt Quirin 80.00 1** *eP* **P** **11 58 46.8 +0.1**
comp=Z,3.3nm,0.8s
**KBA Koelnbreinsper 80.16 360** *iP* **P** **11 58 48.2 +0.5**
comp=Z,4.9nm,0.8s
**FETA Feichten 80.19 2** *iP* **P** **11 58 47.5 -0.3**
comp=Z,5.2nm,1.0s
**KBZ Khabaz 80.22 339** P **P** **11 58 48.4 +0.6**
comp=Z,2.2nm,0.8s,baz=131,slow=7.1,SNR=4.2
KBZ LR LR 12 36 40.3
comp=Z,54nm,20.0s,baz=18,slow=38
comp=Z,2.2nm,0.8s
**ABTA Abfaltersbach 80.49 1** *iP* **P** **11 58 49.7 +0.4**
comp=Z,4.2nm,0.9s
**RKT Rikitea 80.77 151** *eLR* LR 12 24 04.7
comp=Z,744nm,45.5s
**GNI Garni 83.20 336** LR LR 12 41 19.9
comp=Z,26nm,18.8s,baz=236,slow=40
**BRTR Keskin Array B 85.85 344** P **P** **11 59 17.3 +0.1**
comp=Z,5.3nm,0.9s,baz=48,slow=1.8,SNR=27
comp=Z,5.3nm,0.9s
**ESDC Sonseca Array 86.36 13** P **P** **11 59 19.4 -0.2**
comp=Z,1.0nm,0.6s,baz=342,slow=4.9,SNR=12
ESDC LR LR 12 40 06.2
comp=Z,16nm,19.2s,baz=318,slow=37
comp=Z,1.0nm,0.6s
**ROSC El Rosal 87.58 85** LR LR 12 41 09.4
comp=Z,23nm,18.9s,baz=68,slow=37
**WRA Warramunga Arr 88.77 234** P **P** **11 59 31.1 -0.1**
comp=Z,2.0nm,0.9s,baz=41,slow=5.8,SNR=18
comp=Z,2.0nm,0.9s
**KEST Kesra 91.43 3** P **P** **11 59 41.4 -2.2**
comp=Z,2.0nm,0.6s,baz=34,slow=7.3,SNR=4.0
**ASAR Alice Springs 92.15 232** P **P** **11 59 47.0 +0.2**
comp=Z,1.7nm,0.9s,baz=35,slow=4.6,SNR=15
comp=Z,1.7nm,0.9s
**RPN Rapa Nui 94.14 131** LR LR 12 33 13.6
comp=Z,27nm,21.6s,baz=357,slow=30
**H03N2 Juan Fernandez 114.70 113** T T 14 10 10.6
baz=322,slow=77,SNR=212
**H03N1 Juan Fernandez 114.71 113** T T 14 10 12.3
baz=322,slow=77,SNR=176
**H03N3 Juan Fernandez 114.72 113** T T 14 10 20.9
baz=322,slow=77,SNR=213
**QSPA South Pole Qui 142.90 180** PKhKP PKPpre 12 06 05.2
comp=Z,0.9nm,0.4s,baz=194,slow=1.3,SNR=23

*IDC* ***25*** *11:48:22.9±3.0, 44.56°N×149.76°E, h0km, mb3.9/6, mbtmp3.9/7, ML2.8/1, MS3.1/2, Error ellipse: s-maj=87.4km s-min=30.9km az=176.0*
*JMA* ***25*** *11:48:24.1±0.6, 45.56°N±3.4×15.06°E±0.7, h30km, MV3.9/9, SE OFF ETOROFU*
*SKHL* ***25*** *11:48:24.1±0.1, 44.00N×149.80E, h40km±4km, mb4.4/3*
*MOS* ***25*** *11:48:26.0±1.0, 44.18N×149.55E, h47km, mb3.9/1, Error ellipse: s-maj=27.9km s-min=17.2km az=24.1*
**ISC 25 11:48:25.2±1.2, 43.95N±0.09×149.8E±0.2, h37km±4km, n35,σ1§68/27, mb4.0/6, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.87** | **314** | *eP* | | Pn | 11 48 52.7 | -1.9 |
| KUR | | | | | AMB | AMB | 11 48 54.1 | |
| | 180nm,0.4s | | | | | | | |
| KUR | | | | *eS* | | **Sn** | **11 49 14.1** | **-2.9** |
| KUR | | | | | A | A | 11 49 17.0 | |
| | 240nm,0.4s | | | | | | | |
| KUR | | | | | A | A | 11 49 17.0 | |
| | 290nm,0.4s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.87** | **314** | *ePN* | | Pn | 11 48 52.7 | -1.9 |
| KUR | | | | *eS* | | **Sn** | **11 49 14.1** | **-2.9** |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,124nm,0.3s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,85nm,0.2s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=N,70nm,0.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,351nm,0.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,90nm,0.2s | | | | | | | |
| **SHO** | **Shikotan** | **2.12** | **269** | *eP* | | Pn | 11 48 57.4 | -0.7 |
| SHO | | | | | AMB | AMB | 11 48 59.0 | |
| | comp=N,20nm,0.2s | | | | | | | |
| SHO | | | | *eS* | | **Sn** | **11 49 21.7** | **-1.5** |
| SHO | | | | | A | A | 11 49 22.7 | |
| | comp=N,320nm,0.5s | | | | | | | |
| SHO | | | | | A | A | 11 49 22.7 | |
| | comp=N,240nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **2.12** | **269** | PN | | Pn | 11 48 57.4 | -0.7 |
| SHO | | | | *eS* | | **Sn** | **11 49 21.5** | **-1.7** |
| SHO | | | | | pmax | pmax | | |
| | comp=N,7.0nm,0.2s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,18nm,0.2s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,23nm,0.2s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=E,238nm,0.4s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=N,327nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.82** | **273** | *eP* | | Pn | 11 49 06.8 | -0.9 |
| YUK | | | | | AMB | AMB | 11 49 09.2 | |
| | comp=N,80nm,0.3s | | | | | | | |
| YUK | | | | *eS* | | **Sn** | **11 49 38.9** | **-1.5** |
| YUK | | | | | A | A | 11 49 42.5 | |
| | comp=N,170nm,0.4s | | | | | | | |
| YUK | | | | | A | A | 11 49 42.5 | |
| | comp=N,100nm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.82** | **273** | PN | | Pn | 11 49 06.8 | -0.9 |
| YUK | | | | *eS* | | **Sn** | **11 49 38.9** | **-1.5** |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,64nm,0.2s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,172nm,0.4s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,95nm,0.3s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.98** | **260** | P | | Pn | 11 49 09.4 | -0.4 |
| NEM2 | | | | S | | **Sn** | **11 49 42.8** | **-1.4** |
| **JRA** | **Rausu** | **3.35** | **271** | P | | **Pn** | **11 49 15.9** | **+0.9** |
| **JNK** | **Nakash** | **3.67** | **266** | P | | Pn | 11 49 19.4 | 0.0 |
| **JAK** | **Akkeshi** | **3.81** | **257** | P | | Pn | 11 49 21.4 | +0.1 |
| JAK | | | | *eS* | | **Sn** | **11 50 01.9** | **-2.9** |
| **JTKR** | **Abashiri--Toko** | **4.23** | **272** | P | | **Pn** | **11 49 27.6** | **+0.6** |
| JTKR | | | | *eS* | | **Sn** | **11 50 18.4** | **+3.3** |
| **JAR** | **Ashorobuto** | **4.40** | **264** | P | | **Pn** | **11 49 30.1** | **+0.6** |
| **JCH** | **Churui** | **4.86** | **256** | P | | Pn | 11 49 36.0 | +0.3 |
| JCH | | | | S | | **Sn** | **11 50 30.1** | **-0.6** |
| **JKA** | **Kamikawa-asahi** | **5.17** | **274** | *eP* | | **Pn** | **11 49 42.0** | **+2.0** |
| **ASAJ** | **Asahikawa** | **5.17** | **274** | Pn | | **Pn** | **11 49 42.0** | **+2.0** |
| | comp=N,0.3nm,0.3s,baz=4.3,slow=18,SNR=1.8 | | | | | | | |
| | comp=N,9.8nm,0.8s | | | | | | | |
| **ASAJ** | **Asahikawa** | **5.17** | **274** | PN | | **Pn** | **11 49 42.0** | **+2.0** |
| **JNBK** | **Urakawa-nobuka** | **5.40** | **254** | *eP* | | **Pn** | **11 49 43.4** | **+0.3** |
| JNBK | | | | *eS* | | Sn | 11 50 40.9 | -3.0 |
| **USRK** | **Ussuriysk Ar.** | **12.79** | **277** | LR | | LR | 11 56 37.4 | |
| | comp=N,25nm,18.4s,baz=240,slow=39 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.08** | **144** | T | | T | 12 25 17.0 | |
| | baz=334,slow=75,SNR=12 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.09** | **144** | T | | T | 12 25 22.7 | |
| | baz=334,slow=75,SNR=8.1 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.09** | **144** | T | | T | 12 25 17.5 | |
| | baz=334,slow=75,SNR=9.1 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.09** | **145** | T | | T | 12 26 38.0 | |
| | baz=336,slow=76,SNR=140 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.09** | **145** | T | | T | 12 26 39.1 | |
| | baz=336,slow=76,SNR=29 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.10** | **145** | T | | T | 12 26 37.4 | |
| | baz=336,slow=76,SNR=63 | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.16** | **298** | P | | **P** | **11 56 46.4** | **+0.3** |
| | comp=N,1.2nm,0.7s,baz=74,slow=7.8,SNR=12 | | | | | | | |
| | comp=N,1.2nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **46.98** | **305** | *eP* | | **P** | **11 56 53.0** | **+0.7** |
| **KURK** | **Kurchatov** | **46.98** | **305** | P | | **P** | **11 56 53.0** | **+0.7** |
| **KURBB** | **Kurchatov Arra** | **47.07** | **305** | P | | **P** | **11 56 53.0** | **0.0** |
| | comp=N,0.3nm,0.3s,baz=77,slow=7.5,SNR=5.4 | | | | | | | |
| | comp=N,0.3nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.55** | **334** | P | | **P** | **11 59 03.9** | **-0.6** |
| | comp=N,1.7nm,0.8s,baz=33,slow=7.3,SNR=4.9 | | | | | | | |
| | comp=N,1.7nm,0.8s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.08** | **340** | P | | **P** | **11 59 32.6** | **-0.5** |
| | comp=Z,3.6nm,0.9s,baz=31,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.08** | **340** | P | | **P** | **11 59 33.3** | **+0.1** |
| | comp=Z,0.9nm,0.7s,baz=30,slow=6.2,SNR=5.5 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **70.22** | **338** | P | | **P** | **11 59 34.0** | **0.0** |
| | comp=Z,2.0nm,0.7s,baz=40,slow=9.4,SNR=2.8 | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **70.22** | **338** | P | | **P** | **11 59 34.0** | **0.0** |
| **BRTR** | **Keskin Array B** | **78.76** | **315** | LR | | LR | 12 40 36.5 | |
| | comp=Z,39nm,19.4s,baz=337,slow=40 | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.95** | **58** | P | | **P** | **12 00 37.7** | **+1.6** |
| | comp=Z,0.4nm,0.6s,baz=305,slow=4.0,SNR=5.3 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |

*IDC* ***25*** *11:52:09.3±9.9, 10.39N×87.24W, h0km, mb3.3/1, mbtmp3.3/1, Error ellipse: s-maj=741.3km s-min=74.5km az=64.0*
*UCR* ***25*** *11:52:22.2±0.8, 11.57N×86.18W, h88km±7km, MW3.7*
*CATAC* ***25*** *11:52:22.2±0.4, 11.51N×86.21W, h78km±4km, ML3.5*
**ISC 25 11:52:21.5±1.0, 11.57N±0.05×86.21W±0.05, h101km±6km, n59,σ0§69/80, 5C-2D, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ARIN** | **Rivas** | **0.38** | **107** | *iP* | | **Pn** | **11 52 36.2** | **-0.5** |
| ARIN | | | | *iS* | | **Sn** | **11 52 46.8** | **-1.2** |
| ARIN | | | | | IAML | | 11 52 47.4 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **MASN** | **Masaya** | **0.42** | **8** | *iP* | | **Pn** | **11 52 37.1** | **+0.1** |
| MASN | | | | *iS* | | **Sn** | **11 52 48.3** | **-0.3** |
| MASN | | | | | IAML | | 11 52 59.8 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **RA5A7** | **El Crucero** | **0.43** | **347** | *iP* | | **Pn** | **11 52 37.8** | **+0.6** |
| RA5A7 | | | | | IAML | | 11 52 57.9 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **JAPN** | **AI SSO del Vol** | **0.52** | **94** | *iP* | | **Pn** | **11 52 37.8** | **+0.2** |
| JAPN | | | | *iS* | | **Sn** | **11 52 48.5** | **-1.1** |
| JAPN | | | | | IAML | | 11 53 02.6 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **UNAN** | **Cigeo UNAN** | **0.55** | **354** | *iP* | | **Pn** | **11 52 37.7** | **-0.1** |
| UNAN | | | | *iS* | | **Sn** | **11 52 50.0** | **0.0** |
| UNAN | | | | | IAML | | 11 52 51.8 | |
| | comp=Z,13μm,1.0s | | | | | | | |
| **ENAN** | **Enatrel Managu** | **0.55** | **355** | *iP* | | **Pn** | **11 52 37.1** | **-0.7** |
| ENAN | | | | *iS* | | **Sn** | **11 52 50.2** | **+0.2** |
| ENAN | | | | | IAML | | 11 53 29.2 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **USIM** | **UNAN** | **0.55** | **353** | *iP* | | **Pn** | **11 52 37.6** | **-0.3** |
| USIM | | | | *iS* | | **Sn** | **11 52 50.5** | **+0.5** |
| USIM | | | | | IAML | | 11 53 25.8 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **ABCN** | **Banco Central** | **0.56** | **350** | *iP* | | **Pn** | **11 52 38.7** | **+0.8** |
| ABCN | | | | *iS* | | **Sn** | **11 52 51.0** | **+0.8** |
| ABCN | | | | | IAML | | 11 52 52.6 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **0.57** | **354** | *iP* | | **Pn** | **11 52 38.2** | **+0.1** |
| TISN | | | | | IAML | | 11 52 57.2 | |
| | comp=Z,120nm,1.0s | | | | | | | |
| **WILN** | **Americas 2** | **0.59** | **2** | *iP* | | **Pn** | **11 52 37.9** | **-0.3** |
| WILN | | | | *iS* | | **Sn** | **11 52 50.9** | **+0.3** |
| WILN | | | | | IAML | | 11 53 03.5 | |
| | comp=Z,980nm,1.0s | | | | | | | |
| **SAPS** | **Ciudad Sandino** | **0.63** | **342** | *iP* | | **Pn** | **11 52 38.7** | **+0.2** |
| SAPS | | | | *iS* | | **Sn** | **11 52 51.4** | **+0.3** |
| SAPS | | | | | IAML | | 11 52 54.3 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **APYN** | **Apoyeque** | **0.68** | **348** | *iP* | | **Pn** | **11 52 39.1** | **+0.2** |
| APYN | | | | *iS* | | **Sn** | **11 52 52.1** | **+0.2** |
| APYN | | | | | IAML | | 11 52 57.2 | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **COPN** | **Copaltepe** | **0.71** | **329** | *iP* | | **Pn** | **11 52 39.4** | **+0.2** |
| COPN | | | | | IAML | | 11 53 00.7 | |
| | comp=Z,660nm,1.0s | | | | | | | |
| **LCRUZ** | **La Cruz** | **0.75** | **130** | *iP* | | **Pn** | **11 52 40.5** | **+1.0** |
| LCRUZ | | | | *eS* | | **Sn** | **11 52 53.5** | **+0.5** |
| **HUEN** | | **0.77** | **3** | *iP* | | **Pn** | **11 52 40.0** | **+0.3** |
| HUEN | | | | | IAML | | 11 52 56.1 | |
| | comp=Z,730nm,1.0s | | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **0.92** | **334** | *iP* | | **Pn** | **11 52 41.2** | **0.0** |
| LEVN | | | | *iS* | | **Sn** | **11 52 56.0** | **0.0** |
| LEVN | | | | | IAML | | 11 53 06.4 | |
| | comp=Z,860nm,1.0s | | | | | | | |
| **MACN** | **El Madrono** | **1.00** | **333** | *iP* | | **Pn** | **11 52 42.1** | **0.0** |
| MACN | | | | *iS* | | **Sn** | **11 52 56.4** | **-1.2** |
| MACN | | | | | IAML | | 11 53 04.9 | |
| | comp=Z,430nm,1.0s | | | | | | | |
| **CNGA** | **AI SSO del Vol** | **1.04** | **333** | *iP* | | **Pn** | **11 52 41.7** | **-0.9** |
| CNGA | | | | *iS* | | **Sn** | **11 52 56.8** | **-1.6** |
| CNGA | | | | | IAML | | 11 53 02.5 | |
| | comp=Z,670nm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.04** | **333** | *iP* | | **Pn** | **11 52 42.5** | **-0.1** |
| CNGN | | | | *iS* | | **Sn** | **11 52 57.9** | **-0.5** |
| CNGN | | | | | IAML | | 11 53 13.2 | |
| | comp=Z,760nm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **1.04** | **333** | *eP* | | **Pn** | **11 52 42.4** | **-0.1** |
| CNGN | | | | *eS* | | **Sn** | **11 52 57.8** | **-0.6** |
| **ROCN** | **Rota Cerro Neg** | **1.08** | **331** | *iP* | | **Pn** | **11 52 42.9** | **-0.1** |
| ROCN | | | | *iS* | | **Sn** | **11 52 58.6** | **-0.5** |
| ROCN | | | | | IAML | | 11 53 03.0 | |
| | comp=Z,440nm,1.0s | | | | | | | |
| **ACON** | **Acoyapa** | **1.09** | **68** | *iP* | | **Pn** | **11 52 43.0** | **0.0** |
| ACON | | | | | IAML | | 11 52 43.3 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| ACON | | | | *iS* | | **Sn** | **11 52 58.6** | **-0.7** |
| **ACON** | **Acoyapa** | **1.09** | **68** | *eP* | | **Pn** | **11 52 43.0** | **0.0** |
| **GB1A** | **Borínquen Arri** | **1.09** | **133** | *eP* | | **Pn** | **11 52 43.2** | **0.0** |
| **ELI1** | **Hacienda Flor** | **1.12** | **145** | *eP* | | **Pn** | **11 52 44.1** | **+0.7** |
| **VRLE** | **La Escondida,** | **1.13** | **133** | *eP* | | **Pn** | **11 52 43.7** | **+0.1** |
| **GPS3** | **Bodega del ICE** | **1.16** | **134** | *eP* | | **Pn** | **11 52 45.7** | **+1.8** |
| **ALIBA** | **Liberia Airpor** | **1.17** | **146** | *eP* | | **Pn** | **11 52 44.6** | **+0.7** |
| **QUEN** | **AI S del Volca** | **1.20** | **328** | *iP* | | **Pn** | **11 52 43.6** | **-0.7** |
| QUEN | | | | | IAML | | 11 53 09.1 | |
| | comp=Z,590nm,1.0s | | | | | | | |
| **DELF** | **Filadelfia** | **1.28** | **150** | *eP* | | **Pn** | **11 52 46.1** | **+0.8** |
| **PKGN** | **Cerro Pekin** | **1.33** | **326** | *iP* | | **Pn** | **11 52 46.6** | **+0.8** |
| PKGN | | | | *iS* | | **Sn** | **11 53 04.5** | **+0.4** |
| PKGN | | | | | IAML | | 11 53 11.8 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **COLC** | **Colonia** | **1.33** | **132** | *eP* | | **Pn** | **11 52 46.2** | **+0.3** |
| **CUI** | **Cuipilapa** | **1.37** | **131** | *eP* | | **Pn** | **11 52 46.7** | **+0.4** |
| **CRIN** | **San Cristobal** | **1.39** | **324** | *eP* | | **Pn** | **11 52 47.2** | **+0.6** |
| **TENO** | **El Achiote** | **1.48** | **125** | *eP* | | **Pn** | **11 52 47.9** | **+0.2** |
| **VERA** | **Finca Concepci** | **1.49** | **118** | *eP* | | **Pn** | **11 52 47.9** | **+0.1** |
| **LIMN** | **Finca el Limon** | **1.50** | **354** | *iP* | | **Pn** | **11 52 48.2** | **+0.3** |
| LIMN | | | | | IAML | | 11 53 12.5 | |
| | comp=Z,250nm,1.0s | | | | | | | |
| **LCHIL** | **Los Chiles** | **1.56** | **110** | *eP* | | **Pn** | **11 52 48.5** | **0.0** |
| **NICO** | **Nicoya** | **1.61** | **152** | *eP* | | **Pn** | **11 52 49.6** | **+0.3** |
| **JTS** | **Las Juntas de** | **1.77** | **136** | *eP* | | **Pn** | **11 52 51.4** | **+0.1** |
| **JUNT** | **Juntas** | **1.77** | **136** | *eP* | | **Pn** | **11 52 51.3** | **0.0** |
| **CEDE** | **Laguna Cedeo** | **1.83** | **126** | *eP* | | **Pn** | **11 52 52.6** | **+0.6** |
| **INDI** | **Punta Indio, G** | **1.83** | **158** | *iP* | | **Pn** | **11 52 51.1** | **-0.9** |
| INDI | | | | *iS* | | **Sn** | **11 53 13.6** | **-1.5** |
| INDI | | | | | IAML | | 11 53 15.7 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **ARE1** | **Arenal 1** | **1.83** | **127** | *eP* | | **Pn** | **11 52 52.6** | **+0.6** |
| **MTEVE** | **Monteverde** | **1.84** | **132** | *eP* | | **Pn** | **11 52 53.7** | **+1.4** |
| **VACR** | **Volcan Arenal** | **1.86** | **126** | *eP* | | **Pn** | **11 52 52.7** | **+0.3** |
| **TUNA** | **La Fortuna** | **1.89** | **125** | *eP* | | **Pn** | **11 52 53.1** | **+0.4** |
| **ESPN** | **Las Esperanzas** | **1.97** | **71** | *iP* | | **Pn** | **11 52 54.1** | **+0.4** |
| ESPN | | | | | IAML | | 11 52 54.3 | |
| | comp=Z,290nm,1.0s | | | | | | | |
| ESPN | | | | *iS* | | **Sn** | **11 53 18.8** | **+0.4** |
| **ESPN** | **Las Esperanzas** | **1.97** | **71** | *eP* | | **Pn** | **11 52 54.2** | **+0.4** |
| **CBL1** | **Cabuya** | **2.25** | **151** | *eP* | | **Pn** | **11 52 57.3** | **+0.4** |
| **TRB2** | **Turrubares** | **2.39** | **133** | *eP* | | **Pn** | **11 52 59.7** | **+0.4** |
| **BLUN** | **Bluefields** | **2.42** | **79** | *iP* | | **Pn** | **11 52 59.4** | **-0.3** |
| BLUN | | | | | IAML | | 11 54 27.3 | |
| | comp=Z,460nm,1.0s | | | | | | | |
| **TIBA** | **Tibas** | **2.64** | **127** | *eP* | | **Pn** | **11 53 00.8** | **-1.8** |
| **ACOS** | **Acosta** | **2.67** | **131** | *eP* | | **Pn** | **11 53 04.1** | **+1.0** |
| **ABE2** | **San Pablo** | **2.81** | **131** | *eP* | | **Pn** | **11 53 05.8** | **+0.7** |
| **LCR2** | **La Lucha 2** | **2.83** | **130** | *eP* | | **Pn** | **11 53 05.8** | **+0.6** |
| **TXAR** | **Lajitas Array** | **24.02** | **320** | P | | **P** | **11 57 28.7** | **+1.4** |
| | comp=Z,0.4nm,0.4s,baz=146,slow=9.0,SNR=6.9 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **140.06** | **247** | PKP | | **PKPdf** | **12 11 38.0** | **-1.1** |
| | comp=Z,0.3nm,0.7s,baz=103,slow=1.9,SNR=5.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **140.18** | **253** | PKP | | **PKPdf** | **12 11 38.9** | **-0.5** |
| | comp=Z,0.1nm,0.5s,baz=94,slow=2.5,SNR=5.9 | | | | | | | |

*IDC* ***25*** *12:16:39.9±1.2, 36.68N×30.96E, h0km, mb3.7/3, mbtmp3.6/7, ML3.4/3, Error ellipse: s-maj=25.6km s-min=17.7km az=132.0*
*ISK* ***25*** *12:16:47.1, 36.65N×31.12E, h67km±1km, ML3.2/47*
*NIC* ***25*** *12:16:47.3, 36.67N×31.40E, h67km±17km, Ml3.1/9*
*AFAD* ***25*** *12:16:47.1±0.0, 36.65N×31.24E, h14km±1km, ML3.0*
*GII* ***25*** *12:16:50.2±0.5, 36.235N±0.004×31.146E±0.001, h30km, Md3.0/1, Mws3.1/3, confirmed*
**ISC 25 12:16:47.2±0.9, 36.58N±0.03×31.20E±0.02, h67km±7km, n120,σ1§66/151, mb3.6/3, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MNVG** | **Manavgat-Antal** | **0.28** | **39** | | Pg | **Pn** | **12 16 58.1** | **+0.1** |
| MNVG | | | | | Sg | **Sn** | **12 17 06.6** | **+0.8** |
| **KEMT** | **Kemer-ANTALYA** | **0.52** | **273** | | Pg | **Pn** | **12 16 59.6** | **-0.4** |
| **ANTB** | **Antalya** | **0.54** | **307** | | Pg | **Pn** | **12 17 00.2** | **0.0** |
| ANTB | | | | | Sg | **Sn** | **12 17 08.7** | **-1.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SEDI | | | | *i* AML | AML | 12 17 21.0 | | |
| | comp=E,392nm,0.7s | | | | | | | |
| SEDI | | | | *i* AML | AML | 12 17 22.0 | | |
| | comp=N,314nm,0.2s | | | | | | | |
| **BCK** | **Bucak** | **1.01** | **331** | Pg | **Pn** | **12 17 04.9** | **-0.9** | |
| BCK | | | | Sg | **Sn** | **12 17 18.5** | **-1.1** | |
| **ELL** | **Elmali** | **1.05** | **280** | Pg | **Pn** | **12 17 05.4** | **-1.0** | |
| **ELL** | **Elmali** | **1.05** | **280** | S | **Sn** | **12 17 25.0** | **+4.4** | |
| ELL | | | | AML | AML | 12 17 26.6 | | |
| | 3.9nm,0.4s | | | | | | | |
| ELL | | | | AML | AML | 12 17 30.1 | | |
| | 2.9nm,0.6s | | | | | | | |
| **HDMB** | **Hadim** | **1.10** | **69** | Pn | **Pn** | **12 17 08.5** | **+1.4** | |
| HDMB | | | | Sn | **Sn** | **12 17 23.3** | **+1.3** | |
| **AKAS** | **Kas** | **1.33** | **256** | Pn | **Pn** | **12 17 10.1** | **+0.1** | |
| **KNIK** | **Mula-Seydike** | **1.33** | **282** | P | **Pn** | **12 17 11.7** | **+1.7** | |
| KNIK | | | | S | **Sn** | **12 17 30.1** | **+3.0** | |
| KNIK | | | | *i* AML | AML | 12 17 32.0 | | |
| | comp=N,238nm,0.3s | | | | | | | |
| KNIK | | | | *i* AML | AML | 12 17 34.0 | | |
| | comp=E,179nm,1.0s | | | | | | | |
| **BRDR** | **BURDUR-Merkez** | **1.44** | **321** | P | **Pn** | **12 17 11.5** | **+0.1** | |
| BRDR | | | | S | **Sn** | **12 17 31.1** | **+1.5** | |
| BRDR | | | | *i* AML | AML | 12 17 33.0 | | |
| | comp=N,148nm,0.4s | | | | | | | |
| BRDR | | | | *i* AML | AML | 12 17 33.0 | | |
| | comp=E,210nm,0.6s | | | | | | | |
| **GOLH** | **Golhisar** | **1.47** | **297** | P | **Pn** | **12 17 13.5** | **+1.7** | |
| GOLH | | | | S | **Sn** | **12 17 35.2** | **+4.9** | |
| GOLH | | | | *i* AML | AML | 12 17 39.0 | | |
| | comp=N,331nm,0.4s | | | | | | | |
| GOLH | | | | *i* AML | AML | 12 17 39.0 | | |
| | comp=E,610nm,0.4s | | | | | | | |
| **BOZY** | **Bozyazi-Mersin** | **1.51** | **108** | Pn | **Pn** | **12 17 14.3** | **+2.1** | |
| **CAME** | **Cameli-Denizli** | **1.57** | **284** | Pn | **Pn** | **12 17 12.9** | **-0.2** | |
| **DOGA** | **KONYA_Doganhis** | **1.57** | **14** | P | **Pn** | **12 17 13.7** | **+0.5** | |
| DOGA | | | | S | **Sn** | **12 17 34.5** | **+1.7** | |
| DOGA | | | | *i* AML | AML | 12 17 35.0 | | |
| | comp=N,275nm,0.6s | | | | | | | |
| DOGA | | | | *i* AML | AML | 12 17 35.0 | | |
| | comp=E,134nm,0.3s | | | | | | | |
| **CAEL** | **Denizli, Camel** | **1.60** | **290** | P | **Pn** | **12 17 15.7** | **+2.1** | |
| CAEL | | | | S | **Sn** | **12 17 37.9** | **+4.3** | |
| CAEL | | | | *i* AML | AML | 12 17 40.0 | | |
| | comp=E,728nm,0.7s | | | | | | | |
| CAEL | | | | *i* AML | AML | 12 17 47.0 | | |
| | comp=N,623nm,0.6s | | | | | | | |
| **TEKE** | **Tekeli-Mersin** | **1.60** | **105** | Pn | **Pn** | **12 17 15.9** | **+2.4** | |
| **BASM** | **Basmaki-Afyon** | **1.62** | **326** | Pn | **Pn** | **12 17 13.2** | **-0.7** | |
| **KONT** | **Konya--Tatoy** | **1.65** | **34** | Pn | **Pn** | **12 17 14.5** | **+0.3** | |
| **YVAC** | **Isparta, Yalva** | **1.69** | **1** | P | **Pn** | **12 17 14.6** | **-0.2** | |
| YVAC | | | | S | **Sn** | **12 17 35.5** | **-0.1** | |
| YVAC | | | | *i* AML | AML | 12 17 36.0 | | |
| | comp=E,122nm,0.3s | | | | | | | |
| YVAC | | | | *i* AML | AML | 12 17 37.0 | | |
| | comp=N,137nm,1.0s | | | | | | | |
| **FETY** | **Fethiye** | **1.70** | **273** | Pn | **Pn** | **12 17 14.8** | **0.0** | |
| **INCE** | **Denizli-Bozkur** | **1.72** | **312** | P | **Pn** | **12 17 15.3** | **+0.2** | |
| INCE | | | | *i* AML | AML | 12 17 38.0 | | |
| | comp=N,108nm,0.9s | | | | | | | |
| INCE | | | | S | **Sn** | **12 17 38.1** | **+1.8** | |
| INCE | | | | *i* AML | AML | 12 17 43.0 | | |
| | comp=E,88nm,0.4s | | | | | | | |
| **KRMN** | **Karaman** | **1.76** | **70** | Pn | **Pn** | **12 17 17.0** | **+1.3** | |
| **APMY** | **Acipayam-Deniz** | **1.76** | **301** | Pn | **Pn** | **12 17 15.6** | **-0.1** | |
| **AFYN** | **Afyon-Dinar-K** | **1.78** | **342** | P | **Pn** | **12 17 15.8** | **-0.2** | |
| AFYN | | | | S | **Sn** | **12 17 38.5** | **+0.7** | |
| AFYN | | | | *i* AML | AML | 12 17 39.0 | | |
| | comp=E,115nm,0.7s | | | | | | | |
| AFYN | | | | *i* AML | AML | 12 17 43.0 | | |
| | comp=N,119nm,0.8s | | | | | | | |
| **AKMS** | **Akamas** | **1.81** | **149** | P | **Pn** | **12 17 16.2** | **0.0** | |
| AKMS | | | | S | **Sn** | **12 17 39.8** | **+1.5** | |
| AKMS | | | | AML | AML | 12 17 50.1 | | |
| | 0.8nm,0.2s | | | | | | | |
| AKMS | | | | AML | AML | 12 17 51.3 | | |
| | 0.9nm,0.7s | | | | | | | |
| **TEVE** | **Tevekalti-Mers** | **1.81** | **94** | Pn | **Pn** | **12 17 18.7** | **+2.3** | |
| **YORU** | **Yoruktepe-Mers** | **1.83** | **103** | Pn | **Pn** | **12 17 18.3** | **+1.7** | |
| **OREN** | **Orenkoy-Mersin** | **1.86** | **101** | Pn | **Pn** | **12 17 19.2** | **+2.3** | |
| **LADK** | **Ladik-KONYA** | **1.87** | **29** | Pn | **Pn** | **12 17 18.0** | **+0.8** | |
| **DNZT** | **Denizli-Tavas-** | **1.88** | **293** | P | **Pn** | **12 17 18.9** | **+1.6** | |
| DNZT | | | | S | **Sn** | **12 17 42.5** | **+2.4** | |
| DNZT | | | | *i* AML | AML | 12 17 46.0 | | |
| | comp=N,256nm,1.1s | | | | | | | |
| DNZT | | | | *i* AML | AML | 12 17 48.0 | | |
| | comp=E,209nm,0.7s | | | | | | | |
| **KZIL** | **AFYON_Kizioren** | **1.88** | **334** | P | **Pn** | **12 17 16.8** | **-0.5** | |
| KZIL | | | | *i* AML | AML | 12 17 40.0 | | |
| | comp=E,102nm,0.4s | | | | | | | |
| KZIL | | | | S | **Sn** | **12 17 40.6** | **+0.5** | |
| KZIL | | | | *i* AML | AML | 12 17 43.0 | | |
| | comp=N,81nm,0.4s | | | | | | | |
| **AKDN** | **Akdeniz- Kıbrı** | **1.92** | **131** | Pn | **Pn** | **12 17 19.0** | **+1.3** | |
| **AKK1** | **Akkuyu-Mersin** | **1.94** | **102** | Pn | **Pn** | **12 17 20.1** | **+2.1** | |
| **AKKU** | **Akkuyu-Mersin** | **1.94** | **102** | Pn | **Pn** | **12 17 20.3** | **+2.3** | |
| **YESI** | **Yesilovacik-Me** | **2.01** | **100** | Pn | **Pn** | **12 17 20.8** | **+1.9** | |
| **DNIZ** | **Denizli-Tavas-** | **2.02** | **302** | P | **Pn** | **12 17 19.9** | **+0.7** | |
| DNIZ | | | | S | **Sn** | **12 17 46.3** | **+2.8** | |
| DNIZ | | | | *i* AML | AML | 12 17 48.0 | | |
| | comp=N,695nm,0.4s | | | | | | | |
| DNIZ | | | | *i* AML | AML | 12 17 51.0 | | |
| | comp=E,832nm,0.3s | | | | | | | |
| **KEBE** | **Keben-Mersin** | **2.03** | **93** | Pn | **Pn** | **12 17 21.4** | **+2.1** | |
| **IKL** | **Isikli** | **2.03** | **99** | Pn | **Pn** | **12 17 22.2** | **+2.9** | |
| **SHUT** | **Suhut-Afyon** | **2.04** | **346** | Pn | **Pn** | **12 17 19.4** | **-0.1** | |
| **TISA** | **Tisan-Mersin** | **2.04** | **101** | Pn | **Pn** | **12 17 21.7** | **+2.3** | |
| **KARG** | **Kargicak-Mersi** | **2.06** | **100** | Pn | **Pn** | **12 17 21.9** | **+2.3** | |
| **DALY** | **Dalyan (Mula)** | **2.06** | **277** | Pn | **Pn** | **12 17 19.7** | **+0.1** | |
| **NATA** | **Nata** | **2.11** | **148** | P | **Pn** | **12 17 22.4** | **+2.1** | |
| NATA | | | | S | **Sn** | **12 17 46.9** | **+1.3** | |
| NATA | | | | AML | AML | 12 17 58.4 | | |
| | 1.7nm,0.9s | | | | | | | |
| NATA | | | | AML | AML | 12 18 02.6 | | |
| | 2.1nm,0.6s | | | | | | | |
| **TROD** | **Troodos** | **2.12** | **140** | P | **Pn** | **12 17 20.3** | **-0.3** | |
| TROD | | | | S | **Sn** | **12 17 46.3** | **+0.3** | |
| TROD | | | | AML | AML | 12 18 06.5 | | |
| | 0.6nm,0.6s | | | | | | | |
| TROD | | | | AML | AML | 12 18 10.3 | | |
| | 0.4nm,0.6s | | | | | | | |
| **KHL** | **Karahalli** | **2.20** | **323** | Pn | **Pn** | **12 17 21.4** | **-0.2** | |
| **SLFK** | **Silifke-Mersin** | **2.22** | **94** | Pn | **Pn** | **12 17 24.1** | **+2.3** | |
| **ATHAL** | **Athalassa** | **2.29** | **128** | P | **Pn** | **12 17 23.4** | **+0.7** | |
| ATHAL | | | | S | **Sn** | **12 17 50.9** | **+1.0** | |
| ATHAL | | | | AML | AML | 12 18 01.7 | | |
| | 1.2nm,0.7s | | | | | | | |
| ATHAL | | | | AML | AML | 12 18 18.9 | | |
| | 0.9nm,1.1s | | | | | | | |
| **APOL** | **The Sanctuary** | **2.33** | **144** | S | **Sn** | **12 17 53.1** | **+2.1** | |
| APOL | | | | AML | AML | 12 18 14.5 | | |
| | 0.3nm,0.9s | | | | | | | |
| APOL | | | | AML | AML | 12 18 18.4 | | |
| | 0.3nm,0.7s | | | | | | | |
| **KIZT** | **Kizilcal** | **2.36** | **13** | Pn | **Pn** | **12 17 23.6** | **-0.3** | |
| **CSS** | **Mathiatis** | **2.37** | **132** | Pn | **Pn** | **12 17 23.2** | **-0.6** | |
| **CSS** | **Mathiatis** | **2.37** | **132** | P | **Pn** | **12 17 26.1** | **+2.3** | |
| **CSS** | **Mathiatis** | **2.37** | **132** | P | **Pn** | **12 17 23.4** | **-0.4** | |
| **CSS** | **Mathiatis** | **2.37** | **132** | P | **Pn** | **12 17 23.5** | **-0.4** | |
| CSS | | | | S | **Sn** | **12 17 51.5** | **-0.3** | |
| CSS | | | | AML | AML | 12 18 05.2 | | |
| | 0.3nm,0.7s | | | | | | | |
| CSS | | | | AML | AML | 12 18 08.4 | | |
| | 0.3nm,0.7s | | | | | | | |
| **KIZK** | **Mersin** | **2.37** | **91** | Pn | **Pn** | **12 17 26.8** | **+2.9** | |
| **TURN** | **Turunc** | **2.38** | **276** | Pn | **Pn** | **12 17 24.5** | **+0.5** | |
| **YER** | **Yerkesik** | **2.40** | **284** | Pn | **Pn** | **12 17 24.5** | **+0.2** | |
| **CHBY** | **Cihanbeyli** | **2.41** | **33** | Pn | **Pn** | **12 17 25.5** | **+1.0** | |
| **AKIN** | **Akıncılar- Kıb** | **2.41** | **130** | Pn | **Pn** | **12 17 24.5** | **+0.1** | |
| **ASGA** | **Asgata** | **2.44** | **136** | S | **Sn** | **12 17 53.7** | **+0.1** | |
| ASGA | | | | AML | AML | 12 18 07.5 | | |
| | 0.4nm,0.5s | | | | | | | |
| ASGA | | | | AML | AML | 12 18 10.7 | | |
| | 0.3nm,0.7s | | | | | | | |
| **SULT** | **Sultanhani-AKS** | **2.46** | **48** | Pn | **Pn** | **12 17 26.1** | **+1.0** | |
| **MVOU** | **Mavrovouni** | **2.52** | **127** | P | **Pn** | **12 17 25.5** | **-0.3** | |
| MVOU | | | | S | **Sn** | **12 17 54.7** | **-0.7** | |
| MVOU | | | | AML | AML | 12 18 01.6 | | |
| | 0.3nm,0.5s | | | | | | | |
| MVOU | | | | AML | AML | 12 18 08.2 | | |
| | 0.2nm,0.5s | | | | | | | |
| **EREN** | **Erenkoy** | **2.62** | **113** | Pn | **Pn** | **12 17 30.1** | **+2.8** | |
| **KULU** | **Kulu** | **2.85** | **30** | Pn | **Pn** | **12 17 31.2** | **+0.8** | |
| **SVRH** | **Sivrihisar-ESK** | **2.88** | **5** | Pn | **Pn** | **12 17 30.5** | **-0.3** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KARP** | **Karpathos** | **3.43** | **254** | P | **Pn** | **12 17 37.6** | **-0.7** | |
| **BRTR** | **Keskin Array B** | **3.69** | **31** | Pn | **Pn** | **12 17 41.7** | **-0.2** | |
| | 0.9nm,0.3s,baz=211,slow=17,SNR=32 | | | | | | | |
| BRTR | | | | Sn | **Sn** | **12 18 23.5** | **-0.7** | |
| | 2.0nm,0.3s,baz=206,slow=25,SNR=16 | | | | | | | |
| | 3.0nm,0.5s | | | | | | | |
| **HNTI** | **Hanita** | **4.78** | **136** | P | **Pn** | **12 17 58.5** | **+1.8** | |
| **HNTI** | **Hanita** | **4.78** | **136** | S | **Sn** | **12 18 49.6** | **-1.1** | |
| **HNTI** | **Hanita** | **4.78** | **136** | P | **Pn** | **12 17 58.3** | **+1.6** | |
| **MMA0B** | **Mount Meron ar** | **4.96** | **135** | P | **Pn** | **12 17 59.9** | **+0.6** | |
| **MMA0B** | **Mount Meron ar** | **4.96** | **135** | S | **Sn** | **12 18 54.2** | **-1.1** | |
| **MMAI** | **Mount Meron Ar** | **4.96** | **135** | Pn | **Pn** | **12 17 59.8** | **+0.5** | |
| | 3.7nm,0.3s,baz=314,slow=12,SNR=36 | | | | | | | |
| MMAI | | | | Sn | **Sn** | **12 18 53.9** | **-1.4** | |
| | 8.9nm,0.3s,baz=324,slow=28,SNR=12 | | | | | | | |
| | 2.4nm,0.2s | | | | | | | |
| **MMA0** | **Mount Meron ar** | **4.96** | **135** | P | **Pn** | **12 17 59.9** | **+0.7** | |
| **GEM** | **Giv'at Ha'Em** | **4.97** | **131** | P | **Pn** | **12 18 01.4** | **+2.0** | |
| **GEM** | **Giv'at Ha'Em** | **4.97** | **131** | S | **Sn** | **12 18 54.4** | **-1.1** | |
| **GEM** | **Giv'at Ha'Em** | **4.97** | **131** | P | **Pn** | **12 18 00.5** | **+1.1** | |
| **NATI** | **Neve Ativ** | **4.98** | **130** | P | **Pn** | **12 18 01.0** | **+1.5** | |
| **NATI** | **Neve Ativ** | **4.98** | **130** | P | **Pn** | **12 18 00.5** | **+1.1** | |
| **OFRI** | **`Ofer** | **5.03** | **141** | P | **Pn** | **12 18 00.8** | **+0.6** | |
| **KSHT** | **Keshet** | **5.22** | **132** | P | **Pn** | **12 18 04.2** | **+1.4** | |
| **KSHT** | **Keshet** | **5.22** | **132** | S | **Sn** | **12 19 01.4** | **-0.3** | |
| **IDI** | **Anoyia** | **5.28** | **258** | Pn | **Pn** | **12 17 60.0** | **-3.6** | |
| | 2.3nm,0.3s,baz=17,slow=14,SNR=3.2 | | | | | | | |
| IDI | | | | Sn | **Sn** | **12 18 57.0** | **-6.1** | |
| | 1.9nm,0.3s,baz=140,slow=8.9,SNR=6.3 | | | | | | | |
| **SHMJ** | **Saham** | **5.38** | **134** | P | **Pn** | **12 18 06.6** | **+1.7** | |
| **MMLI** | **Mount Malkishu** | **5.40** | **139** | S | **Sn** | **12 19 04.9** | **-1.2** | |
| **MMLI** | **Mount Malkishu** | **5.40** | **139** | P | **Pn** | **12 18 07.1** | **+1.8** | |
| **QRNJ** | **Al-Qirein** | **5.56** | **138** | P | **Pn** | **12 18 08.9** | **+1.5** | |
| **SALP** | **Salfit** | **5.58** | **143** | P | **Pn** | **12 18 09.5** | **+1.8** | |
| **HMDT** | **Nahal Hemdat** | **5.60** | **139** | P | **Pn** | **12 18 08.3** | **+0.8** | |
| **HMDT** | **Nahal Hemdat** | **5.60** | **139** | P | **Pn** | **12 18 09.1** | **+1.1** | |
| **DSI** | **Dead Sea** | **6.08** | **144** | P | **Pn** | **12 18 15.0** | **+0.5** | |
| **DSI** | **Dead Sea** | **6.08** | **144** | S | **Sn** | **12 19 20.9** | **-1.8** | |
| **DSI** | **Dead Sea** | **6.08** | **144** | P | **Pn** | **12 18 15.3** | **+0.8** | |
| **YTIR** | **Yattir** | **6.13** | **147** | P | **Pn** | **12 18 16.2** | **+0.9** | |
| **YTIR** | **Yattir** | **6.13** | **147** | P | **Pn** | **12 18 15.8** | **+0.5** | |
| **KZIT** | **Kziot** | **6.25** | **154** | P | **Pn** | **12 18 15.8** | **-1.1** | |
| **MSBI** | **Mazada** | **6.28** | **145** | P | **Pn** | **12 18 17.6** | **+0.3** | |
| **MSBI** | **Mazada** | **6.28** | **145** | P | **Pn** | **12 18 18.2** | **+1.0** | |
| **ZFRI** | **Zfri** | **6.86** | **150** | P | **Pn** | **12 18 25.1** | **-0.1** | |
| **PRNI** | **Paran** | **6.97** | **152** | P | **Pn** | **12 18 26.3** | **-0.5** | |
| **PRNI** | **Paran** | **6.97** | **152** | P | **Pn** | **12 18 26.2** | **-0.5** | |
| **KRMI** | **Paran Flat** | **7.08** | **154** | P | **Pn** | **12 18 27.7** | **-0.6** | |
| **HRFI** | **Mount Harif** | **7.27** | **153** | P | **Pn** | **12 18 30.1** | **-0.7** | |
| **HRFI** | **Mount Harif** | **7.27** | **153** | P | **Pn** | **12 18 30.5** | **-0.4** | |
| **HRFI** | **Mount Harif** | **7.27** | **153** | S | **Sn** | **12 19 49.5** | **-2.4** | |
| **MBRI** | **Mt Berech** | **7.44** | **154** | P | **Pn** | **12 18 32.7** | **-0.6** | |
| **MBRI** | **Mt Berech** | **7.44** | **154** | P | **Pn** | **12 18 32.8** | **-0.4** | |
| **AQBJ** | **Aqaba** | **7.55** | **154** | P | **Pn** | **12 18 33.8** | **-0.9** | |
| **EIL** | **Elat** | **7.57** | **154** | Pn | **Pn** | **12 18 34.7** | **-0.3** | |
| | 0.5nm,0.3s,baz=342,slow=4.2,SNR=9.1 | | | | | | | |
| EIL | | | | Sn | **Sn** | **12 19 54.7** | **-4.5** | |
| | 2.1nm,0.3s,baz=107,slow=5.0,SNR=9.1 | | | | | | | |
| | 2.9nm,0.5s | | | | | | | |
| **EIL** | **Elat** | **7.57** | **154** | P | **Pn** | **12 18 34.6** | **-0.3** | |
| **FINES** | **FINESS Array B** | **25.10** | **354** | P | **P** | **12 22 04.8** | **-0.5** | |
| | 1.6nm,0.8s,baz=137,slow=14,SNR=4.4 | | | | | | | |
| | 1.6nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.26** | **236** | P | **P** | **12 23 34.7** | **-0.8** | |
| | 0.3nm,0.4s,baz=48,slow=8.4,SNR=2.9 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **36.40** | **52** | P | **P** | **12 23 44.9** | **-0.1** | |
| | 0.4nm,0.2s,baz=283,slow=8.4,SNR=4.3 | | | | | | | |
| | 0.4nm,0.2s | | | | | | | |

*HEL **25** 12:30:00.1±0.1, 67°.94N×25°.88E, h0km, ML1.6, Suspected explosion*
*KOLA **25** 12:30:01.9, 68°.00N×25°.64E, h0km, ML1.9, Error ellipse: s-maj=7.1km s-min=5.6km az=20.0, Finland, Lapland*
*IDC **25** 12:30:02.1±1.5, 68°.02N×25°.68E, h0km, mbtmp3.3/1, ML1.9/1, Error ellipse: s-maj=30.5km s-min=9.4km az=88.0*

**ISC 25 12:29:58.4±0.7, 67°.92N±0°.02×25°.94E±0°.03, h0km, n28, σ0s71/46, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGF** | **Sodankyl** | **0.53** | **155** | PG | | **Pg** | **12 30 08.9** | **+0.4** |
| SGF | | | | SG | | **Sg** | **12 30 14.6** | **-0.7** |
| **HEF** | **Hetta** | **0.98** | **301** | *e*P | | **Pg** | **12 30 16.9** | **-0.4** |
| **HEF** | **Hetta** | **0.98** | **301** | PG | | **Pg** | **12 30 17.2** | **0.0** |
| | baz=115 | | | | | | | |
| HEF | | | | MSG | | | 12 30 29.4 | |
| | comp=Z,4.4nm,0.2s | | | | | | | |
| HEF | | | | SG | | **Sg** | **12 30 29.8** | **-0.1** |
| **KLF** | **Kolari** | **1.02** | **229** | PG | | **Pg** | **12 30 18.1** | **+0.2** |
| KLF | | | | MSG | | | 12 30 31.2 | |
| | comp=Z,4.4nm,0.2s | | | | | | | |
| KLF | | | | SG | | **Sg** | **12 30 31.3** | **+0.1** |
| **RAJF** | **Raja-Jooseppi** | **1.05** | **57** | PB | | **Pb** | **12 30 19.7** | **+0.3** |
| RAJF | | | | SB | | **Sb** | **12 30 33.2** | **-0.5** |
| **RNF** | **Rovaniemi** | **1.31** | **179** | PG | | **Pn** | **12 30 24.3** | **+0.4** |
| RNF | | | | SG | | **Sn** | **12 30 42.0** | **-0.2** |
| **VRF** | **Varrio** | **1.40** | **95** | PN | | **Pb** | **12 30 26.7** | **+1.3** |
| VRF | | | | MSG | | | 12 30 43.1 | |
| | comp=Z,5.2nm,0.2s | | | | | | | |
| VRF | | | | SB | | **Sn** | **12 30 44.9** | **+0.5** |
| **PAJU** | **Pajala** | **1.41** | **232** | PG | | **Pg** | **12 30 25.4** | **0.0** |
| | baz=48 | | | | | | | |
| PAJU | | | | SB | | **Sb** | **12 30 44.0** | **0.0** |
| **KTK1** | **Kautokeino** | **1.48** | **319** | *e*P | | **Pn** | **12 30 26.3** | **-0.1** |
| **KTK1** | **Kautokeino** | **1.48** | **319** | PG | | **Pn** | **12 30 26.2** | **-0.1** |
| KTK1 | | | | SN | | **Sn** | **12 30 48.6** | **+2.2** |
| **LANU** | **Lannavaara** | **1.49** | **277** | PG | | **Pn** | **12 30 26.2** | **-0.2** |
| LANU | | | | SN | | **Sg** | **12 30 46.2** | **-0.1** |
| **ARA0** | **ARCESS Array S** | **1.63** | **355** | PN | | **Pb** | **12 30 29.3** | **-0.1** |
| | baz=176 | | | | | | | |
| ARA0 | | | | SN | | **Sn** | **12 30 50.1** | **0.0** |
| **ARCES** | **ARCESS Array B** | **1.63** | **355** | P | | **Pb** | **12 30 29.3** | **-0.1** |
| ARCES | | | | S | | **Sn** | **12 30 50.1** | **+0.1** |
| **ARCES** | **ARCESS Array B** | **1.63** | **355** | Pg | | **Pb** | **12 30 29.6** | **+0.2** |
| | comp=Z,0.9nm,0.3s,baz=174,slow=16,SNR=50 | | | | | | | |
| ARCES | | | | Lg | | Lg | 12 30 49.9 | |
| | comp=Z,0.8nm,0.3s,baz=180,slow=26,SNR=12 | | | | | | | |
| **KEV** | **Kevo** | **1.89** | **11** | PG | | **Pb** | **12 30 33.8** | **+0.1** |
| KEV | | | | MSG | | | 12 30 55.8 | |
| | comp=Z,4.6nm,0.2s | | | | | | | |
| KEV | | | | SN | | **Sb** | **12 30 57.6** | **-0.1** |
| **RANF** | **Ranua** | **1.94** | **170** | PG | | **Pg** | **12 30 35.2** | **-0.3** |
| | baz=350 | | | | | | | |
| RANF | | | | SG | | **Sg** | **12 31 00.7** | **+0.1** |
| **TOF** | **Tornio** | **1.95** | **200** | PG | | **Pg** | **12 30 35.4** | **-0.3** |
| | baz=18 | | | | | | | |
| TOF | | | | MSG | | | 12 30 58.4 | |
| | comp=Z,3.0nm,0.2s | | | | | | | |
| TOF | | | | SG | | **Sg** | **12 31 00.9** | **-0.1** |
| **OLKF** | **Oulanka, Finla** | **2.10** | **138** | PG | | **Pg** | **12 30 38.2** | **-0.3** |
| OLKF | | | | MSG | | | 12 31 03.1 | |
| | comp=Z,2.6nm,0.2s | | | | | | | |
| OLKF | | | | SG | | **Sg** | **12 31 06.0** | **+0.3** |
| **KALU** | **Kalix** | **2.31** | **207** | SG | | **Sg** | **12 31 11.1** | **-1.3** |
| **MSF** | **Maaselka** | **2.36** | **147** | PG | | **Pb** | **12 30 42.3** | **+0.6** |
| | baz=327 | | | | | | | |
| MSF | | | | SG | | **Sg** | **12 31 13.1** | **-0.9** |
| **KU6** | **Riekki** | **2.45** | **139** | PB | | **Pb** | **12 30 43.0** | **-0.3** |
| KU6 | | | | MSG | | | 12 31 13.4 | |
| | comp=Z,3.9nm,0.2s | | | | | | | |
| KU6 | | | | SG | | **Sg** | **12 31 16.4** | **-0.7** |
| **VADS** | **Vadso** | **2.53** | **28** | P | | **Pb** | **12 30 42.9** | **-1.8** |
| VADS | | | | S | | **Sn** | **12 31 14.1** | **+1.9** |
| **APA0** | **Apatity Array** | **2.70** | **93** | P | | **Pb** | **12 30 46.4** | **-1.1** |
| APA0 | | | | S | | **Sb** | **12 31 21.7** | **+0.5** |
| **OUL** | **Oulu** | **2.84** | **180** | SG | | **Sb** | **12 31 26.3** | **+1.1** |
| **I37NO** | **I37NO** | **2.94** | **297** | I | | I | 12 47 50.0 | |
| | comp=Z,0.1nm,0.9s,baz=108,slow=321,SNR=13 | | | | | | | |
| **FAUS** | **Fauske** | **4.10** | **267** | P | | **Pn** | **12 31 02.1** | **-0.1** |
| FAUS | | | | S | | **Sn** | **12 31 50.8** | **-0.1** |
| **NIF** | **Nilsia** | **4.61** | **169** | SN | | **Sn** | **12 32 02.8** | **-0.6** |
| **FINES** | **FINESS Array B** | **6.50** | **179** | Pn | | Pn | 12 31 39.8 | +4.6 |
| | comp=Z,0.1nm,0.3s,baz=4.8,slow=12,SNR=2.2 | | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | | |

*KRNET **25** 12:44:15.7±0.1, 39°.49N×75°.44E, mb3.3*
*SOME **25** 12:44:17.8, 39°.65N×75°.28E, h10km*
*NNC **25** 12:44:25.4±1.7, 39°.99N×75°.21E, h0km, mb4.0, mpv3.6,*

*Error ellipse: s-maj=14.1km s-min=10.7km az=144.0*

**ISC 25 12:44:17.0±2.1, 39°.39N±0°.10×75°.34E±0°.04, h1km±14km, n56, σ1s34/86, 26C-17D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.55** | **294** | ⇑*i*P | | **Pn** | **12 44 45.5** | **-0.4** |
| | baz=90 | | | | | | | |
| SFK | | | | ⇑*i*S | | **Sb** | **12 45 07.2** | **+0.4** |
| | baz=90 | | | | | | | |
| **NRN** | **Naryn** | **2.10** | **14** | ⇑*e*P | | **Pn** | **12 44 52.3** | **-1.3** |
| | baz=12 | | | | | | | |
| NRN | | | | ⇑*i*S | | **Sn** | **12 45 19.1** | **-1.4** |
| | baz=12 | | | | | | | |
| **OHH** | **Osh** | **2.27** | **301** | ⇑*e*P | | **Pn** | **12 44 56.6** | **+0.9** |
| | baz=98 | | | | | | | |
| OHH | | | | ⇑*i*S | | **Sb** | **12 45 26.5** | **-0.8** |
| | baz=98 | | | | | | | |
| **ARLS** | **Aral** | **2.58** | **343** | ⇑*i*P | | **Pn** | **12 44 59.7** | **-0.4** |
| | baz=41 | | | | | | | |
| ARLS | | | | ⇑*e*S | | **Sn** | **12 45 31.9** | **-0.4** |
| | baz=41 | | | | | | | |
| **ULHL** | **Ulahol** | **2.93** | **13** | ⇓*i*P | | **Pn** | **12 45 04.1** | **-0.8** |
| | baz=12 | | | | | | | |
| ULHL | | | | ⇓*i*S | | **Sn** | **12 45 39.4** | **-1.5** |
| | baz=12 | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **2.99** | **38** | ⇑*i*P | | **Pn** | **12 45 05.1** | **-0.9** |
| | baz=38 | | | | | | | |
| TARG | | | | ⇑*i*S | | **Sn** | **12 45 41.0** | **-1.7** |
| | baz=38 | | | | | | | |
| **AML** | **Almayashu** | **3.01** | **336** | ⇑*e*P | | **Pn** | **12 45 06.2** | **+0.1** |
| | baz=34 | | | | | | | |
| AML | | | | ⇑*i*S | | **Sn** | **12 45 42.9** | **-0.1** |
| | baz=34 | | | | | | | |
| **KDJ** | **Kajisay** | **3.07** | **26** | ⇓*e*P | | **Pn** | **12 45 06.0** | **-0.8** |
| | baz=26 | | | | | | | |
| KDJ | | | | ⇓*i*S | | **Sn** | **12 45 42.6** | **-1.7** |
| | baz=26 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.13** | **8** | ⇓*e*P | | **Pn** | **12 45 06.9** | **-0.7** |
| | baz=7.0 | | | | | | | |
| BOOM | | | | ⇓*i*S | | **Sn** | **12 45 44.2** | **-1.5** |
| | baz=7.0 | | | | | | | |
| **KBK** | **Karagaybulak** | **3.27** | **355** | ⇑*i*P | | **Pn** | **12 45 09.1** | **-0.5** |
| | baz=53 | | | | | | | |
| KBK | | | | ⇑*i*S | | **Sn** | **12 45 48.2** | **-1.1** |
| | baz=53 | | | | | | | |
| **AAK** | **Ala-Archa** | **3.30** | **349** | ⇑Pn | | **Pn** | **12 45 11.3** | **+1.2** |
| | 7.1nm,0.5s | | | | | | | |
| AAK | | | | Lg | | Lg | 12 45 50.0 | |
| | 46nm,1.1s | | | | | | | |
| **AAK** | **Ala-Archa** | **3.30** | **349** | ⇑*e*P | | **Pn** | **12 45 09.7** | **-0.3** |
| | baz=48 | | | | | | | |
| AAK | | | | ⇑*e*S | | **Sn** | **12 45 49.1** | **-0.9** |
| | baz=48 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.47** | **341** | ⇓*e*P | | **Pn** | **12 45 12.2** | **-0.1** |
| | baz=39 | | | | | | | |
| EKS2 | | | | ⇓*i*S | | **Sn** | **12 45 53.5** | **-0.6** |
| | baz=39 | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.53** | **3** | ⇓Pn | | **Pn** | **12 45 13.7** | **+0.6** |
| | 12nm,0.4s | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | 12 45 55.7 | |
| | 48nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.53** | **3** | ⇓*i*P | | **Pn** | **12 45 12.6** | **-0.6** |
| | baz=2.0 | | | | | | | |
| TKM2 | | | | ⇓*i*S | | **Sn** | **12 45 54.1** | **-1.6** |
| | baz=2.0 | | | | | | | |
| **CHMS** | **Chumysh** | **3.63** | **353** | ⇑Pn | | **Pn** | **12 45 13.4** | **-1.0** |
| | 6.5nm,0.6s | | | | | | | |
| CHMS | | | | ⇓Lg | | Lg | 12 45 57.2 | |
| | 25nm,1.1s | | | | | | | |
| **KST** | **Kastek** | **3.68** | **7** | *e*P | | **Pn** | **12 45 17.7** | **+2.6** |
| | 11nm,0.4s | | | | | | | |
| KST | | | | *e*S | | **Sn** | **12 46 00.3** | **+1.1** |
| | 61nm,0.4s | | | | | | | |
| **KST** | **Kastek** | **3.68** | **7** | Pg | | **Pn** | **12 45 17.5** | **+2.4** |
| | 11nm,0.4s | | | | | | | |
| KST | | | | Lg | | Lg | 12 46 00.2 | |
| | 61nm,0.4s | | | | | | | |
| **MRKS** | **Merke** | **3.71** | **335** | *e*P | | **Pb** | **12 45 22.4** | **-1.0** |
| | 5.5nm,0.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sb** | **12 46 08.7** | **-0.2** |
| | 18nm,0.5s | | | | | | | |
| **MRKS** | **Merke** | **3.71** | **335** | Pg | | **Pn** | **12 45 18.1** | **+2.6** |
| | 5.5nm,0.3s | | | | | | | |
| MRKS | | | | Lg | | Lg | 12 46 00.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 31nm,0.8s | | | | | | | |
| **KURS** | **Kuram** | **4.61** | **27** | *e*P | | **Pb** | **12 45 39.0** | **+0.3** |
| | 7.4nm,0.6s | | | | | | | |
| KURS | | | | *e*S | | **Sb** | **12 46 37.2** | **+2.5** |
| | 9.5nm,0.6s | | | | | | | |
| **KURS** | **Kuram** | **4.61** | **27** | Pg | | **Pb** | **12 45 39.0** | **+0.3** |
| | 7.4nm,0.6s | | | | | | | |
| KURS | | | | Lg | | Lg | 12 46 36.4 | |
| | 11nm,1.1s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.62** | **15** | *e*P | | **Pb** | **12 45 39.3** | **+0.4** |
| | 13nm,0.6s | | | | | | | |
| CHKK | | | | *e*S | | **Sb** | **12 46 37.5** | **+2.4** |
| | 31nm,0.7s | | | | | | | |
| **CHKK** | **Chushkaly** | **4.62** | **15** | Pg | | **Pb** | **12 45 39.4** | **+0.5** |
| | 11nm,0.8s | | | | | | | |
| CHKK | | | | Lg | | Lg | 12 46 37.5 | |
| | 31nm,0.7s | | | | | | | |
| **UZB** | **Uzynbulak** | **4.66** | **35** | *e*P | | **Pb** | **12 45 40.2** | **+0.6** |
| | 5.4nm,0.5s | | | | | | | |
| UZB | | | | *e*S | | **Sb** | **12 46 38.6** | **+2.3** |
| | 8.4nm,0.6s | | | | | | | |
| **UZB** | **Uzynbulak** | **4.66** | **35** | Pg | | **Pb** | **12 45 40.2** | **+0.6** |
| | 5.4nm,0.5s | | | | | | | |
| UZB | | | | Lg | | Lg | 12 46 38.7 | |
| | 8.4nm,0.6s | | | | | | | |
| **KPKS** | **Kokpek** | **4.78** | **31** | *e*P | | **Pb** | **12 45 42.5** | **+0.8** |
| | 10.0nm,0.4s | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | **12 46 43.0** | **+3.3** |
| | 26nm,0.5s | | | | | | | |
| **KPKS** | **Kokpek** | **4.78** | **31** | Pg | | **Pb** | **12 45 42.5** | **+0.8** |
| | 10.0nm,0.4s | | | | | | | |
| KPKS | | | | Lg | | Lg | 12 46 42.5 | |
| | 26nm,0.5s | | | | | | | |
| **SHLS** | **Shalkode** | **4.88** | **38** | *e*P | | Pb | 12 45 48.6 | +5.4 |
| | 6.2nm,0.4s | | | | | | | |
| SHLS | | | | *e*S | | **Sg** | **12 46 54.0** | **+0.4** |
| | 21nm,0.4s | | | | | | | |
| **SHLS** | **Shalkode** | **4.88** | **38** | Pg | | **Pg** | **12 45 49.2** | **-1.2** |
| | 6.2nm,0.4s | | | | | | | |
| SHLS | | | | Lg | | Lg | 12 46 53.9 | |
| | 21nm,0.4s | | | | | | | |
| **PDGK** | **Podgornoye** | **5.02** | **37** | Pg | | **Pb** | **12 45 45.8** | **+0.1** |
| | 1.9nm,0.5s | | | | | | | |
| PDGK | | | | Lg | | Lg | 12 46 49.4 | |
| | 10nm,0.8s | | | | | | | |
| **PDGK** | **Podgornoye** | **5.02** | **37** | ⇑Pg | | **Pb** | **12 45 49.5** | **+3.7** |
| | 2.1nm,0.5s | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 12 46 52.3 | |
| | 18nm,0.8s | | | | | | | |
| **ARXS** | **Arharly** | **5.16** | **20** | *e*P | | **Pb** | **12 45 48.6** | **+0.5** |
| | 5.9nm,0.5s | | | | | | | |
| ARXS | | | | *e*S | | **Sb** | **12 46 53.7** | **+3.1** |
| | 10nm,0.5s | | | | | | | |
| **ARXS** | **Arharly** | **5.16** | **20** | Pg | | **Pb** | **12 45 47.8** | **-0.3** |
| | 5.9nm,0.5s | | | | | | | |
| ARXS | | | | Lg | | Lg | 12 46 53.2 | |
| | 10nm,0.6s | | | | | | | |
| **KK31** | **Karatay Array** | **5.20** | **317** | ⇑Pg | | **Pb** | **12 45 50.5** | **+1.9** |
| | 1.2nm,0.5s,baz=138,slow=14,SNR=12 | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 12 46 55.1 | |
| | 6.6nm,0.9s,baz=129,slow=28,SNR=3.8 | | | | | | | |
| **BLB** | **Baldybastay** | **5.25** | **26** | Pg | | **Pb** | **12 45 51.0** | **+1.3** |
| | 24nm,0.6s | | | | | | | |
| BLB | | | | Lg | | Lg | 12 46 56.9 | |
| | 18nm,0.4s | | | | | | | |

*NOU **25** 12:46:26.0,37.˚19S×176.˚89E,h379km,MLv3.7/8,North Island, New Zealand*
*WEL **25** 12:46:38.4±0.8,38.˚3S±7.˚×17.˚6E±.˚,h272km±6km,M2.9/26, MLv2.9/26,Error ellipse: s-maj=0.0km s-min=0.0km az=160.3,confirmed*

**ISC 25 12:46:32.9±2.5,37.˚50S±0.˚10×176.˚45E±0.˚08, h309km±14km,n88,σ1§79/102,North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TOZ** | **Tahuroa Road** | **0.79** | **253** | P | **Pn** | **12 47 15.3** | **+2.0** |
| **URZ** | **Urewera** | **0.92** | **146** | P | **Pn** | **12 47 14.9** | **+1.1** |
| **URZ** | **Urewera** | **0.92** | **146** | P | **Pn** | **12 47 14.8** | **+1.0** |
| URZ | | | | S | **S** | **12 47 43.8** | **-2.5** |
| **KUZ** | **Kuaotunu** | **0.95** | **322** | P | **Pn** | **12 47 15.2** | **+1.1** |
| **KUZ** | **Kuaotunu** | **0.95** | **322** | P | **Pn** | **12 47 15.1** | **+1.1** |
| **MUGZ** | **Murupara** | **1.01** | **166** | P | **Pn** | **12 47 15.7** | **+1.5** |
| MUGZ | | | | S | **S** | **12 47 45.4** | **-1.7** |
| **RUGZ** | **Raukumara Rang** | **1.08** | **116** | P | **Pn** | **12 47 15.2** | **+0.5** |
| RUGZ | | | | S | **S** | **12 47 44.9** | **-3.0** |
| **HAZ** | **Te Kaha** | **1.09** | **104** | P | **Pn** | **12 47 15.4** | **+0.8** |
| HAZ | | | | S | **S** | **12 47 44.9** | **-2.8** |
| **TLZ** | **Tolley Road** | **1.10** | **221** | P | **Pn** | **12 47 15.0** | **+0.3** |
| **MKAZ** | **Moumakai** | **1.10** | **291** | P | **Pn** | **12 47 16.4** | **+1.7** |
| **RTZ** | **Ruatahuna** | **1.19** | **160** | P | **Pn** | **12 47 16.8** | **+1.6** |
| RTZ | | | | S | **S** | **12 47 47.8** | **-1.0** |
| **MWZ** | **Matawai** | **1.19** | **135** | P | **Pn** | **12 47 16.7** | **+1.6** |
| MWZ | | | | S | **S** | **12 47 46.7** | **-2.1** |
| **RAGZ** | **Rawiri** | **1.25** | **143** | P | **Pn** | **12 47 17.5** | **+2.0** |
| RAGZ | | | | S | **S** | **12 47 48.3** | **-1.2** |
| **MRHZ** | **Matea Rd** | **1.33** | **181** | P | **Pn** | **12 47 17.5** | **+1.6** |
| MRHZ | | | | S | **S** | **12 47 48.4** | **-1.8** |
| **PKGZ** | **Pakihiroa** | **1.34** | **106** | P | **Pn** | **12 47 17.8** | **+1.8** |
| **MTHZ** | **Maungataniwha** | **1.39** | **167** | P | **Pn** | **12 47 18.0** | **+1.8** |
| MTHZ | | | | S | **S** | **12 47 48.0** | **-2.7** |
| **TWGZ** | **Tauwhareparae** | **1.39** | **120** | P | **Pn** | **12 47 18.4** | **+2.2** |
| TWGZ | | | | S | **S** | **12 47 50.8** | **0.0** |
| **TKGZ** | **Te Karaka** | **1.45** | **131** | P | **Pn** | **12 47 18.6** | **+2.1** |
| TKGZ | | | | S | **S** | **12 47 49.9** | **-1.4** |
| **SNGZ** | **Shannon Statio** | **1.46** | **152** | P | **Pn** | **12 47 18.7** | **+2.1** |
| SNGZ | | | | S | **S** | **12 47 50.4** | **-1.1** |
| **RATZ** | **Rangitukua** | **1.47** | **201** | P | **Pn** | **12 47 18.7** | **+2.0** |
| **PUZ** | **Puketiti** | **1.54** | **112** | P | **Pn** | **12 47 18.9** | **+1.7** |
| PUZ | | | | S | **S** | **12 47 50.6** | **-1.8** |
| **RIGZ** | **Rimuhau** | **1.59** | **140** | P | **Pn** | **12 47 19.6** | **+2.1** |
| RIGZ | | | | S | **S** | **12 47 52.8** | **-0.2** |
| **HIZ** | **Hauiti** | **1.62** | **231** | P | **Pn** | **12 47 20.1** | **+2.4** |
| **HIZ** | **Hauiti** | **1.62** | **231** | P | **Pn** | **12 47 20.1** | **+2.4** |
| **NMHZ** | **Naumai** | **1.62** | **170** | P | **Pn** | **12 47 20.3** | **+2.6** |
| **BKZ** | **Black Stump Fm** | **1.66** | **179** | P | **Pn** | **12 47 19.7** | **+1.7** |
| **BKZ** | **Black Stump Fm** | **1.66** | **179** | P | **Pn** | **12 47 19.7** | **+1.7** |
| **CNGZ** | **Carnagh Statio** | **1.70** | **126** | P | **Pn** | **12 47 20.6** | **+2.4** |
| **NTVZ** | **North Tongarir** | **1.71** | **201** | P | **Pn** | **12 47 20.6** | **+2.2** |
| **KRVZ** | **Karewarewa** | **1.71** | **202** | P | **Pn** | **12 47 20.5** | **+2.1** |
| **TMVZ** | **Te Maari** | **1.72** | **200** | P | **Pn** | **12 47 20.4** | **+1.9** |
| **WTVZ** | **West Tongariro** | **1.75** | **203** | P | **Pn** | **12 47 20.5** | **+1.8** |
| **NNVZ** | **North Ngauruho** | **1.76** | **202** | P | **Pn** | **12 47 21.0** | **+2.2** |
| **TWVZ** | **Taurewa** | **1.76** | **207** | P | **Pn** | **12 47 20.6** | **+1.8** |
| **OTVZ** | **Oturere** | **1.77** | **200** | P | **Pn** | **12 47 20.9** | **+2.0** |
| **SNVZ** | **South Ngauruho** | **1.80** | **200** | P | **Pn** | **12 47 21.1** | **+2.0** |
| **NGZ** | **Ngauruhoe** | **1.80** | **202** | P | **Pn** | **12 47 21.2** | **+2.1** |
| **ARHZ** | **Aropaoanui** | **1.81** | **167** | P | **Pn** | **12 47 21.4** | **+2.4** |
| **TUVZ** | **Tukino** | **1.87** | **199** | P | **Pn** | **12 47 21.7** | **+2.1** |
| **WNVZ** | **Wahianoa** | **1.94** | **200** | P | **Pn** | **12 47 22.1** | **+1.9** |
| **MCHZ** | **McNeill Hill** | **1.95** | **174** | P | **Pn** | **12 47 22.4** | **+2.4** |
| **MOVZ** | **Moawhango** | **1.98** | **196** | P | **Pn** | **12 47 21.9** | **+1.5** |
| **PKVZ** | **Pokaka** | **1.99** | **206** | P | **Pn** | **12 47 22.6** | **+2.2** |
| **VRZ** | **Vera Road** | **2.10** | **219** | P | **Pn** | **12 47 23.6** | **+2.4** |
| **KRHZ** | **Kereru** | **2.14** | **182** | P | **Pn** | **12 47 23.2** | **+1.7** |
| **KAHZ** | **Kahuranaki** | **2.32** | **172** | P | **Pn** | **12 47 25.3** | **+2.3** |
| **PNHZ** | **Pukenui** | **2.42** | **185** | P | **Pn** | **12 47 25.5** | **+1.7** |
| **WAZ** | **Wanganui** | **2.53** | **207** | P | **Pn** | **12 47 26.9** | **+2.1** |
| **NEZ** | **North Egmont** | **2.56** | **226** | P | **Pn** | **12 47 28.4** | **+3.2** |
| **PKE** | **Pukeiti** | **2.57** | **228** | P | **Pn** | **12 47 28.1** | **+2.8** |
| **KHEZ** | **Kahui Hut** | **2.62** | **226** | P | **Pn** | **12 47 29.0** | **+3.3** |
| **KHEZ** | **Kahui Hut** | **2.62** | **226** | P | **Pn** | **12 47 28.7** | **+2.9** |
| **PRHZ** | **Porangahau** | **2.77** | **177** | P | **Pn** | **12 47 29.1** | **+2.1** |
| **DVHZ** | **Dannevirke** | **2.80** | **184** | P | **Pn** | **12 47 28.8** | **+1.4** |
| **POWZ** | **Post Office Ro** | **2.94** | **190** | P | **Pn** | **12 47 30.0** | **+1.4** |
| **ANWZ** | **Angora Road** | **2.96** | **180** | P | **Pn** | **12 47 30.9** | **+2.2** |
| **PRWZ** | **Pori Road** | **3.07** | **187** | P | **Pn** | **12 47 31.7** | **+1.8** |
| **BFZ** | **Birch Farm** | **3.18** | **183** | P | **Pn** | **12 47 32.7** | **+1.7** |
| **BFZ** | **Birch Farm** | **3.18** | **183** | P | **Pn** | **12 47 32.6** | **+1.6** |
| **MRZ** | **Mangatainoka R** | **3.23** | **192** | P | **Pn** | **12 47 32.6** | **+1.2** |
| **TIWZ** | **Tintock** | **3.30** | **187** | P | **Pn** | **12 47 33.6** | **+1.4** |
| **OGWZ** | **Otaki Gorge** | **3.46** | **196** | P | **Pn** | **12 47 35.1** | **+1.3** |
| **HOWZ** | **Holdsworth Sta** | **3.47** | **192** | P | **Pn** | **12 47 35.0** | **+1.0** |
| **KIW** | **Kapiti Island** | **3.56** | **199** | P | **Pn** | **12 47 36.0** | **+1.2** |
| **TMWZ** | **Te Maipa** | **3.63** | **187** | P | **Pn** | **12 47 37.0** | **+1.4** |
| **MTW** | **Mount Morrison** | **3.73** | **191** | P | **Pn** | **12 47 37.5** | **+1.0** |
| **CAW** | **Cannon Point** | **3.76** | **196** | P | **Pn** | **12 47 37.9** | **+1.0** |
| **DUWZ** | **D'Urville Isla** | **3.84** | **210** | P | **Pn** | **12 47 38.6** | **+0.8** |
| **TRWZ** | **Traveller** | **3.94** | **188** | P | **Pn** | **12 47 40.2** | **+1.4** |
| **PAWZ** | **Paruwai Farm** | **3.96** | **191** | P | **Pn** | **12 47 40.1** | **+1.0** |
| **WEL** | **Wellington** | **4.00** | **199** | P | **Pn** | **12 47 40.6** | **+1.1** |
| **MSWZ** | **Moikau Station** | **4.02** | **193** | P | **Pn** | **12 47 40.6** | **+0.9** |
| **SNZO** | **South Karori** | **4.04** | **199** | P | **Pn** | **12 47 41.0** | **+1.1** |
| **TCW** | **Tory Channel** | **4.07** | **204** | P | **Pn** | **12 47 41.5** | **+1.3** |
| **PLWZ** | **Palliser** | **4.17** | **192** | P | **Pn** | **12 47 42.2** | **+0.8** |
| **TUWZ** | **Tuamarina** | **4.38** | **206** | P | **Pn** | **12 47 45.2** | **+1.6** |
| **NNZ** | **Nelson** | **4.41** | **212** | P | **Pn** | **12 47 44.3** | **+0.4** |
| **TKNZ** | **Takaka Hill** | **4.45** | **216** | P | **Pn** | **12 47 44.4** | **-0.1** |
| **QRZ** | **Quartz Range** | **4.51** | **221** | P | **Pn** | **12 47 46.1** | **+1.0** |
| **QRZ** | **Quartz Range** | **4.51** | **221** | P | **Pn** | **12 47 44.9** | **-0.2** |
| **BSWZ** | **Blackbirch Sta** | **4.66** | **204** | P | **Pn** | **12 47 48.2** | **+1.5** |
| **MRNZ** | **Matariki Terra** | **4.83** | **215** | P | **Pn** | **12 47 49.4** | **+0.7** |
| **THZ** | **Tophouse** | **5.06** | **212** | P | **Pn** | **12 47 52.0** | **+0.6** |
| **KHZ** | **Kahutara** | **5.40** | **204** | P | **Pn** | **12 47 56.4** | **+1.2** |
| **GVZ** | **Greta Valley S** | **6.05** | **205** | P | **Pn** | **12 48 04.3** | **+1.3** |
| **LTZ** | **Lake Taylor** | **6.17** | **210** | P | **Pn** | **12 48 04.7** | **+0.3** |
| **MQZ** | **McQueen's Vall** | **6.84** | **204** | P | **Pn** | **12 48 12.7** | **+0.4** |
| **TMZ** | **Timaru** | **8.02** | **209** | P | **Pn** | **12 48 27.3** | **+0.7** |

*IDC **25** 12:58:01.5±0.7,1.˚21S×120.˚75E,h0km,mb4.1/12, mbtmp4.1/13,ML4.4/1,MS3.3/21,Error ellipse: s-maj=37.7km s-min=13.7km az=66.0*
*NEIC **25** 12:58:03.6±2.0,1.˚35S±0.˚06×120.˚65E±0.˚06,h10km±1km, mb4.6/32,Error ellipse: s-maj=10.1km s-min=9.4km az=215.0*
*DJA **25** 12:58:04.3±1.2,1.˚S±2.˚×12.˚1E±.˚,h12km±9km,M4.9/19, mB5.5/7,mb4.7/19,MLv4.8/17,Mw(mB)5.0/7*

**ISC 25 12:58:05.3±0.4,1.˚34S±0.˚05×120.˚71E±0.˚06,h23km,n109, σ1§40/92,mb4.5/36,MS3.3/19,Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TTSI** | **Tana Toraja** | **1.91** | **208** | P | **Pn** | **12 58 37.0** | **+0.5** |
| **LUWI** | **Luwuk** | **2.08** | **82** | P | **Pb** | **12 58 41.3** | **-1.1** |
| **LUWI** | **Luwuk** | **2.08** | **82** | | **Pn** | **12 58 40.0** | **+1.2** |
| **LUWI** | **Luwuk** | **2.08** | **82** | P | **Pn** | **12 58 40.4** | **+1.6** |
| **MRSI** | **Marisa** | **2.19** | **34** | P | **Pn** | **12 58 39.5** | **-0.8** |
| **TOLI2** | **Tolitoli** | **2.44** | **2** | Pn | **Pn** | **12 58 43.6** | **-0.2** |
| **GTOI** | **Gorontalo** | **3.03** | **50** | P | **Pn** | **12 58 52.7** | **+0.9** |
| **BNSI** | **Bone** | **3.10** | **191** | P | **Pn** | **12 58 53.9** | **+1.1** |
| **KAPI** | **Kappang** | **3.77** | **195** | Pn | **Pn** | **12 59 01.6** | **-0.5** |
| **KAPI** | **Kappang** | **3.77** | **195** | Pn | **Pn** | **12 59 03.0** | **+1.0** |
| | 27nm,0.3s,baz=338,slow=8.0,SNR=27 | | | | | | |
| KAPI | | | | Sn | **Sn** | **12 59 47.4** | **+1.6** |
| | 20nm,0.3s,baz=212,slow=10.0,SNR=4.9 | | | | | | |
| KAPI | | | | LR | LR | 13 00 15.1 | |
| | comp=Z,180nm,18.4s,baz=11,slow=34 | | | | | | |
| | 90nm,0.4s | | | | | | |
| **KMSI** | **Cibinong** | **3.78** | **60** | P | **Pn** | **12 59 04.1** | **+1.8** |
| **BKB** | **Balikpapan** | **3.81** | **271** | P | **Pn** | **12 59 04.8** | **+2.1** |
| **BKB** | **Balikpapan** | **3.81** | **271** | | **Pn** | **12 59 02.2** | **-0.5** |
| **BKB** | **Balikpapan** | **3.81** | **271** | P | **Pn** | **12 59 00.0** | **-2.7** |
| **BSSI** | **Bau Bau, Buton** | **4.77** | **183** | P | **Pn** | **12 59 16.2** | **+0.3** |
| **SANI** | **Sanana** | **5.32** | **98** | P | **Pn** | **12 59 25.4** | **+2.0** |
| **SANI** | **Sanana** | **5.32** | **98** | P | **Pn** | **12 59 22.9** | **-0.5** |
| **MTKI** | **Muara Teweh, K** | **5.83** | **274** | P | **Pn** | **12 59 28.4** | **-2.0** |
| **NLAI** | **Namlea** | **6.66** | **107** | P | **Pn** | **12 59 42.9** | **+1.1** |
| | 38nm,0.7s,0.2nm | | | | | | |
| **MYLDM** | **Lahad Datu** | **6.84** | **341** | Pn | **Pn** | **12 59 45.2** | **+0.8** |
| **WBSI** | **Waikabubak, Su** | **8.35** | **189** | P | **Pn** | **13 00 06.3** | **+1.2** |
| | 83nm,0.9s | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.60** | **329** | P | **Pn** | **13 00 11.7** | **+3.1** |
| **KKM** | **Kota Kinabalu** | **8.60** | **329** | Pn | **Pn** | **13 00 09.8** | **+1.2** |
| **SRBI** | **Singaraja** | **8.65** | **219** | P | **Pn** | **13 00 07.2** | **-2.0** |
| | 40nm,0.9s | | | | | | |
| **SBUM** | **Sibu** | **9.29** | **294** | Pn | **Pn** | **13 00 16.1** | **-1.8** |
| **STKI** | **Sintang** | **9.34** | **279** | P | **Pn** | **13 00 19.8** | **+1.2** |
| | 48nm,1.1s | | | | | | |
| **DAV** | **Davao City (W)** | **9.67** | **30** | LR | LR | 13 04 25.6 | |
| | comp=Z,395nm,20.0s,baz=164,slow=40 | | | | | | |
| **KSM** | **Kuching** | **10.77** | **285** | P | **Pn** | **13 00 39.2** | **+0.9** |
| | 14nm,0.9s | | | | | | |
| **KSM** | **Kuching** | **10.77** | **285** | Pn | **Pn** | **13 00 36.5** | **-1.8** |
| **FAKI** | **Fak Fak** | **11.64** | **98** | Pn | **Pn** | **13 00 50.1** | **0.0** |
| **MTN** | **Manton Dam** | **15.40** | **138** | | **Pn** | **13 01 40.0** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **17.34** | **164** | P | **P** | **13 02 08.2** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **17.34** | **164** | P | **Pn** | **13 02 03.2** | **-2.8** |
| **MBWA** | **Marble Bar** | **19.72** | **183** | P | **Pn** | **13 02 35.9** | **+1.0** |
| **MBWA** | **Marble Bar** | **19.72** | **183** | P | **Pn** | **13 02 35.4** | **+0.5** |
| **PSA00** | **Pilbara Seismi** | **20.12** | **182** | P | **P** | **13 02 38.2** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **20.12** | **182** | P | **P** | **13 02 38.0** | **+0.1** |
| **PDSI** | **Padang** | **20.25** | **271** | P | Pn | 13 02 39.6 | -1.7 |
| | 43nm,1.0s | | | | | | |
| **IPM** | **Ipoh** | **20.50** | **286** | P | Pn | 13 02 44.7 | +0.4 |
| **IPM** | **Ipoh** | **20.50** | **286** | P | **P** | **13 02 41.8** | **-0.2** |
| IPM | | | | IAmb | IAmb | 13 02 43.7 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **KULM** | **Kulim** | **21.09** | **288** | P | **P** | **13 02 47.6** | **-0.8** |
| KULM | | | | IAmb | IAmb | 13 02 51.6 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **RPSI** | **Rantau Prapat** | **22.15** | **280** | P | **P** | **13 02 58.9** | **-0.8** |
| RPSI | | | | IAmb | IAmb | 13 03 01.6 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **PSI** | **Prapat** | **22.16** | **281** | P | **P** | **13 03 02.5** | **+2.4** |
| **WB0** | **Warramunga Arr** | **22.68** | **145** | P | **P** | **13 03 06.0** | **+0.6** |
| **WRAB** | **Tennant Creek** | **22.79** | **145** | P | **P** | **13 03 06.6** | **0.0** |
| **WRA** | **Warramunga Arr** | **22.79** | **145** | P | **P** | **13 03 06.5** | **0.0** |
| **WRA** | **Warramunga Arr** | **22.79** | **145** | P | **P** | **13 03 07.2** | **+0.6** |
| | comp=Z,2.6nm,0.8s,baz=323,slow=9.9,SNR=21 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.80** | **145** | P | **P** | **13 03 07.2** | **+0.6** |
| **WR0** | **Warramunga Arr** | **22.92** | **145** | P | **P** | **13 03 07.7** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 13 03 40.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **YULB** | **Yu-li** | **24.59** | **1** | P | **P** | **13 03 27.3** | **+3.4** |
| **WRKA** | **Warakurna** | **24.67** | **163** | P | **P** | **13 03 24.7** | **+0.1** |
| **MEEK** | **Meekatharra** | **25.23** | **184** | P | **P** | **13 03 30.2** | **+0.5** |
| **AS31** | **Alice Springs** | **25.61** | **151** | P | **P** | **13 03 34.6** | **+1.4** |
| **ASAR** | **Alice Springs** | **25.61** | **151** | P | **P** | **13 03 33.5** | **+0.2** |
| | comp=Z,1.4nm,0.8s,baz=330,slow=9.3,SNR=14 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 07 03.8** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=349,slow=2.8,SNR=3.5 | | | | | | |
| ASAR | | | | LR | LR | 13 13 58.0 | |
| | comp=Z,109nm,19.6s,baz=305,slow=37 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **JOW** | **Kunigami** | **28.95** | **14** | LR | LR | 13 16 41.5 | |
| | comp=Z,106nm,19.5s,baz=112,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.08** | **314** | P | **P** | **13 04 04.7** | **+0.4** |
| | comp=Z,1.5nm,0.6s,baz=139,slow=7.2,SNR=10.0 | | | | | | |
| CMAR | | | | LR | LR | 13 16 12.8 | |
| | comp=Z,46nm,20.8s,baz=150,slow=38 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **CTA** | **Charters Tower** | **31.16** | **128** | LR | LR | 13 18 40.9 | |
| | comp=Z,5.4nm,18.8s,baz=274,slow=40 | | | | | | |
| **PZH** | **PanZhiHua** | **33.19** | **328** | P | **P** | **13 04 44.0** | **+3.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,4.8s | | | | | | |
| **NJ2** | **Nanjing** | **33.26** | **357** | *e*P | **P** | **13 04 44.3** | **+3.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,350nm,4.3s | | | | | | |
| **TNCH** | **TengChong** | **33.91** | **322** | *e*P | **P** | **13 04 47.0** | **0.0** |
| TNCH | | | | pP | sP | 13 04 58.3 | +1.6 |
| TNCH | | | | sP | pP | 13 05 03.5 | +10 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | |
| **JCJ** | **Chichijima** | **35.03** | **35** | LR | LR | 13 18 06.1 | |
| | comp=Z,31nm,20.7s,baz=118,slow=34 | | | | | | |
| **JNU** | **Nakatsue** | **35.60** | **15** | LR | LR | 13 20 48.1 | |
| | comp=Z,13nm,18.7s,baz=170,slow=38 | | | | | | |
| **STKA** | **Stephens Creek** | **36.21** | **149** | P | **P** | **13 05 07.0** | **+0.5** |
| | comp=Z,2.4nm,0.7s,baz=321,slow=11,SNR=6.0 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **TIA** | **Tai'an** | **37.51** | **355** | P | P | 13 05 24.5 | +7.0 |
| TIA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **SHL** | **Shillong** | **38.64** | **316** | P | **P** | **13 05 26.3** | **-1.1** |
| SHL | | | | IAmb | IAmb | 13 05 31.1 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **39.18** | **9** | P | **P** | **13 05 30.1** | **-1.4** |
| | comp=Z,1.7nm,0.7s,baz=189,slow=9.0,SNR=7.6 | | | | | | |
| KSRS | | | | LR | LR | 13 23 20.2 | |
| | comp=Z,25nm,18.5s,baz=220,slow=39 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **LZH** | **Lanzhou** | **40.42** | **339** | *e*P | **P** | **13 05 45.5** | **+3.4** |
| LZH | | | | pP | sP | 13 05 53.5 | +1.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **PALK** | **Pallekele** | **40.82** | **283** | LR | LR | 13 23 11.9 | |
| | comp=Z,78nm,18.1s,baz=213,slow=37 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.06** | **22** | LR | LR | 13 25 02.8 | |
| | comp=Z,38nm,18.3s,baz=200,slow=40 | | | | | | |
| **BJI** | **Beijing** | **41.39** | **355** | P | **P** | **13 05 50.8** | **+1.0** |
| BJI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **42.81** | **350** | *e*P | **P** | **13 06 04.0** | **+2.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,140nm,4.4s | | | | | | |
| **GTA** | **Gaotai** | **44.86** | **337** | *e*P | **P** | **13 06 18.3** | **+0.2** |
| GTA | | | | pP | pP | 13 06 24.8 | -0.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **46.45** | **11** | P | **P** | **13 06 29.4** | **-1.0** |
| | comp=Z,6.1nm,1.1s,baz=203,slow=6.2,SNR=3.6 | | | | | | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **ASAJ** | **Asahikawa** | **49.31** | **21** | LR | LR | 13 28 21.9 | |
| | comp=Z,24nm,20.2s,baz=128,slow=37 | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.44** | **348** | P | **P** | **13 07 01.1** | **-0.1** |
| ULN | | | | IAmb | IAmb | 13 07 08.5 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **50.55** | **348** | P | **P** | **13 07 01.3** | **-0.8** |
| | comp=Z,1.6nm,0.8s,baz=164,slow=5.9,SNR=4.0 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **51.27** | **9** | LR | LR | 13 30 07.3 | |
| | comp=Z,18nm,19.8s,baz=207,slow=38 | | | | | | |
| **HEH** | **HeiHe** | **51.72** | **5** | *e*P | **P** | **13 07 09.3** | **-1.4** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **57.69** | **320** | P | **P** | **13 07 54.5** | **+0.2** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **58.58** | **330** | P | **P** | **13 07 59.7** | **-0.7** |
| MK31 | | | | IAmb | IAmb | 13 08 06.9 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.58** | **330** | P | **P** | **13 07 59.6** | **-0.8** |
| **MKAR** | **Makanchi Array** | **58.58** | **330** | P | **P** | **13 07 59.8** | **-0.6** |
| | comp=Z,2.0nm,0.7s,baz=139,slow=7.6,SNR=16 | | | | | | |
| MKAR | | | | LR | LR | 13 34 07.9 | |
| | comp=Z,24nm,19.4s,baz=82,slow=37 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KBL** | **Kabul** | **60.09** | **312** | P | **P** | **13 08 10.6** | **-0.7** |
| **AAK** | **Ala-Archa** | **60.35** | **322** | P | **P** | **13 08 10.9** | **-1.9** |
| AAK | | | | IAmb | IAmb | 13 08 20.3 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **GAR** | **Garm** | **61.18** | **317** | P | **P** | **13 08 18.3** | **-0.2** |
| **CHGR** | **Chuyangaron** | **61.82** | **316** | | **P** | **13 08 22.0** | **-0.8** |
| **SIMJ** | **Simiganj** | **61.93** | **316** | | **P** | **13 08 23.1** | **-0.5** |
| SIMJ | | | | IAmb | IAmb | 13 08 25.4 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **62.43** | **24** | P | **P** | **13 08 26.5** | **0.0** |
| **PETK** | **Petropavlovsk-** | **62.43** | **24** | LR | LR | 13 34 28.3 | |
| | comp=Z,19nm,21.5s,baz=187,slow=35 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **62.62** | **337** | P | **P** | **13 08 26.3** | **-1.3** |
| ZAA0 | | | | IAmb | IAmb | 13 08 33.3 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.62** | **337** | P | **P** | **13 08 25.8** | **-1.9** |
| | comp=Z,1.7nm,0.8s,baz=130,slow=4.6,SNR=7.5 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.00** | **331** | P | **P** | **13 08 29.2** | **-1.1** |
| | comp=Z,2.3nm,0.8s,baz=141,slow=6.1,SNR=14 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **63.02** | **331** | P | **P** | **13 08 29.4** | **-1.0** |
| **KK31** | **Karatay Array** | **63.07** | **321** | P | **P** | **13 08 29.9** | **-1.1** |
| KK31 | | | | IAmb | IAmb | 13 08 39.0 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array** | **63.07** | **321** | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ARCES | **ARCESS Array B** 2.3nm,0.7s,baz=74,slow=5.6,SNR=7.3 | **78.23** | **342** | P | **P** | **14 03 49.0** | **+1.2** |
| | 2.3nm,0.7s | | | | | | |
| NVAR | **Mina Array Bea** 0.5nm,0.7s,baz=260,slow=4.5,SNR=4.7 | **82.36** | **52** | P | **P** | **14 04 11.5** | **+0.7** |
| | 0.5nm,0.7s | | | | | | |
| FINES | **FINESS Array B** 1.1nm,0.3s,baz=66,slow=4.6,SNR=28 | **82.57** | **335** | P | **P** | **14 04 10.6** | **-0.5** |
| | 1.1nm,0.3s | | | | | | |
| HFS | **Hagfors** 0.9nm,0.5s,baz=323,slow=0.7,SNR=8.0 | **88.08** | **337** | P | **P** | **14 04 37.0** | **-1.5** |
| | 0.9nm,0.5s | | | | | | |
| PLCA | **Paso Flores** 1.9nm,1.0s,baz=223,slow=9.3,SNR=3.4 | **146.05** | **130** | PKPbc | **PKPab** | **14 11 28.8** | **+0.1** |

*IDC **25** 14:00:37.5±1.1,43°.39N×81°.35E,h0km,mb3.8/3, mbtmp3.6/5,ML2.5/3,MS2.5/2,Error ellipse: s-maj=26.0km s-min=12.2km az=90.0*
*NNC **25** 14:00:41.7±0.8,43°.55N×81°.32E,h0km,mb4.1,mpv3.9, Error ellipse: s-maj=6.5km s-min=3.5km az=138.0*
*SOME **25** 14:00:41.9,43°.48N×81°.30E,h15km*

**ISC 25 14:00:41.0±1.5,43°.47N±0°.04×81°.34E±0°.04,h10km±9km, n63,σ2s26/100,mb3.6/3,13C-3D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** 53nm,0.2s | **0.72** | **269** | *eP* | | **Pg** | **14 00 55.3** | **+0.3** |
| KTMS | 362nm,0.2s | | | *eS* | | **Sg** | **14 01 05.1** | **+0.6** |
| **KTMS** | **Ketmen** 53nm,0.1s | **0.72** | **269** | P | | **Pg** | **14 00 55.3** | **+0.3** |
| KTMS | 53nm,0.2s | | | P | | **Pg** | **14 00 55.4** | **+0.3** |
| KTMS | 429nm,0.3s | | | S | | **Sb** | **14 01 05.8** | **+0.1** |
| KTMS | 482nm,0.3s | | | S | | **Sb** | **14 01 05.9** | **+0.1** |
| **PDGK** | **Podgornoye** 216nm,0.2s | **1.36** | **265** | P | | **Pn** | **14 01 08.0** | **+1.8** |
| PDGK | 568nm,0.5s | | | S | | **Sn** | **14 01 26.5** | **+2.3** |
| **PDGK** | **Podgornoye** 165nm,0.3s | **1.36** | **265** | P | | **Pg** | **14 01 06.9** | **-0.2** |
| PDGK | 894nm,0.7s | | | S | | **Sb** | **14 01 26.0** | **+1.9** |
| **SHLS** | **Shalkode** 294nm,0.1s | **1.41** | **258** | *eP* | | Pg | 14 01 02.6 | -5.5 |
| SHLS | 1μm,0.3s | | | *eS* | | Sg | 14 01 17.4 | -8.9 |
| **SHLS** | **Shalkode** 302nm,0.2s | **1.41** | **258** | P | | Pg | 14 01 02.9 | -5.2 |
| SHLS | 294nm,0.1s | | | P | | Pn | 14 01 03.1 | -3.8 |
| SHLS | 788nm,0.4s | | | S | | **Sg** | **14 01 18.3** | **-8.1** |
| SHLS | 875nm,0.3s | | | S | | **Sb** | **14 01 18.5** | **-7.0** |
| **DJR** | **Jarkent** 23nm,0.2s | **1.42** | **308** | *eP* | | **Pg** | **14 01 07.8** | **-0.4** |
| DJR | 278nm,0.4s | | | *eS* | | **Sg** | **14 01 26.4** | **-0.3** |
| **DJR** | **Jarkent** 37nm,0.3s | **1.42** | **308** | P | | **Pg** | **14 01 08.4** | **+0.1** |
| DJR | 278nm,0.4s | | | S | | **Sn** | **14 01 27.5** | **+1.8** |
| **UZB** | **Uzynbulak** 103nm,0.2s | **1.73** | **260** | *eP* | | **Pn** | **14 01 13.2** | **+2.1** |
| UZB | 602nm,0.4s | | | *eS* | | **Sb** | **14 01 36.2** | **+1.6** |
| **UZB** | **Uzynbulak** 108nm,0.3s | **1.73** | **260** | P | | **Pn** | **14 01 13.1** | **+1.9** |
| UZB | 103nm,0.2s | | | P | | **Pn** | **14 01 13.2** | **+2.1** |
| UZB | 602nm,0.4s | | | S | | **Sb** | **14 01 36.2** | **+1.6** |
| UZB | 690nm,0.5s | | | S | | **Sb** | **14 01 36.3** | **+1.6** |
| **KNOS** | **Konyrlen** 105nm,0.3s | **1.80** | **300** | P | | **Pn** | **14 01 14.3** | **+2.1** |
| KNOS | 90nm,0.3s | | | P | | **Pn** | **14 01 14.3** | **+2.1** |
| KNOS | 209nm,0.4s | | | S | | **Sb** | **14 01 38.5** | **+1.6** |
| KNOS | 210nm,0.5s | | | S | | **Sg** | **14 01 38.7** | **-0.3** |
| **KPKS** | **Kokpek** 42nm,0.1s | **1.94** | **271** | *eP* | | **Pn** | **14 01 16.6** | **+2.6** |
| KPKS | 747nm,0.3s | | | *eS* | | **Sb** | **14 01 42.0** | **+1.4** |
| **KPKS** | **Kokpek** 49nm,0.3s | **1.94** | **271** | Pg | | **Pn** | **14 01 16.4** | **+2.3** |
| KPKS | 42nm,0.1s | | | Pg | | **Pn** | **14 01 16.6** | **+2.6** |
| KPKS | 747nm,0.4s | | | Lg | | Lg | 14 01 42.1 | |
| KPKS | 747nm,0.3s | | | Lg | | Lg | 14 01 42.3 | |
| **ZHN** | **Zhinishke** 22nm,0.1s | **2.14** | **263** | *eP* | | **Pb** | **14 01 21.0** | **+1.0** |
| ZHN | 762nm,0.3s | | | *eS* | | **Sg** | **14 01 49.2** | **-0.7** |
| **ZHN** | **Zhinishke** 27nm,0.3s | **2.14** | **263** | Pg | | **Pb** | **14 01 20.1** | **+0.1** |
| ZHN | 22nm,0.1s | | | Pg | | **Pb** | **14 01 21.0** | **+1.0** |
| ZHN | 780nm,0.2s | | | Lg | | Lg | 14 01 48.9 | |
| ZHN | 762nm,0.3s | | | Lg | | Lg | 14 01 49.2 | |
| **BLB** | **Baldybastay** 46nm,0.2s | **2.17** | **288** | Pg | | **Pb** | **14 01 20.8** | **+0.4** |
| BLB | 210nm,0.6s | | | Lg | | Lg | 14 01 48.8 | |
| **SATY** | **Saty** 30nm,0.1s | **2.18** | **260** | *eP* | | **Pb** | **14 01 21.9** | **+1.2** |
| SATY | 551nm,0.4s | | | *eS* | | **Sg** | **14 01 50.8** | **-0.5** |
| **SATY** | **Saty** 30nm,0.1s | **2.18** | **260** | Pg | | **Pb** | **14 01 21.9** | **+1.2** |
| SATY | 551nm,0.4s | | | Lg | | Lg | 14 01 50.8 | |
| **KURS** | **Kuram** 14nm,0.3s | **2.31** | **272** | *eP* | | **Pb** | **14 01 23.9** | **+1.1** |
| KURS | 155nm,0.6s | | | *eS* | | **Sg** | **14 01 54.2** | **-1.1** |
| **KURS** | **Kuram** 14nm,0.3s | **2.31** | **272** | Pg | | **Pb** | **14 01 23.9** | **+1.1** |
| KURS | 155nm,0.6s | | | Lg | | Lg | 14 01 54.2 | |
| **TDK** | **Taldyqorghan** 89nm,0.2s | **2.61** | **307** | *eP* | | **Pb** | **14 01 27.8** | **-0.1** |
| TDK | 134nm,0.4s | | | *eS* | | **Sb** | **14 02 01.1** | **+1.1** |
| **TDK** | **Taldyqorghan** 89nm,0.2s | **2.61** | **307** | Pg | | **Pb** | **14 01 27.8** | **-0.1** |
| TDK | 134nm,0.4s | | | Lg | | Lg | 14 02 01.7 | |
| **ARXS** | **Arharly** 20nm,0.3s | **2.65** | **288** | *eP* | | **Pb** | **14 01 29.5** | **+0.9** |
| ARXS | 90nm,0.3s | | | *eS* | | **Sb** | **14 02 03.6** | **+2.4** |
| **ARXS** | **Arharly** 20nm,0.3s | **2.65** | **288** | Pg | | **Pb** | **14 01 29.5** | **+0.9** |
| ARXS | 90nm,0.3s | | | Lg | | Lg | 14 02 03.6 | |
| **KOTS** | **Kotyrbulak** 22nm,0.6s | **3.10** | **267** | *eP* | | **Pb** | **14 01 38.3** | **+2.1** |
| KOTS | 167nm,0.4s | | | *eS* | | **Sg** | **14 02 18.7** | **-1.8** |
| **KOTS** | **Kotyrbulak** 22nm,0.6s | **3.10** | **267** | Pg | | **Pb** | **14 01 38.3** | **+2.1** |
| KOTS | 167nm,0.4s | | | Lg | | Lg | 14 02 18.7 | |
| **MDOK** | **Medeo** 9.5nm,0.3s | **3.15** | **266** | Pg | | **Pb** | **14 01 38.5** | **+1.3** |
| MDOK | 6.0nm,0.5s | | | Pg | | **Pg** | **14 01 39.8** | **-1.6** |
| MDOK | 61nm,0.8s | | | Lg | | Lg | 14 02 18.2 | |
| MDOK | 64nm,0.4s | | | Lg | | Lg | 14 02 19.2 | |
| **CHKK** | **Chushkaly** 7.4nm,0.4s | **3.19** | **278** | *eP* | | **Pb** | **14 01 38.4** | **+0.8** |
| CHKK | 43nm,0.2s | | | *eS* | | **Sb** | **14 02 18.9** | **+2.4** |
| **CHKK** | **Chushkaly** 5.5nm,0.5s | **3.19** | **278** | Pg | | **Pb** | **14 01 38.4** | **+0.8** |
| CHKK | 43nm,0.4s | | | Lg | | Lg | 14 02 18.9 | |
| **KNDC** | **Almaty** 14nm,0.3s | **3.20** | **267** | Pg | | **Pb** | **14 01 38.9** | **+0.9** |
| KNDC | 99nm,0.6s | | | Lg | | Lg | 14 02 20.4 | |
| **TNSS** | **Tian-Shan** 4.2nm,0.2s | **3.24** | **264** | *eP* | | **Pb** | **14 01 40.7** | **+1.9** |
| TNSS | 32nm,0.4s | | | *eS* | | **Sb** | **14 02 22.6** | **+4.1** |
| **TNSS** | **Tian-Shan** 4.2nm,0.2s | **3.24** | **264** | Pg | | **Pb** | **14 01 40.7** | **+1.9** |
| TNSS | 32nm,0.4s | | | Lg | | Lg | 14 02 22.6 | |
| **MAKZ** | **Makanchi** 7.3nm,0.3s | **3.37** | **7** | ⇑Pg | | **Pb** | **14 01 41.3** | **+0.4** |
| MAKZ | 36nm,0.8s | | | ⇑Lg | | Lg | 14 02 23.8 | |
| **MK31** | **Makanchi Array** 3.9nm,0.2s,baz=180,slow=12,SNR=81 | **3.40** | **11** | Pg | | **Pb** | **14 01 41.8** | **+0.6** |
| MK31 | 109nm,0.8s,baz=186,slow=27,SNR=14 | | | ⇑Lg | | Lg | 14 02 25.5 | |
| **MKAR** | **Makanchi Array** 0.7nm,0.3s,baz=192,slow=13,SNR=25 | **3.40** | **11** | Pn | | **Pn** | **14 01 35.5** | **+1.5** |
| MKAR | 5.0nm,0.3s,baz=188,slow=17,SNR=44 | | | Pg | | **Pb** | **14 01 41.8** | **+0.5** |
| MKAR | 9.9nm,0.3s,baz=188,slow=30,SNR=8.8 | | | Lg | | Lg | 14 02 26.7 | |
| MKAR | comp=Z,23nm,19.5s,baz=355,slow=38 | | | LR | | LR | 14 02 48.6 | |
| **KTBS** | **Karatobe** 16nm,0.3s | **3.40** | **276** | *eP* | | **Pb** | **14 01 43.9** | **+2.6** |
| KTBS | 96nm,0.3s | | | *eS* | | **Sg** | **14 02 28.3** | **-1.8** |
| **KTBS** | **Karatobe** 16nm,0.3s | **3.40** | **276** | Pg | | **Pb** | **14 01 41.4** | **+0.1** |
| KTBS | 96nm,0.4s | | | Lg | | Lg | 14 02 24.2 | |
| **IZV** | **Izvestkoviy** 0.2nm,0.1s | **3.48** | **265** | *eP* | | **Pb** | **14 01 44.0** | **+1.1** |
| IZV | 93nm,0.5s | | | *eS* | | **Sb** | **14 02 28.4** | **+3.2** |
| **IZV** | **Izvestkoviy** 0.2nm,0.1s | **3.48** | **265** | Pg | | **Pb** | **14 01 44.0** | **+1.1** |
| IZV | 93nm,0.5s | | | Lg | | Lg | 14 02 28.4 | |
| **MTBS** | **Maitube** 15nm,0.3s | **3.60** | **266** | *eP* | | **Pb** | **14 01 46.0** | **+1.1** |
| MTBS | 80nm,0.3s | | | *eS* | | **Sb** | **14 02 32.0** | **+3.4** |
| **MTBS** | **Maitube** 15nm,0.3s | **3.60** | **266** | Pg | | **Pb** | **14 01 46.0** | **+1.1** |
| MTBS | 80nm,0.3s | | | Lg | | Lg | 14 02 32.0 | |
| **KUU** | **Kurty** 4.5nm,0.1s | **3.66** | **278** | *eP* | | **Pb** | **14 01 49.0** | **+3.2** |
| KUU | 69nm,0.5s | | | *eS* | | **Sg** | **14 02 37.1** | **-1.3** |
| **KUU** | **Kurty** 4.5nm,0.1s | **3.66** | **278** | Pg | | **Pb** | **14 01 48.9** | **+3.2** |
| KUU | 69nm,0.5s | | | Lg | | Lg | 14 02 37.1 | |
| **KST** | **Kastek** 10nm,0.3s | **3.95** | **266** | *eP* | | **Pb** | **14 01 53.6** | **+2.8** |
| KST | 46nm,0.5s | | | *eS* | | **Sg** | **14 02 45.0** | **-3.0** |
| **KST** | **Kastek** 10nm,0.3s | **3.95** | **266** | Pg | | **Pb** | **14 01 53.6** | **+2.8** |
| KST | 46nm,0.5s | | | Lg | | Lg | 14 02 45.0 | |
| **DGS** | **Degeres** 6.7nm,0.3s | **4.07** | **269** | *eP* | | **Pb** | **14 01 54.9** | **+2.1** |
| DGS | 62nm,0.6s | | | *eS* | | **Sb** | **14 02 47.5** | **+5.4** |
| **DGS** | **Degeres** 6.7nm,0.3s | **4.07** | **269** | Pg | | **Pb** | **14 01 54.9** | **+2.1** |
| DGS | 62nm,0.6s | | | Lg | | Lg | 14 02 47.5 | |
| **KRBS** | **Karabastau** 4.3nm,0.3s | **4.12** | **275** | *eP* | | **Pg** | **14 01 57.7** | **-2.4** |
| KRBS | 31nm,0.5s | | | *eS* | | **Sg** | **14 02 52.3** | **-1.2** |
| **KRBS** | **Karabastau** 4.3nm,0.3s | **4.12** | **275** | Pg | | **Pb** | **14 01 57.2** | **+3.5** |
| KRBS | 29nm,0.4s | | | Lg | | Lg | 14 02 51.1 | |
| **TKM2** | **Tokmak 2** 1.2nm,0.5s | **4.24** | **265** | ⇓Pn | | **Pn** | **14 01 49.0** | **+3.2** |
| TKM2 | 6.4nm,0.5s | | | ⇑Pg | | **Pb** | **14 01 58.0** | **+2.3** |
| TKM2 | 44nm,0.6s | | | ⇓Lg | | Lg | 14 02 55.0 | |
| **ZSN** | **Zaisan** 13nm,0.4s | **4.69** | **31** | *eP* | | **Pb** | **14 02 05.4** | **+2.1** |
| ZSN | 15nm,0.6s | | | *eS* | | **Sb** | **14 03 05.4** | **+5.5** |
| **ZSN** | **Zaisan** 13nm,0.4s | **4.69** | **31** | Pg | | **Pb** | **14 02 05.4** | **+2.1** |
| ZSN | 15nm,0.6s | | | Lg | | Lg | 14 03 05.4 | |
| **CHMS** | **Chumysh** 5.0nm,0.5s | **4.84** | **267** | ⇑Pg | | **Pg** | **14 02 12.5** | **-1.2** |
| CHMS | 28nm,0.9s | | | ⇓Lg | | Lg | 14 03 13.4 | |
| **AAK** | **Ala-Archa** 3.5nm,0.4s | **5.09** | **263** | Pg | | **Pg** | **14 02 18.7** | **+0.2** |
| AAK | 36nm,1.0s | | | Lg | | Lg | 14 03 20.3 | |
| **KURBB** | **Kurchatov Arra** baz=158,slow=13,SNR=1.6 | **7.41** | **346** | Pn | | **Pn** | **14 02 29.1** | **0.0** |
| KURBB | 0.2nm,0.3s,baz=158,slow=23,SNR=5.5 | | | Sn | | **Sn** | **14 03 50.9** | **-2.3** |
| KURBB | 0.2nm,0.3s,baz=165,slow=29,SNR=7.6 | | | Lg | | Lg | 14 04 32.8 | |
| **KURBB** | 0.5nm,0.3s **Kurchatov Arra** 0.4nm,0.3s | **7.41** | **346** | ⇑Pn | | **Pn** | **14 02 28.2** | **-0.9** |
| KURBB | 3.6nm,0.6s | | | ⇑Sn | | **Sn** | **14 03 48.6** | **-4.6** |
| KURBB | 16nm,0.7s | | | ⇑Lg | | Lg | 14 04 32.3 | |
| **KURK** | **Kurchatov** 0.3nm,0.5s | **7.49** | **347** | ⇑Pn | | **Pn** | **14 02 31.0** | **+0.8** |
| KURK | 2.2nm,0.6s | | | ⇑Sn | | **Sn** | **14 03 52.3** | **-2.7** |
| KURK | 15nm,1.0s | | | ⇑Lg | | Lg | 14 04 33.0 | |
| **KK31** | **Karatay Array** 0.7nm,0.5s,baz=347,slow=40,SNR=4.1 | **7.91** | **271** | ⇑Pg | | Pb | 14 03 04.9 | +6.7 |
| KK31 | 4.0nm,0.6s,baz=79,slow=30,SNR=6.2 | | | ⇑Lg | | Lg | 14 04 53.6 | |
| **ZALV** | **Zalesovo Beam** 0.2nm,0.3s,baz=196,slow=15,SNR=3.3 | **10.74** | **11** | Pn | | **Pn** | **14 03 14.0** | **-0.7** |
| ZALV | 0.2nm,0.3s,baz=182,slow=24,SNR=2.5 | | | Lg | | Lg | 14 06 17.8 | |
| **KSRS** | 0.7nm,0.5s **Korea Array** comp=Z,17nm,18.1s,baz=165,slow=40 | **35.57** | **83** | LR | | LR | 14 24 31.8 | |
| **TORD** | **Torodi Ar. Bea** 0.9nm,0.5s,baz=37,slow=5.4,SNR=13 | **73.60** | **273** | P | | **P** | **14 12 12.9** | **-1.7** |
| | 0.9nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** 0.8nm,1.2s,baz=328,slow=5.4,SNR=2.8 | **79.64** | **130** | P | | **P** | **14 12 46.4** | **-2.1** |
| | 0.8nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** 0.3nm,0.8s,baz=328,slow=5.1,SNR=4.7 | **82.40** | **133** | P | | P | 14 13 00.5 | -2.8 |
| | 0.3nm,0.8s | | | | | | | |

*IDC **25** 14:21:24.1±2.0,5°.82S×130°.16E,h0km,mb4.5/2, mbtmp4.1/4,ML3.8/2,Error ellipse: s-maj=141.8km s-min=28.7km az=70.0*

**ISC 25 14:21:39.2±1.0,6°.1S±0°.1×130°.5E±0°.2,h150km,n15, σ1s32/15,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SANI** | **Sanana** | **6.03** | **312** | P | | **Pn** | **14 23 05.5** | **-0.8** |
| **DRS** | **Darwin Rock St** | **6.27** | **176** | P | | **Pn** | **14 23 09.1** | **-0.4** |
| **MTN** | **Manton Dam** | **6.70** | **174** | P | | **Pn** | **14 23 14.5** | **-0.8** |
| **KDU** | **Kakadu** | **6.81** | **163** | P | | **Pn** | **14 23 14.9** | **-1.8** |
| **WRA** | **Warramunga Arr** 0.4nm,0.3s,baz=347,slow=13,SNR=33 | **14.23** | **165** | Pn | | **Pn** | **14 24 51.7** | **-2.4** |
| WRA | 1.5nm,0.3s,baz=332,slow=22,SNR=10 | | | Sn | | Sn | 14 27 19.0 | -13 |
| **COEN** | 0.9nm,0.5s **Coen** | **14.73** | **123** | P | | **Pn** | **14 25 00.8** | **+0.3** |
| **ASAR** | **Alice Springs** 0.4nm,0.3s,baz=349,slow=9.8,SNR=43 | **17.74** | **170** | P | | **Pn** | **14 25 37.6** | **+0.5** |
| ASAR | 0.6nm,0.7s,baz=328,slow=16,SNR=4.2 | | | S | | S | 14 28 42.3 | -10 |
| **AS01** | 1.1nm,0.5s **Alice Springs** | **17.75** | **169** | P | | **Pn** | **14 25 37.7** | **+0.5** |
| **MTSU** | **Mount Surprise** | **18.03** | **133** | P | | **Pn** | **14 25 39.9** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **18.46** | **213** | P | | **Pn** | **14 25 45.9** | **+0.4** |
| **WRKA** | **Warakurna** | **18.91** | **186** | P | | **Pn** | **14 25 50.4** | **-0.4** |
| **OOD** | **Oodnadatta** | **22.11** | **168** | P | | **P** | **14 26 23.7** | **+1.2** |
| **MULG** | **Mulgathing** | **24.26** | **172** | P | | **P** | **14 26 45.1** | **+2.7** |
| **MKAR** | **Makanchi Array** 1.5nm,0.4s,baz=114,slow=8.1,SNR=30 | **67.76** | **326** | P | | **P** | **14 32 21.1** | **+0.4** |
| | 1.5nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** 2.0nm,0.2s,baz=121,slow=4.5,SNR=1.3 | **72.02** | **328** | P | | **P** | **14 32 47.0** | **+0.4** |
| | 2.0nm,0.2s | | | | | | | |

*IDC **25** 14:28:16.6±3.5,18°.15S×178°.11W,h556km±39km, mb3.4/11,mbtmp4.3/12,Error ellipse: s-maj=20.3km s-min=17.8km az=90.0*
*NEIC **25** 14:28:19.3±1.2,18°.2S±0°.1×178°.0W±0°.1,h596km±9km, mb4.1/30,Error ellipse: s-maj=21.7km s-min=11.7km az=153.0*

**ISC 25 14:28:19.1±0.6,18°.14S±0°.10×178°.1W±0°.1,h590km,n54, σ0s84/56,mb4.1/28,4C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.67** | **276** | P | | **P** | **14 29 42.9** | **+1.2** |
| **DZM** | **Mont Dzumac** 3.0nm,0.9s,baz=336,slow=20,SNR=1.1 | **15.02** | **252** | P | | **P** | **14 31 26.8** | **-1.1** |
| **URZ** | **Urewera** 12nm,1.0s,baz=94,slow=16,SNR=2.2 | **20.48** | **191** | P | | **P** | **14 32 14.8** | **-2.6** |
| | 12nm,1.0s | | | | | | | |
| **THZ** | **Tophouse** | **24.77** | **196** | P | | **P** | **14 32 54.2** | **-1.4** |
| **EIDS** | **Eidsvold** | **29.45** | **250** | P | | **P** | **14 33 37.1** | **+0.3** |
| EIDS | comp=Z,7.8nm,1.1s | | | IAmb | | IAmb | 14 33 38.2 | |
| **MLZ** | **Mavora Lakes** | **29.48** | **200** | P | | **P** | **14 33 36.8** | **+0.1** |
| MLZ | comp=Z,6.0nm,0.9s | | | IAmb | | IAmb | 14 33 52.3 | |
| **ARMA** | **Armidale** | **30.06** | **240** | P | | **P** | **14 33 43.2** | **+1.1** |
| ARMA | comp=Z,7.1nm,1.1s | | | IAmb | | IAmb | 14 33 54.8 | |
| **CTA** | **Charters Tower** comp=Z,0.3nm,0.6s,baz=97,slow=7.8,SNR=6.9 | **33.68** | **261** | P | | **P** | **14 34 12.0** | **-0.8** |
| **CTAO** | **Charters Tower** | **33.68** | **261** | P | | **P** | **14 34 12.1** | **-0.7** |
| CTAO | comp=Z,8.7nm,1.1s | | | IAmb | | IAmb | 14 34 19.4 | |
| **CAN** | **Canberra** | **33.78** | **233** | P | | **P** | **14 34 13.4** | **-0.1** |
| **TOO** | **Toolangi** | **37.24** | **231** | P | | **P** | **14 34 41.3** | **-0.7** |
| TOO | comp=Z,7.1nm,1.1s | | | IAmb | | IAmb | 14 34 53.0 | |
| **COEN** | **Coen** | **37.38** | **271** | P | | **P** | **14 34 43.7** | **+0.4** |
| **TAU** | **Tasmania Unive** | **38.26** | **222** | P | | **P** | **14 34 49.6** | **-0.4** |
| **STKA** | **Stephens Creek** | **38.76** | **241** | P | | **P** | **14 34 54.6** | **-0.2** |
| **STKA** | **Stephens Creek** comp=Z,3.2nm,0.6s,baz=64,slow=7.1,SNR=4.6 | **38.76** | **241** | P | | **P** | **14 34 54.3** | **0.0** |
| | comp=Z,3.2nm,0.6s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.53** | **241** | P | | **P** | **14 35 32.1** | **+0.1** |
| BBOO | comp=Z,9.0nm,1.1s | | | IAmb | | IAmb | 14 35 33.0 | |
| **KEKH** | **Kekaha** | **43.76** | **25** | P | | **P** | **14 35 31.6** | **-2.1** |
| **WR0** | **Warramunga Arr** | **44.67** | **260** | P | | **P** | **14 35 40.5** | **-0.5** |
| **WB0** | **Warramunga Arr** | **44.83** | **260** | P | | **P** | **14 35 41.9** | **-0.3** |
| WB0 | comp=Z,4.9nm,0.9s | | | IAmb | | IAmb | 14 35 42.5 | |
| **WB2** | **Warramunga Arr** | **44.85** | **260** | P | | **P** | **14 35 41.9** | **-0.4** |
| WB2 | comp=Z,5.9nm,1.1s | | | IAmb | | IAmb | 14 35 42.8 | |
| **WRAB** | **Tennant Creek** | **44.85** | **260** | P | | **P** | **14 35 41.6** | **-0.7** |
| WRAB | comp=Z,3.4nm,0.8s | | | IAmb | | IAmb | 14 35 42.3 | |
| **WRA** | **Warramunga Arr** | **44.86** | **260** | P | | **P** | **14 35 41.8** | **-0.5** |
| **WRA** | **Warramunga Arr** comp=Z,2.7nm,0.6s,baz=94,slow=7.2,SNR=61 | **44.86** | **260** | P | | **P** | **14 35 42.1** | **-0.3** |
| WRA | | | | PcP | | **PcP** | **14 37 11.6** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=90,slow=3.8,SNR=8.2 | | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| **AS31** | **Alice Springs** | **44.99** | **254** | P | | **P** | **14 35 43.1** | **-0.3** |
| **ASAR** | **Alice Springs** | **44.99** | **254** | P | | **P** | **14 35 42.7** | **-0.6** |
| **ASAR** | **Alice Springs** comp=Z,11nm,0.8s,baz=93,slow=7.6,SNR=139 | **44.99** | **254** | P | | **P** | **14 35 43.5** | **+0.1** |
| ASAR | | | | PcP | | **PcP** | **14 37 11.8** | **+0.1** |
| | comp=Z,0.7nm,0.4s,baz=103,slow=4.3,SNR=6.7 | | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **MTN** | **Manton Dam** | **49.06** | **269** | P | | **P** | **14 36 13.6** | **-0.3** |
| MTN | comp=Z,9.0nm,1.0s | | | IAmb | | IAmb | 14 36 23.4 | |
| **KNRA** | **Kununurra** | **50.74** | **264** | P | | **P** | **14 36 26.3** | **+0.2** |
| KNRA | comp=Z,4.1nm,0.8s | | | IAmb | | IAmb | 14 36 26.9 | |
| **FITZ** | **Fitzroy Crossi** | **53.26** | **261** | P | | **P** | **14 36 44.3** | **+0.1** |
| **PSA00** | **Pilbara Seismi** | **58.12** | **256** | P | | **P** | **14 37 16.6** | **-1.1** |
| **MBWA** | **Marble Bar** | **58.28** | **256** | P | | **P** | **14 37 18.2** | **-0.6** |
| **SBA** | **Scott Base** | **60.21** | **184** | P | | **P** | **14 37 32.9** | **+2.2** |
| **MJAR** | **Matsushiro Arr** comp=Z,3.0nm,0.7s,baz=153,slow=6.0,SNR=9.2 | **68.25** | **323** | P | | **P** | **14 38 22.3** | **+0.2** |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.92** | **180** | P | | **P** | **14 38 43.4** | **0.0** |
| QSPA | comp=Z,4.9nm,1.1s | | | IAmb | | IAmb | 14 38 44.8 | |
| **QSPA** | **South Pole Qui** comp=Z,1.6nm,0.6s,baz=194,slow=0.5,SNR=28 | **71.92** | **180** | P | | **P** | **14 38 44.1** | **+0.7** |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **PETK** | **Petropavlovsk-** comp=Z,1.9nm,0.3s,baz=120,slow=8.5,SNR=4.6 | **73.97** | **345** | P | | **P** | **14 38 55.2** | **+0.2** |
| | comp=Z,1.9nm,0.3s | | | | | | | |
| **OHAK** | **Old Harbor** | **77.89** | **14** | P | | **P** | **14 39 16.8** | **+0.3** |
| OHAK | comp=Z,5.0nm,0.8s | | | IAmb | | IAmb | 14 39 17.4 | |
| **KDAK** | **Kodiak Island** | **78.56** | **14** | P | | **P** | **14 39 18.6** | **-1.5** |
| KDAK | comp=Z,7.7nm,1.0s | | | IAmb | | IAmb | 14 39 24.9 | |
| **NVAR** | **Mina Array Bea** comp=Z,1.2nm,0.8s,baz=223,slow=9.4,SNR=7.8 | **79.40** | **44** | P | | **P** | **14 39 26.7** | **+1.4** |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.96** | **14** | P | | **P** | **14 39 43.2** | **+0.4** |
| **RND** | **Reindeer** | **84.43** | **13** | P | | **P** | **14 39 50.3** | **+0.3** |
| **CCB** | **Clear Creek Bu** | **85.75** | **13** | P | | **P** | **14 39 55.7** | **-0.5** |
| CCB | comp=Z,2.6nm,0.6s | | | IAmb | | IAmb | 14 39 56.2 | |
| **ILAR** | **Eielson Array** comp=Z,0.8nm,0.4s,baz=221,slow=5.0,SNR=23 | **86.05** | **13** | P | | **P** | **14 39 57.4** | **-0.3** |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** comp=Z,0.5nm,0.7s,baz=215,slow=1.8,SNR=4.7 | **87.33** | **43** | P | | **P** | **14 40 05.5** | **+0.9** |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,1.8nm,0.9s,baz=108,slow=2.9,SNR=6.2 | **89.22** | **290** | P | | **P** | **14 40 14.2** | **+0.7** |
| | comp=Z,1.8nm,0.9s | | | | | | | |
| **TROLL** | **Troll, Antarti** comp=Z,47nm,0.5s | **90.08** | **180** | ⇑P | | **P** | **14 40 16.3** | **-0.4** |
| **SNAA** | **Sanae** | **90.36** | **179** | P | | **P** | **14 40 16.7** | **-1.2** |
| SNAA | comp=Z,3.8nm,1.1s | | | IAmb | | IAmb | 14 40 18.4 | |
| **VNA3** | **Neumayer Olymp** comp=Z,2.6nm,0.6s | **90.50** | **176** | ⇑P | | **P** | **14 40 18.4** | **-0.1** |
| **VNA2** | **Neumayer--Watz** comp=Z,2.1nm,0.7s,baz=182,slow=5.3 | **90.94** | **177** | ⇑P | | **P** | **14 40 20.8** | **+0.3** |
| **VNA1** | **Neumayer--Stat** comp=Z,2.7nm,0.7s | **91.17** | **177** | ⇑P | | **P** | **14 40 20.9** | **-0.7** |
| **ARCES** | **ARCESS Array B** comp=Z,2.4nm,0.9s,baz=38,slow=2.2,SNR=5.3 | **126.59** | **350** | PKP | | **PKPdf** | **14 46 15.3** | **-0.1** |
| **BRTR** | **Keskin Array B** comp=Z,1.3nm,0.6s,baz=131,slow=3.6,SNR=9.0 | **145.13** | **315** | PKPbc | | **PKPbc** | **14 46 52.0** | **+0.4** |
| **MMAI** | **Mount Meron Ar** comp=Z,1.3nm,0.5s,baz=77,slow=8.8,SNR=3.6 | **146.49** | **303** | PKPbc | | **PKPbc** | **14 46 55.4** | **-0.2** |
| **GERES** | **GERESS Array B** comp=Z,1.3nm,0.7s,baz=20,slow=4.3,SNR=6.3 | **147.90** | **345** | PKPbc | | **PKPbc** | **14 46 59.0** | **+0.2** |

*DSN **25** 14:28:34.0±1.9,27°.63N×54°.39E,h10km,ML3.0/6,Error ellipse: s-maj=29.5km s-min=11.8km az=31.0*
*TEH **25** 14:28:40.5,28°.02N×54°.76E,h10km,ML2.9*

**ISC 25 14:28:40.0±1.3,27°.21N±0°.08×54°.5E±0°.1,h10km,n9, σ1s00/12,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LAR1** | **LAR** | **0.47** | **348** | Pg | | **Pb** | **14 28 49.3** | **-1.2** |
| LAR1 | | | | Sg | | **Sb** | **14 28 58.6** | **+1.1** |
| **GENO** | **Geno** | **1.51** | **82** | Pg | | **Pb** | **14 29 08.1** | **-0.1** |
| **QIR1** | **Qir** | **1.80** | **315** | Pg | | **Pn** | **14 29 11.7** | **+0.5** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SHME** | **Shamm** | **1.88** | **128** | P | **Pn** | **14 29 11.7** | **-0.4** |
| SHME | | | | S | **Sb** | **14 29 38.5** | **+0.6** |
| **MSFE** | **Esma-Masafi** | **2.38** | **140** | P | **Pn** | **14 29 19.0** | **0.0** |
| MSFE | | | | S | **Sb** | **14 29 53.8** | **+1.5** |
| **NAZ** | **Nazwa, Dubai** | **2.45** | **154** | P | **Pn** | **14 29 20.2** | **+0.2** |
| **FAQ** | **Al Faqa, Dubai** | **2.65** | **158** | P | **Pn** | **14 29 22.4** | **-0.4** |
| **ASUD** | **Al Ashush, Dub** | **2.68** | **163** | P | **Pn** | **14 29 23.5** | **+0.3** |
| **ASHO** | **Ashiyiah** | **2.88** | **150** | P | **Pn** | **14 29 24.4** | **-1.7** |

*NEIC* ***25*** *14:42:42.6±1.5, 69°.58N±0°.08×144°.17W±0°.04, h10km±2km, Error ellipse: s-maj=13.0km s-min=3.2km az=7.0*

**AEIC 25 14:42:41.0±2.1, 69°.45N±0°.08×144°.2W±0°.1, h6km±6km, ML3.3, ML3.5/26(NEIC), Error ellipse: s-maj=12.3km s-min=4.8km az=203.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.25** | **43** | | Pb | 14 42 49.2 | +1.2 |
| **C26K** | **Camden Bay** | **0.54** | **333** | | Pb | 14 42 52.2 | -0.6 |
| C26K | | | | | Sg | 14 42 58.9 | +0.6 |
| **D25K** | **Kavik River** | **0.78** | **262** | | Pg | 14 42 56.0 | +0.1 |
| D25K | | | | | Sb | 14 43 07.0 | -0.9 |
| **D27M** | **Malcolm River** | **1.17** | **98** | | Pg | 14 43 02.8 | -0.5 |
| D27M | | | | | Sb | 14 43 19.2 | +0.2 |
| **E27K** | **Coleen River** | **1.58** | **142** | | Pg | 14 43 11.5 | +0.2 |
| **C24K** | **Franklin Bluff** | **1.60** | **282** | | Pb | 14 43 10.9 | 0.0 |
| **D24K** | **Happy Valley** | **1.67** | **262** | | Pb | 14 43 12.2 | +0.1 |
| **F26K** | **Sheenjek River** | **1.76** | **179** | | Pg | 14 43 14.7 | +0.1 |
| **E28M** | **Babbage River** | **1.88** | **114** | | Pb | 14 43 16.2 | +0.5 |
| **F25K** | **Christian Rive** | **1.93** | **197** | | Pb | 14 43 17.0 | +0.4 |
| **D28M** | **Stokes Point** | **1.94** | **91** | | Pb | 14 43 16.9 | +0.2 |
| **BMAR** | **Burnt Mountain** | **2.03** | **184** | | Pb | 14 43 18.4 | +0.1 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **250** | | Pb | 14 43 18.5 | -0.8 |
| **C23K** | **Itkillik River** | **2.28** | **283** | | Pb | 14 43 20.4 | +1.3 |
| **E29M** | **Blow River** | **2.52** | **112** | | Pb | 14 43 24.8 | -1.7 |
| **FYU** | **Fort Yukon** | **2.92** | **188** | Pn | Pb | 14 43 30.9 | -2.5 |
| **B22K** | **Teshekpuk Lake** | **3.31** | **290** | | Pn | 14 43 35.0 | +1.8 |
| **G29M** | **Pine Creek** | **3.44** | **135** | | Pn | 14 43 37.3 | +2.2 |
| **F22K** | **John River** | **3.52** | **240** | | Pn | 14 43 38.5 | +2.3 |
| **F30M** | **Barrier River** | **3.60** | **117** | | Pn | 14 43 40.1 | +2.8 |
| **G30M** | **tAoh Zraii Nji** | **3.87** | **126** | | Pn | 14 43 43.5 | +2.5 |
| **PRP** | **Porcupine Dome** | **3.98** | **188** | Pn | Pn | 14 43 45.4 | +2.8 |
| PRP | | | | IAML | | 14 44 36.3 | |
| | comp=N,53nm,0.6s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.18** | **174** | | Pn | 14 43 48.0 | +2.8 |
| I26K | | | | IAML | | 14 45 01.3 | |
| | comp=E,77nm,0.7s | | | | | | |
| **MDM** | **Murphy Dome** | **4.77** | **201** | | Pn | 14 43 55.9 | +2.5 |
| MDM | | | | IAML | | 14 45 15.1 | |
| | comp=N,30nm,0.7s | | | | | | |
| MDM | | | | IAML | | 14 45 22.6 | |
| | comp=E,48nm,0.8s | | | | | | |
| **COLA** | **College** | **4.81** | **199** | Pn | Pn | 14 43 57.8 | +4.0 |
| **IL31** | | **4.81** | **194** | | Pn | 14 43 56.3 | +2.4 |
| **ILAR** | **Eielson Array** | **4.81** | **194** | Pn | Pn | 14 43 56.4 | +2.5 |
| **EGAK** | **Eagle** | **4.84** | **164** | Pn | Pn | 14 43 57.0 | +2.7 |
| EGAK | | | | IAML | | 14 44 55.4 | |
| | comp=E,34nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 14 45 33.5 | |
| | comp=E,28nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.02** | **198** | | Pn | 14 43 59.4 | +2.6 |
| **D19K** | **Kuna River** | **5.10** | **266** | | Pn | 14 44 00.0 | +2.1 |
| D19K | | | | IAML | | 14 45 48.1 | |
| | comp=E,32nm,0.9s | | | | | | |
| D19K | | | | IAML | | 14 46 03.5 | |
| | comp=N,26nm,1.2s | | | | | | |
| **MLY** | **Manley** | **5.11** | **213** | Pn | Pn | 14 44 00.6 | +2.6 |
| **HDA** | **Harding Lake** | **5.17** | **193** | | Pn | 14 44 02.2 | +3.4 |
| HDA | | | | IAML | | 14 45 40.8 | |
| | comp=N,28nm,1.1s | | | | | | |
| **E19K** | **Redstone River** | **5.20** | **254** | | Pn | 14 44 00.9 | +1.7 |
| E19K | | | | IAML | | 14 45 43.2 | |
| | comp=E,28nm,0.7s | | | | | | |
| E19K | | | | IAML | | 14 45 44.5 | |
| | comp=N,25nm,0.8s | | | | | | |
| **WRH** | **Wood River Hil** | **5.22** | **199** | | Pn | 14 44 00.2 | +0.6 |
| WRH | | | | IAML | | 14 45 35.1 | |
| | comp=E,23nm,1.2s | | | | | | |
| **H31M** | **Peel River** | **5.25** | **129** | Pn | Pn | 14 44 01.7 | +1.8 |
| H31M | | | | IAML | | 14 45 38.7 | |
| | comp=E,30nm,1.5s | | | | | | |
| H31M | | | | IAML | | 14 45 38.7 | |
| | comp=N,28nm,1.3s | | | | | | |
| **SCRK** | **Sand Creek** | **5.49** | **179** | Pn | Pn | 14 44 06.8 | +3.4 |
| **K27K** | **Chicken** | **5.50** | **170** | | Pn | 14 44 06.7 | +3.3 |
| **DAWY** | **Dawson** | **5.73** | **158** | | Pn | 14 44 09.7 | +3.2 |
| **RIDG** | **Independent Ri** | **5.74** | **183** | | Pn | 14 44 10.2 | +3.5 |
| **BPAW** | **Bear Paw Mtn.** | **6.00** | **210** | | Pn | 14 44 13.0 | +2.8 |
| **RND** | **Reindeer** | **6.34** | **199** | | Pn | 14 44 18.8 | +3.8 |
| **BCAR** | **Beaver Creek A** | **6.48** | **170** | Pn | Pn | 14 44 19.7 | +2.8 |
| **DHY** | **Denali Highway** | **6.52** | **193** | Pn | Pn | 14 44 21.8 | +4.3 |
| **RDOG** | **Red Dog Mine** | **6.93** | **267** | | Pn | 14 44 23.8 | +0.8 |
| **SML** | **Sawmill** | **7.86** | **194** | Pn | Pn | 14 44 40.3 | +4.6 |
| **CTGM** | **Chitina Glacie** | **8.60** | **171** | | Pn | 14 44 50.8 | +4.8 |

**NOU 25 14:56:35.4, 19°.80S×133°.90E, h0km, mb3.7/10, Northern Territory, Australia, Northern Territory**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AS01** | **Alice Springs** | **3.85** | **179** | P | Pn | 14 57 37.4 | +1.5 |
| **QIS** | **Mount Isa** | **5.41** | **99** | P | Pn | 14 57 57.8 | +0.4 |
| **KDU** | **Kakadu** | **7.20** | **349** | P | Pn | 14 58 21.5 | -0.6 |
| **WRKA** | **Warakurna** | **7.35** | **224** | P | Pn | 14 58 23.6 | -0.5 |
| **DRS** | **Darwin Rock St** | **7.87** | **338** | P | Pn | 14 58 31.4 | +0.2 |
| **OOD** | **Oodnadatta** | **8.12** | **169** | P | Pn | 14 58 35.1 | +0.4 |
| **INKA** | **Innaminka** | **10.09** | **143** | P | Pn | 14 59 01.0 | -0.6 |
| **MULG** | **Mulgathing** | **10.44** | **179** | P | Pn | 14 59 05.4 | -1.0 |
| **COEN** | **Coen** | **10.61** | **58** | P | Pn | 14 59 08.4 | -0.4 |
| **LCRK** | **Leigh Creek** | **11.30** | **161** | P | Pn | 14 59 16.9 | -1.3 |

*NEIC* ***25*** *14:56:37.2±0.7, 36°.19N±0°.02×98°.91W±0°.02, h5km±1km, Error ellipse: s-maj=3.2km s-min=2.9km az=279.0*

**TUL 25 14:56:37.4±0.8, 36°.20N±0°.01×98°.92W±0°.02, h5km±5km, ML2.4, mb_Lg2.6/62(NEIC), ML2.6/20(NEIC), Error ellipse: s-maj=2.1km s-min=1.3km az=58.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK038** | **West end E0370** | **0.32** | **27** | | Pg | 14 56 44.1 | +0.6 |
| OK038 | | | | IAML | | 14 56 54.8 | |
| | 914nm,0.4s | | | | | | |
| **ELIS** | **Ellis County** | **0.42** | **252** | | Pg | 14 56 46.0 | +0.5 |
| ELIS | | | | IAML | | 14 56 58.4 | |
| | comp=E,619nm,0.4s | | | | | | |
| **NOKA** | **Waynoka** | **0.44** | **359** | Pg | Pg | 14 56 46.0 | +0.2 |
| NOKA | | | | Sg | Sg | 14 56 52.9 | +1.3 |
| NOKA | | | | IAML | | 14 56 54.3 | |
| | comp=E,521nm,0.3s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.58** | **161** | Pg | Pg | 14 56 48.7 | +0.2 |
| **CROK** | **Carrier** | **0.82** | **68** | Pg | Pg | 14 56 52.6 | -0.5 |
| CROK | | | | Sg | Sg | 14 57 04.4 | +0.7 |
| CROK | | | | IAML | | 14 57 16.7 | |
| | comp=E,269nm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.83** | **43** | | Pg | 14 56 53.4 | -0.1 |
| OK032 | | | | IAML | | 14 57 08.0 | |
| | comp=E,218nm,0.4s | | | | | | |
| OK032 | | | | IAML | | 14 57 15.4 | |
| | comp=E,238nm,0.2s | | | | | | |
| **KAN14** | **Manchester OK** | **1.08** | **45** | Pg | Pg | 14 56 58.2 | 0.0 |
| KAN14 | | | | IAML | | 14 57 23.8 | |
| | comp=E,172nm,0.1s | | | | | | |
| KAN14 | | | | IAML | | 14 57 24.6 | |
| | comp=N,164nm,0.4s | | | | | | |
| **OK029** | **Liberty Lake** | **1.25** | **108** | | Pg | 14 57 00.8 | -0.6 |
| OK029 | | | | IAML | | 14 57 18.3 | |
| | comp=N,105nm,0.2s | | | | | | |
| OK029 | | | | IAML | | 14 57 21.1 | |
| | comp=N,108nm,0.3s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.46** | **175** | Pg | Pn | 14 57 03.3 | -1.2 |
| **SMWD** | **Samnorwood** | **1.53** | **225** | | Pn | 14 57 05.5 | 0.0 |
| **OK048** | **Pawnee Station** | **1.61** | **82** | | Pn | 14 57 06.1 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.71** | **98** | | Pn | 14 57 07.2 | -0.6 |
| **OK051** | **E0350 and S346** | **1.71** | **79** | | Pn | 14 57 08.6 | +0.7 |
| **OK052** | **Battle Ridge R** | **1.73** | **96** | | Pn | 14 57 08.7 | +0.5 |
| **DEOK** | **Depew** | **2.00** | **99** | | Pn | 14 57 12.6 | +0.7 |
| **R32A** | **Long Quarter,** | **2.23** | **4** | | Pn | 14 57 16.2 | +1.1 |
| **WTFS** | **Witchita Falls** | **2.45** | **171** | Pn | Pn | 14 57 19.2 | +1.1 |
| **TUL3** | **Leonard** | **2.55** | **95** | IAmb_Lg | | 14 58 00.8 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.60** | **241** | IAmb_Lg | | 14 58 04.1 | |
| | comp=Z,42nm,0.7s | | | | | | |
| **DKNS** | **Dickens** | **3.01** | **214** | IAmb_Lg | | 14 58 13.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **3.09** | **276** | | Pn | 14 57 28.6 | +1.5 |
| **X37A** | **Clayton** | **3.31** | **118** | IAmb_Lg | | 14 58 30.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **3.43** | **32** | Pn | Pn | 14 57 32.1 | +0.5 |
| KSU1 | | | | IAmb_Lg | | 14 58 33.8 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **3.50** | **208** | IAmb_Lg | | 14 58 38.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.69** | **207** | IAmb_Lg | | 14 58 43.0 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **POST** | **Post** | **3.78** | **215** | IAmb_Lg | | 14 58 43.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **3.86** | **236** | IAmb_Lg | | 14 58 50.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **HHAR** | **Hobbs** | **4.03** | **87** | IAmb_Lg | | 14 58 45.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.07** | **315** | IAmb_Lg | | 14 58 47.3 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **SGCY** | **Sterling City** | **4.65** | **204** | IAmb_Lg | | 14 59 11.3 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **4.73** | **70** | IAmb_Lg | | 14 59 08.2 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.26** | **107** | IAmb_Lg | | 14 59 31.8 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **OGNE** | **Ogallala** | **5.33** | **334** | IAmb_Lg | | 14 59 28.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **5.43** | **78** | IAmb_Lg | | 14 59 41.8 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.46** | **50** | IAmb_Lg | | 14 59 45.2 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.47** | **98** | IAmb_Lg | | 14 59 37.2 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **SDCO** | **Great Sand Dun** | **5.49** | **288** | | Pn | 14 58 01.1 | +0.9 |
| **FCAR** | **Ozark Folk Cen** | **5.52** | **91** | IAmb_Lg | | 14 59 34.9 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **OZNA** | **Ozona** | **5.57** | **200** | IAmb_Lg | | 14 59 38.8 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **5.71** | **67** | IAmb_Lg | | 14 59 40.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **5.75** | **188** | IAmb_Lg | | 14 59 47.3 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **MNHN** | **Monahans** | **5.80** | **215** | IAmb_Lg | | 14 59 54.2 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **T42A** | **Van Buren** | **6.35** | **80** | IAmb_Lg | | 15 00 09.1 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **P40A** | **Paris** | **6.38** | **56** | IAmb_Lg | | 15 00 07.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **N38A** | **Joes South For** | **6.40** | **42** | IAmb_Lg | | 15 00 08.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **FVM** | **French Village** | **7.02** | **73** | IAmb_Lg | | 15 00 23.4 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.21** | **317** | IAmb_Lg | | 15 00 37.5 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **CGM3** | **Cape Girardeau** | **7.52** | **79** | IAmb_Lg | | 15 00 39.6 | |
| | comp=Z,11nm,1.1s | | | | | | |

**TAP 25 15:04:59.8, 24°.47N×121°.94E, h66km, ML1.6, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EWUT** | **Wuta** | **0.14** | **261** | *eP* | Pn | 15 05 10.1 | +0.4 |
| | baz=262 | | | | | | |
| **TWC** | **Suao** | **0.16** | **331** | *eP* | Pn | 15 05 09.3 | -0.4 |
| | baz=333 | | | | | | |
| TWC | | | | S | Sn | 15 05 18.0 | +0.9 |
| | baz=333 | | | | | | |
| **ENA** | **Nanau** | **0.18** | **257** | P | Pn | 15 05 10.4 | +0.6 |
| | baz=257 | | | | | | |
| ENA | | | | S | Sn | 15 05 17.8 | +0.6 |
| | baz=257 | | | | | | |
| **EAHA** | **Aohua** | **0.23** | **232** | *eP* | Pn | 15 05 10.1 | +0.1 |
| | baz=233 | | | | | | |
| **EOS2** | **EOS2** | **0.27** | **100** | *eP* | Pn | 15 05 09.1 | -1.1 |
| | baz=116 | | | | | | |
| EOS2 | | | | S | Sn | 15 05 17.3 | -0.5 |
| | baz=116 | | | | | | |
| **TWE** | **Neicheng** | **0.35** | **316** | *eP* | Pn | 15 05 12.2 | +1.3 |
| | baz=313 | | | | | | |
| TWE | | | | *eS* | Sn | 15 05 19.4 | +0.4 |
| | baz=313 | | | | | | |
| **ENTT** | **Nioudou** | **0.38** | **297** | *eP* | Pn | 15 05 12.6 | +1.4 |
| | baz=290 | | | | | | |
| **EOS3** | **EOS3** | **0.39** | **117** | *eP* | Pn | 15 05 10.1 | -0.9 |
| | baz=124 | | | | | | |
| EOS3 | | | | *eS* | Sn | 15 05 18.5 | -0.8 |
| | baz=124 | | | | | | |
| **NACB** | **Ninganchiao** | **0.43** | **227** | P | Pn | 15 05 11.1 | -0.5 |
| | baz=221 | | | | | | |
| NACB | | | | *eS* | Sn | 15 05 20.6 | +0.4 |
| | baz=221 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.43** | **313** | *eP* | Pn | 15 05 13.0 | +1.4 |
| | baz=312 | | | | | | |
| FUSB | | | | *eS* | Sn | 15 05 21.8 | +1.4 |
| | baz=312 | | | | | | |
| **TIPB** | **Shuangxi** | **0.51** | **349** | *eP* | Pn | 15 05 12.0 | -0.4 |
| | baz=348 | | | | | | |
| TIPB | | | | S | Sn | 15 05 22.2 | +0.5 |
| | baz=348 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.65** | **227** | *eP* | Pn | 15 05 13.7 | -0.4 |
| | baz=219 | | | | | | |
| LXIB | | | | *eS* | Sn | 15 05 25.5 | +1.0 |
| | baz=219 | | | | | | |

*NEIC* ***25*** *15:27:00.7±1.5, 42°.98N±0°.07×126°.5W±0°.1, h10km±2km, ML3.1/72, Error ellipse: s-maj=17.1km s-min=11.0km az=263.0*

*IDC* ***25*** *15:27:04.9±2.3, 43°.29N×125°.88W, h0km, mb3.3/2, mbtmp3.4/7, ML3.3/5, MS3.0/7, Error ellipse: s-maj=41.0km s-min=17.2km az=51.0*

**ISC 25 15:27:01.1±2.0, 42°.98N±0°.06×126°.5W±0°.1, h10km, n52, σ1°.04/45, mb3.3/3, MS3.0/3, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBO** | **Bosley Butte** | **1.85** | **114** | Pn | **Pn** | **15 27 31.5** | **-1.4** |
| KBO | | | | IAML | | 15 27 58.9 | |
| | comp=E,164nm,1.9s | | | | | | |
| **J01E** | **Myrtle Point** | **1.89** | **84** | | **Pn** | **15 27 31.2** | **-2.2** |
| J01E | | | | IAML | | 15 27 54.5 | |
| | comp=N,198nm,0.2s | | | | | | |
| **K02D** | **Willamette Mer** | **2.10** | **97** | | **Pn** | **15 27 34.7** | **-1.8** |
| K02D | | | | IAML | | 15 28 03.6 | |
| | comp=E,120nm,0.5s | | | | | | |
| **KSXB** | **Camp Six Broad** | **2.26** | **120** | | **Pn** | **15 27 37.3** | **-1.2** |
| **L02F** | **Cave Junction** | **2.33** | **111** | | **Pn** | **15 27 38.4** | **-1.0** |
| L02F | | | | IAML | | 15 28 08.5 | |
| | comp=E,68nm,0.7s | | | | | | |
| **DBO** | **Dodson Butte** | **2.39** | **85** | | **Pn** | **15 27 39.0** | **-1.4** |
| DBO | | | | IAML | | 15 28 13.4 | |
| | comp=E,85nm,1.3s | | | | | | |
| **KRMB** | **Red Mountain** | **2.41** | **126** | | **Pn** | **15 27 39.2** | **-1.5** |
| **KRPM** | **Rodgers** | **2.59** | **134** | Pn | **Pn** | **15 27 41.6** | **-1.5** |
| KRPM | | | | IAML | | 15 28 11.6 | |
| | comp=E,78nm,1.8s | | | | | | |
| KRPM | | | | IAML | | 15 28 55.0 | |
| | comp=N,63nm,1.7s | | | | | | |
| **COR** | **Corvallis** | **2.82** | **54** | | **Pn** | **15 27 45.0** | **-1.2** |
| COR | | | | IAML | | 15 28 20.4 | |
| | comp=N,64nm,0.8s | | | | | | |
| COR | | | | IAML | | 15 28 28.7 | |
| | comp=N,50nm,0.7s | | | | | | |
| **BUCK** | **Buck Mountain** | **2.83** | **63** | Pn | **Pn** | **15 27 45.5** | **-0.9** |
| BUCK | | | | IAML | | 15 28 24.0 | |
| | comp=N,73nm,0.6s | | | | | | |
| BUCK | | | | IAML | | 15 28 26.4 | |
| | comp=E,73nm,0.9s | | | | | | |
| **JCC** | **Jacoby Creek,** | **2.84** | **139** | Pn | **Pn** | **15 27 46.2** | **-0.2** |
| JCC | | | | IAML | | 15 28 50.6 | |
| | comp=E,46nm,1.8s | | | | | | |
| **KHMM** | **Horse Mountain** | **2.95** | **135** | Pn | **Pn** | **15 27 46.6** | **-1.4** |
| KHMM | | | | IAML | | 15 28 25.9 | |
| | comp=E,39nm,1.8s | | | | | | |
| **HEBO** | **Mount Hebo** | **2.99** | **41** | Pn | **Pn** | **15 27 47.3** | **-1.2** |
| HEBO | | | | IAML | | 15 28 24.1 | |
| | comp=N,59nm,0.8s | | | | | | |
| HEBO | | | | IAML | | 15 28 26.2 | |
| | comp=E,74nm,1.7s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **3.07** | **113** | Pn | **Pn** | **15 27 49.9** | **+0.2** |
| **YBH** | **Yreka Blue Hor** | **3.07** | **113** | Pn | **Pn** | **15 27 50.0** | **+0.2** |
| | comp=E,3.3nm,0.3s,baz=291,slow=13,SNR=99 | | | | | | |
| YBH | | | | Sn | **Sn** | **15 28 26.7** | **+0.1** |
| | comp=E,1.5nm,0.3s,baz=239,slow=9.4,SNR=6.8 | | | | | | |
| | comp=E,7.4nm,0.3s | | | | | | |
| **I04A** | **Tendick Farm,** | **3.09** | **73** | Pn | **Pn** | **15 27 49.3** | **-0.7** |
| **H04D** | **Lebanon** | **3.14** | **59** | Pn | **Pn** | **15 27 49.9** | **-0.7** |
| H04D | | | | IAML | | 15 28 28.3 | |
| | comp=E,65nm,0.5s | | | | | | |
| H04D | | | | IAML | | 15 28 34.5 | |
| | comp=N,68nm,0.9s | | | | | | |
| **G03D** | **McMinnville, O** | **3.23** | **45** | | **Pn** | **15 27 51.3** | **-0.5** |
| **H04A** | **Detroit Lake** | **3.56** | **60** | Pn | **Pn** | **15 27 55.8** | **-0.6** |
| H04A | | | | IAML | | 15 28 43.0 | |
| | comp=E,42nm,0.4s | | | | | | |
| H04A | | | | IAML | | 15 28 43.4 | |
| | comp=N,43nm,0.4s | | | | | | |
| **F03A** | **Seaside** | **3.63** | **34** | | **Pn** | **15 27 56.4** | **-0.9** |
| **J05D** | **Fort Rock, OR** | **3.87** | **84** | Pn | **Pn** | **15 28 00.3** | **-0.4** |
| J05D | | | | IAML | | 15 29 15.8 | |
| | comp=E,18nm,2.2s | | | | | | |
| J05D | | | | IAML | | 15 29 25.5 | |
| | comp=N,22nm,2.1s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **3.95** | **134** | Pn | **Pn** | **15 28 02.1** | **+0.3** |
| **RADR** | **Rader Ridge** | **3.95** | **28** | Pn | **Pn** | **15 28 00.9** | **-0.8** |
| RADR | | | | IAML | | 15 29 05.6 | |
| | comp=E,30nm,2.8s | | | | | | |
| **F04D** | **Rainier, OR** | **3.98** | **38** | Pn | **Pn** | **15 28 02.0** | **-0.1** |
| **I05D** | **Terrebonne, OR** | **3.99** | **68** | Pn | **Pn** | **15 28 01.8** | **-0.4** |
| I05D | | | | IAML | | 15 29 32.9 | |
| | comp=N,29nm,3.3s | | | | | | |
| **PINE** | **Pine Mountain** | **4.13** | **77** | Pn | **Pn** | **15 28 04.0** | **-0.4** |
| PINE | | | | IAML | | 15 28 52.7 | |
| | comp=E,17nm,2.5s | | | | | | |
| **E03A** | **Lebam** | **4.14** | **29** | | **Pn** | **15 28 02.9** | **-1.3** |
| E03A | | | | IAML | | 15 28 55.0 | |
| | comp=E,30nm,0.6s | | | | | | |
| **F04A** | **Amboy** | **4.16** | **43** | | **Pn** | **15 28 04.2** | **-0.4** |
| **HOOD** | **Mount Hood Mea** | **4.21** | **54** | Pn | **Pn** | **15 28 05.6** | **+0.3** |
| **G06A** | **Carlson Farm,** | **4.79** | **60** | IAML | | 15 30 08.2 | |
| | comp=E,9.8nm,3.6s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.79** | **22** | Pn | **Pn** | **15 28 13.5** | **+0.2** |
| NLWA | | | | IAML | | 15 29 11.0 | |
| | comp=E,12nm,1.5s | | | | | | |
| NLWA | | | | IAML | | 15 29 22.2 | |
| | comp=E,12nm,3.1s | | | | | | |
| **LON** | **Longmire** | **5.04** | **40** | IAML | | 15 29 18.8 | |
| | comp=N,15nm,0.8s | | | | | | |
| LON | | | | IAML | | 15 29 19.5 | |
| | comp=E,12nm,1.0s | | | | | | |
| **I07A** | **Izee** | **5.21** | **75** | Pn | **Pn** | **15 28 19.0** | **-0.1** |
| I07A | | | | IAML | | 15 30 20.7 | |
| | comp=N,7.6nm,4.3s | | | | | | |
| **GNW** | **Green Mountain** | **5.27** | **28** | Pn | **Pn** | **15 28 19.8** | **0.0** |
| GNW | | | | IAML | | 15 29 20.2 | |
| | comp=E,6.6nm,0.4s | | | | | | |
| **MXC** | **Moxie City** | **5.70** | **49** | Pn | **Pn** | **15 28 25.5** | **-0.2** |
| **WVOR** | **Wild Horse Val** | **5.82** | **93** | Pn | **Pn** | **15 28 26.3** | **-1.2** |
| **E07A** | **Sunnyside** | **5.93** | **51** | Pn | **Pn** | **15 28 28.2** | **-0.7** |
| **HAWA** | **Hanford** | **6.03** | **53** | Pn | **Pn** | **15 28 29.7** | **-0.5** |
| **CLRS** | **Cowichan Lake** | **6.08** | **15** | Pn | **Pn** | **15 28 29.9** | **-1.0** |
| **BMO** | **Blue Mountains** | **6.90** | **71** | Pn | **Pn** | **15 28 41.5** | **-0.9** |
| **F10A** | **Beach Ranch, E** | **7.28** | **63** | Pn | **Pn** | **15 28 47.0** | **-0.6** |
| **B08A** | **Colville Reser** | **7.36** | **41** | Pn | **Pn** | **15 28 48.0** | **-0.5** |
| **NVAR** | **Mina Array Bea** | **7.71** | **123** | Pn | Pn | 15 28 59.2 | +5.7 |
| | comp=E,0.2nm,0.3s,baz=300,slow=14,SNR=6.3 | | | | | | |
| | comp=E,0.5nm,0.6s | | | | | | |
| **NEW** | **Newport** | **8.43** | **48** | LR | LR | 15 32 19.4 | |
| | comp=E,138nm,19.6s,baz=238,slow=40 | | | | | | |
| **ELK** | **Elko** | **8.70** | **101** | Pn | **Pn** | **15 29 09.5** | **+2.4** |
| | comp=E,0.1nm,0.3s,baz=297,slow=10,SNR=3.6 | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | |
| **PFO** | **Pinyon Flats O** | **12.22** | **137** | LR | LR | 15 34 38.3 | |
| | comp=E,61nm,19.1s,baz=298,slow=37 | | | | | | |
| **PDAR** | **Pinedale Array** | **12.44** | **85** | Pn | **Pn** | **15 30 00.2** | **+1.9** |
| | baz=270,slow=5.4,SNR=6.0 | | | | | | |
| PDAR | | | | LR | LR | 15 35 01.6 | |
| | comp=E,49nm,21.1s,baz=268,slow=40 | | | | | | |
| | comp=E,0.9nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **17.50** | **111** | Pn | **P** | **15 31 06.7** | **+0.2** |
| | comp=E,0.1nm,0.3s,baz=46,slow=10.0,SNR=5.7 | | | | | | |
| ANMO | | | | LR | LR | 15 38 17.1 | |
| | comp=E,28nm,18.5s,baz=28,slow=39 | | | | | | |
| | comp=E,1.8nm,0.6s | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.15** | **60** | P | **P** | **15 31 57.7** | **+0.9** |
| | comp=E,1.6nm,0.5s,baz=265,slow=12,SNR=1.7 | | | | | | |
| ULM | | | | LR | LR | 15 40 49.9 | |
| | comp=E,54nm,20.8s,baz=288,slow=38 | | | | | | |
| | comp=E,1.6nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **22.83** | **119** | P | P | 15 32 10.4 | +6.1 |
| | comp=E,0.6nm,0.6s,baz=297,slow=5.5,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **24.70** | **339** | P | P | 15 32 26.1 | +4.1 |
| | comp=E,0.2nm,0.6s,baz=138,slow=8.3,SNR=2.0 | | | | | | |
| ILAR | | | | LR | LR | 15 39 56.1 | |
| | comp=E,29nm,19.7s,baz=210,slow=31 | | | | | | |
| | comp=E,0.2nm,0.6s | | | | | | |
| **TKL** | **Tuckaleechee C** | **33.57** | **88** | LR | LR | 15 47 50.3 | |
| | comp=E,34nm,21.3s,baz=303,slow=38 | | | | | | |

**IDC 25 15:51:50.1±1.9, 2°.20N×128°.84E, h0km, mb3.4/5, mbtmp3.4/5, Error ellipse: s-maj=160.1km s-min=20.8km az=67.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.66** | **166** | P | P | 15 56 52.8 | -0.4 |
| | 0.2nm,0.5s,baz=346,slow=11,SNR=2.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **26.18** | **169** | P | P | 15 57 26.2 | -0.3 |
| | 0.1nm,0.5s,baz=352,slow=8.5,SNR=1.6 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.99** | **161** | P | P | 15 58 53.1 | +0.2 |
| | 0.4nm,0.3s,baz=342,slow=16,SNR=3.1 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.01** | **325** | P | P | 16 01 58.7 | 0.0 |
| | 0.5nm,0.5s,baz=116,slow=7.5,SNR=9.4 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.16** | **327** | P | P | 16 02 26.4 | 0.0 |
| | 0.4nm,0.6s,baz=131,slow=6.0,SNR=5.6 | | | | | | |
| | 0.4nm,0.6s | | | | | | |

*ROM* ***25*** *15:54:54.4±0.1, 41°.857N±0°.006×14°.859E±0°.007, h17km±1km, ML3.3/184, Error ellipse: s-maj=0.7km s-min=0.1km az=38.0*

*LDG* ***25*** *15:54:55.3±0.2, 41°.83N×14°.

T1413 AML AML
T1413 AML AML
comp=E,75800µm,1.1s
**FRES Fresagrandinar 0.18 313** ⇓P **Pg 15 54 59.5 -0.6**
FRES S **Sg 15 55 02.6 -0.8**
FRES AML AML
comp=N,9195µm,0.7s
FRES AML AML
comp=N,9195µm,1.3s
FRES AML AML
comp=E,11550µm,0.5s
**CIGN Sant'Elia a Pi 0.20 168** ⇑P **Pg 15 54 59.7 -0.7**
CIGN S **Sg 15 55 02.7 -1.1**
CIGN AML AML
comp=N,19500µm,0.4s
CIGN AML AML
comp=N,19500µm,1.6s
CIGN AML AML
comp=E,15850µm,0.5s
**TRIV Trivento 0.24 250** ⇑P **Pg 15 55 00.6 -0.4**
TRIV S **Sg 15 55 04.9 0.0**
TRIV AML AML
comp=E,6865µm,0.8s
TRIV AML AML
comp=N,8050µm,0.4s
TRIV AML AML
comp=N,7715µm,0.4s
TRIV AML AML
comp=E,7175µm,0.8s
**MELA Melanico ??? S 0.25 125** ⇓P **Pg 15 55 00.2 -1.0**
MELA S **Sg 15 55 04.6 -0.5**
MELA AML AML
comp=E,24350µm,0.7s
MELA AML AML
comp=N,25850µm,0.6s
MELA AML AML
comp=N,27750µm,0.6s
MELA AML AML
comp=E,26200µm,0.7s
MELA AML AML
comp=E,24350µm,1.3s
MELA AML AML
comp=E,26200µm,1.3s
**GATE Gambatesa 0.34 172** ⇑P **Pg 15 55 02.6 0.0**
GATE S **Sg 15 55 09.1 +1.6**
GATE AML AML
comp=E,8850µm,0.6s
GATE AML AML
comp=N,6180µm,0.5s
GATE AML AML
comp=N,6675µm,0.5s
GATE AML AML
comp=N,6180µm,0.5s
GATE AML AML
comp=E,8775µm,0.6s
GATE AML AML
comp=N,6680µm,0.5s
GATE AML AML
comp=E,8855µm,0.6s
**BSSO Busso 0.36 212** ⇑P **Pg 15 55 02.6 -0.4**
BSSO S **Sg 15 55 09.2 +1.1**
BSSO AML AML
comp=E,2260µm,0.7s
BSSO AML AML
comp=N,2005µm,1.0s
BSSO AML AML
comp=E,935µm,0.7s
BSSO AML AML
comp=E,2170µm,1.2s
BSSO AML AML
comp=E,923µm,1.2s
BSSO AML AML
comp=N,890µm,0.9s
BSSO AML AML
comp=E,923µm,0.8s
BSSO AML AML
comp=N,2000µm,1.0s
BSSO AML AML
comp=E,2170µm,0.8s
**SACR S. Croce Del S 0.46 193** ⇑P **Pg 15 55 04.0 -0.9**
SACR S **Sg 15 55 11.1 -0.1**
SACR AML AML
comp=N,2595µm,0.7s
SACR AML AML
comp=N,2710µm,0.7s
SACR AML AML
comp=N,2595µm,1.3s
SACR AML AML
comp=E,4385µm,0.4s
SACR AML AML
comp=E,4235µm,0.4s
SACR AML AML
comp=N,2710µm,1.3s
**MIDA Miranda 0.49 245** ⇑P **Pg 15 55 04.2 -1.1**
MIDA S **Sg 15 55 11.9 -0.1**
MIDA AML AML
comp=N,3710µm,0.4s
MIDA AML AML
comp=E,3195µm,0.5s
MIDA AML AML
comp=E,3195µm,0.8s
MIDA AML AML
comp=E,3195µm,1.2s
MIDA AML AML
comp=N,3615µm,0.4s
**APRC Apricena 0.53 100** ⇓P **Pg 15 55 04.0 -1.9**
APRC S **Sg 15 55 11.6 -1.5**
APRC AML AML
comp=N,4500µm,0.6s
APRC AML AML
comp=E,6200µm,1.0s
APRC AML AML
comp=N,11450µm,1.5s
APRC AML AML
comp=E,6195µm,1.0s
APRC AML AML
comp=N,11450µm,0.5s
APRC AML AML
comp=E,6595µm,0.3s
APRC AML AML
comp=N,4495µm,0.6s
**MOCO Biccari - m.te 0.53 154** ⇓P **Pg 15 55 05.2 -0.9**
MOCO AML AML
comp=E,2095µm,0.7s
MOCO AML AML
comp=N,1215µm,1.5s
MOCO AML AML
comp=E,2200µm,0.7s
MOCO AML AML
comp=N,1275µm,1.4s
MOCO AML AML
comp=N,1215µm,0.5s
MOCO AML AML
comp=E,2100µm,0.7s
**LPEL Lama dei Pelig 0.53 292** ⇓P **Pg 15 55 05.1 -1.0**
LPEL S **Sg 15 55 13.4 0.0**
LPEL AML AML
comp=E,3005µm,0.1s
LPEL AML AML
comp=N,2875µm,1.0s
LPEL AML AML
comp=N,2875µm,1.0s
**PTRJ Pietraroja 0.54 206** P **Pg 15 55 04.8 -1.4**
PTRJ AML AML
comp=E,1935µm,0.3s
PTRJ AML AML
comp=N,1695µm,0.3s
PTRJ AML AML
comp=N,1700µm,0.3s
**RNI2 Rionero Sannit 0.54 254** ⇑P **Pg 15 55 05.3 -0.9**
RNI2 S **Sg 15 55 14.0 +0.4**
RNI2 AML AML
comp=N,8445µm,0.1s
RNI2 AML AML
comp=N,9180µm,0.1s
RNI2 AML AML
comp=E,4885µm,0.4s
RNI2 AML AML
comp=E,4350µm,0.4s
**SGG Gregorio Mates 0.58 217** ⇑P **Pg 15 55 05.6 -1.4**
SGG AML AML
comp=E,4.0nm,0.4s
SGG AML AML
comp=N,3.5nm,0.4s
SGG AML AML
comp=E,1280µm,0.4s
SGG AML AML
comp=N,1108µm,0.4s
SGG AML AML
comp=E,4.0nm,0.4s
SGG AML AML
comp=N,3.5nm,0.4s
**VAGA Valle Agricola 0.63 227** ⇑P **Pg 15 55 06.5 -1.4**
VAGA AML AML
comp=E,1152µm,1.6s
VAGA AML AML
comp=E,1228µm,1.6s
VAGA AML AML
comp=E,1151µm,1.6s
VAGA AML AML
comp=N,1795µm,0.9s
VAGA AML AML
comp=N,1875µm,0.9s
VAGA AML AML
comp=E,1151µm,0.4s
VAGA AML AML
comp=N,1875µm,1.1s
VAGA AML AML
comp=N,1795µm,1.1s
VAGA AML AML
comp=E,1228µm,0.4s
**CERA Filignano 0.67 248** ⇑P **Pg 15 55 06.9 -1.7**
CERA AML AML
comp=E,2265µm,0.8s
CERA AML AML
comp=N,4070µm,0.6s
CERA AML AML
comp=E,2360µm,0.8s
CERA AML AML
comp=N,3890µm,0.6s
**SGRT San Giovanni R 0.68 98** P **Pg 15 55 06.7 -2.0**
SGRT AML AML
comp=N,5270µm,0.5s
SGRT AML AML
comp=N,5270µm,1.5s
SGRT AML AML
comp=E,6240µm,0.4s
**VITU Vitulano (BN) 0.69 194** ⇑P **Pg 15 55 07.3 -1.6**
VITU AML AML
comp=N,4220µm,0.4s
VITU AML AML
comp=N,4310µm,0.4s
VITU AML AML
comp=E,5810µm,0.5s
VITU AML AML
comp=E,1000µm,1.2s
**INTR Introdacqua 0.72 283** ⇓P **Pg 15 55 07.9 -1.7**
INTR AML AML
comp=E,2620µm,0.4s
INTR AML AML
comp=N,3810µm,0.7s
INTR AML AML
comp=E,1845µm,0.4s
INTR AML AML
comp=N,3900µm,0.7s
INTR AML AML
comp=E,2620µm,1.6s
INTR AML AML
comp=E,1845µm,1.6s
**MRB1 Monte Rocchett 0.73 173** P **Pg 15 55 08.7 -1.0**
MRB1 AML AML
comp=N,4835µm,0.6s
MRB1 AML AML
comp=N,4980µm,0.6s
MRB1 AML AML
comp=E,3530µm,0.5s
MRB1 AML AML
comp=N,4835µm,0.5s
MRB1 AML AML
comp=N,4980µm,1.4s
MRB1 AML AML
comp=N,4835µm,1.5s
MRB1 AML AML
comp=E,3590µm,0.5s
**MSAG Monte S. Angel 0.81 99** P **Pg 15 55 09.6 -1.5**
MSAG AML AML
comp=E,1810µm,0.4s
MSAG AML AML
comp=N,12450µm,0.2s
MSAG AML AML
comp=E,4325µm,0.3s
MSAG AML AML
comp=N,5315µm,0.2s
**SGTA Sant Agata di 0.81 151** ⇓P **Pg 15 55 09.3 -1.9**
SGTA AML AML
comp=E,10480µm,0.6s
SGTA AML AML
comp=N,5210µm,0.5s
SGTA AML AML
comp=E,10480µm,0.5s
SGTA AML AML
comp=E,10830µm,0.5s
SGTA AML AML
comp=E,10480µm,1.5s
SGTA AML AML
comp=E,10830µm,1.5s
SGTA AML AML
comp=N,5110µm,0.5s
**PIGN Pignataro Magg 0.82 218** P **Pg 15 55 09.9 -1.4**
PIGN AML AML
comp=E,664µm,1.0s
PIGN AML AML
comp=E,631µm,0.5s
PIGN AML AML
comp=N,539µm,0.4s
PIGN AML AML
comp=N,670µm,0.7s
PIGN AML AML
comp=E,663µm,1.0s
PIGN AML AML
comp=E,631µm,1.5s
**PAOL Paolisi 0.84 195** P Pg 15 55 09.5 -2.4
PAOL AML AML
comp=E,3145µm,0.6s
PAOL AML AML
comp=N,1795µm,0.7s
PAOL AML AML
comp=E,3300µm,0.6s
PAOL AML AML
comp=N,1830µm,0.7s
PAOL AML AML
comp=N,1830µm,1.3s
PAOL AML AML
comp=N,1795µm,1.3s
PAOL AML AML
comp=E,3145µm,1.4s
PAOL AML AML
comp=E,3300µm,1.4s
**MCI Monte Cassino 0.86 245** AML AML
comp=N,1635µm,0.4s
MCI AML AML
comp=E,2130µm,1.2s
MCI AML AML
comp=E,2130µm,0.8s
**POFI Posta Fibreno 0.86 262** ⇑P Pg 15 55 10.1 -2.0
POFI AML AML
comp=E,1645µm,1.0s
POFI AML AML
comp=N,899µm,0.7s
POFI AML AML
comp=E,1745µm,1.0s
POFI AML AML
comp=E,1645µm,1.0s
POFI AML AML
comp=E,1745µm,1.0s
POFI AML AML
comp=N,893µm,0.7s
**CAFE Carife 0.87 160** ⇓P **Pg 15 55 10.4 -1.9**
CAFE AML AML
comp=N,2030µm,0.5s
CAFE AML AML
comp=E,3415µm,0.4s
CAFE AML AML
comp=N,2030µm,0.5s
CAFE AML AML
comp=N,2140µm,0.5s
CAFE AML AML
comp=E,3530µm,0.4s
CAFE AML AML
comp=N,2140µm,1.5s
CAFE AML AML
comp=N,2030µm,1.5s
**T0110 Collepietro 0.88 296** ⇓P Pg 15 55 10.6 -2.0
T0110 AML AML
comp=N,2510µm,0.5s
T0110 AML AML
comp=N,2510µm,1.5s
T0110 AML AML
comp=E,2410µm,1.5s
**VVLD Villa Vallelon 0.92 272** P Pg 15 55 10.8 -2.5
VVLD AML AML
comp=E,2135µm,1.4s
VVLD AML AML
comp=N,1905µm,0.7s
VVLD AML AML
comp=N,1905µm,1.3s
**VCEL Villa Celiera 0.93 306** P Pg 15 55 11.4 -2.0
VCEL AML AML
comp=E,3035µm,0.4s
VCEL AML AML
comp=N,2845µm,0.4s
**MTMR Montemarano 0.94 173** P Pg 15 55 11.3 -2.3
MTMR AML AML
comp=E,2855µm,0.7s
MTMR AML AML
comp=N,2295µm,0.5s
MTMR AML AML
comp=E,5345µm,0.7s
MTMR AML AML
comp=N,5000µm,0.5s
MTMR AML AML
comp=N,2295µm,0.5s
MTMR AML AML
comp=E,5345µm,1.3s
MTMR AML AML
comp=N,4995µm,0.5s
MTMR AML AML
comp=E,2855µm,1.3s
**SNAL S. Angelo Dei 0.96 164** ⇓P Pg 15 55 11.5 -2.5
SNAL AML AML
comp=N,2490µm,1.0s
SNAL AML AML
comp=N,2670µm,1.0s
SNAL AML AML
comp=N,2670µm,1.0s
SNAL AML AML
comp=N,2490µm,1.0s
SNAL AML AML
comp=E,3810µm,1.3s
SNAL AML AML
comp=E,3805µm,1.3s
**CAPA Cerignola FG 1.00 133** P Pg 15 55 11.7 -3.1
CAPA AML AML
comp=E,4395µm,1.1s
CAPA AML AML
comp=N,4810µm,0.8s
CAPA AML AML
comp=E,4395µm,0.9s
**LIK San Giovanni I 1.03 251** P **Pg 15 55 15.3 0.0**
LIK AML AML
comp=E,1835µm,0.7s
LIK AML AML
comp=N,1930µm,0.6s
**VTIR Vesuvio Tirone 1.09 197** P **Pb 15 55 15.7 +0.1**
VTIR AML AML
comp=E,924µm,0.5s
VTIR AML AML
comp=N,719µm,0.6s
VTIR AML AML
comp=N,719µm,1.4s
VTIR AML AML
comp=E,924µm,1.5s
**GIGS Gran Sasso 1.12 303** P Pb 15 55 14.3 -2.0
GIGS AML AML
comp=E,334µm,0.6s
GIGS AML AML
comp=N,402µm,0.6s
GIGS AML AML
comp=N,402µm,1.4s
**TRTR Tortoreto Alta 1.18 324** P **Pb 15 55 17.7 +0.6**
TRTR AML AML
comp=N,5290µm,0.6s
TRTR AML AML
comp=E,6280µm,0.8s
**MRLC Muro Lucano 1.19 156** P Pb 15 55 15.1 -2.3
MRLC AML AML
comp=E,653µm,0.6s
MRLC AML AML
comp=N,584µm,0.8s
MRLC AML AML
comp=E,1425µm,0.6s
MRLC AML AML
comp=N,1295µm,0.8s
MRLC AML AML
comp=E,653µm,1.4s
MRLC AML AML
comp=E,1425µm,1.4s
**TERO Teramo 1.21 310** P Pn 15 55 15.8 -1.5
TERO AML AML
comp=E,612µm,0.6s
TERO AML AML
comp=N,528µm,0.7s
TERO AML AML
comp=E,438µm,0.4s
TERO AML AML
comp=N,952µm,0.5s
**GIUL Giuliano Di Ro 1.23 257** P **Pn 15 55 17.1 -0.5**
GIUL AML AML
comp=E,430µm,1.2s
GIUL AML AML
comp=N,564µm,0.7s
GIUL AML AML
comp=N,564µm,1.3s
GIUL AML AML
comp=E,430µm,0.8s
**PALZ Palazzo San Ge 1.23 137** ⇓P **Pn 15 55 17.6 0.0**
PALZ AML AML
comp=E,2655µm,0.7s
PALZ AML AML
comp=N,2575µm,0.8s
**CAMP Campotosto 1.27 303** P Pn 15 55 16.8 -1.5
CAMP AML AML
comp=E,397µm,0.8s
CAMP AML AML
comp=N,785µm,0.7s
**ACER Acerenza 1.34 142** P **Pn 15 55 19.0 -0.1**
ACER AML AML
comp=N,1625µm,0.4s
ACER AML AML
comp=E,2500µm,0.4s
ACER AML AML
comp=E,2340µm,0.4s
ACER AML AML
comp=N,1560µm,0.4s
**SMA1 SAN MARTINO 1.37 305** P Pn 15 55 18.4 -1.2
SMA1 AML AML
comp=E,1080µm,0.7s
SMA1 AML AML
comp=N,1145µm,1.3s
**MTRA Matera 1.41 311** P Pn 15 55 18.9 -1.1
MTRA AML AML
comp=N,890µm,1.3s
MTRA AML AML
comp=N,896µm,1.3s
MTRA AML AML
comp=E,1085µm,1.0s
MTRA AML AML
comp=N,896µm,0.7s
MTRA AML AML
comp=E,1027µm,1.0s
MTRA AML AML
comp=N,890µm,0.7s
**LATB Latina 1.46 257** P Pn 15 55 18.9 -1.7
LATB AML AML
comp=E,198µm,1.2s
LATB AML AML
comp=E,198µm,0.8s
LATB AML AML
comp=N,174µm,0.8s
**MF5 Montefalcone A 1.53 318** AML AML
comp=N,1345µm,1.1s
MF5 AML AML
comp=E,1160µm,0.7s
MF5 AML AML
comp=N,1345µm,0.9s
**LNSS Leonessa 1.54 300** P **Pn 15 55 21.2 -0.7**
LNSS AML AML
comp=N,538µm,0.6s
LNSS AML AML
comp=E,777µm,0.7s

**MMO1 Montemonaco** 1.54 313 ⇓P Pn 15 55 23.8 +1.9
**CMPR Campora** 1.57 167 P Pn 15 55 22.8 +0.6
CMPR AML AML
comp=E,642µm,1.5s
CMPR AML AML
comp=N,618µm,0.5s
CMPR AML AML
comp=E,642µm,0.5s
CMPR AML AML
comp=N,618µm,1.5s
**NRCA Norcia** 1.62 308 P Pn 15 55 22.8 -0.1
NRCA AML AML
comp=E,490µm,0.8s
NRCA AML AML
comp=N,574µm,0.5s
NRCA AML AML
comp=E,523µm,0.8s
NRCA AML AML
comp=E,490µm,1.2s
NRCA AML AML
comp=N,574µm,0.7s
NRCA AML AML
comp=E,523µm,1.2s
**AMUR Altamura** 1.62 125 ⇓P Pn 15 55 22.9 0.0
AMUR AML AML
comp=N,1310µm,0.5s
AMUR AML AML
comp=E,1110µm,0.3s
**MC2 Monte Cornacci** 1.62 311 P Pn 15 55 22.7 -0.4
**GAVE Gavelli** 1.68 301 AML AML
comp=E,478µm,0.7s
GAVE AML AML
comp=N,502µm,0.4s
GAVE AML AML
comp=E,478µm,1.3s
GAVE AML AML
comp=N,502µm,1.6s
**MTSN Montesano sull** 1.72 156 P Pn 15 55 24.3 -0.1
MTSN AML AML
comp=N,426µm,0.5s
MTSN AML AML
comp=E,398µm,0.7s
**MIGL Miglionico** 1.73 135 P Pn 15 55 24.9 +0.4
MIGL AML AML
comp=E,2255µm,1.5s
MIGL AML AML
comp=N,2810µm,0.9s
MIGL AML AML
comp=E,2255µm,0.5s
MIGL AML AML
comp=N,2810µm,1.1s
**FDMO Fiordimonte** 1.76 313 AML AML
comp=E,429µm,0.5s
FDMO AML AML
comp=N,437µm,1.0s
**HVAR Hvar** 1.78 41 P Pn 15 55 25.6 +0.5
**MGR Morigerati** 1.79 162 AML AML
comp=N,482µm,0.6s
MGR AML AML
comp=E,304µm,1.2s
**BULG Bulgheria - Ca** 1.81 167 P Pn 15 55 26.4 +0.7
BULG AML AML
comp=N,732µm,0.5s
BULG AML AML
comp=E,560µm,1.2s
**MATE Matera** 1.84 130 P Pn 15 55 26.0 +0.1
MATE AML AML
comp=E,1460µm,0.8s
MATE AML AML
comp=N,878µm,0.7s
**CESI CESI - Serrava** 1.84 309 AML AML
comp=N,622µm,0.9s
CESI AML AML
comp=E,672µm,0.6s
CESI AML AML
comp=N,622µm,1.1s
**LTRZ Laterza** 1.94 129 ⇓P Pn 15 55 27.4 +0.1
LTRZ AML AML
comp=E,862µm,1.1s
LTRZ AML AML
comp=N,1015µm,0.6s
LTRZ AML AML
comp=E,862µm,0.9s
**EL6 Elcito** 1.96 319 AML AML
comp=E,661µm,1.5s
EL6 AML AML
comp=N,972µm,0.6s
EL6 AML AML
comp=E,661µm,0.5s
EL6 AML AML
comp=N,972µm,1.4s
**NOCI Noci** 1.98 122 P Pn 15 55 27.9 0.0
NOCI AML AML
comp=E,834µm,1.4s
NOCI AML AML
comp=N,1535µm,0.3s
NOCI AML AML
comp=N,1535µm,1.7s
NOCI AML AML
comp=E,834µm,0.6s
**ASSB Assisi San Ben** 2.01 307 P Pn 15 55 30.9 +2.5
ASSB AML AML
comp=E,310µm,0.7s
ASSB AML AML
comp=N,330µm,1.4s
ASSB AML AML
comp=N,330µm,0.6s
**MURB Monte Urbino** 2.22 310 AML AML
comp=N,612µm,0.9s
MURB AML AML
comp=E,553µm,1.4s
MURB AML AML
comp=E,592µm,1.4s
MURB AML AML
comp=N,632µm,1.6s
MURB AML AML
comp=E,553µm,0.6s
MURB AML AML
comp=N,632µm,0.4s
MURB AML AML
comp=E,592µm,0.6s
**COR1 Corinaldo** 2.24 323 AML AML
comp=E,418µm,1.3s
COR1 AML AML
comp=N,544µm,0.8s
COR1 AML AML
comp=N,544µm,1.2s
COR1 AML AML
comp=E,418µm,0.7s
**SALB San Lorenzo Be** 2.27 150 P Pn 15 55 33.1 +1.2
SALB AML AML
comp=E,188µm,1.0s
SALB AML AML
comp=N,166µm,0.4s
**STON Ston** 2.35 63 *e*Pn Pn 15 55 33.6 +0.8
**STON Ston** 2.35 63 AML AML
comp=E,366µm,0.9s
STON AML AML
comp=E,366µm,1.1s
STON AML AML
comp=N,532µm,0.8s
STON AML AML
comp=N,532µm,1.2s
**STON Ston** 2.35 63 *e*Pn Pn 15 55 34.7 +1.9
**ATVO AVT- Monte Val** 2.37 311 AML AML
comp=E,215µm,0.7s
ATVO AML AML
comp=E,215µm,1.3s
ATVO AML AML
comp=N,177µm,0.9s
**PIEI Pieia** 2.40 315 P Pn 15 55 35.3 +1.7
PIEI AML AML
comp=N,121µm,1.3s
PIEI AML AML
comp=E,148µm,0.9s
PIEI AML AML
comp=N,121µm,0.7s
**ATMI Monte Miggiano** 2.42 309 AML AML
comp=N,388µm,0.9s
ATMI AML AML
comp=E,320µm,1.0s
ATMI AML AML
comp=N,388µm,1.1s
**PE3 Peglio** 2.53 318 AML AML
comp=N,1006µm,0.5s
PE3 AML AML
comp=E,737µm,1.3s
PE3 AML AML
comp=E,737µm,0.7s
**CAFI Castiglion Fio** 2.59 306 P Pn 15 55 38.2 +1.9
CAFI AML AML
comp=N,95µm,1.0s
CAFI AML AML
comp=E,89µm,1.0s
**TREB Trebinje** 2.74 70 *e*Pn Pn 15 55 39.0 +0.7
TREB *e*Sn Sn 15 56 11.5 +0.7
**TREB Trebinje** 2.74 70 *e*Pn Pn 15 55 38.8 +0.5
**A050A Klekovaca** 2.91 25 *e*Pn Pn 15 55 42.1 +1.5
**RUFI Rufina** 3.16 310 AML AML
comp=N,77µm,1.0s
RUFI AML AML
comp=E,72µm,0.7s
**LMD Lutirano** 3.21 315 AML AML
comp=E,71µm,1.6s
LMD AML AML
comp=N,69µm,1.6s
LMD AML AML
comp=N,69µm,0.4s
LMD AML AML
comp=E,71µm,0.4s
**PDG Podgorica** 3.33 78 *e*Pn Pn 15 55 48.8 +2.5
PDG *e*Sn Sn 15 56 26.3 +1.0
**PDG Podgorica** 3.33 78 *e*Pn Pn 15 55 47.9 +1.6
**BLY Banja Luka** 3.36 30 *e*Pn Pn 15 55 51.8 +5.0
**BLY Banja Luka** 3.36 30 *e*Pn Pn 15 55 51.2 +4.4
**A051A Mrakovica** 3.50 25 *e*Pn Pn 15 55 52.5 +3.7
**HAPS Han Pijesak,Bl** 3.75 52 *e*Pn Pn 15 55 55.4 +3.1
**HAPS Han Pijesak,Bl** 3.75 52 *e*Pn Pn 15 55 53.2 +0.9
**PUK Puka** 3.77 85 P Pn 15 55 54.5 +2.0
PUK AML AML
comp=N,428µm,0.6s
PUK AML AML
comp=N,428µm,1.4s
PUK AML AML
comp=E,436µm,0.4s
**VLO Vlora** 3.77 110 AML AML
comp=N,1230µm,0.1s
VLO AML AML
comp=E,963µm,0.1s
**RUDO Rudo** 3.77 61 *e*Pn Pn 15 55 53.5 +1.0
**TIR Tirane** 3.79 96 *e*Pn Pn 15 55 54.2 +1.4
TIR *e*Sn Sn 15 56 36.9 0.0
**BBLS Lazi&#263i** 3.91 57 *e*Pn Pn 15 55 56.3 +1.9
BBLS *e*Sn Sn 15 56 42.0 +2.2
**BBLS Lazi&#263i** 3.91 57 *e*Pn Pn 15 55 55.7 +1.3
**SJES Sjenica** 4.04 68 *e*Pn Pn 15 55 59.2 +2.9
**SJES Sjenica** 4.04 68 *e*Pn Pn 15 55 58.7 +2.4
**TEKS Tekeris** 4.36 50 *e*Pn Pn 15 56 06.9 +6.4
**DIVS Divibare** 4.39 57 *e*Pn Pn 15 56 03.5 +2.4
**PGF Pioggiola** 4.40 281 *e*P Pn 15 56 03.1 +1.9
PGF *e*Sn Sn 15 56 49.3 -2.7
comp=E,8.8nm,0.6s
**OBKA Obir** 4.66 357 *i* Pn Pn 15 56 05.7 +0.9
comp=E,0.6nm,0.2s
OBKA *i* Sn Sn 15 56 55.8 -2.6
comp=E,12nm,0.4s
**OBKA Obir** 4.66 357 *e*Pn Pn 15 56 05.7 +0.9
**TRUS Trudelj** 4.71 58 *e*Pn Pn 15 56 07.5 +2.1
**GRUS Gruza** 4.77 63 *e*Pn Pn 15 56 08.6 +2.4
GRUS *e*Sn Sn 15 57 00.8 -0.1
**SOKA Soboth** 4.83 2 *i* Pn Pn 15 56 07.6 +0.5
comp=E,0.8nm,0.3s
SOKA *i* Sn Sn 15 57 01.3 -1.2
comp=E,4.5nm,0.4s
**SELS Selova** 4.83 71 *e*Pn Pn 15 56 08.6 +1.6
SELS *e*Sn Sn 15 57 02.2 -0.3
**MYKA Terra Mystica** 4.86 350 *i* Sn Sn 15 57 02.6 -0.6
comp=E,15nm,0.5s
**FRGS Fruska Gora** 4.89 46 *e*Pn Pn 15 56 04.7 -3.2
**FNA Florina** 5.03 100 *e*Pn Pn 15 56 11.4 +1.6
FNA *e*Sn Sn 15 57 06.6 -0.8
**ABTA Abfaltersbach** 5.18 342 *i* Pn Pn 15 56 12.3 +0.5
comp=E,2.8nm,0.4s
ABTA *e*Sn Sn 15 57 06.7 -4.3
comp=E,19nm,0.8s
**BARS Barje** 5.25 77 *e*Pn Pn 15 56 15.1 +2.3
BARS *e*Sn Sn 15 57 11.9 -1.0
**ARSA Arzberg** 5.42 5 *e*Pn Pn 15 56 15.6 +0.5
comp=E,1.2nm,0.3s
ARSA *i* Sn Sn 15 57 14.8 -2.2
comp=E,6.9nm,0.6s
**ZAGS Zajecar** 5.77 68 *e*Pn Pn 15 56 22.0 +2.1
ZAGS *e*Sn Sn 15 57 24.0 -1.6
**LESA Schwarzleotal** 5.79 345 *i* Pn Pn 15 56 19.3 -0.9
comp=E,0.9nm,0.2s
LESA *e*Sn Sn 15 57 26.1 +0.1
comp=E,16nm,0.6s
**MDVR Moldovita** 5.80 57 *e*Pn Pn 15 56 22.0 +1.6
**SBF Sospel** 5.81 293 *e*Pn Pn 15 56 19.5 -1.0
SBF *e*Sn Sn 15 57 22.4 -4.2
comp=E,5.4nm,0.3s
**WTTA Wattenberg** 5.88 338 *i* Pn Pn 15 56 21.9 +0.3
comp=E,1.0nm,0.3s
WTTA *i* Sn Sn 15 57 28.7 +0.2
comp=E,11nm,0.4s
**BIOA Bad Ischl, Aus** 5.90 352 *i* Pn Pn 15 56 23.2 +1.4
comp=E,1.7nm,0.3s
BIOA *i* Sn Sn 15 57 29.6 +0.7
comp=E,13nm,0.4s
**ZAPS Zavoj** 5.92 73 *e*Pn Pn 15 56 23.7 +1.7
ZAPS *e*Sn Sn 15 57 28.1 -1.3
**RONA Rosalia, Austr** 5.94 9 *i* Pn Pn 15 56 23.4 +1.2
comp=E,0.9nm,0.3s
RONA *i* Sn Sn 15 57 29.1 -0.7
comp=E,1.3nm,0.2s
**FETA Feichten** 5.95 332 *i* Pn Pn 15 56 23.5 +1.0
comp=E,1.7nm,0.6s
FETA *e*Sn Sn 15 57 27.2 -3.1
comp=E,3.3nm,0.7s
**WATA Walderalm** 5.96 338 *i* Sn Sn 15 57 30.5 0.0
comp=E,9.7nm,0.5s
**SQTA Sankt Quirin** 5.97 335 *i* Pn Pn 15 56 24.2 +1.5
comp=E,3.0nm,0.6s
SQTA *e*Sn Sn 15 57 30.8 +0.2
comp=E,7.6nm,0.4s
**MOA Molln** 6.01 356 *i* Sn Sn 15 57 30.5 -1.1
comp=E,13nm,0.5s
**DAVOX Davos/Dischmat** 6.08 326 Pn Pn 15 56 25.1 +0.7
comp=E,0.6nm,0.3s,baz=138,slow=12,SNR=17
DAVOX Sn Sn 15 57 32.8 -0.7
comp=E,0.5nm,0.3s,baz=151,slow=19,SNR=2.2
DAVOX LR LR 15 59 18.2
comp=E,20nm,20.4s,baz=83,slow=45
comp=E,6.6nm,0.7s
**MOTA Moosalm** 6.11 335 *e*Pn Pn 15 56 25.6 +0.9
comp=E,2.0nm,0.4s
MOTA *e*Sn Sn 15 57 33.5 -0.7
comp=E,8.5nm,0.6s
**CONA Conrad Observa** 6.12 6 *i* Pn Pn 15 56 25.5 +0.7
comp=E,0.7nm,0.4s
CONA *i* Sn Sn 15 57 32.0 -2.3
comp=E,10nm,0.4s
**VTS Vitosha** 6.27 80 *e*Pn Pn 15 56 28.9 +1.9
VTS *e*Sn Sn 15 57 34.8 -3.4
**DAVA Damuels** 6.49 329 *i* Pn Pn 15 56 31.2 +1.2
comp=E,3.0nm,0.4s
DAVA *e*Sn Sn 15 57 44.1 +0.6
comp=E,12nm,0.5s
**MBDF Montbardon** 6.56 299 *e*P Pn 15 56 32.7 +1.8
MBDF *e*Sn Sn 15 57 39.8 -5.4
comp=E,0.5nm,0.3s
**SRS Serrai** 6.61 93 *e*Pn Pn 15 56 32.0 +0.6
**LPG La Plagne** 6.91 305 *e*Pn Pn 15 56 34.4 -1.4
LPG *e*Sn Sn 15 57 47.6 -6.4
comp=E,2.6nm,0.4s
**LPL La Plagne** 6.93 305 *e*Pn Pn 15 56 35.6 -0.5
LPL *e*Sn Sn 15 57 49.2 -5.3
comp=E,2.9nm,0.4s
**CKRC Cesky Krumlov** 6.98 357 *e*PN Pn 15 56 37.7 +1.2
CKRC *e*SN Sn 15 57 51.5 -3.9
**GERES GERESS Array B** 7.04 354 Pn Pn 15 56 38.1 +0.6
comp=E,0.4nm,0.3s,baz=168,slow=14,SNR=4.5
GERES Sn Sn 15 57 53.2 -3.8
comp=E,1.6nm,0.3s,baz=165,slow=22,SNR=15
comp=E,0.3nm,0.3s
**VYHS Vyhne** 7.22 22 *e*PN Pn 15 56 41.3 +1.5
VYHS *e*SN Sn 15 57 58.6 -2.6
**ORIF Oris-en-Rattie** 7.22 298 *e*P Pn 15 56 41.8 +1.9
ORIF *e*Sn Sn 15 57 54.7 -6.6
**KHC Kasperske Hory** 7.34 353 *e*PN Pn 15 56 42.1 +0.7
KHC *e*SN Sn 15 58 00.7 -3.5
**ZVC Zvikov** 7.60 357 *e*SN Sn 15 58 07.3 -3.4
**CABF La Chapelle** 7.89 310 *e*Pn Pn 15 56 48.9 -0.1
**HINF Hinteralfeld** 8.24 319 *e*Pn Pn 15 56 52.5 -1.3
HINF *e*Sn Sn 15 58 21.2 -5.1
comp=E,4.9nm,0.3s
**CDF Champ du Feu** 8.46 323 *e*Pn Pn 15 56 56.1 -0.9
**HAU Haudompre** 8.61 318 *e*Pn Pn 15 56 57.7 -1.2
HAU *e*Sn Sn 15 58 30.5 -5.0
comp=E,6.5nm,0.3s
**MLR Muntele Rosu** 8.83 62 Pn Pn 15 57 05.0 +3.1
comp=E,0.1nm,0.3s,baz=136,slow=20,SNR=5.3
MLR LR LR 16 00 21.1
comp=E,41nm,19.1s,baz=256,slow=38
comp=E,4.0nm,0.9s
**SMF Signal de Mont** 9.24 305 *e*Pn Pn 15 57 06.1 -1.4
SMF *e*Sn Sn 15 58 43.4 -7.5
comp=E,2.4nm,0.4s
**PAGF Fort de Pagny** 9.29 319 *e*P Pn 15 57 13.1 +4.9
**SFTF Sexfontaines** 9.41 316 *e*Pn Pn 15 57 08.7 -1.1
SFTF *e*Sn Sn 15 58 48.3 -6.7
comp=E,2.6nm,0.3s
**LOR Lormes** 9.53 308 *e*Pn Pn 15 57 09.2 -2.3
LOR *e*Sn Sn 15 58 51.6 -6.4
comp=E,2.0nm,0.4s
**AVF Avril sur Loir** 9.60 305 *e*Pn Pn 15 57 12.4 -0.1
AVF *e*Sn Sn 15 58 54.3 -5.5
comp=E,1.0nm,0.3s
**SSF Saint Saulge** 9.64 307 *e*Pn Pn 15 57 10.7 -2.2
**BGF Bois d'Agland** 9.82 303 *e*Pn Pn 15 57 13.8 -1.6
BGF *e*Sn Sn 15 58 58.2 -6.9
comp=E,4.6nm,0.5s
**AKASG Malin Array Be** 13.29 43 LR LR 16 04 13.4
comp=E,29nm,19.4s,baz=238,slow=43
**BRTR Keskin Array B** 14.39 92 Pn P 15 58 26.5 +1.5
comp=E,0.1nm,0.3s,baz=293,slow=12,SNR=2.3
comp=E,0.4nm,0.8s
**FINES FINESS Array B** 20.76 15 P P 15 59 34.4 -0.4
comp=E,2.3nm,0.8s,baz=222,slow=10,SNR=3.0
comp=E,2.3nm,0.8s

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*NOU **25** 16:16:09.6,21.°12S×169.°93E,h0km,MLv4.1/6,Southeast of Loyalty Islands*
*IDC **25** 16:16:15.3±1.0,21.°27S×169.°46E,h0km,mb3.9/6, mbtmp3.9/7,ML3.4/1,MS3.6/1,Error ellipse: s-maj=33.8km s-min=20.4km az=153.0*
*NEIC **25** 16:16:17.2±0.7,21.°3S±0.°2×169.°5E±0.°1,h10km±2km, mb4.2/8,Error ellipse: s-maj=31.4km s-min=8.3km az=328.0*

**ISC 25 16:16:18.2±0.7,21.°3S±0.°2×169.°48E±0.°09,h21km,n31, σ0s94/31,mb4.1/13,4C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | 1.36 | 262 | P | Pn | 16 16 41.6 | -0.4 |
| PINNC | **Pines Island,** | 2.30 | 235 | P | Pn | 16 16 54.8 | -0.1 |
| YATNC | **Mamie plateau,** | 2.52 | 252 | P | Pn | 16 16 57.1 | -0.9 |
| DZM | **Mont Dzumac** | 2.93 | 254 | P | Pn | 16 17 04.0 | +0.4 |
| DZM | **Mont Dzumac** | 2.93 | 254 | Pn | Pn | 16 17 04.1 | +0.4 |
| | 5.6nm,0.3s,baz=110,slow=11,SNR=124 | | | | | | |
| DZM | | | | Sn | Sn | 16 17 37.9 | -0.3 |
| | 17nm,0.3s,baz=344,slow=22,SNR=3.1 | | | | | | |
| | 21nm,0.4s | | | | | | |
| NOUC | **Port Laguerre** | 3.06 | 254 | P | Pn | 16 17 05.8 | +0.4 |
| MSVF | **Nonsavu** | 8.82 | 68 | Pn | Pn | 16 18 24.5 | -0.2 |
| MSVF | **Nonsavu** | 8.82 | 68 | LR | LR | 16 21 12.5 | |
| | comp=Z,353nm,18.3s,baz=212,slow=34 | | | | | | |
| CTA | **Charters Tower** | 21.76 | 269 | P | P | 16 21 09.0 | +0.4 |
| | 0.2nm,0.8s,baz=73,slow=11,SNR=2.1 | | | | | | |
| STKA | **Stephens Creek** | 27.00 | 241 | P | P | 16 22 00.2 | +1.4 |
| | 1.4nm,0.7s,baz=86,slow=13,SNR=4.8 | | | | | | |
| | 1.4nm,0.7s | | | | | | |
| WB0 | **Warramunga Arr** | 32.85 | 266 | P | P | 16 22 50.0 | -0.8 |
| WB0 | | | | IAmb | IAmb | 16 23 00.9 | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| WRA | **Warramunga Arr** | 32.88 | 266 | P | P | 16 22 50.8 | -0.2 |
| WRA | **Warramunga Arr** | 32.88 | 266 | P | P | 16 22 50.5 | -0.5 |
| | comp=Z,0.7nm,0.8s,baz=100,slow=8.4,SNR=8.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| AS31 | **Alice Springs** | 32.90 | 259 | P | P | 16 22 51.5 | +0.2 |
| AS31 | | | | IAmb | IAmb | 16 22 52.5 | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | 32.91 | 259 | P | P | 16 22 51.0 | -0.3 |
| ASAR | **Alice Springs** | 32.91 | 259 | P | P | 16 22 50.8 | -0.5 |
| | comp=Z,1.3nm,0.7s,baz=84,slow=8.9,SNR=25 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| FORT | **Forrest** | 38.21 | 247 | P | P | 16 23 36.5 | -0.2 |
| KNRA | **Kununurra** | 38.94 | 271 | P | P | 16 23 42.0 | -0.9 |
| KNRA | | | | IAmb | IAmb | 16 24 02.0 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| FITZ | **Fitzroy Crossi** | 41.30 | 267 | P | P | 16 24 03.3 | +0.8 |
| MJAR | **Matsushiro Arr** | 64.67 | 332 | P | P | 16 26 54.5 | 0.0 |
| | comp=Z,1.0nm,0.6s,baz=155,slow=8.1,SNR=6.3 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| QSPA | **South Pole Qui** | 68.77 | 180 | P | P | 16 27 20.6 | +0.1 |
| QSPA | | | | IAmb | IAmb | 16 27 40.3 | |
| | comp=Z,4.5nm,1.1s | | | | | | |
| QSPA | **South Pole Qui** | 68.77 | 180 | P | P | 16 27 20.8 | +0.2 |
| | comp=Z,1.4nm,1.0s,baz=88,slow=0.3,SNR=5.1 | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | |
| TROLL | **Troll, Antarti** | 86.51 | 184 | ⇑P | P | 16 28 58.7 | -0.6 |
| | comp=Z,85nm,0.8s | | | | | | |
| SNAA | **Sanae** | 87.13 | 182 | P | P | 16 29 03.2 | +0.9 |
| SNAA | | | | IAmb | IAmb | 16 29 05.4 | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| SNAA | **Sanae** | 87.13 | 182 | ⇑P | P | 16 28 58.4 | -3.9 |
| | comp=Z,22nm,0.9s | | | | | | |
| VNA3 | **Neumayer Olymp** | 87.71 | 180 | ⇑P | P | 16 29 04.9 | -0.1 |
| | comp=Z,2.3nm,0.6s | | | | | | |
| VNA2 | **Neumayer--Watz** | 88.00 | 181 | ⇑P | P | 16 29 06.9 | +0.5 |
| | comp=Z,1.6nm,0.7s,baz=163,slow=4.0 | | | | | | |
| NVAR | **Mina Array Bea** | 89.99 | 48 | P | P | 16 29 17.4 | +0.9 |
| | comp=Z,1.0nm,0.7s,baz=229,slow=8.1,SNR=8.7 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| FINES | **FINESS Array B** | 132.56 | 337 | PKP | PKiKP | 16 35 32.1 | +0.3 |
| | comp=Z,0.6nm,0.8s,baz=117,slow=4.8,SNR=3.4 | | | | | | |
| EKA | **Eskdalemuir Ar** | 145.56 | 353 | PKPbc | PKPdf | 16 35 53.8 | -0.8 |
| | comp=Z,2.6nm,0.4s,baz=360,slow=2.5,SNR=32 | | | | | | |
| GERES | **GERESS Array B** | 146.39 | 331 | PKPbc | PKPbc | 16 35 57.5 | -0.1 |
| | comp=Z,0.7nm,0.7s,baz=339,slow=3.3,SNR=4.3 | | | | | | |

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*IDC **25** 16:18:25.6±0.9,21.°20S×169.°42E,h0km,mb3.9/6, mbtmp3.8/7,ML3.2/1,MS2.4/1,Error ellipse: s-maj=33.7km s-min=23.2km az=153.0*

**ISC 25 16:18:29.8±0.8,21.°2S±0.°2×169.°4E±0.°1,h30km,n15, σ0s57/15,mb4.0/8,4C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DZM | **Mont Dzumac** | 2.89 | 252 | Pn | Pn | 16 19 13.5 | -0.5 |
| | 3.4nm,0.3s,baz=105,slow=20,SNR=1.2 | | | | | | |
| DZM | | | | Sn | Sn | 16 19 48.5 | +0.6 |
| | 21nm,0.3s,baz=210,slow=16,SNR=3.8 | | | | | | |
| | 17nm,0.3s | | | | | | |
| CTA | **Charters Tower** | 21.70 | 269 | LR | LR | 16 30 01.9 | |
| | comp=Z,8.7nm,19.0s,baz=112,slow=32 | | | | | | |
| WRA | **Warramunga Arr** | 32.83 | 266 | P | P | 16 25 00.9 | 0.0 |
| | 0.5nm,0.8s,baz=99,slow=8.2,SNR=5.1 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | 32.86 | 259 | P | P | 16 25 01.8 | +0.5 |
| | 1.1nm,0.7s,baz=81,slow=8.7,SNR=7.6 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| MJAR | **Matsushiro Arr** | 64.57 | 332 | P | P | 16 29 04.1 | -0.2 |
| | 1.5nm,1.0s,baz=153,slow=8.4,SNR=4.4 | | | | | | |
| | 1.5nm,1.0s | | | | | | |
| QSPA | **South Pole Qui** | 68.85 | 180 | P | P | 16 29 31.5 | +0.2 |
| | 1.1nm,0.9s,baz=15,slow=3.0,SNR=2.3 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| TROLL | **Troll, Antarti** | 86.59 | 184 | ⇑P | P | 16 31 09.4 | -0.6 |
| | comp=Z,152nm,0.8s | | | | | | |
| SNAA | **Sanae** | 87.20 | 182 | ⇑P | P | 16 31 12.2 | -0.8 |
| | comp=Z,38nm,1.3s | | | | | | |
| SNAA | **Sanae** | 87.20 | 182 | P | P | 16 31 13.7 | +0.7 |
| | comp=Z,0.6nm,0.7s,baz=175,slow=12,SNR=1.9 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| VNA3 | **Neumayer Olymp** | 87.79 | 180 | ⇑P | P | 16 31 15.4 | -0.3 |
| | comp=Z,3.2nm,0.7s | | | | | | |
| VNA2 | **Neumayer--Watz** | 88.08 | 181 | ⇑P | P | 16 31 16.7 | -0.4 |
| | comp=Z,2.8nm,0.7s,baz=184,slow=5.0 | | | | | | |
| NVAR | **Mina Array Bea** | 89.98 | 48 | P | P | 16 31 27.7 | +0.9 |
| | comp=Z,0.9nm,0.7s,baz=226,slow=8.7,SNR=8.2 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| ARCES | **ARCESS Array B** | 127.01 | 345 | PKP | PKPdf | 16 37 30.0 | -0.3 |
| | comp=Z,2.2nm,0.8s,baz=90,slow=1.2,SNR=4.8 | | | | | | |
| EKA | **Eskdalemuir Ar** | 145.48 | 353 | PKPbc | PKPdf | 16 38 04.3 | -0.3 |
| | comp=Z,3.1nm,0.5s,baz=1.6,slow=2.7,SNR=23 | | | | | | |

**GERES GERESS Array B 146.29 331** PKPbc **PKPab** **16 38 08.0 -0.4**
comp=Z,0.9nm,0.7s,baz=359,slow=6.9,SNR=3.9

*NEIC **25** 16:23:22.8±2.5,23˚.2S±0˚.1×179˚.22E±0˚.06,h565km±10km, mb4.5/22,Error ellipse: s-maj=18.7km s-min=7.4km az=174.0*
*IDC **25** 16:23:23.1±3.4,23˚.24S×179˚.12E,h557km±35km, mb3.5/12,mbtmp4.5/14,Error ellipse: s-maj=27.0km s-min=13.7km az=74.0*
**ISC 25 16:23:22.3±0.5,23°30S±0˚.07×179°.18E±0˚.09,h555km,n78, σ1§33/76,mb4.2/26,5C-1D,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.64** | **349** | P | **P** | **16 24 57.6** | **-0.6** |
| **NIUE** | **Niue** | **10.99** | **70** | P | **P** | **16 25 51.3** | **+0.8** |
| **DZM** | **Mont Dzumac** | **11.82** | **273** | P | **P** | **16 26 01.1** | **+1.9** |
| | 6.9nm,0.8s,baz=73,slow=19,SNR=2.6 | | | | | | |
| **AFI** | **Afiamalu** | **12.67** | **44** | P | **P** | **16 26 04.7** | **-3.4** |
| **TOZ** | **Tahuroa Road** | **14.73** | **192** | P | **P** | **16 26 30.8** | **+2.0** |
| **URZ** | **Urewera** | **15.02** | **186** | P | **P** | **16 26 30.9** | **-0.7** |
| | 34nm,0.8s,baz=84,slow=4.1,SNR=11 | | | | | | |
| URZ | | | | S | **S** | **16 29 01.4** | **-6.0** |
| | 12nm,1.0s,baz=294,slow=20,SNR=2.5 | | | | | | |
| **BKZ** | **Black Stump Fm** | **15.98** | **188** | P | **P** | **16 26 39.7** | **-1.7** |
| BKZ | | | | IAmb | IAmb | 16 27 19.6 | |
| | comp=Z,44nm,1.4s | | | | | | |
| **QRZ** | **Quartz Range** | **18.35** | **196** | P | **P** | **16 27 04.6** | **+1.6** |
| **TKNZ** | **Takaka Hill** | **18.44** | **195** | P | **P** | **16 27 05.0** | **+1.2** |
| **MRNZ** | **Matariki Terra** | **18.84** | **195** | P | **P** | **16 27 08.1** | **+0.7** |
| **THZ** | **Tophouse** | **19.14** | **194** | P | **P** | **16 27 11.1** | **+0.8** |
| THZ | | | | IAmb | IAmb | 16 27 14.3 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **INZ** | **Inchbonnie** | **20.41** | **197** | P | **P** | **16 27 23.7** | **+2.0** |
| **WKZ** | **Wanaka** | **23.03** | **199** | P | **P** | **16 27 44.9** | **-0.3** |
| **MLZ** | **Mavora Lakes** | **23.79** | **200** | P | **P** | **16 27 53.3** | **+1.4** |
| **CTA** | **Charters Tower** | **30.73** | **270** | P | **P** | **16 28 53.5** | **+0.6** |
| | comp=Z,1.0nm,0.5s,baz=97,slow=9.9,SNR=39 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **CTAO** | **Charters Tower** | **30.73** | **270** | P | **P** | **16 28 53.3** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 16 28 53.9 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **32.15** | **236** | P | **P** | **16 29 03.5** | **-1.4** |
| TOO | | | | IAmb | IAmb | 16 29 07.1 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **33.59** | **289** | P | **P** | **16 29 17.3** | **+0.1** |
| **STKA** | **Stephens Creek** | **34.26** | **247** | P | **P** | **16 29 23.1** | **+0.4** |
| **STKA** | **Stephens Creek** | **34.26** | **247** | P | **P** | **16 29 23.4** | **+0.7** |
| | comp=Z,2.1nm,0.5s,baz=81,slow=8.7,SNR=7.8 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **COEN** | **Coen** | **35.28** | **279** | P | **P** | **16 29 31.9** | **+0.5** |
| COEN | | | | IAmb | IAmb | 16 29 32.5 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **38.99** | **246** | P | **P** | **16 30 00.5** | **-1.0** |
| BBOO | | | | IAmb | IAmb | 16 30 02.0 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **41.39** | **260** | P | **P** | **16 30 20.4** | **-0.5** |
| **ASAR** | **Alice Springs** | **41.40** | **260** | P | **P** | **16 30 20.0** | **-1.0** |
| **ASAR** | **Alice Springs** | **41.40** | **260** | P | **P** | **16 30 20.6** | **-0.3** |
| | comp=Z,8.8nm,0.8s,baz=92,slow=8.1,SNR=80 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 32 06.2** | **+0.4** |
| | comp=Z,1.9nm,0.8s,baz=102,slow=3.8,SNR=8.9 | | | | | | |
| ASAR | | | | S | **S** | **16 35 53.2** | **-3.1** |
| | comp=Z,0.6nm,0.8s,baz=101,slow=15,SNR=4.3 | | | | | | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **41.51** | **266** | P | **P** | **16 30 21.0** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 16 30 21.6 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.69** | **266** | P | **P** | **16 30 22.1** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 16 30 23.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **41.69** | **266** | P | **P** | **16 30 22.1** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 16 30 23.0 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.70** | **266** | P | **P** | **16 30 21.6** | **-1.7** |
| **WRA** | **Warramunga Arr** | **41.70** | **266** | P | **P** | **16 30 22.1** | **-1.2** |
| | comp=Z,11nm,0.8s,baz=96,slow=8.2,SNR=229 | | | | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **45.82** | **249** | P | **P** | **16 30 54.1** | **-1.0** |
| FORT | | | | IAmb | IAmb | 16 30 54.9 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **47.94** | **270** | P | **P** | **16 31 10.4** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 16 31 11.3 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **CASY** | **Casey** | **60.32** | **206** | P | **P** | **16 32 37.4** | **-0.1** |
| **QSPA** | **South Pole Qui** | **66.78** | **180** | P | **P** | **16 33 20.3** | **+1.4** |
| QSPA | | | | IAmb | IAmb | 16 33 22.0 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.78** | **180** | P | **P** | **16 33 20.4** | **+1.6** |
| | comp=Z,6.2nm,1.0s,baz=11,slow=0.8,SNR=26 | | | | | | |
| | comp=Z,6.2nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.98** | **326** | P | **P** | **16 33 44.5** | **+0.2** |
| | comp=Z,4.0nm,0.8s,baz=161,slow=5.6,SNR=12 | | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **77.31** | **320** | P | **P** | **16 34 19.9** | **0.0** |
| | comp=Z,2.8nm,0.8s,baz=136,slow=5.7,SNR=9.5 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **78.05** | **201** | P | **P** | **16 34 24.6** | **+1.1** |
| | comp=Z,4.4nm,0.8s,baz=117,slow=6.4,SNR=11 | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.35** | **347** | P | **P** | **16 34 25.4** | **+0.2** |
| | comp=Z,3.7nm,0.9s,baz=151,slow=6.4,SNR=8.7 | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **NJ2** | **Nanjing** | **79.70** | **311** | *e*P | **P** | **16 34 33.5** | **+0.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,250nm,3.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **79.86** | **328** | P | **P** | **16 34 34.2** | **+0.8** |
| | comp=Z,4.3nm,1.0s,baz=131,slow=4.9,SNR=5.1 | | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | | |
| **ELIB** | **Princess Elisa** | **83.56** | **187** | *d*P | **P** | **16 34 51.6** | **-0.6** |
| **TROLL** | **Troll, Antarti** | **84.92** | **181** | ⇑P | **P** | **16 34 59.1** | **+0.2** |
| | comp=Z,157nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **85.27** | **179** | P | **P** | **16 34 59.7** | **-0.8** |
| **SNAA** | **Sanae** | **85.27** | **179** | ⇑P | **P** | **16 35 00.0** | **-0.4** |
| | comp=Z,13nm,0.4s | | | | | | |
| **SNAA** | **Sanae** | **85.27** | **179** | P | **P** | **16 35 00.2** | **-0.2** |
| | comp=Z,0.6nm,0.5s,baz=199,slow=7.3,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **85.51** | **177** | ⇑P | **P** | **16 35 01.4** | **-0.1** |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **85.92** | **178** | ⇑P | **P** | **16 35 03.6** | **+0.2** |
| | comp=Z,4.4nm,0.7s,baz=182,slow=4.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **86.16** | **178** | ⇑P | **P** | **16 35 04.8** | **+0.3** |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.61** | **291** | P | **P** | **16 35 18.1** | **+1.1** |
| | comp=Z,0.8nm,0.3s,baz=126,slow=3.4,SNR=8.0 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **89.47** | **315** | *e*P | **P** | **16 35 23.3** | **+2.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,90nm,5.0s | | | | | | |
| **PZH** | **PanZhiHua** | **89.74** | **299** | P | **P** | **16 35 20.0** | **-2.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.2s | | | | | | |
| **WMQ** | **Urumqi** | **106.78** | **311** | Pdif | **Pdif** | **16 36 38.0** | **-0.4** |
| WMQ | | | | LR | LR | | |
| | comp=N,4μm,19.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,4μm,16.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,5μm,19.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **114.30** | **317** | PKP | PKPdf | 16 40 58.0 | -0.9 |
| | comp=Z,0.5nm,0.5s,baz=112,slow=1.3,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.15** | **348** | PKP | **PKPdf** | **16 41 30.0** | **-0.7** |
| | comp=Z,4.3nm,0.9s,baz=56,slow=3.4,SNR=2.7 | | | | | | |
| **FINES** | **FINESS Array B** | **137.64** | **341** | PKhKP | PKPpre | 16 41 35.3 | |
| | comp=Z,1.6nm,0.9s,baz=46,slow=6.0,SNR=3.4 | | | | | | |
| FINES | | | | PKP | **PKiKP** | **16 41 44.9** | **-0.2** |
| | comp=Z,1.5nm,0.8s,baz=36,slow=2.3,SNR=7.3 | | | | | | |
| **NB2** | **NORSAR Subarra** | **141.37** | **351** | PKP | PKPpre | 16 41 45.1 | |
| | comp=Z,0.6nm,0.7s,baz=14,slow=3.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **141.37** | **351** | PKhKP | PKPpre | 16 41 44.7 | |
| | comp=Z,0.8nm,0.8s,baz=1.4,slow=2.4,SNR=4.2 | | | | | | |
| **HFS** | **Hagfors** | **141.81** | **348** | PKhKP | PKPpre | 16 41 46.1 | |
| | comp=Z,0.9nm,0.3s,baz=61,slow=3.4,SNR=32 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.06** | **327** | PKP | PKPbc | 16 41 53.8 | -0.5 |
| | comp=Z,1.1nm,0.4s,baz=42,slow=4.0,SNR=13 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.62** | **308** | PKPbc | **PKPbc** | **16 42 02.0** | **-0.3** |
| | comp=Z,2.3nm,0.8s,baz=135,slow=3.4,SNR=12 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.77** | **295** | PKPbc | **PKPbc** | **16 42 03.5** | **+0.6** |
| | comp=Z,5.3nm,0.7s,baz=87,slow=3.4,SNR=7.7 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **147.96** | **3** | PKPbc | **PKPbc** | **16 42 05.0** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=347,slow=2.5,SNR=10 | | | | | | |
| **KOLS** | **Kolonicke sedl** | **148.58** | **330** | *e*PKP | **PKiKP** | **16 42 08.4** | **+0.4** |
| **KSP** | **Ksiaz** | **149.46** | **338** | *e*PKP | **PKiKP** | **16 42 09.6** | **-0.2** |
| **LANS** | **Liptovska Anna** | **149.64** | **333** | *e*PKP | **PKiKP** | **16 42 10.8** | **+0.6** |
| **MORC** | **Moravsky Berou** | **149.90** | **336** | *e*PKP | **PKiKP** | **16 42 10.7** | **-0.1** |
| **CLL** | **Collm** | **150.06** | **343** | *i* PKPbc | **PKPbc** | **16 42 10.3** | **-0.1** |
| | comp=Z,16nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **150.18** | **341** | *i* PKP | **PKiKP** | **16 42 11.3** | **+0.1** |
| BRG | | | | Amp | | 16 42 12.1 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **VYHS** | **Vyhne** | **150.41** | **333** | *e*PKP | **PKiKP** | **16 42 11.8** | **0.0** |
| **JAVC** | **Velka Javorina** | **150.60** | **335** | *e*PKP | **PKiKP** | **16 42 13.4** | **+1.2** |
| **VRAC** | **Vranov** | **150.64** | **336** | *e*PKP | **PKiKP** | **16 42 12.2** | **0.0** |
| **KRUC** | **Moravsky** | **150.92** | **336** | *e*PKP | **PKiKP** | **16 42 12.7** | **-0.1** |
| **GERES** | **GERESS Array B** | **152.03** | **339** | PKPbc | **PKPbc** | **16 42 14.9** | **-0.2** |
| | comp=Z,1.0nm,0.7s,baz=42,slow=2.2,SNR=6.5 | | | | | | |
| **CONA** | **Conrad Observa** | **152.05** | **336** | *e*PKiKP | **PKiKP** | **16 42 15.3** | **0.0** |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **RONA** | **Rosalia, Austr** | **152.07** | **335** | *e*PKiKP | **PKiKP** | **16 42 15.4** | **+0.1** |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **WTTA** | **Wattenberg** | **154.08** | **340** | *i* PKP | **PKPbc** | **16 42 16.6** | **-3.1** |
| | comp=Z,6.5nm,1.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.62** | **194** | PKPab | **PKPab** | **16 43 45.0** | **+0.4** |
| | comp=Z,1.1nm,0.7s,baz=154,slow=4.6,SNR=5.2 | | | | | | |

*IDC **25** 16:27:13.2±0.7,8˚.30S×116˚.74E,h0km,mb4.0/12, mbtmp4.0/13,ML4.1/1,MS3.3/2,Error ellipse: s-maj=20.2km s-min=12.1km az=65.0*
*NEIC **25** 16:27:13.9±2.0,8˚.30S±0˚.07×116˚.58E±0˚.07,h10km±1km, mb4.4/13,Error ellipse: s-maj=11.9km s-min=11.3km az=204.0*
*DJA **25** 16:27:14.3±0.2,8˚S±3˚×11˚7E±˚,h10km,M4.6/18,mb4.7/6, mB5.1/4,MLv4.6/18,Mw(mB)4.4/4*
**ISC 25 16:27:14.4±0.5,8°30S±0˚.05×116°.65E±0˚.04,h10km,n61, σ1§33/64,mb4.2/14,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.49** | **153** | P | **Pg** | **16 27 24.7** | **+0.6** |
| **PLAI** | **Plampang** | **1.23** | **115** | P | **Pn** | **16 27 37.1** | **-0.6** |
| PLAI | | | | S | **Sb** | **16 27 53.8** | **+0.1** |
| **SRBI** | **Singaraja** | **1.44** | **278** | P | **Pg** | **16 27 40.4** | **-1.7** |
| SRBI | | | | S | **Sg** | **16 28 00.1** | **-0.8** |
| **DNP** | **Denpasar** | **1.48** | **255** | P | **Pg** | **16 27 42.2** | **-0.6** |
| DNP | | | | S | **Sg** | **16 28 03.9** | **+1.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **266** | Pn | **Pn** | **16 27 54.3** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.48** | **266** | P | **Pn** | **16 27 54.3** | **-0.6** |
| **WBSI** | **Waikabubak, Su** | **3.02** | **116** | P | **Pn** | **16 28 01.7** | **-0.6** |
| **BASI** | **Baing, Sumba** | **4.32** | **117** | P | **Pn** | **16 28 20.8** | **+0.6** |
| **GRJI** | **Gresik** | **4.36** | **288** | P | **Pn** | **16 28 19.7** | **-1.1** |
| **BSSI** | **Bau Bau, Buton** | **4.37** | **61** | P | **Pn** | **16 28 19.3** | **-1.6** |
| **KAPI** | **Kappang** | **4.48** | **44** | Pn | **Pn** | **16 28 20.7** | **-1.8** |
| **KAPI** | **Kappang** | **4.48** | **44** | Pn | **Pn** | **16 28 20.5** | **-2.0** |
| | 10nm,0.3s,baz=176,slow=4.0,SNR=24 | | | | | | |
| KAPI | | | | Sn | **Sn** | **16 29 12.1** | **-2.6** |
| | 7.5nm,0.3s,baz=262,slow=21,SNR=5.7 | | | | | | |
| KAPI | | | | Lg | Lg | 16 29 33.9 | |
| | 5.1nm,0.3s,baz=66,slow=20,SNR=2.1 | | | | | | |
| | 26nm,0.2s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.81** | **273** | P | **Pn** | **16 28 26.2** | **-0.8** |
| **EDFI** | **Ende, Flores** | **5.00** | **96** | P | **Pn** | **16 28 29.0** | **-0.7** |
| **BNSI** | **Bone** | **5.17** | **42** | P | **Pn** | **16 28 31.6** | **-0.4** |
| | 77nm,0.7s,1μm0.4nm | | | | | | |
| **NGJI** | **Ngawi** | **5.23** | **280** | P | **Pn** | **16 28 33.1** | **+0.4** |
| | 61nm,0.8s,0.4nm | | | | | | |
| **MMRI** | **Maumere** | **5.53** | **94** | | **Pn** | **16 28 40.0** | **+3.1** |
| **MMRI** | **Maumere** | **5.53** | **94** | P | **Pn** | **16 28 37.4** | **+0.5** |
| | 157nm,1.3s,2μm0.5nm | | | | | | |
| **UGM** | **Wanagama** | **6.08** | **273** | Pn | **Pn** | **16 28 45.7** | **+1.2** |
| **UGM** | **Wanagama** | **6.08** | **273** | P | **Pn** | **16 28 45.3** | **+0.8** |
| **BATI** | **Baumata** | **7.17** | **106** | P | **Pn** | **16 28 59.7** | **+0.2** |
| | 43nm,0.9s,0.2nm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.51** | **346** | P | **Pn** | **16 29 06.6** | **+2.4** |
| **SOEI** | **Soe** | **7.66** | **101** | | **Pn** | **16 29 09.6** | **+3.3** |
| **SOEI** | **Soe** | **7.66** | **101** | P | **Pn** | **16 29 07.8** | **+1.5** |
| **SMKI** | **Samarinda** | **7.82** | **4** | P | **Pn** | **16 29 07.9** | **-0.4** |
| **FITZ** | **Fitzroy Crossi** | **13.09** | **139** | Pn | **Pn** | **16 30 21.1** | **+0.6** |
| **MBWA** | **Marble Bar** | **13.13** | **167** | | **Pn** | **16 30 20.6** | **-0.5** |
| **PSA00** | **Pilbara Seismi** | **13.55** | **167** | Pn | **Pn** | **16 30 25.3** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **13.55** | **167** | Pn | **Pn** | **16 30 24.4** | **-2.5** |
| **DAV** | **Davao City (W)** | **17.67** | **30** | LR | LR | 16 39 33.7 | |
| | comp=Z,107nm,18.4s,baz=218,slow=42 | | | | | | |
| **WB0** | **Warramunga Arr** | **20.62** | **125** | | **P** | **16 31 53.2** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 16 32 02.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.67** | **126** | P | **P** | **16 31 54.2** | **-0.4** |
| **WRA** | **Warramunga Arr** | **20.67** | **126** | P | **P** | **16 31 53.5** | **-1.1** |
| | comp=Z,9.9nm,0.9s,baz=299,slow=12,SNR=20 | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.67** | **126** | P | **P** | **16 31 53.7** | **-1.0** |
| WRAB | | | | IAmb | IAmb | 16 32 03.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.68** | **126** | P | **P** | **16 31 53.9** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 16 32 03.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **20.84** | **126** | P | **P** | **16 31 55.8** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 16 32 05.2 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **AS31** | **Alice Springs** | **22.51** | **135** | P | **P** | **16 32 13.7** | **-0.8** |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **16 32 13.4** | **-1.1** |
| **ASAR** | **Alice Springs** | **22.51** | **135** | P | **P** | **16 32 13.8** | **-0.6** |
| | comp=Z,3.8nm,0.7s,baz=312,slow=8.8,SNR=26 | | | | | | |
| ASAR | | | | S | **S** | **16 36 23.9** | **+2.3** |
| | comp=Z,0.8nm,0.9s,baz=310,slow=23,SNR=3.6 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **FORT** | **Forrest** | **24.78** | **156** | P | **P** | **16 32 36.8** | **+0.2** |
| **COEN** | **Coen** | **26.61** | **105** | P | **P** | **16 32 51.5** | **-1.9** |
| COEN | | | | IAmb | IAmb | 16 33 20.0 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **30.30** | **146** | P | **P** | **16 33 25.0** | **-1.1** |
| **CMAR** | **Chiang Mai Arr** | **31.82** | **327** | P | **P** | **16 33 41.5** | **+2.0** |
| | comp=Z,0.6nm,0.4s,baz=161,slow=6.7,SNR=4.1 | | | | | | |
| CMAR | | | | LR | LR | 16 47 23.5 | |
| | comp=Z,39nm,18.4s,baz=200,slow=38 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **32.99** | **139** | P | **P** | **16 33 49.2** | **-0.5** |
| **STKA** | **Stephens Creek** | **32.99** | **139** | P | **P** | **16 33 48.7** | **-1.0** |
| | comp=Z,1.2nm,0.5s,baz=341,slow=9.9,SNR=3.7 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **XAN** | **Xi'an** | **42.74** | **351** | P | **P** | **16 35 14.3** | **+2.3** |
| XAN | | | | pP | sP | 16 35 18.0 | +1.3 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **46.72** | **12** | P | **P** | **16 35 44.8** | **+1.1** |
| | comp=Z,2.0nm,0.9s,baz=195,slow=8.5,SNR=4.4 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.98** | **23** | P | **P** | **16 36 02.1** | **+0.8** |
| | comp=Z,1.3nm,0.9s,baz=191,slow=9.0,SNR=2.7 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **49.97** | **343** | *e*P | P | 16 36 14.5 | +5.6 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **56.62** | **352** | P | **P** | **16 36 58.5** | **+0.8** |
| SONM | | | | IAmb | IAmb | 16 37 03.7 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **56.62** | **352** | P | **P** | **16 36 57.7** | **0.0** |
| | comp=Z,1.5nm,0.7s,baz=173,slow=9.0,SNR=5.6 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.80** | **334** | P | **P** | **16 37 39.6** | **-0.6** |
| **MKAR** | **Makanchi Array** | **62.80** | **334** | P | **P** | **16 37 39.2** | **-0.9** |
| | comp=Z,1.4nm,0.7s,baz=141,slow=9.3,SNR=2.9 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.33** | **335** | P | **P** | **16 38 09.8** | **+0.3** |
| | comp=Z,1.3nm,0.9s,baz=145,slow=5.0,SNR=7.0 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.58** | **340** | P | **P** | **16 38 12.3** | **+1.2** |
| | comp=Z,1.2nm,0.6s,baz=143,slow=5.2,SNR=7.1 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.69** | **180** | P | **P** | **16 39 31.1** | **-1.9** |
| QSPA | | | | IAmb | IAmb | 16 39 42.1 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.69** | **180** | P | **P** | **16 39 33.9** | **+0.9** |
| | comp=Z,1.9nm,1.0s,baz=295,slow=3.6,SNR=3.6 | | | | | | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **91.04** | **196** | | **P** | **16 40 17.6** | **-1.2** |
| **SNAA** | **Sanae** | **91.04** | **196** | P | **P** | **16 40 18.4** | **-0.4** |
| | comp=Z,1.3nm,0.8s,baz=164,slow=12,SNR=5.8 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **145.09** | **189** | PKPbc | **PKPab** | **16 46 51.9** | **-0.5** |
| | comp=Z,7.0nm,0.9s,baz=187,slow=5.0,SNR=7.1 | | | | | | |
| **LPAZ** | **La Paz** | **155.12** | **169** | PKPab | **PKPab** | **16 47 34.5** | **+0.5** |
| | comp=Z,1.3nm,0.6s,baz=58,slow=1.1,SNR=4.3 | | | | | | |

*IDC **25** 16:32:04.3±2.1,10˚.98N×126˚.06E,h0km,mb3.7/6, mbtmp3.7/6,Error ellipse: s-maj=209.9km s-min=20.6km az=68.0*
**ISC 25 16:32:08.4±2.3,11°2N±0˚.6×12°7E±˚,h35km,n6,σ0§51/6, mb3.8/6,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **31.86** | **166** | P | **P** | **16 38 29.9** | **-0.5** |
| | 0.3nm,0.6s,baz=344,slow=9.5,SNR=2.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **35.38** | **169** | P | **P** | **16 39 01.6** | **+0.5** |
| | 0.3nm,0.3s,baz=340,slow=7.3,SNR=13 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.57** | **322** | P | **P** | **16 41 11.2** | **+0.1** |
| | 0.5nm,0.5s,baz=124,slow=8.2,SNR=7.6 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.02** | **331** | P | **P** | **16 41 29.4** | **+0.3** |
| | 0.6nm,0.6s,baz=134,slow=4.2,SNR=1.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.57** | **325** | P | **P** | **16 41 39.9** | **-0.4** |
| | 0.5nm,0.6s,baz=123,slow=6.6,SNR=3.5 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **85.28** | **332** | P | **P** | **16 44 41.4** | **0.0** |
| | 1.5nm,0.8s,baz=59,slow=3.7,SNR=5.1 | | | | | | |
| | 1.5nm,0.8s | | | | | | |

**ROM 25 16:35:45.4±0.1,41°856N±0˚.006×14°872E±0˚.007, h19km±1km,ML2.0/24,4C,Error ellipse: s-maj=0.7km s-min=0.3km az=196.0,Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T1411** | **Guglionesi (CB** | **0.10** | **24** | ⇑P | Pg | 16 35 49.5 | +0.3 |
| T1411 | | | | S | Sg | 16 35 52.5 | +0.8 |
| T1411 | | | | AML | AML | | |
| | comp=E,3470μm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=E,3445μm,0.2s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,1550μm,1.5s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,1460μm,1.5s | | | | | | |
| T1411 | | | | AML | AML | | |
| | comp=N,1550μm,0.5s | | | | | | |
| **T1412** | **Lupara (CB)** | **0.11** | **227** | ⇑P | Pg | 16 35 49.0 | -0.2 |
| T1412 | | | | S | Sg | 16 35 51.7 | -0.2 |
| T1412 | | | | AML | AML | | |
| | comp=E,2075μm,1.3s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=N,2835μm,0.4s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=E,2075μm,0.7s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=N,2835μm,1.6s | | | | | | |
| T1412 | | | | AML | AML | | |
| | comp=E,2152μm,0.1s | | | | | | |
| **T1413** | **San Martino in** | **0.11** | **92** | ⇑P | Pg | 16 35 49.5 | +0.2 |
| T1413 | | | | S | Sg | 16 35 52.5 | +0.6 |
| T1413 | | | | AML | AML | | |
| | comp=E,1160μm,0.9s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=N,2665μm,0.5s | | | | | | |
| T1413 | | | | AML | AML | | |
| | comp=E,1160μm,1.1s | | | | | | |
| **FRES** | **Fresagrandinar** | **0.19** | **308** | P | Pg | 16 35 50.7 | +0.4 |
| FRES | | | | S | Sg | 16 35 54.1 | +0.4 |
| FRES | | | | AML | AML | | |
| | comp=N,349μm,1.6s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=E,476μm,1.4s | | | | | | |
| FRES | | | | AML | AML | | |
| | comp=N,349μm,0.4s | | | | | | |
| **CIGN** | **Sant'Elia a Pi** | **0.20** | **173** | P | Pg | 16 35 50.8 | +0.3 |
| CIGN | | | | S | Sg | 16 35 54.5 | +0.6 |
| CIGN | | | | AML | AML | | |
| | comp=N,256μm,0.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=E,210μm,0.4s | | | | | | |
| CIGN | | | | AML | AML | | |
| | comp=N,256μm,1.6s | | | | | | |
| **MELA** | **Melanico ??? S** | **0.24** | **128** | P | Pg | 16 35 51.1 | +0.1 |
| MELA | | | | S | Sg | 16 35 55.6 | +0.7 |
| MELA | | | | AML | AML | | |
| | comp=N,482μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,556μm,0.9s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=N,542μm,0.2s | | | | | | |
| MELA | | | | AML | AML | | |
| | comp=E,450μm,0.

σ1ꝑ89/72, **mb4.1**/17, **South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PWJI** | **Pagerwojo** | **3.13** | **360** | P | **Pn** | **16 38 17.0** | **-1.1** |
| **UGM** | **Wanagama** | **3.48** | **338** | P | **Pn** | **16 38 23.1** | **+0.2** |
| **UGM** | **Wanagama** | **3.48** | **338** | | **Pn** | **16 38 22.4** | **-0.6** |
| **UGM** | **Wanagama** | **3.48** | **338** | P | **Pn** | **16 38 22.3** | **-0.6** |
| UGM | | | | S | **Sn** | **16 39 01.9** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **3.54** | **41** | P | **Pn** | **16 38 24.9** | **+1.2** |
| **JAGI** | **Jajag, Banyuwa** | **3.54** | **41** | | **Pn** | **16 38 24.3** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **3.54** | **41** | P | **Pn** | **16 38 23.8** | **+0.1** |
| JAGI | | | | S | **Sn** | **16 39 00.2** | **-5.5** |
| **YOGI** | **Yogyakarta** | **3.65** | **336** | P | **Pn** | **16 38 24.1** | **-1.2** |
| YOGI | | | | S | **Sn** | **16 39 04.9** | **-3.6** |
| **NGJI** | **Ngawi** | **3.79** | **355** | P | **Pn** | **16 38 26.3** | **-0.9** |
| **DNP** | **Denpasar** | **4.16** | **54** | P | **Pn** | **16 38 32.2** | **+0.8** |
| **GRJI** | **Gresik** | **4.28** | **9** | P | **Pn** | **16 38 33.9** | **0.0** |
| **SMRI** | **Semarang** | **4.31** | **342** | P | **Pn** | **16 38 36.1** | **+1.7** |
| **SMRI** | **Semarang** | **4.31** | **342** | Pn | **Pn** | **16 38 34.5** | **+0.1** |
| **SMRI** | **Semarang** | **4.31** | **342** | P | **Pn** | **16 38 34.8** | **+0.4** |
| **SRBI** | **Singaraja** | **4.54** | **48** | P | **Pn** | **16 38 38.7** | **+1.1** |
| **CMJI** | **Cimerak** | **4.72** | **315** | P | **Pn** | **16 38 39.3** | **-0.8** |
| **KPJI** | **Karang Pucung** | **4.75** | **323** | P | **Pn** | **16 38 40.2** | **-0.3** |
| **BBJI** | **Bungbulang** | **5.51** | **312** | P | **Pn** | **16 38 50.6** | **-0.4** |
| **TWSI** | **Taliwang, Sumb** 63nm,0.7s,3μm0.6nm | **5.55** | **65** | P | **Pn** | **16 38 51.6** | **+0.2** |
| **CNJI** | **Cibinong** 32nm,1.1s,1μm | **6.00** | **309** | P | **Pn** | **16 38 57.0** | **-0.7** |
| **XMIS** | **Christmas Isla** | **6.09** | **276** | P | **Pn** | **16 38 58.1** | **-0.8** |
| **XMIS** | **Christmas Isla** | **6.09** | **276** | Pn | **Pn** | **16 38 57.7** | **-1.1** |
| **PLAI** | **Plampang** 87nm,1.6s | **6.32** | **69** | P | **Pn** | **16 39 02.4** | **+0.4** |
| **SKJI** | **Sukabumi** | **6.63** | **308** | P | **Pn** | **16 39 06.3** | **-0.1** |
| **WBSI** | **Waikabubak, Su** | **7.61** | **79** | P | **Pn** | **16 39 18.3** | **-1.5** |
| **KASI** | **Kota Agung** | **9.15** | **307** | P | **Pn** | **16 39 40.7** | **-0.2** |
| **BSSI** | **Bau Bau, Buton** | **9.93** | **61** | P | **Pn** | **16 39 52.2** | **+0.6** |
| **KAPI** | **Kappang** comp=Z,61nm,18.9s,baz=150,slow=37 | **9.96** | **53** | LR | LR | 16 43 37.6 | |
| **MNAI** | **Manna** | **11.07** | **307** | P | **Pn** | **16 40 06.9** | **-0.4** |
| **GIRL** | **Giralia** | **11.64** | **169** | P | **Pn** | **16 40 12.5** | **-2.6** |
| **GIRL** | **Giralia** | **11.64** | **169** | Pn | **Pn** | **16 40 12.6** | **-2.4** |
| **SOEI** | **Soe** | **12.33** | **85** | P | **Pn** | **16 40 25.2** | **+0.6** |
| **MBWA** | **Marble Bar** | **12.51** | **144** | P | **Pn** | **16 40 23.4** | **-3.5** |
| **MBWA** | **Marble Bar** | **12.51** | **144** | | **Pn** | **16 40 23.3** | **-3.6** |
| **PSA00** | **Pilbara Seismi** | **12.90** | **144** | P | **Pn** | **16 40 28.7** | **-3.5** |
| **PSA00** | **Pilbara Seismi** | **12.90** | **144** | | **Pn** | **16 40 28.7** | **-3.5** |
| **PSA00** | **Pilbara Seismi** | **12.90** | **144** | | **Pn** | **16 40 27.7** | **-4.5** |
| **FITZ** | **Fitzroy Crossi** | **15.04** | **119** | | **Pn** | **16 40 59.9** | **-1.6** |
| **TOLI2** | **Tolitoli** | **15.11** | **37** | Pn | **Pn** | **16 41 03.1** | **+0.6** |
| TOLI2 | comp=Z,6.2nm,0.8s | | | IAmb | IAmb | 16 41 20.7 | |
| **MEEK** | **Meekatharra** | **16.67** | **158** | P | **Pn** | **16 41 18.8** | **-3.8** |
| **KNRA** | **Kununurra** | **17.09** | **107** | Pn | **Pn** | **16 41 27.6** | **-0.3** |
| **MORW** | **Morawa** | **18.24** | **168** | P | **Pn** | **16 41 39.7** | **-2.4** |
| **MORW** | **Morawa** | **18.24** | **168** | Pn | **Pn** | **16 41 39.5** | **-2.6** |
| MORW | comp=Z,9.3nm,0.8s | | | IAmb | IAmb | 16 41 59.5 | |
| **GSI** | **Gunungsitoli** | **18.81** | **310** | P | **P** | **16 41 43.6** | **-5.0** |
| GSI | comp=Z,30nm,1.3s | | | IAmb | IAmb | 16 42 22.4 | |
| **KULM** | **Kulim** | **19.77** | **325** | P | **P** | **16 41 57.4** | **-1.7** |
| KULM | comp=Z,13nm,1.3s | | | IAmb | IAmb | 16 42 24.2 | |
| **FAKI** | **Fak Fak** | **21.86** | **69** | P | **P** | **16 42 22.3** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** comp=Z,8.8nm,1.1s,baz=349,slow=14,SNR=2.5 comp=Z,8.8nm,1.1s | **22.22** | **168** | P | **P** | **16 42 27.6** | **+2.0** |
| **WB0** | **Warramunga Arr** | **23.36** | **114** | P | **P** | **16 42 36.6** | **-1.0** |
| WB0 | comp=Z,11nm,1.4s | | | IAmb | IAmb | 16 42 43.2 | |
| **WRA** | **Warramunga Arr** | **23.37** | **115** | P | **P** | **16 42 37.0** | **-0.7** |
| **WRA** | **Warramunga Arr** comp=Z,1.9nm,0.8s,baz=288,slow=12,SNR=14 | **23.37** | **115** | P | **P** | **16 42 37.0** | **-0.7** |
| WRA | comp=Z,0.4nm,0.6s,baz=286,slow=23,SNR=3.2 comp=Z,1.9nm,0.8s | | | S | **S** | **16 46 50.3** | **-0.6** |
| **WB2** | **Warramunga Arr** | **23.38** | **115** | | **P** | **16 42 38.4** | **+0.6** |
| WB2 | comp=Z,2.3nm,0.8s | | | IAmb | IAmb | 16 43 06.7 | |
| **WR0** | **Warramunga Arr** | **23.55** | **115** | P | **P** | **16 42 39.9** | **+0.4** |
| WR0 | comp=Z,17nm,1.5s | | | IAmb | IAmb | 16 42 45.5 | |
| **ASAR** | **Alice Springs** | **24.43** | **123** | P | **P** | **16 42 47.8** | **0.0** |
| **ASAR** | **Alice Springs** comp=Z,1.5nm,0.7s,baz=298,slow=9.0,SNR=26 comp=Z,1.5nm,0.7s | **24.43** | **123** | P | **P** | **16 42 48.2** | **+0.4** |
| **AS31** | **Alice Springs** | **24.43** | **123** | P | **P** | **16 42 49.0** | **+1.2** |
| **FORT** | **Forrest** | **24.66** | **145** | P | **P** | **16 42 50.9** | **+1.1** |
| **CMAR** | **Chiang Mai Arr** comp=Z,2.6nm,0.9s,baz=173,slow=8.4,SNR=13 comp=Z,2.6nm,0.9s | **32.06** | **337** | P | **P** | **16 43 58.4** | **+2.5** |
| **STKA** | **Stephens Creek** comp=Z,3.2nm,0.8s,baz=294,slow=9.1,SNR=8.7 comp=Z,3.2nm,0.8s | **34.34** | **131** | P | **P** | **16 44 17.6** | **+1.8** |
| **H08S2** | **Diego Garcia H** baz=98,slow=74,SNR=4.1 | **38.93** | **272** | T | T | 17 26 20.8 | |
| **H08S3** | **Diego Garcia H** baz=98,slow=74,SNR=8.0 | **38.94** | **272** | T | T | 17 26 22.5 | |
| **H08S1** | **Diego Carcia H** baz=98 | **38.95** | **272** | T | T | 17 26 27.5 | |
| **MJAR** | **Matsushiro Arr** comp=Z,1.9nm,0.9s,baz=185,slow=8.1,SNR=5.0 | **53.57** | **26** | P | **P** | **16 46 53.3** | **+3.3** |
| **SONM** | **Songino Array** comp=Z,0.3nm,0.5s,baz=165,slow=6.0,SNR=2.1 comp=Z,0.3nm,0.5s | **58.94** | **356** | P | **P** | **16 47 30.9** | **+2.6** |
| **MKAR** | **Makanchi Array** comp=Z,0.7nm,0.5s,baz=146,slow=7.9,SNR=7.3 comp=Z,0.7nm,0.5s | **63.46** | **338** | P | **P** | **16 47 59.3** | **+0.5** |
| **MAW** | **Mawson** comp=Z,563nm,21.5s,baz=314,slow=30 | **64.87** | **199** | LR | LR | 17 10 11.1 | |
| KURBB | **Kurchatov Arra** comp=Z,0.4nm,0.5s,baz=151,slow=5.5,SNR=1.8 comp=Z,0.4nm,0.5s | **68.03** | **338** | P | **P** | **16 48 28.5** | **+0.4** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.4nm,0.7s,baz=130,slow=4.3,SNR=5.6 comp=Z,1.4nm,0.7s | **68.80** | **343** | P | **P** | **16 48 32.9** | **0.0** |
| **PETK** | **Petropavlovsk-** comp=Z,0.4nm,0.7s,baz=255,slow=3.9,SNR=1.3 comp=Z,0.4nm,0.7s | **75.03** | **27** | P | **P** | **16 49 09.7** | **-0.7** |
| **QSPA** | **South Pole Qui** comp=Z,4.6nm,1.1s | **78.84** | **180** | P | **P** | **16 49 31.9** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 16 49 34.0 | |
| **QSPA** | **South Pole Qui** comp=Z,1.8nm,0.8s,baz=165,slow=2.2,SNR=7.5 comp=Z,1.8nm,0.8s | **78.84** | **180** | P | **P** | **16 49 32.2** | **+0.3** |
| **SNAA** | **Sanae** | **86.96** | **197** | P | **P** | **16 50 13.2** | **-0.6** |
| **SNAA** | **Sanae** comp=Z,1.3nm,0.8s,baz=159,slow=4.4,SNR=6.7 comp=Z,1.3nm,0.8s | **86.96** | **197** | P | **P** | **16 50 14.9** | **+1.1** |
| **BRTR** | **Keskin Array B** comp=Z,1.7nm,0.8s,baz=144,slow=7.8,SNR=12 comp=Z,1.7nm,0.8s | **88.13** | **311** | P | **P** | **16 50 20.9** | **+0.8** |

*MOS* ***25*** *16:50:01.4±0.9,52.˙20N×171.˚16W,h37km,mb6.0/93, MS5.7/71,Error ellipse: s-maj=7.4km s-min=4.2km az=105.6*

*NEIC* ***25*** *16:50:01.4±2.8,52.˙10N±0.˙08×171.˚13W±0.˚08,h23km±1km, mb5.8/252,Ms_20 5.6/807,Mww5.9/46,ML5.5(AEIC),Error ellipse: s-maj=14.7km s-min=6.8km az=159.0*

*AEIC* ***25*** *16:50:02.2±2.9,52.˙09N±0.˙09×171.˚02W±0.˚08,h23km±3km, Error ellipse: s-maj=13.2km s-min=5.8km az=160.0*

*IPGP* ***25*** *16:50:02.0,51.˙87N×171.˚01W,h36km,Mw5.9,Fault plane solution: NP1:ϕ=70.00000°,δ59.00000°,λ77.00000°. NP2:ϕ=274.00000°,δ33.00000°,λ110.00000°.*

*BJI* ***25*** *16:50:03.0±0.0,52.˙51N×171.˚39W,h49km,mb5.9/98, mB5.8/78,Ms5.9/99,Ms7 5.7/97*

*IDC* ***25*** *16:50:03.0±1.4,52.˙22N×171.˚13W,h36km±9km,mb5.3/45, mbtmp5.5/48,ML4.8/3,MS5.5/87,Error ellipse: s-maj=11.8km s-min=9.3km az=177.0*

*NEIC* ***25*** *16:50:04,51.˙73N×171.˚21W,h36km,Moment Tensor Solution. Duration: 4ꝑ2 Moment tensor: Scale 10¹⁷Nm; Mrr6.88; Mϑϑ-5.94; Mϕϕ-0.93; Mrϑ2.41; Mrϕ-1.85; Mϑϕ2.31; Fault plane solution: M₀7.49000×10¹⁷ NP1:ϕ61.39000°, δ57.94000°,λ79.23000°. NP2:ϕ261.10000°,δ33.64000°, λ106.61000°. Principal axes: T 7.7673, Plg75.0000°, Azm302.0000°; N -0.5545, Plg9.0000°, Azm67.0000°; P -7.2128, Plg12.0000°, Azm159.0000°;*

*NEIC* ***25*** *16:50:04,52.˙33N×171.˚21W,h36km*

*GCMT* ***25*** *16:50:05.4±0.1,51.˙99N×171.˚01W,h36km,MW6.0/161, Moment Tensor Solution. s160,c363; s161,c539;*

*Duration: 2ꝑ3 Moment tensor: Scale 10¹⁸Nm; Mrr0.84±.01; Mϑϑ-0.79±.01; Mϕϕ-0.05±.01; Mrϑ0.47±.01; Mϑϕ-0.39±.00; Mrϕ0.33±.01; Best double couple: M₀1.06600×10¹⁸ NP1:ϕ60.00000°,δ61.00000°, λ83.00000°. NP2:ϕ254.00000°,δ29.00000°,λ103.00000°. Principal axes: T 1.0110, Plg73.0000°, Azm313.0000°; N 0.1080, Plg6.0000°, Azm63.0000°; P -1.1200, Plg16.0000°, Azm155.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

*BGR* ***25*** *16:50:12.2,53.˙63N×171.˚40W,h33km,mb5.7,Ms5.5*

**ISC 25 16:50:03.1±0.3, 52.˙04N±0.˙03×171.˚17W±0.˚02, h42km±2km, h41km:pP-P, n1813, σ1ꝑ81/1771, mb5.8/467, MS5.6/556, 82C-62D, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLES** | **Cleveland East** | **1.11** | **44** | | **Pn** | **16 50 20.3** | **-1.9** |
| CLES | | | | | **Sn** | **16 50 35.6** | **-0.7** |
| **CLCO** | **Concord Point,** | **1.16** | **49** | | **Pn** | **16 50 20.4** | **-2.4** |
| CLCO | | | | | **Sn** | **16 50 37.2** | **-0.4** |
| **NIKH** | **Nikolski High** | **1.70** | **56** | P | **Pn** | **16 50 28.7** | **-1.5** |
| **NIKH** | **Nikolski High** | **1.70** | **56** | | **Pn** | **16 50 28.8** | **-1.5** |
| NIKH | | | | | **Sn** | **16 50 48.1** | **-2.6** |
| **NIKH** | **Nikolski High** baz=237,SNR=349 | **1.70** | **56** | P | **Pn** | **16 50 28.1** | **-2.1** |
| NIKH | baz=237 | | | S | **Sn** | **16 50 48.0** | **-2.6** |
| **KOSE** | **Korovin Southe** | **1.80** | **281** | | **Pn** | **16 50 33.3** | **+1.6** |
| **KONE** | **Korovin Northe** | **1.85** | **282** | | **Pn** | **16 50 33.9** | **+1.6** |
| **KOKL** | **Mount Kliuchef** | **1.89** | **280** | | **Pn** | **16 50 34.6** | **+1.7** |
| **OKCE** | **Okmok Cone E** | **2.30** | **52** | | **Pn** | **16 50 38.0** | **-0.6** |
| OKCE | | | | | **Sn** | **16 51 05.1** | **-0.4** |
| **OKNC** | **Okmok New Cone** | **2.33** | **51** | | **Pn** | **16 50 38.8** | **-0.2** |
| **GSMY** | **Great Sitkin M** | **3.02** | **272** | | **Pn** | **16 50 49.8** | **+1.4** |
| **GSTR** | **Great Sitkin T** | **3.02** | **273** | | **Pn** | **16 50 50.8** | **+2.4** |
| **MAPS** | **Pakushin South** | **3.11** | **54** | | **Pn** | **16 50 48.9** | **-0.8** |
| **MSW** | **Makushin Switc** | **3.25** | **53** | | **Pn** | **16 50 51.1** | **0.0** |
| **UNV** | **Unalaska Valle** | **3.35** | **56** | P | **Pn** | **16 50 53.7** | **+0.8** |
| **UNV** | **Unalaska Valle** | **3.35** | **56** | | **Pn** | **16 50 52.7** | **-0.2** |
| **UNV** | **Unalaska Valle** baz=239,SNR=255 | **3.35** | **56** | P | **Pn** | **16 50 51.9** | **-1.1** |
| UNV | baz=239 | | | S | **Sn** | **16 51 31.6** | **+0.1** |
| **KIRH** | **Kanaga Island** | **3.67** | **270** | | **Pn** | **16 51 00.1** | **+2.8** |
| **KIWB** | **Kanaga Island** | **3.70** | **269** | | **Pn** | **16 51 00.1** | **+2.3** |
| **AKRB** | **Akutan Reef Bi** | **3.72** | **54** | | **Pn** | **16 50 59.0** | **+1.0** |
| **AKMO** | **Akutan Morgan** | **3.73** | **55** | | **Pn** | **16 50 58.9** | **+0.7** |
| **AKLV** | **Akutan Long Va** | **3.79** | **54** | | **Pn** | **16 51 00.2** | **+1.2** |
| **AKGG** | **Akutan Green G** | **3.80** | **53** | | **Pn** | **16 51 00.2** | **+1.1** |
| **TAFP** | **Tanaga Falls P** | **4.21** | **271** | | **Pn** | **16 51 07.0** | **+2.2** |
| **TANO** | **Tanaga North** | **4.30** | **271** | | **Pn** | **16 51 08.7** | **+2.7** |
| **WESE** | **West Dahl East** | **4.64** | **56** | | **Pn** | **16 51 11.2** | **+0.5** |
| **P08K** | **Saint George I** baz=191,SNR=50 | **4.67** | **11** | P | **Pn** | **16 51 12.2** | **+1.2** |
| P08K | baz=191 | | | S | **Sn** | **16 52 05.6** | **+1.7** |
| P08K | baz=191 | | | S | **Sn** | **16 52 05.6** | **+1.7** |
| **GANO** | **Gareloi North** | **4.73** | **270** | | **Pn** | **16 51 14.5** | **+2.6** |
| **SSLS** | **Shishaldin Sou** | **5.06** | **55** | | **Pn** | **16 51 17.0** | **+0.6** |
| **SPIA** | **Saint Paul Isl** | **5.18** | **6** | P | **Pn** | **16 51 19.7** | **+1.8** |
| **SPIA** | **Saint Paul Isl** | **5.18** | **6** | | **Pn** | **16 51 19.6** | **+1.6** |
| **SPIA** | **Saint Paul Isl** baz=185,SNR=71 | **5.18** | **6** | P | **Pn** | **16 51 19.1** | **+1.2** |
| SPIA | baz=185 | | | S | **Sn** | **16 52 20.4** | **+4.1** |
| **ISLZ** | **Isanotski Laza** | **5.21** | **56** | | **Pn** | **16 51 19.3** | **+0.8** |
| **FALS** | **False Pass** | **5.42** | **56** | P | **Pn** | **16 51 22.5** | **+1.1** |
| **FALS** | **False Pass** | **5.42** | **56** | | **Pn** | **16 51 22.7** | **+1.4** |
| **FALS** | **False Pass** baz=242,SNR=31 | **5.42** | **56** | P | **Pn** | **16 51 23.1** | **+1.7** |
| **S12K** | **Black Hills** baz=239,SNR=11 | **6.52** | **52** | P | **Pn** | **16 51 37.4** | **+1.0** |
| **SDPT** | **Sand Point** | **7.16** | **58** | P | **Pn** | **16 51 46.6** | **+1.4** |
| **SDPT** | **Sand Point** | **7.16** | **58** | | **Pn** | **16 51 45.3** | **+0.1** |
| **SDPT** | **Sand Point** baz=247,SNR=18 | **7.16** | **58** | P | **Pn** | **16 51 44.6** | **-0.6** |
| **CNBA** | **Chernabura Isl** | **7.46** | **64** | Pn | **Pn** | **16 51 49.8** | **+0.5** |
| **CHNA** | **Chernabura Isl** baz=253,SNR=10 | **7.46** | **63** | P | **Pn** | **16 51 48.8** | **-0.5** |
| **M11K** | **Mekoryuk** baz=200,SNR=97 | **8.81** | **16** | P | **Pn** | **16 52 08.4** | **+0.7** |
| **SHEM** | **Shemya Is, Ala** 16nm,0.3s,baz=52,slow=4.4,SNR=13 | **9.04** | **280** | Pn | **Pn** | **16 52 12.8** | **+1.9** |
| SHEM | baz=259,slow=16 | | | Sn | **Sn** | **16 53 52.3** | **+1.1** |
| SHEM | comp=Z,26μm,21.2s,baz=93,slow=37 122nm,0.6s | | | LR | LR | 16 55 35.7 | |
| **O14K** | **Tigyukauivet M** baz=222,SNR=9.6 | **9.14** | **34** | P | **Pn** | **16 52 13.2** | **+1.0** |
| **M13K** | **Dall Lake** baz=210,SNR=60 | **9.45** | **24** | P | **Pn** | **16 52 18.0** | **+1.5** |
| **N14K** | **Kuskokwak Cree** baz=218,SNR=67 | **9.51** | **30** | P | **Pn** | **16 52 18.7** | **+1.3** |
| **R16K** | **Pilot Point** baz=240 | **9.60** | **49** | P | **Pn** | **16 52 19.0** | **+0.5** |
| **O15K** | **Ungalikthiuk R** baz=226,SNR=71 | **9.60** | **37** | P | **Pn** | **16 52 20.2** | **+1.6** |
| **CHIR** | **Chirikof Islan** | **9.92** | **61** | Pn | **Pn** | **16 52 22.6** | **-0.3** |
| **CHIR** | **Chirikof Islan** baz=254 | **9.92** | **61** | P | **Pn** | **16 52 22.3** | **-0.7** |
| **M14K** | **Bethel** baz=214,SNR=101 | **10.10** | **27** | P | **Pn** | **16 52 27.6** | **+2.2** |
| **R17L** | **Mt. Peulik Vol** baz=243,SNR=83 | **10.21** | **51** | P | **Pn** | **16 52 26.5** | **-0.4** |
| **N15K** | **Kwethluk River** baz=222,SNR=116 | **10.22** | **33** | P | **Pn** | **16 52 29.3** | **+2.3** |
| **P16K** | **Nushagak River** baz=232,SNR=37 | **10.23** | **42** | P | **Pn** | **16 52 28.8** | **+1.7** |
| **L14K** | **Kuka Creek** baz=210,SNR=117 | **10.42** | **23** | P | **Pn** | **16 52 30.3** | **+0.6** |
| **M15K** | **Kasigluk River** baz=218,SNR=107 | **10.43** | **30** | P | **Pn** | **16 52 31.4** | **+1.6** |
| **K13K** | **Kusilvak Mount** baz=202,SNR=136 | **10.53** | **17** | P | **Pn** | **16 52 32.8** | **+1.5** |
| **O16K** | **Kokwok River B** baz=230,SNR=307 | **10.54** | **39** | P | **Pn** | **16 52 32.7** | **+1.2** |
| **Q16K** | **King Salmon** baz=237,SNR=59 | **10.59** | **45** | P | **Pn** | **16 52 33.1** | **+1.0** |
| **Q17K** | **Contact Creek** baz=241,SNR=80 | **10.73** | **48** | P | **Pn** | **16 52 33.7** | **-0.4** |
| **N16K** | **Nishlik Lake** baz=224,SNR=124 | **10.89** | **34** | P | **Pn** | **16 52 37.5** | **+1.2** |
| **SII** | **Sitkinak Islan** | **10.90** | **59** | P | **Pn** | **16 52 35.2** | **-1.2** |
| **SII** | **Sitkinak Islan** | **10.90** | **59** | Pn | **Pn** | **16 52 34.9** | **-1.5** |
| **SII** | **Sitkinak Islan** baz=253,SNR=12 | **10.90** | **59** | P | **Pn** | **16 52 34.6** | **-1.8** |
| **P17K** | **Kvichak River** baz=235,SNR=82 | **10.97** | **43** | P | **Pn** | **16 52 38.7** | **+1.4** |
| **L15K** | **Ungalak Mounta** baz=213,SNR=186 | **11.01** | **25** | P | **Pn** | **16 52 39.2** | **+1.5** |
| **O17K** | **Koliganek Bris** baz=231,SNR=137 | **11.05** | **40** | P | **Pn** | **16 52 38.7** | **+0.4** |
| **R18K** | **Karluk** baz=247 | **11.11** | **54** | P | **Pn** | **16 52 38.1** | **-1.1** |
| **M16K** | **Timber Creek** baz=222,SNR=52 | **11.23** | **32** | P | **Pn** | **16 52 40.7** | **-0.1** |
| **Q18K** | **Katmai Hardscr** baz=241,SNR=37 | **11.32** | **48** | P | **Pn** | **16 52 41.1** | **-1.1** |
| **J14K** | **Nanvaranak Lak** baz=204,SNR=96 | **11.48** | **18** | P | **Pn** | **16 52 44.9** | **+0.6** |
| **N17K** | **Nushagak Hills** baz=228,SNR=311 | **11.50** | **37** | P | **Pn** | **16 52 45.0** | **+0.5** |
| **K15K** | **Wolf Creek Mou** baz=211,SNR=256 | **11.52** | **23** | P | **Pn** | **16 52 45.6** | **+0.9** |
| **OHAK** | **Old Harbor** | **11.58** | **56** | P | **Pn** | **16 52 44.7** | **-0.9** |
| **OHAK** | **Old Harbor** | **11.58** | **56** | Pn | **Pn** | **16 52 42.3** | **-3.3** |
| **OHAK** | **Old Harbor** baz=251,SNR=17 | **11.58** | **56** | P | **Pn** | **16 52 44.0** | **-1.5** |
| **L16K** | **Owhat River** baz=218,SNR=204 | **11.59** | **29** | P | **Pn** | **16 52 47.2** | **+1.4** |
| **P18K** | **Big Mountain,** baz=237,SNR=95 | **11.60** | **44** | P | **Pn** | **16 52 45.5** | **-0.4** |
| **GAMB** | **Gambell** baz=178,SNR=66 | **11.77** | **359** | P | **Pn** | **16 52 48.6** | **+0.4** |
| **O18K** | **Koktuh Hills** baz=236,SNR=176 | **11.86** | **42** | P | **Pn** | **16 52 49.6** | **+0.1** |
| **M17K** | **Holitna River** baz=224,SNR=134 | **12.01** | **33** | P | **Pn** | **16 52 52.7** | **+1.2** |
| **Q19K** | **Cape Douglas,** baz=243,SNR=33 | **12.07** | **48** | P | **Pn** | **16 52 50.6** | **-1.9** |
| **N18K** | **Kilae Creek** | **12.08** | **38** | P | **Pn** | **16 52 52.5** | **0.0** |
| | baz=231,SNR=46 | | | | | | |
| **KDAK** | **Kodiak Island** | **12.12** | **54** | Pn | **Pn** | **16 52 50.7** | **-2.3** |
| **KDAK** | **Kodiak Island** 7.2nm,0.3s,baz=274,slow=6.1,SNR=29 | **12.12** | **54** | Pn | **Pn** | **16 52 48.6** | **-4.4** |
| KDAK | baz=317,slow=17 | | | | **Sn** | **16 55 00.4** | **-6.2** |
| **KDAK** | **Kodiak Island** | **12.12** | **54** | P | **Pn** | **16 52 50.7** | **-2.3** |
| **L17K** | **Donlin** baz=220,SNR=87 | **12.28** | **30** | P | **Pn** | **16 52 55.4** | **+0.2** |
| **O19K** | **Port Alsworth** baz=236,SNR=35 | **12.42** | **42** | P | **Pn** | **16 52 57.4** | **+0.3** |
| **SVW2** | **Sparrevohn** | **12.47** | **37** | P | **Pn** | **16 52 59.7** | **+2.0** |
| **SVW2** | **Sparrevohn** | **12.47** | **37** | | **Pn** | **16 53 01.1** | **+3.4** |
| **Q20K** | **Shuyak Island** baz=246,SNR=38 | **12.53** | **51** | P | **Pn** | **16 52 56.0** | **-2.6** |
| **J16K** | **Anvik River** baz=211,SNR=101 | **12.59** | **22** | P | **Pn** | **16 53 00.5** | **+1.1** |
| **P19K** | **Oil Pt** baz=240,SNR=25 | **12.61** | **46** | P | **Pn** | **16 52 58.4** | **-1.3** |
| **M18K** | **Stony River** baz=228,SNR=164 | **12.63** | **35** | P | **Pn** | **16 53 00.1** | **+0.1** |
| **N19K** | **Bonanza Creek** baz=234,SNR=227 | **12.71** | **40** | P | **Pn** | **16 53 01.5** | **+0.3** |
| **K17K** | **Iditarod** baz=218,SNR=77 | **12.72** | **28** | P | **Pn** | **16 53 01.8** | **+0.5** |
| **L18K** | **Granite Mounta** baz=224,SNR=113 | **12.85** | **32** | P | **Pn** | **16 53 03.3** | **+0.5** |
| **ANM** | **Nome** | **12.92** | **11** | Pn | **Pn** | **16 53 06.5** | **+2.6** |
| **ANM** | **Nome** baz=196,SNR=46 | **12.92** | **11** | P | **Pn** | **16 53 06.3** | **+2.4** |
| **ANM** | **Nome** | **12.92** | **11** | P | **Pn** | **16 53 06.5** | **+2.6** |
| **J17K** | **VABM Dome** baz=215,SNR=143 | **13.06** | **25** | P | **Pn** | **16 53 06.7** | **+1.0** |
| **O20K** | **Slope Mountain** baz=240,SNR=18 | **13.09** | **45** | P | **Pn** | **16 53 06.5** | **+0.3** |
| **I17K** | **Unalakleet** baz=209,SNR=15 | **13.09** | **21** | P | **Pn** | **16 53 06.4** | **+0.2** |
| **HOM** | **Homer** baz=244 | **13.32** | **47** | P | **Pn** | **16 53 09.5** | **+0.1** |
| **M19K** | **Big River Lodg** baz=230,SNR=141 | **13.42** | **36** | P | **Pn** | **16 53 11.1** | **+0.4** |
| **L19K** | **White Mountain** baz=228,SNR=147 | **13.44** | **35** | P | **Pn** | **16 53 11.5** | **+0.5** |
| **CNPM** | **China Poot** | **13.45** | **48** | Pn | **Pn** | **16 53 08.3** | **-2.9** |
| **H16K** | **Elim** baz=204,SNR=37 | **13.46** | **17** | P | **Pn** | **16 53 12.6** | **+1.5** |
| **G15K** | **Niukluk** baz=199,SNR=120 | **13.50** | **13** | P | **Pn** | **16 53 13.7** | **+1.9** |
| **TNA** | **Tin City** baz=188,SNR=79 | **13.66** | **6** | P | **Pn** | **16 53 16.0** | **+2.0** |
| **F14K** | **Arctic Creek** baz=192,SNR=126 | **13.70** | **9** | P | **Pn** | **16 53 16.4** | **+1.9** |
| **BRLK** | **Bradley Lake** | **13.71** | **48** | | **Pn** | **16 53 13.0** | **-1.8** |
| **J18K** | **Innoko River** baz=220,SNR=108 | **13.76** | **28** | P | **Pn** | **16 53 15.4** | **0.0** |
| **BRSE** | **Bradley Lake S** baz=245 | **13.77** | **48** | P | **Pn** | **16 53 13.8** | **-1.8** |
| **N20K** | **Mount Spurr** baz=237,SNR=11 | **13.85** | **41** | P | **Pn** | **16 53 15.2** | **-1.4** |
| **SPCR** | **Spurr Chakacha** baz=237 | **13.85** | **41** | P | **Pn** | **16 53 15.5** | **-1.1** |
| **M20K** | **Styx River** baz=233 | **13.88** | **38** | P | **Pn** | **16 53 18.0** | **+1.0** |
| **L20K** | **Farewell, AK** baz=229,SNR=57 | **13.98** | **35** | P | **Pn** | **16 53 18.5** | **+0.1** |
| **F15K** | **North Star Dit** baz=196,SNR=149 | **14.11** | **11** | P | **Pn** | **16 53 21.7** | **+1.7** |
| **G16K** | **Koyuk River** baz=202,SNR=110 | **14.13** | **15** | P | **Pn** | **16 53 20.8** | **+0.4** |
| **H17K** | **Granite Mounta** baz=209,SNR=98 | **14.17** | **20** | P | **Pn** | **16 53 21.8** | **+0.8** |
| **J19K** | **Poorman** baz=221,SNR=71 | **14.48** | **28** | P | **Pn** | **16 53 24.8** | **-0.3** |
| **K20K** | **Telida** baz=226 | **14.50** | **32** | P | **Pn** | **16 53 25.7** | **+0.3** |
| K20K | baz=226 | | | S | **Sn** | **16 56 11.7** | **+7.0** |
| K20K | baz=226 | | | S | **Sn** | **16 56 11.7** | **+7.0** |
| **SEW** | **Seward** baz=246,SNR=43 | **14.51** | **48** | P | **Pn** | **16 53 22.5** | **-3.0** |
| **G17K** | **Kiwalik Mounta** baz=206,SNR=58 | **14.53** | **18** | P | **Pn** | **16 53 27.2** | **+1.5** |
| G17K | baz=206 | | | S | **S** | **16 56 18.8** | **-4.4** |
| **SKT** | **Skwentna** | **14.55** | **39** | Pn | **Pn** | **16 53 27.4** | **+1.4** |
| **SKT** | **Skwentna** baz=236,SNR=67 | **14.55** | **39** | P | **Pn** | **16 53 25.5** | **-0.5** |
| **O22K** | **Cooper Landing** baz=244,SNR=19 | **14.55** | **46** | P | **Pn** | **16 53 24.4** | **-1.6** |
| **SUA** | **Susitna One** | **14.58** | **42** | | **Pn** | **16 53 25.3** | **-1.2** |
| **SUA** | **Susitna One** baz=239,SNR=32 | **14.58** | **42** | P | **Pn** | **16 53 27.4** | **+0.9** |
| **H18K** | **Honhosa River** baz=212,SNR=205 | **14.70** | **22** | P | **Pn** | **16 53 29.0** | **+0.9** |
| H18K | baz=212 | | | S | **S** | **16 56 20.4** | **-6.3** |
| **GCSA** | **Galena City Sc** baz=217,SNR=32 | **14.72** | **25** | P | **Pn** | **16 53 29.0** | **+0.7** |
| GCSA | baz=217 | | | S | **S** | **16 56 20.6** | **-6.5** |
| **RC01** | **Rabbit Creek A** | **14.82** | **44** | | **Pn** | **16 53 27.8** | **-1.9** |
| **RC01** | **Rabbit Creek A** baz=242,SNR=7.4 | **14.82** | **44** | P | **Pn** | **16 53 29.4** | **-0.3** |
| **M22K** | **Willow** baz=239,SNR=17 | **14.99** | **41** | P | **Pn** | **16 53 31.4** | **-0.4** |
| **J20K** | **Nowinta River** baz=224,SNR=82 | **15.06** | **30** | P | **Pn** | **16 53 32.8** | **0.0** |
| J20K | baz=224 | | | S | **Sn** | **16 56 24.8** | **+6.7** |
| J20K | baz=224 | | | S | **Sn** | **16 56 24.8** | **+6.7** |
| **G18K** | **Tagagawik** baz=210,SNR=106 | **15.27** | **20** | P | **Pn** | **16 53 34.9** | **-0.6** |
| G18K | baz=210 | | | S | **S** | **16 56 36.2** | **-2.2** |
| **CUT** | **Chulitna** baz=237,SNR=55 | **15.28** | **39**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BPAW** | **Bear Paw Mtn.** | **16.02** | **33** | | **Pn** | **16 53 46.3** | **+1.0** |
| **BPAW** | **Bear Paw Mtn.** | **16.02** | **33** | P | **Pn** | **16 53 44.8** | **-0.5** |
| | baz=230,SNR=120 | | | | | | |
| BPAW | | | | S | **Sn** | **16 56 44.3** | **+2.6** |
| | baz=230 | | | | | | |
| **WAT1** | **Susitna Watana** | **16.18** | **39** | S | **S** | **16 56 53.1** | **-3.9** |
| | baz=238 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **16.19** | **43** | P | **Pn** | **16 53 45.9** | **-1.5** |
| | baz=243,SNR=61 | | | | | | |
| **D17K** | **Noatak River** | **16.20** | **11** | P | **Pn** | **16 53 48.3** | **+0.9** |
| | baz=198,SNR=85 | | | | | | |
| D17K | | | | S | **S** | **16 56 57.1** | **-0.2** |
| | baz=198 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **16.26** | **19** | P | **Pn** | **16 53 48.5** | **+0.3** |
| | baz=210,SNR=150 | | | | | | |
| F19K | | | | S | **S** | **16 56 57.6** | **-1.0** |
| | baz=210 | | | | | | |
| **E18K** | **Tukpahlearik C** | **16.28** | **15** | P | **P** | **16 53 49.9** | **-1.1** |
| | baz=204,SNR=86 | | | | | | |
| E18K | | | | S | **S** | **16 57 00.1** | **+1.1** |
| | baz=204 | | | | | | |
| **WAT6** | **Susitna Watana** | **16.37** | **41** | P | **Pn** | **16 53 48.9** | **-0.9** |
| | baz=240,SNR=104 | | | | | | |
| WAT6 | | | | S | **S** | **16 56 57.1** | **-4.2** |
| | baz=240 | | | | | | |
| **RND** | **Reindeer** | **16.37** | **37** | Pn | **Pn** | **16 53 49.4** | **-0.3** |
| **RND** | **Reindeer** | **16.37** | **37** | P | **Pn** | **16 53 49.4** | **-0.3** |
| RND | | | | pmax | pmax | | |
| | comp=Z,38nm,0.7s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **16.39** | **49** | P | **Pn** | **16 53 49.2** | **-0.6** |
| **EYAK** | **Cordova Ski Ar** | **16.39** | **49** | P | **Pn** | **16 53 48.6** | **-1.2** |
| | baz=250,SNR=11 | | | | | | |
| **MCK** | **McKinley** | **16.53** | **36** | P | **Pn** | **16 53 49.4** | **-2.2** |
| | baz=235,SNR=31 | | | | | | |
| MCK | | | | S | **S** | **16 56 59.2** | **-4.9** |
| | baz=235 | | | | | | |
| **H21K** | **Melozitna Rive** | **16.53** | **27** | P | **Pn** | **16 53 51.2** | **-0.4** |
| | baz=223,SNR=97 | | | | | | |
| H21K | | | | S | **S** | **16 56 59.6** | **-4.5** |
| | baz=223 | | | | | | |
| H21K | | | | S | **S** | **16 56 59.6** | **-4.5** |
| | baz=223 | | | | | | |
| **C16K** | **Lisburne Hills** | **16.53** | **8** | P | **P** | **16 53 53.5** | **-0.2** |
| | baz=192,SNR=36 | | | | | | |
| C16K | | | | S | **S** | **16 57 02.4** | **-1.6** |
| | baz=192 | | | | | | |
| **RDOG** | **Red Dog Mine** | **16.56** | **11** | P | **P** | **16 53 54.6** | **+0.5** |
| | baz=198,SNR=11 | | | | | | |
| RDOG | | | | S | **S** | **16 57 05.2** | **+0.6** |
| | baz=198 | | | | | | |
| **BWN** | **Browne** | **16.59** | **35** | Pn | **Pn** | **16 53 52.0** | **-0.4** |
| **KLU** | **Klutina** | **16.66** | **46** | P | **Pn** | **16 53 49.5** | **-3.8** |
| | baz=247,SNR=35 | | | | | | |
| **MLY** | **Manley** | **16.71** | **31** | P | **Pn** | **16 53 53.0** | **-1.0** |
| | baz=228,SNR=121 | | | | | | |
| MLY | | | | S | **S** | **16 57 05.4** | **-2.6** |
| | baz=228 | | | | | | |
| **DHY** | **Denali Highway** | **16.76** | **40** | P | **Pn** | **16 53 52.7** | **-2.0** |
| | baz=240,SNR=25 | | | | | | |
| DHY | | | | S | **Sn** | **16 57 02.6** | **+2.8** |
| | baz=240 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **16.80** | **43** | P | **Pn** | **16 53 54.1** | **-1.0** |
| | baz=244,SNR=32 | | | | | | |
| **KAIM** | **Kayak Island** | **16.82** | **52** | P | **Pn** | **16 53 54.4** | **-0.9** |
| | baz=254 | | | | | | |
| **F20K** | **Avaraart Lake** | **16.88** | **21** | P | **P** | **16 53 57.6** | **+0.1** |
| | baz=214,SNR=74 | | | | | | |
| F20K | | | | S | **Sn** | **16 57 05.3** | **+3.1** |
| | baz=214 | | | | | | |
| **E19K** | **Redstone River** | **16.91** | **19** | P | **P** | **16 53 57.2** | **-0.7** |
| | baz=210,SNR=93 | | | | | | |
| E19K | | | | S | **S** | **16 57 08.8** | **-3.0** |
| | baz=210 | | | | | | |
| **C17K** | **DeLong Mountai** | **16.93** | **10** | P | **P** | **16 53 58.6** | **+0.4** |
| | baz=197,SNR=46 | | | | | | |
| C17K | | | | S | **S** | **16 57 12.5** | **+0.2** |
| | baz=197 | | | | | | |
| **G21K** | **Allakaket** | **16.98** | **25** | P | **Pn** | **16 53 57.1** | **-0.2** |
| | baz=220,SNR=74 | | | | | | |
| G21K | | | | S | **S** | **16 57 11.1** | **-2.3** |
| | baz=220 | | | | | | |
| **NEA2** | **Nenana** | **16.99** | **34** | P | **Pn** | **16 53 55.3** | **-2.0** |
| | baz=232,SNR=60 | | | | | | |
| NEA2 | | | | S | **Sn** | **16 57 07.7** | **+2.8** |
| | baz=232 | | | | | | |
| **BMRM** | **Bremner River** | **17.06** | **48** | P | **Pn** | **16 53 55.8** | **-2.5** |
| | baz=250,SNR=34 | | | | | | |
| BMRM | | | | S | **Sn** | **16 57 09.4** | **+2.7** |
| | baz=250 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **17.11** | **28** | P | **P** | **16 53 59.8** | **-0.4** |
| | baz=225,SNR=107 | | | | | | |
| H22K | | | | S | **Sn** | **16 57 11.5** | **+3.6** |
| | baz=225 | | | | | | |
| H22K | | | | S | **Sn** | **16 57 11.5** | **+3.6** |
| | baz=225 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **17.23** | **32** | P | **Pn** | **16 53 59.4** | **-1.0** |
| | baz=231,SNR=139 | | | | | | |
| I23K | | | | S | **Sn** | **16 57 12.9** | **+2.1** |
| | baz=231 | | | | | | |
| I23K | | | | S | **Sn** | **16 57 12.9** | **+2.1** |
| | baz=231 | | | | | | |
| **N25K** | **Chitina, Valde** | **17.29** | **46** | P | **Pn** | **16 53 59.1** | **-2.1** |
| | baz=248,SNR=23 | | | | | | |
| N25K | | | | S | **S** | **16 57 17.5** | **-2.2** |
| | baz=248 | | | | | | |
| **C18K** | **Utukok River** | **17.34** | **12** | P | **P** | **16 54 03.6** | **+1.0** |
| | baz=201,SNR=98 | | | | | | |
| C18K | | | | S | **S** | **16 57 19.5** | **-1.1** |
| | baz=201 | | | | | | |
| **HARP** | **HAARP** | **17.36** | **43** | P | **Pn** | **16 53 59.7** | **-2.3** |
| | baz=245,SNR=13 | | | | | | |
| **PAX** | **Paxson** | **17.48** | **41** | P | **Pn** | **16 54 00.3** | **-3.2** |
| | baz=243,SNR=24 | | | | | | |
| PAX | | | | S | **Sn** | **16 57 19.6** | **+2.7** |
| | baz=243 | | | | | | |
| **F21K** | **Alatna River** | **17.54** | **23** | P | **P** | **16 54 04.7** | **-0.3** |
| | baz=218,SNR=115 | | | | | | |
| F21K | | | | S | **S** | **16 57 22.1** | **-2.6** |
| | baz=218 | | | | | | |
| **COLA** | **College** | **17.57** | **34** | P | **P** | **16 54 05.9** | **+0.7** |
| **H23K** | **Yukon River** | **17.62** | **30** | P | **Pn** | **16 54 04.9** | **-0.3** |
| | baz=229 | | | | | | |
| H23K | | | | S | **Sn** | **16 57 22.8** | **+2.7** |
| | baz=229 | | | | | | |
| H23K | | | | S | **Sn** | **16 57 22.8** | **+2.7** |
| | baz=229 | | | | | | |
| **HDA** | **Harding Lake** | **17.63** | **36** | P | **Pn** | **16 54 01.5** | **-3.8** |
| | baz=237,SNR=35 | | | | | | |
| HDA | | | | S | **Sn** | **16 57 22.2** | **+1.8** |
| | baz=237 | | | | | | |
| **D19K** | **Kuna River** | **17.66** | **16** | P | **P** | **16 54 06.5** | **+0.3** |
| | baz=207,SNR=116 | | | | | | |
| D19K | | | | S | **S** | **16 57 26.4** | **-0.7** |
| | baz=207 | | | | | | |
| **CRQE** | **Cirque** | **17.69** | **50** | P | **Pn** | **16 54 04.3** | **-2.0** |
| | baz=253,SNR=24 | | | | | | |
| **K24K** | **Donnelly Dome** | **17.75** | **39** | P | **Pn** | **16 54 04.4** | **-2.4** |
| | baz=240,SNR=20 | | | | | | |
| **E20K** | **Nigu River** | **17.80** | **18** | P | **P** | **16 54 08.0** | **+0.1** |
| | baz=211,SNR=131 | | | | | | |
| E20K | | | | S | **S** | **16 57 29.6** | **-0.4** |
| | baz=211 | | | | | | |
| **G22K** | **Bettles** | **17.82** | **26** | P | **Pn** | **16 54 07.2** | **-0.3** |
| | baz=223 | | | | | | |
| **ILAR** | **Eielson Array** | **17.85** | **35** | Pn | **Pn** | **16 54 04.2** | **-3.9** |
| **ILAR** | **Eielson Array** | **17.85** | **35** | P | **Pn** | **16 54 05.3** | **-2.7** |
| | comp=Z,1.3nm,0.3s,baz=223,slow=11,SNR=54 | | | | | | |
| | | | | PcP | **PcP** | **16 58 42.9** | **+0.3** |
| | comp=Z,12nm,0.8s,baz=307,slow=3.3,SNR=6.3 | | | | | | |
| ILAR | | | | LR | LR | 17 01 37.8 | |
| | comp=Z,25µm,18.1s,baz=230,slow=39 | | | | | | |
| ILAR | | | | ScP | **ScP** | **17 02 13.2** | **-0.8** |
| | comp=Z,3.3nm,0.8s,baz=308,slow=3.3,SNR=7.7 | | | | | | |
| ILAR | | | | ScS | **ScS** | **17 06 00.8** | **+6.7** |
| | comp=Z,1.1nm,0.8s,baz=232,slow=5.6,SNR=4.5 comp=Z,19nm,0.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **17.86** | **34** | P | **Pn** | **16 54 05.3** | **-2.8** |
| | baz=234 | | | | | | |
| POKR | | | | S | **Sn** | **16 57 28.2** | **+2.2** |
| | baz=234 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **17.92** | **48** | P | **Pn** | **16 54 06.3** | **-2.6** |
| | baz=251,SNR=52 | | | | | | |
| **B18K** | **Kokolik River** | **17.94** | **11** | P | **P** | **16 54 09.7** | **+0.5** |
| | baz=199,SNR=36 | | | | | | |
| B18K | | | | S | **S** | **16 57 34.6** | **+2.0** |
| | baz=199 | | | | | | |
| **C19K** | **Lookout Ridge** | **17.98** | **13** | P | **P** | **16 54 10.8** | **+1.0** |
| | baz=203,SNR=68 | | | | | | |
| C19K | | | | S | **S** | **16 57 35.6** | **+1.9** |
| | baz=203 | | | | | | |
| **G23K** | **Bananza Creek** | **18.08** | **28** | P | **Pn** | **16 54 10.6** | **-0.2** |
| | baz=226,SNR=161 | | | | | | |
| G23K | | | | S | **S** | **16 57 34.2** | **-1.4** |
| | baz=226 | | | | | | |
| **F22K** | **John River** | **18.08** | **24** | P | **P** | **16 54 11.6** | **+0.7** |
| | baz=220,SNR=88 | | | | | | |
| F22K | | | | S | **S** | **16 57 34.9** | **-0.8** |
| | baz=220 | | | | | | |
| **RIDG** | **Independent Ri** | **18.08** | **39** | P | **Pn** | **16 54 08.7** | **-2.2** |
| | baz=242,SNR=36 | | | | | | |
| RIDG | | | | S | **Sn** | **16 57 33.3** | **+1.8** |
| | baz=242 | | | | | | |
| **MESA** | **MESA** | **18.09** | **52** | P | **Pn** | **16 54 08.3** | **-2.8** |
| | baz=256,SNR=8.2 | | | | | | |
| MESA | | | | S | **S** | **16 57 34.3** | **-1.9** |
| | baz=256 | | | | | | |
| **D20K** | **Etivluk River** | **18.12** | **17** | P | **P** | **16 54 11.9** | **+0.7** |
| | baz=210,SNR=87 | | | | | | |
| D20K | | | | S | **S** | **16 57 37.6** | **+1.2** |
| | baz=210 | | | | | | |
| **H24K** | **Noodor Dome** | **18.15** | **32** | P | **P** | **16 54 10.4** | **-1.3** |
| | baz=231,SNR=184 | | | | | | |
| H24K | | | | S | **S** | **16 57 35.9** | **-1.2** |
| | baz=231 | | | | | | |
| H24K | | | | S | **S** | **16 57 35.9** | **-1.2** |
| | baz=231 | | | | | | |
| **M26K** | **Nabesna, AK** | **18.28** | **45** | P | **P** | **16 54 10.3** | **-2.9** |
| | baz=248,SNR=44 | | | | | | |
| **J25K** | **Salcha River,** | **18.32** | **37** | P | **P** | **16 54 10.2** | **-3.4** |
| | baz=239,SNR=216 | | | | | | |
| J25K | | | | S | **Sn** | **16 57 36.0** | **-1.1** |
| | baz=239 | | | | | | |
| J25K | | | | S | **Sn** | **16 57 36.0** | **-1.1** |
| | baz=239 | | | | | | |
| **PET** | **Petropavlovsk** | **18.32** | **285** | P | **Pn** | **16 54 15.5** | **+1.7** |
| **PET** | **Petropavlovsk** | **18.32** | **285** | *e*P | **Pn** | **16 54 13.9** | **+0.1** |
| PET | | | | *e*S | **Sn** | **16 57 26.6** | **-11** |
| PET | | | | pmax | pmax | | |
| | comp=Z,151nm,0.9s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,5µm,11.7s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,6µm,10.5s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,9µm,18.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,8µm,16.0s | | | | | | |
| **L26K** | **Log Cabin Wild** | **18.38** | **42** | P | **P** | **16 54 11.0** | **-3.1** |
| | baz=246,SNR=19 | | | | | | |
| L26K | | | | S | **Sn** | **16 57 37.4** | **-1.1** |
| | baz=246 | | | | | | |
| L26K | | | | S | **Sn** | **16 57 37.4** | **-1.1** |
| | baz=246 | | | | | | |
| **COLD** | **Coldfoot** | **18.39** | **26** | P | **P** | **16 54 13.6** | **-0.6** |
| | baz=224,SNR=88 | | | | | | |
| COLD | | | | S | **S** | **16 57 40.8** | **-1.1** |
| | baz=224 | | | | | | |
| **E21K** | **Killik River** | **18.41** | **20** | P | **Pn** | **16 54 14.7** | **-0.1** |
| | baz=215,SNR=120 | | | | | | |
| E21K | | | | S | **S** | **16 57 42.7** | **+0.5** |
| | baz=215 | | | | | | |
| **SCRK** | **Sand Creek** | **18.53** | **39** | P | **P** | **16 54 12.5** | **-3.4** |
| | baz=242,SNR=89 | | | | | | |
| SCRK | | | | S | **Sn** | **16 57 43.4** | **+1.0** |
| | baz=242 | | | | | | |
| **CTG** | **Chitna Glacier** | **18.58** | **50** | P | **P** | **16 54 13.9** | **-2.6** |
| | baz=255,SNR=193 | | | | | | |
| CTG | | | | S | **Sn** | **16 57 44.5** | **+1.0** |
| | baz=255 | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **18.65** | **23** | P | **P** | **16 54 16.9** | **-0.3** |
| | baz=220,SNR=66 | | | | | | |
| E22K | | | | S | **S** | **16 57 47.9** | **+0.7** |
| | baz=220 | | | | | | |
| **PRP** | **Porcupine Dome** | **18.75** | **34** | P | **P** | **16 54 15.0** | **-3.4** |
| | baz=236,SNR=36 | | | | | | |
| PRP | | | | S | **Sn** | **16 57 47.5** | **-0.1** |
| | baz=236 | | | | | | |
| **M27K** | **Edge Creek, AK** | **18.75** | **45** | P | **P** | **16 54 15.7** | **-2.8** |
| | baz=250,SNR=83 | | | | | | |
| M27K | | | | S | **Sn** | **16 57 46.1** | **-1.7** |
| | baz=250 | | | | | | |
| M27K | | | | S | **Sn** | **16 57 46.1** | **-1.7** |
| | baz=250 | | | | | | |
| **A19K** | **Wainwright** | **18.82** | **11** | S | **S** | **16 57 52.6** | **+2.3** |
| | baz=199 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **18.82** | **30** | P | **P** | **16 54 18.2** | **-0.8** |
| | baz=230,SNR=150 | | | | | | |
| G24K | | | | S | **Sn** | **16 57 48.5** | **-0.7** |
| | baz=230 | | | | | | |
| **C21K** | **Knifeblade Rid** | **18.84** | **18** | P | **Pn** | **16 54 20.0** | **0.0** |
| | baz=212 | | | | | | |
| C21K | | | | S | **S** | **16 57 51.6** | **+0.7** |
| | baz=212 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **18.88** | **286** | | **Pn** | **16 54 21.4** | **+0.8** |
| PEA0B | | | | IAmb | IAmb | 16 54 24.4 | |
| | comp=Z,523nm,1.3s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **18.88** | **286** | P | **Pn** | **16 54 21.4** | **+0.8** |
| PEA0B | | | | pmax | pmax | | |
| | comp=Z,523nm,1.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **18.88** | **286** | P | **P** | **16 54 20.1** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **18.88** | **286** | P | **Pn** | **16 54 21.3** | **+0.7** |
| | comp=Z,20nm,0.3s,baz=82,slow=14,SNR=235 | | | | | | |
| PETK | | | | PcP | **PcP** | **16 58 43.7** | **-0.7** |
| | comp=Z,12nm,0.8s,baz=126,slow=4.6,SNR=4.0 | | | | | | |
| PETK | | | | LR | LR | 17 02 10.8 | |
| | comp=Z,10µm,19.0s,baz=91,slow=39 | | | | | | |
| PETK | | | | ScP | **ScP** | **17 02 16.1** | **-0.4** |
| | comp=Z,8.3nm,0.9s,baz=113,slow=5.2,SNR=7.5 comp=Z,102nm,0.5s | | | | | | |
| **J26L** | **Joseph Creek** | **18.94** | **38** | P | **P** | **16 54 17.6** | **-2.8** |
| | baz=242,SNR=254 | | | | | | |
| J26L | | | | S | **S** | **16 57 53.6** | **+0.4** |
| | baz=242 | | | | | | |
| J26L | | | | S | **S** | **16 57 53.6** | **+0.4** |
| | baz=242 | | | | | | |
| **L27K** | **Beaver Creek,** | **19.03** | **43** | P | **P** | **16 54 18.9** | **-2.4** |
| | baz=248,SNR=27 | | | | | | |
| L27K | | | | S | **S** | **16 57 54.8** | **0.0** |
| | baz=248 | | | | | | |
| **D22K** | **Ayikyak River** | **19.04** | **21** | P | **Pn** | **16 54 22.0** | **-0.5** |
| | baz=217 | | | | | | |
| D22K | | | | S | **S** | **16 57 54.8** | **-0.2** |
| | baz=217 | | | | | | |
| **BCAR** | **Beaver Creek A** | **19.05** | **43** | P | **P** | **16 54 20.1** | **-1.4** |
| **O28M** | **Mount Upton** | **19.07** | **51** | P | **P** | **16 54 21.0** | **-1.1** |
| | baz=257,SNR=138 | | | | | | |
| O28M | | | | S | **Sn** | **16 57 54.5** | **-1.2** |
| | baz=257 | | | | | | |
| **H25L** | **Birch Creek** | **19.08** | **32** | S | **S** | **16 57 57.4** | **+1.7** |
| | baz=234 | | | | | | |
| **E23K** | **Chandalar** | **19.15** | **25** | P | **P** | **16 54 22.3** | **-0.3** |
| | baz=224,SNR=100 | | | | | | |
| E23K | | | | S | **S** | **16 57 58.9** | **+1.6** |
| | baz=224 | | | | | | |
| **B20K** | **Meade River** | **19.17** | **15** | P | **P** | **16 54 22.9** | **+0.2** |
| | baz=207,SNR=35 | | | | | | |
| B20K | | | | S | **S** | **16 58 00.5** | **+3.1** |
| | baz=207 | | | | | | |
| **YUK3** | **Moose Creek** | **19.21** | **48** | P | **P** | **16 54 20.9** | **-2.6** |
| | baz=253,SNR=91 | | | | | | |
| YUK3 | | | | S | **S** | **16 57 56.6** | **-2.1** |
| | baz=253 | | | | | | |
| **F24K** | **Squaw Lake** | **19.24** | **27** | P | **P** | **16 54 23.9** | **+0.3** |
| | baz=228,SNR=95 | | | | | | |
| F24K | | | | S | **Sn** | **16 58 00.8** | **+1.6** |
| | baz=228 | | | | | | |
| **PNL** | **Peninsula** | **19.25** | **54** | P | **Pn** | **16 54 24.4** | **-0.5** |
| **PNL** | **Peninsula** | **19.25** | **54** | P | **P** | **16 54 23.3** | **-0.3** |
| | baz=261,SNR=31 | | | | | | |
| PNL | | | | S | **S** | **16 57 58.8** | **-0.4** |
| | baz=261 | | | | | | |
| **B21K** | **Ikpikpuk River** | **19.27** | **18** | P | **P** | **16 54 23.3** | **-0.4** |
| | baz=212,SNR=58 | | | | | | |
| B21K | | | | S | **Sn** | **16 58 01.5** | **+1.7** |
| | baz=212 | | | | | | |
| **G25K** | **Bearman Lake** | **19.29** | **31** | P | **P** | **16 54 23.0** | **-1.1** |
| | baz=232,SNR=104 | | | | | | |
| G25K | | | | S | **S** | **16 57 57.7** | **-2.2** |
| | baz=232 | | | | | | |
| **K27K** | **Chicken** | **19.31** | **40** | P | **P** | **16 54 22.3** | **-2.1** |
| | baz=245,SNR=43 | | | | | | |
| K27K | | | | S | **S** | **16 58 00.1** | **-0.3** |
| | baz=245 | | | | | | |
| K27K | | | | S | **S** | **16 58 00.1** | **-0.3** |
| | baz=245 | | | | | | |
| **BILL** | **Bilibino** | **19.40** | **334** | *c i*P | **P** | **16 54 25.2** | **0.0** |
| BILL | | | | *e*S | **S** | **16 58 00.0** | **-2.1** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,620nm,1.3s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,20µm,17.0s | | | | | | |
| **YUK8** | **Steele Glacier** | **19.40** | **49** | P | **P** | **16 54 24.0** | **-1.6** |
| | baz=256,SNR=69 | | | | | | |
| YUK8 | | | | S | **Sn** | **16 58 03.8** | **+0.3** |
| | baz=256 | | | | | | |
| **E24K** | **Your Creek** | **19.46** | **26** | P | **P** | **16 54 26.1** | **+0.1** |
| | baz=225,SNR=119 | | | | | | |
| E24K | | | | S | **Sn** | **16 58 06.9** | **+2.3** |
| | baz=225 | | | | | | |
| **I26K** | **Coal Creek Min** | **19.48** | **36** | P | **P** | **16 54 22.7** | **-3.5** |
| | baz=240 | | | | | | |
| I26K | | | | S | **S** | **16 58 03.2** | **-0.7** |
| | baz=240 | | | | | | |
| I26K | | | | S | **S** | **16 58 03.2** | **-0.7** |
| | baz=240 | | | | | | |
| **D23K** | **Nanushuk River** | **19.56** | **22** | P | **P** | **16 54 26.6** | **-0.4** |
| | baz=220,SNR=52 | | | | | | |
| D23K | | | | S | **S** | **16 58 05.5** | **+0.2** |
| | baz=220 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **19.58** | **24** | P | **P** | **16 54 27.4** | **+0.1** |
| | baz=222,SNR=66 | | | | | | |
| TOLK | | | | S | **Sn** | **16 58 07.3** | **-0.3** |
| | baz=222 | | | | | | |
| **O29M** | **Mount Kennedy** | **19.76** | **53** | P | **P** | **16 54 30.0** | **+0.6** |
| | baz=260,SNR=221 | | | | | | |
| O29M | | | | S | **S** | **16 58 08.1** | **-1.6** |
| | baz=260 | | | | | | |
| **YUK4** | **Talbot Arm** | **19.94** | **49** | P | **P** | **16 54 31.3** | **-0.1** |
| | baz=257,SNR=103 | | | | | | |
| **F25K** | **Christian Rive** | **19.95** | **29** | P | **P** | **16 54 30.2** | **-1.0** |
| | baz=231,SNR=239 | | | | | | |
| F25K | | | | S | **Sn** | **16 58 15.3** | **-0.9** |
| | baz=231 | | | | | | |
| **YUK6** | **Outpost Mounta** | **19.98** | **51** | P | **P** | **16 54 30.8** | **-1.2** |
| | baz=258,SNR=104 | | | | | | |
| YUK6 | | | | S | **S** | **16 58 10.9** | **-3.4** |
| | baz=258 | | | | | | |
| **P29M** | **Windy Craggy** | **20.07** | **55** | P | **P** | **16 54 32.7** | **0.0** |
| | baz=262,SNR=104 | | | | | | |
| P29M | | | | S | **S** | **16 58 14.5** | **-1.2** |
| | baz=262 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **20.10** | **17** | P | **P** | **16 54 31.9** | **-0.9** |
| | baz=213,SNR=40 | | | | | | |
| B22K | | | | S | **S** | **16 58 15.7** | **-0.2** |
| | baz=213 | | | | | | |
| **G26K** | **Porcupine Rive** | **20.14** | **32** | P | **P** | **16 54 31.4** | **-1.9** |
| | baz=235,SNR=145 | | | | | | |
| G26K | | | | S | **S** | **16 58 16.1** | **-0.7** |
| | baz=235 | | | | | | |
| **D24K** | **Happy Valley** | **20.15** | **23** | IAMs_20 | IAMs_20 | 17 02 33.0 | |
| | comp=Z,26µm,21.0s | | | | | | |
| **D24K** | **Happy Valley** | **20.15** | **23** | P | **P** | **16 54 32.3** | **-1.1** |
| | baz=223 | | | | | | |
| D24K | | | | S | **S** | **16 58 16.9** | **-0.1** |
| | baz=223 | | | | | | |
| **I27K** | **Kandik River** | **20.19** | **36** | P | **P** | **16 54 31.4** | **-2.6** |
| | baz=242,SNR=319 | | | | | | |
| I27K | | | | S | **S** | **16 58 13.3** | **-4.7** |
| | baz=242 | | | | | | |
| I27K | | | | S | **S** | **16 58 13.3** | **-4.7** |
| | baz=242 | | | | | | |
| **C23K** | **Itkillik River** | **20.25** | **21** | IAMs_20 | IAMs_20 | 17 02 59.6 | |
| | comp=Z,25µm,20.0s | | | | | | |
| **C23K** | **Itkillik River** | **20.25** | **21** | P | **P** | **16 54 33.8** | **-0.7** |
| | baz=219,SNR=192 | | | | | | |
| C23K | | | | S | **S** | **16 58 19.3** | **+0.3** |
| | baz=219 | | | | | | |
| **M29M** | **Somme Creek** | **20.30** | **46** | IAMs_20 | IAMs_20 | 17 03 09.3 | |
| | comp=Z,30µm,18.0s | | | | | | |
| **M29M** | **Somme Creek** | **20.30** | **46** | P | **P** | **16 54 33.8** | **-1.4** |
| | baz=254,SNR=124 | | | | | | |
| M29M | | | | S | **S** | **16 58 18.0** | **-2.2** |
| | baz=254 | | | | | | |
| **SKR** | **Severo-Kuril's** | **20.38** | **279** | *e*P | **P** | **16 54 36.5** | **+0.5** |
| SKR | | | | *e*S | S | 16 58 09.4 | -12 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,231nm,0.7s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,1µm,6.5s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,9µm,19.0s | | | | | | |
| **A22K** | **Sinclair Lake** | **20.39** | **15** | P | **P** | **16 54 33.9** | **-2.1** |
| | baz=209 | | | | | | |
| A22K | | | | S | **S** | **16 58 21.0** | **-0.8** |
| | baz=209 | | | | | | |
| **DAWY** | **Dawson** | **20.41** | **42** | P | **P** | **16 54 33.6** | **-2.8** |
| | baz=249,SNR=56 | | | | | | |
| DAWY | | | | S | **S** | **16 58 18.3** | **-4.2** |
| | baz=249 | | | | | | |
| **A21K** | **Barrow** | **20.43** | **13** | P | **P** | **16 54 34.6** | **-1.7** |
| | baz=206 | | | | | | |
| A21K | | | | S | **S** | **16 58 21.8** | **-0.6** |
| | baz=206 | | | | | | |
| **F26K** | **Sheenjek River** | **20.46** | **30** | IAMs_20 | IAMs_20 | 17 03 07.5 | |
| | comp=Z,32µm,19.0s | | | | | | |
| **F26K** | **Sheenjek River** | **20.46** | **30** | P | **P** | **16 54 35.3** | **-1.5** |
| | baz=233,SNR=69 | | | | | | |
| F26K | | | | S | **S** | **16 58 18.0** | **-5.3** |
| | baz=233 | | | | | | |
| **H27K** | **Steamboat Moun** | **20.52** | **35** | P | **P** | **16 54 34.8** | **-2.8** |
| | baz=240,SNR=69 | | | | | | |
| H27K | | | | S | **S** | **16 58 22.9** | **-1.7** |
| | baz=240 | | | | | | |
| **P30M** | **Million Dollar** | **20.53** | **53** | P | **P** | **16 54 37.5** | **-0.2** |
| | baz=262 | | | | | | |
| P30M | | | | S | **S** | **16 58 21.9** | **-2.9** |
| | baz=262 | | | | | | |
| **C24K** | **Franklin Bluff** | **20.59** | **22** | IAMs_20 | IAMs_20 | 17 03 20.2 | |
| | comp=Z,23µm,18.0s | | | | | | |
| **C24K** | **Franklin Bluff** | **20.59** | **22** | P | **P** | **16 54 37.0** | **-1.2** |
| | baz=222 | | | | | | |
| C24K | | | | S | **S** | **16 58 26.6** | **+0.8** |
| | baz=222 | | | | | | |
| **N30M** | **Aishikik Lake** | **20.69** | **50** | P | **P** | **16 54 38.2** | **-1.2** |
| | baz=258,SNR=155 | | | | | | |
| N30M | | | | S | **S** | **16 58 28.6** | **+0.6** |
| | baz=258 | | | | | | |
| **S31K** | **Pelican** | **20.73** | **60** | P | **P** | **16 54 37.4** | **-2.3** |
| | baz=268,SNR=34 | | | | | | |
| S31K | | | | S | **S** | **16 58 29.3** | **+0.8** |
| | baz=268 | | | | | | |
| S31K | | | | S | **S** | **16 58 29.3** | **+0.8** |
| | baz=268 | | | | | | |
| **I28M** | **Miner Creek** | **20.75** | **38** | P | **P** | **16 54 37.7** | **-2.3** |
| | baz=245,SNR=198 | | | | | | |
| I28M | | | | S | **S** | **16 58 30.4** | **+1.3** |
| | baz=245 | | | | | | |
| **PLBC** | **Pleasant Camp** | **20.75** | **55** | P | **P** | **16 54 38.7** | **-1.2** |
| | baz=264,SNR=81 | | | | | | |
| PLBC | | | | S | **S** | **16 58 26.5** | **-2.5** |
| | baz=264 | | | | | | |
| **G27K** | **Doyon Strip** | **20.77** | **33** | P | **P** | **16 54 37.8** | **-2.4** |
| | baz=239,SNR=46 | | | | | | |
| G27K | | | | S | **S** | **16 58 26.1** | **-3.4** |
| | baz=239 | | | | | | |
| **D25K** | **Kavik River** | **20.88** | **25** | P | **P** | **16 54 40.5** | **-0.9** |
| | baz=226,SNR=113 | | | | | | |
| D25K | | | | S | **S** | **16 58 29.6** | **-2.1** |
| | baz=226 | | | | | | |
| **R31K** | **City Hall, Gus** | **21.00** | **58** | P | **P** | **16 54 40.1** | **-2.6** |
| | baz=268 | | | | | | |
| R31K | | | | S | **S** | **16 58 36.0** | **+2.0** |
| | baz=268 | | | | | | |
| **J29N** | **Klondike Camp** | **21.03** | **41** | IAMs_20 | IAMs_20 | 17 04 01.7 | |
| | comp=Z,25µm,19.0s | | | | | | |
| **J29N** | **Klondike Camp** | **21.03** | **41** | P | **P** | **16 54 41.6** | **-1.5** |
| | baz=249,SNR=8.6 | | | | | | |
| **O30N** | **Mendenhall** | **21.05** | **52** | P | **P** | **16 54 42.1** | **-1.1** |
| | baz=261,SNR=79 | | | | | | |
| O30N | | | | S | **S** | **16 58 31.5** | **-3.5** |
| | baz=261 | | | | | | |
| **K29M** | **Barlow Dome** | **21.12** | **43** | IAMs_20 | IAMs_20 | 17 03 53.1 | |
| | comp=Z,27µm,19.0s | | | | | | |
| **K29M** | **Barlow Dome** | **21.12** | **43** | P | **P** | **16 54 42.9** | **-1.1** |
| | baz=252 | | | | | | |
| K29M | | | | S | **S** | **16 58 39.8** | **+3.3** |
| | baz=252 | | | | | | |
| **SIT** | **Sitka** | **21.22** | **62** | P | **P** | **16 54 47.0** | **+2.0** |
| **SIT** | **Sitka** | **21.22** | **62** | P | **P** | **16 54 42.4** | **-2.6** |
| | baz=272,SNR=8.2 | | | | | | |
| SIT | | | | S | **S** | **16 58 40.5** | **+2.3** |
| | baz=272 | | | | | | |
| **SKAG** | **Skagway** | **21.27** | **56** | P | **P** | **16 54 46.0** | **+0.4** |
| **SKAG** | **Skagway** | **21.27** | **56** | P | **P** | **16 54 45.6** | **0.0** |

baz=265,SNR=101
SKAG S S 16 58 40.2 +0.8
baz=265
**N31M Braeburn, Yuko** 21.32 50 IAMs_20 IAMs_20 17 03 58.3
comp=Z,24µm,19.0s
**N31M Braeburn, Yuko** 21.32 50 P P 16 54 44.6 -1.5
baz=260,SNR=41
N31M S S 16 58 44.5 +4.2
baz=260
**I29M Ogilvie Camp,** 21.33 39 IAMs_20 IAMs_20 17 03 37.6
comp=Z,27µm,18.0s
**I29M Ogilvie Camp,** 21.33 39 P P 16 54 42.9 -3.3
baz=247,SNR=42
I29M S S 16 58 39.5 -1.1
baz=247
**E27K Coleen River** 21.53 30 IAMs_20 IAMs_20 17 03 48.8
comp=Z,24µm,19.0s
**E27K Coleen River** 21.53 30 P P 16 54 46.4 -2.0
baz=236,SNR=81
E27K S S 16 58 45.1 +0.6
baz=236
**S32K Killisnoo** 21.61 61 P P 16 54 47.1 -2.1
baz=271,SNR=42
S32K S S 16 58 49.6 +3.6
baz=271
S32K S S 16 58 49.6 +3.6
baz=271
**WHY Whitehorse** 21.62 52 P P 16 54 49.7 +0.2
**WHY Whitehorse** 21.62 52 P P 16 54 48.3 -1.1
baz=263,SNR=59
WHY S S 16 58 48.8 +2.3
baz=263
**R32K Eaglecrest** 21.64 59 P P 16 54 48.0 -1.5
baz=269,SNR=30
R32K S S 16 58 49.2 +2.5
baz=269
R32K S S 16 58 49.2 +2.5
baz=269
**H29M Whitestone** 21.66 37 IAMs_20 IAMs_20 17 03 56.2
comp=Z,26µm,18.0s
**H29M Whitestone** 21.66 37 P P 16 54 47.3 -2.3
baz=245,SNR=173
H29M S S 16 58 45.4 -1.5
baz=245
**C26K Camden Bay** 21.66 24 P P 16 54 48.7 -1.0
baz=228,SNR=39
C26K S S 16 58 48.3 +1.4
baz=228
**JIS Juneau Island** 21.71 59 P P 16 54 50.9 +0.6
**F28M Old Crow** 21.78 32 IAMs_20 IAMs_20 17 04 07.4
comp=Z,25µm,18.0s
**F28M Old Crow** 21.78 32 P P 16 54 48.2 -2.8
baz=240,SNR=80
F28M S S 16 58 48.1 -1.2
baz=240
**C27K Jago River** 21.79 26 IAMs_20 IAMs_20 17 03 44.7
comp=Z,19µm,20.0s
**C27K Jago River** 21.79 26 P P 16 54 48.5 -2.6
baz=230,SNR=46
C27K S S 16 58 48.0 -1.4
baz=230
**J30M Hart River** 21.84 42 IAMs_20 IAMs_20 17 04 36.1
comp=Z,20µm,19.0s
**J30M Hart River** 21.84 42 P P 16 54 48.4 -3.4
baz=251,SNR=108
J30M S S 16 58 49.2 -1.5
baz=251
**I30M Mount Dempster** 22.04 40 IAMs_20 IAMs_20 17 03 59.2
comp=Z,28µm,20.0s
**I30M Mount Dempster** 22.04 40 P P 16 54 50.1 -3.8
baz=250,SNR=152
I30M S S 16 58 50.9 -3.4
baz=250
**G29M Pine Creek** 22.08 35 IAMs_20 IAMs_20 17 04 11.4
comp=Z,27µm,18.0s
**G29M Pine Creek** 22.08 35 P P 16 54 51.1 -3.1
baz=244,SNR=82
G29M S S 16 58 48.4 -6.6
baz=244
**SEY Seymchan** 22.09 314 P P 16 54 55.1 +0.8
comp=Z,155nm,0.8s,baz=105,slow=10,SNR=188
SEY PcP PcP 16 58 51.4 +1.1
comp=Z,35nm,0.8s,baz=149,slow=5.8,SNR=5.2
SEY ScP ScP 17 02 25.8 +1.9
comp=Z,9.0nm,0.7s,baz=61,slow=6.1,SNR=4.2
SEY LR LR 17 03 10.6
comp=Z,19µm,20.4s,baz=103,slow=36
comp=Z,155nm,0.8s
**M31M Drury Creek, Y** 22.09 48 IAMs_20 IAMs_20 17 03 52.8
comp=Z,26µm,22.0s
**M31M Drury Creek, Y** 22.09 48 P P 16 54 51.5 -2.9
baz=260,SNR=50
M31M S S 16 58 54.8 -0.5
baz=260
**P32M Atlin** 22.11 55 P P 16 54 51.0 -3.6
baz=267,SNR=53
P32M S S 16 58 58.7 +3.1
baz=267
**D27M Malcolm River** 22.32 28 IAMs_20 IAMs_20 17 04 19.1
comp=Z,25µm,20.0s
**D27M Malcolm River** 22.32 28 P P 16 54 56.1 -0.8
baz=235,SNR=54
D27M S S 16 58 58.0 -1.5
baz=235
**EPYK Eagle Plains** 22.33 37 IAMs_20 IAMs_20 17 04 17.9
comp=Z,24µm,19.0s
**EPYK Eagle Plains** 22.33 37 P P 16 54 54.0 -2.9
baz=247,SNR=78
EPYK S S 16 58 52.9 -6.6
baz=247
**E28M Babbage River** 22.40 30 IAMs_20 IAMs_20 17 04 15.8
comp=Z,17µm,20.0s
**E28M Babbage River** 22.40 30 P P 16 54 56.2 -1.5
baz=238,SNR=116
E28M S S 16 58 57.9 -2.8
baz=238
**MA2 Magadan** 22.41 305 P P 16 54 59.4 +1.6
**MA2 Magadan** 22.41 305 P P 16 54 58.5 +0.7
MA2 IAmb IAmb 16 55 03.3
comp=Z,245nm,1.0s
**MA2 Magadan** 22.41 305 LR LR 17 02 56.8
comp=Z,12µm,21.5s,baz=96,slow=35
**MA2 Magadan** 22.41 305*c* iP P 16 54 58.0 +0.2
MA2 pmax pmax
comp=Z,218nm,0.9s
MA2 MLR MLR
comp=Z,13µm,22.0s
**U33K Whale Pass** 22.49 64 P P 16 54 57.0 -1.7
baz=276,SNR=12
U33K S S 16 59 08.5 +6.0
baz=276
U33K S S 16 59 08.5 +6.0
baz=276
**T33K Petersburg** 22.53 63 S S 16 59 07.7 +4.6
baz=274
**N32M Quiet Lake** 22.55 51 P P 16 54 58.4 -1.0
baz=263
N32M S S 16 59 01.6 -2.1
baz=263
**CRAG Craig** 22.56 66 P P 16 54 59.8 +0.4
**CRAG Craig** 22.56 66 P P 16 54 58.1 -1.3
baz=277
CRAG S S 16 59 09.1 +5.4
baz=277
**FARO Faro, Yukon** 22.58 48 P P 16 54 58.6 -1.0
baz=260,SNR=31
FARO S S 16 59 02.3 -1.7
baz=260
**P33M Teslin, Yukon** 22.60 54 IAMs_20 IAMs_20 17 04 11.3
comp=Z,19µm,20.0s
**P33M Teslin, Yukon** 22.60 54 P P 16 54 58.7 -1.2
baz=266,SNR=191
P33M S S 16 59 04.3 -0.1
baz=266
**G30M tAoh Zrail Nji** 22.75 36 IAMs_20 IAMs_20 17 04 41.2
comp=Z,26µm,19.0s
**G30M tAoh Zrail Nji** 22.75 36 P P 16 54 58.5 -2.9
baz=246,SNR=62
G30M S S 16 58 58.7 -8.3
baz=246
**E29M Blow River** 22.81 32 IAMs_20 IAMs_20 17 04 49.7
comp=Z,23µm,18.0s
**E29M Blow River** 22.81 32 P P 16 54 59.7 -2.3
baz=241,SNR=86
E29M S S 16 59 05.0 -2.9
baz=241
**Q32M Nakina River** 22.82 57 P P 16 55 01.6 -0.9
baz=269,SNR=100
Q32M S S 16 59 12.2 +3.6
baz=269
**D28M Stokes Point** 23.03 29 S S 16 59 11.8 +0.3
baz=238
**H31M Peel River** 23.03 39 P P 16 55 00.8 -3.5
baz=251
H31M S S 16 59 05.8 -5.8
baz=251
**F30M Barrier River** 23.17 34 P P 16 55 03.3 -2.3
baz=245,SNR=64
F30M S S 16 59 09.9 -4.0
baz=245
**H02S1 DAWSON INLET T** 23.33 72 P P 16 55 08.7 +1.4
H02S1 T T 17 18 49.8
SNR=10
**V35K Ketchikan** 23.43 66 P P 16 55 06.0 -2.2
baz=278,SNR=24
V35K S S 16 59 21.1 +2.8
baz=278
V35K S S 16 59 21.1 +2.8
baz=278
**G31M Satah River** 23.44 37 IAMs_20 IAMs_20 17 05 02.4
comp=Z,19µm,19.0s
**G31M Satah River** 23.44 37 P P 16 55 05.5 -2.7
baz=249,SNR=21
G31M S S 16 59 13.0 -5.3
baz=249
**S34M Telegraph Cree** 23.45 60 P P 16 55 08.4 +0.1
baz=273,SNR=66
S34M S S 16 59 20.6 +2.1
baz=273
**R33M Jennings River** 23.50 56 P P 16 55 09.3 +0.2
baz=270,SNR=251
R33M S S 16 59 21.3 +1.6
baz=270
**F31M Tsiigehtchic** 23.82 35 P P 16 55 09.0 -2.8
baz=248,SNR=42
F31M S S 16 59 18.9 -5.5
baz=248
**T35M Bob Quinn** 23.99 62 P P 16 55 14.0 +0.5
baz=276,SNR=60
T35M S S 16 59 31.5 +4.2
baz=276
**DLBC Dease Lake** 24.00 58 LR LR 17 05 00.3
comp=Z,8µm,20.9s,baz=289,slow=38
**DLBC Dease Lake** 24.00 58 P P 16 55 14.5 +0.8
baz=272,SNR=135
DLBC S S 16 59 30.2 +2.5
baz=272
**INK Inuvik** 24.23 34 P P 16 55 13.9 -1.7
INK IAMs_20 IAMs_20 17 05 28.2
comp=Z,16µm,21.0s
**INK Inuvik** 24.23 34 P P 16 55 13.4 -2.2
baz=247,SNR=53
INK S S 16 59 28.2 -2.7
baz=247
**INK Inuvik** 24.23 34 P P 16 55 13.9 -1.7
INK pmax pmax
comp=Z,72nm,0.7s
INK MLR MLR
comp=Z,16µm,21.0s
**U35K Hyder** 24.24 64 P P 16 55 15.7 -0.1
baz=278
U35K S S 16 59 36.6 +5.3
baz=278
**RUBB Prince Rupert** 24.39 68 P P 16 55 18.6 +1.5
RUBB IAmb IAmb 16 55 21.5
comp=Z,204nm,0.9s
**WTLY Watson Lake, Y** 24.60 54 P P 16 55 19.2 +0.1
baz=270,SNR=144
WTLY S S 16 59 39.3 +2.2
baz=270
**TGTN Hyland Airport** 24.89 51 P P 16 55 21.4 -0.3
baz=267,SNR=160
TGTN S S 16 59 41.3 -0.6
baz=267
**BBB Bella Bella** 26.16 72 LR LR 17 03 33.3
comp=Z,6µm,20.8s,baz=288,slow=31
**WRGLY Wrigley** 27.20 47 P P 16 55 42.9 +0.4
baz=268,SNR=16
WRGLY S S 17 00 16.6 -1.5
baz=268
**KUR Kuril'sk** 27.62 272 *e*P P 16 55 47.0 +0.7
KUR *e*S S 17 00 23.5 -1.4
KUR pmax pmax
comp=E,336nm,1.2s
KUR pmax pmax
comp=Z,652nm,1.2s
KUR pmax pmax
comp=N,223nm,1.0s
KUR MLR MLR
comp=Z,5µm,16.0s
KUR MLR MLR
comp=N,2µm,17.0s
KUR MLR MLR
comp=E,4µm,17.0s
**C36M Paulatuk** 27.82 34 IAMs_20 IAMs_20 17 07 53.9
comp=Z,18µm,19.0s
**C36M Paulatuk** 27.82 34 P P 16 55 47.3 -0.6
baz=256,SNR=6.9
C36M S S 17 00 24.1 -3.6
baz=256
**A36M Sachs Harbour** 28.23 28 P P 16 55 51.4 -0.1
baz=250,SNR=18
A36M S S 17 00 31.9 -2.2
baz=250
**TYV Tymovskoe** 28.43 286 *e*P P 16 55 53.3 -0.2
TYV *e*S S 17 00 39.5 +1.9
TYV pmax pmax
comp=Z,20nm,1.1s
TYV pmax pmax
comp=Z,300nm,5.3s
TYV smax smax
comp=N,400nm,11.0s
TYV smax smax
comp=E,900nm,11.0s
TYV MLR MLR
comp=Z,5µm,19.0s
TYV MLR MLR
comp=E,5µm,20.0s
**NKL Nikolayevsk** 28.84 292 *e*P P 16 55 56.0 -1.1
NKL *e*S S 17 00 43.2 -0.8
NKL pmax pmax
comp=E,63nm,0.8s
NKL pmax pmax
comp=N,150nm,0.9s
NKL pmax pmax
comp=Z,439nm,0.9s
NKL smax smax
comp=N,229nm,1.4s
NKL smax smax
comp=E,246nm,1.4s
NKL MLR MLR
comp=E,17µm,17.0s
NKL MLR MLR
comp=N,30µm,16.0s
NKL MLR MLR
comp=Z,45µm,18.0s
**OZB Mount Ozzard** 28.85 78 IAmb IAmb 16 56 16.9
comp=Z,309nm,1.7s
**UGL Uglegorsk** 29.46 283 *e*P P 16 56 03.6 +0.9
UGL *e*S S 17 00 53.7 -0.1
UGL pmax pmax
comp=Z,180nm,1.1s
UGL MLR MLR
comp=N,2µm,20.0s
UGL MLR MLR
comp=E,4µm,20.0s
UGL MLR MLR
comp=Z,4µm,16.0s
**YUK Yuzh-Kuril'sk** 29.46 271 *d* iP P 16 56 01.6 -1.1
YUK *e*S S 17 00 54.2 +0.3
YUK *i* SS SnSn 17 02 23.4 +0.1
YUK pmax pmax
comp=Z,1µm,1.2s
YUK pmax pmax
comp=N,403nm,0.6s
YUK pmax pmax
comp=E,504nm,0.7s
**CLRS Cowichan Lake** 29.73 77 P P 16 56 07.1 +2.0
CLRS IAmb IAmb 16 56 25.3
comp=Z,173nm,1.5s
**C03A Quillayute Air** 29.83 79 IAMs_20 IAMs_20 17 08 04.6
comp=Z,13µm,18.0s
**YSS Yuzh-Sakhalins** 29.95 279 P P 16 56 08.2 +1.1
**YSS Yuzh-Sakhalins** 29.95 279 P P 16 56 08.1 +1.1
YSS IAMs_20 IAMs_20 17 06 36.4
comp=Z,13µm,22.0s
**YSS Yuzh-Sakhalins** 29.95 279 *ce*P P 16 56 08.1 +1.0
YSS *e**PP sP 16 56 20.6 -2.2
YSS *e* 16 57 11.0
YSS *e* 16 59 09.4
YSS *e*S S 17 01 00.0 -1.6
YSS *e*SS ScP 17 02 46.5 -0.6
YSS pmax pmax
comp=Z,1µm,4.8s
YSS pmax pmax
comp=N,400nm,3.8s
YSS pmax pmax
comp=E,700nm,4.2s
YSS pmax pmax
comp=Z,70nm,0.9s
YSS smax smax
comp=N,500nm,5.4s
YSS smax smax
comp=E,800nm,7.6s
YSS MLR MLR
comp=Z,3µm,16.0s
YSS MLR MLR
comp=N,3µm,15.0s
YSS MLR MLR
comp=E,3µm,18.0s
**B04A Port Angeles** 30.43 78 IAmb IAmb 16 56 31.8
comp=Z,247nm,1.8s
**NLWA Neilton Lookou** 30.50 80 IAMs_20 IAMs_20 17 05 34.3
comp=Z,11µm,20.0s
**GNW Green Mountain** 31.06 79 PcP PcP 16 59 13.2 +1.7
**E03A Lebam** 31.07 81 IAmb IAmb 16 56 37.5
comp=Z,125nm,1.1s
**YKA Yellowknife Ar** 31.29 48 P P 16 56 18.3 -0.4
YKA PcP PcP 16 59 13.4 +1.5
**YKA Yellowknife Ar** 31.29 48 P P 16 56 17.6 -1.1
comp=Z,11nm,0.7s,baz=53,slow=4.5,SNR=39
YKA PcP PcP 16 59 12.8 +0.9
comp=Z,31nm,0.9s,baz=289,slow=2.7,SNR=16
YKA ScP ScP 17 02 51.4 +0.1
comp=Z,5.6nm,0.8s,baz=292,slow=3.1,SNR=6.6
YKA LR LR 17 10 55.2
comp=Z,6µm,19.0s,baz=274,slow=40
comp=Z,11nm,0.7s
**YKA Yellowknife Ar** 31.29 48 P P 16 56 18.3 -0.4
YKA 16 59 13.4
**JKA Kamikawa-asahi** 31.43 274 IAMs_20 IAMs_20 17 07 01.0
comp=Z,11µm,22.0s
**ASAJ Asahikawa** 31.43 274 LR LR 17 07 34.5
comp=Z,11µm,21.8s,baz=80,slow=33
**HEBO Mount Hebo** 31.60 83 IAMs_20 IAMs_20 17 05 41.5
comp=Z,11µm,22.0s
**G03D McMinnville, O** 31.90 83 IAMs_20 IAMs_20 17 06 02.5
comp=Z,11µm,21.0s
**GRNR Gornyy** 32.13 289 ⇑ *i*P P 16 56 25.9 -0.4
GRNR *e* 16 57 35.1
GRNR pmax pmax
comp=E,40nm,0.8s
GRNR pmax pmax
comp=Z,90nm,0.9s
GRNR MLR MLR
comp=E,5µm,17.0s
GRNR MLR MLR
comp=N,4µm,19.0s
GRNR MLR MLR
comp=Z,5µm,18.0s
**COR Corvallis** 32.19 84 P P 16 56 26.9 0.0
COR IAmb IAmb 16 56 46.0
comp=Z,66nm,0.8s
**COR Corvallis** 32.19 84 IAMs_20 IAMs_20 17 05 59.3
comp=Z,13µm,21.0s
**COR Corvallis** 32.19 84 P P 16 56 26.9 0.0
COR pmax pmax
comp=Z,66nm,0.9s
COR MLR MLR
comp=Z,13µm,21.0s
**JEM Erimo** 32.21 270 P P 16 56 28.7 +1.7
**JEM Erimo** 32.21 270 IAMs_20 IAMs_20 17 09 17.0
comp=Z,10µm,21.0s
**JEM Erimo** 32.21 270 P P 16 56 28.7 +1.7
**ERM Erimo** 32.21 270 P P 16 56 28.7 +1.6
**ERM Erimo** 32.21 270 IAMs_20 IAMs_20 17 09 23.9
comp=Z,10µm,21.0s
**ERM Erimo** 32.21 270 *de*P P 16 56 29.1 +2.1
ERM pmax pmax
comp=Z,403nm,1.1s
**KIP Kipapa** 32.22 157 IAMs_20 IAMs_20 17 06 47.9
comp=Z,12µm,20.0s
**TIXI Tiksi** 32.45 329 P P 16 56 26.8 -2.0
TIXI PcP PcP 16 59 15.4 +0.5
**TIXI Tiksi** 32.45 329 IAMs_20 IAMs_20 17 10 45.9
comp=Z,9µm,19.0s
**TIXI Tiksi** 32.45 329 LR LR 17 11 06.3
comp=Z,9µm,18.6s,baz=110,slow=39
**TIXI Tiksi** 32.45 329 ‖ *eP* P 16 56 28.6 -0.2
TIXI pmax pmax
comp=Z,21nm,0.8s
TIXI MLR MLR
comp=Z,10µm,17.0s
**LTY Liberty** 32.50 78 P P 16 56 30.4 +0.8
LTY IAmb IAmb 16 56 48.8
comp=Z,134nm,1.4s
**J01E Myrtle Point** 32.55 87 IAMs_20 IAMs_20 17 06 46.9
comp=Z,14µm,20.0s
**YAK Yakutsk** 32.55 311 P P 16 56 28.7 -1.1
YAK IAmb IAmb 16 56 33.3
comp=Z,132nm,1.1s
YAK PcP PcP 16 59 15.7 +0.4
**YAK Yakutsk** 32.55 311 IAMs_20 IAMs_20 17 09 13.6
comp=Z,14µm,21.0s
**YAK Yakutsk** 32.55 311 LR LR 17 09 32.0
comp=Z,13µm,21.5s,baz=80,slow=36
**YAK Yakutsk** 32.55 311 *c* iP P 16 56 27.6 -2.2
YAK *e* 16 59 15.1
YAK *e*S S 17 01 44.4 +2.4
YAK *e*SS SnSn 17 03 44.7 +6.5
YAK *e* 17 06 52.7
YAK pmax pmax
comp=Z,73nm,1.0s
YAK pmax pmax
comp=E,35nm,1.2s
YAK pmax pmax
comp=N,10.0nm,1.4s
YAK smax smax
comp=E,131nm,2.2s
YAK smax smax
comp=N,116nm,2.9s
YAK MLR MLR
comp=Z,11µm,20.0s
YAK MLR MLR
comp=N,6µm,17.0s
YAK MLR MLR
comp=E,7µm,20.0s
**H04D Lebanon** 32.57 84 IAMs_20 IAMs_20 17 06 11.3
comp=Z,12µm,21.0s
**BUCK Buck Mountain** 32.59 84 IAmb IAmb 16 56 51.0
comp=Z,126nm,1.3s
BUCK IAMs_20 IAMs_20 17 06 31.7
comp=Z,11µm,20.0s
**H04A Detroit Lake** 32.83 83 P P 16 56 34.1 +1.6
H04A IAmb IAmb 16 56 52.8
comp=Z,209nm,1.4s
H04A IAMs_20 IAMs_20 17 06 21.0
comp=Z,10µm,22.0s
**DBO Dodson Butte** 33.00 86 IAMs_20 IAMs_20 17 07 20.7
comp=Z,13µm,20.0s
**I04A Tendick Farm,** 33.15 85 IAMs_20 IAMs_20 17 06 27.7
comp=Z,10µm,22.0s
**KSXB Camp Six Broad** 33.32 89 P P 16 56 39.4 +2.6
KSXB IAMs_20 IAMs_20 17 06 47.3
comp=Z,9µm,20.0s
**L02F Cave Junction** 33.35 88 IAMs_20 IAMs_20 17 06 50.0
comp=Z,12µm,20.0s
**HUMO Hull Mountain** 33.46 87 IAMs_20 IAMs_20 17 07 24.8
comp=Z,13µm,20.0s
**G06A Carlson Farm,** 33.50 81 P P 16 56 39.7 +1.3
**I05D Terrebonne, OR** 33.53 83 IAMs_20 IAMs_20 17 06 52.5
comp=Z,10µm,22.0s
**HAWA Hanford** 33.60 79 P P 16 56 40.1 +0.9
**D08A Wollman Farm,** 33.65 77 P P 16 56 40.2 +0.6
D08A IAmb IAmb 16 56 59.3
comp=Z,285nm,1.8s
**C09A Chrisman Ranch** 33.69 76 P P 16 56 41.3 +1.4
**KMPM Mount Pierce** 33.98 91 IAmb IAmb 16 57 03.6
comp=Z,82nm,1.0s
**PINE Pine Mountain** 34.06 84 ScP ScP 17 03 03.7 +2.3
PINE IAMs_20 IAMs_20 17 07 09.6

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,12µm,22.0s | | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **34.10** | **88** | | IAMs_20 | IAMs_20 | 17 06 53.8 | | | |
| | comp=Z,12µm,22.0s | | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **34.10** | **88** | | LR | LR | 17 07 26.5 | | | |
| | comp=Z,10µm,20.9s,baz=301,slow=31 | | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **34.15** | **85** | | IAMs_20 | IAMs_20 | 17 08 02.0 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **NEW** | **Newport** | **34.17** | **74** | | ScP | **ScP** | **17 03 03.3** | **+1.7** | | |
| **NEW** | **Newport** | **34.17** | **74** | | LR | LR | 17 07 57.3 | | | |
| | comp=Z,5µm,20.9s,baz=300,slow=32 | | | | | | | | | |
| **K04D** | **Chiloquin, OR** | **34.19** | **86** | | IAMs_20 | IAMs_20 | 17 07 31.2 | | | |
| | comp=Z,11µm,20.0s | | | | | | | | | |
| **JTM** | **Tenmabayashi** | **34.20** | **270** | | P | **P** | **16 56 45.1** | **+0.7** | | |
| **JTM** | **Tenmabayashi** | **34.20** | **270** | | P | **P** | **16 56 44.9** | **+0.4** | | |
| JTM | | | | | IAMs_20 | IAMs_20 | 17 10 28.6 | | | |
| | comp=Z,11µm,21.0s | | | | | | | | | |
| **KMRM** | **Mail Ridge** | **34.35** | **91** | | P | **P** | **16 56 48.1** | **+2.3** | | |
| KMRM | | | | | IAmb | IAmb | 16 57 07.2 | | | |
| | comp=Z,348nm,1.9s | | | | | | | | | |
| **POHA** | **Pohakuloa** | **34.46** | **153** | | IAMs_20 | IAMs_20 | 17 07 10.0 | | | |
| | comp=Z,10µm,22.0s | | | | | | | | | |
| **G08A** | **Pilot Rock** | **34.49** | **80** | | P | **P** | **16 56 47.9** | **+0.8** | | |
| G08A | | | | | IAmb | IAmb | 16 57 06.8 | | | |
| | comp=Z,155nm,1.7s | | | | | | | | | |
| **TEY** | **Ternei** | **34.63** | **280** | *eP* | | **P** | **16 56 47.4** | **-0.6** | | |
| **KCPM** | **Cahto Peak** | **34.75** | **92** | | IAMs_20 | IAMs_20 | 17 07 42.3 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **I07A** | **Izee** | **34.78** | **82** | | P | **P** | **16 56 51.1** | **+1.5** | | |
| I07A | | | | | IAMs_20 | IAMs_20 | 17 07 35.7 | | | |
| | comp=Z,10µm,22.0s | | | | | | | | | |
| **JOM** | **Ohasama** | **34.84** | **268** | | P | **P** | **16 56 50.9** | **+1.0** | | |
| **O02D** | **Mt. Diablo Mer** | **34.95** | **90** | | P | **P** | **16 56 53.0** | **+2.0** | | |
| **JOHN** | **Johnston Islan** | **35.25** | **177** | | IAMs_20 | IAMs_20 | 17 08 11.7 | | | |
| | comp=Z,12µm,20.0s | | | | | | | | | |
| **HATC** | **Hat Creek Radi** | **35.39** | **88** | | P | **P** | **16 56 56.7** | **+1.9** | | |
| HATC | | | | | IAmb | IAmb | 16 57 13.1 | | | |
| | comp=Z,86nm,0.9s | | | | | | | | | |
| HATC | | | | | IAMs_20 | IAMs_20 | 17 08 16.2 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **HOPS** | **Hopland Field** | **35.48** | **92** | | IAMs_20 | IAMs_20 | 17 07 21.8 | | | |
| | comp=Z,12µm,21.0s | | | | | | | | | |
| **KLR** | **Kul'dur** | **35.52** | **289** | | LR | LR | 17 12 42.9 | | | |
| | comp=Z,10µm,18.6s,baz=72,slow=38 | | | | | | | | | |
| **KLR** | **Kul'dur** | **35.52** | **289** | *ce* | P | **P** | **16 56 54.8** | **-0.9** | | |
| KLR | | | | | pmax | pmax | | | | |
| | comp=Z,171nm,1.5s | | | | | | | | | |
| KLR | | | | | MLR | MLR | | | | |
| | comp=Z,9µm,18.0s | | | | | | | | | |
| **GDXM** | **Geysers** | **35.77** | **92** | | IAMs_20 | IAMs_20 | 17 08 13.3 | | | |
| | comp=Z,13µm,20.0s | | | | | | | | | |
| **MCCM** | **Marconi Confer** | **36.12** | **93** | | IAMs_20 | IAMs_20 | 17 08 07.8 | | | |
| | comp=Z,12µm,20.0s | | | | | | | | | |
| **JMM** | **Marumori** | **36.14** | **266** | | P | **P** | **16 57 01.9** | **+0.8** | | |
| **JMM** | **Marumori** | **36.14** | **266** | | IAMs_20 | IAMs_20 | 17 09 32.1 | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| **ZEA** | **Zeya** | **36.17** | **298** | *eP* | | **P** | **16 56 59.9** | **-1.3** | | |
| ZEA | | | | *e* | | | 16 58 28.1 | | | |
| ZEA | | | | *e* | | | 16 59 27.1 | | | |
| ZEA | | | | *eS* | | **S** | **17 02 30.9** | **-7.0** | | |
| ZEA | | | | | pmax | pmax | | | | |
| | comp=E,20nm,0.6s | | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | | |
| | comp=N,20nm,0.9s | | | | | | | | | |
| ZEA | | | | | pmax | pmax | | | | |
| | comp=Z,50nm,0.7s | | | | | | | | | |
| ZEA | | | | | smax | smax | | | | |
| | comp=E,700nm,14.4s | | | | | | | | | |
| ZEA | | | | | MLR | MLR | | | | |
| | comp=N,4µm,17.0s | | | | | | | | | |
| ZEA | | | | | MLR | MLR | | | | |
| | comp=E,6µm,17.0s | | | | | | | | | |
| ZEA | | | | | MLR | MLR | | | | |
| | comp=Z,7µm,17.0s | | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **36.21** | **84** | | IAMs_20 | IAMs_20 | 17 08 40.6 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **36.52** | **216** | | T | T | 17 35 40.9 | | | |
| | baz=21,slow=76,SNR=2641 | | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.52** | **216** | | T | T | 17 35 44.1 | | | |
| | baz=21,slow=76,SNR=15 | | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **36.53** | **216** | | T | T | 17 35 40.4 | | | |
| | baz=21,slow=76,SNR=2629 | | | | | | | | | |
| **AFDM** | **Forest Hills D** | **36.81** | **91** | | PcP | **PcP** | **16 59 29.1** | **+1.0** | | |
| **WAKE** | **Wake Island** | **37.02** | **216** | | IAMs_20 | IAMs_20 | 17 08 51.7 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **OVMT** | **Ovando** | **37.19** | **74** | | P | **P** | **16 57 10.6** | **+0.4** | | |
| **BPMT** | **Black Pine Rid** | **37.24** | **75** | | P | **P** | **16 57 10.2** | **-0.5** | | |
| **PAHR** | **Pah Rah Range** | **37.33** | **88** | | P | **P** | **16 57 12.1** | **+0.7** | | |
| **HEH** | **HeiHe** | **37.56** | **292** | *eP* | | **P** | **16 57 11.8** | **-1.2** | | |
| HEH | | | | | PP | **PnPn** | **16 58 44.5** | **+4.3** | | |
| HEH | | | | | PcP | **PcP** | **16 59 30.5** | **+0.4** | | |
| HEH | | | | | S | **S** | **17 02 54.5** | **-4.6** | | |
| HEH | | | | | ScP | **ScP** | **17 03 14.5** | **+0.7** | | |
| HEH | | | | | pmax | pmax | | | | |
| | comp=Z,430nm,1.0s | | | | | | | | | |
| HEH | | | | | pmax | pmax | | | | |
| | comp=Z,740nm,4.8s | | | | | | | | | |
| HEH | | | | | LR | LR | | | | |
| | comp=Z,7µm,19.3s | | | | | | | | | |
| HEH | | | | | LR | LR | | | | |
| | comp=Z,7µm,17.8s | | | | | | | | | |
| HEH | | | | | LR | LR | | | | |
| | comp=Z,14µm,17.4s | | | | | | | | | |
| **JSD** | **Sado** | **37.59** | **269** | | P | **P** | **16 57 14.9** | **+1.4** | | |
| **JSD** | **Sado** | **37.59** | **269** | | P | **P** | **16 57 14.5** | **+1.0** | | |
| JSD | | | | | IAmb | IAmb | 16 57 16.0 | | | |
| | comp=Z,187nm,1.0s | | | | | | | | | |
| **JSD** | **Sado** | **37.59** | **269** | | P | **P** | **16 57 14.4** | **+1.0** | | |
| **LYMT** | **Lyon Mountain** | **37.66** | **74** | | P | **P** | **16 57 14.9** | **+0.7** | | |
| **H11S1** | **WAKE ISLAND Hy** | **37.71** | **216** | | T | T | 17 37 58.7 | | | |
| | baz=22,slow=76,SNR=9101 | | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **37.73** | **216** | | T | T | 17 37 58.3 | | | |
| | baz=22,slow=76,SNR=809 | | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **37.73** | **216** | | T | T | 17 37 56.8 | | | |
| | baz=22,slow=76,SNR=371 | | | | | | | | | |
| **CMB** | **Columbia Colle** | **37.73** | **91** | | IAMs_20 | IAMs_20 | 17 08 56.2 | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| **YERR** | **Yerington** | **37.85** | **89** | | P | **P** | **16 57 17.0** | **+1.1** | | |
| **USA0B** | **Ussuriysk Arra** | **37.87** | **281** | | P | **P** | **16 57 14.9** | **-0.8** | | |
| **USA0B** | **Ussuriysk Arra** | **37.87** | **281** | ‖ *iP* | | **P** | **16 57 15.2** | **-0.5** | | |
| **USRK** | **Ussuriysk Ar.** | **37.87** | **281** | | P | **P** | **16 57 14.8** | **-0.9** | | |
| **USRK** | **Ussuriysk Ar.** | **37.87** | **281** | | P | **P** | **16 57 14.9** | **-0.8** | | |
| | comp=Z,51nm,1.0s,baz=56,slow=7.2,SNR=42 | | | | | | | | | |
| USRK | | | | | PcP | **PcP** | **16 59 32.0** | **+0.8** | | |
| | comp=Z,16nm,0.8s,baz=50,slow=3.1,SNR=6.9 | | | | | | | | | |
| USRK | | | | | ScP | **ScP** | **17 03 14.8** | **-0.4** | | |
| | comp=Z,1.8nm,0.9s,baz=353,slow=5.8,SNR=2.7 | | | | | | | | | |
| USRK | | | | | LR | LR | 17 12 00.7 | | | |
| | comp=Z,8µm,21.7s,baz=64,slow=35 | | | | | | | | | |
| | comp=Z,51nm,1.0s | | | | | | | | | |
| **SAO** | **San Andreas Ge** | **37.88** | **94** | | IAMs_20 | IAMs_20 | 17 09 07.3 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **WAKR** | **Walker** | **38.03** | **90** | | IAMs_20 | IAMs_20 | 17 09 44.0 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **BMN** | **Battle Mountai** | **38.23** | **86** | | IAMs_20 | IAMs_20 | 17 10 33.2 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **BBGB** | **Big Mountain B** | **38.25** | **94** | | IAMs_20 | IAMs_20 | 17 08 48.1 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| **EUNU** | **Eureka** | **38.35** | **16** | | P | **P** | **16 57 19.7** | **+0.2** | | |
| EUNU | | | | | IAmb | IAmb | 16 57 35.8 | | | |
| | comp=Z,194nm,1.9s | | | | | | | | | |
| **JRY** | **Ryogami san** | **38.48** | **265** | | P | **P** | **16 57 22.5** | **+1.5** | | |
| **RYN** | **Ryan** | **38.52** | **89** | | P | **P** | **16 57 22.9** | **+1.4** | | |
| **MJAR** | **Matsushiro Arr** | **38.57** | **267** | | P | **P** | **16 57 22.5** | **+0.7** | | |
| | comp=Z,45nm,0.7s,baz=28,slow=6.4,SNR=130 | | | | | | | | | |
| MJAR | | | | | PcP | **PcP** | **16 59 34.5** | **+1.0** | | |
| | comp=Z,36nm,0.8s,baz=86,slow=3.4,SNR=11 | | | | | | | | | |
| MJAR | | | | | ScP | **ScP** | **17 03 19.1** | **+1.1** | | |
| | comp=Z,2.7nm,0.9s,baz=52,slow=4.8,SNR=3.3 | | | | | | | | | |
| | comp=Z,45nm,0.7s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **38.57** | **267** | | P | **P** | **16 57 23.1** | **+1.3** | | |
| **MAJO** | **Matsushiro** | **38.57** | **267** | | P | **P** | **16 57 23.1** | **+1.3** | | |
| **MAJO** | **Matsushiro** | **38.57** | **267** | | IAMs_20 | IAMs_20 | 17 10 38.5 | | | |
| | comp=Z,9µm,22.0s | | | | | | | | | |
| **MAJO** | **Matsushiro** | **38.57** | **267** | | P | **P** | **16 57 23.1** | **+1.3** | | |
| MAJO | | | | | pmax | pmax | | | | |
| | comp=Z,404nm,1.2s | | | | | | | | | |
| MAJO | | | | | MLR | MLR | | | | |
| | comp=Z,9µm,22.0s | | | | | | | | | |
| **EGMT** | **Eagleton** | **38.62** | **71** | | P | **P** | **16 57 22.6** | **+0.4** | | |
| **PMPB** | **Monarch Peak** | **38.63** | **94** | | IAMs_20 | IAMs_20 | 17 09 29.2 | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **38.76** | **75** | | P | **P** | **16 57 23.6** | **+0.3** | | |
| BOZ | | | | | IAmb | IAmb | 16 57 42.5 | | | |
| | comp=Z,173nm,1.5s | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **38.76** | **75** | | P | **P** | **16 57 23.7** | **+0.3** | | |
| BOZ | | | | | pmax | pmax | | | | |
| | comp=Z,173nm,1.5s | | | | | | | | | |
| BOZ | | | | | MLR | MLR | | | | |
| **LHV** | **Little Huntoon** | **38.76** | **90** | | P | **P** | **16 57 25.3** | **+2.0** | | |
| LHV | | | | | IAmb | IAmb | 16 57 44.0 | | | |
| | comp=Z,209nm,1.4s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.77** | **89** | | P | **P** | **16 57 24.7** | **+1.0** | | |
| **NVAR** | **Mina Array Bea** | **38.77** | **89** | | P | **P** | **16 57 24.9** | **+1.3** | | |
| | comp=Z,36nm,0.9s,baz=295,slow=7.7,SNR=159 | | | | | | | | | |
| NVAR | | | | | PcP | **PcP** | **16 59 35.4** | **+1.0** | | |
| | comp=Z,5.2nm,0.9s,baz=289,slow=2.8,SNR=7.5 | | | | | | | | | |
| NVAR | | | | | ScP | **ScP** | **17 03 19.4** | **+0.4** | | |
| | comp=Z,14nm,0.9s,baz=281,slow=4.0,SNR=21 | | | | | | | | | |
| NVAR | | | | | LR | LR | 17 10 09.5 | | | |
| | comp=Z,5µm,21.8s,baz=297,slow=31 | | | | | | | | | |
| | comp=Z,36nm,0.9s | | | | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **38.85** | **91** | | IAMs_20 | IAMs_20 | 17 09 32.8 | | | |
| | comp=Z,12µm,22.0s | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **39.09** | **283** | | P | **P** | **16 57 25.6** | **-0.4** | | |
| **MDJ** | **Mudanjiang** | **39.09** | **283** | | P | **P** | **16 57 25.3** | **-0.7** | | |
| MDJ | | | | | PP | **PP** | **16 58 57.0** | **+1.1** | | |
| MDJ | | | | | S | **S** | **17 03 26.5** | **+4.1** | | |
| MDJ | | | | | sS | sS | 17 03 43.5 | +3.3 | | |
| MDJ | | | | | ScS | **ScS** | **17 07 29.0** | **-2.2** | | |
| MDJ | | | | | pmax | pmax | | | | |
| | comp=Z,54nm,0.8s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,4µm,18.5s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,9µm,21.6s | | | | | | | | | |
| MDJ | | | | | LR | LR | | | | |
| | comp=Z,12µm,23.7s | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **39.09** | **283** | | IAMs_20 | IAMs_20 | 17 12 33.2 | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| **Q09A** | **Carvers** | **39.22** | **88** | | IAMs_20 | IAMs_20 | 17 10 42.4 | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| **ELK** | **Elko** | **39.27** | **84** | | IAMs_20 | IAMs_20 | 17 11 18.5 | | | |
| | comp=Z,11µm,20.0s | | | | | | | | | |
| **ELK** | **Elko** | **39.27** | **84** | | LR | LR | 17 11 39.7 | | | |
| | comp=Z,11µm,19.8s,baz=315,slow=33 | | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **39.27** | **280** | *ce* | P | **P** | **16 57 28.4** | **+0.9** | | |
| MSHR | | | | | pmax | pmax | | | | |
| | comp=Z,204nm,0.9s | | | | | | | | | |
| **JGN** | **Niukaw** | **39.33** | **267** | | P | **P** | **16 57 29.4** | **+1.3** | | |
| **YHL** | **Hebgen Lake** | **39.42** | **76** | | IAmb | IAmb | 16 57 48.3 | | | |
| | comp=Z,238nm,1.4s | | | | | | | | | |
| **PSTR** | **Posyet** | **39.45** | **280** | *d iP* | | **P** | **16 57 29.8** | **+0.9** | | |
| **DSP** | **Deep Springs** | **39.64** | **90** | | IAMs_20 | IAMs_20 | 17 10 01.7 | | | |
| | comp=Z,12µm,22.0s | | | | | | | | | |
| **JGF** | **Kuroka** | **39.71** | **266** | | P | **P** | **16 57 32.5** | **+1.2** | | |
| **BNX** | **BinXian** | **39.80** | **286** | ‖ *P* | | **P** | **16 57 30.8** | **-1.1** | | |
| BNX | | | | | S | **S** | **17 03 34.5** | **+1.5** | | |
| BNX | | | | | pmax | pmax | | | | |
| | comp=Z,220nm,0.8s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,4µm,17.5s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,4µm,17.6s | | | | | | | | | |
| BNX | | | | | LR | LR | | | | |
| | comp=Z,5µm,21.7s | | | | | | | | | |
| **FFC** | **Flin Flon** | **39.84** | **58** | | P | **P** | **16 57 32.0** | **0.0** | | |
| **FFC** | **Flin Flon** | **39.84** | **58** | | IAMs_20 | IAMs_20 | 17 13 55.3 | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| **FFC** | **Flin Flon** | **39.84** | **58** | | P | **P** | **16 57 32.1** | **0.0** | | |
| FFC | | | | | pmax | pmax | | | | |
| | comp=Z,89nm,0.9s | | | | | | | | | |
| FFC | | | | | MLR | MLR | | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **39.88** | **261** | | LR | LR | 17 13 20.1 | | | |
| | comp=Z,1µm,21.0s,baz=75,slow=35 | | | | | | | | | |
| **H17A** | **Grant Village** | **40.03** | **76** | | P | **P** | **16 57 34.4** | **+0.3** | | |
| | baz=303,SNR=14 | | | | | | | | | |
| H17A | | | | | S | **S** | **17 03 41.1** | **+4.1** | | |
| | baz=303 | | | | | | | | | |
| **INU** | **Inuyama** | **40.08** | **266** | | P | **P** | **16 57 34.9** | **+0.6** | | |
| **INU** | **Inuyama** | **40.08** | **266** | | P | **P** | **16 57 34.8** | **+0.5** | | |
| **GRAC** | **Grapevine Rang** | **40.25** | **90** | | P | **P** | **16 57 37.3** | **+1.5** | | |
| GRAC | | | | | IAMs_20 | IAMs_20 | 17 10 30.8 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| **ISA** | **Isabella, Lake** | **40.42** | **93** | | IAMs_20 | IAMs_20 | 17 10 27.6 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **40.50** | **87** | | IAMs_20 | IAMs_20 | 17 11 43.3 | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| **R11B** | **Troy Canyon, C** | **40.50** | **87** | | P | **P** | **16 57 38.1** | **+0.1** | | |
| | baz=308,SNR=104 | | | | | | | | | |
| R11B | | | | | S | **S** | **17 03 44.0** | **0.0** | | |
| | baz=308 | | | | | | | | | |
| **BGU** | **Big Grassy Mou** | **40.52** | **82** | | IAMs_20 | IAMs_20 | 17 11 09.5 | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **Q12A** | **Willow Creek R** | **40.54** | **86** | | IAMs_20 | IAMs_20 | 17 11 46.3 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **40.62** | **79** | | IAMs_20 | IAMs_20 | 17 13 17.1 | | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| **WCT** | **Wildcat Mounta** | **40.84** | **90** | | IAMs_20 | IAMs_20 | 17 11 09.3 | | | |
| | comp=Z,10µm,21.0s | | | | | | | | | |
| **S11A** | **Rachel** | **40.84** | **88** | | IAMs_20 | IAMs_20 | 17 11 55.3 | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| **SPR3** | **Spring Creek 3** | **40.87** | **85** | | IAMs_20 | IAMs_20 | 17 12 10.1 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **JIE** | **Ise** | **40.90** | **265** | | P | **P** | **16 57 42.8** | **+1.7** | | |
| **CCAC** | **Calif City Air** | **41.04** | **93** | | IAMs_20 | IAMs_20 | 17 11 07.9 | | | |
| | comp=Z,10µm,20.0s | | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **41.08** | **83** | | IAMs_20 | IAMs_20 | 17 12 37.4 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **LAO** | **LASA Array** | **41.37** | **71** | | P | **P** | **16 57 45.6** | **+0.7** | | |
| LAO | | | | | IAmb | IAmb | 16 57 47.3 | | | |
| | comp=Z,130nm,0.8s | | | | | | | | | |
| LAO | | | | | IAMs_20 | IAMs_20 | 17 15 50.4 | | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| **SNCC** | **San Nicolas Is** | **41.38** | **96** | | IAMs_20 | IAMs_20 | 17 10 11.2 | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **PSUT** | **Pine Spring** | **41.45** | **86** | | IAMs_20 | IAMs_20 | 17 12 07.4 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **PDAR** | **Pinedale Array** | **41.56** | **78** | | P | **P** | **16 57 47.0** | **+0.2** | | |
| | comp=Z,47nm,0.8s,baz=305,slow=5.2,SNR=209 | | | | | | | | | |
| PDAR | | | | | ScP | **ScP** | **17 03 30.1** | **+0.3** | | |
| | comp=Z,7.6nm,1.0s,baz=315,slow=1.1,SNR=6.6 | | | | | | | | | |
| PDAR | | | | | LR | LR | 17 12 54.2 | | | |
| | comp=Z,3µm,20.6s,baz=296,slow=33 | | | | | | | | | |
| | comp=Z,47nm,0.8s | | | | | | | | | |
| **PASC** | **Pasadena Art C** | **41.58** | **94** | | IAMs_20 | IAMs_20 | 17 10 16.4 | | | |
| | comp=Z,7µm,22.0s | | | | | | | | | |
| **DGMT** | **Dagmar** | **41.60** | **67** | | IAmb | IAmb | 16 57 48.7 | | | |
| | comp=Z,139nm,0.9s | | | | | | | | | |
| **DGMT** | **Dagmar** | **41.60** | **67** | | IAMs_20 | IAMs_20 | 17 13 29.4 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **JLU** | **Jardinelle** | **41.67** | **81** | | IAMs_20 | IAMs_20 | 17 11 47.0 | | | |
| | comp=Z,7µm,22.0s | | | | | | | | | |
| **NLU** | **North Lily Min** | **41.68** | **83** | | IAMs_20 | IAMs_20 | 17 12 06.2 | | | |
| | comp=Z,9µm,21.0s | | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **41.69** | **92** | | IAMs_20 | IAMs_20 | 17 10 50.0 | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **MPU** | **Maple Canyon** | **41.91** | **82** | | IAMs_20 | IAMs_20 | 17 12 14.4 | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **CN2** | **Changchun** | **42.03** | **285** | *eP* | | **P** | **16 57 50.0** | **-0.2** | | |
| CN2 | | | | *es* | P | sP | 16 58 07.8 | +1.4 | | |
| CN2 | | | | *eS* | | **S** | **17 04 04.0** | **-2.1** | | |
| CN2 | | | | *es* | S | sS | 17 04 24.8 | +0.8 | | |
| CN2 | | | | | pmax | pmax | | | | |
| | comp=Z,100nm,1.0s | | | | | | | | | |
| CN2 | | | | | LR | LR | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | | |
| CN2 | | | | | LR | LR | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | | |
| CN2 | | | | | LR | LR | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| **JAD** | **Aida** | **42.11** | **268** | | P | **P** | **16 57 52.1** | **+1.1** | | |
| **TCRU** | **Three Creeks R** | **42.27** | **85** | | IAMs_20 | IAMs_20 | 17 13 06.0 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **CCUT** | **Cedar City** | **42.37** | **86** | | IAMs_20 | IAMs_20 | 17 12 55.7 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **HIA** | **Hailar** | **42.38** | **295** | | P | **P** | **16 57 53.3** | **+0.2** | | |
| **HIA** | **Hailar** | **42.38** | **295** | | IAmb | IAmb | 16 57 54.3 | | | |
| | comp=Z,225nm,0.9s | | | | | | | | | |
| **SZCU** | **Shurtz Canyon** | **42.51** | **86** | | IAMs_20 | IAMs_20 | 17 13 01.5 | | | |
| | comp=Z,7µm,20.0s | | | | | | | | | |
| **V12A** | **Nelson** | **42.62** | **90** | | IAMs_20 | IAMs_20 | 17 11 32.5 | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **JCJ** | **Chichijima** | **42.75** | **253** | | P | **P** | **16 57 57.8** | **+1.5** | | |
| **JCJ** | **Chichijima** | **42.75** | **253** | | LR | LR | 17 12 56.3 | | | |
| | comp=Z,3µm,21.9s,baz=32,slow=32 | | | | | | | | | |
| **LCMT** | **Little Creek M** | **42.78** | **87** | | IAMs_20 | IAMs_20 | 17 13 29.7 | | | |
| | comp=Z,7µm,19.0s | | | | | | | | | |
| **MTPU** | **Mount Pierson** | **42.79** | **85** | | IAMs_20 | IAMs_20 | 17 13 22.7 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **P17A** | **Butcher Ranch,** | **42.79** | **82** | | IAMs_20 | IAMs_20 | 17 12 52.6 | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **TULEG** | **Thule** | **42.81** | **20** | | IAMs_20 | IAMs_20 | 17 18 15.0 | | | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| **TULEG** | **Thule** | **42.81** | **20** | *i* | P | **P** | **16 57 55.0** | **-1.2** | | |
| TULEG | | | | | IAmb | IAmb | 16 57 57.5 | | | |
| | comp=Z,61nm,0.8s | | | | | | | | | |
| **Q16A** | **Castle Valley** | **42.87** | **83** | | IAMs_20 | IAMs_20 | 17 12 44.7 | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **P18A** | **Preston Nutter** | **43.00** | **82** | | IAMs_20 | IAMs_20 | 17 13 33.0 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **43.02** | **93** | | P | **P** | **16 57 59.0** | **+0.4** | | |
| **PFO** | **Pinyon Flats O** | **43.02** | **93** | | IAMs_20 | IAMs_20 | 17 12 04.5 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **43.02** | **93** | | LR | LR | 17 11 46.5 | | | |
| | comp=Z,7µm,21.6s,baz=294,slow=30 | | | | | | | | | |
| **PFO** | **Pinyon Flats O** | **43.02** | **93** | *c iP* | | **P** | **16 57 59.1** | **+0.5** | | |
| PFO | | | | | pmax | pmax | | | | |
| | comp=Z,143nm,1.0s | | | | | | | | | |
| **TPFO** | **Pinon Flats** | **43.03** | **93** | | P | **P** | **16 57 58.6** | **-0.1** | | |
| | baz=313,SNR=39 | | | | | | | | | |
| TPFO | | | | | S | **S** | **17 04 21.9** | **+0.5** | | |
| | baz=313 | | | | | | | | | |
| **KNB** | **Kanab** | **43.04** | **87** | | IAMs_20 | IAMs_20 | 17 13 18.5 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **PKCU** | **Pink Cliffs** | **43.09** | **86** | | IAMs_20 | IAMs_20 | 17 13 20.6 | | | |
| | comp=Z,8µm,20.0s | | | | | | | | | |
| **JMN** | **Monobe** | **43.09** | **267** | | P | **P** | **16 58 00.7** | **+1.7** | | |
| **SRU** | **San Rafael Swe** | **43.14** | **83** | | IAMs_20 | IAMs_20 | 17 12 54.0 | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **RWWY** | **Rawlins** | **43.60** | **77** | | IAmb | IAmb | 16 58 21.9 | | | |
| | comp=Z,455nm,1.8s | | | | | | | | | |
| RWWY | | | | | IAMs_20 | IAMs_20 | 17 13 39.2 | | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| **HMU** | **Henry Mountain** | **43.74** | **84** | | IAMs_20 | IAMs_20 | 17 14 03.8 | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **U15A** | **North Rim** | **43.74** | **87** | | IAMs_20 | IAMs_20 | 17 13 40.2 | | | |
| | comp=Z,9µm,20.0s | | | | | | | | | |
| **O20A** | **White River Ci** | **43.91** | **80** | | IAMs_20 | IAMs_20 | 17 13 14.8 | | | |
| | comp=Z,7µm,22.0s | | | | | | | | | |
| **RSSD** | **Black Hills** | **44.07** | **73** | | P | **P** | **16 58 06.8** | **-0.2** | | |
| **RSSD** | **Black Hills** | **44.07** | **73** | | P | **P** | **16 58 06.8** | **-0.2** | | |
| RSSD | | | | | pmax | pmax | | | | |
| | comp=Z,81nm,1.1s | | | | | | | | | |
| **BLYC** | **Blythe** | **44.12** | **92** | | IAMs_20 | IAMs_20 | 17 13 11.5 | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **SNY** | **Shenyang** | **44.29** | **284** | ⇑ | P | **P** | **16 58 08.8** | **+0.3** | | |
| SNY | | | | | S | **S** | **17 04 37.5** | **-1.8** | | |
| SNY | | | | | pmax | pmax | | | | |
| | comp=Z,210nm,0.9s | | | | | | | | | |
| SNY | | | | | pmax | pmax | | | | |
| | comp=Z,1µm,8.0s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,2µm,15.7s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,4µm,17.4s | | | | | | | | | |
| SNY | | | | | LR | LR | | | | |
| | comp=Z,5µm,16.4s | | | | | | | | | |
| **CIT** | **Chita** | **44.33** | **301** | *eP* | | **P** | **16 58 08.2** | **-0.6** | | |
| CIT | | | | *e* | | | 16 58 19.0 | | | |
| CIT | | | | *e* | | | 16 58 25.9 | | | |
| CIT | | | | *e* | | | 16 59 52.3 | | | |
| CIT | | | | *e* | | | 16 59 58.6 | | | |
| CIT | | | | *e* | | | 17 04 42.3 | | | |
| CIT | | | | | pmax | pmax | | | | |
| | comp=Z,167nm,2.1s | | | | | | | | | |
| **KSRS** | **Korea Array** | **44.34** | **276** | | P | **P** | **16 58 09.8** | **+0.8** | | |
| | comp=Z,120nm,0.9s,baz=56,slow=7.3,SNR=295 | | | | | | | | | |
| KSRS | | | | | PcP | **PP** | **16 59 53.5** | **+0.8** | | |
| | comp=Z,12nm,0.9s,baz=49,slow=4.4,SNR=4.6 | | | | | | | | | |
| KSRS | | | | | ScP | **ScP** | **17 03 41.4** | **+0.6** | | |
| | comp=Z,1.9nm,0.8s,baz=48,slow=4.1,SNR=4.4 | | | | | | | | | |
| KSRS | | | | | LR | LR | 17 14 33.2 | | | |
| | comp=Z,4µm,21.8s,baz=55,slow=33 | | | | | | | | | |
| | comp=Z,120nm,0.9s | | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **44.37** | **276** | | P | **P** | **16 58 10.1** | **+0.9** | | |
| **KSAR** | **Wonju Array Be** | **44.37** | **276** | | P | **P** | **16 58 10.1** | **+0.9** | | |
| **GLA** | **Glamis** | **44.41** | **93** | | IAMs_20 

DL2 LR LR
comp=Z,4µm,19.6s
DL2 LR LR
comp=Z,7µm,25.0s
**TUC Tucson 47.41 90** P **P** **16 58 33.7 +0.4**
TUC IAmb IAmb 16 58 53.2
comp=Z,147nm,1.2s
**TUC Tucson 47.41 90** IAMs_20 IAMs_20 17 15 52.3
comp=Z,5µm,19.0s
**TUC Tucson 47.41 90** P **P** **16 58 33.7 +0.4**
TUC pmax pmax
comp=Z,147nm,1.3s
TUC MLR MLR
comp=Z,5µm,19.0s
**XLT XiLinHaoTe 47.48 291** *e*P **P** **16 58 34.0 +0.2**
XLT sP sP 16 58 54.0 +3.9
XLT PcP **PcP** **17 00 04.3 +0.9**
XLT PP **PP** **17 00 24.3 -0.9**
XLT S **S** **17 05 26.8 +1.5**
XLT sS sS 17 05 47.0 +3.6
XLT SS SS 17 08 40.0 -13
XLT pmax pmax
comp=Z,130nm,1.0s
XLT pmax pmax
comp=Z,1µm,6.5s
XLT LR LR
comp=Z,550nm,18.7s
XLT LR LR
comp=Z,4µm,20.0s
XLT LR LR
comp=Z,7µm,17.4s
**F33A 5 Mile Ranch, 47.55 66** IAMs_20 IAMs_20 17 17 04.6
comp=Z,7µm,20.0s
**UPNV Upernavik 47.71 21** *i* P **P** **16 58 34.3 -0.7**
UPNV IAmb IAmb 16 58 36.9
comp=Z,126nm,0.8s
**KSCO Kaye Shedlock' 48.01 77** IAMs_20 IAMs_20 17 16 33.8
comp=Z,6µm,22.0s
**T25A Trinidad 48.12 80** P **P** **16 58 39.0 0.0**
baz=310,SNR=146
T25A S **S** **17 05 34.4 -0.4**
baz=310
**ANMO Albuquerque 48.30 84** IAMs_20 IAMs_20 17 16 51.7
comp=Z,5µm,20.0s
**ANMO Albuquerque 48.30 84** LR LR 17 17 03.1
comp=Z,5µm,19.6s,baz=40,slow=34
**Y22D IRIS PASSCAL I 48.60 85** P **P** **16 58 43.6 +1.0**
baz=312,SNR=6.8
Y22D S **S** **17 05 39.0 -2.5**
baz=312
**ECSD EROS Data Cent 48.63 69** IAmb IAmb 16 58 43.1
comp=Z,118nm,0.9s
**ECSD EROS Data Cent 48.63 69** IAMs_20 IAMs_20 17 16 54.3
comp=Z,7µm,22.0s
**EYMN Ely 48.96 61** IAmb IAmb 16 58 46.0
comp=Z,148nm,0.9s
**EYMN Ely 48.96 61** IAMs_20 IAMs_20 17 21 37.7
comp=Z,6µm,18.0s
**319A Douglas 48.98 90** IAMs_20 IAMs_20 17 17 09.9
comp=Z,6µm,20.0s
**IRK Irkutsk 48.99 306** *e*P **P** **16 58 45.0 -0.2**
IRK pmax pmax
comp=Z,186nm,1.0s
**121A Cookes Peak, D 49.11 87** P **P** **16 58 46.0 -0.5**
baz=313,SNR=70
121A S **S** **17 05 52.7 +3.9**
baz=313
**NUUG Nuugaatsiaq 49.22 22** *i* P **P** **16 58 45.5 -1.1**
NUUG IAmb IAmb 16 58 48.4
comp=Z,66nm,0.8s
**KBS Kingsbay 49.28 359** IAMs_20 IAMs_20 17 19 43.9
comp=Z,5µm,20.0s
**KBS Kingsbay 49.28 359** *i* P **P** **16 58 46.9 -0.2**
**RTBA Rita Blanca 49.60 80** IAmb IAmb 16 59 09.1
comp=Z,203nm,1.3s
**E38A The Farm, Brul 49.73 63** IAMs_20 IAMs_20 17 22 37.2
comp=Z,5µm,18.0s
**BJI Beijing 49.81 286** P **P** **16 58 52.0 +0.5**
BJI S **S** **17 05 58.0 0.0**
BJI pmax pmax
comp=Z,54nm,0.8s
BJI LR LR
comp=Z,2µm,16.7s
BJI LR LR
comp=Z,2µm,17.5s
BJI LR LR
comp=Z,4µm,17.9s
**BJT Baijiatuau 49.83 286** P **P** **16 58 52.5 +0.8**
**BJT Baijiatuau 49.83 286** IAmb IAmb 16 58 53.5
comp=Z,85nm,0.8s
**BJT Baijiatuau 49.83 286** IAMs_20 IAMs_20 17 22 28.1
comp=Z,6µm,18.0s
**L34A Svendsen Farm, 49.85 70** IAMs_20 IAMs_20 17 21 20.7
comp=Z,5µm,18.0s
**SPMN Marine on St. 49.88 65** IAMs_20 IAMs_20 17 18 57.8
comp=Z,7µm,20.0s
**FRB Frobisher Bay 49.88 35** LR LR 17 21 47.7
comp=Z,16µm,18.5s,baz=15,slow=38
**SPA0 Spitsbergen Ar 49.96 358** *e*P **P** **16 58 51.3 -1.0**
**SPITS Spitsbergen Ar 49.96 358** P **P** **16 58 51.8 -0.5**
comp=Z,115nm,0.8s,baz=80,slow=6.9,SNR=34
SPITS PcP **PcP** **17 00 12.0 +0.3**
comp=Z,19nm,0.6s,baz=99,slow=4.3,SNR=5.0
SPITS LR LR 17 22 04.2
comp=Z,5µm,18.3s,baz=336,slow=39
comp=Z,115nm,0.8s
**SRIG Santa Rosalia 50.01 96** IAmb IAmb 16 59 11.8
comp=Z,59nm,1.0s
SRIG IAMs_20 IAMs_20 17 14 49.7
comp=Z,7µm,22.0s
**ULN Ulaanbaatar 50.14 300** P **P** **16 58 54.1 -0.1**
ULN IAmb IAmb 16 58 55.5
comp=Z,60nm,0.8s
**ULN Ulaanbaatar 50.14 300** P **P** **16 58 54.1 -0.1**
ULN pmax pmax
comp=Z,60nm,0.9s
ULN MLR MLR
comp=Z,10µm,18.0s
**DAG Danmarks Havn 50.28 8** *i* P **P** **16 58 52.8 -1.8**
DAG IAmb IAmb 16 58 55.3
comp=Z,79nm,0.7s
**I37A Lemond, Waseca 50.29 66** P **P** **16 58 54.6 -0.5**
I37A IAMs_20 IAMs_20 17 19 00.7
comp=Z,7µm,21.0s
**SONM Songino Array 50.51 300** P **P** **16 58 57.2 +0.3**
SONM IAmb IAmb 16 58 58.8
comp=Z,222nm,1.7s
**SONM Songino Array 50.51 300** P **P** **16 58 57.3 +0.3**
comp=Z,40nm,0.8s,baz=55,slow=5.5,SNR=150
SONM PcP **PcP** **17 00 15.1 +0.7**
comp=Z,26nm,0.9s,baz=64,slow=2.7,SNR=5.5
SONM ScP **ScP** **17 04 07.8 +1.0**
comp=Z,6.8nm,0.8s,baz=52,slow=3.3,SNR=5.6
SONM LR LR 17 20 53.5
comp=Z,10µm,20.6s,baz=51,slow=37
comp=Z,40nm,0.8s
**ZAK Zakamensk 50.59 304** *e*P **P** **16 58 57.1 -0.4**
ZAK pmax pmax
comp=Z,71nm,1.4s
**MOY Mondy 50.96 307** *e*P **P** **16 59 00.3 0.0**
MOY pmax pmax
comp=Z,44nm,2.0s
**N35A Tabor 50.98 71** IAMs_20 IAMs_20 17 21 38.6
comp=Z,4µm,19.0s
**XMAS Kiritimati 51.13 162** IAMs_20 IAMs_20 17 16 56.1
comp=Z,7µm,20.0s
**HSPB Hornsund (broa 51.16 358** *e*P **P** **16 59 00.5 -0.7**
HSPB *e*L L 17 18 22.4
comp=Z,7µm,23.4s
**MSTX Muleshoe 51.22 82** IAMs_20 IAMs_20 17 18 48.3
comp=Z,4µm,20.0s
**AMTX Amarillo 51.27 81** IAmb IAmb 16 59 22.0
comp=Z,198nm,1.6s
**G40A Rib Lake 51.30 63** IAMs_20 IAMs_20 17 19 42.7
comp=Z,5µm,20.0s
**HOPEN Hopen 51.30 355** *e*P **P** **16 59 02.5 +0.2**
HOPEN IVmBBB 16 59 05.6
comp=Z,2µm,1.8s
**JOW Kunigami 51.36 265** P **P** **16 59 04.7 +1.3**
**JOW Kunigami 51.36 265** LR LR 17 19 37.3
comp=Z,2µm,21.5s,baz=68,slow=34
**COWI Conover 51.36 62** IAMs_20 IAMs_20 17 24 10.3
comp=Z,4µm,19.0s
**SUMG Summit 51.42 16** IAMs_20 IAMs_20 17 22 35.0
comp=Z,5µm,19.0s
**SUMG Summit 51.42 16** *i* P **P** **16 59 03.1 -0.6**
SUMG IAmb IAmb 16 59 06.9
comp=Z,190nm,1.0s
**KSU1 Kansas State U 51.54 73** IAmb IAmb 16 59 09.5
comp=Z,169nm,0.9s
**SCIA State Center 51.72 68** IAMs_20 IAMs_20 17 19 02.1
comp=Z,6µm,20.0s
**TIA Tai'an 51.73 282** P **P** **16 59 05.5 -0.6**
TIA sP **sP** **16 59 21.8 -0.2**
TIA PP **PP** **17 01 05.3 +1.6**
TIA S **S** **17 06 24.3 -0.4**
TIA sS **sS** **17 06 42.3 -0.5**
TIA SS **SS** **17 09 55.5 -5.6**
TIA pmax pmax
comp=Z,270nm,0.6s
TIA pmax pmax
comp=Z,2µm,4.1s
TIA LR LR
comp=Z,2µm,18.0s
TIA LR LR
comp=Z,5µm,19.4s
TIA LR LR
comp=Z,5µm,17.2s
**I40A Norwalk 51.93 65** IAMs_20 IAMs_20 17 20 12.5
comp=Z,6µm,20.0s
**GUMO Guam 51.98 239** P **P** **16 59 07.1 -1.0**
**GUMO Guam 51.98 239** P **P** **16 59 06.9 -1.2**
**GUMO Guam 51.98 239** P **P** **16 59 06.9 -1.2**
GUMO pmax pmax
comp=Z,388nm,1.2s
GUMO MLR MLR
comp=Z,2µm,21.0s
**HHC Hu-ho-hao-te 52.00 290** *e*P **P** **16 59 08.8 +0.6**
HHC sP sP 16 59 26.0 +1.4
HHC S **S** **17 06 27.0 -1.5**
HHC sS sS 17 06 46.3 -0.5
HHC pmax pmax
comp=Z,82nm,1.0s
HHC LR LR
comp=Z,2µm,18.3s
HHC LR LR
comp=Z,5µm,18.2s
HHC LR LR
comp=Z,7µm,19.1s
**OK032 Salt Plains WL 52.09 77** IAmb IAmb 16 59 09.8
comp=Z,86nm,1.0s
**F42A Maple Grove Fa 52.12 62** IAMs_20 IAMs_20 17 20 28.1
comp=Z,4µm,20.0s
**HNS HongShan 52.40 285** ⇑P **P** **16 59 12.0 +1.0**
HNS PP **PP** **17 01 12.8 +3.1**
HNS S **S** **17 06 35.0 +1.3**
HNS pmax pmax
comp=Z,690nm,1.0s
HNS pmax pmax
comp=Z,2µm,6.9s
HNS LR LR
comp=Z,9µm,21.1s
HNS LR LR
comp=Z,9µm,22.0s
**N38A Joes South For 52.42 70** IAMs_20 IAMs_20 17 21 13.7
comp=Z,5µm,20.0s
**DBG Daneborg 52.43 10** *i* P **P** **16 59 08.7 -2.0**
DBG IAmb IAmb 16 59 11.1
comp=Z,76nm,0.6s
**CROK Carrier 52.43 77** IAmb IAmb 16 59 12.2
comp=Z,92nm,0.9s
**DKNS Dickens 52.55 81** IAmb IAmb 16 59 30.7
comp=Z,88nm,0.9s
**SSE Sheshan 52.72 274** P **P** **16 59 15.3 +1.9**
SSE S **S** **17 06 38.0 -0.3**
SSE pmax pmax
comp=Z,230nm,1.0s
SSE pmax pmax
comp=Z,1µm,5.5s
SSE LR LR
comp=Z,1µm,20.6s
SSE LR LR
comp=Z,730nm,20.6s
**BLOK Blackwell 52.72 76** IAmb IAmb 16 59 14.3
comp=Z,121nm,0.9s
**L40A Anamosa 52.76 67** IAMs_20 IAMs_20 17 20 16.5
comp=Z,6µm,21.0s
**JFWS Jewell Farm 52.76 66** IAmb IAmb 16 59 15.2
comp=Z,134nm,0.9s
**JFWS Jewell Farm 52.76 66** IAMs_20 IAMs_20 17 20 38.5
comp=Z,8µm,21.0s
**I42A Draeger Farm, 52.88 64** IAMs_20 IAMs_20 17 20 31.6
comp=Z,7µm,20.0s
**BTO Baotou 53.05 291** *e*P **P** **16 59 16.3 +0.4**
BTO pP **pP** **16 59 29.0 +1.4**
BTO sP **sP** **16 59 33.8 +1.4**
BTO PP **PP** **17 01 17.3 +1.6**
BTO S **S** **17 06 43.0 +0.2**
BTO sS **sS** **17 07 01.5 -1.1**
BTO SS **SS** **17 10 17.8 -4.1**
BTO pmax pmax
comp=Z,410nm,0.8s
BTO pmax pmax
comp=Z,4µm,10.6s
BTO LR LR
comp=Z,11µm,16.5s
BTO LR LR
comp=Z,20µm,19.2s
BTO LR LR
comp=Z,22µm,20.3s
**OK048 Pawnee Station 53.11 76** IAmb IAmb 16 59 17.7
comp=Z,126nm,0.8s
**WMOK Wichita Mounta 53.13 79** IAmb IAmb 16 59 18.9
comp=Z,69nm,0.8s
**WMOK Wichita Mounta 53.13 79** IAMs_20 IAMs_20 17 19 27.1
comp=Z,6µm,22.0s
**H43A Windswept, Lux 53.14 63** P **P** **16 59 15.0 -1.4**
H43A IAmb IAmb 16 59 17.2
comp=Z,172nm,0.9s
**SFJD Kangerlussuaq 53.15 25** P **P** **16 59 15.6 -0.5**
SFJD IAmb IAmb 16 59 17.1
comp=Z,122nm,0.9s
**SFJD Kangerlussuaq 53.15 25** LR LR 17 26 02.7
comp=Z,7µm,18.1s,baz=321,slow=41
**SFJD Kangerlussuaq 53.15 25** P **P** **16 59 15.6 -0.5**
SFJD pmax pmax
comp=Z,122nm,1.0s
SFJD MLR MLR
comp=Z,8µm,19.0s
**SFJD Kangerlussuaq 53.15 25** *i* P **P** **16 59 14.8 -1.3**
SFJD IAmb IAmb 16 59 17.9
comp=Z,72nm,0.8s
**APMT Aspermont 53.27 81** IAmb IAmb 16 59 36.4
comp=Z,254nm,1.5s
**KNGR Kungurtug, Tuv 53.34 307** *d* *i* P **P** **16 59 19.2 +1.3**
KNGR pmax pmax
comp=Z,267nm,1.0s
**QUOK Quay 53.42 76** IAmb IAmb 16 59 19.4
comp=Z,93nm,0.9s
**OK052 Battle Ridge R 53.48 76** IAmb IAmb 16 59 20.1
comp=Z,151nm,0.9s
**OK031 S. Brethren Rd 53.48 76** P **P** **16 59 19.0 0.0**
**NJ2 Nanjing 53.49 277** ⇑ *i* P **P** **16 59 19.8 +0.7**
NJ2 S **S** **17 06 48.8 0.0**
NJ2 sS **sS** **17 07 14.0 +5.5**
NJ2 pmax pmax
comp=Z,190nm,0.8s
NJ2 pmax pmax
comp=Z,1µm,3.5s
NJ2 LR LR
comp=Z,2µm,24.5s
NJ2 LR LR
comp=Z,3µm,23.6s
NJ2 LR LR
comp=Z,5µm,24.5s
**TIY Taiyuan 53.54 287** ⇓P **P** **16 59 21.3 +1.8**
TIY sP **sP** **16 59 39.5 +3.5**
TIY S **S** **17 06 49.5 0.0**
TIY sS **sS** **17 07 08.8 -0.6**
TIY pmax pmax
comp=Z,150nm,1.1s
TIY pmax pmax
comp=Z,1µm,11.8s
TIY LR LR
comp=Z,4µm,17.2s
TIY LR LR
comp=Z,4µm,19.9s
TIY LR LR
comp=Z,4µm,21.3s
**LPIG La Paz 53.55 97** LR LR 17 16 50.4
comp=Z,4µm,21.8s,baz=310,slow=30
**SGCY Sterling City 53.63 83** IAmb IAmb 16 59 38.9
comp=Z,178nm,1.1s
**L42A Oliver, Polo 53.68 66** IAMs_20 IAMs_20 17 21 04.8
comp=Z,7µm,20.0s
**DEOK Depew 53.76 76** IAmb IAmb 16 59 22.2
comp=Z,115nm,1.0s
**E46A Sault Ste Mari 53.79 59** P **P** **16 59 20.8 -0.3**
**X34A Smith Ranch, M 53.80 78** IAMs_20 IAMs_20 17 23 12.8
comp=Z,6µm,18.0s
**N41A Harden Midland 53.85 68** IAMs_20 IAMs_20 17 20 28.4
comp=Z,7µm,21.0s
**TX31 Lajitas Ar. Si 53.87 87** IAmb IAmb 16 59 40.7
comp=Z,88nm,0.9s
**TXAR Lajitas Array 53.87 87** P **P** **16 59 21.0 -1.0**
**TXAR Lajitas Array 53.87 87** P **P** **16 59 22.3 +0.2**
comp=Z,60nm,0.8s,baz=299,slow=5.1,SNR=180
TXAR ScP **ScP** **17 04 22.1 +0.5**
comp=Z,4.2nm,0.8s,baz=298,slow=2.7,SNR=4.9
TXAR LR LR 17 19 53.9
comp=Z,3µm,20.8s,baz=310,slow=33
TXAR PKPPKP **P'P'df** **17 29 34.4 -7.4**
comp=Z,0.6nm,0.6s,baz=112,slow=8.2,SNR=3.8
comp=Z,60nm,0.8s
**P40A Paris 53.94 70** IAMs_20 IAMs_20 17 23 57.8
comp=Z,5µm,18.0s
**K43A Burlington 53.97 65** IAMs_20 IAMs_20 17 21 25.5
comp=Z,7µm,20.0s
**WTFS Witchita Falls 53.98 80** IAmb IAmb 16 59 40.9
comp=Z,71nm,0.9s
**ABTX Abilene, Hawle 54.05 81** IAMs_20 IAMs_20 17 20 31.2
comp=Z,5µm,20.0s
**ICESG Greenland Ices 54.05 19** *i* P **P** **16 59 21.9 -1.3**
ICESG IAmb IAmb 16 59 24.4
comp=Z,143nm,0.8s
**SLBS Sierra La Lagu 54.08 97** IAMs_20 IAMs_20 17 16 08.5
comp=Z,5µm,22.0s
**I45A Fountain 54.26 62** IAMs_20 IAMs_20 17 25 31.1
comp=Z,5µm,18.0s
**OZNA Ozona 54.32 84** IAmb IAmb 16 59 43.2
comp=Z,65nm,0.9s
**S39A Bolivar 54.41 72** IAMs_20 IAMs_20 17 25 15.5
comp=Z,4µm,19.0s
**RLO Rose Lookout 54.43 75** IAmb IAmb 16 59 26.6
comp=Z,94nm,0.9s
**L44A Lake County Fo 54.55 65** P **P** **16 59 25.3 -1.4**
baz=311,SNR=12
L44A S **S** **17 06 58.5 -4.4**
baz=311
**R40A Maddies Statio 54.63 71** IAMs_20 IAMs_20 17 23 13.2
comp=Z,4µm,19.0s
**DY2G Dye2 54.66 24** *i* P **P** **16 59 26.0 -1.5**
DY2G IAmb IAmb 16 59 30.4
comp=Z,30nm,0.7s
**HQIL Hanson Quary C 54.83 65** IAMs_20 IAMs_20 17 20 10.3
comp=Z,7µm,20.0s
**HDIL Hopedale 54.84 67** IAMs_20 IAMs_20 17 21 31.7
comp=Z,6µm,21.0s
**NUUK Nuuk 54.97 28** *i* P **P** **16 59 28.4 -1.0**
NUUK IAmb IAmb 16 59 31.1
comp=Z,28nm,0.7s
**HHAR Hobbs 54.99 74** IAMs_20 IAMs_20 17 24 07.2
comp=Z,4µm,19.0s
**M44A Midewin, Midew 55.00 66** IAMs_20 IAMs_20 17 21 46.4
comp=Z,7µm,20.0s
**Z35A Perchaven, San 55.02 79** IAMs_20 IAMs_20 17 20 25.8
comp=Z,6µm,22.0s
**FW06 Azle 55.08 80** IAMs_20 IAMs_20 17 21 47.8
comp=Z,5µm,19.0s
**FW07 Weatherford 55.13 80** IAMs_20 IAMs_20 17 20 20.0
comp=Z,6µm,21.0s
**X37A Clayton 55.29 77** P **P** **16 59 31.9 -0.3**
X37A IAmb IAmb 16 59 36.4
comp=Z,110nm,0.8s
**P43A Skaggs, Pawnee 55.32 68** P **P** **16 59 31.3 -1.0**
P43A IAMs_20 IAMs_20 17 21 33.8
comp=Z,6µm,21.0s
**BRDY Brady 55.37 82** IAmb IAmb 16 59 51.4
comp=Z,82nm,1.0s
**CCM Cathedral Cave 55.39 71** P **P** **16 59 31.7 -1.1**
CCM IAmb IAmb 16 59 49.9
comp=Z,66nm,0.9s
**CCM Cathedral Cave 55.39 71** IAMs_20 IAMs_20 17 23 44.3
comp=Z,4µm,19.0s
**CCM Cathedral Cave 55.39 71** P **P** **16 59 31.7 -1.1**
CCM pmax pmax
comp=Z,67nm,1.0s
CCM MLR MLR
comp=Z,4µm,19.0s
**MGMO Mountain Grove 55.39 72** P **P** **16 59 30.9 -2.1**
MGMO IAmb IAmb 16 59 32.9
comp=Z,87nm,0.8s
MGMO IAMs_20 IAMs_20 17 25 52.6
comp=Z,5µm,19.0s
**JCT Junction City 55.44 83** IAmb IAmb 16 59 51.0
comp=Z,70nm,0.8s
**J47A Sunmer 55.56 62** IAMs_20 IAMs_20 17 22 34.5
comp=Z,4µm,21.0s
**L46A Eue Claire 55.56 64** IAMs_20 IAMs_20 17 22 13.6
comp=Z,6µm,20.0s
**SLM Saint Louis 55.58 70** IAMs_20 IAMs_20 17 23 12.4
comp=Z,5µm,20.0s
**LYN LuoYang 55.65 284** ⇑P **P** **16 59 35.5 +0.7**
LYN sP sP 16 59 54.0 +3.2
LYN PP **PP** **17 01 40.8 +1.8**
LYN S **S** **17 07 13.3 -4.5**
LYN pmax pmax
comp=Z,390nm,0.9s
LYN pmax pmax
comp=Z,2µm,9.5s
LYN LR LR
comp=Z,8µm,21.6s
LYN LR LR
comp=Z,3µm,29.9s
LYN LR LR
comp=Z,12µm,24.4s
**DRIO Del Rio 55.68 85** IAmb IAmb 16 59 52.9
comp=Z,58nm,0.9s
**SCO Scoresbysund 55.78 12** IAMs_20 IAMs_20 17 23 50.3
comp=Z,5µm,21.0s
**SCO Scoresbysund 55.78 12** *i* P **P** **16 59 33.9 -1.3**
SCO IAmb IAmb 16 59 36.4
comp=Z,70nm,0.7s
**FVM French Village 55.91 70** P **P** **16 59 35.1 -1.5**
FVM IAmb IAmb 16 59 36.9
comp=Z,132nm,0.9s
FVM IAMs_20 IAMs_20 17 23 01.2
comp=Z,4µm,20.0s
**FVM French Village 55.91 70** P **P** **16 59 35.1 -1.5**
FVM pmax pmax
comp=Z,132nm,0.9s
FVM MLR MLR
comp=Z,4µm,20.0s
**Q44A Meyer Farm, Va 56.11 69** IAMs_20 IAMs_20 17 21 48.1
comp=Z,5µm,20.0s
**VLDQ Val d'Or 56.16 54** IAmb IAmb 16 59 39.0
comp=Z,113nm,1.0s
VLDQ IAMs_20 IAMs_20 17 22 49.5
comp=Z,5µm,20.0s
**T42A Van Buren 56.17 72** IAMs_20 IAMs_20 17 24 10.5
comp=Z,4µm,19.0s
**YOJ Yonaguni jima 56.33 267** P **P** **16 59 40.6 +0.9**
**YOJ Yonaguni jima 56.33 267** P **P** **16 59 39.8 +0.1**
**YOJ Yonaguni jima 56.33 267** P **P** **16 59 39.8 +0.1**
YOJ pmax pmax
comp=Z,242nm,0.9s
**FCAR Ozark Folk Cen 56.34 73** P **P** **16 59 38.0 -1.7**
FCAR IAmb IAmb 16 59 39.5
comp=Z,114nm,0.9s
**SOEG Soedalen 56.40 17** *i* P **P** **16 59 38.6 -1.1**
SOEG IAmb IAmb 16 59 41.0
comp=Z,73nm,0.7s
**SCHQ Schefferville 56.43 42** P **P** **16 59 39.4 -0.7**
comp=Z,110nm,0.8s,baz=329,slow=7.5,SNR=31
SCHQ LR LR 17 24 59.3
comp=Z,6µm,19.8s,baz=316,slow=37
comp=Z,110nm,0.8s
**435B Jarrell 56.59 82** IAMs_20 IAMs_20 17 22 15.8
comp=Z,5µm,20.0s
**435B Jarrell 56.59 82** P **P** **16 59 40.7 -0.8**
baz=315
435B S **S** **17 07 30.3 0.0**
baz=315
**L48A N Adams 56.64 63** IAMs_20 IAMs_20 17 23 07.0
comp=Z,4µm,21.0s
**JMIC Jan Mayen 56.65 7** *e*P **P** **16 59 41.6 +0.2**
JMIC IVmB_BB 16 59 42.1
comp=Z,4µm,2.2s
JMIC *e*S **S** **17 07 32.3 +2.2**
**JMIC Jan Mayen 56.65 7** LR LR 17 25 15.8

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,4µm,18.4s,baz=4.0,slow=37 | | | | | | | | | |
| **WHAR** | **Wooly Hollow** | **56.65** | **74** | IAmb | IAmb | 16 59 59.6 | | | | |
| | comp=Z,132nm,1.3s | | | | | | | | | |
| **P46A** | **Rosedale** | **56.66** | **67** | IAMs_20 | IAMs_20 | 17 22 47.7 | | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **56.73** | **71** | IAMs_20 | IAMs_20 | 17 24 25.9 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **OLIL** | **Olney** | **56.75** | **68** | IAMs_20 | IAMs_20 | 17 22 08.2 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **S44A** | **Carbondale** | **56.79** | **70** | IAMs_20 | IAMs_20 | 17 23 48.8 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **SIUC** | **Southern Illin** | **56.80** | **70** | IAMs_20 | IAMs_20 | 17 23 48.6 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **237A** | **Washetta, Mont** | **56.81** | **79** | IAMs_20 | IAMs_20 | 17 21 24.4 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| **AAM** | **Ann Arbor** | **56.82** | **62** | IAmb | IAmb | 16 59 43.9 | | | | |
| | comp=Z,63nm,0.8s | | | | | | | | | |
| AAM | | | | IAMs_20 | IAMs_20 | 17 23 32.9 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **56.91** | **317** | IAmb | IAmb | 17 00 40.2 | | | | |
| | comp=Z,57nm,0.9s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.91** | **317** | P | **P** | **16 59 42.5** | **-1.0** | | | |
| | comp=Z,23nm,0.7s,baz=48,slow=6.4,SNR=53 | | | | | | | | | |
| ZALV | | | | PcP | **PcP** | **17 00 39.0** | **+0.6** | | | |
| | comp=Z,47nm,0.8s,baz=45,slow=3.7,SNR=12 | | | | | | | | | |
| ZALV | | | | ScP | **ScP** | **17 04 35.6** | **+1.2** | | | |
| | comp=Z,3.0nm,0.7s,baz=46,slow=4.3,SNR=3.5 | | | | | | | | | |
| ZALV | | | | LR | LR | 17 25 25.6 | | | | |
| | comp=Z,6µm,20.9s,baz=42,slow=37 | | | | | | | | | |
| ZALV | | | | PKP2bc | **P'P'bc** | **17 29 52.4** | **-0.4** | | | |
| | comp=Z,0.4nm,0.2s,baz=192,slow=4.4,SNR=3.6 | | | | | | | | | |
| | comp=Z,23nm,0.7s | | | | | | | | | |
| **UALR** | **University of** | **56.97** | **74** | IAMs_20 | IAMs_20 | 17 26 35.6 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| **K50A** | **Casco** | **57.07** | **61** | IAMs_20 | IAMs_20 | 17 25 52.9 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **ISOG** | **Isortoq, Green** | **57.16** | **22** | *i* P | **P** | **16 59 42.8** | **-2.2** | | | |
| ISOG | | | | IAmb | IAmb | 16 59 45.7 | | | | |
| | comp=Z,70nm,0.8s | | | | | | | | | |
| **HAMF** | **Hammerfest** | **57.16** | **354** | *e*P | **P** | **16 59 43.8** | **-1.2** | | | |
| HAMF | | | | IAmb | IAmb | 16 59 56.9 | | | | |
| | comp=Z,1µm,3.2s | | | | | | | | | |
| **PARMO** | **Parma** | **57.20** | **71** | P | **P** | **16 59 44.9** | **-0.9** | | | |
| PARMO | | | | IAMs_20 | IAMs_20 | 17 24 50.4 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **833A** | **Chaparral WMA,** | **57.22** | **85** | IAMs_20 | IAMs_20 | 17 21 53.8 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **833A** | **Chaparral WMA,** | **57.22** | **85** | P | **P** | **16 59 45.3** | **-0.7** | | | |
| | baz=316,SNR=20 | | | | | | | | | |
| 833A | | | | S | **S** | **17 07 38.7** | **0.0** | | | |
| | baz=316 | | | | | | | | | |
| **VADS** | **Vadso** | **57.24** | **352** | *e*P | **P** | **16 59 45.0** | **-0.6** | | | |
| VADS | | | | IVmBBB | | 16 59 47.0 | | | | |
| | comp=Z,1µm,0.9s | | | | | | | | | |
| VADS | | | | *e*S | **S** | **17 07 38.8** | **+1.0** | | | |
| VADS | | | | IVMs_BB | IVMs_BB | 17 25 43.5 | | | | |
| | comp=Z,3µm,21.8s | | | | | | | | | |
| **WLAR** | **White Oak Lake** | **57.27** | **76** | IAMs_20 | IAMs_20 | 17 26 32.8 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **WHN** | **Wuhan** | **57.30** | **279** | ⇑*i*P | **P** | **16 59 47.3** | **+0.8** | | | |
| WHN | | | | S | **S** | **17 07 42.3** | **+2.7** | | | |
| WHN | | | | pmax | pmax | | | | | |
| | comp=Z,1µm,1.1s | | | | | | | | | |
| WHN | | | | pmax | pmax | | | | | |
| | comp=Z,4µm,2.7s | | | | | | | | | |
| WHN | | | | LR | LR | | | | | |
| | comp=Z,3µm,12.7s | | | | | | | | | |
| WHN | | | | LR | LR | | | | | |
| | comp=Z,22µm,27.9s | | | | | | | | | |
| WHN | | | | LR | LR | | | | | |
| | comp=Z,10µm,20.1s | | | | | | | | | |
| **ANGG** | **Ammassalik, Gr** | **57.40** | **21** | IAMs_20 | IAMs_20 | 17 26 59.1 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **ANGG** | **Ammassalik, Gr** | **57.40** | **21** | *i* P | **P** | **16 59 45.0** | **-1.7** | | | |
| ANGG | | | | IAmb | IAmb | 16 59 47.2 | | | | |
| | comp=Z,78nm,0.9s | | | | | | | | | |
| **PVMO** | **Portageville** | **57.41** | **71** | IAMs_20 | IAMs_20 | 17 24 46.8 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **N49A** | **Columbus Grove** | **57.47** | **64** | IAMs_20 | IAMs_20 | 17 23 22.1 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **USIN** | **University of** | **57.52** | **69** | IAMs_20 | IAMs_20 | 17 22 32.7 | | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **SADO** | **Sadowa** | **57.56** | **58** | IAmb | IAmb | 16 59 50.0 | | | | |
| | comp=Z,113nm,0.8s | | | | | | | | | |
| **SADO** | **Sadowa** | **57.56** | **58** | LR | LR | 17 26 16.3 | | | | |
| | comp=Z,8µm,18.0s,baz=338,slow=38 | | | | | | | | | |
| **HICK** | **Hickman** | **57.59** | **71** | IAMs_20 | IAMs_20 | 17 25 11.7 | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| **T45A** | **Paducah** | **57.60** | **70** | IAMs_20 | IAMs_20 | 17 24 12.9 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **LNXT** | **Lenox** | **57.74** | **71** | IAMs_20 | IAMs_20 | 17 24 57.7 | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| **GLAT** | **Glass** | **57.75** | **71** | IAMs_20 | IAMs_20 | 17 24 57.8 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **Z41A** | **Richland Creek** | **57.75** | **76** | IAMs_20 | IAMs_20 | 17 24 02.7 | | | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| **M50A** | **Fremont** | **57.77** | **63** | IAMs_20 | IAMs_20 | 17 23 52.0 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| **P48A** | **Milroy** | **57.77** | **66** | IAMs_20 | IAMs_20 | 17 23 22.8 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **KEV** | **Kevo** | **57.79** | **353** | P | **P** | **16 59 48.5** | **-1.0** | | | |
| KEV | | | | IAmb | IAmb | 16 59 50.4 | | | | |
| | comp=Z,70nm,0.9s | | | | | | | | | |
| **KEV** | **Kevo** | **57.79** | **353** | P | **P** | **16 59 48.5** | **-1.0** | | | |
| KEV | | | | pmax | pmax | | | | | |
| | comp=Z,71nm,0.9s | | | | | | | | | |
| KEV | | | | MLR | MLR | | | | | |
| | comp=Z,8µm,21.0s | | | | | | | | | |
| **CCAR** | **Cane Creek** | **57.91** | **75** | IAMs_20 | IAMs_20 | 17 27 48.3 | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| **UTMT** | **University of** | **57.94** | **71** | IAMs_20 | IAMs_20 | 17 25 21.9 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **58.12** | **65** | P | **P** | **16 59 50.7** | **-1.5** | | | |
| P49A | | | | IAmb | IAmb | 16 59 52.3 | | | | |
| | comp=Z,125nm,0.9s | | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **58.12** | **65** | P | **P** | **16 59 50.1** | **-2.1** | | | |
| | baz=314,SNR=45 | | | | | | | | | |
| P49A | | | | S | **S** | **17 07 46.1** | **-4.1** | | | |
| | baz=314 | | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **58.12** | **353** | *e*P | **P** | **16 59 51.3** | **-0.5** | | | |
| ARA0 | | | | *e*S | **S** | **17 07 49.8** | **+0.3** | | | |
| ARA0 | | | | *e*SS | **SS** | **17 11 44.0** | **+3.6** | | | |
| **ARCES** | **ARCESS Array B** | **58.12** | **353** | P | **P** | **16 59 50.4** | **-1.4** | | | |
| ARCES | | | | IAmb | IAmb | 17 00 44.2 | | | | |
| | comp=Z,54nm,0.8s | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.12** | **353** | P | **P** | **16 59 50.2** | **-1.6** | | | |
| | comp=Z,36nm,0.8s,baz=15,slow=5.0,SNR=45 | | | | | | | | | |
| ARCES | | | | PcP | **PcP** | **17 00 42.8** | **-0.3** | | | |
| | comp=Z,48nm,0.8s,baz=15,slow=5.0,SNR=11 | | | | | | | | | |
| ARCES | | | | LR | LR | 17 24 39.9 | | | | |
| | comp=Z,6µm,21.8s,baz=10.0,slow=36 | | | | | | | | | |
| | comp=Z,36nm,0.8s | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.12** | **353** | P | **P** | **16 59 50.4** | **-1.4** | | | |
| ARCES | | | | pmax | pmax | | | | | |
| | comp=Z,53nm,0.8s | | | | | | | | | |
| **XAN** | **Xi'an** | **58.12** | **286** | ⇑P | **P** | **16 59 51.8** | **-0.6** | | | |
| XAN | | | | pP | pwP | 17 00 06.0 | +1.8 | | | |
| XAN | | | | PP | **PP** | **17 02 03.3** | **+2.2** | | | |
| XAN | | | | S | **S** | **17 07 48.8** | **-1.8** | | | |
| XAN | | | | sS | sS | 17 08 11.8 | +1.4 | | | |
| XAN | | | | SS | **SS** | **17 11 42.5** | **+0.6** | | | |
| XAN | | | | pmax | pmax | | | | | |
| | comp=Z,290nm,1.0s | | | | | | | | | |
| XAN | | | | pmax | pmax | | | | | |
| | comp=Z,1µm,4.7s | | | | | | | | | |
| XAN | | | | LR | LR | | | | | |
| | comp=Z,6µm,21.6s | | | | | | | | | |
| XAN | | | | LR | LR | | | | | |
| | comp=Z,8µm,19.1s | | | | | | | | | |
| XAN | | | | LR | LR | | | | | |
| | comp=Z,11µm,20.6s | | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **58.13** | **67** | IAMs_20 | IAMs_20 | 17 23 32.6 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **MET** | **Memphis--Engin** | **58.16** | **72** | IAMs_20 | IAMs_20 | 17 27 45.9 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **HKT** | **Hockley** | **58.24** | **81** | IAMs_20 | IAMs_20 | 17 23 29.3 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **IVI** | **Ivigtut** | **58.32** | **28** | *i* P | **P** | **16 59 52.0** | **-1.2** | | | |
| IVI | | | | IAmb | IAmb | 16 59 54.9 | | | | |
| | comp=Z,104nm,0.6s | | | | | | | | | |
| **TRO** | **Tromso** | **58.41** | **356** | *e*P | **P** | **16 59 53.9** | **+0.2** | | | |
| TRO | | | | IVmB_BB | | 17 00 09.4 | | | | |
| | comp=Z,2µm,3.3s | | | | | | | | | |
| TRO | | | | *e*S | **S** | **17 07 49.4** | **-3.8** | | | |
| TRO | | | | *e*SS | **SS** | **17 11 50.5** | **+5.7** | | | |
| TRO | | | | IVMs_BB | IVMs_BB | 17 24 55.3 | | | | |
| | comp=Z,2µm,4.1s | | | | | | | | | |
| **N51A** | **Ashland** | **58.47** | **63** | IAMs_20 | IAMs_20 | 17 27 22.5 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **T47A** | **Sharon Grove** | **58.52** | **69** | IAMs_20 | IAMs_20 | 17 23 13.0 | | | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| **DELO** | **Deloro Mine** | **58.53** | **57** | P | **P** | **16 59 54.9** | **0.0** | | | |
| DELO | | | | IAmb | IAmb | 16 59 56.5 | | | | |
| | comp=Z,128nm,0.9s | | | | | | | | | |
| **M52A** | **Chesterland** | **58.60** | **62** | IAMs_20 | IAMs_20 | 17 26 52.8 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **58.61** | **64** | IAMs_20 | IAMs_20 | 17 24 08.2 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **WVT** | **Waverly** | **58.69** | **70** | P | **P** | **16 59 55.2** | **-1.0** | | | |
| WVT | | | | IAmb | IAmb | 16 59 57.1 | | | | |
| | comp=Z,80nm,1.0s | | | | | | | | | |
| **WVT** | **Waverly** | **58.69** | **70** | IAMs_20 | IAMs_20 | 17 24 45.8 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **WVT** | **Waverly** | **58.69** | **70** | P | **P** | **16 59 55.2** | **-1.0** | | | |
| WVT | | | | pmax | pmax | | | | | |
| | comp=Z,80nm,1.0s | | | | | | | | | |
| WVT | | | | MLR | MLR | | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **KVTX** | **Kingsville** | **58.70** | **84** | IAMs_20 | IAMs_20 | 17 23 23.9 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **QZH** | **Quanzhou** | **58.71** | **271** | ⇑*i*P | **P** | **16 59 57.0** | **+0.6** | | | |
| QZH | | | | S | **S** | **17 08 01.5** | **+3.3** | | | |
| QZH | | | | pmax | pmax | | | | | |
| | comp=Z,210nm,1.1s | | | | | | | | | |
| QZH | | | | pmax | pmax | | | | | |
| | comp=Z,2µm,4.9s | | | | | | | | | |
| QZH | | | | LR | LR | | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| QZH | | | | LR | LR | | | | | |
| | comp=Z,2µm,17.6s | | | | | | | | | |
| QZH | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.6s | | | | | | | | | |
| **R49A** | **Shelbyville** | **58.72** | **67** | IAMs_20 | IAMs_20 | 17 23 52.3 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **58.74** | **312** | *c* *i*P | **P** | **16 59 56.2** | **-0.4** | | | |
| DGZ | | | | pmax | pmax | | | | | |
| | comp=Z,84nm,0.8s | | | | | | | | | |
| DGZ | | | | MLR | MLR | | | | | |
| | comp=Z,9µm,19.0s | | | | | | | | | |
| **KTK1** | **Kautokeino** | **58.80** | **354** | *e*P | **P** | **16 59 56.4** | **-0.1** | | | |
| **LVZ** | **Lovozero** | **58.83** | **349** | P | **P** | **16 59 55.2** | **-1.6** | | | |
| **LVZ** | **Lovozero** | **58.83** | **349** | *c* *i*P | **P** | **16 59 55.7** | **-1.1** | | | |
| LVZ | | | | pmax | pmax | | | | | |
| | comp=Z,210nm,0.9s | | | | | | | | | |
| LVZ | | | | MLR | MLR | | | | | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| **OXF** | **Oxford** | **58.89** | **73** | IAMs_20 | IAMs_20 | 17 29 03.3 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **TRQ** | **Mont Tremblant** | **58.90** | **54** | IAmb | IAmb | 16 59 59.5 | | | | |
| | comp=Z,116nm,1.1s | | | | | | | | | |
| TRQ | | | | IAMs_20 | IAMs_20 | 17 24 29.4 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **143A** | **Socs Landing,** | **58.98** | **76** | IAMs_20 | IAMs_20 | 17 25 13.5 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **M53A** | **WI Miller and** | **59.04** | **61** | P | **P** | **16 59 58.7** | **+0.1** | | | |
| **M53A** | **WI Miller and** | **59.04** | **61** | P | **P** | **16 59 57.3** | **-1.2** | | | |
| | baz=314,SNR=23 | | | | | | | | | |
| M53A | | | | S | **S** | **17 07 59.3** | **-2.8** | | | |
| | baz=314 | | | | | | | | | |
| **APA** | **Apatity** | **59.29** | **349** | ⇓*i*P | **P** | **16 59 56.2** | **-3.7** | | | |
| APA | | | | *i* | | 17 00 47.2 | | | | |
| APA | | | | *i* | | 17 02 16.0 | | | | |
| APA | | | | *i* PPP | PPP | 17 03 38.0 | | | | |
| APA | | | | *i* S | **S** | **17 07 56.0** | **-8.7** | | | |
| APA | | | | *i* | | 17 09 42.0 | | | | |
| APA | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | | |
| APA | | | | MLR | MLR | | | | | |
| | comp=Z,7µm,21.0s | | | | | | | | | |
| **ZAIG** | **Zacatecas** | **59.30** | **92** | IAMs_20 | IAMs_20 | 17 20 39.3 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| **O52A** | **Adamsville** | **59.32** | **63** | IAMs_20 | IAMs_20 | 17 24 51.0 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **PLAL** | **Pickwick Lake** | **59.35** | **71** | P | **P** | **16 59 59.6** | **-1.2** | | | |
| PLAL | | | | IAMs_20 | IAMs_20 | 17 24 57.2 | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **WBO** | **Williamsburg** | **59.39** | **55** | IAMs_20 | IAMs_20 | 17 26 54.3 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **P52A** | **Corning** | **59.49** | **64** | IAMs_20 | IAMs_20 | 17 24 46.6 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **P52A** | **Corning** | **59.49** | **64** | P | **P** | **16 59 59.8** | **-1.9** | | | |
| P52A | baz=314 | | | S | **S** | **17 08 02.8** | **-5.3** | | | |
| | baz=314 | | | | | | | | | |
| **V48A** | **Smith Brothers** | **59.55** | **70** | IAMs_20 | IAMs_20 | 17 25 21.8 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **O53A** | **New Philadelph** | **59.57** | **63** | IAMs_20 | IAMs_20 | 17 24 58.6 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| **O53A** | **New Philadelph** | **59.57** | **63** | P | **P** | **17 00 00.5** | **-1.8** | | | |
| | baz=314,SNR=22 | | | | | | | | | |
| O53A | | | | S | **S** | **17 08 06.3** | **-2.8** | | | |
| | baz=314 | | | | | | | | | |
| **CLTN** | **Cedars of Leba** | **59.59** | **69** | IAMs_20 | IAMs_20 | 17 23 55.4 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **U49A** | **Red Boiling Sp** | **59.61** | **69** | IAMs_20 | IAMs_20 | 17 23 46.9 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **GTA** | **Gaotai** | **59.63** | **296** | P | **P** | **17 00 02.5** | **-0.4** | | | |
| GTA | | | | PcP | **PcP** | **17 00 50.0** | **+0.3** | | | |
| GTA | | | | S | **S** | **17 08 08.3** | **-1.9** | | | |
| GTA | | | | sS | pS | 17 08 23.8 | -0.6 | | | |
| GTA | | | | pmax | pmax | | | | | |
| | comp=Z,100nm,0.9s | | | | | | | | | |
| GTA | | | | pmax | pmax | | | | | |
| | comp=Z,800nm,5.5s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=Z,7µm,17.4s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=Z,9µm,17.8s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=Z,14µm,18.5s | | | | | | | | | |
| **LZH** | **Lanzhou** | **59.67** | **291** | ⇑*i*P | **P** | **17 00 03.8** | **+0.6** | | | |
| LZH | | | | pP | pP | 17 00 15.3 | +0.2 | | | |
| LZH | | | | PcP | **PcP** | **17 00 50.8** | **+0.9** | | | |
| LZH | | | | S | **S** | **17 08 10.5** | **-0.3** | | | |
| LZH | | | | pmax | pmax | | | | | |
| | comp=Z,240nm,1.1s | | | | | | | | | |
| LZH | | | | pmax | pmax | | | | | |
| | comp=Z,2µm,4.3s | | | | | | | | | |
| LZH | | | | LR | LR | | | | | |
| | comp=Z,7µm,19.6s | | | | | | | | | |
| LZH | | | | LR | LR | | | | | |
| | comp=Z,5µm,17.9s | | | | | | | | | |
| LZH | | | | LR | LR | | | | | |
| | comp=Z,10µm,19.2s | | | | | | | | | |
| **T50A** | **Nancy** | **59.80** | **68** | IAMs_20 | IAMs_20 | 17 24 45.8 | | | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| **CNSH** | **ChangSha** | **59.84** | **278** | P | **P** | **17 00 04.8** | **+0.5** | | | |
| CNSH | | | | S | **S** | **17 08 11.3** | **-1.5** | | | |
| CNSH | | | | pmax | pmax | | | | | |
| | comp=Z,210nm,1.3s | | | | | | | | | |
| CNSH | | | | LR | LR | | | | | |
| | comp=Z,3µm,18.6s | | | | | | | | | |
| CNSH | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.6s | | | | | | | | | |
| CNSH | | | | LR | LR | | | | | |
| | comp=Z,4µm,20.4s | | | | | | | | | |
| **VBMS** | **Vicksburg** | **59.85** | **75** | IAMs_20 | IAMs_20 | 17 25 38.7 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **MNTQ** | **Montreal, Queb** | **59.87** | **54** | IAMs_20 | IAMs_20 | 17 24 57.9 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **P53A** | **Whipple** | **60.01** | **63** | IAMs_20 | IAMs_20 | 17 28 53.2 | | | | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| **LONY** | **Lake Ozonia** | **60.01** | **55** | IAmb | IAmb | 17 00 07.5 | | | | |
| | comp=Z,49nm,0.8s | | | | | | | | | |
| LONY | | | | IAMs_20 | IAMs_20 | 17 27 54.7 | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **LMQ** | **La Malbaie** | **60.02** | **50** | IAmb | IAmb | 17 00 06.1 | | | | |
| | comp=Z,82nm,1.0s | | | | | | | | | |
| **S51A** | **Beattyville** | **60.07** | **66** | IAMs_20 | IAMs_20 | 17 24 44.6 | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| **LOF** | **Lofoten** | **60.10** | **358** | *e*P | **P** | **17 00 05.5** | **+0.1** | | | |
| LOF | | | | IVmB_BB | | 17 00 32.7 | | | | |
| | comp=Z,1µm,3.4s | | | | | | | | | |
| LOF | | | | *e*S | **S** | **17 08 08.5** | **-6.5** | | | |
| LOF | | | | *e*SS | **SS** | **17 12 15.9** | **+4.7** | | | |
| LOF | | | | IVMs_BB | IVMs_BB | 17 22 16.8 | | | | |
| | comp=Z,2µm,28.2s | | | | | | | | | |
| **STEI** | **Steigen** | **60.26** | **357** | *e*P | **P** | **17 00 04.5** | **-2.0** | | | |
| **146A** | **Union** | **60.42** | **74** | IAMs_20 | IAMs_20 | 17 29 06.6 | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **SWET** | **Sewanee** | **60.43** | **70** | IAMs_20 | IAMs_20 | 17 25 58.8 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **ENH** | **Enshi** | **60.44** | **282** | P | **P** | **17 00 08.8** | **+0.4** | | | |
| **ENH** | **Enshi** | **60.44** | **282** | IAMs_20 | IAMs_20 | 17 24 54.2 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| **Z47A** | **Carrollton** | **60.61** | **73** | IAMs_20 | IAMs_20 | 17 29 11.1 | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **NCB** | **Newcomb** | **60.65** | **55** | IAMs_20 | IAMs_20 | 17 26 18.6 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| **Q54A** | **Coxs Mills** | **60.67** | **63** | IAMs_20 | IAMs_20 | 17 24 29.7 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| **MCWV** | **Mont Chateau** | **60.73** | **62** | IAMs_20 | IAMs_20 | 17 28 10.3 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **FAUS** | **Fauske** | **60.80** | **357** | *e*P | **P** | **17 00 09.1** | **-1.1** | | | |
| FAUS | | | | *e*S | **S** | **17 08 22.9** | **-1.1** | | | |
| FAUS | | | | *e*SS | **SS** | **17 12 26.6** | **+4.4** | | | |
| FAUS | | | | IVMs_BB | IVMs_BB | 17 23 18.1 | | | | |
| | comp=Z,2µm,19.4s | | | | | | | | | |
| **346A** | **Big Creek Wild** | **61.07** | **75** | IAMs_20 | IAMs_20 | 17 29 45.8 | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **CPCT** | **Cooper Cave** | **61.08** | **69** | IAMs_20 | IAMs_20 | 17 24 52.9 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **FPAL** | **Fort Paine** | **61.10** | **70** | IAMs_20 | IAMs_20 | 17 24 09.5 | | | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| **Y49A** | **Blount Mountai** | **61.12** | **71** | IAMs_20 | IAMs_20 | 17 26 01.4 | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **VT1** | **Waterbury** | **61.13** | **54** | IAMs_20 | IAMs_20 | 17 25 36.7 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **BORG** | **Borgarnes** | **61.23** | **14** | P | **P** | **17 00 13.7** | **+0.5** | | | |
| BORG | | | | IAmb | IAmb | 17 00 15.2 | | | | |
| | comp=Z,63nm,0.9s | | | | | | | | | |
| **BORG** | **Borgarnes** | **61.23** | **14** | IAMs_20 | IAMs_20 | 17 31 13.3 | | | | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| **BORG** | **Borgarnes** | **61.23** | **14** | LR | LR | 17 30 48.8 | | | | |
| | comp=Z,3µm,18.2s,baz=338,slow=40 | | | | | | | | | |
| **BORG** | **Borgarnes** | **61.23** | **14** | P | **P** | **17 00 13.7** | **+0.5** | | | |
| BORG | | | | pmax | pmax | | | | | |
| | comp=Z,63nm,0.9s | | | | | | | | | |
| BORG | | | | MLR | MLR | | | | | |
| | comp=Z,5µm,18.0s | | | | | | | | | |
| **ACCN** | **Adirondack Com** | **61.35** | **55** | IAMs_20 | IAMs_20 | 17 26 40.2 | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **61.36** | **68** | IAmb | IAmb | 17 00 15.2 | | | | |
| | comp=Z,91nm,1.1s | | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **61.36** | **68** | LR | LR | 17 25 04.8 | | | | |
| | comp=Z,5µm,21.2s,baz=323,slow=34 | | | | | | | | | |
| **X51A** | **Calhoun** | **61.52** | **70** | IAMs_20 | IAMs_20 | 17 26 43.4 | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| **Q56A** | **Snyder Ridge,** | **61.53** | **62** | P | **P** | **17 00 14.8** | **-0.9** | | | |
| Q56A | | | | IAMs_20 | IAMs_20 | 17 28 35.5 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **ZSN** | **Zaisan** | **61.55** | **311** | *e*P | **P** | **17 00 15.8** | **+0.1** | | | |
| | comp=Z,88nm,0.7s,baz=311 | | | | | | | | | |
| **ZSN** | **Zaisan** | **61.55** | **311** | *e*P | **P** | **17 00 15.8** | **+0.1** | | | |
| ZSN | | | | pmax | pmax | | | | | |
| | comp=Z,88nm,0.7s | | | | | | | | | |
| **R55A** | **Marlinton** | **61.56** | **63** | IAMs_20 | IAMs_20 | 17 26 01.2 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **KSPA** | **Keystone Colle** | **61.57** | **58** | P | **P** | **17 00 15.4** | **-0.5** | | | |
| KSPA | | | | IAmb | IAmb | 17 00 17.4 | | | | |
| | comp=Z,72nm,0.9s | | | | | | | | | |
| **LBNH** | **Lisbon** | **61.61** | **54** | IAmb | IAmb | 17 00 18.6 | | | | |
| | comp=Z,60nm,0.9s | | | | | | | | | |
| LBNH | | | | IAMs_20 | IAMs_20 | 17 26 01.1 | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| **W52A** | **Murphy** | **61.68** | **69** | IAMs_20 | IAMs_20 | 17 25 11.6 | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| **KONS** | **Konsvik** | **61.74** | **358** | *e*P | **P** | **17 00 12.9** | **-3.7** | | | |
| **HNH** | **Hanover** | **61.82** | **54** | IAMs_20 | IAMs_20 | 17 25 56.5 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **KURK** | **Kurchatov** | **61.87** | **317** | P | **P** | **17 00 17.4** | **-0.3** | | | |
| **KURK** | **Kurchatov** | **61.87** | **317** | *c* *i*P | **P** | **17 00 17.2** | **-0.5** | | | |
| KURK | | | | pmax | pmax | | | | | |
| | comp=Z,116nm,0.7s | | | | | | | | | |
| KURK | | | | MLR | MLR | | | | | |
| | comp=Z,11µm,24.0s | | | | | | | | | |
| **STOK** | **Stokkvaagen** | **61.91** | **358** | *e*P | **P** | **17 00 16.3** | **-1.4** | | | |
| STOK | | | | IVmB_BB | | 17 00 17.7 | | | | |
| | comp=Z,2µm,3.1s | | | | | | | | | |
| STOK | | | | *e*S | **S** | **17 08 37.5** | **-0.6** | | | |
| STOK | | | | IVMs_BB | IVMs_BB | 17 22 57.7 | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| **J61A** | **Chester** | **61.94** | **55** | IAMs_20 | IAMs_20 | 17 27 08.7 | | | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.98** | **317** | P | **P** | **17 00 17.9** | **-0.5** | | | |
| | comp=Z,83nm,0.7s,baz=45,slow=7.0,SNR=341 | | | | | | | | | |
| KURBB | | | | PcP | **PcP** | **17 00 57.3** | **-1.4** | | | |
| | comp=Z,22nm,0.7s,baz=33,slow=3.7,SNR=8.6 | | | | | | | | | |
| KURBB | | | | PKPPKP | P'P'df | 17 29 18.7 | -14 | | | |
| | comp=Z,2.0nm,1.0s,baz=241,slow=2.7,SNR=9.3 | | | | | | | | | |
| KURBB | | | | LR | LR | 17 30 14.5 | | | | |
| | comp=Z,5µm,18.9s,baz=28,slow=39 | | | | | | | | | |
| | comp=Z,83nm,0.7s | | | | | | | | | |
| **MOR8** | **Moi Rana** | **62.04** | **357** | *e*P | **P** | **17 00 16.6** | **-2.1** | | | |
| MOR8 | | | | IVmB_BB | | 17 00 38.5 | | | | |
| | comp=Z,967nm,3.0s | | | | | | | | | |
| MOR8 | | | | *e*S | **S** | **17 08 38.1** | **-1.8** | | | |
| MOR8 | | | | *e*SS | **SS** | **17 

comp=Z,4µm,22.0s
**BVAR Borovoye Array 63.32 324** P **P** **17 00 26.8 -0.6**
comp=Z,105nm,0.7s
comp=Z,105nm,0.7s
**BRVK Borovoye 63.33 324** P **P** **17 00 26.9 -0.6**
BRVK IAmb IAmb 17 00 28.9
comp=Z,86nm,0.8s
**BRVK Borovoye 63.33 324***c iP* **P** **17 00 27.1 -0.3**
BRVK pmax pmax
comp=Z,101nm,0.9s
BRVK MLR MLR
comp=Z,10µm,16.0s
**MAKZ Makanchi 63.35 313** P **P** **17 00 26.9 -0.8**
MAKZ IAmb IAmb 17 00 28.2
comp=Z,39nm,0.8s
**MAKZ Makanchi 63.35 313** P **P** **17 00 26.9 -0.8**
MAKZ pmax pmax
comp=Z,39nm,0.8s
MAKZ MLR MLR
comp=Z,6µm,19.0s
**BCX Boston College 63.38 55** IAMs_20 IAMs_20 17 28 14.8
comp=Z,3µm,20.0s
**CD2 Chengdu 63.41 287** P **P** **17 00 29.0 +0.6**
CD2 PP **PP** **17 02 45.5 -2.3**
CD2 S **S** **17 08 54.8 -3.3**
CD2 pmax pmax
comp=Z,230nm,0.7s
CD2 pmax pmax
comp=Z,2µm,4.1s
CD2 LR LR
comp=Z,4µm,21.6s
CD2 LR LR
comp=Z,5µm,17.8s
CD2 LR LR
comp=Z,5µm,19.7s
**HKPS Hong Kong Po S 63.42 273** P **P** **17 00 29.7 +1.3**
**HKPS Hong Kong Po S 63.42 273** IAMs_20 IAMs_20 17 25 38.0
comp=Z,4µm,22.0s
**GGN Saint George 63.44 50** IAmb IAmb 17 00 29.2
comp=Z,84nm,0.9s
**SVE Sverdlovsk 63.45 331***de*P **P** **17 00 28.0 -0.2**
SVE *eS* **S** **17 08 57.9 +0.2**
SVE pmax pmax
comp=Z,126nm,0.9s
**EMMW East Machias 63.45 51** P **P** **17 00 27.6 -0.8**
**GULI GuiLin 63.51 278** P **P** **17 00 30.0 +0.9**
GULI S **S** **17 08 58.3 -1.1**
GULI pmax pmax
comp=Z,320nm,1.0s
GULI LR LR
comp=Z,2µm,20.6s
GULI LR LR
comp=Z,1µm,21.7s
GULI LR LR
comp=Z,4µm,20.6s
**M63A Gales Ferry 63.61 56** IAMs_20 IAMs_20 17 30 06.3
comp=Z,5µm,20.0s
**352A Blakely 63.69 72** IAMs_20 IAMs_20 17 28 32.1
comp=Z,3µm,19.0s
**NSS Namsos 63.74 358** *eP* **P** **17 00 31.1 +1.2**
NSS IVMs_BB IVMs_BB 17 23 49.6
comp=Z,1µm,22.6s
**JSC Jenkinsville 63.79 67** P **P** **17 00 30.2 -0.5**
**JSC Jenkinsville 63.79 67** P **P** **17 00 30.2 -0.5**
JSC pmax pmax
comp=Z,165nm,0.9s
JSC MLR MLR
comp=Z,6µm,18.0s
**451A Vernon 63.83 73** IAMs_20 IAMs_20 17 31 12.9
comp=Z,3µm,18.0s
**L64A Middleborough 63.84 55** IAMs_20 IAMs_20 17 31 04.8
comp=Z,4µm,18.0s
**W57A Gilead 63.87 66** P **P** **17 00 30.3 -1.0**
W57A IAmb IAmb 17 00 32.3
comp=Z,64nm,0.8s
**V58A Windy Hill, Pi 63.90 65** IAMs_20 IAMs_20 17 27 23.4
comp=Z,5µm,20.0s
**T59A Double "B" Far 63.91 63** IAMs_20 IAMs_20 17 27 35.2
comp=Z,4µm,21.0s
**154A Montrose 63.93 70** IAMs_20 IAMs_20 17 25 58.4
comp=Z,3µm,21.0s
**UNM Universidad Na 63.96 92** IAMs_20 IAMs_20 17 23 37.8
comp=Z,4µm,20.0s
**JOF Joensuu 64.02 349** *eP* **P** **17 00 30.7 -1.1**
**M65A Busby, Falmout 64.21 55** IAMs_20 IAMs_20 17 28 25.9
comp=Z,4µm,21.0s
**ARU Arti 64.40 332** P **P** **17 00 33.4 -1.0**
ARU IAMs_20 IAMs_20 17 32 09.2
comp=Z,4µm,19.0s
**ARU Arti 64.40 332** LR LR 17 32 21.7
comp=Z,3µm,19.6s,baz=27,slow=40
**ARU Arti 64.40 332***c iP* **P** **17 00 33.7 -0.7**
ARU 17 01 06.6
ARU PPP PPP 17 04 29.5
ARU S **S** **17 09 09.1 -0.4**
ARU 17 10 17.0
ARU pmax pmax
comp=Z,159nm,0.8s
ARU MLR MLR
comp=Z,5µm,17.0s
**S61A Accomac 64.42 61** IAMs_20 IAMs_20 17 31 18.0
comp=Z,5µm,19.0s
**Y57A Sumter 64.47 67** IAMs_20 IAMs_20 17 27 21.6
comp=Z,5µm,20.0s
**TIGA Tifton 64.50 71** IAMs_20 IAMs_20 17 28 15.6
comp=Z,3µm,20.0s
**GOMU GeErMu 64.69 297** P **P** **17 00 36.5 -0.6**
GOMU S **S** **17 09 07.0 -7.5**
GOMU pmax pmax
comp=Z,100nm,0.8s
GOMU LR LR
comp=Z,12µm,19.3s
GOMU LR LR
comp=Z,11µm,18.8s
GOMU LR LR
comp=Z,22µm,18.5s
**VAF Ylistaro 64.74 353** *eP* **P** **17 00 34.6 -1.9**
**255A Hazlehurst 64.80 70** IAMs_20 IAMs_20 17 26 24.3
comp=Z,3µm,21.0s
**KIRV Kirov 64.90 338** LR LR 17 32 12.2
comp=Z,4µm,19.7s,baz=25,slow=39
**KIRV Kirov 64.90 338***d iP* **P** **17 00 36.7 -0.9**
**GYA Guiyang 64.91 281** ⇑P **P** **17 00 38.5 +0.1**
GYA pP pP 17 00 47.3 -2.8
GYA PcP **PcP** **17 01 12.5 +1.2**
GYA S **S** **17 09 14.5 -2.4**
GYA SKS **SKSac** **17 10 28.3 -1.5**
GYA SS **SS** **17 13 27.3 -1.2**
GYA pmax pmax
comp=Z,420nm,1.0s
GYA pmax pmax
comp=Z,2µm,9.3s
GYA LR LR
comp=Z,2µm,26.2s
GYA LR LR
comp=Z,1µm,26.4s
GYA LR LR
comp=Z,2µm,27.6s
**TBLU Trondheim 65.05 359** *eP* **P** **17 00 35.4 -3.1**
**V61A Roper 65.31 63** IAMs_20 IAMs_20 17 30 22.2
comp=Z,5µm,20.0s
**KEF Keuruu 65.43 352** *eP* **P** **17 00 40.2 -0.8**
**VALR Valaam 65.59 349***d iP* **P** **17 00 41.4 -0.6**
VALR pmax pmax
comp=Z,88nm,0.9s
VALR MLR MLR
comp=Z,6µm,21.0s
**TLIG Tlapa 65.67 92** IAMs_20 IAMs_20 17 23 34.2
comp=Z,5µm,22.0s
**Y60A Bolivia 65.71 66** P **P** **17 00 43.0 -0.2**
Y60A IAMs_20 IAMs_20 17 28 09.3
comp=Z,5µm,20.0s
**MOL Molde 65.73 1** *eP* **P** **17 00 41.4 -1.5**
MOL IVmB_BB 17 00 43.0
comp=Z,999nm,3.3s
MOL *eS* **S** **17 09 23.4 -2.2**
MOL IVMs_BB IVMs_BB 17 32 35.7
comp=Z,1µm,16.6s
**456A Hilliard 65.94 71** IAMs_20 IAMs_20 17 29 10.6
comp=Z,4µm,19.0s
**FINES FINESS Array B 66.03 351** P **P** **17 00 43.5 -1.4**
comp=Z,50nm,0.8s,baz=23,slow=6.8,SNR=75
FINES PKPPKP **P'P'df** **17 29 19.2 -7.1**
comp=Z,9.2nm,0.9s,baz=331,slow=2.4,SNR=6.7
FINES LR LR 17 29 21.5
comp=Z,5µm,21.8s,baz=8.0,slow=36
comp=Z,50nm,0.8s
**HNR Honiara 66.07 211** LR LR 17 24 03.7
comp=Z,28µm,21.6s,baz=12,slow=31
**TAOE Nuku Hiva Isla 66.25 146** *eS* **S** **17 09 38.1 +5.0**
comp=Z,2µm,29.1s
TAOE *eSS* **SS** **17 13 54.6 +4.5**
comp=Z,3µm,27.4s
TAOE *eLR* LR 17 20 45.8
comp=Z,11µm,22.3s
**DOMB Dombas 66.26 360** *eP* **P** **17 00 45.1 -1.3**
DOMB IVmB_BB 17 00 48.9
comp=Z,889nm,3.9s
DOMB *eS* **S** **17 09 30.5 -1.7**
DOMB IVMs_BB IVMs_BB 17 31 58.1
comp=Z,2µm,16.5s
**TDK Taldyqorghan 66.34 313** *eP* **P** **17 00 47.0 -0.2**
comp=Z,46nm,0.7s,baz=313
TDK LR LR 17 30 12.7
comp=Z,4µm,16.2s,baz=313
**TDK Taldyqorghan 66.34 313** *eP* **P** **17 00 47.0 -0.2**
TDK pmax pmax
comp=Z,46nm,0.7s
TDK MLR MLR
comp=Z,4µm,16.0s
**656A Willston 66.64 72** IAMs_20 IAMs_20 17 33 44.1
comp=Z,3µm,18.0s
**FOO Floro 66.67 2** *eP* **P** **17 00 48.3 -0.6**
FOO IVmB_BB 17 00 51.7
comp=Z,1µm,3.6s
FOO *eS* **S** **17 09 37.1 +0.1**
FOO IVMs_BB IVMs_BB 17 26 10.4
comp=Z,2µm,3.6s
**RAF Rauma 66.81 353** *eP* **P** **17 00 48.5 -1.4**
**HYA Hoyanger 67.12 1** *eP* **P** **17 00 52.5 +0.7**
HYA IVmB_BB 17 01 17.7
comp=Z,1µm,3.6s
HYA *eS* **S** **17 09 43.5 +1.1**
HYA IVMs_BB IVMs_BB 17 23 10.8
comp=Z,1µm,3.7s
**PUL Pulkovo 67.20 348***de*P **P** **17 00 51.9 -0.4**
PUL pmax pmax
comp=Z,145nm,0.6s
PUL MLR MLR
comp=Z,7µm,23.0s
**SUE Sulen 67.21 2** *eP* **P** **17 00 51.9 -0.4**
SUE IVmB_BB 17 01 41.2
comp=Z,2µm,3.1s
SUE *eS* **S** **17 09 44.1 +0.7**
SUE IVMs_BB IVMs_BB 17 26 06.0
comp=Z,2µm,3.6s
**NB2 NORSAR Subarra 67.25 359** P **P** **17 00 51.7 -1.1**
comp=Z,25nm,0.7s,baz=1.6,slow=6.9
NB2 P'P' P'P'df 17 29 15.3 -9.1
comp=Z,156nm,5.0s,baz=163,slow=3.8
**NB2 NORSAR Subarra 67.25 359** P **P** **17 00 51.7 -1.1**
baz=1.6,slow=6.9
**NOA NORSAR Array B 67.25 359** P **P** **17 00 51.5 -1.3**
comp=Z,13nm,0.5s,baz=2.1,slow=6.5,SNR=82
NOA PcP **PcP** **17 01 20.2 -0.1**
comp=Z,20nm,0.8s,baz=354,slow=3.1,SNR=7.8
NOA PKPPKP P'P'df 17 29 12.4 -12
comp=Z,4.7nm,1.0s,baz=165,slow=3.1,SNR=6.2
NOA LR LR 17 31 44.5
comp=Z,2µm,18.8s,baz=0.0,slow=37
comp=Z,13nm,0.5s
**SHLS Shalkode 67.29 312** *eP* **P** **17 00 52.1 -1.3**
comp=Z,51nm,0.9s,baz=311
**SHLS Shalkode 67.29 312** *eP* **P** **17 00 52.1 -1.3**
SHLS pmax pmax
comp=Z,51nm,0.9s
**MEF Metsahovi 67.40 352** *eP* **P** **17 00 52.1 -1.4**
**KPKS Kokpek 67.41 312** *eP* **P** **17 00 54.0 -0.1**
baz=312
KPKS *eS* **S** **17 09 47.4 +0.6**
baz=312
**KPKS Kokpek 67.41 312** *eP* **P** **17 00 54.0 -0.1**
KPKS *eS* **S** **17 09 47.3 +0.6**
**UZB Uzynbulak 67.50 312** *eP* **P** **17 00 54.5 -0.3**
baz=312
UZB *eS* **S** **17 09 48.2 +0.3**
baz=312
**UZB Uzynbulak 67.50 312** *eP* **P** **17 00 54.4 -0.3**
UZB *eS* **S** **17 09 48.2 +0.3**
**NC602 NORSAR Array S 67.56 359** *eP* **P** **17 00 54.1 -0.5**
NC602 IVmB_BB 17 00 54.4
comp=Z,651nm,8.2s
NC602 *eS* **S** **17 09 46.3 -1.4**
**SKAR Skarslia 67.63 0** *eP* **P** **17 00 54.5 -0.6**
SKAR IVmB_BB 17 01 11.7
comp=Z,920nm,2.3s
SKAR *eS* **S** **17 09 47.0 -1.8**
SKAR IVMs_BB IVMs_BB 17 33 20.8
comp=Z,909nm,4.4s
**ZHN Zhinishke 67.75 312** *eP* **P** **17 00 56.1 -0.3**
baz=312
**ZHN Zhinishke 67.75 312** *eP* **P** **17 00 56.0 -0.3**
**ASK Askoy 67.79 2** *eP* **P** **17 00 55.2 -0.9**
**JAY Jayapura 67.81 233** P **P** **17 00 57.0 +0.1**
comp=Z,69nm,1.4s,comp=Z,2µm
**PZH PanZhiHua 67.84 285** P **P** **17 00 57.5 +0.4**
PZH pP **pP** **17 01 07.0 -1.5**
PZH sP **sP** **17 01 12.5 -0.5**
PZH PP **PP** **17 03 29.0 +2.3**
PZH S **S** **17 09 52.3 -0.1**
PZH sS **pS** **17 10 09.0 +1.8**
PZH SS **SS** **17 14 10.0 -3.9**
PZH pmax pmax
comp=Z,370nm,1.0s
PZH pmax pmax
comp=Z,2µm,7.1s
PZH LR LR
comp=Z,3µm,20.0s
PZH LR LR
comp=Z,3µm,18.6s
PZH LR LR
comp=Z,3µm,19.4s
**SATY Saty 67.85 312** *eP* **P** **17 00 56.8 -0.1**
baz=312
SATY *eS* **S** **17 09 52.0 -0.2**
baz=312
**SATY Saty 67.85 312** *eP* **P** **17 00 56.8 -0.1**
SATY *eS* **S** **17 09 51.9 -0.2**
**BER Bergen 67.89 2** *eP* **P** **17 00 55.2 -1.5**
BER IVmB_BB 17 00 56.6
comp=Z,2µm,3.1s
BER *eS* **S** **17 09 52.2 +0.5**
BER IVMs_BB IVMs_BB 17 27 58.8
comp=Z,1µm,3.5s
**ARBE Arbavere 68.01 351** *eP* **P** **17 00 56.2 -1.2**
**HFS Hagfors 68.11 357** P **P** **17 00 56.6 -1.5**
comp=Z,29nm,0.5s,baz=44,slow=4.5,SNR=150
HFS LR LR 17 31 02.2
comp=Z,1µm,20.7s,baz=7.0,slow=36
comp=Z,29nm,0.5s
**KUU Kurty 68.13 314** *eP* **P** **17 00 58.3 -0.2**
baz=314
KUU LR LR 17 31 13.1
comp=Z,3µm,15.2s,baz=314
**KUU Kurty 68.13 314** *eP* **P** **17 00 58.3 -0.2**
KUU MLR MLR
comp=Z,3µm,15.0s
**GENI Genyem 68.15 234** P **P** **17 01 00.7 +1.8**
**GENI Genyem 68.15 234** P **P** **17 00 59.8 +0.9**
comp=Z,176nm,1.0s,comp=Z,3µmcomp=Z,4µm
**DAV Davao City (W) 68.16 253** IAMs_20 IAMs_20 17 26 02.1
comp=Z,5µm,21.0s
**DAV Davao City (W) 68.16 253** LR LR 17 26 13.1
comp=Z,5µm,21.7s,baz=62,slow=32
**BTLS Baital 68.22 316** *eP* **P** **17 00 58.5 -0.5**
baz=316
BTLS *eS* **S** **17 09 56.6 +0.4**
baz=316
**BTLS Baital 68.22 316** *eP* **P** **17 00 58.5 -0.5**
BTLS *eS* **S** **17 09 56.5 +0.4**
**KMI Kunming 68.27 283** ⇑P **P** **17 01 00.5 +0.6**
KMI sP sP 17 01 17.0 +1.1
KMI S **S** **17 09 56.5 -1.2**
KMI SS **SS** **17 14 18.3 -2.5**
KMI pmax pmax
comp=Z,250nm,0.9s
KMI pmax pmax
comp=Z,2µm,9.9s
KMI LR LR
comp=Z,1µm,17.4s
KMI LR LR
comp=Z,3µm,18.4s
KMI LR LR
comp=Z,4µm,27.7s
**CMIG Matias Romero 68.30 90** LR LR 17 26 28.6
comp=Z,5µm,21.9s,baz=304,slow=32
**OSL Oslo 68.37 359** *eP* **P** **17 00 59.5 -0.1**
OSL *eS* **S** **17 09 57.6 +0.2**
**MDOK Medeo 68.39 313** *eP* **P** **17 00 60.0 -0.4**
baz=313
MDOK *eS* **S** **17 09 58.9 +0.4**
baz=313
MDOK LR LR 17 31 24.1
comp=Z,2µm,17.9s,baz=313
**MDOK Medeo 68.39 313** *eP* **P** **17 00 59.9 -0.4**
MDOK *eS* **S** **17 09 58.9 +0.4**
MDOK MLR MLR
comp=Z,2µm,18.0s
**ODD1 Odda 68.39 1** *eP* **P** **17 00 59.3 -0.6**
ODD1 IVmB_BB 17 01 00.1
comp=Z,1µm,2.8s
ODD1 *eS* **S** **17 09 57.2 -0.6**
**AAA Alma-Ata 68.41 313** *eP* **P** **17 01 00.3 0.0**
comp=Z,80nm,0.7s,baz=313
AAA LR LR 17 31 23.2
baz=313
**AAA Alma-Ata 68.41 313** *eP* **P** **17 01 00.3 0.0**
AAA pmax pmax
comp=Z,80nm,0.7s
**QIZ Qiongzhong 68.50 274** P **P** **17 01 02.5 +1.4**
**QIZ Qiongzhong 68.50 274** P **P** **17 01 02.0 +0.9**
QIZ PP **PP** **17 03 28.5 -3.9**
QIZ S **S** **17 09 58.3 -1.8**
QIZ pmax pmax
comp=Z,72nm,1.2s
QIZ pmax pmax
comp=Z,1µm,6.0s
QIZ LR LR
comp=Z,2µm,22.6s
QIZ LR LR
comp=Z,2µm,22.1s
QIZ LR LR
comp=Z,3µm,22.9s
**TNSS Tian-Shan 68.53 313** *eP* **P** **17 01 01.1 -0.4**
baz=313
**TNSS Tian-Shan 68.53 313** *eP* **P** **17 01 01.1 -0.4**
**KONO Kongsberg 68.66 360** P **P** **17 01 01.0 -0.6**
KONO IAmb IAmb 17 01 02.7
comp=Z,84nm,1.1s
**KONO Kongsberg 68.66 360** IAMs_20 IAMs_20 17 33 32.9
comp=Z,4µm,19.0s
**KONO Kongsberg 68.66 360** P **P** **17 01 01.0 -0.6**
KONO pmax pmax
comp=Z,84nm,1.1s
KONO MLR MLR
comp=Z,4µm,19.0s
**BLS5 Blasjo 68.88 1** *eP* **P** **17 01 03.3 +0.4**
**VSU Vasula 68.89 350***c iP* **P** **17 01 02.2 -0.8**
VSU pmax pmax
comp=Z,210nm,0.8s
VSU MLR MLR
comp=Z,10µm,22.0s
**MTSE Matsula 68.93 352** *eP* **P** **17 01 01.0 -2.2**
**KMY Karmoy 69.07 2** *eP* **P** **17 01 04.3 +0.3**
KMY IVmB_BB 17 01 06.0
comp=Z,1µm,4.0s
KMY *eS* **S** **17 10 07.0 +1.3**
KMY IVMs_BB IVMs_BB 17 26 39.5
comp=Z,1µm,3.5s
**TARG Taragay, Kyrgy 69.17 312** P **P** **17 01 06.0 +0.5**
TARG IAmb IAmb 17 01 10.2
comp=Z,59nm,0.6s
**TARG Taragay, Kyrgy 69.17 312** P **P** **17 01 06.0 +0.5**
TARG pmax pmax
comp=Z,59nm,0.6s
**TKM2 Tokmak 2 69.23 314** P **P** **17 01 05.7 +0.1**
SNR=56
**SGDS Sogindy 69.23 315** *eP* **P** **17 01 05.5 0.0**
baz=315
**SGDS Sogindy 69.23 315** *eP* **P** **17 01 05.5 0.0**
**BOOM Boomskoye usch 69.42 313** P **P** **17 01 07.2 +0.4**
**BOOM Boomskoye usch 69.42 313** P **P** **17 01 07.2 +0.4**
BOOM pmax pmax
comp=Z,118nm,0.8s
**USP Ospenovka 69.44 315** P **P** **17 01 06.4 -0.3**
SNR=90
**ULHL Ulahol 69.47 313** P **P** **17 01 07.3 +0.1**
SNR=7.5
**CHMS Chumysh 69.54 314** P **P** **17 01 07.5 +0.2**
SNR=30
**KBK Karagaybulak 69.73 314** P **P** **17 01 09.0 +0.3**
SNR=46
**AKTO Aktyubinsk 69.73 329** P **P** **17 01 07.8 -0.5**
comp=Z,191nm,0.7s,baz=58,slow=7.6,SNR=331
AKTO LR LR 17 35 21.4
comp=Z,6µm,19.1s,baz=30,slow=39
comp=Z,191nm,0.7s
**PMOR Pomariorio Ree 69.76 156** *eP* **P** **17 01 11.8 +3.1**
comp=Z,4µm,30.4s
PMOR *eS* **S** **17 10 13.6 -1.1**
comp=Z,3µm,28.8s
PMOR *eSS* **SS** **17 14 43.1 -1.1**
comp=Z,3µm,26.8s
PMOR *eLR* LR 17 22 30.5
comp=Z,10µm,22.7s
**AAK Ala-Archa 69.94 314** P **P** **17 01 10.3 +0.3**
SNR=49
**AAK Ala-Archa 69.94 314** P **P** **17 01 10.1 0.0**
AAK IAmb IAmb 17 01 11.5
comp=Z,96nm,0.8s
**AAK Ala-Archa 69.94 314** LR LR 17 35 23.0
comp=Z,6µm,18.4s,baz=30,slow=39
**AAK Ala-Archa 69.94 314***c iP* **P** **17 01 10.0 0.0**
AAK pmax pmax
comp=Z,96nm,0.7s
AAK MLR MLR
comp=Z,5µm,17.0s
**SNART Snartemo 69.97 1** *eP* **P** **17 01 08.8 -0.8**
SNART *eS* **S** **17 10 16.3 -0.1**
**MOS Moscow 69.97 343** *eP* **P** **17 01 08.0 -1.7**
MOS *e* 17 01 30.0
MOS *e* 17 03 39.2
MOS *e*PPP PPP 17 05 25.1
MOS *eS* **S** **17 10 17.0 +0.5**
MOS pmax pmax
comp=Z,109nm,0.8s
MOS pmax pmax
comp=Z,111nm,0.7s
MOS MLR MLR
comp=Z,5µm,20.0s
**HOMB Homborsund 70.05 0** *eP* **P** **17 01 10.6 +0.5**
HOMB IVmB_BB 17 01 30.6
comp=Z,654nm,3.8s
HOMB *eS* **S** **17 10 14.7 -2.6**
**VAH Vaihoa 70.05 156** *eS* **S** **17 10 14.0 -4.1**
comp=Z,3µm,26.5s
**VAH Vaihoa 70.05 156** *eLR* LR 17 22 39.2
comp=Z,13µm,22.8s
**MSVF Nonsavu 70.11 191** LR LR 17 28 28.7
comp=Z,3µm,19.2s,baz=354,slow=33
**ABKAR Akbulak array 70.12 327** P **P** **17 01 10.1 -0.7**
**SLIT Slitere, Latvi 70.14 352** *eP* **P** **17 01 09.5 -1.2**
**NRN Naryn 70.23 313** P **P** **17 01 12.5 +0.5**
NRN IAmb IAmb 17 01 13.8
comp=Z,62nm,0.8s
**NRN Naryn 70.23 313** P **P** **17 01 12.5 +0.5**
NRN pmax pmax
comp=Z,62nm,0.8s
**EKS2 Erkin-Say 70.24 315** P **P** **17 01 12.1 +0.3**
SNR=24
**UCH Uchtor 70.26 314** P **P** **17 01 13.1 +0.8**
SNR=6.4
**MCD Coleburn Disti 70.29 7** *eP* **P** **17 01 11.2 -0.4**
MCD IAmb IAmb 17 01 12.4
comp=Z,202nm,0.9s
**SLVN Son La 70.40 280** IAMs_20 IAMs_20 17 31 31.6
comp=Z,4µm,21.0s
**LKP Lekhapani 70.69 290** *eP* **P** **17 01 16.0 +1.4**
LKP IAmb IAmb 17 01 17.3
comp=Z,249nm,0.9s
**AML Almayashu 70.70 314** P **P** **17 01 15.7 +0.7**
SNR=43
**OBN Obninsk 70.76 344** P **P** **17 01 13.8 -0.6**
comp=Z,46nm,0.8s,baz=8.8,slow=4.7,SNR=16
OBN LR LR 17 36 39.9
comp=Z,5µm,18.8s,baz=13,slow=40
comp=Z,46nm,0.8s
**OBN Obninsk 70.76 344***ce*P **P** **17 01 12.3 -2.2**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| OBN | | | | *e**PP | **pP** | **17 01 23.4** | **-3.0** |
| OBN | | | | *e**SP | **sP** | **17 01 28.7** | **-2.4** |
| OBN | | | | *e* | | 17 01 34.7 | |
| OBN | | | | *e* | | 17 03 50.4 | |
| OBN | | | | *e*PPP | PPP | 17 05 33.0 | |
| OBN | | | | *e*S | **S** | **17 10 26.9** | **+1.3** |
| OBN | | | | *e*SS | **SS** | **17 14 59.9** | **+3.0** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,69nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| **TNCH** | **TengChong** | **70.86** | **286** | *i*P | **P** | **17 01 17.3** | **+1.4** |
| TNCH | | | | PcP | **PcP** | **17 01 37.0** | **+0.7** |
| TNCH | | | | PP | **PP** | **17 03 53.8** | **+0.9** |
| TNCH | | | | S | **S** | **17 10 28.5** | **+0.4** |
| TNCH | | | | SS | **SS** | **17 14 55.5** | **-5.1** |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,260nm,1.0s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,1µm,3.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,1µm,20.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,2µm,22.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,3µm,25.9s | | | | | | |
| **PMG** | **Port Moresby** | **70.88** | **224** | P | **P** | **17 01 16.8** | **+1.1** |
| **PMG** | **Port Moresby** | **70.88** | **224** | IAMs_20 | IAMs_20 | 17 27 51.1 | |
| | comp=Z,2µm,20.0s | | | | | | |
| **PMG** | **Port Moresby** | **70.88** | **224** | LR | LR | 17 28 13.3 | |
| | comp=Z,2µm,20.9s,baz=32,slow=32 | | | | | | |
| **BELG** | **Belogornoye** | **70.95** | **336** | P | **P** | **17 01 15.2** | **-0.5** |
| | comp=Z,284nm,0.8s,baz=13,slow=1.3,SNR=67 | | | | | | |
| BELG | | | | LR | LR | 17 35 55.4 | |
| | comp=Z,6µm,19.9s,baz=12,slow=39 | | | | | | |
| | comp=Z,284nm,0.8s | | | | | | |
| **BELG** | **Belogornoye** | **70.95** | **336** | *c i*P | **P** | **17 01 15.0** | **-0.7** |
| BELG | | | | pmax | pmax | | |
| | comp=Z,61nm,1.0s | | | | | | |
| BELG | | | | MLR | MLR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **DRUM** | **Mains of Drumt** | **71.01** | **7** | *e*P | **P** | **17 01 15.6** | **-0.5** |
| DRUM | | | | IAmb | IAmb | 17 01 16.9 | |
| | comp=Z,169nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **71.28** | **317** | P | **P** | **17 01 16.7** | **-1.3** |
| **KKAR** | **Karatay Array** | **71.28** | **317** | P | **P** | **17 01 16.7** | **-1.3** |
| **SWI** | **Sorong** | **71.37** | **243** | P | **P** | **17 01 19.0** | **+0.3** |
| **INVG** | **Invergeldie, C** | **71.38** | **8** | *e*P | **P** | **17 01 16.9** | **-1.3** |
| INVG | | | | IAmb | IAmb | 17 01 18.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **LAWE** | **Loch Awe, Argy** | **71.43** | **8** | *e*P | **P** | **17 01 18.1** | **-0.5** |
| LAWE | | | | IAmb | IAmb | 17 01 19.3 | |
| | comp=Z,78nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **71.59** | **295** | P | **P** | **17 01 22.3** | **+1.8** |
| LSA | | | | S | **S** | **17 10 32.5** | **-4.5** |
| LSA | | | | LR | LR | | |
| | comp=Z,3µm,19.2s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,3µm,18.6s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| **LSA** | **Lhasa** | **71.59** | **295** | P | **P** | **17 01 21.8** | **+1.3** |
| LSA | | | | IAMs_20 | IAMs_20 | 17 33 37.7 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **LSA** | **Lhasa** | **71.59** | **295** | P | **P** | **17 01 21.8** | **+1.3** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,149nm,0.8s | | | | | | |
| LSA | | | | MLR | MLR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| **ZIRO** | **ZIRO** | **71.70** | **291** | *e*P | **P** | **17 01 20.9** | **0.0** |
| ZIRO | | | | IAmb | IAmb | 17 01 24.0 | |
| | comp=Z,418nm,1.1s | | | | | | |
| **PBUR** | **Paburge** | **71.76** | **352** | *e*P | **P** | **17 01 19.2** | **-1.3** |
| **KSH** | **Kashi** | **71.77** | **311** | P | **P** | **17 01 24.0** | **+2.9** |
| KSH | | | | S | **S** | **17 10 42.0** | **+3.8** |
| KSH | | | | SS | **SS** | **17 15 15.8** | **+2.2** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,180nm,0.8s | | | | | | |
| KSH | | | | pmax | pmax | | |
| | comp=Z,920nm,4.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,3µm,18.9s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,5µm,20.3s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,7µm,22.7s | | | | | | |
| **PPT** | **Papeete** | **71.82** | **158** | LR | LR | 17 28 33.5 | |
| | comp=Z,2µm,18.6s,baz=324,slow=32 | | | | | | |
| **PPT2** | **Papeete2** | **71.84** | **158** | *e*P | **P** | **17 01 24.6** | **+3.1** |
| | comp=Z,563nm,26.2s | | | | | | |
| **PPT2** | **Papeete2** | **71.84** | **158** | *e*PP | **PP** | **17 03 58.8** | **-2.9** |
| | comp=Z,177nm,26.8s | | | | | | |
| PPT2 | | | | *e*S | **S** | **17 10 43.5** | **+4.5** |
| | comp=Z,1µm,28.0s | | | | | | |
| PPT2 | | | | *e*SS | **SS** | **17 15 21.8** | **+5.4** |
| | comp=Z,2µm,29.0s | | | | | | |
| PPT2 | | | | *e*SS | SS | 17 15 23.9 | +7.5 |
| | comp=Z,862nm,27.2s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 17 20 16.9 | |
| | comp=Z,1µm,24.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 17 23 23.1 | |
| | comp=Z,4µm,22.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 17 23 24.4 | |
| | comp=Z,4µm,25.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 17 23 24.6 | |
| | comp=Z,2µm,22.4s | | | | | | |
| **MUD** | **Monsted U'grnd** | **71.87** | **360** | *i*P | **P** | **17 01 21.0** | **-0.2** |
| MUD | | | | IAmb | IAmb | 17 01 22.4 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **PAE** | **Paea** | **71.91** | **158** | *e*S | **S** | **17 10 36.2** | **-3.4** |
| | comp=Z,442nm,26.3s | | | | | | |
| PAE | | | | *e*SS | **SS** | **17 15 21.7** | **+4.4** |
| | comp=Z,298nm,24.5s | | | | | | |
| PAE | | | | *e*LR | LR | 17 23 26.8 | |
| | comp=Z,1µm,23.3s | | | | | | |
| **EDI** | **Edinburgh** | **71.94** | **7** | *e*P | **P** | **17 01 21.2** | **-0.4** |
| EDI | | | | IAmb | IAmb | 17 01 22.7 | |
| | comp=Z,54nm,0.9s | | | | | | |
| **PGBU** | **Glenifferbraes** | **71.95** | **8** | *e*P | **P** | **17 01 21.2** | **-0.4** |
| PGBU | | | | IAmb | IAmb | 17 01 22.5 | |
| | comp=Z,119nm,0.9s | | | | | | |
| **PABE** | **Paberze** | **72.09** | **351** | IAMs_20 | IAMs_20 | 17 32 27.6 | |
| | comp=Z,3µm,20.0s | | | | | | |
| **PABE** | **Paberze** | **72.09** | **351** | *e*P | **P** | **17 01 22.0** | **-0.5** |
| **TVO** | **Taravao** | **72.11** | **158** | *e*LR | LR | 17 23 31.4 | |
| | comp=Z,1µm,22.9s | | | | | | |
| **TNTI** | **Ternate** | **72.21** | **247** | P | **P** | **17 01 24.7** | **+0.9** |
| **TNTI** | **Ternate** | **72.21** | **247** | P | **P** | **17 01 24.1** | **+0.3** |
| | comp=Z,68nm,1.8s,comp=Z,2µm | | | | | | |
| **RTAL** | **Retalhuleu** | **72.23** | **89** | IAMs_20 | IAMs_20 | 17 28 06.7 | |
| | comp=Z,3µm,22.0s | | | | | | |
| **KMPI** | **Kaimana, Papua** | **72.39** | **239** | P | **P** | **17 01 25.6** | **+0.8** |
| | comp=Z,333nm,1.0s,comp=Z,4µmcomp=Z,4µm | | | | | | |
| **EKB** | **Eskdalemuir** | **72.53** | **7** | P | **P** | **17 01 24.9** | **-0.3** |
| EKB | | | | IAmb | IAmb | 17 01 26.2 | |
| | comp=Z,76nm,0.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **72.53** | **7** | P | **P** | **17 01 24.4** | **-0.8** |
| | comp=Z,60nm,0.8s,baz=347,slow=4.5,SNR=87 | | | | | | |
| | comp=Z,60nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **72.54** | **241** | P | **P** | **17 01 26.4** | **+0.6** |
| **FAKI** | **Fak Fak** | **72.54** | **241** | P | **P** | **17 01 26.3** | **+0.5** |
| | comp=Z,248nm,1.1s,comp=Z,4µm | | | | | | |
| **ESK** | **Eskdalemuir** | **72.55** | **7** | P | **P** | **17 01 24.7** | **-0.6** |
| ESK | | | | IAmb | IAmb | 17 01 26.3 | |
| | comp=Z,71nm,0.8s | | | | | | |
| **ESK** | **Eskdalemuir** | **72.55** | **7** | IAMs_20 | IAMs_20 | 17 39 30.9 | |
| | comp=Z,3µm,19.0s | | | | | | |
| **ESK** | **Eskdalemuir** | **72.55** | **7** | *e*P | **P** | **17 01 24.5** | **-0.7** |
| ESK | | | | IAmb | IAmb | 17 01 26.1 | |
| | comp=Z,70nm,0.8s | | | | | | |
| **ESK** | **Eskdalemuir** | **72.55** | **7** | P | **P** | **17 01 24.7** | **-0.6** |
| ESK | | | | pmax | pmax | | |
| | comp=Z,71nm,0.8s | | | | | | |
| ESK | | | | MLR | MLR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **MNK** | **Minsk** | **72.65** | **348** | *i*P | **P** | **17 01 26.9** | **+1.0** |
| MNK | | | | *i* | | 17 01 44.2 | |
| MNK | | | | *i* | | 17 04 11.9 | |
| MNK | | | | *i*S | **S** | **17 10 49.1** | **+1.7** |
| MNK | | | | pmax | pmax | | |
| | comp=Z,136nm,0.7s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,80nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,13nm,0.7s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,2µm,17.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,4µm,16.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,4µm,17.0s | | | | | | |
| **NEWG** | **New Galloway** | **72.66** | **8** | *e*P | **P** | **17 01 24.9** | **-1.1** |
| NEWG | | | | IAmb | IAmb | 17 01 26.6 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **72.71** | **341** | *e*P | **P** | **17 01 24.4** | **-1.8** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,80nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,100nm,0.9s | | | | | | |
| **GAL1** | **Galloway** | **72.87** | **8** | *e*P | **P** | **17 01 26.8** | **-0.4** |
| GAL1 | | | | IAmb | IAmb | 17 01 27.8 | |
| | comp=Z,109nm,0.8s | | | | | | |
| **KOHI** | **KOHIMA** | **72.93** | **290** | *e*P | **P** | **17 01 27.7** | **-0.5** |
| KOHI | | | | IAmb | IAmb | 17 01 30.0 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **BSD** | **Bornholm Skovb** | **73.09** | **356** | *e*P | **P** | **17 01 27.4** | **-1.0** |
| **BSD** | **Bornholm Skovb** | **73.09** | **356** | *i*P | **P** | **17 01 28.0** | **-0.5** |
| BSD | | | | IAmb | IAmb | 17 01 29.9 | |
| | comp=Z,37nm,0.9s | | | | | | |
| **EDMD** | **Edmundbyers** | **73.12** | **6** | *e*P | **P** | **17 01 27.7** | **-1.0** |
| EDMD | | | | IAmb | IAmb | 17 01 28.9 | |
| | comp=Z,81nm,0.9s | | | | | | |
| **KESW** | **Keswick, Cumbr** | **73.28** | **7** | *e*P | **P** | **17 01 29.4** | **-0.2** |
| KESW | | | | IAmb | IAmb | 17 01 30.5 | |
| | comp=Z,70nm,0.8s | | | | | | |
| **CRAI** | **Chiangrai** | **73.38** | **282** | P | **P** | **17 01 32.0** | **+1.2** |
| **VRH** | **Novokhopyorsk** | **73.44** | **339** | *e*P | **P** | **17 01 29.7** | **-0.9** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,95nm,0.8s | | | | | | |
| VRH | | | | MLR | MLR | | |
| | comp=Z,7µm,23.0s | | | | | | |
| **IOMK** | **Kirk Michael** | **73.48** | **8** | *e*P | **P** | **17 01 30.3** | **-0.5** |
| IOMK | | | | IAmb | IAmb | 17 01 31.5 | |
| | comp=Z,136nm,0.8s | | | | | | |
| **VORR** | **Voronezh** | **73.53** | **341** | *e*P | **P** | **17 01 30.5** | **-0.6** |
| VORR | | | | pmax | pmax | | |
| | comp=Z,53nm,0.7s | | | | | | |
| VORR | | | | MLR | MLR | | |
| | comp=Z,7µm,21.0s | | | | | | |
| **ILTH** | **Belurgan, Co L** | **73.55** | **9** | *e*P | **P** | **17 01 29.9** | **-1.3** |
| **WIM** | **Isle of Man** | **73.58** | **8** | *e*P | **P** | **17 01 30.1** | **-1.4** |
| **RAR** | **Rarotonga** | **73.62** | **169** | LR | LR | 17 29 58.3 | |
| | comp=Z,3µm,18.4s,baz=1.5,slow=32 | | | | | | |
| **SUW** | **Suwalki** | **73.64** | **351** | *e*P | **P** | **17 01 30.5** | **-1.3** |
| SUW | | | | *e*S | **SKiKP** | **17 10 55.5** | **-2.0** |
| SUW | | | | *e*SS | SS | 17 15 30.2 | -11 |
| SUW | | | | *e*L | L | 17 33 09.1 | |
| | comp=Z,5µm,24.2s | | | | | | |
| **SUW** | **Suwalki** | **73.64** | **351** | *e*P | **P** | **17 01 29.8** | **-1.9** |
| **ESQI** | **Esquipulas** | **73.65** | **87** | IAMs_20 | IAMs_20 | 17 29 36.4 | |
| | comp=Z,3µm,21.0s | | | | | | |
| **IMP** | **Imphal** | **73.70** | **289** | *e*P | **P** | **17 01 32.0** | **-0.7** |
| IMP | | | | IAmb | IAmb | 17 01 34.2 | |
| | comp=Z,156nm,1.2s | | | | | | |
| **RGN** | **Rugen** | **73.72** | **357** | IAMs_20 | IAMs_20 | 17 38 55.5 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **MTO3** | **Montecristo** | **73.77** | **87** | IAMs_20 | IAMs_20 | 17 29 03.3 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **IGLA** | **Glengowla, Co** | **73.81** | **11** | *e*P | **P** | **17 01 31.9** | **-0.8** |
| IGLA | | | | IAmb | IAmb | 17 01 33.2 | |
| | comp=Z,132nm,0.9s | | | | | | |
| **VSR** | **Storozhevoye** | **73.97** | **341** | *e*P | **P** | **17 01 31.6** | **-2.1** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,90nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,130nm,1.0s | | | | | | |
| **UBPT** | **Khong Chiam** | **74.04** | **274** | P | **P** | **17 01 35.1** | **+0.4** |
| **VORD** | **Divnogorie** | **74.18** | **341** | *e*P | **P** | **17 01 32.9** | **-2.0** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,90nm,0.7s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,100nm,0.8s | | | | | | |
| **DSB** | **Dublin** | **74.31** | **9** | IAMs_20 | IAMs_20 | 17 33 58.2 | |
| | comp=Z,4µm,22.0s | | | | | | |
| **KMSI** | **Cibinong** | **74.31** | **250** | P | **P** | **17 01 36.4** | **+0.2** |
| | comp=Z,333nm,1.1s,comp=Z,4µmcomp=Z,3µm | | | | | | |
| **SHL** | **Shillong** | **74.33** | **291** | *e*P | **P** | **17 01 35.5** | **-0.9** |
| **WPS** | **Cemaes, Angles** | **74.34** | **8** | *e*P | **P** | **17 01 35.3** | **-0.5** |
| WPS | | | | IAmb | IAmb | 17 01 36.3 | |
| | comp=Z,57nm,0.8s | | | | | | |
| **WME** | **Myndd Eilian** | **74.36** | **8** | *e*P | **P** | **17 01 34.8** | **-1.2** |
| **BSEG** | **Bad Segeberg** | **74.39** | **359** | *e*P | **P** | **17 01 35.8** | **-0.3** |
| | comp=Z,75nm,1.0s,baz=1.6,slow=5.7 | | | | | | |
| **SNET** | **Serv Nac Est T** | **74.39** | **88** | IAMs_20 | IAMs_20 | 17 29 49.0 | |
| | comp=Z,4µm,22.0s | | | | | | |
| **WLF1** | **Llynfaes** | **74.46** | **8** | *e*P | **P** | **17 01 36.0** | **-0.5** |
| WLF1 | | | | IAmb | IAmb | 17 01 38.6 | |
| | comp=Z,112nm,1.0s | | | | | | |
| **KKM** | **Kota Kinabalu** | **74.58** | **260** | P | **P** | **17 01 39.0** | **+1.1** |
| **MSAI** | **Masohi** | **74.71** | **244** | P | **P** | **17 01 39.1** | **+0.6** |
| | comp=Z,98nm,0.9s,comp=Z,2µm | | | | | | |
| **DLV** | **T Lat** | **74.75** | **270** | P | **P** | **17 01 39.9** | **+0.9** |
| **GKP** | **Gorka Klasztor** | **74.83** | **355** | *e*P | **P** | **17 01 37.9** | **-0.7** |
| **GKP** | **Gorka Klasztor** | **74.83** | **355** | *e*P | **P** | **17 01 37.4** | **-1.2** |
| **GTOI** | **Gorontalo** | **74.83** | **251** | P | **P** | **17 01 37.7** | **-1.5** |
| **STNC** | **Stoke** | **74.83** | **7** | *e*P | **P** | **17 01 38.8** | **+0.1** |
| STNC | | | | IAmb | IAmb | 17 01 39.8 | |
| | comp=Z,159nm,0.8s | | | | | | |
| **GTK** | **Tadong** | **74.84** | **295** | *e*P | **P** | **17 01 39.3** | **-0.1** |
| GTK | | | | IAmb | IAmb | 17 01 42.3 | |
| | comp=Z,118nm,0.7s | | | | | | |
| **FOEL** | **Foel Wylfa** | **74.96** | **8** | *e*P | **P** | **17 01 38.8** | **-0.7** |
| FOEL | | | | IAmb | IAmb | 17 01 40.5 | |
| | comp=Z,158nm,0.8s | | | | | | |
| **LLW** | **Llanuwchllyn** | **74.96** | **8** | *e*P | **P** | **17 01 38.8** | **-0.6** |
| LLW | | | | IAmb | IAmb | 17 01 40.3 | |
| | comp=Z,78nm,0.8s | | | | | | |
| **IWEX** | **Carrickbyrne,** | **75.13** | **10** | *e*P | **P** | **17 01 40.3** | **-0.2** |
| IWEX | | | | IAmb | IAmb | 17 01 41.2 | |
| | comp=Z,87nm,1.1s | | | | | | |
| **BNDI** | **Bandanaira** | **75.15** | **242** | P | **P** | **17 01 42.0** | **+1.0** |
| **BNDI** | **Bandanaira** | **75.15** | **242** | P | **P** | **17 01 40.1** | **-0.9** |
| **CWF** | **Charnwood Fore** | **75.25** | **6** | *e*P | **P** | **17 01 40.1** | **-1.0** |
| CWF | | | | IAmb | IAmb | 17 01 41.4 | |
| | comp=Z,44nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **75.30** | **247** | P | **P** | **17 01 41.5** | **-0.4** |
| **SANI** | **Sanana** | **75.30** | **247** | P | **P** | **17 01 41.0** | **-0.9** |
| | comp=Z,167nm,1.0s,comp=Z,2µmcomp=Z,3µm | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **75.31** | **86** | IAMs_20 | IAMs_20 | 17 31 03.3 | |
| | comp=Z,4µm,22.0s | | | | | | |
| **HLM1** | **Long Mynd** | **75.35** | **7** | *e*P | **P** | **17 01 41.0** | **-0.7** |
| HLM1 | | | | IAmb | IAmb | 17 01 42.5 | |
| | comp=Z,39nm,0.7s | | | | | | |
| **WACR** | **West Acre** | **75.38** | **5** | *e*P | **P** | **17 01 41.4** | **-0.5** |
| WACR | | | | IAmb | IAmb | 17 01 42.9 | |
| | comp=Z,258nm,0.9s | | | | | | |
| **RETH** | **Rethem/Aller,** | **75.59** | **360** | *e*P | **P** | **17 01 42.7** | **-0.3** |
| | comp=Z,44nm,1.0s,baz=1.6,slow=5.7 | | | | | | |
| **SIMJ** | **Simiganj** | **75.59** | **315** | P | **P** | **17 01 43.6** | **0.0** |
| **CM31** | **Chiang Mai Arr** | **75.60** | **281** | P | **P** | **17 01 44.8** | **+1.1** |
| **CMAR** | **Chiang Mai Arr** | **75.60** | **281** | P | **P** | **17 01 44.1** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **75.60** | **281** | P | **P** | **17 01 44.5** | **+0.8** |
| | comp=Z,144nm,0.8s,baz=27,slow=6.7,SNR=562 | | | | | | |
| CMAR | | | | PKPPKP | **P'P'df** | **17 29 06.7** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=261,slow=3.6,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 17 35 50.5 | |
| | comp=Z,2µm,20.9s,baz=55,slow=36 | | | | | | |
| | comp=Z,144nm,0.8s | | | | | | |
| **NLAI** | **Namlea** | **75.64** | **245** | P | **P** | **17 01 44.5** | **+0.6** |
| **HNLY** | **HANLEY** | **75.70** | **305** | *e*P | **P** | **17 01 45.0** | **+0.3** |
| **KHAM** | **Kharkiv** | **75.70** | **342** | P | **P** | **17 01 43.7** | **-0.1** |
| **RSBS** | **Rosebush, Pemb** | **75.75** | **9** | *e*P | **P** | **17 01 43.1** | **-0.9** |
| RSBS | | | | IAmb | IAmb | 17 01 44.8 | |
| | comp=Z,111nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **75.76** | **253** | P | **P** | **17 01 44.4** | **-0.1** |
| **TOLI2** | **Tolitoli** | **75.76** | **253** | IAmb | IAmb | 17 01 45.9 | |
| | comp=Z,108nm,1.3s | | | | | | |
| **RUE** | **Ruedersdorf** | **75.77** | **357** | *e*P | **P** | **17 01 43.9** | **-0.1** |
| **RUE** | **Ruedersdorf** | **75.77** | **357** | *e*P | **P** | **17 01 43.6** | **-0.4** |
| | comp=Z,106nm,1.1s,baz=1.6,slow=5.7 | | | | | | |
| **NRDL** | **Niedersach Rie** | **75.83** | **359** | *e*P | **P** | **17 01 43.8** | **-0.5** |
| | comp=Z,44nm,1.0s,baz=1.6,slow=5.7 | | | | | | |
| **MCH1** | **Michaelchurch** | **75.86** | **8** | *e*P | **P** | **17 01 44.0** | **-0.6** |
| MCH1 | | | | IAmb | IAmb | 17 01 45.4 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **FLTG** | **Flechtingen** | **75.98** | **358** | *e*P | **P** | **17 01 44.3** | **-1.0** |
| | comp=Z,40nm,0.9s,baz=1.6,slow=5.7 | | | | | | |
| **BEL** | **Belsk** | **76.01** | **352** | *e*P | **P** | **17 01 45.5** | **+0.1** |
| BEL | | | | *e*S | **S** | **17 11 22.0** | **-3.1** |
| BEL | | | | *e*SS | **SS** | **17 16 17.9** | **+0.9** |
| BEL | | | | *e*L | L | 17 37 41.8 | |
| | comp=Z,5µm,20.4s | | | | | | |
| **IBBN** | **Ibbenburen** | **76.02** | **1** | *e*P | **P** | **17 01 45.1** | **-0.4** |
| | comp=Z,122nm,0.9s,baz=1.6,slow=5.7 | | | | | | |
| **MONM** | **Monmouth** | **76.03** | **7** | *e*P | **P** | **17 01 44.8** | **-0.8** |
| MONM | | | | IAmb | IAmb | 17 01 46.5 | |
| | comp=Z,75nm,0.8s | | | | | | |
| **AK21** | **Malin Array Si** | **76.14** | **347** | P | **P** | **17 01 44.2** | **-2.0** |
| **AK23** | **Malin Array Si** | **76.14** | **347** | P | **P** | **17 01 44.5** | **-1.7** |
| **STRD** | **Stroud** | **76.14** | **7** | *e*P | **P** | **17 01 46.1** | **-0.1** |
| STRD | | | | IAmb | IAmb | 17 01 47.2 | |
| | comp=Z,110nm,0.8s | | | | | | |
| **AK22** | **Malin Array Si** | **76.15** | **347** | P | **P** | **17 01 44.5** | **-1.8** |
| **AK03** | **Malin Array Si** | **76.16** | **347** | P | **P** | **17 01 44.3** | **-2.0** |
| **MI28** | **Mi28,Pidlybu** | **76.17** | **348** | P | **P** | **17 01 45.7** | **-0.7** |
| **AK20** | **Malin Array Si** | **76.17** | **347** | P | **P** | **17 01 44.7** | **-1.7** |
| **AKASG** | **Malin Array Be** | **76.19** | **347** | P | **P** | **17 01 44.7** | **-1.8** |
| | comp=Z,29nm,0.6s,baz=16,slow=5.7,SNR=85 | | | | | | |
| AKASG | | | | LR | LR | 17 36 39.5 | |
| | comp=Z,7µm,21.9s,baz=5.5,slow=37 | | | | | | |
| | comp=Z,29nm,0.6s | | | | | | |
| **AKBB** | **Malin Array Si** | **76.19** | **347** | IAmb | IAmb | 17 01 46.5 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **AKBB** | **Malin Array Si** | **76.19** | **347** | *c i*P | **P** | **17 01 44.9** | **-1.6** |
| **AKBB** | **Malin Array Si** | **76.19** | **347** | P | **P** | **17 01 44.7** | **-1.8** |
| **AK18** | **Malin Array Si** | **76.19** | **347** | P | **P** | **17 01 44.5** | **-2.0** |
| **AK19** | **Malin Array Si** | **76.19** | **347** | P | **P** | **17 01 44.5** | **-2.0** |
| **KIEV** | **Kiev** | **76.19** | **347** | P | **P** | **17 01 44.7** | **-1.8** |
| KIEV | | | | IAmb | IAmb | 17 01 46.5 | |
| | comp=Z,45nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **76.19** | **347** | P | **P** | **17 01 44.7** | **-1.8** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,45nm,0.8s | | | | | | |
| KIEV | | | | MLR | MLR | | |
| | comp=Z,8µm,21.0s | | | | | | |
| **AK01** | **Malin Array Si** | **76.20** | **347** | P | **P** | **17 01 44.5** | **-2.1** |
| **MI30** | **MI30,Zelenitsa** | **76.28** | **347** | P | **P** | **17 01 46.0** | **-1.1** |
| **LUWI** | **Luwuk** | **76.32** | **250** | P | **P** | **17 01 47.7** | **-0.1** |
| **DZM** | **Mont Dzumac** | **76.35** | **201** | P | **P** | **17 01 49.3** | **+1.6** |
| **DZM** | **Mont Dzumac** | **76.35** | **201** | *e*P | **P** | **17 01 47.8** | **+0.1** |
| | comp=Z,81nm,1.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **76.35** | **201** | *e*PP | **PP** | **17 04 41.0** | **+1.0** |
| | comp=Z,268nm,25.2s | | | | | | |
| DZM | | | | *e*S | **S** | **17 11 34.5** | **+5.0** |
| | comp=Z,2µm,26.2s | | | | | | |
| DZM | | | | *e*SS | **SS** | **17 16 20.8** | **-4.3** |
| | comp=Z,724nm,21.8s | | | | | | |
| DZM | | | | *e*LR | LR | 17 25 30.8 | |
| | comp=Z,5µm,21.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **76.35** | **201** | P | **P** | **17 01 49.3** | **+1.6** |
| | comp=Z,18nm,0.9s,baz=83,slow=12,SNR=7.6 | | | | | | |
| DZM | | | | LR | LR | 17 30 06.3 | |
| | comp=Z,4µm,20.1s,baz=22,slow=31 | | | | | | |
| | comp=Z,18nm,0.9s | | | | | | |
| **SWN1** | **Swindon** | **76.43** | **7** | *e*P | **P** | **17 01 48.1** | **+0.2** |
| SWN1 | | | | IAmb | IAmb | 17 01 51.1 | |
| | comp=Z,125nm,0.7s | | | | | | |
| **CLZ** | **Clausthal** | **76.48** | **359** | *e*P | **P** | **17 01 48.1** | **-0.1** |
| | comp=Z,77nm,0.9s,baz=1.6,slow=5.7 | | | | | | |
| **MI29** | **MI29, Kamyanyy** | **76.65** | **348** | P | **P** | **17 01 48.1** | **-1.0** |
| **COEN** | **Coen** | **76.66** | **226** | P | **P** | **17 01 50.2** | **+0.6** |
| **WOL** | **Wolverton** | **76.67** | **6** | *e*P | **P** | **17 01 48.4** | **-0.8** |
| **HTL** | **Hartland** | **76.72** | **9** | *e*P | **P** | **17 01 49.3** | **-0.2** |
| HTL | | | | IAmb | IAmb | 17 01 50.0 | |
| | comp=Z,62nm,0.9s | | | | | | |
| **GTTG** | **Gottingen** | **76.78** | **359** | *e*P | **P** | **17 01 49.6** | **-0.2** |
| | comp=Z,75nm,1.0s,baz=1.6,slow=5.7 | | | | | | |
| **BUG** | **Bochum--Univer** | **76.89** | **1** | *e*P | **P** | **17 01 49.6** | **-0.8** |
| | comp=Z,59nm,0.9s,baz=1.6,slow=5.7 | | | | | | |
| **CLL** | **Collm** | **76.97** | **357** | IAMs_20 | IAMs_20 | 17 39 30.5 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **CLL** | **Collm** | **76.97** | **357** | *i*P | **P** | **17 01 50.1** | **-0.8** |
| CLL | | | | *e*S | **S** | **17 11 30.0** | **-5.7** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,58nm,1.0s | | | | | | |
| CLL | | | | MLR | MLR | | |
| | comp=Z,4µm,21.2s | | | | | | |
| **CLL** | **Collm** | **76.97** | **357** | P | **P** | **17 01 50.1** | **-0.8** |
| | comp=Z,67nm,1.0s,comp=Z,1µm | | | | | | |
| **CLL** | **Collm** | **76.97** | **357** | *e*P | **P** | **17 01 49.9** | **-1.0** |
| | comp=Z,49nm,1.0s,baz=1.6,slow=5.7 | | | | | | |
| **KLP** | **Kalpa** | **77.06** | **305** | *e*P | **P** | **17 01 51.7** | **-0.5** |
| KLP | | | | IAmb | IAmb | 17 01 52.9 | |
| | comp=Z,253nm,0.7s | | | | | | |
| **NEUB** | **Neuenburg** | **77.10** | **358** | *e*P | **P** | **17 01 51.1** | **-0.5** |
| | comp=Z,106nm,0.9s,baz=1.6,slow=5.7 | | | | | | |
| **KASTN** | **Kahler Asten** | **77.13** | **0** | *e*P | **P** | **17 01 51.4** | **-0.5** |
| | comp=Z,36nm,1.0s,baz=1.6,slow=5.7 | | | | | | |
| **SAUI** | **Saumlaki** | **77.29** | **239** | P | **P** | **17 01 55.0** | **+1.8** |
| **SAUI** | **Saumlaki** | **77.29** | **239** | P | **P** | **17 01 54.3** | **+1.1** |
| **KSP** | **Ksiaz** | **77.30** | **355** | *e*P | **P** | **17 01 51.9** | **-0.9** |
| KSP | | | | *e*S | SKiKP | 17 11 16.6 | +13 |
| KSP | | | | *e*SS | SS | 17 16 51.7 | +15 |
| KSP | | | | *e*L | L | 17 40 14.9 | |
| | comp=Z,4µm,20.2s | | | | | | |
| **KSP** | **Ksiaz** | **77.30** | **355** | P | **P** | **17 01 51.9** | **-0.9** |
| | comp=Z,54nm,1.0s,comp=Z,1µm | | | | | | |
| **DYA** | **Yadsworthy** | **77.33** | **8** | *e*P | **P** | **17 01 52.3** | **-0.7** |
| DYA | | | | IAmb | IAmb | 17 01 53.6 | |
| | comp=Z,50nm,0.8s | | | | | | |
| **CHIV** | **Chivirico** | **77.36** | **74** | IAMs_20 | IAMs_20 | 17 40 07.7 | |
| | comp=Z,3µm,18.0s | | | | | | |
| **BRG** | **Berggiesshubel** | **77.37** | **357** | *i*P | **P** | **17 01 52.6** | **-0.6** |
| BRG | | | | Amp | | 17 01 54.6 | |
| | comp=Z,67nm,1.0s | | | | | | |
| **BRG** | **Berggiesshubel** | **77.37** | **357** | ⇑SKS | **S** | **17 11 43.0** | **+2.9** |
| **BRG** | **Berggiesshubel** | **77.37** | **357** | SS | SS | 17 16 48.0 | +10 |
| **B

**MOX Moxa 77.66 358** *eP* **P 17 01 54.3 -0.6**
comp=Z,56nm,0.8s,baz=1.6,slow=5.7
MOX *eL* L 17 39 23.0
comp=Z,2μm,19.4s
**OJC Ojcow 77.69 353** *eP* **P 17 01 54.1 -0.9**
OJC *eS* **S 17 11 38.7 -4.9**
OJC *eSS* SS 17 16 53.6 +11
OJC *eL* L 17 36 26.9
comp=Z,4μm,22.3s
**OJC Ojcow 77.69 353** P **P 17 01 54.5 -0.5**
comp=Z,52nm,1.0s,comp=Z,1μm
**PVCC Panska Ves 77.69 356** *eP* **P 17 01 55.4 +0.4**
PVCC AMS AMS 17 40 10.0
comp=Z,4μm,20.9s
**PVCC Panska Ves 77.69 356** *eP* **P 17 01 55.4 +0.4**
PVCC MLR MLR
comp=Z,4μm,20.9s
**RICC Richard 77.69 357** *eP* **P 17 01 55.2 +0.2**
RICC AMS AMS 17 40 20.0
comp=Z,2μm,19.2s
**LVV L'vov 77.70 350** *eP* **P 17 01 54.5 -0.5**
LVV *e* 17 04 45.4
LVV *eS* **S 17 11 42.6 -1.1**
LVV *ePS* **PnS 17 12 39.2 +12**
LVV *eSS* **SS 17 16 45.0 +2.4**
LVV pmax pmax
comp=Z,100nm,1.0s
LVV MLR MLR
comp=N,3μm,22.0s
LVV MLR MLR
comp=E,700nm,22.0s
LVV MLR MLR
comp=Z,3μm,22.0s
**LVV L'vov 77.70 350** P **P 17 01 54.5 -0.5**
**MEM Membach 77.70 2** *dP* **P 17 01 54.7 -0.3**
comp=Z,57nm,1.0s
**LGTI Lohaghat 77.70 302** *eP* **P 17 01 55.4 0.0**
**BSTI Sart Tilman 77.72 2** *dP* **P 17 01 54.9 -0.2**
comp=Z,16nm,0.9s
**BTNL Ternell 77.72 2** *dP* **P 17 01 54.7 -0.5**
comp=Z,48nm,0.9s
**NMDO Nuevo Mundo 77.75 72** IAMs_20 IAMs_20 17 38 30.1
comp=Z,3μm,19.0s
**JMU Jammu 77.77 308** *eP* **P 17 01 56.2 +0.5**
**AHRW Bad Neuenahr-A 77.78 1** *eP* **P 17 01 55.2 -0.3**
comp=Z,55nm,0.9s,baz=1.6,slow=5.7
**DPC Dobruska-Polom 77.79 355** *eP* **P 17 01 55.7 +0.1**
DPC AMS AMS 17 40 10.0
comp=Z,3μm,19.5s
**DPC Dobruska-Polom 77.79 355** *eP* **P 17 01 55.7 +0.1**
DPC MLR MLR
comp=Z,3μm,19.5s
**DPC Dobruska-Polom 77.79 355** P **P 17 01 55.4 -0.2**
comp=Z,86nm,1.0s,comp=Z,2μm
**NIL Nilore 77.80 310** P **P 17 01 56.1 +0.2**
**NIL Nilore 77.80 310** P **P 17 01 56.1 +0.2**
NIL pmax pmax
comp=Z,265nm,0.7s
NIL MLR MLR
comp=Z,6μm,20.0s
**PLN Plauen 77.81 358** *eP* **P 17 01 55.1 -0.6**
comp=Z,33nm,0.9s,baz=1.6,slow=5.7
**BCLA Clavier 77.87 2** *dP* **P 17 01 55.5 -0.5**
comp=Z,38nm,1.0s
**TANN Tannenbergstha 77.88 358** *eP* **P 17 01 55.7 -0.4**
comp=Z,38nm,1.1s,baz=1.6,slow=5.7
**BGES Gesves 77.90 2** *dP* **P 17 01 55.6 -0.5**
comp=Z,39nm,1.0s
**SMLA Simla 77.94 305** *eP* **P 17 01 56.1 -0.5**
SMLA IAmb IAmb 17 01 57.5
comp=Z,199nm,0.8s
**BMRD Maredsous 77.98 3** *dP* **P 17 01 56.0 -0.5**
comp=Z,87nm,0.9s
**HORU Horodok 78.02 348** P **P 17 01 56.1 -0.7**
**KWP Kalwaria Pacla 78.02 351** *eP* **P 17 01 56.2 -0.6**
KWP *eL* L 17 36 48.4
comp=Z,6μm,24.9s
**KRLC Kraliky 78.04 355** *eP* **P 17 01 57.0 0.0**
KRLC AMS AMS 17 40 40.0
comp=Z,3μm,18.7s
**KRLC Kraliky 78.04 355** *eP* **P 17 01 57.0 0.0**
KRLC MLR MLR
comp=Z,3μm,18.7s
**MTDJ Mount Denham 78.04 76** IAMs_20 IAMs_20 17 40 56.0
comp=Z,2μm,18.0s
**BHK Bhakra 78.08 306** *eP* **P 17 01 57.5 +0.1**
**TNS Taunus Mts 78.11 0** *eP* **P 17 01 56.8 -0.6**
comp=Z,47nm,0.9s,baz=1.6,slow=5.7
**RCHB Rochefort 78.14 2** *dP* **P 17 01 57.0 -0.4**
comp=Z,55nm,0.9s
**PRA Prague 78.16 356** *eP* **P 17 01 57.2 -0.3**
PRA AMS AMS 17 40 40.0
comp=Z,4μm,20.7s
**PRA Prague 78.16 356** *eP* **P 17 01 57.2 -0.3**
PRA MLR MLR
comp=Z,4μm,20.7s
**GTBY Guantanamo Bay 78.17 73** IAMs_20 IAMs_20 17 39 59.7
comp=Z,3μm,18.0s
**DOU Dourbes 78.18 3** *dP* **P 17 01 57.2 -0.4**
comp=Z,56nm,0.9s
**OKC Ostrava-Krasne 78.19 354** *eP* **P 17 01 57.9 +0.1**
OKC AMS AMS 17 39 40.0
comp=Z,3μm,18.9s
**OKC Ostrava-Krasne 78.19 354** *eP* **P 17 01 57.9 +0.1**
OKC MLR MLR
comp=Z,3μm,18.9s
**PRU Pruhonice 78.23 356** *eP* **P 17 01 57.7 -0.3**
PRU *eS* **S 17 11 48.4 -1.0**
PRU AMS AMS 17 40 40.0
comp=Z,5μm,20.1s
**PRU Pruhonice 78.23 356** *eP* **P 17 01 57.7 -0.3**
PRU *eS* **S 17 11 48.4 -1.0**
PRU MLR MLR
comp=Z,5μm,20.1s
**MORC Moravsky Berou 78.29 354** IAMs_20 IAMs_20 17 36 37.5
comp=Z,3μm,22.0s
**MORC Moravsky Berou 78.29 354** *eP* **P 17 01 58.4 0.0**
MORC *eS* **S 17 11 48.7 -1.4**
**MORC Moravsky Berou 78.29 354** ⇓P **P 17 01 57.9 -0.5**
**MORC Moravsky Berou 78.29 354** P **P 17 01 58.3 -0.1**
**GOPC GO Pecny, Ondr 78.30 356** *eP* **P 17 01 58.3 -0.1**
GOPC AMS AMS 17 40 40.0
comp=Z,5μm,20.9s
**GOPC GO Pecny, Ondr 78.30 356** *eP* **P 17 01 58.3 -0.1**
GOPC MLR MLR
comp=Z,5μm,20.9s
**MANZ Manzenberg 78.31 358** *eP* **P 17 01 57.9 -0.5**
comp=Z,8.9nm,1.1s,baz=1.6,slow=5.7
**NIE Niedzica 78.45 352** *eP* **P 17 01 59.2 -0.1**
NIE *eS* **S 17 11 53.6 +1.8**
NIE *eSS* SS 17 17 08.6 +15
NIE *eL* L 17 35 48.9
comp=Z,2μm,23.9s
**NIE Niedzica 78.45 352** P **P 17 01 59.4 +0.1**
comp=Z,16nm,1.3s,comp=Z,352nm
**NDNU Novodnistrovsk 78.50 348** P **P 17 01 58.1 -1.4**
**ROTZ Rotzenmuhle 78.53 358** *eP* **P 17 01 59.4 -0.3**
comp=Z,9.7nm,0.9s,baz=1.6,slow=5.7
**ESPN Las Esperanzas 78.58 85** IAMs_20 IAMs_20 17 32 02.7
comp=Z,2μm,22.0s
**GRA1 Grafenberg Arr 78.62 358** IAMs_20 IAMs_20 17 42 37.3
comp=Z,2μm,21.0s
**GRF Grafenberg Arr 78.62 358** *eP* **P 17 02 00.2 0.0**
comp=Z,100nm,0.9s,baz=1.6,slow=5.7
GRF *eL* L 17 42 37.1
comp=Z,2μm,20.5s
**GRFO Grafenberg 78.63 358** IAMs_20 IAMs_20 17 42 36.3
comp=Z,2μm,20.0s
**WLF Walferdange 78.65 2** IAMs_20 IAMs_20 17 42 53.8
comp=Z,3μm,20.0s
**WLF Walferdange 78.65 2** *dP* **P 17 02 00.5 +0.2**
comp=Z,27nm,0.9s
**KMPD K-Podol'skiy 78.65 348** P **P 17 01 59.3 -1.0**
KMPD P **P 17 01 59.4 -0.9**
**SRDT SRDT 78.65 279** P **P 17 02 01.8 +1.0**
**GRA2 Grafenberg Arr 78.66 358** *eP* **P 17 02 00.4 0.0**
comp=Z,151nm,0.9s,baz=1.6,slow=5.7
**MAUC Maruska 78.68 354** *eP* **P 17 02 00.9 +0.4**
MAUC *eS* **S 17 11 54.2 -0.1**
**JSA Saint Aubin 78.72 7** *eP* **P 17 02 00.4 -0.3**
JSA IAmb IAmb 17 02 01.4
comp=Z,81nm,0.8s
**STNU Starunia 78.74 349** P **P 17 01 59.6 -1.2**
**GRA4 Grafenberg Arr 78.75 358** *eP* **P 17 02 00.7 -0.2**
comp=Z,132nm,0.9s,baz=1.6,slow=5.7
**KOLS Kolonicke sedl 78.75 351** *eP* **P 17 02 01.3 +0.4**
KOLS pmax pmax
comp=Z,31nm,0.9s
**KOLS Kolonicke sedl 78.75 351** *eP* **P 17 02 01.3 +0.4**
**LANS Liptovska Anna 78.78 353** *eP* **P 17 02 02.0 +0.9**
LANS pmax pmax
comp=Z,43nm,0.9s
**LANS Liptovska Anna 78.78 353** *eP* **P 17 02 02.0 +0.9**
**ZVC Zvikov 78.80 356** *eP* **P 17 02 01.1 0.0**
ZVC AMS AMS 17 41 00.0
comp=Z,4μm,20.5s
**VRAC Vranov 78.81 355** *eP* **P 17 02 00.9 -0.4**
VRAC *eS* **S 17 11 54.0 -1.7**
VRAC *eSS* **SS 17 16 53.7 -5.6**
**VRAC Vranov 78.81 355** P **P 17 02 00.8 -0.4**
comp=Z,68nm,0.8s,baz=12,slow=4.9,SNR=79
VRAC LR LR 17 36 30.0
comp=Z,2μm,21.8s,baz=9.0,slow=35
comp=Z,68nm,0.8s
**VRAC Vranov 78.81 355** ⇓P **P 17 02 01.5 +0.3**
**VRAC Vranov 78.81 355** P **P 17 02 01.5 +0.3**
**SORM Soroca 78.82 347** ⇑P **P 17 01 59.8 -1.4**
**SORM Soroca 78.82 347** P **P 17 01 59.8 -1.4**
**SORM Soroca 78.82 347** P **P 17 01 59.8 -1.4**
comp=Z,91nm,1.0s,comp=Z,1μm
**GRB4 Grafenberg Arr 78.84 358** *eP* **P 17 02 01.2 -0.1**
comp=Z,173nm,1.0s,baz=1.6,slow=5.7
**CRVS Cervenica-Dubn 78.86 352** *eP* **P 17 02 01.6 +0.1**
CRVS pmax pmax
comp=Z,51nm,1.2s
**CRVS Cervenica-Dubn 78.86 352** *eP* **P 17 02 01.6 +0.1**
**TREC Trest 78.88 356** *eP* **P 17 02 01.1 -0.5**
TREC AMS AMS 17 40 10.0
comp=Z,4μm,19.9s
**TREC Trest 78.88 356** *eP* **P 17 02 01.1 -0.5**
TREC MLR MLR
comp=Z,4μm,19.9s
**GOF Gofitskoye 78.89 336***c i* P **P 17 02 01.4 -0.3**
**ERBR Yeremizino-Bor 78.89 338** *eP* **P 17 02 01.6 -0.1**
ERBR *eS* **S 17 11 56.1 -0.4**
ERBR pmax pmax
comp=Z,175nm,0.9s
ERBR MLR MLR
comp=Z,5μm,19.0s
**GRB1 Grafenberg Arr 78.92 358** *eP* **P 17 02 01.6 -0.2**
comp=Z,150nm,0.9s,baz=1.6,slow=5.7
**GRB3 Grafenberg Arr 78.96 358** *eP* **P 17 02 01.9 -0.2**
comp=Z,111nm,0.9s,baz=1.6,slow=5.7
**KBL Kabul 79.01 313** P **P 17 02 01.8 -1.1**
KBL IAmb IAmb 17 02 03.1
comp=Z,117nm,0.8s
**KBL Kabul 79.01 313** P **P 17 02 01.8 -1.1**
KBL pmax pmax
comp=Z,117nm,0.9s
**GRB2 Grafenberg Arr 79.04 358** *eP* **P 17 02 02.1 -0.4**
comp=Z,114nm,0.9s,baz=1.6,slow=5.7
**KRUC Moravsky 79.07 355** *eP* **P 17 02 01.8 -0.8**
KRUC *eS* **S 17 11 57.9 -0.5**
**BOK Bokaro 79.12 295** *eP* **P 17 02 03.5 +0.2**
BOK IAmb IAmb 17 02 04.9
comp=Z,219nm,1.1s
**KHC Kasperske Hory 79.12 357** IAMs_20 IAMs_20 17 42 14.6
comp=Z,4μm,20.0s
**KHC Kasperske Hory 79.12 357** *eP* **P 17 02 03.1 +0.1**
KHC *epP* **pP 17 02 13.5 -1.2**
KHC *eS* S **17 11 57.6 -1.5**
KHC AMS AMS 17 42 00.0
comp=Z,4μm,18.9s
**KHC Kasperske Hory 79.12 357***c i* P **P 17 02 03.2 +0.2**
KHC pmax pmax
comp=Z,173nm,1.1s
KHC MLR MLR
comp=Z,6μm,19.0s
**WET Wettzell 79.13 357** *eP* **P 17 02 02.8 -0.2**
comp=Z,39nm,1.1s,baz=1.6,slow=5.7
**MUKU Mukachevo 79.19 351** P **P 17 02 02.8 -0.4**
**JAVC Velka Javorina 79.20 354** *eP* **P 17 02 04.3 +0.9**
**NSLU Nyzne Selyshc 79.25 349** P **P 17 02 03.7 +0.1**
**GRTK Grand Turk 79.25 69** IAMs_20 IAMs_20 17 35 54.3
comp=Z,3μm,21.0s
**KECS Kecovo 79.36 352** *eP* **P 17 02 04.7 +0.5**
KECS pmax pmax
comp=Z,40nm,1.0s
**KECS Kecovo 79.36 352** *eP* **P 17 02 04.7 +0.5**
**GERES GERESS Array B 79.41 357** P **P 17 02 04.0 -0.6**
comp=Z,25nm,0.8s,baz=5.7,slow=5.4,SNR=116
comp=Z,25nm,0.8s
**BERU Beregovo 79.41 351** P **P 17 02 03.3 -1.2**
**CKRC Cesky Krumlov 79.41 356** *eP* **P 17 02 04.2 -0.3**
CKRC *eS* **S 17 12 01.0 -1.1**
CKRC AMS AMS 17 41 30.0
comp=Z,5μm,20.7s
**CKRC Cesky Krumlov 79.41 356** *eP* **P 17 02 04.2 -0.3**
CKRC *eS* **S 17 12 01.0 -1.1**
CKRC MLR MLR
comp=Z,5μm,20.7s
**VYHS Vyhne 79.48 353** *eP* **P 17 02 05.3 +0.4**
VYHS pmax pmax
comp=Z,46nm,1.0s
**VYHS Vyhne 79.48 353** *eP* **P 17 02 05.3 +0.4**
**TRSU Trosnyk 79.51 350** P **P 17 02 04.4 -0.6**
**SMOL Smolenice 79.56 354** *eP* **P 17 02 06.3 +1.0**
SMOL pmax pmax
comp=Z,35nm,0.9s
**STU Stuttgart 79.57 360** *eP* **P 17 02 04.8 -0.5**
comp=Z,126nm,0.9s,baz=1.6,slow=5.7
**MAK Makhachkala 79.63 332** *eP* **P 17 02 04.8 -0.9**
MAK *e* 17 05 03.7
MAK *ePPP* PPP 17 06 55.5
MAK *eS* **S 17 12 03.9 -0.5**
MAK *eSS* **SS 17 17 11.4 -0.4**
MAK *eSSS* SSS 17 20 39.8
MAK pmax pmax
comp=Z,226nm,1.1s
**JTS Las Juntas de 79.65 87** LR LR 17 39 34.6
comp=Z,1μm,18.6s,baz=298,slow=37
**BURAR Bucovina Array 79.74 349** P **P 17 02 05.3 -1.1**
**BURAR Bucovina Array 79.74 349** ⇓P **P 17 02 06.3 -0.1**
**LABN Labinsk 79.84 337** *eP* **P 17 02 07.7 +0.8**
LABN *eS* **S 17 12 06.6 -0.1**
LABN pmax pmax
comp=Z,50nm,0.6s
LABN MLR MLR
comp=Z,5μm,26.0s
**KIS Kishinev 79.86 346**⇑ *iP* **P 17 02 06.0 -0.9**
comp=Z,70nm,0.9s
KIS *eL* L 17 30 44.0
KIS LRM MLR 17 42 48.0
comp=Z,2μm,18.0s
**KIS Kishinev 79.86 346***c i* P **P 17 02 06.0 -0.9**
KIS *e* 17 02 22.0
KIS *e* 17 12 22.0
KIS *e* 17 13 07.0
KIS pmax pmax
comp=Z,290nm,1.1s
**NDI New Delhi 79.89 304** *eP* **P 17 02 06.8 -0.7**
**MTSU Mount Surprise 79.89 223** P **P 17 02 08.5 +1.1**
**TV1H Townsville Har 79.89 220** P **P 17 02 08.7 +1.4**
**ZST Bratislava 79.89 354** *eP* **P 17 02 08.0 +0.9**
ZST pmax pmax
comp=Z,215nm,1.0s
**ZST Bratislava 79.89 354** *eP* **P 17 02 08.0 +0.9**
**MILM Milestii Mici 79.94 346** *eP* **P 17 02 05.5 -1.9**
comp=Z,160nm,1.4s
MILM *eS* **S 17 12 03.0 -4.6**
MILM *eL* L 17 28 00.0
MILM LRM MLR 17 38 17.0
comp=Z,5μm,23.0s
**MILM Milestii Mici 79.94 346** ⇑P **P 17 02 07.3 -0.1**
**MILM Milestii Mici 79.94 346** *eP* **P 17 02 05.5 -1.9**
MILM *e* 17 02 11.0
MILM *e* 17 02 22.0
MILM *eS* **S 17 12 03.0 -4.6**
MILM *e* 17 13 00.0
MILM pmax pmax
comp=Z,160nm,1.4s
MILM MLR MLR
comp=Z,5μm,23.0s
**NPLP NPLP New Delhi 79.95 304** *eP* **P 17 02 07.2 -0.5**
**BKB Balikpapan 79.96 255** IAMs_20 IAMs_20 17 32 23.5
comp=Z,3μm,21.0s
**PSZ Piszkesteto 79.97 352** ⇓P **P 17 02 08.3 +0.7**
**PSZ Piszkesteto 79.97 352** P **P 17 02 08.3 +0.7**
**KVAR Kislovodsk Arr 80.00 336** P **P 17 02 09.5 +1.6**
comp=Z,26nm,0.8s,baz=90,slow=20,SNR=10
KVAR LR LR 17 41 04.8
comp=Z,3μm,20.1s,baz=270,slow=38
comp=Z,26nm,0.8s
**BFO Black Forest 80.01 0** P **P 17 02 07.1 -0.7**
**BFO Black Forest 80.01 0** P **P 17 02 07.1 -0.7**
BFO pmax pmax
comp=Z,41nm,1.0s
**BFO Black Forest 80.01 0** *eP* **P 17 02 07.3 -0.5**
comp=Z,41nm,1.0s,baz=1.6,slow=5.7
**KIV Kislovodsk 80.01 336** P **P 17 02 07.5 -0.4**
KIV IAmb IAmb 17 02 11.4
comp=Z,78nm,0.9s
**KIV Kislovodsk 80.01 336** *eP* **P 17 02 07.6 -0.4**
KIV *e* 17 05 08.9
KIV *ePPP* PPP 17 07 03.1
KIV *eS* **S 17 12 08.6 -0.1**
KIV *eSS* **SS 17 17 18.9 +1.2**
KIV pmax pmax
comp=Z,78nm,1.1s
KIV pmax pmax
comp=Z,234nm,4.3s
**BBSI Bau Bau 80.05 248** P **P 17 02 07.9 -0.4**
comp=Z,89nm,1.2s,comp=Z,2μmcomp=Z,4μm
**ECH Echery 80.11 1** IAMs_20 IAMs_20 17 42 59.6
comp=Z,2μm,19.0s
**FUR Furstenfeldbru 80.15 358** *eP* **P 17 02 08.2 -0.3**
comp=Z,66nm,1.0s,baz=1.6,slow=5.7
**CLF Chambon-Foret 80.15 4** IAMs_20 IAMs_20 17 44 29.7
comp=Z,2μm,19.0s
**KBZ Khabaz 80.17 336** *eP* **P 17 02 08.9 +0.3**
comp=Z,38nm,0.8s,baz=76,slow=3.0,SNR=67
KBZ LR LR 17 42 08.0
comp=Z,4μm,19.6s,baz=9.5,slow=39
comp=Z,38nm,0.8s
**KBZ Khabaz 80.17 336***c iP* **P 17 02 08.7 +0.1**
KBZ pmax pmax
comp=Z,44nm,0.9s
KBZ MLR MLR
comp=Z,4μm,20.0s
**ALBI Allahabad 80.17 299** *eP* **P 17 02 08.0 -0.9**
**SHA1 Shidzhatmaz 80.22 336***c iP* **P 17 02 09.6 +0.3**
**CONA Conrad Observa 80.23 355** *i P* **P 17 02 09.1 0.0**
comp=Z,69nm,0.9s,SNR=37
**SONA Sohna 80.30 304** *eP* **P 17 02 09.0 -0.7**
**ARCR ARCALIA 80.36 349** ⇓P **P 17 02 10.4 +0.7**
**MOA Molln 80.38 356** *i P* **P 17 02 09.5 -0.3**
comp=Z,25nm,0.9s,SNR=16
**ANN Anapa 80.43 340** *eP* **P 17 02 08.9 -1.1**
ANN *e* 17 05 18.3
ANN *eS* **S 17 12 10.0 -2.9**
ANN *eSS* **SS 17 17 23.8 +0.1**
ANN pmax pmax
comp=Z,53nm,0.7s
ANN MLR MLR
comp=Z,6μm,23.0s
**RONA Rosalia, Austr 80.43 355** *i P* **P 17 02 10.2 +0.1**
comp=Z,32nm,0.9s,SNR=19
**RJOB Jochberg 80.54 357** *eP* **P 17 02 10.3 -0.4**
comp=Z,44nm,0.8s,baz=1.6,slow=5.7
**BIOA Bad Ischl, Aus 80.56 357** *i P* **P 17 02 10.5 -0.2**
comp=Z,72nm,1.1s,SNR=32
**BNSI Bone 80.59 250** P **P 17 02 11.2 0.0**
comp=Z,58nm,1.2s,comp=Z,1μmcomp=Z,4μm
**TESR Tescani 80.64 348** ⇑P **P 17 02 11.0 -0.2**
**TESR Tescani 80.64 348** P **P 17 02 10.7 -0.5**
comp=Z,21nm,0.8s,comp=Z,882nm
**UBR Ueberruh 80.65 359** *eP* **P 17 02 11.1 -0.2**
comp=Z,58nm,1.1s,baz=1.6,slow=5.7
**KDU Kakadu 80.66 235** P **P 17 02 11.6 +0.1**
**KUDL Kundal 80.69 304** *eP* **P 17 02 10.3 -1.4**
**CJR Cluj-Napoca 80.81 350** ⇑P **P 17 02 12.2 +0.1**
**CJR Cluj-Napoca 80.81 350** P **P 17 02 12.2 +0.1**
**DRGR 80.83 350** ⇓P **P 17 02 11.9 -0.4**
**DRGR 80.83 350** P **P 17 02 12.2 -0.1**
**RETA Reutte 80.84 359** *i P* **P 17 02 12.1 -0.2**
comp=Z,41nm,0.8s,SNR=17
**ONER Baraj Valea Uz 80.85 348** ⇓P **P 17 02 12.7 +0.4**
**CTA Charters Tower 80.85 220** P **P 17 02 13.3 +0.8**
**CTA Charters Tower 80.85 220** LR LR 17 33 21.2
comp=Z,162nm,21.5s,baz=31,slow=32
**CTAO Charters Tower 80.85 220** P **P 17 02 13.4 +0.9**
**CTAO Charters Tower 80.85 220** P **P 17 02 12.6 +0.1**
**CTAO Charters Tower 80.85 220** IAMs_20 IAMs_20 17 32 01.4
comp=Z,3μm,21.0s
**CTAO Charters Tower 80.85 220** P **P 17 02 12.6 +0.1**
CTAO pmax pmax
comp=Z,38nm,1.1s
CTAO MLR MLR
comp=Z,2μm,21.0s
**LESA Schwarzleotal 80.86 357** *i P* **P 17 02 12.4 0.0**
comp=Z,31nm,1.1s
**MPLH Magyarpolny 80.89 354** P **P 17 02 12.9 +0.4**
comp=Z,219nm,1.1s,comp=Z,4μm
**MTKI Muara Teweh, K 80.90 257** P **P 17 02 12.8 -0.2**
comp=Z,103nm,1.7s,comp=Z,3μmcomp=Z,3μm
**PAPH Port-au-Prince 80.91 72** IAMs_20 IAMs_20 17 40 56.4
comp=Z,3μm,19.0s
**ARSA Arzberg 80.92 355** *i P* **P 17 02 12.9 +0.2**
comp=Z,44nm,0.9s,SNR=18
**SIM Simferopol' 80.96 342***d iP* **P 17 02 13.7 +0.8**
SIM *eS* **S 17 12 17.0 -1.4**
SIM pmax pmax
comp=Z,133nm,0.9s
SIM pmax pmax
comp=Z,310nm,7.3s
**MOTA Moosalm 80.97 358** *i P* **P 17 02 12.9 -0.3**
comp=Z,74nm,0.9s
**WATA Walderalm 80.97 358** *i P* **P 17 02 13.0 -0.2**
comp=Z,103nm,1.2s,SNR=34
**WTTA Wattenberg 81.05 358** *i P* **P 17 02 13.6 0.0**
comp=Z,120nm,1.4s,SNR=37
**DAVA Damuels 81.05 359** *i P* **P 17 02 13.7 +0.1**
comp=Z,47nm,1.0s,SNR=16
**SOC Sochi 81.08 338** *eP* **P 17 02 12.2 -1.3**
SOC *i* 17 05 15.9
SOC *eS* **S 17 12 18.7 -1.0**
SOC pmax pmax
comp=Z,35nm,0.8s
**SQTA Sankt Quirin 81.10 358** *i P* **P 17 02 13.7 0.0**
comp=Z,99nm,0.9s,SNR=42
**VSLR Vesyoloye 81.12 338***d iP* **P 17 02 14.5 +0.7**
VSLR pmax pmax
comp=Z,69nm,0.9s
VSLR MLR MLR
comp=Z,2μm,21.0s
**SDDR Presa de Saban 81.14 71** IAmb IAmb 17 02 15.9
comp=Z,55nm,0.9s
SDDR IAMs_20 IAMs_20 17 36 19.5
comp=Z,3μm,22.0s
**RAO Raoul Island 81.16 186** IAMs_20 IAMs_20 17 29 06.3
comp=Z,3μm,20.0s
**RAO Raoul Island 81.16 186** LR LR 17 33 15.1
comp=Z,2μm,19.1s,baz=25,slow=32
**OZUR 81.16 348** ⇓P **P 17 02 14.4 +0.4**
**TURR Turia 81.17 348** ⇓P **P 17 02 14.4 +0.3**
**KBA Koelnbreinsper 81.19 357** *i P* **P 17 02 14.7 +0.4**
comp=Z,161nm,0.9s,SNR=61
**DRS Darwin Rock St 81.25 237** P **P 17 02 14.9 +0.2**
**VRI Vrincioaia 81.27 347** ⇑P **P 17 02 14.9 +0.3**
**VRI Vrincioaia 81.27 347** P **P 17 02 14.8 +0.3**
**VRI Vrincioaia 81.27 347** P **P 17 02 14.9 +0.3**
comp=Z,14nm,0.8s,comp=Z,138nm
**RKT Rikitea 81.27 147** *eP* **P 17 02 17.1 +2.5**
comp=Z,2μm,27.5s
**RKT Rikitea 81.27 147** *ePP* **PP 17 05 18.6 -2.3**
comp=Z,1μm,32.0s
RKT *eS* **S 17 12 19.5 -2.2**
comp=Z,4μm,25.5s
RKT *eSS* **SS 17 17 40.7 +2.0**
comp=Z,7μm,28.8s
RKT *eLQ* LQ 17 24 21.4
comp=Z,2μm,30.2s
RKT *eLR* LR 17 27 45.9
comp=Z,10μm,24.6s
RKT *eLR* LR 17 27 48.0
comp=Z,30μm,22.2s
**PLOR3 Plostina Array 81.29 348** P **P 17 02 14.6 -0.1**
comp=Z,22nm,0.9s,comp=Z,1μm
**KAPI Kappang 81.29 250** LR LR 17 35 31.1
comp=Z,540nm,20.5s,baz=20,slow=34
**KAPI Kappang 81.29 250***ceP* **P 17 02 15.8 +0.8**
KAPI pmax pmax
comp=Z,125nm,1.6s
**PLOR Plostina 81.29 348** ⇓P **P 17 02 15.5 +0.8**
**PLOR Plostina 81.29 348** P **P 17 02 15.4 +0.8**
**PLOR5 Plostina Array 81.29 347** P **P 17 02 14.6 -0.1**

comp=Z,30nm,0.9s,comp=Z,1µm
**FETA Feichten 81.30 359** *i* P **P 17 02 15.0 +0.1**
comp=Z,121nm,1.0s,SNR=54
**ODBI Odobesti 81.32 347** ⇓P **P 17 02 15.9 +1.2**
**DOPR Dopca 81.34 348** ⇓P **P 17 02 15.8 +0.9**
**IZVR Izvoarele 81.44 347** ⇓P **P 17 02 15.6 +0.2**
**MTN Manton Dam 81.47 236** P **P 17 02 16.0 +0.1**
**MTN Manton Dam 81.47 236** IAMs_20 IAMs_20 17 36 06.8
comp=Z,2µm,20.0s
**SOKA Soboth 81.52 356** *i* P **P 17 02 15.8 -0.2**
comp=Z,77nm,0.9s,SNR=55
**ABTA Abfaltersbach 81.54 357** *i* P **P 17 02 15.8 -0.3**
comp=Z,74nm,1.2s,SNR=31
**DAVOX Davos/Dischmat 81.56 359** P **P 17 02 16.3 0.0**
comp=Z,54nm,0.7s,baz=344,slow=2.8,SNR=121
DAVOX LR LR 17 42 22.9
comp=Z,1µm,18.0s,baz=26,slow=39
comp=Z,54nm,0.7s
**PERS Pernice 81.56 356** *i* P **P 17 02 15.7 -0.5**
PERS *i* S **S 17 12 22.7 -1.9**
PERS *e*SS **SS 17 17 50.4 +10**
**MYKA Terra Mystica 81.62 357** *i* P **P 17 02 15.5 -0.9**
comp=Z,21nm,1.0s,SNR=8.9
**TLCR 81.63 346** ⇓P **P 17 02 16.7 +0.3**
**TLCR 81.63 346** P **P 17 02 17.3 +0.9**
**OBKA Obir 81.71 356** *i* P **P 17 02 16.7 -0.3**
comp=Z,43nm,0.8s,SNR=18
**OBKA Obir 81.71 356** ⇑*i*P **P 17 02 16.7 -0.3**
**GRER 81.71 347** ⇑P **P 17 02 17.6 +0.8**
**FUORN Ofenpass-Fuorn 81.71 359** P **P 17 02 17.4 +0.2**
FUORN IAmb IAmb 17 02 19.4
comp=Z,112nm,1.3s
**MLR Muntele Rosu 81.74 348** P **P 17 02 17.6 +0.4**
comp=Z,19nm,0.8s,baz=334,slow=2.4,SNR=36
MLR LR LR 17 42 11.4
comp=Z,5µm,20.2s,baz=8.5,slow=38
comp=Z,19nm,0.8s
**MLR Muntele Rosu 81.74 348** ⇑P **P 17 02 17.7 +0.6**
**MLR Muntele Rosu 81.74 348** P **P 17 02 18.2 +1.0**
**MLR Muntele Rosu 81.74 348** P **P 17 02 17.0 -0.2**
comp=Z,30nm,1.0s,comp=Z,891nm
**CFR Carcaliu 81.74 346** ⇓P **P 17 02 17.3 +0.2**
**CFR Carcaliu 81.74 346** P **P 17 02 17.2 +0.2**
**NEHR Nehoiu 81.75 348** ⇓P **P 17 02 18.0 +0.9**
**MORH Mrgy, Hungar 81.76 353** ⇓P **P 17 02 16.1 -1.0**
**MORH Mrgy, Hungar 81.76 353** P **P 17 02 16.1 -1.0**
comp=Z,12nm,2.2s,comp=Z,522nm
**KSM Kuching 81.78 262** P **P 17 02 18.4 +0.8**
**KSM Kuching 81.78 262** P **P 17 02 18.1 +0.5**
KSM IAmb IAmb 17 02 20.0
comp=Z,66nm,0.9s
**JHNI Jhansi 81.80 301** *e*P **P 17 02 16.2 -1.4**
JHNI IAmb IAmb 17 02 17.5
comp=Z,164nm,0.9s
**VOIR 81.90 349** P **P 17 02 18.4 +0.4**
**VOIR 81.90 349** P **P 17 02 18.1 +0.1**
comp=Z,20nm,1.1s,comp=Z,712nm
**JHSG JHARSUGUGA 81.91 295** *e*P **P 17 02 18.7 +0.4**
JHSG IAmb IAmb 17 02 28.1
comp=Z,276nm,1.1s
**SURR Surduc 81.92 351** ⇓P **P 17 02 17.5 -0.4**
**SENIN Lac Senin/Sane 81.97 1** P **P 17 02 18.7 +0.2**
SENIN IAmb IAmb 17 02 21.8
comp=Z,71nm,0.8s
**TPGR Topolog 82.01 346** ⇑P **P 17 02 18.9 +0.4**
**ARR Arges 82.02 349** ⇓P **P 17 02 19.0 +0.4**
**LOT Lotru 82.04 349** ⇓P **P 17 02 18.2 -0.5**
**BZS Buzias 82.10 351** ⇑P **P 17 02 18.2 -0.7**
**BZS Buzias 82.10 351** P **P 17 02 19.0 +0.1**
**LJU Ljubljana 82.17 356** *i* P **P 17 02 18.8 -0.5**
LJU *i* PP **PP 17 05 25.3 -1.6**
LJU *i* S **S 17 12 29.4 -1.6**
**STKI Sintang 82.17 260** P **P 17 02 19.7 0.0**
comp=Z,36nm,0.7s,comp=Z,3µm
**GZR Gura Zlata 82.20 350** ⇓P **P 17 02 19.3 -0.3**
**GZR Gura Zlata 82.20 350** P **P 17 02 19.4 -0.2**
**H07N1 FLORES T-PHASE 82.25 30** P **P 17 02 20.6 +0.7**
SNR=58
**HARR Harsova 82.25 346** ⇓P **P 17 02 19.9 +0.2**
**HARR Harsova 82.25 346** P **P 17 02 20.9 +1.2**
**RK1H Rockhampton Ha 82.25 215** P **P 17 02 20.8 +1.0**
**CTI Castel Tesino 82.26 358** IAMs_20 IAMs_20 17 42 46.5
comp=Z,3µm,21.0s
**CRES Cresnjev 82.35 355** *i* P **P 17 02 19.1 -1.1**
CRES *i* S **S 17 12 32.8 +0.1**
**SURA Surathani 82.36 275** P **P 17 02 21.8 +1.1**
**H07S1 FLORES T-PHASE 82.51 30** P **P 17 02 21.9 +0.7**
SNR=30
**BLSP Bilaspur 82.53 296** *e*P **P 17 02 20.9 -0.7**
BLSP IAmb IAmb 17 02 21.9
comp=Z,114nm,0.8s
**SOEI Soe 82.58 244** P **P 17 02 22.1 +0.2**
**SOEI Soe 82.58 244** IAmb IAmb 17 02 50.0
comp=Z,83nm,0.9s
**SOEI Soe 82.58 244** P **P 17 02 22.0 +0.2**
comp=Z,112nm,1.3s,comp=Z,2µmcomp=Z,4µm
**BCA Borcka 82.63 336** ⇓P **P 17 02 21.6 -0.2**
**MFTR Murfatlar 82.68 346** ⇑P **P 17 02 22.1 +0.2**
**FRGS Fruska Gora 82.72 352** ⇑*i*P **P 17 02 21.8 -0.4**
**HERR Herculane 82.75 350** ⇑P **P 17 02 21.5 -0.8**
**MMRI Maumere 82.80 246** P **P 17 02 22.0 -0.9**
comp=Z,67nm,1.2s,comp=Z,2µmcomp=Z,3µm
**SRIT Nakonsritamara 82.82 275** P **P 17 02 24.4 +1.3**
**ICOR Ion Corvin 82.83 346** ⇑P **P 17 02 23.5 +0.8**
**MDVR Moldovita 82.92 351** ⇓P **P 17 02 22.3 -1.0**
**TEOL Teolo 82.95 358** P **P 17 02 23.6 +0.2**
**SGRR Singureni 82.98 348** ⇓P **P 17 02 23.3 -0.2**
**SSB Saint Sauveur 82.99 3** IAmb IAmb 17 02 25.4
comp=Z,51nm,0.9s
**AJM Ajmer 83.00 305** *e*P **P 17 02 23.6 -0.3**
AJM IAmb IAmb 17 02 26.7
comp=Z,111nm,1.0s
**GNI Garni 83.01 333** IAMs_20 IAMs_20 17 44 07.6
comp=Z,3µm,20.0s
**GNI Garni 83.01 333** P **P 17 02 23.9 -0.1**
comp=Z,17nm,0.8s,baz=41,slow=0.8,SNR=10
GNI LR LR 17 46 14.7
comp=Z,2µm,18.4s,baz=30,slow=41
comp=Z,17nm,0.8s
**A051A Mrakovica 83.08 354** ⇑*i*P **P 17 02 23.1 -1.0**
**GUNA GUNA 83.10 301** *e*P **P 17 02 23.5 -0.9**
GUNA IAmb IAmb 17 02 24.6
comp=Z,189nm,0.8s
**BNI Bardonecchia 83.27 2** IAmb IAmb 17 02 28.0
comp=Z,66nm,0.8s
BNI IAMs_20 IAMs_20 17 40 18.1
comp=Z,2µm,20.0s
**BATI Baumata 83.28 244** P **P 17 02 25.7 +0.3**
comp=Z,89nm,0.8s,comp=Z,2µmcomp=Z,3µm
**BLY Banja Luka 83.32 354** ⇑*i*P **P 17 02 24.2 -1.1**
**TEKS Tekeris 83.35 352** ⇑*i*P **P 17 02 24.8 -0.6**
**A050A Klekovaca 83.63 354** ⇑*i*P **P 17 02 26.3 -0.7**
**HAPS Han Pijesak,BI 83.85 353** ⇑*i*P **P 17 02 27.5 -0.7**
**PCED Cedros 83.96 29** *e*P **P 17 02 29.0 +0.4**
comp=Z,206nm,0.8s
**CALA Caldeira 84.00 29** *e*P **P 17 02 29.7 +0.7**
comp=Z,227nm,0.8s
**ROSA Rosais 84.01 28** *e*P **P 17 02 29.9 +1.0**
comp=Z,124nm,1.0s
**MSSA Maissana 84.02 360** IAMs_20 IAMs_20 17 46 24.1
comp=Z,3µm,19.0s
**BBLS Lazi&#263i 84.04 352** ⇑*i*P **P 17 02 28.6 -0.4**
**BOVS Bovan 84.06 351** ⇑P **P 17 02 28.0 -1.1**
**QIS Mount Isa 84.06 226** P **P 17 02 28.9 -0.3**
**PMAN Manadas 84.13 28** *e*P **P 17 02 30.6 +1.1**
comp=Z,126nm,1.2s
**PICO Pico 84.16 29** *e*P **P 17 02 31.5 +1.8**
comp=Z,92nm,1.3s
**PCAN Candelaria 84.17 29** *e*P **P 17 02 29.6 -0.2**
comp=Z,74nm,1.0s
**BHPL Bhopal 84.19 301** *e*P **P 17 02 29.4 -0.7**
**PSBA Serra de Santa 84.23 28** *e*P **P 17 02 30.2 +0.1**
comp=Z,176nm,0.9s
**PPNO Prainha do Nor 84.23 28** *e*P **P 17 02 30.9 +0.8**
comp=Z,145nm,0.9s
**ELND Elena 84.26 348** ⇓P **P 17 02 29.9 -0.2**
**PAGU Agualva, Azore 84.27 28** *e*P **P 17 02 30.2 0.0**
comp=Z,90nm,0.9s
**RUDO Rudo 84.28 352** *e*P **P 17 02 28.9 -1.3**
RUDO *e*P **PcP 17 02 29.6 -4.3**
**PID Ribeirinha 84.30 28** *e*P **P 17 02 30.9 +0.5**
comp=Z,173nm,0.9s
**PSCM Serra do Cume 84.35 27** *e*P **P 17 02 29.8 -0.9**
comp=Z,69nm,0.6s
**MLPR Magueyes Islan 84.40 68** IAmb IAmb 17 02 34.0
comp=Z,56nm,0.9s
MLPR IAMs_20 IAMs_20 17 38 18.4
comp=Z,2µm,21.0s
**PLE Pljevlja 84.57 352** ⇑*i*P **P 17 02 31.4 -0.4**
**CELP Cerrillos 84.58 68** IAmb IAmb 17 02 33.7
comp=Z,92nm,0.9s
**SJES Sjenica 84.59 352** ⇑*i*P **P 17 02 31.9 0.0**
**UPM Unac-Piva 84.73 353** ⇑*i*P **P 17 02 31.9 -0.8**
**PAYG Puerto Ayora 84.91 98** IAMs_20 IAMs_20 17 31 13.7
comp=Z,3µm,20.0s
**IGPR InterUniversit 84.94 67** IAmb IAmb 17 02 35.4
comp=Z,88nm,0.9s
IGPR IAMs_20 IAMs_20 17 40 44.6
comp=Z,2µm,21.0s
**HUMP Col San Antoni 84.94 67** IAMs_20 IAMs_20 17 40 00.8
comp=Z,2µm,20.0s
**IVA Berane 84.98 352** ⇑*i*P **P 17 02 33.4 -0.5**
**NGP Nagpur 85.01 298** *e*P **P 17 02 33.6 -0.6**
**KOME Kolasin 85.03 352** ⇑*i*P **P 17 02 33.1 -1.0**
**BRY Bratogost 85.06 353** ⇑*i*P **P 17 02 33.2 -1.1**
**BRY Bratogost 85.06 353** ⇑*i*P **P 17 02 33.4 -0.9**
**KNRA Kununurra 85.08 237** IAMs_20 IAMs_20 17 38 49.9
comp=Z,2µm,21.0s
**IPM Ipoh 85.15 271** P **P 17 02 35.2 +0.2**
**STON Šton 85.16 353** ⇑*i*P **P 17 02 33.2 -1.4**
**NKME Niksic 85.17 353** ⇑*i*P **P 17 02 33.8 -0.9**
**PGAV Gavieira, Arco 85.20 13** *e*P **P 17 02 34.5 -0.5**
comp=Z,83nm,2.0s
**PGAV Gavieira, Arco 85.20 13** *e*S **SKSac 17 12 55.3 -1.1**
**PGAV Gavieira, Arco 85.20 13** *e*LQ LQ 17 26 49.2
PGAV *e*LR LR 17 32 00.6
comp=Z,2µm,20.0s
**EDRB Edirne 85.21 347** P **P 17 02 34.2 -0.7**
**FDMO Fiordimonte 85.23 357** IAmb IAmb 17 02 38.3
comp=Z,54nm,0.9s
**GURO Guroymak-BITLI 85.25 334** IAMs_20 IAMs_20 17 45 46.6
comp=Z,3µm,21.0s
**CEME Cevo 85.39 353** ⇑*i*P **P 17 02 34.8 -1.1**
**PDG Podgorica 85.47 352** ⇑*i*P **P 17 02 35.3 -0.9**
**PDG Podgorica 85.47 352** ⇑*i*P **P 17 02 35.5 -0.7**
**PCAB Cabril 85.49 13** *e*P **P 17 02 36.3 0.0**
comp=Z,78nm,1.4s
**PBRG Braganca 85.56 12** *e*P **P 17 02 36.8 +0.1**
comp=Z,68nm,1.8s
**PSET Sete Cidades 85.56 27** *e*P **P 17 02 36.5 -0.3**
comp=Z,194nm,1.7s
**BUM Brajici-Budva 85.63 353** ⇑*i*P **P 17 02 36.1 -1.0**
**PDA Ponta Delgada 85.65 27** *e*P **P 17 02 37.7 +0.6**
comp=Z,165nm,1.0s
**CMLA Cha da Macela 85.67 27** IAMs_20 IAMs_20 17 42 41.9
comp=Z,2µm,18.0s
**DRME Dracevica, Mon 85.72 352** ⇑*i*P **P 17 02 36.8 -0.6**
**DRME Dracevica, Mon 85.72 352** ⇑*i*P **P 17 02 37.1 -0.3**
**BART Piedi Partolome 85.76 26** *e*P **P 17 02 38.3 +0.5**
comp=Z,301nm,1.1s
**WB0 Warramunga Arr 85.76 230** IAmb IAmb 17 02 39.1
comp=Z,51nm,1.1s
**TPRI Tanjung Pinang 85.77 266** P **P 17 02 39.3 +1.3**
comp=Z,57nm,1.0s,comp=Z,2µmcomp=Z,3µm
**POLO Lamas de Olo 85.85 12** *e*P **P 17 02 37.9 -0.3**
comp=Z,21nm,1.0s
**BTDF Bukit Timah Da 85.88 267** P **P 17 02 40.2 +1.6**
**WRAB Tennant Creek 85.92 230***c* *i*P **P 17 02 38.8 +0.2**
WRAB pmax pmax
comp=Z,65nm,1.0s
**WB2 Warramunga Arr 85.93 230** IAmb IAmb 17 02 40.1
comp=Z,63nm,1.0s
**WRA Warramunga Arr 85.94 230** P **P 17 02 37.7 -0.9**
**WRA Warramunga Arr 85.94 230** P **P 17 02 38.0 -0.6**
comp=Z,29nm,0.9s,baz=37,slow=5.9,SNR=188
WRA LR LR 17 36 51.3
comp=Z,2µm,21.9s,baz=26,slow=33
comp=Z,29nm,0.9s
**WRA Warramunga Arr 85.94 230** *i* P **P 17 02 37.7 -0.9**
WRA pmax pmax
comp=Z,31nm,0.9s
**PVRL Vila Real 85.96 12** *e*P **P 17 02 38.8 +0.1**
comp=Z,58nm,1.6s
**YLV Yalova 86.05 344** P **P 17 02 39.6 +0.4**
comp=Z,104nm,1.3s,comp=Z,2µm
**NVR Nevrokopi 86.07 349** P **P 17 02 39.8 +0.5**
**BR106 Keskin Array S 86.08 341** P **P 17 02 39.7 +0.2**
comp=Z,31nm,1.0s,comp=Z,234nm
**BR131 Keskin Array S 86.09 341** IAmb IAmb 17 02 42.4
comp=Z,34nm,0.9s
**BR131 Keskin Array S 86.09 341***c* *i*P **P 17 02 39.4 -0.1**
**BRTR Keskin Array B 86.09 341** P **P 17 02 38.9 -0.6**
**BRTR Keskin Array B 86.09 341** P **P 17 02 39.4 -0.1**
comp=Z,27nm,0.9s,baz=39,slow=2.4,SNR=71
BRTR PKKPbc **PKKPbc 17 20 36.6 +0.3**
comp=Z,1.4nm,0.9s,baz=176,slow=5.2,SNR=7.5
BRTR PKPPKP P'P'df 17 28 37.0 -13
comp=Z,1.1nm,1.0s,baz=165,slow=6.7,SNR=4.8
BRTR LR LR 17 44 40.4
comp=Z,3µm,21.4s,baz=30,slow=38
comp=Z,27nm,0.9s
**BR105 Keskin Array S 86.10 341** P **P 17 02 39.4 -0.2**
comp=Z,33nm,0.9s,comp=Z,248nm
**ANTO Ankara 86.12 342** IAMs_20 IAMs_20 17 44 42.2
comp=Z,3µm,22.0s
**MVO Moncorvo 86.16 12** *e*P **P 17 02 39.0 -0.7**
comp=Z,72nm,1.3s
**MVO Moncorvo 86.16 12** *e*PP PP 17 05 49.0 -11
MVO *e*S **S 17 13 15.2 +4.1**
MVO *e*SS **SS 17 18 54.1 +5.6**
MVO *e*LQ LQ 17 25 51.4
MVO *e*LR LR 17 32 12.9
comp=Z,3µm,20.0s
**INTR Introdacqua 86.22 356** IAmb IAmb 17 02 41.9
comp=Z,54nm,1.0s
**ALN Alexandroupoli 86.24 347** P **P 17 02 38.5 -1.5**
**VAY Valandovo 86.25 350** *i* P **P 17 02 40.6 +0.5**
**SRS Serrai 86.34 349** P **P 17 02 39.8 -0.7**
**KAVA Kavala 86.34 348** P **P 17 02 39.3 -1.2**
**KNT Kendrikon 86.37 349** P **P 17 02 40.2 -0.5**
**AKL Akola 86.47 299** *e*P **P 17 02 41.5 0.0**
AKL IAmb IAmb 17 02 42.3
comp=Z,68nm,1.1s
**PVIS Viseu 86.48 13** *e*P **P 17 02 40.6 -0.7**
comp=Z,62nm,0.7s
**PSMN Pico do Norte, 86.51 27** *e*P **P 17 02 40.6 -0.8**
comp=Z,180nm,1.2s
**KOKK Kokkinochori, 86.58 349** P **P 17 02 40.1 -1.6**
**KIRS Kirsehir-Merke 86.60 341** ⇓P **P 17 02 42.4 +0.4**
**OHR Ohrid 86.64 351** *i* P **P 17 02 42.4 +0.3**
**THAS Thassos island 86.70 348** P **P 17 02 41.3 -1.0**
**SMTH Samothraki Isl 86.73 347** P **P 17 02 40.8 -1.6**
**SABA Saba 86.83 65** IAMs_20 IAMs_20 17 39 30.7
comp=Z,3µm,20.0s
**MTE Manteigas 86.84 12** IAMs_20 IAMs_20 17 42 03.6
comp=Z,2µm,20.0s
**MTE Manteigas 86.84 12** *e*P **P 17 02 42.9 -0.2**
comp=Z,64nm,0.9s
**MTE Manteigas 86.84 12** *e*PP **PP 17 06 07.0 +1.9**
MTE *e*S **S 17 13 23.4 +5.6**
MTE *e*SS **SS 17 19 04.7 +6.1**
MTE *e*LQ LQ 17 28 34.0
MTE *e*LR LR 17 33 30.8
comp=Z,2µm,20.0s
**COI Coimbra 86.91 13** *e*P **P 17 02 44.0 +0.7**
comp=Z,151nm,0.9s
**FNA Florina 86.91 350** P **P 17 02 41.3 -2.1**
**PCAS Casmilo, Conde 87.05 13** *e*P **P 17 02 43.8 -0.2**
comp=Z,113nm,0.9s
**OUR Ouranopolis 87.06 348** P **P 17 02 42.2 -1.8**
**LHMI Lhok Sumawe 87.08 275** P **P 17 02 45.9 +1.4**
**LHMI Lhok Sumawe 87.08 275** IAMs_20 IAMs_20 17 39 33.8
comp=Z,3µm,22.0s
**LHMI Lhok Sumawe 87.08 275** P **P 17 02 45.7 +1.2**
comp=Z,201nm,1.0s
**SEUS St. Eustatius 87.08 65** IAMs_20 IAMs_20 17 41 39.3
comp=Z,3µm,21.0s
**PAOL Paolisi 87.17 356** IAMs_20 IAMs_20 17 46 22.5
comp=Z,2µm,19.0s
**PPBI Pangkal Pinang 87.19 263** P **P 17 02 44.8 -0.2**
**EZN Ezine 87.25 347** P **P 17 02 43.6 -1.3**
**EZN Ezine 87.25 347** P **P 17 02 44.3 -0.6**
comp=Z,104nm,0.9s,comp=Z,1µm
**NEST Nestorio 87.31 351** P **P 17 02 43.6 -1.8**
**LIA Limnos Island 87.34 347** P **P 17 02 44.1 -1.3**
**PCBR Castelo Branco 87.40 12** *e*P **P 17 02 45.2 -0.5**
comp=Z,47nm,1.2s
**QLP Quilpie 87.49 219** P **P 17 02 47.1 +1.1**
**PAIG Paliouri 87.50 349** P **P 17 02 42.6 -3.6**
**PSBE So Bento 87.54 14** *e*P **P 17 02 45.9 -0.5**
comp=Z,89nm,0.8s
**CMBY CAMPBELL BAY 87.54 278** *e*P **P 17 02 46.3 -0.4**
**ANWB Willy Bob 87.61 64** IAMs_20 IAMs_20 17 41 09.2
comp=Z,3µm,21.0s
**GAZ Gaziantep 87.76 338** IAMs_20 IAMs_20 17 47 60.0
comp=Z,2µm,20.0s
**PMRV Marv??o 87.82 13** *e*P **P 17 02 47.4 -0.3**
comp=Z,41nm,0.9s
**PMRV Marv??o 87.82 13** *e*PP PP 17 06 02.5 -10
PMRV *e*SKSac **SKSac 17 13 09.5 -3.0**
PMRV *e*SS **SS 17 19 15.7 +2.9**
PMRV *e*LQ LQ 17 26 16.7
PMRV *e*LR LR 17 33 39.4
comp=Z,3µm,18.0s
**SCTE Santa Cesarea 87.88 353** IAMs_20 IAMs_20 17 48 20.4
comp=Z,2µm,19.0s
**TYRN Tyrnavos 87.88 350** P **P 17 02 45.4 -2.6**
**OUZ Omahuta 87.91 192** IAMs_20 IAMs_20 17 38 13.4
comp=Z,3µm,20.0s
**ESDC Sonseca Array 87.98 10** P **P 17 02 47.8 -0.8**
comp=Z,62nm,0.8s,baz=349,slow=4.6,SNR=264
ESDC PP **PP 17 06 12.2 -2.0**
comp=Z,3.7nm,0.9s,baz=351,slow=7.7,SNR=4.1
ESDC PKKPbc **PKKPbc 17 20 30.6 -1.1**
comp=Z,1.3nm,1.1s,baz=22,slow=1.6,SNR=5.2
ESDC PKPPKP P'P'df 17 28 37.5 -9.1
comp=Z,0.4nm,0.4s,baz=270,slow=1.5,SNR=4.1
ESDC LR LR 17 42 55.1
comp=Z,2µm,20.5s,baz=1.0,slow=36
comp=Z,62nm,0.8s
**PMTG Montargil 88.06 13** *e*P **P 17 02 48.1 -0.7**
comp=Z,33nm,0.9s
**PAB San Pablo 88.07 10** P **P 17 02 48.5 -0.5**
PAB IAmb IAmb 17 02 50.0
comp=Z,41nm,0.9s
**PAB San Pablo 88.07 10** IAMs_20 IAMs_20 17 45 37.2
comp=Z,3µm,20.0s
**PAB San Pablo 88.07 10** P **P 17 02 48.5 -0.5**
PAB pmax pmax
comp=Z,41nm,1.0s
PAB MLR MLR
comp=Z,3µm,20.0s
**KEK Kerkira 88.12 352** P **P 17 02 45.1 -4.1**
**CUC Castrocucco 88.14 355** IAMs_20 IAMs_20 17 46 38.2
comp=Z,3µm,21.0s
**IGT Igoumenitsa 88.25 351** P **P 17 02 48.1 -1.7**
**LIS Lisbon 88.27 14** *e*P **P 17 02 50.6 +0.8**
**LIS Lisbon 88.27 14** *e*P **P 17 02 49.7 -0.1**
LIS IAMs_20 IAMs_20 17 44 03.5
comp=E,4µm,24.6s
**LIS Lisbon 88.27 14** *e*P **P 17 02 49.7 -0.1**
**HYB Hyderabad 88.30 296** *e*P **P 17 02 50.3 -0.1**
HYB IVmB_BB 17 02 50.7
comp=Z,2µm,1.1s
HYB IVMs_BB IVMs_BB 17 43 46.7
comp=Z,1µm,25.4s
**PESTR Estremoz 88.34 13** *e*P **P 17 02 49.5 -0.7**
comp=Z,80nm,1.0s
**ARMA Armidale 88.35 211** P **P 17 02 52.0 +1.8**
**BKNI Bangkinang 88.38 268** P **P 17 02 51.9 +1.2**
**BKNI Bangkinang 88.38 268** P **P 17 02 51.0 +0.3**
**EVO Evora 88.61 13** *e*P **P 17 02 51.0 -0.5**
comp=Z,53nm,1.0s
**AULRC Lightning Ridg 88.67 215** P **P 17 02 52.7 +1.1**
**EVR Evrytania 88.71 350** P **P 17 02 51.1 -1.0**
**KYMI Kymi, Euboea I 88.72 348** P **P 17 02 48.6 -3.4**
**FITZ Fitzroy Crossi 88.73 238** P **P 17 02 52.4 +0.3**
**ABD La Joyeuse, An 88.74 65** IAMs_20 IAMs_20 17 41 35.2
comp=Z,3µm,22.0s
**AXAR Agios Charalam 88.77 349** P **P 17 02 51.0 -1.2**
**VSL Villasalto 88.84 360** IAmb IAmb 17 02 53.6
comp=Z,32nm,0.9s
VSL IAMs_20 IAMs_20 17 46 08.6
comp=Z,2µm,21.0s
**PNCL Nicolau / Gran 88.95 14** *e*P **P 17 02 52.6 -0.5**
comp=Z,60nm,1.2s
**LKD2 Lefkada island 88.96 351** P **P 17 02 51.2 -1.9**
**CBE Ff, Capester 89.00 65** IAMs_20 IAMs_20 17 42 41.1
comp=Z,3µm,22.0s
**ANX Ano Chora 89.02 350** P **P 17 02 51.7 -1.8**
**PVO Paravola 89.04 350** P **P 17 02 51.0 -2.5**
**PBAR Barrancos 89.10 12** *e*P **P 17 02 53.5 -0.3**
comp=Z,81nm,1.0s
**PBEJ Beja 89.13 13** *e*P **P 17 02 53.4 -0.5**
comp=Z,63nm,1.2s
**EFP Efpalio 89.19 350** P **P 17 02 53.1 -1.1**
**AUPHS Peel High Scho 89.22 212** P **P 17 02 55.7 +1.6**
**MESJ Messejana 89.26 13** *e*P **P 17 02 54.7 +0.1**
comp=Z,38nm,1.6s
**MESJ Messejana 89.26 13** *e*P **P 17 02 54.5 -0.1**
MESJ *e*SKSac **SKSac 17 13 21.3 +0.2**
MESJ IAMs_20 IAMs_20 17 45 05.0
comp=Z,4µm,24.1s
**MESJ Messejana 89.26 13** *e*P **P 17 02 54.5 -0.1**
MESJ *e* 17 13 21.3
**AS01 Alice Springs 89.31 229** P **P 17 02 55.4 +0.6**
**AS31 Alice Springs 89.34 229** P **P 17 02 55.4 +0.5**
**ASAR Alice Springs 89.34 229** P **P 17 02 55.1 +0.2**
**ASAR Alice Springs 89.34 229** P **P 17 02 55.3 +0.4**
comp=Z,67nm,0.8s,baz=28,slow=4.7,SNR=656
ASAR PKKPbc **PKKPbc 17 20 30.9 +1.5**
comp=Z,0.8nm,0.7s,baz=205,slow=1.7,SNR=6.8
ASAR PKPPKP **P'P'df 17 28 36.5 +0.1**
comp=Z,0.5nm,0.9s,baz=204,slow=1.6,SNR=2.8
ASAR LR LR 17 38 31.5
comp=Z,1µm,21.5s,baz=34,slow=32
comp=Z,67nm,0.8s
**PTEO Sao Teotonio 89.48 14** *e*P **P 17 02 55.4 -0.1**
comp=Z,117nm,0.9s
**SDV Santo Domingo 89.48 76** LR LR 17 45 51.4
comp=Z,541nm,18.9s,baz=343,slow=37
**SDV Santo Domingo 89.48 76** *e*P **P 17 02 56.1 0.0**
**PCVE Castro Verde 89.49 13** *e*P **P 17 02 55.4 -0.2**
comp=Z,42nm,1.5s
**KLV Kalavryta, Ach 89.54 350** P **P 17 02 52.9 -3.0**
**GUR Gaura 89.62 349** P **P 17 02 54.1 -2.3**
**DRO Drossia 89.68 350** P **P 17 02 54.1 -2.4**
**MORF Marmelete 89.72 14** *e*P **P 17 02 56.5 -0.3**
comp=Z,92nm,1.5s
**MORF Marmelete 89.72 14** *e*P **P 17 02 56.5 -0.3**
MORF IAMs_20 IAMs_20 17 39 12.9
comp=Z,3µm,23.9s
**MORF Marmelete 89.72 14** *e*P **P 17 02 56.5 -0.3**
**GSI Gunungsitoli 89.75 272** P **P 17 02 58.4 +1.2**
**PVAQ Vaqueiros 89.76 13** IAMs_20 IAMs_20 17 42 44.0
comp=Z,2µm,20.0s
**PVAQ Vaqueiros 89.76 13** *e*P **P 17 02 56.7 -0.2**
comp=Z,60nm,0.9s
**PVAQ Vaqueiros 89.76 13** *e*PP **PP 17 06 28.0 -0.4**
PVAQ *e*S **SKSac 17 13 25.3 +1.3**
PVAQ *e*SS **SS 17 19 45.4 +4.4**
PVAQ *e*LQ LQ 17 29 41.2
PVAQ *e*LR LR 17 35 07.9
comp=Z,3µm,22.0s
**CEL Celeste 89.86 354** IAMs_20 IAMs_20 17 47 34.8
comp=Z,3µm,21.0s
**PFVI Vila Bisbo 89.87 14** *e*P **P 17 02 57.1 -0.3**
comp=Z,152nm,1.1s
**PBDV Barranco-do-Ve 89.89 13** *e*P **P 17 02 57.5 0.0**
comp=Z,54nm,1.4s
**INKA Innaminka 89.91 221** P **P 17 02 58.8 +1.4**
**POO Poona 89.95 301** *e*P **P 17 02 58.2 +0.1**
**APE Apeiranthos 90.07 347**⇓*e*P **P 17 02 56.4 -2.0**
APE pmax pmax
comp=Z,22nm,1.0s
**TOZ Tahuroa Road 90.15 191** P **P 17 02 59.6 +1.3**
TOZ IAmb IAmb 17 03 00.6
comp=Z,72nm,1.1s
**SVN Savane Anatole 90.24 65** IAMs_20 IAMs_20 17 41 32.1
comp=Z,2µm,20.0s
**CART Cartagena 90.33 8** IAMs_20 IAMs_20 17 45 13.1
comp=Z,2µm,20.0s
**FDF Fort de France 90.34 65** IAMs_20 IAMs_20 17 41 24.6
comp=Z,3µm,21.0s
**ROSC El Rosal 90.43 82** P **P 17 03 01.3 +0.5**
comp=Z,11nm,0.3s,baz=137,slow=13,SNR=5.7
ROSC LR LR 17 45 42.1
comp=Z,854nm,20.1s,baz=347,slow=37
comp=Z,11nm,0.3s
**ILAM Ilet Lapin Mar 90.46 65** IAMs_20 IAMs_20 17 41 26.8
comp=Z,2µm,21.0s
**URZ Urewera 90.51 189** LR LR 17 37 35.2
comp=Z,4µm,20.0s,baz=112,slow=32
**VAE Valguarnera 90.72 356** LR LR 17 47 21.2
comp=Z,2µm,18.2s,baz=38,slow=38
**MPOM Morne Pois Mar 90.73 65** IAMs_20 IAMs_20 17 41 56.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,3µm,21.0s | | | | | | | | |
| **CSS** | **Mathiatis** | **90.75** | **340** | IAMs_20 | IAMs_20 | 17 49 40.8 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **CSS** | **Mathiatis** | **90.75** | **340** | P | **P** | **17 03 01.6** | **0.0** | | |
| | comp=Z,69nm,1.0s,comp=Z,652nm | | | | | | | | |
| **VLI** | **Veliai** | **90.75** | **349** | P | **P** | **17 02 57.6** | **-3.9** | | |
| **SANT** | **Santorini** | **90.76** | **347** | IAMs_20 | IAMs_20 | 17 47 52.0 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **KAD** | **Karad** | **90.78** | **300** | *e*P | **P** | **17 03 01.8** | **-0.2** | | |
| KAD | | | | IAmb | IAmb | 17 03 02.5 | | | |
| | comp=Z,66nm,1.0s | | | | | | | | |
| **BAUV** | **El Baul** | **90.98** | **74** | P | **P** | **17 03 03.0** | **+0.2** | | |
| **AUDCS** | **Dubbo College** | **91.00** | **213** | P | **P** | **17 03 04.1** | **+1.7** | | |
| **MGCD** | **Mangrove Creek** | **91.09** | **211** | P | **P** | **17 03 04.4** | **+1.6** | | |
| **KARP** | **Karpathos** | **91.32** | **345** | IAMs_20 | IAMs_20 | 17 49 53.6 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **KARP** | **Karpathos** | **91.32** | **345** | P | **P** | **17 03 02.7** | **-1.5** | | |
| | comp=Z,105nm,0.8s,comp=Z,1µm | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **91.40** | **216** | P | **P** | **17 03 05.0** | **+0.7** | | |
| **OTAV** | **Otavalo** | **91.50** | **88** | *e*P | **P** | **17 03 06.6** | **+0.8** | | |
| **IMMV** | **Iera Moni Meta** | **91.86** | **348** | P | **P** | **17 03 02.7** | **-4.0** | | |
| **SHME** | **Shamm** | **91.91** | **319** | *i* P | **P** | **17 03 05.4** | **-1.7** | | |
| | SNR=12 | | | | | | | | |
| **IDI** | **Anoyia** | **91.91** | **347** | P | **P** | **17 03 05.5** | **-1.4** | | |
| | comp=Z,17nm,0.8s,baz=45,slow=10,SNR=5.8 | | | | | | | | |
| IDI | | | | LR | LR | 17 48 14.4 | | | |
| | comp=Z,2µm,20.9s,baz=358,slow=38 | | | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **92.01** | **71** | LR | LR | 17 42 32.1 | | | |
| | comp=Z,2µm,21.9s,slow=34 | | | | | | | | |
| **OOD** | **Oodnadatta** | **92.09** | **225** | P | **P** | **17 03 07.9** | **+0.3** | | |
| **MMAI** | **Mount Meron Ar** | **92.16** | **338** | P | **P** | **17 03 07.8** | **-0.4** | | |
| | comp=Z,24nm,0.7s,baz=17,slow=6.1,SNR=34 | | | | | | | | |
| MMAI | | | | LR | LR | 17 49 31.8 | | | |
| | comp=Z,2µm,19.5s,baz=326,slow=39 | | | | | | | | |
| | comp=Z,24nm,0.7s | | | | | | | | |
| **PMPST** | **Porto Santo, M** | **92.42** | **21** | *e*P | **P** | **17 03 09.7** | **+0.4** | | |
| **PMOZ** | **Porto Moniz, M** | **92.47** | **22** | *e*P | **P** | **17 03 10.1** | **+0.4** | | |
| | comp=Z,170nm,0.9s | | | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **92.47** | **22** | *e*PP | **PP** | **17 06 52.0** | **+1.9** | | |
| PMOZ | | | | *e*S | **SKSac** | **17 13 43.1** | **+3.3** | | |
| **PMOZ** | **Porto Moniz, M** | **92.47** | **22** | *e*LQ | LQ | 17 27 47.9 | | | |
| PMOZ | | | | *e*LR | LR | 17 33 25.8 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **MDH** | **Madha** | **92.51** | **318** | P | **P** | **17 03 08.2** | **-1.7** | | |
| **MSFE** | **Esma-Masafi** | **92.51** | **318** | P | **P** | **17 03 08.4** | **-1.5** | | |
| **BBGH** | **Gun Hill** | **92.52** | **65** | IAMs_20 | IAMs_20 | 17 43 37.4 | | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **KEST** | **Kesra** | **92.60** | **360** | IAmb | IAmb | 17 03 18.9 | | | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| **KEST** | **Kesra** | **92.60** | **360** | P | **P** | **17 03 10.2** | **0.0** | | |
| | comp=Z,15nm,0.9s,baz=328,slow=1.9,SNR=12 | | | | | | | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **92.61** | **336** | P | **P** | **17 03 10.6** | **+0.3** | | |
| | comp=Z,23nm,0.9s,baz=47,slow=0.1,SNR=22 | | | | | | | | |
| ASF | | | | LR | LR | 17 51 41.9 | | | |
| | comp=Z,3µm,19.2s,baz=20,slow=40 | | | | | | | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **PMAR** | **Madeira** | **92.63** | **21** | *e*P | **P** | **17 03 11.2** | **+0.7** | | |
| | comp=Z,269nm,1.5s | | | | | | | | |
| **FUL** | **Funchal** | **92.71** | **22** | *e*P | **P** | **17 03 12.7** | **+2.1** | | |
| | comp=Z,134nm,1.0s | | | | | | | | |
| **UOSS** | **Minazif** | **92.86** | **318** | P | **P** | **17 03 09.6** | **-1.9** | | |
| UOSS | | | | IAmb | IAmb | 17 03 12.4 | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **HATD** | **Hatta, Dubai** | **92.99** | **318** | *i* P | **P** | **17 03 10.8** | **-1.3** | | |
| | SNR=7.6 | | | | | | | | |
| **ASHO** | **Ashiyiah** | **93.15** | **318** | *i* P | **P** | **17 03 11.5** | **-1.4** | | |
| | SNR=9.4 | | | | | | | | |
| **WRKA** | **Warakurna** | **93.17** | **232** | P | **P** | **17 03 13.4** | **+0.7** | | |
| **STKA** | **Stephens Creek** | **93.24** | **219** | P | **P** | **17 03 13.6** | **+0.8** | | |
| **STKA** | **Stephens Creek** | **93.24** | **219** | P | **P** | **17 03 13.3** | **+0.6** | | |
| | comp=Z,20nm,1.0s,baz=354,slow=6.1,SNR=34 | | | | | | | | |
| STKA | | | | PKKPbc | **PKKPbc** | **17 20 20.2** | **+0.5** | | |
| | comp=Z,2.6nm,0.9s,baz=284,slow=2.8,SNR=5.3 | | | | | | | | |
| STKA | | | | LR | LR | 17 40 58.8 | | | |
| | comp=Z,4µm,20.7s,baz=24,slow=33 | | | | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **STKA** | **Stephens Creek** | **93.24** | **219** | *ce*P | **P** | **17 03 13.5** | **+0.8** | | |
| **FAQ** | **Al Faqa, Dubai** | **93.29** | **318** | *i* P | **P** | **17 03 11.6** | **-1.8** | | |
| | SNR=6.5 | | | | | | | | |
| **LCRK** | **Leigh Creek** | **93.33** | **222** | P | **P** | **17 03 13.8** | **+0.6** | | |
| **WSAR** | **Wadi Sarin** | **93.33** | **315** | LR | LR | 17 50 49.3 | | | |
| | comp=Z,3µm,19.5s,baz=78,slow=39 | | | | | | | | |
| **SOHO** | **SOHO** | **93.44** | **317** | *i* P | **P** | **17 03 12.7** | **-1.5** | | |
| | SNR=12 | | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **93.50** | **319** | *i* P | **P** | **17 03 13.4** | **-1.0** | | |
| | SNR=12 | | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **93.76** | **337** | IAMs_20 | IAMs_20 | 17 52 14.8 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **ALNE** | **Al Ain** | **93.83** | **318** | *i* P | **P** | **17 03 14.7** | **-1.3** | | |
| | SNR=20 | | | | | | | | |
| **AVE** | **Averroes** | **93.84** | **14** | IAMs_20 | IAMs_20 | 17 49 16.9 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **BHW** | **Baring Head** | **93.86** | **190** | IAMs_20 | IAMs_20 | 17 37 18.8 | | | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| **MDT** | **Midelt** | **94.69** | **11** | LR | LR | 17 49 05.2 | | | |
| | comp=Z,2µm,18.6s,baz=5.5,slow=38 | | | | | | | | |
| **KOD** | **Kodaikanal** | **94.74** | **293** | *e*P | **P** | **17 03 20.1** | **-0.6** | | |
| **MULG** | **Mulgathing** | **94.95** | **225** | P | **P** | **17 03 20.1** | **-0.6** | | |
| **PALK** | **Pallekele** | **95.26** | **289** | P | **P** | **17 03 22.5** | **-0.2** | | |
| **PALK** | **Pallekele** | **95.26** | **289** | IAMs_20 | IAMs_20 | 17 48 34.4 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **PALK** | **Pallekele** | **95.26** | **289** | LR | LR | 17 48 57.4 | | | |
| | comp=Z,2µm,21.7s,baz=128,slow=37 | | | | | | | | |
| **PALK** | **Pallekele** | **95.26** | **289** | *c* P | **P** | **17 03 22.8** | **+0.1** | | |
| PALK | | | | pmax | pmax | | | | |
| | comp=Z,91nm,1.0s | | | | | | | | |
| PALK | | | | MLR | MLR | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **EIL** | **Elat** | **95.47** | **337** | P | **P** | **17 03 22.9** | **-0.5** | | |
| | comp=Z,17nm,0.9s,baz=290,slow=3.2,SNR=8.2 | | | | | | | | |
| EIL | | | | LR | LR | 17 52 49.5 | | | |
| | comp=Z,1µm,19.1s,baz=34,slow=40 | | | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **RPN** | **Rapa Nui** | **95.56** | **128** | LR | LR | 17 38 03.1 | | | |
| | comp=Z,2µm,19.2s,baz=326,slow=30 | | | | | | | | |
| **HTT** | **Hallett** | **95.66** | **220** | P | **P** | **17 03 24.3** | **+0.4** | | |
| **MZR** | **Muzera** | **95.70** | **319** | *i* P | **P** | **17 03 23.5** | **-1.1** | | |
| | SNR=14 | | | | | | | | |
| **TATN** | **Tataouine** | **95.73** | **359** | IAmb | IAmb | 17 03 23.6 | | | |
| | comp=Z,36nm,0.8s | | | | | | | | |
| TATN | | | | IAMs_20 | IAMs_20 | 17 50 14.0 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **RPZ** | **Rata Peaks** | **96.61** | **193** | LR | LR | 17 39 54.9 | | | |
| | comp=Z,4µm,21.6s,baz=12,slow=31 | | | | | | | | |
| **MACI** | **Morro de la Ar** | **97.02** | **22** | IAMs_20 | IAMs_20 | 17 44 27.4 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **98.20** | **326** | P | **P** | **17 03 35.2** | **-0.7** | | |
| **RAYN** | **Ar Rayn** | **98.20** | **326** | P | **P** | **17 03 35.2** | **-0.7** | | |
| RAYN | | | | pmax | pmax | | | | |
| | comp=Z,42nm,0.8s | | | | | | | | |
| RAYN | | | | MLR | MLR | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **NNA** | **Nana** | **102.00** | **94** | IAMs_20 | IAMs_20 | 17 39 45.2 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **MACA** | **Manacapuru-AM** | **105.01** | **76** | IAMs_20 | IAMs_20 | 17 51 11.3 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **105.16** | **236** | IAMs_20 | IAMs_20 | 18 01 16.8 | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **TAM** | **Tamanrasset** | **105.44** | **3** | IAMs_20 | IAMs_20 | 17 58 39.0 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **MAL2** | **Monte Alegre,** | **107.92** | **69** | IAMs_20 | IAMs_20 | 17 56 15.5 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **SAML** | **Samuel** | **108.06** | **81** | IAMs_20 | IAMs_20 | 17 56 03.7 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **MBO** | **M'Bour** | **110.17** | **27** | IAMs_20 | IAMs_20 | 17 58 19.6 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **VILB** | **Vilhena** | **113.00** | **81** | IAMs_20 | IAMs_20 | 17 57 29.6 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **114.79** | **8** | PKP | **PKiKP** | **17 08 38.4** | **-0.9** | | |
| | comp=Z,8.4nm,0.8s,baz=349,slow=4.4,SNR=32 | | | | | | | | |
| TORD | | | | PKKPab | **PKKPbc** | **17 19 14.4** | **+0.1** | | |
| | comp=Z,6.6nm,0.8s,baz=157,slow=1.2,SNR=21 | | | | | | | | |
| **SIV** | **San Ignacio** | **114.80** | **84** | PKP | PKPdf | 17 08 38.4 | -0.7 | | |
| | comp=Z,4.9nm,0.9s,baz=216,slow=0.6,SNR=13 | | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **115.57** | **82** | IAMs_20 | IAMs_20 | 17 59 10.9 | | | |
| | comp=Z,2µm,22.0s | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **116.84** | **111** | T | T | 19 16 18.0 | | | |
| | baz=316,slow=77,SNR=141 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **116.85** | **111** | T | T | 19 16 18.6 | | | |
| | baz=316,slow=77,SNR=195 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **116.86** | **111** | T | T | 19 16 16.3 | | | |
| | baz=316,slow=77,SNR=602 | | | | | | | | |
| **ARAG** | **Araguaiana, MT** | **120.22** | **76** | *e*P | **PKPdf** | **17 08 49.4** | **-0.1** | | |
| **DBIC** | **Dimbokro** | **120.36** | **16** | PKP | **PKPdf** | **17 08 49.8** | **-0.2** | | |
| | comp=Z,32nm,0.9s,baz=28,slow=1.9,SNR=16 | | | | | | | | |
| **DBIC** | **Dimbokro** | **120.36** | **16** | PKIKP | **PKPdf** | **17 08 49.9** | **-0.1** | | |
| **MT05** | **Renca** | **121.63** | **105** | IAMs_20 | IAMs_20 | 17 49 24.9 | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **MT01** | **Popeta** | **121.65** | **106** | IAMs_20 | IAMs_20 | 17 48 35.6 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **BDFB** | **Brasilia** | **122.42** | **73** | PKP | **PKPdf** | **17 08 53.5** | **-0.5** | | |
| | comp=Z,4.9nm,0.8s,baz=135,slow=5.7,SNR=6.6 | | | | | | | | |
| **BI02** | **San Fabin de** | **123.57** | **108** | IAMs_20 | IAMs_20 | 17 57 14.5 | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **123.95** | **325** | PKP | **PKiKP** | **17 08 58.5** | **+1.1** | | |
| | comp=Z,20nm,0.9s,baz=357,slow=3.6,SNR=36 | | | | | | | | |
| **KIBK** | **Kibwezi** | **124.79** | **324** | IAMs_20 | IAMs_20 | 18 07 36.6 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **CPUP** | **Villa Florida** | **124.82** | **89** | PKP | **PKPdf** | **17 08 58.0** | **-0.1** | | |
| | comp=Z,15nm,0.9s,baz=344,slow=2.1,SNR=16 | | | | | | | | |
| **CPUP** | **Villa Florida** | **124.82** | **89** | PKIKP | **PKPdf** | **17 08 58.0** | **-0.1** | | |
| **PLCA** | **Paso Flores** | **126.71** | **111** | PKP | **PKiKP** | **17 09 01.9** | **0.0** | | |
| | comp=Z,30nm,0.9s,baz=286,slow=2.6,SNR=38 | | | | | | | | |
| **PLCA** | **Paso Flores** | **126.71** | **111** | *e*P | **PKiKP** | **17 09 02.1** | **+0.2** | | |
| **SPB** | **Sao Paulo** | **128.88** | **79** | IAMs_20 | IAMs_20 | 18 06 42.3 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| **TRQA** | **Tornquist** | **130.02** | **103** | PKPdf | **PKPdf** | **17 09 07.9** | **+0.2** | | |
| **TRQA** | **Tornquist** | **130.02** | **103** | PKIKP | **PKPdf** | **17 09 07.9** | **+0.2** | | |
| **SBA** | **Scott Base** | **130.34** | **186** | IAMs_20 | IAMs_20 | 18 01 03.3 | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **PLTB** | **Pedras Altas** | **130.96** | **91** | *e*P | **PKPdf** | **17 09 09.2** | **-0.5** | | |
| **CASY** | **Casey** | **131.95** | **212** | IAMs_20 | IAMs_20 | 18 00 29.4 | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **141.80** | **180** | PKhKP | PKPpre | 17 09 22.5 | | | |
| | comp=Z,18nm,0.8s,baz=266,slow=0.6,SNR=81 | | | | | | | | |
| **PMSA** | **Palmer Station** | **142.04** | **138** | PKhKP | PKPpre | 17 09 23.4 | | | |
| | comp=Z,14nm,0.9s,baz=132,slow=3.2,SNR=6.3 | | | | | | | | |
| **MAW** | **Mawson** | **149.93** | **218** | PKP | **PKPdf** | **17 09 43.0** | **+0.7** | | |
| | comp=Z,35nm,0.9s,baz=260,slow=4.0,SNR=7.3 | | | | | | | | |
| MAW | | | | PKPbc | **PKPbc** | **17 09 47.5** | **+0.2** | | |
| | comp=Z,72nm,1.0s,baz=69,slow=1.2,SNR=72 | | | | | | | | |
| **MAW** | **Mawson** | **149.93** | **218** | PKIKP | **PKPdf** | **17 09 43.0** | **+0.7** | | |
| **LBTB** | **Lobatse** | **150.15** | **328** | | **PKiKP** | **17 09 50.2** | **+0.1** | | |
| **LBTB** | **Lobatse** | **150.15** | **328** | PKIKP | **PKiKP** | **17 09 50.2** | **+0.1** | | |
| **BOSA** | **Boshof** | **153.58** | **326** | PKP | **PKPdf** | **17 09 50.6** | **+1.3** | | |
| | comp=Z,20nm,0.8s,baz=89,slow=2.8,SNR=12 | | | | | | | | |
| BOSA | | | | PKPbc | **PKiKP** | **17 09 57.8** | **+0.7** | | |
| | comp=Z,19nm,0.4s,baz=32,slow=2.9,SNR=15 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **159.01** | **163** | ⇓PKPdf | **PKPdf** | **17 09 53.5** | **-1.4** | | |
| | comp=Z,9.2nm,0.8s | | | | | | | | |
| **ELIB** | **Princess Elisa** | **159.01** | **193** | *d*PKPdf | **PKPdf** | **17 09 54.5** | **-0.6** | | |
| ELIB | | | | *dp*PKPdf | **pPKPdf** | **17 10 05.7** | **-1.6** | | |
| ELIB | | | | *ds*PKP | | 17 10 13.2 | | | |
| ELIB | | | | *d*PKP | **PKPab** | **17 10 31.6** | **-0.3** | | |
| **SNAA** | **Sanae** | **159.62** | **169** | ⇓PKPdf | **PKPdf** | **17 09 54.7** | **-1.0** | | |
| | comp=Z,119nm,0.9s | | | | | | | | |
| **SNAA** | **Sanae** | **159.62** | **169** | PKP | **PKPdf** | **17 09 55.0** | **-0.7** | | |
| | comp=Z,5.8nm,0.9s,baz=140,slow=1.4,SNR=18 | | | | | | | | |
| SNAA | | | | PKPab | **PKPab** | **17 10 34.2** | **-0.3** | | |
| | comp=Z,8.6nm,0.7s,baz=206,slow=7.3,SNR=17 | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **159.67** | **165** | ⇓PKPdf | **PKPdf** | **17 09 55.0** | **-0.7** | | |
| | comp=Z,11nm,0.8s,baz=301,slow=2.0 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **159.76** | **164** | ⇓PKPdf | **PKPdf** | **17 09 53.8** | **-1.9** | | |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **159.76** | **174** | ⇓PKPdf | **PKPdf** | **17 09 54.5** | **-1.5** | | |
| | comp=Z,449nm,0.9s | | | | | | | | |
| **NVL** | **N'lazarevskaya** | **161.16** | **183** | *e*PKIKP | **PKPdf** | **17 09 55.6** | **-1.7** | | |
| NVL | | | | *e*PPP | PPP | 17 18 15.4 | | | |

*AEIC **25** 16:53:09.6±5.5,52.1°N±0.1°×170.4°W±0.2°,h1km±10km, Error ellipse: s-maj=16.2km s-min=15.4km az=182.0*

**NEIC 25 16:53:10.2±2.5,51.95N±0.05°×170.24W±0.08°,h10km±2km, ML3.6(AEIC),Error ellipse: s-maj=11.0km s-min=5.8km az=314.0,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLCO** | **Concord Point,** | **0.90** | **21** | | Pg | 16 53 26.2 | -1.1 |
| CLCO | | | | | Sb | 16 53 39.8 | +0.1 |
| **CLES** | **Cleveland East** | **0.90** | **14** | | Pg | 16 53 25.9 | -1.4 |
| CLES | | | | | Sb | 16 53 39.7 | 0.0 |
| **NIKH** | **Nikolski High** | **1.33** | **39** | | Pn | 16 53 32.9 | -1.7 |
| NIKH | | | | Sn | Sb | 16 53 51.7 | -0.4 |
| **OKTU** | **Okmok Mt. Tuli** | **1.97** | **42** | | Pn | 16 53 43.6 | +0.2 |
| **OKFG** | **Magazine Ridge** | **2.04** | **43** | | Sb | 16 54 12.3 | -0.2 |
| **N15K** | **Kwethluk River** | **9.99** | **31** | Pn | Pn | 16 55 34.8 | +1.3 |
| **O16K** | **Kokwok River B** | **10.26** | **37** | Pn | Pn | 16 55 38.7 | +1.6 |

**TRN 25 17:08:42.8,16.01N×60.79W,h29km,MD3.5,East of Marie-Galante.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAGL** | **Barre de l'ile** | **0.47** | **263** | *e*P | Pn | 17 08 55.2 | +1.6 |
| **CBE** | **Ff, Capester** | **0.78** | **274** | *e*P | Pn | 17 09 00.1 | +2.1 |
| **ABD** | **La Joyeuse, An** | **0.81** | **305** | *e*P | Pb | 17 08 59.0 | +0.7 |
| **TDBA** | **Terre de Bas,** | **0.83** | **259** | *e*P | Pb | 17 09 00.4 | +1.8 |
| **TBG** | **Guadaloupe-3** | **0.83** | **259** | *e*P | Pb | 17 09 00.3 | +1.6 |
| TBG | | | | *e*S | Sn | 17 09 12.4 | +2.5 |
| **SVN** | **Savane Anatole** | **1.22** | **197** | *e*P | Pb | 17 09 04.9 | -0.3 |
| SVN | | | | *e*S | Sb | 17 09 21.0 | +0.5 |
| **ILAM** | **Ilet Lapin Mar** | **1.23** | **184** | *e*P | Pb | 17 09 03.3 | -0.1 |
| ILAM | | | | *e*S | Sb | 17 09 21.8 | +0.9 |
| **CXM** | **Morne La Croix** | **1.25** | **197** | *e*P | Pb | 17 09 05.7 | 0.0 |
| **PCM** | **Pelee Case Pet** | **1.25** | **199** | *e*P | Pb | 17 09 05.5 | -0.3 |
| **PCM** | **Pelee Case Pet** | **1.25** | **199** | *e*P | Pb | 17 09 06.6 | +0.8 |
| **GBMF** | **Grand Be** | **1.26** | **197** | *e*P | Pb | 17 09 05.3 | -0.6 |
| **PML** | **Morne Lenard** | **1.28** | **197** | *e*P | Pb | 17 09 05.8 | -0.4 |
| **ANBD** | **Bethesda, Anti** | **1.39** | **318** | *e*P | Pb | 17 09 07.7 | -0.4 |
| ANBD | | | | *e*S | Sb | 17 09 25.4 | 0.0 |
| **MVM** | **Montagne Vaucl** | **1.45** | **184** | *e*P | Pb | 17 09 08.6 | -0.5 |
| **BIM** | **Bigot** | **1.51** | **190** | *e*P | Pb | 17 09 09.7 | -0.4 |
| BIM | | | | *e*S | Sb | 17 09 28.9 | 0.0 |
| **MBWH** | | **1.53** | **299** | *e*P | Pb | 17 09 10.6 | +0.2 |
| MBWH | | | | *e*S | Sb | 17 09 29.6 | +0.2 |
| **MBFL** | **Flemmings, Mon** | **1.55** | **299** | *e*P | Pb | 17 09 11.0 | +0.2 |
| MBFL | | | | *e*S | Sb | 17 09 30.0 | 0.0 |
| **MPOM** | **Morne Pois Mar** | **1.56** | **182** | *e*P | Pb | 17 09 09.9 | -1.0 |
| **ANWB** | **Willy Bob** | **1.90** | **330** | *e*P | Pb | 17 09 11.6 | -1.2 |
| ANWB | | | | *e*S | Sb | 17 09 38.5 | -1.7 |
| **SLBI** | **Saint Lucia, B** | **1.98** | **185** | *e*P | Pn | 17 09 16.2 | +1.8 |
| SLBI | | | | *e*S | Sb | 17 09 41.2 | -1.2 |

**IDC 25 17:24:24.9±7.9,18.02S×177.30W,h0km,mb3.4/3, mbtmp3.4/3,Error ellipse: s-maj=344.8km s-min=40.9km az=142.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.65** | **259** | P | P | 17 32 47.3 | -0.3 |
| | 0.1nm,0.4s,baz=95,slow=7.3,SNR=8.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.77** | **254** | P | P | 17 32 48.6 | 0.0 |
| | 0.5nm,0.6s,baz=91,slow=7.9,SNR=21 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.77** | **13** | P | P | 17 37 05.6 | 0.0 |
| | 0.2nm,0.6s,baz=205,slow=4.0,SNR=2.2 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **25** 17:25:27.9±0.7,52.20N×171.15W,h0km,mb4.1/21, mbtmp4.1/23,ML3.7/2,MS4.6/1,Error ellipse: s-maj=20.8km s-min=13.8km az=172.0*

*AEIC **25** 17:25:31.6±3.0,51.93N±0.07°×170.94W±0.09°,h28km±5km, Error ellipse: s-maj=12.2km s-min=2.6km az=140.0*

*NEIC **25** 17:25:33.3±2.7,52.10N±0.10°×170.94W±0.09°, h45km±10km,mb4.0/70,ML4.1(AEIC),Error ellipse: s-maj=14.7km s-min=6.6km az=160.0*

**ISC 25 17:25:32.8±0.6,52.00N±0.09°×170.91W±0.05°,h42km, n188,σ1s31/185,mb4.1/31,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLES** | **Cleveland East** | **1.03** | **37** | | **Pn** | **17 25 51.0** | **+0.2** |
| CLES | | | | | **Sn** | **17 26 05.2** | **+1.1** |
| **CLCO** | **Concord Point,** | **1.07** | **42** | | **Pn** | **17 25 51.3** | **0.0** |
| CLCO | | | | | **Sn** | **17 26 06.5** | **+1.5** |
| **NIKH** | **Nikolski High** | **1.59** | **51** | | **Pn** | **17 25 57.0** | **-1.5** |
| **NIKH** | **Nikolski High** | **1.59** | **51** | | **Sn** | **17 26 17.0** | **-0.7** |
| **KOSE** | **Korovin Southe** | **1.96** | **281** | | **Pn** | **17 26 03.6** | **0.0** |
| **KOFP** | **Korovin Flat P** | **1.98** | **279** | | **Pn** | **17 26 03.6** | **-0.3** |
| **KONE** | **Korovin Northe** | **2.01** | **283** | | **Pn** | **17 26 04.0** | **-0.2** |
| **KOKL** | **Mount Kliuchef** | **2.05** | **280** | | **Pn** | **17 26 04.9** | **+0.1** |
| **OKWE** | **Okmok W'ng Wal** | **2.19** | **47** | | **Pn** | **17 26 08.1** | **+1.4** |
| **OKCE** | **Okmok Cone E** | **2.20** | **48** | | **Pn** | **17 26 08.0** | **+1.2** |
| OKCE | | | | | **Sn** | **17 26 34.6** | **+1.9** |
| **OKNC** | **Okmok New Cone** | **2.23** | **48** | | **Pn** | **17 26 09.0** | **+1.7** |
| **OKFG** | **Magazine Ridge** | **2.31** | **51** | | **Pn** | **17 26 09.2** | **+0.9** |
| **MAPS** | **Pakushin South** | **3.01** | **51** | | **Pn** | **17 26 19.3** | **+1.4** |
| **MGOD** | **Makushin Gods** | **3.03** | **52** | | **Pn** | **17 26 20.0** | **+1.7** |
| **MSW** | **Makushin Switc** | **3.15** | **51** | | **Pn** | **17 26 21.0** | **+1.1** |
| **GSMY** | **Great Sitkin M** | **3.18** | **273** | | **Pn** | **17 26 20.1** | **-0.2** |
| **GSTR** | **Great Sitkin T** | **3.18** | **274** | | **Pn** | **17 26 20.1** | **-0.2** |
| **GSTD** | **Great Sitkin T** | **3.23** | **273** | | **Sn** | **17 26 58.9** | **+0.6** |
| **UNV** | **Unalaska Valle** | **3.24** | **54** | | **Pn** | **17 26 20.0** | **-1.1** |
| **GSCK** | **Great Sitkin C** | **3.25** | **272** | | **Pn** | **17 26 20.4** | **-0.7** |
| GSCK | | | | | **Sn** | **17 26 60.0** | **+1.4** |
| **AKRB** | **Akutan Reef Bi** | **3.62** | **52** | | **Pn** | **17 26 29.7** | **+3.5** |
| **AKMO** | **Akutan Morgan** | **3.62** | **53** | | **Pn** | **17 26 28.4** | **+2.0** |
| **KIWB** | **Kanaga Island** | **3.87** | **270** | | **Pn** | **17 26 30.2** | **+0.5** |
| **KIKV** | **Kanaga Island** | **3.88** | **271** | | **Pn** | **17 26 30.4** | **+0.5** |
| **TASE** | **Tanaga Southea** | **4.42** | **271** | | **Pn** | **17 26 38.1** | **+0.8** |
| **P08K** | **Saint George I** | **4.68** | **9** | | **Pn** | **17 26 42.2** | **+1.4** |
| **GAEA** | **Gareloi East** | **4.86** | **270** | | **Pn** | **17 26 44.5** | **+1.2** |
| **GANE** | **Gareloi Northe** | **4.87** | **271** | | **Pn** | **17 26 44.6** | **+1.0** |
| **SPIA** | **Saint Paul Isl** | **5.20** | **4** | | **Pn** | **17 26 45.5** | **-2.4** |
| **AMKA** | **Amchitka** | **6.12** | **268** | | **Pn** | **17 27 00.9** | **+0.3** |
| **S12K** | **Black Hills** | **6.41** | **51** | Pn | **Pn** | **17 27 04.1** | **-0.5** |
| **SDPT** | **Sand Point** | **7.05** | **57** | Pn | **Pn** | **17 27 11.6** | **-1.7** |
| **CNBA** | **Chernabura Isl** | **7.33** | **63** | Pn | **Pn** | **17 27 16.4** | **-0.8** |
| **CHGN** | **Chignik** | **8.50** | **55** | Pn | **Pn** | **17 27 33.7** | **+0.5** |
| **O14K** | **Tigyukauivet M** | **9.08** | **33** | Pn | **Pn** | **17 27 40.2** | **-0.9** |
| **M13K** | **Dall Lake** | **9.42** | **24** | Pn | **Pn** | **17 27 44.7** | **-1.0** |
| **CHIR** | **Chirikof Islan** | **9.79** | **61** | Pn | **Pn** | **17 27 49.4** | **-1.6** |
| **M14K** | **Bethel** | **10.07** | **26** | Pn | **Pn** | **17 27 53.9** | **-0.7** |
| **PLK4** | **Peulik 4** | **10.11** | **50** | Pn | **Pn** | **17 27 56.6** | **+1.4** |
| **N15K** | **Kwethluk River** | **10.16** | **32** | Pn | **Pn** | **17 27 56.5** | **+0.5** |
| **L14K** | **Kuka Creek** | **10.39** | **22** | Pn | **Pn** | **17 27 58.9** | **-0.1** |
| **O16K** | **Kokwok River B** | **10.47** | **38** | Pn | **Pn** | **17 28 02.0** | **+1.9** |
| **K13K** | **Kusilvak Mount** | **10.52** | **16** | Pn | **Pn** | **17 28 01.0** | **+0.3** |
| **SII** | **Sitkinak Islan** | **10.78** | **58** | Pn | **Pn** | **17 28 04.5** | **+0.1** |
| **M16K** | **Timber Creek** | **11.17** | **31** | Pn | **Pn** | **17 28 10.4** | **+0.7** |
| **N17K** | **Nushagak Hills** | **11.43** | **36** | | **Pn** | **17 28 13.9** | **+0.7** |
| **OHAK** | **Old Harbor** | **11.46** | **56** | Pn | **Pn** | **17 28 12.0** | **-1.7** |
| **J14K** | **Nanvaranak Lak** | **11.47** | **17** | Pn | **Pn** | **17 28 13.3** | **-0.5** |
| **K15K** | **Wolf Creek Mou** | **11.49** | **22** | Pn | **Pn** | **17 28 14.3** | **+0.2** |
| **P18K** | **Big Mountain,** | **11.51** | **44** | Pn | **Pn** | **17 28 15.0** | **+0.6** |
| **L16K** | **Owhat River** | **11.55** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **P29M** | **Windy Craggy** | **19.96** | **55** | P | **P** | **17 30 01.8** | **+0.6** |
| P29M | | | | IAmb | IAmb | 17 30 08.2 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **BMAR** | **Burnt Mountain** | **20.12** | **30** | P | Pn | 17 30 03.5 | -1.4 |
| **N30M** | **Aishikik Lake** | **20.59** | **49** | P | **P** | **17 30 08.4** | **+0.4** |
| N30M | | | | IAmb | IAmb | 17 30 37.7 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **I28M** | **Miner Creek** | **20.68** | **38** | P | **P** | **17 30 08.5** | **-0.4** |
| I28M | | | | IAmb | IAmb | 17 30 26.0 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **SKAG** | **Skagway** | **21.16** | **55** | P | **P** | **17 30 14.1** | **0.0** |
| **H29M** | **Whitestone** | **21.59** | **36** | P | **P** | **17 30 18.1** | **-0.5** |
| H29M | | | | IAmb | IAmb | 17 30 37.2 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **G29M** | **Pine Creek** | **22.02** | **35** | P | **P** | **17 30 22.7** | **-0.6** |
| **MA2** | **Magadan** | **22.57** | **305** | P | **P** | **17 30 30.5** | **+1.4** |
| MA2 | | | | IAmb | IAmb | 17 30 41.2 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **ERM** | **Erimo** | **32.38** | **271** | P | **P** | **17 31 58.1** | **0.0** |
| **B08A** | **Colville Reser** | **32.66** | **76** | P | **P** | **17 32 00.8** | **+0.2** |
| B08A | | | | IAmb | IAmb | 17 32 07.6 | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **NEW** | **Newport** | **34.02** | **74** | P | **P** | **17 32 12.3** | **-0.2** |
| **H11N2** | **WAKE ISLAND Hy** | **36.58** | **217** | T | T | 18 11 18.8 | |
| | baz=21,slow=75,SNR=14 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.59** | **217** | T | T | 18 11 12.9 | |
| | baz=21,slow=75,SNR=16 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **36.60** | **217** | T | T | 18 11 13.7 | |
| | baz=21,slow=75,SNR=14 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **37.78** | **216** | T | T | 18 13 22.3 | |
| | baz=22,slow=76,SNR=23 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **37.79** | **216** | T | T | 18 13 24.3 | |
| | baz=22,slow=76,SNR=26 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **37.79** | **216** | T | T | 18 13 27.3 | |
| | baz=22,slow=76,SNR=21 | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **38.28** | **77** | P | **P** | **17 32 50.7** | **+1.5** |
| **EGMT** | **Eagleton** | **38.48** | **71** | P | **P** | **17 32 51.8** | **+1.2** |
| **LHV** | **Little Huntoon** | **38.60** | **90** | P | **P** | **17 32 51.4** | **-0.1** |
| **BOZ** | **Bozeman (W)** | **38.61** | **75** | P | **P** | **17 32 52.1** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **38.61** | **89** | P | **P** | **17 32 53.5** | **+1.5** |
| **NVAR** | **Mina Array Bea** | **38.61** | **89** | P | **P** | **17 32 55.3** | **+3.4** |
| | comp=Z,1.4nm,0.9s,baz=293,slow=8.0,SNR=8.2 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **MDPB** | **Devils Postpil** | **38.63** | **91** | P | **P** | **17 32 51.4** | **-0.7** |
| MDPB | | | | IAmb | IAmb | 17 33 27.6 | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **38.69** | **91** | P | **P** | **17 32 51.9** | **-0.8** |
| OMMB | | | | IAmb | IAmb | 17 32 57.3 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **38.73** | **267** | P | **P** | **17 32 53.6** | **+0.8** |
| | comp=Z,1.8nm,0.5s,baz=32,slow=6.1,SNR=13 | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| **MAJO** | **Matsushiro** | **38.73** | **267** | P | **P** | **17 32 51.5** | **-1.3** |
| **ELK** | **Elko** | **39.11** | **84** | P | **P** | **17 32 55.8** | **-0.3** |
| ELK | | | | IAmb | IAmb | 17 33 04.1 | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **DSP** | **Deep Springs** | **39.48** | **90** | P | **P** | **17 32 59.7** | **+0.8** |
| DSP | | | | IAmb | IAmb | 17 33 03.0 | |
| | comp=Z,5.2nm,1.2s | | | | | | | |
| **TPH** | **Tonopah** | **39.50** | **89** | P | **P** | **17 32 58.6** | **-0.8** |
| **YHH** | **Holmes Hill** | **39.51** | **76** | P | **P** | **17 32 59.0** | **-0.4** |
| **GCMT** | **Greycliff** | **39.68** | **74** | P | **P** | **17 33 00.7** | **0.0** |
| **JGF** | **Kuroka** | **39.87** | **267** | P | **P** | **17 33 03.4** | **+1.1** |
| **GMN** | **Gold Mountain** | **39.96** | **90** | P | **P** | **17 33 03.0** | **-0.3** |
| **PRN** | **Pahroc Range** | **41.26** | **88** | P | **P** | **17 33 13.8** | **0.0** |
| PRN | | | | IAmb | IAmb | 17 33 17.8 | |
| | comp=Z,6.5nm,1.2s | | | | | | | |
| **PD31** | **Pinedale Array** | **41.41** | **78** | P | **P** | **17 33 15.5** | **+0.4** |
| PD31 | | | | IAmb | IAmb | 17 33 31.6 | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **41.41** | **78** | P | **P** | **17 33 16.2** | **+1.1** |
| **PDAR** | **Pinedale Array** | **41.41** | **78** | P | **P** | **17 33 17.2** | **+2.1** |
| | comp=Z,1.4nm,0.5s,baz=292,slow=3.5,SNR=19 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **GSC** | **Goldstone, Bar** | **41.52** | **92** | P | **P** | **17 33 17.3** | **+1.3** |
| **SRU** | **San Rafael Swe** | **42.99** | **83** | P | **P** | **17 33 29.3** | **+1.3** |
| SRU | | | | IAmb | IAmb | 17 33 49.5 | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **KSRS** | **Korea Array** | **44.50** | **276** | P | **P** | **17 33 40.4** | **+0.5** |
| | comp=Z,2.0nm,0.8s,baz=57,slow=7.4,SNR=8.4 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.01** | **358** | P | **P** | **17 34 22.3** | **+0.1** |
| | comp=Z,5.6nm,0.8s,baz=2.9,slow=5.8,SNR=2.0 | | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **50.67** | **300** | P | **P** | **17 34 28.1** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=40,slow=5.5,SNR=3.6 | | | | | | | |
| SONM | | | | PcP | **PcP** | **17 35 46.5** | **+1.8** |
| | comp=Z,0.8nm,0.6s,baz=94,slow=4.1,SNR=5.2 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **53.71** | **87** | P | **P** | **17 34 52.2** | **+1.7** |
| | comp=Z,1.1nm,0.6s,baz=298,slow=5.8,SNR=5.8 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.05** | **317** | P | **P** | **17 35 12.8** | **-1.3** |
| | comp=Z,0.4nm,0.4s,baz=87,slow=12,SNR=2.3 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **17 36 08.7** | **+0.1** |
| | comp=Z,1.3nm,0.7s,baz=1.9,slow=4.5,SNR=4.7 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.18** | **353** | P | **P** | **17 35 20.9** | **-0.9** |
| | comp=Z,2.6nm,1.0s,baz=27,slow=10,SNR=1.7 | | | | | | | |
| ARCES | | | | LR | LR | 17 59 40.9 | |
| | comp=Z,553nm,22.0s,baz=158,slow=35 | | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.12** | **318** | P | **P** | **17 35 48.7** | **-0.3** |
| | comp=Z,1.8nm,0.7s,baz=44,slow=7.0,SNR=13 | | | | | | | |
| KURBB | | | | PcP | **PcP** | **17 36 29.1** | **+0.2** |
| | comp=Z,0.6nm,0.5s,baz=35,slow=4.0,SNR=5.5 | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.36** | **313** | P | **P** | **17 35 56.6** | **-0.8** |
| | comp=Z,0.7nm,0.5s,baz=46,slow=5.7,SNR=13 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **63.44** | **324** | P | **P** | **17 35 57.6** | **-0.2** |
| | comp=Z,2.5nm,0.6s,baz=61,slow=6.2,SNR=8.8 | | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **64.51** | **332** | P | **P** | **17 36 03.1** | **-1.6** |
| | comp=Z,2.3nm,0.5s,baz=6.5,slow=4.0,SNR=6.7 | | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **66.09** | **351** | P | **P** | **17 36 11.2** | **-3.7** |
| | comp=Z,0.7nm,0.6s,baz=33,slow=11,SNR=1.0 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.30** | **359** | P | **P** | **17 36 22.4** | **-0.3** |
| | comp=Z,0.4nm,0.5s,baz=2.9,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.30** | **359** | P | **P** | **17 36 22.1** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=3.2,slow=6.6,SNR=4.3 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **68.16** | **358** | P | **P** | **17 36 27.5** | **-0.5** |
| | comp=Z,1.4nm,0.4s,baz=11,slow=2.3,SNR=15 | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **69.85** | **329** | P | **P** | **17 36 38.0** | **-0.6** |
| | comp=Z,4.5nm,0.6s,baz=34,slow=5.9,SNR=14 | | | | | | | |
| | comp=Z,4.5nm,0.6s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **72.55** | **7** | P | **P** | **17 36 54.5** | **-0.4** |
| | comp=Z,0.4nm,0.4s,baz=357,slow=4.8,SNR=9.4 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.77** | **282** | P | **P** | **17 37 15.4** | **+1.1** |
| | comp=Z,1.4nm,0.4s,baz=27,slow=5.9,SNR=9.3 | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **86.03** | **230** | P | **P** | **17 38 08.9** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=36,slow=5.9,SNR=10 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **ESDC** | **Sonseca Array** | **87.99** | **10** | P | **P** | **17 38 18.7** | **+0.4** |
| | comp=Z,1.4nm,0.9s,baz=4.2,slow=3.1,SNR=7.2 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **89.43** | **229** | P | **P** | **17 38 25.7** | **+0.7** |
| | comp=Z,1.6nm,0.5s,baz=24,slow=4.9,SNR=91 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **116.68** | **111** | T | T | 19 52 18.4 | | |
| | baz=318,slow=77,SNR=5.7 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **116.69** | **111** | T | T | 19 52 14.0 | | |
| | baz=318,slow=77,SNR=5.7 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **116.69** | **111** | T | T | 19 52 12.3 | | |
| | baz=318,slow=77,SNR=5.4 | | | | | | | |
| **BOSA** | **Boshof** | **153.70** | **326** | PKPbc | **PKPbc** | **17 45 26.6** | **-0.3** |
| | comp=Z,3.2nm,0.8s,baz=55,slow=3.1,SNR=9.8 | | | | | | | |

*IDC **25** 17:33:10.9±2.9, 30.09S×176.47W, h0km, mb3.8/2, mbtmp3.8/2, Error ellipse: s-maj=62.4km s-min=51.1km az=28.0*
*NEIC **25** 17:33:23.5±1.8, 28.7S±0.1×177.3W±0.1, h59km±8km, mb4.5/12, Error ellipse: s-maj=21.2km s-min=9.1km az=126.0*
**ISC 25 17:33:22.4±0.9, 28.6S±0.1×177.3W±0.1, h50km, n20, σ0.92/20, mb4.5/8, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.89** | **218** | | **Pn** | **17 33 39.7** | **+1.0** |
| RAO | | | | | Sn | **17 33 50.5** | **-0.1** |
| **RAO** | **Raoul Island** | **0.89** | **218** | Pn | **Pn** | **17 33 39.8** | **+1.1** |
| | 170nm,0.3s,baz=21,slow=22,SNR=16 | | | | | | |
| RAO | | | | | Sn | **17 33 51.1** | **+0.5** |
| | 2μm,0.3s,baz=18,slow=19,SNR=21 | | | | | | |
| **MXZ** | **Matakaoa Point** | **9.72** | **201** | Pn | **Pn** | **17 35 40.2** | **+0.6** |
| **MSVF** | **Nonsavu** | **11.58** | **337** | Pn | Pn | 17 36 15.5 | +10 |
| **RAR** | **Rarotonga** | **17.48** | **69** | | **Pn** | **17 37 22.4** | **-0.3** |
| **ARMA** | **Armidale** | **27.08** | **258** | P | **P** | **17 38 59.9** | **-0.7** |
| ARMA | | | | IAmb | IAmb | 17 39 43.7 | |
| | comp=Z,22nm,1.5s | | | | | | |
| **CTAO** | **Charters Tower** | **34.16** | **276** | P | **P** | **17 40 04.3** | **+1.2** |
| CTAO | | | | IAmb | IAmb | 17 40 04.8 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **AS31** | **Alice Springs** | **43.86** | **265** | P | **P** | **17 41 23.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **43.86** | **265** | P | **P** | **17 41 23.2** | **-0.8** |
| **ASAR** | **Alice Springs** | **43.86** | **265** | P | **P** | **17 41 23.9** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=101,slow=6.7,SNR=44 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.67** | **270** | P | **P** | **17 41 29.9** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 17 41 36.1 | |
| | comp=Z,8.4nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.68** | **270** | P | **P** | **17 41 30.6** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.68** | **270** | P | **P** | **17 41 30.9** | **+0.3** |
| | comp=Z,0.6nm,0.4s,baz=110,slow=7.7,SNR=14 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **47.14** | **253** | P | **P** | **17 41 48.1** | **-1.8** |
| **KNRA** | **Kununurra** | **51.21** | **272** | P | **P** | **17 42 21.5** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 17 42 22.6 | |
| | comp=Z,4.5nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.01** | **268** | P | **P** | **17 42 34.1** | **-0.4** |
| **KHLH** | **Kahului Airpor** | **53.12** | **25** | P | **P** | **17 42 36.0** | **+0.9** |
| **CASY** | **Casey** | **57.06** | **207** | P | **P** | **17 43 01.4** | **-1.7** |
| CASY | | | | IAmb | IAmb | 17 43 38.8 | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.56** | **180** | P | **P** | **17 43 34.9** | **+0.6** |
| QSPA | | | | IAmb | IAmb | 17 43 45.3 | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| **FINES** | **FINESS Array B** | **143.61** | **341** | PKPbc | PKPab | 17 52 49.1 | +1.5 |
| | comp=Z,1.0nm,0.8s,baz=84,slow=4.3,SNR=4.1 | | | | | | |

*IDC **25** 17:35:52.6±1.3, 52.23N×171.00W, h0km, mb3.6/3, mbtmp3.7/5, ML3.0/2, Error ellipse: s-maj=46.1km s-min=25.3km az=168.0*
*AEIC **25** 17:35:56.8±3.9, 51.93N±0.07×170.91W±0.10, h28km±7km, Error ellipse: s-maj=13.4km s-min=3.5km az=141.0*
*NEIC **25** 17:35:59.4±3.6, 51.9N±0.1×170.9W±0.1, h36km±18km, ML3.3(AEIC), Error ellipse: s-maj=16.2km s-min=7.1km az=156.0*
**ISC 25 17:35:58.1±1.0, 51.9N±0.1×170.90W±0.07, h42km, n41, σ1.9/69/45, mb3.7/3, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLES** | **Cleveland East** | **1.15** | **32** | | **Pn** | **17 36 16.1** | **-1.7** |
| CLES | | | | | Sn | **17 36 31.0** | **-1.3** |
| **CLCO** | **Concord Point,** | **1.18** | **37** | | **Pn** | **17 36 16.9** | **-1.2** |
| CLCO | | | | | Sn | **17 36 32.3** | **-0.7** |
| **NIKH** | **Nikolski High** | **1.68** | **47** | Pn | **Pn** | **17 36 22.7** | **-2.3** |
| NIKH | | | | Sn | Sn | **17 36 42.3** | **-3.1** |
| **KOFP** | **Korovin Flat P** | **2.02** | **283** | | **Pn** | **17 36 28.7** | **-1.0** |
| **KOKL** | **Mount Kliuchef** | **2.09** | **284** | | **Pn** | **17 36 30.1** | **-0.5** |
| **OKCE** | **Okmok Cone E** | **2.30** | **46** | | **Sn** | **17 37 00.9** | **+0.4** |
| **OKTU** | **Okmok Mt. Tuli** | **2.32** | **48** | | **Pn** | **17 36 33.3** | **-0.5** |
| **MAPS** | **Pakushin South** | **3.10** | **49** | | **Pn** | **17 36 43.8** | **-0.7** |
| MAPS | | | | | **Sn** | **17 37 21.1** | **+0.9** |
| **MGOD** | **Makushin Gods** | **3.12** | **50** | | **Pn** | **17 36 44.4** | **-0.4** |
| **GSTR** | **Great Sitkin T** | **3.20** | **276** | | **Pn** | **17 36 46.0** | **+0.2** |
| **UNV** | **Unalaska Valle** | **3.33** | **51** | Pn | **Pn** | **17 36 46.5** | **-1.1** |
| **UNV** | **Unalaska Valle** | **3.33** | **51** | | **Sn** | **17 37 26.5** | **+0.7** |
| **ADAG** | **Mount Adagdak** | **3.53** | **274** | | **Pn** | **17 36 50.7** | **+0.4** |
| **SPIA** | **Saint Paul Isl** | **5.35** | **4** | Pn | **Pn** | **17 37 15.9** | **+0.6** |
| **CHGN** | **Chignik** | **8.59** | **54** | Pn | **Pn** | **17 37 60.0** | **+0.3** |
| **O14K** | **Tigyukauivet M** | **9.20** | **33** | Pn | **Pn** | **17 38 10.6** | **+2.6** |
| **PLK4** | **Peulik 4** | **10.20** | **50** | Pn | **Pn** | **17 38 24.1** | **+2.3** |
| **N15K** | **Kwethluk River** | **10.29** | **32** | Pn | **Pn** | **17 38 25.7** | **+2.8** |
| **L14K** | **Kuka Creek** | **10.53** | **22** | Pn | **Pn** | **17 38 29.2** | **+3.1** |
| **O16K** | **Kokwok River B** | **10.58** | **38** | Pn | **Pn** | **17 38 29.7** | **+2.7** |
| **K13K** | **Kusilvak Mount** | **10.66** | **16** | Pn | **Pn** | **17 38 30.1** | **+2.1** |
| **OHAK** | **Old Harbor** | **11.54** | **55** | Pn | **Pn** | **17 38 40.6** | **+0.5** |
| **N17K** | **Nushagak Hills** | **11.55** | **36** | Pn | **Pn** | **17 38 41.6** | **+1.4** |
| **K15K** | **Wolf Creek Mou** | **11.63** | **22** | Pn | **Pn** | **17 38 43.8** | **+2.5** |
| **L16K** | **Owhat River** | **11.68** | **28** | Pn | **Pn** | **17 38 43.0** | **+1.1** |
| **O18K** | **Kahuli Hills** | **11.89** | **42** | Pn | **Pn** | **17 38 48.7** | **+3.8** |
| **M17K** | **Holitna River** | **12.08** | **32** | Pn | **Pn** | **17 38 49.3** | **+1.9** |
| **KDAK** | **Kodiak Island** | **12.10** | **53** | Pn | **Pn** | **17 38 47.4** | **-0.3** |
| **KDAK** | **Kodiak Island** | **12.10** | **53** | Pn | **Pn** | **17 38 47.0** | **-0.7** |
| | 0.3nm,0.3s,baz=281,slow=6.9,SNR=5.9 | | | | | | |
| | 3.9nm,0.8s | | | | | | |
| **SYI** | **Shuyak Island** | **12.52** | **50** | Pn | **Pn** | **17 38 51.9** | **-1.5** |
| **N19K** | **Bonanza Creek** | **12.75** | **39** | Pn | **Pn** | **17 38 58.1** | **+1.4** |
| **K17K** | **Iditarod** | **12.81** | **27** | Pn | **Pn** | **17 38 59.1** | **+1.7** |
| **L18K** | **Granite Mounta** | **12.92** | **31** | Pn | **Pn** | **17 39 00.1** | **+1.3** |
| **J17K** | **VABM Dome** | **13.16** | **24** | Pn | **Pn** | **17 39 03.6** | **+1.4** |
| **M19K** | **Big River Lodg** | **13.48** | **35** | Pn | **Pn** | **17 39 08.3** | **+1.8** |
| **L19K** | **White Mountain** | **13.50** | **34** | Pn | **Pn** | **17 39 07.8** | **+1.0** |
| **ILAR** | **Eielson Array** | **17.91** | **35** | P | **P** | **17 40 03.3** | **-0.6** |
| | 0.2nm,0.6s,baz=231,slow=9.6,SNR=1.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.09** | **286** | P | **P** | **17 40 16.6** | **-0.4** |
| | 0.1nm,0.3s,baz=81,slow=14,SNR=5.7 | | | | | | |
| | 1.8nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **53.71** | **87** | P | **P** | **17 45 17.5** | **+1.7** |
| | 0.1nm,0.3s,baz=302,slow=8.4,SNR=1.8 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **63.57** | **324** | P | **P** | **17 46 21.9** | **-2.0** |
| | 0.7nm,0.7s,baz=63,slow=7.0,SNR=4.1 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **89.34** | **229** | P | **P** | **17 48 50.9** | **+1.1** |
| | 0.2nm,0.5s,baz=27,slow=5.0,SNR=12 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*DRS **25** 17:45:53.3, 40.92N×49.40E, h60km*
*MOS **25** 17:45:54.1, 41.01N×49.23E, h3km, MPVA3.8*
*AZER **25** 17:45:55.3, 41.59N×49.47E, h36km, ml1.9*
**ISC 25 17:46:02.0±1.8, 41.35N±0.04×49.21E±0.08, h11km±9km, n17, σ1.9/65/27, Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIZA** | **Siyzn** | **0.36** | **221** | P | **Pg** | **17 46 08.6** | **-0.6** |
| SIZA | | | | S | **Sb** | **17 46 18.8** | **+2.7** |
| **ATGJ** | **Altiaghaj** | **0.53** | **203** | P | **Pg** | **17 46 12.0** | **-0.3** |
| ATGJ | | | | S | **Sn** | **17 46 23.8** | **-0.7** |
| **QUBA** | **Quba, Azerbaij** | **0.54** | **271** | P | **Pg** | **17 46 11.2** | **-1.3** |
| QUBA | | | | S | **Sb** | **17 46 22.6** | **+1.4** |
| **PQL** | **Pirkuli** | **0.73** | **220** | P | **Pg** | **17 46 15.9** | **-0.2** |
| PQL | | | | S | **Sn** | **17 46 30.8** | **+1.3** |
| **QSAR** | **Qusar** | **0.73** | **284** | P | Pg | 17 46 13.6 | -2.5 |
| QSAR | | | | S | **Sg** | **17 46 26.8** | **+1.1** |
| **XNQ** | **Khinaliq** | **0.82** | **258** | P | **Pg** | **17 46 16.0** | **-1.9** |
| XNQ | | | | S | **Sn** | **17 46 31.3** | **-0.7** |
| **GBS** | **Qobustan** | **0.84** | **194** | P | **Pb** | **17 46 18.1** | **-0.5** |
| GBS | | | | S | **Sn** | **17 46 32.5** | **+0.4** |
| **KSMR** | **Kasumkent** | **0.85** | **288** | *e*Pg | Pb | 17 46 15.7 | -3.1 |
| KSMR | | | | *e*Sg | **Sn** | **17 46 33.0** | **+0.5** |
| **DRN** | **Derbent** | **0.95** | **316** | *e*Pg | **Pb** | **17 46 19.7** | **-0.7** |
| DRN | | | | *e*Sg | **Sn** | **17 46 37.8** | **+3.2** |
| **IML** | **Ismayilli** | **0.95** | **235** | Sn | **Sn** | **17 46 37.5** | **+2.5** |
| **AKT** | **Akhty** | **1.12** | **277** | *e*Pg | Pb | 17 46 20.1 | -3.3 |
| AKT | | | | *e*Sg | **Sg** | **17 46 38.8** | **+0.7** |
| **URKR** | **Urkarakh** | **1.43** | **305** | *e*Pg | **Pn** | **17 46 26.6** | **-1.4** |
| URKR | | | | *e*Sg | **Sg** | **17 46 50.8** | **+2.7** |
| **SGKR** | **Sergokala** | **1.60** | **314** | *e*Pg | **Pn** | **17 46 29.5** | **-0.8** |
| SGKR | | | | *e*Sg | **Sg** | **17 46 55.8** | **+2.3** |
| **KMKR** | **Kumukh** | **1.76** | **297** | *e*Pg | **Pn** | **17 46 30.6** | **-2.1** |
| KMKR | | | | *e*Sg | **Sb** | **17 46 57.9** | **+1.3** |
| **GNBR** | **Gunib** | **1.97** | **303** | *e*Pg | Pn | 17 46 31.1 | -4.3 |
| GNBR | | | | *e*Sg | **Sn** | **17 46 59.4** | **-0.7** |
| **GANJ** | **Ganja** | **2.29** | **253** | Sn | **Sn** | **17 47 07.0** | **-1.0** |
| **GDB** | **GEDABAY** | **2.69** | **258** | Pn | Pn | 17 46 41.5 | -3.8 |
| GDB | | | | Sn | **Sn** | **17 47 16.2** | **-1.6** |

*MOS **25** 17:52:10.1±1.1, 55.69N×114.20E, h6km, mb4.0/6, Error ellipse: s-maj=10.3km s-min=7.3km az=72.5*
*IDC **25** 17:52:13.4±0.7, 55.68N×114.16E, h20km±4km, mb3.6/9, mbtmp3.8/13, ML3.6/4, Error ellipse: s-maj=18.4km s-min=16.5km az=21.0*
*BYKL **25** 17:52:13.1±0.1, 55.80N×114.04E, h20km±2km*
**ISC 25 17:52:11.2±0.5, 55.71N±0.02×113.99E±0.02, h5km±3km, n86, σ2.8/36/129, mb3.9/12, 12C-8D, East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UKT** | **Uakit** | **0.30** | **223** | *i*Pg | **Pg** | **17 52 20.5** | **+3.3** |
| UKT | | | | Pmax | | 17 52 20.6 | |
| | 1μm,0.3s | | | | | | |
| UKT | | | | *e*Sg | **Sg** | **17 52 25.6** | **+4.4** |
| UKT | | | | Smax | | 17 52 26.6 | |
| | 17μm,0.5s | | | | | | |
| **UKT** | **Uakit** | **0.30** | **223** | ⇓*i*PG | **Pg** | **17 52 20.4** | **+3.3** |
| UKT | | | | *e* | | 17 52 25.4 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,1μm,0.3s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=N,14μm,0.5s | | | | | | |
| **SVKR** | **Severomuysk** | **0.47** | **329** | ⇑*i*Pg | **Pg** | **17 52 22.0** | **+1.6** |
| | comp=N,1μm,0.4s | | | | | | |
| SVKR | | | | ⇑*i*Pg | **Pg** | **17 52 22.0** | **+1.6** |
| | comp=N,866nm,0.4s | | | | | | |
| SVKR | | | | ⇑*i*Pg | **Pg** | **17 52 22.0** | **+1.6** |
| | comp=N,22μm,0.4s | | | | | | |
| SVKR | | | | Pmax | | 17 52 22.2 | |
| | comp=N,18μm,0.2s | | | | | | |
| SVKR | | | | *e*Sg | **Sb** | **17 52 29.0** | **-0.5** |
| SVKR | | | | Smax | | 17 52 29.2 | |
| | comp=N,28μm,0.4s | | | | | | |
| **SVKR** | **Severomuysk** | **0.47** | **329** | ⇑*i*PG | **Pg** | **17 52 22.0** | **+1.6** |
| SVKR | | | | *e* | | 17 52 28.3 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,18μm,0.5s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,27μm,0.4s | | | | | | |
| **NLYR** | **Nelyaty** | **1.24** | **50** | ⇓*i*Pg | **Pb** | **17 52 34.1** | **-1.0** |
| NLYR | | | | *e*Pb | **Pg** | **17 52 35.1** | **+0.2** |
| NLYR | | | | max | | 17 52 35.6 | |
| | comp=N,2μm,0.2s | | | | | | |
| NLYR | | | | *e*Sg | **Sn** | **17 52 50.1** | **-2.2** |
| NLYR | | | | *e*Sb | **Sg** | **17 52 52.3** | **+1.3** |
| NLYR | | | | max | | 17 52 52.6 | |
| | comp=N,6μm,0.8s | | | | | | |
| **NLYR** | **Nelyaty** | **1.24** | **50** | ⇓*i*PG | **Pb** | **17 52 34.1** | **-1.0** |
| NLYR | | | | *e* | | 17 52 50.3 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.2s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,6μm,0.8s | | | | | | |
| **YOAB** | **Uoyan, Buryati** | **1.35** | **290** | *e*Pg | **Pn** | **17 52 37.4** | **+0.7** |
| YOAB | | | | Pmax | | 17 52 37.9 | |
| | comp=N,4μm,0.3s | | | | | | |
| YOAB | | | | *e*Sg | **Sg** | **17 52 56.3** | **+1.8** |
| YOAB | | | | *e* | | 17 53 00.5 | |
| YOAB | | | | max | | 17 53 01.0 | |
| | comp=N,20μm,0.5s | | | | | | |
| **KMO** | **Kumora** | **1.59** | **278** | *e*Pg | **Pn** | **17 52 41.1** | **+1.1** |
| KMO | | | | Pmax | | 17 52 41.8 | |
| | comp=N,3μm,0.4s | | | | | | |
| KMO | | | | *e*Sg | **Sb** | **17 53 03.0** | **+1.6** |
| KMO | | | | Smax | | 17 53 04.8 | |
| | comp=N,7μm,1.0s | | | | | | |
| **KMO** | **Kumora** | **1.59** | **278** | ⇑*i*PN | **Pn** | **17 52 41.3** | **+1.3** |
| KMO | | | | *e* | | 17 53 02.9 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,3μm,0.4s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,7μm,0.8s | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.82** | **244** | *e*PN | **Pn** | **17 52 45.2** | **+2.0** |
| YLYR | | | | *e*Pg | **Pb** | **17 52 46.5** | **+1.4** |
| YLYR | | | | Pmax | | 17 52 55.9 | |
| | comp=N,224nm,0.3s | | | | | | |
| YLYR | | | | *e*Sg | **Sg** | **17 53 12.2** | **+2.5** |
| YLYR | | | | Smax | | 17 53 12.6 | |
| | comp=N,3μm,0.3s | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.82** | **244** | *e*PN | **Pn** | **17 52 45.2** | **+2.0** |
| YLYR | | | | *e* | | 17 52 46.3 | |
| YLYR | | | | *e* | | 17 53 11.9 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,184nm,0.2s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=N,3μm,0.3s | | | | | | |
| **BOD** | **Bodaibo** | **2.11** | **0** | *e*Pn | **Pn** | **17 52 46.2** | **-1.0** |
| BOD | | | | *e*Pg | **Pb** | **17 52 48.7** | **-1.3** |
| BOD | | | | Pmax | | 17 52 56.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OGRR** | **Ongureny** | **4.25** | **243** | *e*Pn | **Pn** | **17 53 18.5** | **+1.9** |
| OGRR | | | | *e* | | 17 53 22.2 | |
| OGRR | | | | *e*Pg | Pb | 17 53 31.0 | +4.6 |
| OGRR | | | | Pmax | | 17 53 45.8 | |
| | comp=N,54nm,0.9s | | | | | | |
| OGRR | | | | *e* | | 17 54 25.9 | |
| OGRR | | | | *e*Sg | **Sg** | **17 54 27.1** | **-0.6** |
| OGRR | | | | Smax | | 17 54 43.7 | |
| | comp=N,283nm,0.7s | | | | | | |
| **OGRR** | **Ongureny** | **4.25** | **243** | *e*PN | **Pn** | **17 53 18.3** | **+1.7** |
| OGRR | | | | *e* | | 17 53 29.3 | |
| OGRR | | | | *e* | | 17 54 24.0 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,54nm,1.0s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=E,278nm,1.4s | | | | | | |
| **GORB** | **Goryachinsk** | **4.31** | **233** | *e*Pn | **Pn** | **17 53 20.0** | **+2.5** |
| GORB | | | | *e*Pg | **Pb** | **17 53 31.3** | **+3.8** |
| GORB | | | | *e*Sg | **Sg** | **17 54 29.5** | **-0.1** |
| **UZR** | **Uzur** | **4.36** | **239** | *e*Pn | **Pn** | **17 53 19.9** | **+1.8** |
| UZR | | | | *e*Pg | **Pb** | **17 53 32.7** | **+4.5** |
| UZR | | | | Pmax | | 17 53 41.8 | |
| | comp=E,66nm,0.4s | | | | | | |
| UZR | | | | *e*Sg | **Sg** | **17 54 29.7** | **-1.4** |
| UZR | | | | Smax | | 17 54 37.8 | |
| | comp=E,321nm,0.8s | | | | | | |
| **YKLR** | **Yuktali** | **4.38** | **75** | *e*Sg | **Sg** | **17 54 27.5** | **-4.1** |
| **KELR** | **Kotokel** | **4.56** | **232** | *e*Pn | **Pn** | **17 53 23.7** | **+2.9** |
| KELR | | | | *e*Pg | Pb | 17 53 36.9 | +5.3 |
| KELR | | | | *e*Sg | **Sg** | **17 54 37.1** | **-0.4** |
| **ZRHB** | **Zarechye** | **5.12** | **235** | *e*Sn | **Sn** | **17 54 27.7** | **-0.2** |
| ZRHB | | | | *e*Sg | **Sg** | **17 54 52.9** | **-2.5** |
| ZRHB | | | | Smax | | 17 55 03.3 | |
| | comp=E,987nm,1.3s | | | | | | |
| **TRG** | **Tyrgan** | **5.37** | **240** | *e*Pn | **Pn** | **17 53 33.8** | **+1.8** |
| TRG | | | | *e*Pg | Pb | 17 53 50.8 | +5.3 |
| TRG | | | | Pmax | | 17 54 04.1 | |
| | comp=E,20nm,0.8s | | | | | | |
| TRG | | | | *e*Sg | **Sg** | **17 55 00.9** | **-2.6** |
| TRG | | | | Smax | | 17 55 12.5 | |
| | comp=E,202nm,0.6s | | | | | | |
| **TRG** | **Tyrgan** | **5.37** | **240** | *e*PN | **Pn** | **17 53 33.5** | **+1.5** |
| TRG | | | | *e* | | 17 53 49.3 | |
| TRG | | | | *e*S | **Sn** | **17 54 34.7** | **+0.5** |
| TRG | | | | *e* | | 17 54 59.0 | |
| TRG | | | | pmax | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | |
| TRG | | | | smax | smax | | |
| | comp=E,201nm,0.9s | | | | | | |
| **UUDB** | **Ulan-Yde** | **5.38** | **227** | *e*Pg | **Pg** | **17 53 52.6** | **-1.5** |
| UUDB | | | | Pmax | | 17 54 05.9 | |
| | comp=E,28nm,0.7s | | | | | | |
| UUDB | | | | *e*Sg | **Sg** | **17 55 03.7** | **0.0** |
| UUDB | | | | Smax | | 17 55 06.3 | |
| | comp=E,466nm,1.5s | | | | | | |
| **KAB** | **Kabansk** | **5.68** | **233** | *e*Sg | **Sg** | **17 55 11.8** | **-1.7** |
| KAB | | | | Smax | | 17 55 38.3 | |
| | comp=E,929nm,1.3s | | | | | | |
| **KAB** | **Kabansk** | **5.68** | **233** | *e*PG | Pb | 17 53 57.6 | +6.8 |
| **STDB** | **Stepnoy Dvoret** | **5.73** | **235** | *e*Sg | **Sg** | **17 55 14.8** | **-0.4** |
| **HRMR** | **Khuramsha** | **5.85** | **229** | *e*Pn | **Pn** | **17 53 40.7** | **+2.1** |
| HRMR | | | | *e* | | 17 53 45.3 | |
| HRMR | | | | *e*Pg | Pb | 17 53 59.6 | +6.0 |
| HRMR | | | | Pmax | | 17 54 13.1 | |
| | comp=E,91nm,0.5s | | | | | | |
| HRMR | | | | *e*Sg | **Sg** | **17 55 17.5** | **-1.4** |
| HRMR | | | | Smax | | 17 55 24.2 | |
| | comp=E,846nm,0.8s | | | | | | |
| **KPC** | **Khapcheranga** | **6.10** | **190** | *e*Pn | **Pn** | **17 53 42.8** | **+0.7** |
| KPC | | | | *e*Pg | Pb | 17 54 04.6 | +6.7 |
| KPC | | | | Pmax | | 17 54 37.8 | |
| | comp=E,24nm,0.8s | | | | | | |
| KPC | | | | *e*Sg | **Sg** | **17 55 24.6** | **-2.2** |
| KPC | | | | Smax | | 17 55 40.5 | |
| | comp=E,378nm,1.3s | | | | | | |
| **KPC** | **Khapcheranga** | **6.10** | **190** | *e*PN | **Pn** | **17 53 42.7** | **+0.7** |
| KPC | | | | *e* | | 17 54 01.9 | |
| KPC | | | | *e* | | 17 55 23.6 | |
| KPC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.3s | | | | | | |
| KPC | | | | smax | smax | | |
| | comp=E,378nm,1.3s | | | | | | |
| **CLNS** | **Chul'man** | **6.18** | **75** | *e*Pn | **Pn** | **17 53 43.4** | **+0.3** |
| CLNS | | | | *e*Pg | **Pb** | **17 54 03.5** | **+4.3** |
| CLNS | | | | *e* | | 17 55 13.4 | |
| CLNS | | | | *e*Sg | **Sg** | **17 55 22.9** | **-6.5** |
| **BGT** | **Bolshoye Golou** | **6.26** | **238** | *e*Pg | Pb | 17 54 06.6 | +5.9 |
| BGT | | | | Pmax | | 17 54 13.1 | |
| | comp=E,7.0nm,0.2s | | | | | | |
| BGT | | | | *e*Sg | **Sg** | **17 55 28.9** | **-3.3** |
| BGT | | | | Smax | | 17 55 41.1 | |
| | comp=E,159nm,0.8s | | | | | | |
| **LSTR** | **Listvyanka** | **6.65** | **238** | *e* | Pn | 17 53 55.6 | +6.0 |
| LSTR | | | | *e*Pg | Pb | 17 54 13.5 | +6.2 |
| LSTR | | | | Pmax | | 17 54 30.2 | |
| | comp=E,12nm,0.5s | | | | | | |
| LSTR | | | | *e*Sg | **Sg** | **17 55 40.5** | **-4.1** |
| LSTR | | | | Smax | | 17 55 50.6 | |
| | comp=E,139nm,1.6s | | | | | | |
| **IRK** | **Irkutsk** | **6.70** | **243** | *e*Sg | **Sg** | **17 55 43.5** | **-2.8** |
| IRK | | | | Smax | | 17 55 48.6 | |
| | comp=E,325nm,0.6s | | | | | | |
| **IRK** | **Irkutsk** | **6.70** | **243** | *e*PG | **Pg** | **17 54 18.3** | **-1.2** |
| IRK | | | | *e* | | 17 55 42.9 | |
| IRK | | | | pmax | pmax | | |
| | comp=Z,62nm,0.2s | | | | | | |
| IRK | | | | smax | smax | | |
| | comp=N,325nm,0.5s | | | | | | |
| **IVK** | **Ivanovka** | **6.90** | **239** | *e*Pg | Pb | 17 54 18.2 | +6.7 |
| IVK | | | | Pmax | | 17 54 18.7 | |
| | comp=N,9.0nm,0.2s | | | | | | |
| IVK | | | | *e*Sg | **Sg** | **17 55 47.9** | **-4.6** |
| IVK | | | | Smax | | 17 56 00.5 | |
| | comp=N,266nm,1.1s | | | | | | |
| **HIA** | **Hailar** | **7.34** | **149**↓ | *e*PN | **Pn** | **17 53 59.6** | **+0.5** |
| **TLY** | **Talaya** | **7.35** | **241** | *e*Pg | Pb | 17 54 25.9 | +6.7 |
| TLY | | | | Pmax | | 17 54 29.0 | |
| | comp=N,5.0nm,0.4s | | | | | | |
| TLY | | | | *e*Sg | **Sg** | **17 56 02.4** | **-4.6** |
| TLY | | | | Smax | | 17 56 13.0 | |
| | comp=N,101nm,0.9s | | | | | | |
| **ARS** | **Arshan** | **7.83** | **246** | *e*Pg | Pb | 17 54 35.2 | +7.9 |
| ARS | | | | Pmax | | 17 54 41.8 | |
| | comp=N,27nm,0.5s | | | | | | |
| ARS | | | | *e*Sg | Sg | 17 56 16.5 | -5.8 |
| ARS | | | | Smax | | 17 56 24.5 | |
| | comp=N,559nm,1.0s | | | | | | |
| **ZEA** | **Zeya** | **7.93** | **99** | *e*PN | Pn | 17 54 16.3 | +9.3 |
| ZEA | | | | pmax | pmax | | |
| | comp=E,350nm,0.7s | | | | | | |
| ZEA | | | | pmax | pmax | | |
| | comp=N,470nm,1.1s | | | | | | |
| **ZAK** | **Zakamensk** | **8.37** | **235** | *e*Sg | **Sg** | **17 56 35.3** | **-4.4** |
| ZAK | | | | Smax | | 17 57 01.4 | |
| | comp=N,135nm,1.1s | | | | | | |
| **MOY** | **Mondy** | **8.71** | **248** | *e*Pn | **Pn** | **17 54 20.6** | **+2.7** |
| MOY | | | | *e*Pg | Pg | 17 54 50.7 | -7.2 |
| MOY | | | | Pmax | | 17 55 12.9 | |
| | comp=N,21nm,0.8s | | | | | | |
| MOY | | | | *e* | | 17 56 10.7 | |
| MOY | | | | *e*Sg | Sg | 17 56 44.6 | -6.0 |
| MOY | | | | Smax | | 17 57 01.1 | |
| | comp=N,203nm,1.6s | | | | | | |
| **MOY** | **Mondy** | **8.71** | **248** | *e*PN | Pn | 17 54 28.3 | +10 |
| MOY | | | | *i* | | 17 54 46.1 | |
| MOY | | | | *e* | | 17 56 45.1 | |
| **ORL** | **Orlik** | **8.91** | **255** | *e*Pn | **Pn** | **17 54 23.3** | **+2.6** |
| ORL | | | | *e*Pg | Pg | 17 54 54.4 | -7.4 |
| ORL | | | | Pmax | | 17 55 05.0 | |
| | comp=N,19nm,1.3s | | | | | | |
| ORL | | | | *e* | | 17 56 18.7 | |
| ORL | | | | *e* | | 17 56 43.7 | |
| ORL | | | | *e*Sg | Sg | 17 56 50.7 | -6.4 |
| ORL | | | | Smax | | 17 57 00.9 | |
| | comp=N,180nm,1.5s | | | | | | |
| **ORL** | **Orlik** | **8.91** | **255** | *e*P | **Pn** | **17 54 23.0** | **+2.3** |
| ORL | | | | pmax | pmax | | |
| | comp=Z,26nm,2.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **8.95** | **212**↑ | *e*PN | **Pn** | **17 54 20.1** | **-1.1** |
| **SONM** | **Songino Array** | **9.18** | **214** | Pn | **Pn** | **17 54 26.5** | **+2.1** |
| | comp=Z,0.3nm,0.3s,baz=25,slow=12,SNR=7.7 | | | | | | |
| SONM | | | | Lg | Lg | 17 56 58.8 | |
| | comp=Z,1.6nm,0.3s,baz=39,slow=18,SNR=2.9 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HEH** | **HeiHe** | **9.76** | **118** | *e*P | **Pn** | **17 54 27.5** | **-4.6** |
| HEH | | | | S | **Sn** | **17 56 18.0** | **-4.0** |
| HEH | | | | smax | smax | | |
| | comp=N,290nm,1.1s | | | | | | |
| HEH | | | | smax | smax | | |
| | comp=E,300nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **10.28** | **46** | Sn | **Sn** | **17 56 39.4** | **+4.7** |
| | comp=E,2.1nm,0.3s,baz=290,slow=21,SNR=6.1 | | | | | | |
| YAK | | | | Lg | Lg | 17 57 24.5 | |
| | comp=E,2.4nm,0.3s,baz=150,slow=23,SNR=7.9 | | | | | | |
| **YAK** | **Yakutsk** | **10.28** | **46**↑ | *e*P | **Pn** | **17 54 35.4** | **-3.8** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **12.60** | **114** | Pn | **Pn** | **17 55 11.8** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=82,slow=22,SNR=2.4 | | | | | | |
| KLR | | | | Lg | Lg | 17 58 46.9 | |
| | comp=Z,0.6nm,0.3s,baz=232,slow=22,SNR=8.8 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **12.60** | **114**↓ | *e*P | **Pn** | **17 55 11.4** | **+0.4** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **16.27** | **128** | Lg | Lg | 18 00 48.5 | |
| | comp=Z,0.2nm,0.3s,baz=331,slow=30,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.85** | **276** | Pn | **P** | **17 56 11.0** | **+1.3** |
| | comp=Z,0.2nm,0.3s,baz=64,slow=6.7,SNR=2.6 | | | | | | |
| ZALV | | | | Lg | Lg | 18 01 04.8 | |
| | comp=Z,0.1nm,0.3s,baz=77,slow=25,SNR=3.6 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.85** | **276** | P | **P** | **17 56 11.0** | **+1.3** |
| **DGZ** | **Jazzator, Alta** | **17.12** | **261**↑ | *e*P | **Pn** | **17 56 10.1** | **-1.1** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,3.4s | | | | | | |
| **TIXI** | **Tiksi** | **17.21** | **16** | P | **Pn** | **17 56 10.5** | **-1.4** |
| | comp=Z,1.0nm,0.3s,baz=220,slow=11,SNR=2.1 | | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **TIXI** | **Tiksi** | **17.21** | **16**↑ | *e*P | **Pn** | **17 56 10.4** | **-1.6** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **SEY** | **Seymchan** | **20.60** | **54** | P | Pn | 17 56 51.7 | -1.4 |
| | comp=Z,3.8nm,0.8s,baz=266,slow=9.5,SNR=12 | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **SEY** | **Seymchan** | **20.60** | **54**↑ | *e*P | **P** | **17 56 50.8** | **0.0** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,11nm,2.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **21.59** | **259** | P | **P** | **17 57 02.9** | **+1.2** |
| | comp=Z,0.8nm,0.8s,baz=55,slow=10,SNR=5.0 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **21.59** | **259** | *i* P | **P** | **17 57 05.1** | **+3.5** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **21.60** | **271**↑ | *e*P | **P** | **17 57 02.9** | **+1.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.69** | **271** | P | **P** | **17 57 04.2** | **+1.5** |
| | comp=Z,2.5nm,0.9s,baz=64,slow=11,SNR=7.4 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **25.23** | **282** | P | **P** | **17 57 39.7** | **+2.0** |
| | comp=Z,1.0nm,0.6s,baz=54,slow=7.5,SNR=6.0 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **25.28** | **282**↑ | *e*P | **P** | **17 57 39.6** | **+1.5** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **26.60** | **42**↓ | *e*P | **P** | **17 57 49.1** | **-0.9** |
| BILL | | | | *e* | | 17 58 29.6 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,11nm,1.8s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,136nm,16.0s | | | | | | |
| **FINES** | **FINESS Array B** | **42.87** | **315** | P | **P** | **18 00 07.5** | **-2.4** |
| | comp=Z,0.7nm,0.5s,baz=69,slow=7.6,SNR=1.7 | | | | | | |
| **FINES** | **FINESS Array B** | **42.87** | **315** | *i* P | **P** | **18 00 12.8** | **+2.9** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **45.05** | **37** | P | **P** | **18 00 27.4** | **-0.1** |
| | comp=Z,1.4nm,0.8s,baz=298,slow=8.6,SNR=18 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **48.46** | **319** | P | **P** | **18 00 53.2** | **-0.9** |
| | comp=Z,1.3nm,0.8s,baz=58,slow=11,SNR=4.2 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **71.37** | **314** | P | **P** | **18 03 31.7** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=39,slow=4.9,SNR=3.0 | | | | | | |
| ESDC | | | | pP | **sP** | **18 03 38.1** | **+3.3** |
| | comp=Z,0.8nm,0.8s,baz=26,slow=6.1,SNR=4.9 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **77.31** | **160** | P | **P** | **18 04 05.7** | **-0.8** |
| | comp=Z,0.7nm,0.8s,baz=350,slow=6.4,SNR=9.4 | | | | | | |
| WRA | | | | pP | **pP** | **18 04 12.0** | **+3.3** |
| | comp=Z,0.8nm,0.7s,baz=351,slow=6.3,SNR=6.1 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **77.31** | **160** | *i* P | **P** | **18 04 06.4** | **-0.1** |
| **ASAR** | **Alice Springs** | **80.86** | **162** | P | **P** | **18 04 24.2** | **-1.7** |
| | comp=Z,0.3nm,0.8s,baz=90,slow=7.5,SNR=12 | | | | | | |
| ASAR | | | | pP | **PcP** | **18 04 32.5** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=349,slow=4.8,SNR=3.7 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **145.47** | **180** | PKPbc | **PKPdf** | **18 11 47.8** | **-1.0** |
| | comp=Z,4.2nm,1.1s,baz=292,slow=3.0,SNR=3.7 | | | | | | |
| QSPA | | | | pPKPbc | pPKPab | 18 11 55.0 | +3.7 |
| | comp=Z,2.9nm,1.0s,baz=250,slow=2.1,SNR=4.9 | | | | | | |

**IDC 25 17:58:42.8±1.4, 23°83S×70°36E, h0km, mb3.5/5, mbtmp3.5/5, MS4.3/1, Error ellipse: s-maj=48.2km s-min=30.7km az=51.0, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **16.23** | **8** | T | T | 18 20 03.7 | |
| | baz=190,slow=76,SNR=23 | | | | | | |
| **H08S2** | **Diego Garcia H** | **16.23** | **8** | T | T | 18 20 05.9 | |
| | baz=190,slow=76,SNR=17 | | | | | | |
| **H08S3** | **Diego Garcia H** | **16.24** | **8** | T | T | 18 20 02.0 | |
| | baz=190,slow=76,SNR=36 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **26.84** | **209** | T | T | 18 31 46.7 | |
| | baz=40,SNR=77 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **26.85** | **209** | T | T | 18 31 45.5 | |
| | baz=40,slow=74,SNR=97 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **26.86** | **209** | T | T | 18 31 38.7 | |
| | baz=40,slow=74,SNR=97 | | | | | | |
| **PALK** | **Pallekele** | **32.53** | **19** | LR | LR | 18 16 20.2 | |
| | comp=Z,464nm,18.6s,baz=74,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **57.70** | **104** | P | P | 18 08 35.8 | +0.2 |
| | 0.4nm,0.7s,baz=255,slow=6.1,SNR=11 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **59.06** | **100** | P | P | 18 08 45.6 | +0.4 |
| | 0.6nm,0.8s,baz=258,slow=7.1,SNR=5.9 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.29** | **180** | P | P | 18 09 32.2 | -0.6 |
| | 0.8nm,1.0s,baz=279,slow=3.1,SNR=1.9 | | | | | | |
| | 0.8nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **71.92** | **331** | P | P | 18 10 09.8 | +1.7 |
| | 0.4nm,0.8s,baz=154,slow=7.5,SNR=2.8 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **74.48** | **5** | P | P | 18 10 20.9 | -1.8 |
| | 0.1nm,0.4s,baz=182,slow=7.1,SNR=2.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

**DJA 25 18:11:14.7±0.5, 8°S±5°×117°E±°, h11km±4km, M3.8/8, mb3.9/1, MLv3.7/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.27** | **190** | P | Pb | 18 11 21.3 | -0.3 |
| **PLAI** | **Plampang** | **0.91** | **113** | P | Pg | 18 11 31.6 | -0.7 |
| PLAI | | | | S | Sg | 18 11 43.8 | -0.3 |
| **DNP** | **Denpasar** | **1.71** | **263** | P | Pg | 18 11 48.7 | +1.1 |
| **SRBI** | **Singaraja** | **1.74** | **283** | P | Pn | 18 11 45.2 | +0.3 |
| SRBI | | | | S | Sn | 18 12 06.9 | -0.2 |
| **WBSI** | **Waikabubak, Su** | **2.69** | **116** | P | Pn | 18 11 58.6 | +0.5 |
| WBSI | | | | S | Sn | 18 12 31.4 | +0.7 |
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **270** | P | Pn | 18 11 59.3 | +0.5 |
| JAGI | | | | S | Sn | 18 12 32.5 | +0.5 |
| **BASI** | **Baing, Sumba** | **4.00** | **116** | P | Pn | 18 12 16.0 | +0.1 |
| **BSSI** | **Bau Bau, Buton** | **4.22** | **57** | P | Pn | 18 12 18.5 | -0.5 |
| **EDFI** | **Ende, Flores** | **4.72** | **94** | P | Pn | 18 12 26.2 | +0.3 |
| **BNSI** | **Bone** | **5.13** | **38** | P | Pn | 18 12 32.1 | +0.6 |

*BJI **25** 18:25:32.2±0.0, 44°18N×149°93E, h5km, mb4.8/59, mB5.0/18, Ms4.4/9, Ms7 4.4/9*
*IDC **25** 18:25:35.3±0.5, 44°26N×149°58E, h0km, mb4.5/36, mbtmp4.4/44, ML3.9/6, MS3.8/2, Error ellipse: s-maj=13.5km s-min=10.9km az=145.0*
*NEIC **25** 18:25:37.3±1.6, 44°26N±0°09×149°6E±0°1, h10km±1km, mb4.7/148, Error ellipse: s-maj=18.1km s-min=12.2km az=138.0*
*JMA **25** 18:25:37.8±0.9, 44°N±3°×15°0E±°, h30km, MV4.5/16, SE OFF ETOROFU*
*SKHL **25** 18:25:37.7±0.4, 44°10N×149°90E, h37km±7km, mb4.9/10*
*MOS **25** 18:25:38.7±1.0, 44°07N×149°57E, h38km, mb5.0/34, MS3.7/4, Error ellipse: s-maj=7.7km s-min=5.0km az=124.9*

**ISC 25 18:25:39.4±0.5, 44°16N±0°05×149°67E±0°04, h32km±2km, h31km:pP-P, n666, σ1$30/656, mb4.7/170, MS3.9/6, 44C-50D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.68** | **311** | *i* P | **Pn** | **18 26 06.1** | **-0.4** |
| KUR | | | | AMB | AMB | 18 26 06.9 | |
| | 1μm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **18 26 28.3** | **+1.4** |
| KUR | | | | A | A | 18 26 34.4 | |
| | 3μm,0.6s | | | | | | |
| KUR | | | | A | A | 18 26 34.4 | |
| | 3μm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.68** | **311** | *c i* PN | **Pn** | **18 26 06.1** | **-0.4** |
| KUR | | | | S | **Sb** | **18 26 29.5** | **-0.8** |
| KUR | | | | pmax | pmax | | |
| | comp=N,344nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,1μm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,108nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,3μm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.07** | **263** | *i* P | **Pn** | **18 26 11.1** | **-0.8** |
| SHO | | | | AMB | AMB | 18 26 16.4 | |
| | comp=E,170nm,0.5s | | | | | | |
| SHO | | | | *i* S | **Sn** | **18 26 36.2** | **-0.3** |
| SHO | | | | A | A | 18 26 47.7 | |
| | comp=E,600nm,0.4s | | | | | | |
| SHO | | | | A | A | 18 26 47.7 | |
| | comp=E,810nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.07** | **263**↑ | *i* PN | **Pn** | **18 26 10.9** | **-1.0** |
| SHO | | | | *i* S | **Sn** | **18 26 35.5** | **-1.0** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,86nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,37nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,65nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,680nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,287nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.75** | **269** | *i* P | **Pn** | **18 26 21.1** | **-0.1** |
| YUK | | | | AMB | AMB | 18 26 23.7 | |
| | comp=E,210nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **18 26 53.9** | **+0.7** |
| YUK | | | | A | A | 18 27 05.6 | |
| | comp=E,940nm,0.6s | | | | | | |
| YUK | | | | A | A | 18 27 05.6 | |
| | comp=E,1μm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.75** | **269** | *c i* PN | **Pn** | **18 26 20.8** | **-0.4** |
| YUK | | | | *e*S | **Sn** | **18 26 53.9** | **+0.7** |
| YUK | | | | pmax | pmax | | |
| | comp=E,43nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,290nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,273nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,714nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.95** | **256** | *e*P | **Pn** | **18 26 22.7** | **-1.3** |
| NEM2 | | | | *e*S | **Sn** | **18 26 55.8** | **-2.5** |
| **JRA** | **Rausu** | **3.28** | **268** | *e*P | **Pn** | **18 26 29.2** | **+0.6** |
| **JNK** | **Nakash** | **3.62** | **263** | *e*P | **Pn** | **18 26 32.8** | **-0.5** |
| **JAK** | **Akkeshi** | **3.79** | **254** | P | **Pn** | **18 26 35.0** | **-0.5** |
| **JTKR** | **Abashiri--Toko** | **4.16** | **269** | P | **Pn** | **18 26 41.4** | **+0.9** |
| **JAR** | **Ashorobuto** | **4.36** | **261** | *e*P | **Pn** | **18 26 43.6** | **+0.2** |
| **JOB** | **Onbets** | **4.42** | **256** | *e*P | **Pn** | **18 26 44.4** | **+0.1** |
| **JCH** | **Churui** | **4.85** | **254** | *e*P | **Pn** | **18 26 50.0** | **-0.1** |
| JCH | | | | *e*S | **Sn** | **18 27 44.7** | **-0.4** |
| **JKK2** | **Kamakawa 2** | **5.00** | **269** | *e*P | **Pn** | **18 26 54.0** | **+1.8** |
| **JKA** | **Kamikawa-asahi** | **5.09** | **272** | Pn | **Pn** | **18 26 55.5** | **+2.1** |
| **JKA** | **Kamikawa-asahi** | **5.09** | **272** | *e*P | **Pn** | **18 26 55.5** | **+2.1** |
| **ASAJ** | **Asahikawa** | **5.09** | **272** | Pn | **Pn** | **18 26 55.1** | **+1.7** |
| | comp=E,2.4nm,0.3s,baz=63,slow=18,SNR=19 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.09** | **272** | PN | **Pn** | **18 26 55.5** | **+2.1** |
| **ERM** | **Erimo** | **5.22** | **248** | | **Pn** | **18 26 55.7** | **+0.4** |
| **ERM** | **Erimo** | **5.22** | **248** | *de*PN | **Pn** | **18 26 56.1** | **+0.8** |
| **JNBK** | **Urakawa-nobuka** | **5.39** | **252** | *e*P | **Pn** | **18 26 56.7** | **-0.8** |
| JNBK | | | | *e*S | **Sn** | **18 27 59.8** | **+1.4** |
| **JAB** | **Ashibetsu** | **5.42** | **266** | *e*P | **Pn** | **18 27 00.8** | **+2.8** |
| **YSS** | **Yuzh-Sakhalins** | **5.60** | **302** | | **Pn** | **18 26 58.1** | **-2.3** |
| **YSS** | **Yuzh-Sakhalins** | **5.60** | **302** | *e*P | **Pn** | **18 27 02.2** | **+1.8** |
| YSS | | | | AMB | AMB | 18 27 15.2 | |
| | comp=E,30nm,1.1s | | | | | | |
| YSS | | | | *e*S | **Sn** | **18 28 05.2** | **+1.5** |
| YSS | | | | A | A | 18 28 12.0 | |
| | comp=E,50nm,0.8s | | | | | | |
| YSS | | | | A | A | 18 28 12.0 | |
| | comp=E,50nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.60** | **302** | *e*PN | **Pn** | **18 27 02.2** | **+1.8** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=N,50nm,0.7s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=E,50nm,0.8s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,900nm,16.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,400nm,15.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,1μm,14.0s | | | | | | |
| **JANG** | **Nango** | **7.13** | **241** | *e*P | **Pn** | **18 27 19.6** | **-1.9** |
| JANG | | | | *e*S | **Sn** | **18 28 34.2** | **-7.1** |
| **JTH** | **Tanohata** | **7.17** | **237** | *e*P | **Pn** | **18 27 19.6** | **-2.5** |
| JTH | | | | *e*S | **Sn** | **18 28 34.4** | **-8.0** |
| **UGL** | **Uglegorsk** | **7.18** | **316** | *e*P | **Pn** | **18 27 25.4** | **+3.3** |
| UGL | | | | AMB | AMB | 18 27 37.8 | |
| | comp=E,60nm,0.6s | | | | | | |
| **JTM** | **Tenmabayashi** | **7.19** | **245** | Pn | **Pn** | **18 27 21.2** | **-1.1** |
| **SKR** | **Severo-Kuril's** | **7.86** | **32** | *e*P | **Pn** | **18 27 30.6** | **-0.8** |
| SKR | | | | AMB | AMB | 18 27 34.9 | |
| | comp=E,30nm,0.6s | | | | | | |
| SKR | | | | *e*S | **Sn** | **18 28 54.3** | **-4.8** |
| SKR | | | | A | A | 18 29 04.4 | |
| | comp=E,40nm,0.5s | | | | | | |
| SKR | | | | A | A | 18 29 04.4 | |
| | comp=E,30nm,0.5s | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.86** | **32** | *e*PN | **Pn** | **18 27 30.4** | **-1.0** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,59nm,0.9s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=E,1μm,14.0s | | | | | | |
| **TYV** | **Tymovskoe** | **8.22** | **327** | *e*P | **Pn** | **18 

comp=Z,1.6nm,0.8s,baz=30,slow=13,SNR=9.1
**MJB9 Matsu-Tunnel 11.58 233 Pn 18 28 20.6 -1.8**
**MAJO Matsushiro 11.58 233 Pn Pn 18 28 21.1 -1.3**
**MAJO Matsushiro 11.58 233⇑ *e*PN Pn 18 28 20.9 -1.5**
**USA0B Ussuriysk Arra 12.70 276 Pn Pn 18 28 36.6 -1.1**
**USA0B Ussuriysk Arra 12.70 276⇑ *e*PN Pn 18 28 36.5 -1.1**
**USRK Ussuriysk Ar. 12.70 276 Pn Pn 18 28 36.1 -1.5**
**USRK Ussuriysk Ar. 12.70 276 Pn Pn 18 28 38.0 +0.4**
comp=Z,1.0nm,0.3s,baz=81,slow=13,SNR=30
comp=Z,7.4nm,0.7s
**USRK Ussuriysk Ar. 12.70 276 PN Pn 18 28 38.0 +0.4**
**KLR Kul'dur 13.30 299 Pn Pn 18 28 50.4 +4.6**
comp=Z,0.3nm,0.3s,baz=107,slow=9.8,SNR=8.9
KLR LR LR 18 34 32.6
comp=Z,553nm,18.4s,baz=356,slow=41
**KLR Kul'dur 13.30 299 *e*P Pn 18 28 46.3 +0.5**
**KLR Kul'dur 13.30 299⇑ *e*PN Pn 18 28 46.3 +0.5**
KLR pmax pmax
comp=Z,3.0nm,1.3s
**MDJ Mudanjiang 14.37 279 P Pn 18 29 01.5 +1.1**
MDJ pmax pmax
comp=Z,23nm,1.0s
**MDJ Mudanjiang 14.37 279 Pn Pn 18 29 00.3 -0.1**
**MA2 Magadan 15.46 2 Pn Pn 18 29 14.2 -0.7**
**MA2 Magadan 15.46 2 Pn Pn 18 29 13.4 -1.5**
comp=Z,0.2nm,0.3s,baz=178,slow=14,SNR=2.8
comp=Z,4.6nm,0.7s
**MA2 Magadan 15.46 2 P Pn 18 29 13.2 -1.7**
comp=Z,9.4nm,0.9s
**BNX BinXian 15.84 284 ⇓P Pn 18 29 19.5 -0.4**
BNX pmax pmax
comp=Z,16nm,0.9s
**HEH HeiHe 16.28 300 *e*P Pn 18 29 26.5 +1.1**
HEH pmax pmax
comp=Z,10.0nm,0.6s
**CN2 Changchun 17.43 277 *e*P Pn 18 29 40.5 +0.6**
CN2 *e*PP **pwP 18 29 55.0 +0.8**
CN2 pmax pmax
comp=Z,20nm,1.3s
**ZEA Zeya 17.50 311 *e*P Pn 18 29 40.7 -0.1**
ZEA AMB AMB 18 29 43.9
comp=Z,20nm,0.7s
**ZEA Zeya 17.50 311 *e*P P 18 29 43.0 +1.3**
ZEA pmax pmax
comp=Z,10.0nm,1.0s
**KSRS Korea Array 17.75 255 P Pn 18 29 42.6 -1.3**
comp=Z,0.1nm,0.3s,baz=64,slow=9.8,SNR=8.3
comp=Z,1.7nm,0.8s
**JCJ Chichijima 18.06 202 P P 18 29 50.0 +2.0**
comp=Z,0.8nm,0.3s,baz=294,slow=20,SNR=2.5
comp=Z,43nm,0.8s
**JNU Nakatsue 18.31 239 P Pn 18 29 51.5 +0.6**
comp=Z,0.1nm,0.3s,baz=6.0,slow=19,SNR=2.2
comp=Z,6.0nm,0.9s
**SEY Seymchan 18.88 4 P P 18 29 54.6 -2.1**
comp=Z,0.5nm,0.3s,baz=176,slow=8.7,SNR=37
comp=Z,18nm,1.0s
**SEY Seymchan 18.88 4 *e*P P 18 29 55.0 -1.8**
SEY pmax pmax
comp=Z,22nm,1.0s
**SNY Shenyang 19.20 272 ⇓P Pn 18 30 01.3 -0.3**
SNY pmax pmax
comp=Z,21nm,1.0s
**YAK Yakutsk 21.39 334 P P 18 30 20.5 -3.5**
YAK IAmb IAmb 18 30 24.0
comp=Z,29nm,0.8s
**YAK Yakutsk 21.39 334 P P 18 30 21.9 -2.1**
comp=Z,29nm,0.7s,baz=117,slow=3.4,SNR=16
comp=Z,29nm,0.7s
**YAK Yakutsk 21.39 334 *e*P P 18 30 22.0 -2.1**
YAK *e**PP **sP 18 30 33.0 -1.5**
YAK *e* 18 30 52.9
YAK *e*S **S 18 34 11.9 -7.6**
YAK *e**SS Sn 18 34 26.0 -2.0
YAK *e*SS **SnSn 18 34 30.9 -12**
YAK *e*SSS SSS 18 34 47.7
YAK pmax pmax
comp=Z,28nm,0.9s
YAK pmax pmax
comp=N,5.0nm,1.2s
YAK pmax pmax
comp=E,4.0nm,0.9s
YAK pmax pmax
comp=Z,44nm,1.3s
YAK pmax pmax
comp=E,50nm,2.0s
YAK pmax pmax
comp=N,51nm,1.8s
YAK smax smax
comp=N,157nm,4.7s
YAK smax smax
comp=E,96nm,3.7s
**XLT XiLinHaoTe 24.06 281 *e*P P 18 30 47.8 -3.9**
XLT pP pP 18 30 52.5 -6.9
XLT sP sP 18 30 55.3 -7.2
XLT PP **PnPn 18 31 20.5 -0.6**
XLT pmax pmax
comp=E,9.0nm,0.9s
**BJI Beijing 25.09 272 P P 18 31 02.0 +1.1**
BJI pmax pmax
comp=E,6.0nm,0.8s
BJI LR LR
comp=E,160nm,16.1s
BJI LR LR
comp=E,130nm,16.5s
BJI LR LR
comp=E,200nm,20.2s
**BILL Bilibino 25.49 14 *e*P P 18 31 08.5 +4.2**
BILL *e* 18 31 48.3
BILL pmax pmax
comp=Z,19nm,2.2s
BILL MLR MLR
comp=Z,270nm,16.0s
**TIA Tai'an 25.97 263 P P 18 31 11.0 +2.0**
TIA pmax pmax
comp=Z,40nm,0.7s
**NJ2 Nanjing 26.93 254 *e*P P 18 31 17.5 -0.2**
NJ2 pmax pmax
comp=Z,10.0nm,0.6s
NJ2 pmax pmax
comp=Z,420nm,3.6s
**HNS HongShan 27.17 268 ⇑P P 18 31 22.0 +2.2**
**HHC Hu-ho-hao-te 28.12 277 *e*P P 18 31 32.0 +3.6**
HHC pmax pmax
comp=Z,19nm,0.9s
HHC pmax pmax
comp=Z,140nm,4.1s
HHC LR LR
comp=Z,270nm,13.0s
HHC LR LR
comp=Z,170nm,13.0s
HHC LR LR
comp=Z,400nm,14.5s
**H11N2 WAKE ISLAND Hy 28.29 144** T T 19 02 32.3
baz=334,slow=75,SNR=61
**H11N1 WAKE ISLAND Hy 28.30 144** T T 19 02 40.2
baz=334,slow=75,SNR=56
**H11N3 WAKE ISLAND Hy 28.30 144** T T 19 02 44.2
baz=334,slow=75,SNR=59
**H11S1 WAKE ISLAND Hy 29.30 145** T T 19 03 58.8
baz=335,slow=76,SNR=62
**H11S3 WAKE ISLAND Hy 29.30 145** T T 19 03 59.2
baz=335,slow=76,SNR=50
**BTO Baotou 29.30 277 *e*P P 18 31 39.3 +0.3**
BTO pP **pP 18 31 43.5 -3.2**
BTO sP **sP 18 31 46.3 -3.5**
BTO PP **PnPn 18 32 34.0 +1.2**
BTO S **S 18 36 31.8 +1.7**
BTO sS **pS 18 36 38.5 -0.2**
BTO SS **SnSn 18 38 05.5 +8.5**
BTO pmax pmax
comp=Z,9.0nm,1.0s
BTO pmax pmax
comp=Z,430nm,8.8s
**H11S2 WAKE ISLAND Hy 29.32 145** T T 19 03 57.6
baz=335,slow=76,SNR=40
**GAMB Gambell 29.34 34 P P 18 31 38.6 -0.2**
baz=247
**ULN Ulaanbaatar 29.55 292 P P 18 31 39.7 -1.4**
ULN IAmb IAmb 18 31 42.5
comp=Z,13nm,0.9s
**ULN Ulaanbaatar 29.55 292 *e*P P 18 31 41.7 +0.6**
**ULN Ulaanbaatar 29.55 292 *de*P P 18 31 41.7 +0.6**
ULN pmax pmax
comp=Z,17nm,1.0s
**SONM Songino Array 29.99 293 P P 18 31 44.0 -1.0**
SONM IAmb IAmb 18 31 46.3
comp=Z,6.3nm,0.8s
**SONM Songino Array 29.99 293 P P 18 31 45.2 +0.2**
comp=Z,9.1nm,0.9s,baz=80,slow=8.3,SNR=42
comp=Z,9.1nm,0.9s
**SONM Songino Array 29.99 293 P P 18 31 44.0 -1.0**
SONM pmax pmax
comp=Z,6.0nm,0.8s
**M11K Mekoryuk 30.78 43 P P 18 31 51.9 +0.2**
baz=258
**ZAK Zakamensk 31.66 298 *e*P P 18 31 59.0 -0.7**
ZAK pmax pmax
comp=Z,6.0nm,1.0s
**K13K Kusilvak Mount 31.84 40 P P 18 32 01.3 +0.4**
baz=258
**J14K Nanvaranak Lak 32.52 39 P P 18 32 07.0 +0.1**
baz=258
**L14K Kuka Creek 32.65 41 P P 18 32 08.1 0.0**
baz=261
**F15K North Star Dit 32.86 33 P P 18 32 10.1 +0.2**
baz=252
**G15K Niukluk 32.89 34 P P 18 32 10.3 +0.3**
baz=254
**XAN Xi'an 32.90 266 ⇓P P 18 32 11.0 +0.4**
XAN pmax pmax
comp=Z,15nm,0.8s
**M14K Bethel 32.91 43 P P 18 32 10.9 +0.6**
baz=262
**C16K Lisburne Hills 33.51 28 P P 18 32 15.4 0.0**
C16K IAmb IAmb 18 32 16.7
comp=Z,15nm,0.9s
**C16K Lisburne Hills 33.51 28 P P 18 32 15.6 +0.2**
baz=247
**H16K Elim 33.53 35 P P 18 32 16.0 +0.2**
baz=256
**N15K Kwethluk River 33.76 44 P P 18 32 17.5 -0.3**
baz=265
**O15K Umgalikthiuk R 33.82 46 P P 18 32 18.7 +0.4**
baz=267
**CHNA Chernabura Isl 33.93 53 P P 18 32 19.4 +0.1**
baz=273
**D17K Noatak River 34.09 30 P P 18 32 20.4 -0.2**
baz=251,SNR=8.7
**RDOG Red Dog Mine 34.28 29 P P 18 32 22.2 0.0**
baz=250
**C17K DeLong Mountai 34.33 29 P P 18 32 22.7 +0.1**
baz=250
**E17K Hotham Inlet 34.36 31 P P 18 32 23.4 +0.5**
baz=253
**G17K Kiwalik Mounta 34.40 34 P P 18 32 23.6 +0.4**
baz=256
**F17K Baldwin Pennin 34.40 33 P P 18 32 23.8 +0.7**
**F17K Baldwin Pennin 34.40 33 P P 18 32 23.5 +0.3**
baz=254
**M16K Timber Creek 34.40 42 P P 18 32 23.7 +0.3**
baz=265
**N16K Nishlik Lake 34.44 43 P P 18 32 24.6 +0.9**
baz=266
**J17K VABM Dome 34.65 38 P P 18 32 25.8 +0.4**
baz=261
**O16K Kokwok River B 34.73 45 P P 18 32 26.5 +0.4**
baz=268
**P16K Nushagak River 34.76 46 P P 18 32 27.0 +0.6**
baz=268
**K17K Iditarod 34.90 39 P P 18 32 28.3 +0.6**
baz=263
**R16K Pilot Point 34.96 48 P P 18 32 28.7 +0.6**
baz=271
**F18K Selawik 35.06 33 P P 18 32 29.5 +0.6**
baz=256
**C18K Utukok River 35.07 29 P P 18 32 29.4 +0.2**
baz=252
**B18K Kokolik River 35.11 28 P P 18 32 29.4 +0.1**
baz=250
**M17K Holitna River 35.17 42 P P 18 32 30.7 +0.8**
baz=266
**N17K Nushagak Hills 35.23 43 P P 18 32 31.0 +0.6**
baz=267
**O17K Koliganek Bris 35.24 45 P P 18 32 31.4 +0.8**
baz=268
**H18K Honhosa River 35.26 35 P P 18 32 31.6 +0.9**
H18K IAmb IAmb 18 32 51.1
comp=Z,7.3nm,0.9s
**H18K Honosa River 35.26 35 P P 18 32 31.0 +0.3**
baz=259
**KNGR Kungurtug, Tuv 35.27 299⇑ *e*P P 18 32 30.8 -0.3**
KNGR pmax pmax
comp=Z,3.0nm,0.9s
**G18K Tagagawik 35.29 34 P P 18 32 31.8 +0.9**
G18K IAmb IAmb 18 32 32.9
comp=Z,8.3nm,1.0s
**G18K Tagagawik 35.29 34 P P 18 32 31.4 +0.4**
baz=258,SNR=7.0
**LZH Lanzhou 35.57 273 *e*P P 18 32 35.0 +1.1**
LZH sP pwP 18 32 47.8 -1.5
LZH pmax pmax
comp=Z,64nm,1.0s
**L18K Granite Mounta 35.59 40 P P 18 32 34.5 +1.0**
baz=265
**R17L Mt. Peulik Vol 35.62 48 P P 18 32 33.5 -0.3**
baz=272
**J18K Innoko River 35.71 38 P P 18 32 34.5 -0.1**
baz=263
**C19K Lookout Ridge 35.77 28 P P 18 32 35.8 +0.8**
C19K IAmb IAmb 18 32 37.0
comp=Z,20nm,1.1s
**C19K Lookout Ridge 35.77 28 P P 18 32 35.3 +0.2**
baz=253,SNR=6.1
**F19K Shaleruckik Mo 35.84 32 P P 18 32 36.1 +0.5**
F19K IAmb IAmb 18 32 44.3
comp=Z,5.8nm,0.8s
**F19K Shaleruckik Mo 35.84 32 P P 18 32 36.4 +0.8**
baz=258
**N18K Kilae Creek 35.88 43 P P 18 32 36.3 +0.3**
baz=268
**M18K Stony River 35.95 42 P P 18 32 36.8 +0.2**
baz=267
**G19K Purcell Mounta 35.97 34 P P 18 32 37.2 +0.5**
**G19K Purcell Mounta 35.97 34 P P 18 32 37.6 +0.9**
baz=259
**D19K Kuna River 36.11 30 P P 18 32 38.5 +0.5**
**D19K Kuna River 36.11 30 P P 18 32 38.3 +0.3**
baz=255,SNR=10.0
**H19K Roundabout Mou 36.12 35 P P 18 32 38.3 +0.3**
**H19K Roundabout Mou 36.12 35 P P 18 32 38.6 +0.6**
baz=261,SNR=13
**E19K Redstone River 36.18 31 P P 18 32 39.1 +0.5**
E19K IAmb IAmb 18 32 44.3
comp=Z,13nm,0.9s
**E19K Redstone River 36.18 31 P P 18 32 39.2 +0.6**
baz=257,SNR=11
**P18K Big Mountain, 36.18 45 P P 18 32 39.3 +0.6**
baz=270
**J19K Poorman 36.25 37 P P 18 32 39.5 +0.3**
J19K IAmb IAmb 18 32 54.8
comp=Z,6.7nm,1.0s
**J19K Poorman 36.25 37 P P 18 32 39.7 +0.5**
baz=264
**Q18K Katmai Hardscr 36.31 47 P P 18 32 40.3 +0.4**
baz=272
**N19K Bonanza Creek 36.57 43 P P 18 32 42.6 +0.5**
baz=269
**M19K Big River Lodg 36.65 41 P P 18 32 43.2 +0.6**
baz=268
**F20K Avaraart Lake 36.67 32 P P 18 32 43.6 +0.9**
**F20K Avaraart Lake 36.67 32 P P 18 32 43.4 +0.7**
baz=259
**D20K Etivluk River 36.70 30 P P 18 32 43.7 +0.7**
baz=256,SNR=20
**E20K Nigu River 36.75 30 P P 18 32 43.9 +0.4**
baz=257
**H20K Anotleneega Mo 36.76 35 P P 18 32 43.8 +0.3**
baz=262,SNR=5.5
**B20K Meade River 36.85 27 P P 18 32 44.3 +0.2**
baz=254
**K20K Telida 36.88 39 P P 18 32 43.9 -0.7**
baz=266
**L20K Farewell, AK 36.92 40 P P 18 32 45.1 +0.2**
baz=267
**J20K Nowinta River 36.92 37 P P 18 32 46.2 +1.3**
**J20K Nowinta River 36.92 37 P P 18 32 45.1 +0.2**
baz=265
**GTA Gaotai 37.01 280 P P 18 32 47.3 +1.1**
GTA pmax pmax
comp=Z,12nm,0.8s
**P19K Oil Pt 37.20 45 P P 18 32 47.5 +0.1**
baz=272
**M20K Styx River 37.24 41 P P 18 32 48.1 +0.3**
baz=269
**C21K Knifeblade Rid 37.45 29 P P 18 32 49.7 +0.4**
baz=258,SNR=7.9
**G21K Allakaket 37.45 33 P P 18 32 49.2 -0.2**
G21K IAmb IAmb 18 33 10.3
comp=Z,7.4nm,0.8s
**G21K Allakaket 37.45 33 P P 18 32 49.9 +0.5**
baz=262,SNR=9.5
**F21K Alatna River 37.56 32 P P 18 32 50.6 +0.2**
**F21K Alatna River 37.56 32 P P 18 32 50.6 +0.2**
baz=261
**E21K Killik River 37.59 30 IAmb IAmb 18 32 52.3**
comp=Z,12nm,1.1s
**E21K Killik River 37.59 30 P P 18 32 50.5 0.0**
baz=259,SNR=8.6
**B21K Ikpikpuk River 37.61 28 P P 18 32 51.1 +0.5**
**B21K Ikpikpuk River 37.61 28 P P 18 32 51.5 +0.9**
baz=257,SNR=12
**KDAK Kodiak Island 37.63 48 P P 18 32 50.9 -0.1**
comp=Z,3.9nm,0.8s,baz=257,slow=14,SNR=3.6
KDAK LR LR 18 47 05.5
comp=Z,114nm,21.9s,baz=2.4,slow=34
comp=Z,3.9nm,0.8s
**KDAK Kodiak Island 37.63 48 P P 18 32 52.0 +1.0**
baz=275
**H21K Melozitna Rive 37.63 35 P P 18 32 52.0 +1.0**
baz=264
**SKT Skwentna 38.00 41 P P 18 32 54.7 +0.6**
baz=270
**F22K John River 38.10 32 P P 18 32 55.7 +0.8**
baz=262,SNR=8.3
**D22K Ayikyak River 38.13 30 IAmb IAmb 18 33 00.1**
comp=Z,10nm,0.8s
**D22K Ayikyak River 38.13 30 P P 18 32 55.8 +0.6**
baz=260
**B22K Teshekpuk Lake 38.17 27 P P 18 32 55.7 +0.3**
baz=258
**CD2 Chengdu 38.25 266 P P 18 32 57.0 +0.4**
CD2 pmax pmax
comp=Z,20nm,0.5s
**G22K Bettles 38.29 33 P P 18 32 56.9 +0.5**
baz=264
**BPAW Bear Paw Mtn. 38.30 38 P P 18 32 57.0 +0.5**
baz=268
**E22K Anaktuvuk Pass 38.33 31 IAmb IAmb 18 33 13.4**
comp=Z,17nm,0.7s
**E22K Anaktuvuk Pass 38.33 31 P P 18 32 57.3 +0.5**
baz=262,SNR=28
**SUA Susitna One 38.38 42 P P 18 32 58.4 +1.0**
baz=271
**MLY Manley 38.45 36 P P 18 32 58.7 +0.8**
**MLY Manley 38.45 36 P P 18 32 58.1 +0.3**
baz=267
**BRSE Bradley Lake S 38.45 45 P P 18 32 58.5 +0.5**
baz=274
**COLD Coldfoot 38.83 33 P P 18 33 01.0 0.0**
baz=265
**G23K Bananza Creek 38.86 33 P P 18 33 01.4 +0.2**
baz=266
**D23K Nanushuk River 38.86 30 P P 18 33 02.3 +1.0**
**D23K Nanushuk River 38.86 30 P P 18 33 01.3 +0.1**
baz=262,SNR=5.1
**H23K Yukon River 38.99 35 P P 18 33 03.0 +0.6**
baz=267
**C23K Itkillik River 39.02 28 IAmb IAmb 18 33 04.6**
comp=Z,20nm,0.9s
**C23K Itkillik River 39.02 28 P P 18 33 02.7 +0.2**
baz=261,SNR=9.2
**I23K Minto, Yukon-K 39.04 36 P P 18 33 02.9 +0.3**
baz=268
**E23K Chandalar 39.14 31 IAmb IAmb 18 33 24.6**
comp=Z,9.3nm,0.7s
**E23K Chandalar 39.14 31 P P 18 33 04.4 +0.8**
baz=264,SNR=11
**NEA2 Nenana 39.14 37 P P 18 33 04.5 +0.9**
baz=269
**PMR Palmer 39.15 42 P P 18 33 04.9 +1.2**
baz=273
**MCK McKinley 39.19 38 P P 18 33 04.2 +0.1**
baz=270
**TOLK Toolik Lake Re 39.22 30 IAmb IAmb 18 33 06.3**
comp=Z,9.4nm,0.9s
**TOLK Toolik Lake Re 39.22 30 P P 18 33 05.0 +0.7**
baz=264,SNR=6.4
**WAT1 Susitna Watana 39.38 40 P P 18 33 06.4 +0.8**
baz=272
**KNK Knik Glacier 39.48 42 P P 18 33 06.6 +0.1**
KNK IAmb IAmb 18 33 32.5
comp=Z,9.6nm,1.0s
KNK **S 18 39 03.1 -3.1**
**KNK Knik Glacier 39.48 42 P P 18 33 07.0 +0.5**
baz=273
**MDM Murphy Dome 39.51 36 P P 18 33 07.6 +0.9**
**SML Sawmill 39.52 41 P P 18 33 07.4 +0.5**
SML IAmb IAmb 18 33 24.4
comp=Z,13nm,0.7s
**SML Sawmill 39.52 41 P P 18 33 07.2 +0.3**
baz=273,SNR=6.6
**D24K Happy Valley 39.55 30 IAmb IAmb 18 33 14.7**
comp=Z,18nm,0.6s
**D24K Happy Valley 39.55 30 P P 18 33 07.3 +0.4**
baz=264
**E24K Your Creek 39.56 31 IAmb IAmb 18 33 25.5**
comp=Z,12nm,0.7s
**E24K Your Creek 39.56 31 P P 18 33 08.1 +0.9**
baz=265,SNR=12
**WRH Wood River Hil 39.57 37 P P 18 33 08.7 +1.6**
**PWL Port Wells 39.58 43 P P 18 33 07.6 +0.3**
**PWL Port Wells 39.58 43 P P 18 33 08.1 +0.8**
baz=274
**C24K Franklin Bluff 39.66 29 IAmb IAmb 18 33 09.7**
comp=Z,16nm,0.8s
**C24K Franklin Bluff 39.66 29 P P 18 33 08.1 +0.3**
baz=263
**H24K Noodor Dome 39.68 35 P P 18 33 08.7 +0.6**
baz=269
**CCB Clear Creek Bu 39.69 37 P P 18 33 07.9 -0.3**
**F24K Squaw Lake 39.75 32 P P 18 33 10.0 +1.3**
**F24K Squaw Lake 39.75 32 P P 18 33 09.6 +0.9**
baz=266
**WAT6 Susitna Watana 39.76 40 P P 18 33 09.6 +0.6**
baz=273
**M23K Glacier View 39.81 41 P P 18 33 09.7 +0.5**
baz=274
**POKR Poker Plat Res 39.85 36 P P 18 33 09.6 +0.1**
baz=270
**G24K Hadweenzic Riv 39.87 34 IAmb IAmb 18 33 36.5**
comp=Z,7.9nm,0.8s
**G24K Hadweenzic Riv 39.87 34 P P 18 33 10.4 +0.7**
baz=268,SNR=5.4
**DHY Denali Highway 39.91 39 P P 18 33 10.4 +0.2**
baz=272
**SCM Sheep Creek Mo 39.99 41 P P 18 33 10.8 0.0**
**SCM Sheep Creek Mo 39.99 41 P P 18 33 11.2 +0.4**
baz=274
**SCM Sheep Creek Mo 39.99 41 P P 18 33 10.8 0.0**
SCM pmax pmax
comp=Z,8.0nm,1.0s
**HDA Harding Lake 40.06 37 P P 18 33 11.5 +0.2**
baz=271
**IL31 40.08 37 P P 18 33 10.8 -0.5**
**ILAR Eielson Array 40.08 37 P P 18 33 11.4 0.0**
comp=Z,1.0nm,0.7s,baz=269,slow=8.5,SNR=11
comp=Z,1.0nm,0.7s
**P23K Montague Islan 40.11 44 P P 18 33 12.3 +0.5**
baz=276
**GLI Glacier Island 40.18 43 P P 18 33 12.7 +0.4**
baz=275
**G25K Bearman Lake 40.41 33 P P 18 33 14.9 +0.8**
baz=269
**D25K Kavik River 40.43 29 P P 18 33 15.2 +0.9**
D25K IAmb IAmb 18 33 19.5
comp=Z,15nm,0.9s
**D25K Kavik River 40.43 29 P P 18 33 14.5 +0.2**
baz=266,SNR=11
**M24K Tolsona, Glenn 40.52 41 P P 18 33 16.0 +0.8**
baz=274
**H25L Birch Creek 40.52 34 P P 18 33 14.9 -0.1**
baz=270
**K24K Donnelly Dome 40.59 38 P P 18 33 16.0 +0.3**
baz=273
**PRP Porcupine Dome 40.65 35 P P 18 33 16.5 +0.2**
baz=271
**KLU Klutina 40.69 42 P P 18 33 16.8 +0.2**
KLU IAmb IAmb 18 33 20.1
comp=Z,16nm,1.3s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KLU | Klutina | 40.69 | 42 | P | | P | | 18 33 17.0 | +0.4 | |
| | baz=276 | | | | | | | | | |
| Q23K | Middleton Isla | 40.71 | 45 | P | | P | | 18 33 17.1 | +0.5 | |
| | baz=278 | | | | | | | | | |
| J25K | Salcha River, | 40.74 | 37 | P | | P | | 18 33 17.4 | +0.5 | |
| | baz=272 | | | | | | | | | |
| PAX | Paxson | 40.78 | 39 | P | | P | | 18 33 16.9 | -0.5 | |
| | baz=274 | | | | | | | | | |
| EYAK | Cordova Ski Ar | 40.87 | 43 | P | | P | | 18 33 17.8 | -0.2 | |
| | baz=277 | | | | | | | | | |
| C26K | Camden Bay | 40.98 | 29 | P | | P | | 18 33 18.6 | -0.2 | |
| | baz=266 | | | | | | | | | |
| RIDG | Independent Ri | 41.01 | 38 | P | | P | | 18 33 19.1 | -0.1 | |
| | baz=274 | | | | | | | | | |
| BMAR | Burnt Mountain | 41.02 | 32 | P | | P | | 18 33 19.9 | +0.7 | |
| F26K | Sheenjek River | 41.19 | 32 | P | | P | | 18 33 21.6 | +1.1 | |
| F26K | Sheenjek River | 41.19 | 32 | P | | P | | 18 33 21.1 | +0.5 | |
| | baz=270 | | | | | | | | | |
| N25K | Chitina, Valde | 41.31 | 41 | P | | P | | 18 33 22.2 | +0.5 | |
| | baz=276 | | | | | | | | | |
| G26K | Porcupine Rive | 41.33 | 33 | P | | P | | 18 33 22.6 | +1.0 | |
| | baz=271 | | | | | | | | | |
| SCRK | Sand Creek | 41.38 | 38 | P | | P | | 18 33 22.5 | +0.2 | |
| SCRK | Sand Creek | 41.38 | 38 | P | | P | | 18 33 22.3 | 0.0 | |
| | baz=274 | | | | | | | | | |
| BMRM | Bremner River | 41.38 | 42 | P | | P | | 18 33 22.3 | +0.1 | |
| | baz=277 | | | | | | | | | |
| C27K | Jago River | 41.39 | 29 | P | | P | | 18 33 22.9 | +0.7 | |
| | baz=268,SNR=14 | | | | | | | | | |
| J26L | Joseph Creek | 41.52 | 37 | P | | P | | 18 33 23.6 | +0.2 | |
| | baz=274 | | | | | | | | | |
| KAIM | Kayak Island | 41.61 | 44 | P | | P | | 18 33 24.7 | +0.7 | |
| | baz=278 | | | | | | | | | |
| I26K | Coal Creek Min | 41.65 | 36 | P | | P | | 18 33 24.2 | -0.1 | |
| | baz=273 | | | | | | | | | |
| L26K | Log Cabin Wild | 41.74 | 39 | P | | P | | 18 33 25.4 | +0.2 | |
| | baz=276 | | | | | | | | | |
| DGZ | Jazzator, Alta | 41.78 | 300⇑ | *e*P | | P | | 18 33 26.1 | +0.3 | |
| DGZ | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | | |
| VRDI | Verde Repeater | 41.90 | 42 | P | | P | | 18 33 28.1 | +1.4 | |
| VRDI | | | | IAmb | | IAmb | | 18 33 57.2 | | |
| | comp=Z,13nm,1.1s | | | | | | | | | |
| M26K | Nabesna, AK | 41.97 | 40 | P | | P | | 18 33 27.2 | +0.1 | |
| | baz=277,SNR=7.5 | | | | | | | | | |
| GOMU | GeErMu | 41.98 | 279 | P | | P | | 18 33 28.3 | +0.4 | |
| GOMU | | | | pP | | pP | | 18 33 31.8 | -4.0 | |
| GOMU | | | | sP | | sP | | 18 33 37.3 | -1.6 | |
| GOMU | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| MCARA | McCarthy VSAT | 42.09 | 42 | P | | P | | 18 33 28.1 | +0.2 | |
| | baz=278 | | | | | | | | | |
| CRQM | Cirque | 42.12 | 42 | IAmb | | IAmb | | 18 33 31.5 | | |
| | comp=Z,23nm,1.1s | | | | | | | | | |
| CRQE | Cirque | 42.14 | 42 | P | | P | | 18 33 29.2 | +0.6 | |
| | baz=279 | | | | | | | | | |
| E27K | Coleen River | 42.15 | 31 | P | | P | | 18 33 28.7 | +0.3 | |
| | baz=272 | | | | | | | | | |
| G27K | Doyon Strip | 42.18 | 33 | P | | P | | 18 33 28.6 | 0.0 | |
| | baz=273 | | | | | | | | | |
| ZALV | Zalesovo Beam | 42.20 | 307 | P | | P | | 18 33 27.1 | -1.9 | |
| | comp=Z,1.8nm,0.4s,baz=79,slow=7.8,SNR=10 | | | | | | | | | |
| ZALV | | | | PcP | | PcP | | 18 35 22.9 | +0.3 | |
| | comp=Z,3.4nm,0.7s,baz=88,slow=3.2,SNR=11 | | | | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | | | | |
| K27K | Chicken | 42.21 | 37 | P | | P | | 18 33 30.0 | +1.1 | |
| | baz=276 | | | | | | | | | |
| PZH | PanZhiHua | 42.24 | 262 | P | | P | | 18 33 31.8 | +2.0 | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| PZH | | | | pmax | | pmax | | | | |
| | comp=Z,150nm,6.9s | | | | | | | | | |
| H27K | Steamboat Moun | 42.26 | 34 | P | | P | | 18 33 29.9 | +0.5 | |
| | baz=274 | | | | | | | | | |
| D27M | Malcolm River | 42.35 | 30 | P | | P | | 18 33 31.0 | +0.9 | |
| D27M | Malcolm River | 42.35 | 30 | P | | P | | 18 33 30.6 | +0.5 | |
| | baz=271 | | | | | | | | | |
| L27K | Beaver Creek, | 42.43 | 39 | IAmb | | IAmb | | 18 33 48.4 | | |
| | comp=Z,6.1nm,0.7s | | | | | | | | | |
| L27K | Beaver Creek, | 42.43 | 39 | P | | P | | 18 33 31.7 | +0.9 | |
| | baz=277,SNR=6.1 | | | | | | | | | |
| BCAR | Beaver Creek A | 42.45 | 39 | P | | P | | 18 33 31.7 | +0.7 | |
| M27K | Edge Creek, AK | 42.49 | 40 | P | | P | | 18 33 31.8 | +0.3 | |
| | baz=278 | | | | | | | | | |
| EGAK | Eagle | 42.53 | 36 | P | | P | | 18 33 31.6 | +0.1 | |
| EGAK | Eagle | 42.53 | 36 | P | | P | | 18 33 32.5 | +1.0 | |
| | baz=276 | | | | | | | | | |
| F28M | Old Crow | 42.82 | 32 | P | | P | | 18 33 34.4 | +0.5 | |
| | baz=274 | | | | | | | | | |
| E28M | Babbage River | 42.89 | 31 | P | | P | | 18 33 35.6 | +1.2 | |
| E28M | Babbage River | 42.89 | 31 | P | | P | | 18 33 35.0 | +0.6 | |
| | baz=273 | | | | | | | | | |
| CTG | Chitna Glacier | 42.96 | 42 | P | | P | | 18 33 36.0 | +0.8 | |
| | baz=280 | | | | | | | | | |
| CTGM | Chitina Glacie | 42.96 | 42 | IAmb | | IAmb | | 18 33 38.0 | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| I28M | Miner Creek | 42.98 | 35 | IAmb | | IAmb | | 18 33 56.3 | | |
| | comp=Z,7.2nm,0.8s | | | | | | | | | |
| I28M | Miner Creek | 42.98 | 35 | P | | P | | 18 33 36.1 | +0.8 | |
| | baz=276 | | | | | | | | | |
| YUK3 | Moose Creek | 43.24 | 41 | P | | P | | 18 33 37.8 | +0.2 | |
| | baz=280,SNR=5.9 | | | | | | | | | |
| DAWY | Dawson | 43.38 | 37 | P | | P | | 18 33 38.7 | +0.3 | |
| | baz=278 | | | | | | | | | |
| E29M | Blow River | 43.51 | 31 | IAmb | | IAmb | | 18 33 58.1 | | |
| | comp=Z,5.4nm,0.7s | | | | | | | | | |
| E29M | Blow River | 43.51 | 31 | P | | P | | 18 33 40.0 | +0.6 | |
| | baz=275 | | | | | | | | | |
| H29M | Whitestone | 43.54 | 34 | P | | P | | 18 33 40.7 | +1.0 | |
| H29M | Whitestone | 43.54 | 34 | P | | P | | 18 33 40.1 | +0.4 | |
| | baz=277 | | | | | | | | | |
| O28M | Mount Upton | 43.55 | 42 | P | | P | | 18 33 40.4 | +0.3 | |
| | baz=281 | | | | | | | | | |
| G29M | Pine Creek | 43.60 | 33 | IAmb | | IAmb | | 18 33 58.2 | | |
| | comp=Z,8.3nm,0.8s | | | | | | | | | |
| G29M | Pine Creek | 43.60 | 33 | P | | P | | 18 33 40.8 | +0.6 | |
| | baz=276 | | | | | | | | | |
| WMQ | Urumqi | 43.63 | 292 | *e*P | | P | | 18 33 41.8 | +1.0 | |
| WMQ | | | | sP | | sP | | 18 33 52.8 | +1.0 | |
| WMQ | | | | pmax | | pmax | | | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| I29M | Ogilvie Camp, | 43.67 | 35 | P | | P | | 18 33 41.5 | +0.8 | |
| | baz=278,SNR=8.9 | | | | | | | | | |
| M29M | Somme Creek | 44.05 | 39 | P | | P | | 18 33 45.0 | +1.0 | |
| | baz=280 | | | | | | | | | |
| YUK4 | Talbot Arm | 44.17 | 41 | P | | P | | 18 33 45.8 | +0.7 | |
| | baz=281 | | | | | | | | | |
| EPYK | Eagle Plains | 44.18 | 34 | P | | P | | 18 33 45.0 | +0.1 | |
| EPYK | | | | IAmb | | IAmb | | 18 34 02.4 | | |
| | comp=Z,17nm,1.1s | | | | | | | | | |
| EPYK | Eagle Plains | 44.18 | 34 | P | | P | | 18 33 45.4 | +0.6 | |
| | baz=278 | | | | | | | | | |
| K29M | Barlow Dome | 44.23 | 37 | P | | P | | 18 33 45.8 | +0.4 | |
| | baz=280 | | | | | | | | | |
| G30M | tAoh Zraii Nji | 44.30 | 33 | IAmb | | IAmb | | 18 34 08.1 | | |
| | comp=Z,6.6nm,0.7s | | | | | | | | | |
| G30M | tAoh Zraii Nji | 44.30 | 33 | P | | P | | 18 33 46.5 | +0.8 | |
| | baz=278 | | | | | | | | | |
| F30M | Barrier River | 44.38 | 32 | P | | P | | 18 33 47.0 | +0.6 | |
| | baz=277 | | | | | | | | | |
| I30M | Mount Dempster | 44.49 | 35 | IAmb | | IAmb | | 18 34 14.2 | | |
| | comp=Z,8.8nm,0.8s | | | | | | | | | |
| I30M | Mount Dempster | 44.49 | 35 | P | | P | | 18 33 47.9 | +0.5 | |
| | baz=279,SNR=8.6 | | | | | | | | | |
| J30M | Hart River | 44.62 | 36 | P | | P | | 18 33 48.3 | -0.2 | |
| | baz=280 | | | | | | | | | |
| N30M | Aishikik Lake | 44.88 | 41 | P | | P | | 18 33 50.8 | +0.3 | |
| | baz=283 | | | | | | | | | |
| P29M | Windy Craggy | 44.98 | 43 | P | | P | | 18 33 51.7 | +0.3 | |
| | baz=284,SNR=5.1 | | | | | | | | | |
| G31M | Satah River | 45.06 | 33 | P | | P | | 18 33 53.2 | +1.4 | |
| G31M | | | | IAmb | | IAmb | | 18 34 11.9 | | |
| | comp=Z,7.1nm,1.1s | | | | | | | | | |
| G31M | Satah River | 45.06 | 33 | P | | P | | 18 33 52.4 | +0.7 | |
| | baz=279 | | | | | | | | | |
| INK | Inuvik | 45.13 | 31 | P | | P | | 18 33 53.0 | +0.8 | |
| | comp=Z,1.9nm,0.5s,baz=346,slow=4.2,SNR=2.9 | | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | | |
| INK | Inuvik | 45.13 | 31 | P | | P | | 18 33 53.0 | +0.8 | |
| | baz=279 | | | | | | | | | |
| F31M | Tsiigehtchic | 45.18 | 32 | P | | P | | 18 33 53.5 | +0.8 | |
| | baz=279 | | | | | | | | | |
| H31M | Peel River | 45.23 | 34 | P | | P | | 18 33 53.8 | +0.7 | |
| | baz=280 | | | | | | | | | |
| P30M | Million Dollar | 45.25 | 42 | P | | P | | 18 33 54.5 | +1.0 | |
| | baz=284 | | | | | | | | | |
| N31M | Braeburn, Yuko | 45.49 | 40 | P | | P | | 18 33 56.6 | +1.2 | |
| | baz=284 | | | | | | | | | |
| O30N | Mendenhall | 45.51 | 41 | P | | P | | 18 33 55.8 | +0.3 | |
| | baz=284 | | | | | | | | | |
| PLBC | Pleasant Camp | 45.70 | 43 | P | | P | | 18 33 58.3 | +1.3 | |
| | baz=285 | | | | | | | | | |
| M31M | Drury Creek, Y | 45.96 | 39 | P | | P | | 18 33 59.7 | +0.7 | |
| | baz=284 | | | | | | | | | |
| MK31 | Makanchi Array | 46.00 | 298 | *c* iP | | P | | 18 33 59.8 | +0.2 | |
| MKAR | Makanchi Array | 46.00 | 298 | P | | P | | 18 33 59.7 | +0.1 | |
| MKAR | Makanchi Array | 46.00 | 298 | P | | P | | 18 34 00.0 | +0.4 | |
| | comp=Z,18nm,0.7s,baz=73,slow=8.0,SNR=108 | | | | | | | | | |
| | comp=Z,18nm,0.7s | | | | | | | | | |
| MKAR | Makanchi Array | 46.00 | 298 | *e*P | | P | | 18 33 59.7 | +0.1 | |
| MKAR | Makanchi Array | 46.00 | 298 | P | | P | | 18 33 59.7 | +0.1 | |
| WHY | Whitehorse | 46.12 | 41 | P | | P | | 18 34 01.0 | +0.6 | |
| | baz=285 | | | | | | | | | |
| S31K | Pelican | 46.18 | 45 | P | | P | | 18 34 01.9 | +1.2 | |
| | baz=286 | | | | | | | | | |
| MAKZ | Makanchi | 46.20 | 298 | P | | P | | 18 34 00.8 | -0.3 | |
| MAKZ | Makanchi | 46.20 | 298 | P | | P | | 18 34 00.8 | -0.3 | |
| MAKZ | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| SKAG | Skagway | 46.22 | 43 | P | | P | | 18 34 01.8 | +0.8 | |
| | baz=286 | | | | | | | | | |
| FARO | Faro, Yukon | 46.43 | 39 | P | | P | | 18 34 03.5 | +0.8 | |
| | baz=285 | | | | | | | | | |
| KURK | Kurchatov | 46.80 | 304 | P | | P | | 18 34 05.2 | -0.5 | |
| KURK | Kurchatov | 46.80 | 304 | *e*P | | P | | 18 34 05.6 | -0.1 | |
| KURK | Kurchatov | 46.80 | 304⇓ | *e*P | | P | | 18 34 05.6 | -0.1 | |
| KURK | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | | |
| N32M | Quiet Lake | 46.83 | 40 | P | | P | | 18 34 06.8 | +0.9 | |
| | baz=286 | | | | | | | | | |
| KURBB | Kurchatov Arra | 46.89 | 304 | P | | P | | 18 34 05.8 | -0.6 | |
| | comp=Z,3.8nm,0.4s,baz=71,slow=7.9,SNR=24 | | | | | | | | | |
| KURBB | | | | PcP | | PcP | | 18 35 38.7 | -0.1 | |
| | comp=Z,1.5nm,0.6s,baz=72,slow=3.5,SNR=6.2 | | | | | | | | | |
| | comp=Z,3.8nm,0.4s | | | | | | | | | |
| R32K | Eaglecrest | 46.95 | 45 | P | | P | | 18 34 07.5 | +0.7 | |
| | baz=287 | | | | | | | | | |
| P32M | Attlin | 46.97 | 43 | P | | P | | 18 34 07.8 | +0.8 | |
| | baz=287 | | | | | | | | | |
| P33M | Teslin, Yukon | 47.22 | 42 | P | | P | | 18 34 10.0 | +1.0 | |
| P33M | | | | IAmb | | IAmb | | 18 34 12.4 | | |
| | comp=Z,7.1nm,0.9s | | | | | | | | | |
| P33M | Teslin, Yukon | 47.22 | 42 | P | | P | | 18 34 09.6 | +0.6 | |
| | baz=287,SNR=5.8 | | | | | | | | | |
| A36M | Sachs Harbour | 47.24 | 25 | P | | P | | 18 34 09.5 | +0.6 | |
| | baz=282 | | | | | | | | | |
| Q32M | Nakina River | 47.87 | 43 | P | | P | | 18 34 14.7 | +0.5 | |
| | baz=288 | | | | | | | | | |
| C36M | Paulatuk | 48.27 | 28 | P | | P | | 18 34 16.8 | 0.0 | |
| | baz=286 | | | | | | | | | |
| R33M | Jennings River | 48.36 | 42 | IAmb | | IAmb | | 18 34 35.5 | | |
| | comp=Z,7.5nm,1.1s | | | | | | | | | |
| R33M | Jennings River | 48.36 | 42 | P | | P | | 18 34 18.3 | +0.3 | |
| | baz=289 | | | | | | | | | |
| U33K | Whale Pass | 48.37 | 47 | P | | P | | 18 34 18.8 | +1.1 | |
| | baz=290 | | | | | | | | | |
| PHRA | Phrae | 48.46 | 254 | P | | P | | 18 34 20.0 | +1.1 | |
| CRAG | Craig | 48.59 | 48 | P | | P | | 18 34 20.0 | +0.5 | |
| | baz=291 | | | | | | | | | |
| WRAK | Wrangell Islan | 48.67 | 46 | P | | P | | 18 34 20.5 | +0.4 | |
| | baz=290 | | | | | | | | | |
| S34M | Telegraph Cree | 48.78 | 44 | P | | P | | 18 34 21.5 | +0.6 | |
| | baz=290 | | | | | | | | | |
| TGTN | Hyland Airport | 48.93 | 39 | P | | P | | 18 34 22.6 | +0.4 | |
| | baz=289 | | | | | | | | | |
| DLBC | Dease Lake | 49.14 | 43 | P | | P | | 18 34 25.6 | +1.7 | |
| | comp=Z,1.2nm,0.3s,baz=302,slow=11,SNR=3.2 | | | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | | | |
| DLBC | Dease Lake | 49.14 | 43 | P | | P | | 18 34 24.7 | +0.9 | |
| | baz=290 | | | | | | | | | |
| WTLY | Watson Lake, Y | 49.16 | 41 | P | | P | | 18 34 24.9 | +1.0 | |
| | baz=290 | | | | | | | | | |
| CMAR | Chiang Mai Arr | 49.38 | 255 | P | | P | | 18 34 27.2 | +1.1 | |
| | comp=Z,0.8nm,0.5s,baz=54,slow=8.3,SNR=7.4 | | | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | | | |
| CMAR | Chiang Mai Arr | 49.38 | 255 | *i* P | | P | | 18 34 27.8 | +1.7 | |
| CMAR | | | | pmax | | pmax | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | | |
| V35K | Ketchikan | 49.45 | 48 | P | | P | | 18 34 26.7 | +0.6 | |
| | baz=292 | | | | | | | | | |
| T35M | Bob Quinn | 49.55 | 45 | P | | P | | 18 34 28.4 | +1.5 | |
| | baz=292 | | | | | | | | | |
| BVAR | Borovoye Array | 50.65 | 310 | P | | P | | 18 34 35.1 | -0.2 | |
| | comp=Z,2.1nm,0.6s,baz=57,slow=11,SNR=11 | | | | | | | | | |
| BVAR | | | | PcP | | PcP | | 18 35 52.5 | +0.2 | |
| | comp=Z,1.6nm,0.7s,baz=29,slow=3.4,SNR=3.9 | | | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | | | |
| BRVK | Borovoye | 50.69 | 310 | *e*P | | P | | 18 34 36.1 | +0.6 | |
| BRVK | Borovoye | 50.69 | 310 | *de*P | | P | | 18 34 36.1 | +0.6 | |
| BRVK | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | | |
| TOAD | Toad River Com | 51.32 | 42 | P | | P | | 18 34 40.8 | +0.5 | |
| | baz=293 | | | | | | | | | |
| AAK | Ala-Archa | 52.81 | 296 | P | | P | | 18 34 51.7 | -0.1 | |
| AAK | | | | IAmb | | IAmb | | 18 35 05.8 | | |
| | comp=Z,10nm,0.9s | | | | | | | | | |
| AAK | Ala-Archa | 52.81 | 296 | *e*P | | P | | 18 34 52.4 | +0.6 | |
| AAK | Ala-Archa | 52.81 | 296 | *ce*P | | P | | 18 34 52.4 | +0.6 | |
| AAK | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,1.3s | | | | | | | | | |
| KSH | Kashi | 53.40 | 292 | P | | P | | 18 34 59.8 | +3.8 | |
| KSH | | | | sP | | pwP | | 18 35 13.0 | +1.6 | |
| KSH | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | | |
| SVE | Sverdlovsk | 54.09 | 317 | *e*P | | P | | 18 35 01.0 | +0.3 | |
| SVE | Sverdlovsk | 54.09 | 317 | *e*P | | P | | 18 35 01.0 | +0.3 | |
| SVE | | | | pmax | | pmax | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| YKA | Yellowknife Ar | 54.45 | 35 | P | | P | | 18 35 03.8 | +0.6 | |
| | comp=Z,2.5nm,0.9s,baz=302,slow=7.3,SNR=4.0 | | | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | | | |
| KK31 | Karatay Array | 55.12 | 299 | IAmb | | IAmb | | 18 35 09.7 | | |
| | comp=Z,8.8nm,0.7s | | | | | | | | | |
| KKAR | Karatay Array | 55.12 | 299 | P | | P | | 18 35 08.7 | +0.3 | |
| KKAR | Karatay Array | 55.12 | 299 | IAmb | | IAmb | | 18 35 09.7 | | |
| | comp=Z,8.7nm,0.7s | | | | | | | | | |
| KKAR | Karatay Array | 55.12 | 299 | P | | P | | 18 35 08.7 | +0.3 | |
| ARU | Arti | 55.28 | 317 | P | | P | | 18 35 09.0 | -0.3 | |
| ARU | | | | IAmb | | IAmb | | 18 35 10.1 | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| ARU | Arti | 55.28 | 317 | *e*P | | P | | 18 35 09.0 | -0.3 | |
| ARU | Arti | 55.28 | 317 | *d* iP | | P | | 18 35 09.0 | -0.3 | |
| ARU | | | | *PP | | sP | | 18 35 22.0 | +1.7 | |
| ARU | | | | | | | | 18 36 09.0 | | |
| ARU | | | | S | | S | | 18 42 48.2 | -2.5 | |
| ARU | | | | SS | | SS | | 18 46 31.9 | -2.7 | |
| ARU | | | | pmax | | pmax | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| ARU | Arti | 55.28 | 317 | P | | P | | 18 35 08.4 | -0.9 | |
| | comp=Z,16nm,0.8s | | | | | | | | | |
| BTK | Batken | 56.51 | 295 | IAmb | | IAmb | | 18 35 32.9 | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| KULM | Kulim | 57.75 | 243 | P | | P | | 18 35 28.5 | +1.2 | |
| ABKAR | Akbulak array | 58.22 | 310 | P | | P | | 18 35 30.4 | +0.2 | |
| ABKAR | Akbulak array | 58.22 | 310 | IAmb | | IAmb | | 18 35 31.6 | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| KIRV | Kirov | 58.38 | 323 | P | | P | | 18 35 31.6 | +0.3 | |
| | comp=Z,9.8nm,0.6s,baz=354,slow=7.3,SNR=4.8 | | | | | | | | | |
| | comp=Z,9.8nm,0.6s | | | | | | | | | |
| NIL | Nilore | 58.41 | 288 | P | | P | | 18 35 32.7 | +0.8 | |
| NIL | Nilore | 58.41 | 288 | P | | P | | 18 35 32.7 | +0.8 | |
| NIL | | | | pmax | | pmax | | | | |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| SIMJ | Simiganj | 58.44 | 295 | P | | P | | 18 35 32.0 | -0.2 | |
| ARCES | ARCESS Array B | 59.49 | 340 | P | | P | | 18 35 37.5 | -1.3 | |
| | comp=Z,4.2nm,1.0s,baz=349,slow=9.3,SNR=3.4 | | | | | | | | | |
| | comp=Z,4.2nm,1.0s | | | | | | | | | |
| KBL | Kabul | 60.75 | 291 | P | | P | | 18 35 47.5 | -0.8 | |
| KBL | | | | IAmb | | IAmb | | 18 35 48.7 | | |
| | comp=Z,9.2nm,0.8s | | | | | | | | | |
| KBL | Kabul | 60.75 | 291 | P | | P | | 18 35 47.5 | -0.8 | |
| KBL | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | | |
| JOF | Joensuu | 62.56 | 333 | *e*P | | P | | 18 35 59.9 | +0.2 | |
| BELG | Belogornoye | 62.84 | 318 | P | | P | | 18 36 02.1 | +0.4 | |
| | comp=Z,40nm,0.7s,baz=326,slow=2.4,SNR=18 | | | | | | | | | |
| BELG | Belogornoye | 62.84 | 318 | *c* iP | | P | | 18 36 01.9 | +0.2 | |
| BELG | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| SUMG | Summit | 63.43 | 3 | P | | P | | 18 36 06.3 | +0.4 | |
| SUMG | Summit | 63.43 | 3 | P | | P | | 18 36 06.3 | +0.4 | |
| SUMG | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| VALR | Valaam | 63.81 | 332 | *d* iP | | P | | 18 36 08.2 | +0.2 | |
| VALR | | | | pmax | | pmax | | | | |
| | comp=Z,39nm,0.9s | | | | | | | | | |
| VAF | Ylistaro | 65.13 | 336 | *e*P | | P | | 18 36 16.7 | +0.1 | |
| KEF | Keuruu | 65.15 | 335 | *e*P | | P | | 18 36 16.5 | -0.3 | |
| MOS | Moscow | 65.18 | 325 | *e*P | | P | | 18 36 16.4 | -0.6 | |
| MOS | Moscow | 65.18 | 325 | *e*P | | P | | 18 36 16.4 | -0.6 | |
| MOS | | | | *e* | | | | 18 36 27.4 | | |
| BOZ | Bozeman (W) | 65.30 | 50 | IAmb | | IAmb | | 18 36 36.8 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | | | |
| WRA | Warramunga Arr | 65.31 | 196 | P | | P | | 18 36 18.7 | +0.4 | |
| | comp=Z,2.5nm,1.0s,baz=16,slow=6.9,SNR=17 | | | | | | | | | |
| | comp=Z,2.5nm,1.0s | | | | | | | | | |
| FINES | FINESS Array B | 65.33 | 334 | P | | P | | 18 36 17.3 | -0.6 | |
| | comp=Z,18nm,0.6s,baz=37,slow=7.9,SNR=119 | | | | | | | | | |
| | comp=Z,18nm,0.6s | | | | | | | | | |
| KVN | Kaiserville | 65.56 | 59 | P | | P | | 18 36 20.3 | +0.2 | |
| KVN | | | | IAmb | | IAmb | | 18 36 39.9 | | |
| | comp=Z,4.1nm,1.0s | | | | | | | | | |
| KVN | Kaiserville | 65.56 | 59 | P | | P | | 18 36 20.3 | +0.2 | |
| KVN | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | | |
| LHV | Little Huntoon | 65.80 | 60 | P | | P | | 18 36 22.1 | +0.7 | |
| LHV | | | | IAmb | | IAmb | | 18 36 42.5 | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | | |
| NVAR | Mina Array Bea | 65.81 | 59 | P | | P | | 18 36 22.9 | +1.1 | |
| | comp=Z,1.6nm,0.9s,baz=282,slow=7.7,SNR=11 | | | | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | | | | |
| OBN | Obninsk | 66.05 | 325 | P | | P | | 18 36 22.2 | -0.4 | |
| | comp=Z,17nm,0.5s,baz=90,slow=11,SNR=6.1 | | | | | | | | | |
| | comp=Z,17nm,0.5s | | | | | | | | | |
| OBN | Obninsk | 66.05 | 325 | *e*P | | P | | 18 36 22.7 | +0.1 | |
| OBN | Obninsk | 66.05 | 325 | *ce*P | | P | | 18 36 22.7 | +0.1 | |
| OBN | | | | *e**PP | | sP | | 18 36 34.6 | +0.9 | |
| OBN | | | | *e**SP | | pwP | | 18 36 43.2 | +5.1 | |
| OBN | | | | *e* | | | | 18 36 53.5 | | |
| OBN | | | | *e* | | | | 18 38 52.8 | | |
| OBN | | | | pmax | | pmax | | | | |
| | comp=Z,35nm,1.3s | | | | | | | | | |
| OBN | | | | MLR | | MLR | | | | |
| | comp=Z,77nm,16.0s | | | | | | | | | |
| OBN | Obninsk | 66.05 | 325 | P | | P | | 18 36 22.1 | -0.5 | |
| VRH | Novokhopyorsk | 66.42 | 319 | *e*P | | P | | 18 36 24.6 | -0.5 | |
| VRH | | | | pmax | | pmax | | | | |
| | comp=Z,30nm,0.8s | | | | | | | | | |
| LPSR | Galich'ya Gora | 66.76 | 322 | *e*P | | P | | 18 36 26.6 | -0.6 | |
| LPSR | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,0.7s | | | | | | | | | |
| MEF | Metsahovi | 66.80 | 334 | *e*P | | P | | 18 36 27.4 | +0.1 | |
| ARBE | Arbavere | 66.88 | 332 | *e*P | | P | | 18 36 26.9 | -1.0 | |
| RAF | Rauma | 66.98 | 335 | *e*P | | P | | 18 36 28.1 | -0.4 | |
| VORR | Voronezh | 67.26 | 321 | *e*P | | P | | 18 36 31.0 | +0.5 | |
| VORR | | | | pmax | | pmax | | | | |
| | comp=Z,27nm,1.2s | | | | | | | | | |
| VSU | Vasula | 67.36 | 331 | *de*P | | P | | 18 36 31.2 | +0.2 | |
| VSU | | | | pmax | | pmax | | | | |
| | comp=Z,13nm,1.3s | | | | | | | | | |
| R11B | Troy Canyon, C | 67.54 | 58 | P | | P | | 18 36 33.4 | +0.7 | |
| | baz=309 | | | | | | | | | |
| VSR | Storozhevoye | 67.59 | 320 | *e*P | | P | | 18 36 32.4 | -0.2 | |
| VSR | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,0.6s | | | | | | | | | |
| VORD | Divnogorie | 67.71 | 320 | *e*P | | P | | 18 36 33.4 | +0.1 | |
| VORD | | | | pmax | | pmax | | | | |
| | comp=Z,30nm,1.2s | | | | | | | | | |
| MTSE | Matsula | 68.15 | 333 | *e*P | | P | | 18 36 36.3 | +0.4 | |
| PDAR | Pinedale Array | 68.25 | 51 | P | | P | | 18 36 37.4 | +0.3 | |
| | comp=Z,0.8nm,0.7s,baz=305,slow=2.7,SNR=6.8 | | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | | |
| ASAR | Alice Springs | 69.02 | 195 | P | | P | | 18 36 43.0 | +1.3 | |
| | comp=Z,0.8nm,0.7s,baz=16,slow=6.0,SNR=11 | | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | | |
| RDMU | Red Mountain | 69.67 | 53 | IAmb | | IAmb | | 18 37 05.4 | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | | |
| NC405 | NORSAR Array S | 69.68 | 340 | P | | P | | 18 36 45.0 | -0.4 | |
| NC204 | NORSAR Array S | 69.77 | 340 | P | | P | | 18 36 46.0 | -0.1 | |
| LCMT | Little Creek M | 69.82 | 58 | IAmb | | IAmb | | 18 36 49.2 | | |
| | comp=Z,4.3nm,1.0s | | | | | | | | | |
| NB201 | NORSAR Array S | 69.84 | 340 | P | | P | | 18 36 46.3 | -0.2 | |
| NB2 | NORSAR Subarra | 69.86 | 340 | P | | P | | 18 36 46.4 | -0.2 | |
| | comp=Z,14nm,0.7s,baz=29,slow=6.5 | | | | | | | | | |
| NB2 | NORSAR Subarra | 69.86 | 340 | P | | P | | 18 36 46.4 | -0.2 | |
| | baz=29,slow=6.5 | | | | | | | | | |
| NOA | NORSAR Array B | 69.86 | 340 | P | | P | | 18 36 46.5 | -0.2 | |
| | comp=Z,13nm,0.7s,baz=31,slow=6.3,SNR=59 | | | | | | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| GOF | Gofitskoye | 69.89 | 314 | *ce*P | | P | | 18 36 39.8 | -7.2 | |
| MNK | Minsk | 69.95 | 328 | *i* P | | P | | 18 36 48.2 | +1.0 | |
| MNK | | | | *i* | | | | 18 37 10.4 | | |
| MNK | | | | *i* | | | | 18 39 23.0 | | |
| MNK | | | | *i* PPP | | PPP | | 18 41 05.4 | | |
| MNK | | | | pmax | | pmax | | | | |
| | comp=N,15nm,0.9s | | | | | | | | | |
| MNK | | | | pmax | | pmax | | | | |
| | comp=E,20nm,0.9s | | | | | | | | | |
| MNK | | | | pmax | | pmax | | | | |
| | comp=Z,46nm,0.8s | | | | | | | | | |
| HFS | Hagfors | 70.00 | 338 | P | | P | | 18 36 47.2 | -0.2 | |
| | comp=Z,19nm,0.7s,baz=64,slow=6.8,SNR=35 | | | | | | | | | |
| | comp=Z,19nm,0.7s | | | | | | | | | |
| TPFO | Pinon Flats | 70.01 | 62 | P | | P | | 18 36 49.1 | +1.0 | |
| | baz=310 | | | | | | | | | |
| ULM | Lac du Bonnet | 70.07 | 38 | P | | P | | 18 36 48.5 | +0.6 | |
| | comp=Z,3.3nm,0.7s,baz=308,slow=19,SNR=2.3 | | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | | |
| KNB | Kanab | 70.07 | 58 | IAmb | | IAmb | | 18 37 08.7 | | |
| | comp=Z,5.8nm,1.1s | | | | | | | | | |
| SRU | San Rafael Swe | 70.08 | 55 | P | | P | | 18 36 49.5 | +1.0 | |
| SRU |

comp=Z,13nm,0.9s
**NDNU Novodnistrovsk 74.70 324 P P 18 37 15.3 -0.4**
**GURO Guroymak-BITLI 74.94 309 P P 18 37 17.9 +0.5**
GURO IAmb IAmb 18 37 20.1
comp=Z,4.8nm,0.8s
**T25A Trinidad 74.96 53 P P 18 37 18.5 +0.8**
baz=314
**KMPD K-Podol'skiy 75.11 325 P P 18 37 17.7 -0.3**
KMPD P P 18 37 17.4 -0.6
**MILM Milestii Mici 75.38 323 ⇓P P 18 37 18.7 -0.9**
**MILM Milestii Mici 75.38 323 ⇓P P 18 37 18.7 -0.9**
**UOSS Minazif 75.42 291 P P 18 37 19.7 -0.5**
**MORS Morshin 75.69 327 P P 18 37 20.9 -0.4**
**KWP Kalwaria Pacla 75.76 328 P P 18 37 21.9 +0.2**
comp=Z,24nm,1.1s
KWP pP **PcP 18 37 34.8 +0.5**
comp=Z,24nm,1.1s
**STNU Starunia 75.79 326 P P 18 37 21.5 -0.4**
**KSV Kosov 75.88 325 P P 18 37 21.5 -0.9**
**319A Douglas 76.02 60 IAmb IAmb** 18 37 44.2
comp=Z,7.1nm,0.9s
**121A Cookes Peak, D 76.15 58 P P 18 37 25.1 +0.6**
baz=314
**BUR08 Bucovina Ar. S 76.35 325 P P 18 37 25.6 +0.3**
BUR08 IAmb IAmb 18 37 27.2
comp=Z,5.8nm,0.8s
**BURAR Bucovina Array 76.37 325 P P 18 37 25.7 +0.4**
BURAR IAmb IAmb 18 37 27.2
comp=Z,7.6nm,0.8s
**BURAR Bucovina Array 76.37 325 ⇓P P 18 37 26.0 +0.6**
**BURAR Bucovina Array 76.37 325 ⇓P P 18 37 26.0 +0.6**
**OJC Ojcow 76.37 330 IAmb IAmb** 18 37 26.9
comp=Z,7.5nm,0.7s
**OJC Ojcow 76.37 330 P P 18 37 24.7 -0.5**
comp=Z,13nm,1.0s
**RAKU Rahkiv 76.47 326 P P 18 37 24.1 -1.7**
**KOLS Kolonicke sedl 76.49 327 eP P 18 37 27.2 +1.3**
KOLS pmax pmax
comp=Z,7.0nm,0.7s
**KOLS Kolonicke sedl 76.49 327 eP P 18 37 27.2 +1.3**
**BIZ Bicaz 76.53 324 ⇓P P** 18 37 11.8 -14
**ARPR Arapgir-MALATY 76.57 312 P P 18 37 27.6 +0.8**
ARPR IAmb IAmb 18 37 51.1
comp=Z,7.4nm,0.8s
**TESR Tescani 76.64 323 ⇑P P 18 37 27.2 +0.4**
**TESR Tescani 76.64 323 P P 18 37 27.0 +0.2**
comp=Z,10nm,0.8s
**TLCR 76.72 321 ⇓P P 18 37 27.6 +0.4**
**TLCR 76.72 321 ⇓P P 18 37 27.6 +0.4**
**HOLU Holmets 76.78 327 P P 18 37 28.6 +1.1**
**KORU Korolevo 76.78 326 P P 18 37 28.6 +1.1**
**CRVS Cervenica-Dubn 76.83 328 eP P 18 37 28.8 +1.0**
CRVS pmax pmax
comp=Z,7.0nm,0.8s
**CRVS Cervenica-Dubn 76.83 328 eP P 18 37 28.8 +1.0**
**NIE Niedzica 76.85 329 P P 18 37 28.3 +0.4**
comp=Z,5.0nm,1.1s
**ONER Baraj Valea Uz 76.88 324 ⇓P P 18 37 29.4 +1.3**
**BERU Beregovo 76.91 327 P P 18 37 28.4 +0.2**
**PANC Panciu 76.92 323 ⇑P P 18 37 30.6 +2.2**
**CFR Carcaliu 77.03 322 ⇓P P 18 37 30.9 +1.9**
**CFR Carcaliu 77.03 322 ⇓P P 18 37 30.9 +1.9**
**KSP Ksiaz 77.09 332 P P 18 37 29.0 -0.2**
comp=Z,8.5nm,1.9s
**VRI Vrincioaia 77.11 323 ⇓P P 18 37 29.4 -0.1**
**VRI Vrincioaia 77.11 323 ⇓P P 18 37 29.4 -0.1**
**TPGR Topolog 77.15 321 ⇓P P 18 37 29.8 +0.1**
**PLOR Plostina 77.15 323 ⇓P P 18 37 30.4 +0.7**
**PLOR Plostina 77.15 323 ⇓P P 18 37 30.4 +0.7**
**TURR Turia 77.27 324 ⇑P P 18 37 31.9 +1.6**
**OZUR 77.33 324 ⇑P P 18 37 31.7 +0.9**
**COVR Voineasa-Covas 77.35 323 ⇑P P 18 37 33.6 +2.7**
**LANS Liptovska Anna 77.38 329 eP P 18 37 33.0 +2.1**
LANS pmax pmax
comp=Z,6.0nm,0.8s
**LANS Liptovska Anna 77.38 329 eP P 18 37 33.0 +2.1**
**CHVC Chvalec 77.39 332 eP P 18 37 31.6 +0.7**
**CHVC Chvalec 77.39 332 eP P 18 37 31.6 +0.7**
**FLTG Flechtingen 77.43 335 eP P 18 37 31.2 +0.2**
comp=Z,9.6nm,0.8s,baz=29,slow=5.9
**DPC Dobruska-Polom 77.50 331 eP P 18 37 32.5 +0.9**
**DPC Dobruska-Polom 77.50 331 eP P 18 37 32.5 +0.9**
**DPC Dobruska-Polom 77.50 331 P P 18 37 31.6 0.0**
**HARR Harsova 77.50 322 ⇓P P 18 37 32.5 +0.9**
**HARR Harsova 77.50 322 ⇓P P 18 37 32.5 +0.9**
**MORC Moravsky Berou 77.55 331 IAmb IAmb** 18 37 35.0
comp=Z,8.7nm,0.9s
**MORC Moravsky Berou 77.55 331 eP P 18 37 32.5 +0.6**
**MORC Moravsky Berou 77.55 331 ⇓P P 18 37 33.3 +1.4**
**MORC Moravsky Berou 77.55 331 ⇓P P 18 37 33.3 +1.4**
**KRLC Kraliky 77.57 331 eP P 18 37 33.1 +1.1**
**KRLC Kraliky 77.57 331 eP P 18 37 33.1 +1.1**
**DOPR Dopca 77.60 324 ⇑P P 18 37 36.0 +3.8**
**MESR Meseseni 77.67 326 ⇑P P 18 37 33.5 +1.0**
**MLR Muntele Rosu 77.74 323 IAmb IAmb** 18 37 36.6
comp=Z,3.8nm,0.7s
**MLR Muntele Rosu 77.74 323 P P 18 37 34.0 +0.9**
comp=Z,3.2nm,0.6s,baz=346,slow=12,SNR=9.6
comp=Z,3.2nm,0.6s
**MLR Muntele Rosu 77.74 323 ⇓P P 18 37 34.7 +1.6**
**MLR Muntele Rosu 77.74 323 ⇓P P 18 37 34.7 +1.6**
**CLL Collm 77.77 334 ⇑iP P 18 37 33.4 +0.4**
comp=Z,17nm,1.0s
CLL *i* PcP **sP 18 37 45.9 +1.6**
comp=Z,9.0nm,0.5s
**CLL Collm 77.77 334 ⇑iP P 18 37 33.4 +0.4**
CLL pmax pmax
comp=Z,17nm,1.0s
**CLL Collm 77.77 334 eP P 18 37 33.3 +0.3**
comp=Z,17nm,0.9s,baz=29,slow=5.9
**ISR Istrita 77.78 323 ⇑P P 18 37 35.1 +1.9**
**ISR Istrita 77.78 323 ⇑P P 18 37 35.1 +1.9**
**BRG Berggiesshubel 77.85 333 eP P 18 37 34.1 +0.6**
BRG Amp 18 37 36.1
comp=Z,4.0nm,0.9s
**BRG Berggiesshubel 77.85 333 eP P 18 37 34.0 +0.6**
BRG pmax pmax
comp=Z,4.0nm,0.9s
BRG MLR MLR
comp=Z,705nm,20.0s
BRG MLR MLR
comp=N,622nm,24.7s
BRG MLR MLR
comp=E,487nm,22.9s
**PVCC Panska Ves 77.94 333 eP P 18 37 34.9 +0.9**
**PVCC Panska Ves 77.94 333 eP P 18 37 34.9 +0.9**
**ICOR Ion Corvin 78.00 321 ⇓P P 18 37 37.4 +3.0**
**DRGR 78.05 326 ⇓P P 18 37 35.5 +0.7**
**BNN Bunyan 78.07 313 P P 18 37 35.5 +0.4**
**CLZ Clausthal 78.12 336 eP P 18 37 36.0 +1.0**
comp=E,6.5nm,0.8s,baz=29,slow=5.9
**VYHS Vyhne 78.15 329 eP P 18 37 36.0 +0.8**
VYHS pmax pmax
comp=Z,4.0nm,0.9s
**VYHS Vyhne 78.15 329 eP P 18 37 36.0 +0.8**
**VOIR 78.17 324 ⇓P P 18 37 36.0 +0.5**
**VOIR 78.17 324 ⇓P P 18 37 36.0 +0.5**
**PSZ Piszkesteto 78.23 328 P P 18 37 35.7 -0.1**
PSZ IAmb IAmb 18 37 59.4
comp=Z,6.7nm,0.9s
**PSZ Piszkesteto 78.23 328 ⇑P P 18 37 36.0 +0.2**
**PSZ Piszkesteto 78.23 328 ⇑P P 18 37 36.0 +0.2**
**EKA Eskdalemuir Ar 78.24 345 P P 18 37 35.5 0.0**
comp=Z,2.7nm,0.8s,baz=41,slow=3.5,SNR=7.0
comp=Z,2.7nm,0.8s
**HSKC Hora Svate Kat 78.24 333 eP P 18 37 36.5 +0.8**
**JAVC Velka Javorina 78.28 330 eP P 18 37 37.8 +1.8**
**VRAC Vranov 78.28 331 eP P 18 37 36.8 +0.9**
**VRAC Vranov 78.28 331 P P 18 37 37.0 +1.1**
comp=Z,11nm,1.0s,baz=19,slow=5.2,SNR=11
comp=Z,11nm,1.0s
**VRAC Vranov 78.28 331 ⇑P P 18 37 37.1 +1.2**
**VRAC Vranov 78.28 331 ⇑P P 18 37 37.1 +1.2**
**ARR Arges 78.40 324 ⇓P P 18 37 39.3 +2.6**
**PRU Pruhonice 78.41 332 eP P 18 37 37.5 +0.9**
**PRU Pruhonice 78.41 332 eP P 18 37 37.5 +0.9**
**IBBN Ibbenburen 78.46 337 eP P 18 37 38.3 +1.5**
comp=Z,16nm,0.7s,baz=29,slow=5.9
**KRUC Moravsky 78.56 331 eP P 18 37 38.2 +0.8**
**BR131 Keskin Array S 78.56 315 IAmb IAmb** 18 37 53.3
comp=Z,3.8nm,0.9s
**BR131 Keskin Array S 78.56 315 *d* iP P 18 37 38.7 +0.9**
**BRTR Keskin Array B 78.56 315 P P 18 37 38.0 +0.2**
**BRTR Keskin Array B 78.56 315 P P 18 37 38.7 +0.9**
comp=Z,1.6nm,0.7s,baz=91,slow=3.0,SNR=13
comp=Z,1.6nm,0.7s
**BRTR Keskin Array B 78.56 315 P P 18 37 38.0 +0.2**
**PLN Plauen 78.75 334 eP P 18 37 39.1 +0.6**
comp=Z,4.0nm,0.9s,baz=29,slow=5.9
**ANTO Ankara 78.88 316 ⇑P P 18 37 40.1 +0.6**
**ANTO Ankara 78.88 316 ⇑P P 18 37 40.1 +0.6**
**SIRR Siria 78.90 326 ⇑P P 18 37 39.1 -0.3**
**VHRN Van Horn 79.07 58 P P 18 37 41.7 +0.9**
**SURR Surduc 79.13 326 ⇑P P** 18 37 35.7 -4.9
**COPA Copaceanca 79.13 323 ⇓P P** 18 37 35.5 -5.2
**GZR Gura Zlata 79.16 325 ⇑P P 18 37 40.6 -0.2**
**MANZ Manzenberg 79.20 334 eP P 18 37 41.8 +0.7**
comp=Z,1.1nm,0.9s,baz=29,slow=5.9
**KASTN Kahler Asten 79.25 336 eP P 18 37 42.0 +0.8**
comp=Z,4.2nm,0.8s,baz=29,slow=5.9
**ROTZ Rotzenmuhle 79.36 334 eP P 18 37 42.5 +0.7**
comp=Z,1.8nm,1.0s,baz=29,slow=5.9
**BZS Buzias 79.45 326 ⇓P P 18 37 43.1 +0.7**
**BZS Buzias 79.45 326 ⇓P P 18 37 43.1 +0.7**
**KHC Kasperske Hory 79.47 332 IAmb IAmb** 18 37 44.3
comp=Z,7.7nm,0.7s
**KHC Kasperske Hory 79.47 332 eP P 18 37 43.6 +1.1**
KHC *e*pP **pP 18 37 48.6 -2.0**
**KHC Kasperske Hory 79.47 332 *c*eP P 18 37 43.1 +0.6**
KHC pmax pmax
comp=Z,22nm,1.0s
**CKRC Cesky Krumlov 79.49 332 eP P 18 37 43.1 +0.5**
**CKRC Cesky Krumlov 79.49 332 eP P 18 37 43.1 +0.5**
**GERES GERESS Array B 79.67 332 P P 18 37 43.7 +0.1**
**GERES GERESS Array B 79.67 332 P P 18 37 43.9 +0.2**
comp=Z,1.7nm,0.7s,baz=17,slow=7.0,SNR=9.1
comp=Z,1.7nm,0.7s
**GERES GERESS Array B 79.67 332 P P 18 37 43.7 +0.1**
**WET Wettzell 79.69 333 eP P 18 37 44.5 +0.9**
comp=Z,9.2nm,0.9s,baz=29,slow=5.9
**CONA Conrad Observa 79.71 330 *i* P P 18 37 45.2 +1.4**
comp=Z,7.9nm,1.3s
**GRF Grafenberg Arr 79.74 334 eP P 18 37 45.0 +1.0**
baz=29,slow=5.9
**GRFO Grafenberg 79.74 334 P P 18 37 44.7 +0.8**
GRFO IAmb IAmb 18 37 47.2
comp=Z,13nm,0.8s
**GRFO Grafenberg 79.74 334 P P 18 37 44.7 +0.8**
GRFO pmax pmax
comp=Z,13nm,0.8s
**RONA Rosalia, Austr 79.75 330 *i* P P 18 37 45.3 +1.3**
comp=Z,6.9nm,0.9s
**WMOK Wichita Mounta 79.86 51 P P 18 37 45.2 +0.3**
**WMOK Wichita Mounta 79.86 51 P P 18 37 45.2 +0.3**
WMOK pmax pmax
comp=Z,3.0nm,0.8s
**MDVR Moldovita 80.09 325 ⇓P P 18 37 46.0 0.0**
**MORH Mrgy, Hungar 80.13 328 ⇑P P 18 37 45.9 -0.1**
**MOA Molln 80.33 331 *i* P P 18 37 47.3 +0.2**
comp=Z,3.5nm,1.7s
**ARSA Arzberg 80.41 330 eP P 18 37 46.8 -0.7**
comp=Z,1.9nm,0.7s
**BTNL Ternell 80.45 337 *d*P P 18 37 48.3 +0.6**
**MEM Membach 80.47 337 *d*P P 18 37 47.8 0.0**
**BSTI Sart Tilman 80.61 338 *d*P P 18 37 50.5 +2.0**
**BIOA Bad Ischl, Aus 80.69 332 *i* P P 18 37 49.7 +0.6**
comp=Z,7.5nm,1.1s
**BCLA Clavier 80.83 338 *d*P P 18 37 50.1 +0.4**
**TX31 Lajitas Ar. Si 80.90 58 IAmb IAmb** 18 38 04.9
comp=Z,4.4nm,0.7s
**TXAR Lajitas Array 80.90 58 P P 18 37 50.5 -0.1**
**TXAR Lajitas Array 80.90 58 P P 18 37 51.8 +1.2**
comp=Z,3.4nm,0.8s,baz=297,slow=5.7,SNR=12
comp=Z,3.4nm,0.8s
**TXAR Lajitas Array 80.90 58 P P 18 37 50.5 -0.1**
**BOVS Bovan 81.03 325 ⇓P P 18 37 50.7 -0.2**
**SOKA Soboth 81.07 330 *i* P P 18 37 51.2 0.0**
comp=Z,9.4nm,1.0s
**BMRD Maredsous 81.08 338 *d*P P 18 37 50.8 -0.2**
**RCHB Rochefort 81.09 338 *d*P P 18 37 51.0 -0.1**
**LESA Schwarzleotal 81.25 332 *i* P P 18 37 52.5 +0.4**
comp=Z,5.4nm,0.8s
**DOU Dourbes 81.32 338 *d*P P 18 37 51.8 -0.5**
**KBA Koelnbreinsper 81.32 331 *i* P P 18 37 53.6 +1.0**
comp=Z,9.4nm,0.8s
**ALN Alexandroupoli 81.34 320 IAmb IAmb** 18 37 55.7
comp=Z,6.9nm,0.9s
**WATA Walderalm 81.69 333 *i* P P 18 37 55.4 +0.8**
comp=Z,11nm,1.1s
**WTTA Wattenberg 81.73 333 *i* P P 18 37 55.8 +1.0**
comp=Z,6.3nm,0.8s
**RETA Reutte 81.82 333 eP P 18 37 56.6 +1.4**
comp=Z,6.4nm,0.9s
**MOTA Moosalm 81.84 333 *i* P P 18 37 55.8 +0.4**
comp=Z,11nm,1.0s
**SQTA Sankt Quirin 81.91 333 *i* P P 18 37 56.6 +0.9**
comp=Z,12nm,1.3s
**FETA Feichten 82.24 333 *i* P P 18 37 58.9 +1.4**
comp=Z,3.9nm,1.1s
**DAVA Daniels 82.28 334 eP P 18 37 58.3 +0.7**
comp=Z,5.6nm,0.9s
**MMAI Mount Meron Ar 82.65 309 P P 18 38 00.0 +0.3**
comp=Z,2.3nm,0.6s,baz=29,slow=7.6,SNR=5.2
comp=Z,2.3nm,0.6s
**DRIO Del Rio 82.68 56 IAmb IAmb** 18 38 20.9
comp=Z,6.6nm,0.9s
**DAVOX Davos/Dischmat 82.73 333 P P 18 38 01.5 +1.5**
comp=Z,2.7nm,0.7s,baz=358,slow=12,SNR=6.0
comp=Z,2.7nm,0.7s
**FUORN Ofenpass-Fuorn 82.75 333 IAmb IAmb** 18 38 15.3
comp=Z,5.9nm,0.9s
**P49A Miami Univ. Ec 83.34 39 P P 18 38 03.7 +0.6**
baz=324
**O53A New Philadelph 84.31 37 P P 18 38 08.7 +0.6**
baz=326
**L61B Northampton 85.81 30 P P 18 38 16.1 +0.6**
baz=331
**W50A Signal Mountai 86.56 42 P P 18 38 21.1 +1.7**
**ESDC Sonseca Array 93.23 340 P P 18 38 51.9 +1.2**
comp=Z,0.6nm,0.9s,baz=26,slow=3.8,SNR=3.0
comp=Z,0.6nm,0.9s
**TORD Torodi Ar. Bea 115.95 325 PKP PKiKP 18 44 18.6 -0.7**
comp=Z,0.8nm,1.1s,baz=4.4,slow=4.4,SNR=2.5
**BDFB Brasilia 147.86 33 PKPbc PKPbc 18 45 21.9 +0.4**
comp=Z,2.1nm,0.5s,baz=19,slow=7.9,SNR=3.7
**SNAA Sanae 149.38 197 PKPbc PKPbc 18 45 24.2 +0.4**
comp=Z,2.8nm,1.1s,baz=84,slow=4.1,SNR=6.5
**PLCA Paso Flores 150.33 98 PKPbc PKiKP 18 45 28.0 +0.2**
comp=Z,3.1nm,1.0s,baz=240,slow=16,SNR=3.5
**PLCA Paso Flores 150.33 98 PKiKP PKiKP 18 45 28.0 +0.2**

*SJA **25** 18:32:04.6±0.6,32.°56S×72.°57W,h12km,ML3.1,MW3.5*
*GUC **25** 18:32:07.8±0.8,33.°09S×72.°12W,h14km±3km,ML3.0*
**ISC 25 18:32:04.1±2.5,33.°05S±0.°05×72.°3W±0.°1,h15km±10km,**
**n26,σ1°07/52,7D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VA01** | **Torpederas** | **0.53** | **88** | *e*P | **Pn** | **18 32 16.3** | **-0.9** |
| VA01 | | | | *i* S | **Sb** | **18 32 21.6** | **-1.0** |
| VA01 | | | | IAML | | 18 32 22.6 | |
| comp=N,939nm,0.1s | | | | | | | |
| **VA05** | **Santo Domingo** | **0.83** | **138** | ⇓*i*P | **Pg** | **18 32 21.1** | **+0.9** |
| VA05 | | | | *i* S | **Sb** | **18 32 31.5** | **+0.4** |
| VA05 | | | | IAML | | 18 32 33.0 | |
| comp=N,769nm,0.2s | | | | | | | |
| **VA06** | **Catapilco** | **0.96** | **60** | ⇓*i*P | **Pg** | **18 32 24.0** | **+1.3** |
| VA06 | | | | *i* S | **Sg** | **18 32 35.9** | **+0.6** |
| VA06 | | | | IAML | | 18 32 39.3 | |
| comp=N,1μm,0.3s | | | | | | | |
| **MT02** | **Curacav** | **0.98** | **103** | ⇓*i*P | **Pb** | **18 32 23.2** | **+0.4** |
| MT02 | | | | *i* S | **Sb** | **18 32 34.6** | **-1.0** |
| **ROCH** | **El Roble** | **1.07** | **86** | ⇓*i*P | **Pg** | **18 32 25.0** | **+0.2** |
| ROCH | | | | *e*S | **Sb** | **18 32 37.5** | **-0.9** |
| **MT01** | **Popeta** | **1.19** | **134** | ⇓*i*P | **Pb** | **18 32 26.7** | **+0.4** |
| MT01 | | | | *i* S | **Sn** | **18 32 40.7** | **-1.4** |
| MT01 | | | | IAML | | 18 32 42.1 | |
| comp=N,842nm,0.4s | | | | | | | |
| **MT09** | **Talagante** | **1.30** | **124** | ⇓*i*P | **Pb** | **18 32 28.6** | **+0.2** |
| MT09 | | | | *e*S | **Sn** | **18 32 43.9** | **-1.3** |
| MT09 | | | | IAML | | 18 32 45.6 | |
| comp=N,822nm,0.2s | | | | | | | |
| **MT05** | **Renca** | **1.34** | **105** | *e*P | **Pg** | **18 32 30.8** | **+0.9** |
| MT05 | | | | *i* S | **Sb** | **18 32 47.2** | **+1.2** |
| MT05 | | | | IAML | | 18 32 52.5 | |
| comp=E,639nm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **1.34** | **95** | *e*P | **Pb** | **18 32 29.5** | **+0.5** |
| PEL | | | | *e*S | **Sn** | **18 32 46.1** | **+0.1** |
| PEL | | | | IAML | | 18 32 50.6 | |
| comp=E,540nm,0.6s | | | | | | | |
| **MT10** | **Hacienda Santa** | **1.48** | **99** | ⇓*i*P | **Pb** | **18 32 31.9** | **+0.4** |
| MT10 | | | | *i* S | **Sn** | **18 32 49.6** | **0.0** |
| MT10 | | | | IAML | | 18 32 59.0 | |
| comp=N,886nm,0.4s | | | | | | | |
| **VA03** | **San Esteban** | **1.48** | **80** | *e*P | **Pg** | **18 32 31.7** | **-0.9** |
| VA03 | | | | *i* S | **Sb** | **18 32 50.7** | **+0.6** |
| VA03 | | | | IAML | | 18 32 53.7 | |
| comp=E,650nm,0.4s | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **1.50** | **104** | *e*P | **Pb** | **18 32 32.2** | **+0.4** |
| MT14 | | | | *i* S | **Sn** | **18 32 50.5** | **+0.5** |
| MT14 | | | | IAML | | 18 32 57.6 | |
| comp=E,685nm,0.4s | | | | | | | |
| **MT16** | **CCHEN** | **1.52** | **105** | *e*P | **Pb** | **18 32 32.6** | **+0.5** |
| MT16 | | | | *e*S | **Sn** | **18 32 50.9** | **+0.4** |
| MT16 | | | | IAML | | 18 32 56.2 | |
| comp=N,213nm,0.6s | | | | | | | |
| **MT03** | **Universidad Ad** | **1.55** | **107** | *e*P | **Pb** | **18 32 32.9** | **+0.3** |
| MT03 | | | | *i* S | **Sn** | **18 32 51.9** | **+0.7** |
| **MT15** | **Las Vizcachas** | **1.58** | **111** | *e*P | **Pb** | **18 32 33.7** | **+0.5** |
| MT15 | | | | *e*S | **Sn** | **18 32 52.4** | **+0.4** |
| MT15 | | | | IAML | | 18 32 57.8 | |
| comp=E,475nm,0.3s | | | | | | | |
| **MT12** | **Pirque** | **1.60** | **116** | *e*P | **Pb** | **18 32 33.3** | **-0.2** |
| MT12 | | | | *e*S | **Sn** | **18 32 52.6** | **+0.2** |
| MT12 | | | | IAML | | 18 32 57.9 | |
| comp=E,563nm,0.3s | | | | | | | |
| **FCH** | **Farellones** | **1.69** | **100** | *e*P | **Pb** | **18 32 35.4** | **+0.2** |
| FCH | | | | *i* S | **Sn** | **18 32 56.0** | **+1.0** |
| FCH | | | | IAML | | 18 32 59.5 | |
| comp=N,204nm,0.4s | | | | | | | |
| **MT13** | **San Alfonso** | **1.81** | **113** | *e*P | **Pb** | **18 32 36.9** | **-0.1** |
| MT13 | | | | *i* S | **Sn** | **18 32 58.5** | **+0.9** |
| MT13 | | | | IAML | | 18 33 04.7 | |
| comp=N,526nm,0.3s | | | | | | | |
| **MT04** | **Ro Olivares** | **1.83** | **102** | *e*P | **Pb** | **18 32 37.4** | **-0.1** |
| MT04 | | | | *e*S | **Sn** | **18 32 59.7** | **+1.3** |
| MT04 | | | | IAML | | 18 33 03.9 | |
| comp=E,375nm,0.3s | | | | | | | |
| **LMEL** | **Las Melosas** | **1.91** | **115** | *e*P | **Pb** | **18 32 38.5** | **-0.3** |
| LMEL | | | | *e*S | **Sn** | **18 33 01.6** | **+1.4** |
| LMEL | | | | IAML | | 18 33 07.1 | |
| comp=E,331nm,0.2s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.94** | **102** | *e*P | **Pb** | **18 32 39.0** | **-0.3** |
| MT08 | | | | *e*S | **Sn** | **18 33 03.0** | **+2.0** |
| MT08 | | | | IAML | | 18 33 04.7 | |
| comp=N,193nm,0.3s | | | | | | | |
| **AUSP** | **Uspallata** | **2.58** | **72** | *i* P | **Pg** | **18 32 51.2** | **-2.3** |
| AUSP | | | | *i* S | **Sg** | **18 33 26.1** | **-0.9** |
| **RTLS** | **Leoncito** | **2.81** | **65** | *i* P | **Pb** | **18 32 53.9** | **-0.3** |
| RTLS | | | | *i* S | **Sb** | **18 33 29.5** | **+0.9** |
| RTLS | | | | IAML | | 18 33 38.9 | |
| comp=Z,87nm,0.7s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.82** | **87** | *i* P | **Pb** | **18 32 55.9** | **+1.5** |
| ARCO | | | | *i* S | **Sg** | **18 33 34.2** | **-0.6** |
| ARCO | | | | IAML | | 18 33 36.3 | |
| comp=Z,53nm,0.6s | | | | | | | |
| **AAGR** | **Agrelo** | **2.90** | **92** | *i* P | **Pg** | **18 32 57.7** | **-2.0** |
| AAGR | | | | *i* S | **Sg** | **18 33 36.6** | **-0.7** |
| AAGR | | | | IAML | | 18 33 39.4 | |
| comp=Z,43nm,3.0s | | | | | | | |
| **ASAL** | **Salagasta** | **2.94** | **82** | *i* P | **Pb** | **18 32 56.7** | **+0.5** |
| ASAL | | | | *i* S | **Sb** | **18 33 35.7** | **+3.8** |

*IDC **25** 18:33:13.6±0.3,8.°30S×116.°76E,h0km,mb5.1/35, mbtmp5.1/36,ML5.1/1,MS4.8/58,Error ellipse: s-maj=14.1km s-min=8.7km az=82.0*
*MOS **25** 18:33:14.7±0.9,8.°35S×116.°84E,h19km,mb5.5/61, MS5.0/24,Error ellipse: s-maj=7.8km s-min=4.7km az=108.6*
*NEIC **25** 18:33:15.6±1.9,8.°42S±0.°06×116.°93E±0.°05,h12km±2km, mb5.5/142,Ms_20 5.2/315,Mww5.5/37,Error ellipse: s-maj=9.0km s-min=6.6km az=165.0*
*NEIC **25** 18:33:15.2,8.°83S×117.°01E,h12km,Moment Tensor Solution. Duration: 3s3 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$1.88; $M_{\theta\theta}$-0.17; $M_{\phi\phi}$-1.71; $M_{r\theta}$0.17; $M_{r\phi}$0.58; $M_{\theta\phi}$0.30; Fault plane solution: $M_0$1.93000×$10^{17}$ NP1:$\phi_0$20.52000°, $\delta$50.17000°,$\lambda$92.60000°. NP2:$\phi_0$196.47000°,$\delta$39.90000°, $\lambda$86.89000°. Principal axes: T 1.9140, Plg84.0000°, Azm310.0000°; N 0.0244, Plg2.0000°, Azm199.0000°; P -1.9384, Plg5.0000°, Azm109.0000°;*
*NEIC **25** 18:33:15.2,8.°33S×116.°91E,h12km*
*DJA **25** 18:33:17.3±0.2,9.°S±1.°×117.°7E±.°,h16km±2km,M5.5/113, mb5.5/113,mB5.9/90,MLv6.0/28,Mw5.5/81,Mw(mB)5.5/90, MwMwp5.3/53,Mwp5.5/53*
*GCMT **25** 18:33:18.6±0.1,8.°48S±0.°01×116.°99E±0.°01,h12km, MW5.5/147,Moment Tensor Solution. s112,c179; s147,c291; Duration: 1s4 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$1.98±.02; $M_{\theta\theta}$-0.17±.02; $M_{\phi\phi}$-1.82±.02; $M_{r\theta}$-1.05±.08; $M_{r\phi}$-0.81±.02; $M_{\theta\phi}$-1.12±.07; Best double couple: $M_0$2.57700×$10^{17}$ NP1:$\phi_0$215.00000°,$\delta$64.00000°, $\lambda$102.00000°. NP2:$\phi_0$9.00000°,$\delta$29.00000°,$\lambda$67.00000°. Principal axes: T 2.5440, Plg69.0000°, Azm149.0000°; N 0.0570, Plg11.0000°, Azm29.0000°; P -2.6090, Plg18.0000°, Azm296.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 25 18:33:16.9±0.4,8.°46S±0.°03×116.°94E±0.°03,h22km±2km, h22km:pP-P,n828,σ2s04/736,mb5.4/168,MS5.2/256, 26C-25D,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.29** | **192** | P | **Pb** | **18 33 22.5** | **-1.0** |
| **PLAI** | **Plampang** | **0.90** | **114** | P | **Pb** | **18 33 32.6** | **-1.3** |
| **DNP** | **Denpasar** | **1.73** | **263** | P | **Pn** | **18 33 46.7** | **+1.1** |
| **SRBI** | **Singaraja** | **1.75** | **282** | P | **Pn** | **18 33 45.5** | **-0.4** |
| **WBSI** | **Waikabubak, Su** | **2.69** | **116** | P | **Pn** | **18 33 59.7** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **270** | P | **Pn** | **18 34 00.8** | **+1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **270** | Pn | **Pn** | **18 34 00.1** | **+0.3** |
| JAGI | | | | Sn | **Sn** | **18 34 32.9** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **2.76** | **270** | P | **Pn** | **18 34 00.2** | **+0.3** |
| **BASI** | **Baing, Sumba** | **3.99** | **116** | P | **Pn** | **18 34 20.0** | **+3.3** |
| **BSSI** | **Bau Bau, Buton** | **4.20** | **57** | P | **Pn** | **18 34 19.3** | **-0.4** |
| **KAPI** | **Kappang** | **4.41** | **39** | P | **Pn** | **18 34 23.4** | **+0.9** |
| **KAPI** | **Kappang** | **4.41** | **39** | Pn | **Pn** | **18 34 21.9** | **-0.6** |
| KAPI | | | | Sn | **Sn** | **18 35 11.9** | **-1.3** |
| **KAPI** | **Kappang** | **4.41** | **39** | Pn | **Pn** | **18 34 22.1** | **-0.4** |
| 89nm,0.3s,baz=204,slow=5.7,SNR=55 | | | | | | | |
| KAPI | | | | Sn | **Sn** | **18 35 12.6** | **-0.6** |
| 139nm,0.3s,baz=254,slow=16,SNR=26 | | | | | | | |
| KAPI | | | | LR | LR | 18 36 08.9 | |
| comp=Z,15μm,19.4s,baz=176,slow=40 | | | | | | | |
| 282nm,0.5s | | | | | | | |
| **KAPI** | **Kappang** | **4.41** | **39** | *c*P | **Pn** | **18 34 21.8** | **-0.7** |
| KAPI | | | | pmax | pmax | | |
| comp=Z,511nm,1.1s | | | | | | | |
| **GRJI** | **Gresik** | **4.68** | **289** | P | **Pn** | **18 34 26.8** | **+0.5** |
| **EDFI** | **Ende, Flores** | **4.70** | **94** | P | **Pn** | **18 34 27.6** | **+1.0** |
| **BWJI** | **Bawean** | **4.98** | **301** | P | **Pn** | **18 34 31.2** | **+0.9** |
| **PWJI** | **Pagerwojo** | **5.11** | **274** | P | **Pn** | **18 34 32.6** | **+0.5** |
| comp=Z,625nm,0.6s,comp=Z,15μmcomp=Z,31μmcomp=Z,11nm | | | | | | | |
| **BNSI** | **Bone** | **5.11** | **38** | P | **Pn** | **18 34 33.1** | **+1.0** |
| comp=Z,995nm,1.1s,comp=Z,18μmcomp=Z,17μmcomp=Z,10nm | | | | | | | |
| **MMRI** | **Maumere** | **5.24** | **92** | P | **Pn** | **18 34 35.9** | **+2.0** |
| **MMRI** | **Maumere** | **5.24** | **92** | Pn | **Pn** | **18 34 34.4** | **+0.5** |
| **MMRI** | **Maumere** | **5.24** | **92** | P | **Pn** | **18 34 35.4** | **+1.5** |
| **NGJI** | **Ngawi** | **5.54** | **281** | P | **Pn** | **18 34 40.3** | **+2.3** |
| comp=Z,788nm,0.9s,comp=Z,17μm | | | | | | | |
| **TTSI** | **Tana Toraja** | **6.09** | **28** | P | **Pn** | **18 34 47.7** | **+2.1** |
| **BBSI** | **Bau Bau** | **6.32** | **63** | P | **Pn** | **18 34 50.9** | **+2.2** |
| comp=Z,320nm,1.0s,comp=Z,7μmcomp=Z,16μmcomp=Z,2.5nm | | | | | | | |
| **UGM** | **Wanagama** | **6.38** | **274** | P | **Pn** | **18 34 51.2** | **+1.6** |
| **UGM** | **Wanagama** | **6.38** | **274** | | **Pn** | **18 34 51.5** | **+1.8** |
| UGM | | | | Sn | **Sn** | **18 36 04.8** | **+3.0** |
| **UGM** | **Wanagama** | **6.38** | **274** | P | **Pn** | **18 34 50.8** | **+1.2** |
| comp=Z,870nm,1.0s,comp=Z,17μmcomp=Z,26μm | | | | | | | |
| **SMRI** | **Semarang** | **6.59** | **282** | P | **Pn** | **18 34 54.7** | **+2.1** |
| **SMRI** | **Semarang** | **6.59** | **282** | | **Pn** | **18 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SOEI | Soe | 7.35 | 101 | | | Pn | | 18 35 05.0 | +2.0 |
| SOEI | Soe | 7.35 | 101 | P | | Pn | | 18 35 05.8 | +2.8 |
| MTKI | Muara Teweh, K | 7.74 | 345 | P | | Pn | | 18 35 09.1 | +0.8 |
| comp=Z,484nm,0.7s,comp=Z,7μmcomp=Z,11μmcomp=Z,2.6nm | | | | | | | | | |
| SMKI | Samarinda | 7.96 | 2 | P | | Pn | | 18 35 14.3 | +2.9 |
| KPJI | Karang Pucung | 8.02 | 277 | P | | Pn | | 18 35 14.2 | +2.1 |
| comp=Z,291nm,0.7s,comp=Z,6μmcomp=Z,22μm | | | | | | | | | |
| CMJI | Cimerak | 8.44 | 274 | P | | Pn | | 18 35 17.8 | -0.1 |
| comp=Z,286nm,1.0s,comp=Z,6μmcomp=Z,17μm | | | | | | | | | |
| JCJI | Jatiwangi | 8.82 | 282 | P | | Pn | | 18 35 24.3 | +1.2 |
| comp=Z,345nm,1.0s,comp=Z,10μm | | | | | | | | | |
| MPSI | Mapaga | 9.22 | 19 | P | | Pn | | 18 35 30.1 | +1.5 |
| BBJI | Bungbulang | 9.26 | 275 | P | | Pn | | 18 35 31.0 | +1.8 |
| LUWI | Luwuk | 9.38 | 39 | P | | Pn | | 18 35 35.2 | +4.4 |
| LUWI | Luwuk | 9.38 | 39 | | | Pn | | 18 35 32.0 | +1.2 |
| LUWI | Luwuk | 9.38 | 39 | P | | Pn | | 18 35 32.8 | +2.0 |
| comp=Z,162nm,1.2s,comp=Z,3μm | | | | | | | | | |
| CNJI | Cibinong | 9.79 | 276 | P | | Pn | | 18 35 38.1 | +1.7 |
| comp=Z,128nm,0.9s,comp=Z,6μm | | | | | | | | | |
| STKI | Sintang | 10.07 | 327 | P | | Pn | | 18 35 42.3 | +2.1 |
| comp=Z,143nm,1.0s,comp=Z,4μmcomp=Z,10μm | | | | | | | | | |
| MRSI | Marisa | 10.18 | 30 | P | | Pn | | 18 35 43.4 | +1.7 |
| comp=Z,88nm,1.2s | | | | | | | | | |
| TOLI2 | Tolitoli | 10.25 | 22 | P | | Pn | | 18 35 46.5 | +3.8 |
| TOLI2 | Tolitoli | 10.25 | 22 | | | Pn | | 18 35 44.6 | +1.9 |
| SKJI | Sukabumi | 10.39 | 277 | P | | Pn | | 18 35 46.9 | +2.2 |
| comp=Z,372nm,1.1s,comp=Z,8μmcomp=Z,14μm | | | | | | | | | |
| GTOI | Gorontalo | 10.87 | 34 | P | | Pn | | 18 35 56.3 | +5.1 |
| SBJI | Serang | 10.97 | 281 | P | | Pn | | 18 35 54.2 | +1.5 |
| comp=Z,245nm,1.3s,comp=Z,6μm | | | | | | | | | |
| SANI | Sanana | 11.03 | 55 | P | | Pn | | 18 35 57.5 | +4.1 |
| SANI | Sanana | 11.03 | 55 | P | | Pn | | 18 35 55.8 | +2.4 |
| comp=Z,263nm,1.3s,comp=Z,3μm | | | | | | | | | |
| XMIS | Christmas Isla | 11.32 | 259 | Pn | | Pn | | 18 35 55.9 | -1.5 |
| NLAI | Namlea | 11.35 | 63 | P | | Pn | | 18 36 02.4 | +4.6 |
| comp=Z,96nm,1.6s,comp=Z,2μmcomp=Z,5μm | | | | | | | | | |
| KMSI | Cibinong | 11.39 | 38 | P | | Pn | | 18 36 02.9 | +4.6 |
| comp=Z,238nm,1.2s,comp=Z,4μm | | | | | | | | | |
| SBUM | Sibu | 11.81 | 336 | | | Pn | | 18 36 05.3 | +1.1 |
| KSM | Kuching | 11.88 | 326 | P | | Pn | | 18 36 10.0 | +5.0 |
| KSM | Kuching | 11.88 | 326 | Pn | | Pn | | 18 36 04.3 | -0.7 |
| BLSI | Bandar Lampung | 12.01 | 284 | P | | Pn | | 18 36 08.5 | +1.6 |
| comp=Z,191nm,1.0s,comp=Z,3μm | | | | | | | | | |
| PPBI | Pangkal Pinang | 12.44 | 300 | P | | Pn | | 18 36 14.9 | +2.1 |
| comp=Z,198nm,1.4s,comp=Z,9μm | | | | | | | | | |
| KASI | Kota Agung | 12.69 | 282 | P | | Pn | | 18 36 18.6 | +2.4 |
| comp=Z,125nm,0.9s,comp=Z,4μmcomp=Z,10μm | | | | | | | | | |
| FITZ | Fitzroy Crossi | 12.78 | 139 | P | | Pn | | 18 36 18.2 | +0.9 |
| FITZ | Fitzroy Crossi | 12.78 | 139 | Pn | | Pn | | 18 36 16.9 | -0.5 |
| MBWA | Marble Bar | 12.91 | 168 | P | | Pn | | 18 36 18.4 | -0.7 |
| MBWA | Marble Bar | 12.91 | 168 | Pn | | Pn | | 18 36 17.2 | -1.9 |
| MSAI | Masohi | 12.95 | 68 | P | | Pn | | 18 36 24.0 | +4.2 |
| comp=Z,87nm,1.3s,comp=Z,3μmcomp=Z,6μm | | | | | | | | | |
| LBMI | Labuha | 13.07 | 54 | P | | Pn | | 18 36 24.0 | +2.6 |
| comp=Z,318nm,1.3s,comp=Z,4μm | | | | | | | | | |
| LWLI | Liwa | 13.24 | 284 | P | | Pn | | 18 36 27.6 | +3.8 |
| comp=Z,465nm,1.4s,comp=Z,7μmcomp=Z,10μm | | | | | | | | | |
| PMBI | Palembang | 13.30 | 294 | Pn | | Pn | | 18 36 22.9 | -1.5 |
| PSA00 | Pilbara Seismi | 13.34 | 168 | P | | Pn | | 18 36 23.4 | -1.5 |
| PSA00 | Pilbara Seismi | 13.34 | 168 | Pn | | Pn | | 18 36 22.2 | -2.8 |
| PSA00 | Pilbara Seismi | 13.34 | 168 | Pn | | Pn | | 18 36 23.1 | -1.9 |
| BNDI | Bandanaira | 13.46 | 74 | P | | Pn | | 18 36 29.6 | +3.0 |
| BNDI | Bandanaira | 13.46 | 74 | P | | Pn | | 18 36 29.7 | +3.1 |
| KNRA | Kununurra | 13.60 | 123 | Pn | | Pn | | 18 36 27.9 | -0.6 |
| MYLDM | Lahad Datu | 13.64 | 7 | Pn | | Pn | | 18 36 27.0 | -2.0 |
| TNTI | Ternate | 13.86 | 49 | P | | P | | 18 36 36.4 | -3.8 |
| TNTI | Ternate | 13.86 | 49 | Pn | | Pn | | 18 36 33.9 | +1.8 |
| TNTI | Ternate | 13.86 | 49 | P | | P | | 18 36 37.7 | -2.5 |
| comp=Z,125nm,1.9s,comp=Z,3μm | | | | | | | | | |
| SAUI | Saumlaki | 14.22 | 89 | P | | Pn | | 18 36 39.2 | +2.2 |
| SAUI | Saumlaki | 14.22 | 89 | Pn | | Pn | | 18 36 35.9 | -1.2 |
| SAUI | Saumlaki | 14.22 | 89 | P | | Pn | | 18 36 37.7 | +0.7 |
| DRS | Darwin Rock St | 14.28 | 107 | P | | Pn | | 18 36 38.8 | +0.9 |
| GIRL | Giralia | 14.34 | 190 | P | | Pn | | 18 36 38.0 | -0.7 |
| GIRL | Giralia | 14.34 | 190 | Pn | | Pn | | 18 36 36.4 | -2.3 |
| KKM | Kota Kinabalu | 14.42 | 357 | P | | P | | 18 36 44.6 | -2.0 |
| KKM | Kota Kinabalu | 14.42 | 357 | Pn | | Pn | | 18 36 38.9 | -1.1 |
| MNAI | Manna | 14.48 | 285 | Pn | | Pn | | 18 36 37.1 | -3.6 |
| MNAI | Manna | 14.48 | 285 | P | | Pn | | 18 36 42.7 | +2.0 |
| comp=Z,531nm,1.1s,comp=Z,13μm | | | | | | | | | |
| MTN | Manton Dam | 14.61 | 109 | P | | Pn | | 18 36 41.6 | -0.8 |
| MTN | Manton Dam | 14.61 | 109 | Pn | | Pn | | 18 36 41.3 | -1.1 |
| TPRI | Tanjung Pinang | 15.49 | 306 | P | | P | | 18 36 56.7 | -1.7 |
| comp=Z,131nm,1.4s,comp=Z,3μmcomp=Z,7μm | | | | | | | | | |
| KDU | Kakadu | 15.83 | 107 | P | | Pn | | 18 36 58.0 | -0.5 |
| SWI | Sorong | 16.13 | 63 | P | | Pn | | 18 37 03.5 | +1.1 |
| comp=Z,344nm,1.8s,comp=Z,6μmcomp=Z,6μm | | | | | | | | | |
| FAKI | Fak Fak | 16.19 | 71 | P | | Pn | | 18 37 04.1 | +1.0 |
| FAKI | Fak Fak | 16.19 | 71 | P | | Pn | | 18 37 01.7 | -1.4 |
| FAKI | Fak Fak | 16.19 | 71 | P | | Pn | | 18 37 02.7 | -0.4 |
| comp=Z,268nm,1.1s,comp=Z,6μmcomp=Z,6μm | | | | | | | | | |
| BTDF | Bukit Timah Da | 16.36 | 306 | P | | P | | 18 37 09.9 | +1.9 |
| MYKOM | Kota Tinggi | 16.55 | 307 | | | Pn | | 18 37 07.1 | -0.7 |
| MYKOM | | | | | IAmb | IAmb | | 18 37 15.8 | |
| comp=Z,509nm,2.0s | | | | | | | | | |
| KMPI | Kaimana, Papua | 17.33 | 75 | P | | Pn | | 18 37 16.4 | -1.1 |
| comp=Z,384nm,1.4s,comp=Z,5μmcomp=Z,5μm | | | | | | | | | |
| DAV | Davao City (W) | 17.66 | 29 | P | | P | | 18 37 26.7 | +4.2 |
| DAV | Davao City (W) | 17.66 | 29 | P | | P | | 18 37 23.4 | +0.9 |
| DAV | | | | | IAmb | IAmb | | 18 37 28.6 | |
| comp=Z,499nm,1.4s | | | | | | | | | |
| DAV | Davao City (W) | 17.66 | 29 | P | | P | | 18 37 25.2 | +2.7 |
| comp=Z,81nm,0.3s,baz=176,slow=4.6,SNR=14 | | | | | | | | | |
| DAV | | | | | LR | LR | | 18 44 50.6 | |
| comp=Z,3μm,20.7s,baz=192,slow=40 | | | | | | | | | |
| PPSI | Pulau Pagai | 17.77 | 288 | P | | Pn | | 18 37 22.2 | -0.8 |
| comp=Z,269nm,1.0s,comp=Z,5μm | | | | | | | | | |
| PDSI | Padang | 18.05 | 294 | P | | P | | 18 37 28.3 | +1.5 |
| comp=Z,110nm,1.2s,comp=Z,3μmcomp=Z,7μm | | | | | | | | | |
| BKNI | Bangkinang | 18.09 | 298 | P | | P | | 18 37 31.8 | +4.6 |
| BKNI | Bangkinang | 18.09 | 298 | P | | P | | 18 37 28.3 | +1.0 |
| BKNI | | | | | IAmb | IAmb | | 18 37 35.1 | |
| comp=Z,568nm,1.3s | | | | | | | | | |
| BKNI | Bangkinang | 18.09 | 298 | P | | P | | 18 37 29.5 | +2.3 |
| comp=Z,493nm,2.4s | | | | | | | | | |
| MEEK | Meekatharra | 18.15 | 175 | P | | P | | 18 37 29.0 | +1.2 |
| SISI | Saibi | 19.14 | 291 | P | | Pn | | 18 37 39.7 | 0.0 |
| comp=Z,103nm,1.0s,comp=Z,3μm | | | | | | | | | |
| WRKA | Warakurna | 19.73 | 148 | P | | Pn | | 18 37 47.1 | +0.4 |
| COCO | West Island | 20.13 | 258 | P | | P | | 18 37 49.9 | +0.4 |
| COCO | | | | | IAmb | IAmb | | 18 37 52.6 | |
| comp=Z,745nm,2.0s | | | | | | | | | |
| COCO | West Island | 20.13 | 258 | P | | P | | 18 37 49.9 | +0.4 |
| COCO | | | | | pmax | pmax | | | |
| comp=Z,745nm,2.0s | | | | | | | | | |
| WB0 | Warramunga Arr | 20.29 | 125 | P | | P | | 18 37 51.7 | +0.4 |
| WB0 | | | | | IAmb | IAmb | | 18 37 54.0 | |
| comp=Z,229nm,0.9s | | | | | | | | | |
| WRA | Warramunga Arr | 20.34 | 126 | P | | P | | 18 37 52.8 | +0.9 |
| WRA | Warramunga Arr | 20.34 | 126 | P | | P | | 18 37 52.9 | +1.1 |
| comp=Z,90nm,0.4s,baz=300,slow=12,SNR=992 | | | | | | | | | |
| WRA | | | | | S | S | | 18 41 34.6 | -4.4 |
| comp=Z,31nm,0.9s,baz=288,slow=25,SNR=5.9 | | | | | | | | | |
| WRA | | | | | LR | LR | | 18 47 34.0 | |
| comp=Z,6μm,18.1s,baz=302,slow=42 | | | | | | | | | |
| comp=Z,90nm,0.4s | | | | | | | | | |
| WRA | Warramunga Arr | 20.34 | 126 | *i* P | | P | | 18 37 52.2 | +0.3 |
| WRA | | | | | pmax | pmax | | | |
| comp=Z,112nm,0.4s | | | | | | | | | |
| WRAB | Tennant Creek | 20.34 | 126 | P | | P | | 18 37 52.0 | +0.1 |
| WRAB | | | | | IAmb | IAmb | | 18 37 59.1 | |
| comp=Z,348nm,1.0s | | | | | | | | | |
| WRAB | Tennant Creek | 20.34 | 126 | *ce* P | | P | | 18 37 52.8 | +0.9 |
| WRAB | | | | | pmax | pmax | | | |
| comp=Z,188nm,0.9s | | | | | | | | | |
| WB2 | Warramunga Arr | 20.35 | 126 | P | | P | | 18 37 51.8 | -0.2 |
| WB2 | | | | | IAmb | IAmb | | 18 37 59.1 | |
| comp=Z,403nm,1.1s | | | | | | | | | |
| IPM | Ipoh | 20.43 | 308 | P | | Pn | | 18 37 55.6 | +0.6 |
| IPM | Ipoh | 20.43 | 308 | | | P | | 18 37 53.0 | +0.2 |
| WR0 | Warramunga Arr | 20.51 | 126 | P | | P | | 18 37 53.5 | -0.2 |
| MORW | Morawa | 20.52 | 182 | P | | Pn | | 18 37 56.5 | +0.5 |
| MORW | Morawa | 20.52 | 182 | P | | P | | 18 37 53.7 | 0.0 |
| MORW | | | | | IAmb | IAmb | | 18 38 00.0 | |
| comp=Z,231nm,1.1s | | | | | | | | | |
| RPSI | Rantau Prapat | 21.11 | 301 | P | | P | | 18 37 59.2 | -0.9 |
| RPSI | | | | | IAmb | IAmb | | 18 38 08.7 | |
| comp=Z,386nm,1.7s | | | | | | | | | |
| RPSI | | | | | IAMs_20 | IAMs_20 | | 18 47 22.1 | |
| comp=Z,8μm,18.0s | | | | | | | | | |
| PSI | Prapat | 21.16 | 301 | P | | P | | 18 38 02.9 | +2.0 |
| PSI | Prapat | 21.16 | 301 | P | | P | | 18 37 59.3 | -1.6 |
| PSI | | | | | pmax | pmax | | | |
| comp=Z,386nm,1.7s | | | | | | | | | |
| PSI | | | | | MLR | MLR | | | |
| comp=Z,8μm,18.0s | | | | | | | | | |
| KULM | Kulim | 21.23 | 309 | P | | P | | 18 38 01.7 | +0.3 |
| GSI | Gunungsitoli | 21.61 | 296 | P | | P | | 18 38 09.6 | +4.1 |
| GSI | Gunungsitoli | 21.61 | 296 | P | | P | | 18 38 05.2 | -0.3 |
| GSI | Gunungsitoli | 21.61 | 296 | P | | P | | 18 38 06.4 | +0.9 |
| comp=Z,92nm,1.3s | | | | | | | | | |
| DLV | T Lat | 21.94 | 337 | P | | P | | 18 38 13.2 | +3.9 |
| DLV | T Lat | 21.94 | 337 | P | | P | | 18 38 07.2 | -2.1 |
| BLDU | Ballidu | 22.05 | 181 | P | | P | | 18 38 12.3 | +2.2 |
| AS31 | Alice Springs | 22.19 | 135 | P | | P | | 18 38 12.8 | +1.0 |
| ASAR | Alice Springs | 22.19 | 135 | P | | P | | 18 38 12.0 | +0.2 |
| ASAR | Alice Springs | 22.19 | 135 | P | | P | | 18 38 13.4 | +1.6 |
| comp=Z,115nm,0.6s,baz=307,slow=9.1,SNR=266 | | | | | | | | | |
| ASAR | | | | | PcP | PcP | | 18 42 08.6 | +0.2 |
| comp=Z,14nm,0.8s,baz=336,slow=2.0,SNR=6.9 | | | | | | | | | |
| ASAR | | | | | S | S | | 18 42 17.2 | +1.9 |
| comp=Z,6.7nm,0.8s,baz=316,slow=25,SNR=2.6 | | | | | | | | | |
| ASAR | | | | | LR | LR | | 18 47 11.4 | |
| comp=Z,5μm,19.1s,baz=308,slow=37 | | | | | | | | | |
| comp=Z,115nm,0.6s | | | | | | | | | |
| AS01 | Alice Springs | 22.23 | 135 | P | | P | | 18 38 13.7 | +1.5 |
| KCSI | Kotacane, Aceh | 22.52 | 301 | P | | P | | 18 38 18.1 | +2.7 |
| comp=Z,149nm,1.2s,comp=Z,5μm | | | | | | | | | |
| KLBR | Kellerberrin | 23.03 | 178 | P | | P | | 18 38 23.1 | +2.5 |
| MMPI | Merauke | 23.18 | 92 | P | | P | | 18 38 22.0 | -0.3 |
| comp=Z,269nm,1.1s,comp=Z,6μmcomp=Z,4μm | | | | | | | | | |
| SNSI | Sinabang, Aceh | 23.22 | 297 | P | | P | | 18 38 24.8 | +2.2 |
| comp=Z,236nm,1.3s,comp=Z,5μm | | | | | | | | | |
| KMBL | Kambalda | 23.25 | 169 | P | | P | | 18 38 24.0 | +1.2 |
| MTKN | Mount Kenneth | 23.39 | 183 | P | | P | | 18 38 26.0 | +1.9 |
| MUN | Mundaring | 23.41 | 182 | P | | P | | 18 38 26.1 | +1.7 |
| GENI | Genyem | 23.83 | 77 | P | | P | | 18 38 31.6 | +3.0 |
| GENI | Genyem | 23.83 | 77 | P | | P | | 18 38 27.0 | -1.6 |
| MLSI | Meulaboh, Aceh | 24.07 | 301 | P | | P | | 18 38 30.5 | -0.4 |
| comp=Z,153nm,0.9s | | | | | | | | | |
| LHMI | Lhok Sumawe | 24.14 | 304 | P | | P | | 18 38 36.2 | +4.8 |
| LHMI | Lhok Sumawe | 24.14 | 304 | P | | P | | 18 38 30.6 | -0.9 |
| LHMI | | | | | IAmb | IAmb | | 18 38 50.4 | |
| comp=Z,230nm,1.0s | | | | | | | | | |
| LHMI | Lhok Sumawe | 24.14 | 304 | P | | P | | 18 38 31.6 | +0.2 |
| comp=Z,261nm,1.4s,comp=Z,8μmcomp=Z,7μm | | | | | | | | | |
| SRIT | Nakonsritamara | 24.20 | 314 | P | | P | | 18 38 36.1 | +4.1 |
| SRIT | Nakonsritamara | 24.20 | 314 | P | | P | | 18 38 32.1 | +0.1 |
| NWAO | Narrogin (SRO) | 24.35 | 179 | P | | P | | 18 38 34.9 | +1.6 |
| NWAO | Narrogin (SRO) | 24.35 | 179 | P | | P | | 18 38 35.1 | +1.8 |
| NWAO | Narrogin (SRO) | 24.35 | 179 | P | | P | | 18 38 32.8 | -0.4 |
| NWAO | Narrogin (SRO) | 24.35 | 179 | P | | P | | 18 38 35.0 | +1.8 |
| comp=Z,84nm,0.9s,baz=352,slow=8.8,SNR=25 | | | | | | | | | |
| NWAO | | | | | S | S | | 18 42 58.6 | +7.1 |
| comp=Z,48nm,0.7s,baz=277,slow=20,SNR=2.6 | | | | | | | | | |
| NWAO | | | | | LR | LR | | 18 49 03.4 | |
| comp=Z,2μm,18.0s,baz=3.5,slow=39 | | | | | | | | | |
| comp=Z,84nm,0.9s | | | | | | | | | |
| JAY | Jayapura | 24.37 | 77 | P | | P | | 18 38 31.0 | -2.7 |
| FORT | Forrest | 24.52 | 156 | P | | P | | 18 38 37.1 | +2.3 |
| FORT | Forrest | 24.52 | 156 | P | | P | | 18 38 34.9 | +0.1 |
| SURA | Surathani | 24.57 | 315 | P | | P | | 18 38 38.4 | +3.0 |
| QIS | Mount Isa | 24.98 | 121 | P | | P | | 18 38 40.7 | +1.6 |
| RKGY | Rocky Gully | 26.03 | 180 | P | | P | | 18 38 50.5 | +2.1 |
| OOD | Oodnadatta | 26.14 | 140 | P | | P | | 18 38 50.9 | +1.3 |
| COEN | Coen | 26.29 | 104 | P | | P | | 18 38 51.1 | 0.0 |
| COEN | Coen | 26.29 | 104 | P | | P | | 18 38 51.3 | +0.2 |
| COEN | | | | | IAmb | IAmb | | 18 39 12.8 | |
| comp=Z,99nm,1.1s | | | | | | | | | |
| MULG | Mulgathing | 26.98 | 146 | P | | P | | 18 38 58.2 | +1.1 |
| QIZ | Qiongzhong | 28.20 | 346 | P | | P | | 18 39 11.0 | +2.9 |
| QIZ | | | | | S | S | | 18 43 58.0 | +5.4 |
| QIZ | | | | | pmax | pmax | | | |
| comp=Z,580nm,5.9s | | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| comp=Z,3μm,17.5s | | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| comp=Z,4μm,15.9s | | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| comp=Z,3μm,17.1s | | | | | | | | | |
| QIZ | Qiongzhong | 28.20 | 346 | P | | P | | 18 39 08.4 | +0.3 |
| MTSU | Mount Surprise | 28.28 | 113 | P | | P | | 18 39 10.2 | +1.2 |
| SRDT | SRDT | 28.74 | 322 | P | | P | | 18 39 16.5 | +3.5 |
| INKA | Innaminka | 29.55 | 134 | P | | P | | 18 39 22.4 | +2.3 |
| LCRK | Leigh Creek | 29.57 | 141 | P | | P | | 18 39 21.5 | +1.3 |
| PMG | Port Moresby | 29.86 | 94 | P | | P | | 18 39 22.2 | -0.8 |
| PMG | Port Moresby | 29.86 | 94 | IAMs_20 | | IAMs_20 | | 18 53 37.5 | |
| comp=Z,5μm,19.0s | | | | | | | | | |
| PMG | Port Moresby | 29.86 | 94 | P | | P | | 18 39 24.8 | +1.9 |
| comp=Z,14nm,0.9s,baz=278,slow=11,SNR=3.0 | | | | | | | | | |
| PMG | | | | | LR | LR | | 18 53 58.1 | |
| comp=Z,5μm,18.8s,baz=257,slow=41 | | | | | | | | | |
| comp=Z,14nm,0.9s | | | | | | | | | |
| PMG | Port Moresby | 29.86 | 94 | *ie* P | | P | | 18 39 25.5 | +2.5 |
| PMG | | | | | pmax | pmax | | | |
| comp=Z,35nm,1.1s | | | | | | | | | |
| BBOO | Buckleboo | 30.01 | 147 | P | | P | | 18 39 25.1 | +1.0 |
| BBOO | Buckleboo | 30.01 | 147 | P | | P | | 18 39 23.8 | -0.3 |
| BBOO | | | | | IAmb | IAmb | | 18 39 26.7 | |
| comp=Z,157nm,1.2s | | | | | | | | | |
| CTA | Charters Tower | 30.61 | 115 | P | | P | | 18 39 30.7 | +1.2 |
| comp=Z,4.6nm,1.0s,baz=280,slow=11,SNR=44 | | | | | | | | | |
| CTA | | | | | LR | LR | | 18 52 44.7 | |
| comp=Z,228nm,18.5s,baz=287,slow=38 | | | | | | | | | |
| comp=Z,4.6nm,1.0s | | | | | | | | | |
| CTAO | Charters Tower | 30.61 | 115 | P | | P | | 18 39 31.1 | +1.5 |
| CTAO | Charters Tower | 30.61 | 115 | P | | P | | 18 39 29.8 | +0.3 |
| CTAO | | | | | IAmb | IAmb | | 18 39 32.9 | |
| comp=Z,119nm,1.1s | | | | | | | | | |
| CTAO | Charters Tower | 30.61 | 115 | P | | P | | 18 39 29.8 | +0.3 |
| CTAO | | | | | pmax | pmax | | | |
| comp=Z,119nm,1.2s | | | | | | | | | |
| CTAO | | | | | MLR | MLR | | | |
| comp=Z,3μm,20.0s | | | | | | | | | |
| TV1H | Townsville Har | 30.85 | 114 | P | | P | | 18 39 34.0 | +2.3 |
| MANU | Manus Island | 30.94 | 80 | P | | P | | 18 39 32.8 | +0.3 |
| WHYH | Whyalla | 31.02 | 145 | P | | P | | 18 39 34.6 | +1.6 |
| PHRA | Phrae | 31.46 | 328 | P | | P | | 18 39 37.2 | +0.2 |
| AUAYR | Ayr State High | 31.50 | 114 | P | | P | | 18 39 39.9 | +2.5 |
| QLP | Quilpie | 31.54 | 128 | P | | P | | 18 39 40.0 | +2.3 |
| TPUB | Ta-pu | 31.77 | 6 | P | | P | | 18 39 40.2 | +0.5 |
| TPUB | | | | | IAmb | IAmb | | 18 39 52.7 | |
| comp=Z,51nm,1.1s | | | | | | | | | |
| HTT | Hallett | 32.08 | 144 | P | | P | | 18 39 44.0 | +1.6 |
| CM31 | Chiang Mai Arr | 32.11 | 327 | P | | P | | 18 39 43.1 | +0.4 |
| CM31 | | | | | IAmb | IAmb | | 18 39 48.9 | |
| comp=Z,80nm,1.1s | | | | | | | | | |
| CMAR | Chiang Mai Arr | 32.11 | 327 | P | | P | | 18 39 43.7 | +1.0 |
| CMAR | Chiang Mai Arr | 32.11 | 327 | P | | P | | 18 39 41.6 | -1.1 |
| comp=Z,15nm,0.8s,baz=152,slow=6.4,SNR=59 | | | | | | | | | |
| CMAR | | | | | PcP | PcP | | 18 42 31.4 | -0.5 |
| comp=Z,5.0nm,1.1s,baz=182,slow=3.1,SNR=3.7 | | | | | | | | | |
| CMAR | | | | | ScP | ScP | | 18 46 14.1 | -0.2 |
| comp=Z,1.0nm,0.8s,baz=180,slow=3.2,SNR=3.2 | | | | | | | | | |
| comp=Z,15nm,0.8s | | | | | | | | | |
| SLVN | Son La | 32.26 | 337 | P | | P | | 18 39 42.8 | -1.3 |
| SLVN | | | | | IAmb | IAmb | | 18 39 55.9 | |
| comp=Z,47nm,1.2s | | | | | | | | | |
| SSLB | Suanglung | 32.29 | 7 | P | | P | | 18 39 49.0 | +4.8 |
| SSLB | Suanglung | 32.29 | 7 | P | | P | | 18 39 43.7 | -0.5 |
| STKA | Stephens Creek | 32.68 | 139 | P | | P | | 18 39 48.9 | +1.2 |
| STKA | Stephens Creek | 32.68 | 139 | P | | P | | 18 39 48.5 | +0.9 |
| STKA | Stephens Creek | 32.68 | 139 | P | | P | | 18 39 48.8 | +1.2 |
| comp=Z,71nm,0.6s,baz=311,slow=9.2,SNR=131 | | | | | | | | | |
| STKA | | | | | LR | LR | | 18 53 47.7 | |
| comp=Z,3μm,18.5s,baz=301,slow=38 | | | | | | | | | |
| comp=Z,71nm,0.6s | | | | | | | | | |
| CRAI | Chiangrai | 32.84 | 330 | P | | P | | 18 39 49.5 | +0.4 |
| CRAI | | | | | IAmb | IAmb | | 18 39 54.4 | |
| comp=Z,106nm,1.3s | | | | | | | | | |
| YOJ | Yonaguni jima | 33.25 | 10 | P | | P | | 18 39 52.4 | -0.2 |
| YOJ | Yonaguni jima | 33.25 | 10 | P | | P | | 18 39 52.4 | -0.2 |
| YOJ | | | | | pmax | pmax | | | |
| comp=Z,234nm,1.2s | | | | | | | | | |
| TATO | Taipei | 33.52 | 7 | P | | P | | 18 39 55.6 | +0.6 |
| GULI | GuiLin | 34.15 | 349 | P | | P | | 18 40 02.8 | +2.3 |
| GULI | | | | | S | S | | 18 45 32.5 | +6.9 |
| GULI | | | | | pmax | pmax | | | |
| comp=Z,10.0nm,1.9s | | | | | | | | | |
| GULI | | | | | LR | LR | | | |
| comp=Z,1μm,19.5s | | | | | | | | | |
| GULI | | | | | LR | LR | | | |
| comp=Z,4μm,16.6s | | | | | | | | | |
| GULI | | | | | LR | LR | | | |
| comp=Z,3μm,16.3s | | | | | | | | | |
| RABL | Rabaul | 35.25 | 85 | P | | P | | 18 40 09.5 | -0.7 |
| CMSA | Cobar Meteorol | 35.25 | 135 | P | | P | | 18 40 11.5 | +1.5 |
| RK1H | Rockhampton Ha | 35.39 | 119 | P | | P | | 18 40 12.9 | +1.6 |
| AULRC | Lightning Ridg | 35.82 | 130 | P | | P | | 18 40 16.9 | +2.0 |
| GYA | Guiyang | 36.12 | 344 | ⇓P | | P | | 18 40 21.5 | +4.0 |
| GYA | | | | | S | S | | 18 46 00.5 | +4.4 |
| GYA | | | | | pmax | pmax | | | |
| comp=Z,54nm,1.8s | | | | | | | | | |
| GYA | | | | | pmax | pmax | | | |
| comp=Z,1μm,4.4s | | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| comp=Z,1μm,17.7s | | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| comp=Z,3μm,18.8s | | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| comp=Z,2μm,20.2s | | | | | | | | | |
| KMI | Kunming | 36.13 | 338 | ⇑P | | P | | 18 40 19.8 | +2.0 |
| KMI | | | | | PP | PP | | 18 41 42.5 | +2.2 |
| KMI | | | | | S | S | | 18 45 59.0 | +2.4 |
| KMI | | | | | pmax | pmax | | | |
| comp=Z,71nm,1.0s | | | | | | | | | |
| KMI | | | | | pmax | pmax | | | |
| comp=Z,1μm,5.5s | | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| comp=Z,2μm,18.7s | | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| comp=Z,2μm,14.8s | | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| comp=Z,3μm,14.9s | | | | | | | | | |
| ARPS | Mount Arapiles | 36.13 | 145 | P | | P | | 18 40 19.5 | +2.0 |
| EIDS | Eidsvold | 36.58 | 122 | P | | P | | 18 40 23.8 | +2.3 |
| EIDS | Eidsvold | 36.58 | 122 | P | | P | | 18 40 22.7 | +1.2 |
| EIDS | | | | | IAMs_20 | IAMs_20 | | 18 57 03.8 | |
| comp=Z,4μm,18.0s | | | | | | | | | |
| CNSH | ChangSha | 36.63 | 354 | P | | P | | 18 40 24.3 | +2.6 |
| CNSH | | | | | S | S | | 18 46 08.0 | +4.4 |
| CNSH | | | | | pmax | pmax | | | |
| comp=Z,44nm,1.2s | | | | | | | | | |
| CNSH | | | | | LR | LR | | | |
| comp=Z,2μm,20.4s | | | | | | | | | |
| CNSH | | | | | LR | LR | | | |
| comp=Z,3μm,16.9s | | | | | | | | | |
| CNSH | | | | | LR | LR | | | |
| comp=Z,2μm,19.3s | | | | | | | | | |
| JOW | Kunigami | 36.76 | 17 | LR | | LR | | 18 56 54.5 | |
| comp=Z,808nm,21.0s,baz=129,slow=39 | | | | | | | | | |
| AUMAG | Moama Anglican | 37.40 | 142 | P | | P | | 18 40 31.1 | +2.8 |
| AUDCS | Dubbo College | 37.72 | 133 | P | | P | | 18 40 33.3 | +2.2 |
| PZH | PanZhiHua | 37.76 | 337 | P | | P | | 18 40 33.3 | +1.8 |
| PZH | | | | | S | S | | 18 46 26.0 | +4.9 |
| PZH | | | | | pmax | pmax | | | |
| comp=Z,40nm,1.1s | | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| comp=Z,1μm,5.3s | | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| comp=Z,2μm,16.0s | | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| comp=Z,3μm,17.5s | | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| comp=Z,2μm,17.1s | | | | | | | | | |
| TNCH | TengChong | 37.82 | 332 | ⇑P | | P | | 18 40 34.3 | +2.2 |
| TNCH | | | | | pP | pP | | 18 40 37.8 | -1.1 |
| TNCH | | | | | sP | sP | | 18 40 41.5 | -0.1 |
| TNCH | | | | | PP | PnPn | | 18 42 05.5 | +5.5 |
| TNCH | | | | | S | S | | 18 46 22.8 | +0.6 |
| TNCH | | | | | sS | sS | | 18 46 33.8 | +0.5 |
| TNCH | | | | | SS | SnSn | | 18 48 58.5 | -5.2 |
| TNCH | | | | | pmax | pmax | | | |
| comp=Z,110nm,2.2s | | | | | | | | | |
| TNCH | | | | | pmax | pmax | | | |
| comp=Z,1μm,3.8s | | | | | | | | | |
| TNCH | | | | | LR | LR | | | |
| comp=Z,3μm,18.5s | | | | | | | | | |
| TNCH | | | | | LR | LR | | | |
| comp=Z,3μm,15.9s | | | | | | | | | |
| TNCH | | | | | LR | LR | | | |
| comp=Z,5μm,18.3s | | | | | | | | | |
| BRAT | Ballarat | 37.88 | 144 | P | | P | | 18 40 34.6 | +2.3 |
| GEXS | Deakin Univers | 38.53 | 144 | P | | P | | 18 40 40.8 | +3.0 |
| MLBS | Spotswood, Mel | 38.63 | 144 | P | | P | | 18 40 41.6 | +3.0 |
| YNG | Young | 38.68 | 136 | P | | P | | 18 40 41.1 | +1.9 |
| TOO | Toolangi | 38.81 | 143 | P | | P | | 18 40 43.1 | +2.9 |
| TOO | Toolangi | 38.81 | 143 | P | | P | | 18 40 41.6 | +1.3 |
| TOO | | | | | IAmb | IAmb | | 18 40 44.7 | |
| comp=Z,106nm,1.0s | | | | | | | | | |
| TOO | Toolangi | 38.81 | 143 | P | | P | | 18 40 41.6 | +1.3 |
| TOO | | | | | pmax | pmax | | | |
| comp=Z,106nm,1.0s | | | | | | | | | |
| AUPHS | Peel High Scho | 38.83 | 130 | P | | P | | 18 40 43.0 | +2.6 |
| WHN | Wuhan | 38.86 | 356 | P | | P | | 18 40 44.3 | +3.8 |
| WHN | | | | | pP | sP | | 18 40 50.8 | +0.7 |
| WHN | | | | | S | S | | 18 46 43.0 | +

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HNR | Honiara | 42.47 | 95 | P | P | 18 41 13.4 | +2.7 | | |
| HNR | Honiara | 42.47 | 95 | P | P | 18 41 11.1 | +0.4 | | |
| HNR | Honiara | 42.47 | 95 | LR | LR | 18 59 21.6 | | | |
| | comp=Z,22µm,21.4s,baz=262,slow=37 | | | | | | | | |
| HNR | Honiara | 42.47 | 95 | P | P | 18 41 11.1 | +0.4 | | |
| HNR | | | | pmax | pmax | | | | |
| | comp=Z,418nm,1.1s | | | | | | | | |
| HNR | | | | MLR | MLR | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| GLAD | Gladstone | 42.52 | 145 | P | P | 18 41 13.3 | +2.5 | | |
| XAN | Xi'an | 42.94 | 350 | ⇑P | P | 18 41 14.8 | +0.5 | | |
| XAN | | | | PP | PcP | 18 43 01.5 | -3.2 | | |
| XAN | | | | S | S | 18 47 41.0 | +2.8 | | |
| XAN | | | | ScS | ScS | 18 51 11.8 | -2.2 | | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,40nm,0.8s | | | | | | | | |
| XAN | | | | pmax | pmax | | | | |
| | comp=Z,2µm,5.4s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,3µm,17.2s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,3µm,17.2s | | | | | | | | |
| XAN | | | | LR | LR | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | |
| LYN | LuoYang | 42.98 | 355 | eP | P | 18 41 15.5 | +1.0 | | |
| LYN | | | | pP | sP | 18 41 27.0 | +2.9 | | |
| LYN | | | | S | S | 18 47 42.8 | +4.1 | | |
| LYN | | | | SS | SS | 18 50 46.5 | -4.7 | | |
| LYN | | | | pmax | pmax | | | | |
| | comp=Z,50nm,0.8s | | | | | | | | |
| LYN | | | | pmax | pmax | | | | |
| | comp=Z,2µm,4.2s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,2µm,16.1s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,4µm,15.8s | | | | | | | | |
| LYN | | | | LR | LR | | | | |
| | comp=Z,2µm,16.1s | | | | | | | | |
| JCJ | Chichijima | 42.99 | 34 | P | P | 18 41 18.4 | +3.7 | | |
| JCJ | Chichijima | 42.99 | 34 | P | P | 18 41 13.5 | -1.2 | | |
| JCJ | | | | IAmb | IAmb | 18 41 30.1 | | | |
| | comp=Z,151nm,0.9s | | | | | | | | |
| JCJ | Chichijima | 42.99 | 34 | P | P | 18 41 10.0 | -4.6 | | |
| | comp=Z,73nm,0.6s,baz=223,slow=2.9,SNR=7.6 | | | | | | | | |
| JCJ | | | | LR | LR | 18 58 09.3 | | | |
| | comp=Z,596nm,21.8s,baz=212,slow=35 | | | | | | | | |
| JNU | Nakatsue | 43.42 | 17 | P | P | 18 41 22.1 | +4.0 | | |
| JNU | Nakatsue | 43.42 | 17 | P | P | 18 41 16.3 | -1.9 | | |
| JNU | | | | IAmb | IAmb | 18 41 20.8 | | | |
| | comp=Z,78nm,1.0s | | | | | | | | |
| JNU | Nakatsue | 43.42 | 17 | P | P | 18 41 18.9 | +0.8 | | |
| | comp=Z,55nm,0.9s,baz=195,slow=4.2,SNR=22 | | | | | | | | |
| JNU | | | | LR | LR | 19 03 09.6 | | | |
| | comp=Z,727nm,18.3s,baz=221,slow=42 | | | | | | | | |
| | comp=Z,55nm,0.9s | | | | | | | | |
| TIA | Tai'an | 44.43 | 0 | P | P | 18 41 26.5 | +0.4 | | |
| TIA | | | | PP | PP | 18 43 09.8 | -0.3 | | |
| TIA | | | | S | S | 18 48 01.0 | +1.2 | | |
| TIA | | | | pmax | pmax | | | | |
| | comp=Z,28nm,0.8s | | | | | | | | |
| TIA | | | | pmax | pmax | | | | |
| | comp=Z,700nm,4.0s | | | | | | | | |
| TIA | | | | LR | LR | | | | |
| | comp=Z,670nm,16.5s | | | | | | | | |
| TIA | | | | LR | LR | | | | |
| | comp=Z,1µm,18.0s | | | | | | | | |
| TIA | | | | LR | LR | | | | |
| | comp=Z,680nm,16.5s | | | | | | | | |
| JMN | Monobe | 44.93 | 20 | P | P | 18 41 32.6 | +2.4 | | |
| JMN | Monobe | 44.93 | 20 | P | P | 18 41 30.0 | -0.2 | | |
| LSA | Lhasa | 45.34 | 328 | P | P | 18 41 35.3 | +1.3 | | |
| LSA | | | | S | S | 18 48 17.5 | +3.4 | | |
| LSA | | | | LR | LR | | | | |
| | comp=Z,1µm,23.1s | | | | | | | | |
| LSA | | | | LR | LR | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| LSA | | | | LR | LR | | | | |
| | comp=Z,1µm,23.9s | | | | | | | | |
| LSA | Lhasa | 45.34 | 328 | P | P | 18 41 34.2 | +0.2 | | |
| LSA | | | | IAmb | IAmb | 18 41 42.6 | | | |
| | comp=Z,58nm,0.9s | | | | | | | | |
| LSA | | | | IAMs_20 | IAMs_20 | 19 03 10.9 | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| LSA | Lhasa | 45.34 | 328 | P | P | 18 41 34.2 | +0.2 | | |
| LSA | | | | pmax | pmax | | | | |
| | comp=Z,58nm,0.9s | | | | | | | | |
| LSA | | | | MLR | MLR | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | |
| LHI | Lord Howe Isla | 45.36 | 126 | IAMs_20 | IAMs_20 | 19 02 54.1 | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| TJN | Taejon | 45.66 | 12 | P | P | 18 41 39.3 | +3.4 | | |
| TJN | Taejon | 45.66 | 12 | P | P | 18 41 36.5 | +0.6 | | |
| TJN | Taejon | 45.66 | 12 | ⇑eP | P | 18 41 37.6 | +1.7 | | |
| HNS | HongShan | 45.66 | 358 | ⇑P | P | 18 41 36.5 | +0.6 | | |
| HNS | | | | PP | PP | 18 43 26.0 | +2.8 | | |
| HNS | | | | S | S | 18 48 18.5 | +0.9 | | |
| HNS | | | | SS | ScS | 18 51 34.5 | +3.5 | | |
| HNS | | | | pmax | pmax | | | | |
| | comp=Z,46nm,2.3s | | | | | | | | |
| HNS | | | | pmax | pmax | | | | |
| | comp=Z,960nm,4.9s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,1µm,19.8s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,3µm,17.9s | | | | | | | | |
| HNS | | | | LR | LR | | | | |
| | comp=Z,2µm,16.7s | | | | | | | | |
| HYB | Hyderabad | 45.83 | 304 | eP | P | 18 41 36.6 | -1.0 | | |
| LZH | Lanzhou | 45.99 | 345 | ⇑P | P | 18 41 40.3 | +1.6 | | |
| LZH | | | | pP | pP | 18 41 46.8 | +1.1 | | |
| LZH | | | | PcP | PcP | 18 43 16.0 | +0.7 | | |
| LZH | | | | PP | PP | 18 43 27.5 | +0.6 | | |
| LZH | | | | S | S | 18 48 26.0 | +3.3 | | |
| LZH | | | | pmax | pmax | | | | |
| | comp=Z,85nm,1.1s | | | | | | | | |
| LZH | | | | pmax | pmax | | | | |
| | comp=Z,2µm,4.5s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,1µm,17.2s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,2µm,17.5s | | | | | | | | |
| LZH | | | | LR | LR | | | | |
| | comp=Z,3µm,17.5s | | | | | | | | |
| TIY | Taiyuan | 46.12 | 355 | P | P | 18 41 40.5 | +0.9 | | |
| TIY | | | | S | S | 18 48 25.0 | +0.6 | | |
| TIY | | | | pmax | pmax | | | | |
| | comp=Z,41nm,0.7s | | | | | | | | |
| TIY | | | | pmax | pmax | | | | |
| | comp=Z,820nm,4.1s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,1µm,17.2s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,1µm,17.2s | | | | | | | | |
| TIY | | | | LR | LR | | | | |
| | comp=Z,1µm,16.5s | | | | | | | | |
| HMDM | Hanimaadhoo | 46.18 | 288 | P | P | 18 41 41.0 | +0.6 | | |
| INCN | Inchon | 46.59 | 11 | P | P | 18 41 42.2 | -1.1 | | |
| INCN | | | | IAmb | IAmb | 18 41 48.2 | | | |
| | comp=Z,86nm,1.6s | | | | | | | | |
| INCN | Inchon | 46.59 | 11 | P | P | 18 41 42.2 | -1.1 | | |
| INCN | | | | pmax | pmax | | | | |
| | comp=Z,86nm,1.6s | | | | | | | | |
| JHJ | Hachijo jima 2 | 46.71 | 27 | LR | LR | 18 59 11.1 | | | |
| | comp=Z,393nm,21.2s,baz=118,slow=33 | | | | | | | | |
| KSAR | Wonju Array Be | 46.79 | 12 | P | P | 18 41 45.6 | +0.8 | | |
| KSAR | Wonju Array Be | 46.79 | 12 | P | P | 18 41 45.6 | +0.8 | | |
| KSRS | Korea Array | 46.81 | 12 | P | P | 18 41 45.9 | +1.0 | | |
| | comp=Z,37nm,1.0s,baz=190,slow=7.9,SNR=70 | | | | | | | | |
| KSRS | | | | LR | LR | 19 02 20.6 | | | |
| | comp=Z,397nm,21.2s,baz=205,slow=37 | | | | | | | | |
| | comp=Z,37nm,1.0s | | | | | | | | |
| KS19 | Wonju Array Si | 46.85 | 12 | P | P | 18 41 44.9 | -0.4 | | |
| KS19 | | | | IAmb | IAmb | 18 41 48.3 | | | |
| | comp=Z,83nm,1.2s | | | | | | | | |
| KOUNC | Koumac, New Ca | 47.22 | 110 | P | P | 18 41 51.3 | +2.8 | | |
| KOUNC | Koumac, New Ca | 47.22 | 110 | P | P | 18 41 49.0 | +0.5 | | |
| DL2 | Dalian | 47.32 | 5 | P | P | 18 41 49.0 | +0.1 | | |
| DL2 | | | | S | S | 18 48 42.0 | +0.7 | | |
| DL2 | | | | pmax | pmax | | | | |
| | comp=Z,86nm,1.6s | | | | | | | | |
| DL2 | | | | pmax | pmax | | | | |
| | comp=Z,1µm,6.4s | | | | | | | | |
| DL2 | | | | LR | LR | | | | |
| | comp=Z,1µm,16.0s | | | | | | | | |
| DL2 | | | | LR | LR | | | | |
| | comp=Z,1µm,17.1s | | | | | | | | |
| DL2 | | | | LR | LR | | | | |
| | comp=Z,1µm,15.7s | | | | | | | | |
| INU | Inuyama | 47.51 | 22 | P | P | 18 41 54.3 | +3.8 | | |
| INU | Inuyama | 47.51 | 22 | P | P | 18 41 50.5 | +0.1 | | |
| INU | | | | IAmb | IAmb | 18 41 52.5 | | | |
| | comp=Z,52nm,1.3s | | | | | | | | |
| JGF | Kuroka | 47.86 | 23 | P | P | 18 41 54.3 | +1.0 | | |
| JGF | Kuroka | 47.86 | 23 | P | P | 18 41 52.7 | -0.6 | | |
| JGF | | | | IAmb | IAmb | 18 41 57.9 | | | |
| | comp=Z,38nm,1.0s | | | | | | | | |
| BJT | Baijiatuau | 48.24 | 359 | P | P | 18 41 58.6 | +2.6 | | |
| BJT | Baijiatuau | 48.24 | 359 | P | P | 18 41 56.0 | 0.0 | | |
| BJT | Baijiatuau | 48.24 | 359 | P | P | 18 41 56.0 | 0.0 | | |
| BJT | | | | pmax | pmax | | | | |
| | comp=Z,157nm,1.5s | | | | | | | | |
| BJT | | | | MLR | MLR | | | | |
| | comp=Z,1µm,18.0s | | | | | | | | |
| BJI | Beijing | 48.26 | 359 | P | P | 18 41 56.8 | +0.7 | | |
| BJI | | | | S | S | 18 48 56.8 | +2.3 | | |
| BJI | | | | pmax | pmax | | | | |
| | comp=Z,34nm,1.7s | | | | | | | | |
| BJI | | | | LR | LR | | | | |
| | comp=Z,670nm,16.7s | | | | | | | | |
| BJI | | | | LR | LR | | | | |
| | comp=Z,980nm,17.5s | | | | | | | | |
| BJI | | | | LR | LR | | | | |
| | comp=Z,420nm,15.7s | | | | | | | | |
| MAJO | Matsushiro | 49.02 | 23 | P | P | 18 42 03.2 | +1.1 | | |
| MAJO | Matsushiro | 49.02 | 23 | P | P | 18 42 01.6 | -0.5 | | |
| MAJO | Matsushiro | 49.02 | 23 | dP | P | 18 42 02.5 | +0.4 | | |
| MAJO | | | | pmax | pmax | | | | |
| | comp=Z,76nm,1.2s | | | | | | | | |
| MJAR | Matsushiro Arr | 49.02 | 23 | P | P | 18 42 01.4 | -0.7 | | |
| | comp=Z,62nm,1.1s,baz=194,slow=6.9,SNR=64 | | | | | | | | |
| MJAR | | | | LR | LR | 19 01 59.1 | | | |
| | comp=Z,569nm,20.8s,baz=198,slow=35 | | | | | | | | |
| | comp=Z,62nm,1.1s | | | | | | | | |
| MJB9 | Matsu-Tunnel | 49.02 | 23 | P | P | 18 42 02.0 | -0.1 | | |
| MJB9 | | | | IAmb | IAmb | 18 42 05.4 | | | |
| | comp=Z,129nm,1.3s | | | | | | | | |
| GOMU | GeErMu | 49.06 | 336 | P | P | 18 42 04.5 | +1.7 | | |
| GOMU | | | | sP | sP | 18 42 12.5 | 0.0 | | |
| GOMU | | | | PP | PP | 18 43 52.0 | -4.7 | | |
| GOMU | | | | pmax | pmax | | | | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,5µm,19.2s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,5µm,18.1s | | | | | | | | |
| GOMU | | | | LR | LR | | | | |
| | comp=Z,6µm,19.5s | | | | | | | | |
| BTO | Baotou | 49.23 | 353 | ⇑P | P | 18 42 05.5 | +1.7 | | |
| BTO | | | | PP | PP | 18 44 01.0 | +3.1 | | |
| BTO | | | | S | S | 18 49 09.0 | +0.4 | | |
| BTO | | | | SS | SS | 18 52 38.0 | -2.4 | | |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,160nm,2.1s | | | | | | | | |
| BTO | | | | pmax | pmax | | | | |
| | comp=Z,2µm,7.9s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,6µm,17.1s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,3µm,16.1s | | | | | | | | |
| BTO | | | | LR | LR | | | | |
| | comp=Z,6µm,16.9s | | | | | | | | |
| NOUC | Port Laguerre | 49.29 | 112 | P | P | 18 42 06.6 | +2.1 | | |
| HHC | Hu-ho-hao-te | 49.31 | 355 | eP | P | 18 42 05.8 | +1.4 | | |
| HHC | | | | PP | PP | 18 44 02.5 | +3.9 | | |
| HHC | | | | S | S | 18 49 08.5 | -1.1 | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,45nm,1.4s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,770nm,5.9s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,890nm,15.9s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,1µm,15.1s | | | | | | | | |
| HHC | | | | LR | LR | | | | |
| | comp=Z,1µm,17.7s | | | | | | | | |
| DZM | Mont Dzumac | 49.42 | 112 | P | P | 18 42 07.7 | +2.1 | | |
| DZM | Mont Dzumac | 49.42 | 112 | eP | P | 18 42 03.2 | -2.4 | | |
| | comp=Z,215nm,1.1s | | | | | | | | |
| DZM | | | | eS | S | 18 49 02.1 | -10 | | |
| | comp=Z,1µm,32.7s | | | | | | | | |
| DZM | | | | eSS | SS | 18 52 40.2 | -3.7 | | |
| | comp=Z,2µm,24.7s | | | | | | | | |
| DZM | | | | eLR | LR | 18 56 09.4 | | | |
| | comp=Z,4µm,37.1s | | | | | | | | |
| DZM | Mont Dzumac | 49.42 | 112 | P | P | 18 42 04.9 | -0.7 | | |
| DZM | | | | IAmb | IAmb | 18 42 15.8 | | | |
| | comp=Z,113nm,1.1s | | | | | | | | |
| YATNC | Mamie plateau, | 49.83 | 112 | P | P | 18 42 11.1 | +2.5 | | |
| LIFNC | LIFOU | 49.99 | 110 | P | P | 18 42 12.9 | +3.1 | | |
| LIFNC | LIFOU | 49.99 | 110 | P | P | 18 42 09.5 | -0.3 | | |
| GTA | Gaotai | 50.21 | 343 | P | P | 18 42 12.8 | +1.5 | | |
| GTA | | | | pP | sP | 18 42 23.0 | +2.0 | | |
| GTA | | | | sP | pP | 18 42 27.0 | +8.7 | | |
| GTA | | | | S | S | 18 49 23.0 | +0.7 | | |
| GTA | | | | ScS | ScS | 18 51 59.0 | -2.4 | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,68nm,1.5s | | | | | | | | |
| GTA | | | | pmax | pmax | | | | |
| | comp=Z,1µm,4.4s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,2µm,19.3s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,3µm,17.8s | | | | | | | | |
| GTA | | | | LR | LR | | | | |
| | comp=Z,2µm,19.3s | | | | | | | | |
| JSD | Sado | 50.35 | 22 | P | P | 18 42 14.3 | +2.1 | | |
| JSD | Sado | 50.35 | 22 | P | P | 18 42 10.8 | -1.5 | | |
| JSD | | | | IAmb | IAmb | 18 42 17.2 | | | |
| | comp=Z,102nm,1.1s | | | | | | | | |
| SNY | Shenyang | 50.41 | 6 | ⇓P | P | 18 42 12.8 | +0.3 | | |
| SNY | | | | S | S | 18 49 21.3 | -3.3 | | |
| SNY | | | | pmax | pmax | | | | |
| | comp=Z,64nm,1.2s | | | | | | | | |
| SNY | | | | pmax | pmax | | | | |
| | comp=Z,960nm,4.2s | | | | | | | | |
| SNY | | | | LR | LR | | | | |
| | comp=Z,1µm,17.5s | | | | | | | | |
| SNY | | | | LR | LR | | | | |
| | comp=Z,770nm,15.3s | | | | | | | | |
| SNY | | | | LR | LR | | | | |
| | comp=Z,970nm,20.3s | | | | | | | | |
| DVP | Devils Point | 50.62 | 106 | P | P | 18 42 17.8 | +3.2 | | |
| MARNC | Mare, Loyalty | 50.81 | 111 | P | P | 18 42 16.1 | +0.1 | | |
| JMM | Marumori | 51.19 | 24 | P | P | 18 42 17.1 | -1.4 | | |
| XLT | XiLinHaoTe | 52.12 | 359 | eP | P | 18 42 26.3 | +0.9 | | |
| XLT | | | | pP | sP | 18 42 37.5 | +2.3 | | |
| XLT | | | | PcP | PcP | 18 43 37.5 | +0.3 | | |
| XLT | | | | PP | PP | 18 44 30.0 | +6.0 | | |
| XLT | | | | S | S | 18 49 48.0 | -0.4 | | |
| XLT | | | | sS | sS | 18 50 03.8 | +4.0 | | |
| XLT | | | | SS | SS | 18 53 28.5 | +2.3 | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,110nm,1.2s | | | | | | | | |
| XLT | | | | pmax | pmax | | | | |
| | comp=Z,1µm,4.3s | | | | | | | | |
| XLT | | | | LR | LR | | | | |
| | comp=Z,1µm,15.7s | | | | | | | | |
| XLT | | | | LR | LR | | | | |
| | comp=Z,2µm,16.6s | | | | | | | | |
| PSTR | Posyet | 52.41 | 13 | dP | P | 18 42 28.4 | +0.9 | | |
| MSHR | Mys Shultsa | 52.42 | 13 | ⇑eP | P | 18 42 29.2 | +1.6 | | |
| MSHR | | | | pmax | pmax | | | | |
| | comp=Z,119nm,1.2s | | | | | | | | |
| CN2 | Changchun | 52.58 | 8 | eP | P | 18 42 28.8 | 0.0 | | |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,50nm,1.3s | | | | | | | | |
| ROCAM | Rodrigues Isla | 52.96 | 252 | P | P | 18 42 31.1 | -0.9 | | |
| JTM | Tenmabayashi | 53.81 | 23 | P | P | 18 42 37.5 | -0.4 | | |
| MDJ | Mudanjiang | 54.05 | 11 | P | P | 18 42 40.7 | +1.1 | | |
| MDJ | Mudanjiang | 54.05 | 11 | P | P | 18 42 40.5 | +0.9 | | |
| MDJ | | | | PcP | PcP | 18 43 43.0 | -1.4 | | |
| MDJ | | | | S | S | 18 50 19.5 | +5.0 | | |
| MDJ | | | | sS | sS | 18 50 25.5 | -0.6 | | |
| MDJ | | | | pmax | pmax | | | | |
| | comp=Z,140nm,0.8s | | | | | | | | |
| MDJ | | | | LR | LR | | | | |
| | comp=Z,1µm,18.5s | | | | | | | | |
| MDJ | | | | LR | LR | | | | |
| | comp=Z,1µm,19.2s | | | | | | | | |
| MDJ | Mudanjiang | 54.05 | 11 | P | P | 18 42 39.6 | 0.0 | | |
| USA0B | Ussuriysk Arra | 54.15 | 13 | P | P | 18 42 39.9 | -0.4 | | |
| USA0B | Ussuriysk Arra | 54.15 | 13 | ⇓eP | P | 18 42 41.3 | +1.0 | | |
| USRK | Ussuriysk Ar. | 54.15 | 13 | P | P | 18 42 40.1 | -0.2 | | |
| USRK | Ussuriysk Ar. | 54.15 | 13 | P | P | 18 42 41.1 | +0.8 | | |
| | comp=Z,94nm,0.9s,baz=194,slow=5.5,SNR=118 | | | | | | | | |
| USRK | | | | LR | LR | 19 09 23.0 | | | |
| | comp=Z,252nm,18.1s,baz=224,slow=40 | | | | | | | | |
| | comp=Z,94nm,0.9s | | | | | | | | |
| USRK | Ussuriysk Ar. | 54.15 | 13 | P | P | 18 42 40.1 | -0.2 | | |
| BNX | BinXian | 54.76 | 9 | ⇓P | P | 18 42 45.0 | +0.3 | | |
| BNX | | | | S | S | 18 50 26.3 | +2.2 | | |
| BNX | | | | pmax | pmax | | | | |
| | comp=Z,61nm,1.6s | | | | | | | | |
| BNX | | | | LR | LR | | | | |
| | comp=Z,980nm,14.3s | | | | | | | | |
| BNX | | | | LR | LR | | | | |
| | comp=Z,2µm,14.5s | | | | | | | | |
| BNX | | | | LR | LR | | | | |
| | comp=Z,620nm,19.2s | | | | | | | | |
| TEY | Ternei | 56.12 | 17 | eP | P | 18 42 55.1 | +0.6 | | |
| DCZ | Deep Cove | 56.68 | 140 | P | P | 18 42 58.2 | -0.3 | | |
| DCZ | | | | IAmb | IAmb | 18 43 05.1 | | | |
| | comp=Z,88nm,1.1s | | | | | | | | |
| ULN | Ulaanbaatar | 56.76 | 352 | P | P | 18 42 58.7 | -0.5 | | |
| ULN | | | | IAmb | IAmb | 18 43 02.0 | | | |
| | comp=Z,116nm,1.5s | | | | | | | | |
| ULN | Ulaanbaatar | 56.76 | 352 | cP | P | 18 42 59.6 | +0.4 | | |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,41nm,1.2s | | | | | | | | |
| SONM | Songino Array | 56.82 | 352 | P | P | 18 42 59.2 | -0.5 | | |
| SONM | | | | IAmb | IAmb | 18 43 02.3 | | | |
| | comp=Z,92nm,1.3s | | | | | | | | |
| SONM | Songino Array | 56.82 | 352 | P | P | 18 43 00.3 | +0.6 | | |
| | comp=Z,32nm,1.0s,baz=170,slow=7.7,SNR=92 | | | | | | | | |
| SONM | | | | LR | LR | 19 09 10.9 | | | |
| | comp=Z,2µm,21.1s,baz=182,slow=38 | | | | | | | | |
| | comp=Z,32nm,1.0s | | | | | | | | |
| SONM | Songino Array | 56.82 | 352 | P | P | 18 42 59.2 | -0.5 | | |
| SONM | | | | pmax | pmax | | | | |
| | comp=Z,92nm,1.3s | | | | | | | | |
| JCZ | Jackson Bay | 57.19 | 138 | P | P | 18 43 05.1 | +2.7 | | |
| ASAJ | Asahikawa | 57.25 | 22 | P | P | 18 43 02.5 | -0.1 | | |
| | comp=Z,55nm,1.2s,baz=256,slow=8.9,SNR=6.4 | | | | | | | | |
| | comp=Z,55nm,1.2s | | | | | | | | |
| MLZ | Mavora Lakes | 57.26 | 139 | P | P | 18 43 02.8 | 0.0 | | |
| MLZ | | | | IAmb | IAmb | 18 43 06.3 | | | |
| | comp=Z,124nm,1.3s | | | | | | | | |
| WHZ | Wether Hill Ro | 57.36 | 140 | P | P | 18 43 03.7 | +0.2 | | |
| HIA | Hailar | 57.53 | 2 | P | P | 18 43 08.0 | +3.5 | | |
| HIA | Hailar | 57.53 | 2 | P | P | 18 43 04.3 | -0.2 | | |
| HIA | | | | IAmb | IAmb | 18 43 06.8 | | | |
| | comp=Z,70nm,1.1s | | | | | | | | |
| HIA | Hailar | 57.53 | 2 | cP | P | 18 43 04.6 | +0.1 | | |
| HIA | | | | pmax | pmax | | | | |
| | comp=Z,62nm,1.2s | | | | | | | | |
| WKZ | Wanaka | 57.63 | 138 | P | P | 18 43 05.4 | 0.0 | | |
| LBZ | Lake Benmore | 58.24 | 138 | P | P | 18 43 11.1 | +1.4 | | |
| LBZ | | | | IAmb | IAmb | 18 43 12.4 | | | |
| | comp=Z,111nm,1.3s | | | | | | | | |
| WMQ | Urumqi | 58.40 | 335 | ⇓P | P | 18 43 12.5 | +1.7 | | |
| WMQ | | | | sP | sP | 18 43 21.5 | +0.9 | | |
| WMQ | | | | ScP | ScP | 18 48 05.8 | +5.1 | | |
| WMQ | | | | S | S | 18 51 12.8 | +0.2 | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,46nm,1.3s | | | | | | | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,1µm,4.3s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,1µm,19.3s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,1µm,21.5s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,2µm,23.5s | | | | | | | | |
| DSZ | Denniston Nort | 58.47 | 134 | P | P | 18 43 11.7 | +0.3 | | |
| INZ | Inchbonnie | 58.53 | 135 | P | P | 18 43 11.5 | -0.2 | | |
| INZ | | | | IAmb | IAmb | 18 43 15.1 | | | |
| | comp=Z,85nm,1.1s | | | | | | | | |
| RPZ | Rata Peaks | 58.59 | 137 | P | P | 18 43 12.9 | +0.8 | | |
| RPZ | Rata Peaks | 58.59 | 137 | LR | LR | 19 08 53.4 | | | |
| | comp=Z,2µm,20.4s,baz=266,slow=36 | | | | | | | | |
| KLR | Kul'dur | 58.89 | 11 | P | P | 18 43 13.8 | -0.2 | | |
| | comp=Z,26nm,1.1s,baz=229,slow=4.9,SNR=23 | | | | | | | | |
| KLR | | | | LR | LR | 19 11 09.6 | | | |
| | comp=Z,544nm,19.5s,baz=218,slow=39 | | | | | | | | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| NIL | Nilore | 58.93 | 318 | P | P | 18 43 13.2 | -1.4 | | |
| MRNZ | Matariki Terra | 59.04 | 133 | P | P | 18 43 16.2 | +0.9 | | |
| OXZ | Oxford | 59.14 | 136 | P | P | 18 43 15.7 | -0.2 | | |
| HEH | HeiHe | 59.17 | 8 | eP | P | 18 43 16.0 | +0.1 | | |
| HEH | | | | sP | sP | 18 43 24.8 | -0.9 | | |
| HEH | | | | S | S | 18 51 23.5 | +1.3 | | |
| HEH | | | | pmax | pmax | | | | |
| | comp=Z,140nm,1.4s | | | | | | | | |
| HEH | | | | pmax | pmax | | | | |
| | comp=Z,1µm,4.0s | | | | | | | | |
| HEH | | | | LR | LR | | | | |
| | comp=Z,1µm,16.6s | | | | | | | | |
| HEH | | | | LR | LR | | | | |
| | comp=Z,1µm,15.7s | | | | | | | | |
| HEH | | | | LR | LR | | | | |
| | comp=Z,1µm,16.5s | | | | | | | | |
| THZ | Tophouse | 59.26 | 134 | P | P | 18 43 16.5 | -0.3 | | |
| NNZ | Nelson | 59.43 | 133 | IAMs_20 | IAMs_20 | 19 09 01.8 | | | |
| | comp=Z,3µm,22.0s | | | | | | | | |
| AMCZ | Amberley | 59.51 | 135 | P | P | 18 43 17.9 | -0.6 | | |
| YSS | Yuzh-Sakhalins | 59.76 | 20 | P | P | 18 43 24.3 | +4.3 | | |
| YSS | Yuzh-Sakhalins | 59.76 | 20 | eP | P | 18 43 21.1 | +1.1 | | |
| YSS | | | | eS | S | 18 51 27.3 | -2.5 | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,700nm,5.2s | | | | | | | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=N,500nm,3.8s | | | | | | | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=E,400nm,4.7s | | | | | | | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.1s | | | | | | | | |
| YSS | | | | MLR | MLR | | | | |
| | comp=N,500nm,17.0s | | | | | | | | |
| YSS | | | | MLR | MLR | | | | |
| | comp=Z,500nm,17.0s | | | | | | | | |
| YSS | | | | MLR | MLR | | | | |
| | comp=E,700nm,18.0s | | | | | | | | |
| ZAK | Zakamensk | 59.79 | 350 | eP | P | 18 43 20.4 | +0.1 | | |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,29nm,1.3s | | | | | | | | |
| KHZ | Kahutara | 59.90 | 134 | P | P | 18 43 21.6 | +0.4 | | |
| KHZ | | | | IAmb | IAmb | 18 43 24.3 | | | |
| | comp=Z,81nm,1.3s | | | | | | | | |
| MSVF | Nonsavu | 60.01 | 106 | P | P | 18 43 24.7 | +2.2 | | |
| MSVF | Nonsavu | 60.01 | 106 | P | P | 18 43 22.3 | -0.2 | | |
| MSVF | Nonsavu | 60.01 | 106 | LR | LR | 19 10 53.2 | | | |
| | comp=Z,624nm,18.4s,baz=248,slow=38 | | | | | | | | |
| MSVF | Nonsavu | 60.01 | 106 | ceP | P | 18 43 24.3 | +1.8 | | |
| MSVF | | | | pmax | pmax | | | | |
| | comp=Z,151nm,1.1s | | | | | | | | |
| TCW | Tory Channel | 60.08 | 133 | P | P | 18 43 21.1 | -1.4 | | |
| CIT | Chita | 60.31 | 358 | eP | P | 18 43 25.0 | +1.2 | | |
| CIT | | | | e | | 18 43 37.6 | | | |
| CIT | | | | pmax | pmax | | | | |
| | comp=Z,319nm,2.2s | | | | | | | | |
| MRZ | Mangatainoka R | 60.89 | 132 | P | P | 18 43 28.2 | +0.2 | | |
| MRZ | | | | IAmb | IAmb | 18 43 33.0 | | | |
| | comp=Z,110nm,1.5s | | | | | | | | |
| KSH | Kashi | 60.98 | 325 | P | P | 18 43 27.5 | -1.2 | | |
| KSH | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| KSH | | | | pmax | pmax | | | | |
| | comp=Z,340nm,5.5s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=Z,2µm,18.2s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=Z,800nm,17.9s | | | | | | | | |
| KSH | | | | LR | LR | | | | |
| | comp=Z,2µm,30.2s | | | | | | | | |
| MSEY | Mahe Island | 61.13 | 269 | IAMs_20 | IAMs_20 | 19 06 54.3 | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| KNGR | Kungurtug, Tuv | 61.19 | 346 | dP | P | 18 43 30.8 | +0.9 | | |
| KNGR | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| BKZ | Black Stump Fm | 61.21 | 130 | P | P | 18 43 32.8 | +2.5 | | |
| BKZ | Black Stump Fm | 61.21 | 130 | P | P | 18 43 30.4 | +0.1 | | |
| BKZ | | | | IAmb | IAmb | 18 43 33.2 | | | |
| | comp=Z,85nm,1.2s | | | | | | | | |
| GRNR | Gornyy | 61.36 | 14 | ⇑P | P | 18 43 31.7 | +0.8 | | |
| GRNR | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| GRNR | | | | MLR | MLR | | | | |

**UGL Uglegorsk 61.39 19** *e*P **P 18 43 31.9 +0.8**
UGL *e*S **S 18 51 45.1 -5.5**
UGL pmax pmax
comp=Z,1µm,5.4s
UGL pmax pmax
comp=Z,100nm,1.1s
UGL smax smax
comp=E,1µm,7.3s
UGL smax smax
comp=N,1µm,5.6s
**IRK Irkutsk 61.43 351** *e*P **P 18 43 31.2 -0.1**
IRK pmax pmax
comp=Z,142nm,3.6s
**MOY Mondy 61.44 349** *e*P **P 18 43 32.1 +0.5**
MOY pmax pmax
comp=Z,122nm,1.5s
**SHLS Shalkode 61.65 330** *e*P **P 18 43 31.2 -2.0**
comp=Z,20nm,0.9s,baz=330
**SHLS Shalkode 61.65 330** *e*P **P 18 43 31.2 -2.0**
SHLS pmax pmax
comp=Z,20nm,0.9s
**UZB Uzynbulak 61.86 329** *e*P **P 18 43 34.2 -0.5**
baz=329
UZB *e*S **S 18 51 58.0 +0.7**
baz=329
**UZB Uzynbulak 61.86 329** *e*P **P 18 43 34.1 -0.5**
UZB *e*S **S 18 51 57.9 +0.7**
**SATY Saty 62.11 329** *e*P **P 18 43 35.1 -1.2**
baz=329
SATY *e*S **S 18 52 01.2 +0.9**
baz=329
**SATY Saty 62.11 329** *e*P **P 18 43 35.9 -0.4**
SATY *e*S **S 18 52 01.2 +0.9**
**ZHN Zhinishke 62.17 329** *e*P **P 18 43 36.3 -0.4**
baz=329
**ZHN Zhinishke 62.17 329** *e*P **P 18 43 36.3 -0.4**
**KPKS Kokpek 62.26 329** *e*P **P 18 43 36.9 -0.4**
baz=329
KPKS *e*S **S 18 52 03.0 +0.8**
baz=329
**KPKS Kokpek 62.26 329** *e*P **P 18 43 36.9 -0.4**
KPKS *e*S **S 18 52 03.0 +0.8**
**KBL Kabul 62.29 316** P **P 18 43 34.8 -2.9**
**KBL Kabul 62.29 316** P **P 18 43 34.8 -2.9**
KBL pmax pmax
comp=Z,19nm,1.2s
**ZSN Zaisan 62.51 336** *e*P **P 18 43 38.7 0.0**
comp=Z,21nm,1.1s,baz=336
ZSN *e*S **S 18 52 06.1 +1.1**
baz=336
**ZSN Zaisan 62.51 336** *e*P **P 18 43 38.7 0.0**
ZSN *e*S **S 18 52 06.0 +1.1**
ZSN pmax pmax
comp=Z,21nm,1.1s
**ZEA Zeya 62.57 7** *e*P **P 18 43 39.3 +0.4**
ZEA pmax pmax
comp=E,10.0nm,1.1s
ZEA pmax pmax
comp=N,20nm,1.5s
ZEA pmax pmax
comp=Z,40nm,1.2s
**TNSS Tian-Shan 62.85 328** *e*P **P 18 43 40.9 -0.8**
baz=328
**TNSS Tian-Shan 62.85 328** *e*P **P 18 43 40.8 -0.8**
**MDOK Medeo 62.89 328** *e*P **P 18 43 41.2 -0.3**
baz=328
MDOK LR LR 19 11 17.4
comp=Z,572nm,19.4s,baz=328
**MDOK Medeo 62.89 328** *e*P **P 18 43 41.2 -0.3**
MDOK MLR MLR
comp=Z,572nm,19.0s
**AAA Alma-Ata 62.99 328** *e*P **P 18 43 42.0 -0.1**
baz=328
AAA LR LR 19 11 20.5
baz=328
**AAA Alma-Ata 62.99 328** *e*P **P 18 43 41.9 -0.1**
**MK31 Makanchi Array 63.07 334** P **P 18 43 41.8 -0.6**
MK31 IAmb IAmb 18 43 45.8
comp=Z,34nm,1.2s
**MK31 Makanchi Array 63.07 334***d i*P **P 18 43 42.4 -0.1**
**MKAR Makanchi Array 63.07 334** P **P 18 43 42.0 -0.5**
**MKAR Makanchi Array 63.07 334** P **P 18 43 41.8 -0.7**
comp=Z,20nm,1.0s,baz=144,slow=7.7,SNR=35
MKAR LR LR 19 12 44.9
comp=Z,1µm,21.7s,baz=154,slow=38
comp=Z,20nm,1.0s
**MKAR Makanchi Array 63.07 334** *i* P **P 18 43 41.7 -0.7**
MKAR pmax pmax
comp=Z,21nm,1.0s
**TYV Tymovskoe 63.14 18** *e*P **P 18 43 44.8 +2.0**
TYV *e*S **S 18 52 12.1 -0.5**
TYV pmax pmax
comp=Z,18nm,1.6s
TYV pmax pmax
comp=Z,600nm,5.5s
TYV smax smax
comp=N,400nm,7.2s
TYV smax smax
comp=E,600nm,7.2s
**MAKZ Makanchi 63.21 334** IAMs_20 IAMs_20 19 15 35.7
comp=Z,2µm,20.0s
**DGZ Jazzator, Alta 63.39 339***ce*P **P 18 43 44.4 -0.3**
DGZ pmax pmax
comp=Z,71nm,1.1s
DGZ MLR MLR
comp=Z,1µm,18.0s
**CHKK Chushkaly 63.40 329** *e*P **P 18 43 44.6 -0.2**
baz=329
**CHKK Chushkaly 63.40 329** *e*P **P 18 43 44.5 -0.2**
**TKM2 Tokmak 2 63.49 327** P **P 18 43 45.6 0.0**
SNR=8.4
**TDK Taldyqorghan 63.51 330** *e*P **P 18 43 45.0 -0.4**
comp=Z,20nm,0.8s,baz=330
TDK LR LR 19 11 40.5
comp=Z,853nm,17.7s,baz=330
**TDK Taldyqorghan 63.51 330** *e*P **P 18 43 45.0 -0.4**
TDK pmax pmax
comp=Z,21nm,0.8s
TDK MLR MLR
comp=Z,853nm,18.0s
**KBK Karagaybulak 63.66 327** P **P 18 43 47.4 +0.7**
SNR=7.3
**KUU Kurty 63.77 328** *e*P **P 18 43 46.9 -0.3**
baz=328
KUU LR LR 19 11 49.8
comp=Z,1µm,15.3s,baz=328
**KUU Kurty 63.77 328** *e*P **P 18 43 46.8 -0.3**
KUU MLR MLR
comp=Z,1µm,15.0s
**AAK Ala-Archa 63.89 326** P **P 18 43 46.9 -1.3**
AAK IAmb IAmb 18 44 12.5
comp=Z,24nm,1.1s
**AAK Ala-Archa 63.89 326** IAMs_20 IAMs_20 19 15 37.8
comp=Z,2µm,20.0s
**AAK Ala-Archa 63.89 326** LR LR 19 15 50.5
comp=Z,2µm,19.7s,baz=147,slow=40
**AAK Ala-Archa 63.89 326***ce*P **P 18 43 47.2 -1.0**
AAK pmax pmax
comp=Z,11nm,1.0s
**FRU1 Bishkek 63.94 327** IAMs_20 IAMs_20 19 13 03.0
comp=Z,2µm,21.0s
**AML Almayashu 64.00 325** P **P 18 43 48.8 -0.4**
SNR=5.2
**GAR Garm 64.04 321** IAmb IAmb 18 44 20.3
comp=Z,69nm,1.1s
**RAO Raoul Island 64.25 118** LR LR 19 10 46.2
comp=Z,942nm,20.7s,baz=284,slow=35
**EKS2 Erkin-Say 64.31 326** P **P 18 43 51.4 +0.5**
SNR=17
**USP Ospenovka 64.31 327** P **P 18 43 50.8 0.0**
SNR=6.1
**SGDS Sogindy 64.37 327** *e*P **P 18 43 50.8 -0.4**
baz=327
**SGDS Sogindy 64.37 327** *e*P **P 18 43 50.8 -0.4**
**BTK Batken 64.37 322** IAmb IAmb 18 45 02.5
comp=Z,21nm,1.0s
**CHGR Chuyangaron 64.56 320** IAmb IAmb 18 44 15.2
comp=Z,52nm,1.3s
**SIMJ Simiganj 64.66 320** P **P 18 43 51.5 -1.8**
SIMJ IAmb IAmb 18 44 16.6
comp=Z,31nm,1.3s
SIMJ IAMs_20 IAMs_20 19 15 45.2
comp=Z,1µm,20.0s
**BTLS Baital 65.75 328** *e*P **P 18 43 59.3 -0.7**
baz=328
**BTLS Baital 65.75 328** *e*P **P 18 43 59.3 -0.7**

**BOD Bodaibo 66.09 358** *e*P **P 18 44 01.4 -0.5**
BOD pmax pmax
comp=Z,73nm,1.6s
**KKAR Karatay Array 66.43 325** P **P 18 44 03.0 -1.5**
**KKAR Karatay Array 66.43 325** P **P 18 44 03.0 -1.5**
**SEM Semipalatinsk 66.72 335** *e*P **P 18 44 05.5 -0.9**
baz=336
SEM LR LR 19 13 40.7
comp=Z,524nm,17.6s,baz=336
**SEM Semipalatinsk 66.72 335** *e*P **P 18 44 05.5 -0.9**
SEM MLR MLR
comp=Z,524nm,18.0s
**KURBB Kurchatov Arra 67.60 335** P **P 18 44 10.2 -1.5**
comp=Z,3.9nm,0.9s,baz=147,slow=5.3,SNR=28
KURBB PKP2bc **P'P'bc** **19 12 36.1 +1.1**
comp=Z,0.4nm,0.3s,baz=307,slow=4.1,SNR=14
KURBB LR LR 19 16 03.5
comp=Z,1µm,21.3s,baz=148,slow=38
comp=Z,3.9nm,0.9s
**KURK Kurchatov 67.63 335** P **P 18 44 10.5 -1.4**
**KURK Kurchatov 67.63 335** IAMs_20 IAMs_20 19 15 50.5
comp=Z,2µm,20.0s
**KURK Kurchatov 67.63 335***d i*P **P 18 44 11.5 -0.4**
KURK pmax pmax
comp=Z,21nm,1.2s
**ZAA0 Zalesovo Array 67.83 340** IAmb IAmb 18 44 15.4
comp=Z,26nm,1.1s
**ZALV Zalesovo Beam 67.83 340** P **P 18 44 11.9 -1.1**
**ZALV Zalesovo Beam 67.83 340** P **P 18 44 11.4 -1.6**
comp=Z,6.6nm,0.6s,baz=145,slow=4.2,SNR=28
ZALV PKP2bc **P'P'bc** **19 12 34.5 +0.5**
comp=Z,1.7nm,0.9s,baz=338,slow=0.8,SNR=5.2
ZALV LR LR 19 15 49.3
comp=Z,473nm,21.9s,baz=164,slow=38
comp=Z,6.6nm,0.6s
**ZALV Zalesovo Beam 67.83 340** *i* P **P 18 44 11.3 -1.8**
ZALV pmax pmax
comp=Z,7.0nm,0.6s
**ABPO Ambohimpanom 68.17 253** P **P 18 44 15.2 -1.1**
ABPO IAmb IAmb 18 44 18.9
comp=Z,42nm,1.1s
**ABPO Ambohimpanom 68.17 253** P **P 18 44 15.2 -1.1**
ABPO pmax pmax
comp=Z,42nm,1.1s
**VOI Vohitsoka 68.52 250** IAmb IAmb 18 44 21.1
comp=Z,68nm,1.1s
**MAW Mawson 69.06 199** P **P 18 44 22.2 +1.6**
comp=Z,41nm,1.0s,baz=62,slow=6.2,SNR=56
MAW PKPPKP **P'P'df** **19 12 31.6 -2.2**
comp=Z,3.6nm,1.0s,baz=256,slow=4.3,SNR=6.1
comp=Z,41nm,1.0s
**PEA0B Petropavlovsk- 70.41 25** IAmb IAmb 18 44 31.2
comp=Z,29nm,1.0s
**PEA0B Petropavlovsk- 70.41 25***de*P **P 18 44 29.7 +0.5**
**PETK Petropavlovsk- 70.41 25** P **P 18 44 28.8 -0.4**
**PETK Petropavlovsk- 70.41 25** P **P 18 44 29.4 +0.3**
comp=Z,17nm,0.9s,baz=203,slow=3.8,SNR=25
PETK PKP2bc **P'P'bc** **19 12 26.8 +0.7**
comp=Z,0.7nm,0.8s,baz=96,slow=3.1,SNR=2.1
PETK LR LR 19 17 42.1
comp=Z,115nm,19.2s,baz=226,slow=38
comp=Z,17nm,0.9s
**PET Petropavlovsk 70.75 25** P **P 18 44 30.6 -0.6**
PET IAmb IAmb 18 44 33.1
comp=Z,30nm,1.1s
**PET Petropavlovsk 70.75 25***d i*P **P 18 44 32.1 +0.9**
PET pmax pmax
comp=Z,27nm,1.1s
**PET Petropavlovsk 70.75 25** P **P 18 44 32.3 +1.1**
comp=Z,26nm,1.2s
**YAK Yakutsk 70.97 6** P **P 18 44 31.7 -0.6**
YAK IAmb IAmb 18 44 34.0
comp=Z,43nm,0.8s
**YAK Yakutsk 70.97 6** IAMs_20 IAMs_20 19 21 23.2
comp=Z,979nm,19.0s
**YAK Yakutsk 70.97 6** P **P 18 44 31.7 -0.6**
comp=Z,51nm,0.9s,baz=168,slow=10,SNR=24
YAK LR LR 19 18 32.2
comp=Z,500nm,20.5s,baz=204,slow=38
comp=Z,51nm,0.9s
**YAK Yakutsk 70.97 6** *e*P **P 18 44 31.1 -1.2**
YAK *e**PP **pP** **18 44 40.5 +1.0**
YAK *e* 18 44 51.5
YAK *e* 18 47 08.5
YAK *e*S **S 18 53 51.3 +4.7**
YAK *e**SS **SKiKP** **18 54 19.8 +6.7**
YAK pmax pmax
comp=Z,60nm,1.0s
YAK pmax pmax
comp=E,5.0nm,1.0s
YAK pmax pmax
comp=N,21nm,1.1s
YAK pmax pmax
comp=Z,232nm,4.7s
YAK pmax pmax
comp=N,130nm,4.5s
YAK pmax pmax
comp=E,208nm,4.4s
YAK smax smax
comp=N,198nm,4.5s
YAK smax smax
comp=E,57nm,2.4s
YAK MLR MLR
comp=Z,858nm,17.0s
YAK MLR MLR
comp=E,245nm,13.0s
**BVAR Borovoye Array 72.87 333** P **P 18 44 42.5 -1.5**
comp=E,7.2nm,0.8s,baz=138,slow=7.8,SNR=46
comp=E,7.2nm,0.8s
**BRVK Borovoye 72.94 333** P **P 18 44 42.5 -1.9**
**BRVK Borovoye 72.94 333** IAMs_20 IAMs_20 19 21 50.1
comp=Z,1µm,21.0s
**BRVK Borovoye 72.94 333***d i*P **P 18 44 43.7 -0.7**
BRVK pmax pmax
comp=Z,13nm,1.1s
**MA2 Magadan 72.99 17** P **P 18 44 44.1 -0.5**
MA2 IAmb IAmb 18 44 48.5
comp=Z,70nm,1.2s
**MA2 Magadan 72.99 17** P **P 18 44 44.4 -0.1**
comp=Z,49nm,1.1s,baz=191,slow=5.8,SNR=19
MA2 LR LR 19 17 07.7
comp=Z,139nm,21.9s,baz=234,slow=36
comp=Z,49nm,1.1s
**MA2 Magadan 72.99 17***ce*P **P 18 44 45.0 +0.5**
MA2 pmax pmax
comp=Z,50nm,1.1s
MA2 MLR MLR
comp=Z,411nm,19.0s
**MA2 Magadan 72.99 17** P **P 18 44 44.6 +0.1**
comp=Z,51nm,1.2s,comp=Z,1µm
**SBA Scott Base 73.86 170** P **P 18 44 51.0 +1.6**
SBA IAmb IAmb 18 45 01.2
comp=Z,37nm,1.1s
**SBA Scott Base 73.86 170** P **P 18 44 51.0 +1.6**
SBA pmax pmax
comp=Z,37nm,1.1s
**ABKAR Akbulak array 75.96 325** P **P 18 44 59.9 -2.1**
**SEY Seymchan 76.19 16** P **P 18 45 02.5 -0.4**
comp=Z,26nm,1.0s,baz=220,slow=4.5,SNR=39
comp=Z,26nm,1.0s
**SEY Seymchan 76.19 16***de*P **P 18 45 03.0 0.0**
SEY pmax pmax
comp=Z,50nm,1.1s
SEY MLR MLR
comp=Z,821nm,25.0s
**ATD Arta Tunnel 76.31 284** P **P 18 45 06.1 +1.3**
ATD IAmb IAmb 18 45 07.0
comp=Z,72nm,1.3s
**ATD Arta Tunnel 76.31 284** LR LR 19 16 48.3
comp=Z,14nm,18.1s,baz=102,slow=34
**RAYN Ar Rayn 76.64 297** P **P 18 45 04.8 -1.8**
RAYN IAmb IAmb 18 45 07.7
comp=Z,58nm,1.9s
**RAYN Ar Rayn 76.64 297** IAMs_20 IAMs_20 19 20 04.7
comp=Z,1µm,21.0s
**RAYN Ar Rayn 76.64 297** P **P 18 45 04.8 -1.8**
RAYN pmax pmax
comp=Z,58nm,2.0s
RAYN MLR MLR
comp=Z,1µm,21.0s
**AKTO Aktyubinsk 77.63 326** LR LR 19 22 55.8
comp=Z,2µm,21.9s,baz=110,slow=38
**KIBK Kibwezi 78.68 269** IAMs_20 IAMs_20 19 15 03.6
comp=Z,1µm,20.0s
**KMBO Kilima Mbogo 79.64 270** P **P 18 45 21.4 -2.2**
KMBO IAmb IAmb 18 45 25.7
comp=Z,47nm,1.3s

**KMBO Kilima Mbogo 79.64 270** IAMs_20 IAMs_20 19 17 08.9
comp=Z,1µm,20.0s
**KMBO Kilima Mbogo 79.64 270** P **P 18 45 23.4 -0.2**
comp=Z,10nm,0.8s,baz=63,slow=8.3,SNR=18
KMBO LR LR 19 16 51.3
comp=Z,1µm,20.2s,baz=96,slow=33
comp=Z,10nm,0.8s
**KMBO Kilima Mbogo 79.64 270** *i* P **P 18 45 24.7 +1.1**
KMBO pmax pmax
comp=Z,14nm,1.0s
**SVE Sverdlovsk 79.65 332** *e*P **P 18 45 21.1 -1.3**
SVE pmax pmax
comp=Z,27nm,1.5s
**FURI Furi 79.84 281** LR LR 19 16 56.5
comp=Z,2µm,21.9s,baz=108,slow=33
**TIXI Tiksi 80.33 4** P **P 18 45 23.8 -1.9**
**TIXI Tiksi 80.33 4** IAMs_20 IAMs_20 19 27 50.1
comp=Z,851nm,18.0s
**TIXI Tiksi 80.33 4** LR LR 19 26 43.6
comp=Z,490nm,18.1s,baz=222,slow=40
**TIXI Tiksi 80.33 4***de*P **P 18 45 25.0 -0.7**
TIXI pmax pmax
comp=Z,36nm,1.1s
**ARU Arti 80.41 331** P **P 18 45 24.3 -2.2**
**ARU Arti 80.41 331** P **P 18 45 25.4 -1.1**
comp=Z,2.7nm,0.6s,baz=102,slow=1.5,SNR=10.0
ARU LR LR 19 26 34.9
comp=Z,969nm,19.4s,baz=115,slow=40
comp=Z,2.7nm,0.6s
**ARU Arti 80.41 331***c i*P **P 18 45 24.8 -1.7**
ARU 18 48 28.3
ARU PPP PPP 18 50 20.2
ARU S **S 18 55 31.0 -0.2**
ARU SS **SS 19 00 39.5 -3.9**
ARU pmax pmax
comp=Z,18nm,1.3s
**ARU Arti 80.41 331** P **P 18 45 25.5 -1.0**
comp=Z,8.9nm,1.1s,comp=Z,403nm
**RAR Rarotonga 80.76 110** LR LR 19 19 12.1
comp=Z,614nm,22.0s,baz=246,slow=34
**MAK Makhachkala 81.03 316** *e*P P 18 45 25.1 -5.0
MAK *e* 18 48 34.5
MAK *e*PPP PPP 18 50 21.8
MAK *e*S **S 18 55 30.9 -7.4**
MAK *e*SS **SS 19 00 45.6 -7.8**
MAK *e*SSS SSS 19 04 20.3
MAK pmax pmax
comp=Z,226nm,1.1s
MAK MLR MLR
comp=Z,843nm,16.0s
**QSPA South Pole Qui 81.53 180** P **P 18 45 32.6 0.0**
QSPA IAmb IAmb 18 45 37.5
comp=Z,78nm,1.1s
**QSPA South Pole Qui 81.53 180** P **P 18 45 33.5 +0.9**
comp=Z,52nm,1.1s,baz=323,slow=1.4,SNR=34
QSPA PKKPbc **PKKPbc** **19 04 04.9 -4.2**
comp=Z,2.0nm,1.0s,baz=189,slow=5.2,SNR=3.7
QSPA LR LR 19 18 16.0
comp=Z,589nm,22.0s,baz=328,slow=33
comp=Z,52nm,1.1s
**POGA Pongola 81.96 244** IAmb IAmb 18 45 38.5
comp=Z,77nm,1.0s
POGA IAMs_20 IAMs_20 19 18 09.8
comp=Z,839nm,19.0s
**GNI Garni 82.07 313** IAMs_20 IAMs_20 19 27 10.5
comp=Z,750nm,20.0s
**GNI Garni 82.07 313** LR LR 19 26 43.9
comp=Z,672nm,20.6s,baz=140,slow=39
**LODK Lodwar 82.19 275** P **P 18 45 36.9 -0.1**
LODK IAmb IAmb 18 45 39.0
comp=Z,36nm,1.3s
LODK IAMs_20 IAMs_20 19 19 35.3
comp=Z,955nm,19.0s
**ELIB Princess Elisa 83.14 198** *d*P **P 18 45 42.4 +1.5**
comp=Z,28nm,1.1s
**GURO Guroymak-BITLI 83.61 310** P **P 18 45 43.5 -0.5**
**BILL Bilibino 83.85 17***je*P **P 18 45 43.6 -0.7**
BILL *e* 18 48 58.6
BILL *e*PPP PPP 18 50 50.5
BILL pmax pmax
comp=Z,17nm,1.9s
**BELG Belogornoye 84.34 325** P **P 18 45 45.4 -1.7**
comp=Z,29nm,1.1s,baz=175,slow=13,SNR=8.6
BELG LR LR 19 29 40.2
comp=Z,956nm,19.0s,baz=109,slow=40
comp=Z,29nm,1.1s
**BELG Belogornoye 84.34 325***de*P **P 18 45 45.8 -1.3**
BELG pmax pmax
comp=Z,5.0nm,1.3s
**KBZ Khabaz 84.46 316** P **P 18 45 46.5 -1.5**
comp=Z,4.0nm,0.8s,baz=67,slow=3.7,SNR=10
KBZ LR LR 19 30 25.0
comp=Z,416nm,18.2s,baz=121,slow=41
comp=Z,4.0nm,0.8s
**KBZ Khabaz 84.46 316***de*P **P 18 45 47.4 -0.5**
KBZ pmax pmax
comp=Z,15nm,1.3s
**SHA1 Shidzhatmaz 84.63 316***je*P **P 18 45 48.6 -0.6**
**KVAR Kislovodsk Arr 84.67 316** P **P 18 45 46.8 -2.3**
comp=Z,1.8nm,0.7s,baz=65,slow=14,SNR=1.6
KVAR LR LR 19 29 15.5
comp=Z,713nm,19.6s,baz=144,slow=40
comp=Z,1.8nm,0.7s
**KIV Kislovodsk 84.68 316** IAMs_20 IAMs_20 19 30 50.2
comp=Z,724nm,19.0s
**KIV Kislovodsk 84.68 316** *e*P **P 18 45 47.9 -1.3**
KIV *e* 18 49 03.4
KIV *e* 18 56 11.3
KIV pmax pmax
comp=Z,7.0nm,1.0s
**MATP Matopo 85.65 250** LR LR 19 21 41.3
comp=Z,240nm,18.3s,baz=62,slow=34
**KIRV Kirov 85.78 331** P **P 18 45 52.8 -1.4**
comp=Z,9.6nm,0.6s,baz=80,slow=7.7,SNR=4.1
KIRV LR LR 19 30 16.3
comp=Z,1µm,18.5s,baz=119,slow=40
comp=Z,9.6nm,0.6s
**KIRV Kirov 85.78 331***de*P **P 18 45 53.1 -1.1**
**GRHM Grahamstown, E 85.89 237** P **P 18 45 55.2 -0.4**
**ASF Jabal al Asfar 86.12 303** LR LR 19 29 12.8
comp=Z,839nm,18.1s,baz=341,slow=39
**MBAR Mbarara 86.16 270** P **P 18 45 57.1 -0.3**
MBAR IAmb IAmb 18 45 59.4
comp=Z,65nm,1.1s
**MBAR Mbarara 86.16 270***ce*P **P 18 45 57.6 +0.2**
MBAR pmax pmax
comp=Z,50nm,1.4s
**LABN Labinsk 86.22 316** *e*P **P 18 45 56.6 -0.2**
LABN pmax pmax
comp=Z,15nm,0.5s
**VSLR Vesyoloye 86.39 315***de*P **P 18 45 56.2 -1.4**
VSLR pmax pmax
comp=Z,55nm,1.3s
**ARPR Arapgir-MALATY 86.54 310** IAmb IAmb 18 46 00.1
comp=Z,42nm,1.2s
ARPR IAMs_20 IAMs_20 19 20 47.0
comp=Z,838nm,21.0s
**LSZ Lusaka 86.62 255** P **P 18 45 58.5 -1.0**
**LSZ Lusaka 86.62 255** P **P 18 45 58.5 -1.0**
LSZ pmax pmax
comp=Z,128nm,1.4s
**SOC Sochi 86.64 315** *e*P **P 18 45 57.3 -1.5**
SOC *e* 18 49 19.1
SOC *e*PPP PPP 18 51 16.4
SOC *e*S **SKSac** **18 56 23.3 -1.1**
SOC *e*SS **SS 19 02 13.3 -3.0**
SOC *e*SSS SSS 19 05 49.0
SOC pmax pmax
comp=Z,9.0nm,0.6s
SOC MLR MLR
comp=Z,537nm,19.0s
**ERBR Yeremizino-Bor 86.67 317** *e*P **P 18 45 57.3 -1.6**
ERBR pmax pmax
comp=Z,52nm,1.9s
**GAZ Gaziantep 86.97 308** IAmb IAmb 18 46 01.6
comp=Z,23nm,1.1s
**NVL N'lazarevskaya 87.00 199** *e*P **P 18 46 01.7 +1.6**
NVL *e*S **SKSac** **18 56 30.5 +4.8**
NVL pmax pmax
comp=Z,23nm,0.9s
NVL MLR MLR
comp=Z,426nm,18.0s
**EIL Elat 87.25 300** LR LR 19 25 23.0
comp=Z,1µm,20.6s,baz=124,slow=36
**VRH Novokhopyorsk 87.41 322** *e*P **P 18 46 00.5 -1.9**
VRH pmax pmax

comp=Z,34nm,1.2s
**BOSA Boshof 87.48 242** P **P** **18 46 04.2 +0.7**
comp=Z,46nm,0.9s,baz=112,slow=4.0,SNR=42
BOSA LR LR 19 22 41.1
comp=Z,841nm,18.1s,baz=100,slow=34
comp=Z,46nm,0.9s
**MMAI Mount Meron Ar 87.53 304** P **P** **18 46 03.2 -0.3**
comp=Z,11nm,1.0s,baz=119,slow=6.9,SNR=6.8
MMAI LR LR 19 27 44.4
comp=Z,785nm,20.6s,baz=80,slow=38
comp=Z,11nm,1.0s
**LBTB Lobatse 87.69 245** LR LR 19 19 40.6
comp=Z,341nm,21.3s,baz=96,slow=32
**BNN Bunyan 88.38 309** IAmb IAmb 18 46 08.0
comp=Z,36nm,1.1s
**ANN Anapa 88.53 316** *e*P **P** **18 46 06.9 -1.0**
ANN pmax pmax
comp=Z,13nm,0.9s
ANN MLR MLR
comp=Z,814nm,22.0s
**VORD Divnogorie 88.82 322** *e*P **P** **18 46 06.7 -2.4**
VORD pmax pmax
comp=Z,10.0nm,0.8s
**VSR Storozhevoye 88.96 322** *e*P **P** **18 46 07.2 -2.5**
VSR pmax pmax
comp=Z,20nm,1.2s
**VORR Voronezh 89.05 323** P **P** **18 46 08.7 -1.4**
VORR pmax pmax
comp=Z,26nm,1.2s
**TROLL Troll, Antarti 89.32 196** ⇑P **P** **18 46 13.3 +2.0**
comp=Z,906nm,0.7s
**LPSR Galich'ya Gora 89.45 323** *e*P **P** **18 46 08.2 -3.8**
LPSR pmax pmax
comp=Z,5.0nm,0.7s
**TBI Tubuai 89.97 113** *e*S **S** **18 57 06.2 -1.0**
comp=Z,1µm,26.0s
TBI *e*SS **SS** **19 03 11.6 +6.2**
comp=Z,2µm,33.0s
**TBI Tubuai 89.97 113** *e*LR LR 19 14 53.0
comp=Z,7µm,37.2s
TBI *e*LR LR 19 14 54.1
comp=Z,1µm,43.5s
**BR131 Keskin Array S 90.23 310** *de*P **P** **18 46 14.7 -1.5**
**BRTR Keskin Array B 90.23 310** P **P** **18 46 13.4 -2.8**
**BRTR Keskin Array B 90.23 310** P **P** **18 46 13.7 -2.5**
comp=Z,3.5nm,0.9s,baz=124,slow=6.1,SNR=20
BRTR PKKPbc **PKKPbc** **19 03 46.8 -0.3**
comp=Z,0.6nm,0.9s,baz=207,slow=5.2,SNR=3.8
BRTR LR LR 19 29 56.1
comp=Z,496nm,19.7s,baz=138,slow=38
comp=Z,3.5nm,0.9s
**BRTR Keskin Array B 90.23 310** *i* P **P** **18 46 14.1 -2.1**
BRTR pmax pmax
comp=Z,4.0nm,0.9s
**SUR Sutherland 90.66 237** LR LR 19 24 58.0
comp=Z,604nm,18.3s,baz=119,slow=34
**PPT2 Papeete2 90.77 108** *e*P P 18 46 05.3 -14
comp=Z,133nm,24.0s
**PPT2 Papeete2 90.77 108** *e*S **S** **18 57 12.6 -2.3**
comp=Z,216nm,28.0s
PPT2 *e*SS **SS** **19 03 20.0 +2.6**
comp=Z,453nm,32.5s
**PPT2 Papeete2 90.77 108** *e*LR LR 19 15 11.6
comp=Z,2µm,29.0s
PPT2 *e*LR LR 19 15 16.4
comp=Z,2µm,29.5s
**PPT Papeete 90.77 108** LR LR 19 24 45.7
comp=Z,198nm,21.2s,baz=236,slow=34
**SNAA Sanae 90.97 196** P **P** **18 46 19.9 +1.0**
SNAA IAmb IAmb 18 46 22.6
comp=Z,55nm,1.3s
SNAA IAMs_20 IAMs_20 19 22 38.3
comp=Z,789nm,21.0s
**SNAA Sanae 90.97 196** ⇑P **P** **18 46 20.8 +1.9**
comp=Z,352nm,0.7s
**SNAA Sanae 90.97 196** P **P** **18 46 20.8 +1.9**
comp=Z,21nm,0.9s,baz=144,slow=3.2,SNR=52
SNAA LR LR 19 23 00.8
comp=Z,700nm,21.2s,baz=110,slow=33
comp=Z,21nm,0.9s
**SNAA Sanae 90.97 196** *c i*P **P** **18 46 20.4 +1.5**
SNAA pmax pmax
comp=Z,23nm,1.1s
**OBN Obninsk 91.41 325** LR LR 19 34 46.3
comp=Z,687nm,18.1s,baz=110,slow=40
**OBN Obninsk 91.41 325** *e*P **P** **18 46 21.8 +0.8**
OBN *e* 18 49 57.5
OBN pmax pmax
comp=Z,9.0nm,1.2s
OBN MLR MLR
comp=Z,770nm,23.0s
**VNA2 Neumayer--Watz 92.61 196** ⇑P **P** **18 46 28.1 +1.6**
comp=Z,15nm,0.6s,baz=121,slow=3.8
**VNA1 Neumayer--Stat 93.00 196** ⇑P **P** **18 46 29.8 +1.6**
comp=Z,14nm,1.1s
**VNA3 Neumayer Olymp 93.02 195** ⇑P **P** **18 46 29.5 +1.1**
comp=Z,11nm,0.8s
**G16K Koyuk River 93.77 24** P **P** **18 46 30.9 -0.8**
**AKASG Malin Array Be 95.03 320** P **P** **18 46 35.6 -2.3**
comp=Z,0.9nm,0.5s,baz=94,slow=3.7,SNR=1.9
AKASG LR LR 19 37 05.6
comp=Z,503nm,18.1s,baz=98,slow=40
**KIEV Kiev 95.04 320** IAMs_20 IAMs_20 19 31 30.8
comp=Z,977nm,22.0s
**TSUM Tsumeb 95.99 250** LR LR 19 24 28.5
comp=Z,427nm,21.1s,baz=124,slow=32
**G19K Purcell Mounta 96.04 24** P **P** **18 46 41.8 -0.4**
**SANT Santorini 96.14 306** IAMs_20 IAMs_20 19 33 09.4
comp=Z,597nm,21.0s
**MNK Minsk 96.27 324** *i* P **P** **18 46 41.0 -2.4**
MNK *i* 18 50 33.9
MNK *i* PPP PPP 18 52 36.8
MNK *i* S **SKSac** **18 57 17.3 -1.3**
MNK *i* PS **PS** **18 59 21.8 -2.5**
MNK *i* SSS SSS 19 08 18.0
MNK pmax pmax
comp=E,7.0nm,1.0s
MNK pmax pmax
comp=Z,6.0nm,0.9s
MNK pmax pmax
comp=N,8.0nm,0.9s
MNK MLR MLR
comp=Z,502nm,18.0s
MNK MLR MLR
comp=N,379nm,17.0s
MNK MLR MLR
comp=E,739nm,19.0s
**IDI Anoyia 96.49 305** LR LR 19 34 50.0
comp=E,493nm,21.6s,baz=92,slow=38
**MLR Muntele Rosu 96.66 315** IAMs_20 IAMs_20 19 37 46.4
comp=Z,951nm,20.0s
**MLR Muntele Rosu 96.66 315** LR LR 19 37 48.1
comp=Z,624nm,18.7s,baz=103,slow=40
**F20K Avaraart Lake 96.68 23** P **P** **18 46 44.7 -0.3**
F20K IAmb IAmb 18 46 47.6
comp=Z,16nm,1.6s
**KDAK Kodiak Island 97.34 33** LR LR 19 28 39.6
comp=Z,229nm,21.2s,baz=264,slow=34
**FINES FINESS Array B 97.78 331** P **P** **18 46 47.7 -2.4**
comp=Z,1.8nm,0.8s,baz=91,slow=12,SNR=4.0
FINES LR LR 19 36 15.8
comp=Z,1µm,21.3s,baz=98,slow=39
comp=Z,1.8nm,0.8s
**ARCES ARCESS Array B 98.37 339** LR LR 19 38 29.0
comp=Z,855nm,19.0s,baz=106,slow=40
**SUW Suwalki 98.99 323** IAMs_20 IAMs_20 19 39 52.9
comp=Z,806nm,18.0s
**I23K Minto, Yukon-K 99.17 25** IAmb IAmb 18 46 57.4
comp=Z,26nm,1.8s
**ILAR Eielson Array 100.23 26** PP **PP** **18 51 07.5 +0.6**
comp=Z,1.3nm,1.0s,baz=274,slow=6.4,SNR=5.9
ILAR PKKPbc **PKKPbc** **19 03 18.9 -2.0**
comp=Z,1.5nm,0.8s,baz=76,slow=2.4,SNR=10
**TAOE Nuku Hiva Isla 101.31 101** *e*S **Sdif** **18 58 36.6 -10**
comp=Z,363nm,25.8s
**TAOE Nuku Hiva Isla 101.31 101** *e*LR LR 19 20 12.4
comp=Z,817nm,24.3s
**OKC Ostrava-Krasne 102.08 319** AMS AMS 19 35 30.0
comp=Z,600nm,23.4s
**MORC Moravsky Berou 102.47 319** IAMs_20 IAMs_20 19 33 04.8
comp=Z,510nm,22.0s
**KRLC Kraliky 102.96 319** AMS AMS 19 35 50.0
comp=Z,700nm,20.1s
**RKT Rikitea 103.04 116** *e*S **Sdif** **18 59 05.7 +5.4**
comp=Z,950nm,26.5s
RKT *e*SS **SS** **19 06 02.1 -8.1**
comp=Z,2µm,30.8s
**RKT Rikitea 103.04 116** *e*LR LR 19 20 57.2
comp=Z,6µm,39.5s
**DPC Dobruska-Polom 103.24 320** AMS AMS 19 42 10.0
comp=Z,600nm,21.6s
**OSTC Ostas 103.30 320** AMS AMS 19 39 40.0
comp=Z,700nm,19.7s
**UPC Upice 103.43 320** AMS AMS 19 42 30.0
comp=Z,600nm,19.8s
**GOPC GO Pecny, Ondr 104.25 319** AMS AMS 19 36 30.0
comp=Z,700nm,22.4s
**PRU Pruhonice 104.40 319** AMS AMS 19 40 30.0
comp=Z,600nm,19.2s
**PRA Prague 104.47 319** AMS AMS 19 43 00.0
comp=Z,700nm,21.5s
**CKRC Cesky Krumlov 104.64 318** AMS AMS 19 36 40.0
comp=Z,700nm,24.3s
**ZVC Zvikov 104.67 319** AMS AMS 19 36 40.0
comp=Z,800nm,24.5s
**RGN Rugen 104.74 324** IAMs_20 IAMs_20 19 40 30.3
comp=Z,788nm,19.0s
**GERES GERESS Array B 105.03 318** PP **PKiKP** **18 51 37.0 -0.6**
comp=Z,0.2nm,0.3s,baz=121,slow=12,SNR=2.5
GERES PKKPbc **PKKPbc** **19 03 06.1 -0.3**
comp=Z,0.6nm,0.8s,baz=285,slow=5.2,SNR=4.1
**HSKC Hora Svate Kat 105.06 320** AMS AMS 19 43 20.0
comp=Z,600nm,18.4s
**KHC Kasperske Hory 105.09 319** AMS AMS 19 37 00.0
comp=Z,800nm,21.8s
**CLL Collm 105.27 321** IAMs_20 IAMs_20 19 42 19.5
comp=Z,461nm,19.0s
**CLL Collm 105.27 321** *e*Pdif **Pdif** **18 47 24.0 +0.3**
CLL *e*PKiKP **PKiKP** **18 51 38.0 +0.2**
CLL *e*PS **PS** **19 01 06.0 +5.4**
CLL *e*PPS PPS 19 01 54.0
**CLL Collm 105.27 321** *e*P **Pdif** **18 47 24.0 +0.3**
**SABO M.te Sabotino 105.30 315** IAMs_20 IAMs_20 19 42 26.4
comp=Z,610nm,20.0s
**NRCA Norcia 105.84 312** IAMs_20 IAMs_20 19 41 30.5
comp=Z,860nm,21.0s
**FDMO Fiordimonte 105.85 312** IAMs_20 IAMs_20 19 38 50.7
comp=Z,679nm,21.0s
**KONO Kongsberg 106.00 330** IAMs_20 IAMs_20 19 38 54.3
comp=Z,928nm,22.0s
**GRA1 Grafenberg Arr 106.57 319** IAMs_20 IAMs_20 19 40 46.1
comp=Z,649nm,20.0s
**GRFO Grafenberg 106.57 319** IAMs_20 IAMs_20 19 40 46.1
comp=Z,675nm,20.0s
**CTI Castel Tesino 106.65 315** IAMs_20 IAMs_20 19 42 57.7
comp=Z,436nm,20.0s
**STU Stuttgart 108.00 319** IAMs_20 IAMs_20 19 41 42.1
comp=Z,538nm,21.0s
**TATN Tataouine 108.32 301** IAMs_20 IAMs_20 19 36 46.4
comp=Z,776nm,22.0s
**BFO Black Forest 108.64 318** IAMs_20 IAMs_20 19 45 23.9
comp=Z,456nm,18.0s
**ECH Echery 109.43 318** IAMs_20 IAMs_20 19 45 09.8
comp=Z,515nm,20.0s
**YKA Yellowknife Ar 114.52 24** PKiKP **PKiKP** **18 51 54.0 -0.9**
comp=Z,1.8nm,0.9s,baz=305,slow=2.2,SNR=3.8
**YKA Yellowknife Ar 114.52 24** *i* PKIKP **PKiKP** **18 51 54.0 -0.9**
**TORD Torodi Ar. Bea 116.36 280** PKPdf **PKPdf** **18 51 57.9 -1.9**
**TORD Torodi Ar. Bea 116.36 280** PKP **PKPdf** **18 51 58.4 -1.4**
comp=Z,4.7nm,0.6s,baz=50,slow=2.0,SNR=28
**CART Cartagena 117.20 308** IAMs_20 IAMs_20 19 40 05.6
comp=Z,429nm,21.0s
**KSXB Camp Six Broad 117.23 47** IAMs_20 IAMs_20 19 48 56.5
comp=Z,404nm,21.0s
**PINE Pine Mountain 118.79 44** PKPdf **PKPdf** **18 52 03.3 -0.7**
**ESDC Sonseca Array 119.02 311** **PKPdf** **18 52 02.1 -2.2**
**ESDC Sonseca Array 119.02 311** PKP **PKPdf** **18 52 03.1 -1.2**
comp=Z,3.4nm,1.2s,baz=57,slow=1.7,SNR=7.6
**NEW Newport 119.78 39** PKPdf **PKPdf** **18 52 04.7 -0.8**
**NEW Newport 119.78 39** PKIKP **PKPdf** **18 52 04.7 -0.8**
**PAHR Pah Rah Range 121.07 49** **PKPdf** **18 52 06.7 -1.7**
**OMMB Old Mammoth Mi 121.92 51** IAMs_20 IAMs_20 19 40 23.1
comp=Z,400nm,22.0s
**COI Coimbra 122.17 312** IAMs_20 IAMs_20 19 47 42.6
comp=Z,611nm,19.0s
**KVN Kaiserville 122.21 49** IAMs_20 IAMs_20 19 40 51.5
comp=Z,386nm,22.0s
**NVAR Mina Array Bea 122.23 50** **PKPdf** **18 52 09.4 -1.4**
**NVAR Mina Array Bea 122.23 50** PKP **PKPdf** **18 52 10.7 -0.1**
comp=Z,2.8nm,0.7s,baz=248,slow=2.1,SNR=22
NVAR PKKPbc **PKKPab** **19 02 07.1 +0.2**
comp=Z,1.0nm,0.8s,baz=132,slow=5.2,SNR=6.6
**DBIC Dimbokro 122.32 273** PKP **PKPdf** **18 52 10.6 -0.7**
comp=Z,13nm,0.9s,baz=134,slow=4.9,SNR=5.8
**MSO Missoula 122.33 39** PKPdf **PKPdf** **18 52 08.7 -1.8**
**MFID Camas Ranch 122.42 43** PKPdf **PKPdf** **18 52 09.8 -1.1**
**MESJ Messejana 122.71 310** IAMs_20 IAMs_20 19 48 28.2
comp=Z,489nm,20.0s
**BPMT Black Pine Rid 122.80 39** PKPdf **PKPdf** **18 52 10.5 -1.1**
**OVMT Ovando 122.81 39** **PKPdf** **18 52 10.6 -0.9**
**MORF Marmelete 123.18 309** IAMs_20 IAMs_20 19 49 16.0
comp=Z,464nm,22.0s
**CCAC Calif City Air 123.31 53** IAMs_20 IAMs_20 19 41 21.2
comp=Z,508nm,21.0s
**HLID Hailey 123.33 43** PKPdf **PKPdf** **18 52 11.4 -1.3**
**ELK Elko 123.77 46** PKPdf **PKPdf** **18 52 12.5 -1.2**
**ELK Elko 123.77 46** PKIKP **PKPdf** **18 52 12.5 -1.2**
ELK MLR MLR
comp=Z,300nm,19.0s
**GSC Goldstone, Bar 124.23 53** PKPdf **PKPdf** **18 52 14.1 -0.4**
**GSC Goldstone, Bar 124.23 53** PKIKP **PKPdf** **18 52 14.1 -0.4**
**EGMT Eagleton 124.32 36** PKPdf **PKPdf** **18 52 12.9 -1.4**
**YHL Hebgen Lake 124.92 40** IAMs_20 IAMs_20 19 49 15.1
comp=Z,356nm,19.0s
**PFO Pinyon Flats O 124.94 55** PKPdf **PKPdf** **18 52 14.4 -1.6**
**PFO Pinyon Flats O 124.94 55** IAMs_20 IAMs_20 19 52 03.5
comp=Z,524nm,20.0s
**PFO Pinyon Flats O 124.94 55** PKIKP **PKPdf** **18 52 14.4 -1.6**
PFO MLR MLR
comp=Z,500nm,20.0s
**SPR3 Spring Creek 3 125.02 48** IAMs_20 IAMs_20 19 42 21.7
comp=Z,445nm,21.0s
**YHH Holmes Hill 125.16 40** PKPdf **PKPdf** **18 52 15.4 -0.9**
**BGU Big Grassy Mou 125.27 45** **PKPdf** **18 52 15.5 -1.0**
**YFT Old Faithful 125.31 41** IAMs_20 IAMs_20 19 55 26.7
comp=Z,412nm,21.0s
**YPP Pitchstone Pla 125.42 41** IAMs_20 IAMs_20 19 54 14.4
comp=Z,384nm,21.0s
**RMX La Rumorosa 125.49 56** IAMs_20 IAMs_20 19 42 45.7
comp=Z,406nm,21.0s
**H17A Grant Village 125.51 41** IAMs_20 IAMs_20 19 37 32.8
comp=Z,363nm,20.0s
**PSUT Pine Spring 125.52 48** IAMs_20 IAMs_20 19 43 14.2
comp=Z,362nm,20.0s
**COYC Coyhaique 125.61 172** PKPdf **PKPdf** **18 52 15.6 -1.2**
**YUH Yuha Desert 125.61 56** IAMs_20 IAMs_20 19 42 49.4
comp=Z,348nm,20.0s
**V12A Nelson 125.65 52** **PKPdf** **18 52 15.9 -1.3**
**TPAW Teton Pass 125.66 42** **PKPdf** **18 52 15.0 -2.3**
**ESJX Sierra Juarez 125.74 57** IAMs_20 IAMs_20 19 52 02.0
comp=Z,365nm,19.0s
**LOHW Long Hollow 125.83 41** **PKPdf** **18 52 16.6 -0.9**
**RLMT Red Lodge 126.00 39** IAMs_20 IAMs_20 19 46 46.8
comp=Z,329nm,19.0s
**LCMT Little Creek M 126.48 50** **PKPdf** **18 52 17.7 -1.2**
**MSU Marysvale 126.76 48** PKPdf **PKPdf** **18 52 18.2 -1.3**
**MSU Marysvale 126.76 48** PKIKP **PKPdf** **18 52 18.2 -1.3**
**KNB Kanab 126.80 50** IAMs_20 IAMs_20 19 40 53.2
comp=Z,349nm,21.0s
**PDAR Pinedale Array 126.89 42** PKPdf **PKPdf** **18 52 17.9 -1.6**
**PDAR Pinedale Array 126.89 42** PKP **PKPdf** **18 52 18.9 -0.7**
comp=Z,1.2nm,0.7s,baz=222,slow=2.0,SNR=14
**TMUT Trail Mountain 127.18 47** **PKPdf** **18 52 19.0 -1.3**
**U15A North Rim 127.40 50** PKPdf **PKPdf** **18 52 18.8 -2.0**
**WUAZ Wupatki 128.40 51** IAMs_20 IAMs_20 19 54 56.7
comp=Z,357nm,20.0s
**X16A Lo Mia Camp, P 128.71 52** IAMs_20 IAMs_20 19 44 21.0
comp=Z,364nm,21.0s
**K22A Casper 128.93 41** PKPdf **PKPdf** **18 52 21.7 -1.7**
**RSSD Black Hills 129.74 38** PKPdf **PKPdf** **18 52 22.6 -2.3**
**RSSD Black Hills 129.74 38** PKIKP **PKPdf** **18 52 22.6 -2.3**
**X18A Snowflake 129.83 52** IAMs_20 IAMs_20 19 42 52.7
comp=Z,367nm,21.0s
**TUC Tucson 129.88 55** IAMs_20 IAMs_20 19 45 12.3
comp=Z,360nm,21.0s
**LL04 Puerto Octay 130.13 171** **PKPdf** **18 52 24.2 -1.4**
**ULM Lac du Bonnet 130.22 27** PKP **PKPdf** **18 52 23.9 -1.4**
comp=Z,3.4nm,0.8s,baz=25,slow=2.1,SNR=3.0
**ULM Lac du Bonnet 130.22 27** PKIKP **PKPdf** **18 52 24.0 -1.4**
**PLCA Paso Flores 130.57 173** PKP **PKiKP** **18 52 27.6 +0.3**
comp=Z,18nm,1.2s,baz=201,slow=2.8,SNR=9.1
PLCA SKPbc **SKPbc** **18 55 51.8 +2.8**
comp=Z,10nm,1.1s,baz=175,slow=6.6,SNR=6.1
**319A Douglas 131.38 55** IAMs_20 IAMs_20 19 46 26.2
comp=Z,342nm,20.0s
**ANMO Albuquerque 132.36 50** PKPdf **PKPdf** **18 52 27.2 -2.9**
**ANMO Albuquerque 132.36 50** ⇓*i* PKIKP **PKPdf** **18 52 30.7 +0.5**
**SCHQ Schefferville 133.65 3** PKP **PKPdf** **18 52 31.5 -0.2**
comp=Z,5.0nm,0.9s,baz=307,slow=5.1,SNR=2.9
**TRQA Tornquist 133.72 181** PKPdf **PKPdf** **18 52 30.6 -1.9**
**TRQA Tornquist 133.72 181** PKIKP **PKPdf** **18 52 30.6 -1.9**
**VHRN Van Horn 135.06 54** PKPpre 18 52 18.1
VHRN PKPdf **PKPdf** **18 52 33.7 -1.6**
**CBKS Cedar Bluff 135.32 42** IAMs_20 IAMs_20 19 50 36.5
comp=Z,328nm,22.0s
**MSTX Muleshoe 135.53 49** IAMs_20 IAMs_20 19 49 12.7
comp=Z,309nm,19.0s
**G40A Rib Lake 136.48 28** IAMs_20 IAMs_20 20 06 41.5
comp=Z,447nm,20.0s
**TXAR Lajitas Array 136.63 56** PKPpre 18 52 23.7
**TXAR Lajitas Array 136.63 56** PKhKP PKPpre 18 52 27.1
comp=Z,0.6nm,0.5s,baz=250,slow=3.6,SNR=6.1
TXAR PKP **PKPdf** **18 52 38.3 +0.1**
comp=Z,1.9nm,0.8s,baz=318,slow=3.5,SNR=8.8
TXAR SKPbc **SKPbc** **18 56 11.1 +1.5**
comp=Z,2.2nm,1.0s,baz=270,slow=2.5,SNR=5.7
**SAND Sanderson 137.66 54** PKPpre 18 52 26.0
**OK048 Pawnee Station 138.49 43** IAMs_20 IAMs_20 20 05 27.5
comp=Z,277nm,19.0s
**FNO Franklin 138.80 45** IAMs_20 IAMs_20 20 08 05.1
comp=Z,405nm,22.0s
**DRIO Del Rio 139.07 54** PKPdf PKPpre 18 52 36.4
**JCT Junction City 139.29 52** IAMs_20 IAMs_20 20 06 01.3
comp=Z,315nm,19.0s
**ZAIG Zacatecas 139.52 65** IAMs_20 IAMs_20 19 43 30.4
comp=Z,444nm,21.0s
**TUL3 Leonard 139.54 43** IAMs_20 IAMs_20 20 08 30.4
comp=Z,289nm,20.0s
**RLO Rose Lookout 139.90 42** IAMs_20 IAMs_20 19 44 56.9
comp=Z,3µm,22.0s
**LDAQ Lac Daran 140.02 9** IAMs_20 IAMs_20 20 06 03.2
comp=Z,551nm,22.0s
**S39A Bolivar 140.06 39** PKPdf PKPpre 18 52 39.5
**HHAR Hobbs 140.54 41** IAMs_20 IAMs_20 20 07 25.7
comp=Z,352nm,19.0s
**MGMO Mountain Grove 141.05 38** IAMs_20 IAMs_20 20 07 17.9
comp=Z,360nm,18.0s
**CCM Cathedral Cave 141.08 36** PKPpre 18 52 36.0
**CCM Cathedral Cave 141.08 36** PKHKP PKPpre 18 52 36.0
**Z38A Mt. Pleasant 141.56 45** IAMs_20 IAMs_20 20 09 38.3
comp=Z,420nm,21.0s
**HBVL Hebbronville 141.56 57** PKPdf **PKPdf** **18 52 44.9 -2.2**
**PQI Presque Isle 141.69 6** IAMs_20 IAMs_20 20 03 53.1
comp=Z,480nm,20.0s
**MIAR Mount Ida 141.81 43** PKPpre PKPpre 18 52 38.7
MIAR PKPdf **PKPdf** **18 52 45.3 -2.0**
MIAR IAMs_20 IAMs_20 19 51 52.5
comp=Z,429nm,22.0s
**MIAR Mount Ida 141.81 43** PKHKP PKPpre 18 52 38.7
MIAR 18 52 45.3
MIAR MLR MLR
comp=Z,400nm,22.0s
**DELO Deloro Mine 141.91 17** IAMs_20 IAMs_20 20 07 38.3
comp=Z,434nm,20.0s
**MNTQ Montreal, Queb 141.98 12** IAMs_20 IAMs_20 20 02 32.4
comp=Z,488nm,21.0s
**WBO Williamsburg 142.09 14** IAMs_20 IAMs_20 20 04 42.6
comp=Z,558nm,20.0s
**X40A Basin Creek Fa 142.34 42** IAMs_20 IAMs_20 19 52 42.4
comp=Z,333nm,21.0s
**PBMO Poplar Bluff 142.41 37** PKPpre 18 52 40.9
PBMO IAMs_20 IAMs_20 20 05 56.9
comp=Z,402nm,19.0s
**F64A Sherman 142.45 6** IAMs_20 IAMs_20 20 05 13.4
comp=Z,485nm,20.0s
**SIUC Southern Illin 142.48 35** IAMs_20 IAMs_20 20 08 25.3
comp=Z,384nm,20.0s
**CGM3 Cape Girardeau 142.52 36** IAMs_20 IAMs_20 20 09 18.4
comp=Z,422nm,21.0s
**HKT Hockley 142.60 51** PKPdf **PKPdf** **18 52 46.7 -2.1**
**HKT Hockley 142.60 51** PKIKP **PKPdf** **18 52 46.7 -2.1**
**N49A Columbus Grove 142.62 27** IAMs_20 IAMs_20 20 08 38.9
comp=Z,466nm,21.0s
**J55A Hilton 142.99 18** IAMs_20 IAMs_20 20 08 10.0
comp=Z,485nm,21.0s
**HBAR Harrisburg 143.08 39** IAMs_20 IAMs_20 20 08 32.6
comp=Z,434nm,21.0s
**PVMO Portageville 143.09 37** IAMs_20 IAMs_20 20 03 54.8
comp=Z,385nm,21.0s
**GBN Guysborough 143.16 358** IAMs_20 IAMs_20 19 59 08.9
comp=Z,473nm,19.0s
**P48A Milroy 143.20 29** IAMs_20 IAMs_20 20 04 47.5
comp=Z,480nm,22.0s
**J56A Wolcott 143.27 17** IAMs_20 IAMs_20 20 05 29.2
comp=Z,539nm,22.0s
**T45A Paducah 143.29 35** IAMs_20 IAMs_20 20 08 29.0
comp=Z,355nm,19.0s
**NCB Newcomb 143.31 14** IAMs_20 IAMs_20 20 07 31.9
comp=Z,504nm,22.0s
**H62A Milan 143.34 10** PKPbc 18 52 46.4 -0.4
H62A IAMs_20 IAMs_20 20 06 36.1
comp=Z,518nm,20.0s
**GLAT Glass 143.44 37** IAMs_20 IAMs_20 19 52 59.8
comp=Z,400nm,19.0s
**LBNH Lisbon 143.53 11** IAMs_20 IAMs_20 20 08 42.1
comp=Z,468nm,22.0s
**WVL Waterville 143.57 8** PKPab 18 52 46.1 -0.5
**M53A WI Miller and 143.63 23** IAMs_20 IAMs_20 20 06 51.1
comp=Z,503nm,19.0s
**WCI Wyandotte Cave 143.70 32** PKPdf PKPab 18 52 46.5 -0.8
**WCI Wyandotte Cave 143.70 32** PKIKP PKPab 18 52 46.5 -0.8
**HNH Hanover 143.97 11** IAMs_20 IAMs_20 20 07 32.0
comp=Z,392nm,20.0s
**I62A Tamworth 143.99 10** IAMs_20 IAMs_20 20 04 15.3
comp=Z,466nm,21.0s
**L56A Greenwood 144.10 19** **PKPab** **18 52 47.8 -1.0**
**N53A Lisbon 144.11 23** IAMs_20 IAMs_20 20 11 55.9
comp=Z,469nm,21.0s
**T47A Sharon Grove 144.18 34** IAMs_20 IAMs_20 20 09 08.2
comp=Z,314nm,19.0s
**R49A Shelbyville 144.23 30** PKPdf **PKPab** **18 52 48.3 -0.9**
**J61A Chester 144.26 12** IAMs_20 IAMs_20 20 08 59.8
comp=Z,525nm,22.0s
**143A Socs Landing, 144.35 43** IAMs_20 IAMs_20 20 08 52.0
comp=Z,366nm,22.0s
**WVT Waverly 144.38 36** PKPdf **PKPab** **18 52 48.6 -1.3**
**WVT Waverly 144.38 36** PKIKP **PKPab** **18 52 48.6 -1.3**
**O53A New Philadelph 144.44 24** IAMs_20 IAMs_20 20 11 39.8
comp=Z,578nm,22.0s
**Q51A Peebles 144.53 28** **PKPab** **18 52 49.0 -1.4**
Q51A IAMs_20 IAMs_20 20 09 46.5
comp=Z,536nm,22.0s
**OXF Oxford 144.53 39** IAMs_20 IAMs_20 20 12 06.2
comp=Z,384nm,22.0s
**R50A Paris 144.65 30** **PKPab** **18 52 49.1 -1.8**
**L59A Walton 144.78 16** IAMs_20 IAMs_20 20 10 15.0
comp=Z,520nm,21.0s
**CPUP Villa Florida 144.98 189** PKPbc **PKPdf** **18 52 53.7 +0.5**
comp=Z,152nm,1.0s,baz=158,slow=2.7,SNR=140
**Q52A Bidwell 145.06 27** **PKPbc** **18 52 50.1 -2.2**
**L61B Northampton 145.10 12** IAMs_20 IAMs_20 20 12 01.9
comp=Z,489nm,22.0s
**KSPA Keystone Colle 145.17 17** **PKPbc** **18 52 51.0 -1.5**
**CLTN Cedars of Leba 145.26 34** IAMs_20 IAMs_20 20 09 18.7
comp=Z,434nm,21.0s
**SSPA Standing Stone 145.34 20** **PKPbc** **18 52 51.1 -2.0**
**SSPA Standing Stone 145.34 20** IAMs_20 IAMs_20 20 04 37.3
comp=Z,417nm,21.0s
**BCX Boston College 145.51 11** **PKPdf** **18 52 50.8 -2.8**
**KSCT Kent School, K 145.60 14** **PKPdf** **18 52 51.5 -2.3**
**Q54A Coxs Mills 145.66 25** IAMs_20 IAMs_20 20 03 35.3
comp=Z,539nm,21.0s
**UCCT U. Connecticut 145.82 12** IAMs_20 IAMs_20 20 12 56.0
comp=Z,410nm,20.0s
**ODNJ Ogdensburg 145.93 16** PKPdf **PKPdf** **18 52 53.0 -1.4**
ODNJ IAMs_20 IAMs_20 20 10 41.5
comp=Z,503nm,21.0s
**TRNY Table Rock, Ra 145.97 15** IAMs_20 IAMs_20 20 13 06.5
comp=Z,498nm,21.0s
**SWET Sewanee 146.12 35** **PKPdf** **18 52 52.6 -2.3**
**WSPT Westport, CT 146.17 14** IAMs_20 IAMs_20 20 12 49.7
comp=Z,482nm,21.0s
**PAL Palisades 146.18 15** IAMs_20 IAMs_20 20 12 38.1
comp=Z,413nm,20.0s
**Q56A Snyder Ridge, 146.28 23** IAMs_20 IAMs_20 20 09 19.3
comp=Z,429nm,22.0s
**M65A Busby, Falmout 146.35 10** IAMs_20 IAMs_20 20 07 36.9
comp=Z,449nm,20.0s
**N62A Caumsett State 146.36 14** IAMs_20 IAMs_20 20 12 47.8
comp=Z,423nm,21.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TZTN | Tazewell | 146.40 | 31 | | | PKPdf | 18 52 53.4 | -1.9 |
| R55A | Marlinton | 146.56 | 25 | | | PKPdf | 18 52 55.1 | -0.5 |
| CPCT | Cooper Cave | 146.72 | 33 | IAMs_20 | IAMs_20 | | 20 11 59.3 | |
| | comp=Z,536nm,22.0s | | | | | | | |
| FPAL | Fort Paine | 146.79 | 35 | IAMs_20 | IAMs_20 | | 20 09 49.3 | |
| | comp=Z,419nm,20.0s | | | | | | | |
| Y49A | Blount Mountai | 146.80 | 37 | PKPdf | PKPdf | | 18 52 54.7 | -1.4 |
| X51A | Calhoun | 147.19 | 34 | | PKPdf | | 18 52 56.8 | +0.1 |
| X51A | | | | IAMs_20 | IAMs_20 | | 20 08 17.0 | |
| | comp=Z,426nm,21.0s | | | | | | | |
| U54A | Nelsons Funny | 147.26 | 29 | IAMs_20 | IAMs_20 | | 20 07 41.0 | |
| | comp=Z,554nm,22.0s | | | | | | | |
| W52A | Murphy | 147.31 | 33 | IAMs_20 | IAMs_20 | | 20 08 21.9 | |
| | comp=Z,475nm,22.0s | | | | | | | |
| V53A | Saluda | 147.45 | 31 | | PKPdf | | 18 52 56.5 | -0.6 |
| S57A | Dark Hollow, R | 147.48 | 24 | | PKPdf | | 18 52 56.2 | -0.9 |
| R58B | Mineral | 147.72 | 22 | IAMs_20 | IAMs_20 | | 20 09 07.3 | |
| | comp=Z,427nm,21.0s | | | | | | | |
| BG3 | Lake Jocassee | 147.91 | 32 | | PKPdf | | 18 52 58.6 | +0.7 |
| BG3 | | | | IAMs_20 | IAMs_20 | | 20 09 08.7 | |
| | comp=Z,545nm,22.0s | | | | | | | |
| Y52A | Lilburn | 148.16 | 34 | | PKPdf | | 18 52 58.8 | +0.5 |
| Y52A | | | | IAMs_20 | IAMs_20 | | 20 12 49.5 | |
| | comp=Z,466nm,20.0s | | | | | | | |
| 250A | Grady | 148.18 | 39 | IAMs_20 | IAMs_20 | | 20 11 50.7 | |
| | comp=Z,395nm,21.0s | | | | | | | |
| LVC | Limon Verde | 148.60 | 170 | | PKPbc | | 18 53 02.0 | -1.5 |
| LVC | Limon Verde | 148.60 | 170 | PKIKP | PKPbc | | 18 53 02.0 | -1.5 |
| KMSC | Kings Mountain | 148.60 | 30 | | PKPdf | | 18 52 54.4 | -4.6 |
| KMSC | | | | PKPbc | PKPbc | | 18 52 59.6 | -3.0 |
| 152A | Waverly Hall | 148.65 | 37 | IAMs_20 | IAMs_20 | | 20 01 41.7 | |
| | comp=Z,499nm,20.0s | | | | | | | |
| T59A | Double "B" Far | 148.71 | 23 | IAMs_20 | IAMs_20 | | 20 10 25.7 | |
| | comp=Z,425nm,22.0s | | | | | | | |
| GOGA | Godfrey | 148.82 | 34 | IAMs_20 | IAMs_20 | | 20 13 21.1 | |
| | comp=Z,535nm,22.0s | | | | | | | |
| HODGE | Hodges | 148.85 | 32 | IAMs_20 | IAMs_20 | | 20 14 35.6 | |
| | comp=Z,473nm,20.0s | | | | | | | |
| V58A | Windy Hill, Pi | 149.09 | 26 | | PKPdf | | 18 53 00.6 | +0.8 |
| V58A | | | | IAMs_20 | IAMs_20 | | 20 03 44.1 | |
| | comp=Z,353nm,21.0s | | | | | | | |
| JSC | Jenkinsville | 149.32 | 30 | IAMs_20 | IAMs_20 | | 20 12 10.9 | |
| | comp=Z,511nm,20.0s | | | | | | | |
| BIRD | Birdtown, Kers | 149.42 | 29 | IAMs_20 | IAMs_20 | | 20 12 45.3 | |
| | comp=Z,468nm,22.0s | | | | | | | |
| RCBR | Riachuelo | 149.43 | 243 | PKPbc | PKPbc | | 18 53 04.4 | -1.0 |
| RCBR | Riachuelo | 149.43 | 243 | IAMs_20 | IAMs_20 | | 19 50 02.3 | |
| | comp=Z,417nm,21.0s | | | | | | | |
| RCBR | Riachuelo | 149.43 | 243 | PKP2 | PKPbc | | 18 53 04.4 | -1.0 |
| RCBR | | | | MLR | MLR | | | |
| | comp=Z,400nm,21.0s | | | | | | | |
| 154A | Montrose | 149.62 | 35 | IAMs_20 | IAMs_20 | | 20 12 59.2 | |
| | comp=Z,449nm,21.0s | | | | | | | |
| W59A | Clinton | 149.91 | 26 | IAMs_20 | IAMs_20 | | 20 15 06.8 | |
| | comp=Z,411nm,20.0s | | | | | | | |
| Y57A | Sumter | 149.97 | 30 | IAMs_20 | IAMs_20 | | 20 08 08.8 | |
| | comp=Z,373nm,21.0s | | | | | | | |
| CNNC | Cliffs of the | 150.08 | 25 | IAMs_20 | IAMs_20 | | 20 11 41.2 | |
| | comp=Z,454nm,22.0s | | | | | | | |
| TIGA | Tifton | 150.19 | 37 | | PKPdf | | 18 53 01.9 | +0.3 |
| Y58A | Scranton | 150.41 | 29 | IAMs_20 | IAMs_20 | | 20 11 14.3 | |
| | comp=Z,429nm,21.0s | | | | | | | |
| CCIG | Comitan | 150.58 | 72 | PKPdf | PKPdf | | 18 53 03.3 | +0.5 |
| CCIG | | | | PKPbc | PKiKP | | 18 53 08.7 | -0.3 |
| Y60A | Bolivia | 150.99 | 27 | IAMs_20 | IAMs_20 | | 20 09 06.5 | |
| | comp=Z,480nm,19.0s | | | | | | | |
| BDFB | Brasilia | 151.80 | 212 | PKP | PKPdf | | 18 53 04.8 | +0.1 |
| | comp=Z,5.8nm,0.8s,baz=180,slow=1.5,SNR=6.6 | | | | | | | |
| BDFB | | | | PKPbc | PKiKP | | 18 53 12.0 | +0.6 |
| | comp=Z,24nm,0.6s,baz=150,slow=2.4,SNR=27 | | | | | | | |
| BDFB | | | | PKPab | sPKPbc | | 18 53 21.3 | 0.0 |
| | comp=Z,32nm,0.8s,baz=119,slow=4.9,SNR=11 | | | | | | | |
| MTO3 | Montecristo | 153.56 | 75 | IAMs_20 | IAMs_20 | | 19 49 49.8 | |
| | comp=Z,306nm,20.0s | | | | | | | |
| SNET | Serv Nac Est T | 153.80 | 76 | IAMs_20 | IAMs_20 | | 19 53 52.3 | |
| | comp=Z,430nm,21.0s | | | | | | | |
| LPAZ | La Paz | 154.91 | 168 | PKP | PKPdf | | 18 53 10.2 | +0.5 |
| | comp=Z,8.1nm,1.0s,baz=236,slow=3.6,SNR=16 | | | | | | | |
| LPAZ | | | | PKPab | PKPab | | 18 53 35.4 | +1.9 |
| | comp=Z,16nm,0.9s,baz=151,slow=2.8,SNR=9.9 | | | | | | | |
| JTS | Las Juntas de | 158.32 | 83 | PKPdf | PKPdf | | 18 53 12.4 | -1.1 |
| JTS | Las Juntas de | 158.32 | 83 | PKIKP | PKPdf | | 18 53 12.4 | -1.1 |
| ETMB | Extrema | 161.58 | 170 | PKPdf | PKPdf | | 18 53 15.9 | -1.3 |
| ETMB | | | | | PKPab | | 18 54 01.9 | +0.4 |
| ROSC | El Rosal | 168.25 | 107 | PKP | PKPdf | | 18 53 24.4 | +1.0 |
| | comp=Z,6.8nm,0.3s,baz=233,slow=16,SNR=11 | | | | | | | |
| ROSC | | | | PKPab | PKPab | | 18 54 33.3 | +1.5 |
| | comp=Z,7.3nm,0.3s,baz=226,slow=16,SNR=4.0 | | | | | | | |
| BOAV | Boa Vista | 173.47 | 203 | | PKPdf | | 18 53 23.2 | -2.4 |
| BOAV | | | | | PKPab | | 18 54 55.6 | +1.5 |
| BAUV | El Baul | 175.05 | 84 | PKPdf | PKPdf | | 18 53 24.2 | -1.9 |
| BAUV | | | | | PKPab | | 18 54 58.8 | -2.8 |

*UPP **25** 18:36:24.4±0.1,59.°86N×19.°37E, h0km, ML2.4, Unknown*
*HEL **25** 18:36:24.9±0.1,59.°84N×19.°41E, h0km, ML2.2, Explosion*
*DNK **25** 18:36:24.7±0.6,59.°86N×19.°38E, h0km, ML2.4(UPP), Explosion*
*IDC **25** 18:36:24.7±1.3,59.°77N×19.°51E, h0km, mbtmp2.9/4, ML1.7/3, Error ellipse: s-maj=20.7km s-min=6.2km az=167.0*
*BER **25** 18:36:25.8±2.3,59.°87N×19.°32E, h0km, ML1.9, ML2.2(HEL), Suspected explosion*

**ISC 25 18:36:23.9**±0.7,**59.°88N**±0.°02×**19.°36E**±0.°02,**h0km, n59,** σ1**°54**/101,**Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| NRTU | Norrtaelje | 0.42 | 242 | eP | | Pg | 18 36 32.3 | +0.4 |
| NRTU | | | | eS | | Sg | 18 36 38.5 | +1.2 |
| NRTU | Norrtaelje | 0.42 | 242 | P | | Pg | 18 36 32.4 | +0.4 |
| NRTU | | | | S | | Sg | 18 36 38.3 | +1.0 |
| NRTU | Norrtaelje | 0.42 | 242 | P | | Pg | 18 36 32.4 | +0.4 |
| NRTU | | | | S | | Sg | 18 36 38.3 | +1.0 |
| NRTU | Norrtaelje | 0.42 | 242 | eP | | Pg | 18 36 32.3 | +0.4 |
| NRTU | | | | eS | | Sg | 18 36 38.5 | +1.2 |
| AAL | Aland | 0.44 | 46 | eP | | Pg | 18 36 32.9 | +0.6 |
| AAL | | | | eS | | Sg | 18 36 38.8 | +0.9 |
| AAL | Aland | 0.44 | 46 | P | | Pg | 18 36 32.9 | +0.6 |
| AAL | | | | S | | Sg | 18 36 38.9 | +0.9 |
| AAL | Aland | 0.44 | 46 | P | | Pg | 18 36 32.9 | +0.6 |
| AAL | | | | S | | Sg | 18 36 38.9 | +0.9 |
| AAL | Aland | 0.44 | 46 | eP | | Pg | 18 36 32.9 | +0.6 |
| AAL | | | | eS | | Sg | 18 36 38.8 | +0.9 |
| GRAU | Graesoe | 0.62 | 318 | P | | Pg | 18 36 36.2 | +0.5 |
| GRAU | | | | S | | Sg | 18 36 44.9 | +1.2 |
| GRAU | Graesoe | 0.62 | 318 | P | | Pg | 18 36 36.2 | +0.5 |
| GRAU | | | | S | | Sg | 18 36 44.9 | +1.2 |
| FORU | Forsmark | 0.78 | 311 | P | | Pg | 18 36 39.2 | +0.3 |
| FORU | | | | S | | Sg | 18 36 49.9 | +0.9 |
| FORU | Forsmark | 0.78 | 311 | P | | Pg | 18 36 39.2 | +0.3 |
| FORU | | | | S | | Sg | 18 36 49.9 | +0.9 |
| FLYU | Flymyra | 0.78 | 289 | P | | Pg | 18 36 39.5 | +0.6 |
| FLYU | | | | S | | Sg | 18 36 50.3 | +1.3 |
| FLYU | Flymyra | 0.78 | 289 | P | | Pg | 18 36 39.5 | +0.6 |
| FLYU | | | | S | | Sg | 18 36 50.3 | +1.3 |
| UPP | Uppsala | 0.88 | 270 | eP | | Pg | 18 36 40.3 | -0.4 |
| UPP | | | | eS | | Sg | 18 36 53.1 | +1.1 |
| UPP | Uppsala | 0.88 | 270 | P | | Pg | 18 36 40.3 | -0.4 |
| UPP | Uppsala | 0.88 | 270 | P | | Pg | 18 36 40.3 | -0.4 |
| UPP | Uppsala | 0.88 | 270 | eP | | Pg | 18 36 40.3 | -0.4 |
| UPP | | | | eS | | Sg | 18 36 53.1 | +1.1 |
| FIBU | Brunna | 1.01 | 272 | P | | Pg | 18 36 43.4 | +0.1 |
| FIBU | Brunna | 1.01 | 272 | P | | Pg | 18 36 43.4 | +0.1 |
| NYNU | Nynaeshamn | 1.12 | 219 | P | | Pg | 18 36 45.1 | -0.2 |
| NYNU | Nynaeshamn | 1.12 | 219 | P | | Pg | 18 36 45.1 | -0.2 |
| OSTU | Oestervaala | 1.17 | 289 | P | | Pg | 18 36 46.2 | -0.1 |
| OSTU | Oestervaala | 1.17 | 289 | P | | Pg | 18 36 46.2 | -0.1 |
| IGGU | Iggoen | 1.43 | 315 | P | | Pn | 18 36 50.5 | -0.5 |
| IGGU | Iggoen | 1.43 | 315 | P | | Pn | 18 36 50.5 | -0.5 |
| RAF | Rauma | 1.66 | 45 | eP | | Pn | 18 36 53.9 | -0.2 |
| RAF | | | | eS | | Sn | 18 37 16.1 | 0.0 |
| RAF | | | | MSG | | | 18 37 20.2 | |
| | comp=Z,9.8nm,0.1s | | | | | | | |
| RAF | Rauma | 1.66 | 45 | eP | | Pn | 18 36 53.9 | -0.2 |
| RAF | | | | eS | | Sn | 18 37 16.1 | 0.0 |
| RAF | | | | MSG | | | 18 37 20.2 | |
| | comp=Z,9.8nm,0.1s | | | | | | | |
| ARNU | Arnoeviken | 2.07 | 333 | eP | | Pn | 18 37 00.7 | +0.9 |
| ARNU | | | | eSG | | Sb | 18 37 29.5 | +1.1 |
| ARNU | Arnoeviken | 2.07 | 333 | eP | | Pn | 18 37 00.7 | +0.9 |
| ARNU | | | | eSG | | Sb | 18 37 29.5 | +1.1 |
| GOTU | Gotland | 2.23 | 191 | eP | | Pn | 18 37 02.8 | +0.7 |
| GOTU | Gotland | 2.23 | 191 | eP | | Pn | 18 37 02.8 | +0.7 |
| GOTU | | | | eSG | | Sb | 18 37 32.8 | -0.4 |
| KPF | Kankaanpaa | 2.37 | 33 | ePB | | Pn | 18 37 06.1 | +2.2 |
| KPF | | | | eSG | | Sb | 18 37 38.2 | +1.1 |
| KPF | | | | MSG | | | 18 37 38.6 | |
| | comp=Z,12nm,0.2s | | | | | | | |
| MEF | Metsahovi | 2.55 | 80 | eP | | Pn | 18 37 06.6 | +0.2 |
| MEF | | | | eSB | | Sb | 18 37 41.2 | -1.1 |
| MEF | | | | MSG | | | 18 37 43.7 | |
| | comp=Z,21nm,0.2s | | | | | | | |
| MEF | Metsahovi | 2.55 | 80 | eP | | Pn | 18 37 06.6 | +0.2 |
| MEF | | | | eSB | | Sb | 18 37 41.2 | -1.1 |
| MEF | | | | MSG | | | 18 37 43.7 | |
| | comp=Z,21nm,0.2s | | | | | | | |
| MTSE | Matsula | 2.56 | 115 | eP | | Pn | 18 37 07.2 | +0.6 |
| MTSE | Matsula | 2.56 | 115 | eP | | Pn | 18 37 07.2 | +0.6 |
| MTSE | | | | eSG | | Sb | 18 37 42.5 | -0.2 |
| NUR | Nurmijrvi | 2.72 | 74 | ePB | | Pn | 18 37 11.4 | +2.7 |
| NUR | | | | eSB | | Sb | 18 37 46.5 | -0.6 |
| NUR | | | | MSG | | | 18 37 49.0 | |
| | comp=Z,6.7nm,0.2s | | | | | | | |
| NUR | Nurmijrvi | 2.72 | 74 | ePB | | Pn | 18 37 11.4 | +2.7 |
| NUR | | | | eSB | | Sb | 18 37 46.5 | -0.6 |
| NUR | | | | MSG | | | 18 37 49.0 | |
| | comp=Z,6.7nm,0.2s | | | | | | | |
| SLIT | Slitere, Latvi | 2.72 | 145 | eP | | Pn | 18 37 08.9 | +0.1 |
| SLIT | | | | eSB | | Sn | 18 37 44.0 | +1.6 |
| SLIT | Slitere, Latvi | 2.72 | 145 | eP | | Pn | 18 37 08.9 | +0.1 |
| SLIT | | | | eSB | | Sn | 18 37 44.0 | +1.6 |
| HEL1 | Helsinki | 2.79 | 81 | eP | | Pn | 18 37 10.6 | +0.9 |
| HEL1 | Helsinki | 2.79 | 81 | eP | | Pn | 18 37 10.6 | +0.9 |
| HFS | Hagfors | 2.86 | 278 | Pn | | Pn | 18 37 11.8 | +1.1 |
| | comp=Z,0.4nm,0.3s,baz=90,slow=16,SNR=21 | | | | | | | |
| HFS | | | | Pg | | Pb | 18 37 16.2 | +0.5 |
| | comp=Z,1.2nm,0.3s,baz=94,slow=18,SNR=2.4 | | | | | | | |
| HFS | | | | Sn | | Sn | 18 37 48.2 | +2.4 |
| | comp=Z,2.3nm,0.3s,baz=92,slow=32,SNR=11 | | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| HEMU | Hemsoen | 2.88 | 348 | eP | | Pn | 18 37 12.4 | +1.4 |
| HEMU | Hemsoen | 2.88 | 348 | eP | | Pn | 18 37 12.4 | +1.4 |
| HEMU | | | | eS | | Sn | 18 37 48.2 | +1.8 |
| HUSU | Husum | 3.48 | 359 | eP | | Pn | 18 37 20.9 | +1.7 |
| HUSU | Husum | 3.48 | 359 | eP | | Pn | 18 37 20.9 | +1.7 |
| VAF | Ylistaro | 3.55 | 25 | eP | | Pn | 18 37 21.8 | +1.6 |
| VAF | | | | eSG | | Sg | 18 38 15.8 | -2.1 |
| VAF | | | | MSG | | | 18 38 20.0 | |
| | comp=Z,3.8nm,0.2s | | | | | | | |
| VAF | Ylistaro | 3.55 | 25 | eP | | Pn | 18 37 21.8 | +1.6 |
| VAF | | | | eSG | | Sg | 18 38 15.8 | -2.1 |
| VAF | | | | MSG | | | 18 38 20.0 | |
| | comp=Z,3.8nm,0.2s | | | | | | | |
| FINES | FINESS Array B | 3.66 | 62 | Pn | | Pn | 18 37 22.8 | +1.1 |
| | comp=Z,0.2nm,0.3s,baz=243,slow=12,SNR=38 | | | | | | | |
| FINES | | | | Pg | | Pb | 18 37 29.0 | -0.3 |
| | comp=Z,0.6nm,0.3s,baz=242,slow=15,SNR=22 | | | | | | | |
| FINES | | | | Sn | | Sn | 18 38 05.7 | +0.2 |
| | comp=Z,0.4nm,0.3s,baz=243,slow=17,SNR=1.6 | | | | | | | |
| FINES | | | | Lg | | Lg | 18 38 18.1 | |
| | comp=Z,1.2nm,0.3s,baz=242,slow=24,SNR=9.4 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| NB201 | NORSAR Array S | 4.17 | 290 | eP | | Pn | 18 37 28.8 | +0.1 |
| NB201 | | | | eSg | | Sg | 18 38 35.6 | -1.9 |
| NB201 | | | | IAML | | | 18 38 40.9 | |
| | comp=Z,4.7nm,0.4s | | | | | | | |
| NC303 | NORSAR Array S | 4.17 | 292 | eP | | Pn | 18 37 29.2 | +0.4 |
| NC303 | | | | eSg | | Sg | 18 38 34.9 | -2.9 |
| NC303 | | | | IAML | | | 18 38 40.0 | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| NOA | NORSAR Array B | 4.20 | 290 | Pn | | Pn | 18 37 29.4 | +0.2 |
| | baz=105,slow=12,SNR=8.6 | | | | | | | |
| NOA | | | | Sn | | Sn | 18 38 20.4 | +1.5 |
| | baz=149,slow=7.8,SNR=1.6 | | | | | | | |
| NOA | | | | Lg | | Lg | 18 38 35.8 | |
| | comp=Z,0.2nm,0.3s,baz=106,slow=13,SNR=7.9 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| STRU | Stroemstad | 4.26 | 262 | eP | | Pn | 18 37 31.0 | +1.1 |
| STRU | | | | eS | | Sn | 18 38 18.2 | -2.0 |
| STRU | | | | eSg | | Sb | 18 38 36.0 | +4.6 |
| OSL | Oslo | 4.35 | 275 | eSg | | Sg | 18 38 40.5 | -3.0 |
| OSL | | | | IAML | | | 18 38 43.2 | |
| | comp=Z,13nm,0.5s | | | | | | | |
| KONO | Kongsberg | 4.94 | 272 | eSg | | Sg | 18 38 57.4 | -5.1 |
| KONO | | | | IAML | | | 18 39 06.8 | |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| DOMB | Dombas | 5.47 | 298 | IAML | | | 18 38 52.9 | |
| | comp=Z,1.9nm,0.4s | | | | | | | |
| DOMB | | | | eSg | | Sg | 18 39 14.5 | -4.8 |
| ARCES | ARCESS Array B | 10.04 | 12 | Pn | | Pn | 18 38 47.1 | -2.0 |
| | comp=Z,0.9nm,0.4s,baz=192,slow=14,SNR=18 | | | | | | | |
| ARCES | | | | Sn | | Sn | 18 40 36.6 | -5.7 |
| | comp=Z,0.1nm,0.3s,baz=196,slow=25,SNR=1.7 | | | | | | | |

*IDC **25** 18:40:08.9±1.6,8.°40S×117.°27E, h0km, mb3.7/4, mbtmp3.9/5, ML3.9/1, Error ellipse: s-maj=29.5km s-min=22.6km az=89.0*
*NEIC **25** 18:40:08±2.8,8.°39S±0.°08×116.°99E±0.°04, h10km±1km, mb4.6/6, Error ellipse: s-maj=13.3km s-min=5.8km az=15.0*

**ISC 25 18:40:08.3**±0.8,**8.°4S**±0.°1×**116.°95E**±0.°06,**h10km, n16,** σ1**°63**/19,**mb3.9/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| JAGI | Jajag, Banyuwa | 2.77 | 269 | Pn | | Pn | 18 40 51.9 | -0.8 |
| JAGI | | | | Sn | | Sn | 18 41 25.5 | -0.7 |
| KAPI | Kappang | 4.40 | 39 | Pn | | Pn | 18 41 14.0 | -1.1 |
| | 7.2nm,0.3s,baz=216,slow=4.7,SNR=14 | | | | | | | |
| KAPI | | | | Sn | | Sn | 18 42 04.6 | -1.8 |
| | 8.8nm,0.3s,baz=257,slow=18,SNR=6.8 | | | | | | | |
| KAPI | | | | Lg | | Lg | 18 42 20.8 | |
| | 3.8nm,0.3s,baz=61,slow=23,SNR=1.9 | | | | | | | |
| | 18nm,0.3s | | | | | | | |
| UGM | Wanagama | 6.38 | 274 | Pn | | Pn | 18 41 41.7 | -0.8 |
| UGM | | | | Sn | | Sn | 18 42 55.1 | -0.4 |
| SOEI | Soe | 7.34 | 101 | Pn | | Pn | 18 41 57.7 | +1.9 |
| FAKI | Fak Fak | 16.18 | 71 | P | | Pn | 18 43 55.8 | -0.1 |
| FAKI | | | | IAmb | | IAmb | 18 44 00.4 | |
| | comp=Z,22nm,1.4s | | | | | | | |
| WRA | Warramunga Arr | 20.35 | 126 | P | | P | 18 44 42.5 | -2.5 |
| WRA | Warramunga Arr | 20.35 | 126 | P | | P | 18 44 44.5 | -0.6 |
| | comp=Z,3.0nm,0.5s,baz=302,slow=12,SNR=10.0 | | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| WB2 | Warramunga Arr | 20.36 | 126 | P | | P | 18 44 43.6 | -1.5 |
| WB2 | | | | IAmb | | IAmb | 18 44 56.0 | |
| | comp=Z,80nm,1.1s | | | | | | | |
| WR0 | Warramunga Arr | 20.52 | 126 | P | | P | 18 44 46.8 | -0.1 |
| WR0 | | | | IAmb | | IAmb | 18 44 58.4 | |
| | comp=Z,58nm,1.1s | | | | | | | |
| ASAR | Alice Springs | 22.20 | 135 | P | | P | 18 45 05.1 | +0.1 |
| | comp=Z,4.1nm,0.8s,baz=309,slow=8.7,SNR=1.7 | | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| COEN | Coen | 26.29 | 104 | P | | P | 18 45 42.8 | -1.5 |
| USA0B | Ussuriysk Arra | 54.13 | 13 | P | | P | 18 49 35.2 | +1.7 |
| USA0B | | | | IAmb | | IAmb | 18 50 06.5 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| USRK | Ussuriysk Ar. | 54.13 | 13 | P | | P | 18 49 32.2 | -1.3 |
| MKAR | Makanchi Array | 63.05 | 334 | P | | P | 18 50 36.0 | +0.3 |
| MKAR | Makanchi Array | 63.05 | 334 | P | | P | 18 50 37.7 | +2.0 |
| | comp=Z,0.3nm,0.8s,baz=145,slow=8.1,SNR=1.5 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| ZALV | Zalesovo Beam | 67.81 | 340 | P | | P | 18 51 09.9 | +3.6 |
| | comp=Z,0.4nm,0.4s,baz=136,slow=7.0,SNR=2.9 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |

*SKHL **25** 18:40:22.9±0.2, 44.°00N×150.°00E, h34km±4km, mb4.2/3*
*MOS **25** 18:40:24.4±3.0, 44.°11N×149.°99E, h42km, mb3.8/1, Error ellipse: s-maj=21.2km s-min=16.8km az=29.2*
*JMA **25** 18:40:26.0±0.9, 44.°N±4.°×15.°0E±.°, h30km, MV3.6/12, SE OFF ETOROFU*
*IDC **25** 18:40:39.4±10.0, 45.°34N×149.°17E, h82km±35km, mb3.7/5, mbtmp3.8/7, Error ellipse: s-maj=262.4km s-min=30.3km az=148.0*

**ISC 25 18:40:26.6**±1.4,**44.°09N**±0.°09×**149.°7E**±0.°1,**h35km, n31,** σ1**°02**/36,**mb4.2/5, 1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| KUR | Kuril'sk | 1.75 | 311 | eP | | Pn | 18 40 53.7 | -0.8 |
| KUR | | | | AMB | | AMB | 18 40 55.9 | |
| | 140nm,0.5s | | | | | | | |
| KUR | | | | eS | | Sn | 18 41 16.7 | +1.1 |
| KUR | | | | A | | A | 18 41 22.3 | |
| | 240nm,0.5s | | | | | | | |
| KUR | | | | A | | A | 18 41 22.3 | |
| | 210nm,0.5s | | | | | | | |
| KUR | Kuril'sk | 1.75 | 311 | ePN | | Pn | 18 40 53.7 | -0.8 |
| KUR | | | | S | | Sn | 18 41 16.2 | +0.6 |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,116nm,0.5s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,432nm,0.6s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,66nm,0.4s | | | | | | | |
| SHO | Shikotan | 2.10 | 265 | iP | | Pn | 18 40 58.5 | -0.8 |
| SHO | | | | AMB | | AMB | 18 41 01.8 | |
| | comp=E,20nm,0.5s | | | | | | | |
| SHO | | | | eS | | Sn | 18 41 23.8 | -0.4 |
| SHO | | | | A | | A | 18 41 27.4 | |
| | comp=E,30nm,0.3s | | | | | | | |
| SHO | | | | A | | A | 18 41 27.4 | |
| | comp=E,90nm,0.3s | | | | | | | |
| SHO | Shikotan | 2.10 | 265 | ⇓iPN | | Pn | 18 40 58.5 | -0.8 |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.3s | | | | | | | |
| YUK | Yuzh-Kuril'sk | 2.79 | 270 | eP | | Pn | 18 41 07.8 | -0.9 |
| YUK | | | | AMB | | AMB | 18 41 08.9 | |
| | comp=Z,40nm,0.2s | | | | | | | |
| YUK | | | | eS | | Sn | 18 41 41.8 | +0.7 |
| YUK | | | | A | | A | 18 41 51.9 | |
| | comp=Z,230nm,0.8s | | | | | | | |
| YUK | | | | A | | A | 18 41 51.9 | |
| | comp=Z,190nm,0.8s | | | | | | | |
| YUK | Yuzh-Kuril'sk | 2.79 | 270 | ePN | | Pn | 18 41 07.8 | -0.9 |
| YUK | | | | eS | | Sn | 18 41 41.8 | +0.7 |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,43nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,22nm,0.1s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,75nm,0.4s | | | | | | | |
| NEM2 | Nemuro 2 | 2.98 | 257 | eP | | Pn | 18 41 10.8 | -0.5 |
| NEM2 | | | | eS | | Sn | 18 41 44.2 | -1.6 |
| JRA | Rausu | 3.33 | 269 | eP | | Pn | 18 41 17.5 | +1.4 |
| JNK | Nakash | 3.66 | 264 | eP | | Pn | 18 41 21.1 | +0.4 |
| JNK | | | | eS | | Sn | 18 42 02.1 | -0.4 |
| JAK | Akkeshi | 3.82 | 255 | eP | | Pn | 18 41 22.6 | -0.2 |
| JAK | | | | eS | | Sn | 18 42 03.4 | -3.1 |
| JTKR | Abashiri--Toko | 4.20 | 270 | eP | | Pn | 18 41 28.6 | +0.5 |
| JAR | Ashorobuto | 4.39 | 262 | eP | | Pn | 18 41 31.6 | +0.9 |
| JAR | | | | eS | | Sn | 18 42 21.9 | +1.2 |
| JOB | Onbets | 4.45 | 257 | eP | | Pn | 18 41 32.6 | +1.1 |
| JOB | | | | eS | | Sn | 18 42 21.9 | -0.1 |
| JCH | Churui | 4.87 | 255 | eP | | Pn | 18 41 38.4 | +1.1 |
| JCH | | | | eS | | Sn | 18 42 31.8 | -0.7 |
| ASAJ | Asahikawa | 5.14 | 273 | P | | Pn | 18 41 50.0 | +9.1 |
| | comp=E,3.4nm,0.6s,baz=67,slow=11,SNR=1.1 | | | | | | | |
| JNBK | Urakawa-nobuka | 5.41 | 253 | eP | | Pn | 18 41 47.1 | +2.4 |
| JNBK | | | | eS | | Sn | 18 42 46.2 | +0.5 |
| PETK | Petropavlovsk- | 10.45 | 27 | P | | Pn | 18 42 53.9 | +0.1 |
| | comp=E,0.8nm,0.8s,baz=210,slow=13,SNR=1.9 | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.21 | 144 | T | | T | 19 17 23.1 | |
| | baz=334,slow=75,SNR=7.3 | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.22 | 144 | T | | T | 19 17 28.7 | |
| | baz=334,slow=75,SNR=7.0 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.22 | 144 | T | | T | 19 17 28.9 | |
| | baz=334,slow=75,SNR=5.5 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.22 | 145 | T | | T | 19 18 39.3 | |
| | baz=335,slow=76,SNR=6.6 | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.22 | 145 | T | | T | 19 18 40.0 | |
| | baz=335,slow=76,SNR=5.5 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.23 | 145 | T | | T | 19 18 42.0 | |
| | baz=335,slow=76,SNR=6.3 | | | | | | | |
| MKAR | Makanchi Array | 46.07 | 298 | P | | P | 18 48 47.3 | +0.4 |
| | comp=E,1.8nm,0.8s,baz=73,slow=9.2,SNR=4.6 | | | | | | | |
| | comp=E,1.8nm,0.8s | | | | | | | |
| KURK | Kurchatov | 46.88 | 305 | eP | | P | 18 48 53.2 | +0.1 |
| KURK | Kurchatov | 46.88 | 305 | P | | P | 18 48 53.2 | +0.1 |
| KURBB | Kurchatov Arra | 46.97 | 304 | P | | P | 18 48 53.2 | -0.6 |
| | comp=E,0.4nm,0.4s,baz=73,slow=8.0,SNR=4.2 | | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | | |
| FINES | FINESS Array B | 65.41 | 334 | P | | P | 18 51 04.9 | -0.3 |
| | comp=E,1.9nm,0.6s,baz=38,slow=7.2,SNR=11 | | | | | | | |
| | comp=E,1.9nm,0.6s | | | | | | | |
| NB2 | NORSAR Subarra | 69.94 | 340 | P | | P | 18 51 34.2 | +0.3 |
| | comp=Z,8.5nm,1.7s,baz=32,slow=6.5 | | | | | | | |
| NOA | NORSAR Array B | 69.94 | 340 | P | | P | 18 51 33.2 | -0.7 |
| | comp=Z,1.4nm,0.8s,baz=30,slow=6.3,SNR=4.8 | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | |
| HFS | Hagfors | 70.08 | 338 | P | | P | 18 51 34.3 | -0.4 |
| | comp=Z,1.7nm,0.7s,baz=33,slow=8.6,SNR=3.1 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |

*IDC **25** 18:50:50.6±1.3, 19.°62S×174.°56W, h0km, mb3.4/5, mbtmp3.6/6, ML4.0/1, Error ellipse: s-maj=37.0km s-min=30.7km az=165.0*
*NEIC **25** 18:50:53.6±2.5, 19.°53S±0.°09×174.°0W±0.°1, h40km±9km, mb4.9/14, Error ellipse: s-maj=16.1km s-min=11.3km az=54.0*

**ISC 25 18:50:53.2**±0.6,**19.°55S**±0.°08×**173.°97W**±0.°07,**h35km, n26,** σ1**°84**/28,**mb4.2/8, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| NIUE | Niue | 3.85 | 84 | | | Pn | 18 51 52.4 | +2.5 |
| NIUE | | | | | | Sn | 18 52 32.2 | -1.8 |
| NIUE | | | | | | LR | 18 52 32.5 | |
| AFI | Afiamalu | 5.99 | 21 | Pn | | Pn | 18 52 19.6 | +0.2 |
| AFI | | | | Sn | | Sn | 18 53 27.0 | +0.2 |

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **1.60** | **94** | P | **Pb** | **18 51 43.6** | **-0.1** |
| **MSAI** | **Masohi** | **1.81** | **253** | P | **Pb** | **18 51 46.7** | **-0.5** |
| **BNDI** | **Bandanaira** | **1.86** | **204** | P | **Pn** | **18 51 45.3** | **0.0** |
| **SWI** | **Sorong** | **2.02** | **17** | P | **Pb** | **18 51 50.5** | **-0.4** |
| **NLAI** | **Namlea** | **3.58** | **263** | P | **Pn** | **18 52 09.9** | **+1.1** |
| **WRA** | **Warramunga Arr** | **17.41** | **168** | P | **Pn** | **18 55 16.4** | **+0.1** |
| | 0.1nm,0.3s,baz=348,slow=11,SNR=7.6<br>0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **20.97** | **172** | P | **P** | **18 55 56.4** | **-0.1** |
| | 3.0nm,0.6s,baz=352,slow=11,SNR=63<br>3.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.13** | **326** | P | **P** | **19 01 53.6** | **-0.2** |
| | 0.4nm,0.9s,baz=130,slow=5.8,SNR=1.9<br>0.4nm,0.9s | | | | | | |

**DJA 25 18:52:50.5±0.4, 8°S±6°×11°7E±°, h10km, M3.8/7, mb3.9/1, MLv3.7/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.31** | **187** | P | Pb | 18 52 57.6 | -0.5 |
| **PLAI** | **Plampang** | **0.93** | **115** | P | Pg | 18 53 08.1 | -0.4 |
| **DNP** | **Denpasar** | **1.71** | **262** | P | Pn | 18 53 20.8 | +0.4 |
| **SRBI** | **Singaraja** | **1.72** | **281** | P | Pn | 18 53 20.2 | -0.4 |
| **WBSI** | **Waikabubak, Su** | **2.72** | **116** | P | Pn | 18 53 34.7 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.74** | **269** | P | Pn | 18 53 34.9 | +0.3 |
| **BSSI** | **Bau Bau, Buton** | **4.21** | **58** | P | Pn | 18 53 54.8 | 0.0 |
| **PWJI** | **Pagerwojo** | **5.08** | **274** | P | Pn | 18 54 06.6 | -0.2 |

**KRSC 25 18:54:21.3±1.3, 50°21N×157°43E, h41km±18km, MI3.9, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.96** | **300** | *e*P | Pn | 18 54 39.0 | +0.7 |
| SKR | | | | *e*S | Sn | 18 54 51.6 | +0.9 |
| **KDTR** | **Khodutka, Kamc** | **1.66** | **14** | *e*P | Pn | 18 54 49.3 | +1.5 |
| KDTR | | | | *e*S | Sn | 18 55 09.2 | +1.4 |
| **ASAK** | **Asacha** | **2.20** | **8** | *e*P | Pn | 18 54 57.9 | +2.5 |
| **MTVR** | **Mutnovka** | **2.33** | **11** | *e*P | Pn | 18 54 59.9 | +2.7 |
| MTVR | | | | *e*S | Sn | 18 55 28.3 | +3.7 |
| **GRL** | **Gorelyy** | **2.38** | **10** | *e*P | Pn | 18 55 00.6 | +2.7 |
| GRL | | | | *e*S | Sn | 18 55 30.3 | +4.4 |
| **KRMR** | **Karymshinskiy** | **2.66** | **9** | *e*P | Pn | 18 55 05.2 | +3.6 |
| **APC** | **Apacha** | **2.73** | **357** | *e*P | Pn | 18 55 06.2 | +3.7 |
| **PET** | **Petropavlovsk** | **2.92** | **15** | *e*P | Pn | 18 55 08.4 | +3.3 |
| PET | | | | *e*S | Sn | 18 55 42.8 | +3.8 |
| **DALK** | **Dalny** | **2.95** | **16** | *e*P | Pn | 18 55 08.1 | +2.6 |
| DALK | | | | *e*S | Sn | 18 55 42.8 | +3.2 |
| **UGLR** | **Uglovaya** | **3.13** | **16** | *e*P | Pn | 18 55 11.5 | +3.4 |
| **AVH** | **Avacha** | **3.17** | **14** | *e*P | Pn | 18 55 13.1 | +4.5 |
| **SMAR** | **Somma** | **3.18** | **15** | *e*P | Pn | 18 55 12.5 | +3.6 |
| **KOK** | **Koryaka** | **3.18** | **13** | *e*P | Pn | 18 55 12.9 | +4.1 |
| **SPN** | **Mys Shipunski** | **3.32** | **28** | *e*P | Pn | 18 55 13.9 | +3.3 |
| **GNL** | **Ganaly** | **3.51** | **5** | *e*P | Pn | 18 55 17.5 | +4.1 |
| **TUMD** | **Tumrok D** | **5.32** | **19** | *e*P | Pn | 18 55 43.7 | +5.6 |
| **TUMR** | **Tumrok** | **5.35** | **17** | *e*P | Pn | 18 55 42.2 | +3.6 |
| **KMNR** | **Kamenistaya** | **5.81** | **16** | *e*P | Pn | 18 55 49.0 | +4.0 |

*IDC* ***25*** *18:55:10.1±5.2, 18°01S×178°03W, h440km±57km, mb3.3/9, mbtmp4.1/10, Error ellipse: s-maj=26.0km s-min=22.0km az=96.0*

**ISC 25 18:55:10.7±0.8, 18°0S±0°2×178°2W±0°2, h450km, n11, σ0995/12, mb3.6/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **15.02** | **252** | P | **P** | **18 58 21.1** | **-1.3** |
| | 1.6nm,0.5s,baz=127,slow=20,SNR=1.1 | | | | | | |
| **URZ** | **Urewera** | **20.59** | **191** | P | **P** | **18 59 17.1** | **-0.3** |
| | 3.1nm,0.6s,baz=61,slow=16,SNR=1.4<br>3.1nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | **P** | **19 02 44.7** | **+0.9** |
| | 0.5nm,0.4s,baz=94,slow=6.9,SNR=14<br>0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **45.00** | **254** | P | **P** | **19 02 46.5** | **+1.6** |
| | 3.6nm,0.5s,baz=88,slow=8.4,SNR=60 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 04 15.8** | **-1.1** |
| | 0.4nm,0.9s,baz=117,slow=3.1,SNR=1.6<br>3.6nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.04** | **180** | P | **P** | **19 05 48.1** | **+0.3** |
| | 2.3nm,1.2s,baz=127,slow=3.2,SNR=5.8<br>2.3nm,1.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.84** | **345** | P | **P** | **19 05 58.5** | **+0.4** |
| | 1.5nm,0.7s,baz=116,slow=7.0,SNR=7.4<br>1.5nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.33** | **44** | P | **P** | **19 06 29.7** | **+0.7** |
| | 0.7nm,0.7s,baz=230,slow=9.0,SNR=4.6<br>0.7nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **83.93** | **347** | P | **P** | **19 06 51.8** | **0.0** |
| | 2.1nm,0.5s,baz=149,slow=5.9,SNR=11<br>2.1nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.94** | **13** | P | **P** | **19 07 00.9** | **-0.7** |
| | 0.5nm,0.4s,baz=226,slow=5.8,SNR=5.1<br>0.5nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.26** | **43** | P | **P** | **19 07 08.9** | **+0.2** |
| | 0.3nm,0.4s,baz=242,slow=1.9,SNR=2.5<br>0.3nm,0.4s | | | | | | |
| **GERES** | **GERESS Array B** | **147.78** | **345** | PKPbc | **PKPbc** | **19 14 03.3** | **-0.8** |
| | 0.8nm,0.5s,baz=25,slow=4.4,SNR=5.7 | | | | | | |

*BJI* ***25*** *18:56:43.2±0.0, 44°25N×150°16E, h17km, mb4.7/39, Ms4.6/4, Ms7 4.5/4*

*IDC* ***25*** *18:56:45.7±0.7, 44°20N×149°59E, h0km, mb4.1/21, mbtmp4.1/27, ML3.7/5, Error ellipse: s-maj=17.8km s-min=15.6km az=137.0*

*NEIC* ***25*** *18:56:47.5±1.4, 44°23N±0°09×149°6E±0°1, h10km±1km, mb4.5/97, Error ellipse: s-maj=17.6km s-min=14.0km az=126.0*

*JMA* ***25*** *18:56:48.6±0.8, 44°N±4°×15°0E±°, h30km, MV4.2/16, SE OFF ETOROFU*

*SKHL* ***25*** *18:56:48.4±0.1, 44°10N×149°80E, h33km±4km, mb4.8/5*

*MOS* ***25*** *18:56:48.9±1.2, 44°24N×149°53E, h28km, mb4.9/27, Error ellipse: s-maj=7.9km s-min=6.0km az=116.5*

**ISC 25 18:56:48.0±1.0, 44°21N±0°05×149°62E±0°05, h14km±5km, n263, σ1§18/281, mb4.5/107, 10C-11D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.61** | **310** | *e*P | **Pb** | **18 57 16.8** | **-0.7** |
| KUR | | | | AMB | AMB | 18 57 19.2 | |
| | 610nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sg** | **18 57 38.2** | **-1.7** |
| KUR | | | | A | A | 18 57 47.2 | |
| | 2μm,0.6s | | | | | | |
| KUR | | | | A | A | 18 57 47.2 | |
| | 1μm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.61** | **310** | *c i*PN | **Pb** | **18 57 16.8** | **-0.7** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,629nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,194nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.04** | **261** | *e*P | **Pn** | **18 57 21.6** | **-0.2** |
| SHO | | | | AMB | AMB | 18 57 24.1 | |
| | comp=N,40nm,0.2s | | | | | | |
| SHO | | | | *e*S | **Sn** | **18 57 46.0** | **-1.1** |
| SHO | | | | A | A | 18 57 49.5 | |
| | comp=N,250nm,0.3s | | | | | | |
| SHO | | | | A | A | 18 57 49.5 | |
| | comp=N,560nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.04** | **261** | ⇑ *i*PN | **Pn** | **18 57 21.8** | **0.0** |
| SHO | | | | *i* S | **Sn** | **18 57 45.9** | **-1.1** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,40nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,562nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,228nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.71** | **268** | *i* P | **Pn** | **18 57 31.8** | **+0.7** |
| YUK | | | | AMB | AMB | 18 57 34.1 | |
| | comp=N,270nm,0.5s | | | | | | |
| YUK | | | | *e*S | **Sn** | **18 58 04.3** | **+0.7** |
| YUK | | | | A | A | 18 58 10.9 | |
| | comp=N,310nm,0.4s | | | | | | |
| YUK | | | | A | A | 18 58 10.9 | |
| | comp=N,460nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.71** | **268** | *d i*PN | **Pn** | **18 57 31.7** | **+0.7** |
| YUK | | | | *e*S | **Sn** | **18 58 04.2** | **+0.7** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,128nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,372nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,118nm,0.1s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.93** | **255** | *e*P | **Pn** | **18 57 33.6** | **-0.5** |
| NEM2 | | | | *e*S | **Sn** | **18 58 06.8** | **-2.2** |
| **JRA** | **Rausu** | **3.25** | **267** | *e*P | **Pn** | **18 57 40.1** | **+1.7** |
| JRA | | | | *e*S | **Sn** | **18 58 19.0** | **+2.1** |
| **JNK** | **Nakash** | **3.60** | **262** | P | **Pn** | **18 57 43.6** | **+0.4** |
| JNK | | | | *e*S | **Sn** | **18 58 25.4** | **0.0** |
| **JAK** | **Akkeshi** | **3.78** | **253** | *e*P | **Pn** | **18 57 45.8** | **+0.1** |
| JAK | | | | *e*S | **Sn** | **18 58 27.0** | **-2.9** |
| **JTKR** | **Abashiri--Toko** | **4.12** | **269** | *e*P | **Pn** | **18 57 51.9** | **+1.5** |
| **JAR** | **Ashorobuto** | **4.33** | **260** | P | **Pn** | **18 57 54.6** | **+1.2** |
| JAR | | | | S | **Sn** | **18 58 43.5** | **-0.2** |
| **JOB** | **Onbets** | **4.40** | **255** | *e*P | **Pn** | **18 57 55.0** | **+0.7** |
| JOB | | | | *e*S | **Sn** | **18 58 43.9** | **-1.4** |
| **JCH** | **Churui** | **4.83** | **253** | P | **Pn** | **18 58 00.5** | **+0.3** |
| JCH | | | | S | **Sn** | **18 58 54.8** | **-1.0** |
| **JKK2** | **Kamakawa 2** | **4.96** | **268** | P | **Pn** | **18 58 04.7** | **+2.7** |
| **JKA** | **Kamikawa-asahi** | **5.05** | **271** | Pn | **Pn** | **18 58 03.3** | **+0.1** |
| **ASAJ** | **Asahikawa** | **5.05** | **271** | Pn | **Pn** | **18 58 06.1** | **+2.9** |
| | comp=E,1.4nm,0.3s,baz=54,slow=19,SNR=8.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.05** | **271** | PN | **Pn** | **18 58 03.3** | **+0.1** |
| **ERM** | **Erimo** | **5.21** | **247** | Pn | **Pn** | **18 58 06.5** | **+1.1** |
| **ERM** | **Erimo** | **5.21** | **247** | ⇑ *e*PN | **Pn** | **18 58 06.6** | **+1.1** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,19nm,0.4s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.37** | **251** | P | **Pn** | **18 58 10.1** | **+2.5** |
| JNBK | | | | *e*S | **Sn** | **18 59 10.1** | **+0.8** |
| **JAB** | **Ashibetsu** | **5.39** | **265** | *e*P | Pn | 18 58 13.2 | +5.3 |
| **YSS** | **Yuzh-Sakhalins** | **5.54** | **302** | Pn | **Pn** | **18 58 10.3** | **+0.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.54** | **302** | *e*P | **Pn** | **18 58 12.0** | **+2.1** |
| YSS | | | | AMB | AMB | 18 58 18.8 | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| YSS | | | | *e*S | **Sn** | **18 59 15.4** | **+2.0** |
| YSS | | | | A | A | 18 59 25.3 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| YSS | | | | A | A | 18 59 25.3 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.54** | **302** | *e*PN | **Pn** | **18 58 12.0** | **+2.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,400nm,15.0s | | | | | | |
| **JANG** | **Nango** | **7.13** | **240** | *e*P | **Pn** | **18 58 30.1** | **-1.6** |
| JANG | | | | *e*S | Sn | 18 59 44.8 | -7.6 |
| **JTH** | **Tanohata** | **7.18** | **236** | *e*S | Sn | 18 59 44.9 | -8.8 |
| **JTM** | **Tenmabayashi** | **7.19** | **244** | Pn | **Pn** | **18 58 32.1** | **-0.4** |
| **SKR** | **Severo-Kuril's** | **7.83** | **32** | *e*S | **Sn** | **19 00 07.2** | **-2.3** |
| SKR | | | | *e*P | **Pn** | **18 58 42.0** | **+0.8** |
| SKR | | | | AMB | AMB | 18 58 54.7 | |
| | comp=Z,30nm,0.5s | | | | | | |
| SKR | | | | A | A | 19 00 16.4 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| SKR | | | | A | A | 19 00 16.4 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **TYV** | **Tymovskoe** | **8.15** | **327** | *e*S | **Sn** | **19 00 17.9** | **+0.4** |
| TYV | | | | *e*P | **Pn** | **18 58 49.1** | **+3.4** |
| TYV | | | | AMB | AMB | 18 58 52.0 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| TYV | | | | A | A | 19 00 29.6 | |
| **TYV** | **Tymovskoe** | **8.15** | **327** | *e*PN | **Pn** | **18 58 43.0** | **-2.7** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **JMM** | **Marumori** | **9.20** | **229** | Pn | **Pn** | **18 58 57.6** | **-2.5** |
| **PEA0B** | **Petropavlovsk-** | **10.38** | **28** | ⇑ *e*PN | Pn | 18 59 20.9 | +4.7 |
| **PETK** | **Petropavlovsk-** | **10.38** | **28** | Pn | **Pn** | **18 59 17.9** | **+1.8** |
| | comp=Z,0.4nm,0.3s,baz=128,slow=19,SNR=2.7<br>comp=Z,0.9nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **10.38** | **28** | PN | **Pn** | **18 59 18.0** | **+1.8** |
| **MJA0** | **Matsu Arr-Jizo** | **11.56** | **232** | *e*PN | **Pn** | **18 59 36.5** | **+3.9** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.59** | **232** | Pn | **Pn** | **18 59 32.2** | **-0.6** |
| | comp=Z,0.7nm,0.6s,baz=28,slow=12,SNR=1.5 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **12.65** | **276** | | **Pn** | **18 59 46.2** | **-1.2** |
| **USA0B** | **Ussuriysk Arra** | **12.65** | **276** | PN | **Pn** | **18 59 46.2** | **-1.2** |
| **USRK** | **Ussuriysk Ar.** | **12.65** | **276** | Pn | **Pn** | **18 59 46.4** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **12.65** | **276** | Pn | **Pn** | **18 59 48.5** | **+1.2** |
| | comp=Z,0.6nm,0.3s,baz=86,slow=12,SNR=18<br>comp=Z,3.1nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **13.24** | **299** | Pn | **Pn** | **18 59 59.9** | **+4.5** |
| | comp=Z,0.2nm,0.3s,baz=120,slow=11,SNR=6.5 | | | | | | |
| **KLR** | **Kul'dur** | **13.24** | **299** | *e*P | **Pn** | **18 59 54.5** | **-0.8** |
| **KLR** | **Kul'dur** | **13.24** | **299** | *e*PN | Pn | 19 00 00.2 | +4.9 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **MDJ** | **Mudanjiang** | **14.32** | **279** | P | **Pn** | **19 00 12.0** | **+1.8** |
| MDJ | | | | sP | P | 19 00 22.5 | +5.2 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,960nm,15.8s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,1μm,17.2s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,1μm,18.2s | | | | | | |
| **MA2** | **Magadan** | **15.40** | **2** | Pn | **Pn** | **19 00 24.5** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=164,slow=16,SNR=1.4<br>comp=Z,2.4nm,0.6s | | | | | | |
| **BNX** | **BinXian** | **15.79** | **283** | ⇑P | **Pn** | **19 00 30.5** | **+0.8** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **17.73** | **255** | P | **Pn** | **19 00 54.7** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=68,slow=10,SNR=4.7<br>comp=Z,1.5nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **18.82** | **4** | P | **P** | **19 01 05.8** | **-1.2** |
| | comp=Z,0.2nm,0.3s,baz=176,slow=9.5,SNR=16<br>comp=Z,7.9nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **18.82** | **4** | ⇓ *e*P | **Pn** | **19 01 06.2** | **-1.3** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **YAK** | **Yakutsk** | **21.32** | **334** | P | **P** | **19 01 31.9** | **-2.2** |
| YAK | | | | IAmb | IAmb | 19 01 34.1 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **21.32** | **334** | P | **P** | **19 01 32.3** | **-1.8** |
| | comp=Z,12nm,0.6s,baz=222,slow=1.7,SNR=9.2<br>comp=Z,12nm,0.6s | | | | | | |
| **YAK** | **Yakutsk** | **21.32** | **334** | *e*P | **P** | **19 01 32.4** | **-1.7** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,3.0nm,1.1s | | | | | | |
| **XLT** | **XiLinHaoTe** | **24.01** | **281** | *e*P | **P** | **19 02 00.0** | **-2.3** |
| XLT | | | | pP | pwP | 19 02 08.8 | -3.6 |
| XLT | | | | sP | sP | 19 02 15.0 | +8.9 |
| XLT | | | | pmax | pmax | | |
| | comp=N,13nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **25.44** | **15** | *e*P | **P** | **19 02 14.3** | **-0.6** |
| **BILL** | **Bilibino** | **25.44** | **15** | *e*P | **P** | **19 02 14.3** | **-0.6** |
| BILL | | | | *e* | | 19 02 51.8 | |
| BILL | | | | *e* | | 19 05 47.5 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,173nm,19.0s | | | | | | |
| **TIA** | **Tai'an** | **25.94** | **263** | P | **P** | **19 02 21.5** | **+1.8** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **26.91** | **254** | *e*P | **P** | **19 02 29.5** | **+1.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **28.08** | **277** | *e*P | **P** | **19 02 41.0** | **+2.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.35** | **144** | T | T | 19 33 49.3 | |
| | baz=334,slow=75,SNR=20 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.37** | **144** | T | T | 19 33 50.3 | |
| | baz=334,slow=75,SNR=17 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.37** | **144** | T | T | 19 33 47.2 | |
| | baz=334,slow=75,SNR=20 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.36** | **145** | T | T | 19 35 02.9 | |
| | baz=333,slow=76 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.37** | **145** | T | T | 19 35 36.8 | |
| | baz=333 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.38** | **145** | T | T | 19 35 04.2 | |
| | baz=333,slow=76 | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.50** | **292** | P | **P** | **19 02 52.0** | **+0.3** |
| ULN | | | | IAmb | IAmb | 19 02 53.5 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.50** | **292** | ⇓ *e*P | **P** | **19 02 52.5** | **+0.9** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **29.94** | **292** | P | **P** | **19 02 55.5** | **0.0** |
| **SONM** | **Songino Array** | **29.94** | **292** | P | **P** | **19 02 55.9** | **+0.4** |
| | comp=Z,4.8nm,0.9s,baz=84,slow=8.4,SNR=23<br>comp=Z,4.8nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **29.94** | **292** | *e*P | **P** | **19 02 56.4** | **+0.9** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **ZAK** | **Zakamensk** | **31.61** | **298** | *e*P | **P** | **19 03 09.7** | **-0.5** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **C16K** | **Lisburne Hills** | **33.47** | **29** | P | **P** | **19 03 26.4** | **+0.2** |
| **M16K** | **Timber Creek** | **34.38** | **42** | P | **P** | **19 03 34.7** | **+0.6** |
| M16K | | | | IAmb | IAmb | 19 03 56.8 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **H17K** | **Granite Mounta** | **34.55** | **35** | P | **P** | **19 03 35.2** | **-0.3** |
| **J17K** | **VABM Dome** | **34.62** | **38** | P | **P** | **19 03 35.0** | **-1.3** |
| J17K | | | | IAmb | IAmb | 19 04 00.1 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **C18K** | **Utukok River** | **35.04** | **29** | P | **P** | **19 03 38.8** | **-1.1** |
| C18K | | | | IAmb | IAmb | 19 03 53.9 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **N17K** | **Nushagak Hills** | **35.21** | **43** | P | **P** | **19 03 41.1** | **-0.2** |
| N17K | | | | IAmb | IAmb | 19 04 15.2 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **35.21** | **299** | ⇓ *e*P | **P** | **19 03 42.2** | **+0.6** |
| KNGR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **H18K** | **Honhosa River** | **35.23** | **35** | P | **P** | **19 03 42.5** | **+1.0** |
| H18K | | | | IAmb | IAmb | 19 04 02.0 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **G18K** | **Tagagawik** | **35.26** | **34** | P | **P** | **19 03 40.6** | **-1.1** |
| **LZH** | **Lanzhou** | **35.53** | **273** | *e*P | **P** | **19 03 46.0** | **+1.4** |
| LZH | | | | sP | pwP | 19 03 58.0 | +3.3 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | |
| **J18K** | **Innoko River** | **35.69** | **38** | P | **P** | **19 03 46.3** | **+0.9** |
| **C19K** | **Lookout Ridge** | **35.73** | **28** | P | **P** | **19 03 46.2** | **+0.4** |
| **F19K** | **Shaleruckik Mo** | **35.81** | **32** | P | **P** | **19 03 46.4** | **+0.1** |
| **D19K** | **Kuna River** | **36.08** | **30** | P | **P** | **19 03 48.9** | **+0.2** |
| D19K | | | | IAmb | IAmb | 19 03 50.7 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **H19K** | **Roundabout Mou** | **36.09** | **35** | P | **P** | **19 03 49.2** | **+0.5** |
| H19K | | | | IAmb | IAmb | 19 04 08.9 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **36.15** | **32** | P | **P** | **19 03 49.9** | **+0.5** |
| E19K | | | | IAmb | IAmb | 19 03 55.2 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **J19K** | **Poorman** | **36.23** | **38** | P | **P** | **19 03 50.3** | **+0.3** |
| J19K | | | | IAmb | IAmb | 19 04 00.7 | |
| | comp=Z,7.8nm,1.3s | | | | | | |
| **F20K** | **Avaraart Lake** | **36.64** | **32** | P | **P** | **19 03 54.9** | **+1.4** |
| **B20K** | **Meade River** | **36.81** | **27** | P | **P** | **19 03 55.5** | **+0.6** |
| **J20K** | **Nowinta River** | **36.89** | **37** | P | **P** | **19 03 56.2** | **+0.5** |
| J20K | | | | IAmb | IAmb | 19 04 35.3 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **GTA** | **Gaotai** | **36.97** | **280** | *e*P | **P** | **19 03 58.0** | **+1.2** |
| GTA | | | | sP | pwP | 19 04 10.3 | +3.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **G21K** | **Allakaket** | **37.42** | **34** | P | **P** | **19 04 01.1** | **+1.0** |
| G21K | | | | IAmb | IAmb | 19 04 11.5 | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **F21K** | **Alatna River** | **37.53** | **32** | P | **P** | **19 04 00.5** | **-0.6** |
| **B21K** | **Ikpikpuk River** | **37.57** | **28** | P | **P** | **19 04 01.5** | **+0.2** |
| **H21K** | **Melozitna Rive** | **37.61** | **35** | P | **P** | **19 04 01.6** | **-0.1** |
| **D22K** | **Ayikyak River** | **38.10** | **30** | P | **P** | **19 04 07.1** | **+1.3** |
| D22K | | | | IAmb | IAmb | 19 04 28.6 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **38.30** | **31** | P | **P** | **19 04 08.4** | **+0.8** |
| E22K | | | | IAmb | IAmb | 19 04 10.0 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **SUA** | **Susitna One** | **38.36** | **42** | P | **P** | **19 04 09.3** | **+1.1** |
| SUA | | | | IAmb | IAmb | 19 04 12.2 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **MLY** | **Manley** | **38.42** | **36** | P | **P** | **19 04 09.1** | **+0.4** |
| **D23K** | **Nanushuk River** | **38.83** | **30** | P | **P** | **19 04 12.3** | **+0.3** |
| **G23K** | **Bananza Creek** | **38.83** | **33** | P | **P** | **19 04 12.6** | **+0.6** |
| **H23K** | **Yukon River** | **38.96** | **35** | P | **P** | **19 04 14.3** | **+1.1** |
| **C23K** | **Itkillik River** | **38.98** | **28** | P | **P** | **19 04 13.7** | **+0.5** |
| C23K | | | | IAmb | IAmb | 19 04 29.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **E23K** | **Chandalar** | **39.11** | **31** | P | **P** | **19 04 14.5** | **+0.1** |
| E23K | | | | IAmb | IAmb | 19 04 34.6 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **NEA2** | **Nenana** | **39.12** | **37** | P | **P** | **19 04 14.2** | **-0.2** |
| **TOLK** | **Toolik Lake Re** | **39.19** | **30** | P | **P** | **19 04 14.9** | **-0.1** |
| **KNK** | **Knik Glacier** | **39.46** | **42** | P | **P** | **19 04 16.8** | **-0.6** |
| KNK | | | | IAmb | IAmb | 19 04 18.7 | |
| | comp=Z,4.3nm,0.6s | | | | | | |
| **MDM** | **Murphy Dome** | **39.48** | **36** | P | **P** | **19 04 16.7** | **-0.8** |
| **SML** | **Sawmill** | **39.50** | **41** | P | **P** | **19 04 17.2** | **-0.6** |
| SML | | | | IAmb | IAmb | 19 04 43.8 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **D24K** | **Happy Valley** | **39.52** | **30** | P | **P** | **19 04 17.3** | **-0.4** |
| D24K | | | | IAmb | IAmb | 19 04 23.1 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **39.53** | **31** | P | **P** | **19 04 17.4** | **-0.5** |
| E24K | | | | IAmb | IAmb | 19 04 36.0 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **WRH** | **Wood River Hil** | **39.54** | **37** | P | **P** | **19 04 17.9** | **0.0** |
| **C24K** | **Franklin Bluff** | **39.62** | **29** | P | **P** | **19 04 18.8** | **+0.2** |
| C24K | | | | IAmb | IAmb | 19 04 35.1 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **COLA** | **College** | **39.65** | **36** | ⇑ *e*P | **P** | **19 04 21.4** | **+2.6** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **39.66** | **37** | P | **P** | **19 04 18.9** | **-0.1** |
| **F24K** | **Squaw Lake** | **39.72** | **32** | P | **P** | **19 04 19.6** | **+0.1** |
| **POKR** | **Poker Plat Res** | **39.82** | **36** | P | **P** | **19 04 20.2** | **-0.1** |
| POKR | | | | IAmb | IAmb | 19 04 46.7 | |
| | com

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **G29M** | **Pine Creek** | **43.57** | **33** | P | **P** | **19 04 50.9** | **-0.1** |
| G29M | | | | IAmb | IAmb | 19 04 58.5 | | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **43.64** | **35** | P | **P** | **19 04 52.0** | **+0.5** |
| **G30M** | **tAoh Zraii Nji** | **44.27** | **33** | P | **P** | **19 04 57.3** | **+0.7** |
| G30M | | | | IAmb | IAmb | 19 05 24.0 | | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **I30M** | **Mount Dempster** | **44.46** | **35** | P | **P** | **19 04 58.9** | **+0.6** |
| I30M | | | | IAmb | IAmb | 19 05 24.6 | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **45.03** | **33** | P | **P** | **19 05 02.8** | **+0.2** |
| G31M | | | | IAmb | IAmb | 19 05 25.8 | | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **MK31** | **Makanchi Array** | **45.94** | **298** | P | **P** | **19 05 10.1** | **-0.1** |
| **MK31** | **Makanchi Array** | **45.94** | **298** *d* | *i* P | **P** | **19 05 10.8** | **+0.6** |
| **MKAR** | **Makanchi Array** | **45.94** | **298** | P | **P** | **19 05 10.4** | **+0.3** |
| **MKAR** | **Makanchi Array** | **45.94** | **298** | P | **P** | **19 05 10.7** | **+0.5** |
| | comp=Z,9.4nm,0.7s,baz=73,slow=8.1,SNR=65 | | | | | | | |
| | comp=Z,9.4nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **46.14** | **298** | P | **P** | **19 05 12.3** | **+0.6** |
| **MAKZ** | **Makanchi** | **46.14** | **298** | P | **P** | **19 05 12.3** | **+0.6** |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **46.74** | **304** | P | **P** | **19 05 16.0** | **-0.3** |
| KURK | | | | IAmb | IAmb | 19 05 17.0 | | |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | **46.74** | **304** | *eP* | **P** | **19 05 15.6** | **-0.7** |
| **KURK** | **Kurchatov** | **46.74** | **304** | *jeP* | **P** | **19 05 15.6** | **-0.7** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.83** | **304** | P | **P** | **19 05 16.7** | **-0.3** |
| | comp=Z,2.0nm,0.4s,baz=73,slow=8.0,SNR=20 | | | | | | | |
| KURBB | | | | PcP | **PcP** | **19 06 49.0** | **-0.8** | |
| | comp=Z,0.6nm,0.8s,baz=78,slow=3.7,SNR=4.2 | | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **C36M** | **Paulatuk** | **48.23** | **28** | P | **P** | **19 05 28.4** | **+0.8** |
| **R33M** | **Jennings River** | **48.34** | **42** | P | **P** | **19 05 29.2** | **+0.3** |
| R33M | | | | IAmb | IAmb | 19 05 32.4 | | |
| | comp=Z,4.8nm,1.2s | | | | | | | |
| **CRAG** | **Craig** | **48.58** | **48** | P | **P** | **19 05 30.3** | **-0.2** |
| **BVAR** | **Borovoye Array** | **50.58** | **310** | P | **P** | **19 05 46.2** | **+0.3** |
| | comp=Z,0.9nm,0.5s,baz=50,slow=7.9,SNR=6.2 | | | | | | | |
| BVAR | | | | PcP | **PcP** | **19 07 03.7** | **+0.4** | |
| | comp=Z,0.9nm,0.5s,baz=90,slow=1.4,SNR=3.4 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.89** | **296** | P | **P** | **19 05 57.2** | **+1.1** |
| **BOOM** | **Boomskoye usch** | **51.89** | **296** | P | **P** | **19 05 57.2** | **+1.1** |
| BOOM | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **AAK** | **Ala-Archa** | **52.76** | **296** | *eP* | **P** | **19 06 03.5** | **+1.1** |
| **AAK** | **Ala-Archa** | **52.76** | **296** | *deP* | **P** | **19 06 03.5** | **+1.1** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **KSH** | **Kashi** | **53.34** | **292** | P | **P** | **19 06 10.0** | **+3.2** |
| KSH | | | | sP | pwP | 19 06 24.0 | +7.1 | |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **KK31** | **Karatay Array** | **55.06** | **299** | P | **P** | **19 06 18.9** | **-0.2** |
| KK31 | | | | IAmb | IAmb | 19 06 20.3 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **55.06** | **299** | P | **P** | **19 06 18.9** | **-0.2** |
| KK31 | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **55.06** | **299** | P | **P** | **19 06 18.7** | **-0.4** |
| KKAR | | | | PcP | **PcP** | **19 07 19.9** | **-0.6** | |
| **KKAR** | **Karatay Array** | **55.06** | **299** | P | **P** | **19 06 19.2** | **+0.1** |
| KKAR | | | | IAmb | IAmb | 19 06 20.3 | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **55.06** | **299** | P | **P** | **19 06 18.7** | **-0.4** |
| KKAR | | | | | | 19 07 19.9 | | |
| KKAR | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **55.22** | **317** | P | **P** | **19 06 19.7** | **-0.3** |
| ARU | | | | IAmb | IAmb | 19 06 20.7 | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **ARU** | **Arti** | **55.22** | **317** | *eP* | **P** | **19 06 19.9** | **-0.1** |
| **ARU** | **Arti** | **55.22** | **317** | *c iP* | **P** | **19 06 19.9** | **-0.1** |
| ARU | | | | | | 19 07 20.2 | | |
| ARU | | | | | | 19 08 20.2 | | |
| ARU | | | | S | **S** | **19 14 02.6** | **0.0** | |
| ARU | | | | SS | **SS** | **19 17 44.6** | **-1.5** | |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **BTK** | **Batken** | **56.45** | **295** | P | **P** | **19 06 28.9** | **-0.3** |
| BTK | | | | IAmb | IAmb | 19 06 42.9 | | |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **BTK** | **Batken** | **56.45** | **295** | P | **P** | **19 06 28.9** | **-0.3** |
| BTK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **GAR** | **Garm** | **57.35** | **295** | P | **P** | **19 06 34.9** | **-0.7** |
| **KULM** | **Kulim** | **57.74** | **243** | P | **P** | **19 06 38.4** | **-0.1** |
| **ABKAR** | **Akbulak array** | **58.15** | **310** | P | **P** | **19 06 40.8** | **-0.1** |
| ABKAR | | | | PcP | **PcP** | **19 07 30.6** | **-1.7** | |
| **ABKAR** | **Akbulak array** | **58.15** | **310** | P | **P** | **19 06 40.8** | **-0.1** |
| **COEN** | **Coen** | **58.19** | **187** | P | **P** | **19 06 41.9** | **+0.5** |
| COEN | | | | IAmb | IAmb | 19 07 10.8 | | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **CHGR** | **Chuyangaron** | **58.29** | **295** | P | **P** | **19 06 41.6** | **-0.6** |
| **CHGR** | **Chuyangaron** | **58.29** | **295** | P | **P** | **19 06 41.6** | **-0.6** |
| CHGR | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **NIL** | **Nilore** | **58.35** | **288** | P | **P** | **19 06 42.2** | **-0.4** |
| **NIL** | **Nilore** | **58.35** | **288** | P | **P** | **19 06 42.2** | **-0.4** |
| NIL | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **SIMJ** | **Simiganj** | **58.39** | **295** | P | **P** | **19 06 42.4** | **-0.6** |
| **BELG** | **Belogornoye** | **62.77** | **318** | *ceP* | **P** | **19 07 12.6** | **+0.2** |
| BELG | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.26** | **334** | P | **P** | **19 07 27.7** | **-0.9** |
| | comp=Z,8.1nm,0.6s,baz=36,slow=8.0,SNR=49 | | | | | | | |
| | comp=Z,8.1nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.26** | **334** | *eP* | **P** | **19 07 28.4** | **-0.2** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.36** | **196** | P | **P** | **19 07 29.2** | **-0.5** |
| | comp=Z,0.6nm,0.9s,baz=17,slow=6.9,SNR=4.8 | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.36** | **196** | *eP* | **P** | **19 07 31.2** | **+1.5** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.82** | **59** | P | **P** | **19 07 33.8** | **+0.9** |
| | comp=Z,0.4nm,0.7s,baz=298,slow=3.2,SNR=4.1 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **OBN** | **Obninsk** | **65.98** | **325** | *eP* | **P** | **19 07 36.9** | **+3.5** |
| **OBN** | **Obninsk** | **65.98** | **325** | *eP* | **P** | **19 07 33.8** | **+0.4** |
| OBN | | | | *e* | | 19 08 01.5 | | |
| OBN | | | | *e* | | 19 09 59.9 | | |
| OBN | | | | *e* | PPP | PPP | | 19 11 34.6 |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,33nm,2.5s | | | | | | | |
| OBN | | | | MLR | MLR | | | |
| | comp=Z,1μm,18.0s | | | | | | | |
| **VRH** | **Novokhopyorsk** | **66.35** | **319** | *eP* | **P** | **19 07 34.9** | **-0.9** |
| VRH | | | | *e**SP | **pwP** | **19 07 45.6** | **-0.5** | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **66.69** | **322** | *eP* | **P** | **19 07 36.8** | **-1.2** |
| LPSR | | | | *e**SP | **pwP** | **19 07 49.0** | **+0.3** | |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **VSR** | **Storozhevoye** | **67.53** | **320** | *eP* | **P** | **19 07 41.5** | **-1.8** |
| VSR | | | | *e**SP | **pwP** | **19 07 54.6** | **+0.6** | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **VORD** | **Divnogorie** | **67.64** | **320** | *eP* | **P** | **19 07 42.9** | **-1.1** |
| VORD | | | | *e**SP | **pwP** | **19 07 54.9** | **+0.2** | |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **68.24** | **51** | P | **P** | **19 07 48.5** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=344,slow=4.9,SNR=2.1 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **69.06** | **195** | P | **P** | **19 07 52.6** | **-0.5** |
| | comp=Z,0.5nm,1.0s,baz=11,slow=5.3,SNR=7.8 | | | | | | | |
| | comp=Z,0.5nm,1.0s | | | | | | | |
| **NC405** | **NORSAR Array S** | **69.61** | **340** | P | **P** | **19 07 56.0** | **-0.2** |
| **NB2** | **NORSAR Subarra** | **69.80** | **340** | P | **P** | **19 07 57.1** | **-0.3** |
| | comp=Z,13nm,1.0s,baz=31,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.80** | **340** | P | **P** | **19 07 57.3** | **-0.1** |
| | comp=Z,5.8nm,0.8s,baz=31,slow=6.2,SNR=26 | | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **MNK** | **Minsk** | **69.89** | **328** | *i* P | **P** | **19 07 59.2** | **+1.2** |
| MNK | | | | *i* | | 19 08 27.0 | | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,12nm,0.9s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,5.0nm,0.8s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **69.94** | **338** | P | **P** | **19 07 57.6** | **-0.6** |
| | comp=Z,8.1nm,0.7s,baz=64,slow=6.8,SNR=18 | | | | | | | |
| | comp=Z,8.1nm,0.7s | | | | | | | |
| **KIV** | **Kislovodsk** | **70.77** | **313** | P | **P** | **19 08 02.9** | **-0.8** |
| **KIV** | **Kislovodsk** | **70.77** | **313** | *eP* | **P** | **19 08 05.3** | **+1.6** |
| **KIV** | **Kislovodsk** | **70.77** | **313** | *eP* | **P** | **19 08 05.3** | **+1.6** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **KBZ** | **Khabaz** | **70.81** | **313** | P | **P** | **19 08 04.8** | **+1.0** |
| | comp=Z,6.6nm,0.8s,baz=49,slow=4.8,SNR=16 | | | | | | | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | **70.81** | **313** | *eP* | **P** | **19 08 05.1** | **+1.3** |
| **KBZ** | **Khabaz** | **70.81** | **313** | *deP* | **P** | **19 08 05.1** | **+1.3** |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.25** | **325** | P | **P** | **19 08 12.3** | **0.0** |
| | comp=Z,0.8nm,0.5s,baz=38,slow=6.0,SNR=14 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **AKBB** | **Malin Array Si** | **72.25** | **325** | P | **P** | **19 08 12.0** | **-0.3** |
| **AKBB** | **Malin Array Si** | **72.25** | **325** | *deP* | **P** | **19 08 12.5** | **+0.2** |
| **KIEV** | **Kiev** | **72.26** | **325** | P | **P** | **19 08 11.9** | **-0.5** |
| **KIEV** | **Kiev** | **72.26** | **325** | P | **P** | **19 08 11.9** | **-0.5** |
| KIEV | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **76.28** | **325** | P | **P** | **19 08 35.8** | **-0.3** |
| BUR08 | | | | IAmb | IAmb | 19 08 49.9 | | |
| | comp=Z,8.3nm,1.4s | | | | | | | |
| **OJC** | **Ojcow** | **76.31** | **329** | P | **P** | **19 08 36.0** | **0.0** |
| OJC | | | | IAmb | IAmb | 19 08 49.9 | | |
| | comp=Z,8.4nm,1.2s | | | | | | | |
| **OJC** | **Ojcow** | **76.31** | **329** | P | **P** | **19 08 36.0** | **0.0** |
| OJC | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **76.42** | **327** | *eP* | **P** | **19 08 37.9** | **+1.2** |
| KOLS | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **76.42** | **327** | *eP* | **P** | **19 08 37.9** | **+1.2** |
| **CRVS** | **Cervenica-Dubn** | **76.76** | **328** | *eP* | **P** | **19 08 39.9** | **+1.2** |
| **CRVS** | **Cervenica-Dubn** | **76.76** | **328** | *eP* | **P** | **19 08 39.9** | **+1.2** |
| **LANS** | **Liptovska Anna** | **77.31** | **329** | *eP* | **P** | **19 08 43.3** | **+1.5** |
| LANS | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **LANS** | **Liptovska Anna** | **77.31** | **329** | *eP* | **P** | **19 08 43.3** | **+1.5** |
| **MORC** | **Moravsky Berou** | **77.48** | **330** | P | **P** | **19 08 42.3** | **-0.4** |
| MORC | | | | IAmb | IAmb | 19 08 45.6 | | |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| **MORC** | **Moravsky Berou** | **77.48** | **330** | *eP* | **P** | **19 08 43.2** | **+0.5** |
| **MORC** | **Moravsky Berou** | **77.48** | **330** | P | **P** | **19 08 42.3** | **-0.4** |
| MORC | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **KRLC** | **Kraliky** | **77.50** | **331** | *eP* | **P** | **19 08 43.2** | **+0.4** |
| **KRLC** | **Kraliky** | **77.50** | **331** | *eP* | **P** | **19 08 43.2** | **+0.4** |
| **CLL** | **Collm** | **77.71** | **334** | P | **P** | **19 08 43.4** | **-0.4** |
| **CLL** | **Collm** | **77.71** | **334** | *i* P | **P** | **19 08 43.8** | **-0.1** |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| CLL | | | | *i* PcP | **PcP** | **19 08 56.2** | **+2.3** | |
| **CLL** | **Collm** | **77.71** | **334** | *i* P | **P** | **19 08 43.8** | **-0.1** |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| **VYHS** | **Vyhne** | **78.09** | **329** | *eP* | **P** | **19 08 47.4** | **+1.3** |
| **VYHS** | **Vyhne** | **78.09** | **329** | *eP* | **P** | **19 08 47.3** | **+1.2** |
| **EKA** | **Eskdalemuir Ar** | **78.17** | **345** | P | **P** | **19 08 46.8** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=23,slow=6.6,SNR=3.4 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **JAVC** | **Velka Javorina** | **78.21** | **330** | *eP* | **P** | **19 08 48.3** | **+1.5** |
| **VRAC** | **Vranov** | **78.21** | **331** | *eP* | **P** | **19 08 48.1** | **+1.3** |
| **PRU** | **Pruhonice** | **78.34** | **332** | *eP* | **P** | **19 08 48.0** | **+0.6** |
| **PRU** | **Pruhonice** | **78.34** | **332** | *eP* | **P** | **19 08 48.0** | **+0.6** |
| **KRUC** | **Moravsky** | **78.49** | **331** | *eP* | **P** | **19 08 49.2** | **+0.9** |
| **BR131** | **Keskin Array S** | **78.50** | **315** | *deP* | **P** | **19 08 49.4** | **+0.8** |
| **BRTR** | **Keskin Array B** | **78.50** | **315** | P | **P** | **19 08 47.9** | **-0.8** |
| **BRTR** | **Keskin Array B** | **78.50** | **315** | P | **P** | **19 08 49.1** | **+0.4** |
| | comp=Z,0.8nm,0.8s,baz=57,slow=2.9,SNR=6.7 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.50** | **315** | *eP* | **P** | **19 08 49.5** | **+0.8** |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **CROK** | **Carrier** | **79.00** | **49** | P | **P** | **19 08 50.2** | **-1.2** |
| **KHC** | **Kasperske Hory** | **79.40** | **332** | P | **P** | **19 08 52.9** | **-0.4** |
| KHC | | | | IAmb | IAmb | 19 08 54.9 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **KHC** | **Kasperske Hory** | **79.40** | **332** | *eP* | **P** | **19 08 53.3** | **0.0** |
| KHC | | | | *ex* | x | 19 09 06.4 | | |
| **KHC** | **Kasperske Hory** | **79.40** | **332** | *deP* | **P** | **19 08 54.2** | **+0.9** |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **79.42** | **332** | *eP* | **P** | **19 08 54.2** | **+0.8** |
| CKRC | | | | *ex* | x | 19 09 06.2 | | |
| **CKRC** | **Cesky Krumlov** | **79.42** | **332** | *eP* | **P** | **19 08 54.2** | **+0.8** |
| CKRC | | | | *e* | | 19 09 06.2 | | |
| **GERES** | **GERESS Array B** | **79.60** | **332** | P | **P** | **19 08 54.8** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=90,slow=1.3,SNR=4.8 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **CONA** | **Conrad Observa** | **79.64** | **330** | *i* P | **P** | **19 08 55.3** | **+0.5** |
| | comp=Z,5.5nm,1.3s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **79.68** | **330** | *eP* | **P** | **19 08 53.6** | **-1.3** |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.90** | **58** | P | **P** | **19 09 02.2** | **+0.4** |
| | comp=Z,1.2nm,0.8s,baz=294,slow=3.8,SNR=5.6 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **SOKA** | **Soboth** | **81.00** | **330** | *eP* | **P** | **19 09 02.4** | **+0.4** |
| | comp=Z,6.9nm,1.3s | | | | | | | |
| **LESA** | **Schwarzleotal** | **81.18** | **332** | *eP* | **P** | **19 09 02.2** | **-0.8** |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **OBKA** | **Obir** | **81.32** | **330** | *i* P | **P** | **19 09 04.2** | **+0.4** |
| | comp=Z,6.5nm,1.3s | | | | | | | |
| **WATA** | **Walderalm** | **81.62** | **333** | *i* P | **P** | **19 09 04.9** | **-0.5** |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **MOTA** | **Moosalm** | **81.77** | **333** | *i* P | **P** | **19 09 02.7** | **-3.5** |
| | comp=Z,7.6nm,1.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **81.82** | **332** | *i* P | **P** | **19 09 02.9** | **-3.5** |
| | comp=Z,6.4nm,1.6s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **81.84** | **333** | P | **P** | **19 09 04.3** | **-2.2** |
| | comp=Z,9.4nm,1.5s | | | | | | | |
| **FETA** | **Feichten** | **82.18** | **333** | *eP* | **P** | **19 09 04.9** | **-3.4** |
| | comp=Z,4.5nm,1.4s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **82.59** | **309** | P | **P** | **19 09 11.3** | **+0.6** |
| | comp=Z,1.0nm,0.5s,baz=335,slow=7.4,SNR=3.7 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **X48A** | **Hartselle** | **86.29** | **44** | P | **P** | **19 09 29.3** | **+0.1** |

*IDC **25** 19:12:50.1±2.5,8.°47S×116.°94E, h0km, mb3.7/4, mbtmp3.8/5, ML3.5/1, Error ellipse: s-maj=68.7km s-min=25.7km az=68.0*

*DJA **25** 19:12:52.7±0.2,8.°5S×117.°7E±.°, h10km, M4.1/13, mb4.1/5, MLv4.0/13*

**ISC 25 19:12:51.7±0.7,8.°43S±0.°06×116.°99E±0.°04, h10km, n32, σ2§10/36, mb3.8/4, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.33** | **198** | P | **Pg** | **19 12 58.9** | **+0.6** |
| TWSI | | | | S | **Sb** | **19 13 03.7** | **-1.3** |
| **PLAI** | **Plampang** | **0.88** | **117** | P | **Pg** | **19 13 09.2** | **+0.5** |
| **PLAI** | **Plampang** | **0.88** | **117** | P | **Pg** | **19 13 09.1** | **+0.4** |
| PLAI | | | | S | **Sg** | **19 13 21.3** | **+1.2** |
| **DNP** | **Denpasar** | **1.77** | **262** | P | **Pb** | **19 13 24.7** | **+0.3** |
| **SRBI** | **Singaraja** | **1.79** | **281** | P | **Pn** | **19 13 22.4** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **2.66** | **117** | P | **Pn** | **19 13 35.9** | **+1.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.80** | **269** | P | **Pn** | **19 13 36.7** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.80** | **269** | P | **Pn** | **19 13 36.7** | **0.0** |
| **BSSI** | **Bau Bau, Buton** | **4.15** | **57** | P | **Pn** | **19 13 55.8** | **+0.6** |
| **KAPI** | **Kappang** | **4.36** | **39** | Pn | **Pn** | **19 13 58.0** | **-0.2** |
| | 2.6nm,0.3s,baz=212,slow=17,SNR=1.4 | | | | | | | |
| KAPI | | | | Sn | **Sn** | **19 14 45.9** | **-3.2** | |
| | 4.0nm,0.3s,baz=183,slow=17,SNR=1.5 | | | | | | | |
| | 11nm,0.3s | | | | | | | |
| **EDFI** | **Ende, Flores** | **4.66** | **94** | P | **Pn** | **19 14 04.3** | **+1.9** |
| **BNSI** | **Bone** | **5.06** | **38** | P | **Pn** | **19 14 09.3** | **+1.6** |
| **PWJI** | **Pagerwojo** | **5.14** | **274** | P | **Pn** | **19 14 08.7** | **-0.2** |
| | 28nm,2.0s,0.2nm | | | | | | | |
| **UGM** | **Wanagama** | **6.42** | **274** | P | **Pn** | **19 14 27.4** | **+1.0** |
| **UGM** | **Wanagama** | **6.42** | **274** | P | **Pn** | **19 14 26.7** | **+0.3** |
| **BATI** | **Baumata** | **6.82** | **106** | P | **Pn** | **19 14 33.9** | **+1.9** |
| | 13nm,0.5s,0.1nm | | | | | | | |
| **SOEI** | **Soe** | **7.31** | **101** | P | **Pn** | **19 14 41.5** | **+2.7** |
| **MBWA** | **Marble Bar** | **12.93** | **168** | P | **Pn** | **19 15 55.1** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **13.36** | **168** | P | **Pn** | **19 16 00.8** | **-0.7** |
| **GIRL** | **Giralia** | **14.38** | **190** | P | **Pn** | **19 16 13.8** | **-1.7** |
| **MTN** | **Manton Dam** | **14.58** | **109** | P | **Pn** | **19 16 21.9** | **+3.6** |
| **MEEK** | **Meekatharra** | **18.18** | **175** | P | **P** | **19 17 05.5** | **+0.8** |
| **WRKA** | **Warakurna** | **19.73** | **148** | P | **Pn** | **19 17 23.8** | **+0.6** |
| **WRA** | **Warramunga Arr** | **20.32** | **126** | P | **P** | **19 17 28.7** | **+0.4** |
| | 2.1nm,0.5s,baz=300,slow=12,SNR=76 | | | | | | | |
| WRA | | | | S | **S** | **19 21 09.5** | **-6.8** | |
| | 0.2nm,0.6s,baz=297,slow=23,SNR=2.0 | | | | | | | |
| | 2.1nm,0.5s | | | | | | | |
| **MORW** | **Morawa** | **20.55** | **182** | P | Pn | 19 17 32.2 | -0.6 | |
| **ASAR** | **Alice Springs** | **22.18** | **135** | P | **P** | **19 17 48.8** | **+0.4** |
| | 0.7nm,0.4s,baz=308,slow=8.4,SNR=24 | | | | | | | |
| ASAR | | | | S | **S** | **19 21 46.9** | **-6.0** | |
| | 0.1nm,0.6s,baz=310,slow=24,SNR=1.6 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **AS01** | **Alice Springs** | **22.22** | **135** | P | **P** | **19 17 50.9** | **+2.2** |
| | 4.6nm,1.0s | | | | | | | |
| **FORT** | **Forrest** | **24.53** | **157** | P | **P** | **19 18 12.3** | **+0.7** |
| **OOD** | **Oodnadatta** | **26.14** | **140** | P | **P** | **19 18 28.1** | **+1.9** |
| **LCRK** | **Leigh Creek** | **29.56** | **141** | P | **P** | **19 18 57.9** | **+1.0** |
| **STKA** | **Stephens Creek** | **32.67** | **139** | P | **P** | **19 19 23.4** | **-0.8** |
| | 0.8nm,0.3s,baz=330,slow=12,SNR=5.8 | | | | | | | |
| | 0.8nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **56.80** | **351** | P | **P** | **19 22 36.7** | **+0.4** |
| | 0.5nm,0.8s,baz=164,slow=6.7,SNR=2.7 | | | | | | | |
| | 0.5nm,0.8s | | | | | | | |

**DJA 25 19:19:39.3±0.2,8.°S±3.°×117.°7E±.°, h10km, M4.1/13, mb4.3/5, MLv4.1/13, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.28** | **186** | P | Pb | 19 19 45.8 | -0.6 |
| TWSI | | | | S | Sb | 19 19 50.1 | -1.1 |
| **PLAI** | **Plampang** | **0.93** | **113** | P | Pg | 19 19 56.6 | -0.7 |
| **DNP** | **Denpasar** | **1.69** | **263** | P | Pb | 19 20 09.9 | -0.7 |
| **SRBI** | **Singaraja** | **1.72** | **282** | P | Pn | 19 20 09.2 | -0.1 |
| **WBSI** | **Waikabubak, Su** | **2.72** | **116** | P | Pn | 19 20 23.0 | -0.1 |
| WBSI | | | | S | Sn | 19 20 57.4 | +1.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.73** | **270** | P | Pn | 19 20 23.1 | -0.1 |
| JAGI | | | | S | Sn | 19 20 56.9 | +0.6 |
| **BSSI** | **Bau Bau, Buton** | **4.23** | **57** | P | Pn | 19 20 43.3 | -0.6 |
| **GRJI** | **Gresik** | **4.65** | **289** | P | Pn | 19 20 50.3 | +0.6 |
| GRJI | | | | S | Sn | 19 21 43.2 | -0.6 |
| **EDFI** | **Ende, Flores** | **4.74** | **94** | P | Pn | 19 20 51.3 | +0.4 |
| **PWJI** | **Pagerwojo** | **5.07** | **275** | P | Pn | 19 20 55.5 | 0.0 |
| | 28nm,0.6s,0.2nm | | | | | | | |
| **BNSI** | **Bone** | **5.13** | **38** | P | Pn | 19 20 57.2 | +0.9 |
| **NGJI** | **Ngawi** | **5.51** | **281** | P | Pn | 19 21 02.7 | +1.3 |
| **UGM** | **Wanagama** | **6.35** | **274** | P | Pn | 19 21 12.8 | -0.2 |

**IDC 25 20:02:09.6±50.0, 21.°92S×173.°43W, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=958.0km s-min=181.5km az=86.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **41.07** | **246** | P | P | 20 09 53.8 | -1.3 |
| | 0.7nm,0.5s,baz=107,slow=9.3,SNR=3.3 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **48.36** | **257** | P | P | 20 10 53.2 | -0.3 |
| | 1.2nm,1.1s,baz=96,slow=6.6,SNR=16 | | | | | | |
| | 1.2nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.63** | **262** | P | P | 20 10 56.4 | +0.8 |
| | 1.2nm,0.5s,baz=98,slow=8.2,SNR=28 | | | | | | |
| | 1.2nm,0.5s | | | | | | |

*IDC **25** 20:07:03.4±0.8, 29.°56S×178.°51W, h164km±7km, mb3.4/5, mbtmp3.9/5, Error ellipse: s-maj=27.5km s-min=21.8km az=152.0*

**ISC 25 20:07:05.5±0.8, 29.°88S±0.°09×178.°5W±0.°2, h187km, n39, σ1§84/28, mb3.6/5, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **0.81** | **40** | P | Pn | 20 07 27.2 | -5.5 |
| | 1μm,0.3s,baz=142,slow=2.3,SNR=16 | | | | | | |
| RAO | | | | S | Sn | 20 07 41.7 | -12 | |
| | 1μm,0.2s,baz=262,slow=22,SNR=10 | | | | | | |
| **MWZ** | **Matawai** | **9.05** | **200** | P | Pn | 20 09 31.1 | +19 | |
| **URZ** | **Urewera** | **9.11** | **202** | S | **Sn** | **20 10 52.2** | **-2.7** |
| | 11nm,0.4s,baz=107,slow=24,SNR=7.8 | | | | | | |
| **RAGZ** | **Rawiri** | **9.23** | **200** | P | Pn | 20 09 29.

PHWY IAML 20 10 08.0
152nm,0.3s
**RWWY Rawlins 2.48 215** Pn **Pn** **20 09 32.1 +1.5**
RWWY IAML 20 10 09.3
234nm,0.6s
**N23A Red Feather La 2.88 189** **Pn** **20 09 37.2 +0.9**
N23A IAML 20 10 20.1
comp=N,128nm,0.4s
N23A IAML 20 10 20.7
comp=E,118nm,0.3s
**LAO LASA Array 3.01 348** Pn **Pn** **20 09 38.1 +0.2**
LAO IAML 20 10 33.4
comp=E,117nm,0.8s
LAO IAML 20 10 42.7
comp=E,96nm,0.7s
**RLMT Red Lodge 3.14 297** Pn **Pn** **20 09 40.4 +0.6**
RLMT IAML 20 10 36.5
comp=E,79nm,0.4s
RLMT IAML 20 10 36.5
comp=E,66nm,0.3s
**PD31 Pinedale Array 3.24 254** Pn **Pn** **20 09 42.0 +0.8**
**PDAR Pinedale Array 3.24 254** Pn **Pn** **20 09 41.8 +0.6**
**PDAR Pinedale Array 3.24 254** Pn **Pn** **20 09 42.2 +1.1**
comp=E,7.8nm,0.3s,baz=71,slow=16,SNR=73
PDAR Lg Lg 20 10 25.1
comp=E,15nm,0.3s,baz=64,slow=31,SNR=1.9
**BRIGG Briggsdale 3.25 166** **Pn** **20 09 43.2 +2.0**
**OGNE Ogallala 3.71 138** Pn **Pn** **20 09 48.5 +0.9**
**LOHW Long Hollow 3.83 270** **Pn** **20 09 49.9 +0.7**
**H17A Grant Village 3.83 282** **Pn** **20 09 51.6 +2.3**
H17A IAML 20 10 55.3
comp=E,38nm,1.1s
**FLWY Flagg Ranch 3.89 277** **Pn** **20 09 51.5 +1.4**
FLWY IAML 20 11 06.2
comp=E,49nm,2.1s
FLWY IAML 20 11 06.4
comp=E,58nm,1.9s
**IMW Indian Meadow 4.06 274** **Pn** **20 09 54.4 +1.9**
IMW IAML 20 11 04.2
comp=E,39nm,0.7s
**YHH Holmes Hill 4.10 287** **Pn** **20 09 54.5 +1.5**
**O20A White River Ci 4.21 212** Pn **Pn** **20 09 54.1 -0.3**
**K30B Basset 4.32 102** **Pb** **20 10 05.9 +0.3**
**Q24A Divide 4.78 178** **Pn** **20 10 02.9 +0.5**
Q24A IAML 20 11 19.9
comp=N,20nm,0.4s
Q24A IAML 20 11 21.4
comp=E,34nm,0.4s
**BOZ Bozeman (W) 4.86 295** **Pn** **20 10 04.2 +0.9**
**HWUT Hardware Ranch 5.07 247** Pn **Pn** **20 10 06.7 +0.4**
HWUT IAML 20 11 44.0
comp=E,22nm,1.6s
**EGMT Eagleton 5.28 326** **Pn** **20 10 09.9 +0.9**
**P18A Preston Nutter 5.51 223** **Pn** **20 10 13.2 +0.6**
**SPUT South Promonto 5.79 248** **Pn** **20 10 17.0 +0.8**
**SDCO Great Sand Dun 5.99 181** Pn **Pn** **20 10 20.4 +1.4**
**S22A 4UR Ranch, Cre 6.10 191** Pn **Pn** **20 10 22.0 +1.5**
**ECSD EROS Data Cent 6.32 87** Pn **Pn** **20 10 23.6 +0.3**
**F33A 5 Mile Ranch, 6.77 69** Pn **Pn** **20 10 28.3 -1.1**
**ELK Elko 7.94 251** Pn **Pn** **20 10 46.3 +0.6**
comp=E,0.1nm,0.3s,baz=58,slow=9.9,SNR=1.3
ELK Lg Lg 20 12 53.0
baz=45,slow=20,SNR=1.5
comp=E,0.5nm,0.3s
**ULM Lac du Bonnet 9.17 41** Pn **Pn** **20 11 01.6 -0.8**
comp=E,1.1nm,0.3s,baz=227,slow=11,SNR=11
ULM Lg Lg 20 13 31.9
comp=E,0.3nm,0.3s,baz=256,slow=8.3,SNR=1.6
comp=E,2.4nm,0.4s
**NVAR Mina Array Bea 11.13 246** Pn **Pn** **20 11 29.2 -0.3**
comp=E,0.1nm,0.3s,baz=58,slow=14,SNR=1.8
comp=E,0.2nm,0.5s

**HEL 25 20:16:56.9**±0.5,**67.71N**×**20.26E**,**h0**km,**ML1.0,**
**Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LANU** | **Lannavaara** | **0.74** | **62** | SG | Sg | 20 17 19.1 | -1.6 |
| **PAJU** | **Pajala** | **1.30** | **120** | PN | Pg | 20 17 21.6 | -0.2 |
| PAJU | baz=301 | | | SN | Sn | 20 17 40.6 | +0.2 |
| **HEF** | **Hetta** | **1.46** | **60** | PG | Pn | 20 17 23.4 | -1.1 |
| HEF | | | | MSG | | 20 17 40.7 | |
| HEF | comp=Z,0.8nm,0.2s | | | SG | Sg | 20 17 41.6 | -2.1 |
| **KLF** | **Kolari** | **1.51** | **107** | PN | Pb | 20 17 25.4 | -0.3 |
| KLF | baz=286 | | | MSG | | 20 17 42.0 | |
| KLF | comp=Z,0.9nm,0.2s | | | SN | Sn | 20 17 46.7 | +1.3 |
| **KTK1** | **Kautokeino** | **1.71** | **39** | PG | Pn | 20 17 27.9 | -0.1 |
| KTK1 | | | | SG | Sn | 20 17 49.7 | -0.8 |
| **TRO** | **Tromso** | **2.00** | **347** | SB | Sn | 20 17 54.7 | -2.7 |
| **TOF** | **Tornio** | **2.29** | **134** | PG | Pb | 20 17 38.4 | -0.7 |
| TOF | comp=Z,0.6nm,0.2s | | | MSG | | 20 18 04.8 | |
| **SGF** | **Sodankyl** | **2.42** | **93** | SB | Sn | 20 18 09.1 | +1.2 |
| **RNF** | **Rovaniemi** | **2.50** | **113** | PG | Pb | 20 17 41.4 | -1.2 |
| RNF | | | | SG | Sb | 20 18 15.2 | +1.3 |
| **ARA0** | **ARCESS Array S** | **2.66** | **44** | PB | Pn | 20 17 41.9 | +0.9 |
| ARA0 | baz=227 | | | SG | Sb | 20 18 17.9 | -0.6 |
| **RAJF** | **Raja-Jooseppi** | **3.12** | **72** | SG | Sb | 20 18 33.0 | +1.4 |
| **OBF0** | **Syolatti, Pyha** | **3.61** | **151** | PB | Pb | 20 17 58.3 | -3.2 |

*IDC **25** 20:31:36.4±1.1,17.92N×46.72W,h0km,mb4.1/5,*
*mbtmp4.1/6,ML4.1/1,MS3.5/9,Error ellipse: s-maj=35.6km*
*s-min=27.8km az=128.0*
*NEIC **25** 20:31:38±1.0,17.9N±0.1×46.8W±0.1,h10km±1km,*
*mb4.3/11,Error ellipse: s-maj=24.5km s-min=18.2km*
*az=152.0*
**ISC 25 20:31:37.4**±0.6,**17.9N**±0.1×**46.74W**±0.09,**h10**km,**n40,**
**σ0s83/27,mb4.2/8,MS3.5**/8,**Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GDSD** | **La Dsirade Is** | **13.78** | **266** | Pn | **Pn** | **20 34 51.9** | **-1.2** |
| **MDP** | **Montagnes des** | **13.92** | **205** | Pn | **Pn** | **20 34 54.3** | **-0.6** |
| | 1.0nm,0.3s,baz=26,slow=16,SNR=12 | | | | | | |
| | 6.5nm,0.7s | | | | | | |
| **MPOM** | **Morne Pois Mar** | **13.98** | **258** | Pn | **Pn** | **20 34 55.8** | **0.0** |
| **SVN** | **Savane Anatole** | **14.17** | **260** | Pn | **Pn** | **20 34 59.0** | **+0.6** |
| **FDF** | **Fort de France** | **14.18** | **259** | Pn | **Pn** | **20 34 57.6** | **-0.9** |
| **CBE** | **Ff, Capester** | **14.33** | **265** | Pn | **Pn** | **20 35 01.2** | **+0.6** |
| **MCPB** | **Macapa, AP** | **18.84** | **197** | P | **Pn** | **20 35 57.6** | **-0.5** |
| **CELP** | **Cerrillos** | **18.88** | **274** | P | **P** | **20 35 56.2** | **-1.9** |
| CELP | comp=Z,14nm,0.9s | | | IAmb | IAmb | 20 36 12.7 | |
| **PCRV** | **Puerto La Cruz** | **18.95** | **249** | LR | LR | 20 43 21.8 | |
| | comp=Z,103nm,21.1s,slow=37 | | | | | | |
| **BOAV** | **Boa Vista** | **20.46** | **223** | P | **P** | **20 36 15.2** | **-0.2** |
| BOAV | comp=Z,8.5nm,1.2s | | | IAmb | IAmb | 20 36 20.2 | |
| **BAUV** | **El Baul** | **22.51** | **250** | P | **P** | **20 36 38.9** | **+1.4** |
| **SDV** | **Santo Domingo** | **24.87** | **252** | LR | LR | 20 46 08.8 | |
| | comp=Z,53nm,21.1s,baz=59,slow=35 | | | | | | |
| **BBTS** | **Babate** | **29.16** | **92** | LR | LR | 20 46 29.5 | |
| | comp=Z,111nm,19.5s,baz=146,slow=31 | | | | | | |
| **TKL** | **Tuckaleechee C** | **37.25** | **306** | LR | LR | 20 51 24.7 | |
| | comp=Z,61nm,21.6s,baz=96,slow=32 | | | | | | |
| **JTS** | **Las Juntas de** | **37.76** | **264** | LR | LR | 20 54 54.4 | |
| | comp=Z,37nm,19.7s,baz=110,slow=37 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **40.81** | **126** | T | T | 21 22 31.2 | |
| | baz=309,slow=75,SNR=34 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **40.81** | **126** | T | T | 21 22 33.2 | |
| | baz=309,slow=75,SNR=44 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **40.83** | **126** | T | T | 21 22 32.7 | |
| | baz=309,slow=75,SNR=62 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **41.39** | **127** | T | T | 21 23 16.6 | |
| | baz=306,slow=74,SNR=26 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **41.40** | **127** | T | T | 21 23 18.0 | |
| | baz=274,slow=74,SNR=25 | | | | | | |
| **DBIC** | **Dimbokro** | **42.31** | **100** | P | **P** | **20 39 30.6** | **-1.2** |
| **ESDC** | **Sonseca Array** | **42.84** | **50** | LR | LR | 20 53 11.1 | |
| | comp=Z,88nm,19.5s,baz=266,slow=30 | | | | | | |
| **CPUP** | **Villa Florida** | **45.10** | **193** | P | **P** | **20 39 55.8** | **+1.8** |
| | comp=Z,1.2nm,0.6s,baz=18,slow=6.4,SNR=1.6 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **46.81** | **89** | P | **P** | **20 40 06.9** | **-0.8** |
| TORD | comp=Z,3.1nm,1.1s | | | IAmb | IAmb | 20 40 08.2 | |
| **TORD** | **Torodi Ar. Bea** | **46.81** | **89** | P | **P** | **20 40 07.4** | **-0.3** |
| | comp=Z,2.2nm,0.9s,baz=296,slow=8.5,SNR=8.8 | | | | | | |
| TORD | | | | LR | LR | 20 57 59.2 | |
| | comp=Z,54nm,19.3s,baz=292,slow=34 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **KEST** | **Kesra** | **52.45** | **58** | P | **P** | **20 40 50.8** | **+0.2** |
| KEST | | | | IAmb | IAmb | 20 40 52.0 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **KEST** | **Kesra** | **52.45** | **58** | P | **P** | **20 40 51.1** | **+0.5** |
| | comp=Z,4.2nm,0.9s,baz=215,slow=12,SNR=4.9 | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **55.37** | **300** | LR | LR | 21 03 27.5 | |
| | comp=Z,37nm,20.7s,baz=189,slow=34 | | | | | | |
| **GERES** | **GERESS Array B** | **57.38** | **43** | P | **P** | **20 41 26.2** | **0.0** |
| **BURAR** | **Bucovina Array** | **64.92** | **45** | P | **P** | **20 42 17.9** | **+0.6** |
| **FINES** | **FINESS Array B** | **66.27** | **30** | P | **P** | **20 42 25.9** | **+0.3** |
| **BRTR** | **Keskin Array B** | **71.54** | **53** | P | **P** | **20 42 59.0** | **-0.1** |
| **BRTR** | **Keskin Array B** | **71.54** | **53** | P | **P** | **20 42 59.3** | **+0.2** |
| | comp=Z,1.0nm,0.9s,baz=285,slow=5.5,SNR=6.0 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **E27K** | **Coleen River** | **75.38** | **337** | P | **P** | **20 43 21.4** | **+0.3** |
| E27K | | | | IAmb | IAmb | 20 43 22.8 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **BMAR** | **Burnt Mountain** | **76.65** | **337** | P | **P** | **20 43 28.3** | **0.0** |
| **ILAR** | **Eielson Array** | **78.27** | **334** | P | **P** | **20 43 37.3** | **-0.1** |
| **ILAR** | **Eielson Array** | **78.27** | **334** | P | **P** | **20 43 37.5** | **+0.1** |
| | comp=Z,1.6nm,0.8s,baz=75,slow=4.9,SNR=14 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **G23K** | **Bananza Creek** | **78.90** | **337** | P | **P** | **20 43 41.5** | **+0.7** |
| G23K | | | | IAmb | IAmb | 20 43 43.4 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **79.07** | **338** | P | **P** | **20 43 41.8** | **+0.1** |
| E22K | | | | IAmb | IAmb | 20 44 01.5 | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **FURI** | **Furi** | **82.99** | **83** | LR | LR | 21 20 10.7 | |
| | comp=Z,41nm,19.7s,baz=286,slow=35 | | | | | | |

*IDC **25** 20:31:45.0±1.4,8.46S×116.91E,h0km,mb3.5/4,*
*mbtmp3.7/5,ML3.7/1,Error ellipse: s-maj=27.9km*
*s-min=21.7km az=68.0*
*DJA **25** 20:31:46.6±0.3,8.5S±4.1×11.7E±.1,h10km,M4.1/8,MLv4.1/8*
**ISC 25 20:31:46.4**±0.8,**8.44S**±0.07×**116.93E**±0.04,**h10**km,**n14,**
**σ1s02/17,mb3.7/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.30** | **189** | P | **Pg** | **20 31 53.2** | **+0.7** |
| **PLAI** | **Plampang** | **0.92** | **115** | P | **Pg** | **20 32 04.1** | **-0.1** |
| **DNP** | **Denpasar** | **1.72** | **262** | P | **Pb** | **20 32 17.8** | **-0.3** |
| **SRBI** | **Singaraja** | **1.73** | **281** | P | **Pn** | **20 32 16.6** | **0.0** |
| **WBSI** | **Waikabubak, Su** | **2.71** | **116** | P | **Pn** | **20 32 31.0** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **269** | P | **Pn** | **20 32 30.8** | **+0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.20** | **57** | P | **Pn** | **20 32 50.8** | **+0.2** |
| **KAPI** | **Kappang** | **4.41** | **40** | Pn | **Pn** | **20 32 53.9** | **+0.5** |
| | 4.3nm,0.3s,baz=211,slow=6.5,SNR=16 | | | | | | |
| KAPI | | | | Sn | **Sn** | **20 33 44.8** | **0.0** |
| | 6.1nm,0.3s,baz=232,slow=19,SNR=7.0 | | | | | | |
| KAPI | | | | Lg | Lg | 20 34 05.7 | |
| | 2.4nm,0.3s,baz=198,slow=19,SNR=2.0 | | | | | | |
| | 11nm,0.2s | | | | | | |
| **GRJI** | **Gresik** | **4.66** | **289** | P | **Pn** | **20 32 57.5** | **+0.6** |
| GRJI | | | | S | **Sn** | **20 33 50.4** | **-0.7** |
| **WRA** | **Warramunga Arr** | **20.36** | **126** | P | **P** | **20 36 23.4** | **0.0** |
| | 2.1nm,0.6s,baz=300,slow=12,SNR=51 | | | | | | |
| WRA | | | | S | S | 20 39 59.9 | -12 |
| | 0.2nm,0.8s,baz=297,slow=16,SNR=1.4 | | | | | | |
| | 2.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.22** | **135** | P | **P** | **20 36 43.5** | **+0.2** |
| | 2.0nm,0.7s,baz=314,slow=9.0,SNR=22 | | | | | | |
| ASAR | | | | S | **S** | **20 40 45.4** | **-2.7** |
| | 0.1nm,0.4s,baz=332,slow=21,SNR=2.2 | | | | | | |
| | 2.0nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.08** | **327** | P | **P** | **20 38 15.6** | **+1.7** |
| | 0.8nm,0.8s,baz=161,slow=6.7,SNR=4.1 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.04** | **334** | P | **P** | **20 42 12.6** | **-1.2** |
| | 0.2nm,0.5s,baz=134,slow=6.2,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **CPUP** | **Villa Florida** | **144.99** | **189** | PKP | **PKPab** | **20 51 24.0** | **0.0** |
| | 2.5nm,0.6s,baz=190,slow=6.1,SNR=4.9 | | | | | | |

*TAP **25** 20:53:17.2,24.63N×122.55E,h109km±1km,ML3.1,B*
*JMA **25** 20:53:17.4±0.3,25.N±2.×122.5E±0.7,h105km±2km,*
*MV2.1/11,NW OFF ISHIGAKIJIMA IS*
**ISC 25 20:53:17.3**±1.5,**24.61N**±0.04×**122.56E**±0.03,**h108**km±8km,
**n85,σ0s72/155,5C,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EOS2** | **EOS2** | **0.36** | **237** | i P | **Pn** | **20 53 33.5** | **+0.6** |
| EOS2 | baz=233 | | | *i* S | **Sn** | **20 53 46.0** | **+1.3** |
| **JYNG** | **Yonagunijimaku** | **0.38** | **115** | P | **Pn** | **20 53 33.4** | **+0.2** |
| JYNG | | | | *e*S | **Sn** | **20 53 45.1** | **-0.1** |
| **EOS3** | **EOS3** | **0.40** | **215** | *i* P | **Pn** | **20 53 33.9** | **+0.8** |
| EOS3 | baz=211 | | | S | **Sn** | **20 53 46.6** | **+1.6** |
| **YOJ** | **Yonaguni jima** | **0.43** | **110** | *e*P | **Pn** | **20 53 33.9** | **+0.4** |
| YOJ | baz=111 | | | S | **Sn** | **20 53 44.5** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **0.43** | **110** | *e*S | **Sn** | **20 53 45.0** | **-0.8** |
| **EOS4** | **EOS4** | **0.54** | **205** | *i* P | **Pn** | **20 53 34.1** | **+0.3** |
| EOS4 | baz=202 | | | *i* S | **Sn** | **20 53 47.1** | **+0.9** |
| **EGS** | | **0.62** | **292** | *e*P | **Pn** | **20 53 35.2** | **+0.4** |
| **TWC** | baz=290 **Suao** | **0.65** | **270** | *i* P | **Pn** | **20 53 34.7** | **-0.3** |
| TWC | baz=267 | | | *i* S | **Sn** | **20 53 47.4** | **-1.0** |
| **TWB1** | **Santiao Chiao** | **0.65** | **307** | *i* P | **Pn** | **20 53 34.9** | **-0.3** |
| **ESAO** | baz=306 **Su ao** | **0.66** | **267** | *e*P | **Pn** | **20 53 35.1** | **0.0** |
| ESAO | baz=265 | | | *i* S | **Sn** | **20 53 48.4** | **-0.1** |
| **EWUT** | baz=265 **Wuta** | **0.73** | **257** | P | **Pn** | **20 53 35.8** | **0.0** |
| EWUT | baz=255 | | | S | **Sn** | **20 53 49.6** | **-0.1** |
| **ILA** | baz=255 **Ilan** | **0.76** | **282** | *i* P | **Pn** | **20 53 36.3** | **+0.3** |
| ILA | baz=280 | | | S | **Sn** | **20 53 50.1** | **+0.1** |
| **TIPB** | baz=280 **Shuangxi** | **0.76** | **298** | *i* P | **Pn** | **20 53 36.1** | **+0.1** |
| TIPB | baz=297 | | | *i* S | **Sn** | **20 53 49.3** | **-0.9** |
| **ENA** | baz=297 **Nanau** | **0.77** | **256** | *i* P | **Pn** | **20 53 36.2** | **+0.1** |
| ENA | baz=254 | | | *i* S | **Sn** | **20 53 50.4** | **+0.1** |
| **NDS** | baz=254 **Dongshan** | **0.77** | **272** | *e*P | **Pn** | **20 53 36.4** | **+0.3** |
| NDS | baz=270 | | | S | **Sn** | **20 53 51.0** | **+0.7** |
| **SXI1** | baz=270 **Grass Mountain** | **0.79** | **308** | *i* P | **Pn** | **20 53 36.3** | **0.0** |
| SXI1 | baz=306 | | | S | **Sn** | **20 53 50.0** | **-0.7** |
| **EAHA** | **Aohua** | **0.80** | **250** | P | **Pn** | **20 53 36.6** | **+0.2** |
| EAHA | baz=247 | | | S | **Sn** | **20 53 50.9** | **+0.2** |
| **TWE** | baz=247 **Neicheng** | **0.82** | **278** | i P | **Pn** | **20 53 36.6** | **+0.1** |
| TWE | baz=276 | | | S | **Sn** | **20 53 50.5** | **-0.6** |
| **NWF** | baz=276 **Wu-fen Shan** | **0.84** | **303** | *i* P | **Pn** | **20 53 36.8** | **-0.1** |
| NWF | baz=302 | | | S | **Sn** | **20 53 50.9** | **-0.8** |
| **WFSB** | **Wu-fen Shan** | **0.84** | **303** | P | **Pn** | **20 53 36.5** | **-0.3** |
| **TNOU** | baz=302 **National Taiwa** | **0.90** | **307** | P | **Pn** | **20 53 37.1** | **-0.1** |
| TNOU | baz=306 | | | S | **Sn** | **20 53 51.1** | **-1.2** |
| **FUSB** | baz=306 **Fushanzhiwuyua** | **0.90** | **280** | i P | **Pn** | **20 53 37.4** | **0.0** |
| FUSB | baz=278 | | | *i* S | **Sn** | **20 53 51.2** | **-1.3** |
| | baz=278 | | | | | | |
| **ENTT** | **Nioudou** | **0.91** | **272** | *i* P | **Pn** | **20 53 38.1** | **+0.6** |
| ENTT | baz=270 | | | *i* S | **Sn** | **20 53 53.0** | **+0.4** |
| **LATG** | baz=270 **Datong** | **0.95** | **266** | *i* P | **Pn** | **20 53 38.3** | **+0.3** |
| LATG | baz=264 | | | *i* S | **Sn** | **20 53 53.4** | **-0.1** |
| **NDT** | baz=264 **Datong Townshi** | **0.96** | **270** | P | **Pn** | **20 53 38.4** | **+0.5** |
| NDT | baz=268 | | | S | **Sn** | **20 53 53.8** | **+0.4** |
| **TWA** | baz=268 **Mucha** | **0.96** | **293** | *i* P | **Pn** | **20 53 37.7** | **-0.2** |
| TWA | baz=291 | | | *i* S | **Sn** | **20 53 52.2** | **-1.4** |
| **ETL** | baz=291 **Fush Village** | **0.97** | **242** | P | **Pn** | **20 53 38.2** | **+0.1** |
| ETL | baz=240 | | | S | **Sn** | **20 53 52.7** | **-1.0** |
| **NWLT** | baz=240 **Wulai** | **0.98** | **280** | P | **Pn** | **20 53 38.2** | **0.0** |
| NWLT | baz=278 | | | *i* S | **Sn** | **20 53 54.0** | **+0.1** |
| **NACB** | baz=278 **Ninganchiao** | **0.99** | **244** | P | **Pn** | **20 53 37.5** | **-0.7** |
| NACB | baz=242 | | | S | **Sn** | **20 53 53.0** | **-1.0** |
| **TWD** | baz=242 **Chiawan** | **1.03** | **239** | P | **Pn** | **20 53 38.7** | **0.0** |
| TWD | baz=237 | | | S | **Sn** | **20 53 54.0** | **-0.8** |
| **YM01** | **YM01** | **1.05** | **301** | *i* P | **Pn** | **20 53 38.8** | **-0.1** |
| YM01 | baz=299 | | | S | **Sn** | **20 53 54.1** | **-1.1** |
| **YM08** | baz=299 **YM08** | **1.05** | **303** | P | **Pn** | **20 53 38.2** | **-0.7** |
| **ETLH** | baz=302 **Xiulin Townshi** | **1.07** | **248** | *i* P | **Pn** | **20 53 39.2** | **0.0** |
| ETLH | baz=246 | | | S | **Sn** | **20 53 54.7** | **-0.9** |
| **HWA** | baz=246 **Hwalien** | **1.08** | **234** | P | **Pn** | **20 53 39.2** | **0.0** |
| HWA | baz=232 | | | S | **Sn** | **20 53 56.3** | **+0.6** |
| **YHNB** | **Yeheng** | **1.08** | **273** | i P | **Pn** | **20 53 39.8** | **+0.4** |
| YHNB | baz=272 | | | S | **Sn** | **20 53 55.6** | **-0.3** |
| **NNSB** | **Datong** | **1.09** | **261** | P | **Pn** | **20 53 39.4** | **-0.1** |
| NNSB | baz=259 | | | S | **Sn** | **20 53 55.9** | **-0.3** |
| **TWY** | **Chenhua** | **1.10** | **307** | *e*P | **Pn** | **20 53 39.5** | **+0.2** |
| **NNS** | baz=306 **Nan Shan** | **1.10** | **261** | *i* P | **Pn** | **20 53 39.8** | **+0.3** |
| NNS | baz=259 | | | *i* S | **Sn** | **20 53 55.9** | **-0.4** |
| **IRIF** | baz=259 **Iriomote-Funau** | **1.10** | **104** | *e*S | **Sn** | **20 53 56.4** | **+0.3** |
| **NSK** | **Sanguang** | **1.10** | **274** | i P | **Pn** | **20 53 39.8** | **+0.3** |
| NSK | baz=272 | | | *i* S | **Sn** | **20 53 55.9** | **-0.3** |
| **PCYT** | baz=272 **Pengchaiyu** | **1.11** | **336** | *e*P | **Pn** | **20 53 40.4** | **+0.9** |
| **TWS1** | baz=336 **Kuangyinshan** | **1.15** | **295** | P | **Pn** | **20 53 38.5** | **-1.4** |
| **NTST** | baz=294 **Danshui** | **1.15** | **299** | *e*P | **Pn** | **20 53 40.2** | **+0.2** |
| NTST | baz=297 | | | S | **Sn** | **20 53 56.5** | **-0.6** |
| **TEYL** | baz=297 **Yanliau Villag** | **1.15** | **230** | *e*P | **Pn** | **20 53 40.2** | **+0.2** |
| TEYL | baz=230 | | | *e*S | **Sn** | **20 53 57.8** | **+0.7** |
| **ETM** | baz=230 **Tongmen** | **1.17** | **237** | P | **Pn** | **20 53 40.1** | **-0.1** |
| ETM | baz=235 | | | *e*S | **Sn** | **20 53 56.8** | **-0.7** |
| **LXIB** | baz=235 **Xiulin Townshi** | **1.20** | **241** | *i* P | **Pn** | **20 53 40.6** | **-0.1** |
| LXIB | baz=239 | | | S | **Sn** | **20 53 57.0** | **-1.5** |
| **SHUL** | baz=239 **Shoufeng** | **1.23** | **228** | *e*P | **Pn** | **20 53 41.2** | **+0.4** |
| SHUL | baz=227 | | | *i* S | **Sn** | **20 53 58.8** | **+0.1** |
| **FUSS** | baz=227 **Fushou** | **1.26** | **253** | *e*P | **Pn** | **20 53 42.1** | **+0.7** |
| FUSS | baz=252 | | | *i* S | **Sn** | **20 53 59.9** | **+0.2** |
| **WHF** | baz=252 **Hehuan Shan** | **1.27** | **249** | *i* P | **Pn** | **20 53 41.6** | **-0.1** |
| WHF | baz=247 | | | *i* S | **Sn** | **20 53 59.9** | **-0.4** |
| **ESL** | baz=247 **Shilin** | **1.30** | **233** | *e*P | **Pn** | **20 53 41.4** | **-0.3** |
| ESL | baz=231 | | | S | **Sn** | **20 53 58.8** | **-1.4** |
| **TWT** | baz=231 **Tachien** | **1.31** | **254** | *e*P | **Pn** | **20 53 43.1** | **+1.1** |
| TWT | baz=253 | | | *i* S | **Sn** | **20 54 00.9** | **+0.2** |
| **NFF** | baz=253 **Wufeng Townshi** | **1.32** | **271** | P | **Pn** | **20 53 42.4** | **+0.5** |
| NFF | baz=270 | | | *i* S | **Sn** | **20 54 00.2** | **-0.3** |
| **TDCB** | baz=270 **Techi** | **1.33** | **255** | *e*P | **Pn** | **20 53 43.1** | **+1.0** |
| TDCB | baz=253 | | | S | **Sn** | **20 54 00.6** | **-0.3** |
| **CHGB** | baz=253 **Renai** | **1.38** | **247** | P | **Pn** | **20 53 43.2** | **+0.3** |
| CHGB | baz=245 | | | S | **Sn** | **20 54 02.5** | **+0.3** |
| **WARBT** | **Fenglin Townsh** | **1.40** | **231** | P | **Pn** | **20 53 42.3** | **-0.5** |
| WARBT | baz=229 | | | S | **Sn** | **20 54 00.9** | **-1.3** |
| **EGFH** | baz=229 **Guangfu** | **1.40** | **228** | *e*S | **Sn** | **20 54 01.3** | **-0.9** |
| **LIOB** | baz=226 **Emei** | **1.41** | **272** | *i* P | **Pn** | **20 53 43.4** | **+0.5** |
| LIOB | baz=270 | | | *i* S | **Sn** | **20 54 01.6** | **-0.8** |
| **NSTT** | baz=270 **Nanjuang** | **1.42** | **271** | P | **Pn** | **20 53 43.2** | **+0.1** |
| NSTT | baz=269 | | | *i* S | **Sn** | **20 54 02.5** | **-0.1** |
| **OWD** | baz=269 **Renai** | **1.43** | **243** | *e*P | **Pn** | **20 53 43.8** | **+0.5** |
| OWD | baz=241 | | | *e*S | **Sn** | **20 54 02.6** | **-0.3** |
| **WUSB** | baz=241 **Renai** | **1.46** | **245** | P | **Pn** | **20 53 44.0** | **+0.3** |
| WUSB | baz=244 | | | S | **Sn** | **20 54 03.1** | **-0.5** |
| **JIJ** | baz=244 **Ishigaki jima** | **1.46** | **99** | P | **Pn** | **20 53 43.9** | **+0.4** |
| JIJ | | | | S | **Sn** | **20 54 03.1** | **-0.3** |
| **WHP** | **Taichung City** | **1.51** | **258** | P | **Pn** | **20 53 45.1** | **+0.9** |
| WHP | baz=256 | | | S | **Sn** | **20 54 05.1** | **+0.5** |
| **HGSD** | baz=256 **Ruisui** | **1.53** | **223** | *e*P | **Pn** | **20 53 44.6** | **+0.3** |
| HGSD | baz=222 | | | *e*S | **Sn** | **20 54 04.7** | **-0.1** |
| **VWDT** | baz=222 **VWDT** | **1.56** | **237** | *e*P | **Pn** | **20 53 45.6** | **+0.9** |
| VWDT | baz=235 | | | *i* S | **Sn** | **20 54 05.5** | **+0.1** |
| **EHYH** | baz=235 **Wanrong** | **1.58** | **225** | *e*S | **Sn** | **20 54 05.3** | **-0.6** |
| **EHY** | baz=224 **Hungye** | **1.58** | **226** | P | **Pn** | **20 53 44.5** | **-0.5** |
| EHY | baz=224 | | | S | **Sn** | **20 54 04.4** | **-1.7** |
| **JISG** | **Ishigakijimahi** | **1.59** | **91** | *e*P | **Pn** | **20 53 45.5** | **+0.4** |
| JISG | | | | *e*S | **Sn** | **20 54 05.8** | **-0.4** |
| **WCS** | **Beigang Elemen** | **1.60** | **250** | *e*P | **Pn** | **20 53 46.8** | **+1.5** |
| WCS | baz=249 | | | *e*S | **Sn** | **20 54 07.5** | **+0.9** |
| **NMLH** | baz=249 **Miaoli** | **1.61** | **268** | P | **Pn** | **20 53 46.1** | **+0.7** |
| NMLH | baz=266 | | | S | **Sn** | **20 54 07.2** | **+0.4** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=266 | | | | | | |
| **ECBN** | **Changbin** | **1.64** | **218** | *e*S | **Sn** | **20 54 06.4** | **-1.0** |
| | baz=217 | | | | | | |
| **NSY** | **Sanyi** | **1.65** | **264** | *i* P | **Pn** | **20 53 46.8** | **+0.9** |
| | baz=262 | | | | | | |
| NSY | | | | S | **Sn** | **20 54 08.7** | **+1.1** |
| | baz=262 | | | | | | |
| **TWQ1** | **Liyutan** | **1.65** | **261** | P | **Pn** | **20 53 47.4** | **+1.5** |
| | baz=260 | | | | | | |
| TWQ1 | | | | S | **Sn** | **20 54 07.1** | **-0.5** |
| | baz=260 | | | | | | |
| **YULB** | **Yu-li** | **1.68** | **224** | *e*P | **Pn** | **20 53 46.1** | **-0.2** |
| | baz=222 | | | | | | |
| YULB | | | | *i* S | **Sn** | **20 54 07.0** | **-1.2** |
| | baz=222 | | | | | | |
| **SSLB** | **Suanglung** | **1.68** | **241** | *e*P | **Pn** | **20 53 47.4** | **+1.1** |
| | baz=240 | | | | | | |
| SSLB | | | | *e*S | **Sn** | **20 54 09.1** | **+0.7** |
| | baz=240 | | | | | | |
| **EYUL** | **Yuli** | **1.70** | **222** | *e*P | **Pn** | **20 53 46.3** | **-0.1** |
| | baz=221 | | | | | | |
| EYUL | | | | *e*S | **Sn** | **20 54 08.0** | **-0.7** |
| | baz=221 | | | | | | |
| **TWF1** | **Yuli** | **1.71** | **223** | P | **Pn** | **20 53 46.2** | **-0.3** |
| | baz=221 | | | | | | |
| TWF1 | | | | S | **Sn** | **20 54 07.4** | **-1.5** |
| | baz=221 | | | | | | |
| **CHKH** | **Chenggong** | **1.77** | **217** | *e*S | **Sn** | **20 54 08.8** | **-1.5** |
| | baz=216 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.81** | **240** | *e*P | **Pn** | **20 53 49.1** | **+1.3** |
| | baz=238 | | | | | | |
| WHYT | | | | *e*S | **Sn** | **20 54 12.4** | **+1.2** |
| | baz=238 | | | | | | |
| **FULB** | **Fuli** | **1.83** | **220** | *e*P | **Pn** | **20 53 48.1** | **0.0** |
| | baz=218 | | | | | | |
| FULB | | | | *e*S | **Sn** | **20 54 11.1** | **-0.4** |
| | baz=218 | | | | | | |
| **CHKT** | **Chengkung** | **1.86** | **216** | P | **Pn** | **20 53 49.4** | **+0.9** |
| | baz=215 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **20 54 10.9** | **-1.4** |
| | baz=215 | | | | | | |
| **WNT** | **Mingjian** | **1.86** | **247** | *e*P | **Pn** | **20 53 49.4** | **+0.9** |
| | baz=246 | | | | | | |
| **ELDTW** | **Lidau** | **2.00** | **225** | *e*P | **Pn** | **20 53 50.2** | **-0.1** |
| | baz=224 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **20 54 14.2** | **-1.4** |
| | baz=224 | | | | | | |
| **LDUT** | **Ludao** | **2.18** | **208** | *e*P | **Pn** | **20 53 52.6** | **+0.1** |
| | baz=206 | | | | | | |
| LDUT | | | | S | **Sn** | **20 54 18.4** | **-1.0** |
| | baz=206 | | | | | | |
| **SLGT** | **Liugui** | **2.38** | **228** | *e*P | **Pn** | **20 53 55.7** | **+0.5** |
| | baz=226 | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.18** | **308** | *e*P | **Pn** | **20 54 06.9** | **+1.2** |
| | baz=307 | | | | | | |
| LYJJ | | | | *i* S | **Sn** | **20 54 41.8** | **-1.2** |
| | baz=307 | | | | | | |

*JMA **25** 21:16:12.3±0.4, 44˚N±2˚×14˚8E±˚, h0km, MV3.5/23, E OFF HOKKAIDO*
*SKHL **25** 21:16:13.4±0.1, 44˚.30N×148˚.00E, h33km±6km, mb4.0/3*
**ISC 25 21:16:09.2**±2.9, **44˚.19N**±0˚.09×**148˚.2E**±0˚.2, **h14**km±11km, **n14**, σ1s**70**/25, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **1.00** | **252** | *i* P | **Pg** | **21 16 29.1** | **+0.5** |
| SHO | | | | AMB | AMB | 21 16 29.3 | |
| | 60nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sg** | **21 16 40.8** | **-0.9** |
| SHO | | | | A | A | 21 16 42.3 | |
| | 150nm,0.3s | | | | | | |
| SHO | | | | A | A | 21 16 42.3 | |
| | 230nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **1.06** | **349** | *e*P | **Pg** | **21 16 29.7** | **0.0** |
| KUR | | | | AMB | AMB | 21 16 30.1 | |
| | 100nm,0.3s | | | | | | |
| KUR | | | | *i* S | **Sg** | **21 16 42.0** | **-1.6** |
| KUR | | | | A | A | 21 16 45.3 | |
| | 130nm,0.2s | | | | | | |
| KUR | | | | A | A | 21 16 45.3 | |
| | 170nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.66** | **265** | *i* P | **Pn** | **21 16 38.6** | **+0.9** |
| YUK | | | | AMB | AMB | 21 16 39.9 | |
| | 80nm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **21 16 57.5** | **-1.3** |
| YUK | | | | A | A | 21 17 02.6 | |
| | 180nm,0.3s | | | | | | |
| YUK | | | | A | A | 21 17 02.6 | |
| | 220nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.93** | **246** | P | **Pn** | **21 16 41.7** | **+0.3** |
| NEM2 | | | | S | **Sn** | **21 17 03.2** | **-2.3** |
| **JRA** | **Rausu** | **2.20** | **265** | P | **Pn** | **21 16 46.9** | **+1.7** |
| JRA | | | | *e*S | **Sn** | **21 17 11.6** | **-0.5** |
| **JNSB** | **Nemuroshibetsu** | **2.31** | **261** | *e*P | **Pn** | **21 16 46.9** | **+0.2** |
| **JKHN** | **Kushirohamanak** | **2.44** | **244** | P | **Pn** | **21 16 49.2** | **+0.7** |
| JKHN | | | | *e*S | **Sn** | **21 17 15.6** | **-2.4** |
| **JAK** | **Akkeshi** | **2.78** | **246** | P | **Pn** | **21 16 54.0** | **+0.8** |
| JAK | | | | *e*S | **Sn** | **21 17 24.8** | **-1.7** |
| **JTKR** | **Abashiri--Toko** | **3.06** | **267** | *e*P | **Pn** | **21 17 00.2** | **+3.1** |
| **JAR** | **Ashorobuto** | **3.30** | **256** | P | **Pn** | **21 17 02.4** | **+2.0** |
| JAR | | | | *e*S | **Sn** | **21 17 39.1** | **-0.2** |
| **JOB** | **Onbets** | **3.39** | **249** | P | **Pn** | **21 17 03.2** | **+1.6** |
| JOB | | | | *e*S | **Sn** | **21 17 40.8** | **-0.8** |
| **JCH** | **Churui** | **3.83** | **247** | P | **Pn** | **21 17 08.7** | **+1.1** |
| JCH | | | | *e*S | **Sn** | **21 17 50.8** | **-1.5** |
| **JFR** | **Furan** | **4.16** | **258** | *e*P | **Pn** | **21 17 15.9** | **+3.7** |
| **JNBK** | **Urakawa-nobuka** | **4.38** | **246** | P | **Pn** | **21 17 16.6** | **+1.3** |
| JNBK | | | | *e*S | **Sn** | **21 18 05.1** | **-0.9** |

*NIED **25** 21:47:28.1, 40˚.91N×145˚.08E, h68km, MW3.5, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-0.52; Mθθ-0.41; Mϕϕ0.94; Mrθ-0.40; Mϕ1.17; Mϕr-1.14; Fault plane solution: M₀1.72000×10¹⁴ NP1: ϕs357.00000°, δ81.00000°, λ-133.00000°. NP2: ϕs257.00000°, δ43.00000°, λ-13.00000°.*
**JMA 25 21:47:28.1**±0.2, **40˚.9N**±0˚.8×**145˚.1E**±0˚.9, **h68**km±2km, **MV4.0**/40, **FAR SE OFF HOKKAIDO, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JEM** | **Erimo** | **1.82** | **308** | P | Pn | 21 47 58.0 | +0.8 |
| JEM | | | | *e*S | Sn | 21 48 18.7 | -0.6 |
| **JTHR** | **Tokachihiroo** | **1.92** | **316** | *i* P | Pn | 21 47 59.4 | +0.8 |
| JTHR | | | | S | Sn | 21 48 20.6 | -1.2 |
| **JAK** | **Akkeshi** | **2.10** | **352** | P | Pn | 21 48 01.7 | +0.6 |
| JAK | | | | *e*S | Sn | 21 48 26.8 | +0.6 |
| **JCH** | **Churui** | **2.13** | **323** | *i* P | Pn | 21 48 02.3 | +0.9 |
| JCH | | | | S | Sn | 21 48 26.4 | -0.4 |
| **JKHN** | **Kushirohamanak** | **2.17** | **2** | P | Pn | 21 48 03.1 | +1.2 |
| JKHN | | | | S | Sn | 21 48 28.0 | +0.2 |
| **JOB** | **Onbets** | **2.19** | **335** | P | Pn | 21 48 03.6 | +1.3 |
| JOB | | | | S | Sn | 21 48 29.5 | +1.1 |
| **JNBK** | **Urakawa-nobuka** | **2.22** | **309** | P | Pn | 21 48 04.1 | +1.5 |
| JNBK | | | | S | Sn | 21 48 29.7 | +0.7 |
| **NEM2** | **Nemuro 2** | **2.50** | **11** | P | Pn | 21 48 07.7 | +1.2 |
| NEM2 | | | | S | Sn | 21 48 35.1 | -0.7 |
| **JAR** | **Ashorobuto** | **2.57** | **338** | *i* P | Pn | 21 48 08.1 | +0.6 |
| JAR | | | | S | Sn | 21 48 37.4 | -0.3 |
| **JNK** | **Nakash** | **2.68** | **354** | P | Pn | 21 48 09.3 | +0.4 |
| JNK | | | | S | Sn | 21 48 38.6 | -1.7 |
| **JBT2** | **Biratori 2** | **2.75** | **313** | P | Pn | 21 48 11.1 | +1.2 |
| JBT2 | | | | *e*S | Sn | 21 48 43.0 | +0.9 |
| **JANG** | **Nango** | **2.77** | **260** | *i* P | Pn | 21 48 09.9 | -0.2 |
| **JFR** | **Furan** | **2.91** | **321** | P | Pn | 21 48 13.0 | +0.9 |
| JFR | | | | S | Sn | 21 48 44.7 | -1.3 |
| **JIAM** | **Iburiatsuma** | **2.92** | **307** | P | Pn | 21 48 15.4 | +3.3 |
| JIAM | | | | *e*S | Sn | 21 48 49.6 | +3.6 |
| **JRA** | **Rausu** | **3.02** | **1** | P | Pn | 21 48 14.3 | +0.8 |
| JRA | | | | S | Sn | 21 48 47.3 | -1.2 |
| **JTM** | **Tenmabayashi** | **3.04** | **269** | P | Pn | 21 48 14.7 | +0.8 |
| JTM | | | | *e*S | Sn | 21 48 46.6 | -2.6 |
| **JOT** | **Ohata** | **3.08** | **280** | P | Pn | 21 48 15.0 | +0.7 |
| JOT | | | | *e*S | Sn | 21 48 47.6 | -2.4 |
| **JTKR** | **Abashiri--Toko** | **3.18** | **345** | P | Pn | 21 48 17.4 | +1.8 |
| JTKR | | | | *e*S | Sn | 21 48 52.8 | +0.4 |
| **JKB** | **Kayabe** | **3.20** | **289** | P | Pn | 21 48 16.9 | +1.0 |
| JKB | | | | S | Sn | 21 48 51.1 | -1.7 |

**HEL 25 22:03:52.8**±0.5, **67˚.18N**×**20˚.57E, h0km, ML1.0, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAJU** | **Pajala** | **1.01** | **98** | PG | Pg | 22 04 11.2 | -0.9 |
| | baz=285 | | | | | | |
| PAJU | | | | SG | Sg | 22 04 24.0 | -1.1 |
| **LANU** | **Lannavaara** | **1.03** | **31** | PB | Pg | 22 04 11.8 | -0.7 |
| | baz=225 | | | | | | |
| **KLF** | **Kolari** | **1.32** | **86** | PG | Pg | 22 04 16.7 | -1.4 |
| | baz=284 | | | | | | |
| KLF | | | | MSG | | 22 04 32.7 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| KLF | | | | SG | Sg | 22 04 34.4 | -0.9 |
| **HEF** | **Hetta** | **1.70** | **42** | PG | Pn | 22 04 23.0 | -0.7 |
| HEF | | | | MSG | | 22 04 43.6 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| HEF | | | | SN | Sn | 22 04 45.4 | -0.8 |
| **KALU** | **Kalix** | **1.73** | **139** | PG | Pn | 22 04 24.0 | -0.1 |
| KALU | | | | SG | Sn | 22 04 44.0 | -2.9 |
| **TOF** | **Tornio** | **1.86** | **125** | PG | Pn | 22 04 26.1 | +0.2 |
| | baz=310 | | | | | | |
| TOF | | | | SB | Sn | 22 04 46.3 | -3.7 |
| TOF | | | | MSG | | 22 04 48.3 | |
| | comp=Z,0.7nm,0.2s | | | | | | |
| **RNF** | **Rovaniemi** | **2.22** | **102** | PG | Pn | 22 04 32.1 | +1.2 |
| | baz=290 | | | | | | |
| RNF | | | | SG | Sb | 22 05 01.1 | -0.7 |
| **SGF** | **Sodankyl** | **2.32** | **81** | SG | Sn | 22 05 02.6 | +1.1 |

**UPP 25 22:04:52.2**±0.1, **67˚.15N**×**20˚.72E, h0km, ML2.0, Unknown, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUNU** | **Dundret** | **0.07** | **246** | P | Pg | 22 04 53.7 | +0.3 |
| DUNU | | | | S | Sg | 22 04 54.8 | +0.5 |
| **MASU** | **Masugnsbyn** | **0.58** | **57** | P | Pg | 22 05 03.2 | -0.1 |
| MASU | | | | S | Sg | 22 05 10.6 | -0.3 |
| **PAJU** | **Pajala** | **0.94** | **96** | P | Pg | 22 05 09.9 | -0.3 |
| **HARU** | **Harads** | **0.99** | **174** | P | Pg | 22 05 10.7 | -0.5 |
| **KOVU** | **Salmi** | **1.10** | **349** | P | Pg | 22 05 12.8 | -0.5 |
| **KALU** | **Kalix** | **1.67** | **140** | P | Pn | 22 05 22.9 | +0.3 |
| **SJUU** | **Sjulsmark** | **1.69** | **167** | P | Pn | 22 05 23.0 | +0.2 |

*IDC **25** 22:09:52.7±1.1, 46˚.75N×155˚.78E, h0km, mb3.7/5, mbtmp3.7/7, ML2.8/2, MS2.0/2, Error ellipse: s-maj=31.6km s-min=23.4km az=112.0*
**ISC 25 22:09:54.0**±1.2, **46˚.8N**±0˚.1×**155˚.7E**±0˚.2, **h10**km, **n14**, σ1s**67**/8, **mb3.7**/5, **East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **6.49** | **11** | Pn | **Pn** | **22 11 27.2** | **-2.3** |
| | 0.5nm,0.3s,baz=190,slow=12,SNR=8.3 | | | | | | |
| PETK | | | | Sn | **Sn** | **22 12 45.4** | **+1.8** |
| | 0.2nm,0.3s,baz=145,slow=11,SNR=1.5 | | | | | | |
| PETK | | | | LR | LR | 22 15 00.1 | |
| | comp=Z,5.0nm,18.3s,baz=152,slow=47 1.2nm,0.5s | | | | | | |
| **ASAJ** | **Asahikawa** | **9.56** | **259** | Pn | **Pn** | **22 12 10.8** | **-0.9** |
| | 0.2nm,0.3s,baz=106,slow=15,SNR=1.1 6.0nm,1.1s | | | | | | |
| **MA2** | **Magadan** | **13.17** | **349** | LR | LR | 22 17 51.6 | |
| | comp=Z,13nm,20.0s,baz=214,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.48** | **157** | T | T | 22 45 36.2 | |
| | baz=346,slow=74 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.50** | **157** | T | T | 22 45 37.1 | |
| | baz=346,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.50** | **157** | T | T | 22 45 34.0 | |
| | baz=346 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.60** | **158** | T | T | 22 46 54.1 | |
| | baz=345,slow=76,SNR=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.61** | **158** | T | T | 22 46 54.9 | |
| | baz=345,slow=76,SNR=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.62** | **158** | T | T | 22 47 01.8 | |
| | baz=345,slow=76,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.49** | **298** | P | **P** | **22 18 37.5** | **+0.7** |
| | 0.4nm,0.8s,baz=62,slow=6.9,SNR=2.4 0.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.91** | **305** | P | **P** | **22 18 41.6** | **+1.8** |
| | 1.4nm,0.2s,baz=67,slow=8.6,SNR=3.2 1.4nm,0.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **69.13** | **201** | P | **P** | **22 21 00.2** | **-0.1** |
| | 0.5nm,0.7s,baz=18,slow=6.7,SNR=4.8 0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **72.81** | **201** | P | **P** | **22 21 23.4** | **+0.8** |
| | 0.2nm,0.6s,baz=23,slow=5.9,SNR=5.8 0.2nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **75.94** | **62** | P | **P** | **22 21 41.3** | **+0.2** |
| | 0.4nm,0.6s,baz=312,slow=5.6,SNR=6.1 0.4nm,0.6s | | | | | | |

*PDG **25** 22:13:06.0, 34˚.58N×46˚.30E, h10km, mb6.1/4*
*IDC **25** 22:13:23.5±0.3, 34˚.55N×46˚.24E, h0km, mb5.5/45, mbtmp5.5/55, ML5.1/8, MS5.8/79, Error ellipse: s-maj=9.7km s-min=7.9km az=161.0*
*MOS **25** 22:13:23.5±1.4, 34˚.43N×46˚.15E, h13km, mb6.1/98, MS5.7/99, Error ellipse: s-maj=3.9km s-min=2.4km az=114.2*
*ISN **25** 22:13:24.9±0.6, 34˚.64N×46˚.19E, h13km±7km, ML6.0*
*GII **25** 22:13:25.5±0.5, 34˚.58N×46˚.30E, h10km, confirmed*
*NEIC **25** 22:13:25.6±1.6, 34˚.61N±0˚.05×46˚.24E±0˚.07, h10km±1km, mb6.0/264, Ms_20 5.9/1038, Mwb5.9/75, Mww6.0/23, Error ellipse: s-maj=10.5km s-min=7.9km az=55.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr-0.01; Mθθ-0.48; Mϕϕ0.49; Mrθ0.58; Mϕϕ9.13; Mϕr0.16; Fault plane solution: M₀9.16000×10¹⁷ NP1: ϕs358.45000°, δ86.32000°, λ179.13000°. NP2: ϕs88.51000°, δ89.13000°, λ3.68000°. Principal axes: T 9.1735, Plg3.0000°, Azm314.0000°; N -0.0274, Plg86.0000°, Azm102.0000°; P -9.1461, Plg2.0000°, Azm223.0000°;*
*TEH **25** 22:13:25.0, 34˚.62N×46˚.23E, h8km±18km, ML5.9*
*BJI **25** 22:13:25.0±0.0, 34˚.60N×46˚.25E, h10km, mb5.9/92, mB6.1/69, Ms6.3/99, Ms7 6.1/97*
*NEIC **25** 22:13:25.8, 34˚.65N×46˚.28E, h10km*
*IPGP **25** 22:13:26.0, 34˚.67N×46˚.21E, h13km, Mw6.0, Fault plane solution: NP1:ϕs357.00000°, δ79.00000°, λ-172.00000°. NP2:ϕs266.00000°, δ82.00000°, λ-11.00000°.*
*GCMT **25** 22:13:26.6±0.1, 34˚.49N×46˚.10E, h16km, MW6.0/164, Moment Tensor Solution. s154,c322; s164,c568; Duration: 2s4 Moment tensor: Scale 10¹⁸Nm; Mrr0.06±.01; Mθθ-0.11±.01; Mϕϕ0.05±.01; Mrθ0.39±.02; Mϕϕ1.20±.01; Mϕr-0.12±.02; Best double couple: M₀1.26500×10¹⁸ NP1:ϕs268.00000°, δ86.00000°, λ-17.00000°. NP2:ϕs359.00000°, δ73.00000°, λ-176.00000°. Principal axes: T 1.1990, Plg9.0000°, Azm314.0000°; N 0.1310, Plg72.0000°, Azm75.0000°; P -1.3310, Plg15.0000°, Azm222.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
*NEIC **25** 22:13:26.2, 34˚.87N×46˚.27E, h14km, Moment Tensor Solution. Duration: 4s1.0 Moment tensor: Scale 10¹⁸ Nm; Mrr-0.04; Mθθ-0.12; Mϕϕ0.16; Mrθ0.66; Mϕϕ0.98; Mϕr-0.23; Fault plane solution: M₀1.20000×10¹⁸ NP1: ϕs264.78000°, δ82.06000°, λ-31.46000°. NP2: ϕs359.61000°, δ58.88000°, λ-170.72000°. Principal axes: T 1.0821, Plg16.0000°, Azm316.0000°; N 0.2288, Plg58.0000°, Azm72.0000°; P -1.3110, Plg28.0000°, Azm218.0000°;*
*NEIC **25** 22:13:26.2, 34˚.67N×46˚.27E, h14km*
*NAO **25** 22:13:27.1, 34˚.44N×45˚.99E, h33km, mb5.6*
*DSN **25** 22:13:28.1±0.5, 34˚.33N×46˚.23E, h35km, mb6.5/6, Error ellipse: s-maj=12.0km s-min=5.1km az=59.0*
*SGS **25** 22:13:31.0, 34˚.44N×46˚.06E, h10km, MI6.8*
**ISC 25 22:13:25.8**±0.3, **34˚.58N**±0˚.02×**46˚.26E**±0˚.02, **h11**km±1km, **h11**km:**pP-P, n2645,** σ2s**11**/2761, **mb6.0**/502, **MS5.9**/686, **109C-92D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **41** | Pg | **Pg** | **22 13 28.8** | **-0.6** |
| **IGHG** | **Ghaleghazi** | **0.36** | **135** | Pg | **Pg** | **22 13 33.2** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **212** | Pg | **Pg** | **22 13 36.0** | **-0.6** |
| GLG1 | | | | Sg | **Sb** | **22 13 45.4** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.56** | **262** | Pg | **Pg** | **22 13 35.6** | **-1.1** |
| **KSBB** | **Baniby** | **0.65** | **315** | Pg | **Pg** | **22 13 37.2** | **-1.1** |
| **ILIN** | **Lien** | **0.67** | **60** | Pg | **Pg** | **22 13 38.1** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **115** | Pg | **Pg** | **22 13 39.6** | **+0.1** |
| KCHF | | | | Sg | **Sb** | **22 13 51.6** | **+1.4** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **183** | Pg | **Pg** | **22 13 44.0** | **-0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **76** | Pg | **Pb** | **22 13 47.2** | **-0.8** |
| **SLY** | **Sulaymaniyah** | **1.19** | **329** | Pg | **Pb** | **22 13 45.9** | **-2.5** |
| **IBZA** | **Bozab** | **1.32** | **94** | Pg | **Pn** | **22 13 50.4** | **-0.1** |
| **IBDR** | **Badra** | **1.50** | **191** | *e*Pn | **Pb** | **22 13 53.5** | **0.0** |
| IBDR | | | | *e*Sn | **Sg** | **22 14 15.0** | **+1.1** |
| IBDR | | | | AML | AML | 22 14 21.6 | |
| | comp=E,316μm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 22 14 23.6 | |
| | comp=N,315μm,0.7s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.69** | **128** | Pg | **Pg** | **22 13 57.5** | **-0.6** |
| **SDS1** | **Sardasht. Az.** | **1.69** | **338** | Pg | **Pn** | **22 13 55.4** | **0.0** |
| **IDOB** | **Doab** | **1.77** | **116** | Pn | **Pb** | **22 13 58.6** | **+0.2** |
| **IKRK** | **Kirkuk** | **1.78** | **298** | *e*Pn | **Pn** | **22 13 56.0** | **-0.4** |
| IKRK | | | | *e*Sn | **Sn** | **22 14 19.0** | **0.0** |
| IKRK | | | | AML | AML | 22 14 29.3 | |
| | comp=N,229μm,0.6s | | | | | | |
| IKRK | | | | AML | AML | 22 14 32.8 | |
| | comp=E,138μm,0.8s | | | | | | |
| **HSAM** | **Samen** | **1.97** | **100** | Pn | **Pb** | **22 14 01.4** | **-0.4** |
| **BHD** | **Baghdad** | **2.04** | **231** | *e*Pn | **Pn** | **22 14 01.0** | **+1.0** |
| BHD | | | | *e*Sn | **Sn** | **22 14 26.5** | **+1.0** |
| **MAHB** | **Mahabad** | **2.23** | **348** | Pn | **Pn** | **22 14 03.6** | **+0.9** |
| **HAGD** | **Aghdareh** | **2.38** | **83** | Pn | **Pb** | **22 14 07.2** | **-1.6** |
| **IHSH** | **Hashtrud** | **2.83** | **16** | Pn | **Pn** | **22 14 12.4** | **+1.1** |
| **RAFI** | **Al-Rafai** | **2.85** | **183** | *e*Pn | **Pn** | **22 14 13.0** | **+1.8** |
| RAFI | | | | *e*Sn | **Sn** | **22 14 48.0** | **+2.4** |
| **QABG** | **Abgarm-Qazvin** | **2.94** | **67** | Pn | **Pn** | **22 14 14.5** | **+1.8** |
| **IAZR** | **Azarshahr** | **3.10** | **356** | Pn | **Pn** | **22 14 16.1** | **+1.3** |
| **IRAZ** | **Razeghan** | **3.12** | **74** | Pn | **Pn** | **22 14 17.0** | **+1.9** |
| **CUKT** | **Cukurca** | **3.42** | **322** | P | **Pn** | **22 14 19.7** | **+0.5** |
| **ISRB** | **Sarab** | **3.43** | **19** | Pn | **Pn** | **22 14 20.9** | **+1.6** |
| **JIR1** | **Jirandeh** | **3.58** | **53** | Pn | **Pn** | **22 14 22.9** | **+1.6** |
| **ITBZ** | **Tabriz** | **3.64** | **359** | Pn | **Pn** | **22 14 22.9** | **+0.7** |
| **IGZV** | **Ghazvin** | **3.69** | **60** | Pn | **Pn** | **22 14 24.8** | **+1.8** |
| **ISHB** | **Shabestar** | **3.73** | **352** | Pn | **Pn** | **22 14 24.0** | **+0.5** |
| **IHRS** | **Heris** | **3.78** | **9** | Pn | **Pn** | **22 14 25.3** | **+1.1** |
| **AHWZ** | **Ahwaz** | **3.81** | **148** | Pn | **Pn** | **22 14 26.6** | **+2.2** |
| **IQOM** | **Qom** | **3.97** | **85** | Pn | **Pn** | **22 14 28.4** | **+1.6** |
| **LHJ2** | **Lahijan - Gila** | **4.02** | **49** | Pn | **Pn** | **22 14 29.0** | **+1.8** |
| **IMRD** | **Marand** | **4.15** | **354** | Pn | **Pn** | **22 14 30.5** | **+1.3** |
| **IPIR** | **Pirpir** | **4.30** | **115** | Pn | **Pn** | **22 14 32.7** | **+1.3** |
| **GAS1** | **Astara - Iran** | **4.33** | **28** | Pn | **Pn** | **22 14 33.2** | **+1.7** |
| **QAMS** | **Qamsar** | **4.34** | **100** | Pn | **Pn** | **22 14 33.7** | **+1.9** |
| **KLST** | **Kelardasht - M** | **4.36** | **62** | Pn | **Pn** | **22 14 34.1** | **+1.9** |
| **JHBN** | **Jahan bin** | **4.37** | **121** | Pn | **Pn** | **22 14 33.4** | **+1.1** |
| **GRMI** | **Germi** | **4.42** | **17** | Pn | **Pn** | **22 14 34.4** | **+1.6** |
| **IVRN** | **Varamin** | **4.51** | **83** | Pn | **Pn** | **22 14 36.2** | **+2.0** |
| **ZNGN** | **Zangian** | **4.56** | **121** | Pn | **Pn** | **22 14 35.9** | **+1.0** |
| **AKDM** | **Akdamar-Van** | **4.58** | **326** | *e*P | **Pn** | **22 14 36.2** | **+1.1** |
| **IKLH** | **Kolahrood** | **4.59** | **104** | Pn | **Pn** | **22 14 37.7** | **+2.3** |
| **VANB** | **Van** | **4.62** | **331** | *e*P | **Pn** | **22 14 36.9** | **+1.2** |
| **MZPU** | **Pul - Mazandar** | **4.71** | **65** | Pn | **Pn** | **22 14 39.0** | **+2.1** |
| **IDMV** | **Damavand** | **4.83** | **77** | Pn | **Pn** | **22 14 40.3** | **+1.6** |
| **KRSH** | **Karshahi** | **4.90** | **96** | Pn | **Pn** | **22 14 41.3** | **+1.8** |
| **ISFB** | **Sefidab** | **4.94** | **91** | Pn | **Pn** | **22 14 41.4** | **+1.4** |
| **IBRJ** | **Brojen** | **4.96** | **121** | Pn | **Pn** | **22 14 41.3** | **+0.8** |
| **ERCV** | **ERCIS-VAN** | **5.01** | **333** | *e*P | **Pn** | **22 14 44.1** | **+3.0** |
| **ABEH** | **Behbahan** | **5.21** | **139** | Pn | **Pn** | **22 14 45.3** | **+1.7** |
| **GURO** | **Guroymak-BITLI** | **5.22** | **321** | *e*P | **Pn** | **22 14 44.9** | **+1.0** |
| **GURO** | **Guroymak-BITLI** | **5.22** | **321** | Pn | **Pn** | **22 14 43.5** | **-0.5** |
| **IPRN** | **Peran** | **5.23** | **70** | Pn | **Pn** | **22 14 47.8** | **+3.8** |
| **IGAR** | **Gharneh** | **5.29** | **113** | Pn | **Pn** | **22 14 46.6** | **+1.6** |
| **IZEF** | **Zefreh** | **5.33** | **107** | Pn | **Pn** | **22 14 46.2** | **+0.8** |
| **SVAN** | **Silvan-Diyarba** | **5.42** | **313** | *e*P | **Pn** | **22 14 45.9** | **-0.6** |
| **IFIR** | **Firoozkooh** | **5.42** | **77** | Pn | **Pn** | **22 14 48.6** | **+1.8** |
| **MLAZ** | **Malazgirt-MUS** | **5.44** | **328** | *e*P | **Pn** | **22 14 48.4** | **+1.5** |
| **MAZI** | **Mazidag** | **5.52** | **303** | *e*P | **Pn** | **22 14 46.3** | **-1.7** |
| **KBD** | **Kabd** | **5.53** | **167** | P | **Pn** | **22 14 48.9** | **+1.0** |
| KBD | | | | S | **Sn** | **22 15 48.1** | **-3.4** |
| **ILAS** | **Lasjerd** | **5.55** | **80** | Pn | **Pn** | **22 14 50.0** | **+1.4** |
| **AGRB** | **Hanur-Agry** | **5.63** | **333** | *e*P | **Pn** | **22 14 52.4** | **+2.9** |
| **TASB** | **TASBURUN-IGDIR** | **5.63** | **344** | *e*P | **Pn** | **22 14 52.8** | **+3.4** |
| **GNI** | **Garni** | **5.69** | **348** | *e*P | Pn | 22 14 56.2 | +5.9 |
| **GNI** | **Garni** | **5.69** | **348** | Pn | **Pn** | **22 14 51.5** | **+1.2** |
| **GNI** | **Garni** | **5.69** | **348** | P | **Pn** | **22 14 53.5** | **+3.2** |
| **GNI** | **Garni** | **5.69** | **348** | Pn | **Pn** | **22 14 53.5** | **+3.2** |
| | comp=E,24nm,0.3s,baz=251,slow=1.3,SNR=54 | | | | | | |
| GNI | | | | Lg | Lg | 22 16 24.5 | |
| | comp=E,48nm,0.3s,baz=87,slow=12,SNR=3.4 | | | | | | |
| GNI | | | | LR | LR | 22 17 07.9 | |
| | comp=E,94μm,21.9s,baz=174,slow=39 comp=E,141nm,0.7s | | | | | | |
| **GNI** | **Garni** | **5.69** | **348** | P | Pn | 22 14 55.7 | +5.4 |
| GNI | | | | P | Pn | 22 14 55.7 | +5.4 |
| GNI | | | | S | **Sb** | **22 16 04.8** | **-8.5** |
| GNI | | | | S | **Sb** | **22 16 04.8** | **-8.5** |
| **GNI** | **Garni** | **5.69** | **348** | *ce*P | **Pn** | **22 14 48.5** | **-1.8** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,822nm,2.5s | | | | | | |
| **SRFHA** | **Rafha** | **5.71** | **195** | P | **Pn** | **22 14 51.5** | **+1.0** |
| **SRFHA** | **Rafha** | **5.71** | **195** | S | **Sn** | **22 15 51.5** | **-4.5** |
| **KLNJ** | **Kolanjah** | **5.73** | **127** | Pn | **Pn** | **22 14 51.4** | **+0.3** |
| **IRAM** | **Ramesheh** | **5.83** | **117** | Pn | **Pn** | **22 14 53.0** | **+0.7** |
| **VRTB** | **Varto-Mus** | **5.98** | **321** | *e*P | **Pn** | **22 14 56.3** | **+2.0** |
| **DYBB** | **Diyarbakir** | **5.98** | **306** | *e*P | **Pn** | **22 14 53.5** | **-0.8** |
| **BNGB** | **Bingl** | **6.28** | **316** | *e*P | **Pn** | **22 14 58.6** | **+0.2** |
| **IANJ** | **Anjilo** | **6.34** | **80** | Pn | **Pn** | **22 15 01.5** | **+2.2** |
| **ANAR** | **Anarak**

GUDG Gudauri 7.99 350 P Pn 22 15 26.8 +4.8
GUDG Gudauri 7.99 350 P Pn 22 15 26.8 +4.8
DARE Darende-Malaty 8.11 302 eP Pn 22 15 22.3 -1.2
SHTL Shatili 8.11 354 P Pn 22 15 27.7 +4.2
SHTL Shatili 8.11 354 P Pn 22 15 27.7 +4.2
KMRS Kahramanmaras 8.12 294 eP Pn 22 15 22.2 -1.5
TKB Tkibuli 8.17 343 P Pn 22 15 29.4 +5.1
TKB S Sg 22 17 54.0 +6.2
TKB Tkibuli 8.17 343 P Pn 22 15 29.4 +5.2
ASF Jabal al Asfar 8.19 256 Pn Pn 22 15 24.2 -0.5
comp=Z,57nm,0.3s,baz=274,slow=0.0,SNR=194
ASF Lg Lg 22 17 46.4
comp=Z,91nm,0.3s,baz=308,slow=0.0,SNR=2.6
ASF LR LR 22 19 21.8
comp=Z,56µm,18.6s,baz=48,slow=44
comp=Z,429nm,0.6s
ASF Jabal al Asfar 8.19 256 P Pn 22 15 24.3 -0.4
MTEO Meteo 8.20 351 P Pn 22 15 30.6 +5.5
MTEO Meteo 8.20 351 P Pn 22 15 30.5 +5.5
BEIL Beino 8.31 273 eP Pn 22 15 26.1 -0.2
IBAF Bafgh 8.36 108 Pn Pn 22 15 28.7 +1.7
QIR1 Qir 8.40 135 Pn Pn 22 15 27.1 -0.4
MAK Makhachkala 8.42 6c iP Pn 22 15 33.2 +5.5
MAK eS Sn 22 17 13.7 +11
MAK pmax pmax
comp=Z,2µm,1.3s
MAK MLR MLR
comp=Z,230µm,15.0s
MRVT Maraveh tapeh 8.52 66 Pn Pn 22 15 32.0 +2.8
HWQ Hawqa 8.53 271 eP Pn 22 15 29.1 -0.2
TNSJ Nastanj 8.59 91 Pn Pn 22 15 30.9 +0.8
ZAHL Zahle 8.63 268 eP Pn 22 15 32.2 +1.6
ESPY Espiye-Giresun 8.69 319 eP Pn 22 15 32.6 +1.2
JHRM Jahrom 8.70 132 Pn Pn 22 15 31.8 +0.3
RCY Rachaya 8.72 266 eP Pn 22 15 32.2 +0.2
HSUJ Al Zarqa 8.78 256 P Pn 22 15 32.3 -0.4
BHL Bhannes 8.81 269 eP Pn 22 15 34.5 +1.3
TPRV Parvadeh(Tabas 8.81 97 Pn Pn 22 15 34.2 +1.1
QRWL Qaraoun 8.84 266 eP Pn 22 15 34.0 +0.5
KSHT Keshet 8.85 263 P Pn 22 15 34.0 +0.4
NATI Neve Ativ 8.85 264 P Pn 22 15 33.6 +0.1
NATI Neve Ativ 8.85 264 P Pn 22 15 33.9 +0.3
DQRL Deir Qamar 8.91 267 eP Pn 22 15 35.5 +1.0
BCHG Becho 8.91 342 P Pn 22 15 41.2 +6.7
GEM Giv'at Ha'Em 8.92 264 P Pn 22 15 34.4 -0.1
GEM Giv'at Ha'Em 8.92 264 P Pn 22 15 34.5 0.0
SHMJ Saham 8.95 261 P Pn 22 15 35.7 +0.8
TAPT Tabas- Tapeh t 8.97 85 Pn Pn 22 15 36.5 +1.1
NTAIM NTAIM 8.98 227 P Pn 22 15 34.2 -1.2
TKDS Koohdasht(Taba 9.06 93 Pn Pn 22 15 37.8 +1.2
NCK Nalchik 9.14 348⇓ eP Pn 22 15 38.6 +1.1
NCK pmax pmax
comp=Z,736nm,2.4s
MMA0B Mount Meron ar 9.17 263 P Pn 22 15 38.6 +0.5
MMA0 Mount Meron ar 9.17 263 P Pn 22 15 38.5 +0.4
MMAI Mount Meron Ar 9.17 263 Pn Pn 22 15 37.8 -0.4
comp=Z,70nm,0.3s,baz=84,slow=17,SNR=291
MMAI Lg Lg 22 18 09.8
comp=Z,62nm,0.3s,baz=84,slow=39,SNR=2.4
MMAI LR LR 22 19 26.1
comp=Z,45µm,19.1s,baz=14,slow=40
comp=Z,178nm,0.5s
SWQJ Swaqa 9.20 252 P Pn 22 15 38.4 -0.1
QRNJ Al-Qirein 9.21 259 P Pn 22 15 38.9 +0.4
RMAH Rumah 9.22 176 P Pn 22 15 38.9 +0.2
HMDT Nahal Hemdat 9.27 258 P Pn 22 15 40.2 +0.8
HMDT Nahal Hemdat 9.27 258 P Pn 22 15 39.9 +0.6
MMLI Mount Malkishu 9.30 260 P Pn 22 15 41.2 +1.3
LMD1 Lamerd 9.34 139 Pn Pn 22 15 38.8 -1.5
SAKB Bahrain 9.34 156 P Pn 22 15 39.3 -1.0
SAKB S Sn 22 17 19.0 -6.3
HNTI Hanita 9.35 264 P Pn 22 15 41.5 +1.1
HNTI Hanita 9.35 264 P Pn 22 15 41.3 +0.8
ZRDN Zarand Kerman 9.37 110 Pn Pn 22 15 43.9 +3.0
BNN Bunyan 9.38 300 Pn Pn 22 15 40.3 -0.7
BLGI Bet Lehem HaGe 9.41 262 P Pn 22 15 42.7 +1.4
BLGI Bet Lehem HaGe 9.41 262 P Pn 22 15 42.4 +1.1
UJAP Al Uja 9.41 257 P Pn 22 15 41.6 +0.3
SBZV Sabzevar 9.43 76 Pn Pn 22 15 43.2 +1.5
KBZ Khabaz 9.50 345 Pn Pn 22 15 47.7 +5.3
comp=Z,0.8nm,0.3s,baz=152,slow=9.1,SNR=45
KBZ Sn Sn 22 17 30.7 +1.6
baz=114,slow=20
KBZ Lg Lg 22 18 27.6
comp=Z,0.2nm,0.3s,baz=182,slow=6.9,SNR=1.4
KBZ LR LR 22 19 38.4
comp=Z,74µm,19.8s,baz=148,slow=39
KBZ Khabaz 9.50 345ce eP Pn 22 15 46.1 +3.7
SHA1 Shidzhatmaz 9.56 344c iP Pn 22 15 48.3 +4.8
GHAJ Ghor Haditha 9.56 253 Pn Pn 22 15 42.6 -0.8
GHAJ Ghor Haditha 9.56 253 P Pn 22 15 42.9 -0.5
GHAJ Ghor Haditha 9.56 253 P Pn 22 15 43.5 +0.1
KHGB Koh Gabri 9.59 113 Pn Pn 22 15 42.8 -1.2
KURES Khurais 9.59 169 P Pn 22 15 44.7 +0.9
SALP Salfit 9.60 258 P Pn 22 15 45.2 +1.3
SHMA Al-Shehemyia 9.60 154 P Pn 22 15 42.5 -1.3
SNR=35
SHMA S Sn 22 17 28.4 -3.3
OFRI `Ofer 9.61 261 P Pn 22 15 45.3 +1.2
OFRI `Ofer 9.61 261 P Pn 22 15 45.2 +1.2
DSI Dead Sea 9.61 255 P Pn 22 15 43.8 -0.3
DSI Dead Sea 9.61 255 P Pn 22 15 43.5 -0.6
LISJ El Lisan 9.66 253 P Pn 22 15 44.9 +0.3
SLTI Sal'it 9.67 259 P Pn 22 15 46.2 +1.4
SLTI Sal'it 9.67 259 P Pn 22 15 45.9 +1.1
MSBI Mazada 9.73 253 P Pn 22 15 46.1 +0.5
MSBI Mazada 9.73 253 P Pn 22 15 46.3 +0.8
KVAR Kislovodsk Arr 9.76 345 Pn Pn 22 15 52.3 +6.2
baz=314,slow=12
KVAR Lg Lg 22 18 37.3
baz=190,slow=20
KVAR LR LR 22 19 12.8
comp=Z,154µm,20.4s,baz=62,slow=36
KIV Kislovodsk 9.76 345 Pn Pn 22 15 46.0 -0.2
KIV Kislovodsk 9.76 345 iP Pn 22 15 50.4 +4.3
SNR=106
KIV Kislovodsk 9.76 345 P Pn 22 15 50.9 +4.8
KIV P Pn 22 15 50.9 +4.8
KIV Kislovodsk 9.76 345 eP Pn 22 15 48.7 +2.6
KIV eS Sn 22 17 39.3 +3.6
KIV pmax pmax
comp=Z,446nm,1.1s
KIV MLR MLR
comp=Z,19µm,12.0s
LAR1 LAR 9.78 133 Pn Pn 22 15 44.8 -1.7
YTIR Yattir 9.90 254 P Pn 22 15 48.3 +0.2
YTIR Yattir 9.90 254 P Pn 22 15 48.6 +0.6
HSNJ Maan 9.92 247 P Pn 22 15 49.1 +0.7
TVBK TV Kerman 9.99 114 Pn Pn 22 15 49.4 -0.2
AMAZ Amatzia 10.00 255 P Pn 22 15 50.3 +1.0
VSLR Vesyoloye 10.10 333c iP Pn 22 15 53.4 +2.7
KRM1 Kerman Provinc 10.14 111 Pn Pn 22 15 52.5 +1.0
NGRK Negar Kerman 10.15 116 Pn Pn 22 15 52.1 +0.4
ZFRI Zfri 10.18 250 P Pn 22 15 52.6 +0.8
ZFRI Zfri 10.18 250 P Pn 22 15 52.0 +0.3
SOC Sochi 10.32 332 eP Pn 22 15 55.6 +1.9
SOC e 22 17 55.8
SOC MLR MLR
comp=Z,63µm,17.0s
IAKL Akhelmad 10.37 75 Pn Pn 22 15 56.8 +2.1
PRNI Paran 10.40 249 P Pn 22 15 55.3 +0.4
PRNI Paran 10.40 249 P Pn 22 15 56.2 +1.3
IEMG Emamgholi 10.43 71 Pn Pn 22 15 58.9 +3.5
HRFI Mount Harif 10.52 248 P Pn 22 15 55.9 -0.7
HRFI Mount Harif 10.52 248 P Pn 22 15 57.2 +0.6
ITEG Tejag 10.53 96 Pn Pn 22 15 57.8 +1.0
IPAY Payeh 10.54 76 Pn Pn 22 15 58.7 +1.7
SMRA Abu-Samra 10.57 157 P Pn 22 15 55.5 -1.7
SNR=96
SMRA S Sn 22 17 47.8 -7.9
KZIT Kziot 10.64 253 P Pn 22 15 59.3 +1.1
KZIT Kziot 10.64 253 P Pn 22 15 59.0 +0.9
CHMN Cheshme madani 10.64 113 Pn Pn 22 16 00.7 +2.2
CSS Mathiatis 10.65 276 Pn 22 15 56.9 -1.4
CSS Mathiatis 10.65 276 P Pn 22 16 00.5 +2.3
AFRZ Afriz 10.65 93 Pn Pn 22 16 00.8 +2.4
AQBJ Aqaba 10.66 246 P Pn 22 15 57.4 -1.1
TBHD Torbat heydari 10.67 82 Pn Pn 22 16 03.2 +4.5
TRNA Turayna 10.71 155 P Pn 22 15 57.4 -1.8
SNR=116
TRNA S Sn 22 17 53.9 -5.2
MBRI Mt Berech 10.73 247 P Pn 22 16 00.2 +0.7

GOF Gofitskoye 10.75 348c iP Pn 22 16 03.8 +4.2
EIL Elat 10.77 246 Pn Pn 22 15 58.1 -1.7
comp=Z,14nm,0.3s,baz=78,slow=6.0,SNR=111
EIL Lg Lg 22 19 04.3
comp=Z,13nm,0.3s,baz=280,slow=24,SNR=1.7
EIL LR LR 22 20 40.5
comp=Z,24µm,19.1s,baz=65,slow=41
comp=Z,124nm,0.7s
EIL Elat 10.77 246 P Pn 22 15 59.3 -0.6
IMOG Moghan 10.79 78 Pn Pn 22 16 02.8 +2.4
IKOO Kooshah 10.85 98 Pn Pn 22 16 03.2 +2.0
LABN Labinsk 10.91 339 eP Pn 22 16 06.2 +4.4
LABN pmax pmax
comp=Z,1µm,2.7s
LABN MLR MLR
comp=Z,60µm,17.0s
IKRD Kardeh 11.00 75 Pn Pn 22 16 07.6 +4.3
RAYN Ar Rayn 11.04 184 Pn Pn 22 16 00.7 -3.0
RAYN Ar Rayn 11.04 184 iP Pn 22 16 00.4 -3.3
SNR=395
RAYN Ar Rayn 11.04 184 Pn Pn 22 15 59.9 -3.8
RAYN Ar Rayn 11.04 184 P Pn 22 16 01.4 -2.3
RAYN S Sn 22 17 58.9 -8.3
RAYN Ar Rayn 11.04 184 P Pn 22 16 00.7 -3.0
GENO Geno 11.11 127 Pn Pn 22 16 03.1 -1.6
JRN Qarnain Island 11.18 148 P Pn 22 16 03.6 -1.9
SNR=20
JRN P Pn 22 16 03.6 -1.9
SNR=20
JRN S Sn 22 18 01.6 -8.8
JRN S Sn 22 18 01.6 -8.8
BR131 Keskin Array S 11.30 301 Pn Pn 22 16 07.1 -0.2
BR131 Keskin Array S 11.30 301c iP Pn 22 16 07.3 0.0
BRTR Keskin Array B 11.30 301 Pn Pn 22 16 06.8 -0.5
BRTR Keskin Array B 11.30 301 P Pn 22 16 09.2 +1.9
comp=Z,1.6nm,0.3s,baz=121,slow=10.0,SNR=148
BRTR Sn Sn 22 18 12.3 -1.4
comp=Z,0.7nm,0.3s,baz=120,slow=20,SNR=1.2
BRTR Lg Lg 22 19 19.3
comp=Z,0.1nm,0.3s,baz=121,slow=22,SNR=1.3
BRTR LR LR 22 21 07.7
comp=Z,60µm,18.2s,baz=124,slow=41
comp=Z,142nm,1.1s
BRTR Keskin Array B 11.30 301ce eP Pn 22 16 10.1 +2.8
BRTR pmax pmax
comp=Z,109nm,0.9s
IBND Bandar-abas 11.32 126 Pn Pn 22 16 05.0 -2.4
SNOP Sinop 11.42 314 Pn 22 16 10.2 +1.4
IMYA Miami 11.42 77 Pn Pn 22 16 11.0 +2.0
IDAH Dahanechah 11.48 95 Pn Pn 22 16 11.5 +1.6
SLWR Sila 11.49 154 P Pn 22 16 07.6 -2.2
SLWR P Pn 22 16 07.6 -2.2
SLWR S Sn 22 18 13.5 -4.7
SLWR S Sn 22 18 13.5 -4.7
TBJM Torbat-e-JAM 11.57 83 Pn Pn 22 16 12.8 +1.8
SHRT Shahrakht 11.67 91 Pn Pn 22 16 13.2 +1.0
KBAM BAM 11.70 114 Pn Pn 22 16 12.5 -0.2
KHNJ Kahnooj 11.81 121 Pn Pn 22 16 11.8 -2.4
ANTO Ankara 11.96 300 Pn 22 16 16.6 +0.4
ANTO Ankara 11.96 300 P Pn 22 16 20.4 +4.1
ANTO P Pn 22 16 20.4 +4.1
ANTO Ankara 11.96 300 P Pn 22 16 16.6 +0.4
ERBR Yeremizino-Bor 11.96 340 eP Pn 22 16 18.5 +2.4
ERBR eS Sn 22 18 36.3 +6.8
ERBR pmax pmax
comp=Z,2µm,1.7s
ERBR MLR MLR
comp=E,209µm,12.0s
ERBR MLR MLR
comp=N,140µm,17.0s
ERBR MLR MLR
comp=Z,45µm,11.0s
BR231 Keskin MP Arra 11.96 300 Pn 22 16 16.3 0.0
NHDN Nehbandan 12.00 102 Pn Pn 22 16 17.3 +0.3
SHME Shamm 12.04 132 iP Pn 22 16 14.4 -2.9
SNR=39
SHME Shamm 12.04 132 P Pn 22 16 14.8 -2.5
SNR=39
SHME P Pn 22 16 14.8 -2.5
SNR=39
SHME S Sn 22 18 26.5 -5.1
SHME S Sn 22 18 26.5 -5.1
GHWR Ruwais 12.05 150 P Pn 22 16 15.8 -1.7
GHWR P Pn 22 16 15.8 -1.7
GHWR S Sn 22 18 29.1 -2.7
GHWR S Sn 22 18 29.1 -2.7
BZK Bozkurt 12.12 311 Pn 22 16 19.5 +1.2
UMQ Umm Al-Quwin 12.15 135 iP Pn 22 16 17.5 -1.3
SNR=63
UMQ Umm Al-Quwin 12.15 135 P Pn 22 16 17.8 -1.0
SNR=52
BANOM Banah 12.23 132 iP Pn 22 16 18.3 -1.6
SNR=14
BANOM Banah 12.23 132 P Pn 22 16 19.0 -1.0
BANOM S Sn 22 18 32.7 -3.6
ANN Anapa 12.25 329 eP Pn 22 16 22.7 +2.6
ANN eS Sn 22 18 49.7 +13
ANN pmax pmax
comp=Z,1µm,1.2s
ANN MLR MLR
comp=N,4µm,17.0s
ANN MLR MLR
comp=E,72µm,16.0s
ANN MLR MLR
comp=Z,76µm,16.0s
AJN Ajban 12.54 140 iP Pn 22 16 22.2 -1.9
SNR=66
AJN Ajban 12.54 140 P Pn 22 16 22.6 -1.4
SNR=59
AJN P Pn 22 16 22.6 -1.4
SNR=59
AJN S Sn 22 18 37.7 -6.0
AJN S Sn 22 18 37.7 -6.0
MASF Masafi 12.55 134 P Pn 22 16 22.4 -2.0
SNR=190
MASF P Pn 22 16 22.4 -2.0
SNR=190
MASF S Sn 22 18 38.3 -6.0
SNR=8.4
MASF S Sn 22 18 38.3 -6.0
SNR=8.4
NAZ Nazwa, Dubai 12.56 137 iP Pn 22 16 22.9 -1.6
SNR=482
NAZ Nazwa, Dubai 12.56 137 P Pn 22 16 23.4 -1.1
SNR=482
NAZ P Pn 22 16 23.4 -1.1
SNR=482
NAZ S Sn 22 18 42.0 -2.4
NAZ S Sn 22 18 42.0 -2.4
MSFE Esma-Masafi 12.56 134 iP Pn 22 16 22.2 -2.3
SNR=109
MZWR Madinat Zayed 12.66 146 P Pn 22 16 24.3 -1.6
MZWR P Pn 22 16 24.3 -1.6
MZWR S Sn 22 18 41.6 -5.3
MZWR S Sn 22 18 41.6 -5.3
ASUD Al Ashush, Dub 12.67 139 iP Pn 22 16 24.0 -1.9
SNR=308
ASUD Al Ashush, Dub 12.67 139 P Pn 22 16 24.6 -1.2
SNR=309
ASUD P Pn 22 16 24.6 -1.2
SNR=309
ASUD P Pn 22 16 24.6 -1.2
SNR=309
ASUD S Sn 22 18 42.4 -4.6
SNR=5.9
ASUD S Sn 22 18 42.4 -4.6
SNR=5.9
ASUD S Sn 22 18 42.4 -4.6
SNR=5.9
MDH Madha 12.69 134 iP Pn 22 16 23.6 -2.7
SNR=191
MDH Madha 12.69 134 P Pn 22 16 23.5 -2.7
SNR=121
MDH P Pn 22 16 23.5 -2.7
SNR=121
MDH S Sn 22 18 41.5 -6.1
SNR=8.0
MDH S Sn 22 18 41.5 -6.1
SNR=8.0
FAQ Al Faqa, Dubai 12.71 138 iP Pn 22 16 24.5 -2.0
SNR=171
FAQ Al Faqa, Dubai 12.71 138 P Pn 22 16 24.7 -1.8
SNR=191
FAQ P Pn 22 16 24.7 -1.8
SNR=191
FAQ S Sn 22 18 42.3 -5.9
SNR=8.3
FAQ S Sn 22 18 42.3 -5.9
SNR=8.3
UOSS Minazif 12.91 135 Pn Pn 22 16 26.6 -2.6
UOSS Minazif 12.91 135 iP Pn 22 16 26.2 -3.0
SNR=90
UOSS Minazif 12.91 135 Pn Pn 22 16 25.9 -3.3
UOSS Minazif 12.91 135 P Pn 22 16 26.3 -2.8
UOSS P Pn 22 16 26.3 -2.8
UOSS S Sn 22 18 45.2 -7.7
SNR=6.6
UOSS S Sn 22 18 45.2 -7.7
SNR=6.6
HATD Hatta, Dubai 12.96 136 iP Pn 22 16 27.2 -2.6
SNR=168
HATD Hatta, Dubai 12.96 136 P Pn 22 16 27.5 -2.4
SNR=286
HATD P Pn 22 16 27.5 -2.4
SNR=286
HATD S Sn 22 18 48.2 -5.9
SNR=10
HATD S Sn 22 18 48.2 -5.9
SNR=10
ASHO Ashiyiah 13.02 137 iP Pn 22 16 29.2 -1.6
SNR=757
ASHO Ashiyiah 13.02 137 P Pn 22 16 28.2 -2.6
SNR=1469
ASHO P Pn 22 16 28.2 -2.6
SNR=1469
ASHO S Sn 22 18 47.4 -8.4
SNR=6.8
ASHO S Sn 22 18 47.4 -8.4
SNR=6.8
MZR Muzera 13.15 149 iP Pn 22 16 30.4 -2.1
SNR=690
MZR Muzera 13.15 149 P Pn 22 16 30.2 -2.3
SNR=691
MZR S Sn 22 18 49.0 -10
HRA Herat 13.19 86 Pn 22 16 32.8 -0.3
JASK Jask - Hormozg 13.26 128 Pn Pn 22 16 29.9 -4.0
JASK Jask - Hormozg 13.26 128 P Pn 22 16 30.4 -3.6
SNR=51
JASK S Sn 22 18 56.5 -5.0
MDUB Mudurnu 13.32 301 Pn 22 16 35.7 +0.9
ALNE Al Ain 13.35 139 iP Pn 22 16 32.9 -2.4
SNR=488
ALNE Al Ain 13.35 139 P Pn 22 16 32.7 -2.5
SNR=171
ALNE P Pn 22 16 32.7 -2.5
SNR=171
ALNE S Sn 22 18 56.2 -7.6
ALNE S Sn 22 18 56.2 -7.6
ZHDN Zahedan 13.38 109 Pn Pn 22 16 36.7 +0.9
ELL Elmali 13.47 284 Pn 22 16 38.4 +1.4
ELL Elmali 13.47 284 P Pn 22 16 38.4 +1.4
SOHO SOHO 13.72 137 iP Pn 22 16 36.3 -4.0
SNR=113
SOHO SOHO 13.72 137 P Pn 22 16 36.9 -3.4
SOHO P Pn 22 16 36.9 -3.4
SOHO S Sn 22 19 04.4 -8.4
SOHO S Sn 22 19 04.4 -8.4
SIM Simferopol' 13.93 322c iP Pn 22 16 43.8 +0.8
SIM eS Sn 22 19 24.0 +6.4
SIM pmax pmax
comp=Z,2µm,5.0s
SIM MLR MLR
comp=Z,36µm,20.0s
UMZA Um Al Zommool 14.16 144 P Pn 22 16 42.8 -3.5
UMZA P Pn 22 16 42.8 -3.5
UMZA S Sn 22 19 13.3 -10
UMZA S Sn 22 19 13.3 -10
ARQ Araqi 14.35 139 P Pn 22 16 45.8 -3.1
SNR=150
ARQ P Pn 22 16 45.8 -3.1
SNR=150
ARQ S Sn 22 19 23.5 -4.6
ARQ S Sn 22 19 23.5 -4.6
HOQ Hoqain 14.60 136 Pn Pn 22 16 49.0 -3.3
HOQ Hoqain 14.60 136 P Pn 22 16 49.0 -3.3
SNR=37
HOQ P Pn 22 16 49.0 -3.3
SNR=37
HOQ P Pn 22 16 49.0 -3.3
SNR=37
HOQ S Sn 22 19 25.6 -8.5
HOQ S Sn 22 19 25.6 -8.5
HOQ S Sn 22 19 25.6 -8.5
KULA Kula-Manisa 14.68 291 P Pn 22 16 56.0 +2.6
YER Yerkesik 14.80 285 P Pn 22 16 55.7 +0.6
ISK Istanbul-Kandi 15.05 301 P Pn 22 16 58.8 +0.5
BIDO Bidbid 15.12 134 Pn Pn 22 16 56.2 -3.2
SNR=56
BIDO P Pn 22 16 56.2 -3.2
SNR=56
BIDO P Pn 22 16 56.2 -3.2
SNR=56
BIDO S Sn 22 19 36.5 -10
BIDO S Sn 22 19 36.5 -10
BIDO S Sn 22 19 36.5 -10
KLYT Kilyos 15.12 301 P Pn 22 16 59.8 +0.5
comp=Z,1µm,1.2s,comp=Z,18µm
BSY Bisya 15.19 138 P Pn 22 16 55.8 -4.5
SNR=248
BSY P Pn 22 16 55.8 -4.5
SNR=248
BSY S Sn 22 19 44.0 -4.6
BSY S Sn 22 19 44.0 -4.6
CHBR Chabahar 15.21 122 Pn Pn 22 16 55.6 -4.9
DAT Datca 15.34 283 P Pn 22 17 02.9 +0.6
SMDO Samad 15.43 135 P Pn 22 16 58.7 -4.8
SNR=206
SMDO P Pn 22 16 58.7 -4.8
SNR=206
SMDO P Pn 22 16 58.7 -4.8
SNR=206
SMDO S Sn 22 19 46.2 -8.3
SMDO S Sn 22 19 46.2 -8.3
SMDO S Sn 22 19 46.2 -8.3
BAND Balkesir-Ban 15.52 297 ⇑P Pn 22 17 06.1 +1.6
SRVN Saravan 15.57 113 Pn Pn 22 17 03.9 -1.5
BODT Bodrum 15.57 285 P Pn 22 17 05.2 -0.1
WSAR Wadi Sarin 15.64 133 Pn Pn 22 17 04.0 -2.1
comp=Z,559nm,0.5s,baz=318,slow=9.3,SNR=118
WSAR Sn Sn 22 19 46.7 -13
baz=23,slow=13
WSAR LR LR 22 23 50.9
comp=Z,43µm,20.1s,baz=338,slow=40
KARP Karpathos 15.68 279 Pn 22 17 06.6 0.0
KARP IAmb IAmb 22 17 12.3
comp=Z,978nm,0.8s
KARP Karpathos 15.68 279 P Pn 22 17 08.0 +1.4
KARP Karpathos 15.68 279 P Pn 22 17 07.7 +1.1
KARP Karpathos 15.68 279 P Pn 22 17 07.8 +1.1
comp=Z,2µm,1.0s,comp=Z,37µm
NISR Nisiros 15.70 283 P Pn 22 17 08.1 +1.3
CTYL Yalikoy Yolu 15.73 301 P Pn 22 17 07.2 0.0
comp=Z,1µm,1.6s,comp=Z,19µm
NGCH Negor - Chabah 15.81 122 Pn Pn 22 17 07.9 -0.5
NGCH Negor - Chabah 15.81 122 P Pn 22 17 05.6 -2.8
SNR=13
JMDO Jabal Madar 15.99 136 P Pn 22 17 07.4 -3.4
SNR=60
JMDO P Pn 22 17 07.4 -3.4
SNR=60
JMDO P Pn 22 17 07.4 -3.4
SNR=60
JMDO S Sn 22 19 59.8 -8.3
JMDO S Sn 22 19 59.8 -8.3
JMDO S Sn 22 19 59.8 -8.3
WBK Wadi Bani Khal 16.32 134 Pn Pn 22 17 10.6 -4.3
WBK Wadi Bani Khal 16.32 134 P Pn 22 17 10.5 -4.3
SNR=93
WBK P Pn 22 17 10.5 -4.3
SNR=93
WBK S Sn 22 20 05.7 -10
WBK S Sn 22 20 05.7 -10
ZKR Zakros 16.47 278 P Pn 22 17 17.4 +0.6
EFOR EFORIE 16.59 310 ⇑P Pn 22 17 19.0 +0.9
TSCT Constanta Port 16.61 310 ⇓P P 22 17 19.8 -1.2
PRK Paraskevi 16.65 292 P Pn 22 17 20.0 +1.0
CHOS Chios island 16.69 289 P Pn 22 17 19.9 +0.3
PSN Preselentsi 16.70 308 iP Pn 22 17 19.2 -0.4
EZN Ezine 16.72 294 P Pn 22 17 19.9 +0.1
EZN Ezine 16.72 294 P P 22 17 22.2 +0.1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EZN | Ezine | 16.72 294 | | P | | Pn | 22 17 19.8 | 0.0 | |
| | comp=Z,477nm,1.6s,comp=Z,14µm | | | | | | | | |
| MFTR | Murfatlar | 16.77 310 | ⇓ | P | | P | 22 17 22.5 | -0.2 | |
| JURR | Jurilovca | 16.78 312 | ⇑ | P | | Pn | 22 17 20.9 | +0.3 | |
| JLN | Jalan Bani Buh | 16.93 134 | | P | | Pn | 22 17 18.6 | -4.0 | |
| | SNR=102 | | | | | | | | |
| JLN | | | | P | | Pn | 22 17 18.6 | -4.0 | |
| | SNR=102 | | | | | | | | |
| JLN | | | | S | | Sn | 22 20 30.6 | -0.2 | |
| JLN | | | | S | | Sn | 22 20 30.6 | -0.2 | |
| VRH | Novokhopyorsk | 16.93 350 | *e* | P | | Pn | 22 17 21.6 | -0.9 | |
| VRH | | | | eS | | Sn | 22 20 31.0 | +0.4 | |
| VRH | | | | pmax | | pmax | | | |
| | comp=Z,680nm,1.5s | | | | | | | | |
| VRH | | | | smax | | smax | | | |
| | comp=E,7µm,7.2s | | | | | | | | |
| VRH | | | | MLR | | MLR | | | |
| | comp=Z,17µm,11.0s | | | | | | | | |
| EDRB | Edirne | 16.95 301 | | P | | Pn | 22 17 21.9 | -0.9 | |
| SIGR | SIGRI | 16.96 292 | | P | | Pn | 22 17 22.5 | -0.4 | |
| PRD | Provadia | 16.97 306 | *i* | P | | P | 22 17 24.6 | -0.3 | |
| APE | Apeiranthos | 17.00 284 | | P | | Pn | 22 17 22.7 | -0.8 | |
| APE | Apeiranthos | 17.00 284 | ⇓ | P | | Pn | 22 17 23.9 | +0.4 | |
| APE | Apeiranthos | 17.00 284 | *c i* | P | | Pn | 22 17 23.0 | -0.5 | |
| APE | | | | pmax | | pmax | | | |
| | comp=Z,124nm,1.2s | | | | | | | | |
| MHTO | MHTO | 17.03 140 | | P | | Pn | 22 17 20.2 | -3.7 | |
| | SNR=232 | | | | | | | | |
| MHTO | | | | P | | Pn | 22 17 20.2 | -3.7 | |
| | SNR=232 | | | | | | | | |
| MHTO | | | | P | | Pn | 22 17 20.2 | -3.7 | |
| | SNR=232 | | | | | | | | |
| MHTO | | | | S | | Sn | 22 20 23.7 | -10 | |
| MHTO | | | | S | | Sn | 22 20 23.7 | -10 | |
| MHTO | | | | S | | Sn | 22 20 23.7 | -10 | |
| CAVK | Edirne/Enez-Ca | 17.03 297 | ⇓ | P | | P | 22 17 25.0 | -0.6 | |
| TLCR | | 17.04 314 | ⇓ | P | | Pn | 22 17 24.1 | +0.2 | |
| TLCR | | 17.04 314 | | P | | Pn | 22 17 24.0 | +0.2 | |
| SANT | Santorini | 17.04 282 | | | | Pn | 22 17 23.5 | -0.5 | |
| SANT | Santorini | 17.04 282 | | P | | Pn | 22 17 24.6 | +0.6 | |
| SANT | Santorini | 17.04 282 | ⇑ | P | | P | 22 17 25.1 | -0.7 | |
| ENEZ | Enez | 17.05 297 | | P | | Pn | 22 17 24.8 | +0.7 | |
| SNT1 | Gialos, Santor | 17.07 282 | | P | | Pn | 22 17 19.5 | -4.8 | |
| KHAM | Kharkiv | 17.07 338 | | P | | Pn | 22 17 24.3 | 0.0 | |
| CVDA | Cernavoda | 17.08 310 | ⇑ | P | | P | 22 17 25.6 | -0.6 | |
| THR3 | Thira Island, | 17.09 282 | | P | | Pn | 22 17 23.1 | -1.5 | |
| TPGR | Topolog | 17.10 312 | ⇑ | P | | Pn | 22 17 24.2 | -0.6 | |
| ICOR | Ion Corvin | 17.13 309 | ⇓ | P | | P | 22 17 26.3 | -0.4 | |
| VORD | Divnogorie | 17.14 345 | *e* | P | | Pn | 22 17 25.9 | +0.8 | |
| VORD | | | | eS | | Sn | 22 20 37.1 | +1.5 | |
| VORD | | | | pmax | | pmax | | | |
| | comp=Z,780nm,1.0s | | | | | | | | |
| VORD | | | | smax | | smax | | | |
| | comp=N,330nm,3.2s | | | | | | | | |
| VORD | | | | MLR | | MLR | | | |
| | comp=Z,11µm,12.0s | | | | | | | | |
| ALN | Alexandroupoli | 17.17 297 | | | | Pn | 22 17 24.2 | -1.4 | |
| ALN | | | | IAmb | | IAmb | 22 17 32.5 | | |
| | comp=Z,2µm,1.3s | | | | | | | | |
| ALN | Alexandroupoli | 17.17 297 | | P | | Pn | 22 17 25.8 | +0.2 | |
| ALN | Alexandroupoli | 17.17 297 | | P | | Pn | 22 17 24.2 | -1.4 | |
| ALN | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.3s | | | | | | | | |
| TLBR | Topalu | 17.18 311 | ⇑ | P | | Pn | 22 17 25.3 | -0.4 | |
| PURM | Purcari | 17.21 319 | ⇓ | P | | P | 22 17 27.1 | -0.4 | |
| PURM | Purcari | 17.21 319 | | P | | Pn | 22 17 24.2 | -1.8 | |
| | comp=Z,3µm,0.7s,comp=Z,25µm | | | | | | | | |
| PLTM | Poltava | 17.32 334 | | P | | Pn | 22 17 27.6 | +0.3 | |
| HARR | Harsova | 17.32 311 | ⇑ | P | | Pn | 22 17 27.4 | 0.0 | |
| HARR | Harsova | 17.32 311 | | P | | Pn | 22 17 27.4 | 0.0 | |
| DOK | Doka | 17.37 154 | | P | | Pn | 22 17 24.4 | -3.9 | |
| | SNR=134 | | | | | | | | |
| KSTL | Kastelli Herak | 17.39 278 | | P | | Pn | 22 17 26.6 | -1.8 | |
| VSR | Storozhevoye | 17.40 345 | *e* | P | | Pn | 22 17 27.1 | -1.3 | |
| VSR | | | | eS | | Sn | 22 20 43.6 | +1.6 | |
| VSR | | | | pmax | | pmax | | | |
| | comp=Z,630nm,0.6s | | | | | | | | |
| VSR | | | | smax | | smax | | | |
| | comp=N,4µm,7.4s | | | | | | | | |
| VSR | | | | MLR | | MLR | | | |
| | comp=Z,31µm,16.0s | | | | | | | | |
| CFR | Carcaliu | 17.44 313 | ⇑ | P | | Pn | 22 17 28.6 | -0.4 | |
| CFR | Carcaliu | 17.44 313 | | P | | Pn | 22 17 28.5 | -0.4 | |
| SMTH | Samothraki Isl | 17.45 296 | | P | | Pn | 22 17 29.1 | 0.0 | |
| IDI | Anoyia | 17.54 278 | | | | Pn | 22 17 28.4 | -1.9 | |
| IDI | | | | IAmb | | IAmb | 22 17 38.2 | | |
| | comp=Z,1µm,1.0s | | | | | | | | |
| IDI | Anoyia | 17.54 278 | | P | | Pn | 22 17 30.1 | -0.2 | |
| IDI | Anoyia | 17.54 278 | | P | | P | 22 17 31.1 | -0.3 | |
| IDI | | | | S | | S | 22 20 52.8 | -0.8 | |
| IDI | Anoyia | 17.54 278 | | Pn | | Pn | 22 17 30.1 | -0.2 | |
| | comp=Z,82nm,0.4s,baz=56,slow=13,SNR=50 | | | | | | | | |
| IDI | | | | S | | Sn | 22 20 48.4 | +2.7 | |
| | comp=Z,16nm,0.7s,baz=280,slow=17,SNR=1.1 | | | | | | | | |
| IDI | | | | PKPPKP | | P'P'df | 22 53 41.6 | -5.7 | |
| | comp=Z,4.9nm,0.8s,baz=195,slow=3.0,SNR=3.4 | | | | | | | | |
| GIUM | Giurgiulesti | 17.56 314 | ⇑ | P | | Pn | 22 17 30.4 | +0.1 | |
| LIA | Limnos Island | 17.59 294 | | P | | Pn | 22 17 29.7 | -1.1 | |
| AMRR | Amara | 17.66 310 | ⇑ | P | | Pn | 22 17 31.8 | +0.2 | |
| AMRR | Amara | 17.66 310 | | P | | Pn | 22 17 31.8 | +0.2 | |
| TMBK | Timbaki Herakl | 17.66 278 | | P | | Pn | 22 17 31.9 | +0.2 | |
| DQM | DQM | 17.68 143 | | P | | Pn | 22 17 27.8 | -4.3 | |
| | SNR=57 | | | | | | | | |
| DQM | | | | P | | Pn | 22 17 27.8 | -4.3 | |
| | SNR=57 | | | | | | | | |
| DQM | | | | S | | Sn | 22 20 41.1 | -8.1 | |
| DQM | | | | S | | Sn | 22 20 41.1 | -8.1 | |
| SCHLR | Schela | 17.78 313 | ⇑ | P | | Pn | 22 17 32.8 | -0.2 | |
| NEGRR | Negrea | 17.78 313 | ⇓ | P | | P | 22 17 33.7 | -0.3 | |
| SCTR | Scanteiesti | 17.79 314 | ⇓ | P | | Pn | 22 17 33.0 | -0.2 | |
| SCHL | Schela | 17.79 313 | ⇑ | P | | Pn | 22 17 33.0 | -0.3 | |
| ABKAR | Akbulak array | 17.80 30 | | | | Pn | 22 17 31.6 | -1.8 | |
| ABKAR | Akbulak array | 17.80 30 | | | | Pn | 22 17 31.9 | -1.5 | |
| VORR | Voronezh | 17.82 346 | | P | | Pn | 22 17 33.1 | -0.5 | |
| VORR | | | | eS | | Sn | 22 20 53.3 | +1.2 | |
| VORR | | | | pmax | | pmax | | | |
| | comp=Z,700nm,0.4s | | | | | | | | |
| VLDR | Vladesti | 17.83 315 | ⇓ | P | | Pn | 22 17 34.0 | +0.3 | |
| BELG | Belogornoye | 17.83 3 | | P | | Pn | 22 17 32.1 | -1.6 | |
| | comp=Z,6.8nm,0.3s,baz=81,slow=0.9,SNR=84 | | | | | | | | |
| BELG | | | | S | | Sn | 22 20 50.0 | -2.3 | |
| | comp=Z,128nm,1.0s,baz=83,slow=19,SNR=1.4 | | | | | | | | |
| BELG | | | | LR | | LR | 22 26 13.0 | | |
| | comp=Z,20µm,19.3s,baz=186,slow=43 | | | | | | | | |
| BELG | | | | ScS | | ScS | 22 29 22.4 | -3.0 | |
| | comp=Z,26nm,1.0s,baz=239,slow=19,SNR=2.2 | | | | | | | | |
| | comp=Z,558nm,0.9s | | | | | | | | |
| BELG | Belogornoye | 17.83 3 | *d i* | P | | Pn | 22 17 31.8 | -1.8 | |
| BELG | | | | pmax | | pmax | | | |
| | comp=Z,96nm,0.9s | | | | | | | | |
| IZVR | Izvoarele | 17.85 313 | ⇓ | P | | P | 22 17 34.4 | -0.3 | |
| SLCR | Slobozia Conac | 17.88 313 | ⇓ | P | | P | 22 17 34.7 | -0.2 | |
| KDZ | Kurdzhali | 17.88 299 | *i* | P | | P | 22 17 36.1 | +1.0 | |
| MHLO | Agia Marina, M | 17.89 283 | | P | | P | 22 17 38.0 | +2.8 | |
| WHFO | Wadi Hawf | 17.90 156 | | P | | Pn | 22 17 30.7 | -4.1 | |
| | SNR=138 | | | | | | | | |
| WHFO | | | | P | | Pn | 22 17 30.7 | -4.1 | |
| | SNR=138 | | | | | | | | |
| WHFO | | | | P | | Pn | 22 17 30.7 | -4.1 | |
| | SNR=138 | | | | | | | | |
| SKY | Skiros Island | 17.92 290 | | P | | P | 22 17 35.6 | +0.1 | |
| ELND | Elena | 17.92 304 | ⇓ | P | | P | 22 17 36.1 | +0.6 | |
| TUDR | | 17.94 313 | ⇑ | P | | P | 22 17 35.5 | -0.1 | |
| VARL | Varlezi | 17.99 314 | ⇓ | P | | P | 22 17 36.1 | -0.1 | |
| PGOR | Pogoanele | 18.02 311 | ⇓ | P | | P | 22 17 36.8 | +0.3 | |
| AKTO | Aktyubinsk | 18.02 25 | | P | | P | 22 17 36.7 | +0.2 | |
| | comp=Z,7.1nm,0.3s,baz=208,slow=10,SNR=67 | | | | | | | | |
| AKTO | | | | S | | Sn | 22 20 59.5 | +2.6 | |
| | comp=Z,36nm,0.9s,baz=284,slow=8.9,SNR=1.7 | | | | | | | | |
| AKTO | | | | LR | | LR | 22 26 26.9 | | |
| | comp=Z,20µm,19.4s,baz=220,slow=43 | | | | | | | | |
| AKTO | | | | ScS | | ScS | 22 29 23.9 | -2.3 | |
| | comp=Z,1.3nm,0.6s,baz=56,slow=21,SNR=1.0 | | | | | | | | |
| | comp=Z,135nm,0.7s | | | | | | | | |
| MILM | Milestii Mici | 18.02 318 | *i* | P | | Pn | 22 17 34.0 | -2.1 | |
| | comp=Z,7µm,2.9s | | | | | | | | |
| MILM | | | | *e*S | | Sn | 22 20 54.0 | -3.0 | |
| MILM | | | | *e*L | | L | 22 26 24.0 | | |
| MILM | | | | LRM | | MLR | 22 26 58.0 | | |
| | comp=Z,20µm,13.0s | | | | | | | | |
| MILM | Milestii Mici | 18.02 318 | ⇓ | P | | Pn | 22 17 36.1 | 0.0 | |
| MILM | Milestii Mici | 18.02 318 | *i* | P | | Pn | 22 17 34.0 | -2.1 | |
| MILM | | | | *e*S | | Sn | 22 20 54.0 | -3.0 | |
| MILM | | | | pmax | | pmax | | | |
| | comp=Z,7µm,2.9s | | | | | | | | |
| MILM | | | | MLR | | MLR | | | |
| | comp=Z,20µm,13.0s | | | | | | | | |
| KIS | Kishinev | 18.07 319 | *e* | P | | Pn | 22 17 34.5 | -2.2 | |
| | comp=Z,5µm,4.6s | | | | | | | | |
| KIS | Kishinev | 18.07 319 | | LRM | | MLR | 22 26 53.0 | | |
| | comp=Z,8µm,14.0s | | | | | | | | |
| KIS | Kishinev | 18.07 319 | ⇓ | P | | Pn | 22 17 36.4 | -0.3 | |
| KIS | Kishinev | 18.07 319 | *e* | P | | Pn | 22 17 34.5 | -2.2 | |
| KIS | | | *i* | S | | Sn | 22 20 54.0 | -4.1 | |
| KIS | | | | pmax | | pmax | | | |
| | comp=Z,5µm,4.6s | | | | | | | | |
| KIS | | | | MLR | | MLR | | | |
| | comp=Z,8µm,14.0s | | | | | | | | |
| KIS | Kishinev | 18.07 319 | | P | | Pn | 22 17 35.4 | -1.3 | |
| | comp=Z,419nm,1.3s,comp=Z,8µm | | | | | | | | |
| KIS | Kishinev | 18.07 319 | *e* | PP | | PnPn | 22 17 53.0 | +5.3 | |
| KIS | Kishinev | 18.07 319 | *e* | S | | Sn | 22 20 54.0 | -4.1 | |
| LEOM | Leova | 18.08 316 | ⇑ | P | | P | 22 17 37.1 | 0.0 | |
| LEOM | Leova | 18.08 316 | | P | | P | 22 17 37.1 | 0.0 | |
| THAS | Thassos island | 18.08 296 | | P | | Pn | 22 17 36.3 | -0.6 | |
| GVD | Gavdhos | 18.23 277 | | P | | Pn | 22 17 37.5 | -1.3 | |
| KYMI | Kymi, Euboea I | 18.24 289 | | P | | Pn | 22 17 38.0 | -0.8 | |
| GRER | | 18.25 312 | ⇓ | P | | P | 22 17 39.9 | +0.8 | |
| IMMV | Iera Moni Meta | 18.27 279 | | P | | Pn | 22 17 38.8 | -0.4 | |
| ABTO | Aybut | 18.27 158 | | P | | Pn | 22 17 35.8 | -3.7 | |
| | SNR=66 | | | | | | | | |
| ABTO | | | | P | | Pn | 22 17 35.8 | -3.7 | |
| | SNR=66 | | | | | | | | |
| COSR | Cosmesti PH | 18.29 314 | ⇓ | P | | P | 22 17 40.0 | +0.6 | |
| DION | Dionisos Attik | 18.32 287 | | P | | P | 22 17 40.6 | +0.7 | |
| BIR | Birlad | 18.32 315 | ⇓ | P | | P | 22 17 39.8 | 0.0 | |
| BIR | Birlad | 18.32 315 | | P | | P | 22 17 39.8 | 0.0 | |
| KAVA | Kavala | 18.32 297 | | P | | Pn | 22 17 39.0 | -0.8 | |
| GHRR | | 18.34 314 | ⇑ | P | | P | 22 17 40.1 | +0.1 | |
| GHRR | | 18.34 314 | | P | | Pn | 22 17 39.5 | -0.5 | |
| SGRR | Singureni | 18.36 308 | ⇓ | P | | P | 22 17 41.1 | +0.8 | |
| SULR | | 18.37 309 | ⇓ | P | | P | 22 17 41.9 | +1.5 | |
| BUC1 | Bucharest | 18.38 308 | ⇓ | P | | P | 22 17 41.2 | +0.7 | |
| BUC1 | Bucharest | 18.38 308 | | P | | P | 22 17 41.1 | +0.7 | |
| ISR | Istrita | 18.39 311 | ⇑ | P | | P | 22 17 41.3 | +0.6 | |
| ISR | Istrita | 18.39 311 | | P | | P | 22 17 41.1 | +0.4 | |
| ISR | Istrita | 18.39 311 | | P | | P | 22 17 41.2 | +0.5 | |
| | comp=Z,1µm,3.0s,comp=Z,43µm | | | | | | | | |
| ODBI | Odobesti | 18.39 313 | ⇑ | P | | Pn | 22 17 41.2 | +0.6 | |
| ODBI | Odobesti | 18.39 313 | | P | | Pn | 22 17 40.8 | +0.2 | |
| | comp=Z,401nm,1.1s,comp=Z,4µm | | | | | | | | |
| PANC | Panciu | 18.39 314 | ⇑ | P | | P | 22 17 40.6 | -0.1 | |
| ATHU | Athens Univers | 18.43 287 | | P | | P | 22 17 40.4 | -0.7 | |
| RBK | Rabkut | 18.43 155 | | P | | P | 22 17 37.2 | -4.0 | |
| | SNR=107 | | | | | | | | |
| RBK | | | | P | | P | 22 17 37.2 | -4.0 | |
| | SNR=107 | | | | | | | | |
| RODP | Rodopos | 18.45 279 | | P | | Pn | 22 17 42.3 | +0.9 | |
| PVL | Pavlikeni | 18.47 304 | *i* | P | | Pn | 22 17 42.5 | +0.9 | |
| ATH | Athens Observa | 18.48 287 | | P | | P | 22 17 39.7 | -2.0 | |
| SHAO | Shalim | 18.49 151 | *i* | P | | P | 22 17 37.4 | -4.4 | |
| | SNR=46 | | | | | | | | |
| SHAO | Shalim | 18.49 151 | | P | | P | 22 17 39.4 | -2.4 | |
| | SNR=46 | | | | | | | | |
| SHAO | | | | P | | P | 22 17 39.4 | -2.4 | |
| | SNR=46 | | | | | | | | |
| DMTO | DMTO | 18.50 153 | | P | | P | 22 17 38.6 | -3.4 | |
| | SNR=110 | | | | | | | | |
| ZIMR | | 18.54 305 | | P | | Pn | 22 17 43.6 | +1.2 | |
| OUR | Ouranopolis | 18.58 295 | | P | | P | 22 17 42.6 | -0.1 | |
| PLAR | PLOIESTI | 18.62 310 | ⇑ | P | | Pn | 22 17 44.5 | +1.0 | |
| VRI | Vrincioaia | 18.64 313 | ⇑ | P | | Pn | 22 17 44.4 | +0.7 | |
| VRI | Vrincioaia | 18.64 313 | | P | | P | 22 17 43.2 | -0.2 | |
| VRI | Vrincioaia | 18.64 313 | | P | | P | 22 17 42.4 | -1.0 | |
| | comp=Z,225nm,1.1s,comp=Z,3µm | | | | | | | | |
| KOKK | Kokkinochori, | 18.66 296 | | P | | P | 22 17 42.5 | -1.2 | |
| PLOR5 | Plostina Array | 18.67 313 | | P | | P | 22 17 43.4 | -0.4 | |
| | comp=Z,543nm,1.1s,comp=Z,25µm | | | | | | | | |
| PLOR | Plostina | 18.68 313 | ⇓ | P | | Pn | 22 17 44.2 | 0.0 | |
| PLOR | Plostina | 18.68 313 | | P | | P | 22 17 43.5 | -0.4 | |
| PLOR3 | Plostina Array | 18.69 313 | | P | | P | 22 17 43.2 | -0.7 | |
| | comp=Z,540nm,1.2s,comp=Z,21µm | | | | | | | | |
| NEHR | Nehoiu | 18.69 311 | ⇓ | P | | Pn | 22 17 45.2 | +0.8 | |
| SIMJ | Simiganj | 18.69 71 | | P | | P | 22 17 44.1 | -0.1 | |
| PAIG | Paliouri | 18.73 293 | | P | | P | 22 17 44.0 | -0.4 | |
| KBL | Kabul | 18.76 84 | | P | | Pn | 22 17 46.0 | +0.6 | |
| KBL | Kabul | 18.76 84 | | P | | Pn | 22 17 46.6 | +1.2 | |
| | SNR=206 | | | | | | | | |
| KBL | | | | P | | Pn | 22 17 46.6 | +1.2 | |
| | SNR=206 | | | | | | | | |
| KBL | Kabul | 18.76 84 | | P | | Pn | 22 17 46.0 | +0.6 | |
| LPSR | Galich'ya Gora | 18.76 346 | *e* | P | | P | 22 17 43.3 | -1.3 | |
| LPSR | | | | *e*S | | Sn | 22 21 10.8 | -3.9 | |
| LPSR | | | | pmax | | pmax | | | |
| | comp=Z,1µm,0.9s | | | | | | | | |
| LPSR | | | | smax | | smax | | | |
| | comp=N,7µm,8.5s | | | | | | | | |
| LPSR | | | | MLR | | MLR | | | |
| | comp=Z,18µm,13.0s | | | | | | | | |
| ANKY | Antikythira Is | 18.80 280 | | P | | P | 22 17 42.5 | -2.7 | |
| CHGR | Chuyangaron | 18.81 71 | | P | | Pn | 22 17 46.6 | +0.7 | |
| CHGR | Chuyangaron | 18.81 71 | | P | | Pn | 22 17 46.6 | +0.7 | |
| CHGR | | | | pmax | | pmax | | | |
| | comp=Z,248nm,0.8s | | | | | | | | |
| VILL | Villia | 18.82 288 | | P | | P | 22 17 44.9 | -0.5 | |
| COPA | Copaceanca | 18.82 307 | ⇑ | P | | Pn | 22 17 46.3 | +0.5 | |
| IAS | Iasi | 18.88 317 | ⇓ | P | | P | 22 17 45.3 | -0.7 | |
| IAS | Iasi | 18.88 317 | | P | | P | 22 17 45.3 | -0.7 | |
| NVR | Nevrokopi | 18.88 298 | | P | | Pn | 22 17 47.0 | +0.3 | |
| KRND | KRANIDI | 18.91 285 | | P | | P | 22 17 46.0 | -0.3 | |
| MLR | Muntele Rosu | 18.94 311 | | P | | P | 22 17 46.4 | -0.4 | |
| MLR | | | | IAmb | | IAmb | 22 17 55.6 | | |
| | comp=Z,2µm,1.7s | | | | | | | | |
| MLR | Muntele Rosu | 18.94 311 | | P | | P | 22 17 47.1 | +0.3 | |
| | comp=Z,1.6nm,0.3s,baz=103,slow=6.9,SNR=52 | | | | | | | | |
| MLR | | | | S | | Sn | 22 21 17.0 | -2.4 | |
| | comp=Z,20nm,1.0s,baz=83,slow=16,SNR=1.2 | | | | | | | | |
| MLR | | | | ScP | | ScP | 22 25 48.4 | +0.3 | |
| | comp=Z,11nm,0.9s,baz=288,slow=4.7,SNR=2.0 | | | | | | | | |
| MLR | | | | ScS | | ScS | 22 29 30.7 | +1.2 | |
| | comp=Z,4.5nm,1.1s,baz=85,slow=22,SNR=2.0 | | | | | | | | |
| MLR | | | | P3KPbc | | | 22 52 06.9 | | |
| | comp=Z,0.5nm,0.6s,baz=270,slow=4.0,SNR=1.5 | | | | | | | | |
| | comp=Z,262nm,1.1s | | | | | | | | |
| MLR | Muntele Rosu | 18.94 311 | ⇓ | P | | Pn | 22 17 47.8 | +0.3 | |
| MLR | Muntele Rosu | 18.94 311 | | P | | P | 22 17 46.4 | -0.4 | |
| MLR | | | | pmax | | pmax | | | |
| | comp=Z,2µm,1.7s | | | | | | | | |
| MLR | Muntele Rosu | 18.94 311 | | P | | P | 22 17 46.8 | 0.0 | |
| | comp=Z,762nm,1.1s,comp=Z,23µm | | | | | | | | |
| COVR | Voineasa-Covas | 18.95 312 | ⇑ | P | | Pn | 22 17 48.2 | +0.7 | |
| KTHA | Kythira Island | 18.98 282 | | P | | P | 22 17 45.5 | -1.7 | |
| MMB | Musomishta | 19.01 298 | *i* | P | | Pn | 22 17 49.3 | +1.0 | |
| SORM | Soroca | 19.02 321 | ⇑ | P | | P | 22 17 46.9 | -0.5 | |
| SORM | Soroca | 19.02 321 | | P | | P | 22 17 47.4 | -0.1 | |
| SORM | Soroca | 19.02 321 | | P | | P | 22 17 45.2 | -2.3 | |
| | comp=Z,1µm,2.2s,comp=Z,50µm | | | | | | | | |
| TESR | Tescani | 19.02 315 | ⇓ | P | | P | 22 17 47.5 | 0.0 | |
| TESR | Tescani | 19.02 315 | | P | | P | 22 17 46.0 | -1.6 | |
| | comp=Z,1µm,1.4s,comp=Z,30µm | | | | | | | | |
| SRS | Serrai | 19.03 297 | | P | | P | 22 17 47.7 | 0.0 | |
| LOUT | Loutraki | 19.07 287 | | P | | P | 22 17 47.2 | -1.0 | |
| VLI | Veliai | 19.07 283 | | P | | P | 22 17 46.0 | -2.2 | |
| ONER | Baraj Valea Uz | 19.08 314 | ⇑ | P | | Pn | 22 17 48.8 | -0.2 | |
| HUMR | Humele | 19.13 308 | ⇓ | P | | Pn | 22 17 49.6 | 0.0 | |
| SOH | Sokhos | 19.14 296 | | P | | P | 22 17 49.1 | +0.1 | |
| TURR | Turia | 19.17 313 | ⇓ | P | | Pn | 22 17 50.3 | +0.2 | |
| STFAR | Stefanesti-Arg | 19.28 309 | ⇑ | P | | Pn | 22 17 52.0 | +0.5 | |
| HORT | Hortiatis | 19.29 295 | | P | | P | 22 17 50.2 | -0.4 | |
| VLAD | Vladila | 19.31 306 | ⇑ | P | | P | 22 17 51.1 | +0.4 | |
| OZUR | | 19.33 313 | ⇓ | P | | P | 22 17 51.1 | +0.2 | |
| AXAR | Agios Charalam | 19.37 289 | | P | | P | 22 17 51.4 | -0.1 | |
| MTUR | Matau | 19.37 310 | ⇑ | P | | Pn | 22 17 53.0 | +0.4 | |
| MTUR | Matau | 19.37 310 | | P | | Pn | 22 17 52.8 | +0.2 | |
| BOSR | Bodos | 19.39 312 | ⇓ | P | | Pn | 22 17 52.6 | -0.2 | |
| THE | Thessaloniki | 19.40 295 | | P | | P | 22 17 51.1 | -0.6 | |
| VOIR | | 19.48 310 | ⇑ | P | | Pn | 22 17 53.9 | 0.0 | |
| VOIR | | 19.48 310 | | P | | Pn | 22 17 53.4 | -0.4 | |
| VOIR | | 19.48 310 | | P | | Pn | 22 17 53.5 | -0.4 | |
| | comp=Z,2µm,1.1s,comp=Z,45µm | | | | | | | | |
| DOPR | Dopca | 19.51 312 | ⇑ | P | | Pn | 22 17 53.8 | -0.4 | |
| MPEP | Malo Peshtene | 19.54 303 | *i* | P | | Pn | 22 17 54.7 | +0.2 | |
| KNT | Kendrikon | 19.55 297 | | P | | P | 22 17 52.5 | -0.9 | |
| GUR | Goura | 19.57 287 | | P | | P | 22 17 52.4 | -1.3 | |
| ARR | Arges | 19.71 310 | ⇑ | P | | Pn | 22 17 56.3 | -0.3 | |
| KLV | Kalavryta, Ach | 19.72 287 | | P | | P | 22 17 53.6 | -1.8 | |
| PRAR | RASCA | 19.72 316 | ⇑ | P | | P | 22 17 55.3 | 0.0 | |
| GAR | Garm | 19.74 70 | | P | | P | 22 17 56.0 | +0.4 | |
| KLMT | Kalamata | 19.77 284 | | P | | Pn | 22 18 06.9 | +10 | |
| CHM | Chimkent | 19.80 60 | *e* | P | | Pn | 22 17 57.6 | -0.1 | |
| | baz=60 | | | | | | | | |
| CHM | | | *e* | S | | Sn | 22 21 42.1 | +1.9 | |
| | baz=60 | | | | | | | | |
| CHM | | | | LR | | LR | 22 26 14.7 | | |
| | baz=60 | | | | | | | | |
| CHM | Chimkent | 19.80 60 | *e* | P | | Pn | 22 17 57.6 | -0.1 | |
| CHM | | | *e* | S | | Sn | 22 21 42.0 | +1.9 | |
| MAKR | Makrakomi, Fth | 19.81 290 | | P | | P | 22 17 56.2 | 0.0 | |
| TYRN | Tyrnavos | 19.81 292 | | P | | P | 22 17 55.9 | -0.3 | |
| NDNU | Novodnistrovsk | 19.82 321 | | P | | P | 22 17 54.9 | -1.3 | |
| VAY | Valandovo | 19.83 297 | *i* | P | | P | 22 17 56.1 | -0.3 | |
| ANX | Ano Chora | 19.93 289 | | P | | P | 22 17 56.8 | -0.9 | |
| EFP | Efpalio | 19.94 288 | | P | | P | 22 17 57.1 | -0.5 | |
| DRBR | Darabani | 19.99 319 | ⇓ | P | | P | 22 17 58.3 | +0.2 | |
| UPR | University Cam | 20.02 288 | | P | | Pn | 22 18 00.1 | -0.2 | |
| PYL | PYLOS | 20.03 284 | | P | | P | 22 17 55.9 | -2.7 | |
| BAIL | Bailesti | 20.03 305 | ⇑ | P | | P | 22 17 59.2 | +0.6 | |
| EVR | Evrytania | 20.05 290 | | P | | P | 22 17 58.8 | -0.1 | |
| TNR | Turnu Rosu | 20.06 310 | ⇓ | P | | P | 22 17 59.7 | +0.8 | |
| TNR | Turnu Rosu | 20.06 310 | | P | | P | 22 17 59.7 | +0.8 | |
| DRO | Drossia | 20.07 287 | | P | | P | 22 17 58.4 | -0.7 | |
| MDB | Medias | 20.21 311 | ⇑ | P | | Pn | 22 18 01.5 | -1.0 | |
| MDB | Medias | 20.21 311 | | P | | Pn | 22 18 01.5 | -1.0 | |
| AK07 | Malin Array Si | 20.23 327 | | P | | P | 22 17 59.3 | -1.4 | |
| AK09 | Malin Array Si | 20.24 327 | | P | | P | 22 17 59.1 | -1.7 | |
| AK10 | Malin Array Si | 20.25 327 | | P | | P | 22 17 59.1 | -1.8 | |
| PVO | Paravola | 20.25 289 | | P | | P | 22 18 00.2 | -0.8 | |
| BTK | Batken | 20.25 67 | | P | | Pn | 22 18 02.4 | -0.7 | |
| BTK | | | | IAMs_20 | | IAMs_20 | 22 26 55.5 | | |
| | comp=Z,40µm,20.0s | | | | | | | | |
| BTK | Batken | 20.25 67 | | P | | Pn | 22 18 02.4 | -0.7 | |
| BTK | | | | pmax | | pmax | | | |
| | comp=Z,328nm,1.1s | | | | | | | | |
| BTK | | | | MLR | | MLR | | | |
| | comp=Z,40µm,20.0s | | | | | | | | |
| AK08 | Malin Array Si | 20.27 327 | | P | | P | 22 17 59.5 | -1.6 | |
| KMPD | K-Podol'skiy | 20.28 320 | | P | | Pn | 22 17 59.6 | -3.6 | |
| KMPD | | | | P | | P | 22 17 58.8 | -2.4 | |
| AK05 | Malin Array Si | 20.28 327 | | P | | P | 22 17 59.7 | -1.5 | |
| LOT | Lotru | 20.29 309 | ⇓ | P | | P | 22 18 02.4 | +0.8 | |
| TGMR | Targu Mures | 20.30 313 | ⇓ | P | | Pn | 22 18 02.6 | -1.0 | |
| AK02 | Malin Array Si | 20.31 327 | | P | | P | 22 17 59.9 | -1.6 | |
| AK12 | Malin Array Si | 20.32 327 | | P | | P | 22 18 00.0 | -1.7 | |
| AK01 | Malin Array Si | 20.33 328 | | P | | P | 22 18 00.2 | -1.6 | |
| AKASG | Malin Array Be | 20.33 328 | | P | | P | 22 17 59.8 | -2.0 | |
| AKASG | | | | IAmb | | IAmb | 22 18 07.7 | | |
| | comp=Z,1µm,1.1s | | | | | | | | |
| AKASG | Malin Array Be | 20.33 328 | | P | | P | 22 18 00.3 | -1.4 | |
| | comp=Z,61nm,0.5s,baz=138,slow=8.9,SNR=105 | | | | | | | | |
| AKASG | | | | S | | S | 22 21 45.2 | -4.3 | |
| | comp=Z,8.1nm,0.8s,baz=134,slow=23,SNR=2.1 | | | | | | | | |
| AKASG | | | | ScP | | ScP | 22 25 50.2 | -0.8 | |
| | comp=Z,2.8nm,0.8s,baz=154,slow=1.7,SNR=2.3 | | | | | | | | |
| AKASG | | | | LR | | LR | 22 27 24.2 | | |
| | comp=Z,34µm,19.9s,baz=122,slow=41 | | | | | | | | |
| AKASG | | | | ScS | | ScS | 22 29 35.9 | +2.3 | |
| | comp=Z,0.2nm,0.3s,baz=131,slow=2.8,SNR=1.3 | | | | | | | | |
| | comp=Z,51nm,0.5s | | | | | | | | |
| AKBB | Malin Array Si | 20.33 328 | | P | | P | 22 17 59.7 | -2.1 | |
| AKBB | Malin Array Si | 20.33 328 | *c i* | P | | P | 22 18 00.1 | -1.7 | |
| AKBB | Malin Array Si | 20.33 328 | | P | | P | 22 18 00.0 | -1.7 | |
| AK14 | Malin Array Si | 20.33 327 | | P | | P | 22 18 00.4 | -1.4 | |
| KIEV | Kiev | 20.33 328 | | P | | P | 22 17 59.9 | -1.9 | |
| KIEV | Kiev | 20.33 328 | *i* | P | | P | 22 18 00.2 | -1.6 | |
| | SNR=345 | | | | | | | | |
| KIEV | Kiev | 20.33 328 | ⇓ | P | | P | 22 18 01.0 | -0.8 | |
| KIEV | Kiev | 20.33 328 | | P | | P | 22 18 00.9 | -0.8 | |
| KIEV | Kiev | 20.33 328 | | P | | P | 22 17 59.2 | -2.6 | |
| | comp=Z,3µm,1.4s,comp=Z,85µm | | | | | | | | |
| SRE | Strehaia | 20.35 307 | ⇑ | P | | Pn | 22 18 03.5 | -0.7 | |
| SRE | Strehaia | 20.35 307 | | P | | Pn | 22 18 03.2 | -1.0 | |
| PUNG | Punghina | 20.40 305 | ⇑ | P | | P | 22 18 03.0 | +0.5 | |
| BURAR | Bucovina Array | 20.44 316 | | P | | P | 22 18 02.3 | -0.8 | |
| BURAR | Bucovina Array | 20.44 316 | ⇓ | P | | P | 22 18 03.7 | +0.5 | |
| BURAR | Bucovina Array | 20.44 316 | | P | | P | 22 18 03.6 | +0.5 | |
|

**OBN Obninsk 21.61 345** P **P** **22 18 13.5 -2.0**
**OBN Obninsk 21.61 345** P **P** **22 18 15.8 +0.3**
comp=Z,361nm,0.5s,baz=322,slow=1.4,SNR=32
OBN S **S** **22 22 09.0 -5.6**
comp=Z,248nm,1.1s,baz=222,slow=22,SNR=2.9
OBN LR LR 22 27 40.7
comp=Z,20μm,19.0s,baz=155,slow=40
comp=Z,361nm,0.5s
**OBN Obninsk 21.61 345***c* *i*P **P** **22 18 13.4 -2.1**
OBN *e*PPP PPP 22 18 44.6
OBN *e* 22 22 10.4
OBN *e* 22 22 14.0
OBN *e*SSS SSS 22 22 51.4
OBN pmax pmax
comp=Z,1μm,1.7s
OBN MLR MLR
comp=Z,19μm,16.0s
**OBN Obninsk 21.61 345** P **P** **22 18 13.3 -2.2**
comp=Z,910nm,1.5s,comp=Z,13μm
**KEK Kerkira 21.67 291** P **P** **22 18 13.9 -2.5**
KEK IAmb IAmb 22 18 27.0
comp=Z,684nm,0.9s
**BZS Buzias 21.75 308** ⇑P **P** **22 18 16.6 -0.6**
**BZS Buzias 21.75 308** P **P** **22 18 16.6 -0.6**
**TIR Tirane 21.83 296** P **P** **22 18 16.8 -1.3**
**TIR Tirane 21.83 296** *i*P **P** **22 18 17.0 -1.1**
**TIR Tirane 21.83 296** ⇑P **P** **22 18 18.9 +0.9**
**TIR Tirane 21.83 296** P **P** **22 18 16.8 -1.3**
TIR pmax pmax
comp=Z,3μm,1.9s
TIR MLR MLR
comp=Z,25μm,20.0s
**TIR Tirane 21.83 296** P **P** **22 18 16.5 -1.6**
comp=Z,816nm,1.5s,comp=Z,25μm
**BCI Bajram Curri 21.87 299** *i*P **P** **22 18 17.5 -1.0**
**BCI Bajram Curri 21.87 299** *i*P **P** **22 18 23.6 +5.0**
**PUK Puka 21.93 298** P **P** **22 18 17.2 -2.1**
PUK IAMs_20 IAMs_20 22 28 02.1
comp=Z,46μm,20.0s
**PUK Puka 21.93 298** *i*P **P** **22 18 18.4 -0.9**
**SIRR Siria 21.97 309** ⇓P **P** **22 18 19.9 +0.4**
**MOS Moscow 21.98 347** *e*P **P** **22 18 17.6 -1.9**
MOS *e*S **S** **22 22 17.3 -4.5**
MOS pmax pmax
comp=Z,1μm,1.3s
MOS pmax pmax
comp=N,1μm,1.1s
MOS pmax pmax
comp=E,377nm,1.2s
MOS MLR MLR
comp=Z,9μm,10.0s
**BANR Banloc 21.98 307** ⇓P **P** **22 18 20.3 +0.6**
**VLO Vlora 21.98 293** P **P** **22 18 17.9 -1.8**
VLO IAmb IAmb 22 18 40.1
comp=Z,886nm,1.0s
VLO IAMs_20 IAMs_20 22 28 13.6
comp=Z,45μm,21.0s
**VLO Vlora 21.98 293** *i*P **P** **22 18 20.1 +0.4**
**VLO Vlora 21.98 293** P **P** **22 18 17.9 -1.8**
VLO pmax pmax
comp=Z,886nm,1.0s
VLO MLR MLR
comp=Z,45μm,21.0s
**PVY Plav 22.00 299** ⇓*i*P **P** **22 18 18.0 -2.0**
**TIM Timisoara 22.05 308** ⇓P **P** **22 18 21.5 +1.1**
**TIM Timisoara 22.05 308** P **P** **22 18 21.5 +1.1**
**CEI Carei 22.09 314** ⇑P **P** **22 18 21.6 +0.8**
**CEI Carei 22.09 314** P **P** **22 18 21.5 +0.8**
**IVA Berane 22.11 300** ⇑*i*P **P** **22 18 19.8 -1.4**
**SJES Sjenica 22.14 301** ⇑*i*P **P** **22 18 20.7 -0.9**
**BORR Bors 22.23 312** ⇑P **P** **22 18 23.6 +1.2**
**BERU Beregovo 22.24 315** P **P** **22 18 22.1 -0.3**
**LTVH Ltavrtes, Hu 22.29 312** ⇓P **P** **22 18 23.7 +0.8**
**RNPP2 Kostyukhnivka 22.29 325** P **P** **22 18 22.7 -0.2**
**LVV L'vov 22.31 320** *e*P **P** **22 18 22.5 -0.6**
LVV *e* 22 18 55.3
LVV *e*S **S** **22 22 23.5 -4.7**
LVV pmax pmax
comp=Z,4μm,1.4s
LVV MLR MLR
comp=E,11μm,14.0s
LVV MLR MLR
comp=N,8μm,12.0s
LVV MLR MLR
comp=Z,13μm,13.0s
**LVV L'vov 22.31 320** P **P** **22 18 22.6 -0.6**
**RNPP8 Varash 22.32 325** P **P** **22 18 22.0 -1.2**
**MUKU Mukachevo 22.33 315** P **P** **22 18 23.4 +0.1**
**NIL Nilore 22.34 85** P **P** **22 18 23.6 -0.1**
NIL IAmb IAmb 22 18 33.3
comp=Z,814nm,1.1s
**NIL Nilore 22.34 85** IAMs_20 IAMs_20 22 27 45.9
comp=Z,47μm,21.0s
**NIL Nilore 22.34 85** P **P** **22 18 24.0 +0.3**
NIL P **P** **22 18 24.0 +0.3**
**NIL Nilore 22.34 85** P **P** **22 18 23.6 -0.1**
NIL pmax pmax
comp=Z,815nm,1.1s
NIL MLR MLR
comp=Z,48μm,21.0s
**KOME Kolasin 22.38 300** ⇓*i*P **P** **22 18 21.7 -2.3**
**JASL Jaisalmer 22.47 103** *e*P **P** **22 18 25.1 +0.1**
**PDG Podgorica 22.48 298** P **P** **22 18 21.8 -3.2**
PDG IAMs_20 IAMs_20 22 28 22.2
comp=Z,33μm,20.0s
**PDG Podgorica 22.48 298** ⇑*i*P **P** **22 18 22.1 -2.9**
**PDG Podgorica 22.48 298** ⇑P **P** **22 18 25.4 +0.5**
**PDG Podgorica 22.48 298** ⇓*i*P **P** **22 18 22.0 -2.9**
**DRME Dracevica, Mon 22.48 298** *e*P **P** **22 18 23.4 -1.6**
**DRME Dracevica, Mon 22.48 298** ⇑*i*P **P** **22 18 22.2 -2.8**
**PLE Pljevlja 22.57 301** ⇑*i*P **P** **22 18 24.2 -2.0**
**UZHM Uzhgorod 22.64 316** P **P** **22 18 26.7 0.0**
**RUDO Rudo 22.66 301** *e*P **P** **22 18 25.4 -1.5**
**BBLS Lazi&#263i 22.70 302** ⇑*i*P **P** **22 18 26.1 -1.3**
**BUM Brajici-Budva 22.71 298** ⇓*i*P **P** **22 18 23.8 -3.8**
**SCTE Santa Cesarea 22.73 292** P **P** **22 18 25.7 -2.0**
SCTE IAmb IAmb 22 18 36.0
comp=Z,855nm,1.5s
**AML Almayashu 22.73 62** P **P** **22 18 29.6 +1.5**
SNR=118
**CEME Cevo 22.74 299** ⇓*i*P **P** **22 18 24.9 -3.0**
**NKME Niksic 22.76 299** ⇑*i*P **P** **22 18 25.1 -3.0**
**FRGS Fruska Gora 22.79 306** ⇑*i*P **P** **22 18 27.1 -1.2**
**TEKS Tekeris 22.80 304** *e*P **P** **22 18 27.2 -1.2**
**KOLS Kolonicke sedl 22.80 316** *e*P **P** **22 18 28.3 -0.1**
KOLS pmax pmax
comp=Z,2μm,0.9s
**KOLS Kolonicke sedl 22.80 316** *e*P **P** **22 18 28.3 -0.1**
**EKS2 Erkin-Say 22.89 61** P **P** **22 18 34.1 +4.6**
SNR=73
**UPM Unac-Piva 22.89 300** *e*P **P** **22 18 29.1 -0.5**
**UPM Unac-Piva 22.89 300** ⇑*i*P **P** **22 18 26.3 -3.3**
**KWP Kalwaria Pacla 22.92 318** *e*P **P** **22 18 28.6 -1.0**
KWP *e*S **S** **22 22 41.3 +1.9**
**KWP Kalwaria Pacla 22.92 318** P **P** **22 18 28.0 -1.6**
**KWP Kalwaria Pacla 22.92 318** P **P** **22 18 28.0 -1.6**
KWP pmax pmax
comp=Z,4μm,1.4s
**KWP Kalwaria Pacla 22.92 318** P **P** **22 18 29.0 -0.6**
comp=Z,2μm,1.0s,comp=Z,28μm
**HAPS Han Pijesak,BI 23.07 302** ⇑*i*P **P** **22 18 30.2 -1.1**
**BRY Bratogost 23.09 299** ⇑*i*P **P** **22 18 28.6 -3.0**
**BRY Bratogost 23.09 299** ⇑*i*P **P** **22 18 28.6 -3.0**
**ATD Arta Tunnel 23.16 189** P **P** **22 18 33.5 +1.1**
ATD IAmb IAmb 22 18 56.7
comp=Z,474nm,1.1s
**ATD Arta Tunnel 23.16 189** LR LR 22 26 52.0
comp=Z,521nm,19.5s,baz=4.0,slow=35
**ATD Arta Tunnel 23.16 189** *e*P **P** **22 18 32.3 0.0**
ATD *e*S **S** **22 22 50.5 +6.5**
**TREB Trebinje 23.19 299** *e*P **P** **22 18 30.2 -2.2**
**CRVS Cervenica-Dubn 23.25 315** *e*P **P** **22 18 32.4 -0.7**
CRVS pmax pmax
comp=Z,6μm,2.1s
**CRVS Cervenica-Dubn 23.25 315** *e*P **P** **22 18 32.4 -0.7**
CRVS *e*S **S** **22 22 45.2 +0.1**
**BSZH Besenyszg 23.26 311** ⇑P **P** **22 18 34.0 +0.9**
**BHUJ Bhuj 23.32 113** *e*P **P** **22 18 35.8 +1.9**
BHUJ IAmb IAmb 22 18 47.7
comp=Z,794nm,1.3s
**UCH Uchtor 23.34 63** P **P** **22 18 41.4 +6.9**
SNR=12
**AAK Ala-Archa 23.40 62** P **P** **22 18 37.9 +3.1**
SNR=12
**AAK Ala-Archa 23.40 62** P **P** **22 18 35.1 +0.4**
**AAK Ala-Archa 23.40 62** *i*P **P** **22 18 35.5 +0.8**
SNR=12
**AAK Ala-Archa 23.40 62** P **P** **22 18 36.0 +1.3**
comp=Z,20nm,0.9s,baz=262,slow=9.2,SNR=40
AAK LR LR 22 30 32.5
comp=Z,32μm,18.4s,baz=266,slow=44
comp=Z,20nm,0.9s
**AAK Ala-Archa 23.40 62** P **P** **22 18 35.9 +1.1**
AAK P **P** **22 18 35.9 +1.1**
**AAK Ala-Archa 23.40 62***d* *i*P **P** **22 18 37.2 +2.4**
AAK pmax pmax
comp=Z,237nm,2.5s
AAK MLR MLR
comp=Z,31μm,19.0s
**ARU Arti 23.41 17** P **P** **22 18 34.1 -0.4**
ARU IAmb IAmb 22 18 45.8
comp=Z,418nm,1.0s
**ARU Arti 23.41 17** P **P** **22 18 34.6 +0.1**
comp=Z,45nm,0.5s,baz=213,slow=8.0,SNR=50
ARU S **S** **22 22 45.1 -2.4**
comp=Z,25nm,0.8s,baz=152,slow=23,SNR=1.6
ARU ScP **ScP** **22 25 59.1 +0.4**
comp=Z,8.4nm,0.7s,baz=201,slow=22,SNR=1.8
ARU ScS **ScS** **22 29 44.6 0.0**
comp=Z,1.4nm,0.6s,baz=4.4,slow=22,SNR=1.2
ARU LR LR 22 29 58.8
comp=Z,32μm,18.0s,baz=208,slow=42
ARU P3KPbc 22 51 52.5
comp=Z,0.6nm,0.3s,baz=53,slow=1.8,SNR=1.7
comp=Z,45nm,0.5s
**ARU Arti 23.41 17***d* *i*P **P** **22 18 34.6 +0.1**
ARU PPP PPP 22 19 08.3
ARU S **S** **22 22 49.4 +1.9**
ARU pmax pmax
comp=Z,532nm,2.7s
ARU MLR MLR
comp=Z,32μm,16.0s
**ARU Arti 23.41 17** P **P** **22 18 34.3 -0.3**
comp=Z,460nm,1.3s,comp=Z,9μm
**USP Ospenovka 23.53 60** P **P** **22 18 37.5 +1.6**
SNR=173
**FRU1 Bishkek 23.53 61** P **P** **22 18 37.6 +1.6**
**FRU1 Bishkek 23.53 61** P **P** **22 18 37.6 +1.6**
FRU1 pmax pmax
comp=Z,199nm,1.1s
**KECS Kecovo 23.63 314** *e*P **P** **22 18 37.5 +0.7**
KECS pmax pmax
comp=Z,881nm,1.2s
**KECS Kecovo 23.63 314** *e*P **P** **22 18 37.5 +0.7**
**BTLS Baital 23.65 55** *e*P **P** **22 18 38.6 +1.6**
baz=56
BTLS *e*S **S** **22 22 54.9 +3.3**
baz=56
**BTLS Baital 23.65 55** Pg **P** **22 18 37.8 +0.7**
comp=Z,290nm,3.3s
BTLS Lg Lg 22 19 22.5
comp=Z,77nm,2.2s
**BTLS Baital 23.65 55** *e*P **P** **22 18 38.6 +1.6**
BTLS *e*S **S** **22 22 54.8 +3.3**
**CHMS Chumysh 23.66 61** P **P** **22 18 39.5 +2.3**
SNR=49
**SGDS Sogindy 23.66 60** *e*P **P** **22 18 38.8 +1.5**
baz=60
SGDS *e*S **S** **22 22 55.3 +3.3**
baz=60
**SGDS Sogindy 23.66 60** *e*P **P** **22 18 38.7 +1.5**
SGDS *e*S **S** **22 22 55.2 +3.3**
**STON Ston 23.69 299** ⇑*i*P **P** **22 18 35.3 -2.0**
**MNK Minsk 23.70 333** *i*P **P** **22 18 35.2 -2.2**
comp=E,209nm,0.9s
MNK *i*P **P** **22 18 35.2 -2.2**
comp=N,160nm,0.7s
MNK *i*P **P** **22 18 35.2 -2.2**
comp=Z,67nm,0.6s,baz=139
MNK *i*PP **PnPn** **22 19 02.6 -2.1**
MNK *i*PPP PPP 22 19 10.5
MNK *i*S **S** **22 22 51.5 -0.7**
MNK *i*SS **SnSn** **22 23 30.6 +0.8**
MNK *i*SSS SSS 22 23 44.1
MNK *i*LQ LQ 22 25 31.8
MNK *i*LR LR 22 26 53.6
MNK *i*LRM MLR 22 27 19.6
comp=E,50μm,17.9s
MNK *i*LRM MLR 22 27 20.1
comp=N,20μm,15.1s
MNK *i*LRM MLR 22 29 21.1
comp=Z,15μm,16.1s
**MNK Minsk 23.70 333** *i*P **P** **22 18 35.2 -2.2**
MNK *i*PPP PPP 22 19 10.5
MNK *i* 22 22 18.7
MNK *i*S **S** **22 22 51.4 -0.7**
MNK *i*SSS SSS 22 23 44.0
MNK pmax pmax
comp=N,160nm,0.7s
MNK pmax pmax
comp=E,209nm,0.9s
MNK pmax pmax
comp=Z,67nm,0.6s
MNK MLR MLR
comp=E,50μm,18.0s
MNK MLR MLR
comp=N,20μm,15.0s
MNK MLR MLR
comp=Z,15μm,16.0s
**KBK Karagaybulak 23.73 62** P **P** **22 18 41.1 +3.0**
SNR=60
**PSZ Piszkesteto 23.75 312** P **P** **22 18 37.0 -1.0**
**PSZ Piszkesteto 23.75 312** ⇓P **P** **22 18 37.9 -0.1**
**PSZ Piszkesteto 23.75 312** P **P** **22 18 37.0 -1.0**
PSZ pmax pmax
comp=Z,2μm,1.3s
**SRGN SRI GANGA NAGA 23.78 94** *e*P **P** **22 18 39.7 +1.2**
**DOB Doboj 23.83 304** *e*P **P** **22 18 37.6 -1.1**
**MORH Mrgy, Hungar 23.91 307** ⇑P **P** **22 18 38.9 -0.5**
**MORH Mrgy, Hungar 23.91 307** P **P** **22 18 38.3 -1.1**
comp=Z,998nm,1.7s,comp=Z,24μm
**BKNR BIKANER 23.95 98** *e*P **P** **22 18 40.3 +0.2**
BKNR IAmb IAmb 22 18 48.0
comp=Z,1μm,1.2s
**KIRV Kirov 24.10 4** P **P** **22 18 40.3 -0.8**
comp=Z,111nm,0.6s,baz=4.0,slow=1.6,SNR=43
KIRV S **S** **22 23 01.4 +3.1**
comp=Z,22nm,0.7s,baz=85,slow=21,SNR=1.3
KIRV ScS **ScS** **22 29 48.9 +1.7**
comp=Z,3.4nm,0.6s,baz=232,slow=18,SNR=1.4
KIRV LR LR 22 29 56.5
comp=Z,25μm,18.9s,baz=187,slow=41
comp=Z,111nm,0.6s
**KIRV Kirov 24.10 4***c* *i*P **P** **22 18 40.1 -1.0**
**KSH Kashi 24.16 70** P **P** **22 18 40.5 -1.6**
KSH sP sP 22 18 47.5 0.0
KSH S **S** **22 22 56.3 -3.7**
KSH pmax pmax
comp=Z,210nm,2.2s
KSH pmax pmax
comp=Z,8μm,3.7s
KSH LR LR
comp=Z,69μm,13.1s
KSH LR LR
comp=Z,50μm,19.2s
KSH LR LR
comp=Z,59μm,17.9s
**NIE Niedzica 24.17 316** *e*P **P** **22 18 41.6 -0.3**
NIE *e*S **S** **22 23 03.8 +4.0**
**NIE Niedzica 24.17 316** P **P** **22 18 41.5 -0.5**
comp=Z,444nm,2.3s,comp=Z,13μm
**TKM2 Tokmak 2 24.25 61** P **P** **22 18 45.2 +2.3**
SNR=110
**SVE Sverdlovsk 24.31 19***ce*P **P** **22 18 43.9 +0.8**
SVE *e*S **S** **22 23 02.7 +1.0**
SVE pmax pmax
comp=Z,548nm,1.3s
SVE MLR MLR
comp=Z,24μm,19.0s
**NRN Naryn 24.33 65** P **P** **22 18 44.6 +0.7**
NRN IAmb IAmb 22 18 51.5
comp=Z,464nm,1.3s
**NRN Naryn 24.33 65** P **P** **22 18 44.6 +0.7**
NRN pmax pmax
comp=Z,464nm,1.3s
**NACGM Naroch 24.43 332** *e*P **P** **22 18 42.6 -1.6**
comp=E,31μm,1.3s
**BOOM Boomskoye usch 24.43 62** P **P** **22 18 45.0 +0.5**
BOOM IAmb IAmb 22 19 07.9
comp=Z,769nm,1.7s
**BOOM Boomskoye usch 24.43 62** P **P** **22 18 45.1 +0.5**
BOOM pmax pmax
comp=Z,769nm,1.7s
**BLY Banja Luka 24.46 303** ⇑*i*P **P** **22 18 43.6 -1.0**
**LANS Liptovska Anna 24.53 315** *e*P **P** **22 18 45.6 +0.3**
LANS pmax pmax
comp=Z,435nm,1.3s
**LANS Liptovska Anna 24.53 315** *e*P **P** **22 18 45.6 +0.3**
**ULHL Ulahol 24.61 63** P **P** **22 18 49.4 +3.1**
SNR=12
**THN Thein Dam 24.61 87** *e*P **P** **22 18 47.6 +1.5**
THN IAmb IAmb 22 18 54.1
comp=Z,468nm,0.8s
**VYHS Vyhne 24.63 313** *e*P **P** **22 18 46.0 -0.1**
VYHS pmax pmax
comp=Z,7μm,2.9s
**VYHS Vyhne 24.63 313** *e*P **P** **22 18 46.0 -0.1**
VYHS *e*S **S** **22 23 11.0 +3.8**
**CEL Celeste 24.66 287** P **P** **22 18 45.6 -0.9**
**CEL Celeste 24.66 287** P **P** **22 18 45.7 -0.9**
comp=Z,903nm,2.4s,comp=Z,28μm
**SRO Srobarova 24.68 311** *e*P **P** **22 18 47.9 +1.3**
SRO pmax pmax
comp=Z,35nm,1.1s
**SRO Srobarova 24.68 311** *e*P **P** **22 18 47.9 +1.3**
**A051A Mrakovica 24.72 304** ⇑*i*P **P** **22 18 46.2 -0.8**
**CUC Castrocucco 24.75 292** P **P** **22 18 46.5 -0.8**
**OJC Ojcow 24.84 317** *e*P **P** **22 18 47.3 -0.7**
OJC *e*S **S** **22 23 11.5 +0.9**
**OJC Ojcow 24.84 317** P **P** **22 18 47.4 -0.6**
**OJC Ojcow 24.84 317** P **P** **22 18 47.4 -0.6**
OJC pmax pmax
comp=Z,5μm,1.8s
**OJC Ojcow 24.84 317** P **P** **22 18 47.3 -0.7**
comp=Z,2μm,1.9s,comp=Z,34μm
OJC pP **pP** **22 18 49.9 -1.9**
comp=Z,2μm,1.9s,comp=Z,34μm
**PRIJ Prijedor 24.84 304** *e*P **P** **22 18 44.6 -3.4**
**A050A Klekovaca 24.85 302** ⇑*i*P **P** **22 18 47.1 -1.2**
**MPLH Magyarpolny 24.94 309** P **P** **22 18 48.5 -0.4**
comp=Z,3μm,1.3s,comp=Z,60μm
**KUU Kurty 24.97 59** *e*P **P** **22 18 50.7 +1.5**
comp=Z,196nm,1.3s,baz=59
KUU LR LR 22 29 27.4
comp=Z,10μm,9.3s,baz=59
**KUU Kurty 24.97 59** *e*P **P** **22 18 50.7 +1.5**
KUU pmax pmax
comp=Z,195nm,1.3s
**BRVK Borovoye 25.13 35** P **P** **22 18 50.7 +0.2**
**BRVK Borovoye 25.13 35** P **P** **22 18 52.4 +1.8**
BRVK P **P** **22 18 52.4 +1.8**
BRVK P **P** **22 18 52.4 +1.8**
BRVK S **S** **22 23 17.6 +2.5**
BRVK S **S** **22 23 17.6 +2.5**
BRVK S **S** **22 23 17.6 +2.5**
**BRVK Borovoye 25.13 35***d* *i*P **P** **22 18 52.1 +1.6**
BRVK pmax pmax
comp=Z,333nm,1.3s
BRVK MLR MLR
comp=Z,17μm,17.0s
**DHRM DHARAMSHALA 25.14 87** *e*P **P** **22 18 52.5 +1.3**
DHRM IAmb IAmb 22 18 59.1
comp=Z,665nm,0.6s
**BEL Belsk 25.14 321** *e*P **P** **22 18 50.3 -0.3**
BEL *e*S **S** **22 23 24.2 +9.0**
**BVAR Borovoye Array 25.16 36** P **P** **22 18 52.3 +1.5**
comp=Z,139nm,0.7s,baz=244,slow=6.8,SNR=72
BVAR ScP **ScP** **22 26 02.3 -1.3**
comp=Z,5.6nm,0.7s,baz=222,slow=1.9,SNR=3.4
BVAR PKiKP **PKiKP** **22 30 04.7 -0.6**
comp=Z,3.1nm,0.8s,baz=245,slow=2.9,SNR=2.2
BVAR P3KPbc 22 51 51.8
comp=Z,1.7nm,0.7s,baz=62,slow=3.9,SNR=7.3
comp=Z,139nm,0.7s
**TNSS Tian-Shan 25.25 61** *e*P **P** **22 18 53.4 +1.1**
baz=61
**TNSS Tian-Shan 25.25 61** *e*P **P** **22 18 53.3 +1.1**
**AAA Alma-Ata 25.25 61** *e*P **P** **22 18 53.3 +1.4**
comp=Z,350nm,1.2s,baz=61
AAA LR LR 22 29 49.8
comp=Z,19μm,13.5s,baz=61
**AAA Alma-Ata 25.25 61** *e*P **P** **22 18 53.3 +1.4**
AAA pmax pmax
comp=Z,350nm,1.2s
AAA MLR MLR
comp=Z,19μm,14.0s
**SUW Suwalki 25.30 327** *e*P **P** **22 18 50.5 -1.6**
SUW *e*S **S** **22 23 20.1 +2.4**
**SUW Suwalki 25.30 327** P **P** **22 18 50.8 -1.3**
**SUW Suwalki 25.30 327** *e*P **P** **22 18 52.8 +0.7**
**SUW Suwalki 25.30 327** P **P** **22 18 50.8 -1.3**
SUW pmax pmax
comp=Z,2μm,1.1s
**MDOK Medeo 25.34 61** *e*P **P** **22 18 53.9 +1.0**
baz=61
MDOK *e*S **S** **22 23 21.5 +2.5**
baz=61
MDOK LR LR 22 29 48.6
comp=Z,15μm,10.4s,baz=61
**MDOK Medeo 25.34 61** *e*P **P** **22 18 53.8 +1.0**
MDOK *e*S **S** **22 23 21.5 +2.5**
MDOK MLR MLR
comp=Z,15μm,10.0s
**CHKK Chushkaly 25.42 59** *e*P **P** **22 18 54.5 +1.2**
baz=60
**CHKK Chushkaly 25.42 59** *e*P **P** **22 18 54.5 +1.2**
**BHK Bhakra 25.44 89** *e*P **P** **22 18 54.9 +1.3**
BHK IAmb IAmb 22 19 02.4
comp=Z,1μm,1.2s
**JAVC Velka Javorina 25.48 313** *e*P **P** **22 18 54.6 +0.7**
JAVC *e*S **S** **22 23 26.1 +5.2**
**SMOL Smolenice 25.50 312** *e*P **P** **22 18 54.8 +0.8**
SMOL pmax pmax
comp=Z,344nm,1.2s
**KOGS Kog 25.55 307** *i*P **P** **22 18 54.0 -0.4**
KOGS *e*S **S** **22 23 24.5 +2.5**
**ZST Bratislava 25.58 311** *e*P **P** **22 18 54.4 -0.3**
ZST pmax pmax
comp=Z,2μm,1.1s
**ZST Bratislava 25.58 311** *e*P **P** **22 18 54.4 -0.3**
ZST *e*S S 22 23 34.4 +12
**MAUC Maruska 25.59 314** *e*P **P** **22 18 55.5 +0.6**
**OKC Ostrava-Krasne 25.61 315** *e*P **P** **22 18 54.9 0.0**
OKC *e*S **S** **22 23 32.8 +10**
OKC AMS AMS 22 31 10.0
comp=Z,19μm,18.1s
**OKC Ostrava-Krasne 25.61 315** *e*P **P** **22 18 54.9 0.0**
OKC MLR MLR
comp=Z,19μm,18.1s
**AJM Ajmer 25.68 101** *e*P **P** **22 18 56.9 +1.1**
AJM IAmb IAmb 22 19 04.9
comp=Z,298nm,1.1s
**TARG Taragay, Kyrgy 25.71 65** P **P** **22 18 56.9 +0.4**
**TARG Taragay, Kyrgy 25.71 65** P **P** **22 18 56.9 +0.4**
TARG pmax pmax
comp=Z,122nm,1.0s
**PAOL Paolisi 25.76 294** IAMs_20 IAMs_20 22 30 31.6
comp=Z,26μm,19.0s
**VAE Valguarnera 25.86 286** LR LR 22 31 42.6
comp=Z,14μm,18.6s,baz=58,slow=42
**WDD Wied Dalam 25.91 282** P **P** **22 18 57.1 -0.6**
**RONA Rosalia, Austr 25.91 309** *i*P **P** **22 18 57.6 -0.3**
comp=Z,1μm,2.0s,SNR=219
**MORC Moravsky Berou 25.94 315** P **P** **22 18 56.8 -1.2**
**MORC Moravsky Berou 25.94 315** *e*P **P** **22 18 57.5 -0.5**
MORC *e*S **S** **22 23 30.8 +2.7**
**MORC Moravsky Berou 25.94 315** ⇑P **P** **22 18 57.5 -0.5**
**MORC Moravsky Berou 25.94 315** P **P** **22 18 57.4 -0.5**
**PABE Paberze 25.98 330** P **P** **22 18 56.8 -1.3**
PABE IAmb IAmb 22 19 04.0
comp=Z,168nm,0.7s
**PABE Paberze 25.98 330** *e*P **P** **22 18 58.3 +0.1**
**ARXS Arharly 26.08 59** *e*P **P** **22 19 00.6 +1.2**
**SMLA Simla 26.14 89** *e*P **P** **22 19 01.3 +1.4**
SMLA IAmb IAmb 22 19 09.8
comp=Z,709nm,0.9s
**PRZ Przheval'sk 26.23 63** P **P** **22 19 01.4 +0.5**
**PRZ Przheval'sk 26.23 63** P **P** **22 19 01.4 +0.5**
**CONA Conrad Observa 26.27 310** *i*P **P** **22 19 00.5 -0.5**
comp=Z,857nm,1.1s,SNR=270
**ARSA Arzberg 26.27 308** *i*P **P** **22 19 00.8 -0.2**
comp=Z,476nm,1.4s,SNR=113
**SATY Saty 26.31 62** *e*P **P** **22 19 02.9 +1.4**
comp=Z,172nm,1.2s,baz=62

SATY eS **S** **22 23 37.1 +2.8**
baz=62
**SATY Saty 26.31 62** eP **P** **22 19 02.9 +1.4**
SATY eS **S** **22 23 37.0 +2.8**
SATY pmax pmax
comp=Z,172nm,1.2s
**VRAC Vranov 26.31 313** eP **P** **22 19 01.0 -0.4**
VRAC eS **S** **22 23 35.6 +1.7**
**VRAC Vranov 26.31 313** LR LR 22 31 14.4
comp=Z,15µm,18.3s,baz=120,slow=41
**VRAC Vranov 26.31 313** ⇑P **P** **22 19 01.0 -0.4**
**VRAC Vranov 26.31 313** P **P** **22 19 00.9 -0.4**
**KRUC Moravsky 26.34 312** eP **P** **22 19 01.2 -0.4**
KRUC eS **S** **22 23 40.5 +6.2**
**INTR Introdacqua 26.34 296** P **P** **22 19 00.6 -1.2**
INTR IAmb IAmb 22 19 14.1
comp=Z,316nm,1.1s
**ZHN Zhinishke 26.34 61** eP **P** **22 19 03.0 +1.2**
baz=62
**ZHN Zhinishke 26.34 61** Pg **P** **22 19 03.7 +1.8**
comp=Z,143nm,1.2s
ZHN Lg Lg 22 20 06.5
comp=Z,49nm,1.4s
**ZHN Zhinishke 26.34 61** eP **P** **22 19 03.0 +1.2**
**SOKA Soboth 26.43 307** i P **P** **22 19 02.0 -0.5**
comp=Z,293nm,1.5s,SNR=107
SOKA ePcP **PcP** **22 22 30.2 +2.6**
comp=Z,78nm,1.8s
SOKA i ScP **ScP** **22 26 11.2 +3.8**
comp=Z,26nm,1.2s
**FURI Furi 26.50 197** P **P** **22 19 04.6 +1.0**
FURI IAmb IAmb 22 19 35.1
comp=Z,337nm,1.1s
**FURI Furi 26.50 197** LR LR 22 28 57.2
comp=Z,46µm,20.2s,baz=12,slow=35
**FURI Furi 26.50 197** eP **P** **22 19 02.2 -1.4**
FURI eS **S** **22 23 48.3 +10**
**KRLC Kraliky 26.51 315** eP **P** **22 19 02.6 -0.6**
KRLC AMS AMS 22 31 50.0
comp=Z,18µm,14.5s
**KRLC Kraliky 26.51 315** eP **P** **22 19 02.6 -0.6**
KRLC MLR MLR
comp=Z,18µm,14.5s
**KUDL Kundal 26.53 96** eP **P** **22 19 04.8 +1.3**
KUDL IAmb IAmb 22 19 08.7
comp=Z,248nm,0.8s
**KPKS Kokpek 26.57 61** eP **P** **22 19 05.4 +1.5**
baz=61
KPKS eS **S** **22 23 41.3 +3.0**
baz=61
**KPKS Kokpek 26.57 61** Pg **P** **22 19 05.1 +1.3**
comp=Z,206nm,1.2s
KPKS Lg Lg 22 20 08.7
comp=Z,57nm,1.2s
**KPKS Kokpek 26.57 61** eP **P** **22 19 05.3 +1.5**
KPKS eS **S** **22 23 41.3 +3.0**
**LJU Ljubljana 26.60 305** i P **S** **22 19 03.7 -0.2**
LJU eS **S** **22 23 38.0 -0.5**
**TDK Taldygorghan 26.64 57** eP **P** **22 19 05.7 +1.3**
comp=Z,237nm,1.2s,baz=57
TDK LR LR 22 30 33.5
comp=Z,20µm,14.2s,baz=57
**TDK Taldyqorghan 26.64 57** eP **P** **22 19 05.6 +1.3**
TDK pmax pmax
comp=Z,237nm,1.2s
TDK MLR MLR
comp=Z,20µm,14.0s
**OBKA Obir 26.70 306** i P **P** **22 19 04.8 -0.2**
comp=Z,326nm,1.3s,SNR=66
**OBKA Obir 26.70 306** ⇑i P **P** **22 19 04.5 -0.5**
**CAMP Campotosto 26.76 297** P **P** **22 19 04.8 -0.8**
**UZB Uzynbulak 26.77 62** eP **P** **22 19 07.2 +1.5**
baz=62
**UZB Uzynbulak 26.77 62** Pg **P** **22 19 06.9 +1.2**
comp=Z,169nm,2.0s
UZB Lg Lg 22 20 12.4
comp=Z,64nm,1.8s
**UZB Uzynbulak 26.77 62** eP **P** **22 19 07.2 +1.5**
**DPC Dobruska-Polom 26.89 315** eP **P** **22 19 06.4 -0.2**
DPC eS **S** **22 23 46.7 +3.6**
DPC AMS AMS 22 31 50.0
comp=Z,22µm,14.5s
**DPC Dobruska-Polom 26.89 315** eP **P** **22 19 06.4 -0.2**
DPC eS **S** **22 23 46.7 +3.6**
DPC MLR MLR
comp=Z,22µm,14.5s
**DPC Dobruska-Polom 26.89 315** P **P** **22 19 05.6 -1.0**
comp=Z,412nm,1.4s,comp=Z,7µm
**KLP Kalpa 26.92 87** eP **P** **22 19 08.4 +1.0**
**NDI New Delhi 26.94 94** eP **P** **22 19 08.3 +1.1**
NDI IAmb IAmb 22 19 22.7
comp=Z,145nm,0.9s
**TREC Trest 26.98 312** eP **P** **22 19 07.6 +0.2**
TREC AMS AMS 22 31 40.0
comp=Z,22µm,15.0s
**TREC Trest 26.98 312** eP **P** **22 19 07.6 +0.2**
TREC MLR MLR
comp=Z,22µm,15.0s
**SONA Sohna 26.98 95** eP **P** **22 19 08.8 +1.2**
**NRCA Norcia 27.01 298** IAMs_20 IAMs_20 22 31 32.5
comp=Z,29µm,20.0s
**OSTC Ostas 27.04 315** eP **P** **22 19 07.8 -0.1**
OSTC eS **S** **22 23 47.1 +1.7**
**OSTC Ostas 27.04 315** eP **P** **22 19 07.8 -0.1**
OSTC eS **S** **22 23 47.1 +1.7**
**SHLS Shalkode 27.09 62** eP **P** **22 19 12.9 +4.4**
baz=62
**SHLS Shalkode 27.09 62** Pg **P** **22 19 13.1 +4.5**
comp=Z,85nm,1.7s
SHLS Lg Lg 22 20 22.6
comp=Z,130nm,1.3s
**SHLS Shalkode 27.09 62** eP **P** **22 19 12.9 +4.4**
**DDI Dehra Dun 27.10 90** eP **P** **22 19 10.1 +1.4**
DDI IAmb IAmb 22 19 20.9
comp=Z,505nm,0.9s
**KSP Ksiaz 27.11 316** eP **P** **22 19 07.9 -0.7**
KSP eS **S** **22 23 56.5 +10**
**KSP Ksiaz 27.11 316** P **P** **22 19 07.5 -1.1**
comp=Z,676nm,1.4s,comp=Z,11µm
**UPC Upice 27.14 315** eP **P** **22 19 08.3 -0.5**
UPC AMS AMS 22 32 00.0
comp=Z,24µm,15.3s
**UPC Upice 27.14 315** eP **P** **22 19 08.3 -0.5**
UPC MLR MLR
comp=Z,24µm,15.3s
**CHVC Chvalec 27.14 315** eP **P** **22 19 08.8 -0.1**
CHVC AMS AMS 22 32 10.0
comp=Z,20µm,15.7s
**CHVC Chvalec 27.14 315** eP **P** **22 19 08.8 -0.1**
CHVC MLR MLR
comp=Z,20µm,15.7s
**PBUR Paburge 27.17 330** eP **P** **22 19 08.6 -0.4**
**CADS Cadrg 27.18 305** i P **P** **22 19 08.4 -0.8**
CADS eS **S** **22 23 46.2 -1.5**
**VSU Vasula 27.20 337***c* iP **P** **22 19 07.7 -1.5**
VSU pmax pmax
comp=Z,200nm,0.7s
VSU MLR MLR
comp=Z,40µm,21.0s
**SABO M.te Sabotino 27.21 305** P **P** **22 19 08.6 -0.9**
SABO IAmb IAmb 22 19 15.5
comp=Z,704nm,1.2s
**HNLY HANLEY 27.21 84** eP **P** **22 19 11.8 +1.5**
**MOA Molln 27.26 309** i P **P** **22 19 09.5 -0.4**
comp=Z,520nm,1.3s,SNR=269
**PUL Pulkovo 27.28 342**⇓eP **P** **22 19 09.2 -0.7**
PUL pmax pmax
comp=Z,117nm,0.9s
PUL MLR MLR
comp=Z,24µm,18.0s
**MYKA Terra Mystica 27.34 306** i P **P** **22 19 10.1 -0.6**
comp=Z,131nm,1.6s,SNR=22
MYKA i S **S** **22 23 52.9 +2.7**
comp=Z,38nm,1.5s
**CKRC Cesky Krumlov 27.54 311** eP **P** **22 19 11.7 -0.7**
CKRC AMS AMS 22 33 00.0
comp=Z,15µm,13.3s
**CKRC Cesky Krumlov 27.54 311** eP **P** **22 19 11.7 -0.7**
CKRC MLR MLR
comp=Z,15µm,13.3s
**BIOA Bad Ischl, Aus 27.62 308** i P **P** **22 19 12.6 -0.5**
comp=Z,619nm,1.5s,SNR=172
**GOPC GO Pecny, Ondr 27.63 313** eP **P** **22 19 12.4 -0.8**
GOPC eS **S** **22 23 50.1 -4.6**
GOPC AMS AMS 22 32 20.0
comp=Z,13µm,14.0s
**GOPC GO Pecny, Ondr 27.63 313** eP **P** **22 19 12.4 -0.8**
GOPC eS **S** **22 23 50.1 -4.6**
GOPC MLR MLR
comp=Z,13µm,14.0s
**KBA Koelnbreinsper 27.65 307** i P **P** **22 19 13.2 -0.4**
comp=Z,633nm,1.5s,SNR=145
**GKP Gorka Klasztor 27.74 321** eP **P** **22 19 13.6 -0.5**
GKP eS **S** **22 24 00.5 +4.2**
**GKP Gorka Klasztor 27.74 321** eP **P** **22 19 14.1 -0.1**
**PRU Pruhonice 27.80 313** eP **P** **22 19 15.4 +0.7**
PRU eS **S** **22 23 51.9 -5.5**
PRU AMS AMS 22 32 20.0
comp=Z,14µm,13.8s
**PRU Pruhonice 27.80 313** eP **P** **22 19 15.4 +0.7**
PRU eS **S** **22 23 51.9 -5.5**
PRU MLR MLR
comp=Z,14µm,13.8s
**ZVC Zvikov 27.82 312** eP **P** **22 19 14.7 -0.2**
**PRA Prague 27.90 313** eP **P** **22 19 16.6 +1.0**
PRA AMS AMS 22 32 30.0
comp=Z,16µm,13.2s
**PRA Prague 27.90 313** eP **P** **22 19 16.6 +1.0**
PRA MLR MLR
comp=Z,16µm,13.2s
**GEC2 GERESS Array S 27.93 311** P **P** **22 19 14.0 -2.0**
GEC2 IAmb IAmb 22 19 19.7
comp=Z,366nm,1.6s
**GEC2 GERESS Array S 27.93 311** eP **P** **22 19 14.9 -1.1**
comp=Z,497nm,1.7s,baz=107,slow=8.9
**GERES GERESS Array B 27.93 311** P **P** **22 19 14.7 -1.3**
**GERES GERESS Array B 27.93 311** P **P** **22 19 14.9 -1.1**
comp=Z,21nm,0.7s,baz=108,slow=8.8,SNR=56
GERES PcP **PcP** **22 22 30.8 -0.4**
comp=Z,7.3nm,0.7s,baz=101,slow=2.0,SNR=3.4
GERES ScP **ScP** **22 26 12.2 +0.3**
comp=Z,5.8nm,1.0s,baz=96,slow=3.9,SNR=4.1
GERES LR LR 22 31 53.3
comp=Z,15µm,20.6s,baz=117,slow=40
comp=Z,21nm,0.7s
**PVCC Panska Ves 27.99 314** eP **P** **22 19 16.1 -0.3**
PVCC AMS AMS 22 33 10.0
comp=Z,17µm,12.6s
**PVCC Panska Ves 27.99 314** eP **P** **22 19 16.1 -0.3**
PVCC MLR MLR
comp=Z,17µm,12.6s
**KHC Kasperske Hory 28.10 311** P **P** **22 19 16.0 -1.4**
**KHC Kasperske Hory 28.10 311** eP **P** **22 19 16.7 -0.7**
KHC eS **S** **22 23 58.9 -3.2**
KHC AMS AMS 22 32 30.0
comp=Z,18µm,18.2s
**KHC Kasperske Hory 28.10 311** eP **P** **22 19 16.7 -0.7**
KHC eS **S** **22 23 58.9 -3.2**
KHC MLR MLR
comp=Z,18µm,18.2s
**KHC Kasperske Hory 28.10 311** P **P** **22 19 15.9 -1.5**
comp=Z,299nm,2.0s,comp=Z,9µm
**ABFA Abfaltersbach 28.12 306** i P **P** **22 19 16.9 -0.8**
comp=Z,290nm,1.1s,SNR=74
ABFA ePcP **PcP** **22 22 33.9 +2.2**
comp=Z,56nm,1.0s
ABFA eS **S** **22 24 04.8 +2.1**
comp=Z,29nm,1.4s
ABFA i ScP **ScP** **22 26 17.7 +5.1**
comp=Z,23nm,1.3s
ABFA i pPKiKP **pPKiKP** **22 30 12.0 +0.3**
comp=Z,41nm,1.4s
**SLIT Slitere, Latvi 28.13 332** eP **P** **22 19 17.6 0.0**
**LESA Schwarzleotal 28.18 307** i P **P** **22 19 17.3 -0.9**
comp=Z,387nm,1.5s
LESA ePcP **PcP** **22 22 33.8 +1.9**
comp=Z,84nm,1.9s
LESA eS **S** **22 24 04.3 +0.8**
comp=Z,71nm,1.7s
LESA i ScP **ScP** **22 26 17.0 +4.3**
comp=Z,42nm,1.5s
LESA i pPKiKP **pPKiKP** **22 30 12.0 +0.3**
comp=Z,18nm,1.3s
**RJOB Jochberg 28.18 308** eP **P** **22 19 17.2 -1.0**
comp=Z,440nm,1.5s,baz=107,slow=8.9
**ARBE Arbavere 28.22 338** eP **P** **22 19 18.3 0.0**
**RICC Richard 28.27 314** eP **P** **22 19 18.2 -0.7**
**KURBB Kurchatov Arra 28.36 46** P **P** **22 19 20.7 +1.0**
comp=Z,68nm,0.8s,baz=253,slow=9.4,SNR=107
KURBB PcP **PcP** **22 22 32.3 +0.3**
comp=Z,12nm,1.0s,baz=243,slow=2.9,SNR=2.4
KURBB ScP **ScP** **22 26 11.0 -2.1**
comp=Z,10nm,0.9s,baz=246,slow=4.1,SNR=6.8
KURBB PKiKP **PKiKP** **22 30 06.4 -0.8**
comp=Z,1.2nm,0.2s,baz=220,slow=1.2,SNR=2.8
KURBB LR LR 22 33 25.8
comp=Z,16µm,18.7s,baz=250,slow=42
KURBB P3KPbc 22 51 39.8
comp=Z,2.0nm,0.8s,baz=71,slow=3.6,SNR=6.3
KURBB PKP2ab **P'P'ab** **22 55 41.1 -1.3**
comp=Z,0.7nm,0.2s,baz=66,slow=3.2,SNR=5.4
comp=Z,68nm,0.8s
**MTSE Matsula 28.37 335** eP **P** **22 19 19.3 -0.3**
**KURK Kurchatov 28.45 46** P **P** **22 19 20.4 -0.1**
KURK IAmb IAmb 22 19 33.4
comp=Z,372nm,1.3s
**KURK Kurchatov 28.45 46** P **P** **22 19 22.1 +1.7**
KURK P **P** **22 19 22.1 +1.7**
KURK S **S** **22 24 12.4 +4.8**
KURK S **S** **22 24 12.4 +4.8**
**KURK Kurchatov 28.45 46***c* iP **P** **22 19 22.0 +1.5**
KURK pmax pmax
comp=Z,394nm,1.7s
KURK MLR MLR
comp=Z,25µm,16.0s
**BRG Berggiesshubel 28.49 315** i P **P** **22 19 19.9 -1.0**
BRG Amp 22 19 25.5
comp=Z,411nm,1.4s
**BRG Berggiesshubel 28.49 315** i P **P** **22 19 19.8 -1.0**
BRG S **S** **22 24 06.0 -2.2**
BRG pmax pmax
comp=Z,411nm,1.4s
BRG MLR MLR
comp=N,16µm,14.4s
BRG MLR MLR
comp=E,6µm,13.7s
**BRG Berggiesshubel 28.49 315** eP **P** **22 19 19.9 -1.0**
comp=E,409nm,1.4s,baz=107,slow=8.9
**WET Wettzell 28.54 311** eP **P** **22 19 19.9 -1.4**
comp=E,304nm,1.3s,baz=107,slow=8.9
**VALR Valaam 28.55 344***c* iP **P** **22 19 19.8 -1.4**
**CASP Castiglione de 28.66 297** P **P** **22 19 21.4 -1.1**
CASP IAmb IAmb 22 19 28.9
comp=Z,233nm,1.1s
**GUNA GUNA 28.67 102** eP **P** **22 19 23.6 +0.8**
**HSKC Hora Svate Kat 28.69 314** eP **P** **22 19 21.7 -1.0**
HSKC eS **S** **22 24 02.9 -8.6**
HSKC AMS AMS 22 30 30.0
comp=Z,19µm,22.4s
**WTTA Wattenberg 28.82 307** i P **P** **22 19 23.0 -1.1**
comp=Z,512nm,1.3s,SNR=134
WTTA ePcP **PcP** **22 22 36.3 +2.7**
comp=Z,65nm,0.8s
WTTA i S **S** **22 24 15.1 +1.2**
comp=Z,227nm,1.4s
WTTA i ScP **SS** **22 26 20.5 +4.8**
comp=Z,40nm,1.2s
WTTA epPKiKP **pPKiKP** **22 30 12.9 +0.6**
comp=Z,54nm,1.5s
**WATA Walderalm 28.88 307** i P **P** **22 19 23.2 -1.3**
comp=Z,509nm,1.2s,SNR=199
WATA ePcP **PcP** **22 22 35.3 +1.7**
comp=Z,33nm,0.6s
WATA eS **S** **22 24 13.8 -0.9**
comp=Z,252nm,1.8s
WATA eScP **SS** **22 26 21.3 +4.5**
comp=Z,35nm,1.4s
WATA epPKiKP **pPKiKP** **22 30 12.8 +0.6**
comp=Z,38nm,1.7s
**SQTA Sankt Quirin 29.10 306** i P **P** **22 19 25.2 -1.3**
comp=Z,404nm,1.2s,SNR=128
SQTA ePcP **PcP** **22 22 38.0 +3.8**
comp=Z,67nm,1.1s
SQTA eS **S** **22 24 17.9 -0.2**
comp=Z,152nm,1.8s
SQTA eScP **SS** **22 26 20.9 -0.3**
comp=Z,57nm,1.2s
**VLC Villacollemand 29.14 300** S **S** **22 24 18.8 +0.1**
VLC P **P** **22 19 25.9 -0.8**
**ROTZ Rotzenmuhle 29.15 312** eP **P** **22 19 26.1 -0.6**
comp=Z,1µm,2.9s,baz=107,slow=8.9
**LGTI Lohaghat 29.18 91** eP **P** **22 19 26.7 -0.4**
LGTI IAmb IAmb 22 19 36.0
comp=Z,92nm,1.1s
**MOTA Moosalm 29.20 307** i P **P** **22 19 25.8 -1.5**
comp=Z,354nm,1.0s
MOTA i PcP **PcP** **22 22 36.9 +2.4**
comp=Z,76nm,1.1s
MOTA eS **S** **22 24 18.4 -1.3**
comp=Z,232nm,2.1s
MOTA i ScP **SS** **22 26 20.1 -3.2**
comp=Z,33nm,1.3s
**CLL Collm 29.20 315** P **P** **22 19 25.7 -1.5**
CLL IAmb IAmb 22 19 31.8
comp=Z,501nm,1.4s
**CLL Collm 29.20 315** i P **P** **22 19 26.2 -1.0**
comp=Z,81nm,1.5s
CLL i P(2) 22 19 29.5
comp=Z,592nm,1.5s
CLL ePmax 22 19 31.0
CLL ePPP PPP 22 20 24.0
CLL eS **S** **22 24 19.0 -0.4**
CLL eScS **ScS** **22 30 12.0 +2.3**
CLL AMS AMS 22 33 00.0
comp=N,27µm,19.2s
CLL AMS AMS 22 33 00.0
comp=E,10µm,18.7s
CLL AMS AMS 22 34 00.0
CLL R2 00 58 00.0
CLL R2 01 03 00.0
CLL R2 01 21 00.0
comp=Z,200nm,20.3s
**CLL Collm 29.20 315** i P **P** **22 19 26.2 -1.0**
CLL pmax pmax
comp=Z,592nm,1.5s
**CLL Collm 29.20 315** P **P** **22 19 25.4 -1.8**
comp=Z,277nm,1.5s,comp=Z,6µm
**CLL Collm 29.20 315** eP **P** **22 19 26.0 -1.2**
comp=Z,446nm,1.4s,baz=107,slow=8.9
**TANN Tannenbergstha 29.20 313** eP **P** **22 19 26.1 -1.2**
comp=Z,561nm,2.0s,baz=107,slow=8.9
**RUE Ruedersdorf 29.23 318** eP **P** **22 19 26.3 -1.0**
**RUE Ruedersdorf 29.23 318** eP **P** **22 19 26.6 -0.7**
comp=Z,635nm,1.0s,baz=107,slow=8.9
**POO Poona 29.27 116** eP **P** **22 19 29.4 +1.3**
POO IAmb IAmb 22 19 41.0
comp=Z,268nm,1.6s
**FUR Furstenfeldbru 29.28 308** eP **P** **22 19 26.9 -1.0**
comp=Z,692nm,0.9s,baz=107,slow=8.9
**MANZ Manzenberg 29.28 312** eP **P** **22 19 27.1 -0.8**
comp=Z,68nm,1.3s,baz=107,slow=8.9
**JHNI Jhansi 29.28 99** eP **P** **22 19 28.8 +0.6**
JHNI IAmb IAmb 22 19 41.6
comp=Z,138nm,0.9s
**SEM Semipalatinsk 29.31 47** eP **P** **22 19 30.1 +1.6**
comp=Z,130nm,1.1s,baz=47
SEM LR LR 22 32 17.6
comp=Z,11µm,15.2s,baz=47
**SEM Semipalatinsk 29.31 47** eP **P** **22 19 30.0 +1.6**
SEM pmax pmax
comp=Z,130nm,1.1s
SEM MLR MLR
comp=Z,11µm,15.0s
**MEF Metsahovi 29.33 338** eP **P** **22 19 27.3 -0.8**
**FETA Feichten 29.37 306** i P **P** **22 19 28.0 -1.0**
comp=Z,377nm,1.2s,SNR=108
FETA ePcP **PcP** **22 22 38.8 +3.9**
comp=Z,81nm,1.3s
FETA eS **S** **22 24 23.6 +1.1**
comp=Z,176nm,1.3s
FETA eScP **ScP** **22 26 20.3 +3.7**
comp=Z,59nm,1.5s
FETA epPKiKP **pPKiKP** **22 30 11.9 -0.7**
comp=Z,15nm,1.3s
**BHPL Bhopal 29.41 104** eP **P** **22 19 30.0 +0.7**
**PLN Plauen 29.41 313** eP **P** **22 19 27.8 -1.2**
comp=Z,141nm,1.5s,baz=107,slow=8.9
**MAKZ Makanchi 29.45 55** P **P** **22 19 29.8 +0.4**
MAKZ IAmb IAmb 22 19 36.3
comp=Z,546nm,1.9s
MAKZ IAMs_20 IAMs_20 22 32 28.4
comp=Z,27µm,21.0s
**MAKZ Makanchi 29.45 55** P **P** **22 19 29.8 +0.4**
MAKZ pmax pmax
comp=Z,546nm,1.9s
MAKZ MLR MLR
comp=Z,27µm,21.0s
**RETA Reutte 29.45 307** i P **P** **22 19 28.0 -1.6**
comp=Z,77nm,0.6s,SNR=68
RETA i S **S** **22 24 22.0 -1.5**
comp=Z,205nm,1.5s
RETA eScP **ScP** **22 26 21.7 +5.0**
comp=Z,58nm,1.4s
RETA epPKiKP **pPKiKP** **22 30 13.0 +0.5**
comp=Z,12nm,1.4s
**FUORN Ofenpass-Fuorn 29.61 305** P **P** **22 19 30.6 -0.5**
FUORN IAmb IAmb 22 19 37.9
comp=Z,302nm,1.5s
**MK31 Makanchi Array 29.66 55** P **P** **22 19 31.6 +0.3**
**MK31 Makanchi Array 29.66 55***de* P **P** **22 19 32.0 +0.7**
**MKAR Makanchi Array 29.66 55** P **P** **22 19 31.4 0.0**
**MKAR Makanchi Array 29.66 55** P **P** **22 19 32.1 +0.7**
comp=Z,47nm,0.7s,baz=252,slow=7.2,SNR=110
MKAR PcP **PcP** **22 22 34.4 -1.1**
comp=Z,7.7nm,0.7s,baz=257,slow=3.0,SNR=2.2
MKAR PKiKP **PKiKP** **22 30 08.6 +0.4**
comp=Z,1.2nm,0.8s,baz=248,slow=1.6,SNR=2.5
MKAR LR LR 22 32 54.7
comp=Z,30µm,18.8s,baz=256,slow=39
MKAR P3KPbc 22 51 35.0
comp=Z,5.5nm,1.1s,baz=84,slow=4.5,SNR=16
comp=Z,47nm,0.7s
**MKAR Makanchi Array 29.66 55***ce* P **P** **22 19 32.0 +0.7**
MKAR pmax pmax
comp=Z,48nm,0.7s
**VSL Villasalto 29.71 290** P **P** **22 19 31.5 -0.3**
VSL IAmb IAmb 22 19 36.6
comp=Z,182nm,0.7s
**GRA1 Grafenberg Arr 29.73 311** P **P** **22 19 30.6 -1.3**
**GRF Grafenberg Arr 29.73 311** P **P** **22 19 30.6 -1.3**
GRF pmax pmax
comp=Z,784nm,1.3s
**GRF Grafenberg Arr 29.73 311** eP **P** **22 19 31.3 -0.6**
comp=Z,8µm,2.9s,baz=107,slow=8.9
GRF eL L 22 34 01.4
comp=Z,15µm,19.9s
**GRFO Grafenberg 29.73 311** P **P** **22 19 30.9 -1.0**
**GRFO Grafenberg 29.73 311** P **P** **22 19 30.9 -1.0**
GRFO pmax pmax
comp=Z,762nm,1.3s
**TATN Tataouine 29.75 276** P **P** **22 19 31.6 -0.6**
TATN IAmb IAmb 22 19 37.7
comp=Z,340nm,1.3s
**MSSA Maissana 29.78 300** IAMs_20 IAMs_20 22 33 24.6
comp=Z,24µm,22.0s
**ADZR Andozero 29.78 353**⇑iP **P** **22 19 30.6 -1.5**
ADZR eS **S** **22 24 31.5 +3.3**
ADZR pmax pmax
comp=Z,266nm,0.8s
**MOX Moxa 29.79 313** eP **P** **22 19 31.4 -1.0**
comp=Z,172nm,1.4s,baz=107,slow=8.9
MOX eL L 22 35 09.7
comp=Z,15µm,18.0s
**FIA1 FINESS Array S 29.82 341** P **P** **22 19 31.1 -1.4**
FIA1 IAmb IAmb 22 19 36.0
comp=Z,326nm,1.1s
**FINES FINESS Array B 29.82 341** P **P** **22 19 30.9 -1.6**
**FINES FINESS Array B 29.82 341** P **P** **22 19 31.1 -1.3**
comp=Z,51nm,0.5s,baz=143,slow=9.2,SNR=385
FINES S **S** **22 24 28.6 -0.1**
comp=Z,20nm,0.9s,baz=138,slow=15,SNR=1.6
FINES ScS **ScS** **22 30 10.3 -1.9**
comp=Z,4.1nm,0.9s,baz=134,slow=6.0,SNR=4.4
FINES LR LR 22 32 48.8
comp=Z,25µm,20.4s,baz=144,slow=39
FINES P3KPbc 22 51 32.0
comp=Z,2.9nm,0.6s,baz=356,slow=2.1,SNR=11
comp=Z,51nm,0.5s
**BSD Bornholm Skovb 29.86 323** eP **P** **22 19 33.1 +0.2**
**BSD Bornholm Skovb 29.86 323** i P **P** **22 19 32.0 -0.8**
BSD IAmb IAmb 22 19 37.5
comp=Z,235nm,0.8s
**JOF Joensuu 29.86 346** eP **P** **22 19 33.3 +0.4**
**NEUB Neuenburg 29.89 314** eP **P** **22 19 32.4 -0.8**
comp=Z,138nm,0.9s,baz=107,slow=8.9
**DAVOX Davos/Dischmat 29.90 305** LR LR 22 33 15.2
comp=Z,20µm,20.9s,baz=87,slow=40

UBR **Ueberruh** **29.93 307** *e*P **P** **22 19 32.5 -1.3**
comp=Z,770nm,1.4s,baz=107,slow=8.9
DAVA **Damuels** **30.00 306** *i* P **P** **22 19 33.1 -1.3**
comp=Z,390nm,0.9s,SNR=109
DAVA *e*S **S** **22 24 33.3 +1.0**
comp=Z,430nm,1.9s
DAVA *ep*PKiKP **pPKiKP** **22 30 14.5 +1.5**
comp=Z,29nm,1.4s
KEST **Kesra** **30.09 283** P **P** **22 19 35.1 -0.3**
KEST IAmb IAmb 22 19 41.3
comp=Z,491nm,1.5s
KEST **Kesra** **30.09 283** P **P** **22 19 36.4 +1.0**
comp=Z,108nm,1.1s,baz=354,slow=2.2,SNR=44
KEST PcP **PcP** **22 22 37.1 +0.2**
comp=Z,16nm,0.8s,baz=42,slow=8.7,SNR=2.1
KEST S **S** **22 24 34.7 +0.8**
comp=Z,12nm,1.1s,baz=307,slow=21,SNR=1.1
KEST ScP **ScP** **22 26 21.4 +2.3**
comp=Z,8.3nm,0.9s,baz=277,slow=8.5,SNR=2.9
KEST LR LR 22 35 20.8
comp=Z,12µm,18.4s,baz=30,slow=44
comp=Z,108nm,1.1s
KAD **Karad** **30.29 118** *e*P **P** **22 19 38.4 +1.3**
KAD IAmb IAmb 22 19 45.4
comp=Z,215nm,1.3s
RGN **Rugen** **30.39 321** P **P** **22 19 36.6 -1.0**
RGN **Rugen** **30.39 321** *e*P **P** **22 19 38.3 +0.7**
AKL **Akola** **30.41 109** *e*P **P** **22 19 39.1 +0.9**
AKL IAmb IAmb 22 19 45.2
comp=Z,100nm,1.1s
FLTG **Flechtingen** **30.60 316** *e*P **P** **22 19 38.5 -1.0**
comp=Z,2µm,1.9s,baz=107,slow=8.9
KEF **Keuruu** **30.74 340** *e*P **P** **22 19 39.6 -1.1**
STU **Stuttgart** **30.77 309** P **P** **22 19 39.0 -2.1**
STU IAmb IAmb 22 19 43.9
comp=Z,247nm,1.3s
STU IAMs_20 IAMs_20 22 34 03.4
comp=Z,19µm,19.0s
STU **Stuttgart** **30.77 309** P **P** **22 19 39.0 -2.1**
STU pmax pmax
comp=Z,247nm,1.3s
STU **Stuttgart** **30.77 309** *e*P **P** **22 19 39.3 -1.8**
comp=Z,636nm,1.3s,baz=107,slow=8.9
RAF **Rauma** **30.79 337** *e*P **P** **22 19 39.8 -1.2**
GORT1 **Trebel** **30.81 317** *e*P **P** **22 19 41.0 -0.3**
comp=Z,2µm,1.2s,baz=107,slow=8.9
UBBA **Unterbreizbach** **30.82 313** *e*P **P** **22 19 40.7 -0.7**
comp=Z,473nm,1.7s,baz=107,slow=8.9
CLZ **Clausthal** **30.93 315** *e*P **P** **22 19 41.9 -0.6**
comp=Z,1µm,1.7s,baz=107,slow=8.9
GOA **Goa** **31.22 121** *e*P **P** **22 19 46.8 +1.5**
GOA IAmb IAmb 22 19 54.0
comp=Z,276nm,1.2s
BFO **Black Forest** **31.23 308** P **P** **22 19 43.3 -1.9**
BFO **Black Forest** **31.23 308** P **P** **22 19 43.3 -1.9**
BFO pmax pmax
comp=Z,98nm,1.1s
BFO MLR MLR
comp=Z,17µm,20.0s
BFO **Black Forest** **31.23 308** *e*P **P** **22 19 43.0 -2.2**
comp=Z,351nm,1.9s,baz=107,slow=8.9
NRDL **Niedersach Rie** **31.30 316** *e*P **P** **22 19 45.9 +0.3**
comp=Z,976nm,1.4s,baz=107,slow=8.9
COP **Copenhagen** **31.37 323** *i* P **P** **22 19 46.5 +0.3**
COP IAmb IAmb 22 19 52.5
comp=Z,390nm,0.8s
ZSN **Zaisan** **31.51 54** *e*P **P** **22 19 48.7 +1.1**
baz=54
ZSN **Zaisan** **31.51 54** *e*P **P** **22 19 48.7 +1.1**
STE01 **Stenlille01** **31.70 322** *i* P **P** **22 19 51.4 +2.2**
STE00 **Stenlille00** **31.71 322** *e*P **P** **22 19 51.8 +2.5**
STE00 IAmb IAmb 22 19 54.1
comp=Z,741nm,1.3s
BSEG **Bad Segeberg** **31.72 319** *e*P **P** **22 19 48.9 -0.4**
comp=Z,700nm,1.2s,baz=107,slow=8.9
NGP **Nagpur** **31.77 106** *e*P **P** **22 19 50.3 +0.2**
NGP IAmb IAmb 22 19 56.9
comp=Z,76nm,0.8s
RETH **Rethem/Aller,** **31.82 316** *e*P **P** **22 19 50.6 +0.4**
comp=Z,2µm,1.3s,baz=107,slow=8.9
BNI **Bardonecchia** **31.87 301** P **P** **22 19 48.7 -2.3**
BNI **Bardonecchia** **31.87 301** P **P** **22 19 48.7 -2.3**
BNI pmax pmax
comp=Z,1µm,1.0s
BNI MLR MLR
comp=Z,14µm,21.0s
KASTN **Kahler Asten** **31.89 313** *e*P **P** **22 19 50.7 -0.3**
comp=Z,943nm,1.7s,baz=107,slow=8.9
ECH **Echery** **31.98 307** P **P** **22 19 49.8 -2.0**
ECH IAmb IAmb 22 19 54.8
comp=Z,263nm,1.2s
ECH **Echery** **31.98 307** P **P** **22 19 49.8 -2.0**
ECH pmax pmax
comp=Z,263nm,1.2s
ALBI **Allahabad** **32.02 97** *e*P **P** **22 19 52.3 0.0**
ALBI IAmb IAmb 22 20 00.1
comp=Z,446nm,1.4s
VAF **Ylistaro** **32.06 340** *e*P **P** **22 19 51.3 -0.8**
AHRW **Bad Neuenahr-A** **32.53 311** *e*P **P** **22 19 56.1 -0.4**
comp=Z,4µm,2.9s,baz=107,slow=8.9
LODK **Lodwar** **32.62 201** P **P** **22 19 57.2 -0.4**
LODK **Lodwar** **32.62 201** P **P** **22 19 59.2 +1.5**
SNR=40
BUG **Bochum--Univer** **32.65 313** *e*P **P** **22 19 57.4 -0.1**
comp=Z,735nm,1.5s,baz=107,slow=8.9
SSRD **Sdr. Stenderup** **32.71 321** *i* P **P** **22 19 58.0 0.0**
SSRD IAmb IAmb 22 20 04.5
comp=Z,345nm,0.8s
WLF **Walferdange** **32.91 310** P **P** **22 19 58.5 -1.4**
WLF **Walferdange** **32.91 310** P **P** **22 19 58.5 -1.4**
WLF **Walferdange** **32.91 310** *d*P **P** **22 19 58.6 -1.3**
comp=Z,217nm,1.0s
WLF **Walferdange** **32.91 310** P **P** **22 19 58.5 -1.4**
WLF pmax pmax
comp=Z,285nm,0.9s
WLF MLR MLR
comp=Z,17µm,22.0s
WLF **Walferdange** **32.91 310** *e*P **P** **22 19 58.5 -1.4**
comp=Z,279nm,0.9s,baz=107,slow=8.9
WMQ **Urumqi** **33.11 61** ⇑P **P** **22 20 03.8 +2.0**
WMQ PP **PP** **22 21 14.8 -1.8**
WMQ S **S** **22 25 23.8 +3.0**
WMQ pmax pmax
comp=Z,83nm,1.5s
WMQ pmax pmax
comp=Z,2µm,6.1s
WMQ LR LR
comp=Z,28µm,17.5s
WMQ LR LR
comp=Z,25µm,14.7s
WMQ LR LR
comp=Z,17µm,24.9s
BTNL **Ternell** **33.13 311** *d*P **P** **22 20 01.6 -0.2**
comp=Z,40nm,0.9s
BHOU **Houvegnez** **33.15 311** *d*P **P** **22 20 01.4 -0.6**
comp=Z,63nm,1.0s
HFS **Hagfors** **33.16 330** P **P** **22 20 01.0 -0.9**
comp=Z,157nm,0.5s,baz=126,slow=7.5,SNR=353
HFS S **S** **22 25 18.1 -2.9**
comp=Z,36nm,1.0s,baz=132,slow=12,SNR=3.8
HFS LR LR 22 35 15.9
comp=Z,22µm,18.9s,baz=122,slow=40
comp=Z,157nm,0.5s
ZAA0 **Zalesovo Array** **33.16 42** P **P** **22 20 01.7 -0.3**
ZAA0 IAmb IAmb 22 20 06.9
comp=Z,135nm,1.1s
ZALV **Zalesovo Beam** **33.16 42** P **P** **22 20 01.4 -0.6**
ZALV **Zalesovo Beam** **33.16 42** P **P** **22 20 02.6 +0.6**
comp=Z,48nm,0.7s,baz=260,slow=8.9,SNR=69
ZALV S **S** **22 25 21.0 -0.2**
comp=Z,6.4nm,0.9s,baz=259,slow=13,SNR=2.1
ZALV LR LR 22 36 03.9
comp=Z,8µm,18.3s,baz=244,slow=41
ZALV P3KPbc 22 51 17.4
comp=Z,0.6nm,0.5s,baz=49,slow=4.4,SNR=3.1
comp=Z,48nm,0.7s
ZALV **Zalesovo Beam** **33.16 42** *i* P **P** **22 20 02.5 +0.5**
ZALV pmax pmax
comp=Z,48nm,0.7s
SET **Setif** **33.18 285** P **P** **22 20 04.0 +1.5**
MEM **Membach** **33.21 311** *d*P **P** **22 20 01.8 -0.7**
MUD **Monsted U'grnd** **33.35 322** *i* P **P** **22 20 04.2 +0.6**
MUD IAmb IAmb 22 20 10.5
comp=Z,242nm,0.8s
SSB **Saint Sauveur** **33.39 301** P **P** **22 20 02.0 -2.1**
SSB **Saint Sauveur** **33.39 301** P **P** **22 20 02.1 -2.1**
SSB pmax pmax
comp=Z,568nm,1.3s
BEBN **Eben Emael** **33.46 312** *d*P **P** **22 20 06.5 +1.9**
BSTI **Sart Tilman** **33.48 311** *d*P **P** **22 20 05.1 +0.3**
comp=Z,13nm,1.2s
HYB **Hyderabad** **33.49 112** *e*P **P** **22 20 05.9 +0.7**
HYB IVmB_BB 22 20 11.1
comp=Z,2µm,1.9s
HYB IVMs_BB IVMs_BB 22 34 28.3
comp=Z,5µm,20.3s
GOET **G??ttrup** **33.58 323** *i* P **P** **22 20 05.5 0.0**
GOET IAmb IAmb 22 20 12.3
comp=Z,187nm,0.8s
DGZ **Jazzator, Alta** **33.59 51***c i*P **P** **22 20 07.3 +1.3**
DGZ pmax pmax
comp=Z,87nm,1.0s
DGZ MLR MLR
comp=Z,21µm,16.0s
RCHB **Rochefort** **33.60 310** *d*P **P** **22 20 04.4 -1.5**
comp=Z,110nm,1.3s
BCLA **Clavier** **33.61 311** *d*P **P** **22 20 05.3 -0.6**
MNGI **Mangalore** **33.67 123** *e*P **P** **22 20 08.3 +1.6**
MNGI IAmb IAmb 22 20 13.3
comp=Z,125nm,1.0s
BGES **Gesves** **33.73 311** *d*P **P** **22 20 06.7 -0.4**
comp=Z,66nm,1.2s
APA **Apatity** **33.85 351** ⇓ *i*P **P** **22 20 07.1 -0.8**
APA *i* 22 21 19.0
APA *i* 22 22 47.0
APA *i*S **S** **22 25 38.0 +6.4**
APA pmax pmax
comp=Z,130nm,0.8s
BMRD **Maredsous** **33.92 310** *d*P **P** **22 20 08.1 -0.5**
comp=Z,93nm,1.1s
DOU **Dourbes** **33.99 310** *d*P **P** **22 20 08.4 -0.8**
comp=Z,110nm,1.3s
LVZ **Lovozero** **34.02 352** P **P** **22 20 08.2 -1.1**
LVZ **Lovozero** **34.02 352***de*P **P** **22 20 08.9 -0.5**
LVZ pmax pmax
comp=Z,83nm,0.7s
LVZ MLR MLR
comp=Z,9µm,18.0s
LVZ **Lovozero** **34.02 352** P **P** **22 20 08.3 -1.1**
comp=Z,137nm,0.9s
OSL **Oslo** **34.29 329** *e*P **P** **22 20 10.9 -0.8**
OSL IVmBBB 22 20 14.1
comp=Z,4µm,2.1s
OSL *e*S **S** **22 25 38.7 +0.2**
OSL *e*ScS **ScS** **22 30 34.0 -0.7**
OSL IVMs_BB IVMs_BB 22 35 26.8
comp=Z,8µm,21.5s
NC602 **NORSAR Array S** **34.38 330** *e*P **P** **22 20 12.8 +0.2**
NC602 IVmB_BB 22 20 15.5
comp=Z,2µm,3.6s
NC602 *e*PP **PP** **22 21 29.8 -0.5**
NC602 *e*S **S** **22 25 37.8 -2.2**
NC602 *e*ScS **ScS** **22 30 35.7 +0.4**
NC602 IVMs_BB IVMs_BB 22 35 28.4
comp=Z,7µm,27.2s
HOMB **Homborsund** **34.47 325** *e*P **P** **22 20 13.3 0.0**
HOMB IVmB_BB 22 20 16.9
comp=Z,5µm,3.6s
HOMB *e*PP **PP** **22 21 31.0 -0.3**
HOMB *e*S **S** **22 25 42.7 +1.3**
HOMB *e*ScS **ScS** **22 30 35.5 -0.2**
HOMB IVMs_BB IVMs_BB 22 39 24.4
comp=Z,5µm,12.1s
NC405 **NORSAR Array S** **34.52 331** P **P** **22 20 12.3 -1.4**
EJON **La Jonquera** **34.53 296** P **P** **22 20 12.7 -1.4**
KONO **Kongsberg** **34.63 328** P **P** **22 20 13.3 -1.4**
KONO IAmb IAmb 22 20 21.0
comp=Z,95nm,0.7s
KONO **Kongsberg** **34.63 328** IAMs_20 IAMs_20 22 34 50.5
comp=Z,19µm,20.0s
KONO **Kongsberg** **34.63 328** *e*P **P** **22 20 13.6 -1.1**
KONO IVmB_BB 22 20 17.8
comp=Z,3µm,3.8s
KONO *e*PP **PP** **22 21 32.4 -0.7**
KONO *e*S **S** **22 25 42.9 -0.9**
KONO IVMs_BB IVMs_BB 22 34 41.9
comp=Z,7µm,15.0s
KONO **Kongsberg** **34.63 328** P **P** **22 20 13.5 -1.2**
NB2 **NORSAR Subarra** **34.68 331** P **P** **22 20 13.3 -1.9**
comp=Z,96nm,1.0s,baz=124,slow=9.3
NB2 PP **PnPn** **22 21 31.7 +0.9**
comp=Z,629nm,2.5s,baz=133,slow=12
NB2 **NORSAR Subarra** **34.68 331** P **P** **22 20 13.3 -1.9**
baz=124,slow=9.3
NOA **NORSAR Array B** **34.68 331** P **P** **22 20 13.6 -1.6**
comp=Z,22nm,0.5s,baz=125,slow=8.6,SNR=106
NOA S **S** **22 25 43.8 -0.9**
comp=Z,12nm,1.0s,baz=129,slow=15,SNR=5.5
NOA LR LR 22 36 03.2
comp=Z,18µm,20.6s,baz=130,slow=39
comp=Z,22nm,0.5s
ETOS **Mallorca** **34.75 292** P **P** **22 20 16.0 -0.1**
SNART **Snartemo** **35.12 325** *e*P **P** **22 20 18.9 0.0**
SNART *e*PP **PP** **22 21 38.2 -0.2**
SNART *e*S **S** **22 25 50.1 -1.2**
CLF **Chambon-Foret** **35.20 306** P **P** **22 20 18.5 -1.2**
JHSG **JHARSUGUGA** **35.25 101** *e*P **P** **22 20 21.4 +0.9**
JHSG IAmb IAmb 22 20 25.7
comp=Z,456nm,1.2s
SKAR **Skarslia** **35.71 329** *e*P **P** **22 20 23.8 -0.2**
SKAR *ep*P **pP** **22 20 27.2 -0.7**
SKAR IVmB_BB 22 20 28.1
comp=Z,2µm,4.0s
SKAR *e*S **S** **22 26 00.3 -0.1**
SKAR IVMs_BB IVMs_BB 22 37 35.1
comp=Z,7µm,14.4s
CEST **Esterri de Car** **35.73 297** P **P** **22 20 23.5 -1.1**
CEST IAmb IAmb 22 20 28.3
comp=Z,271nm,1.2s
CEST IAMs_20 IAMs_20 22 34 31.1
comp=Z,11µm,22.0s
BLS5 **Blasjo** **35.94 326** *e*P **P** **22 20 25.9 -0.1**
BLS5 *ep*P **pP** **22 20 29.2 -0.8**
BLS5 IVmB_BB 22 20 30.3
comp=Z,4µm,3.6s
BLS5 *e*S **S** **22 26 04.8 +0.8**
BLS5 IVMs_BB IVMs_BB 22 36 01.2
comp=Z,6µm,22.2s
EIBI **Ibiza** **35.96 291** P **P** **22 20 26.0 -0.4**
BOK **Bokaro** **36.02 97** *e*P **P** **22 20 26.9 -0.1**
BOK IAmb IAmb 22 20 41.3
comp=Z,163nm,1.0s
ODD1 **Odda** **36.08 327** *e*P **P** **22 20 27.2 -0.1**
ODD1 *ep*P **pP** **22 20 30.3 -0.9**
ODD1 IVmB_BB 22 20 31.9
comp=Z,6µm,2.9s
ODD1 *e*S **S** **22 26 07.5 +1.3**
ODD1 IVMs_BB IVMs_BB 22 35 44.3
comp=Z,8µm,20.4s
DOMB **Dombas** **36.09 331** *e*P **P** **22 20 26.9 -0.4**
DOMB *ep*P **pP** **22 20 30.2 -1.0**
DOMB IVmB_BB 22 20 31.0
comp=Z,2µm,3.6s
DOMB *e*S **S** **22 26 06.3 -0.1**
DOMB IVMs_BB IVMs_BB 22 36 23.2
comp=Z,7µm,25.9s
TBLU **Trondheim** **36.30 333** *e*P **P** **22 20 29.3 +0.3**
TBLU *ep*P **pP** **22 20 32.0 -0.9**
TBLU IVmB_BB 22 20 32.5
comp=Z,2µm,4.0s
TBLU *e*PP **PnPn** **22 21 50.6 -0.1**
TBLU *e*S **S** **22 26 10.8 +1.4**
TBLU IVMs_BB IVMs_BB 22 35 54.0
comp=Z,8µm,19.2s
KMY **Karmoy** **36.41 325** *e*P **P** **22 20 30.1 +0.1**
KMY *ep*P **pP** **22 20 33.4 -0.5**
KMY IVmB_BB 22 20 34.1
comp=Z,4µm,2.8s
KMY *e*PP **PP** **22 21 52.2 -0.5**
KMY *e*S **S** **22 26 11.4 +0.3**
KMY IVMs_BB IVMs_BB 22 38 15.3
comp=Z,6µm,11.3s
NSS **Namsos** **36.47 336** *e*P **P** **22 20 29.7 -0.7**
NSS *ep*P **pP** **22 20 33.6 -0.8**
NSS IVmB_BB 22 20 34.0
comp=Z,4µm,4.4s
NSS *e*S **S** **22 26 13.2 +1.3**
NSS IVMs_BB IVMs_BB 22 35 48.6
comp=Z,10µm,19.3s
KMBO **Kilima Mbogo** **36.52 195** P **P** **22 20 32.2 +0.6**
KMBO **Kilima Mbogo** **36.52 195** IAMs_20 IAMs_20 22 34 26.1
comp=Z,16µm,20.0s
KMBO **Kilima Mbogo** **36.52 195** *i* P **P** **22 20 32.9 +1.3**
SNR=18
KMBO **Kilima Mbogo** **36.52 195** P **P** **22 20 30.3 -1.2**
comp=Z,16nm,1.1s,baz=20,slow=11,SNR=26
KMBO PcP **PcP** **22 22 55.8 +0.4**
comp=Z,8.9nm,0.9s,baz=22,slow=15,SNR=2.9
KMBO S **S** **22 26 16.1 +2.1**
comp=Z,1.0nm,0.5s,baz=262,slow=5.4,SNR=1.4
KMBO LR LR 22 34 37.9
comp=Z,17µm,20.7s,baz=11,slow=35
comp=Z,16nm,1.1s
KMBO **Kilima Mbogo** **36.52 195** P **P** **22 20 33.5 +1.9**
KMBO **Kilima Mbogo** **36.52 195***d i*P **P** **22 20 31.7 +0.1**
ELMS **Elmsett, Ipswi** **36.59 313** *e*P **P** **22 20 31.4 -0.3**
ELMS IAmb IAmb 22 20 35.8
comp=Z,642nm,1.2s
ELMS IAMs_20 IAMs_20 22 41 30.9
comp=Z,13µm,15.9s
VADS **Vadso** **36.78 350** *e*P **P** **22 20 33.2 +0.2**
KEV **Kevo** **36.79 349** P **P** **22 20 32.2 -0.9**
KEV **Kevo** **36.79 349** P **P** **22 20 32.2 -0.9**
KEV pmax pmax
comp=Z,73nm,0.8s
KEV MLR MLR
comp=Z,9µm,18.0s
GTK **Tadong** **36.82 90** *e*P **P** **22 20 35.1 +1.1**
GTK IAmb IAmb 22 20 45.8
comp=Z,948nm,0.8s
ARCES **ARCESS Array B** **36.84 348** P **P** **22 20 32.6 -1.0**
ARCES **ARCESS Array B** **36.84 348** P **P** **22 20 32.9 -0.7**
comp=Z,68nm,0.9s,baz=142,slow=5.9,SNR=147
ARCES PP **PnPn** **22 21 57.0 -0.4**
comp=Z,59nm,0.9s,baz=155,slow=9.0,SNR=5.6
ARCES LR LR 22 37 28.1
comp=Z,11µm,19.9s,baz=146,slow=39
comp=Z,68nm,0.9s
WACR **West Acre** **36.93 314** *e*P **P** **22 20 33.6 -0.9**
WACR IAmb IAmb 22 20 38.8
comp=Z,1µm,1.2s
WACR IAMs_20 IAMs_20 22 36 27.6
comp=Z,11µm,25.3s
STOK **Stokkvaagen** **37.30 339** *e*P **P** **22 20 37.2 -0.2**
KONS **Konsvik** **37.38 339** *e*P **P** **22 20 35.5 -2.6**
TAM **Tamanrasset** **37.39 263** P **P** **22 20 39.4 +0.5**
TAM **Tamanrasset** **37.39 263** P **P** **22 20 39.4 +0.5**
TAM pmax pmax
comp=Z,659nm,1.2s
TAM MLR MLR
comp=Z,7µm,22.0s
MDRS **Chennai** **37.48 116** *e*P **P** **22 20 40.0 +0.5**
MDRS IAmb IAmb 22 20 47.3
comp=Z,97nm,1.0s
KIBK **Kibwezi** **37.53 194** P **P** **22 20 40.9 +0.8**
KIBK IAmb IAmb 22 20 52.8
comp=Z,283nm,1.6s
KIBK IAMs_20 IAMs_20 22 35 17.5
comp=Z,21µm,18.0s
KIBK **Kibwezi** **37.53 194** P **P** **22 20 41.8 +1.8**
KIBK **Kibwezi** **37.53 194** P **P** **22 20 41.1 +1.1**
SNR=20
LMK **Market Rasen** **37.63 315** *e*P **P** **22 20 39.7 -0.7**
LMK IAmb IAmb 22 20 44.6
comp=Z,1µm,1.3s
LMK IAMs_20 IAMs_20 22 40 29.3
comp=Z,13µm,14.8s
ECHE **Chera** **37.67 292** S **S** **22 26 32.6 +1.7**
ECHE P **P** **22 20 41.3 +0.3**
STEI **Steigen** **37.78 341** *e*P **P** **22 20 41.3 -0.3**
WOL **Wolverton** **37.83 311** *e*P **P** **22 20 41.4 -0.8**
MBAR **Mbarara** **37.91 206** P **P** **22 20 43.2 -0.1**
MBAR **Mbarara** **37.91 206** *e*P **P** **22 20 44.2 +0.9**
MBAR IAmb IAmb 22 20 53.7
comp=Z,134nm,1.4s
MBAR **Mbarara** **37.91 206** P **P** **22 20 44.1 +0.8**
MBAR **Mbarara** **37.91 206** *e*P **P** 22 20 31.4 -12
MBAR *e*S **S** **22 26 30.8 -4.2**
MBAR **Mbarara** **37.91 206***de*P **P** **22 20 43.4 +0.1**
MBAR pmax pmax
comp=Z,111nm,1.4s
CART **Cartagena** **38.00 289** P **P** **22 20 41.8 -2.0**
CART **Cartagena** **38.00 289** P **P** **22 20 42.9 -0.9**
LSA **Lhasa** **38.08 85** P **P** **22 20 47.3 +2.2**
LSA S **S** **22 26 39.5 +1.4**
LSA LR LR
comp=Z,28µm,18.6s
LSA LR LR
comp=Z,16µm,19.1s
LSA LR LR
comp=Z,22µm,15.7s
LSA **Lhasa** **38.08 85** P **P** **22 20 44.8 -0.3**
LSA IAmb IAmb 22 21 01.8
comp=Z,300nm,1.2s
LSA **Lhasa** **38.08 85** P **P** **22 20 44.7 -0.4**
LSA **Lhasa** **38.08 85** P **P** **22 20 44.8 -0.3**
LSA pmax pmax
comp=Z,300nm,1.2s
LSA MLR MLR
comp=Z,31µm,21.0s
CWF **Charnwood Fore** **38.09 313** *e*P **P** **22 20 42.8 -1.6**
CWF IAmb IAmb 22 20 47.5
comp=Z,236nm,0.9s
CWF IAMs_20 IAMs_20 22 42 16.3
comp=Z,11µm,18.0s
GDLE **Glaisdale, N Y** **38.11 316** *e*P **P** **22 20 43.7 -0.8**
GDLE IAmb IAmb 22 20 47.7
comp=Z,5µm,1.9s
GDLE IAMs_20 IAMs_20 22 38 48.4
comp=Z,27µm,21.1s
EMUR **La Murta** **38.15 289** P **P** **22 20 44.0 -1.0**
TRO **Tromso** **38.20 345** *e*P **P** **22 20 44.7 -0.3**
SWN1 **Swindon** **38.22 311** *e*P **P** **22 20 44.5 -0.9**
SWN1 IAmb IAmb 22 20 49.3
comp=Z,901nm,0.9s
SWN1 IAMs_20 IAMs_20 22 39 52.0
comp=Z,14µm,20.3s
JSA **Saint Aubin** **38.23 308** *e*P **P** **22 20 43.6 -1.9**
JSA IAmb IAmb 22 20 48.2
comp=Z,644nm,1.4s
JSA IAMs_20 IAMs_20 22 37 44.6
comp=Z,14µm,24.6s
ETOB **Tobarra** **38.25 290** P **P** **22 20 46.1 +0.1**
TRD **Trivandrum** **38.30 125** *e*P **P** **22 20 47.2 +0.8**
TRD IAmb IAmb 22 20 54.5
comp=Z,175nm,1.3s
LBWR **Ladybower, Pea** **38.45 314** *e*P **P** **22 20 46.0 -1.4**
LBWR IAmb IAmb 22 20 50.5
comp=Z,727nm,1.3s
LBWR IAMs_20 IAMs_20 22 42 20.8
comp=Z,14µm,14.8s
STRD **Stroud** **38.47 312** *e*P **P** **22 20 46.4 -1.1**
STRD IAmb IAmb 22 20 51.5
comp=Z,596nm,1.0s
STRD IAMs_20 IAMs_20 22 40 13.7
comp=Z,12µm,16.2s
HPK **Haverah Park** **38.49 315** *e*P **P** **22 20 46.5 -1.1**
HPK IAmb IAmb 22 20 51.8
comp=Z,2µm,1.4s
HPK IAMs_20 IAMs_20 22 40 21.1
comp=Z,13µm,16.8s
TLOR **Lorca, Murcia** **38.53 289** P **P** **22 20 47.9 -0.3**
STNC **Stoke** **38.68 314** *e*P **P** **22 20 48.7 -0.6**
STNC IAMs_20 IAMs_20 22 41 20.0
comp=Z,11µm,14.9s
OLDB **Oldbury-Upon-S** **38.70 311** *e*P **P** **22 20 48.1 -1.3**
OLDB IAmb IAmb 22 20 52.7
comp=Z,713nm,1.1s
OLDB IAMs_20 IAMs_20 22 40 18.0
comp=Z,11µm,17.9s
EDMD **Edmundbyers** **38.84 317** *e*P **P** **22 20 49.8 -0.8**
EDMD IAmb IAmb 22 20 53.9
comp=Z,2µm,1.7s
EDMD IAMs_20 IAMs_20 22 38 58.3
comp=Z,17µm,21.7s
MONM **Monmouth** **38.88 312** *e*P **P** **22 20 49.6 -1.4**
MONM IAmb IAmb 22 20 54.0
comp=Z,597nm,1.2s
MONM IAMs_20 IAMs_20 22 40 26.3
comp=Z,10µm,15.5s
HLM1 **Long Mynd** **39.01 313** *e*P **P** **22 20 50.9 -1.2**
HLM1 IAmb IAmb 22 20 55.3
comp=Z,849nm,1.4s
HLM1 IAMs_20 IAMs_20 22 40 04.0
comp=Z,11µm,20.4s
MCH1 **Michaelchurch** **39.02 312** *e*P **P** **22 20 50.7 -1.4**
MCH1 IAmb IAmb 22 20 55.2

comp=Z,483nm,1.2s
MCH1 IAMs_20 IAMs_20 22 40 32.9
comp=Z,9µm,16.3s
**ENIJ Nijar 39.06 288** P **P** **22 20 51.9 -0.8**
**FOEL Foel Wylfa 39.25 313** *eP* **P** **22 20 53.3 -0.8**
FOEL IAmb IAmb 22 20 57.6
comp=Z,2µm,1.7s
FOEL IAMs_20 IAMs_20 22 37 47.2
comp=Z,15µm,22.6s
**GOMU GeErMu 39.28 73** P **P** **22 20 54.5 -0.5**
GOMU pP pP 22 20 58.5 -0.4
GOMU sP sP 22 21 01.5 +1.0
GOMU LR LR
comp=Z,11µm,17.5s
GOMU LR LR
comp=Z,24µm,17.5s
GOMU LR LR
comp=Z,31µm,17.9s
**ESY Stoneypath 39.43 318** *eP* **P** **22 20 54.5 -0.9**
**KESW Keswick, Cumbr 39.45 316** *eP* **P** **22 20 54.8 -0.9**
KESW IAmb IAmb 22 20 60.0
comp=Z,621nm,0.9s
KESW IAMs_20 IAMs_20 22 39 18.1
comp=Z,19µm,19.5s
**DYA Yadsworthy 39.45 309** *eP* **P** **22 20 54.1 -1.7**
DYA IAmb IAmb 22 20 58.9
comp=Z,1µm,1.6s
DYA IAMs_20 IAMs_20 22 37 59.5
comp=Z,11µm,19.8s
**LLW Llanuwchllyn 39.52 313** *eP* **P** **22 20 54.9 -1.5**
LLW IAMs_20 IAMs_20 22 37 56.0
comp=Z,8µm,19.8s
**DRUM Mains of Drumt 39.57 320** *eP* **P** **22 20 56.1 -0.5**
DRUM IAmb IAmb 22 21 00.8
comp=Z,2µm,1.5s
DRUM IAMs_20 IAMs_20 22 40 12.4
comp=Z,14µm,20.3s
**EBER Berja 39.61 288** P **P** **22 20 56.9 -0.7**
**EKA Eskdalemuir Ar 39.61 317** P **P** **22 20 56.2 -0.9**
comp=Z,180nm,0.6s,baz=106,slow=8.0,SNR=199
EKA S **S** **22 26 56.6 -3.2**
comp=Z,3.3nm,0.9s,baz=104,slow=15,SNR=2.9
comp=Z,180nm,0.6s
**CHAS Isla Isabel II 39.63 285** P **P** **22 20 57.9 +0.4**
**EKB Eskdalemuir 39.63 317** P **P** **22 20 56.0 -1.2**
**ESK Eskdalemuir 39.64 317** P **P** **22 20 55.9 -1.4**
**ESK Eskdalemuir 39.64 317** *eP* **P** **22 20 55.9 -1.4**
ESK IAmb IAmb 22 21 01.1
comp=Z,317nm,0.9s
ESK IAMs_20 IAMs_20 22 44 06.5
comp=Z,11µm,16.6s
**ESK Eskdalemuir 39.64 317** P **P** **22 20 55.9 -1.4**
ESK pmax pmax
comp=Z,2µm,1.8s
ESK MLR MLR
comp=Z,6µm,21.0s
**EALB Alboran 39.93 287** P **P** **22 20 59.7 -0.2**
**SBD Saint Breward 39.94 310** *eP* **P** **22 20 58.9 -1.0**
**ESBB Sonseca Array 39.94 292** P **P** **22 20 58.8 -1.3**
ESBB IAmb IAmb 22 21 04.2
comp=Z,415nm,1.1s
**ESDC Sonseca Array 39.95 292** P **P** **22 20 58.9 -1.2**
ESDC IAmb IAmb 22 21 04.0
comp=Z,516nm,1.4s
**ESDC Sonseca Array 39.95 292** P **P** **22 20 59.4 -0.7**
comp=Z,129nm,0.9s,baz=65,slow=7.7,SNR=220
ESDC PcP **PcP** **22 23 05.1 -0.4**
comp=Z,22nm,0.6s,baz=80,slow=2.2,SNR=3.3
ESDC S **S** **22 27 03.4 -1.8**
comp=Z,4.0nm,1.0s,baz=52,slow=16,SNR=4.4
ESDC LR LR 22 38 21.6
comp=Z,6µm,21.3s,baz=76,slow=38
comp=Z,129nm,0.9s
**WME Myndd Eilian 39.97 314** *eP* **P** **22 20 59.0 -1.1**
**EQTA Presa de Quent 39.98 289** P **P** **22 20 59.9 -0.7**
**MSEY Mahe Island 40.00 166** P **P** **22 21 01.2 +0.5**
**MSEY Mahe Island 40.00 166** *eP* **P** **22 21 00.7 0.0**
**MSEY Mahe Island 40.00 166** P **P** **22 21 02.4 +1.7**
MSEY P **P** **22 21 02.4 +1.7**
**MSEY Mahe Island 40.00 166** P **P** **22 21 01.2 +0.5**
MSEY pmax pmax
comp=Z,163nm,1.0s
**EMLI Melilla 40.01 286** P **P** **22 21 01.5 +0.8**
**WLF1 Llynfaes 40.02 314** *eP* **P** **22 20 59.4 -1.0**
WLF1 IAmb IAmb 22 21 03.7
comp=Z,2µm,1.9s
WLF1 IAMs_20 IAMs_20 22 43 11.9
comp=Z,25µm,14.1s
**RSBS Rosebush, Pemb 40.09 312** *eP* **P** **22 20 59.3 -1.7**
RSBS IAmb IAmb 22 21 04.2
comp=Z,727nm,1.5s
RSBS IAMs_20 IAMs_20 22 42 01.4
comp=Z,10µm,15.4s
**WPS Cemaes, Angles 40.09 314** *eP* **P** **22 21 00.4 -0.7**
WPS IAMs_20 IAMs_20 22 41 31.7
comp=Z,14µm,18.4s
**MCD Coleburn Disti 40.13 321** *eP* **P** **22 21 00.3 -1.0**
MCD IAmb IAmb 22 21 05.4
comp=Z,1µm,1.5s
**KNGR Kungurtug, Tuv 40.14 50** *d i* P **P** **22 21 04.1 +2.5**
KNGR pmax pmax
comp=Z,212nm,1.0s
**NEWG New Galloway 40.18 317** *eP* **P** **22 21 01.1 -0.6**
NEWG IAmb IAmb 22 21 05.4
comp=Z,483nm,1.4s
NEWG IAMs_20 IAMs_20 22 41 09.6
comp=Z,14µm,15.4s
**ELGU Los Guajares, 40.20 288** P **P** **22 21 01.3 -0.9**
**SHL Shillong 40.21 90** P **P** **22 21 01.8 -0.8**
SHL IAmb IAmb 22 21 07.2
comp=Z,525nm,1.4s
**SHL Shillong 40.21 90** *eP* **P** **22 21 02.0 -0.5**
SHL IAmb IAmb 22 21 10.1
comp=Z,419nm,1.4s
**SHL Shillong 40.21 90** P **P** **22 21 01.0 -1.5**
SNR=75
**SHL Shillong 40.21 90** P **P** **22 21 01.8 -0.8**
SHL pmax pmax
comp=Z,525nm,1.4s
SHL MLR MLR
comp=Z,29µm,20.0s
**IOMK Kirk Michael 40.24 315** *eP* **P** **22 21 01.4 -0.9**
IOMK IAmb IAmb 22 21 06.1
comp=Z,888nm,1.0s
IOMK IAMs_20 IAMs_20 22 40 03.9
comp=Z,35µm,17.8s
**PAB San Pablo 40.26 292** P **P** **22 21 01.8 -1.0**
PAB IAmb IAmb 22 21 06.8
comp=Z,562nm,1.4s
**PAB San Pablo 40.26 292** P **P** **22 21 01.8 -1.0**
PAB pmax pmax
comp=Z,562nm,1.4s
PAB MLR MLR
comp=Z,6µm,20.0s
**CCA1 Carnmenellis 40.27 309** *eP* **P** **22 21 01.1 -1.4**
CCA1 IAmb IAmb 22 21 05.9
comp=Z,738nm,1.4s
CCA1 IAMs_20 IAMs_20 22 40 21.3
comp=Z,9µm,13.1s
**WIM Isle of Man 40.29 315** *eP* **P** **22 21 01.7 -1.0**
**INVG Invergeldie, C 40.31 319** *eP* **P** **22 21 01.4 -1.4**
INVG IAmb IAmb 22 21 06.8
comp=Z,373nm,1.1s
INVG IAMs_20 IAMs_20 22 39 53.8
comp=Z,8µm,20.0s
**AGT Agartala 40.39 93** *eP* **P** **22 21 05.5 +1.6**
AGT IAmb IAmb 22 21 10.4
comp=Z,614nm,0.8s
**GAL1 Galloway 40.42 316** *eP* **P** **22 21 02.5 -1.2**
GAL1 IAmb IAmb 22 21 07.3
comp=Z,302nm,0.8s
GAL1 IAMs_20 IAMs_20 22 40 26.5
comp=Z,16µm,18.4s
**PGBU Glenifferbraes 40.44 318** *eP* **P** **22 21 03.0 -0.9**
PGBU IAmb IAmb 22 21 08.2
comp=Z,1µm,1.4s
PGBU IAMs_20 IAMs_20 22 37 45.5
comp=Z,10µm,21.2s
**EGOR Sierra Gorda, 40.53 289** P **P** **22 21 03.2 -1.9**
**EADA Adamuz 40.68 290** S **S** **22 27 16.9 +0.7**
EADA P **P** **22 21 05.5 -0.6**
**BIGH Upper Bighouse 40.68 322** *eP* **P** **22 21 05.5 -0.3**
BIGH IAmb IAmb 22 21 09.8
comp=Z,299nm,1.1s
BIGH IAMs_20 IAMs_20 22 41 04.6
comp=Z,11µm,18.0s
**EMAL Malaga-Limoner 40.85 288** S **S** **22 27 20.2 +1.6**
EMAL P **P** **22 21 06.5 -1.0**
**LAWE Loch Awe, Argy 41.02 318** *eP* **P** **22 21 07.2 -1.5**
LAWE IAmb IAmb 22 21 12.7
comp=Z,759nm,1.3s
LAWE IAMs_20 IAMs_20 22 42 55.7
comp=Z,14µm,15.8s
**ZIRO ZIRO 41.06 86** *eP* **P** **22 21 10.0 +0.3**
ZIRO IAmb IAmb 22 21 16.4
comp=Z,228nm,0.8s
**PVLZ Peæn de 41.12 286** P **P** **22 21 10.5 +0.7**
**DSB Dublin 41.19 314** P **P** **22 21 09.7 -0.5**
**DSB Dublin 41.19 314** P **P** **22 21 09.0 -1.1**
**CLGH Cloghs, Cushen 41.24 316** *eP* **P** **22 21 09.5 -1.1**
CLGH IAmb IAmb 22 21 14.8
comp=Z,710nm,1.0s
CLGH IAMs_20 IAMs_20 22 40 20.5
comp=Z,13µm,18.1s
**ILTH Belurgan, Co L 41.25 315** P **P** **22 21 09.7 -0.9**
**ILTH Belurgan, Co L 41.25 315** *eP* **P** **22 21 09.0 -1.5**
**ECAB El Cabril 41.35 290** P **P** **22 21 11.2 -0.5**
**IWEX Carrickbyrne, 41.36 312** P **P** **22 21 11.1 -0.5**
**IWEX Carrickbyrne, 41.36 312** *eP* **P** **22 21 11.0 -0.6**
IWEX IAMs_20 IAMs_20 22 39 46.0
comp=Z,11µm,17.6s
**LIJA Lijar 41.58 289** S **S** **22 27 29.9 +0.1**
LIJA P **P** **22 21 12.3 -1.4**
**ECAL Calabor 41.70 296** P **P** **22 21 13.8 -0.8**
**PBRG Braganca 41.72 296** *eP* **P** **22 21 15.7 +1.0**
comp=Z,268nm,2.1s
**PALK Pallekele 41.74 123** P **P** **22 21 15.2 0.0**
**PALK Pallekele 41.74 123** LR LR 22 40 05.6
comp=Z,22µm,19.6s,baz=67,slow=38
**PALK Pallekele 41.74 123** P **P** **22 21 15.7 +0.6**
PALK P **P** **22 21 15.7 +0.6**
**PALK Pallekele 41.74 123** *de* **P** **22 21 15.9 +0.7**
PALK pmax pmax
comp=Z,127nm,1.0s
**CEU Ceuta 41.79 287** S **S** **22 27 33.7 +1.1**
CEU P **P** **22 21 13.8 -1.5**
**ECEU Ceuta 41.79 287** P **P** **22 21 14.2 -1.2**
**ESPR Espera 41.94 289** P **P** **22 21 14.7 -1.9**
**KOHI KOHIMA 41.98 89** *eP* **P** **22 21 17.5 +0.3**
KOHI IAmb IAmb 22 21 22.7
comp=Z,305nm,1.0s
**MDT Midelt 42.00 282** LR LR 22 41 47.9
comp=Z,4µm,20.1s,baz=89,slow=41
**MVO Moncorvo 42.03 295** *eP* **P** **22 21 16.8 -0.5**
comp=Z,355nm,1.9s
**MVO Moncorvo 42.03 295** *ePP* **PP** **22 22 54.5 +0.1**
MVO *eS* **S** **22 27 35.8 -0.4**
MVO *eLR* LR 22 31 09.8
comp=Z,6µm,16.0s
**IDGL Inch Island, C 42.04 316** P **P** **22 21 16.5 -0.6**
**IDGL Inch Island, C 42.04 316** *eP* **P** **22 21 15.6 -1.5**
IDGL IAMs_20 IAMs_20 22 42 18.8
comp=Z,14µm,18.4s
**KAAM Kaadhehdhoo 42.12 138** P **P** **22 21 18.0 -0.1**
KAAM IAMs_20 IAMs_20 22 38 45.9
comp=Z,15µm,20.0s
**KAAM Kaadhehdhoo 42.12 138** P **P** **22 21 19.3 +1.1**
SNR=10
**IMP Imphal 42.21 90** *eP* **P** **22 21 19.2 +0.2**
IMP IAmb IAmb 22 21 27.8
comp=Z,218nm,0.8s
**IFR Ifrane 42.21 284** S **S** **22 27 42.1 +2.8**
IFR P **P** **22 21 19.9 +0.9**
**SFS San Fernando 42.31 288** S **S** **22 27 43.1 +2.9**
SFS P **P** **22 21 18.3 -1.2**
**MOY Mondy 42.37 49** *eP* **P** **22 21 22.1 +2.1**
MOY pmax pmax
comp=Z,600nm,2.9s
**EMIN Mina Concepcio 42.38 290** P **P** **22 21 19.4 -0.7**
**EBAD Badajoz 42.44 292** P **P** **22 21 19.4 -1.2**
**GTA Gaotai 42.52 67** P **P** **22 21 22.3 +0.9**
GTA pP sP 22 21 26.5 -0.4
GTA ScP **ScP** **22 27 07.8 +3.1**
GTA S **S** **22 27 44.0 +0.3**
GTA sS sS 22 27 50.5 +0.3
GTA ScS **ScS** **22 31 25.3 +2.1**
GTA pmax pmax
comp=Z,60nm,1.5s
GTA pmax pmax
comp=Z,2µm,6.4s
GTA LR LR
comp=Z,20µm,19.6s
GTA LR LR
comp=Z,10µm,18.9s
GTA LR LR
comp=Z,13µm,17.8s
**PVRL Vila Real 42.52 296** *eP* **P** **22 21 20.5 -0.8**
comp=Z,565nm,2.1s
**MTE Manteigas 42.54 294** P **P** **22 21 20.3 -1.1**
**MTE Manteigas 42.54 294** *eP* **P** **22 21 20.8 -0.6**
comp=Z,872nm,1.6s
**MTE Manteigas 42.54 294** *ePP* **PP** **22 23 00.2 +0.3**
MTE *eS* **S** **22 27 43.4 -0.3**
MTE *eLR* LR 22 30 54.9
comp=Z,6µm,18.0s
**POLO Lamas de Olo 42.56 296** *eP* **P** **22 21 21.3 -0.4**
comp=Z,272nm,1.4s
**PBAR Barrancos 42.58 291** *eP* **P** **22 21 21.1 -0.7**
comp=Z,907nm,1.7s
**PBAR Barrancos 42.58 291** P **P** **22 21 21.0 -0.7**
**PCBR Castelo Branco 42.59 293** *eP* **P** **22 21 21.4 -0.3**
comp=Z,1µm,1.7s
**PMRV Marv??o 42.60 293** *eP* **P** **22 21 21.3 -0.6**
comp=Z,543nm,2.1s
**PMRV Marv??o 42.60 293** *ePP* **PP** **22 23 00.6 +0.1**
PMRV *eS* **S** **22 27 41.9 -2.7**
PMRV *eLR* LR 22 30 54.3
comp=Z,5µm,20.0s
**PCAB Cabril 42.68 296** *eP* **P** **22 21 22.0 -0.6**
comp=Z,488nm,1.7s
**PVIS Viseu 42.75 295** *eP* **P** **22 21 22.9 -0.2**
comp=Z,749nm,2.0s
**PVIS Viseu 42.75 295** *ePP* **PP** **22 23 01.9 -0.2**
**LKP Lekhapani 42.78 86** *eP* **P** **22 21 24.4 +1.0**
LKP IAmb IAmb 22 21 30.5
comp=Z,454nm,1.2s
**PGAV Gavieira, Arco 42.83 297** *eP* **P** **22 21 23.2 -0.6**
comp=Z,800nm,1.5s
PGAV *eS* **S** **22 27 46.7 -1.3**
PGAV *eLR* LR 22 33 05.4
comp=Z,6µm,18.0s
**PESTR Estremoz 42.86 292** P **P** **22 21 22.7 -1.3**
PESTR IAmb IAmb 22 21 29.9
comp=Z,280nm,0.9s
**PESTR Estremoz 42.86 292** *eP* **P** **22 21 23.1 -0.9**
comp=Z,543nm,1.6s
**PESTR Estremoz 42.86 292** *ePP* **PP** **22 23 03.4 +0.1**
**PESTR Estremoz 42.86 292** P **P** **22 21 23.0 -1.0**
**IGLA Glengowla, Co 43.00 314** P **P** **22 21 23.1 -1.8**
**IGLA Glengowla, Co 43.00 314** *eP* **P** **22 21 24.0 -0.9**
IGLA IAMs_20 IAMs_20 22 41 14.3
comp=Z,13µm,15.8s
**EGRO El Granado 43.06 290** P **P** **22 21 24.6 -1.0**
**COI Coimbra 43.23 294** P **P** **22 21 26.5 -0.4**
**COI Coimbra 43.23 294** *eP* **P** **22 21 27.4 +0.5**
comp=Z,1µm,2.0s
**COI Coimbra 43.23 294** *ePP* **PP** **22 23 07.2 0.0**
**COI Coimbra 43.23 294** P **P** **22 21 26.5 -0.4**
COI pmax pmax
comp=Z,494nm,0.9s
COI MLR MLR
comp=Z,6µm,20.0s
**PBEJ Beja 43.25 291** *eP* **P** **22 21 26.8 -0.3**
comp=Z,847nm,1.8s
**PBEJ Beja 43.25 291** *ePP* **PP** **22 23 10.1 +2.6**
**EVO Evora 43.25 292** *eP* **P** **22 21 26.7 -0.5**
comp=Z,304nm,1.6s
**EVO Evora 43.25 292** S **S** **22 27 56.2 +2.1**
EVO P **P** **22 21 26.9 -0.2**
**PVAQ Vaqueiros 43.27 290** P **P** **22 21 26.1 -1.2**
PVAQ IAmb IAmb 22 21 31.1
comp=Z,335nm,1.2s
**PVAQ Vaqueiros 43.27 290** *eP* **P** **22 21 26.6 -0.7**
comp=Z,538nm,2.4s
**PVAQ Vaqueiros 43.27 290** *ePP* **PP** **22 23 03.5 -4.3**
PVAQ *eS* **S** **22 27 52.4 -2.0**
PVAQ *eLR* LR 22 31 07.2
comp=Z,3µm,18.0s
**PVAQ Vaqueiros 43.27 290** P **P** **22 21 26.7 -0.6**
**PMTG Montargil 43.30 292** *eP* **P** **22 21 26.9 -0.7**
comp=Z,517nm,1.6s
**PMTG Montargil 43.30 292** *ePP* **PP** **22 23 08.5 +0.4**
**PCAS Casmilo, Conde 43.32 294** *eP* **P** **22 21 27.4 -0.3**
comp=Z,566nm,1.4s
**PCAS Casmilo, Conde 43.32 294** *ePP* PP 22 23 12.2 +4.0
**RTC Rabat Centre 43.46 285** P **P** **22 21 29.4 +0.5**
**PCVE Castro Verde 43.47 290** *eP* **P** **22 21 28.2 -0.8**
comp=Z,597nm,1.5s
**PCVE Castro Verde 43.47 290** *ePP* **PP** **22 23 11.8 +1.9**
**PCVE Castro Verde 43.47 290** P **P** **22 21 28.1 -0.8**
**PBDV Barranco-do-Ve 43.47 290** *eP* **P** **22 21 28.5 -0.5**
comp=Z,447nm,1.8s
**PBDV Barranco-do-Ve 43.47 290** P **P** **22 21 28.8 -0.2**
**VAL Valentia 43.48 311** P **P** **22 21 28.3 -0.5**
**VAL Valentia 43.48 311** S **S** **22 27 58.0 +0.9**
VAL P **P** **22 21 28.0 -0.8**
**MESJ Messejana 43.56 291** P **P** **22 21 28.5 -1.2**
**MESJ Messejana 43.56 291** *eP* **P** **22 21 29.3 -0.4**
comp=Z,462nm,1.7s
**MESJ Messejana 43.56 291** *ePP* **PP** **22 23 12.2 +1.3**
**MESJ Messejana 43.56 291** *eP* **P** **22 21 28.9 -0.8**
MESJ IAMs_20 IAMs_20 22 40 34.4
comp=Z,8µm,20.3s
**MESJ Messejana 43.56 291** *eP* **P** **22 21 28.9 -0.8**
**PSBE So Bento 43.65 293** *eP* **P** **22 21 30.0 -0.4**
comp=Z,1µm,1.8s
**PNCL Nicolau / Gran 43.74 291** *eP* **P** **22 21 30.4 -0.7**
comp=Z,400nm,2.4s
**PNCL Nicolau / Gran 43.74 291** P **P** **22 21 30.7 -0.4**
**ZAK Zakamensk 43.81 51** *eP* **P** **22 21 33.0 +1.3**
ZAK pmax pmax
comp=Z,139nm,1.7s
**PTEO Sao Teotonio 44.02 290** *eP* **P** **22 21 33.2 -0.1**
comp=Z,724nm,2.0s
**MORF Marmelete 44.02 290** *eP* **P** **22 21 35.3 +1.9**
comp=Z,458nm,1.8s
**MORF Marmelete 44.02 290** *eP* **P** **22 21 32.6 -0.8**
MORF *eS* **S** **22 28 05.5 0.0**
MORF IAMs_20 IAMs_20 22 41 05.2
comp=E,9µm,22.3s
**MORF Marmelete 44.02 290** *eP* **P** **22 21 32.6 -0.8**
MORF *eS* **S** **22 28 05.5 0.0**
**LIS Lisbon 44.08 292** *eP* **P** **22 21 34.3 +0.5**
comp=E,1µm,1.6s
**LIS Lisbon 44.08 292** *eP* **P** **22 21 33.1 -0.7**
LIS *eS* **S** **22 28 06.3 +0.1**
LIS IAMs_20 IAMs_20 22 42 25.6
comp=E,12µm,17.0s
**LIS Lisbon 44.08 292** *eP* **P** **22 21 33.1 -0.7**
LIS *eS* **S** **22 28 06.3 +0.1**
**AVE Averroes 44.11 284** S **S** **22 28 08.5 +1.7**
AVE P **P** **22 21 34.5 +0.4**
**PMAFR Mafra 44.13 293** P **P** **22 21 34.7 +0.4**
**PFVI Vila Bisbo 44.20 290** P **P** **22 21 33.8 -1.0**
PFVI IAmb IAmb 22 21 38.9
comp=Z,339nm,1.0s
**PFVI Vila Bisbo 44.20 290** *eP* **P** **22 21 34.9 +0.1**
comp=Z,742nm,1.5s
**PFVI Vila Bisbo 44.20 290** S **S** **22 28 09.7 +1.8**
PFVI P **P** **22 21 34.6 -0.2**
**IRK Irkutsk 44.41 48** *eP* **P** **22 21 37.5 +1.2**
IRK pmax pmax
comp=Z,813nm,3.2s
**TIO Tiouine 44.73 281** S **S** **22 28 17.6 +1.5**
TIO P **P** **22 21 39.2 -0.1**
**SPB2 Spitsbergen Ar 45.54 352** P **P** **22 21 44.7 -0.2**
SPB2 IAmb IAmb 22 21 58.1
comp=Z,176nm,1.0s
**SPA0 Spitsbergen Ar 45.54 352** *eP* **P** **22 21 45.5 +0.5**
**SPITS Spitsbergen Ar 45.54 352** P **P** **22 21 44.7 -0.3**
comp=Z,79nm,0.7s,baz=143,slow=11,SNR=71
SPITS PP **PP** **22 23 33.8 +2.5**
comp=Z,149nm,1.0s,baz=127,slow=18,SNR=6.3
SPITS LR LR 22 40 57.1
comp=Z,7µm,20.9s,baz=128,slow=36
comp=Z,79nm,0.7s
**SPITS Spitsbergen Ar 45.54 352** P **P** **22 21 44.4 -0.6**
SPITS pmax pmax
comp=Z,306nm,1.1s
**TORD Torodi Ar. Bea 45.55 253** P **P** **22 21 45.4 -0.4**
**TORD Torodi Ar. Bea 45.55 253** P **P** **22 21 45.4 -0.4**
comp=Z,426nm,1.2s,baz=38,slow=8.2,SNR=132
TORD PcP **PcP** **22 23 23.1 -1.3**
comp=Z,7.8nm,0.8s,baz=61,slow=2.6,SNR=1.2
TORD S **S** **22 28 25.1 -2.9**
comp=Z,1.0nm,0.7s,baz=46,slow=8.4,SNR=1.2
TORD LR LR 22 44 17.8
comp=Z,11µm,19.2s,baz=53,slow=41
comp=Z,426nm,1.2s
**EKNA AfricaArray - 45.64 237** ⇑ *eP* **P** **22 21 49.3 +2.8**
**TNCH TengChong 45.90 87** ⇑P **P** **22 21 48.3 -0.4**
TNCH pP pP 22 21 51.5 -1.1
TNCH sP sP 22 21 54.5 +0.3
TNCH PP **PP** **22 23 36.5 +0.3**
TNCH S **S** **22 28 29.8 -3.5**
TNCH SS **ScS** **22 31 45.0 -0.1**
TNCH pmax pmax
comp=Z,69nm,1.1s
TNCH pmax pmax
comp=Z,1µm,4.1s
TNCH LR LR
comp=Z,10µm,18.8s
TNCH LR LR
comp=Z,7µm,19.0s
TNCH LR LR
comp=Z,7µm,24.1s
**SONM Songino Array 46.02 54** P **P** **22 21 49.7 +0.4**
SONM IAmb IAmb 22 21 54.8
comp=Z,227nm,1.8s
**SONM Songino Array 46.02 54** P **P** **22 21 49.5 +0.2**
comp=Z,12nm,0.9s,baz=276,slow=10.0,SNR=23
SONM PcP **PcP** **22 23 24.8 -0.9**
comp=Z,6.5nm,0.6s,baz=282,slow=3.9,SNR=6.4
SONM LR LR 22 44 55.3
comp=Z,15µm,18.3s,baz=274,slow=41
comp=Z,12nm,0.9s
**LZH Lanzhou 46.40 71** ⇑P **P** **22 21 53.0 +0.5**
LZH sP sP 22 22 03.8 +5.8
LZH PP **PP** **22 23 47.5 +6.2**
LZH S **S** **22 28 41.5 +1.3**
LZH SS **ScS** **22 31 56.3 +8.3**
LZH pmax pmax
comp=Z,340nm,1.1s
LZH pmax pmax
comp=Z,3µm,3.8s
LZH LR LR
comp=Z,29µm,17.7s
LZH LR LR
comp=Z,9µm,17.2s
LZH LR LR
comp=Z,28µm,19.7s
**ULN Ulaanbaatar 46.46 54** P **P** **22 21 53.2 +0.4**
ULN IAmb IAmb 22 21 58.4
comp=Z,167nm,1.1s
**ULN Ulaanbaatar 46.46 54** IAMs_20 IAMs_20 22 43 26.2
comp=Z,11µm,20.0s
**ULN Ulaanbaatar 46.46 54** P **P** **22 21 53.9 +1.1**
ULN P **P** **22 21 53.9 +1.1**
ULN P **P** **22 21 53.9 +1.1**
**ULN Ulaanbaatar 46.46 54** *c i* P **P** **22 21 53.8 +1.0**
ULN pmax pmax
comp=Z,277nm,1.7s
ULN MLR MLR
comp=Z,11µm,17.0s
**KBS Kingsbay 46.68 351** P **P** **22 21 54.0 +0.1**
KBS IAmb IAmb 22 21 59.9
comp=Z,183nm,1.4s
**KBS Kingsbay 46.68 351** *eP* **P** **22 21 55.3 +1.4**
**KBS Kingsbay 46.68 351** ⇓ *eP* **P** **22 21 55.7 +1.8**
KBS pmax pmax
comp=Z,96nm,1.0s
KBS MLR MLR
comp=Z,7µm,15.0s
**KBS Kingsbay 46.68 351** *i* P **P** **22 21 55.4 +1.6**
**KSMZ Kasama 46.74 201** *i* P **P** **22 21 56.4 +1.2**
KSMZ *i* P **pP** **22 21 57.9 -1.4**
KSMZ *i* P **sP** **22 21 59.0 -1.7**
KSMZ *i* 22 32 13.8
KSMZ *i* 22 35 09.0
KSMZ *i* 22 35 21.4
**PBA Port Blair 47.93 107** P **P** **22 22 04.4 0.0**
**CD2 Chengdu 47.94 77** ⇓P **P** **22 22 05.5 +1.1**
CD2 PP **PP** **22 23 56.8 +0.5**
CD2 S **S** **22 29 01.5 -0.6**
CD2 SS **SS** **22 32 28.5 -2.1**

CD2 pmax pmax
comp=Z,210nm,0.8s
CD2 pmax pmax
comp=Z,2µm,4.1s
CD2 LR LR
comp=Z,16µm,22.2s
CD2 LR LR
comp=Z,13µm,15.2s
CD2 LR LR
comp=Z,19µm,17.8s
**PZH PanZhiHua 47.95 84** P **P** **22 22 04.5 -0.2**
PZH PP **PP** **22 23 55.8 -0.8**
PZH PcS **PcS** **22 27 27.8 -1.0**
PZH S **S** **22 29 00.5 -1.9**
PZH SS **SS** **22 32 25.8 -5.2**
PZH pmax pmax
comp=Z,90nm,1.1s
PZH pmax pmax
comp=Z,920nm,6.7s
PZH LR LR
comp=Z,14µm,21.0s
PZH LR LR
comp=Z,16µm,20.0s
PZH LR LR
comp=Z,10µm,20.8s
**CM31 Chiang Mai Arr 49.26 95** P **P** **22 22 13.9 -0.8**
CM31 IAmb IAmb 22 22 22.2
comp=Z,210nm,1.1s
**CMAR Chiang Mai Arr 49.26 95** P **P** **22 22 13.3 -1.4**
**CMAR Chiang Mai Arr 49.26 95** P **P** **22 22 14.2 -0.5**
comp=Z,67nm,0.7s,baz=295,slow=8.4,SNR=234
CMAR S **S** **22 29 20.1 -0.7**
comp=Z,0.9nm,0.4s,baz=298,slow=15,SNR=1.9
CMAR LR LR 22 47 09.5
comp=Z,8µm,19.8s,baz=290,slow=41
comp=Z,67nm,0.7s
**KMI Kunming 49.34 85** ⇑P **P** **22 22 14.3 -1.1**
KMI PP **PP** **22 24 07.8 -1.6**
KMI S **S** **22 29 19.8 -2.4**
KMI pmax pmax
comp=Z,130nm,0.9s
KMI pmax pmax
comp=Z,1µm,5.9s
KMI LR LR
comp=Z,19µm,20.4s
KMI LR LR
comp=Z,13µm,21.9s
KMI LR LR
comp=Z,12µm,22.5s
**CRAI Chiangrai 49.58 92** P **P** **22 22 15.8 -1.3**
**BORG Borgarnes 49.81 329** P **P** **22 22 18.5 +0.3**
BORG IAmb IAmb 22 22 24.2
comp=Z,315nm,1.6s
**BORG Borgarnes 49.81 329** LR LR 22 43 27.5
comp=Z,8µm,21.6s,baz=92,slow=36
**BORG Borgarnes 49.81 329** P **P** **22 22 18.5 +0.3**
BORG pmax pmax
comp=Z,315nm,1.7s
**BOD Bodaibo 49.87 40** *e*P **P** **22 22 19.2 +0.4**
BOD pmax pmax
comp=Z,418nm,1.5s
**BTO Baotou 49.90 63**⇑*i*P **P** **22 22 20.0 +0.6**
BTO pP **sP** **22 22 24.8 -0.2**
BTO sP **pP** **22 22 27.3 +3.9**
BTO PP **PP** **22 24 14.8 +0.7**
BTO S **S** **22 29 32.5 +3.0**
BTO sS **sS** **22 29 36.5 +0.3**
BTO SS **SS** **22 32 57.5 -4.5**
BTO pmax pmax
comp=Z,280nm,0.9s
BTO pmax pmax
comp=Z,4µm,5.8s
BTO LR LR
comp=Z,41µm,17.3s
BTO LR LR
comp=Z,29µm,18.6s
BTO LR LR
comp=Z,35µm,16.5s
**CIT Chita 50.13 48** *e*P **P** **22 22 22.4 +1.5**
CIT *e* 22 23 38.4
CIT *e* 22 24 21.3
CIT *e* 22 34 38.7
CIT pmax pmax
comp=Z,945nm,2.7s
**PHRA Phrae 50.30 94** P **P** **22 22 22.0 -0.5**
**SCO Scoresbysund 50.58 336** P **P** **22 22 24.1 +0.2**
SCO IAmb IAmb 22 22 29.4
comp=Z,172nm,1.3s
**SCO Scoresbysund 50.58 336** P **P** **22 22 24.1 +0.2**
SCO pmax pmax
comp=Z,172nm,1.3s
SCO MLR MLR
comp=Z,7µm,19.0s
**SCO Scoresbysund 50.58 336** *i*P **P** **22 22 24.7 +0.7**
SCO IAmb IAmb 22 22 34.7
comp=Z,32nm,0.8s
**DBG Daneborg 50.71 341** *i*P **P** **22 22 26.0 +1.1**
DBG IAmb IAmb 22 22 30.5
comp=Z,35nm,0.8s
**DAG Danmarks Havn 50.92 344** *i*P **P** **22 22 27.2 +0.8**
DAG IAmb IAmb 22 22 35.1
comp=Z,37nm,1.0s
**HHC Hu-ho-hao-te 50.97 63** *e*P **P** **22 22 29.0 +1.5**
HHC pP sP 22 22 32.8 -0.3
HHC PP **PP** **22 24 27.5 +3.7**
HHC S **S** **22 29 46.8 +2.4**
HHC ScS **ScS** **22 32 18.3 -0.1**
HHC SS **SS** **22 33 15.8 -3.3**
HHC pmax pmax
comp=Z,90nm,1.4s
HHC LR LR
comp=Z,7µm,12.2s
HHC LR LR
comp=Z,6µm,14.5s
HHC LR LR
comp=Z,10µm,16.3s
**XAN Xi'an 50.99 72** ⇑P **P** **22 22 27.3 -0.4**
XAN PP **PP** **22 24 28.3 +4.3**
XAN S **S** **22 29 45.3 +0.6**
XAN pmax pmax
comp=Z,350nm,0.9s
XAN pmax pmax
comp=Z,3µm,3.8s
XAN LR LR
comp=Z,60µm,18.6s
XAN LR LR
comp=Z,30µm,17.7s
XAN LR LR
comp=Z,14µm,16.1s
**PMPST Porto Santo, M 51.26 287** *e*P **P** **22 22 30.1 +0.4**
comp=Z,2µm,1.7s
**PMPS Porto Santo 51.27 287** *e*P **P** **22 22 29.9 +0.2**
comp=Z,2µm,1.6s
**SRDT SRDT 51.54 99** P **P** **22 22 31.7 -0.2**
**PMAR Madeira 51.84 287** *e*P **P** **22 22 35.2 +0.9**
comp=Z,2µm,1.4s
**FUL Funchal 51.85 287** *e*P **P** **22 22 35.7 +1.6**
comp=Z,955nm,1.8s
**SLVN Son La 51.97 89** P **P** **22 22 34.9 -0.3**
SLVN IAmb IAmb 22 22 42.5
comp=Z,178nm,1.3s
**GYA Guiyang 51.99 82** ⇑P **P** **22 22 35.0 -0.4**
GYA PcP **PcP** **22 23 48.5 +0.7**
GYA S **S** **22 29 56.0 -2.9**
GYA SS **SS** **22 33 29.3 -6.5**
GYA pmax pmax
comp=Z,48nm,0.7s
GYA pmax pmax
comp=Z,1µm,6.4s
GYA LR LR
comp=Z,13µm,30.0s
GYA LR LR
comp=Z,9µm,28.0s
GYA LR LR
comp=Z,6µm,22.0s
**PMOZ Porto Moniz, M 52.03 287** P **P** **22 22 35.3 -0.2**
**PMOZ Porto Moniz, M 52.03 287** *e*P **P** **22 22 37.5 +1.9**
comp=Z,1µm,2.0s
PMOZ *e*S **S** **22 30 02.8 +3.6**
PMOZ *e*LR LR 22 34 15.3
comp=Z,2µm,24.0s
**PMOZ Porto Moniz, M 52.03 287** S **S** **22 30 01.0 +1.8**
PMOZ P **P** **22 22 36.6 +1.0**
**NOR Nord 52.12 350** *i*P **P** **22 22 36.6 +1.2**
NOR IAmb IAmb 22 22 40.3
comp=Z,22nm,0.8s

**LSZ Lusaka 52.48 202** P **P** **22 22 39.0 +0.1**
**LSZ Lusaka 52.48 202** *e*P **P** **22 22 40.1 +1.2**
LSZ IAmb IAmb 22 22 45.0
comp=Z,359nm,1.6s
**LSZ Lusaka 52.48 202** P **P** **22 22 39.0 +0.1**
LSZ pmax pmax
comp=Z,102nm,1.1s
LSZ MLR MLR
comp=Z,14µm,19.0s
**EOSO Osorio 52.49 281** P **P** **22 22 39.1 +0.1**
EOSO S **S** **22 30 07.1 +1.5**
**TIY Taiyuan 52.52 66** P **P** **22 22 40.5 +1.4**
TIY S **S** **22 30 06.3 +0.6**
TIY pmax pmax
comp=Z,160nm,1.4s
TIY LR LR
comp=Z,12µm,14.4s
TIY LR LR
comp=Z,11µm,20.6s
TIY LR LR
comp=Z,14µm,19.2s
**ENH Enshi 52.77 76** P **P** **22 22 41.2 +0.2**
**ENH Enshi 52.77 76** P **P** **22 22 40.7 -0.3**
ENH IAmb IAmb 22 22 58.0
comp=Z,207nm,1.0s
ENH IAMs_20 IAMs_20 22 46 31.3
comp=Z,14µm,22.0s
**OPO Ambohidratompo 52.87 179** LR LR 22 44 53.6
comp=Z,9µm,19.6s,baz=184,slow=36
**MACI Morro de la Ar 53.20 282** P **P** **22 22 44.2 -0.2**
MACI IAmb IAmb 22 22 49.3
comp=Z,352nm,1.2s
**ABPO Ambohimpanom 53.31 179** P **P** **22 22 45.1 0.0**
ABPO IAmb IAmb 22 22 57.8
comp=Z,199nm,1.4s
**ABPO Ambohimpanom 53.31 179** *e*P **P** **22 22 46.2 +1.2**
ABPO IAmb IAmb 22 22 57.4
comp=Z,218nm,1.4s
**ABPO Ambohimpanom 53.31 179** P **P** **22 22 45.1 0.0**
ABPO pmax pmax
comp=Z,199nm,1.4s
**XLT XiLinHaoTe 53.40 58** *e*P **P** **22 22 47.0 +1.5**
XLT S **S** **22 30 21.5 +3.9**
XLT SS **SS** **22 33 55.5 -1.8**
XLT pmax pmax
comp=Z,93nm,1.5s
XLT pmax pmax
comp=Z,2µm,3.6s
XLT LR LR
comp=Z,2µm,19.6s
XLT LR LR
comp=Z,8µm,17.9s
XLT LR LR
comp=Z,11µm,17.0s
**KRI Karoi 53.53 200** *e*P **P** **22 22 47.6 +1.0**
**KRI Karoi 53.53 200** *i*P **P** **22 22 50.9 +4.3**
**KRI Karoi 53.53 200** *i*P **P** **22 22 50.9 +4.3**
**LYN LuoYang 53.58 70** ⇑P **P** **22 22 48.3 +1.5**
LYN pP sP 22 22 51.8 -0.6
LYN PP **PP** **22 24 45.5 -1.8**
LYN S **S** **22 30 20.0 0.0**
LYN SS **SS** **22 34 01.8 +1.6**
LYN pmax pmax
comp=Z,350nm,0.8s
LYN pmax pmax
comp=Z,2µm,3.5s
LYN LR LR
comp=Z,20µm,15.1s
LYN LR LR
comp=Z,19µm,16.8s
LYN LR LR
comp=Z,26µm,17.5s
**HNS HongShan 54.33 66** ⇓P **P** **22 22 53.5 +1.2**
HNS S **S** **22 30 30.5 +0.4**
HNS pmax pmax
comp=Z,130nm,1.4s
HNS pmax pmax
comp=Z,1µm,6.3s
HNS LR LR
comp=Z,21µm,17.2s
HNS LR LR
comp=Z,17µm,17.5s
**HIA Hailar 54.51 50** P **P** **22 22 54.9 +1.5**
**HIA Hailar 54.51 50** P **P** **22 22 52.6 -0.9**
**HIA Hailar 54.51 50** P **P** **22 22 52.6 -0.9**
HIA pmax pmax
comp=Z,604nm,2.0s
HIA MLR MLR
comp=Z,25µm,18.0s
**BJI Beijing 54.58 62** P **P** **22 22 55.0 +1.0**
BJI S **S** **22 30 36.3 +2.9**
BJI pmax pmax
comp=Z,45nm,0.7s
BJI LR LR
comp=Z,9µm,21.9s
BJI LR LR
comp=Z,4µm,21.6s
BJI LR LR
comp=Z,2µm,24.7s
**DBIC Dimbokro 54.58 252** P **P** **22 22 54.1 -0.2**
**DBIC Dimbokro 54.58 252** P **P** **22 22 53.7 -0.6**
comp=Z,72nm,0.6s,baz=29,slow=7.1,SNR=35
DBIC LR LR 22 46 40.8
comp=Z,16µm,18.6s,baz=28,slow=37
comp=Z,72nm,0.6s
**DBIC Dimbokro 54.58 252** P **P** **22 22 54.1 -0.2**
DBIC pmax pmax
comp=Z,258nm,0.9s
**BJT Baijiatuau 54.58 62** P **P** **22 22 54.9 +0.8**
**BJT Baijiatuau 54.58 62** P **P** **22 22 53.2 -0.9**
**BJT Baijiatuau 54.58 62** IAMs_20 IAMs_20 22 48 01.2
comp=Z,12µm,22.0s
**BJT Baijiatuau 54.58 62** P **P** **22 22 53.2 -0.9**
BJT pmax pmax
comp=Z,63nm,0.8s
BJT MLR MLR
comp=Z,12µm,22.0s
**SURA Surathani 54.86 104** P **P** **22 22 55.1 -1.3**
**LHMI Lhok Sumawe 55.12 110** IAMs_20 IAMs_20 22 48 24.8
comp=Z,9µm,20.0s
**SRIT Nakonsritamara 55.17 105** P **P** **22 22 57.0 -1.7**
**SRIT Nakonsritamara 55.17 105** P **P** **22 22 57.1 -1.5**
SRIT IAmb IAmb 22 23 03.2
comp=Z,234nm,1.3s
**TIXI Tiksi 55.28 22** P **P** **22 22 58.8 +0.2**
TIXI IAmb IAmb 22 23 02.7
comp=Z,264nm,1.6s
**TIXI Tiksi 55.28 22** IAMs_20 IAMs_20 22 50 37.9
comp=Z,12µm,20.0s
**TIXI Tiksi 55.28 22** LR LR 22 50 48.8
comp=Z,12µm,19.6s,baz=306,slow=41
**TIXI Tiksi 55.28 22**⇑*e*P **P** **22 23 00.1 +1.5**
TIXI pmax pmax
comp=Z,141nm,1.3s
TIXI MLR MLR
comp=Z,11µm,19.0s
**MLSI Meulaboh, Aceh 55.31 111** P **P** **22 22 56.1 -3.6**
comp=Z,114nm,1.0s
**GULI GuiLin 55.51 81** P **P** **22 23 00.5 -0.5**
GULI S **S** **22 30 41.8 -4.5**
GULI LR LR
comp=Z,7µm,21.7s
GULI LR LR
comp=Z,4µm,22.8s
GULI LR LR
comp=Z,11µm,17.3s
**SUMG Summit 55.83 339** P **P** **22 23 02.2 -0.9**
SUMG IAMs_20 IAMs_20 22 46 47.5
comp=Z,10µm,22.0s
**SUMG Summit 55.83 339** P **P** **22 23 02.2 -0.9**
SUMG pmax pmax
comp=Z,320nm,1.0s
SUMG MLR MLR
comp=Z,10µm,22.0s
**SUMG Summit 55.83 339** *i*P **P** **22 23 04.2 +1.1**
SUMG IAmb IAmb 22 23 11.0
comp=Z,151nm,0.8s
**CHIPN CHIPINGE 56.03 195** *i*P **P** **22 23 06.8 +2.1**
**CHIPN CHIPINGE 56.03 195** *i*P **P** **22 23 06.8 +2.1**
**RER Riviere de l'E 56.16 169** P **P** **22 23 05.8 +0.2**
**RER Riviere de l'E 56.16 169** P **P** **22 23 07.0 +1.4**
SNR=6.0
**VOI Vohitsoka 56.18 179** P **P** **22 23 06.1 +0.4**
VOI IAmb IAmb 22 23 18.2
comp=Z,368nm,1.9s
**VOI Vohitsoka 56.18 179** *e*P **P** **22 23 07.2 +1.4**

**VOI Vohitsoka 56.18 179** P **P** **22 23 09.1 +3.3**
SNR=9.3
**UBPT Khong Chiam 56.25 94** P **P** **22 23 05.8 -0.6**
**UBPT Khong Chiam 56.25 94** P **P** **22 23 05.4 -1.0**
UBPT IAmb IAmb 22 23 10.2
comp=Z,175nm,1.4s
**CNSH ChangSha 56.36 77** P **P** **22 23 07.5 +0.4**
CNSH S **S** **22 30 57.0 -0.6**
CNSH pmax pmax
comp=Z,91nm,0.8s
CNSH LR LR
comp=Z,24µm,18.4s
CNSH LR LR
comp=Z,13µm,19.8s
CNSH LR LR
comp=Z,12µm,19.2s
**BART Pico Bartolome 56.44 296** *e*P **P** **22 23 10.6 +3.0**
comp=Z,783nm,1.3s
**SNSI Sinabang, Aceh 56.44 113** P **P** **22 23 06.8 -0.9**
comp=Z,205nm,1.2s
**WHN Wuhan 56.54 74** P **P** **22 23 09.0 +0.7**
WHN pP **pP** **22 23 12.0 -0.3**
WHN S **S** **22 30 59.8 0.0**
WHN pmax pmax
comp=Z,820nm,1.5s
WHN pmax pmax
comp=Z,3µm,3.4s
WHN LR LR
comp=Z,21µm,13.1s
WHN LR LR
comp=Z,13µm,14.0s
WHN LR LR
comp=Z,64µm,17.9s
**TIA Tai'an 56.56 66** P **P** **22 23 09.3 +0.9**
TIA PP **PP** **22 25 21.0 +7.0**
TIA S **S** **22 31 02.8 +2.8**
TIA pmax pmax
comp=Z,200nm,0.8s
TIA pmax pmax
comp=Z,400nm,4.2s
TIA LR LR
comp=Z,9µm,16.5s
TIA LR LR
comp=Z,4µm,15.1s
**PGRON Lagoa das Cont 56.59 296** *e*P **P** **22 23 12.1 +3.5**
comp=Z,899nm,1.8s
**ANGG Ammassalik, Gr 56.60 330** P **P** **22 23 07.5 -0.7**
ANGG IAmb IAmb 22 23 12.5
comp=Z,251nm,1.5s
ANGG IAMs_20 IAMs_20 22 46 35.3
comp=Z,9µm,22.0s
**ANGG Ammassalik, Gr 56.60 330** *i*P **P** **22 23 08.3 +0.2**
ANGG IAmb IAmb 22 23 14.4
comp=Z,40nm,0.7s
**PSMN Pico do Norte, 56.63 295** *e*P **P** **22 23 12.1 +3.2**
comp=Z,634nm,1.6s
**PCALD Caldeiras da R 56.67 296** *e*P **P** **22 23 12.1 +3.0**
comp=Z,613nm,1.6s
**PSMA Santa Maria 56.68 295** *e*P **P** **22 23 11.7 +2.5**
comp=Z,731nm,1.3s
**CMLA Cha da Macela 56.71 296** *e*P **P** **22 23 12.5 +3.1**
comp=Z,882nm,1.8s
**ICESG Greenland Ices 56.74 335** *i*P **P** **22 23 11.6 +2.0**
ICESG IAmb IAmb 22 23 17.4
comp=Z,147nm,0.8s
**PDA Ponta Delgada 56.82 296** *e*P **P** **22 23 11.1 +1.0**
comp=Z,946nm,1.3s
**PSET Sete Cidades 56.83 296** *e*P **P** **22 23 14.2 +3.9**
comp=Z,784nm,1.2s
**KCSI Kotacane, Aceh 56.83 111** P **P** **22 23 08.6 -2.0**
comp=Z,153nm,1.5s
**BLWY Bulawayo 56.95 200** *e*P **P** **22 23 11.2 -0.2**
BLWY IAmb IAmb 22 23 23.3
comp=Z,291nm,0.8s
**BLWY Bulawayo 56.95 200** *i*P **P** **22 23 13.0 +1.7**
**BLWY Bulawayo 56.95 200** *i*P **P** **22 23 13.0 +1.7**
**YAK Yakutsk 57.12 34** P **P** **22 23 11.5 -0.4**
YAK IAmb IAmb 22 23 21.3
comp=Z,150nm,0.9s
**YAK Yakutsk 57.12 34** P **P** **22 23 11.9 0.0**
comp=Z,91nm,0.8s,baz=278,slow=1.7,SNR=24
YAK LR LR 22 51 39.5
comp=Z,13µm,18.0s,baz=274,slow=40
comp=Z,91nm,0.8s
**YAK Yakutsk 57.12 34** *e*P **P** **22 23 12.7 +0.8**
YAK *e**PP **pP** **22 23 15.4 -0.5**
YAK *e* 22 25 24.8
YAK *e*S **S** **22 31 05.1 -1.5**
YAK *e* 22 33 05.1
YAK pmax pmax
comp=Z,36nm,0.9s
YAK pmax pmax
comp=N,10.0nm,1.5s
YAK pmax pmax
comp=E,44nm,1.4s
YAK pmax pmax
comp=Z,344nm,3.2s
YAK pmax pmax
comp=N,104nm,1.8s
YAK pmax pmax
comp=E,186nm,1.8s
YAK smax smax
comp=E,65nm,1.7s
YAK smax smax
comp=N,154nm,1.5s
YAK MLR MLR
comp=Z,14µm,16.0s
YAK MLR MLR
comp=N,3µm,15.0s
YAK MLR MLR
comp=E,11µm,19.0s
**ISOG Isortoq, Green 57.16 330** *i*P **P** **22 23 13.5 +1.4**
**MATP Matopo 57.25 200** LR LR 22 48 21.1
comp=E,6µm,19.5s,baz=38,slow=37
**MATP Matopo 57.25 200** *i*P **P** **22 23 16.8 +3.4**
**MATP Matopo 57.25 200** *i*P **P** **22 23 16.8 +3.4**
**PSCM Serra do Cume 57.56 297** *e*P **P** **22 23 18.4 +3.0**
comp=E,368nm,1.4s
**PAGU Agualva, Azore 57.58 297** *e*P **P** **22 23 18.9 +3.3**
comp=E,327nm,1.5s
**ADH Angra Heroismo 57.66 297** *e*P **P** **22 23 19.8 +3.7**
comp=E,330nm,1.3s
**PSBA Serra de Santa 57.69 297** *e*P **P** **22 23 19.5 +3.2**
comp=E,378nm,1.6s
**ZEA Zeya 57.91 44** *e*P **P** **22 23 19.1 +1.5**
ZEA *e*S **S** **22 31 22.3 +5.1**
ZEA pmax pmax
comp=E,30nm,1.3s
ZEA pmax pmax
comp=N,20nm,1.1s
ZEA pmax pmax
comp=Z,70nm,1.2s
ZEA pmax pmax
comp=E,400nm,4.5s
ZEA pmax pmax
comp=N,100nm,1.0s
ZEA pmax pmax
comp=Z,600nm,4.3s
ZEA smax smax
comp=N,500nm,12.5s
ZEA smax smax
comp=E,900nm,11.9s
ZEA MLR MLR
comp=E,5µm,16.0s
ZEA MLR MLR
comp=N,5µm,15.0s
ZEA MLR MLR
comp=Z,7µm,16.0s
**QIZ Qiongzhong 57.97 88** P **P** **22 23 18.9 +0.4**
**QIZ Qiongzhong 57.97 88** P **P** **22 23 17.8 -0.7**
QIZ S **S** **22 31 18.0 -0.9**
QIZ ScS **ScS** **22 33 09.0 +0.5**
QIZ pmax pmax
comp=Z,55nm,2.1s
QIZ pmax pmax
comp=Z,750nm,5.6s
QIZ LR LR
comp=Z,10µm,19.6s
QIZ LR LR
comp=Z,8µm,19.6s
QIZ LR LR
comp=Z,8µm,20.4s
**QIZ Qiongzhong 57.97 88** P **P** **22 23 17.5 -1.0**
**QIZ Qiongzhong 57.97 88** IAMs_20 IAMs_20 22 52 14.5
comp=Z,9µm,21.0s
**KULM Kulim 57.98 107** P **P** **22 23 17.0 -1.7**
KULM IAmb IAmb 22 23 24.1

comp=Z,314nm,1.3s
**PGRA Graciosa** 58.07 298 *e*P P 22 23 33.1 +14
comp=Z,281nm,2.0s
**GSI Gunungsitoli** 58.10 113 P **P** **22 23 18.8 -0.7**
**GSI Gunungsitoli** 58.10 113 P **P** **22 23 18.3 -1.2**
GSI IAmb IAmb 22 23 26.0
comp=Z,198nm,1.1s
**GSI Gunungsitoli** 58.10 113 P **P** **22 23 20.4 +0.9**
comp=Z,189nm,1.1s
**NEEM North Greenlan** 58.11 345 *i*P **P** **22 23 20.0 +0.9**
NEEM IAmb IAmb 22 23 25.6
comp=Z,17nm,0.6s
**SRBC Serra Branca** 58.11 298 *e*P **P** **22 23 19.8 +0.5**
comp=Z,445nm,1.9s
**PSI Prapat** 58.18 111 P **P** **22 23 18.5 -1.7**
**PSI Prapat** 58.18 111 P **P** **22 23 18.0 -2.2**
PSI pmax pmax
comp=Z,199nm,1.3s
PSI MLR MLR
comp=Z,7µm,21.0s
**RPSI Rantau Prapat** 58.24 111 P **P** **22 23 18.0 -2.5**
RPSI IAmb IAmb 22 23 33.5
comp=Z,199nm,1.3s
RPSI IAMs_20 IAMs_20 22 50 36.6
comp=Z,7µm,21.0s
**PMAN Manadas** 58.29 298 *e*P **P** **22 23 23.7 +3.1**
comp=Z,499nm,1.3s
**ROSA Rosais** 58.37 298 *e*P **P** **22 23 25.0 +3.9**
comp=Z,396nm,1.2s
**PID Ribeirinha** 58.38 297 *e*P **P** **22 23 24.2 +3.0**
comp=Z,435nm,1.9s
**PPNO Prainha do Nor** 58.48 297 *e*P **P** **22 23 25.2 +3.3**
comp=Z,370nm,1.4s
**PICO Pico** 58.59 298 *e*P **P** **22 23 26.1 +3.4**
comp=Z,271nm,1.4s
**PCAN Candelaria** 58.64 298 *e*P **P** **22 23 25.9 +2.9**
comp=Z,307nm,1.5s
**MUSN Musina, Limpop** 58.67 198 *e*P **P** **22 23 23.0 -0.2**
MUSN IAmb IAmb 22 23 28.9
comp=Z,681nm,2.2s
**MUSN Musina, Limpop** 58.67 198 *i*P **P** **22 23 24.7 +1.5**
**MUSN Musina, Limpop** 58.67 198 *i*P **P** **22 23 24.7 +1.5**
**PCED Cedros** 58.74 298 *e*P **P** **22 23 27.5 +3.8**
comp=Z,292nm,1.5s
**CALA Caldeira** 58.76 298 *e*P **P** **22 23 27.9 +4.0**
comp=Z,605nm,1.3s
**IPM Ipoh** 58.77 108 P **P** **22 23 22.1 -2.1**
**IPM Ipoh** 58.77 108 P **P** **22 23 21.8 -2.5**
IPM IAMs_20 IAMs_20 22 50 34.3
comp=Z,10µm,20.0s
**PFCBR Castelo Branco** 58.79 298 *e*P **P** **22 23 27.2 +3.2**
comp=Z,220nm,1.5s
**DL2 Dalian** 58.93 62 P **P** **22 23 25.5 +0.5**
DL2 S **S** **22 31 30.5 -0.5**
DL2 pmax pmax
comp=Z,500nm,0.9s
DL2 pmax pmax
comp=Z,3µm,4.7s
DL2 LR LR
comp=Z,15µm,23.7s
DL2 LR LR
comp=Z,7µm,19.9s
DL2 LR LR
comp=Z,12µm,16.3s
**HEH HeiHe** 59.02 48 *e*P **P** **22 23 26.0 +0.6**
HEH sP **sP** **22 23 33.8 +2.8**
HEH PP **PP** **22 25 38.0 +2.4**
HEH S **S** **22 31 32.5 +0.7**
HEH ScS **ScS** **22 33 15.8 +0.5**
HEH SS **SS** **22 35 26.5 +1.3**
HEH pmax pmax
comp=Z,260nm,1.0s
HEH LR LR
comp=Z,12µm,13.4s
HEH LR LR
comp=Z,17µm,14.0s
HEH LR LR
comp=Z,26µm,15.4s
**MPHEP Siloam, Limpop** 59.18 197 *e*P **P** **22 23 28.1 +1.3**
MPHEP IAmb IAmb 22 23 32.4
comp=Z,394nm,2.2s
**FOMA Nahampoana Res** 59.24 179 P **P** **22 23 27.1 0.0**
FOMA IAmb IAmb 22 23 34.9
comp=Z,81nm,0.9s
**SNY Shenyang** 59.28 58 ⇓P **P** **22 23 30.3 +2.9**
SNY S **S** **22 31 35.0 -0.4**
SNY pmax pmax
comp=Z,830nm,5.8s
SNY LR LR
comp=Z,6µm,12.4s
SNY LR LR
comp=Z,10µm,15.5s
SNY LR LR
comp=Z,15µm,14.1s
**NJ2 Nanjing** 59.47 70⇑ *i*P **P** **22 23 29.3 +0.5**
NJ2 S **S** **22 31 39.5 +1.4**
NJ2 pmax pmax
comp=Z,130nm,1.4s
NJ2 pmax pmax
comp=Z,1µm,5.0s
NJ2 LR LR
comp=Z,14µm,18.9s
NJ2 LR LR
comp=Z,9µm,16.1s
NJ2 LR LR
comp=Z,10µm,15.2s
**MOPA Mopani** 59.48 196 *e*P **P** **22 23 28.8 -0.1**
MOPA IAmb IAmb 22 23 35.5
comp=Z,2µm,2.8s
**MOPA Mopani** 59.48 196 *i*P **P** **22 23 30.9 +2.0**
**MOPA Mopani** 59.48 196 *i*P **P** **22 23 30.9 +2.0**
**PBSI Pulau Batu** 59.52 114 P **P** **22 23 30.8 +1.5**
comp=Z,207nm,1.1s
**BBTS Babate** 59.52 267 LR LR 22 56 12.9
comp=Z,4µm,18.6s,baz=302,slow=43
**CRAIL Swartwater, Li** 59.58 199 *e*P **P** **22 23 30.9 +1.3**
**CN2 Changchun** 59.88 55 *e*P **P** **22 23 30.8 -0.7**
CN2 *es*P sP 22 23 37.8 +0.7
CN2 *e*S **S** **22 31 35.8 -7.3**
CN2 pmax pmax
comp=Z,50nm,1.1s
CN2 LR LR
comp=Z,6µm,14.0s
CN2 LR LR
comp=Z,4µm,14.0s
CN2 LR LR
comp=Z,6µm,16.0s
**HKPS Hong Kong Po S** 59.95 82 IAMs_20 IAMs_20 22 53 49.9
comp=Z,8µm,19.0s
**MBO M'Bour** 60.01 267 P **P** **22 23 32.5 -0.2**
MBO IAMs_20 IAMs_20 22 53 12.9
comp=Z,7µm,20.0s
**TSUM Tsumeb** 60.04 212 P **P** **22 23 33.5 +0.6**
TSUM IAmb IAmb 22 23 39.0
comp=Z,118nm,1.1s
**TSUM Tsumeb** 60.04 212 *e*P **P** **22 23 34.1 +1.2**
TSUM IAmb IAmb 22 23 38.7
comp=Z,117nm,1.1s
**TSUM Tsumeb** 60.04 212 LR LR 22 50 01.5
comp=Z,12µm,18.3s,baz=34,slow=37
**TSUM Tsumeb** 60.04 212 *i*P **P** **22 23 35.2 +2.3**
**TSUM Tsumeb** 60.04 212 *i*P **P** **22 23 35.2 +2.3**
**HOED Hoedspruit, Li** 60.45 196 *e*P **P** **22 23 36.6 +1.1**
HOED IAmb IAmb 22 23 40.9
comp=Z,515nm,2.1s
**KULLO Kullorsuaq** 60.47 343 *i*P **P** **22 23 36.3 +1.4**
KULLO IAmb IAmb 22 23 42.0
comp=Z,136nm,1.0s
**UMMG Uummannaq** 60.48 338 *i*P **P** **22 23 35.5 +0.4**
**DLV T Lat** 60.50 96 P **P** **22 23 36.9 +0.6**
**DLV T Lat** 60.50 96 P **P** **22 23 35.5 -0.8**
DLV IAmb IAmb 22 23 42.4
comp=Z,180nm,1.4s
DLV IAMs_20 IAMs_20 22 52 50.1
comp=Z,7µm,21.0s
**NUUG Nuugaatsiaq** 60.51 339 *i*P **P** **22 23 36.3 +1.1**
NUUG IAmb IAmb 22 23 41.7
comp=Z,34nm,0.9s
**BNX BinXian** 60.51 53 ⇓P **P** **22 23 35.0 -0.7**
BNX S **S** **22 31 49.0 -2.1**
BNX pmax pmax
comp=Z,110nm,1.5s
BNX pmax pmax
comp=Z,1µm,5.7s
BNX LR LR
comp=Z,8µm,14.1s
BNX LR LR
comp=Z,6µm,13.0s
BNX LR LR
comp=Z,18µm,16.9s
**SUJ Sinuiju** 60.55 60 P **P** **22 23 35.5 -0.6**
SUJ AmB
comp=Z,4µm,3.5s
SUJ AMS AMS
comp=Z,8µm,12.4s
**LEPH Lephalale, Lim** 60.71 199 *e*P **P** **22 23 37.6 +0.3**
LEPH IAmb IAmb 22 23 50.3
comp=Z,93nm,1.1s
**WTBG Waterberg Wild** 60.76 198 *e*P **P** **22 23 38.2 +0.5**
WTBG IAmb IAmb 22 23 42.7
comp=Z,285nm,1.9s
**UPNV Upernavik** 60.88 341 *i*P **P** **22 23 39.9 +2.0**
UPNV IAmb IAmb 22 23 45.3
comp=Z,91nm,0.9s
**SISI Saibi** 60.96 114 P **P** **22 23 40.6 +1.4**
comp=Z,103nm,1.4s,comp=Z,3µm
**PILG Pilgrimsrest,** 61.00 196 *e*P **P** **22 23 42.0 +2.5**
PILG IAmb IAmb 22 23 45.9
comp=Z,64nm,0.8s
**SFJD Kangerlussuaq** 61.27 334 P **P** **22 23 40.0 -0.6**
**SFJD Kangerlussuaq** 61.27 334 LR LR 22 49 54.3
comp=Z,16µm,21.7s,baz=64,slow=36
**SFJD Kangerlussuaq** 61.27 334 P **P** **22 23 40.0 -0.6**
SFJD pmax pmax
comp=Z,519nm,2.0s
SFJD MLR MLR
comp=Z,16µm,22.0s
**SFJD Kangerlussuaq** 61.27 334 *i*P **P** **22 23 40.8 +0.2**
SFJD IAmb IAmb 22 23 45.5
comp=Z,37nm,1.0s
**BKNI Bangkinang** 61.38 111 P **P** **22 23 40.8 -1.2**
**BKNI Bangkinang** 61.38 111 P **P** **22 23 40.3 -1.8**
**BKNI Bangkinang** 61.38 111 P P 22 23 36.1 -5.9
BKNI S **S** **22 31 56.0 -7.0**
**BKNI Bangkinang** 61.38 111 P **P** **22 23 39.6 -2.4**
**DULL Dullstroom, Mp** 61.54 197 *e*P **P** **22 23 43.9 +0.7**
DULL IAmb IAmb 22 23 48.7
comp=Z,495nm,2.0s
**SSE Sheshan** 61.67 70 P **P** **22 23 41.5 -2.4**
SSE S **S** **22 32 05.5 -0.9**
SSE pmax pmax
comp=Z,83nm,1.1s
SSE pmax pmax
comp=Z,760nm,4.9s
SSE LR LR
comp=Z,3µm,16.1s
SSE LR LR
comp=Z,4µm,16.1s
**PDSI Padang** 61.73 113 P **P** **22 23 43.5 -0.9**
comp=Z,126nm,1.1s,comp=Z,2µm
**RUST Rust De Winter** 61.83 198 *e*P **P** **22 23 45.7 +0.8**
RUST IAmb IAmb 22 23 50.4
comp=Z,437nm,2.0s
**NHAM Northam, North** 61.84 200 *e*P **P** **22 23 45.5 +0.5**
NHAM IAmb IAmb 22 23 54.9
comp=Z,104nm,0.9s
**PYAG Pyongyang** 61.86 60 P **P** **22 23 44.5 -0.5**
PYAG S **S** **22 32 05.5 -3.0**
PYAG AmB
comp=Z,3µm,4.0s
PYAG AMS AMS
comp=Z,8µm,13.5s
**KLR Kul'dur** 62.02 48 P **P** **22 23 45.8 -0.1**
comp=Z,31nm,0.7s,baz=300,slow=7.5,SNR=23
KLR LR LR 22 53 10.7
comp=Z,9µm,19.0s,baz=296,slow=38
comp=Z,31nm,0.7s
**KLR Kul'dur** 62.02 48*d* *i*P **P** **22 23 46.1 +0.2**
KLR pmax pmax
comp=Z,188nm,1.7s
KLR MLR MLR
comp=Z,11µm,16.0s
**TSWA Tswaing Meteor** 62.12 199 *e*P **P** **22 23 49.3 +2.4**
TSWA IAmb IAmb 22 23 58.1
comp=Z,93nm,1.2s
**TULEG Thule** 62.14 346 IAMs_20 IAMs_20 22 51 52.9
comp=Z,7µm,21.0s
**CRLN Carolina, Mapu** 62.18 197 *e*P **P** **22 23 49.5 +2.2**
CRLN IAmb IAmb 22 23 59.1
comp=Z,52nm,1.1s
**NYAT Nyati, Northwe** 62.20 199 *e*P **P** **22 23 48.5 +1.1**
NYAT IAmb IAmb 22 23 53.2
comp=Z,633nm,2.1s
**HJU Haeju** 62.23 61 P **P** **22 23 46.9 -0.6**
HJU S **S** **22 32 10.1 -3.1**
HJU AmB
comp=Z,2µm,3.5s
HJU AMS AMS
comp=Z,7µm,15.2s
**QZH Quanzhou** 62.33 78 P **P** **22 23 48.5 +0.1**
QZH S **S** **22 32 13.5 -1.4**
QZH pmax pmax
comp=Z,670nm,5.1s
QZH LR LR
comp=Z,23µm,18.9s
QZH LR LR
comp=Z,12µm,17.4s
QZH LR LR
comp=Z,12µm,18.8s
**MDJ Mudanjiang** 62.36 53 P **P** **22 23 50.5 +2.2**
MDJ PcP **PcP** **22 24 30.3 +2.5**
MDJ PcS **PcS** **22 28 33.5 +2.5**
MDJ S **S** **22 32 16.5 +1.8**
MDJ pmax pmax
comp=Z,42nm,2.3s
MDJ LR LR
comp=Z,8µm,16.8s
MDJ LR LR
comp=Z,16µm,16.8s
MDJ LR LR
comp=Z,21µm,16.8s
**IVI Ivigtut** 62.39 327 P **P** **22 23 47.3 -0.9**
IVI IAMs_20 IAMs_20 22 54 03.3
comp=Z,6µm,19.0s
**IVI Ivigtut** 62.39 327 *i*P **P** **22 23 48.8 +0.6**
IVI IAmb IAmb 22 23 52.2
comp=Z,84nm,0.6s
**KNMB Chin-men Tao** 62.39 78 IAMs_20 IAMs_20 22 52 41.2
comp=Z,9µm,20.0s
**LBTB Lobatse** 62.43 201 P **P** **22 23 48.9 -0.1**
LBTB IAmb IAmb 22 24 01.4
comp=Z,161nm,1.1s
**LBTB Lobatse** 62.43 201 *e*P **P** **22 23 50.0 +1.0**
LBTB IAmb IAmb 22 24 01.1
comp=Z,166nm,1.1s
**LBTB Lobatse** 62.43 201 LR LR 22 49 54.1
comp=Z,10µm,18.1s,baz=26,slow=35
**LBTB Lobatse** 62.43 201 *i*P **P** **22 23 51.6 +2.6**
**LBTB Lobatse** 62.43 201 P **P** **22 23 48.9 -0.1**
LBTB pmax pmax
comp=Z,161nm,1.1s
**LBTB Lobatse** 62.43 201 *i*P **P** **22 23 51.6 +2.6**
**MYKOM Kota Tinggi** 62.64 108 P **P** **22 23 48.5 -2.1**
MYKOM IAmb IAmb 22 23 55.2
comp=Z,220nm,1.4s
MYKOM IAMs_20 IAMs_20 22 53 21.8
comp=Z,8µm,20.0s
**HRAO HartRAO** 62.67 199 *e*P **P** **22 23 51.7 +1.1**
**NUUK Nuuk** 62.76 331 *i*P **P** **22 23 51.9 +1.3**
NUUK IAmb IAmb 22 23 56.0
comp=Z,66nm,0.7s
**BTDF Bukit Timah Da** 62.84 109 P **P** **22 23 50.6 -1.3**
**INCN Inchon** 63.12 62 P **P** **22 23 53.6 +0.1**
**INCN Inchon** 63.12 62 P **P** **22 23 52.0 -1.5**
INCN IAmb IAmb 22 23 57.5
comp=Z,127nm,0.8s
**INCN Inchon** 63.12 62 P **P** **22 23 54.1 +0.6**
**INCN Inchon** 63.12 62 P **P** **22 23 52.0 -1.5**
INCN pmax pmax
comp=Z,127nm,0.9s
INCN MLR MLR
comp=Z,5µm,21.0s
**POGA Pongola** 63.12 195 P **P** **22 23 54.0 +0.6**
POGA IAmb IAmb 22 24 04.2
comp=Z,80nm,0.9s
**POGA Pongola** 63.12 195 *e*P **P** **22 23 54.5 +1.1**
POGA IAmb IAmb 22 23 58.8
comp=Z,879nm,2.3s
**WDLM Western Deep L** 63.25 199 *e*P **P** **22 23 54.7 +0.2**
WDLM IAmb IAmb 22 23 59.8
comp=Z,511nm,1.9s
**TPRI Tanjung Pinang** 63.71 108 P **P** **22 23 57.6 0.0**
comp=Z,163nm,1.2s,comp=Z,2µm
**PRYS Parys** 63.74 199 *e*P **P** **22 23 57.9 +0.2**
PRYS IAmb IAmb 22 24 08.1
comp=Z,75nm,1.0s
**NWCL Newcastle** 63.89 196 *e*P **P** **22 23 59.9 +1.3**
NWCL IAmb IAmb 22 24 09.1
comp=Z,80nm,1.1s
**PSTR Posyet** 63.94 55*d* *e*P **P** **22 23 58.7 -0.1**
**KSAR Wonju Array Be** 64.04 61 P **P** **22 23 58.9 -0.6**
**KSAR Wonju Array Be** 64.04 61 P **P** **22 23 58.9 -0.6**
**KSRS Korea Array** 64.06 61 P **P** **22 23 59.2 -0.4**
comp=Z,57nm,0.7s,baz=283,slow=6.8,SNR=71
KSRS LR LR 22 55 34.0
comp=Z,7µm,18.2s,baz=265,slow=40
comp=Z,57nm,0.7s
**USA0B Ussuriysk Arra** 64.10 53 P **P** **22 23 58.5 -1.3**
USA0B IAmb IAmb 22 24 03.3
comp=Z,84nm,1.0s
**USA0B Ussuriysk Arra** 64.10 53 P **P** **22 23 58.5 -1.3**
USA0B pmax pmax
comp=Z,84nm,1.0s
**USRK Ussuriysk Ar.** 64.10 53 P **P** **22 23 58.7 -1.1**
**USRK Ussuriysk Ar.** 64.10 53 P **P** **22 23 58.6 -1.2**
comp=Z,46nm,0.8s,baz=278,slow=5.7,SNR=51
USRK LR LR 22 56 20.8
comp=Z,12µm,18.6s,baz=291,slow=40
comp=Z,46nm,0.8s
**TJN Taejon** 64.11 62 P **P** **22 24 00.3 +0.3**
**TJN Taejon** 64.11 62 P **P** **22 23 59.5 -0.6**
**TJN Taejon** 64.11 62⇑ *e*P **P** **22 23 59.1 -0.9**
**MSHR Mys Shultsa** 64.20 55⇓ *e*P **P** **22 23 58.7 -1.8**
MSHR pmax pmax
comp=Z,22nm,1.1s
**GRNR Gornyy** 64.21 45⇑ *i*P **P** **22 24 00.8 +0.3**
GRNR pmax pmax
comp=Z,20nm,1.0s
GRNR MLR MLR
comp=E,5µm,15.0s
GRNR MLR MLR
comp=N,6µm,14.0s
GRNR MLR MLR
comp=Z,6µm,15.0s
**SWZ Schweizer** 64.55 201 *e*P **P** **22 24 02.8 -0.2**
SWZ IAmb IAmb 22 24 08.2
comp=Z,408nm,1.9s
**TATO Taipei** 64.64 76 P **P** **22 24 05.2 +1.5**
**TATO Taipei** 64.64 76 P **P** **22 24 03.2 -0.5**
**TATO Taipei** 64.64 76 IAMs_20 IAMs_20 22 55 55.0
comp=Z,9µm,20.0s
**TATO Taipei** 64.64 76 P **P** **22 24 04.9 +1.2**
**YHNB Yeheng** 64.70 77 P **P** **22 24 05.6 +1.4**
**YHNB Yeheng** 64.70 77 P **P** **22 24 04.0 -0.1**
**TPUB Ta-pu** 64.74 78 P **P** **22 24 05.5 +1.1**
**TPUB Ta-pu** 64.74 78 P **P** **22 24 04.3 -0.1**
TPUB IAMs_20 IAMs_20 22 56 11.6
comp=Z,7µm,20.0s
**SSLB Suanglung** 64.77 78 P **P** **22 24 05.6 +1.0**
**SNKL Senekal, Frees** 64.92 198 *e*P **P** **22 24 05.5 +0.1**
SNKL IAmb IAmb 22 24 11.7
comp=Z,120nm,0.7s
**NACB Ninganchiao** 65.11 77 P **P** **22 24 07.8 +1.1**
**NACB Ninganchiao** 65.11 77 P **P** **22 24 06.3 -0.4**
NACB IAmb IAmb 22 24 13.0
comp=Z,145nm,1.6s
NACB IAMs_20 IAMs_20 22 55 37.1
comp=Z,8µm,18.0s
**SACV Santiago Islan** 65.20 272 P **P** **22 24 07.4 0.0**
**YULB Yu-li** 65.24 78 P **P** **22 24 09.0 +1.4**
**YULB Yu-li** 65.24 78 IAMs_20 IAMs_20 22 56 11.7
comp=Z,10µm,21.0s
**TWG Pinlang** 65.33 78 IAMs_20 IAMs_20 22 55 15.4
comp=Z,10µm,21.0s
**TWGBT Beinan** 65.34 78 P **P** **22 24 09.3 +1.0**
**PMBG Pietermaritzbu** 65.46 195 *e*P **P** **22 24 09.5 +0.8**
PMBG IAmb IAmb 22 24 17.3
comp=Z,201nm,1.3s
**MNAI Manna** 65.85 114 P **P** **22 24 11.9 +0.3**
MNAI IAMs_20 IAMs_20 22 54 05.3
comp=Z,6µm,19.0s
**MNAI Manna** 65.85 114 P P 22 24 17.2 +5.6
**BOSA Boshof** 65.92 200 P **P** **22 24 12.1 +0.3**
BOSA IAmb IAmb 22 24 23.5
comp=Z,145nm,1.0s
**BOSA Boshof** 65.92 200 *e*P **P** **22 24 12.1 +0.3**
BOSA IAmb IAmb 22 24 22.6
comp=Z,155nm,1.1s
**BOSA Boshof** 65.92 200 P **P** **22 24 11.2 -0.7**
comp=Z,32nm,0.7s,baz=28,slow=6.2,SNR=44
BOSA LR LR 22 55 02.4
comp=Z,9µm,19.0s,baz=32,slow=38
comp=Z,32nm,0.7s
**BOSA Boshof** 65.92 200 *i*P **P** **22 24 13.4 +1.6**
**BOSA Boshof** 65.92 200 P **P** **22 24 12.1 +0.3**
BOSA pmax pmax
comp=Z,145nm,1.0s
**BOSA Boshof** 65.92 200 *i*P **P** **22 24 13.4 +1.6**
**YOJ Yonaguni jima** 66.11 76 IAMs_20 IAMs_20 22 55 53.5
comp=Z,8µm,18.0s
**PMBI Palembang** 66.31 112 P **P** **22 24 12.5 -2.1**
**SEY Seymchan** 66.57 29 P **P** **22 24 16.3 +0.8**
comp=Z,130nm,0.7s,baz=285,slow=7.8,SNR=41
SEY LR LR 22 58 30.2
comp=Z,8µm,19.1s,baz=312,slow=41
comp=Z,130nm,0.7s
**SEY Seymchan** 66.57 29*d* *i*P **P** **22 24 16.8 +1.3**
SEY pmax pmax
comp=Z,275nm,1.3s
SEY MLR MLR
comp=Z,9µm,16.0s
**KSTD Kokstad** 66.79 196 *e*P **P** **22 24 17.7 +0.3**
KSTD IAmb IAmb 22 24 23.1
comp=Z,261nm,2.0s
**COCO West Island** 66.81 125 IAMs_20 IAMs_20 22 56 30.1
comp=Z,5µm,18.0s
**PPBI Pangkal Pinang** 66.88 110 P **P** **22 24 17.3 -0.9**
comp=Z,73nm,1.6s
**UPI Upington** 66.92 204 *e*P **P** **22 24 19.1 +0.9**
UPI IAmb IAmb 22 24 30.0
comp=Z,102nm,1.0s
**LWLI Liwa** 67.11 114 P **P** **22 24 19.3 -0.5**
**ARMS Ukamas** 67.15 205 *e*P **P** **22 24 21.5 +1.8**
ARMS IAmb IAmb 22 24 31.4
comp=Z,234nm,1.1s
**AUSN Aus** 67.23 209 *e*P **P** **22 24 22.2 +2.0**
AUSN IAmb IAmb 22 24 32.5
comp=Z,146nm,1.0s
**KEIM Keimoes** 67.33 204 *e*P **P** **22 24 21.7 +0.9**
KEIM IAmb IAmb 22 24 32.8
comp=Z,118nm,1.1s
**AUGR Augrabies** 67.45 205 *e*P **P** **22 24 24.5 +3.0**
AUGR IAmb IAmb 22 24 33.4
comp=Z,148nm,1.1s
**MA2 Magadan** 67.59 32 P **P** **22 24 23.2 +1.1**
**MA2 Magadan** 67.59 32 P **P** **22 24 21.5 -0.6**
MA2 IAmb IAmb 22 24 26.7
comp=Z,140nm,1.1s
**MA2 Magadan** 67.59 32 P **P** **22 24 22.0 -0.1**
comp=Z,54nm,0.8s,baz=303,slow=7.7,SNR=16
MA2 LR LR 22 59 08.4
comp=Z,7µm,19.4s,baz=302,slow=41
comp=Z,54nm,0.8s
**MA2 Magadan** 67.59 32*c* *e*P **P** **22 24 22.8 +0.7**
MA2 pmax pmax
comp=Z,222nm,1.7s
MA2 MLR MLR
comp=Z,9µm,17.0s
**MA2 Magadan** 67.59 32 P **P** **22 24 22.3 +0.2**
comp=Z,151nm,1.1s,comp=Z,3µm
**HVD Gariep Dam** 67.73 199 *e*P **P** **22 24 24.8 +1.4**
HVD IAmb IAmb 22 24 32.1
comp=Z,105nm,1.1s
**TYV Tymovskoe** 67.74 43 *e*P **P** **22 24 24.8 +1.7**
TYV *e*S **S** **22 33 22.5 +2.0**
TYV pmax pmax
comp=Z,78nm,1.1s
TYV pmax pmax
comp=Z,1µm,4.2s
TYV smax smax
comp=E,11nm,1.7s
TYV smax smax
comp=N,600nm,6.2s
TYV smax smax
comp=E,1µm,6.2s
TYV MLR MLR
comp=Z,3µm,20.0s
**KASI Kota Agung** 67.77 114 P **P** **22 24 24.3 +0.5**

KSM Kuching 67.95 104 P P 22 24 24.4 -0.6
comp=Z,161nm,1.1s
KSM Kuching 67.95 104 P P 22 24 23.4 -1.6
KSM IAmb IAmb 22 24 32.6
comp=Z,67nm,0.9s
JNU Nakatsue 68.14 64 P P 22 24 26.6 +0.5
JNU Nakatsue 68.14 64 P P 22 24 25.4 -0.6
JNU IAmb IAmb 22 24 30.4
comp=Z,88nm,0.8s
JNU IAMs_20 IAMs_20 22 56 56.5
comp=Z,7µm,21.0s
JNU Nakatsue 68.14 64 P P 22 24 26.4 +0.3
comp=Z,74nm,0.8s,baz=80,slow=2.5,SNR=24
JNU LR LR 22 56 47.1
comp=Z,7µm,20.0s,baz=294,slow=38
comp=Z,74nm,0.8s
UGL Uglegorsk 68.23 45 eP P 22 24 29.2 +2.9
UGL eS S 22 33 30.0 +3.5
UGL pmax pmax
comp=Z,140nm,1.1s
UGL pmax pmax
comp=Z,1µm,4.4s
UGL smax smax
comp=E,2µm,9.7s
UGL smax smax
comp=N,1µm,6.9s
UGL MLR MLR
comp=E,11µm,17.0s
UGL MLR MLR
comp=N,5µm,11.0s
UGL MLR MLR
comp=Z,9µm,15.0s
BLSI Bandar Lampung 68.23 113 P P 22 24 26.8 0.0
BILL Bilibino 68.39 21 P P 22 24 26.3 -0.6
BILL IAmb IAmb 22 24 41.4
comp=Z,167nm,1.2s
BILL Bilibino 68.39 21 d/iP P 22 24 27.9 +1.0
BILL e 22 24 53.0
BILL e 22 27 00.6
BILL ePPP PPP 22 28 37.2
BILL eS S 22 33 30.4 +2.6
BILL pmax pmax
comp=Z,158nm,1.3s
BILL MLR MLR
comp=Z,7µm,17.0s
SBUM Sibu 68.91 102 P P 22 24 29.3 -1.7
JOW Kunigami 69.14 71 P P 22 24 31.2 -1.1
JOW IAmb IAmb 22 24 35.7
comp=Z,86nm,0.7s
JOW IAMs_20 IAMs_20 22 56 07.3
comp=Z,5µm,19.0s
JOW Kunigami 69.14 71 P P 22 24 31.7 -0.6
comp=Z,68nm,0.6s,baz=318,slow=6.7,SNR=10.0
JOW LR LR 23 01 11.4
comp=Z,4µm,18.4s,baz=274,slow=42
comp=Z,68nm,0.6s
BFON Badsfontein, M 69.36 200 eP P 22 24 36.0 +2.4
BFON IAmb IAmb 22 24 38.4
comp=Z,1µm,2.3s
FRB Frobisher Bay 69.39 334 LR LR 22 55 23.8
comp=Z,7µm,21.9s,baz=52,slow=36
BRAK Brakfontein 69.58 201 eP P 22 24 36.8 +2.0
BRAK IAmb IAmb 22 24 46.8
comp=Z,177nm,1.3s
GRAF Camdeboo Natio 69.59 200 eP P 22 24 36.3 +1.4
GRAF IAmb IAmb 22 24 46.3
comp=Z,131nm,1.1s
YSS Yuzh-Sakhalins 69.65 47 P P 22 24 37.9 +2.8
YSS Yuzh-Sakhalins 69.65 47 P P 22 24 34.5 -0.7
YSS IAmb IAmb 22 24 40.0
comp=Z,148nm,1.3s
YSS Yuzh-Sakhalins 69.65 47 eP P 22 24 36.0 +0.9
YSS e*SP sP 22 24 42.5 +1.7
YSS e 22 25 00.4
YSS e 22 27 05.4
YSS eS S 22 33 41.8 -1.6
YSS ePPS PPS 22 34 23.7
YSS eSS SS 22 38 15.4 +4.7
YSS pmax pmax
comp=Z,70nm,0.8s
YSS pmax pmax
comp=Z,1µm,4.2s
YSS pmax pmax
comp=E,600nm,4.6s
YSS smax smax
comp=N,700nm,5.5s
YSS MLR MLR
comp=Z,10µm,17.0s
YSS MLR MLR
comp=E,8µm,16.0s
SOE Somerset East 69.71 199 P P 22 24 35.4 -0.2
SOE IAmb IAmb 22 26 30.4
comp=Z,146nm,0.8s
STKI Sintang 69.72 105 P P 22 24 36.2 +0.1
comp=Z,165nm,1.2s
GRHM Grahamstown, E 70.04 198 P P 22 24 38.2 +0.7
GRHM Grahamstown, E 70.04 198 eP P 22 24 38.8 +1.3
GRHM IAmb IAmb 22 24 43.2
comp=Z,591nm,2.1s
ROOI Rooidraai Farm 70.06 200 eP P 22 24 40.5 +2.8
ROOI IAmb IAmb 22 24 49.9
comp=Z,507nm,1.4s
JMN Monobe 70.07 62 P P 22 24 38.3 +0.3
JMN Monobe 70.07 62 P P 22 24 37.2 -0.8
JMN IAmb IAmb 22 24 42.0
comp=Z,110nm,1.0s
KKM Kota Kinabalu 70.10 96 P P 22 24 38.3 -0.2
KKM Kota Kinabalu 70.10 96 P P 22 24 37.1 -1.4
KKM IAmb IAmb 22 24 44.4
comp=Z,81nm,0.8s
FRAZ Fraserburg 70.17 202 eP P 22 24 40.0 +1.5
FRAZ IAmb IAmb 22 24 50.2
comp=Z,130nm,1.0s
SKJI Sukabumi 70.28 114 P P 22 24 38.5 -0.9
GRAN Grantham 70.28 202 eP P 22 24 40.8 +1.7
GRAN IAmb IAmb 22 25 09.2
comp=Z,24nm,0.8s
CVNA Calvinia 70.29 204 eP P 22 24 40.7 +1.5
CVNA IAmb IAmb 22 24 47.7
comp=Z,141nm,1.0s
SHEL Horse Pasture 70.48 234 P P 22 24 40.5 -0.1
SHEL Horse Pasture 70.48 234 P P 22 24 40.5 -0.1
SHEL pmax pmax
comp=Z,338nm,1.2s
SUR Sutherland 70.78 203 P P 22 24 42.7 +0.4
SUR IAmb IAmb 22 24 55.7
comp=Z,191nm,1.2s
SUR Sutherland 70.78 203 eP P 22 24 44.7 +2.4
SUR IAmb IAmb 22 24 55.5
comp=Z,191nm,1.2s
SUR Sutherland 70.78 203 LR LR 22 55 45.8
comp=Z,10µm,18.3s,baz=26,slow=36
SUR Sutherland 70.78 203 P P 22 24 45.0 +2.7
MERW Merweville 70.83 202 eP P 22 24 44.8 +2.4
MERW IAmb IAmb 22 24 54.6
comp=Z,284nm,1.3s
CNJI Cibinong 70.91 114 P P 22 24 37.5 -5.7
comp=Z,91nm,1.2s,comp=Z,1µm
ASAJ Asahikawa 70.95 49 P P 22 24 42.7 -0.5
comp=Z,27nm,0.7s,baz=288,slow=28,SNR=6.3
ASAJ LR LR 22 58 33.3
comp=Z,12µm,18.6s,baz=301,slow=38
comp=Z,27nm,0.7s
ASAJ Asahikawa 70.95 49 P P 22 24 42.7 -0.5
ASAJ pmax pmax
comp=Z,33nm,0.7s
ASAJ MLR MLR
comp=Z,12µm,18.0s
JKA Kamikawa-asahi 70.95 49 P P 22 24 42.7 -0.4
BUFB Buffelsbos 71.29 199 eP P 22 24 47.5 +2.4
BUFB IAmb IAmb 22 24 56.6
comp=Z,61nm,1.1s
BBJI Bungbulang 71.40 113 P P 22 24 43.5 -2.8
INU Inuyama 71.55 60 P P 22 24 46.0 -0.9
INU IAMs_20 IAMs_20 23 00 02.4
comp=Z,7µm,18.0s
JTM Tenmabayashi 71.63 53 P P 22 24 49.7 +2.4
JTM Tenmabayashi 71.63 53 P P 22 24 47.0 -0.3
JTM IAmb IAmb 22 25 01.9
comp=Z,176nm,1.3s
JGF Kuroka 71.66 59 P P 22 24 48.7 +1.0
JGF Kuroka 71.66 59 P P 22 24 46.4 -1.2
MATJ Matjiesfontein 71.67 202 eP P 22 24 49.6 +2.1
MATJ IAmb IAmb 22 24 53.7
comp=Z,1µm,2.1s

MJB9 Matsu-Tunnel 71.79 58 P P 22 24 48.0 -0.4
MAJO Matsushiro 71.79 58 P P 22 24 48.0 -0.4
MAJO Matsushiro 71.79 58 P P 22 24 47.4 -1.0
MAJO Matsushiro 71.79 58 IAMs_20 IAMs_20 22 58 17.5
comp=Z,6µm,21.0s
MAJO Matsushiro 71.79 58 P P 22 24 47.4 -1.0
MAJO pmax pmax
comp=Z,75nm,1.0s
MAJO MLR MLR
comp=Z,6µm,21.0s
MJAR Matsushiro Arr 71.80 58 P P 22 24 47.9 -0.6
comp=Z,29nm,0.8s,baz=310,slow=3.2,SNR=29
MJAR LR LR 22 58 30.1
comp=Z,6µm,20.8s,baz=304,slow=38
comp=Z,29nm,0.8s
XMIS Christmas Isla 71.87 117 IAMs_20 IAMs_20 22 54 31.5
comp=Z,7µm,21.0s
PRTV Porterville,We 71.97 204 eP P 22 24 50.6 +1.3
PRTV IAmb IAmb 22 25 01.6
comp=Z,351nm,1.6s
CER Ceres 72.17 203 eP P 22 24 52.0 +1.6
CER IAmb IAmb 22 25 02.9
comp=Z,154nm,1.2s
CMJI Cimerak 72.21 113 P P 22 24 50.3 -0.8
comp=Z,208nm,0.9s
KPJI Karang Pucung 72.29 112 P P 22 24 48.4 -3.2
comp=Z,78nm,1.1s
ERM Erimo 72.36 51 P P 22 24 54.3 +2.6
ERM Erimo 72.36 51 P P 22 24 51.4 -0.3
ERM IAmb IAmb 22 25 07.2
comp=Z,89nm,0.8s
ERM Erimo 72.36 51 P P 22 24 51.4 -0.3
ERM pmax pmax
comp=Z,89nm,0.9s
ERM MLR MLR
comp=Z,16µm,19.0s
JEM Erimo 72.36 51 P P 22 24 54.1 +2.4
MYLDM Lahad Datu 72.46 96 P P 22 24 52.5 -0.2
MYLDM IAmb IAmb 22 26 05.1
comp=Z,181nm,1.6s
DRLN Deer Lake 72.65 318 P P 22 24 52.0 -1.2
JSG Sagara 72.71 60 IAMs_20 IAMs_20 23 00 30.9
comp=Z,7µm,19.0s
JMM Marumori 72.91 56 P P 22 24 54.3 -0.7
JMM Marumori 72.91 56 P P 22 24 54.0 -1.1
JMM IAmb IAmb 22 24 58.8
comp=Z,110nm,1.0s
JMM IAMs_20 IAMs_20 22 59 35.9
comp=Z,6µm,22.0s
YUK Yuzh-Kuril'sk 73.01 48 eP P 22 24 56.8 +1.3
YUK eS S 22 34 20.3 -2.1
YUK eSS SS 22 39 03.5 +1.2
YUK eSSS SSS 22 42 15.8
YUK pmax pmax
comp=Z,501nm,1.1s
MTKI Muara Teweh, K 73.06 103 P P 22 25 00.9 +4.7
A21K Barrow 73.14 8 P P 22 24 56.4 +0.7
baz=340
A21K S S 22 34 24.9 +1.9
baz=340
SMRI Semarang 73.27 111 IAMs_20 IAMs_20 23 00 51.3
comp=Z,5µm,20.0s
SMRI Semarang 73.27 111 P P 22 24 59.2 +1.8
comp=Z,58nm,1.1s
A36M Sachs Harbour 73.56 357 P P 22 24 58.1 -0.1
A36M Sachs Harbour 73.56 357 P P 22 24 58.0 -0.2
baz=7.3
A36M S SKiKP 22 34 28.8 +0.6
baz=7.3
KUR Kuril'sk 73.59 46 eP P 22 24 57.3 -1.6
KUR eS S 22 34 26.1 -2.7
KUR MLR MLR
comp=E,4µm,17.0s
KUR MLR MLR
comp=Z,8µm,17.0s
KUR MLR MLR
comp=N,4µm,16.0s
A22K Sinclair Lake 73.62 7 P P 22 24 58.7 +0.1
baz=342
A22K S S 22 34 31.1 +2.8
baz=342
YOGI Yogyakarta 73.64 112 P P 22 25 04.2 +4.6
comp=N,82nm,1.2s
A19K Wainwright 73.65 9 P P 22 24 59.4 +0.7
baz=337
A19K S S 22 34 32.4 +3.6
baz=337
UGM Wanagama 73.88 112 P P 22 25 00.5 -0.6
SCHQ Schefferville 74.12 326 P P 22 25 01.9 0.0
SCHQ IAmb IAmb 22 25 05.8
comp=Z,166nm,0.8s
SCHQ Schefferville 74.12 326 P P 22 25 02.9 +1.0
comp=Z,131nm,0.7s,baz=43,slow=5.7,SNR=33
SCHQ LR LR 22 57 39.9
comp=Z,4µm,22.0s,baz=46,slow=36
comp=Z,131nm,0.7s
NGJI Ngawi 74.26 111 P P 22 25 05.2 +2.0
comp=Z,64nm,1.2s
B18K Kokolik River 74.32 10 P P 22 25 02.6 -0.2
baz=336,SNR=34
B18K S S 22 34 39.5 +3.1
baz=336
B20K Meade River 74.33 8 P P 22 25 03.0 +0.3
B20K IAmb IAmb 22 25 08.3
comp=Z,116nm,0.8s
B20K IAMs_20 IAMs_20 23 02 04.8
comp=Z,6µm,20.0s
B20K Meade River 74.33 8 P P 22 25 02.6 -0.2
baz=340,SNR=10
B20K S S 22 34 38.5 +2.1
baz=340
PEA0B Petropavlovsk- 74.39 36 P P 22 25 03.0 -0.5
PEA0B Petropavlovsk- 74.39 36 deP P 22 25 03.6 +0.1
PETK Petropavlovsk- 74.39 36 P P 22 25 02.4 -1.1
PETK Petropavlovsk- 74.39 36 P P 22 25 02.1 -1.4
comp=Z,15nm,0.8s,baz=270,slow=1.5,SNR=12
PETK LR LR 23 01 35.5
comp=Z,6µm,18.1s,baz=305,slow=39
comp=Z,15nm,0.8s
PETK Petropavlovsk- 74.39 36 P P 22 25 02.4 -1.1
B22K Teshekpuk Lake 74.41 7 P P 22 25 02.8 -0.5
B22K IAmb IAmb 22 25 09.2
comp=Z,126nm,0.8s
B22K IAMs_20 IAMs_20 23 01 11.1
comp=Z,5µm,21.0s
B22K Teshekpuk Lake 74.41 7 P P 22 25 03.2 0.0
baz=343
B22K S S 22 34 39.5 +2.2
baz=343
JHJ Hachijo jima 2 74.65 60 LR LR 22 59 42.5
comp=Z,9µm,21.8s,baz=299,slow=37
JHJ2 Mitsune 74.67 60 IAMs_20 IAMs_20 23 04 22.9
comp=Z,4µm,18.0s
C16K Lisburne Hills 74.77 12 P P 22 25 04.6 -0.7
C16K IAMs_20 IAMs_20 23 02 26.5
comp=Z,5µm,20.0s
C16K Lisburne Hills 74.77 12 P P 22 25 04.2 -1.2
baz=333,SNR=18
C16K S S 22 34 42.4 +1.0
baz=333
BKB Balikpapan 74.86 102 P P 22 25 06.9 +0.2
comp=Z,171nm,1.2s,comp=Z,3µm
C19K Lookout Ridge 74.87 9 IAMs_20 IAMs_20 23 03 28.2
comp=Z,6µm,18.0s
C19K Lookout Ridge 74.87 9 P P 22 25 06.3 +0.3
baz=338,SNR=19
C19K S S 22 34 45.1 +2.4
baz=338
PET Petropavlovsk 74.90 35 P P 22 25 04.8 -1.6
PET IAMs_20 IAMs_20 23 02 33.2
comp=Z,6µm,19.0s
PET Petropavlovsk 74.90 35 eP P 22 25 07.4 +1.0
PET e 22 27 57.1
PET ePPP PPP 22 29 39.2
PET eS S 22 34 41.2 -2.2
PET pmax pmax
comp=Z,25nm,1.7s
PET pmax pmax
comp=Z,400nm,7.0s
PET pmax pmax
comp=Z,200nm,8.0s
PET MLR MLR
comp=Z,4µm,17.0s
PWJI Pagerwojo 74.93 111 P P 22 25 05.7 -1.4
comp=Z,81nm,1.2s
C17K DeLong Mountai 74.93 11 P P 22 25 05.6 -0.8
baz=335,SNR=65

C17K S S 22 34 44.7 +1.4
baz=335
B21K Ikpikpuk River 74.98 7 IAMs_20 IAMs_20 23 02 16.1
comp=Z,6µm,19.0s
B21K Ikpikpuk River 74.98 7 P P 22 25 06.5 -0.1
baz=342,SNR=57
B21K S S 22 34 46.5 +2.8
baz=342
SKR Severo-Kuril's 75.07 38 eP P 22 25 05.1 -2.3
SKR eS SKiKP 22 34 35.4 +4.3
SKR pmax pmax
comp=Z,100nm,4.8s
SKR MLR MLR
comp=Z,5µm,18.0s
C18K Utukok River 75.07 10 IAMs_20 IAMs_20 23 03 00.5
comp=Z,6µm,18.0s
C18K Utukok River 75.07 10 P P 22 25 06.6 -0.6
baz=337,SNR=116
C18K S S 22 34 47.0 +2.1
baz=337
C23K Itkillik River 75.16 6 IAMs_20 IAMs_20 23 01 34.8
comp=Z,5µm,21.0s
C23K Itkillik River 75.16 6 P P 22 25 08.1 +0.5
baz=346,SNR=62
C23K S S 22 34 47.5 +1.8
baz=346
RDOG Red Dog Mine 75.36 11 P P 22 25 09.1 +0.3
RDOG IAmb IAmb 22 25 15.6
comp=Z,340nm,1.6s
RDOG IAMs_20 IAMs_20 23 03 55.2
comp=Z,5µm,18.0s
RDOG Red Dog Mine 75.36 11 P P 22 25 09.2 +0.4
baz=336,SNR=15
RDOG S S 22 34 49.5 +1.5
baz=336
C21K Knifeblade Rid 75.41 8 P P 22 25 08.9 -0.1
baz=342,SNR=84
C21K S S 22 34 50.8 +2.3
baz=342
C24K Franklin Bluff 75.42 5 P P 22 25 09.0 -0.1
baz=347
C24K S S 22 34 51.2 +2.5
baz=347
C26K Camden Bay 75.48 4 P P 22 25 09.8 +0.4
baz=350
C26K S S 22 34 50.7 +1.4
baz=350
D20K Etivluk River 75.62 8 P P 22 25 09.6 -0.7
baz=341,SNR=72
D20K S S 22 34 51.8 +0.8
baz=341
D19K Kuna River 75.64 9 IAMs_20 IAMs_20 23 03 43.4
comp=Z,5µm,20.0s
D19K Kuna River 75.64 9 P P 22 25 09.6 -0.8
baz=340,SNR=92
D19K S S 22 34 51.6 +0.5
baz=340
D17K Noatak River 75.66 11 P P 22 25 10.3 -0.2
baz=335,SNR=131
D17K S S 22 34 53.9 +2.6
baz=335
C27K Jago River 75.84 4 P P 22 25 11.2 -0.4
baz=352,SNR=86
C27K S S 22 34 55.9 +2.6
baz=352
D22K Ayikyak River 75.89 7 IAMs_20 IAMs_20 23 02 20.2
comp=Z,6µm,19.0s
D22K Ayikyak River 75.89 7 P P 22 25 11.4 -0.5
baz=344
D22K S S 22 34 57.6 +3.6
baz=344
D24K Happy Valley 75.97 6 IAMs_20 IAMs_20 23 01 59.3
comp=Z,6µm,22.0s
D24K Happy Valley 75.97 6 P P 22 25 11.4 -0.9
baz=347
D24K S S 22 34 57.2 +2.5
baz=347
D25K Kavik River 75.98 5 P P 22 25 12.0 -0.4
baz=349,SNR=98
D25K S S 22 34 56.2 +1.2
baz=349
D23K Nanushuk River 76.00 6 IAMs_20 IAMs_20 23 02 12.0
comp=Z,6µm,21.0s
D23K Nanushuk River 76.00 6 P P 22 25 12.0 -0.5
baz=346,SNR=100
D23K S S 22 34 57.4 +2.3
baz=346
E20K Nigu River 76.10 8 P P 22 25 12.9 -0.2
baz=341,SNR=113
E20K S S 22 34 58.8 +2.4
baz=341
C36M Paulatuk 76.13 356 P P 22 25 12.5 -0.6
baz=8.2,SNR=64
C36M S S 22 34 57.8 +1.4
baz=8.2
E21K Killik River 76.18 8 IAMs_20 IAMs_20 23 03 13.8
comp=Z,6µm,20.0s
E21K Killik River 76.18 8 P P 22 25 13.1 -0.4
baz=343
E21K S S 22 34 58.7 +1.5
baz=343
E18K Tukpahlearik C 76.29 10 P P 22 25 14.5 +0.4
baz=338,SNR=116
E18K S S 22 35 00.1 +1.8
baz=338
D28M Stokes Point 76.33 2 P P 22 25 14.1 -0.2
baz=356
D28M S S 22 35 01.4 +2.8
baz=356
D27M Malcolm River 76.34 3 P P 22 25 14.8 +0.4
baz=354,SNR=40
D27M S S 22 35 02.2 +3.2
baz=354
MPSI Mapaga 76.36 99 P P 22 25 14.8 -0.6
comp=Z,112nm,1.2s,comp=Z,2µmcomp=Z,1µm
TOLK Toolik Lake Re 76.41 6 P P 22 25 14.7 -0.2
TOLK IAMs_20 IAMs_20 23 02 35.9
comp=Z,6µm,21.0s
TOLK Toolik Lake Re 76.41 6 P P 22 25 14.9 +0.1
baz=347,SNR=154
TOLK S S 22 35 02.6 +2.9
baz=347
E17K Hotham Inlet 76.42 11 P P 22 25 15.5 +0.6
baz=336,SNR=42
E17K S S 22 35 00.9 +1.2
baz=336
TOLI2 Tolitoli 76.64 98 P P 22 25 15.9 -1.1
TOLI2 Tolitoli 76.64 98 P P 22 25 15.2 -1.7
E22K Anaktuvuk Pass 76.70 7 IAMs_20 IAMs_20 23 04 34.6
comp=Z,5µm,20.0s
E22K Anaktuvuk Pass 76.70 7 P P 22 25 16.4 -0.1
baz=345,SNR=98
E22K S S 22 35 03.5 +0.6
baz=345
TNA Tin City 76.71 14 P P 22 25 16.6 +0.1
baz=332,SNR=5.7
TNA S S 22 35 05.0 +2.0
baz=332
E19K Redstone River 76.73 9 IAMs_20 IAMs_20 23 01 20.3
comp=Z,5µm,22.0s
E19K Redstone River 76.73 9 P P 22 25 16.6 0.0
baz=340,SNR=157
E19K S S 22 35 05.0 +1.9
baz=340
E23K Chandalar 76.98 6 IAMs_20 IAMs_20 23 02 54.9
comp=Z,7µm,21.0s
E23K Chandalar 76.98 6 P P 22 25 18.4 +0.3
baz=347,SNR=68
E23K S S 22 35 09.0 +3.0
baz=347
JAGI Jajag, Banyuwa 77.02 110 P P 22 25 18.2 -0.8
JAGI IAMs_20 IAMs_20 23 02 36.7
comp=Z,5µm,20.0s
E28M Babbage River 77.03 2 IAMs_20 IAMs_20 23 02 16.3
comp=Z,6µm,21.0s
E28M Babbage River 77.03 2 P P 22 25 18.4 0.0
baz=355,SNR=82
E28M S S 22 35 08.3 +1.8
baz=355
E24K Your Creek 77.06 6 IAMs_20 IAMs_20 23 02 45.0
comp=Z,5µm,21.0s
E24K Your Creek 77.06 6 P P 22 25 18.8 +0.2
baz=348,SNR=91
E24K S S 22 35 09.5 +2.7
baz=348
GBN Guysborough 77.08 317 P P 22 25 18.1 -0.9
GBN IAmb IAmb 22 25 23.4
comp=Z,167nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **F14K** | **Arctic Creek** | **77.10** | **13** | P | **P** | **22 25 17.8** | **-0.9** |
| | baz=333,SNR=13 | | | | | | |
| F14K | | | | S | **S** | **22 35 08.7** | **+1.5** |
| | baz=333 | | | | | | |
| **F17K** | **Baldwin Pennin** | **77.10** | **11** | IAMs_20 | IAMs_20 | 23 04 04.2 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **F17K** | **Baldwin Pennin** | **77.10** | **11** | P | **P** | **22 25 18.2** | **-0.5** |
| | baz=337,SNR=48 | | | | | | |
| F17K | | | | S | **S** | **22 35 10.8** | **+3.7** |
| | baz=337 | | | | | | |
| **F18K** | **Selawik** | **77.20** | **10** | P | **P** | **22 25 18.7** | **-0.5** |
| | baz=338,SNR=149 | | | | | | |
| F18K | | | | S | **S** | **22 35 10.6** | **+2.4** |
| | baz=338 | | | | | | |
| **F15K** | **North Star Dit** | **77.20** | **13** | IAMs_20 | IAMs_20 | 23 04 03.9 | |
| | comp=Z,7µm,21.0s | | | | | | |
| **F15K** | **North Star Dit** | **77.20** | **13** | P | **P** | **22 25 19.1** | **-0.2** |
| | baz=334,SNR=32 | | | | | | |
| F15K | | | | S | **S** | **22 35 09.5** | **+1.2** |
| | baz=334 | | | | | | |
| **DAV** | **Davao City (W)** | **77.24** | **90** | LR | LR | 23 04 37.0 | |
| | comp=Z,3µm,19.1s,baz=340,slow=40 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **77.25** | **10** | IAMs_20 | IAMs_20 | 23 04 48.0 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **77.25** | **10** | P | **P** | **22 25 18.7** | **-0.8** |
| | baz=340,SNR=110 | | | | | | |
| F19K | | | | S | **S** | **22 35 10.3** | **+1.6** |
| | baz=340 | | | | | | |
| **F22K** | **John River** | **77.27** | **7** | P | **P** | **22 25 19.6** | **0.0** |
| | baz=344 | | | | | | |
| F22K | | | | S | **S** | **22 35 12.3** | **+3.2** |
| | baz=344 | | | | | | |
| **E29M** | **Blow River** | **77.29** | **2** | P | **P** | **22 25 19.6** | **-0.1** |
| | baz=356,SNR=142 | | | | | | |
| E29M | | | | S | **S** | **22 35 11.6** | **+2.3** |
| | baz=356 | | | | | | |
| **F20K** | **Avaraart Lake** | **77.31** | **9** | P | **P** | **22 25 19.4** | **-0.4** |
| | baz=342,SNR=154 | | | | | | |
| F20K | | | | S | **S** | **22 35 12.8** | **+3.4** |
| | baz=342 | | | | | | |
| **E27K** | **Coleen River** | **77.37** | **3** | P | **P** | **22 25 20.2** | **-0.1** |
| | baz=353,SNR=111 | | | | | | |
| E27K | | | | S | **S** | **22 35 13.4** | **+3.2** |
| | baz=353 | | | | | | |
| **F21K** | **Alatna River** | **77.41** | **8** | P | **P** | **22 25 20.5** | **+0.1** |
| | baz=343,SNR=169 | | | | | | |
| F21K | | | | S | **S** | **22 35 13.3** | **+2.8** |
| | baz=343 | | | | | | |
| **INK** | **Inuvik** | **77.42** | **360** | IAMs_20 | IAMs_20 | 23 03 30.7 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **INK** | **Inuvik** | **77.42** | **360** | LR | LR | 23 04 45.0 | |
| | comp=Z,3µm,20.8s,baz=4.0,slow=40 | | | | | | |
| **INK** | **Inuvik** | **77.42** | **360** | P | **P** | **22 25 20.6** | **+0.1** |
| | baz=0.2,SNR=25 | | | | | | |
| INK | | | | S | **S** | **22 35 11.0** | **+0.4** |
| | baz=0.2 | | | | | | |
| **GAMB** | **Gambell** | **77.45** | **16** | P | **P** | **22 25 20.2** | **-0.5** |
| | baz=329 | | | | | | |
| GAMB | | | | S | **S** | **22 35 14.5** | **+3.4** |
| | baz=329 | | | | | | |
| **F24K** | **Squaw Lake** | **77.65** | **6** | IAMs_20 | IAMs_20 | 23 03 03.7 | |
| | comp=Z,6µm,22.0s | | | | | | |
| **F24K** | **Squaw Lake** | **77.65** | **6** | P | **P** | **22 25 21.4** | **-0.4** |
| | baz=348,SNR=76 | | | | | | |
| F24K | | | | S | **S** | **22 35 16.5** | **+3.3** |
| | baz=348 | | | | | | |
| **ICQ** | **Pointe Anglais** | **77.65** | **322** | IAMs_20 | IAMs_20 | 22 59 03.5 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **F26K** | **Sheenjek River** | **77.73** | **4** | P | **P** | **22 25 22.5** | **+0.1** |
| | baz=351,SNR=55 | | | | | | |
| F26K | | | | S | **S** | **22 35 17.5** | **+3.4** |
| | baz=351 | | | | | | |
| **COLD** | **Coldfoot** | **77.74** | **6** | P | **P** | **22 25 22.0** | **-0.2** |
| | baz=346,SNR=74 | | | | | | |
| COLD | | | | S | **S** | **22 35 17.3** | **+3.2** |
| | baz=346 | | | | | | |
| **F25K** | **Christian Rive** | **77.74** | **5** | IAMs_20 | IAMs_20 | 23 01 20.1 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **F25K** | **Christian Rive** | **77.74** | **5** | P | **P** | **22 25 22.2** | **-0.2** |
| | baz=350,SNR=98 | | | | | | |
| F25K | | | | S | **S** | **22 35 18.6** | **+4.4** |
| | baz=350 | | | | | | |
| **G16K** | **Koyuk River** | **77.89** | **12** | P | **P** | **22 25 22.9** | **-0.2** |
| | baz=336,SNR=43 | | | | | | |
| G16K | | | | S | **S** | **22 35 18.7** | **+3.0** |
| | baz=336 | | | | | | |
| **G22K** | **Bettles** | **77.91** | **7** | P | **P** | **22 25 22.9** | **-0.3** |
| | baz=345 | | | | | | |
| **MRSI** | **Marisa** | **77.95** | **98** | P | **P** | **22 25 24.2** | **-0.1** |
| | comp=Z,90nm,1.2s | | | | | | |
| **G15K** | **Niukluk** | **77.96** | **13** | P | **P** | **22 25 23.3** | **-0.2** |
| | baz=335,SNR=32 | | | | | | |
| G15K | | | | S | **S** | **22 35 18.8** | **+2.3** |
| | baz=335 | | | | | | |
| **BMAR** | **Burnt Mountain** | **77.97** | **4** | P | **P** | **22 25 23.6** | **0.0** |
| **G19K** | **Purcell Mounta** | **77.99** | **9** | IAMs_20 | IAMs_20 | 23 06 02.7 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **G19K** | **Purcell Mounta** | **77.99** | **9** | P | **P** | **22 25 23.4** | **-0.3** |
| | baz=340,SNR=248 | | | | | | |
| G19K | | | | S | **S** | **22 35 18.7** | **+1.9** |
| | baz=340 | | | | | | |
| **G18K** | **Tagagawik** | **78.00** | **10** | IAMs_20 | IAMs_20 | 23 05 36.1 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **G18K** | **Tagagawik** | **78.00** | **10** | P | **P** | **22 25 23.3** | **-0.5** |
| | baz=339,SNR=85 | | | | | | |
| G18K | | | | S | **S** | **22 35 19.1** | **+2.0** |
| | baz=339 | | | | | | |
| **F28M** | **Old Crow** | **78.01** | **2** | P | **P** | **22 25 23.2** | **-0.6** |
| | baz=355,SNR=86 | | | | | | |
| F28M | | | | S | **S** | **22 35 18.8** | **+1.7** |
| | baz=355 | | | | | | |
| **G17K** | **Kiwalik Mounta** | **78.07** | **11** | P | **P** | **22 25 23.8** | **-0.3** |
| | baz=338,SNR=46 | | | | | | |
| G17K | | | | S | **S** | **22 35 20.2** | **+2.5** |
| | baz=338 | | | | | | |
| **G21K** | **Allakaket** | **78.08** | **8** | IAMs_20 | IAMs_20 | 23 03 44.1 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **G21K** | **Allakaket** | **78.08** | **8** | P | **P** | **22 25 23.5** | **-0.7** |
| | baz=344,SNR=173 | | | | | | |
| G21K | | | | S | **S** | **22 35 19.5** | **+1.6** |
| | baz=344 | | | | | | |
| **ANM** | **Nome** | **78.10** | **13** | P | **P** | **22 25 24.7** | **+0.4** |
| ANM | | | | IAmb | IAmb | 22 25 29.1 | |
| | comp=Z,178nm,1.4s | | | | | | |
| ANM | | | | IAMs_20 | IAMs_20 | 23 05 11.6 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **ANM** | **Nome** | **78.10** | **13** | P | **P** | **22 25 23.3** | **-1.0** |
| | baz=334,SNR=15 | | | | | | |
| ANM | | | | S | **S** | **22 35 20.7** | **+2.6** |
| | baz=334 | | | | | | |
| **ANM** | **Nome** | **78.10** | **13** | P | **P** | **22 25 24.7** | **+0.4** |
| ANM | | | | pmax | pmax | | |
| | comp=Z,178nm,1.4s | | | | | | |
| ANM | | | | MLR | MLR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| **F30M** | **Barrier River** | **78.11** | **1** | P | **P** | **22 25 24.2** | **-0.2** |
| | baz=358,SNR=165 | | | | | | |
| F30M | | | | S | **S** | **22 35 19.3** | **+1.2** |
| | baz=358 | | | | | | |
| **G23K** | **Bananza Creek** | **78.26** | **7** | IAMs_20 | IAMs_20 | 23 03 47.7 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **G23K** | **Bananza Creek** | **78.26** | **7** | P | **P** | **22 25 25.3** | **0.0** |
| | baz=346,SNR=72 | | | | | | |
| G23K | | | | S | **S** | **22 35 22.5** | **+2.8** |
| | baz=346 | | | | | | |
| **F31M** | **Tsiigehtchic** | **78.29** | **0** | P | **P** | **22 25 24.8** | **-0.5** |
| | baz=0.0,SNR=215 | | | | | | |
| F31M | | | | S | **S** | **22 35 22.2** | **+2.2** |
| | baz=0.0 | | | | | | |
| **BATG** | **Bathurst New B** | **78.44** | **320** | P | **P** | **22 25 25.9** | **-0.6** |
| BATG | | | | IAmb | IAmb | 22 25 31.1 | |
| | comp=Z,103nm,1.0s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **78.49** | **6** | P | **P** | **22 25 26.3** | **-0.2** |
| | baz=348,SNR=84 | | | | | | |
| G24K | | | | S | **S** | **22 35 25.1** | **+2.9** |
| | baz=348 | | | | | | |
| **G26K** | **Porcupine Rive** | **78.50** | **4** | P | **P** | **22 25 26.6** | **+0.1** |
| | baz=352,SNR=205 | | | | | | |
| G26K | | | | S | **S** | **22 35 25.4** | **+3.2** |
| | baz=352 | | | | | | |
| **G25K** | **Bearman Lake** | **78.53** | **5** | P | **P** | **22 25 25.8** | **-0.8** |
| | baz=350,SNR=24 | | | | | | |
| G25K | | | | S | **S** | **22 35 26.2** | **+3.6** |
| | baz=350 | | | | | | |
| **H16K** | **Elim** | **78.60** | **12** | P | **P** | **22 25 26.8** | **-0.3** |
| | baz=336,SNR=21 | | | | | | |
| H16K | | | | S | **S** | **22 35 26.1** | **+2.7** |
| | baz=336 | | | | | | |
| **LMN** | **Caledonia Moun** | **78.65** | **318** | P | **P** | **22 25 26.4** | **-1.4** |
| LMN | | | | IAmb | IAmb | 22 25 32.1 | |
| | comp=Z,125nm,1.1s | | | | | | |
| LMN | | | | IAMs_20 | IAMs_20 | 23 01 16.2 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **H19K** | **Roundabout Mou** | **78.66** | **9** | IAMs_20 | IAMs_20 | 23 03 12.4 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **H19K** | **Roundabout Mou** | **78.66** | **9** | P | **P** | **22 25 26.7** | **-0.7** |
| | baz=341,SNR=74 | | | | | | |
| H19K | | | | S | **S** | **22 35 25.9** | **+1.9** |
| | baz=341 | | | | | | |
| **H17K** | **Granite Mounta** | **78.71** | **11** | P | **P** | **22 25 27.0** | **-0.7** |
| | baz=338,SNR=57 | | | | | | |
| H17K | | | | S | **S** | **22 35 26.7** | **+2.1** |
| | baz=338 | | | | | | |
| **HAL** | **Halifax** | **78.72** | **317** | P | **P** | **22 25 27.7** | **-0.4** |
| HAL | | | | IAmb | IAmb | 22 25 32.8 | |
| | comp=Z,156nm,0.8s | | | | | | |
| **HAL** | **Halifax** | **78.72** | **317** | P | **P** | **22 25 27.7** | **-0.4** |
| HAL | | | | pmax | pmax | | |
| | comp=Z,156nm,0.8s | | | | | | |
| HAL | | | | MLR | MLR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **GTOI** | **Gorontalo** | **78.73** | **97** | P | **P** | **22 25 26.2** | **-2.4** |
| **G30M** | **tAoh Zraii Nji** | **78.74** | **1** | P | **P** | **22 25 26.7** | **-1.1** |
| | baz=358,SNR=170 | | | | | | |
| G30M | | | | S | **S** | **22 35 26.2** | **+1.3** |
| | baz=358 | | | | | | |
| **H18K** | **Honhosa River** | **78.74** | **10** | IAMs_20 | IAMs_20 | 23 06 34.6 | |
| | comp=Z,4µm,19.0s | | | | | | |
| **H18K** | **Honhosa River** | **78.74** | **10** | P | **P** | **22 25 26.4** | **-1.5** |
| | baz=340,SNR=61 | | | | | | |
| H18K | | | | S | **S** | **22 35 27.1** | **+2.1** |
| | baz=340 | | | | | | |
| **G27K** | **Doyon Strip** | **78.75** | **3** | P | **P** | **22 25 27.6** | **-0.3** |
| | baz=353,SNR=170 | | | | | | |
| G27K | | | | S | **S** | **22 35 27.9** | **+2.9** |
| | baz=353 | | | | | | |
| **G29M** | **Pine Creek** | **78.77** | **2** | P | **P** | **22 25 27.6** | **-0.4** |
| | baz=356,SNR=158 | | | | | | |
| G29M | | | | S | **S** | **22 35 27.5** | **+2.2** |
| | baz=356 | | | | | | |
| **G31M** | **Satah River** | **78.81** | **0** | IAMs_20 | IAMs_20 | 23 03 04.4 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **G31M** | **Satah River** | **78.81** | **0** | P | **P** | **22 25 27.6** | **-0.6** |
| | baz=360,SNR=221 | | | | | | |
| G31M | | | | S | **S** | **22 35 26.4** | **+0.8** |
| | baz=360 | | | | | | |
| **H20K** | **Anotleneega Mo** | **78.90** | **9** | P | **P** | **22 25 28.5** | **-0.3** |
| | baz=342,SNR=299 | | | | | | |
| H20K | | | | S | **S** | **22 35 27.2** | **+0.5** |
| | baz=342 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **78.92** | **7** | P | **P** | **22 25 29.3** | **+0.4** |
| | baz=345,SNR=93 | | | | | | |
| H22K | | | | S | **S** | **22 35 29.1** | **+2.3** |
| | baz=345 | | | | | | |
| H22K | | | | S | **S** | **22 35 29.1** | **+2.3** |
| | baz=345 | | | | | | |
| **H21K** | **Melozitna Rive** | **78.99** | **8** | IAMs_20 | IAMs_20 | 23 03 38.1 | |
| | comp=Z,6µm,22.0s | | | | | | |
| **H21K** | **Melozitna Rive** | **78.99** | **8** | P | **P** | **22 25 29.5** | **+0.3** |
| | baz=344,SNR=286 | | | | | | |
| H21K | | | | S | **S** | **22 35 30.9** | **+3.2** |
| | baz=344 | | | | | | |
| H21K | | | | S | **S** | **22 35 30.9** | **+3.2** |
| | baz=344 | | | | | | |
| **H25L** | **Birch Creek** | **79.04** | **5** | P | **P** | **22 25 29.6** | **+0.1** |
| | baz=350 | | | | | | |
| H25L | | | | S | **S** | **22 35 32.4** | **+4.4** |
| | baz=350 | | | | | | |
| **H23K** | **Yukon River** | **79.17** | **7** | IAMs_20 | IAMs_20 | 23 04 24.8 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **H23K** | **Yukon River** | **79.17** | **7** | P | **P** | **22 25 30.6** | **+0.4** |
| | baz=347 | | | | | | |
| H23K | | | | S | **S** | **22 35 35.0** | **+5.5** |
| | baz=347 | | | | | | |
| H23K | | | | S | **S** | **22 35 35.0** | **+5.5** |
| | baz=347 | | | | | | |
| **BNSI** | **Bone** | **79.29** | **103** | P | **P** | **22 25 30.5** | **-1.2** |
| **H24K** | **Noodor Dome** | **79.30** | **6** | P | **P** | **22 25 31.4** | **+0.3** |
| | baz=348 | | | | | | |
| H24K | | | | S | **S** | **22 35 34.4** | **+3.4** |
| | baz=348 | | | | | | |
| H24K | | | | S | **S** | **22 35 34.4** | **+3.4** |
| | baz=348 | | | | | | |
| **H27K** | **Steamboat Moun** | **79.33** | **3** | P | **P** | **22 25 31.6** | **+0.5** |
| | baz=354,SNR=176 | | | | | | |
| H27K | | | | S | **S** | **22 35 35.1** | **+3.8** |
| | baz=354 | | | | | | |
| **EPYK** | **Eagle Plains** | **79.34** | **1** | P | **P** | **22 25 30.9** | **-0.3** |
| | baz=358,SNR=31 | | | | | | |
| EPYK | | | | S | **S** | **22 35 32.7** | **+1.3** |
| | baz=358 | | | | | | |
| **GCSA** | **Galena City Sc** | **79.34** | **10** | P | **P** | **22 25 31.5** | **+0.4** |
| | baz=341 | | | | | | |
| GCSA | | | | S | **S** | **22 35 34.4** | **+3.1** |
| | baz=341 | | | | | | |
| **KAPI** | **Kappang** | **79.36** | **104** | P | **P** | **22 25 31.2** | **-0.9** |
| **KAPI** | **Kappang** | **79.36** | **104** | P | **P** | **22 25 30.6** | **-1.5** |
| **KAPI** | **Kappang** | **79.36** | **104** | P | **P** | **22 25 29.2** | **-2.9** |
| | comp=Z,6.0nm,0.4s,baz=218,slow=14,SNR=1.7 | | | | | | |
| KAPI | | | | LR | LR | 23 04 03.3 | |
| | comp=Z,3µm,21.2s,baz=308,slow=38 | | | | | | |
| **KAPI** | **Kappang** | **79.36** | **104** | P | **P** | **22 25 30.6** | **-1.5** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,98nm,1.3s | | | | | | |
| KAPI | | | | MLR | MLR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| **H29M** | **Whitestone** | **79.46** | **2** | P | **P** | **22 25 31.7** | **-0.1** |
| | baz=356,SNR=124 | | | | | | |
| H29M | | | | S | **S** | **22 35 34.9** | **+2.4** |
| | baz=356 | | | | | | |
| **LUWI** | **Luwuk** | **79.50** | **99** | P | **P** | **22 25 33.5** | **+0.7** |
| **LUWI** | **Luwuk** | **79.50** | **99** | P | **P** | **22 25 31.9** | **-0.9** |
| LUWI | | | | IAMs_20 | IAMs_20 | 23 04 22.7 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **LUWI** | **Luwuk** | **79.50** | **99** | P | P | 22 25 26.0 | -6.8 |
| **LUWI** | **Luwuk** | **79.50** | **99** | P | **P** | **22 25 32.7** | **-0.1** |
| | comp=Z,46nm,1.1s | | | | | | |
| **I17K** | **Unalakleet** | **79.56** | **12** | IAMs_20 | IAMs_20 | 23 06 56.2 | |
| | comp=Z,7µm,19.0s | | | | | | |
| **I17K** | **Unalakleet** | **79.56** | **12** | P | **P** | **22 25 32.3** | **0.0** |
| | baz=338,SNR=28 | | | | | | |
| I17K | | | | S | **S** | **22 35 35.9** | **+2.3** |
| | baz=338 | | | | | | |
| **KMSI** | **Cibinong** | **79.56** | **97** | P | P | 22 25 38.9 | +5.7 |
| | comp=Z,195nm,1.2s | | | | | | |
| **I20K** | **Naaghedeneel** | **79.62** | **9** | IAMs_20 | IAMs_20 | 23 06 19.7 | |
| | comp=Z,6µm,19.0s | | | | | | |
| **I20K** | **Naaghedeneel** | **79.62** | **9** | P | **P** | **22 25 33.0** | **+0.4** |
| | baz=343,SNR=108 | | | | | | |
| I20K | | | | S | **S** | **22 35 36.9** | **+2.8** |
| | baz=343 | | | | | | |
| **JCJ** | **Chichijima** | **79.62** | **64** | LR | LR | 23 02 52.5 | |
| | comp=Z,4µm,21.2s,baz=308,slow=37 | | | | | | |
| **PRP** | **Porcupine Dome** | **79.80** | **5** | P | **P** | **22 25 33.9** | **0.0** |
| **PRP** | **Porcupine Dome** | **79.80** | **5** | P | **P** | **22 25 33.7** | **-0.1** |
| | baz=350,SNR=27 | | | | | | |
| PRP | | | | S | **S** | **22 35 39.5** | **+3.0** |
| | baz=350 | | | | | | |
| **MLY** | **Manley** | **79.82** | **7** | IAMs_20 | IAMs_20 | 23 04 28.1 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **MLY** | **Manley** | **79.82** | **7** | P | **P** | **22 25 34.1** | **+0.3** |
| | baz=346,SNR=155 | | | | | | |
| MLY | | | | S | **S** | **22 35 40.2** | **+3.6** |
| | baz=346 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **79.85** | **7** | IAMs_20 | IAMs_20 | 23 05 14.7 | |
| | comp=Z,6µm,19.0s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **79.85** | **7** | P | **P** | **22 25 34.3** | **+0.5** |
| | baz=347,SNR=56 | | | | | | |
| I23K | | | | S | **S** | **22 35 40.3** | **+3.7** |
| | baz=347 | | | | | | |
| I23K | | | | S | **S** | **22 35 40.3** | **+3.7** |
| | baz=347 | | | | | | |
| **PQI** | **Presque Isle** | **79.86** | **320** | IAMs_20 | IAMs_20 | 23 03 42.1 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **H31M** | **Peel River** | **79.94** | **0** | IAMs_20 | IAMs_20 | 23 03 47.1 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **H31M** | **Peel River** | **79.94** | **0** | P | **P** | **22 25 34.5** | **+0.1** |
| | baz=360 | | | | | | |
| H31M | | | | S | **S** | **22 35 38.6** | **+0.9** |
| | baz=360 | | | | | | |
| **I27K** | **Kandik River** | **79.95** | **3** | P | **P** | **22 25 34.9** | **+0.3** |
| | baz=353,SNR=91 | | | | | | |
| I27K | | | | S | **S** | **22 35 41.6** | **+3.7** |
| | baz=353 | | | | | | |
| I27K | | | | S | **S** | **22 35 41.6** | **+3.7** |
| | baz=353 | | | | | | |
| **POKR** | **Poker Plat Res** | **80.05** | **6** | P | **P** | **22 25 35.0** | **0.0** |
| POKR | | | | IAmb | IAmb | 22 25 40.6 | |
| | comp=Z,136nm,0.9s | | | | | | |
| **POKR** | **Poker Plat Res** | **80.05** | **6** | P | **P** | **22 25 35.1** | **0.0** |
| | baz=349,SNR=58 | | | | | | |
| POKR | | | | S | **S** | **22 35 42.4** | **+3.6** |
| | baz=349 | | | | | | |
| **PLAI** | **Plampang** | **80.07** | **108** | P | **P** | **22 25 37.2** | **+1.3** |
| **J14K** | **Nanvaranak Lak** | **80.09** | **13** | IAMs_20 | IAMs_20 | 23 07 47.3 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **J14K** | **Nanvaranak Lak** | **80.09** | **13** | P | **P** | **22 25 35.1** | **-0.1** |
| | baz=335,SNR=28 | | | | | | |
| J14K | | | | S | **S** | **22 35 42.2** | **+3.0** |
| | baz=335 | | | | | | |
| **D62A** | **Allapoint, All** | **80.13** | **321** | IAMs_20 | IAMs_20 | 23 01 18.2 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **J16K** | **Anvik River** | **80.13** | **12** | IAMs_20 | IAMs_20 | 23 07 25.4 | |
| | comp=Z,6µm,19.0s | | | | | | |
| **J16K** | **Anvik River** | **80.13** | **12** | P | **P** | **22 25 35.4** | **-0.1** |
| | baz=338,SNR=35 | | | | | | |
| J16K | | | | S | **S** | **22 35 42.7** | **+2.9** |
| | baz=338 | | | | | | |
| **MDM** | **Murphy Dome** | **80.14** | **6** | IAMs_20 | IAMs_20 | 23 04 44.4 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **I26K** | **Coal Creek Min** | **80.17** | **4** | P | **P** | **22 25 35.7** | **+0.1** |
| | baz=352 | | | | | | |
| I26K | | | | S | **S** | **22 35 43.3** | **+3.3** |
| | baz=352 | | | | | | |
| I26K | | | | S | **S** | **22 35 43.3** | **+3.3** |
| | baz=352 | | | | | | |
| **I28M** | **Miner Creek** | **80.18** | **3** | P | **P** | **22 25 35.5** | **-0.3** |
| | baz=355,SNR=188 | | | | | | |
| I28M | | | | S | **S** | **22 35 42.0** | **+1.7** |
| | baz=355 | | | | | | |
| **J19K** | **Poorman** | **80.23** | **10** | IAMs_20 | IAMs_20 | 23 04 46.0 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **J19K** | **Poorman** | **80.23** | **10** | P | **P** | **22 25 35.8** | **-0.3** |
| | baz=342,SNR=104 | | | | | | |
| J19K | | | | S | **S** | **22 35 43.5** | **+2.7** |
| | baz=342 | | | | | | |
| J19K | | | | S | **S** | **22 35 43.5** | **+2.7** |
| | baz=342 | | | | | | |
| **COLA** | **College** | **80.25** | **6** | P | **P** | **22 25 36.2** | **+0.1** |
| **COLA** | **College** | **80.25** | **6** | P | **P** | **22 25 35.8** | **-0.3** |
| COLA | | | | IAmb | IAmb | 22 25 42.0 | |
| | comp=Z,297nm,1.2s | | | | | | |
| **COLA** | **College** | **80.25** | **6** | IAMs_20 | IAMs_20 | 23 04 58.5 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **COLA** | **College** | **80.25** | **6** | P | **P** | **22 25 35.9** | **-0.1** |
| | baz=348 | | | | | | |
| COLA | | | | S | **S** | **22 35 43.8** | **+2.9** |
| | baz=348 | | | | | | |
| **COLA** | **College** | **80.25** | **6** | P | **P** | **22 25 35.8** | **-0.3** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,297nm,1.2s | | | | | | |
| COLA | | | | MLR | MLR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| **J20K** | **Nowinta River** | **80.25** | **9** | IAMs_20 | IAMs_20 | 23 06 40.6 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **J20K** | **Nowinta River** | **80.25** | **9** | P | **P** | **22 25 36.5** | **+0.4** |
| | baz=343,SNR=100 | | | | | | |
| J20K | | | | S | **S** | **22 35 43.6** | **+2.6** |
| | baz=343 | | | | | | |
| J20K | | | | S | **S** | **22 35 43.6** | **+2.6** |
| | baz=343 | | | | | | |
| **J17K** | **VABM Dome** | **80.28** | **11** | IAMs_20 | IAMs_20 | 23 06 21.3 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **J17K** | **VABM Dome** | **80.28** | **11** | P | **P** | **22 25 36.3** | **0.0** |
| | baz=339,SNR=32 | | | | | | |
| J17K | | | | S | **S** | **22 35 43.7** | **+2.4** |
| | baz=339 | | | | | | |
| J17K | | | | S | **S** | **22 35 43.7** | **+2.4** |
| | baz=339 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **80.32** | **2** | P | **P** | **22 25 35.7** | **-0.7** |
| | baz=356,SNR=121 | | | | | | |
| I29M | | | | S | **S** | **22 35 41.9** | **+0.2** |
| | baz=356 | | | | | | |
| **NEA2** | **Nenana** | **80.42** | **7** | IAMs_20 | IAMs_20 | 23 05 41.8 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **NEA2** | **Nenana** | **80.42** | **7** | P | **P** | **22 25 37.1** | **+0.1** |
| | baz=347,SNR=6.5 | | | | | | |
| NEA2 | | | | S | **S** | **22 35 43.6** | **+0.9** |
| | baz=347 | | | | | | |
| **ILAR** | **Eielson Array** | **80.44** | **6** | P | **P** | **22 25 36.1** | **-1.0** |
| **ILAR** | **Eielson Array** | **80.44** | **6** | P | **P** | **22 25 36.6** | **-0.4** |
| | comp=Z,19nm,0.8s,baz=322,slow=3.7,SNR=62 | | | | | | |
| ILAR | | | | PKKPbc | **PKKPbc** | **22 44 19.1** | **+0.3** |
| | comp=Z,3.1nm,0.8s,baz=189,slow=2.6,SNR=14 | | | | | | |
| ILAR | | | | PKPPKP | **P'P'df** | **22 52 22.0** | **-7.2** |
| | comp=Z,2.8nm,0.9s,baz=228,slow=2.5,SNR=13 | | | | | | |
| ILAR | | | | LR | LR | 23 04 11.2 | |
| | comp=Z,3µm,21.0s,baz=336,slow=38 | | | | | | |
| | comp=Z,19nm,0.8s | | | | | | |
| **LMQ** | **La Malbaie** | **80.48** | **322** | P | **P** | **22 25 37.2** | **-0.5** |
| LMQ | | | | IAMs_20 | IAMs_20 | 23 00 50.3 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **CCB** | **Clear Creek Bu** | **80.48** | **6** | IAMs_20 | IAMs_20 | 23 05 05.5 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **I30M** | **Mount Dempster** | **80.50** | **1** | P | **P** | **22 25 37.2** | **-0.4** |
| | baz=358,SNR=252 | | | | | | |
| I30M | | | | S | **S** | **22 35 45.6** | **+1.8** |
| | baz=358 | | | | | | |
| **F64A** | **Sherman** | **80.56** | **320** | IAMs_20 | IAMs_20 | 23 01 30.6 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **G65A** | **Princeton** | **80.57** | **319** | IAMs_20 | IAMs_20 | 23 01 51.9 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **J18K** | **Innoko River** | **80.58** | **10** | P | **P** | **22 25 37.9** | **0.0** |
| | baz=341,SNR=59 | | | | | | |
| J18K | | | | S | **S** | **22 35 47.2** | **+2.7** |
| | baz=341 | | | | | | |
| **K13K** | **Kusilvak Mount** | **80.62** | **14** | IAMs_20 | IAMs_20 | 23 06 06.2 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **K13K** | **Kusilvak Mount** | **80.62** | **14** | P | **P** | **22 25 37.1** | **-1.0** |
| | baz=335,SNR=17 | | | | | | |
| K13K | | | | S | **S** | **22 35 48.5** | **+3.7** |
| | baz=335 | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **80.62** | **104** | P | **P** | **22 25 38.5** | **-0.4** |
| | comp=Z,60nm,0.8s,comp=Z,2µm | | | | | | |
| **WRH** | **Wood River Hil** | **80.63** | **6** | IAMs_20 | IAMs_20 | 23 05 19.4 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **LDAQ** | **Lac Daran** | **80.66** | **323** | IAMs_20 | IAMs_20 | 23 03 17.1 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **80.70** | **8** | P | **P** | **22 25 38.3** | **-0.3** |
| BPAW | | | | IAmb | IAmb | 22 25 43.6 | |
| | comp=Z,101nm,0.9s | | | | | | |
| BPAW | | | | IAMs_20 | IAMs_20 | 23 07 03.4 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **80.70** | **8** | P | **P** | **22 25 37.9** | **-0.7** |
| | baz=346,SNR=134 | | | | | | |
| BPAW | | | | S | **S** | **22 35 48.4** | **+2.6** |
| | baz=346 | | | | | | |
| **J25K** | **Salcha River,** | **80.71** | **5** | P | **P** | **22 25 38.3** | **-0.4** |
| | baz=350,SNR=74 | | | | | | |
| J25K | | | | S | **S** | **22 35 47.6** | **+1.7** |
| | baz=350 | | | | | | |
| J25K | | | | S | **S** | **22 35 47.6** | **+1.7** |
| | baz=350 | | | | | | |
| **HDA** | **Harding Lake** | **80.79** | **6** | P | **P** | **22 25 38.0** | **-1.0** |
| | baz=349,SNR=43 | | | | | | |
| HDA | | | | S | **S** | **22 35 46.1** | **-0.4** |
| | baz=349 | | | | | | |
| **BWN** | **Browne** | **80.79** | **7** | IAMs_20 | IAMs_20 | 23 05 19.1 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **EGAK** | **Eagle** | **80.80** | **3** | P | **P** | **22 25 38.7** | **-0.3** |
| EGAK | | | | IAmb | IAmb | 22 25 44.8 | |
| | comp=Z,130nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **80.80** | **3** | P | **P** | **22 25 38.2** | **-0.9** |
| | baz=354,SNR=119 | | | | | | |
| EGAK | | | | S | **S** | **22 35 49.9** | **+3.3** |
| | baz=354 | | | | | | |
| **CRZF** | **Crozet Islands** | **80.80** | **176** | P | **P** | **22 25 40.0** | **+1.0** |
| CRZF | | | | IAmb | IAmb | 22 25 46.2 | |
| | comp=Z,112nm,1.0s | | | | | | |
| **EMMW** | **East Machias** | **80.83** | **319** | P | **P** | **22 25 39.8** | **+0.3** |
| **K15K** | **Wolf Creek Mou** | **80.89** | **13** | IAMs_20 | IAMs_20 | 23 07 29.4 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **80.89** | **13** | P | **P** | **22 25 39.6** | **+0.1** |
| | baz=337,SNR=17 | | | | | | |
| K15K | | | | S | **S** | **22 35 50.7** | **+3.0** |
| | baz=337 | | | | | | |
| **J26L** | **Joseph Creek** | **80.94

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **K17K** | **Iditarod** | **81.05** | **11** | P | **P** | **22 25 40.7** | **+0.3** |
| | baz=340,SNR=30 | | | | | | |
| K17K | | | | S | **S** | **22 35 51.6** | **+2.2** |
| | baz=340 | | | | | | |
| **K20K** | **Telida** | **81.05** | **9** | IAMs_20 | IAMs_20 | 23 06 26.6 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **K20K** | **Telida** | **81.05** | **9** | P | **P** | **22 25 40.4** | **-0.1** |
| | baz=343,SNR=83 | | | | | | |
| K20K | | | | S | **S** | **22 35 52.4** | **+2.9** |
| | baz=343 | | | | | | |
| K20K | | | | S | **S** | **22 35 52.4** | **+2.9** |
| | baz=343 | | | | | | |
| **J30M** | **Hart River** | **81.15** | **1** | P | **P** | **22 25 40.4** | **-0.7** |
| | baz=358,SNR=165 | | | | | | |
| J30M | | | | S | **S** | **22 35 53.1** | **+2.5** |
| | baz=358 | | | | | | |
| **J29N** | **Klondike Camp** | **81.23** | **2** | P | **P** | **22 25 41.7** | **+0.3** |
| | baz=356,SNR=9.8 | | | | | | |
| J29N | | | | S | **S** | **22 35 54.6** | **+3.2** |
| | baz=356 | | | | | | |
| **MCK** | **McKinley** | **81.27** | **7** | P | **P** | **22 25 40.6** | **-1.0** |
| | baz=347,SNR=39 | | | | | | |
| **F62A** | **Pittston Farm,** | **81.39** | **321** | IAMs_20 | IAMs_20 | 23 04 38.5 | |
| | comp=Z,6µm,18.0s | | | | | | |
| **SCRK** | **Sand Creek** | **81.44** | **5** | P | **P** | **22 25 42.3** | **-0.3** |
| SCRK | | | | IAmb | IAmb | 22 25 48.0 | |
| | comp=Z,131nm,0.8s | | | | | | |
| **SCRK** | **Sand Creek** | **81.44** | **5** | P | **P** | **22 25 42.6** | **0.0** |
| | baz=352,SNR=265 | | | | | | |
| SCRK | | | | S | **S** | **22 35 56.8** | **+3.2** |
| | baz=352 | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **81.45** | **320** | P | **P** | **22 25 42.5** | **-0.4** |
| PKME | | | | IAmb | IAmb | 22 25 47.6 | |
| | comp=Z,261nm,1.9s | | | | | | |
| PKME | | | | IAMs_20 | IAMs_20 | 23 02 07.2 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **L15K** | **Ungalak Mounta** | **81.47** | **13** | P | **P** | **22 25 42.6** | **0.0** |
| | baz=337,SNR=14 | | | | | | |
| L15K | | | | S | **S** | **22 35 57.0** | **+3.3** |
| | baz=337 | | | | | | |
| **K24K** | **Donnelly Dome** | **81.48** | **5** | P | **P** | **22 25 42.7** | **0.0** |
| | baz=350,SNR=39 | | | | | | |
| K24K | | | | S | **S** | **22 35 55.4** | **+1.5** |
| | baz=350 | | | | | | |
| K24K | | | | S | **S** | **22 35 55.4** | **+1.5** |
| | baz=350 | | | | | | |
| **K27K** | **Chicken** | **81.50** | **4** | P | **P** | **22 25 42.7** | **-0.1** |
| | baz=353 | | | | | | |
| K27K | | | | S | **S** | **22 35 56.8** | **+2.8** |
| | baz=353 | | | | | | |
| K27K | | | | S | **S** | **22 35 56.8** | **+2.8** |
| | baz=353 | | | | | | |
| **L14K** | **Kuka Creek** | **81.55** | **14** | IAMs_20 | IAMs_20 | 23 09 06.9 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **L14K** | **Kuka Creek** | **81.55** | **14** | P | **P** | **22 25 43.0** | **0.0** |
| | baz=336,SNR=14 | | | | | | |
| L14K | | | | S | **S** | **22 35 57.7** | **+3.2** |
| | baz=336 | | | | | | |
| **DAWY** | **Dawson** | **81.58** | **3** | P | **P** | **22 25 43.4** | **+0.1** |
| | baz=355,SNR=62 | | | | | | |
| DAWY | | | | S | **S** | **22 35 57.8** | **+2.8** |
| | baz=355 | | | | | | |
| **L17K** | **Donlin** | **81.59** | **11** | P | **P** | **22 25 43.7** | **+0.4** |
| | baz=340,SNR=15 | | | | | | |
| L17K | | | | S | **S** | **22 35 58.7** | **+3.7** |
| | baz=340 | | | | | | |
| **RND** | **Reindeer** | **81.60** | **7** | IAMs_20 | IAMs_20 | 23 06 38.1 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **RIDG** | **Independent Ri** | **81.61** | **5** | P | **P** | **22 25 43.1** | **-0.4** |
| | baz=351,SNR=116 | | | | | | |
| RIDG | | | | S | **S** | **22 35 58.2** | **+2.9** |
| | baz=351 | | | | | | |
| **M11K** | **Mekoryuk** | **81.68** | **16** | P | **P** | **22 25 42.9** | **-0.9** |
| | baz=334 | | | | | | |
| M11K | | | | S | **SKSac** | **22 35 59.8** | **-3.5** |
| | baz=334 | | | | | | |
| **L18K** | **Granite Mounta** | **81.77** | **11** | P | **P** | **22 25 44.4** | **+0.2** |
| | baz=341,SNR=23 | | | | | | |
| L18K | | | | S | **S** | **22 36 00.2** | **+3.3** |
| | baz=341 | | | | | | |
| L18K | | | | S | **S** | **22 36 00.2** | **+3.3** |
| | baz=341 | | | | | | |
| **L16K** | **Owhat River** | **81.80** | **12** | IAMs_20 | IAMs_20 | 23 06 05.3 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **L16K** | **Owhat River** | **81.80** | **12** | P | **P** | **22 25 44.7** | **+0.3** |
| | baz=339,SNR=13 | | | | | | |
| L16K | | | | S | **SKSac** | **22 36 00.6** | **-3.5** |
| | baz=339 | | | | | | |
| **WBSI** | **Waikabubak, Su** | **81.83** | **108** | P | **P** | **22 25 44.8** | **-0.5** |
| | comp=Z,146nm,1.3s | | | | | | |
| **K29M** | **Barlow Dome** | **81.86** | **2** | IAMs_20 | IAMs_20 | 23 07 55.9 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **K29M** | **Barlow Dome** | **81.86** | **2** | P | **P** | **22 25 44.9** | **+0.1** |
| | baz=357,SNR=113 | | | | | | |
| K29M | | | | S | **S** | **22 36 00.0** | **+2.0** |
| | baz=357 | | | | | | |
| **BBSI** | **Bau Bau** | **81.91** | **102** | P | **P** | **22 25 47.0** | **+1.3** |
| | comp=Z,94nm,1.1s,comp=Z,2µm | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **81.91** | **29** | LR | LR | 23 08 21.6 | |
| | comp=Z,4µm,18.0s,baz=318,slow=40 | | | | | | |
| **L20K** | **Farewell, AK** | **81.92** | **9** | P | **P** | **22 25 45.2** | **+0.2** |
| | baz=343,SNR=90 | | | | | | |
| L20K | | | | S | **S** | **22 36 00.2** | **+1.7** |
| | baz=343 | | | | | | |
| L20K | | | | S | **S** | **22 36 00.2** | **+1.7** |
| | baz=343 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.04** | **351** | P | **P** | **22 25 45.7** | **+0.1** |
| **YKA** | **Yellowknife Ar** | **82.04** | **351** | P | **P** | **22 25 44.7** | **-0.9** |
| | comp=Z,48nm,0.9s,baz=14,slow=5.9,SNR=42 | | | | | | |
| YKA | | | | LR | LR | 23 04 19.8 | |
| | comp=Z,5µm,20.6s,baz=14,slow=37 | | | | | | |
| | comp=Z,48nm,0.9s | | | | | | |
| **DHY** | **Denali Highway** | **82.06** | **6** | IAMs_20 | IAMs_20 | 23 06 45.4 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **DHY** | **Denali Highway** | **82.06** | **6** | P | **P** | **22 25 45.6** | **-0.4** |
| | baz=349,SNR=46 | | | | | | |
| DHY | | | | S | **S** | **22 36 01.1** | **+1.0** |
| | baz=349 | | | | | | |
| **L19K** | **White Mountain** | **82.07** | **10** | IAMs_20 | IAMs_20 | 23 07 20.6 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **L19K** | **White Mountain** | **82.07** | **10** | P | **P** | **22 25 46.1** | **+0.2** |
| | baz=343,SNR=54 | | | | | | |
| L19K | | | | S | **S** | **22 36 02.8** | **+2.8** |
| | baz=343 | | | | | | |
| L19K | | | | S | **S** | **22 36 02.8** | **+2.8** |
| | baz=343 | | | | | | |
| **WVL** | **Waterville** | **82.11** | **320** | IAMs_20 | IAMs_20 | 23 02 48.7 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **G62A** | **West of Eustis** | **82.14** | **320** | IAMs_20 | IAMs_20 | 23 05 09.3 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **WRGLY** | **Wrigley** | **82.18** | **355** | IAMs_20 | IAMs_20 | 23 06 44.4 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **WRGLY** | **Wrigley** | **82.18** | **355** | P | **P** | **22 25 46.6** | **+0.3** |
| | baz=8.6,SNR=34 | | | | | | |
| WRGLY | | | | S | **S** | **22 36 03.5** | **+2.6** |
| | baz=8.6 | | | | | | |
| **WAT1** | **Susitna Watana** | **82.20** | **7** | P | **P** | **22 25 46.3** | **-0.2** |
| | baz=348 | | | | | | |
| **M14K** | **Bethel** | **82.23** | **14** | P | **P** | **22 25 47.0** | **+0.4** |
| | baz=337,SNR=8.3 | | | | | | |
| M14K | | | | S | **S** | **22 36 04.0** | **+2.4** |
| | baz=337 | | | | | | |
| **TNTI** | **Ternate** | **82.23** | **94** | P | **P** | **22 25 48.3** | **+0.8** |
| **TNTI** | **Ternate** | **82.23** | **94** | P | **P** | **22 25 45.7** | **-1.8** |
| TNTI | | | | IAmb | IAmb | 22 26 00.8 | |
| | comp=Z,167nm,1.5s | | | | | | |
| **TNTI** | **Ternate** | **82.23** | **94** | P | **P** | **22 25 47.0** | **-0.5** |
| | comp=Z,77nm,1.3s,comp=Z,1µm | | | | | | |
| **M13K** | **Dall Lake** | **82.27** | **14** | IAMs_20 | IAMs_20 | 23 07 45.8 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **M13K** | **Dall Lake** | **82.27** | **14** | P | **P** | **22 25 47.1** | **+0.2** |
| | baz=336 | | | | | | |
| **PAX** | **Paxson** | **82.33** | **5** | P | **P** | **22 25 47.4** | **+0.1** |
| | baz=350,SNR=46 | | | | | | |
| PAX | | | | S | **S** | **22 36 04.4** | **+1.6** |
| | baz=350 | | | | | | |
| **M19K** | **Big River Lodg** | **82.40** | **10** | IAMs_20 | IAMs_20 | 23 07 30.4 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **M19K** | **Big River Lodg** | **82.40** | **10** | P | **P** | **22 25 47.7** | **+0.1** |
| | baz=343,SNR=37 | | | | | | |
| M19K | | | | S | **SKSac** | **22 36 06.9** | **-1.3** |
| | baz=343 | | | | | | |
| M19K | | | | S | **SKSac** | **22 36 06.9** | **-1.3** |
| | baz=343 | | | | | | |
| **L26K** | **Log Cabin Wild** | **82.42** | **4** | P | **P** | **22 25 47.4** | **-0.2** |
| | baz=352,SNR=28 | | | | | | |
| L26K | | | | S | **SKSac** | **22 36 06.7** | **-1.6** |
| | baz=352 | | | | | | |
| L26K | | | | S | **SKSac** | **22 36 06.7** | **-1.6** |
| | baz=352 | | | | | | |
| **M17K** | **Holitna River** | **82.43** | **11** | IAMs_20 | IAMs_20 | 23 09 43.0 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **M17K** | **Holitna River** | **82.43** | **11** | P | **P** | **22 25 47.3** | **-0.4** |
| | baz=340,SNR=29 | | | | | | |
| **CUT** | **Chulitna** | **82.43** | **8** | P | **P** | **22 25 47.0** | **-0.7** |
| | baz=346 | | | | | | |
| **BCAR** | **Beaver Creek A** | **82.47** | **4** | P | **P** | **22 25 48.3** | **+0.3** |
| **L27K** | **Beaver Creek,** | **82.47** | **4** | P | **P** | **22 25 47.8** | **-0.2** |
| | baz=353,SNR=104 | | | | | | |
| L27K | | | | S | **SKSac** | **22 36 08.1** | **-0.7** |
| | baz=353 | | | | | | |
| **WAT6** | **Susitna Watana** | **82.52** | **6** | P | **P** | **22 25 48.1** | **-0.3** |
| | baz=348,SNR=42 | | | | | | |
| **M15K** | **Kasigluk River** | **82.53** | **13** | P | **P** | **22 25 47.9** | **-0.2** |
| | baz=338,SNR=13 | | | | | | |
| **M16K** | **Timber Creek** | **82.53** | **12** | IAMs_20 | IAMs_20 | 23 06 37.7 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **M16K** | **Timber Creek** | **82.53** | **12** | P | **P** | **22 25 48.2** | **-0.1** |
| | baz=339,SNR=19 | | | | | | |
| **M18K** | **Stony River** | **82.59** | **10** | P | **P** | **22 25 48.5** | **0.0** |
| | baz=342,SNR=26 | | | | | | |
| **M20K** | **Styx River** | **82.59** | **9** | IAMs_20 | IAMs_20 | 23 05 46.4 | |
| | comp=Z,6µm,22.0s | | | | | | |
| **M20K** | **Styx River** | **82.59** | **9** | P | **P** | **22 25 47.9** | **-0.8** |
| | baz=344,SNR=30 | | | | | | |
| **SKT** | **Skwentna** | **82.70** | **8** | P | **P** | **22 25 48.3** | **-0.8** |
| | baz=345,SNR=93 | | | | | | |
| SKT | | | | S | **S** | **22 36 06.3** | **-0.1** |
| | baz=345 | | | | | | |
| **SANI** | **Sanana** | **82.70** | **98** | P | **P** | **22 25 50.2** | **+0.3** |
| **SANI** | **Sanana** | **82.70** | **98** | P | P | 22 25 44.9 | -5.0 |
| **SANI** | **Sanana** | **82.70** | **98** | P | **P** | **22 25 46.6** | **-3.3** |
| | comp=Z,44nm,1.1s | | | | | | |
| **H62A** | **Milan** | **82.90** | **320** | IAMs_20 | IAMs_20 | 23 05 43.5 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **HARP** | **HAARP** | **82.92** | **5** | P | **P** | **22 25 49.9** | **-0.3** |
| | baz=351,SNR=14 | | | | | | |
| **I63A** | **Otisfield** | **82.94** | **320** | IAMs_20 | IAMs_20 | 23 03 23.8 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **SVW2** | **Sparrevohn** | **83.00** | **10** | P | **P** | **22 25 54.1** | **+3.4** |
| **N14K** | **Kuskokwak Cree** | **83.05** | **14** | P | **P** | **22 25 51.0** | **+0.1** |
| | baz=337 | | | | | | |
| **M26K** | **Nabesna, AK** | **83.06** | **4** | P | **P** | **22 25 51.1** | **0.0** |
| | baz=352,SNR=54 | | | | | | |
| **N16K** | **Nishlik Lake** | **83.08** | **12** | P | **P** | **22 25 51.6** | **+0.5** |
| | baz=340,SNR=12 | | | | | | |
| **M22K** | **Willow** | **83.08** | **8** | IAMs_20 | IAMs_20 | 23 06 53.4 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **M22K** | **Willow** | **83.08** | **8** | P | **P** | **22 25 51.5** | **+0.4** |
| | baz=346,SNR=28 | | | | | | |
| **BASI** | **Baing, Sumba** | **83.11** | **107** | P | **P** | **22 25 53.3** | **+1.4** |
| **EDFI** | **Ende, Flores** | **83.12** | **105** | P | **P** | **22 25 48.9** | **-3.2** |
| | comp=Z,42nm,0.8s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **83.12** | **6** | P | **P** | **22 25 50.9** | **-0.5** |
| | baz=350,SNR=49 | | | | | | |
| **N15K** | **Kwethluk River** | **83.13** | **13** | IAMs_20 | IAMs_20 | 23 08 39.5 | |
| | comp=Z,5µm,19.0s | | | | | | |
| **N15K** | **Kwethluk River** | **83.13** | **13** | P | **P** | **22 25 51.7** | **+0.4** |
| | baz=338,SNR=6.1 | | | | | | |
| **M27K** | **Edge Creek, AK** | **83.17** | **4** | P | **P** | **22 25 51.9** | **+0.2** |
| | baz=353,SNR=100 | | | | | | |
| **SML** | **Sawmill** | **83.22** | **7** | P | **P** | **22 25 51.3** | **-0.6** |
| SML | | | | IAMs_20 | IAMs_20 | 23 06 34.9 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **SML** | **Sawmill** | **83.22** | **7** | P | **P** | **22 25 51.3** | **-0.6** |
| | baz=348,SNR=66 | | | | | | |
| **M29M** | **Somme Creek** | **83.24** | **2** | P | **P** | **22 25 51.2** | **-0.8** |
| | baz=356,SNR=40 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.29** | **6** | P | **P** | **22 25 52.1** | **-0.2** |
| | baz=349,SNR=34 | | | | | | |
| **M23K** | **Glacier View** | **83.29** | **7** | P | **P** | **22 25 51.9** | **-0.3** |
| | baz=348,SNR=30 | | | | | | |
| **N17K** | **Nushagak Hills** | **83.29** | **11** | IAMs_20 | IAMs_20 | 23 08 50.9 | |
| | comp=Z,6µm,19.0s | | | | | | |
| **N17K** | **Nushagak Hills** | **83.29** | **11** | P | **P** | **22 25 52.4** | **+0.2** |
| | baz=341,SNR=11 | | | | | | |
| **SUA** | **Susitna One** | **83.30** | **8** | P | **P** | **22 25 51.6** | **-0.7** |
| SUA | | | | IAMs_20 | IAMs_20 | 23 08 38.9 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **SUA** | **Susitna One** | **83.30** | **8** | P | **P** | **22 25 52.2** | **-0.2** |
| | baz=346,SNR=112 | | | | | | |
| **PMR** | **Palmer** | **83.35** | **7** | P | **P** | **22 25 52.7** | **+0.3** |
| **PMR** | **Palmer** | **83.35** | **7** | P | **P** | **22 25 52.4** | **0.0** |
| | baz=347,SNR=18 | | | | | | |
| **N18K** | **Kilae Creek** | **83.36** | **11** | IAMs_20 | IAMs_20 | 23 07 35.5 | |
| | comp=Z,6µm,20.0s | | | | | | |
| **N18K** | **Kilae Creek** | **83.36** | **11** | P | **P** | **22 25 52.5** | **-0.1** |
| | baz=342,SNR=23 | | | | | | |
| **N20K** | **Mount Spurr** | **83.37** | **9** | P | **P** | **22 25 52.9** | **+0.2** |
| | baz=345,SNR=5.7 | | | | | | |
| **SPCR** | **Spurr Chakacha** | **83.37** | **9** | P | **P** | **22 25 53.0** | **+0.3** |
| | baz=345 | | | | | | |
| **N19K** | **Bonanza Creek** | **83.44** | **10** | IAMs_20 | IAMs_20 | 23 08 37.7 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **N19K** | **Bonanza Creek** | **83.44** | **10** | P | **P** | **22 25 52.4** | **-0.7** |
| | baz=343,SNR=62 | | | | | | |
| **MMRI** | **Maumere** | **83.48** | **105** | P | **P** | **22 25 53.0** | **-0.9** |
| **MMRI** | **Maumere** | **83.48** | **105** | P | **P** | **22 25 51.7** | **-2.2** |
| MMRI | | | | IAmb | IAmb | 22 26 06.7 | |
| | comp=Z,159nm,1.2s | | | | | | |
| MMRI | | | | IAMs_20 | IAMs_20 | 23 07 29.7 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **MMRI** | **Maumere** | **83.48** | **105** | P | **P** | **22 25 51.3** | **-2.6** |
| | comp=Z,109nm,1.4s,comp=Z,2µm | | | | | | |
| **FARO** | **Faro, Yukon** | **83.53** | **360** | P | **P** | **22 25 53.7** | **+0.3** |
| | baz=0.3,SNR=57 | | | | | | |
| **LBNH** | **Lisbon** | **83.53** | **320** | P | **P** | **22 25 53.2** | **-0.5** |
| LBNH | | | | IAmb | IAmb | 22 25 58.7 | |
| | comp=Z,97nm,1.1s | | | | | | |
| LBNH | | | | IAMs_20 | IAMs_20 | 23 06 02.2 | |
| | comp=Z,6µm,18.0s | | | | | | |
| **LBNH** | **Lisbon** | **83.53** | **320** | P | **P** | **22 25 53.2** | **-0.5** |
| LBNH | | | | pmax | pmax | | |
| | comp=Z,97nm,1.2s | | | | | | |
| LBNH | | | | MLR | MLR | | |
| | comp=Z,6µm,18.0s | | | | | | |
| **MNTQ** | **Montreal, Queb** | **83.54** | **322** | IAMs_20 | IAMs_20 | 23 03 34.3 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **VLDQ** | **Val d'Or** | **83.54** | **326** | IAMs_20 | IAMs_20 | 23 05 10.3 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **M31M** | **Drury Creek, Y** | **83.55** | **0** | IAMs_20 | IAMs_20 | 23 08 49.7 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **M31M** | **Drury Creek, Y** | **83.55** | **0** | P | **P** | **22 25 53.3** | **-0.3** |
| | baz=360,SNR=52 | | | | | | |
| **KNK** | **Knik Glacier** | **83.59** | **7** | IAMs_20 | IAMs_20 | 23 06 56.9 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **KNK** | **Knik Glacier** | **83.59** | **7** | P | **P** | **22 25 53.9** | **+0.1** |
| | baz=348 | | | | | | |
| **FIS** | **Fire Island** | **83.67** | **8** | IAMs_20 | IAMs_20 | 23 08 59.9 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **N25K** | **Chitina, Valde** | **83.75** | **5** | P | **P** | **22 25 54.4** | **-0.2** |
| | baz=351,SNR=17 | | | | | | |
| **KLU** | **Klutina** | **83.75** | **6** | P | **P** | **22 25 54.8** | **+0.1** |
| | baz=350,SNR=126 | | | | | | |
| **O14K** | **Tigyukauivet M** | **83.75** | **14** | IAMs_20 | IAMs_20 | 23 09 42.1 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **O14K** | **Tigyukauivet M** | **83.75** | **14** | P | **P** | **22 25 53.9** | **-0.7** |
| | baz=338,SNR=5.5 | | | | | | |
| **RC01** | **Rabbit Creek A** | **83.78** | **8** | IAMs_20 | IAMs_20 | 23 07 03.6 | |
| | comp=Z,4µm,22.0s | | | | | | |
| **RC01** | **Rabbit Creek A** | **83.78** | **8** | P | **P** | **22 25 54.8** | **+0.1** |
| | baz=347,SNR=54 | | | | | | |
| **YUK3** | **Moose Creek** | **83.83** | **3** | P | **P** | **22 25 55.2** | **-0.1** |
| | baz=354,SNR=86 | | | | | | |
| **VT1** | **Waterbury** | **83.90** | **321** | IAMs_20 | IAMs_20 | 23 03 44.1 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **CAPN** | **Captain Cook N** | **83.92** | **8** | IAMs_20 | IAMs_20 | 23 09 01.5 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **CAPN** | **Captain Cook N** | **83.92** | **8** | P | **P** | **22 25 55.5** | **+0.1** |
| | baz=346 | | | | | | |
| **O16K** | **Kokwok River B** | **84.02** | **12** | IAMs_20 | IAMs_20 | 23 07 44.2 | |
| | comp=Z,6µm,21.0s | | | | | | |
| **O16K** | **Kokwok River B** | **84.02** | **12** | P | **P** | **22 25 55.2** | **-0.7** |
| | baz=340,SNR=10.0 | | | | | | |
| **O17K** | **Koliganek Bris** | **84.02** | **12** | P | **P** | **22 25 55.4** | **-0.5** |
| | baz=341,SNR=13 | | | | | | |
| **O19K** | **Port Alsworth** | **84.05** | **10** | IAMs_20 | IAMs_20 | 23 09 05.0 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **O19K** | **Port Alsworth** | **84.05** | **10** | P | **P** | **22 25 56.0** | **0.0** |
| | baz=343 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **84.08** | **4** | P | **P** | **22 25 56.0** | **-0.2** |
| | baz=352,SNR=7.1 | | | | | | |
| **HNH** | **Hanover** | **84.08** | **320** | IAMs_20 | IAMs_20 | 23 06 27.9 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **O15K** | **Ungalikthiuk R** | **84.10** | **13** | P | **P** | **22 25 56.6** | **+0.3** |
| | baz=339,SNR=6.9 | | | | | | |
| **TGTN** | **Hyland Airport** | **84.13** | **357** | P | **P** | **22 25 57.0** | **+0.5** |
| | baz=4.5,SNR=50 | | | | | | |
| **PWL** | **Port Wells** | **84.15** | **7** | IAMs_20 | IAMs_20 | 23 07 05.5 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **PWL** | **Port Wells** | **84.15** | **7** | P | **P** | **22 25 56.5** | **-0.1** |
| | baz=348,SNR=38 | | | | | | |
| **P08K** | **Saint George I** | **84.22** | **19** | P | **P** | **22 25 58.0** | **+1.0** |
| | baz=331 | | | | | | |
| **O18K** | **Koktuh Hills** | **84.25** | **11** | IAMs_20 | IAMs_20 | 23 08 34.1 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **O18K** | **Koktuh Hills** | **84.25** | **11** | P | **P** | **22 25 57.1** | **0.0** |
| | baz=342,SNR=14 | | | | | | |
| **GLI** | **Glacier Island** | **84.25** | **7** | IAMs_20 | IAMs_20 | 23 07 17.2 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **GLI** | **Glacier Island** | **84.25** | **7** | P | **P** | **22 25 56.6** | **-0.6** |
| | baz=349,SNR=11 | | | | | | |
| **N31M** | **Braeburn, Yuko** | **84.26** | **1** | P | **P** | **22 25 57.3** | **+0.2** |
| | baz=358,SNR=15 | | | | | | |
| **N30M** | **Aishikik Lake** | **84.26** | **2** | P | **P** | **22 25 56.7** | **-0.6** |
| | baz=357,SNR=14 | | | | | | |
| **NLAI** | **Namlea** | **84.29** | **98** | P | **P** | **22 25 56.6** | **-1.5** |
| | comp=Z,41nm,1.0s | | | | | | |
| **YUK4** | **Talbot Arm** | **84.33** | **2** | P | **P** | **22 25 57.9** | **+0.1** |
| | baz=356,SNR=33 | | | | | | |
| **YUK8** | **Steele Glacier** | **84.35** | **3** | P | **P** | **22 25 56.9** | **-1.0** |
| | baz=355 | | | | | | |
| **O22K** | **Cooper Landing** | **84.37** | **8** | IAMs_20 | IAMs_20 | 23 07 43.4 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **O22K** | **Cooper Landing** | **84.37** | **8** | P | **P** | **22 25 58.2** | **+0.5** |
| | baz=347,SNR=6.9 | | | | | | |
| **BMRM** | **Bremner River** | **84.38** | **5** | P | **P** | **22 25 58.1** | **+0.3** |
| | baz=351,SNR=11 | | | | | | |
| **O20K** | **Slope Mountain** | **84.40** | **9** | P | **P** | **22 25 56.9** | **-1.1** |
| | baz=344 | | | | | | |
| **FID** | **Port Fidalgo** | **84.44** | **6** | IAMs_20 | IAMs_20 | 23 07 33.4 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **WES** | **Weston** | **84.47** | **319** | IAMs_20 | IAMs_20 | 23 05 06.1 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **J61A** | **Chester** | **84.47** | **320** | IAMs_20 | IAMs_20 | 23 01 59.2 | |
| | comp=Z,4µm,22.0s | | | | | | |
| **P16K** | **Nushagak River** | **84.57** | **12** | P | **P** | **22 25 58.8** | **+0.1** |
| | baz=340,SNR=6.7 | | | | | | |
| **CTG** | **Chitna Glacier** | **84.59** | **4** | P | **P** | **22 25 58.6** | **-0.4** |
| | baz=354,SNR=27 | | | | | | |
| **N32M** | **Quiet Lake** | **84.61** | **360** | P | **P** | **22 25 59.2** | **+0.2** |
| | baz=0.6 | | | | | | |
| **LONY** | **Lake Ozonia** | **84.64** | **322** | P | **P** | **22 25 58.7** | **-0.8** |
| LONY | | | | IAMs_20 | IAMs_20 | 23 06 22.4 | |
| | comp=Z,5µm,18.0s | | | | | | |
| **M65A** | **Busby, Falmout** | **84.65** | **318** | P | **P** | **22 25 60.0** | **+0.5** |
| | baz=48 | | | | | | |
| **P17K** | **Kvichak River** | **84.68** | **12** | P | **P** | **22 25 59.1** | **-0.1** |
| | baz=341,SNR=28 | | | | | | |
| **P18K** | **Big Mountain,** | **84.69** | **11** | IAMs_20 | IAMs_20 | 23 08 56.8 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **P18K** | **Big Mountain,** | **84.69** | **11** | P | **P** | **22 25 59.1** | **-0.3** |
| | baz=342 | | | | | | |
| **CRQE** | **Cirque** | **84.70** | **5** | P | **P** | **22 25 59.3** | **-0.3** |
| | baz=352,SNR=28 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **84.70** | **6** | P | **P** | **22 26 02.9** | **+3.6** |
| **EYAK** | **Cordova Ski Ar** | **84.70** | **6** | P | **P** | **22 25 60.0** | **+0.6** |
| | baz=350,SNR=7.7 | | | | | | |
| **P19K** | **Oil Pt** | **84.73** | **10** | IAMs_20 | IAMs_20 | 23 07 26.0 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **P19K** | **Oil Pt** | **84.73** | **10** | P | **P** | **22 25 59.5** | **-0.1** |
| | baz=344 | | | | | | |
| **YUK6** | **Outpost Mounta** | **84.74** | **2** | P | **P** | **22 25 59.9** | **0.0** |
| | baz=356,SNR=11 | | | | | | |
| **SEW** | **Seward** | **84.77** | **8** | P | **P** | **22 25 59.4** | **-0.3** |
| | baz=347,SNR=11 | | | | | | |
| **HIN** | **Hinchinbrook I** | **84.78** | **6** | IAMs_20 | IAMs_20 | 23 07 43.2 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **O28M** | **Mount Upton** | **84.84** | **3** | P | **P** | **22 26 00.7** | **+0.2** |
| | baz=355,SNR=20 | | | | | | |
| **ISLE** | **Juniper Island** | **84.90** | **4** | IAMs_20 | IAMs_20 | 23 08 18.2 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **NCB** | **Newcomb** | **84.91** | **321** | P | **P** | **22 26 00.8** | **0.0** |
| NCB | | | | IAMs_20 | IAMs_20 | 23 03 43.6 | |
| | comp=Z,4µm,20.0s | | | | | | |
| **BRLK** | **Bradley Lake** | **84.93** | **9** | IAMs_20 | IAMs_20 | 23 09 43.5 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **HOM** | **Homer** | **84.94** | **9** | IAMs_20 | IAMs_20 | 23 07 11.5 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **HOM** | **Homer** | **84.94** | **9** | P | **P** | **22 26 00.7** | **+0.2** |
| | baz=345 | | | | | | |
| **O30N** | **Mendenhall** | **84.97** | **1** | P | **P** | **22 26 00.6** | **-0.2** |
| | baz=358 | | | | | | |
| **BRSE** | **Bradley Lake S** | **84.97** | **9** | P | **P** | **22 26 00.6** | **-0.2** |
| | baz=346,SNR=6.3 | | | | | | |
| **WAX** | **Waxell Ridge** | **85.02** | **5** | IAMs_20 | IAMs_20 | 23 09 18.5 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **HMT** | **Hamilton** | **85.03** | **5** | P | **P** | **22 26 01.2** | **+0.1** |
| HMT | | | | IAmb | IAmb | 22 26 07.5 | |
| | comp=Z,130nm,1.1s | | | | | | |
| **P23K** | **Montague Islan** | **85.09** | **7** | P | **P** | **22 26 01.1** | **-0.2** |
| | baz=349,SNR=7.4 | | | | | | |
| **WHY** | **Whitehorse** | **85.10** | **1** | P | **P** | **22 26 01.1** | **-0.4** |
| | baz=359,SNR=10.0 | | | | | | |
| **CNPM** | **China Poot** | **85.12** | **9** | IAMs_20 | IAMs_20 | 23 07 16.2 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **Q16K** | **King Salmon** | **85.14** | **12** | P | **P** | **22 26 01.8** | **+0.2** |
| | baz=341 | | | | | | |
| **L61B** | **Northampton** | **85.16** | **319** | P | **P** | **22 26 01.8** | **-0.3** |
| | baz=46 | | | | | | |
| L61B | | | | S | **SKSac** | **22 36 29.0** | **+2.2** |
| | baz=46 | | | | | | |
| **SNH** | **Sunshine Point** | **85.28** | **5** | IAMs_20 | IAMs_20 | 23 08 39.6 | |
| | comp=Z,5µm,21.0s | | | | | | |
| **KOTAN** | **Kotaneelee Air** | **85.30** | **355** | P | **P** | **22 26 02.6** | **+0.2** |
| | baz=8.0,SNR=15 | | | | | | |
| KOTAN | | | | S | **S** | **22 36 31.7** | **-0.8** |
| | baz=8.0 | | | | | | |
| **BGLC** | **Bering Glacier** | **85.31** | **5** | P | **P** | **22 26 00.9** | **-1.5** |
| | baz=352 | | | | | | |
| **MESA** | **MESA** | **85.34** | **4** | IAMs_20 | IAMs_20 | 23 08 52.0 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **MESA** | **MESA** | **85.34** | **4** | P | **P** | **22 26 02.0** | **-0.8** |
| | baz=353,SNR=11 | | | | | | |
| **UCCT** | **U. Connecticut** | **85.36** | **319** | IAMs_20 | IAMs_20 | 23 05 29.8 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **Q19K** | **Cape Douglas,** | **85.37** | **10** | IAMs_20 | IAMs_20 | 23 08 48.9 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| R16K | **Pilot Point** | 86.03 | 13 | P | | P | | 22 26 06.5 | +0.5 | |
| | baz=340 | | | | | | | | | |
| P29M | **Windy Craggy** | 86.08 | 2 | P | | P | | 22 26 06.5 | +0.1 | |
| | baz=357,SNR=9.0 | | | | | | | | | |
| LIRD | **Liard River Hi** | 86.14 | 356 | P | | P | | 22 26 06.8 | +0.2 | |
| | baz=6.3,SNR=19 | | | | | | | | | |
| P32M | **Atlin** | 86.17 | 360 | P | | P | | 22 26 06.6 | -0.2 | |
| | baz=0.0,SNR=10 | | | | | | | | | |
| PLK4 | **Peulik 4** | 86.18 | 12 | IAMs_20 | IAMs_20 | | | 23 10 41.3 | | |
| | comp=Z,6µm,19.0s | | | | | | | | | |
| R17L | **Mt. Peulik Vol** | 86.18 | 12 | P | | P | | 22 26 06.3 | -0.6 | |
| | baz=342 | | | | | | | | | |
| J57A | **Williamstown** | 86.22 | 322 | IAMs_20 | IAMs_20 | | | 23 05 16.2 | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| DELO | **Deloro Mine** | 86.23 | 323 | IAMs_20 | IAMs_20 | | | 23 03 59.4 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| PLBC | **Pleasant Camp** | 86.28 | 1 | P | | P | | 22 26 06.2 | -1.0 | |
| | baz=358,SNR=67 | | | | | | | | | |
| SKAG | **Skagway** | 86.30 | 1 | P | | P | | 22 26 10.9 | +3.6 | |
| SKAG | **Skagway** | 86.30 | 1 | P | | P | | 22 26 07.2 | -0.1 | |
| | baz=359,SNR=6.5 | | | | | | | | | |
| R33M | **Jennings River** | 86.34 | 359 | IAMs_20 | IAMs_20 | | | 23 08 18.5 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| R33M | **Jennings River** | 86.34 | 359 | P | | P | | 22 26 07.8 | 0.0 | |
| | baz=2.3,SNR=35 | | | | | | | | | |
| PECO | **Prince Edward** | 86.34 | 323 | P | | P | | 22 26 07.6 | -0.3 | |
| PECO | | | | IAmb | IAmb | | | 22 26 12.1 | | |
| | comp=Z,196nm,1.5s | | | | | | | | | |
| SWI | **Sorong** | 86.36 | 94 | P | | P | | 22 26 08.9 | +0.5 | |
| | comp=Z,88nm,1.3s,comp=Z,2µm | | | | | | | | | |
| WSPT | **Westport, CT** | 86.39 | 319 | IAMs_20 | IAMs_20 | | | 23 06 11.1 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| R18K | **Karluk** | 86.56 | 11 | P | | P | | 22 26 08.7 | +0.1 | |
| | baz=343 | | | | | | | | | |
| L59A | **Walton** | 86.59 | 320 | IAMs_20 | IAMs_20 | | | 23 07 46.2 | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| KDAK | **Kodiak Island** | 86.63 | 10 | P | | P | | 22 26 09.2 | +0.2 | |
| KDAK | **Kodiak Island** | 86.63 | 10 | IAMs_20 | IAMs_20 | | | 23 11 04.1 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| KDAK | **Kodiak Island** | 86.63 | 10 | LR | LR | | | 23 11 05.8 | | |
| | comp=Z,4µm,18.8s,baz=12,slow=40 | | | | | | | | | |
| KDAK | **Kodiak Island** | 86.63 | 10 | P | | P | | 22 26 09.0 | 0.0 | |
| | baz=345 | | | | | | | | | |
| KDAK | **Kodiak Island** | 86.63 | 10 | P | | P | | 22 26 09.2 | +0.2 | |
| KDAK | | | | pmax | pmax | | | | | |
| | comp=Z,197nm,0.9s | | | | | | | | | |
| KDAK | | | | MLR | MLR | | | | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| TOAD | **Toad River Com** | 86.65 | 356 | P | | P | | 22 26 09.5 | +0.3 | |
| | baz=7.0,SNR=40 | | | | | | | | | |
| TOAD | | | | S | | S | | 22 36 41.1 | -4.8 | |
| | baz=7.0 | | | | | | | | | |
| J56A | **Wolcott** | 86.75 | 322 | IAMs_20 | IAMs_20 | | | 23 05 52.3 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| SADO | **Sadowa** | 86.79 | 324 | IAMs_20 | IAMs_20 | | | 23 07 11.0 | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| SADO | **Sadowa** | 86.79 | 324 | P | | P | | 22 26 10.1 | +0.1 | |
| | comp=Z,9.4nm,0.7s,baz=8.7,slow=5.1,SNR=7.3 | | | | | | | | | |
| SADO | | | | PP | | PP | | 22 29 32.5 | +0.7 | |
| | comp=Z,23nm,1.1s,baz=33,slow=7.6,SNR=5.3 | | | | | | | | | |
| SADO | | | | LR | LR | | | 23 07 48.3 | | |
| | comp=Z,5µm,18.1s,baz=54,slow=38 | | | | | | | | | |
| | comp=Z,9.4nm,0.7s | | | | | | | | | |
| Q32M | **Nakina River** | 86.80 | 359 | IAMs_20 | IAMs_20 | | | 23 08 18.6 | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| Q32M | **Nakina River** | 86.80 | 359 | P | | P | | 22 26 09.7 | -0.4 | |
| | baz=1.2,SNR=11 | | | | | | | | | |
| Q32M | | | | S | | S | | 22 36 43.7 | -4.0 | |
| | baz=1.2 | | | | | | | | | |
| PAL | **Palisades** | 86.82 | 319 | IAMs_20 | IAMs_20 | | | 23 06 23.4 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| RCBR | **Riachuelo** | 86.85 | 261 | P | | P | | 22 26 10.6 | -0.3 | |
| RCBR | | | | IAmb | IAmb | | | 22 26 17.5 | | |
| | comp=Z,141nm,1.8s | | | | | | | | | |
| RCBR | **Riachuelo** | 86.85 | 261 | IAMs_20 | IAMs_20 | | | 23 02 03.4 | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| RCBR | **Riachuelo** | 86.85 | 261 | LR | LR | | | 23 05 10.7 | | |
| | comp=Z,2µm,20.7s,baz=334,slow=36 | | | | | | | | | |
| RCBR | **Riachuelo** | 86.85 | 261 | P | | P | | 22 26 10.6 | -0.3 | |
| RCBR | | | | pmax | pmax | | | | | |
| | comp=Z,141nm,1.8s | | | | | | | | | |
| RCBR | | | | MLR | MLR | | | | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| RCBR | **Riachuelo** | 86.85 | 261 | eP | | P | | 22 26 13.9 | +3.0 | |
| S12K | **Black Hills** | 86.87 | 16 | IAMs_20 | IAMs_20 | | | 23 11 13.6 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| S12K | **Black Hills** | 86.87 | 16 | P | | P | | 22 26 09.4 | -0.9 | |
| | baz=337 | | | | | | | | | |
| TRNY | **Table Rock, Ra** | 86.89 | 319 | IAMs_20 | IAMs_20 | | | 23 05 21.3 | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| FFC | **Flin Flon** | 86.95 | 342 | P | | P | | 22 26 09.9 | -0.7 | |
| FFC | | | | IAmb | IAmb | | | 22 26 16.5 | | |
| | comp=Z,119nm,1.2s | | | | | | | | | |
| FFC | **Flin Flon** | 86.95 | 342 | IAMs_20 | IAMs_20 | | | 23 03 59.0 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| FFC | **Flin Flon** | 86.95 | 342 | P | | P | | 22 26 09.9 | -0.7 | |
| FFC | | | | pmax | pmax | | | | | |
| | comp=Z,119nm,1.3s | | | | | | | | | |
| FFC | | | | MLR | MLR | | | | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| K57A | **Scipio Center** | 86.97 | 322 | IAMs_20 | IAMs_20 | | | 23 07 59.1 | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| BBSR | **BB Station** | 87.06 | 308 | P | | P | | 22 26 11.9 | +0.3 | |
| CHGN | **Chignik** | 87.06 | 13 | P | | P | | 22 26 10.3 | -0.8 | |
| | baz=340 | | | | | | | | | |
| OHAK | **Old Harbor** | 87.07 | 11 | P | | P | | 22 26 12.5 | +1.4 | |
| OHAK | **Old Harbor** | 87.07 | 11 | IAMs_20 | IAMs_20 | | | 23 10 23.7 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| OHAK | **Old Harbor** | 87.07 | 11 | P | | P | | 22 26 10.7 | -0.4 | |
| | baz=344,SNR=10.0 | | | | | | | | | |
| BINY | **Binghamton** | 87.08 | 321 | P | | P | | 22 26 12.0 | +0.5 | |
| BINY | | | | IAMs_20 | IAMs_20 | | | 23 05 10.0 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| J55A | **Hilton** | 87.24 | 323 | IAMs_20 | IAMs_20 | | | 23 05 41.2 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| DLBC | **Dease Lake** | 87.28 | 358 | LR | LR | | | 23 09 01.9 | | |
| | comp=Z,3µm,21.8s,baz=355,slow=38 | | | | | | | | | |
| DLBC | **Dease Lake** | 87.28 | 358 | P | | P | | 22 26 12.0 | -0.3 | |
| | baz=3.1,SNR=26 | | | | | | | | | |
| DLBC | | | | S | | S | | 22 36 56.4 | +4.3 | |
| | baz=3.1 | | | | | | | | | |
| BNDI | **Bandanaira** | 87.31 | 97 | P | | P | | 22 26 11.8 | -1.3 | |
| BNDI | **Bandanaira** | 87.31 | 97 | P | | P | | 22 26 13.4 | +0.3 | |
| FALS | **False Pass** | 87.33 | 17 | P | | P | | 22 26 12.7 | +0.2 | |
| | baz=336 | | | | | | | | | |
| R31K | **City Hall, Gus** | 87.34 | 1 | P | | P | | 22 26 12.2 | -0.2 | |
| | baz=358 | | | | | | | | | |
| KSPA | **Keystone Colle** | 87.42 | 320 | IAMs_20 | IAMs_20 | | | 23 08 11.2 | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| UNV | **Unalaska Valle** | 87.48 | 19 | P | | P | | 22 26 12.9 | -0.2 | |
| | baz=334 | | | | | | | | | |
| UNV | | | | S | | S | | 22 36 57.3 | +3.4 | |
| | baz=334 | | | | | | | | | |
| JIS | **Juneau Island** | 87.49 | 0 | P | | P | | 22 26 16.8 | +3.7 | |
| R32K | **Eaglecrest** | 87.49 | 0 | P | | P | | 22 26 12.7 | -0.5 | |
| | baz=359,SNR=9.6 | | | | | | | | | |
| R32K | | | | S | | S | | 22 36 57.4 | +3.5 | |
| | baz=359 | | | | | | | | | |
| R32K | | | | S | | S | | 22 36 57.4 | +3.5 | |
| | baz=359 | | | | | | | | | |
| SDPT | **Sand Point** | 87.54 | 15 | P | | P | | 22 26 13.6 | +0.2 | |
| | baz=338 | | | | | | | | | |
| SII | **Sitkinak Islan** | 87.56 | 11 | IAMs_20 | IAMs_20 | | | 23 13 12.9 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| SII | **Sitkinak Islan** | 87.56 | 11 | P | | P | | 22 26 13.5 | -0.1 | |
| | baz=343 | | | | | | | | | |
| NIKH | **Nikolski High** | 87.60 | 20 | P | | P | | 22 26 13.3 | -0.5 | |
| | baz=332 | | | | | | | | | |
| NIKH | | | | S | | S | | 22 36 53.1 | -2.1 | |
| | baz=332 | | | | | | | | | |
| J54A | **Appleton** | 87.64 | 323 | IAMs_20 | IAMs_20 | | | 23 05 49.8 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| S31K | **Pelican** | 87.78 | 1 | P | | P | | 22 26 14.5 | -0.1 | |
| | baz=358 | | | | | | | | | |
| S34M | **Telegraph Cree** | 87.83 | 359 | P | | P | | 22 26 14.3 | -0.5 | |
| | baz=2.2,SNR=20 | | | | | | | | | |
| S34M | | | | S | | S | | 22 37 01.2 | +4.0 | |
| | baz=2.2 | | | | | | | | | |
| NBCL | **Cascavel-CE** | 87.89 | 263 | eP | | P | | 22 26 18.3 | +2.4 | |
| L56A | **Greenwood** | 87.93 | 322 | IAMs_20 | IAMs_20 | | | 23 08 38.6 | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| E46A | **Sault Ste Mari** | 87.94 | 328 | IAMs_20 | IAMs_20 | | | 23 08 14.1 | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| CHIR | **Chirikof Islan** | 88.03 | 12 | P | | P | | 22 26 15.5 | -0.3 | |
| | baz=342 | | | | | | | | | |
| CHNA | **Chernabura Isl** | 88.21 | 15 | P | | P | | 22 26 15.9 | -0.7 | |
| | baz=339 | | | | | | | | | |
| CNBA | **Chernabura Isl** | 88.22 | 15 | IAMs_20 | IAMs_20 | | | 23 13 09.1 | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| P61A | **Hammonton** | 88.24 | 319 | IAMs_20 | IAMs_20 | | | 23 06 42.9 | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| WVNY | **West Valley, N** | 88.26 | 323 | IAMs_20 | IAMs_20 | | | 23 06 11.3 | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| M57A | **Sunshine Farm,** | 88.29 | 321 | IAMs_20 | IAMs_20 | | | 23 06 08.1 | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| S32K | **Killisnoo** | 88.30 | 0 | P | | P | | 22 26 16.1 | -0.9 | |
| | baz=359,SNR=10 | | | | | | | | | |
| NBCA | **Caruaru-PE** | 88.31 | 259 | eP | | P | | 22 26 19.5 | +1.6 | |
| FAKI | **Fak Fak** | 88.33 | 95 | P | | P | | 22 26 17.4 | -0.6 | |
| FAKI | **Fak Fak** | 88.33 | 95 | P | | P | | 22 26 16.6 | -1.4 | |
| FAKI | **Fak Fak** | 88.33 | 95 | P | | P | | 22 26 16.7 | -1.3 | |
| | comp=Z,160nm,1.6s,comp=Z,2µm | | | | | | | | | |
| N58A | **Sunbury** | 88.44 | 320 | IAMs_20 | IAMs_20 | | | 23 05 54.0 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| SIT | **Sitka** | 88.71 | 1 | P | | P | | 22 26 22.4 | +3.5 | |
| SIT | **Sitka** | 88.71 | 1 | P | | P | | 22 26 17.7 | -1.2 | |
| | baz=359 | | | | | | | | | |
| SIT | | | | S | | S | | 22 37 09.1 | +3.6 | |
| | baz=359 | | | | | | | | | |
| T35M | **Bob Quinn** | 88.74 | 358 | P | | P | | 22 26 18.3 | -0.9 | |
| | baz=2.9,SNR=15 | | | | | | | | | |
| T35M | | | | S | | S | | 22 37 10.0 | +4.0 | |
| | baz=2.9 | | | | | | | | | |
| MVL | **Millersville** | 88.85 | 320 | IAMs_20 | IAMs_20 | | | 23 06 31.9 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| T33K | **Petersburg** | 88.96 | 360 | P | | P | | 22 26 20.0 | -0.1 | |
| | baz=0.7 | | | | | | | | | |
| MBWA | **Marble Bar** | 89.06 | 117 | P | | P | | 22 26 20.1 | -1.0 | |
| MBWA | **Marble Bar** | 89.06 | 117 | P | | P | | 22 26 18.9 | -2.3 | |
| MBWA | | | | IAmb | IAmb | | | 22 26 24.8 | | |
| | comp=Z,212nm,1.8s | | | | | | | | | |
| ULM | **Lac du Bonnet** | 89.14 | 337 | P | | P | | 22 26 20.5 | -0.7 | |
| | comp=Z,19nm,0.7s,baz=34,slow=4.2,SNR=18 | | | | | | | | | |
| ULM | | | | LR | LR | | | 23 06 40.6 | | |
| | comp=Z,4µm,21.5s,baz=27,slow=36 | | | | | | | | | |
| | comp=Z,19nm,0.7s | | | | | | | | | |
| I49A | **Point Hope** | 89.15 | 326 | IAMs_20 | IAMs_20 | | | 23 08 54.4 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| ERPA | **Erie** | 89.17 | 323 | IAMs_20 | IAMs_20 | | | 23 06 47.2 | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| SSPA | **Standing Stone** | 89.19 | 321 | P | | P | | 22 26 20.5 | -1.2 | |
| SSPA | | | | IAmb | IAmb | | | 22 26 25.6 | | |
| | comp=Z,160nm,1.9s | | | | | | | | | |
| SSPA | **Standing Stone** | 89.19 | 321 | IAMs_20 | IAMs_20 | | | 23 06 58.1 | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| GLMI | **Grayling** | 89.28 | 327 | P | | P | | 22 26 21.5 | -0.4 | |
| GLMI | | | | IAmb | IAmb | | | 22 26 26.6 | | |
| | comp=Z,49nm,0.7s | | | | | | | | | |
| GLMI | | | | IAMs_20 | IAMs_20 | | | 23 08 34.6 | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| WRAK | **Wrangell Islan** | 89.35 | 359 | P | | P | | 22 26 22.5 | +0.5 | |
| WRAK | | | | IAmb | IAmb | | | 22 26 30.4 | | |
| | comp=Z,106nm,0.9s | | | | | | | | | |
| WRAK | **Wrangell Islan** | 89.35 | 359 | P | | P | | 22 26 21.2 | -0.8 | |
| | baz=1.2 | | | | | | | | | |
| WRAK | | | | S | | S | | 22 37 14.2 | +2.6 | |
| | baz=1.2 | | | | | | | | | |
| PSA00 | **Pilbara Seismi** | 89.40 | 117 | P | | P | | 22 26 23.2 | +0.5 | |
| PSA00 | **Pilbara Seismi** | 89.40 | 117 | P | | P | | 22 26 21.1 | -1.7 | |
| PSA00 | | | | IAmb | IAmb | | | 22 26 32.9 | | |
| | comp=Z,116nm,1.3s | | | | | | | | | |
| PSA00 | **Pilbara Seismi** | 89.40 | 117 | P | | P | | 22 26 21.1 | -1.7 | |
| PSA00 | | | | IAmb | IAmb | | | 22 26 26.2 | | |
| | comp=Z,141nm,1.7s | | | | | | | | | |
| R61A | **Willards** | 89.49 | 318 | IAMs_20 | IAMs_20 | | | 23 07 34.1 | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| EYMN | **Ely** | 89.56 | 333 | P | | P | | 22 26 22.5 | -0.7 | |
| EYMN | | | | IAmb | IAmb | | | 22 26 28.7 | | |
| | comp=Z,196nm,1.9s | | | | | | | | | |
| U33K | **Whale Pass** | 89.66 | 360 | P | | P | | 22 26 22.7 | -0.7 | |
| | baz=0.5,SNR=9.7 | | | | | | | | | |
| NBPB | **Pedra_Branca-C** | 89.70 | 263 | eP | | P | | 22 26 25.8 | +1.4 | |
| U35K | **Hyder** | 89.80 | 358 | IAMs_20 | IAMs_20 | | | 23 11 28.1 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| U35K | **Hyder** | 89.80 | 358 | P | | P | | 22 26 23.8 | -0.4 | |
| | baz=3.1 | | | | | | | | | |
| KMPI | **Kaimana, Papua** | 89.95 | 94 | P | | P | | 22 26 26.8 | +1.3 | |
| M53A | **WI Miller and** | 90.02 | 323 | IAMs_20 | IAMs_20 | | | 23 09 49.6 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| M53A | **WI Miller and** | 90.02 | 323 | P | | P | | 22 26 24.7 | -0.8 | |
| | baz=41 | | | | | | | | | |
| M53A | | | | S | | S | | 22 37 17.3 | -1.1 | |
| | baz=41 | | | | | | | | | |
| F42A | **Maple Grove Fa** | 90.04 | 330 | IAMs_20 | IAMs_20 | | | 23 09 42.6 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| P57A | **Homestead Farm** | 90.10 | 320 | IAMs_20 | IAMs_20 | | | 23 07 03.2 | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| COWI | **Conover** | 90.17 | 331 | IAMs_20 | IAMs_20 | | | 23 05 43.0 | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| M52A | **Chesterland** | 90.28 | 324 | IAMs_20 | IAMs_20 | | | 23 06 31.5 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| CRAG | **Craig** | 90.31 | 360 | P | | P | | 22 26 25.6 | -0.8 | |
| | baz=0.5 | | | | | | | | | |
| CRAG | | | | S | | S | | 22 37 17.3 | -3.1 | |
| | baz=0.5 | | | | | | | | | |
| V35K | **Ketchikan** | 90.43 | 359 | P | | P | | 22 26 26.2 | -0.8 | |
| | baz=1.8,SNR=5.2 | | | | | | | | | |
| V35K | | | | S | | S | | 22 37 20.6 | -1.1 | |
| | baz=1.8 | | | | | | | | | |
| V35K | | | | S | | S | | 22 37 20.6 | -1.1 | |
| | baz=1.8 | | | | | | | | | |
| BRLDA | **Berland Lookou** | 90.56 | 350 | IAMs_20 | IAMs_20 | | | 23 14 13.3 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| N53A | **Lisbon** | 90.57 | 323 | IAMs_20 | IAMs_20 | | | 23 07 41.4 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| J47A | **Sunmer** | 90.61 | 327 | IAMs_20 | IAMs_20 | | | 23 07 42.9 | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| I45A | **Fountain** | 90.61 | 328 | IAMs_20 | IAMs_20 | | | 23 07 26.9 | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| E38A | **The Farm, Brul** | 90.70 | 332 | IAMs_20 | IAMs_20 | | | 23 06 29.0 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| AAM | **Ann Arbor** | 90.80 | 325 | IAMs_20 | IAMs_20 | | | 23 09 45.1 | | |
| | comp=Z,6µm,20.0s | | | | | | | | | |
| O54A | **Avella** | 90.81 | 322 | IAMs_20 | IAMs_20 | | | 23 07 51.7 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| AGMN | **Agassiz Nation** | 90.82 | 336 | IAMs_20 | IAMs_20 | | | 23 12 58.8 | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| H43A | **Windswept, Lux** | 90.93 | 329 | IAMs_20 | IAMs_20 | | | 23 10 06.2 | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| MCWV | **Mont Chateau** | 90.93 | 321 | IAMs_20 | IAMs_20 | | | 23 10 21.9 | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| O53A | **New Philadelph** | 91.18 | 323 | IAMs_20 | IAMs_20 | | | 23 08 10.5 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| O53A | **New Philadelph** | 91.18 | 323 | P | | P | | 22 26 29.4 | -1.5 | |
| | baz=41 | | | | | | | | | |
| O53A | | | | S | | S | | 22 37 24.4 | -4.8 | |
| | baz=41 | | | | | | | | | |
| M50A | **Fremont** | 91.20 | 324 | IAMs_20 | IAMs_20 | | | 23 09 43.8 | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| N51A | **Ashland** | 91.25 | 324 | IAMs_20 | IAMs_20 | | | 23 08 27.1 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| G40A | **Rib Lake** | 91.28 | 331 | IAMs_20 | IAMs_20 | | | 23 06 49.4 | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| MORW | **Morawa** | 91.34 | 125 | P | | P | | 22 26 31.5 | -0.1 | |
| MORW | **Morawa** | 91.34 | 125 | P | | P | | 22 26 29.8 | -1.8 | |
| MORW | | | | IAmb | IAmb | | | 22 26 41.9 | | |
| | comp=Z,89nm,1.6s | | | | | | | | | |
| MORW | | | | IAMs_20 | IAMs_20 | | | 23 03 38.5 | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| O52A | **Adamsville** | 91.59 | 323 | IAMs_20 | IAMs_20 | | | 23 10 45.4 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| MEEK | **Meekatharra** | 91.61 | 121 | P | | P | | 22 26 33.6 | +0.6 | |
| T59A | **Double "B" Far** | 91.69 | 318 | IAMs_20 | IAMs_20 | | | 23 09 38.3 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| FITZ | **Fitzroy Crossi** | 91.71 | 111 | P | | P | | 22 26 32.4 | -1.1 | |
| FITZ | **Fitzroy Crossi** | 91.71 | 111 | P | | P | | 22 26 31.5 | -2.0 | |
| S57A | **Dark Hollow, R** | 91.87 | 320 | IAMs_20 | IAMs_20 | | | 23 08 53.9 | | |
| | comp=Z,4µm,21.0s | | | | | | | | | |
| GRNB | **Grenville Isla** | 91.87 | 358 | P | | P | | 22 26 33.5 | -0.3 | |
| GRNB | | | | IAmb | IAmb | | | 22 26 48.0 | | |
| | comp=Z,95nm,1.3s | | | | | | | | | |
| I42A | **Draeger Farm,** | 91.88 | 329 | IAMs_20 | IAMs_20 | | | 23 10 26.3 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| Q54A | **Coxs Mills** | 91.94 | 322 | P | | P | | 22 26 34.2 | -0.2 | |
| Q54A | | | | IAmb | IAmb | | | 22 26 38.2 | | |
| | comp=Z,69nm,1.4s | | | | | | | | | |
| V61A | **Roper** | 92.00 | 317 | IAMs_20 | IAMs_20 | | | 23 07 57.6 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| ACSO | **Alum Creek Sta** | 92.07 | 324 | P | | P | | 22 26 33.9 | -1.1 | |
| ACSO | | | | IAmb | IAmb | | | 22 26 40.0 | | |
| | comp=Z,57nm,0.9s | | | | | | | | | |
| ACSO | | | | IAMs_20 | IAMs_20 | | | 23 09 01.9 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| P52A | **Corning** | 92.11 | 323 | IAMs_20 | IAMs_20 | | | 23 07 40.0 | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| P52A | **Corning** | 92.11 | 323 | P | | P | | 22 26 33.4 | -1.8 | |
| | baz=40 | | | | | | | | | |
| P52A | | | | S | | S | | 22 37 34.0 | -3.6 | |
| | baz=40 | | | | | | | | | |
| L46A | **Eue Claire** | 92.24 | 327 | IAMs_20 | IAMs_20 | | | 23 12 13.2 | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| SPMN | **Marine on St.** | 92.34 | 332 | IAMs_20 | IAMs_20 | | | 23 07 30.2 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| I40A | **Norwalk** | 92.58 | 330 | IAMs_20 | IAMs_20 | | | 23 09 14.9 | | |
| | comp=Z,6µm,22.0s | | | | | | | | | |
| T57A | **Hurt** | 92.59 | 319 | IAMs_20 | IAMs_20 | | | 23 11 45.1 | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| K43A | **Burlington** | 92.59 | 328 | IAMs_20 | IAMs_20 | | | 23 10 15.3 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| KNRA | **Kununurra** | 92.75 | 107 | P | | P | | 22 26 36.8 | -1.6 | |
| KNRA | | | | IAmb | IAmb | | | 22 26 42.0 | | |
| | comp=Z,58nm,1.3s | | | | | | | | | |
| O49A | **Covington** | 92.76 | 324 | IAMs_20 | IAMs_20 | | | 23 10 42.1 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| BLDU | **Ballidu** | 92.76 | 126 | P | | P | | 22 26 38.5 | +0.3 | |
| L44A | **Lake County Fo** | 92.83 | 328 | IAMs_20 | IAMs_20 | | | 23 08 41.7 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| L44A | **Lake County Fo** | 92.83 | 328 | P | | P | | 22 26 38.1 | -0.4 | |
| | baz=36 | | | | | | | | | |
| L44A | | | | S | | S | | 22 37 40.9 | -3.0 | |
| | baz=36 | | | | | | | | | |
| MTN | **Manton Dam** | 93.03 | 103 | P | | P | | 22 26 39.6 | -0.1 | |
| MTN | **Manton Dam** | 93.03 | 103 | P | | P | | 22 26 37.8 | -2.0 | |
| BLA | **Blacksburg** | 93.05 | 320 | IAMs_20 | IAMs_20 | | | 23 08 45.3 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| S54A | **Dingess, Beckl** | 93.08 | 321 | IAMs_20 | IAMs_20 | | | 23 09 04.9 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| HQIL | **Hanson Quary C** | 93.11 | 327 | IAMs_20 | IAMs_20 | | | 23 06 47.1 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| Q51A | **Peebles** | 93.18 | 323 | IAMs_20 | IAMs_20 | | | 23 08 13.3 | | |
| | comp=Z,4µm,22.0s | | | | | | | | | |
| JFWS | **Jewell Farm** | 93.23 | 330 | IAMs_20 | IAMs_20 | | | 23 11 20.2 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| V58A | **Windy Hill, Pi** | 93.40 | 318 | IAMs_20 | IAMs_20 | | | 23 09 15.7 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| P49A | **Miami Univ. Ec** | 93.45 | 324 | IAMs_20 | IAMs_20 | | | 23 09 55.5 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| P49A | **Miami Univ. Ec** | 93.45 | 324 | P | | P | | 22 26 40.9 | -0.5 | |
| | baz=38 | | | | | | | | | |
| P49A | | | | S | | S | | 22 37 46.8 | -2.7 | |
| | baz=38 | | | | | | | | | |
| BBB | **Bella Bella** | 93.46 | 357 | IAMs_20 | IAMs_20 | | | 23 15 03.7 | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| BBB | **Bella Bella** | 93.46 | 357 | LR | LR | | | 23 13 50.6 | | |
| | comp=Z,2µm,19.7s,baz=360,slow=39 | | | | | | | | | |
| I37A | **Lemond, Waseca** | 93.58 | 332 | IAMs_20 | IAMs_20 | | | 23 13 12.3 | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| U56A | **King** | 93.68 | 320 | IAMs_20 | IAMs_20 | | | 23 08 00.9 | | |
| | comp=Z,3µm,21.0s | | | | | | | | | |
| L42A | **Oliver, Polo** | 93.74 | 329 | IAMs_20 | IAMs_20 | | | 23 12 08.6 | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| SFIN | **Lafayette** | 93.91 | 326 | IAMs_20 | IAMs_20 | | | 23 09 44.3 | | |
| | comp=Z,6µm,21.0s | | | | | | | | | |
| KDU | **Kakadu** | 94.02 | 103 | P | | P | | 22 26 43.3 | -1.0 | |
| KLBR | **Kellerberrin** | 94.07 | 126 | P | | P | | 22 26 43.2 | -1.0 | |
| Y60A | **Bolivia** | 94.22 | 317 | IAMs_20 | IAMs_20 | | | 23 06 50.4 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| R50A | **Paris** | 94.24 | 323 | IAMs_20 | IAMs_20 | | | 23 08 54.4 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| GDU01 | **Guandu, BA** | 94.30 | 256 | eP | | P | | 22 26 46.7 | +1.1 | |
| W57A | **Gilead** | 94.36 | 318 | IAMs_20 | IAMs_20 | | | 23 09 44.0 | | |
| | comp=Z,5µm,22.0s | | | | | | | | | |
| S51A | **Beattyville** | 94.37 | 322 | IAMs_20 | IAMs_20 | | | 23 12 23.9 | | |
| | comp=Z,5µm,20.0s | | | | | | | | | |
| MDP | **Montagnes des** | 94.44 | 279 | LR | LR | | | 23 09 38.3 | | |
| | comp=Z,3µm,20.7s,baz=54,slow=36 | | | | | | | | | |
| V55A | **Taylorsville** | 94.50 | 320 | IAMs_20 | IAMs_20 | | | 23 16 34.5 | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| NWAO | **Narrogin (SRO)** | 94.56 | 127 | IAMs_20 | IAMs_20 | | | 23 11 45.7 | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| NWAO | **Narrogin (SRO)** | 94.56 | 127 | P | | P | | 22 26 45.1 | -1.3 | |
| | comp=Z,13nm,0.9s,baz=265,slow=3.7,SNR=7.3 | | | | | | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| BLO | **Bloomington** | 94.60 | 325 | P | | P | | 22 26 46.2 | -0.5 | |
| BLO | | | | IAmb | IAmb | | | 22 26 51.2 | | |
| | comp=Z,164nm,1.9s | | | | | | | | | |
| BLO | | | | IAMs_20 | IAMs_20 | | | 23 11 38.8 | | |
| | comp=Z,5µm,21.0s | | | | | | | | | |
| BLO | **Bloomington** | 94.60 | 325 | P | | P | | 22 26 46.2 | -0.5 | |
| BLO | | | | pmax | pmax | | | | | |
| | comp

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| W52A | Murphy | 96.50 | 321 | IAMs_20 | IAMs_20 | 23 | 13 | 51.5 |
| | comp=Z,3µm,21.0s | | | | | | | |
| CLRS | Cowichan Lake | 96.53 | 354 | IAMs_20 | IAMs_20 | 23 | 15 | 10.9 |
| | comp=Z,4µm,20.0s | | | | | | | |
| CPCT | Cooper Cave | 96.53 | 322 | P | P | 22 | 26 | 54.4 -1.2 |
| OVMT | Ovando | 96.61 | 346 | P | P | 22 | 26 | 55.1 -0.7 |
| T47A | Sharon Grove | 96.61 | 324 | IAMs_20 | IAMs_20 | 23 | 13 | 02.2 |
| | comp=Z,4µm,21.0s | | | | | | | |
| PGC | Sidney | 96.63 | 353 | IAMs_20 | IAMs_20 | 23 | 13 | 16.7 |
| | comp=Z,5µm,21.0s | | | | | | | |
| KMBL | Kambalda | 96.74 | 123 | P | P | 22 | 26 | 55.4 -1.0 |
| P40A | Paris | 96.80 | 329 | IAMs_20 | IAMs_20 | 23 | 17 | 16.6 |
| | comp=Z,4µm,19.0s | | | | | | | |
| CLTN | Cedars of Leba | 96.95 | 323 | IAMs_20 | IAMs_20 | 23 | 10 | 19.0 |
| | comp=Z,5µm,21.0s | | | | | | | |
| MSO | Missoula | 97.02 | 346 | P | Pdif | 22 | 26 | 57.9 +0.1 |
| MCPB | Macapa, AP | 97.06 | 274 | eP | Pdif | 22 | 26 | 59.7 +1.3 |
| RSSD | Black Hills | 97.13 | 339 | P | P | 22 | 26 | 58.3 -0.1 |
| RSSD | | | | IAmb | IAmb | 22 | 27 | 04.5 |
| | comp=Z,94nm,1.8s | | | | | | | |
| RSSD | Black Hills | 97.13 | 339 | P | P | 22 | 26 | 58.3 -0.1 |
| RSSD | | | | pmax | pmax | | | |
| | comp=Z,94nm,1.8s | | | | | | | |
| RSSD | | | | MLR | MLR | | | |
| | comp=Z,11µm,21.0s | | | | | | | |
| N35A | Tabor | 97.14 | 332 | IAMs_20 | IAMs_20 | 23 | 16 | 40.4 |
| | comp=Z,5µm,20.0s | | | | | | | |
| B04A | Port Angeles | 97.22 | 353 | IAMs_20 | IAMs_20 | 23 | 12 | 26.4 |
| | comp=Z,4µm,21.0s | | | | | | | |
| 257A | Skidaway Islan | 97.30 | 317 | IAMs_20 | IAMs_20 | 23 | 13 | 15.1 |
| | comp=Z,4µm,20.0s | | | | | | | |
| T45A | Paducah | 97.32 | 325 | IAMs_20 | IAMs_20 | 23 | 13 | 24.9 |
| | comp=Z,4µm,21.0s | | | | | | | |
| FVM | French Village | 97.36 | 327 | IAMs_20 | IAMs_20 | 23 | 15 | 19.8 |
| | comp=Z,5µm,20.0s | | | | | | | |
| X51A | Calhoun | 97.39 | 321 | IAMs_20 | IAMs_20 | 23 | 11 | 47.1 |
| | comp=Z,4µm,22.0s | | | | | | | |
| C03A | Quillayute Air | 97.43 | 354 | IAMs_20 | IAMs_20 | 23 | 14 | 55.9 |
| | comp=Z,4µm,21.0s | | | | | | | |
| SWET | Sewanee | 97.44 | 322 | IAMs_20 | IAMs_20 | 23 | 14 | 19.1 |
| | comp=Z,4µm,19.0s | | | | | | | |
| V48A | Smith Brothers | 97.47 | 323 | IAMs_20 | IAMs_20 | 23 | 14 | 08.8 |
| | comp=Z,5µm,21.0s | | | | | | | |
| RLMT | Red Lodge | 97.62 | 343 | P | Pdif | 22 | 27 | 00.6 0.0 |
| RLMT | | | | IAMs_20 | IAMs_20 | 23 | 12 | 24.4 |
| | comp=Z,5µm,20.0s | | | | | | | |
| D08A | Wollman Farm, | 97.65 | 350 | P | P | 22 | 26 | 59.7 -0.7 |
| WVT | Waverly | 97.65 | 324 | P | P | 22 | 26 | 59.8 -0.8 |
| WVT | Waverly | 97.65 | 324 | IAMs_20 | IAMs_20 | 23 | 14 | 23.6 |
| | comp=Z,4µm,20.0s | | | | | | | |
| WVT | Waverly | 97.65 | 324 | P | P | 22 | 26 | 59.8 -0.8 |
| WVT | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| WVT | | | | MLR | MLR | | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| CCM | Cathedral Cave | 97.67 | 327 | IAMs_20 | IAMs_20 | 23 | 14 | 58.8 |
| | comp=Z,4µm,19.0s | | | | | | | |
| WRKA | Warakurna | 97.70 | 115 | P | P | 22 | 27 | 00.0 -1.0 |
| BOZ | Bozeman (W) | 97.72 | 345 | IAMs_20 | IAMs_20 | 23 | 10 | 52.9 |
| | comp=Z,4µm,21.0s | | | | | | | |
| FPAL | Fort Paine | 97.80 | 322 | IAMs_20 | IAMs_20 | 23 | 11 | 54.9 |
| | comp=Z,5µm,22.0s | | | | | | | |
| SDBA | SAO DESIDERIO | 97.88 | 260 | eP | Pdif | 22 | 27 | 03.1 +1.1 |
| NLWA | Neilton Lookou | 97.92 | 353 | IAMs_20 | IAMs_20 | 23 | 18 | 30.7 |
| | comp=Z,5µm,20.0s | | | | | | | |
| D05A | Enumclaw | 97.92 | 352 | IAMs_20 | IAMs_20 | 23 | 12 | 09.8 |
| | comp=Z,3µm,22.0s | | | | | | | |
| R40A | Maddies Statio | 97.92 | 328 | IAMs_20 | IAMs_20 | 23 | 17 | 09.4 |
| | comp=Z,4µm,20.0s | | | | | | | |
| UTMT | University of | 97.97 | 325 | IAMs_20 | IAMs_20 | 23 | 13 | 42.9 |
| | comp=Z,4µm,22.0s | | | | | | | |
| HICK | Hickman | 97.99 | 325 | IAMs_20 | IAMs_20 | 23 | 13 | 44.4 |
| | comp=Z,4µm,21.0s | | | | | | | |
| PARMO | Parma | 98.13 | 326 | IAMs_20 | IAMs_20 | 23 | 14 | 09.2 |
| | comp=Z,5µm,20.0s | | | | | | | |
| 255A | Hazlehurst | 98.15 | 318 | IAMs_20 | IAMs_20 | 23 | 12 | 37.3 |
| | comp=Z,5µm,22.0s | | | | | | | |
| DLMT | Dillon | 98.15 | 345 | IAMs_20 | IAMs_20 | 23 | 11 | 36.3 |
| | comp=Z,3µm,20.0s | | | | | | | |
| WISH | Wishkah | 98.18 | 353 | IAMs_20 | IAMs_20 | 23 | 14 | 27.7 |
| | comp=Z,4µm,21.0s | | | | | | | |
| GLAT | Glass | 98.23 | 325 | IAMs_20 | IAMs_20 | 23 | 13 | 51.9 |
| | comp=Z,4µm,22.0s | | | | | | | |
| MXC | Moxie City | 98.31 | 351 | IAMs_20 | IAMs_20 | 23 | 13 | 10.2 |
| | comp=Z,4µm,22.0s | | | | | | | |
| PVMO | Portageville | 98.31 | 325 | IAMs_20 | IAMs_20 | 23 | 14 | 04.9 |
| | comp=Z,5µm,20.0s | | | | | | | |
| LON | Longmire | 98.33 | 352 | IAMs_20 | IAMs_20 | 23 | 13 | 44.7 |
| | comp=Z,5µm,22.0s | | | | | | | |
| YNM | Yellowstone No | 98.34 | 344 | IAMs_20 | IAMs_20 | 23 | 13 | 57.2 |
| | comp=Z,5µm,22.0s | | | | | | | |
| YNR | Norris Junctio | 98.34 | 344 | IAMs_20 | IAMs_20 | 23 | 13 | 57.4 |
| | comp=Z,5µm,21.0s | | | | | | | |
| HAWA | Hanford | 98.38 | 350 | P | P | 22 | 27 | 03.4 -0.3 |
| F10A | Beach Ranch, E | 98.44 | 348 | IAMs_20 | IAMs_20 | 23 | 16 | 13.7 |
| | comp=Z,5µm,22.0s | | | | | | | |
| T42A | Van Buren | 98.45 | 327 | IAMs_20 | IAMs_20 | 23 | 13 | 53.4 |
| | comp=Z,5µm,20.0s | | | | | | | |
| LNXT | Lenox | 98.47 | 325 | IAMs_20 | IAMs_20 | 23 | 13 | 58.1 |
| | comp=Z,4µm,21.0s | | | | | | | |
| PRPB | Parauapebas | 98.47 | 268 | eP | Pdif | 22 | 27 | 05.7 +1.0 |
| HALT | Halls | 98.55 | 325 | IAMs_20 | IAMs_20 | 23 | 12 | 38.3 |
| | comp=Z,3µm,20.0s | | | | | | | |
| X48A | Hartselle | 98.60 | 323 | IAMs_20 | IAMs_20 | 23 | 14 | 54.9 |
| | comp=Z,5µm,18.0s | | | | | | | |
| H17A | Grant Village | 98.62 | 343 | P | P | 22 | 27 | 03.6 -1.6 |
| | baz=19 | | | | | | | |
| PEBM | Pemiscott Bayo | 98.63 | 325 | IAMs_20 | IAMs_20 | 23 | 14 | 14.4 |
| | comp=Z,4µm,20.0s | | | | | | | |
| PLAL | Pickwick Lake | 98.69 | 324 | IAMs_20 | IAMs_20 | 23 | 14 | 46.1 |
| | comp=Z,4µm,21.0s | | | | | | | |
| E03A | Lebam | 98.72 | 353 | IAMs_20 | IAMs_20 | 23 | 14 | 36.1 |
| | comp=Z,4µm,20.0s | | | | | | | |
| Y49A | Blount Mountai | 98.75 | 322 | IAMs_20 | IAMs_20 | 23 | 12 | 34.9 |
| | comp=Z,4µm,21.0s | | | | | | | |
| 152A | Waverly Hall | 98.79 | 320 | IAMs_20 | IAMs_20 | 23 | 13 | 55.3 |
| | comp=Z,4µm,19.0s | | | | | | | |
| 456A | Hilliard | 98.80 | 317 | IAMs_20 | IAMs_20 | 23 | 13 | 27.8 |
| | comp=Z,4µm,21.0s | | | | | | | |
| GNAR | Gosnell | 98.82 | 325 | IAMs_20 | IAMs_20 | 23 | 14 | 21.5 |
| | comp=Z,4µm,20.0s | | | | | | | |
| JANB | Januaria | 98.85 | 258 | eP | Pdif | 22 | 27 | 07.5 +1.2 |
| MGMO | Mountain Grove | 98.87 | 328 | IAMs_20 | IAMs_20 | 23 | 11 | 57.5 |
| | comp=Z,6µm,22.0s | | | | | | | |
| S39A | Bolivar | 98.88 | 329 | IAMs_20 | IAMs_20 | 23 | 18 | 31.7 |
| | comp=Z,3µm,20.0s | | | | | | | |
| FLWY | Flagg Ranch | 98.94 | 343 | IAMs_20 | IAMs_20 | 23 | 15 | 57.3 |
| | comp=Z,4µm,21.0s | | | | | | | |
| KSU1 | Kansas State U | 99.03 | 332 | IAMs_20 | IAMs_20 | 23 | 12 | 07.5 |
| | comp=Z,4µm,19.0s | | | | | | | |
| F04D | Rainier, OR | 99.12 | 352 | IAMs_20 | IAMs_20 | 23 | 17 | 22.7 |
| | comp=Z,4µm,20.0s | | | | | | | |
| TIGA | Tifton | 99.13 | 318 | IAMs_20 | IAMs_20 | 23 | 13 | 16.4 |
| | comp=Z,5µm,21.0s | | | | | | | |
| IMW | Indian Meadow | 99.18 | 344 | IAMs_20 | IAMs_20 | 23 | 15 | 54.6 |
| | comp=Z,5µm,22.0s | | | | | | | |
| F04A | Amboy | 99.21 | 352 | IAMs_20 | IAMs_20 | 23 | 14 | 23.9 |
| | comp=Z,3µm,22.0s | | | | | | | |
| LOHW | Long Hollow | 99.37 | 343 | IAMs_20 | IAMs_20 | 23 | 14 | 41.5 |
| | comp=Z,4µm,22.0s | | | | | | | |
| OGNE | Ogallala | 99.38 | 336 | IAMs_20 | IAMs_20 | 23 | 12 | 45.2 |
| | comp=Z,5µm,22.0s | | | | | | | |
| G08A | Pilot Rock | 99.38 | 349 | IAMs_20 | IAMs_20 | 23 | 17 | 14.5 |
| | comp=Z,4µm,20.0s | | | | | | | |
| FXWY | Fox Creek | 99.44 | 343 | IAMs_20 | IAMs_20 | 23 | 14 | 44.5 |
| | comp=Z,4µm,20.0s | | | | | | | |
| HBAR | Harrisburg | 99.46 | 326 | IAMs_20 | IAMs_20 | 23 | 12 | 31.3 |
| | comp=Z,4µm,22.0s | | | | | | | |
| MET | Memphis--Engin | 99.47 | 325 | IAMs_20 | IAMs_20 | 23 | 13 | 14.7 |
| | comp=Z,4µm,20.0s | | | | | | | |
| WB0 | Warramunga Arr | 99.47 | 107 | | Pdif | 22 | 27 | 07.5 -1.4 |
| HDBT | Hernando Brdge | 99.50 | 325 | IAMs_20 | IAMs_20 | 23 | 15 | 45.6 |
| | comp=Z,4µm,20.0s | | | | | | | |
| WRA | Warramunga Arr | 99.53 | 108 | | Pdif | 22 | 27 | 07.8 -1.4 |
| WRA | Warramunga Arr | 99.53 | 108 | P | Pdif | 22 | 27 | 06.9 -2.3 |
| | comp=Z,2.0nm,0.7s,baz=315,slow=3.9,SNR=16 | | | | | | | |
| WRA | | | | PP | PP | 22 | 31 | 13.1 -0.2 |
| | comp=Z,6.9nm,1.0s,baz=304,slow=7.9,SNR=8.9 | | | | | | | |
| WRA | | | | S | SKSac | 22 | 37 | 40.1 -7.8 |
| | comp=Z,1.1nm,0.9s,baz=299,slow=2.9,SNR=5.2 | | | | | | | |
| WRA | | | | PKKPbc | PKKPbc | 22 | 43 | 29.6 -1.1 |
| | comp=Z,2.6nm,0.6s,baz=118,slow=2.8,SNR=23 | | | | | | | |
| WRA | | | | PKPPKP | P'P'df | 22 | 51 | 49.8 +2.5 |
| | comp=Z,1.9nm,1.2s,baz=102,slow=1.6,SNR=5.7 | | | | | | | |
| WRA | | | | LR | LR | 23 | 15 | 09.3 |
| | comp=Z,2µm,21.2s,baz=294,slow=37 | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 99.53 | 108 | P | Pdif | 22 | 27 | 07.8 -1.4 |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,2.0s | | | | | | | |
| WRAB | Tennant Creek | 99.53 | 108 | IAMs_20 | IAMs_20 | 23 | 14 | 45.2 |
| | comp=Z,3µm,20.0s | | | | | | | |
| WRAB | Tennant Creek | 99.53 | 108⇑ | eP | Pdif | 22 | 27 | 07.4 -1.8 |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| BMO | Blue Mountains | 99.54 | 348 | IAMs_20 | IAMs_20 | 23 | 20 | 06.9 |
| | comp=Z,4µm,20.0s | | | | | | | |
| SNOW | Snow King Moun | 99.54 | 343 | IAMs_20 | IAMs_20 | 23 | 19 | 49.3 |
| | comp=Z,4µm,20.0s | | | | | | | |
| TPAW | Teton Pass | 99.56 | 343 | P | Pdif | 22 | 27 | 09.1 -0.3 |
| TPAW | | | | IAMs_20 | IAMs_20 | 23 | 16 | 15.8 |
| | comp=Z,4µm,22.0s | | | | | | | |
| G06A | Carlson Farm, | 99.67 | 351 | IAMs_20 | IAMs_20 | 23 | 13 | 27.2 |
| | comp=Z,5µm,22.0s | | | | | | | |
| OXF | Oxford | 99.72 | 324 | IAMs_20 | IAMs_20 | 23 | 11 | 03.2 |
| | comp=Z,4µm,22.0s | | | | | | | |
| HOOD | Mount Hood Mea | 99.72 | 351 | IAMs_20 | IAMs_20 | 23 | 18 | 56.4 |
| | comp=Z,3µm,21.0s | | | | | | | |
| FCAR | Ozark Folk Cen | 99.86 | 327 | IAMs_20 | IAMs_20 | 23 | 16 | 55.7 |
| | comp=Z,4µm,19.0s | | | | | | | |
| PDAR | Pinedale Array | 99.91 | 342 | P | Pdif | 22 | 27 | 10.2 -0.7 |
| | comp=Z,0.4nm,0.6s,baz=67,slow=3.0,SNR=3.9 | | | | | | | |
| PDAR | | | | PKKPbc | PKKPbc | 22 | 43 | 28.4 -1.8 |
| | comp=Z,0.6nm,0.4s,baz=155,slow=3.0,SNR=5.2 | | | | | | | |
| PDAR | | | | LR | LR | 23 | 12 | 36.8 |
| | comp=Z,3µm,21.5s,baz=9.0,slow=36 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| G03D | McMinnville, O | 100.01 | 353 | IAMs_20 | IAMs_20 | 23 | 15 | 38.2 |
| | comp=Z,5µm,22.0s | | | | | | | |
| 250A | Grady | 100.15 | 320 | IAMs_20 | IAMs_20 | 23 | 14 | 30.1 |
| | comp=Z,3µm,20.0s | | | | | | | |
| HLID | Hailey | 100.25 | 346 | IAMs_20 | IAMs_20 | 23 | 20 | 05.8 |
| | comp=Z,3µm,20.0s | | | | | | | |
| AHID | Aurn Hatcher | 100.28 | 343 | IAMs_20 | IAMs_20 | 23 | 21 | 17.8 |
| | comp=Z,3µm,18.0s | | | | | | | |
| HHAR | Hobbs | 100.33 | 328 | IAMs_20 | IAMs_20 | 23 | 16 | 34.2 |
| | comp=Z,4µm,19.0s | | | | | | | |
| U38A | Gravette | 100.39 | 329 | IAMs_20 | IAMs_20 | 23 | 15 | 09.7 |
| | comp=Z,5µm,22.0s | | | | | | | |
| BRIGG | Briggsdale | 100.44 | 338 | IAMs_20 | IAMs_20 | 23 | 13 | 19.4 |
| | comp=Z,5µm,21.0s | | | | | | | |
| 553A | Crawfordville | 100.55 | 318 | IAMs_20 | IAMs_20 | 23 | 14 | 00.0 |
| | comp=Z,4µm,22.0s | | | | | | | |
| 060A | Indiantown | 100.58 | 313 | IAMs_20 | IAMs_20 | 23 | 13 | 47.3 |
| | comp=Z,3µm,20.0s | | | | | | | |
| H04D | Lebanon | 100.63 | 352 | IAMs_20 | IAMs_20 | 23 | 17 | 57.6 |
| | comp=Z,3µm,20.0s | | | | | | | |
| I07A | Izee | 100.64 | 350 | IAMs_20 | IAMs_20 | 23 | 20 | 20.9 |
| | comp=Z,5µm,21.0s | | | | | | | |
| I05D | Terrebonne, OR | 100.64 | 351 | IAMs_20 | IAMs_20 | 23 | 13 | 36.0 |
| | comp=Z,5µm,22.0s | | | | | | | |
| N23A | Red Feather La | 100.65 | 339 | Pdiff | Pdif | 22 | 27 | 13.0 -1.3 |
| | baz=23 | | | | | | | |
| MFID | Camas Ranch | 100.67 | 347 | IAMs_20 | IAMs_20 | 23 | 20 | 04.8 |
| | comp=Z,4µm,18.0s | | | | | | | |
| FORT | Forrest | 100.74 | 120 | IAMs_20 | IAMs_20 | 23 | 14 | 50.3 |
| | comp=Z,4µm,19.0s | | | | | | | |
| BUCK | Buck Mountain | 100.98 | 352 | IAMs_20 | IAMs_20 | 23 | 16 | 33.9 |
| | comp=Z,3µm,22.0s | | | | | | | |
| PINE | Pine Mountain | 101.13 | 351 | IAMs_20 | IAMs_20 | 23 | 14 | 10.8 |
| | comp=Z,4µm,22.0s | | | | | | | |
| J08A | Circle Bar Ran | 101.19 | 349 | IAMs_20 | IAMs_20 | 23 | 17 | 12.5 |
| | comp=Z,5µm,21.0s | | | | | | | |
| BRAL | Brewton | 101.20 | 321 | IAMs_20 | IAMs_20 | 23 | 15 | 20.9 |
| | comp=Z,4µm,20.0s | | | | | | | |
| ASAR | Alice Springs | 101.21 | 111 | P | Pdif | 22 | 27 | 16.1 -0.5 |
| ASAR | | | | PP | PP | 22 | 31 | 27.2 +1.2 |
| | comp=Z,2.8nm,0.8s,baz=306,slow=4.2,SNR=13 | | | | | | | |
| ASAR | | | | S | SKSac | 22 | 37 | 49.1 -7.0 |
| | comp=Z,6.1nm,0.9s,baz=310,slow=7.2,SNR=8.3 | | | | | | | |
| ASAR | | | | PKKPbc | PKKPbc | 22 | 43 | 27.2 +1.2 |
| | comp=Z,0.6nm,0.9s,baz=309,slow=2.7,SNR=2.3 | | | | | | | |
| ASAR | | | | PKPPKP | P'P'df | 22 | 51 | 45.1 +1.4 |
| | comp=Z,5.0nm,0.5s,baz=120,slow=3.8,SNR=26 | | | | | | | |
| AS01 | Alice Springs | 101.24 | 111 | P | Pdif | 22 | 27 | 17.2 +0.4 |
| X40A | Basin Creek Fa | 101.34 | 327 | IAMs_20 | IAMs_20 | 23 | 15 | 41.1 |
| | comp=Z,5µm,20.0s | | | | | | | |
| TUL3 | Leonard | 101.44 | 329 | IAMs_20 | IAMs_20 | 23 | 14 | 47.3 |
| | comp=Z,4µm,20.0s | | | | | | | |
| HWUT | Hardware Ranch | 101.49 | 343 | IAMs_20 | IAMs_20 | 23 | 17 | 03.8 |
| | comp=Z,4µm,20.0s | | | | | | | |
| HVU | Hansel Valley | 101.61 | 344 | IAMs_20 | IAMs_20 | 23 | 15 | 31.8 |
| | comp=Z,4µm,22.0s | | | | | | | |
| MIAR | Mount Ida | 101.63 | 327 | IAMs_20 | IAMs_20 | 23 | 15 | 16.6 |
| | comp=Z,4µm,20.0s | | | | | | | |
| J05D | Fort Rock, OR | 101.67 | 351 | IAMs_20 | IAMs_20 | 23 | 18 | 38.0 |
| | comp=Z,4µm,19.0s | | | | | | | |
| NMDO | Nuevo Mundo | 101.76 | 305 | IAMs_20 | IAMs_20 | 23 | 16 | 09.5 |
| | comp=Z,2µm,21.0s | | | | | | | |
| OK052 | Battle Ridge R | 101.78 | 330 | IAMs_20 | IAMs_20 | 23 | 22 | 41.5 |
| | comp=Z,4µm,19.0s | | | | | | | |
| CROK | Carrier | 101.82 | 331 | IAMs_20 | IAMs_20 | 23 | 13 | 21.3 |
| | comp=Z,5µm,22.0s | | | | | | | |
| OK031 | S. Brethren Rd | 101.83 | 330 | IAMs_20 | IAMs_20 | 23 | 22 | 42.8 |
| | comp=Z,3µm,19.0s | | | | | | | |
| SPUT | South Promonto | 101.98 | 344 | IAMs_20 | IAMs_20 | 23 | 13 | 12.7 |
| | comp=Z,4µm,22.0s | | | | | | | |
| DBO | Dodson Butte | 102.08 | 352 | IAMs_20 | IAMs_20 | 23 | 14 | 43.9 |
| | comp=Z,5µm,22.0s | | | | | | | |
| J01E | Myrtle Point | 102.11 | 353 | IAMs_20 | IAMs_20 | 23 | 18 | 49.7 |
| | comp=Z,4µm,21.0s | | | | | | | |
| VBMS | Vicksburg | 102.11 | 324 | IAMs_20 | IAMs_20 | 23 | 14 | 56.9 |
| | comp=Z,3µm,21.0s | | | | | | | |
| WVOR | Wild Horse Val | 102.12 | 349 | IAMs_20 | IAMs_20 | 23 | 21 | 35.0 |
| | comp=Z,5µm,21.0s | | | | | | | |
| BDFB | Brasilia | 102.16 | 259 | PP | PP | 22 | 31 | 34.3 +1.0 |
| | comp=Z,21nm,0.9s,baz=43,slow=10,SNR=12 | | | | | | | |
| Q24A | Divide | 102.18 | 338 | Pdiff | Pdif | 22 | 27 | 19.9 -1.3 |
| | baz=24 | | | | | | | |
| OK029 | Liberty Lake | 102.22 | 331 | IAMs_20 | IAMs_20 | 23 | 16 | 37.0 |
| | comp=Z,4µm,20.0s | | | | | | | |
| K04D | Chiloquin, OR | 102.38 | 351 | IAMs_20 | IAMs_20 | 23 | 20 | 45.0 |
| | comp=Z,3µm,18.0s | | | | | | | |
| BOAV | Boa Vista | 102.39 | 282 | IAMs_20 | IAMs_20 | 23 | 13 | 32.8 |
| | comp=Z,3µm,22.0s | | | | | | | |
| CTU | Camp Tracy | 102.40 | 343 | IAMs_20 | IAMs_20 | 23 | 17 | 51.9 |
| | comp=Z,4µm,20.0s | | | | | | | |
| BGU | Big Grassy Mou | 102.48 | 344 | IAMs_20 | IAMs_20 | 23 | 17 | 52.0 |
| | comp=Z,4µm,20.0s | | | | | | | |
| HUMO | Hull Mountain | 102.55 | 352 | IAMs_20 | IAMs_20 | 23 | 17 | 58.4 |
| | comp=Z,5µm,21.0s | | | | | | | |
| MAW | Mawson | 102.64 | 174 | P | Pdif | 22 | 27 | 21.1 -0.7 |
| | comp=Z,2.8nm,0.8s,baz=355,slow=17,SNR=3.0 | | | | | | | |
| MAW | | | | PKKPbc | PKKPbc | 22 | 43 | 22.1 -1.2 |
| | comp=Z,1.7nm,0.7s,baz=220,slow=4.4,SNR=5.0 | | | | | | | |
| MPU | Maple Canyon | 103.02 | 343 | IAMs_20 | IAMs_20 | 23 | 22 | 11.1 |
| | comp=Z,4µm,20.0s | | | | | | | |
| P18A | Preston Nutter | 103.03 | 342 | IAMs_20 | IAMs_20 | 23 | 14 | 33.6 |
| | comp=Z,5µm,20.0s | | | | | | | |
| KBO | Bosley Butte | 103.08 | 353 | IAMs_20 | IAMs_20 | 23 | 17 | 47.4 |
| | comp=Z,4µm,21.0s | | | | | | | |
| CHIV | Chivirico | 103.13 | 306 | IAMs_20 | IAMs_20 | 23 | 12 | 50.7 |
| | comp=Z,1µm,20.0s | | | | | | | |
| ELK | Elko | 103.13 | 346 | IAMs_20 | IAMs_20 | 23 | 15 | 55.0 |
| | comp=Z,4µm,22.0s | | | | | | | |
| ELK | Elko | 103.13 | 346 | Pdiff | Pdif | 22 | 27 | 25.5 +0.2 |
| ELK | | | | PP | PP | 22 | 31 | 40.7 +1.9 |
| | comp=Z,2.1nm,0.7s,baz=67,slow=5.4,SNR=5.8 | | | | | | | |
| ELK | | | | PKKPbc | PKKPbc | 22 | 43 | 20.5 -0.4 |
| | comp=Z,3.6nm,1.0s,baz=43,slow=5.6,SNR=5.1 | | | | | | | |
| NLU | North Lily Min | 103.18 | 343 | IAMs_20 | IAMs_20 | 23 | 18 | 15.5 |
| | comp=Z,3µm,19.0s | | | | | | | |
| P17A | Butcher Ranch, | 103.31 | 342 | IAMs_20 | IAMs_20 | 23 | 14 | 55.8 |
| | comp=Z,4µm,22.0s | | | | | | | |
| Z38A | Mt. Pleasant | 103.34 | 327 | IAMs_20 | IAMs_20 | 23 | 18 | 14.9 |
| | comp=Z,4µm,20.0s | | | | | | | |
| YBH | Yreka Blue Hor | 103.38 | 352 | IAMs_20 | IAMs_20 | 23 | 18 | 13.4 |
| | comp=Z,5µm,22.0s | | | | | | | |
| SRU | San Rafael Swe | 103.59 | 342 | IAMs_20 | IAMs_20 | 23 | 14 | 51.4 |
| | comp=Z,4µm,20.0s | | | | | | | |
| T25A | Trinidad | 103.60 | 336 | Pdiff | Pdif | 22 | 27 | 27.2 -0.3 |
| | baz=24 | | | | | | | |
| WMOK | Wichita Mounta | 103.67 | 331 | IAMs_20 | IAMs_20 | 23 | 15 | 12.5 |
| | comp=Z,4µm,21.0s | | | | | | | |
| BMN | Battle Mountai | 103.82 | 347 | IAMs_20 | IAMs_20 | 23 | 20 | 11.1 |
| | comp=Z,3µm,20.0s | | | | | | | |
| S22A | 4UR Ranch, Cre | 103.82 | 338 | Pdiff | Pdif | 22 | 27 | 26.8 -1.7 |
| | baz=22 | | | | | | | |
| Q16A | Castle Valley | 103.94 | 342 | IAMs_20 | IAMs_20 | 23 | 22 | 35.6 |
| | comp=Z,3µm,20.0s | | | | | | | |
| QIS | Mount Isa | 104.02 | 105 | P | Pdif | 22 | 27 | 28.0 -1.2 |
| CAMR | Camarioca | 104.12 | 311 | IAMs_20 | IAMs_20 | 23 | 11 | 51.3 |
| | comp=Z,3µm,22.0s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HATC | Hat Creek Radi | 104.12 | 350 | IAMs_20 | IAMs_20 | 23 | 19 | 01.1 |
| | comp=Z,4µm,21.0s | | | | | | | |
| Z35A | Perchaven, San | 104.26 | 329 | IAMs_20 | IAMs_20 | 23 | 16 | 36.2 |
| | comp=Z,4µm,21.0s | | | | | | | |
| JCC | Jacoby Creek, | 104.44 | 352 | IAMs_20 | IAMs_20 | 23 | 16 | 09.3 |
| | comp=Z,4µm,22.0s | | | | | | | |
| SPR3 | Spring Creek 3 | 104.61 | 344 | IAMs_20 | IAMs_20 | 23 | 19 | 35.3 |
| | comp=Z,5µm,22.0s | | | | | | | |
| 441A | DeRidder | 104.61 | 325 | IAMs_20 | IAMs_20 | 23 | 19 | 26.9 |
| | comp=Z,5µm,20.0s | | | | | | | |
| Q12A | Willow Creek R | 104.68 | 345 | IAMs_20 | IAMs_20 | 23 | 19 | 26.1 |
| | comp=Z,4µm,21.0s | | | | | | | |
| FW06 | Azle | 104.70 | 329 | IAMs_20 | IAMs_20 | 23 | 16 | 07.8 |
| | comp=Z,3µm,21.0s | | | | | | | |
| KMPM | Mount Pierce | 104.84 | 352 | IAMs_20 | IAMs_20 | 23 | 16 | 22.1 |
| | comp=Z,4µm,22.0s | | | | | | | |
| PAHR | Pah Rah Range | 104.90 | 349 | IAMs_20 | IAMs_20 | 23 | 18 | 02.5 |
| | comp=Z,4µm,22.0s | | | | | | | |
| O02D | Mt. Diablo Mer | 104.93 | 351 | IAMs_20 | IAMs_20 | 23 | 20 | 44.3 |
| | comp=Z,5µm,20.0s | | | | | | | |
| PSUT | Pine Spring | 104.95 | 344 | IAMs_20 | IAMs_20 | 23 | 19 | 19.3 |
| | comp=Z,4µm,21.0s | | | | | | | |
| MTPU | Mount Pierson | 105.02 | 343 | IAMs_20 | IAMs_20 | 23 | 15 | 47.2 |
| | comp=Z,5µm,22.0s | | | | | | | |
| FW07 | Weatherford | 105.03 | 329 | IAMs_20 | IAMs_20 | 23 | 16 | 17.5 |
| | comp=Z,4µm,21.0s | | | | | | | |
| KVN | Kaiserville | 105.32 | 347 | IAMs_20 | IAMs_20 | 23 | 22 | 38.8 |
| | comp=Z,4µm,19.0s | | | | | | | |
| Q09A | Carvers | 105.36 | 347 | IAMs_20 | IAMs_20 | 23 | 20 | 30.9 |
| | comp=Z,4µm,22.0s | | | | | | | |
| WHTX | Lake Whitney, | 105.50 | 329 | IAMs_20 | IAMs_20 | 23 | 19 | 38.1 |
| | comp=Z,4µm,20.0s | | | | | | | |
| KCPM | Cahto Peak | 105.51 | 352 | IAMs_20 | IAMs_20 | 23 | 21 | 21.6 |
| | comp=Z,4µm,21.0s | | | | | | | |
| R11B | Troy Canyon, C | 105.51 | 345 | IAMs_20 | IAMs_20 | 23 | 19 | 52.9 |
| | comp=Z,3µm,19.0s | | | | | | | |
| R11B | Troy Canyon, C | 105.51 | 345 | Pdiff | Pdif | 22 | 27 | 33.7 -2.1 |
| | baz=15 | | | | | | | |
| YERR | Yerington | 105.58 | 348 | IAMs_20 | IAMs_20 | 23 | 18 | 24.7 |
| | comp=Z,4µm,22.0s | | | | | | | |
| PKCU | Pink Cliffs | 105.62 | 342 | IAMs_20 | IAMs_20 | 23 | 19 | 30.1 |
| | comp=Z,4µm,22.0s | | | | | | | |
| MACA | Manacapuru-AM | 105.73 | 277 | IAMs_20 | IAMs_20 | 23 | 18 | 01.6 |
| | comp=Z,4µm,19.0s | | | | | | | |
| CCUT | Cedar City | 105.77 | 343 | IAMs_20 | IAMs_20 | 23 | 18 | 30.1 |
| | comp=Z,4µm,20.0s | | | | | | | |
| RYN | Ryan | 105.80 | 348 | IAMs_20 | IAMs_20 | 23 | 19 | 30.6 |
| | comp=Z,3µm,22.0s | | | | | | | |
| ABTX | Abilene, Hawle | 105.87 | 331 | IAMs_20 | IAMs_20 | 23 | 15 | 52.6 |
| | comp=Z,3µm,21.0s | | | | | | | |
| SPB | Sao Paulo | 105.88 | 252 | IAMs_20 | IAMs_20 | 23 | 13 | 24.9 |
| | comp=Z,4µm,20.0s | | | | | | | |
| AFDM | Forest Hills D | 105.89 | 350 | IAMs_20 | IAMs_20 | 23 | 16 | 58.8 |
| | comp=Z,4µm,22.0s | | | | | | | |
| NVAR | Mina Aray Bea | 105.96 | 347 | Pdiff | Pdif | 22 | 27 | 39.6 +1.7 |
| | comp=Z,0.7nm,0.7s,baz=17,slow=5.0,SNR=4.8 | | | | | | | |
| NVAR | | | | PKiKP | PKiKP | 22 | 31 | 50.4 +0.2 |
| | comp=Z,2.5nm,0.7s,baz=357,slow=1.8,SNR=2.5 | | | | | | | |
| NVAR | | | | PKKPbc | PKKPbc | 22 | 43 | 10.4 -2.0 |
| | comp=Z,3.6nm,0.8s,baz=198,slow=5.3,SNR=7.0 | | | | | | | |
| NVAR | | | | PKPPKP | P'P'df | 22 | 51 | 38.5 -2.4 |
| | comp=Z,0.3nm,0.8s,baz=182,slow=3.3,SNR=3.8 | | | | | | | |
| WAKR | Walker | 106.08 | 348 | IAMs_20 | IAMs_20 | 23 | 20 | 55.9 |
| | comp=Z,4µm,21.0s | | | | | | | |
| HOPS | Hopland Field | 106.13 | 351 | IAMs_20 | IAMs_20 | 23 | 19 | 44.1 |
| | comp=Z,4µm,20.0s | | | | | | | |
| LHV | Little Huntoon | 106.17 | 348 | IAMs_20 | IAMs_20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.5nm,0.4s,baz=105,slow=7.1,SNR=1.4 | | | | | | |
| **SNAA** | **Sanae** | **111.41** | **195** | *e*P | **PKiKP** | **22 32 02.5** | **+3.6** |
| **SNAA** | **Sanae** | **111.41** | **195** | ⇑PKiKP | **PKiKP** | **22 32 01.9** | **+3.0** |
| | comp=Z,137nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **111.41** | **195** | PKiKP | **PKiKP** | **22 32 00.1** | **+1.2** |
| | comp=Z,6.1nm,1.1s,baz=98,slow=2.9,SNR=5.5 | | | | | | |
| SNAA | | | | PKKPbc | **PKKPbc** | **22 42 52.8** | **-3.1** |
| | comp=Z,0.6nm,0.5s,baz=201,slow=8.4,SNR=1.6 | | | | | | |
| **PIX** | **Pinacate** | **111.49** | **341** | IAMs_20 | IAMs_20 | 23 25 24.6 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **ESJX** | **Sierra Juarez** | **111.68** | **344** | IAMs_20 | IAMs_20 | 23 26 46.5 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **ROSC** | **El Rosal** | **111.78** | **293** | PKiKP | **PKiKP** | **22 32 02.0** | **+0.2** |
| | comp=Z,9.1nm,0.6s,baz=198,slow=17,SNR=1.7 | | | | | | |
| ROSC | | | | PP | **PP** | **22 32 44.6** | **+0.8** |
| | comp=Z,5.7nm,0.4s,baz=61,slow=9.6,SNR=5.9 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **111.89** | **197** | ⇑PKiKP | **PKiKP** | **22 32 02.9** | **+3.2** |
| | comp=Z,12nm,1.1s,baz=26,slow=1.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **111.91** | **197** | ⇑PKiKP | **PKiKP** | **22 32 03.3** | **+3.5** |
| | comp=Z,20nm,1.0s | | | | | | |
| **SFX** | **San Felipe** | **112.35** | **343** | IAMs_20 | IAMs_20 | 23 20 15.2 | |
| | comp=Z,4μm,22.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **112.65** | **197** | ⇑PKiKP | **PKiKP** | **22 32 04.1** | **+2.9** |
| | comp=Z,20nm,1.2s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **114.68** | **307** | IAMs_20 | IAMs_20 | 23 31 15.7 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **CPUP** | **Villa Florida** | **115.04** | **254** | PKP | **PKPdf** | **22 32 06.8** | **-0.3** |
| | comp=Z,7.9nm,0.9s,baz=58,slow=0.9,SNR=11 | | | | | | |
| CPUP | | | | PP | **PP** | **22 33 07.2** | **+0.2** |
| | comp=Z,8.0nm,1.0s,baz=73,slow=5.3,SNR=3.1 | | | | | | |
| **EIDS** | **Eidsvold** | **115.57** | **104** | IAMs_20 | IAMs_20 | 23 27 11.7 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **ZAIG** | **Zacatecas** | **115.73** | **328** | IAMs_20 | IAMs_20 | 23 25 43.1 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **CCIG** | **Comitan** | **115.79** | **315** | IAMs_20 | IAMs_20 | 23 23 01.2 | |
| | comp=Z,3μm,22.0s | | | | | | |
| **APG** | **El Apazote** | **115.80** | **313** | PKP | **PKiKP** | **22 32 07.9** | **-1.4** |
| | comp=Z,0.1nm,0.5s,baz=334,slow=10,SNR=1.6 | | | | | | |
| **TOO** | **Toolangi** | **116.63** | **119** | IAMs_20 | IAMs_20 | 23 20 08.8 | |
| | comp=Z,4μm,22.0s | | | | | | |
| **CMIG** | **Matias Romero** | **116.71** | **318** | PKP | **PKPdf** | **22 32 09.3** | **-1.4** |
| | comp=Z,2.3nm,0.6s,baz=328,slow=8.2,SNR=3.3 | | | | | | |
| **LPIG** | **La Paz** | **117.54** | **336** | PKKPbc | PKKPbc | 22 42 32.2 | -1.5 |
| | comp=Z,16nm,0.3s,baz=140,slow=16,SNR=1.4 | | | | | | |
| **OTAV** | **Otavalo** | **117.88** | **292** | PKPdf | **PKPdf** | **22 32 12.2** | **-1.4** |
| **OTAV** | **Otavalo** | **117.88** | **292** | PKiKP | **PKPdf** | **22 32 12.2** | **-1.4** |
| OTAV | | | | MLR | MLR | | |
| | comp=Z,2μm,21.0s | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **118.13** | **281** | IAMs_20 | IAMs_20 | 23 28 31.2 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **CAN** | **Canberra** | **118.29** | **115** | IAMs_20 | IAMs_20 | 23 22 42.8 | |
| | comp=Z,4μm,22.0s | | | | | | |
| **LPAZ** | **La Paz** | **119.00** | **270** | PKPdf | **PKPdf** | **22 32 14.1** | **-1.7** |
| **LPAZ** | **La Paz** | **119.00** | **270** | PKP | **PKPdf** | **22 32 15.1** | **-0.7** |
| | comp=Z,10.0nm,0.9s,baz=181,slow=1.3,SNR=13 | | | | | | |
| LPAZ | | | | PKKPab | **PKKPab** | **22 42 31.4** | **-0.6** |
| | comp=Z,3.0nm,0.7s,baz=187,slow=3.1,SNR=6.9 | | | | | | |
| **TAU** | **Tasmania Unive** | **119.97** | **124** | IAMs_20 | IAMs_20 | 23 24 04.3 | |
| | comp=Z,3μm,19.0s | | | | | | |
| **BELA** | **Belgrano 2** | **121.64** | **194** | PKPdf | **PKPdf** | **22 32 17.9** | **-0.4** |
| **AP01** | **Chacalluta** | **121.86** | **269** | IAMs_20 | IAMs_20 | 23 24 22.9 | |
| | comp=Z,3μm,22.0s | | | | | | |
| **AF01** | **San Pedro de A** | **122.26** | **263** | IAMs_20 | IAMs_20 | 23 33 03.7 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **HMBC** | **Humberstone** | **122.42** | **267** | | **PKPdf** | **22 32 21.0** | **-0.6** |
| **BYL** | **Byron's Ledge** | **122.53** | **24** | IAMs_20 | IAMs_20 | 23 22 27.1 | |
| | comp=Z,3μm,22.0s | | | | | | |
| **LVC** | **Limon Verde** | **122.70** | **264** | *e*P | **PKiKP** | **22 32 23.2** | **+0.6** |
| **TRQA** | **Tornquist** | **123.42** | **244** | PKPdf | **PKPdf** | **22 32 22.8** | **-0.1** |
| **TRQA** | **Tornquist** | **123.42** | **244** | PKiKP | **PKPdf** | **22 32 22.8** | **-0.1** |
| TRQA | | | | MLR | MLR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **TRQA** | **Tornquist** | **123.42** | **244** | *e*P | **PKiKP** | **22 32 23.7** | **+0.5** |
| **PB04** | **IPOC Station P** | **123.59** | **265** | IAMs_20 | IAMs_20 | 23 27 02.9 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **NNA** | **Nana** | **123.89** | **279** | PKPdf | **PKPdf** | **22 32 24.6** | **+0.1** |
| NNA | | | | IAMs_20 | IAMs_20 | 23 27 56.8 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **NNA** | **Nana** | **123.89** | **279** | PKiKP | **PKPdf** | **22 32 24.6** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **124.09** | **93** | IAMs_20 | IAMs_20 | 23 26 51.9 | |
| | comp=Z,2μm,22.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **124.41** | **180** | | **PKPdf** | **22 32 23.8** | **-0.2** |
| **QSPA** | **South Pole Qui** | **124.41** | **180** | PKP | **PKPdf** | **22 32 23.3** | **-0.7** |
| | comp=Z,7.9nm,0.9s,baz=260,slow=1.9,SNR=20 | | | | | | |
| QSPA | | | | PKKPbc | **PKKPbc** | **22 42 08.0** | **-1.0** |
| | comp=Z,2.6nm,1.0s,baz=116,slow=2.3,SNR=1.7 | | | | | | |
| **LHI** | **Lord Howe Isla** | **124.54** | **107** | IAMs_20 | IAMs_20 | 23 29 39.3 | |
| | comp=Z,2μm,21.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **126.57** | **93** | *e*P | **PKPdf** | **22 32 29.4** | **-0.1** |
| | comp=Z,78nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **126.57** | **93** | *e*LR | LR | 23 12 01.6 | |
| | comp=Z,6μm,24.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **126.57** | **93** | IAMs_20 | IAMs_20 | 23 33 31.7 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **PINNC** | **Pines Island,** | **127.64** | **93** | IAMs_20 | IAMs_20 | 23 35 17.1 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **CO05** | **La Serena** | **127.67** | **257** | IAMs_20 | IAMs_20 | 23 28 12.2 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **VA06** | **Catapilco** | **128.68** | **254** | IAMs_20 | IAMs_20 | 23 33 35.0 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **PMSA** | **Palmer Station** | **129.29** | **211** | | **PKiKP** | **22 32 34.1** | **+0.2** |
| **PMSA** | **Palmer Station** | **129.29** | **211** | *e*P | **PKiKP** | **22 32 33.8** | **-0.1** |
| **SBA** | **Scott Base** | **129.86** | **166** | PKPdf | **PKPdf** | **22 32 34.3** | **+0.3** |
| **SBA** | **Scott Base** | **129.86** | **166** | PKiKP | **PKPdf** | **22 32 34.3** | **+0.3** |
| SBA | | | | MLR | MLR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **SMAI** | **San Martin Ant** | **130.28** | **207** | PKPdf | **PKiKP** | **22 32 36.4** | **+0.6** |
| **PLCA** | **Paso Flores** | **130.55** | **243** | PKPdf | **PKiKP** | **22 32 37.4** | **0.0** |
| **PLCA** | **Paso Flores** | **130.55** | **243** | PKhKP | PKPpre | 22 32 28.0 | |
| | comp=Z,3.6nm,0.9s,baz=142,slow=3.1,SNR=6.2 | | | | | | |
| PLCA | | | | PKP | **PKPdf** | **22 32 36.0** | **-0.5** |
| | comp=Z,51nm,1.1s,baz=139,slow=1.6,SNR=14 | | | | | | |
| **PLCA** | **Paso Flores** | **130.55** | **243** | *e*P | **PKPdf** | **22 32 36.9** | **+0.4** |
| **GO06** | **Curarrehue** | **130.94** | **245** | PKPdf | **PKiKP** | **22 32 38.5** | **+0.2** |
| **MSVF** | **Nonsavu** | **134.03** | **81** | IAMs_20 | IAMs_20 | 23 39 45.0 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **CTZ** | **Chatham Island** | **145.84** | **119** | PKPdf | **PKPdf** | **22 33 04.1** | **-0.1** |
| **RAR** | **Rarotonga** | **153.50** | **67** | PP | **PP** | **22 37 13.0** | **+2.0** |
| | comp=Z,21nm,0.8s,baz=77,slow=1.4,SNR=5.2 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **153.72** | **14** | *e*PP | **PP** | **22 37 04.3** | **-6.7** |
| | comp=Z,527nm,29.8s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **153.72** | **14** | *e*SS | SS | 22 56 47.6 | +0.8 |
| | comp=Z,594nm,33.0s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **153.72** | **14** | *e*LR | LR | 23 24 36.2 | |
| | comp=Z,4μm,21.6s | | | | | | |
| **PPT2** | **Papeete2** | **157.94** | **44** | *e*P | **PKPdf** | **22 33 22.1** | **-1.1** |
| | comp=Z,154nm,28.2s | | | | | | |
| **PPT2** | **Papeete2** | **157.94** | **44** | *e*SS | SS | 22 57 26.3 | -7.3 |
| | comp=Z,889nm,31.8s | | | | | | |
| **PPT2** | **Papeete2** | **157.94** | **44** | *e*LR | LR | 23 26 25.1 | |
| | comp=Z,3μm,23.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 23 26 40.3 | |
| | comp=Z,4μm,23.0s | | | | | | |
| **TBI** | **Tubuai** | **162.29** | **55** | *e*S | | 22 39 41.2 | |
| | comp=Z,1μm,29.5s | | | | | | |
| **TBI** | **Tubuai** | **162.29** | **55** | *e*SS | SS | 22 58 20.0 | +0.2 |
| | comp=Z,4μm,35.2s | | | | | | |
| **TBI** | **Tubuai** | **162.29** | **55** | *e*LR | LR | 23 28 37.9 | |
| | comp=Z,15μm,25.8s | | | | | | |
| TBI | | | | *e*LR | LR | 23 28 41.7 | |
| | comp=Z,4μm,25.5s | | | | | | |
| **RKT** | **Rikitea** | **168.53** | **6** | *e*P | **PKPdf** | **22 33 34.8** | **+1.8** |
| | comp=Z,494nm,32.5s | | | | | | |
| **RKT** | **Rikitea** | **168.53** | **6** | *e*PP | **PP** | **22 38 27.3** | **-2.9** |
| | comp=Z,744nm,29.8s | | | | | | |
| **RKT** | **Rikitea** | **168.53** | **6** | *e*SS | SS | 22 59 27.8 | +6.5 |
| | comp=Z,12μm,37.0s | | | | | | |
| **RKT** | **Rikitea** | **168.53** | **6** | *e*LR | LR | 23 31 13.3 | |
| | comp=Z,28μm,26.0s | | | | | | |

**ATH 25 22:15:32.3, 37.84N×23.68E, h6km±2km, ML1.4/6, Manual Solution by G.Panopoulou This location: 2020/07/24 16:43:24 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 1 km; Longitude uncertainty: 1 km, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATH** | **Athens Observa** | **0.13** | **13** | P | Pg | 22 15 35.1 | +0.1 |
| ATH | | | | S | Sg | 22 15 36.3 | -0.7 |
| **ATH5** | **Athens Parliam** | **0.14** | **19** | P | Pg | 22 15 35.5 | +0.3 |
| ATH5 | | | | S | Sg | 22 15 36.7 | -0.4 |
| **ATHU** | **Athens Univers** | **0.15** | **34** | P | Pg | 22 15 35.3 | -0.1 |
| ATHU | | | | S | Sg | 22 15 36.4 | -1.0 |
| **ATHP** | **Athens-Neo Psi** | **0.17** | **26** | P | Pg | 22 15 36.0 | +0.2 |
| **DION** | **Dionisos Attik** | **0.31** | **41** | P | Pb | 22 15 39.4 | -0.9 |
| DION | | | | S | Sg | 22 15 42.6 | +0.1 |
| **VIL2** | **Platees** | **0.49** | **319** | P | Pg | 22 15 40.8 | -0.9 |
| **LOUT** | **Loutraki** | **0.57** | **285** | P | Pg | 22 15 43.6 | +0.3 |
| **KRND** | **KRANIDI** | **0.62** | **223** | P | Pg | 22 15 44.2 | -0.1 |
| **KYMI** | **Kymi, Euboea I** | **0.86** | **23** | P | Pg | 22 15 48.7 | 0.0 |
| **GUR** | **Goura** | **1.06** | **275** | P | Pg | 22 15 52.2 | -0.4 |
| **AXAR** | **Agios Charalam** | **1.22** | **319** | P | Pg | 22 15 55.5 | -0.2 |
| **KLV** | **Kalavryta, Ach** | **1.22** | **280** | P | Pg | 22 15 55.1 | -0.7 |
| **VLI** | **Veliai** | **1.27** | **208** | P | Pn | 22 15 56.4 | -0.2 |
| **KTHA** | **Kythira Island** | **1.66** | **197** | P | Pn | 22 16 02.3 | +0.4 |
| **APE** | **Apeiranthos** | **1.66** | **117** | P | Pn | 22 16 01.9 | -0.2 |

*AEIC **25** 22:33:25.6±1.1, 55.7°N±0.1°×149.2°W±0.1°, h5km±8km, Error ellipse: s-maj=18.3km s-min=10.5km az=173.0*

**NEIC 25 22:33:21.4±1.0, 55.7°N±0.1°×149.2°W±0.1°, h7km±8km, ML3.7**(AEIC)**, Error ellipse: s-maj=18.8km s-min=10.5km az=173.0, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.73** | **306** | | Pn | 22 34 04.8 | -0.7 |
| **KDAK** | **Kodiak Island** | **2.80** | **320** | | Pn | 22 34 06.2 | -0.3 |
| **SII** | **Sitkinak Islan** | **2.92** | **289** | | Pn | 22 34 07.4 | -0.8 |
| **SYI** | **Shuyak Island** | **3.39** | **330** | | Pn | 22 34 14.4 | -0.2 |
| **R18K** | **Karluk** | **3.45** | **305** | | Pn | 22 34 15.4 | 0.0 |
| **CNPM** | **China Poot** | **3.99** | **345** | | Pn | 22 34 22.1 | -0.7 |
| **Q19K** | **Cape Douglas,** | **4.03** | **325** | | Pn | 22 34 23.7 | +0.2 |
| **Q23K** | **Middleton Isla** | **4.04** | **21** | | Pn | 22 34 22.6 | -0.8 |
| **MID** | **Middleton Isla** | **4.04** | **21** | | Pn | 22 34 22.5 | -0.9 |
| **KAHG** | **Katmai Hook Gl** | **4.04** | **316** | | Pn | 22 34 24.3 | +0.7 |
| **BRSE** | **Bradley Lake S** | **4.13** | **349** | | Pn | 22 34 24.1 | -0.8 |
| **BRLK** | **Bradley Lake** | **4.17** | **348** | | Pn | 22 34 24.4 | -0.9 |
| **KABU** | **Katmai Buttres** | **4.21** | **310** | | Pn | 22 34 26.7 | +0.8 |
| **ANCK** | **Angle Creek** | **4.26** | **309** | | Pn | 22 34 27.4 | +0.8 |
| **KAHC** | **Katmai Hardscr** | **4.33** | **315** | | Pn | 22 34 28.0 | +0.5 |
| **PLK4** | **Peulik 4** | **4.40** | **299** | | Pn | 22 34 28.7 | +0.2 |
| **P23K** | **Montague Islan** | **4.41** | **12** | | Pn | 22 34 28.1 | -0.5 |
| **PLK2** | **Peulik 2** | **4.44** | **301** | | Pn | 22 34 29.6 | +0.7 |
| **P19K** | **Oil Pt** | **4.51** | **333** | | Pn | 22 34 30.1 | +0.1 |
| **PLK1** | **Peulik 1** | **4.59** | **300** | | Pn | 22 34 31.6 | +0.6 |
| **PLBL** | **Peulik Blue Cr** | **4.65** | **299** | | Pn | 22 34 32.8 | +0.9 |
| **O20K** | **Slope Mountain** | **4.75** | **339** | | Pn | 22 34 33.4 | 0.0 |
| **HIN** | **Hinchinbrook I** | **4.92** | **16** | | Pn | 22 34 35.1 | -0.5 |
| **P18K** | **Big Mountain,** | **4.92** | **321** | | Pn | 22 34 35.3 | -0.3 |
| **KAIM** | **Kayak Island** | **4.94** | **29** | | Pn | 22 34 35.6 | -0.3 |
| **PWL** | **Port Wells** | **5.19** | **5** | | Pn | 22 34 38.6 | -0.7 |
| **SUCK** | **Suckling Hills** | **5.25** | **31** | | Pn | 22 34 40.1 | 0.0 |
| **P17K** | **Kvichak River** | **5.25** | **315** | | Pn | 22 34 40.4 | +0.4 |
| **O18K** | **Koktuh Hills** | **5.26** | **325** | | Pn | 22 34 39.9 | -0.4 |
| **FID** | **Port Fidalgo** | **5.26** | **15** | | Pn | 22 34 39.6 | -0.7 |
| **RAGM** | **Ragged Mountai** | **5.27** | **25** | Pn | Pn | 22 34 40.3 | -0.1 |
| **GLI** | **Glacier Island** | **5.31** | **11** | | Pn | 22 34 40.8 | -0.1 |
| **HMT** | **Hamilton** | **5.33** | **27** | | Pn | 22 34 41.1 | -0.2 |
| **GOAT** | **Goat Mountain** | **5.43** | **24** | | Pn | 22 34 42.8 | +0.1 |
| **BGLC** | **Bering Glacier** | **5.43** | **33** | | Pn | 22 34 43.0 | +0.4 |
| **FIS** | **Fire Island** | **5.48** | **355** | Pn | Pn | 22 34 42.5 | -0.8 |
| **SNH** | **Sunshine Point** | **5.62** | **34** | Pn | Pn | 22 34 45.2 | 0.0 |
| **WAX** | **Waxell Ridge** | **5.83** | **33** | | Pn | 22 34 47.7 | -0.4 |
| **N19K** | **Bonanza Creek** | **5.83** | **334** | | Pn | 22 34 47.2 | -1.0 |
| **SUA** | **Susitna One** | **5.83** | **353** | Pn | Pn | 22 34 47.2 | -1.0 |
| **BARK** | **Barkley Ridge** | **5.90** | **34** | | Pn | 22 34 49.3 | +0.2 |
| **STLK** | **Strandline Lak** | **5.97** | **348** | | Pn | 22 34 49.5 | -0.6 |
| **KLU** | **Klutina** | **6.05** | **15** | | Pn | 22 34 50.9 | -0.3 |
| **TGL** | **Tana Glacier** | **6.08** | **31** | | Pn | 22 34 51.4 | -0.2 |
| **GHO** | **Glory Hole Cre** | **6.09** | **1** | Pn | Pn | 22 34 52.1 | +0.4 |
| **BAGL** | **Bagley Icefiel** | **6.10** | **35** | | Pn | 22 34 52.0 | +0.3 |
| **ISLE** | **Juniper Island** | **6.11** | **34** | Pn | Pn | 22 34 51.9 | -0.1 |
| **N18K** | **Kilae Creek** | **6.12** | **327** | | Pn | 22 34 51.5 | -0.5 |
| **SML** | **Sawmill** | **6.14** | **4** | Pn | Pn | 22 34 52.7 | +0.3 |
| **O16K** | **Kokwok River B** | **6.17** | **313** | | Pn | 22 34 52.9 | +0.3 |
| **VRDI** | **Verde Repeater** | **6.30** | **26** | | Pn | 22 34 54.5 | -0.2 |
| **SAMH** | **Samovar Hills** | **6.30** | **42** | | Pn | 22 34 55.3 | +0.7 |
| **KIAG** | **Kiagna River** | **6.35** | **32** | | Pn | 22 34 55.4 | 0.0 |
| **TABL** | **Table Mountain** | **6.38** | **39** | | Pn | 22 34 56.0 | +0.2 |
| **N25K** | **Chitina, Valde** | **6.38** | **20** | | Pn | 22 34 56.2 | +0.4 |
| **GRNC** | **Granite Creek** | **6.39** | **35** | | Pn | 22 34 55.9 | 0.0 |
| **GLB** | **Gilahina Butte** | **6.40** | **24** | Pn | Pn | 22 34 55.9 | -0.1 |
| **SKT** | **Skwentna** | **6.41** | **350** | Pn | Pn | 22 34 55.7 | -0.3 |
| **PTPK** | **Patty Peak** | **6.53** | **30** | | Pn | 22 34 58.3 | +0.4 |
| **MCARA** | **McCarthy VSAT** | **6.54** | **27** | Pn | Pn | 22 34 58.3 | +0.4 |
| **PNL** | **Peninsula** | **6.58** | **49** | | Pn | 22 34 58.7 | +0.3 |
| **M24K** | **Tolsona, Glenn** | **6.61** | **12** | Pn | Pn | 22 34 59.8 | +1.0 |
| **BCPM** | **Bancas Point** | **6.65** | **46** | | Pn | 22 34 59.4 | +0.1 |
| **CTGM** | **Chitina Glacie** | **6.70** | **35** | | Pn | 22 35 00.2 | +0.1 |
| **LOGN** | **Logan Glacier** | **6.71** | **37** | | Pn | 22 35 00.3 | +0.1 |
| **O15K** | **Ungalikthiuk R** | **6.71** | **306** | | Pn | 22 35 00.6 | +0.4 |
| **M18K** | **Stony River** | **6.76** | **332** | | Pn | 22 34 59.8 | -0.9 |
| **M17K** | **Holitna River** | **7.15** | **326** | | Pn | 22 35 06.1 | -0.1 |
| **S12K** | **Black Hills** | **7.27** | **275** | Pn | Pn | 22 35 07.8 | -0.1 |
| **O29M** | **Mount Kennedy** | **7.28** | **46** | | Pn | 22 35 08.7 | +0.6 |
| **P29M** | **Windy Craggy** | **7.29** | **53** | | Pn | 22 35 08.3 | +0.1 |
| **M16K** | **Timber Creek** | **7.40** | **320** | | Pn | 22 35 09.6 | 0.0 |
| **O14K** | **Tigyukauivet M** | **7.41** | **304** | Pn | Pn | 22 35 09.8 | +0.1 |
| **S31K** | **Pelican** | **7.46** | **67** | | Pn | 22 35 08.0 | -2.4 |
| **S32K** | **Killisnoo** | **8.26** | **72** | Pn | Pn | 22 35 19.0 | -2.4 |
| **O30N** | **Mendenhall** | **8.57** | **48** | | Pn | 22 35 26.0 | +0.4 |
| **M29M** | **Somme Creek** | **8.72** | **35** | | Pn | 22 35 28.1 | +0.3 |
| **WHY** | **Whitehorse** | **9.04** | **51** | Pn | Pn | 22 35 32.7 | +0.5 |

*NEIC **25** 22:33:47.8±1.3, 55.71°N±0.07°×149.20°W±0.08, h6km±4km, mb5.0/125, ML5.0/56, Mwr4.7/116, ML4.8(AEIC), Error ellipse: s-maj=10.5km s-min=6.3km az=170.0, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=0.33; $M_{\theta\theta}$=0.25; $M_{\phi\phi}$=0.08; $M_{r\theta}$=0.76; $M_{\theta\phi}$=0.95; $M_{rr}$=0.58; Fault plane solution: $M_0$=1.38000×$10^{16}$ NP1: $\phi_s$=267.70000°, δ71.20000°, λ-35.82000°. NP2:$\phi_s$=10.79000°, δ56.36000°, λ-157.23000°. Principal axes: T 1.1421, Plg9.0000°, Azm322.0000°; N 0.3885, Plg50.0000°, Azm64.0000°; P -1.5306, Plg38.0000°, Azm225.0000°;*

*IDC **25** 22:33:47.2±0.5, 55.68N×149.20W, h0km, mb4.7/45, mbtmp4.7/51, ML4.3/6, MS4.2/4 Error ellipse: s-maj=14.0km s-min=8.9km az=15.0*

*MOS **25** 22:33:48.9±0.9, 55.74N×149.20W, h20km, mb5.1/59, Error ellipse: s-maj=10.3km s-min=4.2km az=99.1*

*NEIC **25** 22:33:48.7, 55.80N×149.26W, h6km*

*AEIC **25** 22:33:52.1±2.1, 55.63N±0.07°×149.19°W±0.08, h12km±2km, Error ellipse: s-maj=9.9km s-min=6.5km az=165.0*

**ISC 25 22:33:48.7±0.4, 55.77N±0.05°×149.11W±0.04, h10km, n841, σ0.98/823, mb4.9/180, MS4.9/5, 37C-20D, Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHAK** | **Old Harbor** | **2.73** | **304** | P | **Pn** | **22 34 31.3** | **-1.2** |
| **OHAK** | **Old Harbor** | **2.73** | **304** | | **Pn** | **22 34 31.1** | **-1.4** |
| OHAK | | | | Sn | **Sn** | **22 35 02.3** | **-3.2** |
| **OHAK** | **Old Harbor** baz=122,SNR=143 | **2.73** | **304** | P | **Pn** | **22 34 31.2** | **-1.4** |
| **KDAK** | **Kodiak Island** | **2.77** | **318** | | **Pn** | **22 34 32.4** | **-0.7** |
| KDAK | | | | | **Sn** | **22 35 03.5** | **-3.1** |
| **KDAK** | **Kodiak Island** 73nm,0.3s,baz=166,slow=6.6,SNR=251 | **2.77** | **318** | Pn | **Pn** | **22 34 32.4** | **-0.7** |
| KDAK | | | | Sn | **Sn** | **22 35 02.9** | **-3.7** |
| KDAK | 63nm,0.3s,baz=40,slow=20,SNR=8.9 | | | LR | LR | 22 35 52.4 | |
| | comp=Z,5μm,21.6s,baz=219,slow=44 | | | | | | |
| **KDAK** | 578nm,0.6s **Kodiak Island** baz=137 | **2.77** | **318** | P | **Pn** | **22 34 32.4** | **-0.7** |
| **KDAK** | **Kodiak Island** | **2.77** | **318** | *c iP* | **Pn** | **22 34 32.2** | **-0.9** |
| **SII** | **Sitkinak Islan** | **2.94** | **288** | P | **Pn** | **22 34 33.9** | **-1.5** |
| **SII** | **Sitkinak Islan** | **2.94** | **288** | | **Pn** | **22 34 33.6** | **-1.9** |
| SII | | | | IAML | | 22 35 10.4 | |
| | comp=E,6μm,0.6s | | | | | | |
| SII | | | | IAML | | 22 35 11.3 | |
| | comp=N,8μm,0.7s | | | | | | |
| **SII** | **Sitkinak Islan** baz=104,SNR=43 | **2.94** | **288** | P | **Pn** | **22 34 33.7** | **-1.7** |
| **SYI** | **Shuyak Island** | **3.36** | **329** | | **Pn** | **22 34 40.4** | **-0.7** |
| SYI | | | | | **Sn** | **22 35 20.1** | **-0.8** |
| **Q20K** | **Shuyak Island** baz=148,SNR=62 | **3.36** | **329** | P | **Pn** | **22 34 40.5** | **-0.6** |
| **R18K** | **Karluk** | **3.45** | **304** | | **Pn** | **22 34 41.6** | **-0.7** |
| R18K | | | | | **Sn** | **22 35 20.6** | **-2.7** |
| R18K | | | | IAML | | 22 35 20.9 | |
| | comp=N,3μm,0.6s | | | | | | |
| R18K | | | | IAML | | 22 35 22.9 | |
| | comp=E,2μm,0.6s | | | | | | |
| **R18K** | **Karluk** baz=120 | **3.45** | **304** | P | **Pn** | **22 34 41.6** | **-0.7** |
| **CHIR** | **Chirikof Islan** | **3.67** | **273** | | **Pn** | **22 34 43.3** | **-2.1** |
| **CHIR** | **Chirikof Islan** baz=88 | **3.67** | **273** | P | **Pn** | **22 34 43.5** | **-2.0** |
| **CNPM** | **China Poot** | **3.93** | **344** | | **Pn** | **22 34 48.3** | **-0.7** |
| CNPM | | | | | **Sn** | **22 35 32.9** | **-2.3** |
| CNPM | | | | IAML | | 22 35 36.4 | |
| | comp=E,1μm,0.9s | | | | | | |
| CNPM | | | | IAML | | 22 35 36.6 | |
| | comp=N,1μm,0.6s | | | | | | |
| **MID** | **Middleton Isla** | **3.96** | **21** | P | **Pn** | **22 34 49.5** | **+0.2** |
| **MID** | **Middleton Isla** | **3.96** | **21** | | **Pn** | **22 34 49.0** | **-0.2** |
| **MID** | **Middleton Isla** | **3.96** | **21** | P | **Pn** | **22 34 49.1** | **-0.2** |
| **Q23K** | **Middleton Isla** | **3.96** | **21** | | **Pn** | **22 34 49.3** | **0.0** |
| **Q23K** | **Middleton Isla** baz=204,SNR=24 | **3.96** | **21** | P | **Pn** | **22 34 48.9** | **-0.4** |
| **Q19K** | **Cape Douglas,** | **4.00** | **324** | | **Pn** | **22 34 49.9** | **-0.1** |
| Q19K | | | | IAML | | 22 35 43.4 | |
| | comp=N,2μm,1.2s | | | | | | |
| **Q19K** | **Cape Douglas,** baz=141,SNR=70 | **4.00** | **324** | P | **Pn** | **22 34 50.2** | **+0.2** |
| **KAHG** | **Katmai Hook Gl** | **4.02** | **315** | | **Pn** | **22 34 50.6** | **+0.3** |
| **BRSE** | **Bradley Lake S** | **4.07** | **348** | | **Pn** | **22 34 50.5** | **-0.5** |
| BRSE | | | | | **Sn** | **22 35 36.4** | **-2.3** |
| **BRSE** | **Bradley Lake S** baz=168,SNR=71 | **4.07** | **348** | P | **Pn** | **22 34 50.3** | **-0.7** |
| **BRLK** | **Bradley Lake** | **4.11** | **347** | | **Pn** | **22 34 50.7** | **-0.8** |
| BRLK | | | | IAML | | 22 35 40.0 | |
| | comp=N,853nm,0.5s | | | | | | |
| BRLK | | | | IAML | | 22 35 41.4 | |
| | comp=E,2μm,0.5s | | | | | | |
| **HOM** | **Homer** | **4.12** | **342** | | **Pn** | **22 34 51.7** | **+0.1** |
| HOM | | | | IAML | | 22 35 43.7 | |
| | comp=N,3μm,0.7s | | | | | | |
| HOM | | | | IAML | | 22 35 45.6 | |
| | comp=E,3μm,0.8s | | | | | | |
| **HOM** | **Homer** baz=161,SNR=18 | **4.12** | **342** | P | **Pn** | **22 34 51.5** | **-0.2** |
| **Q18K** | **Katmai Hardscr** baz=130,SNR=107 | **4.31** | **314** | P | **Pn** | **22 34 54.6** | **+0.3** |
| **P23K** | **Montague Islan** baz=194,SNR=24 | **4.33** | **11** | P | **Pn** | **22 34 54.4** | **-0.1** |
| **SEW** | **Seward** | **4.35** | **358** | | **Pn** | **22 34 54.3** | **-0.4** |
| **SEW** | **Seward** baz=178,SNR=26 | **4.35** | **358** | P | **Pn** | **22 34 54.1** | **-0.5** |
| **PLK4** | **Peulik 4** | **4.41** | **298** | | **Pn** | **22 34 54.5** | **-1.1** |
| PLK4 | | | | IAML | | 22 35 46.7 | |
| | comp=N,2μm,0.8s | | | | | | |
| PLK4 | | | | IAML | | 22 35 47.2 | |
| | comp=E,2μm,0.7s | | | | | | |
| **R17L** | **Mt. Peulik Vol** baz=113,SNR=113 | **4.41** | **298** | P | **Pn** | **22 34 55.0** | **-0.6** |
| **Q17K** | **Contact Creek** baz=122,SNR=187 | **4.46** | **307** | P | **Pn** | **22 34 56.2** | **-0.2** |
| **P19K** | **Oil Pt** | **4.47** | **332** | | **Pn** | **22 34 56.4** | **-0.1** |
| P19K | | | | IAML | | 22 35 52.9 | |
| | comp=N,1μm,0.7s | | | | | | |
| P19K | | | | IAML | | 22 35 53.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| **P19K** | **Oil Pt** baz=150,SNR=26 | **4.47** | **332** | P | **Pn** | **22 34 56.3** | **-0.1** |
| **O20K** | **Slope Mountain** baz=156,SNR=14 | **4.71** | **338** | P | **Pn** | **22 34 59.2** | **-0.5** |
| **O22K** | **Cooper Landing** | **4.73** | **356** | | **Pn** | **22 35 00.0** | **0.0** |
| **O22K** | **Cooper Landing** baz=177,SNR=36 | **4.73** | **356** | P | **Pn** | **22 34 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PMR | Palmer | 5.84 | 360 | P | | Pn | 22 35 15.5 | +0.4 | | |
| | baz=181,SNR=12 | | | | | | | | | |
| PMR | Palmer | 5.84 | 360 | P | | Pn | 22 35 15.8 | +0.7 | | |
| O17K | Koliganek Bris | 5.86 | 316 | P | | Pn | 22 35 14.9 | -0.4 | | |
| | baz=130,SNR=49 | | | | | | | | | |
| CRQE | Cirque | 5.92 | 30 | P | | Pn | 22 35 16.7 | +0.3 | | |
| | baz=216,SNR=138 | | | | | | | | | |
| KLU | Klutina | 5.97 | 15 | | | Pn | 22 35 17.8 | +0.7 | | |
| KLU | Klutina | 5.97 | 15 | P | | Pn | 22 35 17.6 | +0.5 | | |
| | baz=198,SNR=63 | | | | | | | | | |
| M22K | Willow | 6.02 | 355 | P | | Pn | 22 35 17.6 | 0.0 | | |
| | baz=175 | | | | | | | | | |
| ISLE | Juniper Island | 6.02 | 34 | | | Pn | 22 35 18.4 | +0.5 | | |
| CHNA | Chernabura Isl | 6.06 | 265 | P | | Pn | 22 35 15.1 | -3.1 | | |
| | baz=77,SNR=6.4 | | | | | | | | | |
| CNBA | Chernabura Isl | 6.06 | 265 | Pn | | Pn | 22 35 15.0 | -3.2 | | |
| SML | Sawmill | 6.07 | 4 | Pn | | Pn | 22 35 19.2 | +0.9 | | |
| SML | Sawmill | 6.07 | 4 | P | | Pn | 22 35 19.2 | +0.9 | | |
| | baz=185,SNR=48 | | | | | | | | | |
| M23K | Glacier View | 6.08 | 6 | P | | Pn | 22 35 19.7 | +1.2 | | |
| | baz=188,SNR=44 | | | | | | | | | |
| N18K | Kilae Creek | 6.08 | 327 | P | | Pn | 22 35 17.8 | -0.8 | | |
| | baz=142,SNR=35 | | | | | | | | | |
| SCM | Sheep Creek Mo | 6.15 | 8 | P | | Pn | 22 35 20.9 | +1.4 | | |
| | baz=190,SNR=42 | | | | | | | | | |
| O16K | Kokwok River B | 6.15 | 312 | P | | Pn | 22 35 19.2 | -0.2 | | |
| | baz=125,SNR=90 | | | | | | | | | |
| VRDI | Verde Repeater | 6.22 | 26 | Pn | | Pn | 22 35 21.0 | +0.4 | | |
| TABL | Table Mountain | 6.30 | 39 | | | Pn | 22 35 22.3 | +0.6 | | |
| YKU2 | Yakutat | 6.30 | 50 | Pn | | Pn | 22 35 21.9 | +0.4 | | |
| N25K | Chitina, Valde | 6.30 | 20 | | | Pn | 22 35 22.6 | +1.0 | | |
| N25K | Chitina, Valde | 6.30 | 20 | P | | Pn | 22 35 22.3 | +0.7 | | |
| | baz=204,SNR=75 | | | | | | | | | |
| GLB | Gilahina Butte | 6.32 | 24 | Pn | | Pn | 22 35 22.4 | +0.5 | | |
| SVW2 | Sparrevohn | 6.32 | 330 | P | | Pn | 22 35 21.4 | -0.5 | | |
| SVW2 | Sparrevohn | 6.32 | 330 | | | Pn | 22 35 20.9 | -1.0 | | |
| SKT | Skwentna | 6.35 | 350 | P | | Pn | 22 35 22.1 | -0.1 | | |
| | baz=168,SNR=38 | | | | | | | | | |
| N17K | Nushagak Hills | 6.40 | 321 | P | | Pn | 22 35 22.3 | -0.5 | | |
| | baz=135,SNR=47 | | | | | | | | | |
| MCARA | McCarthy VSAT | 6.46 | 27 | P | | Pn | 22 35 24.2 | +0.4 | | |
| | baz=213,SNR=122 | | | | | | | | | |
| SDPT | Sand Point | 6.46 | 271 | P | | Pn | 22 35 22.0 | -1.7 | | |
| SDPT | Sand Point | 6.46 | 271 | Pn | | Pn | 22 35 21.7 | -2.0 | | |
| SDPT | Sand Point | 6.46 | 271 | P | | Pn | 22 35 21.8 | -2.0 | | |
| | baz=82,SNR=9.5 | | | | | | | | | |
| M20K | Styx River | 6.47 | 343 | P | | Pn | 22 35 23.2 | -0.7 | | |
| | baz=160,SNR=33 | | | | | | | | | |
| PNL | Peninsula | 6.50 | 49 | P | | Pn | 22 35 25.0 | +0.7 | | |
| PNL | Peninsula | 6.50 | 49 | P | | Pn | 22 35 24.7 | +0.4 | | |
| | baz=238,SNR=145 | | | | | | | | | |
| M24K | Tolsona, Glenn | 6.53 | 12 | | | Pn | 22 35 26.2 | +1.5 | | |
| M24K | Tolsona, Glenn | 6.53 | 12 | P | | Pn | 22 35 25.9 | +1.2 | | |
| | baz=195,SNR=46 | | | | | | | | | |
| BCPM | Bancas Point | 6.56 | 46 | | | Pn | 22 35 26.0 | +0.9 | | |
| CTG | Chitna Glacier | 6.62 | 35 | P | | Pn | 22 35 26.3 | +0.3 | | |
| | baz=222,SNR=70 | | | | | | | | | |
| LOGN | Logan Glacier | 6.62 | 37 | | | Pn | 22 35 26.5 | +0.4 | | |
| CUT | Chulitna | 6.68 | 355 | P | | Pn | 22 35 26.8 | +0.1 | | |
| | baz=175 | | | | | | | | | |
| O15K | Ungalikthiuk R | 6.71 | 305 | P | | Pn | 22 35 26.8 | -0.3 | | |
| | baz=116,SNR=69 | | | | | | | | | |
| M18K | Stony River | 6.72 | 331 | P | | Pn | 22 35 26.2 | -1.0 | | |
| | baz=146,SNR=102 | | | | | | | | | |
| M19K | Big River Lodg | 6.73 | 338 | Pn | | Pn | 22 35 26.7 | -0.7 | | |
| M19K | Big River Lodg | 6.73 | 338 | P | | Pn | 22 35 26.4 | -1.0 | | |
| | baz=154,SNR=28 | | | | | | | | | |
| WAT6 | Susitna Watana | 6.87 | 5 | P | | Pn | 22 35 30.1 | +0.7 | | |
| | baz=187,SNR=41 | | | | | | | | | |
| O28M | Mount Upton | 6.87 | 40 | P | | Pn | 22 35 30.2 | +0.6 | | |
| | baz=227,SNR=125 | | | | | | | | | |
| HARP | HAARP | 6.95 | 15 | | | Pn | 22 35 31.8 | +1.4 | | |
| HARP | HAARP | 6.95 | 15 | P | | Pn | 22 35 31.0 | +0.6 | | |
| | baz=199,SNR=15 | | | | | | | | | |
| N16K | Nishlik Lake | 6.95 | 317 | | | Pn | 22 35 30.3 | -0.1 | | |
| N16K | Nishlik Lake | 6.95 | 317 | P | | Pn | 22 35 30.5 | 0.0 | | |
| | baz=129,SNR=62 | | | | | | | | | |
| L19K | White Mountain | 7.08 | 338 | P | | Pn | 22 35 31.2 | -0.9 | | |
| | baz=153,SNR=36 | | | | | | | | | |
| WAT1 | Susitna Watana | 7.08 | 2 | P | | Pn | 22 35 32.8 | +0.5 | | |
| | baz=183 | | | | | | | | | |
| M17K | Holitna River | 7.12 | 326 | P | | Pn | 22 35 32.3 | -0.4 | | |
| | baz=139,SNR=73 | | | | | | | | | |
| L20K | Farewell, AK | 7.16 | 342 | P | | Pn | 22 35 32.2 | -1.1 | | |
| | baz=158,SNR=13 | | | | | | | | | |
| PS1A | Pavlof South-1 | 7.17 | 272 | | | Pn | 22 35 31.4 | -2.0 | | |
| O29M | Mount Kennedy | 7.20 | 47 | | | Pn | 22 35 35.1 | +1.1 | | |
| O29M | Mount Kennedy | 7.20 | 47 | P | | Pn | 22 35 34.8 | +0.8 | | |
| | baz=236,SNR=282 | | | | | | | | | |
| P29M | Windy Craggy | 7.21 | 53 | Pn | | Pn | 22 35 34.2 | +0.2 | | |
| P29M | Windy Craggy | 7.21 | 53 | P | | Pn | 22 35 34.5 | +0.4 | | |
| | baz=243,SNR=221 | | | | | | | | | |
| N15K | Kwethluk River | 7.31 | 312 | Pn | | Pn | 22 35 35.7 | +0.3 | | |
| N15K | Kwethluk River | 7.31 | 312 | P | | Pn | 22 35 35.7 | +0.3 | | |
| | baz=123,SNR=56 | | | | | | | | | |
| S12K | Black Hills | 7.31 | 275 | Pn | | Pn | 22 35 33.9 | -1.5 | | |
| S12K | Black Hills | 7.31 | 275 | P | | Pn | 22 35 33.5 | -1.9 | | |
| | baz=84,SNR=12 | | | | | | | | | |
| M26K | Nabesna, AK | 7.35 | 23 | | | Pn | 22 35 37.0 | +1.0 | | |
| M26K | Nabesna, AK | 7.35 | 23 | P | | Pn | 22 35 36.6 | +0.6 | | |
| | baz=208,SNR=21 | | | | | | | | | |
| M16K | Timber Creek | 7.37 | 320 | Pn | | Pn | 22 35 36.1 | -0.1 | | |
| M16K | Timber Creek | 7.37 | 320 | P | | Pn | 22 35 36.0 | -0.3 | | |
| | baz=132,SNR=41 | | | | | | | | | |
| YUK8 | Steele Glacier | 7.38 | 38 | P | | Pn | 22 35 38.3 | +1.8 | | |
| | baz=226,SNR=33 | | | | | | | | | |
| DHY | Denali Highway | 7.38 | 6 | | | Pn | 22 35 37.2 | +0.8 | | |
| DHY | Denali Highway | 7.38 | 6 | P | | Pn | 22 35 37.7 | +1.3 | | |
| | baz=188,SNR=49 | | | | | | | | | |
| S31K | Pelican | 7.39 | 67 | Pn | | Pn | 22 35 34.7 | -1.8 | | |
| S31K | Pelican | 7.39 | 67 | P | | Pn | 22 35 34.5 | -2.0 | | |
| | baz=258,SNR=23 | | | | | | | | | |
| O14K | Tigyukauivet M | 7.41 | 303 | Pn | | Pn | 22 35 36.1 | -0.6 | | |
| O14K | Tigyukauivet M | 7.41 | 303 | P | | Pn | 22 35 36.4 | -0.4 | | |
| | baz=113,SNR=26 | | | | | | | | | |
| PAX | Paxson | 7.45 | 13 | P | | Pn | 22 35 37.9 | +0.5 | | |
| | baz=197,SNR=56 | | | | | | | | | |
| YUK3 | Moose Creek | 7.51 | 33 | P | | Pn | 22 35 39.4 | +1.1 | | |
| | baz=221,SNR=147 | | | | | | | | | |
| L18K | Granite Mounta | 7.55 | 332 | P | | Pn | 22 35 37.2 | -1.4 | | |
| | baz=146,SNR=24 | | | | | | | | | |
| M27K | Edge Creek, AK | 7.58 | 26 | P | | Pn | 22 35 40.1 | +1.0 | | |
| | baz=213 | | | | | | | | | |
| YUK6 | Outpost Mounta | 7.66 | 43 | P | | Pn | 22 35 42.0 | +1.6 | | |
| | baz=232,SNR=269 | | | | | | | | | |
| SIT | Sitka | 7.76 | 75 | | | Pn | 22 35 38.6 | -2.8 | | |
| SIT | Sitka | 7.76 | 75 | P | | Pn | 22 35 38.7 | -2.8 | | |
| | baz=266,SNR=5.9 | | | | | | | | | |
| SIT | Sitka | 7.76 | 75 | P | | Pn | 22 35 38.6 | -2.8 | | |
| PLBC | Pleasant Camp | 7.77 | 56 | P | | Pn | 22 35 42.3 | +0.6 | | |
| | baz=247,SNR=302 | | | | | | | | | |
| P30M | Million Dollar | 7.79 | 51 | P | | Pn | 22 35 43.0 | +1.0 | | |
| | baz=242 | | | | | | | | | |
| YUK4 | Talbot Arm | 7.81 | 40 | P | | Pn | 22 35 45.4 | +3.0 | | |
| | baz=229,SNR=84 | | | | | | | | | |
| L26K | Log Cabin Wild | 7.84 | 20 | P | | Pn | 22 35 43.7 | +1.0 | | |
| | baz=205 | | | | | | | | | |
| M15K | Kasigluk River | 7.85 | 314 | P | | Pn | 22 35 42.6 | -0.1 | | |
| | baz=124,SNR=38 | | | | | | | | | |
| N14K | Kuskokwak Cree | 7.89 | 307 | P | | Pn | 22 35 43.5 | +0.3 | | |
| | baz=117,SNR=42 | | | | | | | | | |
| L17K | Donlin | 7.94 | 327 | P | | Pn | 22 35 43.2 | -0.8 | | |
| | baz=140,SNR=22 | | | | | | | | | |
| MCK | McKinley | 7.99 | 1 | | | Pn | 22 35 45.7 | +1.1 | | |
| MCK | McKinley | 7.99 | 1 | P | | Pn | 22 35 46.0 | +1.4 | | |
| | baz=181,SNR=19 | | | | | | | | | |
| MCK | McKinley | 7.99 | 1 | P | | Pn | 22 35 45.7 | +1.1 | | |
| K20K | Telida | 8.01 | 344 | Pn | | Pn | 22 35 44.0 | -0.9 | | |
| K20K | Telida | 8.01 | 344 | P | | Pn | 22 35 44.1 | -0.9 | | |
| | baz=160,SNR=43 | | | | | | | | | |
| L16K | Owhat River | 8.02 | 322 | Pn | | Pn | 22 35 44.3 | -0.8 | | |
| L16K | Owhat River | 8.02 | 322 | P | | Pn | 22 35 44.6 | -0.5 | | |
| | baz=134,SNR=29 | | | | | | | | | |
| L27K | Beaver Creek, | 8.19 | 24 | P | | Pn | 22 35 47.9 | +0.4 | | |
| | baz=211,SNR=26 | | | | | | | | | |
| S32K | Killisnoo | 8.20 | 72 | Pn | | Pn | 22 35 45.3 | -2.2 | | |
| S32K | Killisnoo | 8.20 | 72 | P | | Pn | 22 35 45.6 | -1.8 | | |
| | baz=264,SNR=50 | | | | | | | | | |
| BCAR | Beaver Creek A | 8.21 | 24 | Pn | | Pn | 22 35 48.2 | +0.5 | | |
| FALS | False Pass | 8.21 | 269 | P | | Pn | 22 35 45.4 | -2.3 | | |
| FALS | False Pass | 8.21 | 269 | P | | Pn | 22 35 45.8 | -1.9 | | |
| | baz=78 | | | | | | | | | |
| K24K | Donnelly Dome | 8.23 | 10 | P | | Pn | 22 35 49.3 | +1.4 | | |
| | baz=194,SNR=20 | | | | | | | | | |
| BESE | Bessie Mountai | 8.24 | 64 | | | Pn | 22 35 47.7 | -0.5 | | |
| SKAG | Skagway | 8.27 | 58 | P | | Pn | 22 35 49.3 | +0.8 | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SKAG | Skagway | 8.27 | 58 | | | Pn | 22 35 49.3 | +0.8 | | |
| SKAG | Skagway | 8.27 | 58 | P | | Pn | 22 35 49.0 | +0.5 | | |
| | baz=250,SNR=19 | | | | | | | | | |
| RIDG | Independent Ri | 8.27 | 13 | | | Pn | 22 35 49.2 | +0.6 | | |
| RIDG | Independent Ri | 8.27 | 13 | P | | Pn | 22 35 48.8 | +0.2 | | |
| | baz=197,SNR=46 | | | | | | | | | |
| R32K | Eaglecrest | 8.35 | 67 | Pn | | Pn | 22 35 49.1 | -0.5 | | |
| R32K | Eaglecrest | 8.35 | 67 | P | | Pn | 22 35 49.2 | -0.3 | | |
| | baz=259,SNR=23 | | | | | | | | | |
| K17K | Idlitarod | 8.40 | 330 | P | | Pn | 22 35 49.2 | -1.0 | | |
| | baz=142,SNR=28 | | | | | | | | | |
| M14K | Bethel | 8.40 | 312 | | | Pn | 22 35 49.9 | -0.4 | | |
| M14K | Bethel | 8.40 | 312 | P | | Pn | 22 35 49.9 | -0.4 | | |
| | baz=121,SNR=32 | | | | | | | | | |
| BPAW | Bear Paw Mtn. | 8.41 | 354 | P | | Pn | 22 35 49.7 | -0.7 | | |
| | baz=173,SNR=41 | | | | | | | | | |
| JIS | Juneau Island | 8.42 | 67 | P | | Pn | 22 35 50.2 | -0.3 | | |
| BWN | Browne | 8.43 | 359 | | | Pn | 22 35 49.8 | -0.9 | | |
| N30M | Aishikik Lake | 8.47 | 43 | | | Pn | 22 35 51.9 | +0.6 | | |
| N30M | Aishikik Lake | 8.47 | 43 | P | | Pn | 22 35 52.2 | +0.9 | | |
| | baz=233,SNR=119 | | | | | | | | | |
| O30N | Mendenhall | 8.49 | 49 | | | Pn | 22 35 52.2 | +0.7 | | |
| O30N | Mendenhall | 8.49 | 49 | P | | Pn | 22 35 52.3 | +0.8 | | |
| | baz=240,SNR=27 | | | | | | | | | |
| J18K | Innoko River | 8.62 | 337 | P | | Pn | 22 35 52.5 | -0.7 | | |
| | baz=151,SNR=25 | | | | | | | | | |
| SCRK | Sand Creek | 8.62 | 15 | | | Pn | 22 35 54.0 | +0.5 | | |
| SCRK | Sand Creek | 8.62 | 15 | P | | Pn | 22 35 53.6 | +0.2 | | |
| | baz=200,SNR=13 | | | | | | | | | |
| M29M | Somme Creek | 8.64 | 35 | P | | Pn | 22 35 54.8 | +1.1 | | |
| | baz=236,SNR=174 | | | | | | | | | |
| HDA | Harding Lake | 8.73 | 6 | P | | Pn | 22 35 56.0 | +1.2 | | |
| | baz=189,SNR=24 | | | | | | | | | |
| L15K | Ungalak Mounta | 8.73 | 318 | P | | Pn | 22 35 54.5 | -0.4 | | |
| | baz=128,SNR=37 | | | | | | | | | |
| J20K | Nowinta River | 8.80 | 345 | P | | Pn | 22 35 55.0 | -0.7 | | |
| | baz=162,SNR=24 | | | | | | | | | |
| NEA2 | Nenana | 8.85 | 0 | P | | Pn | 22 35 56.0 | -0.5 | | |
| | baz=181,SNR=13 | | | | | | | | | |
| M13K | Dall Lake | 8.85 | 308 | | | Pn | 22 35 56.0 | -0.4 | | |
| M13K | Dall Lake | 8.85 | 308 | P | | Pn | 22 35 56.5 | +0.1 | | |
| | baz=116,SNR=16 | | | | | | | | | |
| J19K | Poorman | 8.87 | 341 | P | | Pn | 22 35 55.2 | -1.4 | | |
| | baz=156,SNR=19 | | | | | | | | | |
| WHY | Whitehorse | 8.96 | 51 | Pn | | Pn | 22 35 59.0 | +0.9 | | |
| WHY | Whitehorse | 8.96 | 51 | P | | Pn | 22 35 59.0 | +0.9 | | |
| | baz=243,SNR=86 | | | | | | | | | |
| WESE | West Dahl East | 8.96 | 268 | | | Pn | 22 35 55.9 | -2.2 | | |
| K27K | Chicken | 9.00 | 20 | P | | Pn | 22 35 59.3 | +0.8 | | |
| | baz=207 | | | | | | | | | |
| N31M | Braeburn, Yuko | 9.00 | 45 | | | Pn | 22 35 59.7 | +1.2 | | |
| N31M | Braeburn, Yuko | 9.00 | 45 | P | | Pn | 22 35 59.7 | +1.2 | | |
| | baz=237,SNR=141 | | | | | | | | | |
| L14K | Kuka Creek | 9.01 | 314 | | | Pn | 22 35 58.4 | -0.3 | | |
| L14K | Kuka Creek | 9.01 | 314 | P | | Pn | 22 35 58.3 | -0.3 | | |
| | baz=123,SNR=60 | | | | | | | | | |
| CRAG | Craig | 9.06 | 85 | P | | Pn | 22 35 58.0 | -1.2 | | |
| | baz=278 | | | | | | | | | |
| J25K | Salcha River, | 9.06 | 10 | P | | Pn | 22 35 59.2 | -0.2 | | |
| | baz=194,SNR=14 | | | | | | | | | |
| P32M | Atlin | 9.09 | 59 | Pn | | Pn | 22 36 00.1 | +0.3 | | |
| P32M | Atlin | 9.09 | 59 | P | | Pn | 22 35 59.9 | +0.1 | | |
| | baz=252,SNR=59 | | | | | | | | | |
| ILAR | Eielson Array | 9.10 | 6 | Pn | | Pn | 22 36 00.4 | +0.7 | | |
| | comp=E,2.1nm,0.3s,baz=195,slow=13,SNR=46 | | | | | | | | | |
| ILAR | | | | Sn | | Sn | 22 37 39.0 | -3.1 | | |
| | comp=E,7.8nm,0.3s,baz=185,slow=18,SNR=17 | | | | | | | | | |
| | comp=E,5.9nm,0.4s | | | | | | | | | |
| K15K | Wolf Creek Mou | 9.14 | 321 | | | Pn | 22 36 00.3 | -0.1 | | |
| K15K | Wolf Creek Mou | 9.14 | 321 | P | | Pn | 22 35 59.9 | -0.4 | | |
| | baz=131,SNR=16 | | | | | | | | | |
| COLA | College | 9.15 | 3 | P | | Pn | 22 36 01.0 | +0.5 | | |
| COLA | College | 9.15 | 3 | | | Pn | 22 36 00.2 | -0.3 | | |
| COLA | College | 9.15 | 3 | *ce*P | | Pn | 22 36 02.2 | +1.7 | | |
| COLA | | | | pmax | | pmax | | | | |
| | comp=Z,28nm,0.9s | | | | | | | | | |
| J17K | VABM Dome | 9.15 | 331 | Pn | | Pn | 22 35 59.2 | -1.4 | | |
| J17K | VABM Dome | 9.15 | 331 | P | | Pn | 22 35 59.0 | -1.6 | | |
| | baz=143,SNR=14 | | | | | | | | | |
| J26L | Joseph Creek | 9.18 | 15 | P | | Pn | 22 36 01.6 | +0.6 | | |
| | baz=200,SNR=37 | | | | | | | | | |
| MDM | Murphy Dome | 9.23 | 2 | | | Pn | 22 36 02.1 | +0.5 | | |
| MLY | Manley | 9.32 | 356 | Pn | | Pn | 22 36 03.5 | +0.6 | | |
| MLY | Manley | 9.32 | 356 | P | | Pn | 22 36 03.0 | 0.0 | | |
| | baz=175,SNR=32 | | | | | | | | | |
| WRAK | Wrangell Islan | 9.39 | 79 | | | Pn | 22 36 02.2 | -1.7 | | |
| WRAK | Wrangell Islan | 9.39 | 79 | P | | Pn | 22 36 03.0 | -0.9 | | |
| | baz=273 | | | | | | | | | |
| I23K | Minto, Yukon-K | 9.41 | 359 | | | Pn | 22 36 04.6 | +0.5 | | |
| I23K | Minto, Yukon-K | 9.41 | 359 | P | | Pn | 22 36 04.0 | 0.0 | | |
| | baz=180,SNR=26 | | | | | | | | | |
| POKR | Poker Plat Res | 9.41 | 4 | P | | Pn | 22 36 03.9 | -0.2 | | |
| | baz=186 | | | | | | | | | |
| I20K | Naaghedeneel | 9.43 | 346 | P | | Pn | 22 36 04.1 | -0.3 | | |
| | baz=162,SNR=7.4 | | | | | | | | | |
| J16K | Anvik River | 9.51 | 327 | Pn | | Pn | 22 36 04.8 | -0.8 | | |
| J16K | Anvik River | 9.51 | 327 | P | | Pn | 22 36 04.2 | -1.3 | | |
| | baz=138,SNR=16 | | | | | | | | | |
| DAWY | Dawson | 9.63 | 26 | | | Pn | 22 36 07.8 | +0.6 | | |
| DAWY | Dawson | 9.63 | 26 | P | | Pn | 22 36 07.6 | +0.4 | | |
| | baz=215,SNR=18 | | | | | | | | | |
| Q32M | Nakina River | 9.64 | 64 | | | Pn | 22 36 07.7 | +0.3 | | |
| Q32M | Nakina River | 9.64 | 64 | P | | Pn | 22 36 07.4 | -0.1 | | |
| | baz=258,SNR=18 | | | | | | | | | |
| P33M | Teslin, Yukon | 9.72 | 56 | Pn | | Pn | 22 36 09.0 | +0.5 | | |
| P33M | Teslin, Yukon | 9.72 | 56 | P | | Pn | 22 36 08.6 | +0.1 | | |
| | baz=250,SNR=68 | | | | | | | | | |
| GCSA | Galena City Sc | 9.78 | 340 | P | | Pn | 22 36 07.7 | -1.5 | | |
| | baz=154 | | | | | | | | | |
| EGAK | Eagle | 9.85 | 20 | Pn | | Pn | 22 36 10.9 | +0.8 | | |
| EGAK | Eagle | 9.85 | 20 | P | | Pn | 22 36 10.8 | +0.7 | | |
| | baz=208,SNR=9.8 | | | | | | | | | |
| V35K | Ketchikan | 9.93 | 85 | Pn | | Pn | 22 36 09.9 | -1.3 | | |
| V35K | Ketchikan | 9.93 | 85 | P | | Pn | 22 36 11.9 | +0.7 | | |
| | baz=280 | | | | | | | | | |
| PRP | Porcupine Dome | 9.93 | 9 | | | Pn | 22 36 11.8 | +0.5 | | |
| PRP | Porcupine Dome | 9.93 | 9 | P | | Pn | 22 36 12.0 | +0.6 | | |
| | baz=192 | | | | | | | | | |
| M31M | Drury Creek, Y | 9.95 | 44 | | | Pn | 22 36 13.2 | +1.7 | | |
| M31M | Drury Creek, Y | 9.95 | 44 | P | | Pn | 22 36 13.2 | +1.7 | | |
| | baz=236,SNR=88 | | | | | | | | | |
| K29M | Barlow Dome | 9.96 | 31 | P | | Pn | 22 36 12.7 | +0.9 | | |
| | baz=221,SNR=57 | | | | | | | | | |
| N32M | Quiet Lake | 9.96 | 51 | P | | Pn | 22 36 12.7 | +0.9 | | |
| | baz=244,SNR=10 | | | | | | | | | |
| I17K | Unalakleet | 9.99 | 329 | P | | Pn | 22 36 11.9 | -0.1 | | |
| | baz=140 | | | | | | | | | |
| I26K | Coal Creek Min | 10.00 | 15 | P | | Pn | 22 36 12.8 | +0.7 | | |
| | baz=200 | | | | | | | | | |
| H21K | Melozitna Rive | 10.08 | 351 | P | | Pn | 22 36 14.0 | +0.8 | | |
| | baz=168,SNR=102 | | | | | | | | | |
| S34M | Telegraph Cree | 10.08 | 70 | Pn | | Pn | 22 36 12.5 | -0.8 | | |
| S34M | Telegraph Cree | 10.08 | 70 | P | | Pn | 22 36 13.8 | +0.5 | | |
| | baz=265,SNR=20 | | | | | | | | | |
| H23K | Yukon River | 10.09 | 359 | P | | Pn | 22 36 13.8 | +0.4 | | |
| | baz=179 | | | | | | | | | |
| H24K | Noodor Dome | 10.12 | 3 | Pn | | Pn | 22 36 15.4 | +1.5 | | |
| H24K | Noodor Dome | 10.12 | 3 | P | | Pn | 22 36 15.0 | +1.2 | | |
| | baz=184 | | | | | | | | | |
| K13K | Kusilvak Mount | 10.13 | 314 | | | Pn | 22 36 13.5 | -0.4 | | |
| K13K | Kusilvak Mount | 10.13 | 314 | P | | Pn | 22 36 13.8 | -0.1 | | |
| | baz=121,SNR=15 | | | | | | | | | |
| H20K | Anotleneega Mo | 10.15 | 346 | P | | Pn | 22 36 14.0 | -0.2 | | |
| | baz=162 | | | | | | | | | |
| M11K | Mekoryuk | 10.15 | 304 | P | | Pn | 22 36 13.7 | -0.5 | | |
| | baz=110 | | | | | | | | | |
| J14K | Nanvaranak Lak | 10.15 | 319 | | | Pn | 22 36 14.4 | +0.2 | | |
| J14K | Nanvaranak Lak | 10.15 | 319 | P | | Pn | 22 36 14.2 | -0.1 | | |
| | baz=127,SNR=8.1 | | | | | | | | | |
| H22K | Ishtalitna Cre | 10.21 | 355 | P | | Pn | 22 36 15.0 | -0.1 | | |
| | baz=173,SNR=20 | | | | | | | | | |
| UNV | Unalaska Valle | 10.22 | 266 | P | | Pn | 22 36 13.6 | -1.6 | | |
| | baz=72 | | | | | | | | | |
| J29N | Klondike Camp | 10.24 | 27 | P | | Pn | 22 36 16.0 | +0.4 | | |
| | baz=217,SNR=8.6 | | | | | | | | | |
| FARO | Faro, Yukon | 10.37 | 45 | | | Pn | 22 36 18.5 | +1.2 | | |
| FARO | Faro, Yukon | 10.37 | 45 | P | | Pn | 22 36 18.7 | +1.4 | | |
| | baz=239,SNR=54 | | | | | | | | | |
| R33M | Jennings River | 10.39 | 62 | Pn | | Pn | 22 36 18.1 | +0.5 | | |
| R33M | Jennings River | 10.39 | 62 | P | | Pn | 22 36 17.8 | +0.1 | | |
| | baz=258,SNR=74 | | | | | | | | | |
| H19K | Roundabout Mou | 10.42 | 343 | P | | Pn | 22 36 17.8 | 0.0 | | |
| | baz=157,SNR=17 | | | | | | | | | |
| H18K | Honhosa River | 10.44 | 338 | | | Pn | 22 36 17.1 | -1.2 | | |
| H18K | Honhosa River | 10.44 | 338 | P | | Pn | 22 36 16.7 | -1.5 | | |
| | baz=150,SNR=12 | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| I27K | Kandik River | 10.51 | 17 | P | | Pn | 22 36 20.6 | +1.3 | | |
| | baz=204,SNR=7.4 | | | | | | | | | |
| T35M | Bob Quinn | 10.53 | 76 | Pn | | Pn | 22 36 19.5 | 0.0 | | |
| T35M | Bob Quinn | 10.53 | 76 | P | | Pn | 22 36 19.8 | +0.3 | | |
| | baz=271,SNR=6.7 | | | | | | | | | |
| H17K | Granite Mounta | 10.61 | 334 | P | | Pn | 22 36 19.1 | -1.5 | | |
| | baz=145,SNR=14 | | | | | | | | | |
| H25L | Birch Creek | 10.65 | 7 | P | | Pn | 22 36 21.6 | +0.6 | | |
| | baz=190 | | | | | | | | | |
| I28M | Miner Creek | 10.69 | 21 | | | Pn | 22 36 22.8 | +1.1 | | |
| I28M | Miner Creek | 10.69 | 21 | P | | Pn | 22 36 23.3 | +1.7 | | |
| | baz=209,SNR=8.2 | | | | | | | | | |
| DLBC | Dease Lake | 10.71 | 68 | Pn | | Pn | 22 36 21.9 | -0.1 | | |
| DLBC | Dease Lake | 10.71 | 68 | Pn | | Pn | 22 36 22.0 | 0.0 | | |
| | comp=Z,3.9nm,0.3s,baz=268,slow=7.3,SNR=27 | | | | | | | | | |
| DLBC | | | | Sn | | Sn | 22 38 17.4 | -4.5 | | |
| | comp=Z,1.3nm,0.3s,baz=228,slow=25,SNR=1.2 | | | | | | | | | |
| DLBC | | | | LR | | LR | 22 39 49.7 | | | |
| | comp=Z,1µm,20.1s,baz=270,slow=34 | | | | | | | | | |
| | comp=Z,18nm,0.6s | | | | | | | | | |
| DLBC | Dease Lake | 10.71 | 68 | P | | Pn | 22 36 22.1 | 0.0 | | |
| | baz=264,SNR=19 | | | | | | | | | |
| J30M | Hart River | 10.86 | 30 | | | Pn | 22 36 25.4 | +1.3 | | |
| J30M | Hart River | 10.86 | 30 | P | | Pn | 22 36 26.0 | +2.0 | | |
| | baz=222,SNR=18 | | | | | | | | | |
| I29M | Ogilvie Camp, | 10.97 | 24 | P | | Pn | 22 36 26.6 | +1.2 | | |
| | baz=214,SNR=9.7 | | | | | | | | | |
| G21K | Allakaket | 10.98 | 351 | P | | Pn | 22 36 26.0 | +0.4 | | |
| | baz=167,SNR=24 | | | | | | | | | |
| G23K | Bananza Creek | 10.98 | 358 | | | Pn | 22 36 25.4 | -0.3 | | |
| G23K | Bananza Creek | 10.98 | 358 | P | | Pn | 22 36 25.8 | +0.1 | | |
| | baz=178,SNR=34 | | | | | | | | | |
| FYU | Fort Yukon | 10.99 | 8 | | | Pn | 22 36 25.9 | +0.2 | | |
| G24K | Hadweenzic Riv | 10.99 | 3 | | | Pn | 22 36 26.8 | +1.0 | | |
| G24K | Hadweenzic Riv | 10.99 | 3 | P | | Pn | 22 36 26.6 | +0.8 | | |
| | baz=185,SNR=12 | | | | | | | | | |
| H16K | Elim | 11.00 | 329 | P | | Pn | 22 36 25.8 | -0.1 | | |
| | baz=138 | | | | | | | | | |
| G19K | Purcell Mounta | 11.09 | 343 | P | | Pn | 22 36 26.8 | -0.3 | | |
| | baz=156 | | | | | | | | | |
| H27K | Steamboat Moun | 11.11 | 16 | P | | Pn | 22 36 28.5 | +1.2 | | |
| | baz=203,SNR=6.6 | | | | | | | | | |
| G25K | Bearman Lake | 11.12 | 6 | P | | Pn | 22 36 27.7 | +0.2 | | |
| | baz=189 | | | | | | | | | |
| G18K | Tagagawik | 11.15 | 339 | Pn | | Pn | 22 36 27.2 | -0.7 | | |
| G18K | Tagagawik | 11.15 | 339 | P | | Pn | 22 36 27.3 | -0.7 | | |
| | baz=152,SNR=5.5 | | | | | | | | | |
| G22K | Bettles | 11.24 | 355 | P | | Pn | 22 36 29.4 | +0.2 | | |
| | baz=174 | | | | | | | | | |
| G17K | Kiwalik Mounta | 11.26 | 335 | P | | Pn | 22 36 29.3 | -0.1 | | |
| | baz=145 | | | | | | | | | |
| I30M | Mount Dempster | 11.34 | 28 | Pn | | Pn | 22 36 31.4 | +0.7 | | |
| I30M | Mount Dempster | 11.34 | 28 | P | | Pn | 22 36 31.7 | +1.1 | | |
| | baz=220 | | | | | | | | | |
| P08K | Saint George I | 11.41 | 283 | P | | Pn | 22 36 30.8 | -0.7 | | |
| | baz=86 | | | | | | | | | |
| G26K | Porcupine Rive | 11.50 | 11 | P | | Pn | 22 36 32.9 | +0.3 | | |
| | baz=196 | | | | | | | | | |
| COLD | Coldfoot | 11.51 | 358 | P | | Pn | 22 36 33.0 | +0.3 | | |
| | baz=177,SNR=11 | | | | | | | | | |
| G16K | Koyuk River | 11.61 | 332 | | | Pn | 22 36 32.9 | -1.2 | | |
| G16K | Koyuk River | 11.61 | 332 | P | | Pn | 22 36 33.7 | -0.4 | | |
| | baz=140 | | | | | | | | | |
| WTLY | Watson Lake, Y | 11.62 | 60 | | | Pn | 22 36 35.1 | +0.8 | | |
| WTLY | Watson Lake, Y | 11.62 | 60 | P | | Pn | 22 36 35.3 | +0.9 | | |
| | baz=257,SNR=8.0 | | | | | | | | | |
| G27K | Doyon Strip | 11.63 | 15 | | | Pn | 22 36 35.0 | +0.6 | | |
| G27K | Doyon Strip | 11.63 | 15 | P | | Pn | 22 36 34.8 | +0.4 | | |
| | baz=202 | | | | | | | | | |
| F21K | Alatna River | 11.67 | 352 | | | Pn | 22 36 35.2 | +0.1 | | |
| F21K | Alatna River | 11.67 | 352 | P | | Pn | 22 36 35.0 | -0.1 | | |
| | baz=168,SNR=19 | | | | | | | | | |
| H29M | Whitestone | 11.68 | 22 | | | Pn | 22 36 36.3 | +1.2 | | |
| H29M | Whitestone | 11.68 | 22 | P | | Pn | 22 36 35.9 | +0.7 | | |
| | baz=212 | | | | | | | | | |
| F20K | Avaraart Lake |

HOLB **Holberg** 13.56 104 Pn **Pn** 22 37 00.4 -0.5
E28M **Babbage River** 13.60 15 P **Pn** 22 37 02.3 +1.0
baz=204,SNR=10
D17K **Noatak River** 13.62 337 P **Pn** 22 37 01.6 0.0
baz=145,SNR=6.9
D25K **Kavik River** 13.66 4 P **Pn** 22 37 02.5 +0.4
baz=187
E29M **Blow River** 13.67 18 P **Pn** 22 37 02.3 0.0
baz=208,SNR=6.2
C21K **Knifeblade Rid** 13.68 351 P **Pn** 22 37 02.0 -0.4
baz=167
F31M **Tsiigehtchic** 13.74 26 Pn **Pn** 22 37 03.7 +0.5
F31M **Tsiigehtchic** 13.74 26 P **Pn** 22 37 04.3 +1.1
baz=219,SNR=7.1
GAMB **Gambell** 13.85 315 P **Pn** 22 37 04.3 -0.4
baz=115
RDOG **Red Dog Mine** 13.87 338 P **Pn** 22 37 05.1 0.0
baz=146
KOTAN **Kotaneelee Air** 13.96 62 P **Pn** 22 37 07.1 +0.9
baz=263,SNR=19
C24K **Franklin Bluff** 14.00 1 P **Pn** 22 37 07.9 +1.2
baz=181
D27M **Malcolm River** 14.01 12 P **Pn** 22 37 07.4 +0.4
baz=200
C18K **Utukok River** 14.05 342 P **Pn** 22 37 07.2 -0.3
baz=151
C27K **Jago River** 14.11 8 P **Pn** 22 37 07.6 -0.8
baz=193,SNR=9.0
B21K **Ikpikpuk River** 14.12 352 P **Pn** 22 37 08.4 +0.1
baz=168
C23K **Itkillik River** 14.13 358 P **Pn** 22 37 08.9 +0.4
baz=177
C19K **Lookout Ridge** 14.19 345 Pn **Pn** 22 37 08.8 -0.6
C19K **Lookout Ridge** 14.19 345 P **Pn** 22 37 09.0 -0.4
baz=156
C17K **DeLong Mountai** 14.28 339 P **Pn** 22 37 10.6 -0.1
baz=145,SNR=8.5
C26K **Camden Bay** 14.32 6 P **Pn** 22 37 11.4 +0.3
baz=190
D28M **Stokes Point** 14.38 15 P **Pn** 22 37 12.4 +0.4
baz=204
INK **Inuvik** 14.47 24 Pn **Pn** 22 37 14.1 +0.9
comp=Z,1.0nm,0.3s,baz=210,slow=15,SNR=46
INK Sn **Sn** 22 39 50.1 -3.4
comp=Z,0.3nm,0.3s,baz=161,slow=26,SNR=0.8
comp=Z,57nm,1.0s
INK **Inuvik** 14.47 24 P **Pn** 22 37 13.4 +0.2
baz=218,SNR=20
INK **Inuvik** 14.47 24 P **Pn** 22 37 14.2 +1.0
C16K **Lisburne Hills** 14.59 336 Pn **Pn** 22 37 15.2 +0.3
C16K **Lisburne Hills** 14.59 336 P **Pn** 22 37 13.8 -1.1
baz=142,SNR=12
B20K **Meade River** 14.73 349 P **Pn** 22 37 16.2 -0.4
baz=162
B22K **Teshekpuk Lake** 14.74 354 P **Pn** 22 37 17.0 +0.1
baz=171
B18K **Kokolik River** 14.78 342 P **Pn** 22 37 16.5 -0.9
baz=151
WRGLY **Wrigley** 14.92 50 P **Pn** 22 37 20.9 +1.5
baz=252,SNR=11
CBB **Campbell River** 15.40 102 Pn **Pn** 22 37 26.8 +1.0
A19K **Wainwright** 15.41 345 P **Pn** 22 37 24.7 -1.1
baz=154
A22K **Sinclair Lake** 15.50 353 P **Pn** 22 37 26.4 -0.5
baz=168
OZB **Mount Ozzard** 15.91 106 **P** 22 37 34.2 -1.9
CLRS **Cowichan Lake** 16.73 104 P **P** 22 37 43.7 -1.5
C36M **Paulatuk** 17.63 30 Pn **Pn** 22 37 53.2 -0.8
C36M IAmb IAmb 22 37 57.5
comp=Z,98nm,1.1s
C36M **Paulatuk** 17.63 30 P **Pn** 22 37 53.5 -0.5
baz=232,SNR=14
NLWA **Neilton Lookou** 17.71 108 **Pn** 22 37 54.6 -0.5
NLWA IAmb IAmb 22 38 08.2
comp=Z,160nm,1.4s
GNW **Green Mountain** 18.17 106 P **P** 22 38 01.2 +0.2
BRLDA **Berland Lookou** 18.22 82 P **P** 22 38 01.5 -0.2
YKA **Yellowknife Ar** 18.75 55 P **P** 22 38 06.5 -0.8
YKA **Yellowknife Ar** 18.75 55 P **Pn** 22 38 08.6 +0.8
comp=Z,0.7nm,0.3s,baz=262,slow=10,SNR=26
comp=Z,17nm,0.9s
A36M **Sachs Harbour** 19.11 23 **P** 22 38 11.3 +0.1
A36M IAmb IAmb 22 38 26.0
comp=Z,68nm,0.8s
A36M **Sachs Harbour** 19.11 23 P **P** 22 38 11.2 -0.1
baz=224,SNR=7.7
G03D **McMinnville, O** 19.43 112 P **Pn** 22 38 15.3 -0.7
G03D IAmb IAmb 22 38 27.8
comp=Z,99nm,1.2s
COR **Corvallis** 19.84 114 **Pn** 22 38 20.1 -0.8
COR **Corvallis** 19.84 114 P **Pn** 22 38 20.1 -0.8
COR pmax pmax
comp=Z,143nm,1.2s
J01E **Myrtle Point** 20.52 117 P **P** 22 38 26.8 0.0
J01E IAmb IAmb 22 38 39.4
comp=Z,81nm,1.1s
HAWA **Hanford** 20.67 105 **P** 22 38 28.7 +0.3
NEW **Newport** 20.92 98 P **P** 22 38 31.2 0.0
NEW IAmb IAmb 22 38 45.0
comp=Z,53nm,1.0s
NEW **Newport** 20.92 98 P **P** 22 38 32.0 +0.8
comp=Z,7.8nm,0.9s,baz=279,slow=5.8,SNR=9.5
comp=Z,7.8nm,0.9s
NEW **Newport** 20.92 98 P **P** 22 38 32.0 +0.8
SHEM **Shemya Is, Ala** 21.54 277 P **P** 22 38 37.6 -0.1
comp=Z,46nm,0.6s,baz=272,slow=12,SNR=7.3
comp=Z,46nm,0.6s
YBH **Yreka Blue Hor** 22.19 118 P **P** 22 38 44.8 -0.1
YBH IAmb IAmb 22 38 57.6
comp=Z,68nm,1.4s
YBH **Yreka Blue Hor** 22.19 118 LR LR 22 45 10.6
comp=Z,559nm,21.6s,baz=262,slow=31
YBH **Yreka Blue Hor** 22.19 118 P **P** 22 38 44.8 -0.1
YBH pmax pmax
comp=Z,68nm,1.5s
KHMM **Horse Mountain** 22.34 121 P **P** 22 38 46.0 -0.6
KHMM IAmb IAmb 22 38 57.2
comp=Z,80nm,1.4s
MSO **Missoula** 23.51 98 P **P** 22 38 58.2 -0.5
BILL **Bilibino** 23.69 319 P **P** 22 38 58.7 -1.3
BILL **Bilibino** 23.69 319 *c* P **P** 22 39 00.2 +0.2
BILL *e* PPP PPP 22 39 33.9
BILL *e* 22 42 42.6
BILL *e* S **S** 22 43 14.7 +0.1
BILL *e* SS **SnSn** 22 43 52.6 +1.0
BILL pmax pmax
comp=Z,109nm,1.3s
BILL MLR MLR
comp=Z,1μm,19.0s
WVOR **Wild Horse Val** 23.77 111 P **P** 22 39 00.9 -0.2
WVOR IAmb IAmb 22 39 11.9
comp=Z,49nm,1.2s
WVOR **Wild Horse Val** 23.77 111 P **P** 22 39 01.0 -0.2
WVOR pmax pmax
comp=Z,49nm,1.3s
BPMT **Black Pine Rid** 24.02 98 P **P** 22 39 02.8 -0.9
LYMT **Lyon Mountain** 24.36 96 P **P** 22 39 05.9 -0.9
ORV **Oroville** 24.44 120 P **P** 22 39 07.2 -0.2
ORV **Oroville** 24.44 120 P **P** 22 39 07.2 -0.2
ORV pmax pmax
comp=Z,12nm,0.7s
DLMT **Dillon** 25.14 99 P **P** 22 39 13.8 0.0
DLMT IAmb IAmb 22 39 25.6
comp=Z,47nm,1.1s
AFDM **Forest Hills D** 25.17 120 P **P** 22 39 14.8 +0.8
PAHR **Pah Rah Range** 25.38 117 P **P** 22 39 16.6 +0.6
PAHR IAmb IAmb 22 39 27.7
comp=Z,38nm,1.3s
BOZ **Bozeman (W)** 25.54 98 P **P** 22 39 18.4 +1.0
BOZ **Bozeman (W)** 25.54 98 P **P** 22 39 18.4 +1.0
BOZ pmax pmax
comp=Z,9.0nm,0.9s
PNTR **Pine Nut** 25.74 118 P **P** 22 39 20.0 +0.7
PNTR IAmb IAmb 22 39 29.9
comp=Z,36nm,0.9s
BMN **Battle Mountai** 25.95 113 P **P** 22 39 22.1 +0.9
BMN **Battle Mountai** 25.95 113 P **P** 22 39 22.1 +0.9
BMN pmax pmax
comp=Z,11nm,0.9s
CMB **Columbia Colle** 26.17 121 P **P** 22 39 23.4 +0.3
CMB **Columbia Colle** 26.17 121 P **P** 22 39 23.4 +0.3
CMB pmax pmax
comp=Z,18nm,1.4s
YHL **Hebgen Lake** 26.24 99 P **P** 22 39 24.0 0.0
YHL IAmb IAmb 22 39 37.4
comp=Z,24nm,1.1s

YHH **Holmes Hill** 26.47 98 P **P** 22 39 26.1 +0.1
ELK **Elko** 26.76 110 P **P** 22 39 28.7 +0.1
ELK IAmb IAmb 22 39 39.4
comp=Z,23nm,1.2s
ELK **Elko** 26.76 110 P **P** 22 39 29.2 +0.6
comp=Z,3.4nm,0.9s,baz=302,slow=8.8,SNR=8.9
comp=Z,3.4nm,0.9s
H17A **Grant Village** 26.86 99 P **P** 22 39 29.4 -0.1
baz=309
NVAR **Mina Array Bea** 26.89 117 P **P** 22 39 29.7 -0.1
NVAR **Mina Array Bea** 26.89 117 P **P** 22 39 30.3 +0.6
comp=Z,3.5nm,0.8s,baz=306,slow=8.7,SNR=14
comp=Z,3.5nm,0.8s
NV11 **Mina Array Sit** 26.96 117 P **P** 22 39 30.1 -0.3
SPUT **South Promonto** 27.87 106 P **P** 22 39 38.0 -0.4
R11B **Troy Canyon, C** 28.34 114 P **P** 22 39 43.1 +0.4
baz=319,SNR=11
PDAR **Pinedale Array** 28.48 100 P **P** 22 39 43.6 -0.4
comp=Z,0.9nm,0.6s,baz=311,slow=5.1,SNR=6.9
comp=Z,0.9nm,0.6s
SEY **Seymchan** 29.69 308⇑ *e* P **P** 22 39 54.5 +0.3
SEY pmax pmax
comp=Z,15nm,1.0s
PET **Petropavlovsk** 29.94 287 P **P** 22 39 55.7 -0.8
PET IAmb IAmb 22 39 58.0
comp=Z,43nm,1.3s
PET **Petropavlovsk** 29.94 287⇓ *e* P **P** 22 39 57.0 +0.5
PET pmax pmax
comp=Z,47nm,1.7s
SZCU **Shurtz Canyon** 30.21 112 P **P** 22 39 58.5 -0.8
PEA0B **Petropavlovsk-** 30.41 288 P **P** 22 40 00.7 -0.1
PEA0B IAmb IAmb 22 40 02.2
comp=Z,38nm,1.5s
PEA0B **Petropavlovsk-** 30.41 288 *de* P **P** 22 40 01.3 +0.5
PETK **Petropavlovsk-** 30.41 288 P **P** 22 40 00.4 -0.4
comp=Z,5.5nm,0.6s,baz=73,slow=14,SNR=18
comp=Z,5.5nm,0.6s
RSSD **Black Hills** 30.71 93 P **P** 22 40 03.9 +0.2
RSSD IAmb IAmb 22 40 14.1
comp=Z,13nm,0.8s
RSSD **Black Hills** 30.71 93 P **P** 22 40 03.9 +0.2
RSSD pmax pmax
comp=Z,13nm,0.9s
MA2 **Magadan** 31.41 302 P **P** 22 40 09.9 +0.5
MA2 IAmb IAmb 22 40 11.7
comp=Z,25nm,0.9s
MA2 **Magadan** 31.41 302 P **P** 22 40 10.2 +0.7
comp=Z,14nm,0.8s,baz=79,slow=9.3,SNR=14
comp=Z,14nm,0.8s
MA2 **Magadan** 31.41 302 *ce* P **P** 22 40 10.4 +1.0
MA2 pmax pmax
comp=Z,27nm,1.0s
MA2 **Magadan** 31.41 302 P **P** 22 40 08.6 -0.8
comp=Z,37nm,1.1s,comp=Z,1μm
TPFO **Pinon Flats** 31.62 121 P **P** 22 40 11.8 +0.1
baz=324
W13A **Hualapai Mount** 31.71 116 P **P** 22 40 11.1 -1.5
W13A IAmb IAmb 22 40 23.3
comp=Z,13nm,1.1s
N23A **Red Feather La** 31.74 100 P **P** 22 40 12.5 -0.3
baz=313
ULM **Lac du Bonnet** 31.82 77 P **P** 22 40 13.2 0.0
comp=Z,4.0nm,0.8s,baz=298,slow=12,SNR=4.9
comp=Z,4.0nm,0.8s
S22A **4UR Ranch, Cre** 33.45 105 P **P** 22 40 27.9 -0.1
baz=316
214A **Organ Pipe Nat** 34.75 118 P **P** 22 40 38.7 -0.2
baz=324
KIP **Kipapa** 34.94 195⇑ *e* P **P** 22 40 39.6 -0.9
KIP pmax pmax
comp=Z,53nm,1.7s
ECSD **EROS Data Cent** 35.14 87 P **P** 22 40 41.9 -0.3
T25A **Trinidad** 35.22 103 P **P** 22 40 42.2 -1.0
baz=316
EYMN **Ely** 35.49 78 P **P** 22 40 45.0 -0.1
EYMN IAmb IAmb 22 40 46.8
comp=Z,26nm,1.1s
ANMO **Albuquerque** 35.72 108 P **P** 22 40 48.8 +1.3
comp=Z,2.0nm,1.0s,baz=97,slow=7.1,SNR=1.7
comp=Z,2.0nm,1.0s
ANMO **Albuquerque** 35.72 108⇑ *e* P **P** 22 40 50.2 +2.7
ANMO pmax pmax
comp=Z,4.0nm,1.4s
TIXI **Tiksi** 36.16 328 P **P** 22 40 51.4 +0.9
TIXI IAmb IAmb 22 40 52.7
comp=Z,24nm,1.0s
TIXI **Tiksi** 36.16 328⇓ *e* P **P** 22 40 51.8 +1.3
TIXI pmax pmax
comp=Z,14nm,1.0s
121A **Cookes Peak, D** 36.87 112 P **P** 22 40 56.8 -0.4
baz=322
I42A **Draeger Farm,** 39.37 81 IAmb IAmb 22 41 19.5
comp=Z,26nm,1.1s
TYV **Tymovskoe** 39.55 292 *e* P **P** 22 41 20.3 +0.9
TYV pmax pmax
comp=Z,20nm,0.9s
YAK **Yakutsk** 39.79 313 P **P** 22 41 21.0 -0.3
YAK **Yakutsk** 39.79 313 P **P** 22 41 21.6 +0.3
comp=Z,2.5nm,0.6s,baz=89,slow=4.7,SNR=17
comp=Z,45nm,0.6s
YAK **Yakutsk** 39.79 313 *e* P **P** 22 41 21.4 +0.1
YAK pmax pmax
comp=Z,36nm,0.8s
YAK pmax pmax
comp=E,15nm,1.2s
YAK pmax pmax
comp=N,7.0nm,1.2s
E46A **Sault Ste Mari** 40.38 75 IAmb IAmb 22 41 28.2
comp=Z,31nm,1.3s
L44A **Lake County Fo** 41.04 83 P **P** 22 41 31.2 -0.7
baz=311
HDIL **Hopedale** 41.34 86 IAmb IAmb 22 41 43.9
comp=Z,31nm,0.8s
TXAR **Lajitas Array** 41.56 110 P **P** 22 41 36.0 -0.4
TXAR **Lajitas Array** 41.56 110 P **P** 22 41 36.8 +0.5
comp=Z,1.6nm,1.0s,baz=316,slow=5.1,SNR=6.9
comp=Z,1.6nm,1.0s
YSS **Yuzh-Sakhalins** 41.82 288 *e* P **P** 22 41 37.5 -0.7
JCT **Junction City** 42.74 105 P **P** 22 41 45.2 -0.8
JCT IAmb IAmb 22 41 56.9
comp=Z,36nm,1.2s
JCT **Junction City** 42.74 105 P **P** 22 41 45.2 -0.8
JCT pmax pmax
comp=Z,36nm,1.2s
OLIL **Olney** 43.26 87 IAmb IAmb 22 41 59.8
comp=Z,17nm,0.8s
SUMG **Summit** 43.39 24 P **P** 22 41 51.2 +0.1
SUMG **Summit** 43.39 24 P **P** 22 41 51.2 +0.1
SUMG pmax pmax
comp=Z,17nm,1.3s
JKA **Kamikawa-asahi** 43.70 284 P **P** 22 41 52.9 -0.6
ASAJ **Asahikawa** 43.71 284 P **P** 22 41 53.6 +0.1
comp=Z,37nm,0.8s,baz=62,slow=1.8,SNR=15
comp=Z,37nm,0.8s
USIN **University of** 44.04 87 IAmb IAmb 22 42 05.8
comp=Z,19nm,0.7s
DAG **Danmarks Havn** 44.07 15 *i* P **P** 22 41 56.0 -0.1
SCHQ **Schefferville** 44.20 55 P **P** 22 41 58.1 +0.7
comp=Z,11nm,0.9s,baz=322,slow=7.8,SNR=5.9
comp=Z,11nm,0.9s
P49A **Miami Univ. Ec** 44.61 83 P **P** 22 42 00.3 -0.5
baz=314
HKT **Hockley** 45.33 102⇓ *e* P **P** 22 42 08.1 +1.6
HKT pmax pmax
comp=Z,7.0nm,1.0s
ZEA **Zeya** 45.50 304 *e* P **P** 22 42 07.9 +0.2
ZEA pmax pmax
comp=Z,10.0nm,0.7s
M53A **WI Miller and** 45.56 78 P **P** 22 42 08.0 -0.5
baz=313
R50A **Paris** 45.70 84 IAmb IAmb 22 42 19.0
comp=Z,8.5nm,0.8s
PLAL **Pickwick Lake** 45.93 90 IAmb IAmb 22 42 21.0
comp=Z,9.7nm,0.8s
P52A **Corning** 45.99 81 IAmb IAmb 22 42 12.4
comp=Z,22nm,0.9s
P52A **Corning** 45.99 81 P **P** 22 42 11.4 -0.4
baz=314,SNR=6.2
SPITS **Spitsbergen Ar** 46.01 4 P **P** 22 42 12.4 +0.9
comp=Z,14nm,0.8s,baz=20,slow=2.7,SNR=4.8
comp=Z,14nm,0.8s
O53A **New Philadelph** 46.08 80 P **P** 22 42 11.6 -0.8
baz=314
WBO **Williamsburg** 46.13 71 IAmb IAmb 22 42 14.1
comp=Z,14nm,0.9s
KLR **Kul'dur** 46.14 297 P **P** 22 42 13.4 +0.6
comp=Z,15nm,0.6s,baz=56,slow=6.8,SNR=49
comp=Z,15nm,0.6s
KLR **Kul'dur** 46.14 297 *e* P **P** 22 42 10.8 -2.1
KLR pmax pmax
comp=Z,41nm,1.5s
S51A **Beattyville** 46.56 84 IAmb IAmb 22 42 27.1
comp=Z,12nm,0.8s
LONY **Lake Ozonia** 46.75 71 IAmb IAmb 22 42 19.9
comp=Z,8.4nm,1.1s
HEH **HeiHe** 47.63 300 *e* P **P** 22 42 23.8 -0.7
HEH pmax pmax
comp=Z,16nm,1.3s
D62A **Allapoint, All** 48.01 65 IAmb IAmb 22 42 28.9
comp=Z,15nm,1.1s
V53A **Saluda** 48.40 86 IAmb IAmb 22 42 41.1
comp=Z,14nm,1.1s
BLA **Blacksburg** 48.64 82 IAmb IAmb 22 42 37.5
comp=Z,14nm,0.9s
J61A **Chester** 48.69 71 IAmb IAmb 22 42 34.9
comp=Z,16nm,1.1s
H11N2 **WAKE ISLAND Hy** 48.71 241 T T 23 34 56.7
baz=32,slow=76,SNR=62
H11N3 **WAKE ISLAND Hy** 48.72 241 T T 23 34 58.2
baz=32,slow=76,SNR=87
H11N1 **WAKE ISLAND Hy** 48.73 241 T T 23 35 00.8
baz=32,slow=76,SNR=67
BG3 **Lake Jocassee** 48.83 86 IAmb IAmb 22 42 44.3
comp=Z,15nm,0.8s
Y52A **Lilburn** 49.01 88 IAmb IAmb 22 42 45.6
comp=Z,12nm,0.8s
ODNJ **Ogdensburg** 49.14 74 IAmb IAmb 22 42 37.6
comp=Z,13nm,1.0s
V55A **Taylorsville** 49.17 84 IAmb IAmb 22 42 48.0
comp=Z,15nm,1.0s
F64A **Sherman** 49.19 66 P **P** 22 42 36.7 +0.2
F64A IAmb IAmb 22 42 37.6
comp=Z,12nm,0.8s
L61B **Northampton** 49.24 72 P **P** 22 42 36.1 -0.8
baz=314
USRK **Ussuriysk Ar.** 49.35 292 P **P** 22 42 37.3 -0.5
comp=Z,4.1nm,0.8s,baz=66,slow=7.1,SNR=9.4
comp=Z,4.1nm,0.8s
BATG **Bathurst New B** 49.40 63 P **P** 22 42 38.6 +0.4
BATG IAmb IAmb 22 42 39.5
comp=Z,10nm,0.9s
KMSC **Kings Mountain** 49.62 85 IAmb IAmb 22 42 50.0
comp=Z,11nm,0.8s
HODGE **Hodges** 49.76 86 IAmb IAmb 22 42 51.0
comp=Z,10nm,0.8s
H11S1 **WAKE ISLAND Hy** 49.85 240 T T 23 36 26.8
baz=31,slow=76,SNR=16
H11S2 **WAKE ISLAND Hy** 49.86 240 T T 23 36 38.1
baz=31,slow=76,SNR=42
H11S3 **WAKE ISLAND Hy** 49.87 240 T T 23 36 27.0
baz=31,slow=76,SNR=52
WES **Weston** 50.01 71 IAmb IAmb 22 42 44.9
comp=Z,24nm,0.9s
G65A **Princeton** 50.05 66 IAmb IAmb 22 42 44.3
comp=Z,18nm,1.1s
MDJ **Mudanjiang** 50.31 293 P **P** 22 42 45.0 -0.1
MDJ pmax pmax
comp=Z,15nm,1.6s
BNX **BinXian** 50.66 296 ⇑P **P** 22 42 47.8 +0.1
BNX pmax pmax
comp=Z,13nm,1.3s
MJAR **Matsushiro Arr** 51.35 280 P **P** 22 42 52.7 -0.3
comp=Z,2.5nm,0.8s,baz=42,slow=6.7,SNR=7.6
comp=Z,2.5nm,0.8s
CIT **Chita** 52.84 310 *e* P **P** 22 43 05.0 +1.1
CIT *e* 22 44 12.8
CIT *e* 22 55 53.9
CN2 **Changchun** 53.01 295 *e* P **P** 22 43 04.5 -0.8
CN2 pmax pmax
comp=Z,30nm,0.8s
ARCES **ARCESS Array B** 54.94 2 P **P** 22 43 19.4 +0.4
comp=Z,4.7nm,0.5s,baz=17,slow=6.4,SNR=31
comp=Z,4.7nm,0.5s
KSRS **Korea Array** 56.31 288 P **P** 22 43 29.3 +0.1
comp=Z,5.3nm,0.8s,baz=47,slow=6.3,SNR=20
comp=Z,5.3nm,0.8s
KSAR **Wonju Array Be** 56.34 288 P **P** 22 43 28.6 -0.9
KSAR **Wonju Array Be** 56.34 288 P **P** 22 43 28.6 -0.9
LVZ **Lovozero** 56.61 358 P **P** 22 43 31.8 +0.8
LVZ **Lovozero** 56.61 358⇓ *e* P **P** 22 43 32.2 +1.1
LVZ pmax pmax
comp=Z,22nm,1.3s
XLT **XiLinHaoTe** 57.60 301 *e* P **P** 22 43 39.5 +1.0
XLT pP pwP 22 43 44.8 -1.4
XLT pmax pmax
comp=Z,10.0nm,1.0s
JNU **Nakatsue** 57.93 283 P **P** 22 43 41.2 +0.3
comp=Z,2.7nm,0.8s,baz=19,slow=20,SNR=1.1
comp=Z,2.7nm,0.8s
ZAK **Zakamensk** 58.37 314 *e* P **P** 22 43 44.0 +0.2
ZAK pmax pmax
comp=Z,5.0nm,1.0s
ULN **Ulaanbaatar** 58.73 310 P **P** 22 43 46.0 -0.4
ULN IAmb IAmb 22 43 48.0
comp=Z,9.9nm,1.1s
ULN **Ulaanbaatar** 58.73 310⇑ *e* P **P** 22 43 47.1 +0.7
ULN pmax pmax
comp=Z,8.0nm,0.8s
SONM **Songino Array** 59.04 310 P **P** 22 43 49.3 +0.7
SONM IAmb IAmb 22 43 50.6
comp=Z,17nm,1.0s
SONM **Songino Array** 59.04 310 P **P** 22 43 49.5 +0.9
comp=Z,12nm,0.9s,baz=47,slow=7.4,SNR=44
comp=Z,12nm,0.9s
BJI **Beijing** 60.46 298 P **P** 22 43 58.5 +0.3
BJI pmax pmax
comp=Z,5.0nm,0.6s
BJI LR LR
comp=N,1μm,16.5s
BJI LR LR
comp=E,1μm,22.7s
BJI LR LR
comp=Z,720nm,12.4s
KNGR **Kungurtug, Tuv** 60.46 318⇑ *e* P **P** 22 44 00.2 +2.0
KNGR pmax pmax
comp=Z,8.0nm,1.1s
JOF **Joensuu** 61.64 360 *e* P **P** 22 44 06.8 +0.9
ZAA0 **Zalesovo Array** 62.04 327 P **P** 22 44 09.2 +0.5
ZALV **Zalesovo Beam** 62.04 327 P **P** 22 44 09.4 +0.7
comp=Z,13nm,0.7s,baz=28,slow=6.7,SNR=57
comp=Z,13nm,0.7s
HHC **Hu-ho-hao-te** 62.09 302 *e* P **P** 22 44 08.8 -0.6
HHC pmax pmax
comp=Z,22nm,0.6s
HHC pmax pmax
comp=Z,2μm,5.2s
KEF **Keuruu** 62.30 3 *e* P **P** 22 44 10.5 +0.1
NB2 **NORSAR Subarra** 62.50 11 P **P** 22 44 12.3 +0.6
comp=Z,1.9nm,0.6s,baz=348,slow=6.9
NOA **NORSAR Array B** 62.50 11 P **P** 22 44 12.6 +0.9
comp=Z,3.1nm,0.7s,baz=348,slow=6.8,SNR=18
comp=Z,3.1nm,0.7s
TIA **Tai'an** 62.92 295 P **P** 22 44 15.5 +0.6
TIA pmax pmax
comp=Z,9.0nm,0.7s
FINES **FINESS Array B** 63.06 3 P **P** 22 44 16.2 +0.9
FINES **FINESS Array B** 63.06 3 P **P** 22 44 16.5 +1.1
comp=Z,12nm,0.7s,baz=358,slow=8.4,SNR=46
comp=Z,12nm,0.7s
FINES **FINESS Array B** 63.06 3 P **P** 22 44 16.3 +0.9
HNS **HongShan** 63.22 298 ⇑P **P** 22 44 17.8 +1.0
HNS pmax pmax
comp=Z,23nm,0.8s
RAF **Rauma** 63.32 5 *e* P **P** 22 44 17.6 +0.5
HFS **Hagfors** 63.63 10 P **P** 22 44 19.8 +0.6
comp=Z,2.6nm,0.6s,baz=34,slow=0.5,SNR=12
comp=Z,2.6nm,0.6s
MEF **Metsahovi** 64.24 4 *e* P **P** 22 44 24.1 +0.9
DGZ **Jazzator, Alta** 64.83 323⇑ *i* P **P** 22 44 28.7 +1.2
DGZ pmax pmax
comp=Z,50nm,1.6s
KIRV **Kirov** 65.03 349 P **P** 22 44 28.6 +0.3
comp=Z,11nm,0.7s,baz=224,slow=4.3,SNR=6.0
comp=Z,11nm,0.7s
KIRV **Kirov** 65.03 349⇑ *e* P **P** 22 44 28.8 +0.5
ARBE **Arbavere** 65.07 3 *e* P **P** 22 44 28.1 -0.5
SVE **Sverdlovsk** 65.20 343 *e* P **P** 22 44 30.3 +0.8
SVE pmax pmax
comp=Z,27nm,1.0s
NJ2 **Nanjing** 65.25 291 *e* P **P** 22 44 30.5 +0.3
NJ2 pmax pmax
comp=Z,16nm,1.4s
NJ2 pmax pmax
comp=Z,300nm,7.1s

MTSE **Matsula** 65.72 4 *e*P P 22 44 34.0 +1.2
EKA **Eskdalemuir Ar** 65.82 21 P P 22 44 34.5 +0.9
comp=Z,1.4nm,0.6s,baz=307,slow=5.3,SNR=9.7
comp=Z,1.4nm,0.6s
ARU **Arti** 65.92 344 P P 22 44 34.7 +0.5
ARU **Arti** 65.92 344 P P 22 44 34.5 +0.3
comp=Z,16nm,0.7s,baz=9.6,slow=2.8,SNR=16
comp=Z,16nm,0.7s
ARU **Arti** 65.92 344 *c i*P P 22 44 34.5 +0.3
ARU S **S** 22 53 22.6 +1.6
ARU SS **SS** 22 57 33.9 -0.8
ARU pmax pmax
comp=Z,19nm,0.8s
ARU **Arti** 65.92 344 P P 22 44 33.7 -0.5
comp=Z,32nm,1.0s
VSU **Vasula** 66.07 2 *d i*P P 22 44 36.5 +1.4
VSU pmax pmax
comp=Z,73nm,1.3s
LYN **LuoYang** 66.58 297 *e*P P 22 44 39.8 +1.1
LYN pmax pmax
comp=Z,24nm,0.6s
KURK **Kurchatov** 66.72 329 P P 22 44 39.6 +0.3
KURK **Kurchatov** 66.72 329 P P 22 44 40.3 +0.9
BRVK **Borovoye** 66.78 335 P P 22 44 40.5 +0.7
BRVK **Borovoye** 66.78 335⇑ *e*P P 22 44 40.0 +0.2
BRVK pmax pmax
comp=Z,35nm,1.7s
BVAR **Borovoye Array** 66.78 335 P P 22 44 40.5 +0.7
comp=Z,14nm,0.7s,baz=32,slow=6.9,SNR=59
comp=Z,14nm,0.7s
KURBB **Kurchatov Arra** 66.83 329 P P 22 44 40.3 +0.2
comp=Z,7.6nm,0.7s,baz=26,slow=6.1,SNR=30
comp=Z,7.6nm,0.7s
ZSN **Zaisan** 67.64 324 *e*P P 22 44 45.6 +0.3
comp=Z,7.3nm,0.9s,baz=324
ZSN **Zaisan** 67.64 324 *e*P P 22 44 45.6 +0.3
ZSN pmax pmax
comp=Z,7.0nm,0.9s
PBUR **Paburge** 68.32 5 *e*P P 22 44 50.6 +1.2
GTA **Gaotai** 68.63 309 *e*P P 22 44 52.0 +0.1
GTA pP pwP 22 44 59.8 +0.1
GTA pmax pmax
comp=Z,7.0nm,1.3s
MOS **Moscow** 68.71 356 *e*P P 22 44 52.6 +0.8
MOS pmax pmax
comp=Z,31nm,0.7s
XAN **Xi'an** 68.75 299 ⇑P P 22 44 52.5 0.0
XAN pmax pmax
comp=Z,16nm,1.2s
PABE **Paberze** 68.94 4 *e*P P 22 44 54.9 +1.7
MK31 **Makanchi Array** 69.06 325 P P 22 44 54.5 +0.2
MK31 IAmb IAmb 22 44 55.5
comp=Z,16nm,1.1s
MK31 **Makanchi Array** 69.06 325 *c i*P P 22 44 54.3 0.0
MKAR **Makanchi Array** 69.06 325 P P 22 44 54.7 +0.4
MKAR **Makanchi Array** 69.06 325 P P 22 44 54.4 +0.1
comp=Z,12nm,0.8s,baz=41,slow=6.2,SNR=82
comp=Z,12nm,0.8s
MKAR **Makanchi Array** 69.06 325 P P 22 44 54.7 +0.4
MAKZ **Makanchi** 69.15 325 P P 22 44 55.4 +0.4
MAKZ **Makanchi** 69.15 325 P P 22 44 55.2 +0.4
MAKZ pmax pmax
comp=Z,20nm,0.9s
OBN **Obninsk** 69.38 357 P P 22 44 56.2 +0.2
comp=Z,22nm,0.6s,baz=56,slow=3.0,SNR=7.7
comp=Z,22nm,0.6s
OBN **Obninsk** 69.38 357 *e*P P 22 44 56.9 +0.9
OBN *e* 22 45 19.2
OBN *e* 22 47 29.0
OBN *e*PPP PPP 22 49 11.9
OBN *e*S **S** 22 53 59.0 -3.4
OBN *e*SS **SS** 22 58 28.6 +0.6
OBN pmax pmax
comp=Z,64nm,1.7s
OBN MLR MLR
comp=Z,553nm,17.0s
OBN **Obninsk** 69.38 357 P P 22 44 56.2 +0.2
comp=Z,39nm,1.1s
LZH **Lanzhou** 69.53 304 *e*P P 22 44 57.5 0.0
LZH sP pwP 22 45 03.5 -1.8
LZH pmax pmax
comp=Z,13nm,1.0s
NACGM **Naroch** 69.63 3 *e*P P 22 44 58.6 +1.1
comp=N,2μm,1.2s
MNK **Minsk** 70.06 2 *i*P P 22 45 01.3 +1.1
MNK *i* 22 45 23.6
MNK *i* 22 47 35.5
MNK *i* PPP PPP 22 49 16.9
MNK *i*S **S** 22 54 11.4 +0.9
MNK *i*SS **SS** 22 58 41.0 +2.4
MNK pmax pmax
comp=N,7.0nm,0.8s
MNK pmax pmax
comp=E,20nm,0.9s
MNK pmax pmax
comp=Z,49nm,0.9s
SUW **Suwalki** 70.39 5 P P 22 45 02.7 +0.4
SUW **Suwalki** 70.39 5 *e*P P 22 45 03.1 +0.9
SUW **Suwalki** 70.39 5 P P 22 45 02.7 +0.4
SUW pmax pmax
comp=Z,30nm,0.8s
RUE **Ruedersdorf** 71.19 11 *e*P P 22 45 08.9 +1.8
BELG **Belogornoye** 71.31 349 P P 22 45 08.4 +0.6
comp=Z,27nm,0.8s,baz=335,slow=1.2,SNR=7.4
comp=Z,27nm,0.8s
BELG **Belogornoye** 71.31 349 *c i*P P 22 45 07.9 0.0
BELG pmax pmax
comp=Z,6.0nm,1.0s
AKTO **Aktyubinsk** 71.78 342 P P 22 45 11.4 +0.7
comp=Z,9.1nm,0.6s,baz=43,slow=6.7,SNR=22
comp=Z,9.1nm,0.6s
LPSR **Galich'ya Gora** 71.79 355 *e*P P 22 45 09.7 -1.0
LPSR pmax pmax
comp=Z,20nm,0.7s
TDK **Taldyqorghan** 71.90 327 *e*P P 22 45 11.8 +0.1
comp=Z,18nm,0.9s,baz=326
TDK **Taldyqorghan** 71.90 327 *e*P P 22 45 11.7 +0.1
TDK pmax pmax
comp=Z,18nm,0.9s
CLL **Collm** 72.26 12 *i*P P 22 45 14.4 +0.8
comp=Z,6.0nm,0.9s
CLL **Collm** 72.26 12 *i*P P 22 45 14.4 +0.8
CLL pmax pmax
comp=Z,6.0nm,0.9s
CLL **Collm** 72.26 12 P P 22 45 14.3 +0.7
comp=Z,8.3nm,0.8s
ABKAR **Akbulak array** 72.56 341 P P 22 45 16.6 +1.1
ABKAR IAmb IAmb 22 45 17.2
comp=Z,13nm,0.7s
ABKAR **Akbulak array** 72.56 341 P P 22 45 16.4 +0.9
VORR **Voronezh** 72.70 355 *e*P P 22 45 16.8 +0.6
VORR pmax pmax
comp=Z,11nm,0.8s
VRH **Novokhopyorsk** 73.01 353 *e*P P 22 45 18.3 +0.2
VRH pmax pmax
comp=Z,13nm,1.1s
KSP **Ksiaz** 73.06 10 P P 22 45 18.8 +0.4
comp=Z,16nm,0.9s
RNPP9 **Sopachiv** 73.10 3 P P 22 45 19.4 +0.8
VSR **Storozhevoye** 73.16 355 *e*P P 22 45 18.1 -0.8
VSR pmax pmax
comp=Z,10.0nm,0.6s
BTLS **Baital** 73.16 330 *e*P P 22 45 19.5 +0.3
comp=Z,6.8nm,0.9s,baz=329
BTLS **Baital** 73.16 330 *e*P P 22 45 19.4 +0.3
BTLS pmax pmax
comp=Z,7.0nm,0.9s
RNPP8 **Varash** 73.17 3 P P 22 45 19.8 +0.8
KPKS **Kokpek** 73.19 326 *e*P P 22 45 19.8 +0.4
comp=Z,6.8nm,0.9s,baz=326
KPKS **Kokpek** 73.19 326 *e*P P 22 45 19.8 +0.4
KPKS pmax pmax
comp=Z,7.0nm,0.9s
PVCC **Panska Ves** 73.20 11 *e*P P 22 45 20.9 +1.7
PVCC **Panska Ves** 73.20 11 *e*P P 22 45 20.9 +1.7
SHLS **Shalkode** 73.22 325 *e*P P 22 45 19.1 -0.5
comp=Z,13nm,0.8s,baz=325
SHLS **Shalkode** 73.22 325 *e*P P 22 45 19.1 -0.5
SHLS pmax pmax
comp=Z,13nm,0.8s
CHVC **Chvalec** 73.29 10 *e*P P 22 45 21.2 +1.4
CHVC **Chvalec** 73.29 10 *e*P P 22 45 21.2 +1.4
UZB **Uzynbulak** 73.37 325 *e*P P 22 45 20.6 +0.1
baz=325
UZB **Uzynbulak** 73.37 325 *e*P P 22 45 20.6 +0.1

CHKK **Chushkaly** 73.37 327 *e*P P 22 45 20.4 0.0
baz=327
CHKK **Chushkaly** 73.37 327 *e*P P 22 45 20.4 0.0
VORD **Divnogorie** 73.40 354 *e*P P 22 45 19.3 -1.0
VORD pmax pmax
comp=Z,10.0nm,0.7s
ZHN **Zhinishke** 73.54 326 *e*P P 22 45 21.7 +0.2
baz=326
ZHN **Zhinishke** 73.54 326 *e*P P 22 45 21.7 +0.2
DPC **Dobruska-Polom** 73.55 10 *e*P P 22 45 22.1 +0.7
DPC **Dobruska-Polom** 73.55 10 *e*P P 22 45 22.1 +0.7
SATY **Saty** 73.64 326 *e*P P 22 45 22.3 +0.1
baz=326
SATY **Saty** 73.64 326 *e*P P 22 45 22.2 +0.1
PRU **Pruhonice** 73.73 11 *e*P P 22 45 22.9 +0.6
PRU **Pruhonice** 73.73 11 *e*P P 22 45 22.9 +0.6
AK21 **Malin Array Si** 73.81 1 P P 22 45 22.5 -0.3
CD2 **Chengdu** 73.82 301 P P 22 45 23.3 +0.1
CD2 pmax pmax
comp=Z,10.0nm,0.4s
AK23 **Malin Array Si** 73.82 1 P P 22 45 22.6 -0.2
AK19 **Malin Array Si** 73.86 1 P P 22 45 22.9 -0.2
KRLC **Kraliky** 73.87 9 *e*P P 22 45 24.8 +1.6
KRLC **Kraliky** 73.87 9 *e*P P 22 45 24.8 +1.6
AKASG **Malin Array Be** 73.88 1 P P 22 45 23.6 +0.3
comp=Z,11nm,0.7s,baz=360,slow=5.9,SNR=34
comp=Z,11nm,0.7s
AKBB **Malin Array Si** 73.88 1 *ce*P P 22 45 23.5 +0.3
AKBB **Malin Array Si** 73.88 1 P P 22 45 23.2 0.0
KIEV **Kiev** 73.89 1 ⇑P P 22 45 23.7 +0.5
KIEV **Kiev** 73.89 1 P P 22 45 23.7 +0.5
KIEV **Kiev** 73.89 1 P P 22 45 22.3 -0.9
comp=Z,107nm,1.2s
AAA **Alma-Ata** 73.98 327 *e*P P 22 45 24.2 +0.2
comp=Z,7.4nm,0.6s,baz=327
AAA **Alma-Ata** 73.98 327 *e*P P 22 45 24.2 +0.2
AAA pmax pmax
comp=Z,7.0nm,0.6s
MDOK **Medeo** 73.98 327 *e*P P 22 45 24.0 -0.1
baz=326
MDOK **Medeo** 73.98 327 *e*P P 22 45 24.0 -0.1
TNSS **Tian-Shan** 74.12 327 *e*P P 22 45 25.1 -0.3
baz=327
TNSS **Tian-Shan** 74.12 327 *e*P P 22 45 25.0 -0.3
MORC **Moravsky Berou** 74.23 9 *e*P P 22 45 25.0 +0.6
MORC **Moravsky Berou** 74.23 9 ⇓P P 22 45 25.0 -0.3
MORC **Moravsky Berou** 74.23 9 P P 22 45 25.0 -0.3
ZVC **Zvikov** 74.23 11 *e*P P 22 45 27.0 +1.7
SGDS **Sogindy** 74.45 328 *e*P P 22 45 27.0 +0.2
baz=328
SGDS **Sogindy** 74.45 328 *e*P P 22 45 26.9 +0.2
KHC **Kasperske Hory** 74.47 12 *e*P P 22 45 28.2 +1.5
KHC **Kasperske Hory** 74.47 12 ⇓ *e*P P 22 45 28.6 +1.9
KHC pmax pmax
comp=Z,24nm,2.5s
VRAC **Vranov** 74.61 10 *e*P P 22 45 28.7 +1.2
VRAC **Vranov** 74.61 10 P P 22 45 28.8 +1.3
comp=Z,7.6nm,0.7s,baz=9.8,slow=4.6,SNR=19
comp=Z,7.6nm,0.7s
VRAC **Vranov** 74.61 10 ⇑P P 22 45 29.0 +1.5
LUBAR **Lubar, Ukraine** 74.64 2 P P 22 45 26.2 -1.5
TKM2 **Tokmak 2** 74.64 328 P P 22 45 29.2 +1.1
SNR=15
USP **Ospenovka** 74.65 328 P P 22 45 28.9 +1.0
SNR=20
KWP **Kalwaria Pacla** 74.74 6 P P 22 45 28.6 +0.3
comp=Z,17nm,1.3s
GERES **GERESS Array B** 74.76 12 P P 22 45 29.9 +1.3
comp=Z,2.8nm,0.6s,baz=350,slow=5.4,SNR=18
comp=Z,2.8nm,0.6s
NIE **Niedzica** 74.81 7 P P 22 45 28.9 +0.2
comp=Z,5.9nm,1.6s
CHMS **Chumysh** 74.83 328 P P 22 45 30.5 +1.5
SNR=7.8
KRUC **Moravsky** 74.83 10 *e*P P 22 45 29.4 +0.6
CKRC **Cesky Krumlov** 74.86 11 *e*P P 22 45 30.2 +1.2
CKRC **Cesky Krumlov** 74.86 11 *e*P P 22 45 30.2 +1.2
BOOM **Boomskoye usch** 74.93 327 IAmb IAmb 22 45 31.6
comp=Z,12nm,0.7s
LANS **Liptovska Anna** 75.01 8 *e*P P 22 45 32.0 +2.1
LANS pmax pmax
comp=Z,6.0nm,0.8s
LANS **Liptovska Anna** 75.01 8 *e*P P 22 45 32.0 +2.1
KBK **Karagaybulak** 75.08 328 P P 22 45 32.2 +1.6
SNR=9.1
JAVC **Velka Javorina** 75.15 9 *e*P P 22 45 32.6 +1.9
SHIU **Shidnytsya** 75.18 5 P P 22 45 31.6 +0.7
AAK **Ala-Archa** 75.23 328 P P 22 45 32.6 +1.2
SNR=5.4
AAK **Ala-Archa** 75.23 328 P P 22 45 32.0 +0.6
AAK IAmb IAmb 22 45 33.4
comp=Z,18nm,1.1s
AAK **Ala-Archa** 75.23 328 *de*P P 22 45 32.7 +1.2
AAK pmax pmax
comp=Z,24nm,1.7s
CRVS **Cervenica-Dubn** 75.40 6 *e*P P 22 45 33.2 +1.1
CRVS pmax pmax
comp=Z,17nm,1.3s
CRVS **Cervenica-Dubn** 75.40 6 *e*P P 22 45 33.2 +1.1
KOLS **Kolonicke sedl** 75.41 6 *e*P P 22 45 34.5 +2.3
KOLS *e* 22 45 43.6
KOLS **Kolonicke sedl** 75.41 6 *e*P P 22 45 34.5 +2.3
KOLS *e* 22 45 43.5
EKS2 **Erkin-Say** 75.42 329 P P 22 45 33.7 +1.2
SNR=15
VYHS **Vyhne** 75.61 8 *e*P P 22 45 34.4 +1.1
VYHS pmax pmax
comp=Z,5.0nm,0.9s
VYHS **Vyhne** 75.61 8 *e*P P 22 45 34.4 +1.1
STNU **Starunia** 75.75 4 P P 22 45 33.6 -0.5
MOA **Molln** 75.81 11 *i*pP P 22 45 35.7 +1.2
comp=Z,1.5nm,0.6s
HOLU **Holmets** 75.83 6 P P 22 45 34.7 +0.2
NRN **Naryn** 75.87 327 IAmb IAmb 22 45 37.7
comp=Z,13nm,1.0s
BIOA **Bad Ischl, Aus** 75.89 12 *e*pP P 22 45 36.3 +1.4
comp=Z,4.5nm,0.8s
CONA **Conrad Observa** 75.90 10 *i*pP P 22 45 36.6 +1.6
comp=Z,3.0nm,0.7s
AML **Almayashu** 75.93 329 P P 22 45 37.1 +1.3
SNR=13
KK31 **Karatay Array** 75.94 331 IAmb IAmb 22 45 36.8
comp=Z,15nm,0.8s
KKAR **Karatay Array** 75.94 331 P P 22 45 36.0 +0.7
KKAR **Karatay Array** 75.94 331 P P 22 45 36.0 +0.7
KMPD **K-Podol'skiy** 75.97 3 P P 22 45 35.5 +0.2
KMPD P P 22 45 35.5 +0.2
WATA **Walderalm** 75.99 13 *i*pP P 22 45 37.1 +1.5
comp=Z,2.9nm,0.5s,SNR=5.4
SQTA **Sankt Quirin** 76.05 14 *i*pP P 22 45 37.6 +1.6
comp=Z,5.0nm,0.6s
WTTA **Wattenberg** 76.07 13 *e*pP P 22 45 37.7 +1.6
comp=Z,6.4nm,0.7s,SNR=6.8
BERU **Beregovo** 76.13 6 P P 22 45 36.5 +0.3
KSV **Kosov** 76.17 4 P P 22 45 36.7 +0.2
FETA **Feichten** 76.18 14 *e*pP P 22 45 38.4 +1.6
comp=Z,6.9nm,0.9s
KORU **Korolevo** 76.23 5 P P 22 45 37.7 +0.9
NSLU **Nyzhne Selyshc** 76.26 4 P P 22 45 37.6 +0.6
PSZ **Piszkesteto** 76.27 8 P P 22 45 38.2 +1.1
PSZ IAmb IAmb 22 45 39.8
comp=Z,9.9nm,0.9s
PSZ **Piszkesteto** 76.27 8 ⇑P P 22 45 39.1 +2.0
PSZ **Piszkesteto** 76.27 8 P P 22 45 38.2 +1.1
PSZ pmax pmax
comp=Z,10.0nm,0.9s
TRSU **Trosnyk** 76.29 5 P P 22 45 37.6 +0.5
DAVOX **Davos/Dischmat** 76.30 15 P P 22 45 38.8 +1.3
comp=Z,3.5nm,0.7s,baz=352,slow=3.6,SNR=6.6
comp=Z,3.5nm,0.7s
SORM **Soroca** 76.44 2 ⇑P P 22 45 38.2 +0.2
SORM **Soroca** 76.44 2 P P 22 45 38.2 +0.2
SORM **Soroca** 76.44 2 P P 22 45 37.7 -0.3
comp=Z,22nm,1.2s
KBA **Koelnbreinsper** 76.46 12 *i*pP P 22 45 39.9 +1.6
comp=Z,7.6nm,0.6s
CHM **Chimkent** 76.91 332 *e*P P 22 45 40.9 0.0
comp=Z,8.6nm,0.8s,baz=331
CHM **Chimkent** 76.91 332 *e*P P 22 45 40.8 0.0
CHM pmax pmax
comp=Z,9.0nm,0.8s
MYKA **Terra Mystica** 76.94 12 *e*pP P 22 45 42.6 +1.6
comp=Z,3.5nm,0.7s
SOKA **Soboth** 77.05 11 *e*pP P 22 45 42.9 +1.3
comp=Z,4.0nm,0.7s,SNR=5.2

OBKA **Obir** 77.16 11 *e*pP P 22 45 43.6 +1.4
comp=Z,12nm,0.6s,SNR=11
KSH **Kashi** 77.63 326 P P 22 45 48.5 +3.5
KSH pmax pmax
comp=Z,18nm,0.9s
MILM **Milestii Mici** 77.66 1 ⇓P P 22 45 45.4 +0.4
MILM **Milestii Mici** 77.66 1 P P 22 45 45.3 +0.4
MORH **Mrgy, Hungar** 77.86 9 ⇑P P 22 45 46.6 +0.6
MORH **Mrgy, Hungar** 77.86 9 P P 22 45 46.4 +0.4
comp=Z,7.3nm,0.9s
TESR **Tescani** 78.02 3 P P 22 45 47.1 +0.2
comp=Z,12nm,2.0s
PURM **Purcari** 78.06 1 ⇑P P 22 45 48.0 +0.9
PURM **Purcari** 78.06 1 P P 22 45 47.3 +0.2
comp=Z,41nm,1.0s
ONER **Baraj Valea Uz** 78.19 3 ⇓P P 22 45 49.9 +2.0
OZUR 78.41 4 ⇓P P 22 45 50.6 +1.5
PZH **PanZhiHua** 78.45 300 P P 22 45 49.5 -0.3
PZH pmax pmax
comp=Z,20nm,0.8s
TURR **Turia** 78.46 3 ⇓P P 22 45 51.0 +1.5
GHRR 78.50 2 P P 22 45 49.7 +0.2
SURR **Surduc** 78.57 6 ⇑P P 22 45 51.4 +1.5
VRI **Vrincioaia** 78.67 3 ⇓P P 22 45 51.8 +1.3
VRI **Vrincioaia** 78.67 3 P P 22 45 51.8 +1.3
VRI **Vrincioaia** 78.67 3 P P 22 45 52.0 +1.5
comp=Z,3.2nm,0.6s
COVR **Voineasa-Covas** 78.67 3 ⇑P P 22 45 52.6 +2.0
BTK **Batken** 78.68 330 IAmb IAmb 22 45 52.4
comp=Z,18nm,0.9s
PLOR3 **Plostina Array** 78.68 3 P P 22 45 51.6 +1.0
comp=Z,14nm,1.1s
PLOR **Plostina** 78.68 3 ⇓P P 22 45 52.1 +1.5
PLOR **Plostina** 78.68 3 P P 22 45 52.1 +1.5
PLOR5 **Plostina Array** 78.69 3 P P 22 45 51.6 +0.9
comp=Z,8.5nm,1.2s
ODBI **Odobesti** 78.78 3 P P 22 45 52.1 +1.0
comp=Z,4.6nm,0.4s
GZR **Gura Zlata** 78.97 6 ⇓P P 22 45 53.4 +1.1
GZR **Gura Zlata** 78.97 6 P P 22 45 53.4 +1.1
GOF **Gofitskoye** 79.02 351 *ce*P P 22 45 53.2 +0.8
MLR **Muntele Rosu** 79.02 4 P P 22 45 54.5 +1.9
comp=Z,4.1nm,0.6s,baz=27,slow=0.9,SNR=13
comp=Z,4.1nm,0.6s
MLR **Muntele Rosu** 79.02 4 ⇑P P 22 45 54.6 +2.0
MLR **Muntele Rosu** 79.02 4 P P 22 45 53.7 +1.1
comp=Z,13nm,1.1s
VOIR 79.04 4 P P 22 45 54.3 +1.6
VOIR 79.04 4 P P 22 45 54.3 +1.6
VOIR 79.04 4 P P 22 45 53.6 +0.9
comp=Z,7.6nm,0.7s
ARR **Arges** 79.09 4 P P 22 45 54.0 +1.0
CFR **Carcaliu** 79.39 2 ⇑P P 22 45 55.7 +1.2
CFR **Carcaliu** 79.39 2 P P 22 45 55.6 +1.2
TPGR **Topolog** 79.72 2 ⇓P P 22 45 57.1 +0.8
GAR **Garm** 79.80 330 P P 22 45 56.9 -0.1
KIV **Kislovodsk** 80.14 351 P P 22 45 59.2 +0.6
KIV IAmb IAmb 22 46 00.7
comp=Z,16nm,0.8s
KIV **Kislovodsk** 80.14 351 ⇑P P 22 45 59.9 +1.2
KIV **Kislovodsk** 80.14 351 *e*P P 22 45 59.8 +1.1
KIV pmax pmax
comp=Z,15nm,1.0s
KBZ **Khabaz** 80.35 351 P P 22 46 00.8 +1.2
comp=Z,8.0nm,0.8s,baz=217,slow=4.5,SNR=20
comp=Z,8.0nm,0.8s
KBZ **Khabaz** 80.35 351 ⇑ *e*P P 22 46 00.8 +1.2
KBZ pmax pmax
comp=Z,11nm,0.9s
SHA1 **Shidzhatmaz** 80.36 351 *de*P P 22 46 01.5 +1.5
ESDC **Sonseca Array** 80.40 27 P P 22 46 00.8 +0.7
ESDC **Sonseca Array** 80.40 27 P P 22 46 01.0 +0.8
comp=Z,1.5nm,0.8s,baz=332,slow=5.2,SNR=12
comp=Z,1.5nm,0.8s
CHGR **Chuyangaron** 80.45 331 P P 22 46 00.9 +0.5
CHGR **Chuyangaron** 80.45 331 P P 22 46 00.9 +0.5
CHGR pmax pmax
comp=Z,87nm,0.7s
SIMJ **Simiganj** 80.49 331 P P 22 46 00.9 +0.2
NCK **Nalchik** 80.52 351 ⇑ *e*P P 22 46 02.3 +1.7
NCK pmax pmax
comp=Z,17nm,0.9s
VSLR **Vesyoloye** 80.83 353 ⇑ *e*P P 22 46 03.0 +0.7
VSLR pmax pmax
comp=Z,12nm,1.0s
FNA **Florina** 83.47 7 IAmb IAmb 22 46 17.7
comp=Z,9.6nm,1.2s
GNI **Garni** 83.72 349 P P 22 46 18.5 +0.8
comp=Z,8.4nm,0.8s,baz=41,slow=12,SNR=3.6
comp=Z,8.4nm,0.8s
GNI **Garni** 83.72 349 ⇑ *e*P P 22 46 19.8 +2.1
GNI pmax pmax
comp=Z,12nm,1.0s
NIL **Nilore** 83.87 326 P P 22 46 18.7 +0.3
NIL **Nilore** 83.87 326 P P 22 46 18.7 +0.3
NIL pmax pmax
comp=Z,20nm,1.0s
CRAI **Chiangrai** 84.39 298 IAmb IAmb 22 46 21.6
comp=Z,6.8nm,0.7s
ANTO **Ankara** 84.71 359 P P 22 46 24.6 +2.0
BR106 **Keskin Array S** 84.83 358 P P 22 46 23.6 +0.3
comp=Z,4.5nm,1.0s
BR131 **Keskin Array S** 84.84 358 *d i*P P 22 46 24.2 +0.9
BRTR **Keskin Array B** 84.84 358 P P 22 46 24.0 +0.7
BRTR **Keskin Array B** 84.84 358 P P 22 46 24.4 +1.0
comp=Z,4.1nm,0.9s,baz=355,slow=2.2,SNR=20
comp=Z,4.1nm,0.9s
BRTR **Keskin Array B** 84.84 358 *i*P P 22 46 24.3 +0.9
BRTR pmax pmax
comp=Z,4.0nm,0.9s
BR105 **Keskin Array S** 84.85 358 P P 22 46 24.3 +0.9
comp=Z,5.4nm,1.0s,comp=Z,54nm
BR104 **Keskin Array S** 84.86 358 P P 22 46 24.3 +0.9
ATAH **Atahualpa** 85.22 110 LR LR 23 24 39.4
comp=Z,2μm,19.9s,baz=70,slow=36
BNN **Bunyan** 85.65 356 P P 22 46 28.8 +1.4
CMAR **Chiang Mai Arr** 86.61 298 P P 22 46 32.2 0.0
CMAR **Chiang Mai Arr** 86.61 298 P P 22 46 32.1 -0.2
comp=Z,8.0nm,0.7s,baz=9.9,slow=5.0,SNR=42
comp=Z,8.0nm,0.7s
CMAR **Chiang Mai Arr** 86.61 298 *i*P P 22 46 32.0 -0.2
CMAR pmax pmax
comp=Z,9.0nm,0.7s
KEST **Kesra** 87.02 17 P P 22 46 34.3 +0.2
comp=Z,2.7nm,0.8s,baz=21,slow=2.2,SNR=4.2
comp=Z,2.7nm,0.8s
QSPA **South Pole Qui** 145.56 180 PKPbc PKPab 22 53 25.1 -1.0
comp=Z,9.6nm,1.0s,baz=66,slow=0.7,SNR=18
BOSA **Boshof** 152.56 11 PKPbc PKiKP 22 53 44.9 -0.4
comp=Z,2.7nm,0.6s,baz=353,slow=1.9,SNR=8.7
SNAA **Sanae** 158.65 151 ⇑PKPab PKPab 22 54 18.1 -2.3
comp=Z,13nm,0.7s
SNAA **Sanae** 158.65 151 PKPab PKPab 22 54 19.5 -0.8
comp=Z,0.6nm,0.6s,baz=287,slow=7.4,SNR=1.4
TROLL **Troll, Antarti** 159.84 155 ⇑PKPab PKPab 22 54 24.8 -0.8
comp=Z,91nm,0.7s
ELIB **Princess Elisa** 163.45 172 *d*PKPdf PKPdf 22 53 51.2 +1.3

*JMA* ***25*** *22:39:44.5±0.4,33°N±4°×13°8E±°, h359km, MV3.2/37, FAR S OFF TOKAI DISTRICT*
*IDC* ***25*** *22:39:44.4±3.7,32°.88N×137°.25E, h342km±107km, mb2.7/3, mbtmp3.4/5, Error ellipse: s-maj=230.3km s-min=22.4km az=62.0*
**ISC 25 22:39:45.1±1.0, 33°.07N±0°.09×137°.7E±0°.1, h350km, n16, σ2s06/23, mb2.9/3, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TTO1 | **TONANKAI O.B.S** | 0.95 | 306 | *e*P | Pn | 22 40 32.3 | +2.1 |
| JIE | **Ise** | 1.56 | 328 | *e*P | Pn | 22 40 35.4 | +2.0 |
| JHJ | **Hachijo jima 2** | 1.75 | 88 | P | Pn | 22 40 35.6 | +0.9 |
| | 40nm,0.5s,baz=8.4,slow=22,SNR=1.0 | | | | | | |
| JHJ | | | | S | S | 22 41 18.0 | +3.5 |
| | 108nm,0.9s,baz=74,slow=22,SNR=1.6 | | | | | | |
| JNY | **Yasuok** | 2.29 | 3 | P | Pn | 22 40 41.9 | +3.4 |
| BSO3 | **Boso 3** | 2.90 | 53 | *e*S | S | 22 41 31.4 | +1.4 |
| JHU | **Hanno** | 3.07 | 25 | P | Pn | 22 40 46.8 | +1.8 |
| JHU | | | | *e*S | S | 22 41 33.9 | +0.7 |
| JRY | **Ryogami san** | 3.10 | 18 | P | Pn | 22 40 48.0 | +2.7 |
| JRY | | | | *e*S | S | 22 41 37.6 | +3.7 |
| BSO1 | **Boso 1** | 3.15 | 59 | *e*S | S | 22 41 34.9 | +1.4 |
| MJAR | **Matsushiro Arr** | 3.49 | 7 | P | Pn | 22 40 50.7 | +1.8 |
| | 6.2nm,0.7s,baz=186,slow=9.9,SNR=23 | | | | | | |
| JAG | **Ashikaga** | 3.65 | 23 | P | Pn | 22 40 51.2 | +0.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JAG | | | | *e*S | **S** | 22 41 41.8 | -1.3 |
| **JYT** | **Yasato** | **3.76** | **32** | P | **Pn** | 22 40 52.1 | +0.5 |
| JYT | | | | S | **S** | 22 41 44.6 | -0.6 |
| **JHO** | **Hitachi** | **4.25** | **33** | P | **Pn** | 22 40 57.1 | +0.5 |
| JHO | | | | S | **S** | 22 41 52.6 | -1.6 |
| **JFK** | **Kawauchi** | **5.01** | **30** | P | **Pn** | 22 41 06.5 | +1.7 |
| JFK | | | | S | **S** | 22 42 07.8 | -1.5 |
| **MKAR** | **Makanchi Array** | **43.77** | **305** | P | **P** | 22 47 15.2 | -2.0 |
| | 1.0nm,0.8s,baz=87,slow=7.4,SNR=3.0<br>1.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **52.81** | **184** | P | **P** | 22 48 23.9 | -1.9 |
| | 0.2nm,0.3s,baz=355,slow=7.6,SNR=5.5<br>0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **56.53** | **184** | P | **P** | 22 48 51.2 | -1.0 |
| | 0.1nm,0.5s,baz=20,slow=13,SNR=4.3<br>0.1nm,0.5s | | | | | | |

*IDC* ***25*** *22:40:35.9±1.4,34.67N×46.12E, h0km, mb3.8/9, mbtmp3.8/14, ML3.4/5, Error ellipse: s-maj=24.4km s-min=17.6km az=130.0*
*TEH* ***25*** *22:40:36.2, 34.62N×46.19E, h6km±31km, ML3.7*
*ISN* ***25*** *22:40:36.0±0.3, 34.62N×46.16E, h6km±3km, ML3.8*
*NEIC* ***25*** *22:40:37.0±1.2, 34.64N±0.09×46.3E±0.1, h10km±2km, mb4.3/11, Error ellipse: s-maj=22.7km s-min=3.0km az=229.0*

**ISC 25 22:40:36.9±1.1, 34.65N±0.03×46.18E±0.03, h9km±8km, n59, σ1s45/67, mb3.9/12, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.18** | **74** | Pg | **Pg** | **22 40 41.4** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **0.45** | **135** | Pg | **Pg** | **22 40 45.6** | **-0.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.51** | **254** | Pg | **Pb** | **22 40 47.2** | **-0.9** |
| KGS1 | | | | Sg | **Sb** | **22 40 54.8** | **-0.8** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **203** | Pg | **Pg** | **22 40 48.0** | **-0.2** |
| **ILIN** | **Lien** | **0.70** | **67** | Pg | **Pb** | **22 40 50.8** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **118** | Pg | **Pb** | **22 40 52.2** | **-1.0** |
| KCHF | | | | Sg | **Sb** | **22 41 04.4** | **+0.1** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **179** | Pg | **Pb** | **22 40 56.1** | **-0.8** |
| **SNQR** | **Sonqor, Kerman** | **1.21** | **80** | Pg | **Pn** | **22 41 00.3** | **0.0** |
| **IBDR** | **Badra** | **1.55** | **188** | *e*Pn | **Pb** | **22 41 05.5** | **-0.3** |
| IBDR | | | | *e*Sn | **Sg** | **22 41 27.0** | **+0.2** |
| IBDR | | | | AML | AML | 22 41 31.9 | |
| | comp=N,908nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 22 41 36.4 | |
| | comp=E,1μm,0.6s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.60** | **339** | Pg | **Pg** | **22 41 07.4** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.69** | **297** | *e*Pn | **Pb** | **22 41 08.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **22 41 31.0** | **-0.1** |
| IKRK | | | | AML | AML | 22 41 36.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 22 41 39.8 | |
| | comp=E,1μm,0.7s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.78** | **129** | Pg | **Pg** | **22 41 10.3** | **-0.8** |
| **IDOB** | **Doab** | **1.87** | **117** | Pn | **Pb** | **22 41 11.1** | **-0.3** |
| **BHD** | **Baghdad** | **2.03** | **228** | *e*Pn | **Pn** | **22 41 12.0** | **+0.6** |
| BHD | | | | *e*Sn | **Sb** | **22 41 38.5** | **-0.9** |
| **HSAM** | **Samen** | **2.05** | **102** | Pn | **Pb** | **22 41 14.6** | **0.0** |
| **MAHB** | **Mahabad** | **2.15** | **350** | Pn | **Pb** | **22 41 16.3** | **+0.2** |
| **HAGD** | **Aghdareh** | **2.44** | **85** | Pn | **Pb** | **22 41 20.2** | **-1.0** |
| **IHSH** | **Hashtrud** | **2.79** | **18** | Pn | **Pb** | **22 41 24.6** | **-2.6** |
| **RAFI** | **Al-Rafai** | **2.92** | **181** | *e*Pn | **Pn** | **22 41 24.5** | **+0.9** |
| RAFI | | | | *e*Sn | **Sn** | **22 42 00.0** | **+1.2** |
| **IAZR** | **Azarshahr** | **3.02** | **357** | Pn | **Pb** | **22 41 28.0** | **-3.2** |
| **ISRB** | **Sarab** | **3.39** | **20** | Pn | **Pb** | **22 41 33.5** | **-3.8** |
| **ISHB** | **Shabestar** | **3.65** | **353** | Pn | **Pn** | **22 41 37.0** | **+3.1** |
| **IHRS** | **Heris** | **3.73** | **10** | Pn | **Pn** | **22 41 38.4** | **+3.5** |
| **IQOM** | **Qom** | **4.03** | **86** | Pn | **Pn** | **22 41 41.8** | **+2.7** |
| **IMRD** | **Marand** | **4.07** | **355** | Pn | **Pn** | **22 41 43.1** | **+3.5** |
| **QAMS** | **Qamsar** | **4.42** | **100** | Pn | **Pn** | **22 41 47.1** | **+2.6** |
| **ZNGN** | **Zangian** | **4.66** | **122** | Pn | **Pn** | **22 41 49.9** | **+2.1** |
| **GURO** | **Guroymak-BITLI** | **5.13** | **321** | | **Pn** | **22 41 55.5** | **+1.4** |
| **GNI** | **Garni** | **5.61** | **349** | Pn | **Pn** | **22 42 03.3** | **+2.6** |
| | comp=E,0.2nm,0.3s,baz=249,slow=21,SNR=1.8 | | | | | | |
| GNI | | | | Lg | Lg | 22 43 32.3 | |
| | comp=E,0.2nm,0.3s,baz=70,slow=6.0,SNR=1.9<br>comp=E,4.2nm,0.8s | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **7.69** | **307** | Pn | **Pn** | **22 42 32.9** | **+3.7** |
| **ASF** | **Jabal al Asfar** | **8.14** | **255** | Pn | **Pn** | **22 42 35.0** | **-0.5** |
| | comp=E,0.3nm,0.3s,baz=89,slow=0.0,SNR=1.9 | | | | | | |
| ASF | | | | Sn | **Sn** | **22 44 05.4** | **-2.3** |
| | comp=E,0.3nm,0.3s,baz=342,slow=0.1,SNR=1.7<br>comp=E,1.0nm,0.3s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.11** | **263** | Pn | **Pn** | **22 42 49.0** | **+0.2** |
| | comp=E,0.7nm,0.3s,baz=61,slow=14,SNR=4.4 | | | | | | |
| MMAI | | | | Sn | **Sn** | **22 44 32.0** | **+0.5** |
| | comp=E,0.2nm,0.3s,baz=283,slow=41,SNR=1.5<br>comp=E,0.4nm,0.3s | | | | | | |
| **EIL** | **Elat** | **10.73** | **246** | Pn | **Pn** | **22 43 10.4** | **-0.4** |
| | comp=E,0.2nm,0.3s,baz=4.7,slow=18,SNR=1.7 | | | | | | |
| EIL | | | | Lg | Lg | 22 46 15.8 | |
| | comp=E,0.2nm,0.3s,baz=18,slow=21,SNR=1.8<br>comp=E,2.3nm,0.8s | | | | | | |
| **UOSS** | **Minazif** | **13.00** | **135** | Pn | **Pn** | **22 43 40.6** | **-1.3** |
| **WSAR** | **Wadi Sarin** | **15.73** | **133** | Pn | **Pn** | **22 44 18.4** | **-0.5** |
| | comp=E,0.9nm,0.3s,baz=324,slow=9.0,SNR=8.4<br>comp=E,2.9nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **17.78** | **31** | P | **P** | **22 44 45.2** | **-0.1** |
| **MLR** | **Muntele Rosu** | **18.84** | **311** | | **Pn** | **22 44 58.5** | **+0.8** |
| **MLR** | **Muntele Rosu** | **18.84** | **311** | P | **Pn** | **22 44 59.1** | **+1.3** |
| | comp=E,1.4nm,0.7s,baz=216,slow=7.5,SNR=3.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **20.24** | **328** | P | **P** | **22 45 12.3** | **0.0** |
| | comp=E,0.5nm,0.3s,baz=138,slow=8.8,SNR=10<br>comp=E,0.5nm,0.3s | | | | | | |
| **AKBB** | **Malin Array Si** | **20.24** | **328** | P | **P** | **22 45 12.0** | **-0.3** |
| AKBB | | | | IAmb | IAmb | 22 45 24.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **20.24** | **328** | | **P** | **22 45 11.9** | **-0.3** |
| KIEV | | | | IAmb | IAmb | 22 45 24.6 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **BURAR** | **Bucovina Array** | **20.34** | **316** | P | **P** | **22 45 13.7** | **+0.2** |
| **BUR08** | **Bucovina Ar. S** | **20.37** | **316** | P | **P** | **22 45 13.9** | **0.0** |
| BUR08 | | | | IAmb | IAmb | 22 45 42.5 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **MI28** | **Mi28,Pidlybu** | **21.10** | **326** | P | **P** | **22 45 21.5** | **-0.1** |
| **PUK** | **Puka** | **21.84** | **298** | P | **P** | **22 45 30.9** | **+1.1** |
| PUK | | | | IAmb | IAmb | 22 45 55.7 | |
| | comp=Z,4.8nm,1.2s | | | | | | |
| **MORS** | **Morshin** | **21.90** | **318** | P | **P** | **22 45 30.3** | **+0.1** |
| **PSZ** | **Piszkesteto** | **23.65** | **312** | P | **P** | **22 45 48.6** | **+0.1** |
| PSZ | | | | IAmb | IAmb | 22 45 56.5 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **OJC** | **Ojcow** | **24.74** | **317** | P | **P** | **22 45 58.9** | **+0.3** |
| OJC | | | | IAmb | IAmb | 22 46 01.4 | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.68** | **55** | P | **P** | **22 46 44.2** | **+1.2** |
| | comp=Z,0.7nm,0.8s,baz=251,slow=10,SNR=1.9<br>comp=Z,0.7nm,0.8s | | | | | | |
| **FIA1** | **FINESS Array S** | **29.73** | **341** | P | **P** | **22 46 42.6** | **-0.7** |
| **FINES** | **FINESS Array B** | **29.73** | **341** | P | **P** | **22 46 43.1** | **-0.1** |
| | comp=Z,0.9nm,0.4s,baz=146,slow=11,SNR=8.3<br>comp=Z,0.9nm,0.4s | | | | | | |
| **BNI** | **Bardonecchia** | **31.77** | **301** | P | **P** | **22 47 01.3** | **-0.3** |
| BNI | | | | IAmb | IAmb | 22 47 29.5 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **HFS** | **Hagfors** | **33.06** | **330** | P | **P** | **22 47 12.7** | **+0.1** |
| | comp=Z,3.4nm,0.6s,baz=133,slow=8.7,SNR=15<br>comp=Z,3.4nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **36.76** | **348** | P | **P** | **22 47 44.5** | **0.0** |
| | comp=Z,0.5nm,0.5s,baz=155,slow=9.5,SNR=4.8<br>comp=Z,0.5nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.52** | **317** | P | **P** | **22 48 07.4** | **-0.4** |
| | comp=Z,0.7nm,0.4s,baz=105,slow=8.8,SNR=14<br>comp=Z,0.7nm,0.4s | | | | | | |
| **EKB** | **Eskdalemuir** | **39.54** | **317** | P | **P** | **22 48 07.2** | **-0.7** |
| **ESDC** | **Sonseca Array** | **39.85** | **292** | P | **P** | **22 48 10.3** | **-0.5** |
| | comp=Z,0.9nm,0.9s,baz=76,slow=11,SNR=5.0<br>comp=Z,0.9nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.50** | **253** | P | **P** | **22 48 57.0** | **+0.1** |
| | comp=Z,0.3nm,0.8s,baz=44,slow=7.5,SNR=1.9<br>comp=Z,0.3nm,0.8s | | | | | | |
| **SCHQ** | **Schefferville** | **74.03** | **326** | P | **P** | **22 52 12.1** | **-0.8** |
| | comp=Z,2.7nm,0.7s,baz=268,slow=16,SNR=2.0<br>comp=Z,2.7nm,0.7s | | | | | | |

**TEH 25 22:47:20.4, 37.27N×54.61E, h20km±19km, ML3.5, Iran-Turkmenistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IMND** | **Minoodasht** | **0.64** | **91** | Pg | Pb | 22 47 32.8 | -0.1 |
| **IGLO** | **Ghaloghah** | **0.99** | **219** | Pg | Pn | 22 47 39.4 | 0.0 |
| **MRVT** | **Maraveh tapeh** | **1.24** | **71** | Pg | Pb | 22 47 43.7 | +0.4 |
| **IALA** | **Alasht** | **1.87** | **231** | Pn | Pb | 22 47 53.6 | -0.4 |
| **IANJ** | **Anjilo** | **1.88** | **197** | Pn | Pb | 22 47 53.8 | -0.5 |
| **IPRN** | **Peran** | **2.09** | **241** | Pn | Pn | 22 47 55.8 | +1.4 |
| **IFIR** | **Firoozkooh** | **2.21** | **223** | Pn | Pb | 22 47 58.8 | -1.0 |
| **ILAS** | **Lasjerd** | **2.31** | **216** | Pn | Pn | 22 47 59.5 | +1.9 |
| **SBZV** | **Sabzevar** | **2.57** | **109** | Pn | Pn | 22 48 03.1 | +2.0 |
| **MZPU** | **Pul - Mazandar** | **2.57** | **252** | Pn | Pb | 22 48 03.8 | -2.3 |
| **KLST** | **Kelardasht - M** | **2.94** | **256** | Pn | Pn | 22 48 07.5 | +1.1 |
| **TAPT** | **Tabas- Tapeh t** | **3.15** | **138** | Pn | Pn | 22 48 11.1 | +2.1 |
| **IEMG** | **Emamgholi** | **3.23** | **86** | Pn | Pn | 22 48 11.9 | +1.6 |
| **IVRN** | **Varamin** | **3.25** | **227** | Pn | Pn | 22 48 13.0 | +2.6 |
| **IAKL** | **Akhelmad** | **3.39** | **100** | Pn | Pn | 22 48 14.5 | +2.0 |
| **IPAY** | **Payeh** | **3.61** | **102** | Pn | Pn | 22 48 17.7 | +2.2 |
| **IGZV** | **Ghazvin** | **3.63** | **257** | Pn | Pn | 22 48 17.7 | +2.0 |
| **TNSJ** | **Nastanj** | **3.68** | **153** | Pn | Pn | 22 48 18.3 | +2.0 |
| **IKRD** | **Kardeh** | **3.96** | **96** | Pn | Pn | 22 48 22.2 | +2.0 |
| **IMOG** | **Moghan** | **3.98** | **106** | Pn | Pn | 22 48 23.2 | +2.7 |
| **ANAR** | **Anarak** | **4.13** | **190** | Pn | Pn | 22 48 24.3 | +1.7 |
| **TKDS** | **Koohdasht(Taba** | **4.19** | **150** | Pn | Pn | 22 48 24.8 | +1.5 |
| **TPRV** | **Parvadeh(Tabas** | **4.56** | **157** | Pn | Pn | 22 48 30.0 | +1.6 |
| **ISAD** | **Sadrabad** | **5.40** | **188** | Pn | Pn | 22 48 41.7 | +1.6 |
| **IBAF** | **Bafgh** | **5.72** | **172** | Pn | Pn | 22 48 46.1 | +1.7 |

*ISN* ***25*** *22:47:44.8±0.5, 34.64N×46.19E, h6km±4km, ML4.1*
*TEH* ***25*** *22:47:46.6, 34.62N×46.18E, h6km±28km, ML3.9*
*IDC* ***25*** *22:47:47.3±1.7, 34.72N×46.05E, h0km, mb3.8/9, mbtmp3.7/16, ML3.3/6, MS4.4/2, Error ellipse: s-maj=30.8km s-min=16.3km az=148.0*

**ISC 25 22:47:47.5±1.2, 34.61N±0.03×46.17E±0.03, h9km±9km, n64, σ1s68/70, mb3.7/10, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.20** | **64** | Pg | **Pg** | **22 47 52.1** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.43** | **130** | Pg | **Pg** | **22 47 56.5** | **+0.4** |
| IGHG | | | | Sg | **Sb** | **22 48 03.7** | **-0.6** |
| **KGS1** | **Ghasr-e-Shirin** | **0.49** | **258** | Pg | **Pg** | **22 47 57.4** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **203** | Pg | **Pg** | **22 47 58.3** | **+0.3** |
| **ILIN** | **Lien** | **0.72** | **65** | Pg | **Pg** | **22 48 01.3** | **-0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **115** | Pg | **Pg** | **22 48 02.8** | **-0.1** |
| KCHF | | | | Sg | **Sb** | **22 48 15.0** | **+0.3** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **178** | Pg | **Pg** | **22 48 06.6** | **+0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.23** | **78** | Pg | **Pb** | **22 48 10.6** | **-0.5** |
| **IBZA** | **Bozab** | **1.40** | **95** | Pg | **Pg** | **22 48 14.4** | **-0.1** |
| **IBDR** | **Badra** | **1.51** | **188** | *e*Pn | **Pn** | **22 48 14.6** | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | **22 48 36.5** | **+0.4** |
| **SDS1** | **Sardasht. Az.** | **1.63** | **340** | Pg | **Pb** | **22 48 17.6** | **-0.3** |
| **IKRK** | **Kirkuk** | **1.69** | **298** | *e*Pn | **Pb** | **22 48 17.0** | **-0.4** |
| IKRK | | | | *e*Sn | **Sn** | **22 48 40.0** | **+0.8** |
| IKRK | | | | AML | AML | 22 48 46.4 | |
| | comp=N,4μm,0.2s | | | | | | |
| IKRK | | | | AML | AML | 22 48 49.7 | |
| | comp=E,3μm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.77** | **127** | Pg | **Pg** | **22 48 20.9** | **-0.5** |
| **IDOB** | **Doab** | **1.86** | **116** | Pn | **Pb** | **22 48 21.9** | **+0.1** |
| **BHD** | **Baghdad** | **2.00** | **229** | *e*Pn | **Pn** | **22 48 21.0** | **-0.5** |
| BHD | | | | *e*Sn | **Sn** | **22 48 48.0** | **+1.3** |
| BHD | | | | AML | AML | 22 48 56.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| **HSAM** | **Samen** | **2.05** | **101** | Pn | **Pb** | **22 48 25.0** | **-0.2** |
| **MAHB** | **Mahabad** | **2.18** | **350** | Pn | **Pb** | **22 48 26.7** | **-0.6** |
| **HAGD** | **Aghdareh** | **2.46** | **84** | Pn | **Pb** | **22 48 31.0** | **-1.1** |
| **IHSH** | **Hashtrud** | **2.83** | **18** | Pn | **Pb** | **22 48 36.1** | **-2.4** |
| **RAFI** | **Al-Rafai** | **2.88** | **181** | *e*Pn | **Pn** | **22 48 33.6** | **-0.1** |
| RAFI | | | | *e*Sn | **Sn** | **22 49 09.0** | **+0.5** |
| **IAZR** | **Azarshahr** | **3.06** | **357** | Pn | **Pn** | **22 48 39.0** | **+2.5** |
| **IRAZ** | **Razeghan** | **3.19** | **75** | Pn | **Pn** | **22 48 40.3** | **+2.2** |
| **CUKT** | **Cukurca** | **3.35** | **322** | *e*P | **Pn** | **22 48 39.8** | **-0.5** |
| **ISRB** | **Sarab** | **3.43** | **20** | Pn | **Pn** | **22 48 42.8** | **+1.3** |
| **ITBZ** | **Tabriz** | **3.62** | **360** | Pn | **Pn** | **22 48 45.7** | **+1.7** |
| **ISHB** | **Shabestar** | **3.69** | **353** | Pn | **Pn** | **22 48 46.9** | **+1.9** |
| **IHRS** | **Heris** | **3.77** | **11** | Pn | **Pn** | **22 48 48.7** | **+2.6** |
| **IMRD** | **Marand** | **4.11** | **355** | Pn | **Pn** | **22 48 53.3** | **+2.5** |
| **QAMS** | **Qamsar** | **4.42** | **100** | Pn | **Pn** | **22 48 57.1** | **+2.0** |
| **AKDM** | **Akdamar-Van** | **4.51** | **326** | *e*P | **Pn** | **22 48 58.6** | **+2.3** |
| **VANB** | **Van** | **4.56** | **331** | *e*P | **Pn** | **22 48 58.9** | **+2.0** |
| **IBRJ** | **Brojen** | **5.05** | **121** | Pn | **Pn** | **22 49 06.1** | **+2.4** |
| **GURO** | **Guroymak-BITLI** | **5.15** | **321** | *e*P | **Pn** | **22 49 05.7** | **+0.7** |
| **SVAN** | **Silvan-Diyarba** | **5.34** | **313** | *e*P | **Pn** | **22 49 07.9** | **+0.3** |
| **MAZI** | **Mazidag** | **5.44** | **303** | *e*P | **Pn** | **22 49 10.5** | **+1.6** |
| **AGRB** | **Hanur-Agry** | **5.57** | **334** | *e*P | **Pn** | **22 49 14.6** | **+3.8** |
| **GNI** | **Garni** | **5.64** | **349** | *e*P | **Pb** | **22 49 21.8** | **-4.5** |
| **GNI** | **Garni** | **5.64** | **349** | Pn | **Pn** | **22 49 14.9** | **+3.1** |
| | comp=E,0.3nm,0.3s,baz=21,slow=19,SNR=1.4 | | | | | | |
| GNI | | | | Pg | **Pb** | **22 49 26.2** | **-0.1** |
| | comp=E,0.7nm,0.3s,baz=153,slow=18,SNR=3.5 | | | | | | |
| GNI | | | | Lg | Lg | 22 50 51.8 | |
| | baz=173,slow=17<br>comp=E,2.2nm,0.4s | | | | | | |
| **DYBB** | **Diyarbakir** | **5.90** | **306** | *e*P | **Pn** | **22 49 16.5** | **+1.2** |
| **VRTB** | **Varto-Mus** | **5.91** | **322** | *e*P | **Pn** | **22 49 16.4** | **+1.0** |
| **SENK** | **Senkaya-Erzuru** | **6.67** | **334** | *e*P | **Pn** | **22 49 30.1** | **+4.2** |
| **SVRC** | **Sivrice-ELAZID** | **6.68** | **306** | *e*P | **Pn** | **22 49 27.6** | **+1.5** |
| **PTK** | **Pertek** | **6.92** | **310** | *e*P | **Pn** | **22 49 30.4** | **+1.1** |
| **ASF** | **Jabal al Asfar** | **8.12** | **255** | Pn | **Pn** | **22 49 45.3** | **-0.5** |
| | comp=E,0.3nm,0.3s,baz=228,slow=0.1,SNR=1.9 | | | | | | |
| ASF | | | | LR | LR | 22 53 22.4 | |
| | comp=E,1μm,21.9s,baz=354,slow=42<br>comp=E,3.4nm,0.7s | | | | | | |
| **ASF** | **Jabal al Asfar** | **8.12** | **255** | P | **Pn** | **22 49 43.7** | **-2.1** |
| **MMA0** | **Mount Meron ar** | **9.10** | **263** | P | Pn | 22 49 54.3 | -4.9 |
| **MMAI** | **Mount Meron Ar** | **9.10** | **263** | Pn | **Pn** | **22 49 59.1** | **0.0** |
| | comp=E,0.9nm,0.3s,baz=75,slow=16,SNR=6.5 | | | | | | |
| MMAI | | | | Lg | Lg | 22 52 34.2 | |
| | comp=E,0.7nm,0.3s,baz=76,slow=40,SNR=2.0<br>comp=E,0.9nm,0.4s | | | | | | |
| **QRNJ** | **Al-Qirein** | **9.13** | **259** | P | **Pn** | **22 49 57.2** | **-2.3** |
| **MBRI** | **Mt Berech** | **10.67** | **246** | P | **Pn** | **22 50 17.9** | **-2.8** |
| **EIL** | **Elat** | **10.71** | **246** | Pn | **Pn** | **22 50 22.3** | **+1.1** |
| | comp=E,0.5nm,0.3s,baz=303,slow=20,SNR=1.9 | | | | | | |
| EIL | | | | Lg | Lg | 22 53 12.7 | |
| | comp=E,0.2nm,0.3s,baz=313,slow=10,SNR=1.6<br>comp=E,1.9nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **11.22** | **301** | Pn | **Pn** | **22 50 31.4** | **+3.1** |
| | baz=135,slow=16,SNR=4.1<br>comp=E,0.6nm,0.8s | | | | | | |
| **WSAR** | **Wadi Sarin** | **15.71** | **133** | Pn | **Pn** | **22 51 27.2** | **-2.1** |
| | comp=E,1.4nm,0.3s,baz=322,slow=10,SNR=11 | | | | | | |
| **IDI** | **Anoyia** | **17.46** | **278** | Pn | **Pn** | **22 51 51.3** | **-0.1** |
| | comp=E,2.3nm,0.7s,baz=265,slow=16,SNR=1.1 | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.03** | **25** | P | **P** | **22 51 59.1** | **+0.4** |
| | comp=E,0.2nm,0.3s,baz=204,slow=12,SNR=6.9 | | | | | | |
| AKTO | | | | LR | LR | 22 59 39.1 | |
| | comp=E,2μm,19.3s,baz=169,slow=40<br>comp=E,2.4nm,0.7s | | | | | | |
| **KSH** | **Kashi** | **24.22** | **70** | P | **P** | **22 53 01.8** | **-3.0** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,2.1s | | | | | | |
| **BVAR** | **Bovroye Array** | **25.18** | **36** | P | **P** | **22 53 14.8** | **+1.6** |
| | comp=Z,0.7nm,0.5s,baz=231,slow=9.0,SNR=4.3<br>comp=Z,0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.71** | **55** | P | **P** | **22 53 54.9** | **+1.0** |
| | comp=Z,0.8nm,0.9s,baz=248,slow=6.5,SNR=2.5<br>comp=Z,0.8nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **29.76** | **341** | P | **P** | **22 53 53.4** | **-0.8** |
| | comp=Z,3.7nm,1.1s,baz=137,slow=6.9,SNR=5.5<br>comp=Z,3.7nm,1.1s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **29.82** | **305** | P | **P** | **22 53 55.6** | **+0.6** |
| | comp=Z,1.2nm,0.7s,baz=13,slow=23,SNR=1.6<br>comp=Z,1.2nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **33.09** | **331** | P | **P** | **22 54 22.2** | **-1.3** |
| | comp=Z,1.4nm,0.5s,baz=123,slow=7.3,SNR=8.6<br>comp=Z,1.4nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **34.62** | **331** | P | **P** | **22 54 36.1** | **-0.7** |
| | comp=Z,0.5nm,0.7s,baz=124,slow=8.8,SNR=3.7<br>comp=Z,0.5nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.54** | **317** | P | **P** | **22 55 18.2** | **-0.4** |
| | comp=Z,0.9nm,0.5s,baz=106,slow=8.6,SNR=8.0<br>comp=Z,0.9nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.86** | **292** | P | **P** | **22 55 21.2** | **-0.4** |
| | comp=Z,0.7nm,1.0s,baz=81,slow=7.9,SNR=3.3<br>comp=Z,0.7nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.48** | **253** | P | **P** | **22 56 07.6** | **+0.2** |
| | comp=Z,0.6nm,0.8s,baz=56,slow=7.1,SNR=2.7<br>comp=Z,0.6nm,0.8s | | | | | | |

*PRU* ***25*** *22:55:02.7, 49.85N×18.48E, h0km*
**IPEC 25 22:55:01.6±0.3, 49.82N×18.53E, h1km, ML0.9/4, Error ellipse: s-maj=2.1km s-min=1.9km az=111.0, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKC** | **Ostrava-Krasne** | **0.25** | **274** | *e*PG | Pg | 22 55 07.0 | +0.6 |
| OKC | | | | *e*SG | Sg | 22 55 10.5 | +0.9 |
| **MORC** | **Moravsky Berou** | **0.64** | **267** | *e*Pg | Pg | 22 55 14.1 | +0.2 |
| | baz=86 | | | | | | |
| MORC | | | | *e*Sg | Sg | 22 55 21.6 | -0.6 |
| | 5.2nm,0.4s,baz=86 | | | | | | |
| **MORC** | **Moravsky Berou** | **0.64** | **267** | *e*PG | Pg | 22 55 14.2 | +0.3 |
| MORC | | | | *e*SG | Sg | 22 55 21.7 | -0.5 |
| **LANS** | **Liptovska Anna** | **0.91** | **137** | *e*PG | Pb | 22 55 19.8 | -0.3 |
| LANS | | | | *e*SG | Sb | 22 55 32.4 | -0.3 |
| LANS | | | | *e*LG | Lg | 22 55 37.3 | |
| **KRLC** | **Kraliky** | **1.16** | **283** | *e*PG | Pg | 22 55 22.3 | -1.5 |
| KRLC | | | | *e*SG | Sg | 22 55 38.6 | -0.2 |
| **KRLC** | **Kraliky** | **1.16** | **283** | *e* | Pg | 22 55 22.3 | -1.5 |
| **KRLC** | **Kraliky** | **1.16** | **283** | *e* | Sg | 22 55 38.6 | -0.2 |
| **VYHS** | **Vyhne** | **1.34** | **171** | *e*PG | Pn | 22 55 27.5 | 0.0 |
| VYHS | | | | *e*SG | Sn | 22 55 45.6 | -0.3 |
| **VRAC** | **Vranov** | **1.36** | **249** | *e*Pg | Pg | 22 55 27.0 | -0.7 |
| | baz=67 | | | | | | |
| VRAC | | | | *e*Sg | Sg | 22 55 44.2 | -1.1 |
| | 1.4nm,0.3s,baz=67 | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.52** | **291** | *e*PG | Pn | 22 55 28.4 | -1.6 |
| DPC | | | | *e*SG | Sb | 22 55 49.4 | -1.0 |
| **DPC** | **Dobruska-Polom** | **1.52** | **291** | *e* | Pn | 22 55 28.4 | -1.6 |
| **KRUC** | **Moravsky** | **1.59** | **242** | *e*Pg | Pn | 22 55 30.5 | -0.3 |
| | baz=61 | | | | | | |
| KRUC | | | | *e*Sg | Sn | 22 55 51.1 | -0.9 |
| | 0.8nm,0.2s,baz=61 | | | | | | |
| **KRUC** | **Moravsky** | **1.59** | **242** | *e*PG | Pn | 22 55 30.6 | -0.2 |
| KRUC | | | | *e*SG | Sn | 22 55 51.2 | -0.8 |
| **UPC** | **Upice** | **1.76** | **294** | *e*PG | Pn | 22 55 33.5 | +0.3 |
| **CHVC** | **Chvalec** | **1.77** | **297** | *e*PG | Pb | 22 55 34.5 | -0.3 |
| **CHVC** | **Chvalec** | **1.77** | **297** | *e* | Pb | 22 55 34.5 | -0.3 |
| **KHC** | **Kasperske Hory** | **3.30** | **260** | *e*SG | Sg | 22 56 46.7 | -0.9 |

*ISN* ***25*** *23:03:54.5±0.4, 34.60N×46.11E, h6km±3km, ML3.1*
*TEH* ***25*** *23:03:54.7, 34.62N×46.17E, h8km±27km, ML3.0*

**ISC 25 23:03:54.8±1.1, 34.63N±0.03×46.16E±0.03, h6km±12km, n19, σ1s91/24, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.20** | **70** | Pg | **Pg** | **23 03 59.1** | **+0.3** |
| IDHR | | | | Sg | **Sg** | **23 04 02.4** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **0.45** | **131** | Pg | **Pg** | **23 04 03.4** | **-0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.48** | **255** | Pg | **Pb** | **23 04 04.9** | **-0.9** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **202** | Pg | **Pg** | **23 04 05.4** | **-0.1** |
| **ILIN** | **Lien** | **0.72** | **66** | Pg | **Pg** | **23 04 08.2** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **0.81** | **116** | Pg | **Pg** | **23 04 10.2** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **178** | Pg | **Pb** | **23 04 13.8** | **-0.9** |
| **SNQR** | **Sonqor, Kerman** | **1.23** | **79** | Pg | **Pg** | **23 04 18.0** | **-0.4** |
| **IBZA** | **Bozab** | **1.42** | **96** | Pg | **Pn** | **23 04 21.2** | **-0.1** |
| **IBDR** | **Badra** | **1.53** | **187** | *e*Pn | **Pg** | **23 04 23.5** | **-0.6** |
| IBDR | | | | *e*Sn | **Sg** | **23 04 45.0** | **+1.1** |
| **SDS1** | **Sardasht. Az.** | **1.61** | **340** | Pg | **Pb** | **23 04 24.8** | **-0.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BHD | | | | | AML | AML | 23 16 14.9 |
| | comp=E,230nm,0.2s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.23** | **188** | *e*Pn | **Pn** | | **23 15 26.0 +1.2** |
| RAFI | | | | *e*Sn | **Sb** | | **23 15 54.5 -1.3** |
| RAFI | | | | | AML | AML | 23 16 00.3 |
| | comp=E,144nm,0.6s | | | | | | |
| RAFI | | | | | AML | AML | 23 16 01.4 |
| | comp=N,176nm,0.3s | | | | | | |
| **IKRK** | **Kirkuk** | **2.29** | **310** | *e*Pn | **Pb** | | **23 15 28.0 -1.4** |
| IKRK | | | | *e*Sn | **Sb** | | **23 15 57.0 -0.7** |

*IDC* ***25*** *23:14:47.6±1.4, 1°.99N×128°.40E, h0km, mb3.5/6, mbtmp3.5/6, Error ellipse: s-maj=130.1km s-min=18.7km az=69.0*

**ISC 25 23:14:58.2**±1.6,**2°.0N**±0°.5×**12°9E**±°,**h92km**,**n6**,σ0**72/6, mb3.6/6, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.50** | **166** | P | **P** | **23 19 49.3** | **-1.1** |
| | 0.3nm,0.6s,baz=345,slow=11,SNR=2.5 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **26.01** | **169** | P | **P** | **23 20 23.2** | **+0.4** |
| | 0.1nm,0.4s,baz=353,slow=8.2,SNR=6.7 0.1nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **35.85** | **161** | P | **P** | **23 21 49.6** | **+0.4** |
| | 0.7nm,0.4s,baz=326,slow=11,SNR=1.4 0.7nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **49.56** | **340** | P | **P** | **23 23 39.8** | **-0.1** |
| | 0.5nm,0.8s,baz=149,slow=8.7,SNR=2.8 0.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.07** | **325** | P | **P** | **23 24 55.9** | **+0.1** |
| | 0.8nm,0.7s,baz=115,slow=8.2,SNR=8.6 0.8nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.23** | **327** | P | **P** | **23 25 23.3** | **-0.1** |
| | 0.6nm,0.6s,baz=128,slow=6.1,SNR=8.1 0.6nm,0.6s | | | | | | |

*JMA* ***25*** *23:19:12.2±0.5, 34°.2N×13°.7E±°, h418km±4km, MV3.1/58, SE OFF KII PENINSULA*

*IDC* ***25*** *23:19:16.5±1.4, 33°.85N×136°.93E, h400km±28km, mb2.7/4, mbtmp3.4/7, Error ellipse: s-maj=59.4km s-min=18.8km az=59.0*

**ISC 25 23:19:15.1**±1.3,**33°.8N**±0°.1×**136°.95E**±0°.09,**h400km**,**n28, σ1°51/30, mb2.9/4, Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIE** | **Ise** | **0.62** | **341** | P | **Pn** | **23 20 05.2** | **+0.2** |
| **JKN2** | **Miekihoku** | **0.71** | **308** | P | **Pn** | **23 20 05.0** | **-0.3** |
| **JTNC** | **Tanabenakahech** | **1.12** | **271** | *e*P | **Pn** | **23 20 06.0** | **-0.7** |
| **JWY** | **Kouya** | **1.21** | **291** | P | **Pn** | **23 20 06.7** | **-0.3** |
| **JHMK** | **Hamakita** | **1.21** | **33** | P | **Pn** | **23 20 07.4** | **+0.7** |
| **HMMJ** | **Hamamatsu 2** | **1.23** | **31** | *e*P | **Pn** | **23 20 07.8** | **+0.9** |
| **JAO** | **Obara** | **1.48** | **10** | P | **Pn** | **23 20 09.0** | **+0.8** |
| **JNY** | **Yasuok** | **1.73** | **25** | *e*P | **Pn** | **23 20 10.4** | **+1.0** |
| **JWT** | **Wachi** | **1.96** | **320** | *e*P | **Pn** | **23 20 10.8** | **+0.1** |
| **JAI** | **Aioi** | **2.08** | **270** | P | **Pn** | **23 20 10.4** | **-1.1** |
| **JKG** | **Kaga** | **2.52** | **349** | *e*P | **Pn** | **23 20 15.2** | **+0.7** |
| **JRY** | **Ryogami san** | **2.73** | **35** | P | **Pn** | **23 20 17.9** | **+1.8** |
| **JHU** | **Hanno** | **2.80** | **42** | P | **Pn** | **23 20 17.7** | **+1.1** |
| **MAT** | **Matsushiro** | **2.92** | **20** | *e*P | **Pn** | **23 20 18.8** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **2.92** | **20** | P | **Pn** | **23 20 18.8** | **+1.2** |
| | 4.5nm,0.7s,baz=198,slow=9.5,SNR=18 | | | | | | |
| **BSO4** | **Boso 4** | **3.04** | **66** | *e*S | **S** | **23 21 09.7** | **-0.1** |
| **BSO3** | **Boso 3** | **3.11** | **70** | S | **S** | **23 21 09.8** | **-0.7** |
| **JAG** | **Ashikaga** | **3.33** | **37** | P | **Pn** | **23 20 21.3** | **+0.3** |
| JAG | | | | S | S | **23 21 12.7** | **-1.7** |
| **BSO1** | **Boso 1** | **3.44** | **75** | S | **S** | **23 21 14.2** | **-1.0** |
| **JYT** | **Yasato** | **3.60** | **47** | P | **Pn** | **23 20 23.5** | **+0.2** |
| JYT | | | | *e*S | **S** | **23 21 15.1** | **-3.6** |
| **JHO** | **Hitachi** | **4.08** | **46** | P | **Pn** | **23 20 28.3** | **+0.5** |
| JHO | | | | S | **S** | **23 21 23.7** | **-3.2** |
| **JFK** | **Kawauchi** | **4.78** | **41** | P | **Pn** | **23 20 35.8** | **+1.0** |
| JFK | | | | *e*S | **S** | **23 21 35.6** | **-4.1** |
| **KSRS** | **Korea Array** | **8.21** | **299** | P | **P** | **23 21 13.4** | **+0.7** |
| | 1.2nm,0.6s,baz=116,slow=13,SNR=6.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.08** | **341** | P | **P** | **23 21 44.8** | **+0.4** |
| | 0.5nm,0.4s,baz=144,slow=10,SNR=1.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.84** | **304** | P | **P** | **23 26 37.2** | **+1.5** |
| | 0.2nm,0.8s,baz=77,slow=9.6,SNR=1.7 0.2nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.20** | **310** | P | **P** | **23 26 54.6** | **+0.5** |
| | 0.2nm,0.4s,baz=88,slow=10.0,SNR=1.7 0.2nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.50** | **183** | P | P | 23 27 57.6 | +1.3 |
| | 0.7nm,0.3s,baz=0.3,slow=7.6,SNR=21 0.7nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **57.22** | **183** | P | P | 23 28 24.6 | +2.1 |
| | 0.2nm,0.3s,baz=18,slow=12,SNR=6.9 0.2nm,0.3s | | | | | | |

*NEIC* ***25*** *23:21:07.3±1.3, 69°.61N±0°.05×144°.08W±0°.08, h12km±7km, Error ellipse: s-maj=7.0km s-min=3.9km az=195.0*

**AEIC 25 23:21:06.7**±1.4,**69°.48N**±0°.05×**144°.28W**±0°.09,**h13**km±6km**, ML3.2, ML2.6**/14(NEIC),**Error ellipse: s-maj=7.5km s-min=4.1km az=195.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **54** | | Pg | 23 21 10.9 | -0.9 |
| C27K | | | | | Sg | 23 21 14.1 | -1.3 |
| C27K | | | | IAML | | 23 21 14.9 | |
| | comp=N,1μm,0.2s | | | | | | |
| C27K | | | | IAML | | 23 21 15.0 | |
| | comp=E,998nm,0.3s | | | | | | |
| **C26K** | **Camden Bay** | **0.49** | **333** | | Pg | 23 21 16.4 | +0.1 |
| C26K | | | | | Sb | 23 21 23.6 | -0.5 |
| **C26K** | **Camden Bay** | **0.49** | **333** | IAML | | 23 21 25.9 | |
| | comp=N,450nm,0.4s | | | | | | |
| **D25K** | **Kavik River** | **0.76** | **259** | Pg | Pg | 23 21 20.4 | -1.0 |
| D25K | | | | | Sg | 23 21 31.4 | +0.1 |
| **D27M** | **Malcolm River** | **1.20** | **100** | | Pn | 23 21 28.1 | -1.0 |
| D27M | | | | IAML | | 23 21 48.1 | |
| | comp=N,95nm,0.3s | | | | | | |
| D27M | | | | IAML | | 23 21 50.5 | |
| | comp=E,80nm,0.3s | | | | | | |
| **D27M** | **Malcolm River** | **1.20** | **100** | | Sn | 23 21 45.2 | 0.0 |
| **C24K** | **Franklin Bluff** | **1.57** | **281** | | Pg | 23 21 36.4 | -0.4 |
| **C24K** | **Franklin Bluff** | **1.57** | **281** | | Sg | 23 21 57.5 | +0.5 |
| **E27K** | **Coleen River** | **1.63** | **142** | Pn | Pb | 23 21 36.6 | +0.1 |
| E27K | | | | | Sg | 23 21 58.6 | -0.3 |
| E27K | | | | IAML | | 23 22 00.9 | |
| | comp=E,60nm,0.5s | | | | | | |
| E27K | | | | IAML | | 23 22 03.3 | |
| | comp=N,50nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.65** | **260** | | Pg | 23 21 37.9 | -0.4 |
| D24K | | | | | Sg | 23 22 00.7 | +1.1 |
| **F26K** | **Sheenjek River** | **1.80** | **178** | | Pb | 23 21 39.8 | +0.4 |
| F26K | | | | | Sg | 23 22 04.4 | -0.1 |
| **E28M** | **Babbage River** | **1.92** | **115** | Pn | Pb | 23 21 40.7 | -0.8 |
| **E28M** | **Babbage River** | **1.92** | **115** | | Sb | 23 22 06.3 | +1.1 |
| **F25K** | **Christian Rive** | **1.96** | **195** | | Pb | 23 21 42.4 | +0.1 |
| F25K | | | | | Sg | 23 22 08.8 | -1.0 |
| **BMAR** | **Burnt Mountain** | **2.07** | **183** | | Pb | 23 21 43.5 | -0.5 |
| **TOLK** | **Toolik Lake Re** | **2.08** | **248** | | Pb | 23 21 43.9 | -0.4 |
| **E24K** | **Your Creek** | **2.09** | **229** | Pn | Pb | 23 21 43.7 | -0.6 |
| E24K | | | | | Sb | 23 22 11.8 | +1.8 |
| **C23K** | **Itkillik River** | **2.24** | **282** | Pn | Pn | 23 21 45.0 | +1.6 |
| **D23K** | **Nanushuk River** | **2.34** | **260** | Pn | Pb | 23 21 47.5 | -1.1 |
| **F24K** | **Squaw Lake** | **2.38** | **216** | Pn | Pn | 23 21 47.1 | +1.8 |
| **F28M** | **Old Crow** | **2.48** | **137** | Pn | Pn | 23 21 47.9 | +1.3 |
| **E29M** | **Blow River** | **2.56** | **113** | | Pn | 23 21 49.2 | +1.5 |
| **G25K** | **Bearman Lake** | **2.82** | **195** | | Pb | 23 21 54.4 | -2.3 |
| **G27K** | **Doyon Strip** | **2.86** | **159** | Pn | Pn | 23 21 53.7 | +1.8 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **205** | Pn | Pn | 23 21 56.4 | +2.0 |
| **E22K** | **Anaktuvuk Pass** | **3.05** | **247** | | Pn | 23 21 55.9 | +1.3 |
| **D22K** | **Ayikyak River** | **3.06** | **263** | | Pn | 23 21 56.3 | +1.7 |
| **B22K** | **Teshekpuk Lake** | **3.27** | **289** | Pn | Pn | 23 21 59.6 | +2.2 |
| **G29M** | **Pine Creek** | **3.48** | **135** | Pn | Pn | 23 22 02.0 | +1.6 |
| **B21K** | **Ikpikpuk River** | **3.63** | **277** | Pn | Pn | 23 22 04.5 | +2.1 |
| **E21K** | **Killik River** | **3.65** | **258** | Pn | Pn | 23 22 04.1 | +1.4 |
| **C21K** | **Knifeblade Rid** | **3.74** | **270** | | Pn | 23 22 06.2 | +2.2 |
| **H24K** | **Noodor Dome** | **3.91** | **202** | | Pn | 23 22 08.1 | +1.8 |
| **A22K** | **Sinclair Lake** | **3.94** | **298** | | Pn | 23 22 08.0 | +1.4 |
| **H29M** | **Whitestone** | **3.97** | **143** | Pn | Pn | 23 22 09.4 | +2.3 |
| **F21K** | **Alatna River** | **4.10** | **241** | | Pn | 23 22 11.1 | +2.2 |
| **H23K** | **Yukon River** | **4.19** | **211** | Pn | Pn | 23 22 11.7 | +1.6 |
| **I26K** | **Coal Creek Min** | **4.22** | **174** | Pn | Pn | 23 22 12.9 | +2.4 |
| **I28M** | **Miner Creek** | **4.38** | **156** | Pn | Pn | 23 22 15.7 | +2.8 |
| **B20K** | **Meade River** | **4.51** | **283** | | Pn | 23 22 15.8 | +1.4 |
| **G31M** | **Satah River** | **4.53** | **120** | Pn | Pn | 23 22 16.3 | +1.6 |
| **POKR** | **Poker Plat Res** | **4.55** | **197** | Pn | Pn | 23 22 18.1 | +2.9 |
| **G21K** | **Allakaket** | **4.57** | **234** | Pn | Pn | 23 22 18.3 | +2.9 |
| **MDM** | **Murphy Dome** | **4.80** | **201** | | Pn | 23 22 20.5 | +2.0 |
| **EGAK** | **Eagle** | **4.88** | **164** | Pn | Pn | 23 22 21.3 | +1.7 |
| **F20K** | **Avaraart Lake** | **4.91** | **246** | Pn | Pn | 23 22 23.0 | +3.1 |
| **J25K** | **Salcha River,** | **4.91** | **186** | | Pn | 23 22 21.5 | +1.4 |
| **CCB** | **Clear Creek Bu** | **5.05** | **198** | | Pn | 23 22 24.4 | +2.5 |
| **D19K** | **Kuna River** | **5.08** | **265** | Pn | Pn | 23 22 24.1 | +1.8 |
| **I30M** | **Mount Dempster** | **5.25** | **141** | Pn | Pn | 23 22 26.3 | +1.4 |
| **C19K** | **Lookout Ridge** | **5.44** | **273** | | Pn | 23 22 29.2 | +1.8 |
| **SCRK** | **Sand Creek** | **5.53** | **179** | | Pn | 23 22 31.4 | +2.7 |
| **J30M** | **Hart River** | **5.83** | **144** | Pn | Pn | 23 22 34.6 | +1.9 |
| **C18K** | **Utukok River** | **6.12** | **270** | | Pn | 23 22 38.0 | +1.4 |
| **K29M** | **Barlow Dome** | **6.26** | **151** | Pn | Pn | 23 22 40.8 | +2.0 |
| **E18K** | **Tukpahlearik C** | **6.35** | **259** | | Pn | 23 22 41.1 | +1.4 |
| **BCAR** | **Beaver Creek A** | **6.53** | **170** | Pn | Pn | 23 22 43.9 | +1.7 |
| **A36M** | **Sachs Harbour** | **6.76** | **59** | Pn | Pn | 23 22 44.2 | -1.2 |
| **C36M** | **Paulatuk** | **7.12** | **82** | Pn | Pn | 23 22 49.9 | -0.2 |
| **M29M** | **Somme Creek** | **7.46** | **159** | Pn | Pn | 23 22 57.1 | +2.1 |

*NEIC* ***25*** *23:21:57.7±1.2, 68°.89N±0°.03×148°.21W±0°.08, h9km±6km, Error ellipse: s-maj=4.2km s-min=3.7km az=115.0*

**AEIC 25 23:21:56.3**±2.1,**68°.87N**±0°.02×**148°.13W**±0°.08,**h15**km±6km**, ML3.1, ML3.2**/122(NEIC),**Error ellipse: s-maj=4.5km s-min=2.8km az=77.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **D24K** | **Happy Valley** | **0.38** | **319** | Pg | Pb | 23 22 04.3 | -0.4 |
| D24K | | | | Sg | Sb | 23 22 10.6 | +0.2 |
| **TOLK** | **Toolik Lake Re** | **0.57** | **247** | | Pg | 23 22 07.4 | -0.2 |
| TOLK | | | | Sg | Sb | 23 22 16.9 | +0.8 |
| TOLK | | | | IAML | | 23 22 19.0 | |
| | comp=N,1μm,0.9s | | | | | | |
| **D25K** | **Kavik River** | **0.78** | **54** | Pg | Pg | 23 22 10.8 | -0.5 |
| **E24K** | **Your Creek** | **0.81** | **189** | | Sb | 23 22 23.1 | +0.2 |
| **C24K** | **Franklin Bluff** | **0.88** | **347** | Pg | Pn | 23 22 13.8 | -0.2 |
| C24K | | | | | Sn | 23 22 27.7 | +1.2 |
| C24K | | | | IAML | | 23 22 30.5 | |
| | comp=N,900nm,0.5s | | | | | | |
| **D23K** | **Nanushuk River** | **0.93** | **277** | | Pn | 23 22 15.0 | +0.2 |
| **D23K** | **Nanushuk River** | **0.93** | **277** | | Sn | 23 22 27.8 | 0.0 |
| **D23K** | **Nanushuk River** | **0.93** | **277** | IAML | | 23 22 34.0 | |
| | comp=E,613nm,0.6s | | | | | | |
| D23K | | | | IAML | | 23 22 35.7 | |
| | comp=N,587nm,0.8s | | | | | | |
| **E23K** | **Chandalar** | **0.98** | **215** | | Pb | 23 22 15.0 | -0.1 |
| **C23K** | **Itkillik River** | **1.31** | **319** | | Pg | 23 22 21.2 | -0.2 |
| **C23K** | **Itkillik River** | **1.31** | **319** | | Sg | 23 22 39.3 | +0.8 |
| **C23K** | **Itkillik River** | **1.31** | **319** | IAML | | 23 22 41.9 | |
| | comp=N,446nm,0.7s | | | | | | |
| C23K | | | | IAML | | 23 22 47.6 | |
| | comp=E,478nm,0.6s | | | | | | |
| **F24K** | **Squaw Lake** | **1.36** | **176** | Pn | Pb | 23 22 21.9 | +0.5 |
| **F24K** | **Squaw Lake** | **1.36** | **176** | | Sg | 23 22 40.4 | +0.3 |
| **F24K** | **Squaw Lake** | **1.36** | **176** | IAML | | 23 22 41.7 | |
| | comp=N,526nm,0.5s | | | | | | |
| F24K | | | | IAML | | 23 22 41.8 | |
| | comp=E,455nm,0.5s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **1.55** | **243** | Pn | Pb | 23 22 24.9 | +0.3 |
| **C26K** | **Camden Bay** | **1.55** | **46** | | Pg | 23 22 25.6 | -0.4 |
| **C26K** | **Camden Bay** | **1.55** | **46** | IAML | | 23 22 55.2 | |
| | comp=E,386nm,0.9s | | | | | | |
| C26K | | | | IAML | | 23 22 55.9 | |
| | comp=N,302nm,0.5s | | | | | | |
| **F25K** | **Christian Rive** | **1.58** | **143** | Pn | Pg | 23 22 26.0 | -0.7 |
| **F25K** | **Christian Rive** | **1.58** | **143** | | Sg | 23 22 47.1 | -0.2 |
| **F25K** | **Christian Rive** | **1.58** | **143** | IAML | | 23 22 50.0 | |
| | comp=E,181nm,0.6s | | | | | | |
| F25K | | | | IAML | | 23 22 50.7 | |
| | comp=N,192nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **1.65** | **272** | Pn | Pb | 23 22 27.0 | +0.7 |
| **C27K** | **Jago River** | **1.75** | **62** | Pn | Pb | 23 22 27.8 | -0.2 |
| C27K | | | | IAML | | 23 22 57.5 | |
| | comp=N,239nm,0.6s | | | | | | |
| **COLD** | **Coldfoot** | **1.83** | **206** | | Pb | 23 22 29.5 | +0.2 |
| COLD | | | | | Sg | 23 22 53.8 | -1.2 |
| **F26K** | **Sheenjek River** | **1.90** | **127** | | Pb | 23 22 31.0 | +0.4 |
| **BMAR** | **Burnt Mountain** | **1.97** | **136** | Pn | Pb | 23 22 31.8 | +0.1 |
| **F22K** | **John River** | **2.04** | **230** | | Pb | 23 22 32.9 | -0.1 |
| **E21K** | **Killik River** | **2.18** | **261** | Pn | Pn | 23 22 33.5 | +1.5 |
| E21K | | | | IAML | | 23 23 06.4 | |
| | comp=E,143nm,1.1s | | | | | | |
| E21K | | | | IAML | | 23 23 20.8 | |
| | comp=N,154nm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **2.20** | **173** | Pn | Pb | 23 22 34.2 | -1.5 |
| **G25K** | **Bearman Lake** | **2.25** | **159** | | Pb | 23 22 35.7 | -0.8 |
| **G23K** | **Bananza Creek** | **2.29** | **199** | Pn | Pn | 23 22 35.4 | +1.9 |
| G23K | | | | IAML | | 23 23 12.8 | |
| | comp=N,105nm,0.6s | | | | | | |
| G23K | | | | IAML | | 23 23 17.2 | |
| | comp=E,158nm,0.8s | | | | | | |
| **G22K** | **Bettles** | **2.34** | **215** | | Pb | 23 22 36.6 | -1.4 |
| **B22K** | **Teshekpuk Lake** | **2.37** | **311** | | Pb | 23 22 35.9 | +1.4 |
| B22K | | | | IAML | | 23 23 27.1 | |
| | comp=E,114nm,1.0s | | | | | | |
| **B21K** | **Ikpikpuk River** | **2.43** | **291** | Pn | Pb | 23 22 37.5 | -2.1 |
| B21K | | | | IAML | | 23 23 21.5 | |
| | comp=N,122nm,1.0s | | | | | | |
| B21K | | | | IAML | | 23 23 27.8 | |
| | comp=E,120nm,1.0s | | | | | | |
| **E27K** | **Coleen River** | **2.50** | **103** | Pn | Pb | 23 22 39.5 | -1.4 |
| **FYU** | **Fort Yukon** | **2.57** | **153** | | Pb | 23 22 40.7 | -1.2 |
| FYU | | | | IAML | | 23 23 25.1 | |
| | comp=N,107nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **2.61** | **233** | Pn | Pn | 23 22 39.8 | +1.9 |
| F21K | | | | IAML | | 23 23 25.3 | |
| | comp=N,104nm,0.5s | | | | | | |
| F21K | | | | IAML | | 23 23 28.0 | |
| | comp=E,111nm,0.7s | | | | | | |
| **H25L** | **Birch Creek** | **2.76** | **160** | | Pn | 23 22 42.1 | +2.2 |
| **H24K** | **Noodor Dome** | **3.05** | **178** | Pn | Pn | 23 22 46.8 | +2.8 |
| H24K | | | | IAML | | 23 23 41.7 | |
| | comp=N,63nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **3.11** | **191** | | Pn | 23 22 46.8 | +2.1 |
| H23K | | | | IAML | | 23 23 38.9 | |
| | comp=N,59nm,0.7s | | | | | | |
| H23K | | | | IAML | | 23 23 45.2 | |
| | comp=E,83nm,0.9s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **3.24** | **204** | | Pn | 23 22 48.6 | +2.0 |
| **F28M** | **Old Crow** | **3.33** | **108** | Pn | Pn | 23 22 50.6 | +2.9 |
| F28M | | | | IAML | | 23 23 48.3 | |
| | comp=E,66nm,0.8s | | | | | | |
| F28M | | | | IAML | | 23 23 48.5 | |
| | comp=N,63nm,1.0s | | | | | | |
| **B20K** | **Meade River** | **3.38** | **294** | Pn | Pn | 23 22 50.4 | +1.9 |
| B20K | | | | IAML | | 23 24 00.4 | |
| | comp=E,44nm,1.1s | | | | | | |
| B20K | | | | IAML | | 23 24 06.7 | |
| | comp=N,67nm,1.3s | | | | | | |
| **F20K** | **Avaraart Lake** | **3.40** | **241** | | Pn | 23 22 51.3 | +2.6 |
| F20K | | | | IAML | | 23 23 43.0 | |
| | comp=N,43nm,1.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **3.52** | **162** | Pn | Pn | 23 22 53.3 | +2.8 |
| **D19K** | **Kuna River** | **3.67** | **269** | | Pn | 23 22 53.3 | +0.9 |
| D19K | | | | IAML | | 23 24 01.8 | |
| | comp=N,49nm,0.7s | | | | | | |
| D19K | | | | IAML | | 23 24 12.1 | |
| | comp=E,47nm,1.4s | | | | | | |
| **E19K** | **Redstone River** | **3.69** | **252** | | Pn | 23 22 55.4 | +2.7 |
| **H21K** | **Melozitna River** | **3.70** | **212** | | Pn | 23 22 54.5 | +1.6 |
| H21K | | | | IAML | | 23 24 02.2 | |
| | comp=E,36nm,0.9s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **3.77** | **188** | | Pn | 23 22 56.1 | +2.3 |
| I23K | | | | IAML | | 23 24 00.2 | |
| | comp=N,40nm,0.8s | | | | | | |
| I23K | | | | IAML | | 23 24 01.1 | |
| | comp=E,48nm,0.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **3.78** | **176** | | Pn | 23 22 56.8 | +2.9 |
| POKR | | | | IAML | | 23 24 00.7 | |
| | comp=N,32nm,0.7s | | | | | | |
| POKR | | | | IAML | | 23 24 02.2 | |
| | comp=E,36nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **3.93** | **181** | | Pn | 23 22 58.3 | +2.3 |
| MDM | | | | IAML | | 23 24 08.3 | |
| | comp=E,30nm,1.3s | | | | | | |
| MDM | | | | IAML | | 23 24 12.6 | |
| | comp=N,28nm,0.8s | | | | | | |
| **MLY** | **Manley** | **3.99** | **196** | | Pn | 23 22 59.0 | +2.1 |
| **COLA** | **College** | **4.02** | **178** | | Pn | 23 23 00.3 | +3.1 |
| **I26K** | **Coal Creek Min** | **4.08** | **149** | | Pn | 23 23 00.2 | +2.3 |
| **C19K** | **Lookout Ridge** | **4.13** | **279** | | Pn | 23 23 00.4 | +1.6 |
| C19K | | | | IAML | | 23 24 26.0 | |
| | comp=N,34nm,1.2s | | | | | | |
| **I27K** | **Kandik River** | **4.14** | **139** | | Pn | 23 23 01.0 | +2.0 |
| **IL31** | | **4.15** | **173** | | Pn | 23 23 01.4 | +2.5 |
| **ILAR** | **Eielson Array** | **4.15** | **173** | | Pn | 23 23 01.3 | +2.3 |
| **F19K** | **Shaleruckik Mo** | **4.18** | **245** | | Pn | 23 23 00.6 | +1.1 |
| F19K | | | | IAML | | 23 24 21.2 | |
| | comp=E,23nm,1.3s | | | | | | |
| F19K | | | | IAML | | 23 24 22.1 | |
| | comp=N,31nm,1.0s | | | | | | |
| **CCB** | **Clear Creek Bu** | **4.25** | **178** | Pn | Pn | 23 23 02.8 | +2.5 |
| CCB | | | | IAML | | 23 24 12.0 | |
| | comp=E,23nm,0.9s | | | | | | |
| **G29M** | **Pine Creek** | **4.30** | **112** | Pn | Pn | 23 23 03.9 | +2.9 |
| **NEA2** | **Nenana** | **4.32** | **185** | Pn | Pn | 23 23 06.3 | +2.3 |
| **G19K** | **Purcell Mounta** | **4.40** | **236** | Pn | Pn | 23 23 03.5 | +1.1 |
| **J25K** | **Salcha River,** | **4.42** | **164** | | Pn | 23 23 05.3 | +2.5 |
| J25K | | | | IAML | | 23 24 21.5 | |
| | comp=E,27nm,0.9s | | | | | | |
| **WRH** | **Wood River Hil** | **4.42** | **180** | | Pn | 23 23 05.0 | +2.3 |
| WRH | | | | IAML | | 23 24 21.9 | |
| | comp=N,21nm,0.9s | | | | | | |
| WRH | | | | IAML | | 23 24 25.4 | |
| | comp=E,26nm,1.0s | | | | | | |
| **HDA** | **Harding Lake** | **4.51** | **173** | | Pn | 23 23 06.6 | +2.7 |
| **H29M** | **Whitestone** | **4.59** | **121** | | Pn | 23 23 07.8 | +2.7 |
| H29M | | | | IAML | | 23 24 38.4 | |
| | comp=N,24nm,0.9s | | | | | | |
| **H19K** | **Roundabout Mou** | **4.66** | **228** | Pn | Pn | 23 23 06.9 | +0.9 |
| H19K | | | | IAML | | 23 24 27.3 | |
| | comp=E,25nm,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **4.69** | **133** | Pn | Pn | 23 23 09.8 | +3.3 |
| I28M | | | | IAML | | 23 24 32.5 | |
| | comp=N,14nm,1.1s | | | | | | |
| **A19K** | **Wainwright** | **4.73** | **292** | | Pn | 23 23 09.4 | +2.5 |
| **J26L** | **Joseph Creek** | **4.75** | **155** | | Pn | 23 23 09.6 | +2.2 |
| J26L | | | | IAML | | 23 24 27.1 | |
| | comp=E,20nm,0.7s | | | | | | |
| J26L | | | | IAML | | 23 24 38.9 | |
| | comp=N,20nm,0.8s | | | | | | |
| **C18K** | **Utukok River** | **4.76** | **273** | | Pn | 23 23 08.5 | +1.1 |
| C18K | | | | IAML | | 23 24 41.1 | |
| | comp=N,24nm,1.4s | | | | | | |
| **I20K** | **Naaghedeneel** | **4.80** | **214** | Pn | Pn | 23 23 10.5 | +2.7 |
| **G30M** | **tAoh Zraii Nji** | **4.88** | **107** | Pn | Pn | 23 23 11.3 | +2.3 |
| G30M | | | | IAML | | 23 24 15.9 | |
| | comp=E,15nm,0.8s | | | | | | |
| **E18K** | **Tukpahlearik C** | **4.88** | **259** | Pn | Pn | 23 23 10.7 | +1.6 |
| E18K | | | | IAML | | 23 24 10.7 | |
| | comp=E,16nm,0.6s | | | | | | |
| E18K | | | | IAML | | 23 24 10.9 | |
| | comp=N,19nm,0.7s | | | | | | |
| **B18K** | **Kokolik River** | **4.92** | **282** | | Pn | 23 23 11.7 | +2.2 |
| **BPAW** | **Bear Paw Mtn.** | **4.93** | **195** | | Pn | 23 23 11.4 | +1.7 |
| BPAW | | | | IAML | | 23 24 45.3 | |
| | comp=E,18nm,1.0s | | | | | | |
| BPAW | | | | IAML | | 23 24 49.0 | |
| | comp=N,14nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **4.95** | **143** | Pn | Pn | 23 23 12.1 | +2.1 |
| EGAK | | | | IAML | | 23 24 14.1 | |
| | comp=N,20nm,0.8s | | | | | | |
| EGAK | | | | IAML | | 23 24 14.5 | |
| | comp=N,15nm,0.8s | | | | | | |
| **EPYK** | **Eagle Plains** | **5.03** | **115** | | Pn | 23 23 13.7 | +2.5 |
| **G18K** | **Tagagawik** | **5.04** | **239** | | Pn | 23 23 11.5 | +0.2 |
| G18K | | | | IAML | | 23 24 43.6 | |
| | comp=N,16nm,1.5s | | | | | | |
| G18K | | | | IAML | | 23 24 43.7 | |
| | comp=E,14nm,1.6s | | | | | | |
| **MCK** | **McKinley** | **5.17** | **184** | | Pn | 23 23 15.7 | +2.6 |
| **K24K** | **Donnelly Dome** | **5.18** | **168** | | Pn | 23 23 16.4 | +3.2 |
| **SCRK** | **Sand Creek** | **5.19** | **159** | | Pn | 23 23 16.7 | +3.3 |
| SCRK | | | | IAML | | 23 24 19.5 | |
| | comp=N,13nm,0.8s | | | | | | |
| **J20K** | **Nowinta River** | **5.29** | **210** | | Pn | 23 23 16.5 | +1.8 |
| J20K | | | | IAML | | 23 24 53.7 | |
| | comp=E,13nm,0.9s | | | | | | |
| J20K | | | | IAML | | 23 25 13.0 | |
| | comp=N,10nm,1.1s | | | | | | |
| **RIDG** | **Independent Ri** | **5.32** | **164** | | Pn | 23 23 18.0 | +2.8 |
| **K27K** | **Chicken** | **5.43** | **151** | | Pn | 23 23 19.5 | +2.8 |
| **E17K** | **Hotham Inlet** | **5.46** | **257** | | Pn | 23 23 18.8 | +1.9 |
| **H18K** | **Honhosa River** | **5.47** | **232** | | Pn | 23 23 18.2 | +0.9 |
| **RND** | **Reindeer** | **5.50** | **183** | Pn | Pn | 23 23 20.1 | +2.5 |
| **RDOG** | **Red Dog Mine** | **5.50** | **268** | | Pn | 23 23 18.4 | +0.8 |
| **C17K** | **DeLong Mountai** | **5.50** | **273** | | Pn | 23 23 19.1 | +1.5 |
| **F17K** | **Baldwin Pennin** | **5.56** | **250** | | Pn | 23 23 20.3 | +1.9 |
| **G31M** | **Satah River** | **5.58** | **104** | | Pn | 23 23 21.3 | +2.6 |
| **J19K** | **Poorman** | **5.74** | **215** | Pn | Pn | 23 23 22.5 | +1.6 |
| **DHY** | **Denali Highway** | **5.83** | **177** | | Pn | 23 23 25.5 | +3.3 |
| **I30M** | **Mount Dempster** | **5.87** | **123** | | Pn | 23 23 25.1 | +2.3 |
| **DAWY** | **Dawson** | **5.96** | **140** | Pn | Pn | 23 23 26.0 | +2.2 |
| **PAX** | **Paxson** | **6.03** | **168** | | Pn | 23 23 27.6 | +2.7 |
| **K20K** | **Telida** | **6.04** | **206** | Pn | Pn | 23 23 26.1 | +1.2 |
| **WAT7** | **Susitna Watana** | **6.07** | **183** | | Pn | 23 23 27.7 | +2.2 |
| **H17K** | **Granite Mounta** | **6.08** | **235** | | Pn | 23 23 26.6 | +1.1 |
| **H31M** | **Peel River** | **6.15** | **113** | Pn | Pn | 23 23 28.2 | +1.7 |
| **L26K** | **Log Cabin Wild** | **6.19** | **159** | | Pn | 23 23 29.4 | +2.4 |
| **C16K** | **Lisburne Hills** | **6.33** | **273** | Pn | Pn | 23 23 29.7 | +0.8 |
| **J30M** | **Hart River** | **6.36** | **127** | | Pn | 23 23 32.8 | +3.4 |
| **L27K** | **Beaver Creek,** | **6.37** | **153** | | Pn | 23 23 32.3 | +2.7 |
| **BCAR** | **Beaver Creek A** | **6.38** | **153** | | Pn | 23 23 32.6 | +3.0 |
| **G16K** | **Koyuk River** | **6.54** | **245** |

**BHD Baghdad 2.06 230** *e*Pn **Pn** **23 25 42.0 +1.7**
BHD *e*Sn **Sn** **23 26 08.0 +2.4**
BHD AML AML 23 26 17.5
comp=E,1µm,0.3s
**MAHB Mahabad 2.20 348** Pn **Pb** **23 25 44.8 -0.9**
**HAGD Aghdareh 2.38 84** Pn **Pb** **23 25 47.9 -1.0**
**IHSH Hashtrud 2.81 17** Pn **Pb** **23 25 54.2 -2.0**
**RAFI Al-Rafai 2.88 183** *e*Pn **Pn** **23 25 54.0 +2.4**
RAFI *e*Sn **Sn** **23 26 30.0 +4.0**
RAFI AML AML 23 26 53.5
comp=E,545nm,0.7s
RAFI AML AML 23 26 56.2
comp=N,408nm,0.6s
**QABG Abgarm-Qazvin 2.93 67** Pn **Pn** **23 25 55.3 +2.9**
**IAZR Azarshahr 3.07 356** Pn **Pn** **23 25 57.1 +2.7**
**IRAZ Razeghan 3.11 74** Pn **Pn** **23 25 58.0 +3.1**
**CUKT Cukurca 3.40 321** *i* P **Pn** **23 26 00.2 +1.4**
**ISRB Sarab 3.40 19** Pn **Pn** **23 26 01.6 +2.7**
**JIR1 Jirandeh 3.56 53** Pn **Pn** **23 26 04.2 +3.2**
**IHRS Heris 3.75 9** Pn **Pn** **23 26 06.8 +3.0**
**IQOM Qom 3.96 85** Pn **Pn** **23 26 09.5 +2.7**
**LHJ2 Lahijan - Gila 4.00 49** Pn **Pn** **23 26 09.8 +2.8**
**IMRD Marand 4.12 354** Pn **Pn** **23 26 11.3 +2.6**
**GAS1 Astara - Iran 4.30 28** Pn **Pn** **23 26 14.0 +2.9**
**IPIR Pirpir 4.31 115** Pn **Pn** **23 26 13.5 +2.0**
**QAMS Qamsar 4.34 100** Pn **Pn** **23 26 15.3 +3.4**
**KLST Kelardasht - M 4.35 63** Pn **Pn** **23 26 15.4 +3.4**
**JHBN Jahan bin 4.38 122** Pn **Pn** **23 26 15.1 +2.6**
**GRMI Germi 4.39 17** Pn **Pn** **23 26 15.2 +2.8**
**GEVA Gevas 4.50 326** Pn **Pn** **23 26 17.0 +2.9**
**IVRN Varamin 4.51 84** Pn **Pn** **23 26 17.0 +2.9**
**AKDM Akdamar-Van 4.55 325** *e*P **Pn** **23 26 17.3 +2.6**
**ZNGN Zangian 4.58 122** Pn **Pn** **23 26 18.0 +2.8**
**VANB Van 4.60 331** *e*P **Pn** **23 26 16.9 +1.6**
**IKLH Kolahrood 4.60 105** Pn **Pn** **23 26 18.6 +3.1**
**MZPU Pul - Mazandar 4.70 66** Pn **Pn** **23 26 19.1 +2.4**
**IDMV Damavand 4.83 77** Pn **Pn** **23 26 21.4 +2.9**
**CLDR Caldiran 4.90 338** *i* P **Pn** **23 26 16.6 -2.9**
**KRSH Karshahi 4.90 96** Pn **Pn** **23 26 22.3 +2.8**
**ISFB Sefidab 4.94 91** Pn **Pn** **23 26 22.5 +2.5**
**GURO Guroymak-BITLI 5.20 320** *i* P **Pn** **23 26 25.1 +1.6**
**GURO Guroymak-BITLI 5.20 320** Pn **Pn** **23 26 25.2 +1.6**
**MARD Mardin 5.20 303** Pn **Pn** **23 26 24.8 +1.2**
**IGAR Gharneh 5.31 113** Pn **Pn** **23 26 27.8 +2.7**
**IZEF Zefreh 5.33 107** Pn **Pn** **23 26 28.4 +2.8**
**SVAN Silvan-Diyarba 5.40 312** *e*P **Pn** **23 26 26.4 +0.2**
**MLAZ Malazgirt-MUS 5.41 328** *e*P **Pn** **23 26 28.9 +2.4**
**IFIR Firoozkooh 5.42 77** Pn **Pn** **23 26 29.7 +3.1**
**MAZI Mazidag 5.50 303** *e*P **Pn** **23 26 28.1 +0.4**
**ILAS Lasjerd 5.55 80** Pn **Pn** **23 26 31.2 +2.7**
**KBD Kabd 5.56 167** P **Pn** **23 26 30.2 +1.8**
KBD S **Sn** **23 27 32.2 +0.3**
**AGRB Hanur-Agry 5.60 333** *e*P **Pn** **23 26 31.9 +2.8**
**GNI Garni 5.66 348** *e*P **Pn** **23 26 33.2 +3.3**
**GNI Garni 5.66 348** Pn **Pn** **23 26 32.6 +2.7**
**GNI Garni 5.66 348** Pn **Pn** **23 26 33.1 +3.2**
comp=N,0.6nm,0.3s,baz=258,slow=23,SNR=1.5
GNI Lg Lg 23 28 04.7
comp=N,0.4nm,0.3s,baz=159,slow=4.8,SNR=3.6
comp=N,3.2nm,0.5s
**VRTB Varto-Mus 5.95 321** *e*P **Pn** **23 26 36.4 +2.5**
**DYBB Diyarbakir 5.96 306** *e*P **Pn** **23 26 34.7 +0.7**
**BNGB Bingl 6.26 316** *i* P **Pn** **23 26 38.8 +0.7**
**ANAR Anarak 6.37 101** Pn **Pn** **23 26 42.3 +2.7**
**KOPR Koprukoy-ERZUR 6.42 328** *e*P Pn 23 26 45.1 +4.8
**KFJS2 Khafji 6.51 163** P **Pn** **23 26 42.9 +1.6**
**KARS Kars 6.51 338** Pn **Pn** **23 26 43.3 +1.7**
**YEDI Yedisu-Bingol 6.64 318** *e*P **Pn** **23 26 44.3 +0.9**
**URFA Urfa 6.66 297** *e*P **Pn** **23 26 43.2 -0.3**
**SENK Senkaya-Erzuru 6.70 334** *e*P **Pn** **23 26 46.4 +2.2**
**SVRC Sivrice-ELAZID 6.75 306** *e*P **Pn** **23 26 45.4 +0.6**
**QYSM Um Kedad 6.76 175** P **Pn** **23 26 46.8 +1.9**
**KAZ2 Kazeron-Fars-I 6.77 136** Pn **Pn** **23 26 47.4 +2.3**
**PTK Pertek 6.97 310** *i* P **Pn** **23 26 48.5 +0.5**
**KOPT Kop Dagi 7.08 321** Pn **Pn** **23 26 50.4 +0.9**
**ASYS 7.28 194** P **Pn** **23 26 52.1 +0.1**
**HIL04 Ash Shaalaniya 7.46 205** P **Pn** **23 26 54.1 -0.4**
**ARPR Arapgir-MALATY 7.77 307** *e*P **Pn** **23 26 58.1 -0.7**
**ARPR Arapgir-MALATY 7.77 307** **Pn** **23 26 59.0 +0.1**
**GAZ Gaziantep 7.78 292** *e*P **Pn** **23 26 58.5 -0.4**
**GAZ Gaziantep 7.78 292** **Pn** **23 26 59.2 +0.3**
**WANAN Al Wanan 7.92 166** P **Pn** **23 27 01.8 +1.0**
**DARE Darende-Malaty 8.09 302** *e*P **Pn** **23 27 02.6 -0.6**
**KMRS Kahramanmaras 8.11 294** *e*P **Pn** **23 27 02.7 -0.8**
**ASF Jabal al Asfar 8.20 255** Pn **Pn** **23 27 04.0 -0.8**
comp=N,1.0nm,0.3s,baz=8.3,slow=0.1,SNR=9.5
ASF Lg Lg 23 29 21.5
comp=N,1.8nm,0.3s,baz=157,slow=0.0,SNR=6.6
comp=N,4.2nm,0.4s
**ASF Jabal al Asfar 8.20 255** P **Pn** **23 27 04.7 -0.1**
**HTM02 HTM02 8.33 203** P **Pn** **23 27 05.7 -0.8**
**NATI Neve Ativ 8.85 264** P **Pn** **23 27 14.0 +0.5**
**GEM Giv'at Ha'Em 8.92 264** P **Pn** **23 27 15.2 +0.7**
**SHMJ Saham 8.95 261** P **Pn** **23 27 16.5 +1.5**
**MMA0 Mount Meron ar 9.18 263** P **Pn** **23 27 19.1 +1.0**
**MMAI Mount Meron Ar 9.18 263** Pn **Pn** **23 27 18.4 +0.3**
comp=N,1.9nm,0.3s,baz=65,slow=14,SNR=12
MMAI Sn **Sn** **23 29 02.2 +1.1**
comp=N,0.4nm,0.3s,baz=93,slow=19,SNR=1.2
MMAI Lg Lg 23 30 02.4
comp=N,1.4nm,0.3s,baz=110,slow=40,SNR=2.5
comp=N,1.5nm,0.3s
**RMAH Rumah 9.25 177** P **Pn** **23 27 20.5 +1.4**
**HMDT Nahal Hemdat 9.28 258** P **Pn** **23 27 20.7 +1.3**
**SAKB Bahrain 9.36 156** P **Pn** **23 27 21.0 +0.4**
SAKB S **Sn** **23 29 01.4 -4.2**
**BNN Bunyan 9.37 300** Pn **Pn** **23 27 21.8 +1.0**
**UJAP Al Uja 9.42 257** P **Pn** **23 27 23.1 +1.8**
**KBZ Khabaz 9.47 345** Pn **Pn** **23 27 22.2 +0.3**
comp=N,0.1nm,0.3s,baz=216,slow=17,SNR=2.4
comp=N,0.4nm,0.4s
**DSI Dead Sea 9.62 255** P **Pn** **23 27 25.0 +0.9**
**SHMA Al-Shehemyia 9.63 154** P **Pn** **23 27 24.5 +0.3**
SHMA S Sn 23 29 04.7 -7.4
**LISJ El Lisan 9.67 253** P **Pn** **23 27 26.5 +1.8**
**SLTI Sal'it 9.67 259** P **Pn** **23 27 27.1 +2.2**
**KVAR Kislovodsk Arr 9.73 345** Pn **Pn** **23 27 25.8 +0.1**
baz=156,slow=21
comp=N,1.9nm,1.0s
**ZFRI Zfri 10.19 250** P **Pn** **23 27 33.9 +2.0**
**PRNI Paran 10.41 249** P **Pn** **23 27 35.6 +0.6**
**SMRA Abu-Samra 10.60 157** P **Pn** **23 27 37.5 -0.1**
SMRA S **Sn** **23 29 29.7 -6.3**
**AQBJ Aqaba 10.68 246** P **Pn** **23 27 39.4 +0.8**
**TRNA Turayna 10.74 155** P **Pn** **23 27 39.8 +0.3**
SNR=9.7
TRNA S **Sn** **23 29 35.1 -4.4**
**MBRI Mt Berech 10.74 247** P **Pn** **23 27 40.6 +1.0**
**EIL Elat 10.78 246** Pn **Pn** **23 27 39.4 -0.6**
comp=N,0.6nm,0.3s,baz=81,slow=5.8,SNR=7.5
EIL Lg Lg 23 30 41.1
comp=N,0.1nm,0.3s,baz=74,slow=17,SNR=1.5
comp=N,2.7nm,0.6s
**EIL Elat 10.78 246** P **Pn** **23 27 40.2 +0.2**
**RAYN Ar Rayn 11.07 184** Pn **Pn** **23 27 42.0 -2.1**
**RAYN Ar Rayn 11.07 184** *i* Pn **Pn** **23 27 42.0 -2.1**
SNR=13
**JRN Qarnain Island 11.20 148** P **Pn** **23 27 45.9 +0.1**
**BR104 Keskin Array S 11.28 300** P Pn 23 27 52.1 +5.2
comp=N,5.7nm,0.9s,comp=N,39nm
**BR131 Keskin Array S 11.29 301** Pn **Pn** **23 27 47.8 +0.8**
**BRTR Keskin Array B 11.29 301** Pn **Pn** **23 27 48.8 +1.8**
**BRTR Keskin Array B 11.29 301** Pn **Pn** **23 27 49.2 +2.2**
comp=N,0.1nm,0.3s,baz=120,slow=12,SNR=33
comp=N,4.5nm,0.8s
**BR105 Keskin Array S 11.30 300** P Pn 23 27 52.3 +5.1
comp=N,5.9nm,0.9s,comp=N,38nm
**BR106 Keskin Array S 11.30 301** P Pn 23 27 52.2 +4.9
comp=N,6.9nm,0.9s,comp=N,43nm
**SLWR Sila 11.52 154** P **Pn** **23 27 49.5 -0.6**
SLWR S **Sn** **23 29 51.8 -6.7**
**ANTO Ankara 11.94 300** Pn **Pn** **23 27 56.8 +0.8**
**ANTO Ankara 11.94 300** P Pn 23 28 01.8 +5.8
comp=N,3.8nm,0.6s
**SHME Shamm 12.06 132** *i* Pn **Pn** **23 27 56.8 -0.8**
SNR=6.3
**SHME Shamm 12.06 132** ⇓P **Pn** **23 27 56.8 -0.8**
SNR=6.3
**GHWR Ruwais 12.07 150** P **Pn** **23 27 57.8 +0.1**
GHWR S **Sn** **23 30 07.6 -4.5**
**BANOM Banah 12.25 132** P **Pn** **23 27 59.2 -0.9**
**AJN Ajban 12.56 141** Pn **Pn** **23 28 03.7 -0.7**

**AJN Ajban 12.56 141** P **Pn** **23 28 04.4 +0.1**
**MASF Masafi 12.58 134** P **Pn** **23 28 04.1 -0.6**
SNR=7.0
MASF S **Sn** **23 30 17.8 -6.7**
**MSFE Esma-Masafi 12.59 134** *i* Pn **Pn** **23 28 03.8 -1.0**
SNR=11
**NAZ Nazwa, Dubai 12.59 137** *i* Pn **Pn** **23 28 04.9 +0.1**
SNR=29
**NAZ Nazwa, Dubai 12.59 137** P **Pn** **23 28 05.0 +0.3**
SNR=28
**ASUD Al Ashush, Dub 12.69 139** *i* Pn **Pn** **23 28 06.2 +0.1**
SNR=25
**ASUD Al Ashush, Dub 12.69 139** P **Pn** **23 28 06.6 +0.5**
SNR=25
ASUD S **Sn** **23 30 23.1 -4.1**
**MZWR Madinat Zayed 12.69 146** P **Pn** **23 28 06.3 +0.2**
MZWR S **Sn** **23 30 22.5 -4.6**
**MDH Madha 12.71 134** *i* Pn **Pn** **23 28 05.2 -1.3**
SNR=8.7
**MDH Madha 12.71 134** P **Pn** **23 28 06.1 -0.4**
SNR=8.5
MDH S **Sn** **23 30 21.4 -6.3**
**FAQ Al Faqa, Dubai 12.74 138** *i* Pn **Pn** **23 28 06.7 -0.1**
SNR=7.7
**FAQ Al Faqa, Dubai 12.74 138** P **Pn** **23 28 07.2 +0.4**
SNR=7.6
FAQ S **Sn** **23 30 23.0 -5.4**
**UOSS Minazif 12.93 136** Pn **Pn** **23 28 08.3 -1.2**
**UOSS Minazif 12.93 136** *i* Pn **Pn** **23 28 08.1 -1.4**
SNR=8.2
**UOSS Minazif 12.93 136** P **Pn** **23 28 08.2 -1.2**
**HATD Hatta, Dubai 12.98 136** *i* Pn **Pn** **23 28 09.1 -1.0**
SNR=20
**HATD Hatta, Dubai 12.98 136** P **Pn** **23 28 09.5 -0.7**
SNR=20
HATD S **Sn** **23 30 28.5 -5.8**
**ASHO Ashiyiah 13.05 137** *i* Pn **Pn** **23 28 10.1 -0.9**
SNR=36
**ASHO Ashiyiah 13.05 137** P **Pn** **23 28 09.8 -1.3**
SNR=36
ASHO S **Sn** **23 30 29.9 -6.1**
**MZR Muzera 13.18 149** *i* Pn **Pn** **23 28 11.6 -1.3**
SNR=28
**MZR Muzera 13.18 149** P **Pn** **23 28 11.5 -1.3**
SNR=28
MZR S **Sn** **23 30 32.4 -6.8**
**HRA Herat 13.19 86** Pn **Pn** **23 28 12.8 -0.3**
**JASK Jask - Hormozg 13.28 128** P **Pn** **23 28 12.6 -1.6**
**MDUB Mudurnu 13.30 300** **Pn** **23 28 14.4 -0.2**
**ALNE Al Ain 13.38 139** *i* Pn **Pn** **23 28 14.8 -0.8**
SNR=17
**ALNE Al Ain 13.38 139** P **Pn** **23 28 15.2 -0.3**
SNR=17
**SOHO SOHO 13.74 137** *i* Pn **Pn** **23 28 18.6 -1.9**
SNR=12
**SOHO SOHO 13.74 137** P **Pn** **23 28 18.9 -1.6**
SOHO S Sn 23 30 43.1 -10
**ARQ Araqi 14.37 139** P **Pn** **23 28 27.2 -2.0**
SNR=30
ARQ S **Sn** **23 31 02.7 -5.6**
**HOQ Hoqain 14.62 136** P **Pn** **23 28 30.4 -2.1**
SNR=10
HOQ S **Sn** **23 31 10.6 -3.7**
**BIDO Bidbid 15.14 134** P **Pn** **23 28 37.4 -2.2**
**BSY Bisya 15.21 138** P **Pn** **23 28 38.8 -1.8**
SNR=7.7
**SMDO Samad 15.45 135** P **Pn** **23 28 41.7 -2.0**
SMDO S **Sn** **23 31 26.5 -8.2**
**WSAR Wadi Sarin 15.66 133** Pn **Pn** **23 28 44.5 -1.9**
comp=N,15nm,0.5s,baz=309,slow=12,SNR=37
**KARP Karpathos 15.67 279** Pn **Pn** **23 28 46.5 +0.1**
**KARP Karpathos 15.67 279** P **P** **23 28 51.4 +0.9**
comp=N,75nm,0.8s
**NGCH Negor - Chabah 15.83 122** P **Pn** **23 28 46.8 -1.7**
**JMDO Jabal Madar 16.02 137** P **Pn** **23 28 50.0 -1.0**
SNR=14
**WBK Wadi Bani Khal 16.34 134** P **Pn** **23 28 54.0 -1.1**
SNR=8.0
**JLN Jalan Bani Buh 16.95 134** P **Pn** **23 29 01.9 -0.9**
**MHTO MHTO 17.05 140** P **Pn** **23 29 02.3 -1.9**
SNR=11
**TPGR Topolog 17.08 312** ⇑P **P** **23 29 06.5 +0.5**
**ALN Alexandroupoli 17.16 297** P **P** **23 29 06.8 -0.1**
**PURM Purcari 17.19 319** P **P** **23 29 07.7 +0.6**
comp=N,54nm,0.6s,comp=N,2µm
**DOK Doka 17.40 154** P **Pn** **23 29 06.0 -2.5**
**CFR Carcaliu 17.42 313** ⇑P **P** **23 29 10.0 +0.3**
**IDI Anoyia 17.54 278** **Pn** **23 29 10.2 0.0**
**IDI Anoyia 17.54 278** P **Pn** **23 29 10.1 0.0**
comp=N,0.7nm,0.3s,baz=241,slow=14,SNR=3.3
comp=N,4.5nm,0.4s
**DQM DQM 17.71 143** P **Pn** **23 29 11.4 -0.9**
**ABKAR Akbulak array 17.78 30** **Pn** **23 29 13.2 +0.2**
**ABKAR Akbulak array 17.78 30** **P** **23 29 13.9 +0.2**
ABKAR IAmb IAmb 23 29 27.4
comp=Z,5.4nm,1.4s
**BELG Belgormoye 17.80 3** P **Pn** **23 29 11.9 -1.2**
comp=Z,0.5nm,0.3s,baz=240,slow=1.8,SNR=7.1
comp=Z,22nm,0.9s
**ELND Elena 17.91 304** ⇓P **P** **23 29 16.3 +1.2**
**WHFO Wadi Hawf 17.93 156** P **Pn** **23 29 13.8 -1.3**
SNR=15
**AKTO Aktyubinsk 17.99 25** P **Pn** **23 29 14.4 -1.2**
comp=Z,0.2nm,0.3s,baz=208,slow=11,SNR=3.2
comp=Z,1.2nm,0.5s
**ABTO Aybut 18.30 158** P **Pn** **23 29 16.8 -2.8**
**GHRR 18.32 314** P **P** **23 29 23.2 +3.5**
**RBK Rabkut 18.46 155** P **P** **23 29 19.3 -2.2**
**DMTO DMTO 18.53 153** P **P** **23 29 20.0 -2.2**
SNR=16
**VRI Vrincioaia 18.62 313** ⇑P **Pn** **23 29 25.4 +2.0**
**VRI Vrincioaia 18.62 313** P **Pn** **23 29 25.7 +2.3**
comp=Z,5.6nm,1.3s,comp=Z,81nm
**PLOR5 Plostina Array 18.65 313** P **Pn** **23 29 25.9 +2.2**
comp=Z,10nm,0.9s
**PLOR Plostina 18.66 313** ⇑P **Pn** **23 29 25.9 +2.0**
**MLR Muntele Rosu 18.92 311** P **P** **23 29 26.7 +0.3**
**MLR Muntele Rosu 18.92 311** P **Pn** **23 29 29.6 +2.5**
comp=Z,3.2nm,0.6s,baz=189,slow=1.5,SNR=9.9
**MLR Muntele Rosu 18.92 311** ⇓P **Pn** **23 29 28.8 +1.7**
**COVR Voineasa-Covas 18.93 312** ⇓P **Pn** **23 29 28.9 +1.8**
**SORM Soroca 19.00 321** ⇓P **P** **23 29 26.7 -0.4**
**SORM Soroca 19.00 321** P **P** **23 29 26.6 -0.5**
comp=Z,12nm,0.9s
**TESR Tescani 19.00 315** ⇓P **Pn** **23 29 27.7 -0.2**
**TESR Tescani 19.00 315** P **Pn** **23 29 28.5 +0.5**
comp=Z,13nm,0.7s
**ONER Baraj Valea Uz 19.06 314** ⇓P **Pn** **23 29 29.5 +0.9**
**TURR Turia 19.15 313** ⇑P **Pn** **23 29 30.7 +1.0**
**OZUR 19.31 313** ⇓P **Pn** **23 29 32.3 +0.6**
**BOSR Bodos 19.37 312** ⇓P **Pn** **23 29 32.9 +0.5**
**VOIR 19.46 310** ⇑P **Pn** **23 29 34.8 +1.3**
**DOPR Dopca 19.49 312** ⇓P **Pn** **23 29 34.6 +0.8**
**ARR Arges 19.69 310** ⇑P **Pn** **23 29 37.0 +0.7**
**NDNU Novodnistrovsk 19.80 321** P **P** **23 29 36.4 +0.6**
**MDB Medias 20.19 311** ⇓P Pn 23 29 42.5 +0.3
**AK07 Malin Array Si 20.21 327** P **P** **23 29 39.7 -0.6**
**AK09 Malin Array Si 20.22 327** P **P** **23 29 39.8 -0.6**
**AK05 Malin Array Si 20.26 327** P **P** **23 29 40.2 -0.6**
**KMPD K-Podol'skiy 20.26 319** P **P** **23 29 40.7 -0.2**
KMPD P **P** **23 29 40.7 -0.2**
**LOT Lotru 20.27 309** ⇓P Pn 23 29 42.5 -0.7
**AK01 Malin Array Si 20.30 327** P **P** **23 29 40.7 -0.6**
**AKASG Malin Array Be 20.30 328** P **P** **23 29 40.9 -0.5**
comp=Z,1.0nm,0.3s,baz=139,slow=8.8,SNR=22
comp=Z,1.0nm,0.3s
**AKBB Malin Array Si 20.30 328** P **P** **23 29 41.0 -0.4**
AKBB IAmb IAmb 23 29 46.7
comp=Z,7.2nm,0.7s
**AKBB Malin Array Si 20.30 328** P Pn 23 29 43.2 -0.2
**KIEV Kiev 20.31 327** P **P** **23 29 41.1 -0.3**
KIEV IAmb IAmb 23 29 44.1
comp=Z,6.4nm,0.7s
**KIEV Kiev 20.31 327** ⇓P **P** **23 29 40.9 -0.4**
**AK19 Malin Array Si 20.41 327** P **P** **23 29 41.8 -0.8**
**AK22 Malin Array Si 20.42 327** P **P** **23 29 41.7 -0.9**
**BURAR Bucovina Array 20.42 316** P **P** **23 29 43.2 +0.5**
BURAR IAmb IAmb 23 29 49.7
comp=Z,16nm,0.7s
**BURAR Bucovina Array 20.42 316** ⇓P **P** **23 29 43.9 +1.1**
**AK21 Malin Array Si 20.44 327** P **P** **23 29 42.1 -0.7**
**BUR08 Bucovina Ar. S 20.44 316** P **P** **23 29 43.0 0.0**
BUR08 IAmb IAmb 23 29 47.7
comp=Z,11nm,0.9s
**LUBAR Lubar, Ukraine 20.45 324** P **P** **23 29 42.7 -0.2**

**FNA Florina 20.60 295** P **P** **23 29 44.9 +0.1**
FNA IAmb IAmb 23 29 50.1
comp=Z,11nm,0.8s
**KKAR Karatay Array 20.65 59** P **P** **23 29 46.3 +1.1**
**KKAR Karatay Array 20.65 59** P **P** **23 29 45.9 +0.7**
KKAR IAmb IAmb 23 30 09.2
comp=Z,4.2nm,1.1s
**HORU Horodok 20.66 321** P **P** **23 29 45.6 +0.3**
**MI29 MI29, Kamyanyy 20.73 325** P **P** **23 29 45.6 -0.4**
**MI30 MI30,Zelenitsa 20.80 326** P **P** **23 29 46.2 -0.6**
**KSV Kosov 20.88 317** P Pn 23 29 49.6 -0.6
**GZR Gura Zlata 20.89 308** ⇓P **P** **23 29 48.8 +0.9**
**CJR Cluj-Napoca 20.93 312** ⇑P Pn 23 29 49.8 -1.1
**HERR Herculane 20.94 306** ⇓P **P** **23 29 49.5 +1.2**
**BOVS Bovan 21.01 303** ⇓P **P** **23 29 50.1 +1.0**
**MI28 Mi28,Pidlybu 21.17 326** P **P** **23 29 50.2 -0.5**
**STNU Starunia 21.41 318** P **P** **23 29 55.9 +2.6**
**DRGR 21.51 312** ⇑P **P** **23 29 55.6 +1.1**
**KEK Kerkira 21.66 291** P **P** **23 29 54.8 -1.3**
KEK IAmb IAmb 23 30 08.4
comp=Z,15nm,0.9s
**MEZ Mezhgor'ye 21.86 316** P **P** **23 29 59.7 +1.5**
**KORU Korolevo 21.90 315** P **P** **23 30 01.1 +2.5**
**PUK Puka 21.92 298** P **P** **23 29 58.2 -0.8**
PUK IAmb IAmb 23 30 05.1
comp=Z,6.1nm,0.8s
**SIRR Siria 21.95 309** ⇑P **P** **23 30 00.7 +1.4**
**MORS Morshin 21.98 318** P **P** **23 30 00.1 +0.7**
**BRIU Brid 22.05 315** P **P** **23 30 01.6 +1.4**
**BERU Beregovo 22.22 315** P **P** **23 30 03.7 +1.7**
**RNPP8 Varash 22.29 325** P **P** **23 30 04.4 +1.6**
**MUKU Mukachevo 22.30 315** P **P** **23 30 04.5 +1.6**
**SHIU Shidnytsya 22.32 318** P **P** **23 30 04.3 +1.2**
**RNPP9 Sopachiv 22.32 325** P **P** **23 30 04.5 +1.4**
**HOLU Holmets 22.52 315** P **P** **23 30 06.8 +1.6**
**SCTE Santa Cesarea 22.71 292** P **P** **23 30 07.0 -0.3**
**KOLS Kolonicke sedl 22.78 316** *e*P **P** **23 30 10.4 +2.4**
**KWP Kalwaria Pacla 22.90 318** *e*P **P** **23 30 09.7 +0.5**
**KWP Kalwaria Pacla 22.90 318** P **P** **23 30 09.1 -0.1**
KWP IAmb IAmb 23 30 20.0
comp=Z,19nm,0.9s
**CRVS Cervenica-Dubn 23.23 315** *e*P **P** **23 30 16.9 +4.2**
**ARU Arti 23.39 17** P **P** **23 30 14.1 0.0**
**PSZ Piszkesteto 23.73 312** P **P** **23 30 17.3 -0.4**
PSZ IAmb IAmb 23 30 22.6
comp=Z,8.9nm,0.7s
**KSH Kashi 24.15 70** P **P** **23 30 21.0 -0.8**
KSH sP sP 23 30 30.3 +1.1
KSH pmax pmax
comp=Z,2.0nm,1.4s
**NIE Niedzica 24.15 316** *e*P **P** **23 30 23.1 +1.5**
**NRN Naryn 24.32 65** P **P** **23 30 23.3 -0.2**
**NACGM Naroch 24.40 332** *e*P **P** **23 30 23.5 -0.2**
comp=Z,7.0nm,0.8s,baz=138
**BOOM Boomskoye usch 24.41 62** P **P** **23 30 23.9 -0.4**
**LANS Liptovska Anna 24.51 314** *e*P **P** **23 30 26.7 +1.8**
**VYHS Vyhne 24.61 313** *e*P **P** **23 30 28.0 +2.2**
**CEL Celeste 24.65 287** P **P** **23 30 26.0 -0.3**
**CUC Castrocucco 24.74 292** P **P** **23 30 26.7 -0.4**
CUC IAmb IAmb 23 30 44.2
comp=Z,13nm,1.2s
**OJC Ojcow 24.82 317** *e*P **P** **23 30 28.2 +0.6**
**OJC Ojcow 24.82 317** P **P** **23 30 27.2 -0.4**
**OJC Ojcow 24.82 317** P **P** **23 30 27.7 +0.1**
comp=Z,20nm,0.9s
OJC pP **pP** **23 30 31.0 -1.8**
comp=Z,20nm,0.9s
**MPLH Magyarpolny 24.92 309** P **P** **23 30 29.4 +0.8**
comp=Z,32nm,0.9s
**BVAR Borovoye Array 25.13 36** P **P** **23 30 30.3 -0.1**
comp=Z,0.7nm,0.5s,baz=237,slow=9.3,SNR=3.2
comp=Z,0.7nm,0.5s
**SUW Suwalki 25.27 327** *e*P **P** **23 30 26.1 -5.5**
**SUW Suwalki 25.27 327** P **P** **23 30 31.3 -0.3**
**JAVC Velka Javorina 25.46 313** *e*P **P** **23 30 36.2 +2.7**
**OKC Ostrava-Krasne 25.59 315** *e*P **P** **23 30 35.2 +0.6**
**RONA Rosalia, Austr 25.89 309** P **P** **23 30 37.6 +0.1**
comp=Z,4.4nm,0.7s
**RAFF Raffo Rosso 25.90 285** P **P** **23 30 38.1 +0.5**
**MORC Moravsky Berou 25.91 315** P **P** **23 30 38.1 +0.5**
MORC IAmb IAmb 23 30 41.7
comp=Z,6.6nm,0.9s
**MORC Moravsky Berou 25.91 315** *e*P **P** **23 30 38.3 +0.7**
**MORC Moravsky Berou 25.91 315** ⇑P **P** **23 30 38.5 +0.9**
**CONA Conrad Observa 26.25 310** *e*P **P** **23 30 40.9 +0.2**
comp=Z,5.9nm,0.9s
**ARSA Arzberg 26.25 308** *e*P **P** **23 30 40.0 -0.6**
comp=Z,1.2nm,0.6s
**VRAC Vranov 26.29 313** *e*P **P** **23 30 41.7 +0.7**
**KRUC Moravsky 26.32 312** *e*P **P** **23 30 41.9 +0.7**
**DPC Dobruska-Polom 26.87 315** *e*P **P** **23 30 46.6 +0.4**
**DPC Dobruska-Polom 26.87 315** P **P** **23 30 47.1 +0.9**
comp=Z,5.4nm,1.0s
**CHVC Chvalec 27.12 315** *e*P **P** **23 30 48.7 +0.2**
**MOA Molln 27.24 309** *e*P **P** **23 30 49.8 +0.2**
comp=Z,1.0nm,0.4s
**BIOA Bad Ischl, Aus 27.60 308** *e*P **P** **23 30 53.3 +0.5**
comp=Z,3.3nm,0.4s
**ZVC Zvikov 27.80 312** *e*P **P** **23 30 56.8 +2.3**
**GERES GERESS Array B 27.91 311** P **P** **23 30 55.7 +0.1**
comp=Z,1.7nm,1.0s,baz=109,slow=8.4,SNR=3.6
comp=Z,1.7nm,1.0s
**KHC Kasperske Hory 28.07 311** *e*P **P** **23 30 58.0 +1.0**
**KURBB Kurchatov Arra 28.34 46** P **P** **23 31 00.1 +0.8**
comp=Z,0.5nm,0.6s,baz=252,slow=9.1,SNR=4.5
comp=Z,0.5nm,0.6s
**WTTA Wattenberg 28.80 307** *e*P **P** **23 31 03.7 0.0**
comp=Z,2.3nm,0.5s
**WATA Walderalm 28.86 307** *e*P **P** **23 31 04.8 +0.6**
comp=Z,0.8nm,0.3s
**SQTA Sankt Quirin 29.08 306** *e*P **P** **23 31 05.9 -0.2**
comp=Z,3.5nm,0.4s
**MOTA Moosalm 29.18 307** *e*P **P** **23 31 06.5 -0.5**
comp=Z,1.7nm,0.4s
**FETA Feichten 29.36 306** *e*P **P** **23 31 08.7 +0.1**
comp=Z,1.1nm,0.5s
**RETA Reutte 29.43 307** *e*P **P** **23 31 08.6 -0.6**
comp=Z,1.5nm,0.3s
**MK31 Makanchi Array 29.64 55** P **P** **23 31 10.9 0.0**
**MKAR Makanchi Array 29.64 55** P **P** **23 31 11.2 +0.3**
**MKAR Makanchi Array 29.64 55** P **P** **23 31 11.1 +0.1**
comp=Z,0.6nm,0.6s,baz=251,slow=7.6,SNR=7.1
comp=Z,0.6nm,0.6s
**FINES FINESS Array B 29.79 341** P **P** **23 31 11.8 -0.3**
comp=Z,1.6nm,0.4s,baz=148,slow=9.5,SNR=24
comp=Z,1.6nm,0.4s
**DAVA Damuels 29.98 306** *e*P **P** **23 31 13.8 -0.3**
comp=Z,3.7nm,0.4s
**SENIN Lac Senin/Sane 31.57 304** P **P** **23 31 28.1 -0.1**
**BNI Bardonecchia 31.85 301** P **P** **23 31 30.9 +0.3**
**HFS Hagfors 33.13 330** P **P** **23 31 41.4 -0.1**
comp=Z,4.8nm,0.6s,baz=134,slow=8.5,SNR=19
comp=Z,4.8nm,0.6s
**ZALV Zalesovo Beam 33.14 42** P **P** **23 31 42.1 +0.5**
comp=Z,0.7nm,0.5s,baz=237,slow=8.3,SNR=4.1
comp=Z,0.7nm,0.5s
**NB2 NORSAR Subarra 34.66 331** P **P** **23 31 53.5 -1.3**
comp=Z,1.6nm,0.7s,baz=124,slow=9.3
**NOA NORSAR Array B 34.66 331** P **P** **23 31 53.7 -1.1**
comp=Z,0.8nm,0.6s,baz=125,slow=8.7,SNR=7.1
comp=Z,0.8nm,0.6s
**ARCES ARCESS Array B 36.81 348** P **P** **23 32 12.2 -1.0**
comp=Z,0.7nm,0.5s,baz=128,slow=2.0,SNR=5.1
comp=Z,0.7nm,0.5s
**TAM Tamanrasset 37.39 263** P **P** **23 32 18.0 -0.8**
TAM IAmb IAmb 23 32 25.0
comp=Z,6.3nm,1.4s
**EKA Eskdalemuir Ar 39.59 317** P **P** **23 32 36.5 -0.2**
comp=Z,4.5nm,0.5s,baz=102,slow=9.0,SNR=23
comp=Z,4.5nm,0.5s
**ESK Eskdalemuir 39.62 317** P **P** **23 32 36.7 -0.2**
**ESBB Sonseca Array 39.93 292** P **P** **23 32 39.2 -0.6**
ESBB IAmb IAmb 23 32 44.0
comp=Z,6.6nm,1.0s
**ESDC Sonseca Array 39.93 292** P **P** **23 32 40.0 +0.1**
comp=Z,2.1nm,0.7s,baz=62,slow=8.4,SNR=11
ESDC PcP **PcP** **23 34 44.4 -0.7**
comp=Z,0.3nm,0.8s,baz=47,slow=3.1,SNR=1.4
comp=Z,2.1nm,0.7s
**PAB San Pablo 40.25 292** P **P** **23 32 42.3 -0.2**
PAB IAmb IAmb 23 32 44.2
comp=Z,15nm,1.5s
**DSB Dublin 41.17 313** P **P** **23 32 49.9 +0.1**
**PESTR Estremoz 42.85 292** P **P** **23 33 03.7 0.0**
PESTR IAmb IAmb 23 33 17.8

comp=Z,10nm,1.0s
**SPITS Spitsbergen Ar 45.51 352** P **P** **23 33 25.0 +0.5**
comp=Z,1.3nm,0.4s,baz=146,slow=10,SNR=1.4
comp=Z,1.3nm,0.4s
**TORD Torodi Ar. Bea 45.56 253** P **P** **23 33 27.1 +1.5**
TORD IAmb IAmb 23 33 29.5
comp=Z,4.8nm,1.3s
**TORD Torodi Ar. Bea 45.56 253** P **P** **23 33 25.2 -0.4**
comp=Z,1.5nm,0.7s,baz=37,slow=7.6,SNR=9.7
comp=Z,1.5nm,0.7s
**CMAR Chiang Mai Arr 49.26 95** P **P** **23 33 54.9 +0.4**
comp=Z,1.6nm,0.3s,baz=294,slow=8.1,SNR=9.5
comp=Z,1.6nm,0.3s
**XLT XiLinHaoTe 53.39 58** *eP* **P** **23 34 29.8 +4.6**
XLT pmax pmax
comp=Z,14nm,0.6s
**TIA Tai'an 56.55 66** P P 23 34 41.8 -6.3
TIA pmax pmax
comp=Z,8.0nm,1.7s
**KSRS Korea Array 64.05 61** P **P** **23 35 39.3 -0.1**
comp=Z,0.7nm,0.6s,baz=289,slow=8.7,SNR=2.1
comp=Z,0.7nm,0.6s
**BMAR Burnt Mountain 77.94 4** P **P** **23 37 04.2 +1.0**
**G19K Purcell Mounta 77.96 9** P **P** **23 37 04.3 +1.0**
G19K IAmb IAmb 23 37 08.9
comp=Z,2.4nm,0.7s
**G21K Allakaket 78.05 8** P **P** **23 37 04.1 +0.3**
G21K IAmb IAmb 23 37 04.7
comp=Z,4.4nm,1.2s
**F31M Tsiigehtchic 78.26 0** P **P** **23 37 05.6 +0.7**
F31M IAmb IAmb 23 37 10.7
comp=Z,3.8nm,0.8s
**H17K Granite Mounta 78.68 11** P **P** **23 37 08.1 +0.8**
H17K IAmb IAmb 23 37 16.2
comp=Z,8.1nm,1.4s
**ILAR Eielson Array 80.41 6** P **P** **23 37 17.5 +0.8**
comp=Z,0.5nm,0.8s,baz=313,slow=3.1,SNR=4.2
comp=Z,0.5nm,0.8s

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*ISN **25** 23:27:48.0±0.5,34°.68N×46°.16E, h8km±5km, ML3.3*
*TEH **25** 23:27:48.7,34°.64N×46°.18E, h8km±36km, ML3.2*
*IDC **25** 23:27:50.1±2.2,34°.83N×45°.81E, h0km, mb3.6/6, mbtmp3.6/6, Error ellipse: s-maj=50.3km s-min=27.9km az=165.0*

**ISC 25 23:27:48.7**±1.3,**34°.67N**±0°.03×**46°.17E**±0°.03,**h3**km±10km, **n24**,σ0**°76**/27,**mb3.4**/6,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.18** | **82** | Pg | | **Pg** | **23 27 52.9** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.48** | **136** | Pg | | **Pg** | **23 27 57.5** | **-0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **251** | Pg | | **Pg** | **23 27 58.8** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **201** | Pg | | **Pg** | **23 27 59.9** | **-0.3** |
| **ILIN** | **Lien** | **0.70** | **69** | Pg | | **Pg** | **23 28 02.8** | **+0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.82** | **119** | Pg | | **Pg** | **23 28 04.1** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **1.05** | **178** | Pg | | **Pg** | **23 28 08.5** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **81** | Pg | | **Pn** | **23 28 12.6** | **-0.3** |
| **IBZA** | **Bozab** | **1.41** | **98** | Pg | | **Pn** | **23 28 15.0** | **-0.6** |
| **IBDR** | **Badra** | **1.57** | **187** | *e*Pn | | **Pb** | **23 28 18.5** | **+0.1** |
| IBDR | | | | *e*Sn | | **Sg** | **23 28 40.0** | **+0.8** |
| IBDR | | | | AML | AML | | 23 28 50.7 | |
| | comp=E,384nm,0.5s | | | | | | | |
| IBDR | | | | AML | AML | | 23 28 52.2 | |
| | comp=N,291nm,0.8s | | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.57** | **340** | Pg | | **Pg** | **23 28 19.4** | **+0.5** |
| **IKRK** | **Kirkuk** | **1.66** | **296** | *e*Pn | | **Pb** | **23 28 19.0** | **-1.0** |
| IKRK | | | | *e*Sn | | **Sg** | **23 28 42.0** | **-0.2** |
| IKRK | | | | AML | AML | | 23 28 48.5 | |
| | comp=N,472nm,0.2s | | | | | | | |
| IKRK | | | | AML | AML | | 23 28 49.5 | |
| | comp=E,588nm,0.4s | | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.81** | **129** | Pg | | **Pb** | **23 28 21.8** | **-0.5** |
| **IDOB** | **Doab** | **1.89** | **117** | Pn | | **Pb** | **23 28 24.0** | **+0.1** |
| **BHD** | **Baghdad** | **2.04** | **227** | *e*Pn | | **Pn** | **23 28 24.3** | **+0.4** |
| BHD | | | | *e*Sn | | **Sb** | **23 28 51.0** | **-1.1** |
| **HSAM** | **Samen** | **2.07** | **102** | Pn | | **Pb** | **23 28 26.8** | **-0.2** |
| **HAGD** | **Aghdareh** | **2.45** | **86** | Pn | | **Pb** | **23 28 32.3** | **-1.3** |
| **RAFI** | **Al-Rafai** | **2.94** | **181** | *e*Pn | | **Pn** | **23 28 37.0** | **+0.7** |
| RAFI | | | | *e*Sn | | **Sn** | **23 29 13.0** | **+0.9** |
| **KURBB** | **Kurchatov Arra** | **28.36** | **46** | P | | **P** | **23 33 45.6** | **+1.8** |
| | comp=E,0.2nm,0.5s,baz=248,slow=9.6,SNR=1.1 | | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **29.67** | **55** | P | | P | 23 33 59.8 | +4.2 |
| | comp=E,0.3nm,0.6s,baz=250,slow=8.4,SNR=2.9 | | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **29.70** | **341** | P | | **P** | **23 33 54.4** | **-1.2** |
| | comp=E,1.5nm,0.9s,baz=148,slow=16,SNR=1.7 | | | | | | | |
| | comp=E,1.5nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **33.04** | **330** | P | | **P** | **23 34 24.6** | **-0.4** |
| | comp=E,1.0nm,0.5s,baz=135,slow=8.9,SNR=1.6 | | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.49** | **317** | P | | **P** | **23 35 20.1** | **-0.1** |
| | comp=E,0.3nm,0.3s,baz=105,slow=8.7,SNR=5.9 | | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.50** | **253** | P | | **P** | **23 36 09.2** | **-0.3** |
| | comp=E,0.4nm,1.0s,baz=48,slow=6.1,SNR=1.8 | | | | | | | |
| | comp=E,0.4nm,1.0s | | | | | | | |

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*ISN **25** 23:35:33.0±0.5,34°.65N×46°.14E, h13km±5km, ML2.9*
*TEH **25** 23:35:33.0,34°.64N×46°.17E, h9km, ML2.9*

**ISC 25 23:35:33.0**±1.2,**34°.66N**±0°.05×**46°.12E**±0°.05,**h5**km±14km, **n7**,σ0**°75**/12,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.23** | **80** | Pg | | **Pg** | **23 35 37.4** | **-0.1** |
| IDHR | | | | Sg | | **Sg** | **23 35 40.5** | **0.0** |
| **IGHG** | **Ghaleghazi** | **0.50** | **131** | Pg | | **Pg** | **23 35 42.3** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **198** | Pg | | **Pg** | **23 35 44.3** | **+0.3** |
| **IBDR** | **Badra** | **1.55** | **186** | *e*Pn | | **Pb** | **23 36 02.0** | **-0.2** |
| IBDR | | | | *e*Sn | | **Sg** | **23 36 23.5** | **+0.6** |
| **IKRK** | **Kirkuk** | **1.64** | **297** | *e*Pn | | **Pb** | **23 36 03.5** | **-0.1** |
| IKRK | | | | *e*Sn | | **Sg** | **23 36 26.0** | **+0.5** |
| IKRK | | | | AML | AML | | 23 36 31.7 | |
| | comp=E,125nm,0.4s | | | | | | | |
| IKRK | | | | AML | AML | | 23 36 35.9 | |
| | comp=N,130nm,0.6s | | | | | | | |
| **BHD** | **Baghdad** | **2.00** | **227** | *e*Pn | | **Pb** | **23 36 08.5** | **-1.3** |
| BHD | | | | *e*Sn | | **Sb** | **23 36 34.0** | **-1.1** |
| BHD | | | | AML | AML | | 23 36 49.2 | |
| | comp=E,200nm,0.4s | | | | | | | |
| **RAFI** | **Al-Rafai** | **2.93** | **180** | *e*Pn | | **Pn** | **23 36 21.0** | **+0.8** |
| RAFI | | | | *e*Sn | | **Sn** | **23 36 56.0** | **+0.3** |

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*IDC **25** 23:39:53.9±0.9, 16°.38N×95°.02W, h0km, mb3.9/12, mbtmp3.9/15, ML2.9/2, Error ellipse: s-maj=16.6km s-min=9.5km az=87.0*
*NEIC **25** 23:39:55±1.8, 16°.28N±0°.05×95°.14W±0°.03, h10km±1km, mb4.3/49, Md4.5/146(MEX), Error ellipse: s-maj=9.1km s-min=5.1km az=192.0*
*GCG **25** 23:39:56.7±2.8, 16°.37N×94°.98W, h2km, MD5.1*
*MEX **25** 23:39:58.1±1.4, 16°.45N×95°.18W, h29km±36km, MD4.5*
*CATAC **25** 23:40:01.1±0.8, 15°.86N×95°.06W, h29km±8km, MB5.5, mb5.2, ML5.1*

**ISC 25 23:39:54.1**±1.1,**16°.35N**±0°.02×**95°.08W**±0°.02,**h4**km±7km, **n216**,σ2**°11**/297,**mb4.2**/2/27,**Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CMIG** | **Matias Romero** | **0.76** | **14** | Pg | | **Pg** | **23 40 08.7** | **0.0** |
| | 389nm,0.3s,baz=205,slow=14,SNR=4375 | | | | | | | |
| CMIG | | | | Lg | | Lg | 23 40 18.5 | |
| | 6μm,0.3s,baz=23,slow=14,SNR=110 | | | | | | | |
| **CMIG** | **Matias Romero** | **0.76** | **14** | *e*P | | **Pg** | **23 40 08.7** | **0.0** |
| CMIG | | | | *e*S | | **Sg** | **23 40 18.6** | **0.0** |
| **CARR** | **Arriaga** | **1.12** | **95** | *e*P | | **Pg** | **23 40 15.7** | **+0.1** |
| CARR | | | | *e*S | | **Sb** | **23 40 31.6** | **+0.7** |
| **HUIG** | **Huatulco** | **1.15** | **240** | | | **Pg** | **23 40 14.9** | **-1.2** |
| HUIG | | | | | | **Sg** | **23 40 29.8** | **-1.3** |
| **HUIG** | **Huatulco** | **1.15** | **240** | *e*P | | **Pg** | **23 40 14.9** | **-1.2** |
| HUIG | | | | *e*S | | **Sg** | **23 40 29.8** | **-1.3** |
| **UXUV** | **UXUV** | **1.31** | **43** | *e*P | | **Pn** | **23 40 18.9** | **-0.2** |
| UXUV | | | | *e*S | | **Sb** | **23 40 36.7** | **+0.3** |
| **PANG** | **Puerto Angel** | **1.51** | **243** | | | **Pn** | **23 40 20.8** | **-1.0** |
| PANG | | | | | | **Sn** | **23 40 40.4** | **-1.5** |
| **PANG** | **Puerto Angel** | **1.51** | **243** | *e*P | | **Pn** | **23 40 20.8** | **-1.0** |
| PANG | | | | *e*S | | **Sn** | **23 40 40.4** | **-1.5** |
| **NEUV** | **Arroyo Zacate** | **1.52** | **333** | *e*S | | **Sn** | **23 40 40.2** | **-2.1** |
| **OXBJ** | **Oaxaca** | **1.73** | **295** | | | **Pn** | **23 40 25.6** | **+0.5** |
| OXBJ | | | | | | **Sn** | **23 40 46.8** | **-1.0** |
| **OXBJ** | **Oaxaca** | **1.73** | **295** | *e*P | | **Pn** | **23 40 25.6** | **+0.5** |
| OXBJ | | | | *e*S | | **Sn** | **23 40 46.8** | **-1.0** |
| **OXIG** | **Oaxaca** | **1.74** | **295** | | | **Pn** | **23 40 24.7** | **-0.6** |
| OXIG | | | | | | **Sn** | **23 40 46.5** | **-1.5** |
| **VHO** | **Vista Hermosa** | **1.74** | **295** | *e*P | | **Pn** | **23 40 24.7** | **-0.6** |
| VHO | | | | *e*S | | **Sn** | **23 40 46.5** | **-1.5** |
| **TUIG** | **Tuzandepetl** | **1.79** | **20** | *e*P | | **Pn** | **23 40 26.0** | **+0.3** |
| TUIG | | | | *e*S | | **Sn** | **23 40 44.7** | **-4.2** |
| **PCIG** | | **1.90** | **110** | | | **Pn** | **23 40 27.0** | **-0.2** |
| PCIG | | | | | | **Sn** | **23 40 51.9** | **+0.3** |
| **PCIG** | | **1.90** | **110** | *e*P | | **Pn** | **23 40 27.0** | **-0.2** |
| PCIG | | | | *e*S | | **Sn** | **23 40 51.9** | **+0.3** |
| **TGIG** | | **1.92** | **77** | | | **Pb** | **23 40 29.2** | **-0.5** |
| TGIG | | | | | | **Sg** | **23 40 55.6** | **-0.2** |
| **TGIG** | | **1.92** | **77** | *e*P | | **Pb** | **23 40 29.2** | **-0.5** |
| TGIG | | | | *e*S | | **Sg** | **23 40 55.6** | **-0.2** |
| **PEIG** | **Puerto Escondi** | **2.02** | **260** | | | **Pn** | **23 40 26.9** | **-2.0** |
| PEIG | | | | | | **Sn** | **23 40 54.8** | **+0.2** |
| **PEIG** | **Puerto Escondi** | **2.02** | **260** | *e*P | | **Pn** | **23 40 26.9** | **-2.0** |
| PEIG | | | | *e*S | | **Sn** | **23 40 54.8** | **+0.2** |
| **PMUV** | **Sontecomapan** | **2.18** | **359** | *e*P | | **Pb** | **23 40 33.0** | **-1.2** |
| PMUV | | | | *e*S | | **Sn** | **23 40 54.8** | **-3.9** |
| **YOIG** | **Yosondua** | **2.42** | **282** | | | **Pn** | **23 40 34.8** | **+0.1** |
| YOIG | | | | | | **Sb** | **23 41 07.0** | **-1.7** |
| **YOIG** | **Yosondua** | **2.42** | **282** | *e*P | | **Pn** | **23 40 34.8** | **+0.1** |
| YOIG | | | | *e*S | | **Sb** | **23 41 07.0** | **-1.7** |
| **TOIG** | **Toxpalan** | **2.57** | **313** | | | **Pn** | **23 40 37.2** | **+0.6** |
| TOIG | | | | | | **Sn** | **23 41 09.3** | **+0.8** |
| **TOIG** | **Toxpalan** | **2.57** | **313** | *e*P | | **Pn** | **23 40 37.2** | **+0.6** |
| TOIG | | | | *e*S | | **Sn** | **23 41 09.3** | **+0.8** |
| **CCIG** | **Comitan** | **2.82** | **91** | | | **Pn** | **23 40 41.9** | **+1.8** |
| **CCIG** | **Comitan** | **2.82** | **91** | *e*P | | **Pn** | **23 40 42.8** | **-2.4** |
| CCIG | | | | *e*S | | **Sn** | **23 41 16.7** | **+2.0** |
| **CCIG** | **Comitan** | **2.82** | **91** | *i*P | | **Pb** | **23 40 43.8** | **-1.4** |
| CCIG | | | | *i*S | | **Sb** | **23 41 19.3** | **-0.9** |
| CCIG | | | | IAML | | | 23 41 38.2 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **PNIG** | **Pinotepa** | **2.93** | **271** | *e* | | **Pn** | **23 40 40.2** | **-1.3** |
| PNIG | | | | *e* | | | 23 41 19.8 | |
| **HLIG** | **Huajuapan de L** | **3.00** | **300** | | | **Pn** | **23 40 43.4** | **+0.9** |
| HLIG | | | | | | **Sn** | **23 41 18.4** | **-0.6** |
| **HLIG** | **Huajuapan de L** | **3.00** | **300** | *e*P | | **Pn** | **23 40 43.4** | **+0.9** |
| HLIG | | | | *e*S | | **Sn** | **23 41 18.4** | **-0.6** |
| **TPIG** | **Tehuac#an** | **3.00** | **314** | *e* | | **Pb** | **23 40 48.2** | **0.0** |
| TPIG | | | | *e* | | | 23 41 25.1 | |
| **PAVE** | **Pavencul** | **3.02** | **112** | *e*P | | **Pn** | **23 40 43.9** | **+1.0** |
| PAVE | | | | *e*S | | **Sn** | **23 41 19.8** | **+0.2** |
| **THIG** | | **3.06** | **118** | | | **Pn** | **23 40 43.5** | **+0.2** |
| THIG | | | | | | **Sn** | **23 41 19.8** | **-0.5** |
| **THIG** | | **3.06** | **118** | *e*P | | **Pn** | **23 40 43.5** | **+0.2** |
| THIG | | | | *e*S | | **Sn** | **23 41 19.8** | **-0.5** |
| **CHUJ** | **Union Juarez** | **3.12** | **113** | *e*P | | **Pn** | **23 40 44.8** | **+0.5** |
| CHUJ | | | | *e*S | | **Sn** | **23 41 22.3** | **+0.2** |
| **FTIG** | **Fresnillo de T** | **3.31** | **298** | *e* | | **Pb** | **23 40 52.7** | **-0.7** |
| FTIG | | | | *e* | | | 23 41 33.1 | |
| **JAUV** | **Jalcomulco** | **3.42** | **332** | *e*P | | **Pn** | **23 40 45.4** | **-2.8** |
| JAUV | | | | *e*S | | **Sn** | **23 41 21.0** | **-8.3** |
| **MGIG** | **Malinaltepec** | **3.52** | **285** | *e* | | **Pn** | **23 40 50.0** | **+0.3** |
| MGIG | | | | *e* | | | 23 41 36.9 | |
| **TLIG** | **Tlapa** | **3.55** | **290** | Pn | | **Pn** | **23 40 49.9** | **-0.2** |
| **TLIG** | **Tlapa** | **3.55** | **290** | *e* | | **Pb** | **23 40 54.9** | **-2.6** |
| TLIG | | | | *e* | | | 23 41 40.6 | |
| **TLIG** | **Tlapa** | **3.55** | **290** | *i*P | | **Pb** | **23 40 58.8** | **+1.2** |
| TLIG | | | | *i*S | | **Sb** | **23 41 41.3** | **+0.2** |
| TLIG | | | | IAML | | | 23 41 47.0 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **HUEH** | **Huehuetenango** | **3.59** | **106** | | | **Pn** | **23 40 51.6** | **+0.9** |
| **HUEH** | **Huehuetenango** | **3.59** | **106** | *e*P | | **Pb** | **23 40 56.8** | **-1.4** |
| HUEH | | | | *e*S | | **Sb** | **23 41 40.1** | **-2.2** |
| **HUEH** | **Huehuetenango** | **3.59** | **106** | *i*P | | **Pn** | **23 40 53.1** | **+2.4** |
| HUEH | | | | IAML | | | 23 42 01.3 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| **LVIG** | **Laguna Verde** | **3.59** | **339** | *e*P | | **Pn** | **23 40 49.0** | **-1.5** |
| LVIG | | | | *e*S | | Sn | 23 41 22.1 | -11 |
| **RTAL** | **Retalhuleu** | **3.73** | **119** | Pn | | **Pn** | **23 40 52.0** | **-0.4** |
| **RTAL** | **Retalhuleu** | **3.73** | **119** | *e*P | | **Pn** | **23 40 53.0** | **+0.5** |
| RTAL | | | | *e*S | | **Sn** | **23 41 34.8** | **-2.1** |
| **RTAL** | **Retalhuleu** | **3.73** | **119** | *i*P | | **Pn** | **23 40 52.6** | **+0.1** |
| RTAL | | | | *i*S | | **Sn** | **23 41 34.4** | **-2.5** |
| RTAL | | | | IAML | | | 23 42 21.3 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **QUEO** | **Labor Ovalle** | **3.73** | **113** | *i*P | | **Pn** | **23 40 55.2** | **+2.4** |
| QUEO | | | | IAML | | | 23 42 15.4 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| **STG3** | **Santiaguito 3,** | **3.75** | **115** | *e*P | | **Pn** | **23 40 54.7** | **+1.8** |
| **SOKI** | **Kika Raxquin** | **3.85** | **113** | *i*P | | **Pn** | **23 40 56.8** | **+2.3** |
| SOKI | | | | IAML | | | 23 42 15.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CRIG** | **Cruz Grande** | **3.91** | **276** | | | **Pn** | **23 40 53.4** | **-1.5** |
| CRIG | | | | | | **Sb** | **23 41 51.8** | **+0.5** |
| **CRIG** | **Cruz Grande** | **3.91** | **276** | *e*P | | **Pn** | **23 40 53.4** | **-1.5** |
| CRIG | | | | *e*S | | **Sb** | **23 41 51.8** | **+0.5** |
| **SULM** | **Suchitepequez,** | **3.95** | **121** | *e*P | | **Pn** | **23 40 57.0** | **+1.6** |
| **PBCV** | **Popocatepetl** | **4.23** | **309** | *e*P | | **Pn** | **23 41 02.5** | **+2.8** |
| PBCV | | | | *e*S | | **Sb** | **23 41 59.7** | **-1.1** |
| **PBPN** | **Popocatepetl** | **4.32** | **309** | *e*P | | **Pn** | **23 41 03.0** | **+2.1** |
| PBPN | | | | *e*S | | **Sb** | **23 42 02.5** | **-1.0** |
| **PBXN** | **Popocatepetl** | **4.32** | **308** | *e*P | | **Pn** | **23 41 03.1** | **+2.1** |
| PBXN | | | | *e*P | | **Pn** | **23 41 03.2** | **+2.2** |
| PBXN | | | | *e*S | | **Sb** | **23 41 59.3** | **-4.2** |
| PBXN | | | | *e*S | | **Sb** | **23 42 01.1** | **-2.4** |
| **PPM** | **Popocatepetl** | **4.33** | **309** | *e*P | | **Pn** | **23 41 04.2** | **+3.0** |
| PPM | | | | *e*S | | **Sn** | **23 41 56.5** | **+4.1** |
| **PPIG** | **Popocatepetl** | **4.33** | **309** | | | **Pn** | **23 41 04.2** | **+3.0** |
| **DAIG** | **Los Arroyos** | **4.43** | **279** | | | **Pn** | **23 41 01.2** | **-0.9** |
| DAIG | | | | | | **Sb** | **23 42 06.5** | **+0.1** |
| **DAIG** | **Los Arroyos** | **4.43** | **279** | *e*P | | **Pn** | **23 41 01.2** | **-0.9** |
| DAIG | | | | *e*S | | **Sb** | **23 42 06.5** | **+0.1** |
| **CXUV** | **Coxquihui** | **4.49** | **328** | *e*P | | **Pn** | **23 41 01.7** | **-1.3** |
| CXUV | | | | *e*S | | **Sn** | **23 41 53.5** | **-2.1** |
| **FUG** | **Fuego 3** | **4.50** | **114** | *e*P | | **Pn** | **23 41 06.4** | **+3.2** |
| FUG | | | | *e*S | | **Sn** | **23 41 58.0** | **+1.9** |
| **SCIG** | **Sabancuy** | **4.53** | **54** | *e*P | | **Pn** | **23 41 03.8** | **+0.4** |
| SCIG | | | | *e*S | | **Sn** | **23 41 49.8** | **-6.8** |
| **YAIG** | **Yautepec** | **4.55** | **304** | | | **Pn** | **23 41 05.5** | **+1.6** |
| YAIG | | | | | | **Sn** | **23 41 55.0** | **-2.3** |
| **YAIG** | **Yautepec** | **4.55** | **304** | *e*P | | **Pn** | **23 41 05.5** | **+1.6** |
| YAIG | | | | *e*S | | **Sn** | **23 41 55.0** | **-2.3** |
| **MEIG** | **Mezcala** | **4.62** | **290** | | | **Pn** | **23 41 05.7** | **+0.9** |
| **MEIG** | **Mezcala** | **4.62** | **290** | *e*P | | **Pn** | **23 41 05.7** | **+0.9** |
| MEIG | | | | *e*S | | **Sn** | **23 41 52.2** | **-6.6** |
| **APG** | **El Apazote** | **4.64** | **106** | Pn | | **Pn** | **23 41 06.3** | **+1.1** |
| | comp=Z,0.5nm,0.3s,baz=89,slow=19,SNR=37 | | | | | | | |
| APG | | | | Sn | | **Sn** | **23 41 59.3** | **-0.3** |
| | comp=Z,7.8nm,0.3s,baz=74,slow=18,SNR=11 | | | | | | | |
| APG | | | | Lg | | Lg | 23 42 18.8 | |
| | comp=Z,5.4nm,0.3s,baz=112,slow=15,SNR=5.4 | | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | | |
| **PLIG** | **Platanillo** | **4.69** | **296** | | | **Pn** | **23 41 07.0** | **+1.3** |
| PLIG | | | | | | **Sb** | **23 42 14.2** | **+0.4** |
| **PLIG** | **Platanillo** | **4.69** | **296** | *e*P | | **Pn** | **23 41 07.0** | **+1.3** |
| PLIG | | | | *e*S | | **Sb** | **23 42 14.2** | **+0.4** |
| **MPVM** | **San Francisco** | **4.70** | **308** | *e*P | | **Pb** | **23 41 18.8** | **+1.6** |
| MPVM | | | | *e*S | | **Sb** | **23 42 14.8** | **+0.5** |
| **THVM** | **De Xico** | **4.74** | **309** | *e*P | | **Pg** | **23 41 22.6** | **-2.3** |
| THVM | | | | *e*S | | **Sb** | **23 42 10.6** | **-4.8** |
| **TXVM** | **Universitario** | **4.77** | **311** | *e*S | | **Sb** | **23 42 12.8** | **-3.6** |
| **XCVM** | **Xochimilco** | **4.81** | **307** | *e*P | | **Pb** | **23 41 22.2** | **+3.1** |
| XCVM | | | | *e*S | | **Sb** | **23 42 18.6** | **+1.1** |
| **TLVM** | **San Miguel Top** | **4.81** | **307** | *e*P | | **Pb** | **23 41 22.5** | **+3.3** |
| TLVM | | | | *e*S | | **Sn** | **23 42 08.5** | **+4.4** |
| **NBG** | **Las Nubes** | **4.88** | **110** | *e*P | | Pn | 23 41 13.4 | +4.8 |
| **VTVM** | **Tizayuca** | **4.89** | **315** | | | **Pb** | **23 41 23.2** | **+2.7** |
| **VTVM** | **Tizayuca** | **4.89** | **315** | *e*P | | **Pb** | **23 41 23.2** | **+2.7** |
| VTVM | | | | *e*S | | **Sb** | **23 42 13.1** | **-6.8** |
| **COVM** | **Coyoacan** | **4.90** | **308** | *e* | | | 23 42 16.9 | |
| **PBVM** | **Pinon** | **4.90** | **309** | | | **Pb** | **23 41 23.4** | **+3.0** |
| PBVM | | | | | | **Sn** | **23 42 05.8** | **+0.1** |
| **PBVM** | **Pinon** | **4.90** | **309** | *e*P | | **Pb** | **23 41 23.4** | **+3.0** |
| PBVM | | | | *e*S | | **Sn** | **23 42 05.8** | **+0.1** |
| **UNM** | **Universidad Na** | **4.90** | **308** | *e*P | | **Pg** | **23 41 25.2** | **-2.9** |
| | | | | *e*S | | **Sb** | **23 42 22.2** | **+2.1** |
| **BJVM** | **Benito Juarez** | **4.92** | **308** | *e* | | **Sb** | **23 42 25.8** | **+5.0** |
| **MAVM** | **Malinalco, Edo** | **4.95** | **302** | | | **Pn** | **23 41 08.1** | **-1.3** |
| **MAVM** | **Malinalco, Edo** | **4.95** | **302** | *e*P | | **Pn** | **23 41 08.1** | **-1.3** |
| MAVM | | | | *e*S | | Sn | 23 41 50.4 | -17 |
| **CTVM** | **Cuauhtemoc** | **4.96** | **309** | *e* | | | 23 42 16.2 | |
| **MHVM** | **Bosque de Chap** | **4.97** | **308** | *e*P | | **Pb** | **23 41 19.1** | **-2.8** |
| MHVM | | | | *e*S | | **Sb** | **23 42 26.2** | **+4.1** |
| **AOVM** | **Tlapan** | **4.98** | **306** | | | **Sn** | **23 42 07.8** | **-0.4** |
| **AOVM** | **Tlapan** | **4.98** | **306** | *e*P | | **Pb** | **23 41 17.7** | **-4.4** |
| AOVM | | | | *e*S | | **Sn** | **23 42 07.8** | **-0.4** |
| **CJVM** | **Cuajimalpa** | **5.00** | **307** | *e* | | | 23 42 21.6 | |
| **CAIG** | **El Cayaco** | **5.02** | **279** | | | **Pn** | **23 41 09.3** | **-0.9** |
| CAIG | | | | | | **Sn** | **23 42 04.0** | **-4.8** |
| **CAIG** | **El Cayaco** | **5.02** | **279** | *e*P | | **Pn** | **23 41 09.3** | **-0.9** |
| CAIG | | | | *e*S | | **Sn** | **23 42 04.0** | **-4.8** |
| **PETF** | **Flores** | **5.03** | **83** | | | **Pn** | **23 41 12.0** | **+1.8** |
| **PETF** | **Flores** | **5.03** | **83** | *e*P | | **Pn** | **23 41 12.3** | **+2.1** |
| PETF | | | | *e*S | | **Sn** | **23 42 13.8** | **+5.0** |
| **PETF** | **Flores** | **5.03** | **83** | *i*P | | **Pn** | **23 41 14.1** | **+3.8** |
| PETF | | | | IVmB_BB | | | 23 41 19.9 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| PETF | | | | IAmb | IAmb | | 23 41 37.2 | |
| | comp=Z,300nm,0.7s | | | | | | | |
| PETF | | | | *i*S | | **Sn** | **23 42 14.3** | **+5.5** |
| PETF | | | | IAML | | | 23 42 50.5 | |
| | comp=Z,850nm,1.0s | | | | | | | |
| **INVM** | **La Marquesa** | **5.04** | **306** | *e*P | | **Pg** | **23 41 27.0** | **-3.7** |
| INVM | | | | *e*S | | **Sb** | **23 42 23.2** | **-1.0** |
| **MRL** | **Marmol** | **5.34** | **103** | *e*P | | **Pn** | **23 41 16.8** | **+2.0** |
| **ARIG** | **Puente Sto Nin** | **5.39** | **292** | | | **Pn** | **23 41 17.0** | **+1.7** |
| **ARIG** | **Puente Sto Nin** | **5.39** | **292** | *e*P | | **Pn** | **23 41 17.0** | **+1.7** |
| ARIG | | | | *e*S | | **Sb** | **23 42 28.4** | **-5.5** |
| **DHIG** | **Demacu** | **5.44** | **317** | | | **Pb** | **23 41 31.2** | **+1.4** |
| DHIG | | | | | | **Sb** | **23 42 35.8** | **+0.3** |
| **DEIG** | **Demacu** | **5.44** | **317** | *e*P | | **Pb** | **23 41 31.2** | **+1.4** |
| DEIG | | | | *e*S | | **Sb** | **23 42 35.8** | **+0.2** |
| **NUBE** | **Las Nubes** | **5.66** | **115** | *i*P | | **Pn** | **23 41 20.4** | **+1.2** |
| NUBE | | | | IAmb | IAmb | | 23 41 28.4 | |
| | comp=Z,210nm,0.7s | | | | | | | |
| NUBE | | | | IAML | | | 23 41 34.9 | |
| | comp=Z,280nm,1.0s | | | | | | | |
| NUBE | | | | IVmB_BB | | | 23 41 50.0 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| NUBE | | | | *i*S | | **Sn** | **23 42 22.9** | **-1.9** |
| **ESQI** | **Esquipulas** | **5.81** | **107** | Pn | | **Pn** | **23 41 22.1** | **+1.0** |
| **ACIG** | **Acambay** | **5.82** | **309** | | | **Pb** | **23 41 36.2** | **-0.1** |
| ACIG | | | | | | **Sn** | **23 42 26.9** | **-1.8** |
| **ACIG** | **Acambay** | **5.82** | **309** | *e*P | | **Pb** | **23 41 36.2** | **-0.1** |
| ACIG | | | | *e*S | | **Sn** | **23 42 26.9** | **-1.8** |
| **CEVE** | **Cerro Verde** | **5.83** | **115** | *i*P | | **Pn** | **23 41 24.0** | **+2.4** |
| CEVE | | | | IVmB_BB | | | 23 41 32.0 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| CEVE | | | | IAML | | | 23 41 32.1 | |
| | comp=Z,310nm,1.0s | | | | | | | |
| CEVE | | | | IAmb | IAmb | | 23 41 38.1 | |
| | comp=Z,220nm,0.6s | | | | | | | |
| CEVE | | | | *i*S | | **Sn** | **23 42 28.0** | **-1.1** |
| **MTO3** | **Montecristo** | **5.84** | **109** | | | **Pn** | **23 41 21.9** | **+0.2** |
| **MTO3** | **Montecristo** | **5.84** | **109** | *i*P | | **Pn** | **23 41 22.0** | **+0.2** |
| MTO3 | | | | IVmB_BB | | | 23 41 22.3 | |
| | comp=Z,50μm,1.0s | | | | | | | |
| MTO3 | | | | IAML | | | 23 41 22.4 | |
| | comp=Z,640nm,1.0s | | | | | | | |
| **CTUV** | **Llano Grande** | **5.96** | **329** | *e*P | | **Pb** | **23 41 39.2** | **+0.6** |
| CTUV | | | | *e*S | | **Sn** | **23 42 30.6** | **-1.4** |
| **JAYA** | **Jayaque - finc** | **6.06** | **115** | *i*P | | **Pn** | **23 41 25.3** | **+0.6** |
| JAYA | | | | IVmB_BB | | | 23 41 32.2 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| JAYA | | | | IAmb | IAmb | | 23 41 38.0 | |
| | comp=Z,160nm,0.6s | | | | | | | |
| JAYA | | | | *i*S | | **Sn** | **23 42 31.5** | **-3.1** |
| JAYA | | | | IAML | | | 23 42 40.7 | |
| | comp=Z,480nm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **6.15** | **114** | *i*P | | **Pn** | **23 41 27.4** | **+1.5** |
| PMON | | | | IAmb | IAmb | | 23 41 31.7 | |
| | comp=Z,120nm,0.5s | | | | | | | |
| PMON | | | | IVmB_BB | | | 23 41 38.8 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| PMON | | | | *i*S | | **S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TX31** | **Lajitas Ar. Si** | **15.15** | **330** | | | **Pn** | **23 43 31.4** | **+2.4** |
| **ABTX** | **Abilene, Hawle** | **16.72** | **346** | | | **Pn** | **23 43 49.3** | **0.0** |
| ABTX | | | | IAmb | | IAmb | 23 43 56.8 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **Z41A** | **Richland Creek** | **16.96** | **7** | | | **Pn** | **23 43 52.7** | **+0.5** |
| Z41A | | | | IAmb | | IAmb | 23 44 01.0 | |
| | comp=Z,19nm,0.5s | | | | | | | |
| **WLAR** | **White Oak Lake** | **17.35** | **5** | P | | **Pn** | **23 43 57.8** | **+0.7** |
| WLAR | | | | IAmb | | IAmb | 23 44 16.5 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **POST** | **Post** | **17.63** | **342** | | | **Pn** | **23 44 00.3** | **-0.4** |
| **LOOK** | **Love County** | **17.67** | **354** | P | | **P** | **23 44 02.3** | **+0.2** |
| **MIAR** | **Mount Ida** | **18.17** | **4** | P | | **P** | **23 44 07.5** | **-0.1** |
| **UALR** | **University of** | **18.51** | **7** | P | | **P** | **23 44 11.3** | **0.0** |
| **WMOK** | **Wichita Mounta** | **18.61** | **350** | | | **Pn** | **23 44 13.5** | **+0.8** |
| **MSTX** | **Muleshoe** | **18.86** | **340** | P | | **Pn** | **23 44 16.2** | **+0.3** |
| MSTX | | | | IAmb | | IAmb | 23 44 23.1 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **19.03** | **7** | P | | **Pn** | **23 44 18.9** | **+1.2** |
| **121A** | **Cookes Peak, D** | **19.80** | **327** | P | | **P** | **23 44 26.2** | **+0.4** |
| 121A | | | | IAmb | | IAmb | 23 44 33.7 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **GOGA** | **Godfrey** | **19.96** | **30** | P | | **Pn** | **23 44 28.2** | **-0.7** |
| **U38A** | **Gravette** | **20.02** | **2** | P | | **P** | **23 44 27.7** | **-0.2** |
| U38A | | | | IAmb | | IAmb | 23 44 31.4 | |
| | comp=Z,8.8nm,0.8s | | | | | | | |
| **WVT** | **Waverly** | **20.73** | **17** | | | **P** | **23 44 35.6** | **0.0** |
| **PBMO** | **Poplar Bluff** | **20.76** | **11** | P | | **P** | **23 44 35.2** | **-0.8** |
| PBMO | | | | IAmb | | IAmb | 23 44 58.2 | |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| **ANMO** | **Albuquerque** | **21.14** | **333** | P | | **P** | **23 44 41.7** | **+1.4** |
| ANMO | | | | IAmb | | IAmb | 23 44 49.6 | |
| | comp=Z,9.5nm,1.1s | | | | | | | |
| **ANMO** | **Albuquerque** | **21.14** | **333** | P | | **P** | **23 44 40.1** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=244,slow=12,SNR=2.1 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **S39A** | **Bolivar** | **21.32** | **4** | P | | **P** | **23 44 41.8** | **-0.2** |
| S39A | | | | IAmb | | IAmb | 23 44 47.0 | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **TUC** | **Tucson** | **21.34** | **321** | P | | **P** | **23 44 43.0** | **+0.6** |
| **TKL** | **Tuckaleechee C** | **21.71** | **26** | P | | **P** | **23 44 47.1** | **+0.9** |
| **TKL** | **Tuckaleechee C** | **21.71** | **26** | P | | **P** | **23 44 47.3** | **+1.1** |
| | comp=Z,1.7nm,0.7s,baz=200,slow=21,SNR=2.2 | | | | | | | |
| TKL | | | | S | | **S** | **23 48 45.4** | **-1.6** |
| | comp=Z,0.9nm,0.4s,baz=248,slow=8.5,SNR=1.6 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **CCM** | **Cathedral Cave** | **21.88** | **8** | P | | **P** | **23 44 46.2** | **-1.8** |
| CCM | | | | IAmb | | IAmb | 23 44 53.0 | |
| | comp=Z,6.6nm,0.7s | | | | | | | |
| **R40A** | **Maddies Statio** | **22.00** | **6** | P | | **P** | **23 44 49.2** | **-0.1** |
| R40A | | | | IAmb | | IAmb | 23 44 55.0 | |
| | comp=Z,9.5nm,0.7s | | | | | | | |
| **TZTN** | **Tazewell** | **22.57** | **25** | P | | **P** | **23 44 54.8** | **-0.6** |
| TZTN | | | | IAmb | | IAmb | 23 45 07.4 | |
| | comp=Z,10nm,1.2s | | | | | | | |
| **V55A** | **Taylorsville** | **23.02** | **30** | P | | **P** | **23 45 01.3** | **+1.1** |
| V55A | | | | IAmb | | IAmb | 23 45 09.8 | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **23.21** | **339** | P | | **P** | **23 45 02.9** | **+0.4** |
| SDCO | | | | IAmb | | IAmb | 23 45 13.7 | |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| **P40A** | **Paris** | **23.25** | **6** | P | | **P** | **23 45 02.1** | **-0.3** |
| P40A | | | | IAmb | | IAmb | 23 45 07.4 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **Y14A** | **Wickenburg** | **23.81** | **321** | P | | **P** | **23 45 08.6** | **+0.4** |
| Y14A | | | | IAmb | | IAmb | 23 45 11.3 | |
| | comp=Z,6.8nm,0.6s | | | | | | | |
| **MVCO** | **Mesa Verde** | **23.93** | **333** | P | | **P** | **23 45 09.7** | **+0.1** |
| MVCO | | | | IAmb | | IAmb | 23 45 22.1 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **N38A** | **Joes South For** | **24.41** | **3** | P | | **P** | **23 45 13.0** | **-0.6** |
| **N41A** | **Harden Midland** | **24.55** | **8** | P | | **P** | **23 45 13.1** | **-1.7** |
| **SCIA** | **State Center** | **25.52** | **3** | P | | **P** | **23 45 23.9** | **+0.2** |
| **O49A** | **Covington** | **25.52** | **19** | P | | **P** | **23 45 21.9** | **-1.8** |
| **P52A** | **Corning** | **25.80** | **23** | P | | **P** | **23 45 25.7** | **-0.5** |
| P52A | | | | IAmb | | IAmb | 23 45 33.0 | |
| | comp=Z,9.2nm,1.1s | | | | | | | |
| **L40A** | **Anamosa** | **25.84** | **7** | P | | **P** | **23 45 25.2** | **-1.3** |
| **L42A** | **Oliver, Polo** | **25.99** | **9** | P | | **P** | **23 45 27.6** | **-0.2** |
| **JFWS** | **Jewell Farm** | **26.80** | **8** | P | | **P** | **23 45 34.5** | **-0.7** |
| **ECSD** | **EROS Data Cent** | **27.33** | **358** | P | | **P** | **23 45 40.0** | **0.0** |
| ECSD | | | | IAmb | | IAmb | 23 45 43.4 | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **29.10** | **338** | P | | **P** | **23 45 57.2** | **+1.1** |
| | comp=Z,0.1nm,0.4s,baz=159,slow=7.7,SNR=1.5 | | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **29.89** | **320** | P | | **P** | **23 46 02.5** | **-0.8** |
| OMMB | | | | IAmb | | IAmb | 23 46 09.8 | |
| | comp=Z,3.5nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **29.99** | **322** | P | | **P** | **23 46 04.1** | **0.0** |
| **NVAR** | **Mina Array Bea** | **29.99** | **322** | P | | **P** | **23 46 04.8** | **+0.8** |
| | comp=Z,2.5nm,0.9s,baz=137,slow=8.3,SNR=8.8 | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| **TPAW** | **Teton Pass** | **30.24** | **337** | P | | **P** | **23 46 05.8** | **-0.4** |
| TPAW | | | | IAmb | | IAmb | 23 46 14.2 | |
| | comp=Z,15nm,1.5s | | | | | | | |
| **E28A** | **Huff** | **30.50** | **352** | P | | **P** | **23 46 09.1** | **+0.9** |
| **EYMN** | **Ely** | **31.65** | **5** | P | | **P** | **23 46 17.3** | **-0.9** |
| EYMN | | | | IAmb | | IAmb | 23 46 19.4 | |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| **AGMN** | **Agassiz Nation** | **31.87** | **359** | P | | **P** | **23 46 19.7** | **-0.5** |
| **J08A** | **Circle Bar Ran** | **33.48** | **328** | P | | **P** | **23 46 34.8** | **+0.2** |
| J08A | | | | IAmb | | IAmb | 23 46 40.9 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **33.82** | **359** | P | | **P** | **23 46 37.2** | **0.0** |
| **ULM** | **Lac du Bonnet** | **33.82** | **359** | P | | **P** | **23 46 37.0** | **-0.2** |
| | comp=Z,5.2nm,0.8s,baz=178,slow=7.1,SNR=5.1 | | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **VILB** | **Vilhena** | **45.13** | **128** | P | | **P** | **23 48 12.7** | **+0.7** |
| **PTLB** | **Pontes e Lacer** | **47.51** | **130** | P | | **P** | **23 48 30.6** | **-0.1** |
| **BDFB** | **Brasilia** | **56.28** | **122** | P | | **P** | **23 49 37.7** | **+1.4** |
| | comp=Z,5.8nm,0.8s,baz=295,slow=4.7,SNR=7.8 | | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **59.52** | **337** | P | | **P** | **23 49 58.9** | **+0.6** |
| | comp=Z,0.5nm,0.8s,baz=111,slow=4.9,SNR=2.7 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **77.80** | **36** | P | | **P** | **23 51 53.2** | **+0.7** |
| | comp=Z,1.5nm,0.8s,baz=278,slow=5.8,SNR=5.2 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **ESDC** | **Sonseca Array** | **80.59** | **51** | P | | **P** | **23 52 07.5** | **-0.6** |
| | comp=Z,0.6nm,0.9s,baz=293,slow=5.2,SNR=3.3 | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| **NOA** | **NORSAR Array B** | **83.49** | **28** | P | | **P** | **23 52 22.8** | **-0.1** |
| | comp=Z,0.4nm,0.8s,baz=293,slow=4.8,SNR=1.1 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **KEST** | **Kesra** | **91.83** | **52** | P | | **P** | **23 53 04.7** | **+0.8** |
| | comp=Z,3.1nm,0.9s,baz=183,slow=18,SNR=2.8 | | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **92.69** | **76** | P | | **P** | **23 53 06.6** | **-1.5** |
| | comp=Z,0.3nm,0.9s,baz=280,slow=5.4,SNR=1.5 | | | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **133.04** | **258** | PKP | | **PKPdf** | **23 59 11.1** | **-0.6** |
| | comp=Z,0.5nm,0.8s,baz=89,slow=2.8,SNR=3.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **133.58** | **253** | PKP | | **PKPdf** | **23 59 11.7** | **-1.0** |
| | comp=Z,0.3nm,0.7s,baz=80,slow=1.1,SNR=1.2 | | | | | | | |

*ISN **25** 23:48:16.4±0.4,34˚.62N×46˚.25E,h7km±4km,ML3.8*
*IDC **25** 23:48:17.7±1.3,34˚.67N×45˚.95E,h0km,mb3.6/10,*
*mbtmp3.6/17,ML3.1/6,MS4.2/2,Error ellipse:*
*s-maj=25.3km s-min=14.8km az=150.0*
*TEH **25** 23:48:17.3,34˚.61N×46˚.25E,h8km±11km,ML3.7*
*OMAN **25** 23:48:27.3±0.5,33˚.69N×46˚.48E,h10km,mb3.9/12,*
*ms3.7/1,Error ellipse: s-maj=17.3km s-min=9.1km az=31.0*

**ISC 25 23:48:17.8±0.9,34˚.58N±0˚.03×46˚.27E±0˚.03,h14km±6km,**
**n95,σ2s12/108,mb3.5/9,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.16** | **39** | Pg | **Pg** | **23 48 21.0** | **-0.8** |
| IDHR | | | | Sg | **Sg** | **23 48 23.3** | **-1.3** |
| **IGHG** | **Ghaleghazi** | **0.35** | **135** | Pg | **Pg** | **23 48 25.3** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **213** | Pg | **Pg** | **23 48 28.5** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.56** | **263** | Pg | **Pg** | **23 48 28.2** | **-0.7** |
| **ILIN** | **Lien** | **0.67** | **59** | Pg | **Pg** | **23 48 30.3** | **-0.6** |
| ILIN | | | | Sg | **Sg** | **23 48 39.9** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **115** | Pg | **Pg** | **23 48 31.5** | **-0.1** |
| KCHF | | | | Sg | **Sb** | **23 48 43.0** | **+1.3** |
| **ILBA** | **Ilam Banvizeh** | **0.95** | **183** | Pg | **Pg** | **23 48 36.5** | **+0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **76** | Pg | **Pg** | **23 48 39.4** | **-0.8** |
| **IBZA** | **Bozab** | **1.32** | **94** | Pg | **Pn** | **23 48 42.4** | **+0.2** |
| **IBDR** | **Badra** | **1.49** | **191** | *e*Pn | **Pb** | **23 48 46.0** | **+0.7** |
| IBDR | | | | *e*Sn | **Sg** | **23 49 07.5** | **+1.7** |
| IBDR | | | | AML | AML | 23 49 12.9 | |
| | comp=E,737nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 23 49 19.6 | |
| | comp=N,846nm,0.6s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.68** | **128** | Pg | **Pb** | **23 48 49.5** | **+1.0** |
| **SDS1** | **Sardasht. Az.** | **1.69** | **338** | Pg | **Pn** | **23 48 47.9** | **+0.7** |
| **IDOB** | **Doab** | **1.77** | **116** | Pg | **Pb** | **23 48 51.1** | **+0.9** |
| **IKRK** | **Kirkuk** | **1.78** | **298** | *e*Pn | **Pn** | **23 48 49.0** | **+0.7** |
| IKRK | | | | *e*Sn | **Sb** | **23 49 13.0** | **+0.5** |
| IKRK | | | | AML | AML | 23 49 17.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 23 49 20.7 | |
| | comp=N,1μm,0.3s | | | | | | |
| **HSAM** | **Samen** | **1.96** | **100** | Pn | **Pb** | **23 48 53.6** | **+0.1** |
| **BHD** | **Baghdad** | **2.04** | **231** | *e*Pn | **Pn** | **23 48 53.0** | **+1.2** |
| BHD | | | | *e*Sn | **Sb** | **23 49 20.0** | **+0.1** |
| BHD | | | | AML | AML | 23 49 31.6 | |
| | comp=E,1μm,0.3s | | | | | | |
| **MAHB** | **Mahabad** | **2.23** | **348** | Pn | **Pb** | **23 48 56.2** | **-1.8** |
| **HAGD** | **Aghdareh** | **2.38** | **83** | Pn | **Pb** | **23 48 59.5** | **-1.1** |
| **IHSH** | **Hashtrud** | **2.84** | **16** | Pn | **Pn** | **23 49 05.1** | **+2.0** |
| **RAFI** | **Al-Rafai** | **2.85** | **183** | *e*Pn | **Pn** | **23 49 05.0** | **+2.1** |
| RAFI | | | | *e*Sn | **Sn** | **23 49 40.0** | **+3.0** |
| **QABG** | **Abgarm-Qazvin** | **2.94** | **67** | Pn | **Pn** | **23 49 07.2** | **+2.8** |
| **IAZR** | **Azarshahr** | **3.10** | **356** | Pn | **Pn** | **23 49 08.4** | **+1.7** |
| **IRAZ** | **Razeghan** | **3.12** | **74** | Pn | **Pn** | **23 49 10.0** | **+3.2** |
| **ISRB** | **Sarab** | **3.43** | **19** | Pn | **Pn** | **23 49 13.2** | **+2.1** |
| **JIR1** | **Jirandeh** | **3.58** | **53** | Pn | **Pn** | **23 49 15.3** | **+2.2** |
| **ISHB** | **Shabestar** | **3.73** | **352** | Pn | **Pn** | **23 49 17.1** | **+1.8** |
| **IHRS** | **Heris** | **3.79** | **9** | Pn | **Pn** | **23 49 18.1** | **+2.1** |
| **IQOM** | **Qom** | **3.96** | **85** | Pn | **Pn** | **23 49 20.8** | **+2.3** |
| **IMRD** | **Marand** | **4.15** | **354** | Pn | **Pn** | **23 49 23.0** | **+2.0** |
| **IPIR** | **Pirpir** | **4.29** | **115** | Pn | **Pn** | **23 49 25.3** | **+2.2** |
| **QAMS** | **Qamsar** | **4.33** | **100** | Pn | **Pn** | **23 49 26.2** | **+2.7** |
| **JHBN** | **Jahan bin** | **4.36** | **121** | Pn | **Pn** | **23 49 26.5** | **+2.5** |
| **GRMI** | **Germi** | **4.42** | **17** | Pn | **Pn** | **23 49 26.6** | **+2.0** |
| **IVRN** | **Varamin** | **4.51** | **83** | Pn | **Pn** | **23 49 28.7** | **+2.9** |
| **ZNGN** | **Zangian** | **4.56** | **121** | Pn | **Pn** | **23 49 29.6** | **+2.9** |
| **IKLH** | **Kolahrood** | **4.59** | **104** | Pn | **Pn** | **23 49 30.0** | **+2.9** |
| **IDMV** | **Damavand** | **4.83** | **76** | Pn | **Pn** | **23 49 33.0** | **+2.6** |
| **KRSH** | **Karshahi** | **4.90** | **95** | Pn | **Pn** | **23 49 33.8** | **+2.5** |
| **ISFB** | **Sefidab** | **4.94** | **91** | Pn | **Pn** | **23 49 34.3** | **+2.5** |
| **IBRJ** | **Brojen** | **4.96** | **121** | Pn | **Pn** | **23 49 35.4** | **+3.2** |
| **IZEF** | **Zefreh** | **5.32** | **107** | Pn | **Pn** | **23 49 40.1** | **+3.0** |
| **IFIR** | **Firozkooh** | **5.42** | **77** | Pn | **Pn** | **23 49 41.1** | **+2.6** |
| **KBD** | **Kabd** | **5.52** | **167** | P | **Pn** | **23 49 41.6** | **+2.0** |
| **GNI** | **Garni** | **5.69** | **348** | Pb | **Pb** | **23 49 59.4** | **+2.4** |
| **GNI** | **Garni** | **5.69** | **348** | Pn | **Pn** | **23 49 44.3** | **+2.2** |
| | comp=E,0.5nm,0.3s,baz=193,slow=21,SNR=1.7 | | | | | | |
| GNI | | | | Lg | Lg | 23 51 17.9 | |
| | baz=118,slow=13 | | | | | | |
| | comp=E,2.1nm,0.4s | | | | | | |
| **KLNJ** | **Kolanjah** | **5.72** | **127** | Pn | **Pn** | **23 49 44.8** | **+2.1** |
| **IRAM** | **Ramesheh** | **5.82** | **117** | Pn | **Pn** | **23 49 46.6** | **+2.6** |
| **ASF** | **Jabal al Asfar** | **8.20** | **256** | Pn | **Pn** | **23 50 15.4** | **-1.0** |
| | comp=E,0.3nm,0.3s,baz=225,slow=1.0,SNR=2.0 | | | | | | |
| ASF | | | | Lg | Lg | 23 52 26.2 | |
| | comp=E,0.7nm,0.3s,baz=238,slow=0.8,SNR=3.7 | | | | | | |
| | comp=E,1.2nm,0.3s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.18** | **263** | Pn | **Pn** | **23 50 29.7** | **-0.2** |
| | comp=E,0.6nm,0.3s,baz=79,slow=15,SNR=7.8 | | | | | | |
| | comp=E,0.3nm,0.2s | | | | | | |
| **EIL** | **Elat** | **10.77** | **246** | Pn | **Pn** | **23 50 50.8** | **-0.8** |
| | comp=E,0.3nm,0.3s,baz=331,slow=15,SNR=1.8 | | | | | | |
| EIL | | | | Lg | Lg | 23 53 53.9 | |
| | comp=E,0.3nm,0.3s,baz=341,slow=20,SNR=2.3 | | | | | | |
| | comp=E,1.8nm,0.7s | | | | | | |
| **RAYN** | **Ar Rayn** | **11.04** | **184** | *i* Pn | **Pn** | **23 50 53.6** | **-1.8** |
| | SNR=6.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **11.31** | **301** | Pn | **Pn** | **23 50 58.0** | **-1.2** |
| | baz=123,slow=13,SNR=1.3 | | | | | | |
| | comp=E,0.1nm,0.5s | | | | | | |
| **SHME** | **Shmm** | **12.04** | **132** | Pn | **Pn** | **23 51 08.5** | **-0.5** |
| **SHME** | **Shamm** | **12.04** | **132** | P | **Pn** | **23 51 08.8** | **-0.2** |
| **MASF** | **Masafi** | **12.55** | **134** | P | **Pn** | **23 51 16.5** | **+0.4** |
| MASF | | | | S | **Sn** | **23 53 30.7** | **-5.0** |
| **NAZ** | **Nazwa, Dubai** | **12.56** | **137** | *i* Pn | **Pn** | **23 51 16.9** | **+0.7** |
| | SNR=6.6 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **12.56** | **137** | P | **Pn** | **23 51 17.2** | **+1.1** |
| | SNR=6.6 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **12.66** | **139** | *i* Pn | **Pn** | **23 51 18.0** | **+0.4** |
| | SNR=19 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **12.66** | **139** | P | **Pn** | **23 51 18.2** | **+0.7** |
| | SNR=19 | | | | | | |
| ASUD | | | | S | **Sn** | **23 53 34.6** | **-3.8** |
| **MDH** | **Madha** | **12.69** | **134** | Pn | **Pn** | **23 51 17.5** | **-0.4** |
| **MDH** | **Madha** | **12.69** | **134** | P | **Pn** | **23 51 18.0** | **+0.1** |
| MDH | | | | S | **Sn** | **23 53 32.4** | **-6.6** |
| **FAQ** | **Al Faqa, Dubai** | **12.71** | **138** | Pn | **Pn** | **23 51 18.3** | **+0.1** |
| **FAQ** | **Al Faqa, Dubai** | **12.71** | **138** | P | **Pn** | **23 51 18.5** | **+0.3** |
| FAQ | | | | P | **Pn** | **23 51 18.5** | **+0.3** |
| **UOSS** | **Minazif** | **12.90** | **135** | Pn | **Pn** | **23 51 20.3** | **-0.6** |
| **UOSS** | **Minazif** | **12.90** | **135** | P | **Pn** | **23 51 19.9** | **-0.9** |
| UOSS | | | | S | Sn | 23 53 33.6 | -11 |
| **HATD** | **Hatta, Dubai** | **12.95** | **136** | Pn | **Pn** | **23 51 21.3** | **-0.2** |
| **HATD** | **Hatta, Dubai** | **12.95** | **136** | P | **Pn** | **23 51 21.6** | **0.0** |
| HATD | | | | S | **Sn** | **23 53 39.7** | **-5.8** |
| **ASHO** | **Ashiyiah** | **13.02** | **137** | *i* Pn | **Pn** | **23 51 22.1** | **-0.4** |
| | SNR=22 | | | | | | |
| **ASHO** | **Ashiyiah** | **13.02** | **137** | P | **Pn** | **23 51 22.1** | **-0.4** |
| | SNR=22 | | | | | | |
| ASHO | | | | S | Sn | 23 53 39.7 | -7.5 |
| **MZR** | **Muzera** | **13.15** | **149** | P | **Pn** | **23 51 24.4** | **+0.2** |
| | SNR=9.7 | | | | | | |
| **ALNE** | **Al Ain** | **13.35** | **139** | *i* Pn | **Pn** | **23 51 26.6** | **-0.3** |
| | SNR=10 | | | | | | |
| **ALNE** | **Al Ain** | **13.35** | **139** | P | **Pn** | **23 51 26.5** | **-0.4** |
| | SNR=10 | | | | | | |
| ALNE | | | | S | Sn | 23 53 47.6 | -7.6 |
| **SOHO** | **SOHO** | **13.72** | **137** | *i* Pn | **Pn** | **23 51 30.6** | **-1.4** |
| | SNR=7.2 | | | | | | |
| **SOHO** | **SOHO** | **13.72** | **137** | P | **Pn** | **23 51 31.2** | **-0.7** |
| SOHO | | | | S | Sn | 23 53 55.0 | -9.2 |
| **HOQ** | **Hoqain** | **14.59** | **136** | P | **Pn** | **23 51 43.3** | **-0.7** |
| **BSY** | **Bisya** | **15.19** | **138** | P | **Pn** | **23 51 51.4** | **-0.7** |
| | SNR=5.4 | | | | | | |
| BSY | | | | S | Sn | 23 54 30.7 | -9.4 |
| **SMDO** | **Samad** | **15.42** | **135** | P | **Pn** | **23 51 55.2** | **0.0** |
| SMDO | | | | S | **Sn** | **23 54 40.2** | **-5.8** |
| **WSAR** | **Wadi Sarin** | **15.63** | **133** | Pn | **Pn** | **23 51 56.1** | **-1.7** |
| | comp=E,1.0nm,0.3s,baz=307,slow=10.0,SNR=14 | | | | | | |
| WSAR | | | | Sn | Sn | 23 54 41.2 | -10 |
| | comp=E,0.1nm,0.3s,baz=288,slow=13,SNR=2.0 | | | | | | |
| **MHTO** | **MHTO** | **17.02** | **140** | P | **Pn** | **23 52 15.4** | **-0.1** |
| MHTO | | | | S | Sn | 23 55 15.6 | -9.0 |
| **DOK** | **Doka** | **17.37** | **154** | P | **Pn** | **23 52 17.6** | **-2.2** |
| DOK | | | | S | **Sn** | **23 55 26.3** | **-6.8** |
| **IDI** | **Anoyia** | **17.55** | **278** | P | **Pn** | **23 52 20.6** | **-1.5** |
| | comp=E,2.9nm,0.8s,baz=222,slow=23,SNR=1.5 | | | | | | |
| **WHFO** | **Wadi Hawf** | **17.89** | **156** | P | **Pn** | **23 52 25.5** | **-1.0** |
| **AKTO** | **Aktyubinsk** | **18.02** | **25** | P | **P** | **23 52 28.7** | **+0.5** |
| | comp=E,0.1nm,0.3s,baz=220,slow=7.9,SNR=2.4 | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | |
| **ABTO** | **Aybut** | **18.27** | **158** | P | **Pn** | **23 52 30.8** | **-0.3** |
| **AKASG** | **Malin Array Be** | **20.34** | **328** | P | **P** | **23 52 53.3** | **-0.2** |
| | comp=E,0.7nm,0.4s,baz=141,slow=9.2,SNR=1.9 | | | | | | |
| | comp=E,0.7nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **25.16** | **35** | P | **P** | **23 53 45.7** | **+3.2** |
| | comp=E,0.8nm,0.7s,baz=243,slow=8.0,SNR=3.1 | | | | | | |
| | comp=E,0.8nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.36** | **46** | P | **P** | **23 54 13.9** | **+2.5** |
| | comp=E,0.3nm,0.2s,baz=246,slow=9.5,SNR=2.2 | | | | | | |
| | comp=E,0.3nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.66** | **55** | P | **P** | **23 54 27.1** | **+4.1** |
| | comp=E,0.1nm,0.5s,baz=255,slow=8.0,SNR=1.4 | | | | | | |
| | comp=E,0.1nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **29.82** | **341** | P | **P** | **23 54 23.4** | **-0.8** |
| | comp=E,1.4nm,0.8s,baz=155,slow=14,SNR=1.4 | | | | | | |
| FINES | | | | LR | LR | 00 08 18.2 | |
| | comp=E,357nm,18.8s,baz=37,slow=40 | | | | | | |
| | comp=E,1.4nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **33.16** | **330** | P | **P** | **23 54 54.3** | **+0.7** |
| | comp=E,0.7nm,0.4s,baz=131,slow=7.9,SNR=9.7 | | | | | | |
| | comp=E,0.7nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.16** | **42** | P | **P** | **23 54 56.6** | **+2.9** |
| | comp=E,0.2nm,0.3s,baz=233,slow=7.0,SNR=1.9 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.62** | **317** | P | **P** | **23 55 48.7** | **-0.1** |
| | comp=E,1.0nm,0.5s,baz=104,slow=8.8,SNR=9.0 | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.95** | **293** | P | **P** | **23 55 50.3** | **-1.5** |
| | comp=E,0.4nm,0.8s,baz=65,slow=6.9,SNR=3.3 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.55** | **253** | P | **P** | **23 56 38.0** | **+0.6** |
| | comp=E,0.4nm,0.8s,baz=47,slow=6.3,SNR=2.7 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **DAV** | **Davao City (W)** | **77.23** | **90** | LR | LR | 00 39 05.0 | |
| | comp=E,148nm,21.7s,baz=112,slow=39 | | | | | | |

**RSNC 25 23:51:28.5±0.0,4˚N±1˚×7˚6W±˚,h119km±2km,M3.5,mb4.0,**
**ML3.5,Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YOTC** | **Yotoco, Valle** | **0.37** | **181** | P | Pn | 23 51 44.2 | -1.6 |
| YOTC | | | | S | Sn | 23 51 58.0 | -0.9 |
| **PLMC** | **San Jos del P** | **0.55** | **6** | P | Pn | 23 51 44.6 | -2.1 |
| PLMC | | | | S | Sn | 23 51 59.8 | -0.7 |
| **MALC** | **Bahia Malaga** | **1.05** | **251** | P | Pn | 23 51 50.4 | -0.5 |
| MALC | | | | S | Sn | 23 52 09.0 | +1.1 |
| **NIZA** | **Niza - Manizal** | **1.11** | **51** | P | Pn | 23 51 51.6 | -0.3 |
| NIZA | | | | S | Sn | 23 52 08.8 | -0.7 |
| **ORTC** | **Ortega, Tolima** | **1.18** | **112** | P | Pn | 23 51 50.9 | -1.4 |
| ORTC | | | | S | Sn | 23 52 09.3 | -1.1 |
| **PIZC** | **Pizarro, Choco** | **1.18** | **301** | P | Pn | 23 51 51.4 | -0.9 |
| PIZC | | | | S | Sn | 23 52 10.2 | -0.1 |
| **JAMC** | **Jamundi, Valle** | **1.19** | **196** | P | Pn | 23 51 50.7 | -1.9 |
| JAMC | | | | S | Sn | 23 52 10.2 | -0.7 |
| **CBOC** | **Ciudad Bolivar** | **1.53** | **12** | P | Pn | 23 51 54.7 | -1.7 |
| CBOC | | | | S | Sn | 23 52 17.0 | -0.6 |
| **PRAC** | **Prado** | **1.59** | **114** | P | Pn | 23 51 55.9 | -1.0 |
| PRAC | | | | S | Sn | 23 52 18.0 | -0.6 |
| **POPC** | **Popayan, Colom** | **1.84** | **191** | P | Pn | 23 51 58.2 | -2.0 |
| POPC | | | | S | Sn | 23 52 21.3 | -3.0 |
| **NORC** | **Norcasia** | **1.89** | **51** | P | Pn | 23 51 59.3 | -1.3 |
| NORC | | | | S | Sn | 23 52 23.1 | -2.1 |
| **BETC** | **Betania** | **1.89** | **152** | P | Pn | 23 51 59.6 | -1.1 |
| BETC | | | | S | Sn | 23 52 24.2 | -1.0 |
| **ROSC** | **El Rosal** | **2.07** | **77** | P | Pn | 23 52 03.7 | +0.5 |
| ROSC | | | | S | Sn | 23 52 32.4 | +2.8 |
| **SOLC** | **Bahia Solano** | **2.14** | **330** | P | Pn | 23 52 02.0 | -1.7 |
| SOLC | | | | S | Sn | 23 52 29.2 | -1.4 |
| **URMC** | **La Uribe, Meta** | **2.25** | **119** | P | Pn | 23 52 03.7 | -1.4 |
| URMC | | | | S | Sn | 23 52 31.7 | -1.5 |
| **GR1C** | **Gorgona, Isla** | **2.27** | **234** | P | Pn | 23 52 02.3 | -3.0 |
| GR1C | | | | S | Sn | 23 52 29.4 | -4.1 |
| **GARC** | **Garzon, Huila** | **2.32** | **159** | P | Pn | 23 52 04.5 | -1.7 |
| GARC | | | | S | Sn | 23 52 33.0 | -2.1 |
| **BBAC** | **Balboa, Cauca** | **2.49** | **201** | P | Pn | 23 52 06.7 | -1.7 |
| BBAC | | | | S | Sn | 23 52 38.2 | -0.8 |
| **SPBC** | **San Pablo de B** | **2.60** | **60** | P | Pn | 23 52 08.7 | -0.9 |
| **CHIC** | **Chingaza** | **2.61** | **84** | P | Pn | 23 52 10.8 | +0.7 |
| CHIC | | | | S | Sn | 23 52 42.7 | +0.6 |
| **DBBC** | **Dabeiba** | **2.64** | **3** | P | Pn | 23 52 08.8 | -1.4 |
| DBBC | | | | S | Sn | 23 52 41.1 | -1.2 |
| **VILC** | **Villavicencio,** | **2.65** | **95** | P | Pn | 23 52 10.1 | -0.2 |
| VILC | | | | S | Sn | 23 52 44.0 | +1.5 |
| **CRUC** | **La Cruz** | **2.84** | **192** | P | Pn | 23 52 11.7 | -1.3 |
| CRUC | | | | S | Sn | 23 52 45.2 | -2.1 |
| **FLOC** | **Florencia

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HAGD | Aghdareh | 2.47 | 85 | Pn | Pb | 00 05 30.1 | -1.5 |
| IHSH | Hashtrud | 2.83 | 18 | Pn | Pb | 00 05 34.9 | -2.8 |
| RAFI | Al-Rafai | 2.89 | 181 | *e*Pn | Pn | 00 05 34.0 | +0.6 |
| RAFI | | | | *e*Sn | Sn | 00 06 08.5 | -0.2 |
| IAZR | Azarshahr | 3.05 | 358 | Pn | Pb | 00 05 38.3 | -3.3 |
| IRAZ | Razeghan | 3.20 | 75 | Pn | Pb | 00 05 40.4 | -3.7 |
| ISRB | Sarab | 3.42 | 21 | Pn | Pn | 00 05 43.1 | +2.2 |
| ISHB | Shabestar | 3.68 | 353 | Pn | Pn | 00 05 47.1 | +2.6 |
| IPIR | Pirpir | 4.40 | 115 | Pn | Pn | 00 05 55.3 | +0.8 |
| QAMS | Qamsar | 4.44 | 100 | Pn | Pn | 00 05 57.0 | +2.0 |
| JHBN | Jahan bin | 4.47 | 121 | Pn | Pn | 00 05 56.8 | +1.4 |
| ZNGN | Zangian | 4.66 | 121 | Pn | Pn | 00 06 00.0 | +1.9 |
| KRSH | Karshahi | 5.00 | 96 | Pn | Pn | 00 06 04.8 | +2.2 |

*IDC* ***26*** *00:11:01.1±1.6,34°.64N×46°.13E, h0km, mb3.6/7, mbtmp3.5/10, ML3.4/3, Error ellipse: s-maj=26.8km s-min=21.8km az=151.0*

*ISN* ***26*** *00:11:02.0±0.5,34°.60N×46°.17E, h7km±5km, ML3.6*

*TEH* ***26*** *00:11:03.5,34°.59N×46°.21E, h8km±15km, ML3.5*

**ISC 26 00:11:03.6±0.9,34°.59N±0°.03×46°.20E±0°.03, h14km±6km, n49, σ1°91/58, mb3.4/7, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IDHR | **Dehrash** | 0.19 | 55 | Pg | **Pg** | 00 11 07.8 | -0.4 |
| IDHR | | | | Sg | **Sg** | 00 11 11.3 | -0.1 |
| IGHG | **Ghaleghazi** | 0.40 | 130 | Pg | **Pg** | 00 11 11.6 | -0.2 |
| IGHG | | | | Sg | **Sg** | 00 11 18.6 | +1.2 |
| KGS1 | **Ghasr-e-Shirin** | 0.51 | 261 | Pg | **Pg** | 00 11 13.6 | -0.1 |
| KGS1 | | | | Sg | **Sg** | 00 11 22.0 | +1.5 |
| GLG1 | **Gilan-e-Gharb** | 0.53 | 207 | Pg | **Pg** | 00 11 14.0 | -0.2 |
| GLG1 | | | | Sg | **Sg** | 00 11 22.3 | +1.0 |
| ILIN | **Lien** | 0.71 | 62 | Pg | **Pg** | 00 11 16.8 | -0.8 |
| KCHF | **Cheshme Sefid,** | 0.77 | 114 | Pg | **Pg** | 00 11 17.8 | -0.8 |
| KCHF | | | | Sg | **Sg** | 00 11 29.7 | +1.0 |
| ILBA | **Ilam Banvizeh** | 0.96 | 179 | Pg | **Pg** | 00 11 21.9 | -0.4 |
| SNQR | **Sonqor, Kerman** | 1.21 | 77 | Pg | **Pg** | 00 11 26.9 | -0.1 |
| IBZA | **Bozab** | 1.38 | 95 | Pg | **Pn** | 00 11 29.6 | +0.9 |
| IBDR | **Badra** | 1.49 | 189 | *e*Pn | **Pn** | 00 11 31.0 | +1.0 |
| IBDR | | | | *e*Sn | **Sn** | 00 11 52.0 | +2.7 |
| IBDR | comp=E,1μm,0.8s | | | AML | AML | 00 11 57.0 | |
| IBDR | comp=N,961nm,0.6s | | | AML | AML | 00 12 07.0 | |
| SDS1 | **Sardasht. Az.** | 1.66 | 340 | Pg | **Pn** | 00 11 34.0 | +1.5 |
| IKRK | **Kirkuk** | 1.73 | 298 | *e*Pn | **Pn** | 00 11 34.0 | +0.8 |
| IKRK | | | | *e*Sn | **Sn** | 00 11 57.3 | +2.2 |
| IKRK | comp=E,564nm,0.4s | | | AML | AML | 00 12 05.2 | |
| IKRK | comp=N,721nm,0.5s | | | AML | AML | 00 12 07.1 | |
| IKFM | **Kafar-mosalman** | 1.73 | 127 | Pg | **Pn** | 00 11 35.7 | +2.3 |
| IDOB | **Doab** | 1.83 | 115 | Pn | **Pn** | 00 11 37.1 | +2.3 |
| BHD | **Baghdad** | 2.00 | 229 | *e*Pn | **Pn** | 00 11 38.0 | +1.0 |
| BHD | | | | *e*Sn | **Sn** | 00 12 04.0 | +2.1 |
| BHD | comp=E,713nm,0.3s | | | AML | AML | 00 12 20.0 | |
| HSAM | **Samen** | 2.02 | 100 | Pn | **Pn** | 00 11 39.4 | +1.8 |
| MAHB | **Mahabad** | 2.21 | 350 | Pn | **Pn** | 00 11 42.9 | +2.9 |
| HAGD | **Aghdareh** | 2.44 | 84 | Pn | **Pn** | 00 11 45.7 | +2.5 |
| IHSH | **Hashtrud** | 2.84 | 17 | Pn | **Pn** | 00 11 51.7 | +2.8 |
| RAFI | **Al-Rafai** | 2.86 | 181 | *e*Pn | **Pn** | 00 11 50.0 | +1.2 |
| RAFI | | | | *e*Sn | **Sn** | 00 12 25.5 | +2.4 |
| QABG | **Abgarm-Qazvin** | 2.99 | 67 | Pn | **Pn** | 00 11 53.1 | +2.3 |
| IAZR | **Azarshahr** | 3.09 | 357 | Pn | **Pn** | 00 11 54.7 | +2.5 |
| ISRB | **Sarab** | 3.44 | 20 | Pn | **Pn** | 00 11 60.0 | +3.0 |
| ISHB | **Shabestar** | 3.71 | 353 | Pn | **Pn** | 00 12 03.3 | +2.5 |
| IHRS | **Heris** | 3.78 | 10 | Pn | **Pn** | 00 12 04.3 | +2.6 |
| IQOM | **Qom** | 4.02 | 85 | Pn | **Pn** | 00 12 07.3 | +2.3 |
| QAMS | **Qamsar** | 4.39 | 100 | Pn | **Pn** | 00 12 12.9 | +2.7 |
| JHBN | **Jahan bin** | 4.42 | 121 | Pn | **Pn** | 00 12 12.5 | +1.9 |
| GRMI | **Germi** | 4.42 | 17 | Pn | **Pn** | 00 12 13.4 | +2.9 |
| IVRN | **Varamin** | 4.57 | 83 | Pn | **Pn** | 00 12 14.9 | +2.5 |
| ZNGN | **Zangian** | 4.61 | 121 | Pn | **Pn** | 00 12 15.5 | +2.2 |
| IKLH | **Kolahrood** | 4.65 | 104 | Pn | **Pn** | 00 12 16.4 | +2.7 |
| KRSH | **Karshahi** | 4.96 | 96 | Pn | **Pn** | 00 12 20.4 | +2.6 |
| IBRJ | **Brojen** | 5.01 | 121 | Pn | **Pn** | 00 12 20.7 | +2.0 |
| IZEF | **Zefreh** | 5.38 | 107 | Pn | **Pn** | 00 12 26.4 | +2.7 |
| IFIR | **Firoozkooh** | 5.47 | 77 | Pn | **Pn** | 00 12 27.4 | +2.3 |
| GNI | **Garni** | 5.67 | 349 | Pg | **Pb** | 00 12 41.3 | -1.1 |
| GNI | comp=E,0.3nm,0.3s,baz=225,slow=19,SNR=1.7 | | | Lg | Lg | 00 14 00.7 | |
| IRAM | **Rameshеh** | 5.88 | 116 | Pn | **Pn** | 00 12 32.3 | +1.8 |
| MMAI | **Mount Meron Ar** | 9.12 | 263 | Pn | **Pn** | 00 13 13.2 | -1.7 |
| BRTR | **Keskin Array B** | 11.25 | 301 | Pn | **Pn** | 00 13 45.0 | +0.9 |
| WSAR | **Wadi Sarin** | 15.68 | 133 | Pn | **Pn** | 00 14 41.1 | -3.1 |
| WSAR | comp=E,1.6nm,0.3s,baz=318,slow=10,SNR=17 | | | Sn | Sn | 00 17 26.2 | -12 |
| MLR | **Muntele Rosu** | 18.89 | 311 | P | **P** | 00 15 23.4 | -0.4 |
| KURBB | **Kurchatov Arra** | 28.40 | 46 | P | **P** | 00 16 57.0 | -0.5 |
| MKAR | **Makanchi Array** | 29.70 | 55 | P | **P** | 00 17 09.1 | 0.0 |
| FINES | **FINESS Array B** | 29.79 | 341 | P | **P** | 00 17 08.9 | -0.7 |
| HFS | **Hagfors** | 33.12 | 331 | P | **P** | 00 17 37.3 | -1.7 |
| EKA | **Eskdalemuir Ar** | 39.57 | 317 | P | **P** | 00 18 33.8 | -0.4 |
| ESDC | **Sonseca Array** | 39.89 | 292 | P | **P** | 00 18 35.4 | -1.7 |
| TORD | **Torodi Ar. Bea** | 45.50 | 253 | P | **P** | 00 19 22.5 | -0.3 |

comp=E,1.2nm,1.0s,baz=72,slow=8.2,SNR=4.9
comp=E,1.2nm,1.0s
comp=E,0.1nm,0.6s,baz=138,slow=7.5,SNR=6.1
comp=E,1.0nm,0.6s
comp=E,0.5nm,0.6s,baz=104,slow=8.1,SNR=2.1
comp=E,0.5nm,0.6s
comp=E,0.1nm,0.5s,baz=245,slow=3.0,SNR=1.8
comp=E,0.1nm,0.5s
comp=E,0.1nm,0.4s,baz=252,slow=8.6,SNR=2.2
comp=E,0.1nm,0.4s
comp=E,0.1nm,0.3s,baz=291,slow=20,SNR=2.2
comp=E,1.0nm,0.9s
comp=E,0.1nm,0.3s,baz=254,slow=20,SNR=5.9
comp=E,0.4nm,0.3s,baz=319,slow=20,SNR=17
comp=E,1.6nm,0.3s,baz=318,slow=10,SNR=17
comp=E,1.1nm,1.1s
baz=126,slow=9.8,SNR=3.0
comp=E,0.3nm,0.3s,baz=288,slow=20,SNR=1.4
comp=E,0.3nm,0.3s,baz=225,slow=19,SNR=1.7
comp=E,0.3nm,0.3s,baz=72,slow=17,SNR=2.2
comp=E,1.1nm,0.6s
comp=E,0.1nm,0.6s
comp=E,0.1nm,0.4s,baz=252,slow=8.6,SNR=2.2
comp=E,0.1nm,0.4s
comp=E,0.1nm,0.5s,baz=245,slow=3.0,SNR=1.8
comp=E,0.1nm,0.5s
comp=E,1.7nm,1.0s,baz=125,slow=7.0,SNR=3.4
comp=E,1.7nm,1.0s
comp=E,1.0nm,0.6s,baz=138,slow=7.5,SNR=6.1
comp=E,1.0nm,0.6s
comp=E,0.5nm,0.6s,baz=104,slow=8.1,SNR=2.1
comp=E,0.5nm,0.6s
comp=E,1.2nm,1.0s,baz=72,slow=8.2,SNR=4.9
comp=E,1.2nm,1.0s
comp=E,0.3nm,0.7s,baz=54,slow=7.5,SNR=1.7
comp=E,0.3nm,0.7s

*ISN* ***26*** *00:21:45.9±0.6,34°.63N×46°.15E, h8km±6km, ML3.3*

*TEH* ***26*** *00:21:47.6,34°.63N×46°.14E, h8km±19km, ML3.3*

**ISC 26 00:21:48.0±1.2,34°.63N±0°.03×46°.11E±0°.03, h4km±11km, n26, σ0°76/35, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IDHR | **Dehrash** | 0.24 | 73 | Pg | **Pg** | 00 21 52.4 | -0.3 |
| IDHR | | | | Sg | **Sg** | 00 21 56.0 | +0.2 |
| KGS1 | **Ghasr-e-Shirin** | 0.45 | 254 | Pg | **Pg** | 00 21 57.1 | +0.4 |
| IGHG | **Ghaleghazi** | 0.48 | 129 | Pg | **Pg** | 00 21 57.1 | -0.3 |
| IGHG | | | | Sg | **Sg** | 00 22 04.6 | +1.0 |
| GLG1 | **Gilan-e-Gharb** | 0.54 | 198 | Pg | **Pg** | 00 21 58.8 | +0.4 |
| GLG1 | | | | Sg | **Sg** | 00 22 06.8 | +1.2 |
| ILIN | **Lien** | 0.76 | 68 | Pg | **Pg** | 00 22 01.4 | -1.1 |
| KCHF | **Cheshme Sefid,** | 0.85 | 115 | Pg | **Pg** | 00 22 03.3 | -1.0 |
| KCHF | | | | Sg | **Sg** | 00 22 15.5 | +0.3 |
| ILBA | **Ilam Banvizeh** | 1.01 | 175 | Pg | **Pg** | 00 22 07.3 | -0.1 |
| ILBA | | | | Sg | **Sg** | 00 22 20.9 | +0.4 |
| SNQR | **Sonqor, Kerman** | 1.27 | 79 | Pg | **Pg** | 00 22 11.9 | -0.5 |
| IBDR | **Badra** | 1.52 | 186 | *e*Pn | **Pn** | 00 22 15.5 | -0.6 |
| IBDR | | | | *e*Sn | **Sb** | 00 22 36.5 | -0.1 |
| IBDR | comp=N,462nm,0.5s | | | AML | AML | 00 22 42.3 | |
| IBDR | comp=E,817nm,0.7s | | | AML | AML | 00 22 42.6 | |
| SDS1 | **Sardasht. Az.** | 1.60 | 342 | Pg | **Pb** | 00 22 17.6 | -0.7 |
| IKRK | **Kirkuk** | 1.64 | 298 | *e*Pn | **Pn** | 00 22 17.0 | -0.7 |
| IKRK | | | | *e*Sn | **Sg** | 00 22 40.5 | -0.4 |
| IKRK | comp=N,423nm,0.5s | | | AML | AML | 00 22 50.5 | |
| IKRK | comp=E,252nm,0.4s | | | AML | AML | 00 22 51.9 | |
| IKFM | **Kafar-mosalman** | 1.81 | 127 | Pg | **Pb** | 00 22 21.0 | -0.8 |
| IDOB | **Doab** | 1.91 | 116 | Pn | **Pn** | 00 22 22.2 | +0.7 |
| BHD | **Baghdad** | 1.98 | 227 | *e*Pn | **Pn** | 00 22 22.0 | -0.3 |
| BHD | | | | *e*Sn | **Sn** | 00 22 48.0 | +0.4 |
| BHD | | | | *e*SN5 | | 00 22 48.0 | |
| HSAM | **Samen** | 2.10 | 101 | Pn | **Pn** | 00 22 25.1 | +0.8 |
| MAHB | **Mahabad** | 2.16 | 351 | Pn | **Pn** | 00 22 25.7 | +0.8 |
| HAGD | **Aghdareh** | 2.50 | 85 | Pn | **Pn** | 00 22 30.6 | +0.9 |
| IHSH | **Hashtrud** | 2.83 | 19 | Pn | **Pn** | 00 22 35.5 | +1.2 |
| RAFI | **Al-Rafai** | 2.90 | 180 | *e*Pn | **Pn** | 00 22 34.5 | -0.5 |
| RAFI | | | | *e*Sn | **Sn** | 00 23 10.0 | -0.3 |
| IAZR | **Azarshahr** | 3.04 | 358 | Pn | **Pn** | 00 22 38.3 | +1.1 |
| ISRB | **Sarab** | 3.42 | 21 | Pn | **Pn** | 00 22 43.6 | +1.2 |
| QAMS | **Qamsar** | 4.47 | 100 | Pn | **Pn** | 00 22 57.6 | +0.7 |
| JHBN | **Jahan bin** | 4.50 | 121 | Pn | **Pn** | 00 22 58.3 | +1.0 |
| ZNGN | **Zangian** | 4.69 | 121 | Pn | **Pn** | 00 23 00.5 | +0.6 |
| KRSH | **Karshahi** | 5.03 | 96 | Pn | **Pn** | 00 23 05.2 | +0.8 |
| ISFB | **Sefidab** | 5.07 | 91 | Pn | **Pn** | 00 23 05.2 | +0.3 |

*NOU* ***26*** *00:21:41.1,20°.34S×178°.15W, h470km, mb4.4/13, Fiji Islands Region*

*IDC* ***26*** *00:22:16.3±1.8,23°.26S×179°.26E, h532km±17km, mb3.5/11, mbtmp4.4/12, Error ellipse: s-maj=17.9km s-min=15.6km az=86.0*

*NEIC* ***26*** *00:22:17.6±2.9,23°.3S±0°.1×179°.4E±0°.1, h543km±8km, mb4.2/18, Error ellipse: s-maj=19.4km s-min=16.8km az=100.0*

**ISC 26 00:22:17.4±0.5,23°.37S±0°.07×179°.30E±0°.09, h548km, n78, σ1°32/76, mb4.1/22, 4C-1D, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | **Nonsavu** | 5.73 | 348 | P | **P** | 00 23 53.6 | 0.0 |
| DZM | **Mont Dzumac** | 11.93 | 274 | P | P | 00 24 46.0 | -9.3 |
| NOUC | **Port Laguerre** | 12.06 | 273 | P | P | 00 24 48.2 | -8.3 |
| AFI | **Afiamalu** | 12.65 | 43 | P | **P** | 00 25 00.1 | -2.8 |
| OUZ | **Omahuta** | 12.81 | 202 | P | **P** | 00 25 07.2 | +3.1 |
| KUZ | **Kuaotunu** | 13.68 | 192 | P | **P** | 00 25 14.9 | +1.8 |
| MXZ | **Matakaoa Point** | 14.17 | 183 | P | **P** | 00 25 17.8 | -0.3 |
| MXZ | **Matakaoa Point** | 14.17 | 183 | P | **P** | 00 25 17.9 | -0.2 |
| TOZ | **Tahuroa Road** | 14.68 | 192 | | **P** | 00 25 24.7 | +1.4 |
| URZ | **Urewera** | 14.96 | 187 | P | **P** | 00 25 25.0 | -1.2 |
| URZ | **Urewera** | 14.96 | 187 | P | **P** | 00 25 24.5 | -1.7 |
| URZ | 43nm,0.8s,baz=345,slow=2.9,SNR=21 | | | S | **S** | 00 27 56.2 | -5.6 |
| BKZ | 9.1nm,0.5s,baz=275,slow=23,SNR=9.2 **Black Stump Fm** | 15.93 | 188 | P | **P** | 00 25 34.1 | -2.0 |
| BFZ | **Birch Farm** | 17.45 | 188 | P | **P** | 00 25 48.5 | -1.6 |
| SNZO | **South Karori** | 18.30 | 191 | P | **P** | 00 25 57.6 | -0.2 |
| QRZ | **Quartz Range** | 18.31 | 197 | P | **P** | 00 25 59.5 | +1.5 |
| KHZ | **Kahutara** | 19.59 | 193 | P | **P** | 00 26 09.5 | -0.1 |
| RPZ | **Rata Peaks** | 21.40 | 197 | P | **P** | 00 26 27.6 | +1.6 |
| JCZ | 5.3nm,0.5s,baz=192,slow=1.8,SNR=6.1 5.3nm,0.5s **Jackson Bay** | 22.39 | 200 | P | **P** | 00 26 35.3 | +0.4 |
| ARMA | **Armidale** | 25.61 | 248 | P | **P** | 00 27 05.0 | +1.2 |
| ARMA | comp=Z,13nm,1.2s | | | IAmb | IAmb | 00 27 28.2 | |
| CAN | **Canberra** | 28.86 | 239 | P | **P** | 00 27 33.5 | +1.5 |
| CTAO | **Charters Tower** | 30.83 | 270 | P | **P** | 00 27 50.0 | +0.8 |
| TOO | **Toolangi** | 32.20 | 236 | P | **P** | 00 28 01.7 | +1.0 |
| STKA | **Stephens Creek** | 34.32 | 247 | P | **P** | 00 28 19.1 | +0.4 |
| STKA | **Stephens Creek** | 34.32 | 247 | P | **P** | 00 28 18.6 | 0.0 |
| COEN | comp=Z,1.5nm,0.4s,baz=83,slow=10,SNR=4.6 comp=Z,1.5nm,0.4s **Coen** | 35.39 | 279 | P | **P** | 00 28 27.9 | +0.1 |
| COEN | comp=Z,15nm,1.4s | | | IAmb | IAmb | 00 28 56.5 | |
| BBOO | **Buckleboo** | 39.06 | 246 | P | **P** | 00 28 57.0 | -0.6 |
| BBOO | comp=Z,10.0nm,1.3s | | | IAmb | IAmb | 00 29 05.4 | |
| AS31 | **Alice Springs** | 41.48 | 260 | P | **P** | 00 29 16.9 | -0.2 |
| ASAR | **Alice Springs** | 41.48 | 260 | P | **P** | 00 29 16.7 | -0.4 |
| ASAR | **Alice Springs** | 41.48 | 260 | P | **P** | 00 29 17.1 | 0.0 |
| ASAR | comp=Z,2.6nm,0.7s,baz=101,slow=6.9,SNR=30 | | | ScP | **ScP** | 00 34 02.0 | +2.1 |
| ASAR | comp=Z,1.0nm,0.8s,baz=98,slow=4.1,SNR=6.5 | | | S | **S** | 00 34 51.1 | -2.4 |
| WR0 | comp=Z,0.3nm,0.7s,baz=94,slow=14,SNR=3.6 comp=Z,2.6nm,0.7s **Warramunga Arr** | 41.61 | 266 | P | **P** | 00 29 17.7 | -0.4 |
| WR0 | comp=Z,7.8nm,1.3s | | | IAmb | IAmb | 00 29 28.8 | |
| WRA | **Warramunga Arr** | 41.80 | 266 | P | **P** | 00 29 18.4 | -1.2 |
| WRA | **Warramunga Arr** | 41.80 | 266 | P | **P** | 00 29 18.6 | -1.0 |
| WRA | comp=Z,2.8nm,0.7s,baz=96,slow=8.1,SNR=53 | | | ScP | **ScP** | 00 34 03.1 | +1.9 |
| WRA | comp=Z,0.6nm,0.9s,baz=111,slow=4.1,SNR=5.1 | | | S | **S** | 00 34 54.2 | -3.8 |
| FORT | comp=Z,0.9nm,1.1s,baz=105,slow=14,SNR=4.8 comp=Z,2.8nm,0.7s **Forrest** | 45.89 | 249 | P | **P** | 00 29 50.5 | -0.7 |
| KNRA | **Kununurra** | 48.04 | 270 | P | **P** | 00 30 06.6 | -0.9 |
| KNRA | comp=Z,12nm,1.2s | | | IAmb | IAmb | 00 30 08.2 | |
| SBA | **Scott Base** | 54.87 | 183 | P | **P** | 00 30 57.8 | +2.1 |
| SBA | comp=Z,5.5nm,1.0s | | | IAmb | IAmb | 00 31 00.4 | |
| CASY | **Casey** | 60.30 | 206 | P | **P** | 00 31 32.4 | -0.5 |
| CASY | comp=Z,6.8nm,1.0s | | | IAmb | IAmb | 00 31 34.0 | |
| QSPA | **South Pole Qui** | 66.71 | 180 | P | **P** | 00 32 15.6 | +1.5 |
| QSPA | comp=Z,13nm,1.0s | | | IAmb | IAmb | 00 32 16.7 | |
| QSPA | **South Pole Qui** comp=Z,11nm,1.0s,baz=334,slow=0.7,SNR=52 comp=Z,11nm,1.0s | 66.71 | 180 | P | **P** | 00 32 15.5 | +1.5 |
| SMAI | **San Martin Ant** | 76.83 | 159 | P | **P** | 00 33 14.0 | +1.4 |
| SMAI | comp=Z,14nm,0.9s | | | IAmb | IAmb | 00 33 15.7 | |
| BELA | **Belgrano 2** | 77.04 | 173 | P | **P** | 00 33 13.3 | -0.4 |
| BELA | comp=Z,8.4nm,0.7s | | | IAmb | IAmb | 00 33 15.1 | |
| MAW | **Mawson** comp=Z,5.7nm,0.6s,baz=143,slow=4.6,SNR=16 comp=Z,5.7nm,0.6s | 78.02 | 201 | P | **P** | 00 33 20.2 | +1.2 |
| PETK | **Petropavlovsk-** | 78.44 | 347 | P | **P** | 00 33 21.4 | 0.0 |
| PETK | **Petropavlovsk-** comp=Z,2.2nm,0.7s,baz=132,slow=8.6,SNR=4.7 comp=Z,2.2nm,0.7s | 78.44 | 347 | P | **P** | 00 33 22.0 | +0.6 |
| NVAR | **Mina Array Bea** comp=Z,0.7nm,0.8s,baz=231,slow=6.1,SNR=4.4 comp=Z,0.7nm,0.8s | 84.82 | 44 | P | **P** | 00 33 54.3 | -0.3 |
| TROLL | **Troll, Antarti** comp=Z,390nm,1.1s | 84.85 | 181 | ⇑P | **P** | 00 33 54.3 | +0.1 |
| SNAA | **Sanae** | 85.20 | 179 | P | **P** | 00 33 55.3 | -0.4 |
| SNAA | **Sanae** comp=Z,42nm,0.5s | 85.20 | 179 | ⇑P | **P** | 00 33 55.4 | -0.4 |
| SNAA | **Sanae** comp=Z,1.5nm,0.5s,baz=206,slow=8.9,SNR=29 comp=Z,1.5nm,0.5s | 85.20 | 179 | P | **P** | 00 33 55.5 | -0.3 |
| VNA3 | **Neumayer Olymp** comp=Z,4.7nm,0.7s | 85.44 | 177 | ⇑P | **P** | 00 33 56.9 | 0.0 |
| VNA2 | **Neumayer--Watz** comp=Z,6.0nm,0.8s,baz=180,slow=4.8 | 85.85 | 178 | ⇑P | **P** | 00 33 59.1 | +0.3 |
| CMAR | **Chiang Mai Arr** comp=Z,0.6nm,0.3s,baz=146,slow=8.2,SNR=4.4 comp=Z,0.6nm,0.3s | 88.74 | 291 | P | **P** | 00 34 13.7 | +0.5 |
| TXAR | **Lajitas Array** comp=Z,0.8nm,0.8s,baz=212,slow=7.6,SNR=8.3 comp=Z,0.8nm,0.8s | 90.70 | 58 | P | **P** | 00 34 23.6 | +1.3 |
| KURBB | **Kurchatov Arra** comp=Z,0.1nm,0.5s,baz=96,slow=1.7,SNR=4.8 | 114.42 | 317 | PKiKP | PKPdf | 00 39 53.7 | -1.2 |
| BVAR | **Borovoye Array** comp=Z,0.9nm,0.5s,baz=132,slow=2.4,SNR=6.4 | 119.62 | 319 | PKP | **PKPdf** | 00 40 03.8 | -1.0 |
| ARU | **Arti** comp=Z,0.7nm,0.3s,baz=283,slow=5.5,SNR=3.0 | 126.08 | 324 | PKP | **PKPdf** | 00 40 17.3 | +0.2 |
| ARCES | **ARCESS Array B** comp=Z,4.0nm,0.8s,baz=35,slow=3.0,SNR=4.0 | 131.24 | 348 | PKP | **PKPdf** | 00 40 26.4 | -0.2 |
| FINES | **FINESS Array B** comp=Z,0.9nm,0.6s,baz=20,slow=1.6,SNR=5.1 | 137.74 | 341 | PKP | **PKPdf** | 00 40 39.4 | +0.5 |
| FINES | comp=Z,3.4nm,0.8s,baz=45,slow=2.2,SNR=9.3 | | | SKPbc | **SKPbc** | 00 43 21.5 | +0.2 |
| HFS | **Hagfors** comp=Z,1.1nm,0.3s,baz=43,slow=2.3,SNR=18 | 141.90 | 348 | PKhKP | PKPpre | 00 40 41.6 | |
| ARPR | **Arapgir-MALATY** | 143.43 | 305 | | PKPbc | 00 40 49.4 | +0.7 |
| AKASG | **Malin Array Be** comp=Z,1.1nm,0.4s,baz=45,slow=3.9,SNR=5.3 | 144.18 | 327 | PKP | PKPbc | 00 40 49.7 | -0.7 |
| AKBB | **Malin Array Si** | 144.18 | 327 | PKPbc | PKPbc | 00 40 49.5 | -0.8 |
| KIEV | **Kiev** | 144.19 | 327 | PKPbc | PKPbc | 00 40 49.6 | -0.8 |
| BNN | **Bunyan** | 145.37 | 305 | | **PKPbc** | 00 40 54.1 | -0.5 |
| BRTR | **Keskin Array B** | 146.74 | 307 | PKPbc | **PKPbc** | 00 40 58.3 | -0.1 |
| BRTR | **Keskin Array B** comp=Z,1.0nm,0.7s,baz=131,slow=4.5,SNR=9.3 | 146.74 | 307 | PKPbc | **PKPbc** | 00 40 58.1 | -0.3 |
| MMAI | **Mount Meron Ar** comp=Z,2.8nm,0.5s,baz=76,slow=7.0,SNR=12 | 146.89 | 295 | PKPbc | **PKPbc** | 00 40 59.5 | +0.5 |
| KWP | **Kalwaria Pacla** | 147.99 | 331 | PKPbc | **PKPbc** | 00 41 01.1 | 0.0 |
| EKA | **Eskdalemuir Ar** comp=Z,0.3nm,0.3s,baz=348,slow=3.0,SNR=9.2 | 148.03 | 3 | PKPbc | **PKPbc** | 00 41 00.5 | -0.5 |
| BURAR | **Bucovina Array** | 148.17 | 326 | PKPbc | **PKPbc** | 00 41 02.2 | +0.4 |
| MLR | **Muntele Rosu** | 149.10 | 322 | | **PKPbc** | 00 41 04.0 | -0.2 |
| CLL | **Collm** | 150.16 | 343 | | **PKPbc** | 00 41 06.4 | +0.1 |
| CLL | **Collm** | 150.16 | 343 | ⇓*i*PKPbc | **PKiKP** | 00 41 06.6 | -0.3 |
| BRG | comp=Z,11nm,0.9s **Berggiesshubel** comp=Z,4.7nm,0.6s | 150.28 | 341 | Amp | | 00 41 08.1 | |
| BRG | **Berggiesshubel** | 150.28 | 341 | *i* P | **PKiKP** | 00 41 07.3 | +0.2 |
| ALN | **Alexandroupoli** | 151.56 | 314 | PKPbc | **PKPbc** | 00 41 08.7 | -1.2 |
| KHC | **Kasperske Hory** | 151.93 | 340 | PKPbc | **PKPbc** | 00 41 10.5 | +0.1 |
| GERES | **GERESS Array B** comp=Z,0.2nm,0.3s,baz=53,slow=3.8,SNR=4.4 | 152.14 | 339 | PKPbc | **PKiKP** | 00 41 11.1 | -0.1 |
| TORD | **Torodi Ar. Bea** comp=Z,1.1nm,0.9s,baz=152,slow=0.3,SNR=4.4 | 169.58 | 193 | PKP | **PKPdf** | 00 41 22.3 | -0.6 |
| TORD | comp=Z,1.5nm,0.8s,baz=157,slow=3.4,SNR=7.9 | | | PKPab | **PKPab** | 00 42 40.0 | -0.1 |

*IDC* ***26*** *00:33:15.6±1.0,3°.38S×140°.62E, h0km, mb4.0/7, mbtmp4.1/9, ML4.5/1, MS4.0/4, Error ellipse: s-maj=43.9km s-min=21.0km az=79.0*

*NEIC* ***26*** *00:33:18.0±1.1,3°.43S±0°.09×140°.60E±0°.09, h10km±1km, mb4.4/21, Error ellipse: s-maj=16.3km s-min=13.8km az=145.0*

*DJA* ***26*** *00:33:18.9±0.3,3°.S±2°×14°.1E±°, h10km, M4.3/10, mb4.4/10, MLv4.2/2*

**ISC 26 00:33:17.7±0.6,3°.35S±0°.05×140°.72E±0°.07, h10km, n64, σ1°57/57, mb4.5/20, MS3.9/4, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAY | **Jayapura** | 0.83 | 359 | P | **Pg** | 00 33 33.4 | -0.3 |
| JAY | | | | S | **Sg** | 00 33 43.0 | -1.6 |
| GENI | **Genyem** | 0.94 | 324 | P | **Pn** | 00 33 36.4 | -0.5 |
| GENI | **Genyem** | 0.94 | 324 | P | **Pn** | 00 33 36.4 | -0.5 |
| GENI | | | | S | **Sn** | 00 33 49.9 | -0.5 |
| MANU | **Manus Island** | 6.76 | 79 | Pn | **Pn** | 00 34 59.6 | +2.5 |
| FAKI | **Fak Fak** 14nm,0.9s | 8.47 | 273 | P | **Pn** | 00 35 23.4 | +2.8 |
| PMG | **Port Moresby** | 8.78 | 134 | P | Pn | 00 35 31.8 | +7.0 |
| PMG | **Port Moresby** | 8.78 | 134 | P | Pn | 00 35 31.7 | +7.0 |
| PMG | **Port Moresby** 7.7nm,0.3s,baz=318,slow=6.9,SNR=4.5 | 8.78 | 134 | Pn | **Pn** | 00 35 26.1 | +1.3 |
| COEN | **Coen** | 10.81 | 167 | Pn | **Pn** | 00 35 53.5 | +0.8 |
| RABL | **Rabaul** | 11.45 | 95 | Pn | **Pn** | 00 36 03.5 | +2.1 |
| KDU | **Kakadu** | 12.36 | 221 | P | **Pn** | 00 36 14.3 | +0.5 |
| DRS | **Darwin Rock St** 29nm,0.7s | 13.26 | 227 | P | **Pn** | 00 36 28.1 | +1.9 |
| MTN | **Manton Dam** | 13.38 | 225 | P | **Pn** | 00 36 28.0 | +0.3 |
| MTN | **Manton Dam** | 13.38 | 225 | Pn | **Pn** | 00 36 26.9 | -0.8 |
| KNRA | **Kununurra** | 16.99 | 223 | | **Pn** | 00 37 14.9 | -0.7 |
| QIS | **Mount Isa** | 17.14 | 184 | P | **P** | 00 37 21.4 | +2.2 |
| WB0 | **Warramunga Arr** | 17.45 | 200 | P | **Pn** | 00 37 20.0 | -1.3 |
| CTA | **Charters Tower** comp=Z,27nm,22.0s,baz=18,slow=37 | 17.49 | 162 | LR | LR | 00 43 59.0 | |
| SOEI | **Soe** | 17.54 | 248 | P | **P** | 00 37 23.8 | +0.1 |
| SOEI | **Soe** | 17.54 | 248 | | **Pn** | 00 37 20.1 | -2.5 |
| SOEI | **Soe** 63nm,1.4s | 17.54 | 248 | P | **P** | 00 37 23.8 | +0.1 |
| WR0 | **Warramunga Arr** | 17.58 | 200 | | **Pn** | 00 37 21.0 | -1.9 |
| WRA | **Warramunga Arr** | 17.63 | 200 | Pn | **Pn** | 00 37 21.5 | -2.1 |
| WRA | **Warramunga Arr** 1.8nm,0.3s,baz=23,slow=12,SNR=51 | 17.63 | 200 | P | **Pn** | 00 37 22.0 | -1.6 |
| WRA | 2.6nm,1.0s,baz=19,slow=22,SNR=5.0 4.2nm,0.5s | | | S | Sn | 00 40 29.1 | -11 |
| GTOI | **Gorontalo** 10nm,1.0s | 18.14 | 282 | P | **P** | 00 37 33.0 | +2.7 |
| BBSI | **Bau Bau** 28nm,1.1s | 18.22 | 263 | P | **P** | 00 37 34.0 | +2.8 |
| BATI | **Baumata** 38nm,1.0s | 18.25 | 247 | P | **P** | 00 37 33.6 | +2.1 |
| TOLI2 | **Tolitoli** | 20.42 | 282 | P | Pn | 00 37 58.2 | +0.8 |
| TOLI2 | **Tolitoli** | 20.42 | 282 | | **P** | 00 37 54.4 | -0.8 |
| TOLI2 | comp=Z,8.9nm,0.8s | | | IAmb | IAmb | 00 38 04.1 | |
| BNSI | **Bone** | 20.59 | 266 | P | Pn | 00 37 59.3 | -0.1 |
| FITZ | **Fitzroy Crossi** comp=Z,20nm,1.1s | 20.81 | 224 | P | Pn | 00 38 01.8 | -0.1 |
| FITZ | **Fitzroy Crossi** | 20.81 | 224 | | **P** | 00 37 58.1 | -1.3 |
| AS01 | **Alice Springs** comp=Z,25nm,0.9s | 21.23 | 197 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LANS** | **Liptovska Anna** | **1.19** | **158** | *e*PG | Pg | 00 40 37.6 | -0.3 |
| LANS | | | | *e*SG | Sb | 00 40 54.0 | -0.5 |
| LANS | | | | *e*LG | Lg | 00 41 02.6 | |
| **KRLC** | **Kraliky** | **1.30** | **263** | *e*PG | Pg | 00 40 39.0 | -1.0 |
| KRLC | | | | *e*SG | Sg | 00 40 55.3 | -1.5 |
| **DPC** | **Dobruska-Polom** | **1.58** | **275** | *e*SG | Sn | 00 41 05.4 | -0.3 |

*ISN* **26** *00:44:25.7±0.5,34.˚63N×46.˚15E,h12km±5km, ML2.8*
*TEH* **26** *00:44:26.2,34.˚62N×46.˚16E,h9km±26km, ML2.9*
**ISC 26 00:44:26.1**±1.2,**34.˚63N**±0.˚05×**46.˚12E**±0.˚04,**h5**km±14km, **n12**,σ0°**69**/19, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.23** | **72** | Pg | | **Pg** | **00 44 30.6** | **-0.2** |
| IDHR | | | | Sg | | **Sg** | **00 44 34.6** | **+0.7** |
| **KGS1** | **Ghasr-e-Shirin** | **0.45** | **254** | Pg | | **Pb** | **00 44 36.1** | **-0.5** |
| **IGHG** | **Ghaleghazi** | **0.48** | **128** | Pg | | **Pg** | **00 44 35.5** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **198** | Pg | | **Pb** | **00 44 37.2** | **-0.9** |
| GLG1 | | | | Sg | | **Sb** | **00 44 45.2** | **-1.0** |
| **KCHF** | **Cheshme Sefid,** | **0.84** | **115** | Pg | | **Pg** | **00 44 41.7** | **-0.6** |
| KCHF | | | | Sg | | **Sb** | **00 44 54.2** | **-0.8** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **176** | Pg | | **Pb** | **00 44 45.6** | **-0.4** |
| **IBZA** | **Bozab** | **1.45** | **96** | Pg | | **Pg** | **00 44 53.3** | **-0.5** |
| **IBDR** | **Badra** | **1.52** | **186** | *e*Pn | | **Pb** | **00 44 54.6** | **-0.2** |
| IBDR | | | | *e*Sn | | **Sg** | **00 45 15.6** | **+0.6** |
| IBDR | comp=N,115nm,0.3s | | | AML | AML | 00 45 21.6 | | |
| IBDR | comp=E,129nm,0.5s | | | AML | AML | 00 45 22.5 | | |
| **IKRK** | **Kirkuk** | **1.65** | **298** | *e*Pn | | **Pb** | **00 44 56.5** | **-0.5** |
| IKRK | | | | *e*Sn | | **Sg** | **00 45 19.5** | **+0.4** |
| IKRK | comp=N,252nm,0.4s | | | AML | AML | 00 45 24.4 | | |
| **IDOB** | **Doab** | **1.90** | **116** | Pn | | **Pg** | **00 45 02.3** | **-0.3** |
| **BHD** | **Baghdad** | **1.98** | **227** | *e*Pn | | **Pn** | **00 45 01.0** | **+0.8** |
| BHD | | | | *e*Sn | | **Sb** | **00 45 27.0** | **-0.6** |
| **RAFI** | **Al-Rafai** | **2.90** | **180** | *e*Pn | | **Pn** | **00 45 14.0** | **+1.1** |
| RAFI | | | | *e*Sn | | **Sn** | **00 45 48.5** | **+0.4** |
| RAFI | comp=N,47nm,0.1s | | | AML | AML | 00 46 07.0 | | |
| RAFI | comp=E,57nm,0.3s | | | AML | AML | 00 46 19.1 | | |

*TEH* **26** *00:50:34.1,34.˚61N×46.˚20E,h10km±46km, ML2.5*
*ISN* **26** *00:50:34.7±1.2,34.˚61N×46.˚22E,h21km±23km, ML2.5*
**ISC 26 00:50:34.3**±1.1,**34.˚61N**±0.˚05×**46.˚20E**±0.˚06,**h11**km±11km, **n9**,σ0°**59**/12, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.18** | **59** | Pg | | **Pg** | **00 50 38.2** | **-0.2** |
| IDHR | | | | Sg | | **Sg** | **00 50 41.8** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **0.41** | **132** | Pg | | **Pg** | **00 50 42.7** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **206** | Pg | | **Pg** | **00 50 45.2** | **+0.2** |
| **ILIN** | **Lien** | **0.70** | **63** | Pg | | **Pg** | **00 50 47.9** | **0.0** |
| **KCHF** | **Cheshme Sefid,** | **0.77** | **115** | Pg | | **Pg** | **00 50 48.6** | **-0.5** |
| **IBZA** | **Bozab** | **1.38** | **95** | Pg | | **Pg** | **00 51 00.7** | **-0.1** |
| **IBDR** | **Badra** baz=9.0 | **1.51** | **189** | *e*Pg | | **Pn** | **00 51 01.5** | **+0.3** |
| IBDR | | | | *e*Sg | | **Sg** | **00 51 22.5** | **-0.4** |
| IBDR | comp=E,75nm,0.5s | | | AML | AML | 00 51 28.8 | | |
| IBDR | comp=N,47nm,0.6s | | | AML | AML | 00 51 29.8 | | |
| **IKRK** | **Kirkuk** | **1.72** | **298** | *e*Pn | | **Pb** | **00 51 05.0** | **-0.9** |
| IKRK | | | | *e*Sn | | **Sb** | **00 51 28.5** | **+1.0** |
| IKRK | comp=N,51nm,0.4s | | | AML | AML | 00 51 32.9 | | |
| IKRK | comp=E,96nm,0.4s | | | AML | AML | 00 51 34.3 | | |
| **IDOB** | **Doab** | **1.83** | **116** | Pn | | **Pg** | **00 51 09.8** | **+0.4** |

*NAO* **26** *00:53:40.5,32.˚27N×46.˚69E,h33km, mb3.8*
*TEH* **26** *00:53:49.4,34.˚62N×46.˚23E,h6km±60km, ML3.9*
*MOS* **26** *00:53:52.8±1.9,34.˚62N×46.˚50E,h10km,mb4.4/13, Error ellipse: s-maj=7.8km s-min=3.8km az=114.5*
*NEIC* **26** *00:53:54.0±1.6,34.˚71N±0.˚07×46.˚51E±0.˚06,h10km±1km, mb4.3/24, Error ellipse: s-maj=13.2km s-min=7.3km az=207.0*
*ISN* **26** *00:53:54.2±0.5,34.˚72N×46.˚17E,h7km±6km, ML4.0*
*DSN* **26** *00:53:56.0±0.4,34.˚48N×46.˚11E,h10km, mb4.7/1, Error ellipse: s-maj=9.3km s-min=4.3km az=51.0*
*IDC* **26** *00:53:56.4±1.0,34.˚78N×46.˚05E,h0km, mb3.9/14, mbtmp3.9/22, ML3.5/7, MS3.4/3, Error ellipse: s-maj=18.2km s-min=11.6km az=159.0*
*SGS* **26** *00:54:03.1,34.˚44N×46.˚08E,h12km, Ml4.8*
**ISC 26 00:53:54.1**±0.3,**34.˚61N**±0.˚02×**46.˚41E**±0.˚03,**h10**km,**n363, s231**/272,**mb4.2**/47,**MS3.8**/12,**41C-16D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.09** | **350** | Pg | | **Pg** | **00 53 53.7** | **-3.1** |
| **IGHG** | **Ghaleghazi** | **0.31** | **155** | Pg | | **Pg** | **00 53 58.7** | **-1.7** |
| **ILIN** | **Lien** | **0.55** | **56** | Pg | | **Pg** | **00 54 03.5** | **-1.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.65** | **220** | Pg | | **Pg** | **00 54 01.8** | **-4.8** |
| **KGS1** | **Ghasr-e-Shirin** | **0.68** | **261** | Pg | | Pg | 00 54 01.1 | -6.2 |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **190** | Pg | | **Pg** | **00 54 09.8** | **-3.6** |
| **SNQR** | **Sonqor, Kerman** | **1.04** | **76** | Pg | | **Pb** | **00 54 13.7** | **-0.6** |
| **IBZA** | **Bozab** | **1.21** | **96** | Pg | | **Pn** | **00 54 16.2** | **-1.1** |
| **IBDR** | **Badra** | **1.55** | **195** | *e*Pn | | **Pg** | **00 54 25.0** | **+1.2** |
| IBDR | | | | *e*Sn | | **Sg** | **00 54 47.0** | **+3.0** |
| IBDR | comp=E,2μm,0.8s | | | AML | AML | 00 54 59.8 | | |
| IBDR | comp=N,2μm,0.7s | | | AML | AML | 00 55 02.8 | | |
| **IKFM** | **Kafar-mosalman** | **1.62** | **132** | Pg | | **Pg** | **00 54 23.2** | **-1.9** |
| **IDOB** | **Doab** | **1.68** | **119** | Pn | | **Pg** | **00 54 24.6** | **-1.8** |
| **SDS1** | **Sardasht. Az.** | **1.71** | **334** | Pg | | **Pn** | **00 54 20.8** | **-3.2** |
| **HSAM** | **Samen** | **1.86** | **102** | Pn | | **Pb** | **00 54 27.7** | **-0.6** |
| **IKRK** | **Kirkuk** | **1.87** | **295** | *e*Pn | | **Pb** | **00 54 25.0** | **-3.3** |
| IKRK | | | | *e*Sn | | **Sb** | **00 54 48.3** | **-3.4** |
| IKRK | comp=N,2μm,0.5s | | | AML | AML | 00 54 59.4 | | |
| IKRK | comp=E,4μm,0.8s | | | AML | AML | 00 55 03.8 | | |
| **BHD** | **Baghdad** | **2.15** | **232** | *e*Pn | | **Pg** | **00 54 31.0** | **-4.3** |
| BHD | | | | *e*Sn | | **Sg** | **00 54 58.0** | **-5.2** |
| BHD | comp=E,1μm,0.6s | | | AML | AML | 00 55 09.9 | | |
| **HAGD** | **Aghdareh** | **2.26** | **84** | Pn | | **Pb** | **00 54 33.3** | **-1.9** |
| **RAFI** | **Al-Rafai** | **2.89** | **185** | *e*Pn | | **Pb** | **00 54 44.0** | **-1.8** |
| RAFI | | | | *e*Sn | | **Sb** | **00 55 20.0** | **-1.2** |
| **ISRB** | **Sarab** | **3.36** | **17** | Pn | | **Pn** | **00 54 46.8** | **-0.1** |
| **CUKT** | **Cukurca** | **3.47** | **320** | *e*P | | **Pn** | **00 54 49.9** | **+1.6** |
| **ISHB** | **Shabestar** | **3.72** | **350** | Pn | | **Pn** | **00 54 50.5** | **-1.3** |
| **IHRS** | **Heris** | **3.73** | **8** | Pn | | **Pn** | **00 54 51.8** | **-0.2** |
| **GRMI** | **Germi** | **4.35** | **16** | Pn | | **Pn** | **00 54 59.8** | **-0.6** |
| **LKRN** | **Lenkeran, Azer** | **4.51** | **24** | P | | **Pn** | **00 55 02.4** | **-0.1** |
| **AKDM** | **Akdamar-Van** | **4.62** | **324** | *e*P | | **Pn** | **00 55 05.9** | **+1.7** |
| **VANB** | **Van** | **4.66** | **329** | *e*P | | **Pn** | **00 55 06.2** | **+1.6** |
| **GURO** | **Guroymak-BITLI** | **5.27** | **319** | *e*P | | Pn | 00 55 15.9 | +2.8 |
| **MLAZ** | **Malazgirt-MUS** | **5.47** | **327** | *e*P | | **Pn** | **00 55 18.5** | **+2.6** |
| **SVAN** | **Silvan-Diyarba** | **5.49** | **312** | *e*P | | **Pn** | **00 55 18.3** | **+2.4** |
| **KBD** | **Kabd** | **5.53** | **168** | P | | Pb | 00 55 21.3 | -9.5 |
| **MAZI** | **Mazidag** | **5.60** | **302** | *e*P | | Pn | 00 55 21.4 | +3.8 |
| **AGRB** | **Hanur-Agry** | **5.65** | **332** | *e*P | | **Pn** | **00 55 21.1** | **+2.7** |
| **GNI** | **Garni** | **5.68** | **347** | *e*P | | Pb | 00 55 25.4 | -8.0 |
| **GNI** | **Garni** | **5.68** | **347** | | | **Pn** | **00 55 18.4** | **-0.3** |
| **GNI** | **Garni** comp=E,0.6nm,0.3s,baz=117,slow=2.3,SNR=2.9 | **5.68** | **347** | Pg | | **Pb** | **00 55 33.8** | **+0.4** |
| GNI | baz=253,slow=19 | | | Lg | Lg | 00 56 50.5 | | |
| **GNI** | **Garni** | **5.68** | **347** | P | | **Pg** | **00 55 38.6** | **-4.3** |
| **GNI** | **Garni** | **5.68** | **347** | P | *e*P | **Pn** | **00 55 18.2** | **-0.5** |
| **SRFHA** | **Rafha** | **5.77** | **196** | P | | Pn | 00 55 23.7 | +3.9 |
| **GANJ** | **Ganja** | **6.02** | **359** | P | | **Pn** | **00 55 24.6** | **+1.3** |
| **VRTB** | **Varto-Mus** | **6.03** | **320** | *e*P | | Pn | 00 55 26.5 | +3.1 |
| **DYBB** | **Diyarbakir** | **6.06** | **305** | *e*P | | Pn | 00 55 27.4 | +3.6 |
| **MNGR** | **Mingechevir, A** | **6.17** | **5** | P | | **Pn** | **00 55 26.2** | **+0.9** |
| **BNGB** | **Bingl** | **6.34** | **315** | *e*P | | **Pn** | **00 55 30.3** | **+2.6** |
| **KFJS2** | **Khafji** | **6.47** | **164** | P | | Pn | 00 55 34.3 | +4.8 |
| **SEKA** | **Sheki** | **6.61** | **5** | P | | **Pn** | **00 55 32.3** | **+0.9** |
| **YEDI** | **Yedisu-Bingol** | **6.72** | **317** | *e*P | | **Pn** | **00 55 35.1** | **+2.1** |
| **SENK** | **Senkaya-Erzuru** | **6.75** | **333** | *e*P | | Pn | 00 55 36.8 | +3.3 |
| **URFA** | **Urfa** | **6.76** | **297** | *e*P | | Pn | 00 55 38.6 | +5.1 |
| **SVRC** | **Sivrice-ELAZID** | **6.84** | **305** | *e*P | | Pn | 00 55 38.3 | +3.7 |
| **PTK** | **Pertek** | **7.07** | **309** | *e*P | | Pn | 00 55 41.7 | +4.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HANO** | **Al Hamad** | **7.50** | **247** | P | | Pn | 00 55 45.4 | +1.8 |
| **ARPR** | **Arapgir-MALATY** | **7.86** | **307** | *e*P | | Pn | 00 55 52.6 | +4.0 |
| **ARPR** | **Arapgir-MALATY** | **7.86** | **307** | Pn | | Pn | 00 55 51.2 | +2.6 |
| **GAZ** | **Gaziantep** | **7.89** | **292** | *e*P | | Pn | 00 55 56.6 | +7.7 |
| **GAZ** | **Gaziantep** | **7.89** | **292** | Pn | | **Pn** | **00 55 49.4** | **+0.5** |
| **DARE** | **Darende-Malaty** | **8.19** | **301** | *e*P | | Pn | 00 55 58.3 | +5.2 |
| **ASF** | **Jabal al Asfar** comp=E,1.1nm,0.3s,baz=310,slow=0.1,SNR=7.1 | **8.31** | **256** | Pn | | **Pn** | **00 55 55.7** | **+0.9** |
| ASF | comp=E,0.6nm,0.3s,baz=178,slow=0.1,SNR=5.6 | | | Lg | Lg | 00 58 12.3 | | |
| **MAK** | **Makhachkala** | **8.38** | **6** | *e*P | | Pn | 00 55 50.6 | -4.9 |
| MAK | comp=E,4.5nm,0.6s | | | *e*S | | **Sn** | **00 57 23.6** | **-6.6** |
| MAK | comp=Z,192nm,0.9s | | | pmax | pmax | | | |
| MAK | comp=Z,361nm,16.0s | | | MLR | MLR | | | |
| **HSUJ** | **Al Zarqa** | **8.90** | **257** | P | | Pn | 00 56 10.6 | +7.8 |
| **GEM** | **Giv'at Ha'Em** | **9.04** | **264** | P | | Pn | 00 56 12.2 | +7.6 |
| **SHMJ** | **Saham** | **9.07** | **261** | P | | Pn | 00 56 12.9 | +7.8 |
| **NCK** | **Nalchik** | **9.13** | **347** | *e*P | | **Pn** | **00 56 04.9** | **-1.0** |
| **MMA0** | **Mount Meron ar** | **9.29** | **263** | P | | Pn | 00 56 14.9 | +6.7 |
| **MMAI** | **Mount Meron Ar** comp=Z,1.0nm,0.3s,baz=74,slow=16,SNR=9.4 | **9.29** | **263** | Pn | | **Pn** | **00 56 08.2** | **0.0** |
| MMAI | comp=Z,0.6nm,0.3s,baz=58,slow=46,SNR=1.9 | | | Lg | Lg | 00 58 41.9 | | |
| MMAI | comp=Z,116nm,19.0s,baz=77,slow=43 comp=Z,0.6nm,0.3s | | | LR | LR | 01 00 27.4 | | |
| **SWQJ** | **Swaqa** | **9.32** | **252** | P | | Pn | 00 56 11.8 | +3.2 |
| **QRNJ** | **Al-Qirein** | **9.33** | **259** | P | | Pn | 00 56 16.0 | +7.4 |
| **HMDT** | **Nahal Hemdat** | **9.39** | **259** | P | | Pn | 00 56 15.2 | +5.7 |
| **BNN** | **Bunyan** | **9.47** | **300** | Pn | | **Pn** | **00 56 11.6** | **+0.9** |
| **KBZ** | **Khabaz** comp=Z,0.2nm,0.3s,baz=141,slow=13,SNR=1.7 comp=Z,0.5nm,0.4s | **9.50** | **344** | Pn | | Pn | 00 56 14.5 | +3.6 |
| **KBZ** | **Khabaz** | **9.50** | **344** | *e*P | | **Pn** | **00 56 09.4** | **-1.5** |
| **SHA1** | **Shidzhatmaz** | **9.56** | **343** | *e*P | | **Pn** | **00 56 10.1** | **-1.9** |
| **DSI** | **Dead Sea** | **9.73** | **255** | P | | Pn | 00 56 20.0 | +5.8 |
| **KIV** | **Kislovodsk** | **9.76** | **344** | *e*P | | **Pn** | **00 56 13.5** | **-1.1** |
| KIV | comp=Z,3.0nm,1.0s | | | pmax | pmax | | | |
| **LISJ** | **El Lisan** | **9.78** | **253** | P | | Pn | 00 56 21.8 | +7.1 |
| **MSBI** | **Mazada** | **9.85** | **254** | P | | Pn | 00 56 20.8 | +5.1 |
| **YTIR** | **Yattir** | **10.02** | **254** | P | | Pn | 00 56 24.9 | +6.7 |
| **VSLR** | **Vesyoloye** | **10.13** | **333** | *e*P | | **Pn** | **00 56 19.0** | **-0.5** |
| **SOC** | **Sochi** | **10.35** | **332** | *e*P | | Pn | 00 56 17.4 | -5.2 |
| SOC | | | | *e* | | | 00 58 13.1 | |
| SOC | comp=Z,92nm,17.0s | | | MLR | MLR | | | |
| **PRNI** | **Paran** | **10.52** | **249** | P | | Pn | 00 56 27.9 | +2.9 |
| **SMRA** | **Abu-Samra** | **10.56** | **158** | P | | **Pn** | **00 56 27.7** | **+2.2** |
| **HRFI** | **Mount Harif** | **10.64** | **248** | P | | Pn | 00 56 29.2 | +2.5 |
| **TRNA** | **Turayna** | **10.69** | **156** | P | | Pn | 00 56 29.9 | +2.6 |
| TRNA | | | | S | | **Sn** | **00 58 27.1** | **0.0** |
| **KZIT** | **Kziot** | **10.76** | **253** | P | | Pn | 00 56 34.3 | +6.0 |
| **MBRI** | **Mt Berech** | **10.85** | **247** | P | | Pn | 00 56 33.2 | +3.6 |
| **EIL** | **Elat** comp=Z,0.3nm,0.3s,baz=49,slow=12,SNR=1.4 | **10.89** | **246** | Pn | | Pn | 00 56 32.2 | +2.3 |
| EIL | comp=Z,0.1nm,0.3s,baz=80,slow=15,SNR=3.8 comp=Z,1.1nm,0.5s | | | Lg | Lg | 00 59 36.9 | | |
| **EIL** | **Elat** | **10.89** | **246** | P | | Pn | 00 56 34.4 | +4.4 |
| **RAYN** | **Ar Rayn** | **11.08** | **184** | Pn | | **Pn** | **00 56 33.2** | **+0.5** |
| **RAYN** | **Ar Rayn** | **11.08** | **184** | P | | **Pn** | **00 56 33.2** | **+0.5** |
| **RAYN** | **Ar Rayn** | **11.08** | **184** | P | | **Pn** | **00 56 33.2** | **+0.5** |
| **BR104** | **Keskin Array S** comp=Z,2.4nm,0.9s | **11.38** | **300** | P | | **Pn** | **00 56 36.8** | **0.0** |
| **BR131** | **Keskin Array S** | **11.39** | **300** | Pn | | **Pn** | **00 56 37.2** | **+0.2** |
| **BR131** | **Keskin Array S** | **11.39** | **300** | *e*P | | **Pn** | **00 56 35.7** | **-1.2** |
| **BRTR** | **Keskin Array B** | **11.39** | **300** | Pn | | **Pn** | **00 56 36.5** | **-0.5** |
| **BRTR** | **Keskin Array B** baz=112,slow=11,SNR=1.8 | **11.39** | **300** | Pn | | **Pn** | **00 56 37.6** | **+0.7** |
| BRTR | comp=Z,122nm,20.9s,baz=123,slow=42 | | | LR | LR | 01 01 42.0 | | |
| **BR105** | **Keskin Array S** comp=Z,3.1nm,1.3s | **11.40** | **300** | P | | **Pn** | **00 56 35.9** | **-1.2** |
| **BR106** | **Keskin Array S** comp=Z,2.6nm,1.1s | **11.41** | **300** | P | | **Pn** | **00 56 36.0** | **-1.2** |
| **SLWR** | **Sila** | **11.47** | **155** | P | | Pn | 00 56 40.9 | +2.9 |
| SLWR | | | | S | | **Sn** | **00 58 44.2** | **-2.7** |
| **SHME** | **Shamm** | **11.97** | **133** | P | | Pn | 00 56 48.6 | +3.7 |
| **GHWR** | **Ruwais** | **12.02** | **150** | P | | Pn | 00 56 49.5 | +4.1 |
| GHWR | | | | S | | **Sn** | **00 59 00.1** | **+0.6** |
| **AJN** | **Ajban** | **12.48** | **141** | P | | Pn | 00 56 56.9 | +5.1 |
| AJN | | | | S | | **Sn** | **00 59 11.6** | **+0.6** |
| **MASF** | **Masafi** SNR=6.9 | **12.49** | **135** | P | | Pn | 00 56 56.4 | +4.4 |
| MASF | | | | S | | **Sn** | **00 59 10.7** | **-0.6** |
| **MSFE** | **Esma-Masafi** | **12.50** | **135** | P | | Pn | 00 56 55.6 | +3.5 |
| **NAZ** | **Nazwa, Dubai** SNR=11 | **12.51** | **138** | *i* P | | Pn | 00 56 56.1 | +3.9 |
| **NAZ** | **Nazwa, Dubai** SNR=11 | **12.51** | **138** | P | | Pn | 00 56 56.2 | +4.0 |
| NAZ | | | | S | | **Sn** | **00 59 11.8** | **+0.2** |
| **ASUD** | **Al Ashush, Dub** SNR=11 | **12.61** | **140** | *i* P | | Pn | 00 56 57.1 | +3.5 |
| **ASUD** | **Al Ashush, Dub** SNR=11 | **12.61** | **140** | P | | Pn | 00 56 57.6 | +4.0 |
| ASUD | | | | S | | **Sn** | **00 59 13.1** | **-1.1** |
| **MZWR** | **Madinat Zayed** | **12.63** | **147** | P | | Pn | 00 56 57.1 | +3.3 |
| MZWR | | | | S | | **Sn** | **00 59 10.6** | **-3.8** |
| **MDH** | **Madha** | **12.63** | **135** | P | | **Pn** | **00 56 56.6** | **+2.7** |
| **MDH** | **Madha** | **12.63** | **135** | P | | **Pn** | **00 56 56.5** | **+2.7** |
| MDH | | | | S | | **Sn** | **00 59 11.0** | **-3.6** |
| **FAQ** | **Al Faqa, Dubai** | **12.66** | **139** | P | | Pn | 00 56 57.7 | +3.4 |
| **FAQ** | **Al Faqa, Dubai** | **12.66** | **139** | P | | Pn | 00 56 58.0 | +3.7 |
| FAQ | | | | S | | **Sn** | **00 59 13.0** | **-2.3** |
| **UOSS** | **Minazif** | **12.85** | **136** | Pn | | **Pn** | **00 56 57.4** | **+0.6** |
| **UOSS** | **Minazif** | **12.85** | **136** | P | | **Pn** | **00 56 59.2** | **+2.4** |
| **UOSS** | **Minazif** | **12.85** | **136** | P | | **Pn** | **00 56 59.4** | **+2.6** |
| UOSS | | | | S | | **Sn** | **00 59 14.6** | **-5.3** |
| **HATD** | **Hatta, Dubai** SNR=12 | **12.90** | **137** | *i* P | | **Pn** | **00 57 00.4** | **+2.9** |
| **HATD** | **Hatta, Dubai** SNR=12 | **12.90** | **137** | P | | **Pn** | **00 57 00.5** | **+2.9** |
| HATD | | | | S | | **Sn** | **00 59 19.6** | **-1.6** |
| **ASHO** | **Ashiyiah** SNR=29 | **12.97** | **137** | *i* P | | **Pn** | **00 57 01.4** | **+2.9** |
| **ASHO** | **Ashiyiah** SNR=16 | **12.97** | **137** | P | | Pn | 00 57 02.0 | +3.5 |
| ASHO | | | | S | | **Sn** | **00 59 18.9** | **-4.0** |
| **HRA** | **Herat** | **13.07** | **86** | Pn | | **Pn** | **00 56 57.5** | **-2.5** |
| **MZR** | **Muzera** SNR=8.2 | **13.12** | **150** | *i* P | | **Pn** | **00 57 03.0** | **+2.5** |
| **MZR** | **Muzera** SNR=8.3 | **13.12** | **150** | P | | P | 00 57 03.8 | -7.1 |
| MZR | | | | S | | **Sn** | **00 59 25.8** | **-0.8** |
| **ALNE** | **Al Ain** | **13.30** | **140** | P | | **Pn** | **00 57 05.9** | **+2.9** |
| **ALNE** | **Al Ain** SNR=12 | **13.30** | **140** | P | | P | 00 57 06.2 | -6.6 |
| ALNE | | | | S | | **Sn** | **00 59 26.4** | **-4.6** |
| **MDUB** | **Mudurnu** | **13.40** | **300** | Pn | | **Pn** | **00 57 04.7** | **+0.3** |
| **SOHO** | **SOHO** SNR=11 | **13.66** | **137** | *i* P | | **Pn** | **00 57 10.1** | **+2.2** |
| **SOHO** | **SOHO** | **13.66** | **137** | P | | **Pn** | **00 57 10.3** | **+2.3** |
| SOHO | | | | S | | **Sn** | **00 59 37.1** | **-2.8** |
| **ARQ** | **Araqi** SNR=7.4 | **14.29** | **139** | P | | P | 00 57 19.1 | -4.8 |
| ARQ | | | | S | | **Sn** | **00 59 51.7** | **-3.6** |
| **HOQ** | **Hoqain** | **14.54** | **136** | P | | **P** | **00 57 23.4** | **-3.1** |
| HOQ | | | | S | | **Sn** | **00 59 59.7** | **-1.5** |
| **BSY** | **Bisya** SNR=8.4 | **15.14** | **139** | P | | **P** | **00 57 30.0** | **-3.3** |
| BSY | | | | S | | **Sn** | **01 00 11.2** | **-4.6** |
| **SMDO** | **Samad** | **15.37** | **135** | P | | **P** | **00 57 33.4** | **-2.5** |
| SMDO | | | | S | | **Sn** | **01 00 17.4** | **-4.1** |
| **WSAR** | **Wadi Sarin** comp=Z,1.3nm,0.3s,baz=296,slow=11,SNR=14 | **15.57** | **133** | Pn | | **P** | **00 57 35.8** | **-2.3** |
| WSAR | comp=Z,0.2nm,0.3s,baz=127,slow=20,SNR=2.3 | | | Sn | | **Sn** | **01 00 20.6** | **-5.8** |
| **JMDO** | **Jabal Madar** | **15.94** | **137** | P | | **P** | **00 57 40.8** | **-1.3** |
| JMDO | | | | S | | **Sn** | **01 00 34.5** | **-0.8** |
| **MFTR** | **Murfatlar** | **16.84** | **310** | P | | **P** | **00 57 52.6** | **+0.7** |
| **JURR** | **Jurilovca** | **16.84** | **312** | P | | **P** | **00 57 53.7** | **+1.7** |
| **JLN** | **Jalan Bani Buh** | **16.86** | **134** | P | | **P** | **00 57 52.9** | **+0.5** |
| **VRH** | **Novokhopyorsk** comp=Z,10.0nm,1.0s | **16.93** | **350** | *e*P | | **P** | **00 57 53.9** | **+1.0** |
| VRH | | | | pmax | pmax | | | |
| **MHTO** | **MHTO** | **16.98** | **140** | P | | **P** | **00 57 53.5** | **-0.2** |
| **APE** | **Apeiranthos** | **17.10** | **284** | *e*P | | **Pn** | **00 57 50.7** | **-2.6** |
| APE | comp=Z,18nm,1.3s | | | pmax | pmax | | | |
| **VORD** | **Divnogorie** | **17.14** | **345** | *e*P | | **P** | **00 57 58.8** | **+3.5** |
| VORD | comp=Z,30nm,0.4s | | | pmax | pmax | | | |
| **TPGR** | **Topolog** | **17.17** | **312** | P | | **P** | **00 57 56.5** | **+0.8** |
| **TLBR** | **Topalu** | **17.25** | **311** | P | | **P** | **00 57 58.2** | **+1.7** |
| **PURM** | **Purcari** | **17.26** | **319** | P | | **P** | **00 57 58.5** | **+1.9** |
| **PURM** | **Purcari** comp=Z,66nm,0.7s,comp=Z,2μm | **17.26** | **319** | P | | **P** | **00 57 57.6** | **+1.0** |
| **DOK** | **Doka** | **17.35** | **155** | P | | **P** | **00 57 57.5** | **-0.3** |
| **HARR** | **Harsova** | **17.39** | **311** | P | | **P** | **00 57 58.7** | **+0.6** |
| **HARR** | **Harsova** | **17.39** | **311** | P | | **P** | **00 57 58.6** | **+0.6** |
| **VSR** | **Storozhevoye** | **17.41** | **345** | *e*P | | **P** | **00 57 59.3** | **+1.1** |
| VSR | comp=Z,8.0nm,0.6s | | | pmax | pmax | | | |
| **CFR** | **Carcaliu** | **17.51** | **313** | P | | **P** | **00 57 59.8** | **+0.5** |
| **CFR** | **Carcaliu** | **17.51** | **313** | P | | **P** | **00 57 59.8** | **+0.5** |
| **IDI** | **Anoyia** | **17.65** | **278** | | | **P** | **00 58 00.8** | **-0.3** |
| **IDI** | **Anoyia** comp=Z,4.2nm,0.9s,baz=55,slow=14,SNR=2.7 | **17.65** | **278** | P | | **P** | **00 57 59.6** | **-1.5** |
| **ABKAR** | **Akbulak array** | **17.72** | **30** | | | **P** | **00 58 01.2** | **-0.5** |
| **ABKAR** | **Akbulak array** | **17.72** | **30** | | | **Pn** | **00 57 60.0** | **-0.8** |
| ABKAR | comp=Z,2.3nm,1.1s | | | IAmb | IAmb | 00 58 11.2 | | |
| **BELG** | **Belogormoye** comp=Z,0.4nm,0.3s,baz=177,slow=5.6,SNR=2.5 comp=Z,12nm,0.8s | **17.80** | **2** | P | | **P** | **00 58 04.5** | **+2.1** |
| **WHFO** | **Wadi Hawf** | **17.88** | **157** | P | | **P** | **00 58 03.8** | **+0.1** |
| **AKTO** | **Aktyubinsk** comp=Z,0.3nm,0.3s,baz=210,slow=10.0,SNR=7.9 comp=Z,2.4nm,0.7s | **17.94** | **25** | P | | **P** | **00 58 07.8** | **+3.6** |
| **MILM** | **Milestii Mici** | **18.08** | **318** | P | | **P** | **00 58 08.0** | **+2.4** |
| **MILM** | **Milestii Mici** | **18.08** | **318** | P | | **P** | **00 58 08.0** | **+2.4** |
| **ABTO** | **Aybut** | **18.26** | **159** | P | | **P** | **00 58 09.7** | **+1.8** |
| **GHRR** | | **18.40** | **314** | P | | **P** | **00 58 12.3** | **+2.8** |
| **RBK** | **Rabkut** | **18.41** | **156** | P | | **P** | **00 58 12.3** | **+2.8** |
| **DMTO** | **DMTO** | **18.48** | **153** | P | | **Pn** | **00 58 12.7** | **+2.4** |
| **VRI** | **Vrincioaia** | **18.71** | **313** | P | | **Pn** | **00 58 16.1** | **+3.0** |
| **VRI** | **Vrincioaia** | **18.71** | **313** | P | | **Pn** | **00 58 16.0** | **+3.0** |
| **VRI** | **Vrincioaia** comp=Z,3.7nm,0.8s,comp=Z,91nm | **18.71** | **313** | P | | **Pn** | **00 58 15.4** | **+2.4** |
| **PLOR5** | **Plostina Array** comp=Z,14nm,0.8s | **18.74** | **313** | P | | **Pn** | **00 58 16.0** | **+2.6** |
| **PLOR** | **Plostina** | **18.75** | **313** | P | | **Pn** | **00 58 16.7** | **+3.1** |
| **PLOR** | **Plostina** | **18.75** | **313** | P | | **Pn** | **00 58 16.6** | **+3.1** |
| **PLOR3** | **Plostina Array** comp=Z,7.1nm,1.9s | **18.75** | **313** | P | | **Pn** | **00 58 12.8** | **-0.8** |
| **LPSR** | **Galich'ya Gora** | **18.76** | **346** | *e*P | | **Pn** | **00 58 12.9** | **-0.6** |
| LPSR | comp=Z,30nm,0.7s | | | pmax | pmax | | | |
| **MLR** | **Muntele Rosu** | **19.01** | **311** | | | **Pn** | **00 58 15.0** | **-1.7** |
| **MLR** | **Muntele Rosu** comp=Z,2.4nm,1.1s,baz=151,slow=19 | **19.01** | **311** | P | | **Pn** | **00 58 16.8** | **0.0** |
| **MLR** | **Muntele Rosu** | **19.01** | **311** | P | | **Pn** | **00 58 18.7** | **+2.0** |
| **MLR** | **Muntele Rosu** comp=Z,12nm,1.0s | **19.01** | **311** | P | | **Pn** | **00 58 17.0** | **+0.3** |
| **COVR** | **Voineasa-Covas** | **19.02** | **312** | P | | **Pn** | **00 58 19.7** | **+3.0** |
| **SORM** | **Soroca** | **19.07** | **321** | P | | **Pn** | **00 58 18.1** | **+0.8** |
| **SORM** | **Soroca** | **19.07** | **321** | P | | **Pn** | **00 58 18.1** | **+0.8** |
| **SORM** | **Soroca** comp=Z,12nm,0.7s | **19.07** | **321** | P | | **Pn** | **00 58 19.5** | **+2.2** |
| **TESR** | **Tescani** | **19.09** | **314** | P | | **Pn** | **00 58 19.3** | **+1.7** |
| **TESR** | **Tescani** comp=Z,14nm,0.8s | **19.09** | **314** | P | | **Pn** | **00 58 18.5** | **+1.0** |
| **ONER** | **Baraj Valea Uz** | **19.15** | **314** | P | | **Pn** | **00 58 20.6** | **+2.3** |
| **TURR** | **Turia** | **19.23** | **313** | P | | **Pn** | **00 58 21.8** | **+2.4** |
| **BOSR** | **Bodos** | **19.46** | **312** | P | | **Pn** | **00 58 23.7** | **+1.6** |
| **VOIR** | | **19.55** | **310** | P | | **Pn** | **00 58 25.4** | **+2.2** |
| **VOIR** | | **19.55** | **310** | P | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RNPP9 | **Sopachiv** | **22.39** | **325** | P | **P** | **00 58 55.1** | **+2.7** |
| **SHIU** | **Shidnytsya** | **22.40** | **318** | P | **P** | **00 58 54.7** | **+2.1** |
| **HOLU** | **Holmets** | **22.60** | **315** | P | **P** | **00 58 56.2** | **+1.5** |
| **KOLS** | **Kolonicke sedl** | **22.86** | **316** | *e*P | **P** | **00 59 01.1** | **+3.6** |
| KOLS | comp=Z,14nm,0.8s | | | pmax | pmax | | |
| **KOLS** | **Kolonicke sedl** | **22.86** | **316** | *e*P | **P** | **00 59 01.1** | **+3.6** |
| **KWP** | **Kalwaria Pacla** | **22.98** | **318** | P | **P** | **00 58 57.3** | **-1.4** |
| **KWP** | **Kalwaria Pacla** | **22.98** | **318** | P | **P** | **00 58 57.3** | **-1.4** |
| KWP | comp=Z,21nm,0.9s | | | pmax | pmax | | |
| **KWP** | **Kalwaria Pacla** | **22.98** | **318** | P | **P** | **00 59 01.3** | **+2.6** |
| **AAK** | **Ala-Archa** | **23.28** | **62**⇑ | *e*P | **P** | **00 58 59.6** | **-2.5** |
| AAK | comp=Z,9.0nm,3.1s | | | pmax | pmax | | |
| **CRVS** | **Cervenica-Dubn** | **23.32** | **315** | *e*P | P | 00 59 08.2 | +6.0 |
| CRVS | comp=Z,25nm,1.0s | | | pmax | pmax | | |
| **CRVS** | **Cervenica-Dubn** | **23.32** | **315** | *e*P | P | 00 59 08.2 | +6.0 |
| **ARU** | **Arti** | **23.35** | **17** | P | **P** | **00 59 01.3** | **-1.1** |
| ARU | comp=Z,6.3nm,0.8s | | | IAmb | IAmb | 00 59 15.7 | |
| **ARU** | **Arti** | **23.35** | **17***c* | *i*P | **P** | **00 59 07.7** | **+5.3** |
| ARU | | | | | | 00 59 37.1 | |
| ARU | | | | SS | SnSn | 01 04 08.8 | +19 |
| ARU | comp=Z,7.0nm,1.5s | | | pmax | pmax | | |
| **ARU** | **Arti** | **23.35** | **17** | P | **P** | **00 59 08.2** | **+5.8** |
| **PSZ** | comp=Z,9.3nm,1.0s **Piszkesteto** | **23.81** | **312** | P | **P** | **00 59 06.2** | **-0.9** |
| PSZ | comp=Z,8.3nm,0.8s | | | IAmb | IAmb | 00 59 11.8 | |
| **PSZ** | **Piszkesteto** | **23.81** | **312** | ⇓P | **P** | **00 59 09.5** | **+2.4** |
| **PSZ** | **Piszkesteto** | **23.81** | **312** | P | **P** | **00 59 06.3** | **-0.9** |
| PSZ | comp=Z,8.0nm,0.8s | | | pmax | pmax | | |
| **MORH** | **Mrgy, Hungar** | **23.98** | **307** | ⇑P | **P** | **00 59 11.4** | **+2.8** |
| **MORH** | **Mrgy, Hungar** | **23.98** | **307** | P | **P** | **00 59 11.4** | **+2.8** |
| **KIRV** | comp=Z,8.0nm,1.1s **Kirov** | **24.06** | **4**⇑ | *e*P | **P** | **00 59 07.6** | **-1.7** |
| **NACGM** | **Naroch** | **24.45** | **332** | *e*P | P | 00 59 19.5 | +6.6 |
| **LANS** | comp=Z,10.0nm,0.8s,baz=139 **Liptovska Anna** | **24.59** | **314** | *e*P | **P** | **00 59 17.2** | **+2.9** |
| LANS | comp=Z,3.0nm,0.8s | | | pmax | pmax | | |
| **LANS** | **Liptovska Anna** | **24.59** | **314** | *e*P | **P** | **00 59 17.2** | **+2.9** |
| **VYHS** | **Vyhne** | **24.69** | **313** | *e*P | **P** | **00 59 18.5** | **+3.3** |
| VYHS | comp=Z,6.0nm,1.3s | | | pmax | pmax | | |
| **VYHS** | **Vyhne** | **24.69** | **313** | *e*P | **P** | **00 59 18.5** | **+3.3** |
| **OJC** | **Ojcow** | **24.90** | **317** | P | **P** | **00 59 16.5** | **-0.5** |
| **OJC** | **Ojcow** | **24.90** | **317** | P | **P** | **00 59 16.5** | **-0.5** |
| OJC | comp=Z,17nm,0.7s | | | pmax | pmax | | |
| **OJC** | **Ojcow** | **24.90** | **317** | P | **P** | **00 59 18.6** | **+1.6** |
| **MPLH** | comp=Z,25nm,0.8s **Magyarpolny** | **25.01** | **309** | P | **P** | **00 59 20.4** | **+2.3** |
| **BRVK** | comp=Z,50nm,1.1s,comp=Z,2µm **Borovoye** | **25.04** | **35**⇓ | *e*P | **P** | **00 59 17.4** | **-0.8** |
| BRVK | comp=Z,3.0nm,1.0s | | | pmax | pmax | | |
| **BVAR** | **Borovoye Array** | **25.07** | **35** | P | P | 00 59 24.6 | +6.1 |
| **SUW** | comp=Z,1.1nm,0.5s,baz=224,slow=6.2,SNR=8.1 comp=Z,1.1nm,0.5s **Suwalki** | **25.34** | **327** | P | **P** | **00 59 20.4** | **-0.5** |
| **SUW** | **Suwalki** | **25.34** | **327** | P | **P** | **00 59 20.4** | **-0.5** |
| SUW | comp=Z,27nm,1.0s | | | pmax | pmax | | |
| **JAVC** | **Velka Javorina** | **25.55** | **313** | *e*P | **P** | **00 59 27.0** | **+4.0** |
| **MAUC** | **Maruska** | **25.66** | **314** | *e*P | **P** | **00 59 28.2** | **+4.3** |
| **OKC** | **Ostrava-Krasne** | **25.67** | **315** | AMS | AMS | 01 22 20.0 | |
| **RONA** | comp=Z,300nm,22.7s **Rosalia, Austr** | **25.99** | **309** | *e*pP | P | 00 59 32.1 | +5.2 |
| **MORC** | comp=Z,5.2nm,1.1s **Moravsky Berou** | **26.00** | **314** | P | **P** | **00 59 25.8** | **-1.3** |
| MORC | | | | IAmb | IAmb | 00 59 32.8 | |
| **MORC** | comp=Z,5.1nm,1.0s **Moravsky Berou** | **26.00** | **314** | *e*P | **P** | **00 59 29.3** | **+2.3** |
| **MORC** | **Moravsky Berou** | **26.00** | **314** | ⇓P | **P** | **00 59 30.0** | **+3.0** |
| **MORC** | **Moravsky Berou** | **26.00** | **314** | P | **P** | **00 59 25.8** | **-1.3** |
| MORC | comp=Z,5.0nm,1.0s | | | pmax | pmax | | |
| **RAFF** | **Raffo Rosso** | **26.02** | **285** | P | **P** | **00 59 26.1** | **-1.1** |
| **CONA** | **Conrad Observa** | **26.34** | **310** | *i*P | **P** | **00 59 33.4** | **+3.2** |
| **ARSA** | comp=Z,5.9nm,1.3s **Arzberg** | **26.34** | **308** | *e*P | **P** | **00 59 33.1** | **+2.9** |
| **VRAC** | comp=Z,6.1nm,1.3s **Vranov** | **26.38** | **313** | *e*P | **P** | **00 59 33.8** | **+3.4** |
| **VRAC** | **Vranov** | **26.38** | **313** | ⇑P | **P** | **00 59 33.2** | **+2.8** |
| **VRAC** | **Vranov** | **26.38** | **313** | P | **P** | **00 59 33.2** | **+2.8** |
| **KRUC** | **Moravsky** | **26.40** | **312** | *e*P | **P** | **00 59 32.7** | **+2.0** |
| **KRLC** | **Kraliky** | **26.57** | **315** | *e*P | **P** | **00 59 34.4** | **+2.2** |
| **KRLC** | **Kraliky** | **26.57** | **315** | *e*P | **P** | **00 59 34.4** | **+2.2** |
| **OBKA** | **Obir** | **26.78** | **306** | *e*pP | **P** | **00 59 36.0** | **+1.9** |
| **DPC** | comp=Z,24nm,1.5s **Dobruska-Polom** | **26.95** | **315** | *e*P | **P** | **00 59 38.2** | **+2.5** |
| DPC | comp=Z,300nm,20.7s | | | AMS | AMS | 01 16 50.0 | |
| **DPC** | **Dobruska-Polom** | **26.95** | **315** | *e*P | **P** | **00 59 38.2** | **+2.5** |
| DPC | comp=Z,300nm,20.7s | | | MLR | MLR | | |
| **TREC** | **Trest** | **27.04** | **312** | AMS | AMS | 01 20 40.0 | |
| **KSP** | comp=Z,300nm,22.9s **Ksiaz** | **27.17** | **316** | P | **P** | **00 59 38.0** | **+0.4** |
| **UPC** | comp=Z,5.0nm,0.9s **Upice** | **27.20** | **315** | AMS | AMS | 01 16 40.0 | |
| **CHVC** | comp=Z,300nm,15.6s **Chvalec** | **27.20** | **315** | *e*P | **P** | **00 59 40.8** | **+2.9** |
| **CHVC** | **Chvalec** | **27.20** | **315** | *e*P | **P** | **00 59 40.8** | **+2.9** |
| **MOA** | **Molln** | **27.33** | **309** | *e*P | **P** | **00 59 41.5** | **+2.4** |
| **CKRC** | comp=Z,5.9nm,1.2s **Cesky Krumlov** | **27.61** | **311** | *e*P | **P** | **00 59 43.7** | **+2.2** |
| CKRC | | | | AMS | AMS | 01 17 20.0 | |
| **CKRC** | comp=Z,200nm,21.2s **Cesky Krumlov** | **27.61** | **311** | *e*P | **P** | **00 59 43.7** | **+2.2** |
| CKRC | comp=Z,200nm,21.2s | | | MLR | MLR | | |
| **GOPC** | **GO Pecny, Ondr** | **27.69** | **313** | AMS | AMS | 01 21 00.0 | |
| **KBA** | comp=Z,300nm,22.7s **Koelnbreinsper** | **27.72** | **307** | *e*P | **P** | **00 59 46.6** | **+3.9** |
| **PRU** | comp=Z,14nm,1.1s **Pruhonice** | **27.87** | **313** | AMS | AMS | 01 20 50.0 | |
| **ZVC** | comp=Z,300nm,22.4s **Zvikov** | **27.89** | **312** | *e*P | **P** | **00 59 47.6** | **+3.6** |
| **PRA** | **Prague** | **27.96** | **313** | AMS | AMS | 01 20 40.0 | |
| **GERES** | comp=Z,300nm,19.3s **GERESS Array B** | **28.00** | **311** | P | **P** | **00 59 46.3** | **+1.2** |
| **PVCC** | comp=Z,0.4nm,0.5s,baz=118,slow=10,SNR=2.4 comp=Z,0.4nm,0.5s **Panska Ves** | **28.05** | **314** | AMS | AMS | 01 20 50.0 | |
| **KHC** | comp=Z,300nm,23.3s **Kasperske Hory** | **28.16** | **311** | *e*P | P | 00 59 49.4 | +2.9 |
| KHC | | | | AMS | AMS | 01 26 50.0 | |
| **KHC** | comp=Z,300nm,19.9s **Kasperske Hory** | **28.16** | **311** | *e*P | P | 00 59 49.4 | +2.9 |
| KHC | | | | MLR | MLR | | |
| **LESA** | comp=Z,300nm,19.9s **Schwarzleotal** | **28.25** | **307** | *e*pP | **P** | **00 59 49.7** | **+2.3** |
| **KURBB** | comp=Z,15nm,1.6s **Kurchatov Arra** | **28.26** | **46** | P | P | 00 59 52.1 | +4.9 |
| **KURK** | comp=Z,1.6nm,0.9s,baz=251,slow=8.9,SNR=5.8 comp=Z,1.6nm,0.9s **Kurchatov** | **28.35** | **46** | P | P | 00 59 52.2 | +4.2 |
| **HSKC** | **Hora Svate Kat** | **28.75** | **314** | AMS | AMS | 01 14 20.0 | |
| **WTTA** | comp=Z,200nm,21.4s **Wattenberg** | **28.90** | **307** | *e*pP | P | 00 59 55.8 | +2.6 |
| **SQTA** | comp=Z,4.9nm,1.0s **Sankt Quirin** | **29.17** | **306** | *e*pP | **P** | **00 59 57.4** | **+1.8** |
| **CLL** | comp=Z,2.5nm,0.4s **Collm** | **29.26** | **315** | *e*P | P | 00 59 59.0 | +2.8 |
| **MOTA** | **Moosalm** | **29.27** | **307** | *e*pP | **P** | **00 59 58.1** | **+1.6** |
| **FETA** | comp=Z,8.5nm,1.2s **Feichten** | **29.45** | **306** | *e*pP | **P** | **00 59 59.3** | **+1.2** |
| **RETA** | comp=Z,6.0nm,1.1s **Reutte** | **29.53** | **307** | *e*pP | **P** | **01 00 01.0** | **+2.3** |
| **MK31** | comp=Z,1.2nm,0.5s **Makanchi Array** | **29.54** | **55**⇑ | *e*P | **P** | **00 59 58.0** | **-0.8** |
| **MKAR** | **Makanchi Array** | **29.54** | **55** | P | P | 01 00 03.0 | +4.1 |
| **MKAR** | comp=Z,0.8nm,0.7s,baz=252,slow=6.3,SNR=7.7 comp=Z,0.8nm,0.7s **Makanchi Array** | **29.54** | **55** | P | P | 01 00 03.0 | +4.2 |
| **FINES** | **FINESS Array B** | **29.83** | **340** | P | **P** | **01 00 02.2** | **+1.1** |
| **DAVA** | comp=Z,2.1nm,0.8s,baz=142,slow=10,SNR=9.0 comp=Z,2.1nm,0.8s **Damuels** | **30.07** | **306** | *e*pP | **P** | **01 00 05.3** | **+1.7** |
| | comp=Z,2.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.06** | **42** | P | P | 01 00 33.7 | +4.1 |
| **HFS** | comp=Z,1.1nm,0.8s,baz=263,slow=8.9,SNR=5.5 comp=Z,1.1nm,0.8s **Hagfors** | **33.19** | **330** | P | **P** | **01 00 31.7** | **+1.0** |
| **DGZ** | comp=Z,4.0nm,0.8s,baz=111,slow=8.1,SNR=15 comp=Z,4.0nm,0.8s **Jazzator, Alta** | **33.48** | **51**⇑ | *e*P | **P** | **01 00 33.6** | **0.0** |
| DGZ | comp=Z,10.0nm,4.1s | | | pmax | pmax | | |
| **NB2** | **NORSAR Subarra** | **34.71** | **330** | P | **P** | **01 00 45.4** | **+1.4** |
| **NOA** | comp=Z,1.4nm,0.8s,baz=125,slow=8.6 **NORSAR Array B** | **34.71** | **330** | P | **P** | **01 00 44.0** | **0.0** |
| **TAM** | comp=Z,0.5nm,0.6s,baz=125,slow=8.7,SNR=4.6 comp=Z,0.5nm,0.6s **Tamanrasset** | **37.51** | **263** | P | **P** | **01 01 08.0** | **-0.5** |
| TAM | | | | IAmb | IAmb | 01 01 16.6 | |
| **TAM** | comp=Z,3.6nm,1.1s **Tamanrasset** | **37.51** | **263** | P | **P** | **01 01 08.0** | **-0.5** |
| TAM | comp=Z,4.0nm,1.1s | | | pmax | pmax | | |
| **EKA** | **Eskdalemuir Ar** | **39.67** | **317** | P | **P** | **01 01 27.4** | **+1.4** |
| **ESDC** | comp=Z,2.6nm,0.5s,baz=106,slow=8.8,SNR=17 comp=Z,2.6nm,0.5s **Sonseca Array** | **40.04** | **292** | P | **P** | **01 01 30.6** | **+1.2** |
| **TORD** | comp=Z,1.9nm,0.9s,baz=60,slow=8.8,SNR=13 comp=Z,1.9nm,0.9s **Torodi Ar. Bea** | **45.67** | **253** | P | **P** | **01 02 15.6** | **+0.3** |
| TORD | comp=Z,3.4nm,1.4s | | | IAmb | IAmb | 01 02 38.0 | |
| **TORD** | **Torodi Ar. Bea** | **45.67** | **253** | P | **P** | **01 02 16.8** | **+1.5** |
| **PZH** | comp=Z,1.6nm,0.9s,baz=49,slow=5.3,SNR=11 comp=Z,1.6nm,0.9s **PanZhiHua** | **47.83** | **84** | P | **P** | **01 02 31.8** | **-0.4** |
| PZH | comp=Z,20nm,0.7s | | | pmax | pmax | | |
| PZH | comp=Z,110nm,5.1s | | | pmax | pmax | | |
| **CMAR** | **Chiang Mai Arr** | **49.15** | **95** | P | P | 01 02 48.1 | +5.8 |
| **HHC** | comp=Z,0.7nm,0.3s,baz=308,slow=9.0,SNR=4.3 comp=Z,0.7nm,0.3s **Hu-ho-hao-te** | **50.86** | **63** | *e*P | **P** | **01 02 53.0** | **-2.2** |
| HHC | comp=Z,17nm,0.7s | | | pmax | pmax | | |
| HHC | comp=Z,140nm,5.3s | | | pmax | pmax | | |
| **OPO** | **Ambohidratompo** | **52.89** | **179** | LR | LR | 01 27 51.1 | |
| **D19K** | comp=Z,78nm,18.5s,baz=330,slow=38 **Kuna River** | **75.59** | **9** | P | **P** | **01 05 37.0** | **-1.7** |
| D19K | comp=Z,5.3nm,1.3s | | | IAmb | IAmb | 01 06 05.4 | |
| **BMAR** | **Burnt Mountain** | **77.93** | **4** | P | **P** | **01 05 51.1** | **-0.9** |
| **G31M** | **Satah River** | **78.78** | **0** | P | **P** | **01 05 57.2** | **+0.6** |
| **H21K** | **Melozitna Rive** | **78.94** | **8** | P | **P** | **01 05 56.1** | **-1.4** |
| H21K | comp=Z,7.4nm,1.5s | | | IAmb | IAmb | 01 06 04.3 | |
| **ILAR** | **Eielson Array** | **80.39** | **6** | P | **P** | **01 06 08.2** | **+2.9** |
| | comp=Z,0.5nm,0.9s,baz=333,slow=5.2,SNR=3.1 comp=Z,0.5nm,0.9s | | | | | | |

*TEH* ***26*** *01:06:48.2,34.°63N×46.°18E,h7km±36km, ML3.0*
*ISN* ***26*** *01:07:06.3±0.5, 34.°72N×46.°23E, h7km±5km, ML2.9*
**ISC 26 01:06:48.1**±1.1**, 34.°62N**±0.°04×**46.°17E**±0.°03**, h12**km±10km**, n18**, σ0.°37/17, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.19** | **65** | Pg | **Pg** | **01 06 52.5** | **0.0** |
| IDHR | | | | Sg | **Sg** | **01 06 55.7** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.43** | **131** | Pg | **Pb** | **01 06 57.3** | **-0.5** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **257** | Pg | **Pg** | **01 06 58.0** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **204** | Pg | **Pb** | **01 06 59.5** | **-0.2** |
| GLG1 | | | | Sg | **Sb** | **01 07 08.0** | **+0.4** |
| **ILIN** | **Lien** | **0.71** | **65** | Pg | **Pg** | **01 07 01.8** | **-0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **115** | Pg | **Pg** | **01 07 03.5** | **0.0** |
| KCHF | | | | Sg | **Sb** | **01 07 15.3** | **+0.7** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **178** | Pg | **Pn** | **01 07 07.8** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **78** | Pg | **Pg** | **01 07 11.9** | **+0.3** |
| **IBZA** | **Bozab** | **1.40** | **96** | Pg | **Pg** | **01 07 14.9** | **-0.2** |
| **IBDR** | **Badra** | **1.52** | **188** | *e*Pn | Pg | 01 07 37.0 | +20 |
| IBDR | | | | *e*Sn | Sg | 01 07 59.4 | +22 |
| **SDS1** | **Sardasht. Az.** | **1.63** | **340** | Pg | **Pg** | **01 07 18.9** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.69** | **298** | *e*Pn | Pg | 01 07 38.0 | +17 |
| IKRK | | | | *e*Sn | Sg | 01 08 01.5 | +19 |
| IKRK | comp=N,167nm,0.9s | | | AML | AML | 01 08 09.9 | |
| IKRK | comp=E,188nm,0.3s | | | AML | AML | 01 08 10.0 | |
| **IKFM** | **Kafar-mosalman** | **1.77** | **128** | Pg | **Pg** | **01 07 21.3** | **-0.6** |
| **IDOB** | **Doab** | **1.86** | **116** | Pn | **Pg** | **01 07 23.5** | **-0.2** |
| **BHD** | **Baghdad** | **2.01** | **228** | *e*Pn | Pg | 01 07 44.0 | +17 |
| BHD | | | | *e*Sn | Sg | 01 08 11.0 | +18 |
| **HSAM** | **Samen** | **2.05** | **101** | Pn | **Pb** | **01 07 25.6** | **+0.2** |
| **MAHB** | **Mahabad** | **2.18** | **350** | Pn | **Pb** | **01 07 27.3** | **-0.1** |
| **RAFI** | **Al-Rafai** | **2.89** | **181** | *e*Pn | Pg | 01 07 56.0 | +13 |
| RAFI | | | | *e*Sn | Sg | 01 08 32.5 | +12 |

*IDC* ***26*** *01:11:01.9±11.0, 10.°62S×161.°30E, h91km±97km, mb3.7/12, mbtmp4.1/12, ML2.5/1, MS3.7/16, Error ellipse: s-maj=50.5km s-min=20.1km az=89.0*
**ISC 26 01:10:58.2**±1.1**, 10.°6S**±0.°2×**161.°4E**±0.°2**, h61**km**, n25**, σ0.°96/13**, mb4.0/12, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **12.39** | **158** | LR | LR | 01 18 00.2 | |
| **PMG** | comp=Z,220nm,19.3s,baz=326,slow=34 **Port Moresby** | **14.12** | **273** | LR | LR | 01 19 27.6 | |
| **CTA** | comp=Z,746nm,19.9s,baz=112,slow=36 **Charters Tower** | **17.42** | **235** | P | **P** | **01 14 59.3** | **+1.6** |
| CTA | baz=62,slow=14,SNR=7.0 | | | LR | LR | 01 20 58.6 | |
| **MSVF** | comp=Z,27nm,19.8s,baz=94,slow=34 **Nonsavu** | **17.59** | **116** | LR | LR | 01 20 50.5 | |
| **WRA** | comp=Z,169nm,18.9s,baz=280,slow=33 **Warramunga Arr** | **27.72** | **247** | P | **P** | **01 16 40.2** | **-0.9** |
| WRA | 1.8nm,0.8s,baz=75,slow=9.2,SNR=10 | | | LR | LR | 01 27 26.1 | |
| **STKA** | comp=Z,331nm,18.2s,baz=42,slow=36 1.8nm,0.8s **Stephens Creek** | **28.04** | **218** | LR | LR | 01 27 51.9 | |
| **GUMO** | comp=Z,422nm,19.0s,baz=27,slow=36 **Guam** | **29.10** | **325** | LR | LR | 01 29 55.4 | |
| **ASAR** | comp=Z,86nm,18.3s,baz=115,slow=39 **Alice Springs** | **29.29** | **240** | P | **P** | **01 16 53.8** | **-1.3** |
| ASAR | 0.9nm,1.0s,baz=72,slow=9.2,SNR=7.2 | | | LR | LR | 01 28 20.3 | |
| **DAV** | comp=Z,576nm,18.9s,baz=80,slow=36 0.9nm,1.0s **Davao City (W)** | **39.78** | **295** | LR | LR | 01 34 20.9 | |
| **KAPI** | comp=Z,36nm,18.5s,baz=144,slow=35 **Kappang** | **41.65** | **274** | LR | LR | 01 36 41.1 | |
| **NWAO** | comp=Z,82nm,21.1s,baz=280,slow=37 **Narrogin (SRO)** | **46.26** | **234** | LR | LR | 01 38 05.0 | |
| **PPT** | comp=Z,132nm,18.8s,baz=36,slow=35 **Papeete** | **47.91** | **104** | LR | LR | 01 35 56.2 | |
| **MJAR** | comp=Z,67nm,20.5s,baz=229,slow=31 **Matsushiro Arr** | **51.72** | **336** | P | **P** | **01 19 58.5** | **-0.8** |
| **KSRS** | 1.2nm,0.7s,baz=164,slow=8.7,SNR=4.1 1.2nm,0.7s **Korea Array** | **57.19** | **328** | P | **P** | **01 20 39.5** | **+0.5** |
| KSRS | 0.5nm,0.6s,baz=116,slow=5.5,SNR=2.0 | | | LR | LR | 01 42 44.8 | |
| **USRK** | comp=Z,27nm,21.9s,baz=220,slow=33 0.5nm,0.6s **Ussuriysk Ar.** | **60.72** | **336** | P | **P** | **01 21 04.3** | **+0.9** |
| **CMAR** | 3.5nm,0.9s,baz=165,slow=9.0,SNR=5.1 3.5nm,0.9s **Chiang Mai Arr** | **68.07** | **295** | P | **P** | **01 21 51.8** | **-0.2** |
| **SONM** | 1.9nm,0.3s,baz=114,slow=4.2,SNR=2.1 1.9nm,0.3s **Songino Array** | **75.83** | **325** | P | **P** | **01 22 38.9** | **+0.9** |
| **QSPA** | 1.9nm,0.7s,baz=138,slow=6.0,SNR=7.0 1.9nm,0.7s **South Pole Qui** | **79.42** | **180** | P | **P** | **01 22 58.0** | **+0.2** |
| **MAW** | 2.3nm,1.0s,baz=183,slow=1.0,SNR=7.0 2.3nm,1.0s **Mawson** | **83.56** | **202** | P | **P** | **01 23 19.3** | **0.0** |
| **ILAR** | 1.9nm,0.8s,baz=96,slow=8.1,SNR=4.5 1.9nm,0.8s **Eielson Array** | **84.46** | **20** | P | **P** | **01 23 23.7** | **-0.2** |
| **DLBC** | 0.3nm,0.6s,baz=262,slow=5.2,SNR=2.4 0.3nm,0.6s **Dease Lake** | **88.04** | **29** | LR | LR | 02 00 24.0 | |
| **NVAR** | comp=Z,54nm,18.2s,baz=96,slow=34 **Mina Array Bea** | **88.97** | **51** | LR | LR | 01 56 40.2 | |
| **PFO** | comp=Z,38nm,21.6s,baz=290,slow=31 **Pinyon Flats O** | **89.29** | **56** | LR | LR | 01 56 24.6 | |
| **MKAR** | comp=Z,50nm,19.6s,baz=315,slow=30 **Makanchi Array** | **90.31** | **318** | P | **P** | **01 23 52.7** | **+0.1** |
| **KURBB** | 0.4nm,0.6s,baz=113,slow=5.8,SNR=4.5 0.4nm,0.6s **Kurchatov Arra** | **93.63** | **321** | P | **P** | **01 24 06.7** | **-1.1** |
| | 0.5nm,0.2s,baz=101,slow=4.8,SNR=1.9 0.5nm,0.2s | | | | | | |

*ISN* ***26*** *01:11:15.3±0.7, 34.°62N×46.°21E, h11km±9km, ML2.6*
*TEH* ***26*** *01:11:16.3, 34.°61N×46.°22E, h10km±53km, ML2.7*
**ISC 26 01:11:16.3**±1.0**, 34.°61N**±0.°05×**46.°21E**±0.°05**, h11**km±11km**, n8**, σ0.°59/14**, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.17** | **58** | Pg | **Pg** | **01 11 20.2** | **-0.1** |
| IDHR | | | | Sg | **Sg** | **01 11 23.5** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **0.41** | **133** | Pg | **Pb** | **01 11 24.7** | **-0.9** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **207** | Pg | **Pb** | **01 11 27.6** | **-0.5** |
| GLG1 | | | | Sg | **Sb** | **01 11 35.9** | **0.0** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **116** | Pg | **Pg** | **01 11 30.8** | **-0.3** |
| KCHF | | | | Sg | **Sb** | **01 11 42.7** | **+0.6** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **180** | Pg | **Pb** | **01 11 35.2** | **-0.2** |
| **IBDR** | **Badra** | **1.51** | **189** | *e*Pn | **Pb** | **01 11 44.0** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **01 12 05.5** | **+0.5** |
| **IKRK** | **Kirkuk** | **1.73** | **298** | *e*Pn | **Pb** | **01 11 47.5** | **-0.6** |
| IKRK | | | | *e*Sn | **Sb** | **01 12 10.0** | **+0.2** |
| IKRK | comp=N,97nm,0.3s | | | AML | AML | 01 12 14.8 | |
| IKRK | comp=E,80nm,0.3s | | | AML | AML | 01 12 24.0 | |
| **BHD** | **Baghdad** | **2.02** | **229** | *e*Pn | **Pn** | **01 11 51.0** | **+0.7** |
| BHD | | | | *e*Sn | **Sb** | **01 12 17.5** | **-0.7** |

*IDC* ***26*** *01:14:43.9±5.0, 23.°19N×142.°91E, h0km, mb3.9/6, mbtmp3.8/7, ML2.4/1, Error ellipse: s-maj=208.7km s-min=20.4km az=77.0*
**ISC 26 01:14:46.9**±4.2**, 23.°3N**±0.°2×**14.°4E**±.°**, h35**km**, n7**, σ0**.84/7, mb3.9/6, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **14.01** | **342** | Pn | **Pn** | **01 18 03.2** | **+0.3** |
| **WRA** | baz=133,slow=13,SNR=2.6 0.5nm,0.5s **Warramunga Arr** | **43.93** | **193** | P | **P** | **01 22 50.6** | **+0.1** |
| **ASAR** | 0.9nm,0.4s,baz=11,slow=8.1,SNR=24 0.9nm,0.4s **Alice Springs** | **47.64** | **192** | P | **P** | **01 23 19.9** | **0.0** |
| **ZALV** | 0.3nm,0.7s,baz=19,slow=12,SNR=5.9 0.3nm,0.7s **Zalesovo Beam** | **53.23** | **321** | P | **P** | **01 24 00.5** | **-1.2** |
| | 0.6nm,0.6s,baz=107,slow=7.7,SNR=2.4 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0.6nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.94** | **312** | P | | **P** | **01 24 06.9** | **-0.2** | |
| | 0.8nm,0.6s,baz=89,slow=8.9,SNR=6.9 | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.66** | **316** | P | | **P** | **01 24 25.5** | **-1.1** | |
| | 0.5nm,0.2s,baz=93,slow=7.9,SNR=7.0 | | | | | | | | |
| | 0.5nm,0.2s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.74** | **319** | P | | **P** | **01 25 01.9** | **+0.1** | |
| | 2.2nm,0.6s,baz=86,slow=8.2,SNR=14 | | | | | | | | |
| | 2.2nm,0.6s | | | | | | | | |

*ISN* ***26*** *01:15:51.4±0.3,34.61N×46.21E,h13km±4km, ML2.6*
*TEH* ***26*** *01:15:52.2,34.62N×46.18E,h10km±55km, ML2.7*
**ISC 26 01:15:52.1**±1.2**,34.63N**±0.04×**46.19E**±0.04**,h17**km±10km**,**n9,**σ0s68/14**,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **IDHR** | **Dehrash** | **0.18** | **65** | Pg | **Pb** | | **01 15 56.6** | **-0.5** |
| IDHR | | | | Sg | **Sg** | | **01 16 00.3** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.43** | **133** | Pg | **Pb** | | **01 16 01.5** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **205** | Pg | **Pb** | | **01 16 03.2** | **-0.3** |
| **ILIN** | **Lien** | **0.70** | **65** | Pg | **Pb** | | **01 16 06.2** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.78** | **116** | Pg | **Pb** | | **01 16 07.2** | **-0.2** |
| KCHF | | | | Sg | **Sn** | | **01 16 19.5** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **179** | Pg | **Pn** | | **01 16 11.4** | **0.0** |
| **IBDR** | **Badra** | **1.53** | **188** | *e*Pn | **Pb** | | **01 16 20.0** | **0.0** |
| IBDR | | | | *e*Sn | **Sg** | | **01 16 41.0** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.70** | **297** | *e*Pn | **Pb** | | **01 16 23.0** | **0.0** |
| IKRK | | | | *e*Sn | **Sg** | | **01 16 46.0** | **-1.1** |
| IKRK | | | | AML | AML | | 01 16 50.7 | |
| | comp=N,103nm,0.4s | | | | | | | |
| IKRK | | | | AML | AML | | 01 16 51.0 | |
| | comp=E,62nm,0.4s | | | | | | | |
| **BHD** | **Baghdad** | **2.02** | **229** | *e*Pn | **Pn** | | **01 16 27.0** | **+1.6** |
| BHD | | | | *e*Sn | **Sb** | | **01 16 53.0** | **-0.3** |

*NOU* ***26*** *01:17:06.0,20.49S×169.47E,h8km,MLv4.6/10, Vanuatu Islands*
*IDC* ***26*** *01:17:10.1±4.3,20.58S×169.30E,h89km±34km, mb3.5/7, mbtmp3.8/8,MS3.4/1,Error ellipse: s-maj=33.1km s-min=27.6km az=81.0*
**ISC 26 01:17:06.1**±0.8**,20.53S**±0.08×**169.6E**±0.1**,h55**km**,n23,** σ1s55/23**,mb3.9/9,4C,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.71** | **236** | P | **Pn** | | **01 17 35.2** | **+1.6** |
| **LIFNC** | **LIFOU** | **2.18** | **263** | P | **Pn** | | **01 17 41.0** | **+1.0** |
| **PINNC** | **Pines Island,** | **2.86** | **223** | P | **Pn** | | **01 17 51.6** | **+2.3** |
| **YATNC** | **Mamie plateau,** | **2.92** | **238** | P | **Pn** | | **01 17 51.6** | **+1.5** |
| **DVP** | **Devils Point** | **3.07** | **335** | P | **Pn** | | **01 17 54.2** | **+1.9** |
| **DZM** | **Mont Dzumac** | **3.28** | **242** | P | **Pn** | | **01 17 56.5** | **+1.3** |
| **DZM** | **Mont Dzumac** | **3.28** | **242** | P | **Pn** | | **01 17 57.1** | **+1.9** |
| | 9.9nm,0.3s,baz=104,slow=12,SNR=60 | | | | | | | |
| DZM | | | | S | **Sn** | | **01 18 32.1** | **-0.9** |
| | 186nm,0.3s,baz=107,slow=19,SNR=20 | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.41** | **242** | P | **Pn** | | **01 17 59.5** | **+2.6** |
| **KOUNC** | **Koumac, New Ca** | **4.94** | **269** | P | **Pn** | | **01 18 20.2** | **+2.4** |
| **RAO** | **Raoul Island** | **14.29** | **130** | LR | LR | | 01 24 52.4 | |
| | comp=Z,130nm,18.4s,baz=91,slow=32 | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.01** | **265** | P | **P** | | **01 23 35.0** | **-1.4** |
| | 0.1nm,0.4s,baz=105,slow=7.8,SNR=1.3 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.13** | **258** | P | **P** | | **01 23 36.3** | **-1.1** |
| | 0.8nm,0.5s,baz=88,slow=9.2,SNR=22 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **69.53** | **180** | P | **P** | | **01 28 09.1** | **+0.1** |
| | 2.5nm,0.7s,baz=1.2,slow=1.2,SNR=22 | | | | | | | |
| | 2.5nm,0.7s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **87.28** | **184** | ⇑P | **P** | | **01 29 46.4** | **-0.2** |
| | comp=Z,126nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **87.89** | **182** | ⇑P | **P** | | **01 29 48.4** | **-1.1** |
| | comp=Z,20nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **87.89** | **182** | P | **P** | | **01 29 48.7** | **-0.8** |
| | comp=Z,0.8nm,0.6s,baz=207,slow=8.5,SNR=15 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **88.42** | **323** | P | **P** | | **01 29 52.5** | **+0.2** |
| | comp=Z,0.6nm,0.7s,baz=148,slow=8.5,SNR=2.7 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **88.47** | **180** | ⇑P | **P** | | **01 29 51.7** | **-0.5** |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **88.77** | **181** | ⇑P | **P** | | **01 29 53.4** | **-0.2** |
| | comp=Z,4.4nm,0.6s,baz=178,slow=5.1 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.43** | **48** | P | **P** | | **01 29 59.5** | **+2.1** |
| | comp=Z,0.3nm,0.6s,baz=297,slow=4.0,SNR=1.9 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **91.37** | **17** | P | **P** | | **01 30 04.3** | **-1.2** |
| | comp=Z,0.3nm,0.8s,baz=218,slow=4.2,SNR=2.2 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **144.82** | **353** | PKP | **PKPab** | | **01 36 34.1** | **-1.6** |
| | comp=Z,0.3nm,0.3s,baz=357,slow=2.3,SNR=9.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **145.76** | **331** | PKPbc | **PKPdf** | | **01 36 37.8** | **-0.8** |
| | comp=Z,1.2nm,0.8s,baz=5.7,slow=3.0,SNR=5.6 | | | | | | | |

*TIR* ***26*** *01:26:56.1,39.96N×20.01E,h15km,Md2.9,Ml2.1*
*ATH* ***26*** *01:26:57.5,39.95N×20.01E,h8km±1km, ML2.1/7,Manual Solution by A.Papageorgiou This location: 2020/06/12 14:37:05 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 1 km; Longitude uncertainty: 2 km*
**ISC 26 01:26:57.3**±0.9**,39.94N**±0.02×**20.01E**±0.03**,h10**km±6km**,**n28,**σ1s04/51**,Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **SRN** | **Sarande** | **0.06** | **190** | P | **Pg** | | **01 26 59.4** | **0.0** |
| | baz=186 | | | | | | | |
| SRN | | | | S | **Sg** | | **01 27 01.2** | **+0.3** |
| | baz=186 | | | | | | | |
| SRN | | | | AMP | | | | |
| | comp=N,17nm,0.1s,baz=186 | | | | | | | |
| **KASA** | **Kassiopi** | **0.20** | **198** | P | **Pg** | | **01 27 01.4** | **-0.1** |
| KASA | | | | S | **Sg** | | **01 27 04.6** | **+0.3** |
| **KEK** | **Kerkira** | **0.28** | **217** | P | **Pg** | | **01 27 02.7** | **-0.3** |
| KEK | | | | S | **Sg** | | **01 27 07.5** | **+0.8** |
| **IGT** | **Igoumenitsa** | **0.47** | **149** | P | **Pg** | | **01 27 06.0** | **-0.5** |
| | baz=149 | | | | | | | |
| IGT | | | | S | **Sg** | | **01 27 13.6** | **+0.8** |
| | baz=149 | | | | | | | |
| IGT | | | | AMP | | | | |
| | comp=E,0.6nm,0.7s,baz=149 | | | | | | | |
| **IGT** | **Igoumenitsa** | **0.47** | **149** | P | **Pb** | | **01 27 07.1** | **-0.6** |
| IGT | | | | S | **Sb** | | **01 27 14.7** | **0.0** |
| **VLO** | **Vlora** | **0.66** | **323** | P | **Pg** | | **01 27 09.6** | **-0.6** |
| | baz=323 | | | | | | | |
| VLO | | | | S | **Sg** | | **01 27 18.3** | **-0.5** |
| | baz=323 | | | | | | | |
| VLO | | | | AMP | | | | |
| | comp=N,0.8nm,0.1s,baz=323 | | | | | | | |
| **PENT** | **Pentalofos** | **0.90** | **73** | P | **Pb** | | **01 27 14.6** | **-0.5** |
| **KBN** | **Korca** | **0.91** | **41** | P | **Pb** | | **01 27 14.3** | **-0.9** |
| | baz=41 | | | | | | | |
| KBN | | | | S | **Sb** | | **01 27 27.1** | **-0.2** |
| | baz=41 | | | | | | | |
| KBN | | | | AMP | | | | |
| | comp=N,0.3nm,0.6s,baz=41 | | | | | | | |
| **NEST** | **Nestorio** | **0.93** | **59** | P | **Pn** | | **01 27 15.5** | **-1.0** |
| NEST | | | | S | **Sn** | | **01 27 28.8** | **-1.1** |
| **SCTE** | **Santa Cesarea** | **1.20** | **277** | P | **Pg** | | **01 27 20.1** | **-0.1** |
| | baz=277 | | | | | | | |
| SCTE | | | | S | **Sn** | | **01 27 36.5** | **+0.1** |
| | baz=277 | | | | | | | |
| SCTE | | | | AMP | | | | |
| | comp=E,0.1nm,0.2s,baz=277 | | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.20** | **277** | P | **Pg** | | **01 27 20.4** | **+0.2** |
| **TSLK** | **Tsoukalades, L** | **1.22** | **156** | P | **Pg** | | **01 27 20.3** | **-0.4** |
| TSLK | | | | S | **Sn** | | **01 27 37.6** | **+0.7** |
| **LKD2** | **Lefkada island** | **1.25** | **156** | P | **Pg** | | **01 27 21.5** | **+0.2** |
| | baz=156 | | | | | | | |
| LKD2 | | | | S | **Sg** | | **01 27 38.9** | **+1.3** |
| | baz=156 | | | | | | | |
| LKD2 | | | | AMP | | | | |
| | comp=E,0.1nm,0.3s,baz=156 | | | | | | | |
| **LKD2** | **Lefkada island** | **1.25** | **156** | P | **Pg** | | **01 27 21.3** | **0.0** |
| LKD2 | | | | S | **Sg** | | **01 27 38.2** | **+0.7** |
| **OHR** | **Ohrid** | **1.32** | **27** | *i* Pn | **Pg** | | **01 27 25.1** | **+2.5** |
| OHR | | | | *i* Sn | **Sg** | | **01 27 44.1** | **+4.3** |
| **NYDR** | **Nydri-Lefkada** | **1.33** | **156** | P | **Pg** | | **01 27 22.7** | **-0.2** |
| NYDR | | | | S | **Sg** | | **01 27 40.3** | **+0.1** |
| **FNA** | **Florina** | **1.34** | **50** | P | **Pg** | | **01 27 22.3** | **-0.8** |
| | baz=51 | | | | | | | |
| FNA | | | | S | **Sg** | | **01 27 40.1** | **-0.4** |
| | baz=51 | | | | | | | |
| FNA | | | | AMP | | | | |
| | comp=E,0.1nm,0.5s,baz=51 | | | | | | | |
| **FNA** | **Florina** | **1.34** | **50** | P | **Pg** | | **01 27 22.5** | **-0.6** |
| FNA | | | | S | **Sg** | | **01 27 40.4** | **-0.2** |
| **EVGI** | **Lefkada island** | **1.41** | **159** | P | **Pg** | | **01 27 23.9** | **-0.3** |
| EVGI | | | | S | **Sb** | | **01 27 41.9** | **+0.4** |
| **FSK** | **Fiskardo** | **1.54** | **164** | P | **Pb** | | **01 27 25.3** | **-0.5** |
| FSK | | | | S | **Sb** | | **01 27 45.6** | **+0.3** |
| **EVR** | **Evrytania** | **1.72** | **126** | P | **Pb** | | **01 27 28.6** | **-0.5** |
| EVR | | | | S | **Sb** | | **01 27 50.0** | **-0.8** |
| **TYRN** | **Tyrnavos** | **1.72** | **97** | P | **Pb** | | **01 27 28.9** | **-0.2** |
| TYRN | | | | S | **Sb** | | **01 27 50.0** | **-0.7** |
| **MAKR** | **Makrakomi, Fth** | **1.88** | **119** | P | **Pb** | | **01 27 30.7** | **-1.0** |
| MAKR | | | | S | **Sb** | | **01 27 54.6** | **-0.7** |
| **ANX** | **Ano Chora** | **2.00** | **132** | P | **Pb** | | **01 27 32.1** | **-1.6** |
| ANX | | | | S | **Sn** | | **01 27 56.5** | **+0.2** |
| **EFP** | **Efpalio** | **2.11** | **135** | P | **Pb** | | **01 27 33.7** | **-1.8** |
| **PUK** | **Puka** | **2.11** | **358** | P | **Pb** | | **01 27 34.1** | **-1.5** |
| | baz=358 | | | | | | | |
| PUK | | | | S | **Sb** | | **01 28 02.3** | **+0.5** |
| | baz=358 | | | | | | | |
| **DRO** | **Drossia** | **2.38** | **146** | P | **Pn** | | **01 27 37.5** | **+1.1** |
| **KLV** | **Kalavryta, Ach** | **2.52** | **138** | P | **Pn** | | **01 27 40.0** | **+1.7** |

**IDC 26 01:30:24.8**±2.2**,6.60S**×**129.27E,h0**km**,mb3.9/1, mbtmp3.7/3,ML3.5/2,Error ellipse: s-maj=143.9km s-min=31.3km az=68.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **14.15** | **160** | Pn | Pn | | 01 33 45.8 | -1.0 |
| | 0.2nm,0.3s,baz=342,slow=13,SNR=6.7 | | | | | | | |
| WRA | | | | Sn | Sn | | 01 36 10.4 | -14 |
| | 0.2nm,0.3s,baz=338,slow=22,SNR=2.4 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **17.55** | **166** | P | P | | 01 34 31.8 | -0.5 |
| | 0.3nm,0.3s,baz=346,slow=10,SNR=14 | | | | | | | |
| ASAR | | | | S | Sn | | 01 37 34.1 | -13 |
| | 0.1nm,0.5s,baz=345,slow=13,SNR=1.9 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.49** | **327** | P | P | | 01 41 22.8 | 0.0 |
| | 0.7nm,0.6s,baz=122,slow=7.8,SNR=6.9 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |

*JMA* ***26*** *01:35:05.3±0.7,45.7N×4.15°E, h30km, MV3.9/13, SE OFF ETOROFU*
*SKHL* ***26*** *01:35:05.1±0.6,44.00N×149.80E, h34km±3km, mb4.3/3*
*IDC* ***26*** *01:35:10.3±5.4,44.29N×149.56E, h59km±61km, mb3.6/7, mbtmp3.8/9,ML3.3/2, Error ellipse: s-maj=107.7km s-min=33.3km az=6.0*
**ISC 26 01:35:05.8**±1.2**,43.96N**±0.09×**149.77E**±0.09**,h35**km**,n30,** σ1s90/33**,mb4.0/7,East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.86** | **314** | *e*P | **Pn** | | **01 35 33.8** | **-1.3** |
| KUR | | | | AMB | AMB | | 01 35 36.4 | |
| | 180nm,0.5s | | | | | | | |
| KUR | | | | *e*S | **Sn** | | **01 35 55.6** | **-1.8** |
| **SHO** | **Shikotan** | **2.13** | **268** | *e*P | **Pn** | | **01 35 38.2** | **-0.6** |
| SHO | | | | AMB | AMB | | 01 35 39.2 | |
| | 20nm,0.3s | | | | | | | |
| SHO | | | | *e*S | **Sn** | | **01 36 03.1** | **-0.8** |
| SHO | | | | A | A | | 01 36 05.3 | |
| | 160nm,0.4s | | | | | | | |
| SHO | | | | A | A | | 01 36 05.3 | |
| | 150nm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.82** | **273** | *e*P | **Pn** | | **01 35 47.8** | **-0.5** |
| YUK | | | | AMB | AMB | | 01 35 49.2 | |
| | 70nm,0.3s | | | | | | | |
| YUK | | | | *e*S | **Sn** | | **01 36 19.3** | **-1.8** |
| YUK | | | | A | A | | 01 36 21.6 | |
| | 80nm,0.4s | | | | | | | |
| YUK | | | | A | A | | 01 36 21.6 | |
| | 210nm,0.4s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.98** | **260** | P | **Pn** | | **01 35 50.8** | **+0.2** |
| NEM2 | | | | *e*S | **Sn** | | **01 36 24.3** | **-0.8** |
| **JRA** | **Rausu** | **3.36** | **271** | *e*P | **Pn** | | **01 35 57.2** | **+1.5** |
| JRA | | | | *e*S | **Sn** | | **01 36 35.7** | **+1.4** |
| **JNK** | **Nakash** | **3.68** | **266** | *e*P | **Pn** | | **01 35 57.5** | **-2.6** |
| **JAK** | **Akkeshi** | **3.82** | **257** | *e*P | **Pn** | | **01 36 02.8** | **+0.8** |
| JAK | | | | *e*S | **Sn** | | **01 36 46.9** | **+1.2** |
| **JTKR** | **Abashiri--Toko** | **4.23** | **272** | *e*P | **Pn** | | **01 36 09.1** | **+1.4** |
| **JAR** | **Ashorobuto** | **4.41** | **263** | *e*P | **Pn** | | **01 36 12.4** | **+2.2** |
| **JOB** | **Onbets** | **4.45** | **258** | *e*P | **Pn** | | **01 36 12.2** | **+1.5** |
| **JCH** | **Churui** | **4.87** | **256** | *e*P | **Pn** | | **01 36 17.6** | **+1.2** |
| JCH | | | | *e*S | **Sn** | | **01 37 11.4** | **-0.2** |
| **ASAJ** | **Asahikawa** | **5.17** | **274** | P | **Pn** | | **01 36 23.4** | **+2.7** |
| | 0.8nm,0.3s,baz=52,slow=17,SNR=6.9 | | | | | | | |
| ASAJ | | | | S | **Sn** | | **01 37 19.9** | **+0.8** |
| | 7.7nm,0.9s,baz=329,slow=23,SNR=1.6 | | | | | | | |
| | 5.6nm,0.8s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.40** | **254** | *e*P | **Pn** | | **01 36 27.1** | **+3.3** |
| JNBK | | | | *e*S | **Sn** | | **01 37 26.7** | **+1.9** |
| **JANG** | **Nango** | **7.10** | **243** | *e*S | **Sn** | | **01 38 02.7** | **-4.0** |
| **JTH** | **Tanohata** | **7.13** | **238** | *e*S | **Sn** | | **01 38 02.0** | **-5.3** |
| **USRK** | **Ussuriysk Ar.** | **12.79** | **277** | P | **Pn** | | **01 38 06.2** | **+1.2** |
| | 0.2nm,0.3s,baz=86,slow=13,SNR=1.7 | | | | | | | |
| | 0.7nm,0.4s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.09** | **144** | T | T | | 02 12 02.1 | |
| | baz=334,slow=75 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.10** | **144** | T | T | | 02 11 58.6 | |
| | baz=334,slow=75 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.11** | **144** | T | T | | 02 12 01.4 | |
| | baz=334,slow=75 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.10** | **145** | T | T | | 02 13 24.5 | |
| | baz=335,slow=76 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.10** | **145** | T | T | | 02 13 25.3 | |
| | baz=335,slow=76 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.11** | **145** | T | T | | 02 13 25.8 | |
| | baz=335,slow=76 | | | | | | | |
| **SONM** | **Songino Array** | **30.14** | **293** | P | **P** | | **01 41 10.7** | **-1.5** |
| | 0.5nm,0.5s,baz=74,slow=11,SNR=2.4 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.16** | **298** | P | **P** | | **01 43 27.6** | **+0.8** |
| | 1.7nm,0.8s,baz=77,slow=7.1,SNR=8.8 | | | | | | | |
| | 1.7nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.06** | **305** | P | **P** | | **01 43 32.6** | **-1.1** |
| | 0.6nm,0.4s,baz=69,slow=7.6,SNR=3.0 | | | | | | | |
| | 0.6nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.53** | **334** | P | **P** | | **01 45 45.0** | **-0.2** |
| | 1.4nm,0.5s,baz=27,slow=8.0,SNR=15 | | | | | | | |
| | 1.4nm,0.5s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.07** | **340** | P | **P** | | **01 46 13.8** | **0.0** |
| | comp=Z,0.8nm,0.5s,baz=31,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.07** | **340** | P | **P** | | **01 46 13.2** | **-0.6** |
| | comp=Z,1.3nm,0.8s,baz=28,slow=6.4,SNR=5.1 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **70.21** | **338** | P | **P** | | **01 46 14.3** | **-0.3** |
| | comp=Z,1.7nm,0.6s,baz=45,slow=4.7,SNR=7.2 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.94** | **58** | P | **P** | | **01 47 18.2** | **+1.5** |
| | comp=Z,0.2nm,0.5s,baz=311,slow=5.8,SNR=4.6 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |

*DNK* ***26*** *01:41:23.8±0.8,51.51N×14.22E,h0km, Suspected explosion*
*VIE* ***26*** *01:41:26.6±1.1,51.53N×16.40E,h0km, mb2.6/3,ml2.5/5, Error ellipse: s-maj=10.9km s-min=7.6km az=92.0, Suspected Mining induced.*
*PRU* ***26*** *01:41:28.4,51.48N×16.09E,h0km*
**ISC 26 01:41:24.6**±0.9**,51.65N**±0.03×**16.17E**±0.03**,h0**km**,n30,** σ0s81/62**,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **KSP** | **Ksiaz** | **0.81** | **174** | *e*Pg | **Pg** | | **01 41 40.1** | **0.0** |
| KSP | | | | *e*Sg | **Sg** | | **01 41 50.0** | **-0.6** |
| **CHVC** | **Chvalec** | **1.07** | **184** | *e*PG | **Pg** | | **01 41 45.0** | **0.0** |
| CHVC | | | | *e*SG | **Sg** | | **01 41 57.8** | **-1.0** |
| | comp=Z,21nm,0.5s | | | | | | | |
| **OSTC** | **Ostas** | **1.10** | **178** | *e*PG | **Pg** | | **01 41 45.7** | **+0.1** |
| OSTC | | | | *e*SG | **Sg** | | **01 41 58.7** | **-1.0** |
| **UPC** | **Upice** | **1.15** | **185** | *e*PG | **Pg** | | **01 41 46.4** | **-0.2** |
| UPC | | | | *e*SG | **Sg** | | **01 42 00.1** | **-1.3** |
| **DPC** | **Dobruska-Polom** | **1.31** | **176** | *e*PG | **Pg** | | **01 41 48.9** | **-0.7** |
| DPC | | | | *e*SG | **Sg** | | **01 42 04.4** | **-2.1** |
| **PVCC** | **Panska Ves** | **1.51** | **223** | *e*PG | **Pn** | | **01 41 53.0** | **+0.1** |
| PVCC | | | | *e*SG | **Sg** | | **01 42 12.7** | **-0.4** |
| | comp=Z,62nm,0.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.60** | **242** | Pg | **Pg** | | **01 41 55.0** | **-0.2** |
| BRG | | | | Sg | **Sb** | | **01 42 15.8** | **0.0** |
| BRG | | | | Amp | | | 01 42 16.6 | |
| | comp=Z,20nm,0.5s | | | | | | | |
| **KRLC** | **Kraliky** | **1.62** | **166** | *e*PG | **Pn** | | **01 41 54.5** | **0.0** |
| KRLC | | | | *e*SG | **Sn** | | **01 42 15.1** | **-1.0** |
| | comp=Z,12nm,0.2s | | | | | | | |
| **RICC** | **Richard** | **1.71** | **230** | *e*PG | **Pb** | | **01 41 56.5** | **-0.4** |
| **PRU** | **Pruhonice** | **1.96** | **212** | *e*PN | **Pn** | | **01 41 58.5** | **-0.5** |
| PRU | | | | *e*PG | **Pb** | | **01 42 00.6** | **-0.5** |
| PRU | | | | *e*SG | **Sn** | | **01 42 24.9** | **+0.6** |
| | comp=Z,9.2nm,0.3s | | | | | | | |
| **CLL** | **Collm** | **2.01** | **261** | *i* Pn | **Pn** | | **01 41 59.3** | **-0.4** |
| CLL | | | | *e*Pg | **Pg** | | **01 42 03.0** | **-0.1** |
| CLL | | | | *i* x | x | | 01 42 06.3 | |
| CLL | | | | *e*x | x | | 01 42 18.0 | |
| CLL | | | | *i* Sg | **Sg** | | **01 42 29.1** | **0.0** |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **2.02** | **240** | *e*PN | **Pn** | | **01 41 59.6** | **-0.3** |
| HSKC | | | | *e*PG | **Pb** | | **01 42 01.5** | **-0.6** |
| HSKC | | | | *e*SG | **Sb** | | **01 42 27.6** | **-0.1** |
| | comp=Z,12nm,0.3s | | | | | | | |
| **MORC** | **Moravsky Berou** | **2.07** | **155** | *e*PN | **Pn** | | **01 42 00.2** | **-0.4** |
| MORC | | | | *e*SG | **Sb** | | **01 42 29.3** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **2.21** | **145** | *e*SG | **Sb** | | **01 42 33.3** | **+0.1** |
| **VRAC** | **Vranov** | **2.36** | **173** | *e*PN | **Pn** | | **01 42 04.7** | **+0.1** |
| VRAC | | | | *e*SG | **Sb** | | **01 42 37.5** | **-0.1** |
| **TREC** | **Trest** | **2.40** | **191** | *e*SG | **Sb** | | **01 42 38.8** | **+0.1** |
| **KRUC** | **Moravsky** | **2.60** | **177** | *e*PN | **Pn** | | **01 42 07.8** | **0.0** |
| KRUC | | | | *e*SG | **Sb** | | **01 42 44.9** | **+0.5** |
| **OJC** | **Ojcow** | **2.71** | **121** | *e*Pg | **Pg** | | **01 42 16.9** | **+0.5** |
| OJC | | | | *e*Sg | **Sg** | | **01 42 51.9** | **+0.4** |
| **KHC** | **Kasperske Hory** | **3.02** | **214** | *e*PN | **Pn** | | **01 42 12.9** | **-0.7** |
| KHC | | | | *e*PG | **Pb** | | **01 42 19.7** | **+0.5** |
| KHC | | | | *e*SN | **Sn** | | **01 42 50.0** | **-0.5** |
| KHC | | | | *e*SG | **Sb** | | **01 42 58.4** | **+1.8** |
| **CKRC** | **Cesky Krumlov** | **3.08** | **204** | *e*PN | **Pn** | | **01 42 14.9** | **+0.5** |
| CKRC | | | | *e*PG | **Pb** | | **01 42 20.9** | **+0.8** |
| CKRC | | | | *e*SG | **Sb** | | **01 42 59.8** | **+1.6** |
| **LANS** | **Liptovska Anna** | **3.27** | **139** | *e*PG | **Pg** | | **01 42 27.1** | **-0.2** |
| LANS | | | | *e*SG | **Sg** | | **01 43 07.9** | **-1.8** |
| **NIE** | **Niedzica** | **3.46** | **129** | *e*Pg | **Pg** | | **01 42 31.5** | **+0.8** |
| NIE | | | | *e*Sg | **Sg** | | **01 43 14.8** | **-0.7** |
| **BSD** | **Bornholm Skovb** | **3.55** | **348** | *i* P | **Pn** | | **01 42 21.0** | **+0.1** |
| BSD | | | | *i* P | **Pn** | | **01 42 21.0** | **+0.1** |
| BSD | | | | *e*S | **Sn** | | **01 43 03.7** | **+0.2** |
| **VYHS** | **Vyhne** | **3.60** | **150** | *e*PN | **Pn** | | **01 42 20.9** | **-0.7** |
| VYHS | | | | *e*PG | **Pg** | | **01 42 33.1** | **-0.4** |
| **CONA** | **Conrad Observa** | **3.73** | **183** | *e*Pn | **Pn** | | **01 42 24.4** | **+0.9** |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| CONA | | | | *e*Sn | **Sn** | | **01 43 10.4** | **+2.2** |
| | comp=Z,4.2nm,0.4s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **3.96** | **179** | *e*Sn | **Sn** | | **01 43 13.5** | **-0.1** |
| | comp=Z,3.5nm,0.4s | | | | | | | |
| **MOA** | **Molln** | **4.00** | **199** | *i* Pn | **Pn** | | **01 42 27.4** | **+0.3** |
| | comp=Z,1.5nm,0.3s | | | | | | | |
| MOA | | | | *i* Sn | **Sn** | | **01 43 15.0** | **+0.3** |
| | comp=Z,3.8nm,0.5s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **4.29** | **204** | *e*Pn | **Pn** | | **01 42 32.7** | **+1.6** |
| | comp=Z,1.5nm,0.4s | | | | | | | |
| BIOA | | | | *e*Sn | **Sn** | | **01 43 22.2** | **+0.3** |
| | comp=Z,1.8nm,0.3s | | | | | | | |
| **ARSA** | **Arzberg** | **4.42** | **186** | *e*Pn | **Pn** | | **01 42 33.4** | **+0.4** |
| | comp=Z,0.1nm,0.1s | | | | | | | |
| ARSA | | | | *e*Sn | **Sn** | | **01 43 27.1** | **+1.9** |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| **DEL** | **Delary** | **5.01** | **345** | *i* P | **Pn** | | **01 42 40.0** | **-1.0** |

*TEH* ***26*** *01:41:45.5,34.62N×46.26E,h9km,ML2.9*
*ISN* ***26*** *01:41:46.1±0.4,34.62N×46.27E,h16km±6km, ML2.9*
**ISC 26 01:41:45.6**±1.0**,34.62N**±0.04×**46.26E**±0.04**,h11**km±9km**,**n12,**σ0s55/17**,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **IDHR** | **Dehrash** | **0.14** | **52** | Pg | **Pg** | | **01 41 48.9** | **-0.2** |
| IDHR | | | | Sg | **Sg** | | **01 41 51.7** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.39** | **138** | Pg | **Pg** | | **01 41 53.7** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **210** | Pg | **Pg** | | **01 41 56.7** | **-0.2** |
| GLG1 | | | | Sg | **Sb** | | **01 42 06.0** | **0.0** |
| **ILIN** | **Lien** | **0.65** | **62** | Pg | **Pg** | | **01 41 58.0** | **-0.4** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **118** | Pg | **Pg** | | **01 41 59.3** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **182** | Pg | **Pb** | | **01 42 04.7** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **78** | Pg | **Pn** | | **01 42 07.8** | **-0.1** |
| **IBZA** | **Bozab** | **1.33** | **96** | Pg | **Pb** | | **01 42 10.8** | **0.0** |
| **IBDR** | **Badra** | **1.53** | **190** | *e*Pn | **Pg** | | **01 42 14.4** | **+0.5** |
| IBDR | | | | *e*Sn | **Sg** | | **01

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GLG1 | | | | Sg | Sb | 02 10 14.8 | -0.3 |
| KCHF | Cheshme Sefid, | 0.79 | 116 | Pg | Pg | 02 10 10.7 | +0.2 |
| KCHF | | | | Sg | Sb | 02 10 22.4 | +0.5 |
| ILBA | Ilam Banvizeh | 1.00 | 179 | Pg | Pg | 02 10 14.2 | -0.2 |
| IBDR | Badra | 1.52 | 188 | *e*Pn | Pn | 02 10 23.0 | +0.5 |
| IKRK | Kirkuk | 1.70 | 298 | *e*Pn | Pb | 02 10 26.0 | -0.6 |
| IKRK | | | | *e*Sn | Sg | 02 10 49.5 | -0.4 |
| IKRK | comp=N,123nm,0.6s | | | AML | AML | 02 10 53.7 | |
| IKRK | comp=E,67nm,0.4s | | | AML | AML | 02 10 57.2 | |
| BHD | Baghdad | 2.02 | 229 | *e*Pn | Pn | 02 10 30.0 | +0.7 |
| BHD | | | | *e*Sn | Sb | 02 10 56.5 | -0.6 |

**SGS 26 02:12:25.8, 24.7′0N×36.9′59E, h18km, MI1.2, Red Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LNY13 | LNY13 | 1.06 | 63 | P | Pb | 02 12 43.9 | -1.7 |
| LNY05 | LNY05 | 1.06 | 71 | P | Pb | 02 12 43.9 | -1.8 |
| LNY04 | LNY04 | 1.11 | 59 | P | Pn | 02 12 44.5 | -2.0 |
| LNY16 | LNY16 | 1.12 | 54 | S | Sb | 02 12 59.1 | -1.9 |
| LNY16 | LNY16 | 1.12 | 54 | P | Pn | 02 12 44.6 | -2.0 |
| LNY08 | LNY08 | 1.19 | 73 | P | Pn | 02 12 45.7 | -2.0 |
| LNY06 | LNY06 | 1.19 | 64 | P | Pn | 02 12 46.0 | -1.7 |
| UMJ01 | UMJ01 | 1.19 | 36 | P | Pn | 02 12 45.7 | -1.9 |
| LNY09 | LNY09 | 1.20 | 54 | P | Pn | 02 12 46.1 | -1.6 |
| LNY12 | LNY12 | 1.21 | 62 | P | Pn | 02 12 46.1 | -1.9 |
| UMJ06 | UMJ06 | 1.23 | 33 | P | Pn | 02 12 46.1 | -1.9 |
| LNY17 | LNY17 | 1.23 | 63 | P | Pn | 02 12 46.4 | -1.8 |
| LNY15 | LNY15 | 1.23 | 63 | P | Pn | 02 12 46.6 | -1.6 |
| LNY02 | LNY02 | 1.23 | 69 | P | Pn | 02 12 46.1 | -2.2 |
| LNY11 | LNY11 | 1.24 | 60 | P | Pn | 02 12 46.5 | -1.8 |
| UMJ02 | UMJ02 | 1.25 | 35 | P | Pn | 02 12 46.5 | -1.9 |
| UMJ07 | UMJ07 | 1.28 | 36 | P | Pn | 02 12 47.1 | -1.8 |
| LNY10 | LNY10 | 1.29 | 63 | P | Pn | 02 12 47.3 | -1.7 |
| LNYS | LNYS | 1.29 | 72 | P | Pn | 02 12 46.8 | -2.2 |
| LNY03 | LNY03 | 1.33 | 59 | P | Pn | 02 12 48.0 | -1.5 |
| UMJ05 | UMJ05 | 1.37 | 20 | P | Pn | 02 12 48.4 | -1.6 |
| UMJ10 | UMJ10 | 1.58 | 36 | P | Pn | 02 12 52.0 | -1.0 |
| TRAS | Al Qrash | 1.83 | 78 | P | Pn | 02 12 54.8 | -1.5 |
| YOBS | | 1.99 | 99 | P | Pn | 02 12 55.8 | -2.8 |

*IDC **26** 02:24:04.3±2.4, 18°.14S×178°.14W, h536km±27km, mb3.7/15, mbtmp4.5/16, Error ellipse: s-maj=16.6km s-min=12.7km az=115.0*
*NEIC **26** 02:24:05.7±1.8, 18°.0S±0°.1×178°.2W±0°.1, h547km±7km, mb4.3/156, Error ellipse: s-maj=18.8km s-min=15.0km az=139.0*

**ISC 26 02:24:05.9±0.4, 18°.09S±0°.08×178°.26W±0°.08, h550km, n210, σ0.91/200, mb4.3/95, 11C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.54 | 275 | P | P | 02 25 29.7 | +5.2 |
| AFI | Afiamalu | 7.49 | 57 | P | P | 02 25 58.3 | -0.5 |
| NIUE | Niue | 7.96 | 98 | P | P | 02 26 04.2 | +0.9 |
| LIFNC | LIFOU | 13.94 | 257 | P | P | 02 27 04.9 | +0.4 |
| PINNC | Pines Island, | 14.14 | 249 | P | P | 02 27 07.1 | +0.5 |
| DZM | Mont Dzumac | 14.91 | 252 | P | P | 02 27 16.2 | +1.7 |
| DZM | Mont Dzumac | 14.91 | 252 | P | P | 02 27 15.3 | +0.7 |
| | 14nm,0.8s,baz=130,slow=19,SNR=22 | | | | | | |
| KOUNC | Koumac, New Ca | 16.66 | 259 | P | P | 02 27 33.5 | +1.9 |
| URZ | Urewera | 20.50 | 190 | P | P | 02 28 03.1 | -3.1 |
| | 5.4nm,0.4s,baz=352,slow=1.9,SNR=12 | | | | | | |
| | 5.4nm,0.4s | | | | | | |
| BFZ | Birch Farm | 23.00 | 191 | P | P | 02 28 28.5 | -0.3 |
| THZ | Tophouse | 24.77 | 196 | P | P | 02 28 44.1 | -0.4 |
| MQZ | McQueen's Vall | 26.66 | 195 | P | P | 02 28 58.9 | -2.1 |
| EIDS | Eidsvold | 29.34 | 250 | P | P | 02 29 25.6 | +0.8 |
| MLZ | Mavora Lakes | 29.47 | 200 | P | P | 02 29 26.3 | +0.6 |
| ARMA | Armidale | 29.97 | 240 | P | P | 02 29 31.5 | +1.2 |
| CTAO | Charters Tower | 33.56 | 261 | P | P | 02 30 01.5 | +0.6 |
| CAN | Canberra | 33.71 | 233 | P | P | 02 30 02.9 | +0.9 |
| TOO | Toolangi | 37.17 | 231 | P | P | 02 30 31.8 | +1.2 |
| COEN | Coen | 37.25 | 271 | P | P | 02 30 32.5 | +1.0 |
| STKA | Stephens Creek | 38.67 | 241 | P | P | 02 30 43.9 | +1.1 |
| STKA | Stephens Creek | 38.67 | 241 | P | P | 02 30 43.8 | +0.9 |
| | 16nm,0.8s,baz=88,slow=9.6,SNR=27 | | | | | | |
| | 16nm,0.8s | | | | | | |
| BBOO | Buckleboo | 43.44 | 241 | P | P | 02 31 20.8 | +0.1 |
| WB0 | Warramunga Arr | 44.71 | 260 | P | P | 02 31 30.4 | -0.2 |
| WB0 | | | | IAmb | IAmb | 02 31 31.1 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| WB2 | Warramunga Arr | 44.73 | 260 | P | P | 02 31 30.8 | -0.1 |
| WB2 | | | | IAmb | IAmb | 02 31 31.3 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 44.74 | 260 | P | P | 02 31 30.5 | -0.4 |
| WRA | Warramunga Arr | 44.74 | 260 | P | P | 02 31 30.4 | -0.5 |
| | comp=Z,7.3nm,0.7s,baz=96,slow=7.1,SNR=108 | | | | | | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| AS31 | Alice Springs | 44.88 | 254 | P | P | 02 31 32.0 | +0.1 |
| ASAR | Alice Springs | 44.88 | 254 | P | P | 02 31 32.2 | +0.2 |
| ASAR | Alice Springs | 44.88 | 254 | P | P | 02 31 32.1 | +0.1 |
| | comp=Z,44nm,0.7s,baz=88,slow=8.7,SNR=595 | | | | | | |
| ASAR | | | | PcP | PcP | 02 33 01.4 | -0.4 |
| | comp=Z,0.9nm,0.5s,baz=98,slow=4.4,SNR=5.6 | | | | | | |
| ASAR | | | | ScP | ScP | 02 36 01.9 | -0.1 |
| | comp=Z,0.4nm,0.6s,baz=98,slow=4.2,SNR=4.6 | | | | | | |
| ASAR | | | | S | S | 02 37 26.9 | -3.2 |
| | comp=Z,1.2nm,1.1s,baz=88,slow=16,SNR=8.0 | | | | | | |
| | comp=Z,44nm,0.7s | | | | | | |
| MTN | Manton Dam | 48.94 | 269 | P | P | 02 32 02.4 | -0.2 |
| MTN | | | | IAmb | IAmb | 02 32 03.6 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| FORT | Forrest | 50.06 | 245 | P | P | 02 32 10.3 | -0.4 |
| KNRA | Kununurra | 50.62 | 264 | P | P | 02 32 14.8 | -0.1 |
| KNRA | | | | IAmb | IAmb | 02 32 15.0 | |
| | comp=Z,19nm,1.4s | | | | | | |
| FITZ | Fitzroy Crossi | 53.14 | 261 | P | P | 02 32 33.1 | 0.0 |
| PSA00 | Pilbara Seismi | 58.00 | 255 | P | P | 02 33 06.2 | -0.5 |
| PSA00 | | | | IAmb | IAmb | 02 33 38.5 | |
| | comp=Z,25nm,1.4s | | | | | | |
| MBWA | Marble Bar | 58.17 | 256 | P | P | 02 33 07.3 | -0.5 |
| MBWA | | | | IAmb | IAmb | 02 33 36.9 | |
| | comp=Z,36nm,1.5s | | | | | | |
| JCJ | Chichijima | 59.08 | 319 | P | P | 02 33 12.0 | -1.7 |
| SBA | Scott Base | 60.24 | 184 | P | P | 02 33 22.3 | +1.5 |
| MORW | Morawa | 60.54 | 246 | P | P | 02 33 23.0 | -0.6 |
| GIRL | Giralia | 62.98 | 253 | P | P | 02 33 40.1 | +0.5 |
| MJAR | Matsushiro Arr | 68.14 | 323 | P | P | 02 34 11.3 | -0.2 |
| | comp=Z,3.8nm,0.7s,baz=158,slow=5.5,SNR=11 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| MAJO | Matsushiro | 68.14 | 323 | P | P | 02 34 11.4 | -0.1 |
| MAJO | | | | IAmb | IAmb | 02 34 12.0 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| MJB9 | Matsu-Tunnel | 68.15 | 323 | P | P | 02 34 11.3 | -0.2 |
| MJB9 | | | | IAmb | IAmb | 02 34 12.0 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| UGM | Wanagama | 69.79 | 268 | P | P | 02 34 21.5 | -0.3 |
| JKA | Kamikawa-asahi | 71.51 | 331 | P | P | 02 34 31.1 | -0.2 |
| JKA | | | | IAmb | IAmb | 02 34 58.0 | |
| | comp=Z,22nm,1.3s | | | | | | |
| QSPA | South Pole Qui | 71.96 | 180 | P | P | 02 34 33.9 | +0.1 |
| | comp=Z,3.5nm,0.9s,baz=345,slow=1.1,SNR=17 | | | | | | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| PEA0B | Petropavlovsk- | 73.89 | 345 | P | P | 02 34 44.7 | -0.1 |
| PEA0B | | | | IAmb | IAmb | 02 34 45.4 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| PETK | Petropavlovsk- | 73.89 | 345 | P | P | 02 34 44.6 | -0.2 |
| | comp=Z,5.4nm,0.6s,baz=124,slow=7.8,SNR=18 | | | | | | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| S12K | Black Hills | 74.78 | 9 | P | P | 02 34 48.5 | -1.2 |
| KSRS | Korea Array | 74.94 | 318 | P | P | 02 34 52.0 | +1.0 |
| | comp=Z,0.7nm,0.6s,baz=117,slow=6.4,SNR=2.8 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| KMRM | Mail Ridge | 77.06 | 40 | P | P | 02 35 01.9 | -0.9 |
| KRPM | Rodgers | 77.44 | 39 | P | P | 02 35 04.6 | -0.2 |
| PLK4 | Peulik 4 | 77.61 | 12 | P | P | 02 35 05.0 | -0.4 |
| OHAK | Old Harbor | 77.88 | 14 | P | P | 02 35 05.8 | -0.9 |
| OHAK | | | | IAmb | IAmb | 02 35 13.8 | |
| | comp=Z,21nm,1.2s | | | | | | |
| MDPB | Devils Postpil | 78.51 | 44 | P | P | 02 35 11.1 | +0.2 |
| KDAK | Kodiak Island | 78.55 | 14 | P | P | 02 35 09.9 | -0.3 |
| KDAK | Kodiak Island | 78.55 | 14 | P | P | 02 35 09.2 | -1.1 |
| | comp=Z,5.7nm,0.7s,baz=281,slow=20,SNR=6.4 | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| YBH | Yreka Blue Hor | 78.58 | 39 | P | P | 02 35 11.4 | +0.5 |
| DSP | Deep Springs | 79.10 | 45 | P | P | 02 35 14.0 | +0.3 |
| O16K | Kokwok River B | 79.14 | 10 | P | P | 02 35 12.1 | -1.3 |
| O16K | | | | IAmb | IAmb | 02 35 47.8 | |
| | comp=Z,12nm,1.2s | | | | | | |
| GRAC | Grapevine Rang | 79.31 | 45 | P | P | 02 35 14.9 | 0.0 |
| N15K | Kwethluk River | 79.37 | 9 | P | P | 02 35 14.4 | -0.2 |
| N15K | | | | IAmb | IAmb | 02 35 28.0 | |
| | comp=Z,17nm,1.4s | | | | | | |
| NVAR | Mina Array Bea | 79.46 | 44 | P | P | 02 35 16.3 | +0.4 |
| NVAR | Mina Array Bea | 79.46 | 44 | P | P | 02 35 16.1 | +0.2 |
| | comp=Z,2.3nm,0.8s,baz=223,slow=9.2,SNR=17 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| P18K | Big Mountain, | 79.47 | 12 | P | P | 02 35 13.7 | -1.5 |
| P18K | | | | IAmb | IAmb | 02 35 15.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| WCT | Wildcat Mounta | 79.70 | 46 | P | P | 02 35 17.5 | +0.5 |
| O18K | Koktuh Hills | 79.91 | 12 | P | P | 02 35 16.9 | -0.5 |
| O18K | | | | IAmb | IAmb | 02 35 17.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| KVN | Kaiserville | 79.93 | 43 | P | P | 02 35 17.3 | -1.0 |
| TPH | Tonopah | 79.98 | 45 | P | P | 02 35 17.6 | -1.0 |
| TPH | | | | IAmb | IAmb | 02 35 19.7 | |
| | comp=Z,27nm,1.4s | | | | | | |
| P19K | Oil Pt | 80.11 | 13 | P | P | 02 35 16.5 | -2.0 |
| M16K | Timber Creek | 80.36 | 9 | P | P | 02 35 20.0 | +0.2 |
| M16K | | | | IAmb | IAmb | 02 35 21.4 | |
| | comp=Z,18nm,1.2s | | | | | | |
| J05D | Fort Rock, OR | 80.38 | 38 | P | P | 02 35 20.4 | 0.0 |
| J05D | | | | IAmb | IAmb | 02 35 21.9 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| CNPM | China Poot | 80.43 | 14 | P | P | 02 35 19.6 | -0.6 |
| CNPM | | | | IAmb | IAmb | 02 35 26.7 | |
| | comp=Z,28nm,1.4s | | | | | | |
| N18K | Kilae Creek | 80.55 | 11 | P | P | 02 35 19.9 | -0.9 |
| N18K | | | | IAmb | IAmb | 02 35 53.3 | |
| | comp=Z,11nm,1.5s | | | | | | |
| H04A | Detroit Lake | 80.65 | 37 | P | P | 02 35 21.3 | -0.4 |
| H04A | | | | IAmb | IAmb | 02 35 21.9 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| RADR | Rader Ridge | 80.82 | 35 | P | P | 02 35 22.8 | +0.2 |
| PINE | Pine Mountain | 80.85 | 38 | P | P | 02 35 23.1 | +0.2 |
| PINE | | | | IAmb | IAmb | 02 35 24.5 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| L16K | Owhat River | 80.93 | 9 | P | P | 02 35 22.8 | +0.1 |
| L16K | | | | IAmb | IAmb | 02 35 24.0 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| N19K | Bonanza Creek | 80.93 | 12 | P | P | 02 35 21.4 | -1.4 |
| N19K | | | | IAmb | IAmb | 02 35 42.8 | |
| | comp=Z,8.9nm,1.3s | | | | | | |
| M17K | Holitna River | 80.96 | 10 | P | P | 02 35 23.7 | +0.8 |
| K15K | Wolf Creek Mou | 81.21 | 8 | P | P | 02 35 24.7 | +0.6 |
| L18K | Granite Mounta | 81.85 | 10 | P | P | 02 35 27.7 | +0.3 |
| L18K | | | | IAmb | IAmb | 02 35 28.5 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| I07A | Izee | 81.86 | 38 | P | P | 02 35 28.6 | +0.6 |
| I07A | | | | IAmb | IAmb | 02 35 29.3 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| M19K | Big River Lodg | 81.96 | 11 | P | P | 02 35 27.5 | -0.5 |
| M19K | | | | IAmb | IAmb | 02 35 52.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| K17K | Iditarod | 82.06 | 9 | P | P | 02 35 28.7 | +0.2 |
| K17K | | | | IAmb | IAmb | 02 35 59.5 | |
| | comp=Z,16nm,1.5s | | | | | | |
| L19K | White Mountain | 82.13 | 11 | P | P | 02 35 28.8 | -0.1 |
| L19K | | | | IAmb | IAmb | 02 35 51.9 | |
| | comp=Z,8.9nm,1.4s | | | | | | |
| SUA | Susitna One | 82.28 | 13 | IAmb | IAmb | 02 35 29.4 | |
| | comp=Z,6.9nm,0.6s | | | | | | |
| PWL | Port Wells | 82.28 | 14 | P | P | 02 35 28.3 | -1.3 |
| PWL | | | | IAmb | IAmb | 02 35 29.1 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| J16K | Anvik River | 82.28 | 8 | P | P | 02 35 29.6 | 0.0 |
| J16K | | | | IAmb | IAmb | 02 35 30.3 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| CCUT | Cedar City | 82.33 | 47 | P | P | 02 35 30.5 | -0.2 |
| KAIM | Kayak Island | 82.46 | 16 | P | P | 02 35 30.4 | -0.2 |
| PSUT | Pine Spring | 82.48 | 46 | P | P | 02 35 31.3 | -0.2 |
| U15A | North Rim | 82.53 | 48 | P | P | 02 35 32.9 | +1.0 |
| U15A | | | | IAmb | IAmb | 02 35 33.5 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| SKT | Skwentna | 82.58 | 12 | P | P | 02 35 29.9 | -1.2 |
| GLI | Glacier Island | 82.59 | 15 | IAmb | IAmb | 02 35 31.0 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| J17K | VABM Dome | 82.60 | 9 | P | P | 02 35 31.4 | +0.3 |
| HMT | Hamilton | 82.85 | 16 | P | P | 02 35 32.0 | -0.5 |
| HMT | | | | IAmb | IAmb | 02 35 42.3 | |
| | comp=Z,21nm,1.4s | | | | | | |
| G08A | Pilot Rock | 82.87 | 38 | P | P | 02 35 33.4 | +0.3 |
| GHO | Glory Hole Cre | 82.95 | 14 | IAmb | IAmb | 02 35 33.1 | |
| | comp=Z,11nm,0.7s | | | | | | |
| J18K | Innoko River | 83.02 | 10 | IAmb | IAmb | 02 35 33.9 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| SNH | Sunshine Point | 83.11 | 17 | P | P | 02 35 33.3 | -0.5 |
| SML | Sawmill | 83.12 | 14 | P | P | 02 35 32.4 | -1.5 |
| K20K | Telida | 83.36 | 11 | P | P | 02 35 34.8 | -0.2 |
| K20K | | | | IAmb | IAmb | 02 35 35.3 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| SCM | Sheep Creek Mo | 83.37 | 14 | P | P | 02 35 34.7 | -0.5 |
| SCM | | | | IAmb | IAmb | 02 35 35.2 | |
| | comp=Z,9.7nm,0.6s | | | | | | |
| BMO | Blue Mountains | 83.60 | 39 | P | P | 02 35 35.9 | -0.8 |
| J19K | Poorman | 83.69 | 10 | P | P | 02 35 36.7 | +0.1 |
| TABL | Table Mountain | 83.80 | 18 | P | P | 02 35 37.2 | -0.3 |
| TABL | | | | IAmb | IAmb | 02 35 37.9 | |
| | comp=Z,8.2nm,0.6s | | | | | | |
| VRDI | Verde Repeater | 83.82 | 16 | IAmb | IAmb | 02 35 37.2 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| N25K | Chitina, Valde | 83.84 | 15 | P | P | 02 35 37.1 | -0.4 |
| N25K | | | | IAmb | IAmb | 02 35 37.8 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| M24K | Tolsona, Glenn | 83.88 | 15 | P | P | 02 35 37.7 | +0.1 |
| M24K | | | | IAmb | IAmb | 02 35 38.5 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| GLB | Gilahina Butte | 83.90 | 16 | P | P | 02 35 36.9 | -0.9 |
| GLB | | | | IAmb | IAmb | 02 35 37.9 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| LYN | LuoYang | 84.06 | 309 | *e*P | P | 02 35 43.5 | +4.4 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,170nm,4.0s | | | | | | |
| J20K | Nowinta River | 84.10 | 10 | P | P | 02 35 38.1 | -0.5 |
| J20K | | | | IAmb | IAmb | 02 35 39.0 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| G16K | Koyuk River | 84.11 | 7 | P | P | 02 35 39.1 | +0.5 |
| G16K | | | | IAmb | IAmb | 02 36 22.2 | |
| | comp=Z,8.4nm,1.3s | | | | | | |
| CTGM | Chitina Glacie | 84.17 | 17 | P | P | 02 35 38.6 | -0.7 |
| CTGM | | | | IAmb | IAmb | 02 35 39.6 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| F10A | Beach Ranch, E | 84.26 | 38 | P | P | 02 35 38.5 | -1.5 |
| F10A | | | | IAmb | IAmb | 02 35 40.5 | |
| | comp=Z,7.3nm,1.0s | | | | | | |
| RND | Reindeer | 84.42 | 13 | P | P | 02 35 40.0 | -0.3 |
| RND | | | | IAmb | IAmb | 02 35 40.3 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| BPAW | Bear Paw Mtn. | 84.61 | 12 | P | P | 02 35 40.5 | -0.6 |
| M26K | Nabesna, AK | 84.92 | 16 | P | P | 02 35 41.4 | -1.3 |
| M26K | | | | IAmb | IAmb | 02 35 43.2 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| S34M | Telegraph Cree | 85.16 | 23 | P | P | 02 35 44.5 | +0.6 |
| M27K | Edge Creek, AK | 85.18 | 16 | P | P | 02 35 44.0 | -0.1 |
| M27K | | | | IAmb | IAmb | 02 35 44.9 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| G19K | Purcell Mounta | 85.48 | 8 | P | P | 02 35 44.8 | -0.5 |
| MLY | Manley | 85.49 | 11 | P | P | 02 35 44.0 | -1.5 |
| MLY | | | | IAmb | IAmb | 02 35 45.8 | |
| | comp=Z,7.3nm,1.4s | | | | | | |
| Q32M | Nakina River | 85.50 | 22 | P | P | 02 35 46.3 | +0.5 |
| Q32M | | | | IAmb | IAmb | 02 35 46.5 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| WRH | Wood River Hil | 85.52 | 13 | IAmb | IAmb | 02 35 45.9 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| O30N | Mendenhall | 85.58 | 19 | P | P | 02 35 45.9 | -0.1 |
| O30N | | | | IAmb | IAmb | 02 35 46.7 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| RIDG | Independent Ri | 85.60 | 14 | P | P | 02 35 45.1 | -0.9 |
| RIDG | | | | IAmb | IAmb | 02 35 46.1 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| H21K | Melozitna Rive | 85.69 | 10 | P | P | 02 35 45.6 | -0.8 |
| HDA | Harding Lake | 85.70 | 13 | IAmb | IAmb | 02 35 47.2 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| CCB | Clear Creek Bu | 85.73 | 13 | P | P | 02 35 44.1 | -2.4 |
| CCB | | | | IAmb | IAmb | 02 35 45.5 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| BCAR | Beaver Creek A | 85.78 | 16 | P | P | 02 35 46.3 | -0.6 |
| I23K | Minto, Yukon-K | 85.86 | 12 | P | P | 02 35 45.9 | -1.2 |
| MDM | Murphy Dome | 85.92 | 12 | P | P | 02 35 45.8 | -1.6 |
| MDM | | | | IAmb | IAmb | 02 35 46.8 | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 85.97 | 58 | P | P | 02 35 49.8 | +1.2 |
| TXAR | Lajitas Array | 85.97 | 58 | P | P | 02 35 49.6 | +1.0 |
| | comp=Z,2.0nm,0.8s,baz=219,slow=6.1,SNR=28 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| SCRK | Sand Creek | 86.00 | 14 | P | P | 02 35 47.9 | -0.1 |
| IL31 | | 86.03 | 13 | IAmb | IAmb | 02 35 47.5 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| ILAR | Eielson Array | 86.03 | 13 | P | P | 02 35 46.7 | -1.3 |
| ILAR | Eielson Array | 86.03 | 13 | P | P | 02 35 46.5 | -1.5 |
| | comp=Z,1.3nm,0.4s,baz=221,slow=4.8,SNR=29 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| IL03 | Eielson Array | 86.04 | 13 | P | P | 02 35 47.3 | -0.8 |
| M29M | Somme Creek | 86.18 | 17 | IAmb | IAmb | 02 35 49.4 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| POKR | Poker Plat Res | 86.22 | 13 | P | P | 02 35 47.4 | -1.5 |
| POKR | | | | IAmb | IAmb | 02 35 48.0 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| J25K | Salcha River, | 86.23 | 14 | IAmb | IAmb | 02 35 48.8 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| E18K | Tukpahlearik C | 86.26 | 7 | P | P | 02 35 48.8 | -0.1 |
| R33M | Jennings River | 86.28 | 22 | P | P | 02 35 49.6 | +0.2 |
| R33M | | | | IAmb | IAmb | 02 35 50.8 | |
| | comp=Z,8.6nm,1.5s | | | | | | |
| MCMT | McKenzie Canyo | 86.28 | 40 | P | P | 02 35 50.3 | +0.3 |
| J26L | Joseph Creek | 86.55 | 14 | IAmb | IAmb | 02 35 50.7 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| RDOG | Red Dog Mine | 86.63 | 6 | | pP | 02 37 47.3 | -2.4 |
| MSO | Missoula | 86.64 | 38 | P | P | 02 35 51.7 | +0.3 |
| E19K | Redstone River | 86.70 | 8 | P | P | 02 35 50.7 | -0.4 |
| E19K | | | | IAmb | IAmb | 02 35 51.2 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| IMW | Indian Meadow | 87.03 | 42 | P | P | 02 35 52.6 | -0.9 |
| OVMT | Ovando | 87.31 | 38 | P | P | 02 35 54.1 | -0.5 |
| YHL | Hebgen Lake | 87.33 | 41 | P | P | 02 35 55.9 | +1.0 |
| YHL | | | | IAmb | IAmb | 02 35 56.6 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| EGAK | Eagle | 87.36 | 15 | P | P | 02 35 54.1 | -0.1 |
| EGAK | | | | IAmb | IAmb | 02 35 55.0 | |
| | comp=Z,6.9nm,1.4s | | | | | | |
| PD31 | Pinedale Array | 87.39 | 43 | P | P | 02 35 53.6 | -1.5 |
| PDAR | Pinedale Array | 87.39 | 43 | P | P | 02 35 54.3 | -0.8 |
| PDAR | Pinedale Array | 87.39 | 43 | P | P | 02 35 54.6 | -0.5 |
| | comp=Z,1.1nm,0.7s,baz=211,slow=2.1,SNR=13 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| HHC | Hu-ho-hao-te | 87.51 | 314 | *e*P | P | 02 35 56.3 | +0.7 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,4.6s | | | | | | |
| D19K | Kuna River | 87.57 | 7 | P | P | 02 35 54.6 | -0.6 |
| D19K | | | | IAmb | IAmb | 02 35 55.2 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| G24K | Hadweenzic Riv | 87.60 | 12 | P | P | 02 35 54.8 | -0.6 |
| LYMT | Lyon Mountain | 87.69 | 39 | P | P | 02 35 56.1 | -0.4 |
| C19K | Lookout Ridge | 87.99 | 7 | P | P | 02 35 57.1 | 0.0 |
| E22K | Anaktuvuk Pass | 88.12 | 10 | P | P | 02 35 57.1 | -0.7 |
| E22K | | | | IAmb | IAmb | 02 35 58.1 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| I28M | Miner Creek | 88.20 | 15 | P | P | 02 35 57.4 | -0.9 |
| I28M | | | | IAmb | IAmb | 02 36 00.8 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| D22K | Ayikyak River | 88.67 | 9 | P | P | 02 36 00.4 | +0.1 |
| D22K | | | | IAmb | IAmb | 02 36 00.5 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| BMAR | Burnt Mountain | 88.81 | 12 | P | P | 02 36 00.1 | -0.9 |
| I30M | Mount Dempster | 88.94 | 16 | P | P | 02 36 00.1 | -1.6 |
| I30M | | | | IAmb | IAmb | 02 36 02.0 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| ELIB | Princess Elisa | 88.99 | 187 | *d*P | P | 02 36 01.0 | -1.1 |
| | comp=Z,2.5nm,0.7s | | | | | | |
| D23K | Nanushuk River | 89.05 | 10 | P | P | 02 36 01.4 | -0.7 |
| D23K | | | | IAmb | IAmb | 02 36 02.3 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| F26K | Sheenjek River | 89.12 | 12 | P | P | 02 36 02.0 | -0.5 |
| H29M | Whitestone | 89.21 | 15 | P | P | 02 36 01.8 | -1.0 |
| H29M | | | | IAmb | IAmb | 02 36 03.2 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| G29M | Pine Creek | 89.84 | 15 | P | P | 02 36 05.2 | -0.5 |
| C23K | Itkillik River | 89.85 | 9 | P | P | 02 36 05.4 | -0.2 |
| TROLL | Troll, Antarti | 90.12 | 180 | ⇑P | P | 02 36 06.2 | -1.2 |
| | comp=Z,51nm,0.5s | | | | | | |
| SNAA | Sanae | 90.41 | 179 | P | P | 02 36 07.6 | -1.0 |
| SNAA | | | | IAmb | IAmb | 02 36 29.2 | |
| | comp=Z,5.8nm,1.5s | | | | | | |
| SNAA | Sanae | 90.41 | 179 | ⇑P | P | 02 36 07.2 | -1.4 |
| | comp=Z,22nm,0.7s | | | | | | |
| SNAA | Sanae | 90.41 | 179 | P | P | 02 36 07.3 | -1.2 |
| | comp=Z,0.8nm,0.7s,baz=206,slow=9.4,SNR=8.7 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| VNA3 | Neumayer Olymp | 90.55 | 176 | ⇑P | P | 02 36 08.3 | -0.8 |
| | comp=Z,3.0nm,0.6s | | | | | | |
| VNA2 | Neumayer--Watz | 90.99 | 177 | ⇑P | P | 02 36 10.1 | -1.1 |
| | comp=Z,1.9nm,0.6s,baz=68,slow=6.1 | | | | | | |
| VNA1 | Neumayer--Stat | 91.21 | 177 | ⇑P | P | 02 36 11.6 | -0.6 |
| | comp=Z,2.5nm,0.9s | | | | | | |
| INK | Inuvik | 92.03 | 15 | P | P | 02 36 14.2 | -1.6 |
| | comp=Z,3.0nm,0.8s,baz=193,slow=4.9,SNR=4.3 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| EKA | Eskdalemuir Ar | 142.64 | 5 | PKhKP | PKPpre | 02 42 32.0 | |
| | comp=Z,0.7nm,0.6s,baz=332,slow=4.0,SNR=4.0 | | | | | | |
| KWP | Kalwaria Pacla | 144.30 | 337 | | PKPbc | 02 42 38.8 | -0.5 |
| BRTR | Keskin Array B | 145.02 | 315 | | PKPdf | 02 42 41.1 | -0.1 |
| BRTR | Keskin Array B | 145.02 | 315 | PKPbc | PKPbc | 02 42 41.3 | -0.7 |
| | comp=Z,1.3nm,0.7s,baz=137,slow=5.0,SNR=12 | | | | | | |
| CLL | Collm | 145.68 | 347 | | PKPbc | 02 42 42.9 | -0.4 |
| DPC | Dobruska-Polom | 145.77 | 343 | ⇑*e*PKP | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ILBA** | **Ilam Banvizeh** | **0.98** | **181** | Pg | **Pg** | 02 26 52.9 | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.18** | **77** | Pg | **Pb** | 02 26 56.4 | **-0.8** |
| **IBZA** | **Bozab** | **1.35** | **95** | Pg | **Pb** | 02 26 59.6 | **-0.5** |
| **IBDR** | **Badra** | **1.52** | **190** | *e*Pn | **Pb** | 02 27 02.5 | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | 02 27 23.0 | **0.0** |
| IBDR | | | | AML | AML | 02 27 29.4 | |
| | comp=E,238nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 02 27 42.1 | |
| | comp=N,192nm,0.6s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.72** | **128** | Pg | **Pg** | 02 27 06.8 | **-0.6** |
| **IKRK** | **Kirkuk** | **1.74** | **297** | *e*Pn | **Pb** | 02 27 06.0 | **-0.6** |
| IKRK | | | | *e*Sn | **Sb** | 02 27 29.0 | **+0.3** |
| **IDOB** | **Doab** | **1.81** | **116** | Pg | **Pg** | 02 27 08.1 | **-0.9** |
| **HSAM** | **Samen** | **2.00** | **101** | Pn | **Pb** | 02 27 10.9 | **-0.2** |
| **BHD** | **Baghdad** | **2.04** | **230** | *e*Pn | **Pb** | 02 27 10.0 | **-1.6** |
| BHD | | | | *e*Sn | **Sb** | 02 27 36.0 | **-1.2** |
| **MAHB** | **Mahabad** | **2.20** | **349** | Pn | **Pb** | 02 27 13.4 | **-1.0** |
| **HAGD** | **Aghdareh** | **2.41** | **84** | Pn | **Pb** | 02 27 16.6 | **-1.5** |
| **RAFI** | **Al-Rafai** | **2.88** | **182** | *e*Pn | **Pn** | 02 27 22.0 | **+1.4** |
| RAFI | | | | *e*Sn | **Sn** | 02 27 56.5 | **+1.0** |

*NNC **26** 02:32:25.4±0.8, 42°.23N×79°.46E, h0km, mb3.4, mpv3.1, Error ellipse: s-maj=5.1km s-min=2.8km az=144.0*
*SOME **26** 02:32:26.6, 42°.25N×79°.40E, h10km*
*KRNET **26** 02:32:28.1±0.1, 42°.17N×79°.23E, h13km, mb2.1*

**ISC 26 02:32:24.6**±1.4, **42°.20N**±0°.05×**79°.42E**±0°.04, **h12**km±10km, **n45**, σ0**78**/77, **17C-1D**, **Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRZ** | **Przheval'sk** | **0.81** | **291** | ⇑*e*P | **Pn** | **02 32 41.8** | **-0.2** |
| PRZ | baz=99 | | | ⇑*e*S | **Sb** | **02 32 51.4** | **-0.3** |
| | baz=99 | | | | | | |
| **SHLS** | **Shalkode** | **0.95** | **2** | *e*P | **Pn** | **02 32 44.7** | **+0.7** |
| SHLS | 3.5nm,0.2s | | | *e*S | **Sn** | **02 32 57.8** | **+0.2** |
| | 42nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **0.99** | **343** | *e*P | **Pn** | **02 32 44.4** | **-0.1** |
| UZB | 2.7nm,0.1s | | | *e*S | **Sb** | **02 32 57.5** | **+0.7** |
| | 4.8nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **0.99** | **343** | P | **Pn** | **02 32 44.4** | **-0.1** |
| UZB | 2.7nm,0.1s | | | S | **Sb** | **02 32 57.5** | **+0.7** |
| | 4.8nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **1.12** | **3** | P | **Pn** | **02 32 46.7** | **+0.3** |
| PDGK | 0.8nm,0.1s | | | S | **Sn** | **02 33 01.6** | **-0.3** |
| | 2.0nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **1.12** | **3** | ⇑P | **Pb** | **02 32 45.5** | **-0.6** |
| PDGK | 1.2nm,0.4s | | | ⇓S | **Sn** | **02 33 01.5** | **-0.3** |
| | 5.5nm,0.8s | | | | | | |
| **SATY** | **Saty** | **1.14** | **319** | *e*P | **Pn** | **02 32 47.4** | **+0.9** |
| SATY | 4.7nm,0.2s | | | *e*S | **Sn** | **02 33 02.6** | **+0.5** |
| | 14nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.14** | **319** | P | **Pn** | **02 32 47.4** | **+0.9** |
| SATY | 4.7nm,0.2s | | | S | **Sn** | **02 33 02.6** | **+0.5** |
| | 14nm,0.1s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.30** | **249** | ⇑*i*P | **Pg** | **02 32 49.8** | **+0.3** |
| TARG | baz=48 | | | ⇑*i*S | **Sg** | **02 33 06.1** | **-0.3** |
| | baz=48 | | | | | | |
| **KPKS** | **Kokpek** | **1.37** | **337** | *e*P | **Pg** | **02 32 51.6** | **+0.6** |
| KPKS | 6.6nm,0.2s | | | *e*S | **Sg** | **02 33 09.9** | **+1.1** |
| | 6.5nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **1.37** | **337** | P | **Pg** | **02 32 51.6** | **+0.6** |
| KPKS | 6.6nm,0.2s | | | S | **Sg** | **02 33 09.9** | **+1.1** |
| | 8.9nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **1.42** | **29** | *e*P | **Pg** | **02 32 51.8** | **0.0** |
| KTMS | 0.9nm,0.1s | | | *e*S | **Sg** | **02 33 10.4** | **+0.2** |
| | 2.4nm,0.1s | | | | | | |
| **KTMS** | **Ketmen** | **1.42** | **29** | P | **Pg** | **02 32 51.8** | **0.0** |
| KTMS | 0.9nm,0.1s | | | S | **Sg** | **02 33 10.4** | **+0.2** |
| | 2.4nm,0.1s | | | | | | |
| **ANVS** | **Anan'yevo** | **1.42** | **295** | ⇑*i*P | **Pg** | **02 32 52.8** | **+0.9** |
| ANVS | baz=99 | | | ⇑*i*S | **Sg** | **02 33 10.7** | **+0.3** |
| | baz=99 | | | | | | |
| **KURS** | **Kuram** | **1.58** | **325** | *e*P | **Pg** | **02 32 55.3** | **+0.4** |
| KURS | 3.4nm,0.4s | | | *e*S | **Sg** | **02 33 16.4** | **+1.0** |
| | 6.4nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.58** | **325** | P | **Pg** | **02 32 55.3** | **+0.4** |
| KURS | 3.4nm,0.4s | | | S | **Sg** | **02 33 16.4** | **+1.0** |
| | 6.4nm,0.4s | | | | | | |
| **KDJ** | **Kajisay** | **1.67** | **268** | ⇑*i*P | **Pg** | **02 32 56.3** | **-0.3** |
| KDJ | baz=69 | | | ⇑*i*S | **Sb** | **02 33 17.2** | **+0.8** |
| | baz=69 | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.99** | **302** | *e*P | **Pg** | **02 33 02.8** | **0.0** |
| KOTS | 3.3nm,0.2s | | | *e*S | **Sg** | **02 33 29.3** | **+0.8** |
| | 12nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.99** | **302** | Pg | **Pg** | **02 33 02.8** | **0.0** |
| KOTS | 3.3nm,0.2s | | | Lg | Lg | 02 33 29.3 | |
| | 12nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.00** | **299** | *e*P | **Pg** | **02 33 02.9** | **0.0** |
| MDOK | 4.9nm,0.2s | | | *e*S | **Sg** | **02 33 29.4** | **+0.6** |
| | 8.6nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **2.00** | **299** | Pg | **Pg** | **02 33 02.9** | **0.0** |
| MDOK | 4.9nm,0.2s | | | Lg | Lg | 02 33 29.4 | |
| | 8.6nm,0.4s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.01** | **295** | *e*P | **Pg** | **02 33 03.1** | **0.0** |
| TNSS | 9.2nm,0.2s | | | *e*S | **Sg** | **02 33 30.0** | **+0.8** |
| | 8.1nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **2.01** | **295** | Pg | **Pg** | **02 33 03.2** | **0.0** |
| TNSS | 9.2nm,0.2s | | | Lg | Lg | 02 33 30.0 | |
| | 8.1nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **2.01** | **340** | Pg | **Pg** | **02 33 03.0** | **-0.3** |
| BLB | 38nm,0.3s | | | Lg | Lg | 02 33 29.6 | |
| | 12nm,0.3s | | | | | | |
| **KNDC** | **Almaty** | **2.07** | **300** | ⇑Pn | **Pn** | **02 33 00.4** | **+1.1** |
| KNDC | 12nm,0.3s | | | ⇑Sn | **Sb** | **02 33 28.6** | **+0.6** |
| | 8.1nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **2.14** | **7** | *e*P | **Pg** | **02 33 04.8** | **-0.9** |
| DJR | 4.2nm,0.3s | | | *e*S | **Sg** | **02 33 32.5** | **-1.0** |
| | 14nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **2.14** | **7** | Pg | **Pg** | **02 33 04.8** | **-0.9** |
| DJR | 4.2nm,0.3s | | | Lg | Lg | 02 33 32.5 | |
| | 14nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **2.16** | **355** | Pg | **Pg** | **02 33 05.3** | **-0.7** |
| KNOS | 5.4nm,0.2s | | | Lg | Lg | 02 33 33.6 | |
| | 6.7nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **2.32** | **330** | *e*P | **Pg** | **02 33 08.0** | **-1.1** |
| ARXS | 3.7nm,0.2s | | | *e*S | **Sg** | **02 33 38.2** | **-1.0** |
| | 5.0nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **2.32** | **330** | Pg | **Pg** | **02 33 08.0** | **-1.1** |
| ARXS | 3.7nm,0.2s | | | Lg | Lg | 02 33 38.2 | |
| | 5.0nm,0.5s | | | | | | |
| **ULHL** | **Ulahol** | **2.36** | **272** | ⇑*i*P | **Pb** | **02 33 08.0** | **+0.8** |
| ULHL | baz=73 | | | ⇑*i*S | **Sb** | **02 33 37.2** | **+0.8** |
| | baz=73 | | | | | | |
| **MTBS** | **Maitube** | **2.39** | **294** | *e*P | **Pg** | **02 33 09.7** | **-0.8** |
| MTBS | 2.3nm,0.2s | | | *e*S | **Sg** | **02 33 41.1** | **-0.4** |
| | 8.7nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **2.39** | **294** | Pg | **Pg** | **02 33 09.7** | **-0.8** |
| MTBS | 2.3nm,0.2s | | | Lg | Lg | 02 33 41.1 | |
| | 8.7nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **2.43** | **314** | *e*P | **Pg** | **02 33 10.3** | **-0.9** |
| CHKK | 10nm,0.4s | | | *e*S | **Sg** | **02 33 42.2** | **-0.5** |
| | 9.5nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **2.43** | **314** | Pg | **Pg** | **02 33 10.3** | **-0.9** |
| CHKK | 10nm,0.4s | | | Lg | Lg | 02 33 42.2 | |
| | 9.5nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **2.51** | **308** | *e*P | **Pg** | **02 33 11.9** | **-0.9** |
| KTBS | 2.5nm,0.2s | | | *e*S | **Sg** | **02 33 44.9** | **-0.5** |
| | 8.6nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **2.51** | **308** | Pg | **Pg** | **02 33 11.9** | **-0.9** |
| KTBS | 2.5nm,0.2s | | | Lg | Lg | 02 33 44.9 | |
| | 8.6nm,0.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.60** | **277** | ⇑*i*P | **Pb** | **02 33 11.4** | **+0.2** |
| BOOM | baz=79 | | | ⇑*i*S | **Sb** | **02 33 42.9** | **-0.2** |
| | baz=79 | | | | | | |
| **KST** | **Kastek** | **2.69** | **289** | *e*P | **Pg** | **02 33 14.7** | **-1.4** |
| KST | 2.4nm,0.4s | | | *e*S | **Sg** | **02 33 49.7** | **-1.3** |
| | 7.6nm,0.5s | | | | | | |
| **KST** | **Kastek** | **2.69** | **289** | Pg | **Pg** | **02 33 14.6** | **-1.4** |
| KST | 2.4nm,0.4s | | | Lg | Lg | 02 33 49.7 | |
| | 7.6nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **2.88** | **292** | *e*P | **Pg** | **02 33 18.7** | **-1.1** |
| DGS | 2.2nm,0.3s | | | *e*S | **Sg** | **02 33 56.5** | **-0.7** |
| | 7.8nm,0.5s | | | | | | |
| **DGS** | **Degeres** | **2.88** | **292** | Pg | **Pg** | **02 33 18.7** | **-1.1** |
| DGS | 2.2nm,0.3s | | | Lg | Lg | 02 33 56.5 | |
| | 7.8nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.92** | **286** | ⇑*i*P | **Pb** | **02 33 16.0** | **-0.7** |
| TKM2 | baz=87 | | | ⇑*i*S | **Sb** | **02 33 50.8** | **-1.5** |
| | baz=87 | | | | | | |
| **KRBS** | **Karabastau** | **3.13** | **300** | *e*P | **Pg** | **02 33 23.1** | **-1.5** |
| KRBS | 0.9nm,0.3s | | | *e*S | **Sg** | **02 34 04.2** | **-0.9** |
| | 3.7nm,0.3s | | | | | | |
| **KRBS** | **Karabastau** | **3.13** | **300** | Pg | **Pg** | **02 33 23.1** | **-1.5** |
| KRBS | 0.9nm,0.3s | | | Lg | Lg | 02 34 04.2 | |
| | 3.7nm,0.3s | | | | | | |

*IDC **26** 02:41:46.8±1.7, 13°.54N×96°.70E, h0km, mb3.5/5, mbtmp3.4/6, ML3.8/1, Error ellipse: s-maj=62.8km s-min=21.7km az=61.0*

**ISC 26 02:41:52.2**±1.5, **13°.6N**±0°.1×**96°.8E**±0°.2, **h35**km, **n6**, σ0**66**/7, **mb3.4**/5, **Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **5.25** | **23** | Pn | **Pn** | **02 43 09.1** | **+0.8** |
| CMAR | 0.9nm,0.3s,baz=215,slow=14,SNR=14 | | | Sn | **Sn** | **02 44 06.8** | **-0.8** |
| | 1.0nm,0.3s,baz=214,slow=17,SNR=4.7 | | | | | | |
| | 2.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **35.24** | **343** | P | **P** | **02 48 43.6** | **+0.3** |
| | 0.3nm,0.5s,baz=145,slow=10,SNR=3.6 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **39.78** | **342** | P | **P** | **02 49 21.3** | **-0.4** |
| | 0.4nm,0.5s,baz=150,slow=8.6,SNR=4.5 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.33** | **349** | P | **P** | **02 49 33.9** | **-0.5** |
| | 0.7nm,0.5s,baz=158,slow=14,SNR=2.5 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.78** | **131** | P | **P** | **02 50 41.6** | **-0.1** |
| | 0.3nm,0.6s,baz=309,slow=8.1,SNR=4.6 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **51.88** | **135** | P | **P** | **02 50 57.5** | **-0.1** |
| | 0.3nm,0.8s,baz=312,slow=7.0,SNR=2.1 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

*IDC **26** 02:48:25.1±3.7, 17°.87S×178°.07W, h570km±42km, mb3.5/12, mbtmp4.4/13, Error ellipse: s-maj=21.1km s-min=17.7km az=78.0*
*NEIC **26** 02:48:27.5±1.4, 18°.0S±0°.2×177°.9W±0°.1, h608km±10km, mb4.5/29, Error ellipse: s-maj=24.4km s-min=17.4km az=149.0*

**ISC 26 02:48:26.4**±0.5, **18°.04S**±0°.10×**177°.97W**±0°.09, **h590**km, **n62**, σ1**04**/63, **mb4.5**/24, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.80** | **274** | P | **P** | **02 49 53.0** | **+3.1** |
| **AFI** | **Afiamalu** | **7.24** | **56** | P | **P** | **02 50 18.5** | **+0.1** |
| **FUNA** | **Funafuti** | **9.85** | **343** | P | **P** | **02 50 45.2** | **+1.6** |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | **02 51 37.0** | **+0.3** |
| DZM | comp=Z,11nm,0.9s | | | IAmb | IAmb | 02 51 37.8 | |
| **DZM** | **Mont Dzumac** | **15.18** | **252** | P | **P** | **02 51 36.9** | **+0.2** |
| | comp=Z,4.8nm,0.6s,baz=118,slow=22,SNR=9.5 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.93** | **259** | P | **P** | **02 51 53.8** | **+1.1** |
| **URZ** | **Urewera** | **20.60** | **191** | P | **P** | **02 52 25.0** | **-0.7** |
| | comp=Z,4.5nm,0.8s,baz=43,slow=16,SNR=1.8 | | | | | | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **29.61** | **250** | P | **P** | **02 53 45.2** | **-0.2** |
| EIDS | comp=Z,8.2nm,0.7s | | | IAmb | IAmb | 02 53 45.8 | |
| **ARMA** | **Armidale** | **30.23** | **240** | P | **P** | **02 53 51.5** | **+0.7** |
| ARMA | comp=Z,14nm,1.2s | | | IAmb | IAmb | 02 54 12.9 | |
| **CTAO** | **Charters Tower** | **33.83** | **261** | P | **P** | **02 54 21.1** | **-0.2** |
| CTAO | comp=Z,14nm,0.7s | | | IAmb | IAmb | 02 54 21.7 | |
| **CAN** | **Canberra** | **33.95** | **233** | P | **P** | **02 54 22.8** | **+0.6** |
| **PMG** | **Port Moresby** | **34.89** | **280** | P | **P** | **02 54 30.6** | **+0.5** |
| **TOO** | **Toolangi** | **37.41** | **231** | P | **P** | **02 54 51.6** | **+1.0** |
| TOO | comp=Z,11nm,0.8s | | | IAmb | IAmb | 02 54 52.3 | |
| **COEN** | **Coen** | **37.52** | **270** | P | **P** | **02 54 52.1** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.93** | **241** | P | **P** | **02 55 03.7** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.93** | **241** | P | **P** | **02 55 03.7** | **+0.8** |
| | comp=Z,11nm,0.5s,baz=90,slow=9.6,SNR=25 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.70** | **241** | P | **P** | **02 55 40.7** | **+0.1** |
| BBOO | comp=Z,13nm,0.8s | | | IAmb | IAmb | 02 55 41.3 | |
| **WR0** | **Warramunga Arr** | **44.83** | **260** | P | **P** | **02 55 48.6** | **-0.8** |
| WR0 | comp=Z,24nm,1.5s | | | IAmb | IAmb | 02 55 49.0 | |
| **WB0** | **Warramunga Arr** | **44.98** | **260** | P | **P** | **02 55 49.6** | **-0.9** |
| WB0 | comp=Z,14nm,0.6s | | | IAmb | IAmb | 02 55 50.2 | |
| **WB2** | **Warramunga Arr** | **45.00** | **260** | P | **P** | **02 55 49.7** | **-1.0** |
| **WRA** | **Warramunga Arr** | **45.02** | **260** | P | **P** | **02 55 49.9** | **-0.9** |
| **WRA** | **Warramunga Arr** | **45.02** | **260** | P | **P** | **02 55 49.9** | **-0.9** |
| | comp=Z,9.0nm,0.5s,baz=94,slow=7.4,SNR=294 | | | | | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.15** | **254** | P | **P** | **02 55 51.6** | **-0.3** |
| AS31 | comp=Z,10nm,0.6s | | | IAmb | IAmb | 02 55 52.5 | |
| **ASAR** | **Alice Springs** | **45.15** | **254** | P | **P** | **02 55 51.7** | **-0.2** |
| **ASAR** | **Alice Springs** | **45.15** | **254** | P | **P** | **02 55 51.5** | **-0.4** |
| | comp=Z,35nm,0.6s,baz=86,slow=8.8,SNR=604 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 57 19.1** | **-0.4** |
| | comp=Z,1.4nm,0.5s,baz=105,slow=3.8,SNR=4.7 | | | | | | |
| ASAR | | | | S | **S** | **03 01 46.0** | **-3.6** |
| | comp=Z,1.0nm,0.9s,baz=86,slow=17,SNR=8.5 | | | | | | |
| | comp=Z,35nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.21** | **268** | P | **P** | **02 56 21.5** | **-0.8** |
| MTN | comp=Z,16nm,0.8s | | | IAmb | IAmb | 02 56 21.6 | |
| **FORT** | **Forrest** | **50.33** | **245** | P | **P** | **02 56 29.3** | **-0.9** |
| FORT | comp=Z,15nm,0.7s | | | IAmb | IAmb | 02 56 30.0 | |
| **KNRA** | **Kununurra** | **50.89** | **264** | P | **P** | **02 56 33.6** | **-0.8** |
| KNRA | comp=Z,13nm,0.8s | | | IAmb | IAmb | 02 56 34.3 | |
| **FITZ** | **Fitzroy Crossi** | **53.41** | **261** | P | **P** | **02 56 52.2** | **-0.4** |
| **SOEI** | **Soe** | **56.48** | **270** | P | **P** | **02 57 14.1** | **0.0** |
| SOEI | comp=Z,37nm,0.8s | | | IAmb | IAmb | 02 57 15.6 | |
| **PSA00** | **Pilbara Seismi** | **58.28** | **255** | P | **P** | **02 57 25.2** | **-0.8** |
| **MBWA** | **Marble Bar** | **58.44** | **256** | P | **P** | **02 57 26.2** | **-0.9** |
| MBWA | comp=Z,25nm,1.4s | | | IAmb | IAmb | 02 58 05.3 | |
| **TOLI2** | **Tolitoli** | **63.15** | **281** | P | **P** | **02 57 57.4** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **68.26** | **323** | P | **P** | **02 58 27.8** | **-1.6** |
| | comp=Z,3.2nm,0.8s,baz=160,slow=6.3,SNR=7.4 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **ERM** | **Erimo** | **69.71** | **330** | P | **P** | **02 58 37.8** | **-0.1** |
| **QSPA** | **South Pole Qui** | **72.01** | **180** | P | **P** | **02 58 52.8** | **+1.5** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,2.7nm,0.7s,baz=278,slow=0.8,SNR=26 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.91** | **345** | P | **P** | **02 59 00.7** | **-1.3** |
| | comp=Z,2.6nm,0.7s,baz=124,slow=7.5,SNR=4.4 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **ISA** | **Isabella, Lake** | **77.61** | **46** | P | **P** | **02 59 20.9** | **-2.1** |
| **NJ2** | **Nanjing** | **78.34** | **309** | *e*P | **P** | **02 59 28.3** | **+1.5** |
| **MDJ** | **Mudanjiang** | **78.53** | **325** | P | **P** | **02 59 28.3** | **+0.7** |
| **NVAR** | **Mina Array Bea** | **79.23** | **44** | P | **P** | **02 59 32.8** | **+1.1** |
| | comp=Z,0.6nm,0.8s,baz=227,slow=9.2,SNR=3.8 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **81.98** | **173** | P | **P** | **02 59 45.4** | **+0.4** |
| **LYN** | **LuoYang** | **84.23** | **309** | P | **P** | **02 59 57.3** | **+0.4** |
| **TX31** | **Lajitas Ar. Si** | **85.72** | **57** | P | **P** | **03 00 03.3** | **-1.0** |
| **TXAR** | **Lajitas Array** | **85.72** | **57** | P | **P** | **03 00 03.4** | **-1.0** |
| **TXAR** | **Lajitas Array** | **85.72** | **57** | P | **P** | **03 00 05.9** | **+1.6** |
| | comp=Z,1.1nm,0.8s,baz=220,slow=6.3,SNR=14 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.92** | **13** | P | **P** | **03 00 02.6** | **-1.7** |
| | comp=Z,0.4nm,0.8s,baz=227,slow=5.8,SNR=5.3 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **XAN** | **Xi'an** | **86.67** | **307** | *e*P | **P** | **03 00 09.0** | **+0.3** |
| **HHC** | **Hu-ho-hao-te** | **87.66** | **314** | *e*P | **P** | **03 00 14.0** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** | **89.32** | **290** | P | **P** | **03 00 22.0** | **+0.7** |
| | comp=Z,1.0nm,0.4s,baz=117,slow=3.2,SNR=6.4 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **PZH** | **PanZhiHua** | **89.58** | **298** | P | **P** | **03 00 22.5** | **0.0** |
| **SNAA** | **Sanae** | **90.45** | **178** | P | **P** | **03 00 25.7** | **0.0** |
| | comp=Z,0.6nm,0.8s,baz=299,slow=13,SNR=1.4 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **91.30** | **308** | *e*P | P | 03 00 25.0 | -5.3 |
| LZH | | | | pP | pP | 03 02 38.0 | -0.3 |
| **BRTR** | **Keskin Array B** | **145.17** | **315** | PKP | **PKPdf** | **03 06 58.2** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=139,slow=4.0,SNR=16 | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.79** | **344** | *e*PKP | **PKPbc** | **03 07 00.0** | **-0.4** |
| **KRLC** | **Kraliky** | **145.92** | **343** | *e*PKP | **PKPbc** | **03 07 00.1** | **-0.6** |
| **MMAI** | **Mount Meron Ar** | **146.56** | **303** | PKPbc | **PKPbc** | **03 07 02.9** | **-0.2** |
| | comp=Z,2.8nm,0.5s,baz=90,slow=6.2,SNR=7.5 | | | | | | |
| **PRU** | **Pruhonice** | **146.58** | **345** | *e*PKP | **PKPbc** | **03 07 01.9** | **-0.6** |
| **ZVC** | **Zvikov** | **147.18** | **345** | *e*PKP | **PKPbc** | **03 07 04.0** | **-0.1** |
| **KHC** | **Kasperske Hory** | **147.61** | **346** | *e*PKP | **PKPbc** | **03 07 04.7** | **-0.6** |
| **CKRC** | **Cesky Krumlov** | **147.72** | **345** | *e*PKP | **PKPbc** | **03 07 05.0** | **-0.5** |
| **GERES** | **GERESS Array B** | **147.85** | **345** | PKPbc | **PKPbc** | **03 07 05.5** | **-0.4** |
| | comp=Z,1.2nm,0.6s,baz=24,slow=4.5,SNR=8.6 | | | | | | |

*BGR **26** 02:49:16.3, 17°.19S×177°.49W, h33km*
*NOU **26** 02:49:46.8, 17°.26S×175°.99W, h425km, mb4.5/19, Tonga Islands*
*IDC **26** 02:50:13.4±2.1, 18°.23S×178°.18W, h566km±24km, mb3.7/19, mbtmp4.5/20, Error ellipse: s-maj=14.3km s-min=11.0km az=123.0*
*NEIC **26** 02:50:13±1.4, 18°.2S±0°.1×178°.02W±0°.06, h563km±6km, mb4.4/129, Error ellipse: s-maj=16.6km s-min=7.6km az=163.0*

**ISC 26 02:50:14.9**±0.4, **18°.18S**±0°.08×**178°.10W**±0°.07, **h590**km, **n321**, σ0**97**/303, **mb4.4**/90, **43C-28D**, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.70** | **276** | P | **P** | **02 51 36.3** | **-1.3** |
| **AFI** | **Afiamalu** | **7.41** | **56** | P | **P** | **02 52 05.1** | **-3.4** |
| AFI | | | | S | **S** | **02 53 34.6** | **-6.8** |
| **NIUE** | **Niue** | **7.80** | **98** | P | **P** | **02 52 10.2** | **-1.7** |
| **LIFNC** | **LIFOU** | **14.07** | **257** | P | **P** | **02 53 11.2** | **-3.4** |
| **LIFNC** | **LIFOU** | **14.07** | **257** | P | **P** | **02 53 11.5** | **-3.1** |
| **PINNC** | **Pines Island,** | **14.25** | **250** | P | **P** | **02 53 14.3** | **-2.0** |
| **YATNC** | **Mamie plateau,** | **14.62** | **252** | P | **P** | **02 53 18.0** | **-1.8** |
| **DZM** | **Mont Dzumac** | **15.02** | **253** | P | **P** | **02 53 22.5** | **-1.2** |
| **DZM** | **Mont Dzumac** | **15.02** | **253** | P | **P** | **02 53 22.7** | **-1.0** |
| DZM | comp=Z,11nm,0.7s | | | IAmb | IAmb | 02 53 25.5 | |
| **DZM** | **Mont Dzumac** | **15.02** | **253** | P | **P** | **02 53 21.7** | **-2.1** |
| | comp=Z,6.5nm,0.4s,baz=42,slow=1.7,SNR=18 | | | | | | |
| **NOUC** | **Port Laguerre** | **15.16** | **253** | P | **P** | **02 53 23.8** | **-1.1** |
| **KOUNC** | **Koumac, New Ca** | **16.79** | **259** | P | **P** | **02 53 40.4** | **+0.4** |
| **KOUNC** | **Koumac, New Ca** | **16.79** | **259** | P | **P** | **02 53 40.1** | **+0.1** |
| **TOZ** | **Tahuroa Road** | **20.27** | **195** | P | **P** | **02 54 11.6** | **+0.3** |
| TOZ | comp=Z,14nm,1.0s | | | IAmb | IAmb | 02 54 14.5 | |
| **URZ** | **Urewera** | **20.44** | **191** | P | **P** | **02 54 10.0** | **-2.8** |
| | comp=Z,14nm,0.4s,baz=9.2,slow=1.5,SNR=23 | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.43** | **192** | P | **P** | **02 54 19.0** | **-2.9** |
| **PLWZ** | **Palliser** | **23.99** | **192** | P | **P** | **02 54 43.0** | **-1.5** |
| **TKNZ** | **Takaka Hill** | **24.03** | **197** | P | **P** | **02 54 43.9** | **-1.0** |
| **DSZ** | **Denniston Nort** | **25.02** | **198** | P | **P** | **02 54 53.4** | **-0.3** |
| **KHZ** | **Kehuhu** | **25.18** | **195** | P | **P** | **02 54 53.3** | **-1.7** |
| **FOZ** | **Fox Glacier** | **27.25** | **199** | P | **P** | **02 55 12.6** | **-0.5** |
| **LBZ** | **Lake Benmore** | **27.91** | **198** | P | **P** | **02 55 17.0** | **-2.0** |
| **MLZ** | **Mavora Lakes** | **29.44** | **200** | P | **P** | **02 55 32.0** | **-0.2** |
| **EIDS** | **Eidsvold** | **29.45** | **251** | P | **P** | **02 55 32.1** | **-0.4** |
| EIDS | comp=Z,23nm,1.4s | | | IAmb | IAmb | 02 55 43.9 | |
| **DCZ** | **Deep Cove** | **29.85** | **201** | P | **P** | **02 55 34.6** | **-0.9** |
| **WHZ** | **Wether Hill Ro** | **29.96** | **200** | P | **P** | **02 55 36.3** | **-0.3** |
| **ARMA** | **Armidale** | **30.06** | **240** | P | **P** | **02 55 38.6** | **+0.8** |
| **ARMA** | **Armidale** | **30.06** | **240** | P | **P** | **02 55 37.8** | **-0.1** |
| ARMA | comp=Z,24nm,1.5s | | | IAmb | IAmb | 02 55 49.3 | |
| **CNB** | **Canberra Magne** | **33.50** | **233** | P | **P** | **02 56 07.7** | **+0.8** |
| **CTAO** | **Charters Tower** | **33.70** | **261** | P | **P** | **02 56 08.3** | **-0.3** |
| **CTAO** | **Charters Tower** | **33.70** | **261** | | **P** | **02 56 08.4** | **-0.3** |
| **CAN** | **Canberra** | **33.77** | **233** | P | **P** | **02 56 09.7** | **+0.5** |
| **CAN** | **Canberra** | **33.77** | **233** | P | **P** | **02 56 09.4** | **+0.2** |
| CAN | comp=Z,14nm,1.3s | | | IAmb | IAmb | 02 56 18.7 | |
| **PMG** | **Port Moresby** | **34.80** | **280** | | **P** | **02 56 18.2** | **+0.3** |
| **QLP** | **Quilpie** | **35.72** | **250** | P | **P** | **02 56 25.4** | **0.0** |
| **TOO** | **Toolangi** | **37.23** | **231** | P | **P** | **02 56 38.1** | **+0.4** |
| TOO | comp=Z,19nm,1.4s | | | IAmb | IAmb | 02 57 20.2 | |
| **COEN** | **Coen** | **37.41** | **271** | P | **P** | **02 56 39.4** | **+0.1** |
| **COEN** | **Coen** | **37.41** | **271** | | **P** | **02 56 39.3** | **-0.1** |
| **MANU**

**NWAO Narrogin (SRO)** 59.34 242 P P 02 59 21.4 -0.1
NWAO IAmb IAmb 02 59 22.3
comp=Z,25nm,1.2s
**MORW Morawa** 60.64 246 P P 02 59 29.7 -0.4
**KAPI Kappang** 62.01 274 P P 02 59 39.1 -0.1
KAPI IAmb IAmb 02 59 52.4
comp=Z,16nm,1.2s
**TOLI2 Tolitoli** 63.06 281 P P 02 59 45.7 -0.4
TOLI2 IAmb IAmb 02 59 46.5
comp=Z,9.0nm,0.8s
**GIRL Giralia** 63.10 253 P P 02 59 46.9 +0.8
**JHJ2 Mitsune** 64.94 322 P P 02 59 57.9 +0.3
**JAGI Jajag, Banyuwa** 66.33 269 P 03 00 05.4 -1.2
**JGF Kuroka** 68.14 322 P P 03 00 17.6 +0.3
JGF IAmb IAmb 03 00 18.0
comp=Z,8.1nm,0.7s
**MJAR Matsushiro Arr** 68.30 323 P P 03 00 18.1 -0.1
comp=Z,7.4nm,0.5s,baz=162,slow=5.8,SNR=31
comp=Z,7.4nm,0.5s
**MAJO Matsushiro** 68.31 323 P P 03 00 18.3 +0.1
MAJO IAmb IAmb 03 00 18.6
comp=Z,11nm,0.5s
**MJB9 Matsu-Tunnel** 68.31 323 P P 03 00 18.3 +0.1
MJB9 IAmb IAmb 03 00 18.6
comp=Z,11nm,0.5s
**KKM Kota Kinabalu** 69.10 284 P P 03 00 23.4 -0.1
KKM IAmb IAmb 03 00 24.1
comp=Z,11nm,0.6s
**ERM Erimo** 69.78 330 P P 03 00 25.8 -1.0
**UGM Wanagama** 69.93 268 P P 03 00 28.4 -0.1
**YOJ Yonaguni jima** 71.35 305 P P 03 00 36.6 +0.2
**JKA Kamikawa-asahi** 71.66 331 P P 03 00 39.5 +1.7
**QSPA South Pole Qui** 71.87 180 P P 03 00 40.2 +1.3
comp=Z,4.0nm,0.8s,baz=194,slow=0.6,SNR=22
comp=Z,4.0nm,0.8s
**TWG Pinlang** 72.07 302 P P 03 00 39.6 -1.1
TWG IAmb IAmb 03 00 41.5
comp=Z,15nm,0.8s
**YULB Yu-li** 72.17 303 P P 03 00 40.2 -1.1
YULB IAmb IAmb 03 00 52.0
comp=Z,26nm,1.4s
**NACB Ninganchiao** 72.32 304 P P 03 00 41.8 -0.3
NACB IAmb IAmb 03 00 43.2
comp=Z,22nm,1.0s
**SSLB Suanglung** 72.64 303 P P 03 00 43.3 -0.6
**TPUB Ta-pu** 72.66 302 P P 03 00 43.2 -0.9
**YHNB Yeheng** 72.73 304 P P 03 00 44.7 +0.1
**KSM Kuching** 73.01 277 P P 03 00 46.4 +0.1
**PETK Petropavlovsk-** 74.02 345 P P 03 00 51.5 +0.4
comp=Z,6.6nm,0.6s,baz=123,slow=8.0,SNR=18
comp=Z,6.6nm,0.6s
**KSRS Korea Array** 75.10 318 P P 03 00 58.8 +1.2
comp=Z,2.3nm,0.7s,baz=132,slow=6.2,SNR=8.1
comp=Z,2.3nm,0.7s
**USRK Ussuriysk Ar.** 77.01 326 P P 03 01 09.5 +1.6
comp=Z,3.3nm,0.8s,baz=122,slow=3.6,SNR=4.9
comp=Z,3.3nm,0.8s
**PLK4 Peulik 4** 77.67 12 P P 03 01 11.4 +0.2
PLK4 IAmb IAmb 03 01 32.9
comp=Z,27nm,1.2s
**OHAK Old Harbor** 77.93 13 P P 03 01 12.9 +0.4
OHAK IAmb IAmb 03 01 41.4
comp=Z,16nm,1.2s
**MNAI Manna** 78.16 269 P P 03 01 14.6 -0.2
**KDAK Kodiak Island** 78.60 14 P P 03 01 16.4 +0.3
KDAK IAmb IAmb 03 01 18.3
comp=Z,9.5nm,0.9s
**KDAK Kodiak Island** 78.60 14 P P 03 01 16.7 +0.7
comp=Z,7.2nm,0.9s,baz=246,slow=3.8,SNR=6.3
comp=Z,7.2nm,0.9s
**J01E Myrtle Point** 78.71 37 P P 03 01 15.7 -1.3
J01E IAmb IAmb 03 01 33.4
comp=Z,31nm,1.4s
**DSP Deep Springs** 79.06 45 P P 03 01 20.4 +1.5
**O16K Kokwok River B** 79.20 10 P P 03 01 19.0 -0.2
O16K IAmb IAmb 03 01 27.5
comp=Z,17nm,1.5s
**NVAR Mina Array Bea** 79.42 44 P P 03 01 22.6 +1.4
**NVAR Mina Array Bea** 79.42 44 P P 03 01 22.7 +1.5
comp=Z,0.6nm,0.7s,baz=219,slow=6.9,SNR=3.7
comp=Z,0.6nm,0.7s
**N15K Kwethluk River** 79.43 9 P P 03 01 20.8 +0.4
N15K IAmb IAmb 03 01 47.5
comp=Z,21nm,1.4s
**KVN Kaiserville** 79.89 43 P P 03 01 25.0 +1.4
**O18K Koktuh Hills** 79.96 11 P P 03 01 23.6 +0.4
O18K IAmb IAmb 03 01 24.3
comp=Z,14nm,0.9s
**P19K Oil Pt** 80.17 13 P P 03 01 24.7 +0.3
P19K IAmb IAmb 03 01 54.5
comp=Z,30nm,1.2s
**J05D Fort Rock, OR** 80.35 38 P P 03 01 27.8 +2.0
**Q09A Carvers** 80.37 44 pwP 03 03 29.7 -3.1
**M16K Timber Creek** 80.42 9 P P 03 01 26.9 +1.4
M16K IAmb IAmb 03 01 28.0
comp=Z,19nm,1.2s
**CNPM China Poot** 80.48 14 P P 03 01 26.6 +0.7
CNPM IAmb IAmb 03 01 53.5
comp=Z,18nm,1.3s
**BNX BinXian** 80.49 325 ⇑P P 03 01 27.0 +0.7
BNX pmax pmax
comp=Z,17nm,0.9s
**SMAI San Martin Ant** 80.79 159 P P 03 01 29.2 +1.6
**N19K Bonanza Creek** 80.99 11 P P 03 01 28.5 -0.1
N19K IAmb IAmb 03 01 41.0
comp=Z,9.8nm,1.4s
**L16K Owhat River** 81.00 9 P P 03 01 29.1 +0.6
L16K IAmb IAmb 03 01 31.2
comp=Z,10nm,1.2s
**M17K Holitna River** 81.02 10 P P 03 01 29.2 +0.6
M17K IAmb IAmb 03 01 31.1
comp=Z,11nm,0.9s
**K15K Wolf Creek Mou** 81.28 8 P P 03 01 31.1 +1.1
K15K IAmb IAmb 03 01 32.3
comp=Z,14nm,0.8s
**BELA Belgrano 2** 81.86 173 P P 03 01 33.3 +0.5
BELA IAmb IAmb 03 01 34.4
comp=Z,6.7nm,0.7s
**L18K Granite Mounta** 81.91 10 P P 03 01 34.4 +1.2
L18K IAmb IAmb 03 01 35.3
comp=Z,5.1nm,0.7s
**M19K Big River Lodg** 82.02 11 P P 03 01 34.1 +0.4
**K17K Iditarod** 82.13 9 P P 03 01 35.2 +0.9
K17K IAmb IAmb 03 02 02.5
comp=Z,13nm,1.4s
**L19K White Mountain** 82.19 11 P P 03 01 35.7 +1.1
**PWL Port Wells** 82.33 14 P P 03 01 35.5 +0.1
**SUA Susitna One** 82.33 13 P P 03 01 35.5 0.0
**J16K Anvik River** 82.35 8 P P 03 01 36.8 +1.5
J16K IAmb IAmb 03 01 50.9
comp=Z,14nm,1.4s
**GLI Glacier Island** 82.64 15 P P 03 01 37.0 +0.1
GLI IAmb IAmb 03 01 37.7
comp=Z,5.5nm,0.8s
**J17K VABM Dome** 82.66 9 P P 03 01 37.7 +0.7
J17K IAmb IAmb 03 01 41.1
comp=Z,13nm,1.5s
**IPM Ipoh** 82.75 277 P P 03 01 39.1 +0.5
IPM IAmb IAmb 03 01 40.1
comp=Z,13nm,0.7s
**PMR Palmer** 82.80 13 P P 03 01 37.9 +0.2
PMR IAmb IAmb 03 01 38.1
comp=Z,3.3nm,0.5s
**HMT Hamilton** 82.89 16 P P 03 01 38.7 +0.5
HMT IAmb IAmb 03 01 57.0
comp=Z,29nm,1.4s
**GHO Glory Hole Cre** 83.00 14 P P 03 01 39.3 +0.5
GHO IAmb IAmb 03 01 39.7
comp=Z,8.8nm,0.7s
**LTY Liberty** 83.02 35 pP 03 03 36.5 -7.4
**J18K Innoko River** 83.08 9 P P 03 01 40.0 +1.0
**HEH HeiHe** 83.30 328 eP P 03 01 40.8 +0.4
HEH pmax pmax
comp=Z,5.0nm,0.9s
**K20K Telida** 83.42 11 IAmb IAmb 03 01 42.0
comp=Z,4.8nm,0.7s
**SCM Sheep Creek Mo** 83.42 14 P P 03 01 41.4 +0.6
SCM IAmb IAmb 03 01 41.9
comp=Z,7.4nm,0.6s
**MVU Marysvale** 83.54 46 pwP 03 03 45.4 -5.4
**MAW Mawson** 83.70 200 P P 03 01 42.9 +0.7
comp=Z,1.3nm,0.5s,baz=170,slow=4.8,SNR=8.5
comp=Z,1.3nm,0.5s
**J19K Poorman** 83.75 10 P P 03 01 43.4 +1.1
**TABL Table Mountain** 83.84 17 P P 03 01 44.0 +0.9
TABL IAmb IAmb 03 02 26.4
comp=Z,9.8nm,1.0s
**VRDI Verde Repeater** 83.86 16 P P 03 01 43.7 +0.5
**D08A Wollman Farm,** 83.87 36 pP 03 03 39.1 -9.2
**N25K Chitina, Valde** 83.89 15 P P 03 01 43.8 +0.6
N25K IAmb IAmb 03 01 44.5
comp=Z,4.7nm,0.7s
**M24K Tolsona, Glenn** 83.93 14 P P 03 01 44.2 +0.8
M24K IAmb IAmb 03 01 45.1
comp=Z,5.2nm,0.6s
**GLB Gilahina Butte** 83.95 16 P P 03 01 43.9 +0.5
**RPSI Rantau Prapat** 84.17 275 P P 03 01 44.5 -1.1
RPSI IAmb IAmb 03 01 46.4
comp=Z,9.2nm,0.7s
**LOGN Logan Glacier** 84.19 17 P P 03 01 45.5 +0.7
LOGN IAmb IAmb 03 02 08.4
comp=Z,8.0nm,1.2s
**LYN LuoYang** 84.23 309 P P 03 01 47.0 +1.6
LYN pmax pmax
comp=Z,33nm,0.7s
**RND Reindeer** 84.47 13 P P 03 01 46.1 +0.1
RND IAmb IAmb 03 01 47.0
comp=Z,8.1nm,0.7s
**DHY Denali Highway** 84.50 14 P P 03 01 46.5 +0.2
DHY IAmb IAmb 03 01 46.7
comp=Z,2.5nm,0.4s
**BPAW Bear Paw Mtn.** 84.66 12 P P 03 01 46.3 -0.5
**H19K Roundabout Mou** 85.06 9 P P 03 01 49.3 +0.7
**G18K Tagagawik** 85.10 8 P P 03 01 49.0 +0.1
**M27K Edge Creek, AK** 85.22 16 P P 03 01 50.9 +1.1
**NEA2 Nenana** 85.48 12 P P 03 01 51.4 +0.6
**Q32M Nakina River** 85.53 22 P P 03 01 52.6 +1.2
Q32M IAmb IAmb 03 02 11.1
comp=Z,11nm,1.4s
**G19K Purcell Mounta** 85.55 8 P P 03 01 51.2 +0.2
**WRH Wood River Hil** 85.57 13 IAmb IAmb 03 01 51.9
comp=Z,9.2nm,1.3s
**O30N Mendenhall** 85.61 19 P P 03 01 51.4 -0.2
**H21K Melozitna Rive** 85.76 10 P P 03 01 52.9 +0.9
**HDA Harding Lake** 85.76 13 P P 03 01 52.3 +0.2
HDA IAmb IAmb 03 01 52.8
comp=Z,9.3nm,1.4s
**CCB Clear Creek Bu** 85.79 13 P P 03 01 52.0 -0.1
CCB IAmb IAmb 03 01 52.2
comp=Z,4.4nm,0.5s
**TXAR Lajitas Array** 85.89 57 P P 03 01 56.2 +2.6
comp=Z,0.5nm,0.7s,baz=214,slow=5.4,SNR=7.5
comp=Z,0.5nm,0.7s
**MDM Murphy Dome** 85.97 12 P P 03 01 52.8 -0.3
MDM IAmb IAmb 03 01 53.6
comp=Z,4.6nm,1.0s
**SCRK Sand Creek** 86.05 14 P P 03 01 54.4 +0.8
**IL31** 86.09 13 P P 03 01 53.5 -0.1
IL31 IAmb IAmb 03 01 54.3
comp=Z,2.4nm,0.6s
**ILAR Eielson Array** 86.09 13 P P 03 01 53.6 0.0
**ILAR Eielson Array** 86.09 13 P P 03 01 53.4 -0.2
comp=Z,1.5nm,0.4s,baz=220,slow=5.0,SNR=51
comp=Z,1.5nm,0.4s
**IL03 Eielson Array** 86.09 13 P P 03 01 53.7 0.0
**M29M Somme Creek** 86.22 17 P P 03 01 55.4 +1.0
**POKR Poker Plat Res** 86.28 12 P P 03 01 54.4 -0.1
POKR IAmb IAmb 03 01 54.8
comp=Z,3.0nm,0.7s
**J25K Salcha River,** 86.28 14 P P 03 01 55.2 +0.6
J25K IAmb IAmb 03 01 55.5
comp=Z,2.5nm,0.5s
**E18K Tukpahlearik C** 86.33 7 P P 03 01 55.5 +0.7
**XAN Xi'an** 86.66 307 P P 03 01 59.0 +1.9
XAN pmax pmax
comp=Z,26nm,1.0s
**PDAR Pinedale Array** 87.35 43 P P 03 02 00.8 +0.4
comp=Z,0.3nm,0.3s,baz=226,slow=3.6,SNR=3.1
comp=Z,0.3nm,0.3s
**HHC Hu-ho-hao-te** 87.68 314 eP P 03 02 03.8 +2.0
HHC pmax pmax
comp=Z,11nm,0.5s
HHC pmax pmax
comp=Z,54nm,5.0s
**ELIB Princess Elisa** 88.92 187 dP P 03 02 07.4 +0.3
comp=Z,6.9nm,0.7s
**I30M Mount Dempster** 88.98 16 IAmb IAmb 03 02 08.5
comp=Z,4.7nm,1.2s
**CMAR Chiang Mai Arr** 89.26 290 P P 03 02 11.2 +1.7
comp=Z,5.0nm,0.9s,baz=113,slow=3.0,SNR=18
comp=Z,5.0nm,0.9s
**H29M Whitestone** 89.26 15 P P 03 02 09.4 +1.0
H29M IAmb IAmb 03 02 49.0
comp=Z,9.5nm,1.4s
**PZH PanZhiHua** 89.55 298 P P 03 02 13.5 +2.6
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,100nm,5.9s
**TROLL Troll, Antarti** 90.03 180 ⇑P P 03 02 12.4 +0.2
comp=Z,144nm,0.4s
**SNAA Sanae** 90.32 179 ⇑P P 03 02 13.0 -0.5
comp=Z,31nm,0.5s
**SNAA Sanae** 90.32 179 P P 03 02 13.6 +0.1
comp=Z,1.3nm,0.6s,baz=202,slow=6.5,SNR=14
comp=Z,1.3nm,0.6s
**VNA3 Neumayer Olymp** 90.45 176 ⇑P P 03 02 14.3 +0.2
comp=Z,7.1nm,0.6s
**G31M Satah River** 90.84 16 P P 03 02 16.0 +0.3
G31M IAmb IAmb 03 02 16.5
comp=Z,4.4nm,0.8s
**VNA2 Neumayer--Watz** 90.89 177 ⇑P P 03 02 16.7 +0.6
comp=Z,5.7nm,0.7s,baz=182,slow=4.7
**VNA1 Neumayer--Stat** 91.11 177 ⇑P P 03 02 17.4 +0.3
comp=Z,4.9nm,0.8s
**INK Inuvik** 92.07 15 P P 03 02 20.8 -0.6
comp=Z,2.0nm,0.7s,baz=242,slow=7.4,SNR=3.5
comp=Z,2.0nm,0.7s
**SONM Songino Array** 93.95 319 P P 03 02 31.3 +0.7
comp=Z,0.5nm,0.5s,baz=132,slow=4.4,SNR=4.2
comp=Z,0.5nm,0.5s
**441A DeRidder** 94.88 59 03 04 32.3
**MKAR Makanchi Array** 109.54 314 PKiKP **PKiKP** 03 07 38.6 -0.6
comp=Z,0.8nm,0.5s,baz=110,slow=0.7,SNR=12
**KURBB Kurchatov Arra** 112.28 318 PKiKP **PKiKP** 03 07 43.8 -0.5
comp=Z,1.1nm,0.5s,baz=96,slow=1.9,SNR=14
**BVAR Borovoye Array** 117.25 321 PKP **PKPdf** 03 07 53.6 -0.1
comp=Z,2.1nm,0.4s,baz=99,slow=2.1,SNR=9.3
**ARCES ARCESS Array B** 126.64 350 PKP **PKPdf** 03 08 11.6 +0.3
comp=Z,1.9nm,0.6s,baz=79,slow=1.0,SNR=9.5
**FINES FINESS Array B** 133.53 344 PKhKP PKPpre 03 08 22.3
comp=Z,1.4nm,0.6s,baz=62,slow=3.1,SNR=6.8
**NB2 NORSAR Subarra** 136.68 353 PKP PKPpre 03 08 24.2
comp=Z,0.5nm,0.6s,baz=18,slow=3.3
**NOA NORSAR Array B** 136.68 353 PKhKP PKPpre 03 08 22.2
comp=Z,0.4nm,0.7s,baz=11,slow=2.5,SNR=3.8
**HFS Hagfors** 137.25 351 PKhKP PKPpre 03 08 22.5
comp=Z,1.2nm,0.4s,baz=96,slow=4.5,SNR=12
**KMBO Kilima Mbogo** 140.28 245 PKhKP PKPpre 03 08 33.6
comp=Z,0.6nm,0.5s,baz=222,slow=12,SNR=1.9
**AKASG Malin Array Be** 140.94 332 PKhKP PKPpre 03 08 32.8
comp=Z,0.7nm,0.3s,baz=43,slow=3.9,SNR=4.7
**KIEV Kiev** 140.95 332 ⇑P PKPpre 03 08 33.2
**EKA Eskdalemuir Ar** 142.72 5 PKhKP PKPpre 03 08 38.5
comp=Z,0.7nm,0.4s,baz=321,slow=2.1,SNR=5.1
**SORM Soroca** 143.18 330 ⇓P PKPab 03 08 40.8 +0.2
**BSEG Bad Segeberg** 143.73 352 ePKPbc PKPbc 03 08 42.7 +0.2
baz=15,slow=3.0
**MILM Milestii Mici** 143.80 328 ⇑P PKPbc 03 08 42.7 -0.2
**KWP Kalwaria Pacla** 144.44 337 ePKP **PKPab** **03 08 45.5 +0.1**
**RUE Ruedersdorf** 144.53 347 ePKPbc **PKPab** **03 08 45.6 0.0**
baz=15,slow=3.0
**VLDR Vladesti** 144.90 328 ⇑P PKPbc 03 08 46.4 +0.1
**TLCR** 144.97 326 ⇓P PKPbc 03 08 46.3 -0.2
**OJC Ojcow** 144.97 340 ePKP PKPbc 03 08 47.0 +0.6
**OJC Ojcow** 144.97 340 PKPbc 03 08 46.7 +0.3
**BURAR Bucovina Array** 145.00 332 **PKPab** **03 08 47.5 -0.2**
**BURAR Bucovina Array** 145.00 332 ⇓P **PKPab** **03 08 47.6 -0.2**
**SCTR Scanteiesti** 145.06 327 ⇑P **PKPab** **03 08 48.1 +0.1**
**GHRR** 145.09 328 ⇑P **PKPab** **03 08 48.2 +0.1**
**FLTG Flechtingen** 145.14 350 ePKPbc **PKPbc** **03 08 47.3 +0.4**
baz=15,slow=3.0
**TESR Tescani** 145.15 330 ⇓P **PKPbc** **03 08 47.6 +0.5**
**BR131 Keskin Array S** 145.19 315 **PKPbc** **03 08 47.9 +0.2**
**BRTR Keskin Array B** 145.19 315 **PKPbc** **03 08 48.3 +0.7**
**BRTR Keskin Array B** 145.19 315 PKPbc **PKPbc** **03 08 47.6 0.0**
comp=Z,5.8nm,0.7s,baz=135,slow=4.8,SNR=35
**GISR Galati** 145.19 327 ⇑P **PKiKP** **03 08 51.4 +1.1**
**JURR Jurilovca** 145.21 326 ⇓P **PKPbc** **03 08 48.0 +0.7**
**NEGRR Negrea** 145.22 327 ⇓P **PKPab** **03 08 48.2 -0.3**
**SLCR Slobozia Conac** 145.24 328 ⇓P **PKPbc** **03 08 47.6 +0.3**

**IZVR Izvoarele** 145.27 327 ⇑P **PKiKP** **03 08 49.9 -0.5**
**KIRS Kirsehir-Merke** 145.28 314 ⇓P **PKPbc** **03 08 48.0 +0.2**
**CFR Carcaliu** 145.33 327 ⇓P **PKPbc** **03 08 48.2 +0.6**
**TPGR Topolog** 145.39 326 ⇓P **PKPab** **03 08 48.9 -0.4**
**ONER Baraj Valea Uz** 145.40 330 ⇓P **PKPab** **03 08 48.8 -0.5**
**KSP Ksiaz** 145.46 344 ePKP **PKPab** **03 08 49.0 -0.3**
**ODBI Odobesti** 145.48 328 ⇑P **PKPab** **03 08 49.0 -0.6**
**NIE Niedzica** 145.49 339 ePKP **PKPab** **03 08 49.3 -0.3**
**CRVS Cervenica-Dubn** 145.50 337 ePKP **PKPab** **03 08 49.2 -0.4**
**VRI Vrincioaia** 145.57 329 ⇑P **PKPbc** **03 08 49.1 +0.8**
**PLOR Plostina** 145.62 329 ⇓P **PKPbc** **03 08 48.9 +0.4**
**BMR Baia Mare** 145.69 334 ⇓P **PKPbc** **03 08 49.3 +0.7**
**OSTC Ostas** 145.74 344 ⇑ ePKP **PKPab** **03 08 50.4 -0.1**
**CHVC Chvalec** 145.75 344 ⇑ ePKP **PKPbc** **03 08 49.6 +0.9**
**CLZ Clausthal** 145.75 351 ePKPbc **PKPbc** **03 08 49.7 +1.0**
baz=15,slow=3.0
**HARR Harsova** 145.76 326 ⇑P **PKPab** **03 08 50.1 -0.7**
**TURR Turia** 145.78 330 ⇑P **PKPab** **03 08 50.4 -0.4**
**CLL Collm** 145.79 348 ePKPbc **PKPbc** **03 08 49.5 +0.8**
baz=15,slow=3.0
**TLBR Topalu** 145.80 326 ⇓P **PKPbc** **03 08 49.6 +0.6**
**OKC Ostrava-Krasne** 145.83 341 ⇑ ePKP **PKPbc** **03 08 49.9 +1.0**
**UPC Upice** 145.84 344 ⇑ ePKP **PKPbc** **03 08 50.0 +1.1**
**COVR Voineasa-Covas** 145.84 329 ⇓P **PKPbc** **03 08 49.0 -0.1**
**MFTR Murfatlar** 145.84 325 ⇓P **PKPbc** **03 08 49.2 +0.1**
**OZUR** 145.86 330 ⇓P **PKPab** **03 08 50.4 -0.7**
**DPC Dobruska-Polom** 145.90 343 ePKPDF **PKPbc** **03 08 48.7 -0.5**
DPC ⇑ ePKP **PKPab** **03 08 50.3 -0.8**
**BOSR Bodos** 145.93 330 ⇑P **PKPab** **03 08 50.3 +0.9**
**LANS Liptovska Anna** 146.00 339 ePKP **PKPab** **03 08 51.2 -0.4**
**BRG Berggiesshubel** 146.00 346 ePKPbc **PKPbc** **03 08 50.0 +0.7**
baz=15,slow=3.0
**KRLC Kraliky** 146.02 343 ⇑ ePKP **PKPbc** **03 08 50.5 +1.0**
**MORC Moravsky Berou** 146.06 342 ePKP **PKPbc** **03 08 50.3 +0.7**
**MORC Moravsky Berou** 146.06 342 ⇑P **PKPbc** **03 08 50.4 +0.8**
**NEHR Nehoiu** 146.09 329 ⇓P **PKPbc** **03 08 49.9 0.0**
**NEUB Neuenburg** 146.13 349 ePKPbc **PKPbc** **03 08 50.4 +0.8**
baz=15,slow=3.0
**PVCC Panska Ves** 146.18 345 ⇑ ePKP **PKPbc** **03 08 50.9 +1.0**
**MLR Muntele Rosu** 146.22 329 **PKPbc** **03 08 50.5 +0.2**
**MLR Muntele Rosu** 146.22 329 ⇓P **PKPbc** **03 08 50.7 +0.4**
**HSKC Hora Svate Kat** 146.37 347 ⇑ ePKP **PKPbc** **03 08 51.4 +1.0**
**CBBR Cluj-Babes-Bol** 146.38 333 ⇑P **PKPbc** **03 08 49.8 -0.7**
**CJR Cluj-Napoca** 146.40 333 ⇑P **PKPbc** **03 08 51.2 +0.5**
**MMAI Mount Meron Ar** 146.54 303 PKPbc **PKiKP** **03 08 52.7 -0.9**
comp=Z,6.6nm,0.4s,baz=76,slow=7.0,SNR=20
**LTVH Ltavrtes, Hu** 146.58 335 ⇑P **PKiKP** **03 08 52.3 -0.8**
**SULR** 146.64 328 ⇑P **PKPbc** **03 08 51.1 -0.2**
**KASTN Kahler Asten** 146.65 353 ePKPbc **PKPbc** **03 08 51.6 +0.4**
baz=15,slow=3.0
**PRU Pruhonice** 146.69 345 ⇑ ePKP **PKPbc** **03 08 52.0 +0.8**
**VOIR** 146.69 330 ⇑P **PKPbc** **03 08 52.3 +0.8**
**DRGR** 146.72 334 ⇓P **PKPbc** **03 08 52.1 +0.5**
**PLN Plauen** 146.75 348 ePKPbc **PKPbc** **03 08 52.1 +0.7**
baz=15,slow=3.0
**TANN Tannenbergstha** 146.75 348 ePKPbc **PKPbc** **03 08 52.3 +0.8**
baz=15,slow=3.0
**VRAC Vranov** 146.76 342 ePKP **PKPbc** **03 08 52.0 +0.5**
**VRAC Vranov** 146.76 342 ⇑P **PKPbc** **03 08 52.3 +0.8**
**VYHS Vyhne** 146.78 339 ePKP **PKPbc** **03 08 52.6 +1.0**
**JAVC Velka Javorina** 146.84 341 ePKP **PKiKP** **03 08 53.7 0.0**
**PSZ Piszkesteto** 146.90 338 **PKPbc** **03 08 52.8 +0.8**
**PSZ Piszkesteto** 146.90 338 ⇑P **PKPbc** **03 08 51.5 -0.5**
**ARR Arges** 146.94 330 ⇓P **PKiKP** **03 08 53.6 -0.4**
**KRUC Moravsky** 147.04 342 ePKP **PKPbc** **03 08 52.9 +0.7**
**TREC Trest** 147.08 344 ⇑ ePKP **PKPbc** **03 08 53.2 +0.8**
**MANZ Manzenberg** 147.23 348 ePKPbc **PKPbc** **03 08 53.6 +0.9**
baz=15,slow=3.0
**LOT Lotru** 147.29 331 ⇑P **PKPbc** **03 08 53.2 +0.1**
**HUMR Humele** 147.39 329 ⇑P **PKPbc** **03 08 53.5 +0.3**
**ROTZ Rotzenmuhle** 147.42 348 ePKPbc **PKPbc** **03 08 54.1 +0.9**
baz=15,slow=3.0
**SIRR Siria** 147.57 334 ⇑P **PKPbc** **03 08 54.3 +0.6**
**TNS Taunus Mts** 147.61 352 ePKPbc **PKPbc** **03 08 54.6 +0.9**
baz=15,slow=3.0
**KHC Kasperske Hory** 147.72 346 ⇑ ePKP **PKPbc** **03 08 54.9 +0.9**
**GZR Gura Zlata** 147.78 332 ⇓P **PKPbc** **03 08 54.6 +0.2**
**SURR Surduc** 147.78 333 ⇓P **PKPbc** **03 08 54.7 +0.5**
**CKRC Cesky Krumlov** 147.83 345 ⇑ ePKP **PKiKP** **03 08 55.2 -0.5**
**GEC2 GERESS Array S** 147.95 345 ePKPbc **PKPbc** **03 08 55.4 +0.7**
baz=15,slow=3.0
**GERES GERESS Array B** 147.95 345 PKPbc **PKPbc** **03 08 55.5 +0.8**
comp=Z,5.3nm,0.6s,baz=23,slow=4.5,SNR=31
**ELND Elena** 148.05 326 ⇓P **PKPbc** **03 08 55.7 +0.7**
**BZS Buzias** 148.11 333 ⇑P **PKPbc** **03 08 55.4 +0.3**
**CONA Conrad Observa** 148.22 342 *i* PKiKP **PKiKP** **03 08 56.3 -0.3**
comp=Z,15nm,1.2s,SNR=7.3
**RONA Rosalia, Austr** 148.29 341 *i* PKiKP **PKiKP** **03 08 56.8 +0.1**
comp=Z,7.2nm,0.8s,SNR=4.7
**HERR Herculane** 148.34 332 ⇑P **PKPbc** **03 08 55.8 +0.2**
**BAND Balkesir-Ban** 148.42 320 ⇓P **PKPbc** **03 08 54.8 -1.2**
**MORH Mrgy, Hungar** 148.80 337 ⇓P **PKPbc** **03 08 56.0 -0.8**
**ARSA Arzberg** 148.93 342 *i* PKiKP **PKiKP** **03 08 58.3 +0.3**
comp=Z,5.5nm,1.4s
**BIOA Bad Ischl, Aus** 149.04 345 ePKiKP **PKiKP** **03 08 58.3 +0.1**
comp=Z,9.1nm,0.9s
**ALN Alexandroupoli** 149.31 323 **PKPbc** **03 08 58.2 +0.1**
**BFO Black Forest** 149.48 352 **PKPbc** **03 08 58.7 +0.3**
**LESA Schwarzleotal** 149.53 346 ePKP **PKPbc** **03 08 59.1 +0.5**
comp=Z,8.9nm,0.9s
**SOKA Soboth** 149.59 342 ePKP **PKPbc** **03 08 59.2 +0.5**
comp=Z,3.7nm,0.8s
**BOVS Bovan** 149.62 331 ⇓P **PKPbc** **03 08 58.2 -0.6**
**KBA Koelnbreinsper** 149.68 344 ePKiKP **PKiKP** **03 08 59.7 0.0**
comp=Z,6.9nm,0.6s
**WATA Walderalm** 149.86 347 *i* PKP **PKPbc** **03 08 59.7 +0.3**
comp=Z,5.1nm,0.5s,SNR=6.3
**RETA Reutte** 149.88 348 *i* PKiKP **PKiKP** **03 09 00.0 0.0**
comp=Z,7.6nm,0.8s,SNR=4.4
**WTTA Wattenberg** 149.91 347 *i* PKiKP **PKiKP** **03 09 00.1 -0.1**
comp=Z,12nm,0.5s,SNR=11
**MOTA Moosalm** 149.95 347 *i* PKP **PKPbc** **03 08 59.8 +0.2**
comp=Z,9.9nm,0.9s
**MYKA Terra Mystica** 150.02 344 ePKP **PKPbc** **03 08 59.8 0.0**
comp=Z,8.2nm,0.6s
**SQTA Sankt Quirin** 150.05 347 *i* PKiKP **PKiKP** **03 09 00.4 0.0**
comp=Z,11nm,0.7s
**ABTA Abfaltersbach** 150.20 345 *i* PKP **PKPbc** **03 09 00.4 +0.2**
comp=Z,14nm,0.6s,SNR=8.2
**DAVA Damuels** 150.24 349 *i* PKiKP **PKiKP** **03 09 01.8 +1.0**
comp=Z,14nm,1.0s
**FETA Feichten** 150.34 348 *i* PKiKP **PKiKP** **03 09 01.5 +0.4**
comp=Z,8.6nm,0.7s,SNR=4.8
**VAY Valandovo** 150.93 327 *i* P **PKPdf** **03 08 56.2 +0.7**
**OHR Ohrid** 151.98 329 *i* P **PKiKP** **03 09 04.8 +0.3**
**ESDC Sonseca Array** 157.99 12 PKPab **PKPab** **03 09 42.5 +0.1**
comp=Z,0.4nm,0.6s,baz=341,slow=6.0,SNR=4.9
**KEST Kesra** 161.32 341 PKPab **PKPab** **03 09 56.5 -0.7**
comp=Z,2.5nm,0.8s,baz=326,slow=2.2,SNR=4.3
**TORD Torodi Ar. Bea** 174.99 178 PKP **PKPdf** **03 09 18.4 -0.3**
comp=Z,0.7nm,0.7s,baz=11,slow=3.6,SNR=3.9

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*ISN* ***26*** *02:56:30.7±0.9, 34°.63N×46°.14E, h12km±9km, ML2.9*
*TEH* ***26*** *02:56:31.3, 34°.63N×46°.14E, h10km±62km, ML2.8*
**ISC 26 02:56:31.7±1.4, 34°.62N±0°.04×46°.16E±0°.04, h5km±12km, n13, σ0s54/17, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.20** | **67** | Pg | **Pg** | **02 56 36.7** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **0.45** | **130** | Pg | **Pg** | **02 56 40.7** | **+0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.48** | **257** | Pg | **Pg** | **02 56 40.9** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **202** | Pg | **Pg** | **02 56 42.1** | **-0.1** |
| **ILIN** | **Lien** | **0.73** | **65** | Pg | **Pg** | **02 56 45.1** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.81** | **115** | Pg | **Pb** | **02 56 47.4** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **178** | Pg | **Pg** | **02 56 50.5** | **-0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.23** | **78** | Pg | **Pn** | **02 56 55.6** | **-0.3** |
| **IBDR** | **Badra** | **1.52** | **187** | *e*Pn | **Pn** | **02 56 59.0** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **02 57 20.5** | **+0.1** |
| IBDR | | | | AML | AML | 02 57 26.3 | |
| | comp=E,197nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 02 57 36.2 | |
| | comp=N,129nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.68** | **298** | *e*Pn | **Pn** | **02 57 02.0** | **+0.2** |
| IKRK | | | | *e*Sn | **Sn** | **02 57 24.0** | **+0.3** |
| IKRK | | | | AML | AML | 02 57 38.9 | |
| | comp=E,195nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 02 58 05.9 | |
| | comp=N,180nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.78** | **127** | Pg | **Pb** | **02 57 04.7** | **0.0** |
| **BHD** | **Baghdad** | **2.00** | **228** | *e*Pn | **Pn** | **02 57 06.0** | **-0.1** |
| BHD | | | | *e*Sn | **Sn** | **02 57 32.0** | **+0.6** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RAFI** | **Al-Rafai** | **2.89** | **181** | *e*Pn | **Pn** | **02** | **57** | **19.0 +0.7** |
| RAFI | | | | *e*Sn | **Sn** | **02** | **57** | **54.0 +0.6** |

*ISN **26** 03:03:23.2±0.4,34.°65N×46.°25E,h9km±4km,ML3.3*
*TEH **26** 03:03:23.3,34.°62N×46.°27E,h6km±22km,ML3.2*
**ISC 26 03:03:24.1**±1.3,**34.°61N**±0.°03×**46.°25E**±0.°03,**h2**km±12km,
**n22,**σ1§**31**/29,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **52** | Pg | **Pg** | **03 03 27.4** | **+0.3** |
| IDHR | | | | Sg | **Sg** | **03 03 30.2** | **+1.2** |
| **IGHG** | **Ghaleghazi** | **0.39** | **136** | Pg | **Pb** | **03 03 32.3** | **-1.5** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **259** | Pg | **Pb** | **03 03 35.4** | **-1.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **210** | Pg | **Pb** | **03 03 35.8** | **-1.1** |
| GLG1 | | | | Sg | **Sb** | **03 03 44.9** | **-0.6** |
| **ILIN** | **Lien** | **0.67** | **62** | Pg | **Pb** | **03 03 36.8** | **-1.8** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **117** | Pg | **Pb** | **03 03 38.4** | **-1.4** |
| KCHF | | | | Sg | **Sb** | **03 03 49.9** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **182** | Pg | **Pb** | **03 03 43.4** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **77** | Pg | **Pn** | **03 03 46.2** | **-1.5** |
| **IBZA** | **Bozab** | **1.34** | **96** | Pg | **Pg** | **03 03 49.5** | **-0.3** |
| **IBDR** | **Badra** | **1.52** | **190** | *e*Pn | **Pg** | **03 03 53.0** | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | **03 04 14.5** | **+1.6** |
| IBDR | | | | AML | AML | 03 04 20.9 | |
| | comp=E,473nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 03 04 25.3 | |
| | comp=N,413nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.71** | **129** | Pg | **Pg** | **03 03 56.0** | **-0.9** |
| **IKRK** | **Kirkuk** | **1.75** | **297** | *e*Pn | **Pb** | **03 03 55.3** | **-1.7** |
| IKRK | | | | *e*Sn | **Sb** | **03 04 19.0** | **-0.5** |
| IKRK | | | | AML | AML | 03 04 26.8 | |
| | comp=N,452nm,0.7s | | | | | | |
| IKRK | | | | AML | AML | 03 04 29.3 | |
| | comp=E,391nm,0.6s | | | | | | |
| **IDOB** | **Doab** | **1.80** | **117** | Pg | **Pg** | **03 03 58.3** | **-0.3** |
| **HSAM** | **Samen** | **1.99** | **101** | Pn | **Pb** | **03 04 00.2** | **-1.0** |
| **BHD** | **Baghdad** | **2.05** | **230** | *e*Pn | **Pb** | **03 04 00.0** | **-2.0** |
| BHD | | | | *e*Sn | **Sb** | **03 04 27.0** | **-1.0** |
| BHD | | | | AML | AML | 03 04 45.6 | |
| | comp=E,370nm,0.5s | | | | | | |
| **MAHB** | **Mahabad** | **2.20** | **349** | Pn | **Pb** | **03 04 03.7** | **-1.0** |
| **HAGD** | **Aghdareh** | **2.39** | **84** | Pn | **Pb** | **03 04 06.6** | **-1.5** |
| **RAFI** | **Al-Rafai** | **2.88** | **182** | *e*Pn | **Pn** | **03 04 12.0** | **+1.0** |
| RAFI | | | | *e*Sn | **Sn** | **03 04 47.5** | **+1.2** |
| **IAZR** | **Azarshahr** | **3.07** | **356** | Pn | **Pn** | **03 04 15.1** | **+1.2** |
| **JHBN** | **Jahan bin** | **4.39** | **121** | Pn | **Pn** | **03 04 33.8** | **+1.7** |
| **GRMI** | **Germi** | **4.39** | **17** | Pn | **Pn** | **03 04 33.5** | **+1.5** |
| **IFIR** | **Firoozkooh** | **5.43** | **77** | Pn | **Pn** | **03 04 48.1** | **+1.7** |

*FUNV **26** 03:05:07.7,9.°62N×62.°27W,h26km,MW3.2*
**ISC 26 03:05:08.9**±1.3,**9.°33N**±0.°06×**62.°57W**±0.°05,**h35**km,**n6,**
σ2§**61**/12,**Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TCE** | **Chacachacare** | **1.58** | **31** | *e*P | **Pn** | **03 05 33.9** | **-0.6** |
| TCE | | | | *e*S | **Sn** | **03 05 52.5** | **-1.2** |
| **LUEV** | **Luepa** | **3.63** | **162** | *e*P | **Pn** | **03 06 04.1** | **+1.2** |
| LUEV | | | | *e*S | **Sn** | **03 06 45.9** | **+1.2** |
| **CACV** | **CAICARA DEL OR** | **4.30** | **246** | *e*P | **Pn** | **03 06 09.3** | **-2.6** |
| CACV | | | | *e*S | **Sn** | **03 06 54.7** | **-6.2** |
| **TACV** | **Tcata** | **4.47** | **281** | *e*P | **Pn** | **03 06 15.6** | **+1.4** |
| TACV | | | | *e*S | **Sn** | **03 07 05.7** | **+0.6** |
| **BENV** | **Beln** | **5.00** | **278** | *e*P | **Pn** | **03 06 23.0** | **+1.4** |
| BENV | | | | *e*S | **Sn** | **03 07 19.2** | **+1.0** |
| **BAUV** | **El Baul** | **5.42** | **266** | *e*P | **Pn** | **03 06 29.4** | **+2.1** |
| BAUV | | | | *e*S | **Sn** | **03 07 29.8** | **+1.4** |

*ISN **26** 03:09:52.1±0.5,34.°63N×46.°15E,h5km±4km,ML2.8*
*TEH **26** 03:09:53.1,34.°63N×46.°18E,h10km±77km,ML2.7*
**ISC 26 03:09:53.6**±1.4,**34.°63N**±0.°04×**46.°17E**±0.°04,**h5**km±13km,
**n11,**σ0§**65**/15,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.19** | **68** | Pg | **Pg** | **03 09 57.8** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.44** | **132** | Pg | **Pg** | **03 10 02.2** | **+0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.49** | **256** | Pg | **Pg** | **03 10 03.0** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **203** | Pg | **Pg** | **03 10 04.3** | **0.0** |
| **ILIN** | **Lien** | **0.71** | **66** | Pg | **Pg** | **03 10 07.0** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **116** | Pg | **Pg** | **03 10 08.3** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **178** | Pg | **Pb** | **03 10 12.6** | **-0.9** |
| **IBDR** | **Badra** | **1.52** | **188** | *e*Pn | **Pb** | **03 10 22.0** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **03 10 43.5** | **+0.9** |
| **IKRK** | **Kirkuk** | **1.69** | **298** | *e*Pn | **Pn** | **03 10 24.0** | **+0.2** |
| IKRK | | | | *e*Sn | **Sb** | **03 10 47.0** | **+0.2** |
| IKRK | | | | AML | AML | 03 10 55.8 | |
| | comp=E,100nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 03 10 56.2 | |
| | comp=N,143nm,0.4s | | | | | | |
| **BHD** | **Baghdad** | **2.01** | **228** | *e*Pn | **Pn** | **03 10 28.0** | **-0.2** |
| BHD | | | | *e*Sn | **Sb** | **03 10 55.0** | **-1.0** |
| **RAFI** | **Al-Rafai** | **2.90** | **181** | *e*Pn | **Pn** | **03 10 41.0** | **+0.6** |
| RAFI | | | | *e*Sn | **Sn** | **03 11 16.5** | **+0.9** |

*ISN **26** 03:10:35.6±0.5,34.°63N×46.°24E,h18km±6km,ML2.9*
*TEH **26** 03:10:35.8,34.°62N×46.°23E,h10km±48km,ML2.8*
**ISC 26 03:10:35.8**±1.2,**34.°62N**±0.°04×**46.°22E**±0.°04,**h9**km±11km,
**n10,**σ0§**79**/14,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.16** | **59** | Pg | **Pg** | **03 10 39.7** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **0.41** | **135** | Pg | **Pb** | **03 10 44.4** | **-0.9** |
| **KGS1** | **Ghasr-e-Shirin** | **0.54** | **258** | Pg | **Pg** | **03 10 46.5** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **207** | Pg | **Pg** | **03 10 47.1** | **+0.3** |
| **ILIN** | **Lien** | **0.68** | **63** | Pg | **Pg** | **03 10 49.1** | **+0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **117** | Pg | **Pg** | **03 10 50.4** | **0.0** |
| **IBDR** | **Badra** | **1.52** | **189** | *e*Pn | **Pb** | **03 11 03.7** | **-0.5** |
| IBDR | | | | *e*Sn | **Sg** | **03 11 24.5** | **-0.3** |
| IBDR | | | | AML | AML | 03 11 30.7 | |
| | comp=E,142nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 03 11 32.7 | |
| | comp=N,106nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.73** | **297** | *e*Pn | **Pb** | **03 11 07.0** | **-0.8** |
| IKRK | | | | *e*Sn | **Sb** | **03 11 29.5** | **-0.2** |
| IKRK | | | | AML | AML | 03 11 36.6 | |
| | comp=N,207nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 03 11 39.6 | |
| | comp=E,271nm,0.3s | | | | | | |
| **BHD** | **Baghdad** | **2.04** | **229** | *e*Pn | **Pn** | **03 11 11.0** | **+0.7** |
| BHD | | | | *e*Sn | **Sb** | **03 11 37.0** | **-1.4** |
| BHD | | | | AML | AML | 03 11 38.4 | |
| | comp=E,165nm,0.4s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.89** | **182** | *e*Pn | **Pn** | **03 11 23.0** | **+1.0** |
| RAFI | | | | *e*Sn | **Sn** | **03 11 57.5** | **+0.7** |

**IDC 26 03:16:16.2**±4.5,**13.°65S**×**176.°38W**,**h0**km,**mb3.8**/3,
**mbtmp3.8**/3,**MS3.2**/2,**Error ellipse: s-maj=127.6km**
**s-min=52.9km az=21.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **15.59** | **185** | LR | LR | 03 24 14.0 | |
| | comp=Z,103nm,18.7s,baz=50,slow=31 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 36.03** | **332** | | T | T | 04 02 56.4 | |
| | baz=153,slow=76,SNR=4.6 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 36.04** | **332** | | T | T | 04 02 50.8 | |
| | baz=153,slow=76,SNR=6.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 36.05** | **332** | | T | T | 04 02 56.0 | |
| | baz=153,slow=76,SNR=4.5 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 37.01** | **333** | | T | T | 04 04 02.1 | |
| | baz=152,slow=76,SNR=14 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 37.02** | **333** | | T | T | 04 04 03.0 | |
| | baz=152,slow=76,SNR=100 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 37.03** | **333** | | T | T | 04 04 04.2 | |
| | baz=152,slow=76,SNR=21 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.46** | **255** | P | P | 03 24 53.3 | 0.0 |
| | 0.6nm,0.8s,baz=90,slow=7.9,SNR=5.2 0.6nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **47.94** | **250** | P | P | 03 24 56.8 | -0.2 |
| | 2.0nm,0.7s,baz=82,slow=8.2,SNR=26 2.0nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **76.38** | **180** | P | P | 03 28 07.5 | +0.1 |
| | 0.5nm,0.6s,baz=51,slow=1.3,SNR=1.8 0.5nm,0.6s | | | | | | |
| **MA2** | **Magadan** | **77.66** | **344** | LR | LR | 03 59 39.6 | |
| | comp=Z,12nm,21.2s,baz=79,slow=34 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BRTR** | **Keskin Array B** | **142.98** | **320** | PKP | PKPdf | 03 35 51.8 | | -0.8 |
| | 0.9nm,0.9s,baz=41,slow=4.2,SNR=7.0 | | | | | | | |

*ISN **26** 03:20:55.4±0.8,34.°63N×46.°24E,h2km±7km,ML2.9*
*TEH **26** 03:20:56.8,34.°63N×46.°25E,h10km±81km,ML2.8*
**ISC 26 03:20:57.0**±1.3,**34.°64N**±0.°04×**46.°21E**±0.°05,**h4**km±13km,
**n9,**σ0§**94**/13,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.16** | **69** | Pg | **Pg** | **03 21 00.4** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.43** | **136** | Pg | **Pg** | **03 21 05.3** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **205** | Pg | **Pg** | **03 21 08.6** | **+0.4** |
| **ILIN** | **Lien** | **0.68** | **66** | Pg | **Pg** | **03 21 09.7** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **180** | Pg | **Pg** | **03 21 15.9** | **-0.6** |
| **IBDR** | **Badra** | **1.55** | **189** | *e*Pn | **Pb** | **03 21 25.5** | **-0.7** |
| IBDR | | | | *e*Sn | **Sg** | **03 21 47.5** | **+0.8** |
| IBDR | | | | AML | AML | 03 21 52.7 | |
| | comp=E,194nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 03 21 59.4 | |
| | comp=N,76nm,0.7s | | | | | | |
| **IKRK** | **Kirkuk** | **1.71** | **297** | *e*Pn | **Pn** | **03 21 28.0** | **+0.4** |
| IKRK | | | | *e*Sn | **Sg** | **03 21 53.0** | **+1.1** |
| IKRK | | | | AML | AML | 03 21 57.4 | |
| | comp=N,211nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 03 21 58.5 | |
| | comp=E,182nm,0.4s | | | | | | |
| **BHD** | **Baghdad** | **2.04** | **228** | *e*Pn | **Pb** | **03 21 33.0** | **-1.7** |
| BHD | | | | *e*Sn | **Sb** | **03 22 00.0** | **-0.5** |
| **RAFI** | **Al-Rafai** | **2.91** | **182** | *e*Pn | **Pn** | **03 21 45.0** | **+0.8** |
| RAFI | | | | *e*Sn | **Sn** | **03 22 20.5** | **+0.8** |

*TEH **26** 03:29:49.7,34.°64N×46.°25E,h10km±76km,ML2.8*
*ISN **26** 03:29:49.0±0.3,34.°64N×46.°24E,h5km±3km,ML3.2*
**ISC 26 03:29:50.5**±1.2,**34.°64N**±0.°04×**46.°26E**±0.°04,**h8**km±11km,
**n13,**σ0§**85**/17,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.12** | **59** | Pg | **Pg** | **03 29 53.6** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.40** | **140** | Pg | **Pg** | **03 29 58.6** | **+0.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.57** | **257** | Pg | **Pg** | **03 30 00.7** | **-0.8** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **209** | Pg | **Pg** | **03 30 01.5** | **-0.6** |
| **ILIN** | **Lien** | **0.64** | **64** | Pg | **Pg** | **03 30 02.7** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.74** | **119** | Pg | **Pg** | **03 30 04.4** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **183** | Pg | **Pg** | **03 30 09.0** | **-0.9** |
| **SNQR** | **Sonqor, Kerman** | **1.15** | **79** | Pg | **Pg** | **03 30 11.6** | **-0.9** |
| **IBZA** | **Bozab** | **1.33** | **97** | Pg | **Pn** | **03 30 14.7** | **-0.9** |
| **IBDR** | **Badra** | **1.55** | **190** | *e*Pn | **Pb** | **03 30 19.0** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **03 30 40.8** | **+0.5** |
| IBDR | | | | AML | AML | 03 30 45.0 | |
| | comp=N,322nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 03 30 45.5 | |
| | comp=E,461nm,0.8s | | | | | | |
| **IKRK** | **Kirkuk** | **1.75** | **296** | *e*Pn | **Pn** | **03 30 21.5** | **+0.4** |
| IKRK | | | | *e*Sn | **Sb** | **03 30 45.5** | **+0.5** |
| **BHD** | **Baghdad** | **2.07** | **229** | *e*Pn | **Pn** | **03 30 26.0** | **+0.5** |
| BHD | | | | *e*Sn | **Sb** | **03 30 53.0** | **-1.2** |
| BHD | | | | AML | AML | 03 30 54.5 | |
| | comp=E,161nm,0.4s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.91** | **182** | *e*Pn | **Pn** | **03 30 38.0** | **+1.0** |
| RAFI | | | | *e*Sn | **Sn** | **03 31 13.5** | **+1.4** |

*ISN **26** 03:33:08.1±0.5,34.°62N×46.°25E,h6km±4km,ML2.9*
*TEH **26** 03:33:08.6,34.°61N×46.°25E,h10km±68km,ML2.9*
**ISC 26 03:33:08.8**±1.3,**34.°62N**±0.°04×**46.°23E**±0.°04,**h2**km±14km,
**n11,**σ1§**16**/15,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **57** | Pg | **Pg** | **03 33 12.3** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.40** | **136** | Pg | **Pb** | **03 33 17.0** | **-1.8** |
| **KGS1** | **Ghasr-e-Shirin** | **0.54** | **258** | Pg | **Pb** | **03 33 19.8** | **-1.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **208** | Pg | **Pg** | **03 33 19.6** | **-0.1** |
| **ILIN** | **Lien** | **0.67** | **63** | Pg | **Pg** | **03 33 21.6** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.75** | **117** | Pg | **Pg** | **03 33 22.8** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **181** | Pg | **Pb** | **03 33 27.9** | **-0.9** |
| **IBDR** | **Badra** | **1.52** | **190** | *e*Pn | **Pb** | **03 33 37.8** | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | **03 33 59.5** | **+1.7** |
| IBDR | | | | AML | AML | 03 34 05.0 | |
| | comp=N,125nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 03 34 09.8 | |
| | comp=E,231nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.74** | **297** | *e*Pn | **Pb** | **03 33 40.7** | **-0.8** |
| IKRK | | | | *e*Sn | **Sg** | **03 34 05.0** | **+0.3** |
| **BHD** | **Baghdad** | **2.04** | **229** | *e*Pn | **Pb** | **03 33 45.0** | **-1.7** |
| BHD | | | | *e*Sn | **Sb** | **03 34 12.0** | **-0.5** |
| **RAFI** | **Al-Rafai** | **2.89** | **182** | *e*Pn | **Pn** | **03 33 57.0** | **+1.1** |
| RAFI | | | | *e*Sn | **Sn** | **03 34 32.0** | **+0.8** |

*ISN **26** 03:42:10.2±0.6,34.°61N×46.°20E,h2km±5km,ML3.4*
*TEH **26** 03:42:11.6,34.°62N×46.°17E,h8km±31km,ML3.3*
**ISC 26 03:42:12.0**±1.2,**34.°61N**±0.°03×**46.°18E**±0.°03,**h1**km±13km,
**n22,**σ1§**08**/27,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.19** | **64** | Pg | **Pg** | **03 42 15.9** | **+0.1** |
| IDHR | | | | Sg | **Sg** | **03 42 19.5** | **+1.1** |
| **IGHG** | **Ghaleghazi** | **0.43** | **131** | Pg | **Pg** | **03 42 20.5** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **258** | Pg | **Pg** | **03 42 21.4** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **204** | Pg | **Pg** | **03 42 22.6** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **115** | Pg | **Pg** | **03 42 26.4** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **178** | Pg | **Pb** | **03 42 30.9** | **-1.0** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **78** | Pg | **Pn** | **03 42 35.3** | **-1.2** |
| **IBZA** | **Bozab** | **1.40** | **95** | Pg | **Pg** | **03 42 38.6** | **-0.2** |
| **IBDR** | **Badra** | **1.51** | **188** | *e*Pn | **Pb** | **03 42 40.0** | **-0.8** |
| IBDR | | | | *e*Sn | **Sg** | **03 43 01.5** | **+0.9** |
| IBDR | | | | AML | AML | 03 43 11.7 | |
| | comp=E,486nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 03 43 18.9 | |
| | comp=N,564nm,0.7s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.63** | **340** | Pg | **Pb** | **03 42 42.0** | **-0.9** |
| **IKRK** | **Kirkuk** | **1.70** | **298** | *e*Pn | **Pb** | **03 42 43.0** | **-1.0** |
| IKRK | | | | *e*Sn | **Sg** | **03 43 07.0** | **+0.4** |
| IKRK | | | | AML | AML | 03 43 10.8 | |
| | comp=N,558nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 03 43 11.8 | |
| | comp=E,582nm,0.4s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.76** | **128** | Pg | **Pg** | **03 42 45.4** | **-0.4** |
| **IDOB** | **Doab** | **1.85** | **116** | Pn | **Pb** | **03 42 46.3** | **-0.4** |
| **BHD** | **Baghdad** | **2.01** | **229** | *e*Pn | **Pn** | **03 42 47.0** | **+0.1** |
| BHD | | | | *e*Sn | **Sb** | **03 43 14.0** | **-0.7** |
| **HSAM** | **Samen** | **2.05** | **101** | Pn | **Pb** | **03 42 49.4** | **-0.7** |
| **MAHB** | **Mahabad** | **2.18** | **350** | Pn | **Pb** | **03 42 50.4** | **-1.9** |
| **HAGD** | **Aghdareh** | **2.45** | **84** | Pn | **Pb** | **03 42 55.0** | **-2.0** |
| **RAFI** | **Al-Rafai** | **2.88** | **181** | *e*Pn | **Pn** | **03 42 59.2** | **+0.2** |
| RAFI | | | | *e*Sn | **Sn** | **03 43 35.0** | **+0.7** |
| **IAZR** | **Azarshahr** | **3.06** | **357** | Pn | **Pn** | **03 43 02.4** | **+0.6** |
| **ISHB** | **Shabestar** | **3.69** | **353** | Pn | **Pn** | **03 43 11.6** | **+1.3** |
| **GRMI** | **Germi** | **4.41** | **18** | Pn | **Pn** | **03 43 22.1** | **+2.0** |
| **QAMS** | **Qamsar** | **4.42** | **100** | Pn | **Pn** | **03 43 22.2** | **+1.9** |

*IDC **26** 03:43:54.6±2.9,18.°20S×178.°22W,h553km±33km,*
*mb3.3/10,mbtmp4.2/10,Error ellipse: s-maj=17.5km*
*s-min=15.1km az=132.0*
*NEIC **26** 03:43:55.5±1.2,18.°1S±0.°1×178.°2W±0.°2,h572km±8km,*
*mb4.1/26,Error ellipse: s-maj=25.7km s-min=14.8km*
*az=94.0*
**ISC 26 03:43:56.5**±0.7,**18.°2S**±0.°1×**178.°3W**±0.°1,**h579**km,**n41,**
σ0§**83**/41,**mb4.0**/23,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.54** | **277** | P | **P** | **03 45 16.8** | **-0.5** |
| **URZ** | **Urewera** | **20.39** | **190** | P | **P** | **03 47 52.1** | **-2.4** |
| | 3.1nm,0.3s,baz=13,slow=1.5,SNR=7.7 3.1nm,0.3s | | | | | | |
| **TKNZ** | **Takaka Hill** | **23.98** | **197** | P | **P** | **03 48 26.1** | **-0.4** |
| **THZ** | **Tophouse** | **24.67** | **196** | P | **P** | **03 48 31.6** | **-1.2** |
| **MLZ** | **Mavora Lakes** | **29.37** | **200** | P | **P** | **03 49 14.0** | **+0.2** |
| **CTAO** | **Charters Tower** | **33.54** | **261** | P | **P** | **03 49 49.1** | **-0.4** |
| CTAO | | | | IAmb | IAmb | 03 49 50.4 | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **COEN** | **Coen** | **37.25** | **271** | P | **P** | **03 50 21.1** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.61** | **242** | P | **P** | **03 50 32.0** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.61** | **242** | P | **P** | **03 50 32.5** | **+1.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,1.1nm,0.5s,baz=89,slow=12,SNR=3.7 comp=Z,1.1nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.39** | **241** | P | **P** | **03 51 09.0** | | **+0.1** |
| BBOO | | | | IAmb | IAmb | 03 51 37.6 | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.53** | **260** | P | **P** | **03 51 17.5** | | **-0.4** |
| **WB0** | **Warramunga Arr** | **44.68** | **260** | P | **P** | **03 51 18.7** | | **-0.4** |
| WB0 | | | | IAmb | IAmb | 03 51 22.8 | | |
| | comp=Z,9.5nm,1.5s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.70** | **260** | P | **P** | **03 51 19.0** | | **-0.3** |
| WB2 | | | | IAmb | IAmb | 03 51 20.9 | | |
| | comp=Z,7.7nm,1.5s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.71** | **260** | P | **P** | **03 51 18.9** | | **-0.4** |
| WRAB | | | | IAmb | IAmb | 03 51 40.0 | | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **03 51 18.5** | | **-0.8** |
| **WRA** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **03 51 19.2** | | **-0.1** |
| | comp=Z,1.5nm,0.4s,baz=96,slow=7.1,SNR=55 comp=Z,1.5nm,0.4s | | | | | | | |
| **AS31** | **Alice Springs** | **44.84** | **255** | P | **P** | **03 51 20.9** | | **+0.6** |
| AS31 | | | | IAmb | IAmb | 03 51 21.8 | | |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.85** | **255** | P | **P** | **03 51 20.9** | | **+0.6** |
| | comp=Z,10.0nm,0.5s,baz=88,slow=8.7,SNR=248 | | | | | | | |
| ASAR | | | | S | **S** | **03 57 17.6** | | **+1.0** |
| | comp=Z,0.8nm,0.9s,baz=93,slow=15,SNR=6.5 comp=Z,10.0nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **50.01** | **245** | P | **P** | **03 51 58.4** | | **-0.4** |
| **KNRA** | **Kununurra** | **50.60** | **264** | P | **P** | **03 52 02.3** | | **-0.9** |
| KNRA | | | | IAmb | IAmb | 03 52 02.8 | | |
| | comp=Z,8.2nm,1.4s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.22** | **323** | P | **P** | **03 54 00.1** | | **0.0** |
| | comp=Z,1.3nm,0.5s,baz=166,slow=5.8,SNR=7.9 comp=Z,1.3nm,0.5s | | | | | | | |
| **MAJO** | **Matsushiro** | **68.22** | **323** | P | **P** | **03 53 58.9** | | **-1.3** |
| **MJB9** | **Matsu-Tunnel** | **68.23** | **323** | P | **P** | **03 53 59.5** | | **-0.6** |
| MJB9 | | | | IAmb | IAmb | 03 54 35.4 | | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.86** | **180** | P | **P** | **03 54 22.4** | | **+1.0** |
| **QSPA** | **South Pole Qui** | **71.86** | **180** | P | **P** | **03 54 22.3** | | **+1.0** |
| | comp=Z,1.6nm,0.5s,baz=208,slow=0.8,SNR=25 comp=Z,1.6nm,0.5s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.99** | **345** | P | **P** | **03 54 33.0** | | **-0.5** |
| **PETK** | **Petropavlovsk-** | **73.99** | **345** | P | **P** | **03 54 33.6** | | **+0.2** |
| | comp=Z,1.4nm,0.6s,baz=109,slow=8.0,SNR=5.1 comp=Z,1.4nm,0.6s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.31** | **8** | P | **P** | **03 55 13.5** | | **+0.8** |
| **BELA** | **Belgrano 2** | **81.86** | **173** | P | **P** | **03 55 15.3** | | **-0.1** |
| BELA | | | | IAmb | IAmb | 03 55 16.7 | | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **L18K** | **Granite Mounta** | **81.95** | **10** | P | **P** | **03 55 15.8** | | **-0.2** |
| **J17K** | **VABM Dome** | **82.70** | **9** | P | **P** | **03 55 19.8** | | **+0.2** |
| J17K | | | | IAmb | IAmb | 03 55 29.7 | | |
| | comp=Z,7.7nm,1.2s | | | | | | | |
| **J18K** | **Innoko River** | **83.12** | **10** | P | **P** | **03 55 21.9** | | **+0.1** |
| J18K | | | | IAmb | IAmb | 03 55 36.6 | | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **K20K** | **Telida** | **83.46** | **11** | P | **P** | **03 55 23.1** | | **-0.4** |
| **KLU** | **Klutina** | **83.51** | **15** | P | **P** | **03 55 22.6** | | **-1.3** |
| KLU | | | | IAmb | IAmb | 03 55 24.4 | | |
| | comp=Z,3.6nm,0.5s | | | | | | | |
| **J19K** | **Poorman** | **83.79** | **10** | P | **P** | **03 55 24.7** | | **-0.4** |
| J19K | | | | IAmb | IAmb | 03 55 27.6 | | |
| | comp=Z,5.8nm,1.4s | | | | | | | |
| **J20K** | **Nowinta River** | **84.21** | **10** | P | **P** | **03 55 27.4** | | **+0.3** |
| J20K | | | | IAmb | IAmb | 03 55 35.5 | | |
| | comp=Z,5.1nm,1.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.03** | **58** | P | **P** | **03 55 38.1** | | **+1.3** |
| | comp=Z,1.0nm,1.0s,baz=219,slow=6.4,SNR=7.4 comp=Z,1.0nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.14** | **13** | P | **P** | **03 55 35.0** | | **-1.4** |
| | comp=Z,0.4nm,0.4s,baz=224,slow=4.8,SNR=12 comp=Z,0.4nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **90.31** | **179** | P | **P** | **03 55 55.8** | | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=205,slow=9.3,SNR=8.0 comp=Z,0.5nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.08** | **315** | PKPbc | PKPbc | 04 02 30.3 | | +0.4 |
| | comp=Z,0.5nm,0.4s,baz=96,slow=2.6,SNR=7.5 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.93** | **345** | PKPbc | **PKPbc** | **04 02 37.9** | | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=336,slow=2.2,SNR=3.1 | | | | | | | |

**DJA 26 03:53:37.6**±0.5,**9.°3S**±4.°×**11.°7E**±.°,**h10**km,**M4.7**/4,**MLv4.7**/4,
**Sumbawa region**

| Code | Station Name | Δ°

123nm,1.3s,1.1nm
**KPJI Karang Pucung 8.02 277 P Pn 03 56 03.0 +2.6**
72nm,0.8s
**CMJI Cimerak 8.45 274 P Pn 03 56 07.8 +1.6**
91nm,1.2s
**CNJI Cibinong 9.80 276 P Pn 03 56 26.2 +1.5**
**TOLI2 Tolitoli 10.19 22 Pn 03 56 31.4 +1.3**
**KSM Kuching 11.84 326 Pn Pn 03 56 52.6 -0.1**
**FITZ Fitzroy Crossi 12.81 140 Pn Pn 03 57 03.0 -3.0**
**FITZ Fitzroy Crossi 12.81 140 P Pn 03 57 05.9 -0.1**
comp=Z,416nm,0.7s
**MBWA Marble Bar 12.96 168 P Pn 03 57 08.9 +0.9**
**MBWA Marble Bar 12.96 168 Pn Pn 03 57 06.9 -1.2**
**MBWA Marble Bar 12.96 168 P Pn 03 57 07.6 -0.5**
comp=Z,71nm,0.8s
**PSAD1 Pilbara Seismi 13.27 168 P Pn 03 57 12.5 +0.2**
comp=Z,53nm,0.7s
**PSA00 Pilbara Seismi 13.39 168 P Pn 03 57 14.3 +0.5**
comp=Z,68nm,0.8s
**PSA00 Pilbara Seismi 13.39 168 Pn 03 57 12.1 -1.7**
**PSA00 Pilbara Seismi 13.39 168 Pn 03 57 12.9 -1.0**
**PSA00 Pilbara Seismi 13.39 168 P Pn 03 57 13.2 -0.6**
comp=Z,68nm,0.8s
**KNRA Kununurra 13.62 123 Pn Pn 03 57 16.2 -0.8**
**KNRA Kununurra 13.62 123 P Pn 03 57 16.7 -0.3**
comp=Z,37nm,1.0s
**KKM Kota Kinabalu 14.37 357 Pn Pn 03 57 28.7 +1.2**
**GIRL Giralia 14.40 190 Pn Pn 03 57 26.4 -1.3**
**GIRL Giralia 14.40 190 P Pn 03 57 27.0 -0.7**
comp=Z,219nm,0.8s
**MTN Manton Dam 14.61 109 Pn Pn 03 57 27.9 -2.7**
**MTN Manton Dam 14.61 109 P Pn 03 57 29.3 -1.4**
comp=Z,33nm,0.5s
**KDU Kakadu 15.83 107 P Pn 03 57 44.6 -2.3**
**SWI Sorong 16.09 63 P Pn 03 57 51.5 +1.3**
comp=Z,77nm,1.2s
**FAKI Fak Fak 16.16 71 Pn Pn 03 57 50.3 -0.8**
**FAKI Fak Fak 16.16 71 P Pn 03 57 50.6 -0.5**
**DAV Davao City (W) 17.61 29 LR LR** 04 05 40.7
comp=Z,272nm,19.8s,baz=180,slow=40
**MEEK Meekatharra 18.20 175 P P 03 58 18.9 +2.0**
comp=Z,98nm,0.8s
**WRKA Warakurna 19.76 148 P Pn 03 58 35.7 +0.1**
comp=Z,48nm,0.9s
**WB0 Warramunga Arr 20.31 126 P P 03 58 39.7 -0.4**
**WRA Warramunga Arr 20.36 126 P P 03 58 39.9 -0.6**
**WRA Warramunga Arr 20.36 126 P P 03 58 41.5 +0.9**
comp=Z,59nm,0.7s,baz=300,slow=12,SNR=221
WRA S **S** **04 02 28.8 -0.1**
comp=Z,4.2nm,0.7s,baz=294,slow=24,SNR=5.3
WRA LR LR 04 07 17.9
comp=Z,210nm,19.9s,baz=214,slow=39
comp=Z,59nm,0.7s
**WRAB Tennant Creek 20.36 126 P P 03 58 40.6 0.0**
WRAB IAmb IAmb 03 58 42.6
comp=Z,68nm,0.7s
**WB2 Warramunga Arr 20.37 126 P P 03 58 40.6 -0.1**
WB2 IAmb IAmb 03 58 42.2
comp=Z,63nm,0.7s
**IPM Ipoh 20.40 308 P P 03 58 41.7 +0.7**
**WR0 Warramunga Arr 20.53 126 P P 03 58 42.9 +0.5**
**MORW Morawa 20.57 182 P 03 58 43.2 +0.4**
**MORW Morawa 20.57 182 P Pn** 03 58 44.8 -0.2
comp=Z,26nm,1.0s
**RPSI Rantau Prapat 21.09 301 P P 03 58 49.4 +0.9**
RPSI IAmb IAmb 03 59 05.7
comp=Z,47nm,1.2s
**KULM Kulim 21.20 309 P P 03 58 50.2 +0.5**
**GSI Gunungsitoli 21.59 296 P P 03 58 53.9 0.0**
**BLDU Ballidu 22.10 181 P P 03 59 00.9 +1.7**
comp=Z,25nm,0.7s
**AS31 Alice Springs 22.22 135 P P 03 59 00.9 +0.2**
**AS31 Alice Springs 22.22 135 P P 03 59 01.1 +0.5**
comp=Z,14nm,0.9s
**ASAR Alice Springs 22.22 135 P P 03 59 00.7 +0.1**
**ASAR Alice Springs 22.22 135 P P 03 59 01.8 +1.2**
comp=Z,27nm,0.8s,baz=310,slow=8.6,SNR=70
ASAR PcP **PcP** **04 02 56.5 -0.8**
comp=Z,2.2nm,0.8s,baz=344,slow=1.3,SNR=5.2
ASAR S **S** **04 03 07.3 +1.9**
comp=Z,2.2nm,0.8s,baz=305,slow=20,SNR=3.3
ASAR LR LR 04 07 52.6
comp=Z,327nm,19.5s,baz=314,slow=37
comp=Z,27nm,0.8s
**KLBR Kellerberrin 23.08 178 P P 03 59 10.3 +0.6**
comp=Z,68nm,0.7s
**KMBL Kambalda 23.30 169 P P 03 59 11.2 -0.7**
comp=Z,37nm,0.8s
**MTKN Mount Kenneth 23.44 183 P P 03 59 16.5 +3.3**
**MUN Mundaring 23.47 182 P P 03 59 13.9 +0.4**
comp=Z,35nm,0.7s
**LHMI Lhok Sumawe 24.12 303 P P 03 59 19.7 -0.2**
**NWAO Narrogin (SRO) 24.41 179 P P 03 59 21.4 -1.0**
NWAO IAmb IAmb 03 59 24.4
comp=Z,37nm,1.2s
**NWAO Narrogin (SRO) 24.41 179 P P 03 59 23.5 +1.1**
comp=Z,136nm,0.7s
**NWAO Narrogin (SRO) 24.41 179 LR LR** 04 09 59.7
comp=Z,263nm,19.2s,baz=345,slow=39
**FORT Forrest 24.56 157 P P 03 59 25.8 +2.0**
**FORT Forrest 24.56 157 P P 03 59 24.2 +0.4**
**FORT Forrest 24.56 157 P P 03 59 24.4 +0.6**
comp=Z,64nm,0.7s
**QIS Mount Isa 24.99 121 P P 03 59 28.0 +0.1**
comp=Z,58nm,1.2s
**UBPT Khong Chiam 26.14 334 P P 03 59 39.8 +1.6**
**OOD Oodnadatta 26.18 140 P P 03 59 37.3 -1.2**
**COEN Coen 26.29 104 P P 03 59 40.3 +0.6**
**COEN Coen 26.29 104 P P 03 59 39.3 -0.4**
COEN IAmb IAmb 03 59 50.3
comp=Z,22nm,0.9s
**COEN Coen 26.29 104 P P 03 59 38.9 -0.8**
comp=Z,28nm,0.9s
**MULG Mulgathing 27.02 146 P P 03 59 46.7 +0.6**
**QIZ Qiongzhong 28.15 346 P P 03 59 57.5 +1.2**
QIZ S **S** **04 04 45.8 +4.1**
QIZ LR LR
comp=Z,190nm,15.7s
QIZ LR LR
comp=Z,210nm,10.9s
QIZ LR LR
comp=Z,180nm,13.8s
**MTSU Mount Surprise 28.29 113 P P 03 59 58.5 +0.8**
**INKA Innaminka 29.58 134 P P 04 00 09.1 +0.1**
**LCRK Leigh Creek 29.60 141 P P 04 00 10.0 +0.9**
**BBOO Buckleboo 30.05 147 P P 04 00 12.9 -0.2**
BBOO IAmb IAmb 04 00 14.3
comp=Z,24nm,0.8s
**BBOO Buckleboo 30.05 147 P P 04 00 13.5 +0.4**
comp=Z,34nm,1.1s
**CTA Charters Tower 30.62 115 LR LR** 04 13 34.5
comp=Z,22nm,19.3s,baz=280,slow=38
**CTAO Charters Tower 30.62 115 P P 04 00 18.8 +0.5**
**CTAO Charters Tower 30.62 115 P P 04 00 18.1 -0.2**
CTAO IAmb IAmb 04 00 20.2
comp=Z,18nm,1.0s
**QLP Quilpie 31.56 128 P P 04 00 27.1 +0.6**
**QLP Quilpie 31.56 128 P P 04 00 27.5 +1.0**
comp=Z,36nm,1.4s
**YULB Yu-li 31.88 8 P P 04 00 30.5 +1.2**
**CM31 Chiang Mai Arr 32.07 326 P 04 00 31.0 0.0**
CM31 IAmb IAmb 04 00 34.1
comp=Z,23nm,1.4s
**CMAR Chiang Mai Arr 32.07 326 P P 04 00 31.6 +0.6**
**CMAR Chiang Mai Arr 32.07 326 P P 04 00 32.5 +1.5**
comp=Z,6.8nm,0.8s,baz=155,slow=6.9,SNR=27
CMAR LR LR 04 14 35.5
comp=Z,175nm,21.0s,baz=160,slow=39
**HTT Hallett 32.12 144 P P 04 00 33.2 +1.8**
**HTT Hallett 32.12 144 P P 04 00 32.7 +1.3**
comp=Z,28nm,1.1s
**SLVN Son La 32.21 337 P P 04 00 31.9 -0.4**
SLVN IAmb IAmb 04 00 35.9
comp=Z,18nm,1.5s
**STKA Stephens Creek 32.71 139 P P 04 00 37.7 +1.2**
**STKA Stephens Creek 32.71 139 P P 04 00 36.1 -0.4**
**STKA Stephens Creek 32.71 139 P P 04 00 37.3 +0.7**
comp=Z,7.4nm,0.7s
**STKA Stephens Creek 32.71 139 P P 04 00 37.6 +1.0**
comp=Z,20nm,0.7s,baz=312,slow=9.4,SNR=54
STKA PcP **PcP** **04 03 21.6 -0.6**
comp=Z,2.8nm,0.6s,baz=310,slow=6.1,SNR=3.5
STKA LR LR 04 15 10.5
comp=Z,176nm,19.4s,baz=330,slow=39
comp=Z,20nm,0.7s
**CRAI Chiangrai 32.80 330 P P 04 00 38.5 +1.1**
CRAI IAmb IAmb 04 00 40.9
comp=Z,19nm,1.0s
**CMSA Cobar Meteorol 35.28 135 P P 04 01 00.6 +1.7**
**CMSA Cobar Meteorol 35.28 135 P P 04 01 00.1 +1.2**
comp=Z,15nm,3.0s
**GUMO Guam 35.29 52 LR LR** 04 16 29.9
comp=Z,32nm,20.0s,baz=300,slow=38
**ARPS Mount Arapiles 36.17 145 P P 04 01 06.1 -0.3**
comp=Z,23nm,1.0s
**PZH PanZhiHua 37.71 337 P P 04 01 21.8 +2.0**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,120nm,5.1s
**TNCH TengChong 37.78 332 eP P 04 01 22.5 +2.1**
TNCH pmax pmax
comp=Z,170nm,4.7s
**YNG Young 38.71 136 P P 04 01 30.1 +2.0**
**YNG Young 38.71 136 P P 04 01 29.0 +0.9**
comp=Z,86nm,0.9s
**WHN Wuhan 38.80 356 P P 04 01 31.5 +2.8**
**TOO Toolangi 38.85 143 P P 04 01 32.6 +3.4**
**TOO Toolangi 38.85 143 P P 04 01 29.3 +0.1**
TOO IAmb IAmb 04 01 38.8
comp=Z,29nm,1.1s
**TOO Toolangi 38.85 143 P P 04 01 30.5 +1.3**
comp=Z,27nm,1.9s
**AUPHS Peel High Scho 38.85 130 P P 04 01 31.5 +2.2**
**ARMA Armidale 39.10 129 P P 04 01 33.7 +2.2**
comp=Z,14nm,0.9s
**ENH Enshi 39.12 350 P P 04 01 31.8 +0.3**
ENH IAmb IAmb 04 01 33.7
comp=Z,18nm,0.9s
**PALK Pallekele 39.35 292 LR LR** 04 19 21.2
comp=Z,105nm,18.4s,baz=217,slow=39
**NJ2 Nanjing 40.27 2 eP P 04 01 43.5 +2.6**
NJ2 sP **sP** **04 01 49.0 +3.7**
NJ2 pmax pmax
comp=Z,15nm,0.7s
NJ2 pmax pmax
comp=Z,340nm,4.7s
**CD2 Chengdu 41.09 343 P P 04 01 49.0 +1.2**
CD2 pmax pmax
comp=Z,60nm,0.9s
CD2 LR LR
comp=Z,230nm,8.6s
CD2 LR LR
comp=Z,250nm,9.8s
CD2 LR LR
comp=Z,270nm,13.9s
**SHL Shillong 41.66 325 P P 04 01 51.7 -1.1**
SHL IAmb IAmb 04 01 54.3
comp=Z,30nm,0.9s
**HNR Honiara 42.46 95 LR LR** 04 22 03.7
comp=Z,1μm,18.2s,baz=118,slow=40
**XAN Xi'an 42.89 350 P P 04 02 03.0 +0.5**
XAN pP sP 04 02 08.0 +1.1
XAN pmax pmax
comp=Z,14nm,0.9s
**LYN LuoYang 42.93 355 P P** 04 02 09.0 +6.2
LYN S **S** **04 08 31.5 +3.7**
LYN pmax pmax
comp=Z,23nm,0.6s
LYN pmax pmax
comp=Z,270nm,4.5s
LYN LR LR
comp=Z,290nm,17.9s
LYN LR LR
comp=Z,260nm,18.2s
LYN LR LR
comp=Z,410nm,22.7s
**TIA Tai'an 44.38 0 P P 04 02 14.3 -0.1**
TIA pmax pmax
comp=Z,10.0nm,0.7s
**LSA Lhasa 45.30 328 P P 04 02 23.3 +0.9**
**LSA Lhasa 45.30 328 P P 04 02 22.3 -0.1**
LSA IAmb IAmb 04 02 34.4
comp=Z,25nm,1.2s
**HNS HongShan 45.61 357 ⇑P P** 04 02 30.0 +5.8
**LZH Lanzhou 45.94 345 eP P 04 02 28.5 +1.5**
LZH sP sP 04 02 34.8 +3.4
LZH SS SS 04 12 34.0 -3.0
LZH pmax pmax
comp=Z,17nm,1.1s
LZH LR LR
comp=Z,140nm,14.8s
LZH LR LR
comp=Z,190nm,15.6s
**KSAR Wonju Array Be 46.74 12 P P 04 02 32.2 -0.8**
**KSRS Korea Array 46.76 12 P P 04 02 34.2 +1.1**
comp=Z,4.2nm,0.8s,baz=190,slow=8.4,SNR=16
**BJT Baijiatuau 48.18 359 P P 04 02 43.0 -1.2**
BJT IAmb IAmb 04 02 46.3
comp=Z,7.4nm,0.7s
**BJI Beijing 48.20 359 P P 04 02 44.3 -0.1**
BJI pP **sP** **04 02 48.5 -0.3**
BJI sP **pP** **04 02 51.0 +3.4**
BJI S **S** **04 09 42.0 -1.7**
BJI pmax pmax
comp=Z,4.0nm,0.6s
BJI LR LR
comp=Z,170nm,12.9s
BJI LR LR
comp=Z,69nm,10.5s
BJI LR LR
comp=Z,87nm,18.4s
**MAJO Matsushiro 48.96 23 P P 04 02 48.1 -2.3**
MAJO IAmb IAmb 04 02 50.8
comp=Z,8.1nm,0.8s
**MJAR Matsushiro Arr 48.96 23 P P 04 02 49.1 -1.3**
comp=Z,4.3nm,0.8s,baz=199,slow=7.7,SNR=12
MJAR LR LR 04 22 41.4
comp=Z,31nm,20.9s,baz=204,slow=35
comp=Z,4.3nm,0.8s
**MJB9 Matsu-Tunnel 48.97 23 P P 04 02 48.1 -2.3**
MJB9 IAmb IAmb 04 02 50.8
comp=Z,7.7nm,0.8s
**BTO Baotou 49.18 353 eP P 04 02 53.8 +1.7**
BTO pP **sP** **04 02 58.3 +1.8**
BTO sP **pP** **04 03 00.8 +5.6**
BTO pmax pmax
comp=Z,31nm,0.9s
BTO pmax pmax
comp=Z,250nm,6.1s
**HHC Hu-ho-hao-te 49.26 355 eP P** 04 02 45.5 -7.2
HHC pmax pmax
comp=Z,27nm,0.6s
HHC pmax pmax
comp=Z,70nm,4.7s
**DZM Mont Dzumac 49.42 112 eLR LR** 04 16 50.8
comp=Z,105nm,23.0s
**DZM Mont Dzumac 49.42 112 P P 04 02 54.7 +0.3**
**DZM Mont Dzumac 49.42 112 LR LR** 04 24 13.2
comp=Z,124nm,18.4s,baz=37
**GTA Gaotai 50.16 343 P P 04 03 01.0 +1.4**
GTA pP sP 04 03 06.0 +2.0
GTA pmax pmax
comp=Z,21nm,1.5s
GTA LR LR
comp=Z,62nm,14.3s
GTA LR LR
comp=Z,79nm,14.7s
GTA LR LR
comp=Z,1μm,14.3s
**JMM Marumori 51.13 24 P P 04 03 05.6 -1.1**
**NFK Norfolk Island 52.01 120 P P 04 03 13.6 0.0**
comp=Z,127nm,1.0s
**XLT XiLinHaoTe 52.06 359 eP P 04 03 14.8 +1.0**
XLT pmax pmax
comp=Z,17nm,0.9s
**MDJ Mudanjiang 53.99 11 P P 04 03 28.3 +0.4**
MDJ pmax pmax
comp=Z,24nm,1.1s
**MDJ Mudanjiang 53.99 11 P P 04 03 27.3 -0.6**
**USRK Ussuriysk Ar. 54.10 13 P P 04 03 28.0 -0.6**
**USRK Ussuriysk Ar. 54.10 13 P P 04 03 27.6 -1.1**
comp=Z,9.5nm,1.0s,baz=203,slow=8.1,SNR=9.4
comp=Z,9.5nm,1.0s
**BNX BinXian 54.70 9 ⇓P P 04 03 33.8 +0.8**
BNX pmax pmax
comp=Z,7.0nm,1.0s
**ULN Ulaanbaatar 56.70 352 P P 04 03 46.9 -0.7**
ULN IAmb IAmb 04 03 48.4
comp=Z,11nm,0.9s
**SONM Songino Array 56.77 352 P P 04 03 47.1 -0.9**
SONM IAmb IAmb 04 03 48.7
comp=Z,14nm,0.9s
**SONM Songino Array 56.77 352 P P 04 03 48.2 +0.2**
comp=Z,9.9nm,0.8s,baz=171,slow=8.6,SNR=40
SONM LR LR 04 29 50.8
comp=Z,50nm,20.2s,baz=164,slow=38
comp=Z,9.9nm,0.8s
**ASAJ Asahikawa 57.20 22 LR LR** 04 30 07.3
comp=Z,32nm,19.1s,baz=152,slow=38
**HIA Hailar 57.48 2 P P 04 03 51.7 -1.1**
HIA IAmb IAmb 04 03 53.7
comp=Z,18nm,1.2s
**CASY Casey 57.96 183 P P 04 03 54.5 -1.5**
**WMQ Urumqi 58.36 335 eP P 04 04 00.0 +0.8**
WMQ pmax pmax
comp=Z,21nm,0.9s
WMQ LR LR
comp=Z,110nm,22.1s
**KLR Kul'dur 58.84 11 LR LR** 04 31 02.4
comp=Z,36nm,20.1s,baz=210,slow=38
**HEH HeiHe 59.12 8 eP P 04 04 03.5 -0.8**
HEH pmax pmax
comp=Z,35nm,0.9s
HEH pmax pmax
comp=Z,170nm,3.5s
**KSH Kashi 60.94 325 P P 04 04 14.8 -2.4**
KSH pP sP 04 04 21.0 -0.6
KSH pmax pmax
comp=Z,5.0nm,0.9s
**URZ Urewera 61.50 129 LR LR** 04 32 42.0
comp=Z,95nm,18.3s,baz=352,slow=38
**PRZ Przheval'sk 61.66 328 P P 04 04 20.7 -1.4**
PRZ IAmb IAmb 04 04 23.8
comp=Z,11nm,0.9s
**BOOM Boomskoye usch 62.97 327 P P 04 04 28.2 -2.7**
BOOM IAmb IAmb 04 04 41.4
comp=Z,6.4nm,1.0s
**MK31 Makanchi Array 63.02 334 P P 04 04 29.3 -1.6**
MK31 IAmb IAmb 04 04 31.5
comp=Z,7.8nm,0.9s
**MKAR Makanchi Array 63.02 334 P P 04 04 29.5 -1.4**
comp=Z,7.4nm,0.8s,baz=142,slow=6.9,SNR=51
MKAR LR LR 04 34 28.4
comp=Z,55nm,18.1s,baz=140,slow=39
comp=Z,7.4nm,0.8s
**MAKZ Makanchi 63.17 334 P P 04 04 30.4 -1.5**
MAKZ IAmb IAmb 04 04 42.3
comp=Z,7.8nm,1.1s
**AAK Ala-Archa 63.86 326 LR LR** 04 37 21.4
comp=Z,56nm,18.1s,baz=132,slow=41
**GAR Garm 64.00 321 P P 04 04 34.6 -3.1**
**RAO Raoul Island 64.26 118 LR LR** 04 32 54.3
comp=Z,151nm,18.4s,baz=280,slow=36
**KURBB Kurchatov Arra 67.56 335 P P 04 04 58.3 -1.9**
comp=Z,2.4nm,0.2s,baz=146,slow=5.0,SNR=8.0
comp=Z,2.4nm,0.2s
**KURK Kurchatov 67.59 335 P P 04 04 58.5 -1.9**
KURK IAmb IAmb 04 05 10.8
comp=Z,15nm,1.3s
**ZAA0 Zalesovo Array 67.78 340 P P 04 04 58.6 -2.9**
ZAA0 IAmb IAmb 04 05 00.9
comp=Z,6.6nm,0.8s
**ZALV Zalesovo Beam 67.78 340 P P 04 04 58.7 -2.8**
**ZALV Zalesovo Beam 67.78 340 P P 04 04 59.5 -2.1**
comp=Z,5.1nm,0.7s,baz=140,slow=4.4,SNR=16
comp=Z,5.1nm,0.7s
**MAW Mawson 69.11 199 P P 04 05 10.9 +1.2**
comp=Z,9.7nm,0.9s,baz=60,slow=7.1,SNR=14
comp=Z,9.7nm,0.9s
**PETK Petropavlovsk- 70.36 25 P P 04 05 15.8 -1.8**
**PETK Petropavlovsk- 70.36 25 P P 04 05 16.9 -0.7**
comp=Z,3.9nm,0.8s,baz=220,slow=3.9,SNR=6.8
comp=Z,3.9nm,0.8s
**BVAR Borovoye Array 72.83 333 P P 04 05 30.5 -2.0**
comp=Z,2.6nm,0.7s,baz=141,slow=7.3,SNR=15
comp=Z,2.6nm,0.7s
**BRVK Borovoye 72.90 333 P P 04 05 31.2 -1.7**
**SBA Scott Base 73.91 170 P P 04 05 38.6 +0.1**
**ABKAR Akbulak array 75.92 325 P P 04 05 47.1 -3.4**
**KIBK Kibwezi 78.70 269 P P 04 06 05.7 -1.3**
**KMBO Kilima Mbogo 79.65 270 P P 04 06 10.7 -1.8**
comp=Z,2.0nm,0.8s,baz=86,slow=4.7,SNR=6.4
comp=Z,2.0nm,0.8s
**TIXI Tiksi 80.27 4 LR LR** 04 46 02.5
comp=Z,32nm,18.4s,baz=244,slow=39
**QSPA South Pole Qui 81.59 180 P P 04 06 21.4 -0.3**
QSPA IAmb IAmb 04 06 30.6
comp=Z,9.9nm,1.1s
**QSPA South Pole Qui 81.59 180 P P 04 06 22.3 +0.6**
comp=Z,5.9nm,0.9s,baz=316,slow=1.3,SNR=15
QSPA LR LR 04 39 47.3
comp=Z,88nm,21.4s,baz=336,slow=34
comp=Z,5.9nm,0.9s
**GNI Garni 82.05 313 LR LR** 04 47 44.2
comp=Z,22nm,19.0s,baz=136,slow=39
**KIRV Irkv 85.74 331 LR LR** 04 50 30.0
comp=Z,36nm,19.1s,baz=132,slow=40
**MBAR Mbarara 86.17 270 P P 04 06 44.9 -1.3**
**ARPR Arapgir-MALATY 86.52 310 P P 04 06 44.9 -2.5**
ARPR IAmb IAmb 04 06 46.8
comp=Z,6.3nm,0.9s
**LSZ Lusaka 86.64 255 P P 04 06 46.8 -1.6**
**BOSA Boshof 87.52 242 P P 04 06 52.2 -0.3**
comp=Z,8.0nm,0.9s,baz=111,slow=5.1,SNR=6.2
comp=Z,8.0nm,0.9s
**TROLL Troll, Antarti 89.38 196 ⇑P P 04 07 01.1 +0.7**
comp=Z,78nm,0.6s
**TBI Tubuai 89.98 113 eLR LR** 04 35 42.4
comp=Z,503nm,32.5s
**BRTR Keskin Array B 90.21 310 P P 04 07 01.9 -3.0**
comp=Z,0.9nm,1.0s,baz=122,slow=6.4,SNR=5.9
BRTR LR LR 04 52 26.4
comp=Z,35nm,18.8s,baz=152,slow=39
comp=Z,0.9nm,1.0s
**PPT2 Papeete2 90.77 108 eLR LR** 04 36 01.7
comp=Z,34nm,23.2s
**SNAA Sanae 91.02 196 P P 04 07 08.1 +0.1**
SNAA IAmb IAmb 04 07 10.0
comp=Z,6.6nm,1.1s
**SNAA Sanae 91.02 196 ⇑P P 04 07 08.9 +0.9**
comp=Z,89nm,0.9s
**SNAA Sanae 91.02 196 P P 04 07 08.9 +0.9**
comp=Z,4.7nm,1.0s,baz=97,slow=4.6,SNR=16
comp=Z,4.7nm,1.0s
**S12K Black Hills 91.83 34 P P 04 07 11.6 -0.2**
**BELA Belgrano 2 92.41 186 P P 04 07 12.2 -2.0**
BELA IAmb IAmb 04 07 21.1
comp=Z,4.5nm,0.7s
**VNA2 Neumayer--Watz 92.66 196 ⇑P P 04 07 16.2 +0.7**
comp=Z,3.5nm,0.6s,baz=117,slow=4.7
**VNA1 Neumayer--Stat 93.06 196 ⇑P P** 04 07 24.8 +7.6
comp=Z,2.8nm,0.6s
**VNA3 Neumayer Olymp 93.07 195 ⇑P P 04 07 17.1 -0.3**
comp=Z,1.9nm,0.7s
**AKASG Malin Array Be 95.00 320 LR LR** 05 00 10.3
comp=Z,26nm,18.1s,baz=354,slow=42
**MLR Muntele Rosu 96.63 315 LR LR** 04 56 45.8
comp=Z,32nm,20.6s,baz=356,slow=39
**FINES FINESS Array B 97.74 331 LR LR** 04 58 53.0
comp=Z,45nm,18.7s,baz=72,slow=40
**ARCES ARCESS Array B 98.32 339 LR LR** 04 59 11.7
comp=Z,47nm,18.4s,baz=16,slow=40
**RKT Rikitea 103.05 116 eLR LR** 04 41 39.1
comp=Z,681nm,39.0s
**TORD Torodi Ar. Bea 116.37 280 PKP PKPdf 04 12 45.9 -2.8**
comp=Z,2.3nm,0.7s,baz=42,slow=2.3,SNR=18
**NVAR Mina Array Bea 122.19 50 PKP PKPdf 04 12 58.9 -0.6**
comp=Z,1.0nm,0.7s,baz=238,slow=1.4,SNR=9.2
**PDAR Pinedale Array 126.84 42 PKP PKPdf 04 13 07.0 -1.4**
comp=Z,0.1nm,0.4s,baz=169,slow=0.8,SNR=5.0
**TXAR Lajitas Array 136.59 56 PKP PKPdf 04 13 26.1 -0.9**
comp=Z,0.9nm,0.8s,baz=268,slow=0.9,SNR=11
**CPUP Villa Florida 145.03 189 PKPbc PKPdf 04 13 42.0 -0.1**
comp=Z,39nm,0.9s,baz=167,slow=2.9,SNR=52
**LVC Limon Verde 148.65 170 PKPbc PKPbc 04 13 53.2 +0.8**
comp=Z,11nm,0.9s,baz=265,slow=1.9,SNR=7.5
**BDFB Brasilia 151.85 212 PKPbc PKPbc 04 13 59.5 -0.5**
comp=Z,7.0nm,0.7s,baz=143,slow=2.3,SNR=10
**LPAZ La Paz 154.96 168 PKPbc PKPbc 04 14 07.3 -0.2**
comp=Z,0.9nm,0.7s,baz=125,slow=3.9,SNR=3.6
LPAZ PKPab **PKPab** **04 14 24.1 +1.5**
comp=Z,5.1nm,1.0s,baz=106,slow=2.2,SNR=5.3

*ISN **26** 04:01:42.7±0.5, 34°.64N×46°.17E, h4km±4km, ML2.8*
*TEH **26** 04:01:43.7, 34°.63N×46°.21E, h10km±84km, ML2.7*
**ISC 26 04:01:44.3±1.5, 34°.64N±0°.04×46°.19E±0°.06, h4km±14km, n10, σ0°.71/14, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.17** | **69** | Pg | **Pg** | **04 01 48.1** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.44** | **134** | Pg | **Pg** | **04 01 52.7** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **204** | Pg | **Pg** | **04 01 55.1** | **-0.1** |
| **ILIN** | **Lien** | **0.70** | **66** | Pg | **Pg** | **04 01 57.2** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **179** | Pg | **Pg** | **04 02 03.0** | **-0.7** |
| **SNQR** | **Sonqor, Kerman** | **1.21** | **79** | Pg | **Pg** | **04 02 06.4** | **-1.0** |
| **IBDR** | **Badra** | **1.54** | **188** | *e*Pn | **Pn** | **04 02 12.8** | **+0.3** |
| IBDR | | | | *e*Sn | **Sg** | **04 02 34.5** | **+0.8** |
| IBDR | | | | AML | AML | 04 02 38.4 | |
| | comp=N,123nm,0.3s | | | | | | |
| IBDR | | | | AML | AML | 04 02 39.7 | |
| | comp=E,126nm,0.7s | | | | | | |
| **IKRK** | **Kirkuk** | **1.70** | **297** | *e*Pn | **Pn** | **04 02 15.0** | **+0.3** |
| IKRK | | | | *e*Sn | **Sb** | **04 02 38.0** | **+0.2** |
| IKRK | | | | AML | AML | 04 02 43.8 | |
| | comp=N,182nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 04 02 44.1 | |
| | comp=E,157nm,0.5s | | | | | | |
| **BHD** | **Baghdad** | **2.03** | **228** | *e*Pn | **Pn** | **04 02 19.0** | **-0.3** |
| BHD | | | | *e*Sn | **Sb** | **04 02 46.0** | **-1.3** |
| **RAFI** | **Al-Rafai** | **2.91** | **181** | *e*Pn | **Pn** | **04 02 31.5** | **+0.2** |
| RAFI | | | | *e*Sn | **Sn** | **04 03 07.5** | **+0.8** |

**KRSC 26 04:02:51.1**±0.9,**55°57N**×**160°88E**,**h155**km±8km,**MI3.5,**
**Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BZGR** | **Bezymyannyi-Gr** | **0.39** | **344** | *e*P | Pn | 04 03 14.2 | +1.5 |
| BZGR | | | | *e*S | Sn | 04 03 31.0 | +1.7 |
| **BZP** | **Bezymyannyi-Pe** | **0.40** | **331** | *e*P | Pn | 04 03 13.9 | +1.2 |
| **KMNR** | **Kamenistaya** | **0.41** | **298** | *e*P | Pn | 04 03 14.1 | +1.3 |
| KMNR | | | | *e*S | Sn | 04 03 30.5 | +1.2 |
| **BZMR** | **Bezymyannaya** | **0.43** | **329** | *e*P | Pn | 04 03 14.2 | +1.3 |
| **TUMD** | **Tumrok D** | **0.46** | **217** | *e*P | Pn | 04 03 14.1 | +1.2 |
| **ZLN** | **Zelenaya** | **0.46** | **354** | *e*P | Pn | 04 03 14.5 | +1.6 |
| ZLN | | | | *e*S | Sn | 04 03 31.5 | +1.9 |
| **BZWR** | **Bezymyannyi-We** | **0.46** | **332** | *e*P | Pn | 04 03 14.3 | +1.3 |
| BZWR | | | | *e*S | Sn | 04 03 31.0 | +1.2 |
| **KIRR** | **Kirishev** | **0.49** | **322** | *e*P | Pn | 04 03 14.1 | +0.9 |
| KIRR | | | | *e*S | Sn | 04 03 30.3 | +0.3 |
| **TUMR** | **Tumrok** | **0.51** | **236** | *e*P | Pn | 04 03 14.9 | +1.7 |
| TUMR | | | | *e*S | Sn | 04 03 31.7 | +1.7 |
| **KPT** | **Kopyto** | **0.55** | **317** | *e*P | Pn | 04 03 14.2 | +0.8 |
| **CIRR** | **Tsirk** | **0.56** | **352** | *e*P | Pn | 04 03 15.1 | +1.6 |
| **KRSR** | **Krestovskiy** | **0.68** | **345** | *e*P | Pn | 04 03 14.8 | +0.7 |
| KRSR | | | | *e*S | Sn | 04 03 31.8 | 0.0 |
| **KOZ** | **Kozyrevsk** | **0.75** | **311** | *e*P | Pn | 04 03 15.3 | +0.8 |
| **KLY** | **Klyuchi** | **0.76** | **350** | *e*P | Pn | 04 03 15.4 | +0.9 |
| KLY | | | | *e*S | Sn | 04 03 33.5 | +1.0 |
| **SRDR** | **Sredinnyy** | **1.00** | **319** | *e*P | Pn | 04 03 17.0 | +0.6 |
| **MKZ** | **Mys Kozlova** | **1.12** | **154** | *e*P | Pn | 04 03 18.7 | +1.3 |
| MKZ | | | | *e*S | Sn | 04 03 39.3 | +1.9 |
| **KBG** | **Krutoberegovo** | **1.24** | **55** | *e*P | Pn | 04 03 20.0 | +1.6 |
| KBG | | | | *e*S | Sn | 04 03 41.0 | +1.7 |
| **KBTR** | **Krutoberegovo** | **1.27** | **59** | *e*P | Pn | 04 03 20.1 | +1.4 |
| KBTR | | | | *e*S | Sn | 04 03 41.4 | +1.5 |
| **ESO** | **Esso** | **1.28** | **287** | *e*P | Pn | 04 03 19.5 | +0.6 |
| **KII** | **Karymskiy** | **1.74** | **209** | *e*P | Pn | 04 03 25.7 | +1.9 |
| **SPN** | **Mys Shipunski** | **2.52** | **192** | *e*P | Pn | 04 03 32.8 | 0.0 |
| SPN | | | | *e*S | Sn | 04 04 03.7 | -1.1 |
| **GNL** | **Ganaly** | **2.54** | **224** | *e*P | Pn | 04 03 34.9 | +1.9 |
| **NLC** | **Nalytchevo** | **2.56** | **201** | *e*S | Sn | 04 04 06.6 | +1.0 |
| **SMAR** | **Somma** | **2.61** | **209** | *e*P | Pn | 04 03 36.7 | +2.7 |
| **AVH** | **Avacha** | **2.62** | **209** | *e*P | Pn | 04 03 36.2 | +2.1 |
| **UGLR** | **Uglovaya** | **2.65** | **208** | *e*P | Pn | 04 03 37.2 | +2.8 |
| **BKI** | **Bering** | **2.93** | **95** | *e*P | Pn | 04 03 39.9 | +2.3 |
| BKI | | | | *e*S | Sn | 04 04 14.4 | +0.7 |
| **GRL** | **Gorelyy** | **3.44** | **210** | *e*P | Pn | 04 03 46.1 | +1.6 |
| **MTVR** | **Mutnovka** | **3.47** | **208** | *e*P | Pn | 04 03 47.4 | +2.6 |
| **ASAK** | **Asacha** | **3.64** | **210** | *e*P | Pn | 04 03 48.9 | +1.9 |
| **KDTR** | **Khodutka, Kamc** | **4.12** | **205** | *e*P | Pn | 04 03 54.2 | +1.3 |
| KDTR | | | | *e*S | Sn | 04 04 39.5 | -1.5 |

*JMA **26** 04:09:52.8±0.5,30°N±4°×13°9E±°,h467km,MV3.4/11,*
*NEAR TORISHIMA IS*
*IDC **26** 04:09:52.0±5.8,30°.03N×137°.42E,h380km±142km,*
*mb2.9/2,mbtmp3.7/4,Error ellipse: s-maj=243.1km*
*s-min=71.9km az=67.0*
**ISC 26 04:09:54.0**±1.2,**30°5N**±0°.1×**138°8E**±0°.1,**h450**km,**n11,**
σ1§**84**/15,**Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ** | **Hachijo jima 2** | **2.77** | **18** | P | **P** | **04 11 00.2** | **+1.0** |
| | 48nm,0.3s,baz=129,slow=21,SNR=7.0 | | | | | | |
| JHJ | | | | S | **S** | **04 11 47.3** | **-5.1** |
| | 102nm,0.9s,baz=72,slow=20,SNR=1.6 | | | | | | |
| **JHJ2** | **Mitsune** | **2.77** | **18** | *e*P | **P** | **04 11 00.3** | **+1.1** |
| **JIE** | **Ise** | **4.29** | **336** | *e*P | **P** | **04 11 13.4** | **+1.9** |
| **JTNC** | **Tanabenakahech** | **4.29** | **322** | *e*P | **P** | **04 11 12.5** | **+0.9** |
| **BSO1** | **Boso 1** | **4.56** | **23** | *e*P | **P** | **04 11 14.6** | **+1.1** |
| BSO1 | | | | *e*S | **S** | **04 12 19.8** | **+1.4** |
| **JOD2** | **Odawara 2** | **4.79** | **3** | *e*P | **P** | **04 11 16.9** | **+0.7** |
| JOD2 | | | | *e*S | **S** | **04 12 23.7** | **+0.4** |
| **JRY** | **Ryogami san** | **5.53** | **1** | P | **P** | **04 11 17.2** | **+0.7** |
| JRY | | | | *e*S | **S** | **04 12 35.0** | **-1.6** |
| **MJAR** | **Matsushiro Arr** | **6.07** | **356** | P | **P** | **04 11 29.1** | **+0.2** |
| | 1.9nm,0.4s,baz=173,slow=11,SNR=13 | | | | | | |
| **JHS** | **Saijyo** | **6.57** | **315** | *e*P | **P** | **04 11 34.6** | **+0.5** |
| **WRA** | **Warramunga Arr** | **50.31** | **185** | P | **P** | **04 18 07.1** | **-0.8** |
| | 0.7nm,0.4s,baz=1.4,slow=7.9,SNR=22 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **54.03** | **186** | P | **P** | **04 18 35.5** | **+0.6** |
| | 0.3nm,0.6s,baz=17,slow=12,SNR=11 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

**DJA 26 04:14:50.3**±0.4,**9°S**±7°×**11°8E**±°,**h76**km±6km,**M3.8/8,**
**mb4.4/1,MLv3.5/8,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **0.35** | **305** | P | Pn | 04 15 03.9 | +1.4 |
| PLAI | | | | S | Sn | 04 15 14.1 | +2.6 |
| **TWSI** | **Taliwang, Sumb** | **1.21** | **284** | P | Pn | 04 15 12.8 | +1.1 |
| TWSI | | | | S | Sn | 04 15 29.4 | +1.6 |
| **WBSI** | **Waikabubak, Su** | **1.44** | **115** | P | Pn | 04 15 14.3 | -0.4 |
| WBSI | | | | S | Sn | 04 15 33.2 | +0.1 |
| **BASI** | **Baing, Sumba** | **2.74** | **116** | P | Pn | 04 15 32.6 | +0.5 |
| **SRBI** | **Singaraja** | **2.98** | **288** | P | Pn | 04 15 35.0 | -0.3 |
| SRBI | | | | S | Sn | 04 16 07.6 | -2.4 |
| **BSSI** | **Bau Bau, Buton** | **3.74** | **40** | P | Pn | 04 15 45.6 | -0.1 |
| BSSI | | | | S | Sn | 04 16 25.7 | -2.9 |
| **JAGI** | **Jajag, Banyuwa** | **3.91** | **278** | P | Pn | 04 15 47.5 | -0.5 |
| **BATI** | **Baumata** | **5.64** | **102** | P | Pn | 04 16 12.2 | +0.6 |

*IDC **26** 04:17:05.6±2.3,34°.74N×46°.51E,h0km,mb3.7/5,*
*mbtmp3.7/7,ML3.4/2,MS3.6/3,Error ellipse: s-maj=60.4km*
*s-min=36.4km az=42.0*
*ISN **26** 04:17:06.6±0.5,34°.65N×46°.25E,h9km±6km,ML3.6*
*TEH **26** 04:17:07.2,34°.64N×46°.27E,h8km±16km,ML3.6*
**ISC 26 04:17:08.0**±0.9,**34°62N**±0°.03×**46°27E**±0°.03,**h8**km±7km,
**n50,**σ1§**44**/52,**mb3.9**/9,**MS3.7**/3,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.13** | **49** | Pg | **Pb** | **04 17 10.4** | **-0.5** |
| **IGHG** | **Ghaleghazi** | **0.38** | **139** | Pg | **Pg** | **04 17 15.4** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.57** | **259** | Pg | **Pg** | **04 17 18.8** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **211** | Pg | **Pg** | **04 17 19.0** | **-0.3** |
| **ILIN** | **Lien** | **0.64** | **62** | Pg | **Pg** | **04 17 19.8** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **118** | Pg | **Pg** | **04 17 21.2** | **-0.7** |
| KCHF | | | | Sg | **Sb** | **04 17 32.7** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **183** | Pg | **Pb** | **04 17 26.8** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.14** | **78** | Pg | **Pn** | **04 17 29.2** | **-1.3** |
| **IBZA** | **Bozab** | **1.32** | **96** | Pg | **Pn** | **04 17 32.6** | **-0.3** |
| **IBDR** | **Badra** | **1.53** | **191** | *e*Pn | **Pb** | **04 17 36.5** | **0.0** |
| IBDR | | | | *e*Sn | **Sg** | **04 17 58.0** | **+0.9** |
| IBDR | | | | AML | AML | 04 18 07.6 | |
| | comp=N,578nm,0.1s | | | | | | |
| IBDR | | | | AML | AML | 04 18 09.4 | |
| | comp=E,972nm,0.5s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.66** | **337** | Pg | **Pn** | **04 17 38.5** | **+1.0** |
| **IKFM** | **Kafar-mosalman** | **1.70** | **129** | Pg | **Pb** | **04 17 39.3** | **-0.1** |
| **IKRK** | **Kirkuk** | **1.77** | **297** | *e*Pn | **Pn** | **04 17 38.5** | **-0.3** |
| IKRK | | | | *e*Sn | **Sb** | **04 18 02.5** | **-0.4** |
| IKRK | | | | AML | AML | 04 18 08.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 04 18 11.2 | |
| | comp=E,1μm,0.8s | | | | | | |
| **IDOB** | **Doab** | **1.78** | **117** | Pg | **Pb** | **04 17 40.5** | **-0.5** |
| **HSAM** | **Samen** | **1.97** | **101** | Pn | **Pb** | **04 17 43.9** | **-0.3** |
| **BHD** | **Baghdad** | **2.07** | **230** | *e*Pn | **Pn** | **04 17 43.5** | **+0.6** |
| BHD | | | | *e*Sn | **Sb** | **04 18 10.0** | **-1.5** |
| BHD | | | | AML | AML | 04 18 20.2 | |
| | comp=E,493nm,0.7s | | | | | | |
| **MAHB** | **Mahabad** | **2.19** | **348** | Pn | **Pn** | **04 17 45.6** | **+0.8** |
| **RAFI** | **Al-Rafai** | **2.89** | **183** | *e*Pn | **Pn** | **04 17 55.0** | **+0.8** |
| RAFI | | | | *e*Sn | **Sn** | **04 18 30.5** | **+1.4** |
| RAFI | | | | AML | AML | 04 18 48.1 | |
| | comp=N,208nm,0.3s | | | | | | |
| RAFI | | | | AML | AML | 04 18 52.3 | |
| | comp=E,192nm,0.8s | | | | | | |
| **IRAZ** | **Razeghan** | **3.10** | **74** | Pn | **Pn** | **04 17 58.8** | **+1.4** |
| **ISHB** | **Shabestar** | **3.70** | **352** | Pn | **Pn** | **04 18 07.0** | **+1.5** |
| **IHRS** | **Heris** | **3.75** | **9** | Pn | **Pn** | **04 18 07.9** | **+1.7** |
| **QAMS** | **Qamsar** | **4.34** | **100** | Pn | **Pn** | **04 18 15.8** | **+1.4** |
| **JHBN** | **Jahan bin** | **4.38** | **122** | Pn | **Pn** | **04 18 16.4** | **+1.4** |
| **GRMI** | **Germi** | **4.38** | **17** | Pn | **Pn** | **04 18 16.9** | **+2.0** |
| **IVRN** | **Varamin** | **4.50** | **84** | Pn | **Pn** | **04 18 17.1** | **+0.6** |
| **ZNGN** | **Zangian** | **4.57** | **122** | Pn | **Pn** | **04 18 19.8** | **+2.1** |
| **IDMV** | **Damavand** | **4.82** | **77** | Pn | **Pn** | **04 18 22.9** | **+1.8** |
| **KRSH** | **Karshahi** | **4.90** | **96** | Pn | **Pn** | **04 18 24.1** | **+2.1** |
| **ISFB** | **Sefidab** | **4.94** | **91** | Pn | **Pn** | **04 18 24.2** | **+1.7** |
| **IZEF** | **Zefreh** | **5.33** | **107** | Pn | **Pn** | **04 18 29.9** | **+1.9** |
| **IFIR** | **Firoozkooh** | **5.41** | **77** | Pn | **Pn** | **04 18 31.4** | **+2.3** |
| **KLNJ** | **Kolanjah** | **5.75** | **127** | Pn | **Pn** | **04 18 35.1** | **+1.3** |
| **IRAM** | **Ramesheh** | **5.84** | **117** | Pn | **Pn** | **04 18 36.7** | **+1.7** |
| **BRTR** | **Keskin Array B** | **11.29** | **301** | Pn | **Pn** | **04 19 53.2** | **+3.6** |
| | comp=E,0.1nm,0.3s,baz=122,slow=11,SNR=8.8 | | | | | | |
| BRTR | | | | LR | LR | 04 24 05.3 | |
| | comp=E,9.9nm,18.8s,baz=133,slow=37 | | | | | | |
| | comp=E,1.0nm,0.8s | | | | | | |
| **WSAR** | **Wadi Sarin** | **15.65** | **133** | Pn | **Pn** | **04 20 47.0** | **-1.9** |
| | comp=E,0.7nm,0.3s,baz=320,slow=8.2,SNR=5.7 | | | | | | |
| | comp=E,3.8nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **20.30** | **328** | P | **P** | **04 21 42.8** | **-1.3** |
| | comp=E,0.5nm,0.3s,baz=139,slow=8.8,SNR=5.0 | | | | | | |
| | comp=E,0.5nm,0.3s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **22.78** | **316** | *e*P | **P** | **04 22 14.6** | **+3.8** |
| **CRVS** | **Cervenica-Dubn** | **23.23** | **315** | *e*P | **P** | **04 22 16.7** | **+1.3** |
| **WTTA** | **Wattenberg** | **28.81** | **307** | *i* pP | **P** | **04 23 08.0** | **+1.4** |
| | comp=E,0.8nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **29.08** | **306** | *i* pP | **P** | **04 23 09.7** | **+0.8** |
| | comp=E,1.4nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **29.18** | **307** | *i* P | **P** | **04 23 09.1** | **-0.8** |
| | comp=E,0.3nm,0.2s | | | | | | |
| **FETA** | **Feichten** | **29.36** | **306** | *i* pP | **P** | **04 23 11.3** | **-0.1** |
| | comp=E,1.5nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **29.79** | **340** | P | **P** | **04 23 13.2** | **-1.6** |
| | comp=E,0.6nm,0.4s,baz=148,slow=8.2,SNR=4.6 | | | | | | |
| | comp=E,0.6nm,0.4s | | | | | | |
| **DAVA** | **Damuels** | **29.98** | **306** | *i* P | **P** | **04 23 15.8** | **-1.1** |
| | comp=E,1.5nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **33.13** | **330** | P | **P** | **04 23 43.7** | **-0.5** |
| | comp=E,1.3nm,0.6s,baz=132,slow=8.2,SNR=6.8 | | | | | | |
| | comp=E,1.3nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.13** | **42** | LR | LR | 04 40 13.3 | |
| | comp=E,11nm,19.7s,baz=296,slow=42 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.59** | **317** | P | **P** | **04 24 38.5** | **-1.1** |
| | comp=E,0.3nm,0.3s,baz=102,slow=9.0,SNR=6.1 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.94** | **292** | P | **P** | **04 24 42.3** | **-0.3** |
| | comp=E,0.9nm,0.8s,baz=56,slow=8.7,SNR=5.9 | | | | | | |
| | comp=E,0.9nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **62.47** | **201** | LR | LR | 04 54 55.6 | |
| | comp=E,104nm,18.2s,baz=332,slow=36 | | | | | | |
| **BOSA** | **Boshof** | **65.95** | **200** | LR | LR | 04 55 41.6 | |
| | comp=E,46nm,19.0s,baz=348,slow=35 | | | | | | |

*ISN **26** 04:21:48.9±0.7,34°.65N×46°.19E,h8km±9km,ML2.8*
*TEH **26** 04:21:50.2,34°.65N×46°.16E,h10km±38km,ML2.6*
**ISC 26 04:21:50.2**±1.1,**34°63N**±0°.04×**46°16E**±0°.04,**h11**km±12km,
**n11,**σ0§**65**/14,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.20** | **70** | Pg | **Pg** | **04 21 54.9** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.45** | **131** | Pg | **Pb** | **04 21 59.8** | **-0.6** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **202** | Pg | **Pb** | **04 22 01.7** | **-0.3** |
| **ILIN** | **Lien** | **0.72** | **66** | Pg | **Pb** | **04 22 04.0** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **178** | Pg | **Pn** | **04 22 09.9** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.23** | **79** | Pg | **Pn** | **04 22 14.4** | **+0.8** |
| **IBZA** | **Bozab** | **1.42** | **96** | Pg | **Pg** | **04 22 17.5** | **+0.1** |
| **IBDR** | **Badra** | **1.53** | **187** | *e*Pn | **Pg** | **04 22 19.0** | **-0.6** |
| IBDR | | | | *e*Sn | **Sg** | **04 22 40.0** | **+0.6** |
| IBDR | | | | AML | AML | 04 22 50.0 | |
| | comp=E,155nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 04 22 52.5 | |
| | comp=N,121nm,0.4s | | | | | | |
| **IKRK** | **Kirkuk** | **1.68** | **298** | *e*Pn | **Pb** | **04 22 20.5** | **-0.6** |
| IKRK | | | | *e*Sn | **Sg** | **04 22 44.0** | **-0.2** |
| IKRK | | | | AML | AML | 04 22 50.6 | |
| | comp=N,171nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 04 22 51.4 | |
| | comp=E,150nm,0.4s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.78** | **128** | Pg | **Pg** | **04 22 24.4** | **0.0** |
| **BHD** | **Baghdad** | **2.01** | **228** | *e*Pn | **Pn** | **04 22 25.0** | **+1.0** |
| BHD | | | | *e*Sn | **Sb** | **04 22 52.0** | **+0.4** |

*IDC **26** 04:21:41.4±1.1,7°.89S×128°.05E,h0km,mb4.1/7,*
*mbtmp4.1/9,ML4.4/2,MS3.2/1,Error ellipse:*
*s-maj=142.8km s-min=18.3km az=67.0*
*NEIC **26** 04:21:51.2±1.4,7°.69S±0°.08×128°.91E±0°.04,h83km±9km,*
*mb4.2/14,Error ellipse: s-maj=12.7km s-min=4.5km*
*az=157.0*
**ISC 26 04:21:52.3**±0.6,**7°84S**±0°.06×**128°97E**±0°.07,**h100**km,**n54,**
σ2§**27**/54,**mb4.1**/12,**Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.31** | **94** | Pn | **Pn** | **04 22 27.9** | **-1.0** |
| **DRS** | **Darwin Rock St** | **4.94** | **158** | P | **Pn** | **04 23 07.0** | **+2.7** |
| **SOEI** | **Soe** | **5.03** | **247** | P | **Pn** | **04 23 05.0** | **-0.5** |
| **SOEI** | **Soe** | **5.03** | **247** | Pn | **Pn** | **04 23 04.2** | **-1.3** |
| **MTN** | **Manton Dam** | **5.41** | **157** | P | **Pn** | **04 23 12.8** | **+2.2** |
| **MTN** | **Manton Dam** | **5.41** | **157** | Pn | **Pn** | **04 23 12.5** | **+1.8** |
| **FAKI** | **Fak Fak** | **5.87** | **34** | P | **Pn** | **04 23 14.7** | **-2.3** |
| **FAKI** | **Fak Fak** | **5.87** | **34** | Pn | **Pn** | **04 23 14.2** | **-2.7** |
| **KDU** | **Kakadu** | **5.92** | **145** | P | **Pn** | **04 23 18.9** | **+1.3** |
| **KNRA** | **Kununurra** | **7.79** | **181** | Pn | **Pn** | **04 23 43.2** | **+0.2** |
| **LUWI** | **Luwuk** | **9.15** | **317** | Pn | **Pn** | **04 23 55.0** | **-6.5** |
| **FITZ** | **Fitzroy Crossi** | **10.70** | **197** | Pn | **Pn** | **04 24 20.2** | **-2.4** |
| **WB0** | **Warramunga Arr** | **12.97** | **157** | Pn | **Pn** | **04 24 51.5** | **-1.4** |
| **WRAB** | **Tennant Creek** | **13.11** | **157** | Pn | **Pn** | **04 24 53.2** | **-1.5** |
| **WRA** | **Warramunga Arr** | **13.11** | **157** | Pn | **Pn** | **04 24 51.4** | **-3.3** |
| **WRA** | **Warramunga Arr** | **13.11** | **157** | Pn | **Pn** | **04 24 53.2** | **-1.5** |
| | 2.2nm,0.3s,baz=345,slow=13,SNR=86 | | | | | | |
| WRA | | | | Sn | **Sn** | **04 27 13.1** | **-5.9** |
| | 2.3nm,0.3s,baz=329,slow=24,SNR=9.3 | | | | | | |
| | 8.8nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **13.12** | **157** | Pn | **Pn** | **04 24 52.6** | **-2.2** |
| **WR0** | **Warramunga Arr** | **13.20** | **156** | Pn | **Pn** | **04 24 53.6** | **-2.4** |
| **COEN** | **Coen** | **15.21** | **115** | Pn | **Pn** | **04 25 22.0** | **+0.1** |
| **MBWA** | **Marble Bar** | **15.97** | **213** | Pn | **Pn** | **04 25 29.5** | **-1.8** |
| MBWA | | | | IAmb | IAmb | 04 25 36.6 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **16.25** | **212** | P | **Pn** | **04 25 33.6** | **-1.2** |
| **PSA00** | **Pilbara Seismi** | **16.25** | **212** | Pn | **Pn** | **04 25 33.5** | **-1.2** |
| PSA00 | | | | IAmb | IAmb | 04 25 39.9 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **QIS** | **Mount Isa** | **16.30** | **142** | P | **P** | **04 25 36.3** | **-0.3** |
| **AS31** | **Alice Springs** | **16.43** | **164** | Pn | **Pn** | **04 25 37.7** | **+0.6** |
| **ASAR** | **Alice Springs** | **16.44** | **164** | Pn | **Pn** | **04 25 36.5** | **-0.6** |
| **ASAR** | **Alice Springs** | **16.44** | **164** | Pn | **Pn** | **04 25 37.5** | **+0.4** |
| | comp=Z,1.1nm,0.3s,baz=330,slow=9.4,SNR=88 | | | | | | |
| ASAR | | | | Sn | **Sn** | **04 28 33.0** | **-6.5** |
| | comp=Z,0.7nm,0.3s,baz=318,slow=18,SNR=6.0 | | | | | | |
| ASAR | | | | LR | LR | 04 32 24.8 | |
| | comp=Z,80nm,19.7s,baz=322,slow=39 | | | | | | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **WRKA** | **Warakurna** | **17.12** | **182** | P | **Pn** | **04 25 45.0** | **-0.4** |
| **GIRL** | **Giralia** | **20.44** | **222** | P | **P** | **04 26 23.6** | **+1.8** |
| **OOD** | **Oodnadatta** | **20.84** | **163** | P | Pn | 04 26 29.3 | -0.2 |
| **INKA** | **Innaminka** | **22.72** | **152** | P | **P** | **04 26 50.0** | **+4.1** |
| **MULG** | **Mulgathing** | **22.83** | **169** | P | **P** | **04 26 50.0** | **+3.0** |
| **FORT** | **Forrest** | **22.84** | **182** | P | **P** | **04 26 50.2** | **+3.1** |
| **FORT** | **Forrest** | **22.84** | **182** | P | **P** | **04 26 49.7** | **+2.7** |
| **QLP** | **Quilpie** | **23.62** | **144** | P | **P** | **04 26 58.6** | **+4.2** |
| **LCRK** | **Leigh Creek** | **24.10** | **160** | P | **P** | **04 27 02.1** | **+3.4** |
| **BBOO** | **Buckleboo** | **25.70** | **166** | P | **P** | **04 27 15.7** | **+2.5** |
| BBOO | | | | IAmb | IAmb | 04 27 59.4 | |
| | comp=Z,7.6nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **26.65** | **156** | P | **P** | **04 27 24.4** | **+2.6** |
| **STKA** | **Stephens Creek** | **26.65** | **156** | P | **P** | **04 27 25.3** | **+3.5** |
| | comp=Z,1.4nm,0.5s,baz=338,slow=10,SNR=4.9 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **27.24** | **202** | P | **P** | **04 27 28.0** | **+1.0** |
| **HHC** | **Hu-ho-hao-te** | **51.03** | **343** | *e*P | **P** | **04 30 46.5** | **+2.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,59nm,4.2s | | | | | | |
| **SONM** | **Songino Array** | **58.92** | **342** | | **P** | **04 31 41.5** | **+0.5** |
| SONM | | | | IAmb | IAmb | 04 31 46.9 | |
| | comp=Z,1.9nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **58.92** | **342** | P | **P** | **04 31 40.6** | **-0.4** |
| | comp=Z,0.5nm,0.7s,baz=167,slow=7.7,SNR=3.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **68.37** | **327** | P | **P** | **04 32 42.9** | **-0.3** |
| MK31 | | | | IAmb | IAmb | 04 32 43.7 | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.37** | **327** | P | **P** | **04 32 42.0** | **-1.1** |
| **MKAR** | **Makanchi Array** | **68.37** | **327** | P | **P** | **04 32 42.9** | **-0.2** |
| | comp=Z,2.0nm,0.7s,baz=125,slow=7.8,SNR=18 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.88** | **334** | P | **P** | **04 33 03.5** | **-0.8** |
| | comp=Z,2.4nm,0.8s,baz=129,slow=4.0,SNR=6.9 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.69** | **329** | P | **P** | **04 33 08.4** | **-0.8** |
| | comp=Z,2.5nm,0.7s,baz=131,slow=5.0,SNR=18 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **72.70** | **329** | P | **P** | **04 33 08.8** | **-0.5** |
| KURK | | | | IAmb | IAmb | 04 33 09.8 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **73.30** | **319** | P | **P** | **04 33 12.8** | **-0.2** |
| KK31 | | | | IAmb | IAmb | 04 33 14.5 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **KKAR** | **Karatay Array** | **73.30** | **319** | P | **P** | **04 33 13.1** | **0.0** |
| **BVAR** | **Borovoye Array** | **78.23** | **328** | P | **P** | **04 33 40.4** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=140,slow=7.4,SNR=4.0 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.14** | **180** | P | **P** | **04 34 03.4** | **+1.5** |
| QSPA | | | | IAmb | IAmb | 04 34 27.6 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.14** | **180** | P | **P** | **04 34 03.2** | **+1.3** |
| | comp=Z,1.6nm,1.1s,baz=246,slow=1.8,SNR=5.8 | | | | | | |
| | comp=Z,1.6nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **82.53** | **322** | P | **P** | **04 34 03.4** | **-0.6** |

*IDC **26** 04:23:52.4±4.5,13°.16S×166°.92E,h218km±39km,mb3.7/5,*
*mbtmp4.2/6,Error ellipse: s-maj=29.7km s-min=26.8km*
*az=63.0*
*NEIC **26** 04:23:55.0±1.4,13°.29S±0°.04×167°.1E±0°.2,h239km±9km,*
*mb4.2/14,Error ellipse: s-maj=25.7km s-min=6.4km*
*az=93.0*
**ISC 26 04:23:49.6**±0.8,**13°04S**±0°.08×**167°1E**±0°.1,**h200**km,**n41,**
σ1§**51**/42,**mb4.2**/13,**Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOUNC** | **Koumac, New Ca** | **7.94** | **199** | Pn | **Pn** | **04 25 44.2** | **+2.2** |
| KOUNC | | | | Sn | **Sn** | **04 27 12.3** | **+0.7** |
| **DZM** | **Mont Dzumac** | **9.01** | **184** | P | **Pn** | **04 25 57.7** | **+1.7** |
| | 3.8nm,0.6s,baz=124,slow=14,SNR=6.6 | | | | | | |
| DZM | | | | S | **Sn** | **04 27 37.0** | **-0.1** |
| | 5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,164nm,0.2s | | | | | | | |
| IKRK | | | | | AML | AML | 04 40 08.0 | |
| | comp=N,131nm,0.4s | | | | | | | |
| **BHD** | **Baghdad** | **2.01** | **229** | *e*Pn | **Pn** | | **04 39 40.0** | **-0.1** |
| BHD | | | | *e*Sn | **Sn** | | **04 40 05.8** | **+0.5** |
| **RAFI** | **Al-Rafai** | **2.89** | **181** | *e*Pn | **Pn** | | **04 39 53.0** | **+0.9** |
| RAFI | | | | *e*Sn | **Sn** | | **04 40 27.5** | **+0.6** |

*NEIC* ***26*** *04:43:43.7±1.2,35.475N×97.91W±0.01,h5km±1km, Error ellipse: s-maj=2.9km s-min=1.9km az=215.0*
**TUL 26 04:43:44.2±1.1,35.475N±0.010×97.91W±0.01,h7km±4km, ML2.1,mb_Lg2.1**/12(NEIC),**ML2.2**/36(NEIC),**Error ellipse: s-maj=1.7km s-min=0.8km az=137.0,Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKCSW | **OKLAHOMA CITY** | **0.39** | **100** | Pg | Pg | 04 43 51.7 | -0.1 |
| OKCSW | | | | Sg | Sg | 04 43 57.4 | +0.3 |
| **FNO** | **Franklin** | **0.47** | **117** | Pg | Pg | 04 43 53.3 | 0.0 |
| FNO | | | | Sg | Sg | 04 44 00.5 | +1.0 |
| FNO | | | | IAML | | 04 44 06.2 | |
| | comp=N,127nm,0.6s | | | | | | |
| **ADOK** | **Arcadia Dam** | **0.47** | **68** | Pg | Pg | 04 43 54.0 | +0.6 |
| **OK029** | **Liberty Lake** | **0.49** | **49** | Pg | Pg | 04 43 54.2 | +0.5 |
| OK029 | | | | Sg | Sg | 04 44 01.0 | +0.8 |
| OK029 | | | | IAML | | 04 44 03.8 | |
| | comp=N,182nm,0.3s | | | | | | |
| OK029 | | | | IAML | | 04 44 04.0 | |
| | comp=N,189nm,0.5s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.66** | **285** | Pg | Pg | 04 43 57.1 | +0.2 |
| **X34A** | **Smith Ranch, M** | **0.88** | **176** | Pg | Pg | 04 44 00.8 | -0.2 |
| X34A | | | | IAML | | 04 44 15.8 | |
| | comp=E,43nm,0.2s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.02** | **224** | Pg | Pg | 04 44 02.8 | -1.0 |
| **OK052** | **Battle Ridge R** | **1.04** | **60** | Pg | Pg | 04 44 03.2 | -1.0 |
| OK052 | | | | IAML | | 04 44 20.9 | |
| | comp=E,100nm,0.3s | | | | | | |
| **QUOK** | **Quay** | **1.20** | **54** | | Pg | 04 44 06.1 | -1.1 |
| **OK038** | **West end E0370** | **1.21** | **326** | | Pg | 04 44 06.3 | -1.1 |
| **OK032** | **Salt Plains WL** | **1.35** | **350** | | Pn | 04 44 08.2 | -1.3 |
| **OK051** | **E0350 and S346** | **1.35** | **40** | | Pn | 04 44 08.1 | -1.4 |
| **GC02** | **Grant County #** | **1.37** | **2** | | Pn | 04 44 08.5 | -1.4 |
| **LOOK** | **Love County** | **1.60** | **158** | | Pn | 04 44 12.5 | -0.4 |
| **WTFS** | **Witchita Falls** | **1.77** | **195** | Pn | Pn | 04 44 15.6 | +0.4 |
| **TUL3** | **Leonard** | **1.78** | **75** | Pn | Pn | 04 44 15.6 | +0.1 |
| **T35A** | **Sooner Cattle** | **1.83** | **38** | Pn | Pn | 04 44 16.1 | 0.0 |
| **SMWD** | **Samnorwood** | **1.94** | **260** | Pn | Pn | 04 44 16.8 | -0.9 |
| **Z35A** | **Perchaven, San** | **2.21** | **166** | Pn | Pn | 04 44 22.3 | +1.0 |
| **X37A** | **Clayton** | **2.27** | **112** | Pn | Pn | 04 44 22.9 | +0.8 |
| **FW03** | **Perrin-Whitt E** | **2.43** | **183** | IAmb_Lg | | 04 45 05.2 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **RLO** | **Rose Lookout** | **2.45** | **73** | Pn | Pn | 04 44 25.1 | +0.5 |
| **PLPT** | **Palo Pinto** | **2.68** | **187** | Pn | Pn | 04 44 28.8 | +1.1 |
| **MIAR** | **Mount Ida** | **3.68** | **103** | Pn | Pn | 04 44 41.4 | -0.1 |
| **S39A** | **Bolivar** | **4.30** | **58** | IAmb_Lg | | 04 46 03.8 | |
| | comp=Z,4.1nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.73** | **83** | IAmb_Lg | | 04 46 16.8 | |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.86** | **68** | IAmb_Lg | | 04 46 26.9 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **5.23** | **198** | IAmb_Lg | | 04 46 39.3 | |
| | comp=Z,9.9nm,1.3s | | | | | | |
| **R40A** | **Maddies Statio** | **5.33** | **56** | IAmb_Lg | | 04 46 38.5 | |
| | comp=Z,2.5nm,0.8s | | | | | | |

**HEL 26 04:50:23.2±0.6,67.85N×20.34E,h0km,ML0.8, Explosion,Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAJU** | **Pajala** | **1.35** | **126** | SG | Sg | 04 51 04.9 | -1.8 |
| **HEF** | **Hetta** | **1.36** | **64** | PG | Pg | 04 50 47.5 | -1.8 |
| HEF | | | | MSG | | 04 51 04.4 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| HEF | | | | SG | Sg | 04 51 05.6 | -1.3 |
| **KLF** | **Kolari** | **1.52** | **112** | MSG | | 04 51 08.8 | |
| | comp=Z,0.7nm,0.2s | | | | | | |
| KLF | | | | SG | Sg | 04 51 10.6 | -1.5 |
| **KTK1** | **Kautokeino** | **1.58** | **41** | SN | Sg | 04 51 15.3 | +1.2 |
| **TRO** | **Tromso** | **1.86** | **345** | SG | Sg | 04 51 23.0 | 0.0 |
| **KALU** | **Kalix** | **2.33** | **148** | SB | Sb | 04 51 33.6 | -1.6 |
| **TOF** | **Tornio** | **2.37** | **137** | MSG | | 04 51 33.4 | |
| | comp=Z,0.3nm,0.2s | | | | | | |
| TOF | | | | SB | Sb | 04 51 35.4 | -1.0 |
| **SGF** | **Sodankyl** | **2.40** | **97** | SG | Sb | 04 51 36.0 | -1.4 |
| **ARA0** | **ARCESS Array S** | **2.54** | **46** | PN | Pn | 04 51 05.9 | +0.3 |
| | baz=233 | | | | | | |
| ARA0 | | | | SB | Sn | 04 51 38.7 | +1.6 |
| **RNF** | **Rovaniemi** | **2.54** | **117** | PN | Pn | 04 51 05.8 | +0.2 |
| RNF | | | | SG | Sb | 04 51 40.2 | -1.0 |

*ISN* ***26*** *04:53:11.1±0.4,34.65N×46.24E,h8km±5km,ML2.9*
*TEH* ***26*** *04:53:12.2,34.65N×46.25E,h11km±48km,ML2.8*
**ISC 26 04:53:12.0±1.1,34.67N±0.04×46.23E±0.04,h10km±11km, n12,σ0.91/16,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.13** | **77** | Pg | **Pg** | **04 53 15.8** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **0.44** | **140** | Pg | **Pb** | **04 53 21.0** | **-1.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **253** | Pg | **Pb** | **04 53 23.3** | **-0.5** |
| **ILIN** | **Lien** | **0.65** | **67** | Pg | **Pb** | **04 53 25.1** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **0.78** | **120** | Pg | **Pb** | **04 53 26.6** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.04** | **181** | Pg | **Pb** | **04 53 31.8** | **-0.4** |
| **SNQR** | **Sonqor, Kerman** | **1.17** | **80** | Pg | **Pn** | **04 53 34.4** | **-0.2** |
| **IBDR** | **Badra** | **1.58** | **189** | *e*Pn | **Pb** | **04 53 41.0** | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | **04 54 02.5** | **-0.2** |
| IBDR | | | | AML | AML | 04 54 14.8 | |
| | comp=N,156nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 04 54 17.0 | |
| | comp=E,199nm,0.9s | | | | | | |
| **IKRK** | **Kirkuk** | **1.71** | **296** | *e*Pn | **Pb** | **04 53 43.3** | **-0.3** |
| IKRK | | | | *e*Sn | **Sg** | **04 54 07.0** | **-0.1** |
| **IKFM** | **Kafar-mosalman** | **1.76** | **130** | Pg | **Pg** | **04 53 45.9** | **+0.1** |
| **BHD** | **Baghdad** | **2.08** | **228** | *e*Pn | **Pb** | **04 53 48.0** | **-1.8** |
| BHD | | | | *e*Sn | **Sb** | **04 54 15.0** | **-0.6** |
| **RAFI** | **Al-Rafai** | **2.94** | **182** | *e*Pn | **Pb** | **04 54 00.0** | **+1.2** |
| RAFI | | | | *e*Sn | **Sn** | **04 54 35.7** | **+1.5** |

*TEH* ***26*** *04:58:32.5,34.67N×46.21E,h10km±73km,ML2.7*
*ISN* ***26*** *04:58:32.0±0.3,34.66N×46.22E,h7km±4km,ML2.8*
**ISC 26 04:58:32.8±1.1,34.67N±0.04×46.21E±0.04,h14km±13km, n9,σ0.46/12,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **80** | Pg | **Pg** | **04 58 36.6** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **0.46** | **139** | Pg | **Pg** | **04 58 41.8** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **204** | Pg | **Pg** | **04 58 44.5** | **-0.2** |
| **ILIN** | **Lien** | **0.67** | **68** | Pg | **Pg** | **04 58 45.9** | **0.0** |
| **ILBA** | **Ilam Banvizeh** | **1.05** | **180** | Pg | **Pb** | **04 58 52.7** | **0.0** |
| **SNQR** | **Sonqor, Kerman** | **1.19** | **81** | Pg | **Pb** | **04 58 54.9** | **-0.3** |
| **IBDR** | **Badra** | **1.57** | **188** | *e*Pn | **Pb** | **04 59 02.0** | **+0.3** |
| IBDR | | | | *e*Sn | **Sg** | **04 59 24.0** | **+0.5** |
| **IKRK** | **Kirkuk** | **1.69** | **296** | *e*Pn | **Pb** | **04 59 04.0** | **+0.3** |
| IKRK | | | | *e*Sn | **Sg** | **04 59 27.5** | **+0.2** |
| IKRK | | | | AML | AML | 04 59 32.7 | |
| | comp=N,151nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 04 59 32.8 | |
| | comp=E,119nm,0.2s | | | | | | |
| **BHD** | **Baghdad** | **2.06** | **228** | *e*Pn | **Pb** | **04 59 09.0** | **-1.0** |
| BHD | | | | *e*Sn | **Sb** | **04 59 35.7** | **+0.2** |

*TAP* ***26*** *05:06:39.9,24.62N×122.82E,h110km,ML2.5,D*
*JMA* ***26*** *05:06:40.5±0.2,25.N±3.×122.8E±0.6,h105km±1km, MV1.8/11,NW OFF ISHIGAKIJIMA IS*
**ISC 26 05:06:39.9±1.8,24.54N±0.06×122.77E±0.03, h111km±10km,n39,σ0.72/75,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.18** | **119** | P | **Pn** | **05 06 55.2** | **-0.1** |
| JYNG | | | | *e*S | **Sn** | **05 07 06.5** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **0.23** | **110** | *e*P | **Pn** | **05 06 55.4** | **0.0** |
| | baz=139 | | | | | | |
| YOJ | | | | *e*S | **Sn** | **05 07 06.9** | **-0.3** |
| | baz=139 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.23** | **110** | P | **Pn** | **05 06 55.4** | **0.0** |
| **EOS3** | **EOS3** | **0.48** | **239** | *e*P | **Pn** | **05 06 57.3** | **+0.8** |
| | baz=243 | | | | | | |
| EOS3 | | | | *e*S | **Sn** | **05 07 10.4** | **+1.3** |
| | baz=243 | | | | | | |
| **EOS2** | **EOS2** | **0.51** | **256** | *e*P | **Pn** | **05 06 57.1** | **+0.4** |
| | baz=246 | | | | | | |
| EOS2 | | | | *e*S | **Sn** | **05 07 10.3** | **+1.0** |
| | baz=246 | | | | | | |
| **EOS4** | **EOS4** | **0.59** | **225** | *e*P | **Pn** | **05 06 57.6** | **+0.6** |
| | baz=227 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **05 07 10.7** | **+0.8** |
| | baz=227 | | | | | | |
| **TWC** | **Suao** | **0.84** | **275** | *e*P | **Pn** | **05 06 58.6** | **-0.9** |
| | baz=269 | | | | | | |
| TWC | | | | *e*S | **Sn** | **05 07 12.8** | **-1.5** |
| | baz=269 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.90** | **103** | P | **Pn** | **05 07 00.4** | **+0.3** |
| **EWUT** | **Wuta** | **0.91** | **264** | *e*P | **Pn** | **05 07 00.6** | **+0.4** |
| | baz=256 | | | | | | |
| EWUT | | | | *e*S | **Sn** | **05 07 14.9** | **-0.7** |
| | baz=256 | | | | | | |
| **ENA** | **Nanau** | **0.94** | **263** | *e*P | **Pn** | **05 07 01.1** | **+0.5** |
| | baz=257 | | | | | | |
| ENA | | | | *e*S | **Sn** | **05 07 15.9** | **-0.2** |
| | baz=257 | | | | | | |
| **TIPB** | **Shuangxi** | **0.96** | **297** | *e*P | **Pn** | **05 07 01.5** | **+0.7** |
| | baz=285 | | | | | | |
| TIPB | | | | *e*S | **Sn** | **05 07 15.5** | **-1.0** |
| | baz=285 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.10** | **282** | *e*P | **Pn** | **05 07 02.4** | **+0.2** |
| | baz=283 | | | | | | |
| FUSB | | | | *e*S | **Sn** | **05 07 18.0** | **-1.2** |
| | baz=283 | | | | | | |
| **NACB** | **Ninganchiao** | **1.13** | **251** | *e*P | **Pn** | **05 07 02.3** | **-0.2** |
| | baz=248 | | | | | | |
| NACB | | | | *e*S | **Sn** | **05 07 19.1** | **-0.6** |
| | baz=248 | | | | | | |
| **LATG** | **Datong** | **1.13** | **270** | *e*P | **Pn** | **05 07 02.8** | **+0.2** |
| | baz=269 | | | | | | |
| LATG | | | | *e*S | **Sn** | **05 07 19.7** | **-0.2** |
| | baz=269 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.17** | **105** | P | **Pn** | **05 07 03.8** | **+0.9** |
| **NWLT** | **Wulai** | **1.18** | **282** | *e*P | **Pn** | **05 07 03.7** | **+0.7** |
| | baz=282 | | | | | | |
| NWLT | | | | *e*S | **Sn** | **05 07 19.6** | **-1.0** |
| | baz=282 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.22** | **254** | *e*P | **Pn** | **05 07 03.7** | **+0.1** |
| | baz=251 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **05 07 21.0** | **-0.6** |
| | baz=251 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.26** | **98** | P | **Pn** | **05 07 04.3** | **+0.4** |
| JIJ | | | | *e*S | **Sn** | **05 07 21.4** | **-0.8** |
| **NNSB** | **Datong** | **1.27** | **265** | *e*P | **Pn** | **05 07 04.8** | **+0.6** |
| | baz=255 | | | | | | |
| NNSB | | | | *e*S | **Sn** | **05 07 22.0** | **-0.6** |
| | baz=255 | | | | | | |
| **YHNB** | **Yeheng** | **1.28** | **276** | *e*P | **Pn** | **05 07 05.1** | **+0.9** |
| | baz=281 | | | | | | |
| YHNB | | | | *e*S | **Sn** | **05 07 22.3** | **-0.3** |
| | baz=281 | | | | | | |
| **NSK** | **Sanguang** | **1.29** | **276** | *e*P | **Pn** | **05 07 05.1** | **+0.7** |
| | baz=281 | | | | | | |
| NSK | | | | *e*S | **Sn** | **05 07 22.6** | **-0.4** |
| | baz=281 | | | | | | |
| **ETM** | **Tongmen** | **1.30** | **244** | *e*P | **Pn** | **05 07 04.4** | **0.0** |
| | baz=242 | | | | | | |
| ETM | | | | *e*S | **Sn** | **05 07 22.6** | **-0.4** |
| | baz=242 | | | | | | |
| **SHUL** | **Shoufeng** | **1.33** | **236** | *e*P | **Pn** | **05 07 04.2** | **-0.5** |
| | baz=234 | | | | | | |
| SHUL | | | | *e*S | **Sn** | **05 07 23.6** | **0.0** |
| | baz=234 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.34** | **248** | P | **Pn** | **05 07 05.2** | **+0.2** |
| | baz=245 | | | | | | |
| LXIB | | | | S | **Sn** | **05 07 23.2** | **-0.9** |
| | baz=245 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.40** | **88** | *e*P | **Pn** | **05 07 06.0** | **+0.4** |
| JISG | | | | *e*S | **Sn** | **05 07 24.2** | **-0.8** |
| **ESL** | **Shilin** | **1.42** | **240** | *e*P | **Pn** | **05 07 04.2** | **-1.6** |
| | baz=237 | | | | | | |
| ESL | | | | *e*S | **Sn** | **05 07 24.8** | **-0.7** |
| | baz=237 | | | | | | |
| **FUSS** | **Fushou** | **1.42** | **258** | *e*P | **Pn** | **05 07 05.6** | **-0.4** |
| | baz=255 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **05 07 25.9** | **0.0** |
| | baz=255 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.43** | **254** | *e*P | **Pn** | **05 07 06.8** | **+0.5** |
| | baz=251 | | | | | | |
| WHF | | | | *e*S | **Sn** | **05 07 25.5** | **-0.8** |
| | baz=251 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.51** | **237** | P | **Pn** | **05 07 07.0** | **+0.2** |
| | baz=241 | | | | | | |
| WARBT | | | | *e*S | **Sn** | **05 07 26.2** | **-1.1** |
| | baz=241 | | | | | | |
| **CHGB** | **Renai** | **1.53** | **252** | *e*P | **Pn** | **05 07 07.8** | **+0.4** |
| | baz=250 | | | | | | |
| CHGB | | | | *e*S | **Sn** | **05 07 28.2** | **0.0** |
| | baz=250 | | | | | | |
| **WUSB** | **Renai** | **1.60** | **250** | *e*P | **Pn** | **05 07 09.0** | **+0.9** |
| | baz=248 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **05 07 30.0** | **+0.4** |
| | baz=248 | | | | | | |
| **HGSD** | **Ruisui** | **1.61** | **230** | *e*P | **Pn** | **05 07 08.8** | **+0.7** |
| | baz=225 | | | | | | |
| HGSD | | | | *e*S | **Sn** | **05 07 29.4** | **-0.2** |
| | baz=225 | | | | | | |
| **EHY** | **Hungye** | **1.68** | **232** | *e*P | **Pn** | **05 07 09.1** | **+0.2** |
| | baz=238 | | | | | | |
| EHY | | | | *e*S | **Sn** | **05 07 29.4** | **-1.6** |
| | baz=238 | | | | | | |
| **VWDT** | **VWDT** | **1.68** | **243** | *e*P | **Pn** | **05 07 09.5** | **+0.6** |
| | baz=237 | | | | | | |
| VWDT | | | | *e*S | **Sn** | **05 07 30.7** | **-0.3** |
| | baz=237 | | | | | | |
| **WHP** | **Taichung City** | **1.69** | **261** | *e*P | **Pn** | **05 07 10.1** | **+1.0** |
| | baz=255 | | | | | | |
| WHP | | | | *e*S | **Sn** | **05 07 32.7** | **+1.4** |
| | baz=255 | | | | | | |
| **YULB** | **Yu-li** | **1.77** | **230** | P | **Pn** | **05 07 10.3** | **+0.3** |
| | baz=236 | | | | | | |
| YULB | | | | *e*S | **Sn** | **05 07 32.3** | **-0.7** |
| | baz=236 | | | | | | |
| **TWF1** | **Yuli** | **1.79** | **229** | *e*P | **Pn** | **05 07 10.6** | **+0.3** |
| | baz=235 | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **05 07 32.9** | **-0.7** |
| | baz=235 | | | | | | |
| **FULB** | **Fuli** | **1.90** | **226** | *e*P | **Pn** | **05 07 12.2** | **+0.5** |
| | baz=219 | | | | | | |
| FULB | | | | *e*S | **Sn** | **05 07 37.0** | **+1.0** |
| | baz=219 | | | | | | |
| **EDH** | **Donghe** | **2.06** | **221** | *e*P | **Pn** | **05 07 13.7** | **+0.1** |
| | baz=220 | | | | | | |
| EDH | | | | *e*S | **Sn** | **05 07 38.4** | **-1.1** |
| | baz=220 | | | | | | |

*ISN* ***26*** *05:09:12.7±0.4,34.63N×46.19E,h11km±5km,ML2.5*
*TEH* ***26*** *05:09:13.4,34.62N×46.20E,h10km±48km,ML2.7*
**ISC 26 05:09:13.2±1.1,34.63N±0.05×46.15E±0.06,h12km±17km, n10,σ0.46/13,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.21** | **70** | Pg | **Pg** | **05 09 17.6** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **0.46** | **131** | Pg | **Pg** | **05 09 22.1** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.48** | **255** | Pg | **Pb** | **05 09 23.7** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **201** | Pg | **Pb** | **05 09 24.6** | **-0.2** |
| **ILIN** | **Lien** | **0.73** | **66** | Pg | **Pg** | **05 09 26.9** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **177** | Pg | **Pb** | **05 09 32.6** | **0.0** |
| **SNQR** | **Sonqor, Kerman** | **1.24** | **79** | Pg | **Pg** | **05 09 37.0** | **0.0** |
| **IBDR** | **Badra** | **1.53** | **187** | *e*Pn | **Pb** | **05 09 41.5** | **+0.1** |
| IBDR | | | | *e*Sn | **Sg** | **05 10 03.0** | **+0.7** |
| IBDR | | | | AML | AML | 05 10 12.8 | |
| | comp=E,70nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 05 10 15.7 | |
| | comp=N,87nm,0.3s | | | | | | |
| **IKRK** | **Kirkuk** | **1.67** | **298** | *e*Pn | **Pb** | **05 09 44.3** | **+0.4** |
| IKRK | | | | *e*Sn | **Sg** | **05 10 07.0** | **0.0** |
| **BHD** | **Baghdad** | **2.00** | **228** | *e*Pn | **Pb** | **05 09 48.5** | **-1.0** |
| BHD | | | | *e*Sn | **Sb** | **05 10 14.5** | **+0.1** |

*KRNET* ***26*** *05:14:44.9±0.1,40.80N×74.19E,h21km,mb4.0*
*SOME* ***26*** *05:14:45.9,40.83N×74.18E,h20km*
*KNET* ***26*** *05:14:47.8±0.4,41.00N×74.22E,h4km±2km,ml3.6, Error ellipse: s-maj=4.2km s-min=2.2km az=60.0*

*NNC* ***26*** *05:14:47.2±0.8,40.90N×74.25E,h0km,mb4.4,mpv4.1, Error ellipse: s-maj=6.1km s-min=4.6km az=179.0*
*IDC* ***26*** *05:14:49.0±2.2,41.14N×74.11E,h0km,mb4.1/3, mbtmp3.9/5,ML2.6/3,Error ellipse: s-maj=35.9km s-min=17.9km az=130.0*
**ISC 26 05:14:47.3±0.6,40.87N±0.02×74.07E±0.02,h10km,n100, σ1.55/159,mb4.0/3,37C-44D,Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.95** | **207** | ⇓*i*P | **Pg** | **05 15 02.6** | **-3.1** |
| | baz=14 | | | | | | |
| SFK | | | | ⇓*e*S | **Sg** | **05 15 15.5** | **-2.6** |
| | baz=14 | | | | | | |
| **ARLS** | **Aral** | **1.01** | **11** | ⇓*e*P | **Pg** | **05 15 04.5** | **-2.3** |
| | baz=6.0 | | | | | | |
| ARLS | | | | ⇓*e*S | **Sg** | **05 15 18.9** | **-1.1** |
| | baz=6.0 | | | | | | |
| **OHH** | **Osh** | **1.03** | **251** | ⇑*e*P | **Pg** | **05 15 05.3** | **-1.8** |
| | baz=56 | | | | | | |
| OHH | | | | ⇑*e*S | **Sb** | **05 15 20.2** | **-0.8** |
| | baz=56 | | | | | | |
| **AML** | **Almayashu** | **1.30** | **348** | ⇓P | **Pn** | **05 15 10.4** | **-1.4** |
| | 334nm,0.2s,SNR=527 | | | | | | |
| AML | | | | ⇓S | **Sn** | **05 15 28.9** | **-0.5** |
| | 979nm,0.4s | | | | | | |
| **AML** | **Almayashu** | **1.30** | **348** | ⇓*e*P | **Pn** | **05 15 10.4** | **-1.4** |
| | baz=45 | | | | | | |
| AML | | | | ⇓*i*S | **Sn** | **05 15 29.1** | **-0.3** |
| | baz=45 | | | | | | |
| **UCH** | **Uchtor** | **1.40** | **14** | ⇑P | **Pn** | **05 15 12.0** | **-1.3** |
| | 32nm,0.2s,SNR=26 | | | | | | |
| **NRN** | **Naryn** | **1.56** | **68** | ⇑*e*P | **Pn** | **05 15 12.1** | **-3.3** |
| | baz=65 | | | | | | |
| NRN | | | | ⇑*e*S | **Sn** | **05 15 32.0** | **-3.9** |
| | baz=65 | | | | | | |
| **AAK** | **Ala-Archa** | **1.80** | **10** | ⇓P | **Pb** | **05 15 19.2** | **-1.2** |
| | 64nm,0.2s,SNR=71 | | | | | | |
| AAK | | | | ⇑S | **Sg** | **05 15 43.3** | **-1.9** |
| | 300nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **1.80** | **10** | Pn | **Pb** | **05 15 19.2** | **-1.2** |
| | 25nm,0.3s,baz=165,slow=8.1,SNR=80 | | | | | | |
| AAK | | | | Sn | **Sb** | **05 15 42.7** | **-0.4** |
| | 47nm,0.3s,baz=45,slow=19,SNR=5.6 | | | | | | |
| AAK | | | | LR | LR | 05 15 46.8 | |
| | comp=Z,21nm,20.1s,baz=64,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **1.80** | **10** | P | **Pb** | **05 15 19.1** | **-1.4** |
| | 63nm,0.5s | | | | | | |
| AAK | | | | S | **Sg** | **05 15 43.2** | **-1.9** |
| | 179nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **1.80** | **10** | ⇓*e*P | **Pn** | **05 15 18.5** | **0.0** |
| | baz=7.0 | | | | | | |
| AAK | | | | ⇓*i*S | **Sb** | **05 15 43.0** | **-0.1** |
| | baz=7.0 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.81** | **353** | P | **Pb** | **05 15 19.5** | **-1.0** |
| | 111nm,0.4s,SNR=95 | | | | | | |
| EKS2 | | | | ⇑S | **Sg** | **05 15 44.2** | **-1.2** |
| | 124nm,0.3s | | | | | | |
| **EKS2** | **Erkin-Say** | **1.81** | **353** | ⇑*i*P | **Pb** | **05 15 18.9** | **-1.6** |
| | baz=51 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sg** | **05 15 43.9** | **-1.5** |
| | baz=51 | | | | | | |
| **ARK** | **Arkit** | **1.84** | **301** | ⇓*e*P | **Pb** | **05 15 20.3** | **-0.8** |
| | baz=2.0 | | | | | | |
| ARK | | | | ⇓*e*S | **Sg** | **05 15 46.0** | **-0.4** |
| | baz=2.0 | | | | | | |
| **KBK** | **Karagaybulak** | **1.91** | **20** | P | **Pb** | **05 15 21.6** | **-0.7** |
| | SNR=53 | | | | | | |
| **KBK** | **Karagaybulak** | **1.91** | **20** | ⇓*i*P | **Pn** | **05 15 19.8** | **-0.2** |
| | baz=17 | | | | | | |
| KBK | | | | ⇓*e*S | **Sb** | **05 15 45.2** | **-1.0** |
| | baz=17 | | | | | | |
| **MRKS** | **Merke** | **1.98** | **342** | *e*P | **Pg** | **05 15 23.8** | **-1.4** |
| | 847nm,0.3s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **05 15 50.1** | **-0.9** |
| | 380nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **1.98** | **342** | Pg | **Pg** | **05 15 23.8** | **-1.4** |
| | 878nm,0.3s | | | | | | |
| MRKS | | | | Lg | Lg | 05 15 50.1 | |
| | 380nm,0.3s | | | | | | |
| **KSH** | **Kashi** | **1.99** | **132** | Pn | **Pn** | **05 15 22.0** | **+1.0** |
| KSH | | | | Sn | **Sb** | **05 15 48.8** | **+0.4** |
| KSH | | | | smax | smax | | |
| | comp=N,220nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,170nm,0.7s | | | | | | |
| **FRU1** | **Bishkek** | **1.99** | **12** | ⇑*i*P | **Pn** | **05 15 21.2** | **+0.2** |
| | baz=9.0 | | | | | | |
| FRU1 | | | | ⇑*e*S | **Sb** | **05 15 47.8** | **-0.6** |
| | baz=9.0 | | | | | | |
| **MNAS** | **Manas** | **2.00** | **325** | ⇓*e*P | **Pb** | **05 15 22.0** | **-1.8** |
| | baz=24 | | | | | | |
| MNAS | | | | ⇓*e*S | **Sg** | **05 15 49.1** | **-2.4** |
| | baz=24 | | | | | | |
| **ULHL** | **Ulahol** | **2.14** | **49** | ⇑P | **Pn** | **05 15 24.3** | **+1.1** |
| | comp=E,152nm,0.3s,SNR=11 | | | | | | |
| ULHL | | | | ⇓S | **Sb** | **05 15 51.8** | **-1.1** |
| | comp=E,285nm,0.3s | | | | | | |
| **ULHL** | **Ulahol** | **2.14** | **49** | ⇓*e*P | **Pn** | **05 15 22.2** | **-1.0** |
| | baz=46 | | | | | | |
| ULHL | | | | ⇓*e*S | **Sn** | **05 15 49.4** | **-0.5** |
| | baz=46 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.15** | **40** | ⇑*e*P | **Pn** | **05 15 22.5** | **-0.8** |
| | baz=37 | | | | | | |
| BOOM | | | | ⇑*e*S | **Sn** | **05 15 50.1** | **+0.1** |
| | baz=37 | | | | | | |
| **CHMS** | **Chumysh** | **2.19** | **13** | ⇑P | **Pb** | **05 15 26.1** | **-0.9** |
| | comp=E,41nm,0.2s,SNR=35 | | | | | | |
| CHMS | | | | ⇑S | **Sg** | **05 15 55.4** | **-2.3** |
| | comp=E,285nm,0.3s | | | | | | |
| **CHMS** | **Chumysh** | **2.19** | **13** | ⇓*e*P | **Pn** | **05 15 23.8** | **0.0** |
| | baz=11 | | | | | | |
| CHMS | | | | ⇓*i*S | **Sb** | **05 15 52.1** | **-2.2** |
| | baz=11 | | | | | | |
| **DRK** | **Karamyk** | **2.22** | **232** | ⇓*e*P | **Pn** | **05 15 24.2** | **-0.2** |
| | baz=35 | | | | | | |
| DRK | | | | ⇓*e*S | **Sn** | **05 15 53.0** | **+0.9** |
| | baz=35 | | | | | | |
| **TRKS** | **Terek-Say** | **2.31** | **288** | ⇑*e*P | **Pn** | **05 15 25.7** | **+0.2** |
| | baz=87 | | | | | | |
| TRKS | | | | ⇑*e*S | **Sb** | **05 15 55.5** | **-2.2** |
| | baz=87 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.35** | **29** | ⇑P | **Pb** | **05 15 28.0** | **-1.8** |
| | comp=E,31nm,0.2s,SNR=54 | | | | | | |
| TKM2 | | | | ⇑S | **Sb** | **05 15 59.0** | **0.0** |
| | comp=E,249nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.35** | **29** | ⇑Pn | **Pb** | **05 15 27.7** | **-2.1** |
| | comp=E,32nm,0.4s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 05 16 00.2 | |
| | comp=E,192nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.35** | **29** | ⇓*e*P | **Pn** | **05 15 25.7** | **-0.4** |
| | baz=26 | | | | | | |
| TKM2 | | | | ⇓*e*S | **Sn** | **05 15 55.5** | **+0.4** |
| | baz=26 | | | | | | |
| **USP** | **Ospenovka** | **2.42** | **7** | ⇑P | **Pb** | **05 15 29.1** | **-1.9** |
| | comp=E,91nm,0.2s,SNR=221 | | | | | | |
|

comp=E,116nm,0.6s
DGS Lg Lg 05 16 09.0
comp=E,548nm,0.6s
**MTBS Maitube 2.87 37** *e*P **Pb 05 15 37.7 -0.8**
comp=E,54nm,0.3s
MTBS *e*S **Sb 05 16 13.8 +0.1**
comp=E,331nm,0.4s
**MTBS Maitube 2.87 37** Pg **Pb 05 15 37.7 -0.8**
comp=E,54nm,0.3s
MTBS Lg Lg 05 16 13.8
comp=E,331nm,0.4s
**IZV Izvestkoviy 2.88 40** *e*P **Pb 05 15 37.3 -1.5**
IZV *e*S **Sb 05 16 13.2 -1.1**
**IZV Izvestkoviy 2.88 40** Pg **Pb 05 15 37.3 -1.5**
IZV Lg Lg 05 16 13.2
**TARG Taragay, Kyrgy 2.94 72**⇓*e*P **Pn 05 15 32.9 -1.6**
baz=70
TARG ⇓*e*S **Sn 05 16 08.1 -2.0**
baz=70
**KASK Kaskelen 3.03 38** ⇑Pg **Pb 05 15 41.1 -0.2**
KASK ⇓Lg Lg 05 16 21.5
**TNSS Tian-Shan 3.05 44** *e*P **Pb 05 15 40.9 -1.0**
comp=E,64nm,0.4s
TNSS *e*S **Sb 05 16 19.3 -0.1**
comp=E,112nm,0.6s
**TNSS Tian-Shan 3.05 44** Pg **Pb 05 15 40.9 -1.0**
comp=E,64nm,0.4s
TNSS Lg Lg 05 16 19.3
comp=E,112nm,0.6s
**KRBS Karabastau 3.07 22** *e*P **Pb 05 15 41.3 -0.7**
comp=E,72nm,0.4s
KRBS *e*S **Sb 05 16 20.1 +0.5**
comp=E,187nm,0.4s
**KRBS Karabastau 3.07 22** Pg **Pb 05 15 41.3 -0.7**
comp=E,72nm,0.4s
KRBS Lg Lg 05 16 20.1
comp=E,187nm,0.4s
**AAA Alma-Ata 3.16 41** *e*P **Pb 05 15 43.3 -0.2**
comp=E,59nm,0.1s
AAA *e*S **Sb 05 16 23.5 +1.4**
comp=E,324nm,0.4s
**AAA Alma-Ata 3.16 41** Pg **Pb 05 15 43.3 -0.2**
comp=E,59nm,0.1s
AAA Lg Lg 05 16 23.5
comp=E,324nm,0.4s
**KNDC Almaty 3.19 42** ⇓Pg **Pb 05 15 43.5 -0.5**
comp=E,90nm,0.6s
KNDC ⇓Lg Lg 05 16 29.0
comp=E,282nm,0.5s
**MDOK Medeo 3.19 43** *e*P **Pb 05 15 43.0 -1.1**
comp=E,46nm,0.4s
MDOK *e*S **Sb 05 16 23.0 -0.2**
comp=E,117nm,0.5s
**MDOK Medeo 3.19 43** ⇑Pn **Pn 05 15 38.9 +1.2**
comp=E,12nm,0.7s
MDOK Pg **Pb 05 15 43.0 -1.1**
comp=E,46nm,0.4s
MDOK ⇑Pg Pg 05 15 43.1 -5.3
comp=E,23nm,0.4s
MDOK Lg Lg 05 16 23.0
comp=E,117nm,0.5s
MDOK Lg Lg 05 16 26.2
comp=E,134nm,0.8s
**KOTS Kotyrbulak 3.28 43** *e*P **Pb 05 15 44.8 -0.8**
comp=E,62nm,0.3s
KOTS *e*S **Sb 05 16 26.0 +0.4**
comp=E,373nm,0.6s
**KOTS Kotyrbulak 3.28 43** Pg **Pb 05 15 44.7 -0.8**
comp=E,62nm,0.3s
KOTS Lg Lg 05 16 26.0
comp=E,373nm,0.6s
**ANVS Anan'yevo 3.30 53**⇑*e*P **Pn 05 15 38.3 -0.9**
baz=52
ANVS ⇑*i*S **Sn 05 16 17.2 -1.4**
baz=52
**GAR Garm 3.43 238**⇑*e*P **Pn 05 15 41.1 +0.2**
baz=40
GAR ⇑*e*S **Sn 05 16 22.1 +0.3**
baz=40
**KTBS Karatobe 3.44 33** *e*P **Pb 05 15 47.4 -1.0**
comp=E,13nm,0.4s
KTBS *e*S **Sb 05 16 30.4 +0.1**
comp=E,261nm,0.5s
**KUU Kurty 3.46 28** *e*P **Pb 05 15 49.0 +0.3**
comp=E,18nm,0.3s
KUU *e*S **Sb 05 16 33.2 +2.5**
comp=E,143nm,0.8s
**KUU Kurty 3.46 28** Pg **Pb 05 15 49.0 +0.3**
comp=E,18nm,0.3s
KUU Lg Lg 05 16 33.2
comp=E,143nm,0.8s
**KK31 Karatay Array 3.47 311** ⇓Pn **Pn 05 15 42.4 +1.0**
comp=E,0.7nm,0.3s,baz=131,slow=13,SNR=42
KK31 Pg **Pb 05 15 48.9 +0.1**
comp=E,8.4nm,0.3s,baz=128,slow=16,SNR=38
KK31 ⇑Lg Lg 05 16 37.6
comp=E,24nm,0.3s,baz=133,slow=28,SNR=12
**KKAR Karatay Array 3.47 311**⇓*e*P **Pn 05 15 42.3 +1.0**
baz=11
KKAR ⇓*i*S **Sn 05 16 24.4 +1.9**
baz=11
**CHKK Chushkaly 3.69 35** *e*P **Pb 05 15 52.6 +0.1**
comp=E,20nm,0.3s
CHKK *e*S **Sb 05 16 39.6 +2.3**
comp=E,96nm,0.5s
**CHKK Chushkaly 3.69 35** Pg **Pb 05 15 52.6 +0.1**
comp=E,20nm,0.3s
CHKK Lg Lg 05 16 39.6
comp=E,96nm,0.5s
**SATY Saty 3.91 54** *e*P **Pb 05 15 55.6 -0.7**
comp=E,43nm,0.8s
SATY *e*S **Sb 05 16 44.4 +0.7**
comp=E,110nm,0.4s
**SATY Saty 3.91 54** Pg **Pb 05 15 55.6 -0.7**
comp=E,43nm,0.8s
SATY Lg Lg 05 16 44.4
comp=E,110nm,0.4s
**ZHN Zhinishke 3.98 53** *e*P **Pb 05 15 57.0 -0.6**
comp=E,21nm,0.4s
ZHN *e*S **Sb 05 16 46.9 +1.0**
comp=E,73nm,0.3s
**ZHN Zhinishke 3.98 53** Pg **Pb 05 15 57.0 -0.6**
comp=E,21nm,0.4s
ZHN Lg Lg 05 16 46.9
comp=E,73nm,0.3s
**KURS Kuram 4.02 48** *e*P **Pb 05 15 57.6 -0.6**
comp=E,31nm,0.5s
KURS *e*S **Sb 05 16 47.8 +0.9**
comp=E,43nm,0.7s
**KURS Kuram 4.02 48** Pg **Pb 05 15 57.6 -0.6**
comp=E,31nm,0.5s
KURS Lg Lg 05 16 47.8
comp=E,43nm,0.7s
**BTLS Baital 4.17 360** *e*P **Pb 05 16 03.2 +2.4**
comp=E,17nm,0.5s
BTLS *e*S **Sg 05 16 57.4 -3.9**
comp=E,43nm,0.5s
**BTLS Baital 4.17 360** Pg **Pb 05 16 03.2 +2.4**
comp=E,17nm,0.5s
BTLS Lg Lg 05 16 57.4
comp=E,43nm,0.5s
**KPKS Kokpek 4.30 51** *e*P **Pb 05 16 02.7 -0.3**
comp=E,30nm,0.6s
KPKS *e*S **Sb 05 16 56.8 +1.7**
comp=E,68nm,0.6s
**KPKS Kokpek 4.30 51** Pg **Pb 05 16 02.7 -0.3**
comp=E,30nm,0.6s
KPKS Lg Lg 05 16 56.8
comp=E,68nm,0.6s
**UZB Uzynbulak 4.34 57** *e*P **Pb 05 16 03.5 -0.1**
comp=E,38nm,0.6s
UZB *e*S **Sb 05 16 58.5 +2.4**
comp=E,49nm,0.8s
**UZB Uzynbulak 4.34 57** Pg **Pb 05 16 03.5 -0.1**
comp=E,38nm,0.6s
UZB Lg Lg 05 16 58.5
comp=E,49nm,0.8s
**ARXS Arharly 4.35 38** *e*P **Pb 05 16 04.3 +0.5**
comp=E,22nm,0.3s
ARXS *e*S **Sb 05 16 59.3 +3.0**
comp=E,96nm,0.6s
**ARXS Arharly 4.35 38** Pg **Pb 05 16 04.3 +0.5**
comp=E,22nm,0.3s
ARXS Lg Lg 05 16 59.3
comp=E,96nm,0.6s
**CHGR Chuyangaron 4.38 241**⇓*e*P **Pn 05 15 54.2 +0.3**
baz=43
CHGR ⇓*i*S **Sn 05 16 44.9 -0.1**
baz=43
**BLB Baldybastay 4.59 44** Pg **Pb 05 16 07.9 -0.1**
comp=E,60nm,0.5s
BLB Lg Lg 05 17 05.9
comp=E,151nm,0.6s
**PDGK Podgornoye 4.72 57** Pg **Pb 05 16 11.2 +0.9**
comp=E,14nm,0.7s
PDGK Lg Lg 05 17 11.1
comp=E,30nm,0.6s
**PDGK Podgornoye 4.72 57** ⇓Pn **Pn 05 15 58.1 -0.6**
comp=E,5.1nm,0.6s
PDGK ⇓Pg **Pb 05 16 09.5 -0.7**
comp=E,31nm,0.8s
PDGK ⇓Lg Lg 05 17 13.3
comp=E,39nm,0.6s
**KNOS Konyrlen 5.14 46** Pg **Pb 05 16 18.7 +1.4**
comp=E,9.6nm,0.6s
KNOS Lg Lg 05 17 24.2
comp=E,37nm,0.6s
**TDK Taldyqorghan 5.22 36** *e*P **Pb 05 16 20.4 +1.8**
comp=E,43nm,0.4s
TDK *e*S **Sb 05 17 27.0 +5.7**
comp=E,178nm,0.9s
**TDK Taldyqorghan 5.22 36** Pg **Pb 05 16 20.4 +1.8**
comp=E,43nm,0.4s
TDK Lg Lg 05 17 27.0
comp=E,178nm,0.9s
**KTMS Ketmen 5.33 59** *e*P **Pb 05 16 21.9 +1.2**
comp=E,9.3nm,0.6s
KTMS *e*S **Sb 05 17 29.6 +4.8**
comp=E,13nm,0.5s
**KTMS Ketmen 5.33 59** Pg **Pb 05 16 21.9 +1.2**
comp=E,9.3nm,0.6s
KTMS Lg Lg 05 17 29.5
comp=E,13nm,0.5s
**DJR Jarkent 5.46 49** *e*P **Pb 05 16 24.6 +1.9**
comp=E,12nm,0.6s
DJR *e*S **Sb 05 17 34.5 +6.1**
comp=E,36nm,0.6s
**DJR Jarkent 5.46 49** Pg **Pb 05 16 24.6 +1.9**
comp=E,12nm,0.6s
DJR Lg Lg 05 17 34.5
comp=E,36nm,0.6s
**MK31 Makanchi Array 8.39 42** ⇑Pn **Pn 05 16 46.9 -2.0**
comp=E,0.8nm,0.5s,baz=138,slow=14,SNR=2.8
MK31 ⇑Lg Lg 05 19 14.2
comp=E,9.7nm,0.8s,baz=217,slow=30,SNR=4.8
**MKAR Makanchi Array 8.39 42** Pn **Pn 05 16 50.3 +1.4**
comp=E,0.1nm,0.3s,baz=233,slow=14,SNR=3.1
**KURBB Kurchatov Arra 10.24 16** ⇑Lg Lg 05 20 10.3
comp=E,77nm,1.4s
**KURK Kurchatov 10.35 16** ⇑Lg Lg 05 20 15.4
comp=E,26nm,0.8s
**BVAR Borovoye Array 12.42 350** Pn **Pn 05 17 42.9 -1.1**
baz=150,slow=12,SNR=4.2
comp=E,0.9nm,0.6s
**ZALV Zalesovo Beam 14.95 25** Pn **Pn 05 18 18.5 0.0**
comp=E,0.1nm,0.3s,baz=200,slow=7.7,SNR=2.0
comp=E,0.4nm,0.3s
**EIL Elat 33.58 263** P **P 05 21 31.6 +4.0**
comp=E,3.8nm,0.5s,baz=42,slow=14,SNR=2.7
comp=E,3.8nm,0.5s
**FINES FINESS Array B 35.37 322** P **P 05 21 42.9 +0.3**
comp=E,2.3nm,1.0s,baz=134,slow=8.0,SNR=3.3
comp=E,2.3nm,1.0s
**ARCES ARCESS Array B 38.13 335** P **P 05 22 08.2 +2.1**
comp=E,1.2nm,0.7s,baz=94,slow=10.0,SNR=3.6
comp=E,1.2nm,0.7s

*SJA **26** 05:15:03.8±0.6,31°.76S×72°.54W,h15km,ML3.6,MW3.9*
*GUC **26** 05:15:08.1±1.0,31°.81S×72°.00W,h28km±5km,ML3.3*
**ISC 26 05:15:06.9±1.6,31°.81S±0°.03×72°.19W±0°.07,h28km±16km,**
**n40,σ2°.9/19°/57,2C-1D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CO04** | **Los Peladeros** | **1.06** | **103** | ⇓*i*P | **Pb** | **05 15 26.4** | **-0.3** |
| CO04 | | | | *e*S | **Sn** | **05 15 39.2** | **-1.0** |
| CO04 | | | | IAML | | 05 15 40.1 | |
| comp=N,2μm,0.3s | | | | | | | |
| **VA06** | **Catapilco** | **1.07** | **135** | *e*P | **Pb** | **05 15 26.8** | **+0.1** |
| VA06 | | | | *e*S | **Sb** | **05 15 40.1** | **-0.2** |
| VA06 | | | | IAML | | 05 15 46.4 | |
| comp=E,2μm,0.4s | | | | | | | |
| **CO02** | **Combarbal** | **1.18** | **60**⇑ | *i*P | **Pb** | **05 15 28.5** | **-0.2** |
| CO02 | | | | *e*S | **Sb** | **05 15 43.1** | **-0.5** |
| **CO06** | **Fray Jorge** | **1.22** | **23** | *i* P | **Pb** | **05 15 29.2** | **-0.1** |
| CO06 | | | | IAML | | 05 15 51.5 | |
| comp=N,578nm,0.2s | | | | | | | |
| **VA01** | **Torpederas** | **1.30** | **160** | *e*P | **Pb** | **05 15 30.8** | **+0.1** |
| **ROCH** | **El Roble** | **1.53** | **140** | *e*P | **Pb** | **05 15 34.1** | **-0.6** |
| ROCH | | | | *e*S | **Sb** | **05 15 53.7** | **-0.2** |
| **CO03** | **El Pedregal** | **1.60** | **53** | *e*P | **Pb** | **05 15 35.3** | **-0.6** |
| CO03 | | | | *e*S | **Sb** | **05 15 55.2** | **-0.6** |
| CO03 | | | | IAML | | 05 15 57.2 | |
| comp=E,908nm,0.4s | | | | | | | |
| **VA03** | **San Esteban** | **1.68** | **125** | *e*P | **Pb** | **05 15 36.2** | **-1.0** |
| VA03 | | | | *e*S | **Sb** | **05 15 57.5** | **-0.6** |
| VA03 | | | | IAML | | 05 16 04.6 | |
| comp=N,905nm,0.4s | | | | | | | |
| **MT02** | **Curacav** | **1.70** | **149** | *e*P | **Pb** | **05 15 36.7** | **-0.8** |
| **PEL** | **Peldehue** | **1.84** | **137** | *e*P | **Pb** | **05 15 38.6** | **-1.3** |
| PEL | | | | *e*S | **Sb** | **05 16 02.2** | **-0.4** |
| PEL | | | | IAML | | 05 16 07.3 | |
| comp=E,496nm,0.3s | | | | | | | |
| **VA05** | **Santo Domingo** | **1.91** | **165** | *e*P | **Pn** | **05 15 39.2** | **+1.6** |
| VA05 | | | | IAML | | 05 16 14.8 | |
| comp=E,751nm,0.3s | | | | | | | |
| **MT05** | **Renca** | **2.00** | **143** | *e*P | **Pb** | **05 15 42.8** | **+0.1** |
| MT05 | | | | IAML | | 05 16 24.9 | |
| comp=E,461nm,0.3s | | | | | | | |
| **GO04** | **Tololo Observa** | **2.02** | **37** | *e*P | **Pb** | **05 15 43.2** | **+0.1** |
| GO04 | | | | *e*S | **Sb** | **05 16 09.8** | **+2.0** |
| **MT10** | **Hacienda Santa** | **2.02** | **137** | *e*P | **Pb** | **05 15 41.4** | **-1.7** |
| MT10 | | | | *e*S | **Sb** | **05 16 08.2** | **+0.3** |
| **CO05** | **La Serena** | **2.05** | **24** | *e*P | **Pn** | **05 15 41.2** | **+1.6** |
| CO05 | | | | IAML | | 05 16 15.8 | |
| comp=N,335nm,0.6s | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **2.11** | **139** | *e*P | **Pb** | **05 15 42.9** | **-1.7** |
| MT14 | | | | *e*S | **Sb** | **05 16 11.2** | **+0.8** |
| MT14 | | | | IAML | | 05 16 15.0 | |
| comp=N,767nm,0.4s | | | | | | | |
| **MT16** | **CCHEN** | **2.14** | **139** | *e*P | **Pb** | **05 15 43.3** | **-1.8** |
| MT16 | | | | IAML | | 05 16 15.6 | |
| comp=E,230nm,0.5s | | | | | | | |
| **MT01** | **Popeta** | **2.20** | **159** | *e*P | **Pn** | **05 15 43.4** | **+1.8** |
| MT01 | | | | IAML | | 05 16 23.9 | |
| comp=N,159nm,0.3s | | | | | | | |
| **MT03** | **Universidad Ad** | **2.20** | **140** | *e*P | **Pb** | **05 15 44.5** | **-1.6** |
| MT03 | | | | IAML | | 05 16 18.9 | |
| comp=E,563nm,0.1s | | | | | | | |
| **FCH** | **Farellones** | **2.21** | **134** | *e*P | **Pb** | **05 15 44.0** | **-2.3** |
| FCH | | | | IAML | | 05 16 17.7 | |
| comp=E,211nm,0.3s | | | | | | | |
| **MT09** | **Talagante** | **2.21** | **153** | *e*P | **Pb** | **05 15 44.4** | **-1.9** |
| MT09 | | | | IAML | | 05 16 20.1 | |
| comp=E,241nm,0.6s | | | | | | | |
| **MT15** | **Las Vizcachas** | **2.28** | **142** | *e*P | **Pb** | **05 15 46.2** | **-1.2** |
| MT15 | | | | IAML | | 05 16 22.6 | |
| comp=E,357nm,0.5s | | | | | | | |
| **MT04** | **Ro Olivares** | **2.35** | **133** | *e*P | **Pb** | **05 15 46.7** | **-2.1** |
| MT04 | | | | IAML | | 05 16 20.2 | |
| comp=E,225nm,0.3s | | | | | | | |
| **MT12** | **Pirque** | **2.37** | **145** | *e*P | **Pb** | **05 15 46.4** | **-2.5** |
| MT12 | | | | IAML | | 05 16 28.3 | |
| comp=E,404nm,0.4s | | | | | | | |
| **AUSP** | **Uspallata** | **2.42** | **101** | *i* P | **Pb** | **05 15 50.1** | **+0.2** |
| AUSP | | | | *i* S | **Sb** | **05 16 24.3** | **+5.0** |
| **MT08** | **Bocatoma Ro** | **2.46** | **132** | *e*P | **Pb** | **05 15 48.6** | **-1.9** |
| MT08 | | | | IAML | | 05 16 23.9 | |
| comp=N,138nm,0.4s | | | | | | | |
| **RTLS** | **Leoncito** | **2.46** | **91** | *i* P | **Pb** | **05 15 50.7** | **0.0** |
| RTLS | | | | *i* S | **Sb** | **05 16 25.8** | **+5.2** |
| RTLS | | | | IAML | | 05 16 32.2 | |
| comp=Z,378nm,0.6s | | | | | | | |
| **MT13** | **San Alfonso** | **2.51** | **141** | *e*P | **Pb** | **05 15 48.4** | **-3.0** |
| MT13 | | | | IAML | | 05 16 31.2 | |
| comp=E,284nm,0.4s | | | | | | | |
| **LMEL** | **Las Melosas** | **2.63** | **141** | *e*P | **Pb** | **05 15 50.3** | **-3.2** |
| LMEL | | | | IAML | | 05 16 38.3 | |
| comp=E,159nm,0.5s | | | | | | | |
| **AROD** | **Rodeo** | **2.85** | **56** | *i* P | **Pb** | **05 15 55.5** | **-1.7** |
| AROD | | | | *i* S | **Sb** | **05 16 33.5** | **+1.8** |
| **ACCO** | **Cerro Coronel** | **2.94** | **66** | *i* P | **Pb** | **05 15 58.0** | **-0.8** |
| ACCO | | | | *i* S | **Sb** | **05 16 36.9** | **+2.5** |
| ACCO | | | | IAML | | 05 16 39.0 | |
| comp=Z,260nm,0.8s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.94** | **111** | *i* P | **Pb** | **05 15 57.3** | **-1.5** |
| ARCO | | | | *i* S | **Sb** | **05 16 36.7** | **+2.3** |
| ARCO | | | | IAML | | 05 16 52.0 | |
| comp=Z,83nm,1.1s | | | | | | | |
| **ASAL** | **Salagasta** | **2.95** | **106** | *i* P | **Pb** | **05 15 57.5** | **-1.3** |
| ASAL | | | | *i* S | **Sb** | **05 16 36.7** | **+2.3** |
| ASAL | | | | IAML | | 05 16 50.9 | |
| comp=Z,68nm,0.7s | | | | | | | |
| **LCO** | **Las Campanas** | **3.07** | **25** | *e*P | **Pn** | **05 15 55.0** | **+1.2** |
| **ACDV** | **Cuesta del Vie** | **3.10** | **59** | *i* P | **Pb** | **05 15 58.9** | **-2.5** |
| ACDV | | | | *i* S | **Sb** | **05 16 39.8** | **+1.0** |
| ACDV | | | | IAML | | 05 16 42.7 | |
| comp=Z,154nm,1.0s | | | | | | | |
| **AAGR** | **Agrelo** | **3.11** | **115** | *i* P | **Pb** | **05 15 59.5** | **-2.2** |
| AAGR | | | | *i* S | **Sb** | **05 16 40.8** | **+1.5** |
| AAGR | | | | IAML | | 05 16 48.9 | |
| comp=Z,83nm,1.2s | | | | | | | |
| **AVFE** | **Valle Fertil** | **4.21** | **75** | *i* P | Pb | 05 16 14.6 | -5.8 |
| AVFE | | | | *i* S | **Sb** | **05 17 07.8** | **-3.0** |
| AVFE | | | | IAML | | 05 17 15.5 | |
| comp=Z,87nm,0.9s | | | | | | | |
| **VCA** | **Vinchina** | **4.61** | **49** | *i* P | Pn | 05 16 19.2 | +4.3 |
| VCA | | | | ⇑*i*S | **Sb** | **05 17 15.2** | **-7.0** |
| VCA | | | | IAML | | 05 17 39.2 | |
| comp=Z,108nm,1.2s | | | | | | | |
| **ACHE** | **Chepes** | **4.76** | **84** | *i* P | Pb | 05 16 23.1 | -6.7 |
| ACHE | | | | *i* S | **Sb** | **05 17 21.5** | **-5.2** |
| **CYA** | **Choya** | **6.47** | **60** | *i* P | Pn | 05 16 44.8 | +4.5 |
| CYA | | | | IAML | | 05 18 48.9 | |
| comp=Z,15nm,4.8s | | | | | | | |

*IDC **26** 05:15:44.1±2.7,8°.42S×117°.05E,h0km,mb4.1/3,*
*mbtmp4.1/4,ML3.6/1,Error ellipse: s-maj=52.6km*
*s-min=30.5km az=102.0*
*DJA **26** 05:15:44.9±0.3,9°.5S±3°×11°.7E±°,h10km,M4.2/11,mb4.5/2,*
*MLv4.0/11*
**ISC 26 05:15:44.0±2.0,8°.40S±0°.08×116°.97E±0°.04,h5km±13km,**
**n17,σ0°.63/23,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.34** | **195** | P | **Pg** | **05 15 50.7** | **0.0** |
| TWSI | | | | S | **Sg** | **05 15 55.1** | **-0.1** |
| **PLAI** | **Plampang** | **0.90** | **118** | P | **Pb** | **05 16 01.7** | **-0.5** |
| PLAI | | | | S | **Sb** | **05 16 13.9** | **-0.6** |
| **DNP** | **Denpasar** | **1.76** | **261** | P | **Pn** | **05 16 15.0** | **-0.2** |
| **SRBI** | **Singaraja** | **1.77** | **280** | P | **Pn** | **05 16 15.4** | **+0.1** |
| SRBI | | | | S | **Sn** | **05 16 37.5** | **-0.7** |
| **IGBI** | **Denpasar** | **1.85** | **257** | P | **Pn** | **05 16 17.9** | **+1.5** |
| **WBSI** | **Waikabubak, Su** | **2.69** | **117** | P | **Pn** | **05 16 28.5** | **+0.5** |
| WBSI | | | | S | **Sn** | **05 17 01.0** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.79** | **268** | P | **Pn** | **05 16 29.4** | **0.0** |
| JAGI | | | | S | **Sn** | **05 17 03.5** | **+0.1** |
| **BSSI** | **Bau Bau, Buton** | **4.15** | **57** | P | **Pn** | **05 16 48.9** | **+0.8** |
| **KAPI** | **Kappang** | **4.36** | **40** | Pn | **Pn** | **05 16 51.6** | **+0.7** |
| | 3.2nm,0.3s,baz=208,slow=6.2,SNR=7.5 | | | | | | |
| KAPI | | | | Sn | **Sn** | **05 17 41.8** | **-0.3** |
| | 3.8nm,0.3s,baz=46,slow=21,SNR=7.3 | | | | | | |
| | 7.9nm,0.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **4.68** | **95** | P | **Pn** | **05 16 56.5** | **+1.0** |
| **GRJI** | **Gresik** | **4.69** | **288** | P | **Pn** | **05 16 56.2** | **+0.7** |
| **PWJI** | **Pagerwojo** | **5.13** | **274** | P | **Pn** | **05 17 02.2** | **+0.7** |
| | 33nm,1.2s,0.2nm | | | | | | |
| **UGM** | **Wanagama** | **6.40** | **274** | P | **Pn** | **05 17 19.6** | **+0.5** |
| **WRA** | **Warramunga Arr** | **20.35** | **126** | P | **P** | **05 20 21.7** | **+0.1** |
| | 4.6nm,0.5s,baz=301,slow=12,SNR=171 | | | | | | |
| | 4.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.21** | **135** | P | **P** | **05 20 42.1** | **+0.5** |
| | 1.9nm,0.5s,baz=312,slow=9.9,SNR=35 | | | | | | |
| | 1.9nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **32.70** | **139** | P | **P** | **05 22 17.2** | **-0.4** |
| | 2.9nm,0.6s,baz=321,slow=11,SNR=5.6 | | | | | | |
| | 2.9nm,0.6s | | | | | | |
| **CPUP** | **Villa Florida** | **145.03** | **189** | PKPbc | **PKPab** | **05 35 22.7** | **+0.1** |
| | 2.2nm,0.8s,baz=93,slow=7.4,SNR=4.2 | | | | | | |

*IDC **26** 05:18:26.7±1.0,34°.66N×46°.13E,h0km,mb3.9/14,*
*mbtmp3.9/20,ML3.7/6,MS2.8/8,Error ellipse:*
*s-maj=21.0km s-min=14.9km az=162.0*
*ISN **26** 05:18:27.2±0.5,34°.63N×46°.18E,h7km±5km,ML4.2*
*NEIC **26** 05:18:27.9±1.7,34°.57N±0°.06×46°.21E±0°.09,h10km±1km,*
*mb4.2/13,Error ellipse: s-maj=14.1km s-min=7.4km*
*az=56.0*
*TEH **26** 05:18:28.5,34°.62N×46°.23E,h9km±24km,ML4.0*
**ISC 26 05:18:28.4±0.9,34°.59N±0°.03×46°.19E±0°.03,h13km±6km,**
**n168,σ1°.77/168,mb3.9/29,MS2.8/3,4C-11D,Western**
**Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.20** | **55** | Pg | **Pg** | **05 18 32.4** | **-0.5** |
| IDHR | | | | Sg | **Sg** | **05 18 35.8** | **-0.3** |
| **IGHG** | **Ghaleghazi** | **0.41** | **130** | Pg | **Pb** | **05 18 37.2** | **-0.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **261** | Pg | **Pb** | **05 18 39.0** | **-0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.53** | **206** | Pg | **Pb** | **05 18 39.6** | **0.0** |
| **ILIN** | **Lien** | **0.71** | **62** | Pg | **Pg** | **05 18 41.6** | **-0.8** |
| **KCHF** | **Cheshme Sefid,** | **0.77** | **114** | Pg | **Pg** | **05 18 43.3** | **-0.1** |
| KCHF | | | | Sg | **Sb** | **05 18 55.1** | **+1.0** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **179** | Pg | **Pn** | **05 18 47.8** | **+0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.21** | **77** | Pg | **Pb** | **05 18 51.2** | **-0.2** |
| SNQR | | | | Sg | **Sb** | **05 19 06.8** | **-0.3** |
| **IBZA** | **Bozab** | **1.38** | **94** | Pg | **Pg** | **05 18 54.6** | **-0.4** |
| **IBDR** | **Badra** | **1.49** | **188** | *e*Pn | **Pg** | **05 18 56.7** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **05 19 18.0** | **+1.6** |
| IBDR | | | | AML | AML | 05 19 22.9 | |
| comp=E,5μm,0.3s | | | | | | | |
| IBDR | | | | AML | AML | 05 19 29.6 | |
| comp=N,3μm,0.4s | | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.66** | **340** | Pg | **Pb** | **05 18 58.4** | **-0.5** |
| **IKRK** | **Kirkuk** | **1.72** | **299** | *e*Pn | **Pb** | **05 18 59.0** | **-0.9** |
| IKRK | | | | *e*Sn | **Sg** | **05 19 22.5** | **-1.4** |
| IKRK | | | | AML | AML | 05 19 30.4 | |
| comp=E,4μm,0.5s | | | | | | | |
| IKRK | | | | AML | AML | 05 19 31.4 | |
| comp=N,9μm,0.6s | | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.74** | **127** | Pg | **Pb** | **05 19 00.9** | **+0.7** |
| **IDOB** | **Doab** | **1.83** | **115** | Pn | **Pb** | **05 19 02.6** | **+0.7** |
| **BHD** | **Baghdad** | **2.00** | **229** | *e*Pn | **Pn** | **05 19 03.2** | **+1.4** |
| BHD | | | | *e*Sn | **Sb** | **05 19 30.0** | **+0.6** |
| BHD | | | | AML | AML | 05 19 38.4 | |
| comp=E,2μm,0.3s | | | | | | | |
| **HSAM** | **Samen** | **2.03** | **100** | Pn | **Pb** | **05 19 05.3** | **0.0** |
| **MAHB** | **Mahabad** | **2.21** | **350** | Pn | **Pb** | **05 19 07.3** | **-1.0** |
| **HAGD** | **Aghdareh** | **2.44** | **84** | Pn | **Pb** | **05 19 10.6** | **-1.6** |
| **RAFI** | **Al-Rafai** | **2.86** | **181** | *e*Pn | **Pn** | **05 19 16.0** | **+2.3** |
| RAFI | | | | *e*Sn | **Sn** | **05 19 51.0** | **+3.1** |
| RAFI | | | | AML | AML | 05 20 16.7 | |
| comp=E,644nm,0.4s | | | | | | | |
| RAFI | | | | AML | AML | 05 20 32.9 | |
| comp=N,474nm,1.1s | | | | | | | |
| **IAZR** | **Azarshahr** | **3.09** | **357** | Pn | **Pn** | **05 19 19.3** | **+2.2** |
| **IRAZ** | **Razeghan** | **3.17** | **74** | Pn | **Pn** | **05 19 20.9** | **+2.6** |
| **CUKT** | **Cukurca** | **3.38** | **322** | P | **Pn** | **05 19 22.2** | **+1.2** |
| **ISRB** | **Sarab** | **3.44** | **20** | Pn | **Pn** | **05 19 24.8** | **+2.9** |
| **ITBZ** | **Tabriz** | **3.64** | **359** | Pn | **Pn** | **05 19 26.8** | **+2.3** |
| **IMRD** | **Marand** | **4.14** | **355** | Pn | **Pn** | **05 19 33.8** | **+2.4** |
| **IPIR** | **Pirpir** | **4.36** | **115** | Pn | **Pn** | **05 19 36.5** | **+2.0** |
| **QAMS** | **Qamsar** | **4.40** | **100** | Pn | **Pn** | **05 19 37.8** | **+2.7** |
| **JHBN** | **Jahan bin** | **4.42** | **121** | Pn | **Pn** | **05 19 38.0** | **+2.6** |
| **GRMI** | **Germi** | **4.43** | **17** | Pn | **Pn** | **05 19 37.9** | **+2.5** |
| **AKDM** | **Akdamar-Van** | **4.54** | **326** | *e*P | **Pn** | **05 19 39.5** | **+2.5** |
| **IVRN** | **Varamin** | **4.57** | **83** | Pn | **Pn** | **05 19 39.6** | **+2.3** |
| **VANB** | **Van** | **4.59** | **331** | P | **Pn** | **05 19 38.9** | **+1.3** |
| **IKLH** | **Kolahrood** | **4.65** | **104** | Pn | **Pn** | **05 19 41.3** | **+2.7** |
| **IDMV** | **Damavand** | **4.89** | **77** | Pn | **Pn** | **05 19 44.1** | **+2.2** |
| **CLDR** | **Caldiran** | **4.90** | **339** | *e*P | **Pn** | **05 19 38.9** | **-3.0** |
| **KRSH** | **Karshahi** | **4.96** | **95** | Pn | **Pn** | **05 19 45.9** | **+3.2** |
| **ISFB** | **Sefidab** | **5.00** | **91** | Pn | **Pn** | **05 19 44.8** | **+1.6** |
| **IBRJ** | **Brojen** | **5.02** | **121** | Pn | **Pn** | **05 19 46.7** | **+3.1** |
| **GURO** | **Guroymak-BITLI** | **5.18** | **321** | *e*P | **Pn** | **05 19 47.5** | **+1.8** |
| **GURO** | **Guroymak-BITLI** | **5.18** | **321** | | **Pn** | **05 19 47.2** | **+1.4** |
| **SVAN** | **Silvan-Diyarba** | **5.37** | **313** | *e*P | **Pn** | **05 19 48.7** | **+0.4** |
| **IZEF** | **Zefreh** | **5.38** | **107** | Pn | **Pn** | **05 19 51.4** | **+2.7** |
| **MAZI** | **Mazidag** | **5.47** | **303** | *e*P | **Pn** | **05 19 50.2** | **+0.6** |
| **IFIR** | **Firoozkooh** | **5.48** | **77** | Pn | **Pn** | **05 19 52.4** | **+2.5** |
| **AGRB** | **Hanur-Agry** | **5.60** | **334** | *e*P | **Pn** | **05 19 53.7** | **+2.2** |
| **GNI** | **Garni** | **5.67** | **349** | Pn | **Pn** | **05 19 52.5** | **+0.1** |
| **GNI** | **Garni** | **5.67** | **349** | Pb | **Pb** | **05 20 06.1** | **-1.2** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GNI** | **Garni** | | **5.67 349** | Pn | | **Pn** | **05 19 53.8** | **+1.4** |
| | comp=N,0.8nm,0.3s,baz=145,slow=16,SNR=1.6 | | | | | | | |
| GNI | | | | LR | | LR | 05 22 24.0 | |
| | comp=N,76nm,21.9s,baz=174,slow=42 | | | | | | | |
| | comp=N,4.0nm,0.5s | | | | | | | |
| **DYBB** | **Diyarbakir** | | **5.93 306** | *e*P | | **Pn** | **05 19 56.6** | **+0.6** |
| **BNGB** | **Bingl** | | **6.23 316** | *e*P | | **Pn** | **05 20 01.4** | **+1.2** |
| **ANAR** | **Anarak** | | **6.42 100** | Pn | | **Pn** | **05 20 05.3** | **+2.5** |
| **KARS** | **Kars** | | **6.51 339** | Pn | | **Pn** | **05 20 04.9** | **+0.9** |
| **URFA** | **Urfa** | | **6.62 298** | *e*P | | **Pn** | **05 20 06.3** | **+0.9** |
| **YEDI** | **Yedisu-Bingol** | | **6.62 319** | *e*P | | **Pn** | **05 20 03.8** | **-1.7** |
| **SVRC** | **Sivrice-ELAZID** | | **6.71 306** | *e*P | | **Pn** | **05 20 07.4** | **+0.6** |
| **PTK** | **Pertek** | | **6.95 310** | *e*P | | **Pn** | **05 20 10.6** | **+0.6** |
| **GAZ** | **Gaziantep** | | **7.73 292** | Pn | | **Pn** | **05 20 20.8** | **+0.1** |
| **BCA** | **Borcka** | | **7.74 334** | *e*P | | **Pn** | **05 20 22.1** | **+1.4** |
| **ARPR** | **Arapgir-MALATY** | | **7.74 308** | Pn | | **Pn** | **05 20 21.4** | **+0.6** |
| **DARE** | **Darende-Malaty** | | **8.05 302** | *e*P | | **Pn** | **05 20 23.8** | **-1.3** |
| **ASF** | **Jabal al Asfar** | | **8.14 255** | Pn | | **Pn** | **05 20 25.3** | **-1.0** |
| | comp=N,1.5nm,0.3s,baz=92,slow=0.2,SNR=6.7 | | | | | | | |
| | comp=N,3.7nm,0.3s | | | | | | | |
| **TAHT** | **Tahtakopru-Hat** | | **8.36 285** | *e*P | | **Pn** | **05 20 26.1** | **-3.1** |
| **TPRV** | **Parvadeh(Tabas** | | **8.87 97** | Pn | | **Pn** | **05 20 38.9** | **+2.5** |
| **MMAI** | **Mount Meron Ar** | | **9.12 263** | Pn | | **Pn** | **05 20 39.2** | **-0.4** |
| | comp=N,2.6nm,0.3s,baz=91,slow=16,SNR=5.1 | | | | | | | |
| | comp=N,1.5nm,0.3s | | | | | | | |
| **BNN** | **Bunyan** | | **9.33 300** | Pn | | **Pn** | **05 20 41.9** | **-0.8** |
| **KBZ** | **Khabaz** | | **9.48 345** | Pn | | Pn | 05 20 49.5 | +4.9 |
| | comp=N,0.1nm,0.3s,baz=217,slow=5.9,SNR=1.9 | | | | | | | |
| KBZ | | | | LR | | LR | 05 24 03.3 | |
| | comp=N,30nm,18.7s,baz=151,slow=36 | | | | | | | |
| **EIL** | **Elat** | | **10.71 246** | Pn | | **Pn** | **05 21 01.9** | **+0.3** |
| | comp=N,0.9nm,0.3s,baz=124,slow=7.3,SNR=3.0 | | | | | | | |
| EIL | | | | LR | | LR | 05 25 57.2 | |
| | comp=N,57nm,18.8s,baz=67,slow=42 | | | | | | | |
| | comp=N,2.7nm,0.4s | | | | | | | |
| **RAYN** | **Ar Rayn** | | **11.04 183** | | | **Pn** | **05 21 04.6** | **-1.6** |
| **RAYN** | **Ar Rayn** | | **11.04 183** | Pn | | Pn | 05 21 01.4 | -4.7 |
| **BR104** | **Keskin Array S** | | **11.24 301** | P | | **Pn** | **05 21 13.3** | **+4.5** |
| | comp=N,2.8nm,1.1s | | | | | | | |
| **BR131** | **Keskin Array S** | | **11.25 301** | | | **Pn** | **05 21 08.8** | **-0.2** |
| **BRTR** | **Keskin Array B** | | **11.25 301** | Pn | | **Pn** | **05 21 11.6** | **+2.6** |
| | comp=N,0.1nm,0.3s,baz=116,slow=14,SNR=13 | | | | | | | |
| | comp=N,1.6nm,0.8s | | | | | | | |
| **BR106** | **Keskin Array S** | | **11.27 301** | P | | **Pn** | **05 21 13.9** | **+4.7** |
| | comp=N,3.7nm,0.8s | | | | | | | |
| **SHME** | **Shamm** | | **12.09 132** | Pn | | **Pn** | **05 21 19.5** | **-0.8** |
| **NAZ** | **Nazwa, Dubai** | | **12.61 137** | Pn | | **Pn** | **05 21 27.0** | **-0.4** |
| **MSFE** | **Esma-Masafi** | | **12.61 134** | Pn | | **Pn** | **05 21 27.1** | **-0.4** |
| **ASUD** | **Al Ashush, Dub** | | **12.71 139** | Pn | | **Pn** | **05 21 28.1** | **-0.8** |
| **MDH** | **Madha** | | **12.74 134** | Pn | | **Pn** | **05 21 27.8** | **-1.4** |
| **FAQ** | **Al Faqa, Dubai** | | **12.76 138** | Pn | | **Pn** | **05 21 28.8** | **-0.8** |
| **UOSS** | **Minazif** | | **12.95 135** | | | **Pn** | **05 21 30.9** | **-1.2** |
| **UOSS** | **Minazif** | | **12.95 135** | Pn | | **Pn** | **05 21 30.7** | **-1.5** |
| **HATD** | **Hatta, Dubai** | | **13.00 136** | Pn | | **Pn** | **05 21 30.9** | **-1.9** |
| HATD | | | | P | | P | 05 21 31.1 | -12 |
| **ASHO** | **Ashiyiah** | | **13.07 136** | Pn | | **Pn** | **05 21 33.1** | **-0.7** |
| ASHO | | | | Sn | | **Sn** | **05 23 50.6** | **-8.5** |
| **WSAR** | **Wadi Sarin** | | **15.68 133** | Pn | | **Pn** | **05 22 08.4** | **-0.7** |
| | comp=N,0.8nm,0.3s,baz=332,slow=13,SNR=2.7 | | | | | | | |
| | comp=N,8.0nm,0.5s | | | | | | | |
| **JURR** | **Jurilovca** | | **16.73 313** | ⇓P | | **P** | **05 22 25.5** | **+0.9** |
| **TPGR** | **Topolog** | | **17.05 312** | ⇓P | | **P** | **05 22 28.2** | **0.0** |
| **IDI** | **Anoyia** | | **17.48 278** | P | | **Pn** | **05 22 31.9** | **-0.1** |
| **BELG** | **Belogornoye** | | **17.83 3** | LR | | LR | 05 31 02.2 | |
| | comp=N,30nm,19.2s,baz=223,slow=42 | | | | | | | |
| **ELND** | **Elena** | | **17.87 304** | ⇓P | | **P** | **05 22 38.7** | **+1.5** |
| **VARL** | **Varlezi** | | **17.95 315** | ⇓P | | **P** | **05 22 39.6** | **+1.5** |
| **AKTO** | **Aktyubinsk** | | **18.04 25** | LR | | LR | 05 32 34.8 | |
| | comp=N,30nm,18.9s,baz=61,slow=47 | | | | | | | |
| **MLR** | **Muntele Rosu** | | **18.89 311** | P | | **P** | **05 22 48.4** | **-0.2** |
| **MLR** | **Muntele Rosu** | | **18.89 311** | P | | **Pn** | **05 22 52.4** | **+3.2** |
| | comp=N,2.4nm,0.7s,baz=163,slow=7.0,SNR=5.4 | | | | | | | |
| **MLR** | **Muntele Rosu** | | **18.89 311** | ⇓P | | **Pn** | **05 22 53.0** | **+3.8** |
| **SORM** | **Soroca** | | **18.98 321** | P | | **P** | **05 22 49.5** | **+0.1** |
| | comp=N,4.7nm,0.7s | | | | | | | |
| **TESR** | **Tescani** | | **18.98 315** | P | | **P** | **05 22 49.1** | **-0.3** |
| | comp=N,9.7nm,0.8s | | | | | | | |
| **VOIR** | | | **19.43 310** | ⇑P | | **Pn** | **05 22 56.7** | **+1.1** |
| **VOIR** | | | **19.43 310** | P | | **Pn** | **05 22 56.0** | **+0.4** |
| | comp=N,13nm,1.1s | | | | | | | |
| **DOPR** | **Dopca** | | **19.46 312** | ⇑P | | **Pn** | **05 22 56.3** | **+0.3** |
| **ARR** | **Arges** | | **19.66 310** | ⇓P | | **Pn** | **05 22 59.2** | **+0.8** |
| **NDNU** | **Novodnistrovsk** | | **19.78 321** | P | | **P** | **05 22 57.7** | **-0.4** |
| **AK09** | **Malin Array Si** | | **20.21 328** | P | | **P** | **05 23 02.2** | **-0.6** |
| **KMPD** | **K-Podol'skiy** | | **20.24 320** | P | | Pn | 05 23 02.1 | -3.0 |
| KMPD | | | | | | **P** | **05 23 01.9** | **-1.2** |
| **LOT** | **Lotru** | | **20.24 309** | ⇓P | | Pn | 05 23 04.7 | -0.6 |
| **AKASG** | **Malin Array Be** | | **20.29 328** | P | | **P** | **05 23 02.9** | **-0.9** |
| | comp=N,0.6nm,0.3s,baz=138,slow=8.7,SNR=5.1 | | | | | | | |
| AKASG | | | | LR | | LR | 05 32 17.2 | |
| | comp=N,33nm,18.8s,baz=30,slow=41 | | | | | | | |
| | comp=N,0.6nm,0.3s | | | | | | | |
| **KIEV** | **Kiev** | | **20.30 328** | P | | Pn | 05 23 05.1 | -0.7 |
| | comp=N,62nm,1.2s | | | | | | | |
| **BURAR** | **Bucovina Array** | | **20.39 316** | P | | **P** | **05 23 05.5** | **+0.5** |
| **BURAR** | **Bucovina Array** | | **20.39 316** | ⇓P | | Pn | 05 23 06.8 | -0.2 |
| **BUR08** | **Bucovina Ar. S** | | **20.42 316** | P | | **P** | **05 23 05.5** | **+0.3** |
| BUR08 | | | | IAmb | | IAmb | 05 23 08.8 | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **LUBAR** | **Lubar, Ukraine** | | **20.43 324** | P | | **P** | **05 23 05.0** | **-0.2** |
| **MI29** | **MI29, Kamyanyy** | | **20.72 325** | P | | **P** | **05 23 07.6** | **-0.8** |
| **MI30** | **MI30,Zelenitsa** | | **20.73 325** | P | | **P** | **05 23 08.3** | **-0.8** |
| **KSV** | **Kosov** | | **20.86 317** | P | | **P** | **05 23 09.7** | **-0.2** |
| **GZR** | **Gura Zlata** | | **20.86 308** | ⇓P | | **P** | **05 23 10.9** | **+0.8** |
| **CJR** | **Cluj-Napoca** | | **20.91 312** | ⇓P | | **P** | **05 23 11.0** | **+0.5** |
| **HERR** | **Herculane** | | **20.91 307** | ⇑P | | **P** | **05 23 11.6** | **+1.2** |
| **BOVS** | **Bovan** | | **20.98 303** | ⇑P | | **P** | **05 23 11.6** | **+0.3** |
| **MI28** | **Mi28,Pidlybu** | | **21.16 326** | P | | **P** | **05 23 12.4** | **-0.7** |
| **DRGR** | | | **21.49 312** | ⇓P | | **P** | **05 23 18.1** | **+1.4** |
| **MEZ** | **Mezhgor'ye** | | **21.84 316** | P | | **P** | **05 23 21.1** | **+0.7** |
| **MORS** | **Morshin** | | **21.95 318** | P | | **P** | **05 23 21.4** | **-0.3** |
| **BRIU** | **Brid** | | **22.03 316** | P | | **P** | **05 23 23.9** | **+1.4** |
| **SHIU** | **Shidnytsya** | | **22.30 318** | P | | **P** | **05 23 26.0** | **+0.6** |
| **HOLU** | **Holmets** | | **22.49 315** | P | | **P** | **05 23 28.3** | **+0.9** |
| **KOLS** | **Kolonicke sedl** | | **22.76 316** | *e*P | | **P** | **05 23 32.1** | **+1.8** |
| **CRVS** | **Cervenica-Dubn** | | **23.21 316** | *e*P | | **P** | **05 23 38.6** | **+3.7** |
| **ARU** | **Arti** | | **23.43 17** | P | | **P** | **05 23 38.4** | **+1.4** |
| | comp=Z,2.0nm,0.5s,baz=288,slow=19,SNR=3.4 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **PSZ** | **Piszkesteto** | | **23.70 312** | P | | **P** | **05 23 39.6** | **-0.3** |
| PSZ | | | | IAmb | | IAmb | 05 23 45.5 | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **LANS** | **Liptovska Anna** | | **24.49 315** | *e*P | | **P** | **05 23 48.4** | **+1.2** |
| **VYHS** | **Vyhne** | | **24.58 313** | *e*P | | **P** | **05 23 51.2** | **+3.2** |
| **OJC** | **Ojcow** | | **24.79 317** | P | | **P** | **05 23 49.6** | **-0.3** |
| OJC | | | | IAmb | | IAmb | 05 23 53.8 | |
| | comp=Z,8.5nm,1.0s | | | | | | | |
| **OJC** | **Ojcow** | | **24.79 317** | P | | **P** | **05 23 50.4** | **+0.5** |
| **BRVK** | **Borovoye** | | **25.16 35** | P | | **P** | **05 23 53.6** | **+0.5** |
| BRVK | | | | IAmb | | IAmb | 05 23 59.3 | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | | **25.19 36** | P | | **P** | **05 23 54.4** | **+1.0** |
| | comp=Z,3.3nm,1.1s,baz=231,slow=9.1,SNR=3.7 | | | | | | | |
| | comp=Z,3.3nm,1.1s | | | | | | | |
| **CONA** | **Conrad Observa** | | **26.22 310** | *e*pP | | **P** | **05 24 06.5** | **+3.5** |
| | comp=Z,3.5nm,1.0s | | | | | | | |
| **OBKA** | **Obir** | | **26.65 306** | *e*pP | | **P** | **05 24 10.4** | **+3.5** |
| | comp=Z,26nm,1.8s | | | | | | | |
| **CHVC** | **Chvalec** | | **27.10 315** | *e*P | | **P** | **05 24 10.3** | **-0.5** |
| **MOA** | **Molln** | | **27.21 309** | *e*P | | **P** | **05 24 13.6** | **+1.8** |
| | comp=Z,0.3nm,0.2s | | | | | | | |
| **ZVC** | **Zvikov** | | **27.77 312** | *e*P | | **P** | **05 24 23.6** | **+6.8** |
| **KHC** | **Kasperske Hory** | | **28.05 311** | *e*P | | **P** | **05 24 20.1** | **+0.8** |
| **ABTA** | **Abfaltersbach** | | **28.07 306** | *e*P | | **P** | **05 24 21.3** | **+1.8** |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | | **28.40 46** | P | | **P** | **05 24 22.4** | **0.0** |
| | comp=Z,0.3nm,0.4s,baz=248,slow=9.6,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | | **28.77 307** | *e*P | | **P** | **05 24 27.1** | **+1.2** |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **WATA** | **Walderalm** | | **28.83 307** | *e*P | | **P** | **05 24 26.8** | **+0.4** |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | | **29.05 306** | *e*P | | **P** | **05 24 28.5** | **+0.2** |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **MOTA** | **Moosalm** | | **29.14 307** | *i* P | | **P** | **05 24 29.7** | **+0.5** |
| | comp=Z,0.5nm,0.2s | | | | | | | |
| **CLL** | **Collm** | | **29.16 315** | P | | **P** | **05 24 29.2** | **+0.1** |
| CLL | | | | IAmb | | IAmb | 05 24 53.4 | |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **FETA** | **Feichten** | | **29.32 306** | *i* P | | **P** | **05 24 31.7** | **+0.9** |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **RETA** | **Reutte** | | **29.40 307** | *e*P | | **P** | **05 24 31.7** | **+0.3** |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | | **29.70 55** | P | | **P** | **05 24 32.3** | **-1.8** |
| **MKAR** | **Makanchi Array** | | **29.70 55** | P | | **P** | **05 24 33.9** | **-0.1** |
| | comp=Z,0.4nm,0.7s,baz=268,slow=5.4,SNR=3.5 | | | | | | | |
| MKAR | | | | LR | | LR | 05 38 09.1 | |
| | comp=Z,22nm,19.6s,baz=253,slow=40 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | | **29.79 341** | P | | **P** | **05 24 34.0** | **-0.6** |
| **FINES** | **FINESS Array B** | | **29.79 341** | P | | **P** | **05 24 33.8** | **-0.8** |
| | comp=Z,1.4nm,0.6s,baz=143,slow=8.7,SNR=8.3 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **FIA1** | **FINESS Array S** | | **29.79 341** | P | | **P** | **05 24 34.0** | **-0.6** |
| **DAVA** | **Damuels** | | **29.94 306** | *e*P | | **P** | **05 24 35.9** | **-0.4** |
| | comp=Z,0.7nm,0.2s | | | | | | | |
| **BNI** | **Bardonecchia** | | **31.81 301** | P | | **P** | **05 24 52.8** | **-0.1** |
| **HFS** | **Hagfors** | | **33.12 331** | P | | **P** | **05 25 02.7** | **-1.3** |
| | comp=Z,2.5nm,0.5s,baz=139,slow=9.8,SNR=17 | | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | | **36.50 195** | LR | | LR | 05 41 18.8 | |
| | comp=Z,26nm,18.0s,baz=81,slow=38 | | | | | | | |
| **ARCES** | **ARCESS Array B** | | **36.83 348** | P | | **P** | **05 25 35.5** | **-0.2** |
| | comp=Z,1.9nm,0.9s,baz=166,slow=8.4,SNR=1.7 | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | | **39.57 317** | P | | **P** | **05 25 58.1** | **-0.9** |
| | comp=Z,0.7nm,0.3s,baz=108,slow=8.3,SNR=11 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **EKB** | **Eskdalemuir** | | **39.59 317** | P | | **P** | **05 25 59.7** | **+0.5** |
| **ESDC** | **Sonseca Array** | | **39.89 292** | P | | **P** | **05 26 02.1** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=68,slow=9.5,SNR=6.6 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **PESTR** | **Estremoz** | | **42.80 292** | P | | **P** | **05 26 24.5** | **-1.4** |
| PESTR | | | | IAmb | | IAmb | 05 26 42.5 | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | **45.49 253** | P | | **P** | **05 26 46.4** | **-1.2** |
| TORD | | | | IAmb | | IAmb | 05 26 53.7 | |
| | comp=Z,2.4nm,1.1s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | **45.49 253** | P | | **P** | **05 26 48.1** | **+0.5** |
| | comp=Z,1.3nm,0.9s,baz=52,slow=9.6,SNR=5.9 | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | **49.32 95** | P | | **P** | **05 27 18.6** | **+1.2** |
| | comp=Z,0.8nm,0.3s,baz=292,slow=9.6,SNR=4.7 | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **DBIC** | **Dimbokro** | | **54.52 252** | P | | **P** | **05 27 56.1** | **-0.1** |
| | comp=Z,7.5nm,1.1s,baz=34,slow=9.3,SNR=1.8 | | | | | | | |
| | comp=Z,7.5nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | | **80.44 6** | P | | **P** | **05 30 39.0** | **-0.4** |
| | comp=Z,0.4nm,0.9s,baz=322,slow=5.7,SNR=3.0 | | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | | |

*NEIC* ***26*** *05:24:14.0±0.3,36°.20N±0°.01×98°.91W±0°.04, h5km±1km, Error ellipse: s-maj=5.1km s-min=2.8km az=88.0*

**TUL 26 05:24:14.4±0.4, 36°.20N±0°.01×98°.91W±0°.04, h5km±5km, ML2.3, mb_Lg2.4**/50(NEIC), **ML2.5**/16(NEIC), **Error ellipse: s-maj=4.2km s-min=1.7km az=92.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK038** | **West end E0370** | **0.31** | **26** | Pg | Pg | 05 24 20.8 | +0.3 |
| OK038 | | | | IAML | | 05 24 31.5 | |
| | 694nm,0.4s | | | | | | |
| **ELIS** | **Ellis County** | **0.43** | **252** | | Pg | 05 24 22.9 | +0.2 |
| **NOKA** | **Waynoka** | **0.43** | **358** | Pg | Pg | 05 24 22.8 | 0.0 |
| NOKA | | | | IAML | | 05 24 29.7 | |
| | comp=E,384nm,0.3s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.58** | **162** | | Pg | 05 24 25.7 | +0.1 |
| **CROK** | **Carrier** | **0.81** | **68** | Pg | Pg | 05 24 29.7 | -0.2 |
| CROK | | | | IAML | | 05 24 51.1 | |
| | comp=E,180nm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.83** | **43** | | Pg | 05 24 30.2 | -0.1 |
| OK032 | | | | IAML | | 05 24 44.7 | |
| | comp=E,162nm,0.3s | | | | | | |
| OK032 | | | | IAML | | 05 24 46.4 | |
| | comp=E,131nm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **1.07** | **52** | Pg | Pg | 05 24 35.0 | 0.0 |
| **KAN14** | **Manchester OK** | **1.07** | **45** | Pg | Pg | 05 24 34.4 | -0.6 |
| KAN14 | | | | IAML | | 05 24 56.4 | |
| | comp=N,106nm,0.3s | | | | | | |
| KAN14 | | | | IAML | | 05 24 56.7 | |
| | comp=E,89nm,0.2s | | | | | | |
| **OK029** | **Liberty Lake** | **1.25** | **108** | | Pg | 05 24 37.5 | -0.9 |
| OK029 | | | | IAML | | 05 24 57.9 | |
| | comp=E,81nm,0.4s | | | | | | |
| **KAN17** | **Caldwell West** | **1.25** | **47** | IAmb_Lg | | 05 24 55.9 | |
| | comp=Z,23nm,0.8s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **1.44** | **123** | IAmb_Lg | | 05 25 01.6 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.46** | **176** | | Pn | 05 24 40.1 | -1.4 |
| **BLOK** | **Blackwell** | **1.48** | **67** | | Pn | 05 24 41.7 | 0.0 |
| **SMWD** | **Samnorwood** | **1.54** | **225** | Pg | Pn | 05 24 42.0 | -0.6 |
| **FNO** | **Franklin** | **1.55** | **127** | | Pn | 05 24 42.2 | -0.4 |
| **OK048** | **Pawnee Station** | **1.60** | **82** | | Pn | 05 24 43.3 | -0.1 |
| **OK051** | **E0350 and S346** | **1.70** | **79** | | Pn | 05 24 45.1 | +0.3 |
| **OK052** | **Battle Ridge R** | **1.72** | **96** | | Pn | 05 24 45.0 | 0.0 |
| **QUOK** | **Quay** | **1.78** | **90** | Pn | Pn | 05 24 45.6 | -0.3 |
| **DEOK** | **Depew** | **1.99** | **100** | Pn | Pn | 05 24 49.0 | +0.3 |
| **T35A** | **Sooner Cattle** | **2.06** | **69** | IAmb_Lg | | 05 25 22.4 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **R32A** | **Long Quarter,** | **2.23** | **4** | Pn | Pn | 05 24 52.5 | +0.5 |
| **TUL3** | **Leonard** | **2.54** | **96** | Pn | Pn | 05 24 56.9 | +0.6 |
| TUL3 | | | | IAmb_Lg | | 05 25 40.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **2.61** | **241** | IAmb_Lg | | 05 25 42.4 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **LOOK** | **Low County** | **2.62** | **147** | Pn | Pn | 05 24 57.8 | +0.4 |
| **DKNS** | **Dickens** | **3.02** | **214** | IAmb_Lg | | 05 25 50.0 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **APMT** | **Aspermont** | **3.04** | **199** | Pn | Pn | 05 25 03.5 | +0.4 |
| **RTBA** | **Rita Blanca** | **3.10** | **276** | | Pn | 05 25 04.7 | +0.6 |
| RTBA | | | | IAmb_Lg | | 05 25 56.2 | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| **X37A** | **Clayton** | **3.31** | **118** | IAmb_Lg | | 05 26 03.7 | |
| | comp=Z,9.2nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **3.42** | **32** | Pn | Pn | 05 25 09.0 | +0.6 |
| KSU1 | | | | IAmb_Lg | | 05 26 10.9 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **3.50** | **208** | IAmb_Lg | | 05 26 12.8 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **U38A** | **Gravette** | **3.66** | **85** | IAmb_Lg | | 05 26 18.8 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **3.69** | **207** | IAmb_Lg | | 05 26 15.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **POST** | **Post** | **3.79** | **215** | IAmb_Lg | | 05 26 20.3 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **3.87** | **236** | IAmb_Lg | | 05 26 27.0 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **4.02** | **87** | IAmb_Lg | | 05 26 22.1 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.07** | **315** | IAmb_Lg | | 05 26 32.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **4.72** | **70** | IAmb_Lg | | 05 26 44.6 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.38** | **116** | IAmb_Lg | | 05 27 11.0 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **5.46** | **50** | IAmb_Lg | | 05 27 22.3 | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.51** | **91** | IAmb_Lg | | 05 27 11.7 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **5.51** | **168** | IAmb_Lg | | 05 27 12.0 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **OZNA** | **Ozona** | **5.58** | **200** | IAmb_Lg | | 05 27 20.3 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **5.67** | **301** | IAmb_Lg | | 05 27 29.7 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.75** | **188** | IAmb_Lg | | 05 27 25.0 | |
| | comp=Z,7.4nm,1.0s | | | | | | |
| **FVM** | **French Village** | **7.01** | **73** | IAmb_Lg | | 05 28 09.8 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **7.23** | **313** | IAmb_Lg | | 05 28 17.9 | |
| | comp=Z,6.4nm,0.8s | | | | | | |

*IDC* ***26*** *05:35:01.3±8.2,26°.23S×29°.06E, h0km, mbtmp2.8/1, ML2.0/1, Error ellipse: s-maj=91.5km s-min=56.9km az=144.0*

*BUL* ***26*** *05:35:04.9±0.7,25°.96S×29°.24E, h10km, MD3.5*

**ISC 26 05:35:02.7±1.4, 25°.94S±0°.07×29°.27E±0°.06, h10km, n13, σ1°43/18, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOPA** | **Mopani** | **3.09** | **39** | *i* P | **Pn** | **05 35 52.3** | **+0.7** |
| MOPA | | | | *i* S | **Sn** | **05 36 27.8** | **-0.8** |
| **MOPA** | **Mopani** | **3.09** | **39** | *i* P | **Pn** | **05 35 52.3** | **+0.7** |
| MOPA | | | | *i* S | **Sn** | **05 36 27.8** | **-0.8** |
| **LBTB** | **Lobatse** | **3.45** | **285** | *i* P | **Pn** | **05 35 57.5** | **+0.9** |
| LBTB | | | | *i* S | **Sn** | **05 36 37.1** | **-0.5** |
| **LBTB** | **Lobatse** | **3.45** | **285** | *i* P | **Pn** | **05 35 57.5** | **+0.9** |
| LBTB | | | | *i* S | **Sn** | **05 36 37.1** | **-0.5** |
| **BOSA** | **Boshof** | **4.46** | **232** | Pn | Pn | 05 36 06.2 | -4.4 |
| | 0.1nm,0.3s,baz=58,slow=11,SNR=1.0 | | | | | | |
| BOSA | | | | Pg | Pb | 05 36 16.9 | -4.3 |
| | 0.4nm,0.3s,baz=54,slow=15,SNR=9.2 | | | | | | |
| BOSA | | | | Lg | Lg | 05 37 11.3 | |
| | 1.3nm,0.3s,baz=152,slow=21,SNR=3.1 | | | | | | |
| | 2.7nm,1.1s | | | | | | |
| **BOSA** | **Boshof** | **4.46** | **232** | *i* P | **Pn** | **05 36 11.8** | **+1.3** |
| BOSA | | | | *i* S | **Sn** | **05 37 00.6** | **-2.0** |
| **BOSA** | **Boshof** | **4.46** | **232** | *i* P | **Pn** | **05 36 11.8** | **+1.3** |
| BOSA | | | | *i* S | **Sn** | **05 37 00.6** | **-2.0** |
| **I47ZA** | **BOSHOF INFRASO** | **4.48** | **232** | I | I | 06 03 00.0 | |
| | 0.1nm,0.8s,baz=54,slow=314,SNR=1.6 | | | | | | |
| **MATP** | **Matopo** | **5.53** | **352** | *i* P | **Pn** | **05 36 27.0** | **+1.7** |
| MATP | | | | *i* S | **Sn** | **05 37 27.0** | **-2.0** |
| **MATP** | **Matopo** | **5.53** | **352** | *i* P | **Pn** | **05 36 27.0** | **+1.7** |
| MATP | | | | *i* S | **Sn** | **05 37 27.0** | **-2.0** |
| **BLWY** | **Bulawayo** | **5.80** | **354** | *i* P | **Pn** | **05 36 30.0** | **+1.0** |
| **BLWY** | **Bulawayo** | **5.80** | **354** | *i* P | **Pn** | **05 36 30.0** | **+1.0** |
| **I35NA** | **TSUMEB INFRASO** | **12.71** | **299** | I | I | 06 59 00.0 | |
| | baz=123,slow=318,SNR=12 | | | | | | |

*BJI* ***26*** *05:43:20.2±0.0,5°.35S×152°.44E, h62km, mb4.9/58, mB5.1/18, Ms5.4/20, Ms7 5.1/20*

*DJA* ***26*** *05:43:24.4±0.6,5°.S±3°×15°.2E±°, h60km±6km, M5.3/25, mb5.2/25, mB5.6/12, MLv6.0/1, Mw(mB)5.1/12, MwMwp4.8/1, Mwp5.1/1*

*NEIC* ***26*** *05:43:25.4±1.8,5°.05S±0°.06×152°.14E±0°.08, h61km±4km, mb5.2/331, Mww5.2/16, Error ellipse: s-maj=12.1km s-min=8.8km az=105.0*

*GCMT* ***26*** *05:43:25.4±0.2,5°.25S±0°.01×152°.07E±0°.01, h60km±1km, MW5.2/112, Moment Tensor Solution. s96,c136; s112,c177; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr6.23±.15; Mθθ-6.90±.12; Mφφ0.66±.14; Mrθ-1.44±.12; Mrφ2.39±.12; Mθφ0.70±.11; Best double couple: M₀7.09600×10¹⁶ NP1:φs289.00000°, δ52.00000°, λ94.00000°. NP2:φs103.00000°, δ39.00000°, λ85.00000°. Principal axes: T 6.4220, Plg83.0000°, Azm222.0000°; N 1.3450, Plg3.0000°, Azm107.0000°; P -7.7700, Plg6.0000°, Azm16.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC* ***26*** *05:43:25.5,5°.04S×152°.14E, h60km*

*NEIC* ***26*** *05:43:25.5,5°.04S×152°.14E, h60km, Moment Tensor Solution. Duration: 1s1.0 Moment tensor: Scale 10¹⁶ Nm; Mrr6.45; Mθθ-6.41; Mφφ-0.04; Mrθ-0.74; Mθφ1.87; Mφr1.05; Fault plane solution: M₀6.81000×10¹⁶ NP1: φs292.67000°, δ49.68000°, λ99.88000°. NP2:φs97.59000°, δ41.31000°, λ78.56000°. Principal axes: T 6.6305, Plg81.0000°, Azm257.0000°; N 0.3549, Plg8.0000°, Azm106.0000°; P -6.9854, Plg4.0000°, Azm16.0000°;*

*IDC* ***26*** *05:43:26.0±1.6,5°.05S×152°.05E, h73km±12km, mb4.5/24, mbtmp4.7/25, MS4.2/21 Error ellipse: s-maj=13.4km s-min=9.0km az=103.0*

*MOS* ***26*** *05:43:27.1±0.9,5°.00S×151°.82E, h90km, mb4.8/23, Error ellipse: s-maj=10.3km s-min=7.2km az=84.1*

**ISC 26 05:43:24.5±0.5, 5°.09S±0°.03×152°.21E±0°.04, h60km±4km, h61km:pP-P, n800, σ1°13/680, mb5.2/221, 12C-20D, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **22.18** | **248** | P | **P** | **05** | **48** | **14.6 -1.3** |
| **MTN** | **Manton Dam** | **22.18** | **248** | P | **P** | **05** | **48** | **14.3 -1.6** |
| | comp=Z,78nm,0.6s | | | | | | | |
| AUWSH | **Wavell State H** | **22.20** | **178** | P | **P** | **05** | **48** | **17.3 +1.3** |
| **DRS** | **Darwin Rock St** | **22.27** | **249** | P | **P** | **05** | **48** | **16.6 -0.3** |
| **WB0** | **Warramunga Arr** | **22.66** | **228** | P | **P** | **05** | **48** | **20.6 -0.5** |
| **WR0** | **Warramunga Arr** | **22.67** | **228** | P | **P** | **05** | **48** | **20.7 -0.5** |
| **QLP** | **Quilpie** | **22.69** | **199** | P | **P** | **05** | **48** | **22.9 +1.7** |
| **QLP** | **Quilpie** | **22.69** | **199** | P | **P** | **05** | **48** | **20.3 -1.0** |
| | comp=Z,154nm,1.5s | | | | | | | |
| **WRAB** | **Tennant Creek** | **22.80** | **228** | P | **P** | **05** | **48** | **21.9 -0.6** |
| **WRAB** | **Tennant Creek** | **22.80** | **228***c i* | P | **P** | **05** | **48** | **21.4 -1.1** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,163nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **22.80** | **228** | P | **P** | **05** | **48** | **22.0 -0.5** |
| **WRA** | **Warramunga Arr** | **22.81** | **228** | P | **P** | **05** | **48** | **22.1 -0.5** |
| **WRA** | **Warramunga Arr** | **22.81** | **228** | P | **P** | **05** | **48** | **21.8 -0.8** |
| | comp=Z,55nm,0.5s,baz=53,slow=9.9,SNR=318 | | | | | | | |
| WRA | | | | PcP | **PcP** | **05** | **52** | **12.4 +0.2** |
| | comp=Z,11nm,0.9s,baz=52,slow=1.8,SNR=8.1 | | | | | | | |
| WRA | | | | S | **S** | **05** | **52** | **25.4 -2.1** |
| | comp=Z,102nm,1.3s,baz=56,slow=18,SNR=26 | | | | | | | |
| WRA | | | | ScP | **ScP** | **05** | **55** | **43.9 -1.2** |
| | comp=Z,3.6nm,1.0s,baz=39,slow=2.7,SNR=5.3 | | | | | | | |
| WRA | | | | LR | LR | 05 | 57 | 22.9 |
| | comp=Z,716nm,20.5s,baz=29,slow=37 | | | | | | | |
| WRA | | | | PKiKP | **PKiKP** | **05** | **59** | **54.5 -2.7** |
| | comp=Z,0.6nm,1.1s,baz=304,slow=1.0,SNR=4.6 | | | | | | | |
| | comp=Z,55nm,0.5s | | | | | | | |
| **PINNC** | **Pines Island,** | **22.82** | **141** | P | **P** | **05** | **48** | **22.9 +0.3** |
| PINNC | | | | IAmb | IAmb | 05 | 48 | 31.1 |
| | comp=Z,76nm,1.0s | | | | | | | |
| **AULRC** | **Lightning Ridg** | **24.54** | **189** | P | **P** | **05** | **48** | **39.9 +1.3** |
| **INKA** | **Innaminka** | **25.03** | **205** | P | **P** | **05** | **48** | **43.9 +0.8** |
| **ARMA** | **Armidale** | **25.20** | **181** | P | **P** | **05** | **48** | **46.5 +1.7** |
| **ARMA** | **Armidale** | **25.20** | **181** | P | **P** | **05** | **48** | **46.0 +1.2** |
| **ARMA** | **Armidale** | **25.20** | **181** | P | **P** | **05** | **48** | **46.1 +1.3** |
| | comp=Z,32nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **25.31** | **244** | P | **P** | **05** | **48** | **45.2 -0.6** |
| KNRA | | | | IAmb | IAmb | 05 | 49 | 23.0 |
| | comp=Z,94nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **25.31** | **244** | P | **P** | **05** | **48** | **44.8 -1.0** |
| | comp=Z,106nm,1.0s | | | | | | | |
| **AS01** | **Alice Springs** | **25.51** | **222** | P | **P** | **05** | **48** | **47.6 0.0** |
| **AS31** | **Alice Springs** | **25.54** | **222** | P | **P** | **05** | **48** | **47.5 -0.4** |
| AS31 | | | | IAmb | IAmb | 05 | 48 | 51.2 |
| | comp=Z,33nm,0.4s | | | | | | | |
| **AS31** | **Alice Springs** | **25.54** | **222** | P | **P** | **05** | **48** | **47.5 -0.4** |
| | comp=Z,41nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **25.54** | **222** | P | **P** | **05** | **48** | **48.0 +0.1** |
| **ASAR** | **Alice Springs** | **25.54** | **222** | P | **P** | **05** | **48** | **47.5 -0.3** |
| | comp=Z,35nm,0.4s,baz=56,slow=9.2,SNR=369 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **05** | **52** | **18.1 -0.1** |
| | comp=Z,8.8nm,0.9s,baz=49,slow=3.0,SNR=5.9 | | | | | | | |
| ASAR | | | | S | **S** | **05** | **53** | **20.7 +9.2** |
| | comp=Z,18nm,1.1s,baz=40,slow=18,SNR=12 | | | | | | | |
| ASAR | | | | LR | LR | 05 | 59 | 05.8 |
| | comp=Z,696nm,20.1s,baz=67,slow=37 | | | | | | | |
| | comp=Z,35nm,0.4s | | | | | | | |
| AUPHS | **Peel High Scho** | **25.91** | **183** | P | **P** | **05** | **48** | **52.5 +1.4** |
| **CMSA** | **Cobar Meteorol** | **27.02** | **192** | P | **P** | **05** | **49** | **02.4 +1.4** |
| **CMSA** | **Cobar Meteorol** | **27.02** | **192** | P | **P** | **05** | **49** | **00.8 -0.2** |
| | comp=Z,36nm,1.1s | | | | | | | |
| **OOD** | **Oodnadatta** | **27.51** | **213** | P | **P** | **05** | **49** | **05.6 +0.1** |
| **SOEI** | **Soe** | **28.08** | **259** | P | **P** | **05** | **49** | **11.5 +0.6** |
| **SOEI** | **Soe** | **28.08** | **259** | P | **P** | **05** | **49** | **11.2 +0.2** |
| SOEI | | | | IAmb | IAmb | 05 | 50 | 04.4 |
| | comp=Z,86nm,1.1s | | | | | | | |
| **SOEI** | **Soe** | **28.08** | **259** | P | **P** | **05** | **49** | **11.3 +0.4** |
| | comp=Z,43nm,0.7s | | | | | | | |
| **MSVF** | **Nonsavu** | **28.23** | **119** | P | **P** | **05** | **49** | **12.7 +0.6** |
| **MSVF** | **Nonsavu** | **28.23** | **119** | LR | LR | 06 | 01 | 04.4 |
| | comp=Z,202nm,18.1s,baz=251,slow=37 | | | | | | | |
| **MSVF** | **Nonsavu** | **28.23** | **119**‖ *eP* | | **P** | **05** | **49** | **13.6 +1.5** |
| MSVF | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **28.45** | **199** | P | **P** | **05** | **49** | **13.5 -0.3** |
| **STKA** | **Stephens Creek** | **28.45** | **199** | P | **P** | **05** | **49** | **13.7 -0.1** |
| **STKA** | **Stephens Creek** | **28.45** | **199** | P | **P** | **05** | **49** | **13.8 -0.1** |
| | comp=Z,9.3nm,0.6s,baz=7.2,slow=9.9,SNR=24 | | | | | | | |
| STKA | | | | LR | LR | 06 | 00 | 50.8 |
| | comp=Z,664nm,19.2s,baz=31,slow=37 | | | | | | | |
| | comp=Z,9.3nm,0.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **28.45** | **199***d i* | P | **P** | **05** | **49** | **13.9 +0.1** |
| **LCRK** | **Leigh Creek** | **28.46** | **206** | P | **P** | **05** | **49** | **14.2 +0.2** |
| **BATI** | **Baumata** | **28.73** | **258** | P | **P** | **05** | **49** | **17.3 +0.7** |
| | comp=Z,65nm,0.7s | | | | | | | |
| **DAV** | **Davao City (W)** | **29.19** | **294** | LR | LR | 06 | 00 | 04.5 |
| | comp=Z,380nm,21.3s,baz=110,slow=34 | | | | | | | |
| **LUWI** | **Luwuk** | **29.66** | **277** | P | **P** | **05** | **49** | **25.0 +0.2** |
| LUWI | | | | IAmb | IAmb | 05 | 49 | 27.3 |
| | comp=Z,68nm,1.0s | | | | | | | |
| **GTOI** | **Gorontalo** | **29.71** | **280** | P | **P** | **05** | **49** | **25.5 +0.3** |
| **MMRI** | **Maumere** | **29.95** | **262** | P | **P** | **05** | **49** | **28.2 +0.8** |
| **MMRI** | **Maumere** | **29.95** | **262** | P | **P** | **05** | **49** | **27.3 -0.1** |
| **MMRI** | **Maumere** | **29.95** | **262** | P | **P** | **05** | **49** | **26.5 -0.9** |
| | comp=Z,58nm,0.8s | | | | | | | |
| **WRKA** | **Warakurna** | **30.33** | **227** | P | **P** | **05** | **49** | **29.5 -1.2** |
| **MULG** | **Mulgathing** | **30.35** | **212** | P | **P** | **05** | **49** | **30.4 -0.3** |
| **HTT** | **Hallett** | **30.80** | **202** | P | **P** | **05** | **49** | **34.7 0.0** |
| **WHYH** | **Whyalla** | **30.97** | **204** | P | **P** | **05** | **49** | **36.7 +0.6** |
| **BBOO** | **Buckleboo** | **31.43** | **207** | P | **P** | **05** | **49** | **39.9 -0.3** |
| **BBOO** | **Buckleboo** | **31.43** | **207** | P | **P** | **05** | **49** | **40.1 -0.2** |
| **BASI** | **Baing, Sumba** | **31.74** | **259** | P | **P** | **05** | **49** | **43.0 -0.2** |
| **KAPI** | **Kappang** | **32.33** | **269** | P | **P** | **05** | **49** | **47.3 -1.0** |
| **KAPI** | **Kappang** | **32.33** | **269**‖ *eP* | | **P** | **05** | **49** | **46.9 -1.4** |
| KAPI | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.5s | | | | | | | |
| **WBSI** | **Waikabubak, Su** | **32.84** | **260** | P | **P** | **05** | **49** | **51.9 -1.0** |
| | comp=Z,47nm,1.1s,comp=Z,1μm | | | | | | | |
| **TOO** | **Toolangi** | **32.91** | **190** | P | **P** | **05** | **49** | **53.5 +0.3** |
| TOO | | | | IAmb | IAmb | 05 | 50 | 19.7 |
| | comp=Z,90nm,1.9s | | | | | | | |
| **TOO** | **Toolangi** | **32.91** | **190** | P | **P** | **05** | **49** | **53.5 +0.3** |
| TOO | | | | pmax | pmax | | | |
| | comp=Z,90nm,2.0s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.94** | **195** | P | **P** | **05** | **49** | **54.2 +0.9** |
| **JCJ** | **Chichijima** | **33.43** | **344** | LR | LR | 06 | 02 | 32.8 |
| | comp=Z,226nm,21.4s,baz=144,slow=34 | | | | | | | |
| **FORT** | **Forrest** | **34.19** | **219** | P | **P** | **05** | **50** | **04.2 -0.2** |
| **FORT** | **Forrest** | **34.19** | **219** | P | **P** | **05** | **50** | **03.9 -0.4** |
| MYLDM | **Lahad Datu** | **35.17** | **286** | P | **P** | **05** | **50** | **12.3 -0.7** |
| **TWSI** | **Taliwang, Sumb** | **35.24** | **262** | P | **P** | **05** | **50** | **11.5 -2.2** |
| | comp=Z,22nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | **35.31** | **240** | P | **P** | **05** | **50** | **13.5 -0.7** |
| **MBWA** | **Marble Bar** | **35.31** | **240** | P | **P** | **05** | **50** | **13.5 -0.7** |
| **MBWA** | **Marble Bar** | **35.31** | **240** | P | **P** | **05** | **50** | **13.0 -1.2** |
| MBWA | | | | pP | **pP** | **05** | **50** | **27.9 -1.6** |
| **PSA00** | **Pilbara Seismi** | **35.37** | **239** | P | **P** | **05** | **50** | **14.3 -0.4** |
| **PSA00** | **Pilbara Seismi** | **35.37** | **239** | P | **P** | **05** | **50** | **13.9 -0.8** |
| **RAO** | **Raoul Island** | **37.10** | **134** | LR | LR | 06 | 03 | 00.8 |
| | comp=Z,380nm,21.7s,baz=281,slow=32 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **37.59** | **287** | P | **P** | **05** | **50** | **33.5 -0.3** |
| **KKM** | **Kota Kinabalu** | **37.59** | **287** | P | **P** | **05** | **50** | **33.0 -0.9** |
| KKM | | | | IAmb | IAmb | 05 | 50 | 34.0 |
| | comp=Z,76nm,1.7s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **37.92** | **263** | P | **P** | **05** | **50** | **34.2 -2.3** |
| **JAGI** | **Jajag, Banyuwa** | **37.92** | **263** | P | **P** | **05** | **50** | **33.4 -3.1** |
| **MEEK** | **Meekatharra** | **38.56** | **233** | P | **P** | **05** | **50** | **41.0 -0.7** |
| **KMBL** | **Kambalda** | **38.64** | **224** | P | **P** | **05** | **50** | **42.4 +0.1** |
| **TOZ** | **Tahuroa Road** | **38.83** | **150** | IAmb | IAmb | 05 | 50 | 47.1 |
| | comp=Z,78nm,1.5s | | | | | | | |
| **URZ** | **Urewera** | **40.04** | **149** | P | **P** | **05** | **50** | **55.0 +1.2** |
| | comp=Z,39nm,1.2s,baz=16,slow=3.0,SNR=7.3 | | | | | | | |
| URZ | | | | LR | LR | 06 | 04 | 42.0 |
| | comp=Z,289nm,18.5s,baz=50,slow=32 | | | | | | | |
| | comp=Z,39nm,1.2s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **40.43** | **150** | P | **P** | **05** | **50** | **59.1 +2.0** |
| **GIRL** | **Giralia** | **40.61** | **241** | P | **P** | **05** | **50** | **59.1 +0.3** |
| **GIRL** | **Giralia** | **40.61** | **241** | P | **P** | **05** | **50** | **59.0 +0.2** |
| **SBUM** | **Sibu** | **40.64** | **280** | P | **P** | **05** | **50** | **58.7 -0.5** |
| **THZ** | **Tophouse** | **40.93** | **156** | P | **P** | **05** | **51** | **01.2 0.0** |
| THZ | | | | IAmb | IAmb | 05 | 51 | 02.8 |
| | comp=Z,29nm,0.9s | | | | | | | |
| **INZ** | **Inchbonnie** | **41.19** | **158** | P | **P** | **05** | **51** | **06.1 +2.8** |
| **UGM** | **Wanagama** | **41.50** | **264** | P | **P** | **05** | **51** | **06.1 -0.1** |
| **LTZ** | **Lake Taylor** | **41.55** | **158** | IAmb | IAmb | 05 | 51 | 08.3 |
| | comp=Z,93nm,1.5s | | | | | | | |
| **KLBR** | **Kellerberrin** | **41.68** | **227** | P | **P** | **05** | **51** | **06.3 -1.2** |
| **MORW** | **Morawa** | **41.71** | **231** | P | **P** | **05** | **51** | **06.8 -0.9** |
| **MORW** | **Morawa** | **41.71** | **231** | P | **P** | **05** | **51** | **06.8 -0.9** |
| MORW | | | | IAmb | IAmb | 05 | 51 | 07.8 |
| | comp=Z,43nm,0.9s | | | | | | | |
| **RPZ** | **Rata Peaks** | **41.91** | **159** | P | **P** | **05** | **51** | **10.0 +0.8** |
| RPZ | | | | IAmb | IAmb | 05 | 51 | 11.6 |
| | comp=Z,60nm,1.2s | | | | | | | |
| **RPZ** | **Rata Peaks** | **41.91** | **159** | LR | LR | 06 | 06 | 25.5 |
| | comp=Z,1μm,21.9s,baz=318,slow=33 | | | | | | | |
| **BLDU** | **Ballidu** | **41.95** | **228** | P | **P** | **05** | **51** | **08.4 -1.3** |
| **KSM** | **Kuching** | **42.36** | **278** | P | **P** | **05** | **51** | **12.9 -0.3** |
| **KSM** | **Kuching** | **42.36** | **278** | P | **P** | **05** | **51** | **12.2 -1.1** |
| KSM | | | | IAmb | IAmb | 05 | 51 | 14.3 |
| | comp=Z,62nm,1.3s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **42.46** | **163** | P | **P** | **05** | **51** | **14.2 +0.6** |
| MLZ | | | | IAmb | IAmb | 05 | 51 | 15.3 |
| | comp=Z,45nm,1.0s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.77** | **225** | P | **P** | **05** | **51** | **14.4 -1.9** |
| | comp=Z,6.1nm,0.5s,baz=50,slow=7.0,SNR=6.2 | | | | | | | |
| | comp=Z,6.1nm,0.5s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.77** | **225** | P | **P** | **05** | **51** | **15.0 -1.3** |
| **MUN** | **Mundaring** | **43.00** | **227** | P | **P** | **05** | **51** | **17.8 -0.4** |
| **JNU** | **Nakatsue** | **43.05** | **333** | P | **P** | **05** | **51** | **19.6 +1.0** |
| JNU | | | | IAmb | IAmb | 05 | 51 | 35.9 |
| | comp=Z,91nm,1.4s | | | | | | | |
| **JNU** | **Nakatsue** | **43.05** | **333** | P | **P** | **05** | **51** | **18.1 -0.5** |
| | comp=Z,7.3nm,0.7s,baz=42,slow=7.8,SNR=6.6 | | | | | | | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.43** | **344** | P | **P** | **05** | **51** | **19.9 -1.7** |
| | comp=Z,1.4nm,0.9s,baz=161,slow=7.7,SNR=2.6 | | | | | | | |
| MJAR | | | | ScP | **ScP** | **05** | **56** | **54.1 -1.4** |
| | comp=Z,2.9nm,1.0s,baz=165,slow=5.0,SNR=5.6 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **JMM** | **Marumori** | **44.03** | **347** | P | **P** | **05** | **51** | **26.7 +0.4** |
| JMM | | | | IAmb | IAmb | 05 | 52 | 21.8 |
| | comp=Z,97nm,1.8s | | | | | | | |
| **DLV** | **T Lat** | **46.65** | **292** | P | **P** | **05** | **51** | **47.6 -0.1** |
| **DLV** | **T Lat** | **46.65** | **292** | P | **P** | **05** | **51** | **47.8 +0.1** |
| **KSRS** | **Korea Array** | **47.99** | **334** | P | **P** | **05** | **51** | **56.6 -0.8** |
| | comp=Z,2.0nm,0.9s,baz=151,slow=9.2,SNR=7.7 | | | | | | | |
| KSRS | | | | LR | LR | 06 | 10 | 20.5 |
| | comp=Z,442nm,19.0s,baz=60,slow=34 | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **QIZ** | **Qiongzhong** | **48.10** | **301** | P | **P** | **05** | **51** | **59.3 +0.6** |
| QIZ | | | | S | **S** | **05** | **58** | **55.8 +2.4** |
| QIZ | | | | LR | LR | | | |
| | comp=Z,270nm,15.9s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,280nm,14.4s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,400nm,22.8s | | | | | | | |
| **NJ2** | **Nanjing** | **48.70** | **322** | *eP* | **P** | **05** | **52** | **05.3 +2.3** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **RAR** | **Rarotonga** | **49.21** | **114** | LR | LR | 06 | 09 | 41.6 |
| | comp=Z,77nm,21.1s,baz=279,slow=32 | | | | | | | |
| **WHN** | **Wuhan** | **50.65** | **317** | P | **P** | **05** | **52** | **18.8 +0.9** |
| **IPM** | **Ipoh** | **51.99** | **280** | P | **P** | **05** | **52** | **28.4 +0.1** |
| **IPM** | **Ipoh** | **51.99** | **280** | P | **P** | **05** | **52** | **26.7 -1.6** |
| IPM | | | | IAmb | IAmb | 05 | 52 | 28.5 |
| | comp=Z,34nm,0.9s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.33** | **342** | P | **P** | **05** | **52** | **30.6 +0.4** |
| **USRK** | **Ussuriysk Ar.** | **52.33** | **342** | P | **P** | **05** | **52** | **29.7 -0.5** |
| | comp=Z,2.3nm,0.7s,baz=133,slow=5.5,SNR=6.8 | | | | | | | |
| USRK | | | | ScP | **ScP** | **05** | **57** | **31.9 -0.9** |
| | comp=Z,2.3nm,0.8s,baz=243,slow=6.2,SNR=4.3 | | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.33** | **342** | P | **P** | **05** | **52** | **30.6 +0.4** |
| **KULM** | **Kulim** | **52.51** | **281** | P | **P** | **05** | **52** | **30.2 -1.9** |
| **NONG** | **Nongkai** | **53.57** | **297** | P | **P** | **05** | **52** | **39.9 +0.1** |
| **RPSI** | **Rantau Prapat** | **53.79** | **277** | P | **P** | **05** | **52** | **39.0 -2.5** |
| RPSI | | | | IAmb | IAmb | 05 | 52 | 42.0 |
| | comp=Z,28nm,1.2s | | | | | | | |
| **PSI** | **Prapat** | **53.80** | **277** | P | **P** | **05** | **52** | **39.0 -2.8** |
| PSI | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **ENH** | **Enshi** | **53.92** | **313** | P | **P** | **05** | **52** | **42.5 +0.3** |
| **ENH** | **Enshi** | **53.92** | **313** | P | **P** | **05** | **52** | **42.0 -0.2** |
| **SLVN** | **Son La** | **54.13** | **301** | P | **P** | **05** | **52** | **43.8 -0.2** |
| **SURA** | **Surathani** | **54.28** | **285** | P | **P** | **05** | **52** | **44.4 -0.7** |
| **CN2** | **Changchun** | **54.32** | **336** | *eP* | **P** | **05** | **52** | **48.0 +3.2** |
| CN2 | | | | *eS* | **S** | **06** | **00** | **13.0 -5.3** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,100nm,3.0s | | | | | | | |
| **LYN** | **LuoYang** | **54.37** | **320** | P | **P** | **05** | **52** | **45.3 -0.1** |
| LYN | | | | sP | sP | 05 | 53 | 08.3 -0.1 |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.5s | | | | | | | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,180nm,6.6s | | | | | | | |
| **HNS** | **HongShan** | **54.82** | **324** | ⇓P | **P** | **05** | **52** | **48.5 -0.1** |
| HNS | | | | S | **S** | **06** | **00** | **21.5 -3.8** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **GSI** | **Gunungsitoli** | **54.94** | **275** | P | **P** | **05** | **52** | **49.8 -0.1** |
| **BNX** | **BinXian** | **55.22** | **339** | ⇑P | **P** | **05** | **52** | **52.5 +1.2** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **PHRA** | **Phrae** | **56.32** | **296** | P | **P** | **05** | **52** | **59.8 +0.1** |
| **XAN** | **Xi'an** | **56.42** | **317** | P | **P** | **05** | **53** | **00.0 -0.2** |
| XAN | | | | pP | pP | 05 | 53 | 16.0 -0.4 |
| XAN | | | | S | **S** | **06** | **00** | **46.0 -0.9** |
| | comp=Z,25nm,1.1s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,820nm,15.9s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,1μm,16.3s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,2μm,18.0s | | | | | | | |
| **KMI** | **Kunming** | **56.66** | **304** | ⇓P | **P** | **05** | **53** | **03.3 +1.0** |
| KMI | | | | pP | pP | 05 | 53 | 20.5 +2.2 |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.3s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,210nm,10.8s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,280nm,11.6s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,330nm,29.2s | | | | | | | |
| **CRAI** | **Chiangrai** | **56.78** | **298** | IAmb | IAmb | 05 | 53 | 04.5 |
| | comp=Z,38nm,1.3s | | | | | | | |
| **KLR** | **Kul'dur** | **56.95** | **344** | P | **P** | **05** | **53** | **02.2 -1.4** |
| | comp=Z,3.6nm,0.8s,baz=129,slow=10.0,SNR=6.2 | | | | | | | |
| KLR | | | | ScP | **ScP** | **05** | **57** | **51.6 -1.4** |
| | comp=Z,2.9nm,0.9s,baz=214,slow=2.9,SNR=4.7 | | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **56.95** | **344**‖ *eP* | | **P** | **05** | **53** | **04.4 +0.8** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.46** | **296** | P | **P** | **05** | **53** | **07.7 -0.1** |
| **CMAR** | **Chiang Mai Arr** | **57.46** | **296** | P | **P** | **05** | **53** | **08.6 +0.7** |
| | comp=Z,4.5nm,0.7s,baz=109,slow=5.2,SNR=24 | | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.46** | **296** | *i* P | **P** | **05** | **53** | **08.3 +0.5** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **58.05** | **305** | P | **P** | **05** | **53** | **14.3 +2.3** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,130nm,5.7s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **58.16** | **4**‖ *eP* | | **P** | **05** | **53** | **13.1 +1.1** |
| **PETK** | **Petropavlovsk-** | **58.16** | **4** P | | **P** | **05** | **53** | **12.7 +0.6** |
| | comp=Z,1.3nm,0.5s,baz=160,slow=6.4,SNR=5.8 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **PPT2** | **Papeete2** | **58.21** | **107** | *eP* | **P** | **05** | **53** | **11.5 -1.6** |
| PPT2 | | | | *eS* | **S** | **06** | **01** | **06.9 -4.0** |
| | comp=Z,60nm,24.8s | | | | | | | |
| PPT2 | | | | *eS* | **S** | **06** | **01** | **06.9 -4.0** |
| | comp=Z,144nm,29.2s | | | | | | | |
| PPT2 | | | | *eSS* | **SS** | **06** | **05** | **05.0 +1.4** |
| | comp=Z,57nm,24.2s | | | | | | | |
| PPT2 | | | | *eLQ* | LQ | 06 | 07 | 52.0 |
| | comp=Z,250nm,24.0s | | | | | | | |
| PPT2 | | | | *eLR* | LR | 06 | 10 | 18.8 |
| | comp=Z,193nm,34.5s | | | | | | | |
| PPT2 | | | | *eLR* | LR | 06 | 10 | 23.6 |
| | comp=Z,258nm,33.8s | | | | | | | |
| **CD2** | **Chengdu** | **58.47** | **311** | P | **P** | **05** | **53** | **14.5 -0.2** |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **58.62** | **330** | *eP* | **P** | **05** | **53** | **15.3 -0.2** |
| XLT | | | | pP | pP | 05 | 53 | 30.5 -1.2 |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.93** | **325** | *eP* | **P** | **05** | **53** | **17.8 0.0** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,69nm,5.1s | | | | | | | |
| **TBI** | **Tubuai** | **58.98** | **114** | *eS* | **S** | **06** | **01** | **17.8 -2.9** |
| | comp=Z,470nm,32.8s | | | | | | | |
| TBI | | | | *eLQ* | LQ | 06 | 08 | 15.7 |
| | comp=Z,844nm,26.0s | | | | | | | |
| TBI | | | | *eLR* | LR | 06 | 10 | 44.2 |
| | comp=Z,3μm,30.8s | | | | | | | |
| TBI | | | | *eLR* | LR | 06 | 10 | 46.9 |
| | comp=Z,1μm,29.2s | | | | | | | |
| **HEH** | **HeiHe** | **59.14** | **342** | *eP* | **P** | **05** | **53** | **21.5 +2.6** |
| **BTO** | **Baotou** | **59.68** | **324** | *eP* | **P** | **05** | **53** | **24.0 +1.1** |
| BTO | | | | S | **S** | **06** | **01** | **31.5 +2.2** |
| BTO | | | | sS | **sS** | **06** | **01** | **57.0 +0.4** |
| BTO | | | | SS | **SS** | **06** | **05** | **30.0 +3.9** |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,160nm,5.3s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,2μm,14.3s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,3μm,17.2s | | | | | | | |
| BTO | | | | LR | LR | | | |
| | comp=Z,4μm,17.6s | | | | | | | |
| **TNCH** | **TengChong** | **60.12** | **303** | P | **P** | **05** | **53** | **29.3 +2.9** |
| TNCH | | | | sP | sP | 05 | 53 | 50.0 +0.6 |
| TNCH | | | | S | **S** | **06** | **01** | **42.8 +7.1** |
| TNCH | | | | sS | sS | 06 | 02 | 01.8 -0.4 |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,110nm,5.0s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,230nm,6.9s | | | | | | | |
| TNCH | | | | LR | LR | | | |
| | comp=Z,170nm,6.1s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **60.52** | **15** | LR | LR | 06 | 15 | 03.9 |
| | comp=Z,555nm,20.9s,baz=248,slow=31 | | | | | | | |
| **LZH** | **Lanzhou** | **61.02** | **316** | *eP* | **P** | **05** | **53** | **32.8 +0.5** |
| LZH | | | | sP | pP | 05 | 53 | 52.5 +3.8 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.1s | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **62.05** | **185** | P | **P** | **05** | **53** | **38.9 +0.4** |
| **GTA** | **Gaotai** | **65.46** | **318** | P | **P** | **05** | **54** | **02.0 +0.4** |
| GTA | | | | pP | pP | 05 | 54 | 17.8 -0.4 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **65.93** | **328** | P | **P** | **05** | **54** | **04.2 -0.2** |
| **ULN** | **Ulaanbaatar** | **65.93** | **328***c i* | P | **P** | **05** | **54** | **04.3 -0.2** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **SHL** | **Shillong** | **65.94** | **301** | P | **P** | **05** | **54** | **03.9 -1.1** |
| SHL | | | | IAmb | IAmb | 05 | 54 | 05.1 |
| | comp=Z,46nm,1.2s | | | | | | | |
| **SHL** | **Shillong** | **65.94** | **301** | P | **P** | **05** | **54** | **03.9 -1.1** |
| SHL | | | | pmax | pmax | | | |
| | comp=Z,46nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **66.25** | **328** | P | **P** | **05** | **54** | **06.2 -0.3** |
| **SONM** | **Songino Array** | **66.25** | **328** | P | **P** | **05** | **54** | **06.6 +0.1** |
| | comp=Z,7.0nm,1.1s,baz=142,slow=5.4,SNR=28 | | | | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **NIKH** | **Nikolski High** | **66.52** | **24** | P | **P** | **05** | **54** | **09.0 +1.1** |
| | baz=223 | | | | | | | |
| **CASY** | **Casey** | **67.57** | **197** | P | **P** | **05** | **54** | **14.5 +0.1** |
| CASY | | | | IAmb | IAmb | 05 | 54 | 15.7 |
| | comp=Z,43nm,1.1s | | | | | | | |
| **CASY** | **Casey** | **67.57** | **197** | P | **P** | **05** | **54** | **14.3 -0.1** |
| CASY | | | | pP | **pP** | **05** | **54** | **29.3 -1.3** |
| **LSA** | **Lhasa** | **67.91** | **305** | P | **P** | **05** | **54** | **17.0 -0.8** |
| **LSA** | **Lhasa** | **67.91** | **305** | P | **P** | **05** | **54** | **17.0 -0.8** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **UNV** | **Unalaska Valle** | **68.13** | **25** | P | **P** | **05** | **54** | **19.0 +1.0** |
| | baz=225 | | | | | | | |
| **YAK** | **Yakutsk** | **69.14** | **349** | *eP* | **P** | **05** | **54** | **23.2 -0.9** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,7.0nm,1.8s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,3.0nm,1.2s | | | | | | | |
| **ZAK** | **Zakamensk** | **69.43** | **329** | *eP* | **P** | **05** | **54** | **25.6 -0.8** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **S12K** | **Black Hills

R18K **Karluk** 75.74 26 P P 05 55 04.4 +0.9
baz=236
P17K **Kvichak River** 75.84 24 P P 05 55 04.3 +0.2
baz=233
K15K **Wolf Creek Mou** 75.88 20 P P 05 55 05.2 +0.9
K15K IAmb IAmb 05 55 06.2
comp=Z,41nm,1.4s
K15K **Wolf Creek Mou** 75.88 20 P P 05 55 04.7 +0.4
baz=228,SNR=5.1
O17K **Koliganek Bris** 75.92 24 P P 05 55 05.5 +0.9
baz=233
M16K **Timber Creek** 75.97 22 P P 05 55 05.9 +1.0
baz=231
OHAK **Old Harbor** 76.07 27 P P 05 55 05.9 +0.5
OHAK **Old Harbor** 76.07 27 P P 05 55 06.1 +0.6
baz=237
Q18K **Katmai Hardscr** 76.12 25 P P 05 55 06.1 +0.2
baz=235
ANM **Nome** 76.22 17 P P 05 55 06.7 +0.5
baz=224
TNA **Tin City** 76.23 16 P P 05 55 07.0 +0.8
baz=221
N17K **Nushagak Hills** 76.34 23 P P 05 55 07.6 +0.7
baz=232
P18K **Big Mountain,** 76.46 25 P P 05 55 07.9 +0.2
baz=234
F14K **Arctic Creek** 76.61 17 P P 05 55 08.6 +0.2
baz=223
KDAK **Kodiak Island** 76.70 27 LR LR 06 23 02.6
comp=Z,396nm,21.6s,baz=283,slow=31
KDAK **Kodiak Island** 76.70 27 P P 05 55 09.6 +0.6
baz=237
O18K **Koktuh Hills** 76.74 24 P P 05 55 09.7 +0.5
baz=234
M17K **Holitna River** 76.79 22 P P 05 55 10.5 +1.0
baz=232
J16K **Anvik River** 76.86 20 IAmb IAmb 05 55 13.0
comp=Z,43nm,1.6s
J16K **Anvik River** 76.86 20 P P 05 55 10.5 +0.7
baz=229
Q19K **Cape Douglas,** 76.86 26 P P 05 55 09.5 -0.5
baz=236
L17K **Donlin** 76.92 22 P P 05 55 10.5 +0.3
baz=231
G15K **Niukluk** 76.93 18 P P 05 55 11.4 +1.2
baz=225
N18K **Kilae Creek** 76.95 23 IAmb IAmb 05 55 12.6
comp=Z,32nm,1.2s
N18K **Kilae Creek** 76.95 23 P P 05 55 11.0 +0.6
baz=234,SNR=5.1
I17K **Unalakleet** 77.23 19 P P 05 55 12.0 +0.2
baz=228
Q20K **Shuyak Island** 77.23 26 P P 05 55 12.7 +0.7
baz=237
H16K **Elim** 77.24 18 P P 05 55 12.2 +0.3
baz=227
F15K **North Star Dit** 77.26 17 P P 05 55 12.4 +0.4
baz=224
K17K **Iditarod** 77.29 21 IAmb IAmb 05 55 14.4
comp=Z,35nm,1.2s
K17K **Iditarod** 77.29 21 P P 05 55 12.7 +0.5
baz=231,SNR=5.7
O19K **Port Alsworth** 77.30 24 P P 05 55 12.5 +0.2
baz=235
P19K **Oil Pt** 77.44 25 P P 05 55 13.5 +0.3
baz=236
J17K **VABM Dome** 77.45 20 IAmb IAmb 05 55 15.4
comp=Z,25nm,1.1s
J17K **VABM Dome** 77.45 20 P P 05 55 13.6 +0.5
baz=230,SNR=8.9
M18K **Stony River** 77.46 23 P P 05 55 13.9 +0.7
baz=234,SNR=6.0
L18K **Granite Mounta** 77.57 22 IAmb IAmb 05 55 16.1
comp=Z,27nm,1.1s
L18K **Granite Mounta** 77.57 22 P P 05 55 14.5 +0.7
baz=233,SNR=12
N19K **Bonanza Creek** 77.59 24 P P 05 55 14.6 +0.5
baz=235
G16K **Koyuk River** 77.72 18 P P 05 55 15.0 +0.4
baz=227
O20K **Slope Mountain** 77.94 25 P P 05 55 15.9 -0.1
baz=237,SNR=5.6
DGZ **Jazzator, Alta** 77.95 323 *c i* P P 05 55 15.7 -0.7
DGZ pmax pmax
comp=Z,10.0nm,1.1s
HOM **Homer** 78.12 26 P P 05 55 17.3 +0.4
baz=238
H17K **Granite Mounta** 78.18 19 P P 05 55 17.6 +0.5
baz=229,SNR=6.6
L19K **White Mountain** 78.24 22 IAmb IAmb 05 55 19.4
comp=Z,30nm,1.0s
L19K **White Mountain** 78.24 22 P P 05 55 17.8 +0.2
baz=234,SNR=14
M19K **Big River Lodg** 78.25 23 P P 05 55 18.4 +0.7
baz=235,SNR=6.8
G17K **Kiwalik Mounta** 78.32 18 P P 05 55 18.4 +0.5
baz=228,SNR=7.1
J18K **Innoko River** 78.32 21 IAmb IAmb 05 55 19.5
comp=Z,21nm,1.0s
J18K **Innoko River** 78.32 21 P P 05 55 17.9 -0.1
baz=232,SNR=16
M20K **Styx River** 78.73 23 P P 05 55 20.5 +0.1
baz=236
F17K **Baldwin Pennin** 78.77 17 P P 05 55 20.9 +0.5
baz=228,SNR=5.9
L20K **Farewell, AK** 78.78 23 P P 05 55 21.0 +0.5
baz=235,SNR=6.7
H18K **Honhosa River** 78.82 19 P P 05 55 20.9 +0.2
baz=230
CAPN **Captain Cook N** 78.92 25 P P 05 55 22.1 +0.9
baz=238
C16K **Lisburne Hills** 78.94 15 P P 05 55 21.1 -0.1
baz=223
J19K **Poorman** 79.03 21 P P 05 55 21.9 +0.1
baz=233,SNR=9.8
E17K **Hotham Inlet** 79.04 17 P P 05 55 22.2 +0.4
baz=227,SNR=14
GCSA **Galena City Sc** 79.06 20 P P 05 55 21.8 -0.1
baz=232
D17K **Noatak River** 79.12 16 P P 05 55 22.4 +0.2
baz=226,SNR=6.8
G18K **Tagagawik** 79.20 18 P P 05 55 22.6 -0.1
baz=230,SNR=11
K20K **Telida** 79.22 22 IAmb IAmb 05 55 24.8
comp=Z,25nm,1.1s
K20K **Telida** 79.22 22 P P 05 55 23.4 +0.5
baz=235,SNR=16
SEW **Seward** 79.30 26 P P 05 55 22.6 -0.8
baz=240,SNR=7.9
F18K **Selawik** 79.35 18 P P 05 55 23.1 -0.4
baz=229
O22K **Cooper Landing** 79.38 25 P P 05 55 24.2 +0.5
baz=239
SKT **Skwentna** 79.42 24 P P 05 55 22.5 -1.5
baz=237,SNR=5.1
SUA **Susitna One** 79.46 24 P P 05 55 23.3 -1.1
baz=238,SNR=12
E18K **Tukpahlearik C** 79.62 17 P P 05 55 25.0 0.0
baz=228
C17K **DeLong Mountai** 79.64 15 P P 05 55 25.3 +0.2
baz=225
J20K **Nowinta River** 79.66 21 IAmb IAmb 05 55 27.2
comp=Z,34nm,1.1s
J20K **Nowinta River** 79.66 21 P P 05 55 25.8 +0.5
baz=235,SNR=17
H19K **Roundabout Mou** 79.68 19 P P 05 55 25.4 +0.1
baz=232,SNR=13
RC01 **Rabbit Creek A** 79.68 25 IAmb IAmb 05 55 26.4
comp=Z,45nm,1.1s
RC01 **Rabbit Creek A** 79.68 25 P P 05 55 24.8 -0.7
baz=239,SNR=5.8
G19K **Purcell Mounta** 79.86 19 IAmb IAmb 05 55 28.1
comp=Z,30nm,1.2s
G19K **Purcell Mounta** 79.86 19 P P 05 55 26.7 +0.4
baz=232,SNR=9.4
M22K **Willow** 79.87 24 IAmb IAmb 05 55 27.3
comp=Z,50nm,1.2s
M22K **Willow** 79.87 24 P P 05 55 26.6 +0.2
baz=239,SNR=6.5
I20K **Naaghedeneel** 79.91 20 P P 05 55 26.6 0.0
baz=234
F19K **Shaleruckim Mo** 80.08 18 P P 05 55 27.0 -0.5
baz=231,SNR=9.3
P23K **Montague Islan** 80.14 26 P P 05 55 27.5 -0.5
baz=242
CUT **Chulitna** 80.15 23 P P 05 55 26.7 -1.2
baz=239
MK31 **Makanchi Array** 80.15 319 P P 05 55 27.4 -1.0
MK31 **Makanchi Array** 80.15 319 *c i* P P 05 55 26.8 -1.6
MKAR **Makanchi Array** 80.15 319 P P 05 55 27.7 -0.7
MKAR **Makanchi Array** 80.15 319 P P 05 55 28.0 -0.4
comp=Z,5.9nm,1.0s,baz=101,slow=6.4,SNR=29
comp=Z,5.9nm,1.0s
MKAR **Makanchi Array** 80.15 319 *i* P P 05 55 27.7 -0.7
MKAR pmax pmax
comp=Z,6.0nm,0.9s
PWL **Port Wells** 80.16 25 P P 05 55 28.3 +0.3
PWL **Port Wells** 80.16 25 P P 05 55 27.8 -0.3
baz=241,SNR=33
H20K **Anotleneega Mo** 80.18 20 P P 05 55 28.2 +0.1
baz=234,SNR=8.0
PMR **Palmer** 80.19 24 P P 05 55 30.5 +2.4
PMR **Palmer** 80.19 24 P P 05 55 27.9 -0.2
PMR IAmb IAmb 05 55 28.9
comp=Z,29nm,1.2s
PMR **Palmer** 80.19 24 P P 05 55 27.4 -0.8
baz=240,SNR=10
PMR **Palmer** 80.19 24 P P 05 55 27.9 -0.2
PMR pmax pmax
comp=Z,29nm,1.2s
C18K **Utukok River** 80.29 16 P P 05 55 28.4 -0.3
baz=227
MAKZ **Makanchi** 80.36 319 P P 05 55 28.5 -1.0
MAKZ **Makanchi** 80.36 319 P P 05 55 28.5 -1.0
MAKZ pmax pmax
comp=Z,8.0nm,0.8s
GHO **Glory Hole Cre** 80.37 24 P P 05 55 29.0 -0.2
GHO IAmb IAmb 05 55 30.1
comp=Z,23nm,1.0s
KNK **Knik Glacier** 80.38 25 IAmb IAmb 05 55 30.5
comp=Z,22nm,1.0s
KNK **Knik Glacier** 80.38 25 P P 05 55 28.5 -0.8
baz=240,SNR=7.9
B18K **Kokolik River** 80.62 15 P P 05 55 30.5 +0.1
baz=227
SML **Sawmill** 80.63 24 P P 05 55 30.2 -0.5
baz=240,SNR=20
E19K **Redstone River** 80.64 18 IAmb IAmb 05 55 32.3
comp=Z,22nm,1.0s
E19K **Redstone River** 80.64 18 P P 05 55 30.4 -0.1
baz=231,SNR=7.6
GLI **Glacier Island** 80.70 26 IAmb IAmb 05 55 32.0
comp=Z,27nm,0.8s
GLI **Glacier Island** 80.70 26 P P 05 55 30.8 -0.2
baz=242,SNR=12
HIN **Hinchinbrook I** 80.73 26 IAmb IAmb 05 55 32.4
comp=Z,60nm,1.3s
BPAW **Bear Paw Mtn.** 80.77 22 P P 05 55 30.5 -0.8
baz=238,SNR=5.1
F20K **Avaraart Lake** 80.84 18 P P 05 55 31.4 -0.1
baz=233
M23K **Glacier View** 80.87 25 P P 05 55 31.3 -0.5
baz=241,SNR=8.3
FID **Port Fidalgo** 80.90 26 IAmb IAmb 05 55 33.1
comp=Z,29nm,1.0s
H21K **Melozitna Rive** 80.98 20 P P 05 55 32.5 +0.1
baz=236
C19K **Lookout Ridge** 81.03 16 P P 05 55 32.6 0.0
baz=229
D19K **Kuna River** 81.04 17 P P 05 55 32.2 -0.4
baz=230
WAT1 **Susitna Watana** 81.05 24 P P 05 55 32.3 -0.6
baz=240
SCM **Sheep Creek Mo** 81.06 25 IAmb IAmb 05 55 34.2
comp=Z,33nm,1.0s
SCM **Sheep Creek Mo** 81.06 25 P P 05 55 32.8 -0.2
baz=241,SNR=13
ZAA0 **Zalesovo Array** 81.06 326 P P 05 55 31.5 -1.5
ZALV **Zalesovo Beam** 81.06 326 P P 05 55 31.6 -1.4
comp=Z,2.4nm,0.4s,baz=115,slow=5.6,SNR=15
comp=Z,2.4nm,0.4s
EYAK **Cordova Ski Ar** 81.13 26 P P 05 55 35.1 +1.9
EYAK **Cordova Ski Ar** 81.13 26 P P 05 55 33.0 -0.2
baz=243
RND **Reindeer** 81.22 23 IAmb IAmb 05 55 34.0
comp=Z,28nm,1.0s
G21K **Allakaket** 81.24 19 P P 05 55 33.5 -0.2
baz=235
WAT6 **Susitna Watana** 81.25 24 P P 05 55 33.7 -0.4
baz=241,SNR=14
MCK **McKinley** 81.35 23 P P 05 55 33.5 -0.9
baz=240,SNR=21
MLY **Manley** 81.36 21 IAmb IAmb 05 55 35.4
comp=Z,34nm,1.2s
MLY **Manley** 81.36 21 P P 05 55 33.8 -0.7
baz=238,SNR=13
E20K **Nigu River** 81.44 17 P P 05 55 34.8 0.0
baz=232,SNR=6.6
KAIM **Kayak Island** 81.45 27 P P 05 55 34.8 -0.1
baz=244
KLU **Klutina** 81.49 25 IAmb IAmb 05 55 36.8
comp=Z,36nm,1.0s
KLU **Klutina** 81.49 25 P P 05 55 35.3 0.0
baz=243,SNR=18
RAGM **Ragged Mountai** 81.53 27 IAmb IAmb 05 55 37.0
comp=Z,43nm,1.1s
D20K **Etivluk River** 81.60 17 P P 05 55 35.6 0.0
baz=232
H22K **Ishtalitna Cre** 81.60 20 P P 05 55 35.9 +0.2
baz=237
DHY **Denali Highway** 81.64 24 P P 05 55 35.5 -0.6
baz=241,SNR=8.6
F21K **Alatna River** 81.65 19 P P 05 55 35.7 -0.2
baz=235
M24K **Tolsona, Glenn** 81.67 25 P P 05 55 36.2 +0.1
baz=242,SNR=8.3
HMT **Hamilton** 81.70 27 IAmb IAmb 05 55 37.8
comp=Z,40nm,1.1s
NEA2 **Nenana** 81.74 22 IAmb IAmb 05 55 36.6
comp=Z,28nm,1.1s
NEA2 **Nenana** 81.74 22 P P 05 55 35.1 -1.3
baz=239,SNR=13
BMRM **Bremner River** 81.82 26 P P 05 55 37.0 0.0
baz=244,SNR=11
I23K **Minto, Yukon-K** 81.92 21 P P 05 55 37.0 -0.3
baz=239
BGLC **Bering Glacier** 82.05 27 P P 05 55 38.1 0.0
baz=245
WRH **Wood River Hil** 82.05 22 IAmb IAmb 05 55 38.1
comp=Z,27nm,1.1s
N25K **Chitina, Valde** 82.11 26 IAmb IAmb 05 55 40.1
comp=Z,53nm,1.6s
N25K **Chitina, Valde** 82.11 26 P P 05 55 38.5 0.0
baz=244,SNR=10
G22K **Bettles** 82.12 19 P P 05 55 38.2 -0.1
baz=237
H23K **Yukon River** 82.21 21 P P 05 55 38.9 0.0
baz=239
E21K **Killik River** 82.21 18 P P 05 55 38.8 0.0
baz=234
HARP **HAARP** 82.22 25 P P 05 55 38.9 -0.1
baz=243
F22K **John River** 82.23 19 P P 05 55 38.8 -0.1
baz=236
CCB **Clear Creek Bu** 82.24 22 IAmb IAmb 05 55 38.9
comp=Z,22nm,1.1s
B20K **Meade River** 82.27 16 P P 05 55 38.7 -0.3
baz=231
COLA **College** 82.33 22 P P 05 55 41.2 +1.7
COLA **College** 82.33 22 P P 05 55 38.7 -0.8
COLA IAmb IAmb 05 55 39.4
comp=Z,28nm,0.9s
COLA **College** 82.33 22 P P 05 55 38.6 -0.8
baz=240
COLA **College** 82.33 22 P P 05 55 38.7 -0.8
COLA pmax pmax
comp=Z,28nm,1.0s
PAX **Paxson** 82.36 24 P P 05 55 39.2 -0.6
baz=243,SNR=6.8
GLB **Gilahina Butte** 82.37 26 P P 05 55 39.9 +0.1
GLB IAmb IAmb 05 55 41.2
comp=Z,29nm,1.0s
CRQM **Cirque** 82.38 27 IAmb IAmb 05 55 41.5
comp=Z,42nm,1.1s
CRQE **Cirque** 82.40 27 P P 05 55 40.1 0.0
baz=245,SNR=9.3
C21K **Knifeblade Rid** 82.40 17 P P 05 55 40.4 +0.6
baz=233
VRDI **Verde Repeater** 82.44 26 IAmb IAmb 05 55 41.7
comp=Z,28nm,1.0s
HDA **Harding Lake** 82.45 22 IAmb IAmb 05 55 40.2
comp=Z,43nm,1.8s
HDA **Harding Lake** 82.45 22 P P 05 55 39.1 -1.0
baz=241
G23K **Bananza Creek** 82.51 20 P P 05 55 40.3 -0.1
baz=238,SNR=8.9
TGL **Tana Glacier** 82.52 27 IAmb IAmb 05 55 42.1
comp=Z,25nm,1.0s
POKR **Poker Plat Res** 82.61 22 P P 05 55 39.7 -1.2
baz=241
K24K **Donnelly Dome** 82.61 23 P P 05 55 40.6 -0.5
baz=242
ILAR **Eielson Array** 82.65 22 P P 05 55 40.1 -1.0
ILAR **Eielson Array** 82.65 22 P P 05 55 40.0 -1.2
comp=Z,9.9nm,0.8s,baz=252,slow=5.3,SNR=41
comp=Z,9.9nm,0.8s
ILAR **Eielson Array** 82.65 22 P P 05 55 40.2 -1.0
KSH **Kashi** 82.67 311 P P 05 55 43.0 +1.0
KSH pP pP 05 56 00.3 +1.4
KSH pmax pmax
comp=Z,9.0nm,1.3s
KSH LR LR
comp=Z,550nm,15.1s
KSH LR LR
comp=Z,640nm,16.5s
KSH LR LR
comp=Z,1µm,14.4s
ISLE **Juniper Island** 82.67 27 IAmb IAmb 05 55 42.8
comp=Z,28nm,0.9s
MESA **MESA** 82.68 27 P P 05 55 41.3 -0.3
baz=246
MCARA **McCarthy VSAT** 82.69 26 IAmb IAmb 05 55 43.0
comp=Z,26nm,1.0s
MCARA **McCarthy VSAT** 82.69 26 P P 05 55 41.4 0.0
baz=245,SNR=5.8
E22K **Anaktuvuk Pass** 82.70 18 P P 05 55 41.2 -0.2
baz=236,SNR=6.0
COLD **Coldfoot** 82.72 19 P P 05 55 41.6 +0.1
baz=238,SNR=5.6
B21K **Ikpikpuk River** 82.73 16 P P 05 55 41.4 -0.1
baz=234
H24K **Noodor Dome** 82.80 21 P P 05 55 41.8 -0.2
baz=240
D22K **Ayikyak River** 82.85 17 P P 05 55 42.2 +0.1
baz=236,SNR=6.8
RIDG **Independent Ri** 82.95 24 IAmb IAmb 05 55 43.9
comp=Z,30nm,1.2s
RIDG **Independent Ri** 82.95 24 P P 05 55 42.3 -0.5
baz=243,SNR=8.3
GRNC **Granite Creek** 82.99 27 IAmb IAmb 05 55 44.6
comp=Z,20nm,1.0s
ULHL **Ulahol** 83.08 313 P P 05 55 36.2 -8.0
SNR=8.9
M26K **Nabesna, AK** 83.13 25 P P 05 55 44.1 +0.4
baz=245,SNR=5.7
J25K **Salcha River,** 83.15 23 IAmb IAmb 05 55 44.5
comp=Z,33nm,0.9s
J25K **Salcha River,** 83.15 23 P P 05 55 43.1 -0.8
baz=243,SNR=18
TABL **Table Mountain** 83.15 27 IAmb IAmb 05 55 45.5
comp=Z,31nm,0.8s
L26K **Log Cabin Wild** 83.25 24 P P 05 55 44.0 -0.3
baz=245,SNR=10
CTG **Chitna Glacier** 83.27 27 P P 05 55 44.6 0.0
baz=247,SNR=16
CTGM **Chitina Glacie** 83.27 27 IAmb IAmb 05 55 46.2
comp=Z,39nm,1.0s
E23K **Chandalar** 83.35 19 P P 05 55 45.0 +0.2
baz=238,SNR=8.5
LOGN **Logan Glacier** 83.36 27 IAmb IAmb 05 55 46.6
comp=Z,29nm,1.0s
G24K **Hadweenzic Riv** 83.37 20 P P 05 55 44.8 -0.1
baz=241,SNR=10
SCRK **Sand Creek** 83.40 23 P P 05 55 45.0 -0.2
baz=244,SNR=7.5
PINM **Pinnacle** 83.43 28 P P 05 55 45.2 -0.2
baz=248,SNR=5.5
A22K **Sinclair Lake** 83.46 15 P P 05 55 45.9 +0.7
baz=233
D23K **Nanushuk River** 83.50 18 IAmb IAmb 05 56 11.2
comp=Z,24nm,0.8s
D23K **Nanushuk River** 83.50 18 P P 05 55 45.7 +0.2
baz=237,SNR=17
M27K **Edge Creek, AK** 83.59 25 P P 05 55 46.1 -0.1
baz=246,SNR=46
KURK **Kurchatov** 83.63 322 P P 05 55 45.0 -1.5
KURK **Kurchatov** 83.63 322 *de* P P 05 55 45.8 -0.7
KURK pmax pmax
comp=Z,14nm,1.2s
F24K **Squaw Lake** 83.64 20 P P 05 55 46.4 +0.1
baz=240,SNR=12
KURBB **Kurchatov Arra** 83.66 322 P P 05 55 45.5 -1.1
comp=Z,3.7nm,0.9s,baz=106,slow=4.2,SNR=16
comp=Z,3.7nm,0.9s
BCPM **Bancas Point** 83.66 28 IAmb IAmb 05 55 48.3
comp=Z,24nm,0.8s
PNL **Peninsula** 83.67 28 P P 05 55 48.0 +1.4
PNL **Peninsula** 83.67 28 P P 05 55 46.9 +0.3
baz=248,SNR=7.3
TOLK **Toolik Lake Re** 83.67 18 P P 05 55 46.5 +0.1
baz=238,SNR=5.4
TKM2 **Tokmak 2** 83.70 314 P P 05 55 47.2 -0.1
SNR=7.1
O28M **Mount Upton** 83.71 27 P P 05 55 46.6 -0.4
baz=248,SNR=14
E24K **Your Creek** 83.72 19 P P 05 55 47.0 +0.3
baz=240
H25L **Birch Creek** 83.75 21 P P 05 55 47.9 +1.2
baz=242
J26L **Joseph Creek** 83.80 23 P P 05 55 47.3 +0.1
baz=244,SNR=8.1
G25K **Bearman Lake** 83.88 21 P P 05 55 47.9 +0.5
baz=242,SNR=6.3
L27K **Beaver Creek,** 83.89 25 P P 05 55 48.1 +0.4
baz=246,SNR=13
BCAR **Beaver Creek A** 83.91 25 P P 05 55 48.1 +0.3
YUK3 **Moose Creek** 83.97 26 P P 05 55 48.5 +0.2
baz=248,SNR=20
C23K **Itkillik River** 84.00 17 IAmb IAmb 05 55 49.6
comp=Z,21nm,1.1s
C23K **Itkillik River** 84.00 17 P P 05 55 48.2 +0.2
baz=237,SNR=5.6
YUK8 **Steele Glacier** 84.10 27 P P 05 55 49.3 +0.3
baz=248,SNR=12
D24K **Happy Valley** 84.17 18 P P 05 55 49.4 +0.5
baz=239
K27K **Chicken** 84.19 24 IAmb IAmb 05 55 51.2
comp=Z,24nm,1.1s
K27K **Chicken** 84.19 24 P P 05 55 49.8 +0.8
baz=246
O29M **Mount Kennedy** 84.28 28 IAmb IAmb 05 55 51.9
comp=Z,21nm,0.9s
O29M **Mount Kennedy** 84.28 28 P P 05 55 50.4 +0.6
baz=249,SNR=10
I26K **Coal Creek Min** 84.30 22 P P 05 55 49.4 -0.2
baz=245
CHMS **Chumysh** 84.32 314 P P 05 55 50.2 -0.1
SNR=6.1
F25K **Christian River** 84.43 20 P P 05 55 50.8 +0.5
baz=242,SNR=6.3
AAK **Ala-Archa** 84.43 314 P P 05 55 50.6 -0.4
AAK **Ala-Archa** 84.43 314 *c i* P P 05 55 50.8 -0.2
AAK pmax pmax
comp=Z,9.0nm,1.0s
P29M **Windy Craggy** 84.45 29 IAmb IAmb 05 55 52.4
comp=Z,27nm,1.1s
P29M **Windy Craggy** 84.45 29 P P 05 55 50.9 +0.4
baz=250,SNR=6.7
C24K **Franklin Bluff** 84.50 17 IAmb IAmb 05 55 52.2
comp=Z,22nm,0.9s
C24K **Franklin Bluff** 84.50 17 P P 05 55 50.9 +0.4
baz=239
USP **Ospenovka** 84.56 314 P P 05 55 51.0 -0.5
SNR=13
YUK6 **Outpost Mounta** 84.61 27 P P 05 55 51.7 +0.2
baz=250,SNR=5.8
YUK4 **Talbot Arm** 84.62 27 P P 05 55 52.5 +0.9
baz=249,SNR=20
S31K **Pelican** 84.64 31 P P 05 55 52.2 +0.8
baz=252
BMAR **Burnt Mountain** 84.72 20 P P 05 55 52.3 +0.5
G26K **Porcupine Rive** 84.78 21 P P 05 55 53.1 +1.2
baz=244,SNR=22
EGAK **Eagle** 84.85 23 IAmb IAmb 05 55 53.9
comp=Z,23nm,1.0s
EGAK **Eagle** 84.85 23 P P 05 55 53.0 +0.6
baz=247,SNR=12
QSPA **South Pole Qui** 84.88 180 P P 05 55 53.0 +0.2
QSPA **South Pole Qui** 84.88 180 P P 05 55 52.7 0.0
comp=Z,24nm,0.9s,baz=347,slow=1.2,SNR=83
comp=Z,24nm,0.9s
AML **Almayashu** 84.91 313 P P 05 55 54.4 +0.6
SNR=6.4
EKS2 **Erkin-Say** 84.95 313 P P 05 55 53.6 0.0

SNR=13
P30M **Million Dollar** 84.98 28 P P 05 55 53.9 +0.7
baz=251
F26K **Sheenjek River** 84.99 20 P P 05 55 53.4 +0.3
baz=244
I27K **Kandik River** 85.01 22 P P 05 55 53.4 +0.1
baz=246,SNR=14
D25K **Kavik River** 85.01 18 P P 05 55 53.0 -0.2
baz=241
PLBC **Pleasant Camp** 85.05 29 P P 05 55 54.2 +0.7
baz=251,SNR=5.0
MAW **Mawson** 85.08 203 P P 05 55 53.6 +0.1
comp=Z,34nm,0.8s,baz=94,slow=6.7,SNR=69
MAW LR LR 06 30 22.2
comp=Z,166nm,21.8s,baz=96,slow=33
comp=Z,34nm,0.8s
M29M **Somme Creek** 85.09 26 IAmb IAmb 05 55 55.7
comp=Z,18nm,0.9s
M29M **Somme Creek** 85.09 26 P P 05 55 54.4 +0.5
baz=249,SNR=27
DAWY **Dawson** 85.29 24 IAmb IAmb 05 55 56.6
comp=Z,31nm,1.3s
DAWY **Dawson** 85.29 24 P P 05 55 55.0 +0.3
baz=248,SNR=13
H27K **Steamboat Moun** 85.30 22 P P 05 55 55.4 +0.7
baz=246,SNR=15
S32K **Killisnoo** 85.34 31 IAmb IAmb 05 55 56.5
comp=Z,28nm,1.1s
S32K **Killisnoo** 85.34 31 P P 05 55 55.6 +0.6
baz=253,SNR=5.4
N30M **Aishikik Lake** 85.36 27 P P 05 55 55.8 +0.6
baz=251,SNR=6.7
G27K **Doyon Strip** 85.48 21 P P 05 55 56.5 +0.9
baz=246,SNR=11
SKAG **Skagway** 85.55 29 P P 05 55 57.4 +1.4
SKAG **Skagway** 85.55 29 IAmb IAmb 05 55 58.1
comp=Z,39nm,1.5s
SKAG **Skagway** 85.55 29 P P 05 55 56.6 +0.7
baz=252
I28M **Miner Creek** 85.59 23 P P 05 55 56.7 +0.5
baz=248,SNR=9.1
O30N **Mendenhall** 85.60 28 IAmb IAmb 05 55 59.0
comp=Z,22nm,1.1s
O30N **Mendenhall** 85.60 28 P P 05 55 57.0 +0.8
baz=252,SNR=13
R32K **Eaglecrest** 85.60 31 P P 05 55 56.9 +0.6
baz=253
JIS **Juneau Island** 85.67 31 P P 05 55 58.4 +1.8
U33K **Whale Pass** 85.73 33 P P 05 55 57.4 +0.5
baz=254
C26K **Camden Bay** 85.75 18 P P 05 55 57.6 +0.8
baz=243
J29N **Klondike Camp** 85.91 24 P P 05 55 58.6 +0.8
baz=249
N31M **Braeburn, Yuko** 85.97 27 IAmb IAmb 05 56 01.1
comp=Z,22nm,0.8s
N31M **Braeburn, Yuko** 85.97 27 P P 05 55 58.8 +0.7
baz=252,SNR=15
K29M **Barlow Dome** 85.98 25 P P 05 55 59.3 +1.1
baz=250,SNR=29
C27K **Jago River** 85.99 18 P P 05 55 58.9 +0.9
baz=244
T33K **Petersburg** 86.00 32 P P 05 55 59.0 +0.7
baz=255
E27K **Coleen River** 86.07 20 IAmb IAmb 05 56 00.3
comp=Z,24nm,1.1s
E27K **Coleen River** 86.07 20 P P 05 55 59.0 +0.6
baz=246,SNR=6.9
WHY **Whitehorse** 86.13 28 IAmb IAmb 05 56 00.9
comp=Z,20nm,1.0s
WHY **Whitehorse** 86.13 28 P P 05 55 59.0 0.0
baz=253,SNR=8.8
I29M **Ogilvie Camp,** 86.19 23 IAmb IAmb 05 56 00.4
comp=Z,30nm,1.1s
I29M **Ogilvie Camp,** 86.19 23 P P 05 55 58.8 -0.3
baz=249,SNR=18
WRAK **Wrangell Islan** 86.22 33 P P 05 55 59.9 +0.6
baz=255
V35K **Ketchikan** 86.35 34 P P 05 56 00.9 +0.9
baz=256
P32M **Atlin** 86.38 29 IAmb IAmb 05 56 02.1
comp=Z,22nm,1.1s
P32M **Atlin** 86.38 29 P P 05 56 00.8 +0.6
baz=254,SNR=6.2
F28M **Old Crow** 86.44 21 IAmb IAmb 05 56 01.9
comp=Z,13nm,0.9s
F28M **Old Crow** 86.44 21 P P 05 56 00.3 0.0
baz=248,SNR=15
H29M **Whitestone** 86.48 22 P P 05 56 00.8 +0.4
baz=249
BTK **Batken** 86.67 311 IAmb IAmb 05 56 02.7
comp=Z,33nm,1.5s
D27M **Malcolm River** 86.71 19 IAmb IAmb 05 56 03.4
comp=Z,18nm,0.9s
D27M **Malcolm River** 86.71 19 P P 05 56 02.1 +0.6
baz=247
J30M **Hart River** 86.72 24 P P 05 56 02.2 +0.4
baz=251,SNR=19
M31M **Drury Creek, Y** 86.81 27 IAmb IAmb 05 56 03.6
comp=Z,24nm,1.1s
M31M **Drury Creek, Y** 86.81 27 P P 05 56 02.0 -0.2
baz=253,SNR=14
G29M **Pine Creek** 86.85 22 P P 05 56 02.4 +0.1
baz=249,SNR=18
GAR **Garm** 86.89 309 IAmb IAmb 05 56 03.6
comp=Z,33nm,1.4s
I30M **Mount Dempster** 86.91 24 IAmb IAmb 05 56 04.1
comp=Z,19nm,1.0s
I30M **Mount Dempster** 86.91 24 P P 05 56 02.6 -0.2
baz=251,SNR=13
Q32M **Nakina River** 86.92 30 IAmb IAmb 05 56 04.7
comp=Z,11nm,0.8s
Q32M **Nakina River** 86.92 30 P P 05 56 03.3 +0.3
baz=255,SNR=5.8
E28M **Babbage River** 86.94 20 IAmb IAmb 05 56 04.4
comp=Z,21nm,1.1s
E28M **Babbage River** 86.94 20 P P 05 56 03.0 +0.4
baz=248,SNR=5.9
P33M **Teslin, Yukon** 86.98 29 IAmb IAmb 05 56 04.7
comp=Z,16nm,1.1s
P33M **Teslin, Yukon** 86.98 29 P P 05 56 03.5 +0.4
baz=254,SNR=8.4
N32M **Quiet Lake** 87.11 28 P P 05 56 04.0 +0.3
baz=254
EPYK **Eagle Plains** 87.16 22 P P 05 56 03.6 -0.2
baz=251,SNR=18
S34M **Telegraph Cree** 87.24 31 P P 05 56 05.2 +0.9
baz=256,SNR=16
FARO **Faro, Yukon** 87.29 27 IAmb IAmb 05 56 06.0
comp=Z,23nm,1.0s
FARO **Faro, Yukon** 87.29 27 P P 05 56 04.9 +0.4
baz=254,SNR=22
KKAR **Karatay Array** 87.39 313 P P 05 56 04.3 -1.2
KKAR **Karatay Array** 87.39 313 P P 05 56 04.3 -1.2
E29M **Blow River** 87.42 20 P P 05 56 05.1 +0.1
E29M **Blow River** 87.42 20 P P 05 56 05.1 +0.1
baz=250
D28M **Stokes Point** 87.47 19 P P 05 56 05.7 +0.5
baz=249
T35M **Bob Quinn** 87.48 32 IAmb IAmb 05 56 08.0
comp=Z,16nm,1.0s
T35M **Bob Quinn** 87.48 32 P P 05 56 06.7 +1.1
baz=257,SNR=6.1
G30M **tAoh Zraii Nji** 87.54 22 IAmb IAmb 05 56 06.7
comp=Z,19nm,1.1s
G30M **tAoh Zraii Nji** 87.54 22 P P 05 56 06.0 +0.3
baz=251,SNR=10
R33M **Jennings River** 87.68 30 IAmb IAmb 05 56 08.8
comp=Z,24nm,1.0s
R33M **Jennings River** 87.68 30 P P 05 56 07.1 +0.5
baz=256,SNR=17
SIMJ **Simiganj** 87.84 309 P P 05 56 06.8 -1.0
H31M **Peel River** 87.90 23 IAmb IAmb 05 56 08.4
comp=Z,25nm,1.1s
H31M **Peel River** 87.90 23 P P 05 56 07.2 -0.2
baz=253,SNR=9.6
F30M **Barrier River** 87.91 21 P P 05 56 07.4 +0.1
baz=252,SNR=17
DLBC **Dease Lake** 87.93 31 P P 05 56 07.9 +0.2
DLBC **Dease Lake** 87.93 31 P P 05 56 08.3 +0.6
baz=257,SNR=14
G31M **Satah River** 88.26 22 IAmb IAmb 05 56 10.1
comp=Z,22nm,1.0s
G31M **Satah River** 88.26 22 P P 05 56 09.5 +0.6
baz=253,SNR=9.8
F31M **Tsiigehtchic** 88.61 22 P P 05 56 10.7 +0.1
baz=253
WTLY **Watson Lake, Y** 88.91 29 P P 05 56 13.3 +1.0
baz=258
INK **Inuvik** 88.93 21 IAmb IAmb 05 56 12.8
comp=Z,17nm,1.1s
INK **Inuvik** 88.93 21 P P 05 56 12.1 0.0
baz=254,SNR=8.3
CBB **Campbell River** 89.01 40 IAmb IAmb 05 56 14.6
comp=Z,13nm,0.9s
BVAR **Borovoye Array** 89.11 323 P P 05 56 11.7 -1.6
comp=Z,1.6nm,0.4s,baz=108,slow=4.8,SNR=16
comp=Z,1.6nm,0.4s
BRVK **Borovoye** 89.18 323 P P 05 56 11.6 -2.1
BRVK **Borovoye** 89.18 323 *de*P P 05 56 12.5 -1.1
BRVK pmax pmax
comp=Z,4.0nm,1.1s
O02D **Mt. Diablo Mer** 89.44 50 IAmb IAmb 05 56 18.5
comp=Z,18nm,1.1s
TGTN **Hyland Airport** 89.45 28 P P 05 56 15.6 +0.8
baz=258
DBO **Dodson Butte** 89.47 47 IAmb IAmb 05 56 17.8
comp=Z,11nm,1.0s
NLWA **Neilton Lookou** 89.60 43 P P 05 56 16.1 +0.4
NLWA IAmb IAmb 05 56 17.7
comp=Z,15nm,1.1s
CLRS **Cowichan Lake** 89.62 41 IAmb IAmb 05 56 17.3
comp=Z,12nm,0.8s
YBH **Yreka Blue Hor** 89.69 48 P P 05 56 17.1 +0.7
YBH IAmb IAmb 05 56 18.7
comp=Z,28nm,1.5s
YBH **Yreka Blue Hor** 89.69 48 LR LR 06 28 07.6
comp=Z,178nm,21.6s,baz=303,slow=30
YBH **Yreka Blue Hor** 89.69 48 P P 05 56 17.1 +0.7
YBH pmax pmax
comp=Z,28nm,1.5s
PGC **Sidney** 90.05 41 IAmb IAmb 05 56 19.2
comp=Z,16nm,1.0s
LIRD **Liard River Hi** 90.12 30 P P 05 56 18.7 +0.8
baz=260
GNW **Green Mountain** 90.32 42 IAmb IAmb 05 56 20.8
comp=Z,13nm,0.9s
H04A **Detroit Lake** 90.42 45 IAmb IAmb 05 56 21.0
comp=Z,15nm,1.0s
TOAD **Toad River Com** 90.47 31 P P 05 56 20.2 +0.6
baz=261
LRDM **Redding Peak** 90.48 50 IAmb IAmb 05 56 26.8
comp=Z,8.6nm,0.8s
D05A **Enumclaw** 90.84 43 IAmb IAmb 05 56 22.9
comp=Z,11nm,0.9s
KOTAN **Kotaneelee Air** 91.25 30 P P 05 56 24.3 +1.1
baz=262
LTY **Liberty** 91.74 43 IAmb IAmb 05 56 26.4
comp=Z,6.5nm,0.8s
WAKR **Walker** 91.85 52 IAmb IAmb 05 56 29.0
comp=Z,10nm,1.0s
WRGLY **Wrigley** 91.95 27 P P 05 56 26.9 +0.6
baz=263
PAHR **Pah Rah Range** 91.99 50 IAmb IAmb 05 56 29.1
comp=Z,15nm,1.1s
MDPB **Devils Postpil** 92.05 53 IAmb IAmb 05 56 29.8
comp=Z,13nm,1.0s
OMMB **Old Mammoth Mi** 92.11 53 IAmb IAmb 05 56 30.2
comp=Z,9.5nm,1.1s
ISA **Isabella, Lake** 92.38 55 IAmb IAmb 05 56 30.9
comp=Z,7.0nm,0.9s
HAWA **Hanford** 92.44 44 IAmb IAmb 05 56 30.8
comp=Z,16nm,1.1s
A36M **Sachs Harbour** 92.49 18 P P 05 56 28.9 +0.3
baz=261
C36M **Paulatuk** 92.50 21 P P 05 56 29.4 +0.7
baz=262
RYN **Ryan** 92.57 52 IAmb IAmb 05 56 32.0
comp=Z,15nm,1.0s
NVAR **Mina Array Bea** 92.73 52 P P 05 56 32.2 +1.4
NVAR **Mina Array Bea** 92.73 52 P P 05 56 32.0 +1.3
comp=Z,14nm,0.8s,baz=254,slow=6.8,SNR=94
NVAR LR LR 06 30 34.3
comp=Z,230nm,21.3s,baz=282,slow=30
comp=Z,14nm,0.8s
B08A **Colville Reser** 92.74 42 IAmb IAmb 05 57 10.7
comp=Z,14nm,0.9s
E08A **Dider Farm, El** 92.78 44 IAmb IAmb 05 56 32.3
comp=Z,15nm,1.1s
D08A **Wollman Farm,** 92.92 43 IAmb IAmb 05 56 32.2
comp=Z,12nm,1.2s
GRAC **Greevine Rang** 93.37 53 IAmb IAmb 05 56 35.7
comp=Z,14nm,1.0s
MZP **Montezuma Peak** 93.40 53 IAmb IAmb 05 56 35.9
comp=Z,12nm,0.9s
BMN **Battle Mountai** 93.70 50 IAmb IAmb 05 56 38.4
comp=Z,6.8nm,1.0s
GSC **Goldstone, Bar** 93.71 55 IAmb IAmb 05 56 37.5
comp=Z,10nm,1.1s
GWY **Greenwater Val** 93.88 54 IAmb IAmb 05 56 38.0
comp=Z,8.5nm,1.0s
PFO **Pinyon Flats O** 93.89 57 P P 05 56 37.8 +1.6
PFO IAmb IAmb 05 56 38.6
comp=Z,14nm,1.1s
PFO **Pinyon Flats O** 93.89 57 LR LR 06 31 05.6
comp=Z,207nm,21.5s,baz=260,slow=30
PFO **Pinyon Flats O** 93.89 57 *eP* P 05 56 37.1 +1.0
PFO pmax pmax
comp=Z,20nm,1.1s
BMO **Blue Mountains** 93.90 45 IAmb IAmb 05 56 37.2
comp=Z,14nm,1.1s
TPFO **Pinon Flats** 93.90 57 P P 05 56 36.7 +0.5
baz=267
NEW **Newport** 94.20 42 IAmb IAmb 05 56 38.4
comp=Z,12nm,1.1s
YUH **Yuha Desert** 94.29 58 IAmb IAmb 05 56 41.6
comp=Z,12nm,1.2s
VTX **Valle De La Tr** 94.33 59 IAmb IAmb 05 56 41.7
comp=Z,11nm,1.2s
S11A **Rachel** 94.69 53 IAmb IAmb 05 56 41.7
comp=Z,11nm,0.9s
R11B **Troy Canyon, C** 94.85 52 IAmb IAmb 05 56 42.6
comp=Z,13nm,1.2s
R11B **Troy Canyon, C** 94.85 52 P P 05 56 40.9 +0.4
baz=267
MFID **Camas Ranch** 94.89 47 IAmb IAmb 05 56 42.3
comp=Z,18nm,1.5s
Q12A **Willow Creek R** 95.47 51 IAmb IAmb 05 56 45.5
comp=Z,13nm,1.0s
SPR3 **Spring Creek 3** 95.86 51 P P 05 56 46.5 +1.3
YKA **Yellowknife Ar** 95.95 28 P P 05 56 44.6 -0.1
comp=Z,2.1nm,0.8s,baz=289,slow=4.7,SNR=6.1
YKA LR LR 06 38 54.1
comp=Z,210nm,18.1s,baz=304,slow=35
comp=Z,2.1nm,0.8s
W13A **Hualapai Mount** 96.09 55 IAmb IAmb 05 56 48.9
comp=Z,7.8nm,0.9s
PSUT **Pine Spring** 96.22 52 IAmb IAmb 05 56 48.8
comp=Z,7.8nm,1.0s
ARU **Arti** 96.22 326 P P 05 56 49.8 +3.8
ARU 06 00 46.6
ELIB **Princess Elisa** 96.38 194 *d*P P 05 56 46.1 -0.6
comp=Z,14nm,1.0s
CCUT **Cedar City** 96.58 53 IAmb IAmb 05 56 51.0
comp=Z,10nm,1.0s
LCMT **Little Creek M** 96.67 53 IAmb IAmb 05 56 51.2
comp=Z,8.7nm,1.0s
214A **Organ Pipe Nat** 96.89 59 P P 05 56 50.5 +0.7
baz=268
BELA **Belgrano 2** 97.07 179 P P 05 56 49.3 -0.3
BELA IAmb IAmb 05 56 49.9
comp=Z,7.0nm,1.0s
HVU **Hansel Valley** 97.10 49 IAmb IAmb 05 56 53.2
comp=Z,9.8nm,0.9s
U15A **North Rim** 97.42 54 IAmb IAmb 05 56 55.1
comp=Z,8.5nm,1.0s
MTPU **Mount Pierson** 97.52 52 IAmb IAmb 05 56 55.8
comp=Z,10nm,1.2s
WUAZ **Wupatki** 98.15 55 IAmb IAmb 05 56 58.4
comp=Z,8.3nm,1.1s
TMUT **Trail Mountain** 98.29 51 IAmb IAmb 05 56 58.1
comp=Z,9.0nm,0.9s
Q16A **Castle Valley** 98.32 52 IAmb IAmb 05 56 58.3
comp=Z,5.6nm,1.0s
AHID **Auburn Hatcher** 98.34 48 IAmb IAmb 05 56 57.4
comp=Z,6.3nm,1.0s
YFT **Old Faithful** 98.50 46 IAmb IAmb 05 56 59.9
comp=Z,11nm,1.0s
HMU **Henry Mountain** 98.66 53 IAmb IAmb 05 56 59.8
comp=Z,12nm,1.0s
LOHW **Long Hollow** 98.69 47 IAmb IAmb 05 57 16.4
comp=Z,15nm,2.0s
H17A **Grant Village** 98.69 46 IAmb IAmb 05 57 01.9
comp=Z,5.8nm,1.0s
H17A **Grant Village** 98.69 46 P P 05 56 58.4 +0.6
baz=272
LPIG **La Paz** 98.88 66 LR LR 06 38 38.9
comp=Z,84nm,18.0s,baz=285,slow=34
X18A **Snowflake** 99.32 56 IAmb IAmb 05 57 04.0
comp=Z,5.0nm,0.9s
PDAR **Pinedale Array** 99.48 48 P Pdif 05 57 01.0 -0.4
comp=Z,4.5nm,0.8s,baz=249,slow=2.2,SNR=34
comp=Z,4.5nm,0.8s
W18A **Petrified Fore** 99.49 55 P Pdif 05 57 02.5 +0.9
baz=270
NVL **N'lazarevskaya** 99.86 192 *e*P Pdif 05 57 01.1 -1.0
NVL pmax pmax
comp=Z,6.0nm,0.8s
TROLL **Troll, Antarti** 100.57 189 ⇑P Pdif 05 57 04.8 -0.7
comp=Z,209nm,0.9s
121A **Cookes Peak, D** 101.15 58 P Pdif 05 57 09.4 +0.4
baz=271
SNAA **Sanae** 101.67 188 ⇑P Pdif 05 57 07.8 -2.5
comp=Z,40nm,1.0s
SNAA **Sanae** 101.67 188 P Pdif 05 57 09.3 -0.9
comp=Z,1.4nm,0.9s,baz=125,slow=2.6,SNR=4.1
S22A **4UR Ranch, Cre** 101.77 53 P Pdif 05 57 12.2 +0.4
baz=273
Y22D **IRIS PASSCAL I** 101.83 56 P Pdif 05 57 12.6 +0.7
baz=272
N23A **Red Feather La** 102.27 49 P Pdif 05 57 14.3 +0.4
baz=274
VNA3 **Neumayer Olymp** 102.88 186 ⇑P Pdif 05 57 16.0 +0.4
comp=Z,1.5nm,0.6s
Q24A **Divide** 103.01 51 P Pdif 05 57 17.4 +0.2
baz=274
T25A **Trinidad** 103.72 53 P Pdif 05 57 20.4 0.0
baz=274
TXAR **Lajitas Array** 104.79 61 Pdiff Pdif 05 57 27.2 +2.1
comp=Z,0.2nm,0.8s,baz=282,slow=4.3,SNR=2.3
TXAR PKiKP **PKiKP** 06 01 40.6 +0.3
comp=Z,0.6nm,0.8s,baz=202,slow=1.8,SNR=6.8
ARCES **ARCESS Array B** 106.97 343 PKiKP **PKiKP** 06 01 42.9 -0.2
comp=Z,5.1nm,1.0s,baz=42,slow=0.1,SNR=22
FINES **FINESS Array B** 111.06 335 PKiKP **PKiKP** 06 01 49.7 -1.2
comp=Z,0.7nm,0.3s,baz=96,slow=3.5,SNR=7.9
AKASG **Malin Array Be** 114.38 324 PKiKP PKPdf 06 01 56.6 -0.9
comp=Z,0.4nm,0.3s,baz=50,slow=2.2,SNR=5.0
BRTR **Keskin Array B** 115.05 312 PKP **PKiKP** 06 01 58.7 -0.7
comp=Z,1.5nm,0.9s,baz=64,slow=3.4,SNR=6.0
HFS **Hagfors** 116.72 338 PKP **PKPdf** 06 02 00.7 -1.1
comp=Z,0.6nm,0.3s,baz=74,slow=6.2,SNR=8.1
NB2 **NORSAR Subarra** 116.98 340 PKPdf **PKPdf** 06 02 00.9 -1.5
comp=Z,0.6nm,0.5s,baz=39,slow=1.9
NOA **NORSAR Array B** 116.98 340 PKP **PKPdf** 06 02 01.4 -0.9
comp=Z,2.2nm,0.8s,baz=44,slow=1.9,SNR=5.7
WVT **Waverly** 117.03 52 **PKPdf** 06 02 02.5 -0.6
WVT **Waverly** 117.03 52 PKiKP **PKPdf** 06 02 02.5 -0.6
WCI **Wyandotte Cave** 117.66 49 PKPdf **PKPdf** 06 02 04.2 -0.1
WCI **Wyandotte Cave** 117.66 49 PKiKP **PKPdf** 06 02 04.2 -0.1
P49A **Miami Univ. Ec** 118.44 47 P **PKPdf** 06 02 05.6 -0.2
baz=288
BOSA **Boshof** 118.98 233 PKP **PKPdf** 06 02 06.7 -0.6
comp=Z,3.0nm,0.7s,baz=171,slow=0.7,SNR=5.7
PLCA **Paso Flores** 119.91 143 PKP **PKPdf** 06 02 08.6 -0.1
comp=Z,1.5nm,0.5s,baz=194,slow=4.3,SNR=5.4
P52A **Corning** 120.29 47 P **PKPdf** 06 02 09.4 0.0
baz=291
M53A **WI Miller and** 120.67 44 P **PKPdf** 06 02 09.7 -0.3
baz=293
O53A **New Philadelph** 120.73 46 P **PKPdf** 06 02 10.0 -0.2
baz=292
LSZ **Lusaka** 120.98 249 **PKPdf** 06 02 10.4 -1.0
LSZ **Lusaka** 120.98 249 PKiKP **PKPdf** 06 02 10.4 -1.0
SCHQ **Schefferville** 121.30 25 PKP **PKPdf** 06 02 10.8 0.0
comp=Z,1.3nm,0.4s,baz=6.3,slow=9.2,SNR=1.8
BRG **Berggiesshubel** 122.62 330 *e*PKP **PKPdf** 06 02 13.4 -0.1
BRG Amp 06 02 14.8
comp=Z,11nm,1.2s
BRG **Berggiesshubel** 122.62 330 *e*PKiKP **PKPdf** 06 02 13.3 -0.1
BRG pmax pmax
comp=Z,11nm,1.2s
CLL **Collm** 122.81 331 *i* PKiKP **PKPdf** 06 02 13.4 -0.4
comp=Z,11nm,1.3s
CLL *i* pPKPdf **pPKPdf** 06 02 30.8 +0.2
CLL **Collm** 122.81 331 *i* PKiKP **PKPdf** 06 02 13.4 -0.4
CLL pmax pmax
comp=Z,11nm,1.3s
SSPA **Standing Stone** 122.92 44 PKPdf **PKPdf** 06 02 14.6 +0.2
JTS **Las Juntas de** 123.18 81 PKPdf **PKPdf** 06 02 16.2 +0.6
JTS **Las Juntas de** 123.18 81 PKiKP **PKPdf** 06 02 16.2 +0.6
LONY **Lake Ozonia** 123.28 39 PKPdf **PKPdf** 06 02 14.4 -0.5
CONA **Conrad Observa** 123.36 326 *e*PKP **PKPdf** 06 02 14.5 -0.6
comp=Z,1.6nm,0.5s
FNA **Florina** 123.49 316 PKPdf **PKPdf** 06 02 14.8 -0.7
FNA **Florina** 123.49 316 PKiKP **PKPdf** 06 02 14.8 -0.7
NCB **Newcomb** 123.83 39 **PKPdf** 06 02 16.6 +0.5
ARSA **Arzberg** 123.93 326 *i* PKP **PKPdf** 06 02 15.3 -0.9
comp=Z,1.0nm,0.4s
GEC2 **GERESS Array S** 123.98 328 PKPdf **PKPdf** 06 02 16.0 -0.3
GERES **GERESS Array B** 123.98 328 PKP **PKPdf** 06 02 16.0 -0.3
comp=Z,1.7nm,0.4s,baz=62,slow=1.8,SNR=17
GERES **GERESS Array B** 123.98 328 PKiKP **PKPdf** 06 02 16.0 -0.3
R58B **Mineral** 124.00 47 **PKPdf** 06 02 16.6 +0.1
MOA **Molln** 124.28 327 *e*PKP **PKPdf** 06 02 15.0 -1.8
comp=Z,0.5nm,0.3s
SOKA **Soboth** 124.53 325 *i* PKP **PKPdf** 06 02 16.4 -1.0
comp=Z,3.7nm,0.7s
BIOA **Bad Ischl, Aus** 124.71 327 *e*PKP **PKPdf** 06 02 16.9 -0.7
comp=Z,1.5nm,0.3s
OBKA **Obir** 124.90 325 *i* PKiKP **PKPdf** 06 02 18.6 +0.5
comp=Z,2.9nm,0.6s
HNH **Hanover** 125.17 38 **PKPdf** 06 02 19.4 +0.8
D62A **Allapoint, All** 125.17 33 **PKPdf** 06 02 18.3 -0.2
KBA **Koelnbreinsper** 125.24 327 *i* PKP **PKPdf** 06 02 19.2 +0.3
comp=Z,2.4nm,0.4s
LESA **Schwarzleotal** 125.39 327 *i* PKP **PKPdf** 06 02 18.0 -1.0
comp=Z,7.3nm,1.0s
G62A **West of Eustis** 125.41 36 **PKPdf** 06 02 19.3 +0.3
L61B **Northampton** 125.56 40 P **PKPdf** 06 02 19.3 0.0
baz=300
ABTA **Abfaltersbach** 125.89 327 *i* PKP **PKPdf** 06 02 17.9 -2.1
comp=Z,3.8nm,0.8s
WATA **Walderalm** 126.04 328 *i* PKP **PKPdf** 06 02 19.6 -0.7
comp=Z,0.6nm,0.2s
WTTA **Wattenberg** 126.05 328 *i* PKP **PKPdf** 06 02 19.9 -0.5
comp=Z,1.8nm,0.3s
EKA **Eskdalemuir Ar** 126.13 343 PKP **PKPdf** 06 02 19.9 -0.1
comp=Z,2.9nm,0.4s,baz=14,slow=2.7,SNR=36
MOTA **Moosalm** 126.28 328 *i* PKP **PKPdf** 06 02 20.1 -0.7
comp=Z,3.0nm,0.5s
SQTA **Sankt Quirin** 126.30 328 *i* PKP **PKPdf** 06 02 20.6 -0.2
comp=Z,1.8nm,0.4s
STU **Stuttgart** 126.33 330 PKPdf **PKPdf** 06 02 20.4 -0.2
STU **Stuttgart** 126.33 330 PKiKP **PKPdf** 06 02 20.4 -0.2
RETA **Reutte** 126.37 328 *i* PKP **PKPdf** 06 02 20.2 -0.6
comp=Z,1.0nm,0.4s
BTNL **Ternell** 126.49 334 *d*P **PKPdf** 06 02 20.8 -0.2
MEM **Membach** 126.53 334 *d*PKPdf **PKPdf** 06 02 21.5 +0.5
FETA **Feichten** 126.68 328 *i* PKP **PKPdf** 06 02 21.5 -0.1
comp=Z,5.8nm,1.1s
BSTI **Sart Tilman** 126.74 334 *d*PKPdf **PKPdf** 06 02 22.0 +0.7
DAVA **Damuels** 126.96 329 *i* PKP **PKPdf** 06 02 22.1 0.0
comp=Z,3.0nm,0.3s
BCLA **Clavier** 126.98 334 *d*PKPdf **PKPdf** 06 02 22.2 +0.4
BGES **Gesves** 127.10 334 *d*PKPdf **PKPdf** 06 02 22.0 -0.1
WLF **Walferdange** 127.15 333 **PKPdf** 06 02 22.2 0.0
WLF **Walferdange** 127.15 333 *d*PKPdf **PKPdf** 06 02 21.7 -0.5
WLF **Walferdange** 127.15 333 PKiKP **PKPdf** 06 02 22.2 0.0
RCHB **Rochefort** 127.20 334 *d*PKPdf **PKPdf** 06 02 22.5 +0.2
BMRD **Maredsous** 127.30 334 *d*PKPdf **PKPdf** 06 02 22.5 0.0
DOU **Dourbes** 127.52 334 *d*PKPdf **PKPdf** 06 02 22.6 -0.2
INTR **Introdacqua** 127.81 321 **PKPdf** 06 02 24.2 +0.4
ROSC **El Rosal** 133.66 88 PKP **PKPdf** 06 02 37.3 +1.3
comp=Z,7.4nm,0.4s,baz=139,slow=7.8,SNR=12
KEST **Kesra** 134.21 317 PKP **PKPdf** 06 02 36.4 +0.3
comp=Z,2.0nm,0.7s,baz=252,slow=1.6,SNR=4.3
LPAZ **La Paz** 134.80 119 PKPdf **PKPdf** 06 02 37.3 -1.0
LPAZ **La Paz** 134.80 119 PKP **PKPdf** 06 02 39.5 +1.1
comp=Z,4.5nm,0.5s,baz=292,slow=1.1,SNR=23
SDV **Santo Domingo** 137.33 82 PKPdf **PKPdf** 06 02 43.5 +0.9
CPUP **Villa Florida** 137.64 139 PKhKP PKPpre 06 02 32.8
comp=Z,2.6nm,1.0s,baz=338,slow=1.5,SNR=3.1
CPUP PKP **PKPdf** 06 02 43.0 +0.4
comp=Z,4.2nm,0.9s,baz=236,slow=3.4,SNR=6.0
PGAV **Gavieira, Arco** 139.36 337 *e*LR LR 06 45 18.1
comp=Z,304nm,21.2s
ESDC **Sonseca Array** 139.40 331 PKP **PKiKP** 06 02 47.2 -0.6
comp=Z,0.6nm,0.9s,baz=16,slow=3.5,SNR=4.5
MVO **Moncorvo** 139.55 336 *e*LR LR 06 46 31.4
comp=Z,292nm,29.1s
POLO **Lamas de Olo** 139.68 337 *e*PKPdf **PKPdf** 06 02 47.0 +0.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PVRL | Vila Real | 139.73 | 336 | ePKPdf | PKPdf | 06 02 46.8 | +0.7 | |
| BAUV | El Baul | 139.89 | 82 | PKPdf | PKPdf | 06 02 46.7 | -0.4 | |
| GCPR | Guaynabo City | 140.38 | 67 | | PKPdf | 06 02 48.4 | +0.6 | |
| MTE | Manteigas | 140.40 | 335 | ePKPdf | PKPdf | 06 02 48.4 | +1.0 | |
| MTE | Manteigas | 140.40 | 335 | eLR | LR | 06 45 56.0 | | |
| | comp=Z,331nm,18.5s | | | | | | | |
| IGPR | InterUniversit | 140.44 | 68 | PKPdf | PKPdf | 06 02 48.8 | +0.9 | |
| PCBR | Castelo Branco | 140.84 | 335 | ePKPdf | PKPdf | 06 02 48.6 | +0.5 | |
| PMRV | Marv??o | 141.15 | 335 | ePKPdf | PKPdf | 06 02 50.4 | +1.7 | |
| PMRV | Marv??o | 141.15 | 335 | eLR | LR | 06 45 34.7 | | |
| | comp=Z,346nm,21.2s | | | | | | | |
| PMTG | Montargil | 141.81 | 335 | ePKPdf | PKPdf | 06 02 50.6 | +0.8 | |
| PBAR | Barrancos | 142.03 | 333 | ePKPdf | PKiKP | 06 02 53.2 | 0.0 | |
| SAML | Samuel | 142.07 | 111 | | PKPpre | 06 02 46.1 | | |
| SAML | Samuel | 142.07 | 111 | PKHKP | PKPpre | 06 02 46.1 | | |
| AQDB | Aquidauana | 142.63 | 134 | | PKPdf | 06 02 50.0 | -1.9 | |
| PTLB | Pontes e Lacer | 142.85 | 124 | PKPdf | PKPdf | 06 02 48.9 | -3.5 | |
| PVAQ | Vaqueiros | 142.97 | 333 | eLR | LR | 06 46 48.0 | | |
| | comp=Z,338nm,18.5s | | | | | | | |
| VILB | Vilhena | 143.16 | 119 | | PKPab | 06 02 50.0 | +1.4 | |
| TAM | Tamanrasset | 143.33 | 302 | PKPdf | PKPbc | 06 02 51.2 | +0.8 | |
| TAM | Tamanrasset | 143.33 | 302 | PKIKP | PKPbc | 06 02 51.2 | +0.8 | |
| GDSD | La Dsirade Is | 145.52 | 69 | | PKPdf | 06 02 55.7 | -1.2 | |
| MACA | Manacapuru-AM | 146.14 | 103 | | PKPdf | 06 02 58.3 | +0.2 | |
| SRBC | Serra Branca | 146.20 | 0 | ePKP | PKPdf | 06 02 56.6 | -0.9 | |
| PAGU | Agualva, Azore | 146.47 | 359 | ePKP | PKPdf | 06 02 58.2 | +0.2 | |
| ROSA | Rosais | 146.52 | 1 | ePKP | PKPdf | 06 02 58.9 | +0.8 | |
| PMAN | Manadas | 146.61 | 0 | ePKP | PKPbc | 06 03 00.3 | +0.5 | |
| HOR | Horta | 146.70 | 1 | ePKP | PKPdf | 06 02 58.2 | -0.2 | |
| PICO | Pico | 146.73 | 1 | ePKP | PKPdf | 06 02 58.4 | -0.1 | |
| PCAN | Candelaria | 146.77 | 1 | ePKP | PKPdf | 06 02 59.8 | +1.3 | |
| PID | Ribeirinha | 146.80 | 0 | ePKP | PKPdf | 06 02 58.9 | +0.3 | |
| BOAV | Boa Vista | 147.24 | 93 | | PKPdf | 06 03 00.9 | +0.9 | |
| TORD | Torodi Ar. Bea | 149.83 | 287 | PKPdf | PKPdf | 06 03 03.2 | -0.9 | |
| TORD | | | | PKPbc | PKPbc | 06 03 08.1 | -0.9 | |
| TORD | Torodi Ar. Bea | 149.83 | 287 | PKP | PKPdf | 06 03 03.3 | -0.8 | |
| | comp=Z,30nm,0.7s,baz=326,slow=3.2,SNR=96 | | | | | | | |
| TORD | | | | PKPbc | PKPbc | 06 03 07.9 | -1.0 | |
| | comp=Z,21nm,0.5s,baz=98,slow=3.1,SNR=124 | | | | | | | |
| PMOZ | Porto Moniz, M | 150.68 | 342 | ePKPbc | PKiKP | 06 03 11.7 | +0.4 | |
| PMAR | Madeira | 150.69 | 341 | ePKPbc | PKiKP | 06 03 11.7 | +0.3 | |
| BDFB | Brasilia | 151.28 | 136 | | PKPbc | 06 03 12.9 | +0.4 | |
| BDFB | Brasilia | 151.28 | 136 | PKP | PKPdf | 06 03 07.6 | +1.1 | |
| | comp=Z,24nm,0.7s,baz=102,slow=1.6,SNR=3.6 | | | | | | | |
| BDFB | | | | PKPbc | PKPbc | 06 03 12.7 | +0.2 | |
| | comp=Z,24nm,0.7s,baz=220,slow=1.5,SNR=22 | | | | | | | |
| BDFB | | | | PKPab | PKPab | 06 03 20.9 | +0.3 | |
| | comp=Z,14nm,0.8s,baz=248,slow=5.2,SNR=8.6 | | | | | | | |
| DBIC | Dimbokro | 157.13 | 275 | PKPbc | PKPdf | 06 03 24.3 | +10 | |
| | comp=Z,2.2nm,0.4s,baz=108,slow=3.5,SNR=11 | | | | | | | |
| DBIC | | | | PKPab | PKPab | 06 03 45.4 | -0.1 | |
| | comp=Z,3.8nm,0.5s,baz=86,slow=4.4,SNR=2.5 | | | | | | | |

*IDC* ***26*** *05:49:37.7±0.8,44°.26N×149°.73E,h0km,mb4.2/16, mbtmp4.1/20,ML3.4/4,Error ellipse: s-maj=20.3km s-min=17.1km az=166.0*

*NEIC* ***26*** *05:49:39.8±1.5,44°.1N±0°.1×149°.7E±0°.1,h10km±2km, mb4.6/29,Error ellipse: s-maj=24.5km s-min=2.9km az=141.0*

*SKHL* ***26*** *05:49:40.6±0.4,44°.10N×149°.80E,h33km±5km,mb4.7/4*

*MOS* ***26*** *05:49:40.8±1.2,44°.22N×149°.71E,h33km,mb4.9/16,Error ellipse: s-maj=9.6km s-min=7.0km az=133.2*

*JMA* ***26*** *05:49:43.3±1.3,44°N±5°×14°9E±°,h30km,MV4.1/14,SE OFF ETOROFU*

**ISC 26 05:49:40.8±1.3,44°.12N±0°.07×149°.71E±0°.06,h19km±5km, n144,σ1§23/140,mb4.6/41,13C-6D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| KUR | **Kuril'sk** | **1.72** | **311** | *i* P | | **Pn** | **05 50 09.1** | **-0.5** |
| KUR | | | | | AMB | AMB | 05 50 10.0 | |
| | 430nm,0.6s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **05 50 30.4** | **-0.6** |
| KUR | | | | A | | A | 05 50 38.5 | |
| | 1μm,0.5s | | | | | | | |
| KUR | | | | A | | A | 05 50 38.5 | |
| | 820nm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.72** | **311** | *c i* PN | | **Pn** | **05 50 08.8** | **-0.8** |
| **SHO** | **Shikotan** | **2.09** | **264** | *e*P | | **Pn** | **05 50 13.8** | **-0.9** |
| SHO | | | | | AMB | AMB | 05 50 15.9 | |
| | 50nm,0.4s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **05 50 38.5** | **-1.7** |
| SHO | | | | A | | A | 05 50 40.6 | |
| | 330nm,0.4s | | | | | | | |
| SHO | | | | A | | A | 05 50 40.6 | |
| | 150nm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **2.09** | **264** | *e*PN | | **Pn** | **05 50 13.8** | **-0.9** |
| SHO | | | | *e*S | | **Sn** | **05 50 37.9** | **-2.3** |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,53nm,0.4s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=N,14nm,0.3s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=E,35nm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,286nm,0.5s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,141nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.77** | **270** | *e*P | | **Pn** | **05 50 23.7** | **-0.4** |
| YUK | | | | | AMB | AMB | 05 50 24.2 | |
| | comp=E,100nm,0.3s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **05 50 56.4** | **-0.6** |
| YUK | | | | A | | A | 05 51 04.3 | |
| | comp=E,470nm,0.4s | | | | | | | |
| YUK | | | | A | | A | 05 51 04.3 | |
| | comp=E,200nm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.77** | **270** | *e*PN | | **Pn** | **05 50 22.7** | **-1.4** |
| YUK | | | | *e*S | | **Sn** | **05 50 57.4** | **+0.4** |
| YUK | | | | pmax | | pmax | | |
| | comp=N,29nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=E,38nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,60nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,343nm,0.3s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,121nm,0.3s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.97** | **257** | *e*P | | **Pn** | **05 50 25.7** | **-1.1** |
| NEM2 | | | | *e*S | | **Sn** | **05 50 57.6** | **-4.3** |
| **JRA** | **Rausu** | **3.31** | **268** | *e*P | | **Pn** | **05 50 32.6** | **+1.1** |
| **JNK** | **Nakash** | **3.65** | **263** | *e*P | | **Pn** | **05 50 36.2** | **+0.1** |
| **JAK** | **Akkeshi** | **3.81** | **255** | *e*P | | **Pn** | **05 50 38.3** | **0.0** |
| **JTKR** | **Abashiri--Toko** | **4.18** | **270** | *e*P | | **Pn** | **05 50 44.3** | **+0.9** |
| **JAR** | **Ashorobuto** | **4.38** | **261** | *e*P | | **Pn** | **05 50 47.7** | **+1.5** |
| **JOB** | **Onbets** | **4.44** | **256** | *e*P | | **Pn** | **05 50 47.8** | **+0.8** |
| **JCH** | **Churui** | **4.86** | **254** | *e*P | | **Pn** | **05 50 53.5** | **+0.6** |
| JCH | | | | *e*S | | **Sn** | **05 51 45.7** | **-2.9** |
| **JKK2** | **Kamakawa 2** | **5.03** | **270** | *e*P | | Pn | 05 51 01.3 | +6.2 |
| **JKA** | **Kamikawa-asahi** | **5.12** | **272** | Pn | | **Pn** | **05 50 57.8** | **+1.6** |
| **JKA** | **Kamikawa-asahi** | **5.12** | **272** | *i* P | | **Pn** | **05 50 57.9** | **+1.6** |
| **ASAJ** | **Asahikawa** | **5.12** | **272** | Pn | | **Pn** | **05 50 57.9** | **+1.6** |
| | comp=E,0.7nm,0.3s,baz=45,slow=19,SNR=6.2 | | | | | | | |
| **ERM** | **Erimo** | **5.24** | **249** | | | **Pn** | **05 50 59.5** | **+1.5** |
| **ERM** | **Erimo** | **5.24** | **249** | *e*PN | | **Pn** | **05 50 59.1** | **+1.1** |
| ERM | | | | pmax | | pmax | | |
| | comp=Z,114nm,1.3s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.41** | **253** | P | | **Pn** | **05 51 02.3** | **+2.0** |
| **YSS** | **Yuzh-Sakhalins** | **5.65** | **303** | *e*P | | **Pn** | **05 51 05.7** | **+2.2** |
| YSS | | | | | AMB | AMB | 05 51 07.2 | |
| | comp=Z,10.0nm,0.3s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.65** | **303** | *e*PN | | **Pn** | **05 51 01.2** | **-2.3** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=N,200nm,12.0s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,400nm,12.0s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=E,300nm,14.0s | | | | | | | |
| **JANG** | **Nango** | **7.14** | **241** | *e*P | | Pn | 05 51 22.3 | -1.8 |
| JANG | | | | *e*S | | Sn | 05 52 38.5 | -6.1 |
| **JTH** | **Tanohata** | **7.18** | **237** | *e*S | | Sn | 05 52 36.9 | -8.7 |
| **JTM** | **Tenmabayashi** | **7.20** | **245** | Pn | | **Pn** | **05 51 25.1** | **+0.2** |
| **SKR** | **Severo-Kuril's** | **7.87** | **31** | *e*P | | **Pn** | **05 51 33.7** | **-0.4** |
| SKR | | | | | AMB | AMB | 05 51 36.5 | |
| | comp=E,20nm,0.6s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.87** | **31** | *e*PN | | Pn | 05 51 40.1 | +6.0 |
| SKR | | | | pmax | | pmax | | |
| | comp=Z,71nm,0.6s | | | | | | | |
| SKR | | | | MLR | | MLR | | |
| | comp=Z,600nm,12.0s | | | | | | | |
| **TYV** | **Tymovskoe** | **8.26** | **327** | *e*P | | **Pn** | **05 51 41.3** | **+1.9** |
| TYV | | | | | AMB | AMB | 05 51 43.2 | |
| **TYV** | **Tymovskoe** | **8.26** | **327** | *e*PN | | Pn | 05 51 50.0 | +11 |
| TYV | | | | *e*S | | Sn | 05 53 25.4 | +13 |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,100nm,3.7s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=N,4.0nm,1.3s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=E,4.0nm,1.3s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=N,100nm,3.7s | | | | | | | |
| TYV | | | | smax | | smax | | |
| | comp=E,100nm,3.7s | | | | | | | |
| TYV | | | | MLR | | MLR | | |
| | comp=Z,200nm,13.0s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **10.43** | **28** | Pn | | **Pn** | **05 52 11.0** | **+1.9** |
| **PEA0B** | **Petropavlovsk-** | **10.43** | **28** | *e*PN | | **Pn** | **05 52 08.1** | **-1.0** |
| **PETK** | **Petropavlovsk-** | **10.43** | **28** | Pn | | **Pn** | **05 52 10.7** | **+1.6** |
| **PETK** | **Petropavlovsk-** | **10.43** | **28** | Pn | | **Pn** | **05 52 05.5** | **-3.6** |
| | comp=Z,2.6nm,1.0s,baz=195,slow=10,SNR=2.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.73** | **277** | Pn | | **Pn** | **05 52 41.7** | **+1.1** |
| | comp=Z,0.4nm,0.3s,baz=88,slow=15,SNR=6.8 | | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **KLR** | **Kul'dur** | **13.34** | **299** | Pn | | **Pn** | **05 52 52.3** | **+3.4** |
| | comp=Z,0.1nm,0.3s,baz=120,slow=7.4,SNR=3.6 | | | | | | | |
| **KLR** | **Kul'dur** | **13.34** | **299** | *e*PN | | **Pn** | **05 52 50.3** | **+1.4** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | | |
| **PSTR** | **Posyet** | **13.83** | **270** | *e*P | | **Pn** | **05 52 55.0** | **-0.6** |
| **CN2** | **Changchun** | **17.46** | **277** | *e*P | | **P** | **05 53 43.8** | **-0.3** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **ZEA** | **Zeya** | **17.55** | **311** | *e*P | | **P** | **05 53 51.1** | **+6.1** |
| ZEA | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | | |
| **KSRS** | **Korea Array** | **17.76** | **255** | P | | **P** | **05 53 47.5** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=58,slow=12,SNR=3.2 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **TJN** | **Taejon** | **18.69** | **253** | *e*P | | **Pn** | **05 53 59.6** | **+1.4** |
| **SEY** | **Seymchan** | **18.91** | **4** | P | | **P** | **05 53 57.6** | **-2.4** |
| | comp=Z,0.2nm,0.3s,baz=184,slow=10.0,SNR=11 | | | | | | | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **SEY** | **Seymchan** | **18.91** | **4** | *e*P | | **P** | **05 53 58.2** | **-1.8** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| **YAK** | **Yakutsk** | **21.44** | **334** | *e*P | | **P** | **05 54 25.7** | **-1.7** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.24** | **144** | T | | T | 06 26 37.3 | |
| | baz=334,slow=75,SNR=56 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.25** | **144** | T | | T | 06 26 40.0 | |
| | baz=334,slow=75,SNR=46 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.26** | **144** | T | | T | 06 26 40.8 | |
| | baz=334,slow=75,SNR=57 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.25** | **145** | T | | T | 06 27 57.2 | |
| | baz=335,slow=76,SNR=47 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.26** | **145** | T | | T | 06 27 54.8 | |
| | baz=335,slow=76,SNR=34 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.27** | **145** | T | | T | 06 27 53.2 | |
| | baz=335,slow=76,SNR=42 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.59** | **292** | *e*P | | **P** | **05 55 43.5** | **-1.0** |
| **ULN** | **Ulaanbaatar** | **29.59** | **292** | *ce*P | | **P** | **05 55 43.5** | **-1.0** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **30.03** | **293** | P | | **P** | **05 55 48.6** | **+0.2** |
| **SONM** | **Songino Array** | **30.03** | **293** | P | | **P** | **05 55 48.2** | **-0.2** |
| | comp=Z,4.4nm,0.9s,baz=85,slow=8.1,SNR=5.5 | | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **30.03** | **293** | *e*P | | **P** | **05 55 48.4** | **0.0** |
| SONM | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **LYN** | **LuoYang** | **30.13** | **264** | P | | **P** | **05 55 51.0** | **+1.8** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,28nm,0.5s | | | | | | | |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,310nm,4.5s | | | | | | | |
| **C18K** | **Utukok River** | **35.09** | **29** | P | | **P** | **05 56 32.6** | **+0.3** |
| C18K | | | | | IAmb | IAmb | 05 56 32.8 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **C19K** | **Lookout Ridge** | **35.79** | **28** | P | | **P** | **05 56 38.9** | **+0.7** |
| C19K | | | | | IAmb | IAmb | 05 56 39.5 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **35.85** | **32** | P | | **P** | **05 56 38.9** | **+0.1** |
| F19K | | | | | IAmb | IAmb | 05 56 39.7 | |
| | comp=Z,5.6nm,0.9s | | | | | | | |
| **D19K** | **Kuna River** | **36.13** | **30** | P | | **P** | **05 56 41.7** | **+0.5** |
| **B20K** | **Meade River** | **36.87** | **27** | P | | **P** | **05 56 48.0** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **37.62** | **28** | P | | **P** | **05 56 54.7** | **+0.9** |
| **E22K** | **Anaktuvuk Pass** | **38.35** | **31** | P | | **P** | **05 57 01.3** | **+1.3** |
| E22K | | | | | IAmb | IAmb | 05 57 01.5 | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **C23K** | **Itkillik River** | **39.03** | **28** | P | | **P** | **05 57 06.3** | **+0.6** |
| C23K | | | | | IAmb | IAmb | 05 57 09.2 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **39.23** | **30** | P | | **P** | **05 57 08.5** | **+1.0** |
| **E24K** | **Your Creek** | **39.58** | **31** | P | | **P** | **05 57 10.8** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **39.88** | **33** | P | | **P** | **05 57 13.9** | **+1.1** |
| **DHY** | **Denali Highway** | **39.92** | **39** | P | | **P** | **05 57 13.3** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **42.25** | **307** | PcP | | **PcP** | **05 59 26.4** | **+0.4** |
| | comp=Z,1.6nm,0.7s,baz=48,slow=3.7,SNR=4.7 | | | | | | | |
| **BCAR** | **Beaver Creek A** | **42.45** | **39** | P | | **P** | **05 57 34.9** | **+0.8** |
| **MK31** | **Makanchi Array** | **46.04** | **298** | P | | **P** | **05 58 03.1** | **+0.1** |
| MK31 | | | | | IAmb | IAmb | 05 58 03.5 | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| **MK31** | **Makanchi Array** | **46.04** | **298** | *d i* P | | **P** | **05 58 02.8** | **-0.2** |
| **MKAR** | **Makanchi Array** | **46.04** | **298** | P | | **P** | **05 58 03.3** | **+0.3** |
| **MKAR** | **Makanchi Array** | **46.04** | **298** | P | | **P** | **05 58 02.9** | **0.0** |
| | comp=Z,7.1nm,0.7s,baz=73,slow=8.1,SNR=19 | | | | | | | |
| | comp=Z,7.1nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **46.24** | **298** | P | | **P** | **05 58 04.4** | **-0.1** |
| **MAKZ** | **Makanchi** | **46.24** | **298** | P | | **P** | **05 58 04.4** | **-0.1** |
| MAKZ | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **46.85** | **304** | *e*P | | **P** | **05 58 08.8** | **-0.4** |
| **KURK** | **Kurchatov** | **46.85** | **304** | P | | **P** | **05 58 08.8** | **-0.4** |
| **KURBB** | **Kurchatov Arra** | **46.94** | **304** | P | | **P** | **05 58 08.8** | **-1.0** |
| | comp=Z,1.6nm,0.3s,baz=71,slow=8.1,SNR=4.6 | | | | | | | |
| | comp=Z,1.6nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **50.69** | **310** | P | | **P** | **05 58 37.1** | **-1.6** |
| | comp=Z,0.7nm,0.5s,baz=68,slow=9.5,SNR=2.4 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.99** | **296** | P | | **P** | **05 58 49.1** | **+0.3** |
| BOOM | | | | | IAmb | IAmb | 05 58 50.2 | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **51.99** | **296** | P | | **P** | **05 58 49.1** | **+0.3** |
| BOOM | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **AAK** | **Ala-Archa** | **52.85** | **296** | *e*P | | **P** | **05 58 55.5** | **+0.3** |
| **AAK** | **Ala-Archa** | **52.85** | **296** | *e*P | | **P** | **05 58 55.5** | **+0.3** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,2.5s | | | | | | | |
| **KKAR** | **Karatay Array** | **55.16** | **299** | P | | **P** | **05 59 11.5** | **-0.4** |
| **KKAR** | **Karatay Array** | **55.16** | **299** | P | | **P** | **05 59 11.5** | **-0.4** |
| **ARU** | **Arti** | **55.33** | **318** | *e*P | | **P** | **05 59 11.8** | **-1.0** |
| **ARU** | **Arti** | **55.33** | **318** | *c i* P | | **P** | **05 59 11.8** | **-1.0** |
| ARU | | | | | | | 06 01 12.7 | |
| ARU | | | | S | | **S** | **06 06 56.7** | **+1.1** |
| ARU | | | | SS | | **SS** | **06 10 38.6** | **-0.8** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **58.26** | **310** | P | | **P** | **05 59 33.4** | **-0.3** |
| ABKAR | | | | | IAmb | IAmb | 05 59 34.2 | |
| | comp=Z,5.5nm,0.7s | | | | | | | |
| **SIMJ** | **Simiganj** | **58.48** | **295** | P | | **P** | **05 59 35.1** | **-0.6** |
| SIMJ | | | | | IAmb | IAmb | 05 59 49.0 | |
| | comp=Z,6.4nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **65.27** | **196** | *e*P | | **P** | **06 00 20.5** | **-0.6** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.28** | **196** | P | | **P** | **06 00 21.2** | **0.0** |
| | comp=Z,1.2nm,0.9s,baz=7.8,slow=6.2,SNR=5.0 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.37** | **334** | P | | **P** | **06 00 19.8** | **-1.5** |
| | comp=Z,6.7nm,0.6s,baz=37,slow=7.9,SNR=55 | | | | | | | |
| | comp=Z,6.7nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.37** | **334** | *i* P | | **P** | **06 00 20.3** | **-1.0** |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.81** | **59** | P | | **P** | **06 00 24.6** | **-0.3** |
| | comp=Z,0.9nm,0.9s,baz=294,slow=7.4,SNR=4.2 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |
| **OBN** | **Obninsk** | **66.09** | **325** | *e*P | | **P** | **06 00 26.0** | **-0.1** |
| **OBN** | **Obninsk** | **66.09** | **325** | *e*P | | **P** | **06 00 26.0** | **-0.1** |
| OBN | | | | *e* | | | 06 00 54.7 | |
| OBN | | | | *e* | | | 06 02 55.6 | |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,153nm,20.0s | | | | | | | |
| **PDAR** | **Pinedale Array** | **68.25** | **51** | P | | **P** | **06 00 40.7** | **+0.4** |
| | comp=Z,0.3nm,0.6s,baz=204,slow=2.0,SNR=4.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **68.99** | **196** | P | | **P** | **06 00 45.6** | **+0.9** |
| | comp=Z,0.4nm,0.8s,baz=16,slow=6.2,SNR=4.2 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **NC405** | **NORSAR Array S** | **69.72** | **340** | P | | **P** | **06 00 48.2** | **-0.6** |
| **AKT** | **Akhty** | **69.79** | **308** | *e*P | | **P** | **06 00 49.4** | **-0.3** |
| AKT | | | | *e* | | | 06 01 11.9 | |
| AKT | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.9s | | | | | | | |
| **NC204** | **NORSAR Array S** | **69.81** | **340** | P | | **P** | **06 00 48.9** | **-0.6** |
| **NB2** | **NORSAR Subarra** | **69.91** | **340** | P | | **P** | **06 00 48.9** | **-1.1** |
| | comp=Z,7.5nm,0.7s,baz=31,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.91** | **340** | P | | **P** | **06 00 49.5** | **-0.6** |
| | comp=Z,6.4nm,0.8s,baz=32,slow=6.6,SNR=22 | | | | | | | |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.91** | **340** | *e*P | | **P** | **06 00 49.1** | **-0.9** |
| NOA | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | **70.05** | **338** | P | | **P** | **06 00 49.9** | **-0.9** |
| | comp=Z,7.2nm,0.7s,baz=54,slow=7.5,SNR=18 | | | | | | | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **70.92** | **313** | P | | **P** | **06 00 56.0** | **-0.4** |
| | comp=Z,5.3nm,0.8s,baz=48,slow=4.7,SNR=14 | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | **70.92** | **313** | *e*P | | **P** | **06 00 57.3** | **+0.9** |
| **KBZ** | **Khabaz** | **70.92** | **313** | *de*P | | **P** | **06 00 57.3** | **+0.9** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **71.04** | **313** | *e*P | | **P** | **06 00 58.3** | **+0.8** |
| **AKASG** | **Malin Array Be** | **72.36** | **325** | P | | **P** | **06 01 04.2** | **-0.7** |
| | comp=Z,1.1nm,0.7s,baz=40,slow=5.8,SNR=10 | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **AKBB** | **Malin Array Si** | **72.36** | **325** | *e*P | | **P** | **06 01 03.8** | **-1.2** |
| **KIEV** | **Kiev** | **72.37** | **325** | P | | **P** | **06 01 03.9** | **-1.2** |
| KIEV | | | | IAmb | | IAmb | 06 01 17.6 | |
| | comp=Z,6.6nm,0.9s | | | | | | | |
| **KIEV** | **Kiev** | **72.37** | **325** | P | | **P** | **06 01 03.9** | **-1.2** |
| KIEV | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **VSLR** | **Vesyoloye** | **72.61** | **314** | *i* P | | **P** | **06 01 06.8** | **+0.2** |
| VSLR | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **76.40** | **325** | IAmb | | IAmb | 06 01 29.8 | |
| | comp=Z,3.6nm,0.9s | | | | | | | |
| **OJC** | **Ojcow** | **76.42** | **330** | IAmb | | IAmb | 06 01 42.6 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **76.54** | **327** | *e*P | | **P** | **06 01 29.2** | **-0.1** |
| **KOLS** | **Kolonicke sedl** | **76.54** | **327** | *e*P | | **P** | **06 01 29.2** | **-0.1** |
| **CRVS** | **Cervenica-Dubn** | **76.87** | **328** | *e*P | | **P** | **06 01 31.2** | **-0.1** |
| **CRVS** | **Cervenica-Dubn** | **76.87** | **328** | *e*P | | **P** | **06 01 31.2** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **77.54** | **332** | *e*P | | **P** | **06 01 35.4** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **77.54** | **332** | *e*P | | **P** | **06 01 35.4** | **+0.4** |
| **MORC** | **Moravsky Berou** | **77.60** | **331** | P | | **P** | **06 01 34.4** | **-0.9** |
| MORC | | | | IAmb | | IAmb | 06 01 37.3 | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **MORC** | **Moravsky Berou** | **77.60** | **331** | P | | **P** | **06 01 34.4** | **-0.9** |
| MORC | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **KRLC** | **Kraliky** | **77.61** | **331** | *e*P | | **P** | **06 01 35.4** | **0.0** |
| **KRLC** | **Kraliky** | **77.61** | **331** | *e*P | | **P** | **06 01 35.4** | **0.0** |
| **CLL** | **Collm** | **77.82** | **334** | P | | **P** | **06 01 35.9** | **-0.5** |
| **CLL** | **Collm** | **77.82** | **334** | *i* P | | **P** | **06 01 35.9** | **-0.5** |
| CLL | | | | *i* PcP | | **pwP** | **06 01 48.6** | **-1.0** |
| CLL | | | | *i* x | | x | 06 01 57.2 | |
| **CLL** | **Collm** | **77.82** | **334** | *i* P | | **P** | **06 01 35.9** | **-0.5** |
| **VYHS** | **Vyhne** | **78.20** | **329** | *e*P | | **P** | **06 01 39.4** | **+0.7** |
| **VYHS** | **Vyhne** | **78.20** | **329** | *e*P | | **P** | **06 01 39.4** | **+0.7** |
| **PRU** | **Pruhonice** | **78.45** | **332** | *e*P | | **P** | **06 01 40.4** | **+0.4** |
| **PRU** | **Pruhonice** | **78.45** | **332** | *e*P | | **P** | **06 01 40.4** | **+0.4** |
| **BRTR** | **Keskin Array B** | **78.61** | **315** | P | | **P** | **06 01 41.5** | **+0.3** |
| | comp=Z,0.8nm,0.8s,baz=74,slow=1.9,SNR=5.4 | | | |

KUR smax smax
comp=E,10μm,0.6s
KUR smax smax
comp=N,6μm,0.7s
**SHO Shikotan 2.07 261** *i* P **Pn 05 57 46.1 -1.1**
SHO AMB AMB 05 57 47.6
comp=N,620nm,0.4s
SHO *i* S **Sn 05 58 10.3 -1.9**
SHO A A 05 58 13.4
comp=N,10μm,0.7s
SHO A A 05 58 13.4
comp=N,7μm,0.7s
SHO A A 05 58 20.0
comp=N,5μm,1.0s
SHO A A 05 58 20.0
comp=N,8μm,1.0s
**SHO Shikotan 2.07 261**⇑ *i* PN **Pn 05 57 46.2 -1.0**
SHO *i* S **Sn 05 58 09.9 -2.3**
SHO pmax pmax
comp=Z,472nm,0.4s
SHO pmax pmax
comp=N,219nm,0.3s
SHO pmax pmax
comp=E,237nm,0.3s
SHO smax smax
comp=E,5μm,0.4s
SHO smax smax
comp=N,9μm,0.6s
SHO smax smax
comp=N,5μm,0.7s
SHO smax smax
comp=E,8μm,1.3s
**YUK Yuzh-Kuril'sk 2.74 267** *i* P **Pn 05 57 56.0 -0.4**
YUK AMB AMB 05 57 59.2
comp=E,1μm,0.3s
YUK AMB AMB 05 58 00.7
comp=E,2μm,1.0s
YUK *e*S **Sn 05 58 28.1 -0.7**
YUK A A 05 58 31.7
comp=E,5μm,0.7s
YUK A A 05 58 31.7
comp=E,6μm,0.7s
YUK A A 05 58 34.4
comp=E,4μm,1.0s
YUK A A 05 58 34.4
comp=E,8μm,1.0s
YUK AMS AMS 05 59 35.3
comp=E,11μm,12.0s
**YUK Yuzh-Kuril'sk 2.74 267** *c i* PN **Pn 05 57 56.0 -0.4**
YUK *e*S **Sn 05 58 28.0 -0.7**
YUK pmax pmax
comp=Z,887nm,0.3s
YUK pmax pmax
comp=E,246nm,0.2s
YUK pmax pmax
comp=E,2μm,1.0s
YUK smax smax
comp=N,3μm,0.4s
YUK smax smax
comp=E,5μm,0.5s
YUK smax smax
comp=E,8μm,1.3s
YUK smax smax
comp=N,4μm,0.7s
YUK MLR MLR
comp=Z,11μm,12.0s
**NEM2 Nemuro 2 2.96 255** P **Pn 05 57 58.4 -1.1**
NEM2 *e*S **Sn 05 58 31.0 -3.2**
**NEM2 Nemuro 2 2.96 255** A A 05 57 58.4
comp=Z,7.0nm,2.7s
**JRA Rausu 3.28 267** P **Pn 05 58 04.3 +0.4**
**JRA Rausu 3.28 267** A A 05 58 04.3
comp=Z,10.0nm,3.4s,comp=E,10.0nm,2.1s,comp=N,14nm,1.6s
**JNSB Nemuroshibetsu 3.39 264** A A 05 58 03.9
comp=E,18nm,2.1s,comp=N,17nm,3.4s
**JKHN Kushirohamanak 3.46 252** A A 05 58 05.3
comp=E,9.0nm,3.7s,comp=N,10.0nm,4.6s
**JNK Nakash 3.63 262** P **Pn 05 58 08.5 -0.2**
**JAK Akkeshi 3.81 253** *e*P **Pn 05 58 10.2 -0.8**
JAK *e*S **Sn 05 58 51.5 -3.5**
**JAK Akkeshi 3.81 253** A A 05 58 10.2
comp=E,8.0nm,2.8s,comp=N,10.0nm,4.8s
**JTKR Abashiri--Toko 4.15 269** P **Pn 05 58 16.8 +1.0**
**JAR Ashorobuto 4.37 260** *e*P **Pn 05 58 19.3 +0.6**
JAR *e*S **Sn 05 59 08.3 -0.5**
**JAR Ashorobuto 4.37 260** A A 05 58 19.3
comp=E,5.0nm,2.9s,comp=N,4.0nm,0.8s
**JOB Onbets 4.43 255** *e*P **Pn 05 58 19.6 -0.1**
JOB *e*S **Sn 05 59 08.8 -1.6**
**JOB Onbets 4.43 255** A A 05 58 19.6
comp=Z,6.0nm,1.8s,comp=E,7.0nm,4.3s,comp=N,9.0nm,3.1s
**JCH Churui 4.86 253** *e*P **Pn 05 58 24.3 -1.2**
JCH *e*S **Sn 05 59 19.4 -1.6**
**JKK2 Kamakawa 2 5.00 268** *e*P **Pn 05 58 29.0 +1.6**
**JKA Kamikawa-asahi 5.08 271** Pn **Pn 05 58 27.9 -0.7**
**JKA Kamikawa-asahi 5.08 271** *e*P **Pn 05 58 30.9 +2.3**
**ASAJ Asahikawa 5.08 271** P **Pn 05 58 30.9 +2.3**
comp=N,12nm,0.3s,baz=64,slow=18,SNR=45
ASAJ LR LR 06 00 42.5
comp=N,5μm,19.3s,baz=140,slow=41
comp=N,126nm,1.1s
**ERM Erimo 5.25 247** P **Pn 05 58 32.1 +1.3**
**ERM Erimo 5.25 247** Pn **Pn 05 58 31.3 +0.5**
**ERM Erimo 5.25 247** *ce*PN **Pn 05 58 31.5 +0.7**
ERM pmax pmax
comp=Z,392nm,0.8s
**JEM Erimo 5.25 247** P **Pn 05 58 32.0 +1.2**
**JNBK Urakawa-nobuka 5.41 251** *e*P **Pn 05 58 32.2 -0.8**
JNBK *e*S **Sn 05 59 35.2 +0.8**
**JNBK Urakawa-nobuka 5.41 251** A A 05 58 32.2
comp=E,13nm,1.0s,comp=N,7.0nm,1.4s
**JAB Ashibetsu 5.42 265** *e*P **Pn 05 58 35.9 +2.5**
**JSHD Hidakashinhida 5.55 253** A A 05 58 34.1
comp=E,12nm,1.6s,comp=N,11nm,2.8s
**YSS Yuzh-Sakhalins 5.56 302** P **Pn 05 58 37.8 +2.6**
**YSS Yuzh-Sakhalins 5.56 302** Pn **Pn 05 58 33.2 -1.9**
**YSS Yuzh-Sakhalins 5.56 302** *i* P **Pn 05 58 36.6 +1.4**
YSS AMB AMB 05 58 38.5
comp=N,400nm,3.0s
YSS AMB AMB 05 58 39.4
comp=N,70nm,0.9s
YSS *e*S **Sn 05 59 39.4 +1.2**
YSS A A 05 59 58.2
comp=N,170nm,0.9s
YSS A A 05 59 58.2
comp=N,170nm,0.9s
**YSS Yuzh-Sakhalins 5.56 302**⇑ *i* PN **Pn 05 58 36.6 +1.4**
YSS pmax pmax
comp=Z,80nm,1.0s
YSS pmax pmax
comp=Z,400nm,3.3s
YSS pmax pmax
comp=N,300nm,2.6s
YSS pmax pmax
comp=E,300nm,3.4s
YSS MLR MLR
comp=Z,7μm,16.0s
YSS MLR MLR
comp=N,3μm,15.0s
YSS MLR MLR
comp=E,6μm,16.0s
**JWK2 Keihoku 5.63 284** *e*P **Pn 05 58 40.1 +3.9**
**JRBN Rebuntou 6.23 284** *e*P **Pn 05 58 47.0 +2.7**
**JKB Kayabe 6.74 253** A A 05 58 50.4
comp=E,7.0nm,1.4s,comp=N,6.0nm,2.3s
**UGL Uglegorsk 7.13 316** *e*S **Sn 06 00 17.5 +0.7**
UGL *e*P **Pn 05 59 00.1 +3.4**
UGL AMB AMB 05 59 02.7
comp=N,70nm,0.5s
UGL A A 06 00 33.4
comp=N,120nm,0.5s
UGL A A 06 00 33.4
comp=N,130nm,0.5s
UGL AMS AMS 06 03 13.0
comp=N,4μm,14.0s
UGL AMS AMS 06 03 20.0
comp=N,5μm,13.0s
UGL AMS AMS 06 03 20.0
comp=N,2μm,13.0s
**UGL Uglegorsk 7.13 316** *e*PN **Pn 05 59 00.2 +3.5**
UGL pmax pmax
comp=Z,100nm,1.0s
UGL MLR MLR
comp=Z,4μm,14.0s
UGL MLR MLR
comp=E,2μm,12.0s
UGL MLR MLR
comp=N,5μm,14.0s
**JANG Nango 7.16 240** *e*P **Pn 05 58 55.0 -2.1**
JANG *e*S **Sn 06 00 09.4 -8.2**
**JTH Tanohata 7.21 236** *e*P **Pn 05 58 54.6 -3.2**
JTH *e*S Sn 06 00 09.3 -9.5
**JTM Tenmabayashi 7.22 245** P **Pn 05 58 57.2 -0.7**
**JTM Tenmabayashi 7.22 245** Pn **Pn 05 58 56.8 -1.1**
**SKR Severo-Kuril's 7.80 32** *e*S **Sn 06 00 29.9 -3.4**
SKR *e*P **Pn 05 59 05.5 -0.4**
SKR AMB AMB 05 59 10.9
comp=N,90nm,0.5s
SKR A A 06 00 41.7
comp=N,80nm,0.7s
SKR A A 06 00 41.7
comp=N,60nm,0.7s
SKR AMS AMS 06 02 07.1
comp=N,6μm,16.0s
**SKR Severo-Kuril's 7.80 32** *e*PN **Pn 05 59 05.4 -0.4**
SKR pmax pmax
comp=Z,144nm,0.6s
SKR MLR MLR
comp=Z,6μm,16.0s
**TYV Tymovskoe 8.16 327** *e*S **Sn 06 00 43.3 +1.3**
TYV *e*P **Pn 05 59 13.5 +2.8**
TYV AMB AMB 05 59 15.1
comp=Z,200nm,3.0s
TYV AMB AMB 05 59 20.1
comp=Z,40nm,0.8s
TYV A A 06 00 43.7
comp=Z,10.0nm,1.0s
TYV A A 06 00 43.7
comp=Z,20nm,1.0s
TYV A A 06 00 45.0
comp=Z,200nm,4.0s
TYV A A 06 00 45.0
comp=Z,200nm,4.0s
TYV AMS AMS 06 02 30.9
comp=Z,3μm,17.0s
TYV AMS AMS 06 02 30.9
comp=Z,2μm,17.0s
**TYV Tymovskoe 8.16 327** *e*PN **Pn 05 59 13.5 +2.8**
TYV pmax pmax
comp=Z,200nm,3.2s
TYV pmax pmax
comp=Z,39nm,0.8s
TYV MLR MLR
comp=E,3μm,16.0s
TYV MLR MLR
comp=Z,2μm,17.0s
**JMM Marumori 9.23 230** **Pn 05 59 21.9 -3.6**
**TEY Ternei 9.35 280** *e*P **Pn 05 59 29.1 +2.0**
**TEY Ternei 9.35 280** *e*PN **Pn 05 59 29.1 +2.0**
**KDTR Khodutka, Kamc 9.45 34** *e*P **Pn 05 59 27.8 -0.7**
KDTR AMB AMB 05 59 31.0
comp=Z,20nm,0.4s
**OKH Okha 10.33 337** *e*P **Pn 05 59 42.7 +2.3**
**OKH Okha 10.33 337** *de*PN **Pn 05 59 36.0 -4.4**
OKH pmax pmax
comp=Z,200nm,4.7s
OKH MLR MLR
comp=Z,2μm,15.0s
OKH MLR MLR
comp=E,1μm,15.0s
OKH MLR MLR
comp=N,3μm,16.0s
**PEA0B Petropavlovsk- 10.35 28** Pn **Pn 05 59 40.1 -0.7**
**PEA0B Petropavlovsk- 10.35 28** *ce*PN **Pn 05 59 40.0 -0.8**
**PETK Petropavlovsk- 10.35 28** P **Pn 05 59 40.4 -0.5**
comp=N,10nm,0.7s,baz=202,slow=14,SNR=21
**JSD Sado 10.58 238** Pn **Pn 05 59 41.8 -2.3**
**NKL Nikolayevsk 10.72 330** *e*P **Pn 05 59 47.8 +2.0**
NKL AMB AMB 05 59 50.6
comp=N,20nm,0.7s
**NKL Nikolayevsk 10.72 330** *e*PN **Pn 05 59 46.5 +0.7**
NKL pmax pmax
comp=N,22nm,1.1s
NKL pmax pmax
comp=Z,144nm,1.3s
NKL MLR MLR
comp=N,7μm,16.0s
NKL MLR MLR
comp=E,8μm,16.0s
NKL MLR MLR
comp=Z,7μm,15.0s
**GRNR Gornyy 11.09 311** *e*P **Pn 05 59 53.3 +2.4**
GRNR AMB AMB 05 59 54.2
comp=Z,10.0nm,0.9s
**GRNR Gornyy 11.09 311**⇑ *i* PN **Pn 05 59 53.3 +2.4**
GRNR pmax pmax
comp=Z,7.0nm,0.9s
GRNR MLR MLR
comp=E,2μm,16.0s
GRNR MLR MLR
comp=N,1μm,15.0s
GRNR MLR MLR
comp=Z,2μm,14.0s
**MAJO Matsushiro 11.62 233** P **Pn 05 59 56.9 -1.3**
**MAJO Matsushiro 11.62 233** **Pn 05 59 56.3 -2.0**
**MAJO Matsushiro 11.62 233** PN **Pn 05 59 56.3 -2.0**
**MAJR Matsushiro Arr 11.62 233** P **Pn 05 59 56.6 -1.6**
comp=Z,15nm,0.9s,baz=25,slow=14,SNR=35
**MJB9 Matsu-Tunnel 11.62 233** **Pn 05 59 56.5 -1.7**
**USA0B Ussuriysk Arra 12.68 276** **Pn 06 00 14.2 +1.5**
**USA0B Ussuriysk Arra 12.68 276** *i* PN **Pn 06 00 11.4 -1.3**
**USRK Ussuriysk Ar. 12.68 276** P **Pn 06 00 13.6 +0.9**
comp=Z,4.2nm,0.3s,baz=82,slow=13,SNR=54
USRK LR LR 06 05 34.2
comp=Z,3μm,18.4s,baz=92,slow=39
comp=Z,24nm,0.5s
**JGF Kuroka 12.77 232** Pn **Pn 06 00 12.6 -1.4**
**INU Inuyama 13.14 232** Pn **Pn 06 00 17.8 -1.3**
**KLR Kul'dur 13.26 298** P **Pn 06 00 22.9 +2.4**
comp=Z,0.5nm,0.3s,baz=106,slow=14,SNR=23
KLR LR LR 06 06 07.5
comp=Z,3μm,18.4s,baz=104,slow=40
comp=Z,12nm,1.0s
**KLR Kul'dur 13.26 298** *e*P **Pn 06 00 22.0 +1.4**
**KLR Kul'dur 13.26 298** *ce*PN **Pn 06 00 21.3 +0.7**
KLR pmax pmax
comp=Z,24nm,1.3s
**JHJ2 Mitsune 13.49 218** Pn **Pn 06 00 22.2 -1.6**
**MSHR Mys Shultsa 13.56 269** *ce*P **Pn 06 00 24.1 -0.6**
MSHR pmax pmax
comp=Z,41nm,1.3s
**PSTR Posyet 13.79 270** *i* P **Pn 06 00 27.4 -0.5**
**MDJ Mudanjiang 14.35 279** P **Pn 06 00 35.2 -0.3**
**MDJ Mudanjiang 14.35 279** P **Pn 06 00 35.5 0.0**
MDJ PP **PnPn 06 00 44.8 +1.5**
MDJ S **Sn 06 03 17.3 +3.6**
MDJ ScS **ScS 06 13 04.8 +4.6**
MDJ pmax pmax
comp=Z,100nm,0.9s
MDJ LR LR
comp=Z,3μm,14.8s
MDJ LR LR
comp=Z,3μm,18.9s
MDJ LR LR
comp=Z,4μm,16.5s
**MDJ Mudanjiang 14.35 279** Pn **Pn 06 00 32.8 -2.7**
**MA2 Magadan 15.39 2** P **Pn 06 00 49.0 -0.4**
**MA2 Magadan 15.39 2** Pn **Pn 06 00 49.0 -0.4**
MA2 IAmb IAmb 06 00 55.9
comp=Z,233nm,2.0s
**MA2 Magadan 15.39 2** P **Pn 06 00 48.9 -0.5**
comp=Z,0.5nm,0.3s,baz=185,slow=12,SNR=2.9
MA2 LR LR 06 07 15.8
comp=Z,2μm,18.7s,baz=190,slow=39
comp=Z,7.3nm,0.6s
**MA2 Magadan 15.39 2** *i* P **Pn 06 00 46.7 -2.6**
**MA2 Magadan 15.39 2** P **Pn 06 00 48.7 -0.6**
comp=Z,36nm,2.0s
**BNX BinXian 15.82 283**⇑ P **Pn 06 00 53.5 -1.4**
BNX pmax pmax
comp=Z,82nm,1.0s
**HEH HeiHe 16.24 300** *e*P **Pn 06 00 59.5 -0.8**
HEH pP **P 06 01 02.3 -0.9**
HEH S **S 06 04 07.5 -4.5**
HEH pmax pmax
comp=Z,42nm,1.2s
HEH pmax pmax
comp=Z,630nm,5.1s
HEH LR LR
comp=Z,2μm,14.8s
HEH LR LR
comp=Z,4μm,15.2s
HEH LR LR
comp=Z,4μm,16.5s
**CN2 Changchun 17.41 277** *e*P **Pn 06 01 13.3 -1.8**
CN2 *e*S **Sn 06 04 25.3 -2.8**
CN2 pmax pmax
comp=Z,30nm,1.2s
CN2 pmax pmax
comp=Z,200nm,5.0s
CN2 LR LR
comp=Z,3μm,16.0s
CN2 LR LR
comp=Z,2μm,16.0s
CN2 LR LR
comp=Z,3μm,16.0s
**ZEA Zeya 17.45 311** *e*P **Pn 06 01 15.0 -0.6**
ZEA AMB AMB 06 01 19.6
comp=Z,70nm,0.9s
**ZEA Zeya 17.45 311** *e*P **Pn 06 01 15.0 -0.6**
ZEA *e*S **Sn 06 04 20.0 -8.9**
ZEA pmax pmax
comp=Z,60nm,1.0s
ZEA pmax pmax
comp=E,300nm,2.8s
ZEA pmax pmax
comp=N,200nm,4.9s
ZEA pmax pmax
comp=Z,400nm,4.9s
ZEA smax smax
comp=N,200nm,12.7s
ZEA MLR MLR
comp=N,800nm,15.0s
ZEA MLR MLR
comp=E,1μm,15.0s
ZEA MLR MLR
comp=Z,2μm,17.0s
**KSRS Korea Array 17.76 255** P **Pn 06 01 19.0 -0.4**
comp=Z,12nm,0.9s,baz=63,slow=12,SNR=24
**KS19 Wonju Array Si 17.77 255** P **Pn 06 01 18.2 -1.4**
**KSAR Wonju Array Be 17.79 255** **Pn 06 01 16.1 -3.7**
**KSAR Wonju Array Be 17.79 255** P **Pn 06 01 16.1 -3.7**
**SHEM Shemya Is, Ala 18.23 54** P **P 06 01 25.7 +0.5**
comp=Z,3.7nm,0.3s,baz=215,slow=3.6,SNR=5.3
comp=Z,23nm,0.6s
**JNU Nakatsue 18.34 239** P **Pn 06 01 27.1 +0.4**
**JNU Nakatsue 18.34 239** P **P 06 01 25.6 -0.9**
**JNU Nakatsue 18.34 239** P **Pn 06 01 27.0 +0.4**
comp=Z,0.4nm,0.3s,baz=51,slow=9.6,SNR=11
comp=Z,24nm,0.9s
**INCN Inchon 18.64 257** P **Pn 06 01 30.3 0.0**
**INCN Inchon 18.64 257** P **P 06 01 27.8 -2.1**
**INCN Inchon 18.64 257** P **P 06 01 27.8 -2.1**
INCN pmax pmax
comp=Z,124nm,1.7s
**TJN Taejon 18.69 253** P **Pn 06 01 31.8 +1.0**
**TJN Taejon 18.69 253** P **P 06 01 29.9 -0.4**
TJN IAmb IAmb 06 01 32.7
comp=Z,268nm,1.0s
**TJN Taejon 18.69 253** *ce*P **Pn 06 01 32.3 +1.5**
**SEY Seymchan 18.81 4** P **P 06 01 30.4 -1.1**
comp=Z,1.0nm,0.3s,baz=176,slow=8.8,SNR=78
comp=Z,58nm,0.9s
**SEY Seymchan 18.81 4** *ce*P **P 06 01 29.5 -2.0**
SEY pmax pmax
comp=Z,109nm,1.3s
**SNY Shenyang 19.19 272**⇑ P **P 06 01 36.3 +0.5**
SNY pmax pmax
comp=Z,100nm,1.2s
SNY pmax pmax
comp=Z,360nm,3.8s
SNY LR LR
comp=Z,730nm,22.2s
SNY LR LR
comp=Z,1μm,18.0s
SNY LR LR
comp=Z,2μm,18.0s
**HIA Hailar 21.03 294** P **P 06 01 56.3 +0.4**
**HIA Hailar 21.03 294** P **P 06 01 53.3 -2.6**
**HIA Hailar 21.03 294** P **P 06 01 53.3 -2.6**
HIA pmax pmax
comp=Z,24nm,0.9s
**YAK Yakutsk 21.33 334** P **P 06 01 57.0 -1.9**
YAK IAmb IAmb 06 01 58.8
comp=Z,125nm,0.8s
**YAK Yakutsk 21.33 334** P **P 06 01 56.7 -2.1**
comp=Z,84nm,0.5s,baz=331,slow=2.0,SNR=19
YAK LR LR 06 10 58.3
comp=Z,2μm,18.2s,baz=134,slow=39
comp=Z,84nm,0.5s
**YAK Yakutsk 21.33 334** *e*P **P 06 01 55.8 -3.0**
YAK *e**PP **pP 06 02 03.3 -1.1**
YAK *e*PPP PPP 06 02 26.1
YAK *e*S **S 06 05 53.1 -1.1**
YAK *e**SS Sn 06 06 00.9 -1.3
YAK *e*SSS SSS 06 06 31.0
YAK *e* 06 13 19.3
YAK pmax pmax
comp=Z,124nm,0.9s
YAK pmax pmax
comp=N,27nm,2.0s
YAK pmax pmax
comp=E,17nm,0.9s
YAK smax smax
comp=E,542nm,7.8s
YAK smax smax
comp=N,275nm,2.8s
YAK MLR MLR
comp=Z,2μm,26.0s
YAK MLR MLR
comp=N,1μm,26.0s
YAK MLR MLR
comp=E,645nm,17.0s
**DL2 Dalian 21.58 265** P **P 06 02 02.0 +0.3**
DL2 pP **sP 06 02 10.3 +0.5**
DL2 sP **pwP 06 02 13.3 -0.9**
DL2 pmax pmax
comp=E,140nm,1.0s
DL2 pmax pmax
comp=E,440nm,5.3s
DL2 LR LR
comp=E,810nm,16.2s
DL2 LR LR
comp=E,1μm,17.6s
DL2 LR LR
comp=E,2μm,18.6s
**XLT XiLinHaoTe 24.04 281** *e*P **P 06 02 26.0 -1.1**
XLT sS sS 06 06 48.5 -4.3
XLT SS **SnSn 06 07 33.0 +9.0**
XLT pmax pmax
comp=E,88nm,1.0s
XLT pmax pmax
comp=E,370nm,6.4s
XLT LR LR
comp=E,2μm,15.7s
XLT LR LR
comp=E,2μm,15.5s
**BJI Beijing 25.08 272** P **P 06 02 36.5 +0.1**
BJI sP **pP 06 02 42.8 +0.5**
BJI PP **PnPn 06 03 14.0 +3.7**
BJI PcP **PcP 06 06 11.3 +0.9**
BJI S **S 06 06 57.0 -2.3**
BJI sS **sS 06 07 10.0 +0.8**
BJI pmax pmax
comp=E,33nm,1.3s
BJI LR LR
comp=E,430nm,15.9s
BJI LR LR
comp=E,710nm,17.3s
BJI LR LR
comp=E,1μm,18.8s
**BJT Baijiatuau 25.09 272** P **P 06 02 38.2 +1.6**
**BJT Baijiatuau 25.09 272** P **P 06 02 36.4 -0.1**
BJT IAmb IAmb 06 02 38.2
comp=Z,53nm,0.9s
**BJT Baijiatuau 25.09 272** P **P 06 02 36.4 -0.1**
BJT pmax pmax
comp=Z,53nm,0.9s
**BILL Bilibino 25.42 15** P **P 06 02 38.0 -1.4**
BILL IAmb IAmb 06 03 03.3
comp=Z,36nm,0.5s
**BILL Bilibino 25.42 15** *e*P **P 06 02 38.6 -0.7**
**BILL Bilibino 25.42 15** *d i*P **P 06 02 38.6 -0.7**
BILL *e* 06 03 12.5
BILL *e*S **S 06 07 08.3 +4.0**
BILL pmax pmax
comp=Z,18nm,0.7s
BILL MLR MLR

comp=Z,2µm,17.0s
**BOD Bodaibo 25.87 314** *e*P **P 06 02 40.1 -3.4**
BOD pmax pmax
comp=Z,20nm,1.1s
**TIA Tai'an 25.97 263** P **P 06 02 44.8 +0.2**
TIA pmax pmax
comp=Z,190nm,0.8s
TIA pmax pmax
comp=Z,280nm,4.1s
TIA LR LR
comp=Z,870nm,15.6s
TIA LR LR
comp=Z,770nm,16.6s
TIA LR LR
comp=Z,2µm,18.0s
**NJ2 Nanjing 26.94 254** ⇓ *i*P **P 06 02 56.8 +3.4**
NJ2 pP **sP 06 03 01.5 -0.4**
NJ2 S **S 06 07 30.5 +1.6**
NJ2 pmax pmax
comp=Z,31nm,1.1s
NJ2 pmax pmax
comp=Z,340nm,5.2s
NJ2 LR LR
comp=Z,2µm,16.6s
NJ2 LR LR
comp=Z,1µm,15.2s
NJ2 LR LR
comp=Z,2µm,15.2s
**HNS HongShan 27.17 268** ⇑P **P 06 02 55.8 +0.4**
HNS PP **PnPn 06 03 41.8 +2.9**
HNS pmax pmax
comp=Z,31nm,1.0s
HNS pmax pmax
comp=Z,310nm,11.1s
HNS LR LR
comp=Z,760nm,16.7s
HNS LR LR
comp=Z,670nm,17.4s
HNS LR LR
comp=Z,840nm,17.2s
**SPIA Saint Paul Isl 28.06 48** P **P 06 03 02.9 -0.2**
baz=260
**HHC Hu-ho-hao-te 28.11 277** *e*P **P 06 03 04.5 +0.6**
HHC pP pP 06 03 07.8 -1.9
HHC S **S 06 07 46.8 -0.6**
HHC sS pS 06 07 55.3 +1.1
HHC pmax pmax
comp=Z,37nm,0.9s
HHC LR LR
comp=Z,810nm,13.4s
HHC LR LR
comp=Z,2µm,15.7s
HHC LR LR
comp=Z,2µm,16.0s
**P08K Saint George I 28.34 50** P **P 06 03 05.6 0.0**
baz=262
**H11N2 WAKE ISLAND Hy 28.34 144** T T 06 34 08.4
baz=333,slow=75,SNR=226
**H11N1 WAKE ISLAND Hy 28.36 144** T T 06 34 15.3
baz=333,slow=75,SNR=246
**H11N3 WAKE ISLAND Hy 28.36 144** T T 06 34 09.7
baz=333,slow=75,SNR=207
**TIY Taiyuan 28.67 270** P **P 06 03 10.3 +1.4**
TIY S **S 06 08 01.5 +5.3**
TIY pmax pmax
comp=Z,200nm,4.8s
TIY LR LR
comp=Z,640nm,16.5s
TIY LR LR
comp=Z,560nm,15.8s
TIY LR LR
comp=Z,560nm,17.2s
**BTO Baotou 29.29 277** *e*P **P 06 03 15.3 +0.9**
BTO pP **pP 06 03 19.8 -0.5**
BTO sP **sP 06 03 22.3 -0.5**
BTO PP **PnPn 06 04 10.0 +2.1**
BTO S **S 06 08 06.8 +0.8**
BTO sS **pS 06 08 14.3 +1.5**
BTO SS **SnSn 06 09 36.3 +4.0**
BTO pmax pmax
comp=Z,330nm,4.0s
BTO LR LR
comp=Z,4µm,20.4s
BTO LR LR
comp=Z,3µm,17.4s
BTO LR LR
comp=Z,4µm,17.3s
**TIXI Tiksi 29.29 347** P **P 06 03 10.7 -3.2**
TIXI lAmb lAmb 06 03 11.9
comp=Z,18nm,0.6s
**TIXI Tiksi 29.29 347** *i*P **P 06 03 10.9 -3.0**
TIXI pmax pmax
comp=Z,18nm,0.8s
**H11S1 WAKE ISLAND Hy 29.36 145** T T 06 35 31.5
baz=334,slow=76,SNR=225
**H11S3 WAKE ISLAND Hy 29.36 145** T T 06 35 31.9
baz=334,slow=76,SNR=108
**H11S2 WAKE ISLAND Hy 29.37 145** T T 06 35 32.7
baz=334,slow=76,SNR=287
**ULN Ulaanbaatar 29.52 292** P **P 06 03 16.8 +0.4**
ULN lAmb lAmb 06 03 17.9
comp=Z,66nm,0.9s
**ULN Ulaanbaatar 29.52 292** P **P 06 03 16.9 +0.5**
ULN P **P 06 03 16.9 +0.5**
**ULN Ulaanbaatar 29.52 292** *e*P **P 06 03 16.3 -0.1**
**ULN Ulaanbaatar 29.52 292** *ce*P **P 06 03 16.3 -0.1**
ULN pmax pmax
comp=Z,80nm,1.0s
**SONM Songino Array 29.96 292** P **P 06 03 20.4 +0.2**
SONM lAmb lAmb 06 03 21.8
comp=Z,46nm,0.9s
**SONM Songino Array 29.96 292** P **P 06 03 20.6 +0.3**
comp=Z,34nm,0.9s,baz=82,slow=8.8,SNR=156
SONM LR LR 06 16 40.3
comp=Z,2µm,18.0s,baz=90,slow=39
comp=Z,34nm,0.9s
**SONM Songino Array 29.96 292** P **P 06 03 20.5 +0.2**
SONM pmax pmax
comp=Z,46nm,0.9s
**LYN LuoYang 30.10 264** P **P 06 03 22.5 +1.0**
LYN pP pP 06 03 27.0 -0.5
LYN PP **PnPn 06 04 20.0 +1.1**
LYN S **S 06 08 13.8 -4.8**
LYN pmax pmax
comp=Z,58nm,1.1s
LYN pmax pmax
comp=Z,400nm,3.5s
LYN LR LR
comp=Z,1µm,15.5s
LYN LR LR
comp=Z,1µm,15.8s
LYN LR LR
comp=Z,1µm,14.4s
**M11K Mekoryuk 30.74 43** P **P 06 03 26.1 -0.7**
baz=258
**GUMO Guam 30.80 189** LR LR 06 17 53.0
comp=Z,400nm,18.6s,baz=14,slow=40
**IRK Irkutsk 30.84 301** *e*P **P 06 03 26.3 -1.6**
IRK pmax pmax
comp=Z,31nm,1.4s
**WHN Wuhan 30.95 256** ⇓ P **P 06 03 29.5 +0.5**
WHN S **S 06 08 31.0 -0.9**
WHN LR LR
comp=Z,2µm,13.3s
WHN LR LR
comp=Z,4µm,15.7s
WHN LR LR
comp=Z,5µm,14.6s
**TNA Tin City 31.48 33** P **P 06 03 32.7 -0.5**
baz=248
**ZAK Zakamensk 31.63 298** *e*P **P 06 03 35.0 +0.1**
**ZAK Zakamensk 31.63 298** *eP* **P 06 03 35.0 +0.1**
ZAK pmax pmax
comp=Z,32nm,1.0s
**TPUB Ta-pu 31.64 238** P **P 06 03 33.5 -1.7**
**K13K Kusilvak Mount 31.79 40** P **P 06 03 36.2 +0.1**
K13K lAmb lAmb 06 04 18.0
comp=Z,66nm,1.6s
**K13K Kusilvak Mount 31.79 40** P **P 06 03 36.5 +0.3**
baz=258
**F14K Arctic Creek 32.07 33** P **P 06 03 38.4 -0.1**
baz=250,SNR=6.3
**M13K Dall Lake 32.13 43** P **P 06 03 39.2 +0.1**
baz=261
**ANM Nome 32.16 35** P **P 06 03 38.9 -0.5**
baz=253

**J14K Nanvaranak Lak 32.47 39** P **P 06 03 42.2 +0.1**
baz=257
**L14K Kuka Creek 32.60 41** P **P 06 03 43.1 -0.1**
baz=260
**F15K North Star Dit 32.80 33** P **P 06 03 44.6 -0.3**
**F15K North Star Dit 32.80 33** P **P 06 03 45.0 +0.1**
baz=252
**G15K Niukluk 32.83 35** P **P 06 03 44.4 -0.8**
baz=254
**M14K Bethel 32.86 43** P **P 06 03 44.4 -1.1**
baz=262
**N14K Kuskokwak Cree 32.90 44** P **P 06 03 44.9 -0.8**
baz=264
**XAN Xi'an 32.90 266** ⇑P **P 06 03 46.0 -0.2**
XAN pP pP 06 03 50.8 -1.4
XAN S **S 06 09 06.5 +4.1**
XAN pmax pmax
comp=Z,48nm,0.9s
XAN LR LR
comp=Z,870nm,19.2s
XAN LR LR
comp=Z,1µm,16.3s
XAN LR LR
comp=Z,2µm,18.6s
**O14K Tigyukauivet M 33.04 45** P **P 06 03 47.5 +0.4**
O14K lAmb lAmb 06 04 37.5
comp=Z,63nm,1.4s
**O14K Tigyukauivet M 33.04 45** P **P 06 03 45.6 -1.4**
baz=265
**K15K Wolf Creek Mou 33.30 40** P **P 06 03 48.9 -0.4**
baz=260
**SDPT Sand Point 33.36 53** P **P 06 03 49.6 -0.2**
baz=272
**CNSH ChangSha 33.36 254** P **P 06 03 49.0 -1.2**
CNSH LR LR
comp=Z,1µm,17.2s
CNSH LR LR
comp=Z,1µm,14.3s
CNSH LR LR
comp=Z,2µm,16.8s
**C16K Lisburne Hills 33.45 29** P **P 06 03 51.3 +0.8**
C16K lAmb lAmb 06 03 51.9
comp=Z,40nm,0.8s
**C16K Lisburne Hills 33.45 29** P **P 06 03 50.6 +0.1**
baz=247,SNR=20
**M15K Kasigluk River 33.48 43** P **P 06 03 51.2 +0.4**
baz=263,SNR=5.2
**H16K Elim 33.48 36** P **P 06 03 50.3 -0.5**
baz=256
**G16K Koyuk River 33.62 34** P **P 06 03 52.5 +0.4**
baz=255
**N15K Kwethluk River 33.72 44** lAmb lAmb 06 04 09.7
comp=Z,29nm,1.2s
**N15K Kwethluk River 33.72 44** P **P 06 03 53.1 +0.1**
baz=265
**O15K Ungalikthiuk R 33.77 46** P **P 06 03 53.2 -0.2**
baz=266,SNR=5.5
**D17K Noatak River 34.04 30** P **P 06 03 55.8 +0.2**
baz=251,SNR=46
**L16K Owhat River 34.18 41** lAmb lAmb 06 04 27.7
comp=Z,50nm,1.8s
**L16K Owhat River 34.18 41** P **P 06 03 56.7 -0.2**
baz=263
**RDOG Red Dog Mine 34.22 29** lAmb lAmb 06 03 59.1
comp=Z,38nm,0.8s
**RDOG Red Dog Mine 34.22 29** P **P 06 03 57.4 +0.1**
baz=250,SNR=9.8
**C17K DeLong Mountai 34.27 29** P **P 06 03 57.7 0.0**
baz=250,SNR=9.7
**E17K Hotham Inlet 34.30 31** P **P 06 03 58.5 +0.5**
baz=253,SNR=55
**G17K Kiwalik Mounta 34.34 34** P **P 06 03 58.8 +0.5**
baz=256,SNR=15
**F17K Baldwin Pennin 34.34 33** P **P 06 03 59.0 +0.7**
baz=254,SNR=32
**M16K Timber Creek 34.35 42** P **P 06 03 59.2 +0.7**
**M16K Timber Creek 34.35 42** P **P 06 03 58.9 +0.4**
baz=265,SNR=6.5
**N16K Nishlik Lake 34.40 43** P **P 06 03 59.0 +0.1**
baz=266,SNR=10.0
**H17K Granite Mounta 34.52 35** P **P 06 04 00.5 +0.7**
baz=258,SNR=5.6
**ENH Enshi 34.52 260** P **P 06 04 01.2 +0.9**
**J17K VABM Dome 34.60 38** lAmb lAmb 06 04 29.3
comp=Z,73nm,1.9s
**J17K VABM Dome 34.60 38** P **P 06 03 60.0 -0.6**
baz=261,SNR=5.9
**O16K Kokwok River B 34.68 45** P **P 06 04 02.1 +0.8**
O16K lAmb lAmb 06 04 17.0
comp=Z,54nm,1.9s
**O16K Kokwok River B 34.68 45** P **P 06 04 01.5 +0.2**
baz=268
**P16K Nushagak River 34.71 46** P **P 06 04 01.4 -0.1**
baz=268
**L17K Donlin 34.78 40** P **P 06 04 02.2 +0.1**
baz=264,SNR=5.5
**K17K Iditarod 34.85 39** P **P 06 04 03.4 +0.6**
K17K lAmb lAmb 06 04 24.6
comp=Z,22nm,0.9s
**K17K Iditarod 34.85 39** P **P 06 04 02.9 +0.2**
baz=263,SNR=5.0
**E18K Tukpahlearik C 34.86 31** P **P 06 04 03.9 +1.2**
**E18K Tukpahlearik C 34.86 31** P **P 06 04 03.2 +0.5**
baz=254,SNR=9.1
**F18K Selawik 35.00 33** P **P 06 04 04.5 +0.5**
baz=256,SNR=21
**C18K Utukok River 35.02 29** P **P 06 04 05.0 +0.8**
**C18K Utukok River 35.02 29** P **P 06 04 04.2 0.0**
baz=251,SNR=30
**B18K Kokolik River 35.05 28** P **P 06 04 05.0 +0.6**
baz=250,SNR=8.6
**M17K Holitna River 35.12 42** lAmb lAmb 06 04 07.7
comp=Z,24nm,0.9s
**M17K Holitna River 35.12 42** P **P 06 04 04.8 -0.3**
baz=266,SNR=6.8
**N17K Nushagak Hills 35.18 43** P **P 06 04 06.4 +0.7**
baz=267
**O17K Koliganek Bris 35.20 45** P **P 06 04 06.0 +0.3**
baz=268,SNR=9.8
**H18K Honhosa River 35.21 35** lAmb lAmb 06 04 08.1
comp=Z,28nm,1.0s
**H18K Honhosa River 35.21 35** P **P 06 04 05.9 0.0**
baz=259,SNR=11
**KNGR Kungurtug, Tuv 35.23 299** *i*P **P 06 04 06.2 -0.1**
KNGR pmax pmax
comp=Z,22nm,1.1s
**G18K Tagagawik 35.23 34** lAmb lAmb 06 04 08.2
comp=Z,32nm,0.9s
**G18K Tagagawik 35.23 34** P **P 06 04 06.6 +0.6**
baz=258,SNR=30
**P17K Kvichak River 35.52 46** P **P 06 04 08.2 -0.3**
baz=270
**L18K Granite Mounta 35.54 40** lAmb lAmb 06 04 26.7
comp=Z,66nm,1.8s
**L18K Granite Mounta 35.54 40** P **P 06 04 09.7 +0.9**
baz=265,SNR=10
**LZH Lanzhou 35.56 273** ⇑ *i*P **P 06 04 10.5 +1.1**
LZH sP pwP 06 04 23.0 +0.8
LZH S **S 06 09 48.8 +5.0**
LZH pmax pmax
comp=Z,260nm,0.9s
LZH LR LR
comp=Z,1µm,15.1s
LZH LR LR
comp=Z,1µm,17.0s
LZH LR LR
comp=Z,2µm,18.4s
**A19K Wainwright 35.58 26** P **P 06 04 09.2 +0.2**
baz=250
**J18K Innoko River 35.66 38** P **P 06 04 10.0 +0.2**
baz=263,SNR=8.3
**C19K Lookout Ridge 35.71 28** P **P 06 04 10.4 +0.2**
baz=253,SNR=21
**F19K Shaleruckik Mo 35.78 32** lAmb lAmb 06 04 20.3
comp=Z,22nm,0.8s
**F19K Shaleruckik Mo 35.78 32** P **P 06 04 11.3 +0.6**
baz=258,SNR=24
**Q17K Contact Creek 35.81 47** P **P 06 04 12.0 +0.8**
baz=271
**N18K Kilae Creek 35.83 43** P **P 06 04 12.8 +1.5**
N18K lAmb lAmb 06 04 29.5
comp=Z,34nm,1.1s
**N18K Kilae Creek 35.83 43** P **P 06 04 11.8 +0.5**
baz=268,SNR=11
**M18K Stony River 35.90 42** P **P 06 04 11.7 -0.1**
baz=267,SNR=5.3
**G19K Purcell Mounta 35.91 34** P **P 06 04 12.0 +0.2**

baz=259,SNR=11
**D19K Kuna River 36.05 30** P **P 06 04 13.3 +0.2**
baz=255,SNR=56
**H19K Roundabout Mou 36.06 35** lAmb lAmb 06 04 15.4
comp=Z,58nm,1.0s
**H19K Roundabout Mou 36.06 35** P **P 06 04 13.7 +0.6**
baz=261,SNR=47
**E19K Redstone River 36.13 32** P **P 06 04 14.2 +0.5**
baz=257,SNR=58
**P18K Big Mountain, 36.14 45** lAmb lAmb 06 04 15.9
comp=Z,24nm,0.9s
**P18K Big Mountain, 36.14 45** P **P 06 04 14.1 +0.2**
baz=270
**O18K Koktuh Hills 36.15 45** P **P 06 04 14.5 +0.5**
baz=270
**J19K Poorman 36.20 38** lAmb lAmb 06 04 34.4
comp=Z,24nm,1.0s
**J19K Poorman 36.20 38** P **P 06 04 15.1 +0.7**
baz=264,SNR=16
**Q18K Katmai Hardscr 36.26 47** P **P 06 04 14.9 -0.2**
baz=272,SNR=5.5
**L19K White Mountain 36.40 41** P **P 06 04 16.4 +0.3**
baz=267
**N19K Bonanza Creek 36.52 43** P **P 06 04 18.0 +0.8**
baz=269,SNR=10
**O19K Port Alsworth 36.60 44** lAmb lAmb 06 04 46.0
comp=Z,59nm,1.5s
**O19K Port Alsworth 36.60 44** P **P 06 04 18.3 +0.6**
baz=270
**M19K Big River Lodg 36.60 41** P **P 06 04 18.0 +0.2**
baz=268
**R18K Karluk 36.60 48** P **P 06 04 18.5 +0.7**
baz=273
**F20K Avaraart Lake 36.62 32** P **P 06 04 18.4 +0.6**
baz=259
**D20K Etivluk River 36.64 30** P **P 06 04 18.8 +0.7**
baz=256
**E20K Nigu River 36.69 30** P **P 06 04 18.9 +0.4**
baz=257,SNR=71
**H20K Anotleneega Mo 36.70 35** P **P 06 04 18.7 +0.1**
baz=262,SNR=16
**B20K Meade River 36.79 27** P **P 06 04 19.6 +0.3**
baz=254
**K20K Telida 36.83 39** lAmb lAmb 06 04 50.4
comp=Z,46nm,1.6s
**K20K Telida 36.83 39** P **P 06 04 20.2 +0.4**
baz=266,SNR=6.9
**J20K Nowinta River 36.87 37** lAmb lAmb 06 04 46.5
comp=Z,91nm,1.8s
**J20K Nowinta River 36.87 37** P **P 06 04 20.6 +0.6**
baz=265,SNR=24
**L20K Farewell, AK 36.87 40** P **P 06 04 20.8 +0.7**
baz=267,SNR=5.7
**Q19K Cape Douglas, 36.97 46** P **P 06 04 21.2 +0.3**
baz=272
**GTA Gaotai 37.00 280** ⇑P **P 06 04 22.5 +0.9**
GTA sP pwP 06 04 34.0 -1.1
GTA PcP **PcP 06 06 41.8 -0.4**
GTA S **S 06 10 10.8 +5.2**
GTA pmax pmax
comp=Z,48nm,0.7s
GTA pmax pmax
comp=Z,210nm,8.4s
GTA LR LR
comp=Z,760nm,18.3s
GTA LR LR
comp=Z,700nm,13.5s
GTA LR LR
comp=Z,1µm,14.3s
**M20K Styx River 37.20 41** lAmb lAmb 06 04 50.2
comp=Z,66nm,1.6s
**M20K Styx River 37.20 41** P **P 06 04 23.8 +0.9**
baz=269
**A21K Barrow 37.34 25** P **P 06 04 25.1 +1.2**
baz=253
**C21K Knifeblade Rid 37.39 29** P **P 06 04 24.9 +0.6**
baz=258,SNR=29
**G21K Allakaket 37.40 34** lAmb lAmb 06 04 26.9
comp=Z,39nm,1.1s
**G21K Allakaket 37.40 34** P **P 06 04 25.1 +0.5**
baz=262,SNR=27
**O20K Slope Mountain 37.45 44** P **P 06 04 25.2 +0.1**
baz=272
**F21K Alatna River 37.51 32** P **P 06 04 26.3 +0.9**
baz=261,SNR=24
**E21K Killik River 37.53 30** lAmb lAmb 06 04 27.5
comp=Z,42nm,1.0s
**E21K Killik River 37.53 30** P **P 06 04 26.3 +0.6**
baz=259
**B21K Ikpikpuk River 37.55 28** P **P 06 04 26.6 +0.9**
**B21K Ikpikpuk River 37.55 28** P **P 06 04 26.2 +0.5**
baz=257,SNR=45
**H21K Melozitna Rive 37.58 35** P **P 06 04 26.7 +0.6**
**H21K Melozitna Rive 37.58 35** P **P 06 04 26.9 +0.9**
baz=264,SNR=19
**KDAK Kodiak Island 37.59 48** P **P 06 04 25.8 -0.4**
baz=275
**Q20K Shuyak Island 37.63 47** P **P 06 04 26.4 -0.2**
baz=274
**N20K Mount Spurr 37.63 42** P **P 06 04 26.9 +0.3**
baz=270
**SPCR Spurr Chakacha 37.63 42** P **P 06 04 27.3 +0.6**
baz=270
**A22K Sinclair Lake 37.77 26** P **P 06 04 27.9 +0.4**
baz=255
**SKT Skwentna 37.95 41** P **P 06 04 30.0 +0.7**
baz=270
**HOM Homer 37.96 45** lAmb lAmb 06 04 31.2
comp=Z,63nm,0.9s
**HOM Homer 37.96 45** P **P 06 04 29.5 +0.3**
baz=273
**F22K John River 38.05 32** P **P 06 04 30.8 +0.7**
baz=262
**D22K Ayikyak River 38.08 30** lAmb lAmb 06 04 46.6
comp=Z,32nm,0.7s
**D22K Ayikyak River 38.08 30** P **P 06 04 30.5 +0.3**
baz=260,SNR=23
**B22K Teshekpuk Lake 38.11 27** lAmb lAmb 06 04 47.3
comp=Z,41nm,0.8s
**B22K Teshekpuk Lake 38.11 27** P **P 06 04 30.7 +0.3**
baz=258
**H22K Ishtalitna Cre 38.19 35** P **P 06 04 31.6 +0.4**
baz=265
**G22K Bettles 38.24 33** P **P 06 04 32.0 +0.4**
baz=264
**BPAW Bear Paw Mtn. 38.24 38** P **P 06 04 32.6 +0.9**
baz=268,SNR=10
**CD2 Chengdu 38.25 266** P **P 06 04 32.5 +0.3**
CD2 pP pP 06 04 35.8 -2.2
CD2 S **S 06 10 24.5 -0.1**
CD2 pmax pmax
comp=Z,80nm,0.5s
CD2 LR LR
comp=Z,910nm,14.9s
CD2 LR LR
comp=Z,740nm,14.6s
CD2 LR LR
comp=Z,680nm,17.1s
**E22K Anaktuvuk Pass 38.27 31** P **P 06 04 32.7 +0.8**
baz=262,SNR=97
**SUA Susitna One 38.33 42** P **P 06 04 32.9 +0.3**
baz=271,SNR=14
**MLY Manley 38.40 36** P **P 06 04 33.5 +0.5**
baz=267,SNR=19
**CUT Chulitna 38.54 40** P **P 06 04 35.0 +0.8**
baz=271
**M22K Willow 38.63 41** P **P 06 04 34.8 -0.1**
baz=272
**COLD Coldfoot 38.78 33** P **P 06 04 36.6 +0.5**
baz=265,SNR=23
**GYA Guiyang 38.79 257** ⇓ P **P 06 04 37.0 +0.2**
GYA PP **PP 06 06 06.0 +0.2**
GYA S **S 06 10 33.5 +0.5**
GYA pmax pmax
comp=Z,39nm,1.0s
GYA pmax pmax
comp=Z,170nm,3.3s
GYA LR LR
comp=Z,610nm,19.1s
GYA LR LR
comp=Z,520nm,23.5s
GYA LR LR
comp=Z,470nm,21.0s
**G23K Bananza Creek 38.80 33** P **P 06 04 36.5 +0.1**
baz=265,SNR=13
**D23K Nanushuk River 38.80 30** lAmb lAmb 06 04 38.9
comp=Z,37nm,0.9s
**D23K Nanushuk River 38.80 30** P **P 06 04 36.7 +0.4**

baz=262,SNR=28
**RC01 Rabbit Creek A** 38.84 42 P P 06 04 36.8 +0.1
baz=273
**O22K Cooper Landing** 38.87 43 IAmb IAmb 06 05 02.3
comp=Z,50nm,0.7s
**O22K Cooper Landing** 38.87 43 P P 06 04 37.1 +0.2
baz=274
**H23K Yukon River** 38.94 35 P P 06 04 37.7 +0.2
baz=267
**C23K Itkillik River** 38.96 28 P P 06 04 38.1 +0.5
baz=261,SNR=49
**I23K Minto, Yukon-K** 38.98 36 IAmb IAmb 06 05 05.5
comp=Z,68nm,1.7s
**I23K Minto, Yukon-K** 38.98 36 P P 06 04 38.1 +0.3
baz=268,SNR=10
**SEW Seward** 39.03 44 P P 06 04 38.7 +0.4
baz=274,SNR=5.3
**E23K Chandalar** 39.08 31 IAmb IAmb 06 04 41.3
comp=Z,41nm,0.9s
**E23K Chandalar** 39.08 31 P P 06 04 39.5 +0.7
baz=264,SNR=27
**NEA2 Nenana** 39.09 37 P P 06 04 39.1 +0.4
baz=269,SNR=14
**PMR Palmer** 39.10 42 P P 06 04 41.6 +2.8
**PMR Palmer** 39.10 42 P P 06 04 38.8 -0.1
baz=273,SNR=11
**MCK McKinley** 39.14 38 P P 06 04 39.6 +0.3
baz=270
**TOLK Toolik Lake Re** 39.16 30 IAmb IAmb 06 04 56.2
comp=Z,31nm,0.8s
**TOLK Toolik Lake Re** 39.16 30 P P 06 04 40.5 +1.1
baz=264,SNR=25
**RND Reindeer** 39.18 39 IAmb IAmb 06 05 05.6
comp=Z,81nm,1.6s
**GHO Glory Hole Cre** 39.19 41 IAmb IAmb 06 05 06.9
comp=Z,29nm,0.8s
**WAT1 Susitna Watana** 39.33 40 P P 06 04 40.4 -0.4
baz=272
**KNK Knik Glacier** 39.44 42 IAmb IAmb 06 05 07.5
comp=Z,60nm,1.2s
**KNK Knik Glacier** 39.44 42 P P 06 04 41.7 0.0
baz=273,SNR=8.8
**MDM Murphy Dome** 39.46 36 IAmb IAmb 06 05 08.6
comp=Z,90nm,1.7s
**SML Sawmill** 39.47 41 IAmb IAmb 06 05 08.4
comp=Z,65nm,0.8s
**SML Sawmill** 39.47 41 P P 06 04 42.0 -0.1
baz=273,SNR=35
**D24K Happy Valley** 39.49 30 IAmb IAmb 06 04 47.9
comp=Z,86nm,0.9s
**D24K Happy Valley** 39.49 30 P P 06 04 42.8 +0.7
baz=264
**E24K Your Creek** 39.51 31 IAmb IAmb 06 05 00.7
comp=Z,42nm,0.7s
**E24K Your Creek** 39.51 31 P P 06 04 43.0 +0.8
baz=265
**WRH Wood River Hil** 39.51 37 IAmb IAmb 06 05 10.0
comp=Z,77nm,1.6s
**PWL Port Wells** 39.53 43 P P 06 04 42.7 +0.2
baz=274,SNR=15
**C24K Franklin Bluff** 39.60 29 P P 06 04 43.4 +0.5
baz=263
**COLA College** 39.62 36 P P 06 04 45.5 +2.4
**COLA College** 39.62 36 P P 06 04 43.9 +0.8
COLA IAmb IAmb 06 05 09.0
comp=Z,29nm,0.7s
**COLA College** 39.62 36 P P 06 04 43.8 +0.8
baz=270
**COLA College** 39.62 36 *i* P P 06 04 42.9 -0.2
COLA pmax pmax
comp=Z,35nm,1.9s
**H24K Noodor Dome** 39.62 35 IAmb IAmb 06 05 10.3
comp=Z,68nm,1.7s
**H24K Noodor Dome** 39.62 35 P P 06 04 43.9 +0.6
baz=268,SNR=16
**F24K Squaw Lake** 39.69 32 P P 06 04 44.2 +0.4
baz=266,SNR=21
**WAT6 Susitna Watana** 39.71 40 P P 06 04 44.5 +0.3
baz=273,SNR=9.1
**M23K Glacier View** 39.76 41 P P 06 04 45.2 +0.8
baz=274,SNR=10
**POKR Poker Plat Res** 39.80 36 IAmb IAmb 06 05 11.4
comp=Z,170nm,1.8s
**POKR Poker Plat Res** 39.80 36 P P 06 04 45.2 +0.6
baz=270,SNR=11
**G24K Hadweenzic Riv** 39.81 34 IAmb IAmb 06 05 11.8
comp=Z,102nm,1.7s
**G24K Hadweenzic Riv** 39.81 34 P P 06 04 45.7 +0.9
baz=268,SNR=29
**DHY Denali Highway** 39.86 39 P P 06 04 45.7 +0.3
baz=272,SNR=9.5
**SCM Sheep Creek Mo** 39.95 41 P P 06 04 46.6 +0.6
baz=274,SNR=11
**HDA Harding Lake** 40.01 37 P P 06 04 47.2 +0.8
baz=271,SNR=7.3
**ILAR Eielson Array** 40.03 37 P P 06 04 46.4 -0.2
comp=Z,4.2nm,0.8s,baz=259,slow=8.1,SNR=38
ILAR PKiKP **PKiKP** 06 14 03.5 +2.2
comp=Z,0.3nm,0.5s,baz=342,slow=1.3,SNR=5.9
comp=Z,4.2nm,0.8s
**P23K Montague Islan** 40.07 44 P P 06 04 46.7 -0.2
baz=276
**GLI Glacier Island** 40.13 43 P P 06 04 47.8 +0.3
baz=275,SNR=11
**G25K Bearman Lake** 40.36 33 P P 06 04 50.1 +0.8
baz=269,SNR=16
**D25K Kavik River** 40.38 30 P P 06 04 46.8 -2.7
**D25K Kavik River** 40.38 30 IAmb IAmb 06 05 01.7
comp=Z,62nm,0.8s
**D25K Kavik River** 40.38 30 P P 06 04 48.5 -1.0
baz=266,SNR=57
**H25L Birch Creek** 40.47 34 P P 06 04 50.6 +0.5
baz=270,SNR=16
**M24K Tolsona, Glenn** 40.47 41 IAmb IAmb 06 05 16.8
comp=Z,42nm,0.9s
**M24K Tolsona, Glenn** 40.47 41 P P 06 04 50.9 +0.6
baz=274,SNR=7.6
**HIN Hinchinbrook I** 40.47 43 P P 06 04 50.7 +0.4
**K24K Donnelly Dome** 40.54 38 P P 06 04 51.4 +0.5
baz=273,SNR=5.2
**F25K Christian Rive** 40.56 32 P P 06 04 51.2 +0.3
baz=268,SNR=23
**PRP Porcupine Dome** 40.60 35 P P 06 04 51.5 0.0
baz=271,SNR=12
**KLU Klutina** 40.64 42 IAmb IAmb 06 05 18.0
comp=Z,34nm,0.9s
**KLU Klutina** 40.64 42 P P 06 04 51.8 0.0
baz=275,SNR=27
**J25K Saicha River,** 40.69 37 P P 06 04 52.1 0.0
baz=272,SNR=19
**PAX Paxson** 40.73 39 P P 06 04 52.4 -0.1
baz=274,SNR=8.9
**EYAK Cordova Ski Ar** 40.83 43 P P 06 04 55.6 +2.4
**EYAK Cordova Ski Ar** 40.83 43 P P 06 04 53.8 +0.7
baz=277
**HARP HAARP** 40.92 40 P P 06 04 54.0 0.0
baz=275
**RIDG Independent Ri** 40.96 38 P P 06 04 54.2 -0.1
baz=274,SNR=9.4
**BMAR Burnt Mountain** 40.96 32 P P 06 04 55.6 +1.3
**F26K Sheenjek River** 41.13 32 IAmb IAmb 06 05 39.2
comp=Z,27nm,0.5s
**F26K Sheenjek River** 41.13 32 P P 06 04 56.4 +0.7
baz=270,SNR=45
**N25K Chitina, Valde** 41.26 41 P P 06 04 56.8 0.0
baz=276,SNR=7.5
**G26K Porcupine Rive** 41.28 33 P P 06 04 57.3 +0.5
baz=271,SNR=34
**SCRK Sand Creek** 41.33 38 P P 06 04 58.0 +0.6
**SCRK Sand Creek** 41.33 38 P P 06 04 57.3 -0.1
baz=274,SNR=12
**BMRM Bremner River** 41.33 42 P P 06 04 57.8 +0.3
baz=277,SNR=22
**J26L Joseph Creek** 41.47 37 P P 06 04 58.2 -0.4
baz=274,SNR=9.5
**KAIM Kayak Island** 41.57 44 IAmb IAmb 06 05 02.0
comp=Z,42nm,0.8s
**KAIM Kayak Island** 41.57 44 P P 06 04 59.1 -0.2
baz=278,SNR=5.0
**HMT Hamilton** 41.59 43 IAmb IAmb 06 05 01.8
comp=Z,25nm,0.8s
**I26K Coal Creek Min** 41.59 36 P P 06 04 59.2 -0.3
baz=273
**QIZ Qiongzhong** 41.61 246 P P 06 05 00.8 +0.7
QIZ PP **PP** 06 06 36.5 +0.1
QIZ S **S** 06 11 20.0 +5.1
QIZ LR LR
comp=Z,690nm,17.8s
QIZ LR LR
comp=Z,890nm,18.3s
QIZ LR LR
comp=Z,850nm,19.0s
**GLB Gilahina Butte** 41.66 42 P P 06 05 00.6 +0.5
**L26K Log Cabin Wild** 41.69 39 P P 06 05 00.7 +0.4
baz=276,SNR=13
**DGZ Jazzator, Alta** 41.74 300 *i* P P 06 05 01.7 +0.6
DGZ pmax pmax
comp=Z,19nm,0.8s
**VRDI Verde Repeater** 41.86 42 P P 06 05 02.5 +0.7
VRDI IAmb IAmb 06 05 04.1
comp=Z,24nm,0.8s
**M26K Nabesna, AK** 41.92 40 IAmb IAmb 06 05 29.1
comp=Z,38nm,1.0s
**M26K Nabesna, AK** 41.92 40 P P 06 05 02.9 +0.6
baz=277,SNR=24
**GOMU GeErMu** 41.97 279 P P 06 05 03.8 +0.5
GOMU pP sP 06 05 13.5 +2.0
GOMU S S 06 11 26.5 +5.8
GOMU pmax pmax
comp=Z,93nm,0.8s
GOMU LR LR
comp=Z,2μm,16.7s
GOMU LR LR
comp=Z,3μm,17.9s
GOMU LR LR
comp=Z,4μm,17.2s
**MCARA McCarthy VSAT** 42.04 42 IAmb IAmb 06 05 26.0
comp=Z,26nm,0.8s
**MCARA McCarthy VSAT** 42.04 42 P P 06 05 03.4 +0.3
baz=278
**E27K Coleen River** 42.09 31 P P 06 05 05.0 +1.5
**E27K Coleen River** 42.09 31 IAmb IAmb 06 05 37.3
comp=Z,27nm,0.8s
**E27K Coleen River** 42.09 31 P P 06 05 03.8 +0.3
baz=272,SNR=17
**CRQE Cirque** 42.10 42 P P 06 05 04.2 +0.4
baz=279,SNR=24
**G27K Doyon Strip** 42.12 33 P P 06 05 04.4 +0.6
baz=273
**ZAA0 Zalesovo Array** 42.16 307 P P 06 05 02.9 -1.3
**ZALV Zalesovo Beam** 42.16 307 P P 06 05 02.9 -1.3
**ZALV Zalesovo Beam** 42.16 307 P P 06 05 03.2 -1.0
comp=Z,5.1nm,0.6s,baz=79,slow=8.1,SNR=16
ZALV PcP **PcP** 06 06 58.5 +0.3
comp=Z,16nm,0.7s,baz=77,slow=3.2,SNR=19
ZALV LR LR 06 23 57.2
comp=Z,935nm,19.0s,baz=78,slow=38
comp=Z,5.1nm,0.6s
**K27K Chicken** 42.16 38 IAmb IAmb 06 05 30.9
comp=Z,57nm,1.2s
**K27K Chicken** 42.16 38 P P 06 05 04.8 +0.7
baz=276
**H27K Steamboat Moun** 42.21 34 P P 06 05 04.7 +0.2
baz=274,SNR=18
**I27K Kandik River** 42.22 35 P P 06 05 04.7 +0.1
baz=274
**TGL Tana Glacier** 42.22 42 IAmb IAmb 06 05 32.3
comp=Z,146nm,1.9s
**PZH PanZhiHua** 42.24 262 P P 06 05 03.0 -2.4
PZH S S 06 11 24.5 +0.1
PZH pmax pmax
comp=Z,40nm,1.0s
PZH pmax pmax
comp=Z,190nm,3.6s
PZH LR LR
comp=Z,560nm,16.5s
PZH LR LR
comp=Z,390nm,15.3s
PZH LR LR
comp=Z,480nm,16.5s
**WAX Waxell Ridge** 42.26 43 IAmb IAmb 06 05 07.6
comp=Z,52nm,0.7s
**D27M Malcolm River** 42.30 30 P P 06 05 05.8 +0.6
baz=271
**SNH Sunshine Point** 42.31 43 IAmb IAmb 06 05 08.9
comp=Z,42nm,0.9s
**L27K Beaver Creek,** 42.38 39 IAmb IAmb 06 05 33.7
comp=Z,146nm,1.8s
**L27K Beaver Creek,** 42.38 39 P P 06 05 06.7 +0.8
baz=277,SNR=37
**KMI Kunming** 42.39 259 ⇑P P 06 05 07.3 +0.6
KMI pmax pmax
comp=Z,38nm,1.1s
KMI LR LR
comp=Z,410nm,17.1s
KMI LR LR
comp=Z,400nm,15.1s
KMI LR LR
comp=Z,630nm,18.4s
**BCAR Beaver Creek A** 42.40 39 P P 06 05 07.2 +1.2
**M27K Edge Creek, AK** 42.45 40 P P 06 05 07.1 +0.5
baz=278,SNR=12
**EGAK Eagle** 42.48 36 IAmb IAmb 06 05 32.6
comp=Z,79nm,1.6s
**EGAK Eagle** 42.48 36 P P 06 05 06.6 -0.1
baz=276,SNR=14
**ISLE Juniper Island** 42.49 43 IAmb IAmb 06 05 09.2
comp=Z,31nm,0.8s
**MESA MESA** 42.75 43 IAmb IAmb 06 05 15.8
comp=Z,49nm,1.1s
**MESA MESA** 42.75 43 P P 06 05 09.5 +0.3
baz=280,SNR=6.2
**GRNC Granite Creek** 42.75 42 IAmb IAmb 06 05 11.5
comp=Z,55nm,0.7s
**F28M Old Crow** 42.77 32 IAmb IAmb 06 06 03.0
comp=Z,22nm,0.7s
**F28M Old Crow** 42.77 32 P P 06 05 09.3 +0.2
baz=274,SNR=23
**E28M Babbage River** 42.84 31 P P 06 05 10.3 +0.7
baz=273,SNR=18
**CTG Chitna Glacier** 42.91 42 P P 06 05 10.9 +0.5
baz=280,SNR=21
**CTGM Chitina Glacie** 42.91 42 IAmb IAmb 06 05 12.8
comp=Z,41nm,0.8s
**I28M Miner Creek** 42.93 35 P P 06 05 10.8 +0.4
baz=276,SNR=38
**D28M Stokes Point** 43.09 30 P P 06 05 12.2 +0.7
baz=273
**LOGN Logan Glacier** 43.10 42 IAmb IAmb 06 05 18.9
comp=Z,29nm,0.9s
**TABL Table Mountain** 43.10 43 IAmb IAmb 06 05 14.1
comp=Z,35nm,0.7s
**YUK3 Moose Creek** 43.19 41 P P 06 05 12.8 +0.1
baz=280,SNR=16
**DAWY Dawson** 43.33 37 P P 06 05 13.8 +0.2
baz=278,SNR=5.8
**E29M Blow River** 43.45 31 IAmb IAmb 06 06 04.0
comp=Z,27nm,0.8s
**E29M Blow River** 43.45 31 P P 06 05 15.2 +0.7
baz=275,SNR=26
**H29M Whitestone** 43.48 34 P P 06 05 15.4 +0.6
baz=277,SNR=12
**O28M Mount Upton** 43.50 42 P P 06 05 15.3 0.0
baz=281,SNR=14
**G29M Pine Creek** 43.55 33 IAmb IAmb 06 05 24.3
comp=Z,22nm,0.8s
**G29M Pine Creek** 43.55 33 P P 06 05 16.0 +0.7
baz=276,SNR=20
**PINM Pinnacle** 43.60 43 P P 06 05 16.3 +0.5
baz=281,SNR=5.7
**WMQ Urumqi** 43.60 292 ⇑P P 06 05 16.5 +0.4
WMQ pP sP 06 05 24.3 -0.4
WMQ sP pwP 06 05 27.3 -1.5
WMQ pmax pmax
comp=Z,93nm,1.1s
WMQ pmax pmax
comp=Z,180nm,3.6s
WMQ LR LR
comp=Z,2μm,18.1s
WMQ LR LR
comp=Z,1μm,20.7s
WMQ LR LR
comp=Z,1μm,18.1s
**YUK8 Steele Glacier** 43.61 41 P P 06 05 16.3 +0.1
baz=281
**I29M Ogilvie Camp,** 43.62 35 IAmb IAmb 06 05 22.5
comp=Z,26nm,0.8s
**I29M Ogilvie Camp,** 43.62 35 P P 06 05 16.5 +0.7
baz=278,SNR=20
**M29M Somme Creek** 44.00 40 P P 06 05 19.3 +0.2
baz=280,SNR=9.8
**SLVN Son La** 44.02 254 P P 06 05 18.3 -1.4
**ZSN Zaisan** 44.09 298 *e*P P 06 05 20.2 +0.3
baz=298
**ZSN Zaisan** 44.09 298 *e*P P 06 05 20.2 +0.3
**PNL Peninsula** 44.11 44 P P 06 05 19.6 -0.3
baz=282
**YUK4 Talbot Arm** 44.12 41 P P 06 05 20.6 +0.3
baz=281,SNR=5.3
**EPYK Eagle Plains** 44.13 34 IAmb IAmb 06 05 46.2
comp=Z,32nm,0.8s
**EPYK Eagle Plains** 44.13 34 P P 06 05 20.2 +0.2
baz=278,SNR=15
**K29M Barlow Dome** 44.18 37 P P 06 05 20.5 0.0
baz=280,SNR=7.6
**G30M tAoh Zraii Nji** 44.24 33 IAmb IAmb 06 05 47.5
comp=Z,50nm,1.4s
**G30M tAoh Zraii Nji** 44.24 33 P P 06 05 20.6 -0.3
baz=278,SNR=11
**F30M Barrier River** 44.33 32 P P 06 05 21.8 +0.2
baz=277,SNR=41
**YUK6 Outpost Mounta** 44.34 42 P P 06 05 21.6 -0.4
baz=282
**O29M Mount Kennedy** 44.38 43 P P 06 05 22.7 +0.5
baz=282
**I30M Mount Dempster** 44.44 35 IAmb IAmb 06 05 51.6
comp=Z,49nm,1.1s
**I30M Mount Dempster** 44.44 35 P P 06 05 23.0 +0.4
baz=279,SNR=43
**J30M Hart River** 44.56 36 IAmb IAmb 06 05 50.6
comp=Z,46nm,1.6s
**J30M Hart River** 44.56 36 P P 06 05 24.6 +0.9
baz=280,SNR=12
**N30M Aishikik Lake** 44.83 41 P P 06 05 26.7 +0.9
baz=282
**P29M Windy Craggy** 44.94 43 P P 06 05 27.6 +1.1
baz=284,SNR=30
**G31M Satah River** 45.01 33 P P 06 05 28.0 +1.1
baz=279,SNR=9.2
**INK Inuvik** 45.07 31 IAmb IAmb 06 05 53.0
comp=Z,26nm,1.1s
**INK Inuvik** 45.07 31 P P 06 05 28.4 +0.9
baz=279,SNR=12
**F31M Tsiigehtchic** 45.13 32 P P 06 05 29.1 +1.3
baz=279
**H31M Peel River** 45.17 34 IAmb IAmb 06 05 54.5
comp=Z,37nm,1.0s
**H31M Peel River** 45.17 34 P P 06 05 29.7 +1.4
baz=280,SNR=7.5
**P30M Million Dollar** 45.20 43 P P 06 05 30.1 +1.5
baz=284
**TNCH TengChong** 45.44 262 P P 06 05 32.0 +0.9
TNCH PP **PP** 06 07 20.5 +2.9
TNCH S **S** 06 12 08.3 -2.9
TNCH SS **ScS** 06 15 25.3 -1.0
TNCH pmax pmax
comp=Z,64nm,0.8s
TNCH pmax pmax
comp=Z,120nm,5.3s
TNCH LR LR
comp=Z,400nm,14.6s
TNCH LR LR
comp=Z,230nm,13.1s
TNCH LR LR
comp=Z,270nm,14.7s
**N31M Braeburn, Yuko** 45.44 40 IAmb IAmb 06 05 33.8
comp=Z,27nm,1.0s
**N31M Braeburn, Yuko** 45.44 40 P P 06 05 32.1 +1.6
baz=284,SNR=14
**O30N Mendenhall** 45.46 42 P P 06 05 32.1 +1.4
baz=284,SNR=8.8
**PLBC Pleasant Camp** 45.66 43 P P 06 05 33.5 +1.3
baz=285,SNR=12
**SEM Semipalatinsk** 45.90 303 *e*P P 06 05 33.8 -0.7
baz=304
**SEM Semipalatinsk** 45.90 303 *e*P P 06 05 33.8 -0.7
**M31M Drury Creek, Y** 45.91 39 P P 06 05 35.3 +1.0
baz=284,SNR=9.3
**MK31 Makanchi Array** 45.97 298 P P 06 05 34.5 -0.3
**MK31 Makanchi Array** 45.97 298 *c* *i*P P 06 05 35.0 +0.1
**MKAR Makanchi Array** 45.97 298 P P 06 05 34.7 -0.1
**MKAR Makanchi Array** 45.97 298 P P 06 05 35.1 +0.3
comp=Z,77nm,0.8s,baz=72,slow=9.1,SNR=340
MKAR PcP **PcP** 06 07 11.2 -0.1
comp=Z,4.6nm,0.7s,baz=75,slow=4.3,SNR=1.8
MKAR LR LR 06 26 17.0
comp=Z,2μm,18.5s,baz=74,slow=38
comp=Z,77nm,0.8s
**MKAR Makanchi Array** 45.97 298 *e*P P 06 05 35.0 +0.1
**MKAR Makanchi Array** 45.97 298 *c* *e*P P 06 05 35.0 +0.1
MKAR pmax pmax
comp=Z,77nm,0.8s
**WHY Whitehorse** 46.07 41 P P 06 05 36.3 +0.7
baz=285,SNR=9.8
**MANU Manus Island** 46.11 183 P P 06 05 35.5 -0.7
MANU IAmb IAmb 06 06 53.4
comp=Z,52nm,1.6s
**S31K Pelican** 46.13 45 P P 06 05 37.4 +1.5
baz=286
**MAKZ Makanchi** 46.16 298 P P 06 05 35.4 -1.0
**MAKZ Makanchi** 46.16 298 P P 06 05 36.6 +0.2
**SKAG Skagway** 46.17 43 P P 06 05 38.8 +2.6
**SKAG Skagway** 46.17 43 IAmb IAmb 06 06 07.0
comp=Z,29nm,1.5s
**SKAG Skagway** 46.17 43 P P 06 05 36.4 +0.2
baz=286
**FARO Faro, Yukon** 46.38 39 P P 06 05 38.1 +0.2
baz=285,SNR=12
**KURK Kurchatov** 46.76 304 P P 06 05 40.2 -0.8
KURK IAmb IAmb 06 05 41.7
comp=Z,23nm,0.6s
**KURK Kurchatov** 46.76 304 *e*P P 06 05 41.0 0.0
**KURK Kurchatov** 46.76 304 *c* *e*P P 06 05 41.0 0.0
KURK pmax pmax
comp=Z,28nm,0.8s
**NONG Nongkai** 46.77 251 P P 06 05 43.1 +1.7
**N32M Quiet Lake** 46.78 40 P P 06 05 41.3 +0.2
baz=286
**KURBB Kurchatov Arra** 46.85 304 P P 06 05 41.0 -0.6
comp=Z,14nm,0.5s,baz=70,slow=8.1,SNR=56
KURBB PcP **PcP** 06 07 14.3 +0.1
comp=Z,8.8nm,0.8s,baz=76,slow=3.5,SNR=8.7
KURBB LR LR 06 26 36.4
comp=Z,708nm,18.1s,baz=164,slow=38
comp=Z,14nm,0.5s
**SIT Sitka** 46.87 46 P P 06 05 42.4 +0.7
baz=288
**R32K Eaglecrest** 46.91 45 IAmb IAmb 06 05 45.0
comp=Z,18nm,0.8s
**R32K Eaglecrest** 46.91 45 P P 06 05 42.1 0.0
baz=287,SNR=6.9
**P32M Atlin** 46.92 43 P P 06 05 43.0 +0.8
baz=287,SNR=6.1
**JIS Juneau Island** 46.98 45 P P 06 05 45.5 +3.0
**S32K Killisnoo** 47.13 46 IAmb IAmb 06 05 46.2
comp=Z,16nm,1.0s
**S32K Killisnoo** 47.13 46 P P 06 05 44.4 +0.7
baz=288
**P33M Teslin, Yukon** 47.17 42 IAmb IAmb 06 05 47.1
comp=Z,27nm,0.9s
**P33M Teslin, Yukon** 47.17 42 P P 06 05 44.8 +0.6
baz=287,SNR=16
**A36M Sachs Harbour** 47.18 25 P P 06 05 45.2 +1.2
baz=282,SNR=21
**UBPT Khong Chiam** 47.19 246 P P 06 05 46.3 +1.6
**CRAI Chiangrai** 47.21 256 IAmb IAmb 06 05 47.3
comp=Z,30nm,1.0s
**Q32M Nakina River** 47.82 43 IAmb IAmb 06 06 47.9
comp=Z,20nm,1.3s
**Q32M Nakina River** 47.82 43 P P 06 05 49.7 +0.3
baz=288
**LSA Lhasa** 47.98 273 P P 06 05 53.0 +1.7
LSA pmax pmax
comp=Z,21nm,1.1s
**LSA Lhasa** 47.98 273 IAmb IAmb 06 06 06.7
comp=Z,48nm,1.3s
**C36M Paulatuk** 48.21 28 P P 06 05 52.4 +0.4
baz=286,SNR=7.8
**R33M Jennings River** 48.32 42 IAmb IAmb 06 05 56.4
comp=Z,21nm,0.8s
**R33M Jennings River** 48.32 42 P P 06 05 53.7 +0.5
baz=289,SNR=19
**U33K Whale Pass** 48.33 47 P P 06 05 53.9 +0.9
baz=290
**WRAK Wrangell Islan** 48.63 46 P P 06 05 56.2 +0.8
baz=290
**S34M Telegraph Cree** 48.73 44 IAmb IAmb 06 05 59.3
comp=Z,14nm,0.8s
**S34M Telegraph Cree** 48.73 44 P P 06 05 57.0 +0.8
baz=290,SNR=8.3
**TGTN Hyland Airport** 48.88 39 P P 06 05 58.3 +0.9
baz=289

DLBC **Dease Lake** 49.10 43 IAmb IAmb 06 06 02.4
comp=Z,16nm,0.9s
DLBC **Dease Lake** 49.10 43 P **P** **06 05 59.6 +0.5**
baz=290,SNR=13
TDK **Taldyqorghan** 49.17 297 *eP* **P** **06 06 00.1 +0.3**
baz=297
TDK **Taldyqorghan** 49.17 297 *eP* **P** **06 06 00.1 +0.3**
SHLS **Shalkode** 49.31 295 *eP* **P** **06 05 59.0 -2.1**
comp=Z,17nm,0.6s,baz=295
SHLS **Shalkode** 49.31 295 *eP* **P** **06 05 58.9 -2.1**
SHLS pmax pmax
comp=Z,17nm,0.6s
CMAR **Chiang Mai Arr** 49.40 255 P **P** **06 06 01.4 -0.3**
CMAR **Chiang Mai Arr** 49.40 255 P **P** **06 06 02.8 +1.0**
comp=Z,5.4nm,0.9s,baz=37,slow=8.1,SNR=25
comp=Z,5.4nm,0.9s
CMAR **Chiang Mai Arr** 49.40 255 *ce*P **P** **06 06 03.0 +1.2**
CMAR pmax pmax
comp=Z,4.0nm,0.8s
V35K **Ketchikan** 49.41 48 P **P** **06 06 02.3 +1.0**
baz=292
FAKI **Fak Fak** 49.46 203 P **P** **06 06 01.1 -1.1**
T35M **Bob Quinn** 49.51 45 IAmb IAmb 06 06 05.9
comp=Z,24nm,0.8s
T35M **Bob Quinn** 49.51 45 P **P** **06 06 03.0 +0.9**
baz=291,SNR=10.0
UZB **Uzynbulak** 49.60 295 *eP* **P** **06 06 03.4 +0.1**
comp=Z,17nm,0.6s,baz=295
UZB **Uzynbulak** 49.60 295 *eP* **P** **06 06 03.3 +0.1**
UZB pmax pmax
comp=Z,17nm,0.6s
KPKS **Kokpek** 49.68 295 *eP* **P** **06 06 03.9 +0.1**
comp=Z,33nm,0.7s,baz=296
KPKS **Kokpek** 49.68 295 *eP* **P** **06 06 03.9 +0.1**
KPKS pmax pmax
comp=Z,33nm,0.7s
SHL **Shillong** 49.87 268 P **P** **06 06 05.4 -0.1**
SNR=9.5
ARXS **Arharly** 49.90 297 *eP* **P** **06 06 05.4 0.0**
ZHN **Zhinishke** 49.98 295 *eP* **P** **06 06 06.1 +0.1**
comp=Z,28nm,0.7s,baz=295
ZHN **Zhinishke** 49.98 295 *eP* **P** **06 06 06.1 +0.1**
ZHN pmax pmax
comp=Z,27nm,0.7s
TOLI2 **Tolitoli** 50.00 219 P **P** **06 06 07.6 +1.3**
TOLI2 **Tolitoli** 50.00 219 P **P** **06 06 05.8 -0.5**
SATY **Saty** 50.05 295 *eP* **P** **06 06 06.8 +0.2**
comp=Z,26nm,0.7s,baz=295
SATY **Saty** 50.05 295 *eP* **P** **06 06 06.8 +0.2**
SATY pmax pmax
comp=Z,26nm,0.7s
WRGLY **Wrigley** 50.40 36 P **P** **06 06 09.9 +1.2**
baz=291
BVAR **Borovoye Array** 50.60 310 P **P** **06 06 10.1 -0.4**
comp=Z,8.6nm,0.7s,baz=60,slow=9.0,SNR=31
BVAR PcP **PcP** **06 07 28.1 +0.3**
comp=Z,7.3nm,0.7s,baz=70,slow=3.1,SNR=4.6
comp=Z,8.6nm,0.7s
CHKK **Chushkaly** 50.60 297 *eP* **P** **06 06 10.7 +0.1**
baz=297
CHKK **Chushkaly** 50.60 297 *eP* **P** **06 06 10.7 +0.1**
BRVK **Borovoye** 50.64 310 P **P** **06 06 10.1 -0.7**
BRVK **Borovoye** 50.64 310 P **P** **06 06 11.2 +0.4**
BRVK P **P** **06 06 11.2 +0.4**
BRVK **Borovoye** 50.64 310 *eP* **P** **06 06 10.7 -0.1**
BRVK **Borovoye** 50.64 310 *ce*P **P** **06 06 10.7 -0.1**
BRVK pmax pmax
comp=Z,13nm,0.8s
LIRD **Liard River Hi** 50.64 41 P **P** **06 06 12.1 +1.4**
baz=292
MDOK **Medeo** 50.88 296 *eP* **P** **06 06 13.1 +0.2**
baz=296
MDOK **Medeo** 50.88 296 *eP* **P** **06 06 13.1 +0.2**
AAA **Alma-Ata** 50.94 296 *eP* **P** **06 06 13.5 +0.2**
comp=Z,40nm,0.8s,baz=296
AAA **Alma-Ata** 50.94 296 *eP* **P** **06 06 13.5 +0.2**
AAA **Alma-Ata** 50.94 296 *eP* **P** **06 06 13.5 +0.2**
AAA pmax pmax
comp=Z,40nm,0.8s
KUU **Kurty** 50.99 297 *eP* **P** **06 06 13.9 +0.2**
comp=Z,22nm,0.8s,baz=297
KUU **Kurty** 50.99 297 *eP* **P** **06 06 13.8 +0.2**
KUU pmax pmax
comp=Z,22nm,0.8s
TNSS **Tian-Shan** 51.00 296 *eP* **P** **06 06 14.1 -0.1**
baz=296
TNSS **Tian-Shan** 51.00 296 *eP* **P** **06 06 14.0 -0.1**
TARG **Taragay, Kyrgy** 51.06 294 IAmb IAmb 06 06 16.9
comp=Z,49nm,1.1s
MPSI **Mapaga** 51.08 220 P **P** **06 06 13.5 -1.0**
TOAD **Toad River Com** 51.27 42 P **P** **06 06 16.4 +0.9**
baz=293,SNR=21
KOTAN **Kotaneelee Air** 51.32 40 P **P** **06 06 16.5 +0.8**
baz=293
ULHL **Ulahol** 51.84 295 P **P** **06 06 21.1 +0.9**
SNR=48
BTLS **Baital** 51.92 299 *eP* **P** **06 06 20.5 0.0**
baz=299
BTLS **Baital** 51.92 299 *eP* **P** **06 06 20.4 0.0**
TKM2 **Tokmak 2** 51.93 296 P **P** **06 06 21.8 +0.9**
SNR=53
SGDS **Sogindy** 52.30 297 *eP* **P** **06 06 23.4 0.0**
comp=Z,17nm,0.5s,baz=297
SGDS **Sogindy** 52.30 297 *eP* **P** **06 06 23.4 0.0**
SGDS pmax pmax
comp=Z,17nm,0.5s
NRN **Naryn** 52.39 294 IAmb IAmb 06 06 43.4
comp=Z,20nm,1.0s
CHMS **Chumysh** 52.44 297 P **P** **06 06 24.8 +0.4**
SNR=10
USP **Ospenovka** 52.47 297 P **P** **06 06 25.5 +0.9**
SNR=37
KBK **Karagaybulak** 52.48 296 P **P** **06 06 25.8 +0.9**
SNR=26
AAK **Ala-Archa** 52.78 296 P **P** **06 06 27.6 +0.5**
AAK **Ala-Archa** 52.78 296 *i* P **P** **06 06 27.7 +0.5**
SNR=8.1
AAK **Ala-Archa** 52.78 296 LR LR 06 30 47.8
comp=Z,662nm,18.9s,baz=66,slow=38
AAK **Ala-Archa** 52.78 296 P **P** **06 06 28.0 +0.9**
AAK **Ala-Archa** 52.78 296 *eP* **P** **06 06 27.7 +0.6**
AAK **Ala-Archa** 52.78 296 *ce*P **P** **06 06 27.7 +0.6**
AAK pmax pmax
comp=Z,44nm,0.8s
EKS2 **Erkin-Say** 53.23 297 P **P** **06 06 31.2 +0.8**
SNR=49
KSH **Kashi** 53.37 292 P **P** **06 06 35.8 +4.4**
KSH sP pwP 06 06 43.0 -1.2
KSH pmax pmax
comp=Z,26nm,1.0s
KSH LR LR
comp=Z,720nm,13.4s
KSH LR LR
comp=Z,750nm,14.4s
KSH LR LR
comp=Z,1μm,14.8s
PMG **Port Moresby** 53.42 183 LR LR 06 26 51.4
comp=Z,75nm,21.5s,baz=329,slow=33
AML **Almayashu** 53.54 296 P **P** **06 06 34.3 +1.2**
SNR=10.0
SVE **Sverdlovsk** 54.03 317 *eP* **P** **06 06 35.8 -0.1**
SVE **Sverdlovsk** 54.03 317 *eP* **P** **06 06 35.8 -0.1**
SVE pmax pmax
comp=Z,50nm,0.9s
SVE MLR MLR
comp=Z,1μm,16.0s
HNR **Honiara** 54.21 167 LR LR 06 30 31.5
comp=Z,5μm,18.9s,baz=1.5,slow=37
YKA **Yellowknife Ar** 54.39 35 P **P** **06 06 39.0 +0.6**
comp=Z,7.3nm,0.8s,baz=301,slow=7.3,SNR=12
comp=Z,7.3nm,0.8s
SPITS **Spitsbergen Ar** 54.66 349 P **P** **06 06 38.6 -1.5**
comp=Z,12nm,1.0s,baz=30,slow=9.0,SNR=5.3
comp=Z,12nm,1.0s
KSM **Kuching** 55.00 231 P **P** **06 06 45.1 +1.7**
KSM **Kuching** 55.00 231 P **P** **06 06 43.2 -0.2**
KSM IAmb IAmb 06 07 03.7
comp=Z,58nm,1.4s
KK31 **Karatay Array** 55.08 299 P **P** **06 06 44.0 +0.2**
KK31 **Karatay Array** 55.08 299 P **P** **06 06 44.0 +0.2**
KK31 pmax pmax
comp=Z,46nm,1.0s
KKAR **Karatay Array** 55.08 299 P **P** **06 06 43.9 +0.1**
KKAR **Karatay Array** 55.08 299 P **P** **06 06 43.9 +0.1**
ARU **Arti** 55.23 317 P **P** **06 06 43.5 -1.0**
ARU **Arti** 55.23 317 *d* *i*P **P** **06 06 44.2 -0.4**
ARU 06 07 44.3
ARU 06 08 45.1
ARU S **S** **06 14 29.4 +3.2**
ARU SS **SS** **06 18 08.5 -1.4**
ARU pmax pmax
comp=Z,52nm,0.9s
ARU MLR MLR
comp=Z,1μm,17.0s
**ARU** **Arti** 55.23 317 P **P** **06 06 43.4 -1.2**
comp=Z,60nm,0.8s,comp=Z,610nm
KAPI **Kappang** 55.91 217 LR LR 06 30 34.8
comp=Z,118nm,20.7s,baz=44,slow=36
KAPI **Kappang** 55.91 217 *i* P **P** **06 06 49.2 -0.7**
KAPI pmax pmax
comp=Z,20nm,1.1s
SRIT **Nakonsritamara** 55.97 246 P **P** **06 06 52.3 +1.9**
BTK **Batken** 56.47 295 P **P** **06 06 53.7 -0.2**
BTK **Batken** 56.47 295 P **P** **06 06 53.7 -0.2**
BTK pmax pmax
comp=Z,62nm,0.9s
BRLDA **Berland Lookou** 57.32 44 IAmb IAmb 06 07 01.2
comp=Z,16nm,0.9s
NEEM **North Greenlan** 57.92 5 *i* P **P** **06 07 02.6 -1.1**
NEEM IAmb IAmb 06 07 05.3
comp=Z,45nm,0.9s
VADS **Vadso** 58.06 340 *eP* **P** **06 07 05.7 +1.3**
IPM **Ipoh** 58.16 242 P **P** **06 07 07.1 +1.2**
IPM **Ipoh** 58.16 242 P **P** **06 07 05.8 -0.1**
IPM IAmb IAmb 06 07 07.9
comp=Z,35nm,1.0s
ABKAR **Akbulak array** 58.17 310 P **P** **06 07 05.9 +0.4**
KIRV **Kirov** 58.33 323 LR LR 06 34 34.1
comp=Z,552nm,18.7s,baz=52,slow=38
KIRV **Kirov** 58.33 323 *ce*P **P** **06 07 06.6 +0.2**
SIMJ **Simiganj** 58.41 295 P **P** **06 07 07.4 -0.1**
SOEI **Soe** 58.45 210 P **P** **06 07 10.0 +2.0**
EDFI **Ende, Flores** 58.49 213 P **P** **06 07 06.3 -1.9**
AKTO **Aktyubinsk** 58.59 311 LR LR 06 34 29.1
comp=Z,669nm,19.2s,baz=69,slow=38
APA **Apatity** 58.68 336 *i* *i*P **P** **06 07 06.8 -2.0**
APA *i* 06 07 56.5
APA *i* 06 09 26.0
APA *i* S **S** **06 15 05.0 -6.4**
APA *i* 06 16 56.0
APA pmax pmax
comp=Z,13nm,0.9s
APA MLR MLR
comp=Z,900nm,19.0s
KDU **Kakadu** 58.76 200 P **P** **06 07 10.9 +1.0**
KDU **Kakadu** 58.76 200 P **P** **06 07 09.7 -0.3**
comp=Z,14nm,0.7s
F04A **Amboy** 58.94 55 IAmb IAmb 06 07 33.6
comp=Z,20nm,1.0s
HAMF **Hammerfest** 59.04 342 *eP* **P** **06 07 10.7 -0.5**
DAG **Danmarks Havn** 59.05 357 *i* P **P** **06 07 10.0 -1.3**
DAG IAmb IAmb 06 07 11.3
comp=Z,4.0nm,0.7s
MTN **Manton Dam** 59.25 201 P **P** **06 07 14.3 +1.0**
MTN **Manton Dam** 59.25 201 P **P** **06 07 13.1 -0.2**
MTN IAmb IAmb 06 07 50.5
comp=Z,19nm,1.0s
ARA0 **ARCESS Array S** 59.42 340 *eP* **P** **06 07 13.9 -0.1**
ARCES **ARCESS Array B** 59.42 340 P **P** **06 07 13.6 -0.4**
ARCES **ARCESS Array B** 59.42 340 P **P** **06 07 13.3 -0.7**
comp=Z,8.3nm,0.9s,baz=43,slow=7.2,SNR=9.7
ARCES LR LR 06 35 16.1
comp=Z,228nm,20.8s,baz=35,slow=38
comp=Z,8.3nm,0.9s
ARCES **ARCESS Array B** 59.42 340 P **P** **06 07 13.6 -0.4**
ARCES pmax pmax
comp=Z,120nm,2.0s
ADZR **Andozero** 59.49 331 P **P** **06 07 12.6 -1.8**
ADZR pmax pmax
comp=Z,21nm,0.5s
H04A **Detroit Lake** 59.76 56 IAmb IAmb 06 07 36.2
comp=Z,32nm,1.2s
MXC **Moxie City** 59.81 53 IAmb IAmb 06 07 36.3
comp=Z,40nm,1.7s
C09A **Chrisman Ranch** 60.27 51 IAmb IAmb 06 07 38.6
comp=Z,18nm,1.4s
PPBI **Pangkal Pinang** 60.34 232 P **P** **06 07 22.0 +1.1**
comp=Z,22nm,0.7s,comp=Z,21μm
HAWA **Hanford** 60.35 53 IAmb IAmb 06 07 39.9
comp=Z,29nm,1.6s
KTK1 **Kautokeino** 60.36 341 *eP* **P** **06 07 19.3 -1.1**
G06A **Carlson Farm,** 60.37 54 IAmb IAmb 06 07 40.4
comp=Z,25nm,1.5s
NEW **Neport** 60.65 50 IAmb IAmb 06 07 41.3
comp=Z,20nm,1.2s
KBL **Kabul** 60.72 291 P **P** **06 07 22.8 -0.9**
KBL **Kabul** 60.72 291 P **P** **06 07 23.7 0.0**
SNR=12
KBL P **P** **06 07 23.7 0.0**
SNR=12
KBL **Kabul** 60.72 291 P **P** **06 07 22.8 -0.9**
KBL pmax pmax
comp=Z,40nm,0.9s
PSI **Prapat** 60.78 242 P **P** **06 07 24.9 +0.8**
PSI **Prapat** 60.78 242 P **P** **06 07 24.4 +0.3**
PSI pmax pmax
comp=Z,23nm,0.9s
RPSI **Rantau Prapat** 60.86 242 P **P** **06 07 24.4 -0.1**
RPSI IAmb IAmb 06 07 27.1
comp=Z,23nm,0.9s
TRO **Tromso** 60.87 342 *eP* **P** **06 07 22.7 -1.1**
TRO IAmb IAmb 06 07 26.4
comp=Z,2μm,3.6s
PINE **Pine Mountain** 61.00 56 IAmb IAmb 06 07 47.0
comp=Z,13nm,0.7s
E09A **Wood Farm, Sta** 61.08 52 IAmb IAmb 06 07 44.6
comp=Z,35nm,1.4s
L04D **Klamath Falls** 61.08 58 IAmb IAmb 06 07 45.1
comp=Z,22nm,0.9s
J05D **Fort Rock, OR** 61.12 57 IAmb IAmb 06 07 45.5
comp=Z,12nm,1.0s
F10A **Beach Ranch, E** 61.91 52 IAmb IAmb 06 08 31.9
comp=Z,28nm,1.8s
PWJI **Pagerwoju** 62.24 223 P **P** **06 07 32.1 -1.6**
comp=Z,50nm,1.2s
HATC **Hat Creek Radi** 62.40 59 IAmb IAmb 06 07 56.2
comp=Z,18nm,0.9s
JOF **Joensuu** 62.50 333 *eP* **P** **06 07 34.7 -0.2**
LRDM **Redding Peak** 62.61 59 IAmb IAmb 06 07 60.0
comp=Z,15nm,0.9s
BELG **Belogornoye** 62.78 318 LR LR 06 37 24.6
comp=Z,897nm,18.4s,baz=50,slow=38
BELG **Belogornoye** 62.78 318 *c* *i*P **P** **06 07 36.9 0.0**
BELG pmax pmax
comp=Z,32nm,0.9s
STEI **Steigen** 63.04 342 *eP* **P** **06 07 38.8 +0.4**
LOF **Lofoten** 63.24 343 *eP* **P** **06 07 39.4 -0.4**
LOF IAmb IAmb 06 07 40.3
comp=Z,66nm,1.4s
MSO **Missoula** 63.24 50 IAmb IAmb 06 07 59.0
comp=Z,29nm,1.3s
SUMG **Summit** 63.36 3 P **P** **06 07 40.8 -0.2**
SUMG **Summit** 63.36 3 P **P** **06 07 40.8 -0.2**
SUMG pmax pmax
comp=Z,65nm,1.0s
SUMG **Summit** 63.36 3 *i* P **P** **06 07 40.8 -0.2**
SUMG IAmb IAmb 06 07 43.5
comp=Z,34nm,1.0s
FAUS **Fauske** 63.48 342 *eP* **P** **06 07 40.9 -0.5**
FAUS IAmb IAmb 06 07 41.9
comp=Z,17nm,0.5s
VALR **Valaam** 63.75 332 *c* *i*P **P** **06 07 43.1 -0.1**
VALR pmax pmax
comp=Z,101nm,0.9s
JMIC **Jan Mayen** 64.03 352 LR LR 06 35 33.1
comp=Z,217nm,18.2s,baz=30,slow=36
CTA **Charters Tower** 64.07 184 LR LR 06 36 10.1
comp=Z,11nm,19.5s,baz=326,slow=36
FFC **Flin Flon** 64.23 38 P **P** **06 07 46.4 -0.1**
FFC **Flin Flon** 64.23 38 P **P** **06 07 46.4 -0.1**
FFC pmax pmax
comp=Z,27nm,0.9s
PAHR **Pah Rah Range** 64.34 59 IAmb IAmb 06 08 07.2
comp=Z,28nm,1.5s
PNTR **Pine Nut** 64.58 59 IAmb IAmb 06 08 09.2
comp=Z,38nm,1.5s
HYB **Hyderabad** 64.59 270 *eP* **P** **06 07 49.0 -0.5**
MOR8 **Moi Rana** 64.67 342 *eP* **P** **06 07 47.2 -2.0**
MOR8 IAmb IAmb 06 07 48.6
comp=Z,46nm,1.0s
CMB **Columbia Colle** 64.73 61 IAmb IAmb 06 08 09.8
comp=Z,16nm,1.4s
EGMT **Eagleton** 64.75 47 IAmb IAmb 06 08 08.0
comp=Z,25nm,1.1s
YERR **Yerington** 64.87 59 IAmb IAmb 06 08 10.9
comp=Z,38nm,1.4s
WAKR **Walker** 65.04 60 IAmb IAmb 06 08 11.6
comp=Z,11nm,1.0s
VAF **Ylistaro** 65.07 336 *eP* **P** **06 07 51.6 -0.2**
PUL **Pulkovo** 65.08 331 *eP* **P** **06 07 51.7 -0.3**
PUL **Pulkovo** 65.08 331 *ce*P **P** **06 07 51.7 -0.3**
PUL pmax pmax
comp=Z,70nm,0.6s
KEF **Keuruu** 65.09 335 *eP* **P** **06 07 50.4 -1.6**
MOS **Moscow** 65.12 325 *eP* **P** **06 07 51.3 -1.0**
MOS pmax pmax
comp=Z,96nm,1.1s
MOS MLR MLR
comp=Z,500nm,17.0s
WB0 **Warramunga Arr** 65.19 196 P **P** **06 07 53.1 0.0**
WB0 IAmb IAmb 06 07 53.9
comp=Z,18nm,0.9s
BOZ **Bozeman (W)** 65.26 50 IAmb IAmb 06 08 08.8
comp=Z,10nm,0.7s
FIA1 **FINESS Array S** 65.26 334 P **P** **06 07 52.5 -0.6**
FINES **FINESS Array B** 65.26 334 P **P** **06 07 52.2 -0.9**
FINES **FINESS Array B** 65.26 334 P **P** **06 07 52.4 -0.7**
comp=Z,53nm,0.6s,baz=39,slow=7.1,SNR=239
comp=Z,53nm,0.6s
HRA **Herat** 65.32 295 P **P** **06 07 53.6 -0.6**
HRA IAmb IAmb 06 07 55.5
comp=Z,15nm,0.8s
WR0 **Warramunga Arr** 65.35 196 IAmb IAmb 06 07 55.0
comp=Z,15nm,1.0s
WRAB **Tennant Creek** 65.36 196 P **P** **06 07 53.8 -0.4**
WRAB IAmb IAmb 06 07 55.1
comp=Z,18nm,0.9s
WRAB **Tennant Creek** 65.36 196 *eP* **P** **06 07 54.1 -0.1**
WRAB pmax pmax
comp=Z,20nm,0.9s
WB2 **Warramunga Arr** 65.37 196 IAmb IAmb 06 07 55.2
comp=Z,19nm,0.9s
WRA **Warramunga Arr** 65.38 196 P **P** **06 07 53.5 -0.8**
WRA **Warramunga Arr** 65.38 196 P **P** **06 07 54.1 -0.1**
comp=Z,13nm,0.8s,baz=15,slow=6.8,SNR=89
WRA pP **pwP** **06 08 07.3 -1.1**
comp=Z,6.7nm,0.8s,baz=16,slow=6.9,SNR=7.8
WRA LR LR 06 37 11.3
comp=Z,75nm,19.8s,baz=357,slow=37
comp=Z,13nm,0.8s
SCO **Scoresbysund** 65.44 357 *i* P **P** **06 07 53.1 -1.0**
SCO IAmb IAmb 06 07 55.9
comp=Z,13nm,0.9s
RYN **Ryan** 65.53 59 IAmb IAmb 06 08 14.5
comp=Z,10nm,0.9s
KVN **Kaiserville** 65.53 59 IAmb IAmb 06 08 14.5
comp=Z,13nm,0.9s
LHV **Little Huntoon** 65.77 60 IAmb IAmb 06 08 17.8
comp=Z,24nm,1.1s
NVAR **Mina Array Bea** 65.78 59 P **P** **06 07 57.6 +0.4**
NVAR **Mina Array Bea** 65.78 59 P **P** **06 07 58.1 +1.0**
comp=Z,6.2nm,0.8s,baz=285,slow=6.7,SNR=48
comp=Z,6.2nm,0.8s
NV11 **Mina Array Sit** 65.88 59 IAmb IAmb 06 08 17.4
comp=Z,16nm,1.3s
OBN **Obninsk** 65.99 325 P **P** **06 07 57.7 -0.2**
OBN **Obninsk** 65.99 325 *eP* **P** **06 07 57.8 -0.1**
OBN **Obninsk** 65.99 325 *c* *i*P **P** **06 07 57.8 -0.1**
OBN *e* 06 08 29.2
OBN *e* 06 10 23.6
OBN pmax pmax
comp=Z,189nm,1.3s
OBN MLR MLR
comp=Z,508nm,16.0s
**OBN** **Obninsk** 65.99 325 P **P** **06 07 57.5 -0.4**
comp=Z,145nm,0.9s,comp=Z,1μm
VRH **Novokhopyorsk** 66.36 319 *eP* **P** **06 07 59.6 -0.8**
VRH pmax pmax
comp=Z,160nm,0.9s
H17A **Grant Village** 66.60 50 IAmb IAmb 06 08 05.9
comp=Z,12nm,1.0s
**H17A** **Grant Village** 66.60 50 P **P** **06 08 02.6 +0.3**
baz=310
NSS **Namsos** 66.62 342 *eP* **P** **06 08 01.8 0.0**
NSS IAmb IAmb 06 08 02.2
comp=Z,25nm,0.9s
DSP **Deep Springs** 66.65 60 IAmb IAmb 06 08 22.6
comp=Z,13nm,1.1s
LPSR **Galich'ya Gora** 66.70 322 *eP* **P** **06 08 00.9 -1.6**
LPSR pmax pmax
comp=Z,180nm,0.9s
FLWY **Flagg Ranch** 66.73 51 IAmb IAmb 06 08 49.4
comp=Z,37nm,1.8s
MEF **Metsahovi** 66.73 334 *eP* **P** **06 08 01.8 -0.7**
ICESG **Greenland Ices** 66.80 4 *i* P **P** **06 08 03.4 +0.1**
ICESG IAmb IAmb 06 08 07.2
comp=Z,23nm,0.8s
ARBE **Arbavere** 66.81 332 *eP* **P** **06 08 02.4 -0.7**
RLMT **Red Lodge** 66.85 49 IAmb IAmb 06 08 22.5
comp=Z,16nm,1.2s
MSVF **Nonsavu** 66.90 150 LR LR 06 35 07.0
comp=Z,115nm,18.5s,baz=24,slow=34
RAF **Rauma** 66.92 335 *eP* **P** **06 08 04.2 +0.5**
TPAW **Teton Pass** 66.97 51 IAmb IAmb 06 08 23.4
comp=Z,15nm,0.9s
VORR **Voronezh** 67.21 321 *eP* **P** **06 08 06.2 +0.5**
VORR pmax pmax
comp=Z,111nm,1.4s
GRAC **Grapevine Rang** 67.26 60 IAmb IAmb 06 08 26.3
comp=Z,16nm,0.9s
VSU **Vasula** 67.30 331 *ce*P **P** **06 08 06.6 +0.4**
VSU pmax pmax
comp=Z,132nm,1.3s
LAO **LASA Array** 67.45 46 IAmb IAmb 06 08 09.5
comp=Z,15nm,0.8s
R11B **Troy Canyon, C** 67.50 58 P **P** **06 08 08.7 +0.6**
baz=309
Q12A **Willow Creek R** 67.53 57 IAmb IAmb 06 08 27.1
comp=Z,14nm,1.0s
VSR **Storozhevoye** 67.54 320 *eP* **P** **06 08 07.4 -0.4**
VSR pmax pmax
comp=Z,80nm,0.6s
VORD **Divnogorie** 67.65 320 *eP* **P** **06 08 07.9 -0.7**
VORD pmax pmax
comp=Z,170nm,1.2s
DZM **Mont Dzumac** 67.74 163 *e*LR LR 06 28 30.1
comp=Z,288nm,20.5s
DZM **Mont Dzumac** 67.74 163 LR LR 06 35 14.2
comp=Z,325nm,19.1s,baz=22,slow=34
SOEG **Soedalen** 67.90 0 *i* P **P** **06 08 10.3 +0.5**
SFJD **Kangerlussuaq** 68.03 8 *i* P **P** **06 08 10.5 -0.2**
SFJD IAmb IAmb 06 08 12.9
comp=Z,10nm,0.7s
MTSE **Matsula** 68.09 333 *eP* **P** **06 08 11.5 +0.3**
TBLU **Trondheim** 68.11 341 *eP* **P** **06 08 10.4 -0.8**
TBLU IAmb IAmb 06 08 10.9
comp=Z,31nm,0.9s
GWY **Greenwater Val** 68.20 60 IAmb IAmb 06 08 31.9
comp=Z,11nm,1.0s
PD31 **Pinedale Array** 68.21 51 P **P** **06 08 12.4 -0.1**
PDAR **Pinedale Array** 68.21 51 P **P** **06 08 12.1 -0.5**
PDAR **Pinedale Array** 68.21 51 P **P** **06 08 12.8 +0.2**
comp=Z,4.0nm,0.7s,baz=267,slow=2.1,SNR=47
PDAR pP **pwP** **06 08 26.2 +0.4**
comp=Z,3.3nm,0.7s,baz=251,slow=2.1,SNR=8.5
comp=Z,4.0nm,0.7s
PRN **Pahroc Range** 68.43 58 IAmb IAmb 06 08 51.4
comp=Z,21nm,1.4s
MAK **Makhachkala** 68.85 310 *eP* P 06 08 10.6 -5.6
MAK *eS* **S** **06 17 11.9 -6.5**
MAK *eSS* **SS** **06 21 46.9 +4.0**
MAK pmax pmax
comp=Z,159nm,1.0s
MAK MLR MLR
comp=Z,715nm,16.0s
DY2G **Dye2** 68.96 7 *i* P **P** **06 08 16.4 -0.3**
DY2G IAmb IAmb 06 08 18.1
comp=Z,16nm,0.7s
AS01 **Alice Springs** 69.07 195 P **P** **06 08 17.2 -0.5**
ASAR **Alice Springs** 69.08 195 LR LR 06 38 47.3
comp=Z,121nm,19.6s,baz=6.5,slow=36
MOL **Molde** 69.31 342 *eP* **P** **06 08 18.9 +0.1**
DOMB **Dombas** 69.44 341 *eP* **P** **06 08 19.7 +0.1**
MVU **Marysvale** 69.44 56 IAmb IAmb 06 08 22.0
comp=Z,14nm,0.8s
SLIT **Slitere, Latvi** 69.44 333 *eP* **P** **06 08 19.3 -0.3**
AKT **Akhty** 69.70 308 *c* *i*P **P** **06 08 22.4 +0.7**
AKT *e* 06 08 45.4

AKT *e*PPP PPP 06 12 39.7
AKT pmax pmax
comp=Z,71nm,1.0s
**LCMT Little Creek M 69.79 58** IAmb IAmb 06 08 24.5
comp=Z,12nm,0.8s
**NB2 NORSAR Subarra 69.80 340** P **P** **06 08 21.6 -0.2**
comp=Z,69nm,0.8s,baz=29,slow=6.5
**NB2 NORSAR Subarra 69.80 340** P **P** **06 08 21.6 -0.2**
baz=29,slow=6.5
**NOA NORSAR Array B 69.80 340** P **P** **06 08 21.7 -0.1**
comp=Z,55nm,0.8s,baz=31,slow=6.2,SNR=172
NOA pP **pwP** **06 08 34.4 -0.7**
comp=Z,34nm,0.9s,baz=31,slow=6.2,SNR=9.8
NOA LR LR 06 44 11.5
comp=Z,243nm,18.5s,baz=40,slow=40
comp=Z,55nm,0.8s
**GOF Gofitskoye 69.84 314***c i*P **P** **06 08 23.3 +1.0**
**MNK Minsk 69.89 328***d i*P **P** **06 08 23.5 +1.0**
**PALK Pallekele 69.91 260** P **P** **06 08 23.1 -0.1**
**HFS Hagfors 69.94 338** P **P** **06 08 22.2 -0.5**
comp=Z,68nm,0.7s,baz=62,slow=6.9,SNR=96
HFS pP **pwP** **06 08 34.9 -1.1**
comp=Z,28nm,0.6s,baz=46,slow=4.3,SNR=8.4
comp=Z,68nm,0.7s
**K22A Casper 69.97 50** IAmb IAmb 06 08 46.3
comp=Z,47nm,1.8s
**NC602 NORSAR Array S 69.98 340** IAmb IAmb 06 08 23.7
comp=Z,42nm,0.9s
**NC602 NORSAR Array S 69.98 340***e*P **P** **06 08 22.4 -0.5**
NC602 IAmb IAmb 06 08 23.4
comp=Z,44nm,0.9s
**PFO Pinyon Flats O 69.98 62** P **P** **06 08 22.2 -1.3**
PFO pmax pmax
comp=Z,7.0nm,1.0s
**TPFO Pinon Flats 69.99 62** P **P** **06 08 24.6 +1.1**
baz=310
**ULM Lac du Bonnet 70.02 38** P **P** **06 08 23.2 -0.1**
comp=Z,5.1nm,0.8s,baz=313,slow=6.2,SNR=6.9
ULM LR LR 06 41 34.4
comp=Z,229nm,19.6s,baz=334,slow=38
comp=Z,5.1nm,0.8s
**ULM Lac du Bonnet 70.02 38***e*P **P** **06 08 22.6 -0.7**
**KNB Kanab 70.04 58** IAmb IAmb 06 08 26.3
comp=Z,14nm,0.9s
**SRU San Rafael Swe 70.04 55** IAmb IAmb 06 08 42.8
comp=Z,16nm,0.8s
**RWWY Rawlins 70.23 51** IAmb IAmb 06 08 26.3
comp=Z,12nm,0.9s
**RSSD Black Hills 70.32 47** P **P** **06 08 25.3 -0.2**
RSSD IAmb IAmb 06 08 43.8
comp=Z,39nm,1.6s
**RSSD Black Hills 70.32 47** P **P** **06 08 25.3 -0.2**
RSSD pmax pmax
comp=Z,39nm,1.6s
**PABE Paberze 70.55 331***e*P **P** **06 08 27.1 +0.7**
**NCK Nalchik 70.61 312** *i*P **P** **06 08 26.9 -0.2**
NCK pmax pmax
comp=Z,43nm,0.7s
**NUUK Nuuk 70.63 10** *i*P **P** **06 08 27.0 +0.2**
NUUK IAmb IAmb 06 08 29.5
comp=Z,26nm,0.8s
**HMU Henry Mountain 70.69 56** IAmb IAmb 06 08 46.5
comp=Z,15nm,0.7s
**O20A White River Ci 70.69 53** IAmb IAmb 06 08 44.4
comp=Z,30nm,1.8s
**ERBR Yeremizino-Bor 70.70 315***e*P **P** **06 08 28.5 +0.9**
ERBR *e*S **S** **06 17 44.1 +3.9**
ERBR pmax pmax
comp=Z,97nm,0.8s
**FOO Floro 70.72 343***e*P **P** **06 08 27.9 +0.5**
**U15A North Rim 70.75 58** IAmb IAmb 06 08 30.6
comp=Z,12nm,0.9s
**KIV Kislovodsk 70.78 313** P **P** **06 08 28.3 +0.1**
**KIV Kislovodsk 70.78 313** *i*P **P** **06 08 29.5 +1.3**
SNR=11
**KIV Kislovodsk 70.78 313** P **P** **06 08 30.1 +1.8**
KIV P **P** **06 08 30.1 +1.8**
**KIV Kislovodsk 70.78 313** ⇓P **P** **06 08 30.0 +1.8**
**KIV Kislovodsk 70.78 313***e*P **P** **06 08 29.2 +1.0**
**KIV Kislovodsk 70.78 313***e*P **P** **06 08 29.2 +1.0**
KIV *e*S **S** **06 17 45.1 +3.7**
KIV pmax pmax
comp=Z,71nm,1.0s
KIV pmax pmax
comp=Z,32nm,3.0s
**KIV Kislovodsk 70.78 313** P **P** **06 08 29.7 +1.5**
comp=Z,85nm,0.9s,comp=Z,812nm
**SKAR Skarslia 70.81 341***e*P **P** **06 08 28.8 +0.7**
**KBZ Khabaz 70.83 313** P **P** **06 08 29.2 +0.9**
comp=Z,58nm,0.8s,baz=52,slow=3.8,SNR=129
KBZ LR LR 06 44 10.0
comp=Z,2µm,18.9s,baz=42,slow=40
comp=Z,58nm,0.8s
**KBZ Khabaz 70.83 313***ce*P **P** **06 08 29.6 +1.3**
KBZ pmax pmax
comp=Z,69nm,0.9s
**PBUR Paburge 70.84 332***e*P **P** **06 08 28.9 +0.7**
**HYA Hoyanger 70.86 342***e*P **P** **06 08 28.7 +0.5**
HYA IAmb IAmb 06 08 29.4
comp=Z,87nm,0.9s
**OSL Oslo 70.88 340***e*P **P** **06 08 29.0 +0.7**
**SHA1 Shidzhatmaz 70.95 313***ce*P **P** **06 08 30.8 +1.4**
**BORG Borgarnes 71.14 356** P **P** **06 08 30.6 +0.7**
**BORG Borgarnes 71.14 356** P **P** **06 08 30.6 +0.7**
BORG pmax pmax
comp=Z,54nm,0.9s
**SUE Sulen 71.27 343***e*P **P** **06 08 31.1 +0.5**
**LABN Labinsk 71.33 315***e*P **P** **06 08 32.3 +0.9**
**KONO Kongsberg 71.41 340** P **P** **06 08 31.6 0.0**
**KONO Kongsberg 71.41 340** P **P** **06 08 31.6 0.0**
KONO pmax pmax
comp=Z,37nm,1.0s
**N23A Red Feather La 71.47 51** P **P** **06 08 32.5 -0.2**
baz=313
**WRKA Warakurna 71.65 200** P **P** **06 08 34.7 +1.3**
**WRKA Warakurna 71.65 200** P **P** **06 08 34.1 +0.7**
comp=Z,15nm,1.0s
**ASK Askoy 71.69 342***e*P **P** **06 08 34.3 +1.0**
**BER Bergen 71.75 342***e*P **P** **06 08 34.3 +0.7**
**NGCH Negor - Chabah 71.77 288** P **P** **06 08 35.4 +1.1**
**ODD1 Odda 71.88 341***e*P **P** **06 08 35.1 +0.6**
ODD1 IAmb IAmb 06 08 35.9
comp=Z,48nm,1.0s
**SUW Suwalki 72.01 330***e*P **P** **06 08 35.4 +0.1**
**SUW Suwalki 72.01 330***e*P **P** **06 08 35.9 +0.6**
**AK23 Malin Array Si 72.25 325** P **P** **06 08 36.8 0.0**
**AKASG Malin Array Be 72.25 325** P **P** **06 08 36.7 -0.1**
**AKASG Malin Array Be 72.25 325** P **P** **06 08 36.7 -0.1**
comp=Z,27nm,0.8s,baz=38,slow=6.3,SNR=115
AKASG pP **pwP** **06 08 49.2 -0.9**
comp=Z,29nm,0.7s,baz=37,slow=5.9,SNR=15
comp=Z,27nm,0.8s
**AKBB Malin Array Si 72.25 325***ce*P **P** **06 08 36.5 -0.3**
AKBB pmax pmax
comp=Z,104nm,1.1s
**AKBB Malin Array Si 72.25 325** P **P** **06 08 36.6 -0.3**
**KIEV Kiev 72.27 325** P **P** **06 08 36.6 -0.3**
**KIEV Kiev 72.27 325** *i*P **P** **06 08 36.7 -0.3**
SNR=6.5
**KIEV Kiev 72.27 325** ⇑P **P** **06 08 37.5 +0.6**
**KIEV Kiev 72.27 325** P **P** **06 08 37.5 +0.6**
**KIEV Kiev 72.27 325** P **P** **06 08 36.3 -0.6**
comp=Z,260nm,1.0s,comp=Z,3µm
**GNI Garni 72.27 309** LR LR 06 44 00.7
comp=Z,527nm,18.4s,baz=32,slow=39
**GNI Garni 72.27 309** P **P** **06 08 38.2 +0.8**
GNI P **P** **06 08 38.2 +0.8**
**GNI Garni 72.27 309***ce*P **P** **06 08 39.6 +2.2**
GNI pmax pmax
comp=Z,29nm,1.3s
**AK05 Malin Array Si 72.32 325** P **P** **06 08 37.3 0.0**
**BLS5 Blasjo 72.36 341***e*P **P** **06 08 38.2 +0.8**
**VSLR Vesyoloye 72.51 314***e*P **P** **06 08 39.2 +0.7**
VSLR pmax pmax
comp=Z,79nm,0.9s
**BRIGG Briggsdale 72.59 50** IAmb IAmb 06 08 58.3
comp=Z,30nm,1.1s
**SOC Sochi 72.59 314***e*P **P** **06 08 38.5 -0.4**
**SOC Sochi 72.59 314***e*P **P** **06 08 38.5 -0.4**
SOC *e* 06 11 18.0
SOC *e*PPP PPP 06 12 59.7
SOC *e*S **S** **06 18 06.0 +4.1**
SOC *e*SS **SS** **06 22 42.2 +1.9**
SOC pmax pmax
comp=Z,28nm,0.6s

**X16A Lo Mia Camp, P 72.59 59** IAmb IAmb 06 08 41.6
comp=Z,12nm,0.8s
**MI30 MI30,Zelenitsa 72.64 325** P **P** **06 08 38.7 -0.5**
**MI28 Mi28,Pidlybu 72.71 326** P **P** **06 08 39.4 -0.2**
**OOD Oodnadatta 72.80 193** P **P** **06 08 41.9 +1.7**
**KMY Karmoy 72.83 342***e*P **P** **06 08 41.2 +1.1**
KMY IAmb IAmb 06 08 41.7
comp=Z,72nm,1.0s
**ANN Anapa 72.87 316***e*P **P** **06 08 40.7 +0.1**
ANN *e* 06 11 20.5
ANN *e*S **SKiKP** **06 18 11.2 -0.7**
ANN pmax pmax
comp=Z,40nm,0.8s
**HOMB Homborsund 72.89 340***e*P **P** **06 08 41.1 +0.7**
HOMB IAmb IAmb 06 08 41.6
comp=Z,68nm,1.1s
**F33A 5 Mile Ranch, 73.01 42** IAmb IAmb 06 08 55.1
comp=Z,12nm,0.7s
**BCA Borcka 73.08 312** ⇓P **P** **06 08 43.5 +1.5**
**S22A 4UR Ranch, Cre 73.11 54** P **P** **06 08 42.6 +0.1**
baz=313
**SNART Snartemo 73.15 340***e*P **P** **06 08 42.8 +0.8**
**W18A Petrified Fore 73.17 57** P **P** **06 08 42.5 -0.3**
baz=313
**Q24A Divide 73.24 52** P **P** **06 08 43.2 -0.1**
baz=314
**214A Organ Pipe Nat 73.38 62** P **P** **06 08 44.6 +0.6**
baz=312
**LUBAR Lubar, Ukraine 73.46 325** P **P** **06 08 43.9 -0.1**
**K30B Basset 73.64 46** IAmb IAmb 06 08 46.5
comp=Z,32nm,0.8s
**EYMN Ely 73.66 38** P **P** **06 08 45.2 0.0**
EYMN IAmb IAmb 06 08 46.2
comp=Z,20nm,1.1s
**BSD Bornholm Skovb 73.85 335***e*P **P** **06 08 46.1 -0.1**
**BSD Bornholm Skovb 73.85 335** *i*P **P** **06 08 45.2 -1.0**
BSD IAmb IAmb 06 08 48.0
comp=Z,63nm,0.9s
**SDCO Great Sand Dun 73.88 53** P **P** **06 08 47.4 +0.3**
**COP Copenhagen 74.10 336** *i*P **P** **06 08 47.8 +0.1**
COP IAmb IAmb 06 08 49.5
comp=Z,81nm,0.7s
**SIM Simferopol' 74.38 318***e*P **P** **06 08 50.0 +0.5**
SIM *e* 06 09 06.0
SIM *e*S **S** **06 18 21.0 -1.2**
SIM pmax pmax
comp=Z,43nm,0.8s
SIM MLR MLR
comp=Z,500nm,17.5s
**ECSD EROS Data Cent 74.39 44** P **P** **06 08 49.5 -0.1**
ECSD IAmb IAmb 06 09 08.1
comp=Z,19nm,1.1s
**TUC Tucson 74.42 60** P **P** **06 08 50.6 +0.6**
**TUC Tucson 74.42 60** P **P** **06 08 50.6 +0.6**
TUC pmax pmax
comp=Z,7.0nm,1.0s
**SORM Soroca 74.59 324** ⇓P **P** **06 08 51.1 +0.5**
**SORM Soroca 74.59 324** P **P** **06 08 51.1 +0.5**
**SORM Soroca 74.59 324** P **P** **06 08 50.0 -0.6**
comp=Z,49nm,0.9s,comp=Z,3µm
**BEL Belsk 74.63 330***e*P **P** **06 08 51.8 +1.0**
BEL *e*PcP **pwP** **06 09 04.2 +0.2**
**NDNU Novodnistrovsk 74.65 324** P **P** **06 08 50.8 -0.2**
**GKP Gorka Klasztor 74.67 333***e*P **P** **06 08 51.1 +0.1**
GKP *e*PcP **pwP** **06 09 04.2 -0.1**
**GKP Gorka Klasztor 74.67 333***e*P **P** **06 08 51.5 +0.6**
**BANOM Banah 74.68 291** P **P** **06 08 52.2 +0.6**
BANOM P **P** **06 08 52.2 +0.6**
**SHME Shamm 74.70 291** P **P** **06 08 52.1 +0.5**
**SHME Shamm 74.70 291** P **P** **06 08 51.9 +0.3**
SHME P **P** **06 08 51.9 +0.3**
**WSAR Wadi Sarin 74.88 288** LR LR 06 46 52.9
comp=Z,414nm,18.1s,baz=72,slow=40
**GURO Guroymak-BITLI 74.89 309** IAmb IAmb 06 08 55.5
comp=Z,26nm,0.9s
**T25A Trinidad 74.92 53** P **P** **06 08 53.2 +0.2**
baz=314
**LVV L'vov 75.03 327***e*P **P** **06 08 52.5 -0.7**
LVV *e* 06 11 42.2
LVV *e*S **S** **06 18 25.6 -3.7**
LVV *e*PS **PnS** **06 19 18.9 +13**
LVV pmax pmax
comp=Z,170nm,1.5s
LVV MLR MLR
comp=E,300nm,18.0s
LVV MLR MLR
comp=N,300nm,17.0s
LVV MLR MLR
comp=Z,400nm,18.0s
**LCRK Leigh Creek 75.04 190** P **P** **06 08 54.6 +1.4**
**KMPD K-Podol'skiy 75.05 325** P **pP** **06 08 52.7 -7.0**
KMPD P **P** **06 08 52.6 -0.7**
**WBK Wadi Bani Khal 75.07 287** P **P** **06 08 54.8 +0.9**
WBK P **P** **06 08 54.8 +0.9**
**JLN Jalan Bani Buh 75.07 286** P **P** **06 08 55.1 +1.3**
JLN P **P** **06 08 55.1 +1.3**
**MDH Madha 75.09 291** P **P** **06 08 53.9 -0.1**
**MDH Madha 75.09 291** P **P** **06 08 54.6 +0.6**
**MASF Masafi 75.14 291** P **P** **06 08 54.9 +0.7**
**MSFE Esma-Masafi 75.15 291** P **P** **06 08 54.8 +0.5**
**ANMO Albuquerque 75.25 56** P **P** **06 08 55.0 0.0**
**ANMO Albuquerque 75.25 56** *i*P **P** **06 08 55.3 +0.3**
ANMO pmax pmax
comp=Z,3.0nm,0.8s
**KIS Kishinev 75.26 323**⇑ *i*P **P** **06 08 54.6 +0.1**
comp=Z,50nm,2.8s
KIS *e*L L 06 43 47.0
KIS LRM MLR 06 44 35.0
comp=Z,300nm,22.5s
**KIS Kishinev 75.26 323***c i*P **P** **06 08 54.6 +0.1**
KIS pmax pmax
comp=Z,50nm,2.8s
KIS MLR MLR
comp=Z,300nm,22.5s
**DUN6 Lazy B Ranch 75.30 59** IAmb IAmb 06 09 14.5
comp=Z,40nm,1.0s
**MILM Milestii Mici 75.32 323**⇑ *i*P **P** **06 08 54.5 -0.4**
comp=Z,200nm,4.7s
MILM *e*S S 06 18 43.0 +10
MILM *e*L L 06 43 38.0
**MILM Milestii Mici 75.32 323**⇑⇑P **P** **06 08 55.4 +0.5**
**MILM Milestii Mici 75.32 323** P **P** **06 08 55.3 +0.5**
**UOSS Minazif 75.39 291** P **P** **06 08 55.3 -0.4**
**UOSS Minazif 75.39 291** *i*P **P** **06 08 55.8 +0.1**
SNR=8.9
**UOSS Minazif 75.39 291** P **P** **06 08 56.0 +0.4**
UOSS P **P** **06 08 56.0 +0.4**
**SMDO Samad 75.40 288** P **P** **06 08 57.2 +1.3**
SMDO P **P** **06 08 57.2 +1.3**
**MULG Mulgathing 75.51 194** P **P** **06 08 57.3 +1.4**
**HATD Hatta, Dubai 75.52 290** *i*P **P** **06 08 57.1 +0.7**
SNR=10.0
**HATD Hatta, Dubai 75.52 290** P **P** **06 08 57.0 +0.6**
SNR=5.9
HATD P **P** **06 08 57.0 +0.6**
SNR=5.9
**HOQ Hoqain 75.55 289** P **P** **06 08 57.5 +0.8**
HOQ P **P** **06 08 57.5 +0.8**
**HMDM Hanimaadhoo 75.62 265** P **P** **06 08 56.8 -0.2**
**MORS Morshin 75.64 327** P **P** **06 08 56.4 -0.2**
**ASHO Ashiyiah 75.67 290** *i*P **P** **06 08 57.2 -0.1**
SNR=7.0
**ASHO Ashiyiah 75.67 290** P **P** **06 08 57.4 +0.1**
SNR=5.0
ASHO P **P** **06 08 57.4 +0.1**
SNR=5.0
**KWP Kalwaria Pacla 75.70 328***e*P **P** **06 08 57.9 +0.8**
**KWP Kalwaria Pacla 75.70 328** P **P** **06 08 57.6 +0.6**
comp=Z,135nm,1.1s,comp=Z,2µm
**SOHO SOHO 75.71 290** P **P** **06 08 57.8 +0.3**
SOHO P **P** **06 08 57.8 +0.3**
**NAZ Nazwa, Dubai 75.73 291** P **P** **06 08 58.0 +0.4**
**STNU Starunia 75.73 326** P **P** **06 08 56.9 -0.3**
**SHIU Shidnytsya 75.77 327** P **P** **06 08 58.2 +0.7**
**L34A Svendsen Farm, 75.80 45** IAmb IAmb 06 09 12.4
comp=Z,16nm,0.7s
**KSV Kosov 75.81 325** P **P** **06 08 57.1 -0.6**
**JMDO Jabal Madar 75.82 287** P **P** **06 08 59.1 +1.0**
JMDO P **P** **06 08 59.1 +1.0**
**FAQ Al Faqa, Dubai 75.94 291** P **P** **06 08 59.0 +0.2**
**FAQ Al Faqa, Dubai 75.94 291** P **P** **06 08 59.3 +0.5**
FAQ P **P** **06 08 59.3 +0.5**
**319A Douglas 75.99 60** IAmb IAmb 06 09 01.1
comp=Z,22nm,0.8s

**STKA Stephens Creek 76.09 187** P **P** **06 09 00.7 +1.4**
comp=Z,4.7nm,0.9s,baz=345,slow=6.6,SNR=8.0
STKA LR LR 06 47 35.6
comp=Z,168nm,18.3s,baz=19,slow=40
comp=Z,4.7nm,0.9s
**STKA Stephens Creek 76.09 187***e*P **P** **06 09 00.4 +1.2**
**COWI Conover 76.11 38** IAmb IAmb 06 09 16.9
comp=Z,22nm,1.4s
**121A Cookes Peak, D 76.11 58** IAmb IAmb 06 09 02.2
comp=Z,15nm,0.9s
**121A Cookes Peak, D 76.11 58** P **P** **06 08 59.9 0.0**
baz=314
**BSY Bisya 76.19 288** P **P** **06 09 01.3 +1.0**
BSY P **P** **06 09 01.3 +1.0**
**ASUD Al Ashush, Dub 76.20 291** P **P** **06 09 00.9 +0.7**
**ASUD Al Ashush, Dub 76.20 291** P **P** **06 09 01.0 +0.7**
**BSEG Bad Segeberg 76.23 337***e*P **P** **06 09 00.6 +0.7**
comp=Z,96nm,1.6s,baz=29,slow=5.5
**ARQ Araqi 76.25 289** P **P** **06 09 01.6 +0.9**
**DIKM Dikmen 76.26 315**⇑P **P** **06 09 01.6 +1.3**
**DIKM Dikmen 76.26 315** P **P** **06 09 01.4 +1.1**
comp=Z,46nm,0.7s,comp=Z,530nm
**MEZ Mezhgor'ye 76.28 326** P **P** **06 09 00.5 +0.1**
**BUR08 Bucovina Ar. S 76.29 325** IAmb IAmb 06 09 02.9
comp=Z,21nm,0.8s
**ALNE Al Ain 76.29 290** P **P** **06 09 01.4 +0.5**
**BURAR Bucovina Array 76.31 325** P **P** **06 09 01.2 +0.5**
**BURAR Bucovina Array 76.31 325**⇑P **P** **06 09 01.5 +0.8**
**BURAR Bucovina Array 76.31 325** P **P** **06 09 01.2 +0.5**
**OJC Ojcow 76.31 330***e*P **P** **06 09 01.0 +0.5**
OJC *e*PcP **pwP** **06 09 13.4 -0.4**
**OJC Ojcow 76.31 330** P **P** **06 09 00.6 +0.1**
comp=Z,63nm,1.0s,comp=Z,884nm
**RTBA Rita Blanca 76.37 52** IAmb IAmb 06 11 40.3
comp=Z,23nm,1.1s
**RAKU Rahkiv 76.41 326** P **P** **06 08 59.8 -1.3**
**KOLS Kolonicke sedl 76.43 327***e*P **P** **06 09 01.8 +0.6**
KOLS *e* 06 09 14.9
KOLS pmax pmax
comp=Z,27nm,0.8s
**KOLS Kolonicke sedl 76.43 327***e*P **P** **06 09 01.8 +0.6**
KOLS *e* 06 09 14.9
**RUE Ruedersdorf 76.45 334***e*P **P** **06 09 02.1 +0.9**
**AJN Ajban 76.47 291** P **P** **06 09 01.8 +0.1**
**VLDR Vladesti 76.48 322** ⇓P **P** **06 09 02.5 +1.0**
**SCHQ Schefferville 76.56 21** P **P** **06 09 02.1 +0.3**
comp=Z,10.0nm,0.9s,baz=338,slow=5.7,SNR=6.7
comp=Z,10.0nm,0.9s
**TESR Tescani 76.58 323**⇑P **P** **06 09 02.4 +0.4**
**TESR Tescani 76.58 323** P **P** **06 09 01.8 -0.3**
comp=Z,41nm,0.9s
**GHRR 76.60 323** P **P** **06 09 03.3 +1.1**
**BRIU Brid 76.62 327** P **P** **06 09 02.7 +0.5**
**MUKU Mukachevo 76.66 327** P **P** **06 09 02.9 +0.5**
**TLCR 76.66 321**⇑P **P** **06 09 02.5 0.0**
**TLCR 76.66 321** P **P** **06 09 02.5 0.0**
**HOLU Holmets 76.72 327** P **P** **06 09 03.4 +0.6**
**KORU Korolevo 76.72 326** P **P** **06 09 03.5 +0.7**
**CRVS Cervenica-Dubn 76.77 328***e*P **P** **06 09 04.1 +1.0**
CRVS pmax pmax
comp=Z,57nm,1.1s
**CRVS Cervenica-Dubn 76.77 328***e*P **P** **06 09 04.1 +1.0**
**NIE Niedzica 76.78 329***e*P **P** **06 09 04.3 +1.1**
NIE *e*PcP **pwP** **06 09 16.7 +0.1**
**NIE Niedzica 76.78 329** P **P** **06 09 03.7 +0.5**
comp=Z,20nm,1.1s
**F42A Maple Grove Fa 76.82 37** IAmb IAmb 06 09 04.4
comp=Z,11nm,0.8s
**MHTO MHTO 76.84 286** P **P** **06 09 04.9 +0.9**
SNR=6.1
MHTO P **P** **06 09 04.9 +0.9**
SNR=6.1
**BERU Beregovo 76.85 327** P **P** **06 09 04.3 +0.7**
**CFR Carcaliu 76.97 322**⇑P **P** **06 09 04.7 +0.4**
**CFR Carcaliu 76.97 322** P **P** **06 09 04.6 +0.4**
**ODBI Odobesti 76.99 323**⇑P **P** **06 09 05.7 +1.3**
**ODBI Odobesti 76.99 323** P **P** **06 09 05.9 +1.5**
comp=Z,42nm,0.9s,comp=Z,706nm
**KSP Ksiaz 77.03 332***e*P **P** **06 09 05.0 +0.5**
**KSP Ksiaz 77.03 332** P **P** **06 09 04.4 -0.1**
comp=Z,43nm,1.0s,comp=Z,686nm
**VRI Vrincioaia 77.05 323**⇑P **P** **06 09 06.0 +1.2**
**VRI Vrincioaia 77.05 323** P **P** **06 09 06.0 +1.2**
**VRI Vrincioaia 77.05 323** P **P** **06 09 06.0 +1.2**
comp=Z,13nm,0.8s,comp=Z,149nm
**TPGR Topolog 77.09 321**⇑P **P** **06 09 05.6 +0.6**
**PLOR5 Plostina Array 77.09 323** P **P** **06 09 06.2 +1.2**
comp=Z,20nm,1.0s
**PLOR Plostina 77.09 323**⇑P **P** **06 09 06.3 +1.2**
**PLOR Plostina 77.09 323** P **P** **06 09 06.2 +1.2**
**PLOR3 Plostina Array 77.09 323** P **P** **06 09 05.7 +0.6**
comp=Z,14nm,0.9s
**TURR Tarria 77.21 324**⇑P **P** **06 09 07.2 +1.6**
**FORT Forrest 77.21 199** P **P** **06 09 07.5 +1.9**
**FORT Forrest 77.21 199** P **P** **06 09 06.9 +1.3**
FORT IAmb IAmb 06 09 07.9
comp=Z,29nm,0.8s
**FORT Forrest 77.21 199** P **P** **06 09 06.8 +1.3**
comp=Z,40nm,0.9s
**OKC Ostrava-Krasne 77.22 330** AMS AMS 06 47 30.0
comp=Z,700nm,16.3s
**OZUR 77.27 324**⇑P **P** **06 09 07.6 +1.6**
**COVR Voineasa-Covas 77.29 323**⇑P **P** **06 09 07.1 +1.0**
**OSTC Ostas 77.29 332***e*P **P** **06 09 06.8 +0.7**
OSTC AMS AMS 06 47 50.0
comp=Z,600nm,14.0s
**OSTC Ostas 77.29 332***e*P **P** **06 09 06.8 +0.7**
OSTC MLR MLR
comp=Z,600nm,14.0s
**LANS Liptovska Anna 77.31 329***e*P **P** **06 09 07.7 +1.5**
LANS pmax pmax
comp=Z,22nm,0.8s
**LANS Liptovska Anna 77.31 329***e*P **P** **06 09 07.7 +1.5**
LANS *e* 06 09 31.2
**CHVC Chvalec 77.32 332***e*P **P** **06 09 07.0 +0.8**
CHVC AMS AMS 06 47 50.0
comp=Z,600nm,15.6s
**CHVC Chvalec 77.32 332***e*P **P** **06 09 07.0 +0.8**
CHVC MLR MLR
comp=Z,600nm,15.6s
**FLTG Flechtingen 77.36 335***e*P **P** **06 09 06.3 0.0**
comp=Z,36nm,0.8s,baz=29,slow=5.5
**UPC Upice 77.41 332***e*P **P** **06 09 07.5 +0.8**
UPC AMS AMS 06 48 00.0
comp=Z,600nm,15.0s
**UPC Upice 77.41 332***e*P **P** **06 09 07.5 +0.8**
UPC MLR MLR
comp=Z,600nm,15.0s
**SCIA State Center 77.42 43** IAmb IAmb 06 09 08.0
comp=Z,23nm,0.8s
**DPC Dobruska-Polom 77.43 331***e*P **P** **06 09 07.8 +0.9**
DPC AMS AMS 06 47 50.0
comp=Z,500nm,16.2s
**DPC Dobruska-Polom 77.43 331***e*P **P** **06 09 07.8 +0.9**
DPC MLR MLR
comp=Z,500nm,16.2s
**DPC Dobruska-Polom 77.43 331** P **P** **06 09 07.4 +0.5**
comp=Z,27nm,1.1s,comp=Z,672nm
**HARR Harsova 77.44 322** ⇓P **P** **06 09 07.6 +0.7**
**HARR Harsova 77.44 322** P **P** **06 09 07.8 +0.9**
**KECS Kecovo 77.48 328***e*P **P** **06 09 07.9 +0.8**
**KECS Kecovo 77.48 328***e*P **P** **06 09 07.9 +0.8**
**MORC Moravsky Berou 77.49 330***e*P **P** **06 09 08.0 +0.8**
**MORC Moravsky Berou 77.49 330**⇑P **P** **06 09 08.1 +0.9**
**MORC Moravsky Berou 77.49 330** P **P** **06 09 08.1 +0.9**
**KRLC Kraliky 77.51 331***e*P **P** **06 09 08.2 +0.9**
KRLC AMS AMS 06 51 40.0
comp=Z,700nm,14.8s
**KRLC Kraliky 77.51 331***e*P **P** **06 09 08.2 +0.9**
KRLC MLR MLR
comp=Z,700nm,14.8s
**DOPR Dopca 77.54 324**⇑P **P** **06 09 08.5 +1.0**
**NRDL Niedersach Rie 77.56 336***e*P **P** **06 09 07.6 +0.3**
comp=Z,32nm,1.0s,baz=29,slow=5.5
**RETH Rethem/Aller, 77.56 337***e*P **P** **06 09 07.9 +0.5**
comp=Z,38nm,1.0s,baz=29,slow=5.5
**MESR Meseseni 77.61 326**⇑P **P** **06 09 08.6 +0.8**
**JRN Qarnain Island 77.64 293** P **P** **06 09 07.1 -1.2**
JRN P **P** **06 09 07.1 -1.2**
**CBBR Cluj-Babes-Bol 77.67 325** ⇓P **P** **06 09 08.8 +0.6**
**MLR Muntele Rosu 77.68 323** IAmb IAmb 06 09 23.9
comp=Z,14nm,0.7s
**MLR Muntele Rosu 77.68 323** ⇓P **P** **06 09 09.6 +1.1**
**MLR Muntele Rosu 77.68 323** P **P** **06 09 09.1 +0.6**

MLR **Muntele Rosu** 77.68 323 P P 06 09 09.0 +0.6
comp=Z,21nm,0.7s
CJR **Cluj-Napoca** 77.69 325 ⇑P P 06 09 08.8 +0.3
CJR **Cluj-Napoca** 77.69 325 P P 06 09 08.7 +0.3
CLL **Collm** 77.71 334 ⇑*i*P P 06 09 08.4 0.0
CLL *eS* S 06 18 59.0 +0.4
CLL *e* 06 19 21.0
CLL pmax pmax
comp=Z,71nm,0.8s
CLL MLR MLR
comp=Z,400nm,18.2s
**CLL Collm** 77.71 334 P P 06 09 07.9 -0.4
comp=Z,101nm,0.9s,comp=Z,857nm
**CLL Collm** 77.71 334 *e*P P 06 09 08.3 0.0
comp=Z,81nm,1.0s,baz=29,slow=5.5
**ISR Istrita** 77.72 323 ⇓P P 06 09 09.8 +1.2
**ISR Istrita** 77.72 323 P P 06 09 09.7 +1.2
**ISR Istrita** 77.72 323 P P 06 09 09.2 +0.6
comp=Z,71nm,0.9s
**MAUC Maruska** 77.73 330 *e*P P 06 09 09.7 +1.1
**BRG Berggiesshubel** 77.78 333 *e*P P 06 09 09.1 +0.3
BRG Amp 06 09 11.5
comp=Z,19nm,1.0s
**BRG Berggiesshubel** 77.78 333 *e*P P 06 09 09.0 +0.3
BRG pmax pmax
comp=Z,19nm,1.0s
BRG MLR MLR
comp=N,431nm,18.1s
BRG MLR MLR
comp=E,281nm,20.1s
BRG MLR MLR
comp=Z,706nm,15.1s
**BRG Berggiesshubel** 77.78 333 *e*P P 06 09 08.9 +0.2
comp=Z,19nm,1.0s,baz=29,slow=5.5
**PVCC Panska Ves** 77.87 333 AMS AMS 06 50 20.0
comp=Z,500nm,15.1s
**I42A Draeger Farm,** 77.93 39 IAmb IAmb 06 09 28.0
comp=Z,34nm,1.6s
**ICOR Ion Corvin** 77.95 321 ⇑P P 06 09 10.9 +1.1
**DRGR** 77.99 326 ⇓P P 06 09 10.9 +0.8
**DRGR** 77.99 326 P P 06 09 10.4 +0.3
**CLZ Clausthal** 78.05 336 *e*P P 06 09 11.0 +0.7
comp=Z,66nm,1.2s,baz=29,slow=5.5
**KBD Kabd** 78.07 299 P P 06 09 10.4 -0.3
**VYHS Vyhne** 78.09 329 *e*P P 06 09 11.5 +1.0
VYHS *e* 06 09 23.8
VYHS pmax pmax
comp=Z,23nm,1.0s
**VYHS Vyhne** 78.09 329 *e*P P 06 09 11.5 +1.0
VYHS *e* 06 09 23.8
VYHS *e* 06 09 35.2
**VOIR** 78.11 324 ⇓P P 06 09 12.0 +1.2
**VOIR** 78.11 324 P P 06 09 11.6 +0.8
**VOIR** 78.11 324 P P 06 09 11.3 +0.5
comp=Z,28nm,1.1s
**EKA Eskdalemuir Ar** 78.17 345 P P 06 09 11.4 +0.6
comp=Z,9.5nm,0.8s,baz=24,slow=4.6,SNR=16
EKA pP **pwP** 06 09 23.6 -0.6
comp=Z,14nm,0.8s,baz=27,slow=4.6,SNR=10.0
comp=Z,9.5nm,0.8s
**PSZ Piszkesteto** 78.17 328 ⇑P P 06 09 12.2 +1.0
**PSZ Piszkesteto** 78.17 328 P P 06 09 12.1 +1.0
**HSKC Hora Svate Kat** 78.18 333 *e*P P 06 09 11.2 +0.2
HSKC AMS AMS 06 48 20.0
comp=Z,700nm,16.0s
**JAVC Velka Javorina** 78.21 330 *e*P P 06 09 12.9 +1.6
**VRAC Vranov** 78.22 331 *e*P P 06 09 12.1 +0.8
**VRAC Vranov** 78.22 331 ⇑P P 06 09 12.1 +0.8
**VRAC Vranov** 78.22 331 P P 06 09 12.0 +0.8
**SHMA Al-Shehemyia** 78.26 295 P P 06 09 12.0 +0.2
**GHWR Ruwais** 78.29 292 P P 06 09 11.9 -0.1
GHWR P P 06 09 11.9 -0.1
**PRA Prague** 78.31 332 *e*P P 06 09 12.7 +1.0
PRA AMS AMS 06 47 30.0
comp=Z,500nm,18.1s
**PRA Prague** 78.31 332 *e*P P 06 09 12.7 +1.0
PRA MLR MLR
comp=Z,500nm,18.1s
**GOPC GO Pecny, Ondr** 78.33 332 *e*P P 06 09 12.5 +0.7
GOPC *ex* x 06 09 25.1
GOPC AMS AMS 06 47 30.0
comp=Z,500nm,16.8s
**GOPC GO Pecny, Ondr** 78.33 332 *e*P P 06 09 12.5 +0.7
GOPC *e* 06 09 25.1
GOPC MLR MLR
comp=Z,500nm,16.8s
**ARR Arges** 78.34 324 ⇑P P 06 09 13.4 +1.3
**PRU Pruhonice** 78.34 332 *e*P P 06 09 12.8 +0.9
PRU *ex* x 06 19 13.5
PRU AMS AMS 06 47 20.0
comp=Z,500nm,19.2s
**PRU Pruhonice** 78.34 332 *e*P P 06 09 12.8 +0.9
PRU *e* 06 19 13.5
PRU MLR MLR
comp=Z,500nm,19.2s
**IBBN Ibbenburen** 78.39 337 *e*P P 06 09 12.7 +0.6
comp=Z,40nm,0.8s,baz=29,slow=5.5
**GTTG Gottingen** 78.43 336 *e*P P 06 09 12.9 +0.6
comp=Z,43nm,1.0s,baz=29,slow=5.5
**SAKB Bahrain** 78.45 295 P P 06 09 12.7 -0.1
**KRUC Moravsky** 78.50 331 *e*P P 06 09 13.5 +0.8
**BR131 Keskin Array S** 78.51 315 IAmb IAmb 06 09 15.1
comp=Z,66nm,1.8s
**BR131 Keskin Array S** 78.51 315 *c*P P 06 09 13.7 +0.6
**BRTR Keskin Array B** 78.51 315 P P 06 09 12.8 -0.4
**BRTR Keskin Array B** 78.51 315 P P 06 09 13.8 +0.6
comp=Z,8.3nm,0.9s,baz=85,slow=3.5,SNR=44
BRTR pP **pwP** 06 09 26.9 +0.4
comp=Z,7.1nm,0.9s,baz=68,slow=4.3,SNR=6.8
comp=Z,8.3nm,0.9s
**BR106 Keskin Array S** 78.51 315 P P 06 09 13.7 +0.5
comp=Z,12nm,1.1s,comp=Z,110nm
**BR104 Keskin Array S** 78.52 315 P P 06 09 13.6 +0.4
comp=Z,15nm,1.0s,comp=Z,116nm
**BR105 Keskin Array S** 78.53 315 P P 06 09 13.5 +0.2
comp=Z,13nm,1.3s,comp=Z,124nm
**MZR Muzera** 78.54 291 P P 06 09 13.8 +0.3
SNR=7.1
MZR P P 06 09 13.8 +0.3
SNR=7.1
**SMOL Smolenice** 78.59 330 *e*P P 06 09 14.7 +1.4
SMOL pmax pmax
comp=Z,16nm,0.8s
**TANN Tannenbergstha** 78.66 334 *e*P P 06 09 13.6 -0.1
comp=Z,14nm,1.0s,baz=29,slow=5.5
**PLN Plauen** 78.69 334 *e*P P 06 09 14.2 +0.4
comp=Z,23nm,1.0s,baz=29,slow=5.5
**MOX Moxa** 78.72 334 *e*P P 06 09 14.2 +0.2
comp=Z,21nm,0.9s,baz=29,slow=5.5
MOX *eL* L 06 48 35.0
comp=Z,305nm,19.6s
**KIRS Kirsehir-Merke** 78.81 314 ⇑P P 06 09 15.7 +0.9
**ANTO Ankara** 78.83 316 P P 06 09 15.4 +0.5
**ANTO Ankara** 78.83 316 P P 06 09 16.2 +1.4
ANTO P P 06 09 16.2 +1.4
**ANTO Ankara** 78.83 316 ⇑P P 06 09 16.1 +1.4
**ANTO Ankara** 78.83 316 P P 06 09 15.4 +0.5
ANTO pmax pmax
comp=Z,35nm,0.8s
**ANTO Ankara** 78.83 316 P P 06 09 15.2 +0.4
comp=Z,28nm,1.1s,comp=Z,268nm
**SIRR Siria** 78.84 326 ⇑P P 06 09 15.0 +0.3
**RAO Raoul Island** 78.90 151 LR LR 06 41 28.1
comp=Z,283nm,19.3s,baz=104,slow=34
**ZVC Zvikov** 78.93 332 *e*P P 06 09 16.0 +0.9
ZVC AMS AMS 06 47 50.0
comp=Z,600nm,15.8s
**ZST Bratislava** 78.98 330 *e*P P 06 09 17.1 +1.7
**ZST Bratislava** 78.98 330 *e*P P 06 09 17.1 +1.7
**SURR Surduc** 79.07 326 ⇓P P 06 09 16.8 +0.8
**COPA Copaceanca** 79.08 323 ⇓P P 06 09 16.7 +0.7
**GZR Gura Zlata** 79.10 325 ⇑P P 06 09 16.4 +0.3
**GZR Gura Zlata** 79.10 325 P P 06 09 16.5 +0.3
**SMRA Abu-Samra** 79.11 294 P P 06 09 16.3 -0.2
**MANZ Manzenberg** 79.14 334 *e*P P 06 09 16.6 +0.3
comp=Z,5.5nm,0.9s,baz=29,slow=5.5
**KASTN Kahler Asten** 79.19 336 *e*P P 06 09 16.9 +0.3
comp=Z,27nm,1.0s,baz=29,slow=5.5
**ROTZ Rotzenmuhle** 79.30 333 *e*P P 06 09 17.7 +0.5
comp=Z,6.6nm,1.0s,baz=29,slow=5.5
**BUG Bochum--Univer** 79.30 337 *e*P P 06 09 17.2 +0.1
comp=Z,27nm,0.9s,baz=29,slow=5.5
**BZS Buzias** 79.39 326 ⇑P P 06 09 17.8 +0.1
**BZS Buzias** 79.39 326 P P 06 09 17.8 +0.1
**KHC Kasperske Hory** 79.40 332 *e*P P 06 09 18.7 +0.9
KHC *ex* x 06 09 31.3
KHC *ex* x 06 09 42.8
KHC AMS AMS 06 48 00.0
comp=Z,800nm,14.5s
**KHC Kasperske Hory** 79.40 332 *ce*P P 06 09 18.6 +0.8
KHC pmax pmax
comp=Z,126nm,1.3s
**KHC Kasperske Hory** 79.40 332 P P 06 09 17.9 +0.1
comp=Z,61nm,0.9s,comp=Z,494nm
**CKRC Cesky Krumlov** 79.42 332 *e*P P 06 09 18.5 +0.6
CKRC *ex* x 06 09 30.7
CKRC *ex* x 06 19 17.7
CKRC AMS AMS 06 49 10.0
comp=Z,400nm,13.0s
**CKRC Cesky Krumlov** 79.42 332 *e*P P 06 09 18.5 +0.6
CKRC *e* 06 09 30.7
CKRC *e* 06 19 17.7
CKRC MLR MLR
comp=Z,400nm,13.0s
**POST Post** 79.48 54 IAmb IAmb 06 09 20.0
comp=Z,16nm,1.0s
**ODSA Odessa** 79.55 55 IAmb IAmb 06 09 20.3
comp=Z,17nm,0.9s
**GEC2 GERESS Array S** 79.61 332 IAmb IAmb 06 09 21.2
comp=Z,20nm,1.1s
**GEC2 GERESS Array S** 79.61 332 *e*P P 06 09 19.2 +0.3
comp=Z,34nm,1.3s,baz=29,slow=5.5
**GERES GERESS Array B** 79.61 332 P P 06 09 18.9 0.0
**GERES GERESS Array B** 79.61 332 P P 06 09 19.4 +0.5
comp=Z,8.6nm,0.8s,baz=21,slow=5.7,SNR=40
GERES pP **pwP** 06 09 31.6 -0.7
comp=Z,5.6nm,0.7s,baz=23,slow=7.2,SNR=9.3
comp=Z,8.6nm,0.8s
**WET Wettzell** 79.62 333 *e*P P 06 09 19.6 +0.6
comp=Z,46nm,1.0s,baz=29,slow=5.5
**CONA Conrad Observa** 79.65 330 *i*pP P 06 09 20.3 +1.1
comp=Z,15nm,0.8s,SNR=9.3
**HERR Herculane** 79.66 325 ⇑P P 06 09 19.1 -0.1
**GRF Grafenberg Arr** 79.68 334 *e*P P 06 09 20.2 +0.9
comp=Z,73nm,1.1s,baz=29,slow=5.5
GRF *eL* L 06 49 12.1
comp=Z,394nm,19.0s
**GRFO Grafenberg** 79.68 334 P P 06 09 19.6 +0.4
**GRFO Grafenberg** 79.68 334 P P 06 09 19.6 +0.4
GRFO pmax pmax
comp=Z,56nm,0.9s
**MPLH Magyarpolny** 79.68 329 P P 06 09 19.5 +0.2
comp=Z,139nm,1.1s,comp=Z,4μm
**RONA Rosalia, Austr** 79.69 330 *i*pP P 06 09 20.5 +1.1
comp=Z,18nm,0.9s,SNR=11
**ELND Elena** 79.74 322 ⇑P P 06 09 19.8 +0.1
**WMOK Wichita Mounta** 79.82 51 IAmb IAmb 06 10 38.2
comp=Z,21nm,0.6s
**RAR Rarotonga** 79.86 133 LR LR 06 40 48.0
comp=Z,252nm,19.2s,baz=302,slow=33
**MNHN Monahans** 79.98 56 IAmb IAmb 06 09 22.6
comp=Z,14nm,0.7s
**MDVR Moldovita** 80.03 325 ⇓P P 06 09 21.2 -0.1
**TNS Taunus Mts** 80.05 336 *e*P P 06 09 21.7 +0.4
comp=Z,30nm,1.1s,baz=29,slow=5.5
**MORH Mrgy, Hungar** 80.06 328 ⇓P P 06 09 21.4 +0.1
**MORH Mrgy, Hungar** 80.06 328 P P 06 09 20.5 -0.8
comp=Z,14nm,1.0s
**MOA Molln** 80.27 331 *i*pP P 06 09 23.3 +0.8
comp=Z,6.9nm,0.8s
**M44A Midewin, Midew** 80.28 40 IAmb IAmb 06 09 23.4
comp=Z,21nm,1.1s
**ARSA Arzberg** 80.34 330 *i*pP P 06 09 23.8 +0.9
comp=Z,0.4nm,0.3s
**HDIL Hopedale** 80.35 41 IAmb IAmb 06 09 23.9
comp=Z,21nm,0.7s
**BTNL Ternell** 80.39 337 *d*P P 06 09 23.4 +0.3
comp=Z,15nm,1.1s
**MEM Membach** 80.40 337 *d*P P 06 09 23.4 +0.4
comp=Z,24nm,1.0s
**SGCY Sterling City** 80.53 55 IAmb IAmb 06 09 25.6
comp=Z,22nm,0.8s
**BSTI Sart Tilman** 80.55 338 *d*P P 06 09 24.7 +0.8
**L46A Eue Claire** 80.59 39 IAmb IAmb 06 09 25.0
comp=Z,27nm,1.1s
**BIOA Bad Ischl, Aus** 80.62 332 *i*pP P 06 09 25.4 +1.0
comp=Z,8.3nm,0.7s,SNR=9.8
**BHOU Houvegnez** 80.63 337 *d*P P 06 09 24.4 0.0
comp=Z,16nm,1.1s
**BCLA Clavier** 80.77 338 *d*P P 06 09 25.2 +0.2
comp=Z,18nm,0.9s
**BGES Gesves** 80.86 338 *d*P P 06 09 25.7 +0.2
comp=Z,19nm,0.9s
**RJOB Jochberg** 80.87 332 *e*P P 06 09 26.4 +0.6
comp=Z,22nm,1.0s,baz=29,slow=5.5
**TX31 Lajitas Ar. Si** 80.87 58 IAmb IAmb 06 09 27.6
comp=Z,18nm,0.7s
**TXAR Lajitas Array** 80.87 58 P P 06 09 26.5 +0.4
**TXAR Lajitas Array** 80.87 58 P P 06 09 26.8 +0.6
comp=Z,15nm,0.6s,baz=301,slow=4.0,SNR=244
comp=Z,15nm,0.6s
**TXAR Lajitas Array** 80.87 58 P P 06 09 26.5 +0.4
**KLBR Kellerberrin** 80.88 207 P P 06 09 26.4 +0.7
**KLBR Kellerberrin** 80.88 207 P P 06 09 26.0 +0.3
comp=Z,35nm,1.0s
**ABTX Abilene, Hawle** 80.88 53 IAmb IAmb 06 10 50.0
comp=Z,22nm,1.4s
**BOVS Bovan** 80.97 325 ⇑P P 06 09 26.2 0.0
**FUR Furstenfeldbru** 81.00 333 *e*P P 06 09 27.0 +0.6
comp=Z,52nm,1.0s,baz=29,slow=5.5
**SOKA Soboth** 81.01 330 *i*pP P 06 09 26.9 +0.4
comp=Z,10nm,0.8s,SNR=9.2
**BMRD Maredsous** 81.02 338 *d*P P 06 09 26.6 +0.2
comp=Z,30nm,1.0s
**RCHB Rochefort** 81.03 338 *d*P P 06 09 26.8 +0.4
comp=Z,17nm,1.0s
**DOK Doka** 81.09 287 P P 06 09 27.4 +0.1
DOK P P 06 09 27.4 +0.1
**STU Stuttgart** 81.12 335 IAmb IAmb 06 09 30.1
comp=Z,34nm,1.0s
**STU Stuttgart** 81.12 335 *e*P P 06 09 27.3 +0.4
comp=Z,89nm,1.0s,baz=29,slow=5.5
**DMTO DMTO** 81.15 286 P P 06 09 28.0 +0.5
**LESA Schwarzleotal** 81.18 332 *i*pP P 06 09 28.2 +0.8
comp=Z,9.7nm,0.7s
**WLF Walferdange** 81.21 337 IAmb IAmb 06 09 45.5
comp=Z,25nm,1.0s
**WLF Walferdange** 81.21 337 *d*PcP PcP 06 09 32.4 -1.2
**DOU Dourbes** 81.25 338 *d*P P 06 09 27.7 +0.1
comp=Z,11nm,1.0s
**KBA Koelnbreinsper** 81.25 331 *i*pP P 06 09 29.1 +1.1
comp=Z,33nm,1.0s,SNR=11
**ALN Alexandroupoli** 81.28 320 IAmb IAmb 06 09 53.6
comp=Z,34nm,1.2s
**OBKA Obir** 81.33 330 *i*pP P 06 09 28.7 +0.4
comp=Z,5.2nm,0.6s
**CCM Cathedral Cave** 81.33 44 P P 06 09 27.8 -0.5
CCM IAmb IAmb 06 12 05.4
comp=Z,16nm,0.7s
**CCM Cathedral Cave** 81.33 44 P P 06 09 27.8 -0.5
CCM pmax pmax
comp=Z,16nm,0.7s
**SADO Sadowa** 81.34 33 LR LR 06 49 14.1
comp=Z,192nm,18.5s,baz=306,slow=38
**L48A N Adams** 81.47 38 IAmb IAmb 06 09 30.0
comp=Z,21nm,0.8s
**MGMO Mountain Grove** 81.51 45 IAmb IAmb 06 11 29.5
comp=Z,19nm,0.7s
**MYKA Terra Mystica** 81.54 331 *i*P P 06 09 29.5 +0.1
comp=Z,4.3nm,0.6s
**WATA Walderalm** 81.63 333 *i*pP P 06 09 30.6 +0.7
comp=Z,18nm,0.9s,SNR=9.8
**WTTA Wattenberg** 81.67 333 *i*pP P 06 09 31.0 +0.9
comp=Z,15nm,0.7s,SNR=6.6
**PRED Cave del Predi** 81.73 331 IAmb IAmb 06 09 54.5
comp=Z,23nm,0.9s
**RETA Reutte** 81.76 333 *i*pP P 06 09 31.3 +0.8
comp=Z,9.5nm,0.8s
**N47A Urbana** 81.77 39 IAmb IAmb 06 09 31.1
comp=Z,20nm,1.1s
**MOTA Moosalm** 81.77 333 *i*pP P 06 09 31.3 +0.6
comp=Z,21nm,0.9s
**BFO Black Forest** 81.78 335 P P 06 09 30.9 +0.4
BFO IAmb IAmb 06 09 55.9
comp=Z,23nm,0.9s
**BFO Black Forest** 81.78 335 P P 06 09 30.9 +0.4
BFO pmax pmax
comp=Z,23nm,0.9s
**BFO Black Forest** 81.78 335 *e*P P 06 09 30.6 +0.1
comp=Z,17nm,1.0s,baz=29,slow=5.5
**TRQ Mont Tremblant** 81.81 29 IAmb IAmb 06 09 31.2
comp=Z,13nm,0.8s
**WHFO Wadi Hawf** 81.82 287 P P 06 09 31.0 -0.2
**ABTA Abfaltersbach** 81.83 332 *i*pP P 06 09 32.2 +1.4
comp=Z,3.5nm,0.6s
**SQTA Sankt Quirin** 81.85 333 *i*pP P 06 09 31.9 +0.9
comp=Z,14nm,0.8s,SNR=8.7
**EZN Ezine** 82.00 319 P P 06 09 31.7 -0.1
comp=Z,26nm,1.2s,comp=Z,366nm
**LMQ La Malbaie** 82.06 26 IAmb IAmb 06 09 32.8
comp=Z,14nm,0.9s
**P46A Rosedale** 82.07 41 IAmb IAmb 06 09 33.2
comp=Z,29nm,0.8s
**FETA Feichten** 82.18 333 *i*pP P 06 09 33.9 +1.1
comp=Z,6.8nm,0.9s
**T42A Van Buren** 82.20 45 IAmb IAmb 06 12 08.6
comp=Z,14nm,0.6s
**DAVA Damuels** 82.22 334 *i*pP P 06 09 33.5 +0.5
comp=Z,10nm,0.8s,SNR=7.3
**ECH Echery** 82.23 336 IAmb IAmb 06 09 48.7
comp=Z,19nm,0.9s
**BRDY Brady** 82.23 54 IAmb IAmb 06 12 32.8
comp=Z,9.4nm,0.7s
**TAOE Nuku Hiva Isla** 82.27 110 *e*LR LR 06 35 11.0
comp=Z,344nm,26.9s
**NWAO Narrogin (SRO)** 82.28 207 P P 06 09 34.3 +1.3
**OLIL Olney** 82.35 42 IAmb IAmb 06 09 52.0
comp=Z,17nm,1.0s
**JCT Junction City** 82.36 55 IAmb IAmb 06 09 35.1
comp=Z,14nm,0.8s
**N49A Columbus Grove** 82.41 38 IAmb IAmb 06 09 34.8
comp=Z,15nm,1.0s
**VAY Valandovo** 82.50 323 *i*P P 06 09 34.9 +0.5
**FCAR Ozark Folk Cen** 82.55 46 IAmb IAmb 06 11 39.1
comp=Z,17nm,0.5s
**WHTX Lake Whitney,** 82.59 52 IAmb IAmb 06 09 53.2
comp=Z,20nm,0.9s
**MMAI Mount Meron Ar** 82.60 309 P P 06 09 36.6 +1.5
comp=Z,9.2nm,0.6s,baz=48,slow=5.0,SNR=13
MMAI pP **pwP** 06 09 49.2 +0.8
comp=Z,7.7nm,0.6s,baz=30,slow=6.9,SNR=4.8
MMAI LR LR 06 52 35.6
comp=Z,335nm,18.4s,baz=327,slow=40
comp=Z,9.2nm,0.6s
**FUORN Ofenpass-Fuorn** 82.69 333 IAmb IAmb 06 10 01.6
comp=Z,31nm,1.0s
**CTI Castel Tesino** 82.73 332 IAmb IAmb 06 10 08.9
comp=Z,26nm,1.1s
**PPT Papeete** 82.73 123 LR LR 06 43 55.7
comp=Z,444nm,18.5s,baz=318,slow=34
**PPT2 Papeete2** 82.75 123 *e*LR LR 06 35 11.2
comp=Z,283nm,20.2s
PPT2 *e*LR LR 06 35 20.4
comp=Z,265nm,21.2s
**D62A Allapoint, All** 82.88 26 IAmb IAmb 06 09 37.2
comp=Z,8.4nm,0.8s
**P49A Miami Univ. Ec** 83.29 39 IAmb IAmb 06 09 57.1
comp=Z,39nm,1.4s
**P49A Miami Univ. Ec** 83.29 39 P P 06 09 38.3 -0.3
baz=324
**RAYN Ar Rayn** 83.43 296 P P 06 09 39.3 -0.2
RAYN IAmb IAmb 06 09 41.5
comp=Z,44nm,1.6s
**RAYN Ar Rayn** 83.43 296 *i*P P 06 09 40.2 +0.7
SNR=8.5
**RAYN Ar Rayn** 83.43 296 P P 06 09 40.5 +1.0
**RAYN Ar Rayn** 83.43 296 P P 06 09 39.3 -0.2
RAYN pmax pmax
comp=Z,44nm,1.6s
**OHR Ohrid** 83.43 324 *i*P P 06 09 39.5 +0.2
**M53A WI Miller and** 83.50 36 P P 06 09 39.6 0.0
baz=326
**BATG Bathurst New B** 83.59 24 IAmb IAmb 06 09 41.1
comp=Z,12nm,0.8s
**WCI Wyandotte Cave** 83.61 41 P P 06 09 40.1 0.0
WCI IAmb IAmb 06 09 40.9
comp=Z,11nm,0.8s
**WCI Wyandotte Cave** 83.61 41 P P 06 09 40.1 0.0
WCI pmax pmax
comp=Z,11nm,0.9s
**TIR Tirane** 83.63 324 ⇑P P 06 09 39.6 -0.6
**TIR Tirane** 83.63 324 P P 06 09 39.6 -0.6
**TIR Tirane** 83.63 324 P P 06 09 40.1 -0.1
comp=Z,82nm,0.9s
**F62A Pittston Farm,** 83.64 27 IAmb IAmb 06 09 41.4
comp=Z,16nm,0.9s
**CLF Chambon-Foret** 83.77 339 IAmb IAmb 06 09 43.8
comp=Z,26nm,1.0s
**G62A West of Eustis** 84.06 27 IAmb IAmb 06 09 43.9
comp=Z,14nm,0.9s
**P51A Williamsport** 84.08 38 IAmb IAmb 06 09 43.2
comp=Z,13nm,0.9s
**833A Chaparral WMA,** 84.18 56 P P 06 09 43.4 +0.2
baz=318
**T47A Sharon Grove** 84.21 42 IAmb IAmb 06 09 44.6
comp=Z,20nm,0.8s
**CCAR Cane Creek** 84.25 47 IAmb IAmb 06 10 02.6
comp=Z,22nm,1.0s
**O53A New Philadelph** 84.26 37 P P 06 09 43.3 -0.2
baz=326
**Q51A Peebles** 84.32 39 IAmb IAmb 06 09 45.0
comp=Z,20nm,0.8s
**P52A Corning** 84.36 38 P P 06 09 44.0 0.0
baz=326
**PKME Peaks-Kenny Pk** 84.42 26 IAmb IAmb 06 09 45.5
comp=Z,10nm,0.9s
**R50A Paris** 84.48 40 IAmb IAmb 06 09 45.9
comp=Z,14nm,1.2s
**WVT Waverly** 84.54 43 P P 06 09 44.9 0.0
WVT IAmb IAmb 06 09 46.0
comp=Z,11nm,0.8s
**WVT Waverly** 84.54 43 P P 06 09 44.9 0.0
WVT pmax pmax
comp=Z,11nm,0.8s
**APE Apeiranthos** 84.58 318 ⇑P P 06 09 44.5 -0.7
**APE Apeiranthos** 84.58 318 *i*P P 06 09 43.8 -1.4
APE pmax pmax
comp=Z,17nm,1.0s
**O54A Avella** 84.67 36 IAmb IAmb 06 09 46.7
comp=Z,11nm,0.8s
**G65A Princeton** 85.02 25 IAmb IAmb 06 09 48.5
comp=Z,12nm,0.9s
**M57A Sunshine Farm,** 85.03 33 IAmb IAmb 06 09 48.4
comp=Z,13nm,0.8s
**I63A Otisfield** 85.07 28 IAmb IAmb 06 09 49.3
comp=Z,15nm,0.9s
**L59A Walton** 85.11 32 IAmb IAmb 06 09 48.6
comp=Z,12nm,0.9s
**BNI Bardonecchia** 85.22 335 IAmb IAmb 06 10 02.7
comp=Z,18nm,0.9s
**U49A Red Boiling Sp** 85.23 42 IAmb IAmb 06 09 49.6
comp=Z,20nm,0.8s
**LMN Caledonia Moun** 85.25 23 IAmb IAmb 06 09 49.0
comp=Z,13nm,0.9s
**CLTN Cedars of Leba** 85.30 42 IAmb IAmb 06 09 50.0
comp=Z,15nm,0.8s
**SSPA Standing Stone** 85.32 34 P P 06 09 49.2 +0.4
SSPA IAmb IAmb 06 10 09.5
comp=Z,31nm,1.6s
**PLAL Pickwick Lake** 85.32 44 IAmb IAmb 06 09 49.1
comp=Z,7.9nm,0.8s
**S51A Beattyville** 85.34 40 IAmb IAmb 06 09 50.0
comp=Z,9.7nm,0.8s
**V48A Smith Brothers** 85.34 43 IAmb IAmb 06 09 50.0
comp=Z,11nm,0.7s
**EIL Eiat** 85.37 308 LR LR 06 53 27.7
comp=Z,410nm,18.6s,baz=67,slow=40
**Q54A Coxs Mills** 85.47 37 IAmb IAmb 06 09 51.0
comp=Z,14nm,0.9s
**N58A Sunbury** 85.62 33 IAmb IAmb 06 09 51.4
comp=Z,14nm,0.9s
**SSB Saint Sauveur** 85.65 336 IAmb IAmb 06 09 56.8
comp=Z,27nm,1.2s
**L61B Northampton** 85.75 30 P P 06 09 50.8 -0.1
baz=331
**URZ Urewera** 85.78 159 LR LR 06 45 51.8
comp=Z,181nm,18.3s,baz=68,slow=34
**Q56A Snyder Ridge,** 86.13 36 IAmb IAmb 06 09 54.0
comp=Z,13nm,0.9s
**SWET Sewanee** 86.19 43 IAmb IAmb 06 09 54.0
comp=Z,20nm,0.7s
**S54A Dingess, Beckl** 86.24 38 IAmb IAmb 06 09 54.1
comp=Z,8.3nm,0.8s
**TZTN Tazewell** 86.25 40 IAmb IAmb 06 09 54.8
comp=Z,11nm,0.8s
**IDI Anoyia** 86.31 318 IAmb IAmb 06 10 18.4
comp=Z,22nm,0.8s
**R55A Marlinton** 86.36 37 IAmb IAmb 06 09 55.4
comp=Z,19nm,0.8s
**MVL Millersville** 86.48 34 IAmb IAmb 06 09 55.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **UCCT** | **U. Connecticut** | **86.49** | **30** | IAmb | IAmb | 06 10 19.4 | | |
| | comp=Z,31nm,1.4s | | | | | | | |
| **CPCT** | **Cooper Cave** | **86.69** | **42** | IAmb | IAmb | 06 09 56.2 | | |
| | comp=Z,10nm,0.9s | | | | | | | |
| **Z47A** | **Carrollton** | **86.74** | **45** | IAmb | IAmb | 06 09 57.0 | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **86.87** | **41** | IAmb | IAmb | 06 09 57.7 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **86.87** | **41** | LR | LR | 06 53 49.9 | | |
| | comp=Z,284nm,18.2s,baz=332,slow=39 | | | | | | | |
| **FPAL** | **Fort Paine** | **86.89** | **43** | IAmb | IAmb | 06 09 57.5 | | |
| | comp=Z,9.5nm,0.9s | | | | | | | |
| **Y49A** | **Blount Mountai** | **87.05** | **44** | IAmb | IAmb | 06 09 58.1 | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **U54A** | **Nelsons Funny** | **87.07** | **39** | IAmb | IAmb | 06 10 23.6 | | |
| | comp=Z,42nm,1.6s | | | | | | | |
| **BLA** | **Blacksburg** | **87.12** | **38** | IAmb | IAmb | 06 10 32.1 | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **TBI** | **Tubuai** | **87.27** | **127** | *e*S | **S** | **06 20 37.4** | **+0.6** | |
| | comp=Z,359nm,24.5s | | | | | | | |
| **TBI** | **Tubuai** | **87.27** | **127** | *e*LR | LR | 06 37 04.0 | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **S57A** | **Dark Hollow, R** | **87.30** | **37** | IAmb | IAmb | 06 10 17.1 | | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **T57A** | **Hurt** | **87.81** | **37** | IAmb | IAmb | 06 10 19.5 | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **U56A** | **King** | **87.86** | **38** | IAmb | IAmb | 06 10 02.5 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **Y52A** | **Lilburn** | **88.19** | **42** | IAmb | IAmb | 06 10 04.3 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **KMSC** | **Kings Mountain** | **88.43** | **40** | IAmb | IAmb | 06 10 05.1 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **PAULI** | **Pauline** | **88.47** | **40** | IAmb | IAmb | 06 10 05.3 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **T59A** | **Double "B" Far** | **88.56** | **36** | IAmb | IAmb | 06 10 06.1 | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **HODGE** | **Hodges** | **88.75** | **41** | IAmb | IAmb | 06 10 07.0 | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **152A** | **Waverly Hall** | **88.84** | **43** | IAmb | IAmb | 06 10 06.8 | | |
| | comp=Z,7.8nm,0.8s | | | | | | | |
| **GOGA** | **Godfrey** | **88.85** | **42** | IAmb | IAmb | 06 10 07.5 | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **V58A** | **Windy Hill, Pi** | **88.88** | **38** | IAmb | IAmb | 06 10 07.3 | | |
| | comp=Z,8.1nm,0.8s | | | | | | | |
| **W57A** | **Gilead** | **89.03** | **39** | IAmb | IAmb | 06 10 07.9 | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **VAE** | **Valguarnera** | **89.14** | **326** | LR | LR | 06 56 01.0 | | |
| | comp=Z,214nm,18.9s,baz=127,slow=40 | | | | | | | |
| **JSC** | **Jenkinsville** | **89.17** | **40** | IAmb | IAmb | 06 10 08.7 | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **BIRD** | **Birdtown, Kers** | **89.24** | **39** | IAmb | IAmb | 06 10 09.0 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **X58A** | **Rowland** | **89.82** | **39** | IAmb | IAmb | 06 10 11.7 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **KEST** | **Kesra** | **92.64** | **329** | P | **P** | **06 10 23.4** | **-0.3** | |
| | comp=Z,1.5nm,0.5s,baz=63,slow=6.8,SNR=3.2 | | | | | | | |
| KEST | | | | LR | LR | 06 57 52.2 | | |
| | comp=Z,409nm,18.2s,baz=317,slow=39 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **93.16** | **340** | P | **P** | **06 10 25.5** | **-0.6** | |
| **ESDC** | **Sonseca Array** | **93.16** | **340** | P | **P** | **06 10 25.3** | **-0.7** | |
| | comp=Z,0.9nm,0.7s,baz=19,slow=4.0,SNR=6.9 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **ATD** | **Arta Tunnel** | **93.77** | **290** | LR | LR | 06 58 35.6 | | |
| | comp=Z,22nm,18.1s,baz=2.5,slow=39 | | | | | | | |
| **RKT** | **Rikitea** | **95.98** | **116** | *e*LR | LR | 06 41 30.1 | | |
| | comp=Z,728nm,29.2s | | | | | | | |
| **MDT** | **Midelt** | **99.82** | **338** | LR | LR | 07 02 54.6 | | |
| | comp=Z,138nm,19.6s,baz=34,slow=40 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.89** | **325** | PKP | **PKiKP** | **06 15 54.2** | **-0.7** | |
| | comp=Z,0.8nm,0.5s,baz=31,slow=1.7,SNR=8.8 | | | | | | | |
| TORD | | | | pPKP | **pPKiKP** | **06 16 07.2** | **+5.9** | |
| | comp=Z,0.9nm,0.6s,baz=358,slow=2.2,SNR=3.7 | | | | | | | |
| TORD | | | | PP | PP | 06 16 49.2 | -8.5 | |
| | comp=Z,2.4nm,0.8s,baz=9.3,slow=9.6,SNR=8.5 | | | | | | | |
| **DBIC** | **Dimbokro** | **124.37** | **329** | PKP | **PKPdf** | **06 16 10.6** | **-0.6** | |
| | comp=Z,3.2nm,0.7s,baz=21,slow=6.0,SNR=5.0 | | | | | | | |
| DBIC | | | | pPKP | **sPKPdf** | **06 16 24.2** | **+4.3** | |
| | comp=Z,9.7nm,1.0s,baz=321,slow=0.3,SNR=3.4 | | | | | | | |
| **MAW** | **Mawson** | **128.80** | **209** | PKP | **PKiKP** | **06 16 18.7** | **+0.1** | |
| | comp=Z,2.6nm,0.9s,baz=3.8,slow=6.1,SNR=4.8 | | | | | | | |
| **QSPA** | **South Pole Qui** | **133.96** | **180** | | **PKiKP** | **06 16 29.9** | **+0.8** | |
| **QSPA** | **South Pole Qui** | **133.96** | **180** | PKP | **PKiKP** | **06 16 29.5** | **+0.4** | |
| | comp=Z,4.8nm,0.8s,baz=304,slow=1.6,SNR=23 | | | | | | | |
| QSPA | | | | pPKP | **sPKPdf** | **06 16 42.2** | **+5.7** | |
| | comp=Z,3.2nm,0.7s,baz=11,slow=1.1,SNR=6.2 | | | | | | | |
| **LPAZ** | **La Paz** | **137.68** | **61** | PKP | **PKPdf** | **06 16 37.4** | **+0.4** | |
| | comp=Z,0.9nm,0.7s,baz=17,slow=4.8,SNR=3.8 | | | | | | | |
| **ELIB** | **Princess Elisa** | **142.48** | **204** | *d*PKPdf | **PKPdf** | **06 16 40.2** | **-3.2** | |
| **AC05** | **El Transito** | **144.80** | **78** | PKPdf | **PKPdf** | **06 16 48.7** | **-0.1** | |
| **CO01** | **Juntas del Tor** | **145.60** | **79** | | **PKPab** | **06 16 51.2** | **+0.3** | |
| **NVL** | **N'lazarevskaya** | **146.34** | **204** | *e*PKHKP | PKPpre | 06 16 45.1 | | |
| NVL | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **BDFB** | **Brasilia** | **147.80** | **33** | PKPab | **PKPbc** | **06 16 57.9** | **+0.8** | |
| **BDFB** | **Brasilia** | **147.80** | **33** | PKPbc | **PKPbc** | **06 16 57.3** | **+0.2** | |
| | comp=Z,10nm,0.7s,baz=304,slow=2.7,SNR=20 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **148.03** | **199** | ⇑P | **PKiKP** | **06 16 57.2** | **-0.7** | |
| | comp=Z,834nm,0.7s | | | | | | | |
| **BI02** | **San Fabin de** | **148.21** | **91** | | **PKPbc** | **06 16 58.2** | **+0.6** | |
| **AQDB** | **Aquidauana** | **148.30** | **50** | | **PKPbc** | **06 16 58.7** | **+0.5** | |
| **SMAI** | **San Martin Ant** | **149.34** | **154** | | **PKiKP** | **06 17 00.7** | **+0.3** | |
| **SNAA** | **Sanae** | **149.44** | **197** | PKPdf | **PKPdf** | **06 16 54.1** | **-1.0** | |
| SNAA | | | | PKPbc | **PKiKP** | **06 17 00.6** | **-0.2** | |
| **SNAA** | **Sanae** | **149.44** | **197** | ⇑P | **PKPbc** | **06 16 59.9** | **+0.3** | |
| | comp=Z,207nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **149.44** | **197** | PKPbc | **PKPbc** | **06 16 59.8** | **+0.1** | |
| | comp=Z,8.7nm,0.9s,baz=177,slow=2.7,SNR=35 | | | | | | | |
| **SNAA** | **Sanae** | **149.44** | **197** | PKHKP | PKPpre | 06 16 54.1 | | |
| SNAA | | | | | | 06 17 00.6 | | |
| **PLCA** | **Paso Flores** | **150.35** | **97** | | **PKiKP** | **06 17 03.9** | **+0.3** | |
| **PLCA** | **Paso Flores** | **150.35** | **97** | PKPbc | **PKiKP** | **06 17 03.3** | **-0.3** | |
| | comp=Z,8.4nm,0.8s,baz=280,slow=3.1,SNR=22 | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **150.94** | **195** | ⇑P | **PKiKP** | **06 17 03.9** | **+0.2** | |
| | comp=Z,38nm,0.7s,baz=118,slow=1.4 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **151.08** | **194** | ⇑P | **PKPbc** | **06 17 03.7** | **+0.2** | |
| | comp=Z,27nm,0.8s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **151.33** | **195** | ⇑P | **PKiKP** | **06 17 05.0** | **+0.5** | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **CPUP** | **Villa Florida** | **151.83** | **60** | PKPbc | **PKPbc** | **06 17 06.1** | **-0.5** | |
| | comp=Z,5.0nm,0.9s,baz=261,slow=2.5,SNR=8.3 | | | | | | | |
| CPUP | | | | PKPab | **PKPab** | **06 17 16.2** | **+0.5** | |
| | comp=Z,2.2nm,0.6s,baz=329,slow=2.5,SNR=6.8 | | | | | | | |

*IDC **26** 06:00:44.9±6.2, 18°.14S×178°.08W, h474km±70km, mb3.2/8, mbtmp4.0/9, Error ellipse: s-maj=32.7km s-min=25.5km az=50.0*
*NEIC **26** 06:00:50.1±0.6, 17°.9S±0°.2×178°.14W±0°.10, h539km±15km, mb4.2/19, Error ellipse: s-maj=25.4km s-min=13.4km az=178.0*

**ISC 26 06:00:50.9**±0.9, **18°.0S**±0°.1×**178°.3W**±0°.1, **h550**km, **n31**, σ1§**18**/31, **mb4.2**/16, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.49** | **273** | P | **P** | **06 02 09.2** | **-0.1** |
| **FUNA** | **Funafuti** | **9.71** | **345** | P | **P** | **06 03 03.4** | **-2.5** |
| **DZM** | **Mont Dzumac** | **14.91** | **252** | P | **P** | **06 03 59.7** | **+0.1** |
| DZM | | | | IAmb | IAmb | 06 04 23.3 | |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **14.91** | **252** | P | **P** | **06 03 57.9** | **-1.7** |
| | comp=Z,5.2nm,1.0s,baz=0.0,slow=20,SNR=1.3 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.65** | **258** | P | **P** | **06 04 16.7** | **+0.2** |
| **URZ** | **Urewera** | **20.60** | **190** | P | **P** | **06 04 47.6** | **-4.6** |
| | comp=Z,1.4nm,0.3s,baz=207,slow=2.3,SNR=1.4 | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **EIDS** | **Eidsvold** | **29.35** | **250** | P | **P** | **06 06 10.5** | **+0.7** |
| EIDS | | | | IAmb | IAmb | 06 06 28.8 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **30.00** | **240** | P | **P** | **06 06 16.4** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 06 06 16.6 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.09** | **199** | P | **P** | **06 06 16.2** | **+0.2** |
| **CTA** | **Charters Tower** | **33.54** | **261** | P | **P** | **06 06 46.2** | **+0.4** |
| | comp=Z,0.4nm,0.6s,baz=88,slow=9.7,SNR=8.3 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.54** | **261** | P | **P** | **06 06 46.1** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 06 06 46.8 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **CAN** | **Canberra** | **33.75** | **233** | P | **P** | **06 06 48.0** | **+0.7** |
| CAN | | | | IAmb | IAmb | 06 07 10.0 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **37.21** | **231** | P | **P** | **06 07 16.7** | **+0.8** |
| TOO | | | | IAmb | IAmb | 06 07 39.4 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **COEN** | **Coen** | **37.22** | **270** | P | **P** | **06 07 16.6** | **+0.4** |
| COEN | | | | IAmb | IAmb | 06 07 25.7 | |
| | comp=Z,8.8nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.69** | **241** | P | **P** | **06 07 28.7** | **+0.7** |
| **STKA** | **Stephens Creek** | **38.69** | **241** | P | **P** | **06 07 28.4** | **+0.3** |
| | comp=Z,3.8nm,0.5s,baz=74,slow=10.0,SNR=9.0 | | | | | | |
| | comp=Z,3.8nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.47** | **241** | P | **P** | **06 08 06.2** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 06 08 06.9 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **06 08 16.0** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 06 08 34.8 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **06 08 15.8** | **0.0** |
| **WRA** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **06 08 15.6** | **-0.3** |
| | comp=Z,1.4nm,0.5s,baz=97,slow=7.7,SNR=28 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.88** | **254** | P | **P** | **06 08 17.4** | **+0.4** |
| AS31 | | | | IAmb | IAmb | 06 08 17.9 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **44.88** | **254** | P | **P** | **06 08 17.3** | **+0.3** |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.88** | **254** | P | **P** | **06 08 17.2** | **+0.3** |
| | comp=Z,12nm,0.6s,baz=89,slow=8.3,SNR=280 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.08** | **245** | P | **P** | **06 08 55.9** | **+0.2** |
| **KNRA** | **Kununurra** | **50.59** | **264** | P | **P** | **06 09 00.6** | **+0.8** |
| KNRA | | | | IAmb | IAmb | 06 09 00.9 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **62.98** | **253** | P | **P** | **06 10 25.1** | **+0.5** |
| **SBUM** | **Sibu** | **71.33** | **279** | P | **P** | **06 11 16.0** | **+0.1** |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | **P** | **06 11 20.3** | **+0.8** |
| **QSPA** | **South Pole Qui** | **72.08** | **180** | P | **P** | **06 11 20.0** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=42,slow=1.2,SNR=6.6 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.93** | **13** | P | **P** | **06 12 33.5** | **+1.0** |
| | comp=Z,0.2nm,0.4s,baz=220,slow=5.2,SNR=5.3 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.33** | **43** | P | **P** | **06 12 41.0** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=239,slow=6.2,SNR=2.9 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |

*RSNC **26** 06:06:02.1±0.7, 6°.5S×7°.8W±°, h360km±11km, M3.9, mb3.9, mB4.7, ML3.5, Mw(mB)4.0*
*VAO **26** 06:06:10.0±1.4, 5°.30S×77°.41W, h17km±10km, mb4.7*

**ISC 26 06:06:08.0**±0.9, **5°.23S**±0°.05×**77°.52W**±0°.09, **h10**km, **n39**, σ1§**60**/47, **Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PIAT** | **Ana Tenorio** | **4.27** | **350** | P | **Pn** | **06 07 11.9** | **-1.6** |
| **CZSB** | **Cruzeiro do Su** | **5.39** | **118** | P | **Pn** | **06 07 30.1** | **+1.5** |
| CZSB | | | | S | **Sn** | **06 08 33.9** | **+3.1** |
| **CZSB** | **Cruzeiro do Su** | **5.39** | **118** | *e*P | **Pn** | **06 07 28.5** | **0.0** |
| **OTAV** | **Otavalo** | **5.51** | **350** | P | **Pn** | **06 07 32.0** | **+1.4** |
| | 25nm,0.9s | | | | | | |
| **OTAV** | **Otavalo** | **5.51** | **350** | *e*P | **Pn** | **06 07 32.3** | **+1.6** |
| OTAV | | | | *e*S | **Sn** | **06 08 37.5** | **+3.2** |
| **PTLC** | **Puerto Leguiza** | **6.02** | **27** | P | Pn | 06 07 32.3 | -4.9 |
| | 39nm,0.8s,996nm | | | | | | |
| PTLC | | | | S | **Sb** | **06 09 07.7** | **+2.4** |
| | 39nm,0.8s,996nm | | | | | | |
| **NNA** | **Nana** | **6.74** | **174** | P | **Pn** | **06 07 47.9** | **+0.7** |
| NNA | | | | S | **Sn** | **06 09 04.0** | **-0.2** |
| **FLOC** | **Florencia** | **7.02** | **15** | P | **Pn** | **06 07 49.4** | **-1.6** |
| | 16nm,0.5s | | | | | | |
| FLOC | | | | S | **Sn** | **06 09 08.5** | **-2.5** |
| | 16nm,0.5s | | | | | | |
| **BBAC** | **Balboa, Cauca** | **7.21** | **2** | P | **Pn** | **06 07 55.8** | **+2.0** |
| | 18nm,0.9s | | | | | | |
| **GARC** | **Garzon, Huila** | **7.64** | **15** | P | **Pn** | **06 07 58.5** | **-1.3** |
| GARC | | | | S | **Sn** | **06 09 22.6** | **-4.0** |
| **TBTG** | **Tabatinga, AM** | **7.66** | **83** | P | **Pn** | **06 08 01.0** | **+1.3** |
| | 79nm,0.8s,2μm | | | | | | |
| TBTG | | | | S | **Sn** | **06 09 26.8** | **+0.2** |
| | 79nm,0.8s,2μm | | | | | | |
| **TBTG** | **Tabatinga, AM** | **7.66** | **83** | *e*P | **Pn** | **06 08 01.0** | **+1.3** |
| TBTG | | | | *e*S | **Sn** | **06 09 25.8** | **-0.8** |
| **POPC** | **Popayan, Colom** | **7.77** | **6** | P | **Pn** | **06 08 02.4** | **+1.0** |
| | 13nm,0.7s | | | | | | |
| POPC | | | | S | Sg | 06 10 09.7 | -7.8 |
| | 13nm,0.7s | | | | | | |
| **MACC** | **Macarena, Meta** | **8.20** | **27** | P | **Pn** | **06 08 06.3** | **-0.8** |
| | 24nm,0.6s | | | | | | |
| MACC | | | | S | **Sn** | **06 09 37.1** | **-2.8** |
| | 24nm,0.6s | | | | | | |
| **YOTC** | **Yotoco, Valle** | **9.23** | **7** | P | **Pn** | **06 08 23.1** | **+1.7** |
| | 6.8nm,0.8s | | | | | | |
| **PRAC** | **Prado** | **9.27** | **17** | P | **Pn** | **06 08 24.0** | **+2.1** |
| | 13nm,0.8s | | | | | | |
| **ORTC** | **Ortega, Tolima** | **9.36** | **14** | P | **Pn** | **06 08 24.8** | **+1.6** |
| | 13nm,1.3s | | | | | | |
| **PLMC** | **San Jos del P** | **10.15** | **7** | P | **Pn** | **06 08 33.2** | **-0.7** |
| | 4.9nm,2.0s | | | | | | |
| **ETMB** | **Extrema** | **12.10** | **113** | *e*P | **Pn** | **06 08 58.0** | **-2.6** |
| **TEFE** | **Tefe** | **12.96** | **83** | *e*P | **Pn** | **06 09 10.7** | **-1.8** |
| **LPAZ** | **La Paz** | **14.34** | **141** | *e*P | **Pn** | **06 09 31.4** | **-0.4** |
| **SAML** | **Samuel** | **14.70** | **105** | *e*P | **Pn** | **06 09 35.1** | **-1.1** |
| **SDV** | **Santo Domingo** | **15.62** | **26** | *e*P | **Pn** | **06 09 49.7** | **+1.1** |
| **MACA** | **Manacapuru-AM** | **16.92** | **84** | *e*P | **Pn** | **06 10 05.4** | **+0.3** |
| **BOAV** | **Boa Vista** | **18.60** | **66** | *e*P | **P** | **06 10 25.7** | **0.0** |
| **VILB** | **Vilhena** | **18.73** | **115** | *e*P | **P** | **06 10 26.6** | **-0.6** |
| **LVC** | **Limon Verde** | **19.18** | **155** | *e*P | **P** | **06 10 32.4** | **+0.1** |
| **BBSD** | **Serra de San D** | **20.38** | **127** | *e*P | **P** | **06 10 44.7** | **-0.5** |
| **PTLB** | **Pontes e Lacer** | **20.72** | **121** | *e*P | **P** | **06 10 48.2** | **-0.6** |
| **PDRB** | **Porto dos Gac** | **21.51** | **108** | *e*P | **P** | **06 10 57.1** | **-0.3** |
| **NPGB** | **Novo Progresso** | **22.11** | **96** | *e*P | **P** | **06 11 01.8** | **-2.0** |
| **CLDB** | **Colider** | **22.22** | **106** | *e*P | **P** | **06 11 05.1** | **+0.1** |
| **SALV** | **Santo Antonio** | **23.90** | **118** | *e*P | **P** | **06 11 21.9** | **-0.4** |
| **MCPB** | **Macapa, AP** | **25.88** | **80** | *e*P | **P** | **06 11 40.1** | **-0.3** |
| **SNDB** | **Serra Nova Dou** | **26.77** | **106** | *e*P | **P** | **06 11 48.6** | **+0.3** |
| **ARAG** | **Araguaiana, MT** | **27.30** | **114** | *e*P | **P** | **06 11 53.6** | **+0.4** |
| **PRPB** | **Parauapebas** | **27.59** | **93** | *e*P | **P** | **06 11 56.1** | **+0.4** |
| **SJPY** | **San Joaquin** | **28.44** | **136** | *e*P | **P** | **06 12 01.4** | **-1.8** |
| **IPMB** | **Ipameri, GO** | **31.32** | **116** | *e*P | **P** | **06 12 28.4** | **-0.5** |

*IDC **26** 06:07:04.5±1.2, 6°.41S×142°.93E, h0km, mb4.0/4, mbtmp3.9/7, ML3.5/2, MS4.1/1, Error ellipse: s-maj=39.9km s-min=27.8km az=84.0*

**ISC 26 06:07:09.3**±1.0, **6°.5S**±0°.1×**143°.0E**±0°.1, **h35**km, **n8**, σ1§**06**/8, **mb3.9**/4, **New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.05** | **125** | Pn | **Pn** | **06 08 23.3** | **+0.7** |
| | 6.1nm,0.5s,baz=14,slow=8.3,SNR=1.7 | | | | | | |
| PMG | | | | Sn | **Sn** | **06 09 18.9** | **-0.8** |
| | 1.5nm,0.3s,baz=232,slow=19,SNR=1.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.72** | **211** | Pn | **Pn** | **06 10 47.2** | **-1.1** |
| | 0.2nm,0.3s,baz=32,slow=13,SNR=5.7 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **19.11** | **206** | P | **P** | **06 11 30.5** | **+1.1** |
| | 0.4nm,0.3s,baz=33,slow=10,SNR=19 | | | | | | |
| | 6.1nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.09** | **354** | LR | LR | 06 31 48.7 | |
| | comp=Z,227nm,19.9s,baz=53,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.39** | **322** | P | **P** | **06 18 48.9** | **-0.6** |
| | 0.8nm,0.8s,baz=119,slow=7.1,SNR=6.2 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **79.28** | **324** | P | **P** | **06 19 12.0** | **+0.8** |
| | 0.6nm,0.7s,baz=101,slow=5.0,SNR=4.5 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **84.86** | **325** | P | **P** | **06 19 41.1** | **+0.8** |
| | 2.1nm,0.7s,baz=101,slow=4.7,SNR=10 | | | | | | |
| | 2.1nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **87.58** | **24** | P | **P** | **06 19 53.0** | **-0.5** |
| | 0.7nm,0.8s,baz=259,slow=5.3,SNR=6.0 | | | | | | |
| | 0.7nm,0.8s | | | | | | |

**NEIC 26 06:09:18.6**±0.3, **37°.06N**±0°.02×**97°.37W**±0°.02, **h6**km±2km, **mb_Lg2.8**/79, **ML3.1**/48, **Error ellipse: s-maj=2.8km s-min=1.1km az=220.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN13** | **South Haven SW** | **0.10** | **241** | | Pg | 06 09 21.1 | +0.3 |
| KAN13 | | | | Sg | Sg | 06 09 22.9 | +0.7 |
| **KAN09** | **Caldwell North** | **0.21** | **291** | | Pg | 06 09 23.2 | +0.5 |
| KAN09 | | | | Sg | Sg | 06 09 26.7 | +1.1 |
| KAN09 | | | | IAML | | 06 09 27.9 | |
| | comp=N,6μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 06 09 28.6 | |
| | comp=E,6μm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.32** | **267** | | Pg | 06 09 25.1 | +0.4 |
| KAN17 | | | | IAML | | 06 09 35.3 | |
| | comp=E,2μm,0.5s | | | | | | |
| KAN17 | | | | IAML | | 06 09 36.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| **BLOK** | **Blackwell** | **0.32** | **157** | | Pg | 06 09 25.1 | +0.2 |
| BLOK | | | | IAML | | 06 09 31.3 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **0.32** | **287** | Pg | Pg | 06 09 25.3 | +0.4 |
| **KS21** | **Milan North St** | **0.33** | **314** | IAML | | 06 09 31.5 | |
| | comp=N,2μm,0.3s | | | | | | |
| KS21 | | | | IAML | | 06 09 31.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| **KS21** | **Milan North St** | **0.33** | **314** | | Pg | 06 09 25.4 | +0.4 |
| KS21 | | | | Sg | Sg | 06 09 30.1 | +0.9 |
| **KAN05** | **Bluff City Nor** | **0.40** | **277** | | Pg | 06 09 26.8 | +0.4 |
| KAN05 | | | | IAML | | 06 09 32.7 | |
| | comp=E,1μm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **0.44** | **242** | Pg | Pg | 06 09 27.5 | +0.4 |
| **KAN14** | **Manchester OK** | **0.48** | **258** | | Pg | 06 09 28.2 | +0.3 |
| **KAN08** | **Anthony NE Sta** | **0.51** | **289** | | Pg | 06 09 28.7 | +0.4 |
| KAN08 | | | | IAML | | 06 09 36.0 | |
| | comp=E,1μm,0.2s | | | | | | |
| **KAN12** | **Harper NE Stat** | **0.55** | **296** | | Pg | 06 09 29.5 | +0.2 |
| **OK051** | **E0350 and S346** | **0.70** | **142** | | Pg | 06 09 32.0 | 0.0 |
| OK051 | | | | IAML | | 06 09 44.2 | |
| | comp=E,957nm,0.2s | | | | | | |
| OK051 | | | | IAML | | 06 09 47.8 | |
| | comp=E,865nm,0.2s | | | | | | |
| **T35A** | **Sooner Cattle** | **0.70** | **102** | Pg | Pg | 06 09 31.9 | -0.1 |
| **OK032** | **Salt Plains WL** | **0.72** | **249** | | Pg | 06 09 32.5 | +0.1 |
| OK032 | | | | IAML | | 06 09 42.7 | |
| | comp=E,878nm,0.2s | | | | | | |
| OK032 | | | | IAML | | 06 09 47.1 | |
| | comp=E,608nm,0.2s | | | | | | |
| **OK048** | **Pawnee Station** | **0.73** | **152** | | Pg | 06 09 32.5 | -0.1 |
| **CROK** | **Carrier** | **0.74** | **222** | | Pg | 06 09 32.9 | +0.1 |
| **QUOK** | **Quay** | **1.03** | **149** | | Pg | 06 09 38.3 | -0.2 |
| QUOK | | | | IAML | | 06 09 55.8 | |
| | comp=E,633nm,0.2s | | | | | | |
| QUOK | | | | IAML | | 06 09 58.7 | |
| | comp=N,708nm,0.2s | | | | | | |
| **OK052** | **Battle Ridge R** | **1.16** | **157** | Pg | Pg | 06 09 40.4 | -0.4 |
| OK052 | | | | IAML | | 06 10 00.4 | |
| | comp=N,1μm,0.4s | | | | | | |
| OK052 | | | | IAML | | 06 10 00.6 | |
| | comp=N,554nm,0.2s | | | | | | |
| **OK031** | **S. Brethren Rd** | **1.19** | **159** | Pg | Pg | 06 09 40.9 | -0.4 |
| OK031 | | | | IAML | | 06 10 01.6 | |
| | comp=N,344nm,0.2s | | | | | | |
| OK031 | | | | IAML | | 06 10 01.9 | |
| | comp=N,515nm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **1.24** | **243** | | Pg | 06 09 42.0 | -0.5 |
| **OK029** | **Liberty Lake** | **1.26** | **183** | Pg | Pn | 06 09 42.4 | -0.4 |
| OK029 | | | | IAML | | 06 10 00.7 | |
| | comp=N,262nm,0.2s | | | | | | |
| OK029 | | | | IAML | | 06 10 03.4 | |
| | comp=N,291nm,0.2s | | | | | | |
| **NOKA** | **Waynoka** | **1.32** | **252** | | Pn | 06 09 43.3 | -0.3 |
| NOKA | | | | IAML | | 06 10 03.6 | |
| | comp=N,398nm,0.2s | | | | | | |
| NOKA | | | | IAML | | 06 10 09.5 | |
| | comp=E,338nm,0.3s | | | | | | |
| **DEOK** | **Depew** | **1.40** | **150** | | Pn | 06 09 44.4 | -0.3 |
| **ADOK** | **Arcadia Dam** | **1.41** | **180** | | Pn | 06 09 44.9 | +0.2 |
| **OKCSW** | **OKLAHOMA CITY** | **1.65** | **182** | | Pn | 06 09 48.7 | +0.6 |
| **TUL3** | **Leonard** | **1.71** | **132** | | Pb | 06 09 49.9 | -0.6 |
| **R32A** | **Long Quarter,** | **1.73** | **322** | Pn | Pb | 06 09 50.4 | -0.3 |
| **CSTR** | **Hydro, Custer** | **1.77** | **217** | | Pb | 06 09 50.7 | -0.7 |
| **FNO** | **Franklin** | **1.80** | **181** | | Pn | 06 09 50.9 | +0.7 |
| **RLO** | **Rose Lookout** | **2.09** | **115** | | Pb | 06 09 55.8 | -1.1 |
| **KSU1** | **Kansas State U** | **2.12** | **16** | | Pn | 06 09 55.2 | +0.6 |
| **U38A** | **Gravette** | **2.48** | **104** | Pn | Pn | 06 10 00.8 | +1.3 |
| **CBKS** | **Cedar Bluff** | **2.56** | **314** | Pn | Pn | 06 10 02.2 | +1.5 |
| **WMOK** | **Wichita Mounta** | **2.58** | **207** | Pn | Pn | 06 10 01.8 | +0.8 |
| **HHAR** | **Hobbs** | **2.87** | **105** | Pn | Pn | 06 10 06.3 | +1.4 |
| **X37A** | **Clayton** | **2.95** | **146**

comp=Z,15nm,0.8s
**RSSD Black Hills 8.68 326** IAmb_Lg 06 14 02.4
comp=Z,5.9nm,1.1s
**SPMN Marine on St. 8.85 21** IAmb_Lg 06 14 17.4

*IDC **26** 06:17:14.8±2.9, 34°.76N×46°.60E, h0km, mb3.6/2, mbtmp3.8/5, ML3.3/3, MS3.8/2, Error ellipse: s-maj=70.0km s-min=35.8km az=48.0*
*TEH **26** 06:17:15.7, 34°.60N×46°.30E, h5km, ML3.6*
*ISN **26** 06:17:15.3±0.5, 34°.61N×46°.30E, h9km±5km, ML3.5*
**ISC 26 06:17:16.5±1.4, 34°60N±0°.03×46°28E±0°.03, h3km±11km, n46, σ1§35/48, 5C-5D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Derash** | **0.13** | **42** | Pg | **Pg** | **06 17 18.5** | **-0.7** |
| **IGHG** | **Ghaleghazi** | **0.36** | **139** | Pg | **Pg** | **06 17 23.9** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **212** | Pg | **Pg** | **06 17 27.8** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.58** | **261** | Pg | **Pg** | **06 17 27.4** | **-0.3** |
| **ILIN** | **Lien** | **0.64** | **61** | Pg | **Pg** | **06 17 28.0** | **-0.9** |
| ILIN | | | | Sg | **Sg** | **06 17 38.1** | **+0.8** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **117** | Pg | **Pg** | **06 17 29.5** | **-0.6** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **184** | Pg | **Pb** | **06 17 35.6** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.14** | **77** | Pg | **Pb** | **06 17 37.8** | **-1.3** |
| **IBZA** | **Bozab** | **1.31** | **95** | Pg | **Pn** | **06 17 41.1** | **-1.0** |
| **IBDR** | **Badra** | **1.52** | **191** | *e*Pn | **Pn** | **06 17 44.5** | **-0.1** |
| IBDR | | | | *e*Sn | **Sb** | **06 18 05.6** | **+0.6** |
| IBDR | comp=E,1μm,0.4s | | | AML | AML | 06 18 12.3 | |
| IBDR | comp=N,452nm,0.6s | | | AML | AML | 06 18 13.7 | |
| **SDS1** | **Sardasht. Az.** | **1.67** | **337** | Pg | **Pn** | **06 17 46.9** | **-0.1** |
| **IKFM** | **Kafar-mosalman** | **1.69** | **129** | Pg | **Pb** | **06 17 48.3** | **+0.1** |
| **IDOB** | **Doab** | **1.77** | **117** | Pg | **Pb** | **06 17 49.6** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.78** | **297** | *e*Pn | **Pn** | **06 17 48.0** | **-0.3** |
| IKRK | | | | *e*Sn | **Sb** | **06 18 12.5** | **-0.1** |
| IKRK | comp=N,1μm,0.5s | | | AML | AML | 06 18 17.4 | |
| IKRK | comp=E,1μm,0.5s | | | AML | AML | 06 18 20.4 | |
| **HSAM** | **Samen** | **1.96** | **101** | Pn | **Pb** | **06 17 52.6** | **-0.4** |
| **BHD** | **Baghdad** | **2.07** | **230** | *e*Pn | **Pn** | **06 17 52.0** | **-0.2** |
| BHD | | | | *e*Sn | **Sn** | **06 18 19.0** | **+0.5** |
| **MAHB** | **Mahabad** | **2.21** | **348** | Pn | **Pn** | **06 17 55.7** | **+1.4** |
| **HAGD** | **Aghdareh** | **2.37** | **84** | Pn | **Pb** | **06 17 58.4** | **-1.6** |
| **RAFI** | **Al-Rafai** | **2.88** | **183** | *e*Pn | **Pn** | **06 18 03.5** | **+0.2** |
| RAFI | | | | *e*Sn | **Sn** | **06 18 38.2** | **-0.3** |
| RAFI | comp=N,113nm,0.3s | | | AML | AML | 06 18 39.5 | |
| RAFI | comp=E,120nm,0.7s | | | AML | AML | 06 18 51.6 | |
| **IAZR** | **Azarshahr** | **3.08** | **356** | Pn | **Pn** | **06 18 08.6** | **+2.2** |
| **IRAZ** | **Razeghan** | **3.10** | **74** | Pn | **Pn** | **06 18 08.7** | **+2.1** |
| **ISHB** | **Shabestar** | **3.71** | **352** | Pn | **Pn** | **06 18 15.8** | **+0.8** |
| **IHRS** | **Heris** | **3.76** | **9** | Pn | **Pn** | **06 18 17.4** | **+1.7** |
| **QAMS** | **Qamsar** | **4.33** | **100** | Pn | **Pn** | **06 18 25.4** | **+1.9** |
| **GRMI** | **Germi** | **4.39** | **17** | Pn | **Pn** | **06 18 25.9** | **+1.6** |
| **IGAR** | **Gharneh** | **5.29** | **113** | Pn | **Pn** | **06 18 38.3** | **+1.6** |
| **IFIR** | **Firoozkooh** | **5.41** | **77** | Pn | **Pn** | **06 18 40.1** | **+1.8** |
| **GNI** | **Garni** comp=E,0.8nm,0.3s,baz=158,slow=19,SNR=2.1 comp=E,4.3nm,0.4s | **5.67** | **348** | Pn | **Pn** | **06 18 42.7** | **+0.8** |
| **BRTR** | **Keskin Array B** baz=122,slow=14,SNR=7.8 comp=E,1.4nm,0.9s | **11.30** | **301** | Pn | **Pn** | **06 20 03.2** | **+4.1** |
| **WSAR** | **Wadi Sarin** comp=E,0.5nm,0.3s,baz=2.1,slow=9.8,SNR=4.4 comp=E,2.7nm,0.5s | **15.64** | **133** | Pn | **Pn** | **06 20 55.7** | **-2.3** |
| **VOIR** | | **19.47** | **310** | ⇑P | **Pn** | **06 21 46.0** | **+0.2** |
| **DOPR** | **Dopca** | **19.50** | **312** | ⇓P | **Pn** | **06 21 46.4** | **+0.3** |
| **ARR** | **Arges** | **19.71** | **310** | ⇓P | **Pn** | **06 21 47.9** | **-0.7** |
| **LOT** | **Lotru** | **20.29** | **309** | ⇓P | **P** | **06 21 53.9** | **+0.3** |
| **AKASG** | **Malin Array Be** comp=E,1.2nm,0.6s,baz=139,slow=11,SNR=2.5 comp=E,1.2nm,0.6s | **20.32** | **328** | P | **P** | **06 21 51.0** | **-2.6** |
| **BURAR** | **Bucovina Array** | **20.43** | **316** | ⇓P | **P** | **06 21 54.8** | **-0.2** |
| **ARCR** | **ARCALIA** | **20.67** | **314** | ⇑P | Pn | 06 21 58.8 | -1.0 |
| **GZR** | **Gura Zlata** | **20.91** | **308** | ⇑P | **P** | **06 21 59.5** | **-0.7** |
| **BOVS** | **Bovan** | **21.03** | **303** | ⇓P | **P** | **06 22 01.2** | **-0.3** |
| **DRGR** | | **21.53** | **312** | ⇑P | **P** | **06 22 07.3** | **+0.4** |
| **SIRR** | **Siria** | **21.97** | **309** | ⇑P | **P** | **06 22 13.1** | **+1.5** |
| **KOLS** | **Kolonicke sedl** | **22.80** | **316** | *e*P | **P** | **06 22 22.6** | **+2.2** |
| **VYHS** | **Vyhne** | **24.63** | **313** | *e*P | **P** | **06 22 40.1** | **+1.9** |
| **FINES** | **FINESS Array B** comp=E,1.2nm,0.7s,baz=144,slow=9.8,SNR=2.2 comp=E,1.2nm,0.7s | **29.80** | **340** | P | **P** | **06 23 22.7** | **-1.7** |
| **BORG** | **Borgarnes** comp=E,52nm,18.6s,baz=354,slow=41 | **49.80** | **329** | LR | LR | 06 51 05.9 | |
| **TSUM** | **Tsumeb** comp=E,119nm,19.9s,baz=141,slow=38 | **60.07** | **212** | LR | LR | 06 55 52.5 | |

*NEIC **26** 06:23:24.6±1.0, 44°.1N±0°.1×149°.7E±0°.1, h10km±1km, mb4.6/24, Error ellipse: s-maj=20.2km s-min=16.9km az=146.0*
*MOS **26** 06:23:24.8±1.1, 44°.21N×149°.78E, h26km, mb4.7/17, Error ellipse: s-maj=12.2km s-min=7.1km az=44.2*
*SKHL **26** 06:23:26.6±0.2, 44°.10N×149°.80E, h40km±5km, mb4.8/3*
*JMA **26** 06:23:26.5±0.7, 44°N±3°×15°0E±°, h30km, MV4.2/14, SE OFF ETOROFU*
*IDC **26** 06:23:29.2±4.2, 44°.25N×149°.71E, h39km±35km, mb3.8/17, mbtmp4.0/20, ML3.5/3, MS3.4/2, Error ellipse: s-maj=20.8km s-min=18.7km az=171.0*
**ISC 26 06:23:26.0±1.3, 44°07N±0°06×149°68E±0°07, h23km±8km, n119, σ1§26/124, mb4.5/38, 10C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.74** | **313** | *i* P | **Pn** | **06 23 54.4** | **-0.4** |
| KUR | 430nm,0.4s | | | AMB | AMB | 06 23 56.7 | |
| KUR | 1μm,0.5s | | | *e*S | **Sn** | **06 24 15.4** | **-0.9** |
| KUR | 650nm,0.5s | | | A | A | 06 24 23.5 | |
| KUR | | | | A | A | 06 24 23.5 | |
| **KUR** | **Kuril'sk** | **1.74** | **313** | *c i* PN | **Pn** | **06 23 54.4** | **-0.4** |
| KUR | | | | *e*S | **Sn** | **06 24 15.2** | **-1.1** |
| KUR | comp=Z,359nm,0.4s | | | pmax | pmax | | |
| KUR | comp=N,165nm,0.3s | | | pmax | pmax | | |
| KUR | comp=E,110nm,0.3s | | | pmax | pmax | | |
| KUR | comp=N,863nm,0.4s | | | smax | smax | | |
| KUR | comp=E,532nm,0.6s | | | smax | smax | | |
| **SHO** | **Shikotan** | **2.07** | **265** | *e*P | **Pn** | **06 23 59.5** | **+0.2** |
| SHO | comp=E,50nm,0.3s | | | AMB | AMB | 06 24 00.8 | |
| SHO | | | | *e*S | **Sn** | **06 24 23.9** | **-0.5** |
| SHO | comp=E,320nm,0.4s | | | A | A | 06 24 29.2 | |
| SHO | comp=E,420nm,0.4s | | | A | A | 06 24 29.2 | |
| **SHO** | **Shikotan** | **2.07** | **265** | *e*PN | **Pn** | **06 23 59.5** | **+0.2** |
| SHO | | | | *e*S | **Sn** | **06 24 23.6** | **-0.8** |
| SHO | comp=Z,52nm,0.3s | | | pmax | pmax | | |
| SHO | comp=N,20nm,0.2s | | | pmax | pmax | | |
| SHO | comp=N,165nm,0.3s | | | smax | smax | | |
| SHO | comp=E,369nm,0.3s | | | smax | smax | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.75** | **271** | *e*P | **Pn** | **06 24 09.6** | **+0.8** |
| YUK | comp=E,270nm,0.4s | | | AMB | AMB | 06 24 11.8 | |
| YUK | comp=E,500nm,0.5s | | | *e*S | **Sn** | **06 24 41.7** | **+0.4** |
| YUK | comp=E,470nm,0.5s | | | A | A | 06 24 55.7 | |
| YUK | | | | A | A | 06 24 55.7 | |
| **YUK** | **Yuzh-Kuril'sk** | **2.75** | **271** | *i* PN | **Pn** | **06 24 09.8** | **+1.0** |
| **NEM2** | **Nemuro 2** | **2.94** | **258** | P | **Pn** | **06 24 11.4** | **+0.1** |
| NEM2 | | | | *e*S | **Sn** | **06 24 44.8** | **-1.1** |
| **JRA** | **Rausu** | **3.29** | **269** | P | **Pn** | **06 24 17.7** | **+1.6** |
| JRA | | | | *e*S | **Sn** | **06 24 54.6** | **+0.1** |
| **JNK** | **Nakash** | **3.62** | **264** | P | **Pn** | **06 24 21.5** | **+0.7** |
| JNK | | | | *e*S | **Sn** | **06 25 02.5** | **-0.3** |
| **JAK** | **Akkeshi** | **3.78** | **255** | *e*P | **Pn** | **06 24 23.3** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **4.17** | **271** | *e*P | **Pn** | **06 24 29.7** | **+1.6** |
| **JAR** | **Ashorobuto** | **4.36** | **262** | P | **Pn** | **06 24 32.5** | **+1.7** |
| **JOB** | **Onbets** | **4.41** | **257** | *e*P | **Pn** | **06 24 32.7** | **+1.2** |
| JOB | | | | *e*S | **Sn** | **06 25 22.0** | **-0.2** |
| **JCH** | **Churui** | **4.83** | **255** | P | **Pn** | **06 24 38.8** | **+1.4** |
| JCH | | | | *e*S | **Sn** | **06 25 32.5** | **-0.1** |
| **JKK2** | **Kamakawa 2** | **5.01** | **270** | *e*P | **Pn** | **06 24 42.4** | **+2.6** |
| **JKA** | **Kamikawa-asahi** | **5.10** | **273** | Pn | **Pn** | **06 24 44.4** | **+3.4** |
| **ASAJ** | **Asahikawa** comp=E,1.1nm,0.3s,baz=100,slow=8.3,SNR=9.0 | **5.10** | **273** | Pn | **Pn** | **06 24 44.8** | **+3.7** |
| ASAJ | comp=E,465nm,18.8s,baz=158,slow=44 comp=E,2.7nm,0.3s | | | LR | LR | 06 27 13.1 | |
| **ERM** | **Erimo** | **5.20** | **249** | Pn | **Pn** | **06 24 45.5** | **+3.0** |
| **ERM** | **Erimo** | **5.20** | **249** | *ce*PN | **Pn** | **06 24 44.2** | **+1.8** |
| ERM | comp=Z,140nm,1.7s | | | pmax | pmax | | |
| **JNBK** | **Urakawa-nobuka** | **5.37** | **253** | *e*P | **Pn** | **06 24 45.7** | **+0.9** |
| JNBK | | | | *e*S | **Sn** | **06 25 46.3** | **+0.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | Pn | **Pn** | **06 24 48.0** | **-0.7** |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | *e*P | **Pn** | **06 24 49.8** | **+1.1** |
| YSS | comp=Z,10.0nm,0.9s | | | AMB | AMB | 06 24 51.8 | |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | *i* PN | **Pn** | **06 24 49.8** | **+1.1** |
| **JANG** | **Nango** | **7.10** | **241** | *e*P | **Pn** | **06 25 07.8** | **-0.6** |
| JANG | | | | *e*S | **Sn** | **06 26 22.5** | **-5.9** |
| **JTM** | **Tenmabayashi** | **7.17** | **246** | Pn | **Pn** | **06 25 10.1** | **+0.7** |
| **TYV** | **Tymovskoe** | **8.29** | **327** | *e*P | **Pn** | **06 25 27.0** | **+2.2** |
| TYV | | | | AMB | AMB | 06 25 30.0 | |
| **TYV** | **Tymovskoe** | **8.29** | **327** | *e*PN | Pb | 06 25 39.8 | -9.0 |
| TYV | comp=Z,5.0nm,0.9s | | | pmax | pmax | | |
| **JMM** | **Marumori** | **9.14** | **230** | Pn | **Pn** | **06 25 36.0** | **-0.4** |
| **TEY** | **Ternei** | **9.39** | **280** | *e*PN | Pn | 06 25 28.7 | -11 |
| **PETK** | **Petropavlovsk-** comp=Z,173nm,19.0s,baz=156,slow=42 | **10.48** | **28** | LR | LR | 06 30 44.2 | |
| **USRK** | **Usuriysk Ar.** comp=Z,0.3nm,0.3s,baz=84,slow=14,SNR=6.4 comp=Z,2.4nm,0.7s | **12.72** | **277** | Pn | **Pn** | **06 26 26.8** | **+1.4** |
| **KLR** | **Kul'dur** comp=Z,0.1nm,0.3s,baz=121,slow=5.9,SNR=2.0 | **13.35** | **299** | Pn | **Pn** | **06 26 38.4** | **+4.4** |
| **KLR** | **Kul'dur** | **13.35** | **299** | *e*P | **Pn** | **06 26 35.4** | **+1.4** |
| **KLR** | **Kul'dur** | **13.35** | **299** | *ce*PN | **Pn** | **06 26 35.4** | **+1.4** |
| KLR | comp=E,10.0nm,2.5s | | | pmax | pmax | | |
| **ZEA** | **Zeya** | **17.57** | **311** | *e*P | **Pn** | **06 27 28.1** | **-1.1** |
| ZEA | comp=Z,20nm,0.6s | | | AMB | AMB | 06 27 31.8 | |
| **ZEA** | **Zeya** | **17.57** | **311** | *e*P | **P** | **06 27 30.9** | **+0.8** |
| **SEY** | **Seymchan** comp=Z,0.4nm,0.3s,baz=184,slow=13,SNR=7.6 comp=Z,6.6nm,1.0s | **18.96** | **4** | P | **P** | **06 27 43.0** | **-2.4** |
| **SEY** | **Seymchan** | **18.96** | **4** | *e*P | **P** | **06 27 43.1** | **-2.4** |
| SEY | comp=Z,10.0nm,1.1s | | | pmax | pmax | | |
| **H11N2** | **WAKE ISLAND Hy** baz=334,slow=75,SNR=20 | **28.21** | **144** | T | T | 07 00 26.3 | |
| **H11N1** | **WAKE ISLAND Hy** baz=334,slow=75,SNR=17 | **28.22** | **144** | T | T | 07 00 18.6 | |
| **H11N3** | **WAKE ISLAND Hy** baz=334,slow=75,SNR=19 | **28.23** | **144** | T | T | 07 00 23.9 | |
| **H11S1** | **WAKE ISLAND Hy** baz=335 | **29.22** | **145** | T | T | 07 01 42.1 | |
| **H11S3** | **WAKE ISLAND Hy** baz=335,slow=74,SNR=250 | **29.23** | **145** | T | T | 07 01 36.6 | |
| **H11S2** | **WAKE ISLAND Hy** baz=335,slow=74,SNR=23 | **29.24** | **145** | T | T | 07 01 40.6 | |
| **ULN** | **Ulaanbaatar** | **29.59** | **293** | P | **P** | **06 29 29.1** | **-0.3** |
| ULN | comp=Z,6.9nm,1.0s | | | IAmb | IAmb | 06 29 30.8 | |
| **ULN** | **Ulaanbaatar** | **29.59** | **293** | *ce*P | **P** | **06 29 28.9** | **-0.5** |
| ULN | comp=Z,7.0nm,1.0s | | | pmax | pmax | | |
| **SONM** | **Songino Array** | **30.04** | **293** | P | **P** | **06 29 33.5** | **+0.3** |
| **SONM** | **Songino Array** comp=Z,4.2nm,0.9s,baz=81,slow=8.2,SNR=16 comp=Z,4.2nm,0.9s | **30.04** | **293** | P | **P** | **06 29 33.8** | **+0.5** |
| **ZAK** | **Zakamensk** | **31.71** | **298** | *e*P | **P** | **06 29 47.7** | **-0.3** |
| **ZAK** | **Zakamensk** | **31.71** | **298** | *e*P | **P** | **06 29 47.7** | **-0.3** |
| ZAK | comp=Z,3.0nm,1.0s | | | pmax | pmax | | |
| **D19K** | **Kuna River** | **36.18** | **30** | P | **P** | **06 30 26.8** | **+0.3** |
| **E19K** | **Redstone River** | **36.25** | **31** | P | **P** | **06 30 26.6** | **-0.4** |
| **B21K** | **Ikpikpuk River** | **37.68** | **28** | P | **P** | **06 30 39.0** | **0.0** |
| **E22K** | **Anaktuvuk Pass** | **38.40** | **31** | P | **P** | **06 30 45.0** | **-0.3** |
| E22K | comp=Z,7.6nm,0.7s | | | IAmb | IAmb | 06 31 01.4 | |
| **E23K** | **Chandalar** | **39.21** | **31** | P | **P** | **06 30 52.3** | **+0.2** |
| **ILAR** | **Eielson Array** comp=Z,0.4nm,0.9s,baz=282,slow=4.5,SNR=1.8 comp=Z,0.4nm,0.9s | **40.15** | **36** | P | **P** | **06 30 59.9** | **0.0** |
| **DGZ** | **Jazzator, Alta** | **41.84** | **301** | *i* P | **P** | **06 31 13.1** | **-1.0** |
| DGZ | comp=Z,1.0nm,0.7s | | | pmax | pmax | | |
| **I30M** | **Mount Dempster** | **44.55** | **35** | P | **P** | **06 31 35.6** | **-0.2** |
| **MK31** | **Makanchi Array** | **46.05** | **298** | P | **P** | **06 31 48.3** | **+0.5** |
| MK31 | comp=Z,8.1nm,0.9s | | | IAmb | IAmb | 06 31 49.1 | |
| **MK31** | **Makanchi Array** | **46.05** | **298** | *ce*P | **P** | **06 31 48.3** | **+0.5** |
| **MKAR** | **Makanchi Array** | **46.05** | **298** | P | **P** | **06 31 48.3** | **+0.5** |
| **MKAR** | **Makanchi Array** comp=Z,7.3nm,0.8s,baz=72,slow=8.0,SNR=63 comp=Z,7.3nm,0.8s | **46.05** | **298** | P | **P** | **06 31 48.7** | **+0.8** |
| **MKAR** | **Makanchi Array** | **46.05** | **298** | *e*P | **P** | **06 31 48.4** | **+0.6** |
| **MKAR** | **Makanchi Array** | **46.05** | **298** | *i* P | **P** | **06 31 48.4** | **+0.6** |
| MKAR | comp=Z,7.0nm,0.8s | | | pmax | pmax | | |
| **MAKZ** | **Makanchi** | **46.24** | **298** | P | **P** | **06 31 49.5** | **+0.2** |
| MAKZ | comp=Z,7.0nm,0.8s | | | IAmb | IAmb | 06 31 50.7 | |
| **MAKZ** | **Makanchi** | **46.24** | **298** | P | **P** | **06 31 49.5** | **+0.2** |
| MAKZ | comp=Z,7.0nm,0.9s | | | pmax | pmax | | |
| **KURK** | **Kurchatov** | **46.86** | **305** | P | **P** | **06 31 54.3** | **+0.2** |
| KURK | comp=Z,4.2nm,1.1s | | | IAmb | IAmb | 06 31 55.0 | |
| **KURK** | **Kurchatov** | **46.86** | **305** | *e*P | **P** | **06 31 54.8** | **+0.7** |
| **KURK** | **Kurchatov** | **46.86** | **305** | *ce*P | **P** | **06 31 54.8** | **+0.7** |
| KURK | comp=Z,4.0nm,1.7s | | | pmax | pmax | | |
| **KURBB** | **Kurchatov Arra** comp=Z,1.6nm,0.4s,baz=72,slow=8.0,SNR=13 comp=Z,1.6nm,0.4s | **46.95** | **304** | P | **P** | **06 31 54.0** | **-0.7** |
| **BVAR** | **Borovoye Array** comp=Z,0.5nm,0.4s,baz=46,slow=12,SNR=3.1 comp=Z,0.5nm,0.4s | **50.71** | **310** | P | **P** | **06 32 23.9** | **+0.3** |
| **BOOM** | **Boomskoye usch** | **51.99** | **296** | P | **P** | **06 32 33.5** | **-0.1** |
| BOOM | comp=Z,7.1nm,0.8s | | | IAmb | IAmb | 06 32 48.0 | |
| **BOOM** | **Boomskoye usch** | **51.99** | **296** | P | **P** | **06 32 33.5** | **-0.1** |
| BOOM | comp=Z,7.0nm,0.8s | | | pmax | pmax | | |
| **AAK** | **Ala-Archa** | **52.86** | **297** | *e*P | **P** | **06 32 40.5** | **+0.5** |
| **AAK** | **Ala-Archa** | **52.86** | **297** | *ce*P | **P** | **06 32 40.5** | **+0.5** |
| AAK | comp=Z,4.0nm,1.3s | | | pmax | pmax | | |
| **KK31** | **Karatay Array** | **55.17** | **299** | P | **P** | **06 32 56.0** | **-0.7** |
| **KK31** | **Karatay Array** | **55.17** | **299** | P | **P** | **06 32 56.0** | **-0.7** |
| KK31 | comp=Z,3.0nm,0.8s | | | pmax | pmax | | |
| **KKAR** | **Karatay Array** | **55.17** | **299** | P | **P** | **06 32 56.9** | **+0.2** |
| **KKAR** | **Karatay Array** | **55.17** | **299** | P | **P** | **06 32 56.9** | **+0.2** |
| **ARU** | **Arti** | **55.35** | **318** | *d* P | **P** | **06 32 55.5** | **-2.3** |
| ARU | | | | S | **S** | **06 40 39.7** | **-0.7** |
| ARU | | | | SS | **SS** | **06 44 23.1** | **-1.3** |
| ARU | comp=Z,5.0nm,0.9s | | | pmax | pmax | | |
| **ABKAR** | **Akbulak array** | **58.28** | **310** | P | **P** | **06 33 19.0** | **+0.4** |
| ABKAR | comp=Z,7.2nm,0.9s | | | IAmb | IAmb | 06 33 19.8 | |
| **KIRV** | **Kirov** | **58.46** | **323** | *i* P | **P** | **06 33 18.5** | **-1.2** |
| **SIMJ** | **Simiganj** | **58.49** | **295** | P | **P** | **06 33 20.3** | **-0.1** |
| SIMJ | comp=Z,6.2nm,0.9s | | | IAmb | IAmb | 06 33 34.6 | |
| **VALR** | **Valaam** | **63.89** | **332** | *e*P | **P** | **06 33 57.9** | **+1.5** |
| VALR | comp=Z,16nm,0.7s | | | pmax | pmax | | |
| **WRA** | **Warramunga Arr** comp=Z,0.5nm,0.6s,baz=16,slow=6.9,SNR=4.9 comp=Z,0.5nm,0.6s | **65.23** | **196** | P | **P** | **06 34 06.7** | **+1.0** |
| **FINES** | **FINESS Array B** comp=Z,4.0nm,0.6s,baz=29,slow=8.1,SNR=33 comp=Z,4.0nm,0.6s | **65.41** | **334** | P | **P** | **06 34 06.2** | **-0.1** |
| **FINES** | **FINESS Array B** | **65.41** | **334** | *i* P | **P** | **06 34 05.8** | **-0.5** |
| FINES | comp=Z,4.0nm,0.6s | | | pmax | pmax | | |
| **NVAR** | **Mina Array Bea** comp=Z,0.4nm,0.7s,baz=280,slow=8.9,SNR=3.7 comp=Z,0.4nm,0.7s | **65.85** | **59** | P | **P** | **06 34 10.2** | **+0.3** |
| **OBN** | **Obninsk** | **66.13** | **325** | *e*P | **P** | **06 34 11.0** | **-0.1** |
| **OBN** | **Obninsk** | **66.13** | **325** | *e*P | **P** | **06 34 11.0** | **-0.1** |
| OBN | comp=Z,10.0nm,0.9s | | | *e* | | 06 36 35.7 | |
| OBN | | | | pmax | pmax | | |
| **PDAR** | **Pinedale Array** comp=Z,0.2nm,0.6s,baz=298,slow=1.9,SNR=3.0 comp=Z,0.2nm,0.6s | **68.30** | **51** | P | **P** | **06 34 25.8** | **+0.4** |
| **ASAR** | **Alice Springs** comp=Z,0.3nm,0.7s,baz=349,slow=1.9,SNR=2.3 comp=Z,0.3nm,0.7s | **68.94** | **195** | P | **P** | **06 34 31.6** | **+2.4** |
| **NC405** | **NORSAR Array S** | **69.76** | **340** | P | **P** | **06 34 33.2** | **-0.7** |
| **NB2** | **NORSAR Subarra** comp=Z,6.8nm,0.8s,baz=31,slow=6.5 | **69.95** | **340** | P | **P** | **06 34 34.4** | **-0.7** |
| **NOA** | **NORSAR Array B** comp=Z,3.0nm,0.7s,baz=31,slow=6.7,SNR=22 comp=Z,3.0nm,0.7s | **69.95** | **340** | P | **P** | **06 34 34.9** | **-0.1** |
| **HFS** | **Hagfors** comp=Z,3.2nm,0.4s,baz=45,slow=4.8,SNR=17 comp=Z,3.2nm,0.4s | **70.09** | **338** | P | **P** | **06 34 35.1** | **-0.8** |
| **KIV** | **Kislovodsk** | **70.90** | **313** | *e*P | **P** | **06 34 41.1** | **-0.1** |
| **KIV** | **Kislovodsk** | **70.90** | **313** | *e*P | **P** | **06 34 41.1** | **-0.1** |
| KIV | comp=E,6.0nm,1.1s | | | pmax | pmax | | |
| **KBZ** | **Khabaz** comp=Z,5.3nm,0.8s,baz=58,slow=1.9,SNR=12 comp=Z,5.3nm,0.8s | **70.94** | **313** | P | **P** | **06 34 42.4** | **+1.0** |
| **AKASG** | **Malin Array Be** comp=Z,0.8nm,0.4s,baz=37,slow=6.6,SNR=12 comp=Z,0.8nm,0.4s | **72.39** | **325** | P | **P** | **06 34 49.8** | **-0.1** |
| **AKASG** | **Malin Array Be** | **72.39** | **325** | *i* P | **P** | **06 34 50.0** | **+0.1** |
| AKASG | comp=Z,1.0nm,0.4s | | | pmax | pmax | | |
| **AKBB** | **Malin Array Si** | **72.39** | **325** | *ce*P | **P** | **06 34 48.9** | **-1.0** |
| AKBB | comp=Z,17nm,1.5s | | | pmax | pmax | | |
| **KIEV** | **Kiev** | **72.40** | **325** | P | **P** | **06 34 49.9** | **-0.1** |
| **KIEV** | **Kiev** | **72.40** | **325** | P | **P** | **06 34 49.9** | **-0.1** |
| KIEV | comp=Z,19nm,1.5s | | | pmax | pmax | | |
| **BUR08** | **Bucovina Ar. S** | **76.43** | **325** | P | **P** | **06 35 14.1** | **+0.4** |
| BUR08 | comp=Z,5.0nm,1.2s | | | IAmb | IAmb | 06 35 15.3 | |
| **BURAR** | **Bucovina Array** | **76.44** | **325** | P | **P** | **06 35 13.7** | **0.0** |
| **DPC** | **Dobruska-Polom** | **77.58** | **332** | *e*P | **P** | **06 35 20.6** | **+0.6** |
| **DPC** | **Dobruska-Polom** | **77.58** | **332** | *e*P | **P** | **06 35 20.6** | **+0.6** |
| **CLL** | **Collm** comp=Z,10.0nm,1.0s | **77.86** | **334** | *i* P | **P** | **06 35 21.1** | **-0.3** |
| CLL | comp=Z,19nm,1.6s | | | *i* PcP | **pwP** | **06 35 34.0** | **-0.8** |
| **CLL** | **Collm** | **77.86** | **334** | *i* P | **P** | **06 35 21.1** | **-0.3** |
| CLL | | | | *i* | | 06 35 34.0 | |
| CLL | comp=Z,10.0nm,1.0s | | | pmax | pmax | | |
| **BR131** | **Keskin Array S** | **78.63** | **315** | *e*P | **P** | **06 35 24.0** | **-2.2** |
| **BRTR** | **Keskin Array B** comp=Z,0.6nm,0.7s,baz=84,slow=6.3,SNR=4.1 comp=Z,0.6nm,0.7s | **78.63** | **315** | P | **P** | **06 35 27.1** | **+0.9** |
| **BRTR** | **Keskin Array B** | **78.63** | **315** | *i* P | **P** | **06 35 28.7** | **+2.5** |
| BRTR | comp=Z,1.0nm,0.9s | | | pmax | pmax | | |
| **KHC** | **Kasperske Hory** comp=Z,4.1nm,0.9s | **79.55** | **332** | IAmb | IAmb | 06 35 33.9 | |
| **KHC** | **Kasperske Hory** | **79.55** | **332** | *e*P | **P** | **06 35 31.1** | **+0.2** |
| KHC | | | | *ex* | x | 06 35 43.4 | |
| **KHC** | **Kasperske Hory** | **79.55** | **332** | *ce*P | **P** | **06 35 29.9** | **-1.0** |
| KHC | comp=Z,16nm,1.7s | | | pmax | pmax | | |
| **GERES** | **GERESS Array B** comp=Z,1.3nm,0.8s,baz=29,slow=3.0,SNR=4.4 comp=Z,1.3nm,0.8s | **79.75** | **332** | P | **P** | **06 35 32.5** | **+0.4** |
| **TX31** | **Lajitas Ar. Si** | **80.94** | **58** | P | **P** | **06 35 39.0** | **+0.2** |
| **TXAR** | **Lajitas Array** comp=Z,0.5nm,0.6s,baz=304,slow=3.7,SNR=11 comp=Z,0.5nm,0.6s | **80.94** | **58** | P | **P** | **06 35 39.4** | **+0.6** |

*IDC **26** 06:23:53.3±14.0, 56°.39S×27°.37W, h115km±123km, mb3.4/3, mbtmp3.9/4, ML3.9/1, MS3.4/1, Error ellipse: s-maj=89.1km s-min=39.8km az=105.0*
**ISC 26 06:23:52.8±1.8, 56°.4S±0°.2×27°.4W±0°.5, h112km, n7, σ0§47/6, mb3.8/3, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** 0.3nm,0.3s,baz=302,slow=9.4,SNR=20 2.9nm,0.6s | **18.48** | **156** | P | **P** | **06 27 59.4** | **-0.3** |
| **QSPA** | **South Pole Qui** 0.9nm,0.5s,baz=186,slow=1.8,SNR=12 0.9nm,0.5s | **33.87** | **180** | P | **P** | **06 30 24.6** | **+0.3** |
| **MAW** | **Mawson** 0.6nm,0.4s,baz=256,slow=8.5,SNR=2.6 0.6nm,0.4s | **39.94** | **143** | P | **P** | **06 31 15.6** | **+0.1** |
| **LVC** | **Limon Verde** comp=Z,43nm,21.5s,baz=260,slow=35 | **45.38** | **301** | LR | LR | 06 50 22.1 | |
| **TORD** | **Torodi Ar. Bea** 0.3nm,0.5s,baz=203,slow=5.6,SNR=4.3 0.3nm,0.5s | **73.39** | **30** | P | **P** | **06 35 12.8** | **+0.3** |
| **FINES** | **FINESS Array B** 2.7nm,1.0s,baz=81,slow=12,SNR=3.6 | **124.72** | **28** | PKP | **PKPdf** | **06 42 37.1** | **-0.6** |
| **SONM** | **Songino Array** 0.4nm,0.4s,baz=243,slow=1.0,SNR=3.6 | **150.85** | **87** | PKPbc | **PKPbc** | **06 43 31.0** | **-0.3** |

*NOU **26** 06:25:39.4, 37°.97S×178°.29E, h107km, MLv3.8/10, Off E. Coast of N. Island, N.Z.*
*WEL **26** 06:25:43.7±1.1, 38°.5S±6°×17°8E±°, h66km±8km, M3.3/49, ML3.4/9, MLv3.3/49, Error ellipse: s-maj=0.0km s-min=0.0km az=28.5, confirmed*
**ISC 26 06:25:41.8±1.9, 37°.97S±0°.05×177°.95E±0°.07, h91km±10km, n102, σ1§42/109, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PKGZ** | **Pakihiroa** | **0.14** | **45** | P | **Pn** | **06 25 55.0** | **+0.3** |
| PKGZ | | | | S | **Sn** | **06 26 03.3** | **-1.1** |
| **TWGZ** | **Tauwhareparae** | **0.21** | **174** | P | **Pn** | **06 25 55.9** | **+0.9** |
| TWGZ | | | | S | **Sn** | **06 26 05.3** | **+0.5** |
| **RUGZ** | **Raukumara Rang** | **0.22** | **271** | P | **Pn** | **06 25 54.6** | **-0.5** |
| RUGZ | | | | S | **Sn** | **06 26 02.8** | **-2.2** |
| **HAZ** | **Te Kaha** | **0.25** | **327** | P | **Pn** | **06 25 54.8** | **-0.3** |
| HAZ | | | | S | **Sn** | **06 26 03.9** | **-1.1** |
| **PUZ** | **Puketiti** | **0.26** | **113** | P |

| | | | | | | |
|---|---|---|---|---|---|---|
| **TOZ** | **Tahuroa Road** | **1.96** | **276** | P | **Pn** | **06 26 14.1 +0.6** |
| **KAHZ** | **Kahuranaki** | **2.01** | **204** | P | **Pn** | **06 26 15.2 +1.0** |
| **KATZ** | **Kakaramea** | **2.04** | **240** | P | **Pn** | **06 26 16.3 +1.7** |
| **KRHZ** | **Kereru** | **2.08** | **216** | P | **Pn** | **06 26 15.9 +0.8** |
| **TMVZ** | **Te Maari** | **2.10** | **236** | P | **Pn** | **06 26 16.8 +1.3** |
| **ETVZ** | **East Tongariro** | **2.11** | **236** | P | **Pn** | **06 26 16.8 +1.2** |
| **NTVZ** | **North Tongarir** | **2.11** | **237** | P | **Pn** | **06 26 17.0 +1.3** |
| **KRVZ** | **Karewarewa** | **2.13** | **237** | P | **Pn** | **06 26 17.3 +1.4** |
| **OTVZ** | **Oturere** | **2.15** | **236** | P | **Pn** | **06 26 17.5 +1.3** |
| **KUZ** | **Kuaotunu** | **2.16** | **304** | P | **Pn** | **06 26 16.2 +0.1** |
| **KUZ** | **Kuaotunu** | **2.16** | **304** | P | **Pn** | **06 26 16.3 +0.2** |
| **NNVZ** | **North Ngauruho** | **2.17** | **237** | P | **Pn** | **06 26 18.0 +1.6** |
| **WTVZ** | **West Tongariro** | **2.18** | **238** | P | **Pn** | **06 26 18.0 +1.5** |
| **SNVZ** | **South Ngauruho** | **2.18** | **235** | P | **Pn** | **06 26 17.9 +1.3** |
| **NGZ** | **Ngauruhoe** | **2.20** | **236** | P | **Pn** | **06 26 18.2 +1.4** |
| **TUVZ** | **Tukino** | **2.22** | **234** | P | **Pn** | **06 26 18.4 +1.4** |
| **PXZ** | **Pawanui** | **2.23** | **202** | P | **Pn** | **06 26 17.5 +0.5** |
| **MOVZ** | **Moawhango** | **2.24** | **229** | P | **Pn** | **06 26 18.3 +1.0** |
| **TWVZ** | **Taurewa** | **2.26** | **240** | P | **Pn** | **06 26 19.3 +1.7** |
| **WNVZ** | **Wahianoa** | **2.29** | **233** | P | **Pn** | **06 26 19.3 +1.3** |
| **PNHZ** | **Pukenui** | **2.38** | **215** | P | **Pn** | **06 26 19.3 +0.3** |
| **MKAZ** | **Moumakai** | **2.38** | **290** | P | **Pn** | **06 26 19.8 +0.8** |
| **WPHZ** | **Waipukurau** | **2.40** | **209** | P | **Pn** | **06 26 19.8 +0.5** |
| **MTVZ** | **Mangateitei** | **2.40** | **233** | P | **Pn** | **06 26 20.8 +1.4** |
| **PKVZ** | **Pokaka** | **2.43** | **236** | P | **Pn** | **06 26 21.4 +1.6** |
| **HIZ** | **Hauiti** | **2.50** | **256** | P | **Pn** | **06 26 22.6 +2.0** |
| **HIZ** | **Hauiti** | **2.50** | **256** | P | **Pn** | **06 26 22.6 +2.0** |
| **PRHZ** | **Porangahau** | **2.51** | **204** | P | **Pn** | **06 26 21.0 +0.2** |
| **WIAZ** | **Waiheke Island** | **2.53** | **297** | P | **Pn** | **06 26 21.9 +0.9** |
| **ETAZ** | **East Tamaki Re** | **2.61** | **292** | P | **Pn** | **06 26 23.3 +1.2** |
| **GRZ** | **Great Barrier** | **2.63** | **310** | P | **Pn** | **06 26 23.0 +0.7** |
| **DVHZ** | **Dannevirke** | **2.71** | **210** | P | **Pn** | **06 26 23.1 -0.3** |
| **MBAZ** | **Motutapu North** | **2.71** | **295** | P | **Pn** | **06 26 24.7 +1.2** |
| **ANWZ** | **Angora Road** | **2.74** | **204** | P | **Pn** | **06 26 23.8 0.0** |
| **VRZ** | **Vera Road** | **2.76** | **244** | P | **Pn** | **06 26 26.1 +2.1** |
| **AWAZ** | **Awhitu Peninsu** | **2.78** | **288** | P | **Pn** | **06 26 25.8 +1.4** |
| **WAZ** | **Wanganui** | **2.92** | **231** | P | **Pn** | **06 26 28.0 +1.6** |
| **RVAZ** | **Riverhead Bore** | **2.94** | **293** | P | **Pn** | **06 26 28.0 +1.5** |
| **POWZ** | **Post Office Ro** | **2.96** | **214** | P | **Pn** | **06 26 27.0 +0.3** |
| **PRWZ** | **Pori Road** | **3.01** | **210** | P | **Pn** | **06 26 27.3 -0.1** |
| **BFZ** | **Birch Farm** | **3.02** | **205** | P | **Pn** | **06 26 27.4 -0.2** |
| **BFZ** | **Birch Farm** | **3.02** | **205** | P | **Pn** | **06 26 25.8 -1.8** |
| **TIWZ** | **Tintock** | **3.23** | **209** | P | **Pn** | **06 26 30.3 -0.2** |
| **MRZ** | **Mangatainoka R** | **3.26** | **214** | P | **Pn** | **06 26 30.0 -0.8** |
| **NEZ** | **North Egmont** | **3.29** | **246** | P | **Pn** | **06 26 34.2 +2.9** |
| **PKE** | **Pukeiti** | **3.34** | **247** | P | **Pn** | **06 26 36.0 +4.0** |
| **KHEZ** | **Kahui Hut** | **3.36** | **246** | P | **Pn** | **06 26 34.4 +2.2** |
| **KHEZ** | **Kahui Hut** | **3.36** | **246** | P | **Pn** | **06 26 35.8 +3.6** |
| **HOWZ** | **Holdsworth Sta** | **3.48** | **212** | P | **Pn** | **06 26 32.6 -1.2** |
| **TMWZ** | **Te Maipa** | **3.52** | **206** | P | **Pn** | **06 26 33.3 -1.0** |
| **WCZ** | **Waipu Caves** | **3.53** | **304** | P | **Pn** | **06 26 35.6 +1.1** |
| **OGWZ** | **Otaki Gorge** | **3.57** | **216** | P | **Pn** | **06 26 34.0 -1.0** |
| **MTW** | **Mount Morrison** | **3.71** | **210** | P | **Pn** | **06 26 35.5 -1.4** |
| **KIW** | **Kapiti Island** | **3.73** | **218** | P | **Pn** | **06 26 36.4 -0.8** |
| **TRWZ** | **Traveller** | **3.85** | **206** | P | **Pn** | **06 26 37.6 -1.2** |
| **CAW** | **Cannon Point** | **3.85** | **215** | P | **Pn** | **06 26 37.3 -1.4** |
| **PAWZ** | **Paruwai Farm** | **3.93** | **209** | P | **Pn** | **06 26 38.5 -1.4** |
| **MSWZ** | **Moikau Station** | **4.03** | **210** | P | **Pn** | **06 26 39.3 -1.9** |
| **PLWZ** | **Palliser** | **4.16** | **209** | P | **Pn** | **06 26 40.9 -2.0** |
| **DUWZ** | **D'Urville Isla** | **4.21** | **227** | P | **Pn** | **06 26 43.1 -0.6** |
| **TCW** | **Tory Channel** | **4.31** | **220** | P | **Pn** | **06 26 43.4 -1.6** |
| **OUZ** | **Omahuta** | **4.45** | **307** | P | **Pn** | **06 26 48.1 +1.1** |
| **QRZ** | **Quartz Range** | **5.08** | **234** | P | **Pn** | **06 26 55.7 +0.2** |
| **KHZ** | **Kahutara** | **5.58** | **216** | P | **Pn** | **06 27 01.2 -1.1** |
| **CTZ** | **Chatham Island** | **7.08** | **146** | P | **Pn** | **06 27 27.2 +4.6** |

*ISN **26** 06:27:46.5±0.8, 34°.62N×46°.20E, h12km±9km, ML2.8*
*TEH **26** 06:27:46.7, 34°.63N×46°.18E, h9km, ML2.7*
**ISC 26 06:27:47.5**±1.4, **34°.64N**±0°.04×**46°.17E**±0°.04, **h11**km±14km, **n10**, σ0°.97/14, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.19** | **70** | Pg | **Pb** | **06 27 51.8** | **-1.4** |
| **IGHG** | **Ghaleghazi** | **0.45** | **133** | Pg | **Pb** | **06 27 56.4** | **-1.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **203** | Pg | **Pb** | **06 27 58.6** | **-0.9** |
| **ILIN** | **Lien** | **0.71** | **66** | Pg | **Pb** | **06 28 01.3** | **-0.8** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **116** | Pg | **Pb** | **06 28 03.0** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **79** | Pg | **Pb** | **06 28 11.8** | **+0.8** |
| **IBDR** | **Badra** | **1.54** | **188** | *e*Pn | **Pb** | **06 28 15.0** | **-1.0** |
| IBDR | | | | *e*Sn | **Sg** | **06 28 36.8** | **-0.1** |
| **IKRK** | **Kirkuk** | **1.69** | **297** | *e*Pn | **Pb** | **06 28 18.3** | **-0.2** |
| IKRK | | | | *e*Sn | **Sg** | **06 28 41.0** | **-0.7** |
| IKRK | comp=N,165nm,0.4s | | | AML | AML | 06 28 46.6 | |
| IKRK | comp=E,114nm,0.5s | | | AML | AML | 06 28 51.5 | |
| **BHD** | **Baghdad** | **2.02** | **228** | *e*Pn | **Pn** | **06 28 22.0** | **+0.5** |
| BHD | | | | *e*Sn | **Sb** | **06 28 48.5** | **-0.8** |
| **RAFI** | **Al-Rafai** | **2.91** | **181** | *e*Pn | **Pn** | **06 28 34.8** | **+1.1** |
| RAFI | | | | *e*Sn | **Sn** | **06 29 09.0** | **+0.4** |

*IDC **26** 06:36:39.3±1.6, 8°.29S×116°.93E, h0km, mb3.5/4,*
*mbtmp3.6/5, ML3.5/1, Error ellipse: s-maj=28.8km*
*s-min=22.2km az=84.0*
*DJA **26** 06:36:41.3±0.7, 8°.5S×116°.7E±°, h12km±5km, M3.9/8,*
*MLv3.9/8*
**ISC 26 06:36:40.6**±0.8, **8°.30S**±0°.05×**116°.90E**±0°.04, **h10**km, **n14,**
**σ0°.54/18, mb3.6/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.44** | **182** | P | **Pb** | **06 36 50.2** | **-0.3** |
| TWSI | | | | S | **Sg** | **06 36 55.8** | **+0.7** |
| **PLAI** | **Plampang** | **1.02** | **121** | P | **Pn** | **06 37 00.5** | **-0.4** |
| PLAI | | | | S | **Sb** | **06 37 13.5** | **-0.3** |
| **SRBI** | **Singaraja** | **1.68** | **277** | P | **Pb** | **06 37 11.8** | **+0.1** |
| SRBI | | | | S | **Sb** | **06 37 33.0** | **+0.1** |
| **DNP** | **Denpasar** | **1.71** | **257** | P | **Pn** | **06 37 09.3** | **-1.2** |
| **IGBI** | **Denpasar** | **1.81** | **253** | P | **Pn** | **06 37 12.6** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.72** | **266** | P | **Pn** | **06 37 24.3** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **2.80** | **119** | P | **Pn** | **06 37 26.1** | **+0.5** |
| **BASI** | **Baing, Sumba** | **4.10** | **118** | P | **Pn** | **06 37 43.8** | **+0.4** |
| **BSSI** | **Bau Bau, Buton** | **4.16** | **59** | P | **Pn** | **06 37 44.2** | **0.0** |
| **KAPI** | **Kappang** | **4.32** | **41** | Pn | **Pn** | **06 37 46.7** | **+0.3** |
| KAPI | 2.4nm,0.3s,baz=123,slow=17,SNR=2.1 | | | Sn | **Sn** | **06 38 36.0** | **-0.9** |
| KAPI | 4.1nm,0.3s,baz=213,slow=15,SNR=6.6 | | | Lg | Lg | 06 38 55.6 | |
| **WRA** | 4.7nm,0.3s,baz=268,slow=22,SNR=3.8<br>4.9nm,0.3s<br>**Warramunga Arr** | **20.47** | **126** | P | **P** | **06 41 18.4** | **-0.3** |
| **ASAR** | 1.8nm,0.5s,baz=301,slow=12,SNR=44<br>1.8nm,0.5s<br>**Alice Springs** | **22.34** | **135** | P | **P** | **06 41 38.9** | **0.0** |
| **SONM** | 0.7nm,0.7s,baz=312,slow=9.3,SNR=7.2<br>0.7nm,0.7s<br>**Songino Array** | **56.65** | **352** | P | **P** | **06 46 24.3** | **+0.1** |
| **MKAR** | 0.5nm,0.6s,baz=157,slow=4.1,SNR=2.9<br>0.5nm,0.6s<br>**Makanchi Array** | **62.90** | **334** | P | **P** | **06 47 07.3** | **+0.2** |
| | 0.3nm,0.6s,baz=139,slow=8.0,SNR=3.5<br>0.3nm,0.6s | | | | | | |

*ISN **26** 06:40:05.2±0.5, 34°.65N×46°.30E, h10km±7km, ML2.8*
*TEH **26** 06:40:06.3, 34°.64N×46°.30E, h9km, ML2.8*
**ISC 26 06:40:06.1**±1.1, **34°.64N**±0°.04×**46°.30E**±0°.04, **h12**km±10km, **n10**, σ0°.55/13, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.09** | **50** | Pg | **Pg** | **06 40 09.1** | **0.0** |
| **IGHG** | **Ghaleghazi** | **0.38** | **144** | Pg | **Pb** | **06 40 14.6** | **-0.3** |
| **ILIN** | **Lien** | **0.61** | **63** | Pg | **Pb** | **06 40 18.6** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.62** | **212** | Pg | **Pb** | **06 40 18.3** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **121** | Pg | **Pg** | **06 40 19.9** | **-0.1** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **184** | Pg | **Pn** | **06 40 26.1** | **-0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.11** | **78** | Pg | **Pn** | **06 40 28.0** | **+0.2** |
| **IBDR** | **Badra** | **1.56** | **192** | *e*Pn | **Pb** | **06 40 35.0** | **+0.1** |
| IBDR | | | | *e*Sn | **Sg** | **06 40 56.5** | **+0.3** |
| IBDR | comp=E,115nm,0.6s | | | AML | AML | 06 41 02.9 | |
| IBDR | comp=N,110nm,0.6s | | | AML | AML | 06 41 27.6 | |
| **IKRK** | **Kirkuk** | **1.78** | **296** | *e*Pn | **Pb** | **06 40 38.0** | **-0.7** |
| IKRK | | | | *e*Sn | **Sb** | **06 41 01.5** | **+0.5** |
| IKRK | comp=N,207nm,0.7s | | | AML | AML | 06 41 07.3 | |
| IKRK | | | | AML | AML | 06 41 10.1 | |
| **BHD** | **Baghdad** | **2.10** | **230** | *e*Pn | **Pn** | **06 40 42.0** | **+0.9** |
| BHD | comp=E,153nm,0.9s | | | *e*Sn | **Sb** | **06 41 09.5** | **-0.7** |

*MEX **26** 06:50:28.6±1.0, 14°.96N×94°.23W, h16km±14km, MD4.2*
*CATAC **26** 06:50:30.3±0.6, 14°.85N×94°.08W, h88km±27km, mb4.1,*
*ML4.3*
*GCG **26** 06:50:33.3±0.8, 15°.18N×93°.77W, h29km±531km, MD4.2*
**ISC 26 06:50:23.2**±1.9, **14°.95N**±0°.07×**94°.25W**±0°.04, **h11**km±13km,
**n25**, σ2°.46/40, **Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.24** | **53** | *e*P | **Pn** | **06 50 47.5** | **+1.0** |
| PCIG | | | | *i* S | **Sg** | **06 51 02.0** | **-1.3** |
| **CARR** | **Arriaga** | **1.33** | **14** | *e*P | **Pg** | **06 50 49.1** | **+0.3** |
| CARR | | | | *i* S | **Sg** | **06 51 04.6** | **-1.4** |
| **HUIG** | **Huatulco** | **1.97** | **295** | *e*P | **Pb** | **06 50 58.8** | **-0.3** |
| HUIG | | | | *e*S | **Sn** | **06 51 19.6** | **-1.8** |
| **PAVE** | **Pavencul** | **2.01** | **83** | *i* P | **Pn** | **06 50 58.6** | **+1.3** |
| PAVE | | | | *e*S | **Sn** | **06 51 21.1** | **-1.6** |
| **CHUJ** | **Union Juarez** | **2.07** | **86** | *e*P | **Pn** | **06 50 59.0** | **+0.8** |
| CHUJ | | | | *e*S | **Sn** | **06 51 22.9** | **-1.2** |
| **CMIG** | **Matias Romero** | **2.22** | **344** | *i* P | **Pb** | **06 51 02.5** | **-0.8** |
| CMIG | | | | *i* S | **Sn** | **06 51 26.7** | **-0.7** |
| **CCIG** | **Comitan** | **2.43** | **57** | *i* P | **Pb** | **06 51 06.6** | **-0.4** |
| CCIG | | | | *i* S | **Sn** | **06 51 35.3** | **+2.5** |
| CCIG | comp=Z,2μm,1.0s | | | IAML | | 06 51 37.3 | |
| **RTAL** | **Retalhuleu** | **2.50** | **99** | *i* P | **Pn** | **06 51 05.9** | **+2.0** |
| RTAL | | | | *i* S | **Sn** | **06 51 34.4** | **-0.1** |
| **STG3** | **Santiaguito 3,** | **2.60** | **95** | *e*P | **Pn** | **06 51 07.6** | **+2.3** |
| STG3 | | | | *e*S | **Sn** | **06 51 34.3** | **-2.8** |
| **SULM** | **Suchitepequez,** | **2.67** | **104** | *e*P | **Pn** | **06 51 09.4** | **+3.2** |
| SULM | | | | *e*S | **Sn** | **06 51 37.6** | **-1.0** |
| **HUEH** | **Huehuetenango** | **2.67** | **82** | *i* P | **Pb** | **06 51 09.8** | **-1.5** |
| HUEH | | | | *i* S | **Sn** | **06 51 41.7** | **+2.7** |
| HUEH | comp=Z,3μm,1.0s | | | IAML | | 06 51 52.7 | |
| **SOKI** | **Kika Raxquin** | **2.75** | **92** | *i* P | **Pn** | **06 51 10.9** | **+3.2** |
| SOKI | comp=Z,320nm,1.0s | | | IAML | | 06 52 04.3 | |
| **NEUV** | **Arroyo Zacate** | **3.13** | **332** | *e*P | **Pn** | **06 51 14.8** | **+2.4** |
| NEUV | | | | *i* S | **Sn** | **06 51 46.8** | **-3.0** |
| **CHTG** | **Tecpan** | **3.16** | **93** | *i* P | **Pn** | **06 51 16.1** | **+2.9** |
| CHTG | comp=Z,1μm,1.0s | | | IAML | | 06 52 15.7 | |
| **FUG** | **Fuego 3** | **3.33** | **98** | *e*P | **Pn** | **06 51 18.6** | **+3.2** |
| FUG | | | | *e*S | **Sn** | **06 51 53.6** | **-1.5** |
| **GUMI** | **Mixco** | **3.53** | **95** | *i* P | **Pn** | **06 51 21.0** | **+2.8** |
| GUMI | comp=Z,710nm,1.0s | | | IAML | | 06 52 17.2 | |
| **MRL** | **Marmol** | **4.41** | **88** | *e*P | **Pn** | **06 51 33.5** | **+3.2** |
| **NUBE** | **Las Nubes** | **4.45** | **103** | *i* P | **Pn** | **06 51 33.7** | **+2.9** |
| NUBE | comp=Z,130nm,1.0s | | | IAML | | 06 51 36.4 | |
| NUBE | | | | *i* S | **Sn** | **06 52 21.3** | **-1.4** |
| **PETF** | **Flores** | **4.64** | **64** | *i* P | **Pn** | **06 51 36.2** | **+2.9** |
| PETF | comp=Z,150nm,1.0s | | | IAML | | 06 52 49.3 | |
| **MTO3** | **Montecristo** | **4.76** | **96** | *i* P | **Pn** | **06 51 37.7** | **+2.6** |
| MTO3 | comp=Z,43nm,1.0s | | | IAML | | 06 52 13.1 | |
| **JAYA** | **Jayaque - finc** | **4.83** | **105** | *i* P | **Pn** | **06 51 39.7** | **+3.7** |
| JAYA | | | | *i* S | **Sn** | **06 52 28.1** | **-3.9** |
| **TLIG** | **Tlapa** | **4.90** | **303** | *i* P | Pb | 06 51 43.5 | -5.6 |
| TLIG | comp=Z,14nm,0.5s | | | IAmb | IAmb | 06 51 45.6 | |
| TLIG | comp=Z,86nm,1.0s | | | IAML | | 06 52 58.2 | |
| **PMON** | **Piamonte** | **4.94** | **104** | *i* P | **Pn** | **06 51 39.4** | **+2.0** |
| PMON | | | | *i* S | **Sn** | **06 52 32.6** | **-2.0** |
| PMON | comp=Z,120nm,1.0s | | | IAML | | 06 52 41.2 | |
| **LALI** | **Alcalda de L** | **4.99** | **106** | *i* S | **Sn** | **06 52 31.7** | **-4.2** |
| **SNET** | **Serv Nac Est T** | **5.02** | **104** | *i* S | **Sn** | **06 52 32.9** | **-3.8** |

**NEIC 26 06:52:49.0**±0.4, **37°.334N**±0°.010×**97°.84W**±0°.02, **h5**km±1km,
**mb_Lg2.5**/42, **ML2.8**/38, **Error ellipse: s-maj=2.9km**
**s-min=2.8km az=222.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.13** | **254** | | Pg | 06 52 51.9 | +0.2 |
| KAN12 | | | | Sg | Sg | 06 52 54.1 | +0.6 |
| KAN12 | comp=E,5μm,0.2s | | | IAML | | 06 52 54.1 | |
| KAN12 | comp=N,4μm,0.3s | | | IAML | | 06 52 55.5 | |
| **KS21** | **Milan North St** | **0.15** | **108** | | Pg | 06 52 52.4 | +0.5 |
| **KAN08** | **Anthony NE Sta** | **0.15** | **225** | | Pg | 06 52 52.4 | +0.4 |
| KAN08 | | | | Sg | Sg | 06 52 54.9 | +0.9 |
| KAN08 | comp=E,3μm,0.2s | | | IAML | | 06 52 54.9 | |
| KAN08 | comp=N,3μm,0.3s | | | IAML | | 06 52 55.0 | |
| **KAN01** | **Argonia South** | **0.19** | **160** | Pg | Pg | 06 52 53.4 | +0.6 |
| KAN01 | | | | IAML | | 06 52 59.8 | |
| **KAN05** | comp=N,2μm,0.5s<br>**Bluff City Nor** | **0.23** | **187** | | Pg | 06 52 54.0 | +0.6 |
| KAN05 | comp=N,2μm,0.6s | | | IAML | | 06 53 00.5 | |
| **KAN09** | **Caldwell North** | **0.26** | **138** | | Pg | 06 52 54.7 | +0.5 |
| KAN09 | comp=N,1μm,0.2s | | | IAML | | 06 53 01.6 | |
| KAN09 | comp=E,1μm,0.3s | | | IAML | | 06 53 02.8 | |
| **KAN17** | **Caldwell West** | **0.29** | **168** | | Pg | 06 52 55.3 | +0.6 |
| KAN17 | | | | IAML | | 06 53 04.5 | |
| **KAN14** | comp=N,2μm,0.5s<br>**Manchester OK** | **0.39** | **195** | | Pg | 06 52 56.9 | +0.4 |
| KAN14 | | | | IAML | | 06 53 10.4 | |
| **KAN13** | comp=N,968nm,0.5s<br>**South Haven SW** | **0.43** | **138** | | Pg | 06 52 57.6 | +0.3 |
| **GC02** | **Grant County #** | **0.48** | **182** | Pg | Pg | 06 52 58.7 | +0.4 |
| **OK032** | **Salt Plains WL** | **0.61** | **209** | Pg | Pg | 06 53 00.8 | +0.2 |
| OK032 | comp=N,458nm,0.2s | | | IAML | | 06 53 12.6 | |
| **BLOK** | **Blackwell** | **0.76** | **139** | Pg | Pg | 06 53 03.8 | +0.3 |
| BLOK | | | | IAML | | 06 53 14.9 | |
| BLOK | comp=E,361nm,0.3s<br>comp=N,374nm,1.0s | | | IAML | | 06 53 20.7 | |
| **CROK** | **Carrier** | **0.83** | **188** | | Pg | 06 53 05.1 | +0.1 |
| CROK | comp=E,314nm,0.6s | | | IAML | | 06 53 23.9 | |
| **NOKA** | **Waynoka** | **1.12** | **232** | Pg | Pg | 06 53 10.1 | -0.4 |
| NOKA | comp=E,225nm,0.2s | | | IAML | | 06 53 31.9 | |
| NOKA | comp=N,252nm,0.3s | | | IAML | | 06 53 32.6 | |
| **OK038** | **West end E0370** | **1.12** | **221** | | Pg | 06 53 10.1 | -0.3 |
| **T35A** | **Sooner Cattle** | **1.14** | **111** | Pg | Pg | 06 53 10.7 | -0.2 |
| **OK051** | **E0350 and S346** | **1.15** | **136** | Pg | Pg | 06 53 10.9 | -0.2 |
| **OK048** | **Pawnee Station** | **1.16** | **142** | | Pg | 06 53 10.7 | -0.6 |
| OK048 | comp=N,151nm,0.3s | | | IAML | | 06 53 31.6 | |
| OK048 | comp=N,248nm,0.3s | | | IAML | | 06 53 31.9 | |
| **R32A** | **Long Quarter,** | **1.29** | **328** | | Pg | 06 53 12.6 | -1.1 |
| **QUOK** | **Quay** | **1.47** | **142** | | Pn | 06 53 16.3 | +0.1 |
| **OK029** | **Liberty Lake** | **1.56** | **168** | | Pn | 06 53 17.9 | +0.4 |
| **OK052** | **Battle Ridge R** | **1.58** | **148** | | Pn | 06 53 17.9 | +0.3 |
| **OK031** | **S. Brethren Rd** | **1.59** | **149** | | Pn | 06 53 18.3 | +0.4 |
| **ELIS** | **Ellis County** | **1.79** | **226** | | Pb | 06 53 21.8 | -0.5 |
| **CSTR** | **Hydro, Custer** | **1.82** | **202** | | Pb | 06 53 21.9 | -0.9 |
| **DEOK** | **Depew** | **1.84** | **144** | | Pn | 06 53 21.6 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **1.95** | **170** | | Pn | 06 53 23.3 | +0.6 |
| **CBKS** | **Cedar Bluff** | **2.10** | **315** | Pn | Pn | 06 53 25.2 | +0.2 |
| **U38A** | **Gravette** | **2.91** | **107** | Pn | Pn | 06 53 37.7 | +1.8 |
| U38A | comp=Z,12nm,0.8s | | | IAmb_Lg | | 06 54 27.8 | |
| **SMWD** | **Samnorwood** | **2.95** | **222** | | Pn | 06 53 37.7 | +1.1 |
| SMWD | comp=Z,15nm,1.0s | | | IAmb_Lg | | 06 54 28.0 | |
| **HHAR** | **Hobbs** | **3.30** | **107** | Pn | Pn | 06 53 42.7 | +1.4 |
| HHAR | comp=Z,10nm,0.8s | | | IAmb_Lg | | 06 54 38.9 | |
| **X37A** | **Clayton** | **3.39** | **143** | Pn | Pn | 06 53 44.1 | +1.5 |
| X37A | comp=Z,16nm,1.0s | | | IAmb_Lg | | 06 54 42.5 | |
| **S39A** | **Bolivar** | **3.61** | **83** | Pn | Pn | 06 53 45.9 | +0.3 |
| **AMTX** | **Amarillo** | **3.96** | **233** | IAmb_Lg | | 06 55 01.8 | |
| **DKNS** | comp=Z,16nm,0.8s<br>**Dickens** | **4.44** | **215** | IAmb_Lg | | 06 55 15.3 | |
| **MGMO** | comp=Z,14nm,0.9s<br>**Mountain Grove** | **4.45** | **91** | IAmb_Lg | | 06 55 14.2 | |
| **PLPT** | comp=Z,8.5nm,0.9s<br>**Palo Pinto** | **4.53** | **185** | IAmb_Lg | | 06 55 18.7 | |
| **Z38A** | comp=Z,6.7nm,1.1s<br>**Mt. Pleasant** | **4.69** | **149** | IAmb_Lg | | 06 55 30.1 | |
| **FCAR** | comp=Z,14nm,0.7s<br>**Ozark Folk Cen** | **4.82** | **106** | IAmb_Lg | | 06 55 25.3 | |
| **WHAR** | comp=Z,7.0nm,1.0s<br>**Wooly Hollow** | **4.92** | **113** | IAmb_Lg | | 06 55 33.4 | |
| **P40A** | comp=Z,1nm,0.9s<br>**Paris** | **5.05** | **62** | IAmb_Lg | | 06 55 35.8 | |
| **T25A** | comp=Z,9.5nm,1.1s<br>**Trinidad** | **5.25** | **270** | IAmb_Lg | | 06 55 38.6 | |
| **CCM** | comp=Z,7.2nm,0.7s<br>**Cathedral Cave** | **5.28** | **80** | IAmb_Lg | | 06 55 46.7 | |
| **WLAR** | comp=Z,6.0nm,1.0s<br>**White Oak Lake** | **5.30** | **132** | IAmb_Lg | | 06 55 39.8 | |
| **K30B** | comp=Z,7.1nm,0.7s<br>**Basset** | **5.50** | **346** | IAmb_Lg | | 06 55 48.1 | |
| **N41A** | comp=Z,12nm,0.8s<br>**Harden Midland** | **6.40** | **56** | IAmb_Lg | | 06 56 11.3 | |
| **143A** | comp=Z,8.8nm,0.7s<br>**Socs Landing,** | **7.01** | **129** | IAmb_Lg | | 06 56 44.0 | |
| **PHWY** | comp=Z,4.8nm,0.8s<br>**Pilot Hill** | **7.11** | **306** | IAmb_Lg | | 06 56 48.0 | |
| **N23A** | comp=Z,5.6nm,1.0s<br>**Red Feather La** | **7.24** | **302** | IAmb_Lg | | 06 56 42.2 | |
| **I40A** | comp=Z,6.4nm,0.8s<br>**Norwalk** | **8.54** | **38** | IAmb_Lg | | 06 57 21.1 | |
| **SPMN** | comp=Z,4.1nm,0.8s<br>**Marine on St.** | **8.74** | **24** | IAmb_Lg | | 06 57 40.3 | |
| | comp=Z,4.5nm,1.1s | | | | | | |

*ISN **26** 06:54:03.3±0.9, 34°.65N×46°.15E, h8km±10km, ML3.2*
*TEH **26** 06:54:04.1, 34°.63N×46°.21E, h8km±19km, ML3.3*
**ISC 26 06:54:04.3**±1.3, **34°.63N**±0°.03×**46°.18E**±0°.03, **h2**km±13km,
**n22**, σ0°.93/29, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.18** | **66** | Pg | **Pg** | **06 54 07.8** | **-0.1** |
| IDHR | | | | S | **Sg** | **06 54 11.1** | **+0.7** |
| **IGHG** | **Ghaleghazi** | **0.43** | **133** | Pg | **Pg** | **06 54 12.8** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **204** | Pg | **Pg** | **06 54 15.3** | **+0.2** |
| GLG1 | | | | Sg | **Sb** | **06 54 24.3** | **-1.1** |
| **ILIN** | **Lien** | **0.70** | **65** | Pg | **Pg** | **06 54 17.3** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **116** | Pg | **Pg** | **06 54 19.4** | **-0.1** |
| KCHF | | | | Sg | **Sg** | **06 54 30.6** | **+0.9** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **179** | Pg | **Pg** | **06 54 23.3** | **-0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.21** | **79** | Pg | **Pb** | **06 54 27.0** | **-1.2** |
| **IBZA** | **Bozab** | **1.39** | **96** | Pg | **Pn** | **06 54 30.4** | **-0.7** |
| **IBDR** | **Badra** | **1.53** | **188** | *e*Pn | **Pb** | **06 54 33.0** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **06 54 54.0** | **+0.6** |
| IBDR | comp=E,430nm,0.6s | | | AML | AML | 06 54 59.6 | |
| IBDR | comp=N,267nm,0.4s | | | AML | AML | 06 55 01.5 | |
| **SDS1** | **Sardasht. Az.** | **1.62** | **340** | Pg | **Pb** | **06 54 34.9** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.70** | **298** | *e*Pn | **Pn** | **06 54 35.0** | **0.0** |
| IKRK | | | | *e*Sn | **Sb** | **06 54 57.3** | **-0.8** |
| **IKFM** | **Kafar-mosalman** | **1.77** | **128** | Pg | **Pb** | **06 54 37.4** | **-0.1** |
| **IDOB** | **Doab** | **1.85** | **116** | Pn | **Pb** | **06 54 38.8** | **-0.2** |
| **BHD** | **Baghdad** | **2.02** | **228** | *e*Pn | **Pn** | **06 54 39.0** | **-0.4** |
| BHD | | | | *e*Sn | **Sb** | **06 55 06.0** | **-1.3** |
| **HSAM** | **Samen** | **2.04** | **101** | Pn | **Pb** | **06 54 41.2** | **-1.1** |
| **MAHB** | **Mahabad** | **2.17** | **350** | Pn | **Pb** | **06 54 43.1** | **-1.3** |
| **RAFI** | **Al-Rafai** | **2.90** | **181** | *e*Pn | **Pn** | **06 54 52.0** | **+0.5** |
| RAFI | | | | *e*Sn | **Sn** | **06 55 28.0** | **+1.1** |
| **IAZR** | **Azarshahr** | **3.05** | **357** | Pn | **Pn** | **06 54 55.6** | **+1.7** |
| **IRAZ** | **Razeghan** | **3.17** | **75** | Pn | **Pn** | **06 54 55.6** | **+0.1** |
| **ISHB** | **Shabestar** | **3.68** | **353** | Pn | **Pn** | **06 55 04.5** | **+2.1** |
| **JHBN** | **Jahan bin** | **4.45** | **121** | Pn | **Pn** | **06 55 13.5** | **+0.4** |
| **IRAM** | **Ramesheh** | **5.91** | **117** | Pn | **Pn** | **06 55 34.4** | **+1.3** |

*SKHL **26** 06:56:32.3±0.2, 43°.80N×150°.00E, h28km±3km, mb4.2/3*
*JMA **26** 06:56:36.5±0.6, 45°.N±3°×15°.0E±°, h30km, MV3.6/9, SE*
*OFF ETOROFU*
*IDC **26** 06:56:41.5±9.7, 45°.51N×149°.05E, h0km, mb3.7/6,*
*mbtmp3.7/7, ML2.6/1, Error ellipse: s-maj=213.2km*
*s-min=38.4km az=147.0*
**ISC 26 06:56:36.1**±1.7, **43°.92N**±0°.10×**149°.9E**±0°.1, **h35**km, **n20,**
**σ1°.81/27, mb3.9/6, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.94** | **313

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **K02D** | **Willamette Mer** | **3.29** | **102** | Pn | Pn | 06 58 06.6 | -0.9 |
| K02D | | | | IAML | | 06 58 46.9 | |
| | comp=E,35nm,0.5s | | | | | | |
| **DBO** | **Dodson Butte** | **3.52** | **94** | Pn | Pn | 06 58 09.8 | -0.8 |
| **HEBO** | **Mount Hebo** | **3.54** | **59** | Pn | Pn | 06 58 10.1 | -0.9 |
| HEBO | | | | IAML | | 06 58 52.5 | |
| | comp=N,64nm,2.2s | | | | | | |
| **L02F** | **Cave Junction** | **3.55** | **110** | Pn | Pn | 06 58 11.7 | +0.8 |
| **COR** | **Corvallis** | **3.60** | **70** | Pn | Pn | 06 58 11.1 | -0.5 |
| COR | | | | IAML | | 06 59 33.4 | |
| | comp=N,21nm,2.8s | | | | | | |
| **BUCK** | **Buck Mountain** | **3.73** | **77** | Pn | Pn | 06 58 13.2 | -0.3 |
| BUCK | | | | IAML | | 06 58 54.9 | |
| | comp=E,18nm,2.9s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.82** | **101** | Pn | Pn | 06 58 14.4 | -0.3 |
| **G03D** | **McMinnville, O** | **3.85** | **61** | | Pn | 06 58 14.5 | -0.6 |
| G03D | | | | IAML | | 06 59 02.1 | |
| | comp=N,32nm,0.7s | | | | | | |
| G03D | | | | IAML | | 06 59 23.4 | |
| | comp=E,19nm,2.5s | | | | | | |
| **H04D** | **Lebanon** | **3.97** | **73** | Pn | Pn | 06 58 16.7 | -0.1 |
| H04D | | | | IAML | | 06 59 05.0 | |
| | comp=N,19nm,2.6s | | | | | | |
| H04D | | | | IAML | | 06 59 09.6 | |
| | comp=E,22nm,2.7s | | | | | | |
| **F03A** | **Seaside** | **4.04** | **51** | | Pn | 06 58 17.4 | -0.4 |
| **I04A** | **Tendick Farm,** | **4.10** | **83** | | Pn | 06 58 18.8 | +0.2 |
| I04A | | | | IAML | | 06 59 07.8 | |
| | comp=E,15nm,0.4s | | | | | | |
| I04A | | | | IAML | | 06 59 08.9 | |
| | comp=N,14nm,0.3s | | | | | | |
| **H04A** | **Detroit Lake** | **4.39** | **72** | Pn | Pn | 06 58 22.5 | -0.1 |
| **E03A** | **Lebam** | **4.43** | **44** | Pn | Pn | 06 58 22.2 | -0.9 |
| **F04D** | **Rainier, OR** | **4.44** | **52** | | Pn | 06 58 22.8 | -0.5 |
| **F04A** | **Amboy** | **4.71** | **56** | Pn | Pn | 06 58 27.0 | +0.1 |
| F04A | | | | IAML | | 06 59 23.6 | |
| | comp=N,21nm,0.5s | | | | | | |
| **WISH** | **Wishkah** | **4.75** | **38** | Pn | Pn | 06 58 27.1 | -0.3 |
| **NLWA** | **Neilton Lookou** | **4.91** | **35** | Pn | Pn | 06 58 29.3 | -0.5 |
| NLWA | | | | IAML | | 06 59 24.0 | |
| | comp=N,14nm,0.5s | | | | | | |
| **I05D** | **Terrebonne, OR** | **4.92** | **77** | | Pn | 06 58 30.0 | +0.1 |
| I05D | | | | IAML | | 06 59 45.8 | |
| | comp=N,14nm,3.4s | | | | | | |
| I05D | | | | IAML | | 07 00 13.7 | |
| | comp=E,13nm,3.3s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.95** | **66** | | Pn | 06 58 30.3 | 0.0 |
| HOOD | | | | IAML | | 06 59 10.0 | |
| | comp=N,13nm,0.8s | | | | | | |
| HOOD | | | | IAML | | 07 01 27.3 | |
| | comp=E,14nm,1.5s | | | | | | |
| **J05D** | **Fort Rock, OR** | **4.96** | **90** | Pn | Pn | 06 58 30.6 | +0.1 |
| J05D | | | | IAML | | 06 59 30.0 | |
| | comp=E,11nm,3.5s | | | | | | |
| J05D | | | | IAML | | 06 59 35.1 | |
| | comp=N,8.8nm,3.1s | | | | | | |
| **C03A** | **Quillayute Air** | **5.11** | **27** | Pn | Pn | 06 58 30.6 | -1.9 |
| **G05A** | **Wamic** | **5.14** | **67** | | Pn | 06 58 33.4 | +0.5 |
| G05A | | | | IAML | | 06 59 46.2 | |
| | comp=N,18nm,3.8s | | | | | | |
| G05A | | | | IAML | | 07 01 38.5 | |
| | comp=E,13nm,3.7s | | | | | | |
| **PINE** | **Pine Mountain** | **5.16** | **84** | Pn | Pn | 06 58 33.8 | +0.5 |
| PINE | | | | IAML | | 06 59 28.4 | |
| | comp=N,8.6nm,3.9s | | | | | | |
| PINE | | | | IAML | | 07 00 33.4 | |
| | comp=E,8.1nm,3.7s | | | | | | |
| **LON** | **Longmire** | **5.51** | **51** | | Pn | 06 58 38.3 | +0.4 |
| **GNW** | **Green Mountain** | **5.51** | **40** | Pn | Pn | 06 58 37.0 | -0.8 |
| **B04A** | **Port Angeles** | **5.59** | **33** | Pn | Pn | 06 58 38.2 | -0.8 |
| **G06A** | **Carlson Farm,** | **5.60** | **69** | Pn | Pn | 06 58 39.1 | -0.2 |
| **D05A** | **Enumclaw** | **5.67** | **47** | | Pn | 06 58 40.9 | +0.8 |
| **PGC** | **Sidney** | **6.10** | **30** | Pn | Pn | 06 58 45.5 | -0.5 |
| **I07A** | **Izee** | **6.21** | **81** | Pn | Pn | 06 58 48.5 | +0.8 |
| **MXC** | **Moxie City** | **6.32** | **58** | | Pn | 06 58 49.3 | +0.3 |
| **LTY** | **Liberty** | **6.44** | **51** | | Pn | 06 58 51.4 | +0.7 |
| **HAWA** | **Hanford** | **6.72** | **61** | Pn | Pn | 06 58 54.8 | +0.3 |
| **G08A** | **Pilot Rock** | **6.76** | **71** | | Pn | 06 58 55.3 | +0.1 |
| **D08A** | **Wollman Farm,** | **7.38** | **58** | Pn | Pn | 06 59 04.0 | +0.5 |
| **C09A** | **Chrisman Ranch** | **8.11** | **54** | Pn | Pn | 06 59 14.2 | +0.7 |
| **NEW** | **Newport** | **9.01** | **54** | Pn | Pn | 06 59 26.4 | +0.5 |

*IDC **26** 07:01:44.1±0.9,44˚.26N×149˚.65E,h0km,mb3.9/13, mbtmp3.9/16,ML3.5/3,Error ellipse: s-maj=21.4km s-min=20.5km az=110.0*
*SKHL **26** 07:01:46.3±0.1,44˚.00N×149˚.80E,h32km±3km,mb4.6/3*
*JMA **26** 07:01:46.5±1.2,45˚.N±4˚×15˚.0E±˚,h30km,MV3.9/14,SE OFF ETOROFU*
*NEIC **26** 07:01:46.2±1.0,44˚.1N±0˚.1×149˚.60E±0˚.10,h10km±1km, mb4.1/35,Error ellipse: s-maj=21.1km s-min=11.6km az=178.0*
*MOS **26** 07:01:46.6±1.2,44˚.29N×149˚.61E,h28km,mb4.2/11,Error ellipse: s-maj=12.0km s-min=8.2km az=35.8*

**ISC 26 07:01:48.7±0.6,44˚04N±0˚.06×149˚60E±0˚.07,h35km,n110, σ1§27/117,mb4.1/38,1C,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.72** | **315** | *i* P | **Pn** | **07 02 15.3** | **-0.8** |
| KUR | | | | AMB | AMB | 07 02 15.9 | |
| | 310nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **07 02 37.1** | **+0.3** |
| KUR | | | | A | A | 07 02 41.4 | |
| | 580nm,0.5s | | | | | | |
| KUR | | | | A | A | 07 02 41.4 | |
| | 810nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **1.72** | **315** | ⇑*i*PN | **Pn** | **07 02 15.3** | **-0.8** |
| KUR | | | | *e*S | **Sn** | **07 02 37.1** | **+0.3** |
| KUR | | | | pmax | pmax | | |
| | comp=N,87nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,291nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,45nm,0.1s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,807nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,334nm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **2.00** | **266** | *e*P | **Pn** | **07 02 19.8** | **-0.2** |
| SHO | | | | AMB | AMB | 07 02 24.6 | |
| | comp=E,60nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **07 02 44.0** | **+0.2** |
| SHO | | | | A | A | 07 02 46.1 | |
| | comp=E,270nm,0.3s | | | | | | |
| SHO | | | | A | A | 07 02 46.1 | |
| | comp=E,290nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.00** | **266** | *e*PN | **Pn** | **07 02 19.8** | **-0.2** |
| SHO | | | | *e*S | **Sn** | **07 02 43.8** | **0.0** |
| SHO | | | | pmax | pmax | | |
| | comp=E,36nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,62nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,225nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,278nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.69** | **271** | *e*P | **Pn** | **07 02 29.5** | **0.0** |
| YUK | | | | AMB | AMB | 07 02 30.2 | |
| | comp=E,100nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **07 03 01.8** | **+1.0** |
| YUK | | | | A | A | 07 03 12.0 | |
| | comp=E,320nm,0.5s | | | | | | |
| YUK | | | | A | A | 07 03 12.0 | |
| | comp=E,330nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.69** | **271** | PN | **Pn** | **07 02 29.5** | **0.0** |
| YUK | | | | S | **Sn** | **07 03 01.8** | **+1.0** |
| YUK | | | | smax | smax | | |
| | comp=N,297nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,131nm,0.2s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.87** | **258** | P | **Pn** | **07 02 32.1** | **+0.1** |
| **JRA** | **Rausu** | **3.23** | **270** | P | **Pn** | **07 02 38.5** | **+1.6** |
| **JNK** | **Nakash** | **3.56** | **264** | P | **Pn** | **07 02 42.2** | **+0.8** |
| JNK | | | | S | **Sn** | **07 03 23.1** | **+0.9** |
| **JAK** | **Akkeshi** | **3.71** | **255** | P | **Pn** | **07 02 44.1** | **+0.6** |
| JAK | | | | S | **Sn** | **07 03 26.6** | **+0.6** |
| **JTKR** | **Abashiri--Toko** | **4.10** | **271** | P | **Pn** | **07 02 50.6** | **+1.7** |
| **JAR** | **Ashorobuto** | **4.29** | **262** | P | **Pn** | **07 02 53.1** | **+1.7** |
| **JOB** | **Onbets** | **4.34** | **257** | P | **Pn** | **07 02 53.8** | **+1.6** |
| JOB | | | | *e*S | **Sn** | **07 03 42.4** | **+0.8** |
| **JCH** | **Churui** | **4.76** | **255** | P | **Pn** | **07 02 59.2** | **+1.2** |
| JCH | | | | *e*S | **Sn** | **07 03 52.1** | **+0.2** |
| **JKA** | **Kamikawa-asahi** | **5.04** | **273** | Pn | **Pn** | **07 03 02.2** | **+0.5** |
| **JKA** | **Kamikawa-asahi** | **5.04** | **273** | *i* P | **Pn** | **07 03 03.4** | **+1.6** |
| **ASAJ** | **Asahikawa** | **5.04** | **273** | Pn | **Pn** | **07 03 03.4** | **+1.6** |
| | comp=E,0.8nm,0.3s,baz=240,slow=20,SNR=2.6 | | | | | | |
| | comp=E,4.8nm,0.5s | | | | | | |
| **ERM** | **Erimo** | **5.13** | **249** | Pn | **Pn** | **07 03 03.9** | **+0.8** |
| **ERM** | **Erimo** | **5.13** | **249** | *i* PN | **Pn** | **07 03 05.0** | **+2.0** |
| **JNBK** | **Urakawa-nobuka** | **5.30** | **253** | P | **Pn** | **07 03 06.6** | **+1.3** |
| JNBK | | | | *e*S | **Sn** | **07 04 04.9** | **-0.3** |
| **YSS** | **Yuzh-Sakhalins** | **5.62** | **304** | *e*P | **Pn** | **07 03 10.2** | **+0.5** |
| YSS | | | | AMB | AMB | 07 03 11.9 | |
| **YSS** | **Yuzh-Sakhalins** | **5.62** | **304** | *e*PN | **Pn** | **07 03 09.8** | **+0.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,300nm,15.0s | | | | | | |
| **JANG** | **Nango** | **7.03** | **241** | P | **Pn** | **07 03 28.8** | **-0.3** |
| JANG | | | | *e*S | **Sn** | **07 04 42.8** | **-4.9** |
| **JTH** | **Tanohata** | **7.07** | **237** | *e*P | **Pn** | **07 03 28.6** | **-1.0** |
| JTH | | | | S | **Sn** | **07 04 43.1** | **-5.6** |
| **JTM** | **Tenmabayashi** | **7.10** | **246** | Pn | **Pn** | **07 03 30.3** | **+0.3** |
| **JMM** | **Marumori** | **9.07** | **230** | | **Pn** | **07 03 56.1** | **-1.0** |
| **TEY** | **Ternei** | **9.33** | **281** | *e*PN | **Pn** | **07 03 58.8** | **-1.8** |
| **MJB9** | **Matsu-Tunnel** | **11.47** | **233** | Pn | **Pn** | **07 04 29.5** | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **12.66** | **277** | Pn | **Pn** | **07 04 47.4** | **+1.3** |
| | comp=Z,0.3nm,0.3s,baz=87,slow=13,SNR=7.2 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **ZEA** | **Zeya** | **17.54** | **311** | *e*P | **Pn** | **07 05 47.8** | **-2.4** |
| **ZEA** | **Zeya** | **17.54** | **311** | *i* P | **Pn** | **07 05 47.8** | **-2.4** |
| **SEY** | **Seymchan** | **19.00** | **4** | P | **P** | **07 06 04.5** | **-2.5** |
| | comp=Z,0.4nm,0.3s,baz=205,slow=8.4,SNR=5.1 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **SEY** | **Seymchan** | **19.00** | **4** | *i* P | **P** | **07 06 03.5** | **-3.5** |
| **YAK** | **Yakutsk** | **21.47** | **334** | *i* P | **P** | **07 06 31.2** | **-2.6** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| **BJT** | **Baijiatuan** | **25.05** | **272** | P | **P** | **07 07 10.8** | **+1.3** |
| BJT | | | | IAmb | IAmb | 07 07 12.9 | |
| | comp=Z,5.3nm,1.0s | | | | | | |
| **BJT** | **Baijiatuan** | **25.05** | **272** | P | **P** | **07 07 10.9** | **+1.3** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.22** | **144** | T | T | 07 38 47.3 | |
| | baz=333,slow=75,SNR=30 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.23** | **144** | T | T | 07 38 54.0 | |
| | baz=333,slow=75,SNR=9.5 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.24** | **144** | T | T | 07 38 45.1 | |
| | baz=333,slow=75,SNR=25 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.23** | **145** | T | T | 07 40 03.7 | |
| | baz=334,slow=76,SNR=23 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.24** | **145** | T | T | 07 40 04.1 | |
| | baz=334,slow=76,SNR=21 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.25** | **145** | T | T | 07 40 05.0 | |
| | baz=334,slow=76,SNR=17 | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.55** | **293** | P | **P** | **07 07 50.2** | **+0.2** |
| ULN | | | | IAmb | IAmb | 07 07 51.4 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.55** | **293** | *e*P | **P** | **07 07 50.2** | **+0.2** |
| **ULN** | **Ulaanbaatar** | **29.55** | **293** | P | **P** | **07 07 50.2** | **+0.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **29.99** | **293** | P | **P** | **07 07 54.2** | **+0.3** |
| **SONM** | **Songino Array** | **29.99** | **293** | P | **P** | **07 07 53.7** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=86,slow=7.4,SNR=5.6 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **29.99** | **293** | P | **P** | **07 07 54.2** | **+0.3** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **C16K** | **Lisburne Hills** | **33.64** | **28** | P | **P** | **07 08 25.3** | **-0.1** |
| **C18K** | **Utukok River** | **35.20** | **29** | P | **P** | **07 08 39.3** | **+0.2** |
| C18K | | | | IAmb | IAmb | 07 08 40.2 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **H18K** | **Honhosa River** | **35.38** | **35** | P | **P** | **07 08 40.4** | **-0.3** |
| **G18K** | **Tagagawik** | **35.42** | **34** | P | **P** | **07 08 40.8** | **-0.2** |
| **C19K** | **Lookout Ridge** | **35.90** | **28** | P | **P** | **07 08 45.4** | **+0.4** |
| C19K | | | | IAmb | IAmb | 07 08 53.6 | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **F19K** | **Shaleruckim Mo** | **35.97** | **32** | P | **P** | **07 08 45.9** | **+0.3** |
| F19K | | | | IAmb | IAmb | 07 09 00.4 | |
| | comp=Z,2.1nm,1.0s | | | | | | |
| **D19K** | **Kuna River** | **36.24** | **30** | P | **P** | **07 08 48.1** | **+0.1** |
| D19K | | | | IAmb | IAmb | 07 08 49.1 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **H19K** | **Roundabout Mou** | **36.24** | **35** | P | **P** | **07 08 47.4** | **-0.5** |
| H19K | | | | IAmb | IAmb | 07 09 05.9 | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **36.31** | **31** | P | **P** | **07 08 49.4** | **+0.8** |
| E19K | | | | IAmb | IAmb | 07 08 53.6 | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **J20K** | **Nowinta River** | **37.04** | **37** | P | **P** | **07 08 55.9** | **+1.1** |
| J20K | | | | IAmb | IAmb | 07 08 56.8 | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **F21K** | **Alatna River** | **37.69** | **32** | P | **P** | **07 09 01.8** | **+1.4** |
| **E22K** | **Anaktuvuk Pass** | **38.46** | **31** | P | **P** | **07 09 07.0** | **+0.3** |
| E22K | | | | IAmb | IAmb | 07 09 08.3 | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **39.14** | **28** | P | **P** | **07 09 12.7** | **+0.3** |
| C23K | | | | IAmb | IAmb | 07 09 27.0 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **C24K** | **Franklin Bluff** | **39.79** | **29** | P | **P** | **07 09 18.9** | **+1.1** |
| C24K | | | | IAmb | IAmb | 07 09 19.0 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **39.99** | **33** | P | **P** | **07 09 20.0** | **+0.5** |
| **DHY** | **Denali Highway** | **40.03** | **39** | P | **P** | **07 09 20.2** | **+0.1** |
| **ILAR** | **Eielson Array** | **40.21** | **36** | P | **P** | **07 09 20.9** | **-0.5** |
| | comp=Z,0.2nm,0.6s,baz=266,slow=7.1,SNR=1.9 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **D25K** | **Kavik River** | **40.56** | **29** | P | **P** | **07 09 25.0** | **+0.7** |
| D25K | | | | IAmb | IAmb | 07 09 27.8 | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.23** | **307** | P | **P** | **07 09 38.7** | **+0.6** |
| | comp=Z,0.7nm,0.4s,baz=57,slow=5.3,SNR=2.1 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **BCAR** | **Beaver Creek A** | **42.57** | **39** | P | **P** | **07 09 40.8** | **0.0** |
| **G30M** | **tAoh Zraii Nji** | **44.42** | **33** | P | **P** | **07 09 56.2** | **+0.5** |
| G30M | | | | IAmb | IAmb | 07 10 05.2 | |
| | comp=Z,2.1nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **46.01** | **298** | P | **P** | **07 10 09.2** | **+0.6** |
| MK31 | | | | IAmb | IAmb | 07 10 10.2 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **46.01** | **298** | *i* P | **P** | **07 10 08.6** | **+0.1** |
| **MKAR** | **Makanchi Array** | **46.01** | **298** | P | **P** | **07 10 09.3** | **+0.8** |
| **MKAR** | **Makanchi Array** | **46.01** | **298** | P | **P** | **07 10 09.0** | **+0.5** |
| | comp=Z,3.1nm,0.7s,baz=73,slow=8.0,SNR=30 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **46.20** | **298** | P | **P** | **07 10 10.7** | **+0.7** |
| **MAKZ** | **Makanchi** | **46.20** | **298** | P | **P** | **07 10 10.7** | **+0.7** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.83** | **305** | P | **P** | **07 10 14.3** | **-0.5** |
| KURK | | | | IAmb | IAmb | 07 10 15.3 | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.83** | **305** | *i* P | **P** | **07 10 12.2** | **-2.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.91** | **304** | P | **P** | **07 10 14.9** | **-0.6** |
| | comp=Z,1.0nm,0.4s,baz=73,slow=7.9,SNR=8.8 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **A36M** | **Sachs Harbour** | **47.37** | **25** | P | **P** | **07 10 19.7** | **+1.0** |
| **C36M** | **Paulatuk** | **48.39** | **28** | P | **P** | **07 10 27.3** | **+0.6** |
| **BOOM** | **Boomskoye usch** | **51.95** | **296** | P | **P** | **07 10 54.2** | **-0.1** |
| **BOOM** | **Boomskoye usch** | **51.95** | **296** | P | **P** | **07 10 54.2** | **-0.1** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **52.82** | **296** | *i* P | **P** | **07 10 58.3** | **-2.4** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **55.13** | **299** | P | **P** | **07 11 18.2** | **+0.8** |
| KK31 | | | | IAmb | IAmb | 07 11 18.3 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **55.13** | **299** | P | **P** | **07 11 18.2** | **+0.8** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **55.13** | **299** | P | **P** | **07 11 18.2** | **+0.8** |
| KKAR | | | | IAmb | IAmb | 07 11 18.3 | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **55.13** | **299** | P | **P** | **07 11 18.0** | **+0.6** |
| **KKAR** | **Karatay Array** | **55.13** | **299** | P | **P** | **07 11 18.0** | **+0.6** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.25** | **310** | P | **P** | **07 11 40.2** | **+0.9** |
| **WRA** | **Warramunga Arr** | **65.18** | **196** | P | **P** | **07 12 28.1** | **+1.9** |
| | comp=Z,0.4nm,0.7s,baz=16,slow=7.1,SNR=5.0 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.18** | **196** | *i* P | **P** | **07 12 28.8** | **+2.5** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **FIA1** | **FINESS Array S** | **65.41** | **334** | P | **P** | **07 12 26.9** | **-0.4** |
| **FINES** | **FINESS Array B** | **65.41** | **334** | P | **P** | **07 12 26.6** | **-0.7** |
| **FINES** | **FINESS Array B** | **65.41** | **334** | P | **P** | **07 12 26.2** | **-1.1** |
| | comp=Z,2.8nm,0.5s,baz=31,slow=7.4,SNR=27 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **65.41** | **334** | *i* P | **P** | **07 12 27.0** | **-0.3** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **BOZ** | **Bozeman (W)** | **65.42** | **50** | P | **P** | **07 12 27.6** | **-0.2** |
| **BOZ** | **Bozeman (W)** | **65.42** | **50** | P | **P** | **07 12 27.6** | **-0.2** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **68.89** | **195** | P | **P** | **07 12 51.7** | **+1.9** |
| | comp=Z,0.3nm,0.8s,baz=13,slow=6.2,SNR=5.2 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **NC303** | **NORSAR Array S** | **69.76** | **340** | P | **P** | **07 12 55.5** | **+0.7** |
| **NB2** | **NORSAR Subarra** | **69.96** | **340** | P | **P** | **07 12 55.4** | **-0.6** |
| | comp=Z,1.6nm,0.6s,baz=29,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.96** | **340** | P | **P** | **07 12 55.6** | **-0.4** |
| | comp=Z,3.0nm,0.8s,baz=31,slow=6.6,SNR=15 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **70.09** | **338** | P | **P** | **07 12 56.2** | **-0.6** |
| | comp=Z,4.4nm,0.6s,baz=46,slow=6.4,SNR=16 | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.38** | **325** | P | **P** | **07 13 09.8** | **-1.0** |
| | comp=Z,0.3nm,0.3s,baz=37,slow=6.5,SNR=4.8 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.38** | **325** | *i* P | **P** | **07 13 11.0** | **+0.2** |
| **BUR08** | **Bucovina Ar. S** | **76.42** | **325** | P | **P** | **07 13 35.6** | **+1.1** |
| **BURAR** | **Bucovina Array** | **76.43** | **325** | P | **P** | **07 13 35.5** | **+1.0** |
| BURAR | | | | IAmb | IAmb | 07 13 49.0 | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **CLL** | **Collm** | **77.86** | **334** | *i* P | **P** | **07 13 42.8** | **+0.5** |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **79.75** | **332** | P | **P** | **07 13 52.8** | **-0.1** |
| | comp=Z,0.4nm,0.5s,baz=5.6,slow=11,SNR=2.7 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **81.01** | **58** | P | **P** | **07 14 01.1** | **+1.0** |
| **TXAR** | **Lajitas Array** | **81.01** | **58** | P | **P** | **07 14 01.0** | **+1.0** |
| | comp=Z,0.6nm,0.5s,baz=297,slow=4.1,SNR=14 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |

*NEIC **26** 07:09:20.4±1.9,43˚.31N±0˚.09×150˚.48E±0˚.04,h10km±1km, mb4.4/24,Error ellipse: s-maj=15.6km s-min=4.1km az=188.0*
*MOS **26** 07:09:25.7±0.9,44˚.23N×149˚.94E,h22km,mb4.3/10,Error ellipse: s-maj=12.4km s-min=9.5km az=40.4*
*IDC **26** 07:09:25.3±1.0,44˚.26N×149˚.89E,h0km,mb3.9/11, mbtmp3.9/13,ML3.2/2,Error ellipse: s-maj=26.7km s-min=24.2km az=64.0*
*SKHL **26** 07:09:26.7±0.1,44˚.00N×149˚.90E,h33km±2km,mb4.5/3*
*JMA **26** 07:09:27.5±1.0,44˚N±3˚×15˚0E±˚,h30km,MV4.0/14,SE OFF ETOROFU*

**ISC 26 07:09:28.9±0.7,43˚97N±0˚06×149˚86E±0˚07,h35km,n99, σ1§84/94,mb4.1/26,1C,East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.90** | **312** | *i* P | **Pn** | **07 09 57.0** | **-1.8** |
| KUR | | | | AMB | AMB | 07 09 59.3 | |
| | 330nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **07 10 19.0** | **-2.4** |
| KUR | | | | A | A | 07 10 25.7 | |
| | 350nm,0.5s | | | | | | |
| KUR | | | | A | A | 07 10 25.7 | |
| | 560nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **1.90** | **312** | ⇑*i*PN | **Pn** | **07 09 57.0** | **-1.8** |
| KUR | | | | *e*S | **Sn** | **07 10 17.6** | **-3.8** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,214nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,100nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,61nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,435nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,364nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **2.19** | **268** | *e*P | **Pn** | **07 10 01.7** | **-1.1** |
| SHO | | | | AMB | AMB | 07 10 04.9 | |
| | comp=E,40nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **07 10 27.2** | **-1.4** |
| SHO | | | | A | A | 07 10 27.9 | |
| | comp=E,200nm,0.3s | | | | | | |
| SHO | | | | A | A | 07 10 27.9 | |
| | comp=E,140nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.19** | **268** | *e*PN | **Pn** | **07 10 01.7** | **-1.1** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,23nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.88** | **273** | *e*P | **Pn** | **07 10 11.6** | **-0.7** |
| YUK | | | | AMB | AMB | 07 10 12.0 | |
| | comp=Z,120nm,0.5s | | | | | | |
| YUK | | | | *e*S | **Sn** | **07 10 44.5** | **-1.2** |
| YUK | | | | A | A | 07 10 50.2 | |
| | comp=Z,180nm,0.4s | | | | | | |
| YUK | | | | A | A | 07 10 50.2 | |
| | comp=Z,120nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.88** | **273** | PN | **Pn** | **07 10 13.5** | **+1.2** |
| **NEM2** | **Nemuro 2** | **3.05** | **260** | P | **Pn** | **07 10 14.1** | **-0.4** |
| **JRA** | **Rausu** | **3.42** | **271** | P | **Pn** | **07 10 20.5** | **+0.8** |
| **JNK** | **Nakash** | **3.74** | **266** | *e*P | **Pn** | **07 10 21.8** | **-2.3** |
| JNK | | | | *e*S | **Sn** | **07 11 05.0** | **-1.9** |
| **JAK** | **Akkeshi** | **3.88** | **257** | P | **Pn** | **07 10 25.7** | **-0.3** |
| **JTKR** | **Abashiri--Toko** | **4.30** | **272** | *e*P | **Pn** | **07 10 32.4** | **+0.7** |
| **JAR** | **Ashorobuto** | **4.47** | **263** | P | **Pn** | **07 10 35.0** | **+0.9** |
| JAR | | | | *e*S | **Sn** | **07 11 25.1** | **+0.1** |
| **JOB** | **Onbets** | **4.52** | **258** | P | **Pn** | **07 10 35.4** | **+0.7** |
| JOB | | | | S | **Sn** | **07 11 24.9** | **-1.1** |
| **JCH** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SSLB** | **Suanglung** | **31.08** | **239** | P | P | 07 15 39.2 | -4.6 |
| **PLK4** | **Peulik 4** | **35.63** | **48** | P | P | 07 16 18.0 | -5.1 |
| **C19K** | **Lookout Ridge** | **35.86** | **28** | P | **P** | **07 16 26.7** | **+1.8** |
| C19K | | | | IAmb | IAmb | 07 16 39.1 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **B20K** | **Meade River** | **36.95** | **27** | P | **P** | **07 16 35.7** | **+1.6** |
| B20K | | | | IAmb | IAmb | 07 16 45.8 | |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **D22K** | **Ayikyak River** | **38.22** | **30** | P | **P** | **07 16 41.8** | **-3.1** |
| **BPAW** | **Bear Paw Mtn.** | **38.35** | **37** | P | **P** | **07 16 46.4** | **+0.3** |
| BPAW | | | | IAmb | IAmb | 07 17 04.5 | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **38.41** | **31** | P | **P** | **07 16 48.7** | **+2.2** |
| E22K | | | | IAmb | IAmb | 07 17 03.3 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **O22K** | **Cooper Landing** | **38.96** | **43** | P | **P** | **07 16 48.7** | **-2.4** |
| O22K | | | | IAmb | IAmb | 07 17 04.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **BWN** | **Browne** | **39.02** | **37** | P | **P** | **07 16 48.1** | **-3.6** |
| **G24K** | **Hadweenzic Riv** | **39.94** | **33** | P | **P** | **07 16 57.9** | **-1.4** |
| **I28M** | **Miner Creek** | **43.05** | **35** | P | **P** | **07 17 22.5** | **-2.4** |
| **G30M** | **tAoh Zraii Nji** | **44.37** | **33** | P | **P** | **07 17 33.1** | **-2.3** |
| **MK31** | **Makanchi Array** | **46.21** | **298** | P | **P** | **07 17 51.0** | **+0.8** |
| MK31 | | | | IAmb | IAmb | 07 17 51.5 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **46.21** | **298** | *i* P | **P** | **07 17 50.1** | **-0.1** |
| **MKAR** | **Makanchi Array** | **46.21** | **298** | P | **P** | **07 17 51.3** | **+1.0** |
| **MKAR** | **Makanchi Array** | **46.21** | **298** | P | **P** | **07 17 51.2** | **+0.9** |
| | comp=Z,3.0nm,0.7s,baz=71,slow=8.2,SNR=28 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.21** | **298** | *e*P | **P** | **07 17 50.9** | **+0.7** |
| **MKAR** | **Makanchi Array** | **46.21** | **298** | *i* P | **P** | **07 17 50.9** | **+0.7** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **46.40** | **299** | P | **P** | **07 17 52.8** | **+1.0** |
| MAKZ | | | | IAmb | IAmb | 07 17 53.1 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **46.40** | **299** | P | **P** | **07 17 52.8** | **+1.0** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **47.02** | **305** | P | **P** | **07 17 56.2** | **-0.3** |
| KURK | | | | IAmb | IAmb | 07 17 56.7 | |
| | comp=Z,1.7nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **47.02** | **305** | *e*P | **P** | **07 17 55.3** | **-1.2** |
| **KURK** | **Kurchatov** | **47.02** | **305** | *i* P | **P** | **07 17 55.3** | **-1.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.11** | **305** | P | **P** | **07 17 56.7** | **-0.5** |
| | comp=Z,0.9nm,0.4s,baz=72,slow=8.0,SNR=10 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **BRVK** | **Borovoye** | **50.91** | **310** | *e*P | **P** | **07 18 25.7** | **-0.6** |
| **BRVK** | **Borovoye** | **50.91** | **310** | *i* P | **P** | **07 18 25.7** | **-0.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **53.02** | **297** | *e*P | **P** | **07 18 41.8** | **-0.5** |
| **AAK** | **Ala-Archa** | **53.02** | **297** | *i* P | **P** | **07 18 41.8** | **-0.5** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **55.33** | **299** | P | **P** | **07 18 59.1** | **+0.1** |
| KK31 | | | | IAmb | IAmb | 07 19 12.5 | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **55.33** | **299** | P | **P** | **07 18 59.1** | **+0.1** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array** | **55.33** | **299** | P | **P** | **07 18 59.8** | **+0.9** |
| **KKAR** | **Karatay Array** | **55.33** | **299** | P | **P** | **07 18 59.8** | **+0.9** |
| **ARU** | **Arti** | **55.51** | **318** | *i* P | **P** | **07 18 58.6** | **-1.4** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.44** | **310** | P | **P** | **07 19 21.6** | **+0.8** |
| ABKAR | | | | IAmb | IAmb | 07 19 22.1 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **BMO** | **Blue Mountains** | **62.55** | **53** | P | P | 07 19 44.4 | -4.8 |
| BMO | | | | IAmb | IAmb | 07 19 45.8 | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **BMO** | **Blue Mountains** | **62.55** | **53** | P | P | 07 19 44.4 | -4.7 |
| BMO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **BELG** | **Belogornoye** | **63.06** | **318** | *i* P | **P** | **07 19 50.0** | **-2.2** |
| **WRA** | **Warramunga Arr** | **65.17** | **196** | P | **P** | **07 20 09.4** | **+3.0** |
| | comp=Z,0.1nm,0.5s,baz=13,slow=6.4,SNR=1.3 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **FIA1** | **FINESS Array S** | **65.55** | **334** | P | **P** | **07 20 08.3** | **0.0** |
| **FINES** | **FINESS Array B** | **65.55** | **334** | P | **P** | **07 20 08.3** | **0.0** |
| **FINES** | **FINESS Array B** | **65.55** | **334** | P | **P** | **07 20 08.2** | **-0.2** |
| | comp=Z,2.2nm,0.5s,baz=35,slow=8.5,SNR=26 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **68.88** | **196** | P | **P** | **07 20 33.3** | **+3.4** |
| | comp=Z,0.2nm,0.9s,baz=9.6,slow=7.8,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.9s | | | | | | |
| **NC303** | **NORSAR Array S** | **69.88** | **340** | P | **P** | **07 20 36.2** | **+0.5** |
| **NC405** | **NORSAR Array S** | **69.89** | **340** | P | **P** | **07 20 36.1** | **+0.4** |
| **NB2** | **NORSAR Subarra** | **70.08** | **340** | P | **P** | **07 20 37.4** | **+0.4** |
| | comp=Z,0.9nm,0.5s,baz=28,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.08** | **340** | P | **P** | **07 20 37.3** | **+0.3** |
| | comp=Z,1.2nm,0.6s,baz=32,slow=6.6,SNR=15 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **70.22** | **338** | P | **P** | **07 20 37.4** | **-0.4** |
| | comp=Z,1.4nm,0.4s,baz=60,slow=7.0,SNR=12 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **KBZ** | **Khabaz** | **71.10** | **313** | P | **P** | **07 20 45.2** | **+1.8** |
| | comp=Z,2.1nm,0.8s,baz=117,slow=6.8,SNR=5.1 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **71.10** | **313** | P | **P** | **07 20 42.0** | **-1.4** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.54** | **325** | P | **P** | **07 20 52.0** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=40,slow=6.5,SNR=1.8 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.54** | **325** | P | **P** | **07 20 52.0** | **+0.1** |
| **BUR08** | **Bucovina Ar. S** | **76.58** | **325** | P | **P** | **07 21 15.4** | **-0.2** |
| **CLL** | **Collm** | **78.00** | **334** | *e*P | **P** | **07 21 24.0** | **+0.7** |
| **TXAR** | **Lajitas Array** | **80.88** | **58** | P | **P** | **07 21 42.0** | **+2.5** |
| | comp=Z,0.3nm,0.7s,baz=257,slow=3.3,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |

*IDC **26** 07:12:08.2±0.8,44°.27N×149°.84E,h0km,mb4.1/17, mbtmp4.0/21,ML3.4/4,MS3.1/2,Error ellipse: s-maj=20.3km s-min=18.5km az=120.0*

*MOS **26** 07:12:11.2±1.1,44°.25N×149°.73E,h31km,mb4.6/13,Error ellipse: s-maj=12.2km s-min=8.9km az=133.9*

*JMA **26** 07:12:11.0±1.2,45°.N±5°.×15°.0E±°,h30km,MV4.0/14,SE OFF ETOROFU*

*NEIC **26** 07:12:11.5±0.7,44°.30N±0°.06×149°.4E±0°.1,h10km±1km, mb4.3/24,Error ellipse: s-maj=18.8km s-min=8.0km az=113.0*

*SKHL **26** 07:12:11.3±0.1,44°.00N×149°.90E,h36km±4km,mb4.6/3*

**ISC 26 07:12:10.8±2.8,44°.05N±0°.06×149°.73E±0°.07,h23km±19km, n102,σ1°69/106,mb4.3/36,2C-1D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.78** | **312** | *i* P | **Pn** | **07 12 40.1** | **0.0** |
| KUR | | | | AMB | AMB | 07 12 42.1 | |
| | 410nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **07 13 01.7** | **-0.3** |
| KUR | | | | A | A | 07 13 08.5 | |
| | 670nm,0.4s | | | | | | |
| KUR | | | | A | A | 07 13 08.5 | |
| | 240nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.78** | **312** | ⇓*i*PN | **Pn** | **07 12 40.1** | **0.0** |
| KUR | | | | *e*S | **Sn** | **07 13 01.2** | **-0.8** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,414nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,140nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,93nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,670nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,244nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **266** | *i* P | **Pn** | **07 12 44.8** | **+0.3** |
| SHO | | | | AMB | AMB | 07 12 49.2 | |
| | comp=E,60nm,0.4s | | | | | | |
| SHO | | | | *i* S | **Sn** | **07 13 10.0** | **+0.1** |
| SHO | | | | A | A | 07 13 10.7 | |
| | comp=E,280nm,0.4s | | | | | | |
| SHO | | | | A | A | 07 13 10.7 | |
| | comp=E,230nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **266***c* | *i*PN | **Pn** | **07 12 44.8** | **+0.3** |
| SHO | | | | *i* S | **Sn** | **07 13 09.8** | **-0.1** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,60nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,29nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,22nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,277nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,233nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.79** | **271** | *e*P | **Pn** | **07 12 55.6** | **+1.6** |
| YUK | | | | AMB | AMB | 07 12 57.1 | |
| | comp=E,60nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **07 13 27.5** | **+0.7** |
| YUK | | | | A | A | 07 13 28.8 | |
| | comp=E,90nm,0.4s | | | | | | |
| YUK | | | | A | A | 07 13 28.8 | |
| | comp=E,370nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.79** | **271** | *e*PN | **Pn** | **07 12 56.5** | **+2.5** |
| YUK | | | | *e*S | **Sn** | **07 13 27.5** | **+0.7** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,64nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,31nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,45nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,92nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,367nm,0.4s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.97** | **258** | P | **Pn** | **07 12 57.0** | **+0.6** |
| **JRA** | **Rausu** | **3.33** | **270** | P | **Pn** | **07 13 03.5** | **+2.2** |
| JRA | | | | *e*S | **Sn** | **07 13 43.1** | **+3.0** |
| **JNK** | **Nakash** | **3.66** | **264** | P | **Pn** | **07 13 07.1** | **+1.2** |
| JNK | | | | *e*S | **Sn** | **07 13 49.2** | **+1.0** |
| **JAK** | **Akkeshi** | **3.81** | **256** | P | **Pn** | **07 13 09.0** | **+1.0** |
| **JTKR** | **Abashiri--Toko** | **4.20** | **271** | *e*P | **Pn** | **07 13 15.5** | **+2.1** |
| **JAR** | **Ashorobuto** | **4.39** | **262** | P | **Pn** | **07 13 17.9** | **+1.9** |
| **JOB** | **Onbets** | **4.44** | **257** | P | **Pn** | **07 13 18.4** | **+1.7** |
| JOB | | | | *e*S | **Sn** | **07 14 07.7** | **+0.1** |
| **JCH** | **Churui** | **4.86** | **255** | P | **Pn** | **07 13 24.3** | **+1.9** |
| **JKK2** | **Kamakawa 2** | **5.04** | **270** | *e*P | Pn | 07 13 32.4 | +7.4 |
| **JKA** | **Kamikawa-asahi** | **5.14** | **273** | *e*P | **Pn** | **07 13 28.6** | **+2.4** |
| **ASAJ** | **Asahikawa** | **5.14** | **273** | Pn | **Pn** | **07 13 28.6** | **+2.3** |
| | comp=E,1.5nm,0.3s,baz=95,slow=10.0,SNR=7.0 | | | | | | |
| | comp=E,9.5nm,0.6s | | | | | | |
| **ERM** | **Erimo** | **5.23** | **249** | Pn | **Pn** | **07 13 28.3** | **+0.8** |
| **ERM** | **Erimo** | **5.23** | **249** | *i* PN | **Pn** | **07 13 29.7** | **+2.2** |
| **JNBK** | **Urakawa-nobuka** | **5.40** | **253** | P | **Pn** | **07 13 31.2** | **+1.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.70** | **303** | Pn | Pn | 07 13 30.7 | -3.2 |
| **YSS** | **Yuzh-Sakhalins** | **5.70** | **303** | *e*P | **Pn** | **07 13 36.7** | **+2.8** |
| YSS | | | | AMB | AMB | 07 13 38.4 | |
| | comp=E,10.0nm,0.4s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.70** | **303** | *e*PN | Pn | 07 13 29.5 | -4.4 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **JANG** | **Nango** | **7.12** | **242** | P | **Pn** | **07 13 53.4** | **-0.1** |
| JANG | | | | S | **Sn** | **07 15 09.8** | **-3.7** |
| **JTH** | **Tanohata** | **7.15** | **238** | *e*S | **Sn** | **07 15 09.0** | **-5.5** |
| **JTM** | **Tenmabayashi** | **7.19** | **246** | Pn | **Pn** | **07 13 55.2** | **+0.8** |
| **JMM** | **Marumori** | **9.15** | **231** | Pn | **Pn** | **07 14 21.1** | **-0.2** |
| **PETK** | **Petropavlovsk-** | **10.48** | **27** | Pn | Pn | 07 14 35.8 | -3.7 |
| | comp=Z,0.2nm,0.3s,baz=167,slow=8.1,SNR=2.5 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **PET** | **Petropavlovsk** | **10.75** | **30** | Pn | Pn | 07 14 43.2 | +0.1 |
| **MJAR** | **Matsushiro Arr** | **11.55** | **233** | LR | LR | 07 20 13.1 | |
| | comp=Z,91nm,20.4s,baz=42,slow=41 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **12.75** | **277** | Pn | Pn | 07 15 07.4 | -3.2 |
| **USA0B** | **Ussuriysk Arra** | **12.75** | **277** | PN | Pn | 07 15 07.4 | -3.2 |
| **USRK** | **Ussuriysk Ar.** | **12.75** | **277** | Pn | **Pn** | **07 15 08.9** | **-1.7** |
| **USRK** | **Ussuriysk Ar.** | **12.75** | **277** | Pn | **Pn** | **07 15 11.7** | **+1.2** |
| | comp=Z,0.4nm,0.3s,baz=80,slow=14,SNR=9.3 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **KLR** | **Kul'dur** | **13.39** | **299** | LR | LR | 07 20 58.0 | |
| | comp=Z,72nm,20.2s,baz=121,slow=40 | | | | | | |
| **ZEA** | **Zeya** | **17.61** | **311** | *e*P | **Pn** | **07 16 13.7** | **-0.7** |
| **ZEA** | **Zeya** | **17.61** | **311** | *i* P | **Pn** | **07 16 13.7** | **-0.7** |
| **SEY** | **Seymchan** | **18.98** | **4** | P | **P** | **07 16 27.4** | **-2.9** |
| | comp=Z,0.3nm,0.3s,baz=163,slow=9.5,SNR=5.3 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **SEY** | **Seymchan** | **18.98** | **4** | *e*P | **P** | **07 16 27.7** | **-2.6** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **YAK** | **Yakutsk** | **21.51** | **334** | *i* P | **P** | **07 16 52.2** | **-5.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.63** | **293** | P | **P** | **07 18 13.7** | **-0.7** |
| ULN | | | | IAmb | IAmb | 07 18 16.2 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.63** | **293** | *e*P | **P** | **07 18 12.1** | **-2.3** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **30.07** | **293** | P | **P** | **07 18 19.5** | **+1.2** |
| | comp=Z,2.2nm,0.6s,baz=71,slow=9.2,SNR=12 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **H19K** | **Roundabout Mou** | **36.18** | **35** | P | **P** | **07 19 12.9** | **+1.9** |
| H19K | | | | IAmb | IAmb | 07 19 28.0 | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **D19K** | **Kuna River** | **36.18** | **30** | P | **P** | **07 19 12.4** | **+1.3** |
| D19K | | | | IAmb | IAmb | 07 19 27.1 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **E19K** | **Redstone River** | **36.25** | **31** | P | **P** | **07 19 13.6** | **+1.8** |
| E19K | | | | IAmb | IAmb | 07 19 25.9 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **B20K** | **Meade River** | **36.92** | **27** | P | **P** | **07 19 18.6** | **+1.2** |
| **G21K** | **Allakaket** | **37.52** | **33** | P | **P** | **07 19 24.0** | **+1.5** |
| **B21K** | **Ikpikpuk River** | **37.68** | **28** | P | **P** | **07 19 24.5** | **+0.7** |
| **E22K** | **Anaktuvuk Pass** | **38.40** | **31** | P | **P** | **07 19 31.6** | **+1.7** |
| E22K | | | | IAmb | IAmb | 07 19 46.3 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| **E23K** | **Chandalar** | **39.21** | **31** | P | **P** | **07 19 38.3** | **+1.5** |
| **TOLK** | **Toolik Lake Re** | **39.29** | **30** | P | **P** | **07 19 39.1** | **+1.7** |
| **E24K** | **Your Creek** | **39.63** | **31** | P | **P** | **07 19 42.1** | **+1.8** |
| **ILAR** | **Eielson Array** | **40.14** | **36** | P | **P** | **07 19 42.6** | **-1.8** |
| | comp=Z,0.2nm,0.5s,baz=262,slow=7.2,SNR=4.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **40.50** | **29** | P | **P** | **07 19 49.5** | **+2.0** |
| D25K | | | | IAmb | IAmb | 07 20 16.0 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **41.88** | **301** | *i* P | **P** | **07 19 58.0** | **-1.1** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.4s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **42.30** | **307** | P | **P** | **07 20 02.4** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **42.30** | **307** | P | **P** | **07 20 02.2** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **42.30** | **307** | P | **P** | **07 20 01.5** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=64,slow=9.8,SNR=2.0 | | | | | | |
| ZALV | | | | PcP | **PcP** | **07 21 56.9** | **+1.2** |
| | comp=Z,0.7nm,0.5s,baz=117,slow=5.0,SNR=2.7 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.30** | **307** | P | **P** | **07 20 02.2** | **-0.1** |
| **I30M** | **Mount Dempster** | **44.55** | **35** | P | **P** | **07 20 22.2** | **+1.7** |
| I30M | | | | IAmb | IAmb | 07 20 27.7 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **45.20** | **31** | P | **P** | **07 20 27.1** | **+1.8** |
| **INK** | **Inuvik** | **45.20** | **31** | P | **P** | **07 20 27.2** | **+1.8** |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **46.09** | **298** | P | **P** | **07 20 32.8** | **-0.1** |
| **MK31** | **Makanchi Array** | **46.09** | **298** | *i* P | **P** | **07 20 32.6** | **-0.2** |
| **MKAR** | **Makanchi Array** | **46.09** | **298** | P | **P** | **07 20 33.3** | **+0.5** |
| **MKAR** | **Makanchi Array** | **46.09** | **298** | P | **P** | **07 20 33.9** | **+1.0** |
| | comp=Z,6.1nm,0.7s,baz=72,slow=8.3,SNR=43 | | | | | | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **46.90** | **305** | P | **P** | **07 20 39.4** | **+0.3** |
| KURK | | | | IAmb | IAmb | 07 20 39.9 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **46.90** | **305** | *i* P | **P** | **07 20 38.3** | **-0.8** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.99** | **304** | P | **P** | **07 20 39.6** | **-0.1** |
| | comp=Z,1.7nm,0.4s,baz=72,slow=8.0,SNR=19 | | | | | | |
| KURBB | | | | PcP | **PcP** | **07 22 13.1** | **+1.3** |
| | comp=Z,0.3nm,0.5s,baz=64,slow=4.2,SNR=2.2 | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **50.75** | **310** | P | **P** | **07 21 09.5** | **+0.9** |
| | comp=Z,1.3nm,0.7s,baz=103,slow=6.2,SNR=4.1 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **52.90** | **297** | *i* P | **P** | **07 21 21.3** | **-3.7** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **55.21** | **299** | P | **P** | **07 21 42.2** | **+0.5** |
| KK31 | | | | IAmb | IAmb | 07 21 55.5 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **55.21** | **299** | P | **P** | **07 21 42.2** | **+0.5** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **55.21** | **299** | P | **P** | **07 21 42.1** | **+0.4** |
| KKAR | | | | IAmb | IAmb | 07 21 55.5 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **55.21** | **299** | P | **P** | **07 21 42.2** | **+0.5** |
| **KKAR** | **Karatay Array** | **55.21** | **299** | P | **P** | **07 21 42.1** | **+0.4** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **ARU** | **Arti** | **55.39** | **318** | *e*P | **P** | **07 21 43.0** | **+0.3** |
| **ARU** | **Arti** | **55.39** | **318***c* | *i*P | **P** | **07 21 43.0** | **+0.3** |
| ARU | | | | | | 07 23 42.2 | |
| ARU | | | | S | **S** | **07 29 26.6** | **+1.0** |
| ARU | | | | SS | **SS** | **07 33 05.8** | **-3.8** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.32** | **310** | P | **P** | **07 22 03.6** | **0.0** |
| **WRA** | **Warramunga Arr** | **65.22** | **196** | P | **P** | **07 22 52.0** | **+1.7** |
| | comp=Z,0.3nm,0.5s,baz=13,slow=6.8,SNR=7.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.22** | **196** | *i* P | **P** | **07 22 52.2** | **+1.9** |
| **FINES** | **FINESS Array B** | **65.44** | **334** | P | **P** | **07 22 50.9** | **-0.3** |
| | comp=Z,5.2nm,0.5s,baz=34,slow=8.1,SNR=42 | | | | | | |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **65.44** | **334** | *i* P | **P** | **07 22 51.0** | **-0.3** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **68.93** | **196** | P | **P** | **07 23 16.4** | **+2.7** |
| | comp=Z,0.2nm,0.6s,baz=14,slow=6.0,SNR=5.6 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.98** | **340** | P | **P** | **07 23 19.9** | **-0.1** |
| | comp=Z,1.8nm,0.5s,baz=29,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.98** | **340** | P | **P** | **07 23 20.1** | **+0.1** |
| | comp=Z,2.3nm,0.6s,baz=32,slow=6.6,SNR=28 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **70.12** | **338** | P | **P** | **07 23 20.6** | **-0.1** |
| | comp=Z,3.9nm,0.5s,baz=56,slow=5.6,SNR=17 | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **KBZ** | **Khabaz** | **70.98** | **313** | P | **P** | **07 23 26.1** | **-0.1** |
| | comp=Z,3.9nm,0.8s,baz=38,slow=2.1,SNR=8.8 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **BORG** | **Borgarnes** | **71.32** | **356** | *i* P | **P** | **07 23 23.7** | **-4.3** |
| **AKASG** | **Malin Array Be** | **72.42** | **325** | P | **P** | **07 23 35.2** | **+0.3** |
| | comp=Z,1.8nm,0.7s,baz=37,slow=5.9,SNR=8.3 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **AKBB** | **Malin Array Si** | **72.42** | **325** | P | **P** | **07 23 35.6** | **+0.7** |
| **AKBB** | **Malin Array Si** | **72.42** | **325** | P | **P** | **07 23 35.6** | **+0.7** |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **KIEV** | **Kiev** | **72.44** | **325** | P | **P** | **07 23 35.7** | **+0.8** |
| **KIEV** | **Kiev** | **72.44** | **325** | P | **P** | **07 23 35.7** | **+0.8** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **76.46** | **325** | P | **P** | **07 23 59.5** | **+0.9** |
| BUR08 | | | | IAmb | IAmb | 07 24 15.6 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MORC** | **Moravsky Berou** | **77.67** | **331** | IAmb | IAmb | 07 24 08.5 | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **CLL** | **Collm** | **77.89** | **334** | *i* P | **P** | **07 24 06.8** | **+0.5** |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **78.35** | **345** | P | **P** | **07 24 09.9** | **+1.0** |
| | comp=Z,1.7nm,0.8s,baz=29,slow=4.5,SNR=1.9 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **78.67** | **315** | P | **P** | **07 24 12.8** | **+1.7** |
| | comp=Z,0.6nm,0.8s,baz=52,slow=4.8,SNR=3.9 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **79.78** | **332** | P | **P** | **07 24 17.7** | **+0.8** |
| | comp=Z,0.7nm,0.6s,baz=23,slow=7.8,SNR=4.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.92** | **58** | P | **P** | **07 24 24.9** | **+1.5** |
| | comp=Z,0.5nm,0.7s,baz=308,slow=3.8,SNR=8.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |

*ISN **26** 07:18:52.9±0.4,34°.64N×46°.23E,h9km±5km,ML2.9*

*TEH **26** 07:18:53.6,34°.64N×46°.22E,h10km±33km,ML2.9*

**ISC 26 07:18:53.5±1.1,34°.65N±0°.04×46°.22E±0°.04,h15km±10km, n10,σ0°50/13,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.15** | **69** | Pg | **Pg** | **07 18 57.6** | **0.0** |
| **IGHG** | **Ghaleghazi** | **0.43** | **138** | Pg | **Pb** | **07 19 02.4** | **-0.6** |
| **GLG1** | **Gilan-e-Gharb** | **0.59** | **206** | Pg | **Pg** | **07 19 05.1** | **-0.1** |
| **ILIN** | **Lien** | **0.67** | **66** | Pg | **Pb** | **07 19 06.7** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **181** | Pg | **Pb** | **07 19 13.1** | **+0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.18** | **79** | Pg | **Pn** | **07 19 16.3** | **+0.5** |
| **IBDR** | **Badra** | **1.55** | **189** | *e*Pn | **Pb** | **07 19 22.3** | **+0.3** |
| IBDR | | | | *e*Sn | **Sg** | **07 19 44.0** | **+0.5** |
| IBDR | | | | AML | AML | 07 19 50.6 | |
| | comp=N,121nm,0.3s | | | | | | |
| IBDR | | | | AML | AML | 07 20 09.5 | |
| | comp=E,194nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **

baz=227,slow=315,SNR=6.9
**DJR Jarkent 5.85 176** Pg **Pg** 07 27 56.8 **+1.9**
1.1nm,0.7s
DJR Lg Lg 07 29 10.1
6.8nm,0.7s
**BVAR Borovoye Array 6.18 301** Sn **Sn** 07 28 46.8 **+0.2**
0.1nm,0.3s,baz=114,slow=21,SNR=2.7
BVAR Lg Lg 07 29 18.1
baz=116,slow=28,SNR=4.2
**BTLS Baital 6.19 216** Pg **Pg** 07 28 02.6 **+1.2**
1.1nm,0.8s
BTLS Lg Lg 07 29 20.1
3.8nm,0.7s
**KTBS Karatobe 6.68 196** Pg **Pg** 07 28 11.7 **+1.0**
0.6nm,0.1s
KTBS Lg Lg 07 29 35.3
5.8nm,0.4s
**KPKS Kokpek 6.71 183** Pg **Pg** 07 28 14.3 **+2.9**
1.0nm,0.9s
KPKS Lg Lg 07 29 40.1
9.7nm,0.8s
**KRBS Karabastau 6.90 202** Pg **Pg** 07 28 14.6 **-0.4**
0.4nm,0.7s
KRBS Lg Lg 07 29 40.1
4.2nm,0.3s
**DGS Degeres 7.31 200** Pg **Pg** 07 28 23.3 **+0.5**
1.0nm,0.6s
DGS Lg Lg 07 29 54.9
10nm,0.7s
**KST Kastek 7.46 198** Pg **Pg** 07 28 25.3 **-0.4**
0.9nm,0.2s
KST Lg Lg 07 29 58.6
7.1nm,0.6s
**AAK Ala-Archa 8.19 205** Lg Lg 07 30 15.8
0.4nm,0.3s,baz=58,slow=18,SNR=1.5

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*IDC* ***26*** *07:26:05.8±0.4,20.93S×174.08W,h0km,mb5.1/19, mbtmp5.1/21,ML5.2/2,MS4.9/52,Error ellipse: s-maj=16.6km s-min=14.0km az=124.0*
*MOS* ***26*** *07:26:05.7±1.2,20.98S×174.18W,h10km,mb5.6/40, MS5.2/21,Error ellipse: s-maj=9.7km s-min=8.4km az=111.7*
*BJI* ***26*** *07:26:06.2±0.0,20.59S×173.86W,h8km,mb5.6/56, mB5.9/49,Ms5.3/57,Ms7 5.1/60*
*NEIC* ***26*** *07:26:06.3±1.6,20.89S±0.05×173.91W±0.07,h10km±1km, mb5.5/325,Ms_20 5.2/521,Mww5.4/22,Error ellipse: s-maj=11.9km s-min=7.8km az=108.0*
*NEIC* ***26*** *07:26:06.3,20.87S×173.90W,h20km*
*NEIC* ***26*** *07:26:06.3,21.07S×173.58W,h20km,Moment Tensor Solution. Duration: 2s2 Moment tensor: Scale 10^17Nm; Mrr1.51; Mθθ-0.36; Mφφ-1.15; Mrθ0.22; Mθφ-0.49; Mφr-0.21; Fault plane solution: M0 1.47000×10^17 NP1: φs195.91000°,δ47.63000°,λ76.96000°. NP2:φs34.88000°, δ43.97000°,λ103.90000°. Principal axes: T 1.5585, Plg80.0000°, Azm36.0000°; N -0.1758, Plg10.0000°, Azm205.0000°; P -1.3827, Plg2.0000°, Azm295.0000°;*
*BGR* ***26*** *07:26:10.7,21.18S×173.35W,h33km*
*NOU* ***26*** *07:26:12.1,21.16S×173.97W,h48km,ML5.6/129,Tonga Islands*
*GCMT* ***26*** *07:26:12.3±0.1,21.07S±0.01×173.66W±0.01,h14km, MW5.4/148,Moment Tensor Solution. s113,c209; s148,c283; Duration: 1s2 Moment tensor: Scale 10^17 Nm; Mrr1.29±.02; Mθθ-0.11±.02; Mφφ-1.18±.02; Mrθ0.36±.03; Mθφ-0.54±.01; Mφr0.74±.03; Best double couple: M0 1.58100×10^17 NP1:φs25.00000°,δ61.00000°, λ92.00000°. NP2:φs201.00000°,δ29.00000°,λ87.00000°. Principal axes: T 1.5230, Plg74.0000°, Azm299.0000°; N 0.1170, Plg2.0000°, Azm204.0000°; P -1.6400, Plg16.0000°, Azm113.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 26 07:26:06.6±0.4,21.00S±0.04×173.84W±0.04,h15km±2km, h15km:pP-P,n1489,σ1970/1161,mb5.5/256,MS5.2/351, 68C-64D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **4.15** | **63** | Pn | **Pn** | **07 27 06.4** | **-3.0** |
| **NIUE** | **Niue** | **4.15** | **63** | P | Pn | 07 27 04.6 | -4.8 |
| NIUE | | | | S | **Sn** | **07 27 52.1** | **-5.6** |
| **AFI** | **Afiamalu** | **7.32** | **16** | Pn | **Pn** | **07 27 48.9** | **-4.2** |
| **AFI** | **Afiamalu** | **7.32** | **16** | P | **Pn** | **07 27 48.9** | **-4.2** |
| **MSVF** | **Nonsavu** | **8.31** | **292** | P | Pn | 07 28 11.1 | +4.3 |
| **MSVF** | **Nonsavu** | **8.31** | **292** | Pn | Pn | 07 28 11.7 | +4.9 |
| **MSVF** | **Nonsavu** | **8.31** | **292** | LR | LR | 07 30 58.4 | |
| | comp=Z,31μm,18.8s,baz=110,slow=36 | | | | | | |
| **MSVF** | **Nonsavu** | **8.31** | **292** | P | Pn | 07 28 11.7 | +4.9 |
| **RIZ** | **Raoul Island** | **9.00** | **203** | S | Sn | 07 29 48.7 | -8.6 |
| **RAO** | **Raoul Island** | **9.01** | **203** | P | **P** | **07 28 16.2** | **0.0** |
| **RAO** | **Raoul Island** | **9.01** | **203** | Pn | **Pn** | **07 28 13.5** | **-2.7** |
| **RAO** | **Raoul Island** | **9.01** | **203** | Pn | **Pn** | **07 28 16.4** | **+0.2** |
| | 43nm,0.3s,baz=118,slow=13,SNR=3.9 | | | | | | |
| RAO | | | | Sn | **Sn** | **07 29 51.5** | **-5.8** |
| | 53nm,0.3s,baz=279,slow=23,SNR=7.8 | | | | | | |
| RAO | | | | LR | LR | 07 31 57.7 | |
| | comp=Z,4μm,18.0s,baz=36,slow=39 409nm,0.7s | | | | | | |
| **GLKZ** | **Green Lake** | **9.02** | **203** | P | **Pn** | **07 28 16.0** | **-0.3** |
| GLKZ | | | | S | Sn | 07 29 47.8 | -10 |
| **RAR** | **Rarotonga** | **13.13** | **93** | Pn | Pn | 07 29 08.9 | -3.8 |
| **RAR** | **Rarotonga** | **13.13** | **93** | Pn | **Pn** | **07 29 09.2** | **-3.5** |
| | 20nm,0.3s,baz=244,slow=9.1,SNR=33 | | | | | | |
| **RAR** | **Rarotonga** | **13.13** | **93** | P | Pn | 07 29 08.9 | -3.8 |
| **MARNC** | **Mare, Loyalty** | **16.91** | **265** | P | **P** | **07 30 04.4** | **-0.4** |
| **RTV** | **Rentapao** | **17.03** | **278** | P | **P** | **07 30 06.3** | **+0.2** |
| **DVP** | **Devils Point** | **17.27** | **278** | P | **P** | **07 30 09.1** | **+0.4** |
| **PINNC** | **Pines Island,** | **17.45** | **261** | P | **Pn** | **07 30 09.1** | **-0.5** |
| **PINNC** | **Pines Island,** | **17.45** | **261** | | **Pn** | **07 30 09.0** | **-0.6** |
| **LIFNC** | **LIFOU** | **17.68** | **267** | P | **P** | **07 30 13.6** | **+0.3** |
| **LIFNC** | **LIFOU** | **17.68** | **267** | | **Pn** | **07 30 09.7** | **-2.7** |
| **YATNC** | **Mamie plateau,** | **17.96** | **263** | P | **P** | **07 30 18.5** | **+2.1** |
| **OUZ** | **Omahuta** | **17.96** | **215** | P | **Pn** | **07 30 12.8** | **-3.0** |
| **WCZ** | **Waipu Caves** | **18.12** | **212** | P | **Pn** | **07 30 17.7** | **-0.1** |
| **KUZ** | **Kuaotunu** | **18.14** | **208** | P | **Pn** | **07 30 15.5** | **+0.6** |
| **KUZ** | **Kuaotunu** | **18.14** | **208** | P | **P** | **07 30 19.3** | **+1.1** |
| **HAZ** | **Te Kaha** | **18.21** | **202** | P | **Pn** | **07 30 15.0** | **-3.8** |
| HAZ | | | | S | Sn | 07 33 30.1 | -12 |
| **DZM** | **Mont Dzumac** | **18.37** | **263** | P | **P** | **07 30 23.3** | **+2.2** |
| **DZM** | **Mont Dzumac** | **18.37** | **263** | *e*P | **P** | **07 30 22.1** | **+1.0** |
| | 433nm,1.4s | | | | | | |
| DZM | | | | *e*S | **Sn** | **07 33 41.9** | **-4.3** |
| | 912nm,25.9s | | | | | | |
| DZM | | | | *e*LR | LR | 07 34 37.8 | |
| | 6μm,25.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.37** | **263** | P | **Pn** | **07 30 19.9** | **-1.2** |
| **DZM** | **Mont Dzumac** | **18.37** | **263** | P | **P** | **07 30 22.0** | **+1.0** |
| | 70nm,0.8s,baz=78,slow=18,SNR=32 | | | | | | |
| DZM | | | | LR | LR | 07 36 15.3 | |
| | comp=Z,5μm,19.2s,baz=94,slow=34 | | | | | | |
| **WIAZ** | **Waiheke Island** | **18.44** | **209** | P | **P** | **07 30 21.1** | **-0.4** |
| **NOUC** | **Port Laguerre** | **18.50** | **263** | P | **Pn** | **07 30 23.5** | **+0.9** |
| **URZ** | **Urewera** | **18.89** | **202** | P | **P** | **07 30 28.0** | **+1.5** |
| | 4.0nm,0.3s,baz=98,slow=3.9,SNR=35 | | | | | | |
| URZ | | | | S | Sn | 07 33 43.5 | -15 |
| | 8.3nm,0.7s,baz=210,slow=20,SNR=1.7 | | | | | | |
| URZ | | | | LR | LR | 07 37 18.8 | |
| | comp=Z,3μm,21.0s,baz=94,slow=36 68nm,0.7s | | | | | | |
| **URZ** | **Urewera** | **18.89** | **202** | P | **P** | **07 30 26.3** | **-0.2** |
| URZ | | | | S | Sn | 07 33 38.9 | -19 |
| **TOZ** | **Tahuroa Road** | **19.06** | **207** | P | **P** | **07 30 29.0** | **+0.6** |
| **TOZ** | **Tahuroa Road** | **19.06** | **207** | P | **P** | **07 30 26.1** | **-2.3** |
| **RTZ** | **Ruatahuna** | **19.26** | **202** | P | **P** | **07 30 31.0** | **+0.3** |
| **MTHZ** | **Maungataniwha** | **19.52** | **202** | S | S | 07 34 01.1 | -12 |
| **TLZ** | **Tolley Road** | **19.55** | **206** | P | **Pn** | **07 30 37.5** | **+2.3** |
| **MRHZ** | **Matea Rd** | **19.65** | **203** | P | **Pn** | **07 30 37.5** | **+1.1** |
| **NMHZ** | **Naumai** | **19.75** | **202** | P | **P** | **07 30 33.4** | **-2.6** |
| NMHZ | | | | S | S | 07 34 04.3 | -14 |
| **BKZ** | **Black Stump Fm** | **19.92** | **203** | P | **P** | **07 30 38.9** | **+1.1** |
| **BKZ** | **Black Stump Fm** | **19.92** | **203** | P | **P** | **07 30 38.1** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **19.92** | **203** | P | **P** | **07 30 38.3** | **+0.5** |
| BKZ | | | | S | S | 07 34 08.2 | -13 |
| **HIZ** | **Hauiti** | **19.99** | **207** | P | **P** | **07 30 40.4** | **+1.9** |
| **MCHZ** | **McNeill Hill** | **20.09** | **202** | P | **P** | **07 30 39.2** | **-0.5** |
| MCHZ | | | | S | S | 07 34 15.0 | -10 |
| **NTVZ** | **North Tongarir** | **20.16** | **204** | P | **P** | **07 30 41.7** | **+1.1** |
| **TMVZ** | **Te Maari** | **20.17** | **204** | P | **P** | **07 30 42.4** | **+1.8** |
| **KWHZ** | **Kaweka Forest** | **20.17** | **202** | P | **P** | **07 30 39.0** | **-1.6** |
| KWHZ | | | | S | S | 07 34 12.1 | -15 |
| **ETVZ** | **East Tongariro** | **20.18** | **204** | P | **P** | **07 30 40.5** | **-0.3** |
| ETVZ | | | | S | S | 07 34 11.6 | -15 |
| **NNVZ** | **North Ngauruho** | **20.21** | **204** | P | **P** | **07 30 42.6** | **+1.4** |
| **SNVZ** | **South Ngauruho** | **20.25** | **204** | P | **P** | **07 30 42.9** | **+1.3** |
| **KAHZ** | **Kahuranaki** | **20.35** | **201** | P | Pn | 07 30 45.7 | +1.1 |
| KAHZ | | | | S | S | 07 34 12.8 | -17 |
| **KRHZ** | **Kereru** | **20.39** | **202** | P | **P** | **07 30 44.0** | **+1.1** |
| KRHZ | | | | S | S | 07 34 12.2 | -19 |
| **MOVZ** | **Moawhango** | **20.40** | **204** | P | Pn | 07 30 46.0 | +0.8 |
| **PKVZ** | **Pokaka** | **20.46** | **205** | P | **P** | **07 30 42.6** | **-1.1** |
| **KOUNC** | **Koumac, New Ca** | **20.46** | **267** | P | Pn | 07 30 44.8 | -1.1 |
| **KOUNC** | **Koumac, New Ca** | **20.46** | **267** | P | **P** | **07 30 42.9** | **-0.9** |
| KOUNC | | | | IAmb | IAmb | 07 30 58.0 | |
| | comp=Z,192nm,1.1s | | | | | | |
| **VRZ** | **Vera Road** | **20.55** | **206** | P | Pn | 07 30 47.8 | +0.9 |
| **PXZ** | **Pawanui** | **20.57** | **201** | P | P | 07 30 38.7 | -6.1 |
| PXZ | | | | S | S | 07 34 23.2 | -11 |
| **PNHZ** | **Pukenui** | **20.69** | **202** | P | **P** | **07 30 43.8** | **-2.3** |
| PNHZ | | | | S | S | 07 34 18.8 | -18 |
| **NEZ** | **North Egmont** | **20.95** | **207** | P | **P** | **07 30 52.6** | **+3.5** |
| **KHEZ** | **Kahui Hut** | **21.00** | **207** | P | **P** | **07 30 52.6** | **+3.0** |
| **DVHZ** | **Dannevirke** | **21.04** | **202** | P | **P** | **07 30 50.4** | **+0.4** |
| DVHZ | | | | S | S | 07 34 29.4 | -14 |
| **ANWZ** | **Angora Road** | **21.08** | **201** | P | **P** | **07 30 53.3** | **+3.0** |
| ANWZ | | | | S | S | 07 34 34.6 | -10 |
| **BFZ** | **Birch Farm** | **21.36** | **201** | P | **P** | **07 30 54.5** | **+1.2** |
| **BFZ** | **Birch Farm** | **21.36** | **201** | P | **P** | **07 30 55.3** | **+1.9** |
| BFZ | | | | IAmb | IAmb | 07 31 05.5 | |
| | comp=Z,122nm,0.8s | | | | | | |
| **BFZ** | **Birch Farm** | **21.36** | **201** | P | **P** | **07 30 55.2** | **+1.9** |
| BFZ | | | | S | S | 07 34 34.3 | -16 |
| **MRZ** | **Mangatainoka R** | **21.57** | **202** | P | **P** | **07 30 55.6** | **0.0** |
| **MRZ** | **Mangatainoka R** | **21.57** | **202** | P | **P** | **07 30 56.6** | **+1.0** |
| MRZ | | | | S | S | 07 34 38.9 | -15 |
| **HOWZ** | **Holdsworth Sta** | **21.80** | **202** | P | **P** | **07 30 59.0** | **+0.9** |
| HOWZ | | | | S | S | 07 34 44.1 | -15 |
| **OGWZ** | **Otaki Gorge** | **21.85** | **203** | P | **P** | **07 30 56.8** | **-1.9** |
| OGWZ | | | | S | S | 07 34 43.5 | -16 |
| **MTW** | **Mount Morrison** | **22.04** | **202** | P | **P** | **07 31 02.1** | **+1.4** |
| **CAW** | **Cannon Point** | **22.14** | **203** | P | **P** | **07 31 01.0** | **-0.8** |
| **PAWZ** | **Paruwai Farm** | **22.26** | **202** | P | **P** | **07 31 04.3** | **+1.2** |
| **DUWZ** | **D'Urville Isla** | **22.31** | **205** | P | **P** | **07 31 02.2** | **-1.5** |
| DUWZ | | | | S | S | 07 34 57.6 | -11 |
| **MSWZ** | **Moikau Station** | **22.35** | **202** | P | **P** | **07 31 03.3** | **-0.7** |
| MSWZ | | | | S | S | 07 35 00.3 | -9.0 |
| **SNZO** | **South Karori** | **22.45** | **203** | P | **P** | **07 31 04.4** | **-0.7** |
| **SNZO** | **South Karori** | **22.45** | **203** | P | **P** | **07 31 05.2** | **+0.1** |
| SNZO | | | | IAmb | IAmb | 07 31 27.1 | |
| | comp=Z,202nm,1.1s | | | | | | |
| **BHW** | **Baring Head** | **22.48** | **203** | P | **P** | **07 31 08.2** | **+2.9** |
| **PLWZ** | **Palliser** | **22.48** | **202** | P | **P** | **07 31 06.6** | **+1.1** |
| **PLWZ** | **Palliser** | **22.48** | **202** | P | **P** | **07 31 06.4** | **+0.9** |
| PLWZ | | | | S | S | 07 35 00.7 | -11 |
| **TCW** | **Tory Channel** | **22.53** | **204** | P | **P** | **07 31 04.5** | **-1.4** |
| **TCW** | **Tory Channel** | **22.53** | **204** | P | **P** | **07 31 04.9** | **-1.0** |
| **TBI** | **Tubuai** | **22.69** | **100** | *e*P | **P** | **07 31 07.5** | **-0.3** |
| | comp=Z,3μm,37.8s | | | | | | |
| TBI | | | | *e*S | **S** | **07 35 13.4** | **-2.4** |
| | comp=Z,14μm,27.2s | | | | | | |
| TBI | | | | *e*LR | LR | 07 36 31.2 | |
| | comp=Z,31μm,27.8s | | | | | | |
| TBI | | | | *e*LR | LR | 07 36 33.0 | |
| | comp=Z,6μm,26.2s | | | | | | |
| **TUWZ** | **Tuamarina** | **22.84** | **204** | P | **P** | **07 31 08.7** | **-0.5** |
| **TUWZ** | **Tuamarina** | **22.84** | **204** | P | **P** | **07 31 09.0** | **-0.2** |
| **NNZ** | **Nelson** | **22.88** | **205** | P | **P** | **07 31 07.9** | **-1.7** |
| **NNZ** | **Nelson** | **22.88** | **205** | P | **P** | **07 31 07.7** | **-2.0** |
| **TKNZ** | **Takaka Hill** | **22.90** | **206** | P | **P** | **07 31 15.7** | **+5.8** |
| **QRZ** | **Quartz Range** | **22.91** | **207** | P | **P** | **07 31 08.2** | **-1.7** |
| **QRZ** | **Quartz Range** | **22.91** | **207** | P | **P** | **07 31 13.7** | **+3.8** |
| QRZ | | | | IAmb | IAmb | 07 31 19.9 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **QRZ** | **Quartz Range** | **22.91** | **207** | P | **P** | **07 31 11.8** | **+1.9** |
| **PPT2** | **Papeete2** | **23.14** | **86** | *e*P | **P** | **07 31 07.1** | **-5.6** |
| | comp=Z,363nm,24.8s | | | | | | |
| PPT2 | | | | *e*S | **S** | **07 35 19.0** | **-4.9** |
| | comp=Z,6μm,26.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 07 36 45.3 | |
| | comp=Z,5μm,24.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 07 36 46.8 | |
| | comp=Z,4μm,25.5s | | | | | | |
| **PPT** | **Papeete** | **23.15** | **86** | P | **P** | **07 31 14.4** | **+1.7** |
| | comp=Z,198nm,1.0s,baz=127,slow=2.9,SNR=12 | | | | | | |
| PPT | | | | LR | LR | 07 38 52.9 | |
| | comp=Z,2μm,18.3s,baz=260,slow=33 comp=Z,198nm,1.0s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **23.16** | **86** | P | **P** | **07 31 13.6** | **+0.8** |
| **PPTF** | **Pamatai, Papee** | **23.16** | **86** | P | **P** | **07 31 11.7** | **-1.0** |
| PPTF | | | | IAmb | IAmb | 07 31 19.6 | |
| | comp=Z,270nm,1.1s | | | | | | |
| **MRNZ** | **Matariki Terra** | **23.29** | **206** | P | **P** | **07 31 12.9** | **-0.9** |
| **MRNZ** | **Matariki Terra** | **23.29** | **206** | P | **P** | **07 31 10.2** | **-3.7** |
| MRNZ | | | | S | **S** | **07 35 18.0** | **-7.7** |
| **KHZ** | **Kahutara** | **23.84** | **204** | IAmb | IAmb | 07 31 28.5 | |
| | comp=Z,119nm,1.0s | | | | | | |
| **DSZ** | **Denniston Nort** | **23.97** | **207** | IAmb | IAmb | 07 31 28.1 | |
| | comp=Z,217nm,1.2s | | | | | | |
| **GVZ** | **Greta Valley S** | **24.51** | **204** | IAmb | IAmb | 07 31 39.0 | |
| | comp=Z,109nm,0.8s | | | | | | |
| **LTZ** | **Lake Taylor** | **24.64** | **205** | IAmb | IAmb | 07 31 35.1 | |
| | comp=Z,97nm,0.8s | | | | | | |
| LTZ | | | | IAMs_20 | IAMs_20 | 07 40 38.8 | |
| | comp=Z,6μm,18.0s | | | | | | |
| **INZ** | **Inchbonnie** | **24.93** | **206** | P | **P** | **07 31 29.0** | **-0.2** |
| **OXZ** | **Oxford** | **25.20** | **205** | IAmb | IAmb | 07 31 43.6 | |
| | comp=Z,100nm,0.8s | | | | | | |
| **OXZ** | **Oxford** | **25.20** | **205** | P | **P** | **07 31 29.3** | **-2.3** |
| **TARA** | **Tarawa** | **25.72** | **328** | IAMs_20 | IAMs_20 | 07 40 23.4 | |
| | comp=Z,6μm,18.0s | | | | | | |
| **WACZ** | **Wakanui South** | **25.79** | **204** | P | **P** | **07 31 40.4** | **+3.4** |
| **RPZ** | **Rata Peaks** | **25.91** | **206** | IAmb | IAmb | 07 32 05.8 | |
| | comp=Z,80nm,1.0s | | | | | | |
| **LBZ** | **Lake Benmore** | **26.82** | **206** | IAmb | IAmb | 07 32 14.4 | |
| | comp=Z,100nm,1.2s | | | | | | |
| LBZ | | | | IAMs_20 | IAMs_20 | 07 41 55.8 | |
| | comp=Z,6μm,18.0s | | | | | | |
| **JCZ** | **Jackson Bay** | **27.16** | **208** | P | **P** | **07 31 49.7** | **+0.2** |
| **JCZ** | **Jackson Bay** | **27.16** | **208** | P | **P** | **07 31 49.9** | **+0.4** |
| **ODZ** | **Otahua Downs** | **27.18** | **205** | P | **P** | **07 31 54.3** | **+4.8** |
| **ODZ** | **Otahua Downs** | **27.18** | **205** | P | **P** | **07 31 48.9** | **-0.6** |
| **WKZ** | **Wanaka** | **27.66** | **207** | IAmb | IAmb | 07 32 35.5 | |
| | comp=Z,179nm,1.1s | | | | | | |
| **HNR** | **Honiara** | **27.73** | **291** | LR | LR | 07 41 18.5 | |
| | comp=Z,26μm,18.7s,baz=128,slow=33 | | | | | | |
| **XMAS** | **Kiritimati** | **27.97** | **37** | IAMs_20 | IAMs_20 | 07 43 41.9 | |
| | comp=Z,6μm,19.0s | | | | | | |
| **MLZ** | **Mavora Lakes** | **28.48** | **207** | IAmb | IAmb | 07 32 37.5 | |
| | comp=Z,176nm,1.5s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **28.97** | **207** | P | **P** | **07 32 09.9** | **+4.4** |
| WHZ | | | | IAmb | IAmb | 07 32 23.7 | |
| | comp=Z,90nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **32.39** | **246** | P | **P** | **07 32 36.3** | **+0.3** |
| **ARMA** | **Armidale** | **32.39** | **246** | P | **P** | **07 32 35.2** | **-0.8** |
| **ARMA** | **Armidale** | **32.39** | **246** | P | **P** | **07 32 34.9** | **-1.1** |
| | comp=Z,17nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **32.48** | **256** | P | **P** | **07 32 37.3** | **+0.6** |
| **EIDS** | **Eidsvold** | **32.48** | **256** | P | **P** | **07 32 35.3** | **-1.4** |
| **EIDS** | **Eidsvold** | **32.48** | **256** | P | **P** | **07 32 34.8** | **-1.9** |
| | comp=Z,35nm,0.9s | | | | | | |
| **NTLH** | **Newcastle Hard** | **32.78** | **242** | P | **P** | **07 32 39.7** | **+0.5** |
| **AUPHS** | **Peel High Scho** | **33.12** | **245** | P | **P** | **07 32 43.2** | **+0.9** |
| **MGCD** | **Mangrove Creek** | **33.33** | **241** | P | **P** | **07 32 44.4** | **+0.3** |
| **MGCD** | **Mangrove Creek** | **33.33** | **241** | P | **P** | **07 32 43.5** | **-0.6** |
| | comp=Z,59nm,1.2s | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **33.75** | **240** | P | **P** | **07 32 47.9** | **+0.2** |
| **WOLH** | **Wollongong Har** | **33.80** | **239** | P | **P** | **07 32 48.2** | **+0.1** |
| **TAOE** | **Nuku Hiva Isla** | **34.64** | **75** | *e*S | **S** | **07 38 22.5** | **-2.6** |
| | comp=Z,460nm,25.6s | | | | | | |
| TAOE | | | | *e*LR | LR | 07 41 59.8 | |
| | comp=Z,2μm,25.7s | | | | | | |
| **AUDCS** | **Dubbo College** | **35.20** | **244** | P | **P** | **07 33 00.2** | **-0.2** |
| **CNB** | **Canberra Magne** | **35.22** | **238** | P | **P** | **07 33 00.6** | **0.0** |
| **CNB** | **Canberra Magne** | **35.22** | **238** | P | **P** | **07 32 59.4** | **-1.2** |
| | comp=Z,61nm,1.4s | | | | | | |
| **AULRC** | **Lightning Ridg** | **35.42** | **248** | P | **P** | **07 33 01.5** | **-0.7** |
| **CAN** | **Canberra** | **35.51** | **238** | P | **P** | **07 33 03.5** | **+0.5** |
| **CAN** | **Canberra** | **35.51** | **238** | P | **P** | **07 33 02.2** | **-0.8** |
| CAN | | | | IAmb | IAmb | 07 33 03.5 | |
| | comp=Z,51nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **35.51** | **238** | P | **P** | **07 33 01.8** | **-1.2** |
| | comp=Z,59nm,1.2s | | | | | | |
| **CAN** | **Canberra** | **35.51** | **238** | P | **P** | **07 33 02.2** | **-0.8** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,51nm,1.0s | | | | | | |
| CAN | | | | MLR | MLR | | |
| | comp=Z,2μm,18.0s | | | | | | |
| **YNG** | **Young** | **35.77** | **240** | P | **P** | **07 33 04.8** | **-0.4** |
| **YNG** | **Young** | **35.77** | **240** | P | **P** | **07 33 03.6** | **-1.6** |
| | comp=Z,116nm,1.1s | | | | | | |
| **MILA** | **Mila** | **35.83** | **235** | P | **P** | **07 33 05.9** | **+0.1** |
| **MILA** | **Mila** | **35.83** | **235** | P | **P** | **07 33 05.5** | **-0.3** |
| | comp=Z,49nm,1.4s | | | | | | |
| **RKT** | **Rikitea** | **36.02** | **101** | *e*P | **P** | **07 33 07.6** | **+0.2** |
| | comp=Z,893nm,33.8s | | | | | | |
| RKT | | | | *e*S | **S** | **07 38 42.1** | **-3.9** |
| | comp=Z,2μm,29.0s | | | | | | |
| RKT | | | | *e*SS | **SS** | **07 41 20.0** | **-3.1** |
| | comp=Z,2μm,26.0s | | | | | | |
| RKT | | | | *e*LR | LR | 07 42 38.7 | |
| | comp=Z,21μm,28.0s | | | | | | |
| **TV1H** | **Townsville Har** | **36.94** | **266** | P | **P** | **07 33 14.2** | **-1.1** |
| **RABL** | **Rabaul** | **37.01** | **292** | P | **P** | **07 33 12.8** | **-3.2** |
| **CTA** | **Charters Tower** | **37.31** | **264** | P | **P** | **07 33 18.0** | **-0.5** |
| **CTA** | **Charters Tower** | **37.31** | **264** | LR | LR | 07 48 15.8 | |
| | comp=Z,278nm,18.3s,baz=92,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **37.31** | **264** | P | **P** | **07 33 17.7** | **-0.8** |
| **CTAO** | **Charters Tower** | **37.31** | **264** | P | **P** | **07 33 17.5** | **-1.0** |
| **CTAO** | **Charters Tower** | **37.31** | **264** | IAMs_20 | IAMs_20 | 07 48 22.8 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **CTAO** | **Charters Tower** | **37.31** | **264** | P | **P** | **07 33 17.5** | **-1.0** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,28nm,1.0s | | | | | | |
| CTAO | | | | MLR | MLR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.59** | **245** | P | **P** | **07 33 19.7** | **-1.0** |
| **CMSA** | **Cobar Meteorol** | **37.59** | **245** | P | **P** | **07 33 19.3** | **-1.4** |
| | comp=Z,59nm,0.9s | | | | | | |
| **QLP** | **Quilpie** | **38.64** | **253** | P | **P** | **07 33 29.5** | **-0.1** |
| **QLP** | **Quilpie** | **38.64** | **253** | P | **P** | **07 33 28.2** | **-1.5** |
| | comp=Z,114nm,1.6s | | | | | | |
| **TOO** | **Toolangi** | **38.79** | **236** | P | **P** | **07 33 30.7** | **-0.1** |
| **TOO** | **Toolangi** | **38.79** | **236** | P | **P** | **07 33 30.6** | **-0.1** |
| **TOO** | **Toolangi** | **38.79** | **236** | P | **P** | **07 33 30.8** | **-0.1** |
| | comp=Z,45nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **38.79** | **236** | P | **P** | **07 33 30.6** | **-0.2** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| **PATS** | **Pohnpei** | **38.90** | **312** | IAMs_20 | IAMs_20 | 07 51 31.0 | |
| | comp=Z,3μm,18.0s | | | | | | |
| **KAVG** | **Kavieng** | **38.99** | **293** | P | **P** | **07 33 32.7** | **0.0** |
| **PMG** | **Port Moresby** | **39.25** | **281** | P | **P** | **07 33 35.0** | **+0.1** |
| **PMG** | **Port Moresby** | **39.25** | **281** | P | **P** | **07 33 35.2** | **+0.3** |
| **PMG** | **Port Moresby** | **39.25** | **281** | P | **P** | **07 33 30.3** | **-1.9** |
| PMG | | | | IAmb | IAmb | 07 33 46.9 | |
| | comp=Z,107nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **39.25** | **281** | LR | LR | 07 48 02.5 | |
| | comp=Z,2μm,18.1s,baz=146,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **39.25** | **281** | *i* P | **P** | **07 33 32.7** | **-2.2** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,65nm,0.9s | | | | | | |
| **MTSU** | **Mount Surprise** | **39.45** | **267** | P | **P** | **07 33 36.7** | **+0.1** |
| **BRAT** | **Ballarat** | **39.99** | **236** | P | **P** | **07 33 40.8** | **0.0** |
| **STKA** | **Stephens Creek** | **41.09** | **245** | P | **P** | **07 33 48.9** | **-1.1** |
| **STKA** | **Stephens Creek** | **41.09** | **245** | P | **P** | **07 33 49.4** | **-0.7** |
| **STKA** | **Stephens Creek** | **41.09** | **245** | P | **P** | **07 33 48.5** | **-1.6** |
| | comp=Z,9.7nm,1.3s | | | | | | |
| **STKA** | **Stephens Creek** | **41.09** | **245** | P | **P** | **07 33 48.9** | **-1.1** |
| | comp=Z,25nm,0.9s,baz=89,slow=8.7,SNR=34 | | | | | | |
| STKA | | | | LR | LR | 07 49 45.7 | |
| | comp=Z,2μm,18.1s,baz=77,slow=35 comp=Z,25nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **41.09** | **245** | *i* P | **P** | **07 33 48.0** | **-2.0** |
| **ARPS** | **Mount Arapiles** | **41.48** | **238** | P | **P** | **07 33 52.8** | **-0.4** |
| **ARPS** | **Mount Arapiles** | **41.48** | **238** | P | **P** | **07 33 52.0** | **-1.2** |
| | comp=Z,75nm,1.0s | | | | | | |
| **COEN** | **Coen** | **41.49** | **273** | P | **P** | **07 33 52.8** | **-0.7** |
| **COEN** | **Coen** | **41.49** | **273** | P | **P** | **07 33 51.8** | **-1.7** |
| COEN | | | | IAmb | IAmb | 07 33 56.0 | |
| | comp=Z,140nm,1.6s | | | | | | |
| **COEN** | **Coen** | **41.49** | **273** | P | **P** | **07 33 51.8** | **-1.7** |
| | comp=Z,57nm,0.9s | | | | | | |
| **INKA** | **Innaminka** | **41.73** | **252** | P | **P** | **07 33 55.0** | **-0.2** |
| **MANU** | **Manus Island** | **42.23** | **291** | P | **P** | **07 33 58.1** | **-1.5** |
| MANU | | | | IAmb | IAmb | 07 34 11.5 | |
| | comp=Z,125nm,1.4s | | | | | | |
| **QIS** | **Mount Isa** | **43.41** | **262** | P | **P** | **07 34 09.7** | **+0.6** |
| **QIS** | **Mount Isa** | **43.41** | **262** | P | **P** | **07 34 06.2** | **-2.8** |
| | comp=Z,14nm,1.4s | | | | | | |
| **HTT** | **Hallett** | **43.46** | **243** | P | **P** | **07 34 08.4** | **-0.9** |
| **HTT** | **Hallett** | **43.46** | **243** | P | **P** | **07 34 07.7** | **-1.6** |
| | comp=Z,68nm,1.1s | | | | | | |
| **LCRK** | **Leigh Creek** | **43.93** | **248** | P | **P** | **07 34 13.0** | **-0.1** |
| **WHYH** | **Whyalla** | **44.56** | **244** | P | **P** | **07 34 17.1** | **-1.0** |
| **BBOO** | **Buckleboo** | **45.82** | **244** | P | **P** | **07 34 26.2** | **-2.0** |
| **BBOO** | **Buckleboo** | **45.82** | **244** | P | **P** | **07 34 26.4** | **-1.8** |
| BBOO | | | | IAmb | IAmb | 07 34 27.5 | |
| | comp=Z,46nm,1.0s | | | | | | |
| **BBOO** | **Buckleboo** | **45.82** | **244** | P | **P** | **07 34 26.1** | **

**BNDI Bandanaira 56.95 279** P **P** 07 35 51.2 -0.6
**BNDI Bandanaira 56.95 279** P **P** 07 35 49.9 -1.9
**SWI Sorong 57.14 283** P **P** 07 35 50.9 -2.3
comp=Z,203nm,1.1s,comp=Z,2µm
**SBA Scott Base 57.66 185** P **P** 07 35 56.5 +0.6
SBA IAmb IAmb 07 36 18.3
comp=Z,79nm,1.3s
**SBA Scott Base 57.66 185** P **P** 07 35 56.5 +0.6
SBA pmax pmax
comp=Z,79nm,1.3s
**KMBL Kambalda 57.90 245** P **P** 07 35 57.9 -0.4
**KMBL Kambalda 57.90 245** P **P** 07 35 57.4 -1.0
comp=Z,75nm,1.2s
**MSAI Masohi 58.29 279** P **P** 07 35 59.0 -2.3
comp=Z,55nm,0.9s,comp=Z,2µm
**RPN Rapa Nui 58.67 110** LR LR 07 57 16.4
comp=Z,2µm,18.0s,baz=279,slow=32
**NLAI Namlea 60.02 279** P **P** 07 36 11.3 -2.0
comp=Z,74nm,1.1s,comp=Z,1µm
**SOEI Soe 60.40 271** P **P** 07 36 16.6 +0.6
**SOEI Soe 60.40 271** P **P** 07 36 14.5 -1.5
SOEI IAMs_20 IAMs_20 08 03 42.4
comp=Z,2µm,18.0s
**SOEI Soe 60.40 271** P **P** 07 36 15.1 -0.9
comp=Z,187nm,1.2s,comp=Z,2µm
**PSA00 Pilbara Seismi 61.34 256** P **P** 07 36 21.2 -1.0
**PSA00 Pilbara Seismi 61.34 256** P **P** 07 36 20.9 -1.3
PSA00 IAmb IAmb 07 36 22.0
comp=Z,34nm,1.2s
**PSA00 Pilbara Seismi 61.34 256** P **P** 07 36 20.2 -2.0
comp=Z,42nm,0.9s
**TNTI Ternate 61.36 283** P **P** 07 36 23.2 +0.8
**TNTI Ternate 61.36 283** P **P** 07 36 20.9 -1.5
**TNTI Ternate 61.36 283** P **P** 07 36 20.9 -1.5
comp=Z,177nm,1.0s,comp=Z,2µm
**KLBR Kellerberrin 61.37 245** P **P** 07 36 22.8 +0.6
**KLBR Kellerberrin 61.37 245** P **P** 07 36 21.5 -0.8
comp=Z,404nm,1.0s
**MEEK Meekatharra 61.42 250** P **P** 07 36 22.9 +0.1
**MEEK Meekatharra 61.42 250** P **P** 07 36 21.5 -1.2
comp=Z,32nm,1.0s
**SANI Sanana 61.50 279** P **P** 07 36 22.8 -0.6
**SANI Sanana 61.50 279** P **P** 07 36 21.3 -2.1
comp=Z,132nm,1.1s,comp=Z,1µm
**MBWA Marble Bar 61.53 257** P **P** 07 36 22.8 -0.7
**MBWA Marble Bar 61.53 257** P **P** 07 36 22.1 -1.4
MBWA IAmb IAmb 07 36 26.7
comp=Z,41nm,0.9s
**MBWA Marble Bar 61.53 257** P **P** 07 36 21.7 -1.8
comp=Z,55nm,0.9s
**RKGY Rocky Gully 61.62 241** P **P** 07 36 24.1 +0.2
**RKGY Rocky Gully 61.62 241** P **P** 07 36 24.6 +0.7
comp=Z,114nm,1.1s
**NWAO Narrogin (SRO) 61.62 243** P **P** 07 36 24.3 +0.4
**NWAO Narrogin (SRO) 61.62 243** P **P** 07 36 23.3 -0.6
**NWAO Narrogin (SRO) 61.62 243** IAMs_20 IAMs_20 08 02 53.2
comp=Z,2µm,18.0s
**NWAO Narrogin (SRO) 61.62 243** LR LR 08 02 04.1
comp=Z,1µm,18.0s,baz=56,slow=35
**NWAO Narrogin (SRO) 61.62 243** P **P** 07 36 23.3 -0.6
NWAO pmax pmax
comp=Z,69nm,1.1s
NWAO MLR MLR
comp=Z,2µm,18.0s
**BLDU Ballidu 62.40 246** P **P** 07 36 29.8 +0.6
**BLDU Ballidu 62.40 246** P **P** 07 36 28.5 -0.8
comp=Z,95nm,1.2s
**MUN Mundaring 62.61 244** P **P** 07 36 30.8 +0.2
**MUN Mundaring 62.61 244** P **P** 07 36 30.7 +0.2
comp=Z,181nm,1.0s
**MMRI Maumere 62.66 271** P **P** 07 36 29.5 -1.6
**MTKN Mount Kenneth 62.98 244** P **P** 07 36 33.9 +0.8
**MTKN Mount Kenneth 62.98 244** P **P** 07 36 34.4 +1.4
comp=Z,350nm,0.9s
**MORW Morawa 63.23 247** P **P** 07 36 35.5 +0.7
**MORW Morawa 63.23 247** P **P** 07 36 34.1 -0.7
**MORW Morawa 63.23 247** P **P** 07 36 33.4 -1.4
comp=Z,107nm,1.1s
**JCJ Chichijima 64.02 316** P **P** 07 36 38.5 -1.4
**JCJ Chichijima 64.02 316** LR LR 08 00 36.5
comp=Z,774nm,19.9s,baz=135,slow=32
**SGSI Sangihe 64.24 285** P **P** 07 36 40.7 -0.9
**KMSI Cibinong 64.37 281** P **P** 07 36 40.9 -1.6
**LUWI Luwuk 64.85 279** P **P** 07 36 46.6 +1.0
**LUWI Luwuk 64.85 279** P **P** 07 36 44.5 -1.2
**LUWI Luwuk 64.85 279** P **P** 07 36 43.9 -1.7
comp=Z,214nm,1.2s,comp=Z,3µm
**WBSI Waikabubak, Su 64.99 269** P **P** 07 36 44.9 -1.7
**GTOI Gorontalo 65.29 281** P **P** 07 36 48.2 -0.2
comp=Z,49nm,1.0s
**DAV Davao City (W) 65.67 288** LR LR 08 05 26.5
comp=Z,678nm,18.0s,baz=98,slow=36
**BNSI Bone 66.09 275** P **P** 07 36 52.3 -1.3
comp=Z,63nm,1.3s,comp=Z,1µm
**GIRL Giralia 66.16 254** P **P** 07 36 54.3 +0.3
**GIRL Giralia 66.16 254** P **P** 07 36 53.3 -0.7
comp=Z,111nm,1.6s
**KAPI Kappang 66.20 274** P **P** 07 36 55.1 +0.7
**KAPI Kappang 66.20 274** P **P** 07 36 53.2 -1.2
KAPI IAmb IAmb 07 36 58.3
comp=Z,57nm,1.4s
**KAPI Kappang 66.20 274** LR LR 08 06 10.6
comp=Z,566nm,19.1s,baz=106,slow=36
**KAPI Kappang 66.20 274** P **P** 07 36 53.2 -1.2
KAPI pmax pmax
comp=Z,57nm,1.4s
**TOLI2 Tolitoli 67.52 280** P **P** 07 37 04.0 +1.3
**TOLI2 Tolitoli 67.52 280** P **P** 07 37 00.8 -1.9
**TWSI Taliwang, Sumb 67.53 269** P **P** 07 37 01.5 -1.9
comp=Z,65nm,1.1s,comp=Z,2µm
**QSPA South Pole Qui 69.07 180** P **P** 07 37 15.1 +3.3
comp=Z,50nm,1.1s,baz=38,slow=1.6,SNR=48
QSPA LR LR 08 05 48.3
comp=Z,887nm,18.6s,baz=40,slow=34
comp=Z,50nm,1.1s
**JHJ2 Mitsune 69.66 320** P **P** 07 37 16.7 +1.1
**JHJ2 Mitsune 69.66 320** P **P** 07 37 14.5 -1.1
**JAGI Jajag, Banyuwa 70.27 268** IAmb IAmb 07 37 20.9
comp=Z,50nm,1.0s
**JMM Marumori 72.44 324** P **P** 07 37 33.5 +1.1
**JGF Kuroka 72.84 320** P **P** 07 37 35.7 +0.8
**JGF Kuroka 72.84 320** IAmb IAmb 07 37 39.4
comp=Z,83nm,1.4s
**INU Inuyama 72.87 320** P **P** 07 37 35.9 +0.8
**INU Inuyama 72.87 320** P **P** 07 37 34.1 -0.9
INU IAmb IAmb 07 37 39.9
comp=Z,62nm,1.3s
**MJAR Matsushiro Arr 72.97 321** P **P** 07 37 35.6 -0.1
comp=Z,26nm,0.9s,baz=155,slow=5.9,SNR=55
MJAR LR LR 08 10 19.7
comp=Z,412nm,18.1s,baz=128,slow=36
comp=Z,26nm,0.9s
**MAJO Matsushiro 72.98 321** P **P** 07 37 36.6 +0.9
**MAJO Matsushiro 72.98 321** P **P** 07 37 34.8 -0.9
MAJO IAmb IAmb 07 37 37.4
comp=Z,78nm,1.2s
**MAJO Matsushiro 72.98 321***c iP* **P** 07 37 35.7 0.0
MAJO pmax pmax
comp=Z,71nm,1.2s
**MJB9 Matsu-Tunnel 72.98 321** P **P** 07 37 35.0 -0.7
MJB9 IAmb IAmb 07 37 37.4
comp=Z,76nm,1.2s
**KKM Kota Kinabalu 73.66 283** P **P** 07 37 40.4 +0.1
**KKM Kota Kinabalu 73.66 283** P **P** 07 37 39.4 -0.9
KKM IAmb IAmb 07 37 41.3
comp=Z,61nm,0.9s
**JMN Monobe 73.77 317** P **P** 07 37 42.3 +1.8
**SHEM Shemya Is, Ala 74.16 352** LR LR 08 06 27.2
comp=Z,972nm,19.7s,baz=126,slow=33
**UNV Unalaska Valle 74.80 4** P **P** 07 37 46.7 +0.8
baz=187
**JNU Nakatsue 75.35 315** P **P** 07 37 50.7 +1.0
**JNU Nakatsue 75.35 315** LR LR 08 07 22.7
comp=Z,232nm,18.7s,baz=132,slow=33
**MCCM Marconi Confer 75.83 39** IAMs_20 IAMs_20 08 10 00.4
comp=Z,1µm,18.0s
**JKA Kamikawa-asahi 76.08 329** IAMs_20 IAMs_20 08 10 19.4
comp=Z,1µm,19.0s
**ASAJ Asahikawa 76.08 329** LR LR 08 10 01.6
comp=Z,832nm,18.0s,baz=161,slow=35
**SKR Severo-Kuril's 76.13 341** *eP* **P** 07 37 53.5 -0.1
SKR pmax pmax
comp=Z,500nm,8.5s
**PASC Pasadena Art C 76.24 45** IAMs_20 IAMs_20 08 06 12.8
comp=Z,841nm,18.0s

**LPIG La Paz 76.36 57** LR LR 08 07 06.1
comp=Z,875nm,18.0s,baz=215,slow=32
**ELS Elsinore Mount 76.43 46** IAmb IAmb 07 38 04.3
comp=Z,50nm,1.4s
**SLBS Sierra La Lagu 76.43 58** IAMs_20 IAMs_20 08 06 54.9
comp=Z,1µm,19.0s
**CNBA Chernabura Isl 76.49 8** IAMs_20 IAMs_20 08 11 55.6
comp=Z,1µm,20.0s
**BBJI Bungbulang 76.67 267** P **P** 07 37 57.0 -0.7
**SMAI San Martin Ant 76.73 158** P **P** 07 37 59.5 +2.5
**SDPT Sand Point 76.89 8** P **P** 07 37 58.0 +0.1
baz=193
**TWG Pinlang 76.95 301** P **P** 07 37 58.2 -0.8
TWG IAmb IAmb 07 38 20.5
comp=Z,42nm,0.9s
TWG IAMs_20 IAMs_20 08 09 49.6
comp=Z,1µm,18.0s
**S12K Black Hills 77.05 7** IAMs_20 IAMs_20 08 07 17.0
comp=Z,1µm,20.0s
**S12K Black Hills 77.05 7** P **P** 07 37 59.8 +1.1
baz=191
**YULB Yu-li 77.05 301** P **P** 07 37 59.3 -0.2
**PFO Pinyon Flats O 77.06 46** LR LR 08 06 28.9
comp=Z,506nm,18.8s,baz=238,slow=31
**PFO Pinyon Flats O 77.06 46** *i* P **P** 07 37 59.8 +0.3
PFO pmax pmax
comp=Z,46nm,1.3s
**TPFO Pinon Flats 77.06 46** P **P** 07 37 59.5 0.0
baz=234
**NACB Ninganchiao 77.21 302** P **P** 07 38 00.6 +0.3
**CMB Columbia Colle 77.25 41** IAMs_20 IAMs_20 08 09 37.2
comp=Z,1µm,18.0s
**KSM Kuching 77.34 277** P **P** 07 38 02.0 +0.7
**KSM Kuching 77.34 277** IAmb IAmb 07 38 14.0
comp=Z,57nm,0.8s
**P08K Saint George I 77.38 2** P **P** 07 38 02.0 +1.5
baz=184
**PET Petropavlovsk 77.49 343** *eP* **P** 07 38 01.4 +0.2
PET *eS* **S** 07 47 51.4 -0.1
PET pmax pmax
comp=Z,300nm,12.6s
PET pmax pmax
comp=Z,300nm,10.3s
PET pmax pmax
comp=Z,28nm,2.0s
**SSLB Suanglung 77.52 302** P **P** 07 38 02.7 +0.5
**SSLB Suanglung 77.52 302** IAmb IAmb 07 38 25.0
comp=Z,29nm,0.9s
SSLB IAMs_20 IAMs_20 08 07 53.9
comp=Z,953nm,20.0s
**TPUB Ta-pu 77.54 301** P **P** 07 38 02.7 +0.4
**YHNB Yeheng 77.63 303** P **P** 07 38 04.1 +1.3
**PEA0B Petropavlovsk- 77.82 343** P **P** 07 38 03.2 0.0
PEA0B IAmb IAmb 07 38 05.4
comp=Z,84nm,1.2s
**PEA0B Petropavlovsk- 77.82 343***ce*P **P** 07 38 03.4 +0.3
**PETK Petropavlovsk- 77.82 343** P **P** 07 38 03.1 0.0
**PETK Petropavlovsk- 77.82 343** P **P** 07 38 03.7 +0.6
comp=Z,30nm,0.9s,baz=125,slow=7.1,SNR=53
PETK LR LR 08 11 23.5
comp=Z,290nm,18.2s,baz=175,slow=35
comp=Z,30nm,0.9s
**SPIA Saint Paul Isl 77.93 2** P **P** 07 38 04.3 +0.7
baz=183
**CHGN Chignik 78.10 9** P **P** 07 38 05.1 +0.5
baz=195
**YSS Yuzh-Sakhalins 78.14 331** P **P** 07 38 06.9 +1.9
**YSS Yuzh-Sakhalins 78.14 331** P **P** 07 38 04.5 -0.5
YSS IAMs_20 IAMs_20 08 03 22.9
comp=Z,1µm,20.0s
**YSS Yuzh-Sakhalins 78.14 331** *eP* **P** 07 38 05.7 +0.7
YSS *e* 07 40 56.5
YSS *eS* **S** 07 48 00.7 +1.9
YSS *eP*S PnS 07 48 17.2 -23
YSS *eP*PS PPS 07 48 28.7
YSS pmax pmax
comp=Z,70nm,0.9s
YSS pmax pmax
comp=Z,600nm,3.2s
YSS pmax pmax
comp=N,300nm,3.0s
YSS pmax pmax
comp=E,200nm,3.0s
YSS pmax pmax
comp=N,200nm,7.4s
YSS pmax pmax
comp=E,100nm,6.9s
YSS smax smax
comp=N,500nm,7.8s
YSS smax smax
comp=E,400nm,8.6s
YSS MLR MLR
comp=N,500nm,16.0s
YSS MLR MLR
comp=E,500nm,16.0s
YSS MLR MLR
comp=Z,600nm,16.0s
**MPK Martis Peak 78.27 40** IAmb IAmb 07 38 29.9
comp=Z,86nm,1.3s
**YBH Yreka Blue Hor 78.31 37** IAMs_20 IAMs_20 08 08 08.0
comp=Z,1µm,19.0s
**YBH Yreka Blue Hor 78.31 37** LR LR 08 07 51.6
comp=Z,1µm,18.6s,baz=230,slow=32
**GWY Greenwater Val 78.44 44** IAmb IAmb 07 38 15.5
comp=Z,60nm,1.6s
**BELA Belgrano 2 78.54 172** P **P** 07 38 09.1 +2.1
**214A Organ Pipe Nat 78.64 49** P **P** 07 38 09.5 +1.3
baz=236
**HUMO Hull Mountain 78.76 36** IAMs_20 IAMs_20 08 06 26.9
comp=Z,1µm,20.0s
**NVAR Mina Aray Bea 78.77 41** P **P** 07 38 11.5 +2.5
comp=Z,23nm,1.0s,baz=224,slow=8.3,SNR=98
NVAR LR LR 08 08 08.8
comp=Z,1µm,18.6s,baz=242,slow=32
comp=Z,23nm,1.0s
**NV11 Mina Array Sit 78.86 41** IAmb IAmb 07 38 31.3
comp=Z,80nm,1.2s
**SII Sitkinak Islan 79.02 11** P **P** 07 38 10.3 +0.6
baz=199
**PMSA Palmer Station 79.26 156** LR LR 08 08 50.0
comp=Z,1µm,18.2s,baz=252,slow=32
**R16K Pilot Point 79.44 9** IAMs_20 IAMs_20 08 08 49.4
comp=Z,918nm,20.0s
**R16K Pilot Point 79.44 9** P **P** 07 38 13.2 +1.3
baz=195
**TJN Taejon 79.61 315** P **P** 07 38 15.0 +1.6
**TJN Taejon 79.61 315***ce*P **P** 07 38 13.6 +0.2
**R17L Mt. Peulik Vol 79.68 9** P **P** 07 38 14.4 +1.1
baz=197
**PLK4 Peulik 4 79.69 9** IAmb IAmb 07 38 25.9
comp=Z,69nm,1.4s
PLK4 IAMs_20 IAMs_20 08 13 16.8
comp=Z,1µm,20.0s
**OHAK Old Harbor 79.81 11** P **P** 07 38 14.6 +0.7
baz=200
**KSRS Korea Array 79.88 317** P **P** 07 38 16.4 +1.6
comp=Z,36nm,1.1s,baz=140,slow=6.0,SNR=70
KSRS LR LR 08 09 58.3
comp=Z,325nm,19.9s,baz=140,slow=33
comp=Z,36nm,1.1s
**KSAR Wonju Array Be 79.90 317** P **P** 07 38 14.1 -0.8
**KSAR Wonju Array Be 79.90 317** P **P** 07 38 14.1 -0.8
**PPBI Pangkal Pinang 79.91 272** P **P** 07 38 15.7 +0.1
**R18K Karluk 79.93 10** P **P** 07 38 15.7 +1.2
baz=198
**KS19 Wonju Array Si 79.94 317** IAmb IAmb 07 38 18.1
comp=Z,117nm,1.4s
**QZH Quanzhou 79.96 302** P **P** 07 38 16.5 +1.0
QZH pmax pmax
comp=Z,610nm,4.9s
QZH LR LR
comp=Z,900nm,18.2s
**TUC Tucson 80.27 50** IAMs_20 IAMs_20 08 09 19.0
comp=Z,1µm,18.0s
**KASI Kota Agung 80.27 268** P **P** 07 38 16.7 -0.8
comp=Z,171nm,1.0s,comp=Z,2µm
**Q17K Contact Creek 80.36 10** P **P** 07 38 17.5 +0.4
baz=197,SNR=8.5
**R11B Troy Canyon, C 80.42 43** IAMs_20 IAMs_20 08 13 26.4
comp=Z,805nm,18.0s
**R11B Troy Canyon, C 80.42 43** P **P** 07 38 18.5 +0.5
baz=234
**KDAK Kodiak Island 80.47 11** P **P** 07 38 18.5 +1.0
KDAK IAmb IAmb 07 38 37.1
comp=Z,85nm,1.4s
**KDAK Kodiak Island 80.47 11** IAMs_20 IAMs_20 08 18 33.7
comp=Z,883nm,18.0s

**KDAK Kodiak Island 80.47 11** LR LR 08 08 12.8
comp=Z,683nm,21.4s,baz=225,slow=31
**KDAK Kodiak Island 80.47 11** P **P** 07 38 18.7 +1.3
baz=200
**KDAK Kodiak Island 80.47 11** *i* P **P** 07 38 17.7 +0.2
KDAK pmax pmax
comp=Z,78nm,1.8s
**H04A Detroit Lake 80.57 35** P **P** 07 38 19.1 +0.6
H04A IAmb IAmb 07 38 31.8
comp=Z,100nm,2.0s
**O14K Tigyukauivet M 80.63 7** IAMs_20 IAMs_20 08 10 02.4
comp=Z,984nm,20.0s
**O14K Tigyukauivet M 80.63 7** P **P** 07 38 18.4 +0.1
baz=192
**O15K Ungalikthiuk R 80.71 7** P **P** 07 38 19.9 +1.1
baz=193
**INCN Inchon 80.73 316** P **P** 07 38 20.8 +1.4
**INCN Inchon 80.73 316** P **P** 07 38 18.6 -0.8
INCN IAmb IAmb 07 38 24.2
comp=Z,88nm,1.1s
**INCN Inchon 80.73 316** P **P** 07 38 18.6 -0.8
INCN pmax pmax
comp=Z,88nm,1.2s
**I05D Terrebonne, OR 80.79 35** P **P** 07 38 19.7 +0.1
**P16K Nushagak River 80.80 8** P **P** 07 38 20.2 +0.9
baz=195
**LWLI Liwa 80.86 268** P **P** 07 38 19.8 -1.0
**Q18K Katmai Hardscr 80.87 10** P **P** 07 38 20.2 +0.4
baz=198,SNR=6.1
**PMBI Palembang 80.92 270** IAMs_20 IAMs_20 08 17 56.2
comp=Z,1µm,19.0s
**WVOR Wild Horse Val 81.07 38** IAMs_20 IAMs_20 08 08 08.2
comp=Z,1µm,20.0s
**TYV Tymovskoe 81.15 334** *eP* **P** 07 38 22.3 +1.0
TYV *eS* **S** 07 48 29.8 -0.7
TYV pmax pmax
comp=Z,20nm,0.9s
TYV pmax pmax
comp=Z,300nm,4.1s
TYV smax smax
comp=N,200nm,7.3s
TYV smax smax
comp=E,100nm,7.3s
TYV MLR MLR
comp=Z,600nm,15.0s
**P17K Kvichak River 81.18 9** P **P** 07 38 21.6 +0.4
baz=196,SNR=8.5
**N14K Kuskokwak Cree 81.24 6** P **P** 07 38 21.7 +0.2
baz=192
**Q20K Shuyak Island 81.28 11** P **P** 07 38 22.1 +0.3
baz=200
**F04A Amboy 81.29 34** P **P** 07 38 22.1 -0.1
F04A IAmb IAmb 07 38 54.9
comp=Z,79nm,1.6s
**PSTR Posyet 81.29 322** *i* P **P** 07 38 24.0 +1.8
**M11K Mekoryuk 81.33 4** P **P** 07 38 22.2 +0.2
baz=187
**O16K Kokwok River B 81.33 8** IAmb IAmb 07 38 33.9
comp=Z,72nm,1.4s
O16K IAMs_20 IAMs_20 08 10 32.3
comp=Z,889nm,21.0s
**O16K Kokwok River B 81.33 8** P **P** 07 38 22.1 +0.1
baz=195
**Q19K Cape Douglas, 81.36 10** IAMs_20 IAMs_20 08 11 24.3
comp=Z,999nm,20.0s
**Q19K Cape Douglas, 81.36 10** P **P** 07 38 22.3 0.0
baz=199
**P18K Big Mountain, 81.55 10** IAmb IAmb 07 38 42.1
comp=Z,81nm,1.4s
P18K IAMs_20 IAMs_20 08 14 43.1
comp=Z,884nm,20.0s
**P18K Big Mountain, 81.55 10** P **P** 07 38 23.2 0.0
baz=198
**M13K Dall Lake 81.57 5** P **P** 07 38 23.4 +0.1
baz=190
**USA0B Ussuriysk Arra 81.61 324** P **P** 07 38 22.3 -1.6
USA0B IAmb IAmb 07 38 32.4
comp=Z,109nm,1.8s
**USA0B Ussuriysk Arra 81.61 324** *i* P **P** 07 38 24.8 +0.9
**USRK Ussuriysk Ar. 81.61 324** P **P** 07 38 22.8 -1.1
**USRK Ussuriysk Ar. 81.61 324** P **P** 07 38 26.0 +2.1
comp=Z,16nm,1.0s,baz=119,slow=2.4,SNR=15
USRK LR LR 08 12 23.4
comp=Z,910nm,18.6s,baz=133,slow=34
comp=Z,16nm,1.0s
**PSUT Pine Spring 81.63 43** P **P** 07 38 23.6 -0.8
**O17K Koliganek Bris 81.64 8** P **P** 07 38 24.7 +1.0
baz=196
**N15K Kwethluk River 81.65 7** IAMs_20 IAMs_20 08 11 04.6
comp=Z,963nm,20.0s
**N15K Kwethluk River 81.65 7** P **P** 07 38 24.0 +0.2
baz=193
**G06A Carlson Farm, 81.76 35** IAmb IAmb 07 38 38.6
comp=Z,49nm,1.4s
**O18K Koktuh Hills 81.99 9** IAmb IAmb 07 38 45.0
comp=Z,61nm,1.1s
**O18K Koktuh Hills 81.99 9** P **P** 07 38 26.4 +0.8
baz=198
**M14K Bethel 82.03 6** P **P** 07 38 27.3 +1.6
baz=191
**M15K Kasigluk River 82.10 6** P **P** 07 38 27.7 +1.6
baz=192,SNR=12
**N16K Nishlik Lake 82.10 7** P **P** 07 38 27.4 +1.2
baz=194
**P19K Oil Pt 82.12 10** IAMs_20 IAMs_20 08 11 27.2
comp=Z,943nm,20.0s
**P19K Oil Pt 82.12 10** P **P** 07 38 26.8 +0.6
baz=199
**CNPM China Poot 82.35 11** IAmb IAmb 07 38 47.1
comp=Z,81nm,1.4s
**N17K Nushagak Hills 82.36 8** P **P** 07 38 27.6 +0.2
baz=196
**HKPS Hong Kong Po S 82.36 297** P **P** 07 38 29.8 +1.4
**HKPS Hong Kong Po S 82.36 297** IAMs_20 IAMs_20 08 11 23.3
comp=Z,1µm,20.0s
**MAW Mawson 82.38 199** P **P** 07 38 30.3 +2.6
comp=Z,13nm,0.8s,baz=124,slow=6.6,SNR=33
MAW LR LR 08 14 42.7
comp=Z,2µm,18.4s,baz=111,slow=35
comp=Z,13nm,0.8s
**HOM Homer 82.40 11** IAMs_20 IAMs_20 08 11 42.7
comp=Z,875nm,20.0s
**O19K Port Alsworth 82.45 10** P **P** 07 38 28.1 +0.1
**O19K Port Alsworth 82.45 10** P **P** 07 38 28.5 +0.6
baz=198
**H03S2 Juan Fernandez 82.48 123** T T 09 10 58.2
baz=248,slow=74,SNR=7.4
**H03S1 Juan Fernandez 82.50 123** T T 09 10 59.3
baz=248,slow=74,SNR=7.4
**H03S3 Juan Fernandez 82.50 123** T T 09 10 59.1
baz=248,slow=74,SNR=9.3
**W18A Petrified Fore 82.50 48** P **P** 07 38 28.7 -0.4
baz=238
**TPRI Tanjung Pinang 82.51 274** P **P** 07 38 29.6 +0.2
**L14K Kuka Creek 82.54 5** P **P** 07 38 30.1 +1.7
baz=190
**121A Cookes Peak, D 82.55 51** P **P** 07 38 28.9 -0.5
baz=239
**H03N2 Juan Fernandez 82.61 123** T T 09 10 59.6
baz=246,SNR=5.5
**M16K Timber Creek 82.61 7** IAMs_20 IAMs_20 08 12 46.1
comp=Z,854nm,20.0s
**M16K Timber Creek 82.61 7** P **P** 07 38 30.9 +2.1
baz=194,SNR=11
**H03N3 Juan Fernandez 82.61 123** T T 09 10 51.1
baz=246
**O20K Slope Mountain 82.62 11** P **P** 07 38 29.7 +0.7
baz=200
**H03N1 Juan Fernandez 82.63 123** T T 09 11 00.1
baz=246
**N18K Kilae Creek 82.68 9** P **P** 07 38 29.7 +0.5
baz=197
**G08A Pilot Rock 82.70 36** IAmb IAmb 07 38 43.6
comp=Z,34nm,1.2s
**K13K Kusilvak Mount 82.97 4** P **P** 07 38 31.4 +0.8
baz=189
**L15K Ungalak Mounta 82.98 6** P **P** 07 38 31.0 +0.3
baz=192,SNR=11
**DLV T Lat 82.99 286** P **P** 07 38 33.5 +1.4
**N19K Bonanza Creek 83.02 9** P **P** 07 38 31.0 0.0
N19K IAmb IAmb 07 38 43.2
comp=Z,71nm,1.5s
**N19K Bonanza Creek 83.02 9** P **P** 07 38 31.1 0.0
baz=198,SNR=8.6
**E07A Sunnyside 83.04 34** IAmb IAmb 07 38 45.3
comp=Z,44nm,1.1s
**BBB Bella Bella 83.06 26** LR LR 08 12 07.3

comp=Z,383nm,18.0s,baz=223,slow=33
**HAWA Hanford 83.10 34** IAmb IAmb 07 38 40.0
comp=Z,52nm,1.4s
**M17K Holitna River 83.17 8** P **P** **07 38 32.5 +0.8**
baz=195
**MDJ Mudanjiang 83.21 323** P **P** **07 38 33.5 +1.3**
**MDJ Mudanjiang 83.21 323** P **P** **07 38 34.0 +1.8**
MDJ PP **PP** **07 41 42.3 -1.7**
MDJ S **S** **07 48 56.3 +4.3**
MDJ sS SKKSac 07 49 00.8 +2.7
MDJ pmax pmax
comp=Z,45nm,1.1s
MDJ pmax pmax
comp=Z,700nm,4.8s
MDJ LR LR
comp=Z,650nm,17.9s
MDJ LR LR
comp=Z,920nm,17.9s
**MDJ Mudanjiang 83.21 323** P **P** **07 38 31.2 -1.0**
**NJ2 Nanjing 83.22 308** *e*P **P** **07 38 33.5 +0.9**
NJ2 sP **PcP** **07 38 37.8 +0.7**
NJ2 pmax pmax
comp=Z,52nm,1.0s
NJ2 pmax pmax
comp=Z,400nm,4.3s
**L16K Owhat River 83.23 7** IAmb IAmb 07 38 39.8
comp=Z,76nm,1.4s
L16K IAMs_20 IAMs_20 08 11 32.2
comp=Z,860nm,21.0s
**L16K Owhat River 83.23 7** P **P** **07 38 33.9 +2.0**
baz=194,SNR=12
**SEW Seward 83.23 12** P **P** **07 38 32.6 +0.6**
baz=203
**DUG Dugway, Tooele 83.24 42** IAMs_20 IAMs_20 08 14 40.0
comp=Z,1µm,18.0s
**Q23K Middleton Isla 83.26 14** P **P** **07 38 33.3 +1.2**
baz=206
**MID Middleton Isla 83.26 14** IAMs_20 IAMs_20 08 13 56.7
comp=Z,851nm,19.0s
**MFID Camas Ranch 83.30 38** IAmb IAmb 07 38 41.1
comp=Z,41nm,1.4s
**HMU Henry Mountain 83.33 45** IAmb IAmb 07 38 47.7
comp=Z,56nm,1.6s
**BMO Blue Mountains 83.34 37** IAmb IAmb 07 38 41.0
comp=Z,27nm,1.1s
BMO IAMs_20 IAMs_20 08 12 00.0
comp=Z,1µm,19.0s
**BTDF Bukit Timah Da 83.38 274** P **P** **07 38 35.3 +1.4**
**M18K Stony River 83.47 9** P **P** **07 38 33.6 +0.4**
baz=197
**O22K Cooper Landing 83.52 12** IAMs_20 IAMs_20 08 12 30.5
comp=Z,1µm,22.0s
**O22K Cooper Landing 83.52 12** P **P** **07 38 33.9 +0.4**
baz=203
**CAPN Captain Cook N 83.53 11** P **P** **07 38 34.6 +1.1**
baz=201
**P23K Montague Islan 83.54 13** P **P** **07 38 34.2 +0.6**
baz=205
**K15K Wolf Creek Mou 83.59 6** P **P** **07 38 35.8 +2.0**
baz=192,SNR=29
**CRAG Craig 83.66 22** P **P** **07 38 34.4 +0.1**
baz=218
**NKL Nikolayevsk 83.67 334** *e*P **P** **07 38 35.0 +0.6**
NKL *e*S **S** **07 48 47.9 -8.3**
NKL pmax pmax
comp=N,39nm,1.0s
NKL pmax pmax
comp=E,48nm,1.0s
NKL pmax pmax
comp=Z,58nm,1.0s
NKL smax smax
comp=E,137nm,2.4s
NKL smax smax
comp=N,135nm,3.0s
NKL MLR MLR
comp=E,3µm,16.0s
NKL MLR MLR
comp=N,5µm,20.0s
NKL MLR MLR
comp=Z,5µm,20.0s
**N20K Mount Spurr 83.75 10** P **P** **07 38 35.4 +0.7**
baz=200
**SPCR Spurr Chakacha 83.75 10** P **P** **07 38 34.9 +0.1**
baz=200
**L17K Donlin 83.77 7** P **P** **07 38 36.8 +2.1**
baz=195,SNR=14
**GRNR Gornyy 83.79 331** ⇓ *i*P **P** **07 38 35.9 +0.8**
GRNR pmax pmax
comp=Z,20nm,1.0s
**D08A Wollman Farm, 83.85 34** IAmb IAmb 07 38 49.4
comp=Z,37nm,1.1s
**J14K Nanvaranak Lak 83.86 5** IAMs_20 IAMs_20 08 17 05.9
comp=Z,822nm,20.0s
**J14K Nanvaranak Lak 83.86 5** P **P** **07 38 36.4 +1.2**
baz=190
**E09A Wood Farm, Sta 83.92 35** IAmb IAmb 07 38 49.4
comp=Z,36nm,1.2s
**Y22D IRIS PASSCAL I 83.95 50** IAMs_20 IAMs_20 08 12 15.5
comp=Z,988nm,18.0s
**Y22D IRIS PASSCAL I 83.95 50** P **P** **07 38 37.1 +0.6**
baz=240
**L18K Granite Mounta 84.06 8** IAmb IAmb 07 39 05.7
comp=Z,81nm,1.8s
**L18K Granite Mounta 84.06 8** P **P** **07 38 37.9 +1.7**
baz=196,SNR=6.5
**M19K Big River Lodg 84.07 9** IAMs_20 IAMs_20 08 19 28.7
comp=Z,789nm,18.0s
**M19K Big River Lodg 84.07 9** P **P** **07 38 37.2 +0.9**
baz=198
**F10A Beach Ranch, E 84.07 36** IAmb IAmb 07 38 44.4
comp=Z,43nm,1.0s
**RC01 Rabbit Creek A 84.08 12** P **P** **07 38 37.0 +0.7**
RC01 IAmb IAmb 07 38 55.7
comp=Z,44nm,1.2s
**RC01 Rabbit Creek A 84.08 12** P **P** **07 38 37.6 +1.2**
baz=203
**TXAR Lajitas Array 84.08 56** P **P** **07 38 38.4 +1.1**
**TXAR Lajitas Array 84.08 56** P **P** **07 38 40.5 +3.2**
comp=Z,4.8nm,1.0s,baz=215,slow=6.2,SNR=19
TXAR LR LR 08 09 54.3
comp=Z,450nm,19.4s,baz=238,slow=31
comp=Z,4.8nm,1.0s
**TXAR Lajitas Array 84.08 56** P **P** **07 38 38.4 +1.1**
**V35K Ketchikan 84.09 23** P **P** **07 38 37.9 +1.5**
baz=219
**HIN Hinchinbrook I 84.10 13** IAMs_20 IAMs_20 08 12 11.9
comp=Z,1µm,22.0s
**SPUT South Promonto 84.10 42** IAmb IAmb 07 38 45.6
comp=Z,28nm,1.2s
**KAIM Kayak Island 84.14 14** P **P** **07 38 38.6 +2.0**
baz=208
**PWL Port Wells 84.14 12** IAmb IAmb 07 38 43.3
comp=Z,41nm,1.1s
PWL IAMs_20 IAMs_20 08 17 58.9
comp=Z,902nm,22.0s
**PWL Port Wells 84.14 12** P **P** **07 38 37.6 +0.9**
baz=204,SNR=11
**U33K Whale Pass 84.17 22** P **P** **07 38 38.0 +1.1**
baz=218
**SIT Sitka 84.20 20** P **P** **07 38 37.7 +0.7**
baz=216
**HLID Hailey 84.21 39** IAmb IAmb 07 38 46.3
comp=Z,23nm,0.9s
**M20K Styx River 84.24 10** IAMs_20 IAMs_20 08 12 02.4
comp=Z,855nm,21.0s
**M20K Styx River 84.24 10** P **P** **07 38 37.9 +0.7**
baz=199
**SUA Susitna One 84.25 11** IAmb IAmb 07 38 49.7
comp=Z,55nm,1.6s
SUA IAMs_20 IAMs_20 08 12 44.6
comp=Z,903nm,20.0s
**SUA Susitna One 84.25 11** P **P** **07 38 38.4 +1.1**
baz=202,SNR=10
**L19K White Mountain 84.27 9** P **P** **07 38 38.9 +1.6**
baz=198
**K17K Iditarod 84.34 7** IAmb IAmb 07 38 51.4
comp=Z,49nm,1.2s
**K17K Iditarod 84.34 7** P **P** **07 38 39.2 +1.6**
baz=195
**EYAK Cordova Ski Ar 84.40 14** P **P** **07 38 40.5 +2.6**
**EYAK Cordova Ski Ar 84.40 14** P **P** **07 38 39.1 +1.2**
baz=206
**GLI Glacier Island 84.41 13** IAmb IAmb 07 38 50.7
comp=Z,61nm,1.2s
**GLI Glacier Island 84.41 13** P **P** **07 38 38.7 +0.7**
baz=205,SNR=14
**FID Port Fidalgo 84.42 13** P **P** **07 38 38.0 -0.1**
FID IAmb IAmb 07 38 50.7
comp=Z,54nm,1.5s
FID IAMs_20 IAMs_20 08 12 21.2
comp=Z,1µm,20.0s
**B08A Colville Reser 84.47 33** IAmb IAmb 07 38 51.8
comp=Z,27nm,1.1s
**GAMB Gambell 84.51 1** P **P** **07 38 40.1 +1.7**
baz=182
**SKT Skwentna 84.60 10** IAmb IAmb 07 38 44.7
comp=Z,26nm,1.2s
SKT IAMs_20 IAMs_20 08 13 05.8
comp=Z,1µm,20.0s
**SKT Skwentna 84.60 10** P **P** **07 38 39.1 +0.1**
baz=201,SNR=13
**KNK Knik Glacier 84.63 12** IAmb IAmb 07 38 48.0
comp=Z,51nm,1.4s
**KNK Knik Glacier 84.63 12** P **P** **07 38 41.1 +2.0**
baz=204
**QIZ Qiongzhong 84.63 293** P **P** **07 38 40.0 -0.1**
QIZ PP **PP** **07 41 54.3 -1.8**
QIZ S **S** **07 49 07.5 +0.2**
QIZ SS **SS** **07 54 42.0 +2.9**
QIZ pmax pmax
comp=Z,490nm,8.6s
QIZ LR LR
comp=Z,280nm,15.4s
QIZ LR LR
comp=Z,340nm,14.8s
QIZ LR LR
comp=Z,400nm,16.4s
**M22K Willow 84.63 11** IAMs_20 IAMs_20 08 10 41.7
comp=Z,1µm,22.0s
**M22K Willow 84.63 11** P **P** **07 38 40.4 +1.3**
baz=202
**J16K Anvik River 84.65 6** P **P** **07 38 41.0 +1.9**
baz=192,SNR=8.2
**S31K Pelican 84.66 19** P **P** **07 38 40.7 +1.4**
baz=215
**C09A Chrisman Ranch 84.66 34** IAmb IAmb 07 38 53.2
comp=Z,60nm,1.6s
**PMR Palmer 84.66 12** P **P** **07 38 41.9 +2.7**
**PMR Palmer 84.66 12** IAMs_20 IAMs_20 08 22 27.6
comp=Z,820nm,19.0s
**PMR Palmer 84.66 12** P **P** **07 38 40.5 +1.3**
baz=203,SNR=5.7
**WRAK Wrangell Islan 84.68 22** P **P** **07 38 40.2 +0.8**
baz=218
**L20K Farewell, AK 84.69 9** P **P** **07 38 40.5 +1.0**
baz=199
**ANMO Albuquerque 84.72 50** P **P** **07 38 43.5 +3.0**
ANMO IAmb IAmb 07 39 13.8
comp=Z,30nm,1.2s
**ANMO Albuquerque 84.72 50** IAMs_20 IAMs_20 08 12 29.7
comp=Z,836nm,20.0s
**ANMO Albuquerque 84.72 50** LR LR 08 12 42.6
comp=Z,634nm,18.1s,baz=340,slow=33
**ANMO Albuquerque 84.72 50** *i* P **P** **07 38 40.5 0.0**
ANMO pmax pmax
comp=Z,17nm,1.5s
**S32K Killisnoo 84.77 20** IAMs_20 IAMs_20 08 19 28.5
comp=Z,837nm,18.0s
**T33K Petersburg 84.79 21** P **P** **07 38 41.8 +1.9**
baz=218
**DL2 Dalian 84.80 315** P **P** **07 38 41.3 +0.8**
DL2 S **SKSac** **07 49 04.5 +0.1**
DL2 pmax pmax
comp=Z,63nm,1.6s
DL2 pmax pmax
comp=Z,750nm,7.3s
DL2 LR LR
comp=Z,560nm,18.0s
DL2 LR LR
comp=Z,350nm,19.9s
DL2 LR LR
comp=Z,740nm,19.1s
**HWUT Hardware Ranch 84.82 42** IAMs_20 IAMs_20 08 15 40.7
comp=Z,1µm,18.0s
**GHO Glory Hole Cre 84.87 12** IAmb IAmb 07 38 47.8
comp=Z,26nm,0.8s
GHO IAMs_20 IAMs_20 08 19 02.0
comp=Z,741nm,18.0s
**J17K VABM Dome 84.91 7** IAmb IAmb 07 38 48.3
comp=Z,36nm,1.2s
J17K IAMs_20 IAMs_20 08 12 54.8
comp=Z,799nm,20.0s
**J17K VABM Dome 84.91 7** P **P** **07 38 42.2 +1.7**
baz=194,SNR=8.8
**MESA MESA 84.95 15** P **P** **07 38 42.7 +1.6**
baz=210
**KLR Kul'dur 84.98 328** LR LR 08 11 08.8
comp=Z,479nm,20.2s,baz=134,slow=32
**KLR Kul'dur 84.98 328** *e*P **P** **07 38 42.7 +1.5**
KLR pmax pmax
comp=Z,21nm,1.7s
**SML Sawmill 85.01 12** IAmb IAmb 07 38 54.0
comp=Z,60nm,1.6s
SML IAMs_20 IAMs_20 08 16 19.9
comp=Z,890nm,20.0s
**SML Sawmill 85.01 12** P **P** **07 38 43.0 +1.9**
baz=204
**BMRM Bremner River 85.03 14** P **P** **07 38 42.8 +1.6**
baz=207,SNR=8.1
**CN2 Changchun 85.11 321** *e*P **P** **07 38 43.3 +1.3**
CN2 *e*S **SKSac** **07 49 06.5 +0.3**
CN2 pmax pmax
comp=Z,30nm,1.1s
CN2 pmax pmax
comp=Z,700nm,3.3s
CN2 LR LR
comp=Z,300nm,15.0s
CN2 LR LR
comp=Z,400nm,15.0s
CN2 LR LR
comp=Z,400nm,15.0s
**M23K Glacier View 85.12 12** P **P** **07 38 42.7 +1.1**
baz=204
**BNX BinXian 85.12 323** ⇑ P **P** **07 38 42.5 +0.6**
BNX S **S** **07 49 12.8 +1.7**
BNX sS **ScS** **07 49 19.0 -2.5**
BNX pmax pmax
comp=Z,64nm,1.0s
BNX pmax pmax
comp=Z,340nm,7.3s
BNX LR LR
comp=Z,560nm,14.1s
BNX LR LR
comp=Z,320nm,15.2s
BNX LR LR
comp=Z,490nm,23.8s
**SNY Shenyang 85.13 318** ⇑ P **P** **07 38 43.5 +1.4**
SNY pmax pmax
comp=Z,14nm,1.0s
SNY pmax pmax
comp=Z,350nm,5.6s
SNY LR LR
comp=Z,380nm,18.0s
SNY LR LR
comp=Z,340nm,14.9s
SNY LR LR
comp=Z,570nm,18.1s
**CRQM Cirque 85.17 15** IAmb IAmb 07 38 55.3
comp=Z,38nm,1.2s
**PNL Peninsula 85.18 17** P **P** **07 38 43.4 +1.5**
**PNL Peninsula 85.18 17** P **P** **07 38 44.0 +2.0**
baz=212
**R31K City Hall, Gus 85.18 19** P **P** **07 38 44.0 +2.1**
baz=215
**CRQE Cirque 85.18 15** P **P** **07 38 43.8 +1.7**
baz=209
**CUT Chulitna 85.21 11** IAMs_20 IAMs_20 08 13 07.1
comp=Z,1µm,22.0s
**CUT Chulitna 85.21 11** P **P** **07 38 43.8 +1.8**
baz=202
**KLU Klutina 85.21 13** IAmb IAmb 07 38 55.2
comp=Z,47nm,1.6s
**KLU Klutina 85.21 13** P **P** **07 38 43.6 +1.4**
baz=206,SNR=10
**I17K Unalakleet 85.23 6** P **P** **07 38 44.1 +2.0**
baz=192
**ISLE Juniper Island 85.23 15** IAmb IAmb 07 38 56.1
comp=Z,53nm,1.3s
**SCM Sheep Creek Mo 85.23 12** IAmb IAmb 07 38 49.2
comp=Z,60nm,1.3s
SCM IAMs_20 IAMs_20 08 15 45.7
comp=Z,1µm,22.0s
**SCM Sheep Creek Mo 85.23 12** P **P** **07 38 44.5 +2.2**
baz=205,SNR=12
**TGL Tana Glacier 85.25 15** P **P** **07 38 43.0 +0.6**
TGL IAmb IAmb 07 39 03.2
comp=Z,54nm,1.4s
**J18K Innoko River 85.25 8** IAmb IAmb 07 38 49.7
comp=Z,59nm,1.3s
**J18K Innoko River 85.25 8** P **P** **07 38 44.0 +1.8**
baz=196,SNR=20
**LR03 Panguipulli 85.27 131** P **P** **07 38 43.1 +0.1**
**LR05 Currie 85.27 131** P **P** **07 38 46.3 +3.2**
LR05 IAmb IAmb 07 38 51.1
comp=Z,64nm,1.2s
**PINM Pinnacle 85.31 16** P **P** **07 38 44.7 +2.0**
baz=211
**MA2 Magadan 85.36 343** *i* P **P** **07 38 42.3 -0.5**
MA2 pmax pmax
comp=Z,76nm,1.9s
**TABL Table Mountain 85.38 16** IAmb IAmb 07 39 03.2
comp=Z,56nm,1.3s
**R32K Eaglecrest 85.44 20** P **P** **07 38 44.6 +1.3**
baz=216
**GRNC Granite Creek 85.48 15** IAmb IAmb 07 39 10.4
comp=Z,60nm,1.4s
**K20K Telida 85.50 9** P **P** **07 38 44.8 +1.3**
baz=198,SNR=22
**RDMU Red Mountain 85.52 43** P **P** **07 38 43.8 -0.6**
**VRDI Verde Repeater 85.52 14** IAmb IAmb 07 39 03.6
comp=Z,92nm,1.7s
**ANM Nome 85.54 4** P **P** **07 38 45.6 +2.0**
baz=188
**NEW Newport 85.55 34** LR LR 08 12 14.4
comp=Z,2µm,18.7s,baz=228,slow=32
**N25K Chitina, Valde 85.60 14** IAmb IAmb 07 38 52.0
comp=Z,69nm,1.6s
**N25K Chitina, Valde 85.60 14** P **P** **07 38 45.5 +1.4**
baz=207,SNR=11
**P29M Windy Craggy 85.60 17** IAmb IAmb 07 38 58.0
comp=Z,55nm,1.4s
**P29M Windy Craggy 85.60 17** P **P** **07 38 45.8 +1.8**
baz=214
**GLB Gilahina Butte 85.63 14** IAmb IAmb 07 39 04.8
comp=Z,45nm,1.4s
**PDSI Padang 85.66 271** P **P** **07 38 43.9 -1.6**
comp=Z,58nm,1.0s,comp=Z,3µm
**M24K Tolsona, Glenn 85.71 13** IAMs_20 IAMs_20 08 13 06.5
comp=Z,948nm,21.0s
**M24K Tolsona, Glenn 85.71 13** P **P** **07 38 46.2 +1.6**
baz=206,SNR=11
**AHID Auburn Hatcher 85.75 41** IAMs_20 IAMs_20 08 12 37.2
comp=Z,825nm,19.0s
**LOGN Logan Glacier 85.75 15** IAmb IAmb 07 38 58.8
comp=Z,29nm,1.1s
LOGN IAMs_20 IAMs_20 08 12 47.8
comp=Z,1µm,20.0s
**MCARA McCarthy VSAT 85.75 14** IAmb IAmb 07 39 11.4
comp=Z,22nm,1.0s
**MCARA McCarthy VSAT 85.75 14** P **P** **07 38 46.3 +1.5**
baz=209
**CTG Chitna Glacier 85.79 15** P **P** **07 38 46.9 +1.8**
baz=210
**CTGM Chitina Glacie 85.79 15** IAmb IAmb 07 38 58.4
comp=Z,70nm,1.6s
**H16K Elim 85.83 5** P **P** **07 38 46.8 +1.7**
baz=191
**WAT6 Susitna Watana 85.83 12** P **P** **07 38 47.0 +1.6**
baz=204,SNR=24
**PLBC Pleasant Camp 85.85 18** P **P** **07 38 47.5 +2.3**
baz=215
**T35M Bob Quinn 85.85 22** P **P** **07 38 47.3 +1.9**
baz=220
**S22A 4UR Ranch, Cre 85.87 47** P **P** **07 38 48.2 +2.0**
baz=240
**WHN Wuhan 85.90 305** ⇑ P **P** **07 38 47.0 +0.8**
WHN S **S** **07 49 16.3 -3.1**
WHN pmax pmax
comp=Z,850nm,2.0s
WHN pmax pmax
comp=Z,3µm,3.5s
WHN LR LR
comp=Z,1µm,18.3s
**J19K Poorman 85.90 8** IAMs_20 IAMs_20 08 13 06.0
comp=Z,945nm,21.0s
**J19K Poorman 85.90 8** P **P** **07 38 47.1 +1.7**
baz=197,SNR=14
**O28M Mount Upton 85.91 16** P **P** **07 38 47.7 +1.8**
baz=211,SNR=6.6
**WAT1 Susitna Watana 85.91 11** P **P** **07 38 47.0 +1.5**
baz=204
**O29M Mount Kennedy 85.93 17** IAmb IAmb 07 38 59.7
comp=Z,67nm,1.4s
**O29M Mount Kennedy 85.93 17** P **P** **07 38 48.4 +2.5**
baz=213,SNR=7.1
**CNSH ChangSha 85.95 302** P **P** **07 38 48.0 +1.5**
CNSH pmax pmax
comp=Z,52nm,1.2s
**G15K Niukluk 86.05 4** P **P** **07 38 48.0 +1.8**
baz=189,SNR=8.1
**PLCA Paso Flores 86.08 132** P **P** **07 38 48.9 +1.7**
comp=Z,6.7nm,1.1s,baz=260,slow=11,SNR=3.3
PLCA LR LR 08 11 46.1
comp=Z,881nm,18.1s,baz=232,slow=32
comp=Z,6.7nm,1.1s
**SKAG Skagway 86.16 19** P **P** **07 38 48.0 +1.3**
**SKAG Skagway 86.16 19** P **P** **07 38 49.0 +2.3**
baz=216
**HARP HAARP 86.19 13** P **P** **07 38 48.5 +1.6**
baz=207
**P30M Million Dollar 86.23 18** P **P** **07 38 49.3 +2.1**
baz=214
**TPAW Teton Pass 86.24 40** IAMs_20 IAMs_20 08 16 34.1
comp=Z,949nm,18.0s
**S34M Telegraph Cree 86.26 21** IAmb IAmb 07 39 07.7
comp=Z,37nm,1.4s
**S34M Telegraph Cree 86.26 21** P **P** **07 38 50.0 +2.7**
baz=219
**J20K Nowinta River 86.27 9** P **P** **07 38 49.1 +1.8**
baz=198,SNR=21
**FXWY Fox Creek 86.28 40** IAMs_20 IAMs_20 08 16 19.1
comp=Z,962nm,18.0s
**DLMT Dillon 86.32 38** IAMs_20 IAMs_20 08 11 08.0
comp=Z,1µm,20.0s
**H17K Granite Mounta 86.33 6** IAmb IAmb 07 38 55.6
comp=Z,99nm,1.8s
**H17K Granite Mounta 86.33 6** P **P** **07 38 48.8 +1.2**
baz=193,SNR=9.5
**SNOW Snow King Moun 86.34 41** IAMs_20 IAMs_20 08 16 20.9
comp=Z,1µm,18.0s
**DHY Denali Highway 86.36 12** IAmb IAmb 07 39 26.9
comp=Z,39nm,1.3s
**DHY Denali Highway 86.36 12** P **P** **07 38 49.2 +1.3**
baz=205
**RND Reindeer 86.39 11** IAmb IAmb 07 38 55.5
comp=Z,66nm,1.2s
**F14K Arctic Creek 86.39 3** P **P** **07 38 49.6 +1.8**
baz=187
**TNA Tin City 86.41 2** P **P** **07 38 50.0 +2.2**
baz=186
**YUK8 Steele Glacier 86.46 16** P **P** **07 38 50.3 +1.7**
baz=212
**GCSA Galena City Sc 86.47 7** P **P** **07 38 50.3 +2.1**
baz=196
**IMW Indian Meadow 86.47 40** IAMs_20 IAMs_20 08 15 17.2
comp=Z,830nm,18.0s
**TIA Tai'an 86.51 311** P **P** **07 38 50.3 +1.2**
TIA S **S** **07 49 20.0 -5.2**
TIA pmax pmax
comp=Z,40nm,1.4s
TIA pmax pmax
comp=Z,750nm,8.3s
TIA LR LR
comp=Z,270nm,14.7s
TIA LR LR
comp=Z,270nm,9.3s
TIA LR LR
comp=Z,160nm,5.9s
**LOHW Long Hollow 86.52 41** IAMs_20 IAMs_20 08 16 17.6
comp=Z,1µm,18.0s
**YUK6 Outpost Mounta 86.53 16** P **P** **07 38 51.4 +2.5**
baz=213
**ELIB Princess Elisa 86.55 185** *d*P **P** **07 38 51.1 +2.2**
comp=Z,27nm,1.1s
**G16K Koyuk River 86.57 5** IAmb IAmb 07 38 57.0
comp=Z,72nm,1.8s
G16K IAMs_20 IAMs_20 08 22 12.4
comp=Z,742nm,19.0s
**G16K Koyuk River 86.57 5** P **P** **07 38 50.7 +2.1**
baz=191
**PAX Paxson 86.64 13** P **P** **07 38 50.4 +1.3**
baz=206,SNR=12
**M26K Nabesna, AK 86.66 14** IAmb IAmb 07 39 20.3

comp=Z,42nm,1.2s
M26K IAMs_20 IAMs_20 08 13 42.6
comp=Z,840nm,19.0s
**M26K Nabesna, AK 86.66 14** P **P** **07 38 51.3 +2.0**
baz=209,SNR=14
**BPAW Bear Paw Mtn. 86.67 10** IAMs_20 IAMs_20 08 15 13.6
comp=Z,947nm,21.0s
**BPAW Bear Paw Mtn. 86.67 10** P **P** **07 38 49.5 +0.3**
baz=201
**MCK McKinley 86.67 11** P **P** **07 38 50.8 +1.5**
baz=203,SNR=17
**H18K Honhosa River 86.70 6** IAMs_20 IAMs_20 08 13 08.0
comp=Z,788nm,20.0s
**H18K Honhosa River 86.70 6** P **P** **07 38 50.7 +1.3**
baz=194,SNR=8.5
**PDAR Pinedale Array 86.70 42** P **P** **07 38 51.4 +1.2**
**PDAR Pinedale Array 86.70 42** P **P** **07 38 51.5 +1.3**
comp=Z,7.1nm,0.9s,baz=207,slow=3.0,SNR=37
PDAR PKKPbc **PKKPbc 07 56 46.0 -0.7**
comp=Z,0.2nm,0.3s,baz=96,slow=1.5,SNR=3.7
PDAR LR LR 08 13 29.9
comp=Z,398nm,18.3s,baz=232,slow=33
comp=Z,7.1nm,0.9s
**Q32M Nakina River 86.70 20** IAmb IAmb 07 39 10.5
comp=Z,37nm,1.4s
**Q32M Nakina River 86.70 20** P **P** **07 38 51.5 +1.7**
baz=218
**YUK3 Moose Creek 86.70 15** P **P** **07 38 51.7 +2.0**
baz=211
**F15K North Star Dit 86.72 4** IAMs_20 IAMs_20 08 16 23.3
comp=Z,892nm,20.0s
**F15K North Star Dit 86.72 4** P **P** **07 38 50.7 +1.2**
baz=189
**FLWY Flagg Ranch 86.72 40** IAMs_20 IAMs_20 08 15 34.8
comp=Z,825nm,18.0s
**P32M Atlin 86.75 19** IAmb IAmb 07 39 03.6
comp=Z,31nm,1.4s
**P32M Atlin 86.75 19** P **P** **07 38 51.9 +2.2**
baz=217
**YUK4 Talbot Arm 86.80 16** P **P** **07 38 52.2 +2.0**
baz=213
**G17K Kiwalik Mounta 86.82 5** P **P** **07 38 52.1 +2.2**
baz=192,SNR=12
**I20K Naaghedeneel 86.82 8** IAMs_20 IAMs_20 08 13 32.3
comp=Z,773nm,20.0s
**I20K Naaghedeneel 86.82 8** P **P** **07 38 51.6 +1.7**
baz=198,SNR=9.3
**M27K Edge Creek, AK 86.87 14** IAMs_20 IAMs_20 08 13 37.3
comp=Z,1μm,20.0s
**M27K Edge Creek, AK 86.87 14** P **P** **07 38 52.9 +2.5**
baz=210,SNR=20
**MSTX Muleshoe 86.92 52** IAMs_20 IAMs_20 08 14 08.1
comp=Z,1μm,18.0s
**H17A Grant Village 86.97 40** P **P** **07 38 52.9 +1.4**
baz=237
**833A Chaparral WMA, 86.98 58** P **P** **07 38 52.2 +0.6**
baz=244
**UBPT Khong Chiam 86.98 288** P **P** **07 38 53.4 +1.6**
**O30N Mendenhall 87.01 18** IAmb IAmb 07 39 11.6
comp=Z,48nm,1.5s
**O30N Mendenhall 87.01 18** P **P** **07 38 53.5 +2.5**
baz=215,SNR=8.6
**BOZ Bozeman (W) 87.01 38** IAMs_20 IAMs_20 08 11 59.4
comp=Z,949nm,20.0s
**DLBC Dease Lake 87.04 21** LR LR 08 10 45.7
comp=Z,429nm,21.1s,baz=261,slow=31
**DLBC Dease Lake 87.04 21** P **P** **07 38 53.6 +2.3**
baz=220
**IPM Ipoh 87.05 276** P **P** **07 38 54.1 +1.8**
**IPM Ipoh 87.05 276** P **P** **07 38 52.2 -0.1**
**L26K Log Cabin Wild 87.13 13** IAmb IAmb 07 39 12.7
comp=Z,34nm,1.3s
L26K IAMs_20 IAMs_20 08 14 12.0
comp=Z,1μm,20.0s
**L26K Log Cabin Wild 87.13 13** P **P** **07 38 53.7 +2.1**
baz=208
**LKWY Lake 87.17 40** IAMs_20 IAMs_20 08 15 15.6
comp=Z,992nm,18.0s
**TROLL Troll, Antarti 87.20 179** ⇓P **P** **07 38 54.6 +2.5**
comp=Z,905nm,1.1s
**T25A Trinidad 87.24 49** P **P** **07 38 52.9 -0.1**
baz=241
**WHY Whitehorse 87.26 18** IAmb IAmb 07 39 06.1
comp=Z,36nm,1.4s
**WHY Whitehorse 87.26 18** P **P** **07 38 53.2 +0.8**
baz=216
**H19K Roundabout Mou 87.28 7** IAMs_20 IAMs_20 08 13 58.3
comp=Z,819nm,20.0s
**H19K Roundabout Mou 87.28 7** P **P** **07 38 54.1 +2.1**
baz=196,SNR=26
**N30M Aishikik Lake 87.30 17** P **P** **07 38 54.2 +1.8**
baz=214
**K24K Donnelly Dome 87.32 12** P **P** **07 38 54.1 +1.7**
baz=206,SNR=12
**VNA3 Neumayer Olymp 87.34 175** ⇓P **P** **07 38 54.8 +2.1**
comp=Z,14nm,0.8s
**SNAA Sanae 87.36 177** P **P** **07 38 53.8 +1.0**
SNAA IAmb IAmb 07 38 59.4
comp=Z,33nm,1.1s
SNAA IAMs_20 IAMs_20 08 23 24.1
comp=Z,920nm,18.0s
**SNAA Sanae 87.36 177** ⇓P **P** **07 38 55.0 +2.2**
comp=Z,278nm,0.8s
**SNAA Sanae 87.36 177** P **P** **07 38 55.2 +2.4**
comp=Z,14nm,0.9s,baz=209,slow=3.7,SNR=24
SNAA LR LR 08 16 50.8
comp=Z,546nm,18.4s,baz=210,slow=35
comp=Z,14nm,0.9s
**SNAA Sanae 87.36 177** *ce*P **P** **07 38 55.3 +2.5**
SNAA pmax pmax
comp=Z,54nm,1.7s
**G18K Tagagawik 87.39 6** P **P** **07 38 53.7 +1.0**
baz=194,SNR=14
**H20K Anotleneega Mo 87.43 8** P **P** **07 38 55.1 +2.2**
baz=198,SNR=18
**NEA2 Nenana 87.44 10** IAmb IAmb 07 39 22.2
comp=Z,43nm,1.4s
**NEA2 Nenana 87.44 10** P **P** **07 38 54.0 +1.0**
baz=203
**RIDG Independent Ri 87.45 12** IAmb IAmb 07 39 12.0
comp=Z,57nm,1.5s
RIDG IAMs_20 IAMs_20 08 14 29.5
comp=Z,988nm,20.0s
**RIDG Independent Ri 87.45 12** P **P** **07 38 54.4 +1.3**
baz=207,SNR=9.8
**R33M Jennings River 87.46 20** IAmb IAmb 07 39 07.3
comp=Z,29nm,1.2s
**R33M Jennings River 87.46 20** P **P** **07 38 55.4 +2.0**
baz=220
**L27K Beaver Creek, 87.50 14** IAMs_20 IAMs_20 08 14 16.8
comp=Z,754nm,19.0s
**L27K Beaver Creek, 87.50 14** P **P** **07 38 55.5 +2.2**
baz=210,SNR=13
**BCAR Beaver Creek A 87.51 14** P **P** **07 38 53.5 +0.1**
**P33M Teslin, Yukon 87.52 19** IAMs_20 IAMs_20 08 20 60.0
comp=Z,675nm,18.0s
**P33M Teslin, Yukon 87.52 19** P **P** **07 38 54.9 +1.4**
baz=218
**MLY Manley 87.58 10** IAmb IAmb 07 39 05.9
comp=Z,78nm,1.9s
MLY IAMs_20 IAMs_20 08 21 20.6
comp=Z,776nm,19.0s
**MLY Manley 87.58 10** P **P** **07 38 54.3 +0.6**
baz=202,SNR=8.8
**JCT Junction City 87.59 56** IAMs_20 IAMs_20 08 14 27.4
comp=Z,1μm,18.0s
**Q24A Divide 87.62 47** P **P** **07 38 55.7 +0.9**
baz=241
**HDA Harding Lake 87.65 11** IAmb IAmb 07 39 08.2
comp=Z,39nm,1.3s
HDA IAMs_20 IAMs_20 08 24 38.6
comp=Z,758nm,18.0s
**HDA Harding Lake 87.65 11** P **P** **07 38 55.4 +1.4**
baz=205,SNR=16
**N31M Braeburn, Yuko 87.68 17** IAmb IAmb 07 39 08.0
comp=Z,38nm,1.2s
**N31M Braeburn, Yuko 87.68 17** P **P** **07 38 56.6 +2.4**
baz=215,SNR=6.3
**F17K Baldwin Pennin 87.69 5** P **P** **07 38 55.4 +1.4**
baz=192
**KULM Kulim 87.69 277** P **P** **07 38 54.5 -0.9**
**CCB Clear Creek Bu 87.71 11** P **P** **07 38 54.8 +0.6**
**M29M Somme Creek 87.77 16** IAmb IAmb 07 39 08.2
comp=Z,41nm,1.4s
M29M IAMs_20 IAMs_20 08 16 32.2
comp=Z,966nm,20.0s
**M29M Somme Creek 87.77 16** P **P** **07 38 56.4 +1.6**
baz=213,SNR=13

**SEY Seymchan 87.80 345** LR LR 08 18 23.8
comp=Z,658nm,18.2s,baz=149,slow=36
**SEY Seymchan 87.80 345** *ce*P **P** **07 38 56.1 +1.4**
SEY pmax pmax
comp=Z,67nm,1.7s
**G19K Purcell Mounta 87.80 7** P **P** **07 38 56.6 +2.0**
baz=196,SNR=14
**HEH HeiHe 87.82 327** *e*P **P** **07 38 55.8 +0.7**
HEH pP **sP** **07 38 58.8 -0.7**
HEH SKS **SKSac 07 49 24.5 +1.9**
HEH S **S** **07 49 39.5 +2.3**
HEH pmax pmax
comp=Z,23nm,1.7s
HEH pmax pmax
comp=Z,560nm,7.1s
HEH LR LR
comp=Z,760nm,20.6s
HEH LR LR
comp=Z,630nm,18.0s
HEH LR LR
comp=Z,1μm,19.6s
**VNA2 Neumayer--Watz 87.83 176** ⇓P **P** **07 38 57.6 +2.6**
comp=Z,13nm,1.0s,baz=157,slow=8.4
**SCRK Sand Creek 87.84 13** IAmb IAmb 07 39 14.2
comp=Z,88nm,2.0s
SCRK IAMs_20 IAMs_20 08 14 21.7
comp=Z,934nm,20.0s
**SCRK Sand Creek 87.84 13** P **P** **07 38 56.7 +1.6**
baz=208,SNR=15
**H21K Melozitna Rive 87.86 9** IAmb IAmb 07 39 03.3
comp=Z,57nm,1.5s
H21K IAMs_20 IAMs_20 08 18 42.0
comp=Z,706nm,19.0s
**H21K Melozitna Rive 87.86 9** P **P** **07 38 56.8 +1.8**
baz=200,SNR=16
**I23K Minto, Yukon-K 87.91 10** IAmb IAmb 07 39 07.8
comp=Z,66nm,1.6s
**I23K Minto, Yukon-K 87.91 10** P **P** **07 38 56.1 +1.0**
baz=203,SNR=21
**COLA College 87.91 11** P **P** **07 38 58.2 +3.0**
**COLA College 87.91 11** P **P** **07 38 55.8 +0.6**
**COLA College 87.91 11** IAMs_20 IAMs_20 08 14 18.4
comp=Z,832nm,20.0s
**COLA College 87.91 11** P **P** **07 38 56.5 +1.3**
baz=204
**COLA College 87.91 11** P **P** **07 38 55.8 +0.6**
COLA pmax pmax
comp=Z,91nm,1.4s
**MDM Murphy Dome 87.92 11** IAMs_20 IAMs_20 08 14 28.8
comp=Z,954nm,20.0s
**F18K Selawik 87.98 6** P **P** **07 38 56.6 +1.1**
baz=193,SNR=12
**ILAR Eielson Array 87.99 11** P **P** **07 38 56.7 +1.1**
**ILAR Eielson Array 87.99 11** P **P** **07 38 56.5 +0.9**
comp=Z,6.0nm,1.1s,baz=215,slow=5.3,SNR=23
ILAR PP **PP** **07 42 17.2 -5.2**
comp=Z,2.0nm,1.1s,baz=232,slow=5.6,SNR=4.1
ILAR PKKP **PKKPdf 07 56 42.4 +3.2**
comp=Z,0.4nm,0.9s,baz=29,slow=2.1,SNR=2.6
ILAR PKPPKP P'P'df 08 04 54.6 +10
comp=Z,0.3nm,0.8s,baz=12,slow=2.3,SNR=4.1
ILAR LR LR 08 16 28.6
comp=Z,296nm,18.1s,baz=196,slow=34
comp=Z,6.0nm,1.1s
**ILAR Eielson Array 87.99 11** P **P** **07 38 56.7 +1.1**
**VNA1 Neumayer--Stat 88.04 175** ⇓P **P** **07 38 58.4 +2.5**
comp=Z,24nm,1.3s
**N23A Reed Feather La 88.04 45** P **P** **07 38 58.4 +1.6**
baz=240
**J25K Salcha River, 88.13 12** IAmb IAmb 07 39 09.6
comp=Z,76nm,1.8s
J25K IAMs_20 IAMs_20 08 26 13.4
comp=Z,734nm,19.0s
**J25K Salcha River, 88.13 12** P **P** **07 38 57.7 +1.4**
baz=206,SNR=18
**RLMT Red Lodge 88.14 40** IAMs_20 IAMs_20 08 20 19.5
comp=Z,929nm,18.0s
**N32M Quiet Lake 88.19 18** P **P** **07 38 58.8 +2.1**
baz=218
**POKR Poker Plat Res 88.21 11** IAMs_20 IAMs_20 08 14 37.3
comp=Z,826nm,20.0s
**POKR Poker Plat Res 88.21 11** P **P** **07 38 58.3 +1.7**
baz=205
**E17K Hotham Inlet 88.28 5** P **P** **07 38 58.6 +1.8**
baz=191,SNR=10
**K27K Chicken 88.29 13** IAmb IAmb 07 39 05.7
comp=Z,51nm,1.4s
K27K IAMs_20 IAMs_20 08 17 20.7
comp=Z,1μm,19.0s
**K27K Chicken 88.29 13** P **P** **07 38 59.3 +2.2**
baz=210
**H22K Ishtalitna Cre 88.29 9** P **P** **07 38 59.2 +2.1**
baz=201
**RPSI Rantau Prapat 88.37 273** P **P** **07 38 57.8 -0.8**
RPSI IAMs_20 IAMs_20 08 20 04.7
comp=Z,788nm,18.0s
**MT01 Popeta 88.39 126** P **P** **07 38 59.6 +1.2**
**J26L Joseph Creek 88.39 13** P **P** **07 39 00.0 +2.4**
baz=208,SNR=39
**F19K Shaleruckik Mo 88.39 6** IAmb IAmb 07 39 05.5
comp=Z,65nm,1.5s
**F19K Shaleruckik Mo 88.39 6** P **P** **07 38 59.0 +1.6**
baz=195,SNR=17
**NVL N'lazarevskaya 88.39 182** *e*P P 07 39 04.7 +7.1
NVL *e*S S 07 49 33.4 -8.9
NVL pmax pmax
comp=Z,6.0nm,0.9s
NVL MLR MLR
comp=Z,656nm,17.0s
**PSI Prapat 88.41 274** P **P** **07 38 59.5 +0.5**
**PSI Prapat 88.41 274** P **P** **07 38 57.8 -1.2**
PSI pmax pmax
comp=Z,97nm,1.1s
PSI MLR MLR
comp=Z,800nm,18.0s
**735A Kenedy 88.47 58** IAMs_20 IAMs_20 08 16 50.7
comp=Z,887nm,18.0s
**H23K Yukon River 88.51 10** IAmb IAmb 07 39 26.0
comp=Z,46nm,1.9s
H23K IAMs_20 IAMs_20 08 18 54.0
comp=Z,1μm,19.0s
**H23K Yukon River 88.51 10** P **P** **07 38 59.1 +1.0**
baz=203
**EFI East Falkland 88.52 146** *i* P **P** **07 39 00.8 +2.2**
EFI pmax pmax
comp=Z,103nm,1.9s
**K22A Casper 88.55 43** IAMs_20 IAMs_20 08 14 34.5
comp=Z,1μm,19.0s
**G21K Allakaket 88.58 8** IAmb IAmb 07 39 11.8
comp=Z,60nm,1.7s
**G21K Allakaket 88.58 8** P **P** **07 39 00.1 +1.7**
baz=199,SNR=10.0
**ABTX Abilene, Hawle 88.65 54** IAmb IAmb 07 39 20.4
comp=Z,64nm,1.6s
**M31M Drury Creek, Y 88.65 17** P **P** **07 39 00.3 +1.5**
baz=216
**E18K Tukpahlearik C 88.71 5** IAMs_20 IAMs_20 08 23 19.9
comp=Z,722nm,19.0s
**E18K Tukpahlearik C 88.71 5** P **P** **07 39 00.2 +1.3**
baz=192,SNR=12
**WTLY Watson Lake, Y 88.73 21** P **P** **07 39 01.0 +1.7**
baz=221
**HNS HongShan 88.78 311** ⇓P **P** **07 39 02.5 +2.5**
HNS SKS **SKSac 07 49 29.8 +0.8**
HNS S **S** **07 49 48.0 +1.1**
HNS pmax pmax
comp=Z,36nm,1.5s
HNS pmax pmax
comp=Z,640nm,5.5s
HNS LR LR
comp=Z,190nm,15.7s
HNS LR LR
comp=Z,470nm,18.6s
HNS LR LR
comp=Z,390nm,19.1s
**H24K Noodor Dome 88.79 10** P **P** **07 39 00.3 +0.8**
baz=204
**D17K Noatak River 88.80 4** P **P** **07 39 01.6 +2.4**
baz=190
**F20K Avaraart Lake 88.82 7** P **P** **07 39 01.6 +2.1**
baz=197,SNR=11
**PRP Porcupine Dome 88.92 11** P **P** **07 39 01.7 +1.6**
baz=206,SNR=16
**DAWY Dawson 88.92 14** IAmb IAmb 07 39 14.5
comp=Z,49nm,1.4s
**DAWY Dawson 88.92 14** P **P** **07 39 02.1 +2.0**
baz=212,SNR=25

**FARO Faro, Yukon 88.97 18** P **P** **07 39 02.1 +1.8**
baz=217
**BJI Beijing 89.01 314** P **P** **07 39 01.5 +0.5**
BJI pP **pwP** **07 39 06.5 -4.4**
BJI SKS **SKSac 07 49 28.5 -1.7**
BJI pmax pmax
comp=Z,310nm,4.9s
BJI LR LR
comp=Z,73nm,18.9s
BJI LR LR
comp=Z,200nm,17.2s
BJI LR LR
comp=Z,260nm,18.7s
**TOAD Toad River Com 89.04 23** P **P** **07 39 02.7 +2.0**
baz=224
**E19K Redstone River 89.05 6** IAmb IAmb 07 39 09.6
comp=Z,28nm,1.1s
**E19K Redstone River 89.05 6** P **P** **07 39 02.5 +1.9**
baz=196,SNR=16
**LYN LuoYang 89.11 308** ⇓*i* P **P** **07 39 04.3 +2.7**
LYN pP pwP 07 39 07.5 -4.1
LYN sP sP 07 39 12.3 +6.3
LYN PP **PP** **07 42 37.8 +5.7**
LYN S **S** **07 49 56.5 +6.4**
LYN pmax pmax
comp=Z,110nm,1.2s
LYN pmax pmax
comp=Z,910nm,4.9s
LYN LR LR
comp=Z,660nm,16.5s
LYN LR LR
comp=Z,540nm,17.2s
LYN LR LR
comp=Z,1μm,22.0s
**EGAK Eagle 89.14 13** IAmb IAmb 07 39 08.5
comp=Z,43nm,1.2s
EGAK IAMs_20 IAMs_20 08 15 21.1
comp=Z,1μm,20.0s
**EGAK Eagle 89.14 13** P **P** **07 39 03.2 +2.2**
baz=210,SNR=25
**GSI Gunungsitoli 89.14 272** P **P** **07 39 04.3 +2.1**
**GSI Gunungsitoli 89.14 272** P **P** **07 39 03.3 +1.1**
**K29M Barlow Dome 89.18 15** IAmb IAmb 07 39 15.3
comp=Z,57nm,1.4s
K29M IAMs_20 IAMs_20 08 15 09.5
comp=Z,1μm,20.0s
**K29M Barlow Dome 89.18 15** P **P** **07 39 03.3 +1.9**
baz=214,SNR=26
**I26K Coal Creek Min 89.19 12** IAMs_20 IAMs_20 08 15 25.3
comp=Z,833nm,19.0s
**I26K Coal Creek Min 89.19 12** P **P** **07 39 03.0 +1.8**
baz=208
**C16K Lisburne Hills 89.23 3** P **P** **07 39 02.9 +1.6**
baz=188
**G22K Bettles 89.24 9** P **P** **07 39 03.5 +2.1**
baz=201
**G23K Bananza Creek 89.26 9** IAmb IAmb 07 39 09.9
comp=Z,55nm,1.7s
G23K IAMs_20 IAMs_20 08 19 28.8
comp=Z,779nm,19.0s
**G23K Bananza Creek 89.26 9** P **P** **07 39 03.6 +2.0**
baz=202,SNR=12
**F21K Alatna River 89.26 8** P **P** **07 39 03.6 +2.0**
baz=199
**APG El Apazote 89.28 74** LR LR 08 10 53.2
comp=Z,39nm,19.7s,baz=251,slow=30
**435B Jarrell 89.45 57** P **P** **07 39 04.9 +1.6**
baz=245
**J29N Klondike Camp 89.53 15** IAMs_20 IAMs_20 08 15 30.5
comp=Z,927nm,19.0s
**J29N Klondike Camp 89.53 15** P **P** **07 39 05.6 +2.7**
baz=213
**H25L Birch Creek 89.54 11** P **P** **07 39 05.8 +3.0**
baz=206
**C17K DeLong Mountai 89.56 4** P **P** **07 39 04.7 +1.8**
baz=190
**ENH Enshi 89.56 303** P **P** **07 39 05.1 +1.2**
**ENH Enshi 89.56 303** P **P** **07 39 04.7 +0.8**
**G24K Hadweenzic Riv 89.65 10** IAMs_20 IAMs_20 08 16 13.3
comp=Z,1μm,20.0s
**G24K Hadweenzic Riv 89.65 10** P **P** **07 39 04.9 +1.6**
baz=204
**F22K John River 89.70 8** P **P** **07 39 05.5 +1.9**
baz=200
**COLD Coldfoot 89.71 9** P **P** **07 39 05.7 +2.0**
baz=202,SNR=7.1
**I27K Kandik River 89.76 13** P **P** **07 39 05.7 +1.8**
baz=210
**SRIT Nakonsritamara 89.85 279** P **P** **07 39 07.4 +1.9**
**C18K Utukok River 89.86 5** IAMs_20 IAMs_20 08 18 34.5
comp=Z,938nm,20.0s
**C18K Utukok River 89.86 5** P **P** **07 39 06.4 +2.0**
baz=192
**SNET Serv Nac Est T 89.91 75** IAMs_20 IAMs_20 08 12 49.2
comp=Z,795nm,18.0s
**E20K Nigu River 89.94 6** P **P** **07 39 06.7 +1.9**
baz=196,SNR=8.0
**G25K Bearman Lake 89.94 11** P **P** **07 39 06.6 +2.0**
baz=206
**TGTN Hyland Airport 89.96 20** P **P** **07 39 07.4 +2.5**
baz=222
**D19K Kuna River 89.97 6** IAMs_20 IAMs_20 08 15 25.8
comp=Z,761nm,21.0s
**D19K Kuna River 89.97 6** P **P** **07 39 06.3 +1.4**
baz=195
**BILL Bilibino 89.98 353** IAMs_20 IAMs_20 08 15 57.7
comp=Z,965nm,20.0s
**BILL Bilibino 89.98 353** ⇑ *e*P **P** **07 39 05.9 +1.0**
BILL *e* 07 42 37.7
BILL *e*PPP PPP 07 44 44.1
BILL pmax pmax
comp=Z,36nm,1.7s
**I28M Miner Creek 89.98 13** IAmb IAmb 07 39 14.3
comp=Z,51nm,1.6s
I28M IAMs_20 IAMs_20 08 16 07.4
comp=Z,976nm,20.0s
**I28M Miner Creek 89.98 13** P **P** **07 39 06.8 +1.7**
baz=211,SNR=16
**ZEA Zeya 90.00 329** *e*P **P** **07 39 05.9 +0.6**
ZEA *e*S **SKSac 07 49 38.5 +3.1**
ZEA pmax pmax
comp=E,100nm,3.3s
ZEA pmax pmax
comp=N,100nm,5.7s
ZEA pmax pmax
comp=Z,200nm,4.8s
ZEA pmax pmax
comp=N,20nm,0.4s
ZEA pmax pmax
comp=Z,30nm,1.0s
ZEA smax smax
comp=N,200nm,12.3s
ZEA smax smax
comp=E,200nm,12.7s
**SURA Surathani 90.03 280** P **P** **07 39 07.8 +1.5**
**WHTX Lake Whitney, 90.06 56** IAMs_20 IAMs_20 08 13 42.5
comp=Z,1μm,20.0s
**J30M Hart River 90.08 15** IAMs_20 IAMs_20 08 15 58.3
comp=Z,1μm,20.0s
**J30M Hart River 90.08 15** P **P** **07 39 07.6 +2.0**
baz=215,SNR=12
**NONG Nongkai 90.10 289** P **P** **07 39 07.9 +1.3**
**I29M Ogilvie Camp, 90.27 14** IAmb IAmb 07 39 19.5
comp=Z,88nm,2.0s
I29M IAMs_20 IAMs_20 08 15 56.1
comp=Z,837nm,20.0s
**I29M Ogilvie Camp, 90.27 14** P **P** **07 39 07.7 +1.4**
baz=213,SNR=9.6
**GYA Guiyang 90.30 298** ⇓P **P** **07 39 09.8 +2.3**
GYA SKS **SKSac 07 49 39.5 +0.8**
GYA S **S** **07 50 00.0 -1.8**
GYA SS **SS** **07 55 57.5 -4.6**
GYA pmax pmax
comp=Z,45nm,1.0s
GYA pmax pmax
comp=Z,540nm,3.7s
GYA LR LR
comp=Z,170nm,13.1s
GYA LR LR
comp=Z,290nm,17.4s
GYA LR LR
comp=Z,140nm,11.4s
**H27K Steamboat Moun 90.32 13** P **P** **07 39 08.6 +2.0**
baz=210,SNR=18
**F24K Squaw Lake 90.33 10** IAmb IAmb 07 39 20.4
comp=Z,36nm,1.7s
F24K IAMs_20 IAMs_20 08 19 52.3

comp=Z,1µm,20.0s
**F24K Squaw Lake** 90.33 10 P P 07 39 08.6 +2.0
baz=204
**D20K Etivluk River** 90.33 6 P P 07 39 08.0 +1.4
baz=196,SNR=8.1
**E22K Anaktuvuk Pass** 90.34 8 IAmb IAmb 07 39 19.9
comp=Z,67nm,1.9s
E22K IAMs_20 IAMs_20 08 23 36.3
comp=Z,906nm,18.0s
**E22K Anaktuvuk Pass** 90.34 8 P P 07 39 08.6 +2.0
baz=200
**E21K Killik River** 90.36 7 IAMs_20 IAMs_20 08 15 57.1
comp=Z,767nm,21.0s
**E21K Killik River** 90.36 7 P P 07 39 08.6 +1.9
baz=198
**KOTAN Kotaneelee Air** 90.37 22 P P 07 39 09.1 +2.2
baz=226
**C19K Lookout Ridge** 90.44 5 IAMs_20 IAMs_20 08 13 56.7
comp=Z,768nm,21.0s
**C19K Lookout Ridge** 90.44 5 P P 07 39 08.8 +1.8
baz=193
**HKT Hockley** 90.49 58 IAMs_20 IAMs_20 08 16 39.2
comp=Z,677nm,18.0s
**G26K Porcupine Rive** 90.52 11 P P 07 39 09.8 +2.4
baz=208
**B18K Kokolik River** 90.53 4 P P 07 39 09.3 +2.0
baz=191
**TIY Taiyuan** 90.54 310 P P 07 39 06.0 -2.3
TIY SKS **SKSac** 07 49 43.3 +3.8
TIY S **S** 07 50 02.5 -0.9
TIY pmax pmax
comp=Z,400nm,5.1s
TIY LR LR
comp=Z,260nm,17.2s
TIY LR LR
comp=Z,240nm,15.8s
TIY LR LR
comp=Z,220nm,19.2s
**E23K Chandalar** 90.57 9 IAmb IAmb 07 39 21.1
comp=Z,35nm,1.6s
**E23K Chandalar** 90.57 9 P P 07 39 10.0 +2.2
baz=203
**I30M Mount Dempster** 90.61 15 IAmb IAmb 07 39 16.3
comp=Z,45nm,1.3s
I30M IAMs_20 IAMs_20 08 16 14.1
comp=Z,898nm,20.0s
**I30M Mount Dempster** 90.61 15 P P 07 39 09.5 +1.5
baz=215,SNR=16
**OGNE Ogallala** 90.67 46 IAMs_20 IAMs_20 08 15 52.8
comp=Z,703nm,18.0s
**SNSI Sinabang, Aceh** 90.69 272 P P 07 39 12.8 +3.3
**E24K Your Creek** 90.75 9 IAMs_20 IAMs_20 08 20 25.3
comp=Z,1µm,20.0s
**E24K Your Creek** 90.75 9 P P 07 39 10.1 +1.6
baz=204
**F25K Christian Rive** 90.77 10 IAmb IAmb 07 39 22.7
comp=Z,57nm,1.8s
F25K IAMs_20 IAMs_20 08 16 15.8
comp=Z,1µm,21.0s
**F25K Christian Rive** 90.77 10 P P 07 39 10.4 +1.8
baz=206
**Z35A Perchaven, San** 90.77 55 IAMs_20 IAMs_20 08 13 46.3
comp=Z,866nm,20.0s
**LAO LASA Array** 90.77 40 IAMs_20 IAMs_20 08 22 41.0
comp=Z,763nm,18.0s
**G27K Doyon Strip** 90.80 12 IAmb IAmb 07 39 17.5
comp=Z,37nm,1.8s
G27K IAMs_20 IAMs_20 08 16 38.0
comp=Z,821nm,21.0s
**G27K Doyon Strip** 90.80 12 P P 07 39 11.0 +2.2
baz=210
**BMAR Burnt Mountain** 90.80 11 P P 07 39 10.2 +1.5
**RSSD Black Hills** 90.85 43 P P 07 39 10.3 +0.5
**RSSD Black Hills** 90.85 43 P P 07 39 10.3 +0.5
RSSD pmax pmax
comp=Z,11nm,1.1s
**XLT XiLinHaoTe** 90.92 317 *e*P P 07 39 10.3 +0.4
XLT SKS **SKSac** 07 49 36.0 -5.4
XLT S **ScS** 07 50 10.0 +0.1
XLT pmax pmax
comp=Z,28nm,0.9s
XLT pmax pmax
comp=Z,400nm,4.7s
XLT LR LR
comp=Z,320nm,18.4s
XLT LR LR
comp=Z,310nm,18.8s
**D22K Ayikyak River** 90.93 8 IAmb IAmb 07 39 22.0
comp=Z,23nm,1.2s
D22K IAMs_20 IAMs_20 08 21 22.9
comp=Z,891nm,19.0s
**D22K Ayikyak River** 90.93 8 P P 07 39 11.0 +1.7
baz=200,SNR=6.3
**C21K Knifeblade Rid** 90.95 7 P P 07 39 11.6 +2.3
baz=198
**H29M Whitestone** 90.98 14 IAmb IAmb 07 39 32.6
comp=Z,49nm,1.4s
H29M IAMs_20 IAMs_20 08 18 34.8
comp=Z,780nm,19.0s
**H29M Whitestone** 90.98 14 P P 07 39 11.8 +2.2
baz=213,SNR=9.1
**F26K Sheenjek River** 91.11 11 P P 07 39 12.7 +2.5
baz=208
**TOLK Toolik Lake Re** 91.11 9 IAmb IAmb 07 39 17.6
comp=Z,52nm,1.9s
**TOLK Toolik Lake Re** 91.11 9 P P 07 39 12.4 +2.2
baz=203
**D23K Nanushuk River** 91.27 8 IAMs_20 IAMs_20 08 24 16.9
comp=Z,761nm,19.0s
**D23K Nanushuk River** 91.27 8 P P 07 39 12.9 +2.0
baz=202
**MLSI Meulaboh, Aceh** 91.28 274 P P 07 39 12.4 +0.2
**HIA Hailar** 91.39 323 IAMs_20 IAMs_20 08 18 00.9
comp=Z,739nm,20.0s
**HIA Hailar** 91.39 323 *i* P P 07 39 12.8 +0.9
HIA pmax pmax
comp=Z,9.0nm,0.8s
**A19K Wainwright** 91.41 4 P P 07 39 13.4 +2.0
baz=192
**B21K Ikpikpuk River** 91.41 7 IAMs_20 IAMs_20 08 17 01.6
comp=Z,1µm,21.0s
**B21K Ikpikpuk River** 91.41 7 P P 07 39 13.7 +2.2
baz=198
**EPYK Eagle Plains** 91.47 14 IAMs_20 IAMs_20 08 16 52.0
comp=Z,700nm,20.0s
**EPYK Eagle Plains** 91.47 14 P P 07 39 13.6 +1.7
baz=214
**B20K Meade River** 91.53 6 IAMs_20 IAMs_20 08 24 45.6
comp=Z,625nm,18.0s
**B20K Meade River** 91.53 6 P P 07 39 13.7 +1.7
baz=196
**XAN Xi'an** 91.55 306 ⇑P P 07 39 15.0 +1.9
XAN pP pwP 07 39 19.3 -3.7
XAN SKS **SKSac** 07 49 49.0 +3.6
XAN S **ScS** 07 50 17.3 +1.7
XAN pmax pmax
comp=Z,79nm,1.1s
XAN pmax pmax
comp=Z,780nm,4.9s
XAN LR LR
comp=Z,370nm,20.6s
XAN LR LR
comp=Z,520nm,18.2s
XAN LR LR
comp=Z,780nm,18.6s
**H31M Peel River** 91.57 15 IAmb IAmb 07 39 20.2
comp=Z,25nm,1.3s
H31M IAMs_20 IAMs_20 08 18 59.7
comp=Z,889nm,19.0s
**H31M Peel River** 91.57 15 P P 07 39 13.7 +1.3
baz=216
**G29M Pine Creek** 91.64 13 IAmb IAmb 07 39 20.0
comp=Z,28nm,1.2s
G29M IAMs_20 IAMs_20 08 16 59.2
comp=Z,922nm,19.0s
**G29M Pine Creek** 91.64 13 P P 07 39 14.7 +2.0
baz=213,SNR=10
**OK029 Liberty Lake** 91.64 52 IAMs_20 IAMs_20 08 15 25.3
comp=Z,1µm,21.0s
**D24K Happy Valley** 91.69 9 P P 07 39 15.0 +2.1
baz=203
**R32A Long Quarter,** 91.84 49 IAmb IAmb 07 39 22.7
comp=Z,32nm,1.1s
R32A IAMs_20 IAMs_20 08 19 51.3
comp=Z,922nm,18.0s
**F28M Old Crow** 91.85 12 IAMs_20 IAMs_20 08 17 29.7
comp=Z,1µm,20.0s
**F28M Old Crow** 91.85 12 P P 07 39 15.4 +1.8
baz=212,SNR=10.0
**E27K Coleen River** 92.01 12 IAMs_20 IAMs_20 08 28 59.9
comp=Z,620nm,18.0s
**E27K Coleen River** 92.01 12 P P 07 39 16.5 +2.2
baz=210,SNR=13
**C23K Itkillik River** 92.09 8 IAmb IAmb 07 39 28.2
comp=Z,46nm,1.5s
C23K IAMs_20 IAMs_20 08 17 14.6
comp=Z,930nm,20.0s
**C23K Itkillik River** 92.09 8 P P 07 39 16.5 +1.9
baz=202
**G30M tAoh Zrai Nji** 92.09 14 IAMs_20 IAMs_20 08 17 30.3
comp=Z,718nm,20.0s
**G30M tAoh Zrai Nji** 92.09 14 P P 07 39 16.3 +1.5
baz=215,SNR=21
**OK031 S. Brethren Rd** 92.16 52 IAMs_20 IAMs_20 08 16 52.0
comp=Z,928nm,18.0s
**NNA Nana** 92.17 104 LR LR 08 13 22.7
comp=Z,543nm,18.0s,baz=242,slow=31
**OK052 Battle Ridge R** 92.21 52 IAmb IAmb 07 39 24.1
comp=Z,43nm,1.4s
OK052 IAMs_20 IAMs_20 08 16 19.2
comp=Z,938nm,19.0s
**D25K Kavik River** 92.21 9 IAmb IAmb 07 39 28.3
comp=Z,29nm,1.8s
D25K IAMs_20 IAMs_20 08 18 18.9
comp=Z,1µm,20.0s
**D25K Kavik River** 92.21 9 P P 07 39 17.0 +1.7
baz=206
**B22K Teshekpuk Lake** 92.23 7 IAMs_20 IAMs_20 08 17 20.2
comp=Z,685nm,20.0s
**B22K Teshekpuk Lake** 92.23 7 P P 07 39 16.6 +1.4
baz=199
**C24K Franklin Bluff** 92.23 9 IAMs_20 IAMs_20 08 23 51.5
comp=Z,694nm,18.0s
**C24K Franklin Bluff** 92.23 9 P P 07 39 17.0 +1.7
baz=203
**OK048 Pawnee Station** 92.28 52 IAMs_20 IAMs_20 08 16 46.0
comp=Z,1µm,18.0s
**SRDT SRDT** 92.35 284 P P 07 39 17.5 +0.4
**OK051 E0350 and S346** 92.39 52 IAMs_20 IAMs_20 08 16 03.0
comp=Z,1µm,20.0s
**G31M Satah River** 92.49 15 IAmb IAmb 07 39 37.4
comp=Z,39nm,1.2s
G31M IAMs_20 IAMs_20 08 20 07.0
comp=Z,963nm,20.0s
**G31M Satah River** 92.49 15 P P 07 39 18.7 +2.2
baz=217
**HHC Hu-ho-hao-te** 92.51 313 *e*P P 07 39 18.0 +0.6
HHC sP pwP 07 39 26.0 -1.4
HHC SKS **SKSac** 07 49 51.0 +0.3
HHC S **S** 07 50 20.5 -0.7
HHC sS sS 07 50 28.8 +2.4
HHC pmax pmax
comp=Z,12nm,0.6s
HHC pmax pmax
comp=Z,260nm,4.5s
HHC LR LR
comp=Z,380nm,17.6s
HHC LR LR
comp=Z,330nm,16.5s
HHC LR LR
comp=Z,650nm,15.9s
**ATAH Atahualpa** 92.53 99 LR LR 08 13 27.3
comp=Z,583nm,18.4s,baz=247,slow=31
**JTS Las Juntas de** 92.60 80 LR LR 08 13 03.9
comp=Z,265nm,18.6s,baz=258,slow=30
**JTS Las Juntas de** 92.60 80 *i* P P 07 39 16.7 -1.6
JTS pmax pmax
comp=Z,28nm,1.1s
**F30M Barrier River** 92.71 14 P P 07 39 18.7 +1.1
baz=215
**WRGLY Wrigley** 92.74 20 P P 07 39 19.3 +1.5
baz=226
**E28M Babbage River** 92.76 12 IAMs_20 IAMs_20 08 20 42.8
comp=Z,947nm,18.0s
**E28M Babbage River** 92.76 12 P P 07 39 19.7 +1.9
baz=212,SNR=13
**DGMT Dagmar** 92.84 39 IAMs_20 IAMs_20 08 15 44.8
comp=Z,1µm,19.0s
**441A DeRidder** 92.90 58 IAMs_20 IAMs_20 08 21 50.1
comp=Z,906nm,18.0s
**E29M Blow River** 92.91 13 IAmb IAmb 07 39 39.7
comp=Z,16nm,1.1s
**E29M Blow River** 92.91 13 P P 07 39 19.8 +1.4
baz=213
**C27K Jago River** 92.91 10 IAmb IAmb 07 39 26.9
comp=Z,32nm,1.4s
C27K IAMs_20 IAMs_20 08 17 48.4
comp=Z,824nm,20.0s
**C27K Jago River** 92.91 10 P P 07 39 19.9 +1.5
baz=208
**TUL3 Leonard** 92.92 53 IAMs_20 IAMs_20 08 16 50.2
comp=Z,922nm,18.0s
**C26K Camden Bay** 92.97 10 P P 07 39 20.6 +1.9
baz=207
**F31M Tsiigehtchic** 93.03 14 IAMs_20 IAMs_20 08 19 38.2
comp=Z,835nm,18.0s
**F31M Tsiigehtchic** 93.03 14 P P 07 39 20.8 +1.8
baz=217
**D27M Malcolm River** 93.05 11 IAmb IAmb 07 39 27.8
comp=Z,60nm,1.8s
**D27M Malcolm River** 93.05 11 P P 07 39 20.9 +1.7
baz=211,SNR=10
**KMI Kunming** 93.06 296 ⇑P P 07 39 22.0 +1.5
KMI sP pwP 07 39 26.0 -4.4
KMI SKS **SKSac** 07 49 54.0 -0.6
KMI S **ScS** 07 50 32.0 +3.2
KMI pmax pmax
comp=Z,55nm,1.2s
KMI pmax pmax
comp=Z,380nm,4.5s
KMI LR LR
comp=Z,460nm,19.1s
KMI LR LR
comp=Z,640nm,18.7s
KMI LR LR
comp=Z,970nm,19.7s
**BTO Baotou** 93.47 312 *e*P P 07 39 24.5 +2.6
BTO pP **pwP** 07 39 30.0 -1.8
BTO sP **sP** 07 39 31.5 +5.2
BTO SKS **SKSac** 07 49 59.5 +3.5
BTO S **ScS** 07 50 32.0 +0.7
BTO sS **sS** 07 50 38.5 +3.6
BTO SS **SS** 07 56 49.5 +2.3
BTO pmax pmax
comp=Z,37nm,0.9s
BTO pmax pmax
comp=Z,880nm,9.4s
BTO LR LR
comp=Z,800nm,18.5s
BTO LR LR
comp=Z,510nm,19.9s
BTO LR LR
comp=Z,810nm,23.9s
**D28M Stokes Point** 93.53 12 P P 07 39 23.5 +2.2
baz=213
**KSU1 Kansas State U** 93.62 49 IAMs_20 IAMs_20 08 17 11.3
comp=Z,756nm,18.0s
**INK Inuvik** 93.78 14 IAmb IAmb 07 39 35.4
comp=Z,18nm,1.1s
INK IAMs_20 IAMs_20 08 20 47.8
comp=Z,723nm,18.0s
**INK Inuvik** 93.78 14 LR LR 08 19 47.9
comp=Z,596nm,18.2s,baz=232,slow=34
**INK Inuvik** 93.78 14 P P 07 39 24.2 +1.8
baz=217
**CMAR Chiang Mai Arr** 93.96 288 P P 07 39 26.2 +1.7
**CMAR Chiang Mai Arr** 93.96 288 P P 07 39 26.6 +2.1
comp=Z,33nm,1.0s,baz=115,slow=2.9,SNR=97
CMAR LR LR 08 19 24.1
comp=Z,193nm,21.0s,baz=105,slow=34
comp=Z,33nm,1.0s
**CMAR Chiang Mai Arr** 93.96 288 P P 07 39 26.2 +1.7
**MIAR Mount Ida** 94.05 55 IAMs_20 IAMs_20 08 16 29.3
comp=Z,711nm,20.0s
**YAK Yakutsk** 94.07 337 LR LR 08 22 14.0
comp=Z,283nm,18.4s,baz=128,slow=36
**YAK Yakutsk** 94.07 337 *i* P P 07 39 23.9 0.0
YAK pmax pmax
comp=Z,16nm,0.7s
**E28A Huff** 94.08 41 IAMs_20 IAMs_20 08 21 25.6
comp=Z,825nm,18.0s
**U38A Gravette** 94.18 53 IAMs_20 IAMs_20 08 18 58.3
comp=Z,797nm,18.0s
**SUSD Miller** 94.25 44 IAMs_20 IAMs_20 08 21 31.4
comp=Z,665nm,18.0s
**CD2 Chengdu** 94.35 301 P P 07 39 27.5 +1.4
CD2 SKS **SKSac** 07 50 01.0 -0.1
CD2 S **S** 07 50 38.3 +0.5
CD2 pmax pmax
comp=Z,10.0nm,1.1s
CD2 pmax pmax
comp=Z,320nm,5.0s
CD2 LR LR
comp=Z,480nm,17.1s
CD2 LR LR
comp=Z,480nm,15.2s
CD2 LR LR
comp=Z,450nm,20.9s
**PZH PanZhiHua** 94.40 297 P P 07 39 28.3 +1.8
PZH SKS **SKSac** 07 50 00.5 -1.2
PZH S **S** 07 50 38.8 +0.3
PZH pmax pmax
comp=Z,40nm,1.0s
PZH pmax pmax
comp=Z,270nm,4.0s
PZH LR LR
comp=Z,280nm,20.6s
PZH LR LR
comp=Z,310nm,18.6s
PZH LR LR
comp=Z,440nm,19.6s
**L34A Svendsen Farm,** 94.94 47 IAMs_20 IAMs_20 08 18 18.0
comp=Z,704nm,19.0s
**LVC Limon Verde** 94.95 116 LR LR 08 15 33.6
comp=Z,770nm,18.3s,baz=245,slow=31
**OTAV Otavalo** 95.12 92 IAMs_20 IAMs_20 08 15 12.9
comp=Z,800nm,18.0s
**MDND Maddock** 95.30 41 IAMs_20 IAMs_20 08 19 17.9
comp=Z,743nm,19.0s
**YKA Yellowknife Ar** 95.37 24 P P 07 39 30.7 +0.8
comp=Z,3.3nm,1.0s,baz=246,slow=4.6,SNR=4.8
comp=Z,3.3nm,1.0s
**ECSD EROS Data Cent** 95.49 45 P P 07 39 30.6 -0.4
ECSD IAmb IAmb 07 39 39.0
comp=Z,27nm,1.2s
**VBMS Vicksburg** 95.56 58 IAMs_20 IAMs_20 08 19 47.6
comp=Z,744nm,18.0s
**P38A Dawn** 96.02 50 IAMs_20 IAMs_20 08 17 48.8
comp=Z,869nm,20.0s
**346A Big Creek Wild** 96.11 59 IAMs_20 IAMs_20 08 26 36.0
comp=Z,577nm,18.0s
**LZH Lanzhou** 96.18 306 *e*P P 07 39 36.0 +1.5
LZH sP pwP 07 39 44.3 -0.1
LZH SKS **SKSac** 07 50 14.8 +3.9
LZH pmax pmax
comp=Z,260nm,4.8s
LZH LR LR
comp=Z,110nm,12.5s
LZH LR LR
comp=Z,520nm,14.8s
LZH LR LR
comp=Z,560nm,17.7s
**F33A 5 Mile Ranch,** 96.54 43 IAmb IAmb 07 39 42.9
comp=Z,16nm,1.2s
F33A IAMs_20 IAMs_20 08 18 17.0
comp=Z,868nm,20.0s
**TNCH TengChong** 96.60 294 ⇑P P 07 39 35.8 -0.8
TNCH sP pwP 07 39 42.8 -3.8
TNCH SKS **SKSac** 07 50 13.8 +0.2
TNCH S **S** 07 50 55.8 -2.0
TNCH pmax pmax
comp=Z,59nm,0.4s
TNCH pmax pmax
comp=Z,230nm,5.0s
TNCH LR LR
comp=Z,390nm,19.1s
TNCH LR LR
comp=Z,410nm,21.6s
TNCH LR LR
comp=Z,460nm,19.5s
**N38A Joes South For** 96.67 49 IAMs_20 IAMs_20 08 22 24.9
comp=Z,658nm,18.0s
**C36M Paulatuk** 96.83 16 P P 07 39 37.6 +1.2
baz=226
**T42A Van Buren** 96.85 53 IAMs_20 IAMs_20 08 17 58.2
comp=Z,634nm,20.0s
**146A Union** 96.87 58 IAMs_20 IAMs_20 08 23 22.1
comp=Z,659nm,18.0s
**Y45A Yeager Farm, C** 96.91 57 IAMs_20 IAMs_20 08 24 59.2
comp=Z,590nm,18.0s
**SCIA State Center** 97.09 48 IAMs_20 IAMs_20 08 21 00.1
comp=Z,596nm,18.0s
**I37A Lemond, Waseca** 97.74 46 IAMs_20 IAMs_20 08 20 23.1
comp=Z,616nm,19.0s
**AGMN Agassiz Nation** 97.77 41 IAMs_20 IAMs_20 08 25 44.4
comp=Z,560nm,18.0s
**LPAZ La Paz** 98.26 111 P Pdif 07 39 51.1 +6.2
comp=Z,1.1nm,0.8s,baz=224,slow=4.5,SNR=4.2
LPAZ LR LR 08 17 21.0
comp=Z,931nm,18.4s,baz=252,slow=31
**ULN Ulaanbaatar** 98.31 318 *i* P P 07 39 43.2 -0.6
ULN pmax pmax
comp=Z,8.0nm,1.1s
**A36M Sachs Harbour** 98.42 14 IAmb IAmb 07 39 48.5
comp=Z,12nm,0.9s
A36M IAMs_20 IAMs_20 08 24 15.3
comp=Z,643nm,19.0s
**A36M Sachs Harbour** 98.42 14 P Pdif 07 39 44.6 +1.1
baz=225
**PLAL Pickwick Lake** 98.44 56 IAMs_20 IAMs_20 08 21 25.4
comp=Z,932nm,19.0s
**ULM Lac du Bonnet** 98.52 39 LR LR 08 20 20.2
comp=Z,1µm,18.9s,baz=257,slow=33
**T45A Paducah** 98.68 54 IAMs_20 IAMs_20 08 18 43.7
comp=Z,998nm,20.0s
**SONM Songino Array** 98.71 318 P Pdif 07 39 46.7 +1.1
comp=Z,1.6nm,1.0s,baz=139,slow=7.5,SNR=2.1
SONM PP **PP** 07 43 43.5 -3.5
comp=Z,1.1nm,0.9s,baz=117,slow=8.9,SNR=4.3
SONM LR LR 08 23 41.5
comp=Z,247nm,18.4s,baz=116,slow=35
comp=Z,1.6nm,1.0s
**WVT Waverly** 99.01 55 IAMs_20 IAMs_20 08 19 03.4
comp=Z,852nm,20.0s
**X48A Hartselle** 99.06 57 IAMs_20 IAMs_20 08 21 40.1
comp=Z,614nm,19.0s
**Y49A Blount Mountai** 99.36 57 IAMs_20 IAMs_20 08 23 30.2
comp=Z,745nm,18.0s
**JFWS Jewell Farm** 99.50 48 IAMs_20 IAMs_20 08 24 24.9
comp=Z,589nm,19.0s
**L42A Oliver, Polo** 99.60 49 IAMs_20 IAMs_20 08 21 13.6
comp=Z,645nm,18.0s
**V48A Smith Brothers** 99.65 55 IAMs_20 IAMs_20 08 24 28.6
comp=Z,756nm,18.0s
**T47A Sharon Grove** 99.84 54 IAMs_20 IAMs_20 08 19 29.3
comp=Z,940nm,20.0s
**TIXI Tiksi** 100.25 344 IAMs_20 IAMs_20 08 18 20.5
comp=Z,624nm,21.0s
**GTA Gaotai** 100.32 308 P Pdif 07 39 59.3 +6.4
GTA pP pwP 07 40 04.0 +1.1
GTA S **Sdif** 07 51 30.5 +1.9
GTA pmax pmax
comp=Z,8.0nm,1.7s
GTA LR LR
comp=Z,220nm,17.5s
GTA LR LR
comp=Z,330nm,19.1s
GTA LR LR
comp=Z,400nm,16.3s
**G40A Rib Lake** 100.32 46 IAMs_20 IAMs_20 08 25 23.3
comp=Z,627nm,18.0s
**EYMN Ely** 100.38 43 IAMs_20 IAMs_20 08 21 38.4
comp=Z,755nm,19.0s
**U49A Red Boiling Sp** 100.70 55 IAMs_20 IAMs_20 08 20 15.2
comp=Z,765nm,19.0s
**I42A Draeger Farm,** 100.74 47 IAMs_20 IAMs_20 08 20 33.6
comp=Z,660nm,19.0s
**X51A Calhoun** 100.81 57 IAMs_20 IAMs_20 08 22 54.4
comp=Z,528nm,18.0s
**HQIL Hanson Quary C** 100.82 49 IAMs_20 IAMs_20 08 18 47.8
comp=Z,881nm,19.0s
**WCI Wyandotte Cave** 100.84 53 IAMs_20 IAMs_20 08 20 10.8
comp=Z,951nm,20.0s
**L44A Lake County Fo** 100.90 49 IAMs_20 IAMs_20 08 24 57.9
comp=Z,795nm,18.0s
**L44A Lake County Fo** 100.90 49 P Pdif 07 39 56.0 +0.7
baz=252
**SFIN Lafayette** 100.92 51 IAMs_20 IAMs_20 08 26 43.6
comp=Z,821nm,18.0s
**Y52A Lilburn** 101.22 58 IAMs_20 IAMs_20 08 25 49.4
comp=Z,678nm,18.0s
**061Z Ochoppi** 101.40 67 IAMs_20 IAMs_20 08 22 40.0
comp=Z,732nm,19.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **154A** | **Montrose** | **101.61** | **59** | IAMs_20 | IAMs_20 | 08 28 25.8 | | |
| | comp=Z,528nm,18.0s | | | | | | | |
| **W52A** | **Murphy** | **101.70** | **57** | IAMs_20 | IAMs_20 | 08 23 27.9 | | |
| | comp=Z,768nm,18.0s | | | | | | | |
| **H43A** | **Windswept, Lux** | **101.71** | **47** | IAMs_20 | IAMs_20 | 08 21 51.0 | | |
| | comp=Z,656nm,18.0s | | | | | | | |
| **F42A** | **Maple Grove Fa** | **101.86** | **46** | IAMs_20 | IAMs_20 | 08 26 01.8 | | |
| | comp=Z,561nm,19.0s | | | | | | | |
| **P48A** | **Milroy** | **101.86** | **52** | IAMs_20 | IAMs_20 | 08 21 57.7 | | |
| | comp=Z,767nm,19.0s | | | | | | | |
| **N47A** | **Urbana** | **102.09** | **51** | IAMs_20 | IAMs_20 | 08 22 03.5 | | |
| | comp=Z,827nm,19.0s | | | | | | | |
| **R50A** | **Paris** | **102.33** | **54** | IAMs_20 | IAMs_20 | 08 20 38.3 | | |
| | comp=Z,940nm,20.0s | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **102.41** | **52** | IAMs_20 | IAMs_20 | 08 22 52.2 | | |
| | comp=Z,829nm,18.0s | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **102.41** | **52** | P | **Pdif** | **07 40 02.6** | **+0.6** | |
| | baz=253 | | | | | | | |
| **TZTN** | **Tazewell** | **102.42** | **56** | IAMs_20 | IAMs_20 | 08 26 22.9 | | |
| | comp=Z,813nm,18.0s | | | | | | | |
| **I45A** | **Fountain** | **102.63** | **48** | IAMs_20 | IAMs_20 | 08 30 08.6 | | |
| | comp=Z,699nm,18.0s | | | | | | | |
| **S51A** | **Beattyville** | **102.70** | **54** | IAMs_20 | IAMs_20 | 08 21 09.2 | | |
| | comp=Z,917nm,20.0s | | | | | | | |
| **V53A** | **Saluda** | **102.74** | **57** | IAMs_20 | IAMs_20 | 08 26 42.4 | | |
| | comp=Z,772nm,18.0s | | | | | | | |
| **Q51A** | **Peebles** | **103.28** | **53** | IAMs_20 | IAMs_20 | 08 21 28.4 | | |
| | comp=Z,800nm,20.0s | | | | | | | |
| **U54A** | **Nelsons Funny** | **103.75** | **56** | IAMs_20 | IAMs_20 | 08 26 57.1 | | |
| | comp=Z,671nm,18.0s | | | | | | | |
| **KMSC** | **Kings Mountain** | **103.75** | **57** | IAMs_20 | IAMs_20 | 08 25 52.3 | | |
| | comp=Z,709nm,18.0s | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **103.88** | **52** | IAMs_20 | IAMs_20 | 08 24 22.2 | | |
| | comp=Z,779nm,18.0s | | | | | | | |
| **GLMI** | **Grayling** | **103.96** | **47** | IAMs_20 | IAMs_20 | 08 23 09.8 | | |
| | comp=Z,610nm,19.0s | | | | | | | |
| **V55A** | **Taylorsville** | **104.04** | **57** | IAMs_20 | IAMs_20 | 08 27 24.8 | | |
| | comp=Z,647nm,18.0s | | | | | | | |
| **Q52A** | **Bidwell** | **104.07** | **53** | IAMs_20 | IAMs_20 | 08 21 53.4 | | |
| | comp=Z,838nm,20.0s | | | | | | | |
| **NHSC** | **New Hope** | **104.11** | **60** | IAMs_20 | IAMs_20 | 08 25 22.1 | | |
| | comp=Z,801nm,18.0s | | | | | | | |
| **M50A** | **Fremont** | **104.15** | **51** | IAMs_20 | IAMs_20 | 08 24 13.3 | | |
| | comp=Z,876nm,19.0s | | | | | | | |
| **Y57A** | **Sumter** | **104.19** | **59** | IAMs_20 | IAMs_20 | 08 26 59.0 | | |
| | comp=Z,710nm,18.0s | | | | | | | |
| **S54A** | **Dingess, Beckl** | **104.48** | **55** | IAMs_20 | IAMs_20 | 08 22 24.5 | | |
| | comp=Z,834nm,19.0s | | | | | | | |
| **Y58A** | **Scranton** | **104.74** | **59** | IAMs_20 | IAMs_20 | 08 28 08.6 | | |
| | comp=Z,523nm,18.0s | | | | | | | |
| **W57A** | **Gilead** | **104.81** | **58** | IAMs_20 | IAMs_20 | 08 25 52.4 | | |
| | comp=Z,645nm,18.0s | | | | | | | |
| **I49A** | **Point Hope** | **104.97** | **48** | IAMs_20 | IAMs_20 | 08 29 01.6 | | |
| | comp=Z,522nm,18.0s | | | | | | | |
| **X58A** | **Rowland** | **105.17** | **58** | IAMs_20 | IAMs_20 | 08 28 12.0 | | |
| | comp=Z,494nm,18.0s | | | | | | | |
| **O53A** | **New Philadelph** | **105.19** | **52** | IAMs_20 | IAMs_20 | 08 23 25.0 | | |
| | comp=Z,889nm,20.0s | | | | | | | |
| **R55A** | **Marlinton** | **105.52** | **55** | IAMs_20 | IAMs_20 | 08 23 05.8 | | |
| | comp=Z,843nm,20.0s | | | | | | | |
| **N53A** | **Lisbon** | **105.61** | **52** | IAMs_20 | IAMs_20 | 08 24 40.9 | | |
| | comp=Z,796nm,18.0s | | | | | | | |
| **V58A** | **Windy Hill, Pi** | **105.67** | **57** | IAMs_20 | IAMs_20 | 08 27 08.0 | | |
| | comp=Z,625nm,18.0s | | | | | | | |
| **T57A** | **Hurt** | **105.86** | **56** | IAMs_20 | IAMs_20 | 08 28 05.0 | | |
| | comp=Z,660nm,18.0s | | | | | | | |
| **W59A** | **Clinton** | **106.04** | **58** | IAMs_20 | IAMs_20 | 08 28 23.0 | | |
| | comp=Z,777nm,18.0s | | | | | | | |
| **CNNC** | **Cliffs of the** | **106.50** | **58** | IAMs_20 | IAMs_20 | 08 28 46.1 | | |
| | comp=Z,674nm,18.0s | | | | | | | |
| **T59A** | **Double "B" Far** | **107.18** | **56** | IAMs_20 | IAMs_20 | 08 29 19.9 | | |
| | comp=Z,638nm,18.0s | | | | | | | |
| **CBN** | **Corbin Frederi** | **107.60** | **55** | IAMs_20 | IAMs_20 | 08 23 51.9 | | |
| | comp=Z,630nm,20.0s | | | | | | | |
| **V61A** | **Roper** | **107.67** | **58** | IAMs_20 | IAMs_20 | 08 29 31.0 | | |
| | comp=Z,761nm,18.0s | | | | | | | |
| **J54A** | **Appleton** | **107.77** | **50** | IAMs_20 | IAMs_20 | 08 25 56.9 | | |
| | comp=Z,768nm,18.0s | | | | | | | |
| **S61A** | **Accomac** | **108.80** | **56** | IAMs_20 | IAMs_20 | 08 27 55.7 | | |
| | comp=Z,593nm,19.0s | | | | | | | |
| **R61A** | **Willards** | **109.19** | **55** | IAMs_20 | IAMs_20 | 08 25 20.1 | | |
| | comp=Z,660nm,19.0s | | | | | | | |
| **WMQ** | **Urumqi** | **110.20** | **310** | *e*PKP | **PKiKP** | **07 44 37.8** | **-0.3** | |
| WMQ | | | | LR | LR | | | |
| | comp=Z,320nm,22.9s | | | | | | | |
| **LONY** | **Lake Ozonia** | **110.90** | **49** | IAMs_20 | IAMs_20 | 08 28 09.6 | | |
| | comp=Z,603nm,18.0s | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **111.28** | **316** | *i* PKiKP | **PKiKP** | **07 44 39.1** | **-0.9** | |
| **ZSN** | **Zaisan** | **112.70** | **314** | *e*PKiKP | **PKiKP** | **07 44 42.6** | **0.0** | |
| | baz=314 | | | | | | | |
| **ZSN** | **Zaisan** | **112.70** | **314** | *i* PKiKP | **PKiKP** | **07 44 42.6** | **0.0** | |
| **ZALV** | **Zalesovo Beam** | **113.33** | **321** | PKiKP | **PKiKP** | **07 44 43.6** | **0.0** | |
| | comp=Z,4.5nm,0.6s,baz=156,slow=1.1,SNR=15 | | | | | | | |
| **TULEG** | **Thule** | **113.77** | **14** | IAMs_20 | IAMs_20 | 08 32 02.2 | | |
| | comp=Z,743nm,20.0s | | | | | | | |
| **G62A** | **West of Eustis** | **113.83** | **49** | IAMs_20 | IAMs_20 | 08 29 07.2 | | |
| | comp=Z,594nm,20.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **114.38** | **313***c* | *i* PKiKP | **PKiKP** | **07 44 46.2** | **+0.4** | |
| **MKAR** | **Makanchi Array** | **114.38** | **313** | PKP | PKPdf | 07 44 46.0 | +0.2 | |
| | comp=Z,5.7nm,0.8s,baz=69,slow=4.0,SNR=25 | | | | | | | |
| MKAR | | | | PKKPab | **PKKPab** | **07 55 32.0** | **+1.5** | |
| | comp=Z,0.6nm,0.7s,baz=275,slow=3.7,SNR=4.9 | | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **114.71** | **49** | IAMs_20 | IAMs_20 | 08 31 03.3 | | |
| | comp=Z,676nm,18.0s | | | | | | | |
| **F63A** | **Nahmakanta, Br** | **114.88** | **48** | IAMs_20 | IAMs_20 | 08 31 21.8 | | |
| | comp=Z,470nm,19.0s | | | | | | | |
| **F64A** | **Sherman** | **115.42** | **48** | IAMs_20 | IAMs_20 | 08 34 15.1 | | |
| | comp=Z,638nm,18.0s | | | | | | | |
| **SEM** | **Semipalatinsk** | **115.96** | **317** | *e*PKP | **PKPdf** | **07 44 48.4** | **-0.7** | |
| | baz=317 | | | | | | | |
| **SEM** | **Semipalatinsk** | **115.96** | **317** | *e*PKiKP | **PKPdf** | **07 44 48.3** | **-0.7** | |
| **SHLS** | **Shalkode** | **116.06** | **309** | *e*PKP | **PKPdf** | **07 44 48.1** | **-1.3** | |
| | baz=309 | | | | | | | |
| **SHLS** | **Shalkode** | **116.06** | **309** | *e*PKiKP | **PKPdf** | **07 44 48.0** | **-1.3** | |
| **KPKS** | **Kokpek** | **116.65** | **309** | *e*PKP | **PKPdf** | **07 44 50.0** | **-0.5** | |
| | baz=309 | | | | | | | |
| **KPKS** | **Kokpek** | **116.65** | **309** | *e*PKiKP | **PKPdf** | **07 44 49.9** | **-0.5** | |
| **ZHN** | **Zhinishke** | **116.81** | **309** | *e*PKP | **PKPdf** | **07 44 50.4** | **-0.4** | |
| | baz=309 | | | | | | | |
| **ZHN** | **Zhinishke** | **116.81** | **309** | *e*PKiKP | **PKPdf** | **07 44 50.3** | **-0.4** | |
| **SATY** | **Saty** | **116.82** | **309** | *e*PKP | **PKPdf** | **07 44 50.3** | **-0.6** | |
| | baz=308 | | | | | | | |
| **SATY** | **Saty** | **116.82** | **309** | *e*PKiKP | **PKPdf** | **07 44 50.2** | **-0.6** | |
| **KURK** | **Kurchatov** | **117.00** | **317** | | **PKiKP** | **07 44 51.2** | **+0.5** | |
| **KURK** | **Kurchatov** | **117.00** | **317***c* | *i* PKiKP | **PKiKP** | **07 44 51.8** | **+1.1** | |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **117.06** | **317** | PKP | **PKiKP** | **07 44 51.6** | **+0.8** | |
| | comp=Z,8.8nm,0.8s,baz=94,slow=1.9,SNR=53 | | | | | | | |
| KURBB | | | | PP | **PP** | **07 45 54.9** | **-5.9** | |
| | comp=Z,2.2nm,1.1s,baz=87,slow=7.6,SNR=7.3 | | | | | | | |
| KURBB | | | | PKKPab | **PKKPab** | **07 55 19.2** | **+0.7** | |
| | comp=Z,0.6nm,0.8s,baz=272,slow=4.1,SNR=2.2 | | | | | | | |
| **MDOK** | **Medeo** | **117.82** | **309** | *e*PKP | **PKPdf** | **07 44 52.3** | **-0.5** | |
| | baz=309 | | | | | | | |
| MDOK | | | | *e*PP | **PP** | **07 46 05.3** | **-1.3** | |
| | baz=309 | | | | | | | |
| **MDOK** | **Medeo** | **117.82** | **309** | *e*PKiKP | **PKPdf** | **07 44 52.3** | **-0.5** | |
| MDOK | | | | *e* | | 07 46 05.2 | | |
| **CHKK** | **Chushkaly** | **117.90** | **309** | *e*PKP | **PKPdf** | **07 44 52.4** | **-0.3** | |
| | baz=309 | | | | | | | |
| **CHKK** | **Chushkaly** | **117.90** | **309** | *e*PKiKP | **PKPdf** | **07 44 52.4** | **-0.3** | |
| **ULHL** | **Ulahol** | **118.36** | **308** | P | **PKiKP** | **07 44 55.7** | **+1.7** | |
| | SNR=5.6 | | | | | | | |
| **KSH** | **Kashi** | **118.37** | **304** | PKP | **PKiKP** | **07 44 56.0** | **+2.1** | |
| **BOOM** | **Boomskoye usch** | **118.60** | **308** | | **PKiKP** | **07 44 55.0** | **+0.7** | |
| **BOOM** | **Boomskoye usch** | **118.60** | **308** | PKiKP | **PKiKP** | **07 44 55.0** | **+0.7** | |
| **TKM2** | **Tokmak 2** | **118.87** | **308** | P | **PKiKP** | **07 44 56.0** | **+1.1** | |
| | SNR=9.8 | | | | | | | |
| **CHMS** | **Chumysh** | **119.49** | **308** | P | **PKiKP** | **07 44 57.0** | **+1.1** | |
| | SNR=6.2 | | | | | | | |
| **SGDS** | **Sogindy** | **119.59** | **309** | *e*PKP | **PKPdf** | **07 44 55.5** | **-0.6** | |
| | baz=309 | | | | | | | |
| **SGDS** | **Sogindy** | **119.59** | **309** | *e*PKiKP | **PKPdf** | **07 44 55.4** | **-0.6** | |
| **AAK** | **Ala-Archa** | **119.67** | **308** | PKP | **PKiKP** | **07 44 57.6** | **+1.2** | |
| | comp=Z,6.9nm,0.9s,baz=174,slow=2.0,SNR=7.2 | | | | | | | |
| **AAK** | **Ala-Archa** | **119.67** | **308***c* | *i* PKiKP | **PKiKP** | **07 44 57.7** | **+1.3** | |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **BTLS** | **Baital** | **120.04** | **311** | *e*PKP | **PKPdf** | **07 44 56.5** | **-0.3** | |
| | baz=311 | | | | | | | |
| BTLS | | | | *e*PP | **PP** | **07 46 20.6** | **-1.1** | |
| | baz=311 | | | | | | | |
| **BTLS** | **Baital** | **120.04** | **311** | *e*PKiKP | **PKPdf** | **07 44 56.4** | **-0.3** | |
| BTLS | | | | *e* | | 07 46 20.6 | | |
| **EKS2** | **Erkin-Say** | **120.20** | **308** | P | **PKiKP** | **07 44 59.0** | **+1.6** | |
| | SNR=5.2 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **120.25** | **307** | P | **PKiKP** | **07 44 59.4** | **+1.6** | |
| | SNR=6.6 | | | | | | | |
| **KBS** | **Kingsbay** | **121.96** | **359** | *i* PKiKP | **PKiKP** | **07 45 00.1** | **+0.4** | |
| **BVAR** | **Borovoye Array** | **121.96** | **320** | PKP | **PKiKP** | **07 45 01.5** | **+1.1** | |
| | comp=Z,20nm,0.8s,baz=82,slow=2.2,SNR=75 | | | | | | | |
| **BRVK** | **Borovoye** | **122.02** | **320** | | **PKiKP** | **07 45 01.1** | **+0.6** | |
| **BRVK** | **Borovoye** | **122.02** | **320** | *i* PKiKP | **PKiKP** | **07 45 00.7** | **+0.2** | |
| **SPITS** | **Spitsbergen Ar** | **122.56** | **358** | PKP | **PKiKP** | **07 45 02.3** | **+1.4** | |
| | comp=Z,9.5nm,0.8s,baz=85,slow=8.8,SNR=4.5 | | | | | | | |
| **KK31** | **Karatay Array** | **122.60** | **308** | | **PKiKP** | **07 45 02.5** | **+0.5** | |
| **KK31** | **Karatay Array** | **122.60** | **308** | PKiKP | **PKiKP** | **07 45 02.5** | **+0.5** | |
| **KKAR** | **Karatay Array** | **122.60** | **308** | | **PKiKP** | **07 45 02.3** | **+0.3** | |
| **KKAR** | **Karatay Array** | **122.60** | **308** | PKiKP | **PKiKP** | **07 45 02.3** | **+0.3** | |
| **SUMG** | **Summit** | **122.69** | **15** | *i* P | **PKPdf** | **07 45 01.5** | **0.0** | |
| **CHM** | **Chimkent** | **123.28** | **307** | *e*PKP | **PKPdf** | **07 45 02.7** | **-0.4** | |
| | baz=308 | | | | | | | |
| **CHM** | **Chimkent** | **123.28** | **307** | *e*PKiKP | **PKPdf** | **07 45 02.7** | **-0.4** | |
| **DY2G** | **Dye2** | **123.71** | **22** | *i* P | **PKPdf** | **07 45 01.5** | **-1.9** | |
| **ICESG** | **Greenland Ices** | **124.50** | **18** | *i* P | **PKPdf** | **07 45 03.5** | **-1.5** | |
| **SVE** | **Sverdlovsk** | **126.59** | **326** | *i* PKiKP | **PKiKP** | **07 45 10.0** | **+0.6** | |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| SVE | | | | MLR | MLR | | | |
| | comp=Z,826nm,22.0s | | | | | | | |
| **BOSA** | **Boshof** | **127.34** | **201** | PKP | **PKiKP** | **07 45 14.2** | **+2.1** | |
| | comp=Z,8.7nm,1.0s,baz=128,slow=6.7,SNR=4.6 | | | | | | | |
| **ARU** | **Arti** | **127.80** | **326** | | **PKiKP** | **07 45 12.7** | **+0.9** | |
| **ARU** | **Arti** | **127.80** | **326** | *i* PKiKP | **PKiKP** | **07 45 12.3** | **+0.5** | |
| ARU | | | | | | 07 47 10.5 | | |
| ARU | | | | | | 07 52 23.4 | | |
| ARU | | | | MLR | MLR | | | |
| | comp=Z,848nm,19.0s | | | | | | | |
| **ABKAR** | **Akbulak array** | **129.11** | **317** | PKPdf | **PKiKP** | **07 45 15.2** | **+0.5** | |
| **ARCES** | **ARCESS Array B** | **130.06** | **351** | PKP | **PKiKP** | **07 45 16.9** | **+0.8** | |
| | comp=Z,5.6nm,0.8s,baz=326,slow=1.8,SNR=12 | | | | | | | |
| **APA** | **Apatity** | **130.38** | **347** | ⇓*i* PKiKP | **PKPdf** | **07 45 13.5** | **-2.3** | |
| APA | | | | *i* | | 07 47 29.0 | | |
| APA | | | | *i* | | 07 52 24.0 | | |
| APA | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| APA | | | | MLR | MLR | | | |
| | comp=Z,800nm,17.0s | | | | | | | |
| **KIRV** | **Kirov** | **131.29** | **331** | *i* PKiKP | **PKiKP** | **07 45 20.2** | **+1.5** | |
| **BORG** | **Borgarnes** | **132.64** | **16** | *i* PKiKP | **PKiKP** | **07 45 21.6** | **+0.3** | |
| **JOF** | **Joensuu** | **134.74** | **344** | *e*P | **PKiKP** | **07 45 25.6** | **0.0** | |
| **BELG** | **Belogornoye** | **135.28** | **325** | *i* PKiKP | **PKPdf** | **07 45 26.0** | **+0.5** | |
| **VALR** | **Valaam** | **136.15** | **345** | *i* PKiKP | **PKPdf** | **07 45 27.0** | **+0.2** | |
| **KEF** | **Keurus** | **136.88** | **347** | *e*P | **PKiKP** | **07 45 32.4** | **+2.4** | |
| **FINES** | **FINESS Array B** | **137.27** | **346** | PKhKP | PKPpre | 07 45 19.5 | | |
| | comp=Z,1.8nm,0.9s,baz=243,slow=1.7,SNR=4.8 | | | | | | | |
| FINES | | | | PKP | sPKPdf | 07 45 31.7 | -1.9 | |
| | comp=Z,5.2nm,0.8s,baz=106,slow=4.2,SNR=8.8 | | | | | | | |
| **MOS** | **Moscow** | **138.12** | **334** | *i* PKiKP | **PKPdf** | **07 45 30.8** | **+0.1** | |
| MOS | | | | *e* | | 07 48 20.2 | | |
| **OBN** | **Obninsk** | **138.99** | **334** | ⇑*e*PKiKP | **PKPdf** | **07 45 32.5** | **+0.2** | |
| OBN | | | | *e* | | 07 48 30.2 | | |
| OBN | | | | *e*PPP | PPP | 07 51 25.7 | | |
| OBN | | | | *i* SS | SS | 08 06 36.1 | -3.7 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,42nm,1.6s | | | | | | | |
| OBN | | | | MLR | MLR | | | |
| | comp=Z,423nm,19.0s | | | | | | | |
| **VRH** | **Novokhopyorsk** | **139.04** | **326** | *e*PKiKP | **PKPdf** | **07 45 33.1** | **+0.6** | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.6s | | | | | | | |
| **MAK** | **Makhachkala** | **139.19** | **312** | *e*P | **Pdif** | **07 42 42.8** | **-2.7** | |
| MAK | | | | *e* | | 07 45 31.5 | | |
| MAK | | | | *e* | | 07 48 21.6 | | |
| MAK | | | | *e*PPP | PPP | 07 51 26.4 | | |
| MAK | | | | *e* | | 07 52 40.3 | | |
| MAK | | | | *e*SS | SS | 08 06 36.8 | -6.7 | |
| MAK | | | | pmax | pmax | | | |
| | comp=Z,262nm,1.6s | | | | | | | |
| **AKT** | **Akhty** | **139.50** | **310** | *e*PKiKP | **PKPdf** | **07 45 33.8** | **0.0** | |
| AKT | | | | *e* | | 07 48 28.6 | | |
| AKT | | | | *e* | | 07 52 44.2 | | |
| AKT | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.3s | | | | | | | |
| **VSU** | **Vasula** | **139.72** | **343** | *i* PKiKP | **PKPdf** | **07 45 34.7** | **+1.2** | |
| **NB2** | **NORSAR Subarra** | **139.84** | **356** | PKP | **PKPdf** | **07 45 27.4** | **-6.4** | |
| | comp=Z,4.3nm,0.9s,baz=16,slow=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **139.84** | **356** | PKhKP | PKPpre | 07 45 25.6 | | |
| | comp=Z,1.1nm,0.8s,baz=9.4,slow=2.3,SNR=4.4 | | | | | | | |
| **VORR** | **Voronezh** | **140.04** | **328** | *e*PKiKP | **PKPdf** | **07 45 35.2** | **+0.9** | |
| VORR | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **HFS** | **Hagfors** | **140.54** | **354** | PKhKP | PKPpre | 07 45 28.9 | | |
| | comp=Z,4.6nm,0.7s,baz=85,slow=1.8,SNR=7.4 | | | | | | | |
| **KIBK** | **Kibwezi** | **141.10** | **237** | IAMs_20 | IAMs_20 | 08 43 28.5 | | |
| | comp=Z,481nm,20.0s | | | | | | | |
| **KBZ** | **Khabaz** | **142.02** | **315** | PKhKP | PKPpre | 07 45 36.0 | | |
| | comp=Z,4.4nm,0.9s,baz=204,slow=2.6,SNR=7.2 | | | | | | | |
| **KBZ** | **Khabaz** | **142.02** | **315** | *i* PKiKP | **PKPdf** | **07 45 34.2** | **-3.9** | |
| **GNI** | **Garni** | **142.06** | **309** | *i* PKiKP | **PKPdf** | **07 45 35.5** | **-3.1** | |
| **KIV** | **Kislovodsk** | **142.06** | **316** | *i* PKiKP | **PKPdf** | **07 45 38.3** | **-0.1** | |
| KIV | | | | *e* | | 07 48 40.8 | | |
| KIV | | | | *e*SS | SS | 08 07 14.7 | -2.5 | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **142.18** | **315** | *i* PKiKP | **PKPdf** | **07 45 38.3** | **-0.5** | |
| **KMBO** | **Kilima Mbogo** | **142.47** | **238** | PKPdf | **PKPdf** | **07 45 38.3** | **-1.9** | |
| **KMBO** | **Kilima Mbogo** | **142.47** | **238** | PKhKP | PKPpre | 07 45 38.1 | | |
| | comp=Z,4.3nm,0.9s,baz=172,slow=2.5,SNR=6.0 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **142.47** | **238** | *i* PKiKP | **PKPdf** | **07 45 37.1** | **-3.1** | |
| **ERBR** | **Yeremizino-Bor** | **142.64** | **319** | *i* PKiKP | **PKPdf** | **07 45 36.9** | **-2.3** | |
| ERBR | | | | pmax | pmax | | | |
| | comp=Z,102nm,1.8s | | | | | | | |
| **KPL** | **Plockton** | **142.68** | **11** | *e*P | **PKPdf** | **07 45 36.2** | **-2.7** | |
| **MNK** | **Minsk** | **142.72** | **339** | *i* PKiKP | **PKPdf** | **07 45 37.3** | **-1.7** | |
| MNK | | | | *i* PPP | PPP | 07 51 55.5 | | |
| MNK | | | | *i* | | 07 52 47.0 | | |
| MNK | | | | *i* SS | SS | 08 07 25.7 | +2.6 | |
| MNK | | | | *i* SSS | SSS | 08 12 46.0 | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,13nm,0.7s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,35nm,1.0s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,251nm,20.0s | | | | | | | |
| **LABN** | **Labinsk** | **143.01** | **318** | *i* PKiKP | **PKPdf** | **07 45 41.5** | **+1.6** | |
| LABN | | | | pmax | pmax | | | |
| | comp=Z,28nm,0.4s | | | | | | | |
| **PABE** | **Paberze** | **143.05** | **343** | *e*P | **PKPdf** | **07 45 39.5** | **-0.1** | |
| **PBUR** | **Paburge** | **143.10** | **345** | *e*P | **PKPdf** | **07 45 41.0** | **+1.4** | |
| **RAYN** | **Ar Rayn** | **143.58** | **281** | PKPdf | PKPbc | 07 45 39.9 | +0.9 | |
| **RAYN** | **Ar Rayn** | **143.58** | **281** | PKiKP | PKPbc | 07 45 39.9 | +0.9 | |
| **ATD** | **Arta Tunnel** | **143.62** | **261** | IAMs_20 | IAMs_20 | 08 47 52.2 | | |
| | comp=Z,493nm,19.0s | | | | | | | |
| **BCA** | **Borcka** | **143.81** | **312** | ⇑P | PKPbc | 07 45 40.2 | +1.1 | |
| **VSLR** | **Vesyoloye** | **144.01** | **316** | *i* PKiKP | PKPbc | 07 45 40.4 | +0.8 | |
| **SOC** | **Sochi** | **144.15** | **317** | *e*PKiKP | PKPbc | 07 45 40.2 | +0.2 | |
| SOC | | | | *e* | | 07 48 54.7 | | |
| SOC | | | | *e*SSS | SSS | 08 13 04.2 | | |
| SOC | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **PGBU** | **Glenifferbraes** | **144.34** | **10** | *e*P | PKPbc | 07 45 40.2 | +0.1 | |
| **EDI** | **Edinburgh** | **144.43** | **9** | *e*P | **PKPdf** | **07 45 41.8** | **-0.2** | |
| **ESY** | **Stoneypath** | **144.52** | **9** | *e*P | **PKPdf** | **07 45 42.1** | **-0.1** | |
| **MUD** | **Monsted U'grnd** | **144.52** | **357** | *i* P | PKPbc | 07 45 41.0 | +0.3 | |
| **SUW** | **Suwalki** | **144.58** | **343** | *e*PKP | **PKPdf** | **07 45 41.9** | **-0.4** | |
| **SUW** | **Suwalki** | **144.58** | **343** | | **PKPdf** | **07 45 42.4** | **+0.1** | |
| **SUW** | **Suwalki** | **144.58** | **343** | *e*P | **PKPdf** | **07 45 42.6** | **+0.3** | |
| **SUW** | **Suwalki** | **144.58** | **343** | PKiKP | **PKPdf** | **07 45 42.4** | **+0.1** | |
| **ANN** | **Anapa** | **144.96** | **320** | *i* PKiKP | **PKPdf** | **07 45 43.3** | **0.0** | |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **145.01** | **9** | PKP | **PKPdf** | **07 45 43.2** | **+0.2** | |
| | comp=Z,14nm,0.9s,baz=322,slow=3.0,SNR=20 | | | | | | | |
| **AK03** | **Malin Array Si** | **145.23** | **334** | PKPdf | **PKPab** | **07 45 43.5** | **+0.2** | |
| **AK23** | **Malin Array Si** | **145.24** | **334** | PKPdf | **PKPab** | **07 45 43.5** | **+0.2** | |
| **AKASG** | **Malin Array Be** | **145.25** | **334** | PKPbc | **PKPab** | **07 45 43.6** | **+0.2** | |
| | comp=Z,40nm,0.7s,baz=41,slow=4.4,SNR=186 | | | | | | | |
| **AKBB** | **Malin Array Si** | **145.25** | **334** | *i* PKiKP | **PKPab** | **07 45 43.5** | **+0.1** | |
| **AKBB** | **Malin Array Si** | **145.25** | **334** | PKPdf | **PKPab** | **07 45 43.4** | **+0.1** | |
| **KIEV** | **Kiev** | **145.26** | **334** | IAMs_20 | IAMs_20 | 08 53 30.2 | | |
| | comp=Z,458nm,20.0s | | | | | | | |
| **KIEV** | **Kiev** | **145.26** | **334** | ⇓P | **PKPdf** | **07 45 44.2** | **+0.6** | |
| **KIEV** | **Kiev** | **145.26** | **334** | PKiKP | **PKPdf** | **07 45 44.2** | **+0.6** | |
| **KIEV** | **Kiev** | **145.26** | **334** | PKPdf | **PKPab** | **07 45 43.5** | **+0.1** | |
| **PCED** | **Cedros** | **145.29** | **52** | *e*PKP | **PKPdf** | **07 45 44.7** | **+0.6** | |
| **BSD** | **Bornholm Skovb** | **145.30** | **351** | *e*P | **PKPdf** | **07 45 44.3** | **+0.7** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CALA** | **Caldeira** | **145.30** | **52** | *e*PKP | **PKPbc** | **07 45 44.0** | **0.0** | |
| **PCAN** | **Candelaria** | **145.50** | **52** | *e*PKP | **PKPab** | **07 45 46.7** | **+1.9** | |
| **PICO** | **Pico** | **145.53** | **52** | *e*PKP | **PKPab** | **07 45 47.2** | **+2.2** | |
| **ROSA** | **Rosais** | **145.59** | **51** | *e*PKP | **PKPab** | **07 45 46.7** | **+1.6** | |
| **MI30** | **MI30,Zelenitsa** | **145.63** | **335** | PKPdf | **PKPdf** | **07 45 44.4** | **+0.2** | |
| **PPNO** | **Prainha do Nor** | **145.66** | **52** | *e*PKP | **PKiKP** | **07 45 48.2** | **-0.6** | |
| **EDMD** | **Edmundbyers** | **145.67** | **8** | *e*P | **PKPab** | **07 45 45.6** | **+0.8** | |
| **MI28** | **Mi28,Pidlybu** | **145.69** | **336** | PKPdf | **PKPab** | **07 45 45.5** | **+0.5** | |
| **PMAN** | **Manadas** | **145.74** | **52** | *e*PKP | **PKPab** | **07 45 47.0** | **+1.4** | |
| **KESW** | **Keswick, Cumbr** | **145.74** | **10** | *e*P | **PKPab** | **07 45 45.9** | **+0.8** | |
| **PID** | **Ribeirinha** | **145.78** | **52** | *e*PKP | **PKPab** | **07 45 46.1** | **+0.3** | |
| **MI29** | **MI29, Kamyanyy** | **146.02** | **335** | PKPdf | **PKPab** | **07 45 46.1** | **-0.2** | |
| **GDLE** | **Glaisdale, N Y** | **146.21** | **7** | *e*P | **PKPab** | **07 45 48.0** | **+1.1** | |
| **PSBA** | **Serra de Santa** | **146.24** | **51** | *e*PKP | **PKPab** | **07 45 48.2** | **+0.6** | |
| **LUBAR** | **Lubar, Ukraine** | **146.45** | **334** | PKPdf | **PKPdf** | **07 45 46.3** | **+0.6** | |
| **HPK** | **Haverah Park** | **146.56** | **8** | *e*P | **PKPab** | **07 45 48.8** | **+0.6** | |
| **WPS** | **Cemaes, Angles** | **146.64** | **12** | *e*P | **PKPbc** | **07 45 46.9** | **-0.5** | |
| **WME** | **Myndd Eilian** | **146.68** | **11** | *e*P | **PKPbc** | **07 45 47.9** | **+0.3** | |
| **GKP** | **Gorka Klasztor** | **146.68** | **348** | *e*PKP | **PKPab** | **07 45 49.1** | **+0.4** | |
| **WLF1** | **Llynfaes** | **146.76** | **12** | *e*P | **PKPab** | **07 45 48.9** | **-0.1** | |
| **SIM** | **Simferopol'** | **146.82** | **323** | *i* PKP2 | **PKPab** | **07 45 49.2** | **-0.3** | |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,207nm,1.0s | | | | | | | |
| **BSEG** | **Bad Segeberg** | **146.97** | **355** | *e*PKPbc | **PKPab** | **07 45 50.0** | **+0.2** | |
| | baz=8.9,slow=2.4 | | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **147.06** | **310** | | **PKPdf** | **07 45 47.7** | **+0.4** | |
| **BEL** | **Belsk** | **147.18** | **343** | *e*PKP | **PKPab** | **07 45 51.1** | **+0.4** | |
| **LMK** | **Market Rasen** | **147.22** | **7** | *e*P | **PKPab** | **07 45 50.8** | **+0.1** | |
| **FOEL** | **Foel Wylfa** | **147.36** | **11** | *e*P | **PKPab** | **07 45 51.0** | **-0.4** | |
| **NE56** | **Odesa** | **147.43** | **328** | PKPdf | **PKPbc** | **07 45 50.2** | **+0.3** | |
| **HORU** | **Horodok** | **147.54** | **335** | PKPdf | **PKPbc** | **07 45 50.9** | **+0.8** | |
| **SORM** | **Soroca** | **147.57** | **332** | ⇑P | **PKPab** | **07 45 51.4** | **-0.9** | |
| **SORM** | **Soroca** | **147.57** | **332** | ⇑PKP2 | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SCHL | **Schela** | **149.77 329** | ⇓P | **PKiKP** | **07 45 58.7 +1.7** |
| JURR | **Jurilovca** | **149.77 327** | ⇓P | **PKiKP** | **07 45 58.1 +1.1** |
| TRSU | **Trosnyk** | **149.77 337** | PKPdf | **PKiKP** | **07 45 57.8 +0.9** |
| SCHLR | **Schela** | **149.79 329** | ⇓P | **PKiKP** | **07 45 58.7 +1.7** |
| KRLC | **Kraliky** | **149.79 346** | ⇑*e*PKP | **PKiKP** | **07 45 58.1 +1.1** |
| KRLC | | | AMS | AMS | 09 01 00.0 |
| | comp=Z,400nm,21.6s | | | | |
| KRLC | **Kraliky** | **149.79 346** | *e*PKP2 | **PKiKP** | **07 45 58.1 +1.1** |
| KRLC | | | MLR | MLR | |
| | comp=Z,400nm,21.6s | | | | |
| PVCC | **Panska Ves** | **149.79 349** | ⇑*e*PKP | **PKiKP** | **07 45 58.3 +1.4** |
| PVCC | | | AMS | AMS | 09 02 40.0 |
| | comp=Z,500nm,18.2s | | | | |
| PVCC | **Panska Ves** | **149.79 349** | *e*PKP2 | **PKiKP** | **07 45 58.3 +1.4** |
| PVCC | | | MLR | MLR | |
| | comp=Z,500nm,18.2s | | | | |
| KASTN | **Kahler Asten** | **149.81 357** | *e*PKPbc | **PKiKP** | **07 45 57.2 +0.3** |
| | baz=8.9,slow=2.4 | | | | |
| ONER | **Baraj Valea Uz** | **149.81 332** | ⇓P | **PKiKP** | **07 45 58.4 +1.4** |
| PANC | **Panciu** | **149.81 330** | ⇑P | **PKiKP** | **07 45 58.3 +1.2** |
| CFR | **Carcaliu** | **149.85 328** | ⇑P | **PKiKP** | **07 45 57.9 +0.8** |
| CFR | **Carcaliu** | **149.85 328** | ⇑PKP2 | **PKiKP** | **07 45 57.9 +0.8** |
| RICC | **Richard** | **149.86 350** | ⇑*e*PKP | **PKiKP** | **07 45 58.8 +1.8** |
| MORC | **Moravsky Berou** | **149.90 345** | IAMs_20 | IAMs_20 | 08 55 34.8 |
| | comp=Z,471nm,20.0s | | | | |
| MORC | **Moravsky Berou** | **149.90 345** | *e*PKP | **PKiKP** | **07 45 58.1 +0.9** |
| MORC | **Moravsky Berou** | **149.90 345** | ⇑P | **PKiKP** | **07 45 58.3 +1.1** |
| HSKC | **Hora Svate Kat** | **149.90 351** | ⇑*e*PKP | **PKiKP** | **07 45 57.9 +0.8** |
| HSKC | | | AMS | AMS | 09 00 50.0 |
| | comp=Z,500nm,17.2s | | | | |
| BMR | **Baia Mare** | **149.93 336** | ⇓P | **PKiKP** | **07 45 58.3 +1.0** |
| TPGR | **Topolog** | **149.94 327** | ⇑P | **PKiKP** | **07 45 58.7 +1.3** |
| ODBI | **Odobesti** | **149.94 330** | PKPdf | **PKiKP** | **07 45 58.7 +1.4** |
| LANS | **Liptovska Anna** | **149.97 342** | *e*PKP2 | **PKiKP** | **07 45 59.1 +1.7** |
| LANS | **Liptovska Anna** | **149.97 342** | *e*PKP | **PKiKP** | **07 45 59.1 +1.7** |
| BR131 | **Keskin Array S** | **150.01 315** | | **PKPdf** | **07 45 53.6 +1.5** |
| BR131 | **Keskin Array S** | **150.01 315** | PKHKP | PKPpre | 07 45 53.6 |
| BRTR | **Keskin Array B** | **150.01 315** | PKPdf | **PKPdf** | **07 45 53.5 +1.4** |
| | comp=Z,2.0nm,0.9s,baz=111,slow=1.7,SNR=14 | | | | |
| BRTR | | | PKPbc | **PKiKP** | **07 45 58.3 +0.4** |
| | comp=Z,34nm,0.8s,baz=134,slow=3.5,SNR=103 | | | | |
| VRI | **Vrincioaia** | **150.01 331** | ⇓P | **PKiKP** | **07 45 58.3 +0.8** |
| VRI | **Vrincioaia** | **150.01 331** | ⇓PKP2 | **PKiKP** | **07 45 58.3 +0.8** |
| VRI | **Vrincioaia** | **150.01 331** | PKPdf | **PKiKP** | **07 45 57.8 +0.3** |
| BR104 | **Keskin Array S** | **150.02 315** | PKPdf | **PKPdf** | **07 45 53.3 +1.3** |
| BR106 | **Keskin Array S** | **150.02 315** | PKPdf | **PKPdf** | **07 45 51.8 -0.3** |
| BR105 | **Keskin Array S** | **150.03 315** | PKPdf | **PKPdf** | **07 45 53.5 +1.4** |
| PLOR5 | **Plostina Array** | **150.06 331** | PKPdf | **PKiKP** | **07 45 58.2 +0.6** |
| PLOR | **Plostina** | **150.06 331** | ⇑P | **PKiKP** | **07 45 58.3 +0.6** |
| PLOR3 | **Plostina Array** | **150.06 331** | PKPdf | **PKiKP** | **07 45 57.9 +0.2** |
| ARCR | **ARCALIA** | **150.08 335** | ⇑P | **PKiKP** | **07 45 59.1 +1.5** |
| UBBA | **Unterbreizbach** | **150.09 355** | *e*PKPbc | **PKiKP** | **07 45 58.0 +0.6** |
| | baz=8.9,slow=2.4 | | | | |
| SPBR | **Spulber** | **150.09 330** | ⇓P | **PKiKP** | **07 45 58.7 +1.0** |
| MOX | **Moxa** | **150.10 353** | *e*PKPbc | **PKiKP** | **07 45 57.8 +0.2** |
| | baz=8.9,slow=2.4 | | | | |
| KIRS | **Kirsehir-Merke** | **150.12 313** | ⇓P | **PKiKP** | **07 45 59.0 +1.0** |
| TURR | **Turia** | **150.19 332** | ⇓P | **PKiKP** | **07 45 59.6 +1.7** |
| PLN | **Plauen** | **150.20 352** | *e*PKPbc | **PKiKP** | **07 45 58.8 +1.1** |
| | baz=8.9,slow=2.4 | | | | |
| MAUC | **Maruska** | **150.21 345** | *e*PKPDF | **PKPbc** | **07 45 55.2 -1.8** |
| MAUC | | | ⇑*e*PKP | **sPKPbc** | **07 45 59.6 -2.0** |
| MAUC | | | AMS | AMS | 09 03 10.0 |
| | comp=Z,1μm,19.8s | | | | |
| TANN | **Tannenbergstha** | **150.23 352** | *e*PKPbc | **PKiKP** | **07 45 58.9 +1.1** |
| | baz=8.9,slow=2.4 | | | | |
| PRA | **Prague** | **150.26 349** | AMS | AMS | 09 01 00.0 |
| | comp=Z,600nm,19.6s | | | | |
| OZUR | | **150.26 332** | ⇓P | **PKiKP** | **07 45 59.7 +1.6** |
| COVR | **Voineasa-Covas** | **150.27 331** | ⇓P | **PKiKP** | **07 45 59.0 +0.9** |
| HARR | **Harsova** | **150.30 328** | ⇑P | **PKiKP** | **07 45 59.6 +1.5** |
| HARR | **Harsova** | **150.30 328** | ⇑PKIKP | **PKiKP** | **07 45 59.6 +1.5** |
| PRU | **Pruhonice** | **150.32 349** | ⇑*e*PKP | **PKiKP** | **07 45 59.2 +1.2** |
| PRU | | | AMS | AMS | 09 01 00.0 |
| | comp=Z,500nm,15.5s | | | | |
| PRU | **Pruhonice** | **150.32 349** | *e*PKIKP | **PKiKP** | **07 45 59.2 +1.2** |
| PRU | | | MLR | MLR | |
| | comp=Z,500nm,15.5s | | | | |
| BOSR | **Bodos** | **150.33 332** | ⇓P | **PKiKP** | **07 46 00.1 +1.9** |
| GOPC | **GO Pecny, Ondr** | **150.35 349** | ⇑*e*PKP | **PKiKP** | **07 45 59.3 +1.2** |
| GOPC | | | AMS | AMS | 08 58 20.0 |
| | comp=Z,600nm,19.7s | | | | |
| GOPC | **GO Pecny, Ondr** | **150.35 349** | *e*PKIKP | **PKiKP** | **07 45 59.3 +1.2** |
| GOPC | | | MLR | MLR | |
| | comp=Z,600nm,19.7s | | | | |
| TLBR | **Topalu** | **150.35 327** | ⇓P | **PKiKP** | **07 46 00.7 +2.5** |
| MFTR | **Murfatlar** | **150.41 326** | ⇑P | **PKiKP** | **07 45 60.0 +1.6** |
| MEM | **Membach** | **150.45 0** | *d*PKP | **PKiKP** | **07 45 59.5 +1.2** |
| BSTI | **Sart Tilman** | **150.47 1** | *d*PKP | **PKiKP** | **07 45 59.9 +1.6** |
| BTNL | **Ternell** | **150.47 0** | *d*PcP | **PKiKP** | **07 45 59.4 +1.0** |
| ANTO | **Ankara** | **150.49 316** | ⇑P | **PKiKP** | **07 45 60.0 +1.2** |
| ANTO | **Ankara** | **150.49 316** | ⇑PKIKP | **PKiKP** | **07 46 00.0 +1.2** |
| ANTO | **Ankara** | **150.49 316** | PKPdf | **PKiKP** | **07 45 59.0 +0.2** |
| DOPR | **Dopca** | **150.53 332** | ⇑P | **PKiKP** | **07 46 00.3 +1.7** |
| NEHR | **Nehoiu** | **150.54 330** | ⇑P | **PKiKP** | **07 46 00.2 +1.5** |
| VRAC | **Vranov** | **150.55 346** | *e*PKP | **PKiKP** | **07 45 59.6 +1.1** |
| VRAC | **Vranov** | **150.55 346** | ⇑P | **PKiKP** | **07 45 60.0 +1.5** |
| VRAC | **Vranov** | **150.55 346** | ⇑PKIKP | **PKiKP** | **07 46 00.0 +1.5** |
| MESR | **Meseseni** | **150.57 336** | ⇓P | **PKiKP** | **07 46 00.5 +1.9** |
| BCLA | **Clavier** | **150.63 1** | *d*PKP | **PKiKP** | **07 45 59.5 +0.9** |
| CBBR | **Cluj-Babes-Bol** | **150.66 335** | ⇓P | **PKiKP** | **07 45 60.0 +1.2** |
| MLR | **Muntele Rosu** | **150.66 331** | ⇑P | **PKiKP** | **07 46 00.2 +1.2** |
| MLR | **Muntele Rosu** | **150.66 331** | ⇑PKIKP | **PKiKP** | **07 46 00.2 +1.2** |
| MLR | **Muntele Rosu** | **150.66 331** | PKPdf | **PKPdf** | **07 45 54.5 +1.6** |
| ISR | **Istrita** | **150.66 330** | ⇓P | **PKiKP** | **07 45 59.8 +0.9** |
| ISR | **Istrita** | **150.66 330** | ⇓PKIKP | **PKiKP** | **07 45 59.8 +0.9** |
| ISR | **Istrita** | **150.66 330** | PKPdf | **PKPbc** | **07 45 58.8 +0.6** |
| BGES | **Gesves** | **150.66 1** | *d*PKP | **PKiKP** | **07 45 59.7 +1.0** |
| CJR | **Cluj-Napoca** | **150.68 335** | ⇓P | **PKiKP** | **07 46 00.3 +1.4** |
| CJR | **Cluj-Napoca** | **150.68 335** | ⇓PKIKP | **PKiKP** | **07 46 00.3 +1.4** |
| MANZ | **Manzenberg** | **150.69 352** | *e*PKPbc | **PKiKP** | **07 46 00.0 +1.2** |
| | baz=8.9,slow=2.4 | | | | |
| BHOU | **Houvegnez** | **150.71 0** | *d*PKP | **PKiKP** | **07 46 00.1 +1.3** |
| JAVC | **Velka Javorina** | **150.72 344** | *e*PKP | **PKiKP** | **07 46 01.2 +2.3** |
| BMRD | **Maredsous** | **150.74 2** | *d*PKP | **PKiKP** | **07 45 59.9 +1.1** |
| VYHS | **Vyhne** | **150.74 343** | *e*PKIKP | **PKiKP** | **07 45 59.9 +1.0** |
| VYHS | **Vyhne** | **150.74 343** | *e*PKP | **PKiKP** | **07 45 59.9 +1.0** |
| LTVH | **Ltavrtes, Hu** | **150.75 338** | ⇓P | **PKiKP** | **07 46 00.7 +1.8** |
| TNS | **Taunus Mts** | **150.78 357** | *e*PKPbc | **PKiKP** | **07 46 00.2 +1.2** |
| | baz=8.9,slow=2.4 | | | | |
| KRUC | **Moravsky** | **150.83 346** | *e*PKP | **PKiKP** | **07 46 00.1 +1.0** |
| ROTZ | **Rotzenmuhle** | **150.90 352** | *e*PKPbc | **PKiKP** | **07 46 00.5 +1.3** |
| | baz=8.9,slow=2.4 | | | | |
| RCHB | **Rochefort** | **150.90 1** | *d*PKP | **PKiKP** | **07 46 00.2 +1.1** |
| DOU | **Dourbes** | **150.94 2** | *d*PKP | **PKiKP** | **07 46 00.4 +1.1** |
| PSZ | **Piszkesteto** | **150.95 341** | ⇓P | **PKiKP** | **07 46 00.7 +1.3** |
| PSZ | **Piszkesteto** | **150.95 341** | ⇓PKIKP | **PKiKP** | **07 46 00.7 +1.3** |
| DRGR | | **150.96 336** | ⇑P | **PKiKP** | **07 46 00.2 +0.6** |
| GRA1 | **Grafenberg Arr** | **151.09 353** | IAMs_20 | IAMs_20 | 08 57 59.6 |
| | comp=Z,486nm,20.0s | | | | |
| GRF | **Grafenberg Arr** | **151.09 353** | *e*PKPbc | **PKiKP** | **07 46 00.9 +1.2** |
| | baz=8.9,slow=2.4 | | | | |
| GRFO | **Grafenberg** | **151.09 353** | IAMs_20 | IAMs_20 | 08 58 08.6 |
| | comp=Z,500nm,20.0s | | | | |
| JSA | **Saint Aubin** | **151.10 11** | *e*P | **PKiKP** | **07 46 00.0 +0.4** |
| VOIR | | **151.10 332** | ⇑P | **PKiKP** | **07 46 02.1 +2.2** |
| VOIR | | **151.10 332** | ⇑PKIKP | **PKiKP** | **07 46 02.1 +2.2** |
| VOIR | | **151.10 332** | PKPdf | **PKPdf** | **07 45 54.5 +1.0** |
| TNR | **Turnu Rosu** | **151.26 333** | ⇑P | **PKiKP** | **07 46 01.9 +1.8** |
| TNR | **Turnu Rosu** | **151.26 333** | ⇑PKIKP | **PKiKP** | **07 46 01.9 +1.8** |
| KHC | **Kasperske Hory** | **151.31 350** | *e*PKPDF | **PKPdf** | **07 45 55.9 +2.3** |
| KHC | | | ⇑*e*PKP | **pPKPbc** | **07 46 01.2 -1.8** |
| KHC | | | *ex* | x | 07 46 11.5 |
| KHC | | | AMS | AMS | 09 03 10.0 |
| | comp=Z,600nm,17.9s | | | | |
| KHC | **Kasperske Hory** | **151.31 350** | *e*PKIKP | **PKPdf** | **07 45 55.9 +2.3** |
| KHC | | | *e* | | 07 46 01.2 |
| KHC | | | MLR | MLR | |
| | comp=Z,600nm,17.9s | | | | |
| KHC | **Kasperske Hory** | **151.31 350** | PKPdf | **PKPdf** | **07 45 55.9 +2.3** |
| ARR | **Arges** | **151.33 332** | ⇓P | **PKiKP** | **07 46 02.7 +2.3** |
| WLF | **Walferdange** | **151.40 0** | *d*PKP | **PKiKP** | **07 46 01.5 +1.3** |
| WLF | **Walferdange** | **151.40 0** | *e*PKPbc | **PKiKP** | **07 46 01.9 +1.7** |
| | baz=8.9,slow=2.4 | | | | |
| WET | **Wettzell** | **151.41 351** | *e*PKPbc | **PKiKP** | **07 46 01.4 +1.1** |
| | baz=8.9,slow=2.4 | | | | |
| MMAI | **Mount Meron Ar** | **151.43 301** | PKPbc | **PKiKP** | **07 46 02.6 +1.7** |
| | comp=Z,44nm,0.8s,baz=54,slow=4.2,SNR=35 | | | | |
| ZST | **Bratislava** | **151.47 345** | *e*PKIKP | **PKPab** | **07 46 07.4 -0.8** |
| ZST | **Bratislava** | **151.47 345** | *e*PKP | **PKPab** | **07 46 07.4 -0.8** |
| CKRC | **Cesky Krumlov** | **151.49 349** | *e*PKPDF | **PKPdf** | **07 45 56.2 +2.3** |
| CKRC | | | ⇑*e*PKP | **pPKPbc** | **07 46 02.1 -1.3** |
| CKRC | | | AMS | AMS | 09 06 40.0 |
| | comp=Z,500nm,20.4s | | | | |
| CKRC | **Cesky Krumlov** | **151.49 349** | *e*PKIKP | **PKPdf** | **07 45 56.2 +2.3** |
| CKRC | | | *e* | | 07 46 02.1 |
| CKRC | | | MLR | MLR | |
| | comp=Z,500nm,20.4s | | | | |
| GEC2 | **GERESS Array S** | **151.57 350** | *e*PKPbc | **PKiKP** | **07 46 01.4 +0.7** |
| | baz=8.9,slow=2.4 | | | | |
| GERES | **GERESS Array B** | **151.57 350** | PKP | **PKPdf** | **07 45 57.0 +2.9** |
| | comp=Z,14nm,0.9s,baz=46,slow=5.8,SNR=11 | | | | |
| GERES | | | PKPbc | **pPKPbc** | **07 46 01.9 -1.9** |
| | comp=Z,14nm,0.9s,baz=20,slow=3.2,SNR=45 | | | | |
| DEV | **Deva** | **151.64 335** | ⇓P | **PKiKP** | **07 46 02.4 +1.6** |
| DEV | **Deva** | **151.64 335** | ⇓PKIKP | **PKiKP** | **07 46 02.4 +1.6** |
| SIRR | **Siria** | **151.79 337** | ⇑P | **PKiKP** | **07 46 02.6 +1.5** |
| HUMR | **Humele** | **151.83 331** | ⇓P | **PKiKP** | **07 46 02.2 +1.0** |
| CONA | **Conrad Observa** | **152.02 346** | *i* pPKP | **PKiKP** | **07 46 03.5 +1.8** |
| | comp=Z,18nm,0.9s,SNR=8.9 | | | | |
| SURR | **Surduc** | **152.05 336** | ⇓P | **PKiKP** | **07 46 03.0 +1.3** |
| GZR | **Gura Zlata** | **152.09 334** | ⇓P | **PKiKP** | **07 46 03.0 +1.1** |
| RONA | **Rosalia, Austr** | **152.13 345** | *i* pPKP | **PKiKP** | **07 46 03.6 +1.7** |
| | comp=Z,23nm,0.9s,SNR=7.8 | | | | |
| STU | **Stuttgart** | **152.18 356** | IAMs_20 | IAMs_20 | 08 57 17.7 |
| | comp=Z,432nm,21.0s | | | | |
| YLV | **Yalova** | **152.25 320** | PKPdf | **PKPbc** | **07 46 01.0 -1.1** |
| MPLH | **Magyarpolny** | **152.31 343** | PKPdf | **PKPbc** | **07 46 02.2 +0.3** |
| BZS | **Buzias** | **152.36 336** | ⇑P | **PKiKP** | **07 46 03.2 +0.9** |
| BZS | **Buzias** | **152.36 336** | ⇑PKIKP | **PKiKP** | **07 46 03.2 +0.9** |
| CSS | **Mathiatis** | **152.37 306** | PKPdf | **PKPbc** | **07 46 02.0 -0.5** |
| MOA | **Molln** | **152.43 348** | *i* PKiKP | **PKiKP** | **07 46 03.8 +1.4** |
| | comp=Z,7.7nm,0.8s | | | | |
| SRE | **Strehaia** | **152.51 333** | ⇓P | **PKiKP** | **07 46 04.9 +2.2** |
| SRE | **Strehaia** | **152.51 333** | ⇓PKIKP | **PKiKP** | **07 46 04.9 +2.2** |
| FUR | **Furstenfeldbru** | **152.59 353** | *e*PKPbc | **PKiKP** | **07 46 04.1 +1.3** |
| | baz=8.9,slow=2.4 | | | | |
| ELND | **Elena** | **152.60 327** | ⇑P | **PKiKP** | **07 46 04.3 +1.4** |
| HERR | **Herculane** | **152.66 334** | ⇓P | **PKiKP** | **07 46 03.8 +0.8** |
| BFO | **Black Forest** | **152.68 357** | IAMs_20 | IAMs_20 | 09 02 35.8 |
| | comp=Z,477nm,20.0s | | | | |
| BFO | **Black Forest** | **152.68 357** | *e*PKPbc | **PKiKP** | **07 46 04.0 +1.0** |
| | baz=8.9,slow=2.4 | | | | |
| BIOA | **Bad Ischl, Aus** | **152.69 349** | *i* PKiKP | **PKiKP** | **07 46 04.4 +1.4** |
| | comp=Z,5.2nm,0.6s | | | | |
| ARSA | **Arserg** | **152.73 346** | *i* PKiKP | **PKiKP** | **07 46 04.5 +1.4** |
| | comp=Z,3.2nm,0.7s | | | | |
| RJOB | **Jochberg** | **152.79 350** | *e*PKPbc | **PKiKP** | **07 46 04.4 +1.1** |
| | baz=8.9,slow=2.4 | | | | |
| ECH | **Echery** | **152.84 359** | IAMs_20 | IAMs_20 | 09 03 34.1 |
| | comp=Z,402nm,19.0s | | | | |
| MORH | **Mrgy, Hungar** | **152.85 341** | ⇑P | **PKiKP** | **07 46 04.3 +1.0** |
| MORH | **Mrgy, Hungar** | **152.85 341** | PKPdf | **PKPbc** | **07 46 02.9 -0.2** |
| LESA | **Schwarzleotal** | **153.12 350** | *i* pPKP | **PKiKP** | **07 46 05.7 +1.7** |
| | comp=Z,5.3nm,0.7s | | | | |
| BAND | **Balkesir-Ban** | **153.14 321** | ⇑P | **PKiKP** | **07 46 05.8 +1.7** |
| UBR | **Ueberruh** | **153.19 354** | *e*PKPbc | **PKiKP** | **07 46 04.7 +0.6** |
| | baz=8.9,slow=2.4 | | | | |
| RETA | **Reutte** | **153.31 353** | *i* PKiKP | **PKiKP** | **07 46 05.9 +1.5** |
| | comp=Z,4.6nm,0.8s | | | | |
| KBA | **Koelnbreinsper** | **153.34 349** | *i* PKiKP | **PKiKP** | **07 46 05.8 +1.3** |
| | comp=Z,8.4nm,0.8s | | | | |
| WATA | **Walderalm** | **153.36 352** | *i* pPKP | **PKiKP** | **07 46 06.1 +1.5** |
| | comp=Z,5.3nm,0.6s | | | | |
| SOKA | **Soboth** | **153.38 346** | *i* PKiKP | **PKiKP** | **07 46 06.0 +1.5** |
| | comp=Z,8.6nm,0.9s | | | | |
| MOTA | **Moosalm** | **153.41 352** | *i* PKiKP | **PKiKP** | **07 46 05.9 +1.2** |
| | comp=Z,13nm,0.9s | | | | |
| WTTA | **Wattenberg** | **153.43 352** | *i* pPKP | **PKiKP** | **07 46 06.4 +1.6** |
| | comp=Z,15nm,0.7s,SNR=5.5 | | | | |
| SQTA | **Sankt Quirin** | **153.52 352** | *i* pPKP | **PKiKP** | **07 46 06.5 +1.6** |
| | comp=Z,9.7nm,0.9s | | | | |
| DAVA | **Damuels** | **153.60 354** | *i* pPKP | **PKiKP** | **07 46 07.8 +2.7** |
| | comp=Z,4.4nm,0.6s | | | | |
| OBKA | **Obir** | **153.65 347** | *i* pPKP | **PKiKP** | **07 46 08.0 +2.9** |
| | comp=Z,2.6nm,0.7s | | | | |
| MYKA | **Terra Mystica** | **153.72 348** | *i* PKiKP | **PKiKP** | **07 46 06.1 +0.9** |
| | comp=Z,3.1nm,0.5s | | | | |
| FETA | **Feichten** | **153.78 353** | *i* pPKP | **PKiKP** | **07 46 07.3 +1.9** |
| | comp=Z,10nm,0.9s,SNR=5.0 | | | | |
| ABTA | **Abfaltersbach** | **153.80 350** | *i* PKiKP | **PKiKP** | **07 46 06.5 +1.1** |
| | comp=Z,14nm,0.9s | | | | |
| ALN | **Alexandroupoli** | **153.95 324** | PKPdf | **PKPdf** | **07 45 56.2 -1.5** |
| ALN | | | PKPab | **PKPab** | **07 46 17.5 -1.4** |
| ALN | **Alexandroupoli** | **153.95 324** | PKIKP | **PKPdf** | **07 45 56.2 -1.5** |
| ALN | | | | | 07 46 17.5 |
| FUORN | **Ofenpass-Fuorn** | **154.22 353** | IAMs_20 | IAMs_20 | 09 01 25.6 |
| | comp=Z,434nm,19.0s | | | | |
| EZN | **Ezine** | **154.52 322** | PKPdf | **PKPdf** | **07 45 59.4 +0.9** |
| SENIN | **Lac Senin/Sane** | **154.68 358** | | **PKPbc** | **07 46 04.3 -3.0** |
| PGAV | **Gavieira, Arco** | **155.81 27** | *e*LR | LR | 08 45 03.0 |
| | comp=Z,494nm,18.0s | | | | |
| PUK | **Puka** | **156.04 334** | IAMs_20 | IAMs_20 | 09 04 02.6 |
| | comp=Z,456nm,20.0s | | | | |
| PMOZ | **Porto Moniz, M** | **156.13 56** | *e*LR | LR | 08 44 16.3 |
| | comp=Z,329nm,18.0s | | | | |
| POLO | **Lamas de Olo** | **156.50 27** | *e*SS | SS | 08 10 07.6 +10 |
| MVO | **Moncorvo** | **157.00 26** | *e*PKPdf | **PKPdf** | **07 46 05.9 +4.0** |
| MVO | **Moncorvo** | **157.00 26** | *e*SS | SS | 08 10 10.3 +7.7 |
| MVO | **Moncorvo** | **157.00 26** | *e*LR | LR | 08 45 55.1 |
| | comp=Z,459nm,20.0s | | | | |
| PVIS | **Viseu** | **157.00 28** | *e*PKPdf | **PKPdf** | **07 46 04.9 +3.0** |
| COI | **Coimbra** | **157.17 30** | *e*SS | SS | 08 10 19.9 +15 |
| MTE | **Manteigas** | **157.41 28** | *e*LQ | LQ | 07 57 28.6 |
| MTE | **Manteigas** | **157.41 28** | *e*SS | SS | 08 10 12.5 +5.4 |
| MTE | **Manteigas** | **157.41 28** | *e*LQ | LQ | 08 32 33.3 |
| MTE | **Manteigas** | **157.41 28** | *e*LR | LR | 08 46 32.3 |
| | comp=Z,482nm,20.0s | | | | |
| PCBR | **Castelo Branco** | **157.89 29** | *e*PKPdf | **PKPdf** | **07 46 05.5 +2.5** |
| CEST | **Esterri de Car** | **158.07 10** | IAMs_20 | IAMs_20 | 08 58 31.8 |
| | comp=Z,596nm,18.0s | | | | |
| PMTG | **Montargil** | **158.16 31** | *e*SS | SS | 08 10 25.8 +11 |
| PMRV | **Marv??o** | **158.27 29** | *e*SS | SS | 08 10 26.5 +10 |
| PMRV | **Marv??o** | **158.27 29** | *e*LR | LR | 08 45 27.7 |
| | comp=Z,401nm,18.0s | | | | |
| PESTR | **Estremoz** | **158.62 31** | *e*PKPdf | **PKPdf** | **07 46 05.5 +1.6** |
| PESTR | **Estremoz** | **158.62 31** | *e*SS | SS | 08 10 27.4 +7.3 |
| EVO | **Evora** | **158.68 32** | *e*PKPdf | **PKPdf** | **07 46 06.3 +2.3** |
| PNCL | **Nicolau / Gran** | **158.74 33** | *e*SS | SS | 08 10 38.4 +17 |
| CUC | **Castrocucco** | **159.35 339** | IAMs_20 | IAMs_20 | 09 07 58.0 |
| | comp=Z,426nm,19.0s | | | | |
| PBAR | **Barrancos** | **159.43 31** | *e*PKPdf | **PKPdf** | **07 46 07.5 +2.6** |
| PBAR | **Barrancos** | **159.43 31** | *e*SS | SS | 08 10 41.6 +13 |
| ESDC | **Sonseca Array** | **159.47 23** | PKP | **PKPdf** | **07 46 05.6 +0.7** |
| | comp=Z,0.8nm,0.9s,baz=328,slow=4.7,SNR=4.2 | | | | |
| ESDC | | | PKPab | **pPKPab** | **07 46 43.9 -1.6** |
| | comp=Z,2.8nm,0.9s,baz=323,slow=3.6,SNR=6.2 | | | | |
| PVAQ | **Vaqueiros** | **159.70 33** | *e*PKPdf | **PKPdf** | **07 46 08.5 +3.3** |
| PVAQ | **Vaqueiros** | **159.70 33** | *e*SS | SS | 08 10 46.8 +15 |
| PVAQ | **Vaqueiros** | **159.70 33** | *e*LR | LR | 08 45 05.7 |
| | comp=Z,438nm,18.0s | | | | |
| PBDV | **Barranco-do-Ve** | **159.71 34** | *e*PKPdf | **PKPdf** | **07 46 09.3 +4.1** |
| PBDV | **Barranco-do-Ve** | **159.71 34** | *e*SS | SS | 08 10 44.4 +13 |
| DBIC | **Dimbokro** | **162.20 142** | PKPab | **PKPab** | **07 46 57.3 +2.1** |
| | comp=Z,9.6nm,0.9s,baz=187,slow=11,SNR=4.7 | | | | |
| TORD | **Torodi Ar. Bea** | **171.10 151** | PKP | **PKPdf** | **07 46 15.8 +0.5** |
| | comp=Z,1.2nm,0.8s,baz=333,slow=3.6,SNR=5.3 | | | | |
| TORD | | | PKPab | **PKPab** | **07 47 35.4 +1.1** |
| | comp=Z,3.0nm,0.7s,baz=242,slow=3.1,SNR=2.5 | | | | |
| TORD | | | PP | **PP** | **07 51 21.9 -2.0** |
| | comp=Z,0.8nm,0.9s,baz=148,slow=8.5,SNR=3.0 | | | | |

*IDC **26** 07:29:42.5±1.4, 37.90N×102.08E, h0km, mb3.8/7, mbtmp3.8/11, ML3.7/4, MS3.3/3, Error ellipse: s-maj=26.9km s-min=23.3km az=63.0*
**ISC 26 07:29:46.9±1.1, 37.9N±0.1×102.1E±0.1, h35km, n11, σ0s53/11, mb3.8/6, Gansu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SONM | **Songino Array** | **10.46** | **16** | Pn | | **Pn** | | **07 32 14.2** | **-0.2** |
| | 0.8nm,0.3s,baz=200,slow=14,SNR=23 | | | | | | | | |
| SONM | | | | Lg | | Lg | | 07 35 13.6 | |
| | 0.6nm,0.3s,baz=207,slow=29,SNR=3.1 | | | | | | | | |
| SONM | | | | LR | | LR | | 07 36 43.6 | |
| | comp=Z,274nm,19.5s,baz=195,slow=40 6.3nm,0.7s | | | | | | | | |
| MKAR | **Makanchi Array** | **17.15** | **308** | P | | **Pn** | | **07 33 43.5** | **-0.1** |
| | 0.1nm,0.3s,baz=119,slow=13,SNR=7.0 | | | | | | | | |
| MKAR | | | | LR | | LR | | 07 41 27.0 | |
| | comp=Z,109nm,19.3s,baz=127,slow=41 0.8nm,0.7s | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **19.52** | **189** | P | | **Pn** | | **07 34 12.8** | **+0.1** |
| | 0.5nm,0.3s,baz=1.4,slow=10,SNR=10 | | | | | | | | |
| CMAR | | | | LR | | LR | | 07 42 22.6 | |
| | comp=Z,60nm,20.2s,baz=60,slow=39 1.2nm,0.3s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ZALV | **Zalesovo Beam** | **20.02 329** | P | **P** | **07 34 17.1 +0.7** |
| | 0.2nm,0.3s,baz=150,slow=12,SNR=3.2 0.9nm,0.5s | | | | |
| KSRS | **Korea Array** | **20.41 83** | P | **P** | **07 34 21.1 +0.3** |
| | 2.9nm,0.7s,baz=276,slow=9.2,SNR=11 2.9nm,0.7s | | | | |
| KURBB | **Kurchatov Arra** | **21.08 315** | P | **P** | **07 34 28.6 +0.6** |
| | 3.4nm,0.8s,baz=124,slow=9.2,SNR=33 3.4nm,0.8s | | | | |
| BVAR | **Borovoye Array** | **26.67 315** | P | **P** | **07 35 21.8 -0.6** |
| | 0.6nm,0.5s,baz=72,slow=9.3,SNR=2.5 0.6nm,0.5s | | | | |
| ARU | **Arti** | **34.24 317** | P | **P** | **07 36 29.1 0.0** |
| | 1.4nm,0.2s,baz=90,slow=20,SNR=1.8 1.4nm,0.2s | | | | |
| FINES | **FINESS Array B** | **51.13 323** | P | **P** | **07 38 45.9 0.0** |
| | 0.8nm,0.6s,baz=99,slow=9.8,SNR=5.8 0.8nm,0.6s | | | | |
| BRTR | **Keskin Array B** | **52.21 295** | P | **P** | **07 38 54.5 0.0** |
| | 0.5nm,0.7s,baz=57,slow=10,SNR=2.2 0.5nm,0.7s | | | | |
| NOA | **NORSAR Array B** | **58.16 325** | P | **P** | **07 39 35.9 -1.0** |
| | 0.7nm,0.8s,baz=71,slow=7.0,SNR=3.1 0.7nm,0.8s | | | | |

*ISN **26** 07:31:58.3±0.4, 34.62N×46.25E, h7km±5km, ML3.1*
*TEH **26** 07:31:59.0, 34.62N×46.29E, h6km±52km, ML2.8*
**ISC 26 07:32:00.1±1.0, 34.64N±0.04×46.30E±0.05, h9km±8km, n12, σ0s70/17, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| IDHR | **Dehrash** | **0.10** | **50** | P | | Pg | **Pg** | **07 32 02.6** | **-0.2** |
| IDHR | | | | | | Sg | **Sg** | **07 32 05.7** | **+0.9** |
| IGHG | **Ghaleghazi** | **0.38** | **144** | | | Pg | **Pg** | **07 32 07.2** | **-0.5** |
| GLG1 | **Gilan-e-Gharb** | **0.61** | **212** | | | Pg | **Pg** | **07 32 11.3** | **-0.7** |
| ILIN | **Lien** | **0.62** | **63** | | | Pg | **Pb** | **07 32 12.1** | **-1.2** |
| KCHF | **Cheshme Sefid,** | **0.71** | **120** | | | Pg | **Pb** | **07 32 14.1** | **-0.8** |
| ILBA | **Ilam Banvizeh** | **1.01** | **184** | | | Pg | **Pb** | **07 32 19.6** | **-0.2** |
| SNQR | **Sonqor, Kerman** | **1.12** | **78** | | | Pg | **Pn** | **07 32 22.3** | **+0.1** |
| IBZA | **Bozab** | **1.30** | **97** | | | Pg | **Pn** | **07 32 25.4** | **+0.6** |
| IBDR | **Badra** | **1.55** | **191** | *e*Pn | | **Pn** | | **07 32 27.7** | **-0.2** |
| IBDR | | | | *e*Sn | | **Sb** | | **07 32 49.6** | **+0.8** |
| IBDR | | | | AML | | AML | | 07 32 56.8 | |
| | comp=E,325nm,0.7s | | | | | | | | |
| IBDR | | | | AML | | AML | | 07 33 03.4 | |
| | comp=N,273nm,0.8s | | | | | | | | |
| IKRK | **Kirkuk** | **1.78** | **296** | *e*Pn | | **Pn** | | **07 32 31.0** | **0.0** |
| IKRK | | | | *e*Sn | | **Sn** | | **07 32 54.7** | **+0.9** |
| BHD | **Baghdad** | **2.10** | **230** | *e*Pn | | **Pn** | | **07 32 35.0** | **-0.4** |
| BHD | | | | *e*Sn | | **Sn** | | **07 33 02.0** | **+0.5** |
| RAFI | **Al-Rafai** | **2.91** | **183** | *e*Pn | | **Pn** | | **07 32 

**MKAR Makanchi Array 59.23 325** P P 07 59 21.4 +0.6
0.2nm,0.4s,baz=120,slow=8.8,SNR=2.5
0.2nm,0.4s
**KURBB Kurchatov Arra 63.40 327** P P 07 59 48.8 -0.1
0.4nm,0.3s,baz=120,slow=5.6,SNR=6.1
0.4nm,0.3s

*TEH **26** 07:52:20.5, 34˚.65N×46˚.28E, h8km, ML2.9*
*ISN **26** 07:52:20.2±0.4, 34˚.65N×46˚.29E, h8km±4km, ML2.7*
**ISC 26 07:52:20.7±1.3, 34˚.65N±0˚.04×46˚.26E±0˚.04, h2km±14km, n11, σ0s86/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.12** | **63** | Pg | **Pg** | **07 52 23.6** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.41** | **140** | Pg | **Pg** | **07 52 28.8** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.57** | **256** | Pg | **Pg** | **07 52 31.9** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **208** | Pg | **Pg** | **07 52 32.8** | **+0.5** |
| **ILIN** | **Lien** | **0.64** | **65** | Pg | **Pg** | **07 52 32.9** | **-0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.75** | **119** | Pg | **Pg** | **07 52 34.4** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **182** | Pg | **Pb** | **07 52 40.4** | **-0.7** |
| **IBDR** | **Badra** | **1.55** | **190** | *e*Pn | **Pg** | **07 52 50.0** | **-0.5** |
| IBDR | | | | *e*Sn | **Sg** | **07 53 11.7** | **+1.0** |
| IBDR | | | | AML | AML | 07 53 19.6 | |
| | comp=N,97nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 07 53 25.4 | |
| | comp=E,120nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.74** | **296** | *e*Pn | **Pb** | **07 52 53.0** | **-0.5** |
| IKRK | | | | *e*Sn | **Sg** | **07 53 16.8** | **0.0** |
| **BHD** | **Baghdad** | **2.08** | **229** | *e*Pn | **Pb** | **07 52 57.4** | **-1.8** |
| BHD | | | | *e*Sn | **Sb** | **07 53 24.7** | **-0.6** |
| **RAFI** | **Al-Rafai** | **2.92** | **182** | *e*Pn | **Pn** | **07 53 09.0** | **+0.9** |
| RAFI | | | | *e*Sn | **Sn** | **07 53 44.6** | **+0.9** |

*IDC **26** 07:56:47.4±1.3, 44˚.15N×149˚.86E, h0km, mb3.6/5,*
*mbtmp3.6/6, ML2.6/1, MS4.2/1, Error ellipse: s-maj=37.9km*
*s-min=29.9km az=10.0*
*SKHL **26** 07:56:50.5±0.3, 43˚.80N×149˚.70E, h34km±4km, mb4.1/4*
**ISC 26 07:56:52.9±1.2, 44˚.0N±0˚.1×149˚.57E±0˚.1, h35km, n10, σ1s50/12, mb3.5/5, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.74** | **316** | *e*P | **Pn** | **07 57 20.0** | **-0.6** |
| KUR | | | | AMB | AMB | 07 57 21.2 | |
| | 90nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **07 57 42.4** | **+0.9** |
| KUR | | | | A | A | 07 57 46.7 | |
| | 190nm,0.5s | | | | | | |
| KUR | | | | A | A | 07 57 46.7 | |
| | 240nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.98** | **268** | *e*P | **Pn** | **07 57 22.8** | **-1.1** |
| SHO | | | | AMB | AMB | 07 57 24.7 | |
| | 20nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **07 57 46.9** | **-0.5** |
| SHO | | | | A | A | 07 57 50.4 | |
| | 100nm,0.3s | | | | | | |
| SHO | | | | A | A | 07 57 50.4 | |
| | 100nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.67** | **272** | *e*P | **Pn** | **07 57 31.9** | **-1.5** |
| YUK | | | | AMB | AMB | 07 57 32.8 | |
| | 60nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **07 58 02.9** | **-1.6** |
| YUK | | | | A | A | 07 58 08.9 | |
| | 170nm,0.7s | | | | | | |
| YUK | | | | A | A | 07 58 08.9 | |
| | 180nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **5.03** | **274** | Pn | **Pn** | **07 58 08.8** | **+3.1** |
| | 0.2nm,0.3s,baz=322,slow=19,SNR=2.4 | | | | | | |
| | 12nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **29.99** | **293** | P | **P** | **08 02 58.5** | **+0.4** |
| | 0.3nm,0.3s,baz=86,slow=7.4,SNR=1.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.02** | **298** | P | **P** | **08 05 13.5** | **+0.8** |
| | 0.7nm,0.7s,baz=75,slow=6.6,SNR=6.7 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **52.82** | **297** | LR | LR | 08 30 32.7 | |
| | comp=Z,229nm,21.5s,baz=104,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.13** | **196** | P | **P** | **08 07 31.0** | **+0.9** |
| | 0.2nm,0.7s,baz=13,slow=6.9,SNR=1.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **65.45** | **334** | P | **P** | **08 07 30.6** | **-1.0** |
| | 1.3nm,0.6s,baz=45,slow=10.0,SNR=6.2 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.06** | **58** | P | **P** | **08 09 03.7** | **-0.8** |
| | 0.3nm,0.6s,baz=316,slow=4.2,SNR=6.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*DJA **26** 07:57:47.7±0.7, 0˚.N±4˚×12˚.2E±˚, h155km±6km, M3.4/7,*
*MLv3.4/7*
*IDC **26** 07:57:47.4±8.8, 0˚.37N×122˚.43E, h212km±87km, mb2.8/4,*
*mbtmp3.3/4, Error ellipse: s-maj=211.8km s-min=19.2km*
*az=61.0*
**ISC 26 07:57:46.7±1.3, 0˚.17N±0˚.09×122˚.06E±0˚.08, h150km, n10, σ3s39/10, mb3.2/4, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **0.33** | **338** | P | **Pn** | **07 58 09.2** | **+1.8** |
| **GTOI** | **Gorontalo** | **1.05** | **64** | P | **Pn** | **07 58 12.8** | **+0.9** |
| GTOI | | | | S | **Sn** | **07 58 33.5** | **+2.3** |
| **LUWI** | **Luwuk** | **1.40** | **150** | P | **Pn** | **07 58 17.5** | **+2.2** |
| LUWI | | | | S | **Sn** | **07 58 40.7** | **+3.6** |
| **KMSI** | **Cibinong** | **1.96** | **78** | P | **Pn** | **07 58 22.7** | **+1.3** |
| **MPSI** | **Mapaga** | **2.17** | **274** | P | **Pn** | **07 58 25.4** | **+1.5** |
| **BNSI** | **Bone** | **4.95** | **203** | P | **Pn** | **07 59 00.8** | **+1.3** |
| **WRA** | **Warramunga Arr** | **23.33** | **150** | P | **P** | **08 02 36.5** | **-5.2** |
| | 0.5nm,0.8s,baz=326,slow=11,SNR=6.4 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **26.34** | **155** | P | **P** | **08 03 04.4** | **-4.5** |
| | 0.1nm,0.5s,baz=341,slow=14,SNR=5.8 | | | | | | |
| ASAR | | | | PcP | PcP | 08 06 23.9 | -7.2 |
| | 0.3nm,0.3s,baz=346,slow=2.0,SNR=8.0 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.98** | **329** | P | P | 08 07 17.9 | -5.7 |
| | 0.6nm,0.4s,baz=122,slow=8.9,SNR=8.9 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.35** | **330** | P | P | 08 07 47.5 | -5.7 |
| | 0.2nm,0.4s,baz=118,slow=5.9,SNR=5.0 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*TEH **26** 07:59:17.8, 34˚.61N×46˚.22E, h9km±15km, ML3.5*
*ISN **26** 07:59:17.0±0.6, 34˚.61N×46˚.23E, h5km±5km, ML3.5*
**ISC 26 07:59:18.4±1.2, 34˚.61N±0˚.03×46˚.21E±0˚.03, h4km±11km, n29, σ0s99/35, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.17** | **57** | Pg | **Pg** | **07 59 21.8** | **-0.1** |
| IDHR | | | | Sg | **Sg** | **07 59 25.3** | **+1.2** |
| **IGHG** | **Ghaleghazi** | **0.40** | **133** | Pg | **Pg** | **07 59 26.3** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.53** | **259** | Pg | **Pg** | **07 59 28.1** | **-0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **207** | Pg | **Pg** | **07 59 28.9** | **-0.2** |
| GLG1 | | | | Sg | **Sg** | **07 59 37.2** | **+0.9** |
| **ILIN** | **Lien** | **0.69** | **63** | Pg | **Pg** | **07 59 31.0** | **-0.7** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **116** | Pg | **Pg** | **07 59 32.4** | **-0.6** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **180** | Pg | **Pg** | **07 59 36.8** | **-0.4** |
| **SNQR** | **Sonqor, Kerman** | **1.19** | **78** | Pg | **Pb** | **07 59 40.8** | **-1.0** |
| **IBZA** | **Bozab** | **1.37** | **95** | Pg | **Pn** | **07 59 43.5** | **-1.1** |
| **IBDR** | **Badra** | **1.51** | **189** | *e*Pn | **Pn** | **07 59 46.4** | **+0.1** |
| IBDR | | | | *e*Sn | **Sg** | **08 00 08.0** | **+1.0** |
| IBDR | | | | AML | AML | 08 00 17.5 | |
| | comp=E,1μm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 08 00 22.2 | |
| | comp=N,645nm,0.6s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.65** | **339** | Pg | **Pn** | **07 59 48.1** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.73** | **298** | *e*Pn | **Pn** | **07 59 49.4** | **+0.1** |
| IKRK | | | | *e*Sn | **Sb** | **08 00 13.6** | **+0.7** |
| **IKFM** | **Kafar-mosalman** | **1.73** | **128** | Pg | **Pb** | **07 59 50.4** | **-0.5** |
| **IDOB** | **Doab** | **1.82** | **116** | Pn | **Pb** | **07 59 51.7** | **-0.8** |
| **HSAM** | **Samen** | **2.01** | **101** | Pn | **Pn** | **07 59 54.2** | **+0.7** |
| **BHD** | **Baghdad** | **2.03** | **229** | *e*Pn | **Pn** | **07 59 54.0** | **+0.6** |
| BHD | | | | *e*Sn | **Sb** | **08 00 20.2** | **-1.2** |
| BHD | | | | AML | AML | 08 00 34.8 | |
| | comp=E,528nm,0.6s | | | | | | |
| **MAHB** | **Mahabad** | **2.19** | **349** | Pn | **Pb** | **07 59 57.4** | **-1.4** |
| **HAGD** | **Aghdareh** | **2.42** | **84** | Pn | **Pb** | **08 00 00.6** | **-2.1** |
| **IHSH** | **Hashtrud** | **2.82** | **17** | Pn | **Pn** | **08 00 04.8** | **+0.2** |
| **RAFI** | **Al-Rafai** | **2.88** | **182** | *e*Pn | **Pn** | **08 00 05.5** | **+0.4** |
| RAFI | | | | *e*Sn | **Sn** | **08 00 41.0** | **+0.8** |
| RAFI | | | | AML | AML | 08 01 15.6 | |
| | comp=E,275nm,0.3s | | | | | | |
| RAFI | | | | AML | AML | 08 01 16.1 | |
| | comp=N,184nm,0.3s | | | | | | |
| **IAZR** | **Azarshahr** | **3.07** | **357** | Pn | **Pn** | **08 00 09.1** | **+1.1** |
| **ISHB** | **Shabestar** | **3.70** | **353** | Pn | **Pn** | **08 00 17.3** | **+0.6** |
| **IHRS** | **Heris** | **3.76** | **10** | Pn | **Pn** | **08 00 19.1** | **+1.6** |
| **IPIR** | **Pirpir** | **4.35** | **115** | Pn | **Pn** | **08 00 25.5** | **-0.1** |
| **QAMS** | **Qamsar** | **4.38** | **100** | Pn | **Pn** | **08 00 28.0** | **+2.0** |
| **GRMI** | **Germi** | **4.40** | **17** | Pn | **Pn** | **08 00 27.5** | **+1.3** |
| **JHBN** | **Jahan bin** | **4.41** | **121** | Pn | **Pn** | **08 00 27.2** | **+0.7** |
| **IZEF** | **Zefreh** | **5.37** | **107** | Pn | **Pn** | **08 00 41.3** | **+1.7** |
| **IRAM** | **Ramesheh** | **5.87** | **117** | Pn | **Pn** | **08 00 46.5** | **-0.1** |

*IDC **26** 07:59:33.5±0.5, 44˚.24N×149˚.65E, h0km, mb4.4/23,*
*mbtmp4.4/28, ML3.2/5, MS4.4/6, Error ellipse:*
*s-maj=15.1km s-min=13.9km az=144.0*
*BJI **26** 07:59:34.5±0.0, 44˚.31N×149˚.79E, h24km, mb4.8/51,*
*mB5.3/13, Ms4.4/20, Ms7 4.3/22*
*NEIC **26** 07:59:35.5±1.4, 44˚.18N±0˚.09×149˚.6E±0˚.1, h10km±1km,*
*mb4.6/117, Error ellipse: s-maj=17.7km s-min=11.6km*
*az=132.0*
*JMA **26** 07:59:36.3±1.1, 44˚N±4˚×15˚0E±˚, h30km, MV4.5/15, SE*
*OFF ETOROFU*
*SKHL **26** 07:59:36.6±0.1, 44˚.20N×149˚.80E, h36km±4km, mb4.9/3*
*MOS **26** 07:59:37.2±1.0, 44˚.22N×149˚.60E, h35km, mb4.9/43, Error*
*ellipse: s-maj=9.1km s-min=5.3km az=134.5*
**ISC 26 07:59:36.1±0.6, 44˚.11N±0˚.05×149˚.71E±0˚.04, h19km±2km, h19km:pP-P, n588, σ1s13/570, mb4.7/143, MS4.4/18, 25C-4D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.73** | **311** | *i* P | **Pn** | **08 00 04.5** | **-0.6** |
| KUR | | | | AMB | AMB | 08 00 05.5 | |
| | 1μm,0.6s | | | | | | |
| KUR | | | | *i* S | **Sn** | **08 00 25.5** | **-1.1** |
| KUR | | | | A | A | 08 00 33.3 | |
| | 3μm,0.6s | | | | | | |
| KUR | | | | A | A | 08 00 33.3 | |
| | 2μm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.73** | **311** | *c i* PN | **Pn** | **08 00 04.7** | **-0.4** |
| KUR | | | | *i* S | **Sb** | **08 00 29.2** | **+0.7** |
| KUR | | | | pmax | pmax | | |
| | comp=N,333nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,997nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,95nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **264** | *e*P | **Pn** | **08 00 09.5** | **-0.6** |
| SHO | | | | AMB | AMB | 08 00 11.0 | |
| | comp=E,100nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **08 00 34.1** | **-1.5** |
| SHO | | | | A | A | 08 00 45.1 | |
| | comp=E,450nm,0.4s | | | | | | |
| SHO | | | | A | A | 08 00 45.1 | |
| | comp=E,110nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **264** | ⇑ *i* PN | **Pn** | **08 00 09.5** | **-0.6** |
| SHO | | | | *e*S | **Sn** | **08 00 33.5** | **-2.1** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,93nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,33nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,449nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,111nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.78** | **270** | *e*P | **Pn** | **08 00 19.8** | **+0.3** |
| YUK | | | | AMB | AMB | 08 00 22.3 | |
| | comp=E,230nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **08 00 52.1** | **-0.3** |
| YUK | | | | A | A | 08 00 54.2 | |
| | comp=E,480nm,0.6s | | | | | | |
| YUK | | | | A | A | 08 00 54.2 | |
| | comp=E,620nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.78** | **270** | PN | **Pn** | **08 00 19.8** | **+0.3** |
| YUK | | | | S | **Sn** | **08 00 52.1** | **-0.3** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,228nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,483nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,624nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.97** | **257** | P | **Pn** | **08 00 21.4** | **-0.8** |
| NEM2 | | | | *e*S | **Sn** | **08 00 55.3** | **-2.0** |
| **JRA** | **Rausu** | **3.32** | **269** | P | **Pn** | **08 00 27.8** | **+0.9** |
| **JNK** | **Nakash** | **3.65** | **263** | P | **Pn** | **08 00 31.6** | **+0.1** |
| **JAK** | **Akkeshi** | **3.81** | **255** | P | **Pn** | **08 00 33.5** | **-0.2** |
| **JTKR** | **Abashiri--Toko** | **4.19** | **270** | *e*P | **Pn** | **08 00 40.1** | **+1.3** |
| **JAR** | **Ashoro** | **4.39** | **261** | P | **Pn** | **08 00 42.5** | **+0.9** |
| **JOB** | **Onbets** | **4.44** | **256** | P | **Pn** | **08 00 43.1** | **+0.8** |
| **JCH** | **Churui** | **4.87** | **254** | P | **Pn** | **08 00 49.1** | **+0.9** |
| **JKK2** | **Kamakawa 2** | **5.03** | **270** | P | **Pn** | **08 00 52.6** | **+2.1** |
| **JKA** | **Kamikawa-asahi** | **5.12** | **273** | | **Pn** | **08 00 51.8** | **+0.1** |
| **ASAJ** | **Asahikawa** | **5.12** | **273** | Pn | **Pn** | **08 00 53.4** | **+1.7** |
| | comp=E,3.5nm,0.3s,baz=63,slow=17,SNR=19 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.12** | **273** | PN | **Pn** | **08 00 51.8** | **+0.1** |
| **ERM** | **Erimo** | **5.24** | **249** | | **Pn** | **08 00 53.8** | **+0.5** |
| **ERM** | **Erimo** | **5.24** | **249** | *ce*PN | **Pn** | **08 00 55.1** | **+1.8** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,57nm,0.8s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.41** | **253** | *e*P | **Pn** | **08 00 56.0** | **+0.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | Pn | **Pn** | **08 00 58.0** | **-1.0** |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | *e*P | **Pn** | **08 01 00.6** | **+1.6** |
| YSS | | | | AMB | AMB | 08 01 03.5 | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| YSS | | | | *e*S | **Sn** | **08 02 02.5** | **-0.8** |
| YSS | | | | A | A | 08 02 10.3 | |
| | comp=Z,20nm,0.6s | | | | | | |
| YSS | | | | A | A | 08 02 10.3 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | *e*PN | **Pn** | **08 00 58.4** | **-0.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **JANG** | **Nango** | **7.14** | **241** | *e*P | **Pn** | **08 01 18.3** | **-1.1** |
| JANG | | | | S | **Sn** | **08 02 32.7** | **-7.2** |
| **JTH** | **Tanohata** | **7.18** | **237** | P | **Pn** | **08 01 17.9** | **-2.0** |
| JTH | | | | *e*S | **Sn** | **08 02 32.8** | **-8.1** |
| **JTM** | **Tenmabayashi** | **7.20** | **246** | Pn | **Pn** | **08 01 20.2** | **-0.1** |
| **TYV** | **Tymovskoe** | **8.27** | **327** | *e*P | **Pn** | **08 01 35.2** | **+0.3** |
| TYV | | | | AMB | AMB | 08 01 36.9 | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| TYV | | | | *e*S | **Sn** | **08 03 05.2** | **-2.5** |
| TYV | | | | A | A | 08 03 11.7 | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **TYV** | **Tymovskoe** | **8.27** | **327** | *e*PN | Pn | 08 01 42.9 | +8.0 |
| TYV | | | | *e*S | Sn | 08 03 17.9 | +10 |
| TYV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,3.3s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=N,5.0nm,0.9s | | | | | | |
| **JMM** | **Marumori** | **9.18** | **230** | Pn | **Pn** | **08 01 46.1** | **-1.4** |
| **PEA0B** | **Petropavlovsk-** | **10.43** | **28** | Pn | **Pn** | **08 02 03.6** | **-0.9** |
| **PEA0B** | **Petropavlovsk-** | **10.43** | **28** | PN | **Pn** | **08 02 03.6** | **-0.9** |
| **PETK** | **Petropavlovsk-** | **10.43** | **28** | Pn | **Pn** | **08 02 02.9** | **-1.6** |
| **PETK** | **Petropavlovsk-** | **10.43** | **28** | Pn | **Pn** | **08 02 02.5** | **-2.0** |
| | comp=N,0.2nm,0.3s,baz=193,slow=9.9,SNR=4.1 | | | | | | |
| | comp=N,2.3nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **10.43** | **28** | PN | **Pn** | **08 02 02.9** | **-1.6** |
| **OKH** | **Okha** | **10.45** | **337** | *e*P | **Pn** | **08 02 05.6** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **11.58** | **233** | Pn | **Pn** | **08 02 19.6** | **-0.6** |
| | baz=24,slow=12,SNR=6.1 | | | | | | |
| | comp=N,1.0nm,0.7s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **11.58** | **233** | Pn | **Pn** | **08 02 20.7** | **+0.4** |
| **MAJO** | **Matsushiro** | **11.58** | **233** | Pn | **Pn** | **08 02 19.6** | **-0.7** |
| **MAJO** | **Matsushiro** | **11.58** | **233** | PN | **Pn** | **08 02 19.6** | **-0.7** |
| **JGF** | **Kuroka** | **12.73** | **232** | Pn | **Pn** | **08 02 35.6** | **-0.4** |
| **USA0B** | **Ussuriysk Arra** | **12.73** | **277** | Pn | **Pn** | **08 02 35.5** | **-0.5** |
| **USA0B** | **Ussuriysk Arra** | **12.73** | **277** | *i* PN | **Pn** | **08 02 34.9** | **-1.1** |
| **USRK** | **Ussuriysk Ar.** | **12.73** | **277** | Pn | **Pn** | **08 02 36.1** | **+0.1** |
| | comp=N,1.3nm,0.3s,baz=80,slow=13,SNR=23 | | | | | | |
| | comp=N,7.9nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **13.35** | **299** | Pn | **Pn** | **08 02 48.5** | **+4.1** |
| | comp=N,0.3nm,0.3s,baz=118,slow=12,SNR=9.5 | | | | | | |
| **KLR** | **Kul'dur** | **13.35** | **299** | *e*P | **Pn** | **08 02 45.6** | **+1.3** |
| **KLR** | **Kul'dur** | **13.35** | **299** | *e*PN | **Pn** | **08 02 47.0** | **+2.7** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **14.40** | **279** | P | **Pn** | **08 03 00.0** | **+1.2** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| **MDJ** | **Mudanjiang** | **14.40** | **279** | Pn | **Pn** | **08 02 58.4** | **-0.4** |
| **BNX** | **BinXian** | **15.88** | **284** | ⇑P | **Pn** | **08 03 17.0** | **-1.4** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **HEH** | **HeiHe** | **16.33** | **300** | *e*P | **Pn** | **08 03 24.5** | **+0.4** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **CN2** | **Changchun** | **17.46** | **277** | *e*P | **P** | **08 03 39.0** | **-0.5** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| **ZEA** | **Zeya** | **17.56** | **311** | *e*P | **Pn** | **08 03 39.1** | **-0.4** |
| ZEA | | | | AMB | AMB | 08 03 41.8 | |
| | comp=Z,30nm,0.6s | | | | | | |
| **ZEA** | **Zeya** | **17.56** | **311** | *e*P | **P** | **08 03 40.2** | **-0.3** |
| ZEA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **17.77** | **256** | P | **Pn** | **08 03 41.9** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=60,slow=12,SNR=6.5 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **18.92** | **4** | P | **P** | **08 03 53.2** | **-2.2** |
| | comp=Z,0.4nm,0.3s,baz=178,slow=7.1,SNR=23 | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **18.92** | **4** | *ce*P | **P** | **08 03 54.3** | **-1.1** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | | |
| **HIA** | **Hailar** | **21.12** | **295** | P | **P** | **08 04 17.8** | **-1.7** |
| **HIA** | **Hailar** | **21.12** | **295** | P | **P** | **08 04 17.8** | **-1.7** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **YAK** | **Yakutsk** | **21.45** | **334** | P | **P** | **08 04 20.6** | **-2.2** |
| YAK | | | | IAmb | IAmb | 08 04 22.6 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **21.45** | **334** | P | **P** | **08 04 20.6** | **-2.2** |
| | comp=Z,23nm,0.6s,baz=286,slow=0.6,SNR=5.9 | | | | | | |
| | comp=Z,23nm,0.6s | | | | | | |
| **YAK** | **Yakutsk** | **21.45** | **334** | *e*P | **P** | **08 04 17.6** | **-5.2** |
| YAK | | | | *e*S | **S** | **08 08 16.8** | **-2.9** |
| YAK | | | | *e*SS | **SnSn** | **08 08 43.2** | **+0.3** |
| YAK | | | | *e* | | 08 15 43.7 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,32nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,5.0nm,1.5s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.7s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,65nm,2.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,17nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,19nm,1.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,122nm,6.3s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,105nm,7.3s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,410nm,33.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,238nm,27.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,221nm,26.0s | | | | | | |
| **BJI** | **Beijing** | **25.12** | **272** | P | **P** | **08 05 00.3** | **+0.7** |
| BJI | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **25.52** | **14** | *e*P | **P** | **08 05 02.2** | **-0.8** |
| **BILL** | **Bilibino** | **25.52** | **14** | ⇑ *e*P | **P** | **08 05 02.2** | **-0.8** |
| BILL | | | | *e* | | 08 05 40.6 | |
| BILL | | | | *e*S | S | 08 08 41.2 | -48 |
| BILL | | | | *e*SS | **SnSn** | **08 10 23.3** | **+0.7** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,16nm,1.7s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,597nm,19.0s | | | | | | |
| **TIA** | **Tai'an** | **26.00** | **264** | P | **P** | **08 05 09.5** | **+1.9** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,41nm,0.7s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,330nm,13.2s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,430nm,14.2s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,460nm,16.5s | | | | | | |
| **NJ2** | **Nanjing** | **26.95** | **254** | *e*P | **P** | **08 05 18.5** | **+2.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **HNS** | **HongShan** | **27.20** | **268** | ⇓P | **P** | **08 05 19.3** | **+0.8** |
| **HHC** | **Hu-ho-hao-te** | **28.16** | **277** | *e*P | **P** | **08 05 29.3** | **+2.2** |
| HHC | | | | pP | pwP | 08 05 37.0 | -2.3 |
| HHC | | | | sP | sP | 08 05 42.8 | +10 |
| HHC | | | | PP | **PnPn** | **08 06 19.5** | **+4.5** |
| HHC | | | | S | **S** | **08 10 11.3** | **-0.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,66nm,4.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,250nm,17.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,200nm,16.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,360nm,17.6s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.23** | **144** | T | T | 08 33 55.0 | |
| | baz=334,slow=75,SNR=7.7 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.24** | **144** | T | T | 08 33 57.2 | |
| | baz=334,slow=75,SNR=5.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.25** | **144** | T | T | 08 33 56.2 | |
| | baz=334,slow=75,SNR=8.0 | | | | | | |
| **NIKH** | **Nikolski High** | **28.48** | **57** | P | **P** | **08 05 30.2** | **+0.5** |
| | baz=269 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.24** | **145** | T | T | 08 35 12.3 | |
| | baz=335,slow=76,SNR=9.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.25** | **145** | T | T | 08 35 09.8 | |
| | baz=335,slow=76,SNR=6.2 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.26** | **145** | T | T | 08 35 13.4 | |
| | baz=335,slow=76,SNR=7.9 | | | | | | |
| **BTO** | **Baotou** | **29.34** | **277** | *e*P | **P** | **08 05 38.8** | **+1.2** |
| BTO | | | | pP | **sP** | **08 05 44.8** | **+1.9** |
| BTO | | | | sP | **pwP** | **08 05 47.5** | **-2.4** |
| BTO | | | | PP | **PnPn** | **08 06 33.5** | **+2.3** |
| BTO | | | | S | **S** | **08 10 32.8** | **+2.7** |
| BTO | | | | sS | **sS** | **08 10 40.5** | **+4.8** |
| BTO | | | | SS | **SnSn** | **08 11 56.8** | **+0.4** |
| BTO | | | | pmax | pmax | | |

LYN comp=Z,470nm,16.1s LR LR
comp=Z,1μm,19.2s
**M11K** **Mekoryuk** 30.79 42 P **P** 08 05 50.0 0.0
baz=258
**TNA** **Tin City** 31.55 32 P **P** 08 05 56.9 +0.2
baz=248
**ZAK** **Zakamensk** 31.71 298 *e*P **P** 08 05 57.7 -0.8
**ZAK** **Zakamensk** 31.71 298 *e*P **P** 08 05 57.7 -0.8
ZAK pmax pmax
comp=Z,5.0nm,1.0s
**F14K** **Arctic Creek** 32.14 33 P **P** 08 06 01.7 -0.2
baz=250
**M13K** **Dall Lake** 32.19 43 P **P** 08 06 01.5 -0.9
baz=261
**S12K** **Black Hills** 32.49 52 P **P** 08 06 04.5 -0.7
baz=270
**J14K** **Nanvaranak Lak** 32.54 39 P **P** 08 06 05.5 +0.1
baz=257
**L14K** **Kuka Creek** 32.66 41 P **P** 08 06 06.3 -0.2
baz=260
**F15K** **North Star Dit** 32.88 33 P **P** 08 06 08.4 +0.1
baz=252
**G15K** **Niukluk** 32.90 34 P **P** 08 06 08.0 -0.6
baz=254
**M14K** **Bethel** 32.92 42 P **P** 08 06 09.3 +0.5
baz=262
**XAN** **Xi'an** 32.93 266 *e*P **P** 08 06 10.0 +0.8
XAN pP pwP 08 06 19.5 -1.9
XAN pmax pmax
comp=Z,9.0nm,1.0s
**N14K** **Kuskokwak Cree** 32.95 44 P **P** 08 06 09.1 +0.1
baz=264
**O14K** **Tigyukauivet M** 33.09 45 P **P** 08 06 10.1 -0.3
baz=265
**L15K** **Ungalak Mounta** 33.28 41 P **P** 08 06 11.4 -0.6
baz=261
**K15K** **Wolf Creek Mou** 33.37 40 P **P** 08 06 11.8 -0.9
baz=260
**SDPT** **Sand Point** 33.40 52 P **P** 08 06 12.7 -0.3
baz=272
**C16K** **Lisburne Hills** 33.53 28 P **P** 08 06 14.2 +0.2
C16K IAmb IAmb 08 06 14.8
comp=Z,11nm,0.9s
**C16K** **Lisburne Hills** 33.53 28 P **P** 08 06 13.4 -0.7
baz=247
**M15K** **Kasigluk River** 33.53 43 P **P** 08 06 13.9 -0.2
baz=263
**H16K** **Elim** 33.55 35 P **P** 08 06 14.1 -0.2
baz=256
**G16K** **Koyuk River** 33.70 34 P **P** 08 06 15.4 -0.1
baz=255
**O15K** **Ungalikthiuk R** 33.83 46 P **P** 08 06 16.2 -0.6
baz=266
**S14K** **Fog Glacier** 33.90 51 P **P** 08 06 17.4 -0.2
baz=271
**CHNA** **Chernabura Isl** 33.93 53 P **P** 08 06 17.7 +0.1
baz=273
**J16K** **Anvik River** 33.97 38 P **P** 08 06 17.8 -0.1
baz=260
**I17K** **Unalakleet** 34.04 37 P **P** 08 06 18.2 -0.3
baz=259
**D17K** **Noatak River** 34.12 30 P **P** 08 06 18.8 -0.3
baz=251,SNR=6.0
**L16K** **Owhat River** 34.24 41 P **P** 08 06 19.9 -0.3
baz=263
**RDOG** **Red Dog Mine** 34.30 29 P **P** 08 06 21.7 +0.9
RDOG IAmb IAmb 08 06 22.0
comp=Z,6.7nm,0.8s
**RDOG** **Red Dog Mine** 34.30 29 P **P** 08 06 20.1 -0.6
baz=250,SNR=5.6
**C17K** **DeLong Mountai** 34.35 29 P **P** 08 06 20.9 -0.3
baz=249
**E17K** **Hotham Inlet** 34.38 31 P **P** 08 06 21.1 -0.4
baz=253,SNR=6.3
**M16K** **Timber Creek** 34.41 42 P **P** 08 06 21.4 -0.4
baz=265
**G17K** **Kiwalik Mounta** 34.41 34 P **P** 08 06 21.5 -0.2
baz=256
**F17K** **Baldwin Pennin** 34.42 32 P **P** 08 06 22.6 +0.9
F17K IAmb IAmb 08 06 23.9
comp=Z,15nm,0.9s
**F17K** **Baldwin Pennin** 34.42 32 P **P** 08 06 21.3 -0.4
baz=254
**N16K** **Nishlik Lake** 34.45 43 P **P** 08 06 21.9 -0.3
baz=266
**CHGN** **Chignik** 34.53 51 P **P** 08 06 23.2 +0.3
baz=272
**H17K** **Granite Mounta** 34.59 35 P **P** 08 06 23.1 -0.2
baz=258
**J17K** **VABM Dome** 34.66 38 P **P** 08 06 23.8 -0.1
baz=261
**O16K** **Kokwok River B** 34.73 45 P **P** 08 06 23.9 -0.7
baz=268
**P16K** **Nushagak River** 34.77 46 P **P** 08 06 23.8 -1.0
baz=268
**L17K** **Donlin** 34.84 40 P **P** 08 06 24.5 -1.0
baz=264
**K17K** **Iditarod** 34.91 39 P **P** 08 06 25.5 -0.6
baz=263
**E18K** **Tukpahlearik C** 34.94 31 P **P** 08 06 26.0 -0.2
baz=254
**R16K** **Pilot Point** 34.97 48 P **P** 08 06 26.7 +0.2
baz=271
**F18K** **Selawik** 35.08 33 P **P** 08 06 27.0 -0.5
baz=256
**C18K** **Utukok River** 35.10 29 P **P** 08 06 27.8 +0.1
C18K IAmb IAmb 08 06 28.7
comp=Z,12nm,0.8s
**C18K** **Utukok River** 35.10 29 P **P** 08 06 27.1 -0.6
baz=251,SNR=5.7
**B18K** **Kokolik River** 35.13 27 P **P** 08 06 28.5 +0.6
baz=250
**M17K** **Holitna River** 35.18 42 P **P** 08 06 28.6 +0.2
baz=266
**N17K** **Nushagak Hills** 35.24 43 P **P** 08 06 29.3 +0.4
baz=267
**O17K** **Koliganek Bris** 35.25 45 P **P** 08 06 29.1 +0.1
baz=268
**H18K** **Honhosa River** 35.28 35 P **P** 08 06 29.2 -0.1
baz=259
**G18K** **Tagagawik** 35.31 34 P **P** 08 06 29.4 -0.1
baz=258
**L18K** **Granite Mounta** 35.60 40 P **P** 08 06 31.9 -0.1
baz=265
**LZH** **Lanzhou** 35.61 273 ||*i* P **P** 08 06 34.3 +1.7
LZH sP pwP 08 06 46.3 +1.5
LZH pmax pmax
comp=Z,51nm,0.8s
LZH LR LR
comp=Z,110nm,14.6s
LZH LR LR
comp=Z,520nm,15.5s
LZH LR LR
comp=Z,560nm,16.8s
**R17L** **Mt. Peulik Vol** 35.62 48 P **P** 08 06 31.9 -0.4
baz=272
**A19K** **Wainwright** 35.66 26 P **P** 08 06 32.0 -0.4
baz=250
**C19K** **Lookout Ridge** 35.79 28 P **P** 08 06 34.5 +0.9
C19K IAmb IAmb 08 06 35.6
comp=Z,21nm,1.2s
**C19K** **Lookout Ridge** 35.79 28 P **P** 08 06 33.4 -0.3
baz=252,SNR=5.1
**F19K** **Shaleruckik Mo** 35.86 32 **P** 08 06 34.8 +0.7
F19K IAmb IAmb 08 06 41.0
comp=Z,4.7nm,0.8s
**F19K** **Shaleruckik Mo** 35.86 32 P **P** 08 06 33.6 -0.5
baz=258
**Q17K** **Contact Creek** 35.86 47 P **P** 08 06 33.9 -0.5
baz=271
**N18K** **Kilae Creek** 35.88 43 P **P** 08 06 34.2 -0.3
baz=268
**M18K** **Stony River** 35.96 42 P **P** 08 06 34.9 -0.1
baz=267
**G19K** **Purcell Mounta** 35.98 34 P **P** 08 06 34.7 -0.5
baz=259
**D19K** **Kuna River** 36.13 30 P **P** 08 06 35.7 -0.9
baz=255
**H19K** **Roundabout Mou** 36.13 35 **P** 08 06 37.0 +0.5
H19K IAmb IAmb 08 06 38.7
comp=Z,11nm,0.9s
**H19K** **Roundabout Mou** 36.13 35 P **P** 08 06 36.2 -0.3
baz=261,SNR=7.5
**P18K** **Big Mountain,** 36.19 45 P **P** 08 06 36.9 -0.3
baz=270
**E19K** **Redstone River** 36.20 31 P **P** 08 06 37.8 +0.7
E19K IAmb IAmb 08 06 42.9
comp=Z,18nm,1.2s
**E19K** **Redstone River** 36.20 31 P **P** 08 06 36.8 -0.4
baz=257
**O18K** **Koktuh Hills** 36.20 44 P **P** 08 06 36.6 -0.6
baz=270
**J19K** **Poorman** 36.27 37 P **P** 08 06 37.3 -0.4
baz=264
**L19K** **White Mountain** 36.46 41 P **P** 08 06 39.2 -0.2
baz=267
**R18K** **Karluk** 36.65 48 P **P** 08 06 40.5 -0.5
baz=273
**M19K** **Big River Lodg** 36.66 41 P **P** 08 06 40.6 -0.5
baz=268
**F20K** **Avaraart Lake** 36.69 32 P **P** 08 06 41.9 +0.6
**F20K** **Avaraart Lake** 36.69 32 P **P** 08 06 40.5 -0.8
baz=259
**D20K** **Etivluk River** 36.72 29 P **P** 08 06 41.5 -0.1
baz=256,SNR=17
**E20K** **Nigu River** 36.77 30 P **P** 08 06 41.3 -0.7
baz=257,SNR=16
**H20K** **Anotleneega Mo** 36.77 35 P **P** 08 06 41.8 -0.2
baz=262
**I20K** **Naaghedeneel** 36.85 36 P **P** 08 06 42.5 -0.2
baz=264
**SII** **Sitkinak Islan** 36.87 50 P **P** 08 06 42.3 -0.7
baz=275
**B20K** **Meade River** 36.87 27 P **P** 08 06 43.5 +0.7
**B20K** **Meade River** 36.87 27 P **P** 08 06 42.5 -0.2
baz=254
**K20K** **Telida** 36.90 39 P **P** 08 06 42.8 -0.3
baz=266
**L20K** **Farewell, AK** 36.93 40 P **P** 08 06 42.9 -0.5
baz=267
**J20K** **Nowinta River** 36.93 37 P **P** 08 06 42.3 -1.0
baz=265
**Q19K** **Cape Douglas,** 37.02 46 P **P** 08 06 43.8 -0.4
baz=272
**GTA** **Gaotai** 37.05 280 P **P** 08 06 46.0 +1.1
GTA pP pwP 08 06 57.3 +0.2
GTA pmax pmax
comp=Z,13nm,1.0s
GTA LR LR
comp=Z,190nm,17.1s
GTA LR LR
comp=Z,350nm,17.1s
GTA LR LR
comp=Z,400nm,17.1s
**P19K** **Oil Pt** 37.20 45 P **P** 08 06 45.6 -0.2
baz=272
**M20K** **Styx River** 37.26 41 P **P** 08 06 46.2 -0.1
baz=269
**OHAK** **Old Harbor** 37.30 49 P **P** 08 06 46.6 +0.1
baz=275
**C21K** **Knifeblade Rid** 37.47 29 P **P** 08 06 47.3 -0.5
baz=258,SNR=6.7
**G21K** **Allakaket** 37.47 33 IAmb IAmb 08 06 55.0
comp=Z,6.3nm,0.8s
**G21K** **Allakaket** 37.47 33 P **P** 08 06 48.0 +0.1
baz=262,SNR=9.1
**F21K** **Alatna River** 37.59 32 P **P** 08 06 49.9 +1.0
**F21K** **Alatna River** 37.59 32 P **P** 08 06 48.8 -0.1
baz=261
**E21K** **Killik River** 37.61 30 IAmb IAmb 08 06 50.4
comp=Z,9.1nm,1.0s
**E21K** **Killik River** 37.61 30 P **P** 08 06 49.2 +0.1
baz=259
**B21K** **Ikpikpuk River** 37.63 28 P **P** 08 06 49.3 +0.1
baz=257,SNR=8.7
**H21K** **Melozitna Rive** 37.65 35 P **P** 08 06 49.5 +0.1
baz=264,SNR=5.4
**Q20K** **Shuyak Island** 37.68 46 P **P** 08 06 49.8 0.0
baz=274
**SPCR** **Spurr Chakacha** 37.69 42 P **P** 08 06 50.0 +0.1
baz=270
**HOM** **Homer** 38.01 45 P **P** 08 06 52.7 +0.2
baz=273
**F22K** **John River** 38.13 32 P **P** 08 06 53.4 -0.1
baz=262
**D22K** **Ayikyak River** 38.16 30 IAmb IAmb 08 06 55.4
comp=Z,8.5nm,0.9s
**D22K** **Ayikyak River** 38.16 30 P **P** 08 06 53.6 -0.1
baz=260
**B22K** **Teshekpuk Lake** 38.19 27 P **P** 08 06 53.7 -0.2
baz=258
**H22K** **Ishtalitna Cre** 38.26 35 P **P** 08 06 54.4 -0.2
baz=265
**BPAW** **Bear Paw Mtn.** 38.31 38 P **P** 08 06 55.3 +0.3
baz=268
**G22K** **Bettles** 38.31 33 P **P** 08 06 54.9 0.0
baz=264
**E22K** **Anaktuvuk Pass** 38.35 31 P **P** 08 06 56.5 +1.1
E22K IAmb IAmb 08 06 57.1
comp=Z,15nm,0.7s
**E22K** **Anaktuvuk Pass** 38.35 31 P **P** 08 06 56.3 +0.9
baz=262,SNR=16
**MLY** **Manley** 38.46 36 P **P** 08 06 57.0 +0.7
baz=267
**COLD** **Coldfoot** 38.85 33 P **P** 08 07 00.1 +0.6
baz=265
**G23K** **Bananza Creek** 38.88 33 P **P** 08 07 00.3 +0.5
baz=265
**D23K** **Nanushuk River** 38.88 30 P **P** 08 07 00.6 +0.8
baz=262
**H23K** **Yukon River** 39.01 35 P **P** 08 07 00.8 -0.1
baz=267
**C23K** **Itkillik River** 39.04 28 IAmb IAmb 08 07 02.6
comp=Z,22nm,1.1s
**C23K** **Itkillik River** 39.04 28 P **P** 08 07 00.8 -0.2
baz=261,SNR=7.7
**I23K** **Minto, Yukon-K** 39.05 36 P **P** 08 07 01.0 -0.2
baz=268
**SEW** **Seward** 39.09 44 P **P** 08 07 01.1 -0.4
baz=274
**E23K** **Chandalar** 39.16 31 IAmb IAmb 08 07 04.2
comp=Z,7.9nm,0.8s
**E23K** **Chandalar** 39.16 31 P **P** 08 07 01.9 -0.3
baz=264,SNR=8.6
**NEA2** **Nenana** 39.16 37 P **P** 08 07 01.9 -0.2
baz=269
**PMR** **Palmer** 39.16 42 P **P** 08 07 02.4 +0.3
baz=273
**MCK** **McKinley** 39.21 38 P **P** 08 07 03.1 +0.5
baz=270
**TOLK** **Toolik Lake Re** 39.24 30 P **P** 08 07 03.3 +0.5
baz=264
**WAT1** **Susitna Watana** 39.39 40 P **P** 08 07 04.3 +0.1
baz=272
**D24K** **Happy Valley** 39.57 30 IAmb IAmb 08 07 10.8
comp=Z,14nm,0.8s
**D24K** **Happy Valley** 39.57 30 P **P** 08 07 05.8 +0.3
baz=264
**E24K** **Your Creek** 39.58 31 P **P** 08 07 06.1 +0.4
baz=265,SNR=12
**C24K** **Franklin Bluff** 39.68 29 IAmb IAmb 08 07 07.9
comp=Z,17nm,0.8s
**C24K** **Franklin Bluff** 39.68 29 P **P** 08 07 05.9 -0.5
baz=263
**COLA** **College** 39.69 36 *i* P **P** 08 07 07.5 +1.0
COLA pmax pmax
comp=Z,5.0nm,0.8s
**H24K** **Noodor Dome** 39.69 35 P **P** 08 07 06.6 -0.1
baz=268
**F24K** **Squaw Lake** 39.77 32 P **P** 08 07 07.5 +0.3
baz=266
**G24K** **Hadweenzic Riv** 39.89 33 P **P** 08 07 08.3 +0.1
baz=268
**DHY** **Denali Highway** 39.92 39 P **P** 08 07 08.7 0.0
baz=272
**ILAR** **Nelson Array** 40.10 37 P **P** 08 07 10.1 +0.1
comp=Z,1.1nm,0.8s,baz=263,slow=8.1,SNR=11
comp=Z,1.1nm,0.8s
**P23K** **Montague Islan** 40.12 44 P **P** 08 07 11.0 +0.8
baz=276
**GLI** **Glacier Island** 40.19 43 P **P** 08 07 11.0 +0.3
baz=275
**G25K** **Bearman Lake** 40.43 33 P **P** 08 07 12.8 +0.1
baz=269
**D25K** **Kavik River** 40.45 29 P **P** 08 07 13.5 +0.6
D25K IAmb IAmb 08 07 14.3
comp=Z,8.1nm,0.8s
**D25K** **Kavik River** 40.45 29 P **P** 08 07 12.7 -0.2
baz=266,SNR=10
**M24K** **Tolsona, Glenn** 40.53 41 P **P** 08 07 13.5 -0.2
**M24K** **Tolsona, Glenn** 40.53 41 P **P** 08 07 13.7 +0.1
baz=274
**H25L** **Birch Creek** 40.54 34 P **P** 08 07 13.6 0.0
baz=270
**K24K** **Donnelly Dome** 40.61 38 P **P** 08 07 14.3 +0.1
baz=273
**F25K** **Christian Rive** 40.63 32 P **P** 08 07 15.1 +0.7
**F25K** **Christian Rive** 40.63 32 P **P** 08 07 14.2 -0.2
baz=268
**PRP** **Porcupine Dome** 40.67 35 P **P** 08 07 14.5 -0.3
baz=271
**Q23K** **Middleton Isla** 40.72 45 P **P** 08 07 15.4 +0.3
baz=278
**J25K** **Salcha River,** 40.76 37 P **P** 08 07 15.0 -0.5
baz=272
**FYU** **Fort Yukon** 40.78 34 IAmb IAmb 08 07 27.6
comp=Z,19nm,1.4s
**EYAK** **Cordova Ski Ar** 40.88 43 P **P** 08 07 16.2 -0.3
baz=277
**HARP** **HAARP** 40.98 40 P **P** 08 07 17.3 0.0
baz=275
**BMAR** **Burnt Mountain** 41.04 32 P **P** 08 07 19.0 +1.3
**F26K** **Sheenjek River** 41.21 32 P **P** 08 07 18.5 -0.6
baz=270
**G26K** **Porcupine Rive** 41.35 33 P **P** 08 07 20.1 -0.1
baz=271
**SCRK** **Sand Creek** 41.39 38 P **P** 08 07 20.6 -0.2
baz=274
**BMRM** **Bremner River** 41.39 42 P **P** 08 07 20.2 -0.5
baz=277
**C27K** **Jago River** 41.41 29 P **P** 08 07 20.7 0.0
baz=268
**I26K** **Coal Creek Min** 41.66 36 P **P** 08 07 22.4 -0.4
baz=273
**L26K** **Log Cabin Wild** 41.76 39 P **P** 08 07 23.6 -0.1
baz=276
**DGZ** **Jazzator, Alta** 41.84 300 *i* P **P** 08 07 24.4 -0.2
DGZ pmax pmax
comp=Z,4.0nm,0.8s
**M26K** **Nabesna, AK** 41.98 40 IAmb IAmb 08 07 27.9
comp=Z,8.9nm,1.0s
**M26K** **Nabesna, AK** 41.98 40 P **P** 08 07 25.4 -0.2
baz=277,SNR=6.4
**GOMU** **GeErMu** 42.02 279 P **P** 08 07 27.3 +0.7
GOMU pP sP 08 07 35.0 +2.8
GOMU sP pwP 08 07 40.0 +1.1
GOMU S **S** **08 13 37.0 -7.8**
GOMU pmax pmax
comp=Z,19nm,0.8s
GOMU LR LR
comp=Z,390nm,17.3s
GOMU LR LR
comp=Z,480nm,18.2s
GOMU LR LR
comp=Z,840nm,16.1s
**CRQM** **Cirque** 42.13 42 IAmb IAmb 08 07 34.6
comp=Z,13nm,0.7s
**CRQE** **Cirque** 42.15 42 P **P** 08 07 27.1 +0.1
baz=278
**E27K** **Coleen River** 42.17 31 P **P** 08 07 27.0 +0.1
baz=272
**G27K** **Doyon Strip** 42.20 33 P **P** 08 07 27.3 +0.1
baz=273
**K27K** **Chicken** 42.23 37 P **P** 08 07 27.7 +0.3
baz=276
**ZALV** **Zalesovo Beam** 42.26 307 P **P** 08 07 25.9 -1.9
comp=Z,1.5nm,0.4s,baz=69,slow=7.7,SNR=5.5
ZALV PcP **PcP** **08 09 21.3 0.0**
comp=Z,3.2nm,0.7s,baz=67,slow=2.9,SNR=10
comp=Z,1.5nm,0.4s
**ZALV** **Zalesovo Beam** 42.26 307 *i* P **P** 08 07 28.0 +0.2
ZALV pmax pmax
comp=Z,2.0nm,0.4s
**PZH** **PanZhiHua** 42.27 262 P **P** 08 07 29.0 +0.6
PZH pmax pmax
comp=Z,10.0nm,1.0s
**H27K** **Steamboat Moun** 42.28 34 P **P** 08 07 27.9 0.0
baz=274
**I27K** **Kandik River** 42.29 35 P **P** 08 07 28.0 0.0
baz=274
**D27M** **Malcolm River** 42.38 30 P **P** 08 07 28.6 -0.1
baz=271
**L27K** **Beaver Creek,** 42.44 39 IAmb IAmb 08 07 57.0
comp=Z,5.8nm,0.7s
**L27K** **Beaver Creek,** 42.44 39 P **P** 08 07 29.8 +0.6
baz=277,SNR=6.1
**BCAR** **Beaver Creek A** 42.46 39 P **P** 08 07 29.2 -0.2
**M27K** **Edge Creek, AK** 42.51 40 P **P** 08 07 30.0 +0.1
baz=278
**EGAK** **Eagle** 42.55 36 P **P** 08 07 29.4 -0.6
baz=276
**GRNC** **Granite Creek** 42.81 42 P **P** 08 07 33.1 +0.6
GRNC IAmb IAmb 08 07 34.3
comp=Z,12nm,0.8s
**F28M** **Old Crow** 42.84 32 P **P** 08 07 33.8 +1.4
**F28M** **Old Crow** 42.84 32 P **P** 08 07 32.1 -0.4
baz=274
**E28M** **Babbage River** 42.91 31 P **P** 08 07 33.1 +0.1
**E28M** **Babbage River** 42.91 31 P **P** 08 07 33.1 +0.1
baz=273
**CTG** **Chitna Glacier** 42.97 42 P **P** 08 07 33.5 -0.2
baz=280,SNR=5.9
**CTGM** **Chitina Glacie** 42.97 42 P **P** 08 07 33.7 0.0
CTGM IAmb IAmb 08 07 35.6
comp=Z,8.9nm,0.8s
**I28M** **Miner Creek** 43.00 35 P **P** 08 07 34.2 +0.4
**I28M** **Miner Creek** 43.00 35 P **P** 08 07 33.6 -0.2
baz=276,SNR=7.2
**D28M** **Stokes Point** 43.17 29 P **P** 08 07 34.6 -0.3
baz=273
**YUK3** **Moose Creek** 43.25 41 P **P** 08 07 35.9 -0.2
baz=280
**DAWY** **Dawson** 43.40 37 P **P** 08 07 36.9 -0.1
baz=278
**E29M** **Blow River** 43.53 31 P **P** 08 07 39.0 +1.0
**E29M** **Blow River** 43.53 31 P **P** 08 07 38.1 +0.2
baz=275
**H29M** **Whitestone** 43.56 34 P **P** 08 07 38.5 +0.3
baz=277
**O28M** **Mount Upton** 43.56 42 P **P** 08 07 38.1 -0.5
baz=281
**G29M** **Pine Creek** 43.62 33 P **P** 08 07 38.5 -0.2
baz=276
**PINM** **Pinnacle** 43.65 43 P **P** 08 07 39.0 -0.1
baz=281
**YUK8** **Steele Glacier** 43.67 41 P **P** 08 07 39.2 -0.3
baz=281
**WMQ** **Urumqi** 43.68 292 *e*P **P** 08 07 40.5 +0.9
WMQ pmax pmax
comp=Z,21nm,0.6s
WMQ LR LR
comp=Z,330nm,24.0s
**I29M** **Ogilvie Camp,** 43.69 35 P **P** 08 07 39.2 0.0
baz=278
**M29M** **Somme Creek** 44.06 39 P **P** 08 07 42.5 0.0
baz=280
**PNL** **Peninsula** 44.16 43 P **P** 08 07 43.1 -0.1
baz=282
**ZSN** **Zaisan** 44.18 298 *e*P **P** 08 07 43.6 +0.2
baz=298
**ZSN** **Zaisan** 44.18 298 *e*P **P** 08 07 43.6 +0.2
**YUK4** **Talbot Arm** 44.19 41 P **P** 08 07 44.3 +0.7
baz=281
**EPYK** **Eagle Plains** 44.20 34 P **P** 08 07 43.3 -0.1
baz=278
**K29M** **Barlow Dome** 44.24 37 P **P** 08 07 44.3 +0.4
baz=280
**G30M** **tAoh Zraii Nji** 44.31 33 P **P** 08 07 43.8 -0.6
baz=276
**F30M** **Barrier River** 44.40 32 P **P** 08 07 44.8 -0.2
baz=277
**O29M** **Mount Kennedy** 44.43 42 P **P** 08 07 45.3 -0.1
baz=282
**I30M** **Mount Dempster** 44.51 35 IAmb IAmb 08 08 12.1
comp=Z,6.0nm,0.7s
**I30M** **Mount Dempster** 44.51 35 P **P** 08 07 45.7 -0.3
baz=279,SNR=9.1
**J30M** **Hart River** 44.63 36 P **P** 08 07 46.5 -0.5
baz=280
**N30M** **Aishikik Lake** 44.90 41 P **P** 08 07 49.0 -0.1
baz=282
**P29M** **Windy Craggy** 44.99 43 P **P** 08 07 49.7 -0.1
baz=284,SNR=6.1
**G31M** **Satah River** 45.08 33 IAmb IAmb 08 07 57.9
comp=Z,4.7nm,0.8s
**G31M** **Satah River** 45.08 33 P **P** 08 07 50.1 -0.2
baz=279
**INK** **Inuvik** 45.15 31 P **P** 08 07 50.8 0.0
baz=279
**H31M** **Peel River** 45.24 34 P **P** 08 07 51.7 0.0
baz=280
**P30M** **Million Dollar** 45.26 42 P **P** 08 07 51.4 -0.5
baz=284

**N31M Braeburn, Yuko 45.50 40** P **P** 08 07 54.5 +0.6
N31M IAmb IAmb 08 07 56.6
comp=Z,6.9nm,0.9s
**N31M Braeburn, Yuko 45.50 40** P **P** 08 07 53.7 -0.2
baz=284
**O30N Mendenhall 45.52 41** P **P** 08 07 53.7 -0.3
baz=284
**PLBC Pleasant Camp 45.72 43** P **P** 08 07 55.2 -0.3
baz=285
**M31M Drury Creek, Y 45.98 39** IAmb IAmb 08 07 59.8
comp=Z,5.2nm,1.2s
**M31M Drury Creek, Y 45.98 39** P **P** 08 07 57.4 -0.2
baz=284
**SEM Semipalatinsk 45.99 304** *eP* **P** 08 07 58.2 +0.1
baz=304
**SEM Semipalatinsk 45.99 304** *eP* **P** 08 07 58.2 +0.1
**MK31 Makanchi Array 46.05 298** P **P** 08 07 58.7 +0.3
**MK31 Makanchi Array 46.05 298** *ceP* **P** 08 07 58.4 0.0
**MKAR Makanchi Array 46.05 298** P **P** 08 07 58.7 +0.3
**MKAR Makanchi Array 46.05 298** P **P** 08 07 58.9 +0.6
comp=Z,15nm,0.7s,baz=74,slow=8.0,SNR=121
comp=Z,15nm,0.7s
**MKAR Makanchi Array 46.05 298** *eP* **P** 08 07 58.4 0.0
**MKAR Makanchi Array 46.05 298** *i* P **P** 08 07 58.4 0.0
MKAR pmax pmax
comp=Z,16nm,0.7s
**WHY Whitehorse 46.13 41** P **P** 08 07 58.7 -0.2
baz=285
**S31K Pelican 46.18 45** P **P** 08 07 59.0 -0.1
baz=286
**SKAG Skagway 46.22 43** P **P** 08 07 59.4 -0.1
baz=286
**MAKZ Makanchi 46.25 298** P **P** 08 08 00.2 +0.3
**MAKZ Makanchi 46.25 298** P **P** 08 08 00.2 +0.3
MAKZ pmax pmax
comp=Z,15nm,0.8s
**R31K City Hall, Gus 46.31 45** P **P** 08 07 60.0 -0.1
baz=286
**FARO Faro, Yukon 46.44 39** P **P** 08 08 01.0 -0.2
baz=285
**N32M Quiet Lake 46.85 40** P **P** 08 08 04.4 -0.1
baz=286
**KURK Kurchatov 46.86 304** P **P** 08 08 03.6 -0.9
**KURK Kurchatov 46.86 304** *eP* **P** 08 08 04.4 -0.2
**KURK Kurchatov 46.86 304** *ceP* **P** 08 08 04.4 -0.2
KURK pmax pmax
comp=Z,5.0nm,0.8s
**SIT Sitka 46.92 46** P **P** 08 08 04.9 0.0
baz=288
**KURBB Kurchatov Arra 46.95 304** P **P** 08 08 04.5 -0.8
comp=Z,3.6nm,0.4s,baz=73,slow=7.8,SNR=43
KURBB PcP **PcP** 08 09 37.6 +0.1
comp=Z,2.0nm,0.7s,baz=72,slow=3.6,SNR=8.8
comp=Z,3.6nm,0.4s
**R32K Eaglecrest 46.96 44** P **P** 08 08 05.4 +0.1
baz=287
**P32M Atlin 46.98 43** P **P** 08 08 05.7 +0.3
baz=287
**S32K Killisnoo 47.18 46** P **P** 08 08 07.4 +0.4
baz=288
**P33M Teslin, Yukon 47.23 42** IAmb IAmb 08 08 10.4
comp=Z,7.6nm,1.1s
**P33M Teslin, Yukon 47.23 42** P **P** 08 08 07.8 +0.3
baz=287,SNR=5.6
**A36M Sachs Harbour 47.27 25** P **P** 08 08 06.8 -0.7
baz=282
**Q32M Nakina River 47.88 43** P **P** 08 08 12.9 +0.3
baz=288
**C36M Paulatuk 48.29 28** P **P** 08 08 15.8 +0.4
baz=286
**R33M Jennings River 48.37 42** IAmb IAmb 08 08 19.2
comp=Z,5.9nm,0.9s
**R33M Jennings River 48.37 42** P **P** 08 08 16.5 +0.1
baz=289
**U33K Whale Pass 48.38 47** P **P** 08 08 17.0 +0.8
baz=290
**KIP Kipapa 48.50 100** *ceP* **P** 08 08 19.3 +1.6
KIP pmax pmax
comp=Z,106nm,1.7s
**CRAG Craig 48.60 48** P **P** 08 08 19.3 +1.3
baz=291
**TGTN Hyland Airport 48.95 39** P **P** 08 08 21.7 +1.0
baz=289
**DLBC Dease Lake 49.15 43** P **P** 08 08 23.0 +0.7
baz=290
**TDK Taldyqorghan 49.26 298** *eP* **P** 08 08 23.6 +0.2
baz=297
**TDK Taldyqorghan 49.26 298** *eP* **P** 08 08 23.5 +0.2
**SHLS Shalkode 49.39 295** *eP* **P** 08 08 22.4 -2.0
comp=Z,3.7nm,0.5s,baz=295
**SHLS Shalkode 49.39 295** *eP* **P** 08 08 22.4 -2.0
SHLS pmax pmax
comp=Z,4.0nm,0.5s
**CMAR Chiang Mai Arr 49.41 256** P **P** 08 08 25.8 +1.1
comp=Z,0.9nm,0.3s,baz=46,slow=8.2,SNR=4.7
comp=Z,0.9nm,0.3s
**CMAR Chiang Mai Arr 49.41 256** *i* P **P** 08 08 26.5 +1.8
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**T35M Bob Quinn 49.56 45** P **P** 08 08 25.9 +0.5
baz=291
**UZB Uzynbulak 49.69 295** *eP* **P** 08 08 26.9 +0.1
baz=295
**UZB Uzynbulak 49.69 295** *eP* **P** 08 08 26.8 +0.1
**KPKS Kokpek 49.76 296** *eP* **P** 08 08 27.6 +0.4
comp=Z,6.1nm,0.8s,baz=295
**KPKS Kokpek 49.76 296** *eP* **P** 08 08 27.6 +0.4
KPKS pmax pmax
comp=Z,6.0nm,0.8s
**SHL Shillong 49.90 268** P **P** 08 08 28.6 0.0
SHL IAmb IAmb 08 08 29.3
comp=Z,8.8nm,0.8s
**SHL Shillong 49.90 268** P **P** 08 08 28.6 0.0
SHL pmax pmax
comp=Z,9.0nm,0.8s
**U35K Hyder 50.07 46** P **P** 08 08 30.1 +0.9
baz=292
**SATY Saty 50.13 295** *eP* **P** 08 08 30.3 +0.3
comp=Z,7.2nm,0.8s,baz=295
**SATY Saty 50.13 295** *eP* **P** 08 08 30.3 +0.3
SATY pmax pmax
comp=Z,7.0nm,0.8s
**CHKK Chushkaly 50.68 297** *eP* **P** 08 08 34.4 +0.3
baz=297
**CHKK Chushkaly 50.68 297** *eP* **P** 08 08 34.4 +0.3
**BVAR Borovoye Array 50.70 310** P **P** 08 08 34.2 +0.1
comp=Z,2.6nm,0.8s,baz=60,slow=8.7,SNR=6.3
BVAR PcP **PcP** 08 09 51.0 -0.1
comp=Z,2.2nm,0.9s,baz=23,slow=4.7,SNR=4.1
comp=Z,2.6nm,0.8s
**BRVK Borovoye 50.74 310** P **P** 08 08 34.3 -0.1
BRVK IAmb IAmb 08 08 35.0
comp=Z,4.0nm,0.7s
**BRVK Borovoye 50.74 310** *eP* **P** 08 08 34.8 +0.4
**BRVK Borovoye 50.74 310** *ceP* **P** 08 08 34.8 +0.4
BRVK pmax pmax
comp=Z,4.0nm,1.0s
**MDOK Medeo 50.96 296** *eP* **P** 08 08 36.6 +0.2
baz=296
**MDOK Medeo 50.96 296** *eP* **P** 08 08 36.6 +0.2
**AAA Alma-Ata 51.03 296** *eP* **P** 08 08 37.2 +0.4
baz=296
**AAA Alma-Ata 51.03 296** *eP* **P** 08 08 37.1 +0.4
**AAA Alma-Ata 51.03 296** *eP* **P** 08 08 37.1 +0.4
**TNSS Tian-Shan 51.09 296** *eP* **P** 08 08 37.6 0.0
baz=296
**TNSS Tian-Shan 51.09 296** *eP* **P** 08 08 37.6 0.0
**ULHL Ulahol 51.92 295** P **P** 08 08 44.3 +0.7
SNR=9.8
**BTLS Baital 52.01 299** *eP* **P** 08 08 44.3 +0.4
baz=299
**BTLS Baital 52.01 299** *eP* **P** 08 08 44.3 +0.4
**TKM2 Tokmak 2 52.02 296** P **P** 08 08 45.1 +0.8
SNR=7.5
**SGDS Sogindy 52.38 297** *eP* **P** 08 08 47.2 +0.3
baz=297
**SGDS Sogindy 52.38 297** *eP* **P** 08 08 47.2 +0.3
**NRN Naryn 52.47 294** P **P** 08 08 47.4 -0.5
**NRN Naryn 52.47 294** P **P** 08 08 47.4 -0.5
NRN pmax pmax
comp=Z,3.0nm,0.9s
**USP Ospenovka 52.55 297** P **P** 08 08 48.8 +0.6
SNR=9.7
**FRU1 Bishkek 52.69 297** P **P** 08 08 49.0 -0.2
**FRU1 Bishkek 52.69 297** P **P** 08 08 49.0 -0.2
FRU1 pmax pmax
comp=Z,64nm,0.2s

**AAK Ala-Archa 52.86 296** P **P** 08 08 50.7 +0.2
AAK IAmb IAmb 08 08 51.7
comp=Z,12nm,1.1s
**AAK Ala-Archa 52.86 296** *eP* **P** 08 08 51.2 +0.6
**AAK Ala-Archa 52.86 296** *ceP* **P** 08 08 51.2 +0.6
AAK pmax pmax
comp=Z,6.0nm,0.7s
**EKS2 Erkin-Say 53.31 297** P **P** 08 08 54.4 +0.6
SNR=15
**KSH Kashi 53.44 292** P **P** 08 08 59.5 +4.7
KSH pmax pmax
comp=Z,5.0nm,0.4s
**AML Almayashu 53.63 296** P **P** 08 08 57.2 +0.7
SNR=6.5
**KK31 Karatay Array 55.17 299** P **P** 08 09 07.2 0.0
KK31 IAmb IAmb 08 09 08.0
comp=Z,7.6nm,0.8s
**KK31 Karatay Array 55.17 299** P **P** 08 09 07.2 0.0
KK31 pmax pmax
comp=Z,8.0nm,0.8s
**KKAR Karatay Array 55.17 299** P **P** 08 09 07.0 -0.2
**KKAR Karatay Array 55.17 299** P **P** 08 09 07.0 -0.2
**ARU Arti 55.34 318** P **P** 08 09 07.2 -1.0
ARU IAmb IAmb 08 09 08.4
comp=Z,11nm,0.9s
**ARU Arti 55.34 318** *c i* P **P** 08 09 08.0 -0.2
ARU 08 10 07.1
ARU S **S** 08 16 55.1 +4.0
ARU SS **SS** 08 20 34.7 -0.2
ARU pmax pmax
comp=Z,13nm,0.9s
**ARU Arti 55.34 318** P **P** 08 09 07.2 -1.0
comp=Z,16nm,0.8s
**CHM Chimkent 56.15 298** *eP* **P** 08 09 14.6 +0.3
comp=Z,8.1nm,0.5s,baz=298
**CHM Chimkent 56.15 298** *eP* **P** 08 09 14.6 +0.3
CHM pmax pmax
comp=Z,8.0nm,0.5s
**BTK Batken 56.56 295** IAmb IAmb 08 09 25.7
comp=Z,9.8nm,1.2s
**KULM Kulim 57.76 243** P **P** 08 09 26.4 +0.5
**ABKAR Akbulak array 58.27 310** P **P** 08 09 29.2 +0.1
**KIRV Kirov 58.44 323** LR LR 08 38 52.3
comp=Z,322nm,20.2s,baz=52,slow=40
**SIMJ Simiganj 58.49 295** P **P** 08 09 31.0 0.0
**ARCES ARCESS Array B 59.54 340** P **P** 08 09 35.9 -1.8
comp=Z,3.2nm,0.8s,baz=38,slow=9.2,SNR=3.8
comp=Z,3.2nm,0.8s
**KBL Kabul 60.80 291** P **P** 08 09 46.2 -0.8
**KBL Kabul 60.80 291** P **P** 08 09 46.2 -0.8
KBL pmax pmax
comp=Z,8.0nm,0.8s
**BELG Belogornoye 62.89 318** *i* P **P** 08 09 58.9 -1.6
BELG pmax pmax
comp=Z,7.0nm,0.8s
**SUMG Summit 63.48 3** P **P** 08 10 04.6 0.0
**SUMG Summit 63.48 3** P **P** 08 10 04.6 0.0
SUMG pmax pmax
comp=Z,11nm,1.1s
**VALR Valaam 63.87 332** *i* P **P** 08 10 04.6 -2.2
VALR pmax pmax
comp=Z,25nm,0.9s
**WB2 Warramunga Arr 65.28 196** P **P** 08 10 16.9 +0.4
WB2 IAmb IAmb 08 10 17.8
comp=Z,4.7nm,0.9s
**WRA Warramunga Arr 65.28 196** P **P** 08 10 17.1 +0.5
**WRA Warramunga Arr 65.28 196** P **P** 08 10 16.9 +0.5
comp=Z,2.9nm,1.0s,baz=14,slow=6.8,SNR=14
comp=Z,2.9nm,1.0s
**WRA Warramunga Arr 65.28 196** *i* P **P** 08 10 17.0 +0.5
WRA pmax pmax
comp=Z,3.0nm,1.0s
**BOZ Bozeman (W) 65.30 50** IAmb IAmb 08 10 37.6
comp=Z,2.6nm,0.8s
**FINES FINESS Array B 65.38 334** P **P** 08 10 15.6 -1.1
comp=Z,13nm,0.6s,baz=36,slow=7.9,SNR=94
FINES LR LR 08 42 44.9
comp=Z,203nm,20.1s,baz=42,slow=40
comp=Z,13nm,0.6s
**NVAR Mina Array Bea 65.81 59** P **P** 08 10 21.4 +1.2
comp=Z,1.3nm,0.9s,baz=285,slow=7.9,SNR=9.0
comp=Z,1.3nm,0.9s
**OBN Obninsk 66.11 325** *eP* **P** 08 10 20.7 -0.8
**OBN Obninsk 66.11 325** *ceP* **P** 08 10 20.7 -0.8
OBN *e* 08 10 47.4
OBN *eS* **PnS** 08 19 27.8 -1.4
OBN *e*SSS SSS 08 26 24.7
OBN pmax pmax
comp=Z,27nm,1.3s
OBN MLR MLR
comp=Z,214nm,19.0s
**VRH Novokhopyorsk 66.47 319** *eP* **P** 08 10 22.2 -1.7
VRH pmax pmax
comp=Z,20nm,0.7s
**H17A Grant Village 66.64 50** P **P** 08 10 25.4 -0.1
baz=310
**LPSR Galich'ya Gora 66.81 322** *eP* **P** 08 10 25.0 -1.1
LPSR pmax pmax
comp=Z,30nm,0.8s
**VORR Voronezh 67.32 321** *eP* **P** 08 10 27.8 -1.5
VORR pmax pmax
comp=Z,40nm,0.4s
**R11B Troy Canyon, C 67.53 58** P **P** 08 10 31.3 +0.1
baz=309
**VSR Storozhevoye 67.65 320** *eP* **P** 08 10 30.2 -1.2
VSR pmax pmax
comp=Z,10.0nm,0.5s
**VORD Divnogorie 67.76 320** *eP* **P** 08 10 30.7 -1.4
VORD pmax pmax
comp=Z,20nm,1.0s
**PDAR Pinedale Array 68.25 51** P **P** 08 10 36.2 +0.5
comp=Z,0.6nm,0.6s,baz=266,slow=2.4,SNR=7.8
comp=Z,0.6nm,0.6s
**ASAR Alice Springs 68.98 196** P **P** 08 10 41.5 +1.4
comp=Z,1.3nm,0.8s,baz=9,slow=6.0,SNR=11
comp=Z,1.3nm,0.8s
**NC303 NORSAR Array S 69.72 340** P **P** 08 10 44.0 -0.2
**NC405 NORSAR Array S 69.73 340** P **P** 08 10 44.2 -0.1
**AKT Akhty 69.80 308** *eP* **P** 08 10 45.8 +0.7
AKT *e* 08 11 09.6
AKT *e* 08 13 21.1
AKT *eS* **S** 08 19 57.7 +4.3
AKT pmax pmax
comp=Z,17nm,1.0s
**LCMT Little Creek M 69.81 58** IAmb IAmb 08 10 47.3
comp=Z,2.8nm,0.9s
**NB2 NORSAR Subarra 69.92 340** P **P** 08 10 44.7 -0.7
comp=Z,26nm,1.1s,baz=29,slow=6.5
**NB2 NORSAR Subarra 69.92 340** P **P** 08 10 44.7 -0.7
baz=29,slow=6.5
**NOA NORSAR Array B 69.92 340** P **P** 08 10 44.9 -0.5
comp=Z,12nm,0.8s,baz=31,slow=6.2,SNR=43
comp=Z,12nm,0.8s
**MNK Minsk 70.01 328** *i* LRM MLR 08 47 02.5
comp=E,340nm,21.4s
**MNK Minsk 70.01 328** *eP* **P** 08 10 46.7 +0.7
**MNK Minsk 70.01 328** *i* P **P** 08 10 46.8 +0.7
comp=E,27nm,0.9s
**MNK Minsk 70.01 328** *i* P **P** 08 10 46.8 +0.7
comp=N,13nm,0.8s
**MNK Minsk 70.01 328** *i* P **P** 08 10 46.8 +0.7
comp=Z,47nm,0.8s,baz=40
**MNK Minsk 70.01 328** *i* PP PP 08 13 21.6 +1.2
**MNK Minsk 70.01 328** *i* PPP PPP 08 15 03.4
**MNK Minsk 70.01 328** *i* S **S** 08 19 56.4 +1.2
**MNK Minsk 70.01 328** *i* SS SS 08 24 21.9 -1.6
**MNK Minsk 70.01 328** *i* SSS SSS 08 27 31.1
**MNK Minsk 70.01 328** *i* LQ LQ 08 35 05.6
**MNK Minsk 70.01 328** *i* LR LR 08 39 56.6
**MNK Minsk 70.01 328** *i* LRM MLR 08 45 18.4
comp=N,284nm,20.3s
**MNK Minsk 70.01 328** *i* LRM MLR 08 46 33.9
comp=Z,454nm,21.2s
**HFS Hagfors 70.06 338** P **P** 08 10 45.5 -0.8
comp=Z,14nm,0.7s,baz=42,slow=4.8,SNR=41
HFS LR LR 08 45 39.4
comp=Z,264nm,21.2s,baz=26,slow=40
comp=Z,14nm,0.7s
**KNB Kanab 70.07 58** P **P** 08 10 47.8 +0.8
KNB IAmb IAmb 08 10 49.2
comp=Z,4.4nm,1.1s
**KNB Kanab 70.07 58** P **P** 08 10 47.8 +0.8
KNB pmax pmax
comp=Z,4.0nm,1.1s
**NACGM Naroch 70.12 329** ⇑ *iP* **P** 08 10 47.3 +0.6
comp=E,900nm,1.1s

**NAO01 NORSAR Array S 70.17 340** P **P** 08 10 46.2 -0.8
**KIV Kislovodsk 70.89 313** *eP* **P** 08 10 52.8 +1.1
KIV pmax pmax
comp=Z,17nm,1.0s
**KBZ Khabaz 70.93 313** P **P** 08 10 52.7 +0.8
comp=Z,12nm,0.8s,baz=77,slow=4.6,SNR=26
comp=Z,12nm,0.8s
**SHA1 Shidzhatmaz 71.05 313** *ceP* **P** 08 10 54.3 +1.4
**AKASG Malin Array Be 72.37 325** P **P** 08 10 59.9 -0.5
comp=Z,3.0nm,0.6s,baz=37,slow=6.4,SNR=18
comp=Z,3.0nm,0.6s
**AKASG Malin Array Be 72.37 325** *i* P **P** 08 11 00.1 -0.3
AKASG pmax pmax
comp=Z,3.0nm,0.6s
**AKBB Malin Array Si 72.37 325** *ceP* **P** 08 10 59.6 -0.8
AKBB pmax pmax
comp=Z,18nm,1.4s
**AKBB Malin Array Si 72.37 325** P **P** 08 10 59.7 -0.7
**GNI Garni 72.37 309** *i* P **P** 08 11 03.6 +2.8
GNI pmax pmax
comp=Z,10.0nm,1.0s
**VSLR Vesyoloye 72.61 314** *i* P **P** 08 11 02.7 +0.7
VSLR pmax pmax
comp=Z,17nm,0.9s
**MI30 MI30,Zelenitsa 72.76 325** P **P** 08 11 01.7 -1.0
**MI28 Mi28,Pidlybu 72.83 326** P **P** 08 11 02.1 -1.0
**S22A 4UR Ranch, Cre 73.14 54** P **P** 08 11 06.0 +0.3
baz=313
**W18A Petrified Fore 73.20 57** P **P** 08 11 05.8 -0.1
baz=313
**LUBAR Lubar, Ukraine 73.57 325** P **P** 08 11 06.0 -1.5
**SORM Soroca 74.70 324** P **P** 08 11 13.4 -0.7
**LVV L'vov 75.15 327** *eP* **P** 08 11 17.0 +0.3
**KMPD K-Podol'skiy 75.16 325** P **pP** 08 11 16.2 -4.7
KMPD P **P** 08 11 15.8 -1.0
**ANMO Albuquerque 75.28 56** *i* P **P** 08 11 17.6 -0.4
ANMO pmax pmax
comp=Z,2.0nm,2.2s
**MORS Morshin 75.75 327** P **P** 08 11 19.5 -0.7
**I37A Lemond, Waseca 75.80 42** IAmb IAmb 08 11 38.4
comp=Z,10nm,1.0s
**STNU Starunia 75.84 326** P **P** 08 11 20.1 -0.7
**KSV Kosov 75.93 326** P **P** 08 11 20.7 -0.6
**121A Cookes Peak, D 76.14 58** P **P** 08 11 23.5 +0.5
baz=314
**BUR08 Bucovina Ar. S 76.41 325** IAmb IAmb 08 11 25.9
comp=Z,4.8nm,0.7s
**BURAR Bucovina Array 76.42 325** P **P** 08 11 23.9 -0.3
BURAR IAmb IAmb 08 11 25.9
comp=Z,5.1nm,0.8s
**OJC Ojcow 76.43 330** IAmb IAmb 08 11 49.1
comp=Z,6.5nm,0.8s
**OJC Ojcow 76.43 330** P **P** 08 11 23.7 -0.3
comp=Z,9.0nm,0.7s
**KOLS Kolonicke sedl 76.55 327** *eP* **P** 08 11 25.6 +0.9
KOLS pmax pmax
comp=Z,7.0nm,0.8s
**KOLS Kolonicke sedl 76.55 327** *eP* **P** 08 11 25.6 +0.9
**TESR Tescani 76.69 324** P **P** 08 11 25.3 -0.3
comp=Z,11nm,0.9s
**HOLU Holmets 76.83 327** P **P** 08 11 26.8 +0.5
**KORU Korolevo 76.83 326** P **P** 08 11 26.4 +0.1
**CRVS Cervenica-Dubn 76.89 328** *eP* **P** 08 11 27.4 +0.7
CRVS pmax pmax
comp=Z,7.0nm,0.9s
**CRVS Cervenica-Dubn 76.89 328** *eP* **P** 08 11 27.4 +0.7
**NIE Niedzica 76.90 329** P **P** 08 11 27.3 +0.5
comp=Z,3.6nm,1.1s
**KSP Ksiaz 77.14 332** P **P** 08 11 28.1 0.0
comp=Z,6.3nm,1.0s
**LANS Liptovska Anna 77.43 329** *eP* **P** 08 11 30.9 +1.1
LANS pmax pmax
comp=Z,5.0nm,0.7s
**LANS Liptovska Anna 77.43 329** *eP* **P** 08 11 30.9 +1.1
**UPC Upice 77.52 332** *eP* **P** 08 11 31.7 +1.5
**UPC Upice 77.52 332** *eP* **P** 08 11 31.7 +1.5
**DPC Dobrusska-Polom 77.55 332** *eP* **P** 08 11 31.1 +0.7
**DPC Dobrusska-Polom 77.55 332** *eP* **P** 08 11 31.1 +0.7
**DPC Dobrusska-Polom 77.55 332** P **P** 08 11 30.6 +0.2
comp=Z,7.3nm,2.2s
**MORC Moravsky Berou 77.61 331** IAmb IAmb 08 11 32.5
comp=Z,7.2nm,0.9s
**MORC Moravsky Berou 77.61 331** *eP* **P** 08 11 30.9 +0.2
**KRLC Kraliky 77.62 331** *eP* **P** 08 11 31.4 +0.6
**KRLC Kraliky 77.62 331** *eP* **P** 08 11 31.4 +0.6
**MLR Muntele Rosu 77.80 323** IAmb IAmb 08 11 34.9
comp=Z,4.1nm,0.8s
**MLR Muntele Rosu 77.80 323** P **P** 08 11 32.6 +0.6
comp=Z,7.4nm,1.1s
**CLL Corrim 77.83 334** ⇑ *iP* **P** 08 11 31.6 -0.3
comp=Z,15nm,0.6s
CLL *i* PcP **pwP** 08 11 44.4 -0.5
CLL *i* x x 08 11 53.2
CLL *i* x x 08 11 55.3
comp=Z,10.0nm,0.7s
**CLL Corrim 77.83 334** ⇑ *iP* **P** 08 11 31.6 -0.3
CLL pmax pmax
comp=Z,15nm,0.6s
**CLL Corrim 77.83 334** P **P** 08 11 31.3 -0.6
comp=Z,22nm,0.8s
**VYHS Vyhne 78.21 329** *eP* **P** 08 11 34.4 +0.3
VYHS pmax pmax
comp=Z,5.0nm,1.0s
**VYHS Vyhne 78.21 329** *eP* **P** 08 11 34.4 +0.3
**VOIR 78.22 324** P **P** 08 11 34.2 -0.1
comp=Z,7.4nm,1.1s
**PSZ Piszkesteto 78.29 328** IAmb IAmb 08 11 37.0
comp=Z,5.7nm,0.8s
**EKA Eskdalemuir Ar 78.29 345** P **P** 08 11 34.0 -0.3
comp=Z,1.3nm,0.6s,baz=22,slow=4.8,SNR=4.5
comp=Z,1.3nm,0.6s
**HSKC Hora Svate Kat 78.30 333** *ex* x 08 11 50.1
**JAVC Velka Javorina 78.33 330** *eP* **P** 08 11 35.8 +1.0
**VRAC Vranov 78.34 331** *eP* **P** 08 11 35.1 +0.3
**VRAC Vranov 78.34 331** LR LR 08 51 24.9
comp=Z,180nm,19.4s,baz=18,slow=40
**PRU Pruhonice 78.46 332** *eP* **P** 08 11 36.2 +0.8
**PRU Pruhonice 78.46 332** *eP* **P** 08 11 36.2 +0.8
**KRUC Moravsky 78.61 331** *eP* **P** 08 11 36.4 +0.1
**BR131 Keskin Array S 78.62 315** P **P** 08 11 36.7 +0.1
BR131 IAmb IAmb 08 11 51.0
comp=Z,3.6nm,0.9s
**BR131 Keskin Array S 78.62 315** *i* P **P** 08 11 34.3 -2.3
**BRTR Keskin Array B 78.62 315** P **P** 08 11 37.0 +0.3
comp=Z,1.3nm,0.7s,baz=82,slow=3.3,SNR=9.9
comp=Z,1.3nm,0.7s
**BRTR Keskin Array B 78.62 315** P **P** 08 11 37.0 +0.3
**BR106 Keskin Array S 78.62 315** P **P** 08 11 36.7 0.0
comp=Z,2.8nm,0.9s
**BR104 Keskin Array S 78.63 315** P **P** 08 11 36.7 0.0
comp=Z,2.4nm,0.8s
**BR105 Keskin Array S 78.63 315** P **P** 08 11 36.6 -0.1
comp=Z,2.7nm,0.8s
**SMWD Samnorwood 78.78 52** IAmb IAmb 08 11 38.8
comp=Z,6.1nm,1.0s
**KHC Kasperske Hory 79.52 332** IAmb IAmb 08 11 44.1
comp=Z,8.0nm,0.9s
**KHC Kasperske Hory 79.52 332** *eP* **P** 08 11 41.9 +0.6
KHC *ex* x 08 11 54.1
KHC *ex* x 08 12 03.8
**KHC Kasperske Hory 79.52 332** *ceP* **P** 08 11 41.6 +0.3
KHC pmax pmax
comp=Z,26nm,1.3s
**KHC Kasperske Hory 79.52 332** P **P** 08 11 41.4 +0.1
comp=Z,9.6nm,0.8s
**CKRC Cesky Krumlov 79.54 332** *eP* **P** 08 11 41.4 0.0
**CKRC Cesky Krumlov 79.54 332** *eP* **P** 08 11 41.4 0.0
**KLYT Kilyos 79.71 319** P **P** 08 11 42.4 0.0
**GEC2 GERESS Array S 79.72 332** IAmb IAmb 08 11 43.1
comp=Z,6.6nm,1.2s
**GERES GERESS Array B 79.72 332** P **P** 08 11 42.8 +0.3
comp=Z,2.0nm,0.8s,baz=33,slow=5.1,SNR=7.5
comp=Z,2.0nm,0.8s
**CONA Conrad Observa 79.76 330** *i* P **P** 08 11 43.4 +0.7
comp=Z,6.3nm,1.0s
**GRFO Grafenberg 79.80 334** P **P** 08 11 43.5 +0.7
**GRFO Grafenberg 79.80 334** P **P** 08 11 43.5 +0.7
GRFO pmax pmax
comp=Z,13nm,0.8s
**RONA Rosalia, Austr 79.80 330** *i* P **P** 08 11 43.4 +0.5
comp=Z,13nm,1.3s
**BIOA Bad Ischl, Aus 80.74 332** *i* P **P** 08 11 48.4 +0.5
comp=Z,7.3nm,1.2s
**TX31 Lajitas Ar. Si 80.90 58** IAmb IAmb 08 11 50.5
comp=Z,3.9nm,0.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **80.90** | **58** | P | **P** | **08 11 49.4** | **+0.3** |
| **TXAR** | **Lajitas Array** | **80.90** | **58** | P | **P** | **08 11 49.9** | **+0.7** |
| | comp=Z,2.4nm,0.6s,baz=300,slow=3.9,SNR=37 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.90** | **58** | P | **P** | **08 11 49.4** | **+0.3** |
| **BGES** | **Gesves** | **80.97** | **338** | *d*P | **P** | **08 11 50.0** | **+0.9** |
| **BMRD** | **Maredsous** | **81.14** | **338** | *d*P | **P** | **08 11 49.8** | **-0.1** |
| | comp=Z,7.1nm,1.0s | | | | | | |
| **LESA** | **Schwarzleotal** | **81.30** | **332** | *i* P | **P** | **08 11 51.5** | **+0.6** |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **KBA** | **Koelnbreinsper** | **81.37** | **332** | *i* P | **P** | **08 11 52.2** | **+0.8** |
| | comp=Z,20nm,1.2s | | | | | | |
| **MYKA** | **Terra Mystica** | **81.66** | **331** | *i* P | **P** | **08 11 52.6** | **-0.2** |
| | comp=Z,15nm,1.5s | | | | | | |
| **WATA** | **Walderalm** | **81.74** | **333** | *i* P | **P** | **08 11 53.6** | **+0.2** |
| | comp=Z,10nm,1.3s | | | | | | |
| **WTTA** | **Wattenberg** | **81.79** | **333** | *i* P | **P** | **08 11 54.4** | **+0.8** |
| | comp=Z,16nm,1.6s | | | | | | |
| **RETA** | **Reutte** | **81.88** | **333** | *i* P | **P** | **08 11 54.3** | **+0.3** |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **MOTA** | **Moosalm** | **81.89** | **333** | *i* P | **P** | **08 11 54.3** | **+0.1** |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **SQTA** | **Sankt Quirin** | **81.97** | **333** | *i* P | **P** | **08 11 54.9** | **+0.3** |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **FETA** | **Feichten** | **82.30** | **333** | *i* P | **P** | **08 11 54.3** | **-2.1** |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **DAVA** | **Damuels** | **82.34** | **334** | *i* P | **P** | **08 11 56.2** | **-0.3** |
| | comp=Z,12nm,1.3s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **82.70** | **309** | P | **P** | **08 11 59.6** | **+1.1** |
| | comp=Z,0.9nm,0.3s,baz=55,slow=7.6,SNR=2.0 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **MIAR** | **Mount Ida** | **82.86** | **48** | P | **P** | **08 11 59.5** | **+0.3** |
| MIAR | | | | IAmb | IAmb | 08 12 22.6 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **82.86** | **48** | P | **P** | **08 11 59.5** | **+0.3** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **O53A** | **New Philadelph** | **84.32** | **37** | P | **P** | **08 12 08.1** | **+1.4** |
| | baz=326 | | | | | | |
| **EIL** | **Elat** | **85.47** | **308** | LR | LR | 08 52 54.2 | |
| | comp=Z,221nm,21.9s,baz=246,slow=38 | | | | | | |
| **MDT** | **Midelt** | **99.94** | **338** | LR | LR | 09 04 49.7 | |
| | comp=Z,244nm,19.7s,baz=236,slow=39 | | | | | | |
| **QSPA** | **South Pole Qui** | **133.85** | **180** | PKP | **PKiKP** | **08 18 52.4** | **+0.6** |
| | comp=Z,1.6nm,0.9s,baz=47,slow=1.3,SNR=3.0 | | | | | | |
| **BDFB** | **Brasília** | **147.88** | **33** | PKPbc | **PKPbc** | **08 19 20.3** | **+0.1** |
| | comp=Z,1.7nm,0.6s,baz=162,slow=3.2,SNR=4.3 | | | | | | |
| **TROLL** | **Troll, Antarti** | **147.93** | **198** | ⇑PKiKP | **PKPbc** | **08 19 19.5** | **+0.7** |
| | comp=Z,136nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **149.34** | **197** | ⇑PKiKP | **PKPbc** | **08 19 22.8** | **+0.5** |
| | comp=Z,35nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **149.34** | **197** | PKPbc | **PKPbc** | **08 19 20.8** | **-1.5** |
| | comp=Z,1.8nm,0.9s,baz=172,slow=0.9,SNR=6.9 | | | | | | |
| **PLCA** | **Paso Flores** | **150.29** | **98** | PKPbc | **PKiKP** | **08 19 26.3** | **-0.1** |
| | comp=Z,2.8nm,0.9s,baz=236,slow=2.6,SNR=4.2 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **150.84** | **195** | ⇑PKiKP | **PKiKP** | **08 19 26.8** | **+0.3** |
| | comp=Z,7.3nm,0.7s,baz=117,slow=1.4 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **150.98** | **194** | ⇑PKiKP | **PKiKP** | **08 19 27.0** | **+0.2** |
| | comp=Z,4.8nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **151.23** | **195** | ⇑PKiKP | **PKiKP** | **08 19 27.5** | **+0.2** |
| | comp=Z,4.6nm,0.8s | | | | | | |

*ISN **26** 08:03:21.4±0.4, 34.°69N×46.°15E, h12km±5km, ML2.9*
*TEH **26** 08:03:22.2, 34.°69N×46.°10E, h8km, ML2.8*
**ISC 26 08:03:22.7**±1.0, **34.°64N**±0.°05×**46.°11E**±0.°04, **h10**km, **n10,**
σ0°**63**/13, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.24** | **75** | Pg | **Pg** | | **08 03 27.9** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.45** | **253** | Pg | **Pg** | | **08 03 31.2** | **-0.2** |
| **IGHG** | **Ghaleghazi** | **0.49** | **129** | Pg | **Pg** | | **08 03 32.4** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **197** | Pg | **Pb** | | **08 03 34.5** | **+0.1** |
| **ILIN** | **Lien** | **0.76** | **68** | Pg | **Pg** | | **08 03 36.8** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **175** | Pg | **Pn** | | **08 03 42.7** | **-0.4** |
| **SNQR** | **Sonqor, Kerman** | **1.27** | **80** | Pg | **Pn** | | **08 03 46.6** | **-0.2** |
| **IBDR** | **Badra** | **1.53** | **186** | *e*Pn | **Pb** | | **08 03 51.0** | **-0.1** |
| IBDR | | | | *e*Sn | **Sg** | | **08 04 13.0** | **+1.1** |
| IBDR | | | | AML | AML | | 08 04 18.0 | |
| | comp=N,114nm,0.5s | | | | | | | |
| IBDR | | | | AML | AML | | 08 04 23.3 | |
| | comp=E,208nm,0.8s | | | | | | | |
| **IKRK** | **Kirkuk** | **1.64** | **298** | *e*Pn | **Pn** | | **08 03 52.0** | **+0.5** |
| IKRK | | | | *e*Sn | **Sb** | | **08 04 14.3** | **+0.7** |
| IKRK | | | | AML | AML | | 08 04 27.0 | |
| | comp=E,173nm,0.4s | | | | | | | |
| IKRK | | | | AML | AML | | 08 04 27.1 | |
| | comp=N,240nm,0.5s | | | | | | | |
| **BHD** | **Baghdad** | **1.98** | **227** | *e*Pn | **Pb** | | **08 03 57.5** | **-1.3** |
| BHD | | | | *e*Sn | **Sb** | | **08 04 23.5** | **0.0** |

*SJA **26** 08:07:31.7±0.7, 22.°69S×64.°41W, h26km±5km, ML3.3, MW3.5*
*IDC **26** 08:07:34.0±3.4, 22.°46S×64.°03W, h35km±35km, mb3.6/1, mbtmp3.5/5, ML3.4/4, Error ellipse: s-maj=34.4km s-min=20.6km az=39.0*
**ISC 26 08:07:32.3**±1.0, **22.°54S**±0.°05×**64.°12W**±0.°07, **h35**km, **n10,**
σ1°**59**/16, **Salta Province**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ALOL** | **LOMAS DE OLMED** | **1.27** | **175** | *i* P | **Pn** | | **08 07 54.3** | **+0.7** |
| ALOL | | | | *i* S | **Sn** | | **08 08 11.1** | **+1.5** |
| **YJA** | **Yavi** | **1.35** | **285** | *i* P | **Pn** | | **08 07 54.6** | **-0.5** |
| YJA | | | | *i* S | **Sn** | | **08 08 11.5** | **-0.4** |
| **AZAP** | **Zapla** | **1.89** | **207** | *i* P | **Pn** | | **08 08 01.5** | **-0.8** |
| AZAP | | | | *i* S | **Sn** | | **08 08 23.0** | **-2.1** |
| AZAP | | | | IAML | | | 08 08 29.8 | |
| | comp=Z,389nm,0.5s | | | | | | | |
| **SLA** | **San Lorenzo** | **2.52** | **210** | *i* P | **Pn** | | **08 08 10.0** | **-0.9** |
| SLA | | | | *i* S | **Sn** | | **08 08 38.9** | **-1.6** |
| SLA | | | | IAML | | | 08 08 57.5 | |
| | comp=Z,126nm,0.7s | | | | | | | |
| **FSA** | **Cafayete** | **3.94** | **205** | *i* P | **Pn** | | **08 08 30.6** | **+0.1** |
| **LVC** | **Limon Verde** | **4.43** | **268** | Pn | **Pn** | | **08 08 40.2** | **+2.7** |
| | comp=Z,0.4nm,0.3s,baz=135,slow=1.4,SNR=2.6 | | | | | | | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **SIV** | **San Ignacio** | **7.12** | **24** | Pn | **Pn** | | **08 09 15.6** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=196,slow=12,SNR=16 | | | | | | | |
| SIV | | | | Sn | **Sn** | | **08 10 31.4** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=253,slow=20,SNR=1.6 | | | | | | | |
| SIV | | | | Lg | Lg | | 08 11 10.7 | |
| | comp=Z,0.1nm,0.3s,baz=257,slow=13,SNR=3.0 | | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | | |
| **CPUP** | **Villa Florida** | **7.24** | **123** | Pn | **Pn** | | **08 09 15.8** | **+0.1** |
| | comp=Z,1.2nm,0.3s,baz=302,slow=11,SNR=33 | | | | | | | |
| CPUP | | | | Lg | Lg | | 08 11 24.8 | |
| | comp=Z,0.5nm,0.3s,baz=348,slow=9.3,SNR=2.6 | | | | | | | |
| | comp=Z,4.1nm,0.4s | | | | | | | |
| **LPAZ** | **La Paz** | **7.28** | **328** | Pn | **Pn** | | **08 09 18.8** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=185,slow=4.5,SNR=7.7 | | | | | | | |
| LPAZ | | | | Sn | **Sn** | | **08 10 38.1** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=9.5,slow=18,SNR=3.6 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.57** | **68** | P | **P** | | **08 19 03.5** | **+1.2** |
| | comp=Z,0.6nm,0.6s,baz=257,slow=6.9,SNR=5.5 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |

**TRN 26 08:14:04.4, 16.°02N×60.°77W, h28km, MD3.6, East of Marie-Galante., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MAGL** | **Barre de l'île** | **0.50** | **262** | *e*P | | Pn | 08 14 17.2 | +1.6 |
| **CBE** | **Ff, Capester** | **0.81** | **274** | *e*P | | Pn | 08 14 22.1 | +2.1 |
| **ABD** | **La Joyeuse, An** | **0.83** | **303** | *e*P | | Pb | 08 14 20.9 | +0.8 |
| **TDBA** | **Terre de Bas,** | **0.85** | **259** | *e*P | | Pb | 08 14 22.4 | +1.7 |
| **TBG** | **Guadaloupe-3** | **0.86** | **259** | *e*P | | Pb | 08 14 22.3 | +1.5 |
| TBG | | | | *e*S | | Sn | 08 14 34.4 | +2.1 |
| **SVN** | **Savane Anatole** | **1.23** | **198** | *e*P | | Pb | 08 14 26.8 | -0.3 |
| SVN | | | | *e*S | | Sb | 08 14 44.0 | +1.4 |
| **ILAM** | **Ilet Lapin Mar** | **1.24** | **185** | *e*P | | Pb | 08 14 27.4 | +0.3 |
| ILAM | | | | *e*S | | Sb | 08 14 43.7 | +0.9 |
| **CXM** | **Morne La Croix** | **1.26** | **198** | *e*P | | Pb | 08 14 27.8 | +0.1 |
| **PCM** | **Pelee Case Pet** | **1.27** | **200** | *e*P | | Pb | 08 14 27.5 | -0.2 |
| **PCM** | **Pelee Case Pet** | **1.27** | **200** | *e*P | | Pb | 08 14 28.8 | +1.1 |
| **GBMF** | **Grand Be** | **1.27** | **198** | *e*P | | Pb | 08 14 27.4 | -0.4 |
| **PML** | **Morne Lenard** | **1.29** | **198** | *e*P | | Pb | 08 14 27.7 | -0.4 |
| **FDF** | **Fort de France** | **1.33** | **196** | *e*P | | Pb | 08 14 28.3 | -0.4 |
| **ANBD** | **Bethesda, Anti** | **1.40** | **317** | *e*P | | Pb | 08 14 29.7 | -0.2 |
| ANBD | | | | *e*S | | Sb | 08 14 49.0 | +1.6 |
| **LPMF** | **Morne Lapointe** | **1.45** | **188** | *e*P | | Pb | 08 14 29.7 | -1.0 |
| **BIM** | **Bigot** | **1.52** | **191** | *e*P | | Pb | 08 14 31.9 | -0.1 |
| BIM | | | | *e*S | | Sb | 08 14 51.0 | +0.1 |
| **MBWH** | | **1.54** | **298** | *e*P | | Pb | 08 14 32.2 | -0.2 |
| MBWH | | | | *e*S | | Sb | 08 14 51.8 | +0.3 |
| **MBFL** | **Flemmings, Mon** | **1.57** | **298** | *e*P | | Pb | 08 14 32.6 | -0.1 |
| MBFL | | | | *e*S | | Sb | 08 14 52.2 | +0.1 |
| **MPOM** | **Morne Pois Mar** | **1.57** | **183** | *e*P | | Pb | 08 14 31.9 | -0.9 |
| **ANWB** | **Willy Bob** | **1.91** | **329** | *e*P | | Pn | 08 14 36.1 | +1.1 |
| ANWB | | | | *e*S | | Sn | 08 14 60.0 | +1.8 |
| **SLBI** | **Saint Lucia, B** | **2.00** | **186** | *e*P | | Pb | 08 14 38.8 | -1.2 |
| **SLB** | **Belfond** | **2.19** | **187** | *e*P | | Pn | 08 14 40.5 | +1.4 |

*ASIES **26** 08:20:34.5, 23.°11N×120.°70E, h6km, ML3.8, Mw3.6, Moment Tensor Solution. Moment tensor: Scale 10²¹Nm; Mrr-0.50; Mθθ-0.39; Mϕϕ0.89; Mrθ 0.75; Mθϕ-2.34; Mϕr 1.13; Fault plane solution: M₀2.81649×10²¹ NP1: ϕs184.42000°, δ76.60000°, λ-27.27000°. NP2: ϕs281.24000°, δ63.53000°, λ-164.99000°. Principal axes: T Plg8.6990°, Azm234.9440°; N Plg59.8400°, Azm340.2100°; P Plg28.6270°, Azm140.1530°;*
*JMA **26** 08:20:34.2±0.2, 23.°1N±0.°2×120.°7E±0.°7, h0km, MV3.6/11, TAIWAN REGION*
*TAP **26** 08:20:34.5, 23.°11N×120.°70E, h6km, ML3.8, C*
**ISC 26 08:20:35.1**±0.8, **23.°11N**±0.°01×**120.°71E**±0.°01, **h9**km±5km, **n127,** σ0°**87**/222, **21C-11D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **STYH** | **Taoyuan** | **0.09** | **42** | ⇑*i*P | | **Pg** | **08 20 37.3** | **-0.2** |
| | baz=47 | | | | | | | |
| STYH | | | | S | | **Sg** | **08 20 39.0** | **-0.1** |
| | baz=47 | | | | | | | |
| **SGST** | **Jiashian** | **0.12** | **259** | ⇑*i*P | | **Pg** | **08 20 36.8** | **-1.1** |
| | baz=256 | | | | | | | |
| SGST | | | | *i* S | | **Sg** | **08 20 39.2** | **-0.7** |
| | baz=256 | | | | | | | |
| **SLGT** | **Liugui** | **0.13** | **208** | ⇑*i*P | | **Pg** | **08 20 38.1** | **+0.1** |
| | baz=203 | | | | | | | |
| SLGT | | | | *i* S | | **Sg** | **08 20 40.5** | **+0.5** |
| | baz=203 | | | | | | | |
| **WTP** | **Ta-pu** | **0.17** | **327** | ⇓*i*P | | **Pg** | **08 20 38.6** | **-0.1** |
| | baz=333 | | | | | | | |
| WTP | | | | *i* S | | **Sg** | **08 20 41.4** | **+0.2** |
| | baz=333 | | | | | | | |
| **CHN1** | **Nanshi** | **0.19** | **295** | ⇓*i*P | | **Pg** | **08 20 39.2** | **+0.2** |
| | baz=297 | | | | | | | |
| CHN1 | | | | S | | **Sg** | **08 20 42.7** | **+1.0** |
| | baz=297 | | | | | | | |
| **TPUB** | **Ta-pu** | **0.21** | **339** | ⇓*i*P | | **Pg** | **08 20 39.6** | **+0.2** |
| | baz=337 | | | | | | | |
| TPUB | | | | *i* S | | **Sg** | **08 20 43.0** | **+0.7** |
| | baz=337 | | | | | | | |
| **SNST** | **Tainan City** | **0.23** | **300** | *e*P | | **Pg** | **08 20 40.3** | **+0.5** |
| | baz=302 | | | | | | | |
| SNST | | | | *e*S | | **Sg** | **08 20 44.4** | **+1.5** |
| | baz=302 | | | | | | | |
| **TWK** | **Hsinying** | **0.26** | **308** | ⇓*i*P | | **Pb** | **08 20 40.8** | **-1.2** |
| | baz=312 | | | | | | | |
| TWK | | | | S | | **Sb** | **08 20 44.9** | **-1.7** |
| | baz=312 | | | | | | | |
| **ELDTW** | **Lidau** | **0.29** | **73** | ⇑*i*P | | **Pb** | **08 20 41.4** | **-1.1** |
| | baz=76 | | | | | | | |
| ELDTW | | | | S | | **Sg** | **08 20 45.6** | **+0.7** |
| | baz=76 | | | | | | | |
| **SCST** | **Cishan** | **0.30** | **223** | ⇑*e*P | | **Pb** | **08 20 42.1** | **-0.5** |
| | baz=220 | | | | | | | |
| SCST | | | | *e*S | | **Sb** | **08 20 47.9** | **+0.4** |
| | baz=220 | | | | | | | |
| **WCKO** | **Fanlu** | **0.35** | **344** | ⇓P | | **Pb** | **08 20 42.7** | **-0.7** |
| | baz=359 | | | | | | | |
| WCKO | | | | S | | **Sb** | **08 20 48.7** | **-0.3** |
| | baz=359 | | | | | | | |
| **TWM1** | **Shoushan** | **0.39** | **224** | ⇑P | | **Pb** | **08 20 44.6** | **+0.5** |
| | baz=219 | | | | | | | |
| TWM1 | | | | S | | **Sb** | **08 20 51.0** | **+0.8** |
| | baz=219 | | | | | | | |
| **SSHA** | **Shanhua** | **0.39** | **275** | *e*P | | **Pn** | **08 20 45.5** | **-1.4** |
| | baz=286 | | | | | | | |
| SSHA | | | | *e*S | | **Sb** | **08 20 53.3** | **+3.1** |
| | baz=286 | | | | | | | |
| **TSMG** | **Majia** | **0.40** | **189** | *i* P | | **Pb** | **08 20 43.3** | **-1.1** |
| | baz=178 | | | | | | | |
| TSMG | | | | *e*S | | **Sb** | **08 20 49.1** | **-1.5** |
| | baz=178 | | | | | | | |
| **ALS** | **Alishan** | **0.41** | **12** | *i* P | | **Pb** | **08 20 43.6** | **-1.1** |
| | baz=26 | | | | | | | |
| ALS | | | | *e*S | | **Sb** | **08 20 50.4** | **-0.7** |
| | baz=26 | | | | | | | |
| **SGLT** | **Jiouru** | **0.43** | **208** | *e*P | | **Pb** | **08 20 44.3** | **-0.5** |
| | baz=194 | | | | | | | |
| SGLT | | | | *e*S | | **Sb** | **08 20 51.9** | **+0.5** |
| | baz=194 | | | | | | | |
| **LONT** | **Longtian** | **0.43** | **117** | ⇓*i*P | | **Pb** | **08 20 44.2** | **-0.7** |
| | baz=110 | | | | | | | |
| LONT | | | | S | | **Sb** | **08 20 51.0** | **-0.4** |
| | baz=110 | | | | | | | |
| **TWG** | **Pinlang** | **0.44** | **130** | ⇓*i*P | | **Pb** | **08 20 44.5** | **-0.5** |
| | baz=129 | | | | | | | |
| TWG | | | | *e*S | | **Sb** | **08 20 51.0** | **-0.6** |
| | baz=129 | | | | | | | |
| **TWGBT** | **Beinan** | **0.44** | **130** | ⇓*i*P | | **Pb** | **08 20 44.5** | **-0.6** |
| | baz=129 | | | | | | | |
| TWGBT | | | | S | | **Sb** | **08 20 51.4** | **-0.4** |
| | baz=129 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.45** | **262** | *e*P | | **Pn** | **08 20 46.6** | **-1.0** |
| | baz=276 | | | | | | | |
| TAI1 | | | | S | | **Sb** | **08 20 53.7** | **+1.8** |
| | baz=276 | | | | | | | |
| **EHD** | **Haiduan** | **0.46** | **84** | *e*P | | **Pg** | **08 20 44.1** | **+0.1** |
| | baz=80 | | | | | | | |
| EHD | | | | *i* S | | **Sg** | **08 20 50.7** | **+0.7** |
| | baz=80 | | | | | | | |
| **ECS** | **Chishang** | **0.47** | **91** | ⇑P | | **Pb** | **08 20 45.1** | **-0.4** |
| | baz=86 | | | | | | | |
| ECS | | | | *e*S | | **Sb** | **08 20 51.9** | **-0.6** |
| | baz=86 | | | | | | | |
| **CHY** | **Chiayi** | **0.47** | **326** | *e*P | | **Pb** | **08 20 45.5** | **0.0** |
| | baz=330 | | | | | | | |
| CHY | | | | *e*S | | **Sb** | **08 20 53.5** | **+0.9** |
| | baz=330 | | | | | | | |
| **ICHU** | **Yijhu** | **0.47** | **303** | *e*P | | **Pb** | **08 20 45.8** | **+0.3** |
| | baz=304 | | | | | | | |
| ICHU | | | | S | | **Sb** | **08 20 54.7** | **+2.1** |
| | baz=304 | | | | | | | |
| **CHN2** | **Minshiung** | **0.48** | **333** | *e*P | | **Pb** | **08 20 45.5** | **-0.1** |
| | baz=337 | | | | | | | |
| CHN2 | | | | S | | **Sb** | **08 20 54.3** | **+1.5** |
| | baz=337 | | | | | | | |
| **SCLT** | **Jiali** | **0.48** | **278** | *e*P | | **Pn** | **08 20 46.6** | **-1.5** |
| | baz=296 | | | | | | | |
| **CHN5** | **Tsauling** | **0.49** | **356** | ⇑*e*P | | **Pb** | **08 20 45.2** | **-0.7** |
| | baz=8.0 | | | | | | | |
| CHN5 | | | | *e*S | | **Sb** | **08 20 53.2** | **0.0** |
| | baz=8.0 | | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.49** | **225** | *e*P | | **Pb** | **08 20 46.1** | **+0.3** |
| | baz=221 | | | | | | | |
| SNJT | | | | *e*S | | **Sb** | **08 20 56.1** | **+2.9** |
| | baz=221 | | | | | | | |
| **MASBT** | **Mashibuluo** | **0.50** | **188** | ⇓*i*P | | **Pb** | **08 20 45.0** | **-1.0** |
| | baz=179 | | | | | | | |
| MASBT | | | | *e*S | | **Sg** | **08 20 51.3** | **+0.1** |
| | baz=179 | | | | | | | |
| **CHN8** | **Yiju** | **0.52** | **298** | *e*P | | **Pb** | **08 20 46.6** | **+0.3** |
| | baz=299 | | | | | | | |
| CHN8 | | | | *i* S | | **Sn** | **08 20 56.2** | **-1.4** |
| | baz=299 | | | | | | | |
| **TTN** | **Taitung** | **0.53** | **131** | *e*P | | **Pb** | **08 20 46.8** | **+0.3** |
| | baz=130 | | | | | | | |
| TTN | | | | *e*S | | **Sb** | **08 20 55.3** | **+1.0** |
| | baz=130 | | | | | | | |
| **FULB** | **Fuli** | **0.54** | **80** | ⇑*i*P | | **Pb** | **08 20 46.7** | **-0.1** |
| | baz=74 | | | | | | | |
| FULB | | | | *i* S | | **Sb** | **08 20 55.5** | **+0.8** |
| | baz=74 | | | | | | | |
| **ECL** | **Taimali** | **0.55** | **156** | ⇓P | | **Pb** | **08 20 46.1** | **-0.8** |
| | baz=153 | | | | | | | |
| ECL | | | | *e*S | | **Sg** | **08 20 53.4** | **+0.3** |
| | baz=153 | | | | | | | |
| **EDH** | **Donghe** | **0.56** | **104** | *i* P | | **Pb** | **08 20 47.4** | **+0.3** |
| | baz=109 | | | | | | | |
| EDH | | | | *i* S | | **Sb** | **08 20 55.9** | **+0.8** |
| | baz=109 | | | | | | | |
| **TSCK** | **Chigu Township** | **0.58** | **274** | *e*P | | **Pn** | **08 20 48.2** | **-1.2** |
| | baz=291 | | | | | | | |
| TSCK | | | | S | | **Sn** | **08 20 58.3** | **-0.7** |
| | baz=291 | | | | | | | |
| **TWF1** | **Yuli** | **0.59** | **65** | ⇑*i*P | | **Pb** | **08 20 46.9** | **-0.7** |
| | baz=75 | | | | | | | |
| TWF1 | | | | *e*S | | **Sg** | **08 20 54.5** | **+0.2** |
| | baz=75 | | | | | | | |
| **CHKT** | **Chengkung** | **0.60** | **90** | ⇑*i*P | | **Pb** | **08 20 48.1** | **+0.3** |
| | baz=91 | | | | | | | |
| CHKT | | | | S | | **Sn** | **08 20 58.2** | **-1.4** |
| | baz=91 | | | | | | | |
| **WDLH** | **Douliu** | **0.60** | **345** | *e*P | | **Pb** | **08 20 48.1** | **+0.4** |
| | baz=347 | | | | | | | |
| WDLH | | | | *e*S | | **Sn** | **08 20 57.9** | **-1.7** |
| | baz=347 | | | | | | | |
| **WHYT** | **Xinyi Township** | **0.60** | **12** | ⇑P | | **Pb** | **08 20 47.0** | **-0.8** |
| | baz=22 | | | | | | | |
| WHYT | | | | *e*S | | **Sb** | **08 20 56.6** | **+0.2** |
| | baz=22 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **0.61** | **313** | *e*P | | **Pb** | **08 20 48.2** | **+0.3** |
| | baz=315 | | | | | | | |
| WSL | | | | *e*S | | **Sn** | **08 20 58.8** | **-1.0** |
| | baz=315 | | | | | | | |
| **EYUL** | **Yuli** | **0.61** | **67** | *e*P | | **Pb** | **08 20 47.3** | **-0.6** |
| | baz=75 | | | | | | | |
| EYUL | | | | *e*S | | **Sg** | **08 20 54.7** | **-0.1** |
| | baz=75 | | | | | | | |
| **YULB** | **Yu-li** | **0.61** | **62** | ⇑*i*P | | **Pg** | **08 20 47.0** | **+0.1** |
| | baz=63 | | | | | | | |
| YULB | | | | *e*S | | **Sg** | **08 20 54.8** | **-0.1** |
| | baz=63 | | | | | | | |
| **CHKH** | **Chenggong** | **0.64** | **82** | ⇑*e*P | | **Pb** | **08 20 48.4** | **+0.1** |
| | baz=83 | | | | | | | |
| CHKH | | | | S | | **Sb** | **08 20 58.0** | **+0.7** |
| | baz=83 | | | | | | | |
| **WTK** | **Tuku** | **0.65** | **333** | *e*P | | **Pb** | **08 20 49.0** | **+0.4** |
| | baz=336 | | | | | | | |
| WTK | | | | *i* S | | **Sn** | **08 20 59.8** | **-1.0** |
| | baz=336 | | | | | | | |
| **EHY** | **Hungye** | **0.69** | **54** | ⇑*i*P | | **Pb** | **08 20 48.5** | **-0.7** |
| | baz=61 | | | | | | | |
| EHY | | | | *e*S | | **Sg** | **08 20 57.2** | **-0.2** |
| | baz=61 | | | | | | | |
| **WSF** | **Szhu** | **0.69** | **320** | *e*P | | **Pb** | **08 20 49.3** | **0.0** |
| | baz=322 | | | | | | | |
| WSF | | | | *e*S | | **Sn** | **08 21 00.3** | **-1.6** |
| | baz=322 | | | | | | | |
| **EHYH** | **Wanrong** | **0.70** | **56** | *e*P | | **Pb** | **08 20 48.7** | **-0.7** |
| | baz=64 | | | | | | | |
| EHYH | | | | *e*S | | **Sg** | **08 20 57.6** | **-0.1** |
| | baz=64 | | | | | | | |
| **ECBN** | **Changbin** | **0.71** | **73** | *e*P | | **Pb** | **08 20 49.9** | **+0.3** |
| | baz=70 | | | | | | | |
| ECBN | | | | *e*S | | **Sb** | **08 21 00.3** | **+0.8** |
| | baz=70 | | | | | | | |
| **WJS** | **Zhushan** | **0.71** | **1** | *e*P | | **Pn** | **08 20 50.3** | **-1.0** |
| | baz=5.0 | | | | | | | |
| WJS | | | | *e*S | | **Sb** | **08 21 00.7** | **+1.1** |
| | baz=5.0 | | | | | | | |
| **SSLB** | **Suanglung** | **0.71** | **18** | ⇑*e*P | | **Pg** | **08 20 48.7** | **-0.2** |
| | baz=29 | | | | | | | |
| SSLB | | | | S | | **Sb** | **08 20 59.4** | **-0.3** |
| | baz=29 | | | | | | | |
| **EAST** | **Anshuo** | **0.73** | **170** | *e*P | | **Pb** | **08 20 49.4** | **-0.5** |
| | baz=161 | | | | | | | |
| EAST | | | | *e*S | | **Sb** | **08 21 00.7** | **+0.6** |
| | baz=161 | | | | | | | |
| **SCZT** | **Fangliau** | **0.73** | **187** | *e*P | | **Pb** | **08 20 49.4** | **-0.6** |
| | baz=173 | | | | | | | |
| **VWDT** | **VWDT** | **0.76** | **31** | ⇑*i*P | | **Pb** | **08 20 49.7** | **-0.7** |
| | baz=37 | | | | | | | |
| VWDT | | | | *e*S | | **Sb** | **08 21 01.1** | **+0.3** |
| | baz=37 | | | | | | | |
| **HGSD** | **Ruisui** | **0.76** | **59** | ⇑*i*P | | **Pb** | **08 20 50.4** | **0.0** |
| | baz=67 | | | | | | | |
| HGSD | | | | S | | **Sg** | **08 21 00.1** | **+0.5** |
| | baz=67 | | | | | | | |
| **TAW** | **Tawu** | **0.76** | **167** | *e*P | | **Pb** | **08 20 50.6** | **+0.2** |
| | baz=171 | | | | | | | |
| **WNT** | **Mingjian** | **0.77** | **358** | ⇑P | | **Pb** | **08 20 51.0** | **+0.4** |
| | baz=2.0 | | | | | | | |
| WNT | | | | S | | **Sn** | **08 21 02.4** | **-1.3** |
| | baz=2.0 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.78** | **168** | *e*P | | **Pb** | **08 20 50.4** | **-0.3** |
| | baz=160 | | | | | | | |
| TAWH | | | | *e*S | | **Sn** | **08 21 03.0** | **-1.0** |
| | baz=160 | | | | | | | |
| **TYC** | **Yuchr** | **0.81** | **10** | ⇑P | | **Pb** | **08 20 51.3** | **+0.1** |
| | baz=20 | | | | | | | |
| TYC | | | | S | | **Sn** | **08 21 03.9** | **-0.8** |
| | baz=20 | | | | | | | |
| **LDUT** | **Ludao** | **0.82** | **121** | *e*P | | **Pb** | **08 20 51.9** | **+0.4** |
| | baz=108 | | | | | | | |
| LDUT | | | | S | | **Sn** | **08 21 04.2** | **-0.8** |
| | baz=108 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.82** | **203** | *e*P | | **Pn** | **08 20 54.5** | **+1.7** |
| | baz=199 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **0.85** | **332** | P | | **Pb** | **08 20 51.6** | **-0.4** |
| | baz=336 | | | | | | | |
| WTCT | | | | *e*S | | **Sb** | **08 21 04.4** | **+0.8** |
| | baz=336 | | | | | | | |
| **EGFH** | **Guangfu** | **0.86** | **49** | *e*P | | **Pb** | **08 20 51.9** | **-0.3** |
| | baz=60 | | | | | | | |
| EGFH | | | | *e*S | | **Sb** | **08 21 03.3** | **-0.6** |
| | baz=60 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **0.87** | **45** | P | | **Pg** | **08 20 51.6** | **-0.2** |
| | baz=48 | | | | | | | |
| WARBT | | | | *e*S | | **Sb** | **08 21 03.4** | **-0.6** |
| | baz=48 | | | | | | | |
| **SLIU** | **Shizi** | **0.89** | **175** | *e*P | | **Pb** | **08 20 52.4** | **-0.3** |
| | baz=172 | | | | | | | |
| SLIU | | | | *e*S | | **Sn** | **08 21 06.4** | **-0.3** |
| | baz=172 | | | | | | | |
| **OWD** | **Renai** | **0.95** | **27** | P | | **Pg** | **08 20 52.9** | **-0.4** |
| | baz=29 | | | | | | | |
| OWD | | | | *e*S | | **Sn** | **08 21 07.5** | **-0.9** |
| | baz=29 | | | | | | | |
| **WUSB** | **Renai** | **0.96** | **23** | ⇓*i*P | | **Pg** | **08 20 52.9** | **-0.6** |
| | baz=33 | | | | | | | |
| WUSB | | | | *e*S | | **Sb** | **08 21 06.8** | **+0.1** |
| | baz=33 | | | | | | | |
| **WCS** | **Beigang Elemen** | **0.96** | **11** | P | | **Pn** | **08 20 54.2** | **-0.6** |
| | baz=14 | | | | | | | |
| WCS | | | | *e*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWT | | | | *e*S | **Sn** | **08 21 15.4** | **+0.3** |
| | baz=24 | | | | | | |
| **FUSS** | **Fushou** | **1.24** | **23** | *e*P | **Pg** | **08 20 58.3** | **-0.6** |
| | baz=27 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **08 21 15.7** | **+0.1** |
| | baz=27 | | | | | | |
| **TWQ1** | **Liyutan** | **1.24** | **3** | *e*P | **Pn** | **08 20 59.3** | **+0.7** |
| | baz=7.0 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **08 21 17.0** | **+1.6** |
| | baz=7.0 | | | | | | |
| **WDJ** | **Dajia District** | **1.24** | **357** | *e*P | **Pn** | **08 20 59.4** | **+0.9** |
| | baz=1.0 | | | | | | |
| WDJ | | | | S | **Sn** | **08 21 17.4** | **+2.0** |
| | baz=1.0 | | | | | | |
| **TWD** | **Chiawan** | **1.27** | **40** | *i* P | **Pg** | **08 20 59.3** | **-0.1** |
| | baz=44 | | | | | | |
| TWD | | | | *e*S | **Sn** | **08 21 16.7** | **+0.7** |
| | baz=44 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.30** | **33** | *e*P | **Pn** | **08 20 59.5** | **-0.1** |
| | baz=48 | | | | | | |
| ETLH | | | | *e*S | **Sn** | **08 21 19.1** | **+2.0** |
| | baz=48 | | | | | | |
| **NSY** | **Sanyi** | **1.30** | **2** | *e*P | **Pg** | **08 21 00.8** | **+0.7** |
| | baz=7.0 | | | | | | |
| NSY | | | | *e*S | **Sn** | **08 21 18.8** | **+1.7** |
| | baz=7.0 | | | | | | |
| **LAY** | **Lan-yu** | **1.31** | **144** | *e*P | **Pb** | **08 20 59.8** | **-0.2** |
| | baz=141 | | | | | | |
| LAY | | | | *e*S | **Sn** | **08 21 17.7** | **+0.4** |
| | baz=141 | | | | | | |
| **NACB** | **Ninganchiao** | **1.34** | **37** | P | **Pg** | **08 21 00.2** | **-0.5** |
| | baz=51 | | | | | | |
| NACB | | | | *e*S | **Sb** | **08 21 16.9** | **-0.6** |
| | baz=51 | | | | | | |
| **LYUB** | **Lan-yu** | **1.36** | **144** | *e*P | **Pn** | **08 20 59.7** | **-0.5** |
| | baz=130 | | | | | | |
| **NMLH** | **Miaoli** | **1.43** | **3** | *e*P | **Pg** | **08 21 01.8** | **-0.7** |
| | baz=9.0 | | | | | | |
| NMLH | | | | *i* S | **Sg** | **08 21 22.9** | **+1.9** |
| | baz=9.0 | | | | | | |
| **NNSB** | **Datong** | **1.45** | **25** | *i* P | **Pb** | **08 21 01.9** | **-0.4** |
| | baz=28 | | | | | | |
| NNSB | | | | *e*S | **Sg** | **08 21 22.1** | **+0.2** |
| | baz=28 | | | | | | |
| **NNS** | **Nan Shan** | **1.46** | **24** | *e*P | **Pb** | **08 21 02.2** | **-0.3** |
| | baz=27 | | | | | | |
| NNS | | | | *e*S | **Sg** | **08 21 21.5** | **-0.6** |
| | baz=27 | | | | | | |
| **EAHA** | **Aohua** | **1.54** | **38** | *e*P | **Pb** | **08 21 03.8** | **+0.1** |
| | baz=49 | | | | | | |
| EAHA | | | | *e*S | **Sg** | **08 21 24.5** | **-0.1** |
| | baz=49 | | | | | | |
| **NSTT** | **Nanjuang** | **1.54** | **10** | *e*P | **Pg** | **08 21 04.3** | **-0.3** |
| | baz=17 | | | | | | |
| NSTT | | | | *e*S | **Sg** | **08 21 25.0** | **+0.3** |
| | baz=17 | | | | | | |
| **LIOB** | **Emei** | **1.56** | **10** | *e*P | **Pb** | **08 21 04.0** | **0.0** |
| | baz=15 | | | | | | |
| LIOB | | | | *e*S | **Sg** | **08 21 26.1** | **+0.8** |
| | baz=15 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.56** | **14** | *e*P | **Pg** | **08 21 04.8** | **-0.3** |
| | baz=7.0 | | | | | | |
| NFF | | | | *i* S | **Sg** | **08 21 25.5** | **+0.1** |
| | baz=7.0 | | | | | | |
| **LATG** | **Datong** | **1.61** | **28** | *e*P | **Pg** | **08 21 05.6** | **-0.3** |
| | baz=42 | | | | | | |
| LATG | | | | *e*S | **Sg** | **08 21 28.7** | **+1.9** |
| | baz=42 | | | | | | |
| **ENA** | **Nanau** | **1.62** | **35** | *e*P | **Pb** | **08 21 04.8** | **-0.3** |
| | baz=53 | | | | | | |
| **EWUT** | **Wuta** | **1.65** | **36** | *e*P | **Pg** | **08 21 06.1** | **-0.7** |
| | baz=53 | | | | | | |
| **NDT** | **Datong Townshi** | **1.66** | **26** | *e*P | **Pb** | **08 21 05.7** | **-0.1** |
| | baz=18 | | | | | | |
| **NSK** | **Sanguang** | **1.67** | **21** | *e*P | **Pg** | **08 21 06.5** | **-0.7** |
| | baz=26 | | | | | | |
| **YHNB** | **Yeheng** | **1.67** | **21** | *e*P | **Pg** | **08 21 06.2** | **-0.9** |
| | baz=26 | | | | | | |
| YHNB | | | | *e*S | **Sg** | **08 21 28.5** | **-0.4** |
| | baz=26 | | | | | | |
| **ENTT** | **Nioudou** | **1.72** | **27** | *e*P | **Pg** | **08 21 07.4** | **-0.6** |
| | baz=41 | | | | | | |
| ENTT | | | | *e*S | **Sg** | **08 21 31.7** | **+1.4** |
| | baz=41 | | | | | | |
| **NDS** | **Dongshan** | **1.78** | **31** | *e*P | **Pg** | **08 21 08.4** | **-0.7** |
| | baz=53 | | | | | | |
| **EOS4** | **EOS4** | **1.79** | **55** | *e*P | **Pn** | **08 21 06.6** | **+0.8** |
| | baz=73 | | | | | | |
| EOS4 | | | | *e*S | **Sb** | **08 21 29.9** | **-0.2** |
| | baz=73 | | | | | | |
| **NWLT** | **Wulai** | **1.81** | **23** | *e*P | **Pg** | **08 21 09.1** | **-0.8** |
| | baz=28 | | | | | | |
| NWLT | | | | *e*S | **Sg** | **08 21 33.5** | **+0.1** |
| | baz=28 | | | | | | |
| **TWC** | **Suao** | **1.82** | **35** | *e*P | **Pb** | **08 21 08.9** | **+0.4** |
| | baz=51 | | | | | | |
| **TWE** | **Neicheng** | **1.83** | **28** | *e*P | **Pg** | **08 21 09.9** | **-0.3** |
| | baz=35 | | | | | | |
| TWE | | | | *e*S | **Sg** | **08 21 33.8** | **-0.2** |
| | baz=35 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.83** | **26** | *e*P | **Pg** | **08 21 09.1** | **-1.1** |
| | baz=21 | | | | | | |
| FUSB | | | | *e*S | **Sg** | **08 21 33.7** | **-0.3** |
| | baz=21 | | | | | | |
| **EOS3** | **EOS3** | **1.88** | **51** | *e*P | **Pn** | **08 21 07.6** | **+0.3** |
| | baz=54 | | | | | | |
| **EOS2** | **EOS2** | **1.91** | **47** | *e*P | **Pb** | **08 21 08.9** | **-1.1** |
| | baz=63 | | | | | | |
| **TWA** | **Mucha** | **2.03** | **23** | *e*P | **Pg** | **08 21 13.8** | **-0.2** |
| | baz=29 | | | | | | |
| **TIPB** | **Shuangxi** | **2.12** | **29** | *e*P | **Pb** | **08 21 12.9** | **-0.7** |
| | baz=52 | | | | | | |
| **VWUC** | **VWUC** | **2.20** | **329** | *e*P | **Pn** | **08 21 11.9** | **+0.1** |
| | baz=334 | | | | | | |
| **TWB1** | **Santiao Chiao** | **2.23** | **31** | *e*P | **Pb** | **08 21 14.9** | **-0.5** |
| | baz=52 | | | | | | |
| **SXI1** | **Grass Mountain** | **2.25** | **28** | *e*P | **Pn** | **08 21 13.6** | **+1.1** |
| | baz=18 | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.41** | **323** | *e*P | **Pn** | **08 21 14.9** | **+0.2** |
| | baz=328 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.45** | **56** | P | **Pb** | **08 21 17.2** | **-2.0** |
| **YOJ** | **Yonaguni jima** | **2.50** | **57** | *e*P | **Pn** | **08 21 15.7** | **-0.2** |
| | baz=60 | | | | | | |
| **KNMB** | **Chin-men Tao** | **2.52** | **303** | *e*P | **Pn** | **08 21 14.6** | **-1.6** |
| | baz=306 | | | | | | |
| **ZPLA** | **Ao Xicun** | **2.84** | **287** | *e*P | **Pn** | **08 21 20.4** | **-0.1** |
| | baz=289 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **3.02** | **66** | *e*P | **Pn** | **08 21 25.5** | **+2.4** |
| **MATB** | **Ma-tsu** | **3.11** | **347** | *e*P | **Pn** | **08 21 23.3** | **-1.0** |
| | baz=354 | | | | | | |
| **MHZQ** | **Yeshan** | **3.35** | **333** | *e*P | **Pn** | **08 21 26.7** | **-0.9** |
| | baz=339 | | | | | | |
| **JIJ** | **Ishigaki jima** | **3.38** | **68** | *e*S | **Sn** | **08 22 09.8** | **+1.4** |
| **JISG** | **Ishigakijimahi** | **3.61** | **65** | *e*S | **Sn** | **08 22 16.0** | **+2.1** |

*IDC* ***26*** *08:24:42.3±3.2, 44°.62N×149°.67E, h0km, mb3.9/7, mbtmp3.8/8, ML2.6/1, Error ellipse: s-maj=84.7km s-min=30.4km az=171.0*
*JMA* ***26*** *08:24:43.4±1.1, 44°.N±4°.×15°.0E±°, h30km, MV3.7/12, SE OFF ETOROFU*
*SKHL* ***26*** *08:24:43.4±0.2, 44°.10N×149°.80E, h32km±1km, mb4.2/4*
*NEIC* ***26*** *08:24:44.3±1.8, 44°.4N±0°.1×149°.44E±0°.10, h10km±2km, mb4.2/8, Error ellipse: s-maj=25.9km s-min=8.9km az=161.0*

**ISC 26 08:24:45.6**±0.9, **44°.05N**±0°.08×**149°.61E**±0°.08, **h35**km, **n43, σ18°37**/42, **mb4.1**/11, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.72** | **314** | *e*P | **Pn** | **08 25 12.1** | **-0.8** |
| KUR | | | | AMB | AMB | 08 25 14.1 | |
| | 150nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **08 25 33.5** | **-0.1** |
| KUR | | | | A | A | 08 25 49.4 | |
| | 220nm,0.5s | | | | | | |
| KUR | | | | A | A | 08 25 49.4 | |
| | 130nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **2.01** | **266** | *e*P | **Pn** | **08 25 16.9** | **-0.1** |
| SHO | | | | AMB | AMB | 08 25 17.9 | |
| | 30nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **08 25 42.2** | **+1.3** |
| SHO | | | | A | A | 08 25 45.3 | |
| | 100nm,0.4s | | | | | | |
| SHO | | | | A | A | 08 25 45.3 | |
| | 80nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.70** | **271** | *e*P | **Pn** | **08 25 27.0** | **+0.5** |
| YUK | | | | AMB | AMB | 08 25 27.9 | |
| | 100nm,0.5s | | | | | | |
| YUK | | | | *e*S | **Sn** | **08 25 59.6** | **+1.7** |
| YUK | | | | A | A | 08 26 07.6 | |
| | 170nm,0.6s | | | | | | |
| YUK | | | | A | A | 08 26 07.6 | |
| | 130nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.88** | **258** | P | **Pn** | **08 25 29.0** | **0.0** |
| NEM2 | | | | *e*S | **Sn** | **08 26 02.4** | **-0.1** |
| **JRA** | **Rausu** | **3.24** | **270** | *e*P | **Pn** | **08 25 35.5** | **+1.6** |
| **JAK** | **Akkeshi** | **3.72** | **255** | P | **Pn** | **08 25 40.6** | **+0.1** |
| **JTKR** | **Abashiri--Toko** | **4.11** | **271** | *e*P | **Pn** | **08 25 47.5** | **+1.7** |
| **JAR** | **Ashorobuto** | **4.30** | **262** | *e*P | **Pn** | **08 25 49.9** | **+1.5** |
| **JOB** | **Onbets** | **4.35** | **257** | *e*S | **Sn** | **08 26 39.7** | **+1.0** |
| **JCH** | **Churui** | **4.78** | **255** | P | **Pn** | **08 25 56.7** | **+1.8** |
| **JKA** | **Kamikawa-asahi** | **5.05** | **273** | Pn | **Pn** | **08 25 57.5** | **-1.2** |
| **ASAJ** | **Asahikawa** | **5.05** | **273** | Pn | **Pn** | **08 25 58.8** | **0.0** |
| | 0.2nm,0.3s,baz=300,slow=20,SNR=2.3 10nm,1.0s | | | | | | |
| **ERM** | **Erimo** | **5.15** | **249** | Pn | **Pn** | **08 26 01.4** | **+1.3** |
| **JNBK** | **Urakawa-nobuka** | **5.32** | **253** | *e*P | **Pn** | **08 26 03.8** | **+1.4** |
| **JANG** | **Nango** | **7.04** | **241** | *e*P | **Pn** | **08 26 25.5** | **-0.6** |
| JANG | | | | *e*S | **Sn** | **08 27 41.5** | **-3.4** |
| **JTH** | **Tanohata** | **7.08** | **237** | S | **Sn** | **08 27 42.2** | **-3.7** |
| **JTM** | **Tenmabayashi** | **7.11** | **246** | Pn | **Pn** | **08 26 27.7** | **+0.7** |
| **MJB9** | **Matsu-Tunnel** | **11.48** | **233** | Pn | **Pn** | **08 27 28.2** | **+1.2** |
| **USA0B** | **Ussuriysk Arra** | **12.66** | **277** | Pn | **Pn** | **08 27 40.6** | **-2.5** |
| **YAK** | **Yakutsk** | **21.47** | **334** | P | **P** | **08 29 28.5** | **-2.1** |
| **H11N2** | **WAKE ISLAND Hy** | **28.23** | **144** | T | T | 09 01 39.5 | |
| | baz=334,slow=75,SNR=6.0 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.24** | **144** | T | T | 09 01 42.5 | |
| | baz=334,slow=75,SNR=4.1 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.24** | **144** | T | T | 09 01 39.9 | |
| | baz=334,slow=75,SNR=4.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.23** | **145** | T | T | 09 02 57.5 | |
| | baz=334,slow=76,SNR=6.1 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.24** | **145** | T | T | 09 02 57.6 | |
| | baz=334,slow=76,SNR=2.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.25** | **145** | T | T | 09 02 59.9 | |
| | baz=334,slow=76,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **29.99** | **293** | P | **P** | **08 30 51.1** | **+0.3** |
| | 0.4nm,0.4s,baz=95,slow=7.2,SNR=3.1 0.4nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **46.01** | **298** | P | **P** | **08 33 06.0** | **+0.6** |
| MK31 | | | | IAmb | IAmb | 08 33 06.5 | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.01** | **298** | P | **P** | **08 33 06.0** | **+0.6** |
| **MKAR** | **Makanchi Array** | **46.01** | **298** | P | **P** | **08 33 06.0** | **+0.6** |
| | comp=Z,1.7nm,0.7s,baz=72,slow=8.2,SNR=13 comp=Z,1.7nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **46.21** | **298** | P | **P** | **08 33 07.3** | **+0.4** |
| MAKZ | | | | IAmb | IAmb | 08 33 08.0 | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **46.83** | **305** | P | **P** | **08 33 11.6** | **-0.1** |
| **KURBB** | **Kurchatov Arra** | **46.92** | **304** | P | **P** | **08 33 11.8** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=71,slow=7.9,SNR=5.2 comp=Z,0.6nm,0.3s | | | | | | |
| **LSA** | **Lhasa** | **47.95** | **273** | P | **P** | **08 33 21.5** | **+0.2** |
| **Q32M** | **Nakina River** | **47.97** | **43** | | **P** | **08 33 22.5** | **+1.8** |
| Q32M | | | | IAmb | IAmb | 08 33 40.3 | |
| | comp=Z,2.4nm,1.1s | | | | | | |
| **R33M** | **Jennings River** | **48.47** | **42** | P | **P** | **08 33 25.4** | **+0.9** |
| **BOOM** | **Boomskoye usch** | **51.95** | **296** | P | **P** | **08 33 52.9** | **+1.7** |
| BOOM | | | | IAmb | IAmb | 08 34 08.3 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **55.13** | **299** | P | **P** | **08 34 14.7** | **+0.5** |
| **FINES** | **FINESS Array B** | **65.40** | **334** | P | **P** | **08 35 22.6** | **-1.5** |
| | comp=Z,1.2nm,0.5s,baz=35,slow=8.1,SNR=14 comp=Z,1.2nm,0.5s | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.95** | **340** | P | **P** | **08 35 52.1** | **-0.8** |
| | comp=Z,0.5nm,0.5s,baz=28,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.95** | **340** | P | **P** | **08 35 52.2** | **-0.6** |
| | comp=Z,0.7nm,0.6s,baz=32,slow=6.6,SNR=8.5 comp=Z,0.7nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **70.08** | **338** | P | **P** | **08 35 52.6** | **-1.0** |
| | comp=Z,1.6nm,0.7s,baz=46,slow=6.4,SNR=6.6 comp=Z,1.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **81.00** | **58** | P | **P** | **08 36 56.9** | **+0.1** |
| | comp=Z,0.2nm,0.7s,baz=316,slow=3.8,SNR=2.7 comp=Z,0.2nm,0.7s | | | | | | |

*AFAD* ***26*** *08:25:00.8±0.0, 34°.09N×45°.99E, h7km±5km, MW4.0*
*IDC* ***26*** *08:25:01.6±1.1, 34°.65N×46°.35E, h0km, mb3.9/11, mbtmp4.0/16, ML3.8/4, Error ellipse: s-maj=23.0km s-min=17.1km az=1.0*
*NEIC* ***26*** *08:25:03.2±1.2, 34°.65N±0°.06×46°.34E±0°.08, h10km±1km, mb4.0/13, Error ellipse: s-maj=14.3km s-min=5.6km az=226.0*
*TEH* ***26*** *08:25:03.2, 34°.62N×46°.26E, h8km±22km, ML4.0*
*ISN* ***26*** *08:25:03.0±0.5, 34°.61N×46°.24E, h12km±5km, ML4.0*
*OMAN* ***26*** *08:25:16.2±0.5, 33°.93N×47°.13E, h10km, mb4.2/22, ms3.3/6, Error ellipse: s-maj=14.2km s-min=3.5km az=70.0*

**ISC 26 08:25:03.7**±0.9, **34°.58N**±0°.02×**46°.32E**±0°.02, **h16**km±6km, **n207, σ2°45**/243, **mb4.2**/28, **6C-2D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.14** | **24** | Pg | **Pg** | **08 25 06.8** | **-1.0** |
| **IGHG** | **Ghaleghazi** | **0.32** | **140** | Pg | **Pb** | **08 25 11.4** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **216** | Pg | **Pg** | **08 25 14.5** | **-0.5** |
| GLG1 | | | | Sg | **Sb** | **08 25 23.9** | **+0.6** |
| **KGS1** | **Ghasr-e-Shirin** | **0.61** | **264** | Pg | **Pg** | **08 25 14.3** | **-1.3** |
| KGS1 | | | | Sg | **Sg** | **08 25 22.9** | **-0.9** |
| **ILIN** | **Lien** | **0.63** | **57** | Pg | **Pg** | **08 25 15.8** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.67** | **116** | Pg | **Pb** | **08 25 17.4** | **+0.3** |
| KCHF | | | | Sg | **Sn** | **08 25 28.8** | **0.0** |
| **ILBA** | **Ilam Banvizeh** | **0.95** | **186** | Pg | **Pb** | **08 25 22.0** | **+0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.11** | **75** | Pg | **Pg** | **08 25 25.0** | **-0.3** |
| **IBZA** | **Bozab** | **1.28** | **94** | Pg | **Pg** | **08 25 28.9** | **+0.5** |
| **IBDR** | **Badra** | **1.50** | **193** | *e*Pn | **Pb** | **08 25 31.7** | **+0.7** |
| IBDR | | | | *e*Sn | **Sg** | **08 25 52.7** | **+0.7** |
| IBDR | | | | AML | AML | 08 25 59.8 | |
| | comp=N,2μm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 08 26 06.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.65** | **129** | Pg | **Pg** | **08 25 35.2** | **-0.1** |
| **SDS1** | **Sardasht. Az.** | **1.71** | **337** | Pg | **Pb** | **08 25 34.1** | **-0.8** |
| **IDOB** | **Doab** | **1.73** | **117** | Pg | **Pg** | **08 25 36.9** | **0.0** |
| **IKRK** | **Kirkuk** | **1.82** | **297** | *e*Pn | **Pn** | **08 25 34.7** | **+0.4** |
| IKRK | | | | *e*Sn | **Sb** | **08 25 58.4** | **-0.8** |
| IKRK | | | | AML | AML | 08 26 03.7 | |
| | comp=E,3μm,0.7s | | | | | | |
| IKRK | | | | AML | AML | 08 26 06.4 | |
| | comp=N,3μm,0.4s | | | | | | |
| **HSAM** | **Samen** | **1.92** | **100** | Pn | **Pb** | **08 25 39.3** | **+0.8** |
| **BHD** | **Baghdad** | **2.07** | **232** | *e*Pn | **Pn** | **08 25 39.0** | **+1.3** |
| BHD | | | | *e*Sn | **Sb** | **08 26 05.2** | **-1.1** |
| BHD | | | | AML | AML | 08 26 17.6 | |
| | comp=E,3μm,0.5s | | | | | | |
| **MAHB** | **Mahabad** | **2.24** | **347** | Pn | **Pn** | **08 25 41.6** | **+1.4** |
| **HAGD** | **Aghdareh** | **2.34** | **83** | Pn | **Pb** | **08 25 45.8** | **+0.2** |
| **RAFI** | **Al-Rafai** | **2.85** | **184** | *e*Pn | **Pn** | **08 25 51.0** | **+2.6** |
| RAFI | | | | *e*Sn | **Sn** | **08 26 25.5** | **+3.1** |
| **IRAZ** | **Razeghan** | **3.08** | **73** | Pn | **Pb** | **08 25 55.6** | **-2.6** |
| **IAZR** | **Azarshahr** | **3.11** | **355** | Pn | **Pn** | **08 25 54.9** | **+2.6** |
| **YOYA** | **Hakkari_Yksek** | **3.43** | **332** | P | **Pn** | **08 25 59.1** | **+2.6** |
| YOYA | | | | S | **Sb** | **08 26 42.6** | **-3.0** |
| **CUKT** | **Cukurca** | **3.46** | **321** | *e*P | **Pn** | **08 25 58.0** | **+1.0** |
| **CUKT** | **Cukurca** | **3.46** | **321** | *e*S | **Sn** | **08 26 40.9** | **+3.3** |
| **CUKT** | **Cukurca** | **3.46** | **321** | P | **Pn** | **08 25 57.9** | **+1.0** |
| CUKT | | | | S | **Sb** | **08 26 48.0** | **+1.7** |
| **HAKT** | **HAKKARI** | **3.65** | **325** | P | **Pn** | **08 26 00.9** | **+1.2** |
| HAKT | | | | S | **Sn** | **08 26 46.3** | **+3.8** |
| **IHRS** | **Heris** | **3.78** | **9** | Pn | **Pn** | **08 26 04.0** | **+2.5** |
| **IPIR** | **Pirpir** | **4.25** | **115** | Pn | **Pn** | **08 26 11.7** | **+3.6** |
| **QAMS** | **Qamsar** | **4.29** | **100** | Pn | **Pn** | **08 26 12.9** | **+4.4** |
| **SIRN** | **Sırnak** | **4.30** | **314** | P | **Pn** | **08 26 09.7** | **+1.2** |
| **JHBN** | **Jahan bin** | **4.32** | **122** | Pn | **Pn** | **08 26 12.4** | **+3.4** |
| **GRMI** | **Germi** | **4.41** | **16** | Pn | **Pn** | **08 26 13.1** | **+3.1** |
| **IVRN** | **Varamin** | **4.47** | **83** | Pn | **Pn** | **08 26 14.5** | **+3.7** |
| **ZNGN** | **Zangian** | **4.52** | **122** | Pn | **Pn** | **08 26 14.9** | **+3.2** |
| **PERV** | **Siirt/Pervari-** | **4.54** | **319** | P | **Pn** | **08 26 13.7** | **+1.8** |
| **IKLH** | **Kolahrood** | **4.55** | **105** | Pn | **Pn** | **08 26 16.2** | **+4.2** |
| **GEVA** | **Gevas** | **4.56** | **326** | P | **Pn** | **08 26 12.6** | **+0.4** |
| **TVAN** | **Van** | **4.59** | **330** | P | **Pn** | **08 26 14.5** | **+1.9** |
| **VANB** | **Van** | **4.65** | **330** | *e*P | **Pn** | **08 26 12.5** | **-0.8** |
| **IDMV** | **Damavand** | **4.79** | **76** | Pn | **Pn** | **08 26 19.6** | **+4.2** |
| **KRSH** | **Karshahi** | **4.85** | **96** | Pn | **Pn** | **08 26 20.3** | **+4.2** |
| **MIDY** | **Mardin/Midyat-** | **4.89** | **307** | P | **Pn** | **08 26 17.6** | **+1.0** |
| MIDY | | | | S | **Sn** | **08 27 13.0** | **+0.2** |
| **ISFB** | **Sefidab** | **4.90** | **91** | Pn | **Pn** | **08 26 19.9** | **+3.2** |
| **IBRJ** | **Brojen** | **4.92** | **121** | Pn | **Pn** | **08 26 21.0** | **+3.8** |
| **SRTM** | **Siirt_Merkez** | **4.92** | **315** | P | **Pn** | **08 26 17.8** | **+0.8** |
| SRTM | | | | S | **Sb** | **08 27 31.8** | **+3.2** |
| **VMUR** | **Van-Muradiye** | **4.93** | **334** | P | **Pn** | **08 26 21.7** | **+4.6** |
| VMUR | | | | S | **Sg** | **08 27 35.7** | **-6.1** |
| **CLDR** | **Caldiran** | **4.95** | **338** | *e*P | **Pn** | **08 26 16.2** | **-1.3** |
| **CLDR** | **Caldiran** | **4.95** | **338** | P | **Pn** | **08 26 14.8** | **-2.8** |
| CLDR | | | | S | **Sb** | **08 27 21.9** | **-7.5** |
| **BLIS** | **Bitlis-Merkez** | **5.11** | **320** | P | **Pn** | **08 26 21.0** | **+1.3** |
| **IGAR** | **Gharneh** | **5.25** | **113** | Pn | **Pn** | **08 26 25.4** | **+3.7** |
| **BTMN** | **Batman** | **5.25** | **310** | P | **Pn** | **08 26 22.2** | **+0.6** |
| **GURO** | **Guroymak-BITLI** | **5.26** | **320** | *e*P | **Pn** | **08 26 21.1** | **-0.6** |
| **GURO** | **Guroymak-BITLI** | **5.26** | **320** | Pn | **Pn** | **08 26 20.7** | **-1.0** |
| **IZEF** | **Zefreh** | **5.28** | **107** | Pn | **Pn** | **08 26 26.2** | **+4.1** |
| **IFIR** | **Firoozkooh** | **5.38** | **77** | Pn | **Pn** | **08 26 27.3** | **+3.9** |
| **SVAN** | **Silvan-Diyarba** | **5.46** | **312** | *e*P | **Pn** | **08 26 23.2** | **-1.2** |
| **SVAN** | **Silvan-Diyarba** | **5.46** | **312** | P | **Pn** | **08 26 24.0** | **-0.3** |
| **KBD** | **Kabd** | **5.51** | **167** | P | **Pn** | **08 26 27.7** | **+2.7** |
| KBD | | | | S | **Sn** | **08 27 26.3** | **-1.7** |
| **MAZI** | **Mazidag** | **5.56** | **303** | *e*P | **Pn** | **08 26 28.2** | **+2.4** |
| **DORK** | **Agr/Tutak/Do** | **5.58** | **331** | P | **Pn** | **08 26 28.0** | **+2.0** |
| **AGRB** | **Hanur-Agry** | **5.66** | **333** | *e*P | **Pn** | **08 26 24.5** | **-2.7** |
| **KLNJ** | **Kolanjah** | **5.69** | **127** | Pn | **Pn** | **08 26 30.9** | **+3.1** |
| **GNI** | **Garni** | **5.70** | **348** | Pn | **Pn** | **08 26 26.7** | **-1.1** |
| **GNI** | **Garni** | **5.70** | **348** | Pg | **Pb** | **08 26 44.5** | **+1.7** |
| | comp=E,1.2nm,0.3s,baz=184,slow=15,SNR=3.2 | | | | | | |
| GNI | | | | Lg | Lg | 08 28 10.0 | |
| | comp=E,0.4nm,0.3s,baz=27,slow=18,SNR=4.9 | | | | | | |
| **GNI** | **Garni** | **5.70** | **348** | P | **Pg** | **08 26 51.7** | **-1.2** |
| GNI | | | | S | **Sg** | **08 28 09.8** | **+3.1** |
| **IRAM** | **Ramesheh** | **5.78** | **117** | Pn | **Pn** | **08 26 32.8** | **+3.8** |
| **DYBB** | **Diyarbakir** | **6.02** | **306** | *e*P | **Pn** | **08 26 36.3** | **+4.2** |
| **ANAR** | **Anarak** | **6.32** | **101** | Pn | **Pn** | **08 26 40.2** | **+3.9** |
| **URFA** | **Urfa** | **6.72** | **297** | *e*P | **Pn** | 08 26 46.9 | +5.3 |
| **SVRC** | **Sivrice-ELAZID** | **6.80** | **306** | *e*P | **Pn** | **08 26 41.7** | **-1.3** |
| **PTK** | **Pertek** | **7.03** | **310** | *e*P | **Pn** | **08 26 45.8** | **-0.3** |
| **DSBU** | **Dashti - Bushe** | **7.49** | **144** | Pn | **Pn** | **08 26 55.1** | **+2.8** |
| **ARPR** | **Arapgir-MALATY** | **7.83** | **307** | *e*P | **Pn** | **08 26 57.7** | **+0.7** |
| **ARPR** | **Arapgir-MALATY** | **7.83** | **307** | | **Pn** | **08 26 56.8** | **-0.2** |
| **GAZ** | **Gaziantep** | **7.83** | **292** | Pn | **Pn** | **08 26 56.9** | **-0.1** |
| **ASF** | **Jabal al Asfar** | **8.24** | **256** | Pn | **Pn** | **08 27 03.2** | **+0.7** |
| | comp=E,1.5nm,0.3s,baz=266,slow=0.1,SNR=6.3 comp=E,4.4nm,0.2s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.22** | **263** | Pn | **Pn** | **08 27 16.6** | **+0.6** |
| | comp=E,1.7nm,0.3s,baz=75,slow=16,SNR=5.0 comp=E,1.2nm,0.3s | | | | | | |
| **SAKB** | **Bahrain** | **9.31** | **156** | P | **Pn** | **08 27 18.6** | **+1.4** |
| SAKB | | | | S | **Sn** | **08 28 57.6** | **-4.0** |
| **BNN** | **Bunyan** | **9.43** | **300** | Pn | **Pn** | **08 27 18.4** | **-0.5** |
| **SMRA** | **Abu-Samra** | **10.55** | **157** | P | **Pn** | **08 27 34.9** | **+0.8** |
| SMRA | | | | S | **Sn** | **08 29 27.5** | **-4.5** |
| **TRNA** | **Turayna** | **10.69** | **155** | P | **Pn** | **08 27 36.9** | **+0.9** |
| TRNA | | | | S | **Sn** | **08 29 31.8** | **-3.6** |
| **RAYN** | **Ar Rayn** | **11.04** | **184** | Pn | **Pn** | **08 27 40.1** | **-0.8** |
| **RAYN** | **Ar Rayn** | **11.04** | **184** | *i* Pn | **Pn** | **08 27 39.9** | **-1.0** |
| | SNR=8.1 | | | | | | |
| **JRN** | **Qarnain Island** | **11.15** | **148** | P | **Pn** | **08 27 43.3** | **+0.9** |
| JRN | | | | P | **Pn** | **08 27 43.3** | **+0.9** |
| JRN | | | | S | **Sn** | **08 29 40.2** | **-6.4** |
| JRN | | | | S | **Sn** | **08 29 40.2** | **-6.4** |
| **BR104** | **Keskin Array S** | **11.34** | **301** | P | **Pn** | **08 27 49.5** | **+4.5** |
| | comp=E,5.2nm,0.9s,comp=E,35nm | | | | | | |
| **BR131** | **Keskin Array S** | **11.35** | **301** | Pn | **Pn** | **08 27 45.2** | **0.0** |
| **BRTR** | **Keskin Array B** | **11.35** | **301** | Pn | **Pn** | **08 27 44.4** | **-0.8** |
| **BRTR** | **Keskin Array B** | **11.35** | **301** | Pn | **Pn** | **08 27 48.4** | **+3.2** |
| | comp=E,0.1nm,0.3s,baz=122,slow=13,SNR=24 comp=E,3.8nm,0.8s | | | | | | |
| **BR105** | **Keskin Array S** | **11.36** | **301** | P | **Pn** | **08 27 49.1** | **+3.8** |
| | comp=E,5.0nm,0.8s | | | | | | |
| **BR106** | **Keskin Array S** | **11.36** | **301** | P | **Pn** | **08 27 49.4** | **+4.0** |
| | comp=E,5.1nm,0.9s,comp=E,37nm | | | | | | |
| **SLWR** | **Sila** | **11.47** | **155** | P | **Pn** | **08 27 47.7** | **+1.0** |
| SLWR | | | | S | **Sn** | **08 29 49.4** | **-5.0** |
| **SHME** | **Shamm** | **12.00** | **132** | Pn | **Pn** | **08 27 54.1** | **0.0** |
| **SHME** | **Shamm** | **12.00** | **132** | P | **Pn** | **08 27 55.1** | **+1.0** |
| **ANTO** | **Ankara** | **12.00** | **300** | P | **Pn** | **08 27 58.3** | **+4.2** |
| | comp=E,8.3nm,0.6s | | | | | | |
| **AJN** | **Ajban** | **12.50** | **141** | P | **Pn** | **08 28 02.8** | **+1.9** |
| **MASF** | **Masafi** | **12.52** | **134** |

comp=Z,11nm,0.9s
**ONER Baraj Valea Uz 19.12 314** ⇑P **Pn 08 29 27.5 +0.8**
**VOIR 19.52 310** ⇓P **Pn 08 29 32.4 +0.9**
**VOIR 19.52 310** P **Pn 08 29 31.7 +0.2**
comp=Z,20nm,0.9s
**ARR Arges 19.75 310** ⇑P **Pn 08 29 36.1 +1.9**
**NDNU Novodnistrovsk 19.85 321** P **P 08 29 33.3 -0.5**
**AK07 Malin Array Si 20.26 327** P **P 08 29 37.3 -0.9**
**AK09 Malin Array Si 20.27 327** P **P 08 29 37.4 -0.9**
**KMPD K-Podol'skiy 20.32 319** P Pn 08 29 37.4 -3.4
KMPD P **P 08 29 36.9 -1.9**
**AKASG Malin Array Be 20.36 328** P **P 08 29 38.7 -0.5**
**AKASG Malin Array Be 20.36 328** P **P 08 29 38.6 -0.7**
comp=Z,1.6nm,0.6s,baz=141,slow=8.7,SNR=14
comp=Z,1.6nm,0.6s
**AKBB Malin Array Si 20.36 328** **P 08 29 39.0 -0.3**
AKBB IAmb IAmb 08 29 41.6
comp=Z,5.8nm,0.6s
**AKBB Malin Array Si 20.36 328** P **P 08 29 38.4 -0.9**
**KIEV Kiev 20.36 327** **P 08 29 38.7 -0.6**
KIEV IAmb IAmb 08 29 41.6
comp=Z,5.2nm,0.6s
**KIEV Kiev 20.36 327** ⇓P **P 08 29 38.7 -0.6**
**KIEV Kiev 20.36 327** P **P 08 29 38.4 -0.9**
comp=Z,32nm,0.8s
**BURAR Bucovina Array 20.48 316** P **P 08 29 41.5 +0.8**
BURAR IAmb IAmb 08 29 47.5
comp=Z,4.6nm,0.7s
**BURAR Bucovina Array 20.48 316** ⇑P **P 08 29 41.7 +1.0**
**BUR08 Bucovina Ar. S 20.50 316** P **P 08 29 40.8 -0.1**
**LUBAR Lubar, Ukraine 20.50 324** P **P 08 29 39.5 -1.3**
**FNA Florina 20.66 295** **P 08 29 42.9 +0.2**
**HORU Horodok 20.72 321** P **P 08 29 42.1 -1.1**
**MI29 MI29, Kamyanyy 20.79 325** P **P 08 29 43.7 -0.3**
**MI30 MI30,Zelenitsa 20.86 326** P **P 08 29 43.5 -1.2**
**GZR Gura Zlata 20.95 308** ⇑P **P 08 29 46.6 +0.8**
**BOVS Bovan 21.07 303** ⇑P **P 08 29 48.0 +0.9**
**MI28 MI28,Pidlybu 21.23 326** P **P 08 29 47.6 -1.0**
**STNU Starunia 21.47 318** P **P 08 29 52.1 +0.8**
**DRGR 21.57 312** ⇑P **P 08 29 52.9 +0.4**
**MORS Morshin 22.04 318** P **P 08 29 56.9 -0.4**
**BRIU Brid 22.11 315** P **P 08 29 58.3 +0.1**
**SHIU Shidnytsya 22.38 318** P **P 08 30 01.0 -0.1**
**HOLU Holmets 22.57 315** P **P 08 30 04.4 +1.3**
**KOLS Kolonicke sedl 22.84 316** *e*P **P 08 30 07.8 +1.9**
**CRVS Cervenica-Dubn 23.29 315** *e*P **P 08 30 13.9 +3.3**
**VYHS Vyhne 24.67 313** *e*P **P 08 30 27.0 +3.4**
**OJC Ojcow 24.88 317** P **P 08 30 25.8 +0.4**
**OJC Ojcow 24.88 317** P **P 08 30 25.3 -0.1**
comp=Z,13nm,0.9s
**MPLH Magyarpolny 24.98 309** P **P 08 30 26.9 +0.5**
comp=Z,33nm,1.0s,comp=Z,2µm
**BVAR Borovoye Array 25.14 35** P **P 08 30 32.9 +5.1**
comp=Z,1.4nm,0.6s,baz=254,slow=8.9,SNR=6.7
**RONA Rosalia, Austr 25.95 309** *e*P **P 08 30 34.1 -1.2**
comp=Z,5.9nm,1.1s
**MORC Moravsky Berou 25.97 315** P **P 08 30 36.3 +0.9**
MORC IAmb IAmb 08 30 40.4
comp=Z,3.4nm,0.8s
**CONA Conrad Observa 26.31 310** *i* P **P 08 30 41.7 +3.2**
comp=Z,10nm,1.2s
**ARSA Arzberg 26.31 308** *e*P **P 08 30 38.6 +0.1**
comp=Z,8.0nm,1.2s
**OBKA Obir 26.74 306** *i* pP **P 08 30 44.3 +1.9**
comp=Z,33nm,1.7s
**BIOA Bad Ischl, Aus 27.66 308** *e*pP **P 08 30 53.4 +2.8**
comp=Z,1.5nm,0.5s
**KBA Koelnbreinsper 27.69 307** *i* P **P 08 30 56.1 +5.0**
comp=Z,8.4nm,1.0s
**KURBB Kurchatov Arra 28.34 46** P **P 08 30 56.5 -0.1**
comp=Z,0.2nm,0.2s,baz=244,slow=9.5,SNR=1.7
comp=Z,0.2nm,0.2s
**WTTA Wattenberg 28.86 307** *i* P **P 08 31 02.7 +1.2**
comp=Z,1.3nm,0.4s
**WATA Walderalm 28.92 307** *i* P **P 08 31 03.0 +1.0**
comp=Z,1.7nm,0.5s
**SQTA Sankt Quirin 29.14 306** *e*P **P 08 31 03.4 -0.5**
comp=Z,4.2nm,0.5s
**MOTA Moosalm 29.24 307** *e*pP **P 08 31 06.4 +1.6**
comp=Z,4.4nm,0.6s
**CLL Collm 29.24 315** *e*Px Px 08 31 06.0
**FETA Feichten 29.41 306** *e*P **P 08 31 07.3 +0.9**
comp=Z,9.0nm,1.7s
**MKAR Makanchi Array 29.62 55** P **P 08 31 08.0 -0.1**
comp=Z,0.2nm,0.7s,baz=251,slow=4.4,SNR=2.0
comp=Z,0.2nm,0.7s
**FUORN Ofenpass-Fuorn 29.65 305** P **P 08 31 08.7 +0.1**
FUORN IAmb IAmb 08 31 26.8
comp=Z,4.6nm,1.3s
**FINES FINESS Array B 29.84 340** P **P 08 31 09.0 -0.7**
**FINES FINESS Array B 29.84 340** P **P 08 31 09.2 -0.5**
comp=Z,0.9nm,0.4s,baz=151,slow=9.6,SNR=12
comp=Z,0.9nm,0.4s
**DAVA Damuels 30.04 306** *i* P **P 08 31 11.2 -0.7**
comp=Z,3.2nm,0.4s
**HFS Hagfors 33.19 330** P **P 08 31 38.9 -0.3**
comp=Z,2.0nm,0.5s,baz=116,slow=10,SNR=11
comp=Z,2.0nm,0.5s
**NOA NORSAR Array B 34.71 331** P **P 08 31 51.6 -0.9**
comp=Z,0.4nm,0.6s,baz=125,slow=8.7,SNR=3.4
comp=Z,0.4nm,0.6s
**ARCES ARCESS Array B 36.86 348** P **P 08 32 11.2 +0.4**
**ARCES ARCESS Array B 36.86 348** P **P 08 32 10.4 -0.5**
comp=Z,3.4nm,0.9s,baz=135,slow=9.0,SNR=4.3
comp=Z,3.4nm,0.9s
**EKA Eskdalemuir Ar 39.65 317** P **P 08 32 34.4 -0.1**
comp=Z,2.7nm,0.5s,baz=105,slow=8.3,SNR=17
comp=Z,2.7nm,0.5s
**ESDC Sonseca Array 39.99 293** P **P 08 32 37.5 0.0**
comp=Z,2.1nm,0.9s,baz=77,slow=9.0,SNR=9.4
comp=Z,2.1nm,0.9s
**TORD Torodi Ar. Bea 45.59 253** P **P 08 33 23.9 +0.6**
comp=Z,1.0nm,0.9s,baz=34,slow=9.2,SNR=4.5
comp=Z,1.0nm,0.9s
**CMAR Chiang Mai Arr 49.21 95** P **P 08 33 52.4 +1.0**
comp=Z,1.2nm,0.4s,baz=300,slow=8.2,SNR=1.2
comp=Z,1.2nm,0.4s
**HHC Hu-ho-hao-te 50.94 63** *e*P **P 08 34 04.5 +0.2**
HHC pmax pmax
comp=Z,10.0nm,0.5s
HHC pmax pmax
comp=Z,81nm,4.9s

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**IDC 26 08:27:31.8±4.7, 46°.73N×148°.21E, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=156.9km s-min=43.4km az=6.0, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **43.93** | **295** | P | P | 08 35 40.1 | -0.1 |
| | 0.8nm,0.8s,baz=70,slow=8.4,SNR=4.8 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **62.57** | **333** | P | P | 08 37 57.0 | 0.0 |
| | 0.4nm,0.5s,baz=34,slow=10,SNR=5.3 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.39** | **57** | P | P | 08 39 45.3 | 0.0 |
| | 0.1nm,0.6s,baz=328,slow=3.3,SNR=2.2 | | | | | | |
| | 0.1nm,0.6s | | | | | | |

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*IDC **26** 08:36:03.3±12.0, 7°.28S×116°.35E, h0km, mb3.8/3, mbtmp3.9/3, Error ellipse: s-maj=256.9km s-min=155.6km az=20.0*
*DJA **26** 08:36:17.7±0.4, 8°.5S×117°.7E±°, h10km, M3.7/6, MLv3.7/6*
**ISC 26 08:36:17.1±1.0, 8°.55S±0°.1×116°.93E±0°.04, h10km, n10, σ0°.92/11, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.27** | **190** | P | **Pb** | **08 36 23.8** | **-0.3** |
| **PLAI** | **Plampang** | **0.91** | **113** | P | **Pb** | **08 36 35.1** | **0.0** |
| **SRBI** | **Singaraja** | **1.74** | **283** | P | **Pn** | **08 36 48.3** | **+0.9** |
| SRBI | | | | S | **Sn** | **08 37 09.9** | **+0.2** |
| **IGBI** | **Denpasar** | **1.79** | **259** | P | **Pb** | **08 36 50.1** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **270** | P | **Pn** | **08 37 01.6** | **+0.3** |
| **BSSI** | **Bau Bau, Buton** | **4.23** | **57** | P | **Pn** | **08 37 21.3** | **-0.4** |
| **EDFI** | **Ende, Flores** | **4.72** | **94** | P | **Pn** | **08 37 30.0** | **+1.5** |
| **WRA** | **Warramunga Arr** | **20.34** | **126** | P | **P** | **08 40 54.3** | **+0.4** |
| | 1.6nm,0.5s,baz=301,slow=12,SNR=66 | | | | | | |
| | 1.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **22.19** | **135** | P | **P** | **08 41 14.7** | **+0.9** |
| | 1.6nm,0.6s,baz=314,slow=9.2,SNR=26 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **32.68** | **139** | P | **P** | **08 42 48.1** | **-1.6** |
| | 2.1nm,0.8s,baz=297,slow=12,SNR=3.4 | | | | | | |

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*NEIC **26** 08:38:27.2±1.1, 44°.1N±0°.1×149°.7E±0°.1, h10km±2km, mb4.5/41, Error ellipse: s-maj=20.0km s-min=13.5km az=137.0*
*MOS **26** 08:38:27.5±1.2, 44°.26N×149°.76E, h24km, mb4.7/19, Error ellipse: s-maj=8.5km s-min=6.8km az=118.6*
*SKHL **26** 08:38:27.6±0.5, 44°.00N×149°.90E, h36km±4km, mb4.8/5*
*NIED **26** 08:38:28.1, 44°.46N×149°.75E, h30km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.94; $M_{\theta\theta}$-0.14; $M_{\phi\phi}$-0.80; $M_{r\theta}$-0.24; $M_{\theta\phi}$-0.55; $M_{\phi r}$0.12; Fault plane solution: $M_0$1.06000×$10^{15}$ NP1: $\phi_s$226.00000°, $\delta$48.00000°, $\lambda$113.00000°. NP2: $\phi_s$13.00000°, $\delta$47.00000°, $\lambda$66.00000°.*
*JMA **26** 08:38:28.1±0.7, 44°.34N×149°.65E, h46km±4km, mb3.8/18, mbtmp4.0/23, Error ellipse: s-maj=19.1km s-min=14.0km az=167.0*
**ISC 26 08:38:27.7±0.7, 44°.00N±0°.06×149°.72E±0°.06, h19km±2km, n165, σ1$40/183, mb4.5/54, 4C-2D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.81** | **314** | *i* P | **Pn** | **08 38 57.2** | **-0.6** |
| KUR | | | | AMB | AMB | 08 38 59.2 | |
| | 860nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **08 39 19.8** | **-0.4** |
| KUR | | | | A | A | 08 39 24.2 | |
| | 2µm,0.6s | | | | | | |
| KUR | | | | A | A | 08 39 24.2 | |
| | 1µm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.81** | **314** | *c* PN | **Pn** | **08 38 56.9** | **-0.9** |
| KUR | | | | *e*S | **Sn** | **08 39 20.4** | **+0.2** |
| KUR | | | | pmax | pmax | | |
| | comp=N,198nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,734nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,181nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,1µm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,451nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **267** | *e*P | **Pn** | **08 39 02.0** | **+0.3** |
| SHO | | | | AMB | AMB | 08 39 06.2 | |
| | comp=E,80nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **08 39 27.4** | **+0.2** |
| SHO | | | | A | A | 08 39 40.9 | |
| | comp=E,430nm,0.4s | | | | | | |
| SHO | | | | A | A | 08 39 40.9 | |
| | comp=E,420nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **267** | *e*PN | **Pn** | **08 39 02.0** | **+0.3** |
| SHO | | | | *e*S | **Sn** | **08 39 26.7** | **-0.5** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,41nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,303nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,420nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.79** | **272** | *e*P | **Pn** | **08 39 11.8** | **+0.6** |
| YUK | | | | AMB | AMB | 08 39 14.9 | |
| | comp=E,190nm,0.5s | | | | | | |
| YUK | | | | *e*S | **Sn** | **08 39 44.3** | **0.0** |
| YUK | | | | A | A | 08 39 53.6 | |
| | comp=E,330nm,0.5s | | | | | | |
| YUK | | | | A | A | 08 39 53.6 | |
| | comp=E,460nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.79** | **272** | *e*PN | **Pn** | **08 39 11.8** | **+0.6** |
| YUK | | | | *e*S | **Sn** | **08 39 44.2** | **0.0** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,170nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,34nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,395nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,167nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.96** | **259** | P | **Pn** | **08 39 14.1** | **+0.5** |
| NEM2 | | | | *e*S | **Sn** | **08 39 47.5** | **-1.0** |
| **JRA** | **Rausu** | **3.32** | **271** | P | **Pn** | **08 39 20.4** | **+1.9** |
| **JNK** | **Nakash** | **3.65** | **265** | P | **Pn** | **08 39 24.0** | **+0.9** |
| JNK | | | | *e*S | **Sn** | **08 40 05.5** | **0.0** |
| **JAK** | **Akkeshi** | **3.79** | **256** | P | **Pn** | **08 39 25.9** | **+0.9** |
| JAK | | | | S | **Sn** | **08 40 08.6** | **-0.5** |
| **JTKR** | **Abashiri--Toko** | **4.20** | **272** | *e*P | **Pn** | **08 39 32.6** | **+2.0** |
| **JAR** | **Ashorobuto** | **4.38** | **263** | P | **Pn** | **08 39 34.7** | **+1.6** |
| **JOB** | **Onbets** | **4.43** | **258** | *e*P | **Pn** | **08 39 33.5** | **-0.3** |
| **JCH** | **Churui** | **4.84** | **256** | P | **Pn** | **08 39 41.3** | **+1.8** |
| JCH | | | | *e*S | **Sn** | **08 40 34.9** | **-0.2** |
| **JKK2** | **Kamakawa 2** | **5.04** | **271** | *e*P | **Pn** | **08 39 45.0** | **+2.8** |
| **JKA** | **Kamikawa-asahi** | **5.14** | **274** | Pn | **Pn** | **08 39 44.7** | **+1.1** |
| **JKA** | **Kamikawa-asahi** | **5.14** | **274** | *e*P | **Pn** | **08 39 47.0** | **+3.5** |
| **ASAJ** | **Asahikawa** | **5.14** | **274** | P | **Pn** | **08 39 47.0** | **+3.4** |
| | comp=E,6.1nm,0.5s,baz=70,slow=19,SNR=13 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.14** | **274** | PN | **Pn** | **08 39 47.0** | **+3.4** |
| **ERM** | **Erimo** | **5.21** | **250** | Pn | **Pn** | **08 39 43.6** | **-0.9** |
| **ERM** | **Erimo** | **5.21** | **250** | *i* PN | **Pn** | **08 39 47.1** | **+2.6** |
| **JNBK** | **Urakawa-nobuka** | **5.38** | **254** | P | **Pn** | **08 39 48.2** | **+1.3** |
| JNBK | | | | *e*S | **Sn** | **08 40 46.9** | **-1.4** |
| **JAB** | **Ashibetsu** | **5.46** | **267** | *e*P | **Pn** | **08 39 50.9** | **+3.0** |
| **YSS** | **Yuzh-Sakhalins** | **5.72** | **304** | Pn | **Pn** | **08 39 49.8** | **-1.7** |
| **YSS** | **Yuzh-Sakhalins** | **5.72** | **304** | *e*P | **Pn** | **08 39 53.0** | **+1.5** |
| YSS | | | | AMB | AMB | 08 39 55.8 | |
| | comp=E,10.0nm,0.7s | | | | | | |
| YSS | | | | *e*S | **Sn** | **08 40 57.0** | **+0.4** |
| YSS | | | | A | A | 08 41 01.3 | |
| | comp=E,20nm,0.7s | | | | | | |
| YSS | | | | A | A | 08 41 01.3 | |
| | comp=E,20nm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.72** | **304** | *e*PN | **Pn** | **08 39 53.0** | **+1.5** |
| YSS | | | | *e*S | **Sn** | **08 40 57.0** | **+0.4** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,20nm,0.7s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,20nm,0.7s | | | | | | |
| **JANG** | **Nango** | **7.09** | **242** | *e*P | **Pn** | **08 40 10.4** | **0.0** |
| JANG | | | | *e*S | **Sn** | **08 41 25.4** | **-5.1** |
| **JTH** | **Tanohata** | **7.12** | **238** | *e*S | **Sn** | **08 41 26.9** | **-4.4** |
| **JTM** | **Tenmabayashi** | **7.17** | **246** | Pn | **Pn** | **08 40 11.9** | **+0.6** |
| **SKR** | **Severo-Kuril's** | **7.97** | **31** | *e*P | **Pn** | **08 40 22.9** | **+0.6** |
| SKR | | | | AMB | AMB | 08 40 24.0 | |
| | comp=E,30nm,0.5s | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.97** | **31** | *e*PN | **Pn** | **08 40 23.1** | **+0.8** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,26nm,0.5s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,300nm,17.0s | | | | | | |
| **TYV** | **Tymovskoe** | **8.37** | **328** | *e*P | **Pn** | **08 40 28.4** | **+0.6** |
| TYV | | | | AMB | AMB | 08 40 33.3 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **JMM** | **Marumori** | **9.12** | **231** | Pn | **Pn** | **08 40 37.4** | **-0.8** |
| **PEA0B** | **Petropavlovsk-** | **10.53** | **27** | Pn | **Pn** | **08 40 57.8** | **+0.3** |
| **PEA0B** | **Petropavlovsk-** | **10.53** | **27** | PN | **Pn** | **08 40 57.8** | **+0.3** |
| **PETK** | **Petropavlovsk-** | **10.53** | **27** | P | **Pn** | **08 40 56.6** | **-0.8** |
| | comp=Z,2.7nm,0.9s,baz=203,slow=11,SNR=3.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.52** | **234** | P | Pn | 08 41 18.3 | +7.2 |
| | comp=Z,0.6nm,0.6s,baz=32,slow=17,SNR=2.4 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **12.75** | **277** | Pn | **Pn** | **08 41 27.0** | **-0.9** |
| **USA0B** | **Ussuriysk Arra** | **12.75** | **277** | PN | **Pn** | **08 41 27.0** | **-0.9** |
| **USRK** | **Ussuriysk Ar.** | **12.75** | **277** | Pn | **Pn** | **08 41 28.5** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **12.75** | **277** | P | **Pn** | **08 41 29.6** | **+1.7** |
| | comp=Z,3.8nm,0.6s,baz=82,slow=15,SNR=12 | | | | | | |
| **KLR** | **Kul'dur** | **13.41** | **299** | P | **Pn** | **08 41 40.4** | **+3.6** |
| | comp=Z,0.8nm,0.4s,baz=106,slow=18,SNR=2.7 | | | | | | |
| **KLR** | **Kul'dur** | **13.41** | **299** | *e*PN | **Pn** | **08 41 39.8** | **+3.0** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,2.5s | | | | | | |
| **BNX** | **BinXian** | **15.91** | **284** | ⇓P | **Pn** | **08 42 11.5** | **+1.1** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **CN2** | **Changchun** | **17.49** | **278** | *e*P | **P** | **08 42 31.8** | **+0.4** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **ZEA** | **Zeya** | **17.63** | **311** | *e*P | **Pn** | **08 42 30.4** | **-1.7** |
| ZEA | | | | AMB | AMB | 08 42 34.0 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **ZEA** | **Zeya** | **17.63** | **311** | *i* P | **Pn** | **08 42 30.4** | **-1.7** |
| **KSRS** | **Korea Array** | **17.75** | **256** | P | **P** | **08 42 34.5** | **+0.2** |
| | comp=Z,1.6nm,0.9s,baz=60,slow=10,SNR=3.2 | | | | | | |
| **SEY** | **Seymchan** | **19.03** | **4** | P | **P** | **08 42 46.1** | **-2.2** |
| | comp=Z,4.0nm,0.8s,baz=180,slow=9.9,SNR=9.0 | | | | | | |
| **SEY** | **Seymchan** | **19.03** | **4** | *i* P | **P** | **08 42 45.2** | **-3.0** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **BILL** | **Bilibino** | **25.63** | **14** | ⇑*e*P | **P** | **08 43 52.7** | **-2.9** |
| BILL | | | | *e*S | **S** | **08 48 18.5** | **-4.1** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,11nm,1.5s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,98nm,16.0s | | | | | | |
| **NJ2** | **Nanjing** | **26.93** | **254** | *e*P | **P** | **08 44 07.5** | **-0.1** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.14** | **144** | T | T | 09 15 32.7 | |
| | baz=334,slow=75,SNR=51 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.15** | **144** | T | T | 09 15 33.8 | |
| | baz=334,slow=75,SNR=38 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.16** | **144** | T | T | 09 15 32.4 | |
| | baz=334,slow=75,SNR=34 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **28.18** | **277** | *e*P | **P** | **08 44 19.3** | **+0.4** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,150nm,5.2s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.15** | **145** | T | T | 09 16 48.2 | |
| | baz=335,slow=76,SNR=50 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.15** | **145** | T | T | 09 16 48.8 | |
| | baz=335,slow=76,SNR=36 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.16** | **145** | T | T | 09 16 47.7 | |
| | baz=335,slow=76,SNR=38 | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.65** | **293** | P | **P** | **08 44 30.9** | **-1.1** |
| ULN | | | | IAmb | IAmb | 08 44 33.1 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.65** | **293** | *e*P | **P** | **08 44 31.2** | **-0.8** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **30.09** | **293** | P | **P** | **08 44 35.6** | **-0.2** |
| **SONM** | **Songino Array** | **30.09** | **293** | P | **P** | **08 44 36.2** | **+0.3** |
| | comp=Z,2.6nm,0.6s,baz=82,slow=8.7,SNR=16 | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **32.93** | **267** | *e*P | **P** | **08 45 01.5** | **+0.6** |
| **C16K** | **Lisburne Hills** | **33.62** | **28** | P | **P** | **08 45 06.3** | **-0.2** |
| C16K | | | | IAmb | IAmb | 08 45 09.6 | |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **C18K** | **Utukok River** | **35.19** | **29** | P | **P** | **08 45 20.1** | **0.0** |
| C18K | | | | IAmb | IAmb | 08 45 20.8 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **C19K** | **Lookout Ridge** | **35.89** | **28** | P | **P** | **08 45 26.5** | **+0.4** |
| C19K | | | | IAmb | IAmb | 08 45 27.1 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **35.95** | **32** | P | **P** | **08 45 27.1** | **+0.5** |
| **H19K** | **Roundabout Mou** | **36.22** | **35** | P | **P** | **08 45 28.9** | **0.0** |
| H19K | | | | IAmb | IAmb | 08 45 30.7 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **36.23** | **30** | IAmb | IAmb | 08 45 30.0 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **J19K** | **Poorman** | **36.35** | **37** | P | **P** | **08 45 30.8** | **+0.7** |
| **B20K** | **Meade River** | **36.97** | **27** | P | **P** | **08 45 35.5** | **+0.3** |
| **J20K** | **Nowinta River** | **37.02** | **37** | P | **P** | **08 45 36.7** | **+1.0** |
| **GTA** | **Gaotai** | **37.08** | **281** | *e*P | **P** | **08 45 38.5** | **+1.8** |
| GTA | | | | pP | pwP | 08 45 51.0 | +1.9 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **F21K** | **Alatna River** | **37.67** | **32** | P | **P** | **08 45 42.0** | **+0.7** |
| **B21K** | **Ikpikpuk River** | **37.72** | **28** | P | **P** | **08 45 42.9** | **+1.3** |
| B21K | | | | IAmb | IAmb | 08 45 57.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **H21K** | **Melozitna Rive** | **37.74** | **35** | P | **P** | **08 45 42.3** | **+0.5** |
| **D22K** | **Ayikyak River** | **38.25** | **30** | P | **P** | **08 45 46.6** | **+0.5** |
| **E22K** | **Anaktuvuk Pass** | **38.44** | **31** | P | **P** | **08 45 48.9** | **+1.1** |
| E22K | | | | IAmb | IAmb | 08 45 49.2 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **39.13** | **28** | P | **P** | **08 45 54.2** | **+0.7** |
| C23K | | | | IAmb | IAmb | 08 45 54.7 | |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **D24K** | **Happy Valley** | **39.66** | **30** | IAmb | IAmb | 08 46 05.0 | |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **C24K** | **Franklin Bluff** | **39.77** | **29** | IAmb | IAmb | 08 46 00.4 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **40.18** | **36** | P | **P** | **08 46 01.6** | **-0.6** |
| | comp=Z,0.3nm,0.8s,baz=272,slow=8.8,SNR=3.3 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **41.90** | **301** | *i* P | **P** | **08 46 17.1** | **+0.3** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **M26K** | **Nabesna, AK** | **42.06** | **40** | P | **P** | **08 46 18.6** | **+0.7** |
| **PZH** | **PanZhiHua** | **42.26** | **262** | P | **P** | **08 46 21.5** | **+1.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,140nm,4.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.33** | **307** | P | **P** | **08 46 18.5** | **-1.5** |
| | comp=Z,0.8nm,0.4s,baz=75,slow=6.1,SNR=3.2 | | | | | | |
| ZALV | | | | PcP | **PcP** | **08 48 14.0** | **+0.8** |
| | comp=Z,1.2nm,0.6s,baz=104,slow=3.1,SNR=5.4 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **L27K** | **Beaver Creek,** | **42.52** | **39** | P | **P** | **08 46 22.2** | **+0.7** |
| **WMQ** | **Urumqi** | **43.73** | **292** | *e*P | **P** | **08 46 35.5** | **+3.9** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | |
| **I30M** | **Mount Dempster** | **44.59** | **35** | P | **P** | **08 46 38.6** | **+0.3** |
| I30M | | | | IAmb | IAmb | 08 46 55.0 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **46.11** | **298** | P | **P** | **08 46 50.7** | **+0.2** |
| **MK31** | **Makanchi Array** | **46.11** | **298** | *i* P | **P** | **08 46 50.4** | **-0.1** |
| **MKAR** | **Makanchi Array** | **46.11** | **298** | P | **P** | **08 46 50.8** | **+0.4** |
| **MKAR** | **Makanchi Array** | **46.11** | **298** | P | **P** | **08 46 51.1** | **+0.7** |
| | comp=Z,7.4nm,0.7s,baz=73,slow=8.0,SNR=75 | | | | | | |
| MKAR | | | | pP | **pwP** | **08 47 03.2** | **+0.3** |
| | comp=Z,3.4nm,0.7s,baz=69,slow=7.3,SNR=9.0 | | | | | | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.11** | **298** | *e*P | **P** | **08 46 50.9** | **+0.4** |
| **MKAR** | **Makanchi Array** | **46.11** | **298** | *i* P | **P** | **08 46 50.9** | **+0.4** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **46.30** | **298** | P | **P** | **08 46 52.8** | **+0.8** |
| **MAKZ** | **Makanchi** | **46.30** | **298** | P | **P** | **08 46 52.8** | **+0.8** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **46.93** | **305** | P | **P** | **08 46 56.2** | **-0.6** |
| KURK | | | | IAmb | IAmb | 08 46 57.0 | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **46.93** | **305** | *e*P | **P** | **08 46 56.1** | **-0.6** |
| **KURK** | **Kurchatov** | **46.93** | **305** | *i* P | **P** | **08 46 56.1** | **-0.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.01** | **304** | P | **P** | **08 46 56.7** | **-0.7** |
| | comp=Z,2.5nm,0.4s,baz=70,slow=8.4,SNR=7.7 | | | | | | |
| KURBB | | | | pP | **pwP** | **08 47 09.7** | **-0.3** |
| | comp=Z,0.7nm,0.3s,baz=71,slow=8.2,SNR=2.1 | | | | | | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARU | | | | S | **S** | **08 55 42.7** | **-1.2** |
| ARU | | | | SS | **SS** | **08 59 25.4** | **-2.6** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.35 310** | | P | **P** | **08 48 21.7** | **+0.4** |
| **SIMJ** | **Simiganj** | **58.55 295** | | P | **P** | **08 48 23.3** | **+0.2** |
| SIMJ | | | | IAmb | IAmb | 08 48 36.9 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.17 196** | | P | **P** | **08 49 09.2** | **+1.7** |
| | comp=Z,0.9nm,1.0s,baz=16,slow=6.1,SNR=4.2 | | | | | | |
| | comp=Z,0.9nm,1.0s | | | | | | |
| **FIA1** | **FINESS Array S** | **65.48 334** | | P | **P** | **08 49 08.5** | **-0.5** |
| **FINES** | **FINESS Array B** | **65.48 334** | | P | **P** | **08 49 08.4** | **-0.6** |
| **FINES** | **FINESS Array B** | **65.48 334** | | P | **P** | **08 49 07.8** | **-1.2** |
| | comp=Z,6.2nm,0.5s,baz=37,slow=7.8,SNR=46 | | | | | | |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **65.48 334** | | *i* P | **P** | **08 49 08.1** | **-0.9** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **65.86 59** | | P | **P** | **08 49 13.1** | **+0.9** |
| | comp=Z,0.5nm,0.8s,baz=271,slow=6.2,SNR=3.7 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **OBN** | **Obninsk** | **66.20 325** | | *e*P | **P** | **08 49 12.2** | **-1.5** |
| **OBN** | **Obninsk** | **66.20 325**⇑ | | *e*P | **P** | **08 49 12.2** | **-1.5** |
| OBN | | | | *e* | | 08 49 40.0 | |
| OBN | | | | *e* | | 08 51 37.1 | |
| OBN | | | | *e*S | **PnS** | **08 58 19.2** | **-2.9** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,180nm,17.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **68.31 51** | | P | **P** | **08 49 28.2** | **+0.5** |
| | comp=Z,0.3nm,0.7s,baz=260,slow=5.3,SNR=3.7 | | | | | | |
| PDAR | | | | pP | **pwP** | **08 49 42.9** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=321,slow=1.9,SNR=3.8 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **68.88 196** | | P | **P** | **08 49 34.2** | **+3.2** |
| | comp=Z,0.3nm,0.7s,baz=10,slow=6.0,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **NC303** | **NORSAR Array S** | **69.83 340** | | P | **P** | **08 49 36.3** | **-0.2** |
| **NC405** | **NORSAR Array S** | **69.84 340** | | P | **P** | **08 49 36.4** | **-0.2** |
| **AKT** | **Akhty** | **69.87 308** | | *e*P | **P** | **08 49 37.5** | **+0.3** |
| AKT | | | | *e* | | 08 49 59.7 | |
| AKT | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **NB201** | **NORSAR Array S** | **70.00 340** | | P | **P** | **08 49 37.5** | **-0.1** |
| **NB2** | **NORSAR Subarra** | **70.02 340** | | P | **P** | **08 49 36.9** | **-0.8** |
| | comp=Z,2.8nm,0.6s,baz=29,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.02 340** | | P | **P** | **08 49 37.1** | **-0.6** |
| | comp=Z,3.5nm,0.6s,baz=32,slow=6.6,SNR=26 | | | | | | |
| | comp=Z,3.5nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **70.16 338** | | P | **P** | **08 49 37.7** | **-0.8** |
| | comp=Z,7.2nm,0.7s,baz=46,slow=6.4,SNR=18 | | | | | | |
| HFS | | | | pP | **pwP** | **08 49 50.3** | **-1.7** |
| | comp=Z,2.3nm,0.6s,baz=56,slow=3.7,SNR=3.2 | | | | | | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| **NACGM** | **Naroch** | **70.22 329** | | *e*P | **P** | **08 49 39.1** | **+0.2** |
| | comp=Z,28nm,0.9s,baz=40 | | | | | | |
| **KBZ** | **Khabaz** | **71.01 313** | | P | **P** | **08 49 44.7** | **+0.7** |
| | comp=Z,5.1nm,0.8s,baz=75,slow=3.5,SNR=14 | | | | | | |
| KBZ | | | | pP | **pwP** | **08 49 57.4** | **0.0** |
| | comp=Z,3.7nm,0.8s,baz=70,slow=3.8,SNR=4.0 | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **71.01 313** | | *e*P | **P** | **08 49 43.3** | **-0.7** |
| **KBZ** | **Khabaz** | **71.01 313** | | *i* P | **P** | **08 49 43.3** | **-0.7** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.46 325** | | P | **P** | **08 49 51.4** | **-1.2** |
| | comp=Z,0.8nm,0.4s,baz=37,slow=6.2,SNR=6.9 | | | | | | |
| AKASG | | | | pP | **pwP** | **08 50 04.6** | **-1.5** |
| | comp=Z,2.9nm,0.7s,baz=37,slow=6.1,SNR=5.0 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.46 325** | | *i* P | **P** | **08 49 52.4** | **-0.2** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **AKBB** | **Malin Array Si** | **72.46 325** | | *i* P | **P** | **08 49 51.3** | **-1.3** |
| AKBB | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **76.50 325** | | P | **P** | **08 50 16.8** | **+0.5** |
| BUR08 | | | | IAmb | IAmb | 08 50 17.7 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **BURAR** | **Bucovina Array** | **76.52 325** | | P | **P** | **08 50 16.9** | **+0.5** |
| BURAR | | | | IAmb | IAmb | 08 50 18.0 | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **76.64 327** | | *e*P | **P** | **08 50 17.8** | **+0.9** |
| **KOLS** | **Kolonicke sedl** | **76.64 327** | | *e*P | **P** | **08 50 17.8** | **+0.9** |
| **LANS** | **Liptovska Anna** | **77.53 329** | | *e*P | **P** | **08 50 23.6** | **+1.6** |
| **LANS** | **Liptovska Anna** | **77.53 329** | | *e*P | **P** | **08 50 23.6** | **+1.6** |
| **MORC** | **Moravsky Berou** | **77.71 331** | | P | **P** | **08 50 23.2** | **+0.3** |
| MORC | | | | IAmb | IAmb | 08 50 25.1 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **MORC** | **Moravsky Berou** | **77.71 331** | | P | **P** | **08 50 23.2** | **+0.3** |
| MORC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KRLC** | **Kraliky** | **77.72 331** | | *e*P | **P** | **08 50 22.7** | **-0.3** |
| **KRLC** | **Kraliky** | **77.72 331** | | *e*P | **P** | **08 50 22.7** | **-0.3** |
| **CLL** | **Collm** | **77.93 334** | | P | **P** | **08 50 23.6** | **-0.4** |
| **CLL** | **Collm** | **77.93 334** | | *i* P | **P** | **08 50 23.9** | **-0.2** |
| | comp=Z,13nm,1.1s | | | | | | |
| **CLL** | **Collm** | **77.93 334** | | *i* P | **P** | **08 50 23.9** | **-0.2** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **VYHS** | **Vyhne** | **78.31 329** | | *e*P | **P** | **08 50 28.0** | **+1.7** |
| **VYHS** | **Vyhne** | **78.31 329** | | *e*P | **P** | **08 50 28.0** | **+1.7** |
| **BR131** | **Keskin Array S** | **78.70 315** | | *i* P | **P** | **08 50 24.9** | **-3.8** |
| **BRTR** | **Keskin Array B** | **78.70 315** | | P | **P** | **08 50 29.0** | **+0.2** |
| **BRTR** | **Keskin Array B** | **78.70 315** | | P | **P** | **08 50 28.7** | **-0.1** |
| | comp=Z,0.9nm,0.9s,baz=100,slow=3.8,SNR=5.4 | | | | | | |
| BRTR | | | | pP | **pwP** | **08 50 41.2** | **-1.0** |
| | comp=Z,1.0nm,0.8s,baz=84,slow=3.8,SNR=5.1 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **78.70 315** | | P | **P** | **08 50 29.0** | **+0.2** |
| **KHC** | **Kasperske Hory** | **79.62 332** | | P | **P** | **08 50 34.1** | **+0.7** |
| KHC | | | | IAmb | IAmb | 08 50 36.2 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **79.62 332** | | *e*P | **P** | **08 50 33.7** | **+0.2** |
| KHC | | | | *ex* | x | 08 50 46.1 | |
| KHC | | | | *ex* | x | 08 50 57.3 | |
| **KHC** | **Kasperske Hory** | **79.62 332** | | *e*P | **P** | **08 50 33.7** | **+0.2** |
| KHC | | | | *e* | | 08 50 46.1 | |
| **GERES** | **GERESS Array B** | **79.83 332** | | P | **P** | **08 50 34.5** | **-0.2** |
| | comp=Z,0.4nm,0.4s,baz=33,slow=7.4,SNR=3.3 | | | | | | |
| GERES | | | | pP | **pwP** | **08 50 48.2** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=49,slow=6.1,SNR=3.0 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.95 58** | | P | **P** | **08 50 41.8** | **+0.7** |
| | comp=Z,1.0nm,0.6s,baz=298,slow=3.7,SNR=18 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **BMRD** | **Maredsous** | **81.24 338** | | *d*P | **P** | **08 50 43.7** | **+1.6** |

*TEH **26** 08:41:51.6, 34.°63N×46.°20E, h8km±17km, ML3.6*
*ISN **26** 08:41:51.8±1.0, 34.°62N×46.°21E, h7km±11km, ML3.7*
**ISC 26 08:41:54.1**±0.7,**34.°59N**±0.°03×**46.°21E**±0.°03,**h10**km,**n45,**
**σ1§83/50,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.18** | **51** | Pg | | **Pg** | **Pg** | **08 41 56.8** | **-1.3** |
| **IGHG** | **Ghaleghazi** | **0.39** | **131** | Pg | | **Pg** | **Pg** | **08 42 01.5** | **-0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.52** | **261** | Pg | | **Pg** | **Pg** | **08 42 02.9** | **-1.3** |
| KGS1 | | | | Sg | | **Sg** | **Sg** | **08 42 10.7** | **-0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.53** | **208** | Pg | | **Pg** | **Pg** | **08 42 03.8** | **-0.7** |
| **ILIN** | **Lien** | **0.70** | **61** | Pg | | **Pg** | **Pg** | **08 42 06.0** | **-1.7** |
| **KCHF** | **Cheshme Sefid,** | **0.75** | **114** | Pg | | **Pg** | **Pg** | **08 42 07.5** | **-1.1** |
| KCHF | | | | Sg | | **Sb** | **Sb** | **08 42 19.7** | **0.0** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **180** | Pg | | **Pg** | **Pg** | **08 42 11.6** | **-0.9** |
| **SNQR** | **Sonqor, Kerman** | **1.20** | **76** | Pg | | **Pb** | **Pb** | **08 42 15.6** | **-1.5** |
| **IBZA** | **Bozab** | **1.36** | **94** | Pg | | **Pn** | **Pn** | **08 42 18.8** | **-0.7** |
| **IBDR** | **Badra** | **1.49** | **189** | *e*Pn | | **Pb** | **Pb** | **08 42 21.0** | **-0.9** |
| IBDR | | | | *e*Sn | | **Sg** | **Sg** | **08 42 42.0** | **0.0** |
| IBDR | | | | AML | | AML | AML | 08 42 47.1 | |
| | comp=E,2μm,0.5s | | | | | | | | |
| IBDR | | | | AML | | AML | AML | 08 42 58.3 | |
| | comp=N,1μm,0.6s | | | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.67** | **339** | Pg | | **Pn** | **Pn** | **08 42 22.4** | **-1.2** |
| **IKFM** | **Kafar-mosalman** | **1.72** | **128** | Pg | | **Pb** | **Pb** | **08 42 25.4** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.74** | **298** | *e*Pn | | **Pn** | **Pn** | **08 42 24.2** | **-0.2** |
| IKRK | | | | *e*Sn | | **Sn** | **Sn** | **08 42 47.5** | **+0.8** |
| **IDOB** | **Doab** | **1.81** | **115** | Pn | | **Pb** | **Pb** | **08 42 26.6** | **-0.9** |
| **HSAM** | **Samen** | **2.01** | **100** | Pn | | **Pn** | **Pn** | **08 42 29.5** | **+1.2** |
| **BHD** | **Baghdad** | **2.01** | **230** | *e*Pn | | **Pn** | **Pn** | **08 42 28.0** | **-0.1** |
| BHD | | | | *e*Sn | | **Sb** | **Sb** | **08 42 55.0** | **-0.8** |
| BHD | | | | AML | | AML | AML | 08 43 02.5 | |
| | comp=E,736nm,0.6s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAHB** | **Mahabad** | **2.22 349** | | Pn | | **Pn** | **08 42 32.0** | **+1.0** |
| **IHSH** | **Hashtrud** | **2.84** | **17** | Pn | | **Pn** | **08 42 40.0** | **+0.1** |
| **RAFI** | **Al-Rafai** | **2.85 182** | | *e*Pn | | **Pn** | **08 42 40.5** | **+0.8** |
| RAFI | | | | *e*Sn | | **Sn** | **08 43 16.0** | **+1.9** |
| RAFI | | | | AML | AML | 08 43 32.7 | | |
| | comp=N,204nm,0.5s | | | | | | | |
| RAFI | | | | AML | AML | 08 43 41.0 | | |
| | comp=E,263nm,0.4s | | | | | | | |
| **IAZR** | **Azarshahr** | **3.09** | **357** | Pn | | **Pn** | **08 42 43.1** | **-0.1** |
| **IRAZ** | **Razeghan** | **3.16** | **74** | Pn | | **Pn** | **08 42 45.2** | **+1.1** |
| **ISRB** | **Sarab** | **3.44** | **20** | Pn | | **Pn** | **08 42 48.8** | **+0.9** |
| **ISHB** | **Shabestar** | **3.72** | **353** | Pn | | **Pn** | **08 42 52.2** | **+0.3** |
| **IPIR** | **Pirpir** | **4.34** | **115** | Pn | | **Pn** | **08 43 00.6** | **+0.2** |
| **QAMS** | **Qamsar** | **4.38** | **100** | Pn | | **Pn** | **08 43 02.5** | **+1.6** |
| **GRMI** | **Germi** | **4.43** | **17** | Pn | | **Pn** | **08 43 02.3** | **+0.9** |
| **IVRN** | **Varamin** | **4.56** | **83** | Pn | | **Pn** | **08 43 04.1** | **+0.9** |
| **ZNGN** | **Zangian** | **4.60** | **121** | Pn | | **Pn** | **08 43 05.0** | **+1.0** |
| **KRSH** | **Karshahi** | **4.94** | **95** | Pn | | **Pn** | **08 43 09.5** | **+0.9** |
| **ISFB** | **Sefidab** | **4.98** | **91** | Pn | | **Pn** | **08 43 09.8** | **+0.7** |
| **IZEF** | **Zefreh** | **5.37** | **107** | Pn | | **Pn** | **08 43 16.1** | **+1.6** |
| **KLNJ** | **Kolanjah** | **5.76** | **127** | Pn | | **Pn** | **08 43 21.2** | **+1.1** |
| **IRAM** | **Ramesheh** | **5.86** | **116** | Pn | | **Pn** | **08 43 22.2** | **+0.9** |
| **RAYN** | **Ar Rayn** | **11.04** | **183** | Pn | | **Pn** | **08 44 29.7** | **-2.5** |
| **SHME** | **Shamm** | **12.07** | **132** | Pn | | **Pn** | **08 44 44.4** | **-1.8** |
| **ASUD** | **Al Ashush, Dub** | **12.70** | **139** | Pn | | **Pn** | **08 44 53.0** | **-1.7** |
| **MDH** | **Madha** | **12.72** | **134** | Pn | | **Pn** | **08 44 52.1** | **-3.1** |
| **FAQ** | **Al Faqa, Dubai** | **12.74** | **138** | Pn | | **Pn** | **08 44 52.8** | **-2.7** |
| **UOSS** | **Minazif** | **12.94** | **135** | Pn | | **Pn** | **08 44 54.0** | **-4.0** |
| **HATD** | **Hatta, Dubai** | **12.99** | **136** | Pn | | **Pn** | **08 44 53.3** | **-5.4** |
| **ASHO** | **Ashiyiah** | **13.05** | **136** | Pn | | **Pn** | **08 44 57.3** | **-2.4** |
| ASHO | | | | Sn | | Sn | 08 47 11.2 | -14 |
| **KOLS** | **Kolonicke sedl** | **22.77** | **316** | *e*P | | **P** | **08 46 59.2** | **+2.6** |
| **CRVS** | **Cervenica-Dubn** | **23.22** | **316** | *e*P | | **P** | **08 47 06.1** | **+4.8** |
| **VYHS** | **Vyhne** | **24.60** | **313** | *e*P | | **P** | **08 47 18.9** | **+4.5** |
| **ZST** | **Bratislava** | **25.55** | **311** | *e*P | | **P** | **08 47 27.2** | **+4.3** |

*MOS **26** 08:45:41.1±0.6, 44.°09N×150.°09E, h33km, mb3.8/1, Error ellipse: s-maj=46.2km s-min=23.4km az=40.0*
*SKHL **26** 08:45:42.0±0.2, 44.°00N×150.°00E, h35km±4km, mb4.2/3*
*IDC **26** 08:45:45.6±39.0, 45.°20N×149.°60E, h0km, mb4.0/5, mbtmp4.0/5, Error ellipse: s-maj=911.0km s-min=55.5km az=155.0*
*JMA **26** 08:45:45.0±0.9, 45°N±5.°×15°0E±.°, h30km, MV3.6/11, SE OFF ETOROFU*
**ISC 26 08:45:44.1**±1.7,**43.°97N**±0.°08×**149.°8E**±0.°1,**h35**km,**n19,**
**σ1§94/28,mb3.9/5,East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.87** | **313** | *e*P | | **Pn** | **Pn** | **08 46 12.4** | **-1.2** |
| KUR | | | | AMB | | AMB | AMB | 08 46 14.1 | |
| | 130nm,0.5s | | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **Sn** | **08 46 35.1** | **-0.9** |
| KUR | | | | A | | A | A | 08 46 39.4 | |
| | 310nm,0.7s | | | | | | | | |
| KUR | | | | A | | A | A | 08 46 39.4 | |
| | 210nm,0.7s | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.87** | **313** | *e*PN | | **Pn** | **Pn** | **08 46 12.4** | **-1.2** |
| KUR | | | | *e*S | | **Sn** | **Sn** | **08 46 35.1** | **-0.9** |
| KUR | | | | pmax | pmax | | | | |
| | comp=Z,130nm,0.5s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=N,30nm,0.3s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=E,29nm,0.4s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=N,216nm,0.4s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=E,69nm,0.2s | | | | | | | | |
| **SHO** | **Shikotan** | **2.15** | **268** | *e*P | | **Pn** | **Pn** | **08 46 17.4** | **-0.1** |
| SHO | | | | AMB | | AMB | AMB | 08 46 19.6 | |
| | comp=E,20nm,0.3s | | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **Sn** | **08 46 41.9** | **-1.0** |
| SHO | | | | A | | A | A | 08 46 45.2 | |
| | comp=E,100nm,0.3s | | | | | | | | |
| SHO | | | | A | | A | A | 08 46 45.2 | |
| | comp=E,60nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **2.15** | **268** | *e*PN | | **Pn** | **Pn** | **08 46 18.2** | **+0.7** |
| SHO | | | | pmax | pmax | | | | |
| | comp=Z,18nm,0.3s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.85** | **273** | *e*P | | **Pn** | **Pn** | **08 46 26.5** | **-0.5** |
| YUK | | | | AMB | | AMB | AMB | 08 46 28.3 | |
| | comp=Z,80nm,0.6s | | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **Sn** | **08 47 00.0** | **-0.1** |
| YUK | | | | A | | A | A | 08 47 02.3 | |
| | comp=Z,150nm,0.6s | | | | | | | | |
| YUK | | | | A | | A | A | 08 47 02.3 | |
| | comp=Z,130nm,0.6s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **3.01** | **260** | P | | **Pn** | **Pn** | **08 46 29.4** | **+0.1** |
| NEM2 | | | | *e*S | | **Sn** | **Sn** | **08 47 02.0** | **-2.1** |
| **JRA** | **Rausu** | **3.38** | **271** | *e*P | | **Pn** | **Pn** | **08 46 35.7** | **+1.3** |
| **JNK** | **Nakash** | **3.71** | **266** | P | | **Pn** | **Pn** | **08 46 40.0** | **+1.2** |
| **JAK** | **Akkeshi** | **3.85** | **257** | P | | **Pn** | **Pn** | **08 46 41.0** | **+0.3** |
| JAK | | | | *e*S | | **Sn** | **Sn** | **08 47 22.9** | **-1.8** |
| **JAR** | **Ashorobuto** | **4.43** | **263** | *e*P | | **Pn** | **Pn** | **08 46 50.2** | **+1.4** |
| JAR | | | | *e*S | | **Sn** | **Sn** | **08 47 39.8** | **+0.6** |
| **JCH** | **Churui** | **4.90** | **256** | *e*P | | **Pn** | **Pn** | **08 46 56.3** | **+1.1** |
| JCH | | | | *e*S | | **Sn** | **Sn** | **08 47 50.2** | **-0.4** |
| **JNBK** | **Urakawa-nobuka** | **5.43** | **254** | P | | **Pn** | **Pn** | **08 47 05.5** | **+3.0** |
| JNBK | | | | *e*S | | **Sn** | **Sn** | **08 48 05.4** | **+1.6** |
| **JANG** | **Nango** | **7.13** | **243** | *e*S | | **Sn** | **Sn** | **08 48 40.2** | **-5.5** |
| **JTH** | **Tanohata** | **7.16** | **238** | *e*S | | **Sn** | **Sn** | **08 48 41.1** | **-5.3** |
| **SONM** | **Songino Array** | **30.16** | **293** | P | | **P** | **P** | **08 51 51.9** | **+1.1** |
| | comp=Z,0.7nm,0.8s,baz=69,slow=7.9,SNR=3.3 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.18** | **298** | P | | **P** | **P** | **08 54 06.4** | **+1.2** |
| | comp=Z,1.0nm,0.7s,baz=72,slow=7.7,SNR=10 | | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **65.53** | **334** | P | | **P** | **P** | **08 56 22.8** | **-0.7** |
| | comp=Z,2.0nm,0.9s,baz=44,slow=6.2,SNR=9.0 | | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.07** | **340** | P | | **P** | **P** | **08 56 51.7** | **-0.4** |
| | comp=Z,0.7nm,0.6s,baz=29,slow=6.5,SNR=5.2 | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | |
| **HFS** | **Hagfors** | **70.21** | **338** | P | | **P** | **P** | **08 56 52.4** | **-0.5** |
| | comp=Z,3.7nm,0.9s,baz=61,slow=12,SNR=4.0 | | | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | | | |

*TEH **26** 09:02:35.5, 34.°63N×46.°28E, h17km±10km, ML2.6*
*ISN **26** 09:02:35.7±0.4, 34.°63N×46.°29E, h12km±6km, ML2.9*
**ISC 26 09:02:35.8**±1.3,**34.°63N**±0.°04×**46.°26E**±0.°04,**h17**km±9km,
**n10,σ0§74/13,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.13** | **56** | Pg | | **Pg** | **Pb** | **09 02 40.2** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.39** | **139** | Pg | | **Pg** | **Pb** | **09 02 44.8** | **+0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.56** | **258** | Pg | | **Pg** | **Pb** | **09 02 48.0** | **+0.8** |
| **GLG1** | **Gilan-e-Gharb** | **0.59** | **209** | Pg | | **Pg** | **Pb** | **09 02 48.3** | **+0.7** |
| **ILIN** | **Lien** | **0.65** | **63** | Pg | | **Pg** | **Pb** | **09 02 49.1** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.74** | **118** | Pg | | **Pn** | **Pn** | **09 02 50.8** | **-0.8** |
| **SNQR** | **Sonqor, Kerman** | **1.15** | **78** | Pg | | **Pg** | **Pg** | **09 02 58.5** | **+0.4** |
| **IBDR** | **Badra** | **1.54** | **190** | *e*Pn | | **Pg** | **Pg** | **09 03 05.0** | **-0.3** |
| IBDR | | | | *e*Sn | | **Sg** | **Sg** | **09 03 26.0** | **+0.7** |
| IBDR | | | | AML | | AML | AML | 09 03 32.3 | |
| | comp=E,201nm,0.9s | | | | | | | | |
| IBDR | | | | AML | | AML | AML | 09 03 33.0 | |
| | comp=N,122nm,0.4s | | | | | | | | |
| **IKRK** | **Kirkuk** | **1.75** | **297** | *e*Pn | | **Pb** | **Pb** | **09 03 08.0** | **+0.5** |
| IKRK | | | | *e*Sn | | **Sg** | **Sg** | **09 03 31.5** | **-0.7** |
| IKRK | | | | AML | | AML | AML | 09 03 36.4 | |
| | comp=E,162nm,0.4s | | | | | | | | |
| IKRK | | | | AML | | AML | AML | 09 03 41.9 | |
| | comp=N,161nm,0.4s | | | | | | | | |
| **BHD** | **Baghdad** | **2.06** | **230** | *e*Pn | | **Pb** | **Pb** | **09 03 12.0** | **-0.8** |
| BHD | | | | *e*Sn | | **Sb** | **Sb** | **09 03 39.0** | **+0.9** |

*NEIC **26** 09:07:55.9±0.6, 56.°22S±0.°09×27.°6W±0.°3, h123km±10km, mb5.2/16, Error ellipse: s-maj=24.7km s-min=5.0km az=59.0*
*IDC **26** 09:07:58.8±6.2, 56.°19S×27.°31W, h149km±56km, mb3.8/5, mbtmp4.2/6, Error ellipse: s-maj=31.0km s-min=18.8km az=62.0*
**ISC 26 09:07:54.7**±0.7,**56.°2S**±0.°1×**27.°5W**±0.°1,**h112**km,**n36,**
**σ1§51/42,mb5.1/13,5C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.48** | **287** | Pn | | **Pn** | **Pn** | **09 09 14.7** | **+0.8** |
| HOPE | | | | Sn | | **Sn** | **Sn** | **09 10 12.9** | **-2.8** |
| **VNA1** | **Neumayer--Stat** | **16.73** | **158** | ⇑P | | **Pn** | **Pn** | **09 11 40.9** | **-1.0** |
| | comp=Z,1.7nm,0.5s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **16.92** | **160** | ⇑P | | **Pn** | **Pn** | **09 11 44.1** | **-0.1** |
| | comp=Z,3.9nm,0.5s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **17.13** | **157** | ⇑P | | **P** | **P** | **09 11 46.5** | **-0.1** |
| | comp=Z,1.8nm,0.3s,baz=316,slow=13 | | | | | | | | |
| **SNAA** | **Sanae** | **18.69** | **156** | ⇑P | | **P** | **P** | **09 12 03.9** | **+0.1** |
| | comp=Z,173nm,0.4s | | | | | | | | |
| **SNAA** | **Sanae** | **18.69** | **156** | P | | **P** | **P** | **09 12 03.9** | **+0.1** |
| | comp=Z,7.7nm,0.5s,baz=303,slow=10,SNR=181 | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **20.20** | **153** | ⇑P | | **P** | **P** | **09 12 20.2** | **-0.1** |
| | comp=Z,549nm,0.6s | | | | | | | | |
| **BELA** | **Belgrano 2** | **21.92** | **184** | P | | **P** | **P** | **09 12 38.3** | **-0.2** |
| **PLTB** | **Pedras Altas** | **30.46** | **312** | P | | **P** | **P** | **09 13 56.1** | **-0.5** |
| **QSPA** | **South Pole Qui** | **34.06** | **180** | P | | **P** | **P** | **09 14 28.7** | **+0.8** |
| QSPA | | | | PcP | | **PcP** | **PcP** | **09 17 02.1** | **-0.5** |
| **QSPA** | **South Pole Qui** | **34.06** | **180** | P | | **P** | **P** | **09 14 28.7** | **+0.8** |
| | comp=Z,1.7nm,0.5s,baz=203,slow=1.2,SNR=24 | | | | | | | | |
| QSPA | | | | PcP | | **PcP** | **PcP** | **09 17 02.1** | **-0.5** |
| | comp=Z,0.7nm,0.4s,baz=26,slow=1.5,SNR=6.5 | | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.06** | **180** | P | | **P** | **P** | **09 14 28.6** | **+0.7** |
| QSPA | | | | pP | | **pwP** | **pwP** | **09 14 57.7** | **+2.0** |
| **MT09** | **Talagante** | **37.19** | **288** | P | | **P** | **P** | **09 14 53.3** | **-1.5** |
| MT09 | | | | IAmb | | IAmb | IAmb | 09 15 18.4 | |
| | comp=Z,99nm,1.9s | | | | | | | | |
| **MT02** | **Curacav** | **37.66** | **289** | P | | **P** | **P** | **09 14 57.1** | **-1.6** |
| MT02 | | | | IAmb | | IAmb | IAmb | 09 15 15.4 | |
| | comp=Z,66nm,1.5s | | | | | | | | |
| **VA06** | **Catapilco** | **38.29** | **289** | P | | **P** | **P** | **09 15 02.6** | **-1.4** |
| **CO02** | **Combarbal** | **39.20** | **291** | P | | **P** | **P** | **09 15 11.0** | **-0.7** |
| CO02 | | | | IAmb | | IAmb | IAmb | 09 15 40.6 | |
| | comp=Z,80nm,1.4s | | | | | | | | |
| **CO03** | **El Pedregal** | **39.33** | **292** | P | | **P** | **P** | **09 15 12.3** | **-0.5** |
| CO03 | | | | IAmb | | IAmb | IAmb | 09 16 43.2 | |
| | comp=Z,56nm,1.6s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **39.71** | **293** | P | | **P** | **P** | **09 15 16.4** | **+0.3** |
| CO01 | | | | IAmb | | IAmb | IAmb | 09 15 53.1 | |
| | comp=Z,59nm,1.9s | | | | | | | | |
| **MAW** | **Mawson** | **40.14** | **144** | P | | **P** | **P** | **09 15 19.0** | **+0.1** |
| | comp=Z,1.0nm,0.4s,baz=227,slow=8.2,SNR=6.9 | | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **AC05** | **El Transito** | **40.72** | **294** | P | | **P** | **P** | **09 15 23.7** | **-0.6** |
| AC05 | | | | IAmb | | IAmb | IAmb | 09 16 57.5 | |
| | comp=Z,81nm,1.9s | | | | | | | | |
| **GO02** | **Mina Guanaco** | **43.40** | **298** | P | | **P** | **P** | **09 15 45.8** | **-0.5** |
| GO02 | | | | IAmb | | IAmb | IAmb | 09 15 46.2 | |
| | comp=Z,72nm,1.9s | | | | | | | | |
| **LVC** | **Limon Verde** | **45.22** | **301** | P | | **P** | **P** | **09 16 00.4** | **-0.5** |
| **LVC** | **Limon Verde** | **45.22** | **301** | P | | **P** | **P** | **09 16 01.6** | **+0.7** |
| LVC | | | | pP | | **pP** | **pP** | **09 16 31.1** | **+5.0** |
| **PB09** | **IPOC Station P** | **46.07** | **301** | P | | **P** | **P** | **09 16 08.0** | **+0.6** |
| **CCD** | **Concordia, Ant** | **47.57** | **170** | P | | **P** | **P** | **09 16 18.9** | **+0.2** |
| **HMBC** | **Humberstone** | **47.68** | **301** | P | | **P** | **P** | **09 16 19.1** | **-0.7** |
| HMBC | | | | IAmb | | IAmb | IAmb | 09 18 01.4 | |
| | comp=Z,59nm,1.7s | | | | | | | | |
| **LPAZ** | **La Paz** | **50.31** | **306** | P | | **P** | **P** | **09 16 41.1** | **+0.6** |
| **LPAZ** | **La Paz** | **50.31** | **306** | P | | **P** | **P** | **09 16 41.4** | **+0.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KUR | | | | smax | smax | | | |
| | comp=E,136nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **2.01** | **259** | *e*P | | **Pn** | **09 12 50.2** | **+0.5** |
| SHO | | | | AMB | AMB | | 09 12 51.0 | |
| | comp=E,10.0nm,0.2s | | | | | | | |
| SHO | | | | *i* S | | **Sn** | **09 13 14.7** | **-0.7** |
| SHO | | | | A | A | | 09 13 17.9 | |
| | comp=E,100nm,0.3s | | | | | | | |
| SHO | | | | A | A | | 09 13 17.9 | |
| | comp=E,50nm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **2.01** | **259** | *e*PN | | **Pn** | **09 12 50.8** | **+1.1** |
| SHO | | | | *i* S | | **Sn** | **09 13 14.6** | **-0.8** |
| SHO | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.1s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=N,103nm,0.4s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=E,58nm,0.2s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.67** | **266** | *e*P | | **Pn** | **09 13 00.1** | **+1.3** |
| YUK | | | | AMB | AMB | | 09 13 02.6 | |
| | comp=E,80nm,0.5s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **09 13 32.1** | **+0.4** |
| YUK | | | | A | A | | 09 13 40.6 | |
| | comp=E,110nm,0.6s | | | | | | | |
| YUK | | | | A | A | | 09 13 40.6 | |
| | comp=E,140nm,0.6s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.67** | **266** | *e*PN | | **Pn** | **09 13 00.1** | **+1.3** |
| YUK | | | | *e*S | | **Sn** | **09 13 32.1** | **+0.4** |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,78nm,0.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=N,13nm,0.1s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=E,164nm,0.6s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=N,112nm,0.3s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.91** | **253** | *e*P | | **Pn** | **09 13 02.1** | **0.0** |
| NEM2 | | | | *e*S | | **Sn** | **09 13 38.0** | **+0.3** |
| **JRA** | **Rausu** | **3.21** | **265** | *e*P | | **Pn** | **09 13 08.6** | **+2.4** |
| **JNK** | **Nakash** | **3.57** | **260** | P | | **Pn** | **09 13 12.1** | **+1.0** |
| JNK | | | | *e*S | | **Sn** | **09 13 53.7** | **-0.1** |
| **JAK** | **Akkeshi** | **3.76** | **251** | *e*P | | **Pn** | **09 13 14.1** | **+0.4** |
| JAK | | | | *e*S | | **Sn** | **09 13 57.1** | **-1.5** |
| **JTKR** | **Abashiri--Toko** | **4.08** | **267** | *e*P | | **Pn** | **09 13 20.5** | **+2.4** |
| **JAR** | **Ashorobuto** | **4.31** | **259** | *e*P | | **Pn** | **09 13 22.9** | **+1.6** |
| JAR | | | | *e*S | | **Sn** | **09 14 12.8** | **+0.7** |
| **JCH** | **Churui** | **4.81** | **252** | *e*P | | **Pn** | **09 13 29.0** | **+0.8** |
| JCH | | | | *e*S | | **Sn** | **09 14 22.9** | **-1.6** |
| **JKA** | **Kamikawa-asahi** | **5.01** | **270** | *e*P | | Pn | 09 13 35.0 | +4.1 |
| **ASAJ** | **Asahikawa** | **5.01** | **270** | Pn | | Pn | 09 13 35.0 | +4.1 |
| | comp=N,0.3nm,0.3s,baz=330,slow=20,SNR=1.9 | | | | | | | |
| | comp=N,5.8nm,0.9s | | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.36** | **250** | *e*P | | **Pn** | **09 13 36.5** | **+0.7** |
| **JANG** | **Nango** | **7.13** | **239** | *e*S | | Sn | 09 15 13.2 | -8.5 |
| **H11N2** | **WAKE ISLAND Hy** | **28.45** | **144** | T | | T | 09 49 16.8 | |
| | baz=334,slow=76,SNR=7.2 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.46** | **144** | T | | T | 09 49 17.9 | |
| | baz=334,slow=76,SNR=3.8 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.47** | **144** | T | | T | 09 49 14.6 | |
| | baz=334,slow=76,SNR=5.1 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.46** | **145** | T | | T | 09 50 33.2 | |
| | baz=334,slow=76,SNR=8.1 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.47** | **145** | T | | T | 09 50 34.4 | |
| | baz=334,slow=76,SNR=3.9 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.48** | **145** | T | | T | 09 50 34.8 | |
| | baz=334,slow=76,SNR=6.2 | | | | | | | |
| **SONM** | **Songino Array** | **29.87** | **292** | P | | **P** | **09 18 23.6** | **0.0** |
| | comp=N,0.3nm,0.4s,baz=78,slow=7.5,SNR=2.3 | | | | | | | |
| | comp=N,0.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.87** | **298** | P | | **P** | **09 20 39.2** | **+1.0** |
| | comp=N,1.3nm,0.7s,baz=75,slow=8.4,SNR=12 | | | | | | | |
| | comp=N,1.3nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.16** | **334** | P | | **P** | **09 22 56.2** | **-0.6** |
| | comp=N,0.9nm,0.6s,baz=46,slow=8.5,SNR=10 | | | | | | | |
| | comp=N,0.9nm,0.6s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.70** | **340** | P | | **P** | **09 23 25.4** | **-0.2** |
| | comp=Z,0.5nm,0.5s,baz=28,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.70** | **340** | P | | **P** | **09 23 24.1** | **-1.5** |
| | comp=Z,1.0nm,0.8s,baz=30,slow=6.7,SNR=5.6 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **69.84** | **338** | P | | **P** | **09 23 25.4** | **-1.0** |
| | comp=Z,1.7nm,0.7s,baz=69,slow=8.2,SNR=2.3 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.89** | **58** | P | | **P** | **09 24 30.2** | **-0.4** |
| | comp=Z,0.2nm,0.7s,baz=298,slow=5.7,SNR=2.7 | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | |

*ISN **26** 09:17:58.5±0.5,34.71N×46.18E,h8km±5km,ML2.9*
*TEH **26** 09:17:59.0,34.70N×46.22E,h11km,ML2.7*
**ISC 26 09:17:59.6±1.5,34.70N±0.04×46.21E±0.04,h3km±13km, n12,σ0°39/16,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **91** | Pg | **Pg** | **09 18 02.9** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.48** | **141** | Pg | **Pg** | **09 18 08.7** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **249** | Pg | **Pg** | **09 18 10.1** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.64** | **203** | Pg | **Pg** | **09 18 11.5** | **-0.3** |
| **ILIN** | **Lien** | **0.66** | **71** | Pg | **Pg** | **09 18 11.5** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.81** | **122** | Pg | **Pg** | **09 18 14.6** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.08** | **180** | Pg | **Pg** | **09 18 19.6** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.18** | **82** | Pg | **Pg** | **09 18 21.1** | **-0.1** |
| **IBDR** | **Badra** | **1.61** | **188** | *e*Pn | **Pg** | **09 18 28.7** | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | **09 18 51.5** | **+0.3** |
| IBDR | | | | AML | AML | 09 18 57.5 | |
| | comp=N,181nm,0.3s | | | | | | |
| IBDR | | | | AML | AML | 09 18 57.8 | |
| | comp=E,152nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.68** | **295** | *e*Pn | **Pn** | **09 18 29.7** | **-0.3** |
| IKRK | | | | *e*Sn | **Sn** | **09 18 52.5** | **+0.4** |
| **BHD** | **Baghdad** | **2.09** | **227** | *e*Pn | **Pn** | **09 18 35.5** | **0.0** |
| BHD | | | | *e*Sn | **Sn** | **09 19 02.0** | **0.0** |
| **RAFI** | **Al-Rafai** | **2.97** | **182** | *e*Pn | **Pn** | **09 18 48.0** | **+0.3** |
| RAFI | | | | *e*Sn | **Sn** | **09 19 24.0** | **+0.1** |

*ISN **26** 09:23:32.1±0.6,34.62N×46.20E,h5km±5km,ML4.2*
*IDC **26** 09:23:32.1±1.3,34.64N×46.10E,h0km,mb3.9/13, mbtmp3.9/21,ML3.8/7,Error ellipse: s-maj=27.0km s-min=14.1km az=163.0*
*TEH **26** 09:23:33.3,34.61N×46.20E,h7km±37km,ML4.1*
*NEIC **26** 09:23:33.2±2.9,34.56N±0.06×46.15E±0.08,h10km±1km, mb4.5/15,Error ellipse: s-maj=13.8km s-min=6.6km az=47.0*
*OMAN **26** 09:23:44.8±0.0,33.98N×47.10E,h10km,mb4.2/27,Error ellipse: s-maj=1.5km s-min=0.6km az=241.0*
**ISC 26 09:23:32.5±0.4,34.52N±0.02×46.23E±0.03,h10km,n205, σ26/64/228,mb4.2/30,7C-7D,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.22** | **37** | Pg | **Pg** | **09 23 37.5** | **+0.2** |
| IDHR | | | | Sg | **Sg** | **09 23 41.0** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.34** | **124** | Pg | **Pb** | **09 23 41.9** | **+1.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.48** | **213** | Pg | **Pn** | **09 23 44.0** | **-1.5** |
| GLG1 | | | | Sg | **Sb** | **09 23 52.8** | **+2.6** |
| **KGS1** | **Ghasr-e-Shirin** | **0.53** | **269** | Pg | **Pb** | **09 23 43.8** | **0.0** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **110** | Pg | **Pb** | **09 23 48.0** | **+0.8** |
| KCHF | | | | Sg | **Sn** | **09 24 00.3** | **+0.3** |
| **ILIN** | **Lien** | **0.73** | **57** | Pg | **Pg** | **09 23 46.6** | **0.0** |
| **ILBA** | **Ilam Banvizeh** | **0.89** | **181** | Pg | **Pn** | **09 23 52.3** | **+1.1** |
| **SNQR** | **Sonqor, Kerman** | **1.21** | **73** | Pg | **Pn** | **09 23 56.3** | **+0.6** |
| **IBZA** | **Bozab** | **1.35** | **92** | Pg | **Pn** | **09 23 58.4** | **+0.7** |
| **IBDR** | **Badra** | **1.43** | **190** | *e*Pn | **Pg** | **09 24 02.0** | **+2.1** |
| IBDR | | | | *e*Sn | **Sg** | **09 24 23.5** | **+5.1** |
| IBDR | | | | AML | AML | 09 24 33.2 | |
| | comp=E,6μm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 09 24 37.8 | |
| | comp=N,3μm,0.5s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.67** | **126** | Pg | **Pg** | **09 24 05.7** | **+1.1** |
| **SDS1** | **Sardasht. Az.** | **1.73** | **340** | Pg | **Pn** | **09 24 03.6** | **+0.8** |
| **IDOB** | **Doab** | **1.78** | **114** | Pn | **Pg** | **09 24 06.6** | **0.0** |
| **IKRK** | **Kirkuk** | **1.78** | **300** | *e*Pn | **Pn** | **09 24 04.5** | **+1.2** |
| IKRK | | | | *e*Sn | **Sb** | **09 24 28.3** | **+0.7** |
| IKRK | | | | AML | AML | 09 24 36.9 | |
| | comp=N,7μm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 09 24 41.3 | |
| | comp=E,5μm,0.7s | | | | | | |
| **BHD** | **Baghdad** | **1.98** | **231** | *e*Pn | **Pb** | **09 24 08.3** | **-0.2** |
| BHD | | | | *e*Sn | **Sg** | **09 24 35.6** | **-0.4** |
| **HSAM** | **Samen** | **1.99** | **98** | Pn | **Pb** | **09 24 09.9** | **+1.0** |
| **MAHB** | **Mahabad** | **2.28** | **349** | Pn | **Pn** | **09 24 12.2** | **+1.9** |
| **HAGD** | **Aghdareh** | **2.42** | **82** | Pn | **Pb** | **09 24 16.1** | **-0.2** |
| **RAFI** | **Al-Rafai** | **2.79** | **182** | *e*Pn | **Pb** | **09 24 21.0** | **-1.4** |
| RAFI | | | | *e*Sn | **Sb** | **09 24 56.0** | **-0.6** |
| RAFI | | | | AML | AML | 09 25 18.6 | |
| | comp=N,497nm,0.7s | | | | | | |
| RAFI | | | | AML | AML | 09 25 19.4 | |
| | comp=E,826nm,0.6s | | | | | | |
| **IAZR** | **Azarshahr** | **3.16** | **356** | Pn | **Pn** | **09 24 24.0** | **+1.5** |
| **IRAZ** | **Razeghan** | **3.17** | **73** | Pn | **Pn** | **09 24 25.9** | **+3.3** |
| **CUKT** | **Cukurca** | **3.45** | **323** | P | **Pn** | **09 24 27.5** | **+1.1** |
| **ISRB** | **Sarab** | **3.50** | **19** | Pn | **Pn** | **09 24 29.3** | **+2.1** |
| **ISHB** | **Shabestar** | **3.79** | **353** | Pn | **Pn** | **09 24 33.6** | **+2.5** |
| **IQOM** | **Qom** | **4.01** | **84** | Pn | **Pn** | **09 24 37.4** | **+3.3** |
| **JHBN** | **Jahan bin** | **4.36** | **120** | Pn | **Pn** | **09 24 42.3** | **+3.2** |
| **QAMS** | **Qamsar** | **4.36** | **99** | Pn | **Pn** | **09 24 42.9** | **+3.8** |
| **GAS1** | **Astara - Iran** | **4.40** | **28** | Pn | **Pn** | **09 24 42.0** | **+2.7** |
| **GRMI** | **Germi** | **4.49** | **17** | Pn | **Pn** | **09 24 42.8** | **+2.2** |
| **IVRN** | **Varamin** | **4.55** | **82** | Pn | **Pn** | **09 24 44.4** | **+2.8** |
| **ZNGN** | **Zangian** | **4.56** | **120** | Pn | **Pn** | **09 24 44.3** | **+2.6** |
| **IKLH** | **Kolahrood** | **4.61** | **104** | Pn | **Pn** | **09 24 45.9** | **+3.4** |
| **AKDM** | **Akdamar-Van** | **4.61** | **326** | *e*P | **Pn** | **09 24 44.6** | **+2.2** |
| **VANB** | **Van** | **4.66** | **332** | *e*P | **Pn** | **09 24 44.1** | **+1.0** |
| **IDMV** | **Damavand** | **4.88** | **76** | Pn | **Pn** | **09 24 48.8** | **+2.6** |
| **KRSH** | **Karshahi** | **4.93** | **95** | Pn | **Pn** | **09 24 50.0** | **+3.3** |
| **IBRJ** | **Brojen** | **4.96** | **120** | Pn | **Pn** | **09 24 49.9** | **+2.6** |
| **CLDR** | **Caldiran** | **4.97** | **339** | *e*P | **Pn** | **09 24 43.7** | **-3.7** |
| **ISFB** | **Sefidab** | **4.97** | **90** | Pn | **Pn** | **09 24 49.6** | **+2.3** |
| **GURO** | **Guroymak-BITLI** | **5.25** | **321** | *e*P | **Pn** | **09 24 52.5** | **+1.3** |
| **IGAR** | **Gharneh** | **5.30** | **112** | Pn | **Pn** | **09 24 55.0** | **+3.0** |
| **IZEF** | **Zefreh** | **5.34** | **106** | Pn | **Pn** | **09 24 55.2** | **+2.7** |
| **SVAN** | **Silvan-Diyarba** | **5.44** | **313** | *e*P | **Pn** | **09 24 52.2** | **-1.5** |
| **IFIR** | **Firoozkooh** | **5.47** | **76** | Pn | **Pn** | **09 24 57.0** | **+2.7** |
| **KBD** | **Kabd** | **5.47** | **166** | P | **Pn** | **09 24 57.6** | **+3.5** |
| KBD | | | | S | **Sn** | **09 25 55.3** | **-1.8** |
| **MAZI** | **Mazidag** | **5.53** | **304** | *e*P | **Pn** | **09 24 53.6** | **-1.3** |
| **AGRB** | **Hanur-Agry** | **5.67** | **334** | *e*P | **Pn** | **09 24 57.3** | **+0.3** |
| **KLNJ** | **Kolanjah** | **5.72** | **126** | Pn | **Pn** | **09 25 00.4** | **+2.6** |
| **GNI** | **Garni** | **5.74** | **349** | Pn | **Pn** | **09 25 00.7** | **+2.7** |
| | comp=E,1.9nm,0.3s,baz=180,slow=20,SNR=2.4 | | | | | | |
| GNI | | | | Lg | Lg | 09 26 38.5 | |
| | comp=E,1.7nm,0.3s,baz=151,slow=18,SNR=3.6 | | | | | | |
| | comp=E,5.4nm,0.4s | | | | | | |
| **GNI** | **Garni** | **5.74** | **349** | P | **Pg** | **09 25 19.1** | **-3.3** |
| **DYBB** | **Diyarbakir** | **5.99** | **307** | *e*P | Pn | 09 25 09.1 | +7.8 |
| **BNGB** | **Bingl** | **6.30** | **317** | *e*P | **Pn** | **09 25 05.8** | **+0.2** |
| **ANAR** | **Anarak** | **6.38** | **100** | Pn | **Pn** | **09 25 09.6** | **+2.9** |
| **IGLO** | **Ghaloghah** | **6.51** | **70** | Pn | **Pn** | **09 25 11.2** | **+2.7** |
| **SVRC** | **Sivrice-ELAZID** | **6.78** | **307** | *e*P | **Pn** | **09 25 11.8** | **-0.3** |
| **PTK** | **Pertek** | **7.01** | **310** | *e*P | **Pn** | **09 25 14.9** | **-0.5** |
| **GAZ** | **Gaziantep** | **7.78** | **292** | | **Pn** | **09 25 26.4** | **+0.5** |
| **ASF** | **Jabal al Asfar** | **8.15** | **256** | Pn | **Pn** | **09 25 30.6** | **-0.3** |
| | comp=E,1.5nm,0.3s,baz=226,slow=0.1,SNR=6.4 | | | | | | |
| | comp=E,4.1nm,0.4s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.13** | **264** | Pn | **Pn** | **09 25 46.0** | **+1.6** |
| | comp=E,1.3nm,0.3s,baz=81,slow=18,SNR=4.6 | | | | | | |
| MMAI | | | | Lg | Lg | 09 28 11.9 | |
| | comp=E,1.6nm,0.3s,baz=92,slow=39,SNR=4.1 | | | | | | |
| | comp=E,0.8nm,0.3s | | | | | | |
| **SAKB** | **Bahrain** | **9.29** | **155** | P | **Pn** | **09 25 50.0** | **+3.5** |
| **KBZ** | **Khabaz** | **9.55** | **345** | Pn | Pn | 09 25 56.0 | +6.0 |
| | comp=E,0.2nm,0.3s,baz=140,slow=7.9,SNR=2.8 | | | | | | |
| **SHMA** | **Al-Shehemyia** | **9.56** | **153** | P | **Pn** | **09 25 53.5** | **+3.3** |
| SHMA | | | | S | **Sn** | **09 27 33.7** | **-3.9** |
| **KIV** | **Kislovodsk** | **9.81** | **345** | P | Pn | 09 26 17.3 | +24 |
| **SMRA** | **Abu-Samra** | **10.53** | **156** | P | **Pn** | **09 26 07.1** | **+3.7** |
| SMRA | | | | S | **Sn** | **09 27 56.3** | **-5.1** |
| **TRNA** | **Turayna** | **10.67** | **155** | P | **Pn** | **09 26 08.2** | **+2.8** |
| | SNR=7.3 | | | | | | |
| TRNA | | | | S | **Sn** | **09 28 00.4** | **-4.5** |
| **EIL** | **Elat** | **10.71** | **246** | Pn | **Pn** | **09 26 06.4** | **+0.4** |
| | comp=E,1.1nm,0.3s,baz=77,slow=5.0,SNR=5.3 | | | | | | |
| | comp=E,2.9nm,0.4s | | | | | | |
| **RAYN** | **Ar Rayn** | **10.98** | **183** | | **Pn** | **09 26 09.1** | **-0.5** |
| **RAYN** | **Ar Rayn** | **10.98** | **183** | *i* Pn | **Pn** | **09 26 09.0** | **-0.7** |
| | SNR=9.2 | | | | | | |
| **JRN** | **Qarnain Island** | **11.14** | **147** | P | **Pn** | **09 26 13.5** | **+1.6** |
| JRN | | | | S | **Sn** | **09 28 11.5** | **-5.0** |
| **BR104** | **Keskin Array S** | **11.30** | **301** | P | **Pn** | **09 26 18.5** | **+4.4** |
| | comp=E,4.5nm,0.9s,comp=E,34nm | | | | | | |
| **BRTR** | **Keskin Array B** | **11.31** | **301** | Pn | **Pn** | **09 26 17.1** | **+2.8** |
| | comp=E,0.1nm,0.3s,baz=118,slow=13,SNR=22 | | | | | | |
| | comp=E,3.4nm,0.8s | | | | | | |
| **BR105** | **Keskin Array S** | **11.32** | **301** | P | **Pn** | **09 26 18.4** | **+4.0** |
| | comp=E,4.6nm,1.0s | | | | | | |
| **BR106** | **Keskin Array S** | **11.33** | **301** | P | **Pn** | **09 26 17.8** | **+3.3** |
| | comp=E,5.6nm,0.9s,comp=E,37nm | | | | | | |
| **SLWR** | **Sila** | **11.45** | **154** | P | **Pn** | **09 26 19.6** | **+3.6** |
| SLWR | | | | S | **Sn** | **09 28 18.8** | **-5.3** |
| **ANTO** | **Ankara** | **11.96** | **300** | P | Pn | 09 26 28.2 | +5.1 |
| | comp=E,5.8nm,0.5s | | | | | | |
| **GHWR** | **Ruwais** | **12.01** | **149** | P | **Pn** | **09 26 26.2** | **+2.5** |
| GHWR | | | | S | **Sn** | **09 28 29.9** | **-7.9** |
| **SHME** | **Shamm** | **12.02** | **132** | Pn | **Pn** | **09 26 24.1** | **+0.2** |
| **SHME** | **Shamm** | **12.02** | **132** | P | **Pn** | **09 26 24.1** | **+0.2** |
| **BANOM** | **Banah** | **12.21** | **132** | Pn | **Pn** | **09 26 26.4** | **-0.1** |
| **BANOM** | **Banah** | **12.21** | **132** | P | **Pn** | **09 26 27.2** | **+0.6** |
| BANOM | | | | S | Sn | 09 28 33.3 | -10 |
| **AJN** | **Ajban** | **12.51** | **140** | Pn | **Pn** | **09 26 30.1** | **-0.5** |
| **MASF** | **Masafi** | **12.54** | **134** | P | **Pn** | **09 26 31.5** | **+0.5** |
| MASF | | | | S | **Sn** | **09 28 44.8** | **-5.9** |
| **NAZ** | **Nazwa, Dubai** | **12.54** | **137** | *i* Pn | **Pn** | **09 26 32.2** | **+1.2** |
| | SNR=8.0 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **12.54** | **137** | P | **Pn** | **09 26 32.8** | **+1.8** |
| | SNR=8.0 | | | | | | |
| NAZ | | | | S | Sn | 09 28 40.1 | -11 |
| **MSFE** | **Esma-Masafi** | **12.54** | **134** | Pn | **Pn** | **09 26 30.4** | **-0.6** |
| **ASUD** | **Al Ashush, Dub** | **12.64** | **139** | *i* Pn | **Pn** | **09 26 33.1** | **+0.7** |
| | SNR=7.2 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **12.64** | **139** | P | **Pn** | **09 26 33.2** | **+0.9** |
| | SNR=29 | | | | | | |
| ASUD | | | | S | Sn | 09 28 43.2 | -10 |
| **MDH** | **Madha** | **12.67** | **134** | P | **Pn** | **09 26 32.9** | **+0.1** |
| MDH | | | | S | **Sn** | **09 28 46.0** | **-8.0** |
| **FAQ** | **Al Faqa, Dubai** | **12.69** | **138** | Pn | **Pn** | **09 26 33.8** | **+0.7** |
| **FAQ** | **Al Faqa, Dubai** | **12.69** | **138** | P | **Pn** | **09 26 34.3** | **+1.3** |
| FAQ | | | | S | **Sn** | **09 28 49.1** | **-5.4** |
| **UOSS** | **Minazif** | **12.88** | **135** | Pn | **Pn** | **09 26 35.7** | **+0.1** |
| **UOSS** | **Minazif** | **12.88** | **135** | *i* Pn | **Pn** | **09 26 34.2** | **-1.5** |
| | SNR=14 | | | | | | |
| **UOSS** | **Minazif** | **12.88** | **135** | P | **Pn** | **09 26 35.8** | **+0.1** |
| UOSS | | | | S | **Sn** | **09 28 51.9** | **-7.3** |
| **HATD** | **Hatta, Dubai** | **12.93** | **136** | *i* Pn | **Pn** | **09 26 36.1** | **-0.3** |
| | SNR=9.3 | | | | | | |
| **HATD** | **Hatta, Dubai** | **12.93** | **136** | P | **Pn** | **09 26 37.2** | **+0.8** |
| | SNR=9.2 | | | | | | |
| HATD | | | | S | **Sn** | **09 28 54.1** | **-6.4** |
| **ASHO** | **Ashiyiah** | **13.00** | **136** | *i* Pn | **Pn** | **09 26 38.0** | **+0.6** |
| | SNR=12 | | | | | | |
| ASHO | | | | Sn | Sn | 09 28 50.0 | -12 |
| **ASHO** | **Ashiyiah** | **13.00** | **136** | P | **Pn** | **09 26 38.0** | **+0.6** |
| | SNR=12 | | | | | | |
| ASHO | | | | S | **Sn** | **09 28 55.8** | **-6.3** |
| **JASK** | **Jask - Hormozg** | **13.25** | **127** | P | **Pn** | **09 26 40.5** | **-0.1** |
| **ALNE** | **Al Ain** | **13.32** | **139** | *i* Pn | **Pn** | **09 26 42.4** | **+0.7** |
| | SNR=13 | | | | | | |
| **ALNE** | **Al Ain** | **13.32** | **139** | P | **Pn** | **09 26 42.4** | **+0.7** |
| | SNR=13 | | | | | | |
| ALNE | | | | P | P | 09 26 42.5 | -9.0 |
| | SNR=8.4 | | | | | | |
| ALNE | | | | S | **Sn** | **09 29 03.4** | **-6.6** |
| **SOHO** | **SOHO** | **13.70** | **136** | *i* Pn | **Pn** | **09 26 46.0** | **-0.8** |
| | SNR=5.5 | | | | | | |
| **SOHO** | **SOHO** | **13.70** | **136** | P | **Pn** | **09 26 46.2** | **-0.7** |
| SOHO | | | | S | **Sn** | **09 29 10.7** | **-8.4** |
| **ARQ** | **Araqi** | **14.32** | **138** | P | **Pn** | **09 26 56.0** | **+0.6** |
| | SNR=8.6 | | | | | | |
| ARQ | | | | S | **Sn** | **09 29 26.9** | **-7.5** |
| **HOQ** | **Hoqain** | **14.57** | **135** | P | **Pn** | **09 26 58.1** | **-0.7** |
| HOQ | | | | S | **Sn** | **09 29 35.5** | **-5.0** |
| **BSY** | **Bisya** | **15.17** | **138** | P | **Pn** | **09 27 07.1** | **+0.3** |
| BSY | | | | S | **Sn** | **09 29 48.3** | **-6.7** |
| **SMDO** | **Samad** | **15.41** | **135** | P | **Pn** | **09 27 09.6** | **-0.4** |
| SMDO | | | | S | **Sn** | **09 29 52.1** | **-8.8** |
| **WSAR** | **Wadi Sarin** | **15.62** | **133** | Pn | **Pn** | **09 27 10.8** | **-1.9** |
| | comp=E,3.3nm,0.3s,baz=323,slow=9.2,SNR=33 | | | | | | |
| **KARP** | **Karpathos** | **15.65** | **279** | P | **P** | **09 27 17.8** | **+0.5** |
| KARP | | | | IAmb | IAmb | 09 27 19.0 | |
| | comp=Z,41nm,0.8s | | | | | | |
| **KARP** | **Karpathos** | **15.65** | **279** | P | **P** | **09 27 17.7** | **+0.4** |
| | comp=Z,59nm,0.7s | | | | | | |
| **JMDO** | **Jabal Madar** | **15.97** | **136** | P | **Pn** | **09 27 17.4** | **+0.1** |
| **WBK** | **Wadi Bani Khal** | **16.30** | **133** | P | **Pn** | **09 27 21.5** | **0.0** |
| | SNR=7.3 | | | | | | |
| **JURR** | **Jurilovca** | **16.80** | **313** | ⇑P | **P** | **09 27 29.6** | **-0.2** |
| **JLN** | **Jalan Bani Buh** | **16.91** | **133** | P | **Pn** | **09 27 29.0** | **-0.2** |
| **MHTO** | **MHTO** | **17.00** | **139** | P | **Pn** | **09 27 30.1** | **-0.4** |
| | SNR=6.2 | | | | | | |
| MHTO | | | | S | **Sn** | **09 30 31.0** | **-8.5** |
| **IDI** | **Anoyia** | **17.52** | **279** | P | **P** | **09 27 38.2** | **+0.2** |
| IDI | | | | IAmb | IAmb | 09 27 42.0 | |
| | comp=Z,39nm,1.5s | | | | | | |
| **IDI** | **Anoyia** | **17.52** | **279** | P | **Pn** | **09 27 36.1** | **-0.8** |
| | comp=Z,4.3nm,0.5s,baz=139,slow=9.3,SNR=4.5 | | | | | | |
| **DQM** | **DQM** | **17.66** | **143** | P | **P** | **09 27 39.8** | **+0.3** |
| **WHFO** | **Wadi Hawf** | **17.85** | **156** | P | **P** | **09 27 42.8** | **+1.1** |
| | SNR=5.6 | | | | | | |
| WHFO | | | | S | **Sn** | **09 30 53.7** | **-6.5** |
| **ABKAR** | **Akbulak array** | **17.88** | **30** | P | **Pn** | **09 27 40.7** | **-0.5** |
| **ABKAR** | **Akbulak array** | **17.88** | **30** | P | **Pn** | **09 27 40.9** | **-0.2** |
| ABKAR | | | | IAmb | IAmb | 09 27 47.9 | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.09** | **25** | P | **Pn** | **09 27 42.5** | **-1.3** |
| | comp=Z,0.1nm,0.3s,baz=185,slow=9.9,SNR=4.8 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **ABTO** | **Aybut** | **18.23** | **158** | P | **P** | **09 27 46.6** | **+0.7** |
| ABTO | | | | S | **Sn** | **09 31 02.1** | **-7.2** |
| **RBK** | **Rabkut** | **18.39** | **155** | P | **P** | **09 27 49.4** | **+1.7** |
| **DMTO** | **DMTO** | **18.46** | **153** | S | **Sn** | **09 31 07.3** | **-7.6** |
| **PLOR3** | **Plostina Array** | **18.71** | **313** | P | **Pn** | **09 27 52.0** | **+0.6** |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **MLR** | **Muntele Rosu** | **18.96** | **311** | P | **P** | **09 27 53.9** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=63,slow=2.3,SNR=2.5 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **MLR** | **Muntele Rosu** | **18.96** | **311** | P | **Pn** | **09 27 55.8** | **+1.3** |
| | comp=Z,6.7nm,1.5s | | | | | | |
| **TESR** | **Tescani** | **19.05** | **315** | P | **P** | **09 27 54.8** | **+0.1** |
| | comp=Z,8.7nm,0.9s | | | | | | |
| **SORM** | **Soroca** | **19.05** | **321** | ⇑P | **P** | **09 27 54.8** | **+0.1** |
| **SORM** | **Soroca** | **19.05** | **321** | P | **P** | **09 27 54.5** | **-0.2** |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **ONER** | **Baraj Valea Uz** | **19.10** | **314** | ⇓P | **Pn** | **09 27 56.5** | **+0.3** |
| **VOIR** | | **19.49** | **310** | ⇓P | **Pn** | **09 28 01.1** | **+0.2** |
| **VOIR** | | **19.49** | **310** | P | **P** | **09 28 00.5** | **+0.8** |
| | comp=Z,12nm,0.7s | | | | | | |
| **ARR** | **Arges** | **19.72** | **310** | ⇓P | **Pn** | **09 28 04.2** | **+0.5** |
| **NDNU** | **Novodnistrovsk** | **19.85** | **321** | P | **P** | **09 28 03.4** | **0.0** |
| **AK07** | **Malin Array Si** | **20.27** | **327** | P | **P** | **09 28 06.4** | **-1.6** |
| **AK09** | **Malin Array Si** | **20.28** | **328** | P | **P** | **09 28 06.5** | **-1.6** |
| **AK10** | **Malin Array Si** | **20.28** | **328** | P | **P** | **09 28 06.9** | **-1.2** |
| **AK08** | **Malin Array Si** | **20.30** | **328** | P | **P** | **09 28 07.1** | **-1.3** |
| **KMPD** | **K-Podol'skiy** | **20.31** | **320** | P | Pn | 09 28 07.7 | -2.7 |
| KMPD | | | | P | **P** | **09 28 06.4** | **-2.0** |
| **LOT** | **Lotru** | **20.31** | **309** | ⇓P | Pn | 09 28 10.8 | +0.1 |
| **AK05** | **Malin Array Si** | **20.32** | **328** | P | **P** | **09 28 07.6** | **-0.9** |
| **AK02** | **Malin Array Si** | **20.34** | **328** | P | **P** | **09 28 07.2** | **-1.6** |
| **AKASG** | **Malin Array Be** | **20.37** | **328** | P | **P** | **09 28 08.1** | **-0.9** |
| | comp=Z,3.0nm,0.6s,baz=140,slow=8.9,SNR=11 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **AKBB** | **Malin Array Si** | **20.37** | **328** | P | **P** | **09 28 07.7** | **-1.3** |
| **KIEV** | **Kiev** | **20.37** | **328** | ⇓P | **P** | **09 28 08.0** | **-1.0** |
| **KIEV** | **Kiev** | **20.37** | **328** | P | **P** | **09 28 07.4** | **-1.7** |
| | comp=Z,38nm,0.7s | | | | | | |
| **BURAR** | **Bucovina Array** | **20.46** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SCHQ** | **Schefferville** | **74.16** | **326** | P | **P** | **09 35 08.2** | **-0.8** |
| SCHQ | | | | IAmb | IAmb | 09 35 34.2 | |
| | comp=Z,9.2nm,1.3s | | | | | | |

*IDC* ***26*** *09:25:50.7±2.2,44˚.42N×149˚.75E,h0km,mb4.0/8, mbtmp3.9/12,ML3.3/3,Error ellipse: s-maj=54.1km s-min=22.7km az=166.0*
*JMA* ***26*** *09:25:53.6±0.6,45˚N±3˚×15˚0E±˚,h30km,MV4.1/13,SE OFF ETOROFU*
*MOS* ***26*** *09:25:53.1±1.3,44˚.25N×149˚.72E,h39km,mb4.5/7,Error ellipse: s-maj=11.6km s-min=9.8km az=133.3*
*SKHL* ***26*** *09:25:53.2±0.3,44˚.10N×149.80E,h42km±3km,mb4.6/5*
**ISC 26 09:25:52.0**±3.8**,44˚02N**±0˚.08×**149˚.76E**±0˚.08**,h23**km±29km**, n54,σ1§38/62,mb4.3**/13**,2D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.82** | **313** | *i* P | **Pn** | **09 26 21.1** | **-0.7** |
| KUR | | | | AMB | AMB | 09 26 24.7 | |
| | 260nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **09 26 42.3** | **-1.8** |
| KUR | | | | A | A | 09 26 50.4 | |
| | 280nm,0.5s | | | | | | |
| KUR | | | | A | A | 09 26 50.4 | |
| | 640nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **1.82** | **313** | *d i* PN | **Pn** | **09 26 21.1** | **-0.7** |
| KUR | | | | *e*S | **Sn** | **09 26 43.2** | **-0.9** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,260nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,154nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,208nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,282nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,640nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **2.12** | **267** | *e*P | **Pn** | **09 26 26.1** | **+0.1** |
| SHO | | | | AMB | AMB | 09 26 28.7 | |
| | comp=E,50nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **09 26 50.6** | **-1.1** |
| SHO | | | | A | A | 09 26 52.3 | |
| | comp=E,320nm,0.4s | | | | | | |
| SHO | | | | A | A | 09 26 52.3 | |
| | comp=E,290nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.12** | **267** | *e*PN | **Pn** | **09 26 26.1** | **+0.1** |
| SHO | | | | *i* S | **Sn** | **09 26 50.2** | **-1.4** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,45nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,14nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,289nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,316nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.81** | **272** | *i* P | **Pn** | **09 26 35.9** | **+0.4** |
| YUK | | | | AMB | AMB | 09 26 37.0 | |
| | comp=N,100nm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **09 27 07.8** | **-0.9** |
| YUK | | | | A | A | 09 27 13.2 | |
| | comp=N,290nm,0.3s | | | | | | |
| YUK | | | | A | A | 09 27 13.2 | |
| | comp=N,80nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.81** | **272** | *d i* PN | **Pn** | **09 26 35.9** | **+0.4** |
| YUK | | | | *i* S | **Sn** | **09 27 07.8** | **-0.9** |
| YUK | | | | pmax | pmax | | |
| | comp=E,51nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,102nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,80nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,286nm,0.4s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.99** | **259** | P | **Pn** | **09 26 38.2** | **+0.3** |
| NEM2 | | | | *e*S | **Sn** | **09 27 10.4** | **-2.5** |
| **JRA** | **Rausu** | **3.35** | **270** | P | **Pn** | **09 26 44.5** | **+1.6** |
| JRA | | | | *e*S | **Sn** | **09 27 23.4** | **+1.4** |
| **JNK** | **Nakash** | **3.68** | **265** | *e*P | **Pn** | **09 26 48.3** | **+0.9** |
| JNK | | | | *e*S | **Sn** | **09 27 29.9** | **-0.1** |
| **JAK** | **Akkeshi** | **3.83** | **256** | *e*P | **Pn** | **09 26 50.0** | **+0.6** |
| JAK | | | | *e*S | **Sn** | **09 27 32.5** | **-1.1** |
| **JTKR** | **Abashiri--Toko** | **4.23** | **271** | *e*P | **Pn** | **09 26 56.6** | **+1.7** |
| **JAR** | **Ashorobuto** | **4.41** | **263** | P | **Pn** | **09 26 58.9** | **+1.4** |
| JAR | | | | *e*S | **Sn** | **09 27 48.0** | **0.0** |
| **JOB** | **Onbets** | **4.46** | **258** | *e*P | **Pn** | **09 26 59.3** | **+1.2** |
| JOB | | | | *e*S | **Sn** | **09 27 48.6** | **-0.6** |
| **JCH** | **Churui** | **4.88** | **255** | *e*P | **Pn** | **09 27 05.5** | **+1.6** |
| JCH | | | | *e*S | **Sn** | **09 27 58.7** | **-0.9** |
| **JKA** | **Kamikawa-asahi** | **5.16** | **274** | *e*P | **Pn** | **09 27 10.2** | **+2.4** |
| **ASAJ** | **Asahikawa** | **5.17** | **274** | Pn | **Pn** | **09 27 10.2** | **+2.3** |
| | comp=N,1.0nm,0.3s,baz=101,slow=5.2,SNR=9.3 | | | | | | |
| | comp=N,10nm,1.1s | | | | | | |
| **ERM** | **Erimo** | **5.24** | **250** | *i* PN | **Pn** | **09 27 10.7** | **+1.8** |
| **JNBK** | **Urakawa-nobuka** | **5.42** | **254** | *e*P | **Pn** | **09 27 12.3** | **+1.0** |
| JNBK | | | | *e*S | **Sn** | **09 28 14.9** | **+2.1** |
| **YSS** | **Yuzh-Sakhalins** | **5.74** | **303** | *e*P | **Pn** | **09 27 16.9** | **+1.3** |
| YSS | | | | AMB | AMB | 09 27 17.4 | |
| | comp=N,10.0nm,0.9s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.74** | **303** | *e*PN | **Pn** | **09 27 16.9** | **+1.3** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **JANG** | **Nango** | **7.12** | **242** | *e*S | **Sn** | **09 28 50.0** | **-5.0** |
| **SKR** | **Severo-Kuril's** | **7.94** | **31** | *e*P | **Pn** | **09 27 46.8** | **+1.0** |
| SKR | | | | AMB | AMB | 09 27 48.4 | |
| | comp=Z,10.0nm,0.2s | | | | | | |
| **SKR** | **Severo-Kuril's** | **7.94** | **31** | *i* PN | **Pn** | **09 27 46.8** | **+1.0** |
| **PETK** | **Petropavlovsk-** | **10.50** | **27** | Pn | **Pn** | **09 28 18.8** | **-2.1** |
| | comp=Z,0.5nm,0.5s,baz=135,slow=27,SNR=5.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.78** | **277** | Pn | **Pn** | **09 28 52.5** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=86,slow=14,SNR=7.0 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **SEY** | **Seymchan** | **19.01** | **4** | P | **P** | **09 30 10.1** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=209,slow=13,SNR=4.1 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **21.55** | **334** | *e*P | **P** | **09 30 38.9** | **-0.4** |
| **YAK** | **Yakutsk** | **21.55** | **334** | *i* P | **P** | **09 30 38.9** | **-0.4** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.14** | **144** | T | T | 10 02 54.0 | |
| | baz=334,slow=75,SNR=28 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.15** | **144** | T | T | 10 02 49.6 | |
| | baz=334,slow=75,SNR=21 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.15** | **144** | T | T | 10 02 49.9 | |
| | baz=334,slow=75,SNR=26 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.14** | **145** | T | T | 10 04 11.8 | |
| | baz=335,slow=76,SNR=23 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.15** | **145** | T | T | 10 04 09.4 | |
| | baz=335,slow=76,SNR=23 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.16** | **145** | T | T | 10 04 13.7 | |
| | baz=335,slow=76,SNR=19 | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.67** | **293** | *e*P | **P** | **09 31 55.9** | **0.0** |
| **ULN** | **Ulaanbaatar** | **29.67** | **293** | P | **P** | **09 31 55.9** | **0.0** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **30.11** | **293** | P | **P** | **09 32 00.2** | **+0.4** |
| | comp=Z,0.4nm,0.4s,baz=81,slow=8.1,SNR=5.1 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **41.91** | **301** | *i* P | **P** | **09 33 39.8** | **-0.8** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **46.13** | **298** | *i* P | **P** | **09 34 14.7** | **+0.4** |
| **MKAR** | **Makanchi Array** | **46.13** | **298** | P | **P** | **09 34 15.2** | **+0.9** |
| | comp=Z,2.1nm,0.8s,baz=73,slow=8.1,SNR=17 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.13** | **298** | *e*P | **P** | **09 34 14.8** | **+0.5** |
| **MKAR** | **Makanchi Array** | **46.13** | **298** | *i* P | **P** | **09 34 14.8** | **+0.5** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.94** | **305** | *e*P | **P** | **09 34 21.3** | **+0.7** |
| **KURK** | **Kurchatov** | **46.94** | **305** | P | **P** | **09 34 21.3** | **+0.7** |
| **KURBB** | **Kurchatov Arra** | **47.03** | **304** | P | **P** | **09 34 21.3** | **0.0** |
| | comp=Z,0.6nm,0.4s,baz=72,slow=7.9,SNR=3.6 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **65.48** | **334** | P | **P** | **09 36 32.3** | **-0.4** |
| | comp=Z,1.9nm,0.6s,baz=32,slow=8.6,SNR=15 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **65.48** | **334** | *i* P | **P** | **09 36 32.5** | **-0.2** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **AKT** | **Akhty** | **69.89** | **308** | *e*P | **P** | **09 36 58.6** | **-2.4** |
| AKT | | | | *e* | | 09 37 20.2 | |
| AKT | | | | pmax | pmax | | |
| | comp=Z,13nm,1.7s | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.02** | **340** | P | **P** | **09 37 01.1** | **-0.2** |
| | comp=Z,10nm,1.1s,baz=30,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.02** | **340** | P | **P** | **09 37 01.1** | **-0.2** |
| | comp=Z,1.6nm,0.8s,baz=31,slow=6.3,SNR=7.9 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **70.16** | **338** | P | **P** | **09 37 01.8** | **-0.3** |
| | comp=Z,1.8nm,0.6s,baz=62,slow=10,SNR=6.5 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **KIV** | **Kislovodsk** | **70.98** | **313** | *e*P | **P** | **09 37 09.4** | **+1.8** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **71.02** | **313** | P | **P** | **09 37 09.7** | **+2.0** |
| | comp=Z,1.3nm,0.5s,baz=68,slow=8.8,SNR=4.3 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.92** | **58** | P | **P** | **09 38 06.1** | **+1.5** |
| | comp=Z,0.4nm,0.5s,baz=292,slow=3.6,SNR=9.7 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |

*DJA* ***26*** *09:26:32.3±0.6,6˚S±6˚×14˚7E±˚,h173km±10km,M4.5/7, mB4.6/5,mb4.5/7,MLv4.8/3,Mw(mB)3.8/5*
*NEIC* ***26*** *09:26:33.5±1.5,5˚.5S±0˚.1×147˚.28E±0˚.06,h193km±8km, mb4.8/20,Error ellipse: s-maj=15.9km s-min=7.6km az=165.0*
*IDC* ***26*** *09:26:34.0±2.0,5˚.65S×147˚.49E,h200km±18km,mb3.8/5, mbtmp4.4/8,MS3.2/1,Error ellipse: s-maj=37.0km s-min=14.5km az=112.0*
**ISC 26 09:26:34.2**±0.5**,5˚.62S**±0˚.06×**147˚.26E**±0˚.07**,h200**km**,n90, σ1§18/92,mb4.8/20,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.77** | **182** | P | **Pn** | **09 27 31.4** | **-1.7** |
| **PMG** | **Port Moresby** | **3.77** | **182** | P | **Pn** | **09 27 31.4** | **-1.7** |
| | 217nm,0.3s,baz=330,slow=6.4,SNR=310 | | | | | | |
| PMG | | | | S | **Sn** | **09 28 13.5** | **-5.9** |
| | 151nm,0.5s,baz=19,slow=9.3,SNR=3.6 | | | | | | |
| **RABL** | **Rabaul** | **5.08** | **74** | P | **Pn** | **09 27 48.4** | **-1.3** |
| **JAY** | **Jayapura** | **7.23** | **295** | P | **Pn** | **09 28 14.8** | **-2.7** |
| | 28nm,1.1s,354nm0.1nm | | | | | | |
| **GENI** | **Genyem** | **7.69** | **293** | P | **Pn** | **09 28 21.4** | **-2.0** |
| | 56nm,0.7s,0.3nm | | | | | | |
| **COEN** | **Coen** | **9.21** | **206** | P | **Pn** | **09 28 44.4** | **+1.1** |
| **COEN** | **Coen** | **9.21** | **206** | Pn | **Pn** | **09 28 44.0** | **+0.7** |
| **MTSU** | **Mount Surprise** | **12.77** | **193** | P | **Pn** | **09 29 30.4** | **+1.5** |
| **HNR** | **Honiara** | **13.13** | **108** | P | **P** | **09 29 35.9** | **-0.5** |
| **TV1H** | **Townsville Har** | **13.57** | **182** | P | **Pn** | **09 29 40.0** | **+1.2** |
| | 112nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **14.42** | **184** | P | **Pn** | **09 29 50.5** | **+1.2** |
| | 1.8nm,0.8s,baz=360,slow=12,SNR=35 | | | | | | |
| **CTAO** | **Charters Tower** | **14.42** | **184** | P | **Pn** | **09 29 50.9** | **+1.5** |
| **CTAO** | **Charters Tower** | **14.42** | **184** | P | **Pn** | **09 29 50.8** | **+1.4** |
| **QIS** | **Mount Isa** | **16.61** | **206** | P | **P** | **09 30 16.4** | **+1.5** |
| **MTN** | **Manton Dam** | **17.46** | **245** | P | **P** | **09 30 25.0** | **+0.7** |
| **MTN** | **Manton Dam** | **17.46** | **245** | P | **P** | **09 30 24.9** | **+0.7** |
| **DRS** | **Darwin Rock St** | **17.51** | **246** | P | **P** | **09 30 25.5** | **+0.7** |
| | 80nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **18.83** | **221** | P | **P** | **09 30 39.8** | **+0.6** |
| **WR0** | **Warramunga Arr** | **18.88** | **220** | P | **P** | **09 30 40.4** | **+0.8** |
| **WRAB** | **Tennant Creek** | **18.98** | **220** | P | **P** | **09 30 42.0** | **+1.3** |
| **WB2** | **Warrungga Arr** | **18.98** | **220** | P | **P** | **09 30 41.5** | **+0.7** |
| **WRA** | **Warramunga Arr** | **18.99** | **220** | P | **P** | **09 30 41.4** | **+0.5** |
| **WRA** | **Warramunga Arr** | **18.99** | **220** | P | **P** | **09 30 41.8** | **+0.8** |
| | 31nm,0.4s,baz=48,slow=12,SNR=576 | | | | | | |
| WRA | | | | S | **S** | **09 34 05.8** | **-0.1** |
| | 6.5nm,0.9s,baz=41,slow=20,SNR=6.3 | | | | | | |
| **EIDS** | **Eidsvold** | **19.98** | **170** | P | **P** | **09 30 52.9** | **+1.5** |
| **KNRA** | **Kununurra** | **20.73** | **240** | P | **P** | **09 30 59.0** | **-0.5** |
| **QLP** | **Quilpie** | **21.05** | **188** | P | **P** | **09 31 04.0** | **+1.3** |
| **AS01** | **Alice Springs** | **22.05** | **214** | P | **P** | **09 31 13.3** | **+0.3** |
| | 62nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **22.08** | **214** | P | **P** | **09 31 14.2** | **+0.9** |
| **ASAR** | **Alice Springs** | **22.08** | **214** | P | **P** | **09 31 14.1** | **+0.7** |
| **ASAR** | **Alice Springs** | **22.08** | **214** | P | **P** | **09 31 14.2** | **+0.8** |
| | 42nm,0.7s,baz=49,slow=8.5,SNR=857 | | | | | | |
| ASAR | | | | S | **S** | **09 35 03.8** | **+1.6** |
| | 4.1nm,0.8s,baz=29,slow=20,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 09 41 02.5 | |
| | comp=Z,58nm,18.9s,baz=44,slow=39 | | | | | | |
| | 42nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **24.49** | **238** | P | **P** | **09 31 35.4** | **+0.1** |
| **LIFNC** | **LIFOU** | **24.55** | **130** | P | **P** | **09 31 37.2** | **+1.4** |
| **LIFNC** | **LIFOU** | **24.55** | **130** | P | **P** | **09 31 35.8** | **+0.1** |
| **OOD** | **Oodnadatta** | **24.65** | **205** | P | **P** | **09 31 37.2** | **+0.7** |
| **DZM** | **Mont Dzumac** | **24.73** | **133** | P | **P** | **09 31 38.6** | **+1.1** |
| **DZM** | **Mont Dzumac** | **24.73** | **133** | P | **P** | **09 31 36.7** | **-0.8** |
| DZM | | | | IAmb | IAmb | 09 31 45.4 | |
| | comp=Z,43nm,1.5s | | | | | | |
| **ARMA** | **Armidale** | **25.01** | **171** | P | **P** | **09 31 41.2** | **+1.3** |
| **ARMA** | **Armidale** | **25.01** | **171** | P | **P** | **09 31 41.5** | **+1.6** |
| ARMA | | | | IAmb | IAmb | 09 31 59.9 | |
| | comp=Z,38nm,1.6s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.83** | **183** | P | **P** | **09 31 48.5** | **+1.3** |
| **LCRK** | **Leigh Creek** | **26.13** | **198** | P | **P** | **09 31 50.3** | **+0.5** |
| **WRKA** | **Warakurna** | **26.53** | **221** | P | **P** | **09 31 54.2** | **+0.6** |
| **STKA** | **Stephens Creek** | **26.66** | **191** | P | **P** | **09 31 55.2** | **+0.6** |
| **STKA** | **Stephens Creek** | **26.66** | **191** | P | **P** | **09 31 54.7** | **+0.1** |
| **STKA** | **Stephens Creek** | **26.66** | **191** | P | **P** | **09 31 54.7** | **+0.1** |
| | comp=Z,1.1nm,0.5s,baz=6.4,slow=8.0,SNR=4.9 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **MULG** | **Mulgathing** | **27.51** | **205** | P | **P** | **09 32 02.5** | **+0.3** |
| **HTT** | **Hallett** | **28.74** | **195** | P | **P** | **09 32 14.6** | **+1.5** |
| **BBOO** | **Buckleboo** | **29.00** | **200** | P | **P** | **09 32 15.9** | **+0.5** |
| **BBOO** | **Buckleboo** | **29.00** | **200** | P | **P** | **09 32 15.6** | **+0.1** |
| **NFK** | **Norfolk Island** | **30.42** | **142** | P | **P** | **09 32 28.7** | **+0.7** |
| **MBWA** | **Marble Bar** | **30.83** | **237** | P | **P** | **09 32 32.1** | **+0.4** |
| **MBWA** | **Marble Bar** | **30.83** | **237** | P | **P** | **09 32 31.8** | **+0.1** |
| MBWA | | | | IAmb | IAmb | 09 33 41.8 | |
| | comp=Z,28nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **30.86** | **213** | P | **P** | **09 32 32.8** | **+1.0** |
| **FORT** | **Forrest** | **30.86** | **213** | P | **P** | **09 32 31.7** | **-0.1** |
| FORT | | | | IAmb | IAmb | 09 32 40.9 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **30.92** | **237** | P | **P** | **09 32 32.5** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **30.92** | **237** | P | **P** | **09 32 32.1** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 09 32 32.3 | |
| | comp=Z,57nm,1.9s | | | | | | |
| **MEEK** | **Meekatharra** | **34.40** | **229** | P | **P** | **09 33 03.4** | **+0.7** |
| **KMBL** | **Kambalda** | **34.96** | **220** | P | **P** | **09 33 07.7** | **+0.3** |
| **GIRL** | **Giralia** | **36.09** | **239** | P | **P** | **09 33 17.3** | **+0.2** |
| **GIRL** | **Giralia** | **36.09** | **239** | P | **P** | **09 33 17.8** | **+0.7** |
| **MORW** | **Morawa** | **37.62** | **228** | P | **P** | **09 33 30.2** | **+0.3** |
| **MORW** | **Morawa** | **37.62** | **228** | P | **P** | **09 33 29.9** | **0.0** |
| **KLBR** | **Kellerberrin** | **37.83** | **223** | P | **P** | **09 33 31.9** | **+0.2** |
| **BLDU** | **Ballidu** | **37.98** | **225** | P | **P** | **09 33 33.5** | **+0.5** |
| **OUZ** | **Omahuta** | **38.17** | **144** | P | **P** | **09 33 35.2** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **38.99** | **222** | P | **P** | **09 33 40.3** | **-1.0** |
| NWAO | | | | IAmb | IAmb | 09 34 27.6 | |
| | comp=Z,61nm,1.6s | | | | | | |
| **MUN** | **Mundaring** | **39.12** | **224** | P | **P** | **09 33 42.9** | **+0.5** |
| **URZ** | **Urewera** | **42.31** | **144** | P | **P** | **09 34 09.0** | **+0.7** |
| **RTZ** | **Ruatahuna** | **42.48** | **145** | P | **P** | **09 34 10.2** | **+0.4** |
| RTZ | | | | IAmb | IAmb | 09 34 36.5 | |
| | comp=Z,32nm,1.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **42.58** | **146** | P | **P** | **09 34 11.3** | **+0.7** |
| **BFZ** | **Birch Farm** | **43.51** | **148** | P | **P** | **09 34 18.5** | **+0.5** |
| **NJ2** | **Nanjing** | **46.21** | **326** | *e*P | **P** | **09 34 40.3** | **+1.0** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| **CN2** | **Changchun** | **52.99** | **340** | *e*P | **P** | **09 35 29.3** | **-1.0** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **PZH** | **PanZhiHua** | **54.43** | **308** | P | **P** | **09 35 41.5** | **+0.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,5.7s | | | | | | |
| **TNCH** | **TengChong** | **56.33** | **305** | *e*P | P | 09 36 04.0 | +9.1 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,92nm,3.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.65** | **328** | *e*P | **P** | **09 35 58.3** | **+1.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,73nm,5.7s | | | | | | |
| **SONM** | **Songino Array** | **64.20** | **331** | P | **P** | **09 36 48.7** | **+1.0** |
| | comp=Z,0.6nm,0.6s,baz=113,slow=3.9,SNR=3.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **72.67** | **319** | *e*P | **P** | **09 37 41.0** | **+0.7** |
| **KAAM** | **Kaadhehdhoo** | **74.39** | **272** | P | **P** | **09 37 49.2** | **-1.6** |
| **K15K** | **Wolf Creek Mou** | **78.14** | **22** | P | **P** | **09 38 11.2** | **+0.3** |
| K15K | | | | IAmb | IAmb | 09 40 24.7 | |
| | comp=Z,51nm,1.7s | | | | | | |
| **M16K** | **Timber Creek** | **78.38** | **24** | P | **P** | **09 38 13.0** | **+0.8** |
| M16K | | | | IAmb | IAmb | 09 40 24.9 | |
| | comp=Z,38nm,1.8s | | | | | | |
| **L18K** | **Granite Mounta** | **79.95** | **23** | P | **P** | **09 38 19.3** | **-1.4** |
| L18K | | | | IAmb | IAmb | 09 38 33.9 | |
| | comp=Z,23nm,1.8s | | | | | | |
| **E19K** | **Redstone River** | **82.67** | **19** | P | **P** | **09 38 35.8** | **+0.9** |
| **QSPA** | **South Pole Qui** | **84.35** | **180** | P | **P** | **09 38 43.5** | **-0.2** |
| **QSPA** | **South Pole Qui** | **84.35** | **180** | P | **P** | **09 38 43.7** | **0.0** |
| | comp=Z,0.5nm,0.4s,baz=187,slow=2.0,SNR=16 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **IL31** | | **85.03** | **23** | P | **P** | **09 38 45.0** | **-1.8** |
| **ILAR** | **Eielson Array** | **85.03** | **23** | P | **P** | **09 38 45.4** | **-1.5** |
| **ILAR** | **Eielson Array** | **85.03** | **23** | P | **P** | **09 38 45.5** | **-1.4** |
| | comp=Z,2.0nm,0.6s,baz=253,slow=4.8,SNR=23 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **IL03** | **Eielson Array** | **85.04** | **23** | P | **P** | **09 38 45.5** | **-1.5** |
| **GERES** | **GERESS Array B** | **121.74** | **326** | PKP | **PKiKP** | **09 45 04.6** | **-0.1** |
| | comp=Z,0.6nm,0.5s,baz=29,slow=2.2,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.25** | **285** | PKPbc | **PKPab** | **09 45 49.4** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=73,slow=4.5,SNR=8.9 | | | | | | |

*NEIC* ***26*** *09:27:59.2±1.3,44˚.1N±0˚.1×149˚.7E±0˚.1,h10km±2km, mb4.4/31,Error ellipse: s-maj=23.7km s-min=14.4km az=149.0*
*NIED* ***26*** *09:28:00.9,44˚.51N×149˚.67E,h30km,MW3.9,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr6.42; Mθθ0.85; Mϕϕ-7.27; Mrθ1.39; Mθϕ-5.10; Mϕr2.29; Fault plane solution: Mo8.51000×10¹⁴ NP1:φ±29.00000°, δ54.00000°,λ.95.00000°. NP2:φ±201.00000°,δ36.00000°, λ.83.00000°.*
*JMA* ***26*** *09:28:00.9±0.6,45˚N±3˚×15˚0E±˚,h30km,MV4.3/13,SE OFF ETOROFU*
*SKHL* ***26*** *09:28:02.6±0.4,44˚.20N×149˚.70E,h46km±3km,mb4.7/3*
*MOS* ***26*** *09:28:02.7±0.8,44˚.18N×149˚.57E,h47km,mb4.5/13,Error ellipse: s-maj=9.9km s-min=7.4km az=44.3*
*IDC* ***26*** *09:28:03.8±0.9,44˚.31N×149˚.69E,h41km±4km,mb3.9/17, mbtmp4.0/22,ML3.0/5,MS3.0/1,Error ellipse: s-maj=23.3km s-min=16.1km az=166.0*
**ISC 26 09:28:02.9**±0.6**,44˚.14N**±0˚.07×**149˚.58E**±0˚.07**,h39**km±3km**, h40km:pP-P,n128,σ1§41/145,mb4.4/42,1C-1D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.64** | **313** | *e*P | **Pn** | **09 28 29.0** | **-0.2** |
| KUR | | | | AMB | AMB | 09 28 30.8 | |
| | 540nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **09 28 48.6** | **-0.4** |
| KUR | | | | A | A | 09 28 57.4 | |
| | 2μm,0.6s | | | | | | |
| KUR | | | | A | A | 09 28 57.4 | |
| | 1μm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.64** | **313** | *i* PN | **Pn** | **09 28 28.3** | **-0.9** |
| **SHO** | **Shikotan** | **2.00** | **263** | *i* P | **Pn** | **09 28 34.3** | **+0.2** |
| SHO | | | | AMB | AMB | 09 28 38.6 | |
| | 100nm,0.5s | | | | | | |
| SHO | | | | *i* S | **Sn** | **09 28 58.0** | **+0.1** |
| SHO | | | | A | A | 09 28 59.8 | |
| | 540nm,0.6s | | | | | | |
| SHO | | | | A | A | 09 28 59.8 | |
| | 530nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.00** | **263** | ⇑ *i* PN | **Pn** | **09 28 34.5** | **+0.4** |
| SHO | | | | *i* S | **Sn** | **09 28 57.7** | **-0.2** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,84nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,33nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,39nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,244nm,0.5s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,494nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.68** | **269** | *e*P | **Pn** | **09 28 44.4** | **+0.9** |
| YUK | | | | AMB | AMB | 09 28 45.5 | |
| | comp=E,140nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **09 29 16.1** | **+1.5** |
| YUK | | | | A | A | 09 29 25.9 | |
| | comp=E,430nm,0.5s | | | | | | |
| YUK | | | | A | A | 09 29 25.9 | |
| | comp=E,420nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.68** | **269** | *e*PN | **Pn** | **09 28 44.0** | **+0.5** |
| YUK | | | | *e*S | **Sn** | **09 29 16.3** | **+1.7** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,90nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,14nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,263nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,357nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.88** | **256** | *e*P | **Pn** | **09 28 46.0** | **-0.3** |
| NEM2 | | | | *e*S | **Sn** | **09 29 19.7** | **0.0** |
| **JRA** | **Rausu** | **3.22** | **268** | *e*P | **Pn** | **09 28 52.4** | **+1.5** |
| JRA | | | | *e*S | **Sn** | **09 29 31.9** | **+4.0** |
| **JNK** | **Nakash** | **3.56** | **263** | *e*P | **Pn** | **09 28 55.9** | **+0.3** |
| JNK | | | | *e*S | **Sn** | **09 29 37.2** | **+0.9** |
| **JAK** | **Akkeshi** | **3.73** | **254** | *e*P | **Pn** | **09 28 58.2** | **+0.3** |
| JAK | | | | *e*S | **Sn** | **09 29 40.8** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **4.09** | **270** | *e*P | **Pn** | **09 29 04.4** | **+1.6** |
| **JAR** | **Ashorobuto** | **4.29** | **261** | *e*P | **Pn** | **09 29 06.8** | **+1.2** |
| **JOB** | **Onbets**

baz=334,slow=75,SNR=19
**H11S1 WAKE ISLAND Hy 29.32 145** T T 10 06 15.9
baz=334,slow=76,SNR=33
**H11S3 WAKE ISLAND Hy 29.32 145** T T 10 06 18.1
baz=334,slow=76,SNR=21
**H11S2 WAKE ISLAND Hy 29.34 145** T T 10 06 19.0
baz=334,slow=76,SNR=22
**ULN Ulaanbaatar 29.50 292** P **P** **09 34 03.5 +0.1**
**ULN Ulaanbaatar 29.50 292** *e*P **P** **09 34 03.6 +0.2**
**ULN Ulaanbaatar 29.50 292** *i* P **P** **09 34 03.6 +0.2**
ULN pmax pmax
comp=Z,4.0nm,0.8s
**SONM Songino Array 29.94 293** P **P** **09 34 07.4 +0.1**
**SONM Songino Array 29.94 293** P **P** **09 34 08.4 +1.1**
comp=Z,1.8nm,0.6s,baz=82,slow=9.4,SNR=10
comp=Z,1.8nm,0.6s
**C16K Lisburne Hills 33.56 28** P **P** **09 34 38.3 -0.3**
**C18K Utukok River 35.12 29** P **P** **09 34 51.9 -0.4**
C18K lAmb lAmb 09 35 28.5
comp=Z,10nm,1.2s
**G18K Tagagawik 35.34 34** P **P** **09 34 54.3 +0.2**
G18K lAmb lAmb 09 35 14.9
comp=Z,5.7nm,1.2s
**C19K Lookout Ridge 35.82 28** P **P** **09 34 58.1 -0.1**
C19K lAmb lAmb 09 35 12.6
comp=Z,9.7nm,1.1s
**F19K Shaleruckik Mo 35.89 32** P **P** **09 34 58.1 -0.6**
**D19K Kuna River 36.16 30** P **P** **09 35 01.2 0.0**
D19K lAmb lAmb 09 35 17.1
comp=Z,9.9nm,1.1s
**H19K Roundabout Mou 36.17 35** P **P** **09 35 01.8 +0.6**
H19K lAmb lAmb 09 35 09.8
comp=Z,6.0nm,1.1s
**E19K Redstone River 36.23 31** P **P** **09 35 02.4 +0.7**
**B20K Meade River 36.90 27** P **P** **09 35 07.7 +0.4**
**D22K Ayikyak River 38.18 30** P **P** **09 35 18.3 +0.1**
D22K lAmb lAmb 09 35 33.4
comp=Z,5.8nm,1.1s
**BPAW Bear Paw Mtn. 38.35 38** P **P** **09 35 21.0 +1.3**
BPAW lAmb lAmb 09 35 31.9
comp=Z,7.8nm,1.4s
**C23K Itkillik River 39.06 28** P **P** **09 35 26.4 +0.8**
C23K lAmb lAmb 09 35 43.1
comp=Z,9.7nm,1.1s
**TOLK Toolik Lake Re 39.27 30** P **P** **09 35 27.8 +0.4**
**MDM Murphy Dome 39.56 36** P **P** **09 35 29.7 -0.2**
**G24K Hadweenzic Riv 39.92 34** P **P** **09 35 33.1 +0.4**
**ILAR Eielson Array 40.14 37** P **P** **09 35 34.5 -0.1**
comp=Z,0.3nm,0.7s,baz=271,slow=7.9,SNR=2.4
comp=Z,0.3nm,0.7s
**DGZ Jazzator, Alta 41.74 300** *i* P **P** **09 35 47.9 -0.2**
DGZ pmax pmax
comp=Z,1.0nm,0.7s
**ZALV Zalesovo Beam 42.16 307** P **P** **09 35 50.8 -0.5**
comp=Z,0.7nm,0.5s,baz=84,slow=10,SNR=3.0
comp=Z,0.7nm,0.5s
**BCAR Beaver Creek A 42.50 39** P **P** **09 35 54.8 +0.7**
**TABL Table Mountain 43.20 43** P **P** **09 35 59.5 -0.5**
**MK31 Makanchi Array 45.95 298** P **P** **09 36 22.8 +1.0**
MK31 lAmb lAmb 09 36 23.8
comp=Z,5.4nm,0.8s
**MK31 Makanchi Array 45.95 298** *i* P **P** **09 36 22.3 +0.4**
**MKAR Makanchi Array 45.95 298** P **P** **09 36 22.5 +0.7**
**MKAR Makanchi Array 45.95 298** P **P** **09 36 22.4 +0.5**
comp=Z,5.2nm,0.7s,baz=73,slow=8.2,SNR=30
MKAR pP **sP** **09 36 34.0 -2.1**
comp=Z,4.2nm,0.7s,baz=71,slow=7.8,SNR=12
comp=Z,5.2nm,0.7s
**MKAR Makanchi Array 45.95 298** *e*P **P** **09 36 22.7 +0.8**
**MKAR Makanchi Array 45.95 298** *i* P **P** **09 36 22.7 +0.8**
MKAR pmax pmax
comp=Z,5.0nm,0.7s
**MAKZ Makanchi 46.15 298** P **P** **09 36 24.1 +0.7**
**MAKZ Makanchi 46.15 298** P **P** **09 36 24.1 +0.7**
MAKZ pmax pmax
comp=Z,5.0nm,0.8s
**KURK Kurchatov 46.76 304** P **P** **09 36 28.2 +0.1**
KURK lAmb lAmb 09 36 29.5
comp=Z,2.4nm,0.5s
**KURK Kurchatov 46.76 304** *e*P **P** **09 36 28.0 -0.1**
**KURK Kurchatov 46.76 304** *i* P **P** **09 36 28.0 -0.1**
KURK pmax pmax
comp=Z,2.0nm,0.9s
**KURBB Kurchatov Arra 46.85 304** P **P** **09 36 28.4 -0.4**
comp=Z,1.6nm,0.4s,baz=72,slow=8.0,SNR=11
KURBB pP **sP** **09 36 41.2 -1.8**
comp=Z,1.3nm,0.6s,baz=71,slow=8.4,SNR=4.2
comp=Z,1.6nm,0.4s
**BVAR Borovoye Array 50.61 310** P **P** **09 36 58.2 +0.6**
comp=Z,1.0nm,0.8s,baz=38,slow=7.3,SNR=3.0
comp=Z,1.0nm,0.8s
**BOOM Boomskoye usch 51.90 296** P **P** **09 37 09.1 +1.4**
BOOM lAmb lAmb 09 37 10.1
comp=Z,8.4nm,1.0s
**BOOM Boomskoye usch 51.90 296** P **P** **09 37 09.1 +1.4**
BOOM pmax pmax
comp=Z,8.0nm,1.0s
**AAK Ala-Archa 52.76 296** *e*P **P** **09 37 15.7 +1.6**
**AAK Ala-Archa 52.76 296** *i* P **P** **09 37 15.7 +1.6**
AAK pmax pmax
comp=Z,3.0nm,1.0s
**KK31 Karatay Array 55.07 299** P **P** **09 37 31.3 +0.6**
KK31 lAmb lAmb 09 37 32.2
comp=Z,2.4nm,0.8s
**KK31 Karatay Array 55.07 299** P **P** **09 37 31.3 +0.6**
KK31 pmax pmax
comp=Z,2.0nm,0.8s
**KKAR Karatay Array 55.07 299** P **P** **09 37 31.3 +0.5**
**KKAR Karatay Array 55.07 299** P **P** **09 37 30.9 +0.1**
KKAR lAmb lAmb 09 37 32.2
comp=Z,2.4nm,0.8s
**KKAR Karatay Array 55.07 299** P **P** **09 37 31.3 +0.5**
**ARU Arti 55.26 317** *d* iP **P** **09 37 29.8 -2.0**
ARU S **S** **09 45 15.1 +2.7**
ARU SS **SS** **09 48 53.9 -2.4**
ARU pmax pmax
comp=Z,2.0nm,0.6s
**ABKAR Akbulak array 58.18 310** P **P** **09 37 53.5 +0.8**
**ABKAR Akbulak array 58.18 310** P **P** **09 37 53.4 +0.8**
ABKAR lAmb lAmb 09 37 54.1
comp=Z,3.9nm,0.7s
**KIRV Kirov 58.36 323** *i* P **P** **09 37 55.9 +2.2**
**AKTO Aktyubinsk 58.60 312** P **P** **09 37 55.4 -0.2**
comp=Z,1.0nm,0.5s,baz=338,slow=4.6,SNR=3.6
comp=Z,1.0nm,0.5s
**BELG Belogornoye 62.81 318** P **P** **09 38 24.8 +0.7**
comp=Z,8.5nm,0.6s,baz=36,slow=9.4,SNR=4.1
comp=Z,8.5nm,0.6s
**WRA Warramunga Arr 65.28 196** P **P** **09 38 41.2 +0.5**
comp=Z,0.6nm,0.8s,baz=14,slow=6.8,SNR=3.3
comp=Z,0.6nm,0.8s
**FIA1 FINESS Array S 65.31 334** P **P** **09 38 40.1 -0.4**
**FINES FINESS Array B 65.31 334** P **P** **09 38 40.1 -0.4**
**FINES FINESS Array B 65.31 334** P **P** **09 38 39.9 -0.6**
comp=Z,4.6nm,0.5s,baz=33,slow=8.4,SNR=31
FINES pP **pP** **09 38 52.2 +1.6**
comp=Z,3.1nm,0.6s,baz=37,slow=7.4,SNR=4.8
comp=Z,4.6nm,0.5s
**FINES FINESS Array B 65.31 334** *i* P **P** **09 38 40.5 +0.1**
FINES pmax pmax
comp=Z,5.0nm,0.5s
**NC405 NORSAR Array S 69.67 340** P **P** **09 39 08.4 +0.4**
**NB2 NORSAR Subarra 69.86 340** P **P** **09 39 09.0 -0.2**
comp=Z,3.7nm,0.7s,baz=31,slow=6.5
**NOA NORSAR Array B 69.86 340** P **P** **09 39 09.1 -0.1**
comp=Z,3.5nm,0.8s,baz=31,slow=6.6,SNR=16
NOA pP **pP** **09 39 20.7 +1.4**
comp=Z,2.6nm,0.8s,baz=31,slow=6.2,SNR=7.2
comp=Z,3.5nm,0.8s
**HFS Hagfors 70.00 338** P **P** **09 39 09.8 -0.2**
comp=Z,2.8nm,0.5s,baz=57,slow=5.5,SNR=12
HFS pP **pP** **09 39 21.6 +1.4**
comp=Z,4.3nm,0.7s,baz=40,slow=4.8,SNR=5.3
comp=Z,2.8nm,0.5s
**KIV Kislovodsk 70.80 313** *e*P **P** **09 39 16.7 +1.4**
**KIV Kislovodsk 70.80 313** *e*P **P** **09 39 16.7 +1.4**
KIV pmax pmax
comp=Z,6.0nm,1.0s
**KBZ Khabaz 70.84 313** P **P** **09 39 16.4 +1.0**
comp=Z,4.5nm,0.9s,baz=92,slow=2.5,SNR=9.5
comp=Z,4.5nm,0.9s
**AKASG Malin Array Be 72.29 325** P **P** **09 39 23.8 -0.2**
comp=Z,0.6nm,0.4s,baz=34,slow=6.2,SNR=5.5
AKASG pP **sP** **09 39 36.4 -1.9**
comp=Z,2.0nm,0.6s,baz=37,slow=5.7,SNR=5.5
comp=Z,0.6nm,0.4s
**AKASG Malin Array Be 72.29 325** *i* P **P** **09 39 24.7 +0.7**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**BUR08 Bucovina Ar. S 76.33 325** P **P** **09 39 48.0 +0.2**
BUR08 lAmb lAmb 09 40 01.8
comp=Z,5.5nm,1.2s
**BURAR Bucovina Array 76.34 325** P **P** **09 39 48.5 +0.7**
BURAR lAmb lAmb 09 39 50.1
comp=Z,1.7nm,0.7s
**KRLC Kraliky 77.55 331** *e*P **P** **09 39 56.7 +2.2**
**KRLC Kraliky 77.55 331** *e*P **P** **09 39 56.7 +2.2**
**CLL Collm 77.76 334** *i* P **P** **09 39 56.0 +0.4**
comp=Z,5.0nm,0.6s
CLL *e*PcP **pP** **09 40 07.0 +1.5**
**BRTR Keskin Array B 78.53 315** P **P** **09 40 01.1 +0.8**
comp=Z,0.6nm,0.8s,baz=56,slow=6.6,SNR=4.6
BRTR pP **sP** **09 40 14.0 -0.7**
comp=Z,1.3nm,0.9s,baz=79,slow=2.6,SNR=4.8
comp=Z,0.6nm,0.8s
**KHC Kasperske Hory 79.45 332** P **P** **09 40 04.7 -0.3**
KHC lAmb lAmb 09 40 19.5
comp=Z,3.2nm,0.8s
**KHC Kasperske Hory 79.45 332** *e*P **P** **09 40 05.8 +0.8**
KHC *ex* x 09 40 18.0
**KHC Kasperske Hory 79.45 332** *e*P **P** **09 40 05.8 +0.8**
KHC *e* 09 40 18.0
**GERES GERESS Array B 79.66 332** P **P** **09 40 06.5 +0.3**
comp=Z,0.7nm,0.8s,baz=32,slow=7.8,SNR=3.6
GERES pP **sP** **09 40 18.7 -1.9**
comp=Z,0.6nm,0.4s,baz=36,slow=7.0,SNR=3.8
comp=Z,0.7nm,0.8s
**TXAR Lajitas Array 80.97 58** P **P** **09 40 13.5 -0.1**
**TXAR Lajitas Array 80.97 58** P **P** **09 40 14.3 +0.7**
comp=Z,0.5nm,0.6s,baz=298,slow=3.6,SNR=9.3
TXAR pP **sP** **09 40 25.5 -1.7**
comp=Z,0.8nm,0.6s,baz=302,slow=4.1,SNR=7.9
comp=Z,0.5nm,0.6s
**TORD Torodi Ar. Bea 115.92 325** PKP **PKPdf** **09 46 42.5 +0.7**
comp=Z,1.1nm,0.8s,baz=56,slow=4.0,SNR=4.5

*NEIC* ***26*** *09:39:27.6±2.2, 43°.7N±0°.1×149°.9E±0°.1, h10km±2km, mb4.2/23, Error ellipse: s-maj=23.8km s-min=13.2km az=140.0*
*JMA* ***26*** *09:39:31.5±0.8, 45°.N±4°.×15°.0E±°, h30km, MV4.0/12, SE OFF ETOROFU*
*MOS* ***26*** *09:39:34.5±0.9, 44°.22N×149°.51E, h58km, mb4.3/6, Error ellipse: s-maj=12.6km s-min=9.6km az=29.4*
*SKHL* ***26*** *09:39:34.6±0.5, 44°.20N×149°.60E, h59km±5km, mb4.4/3*
*IDC* ***26*** *09:39:35.1±2.2, 44°.46N×149°.76E, h44km±6km, mb3.7/9, mbtmp3.9/11, ML3.2/2, Error ellipse: s-maj=62.4km s-min=20.6km az=176.0*
**ISC 26 09:39:34.5±0.8, 44°.10N±0°.07×149°.62E±0°.07, h49km±6km, n89, σ1§18/97, mb4.2/23, 1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.69** | **313** | *i* P | | **Pn** | **09 39 59.7** | **-1.8** |
| KUR | | | | | AMB | AMB | 09 40 01.7 | |
| | 200nm,0.4s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **09 40 18.9** | **-3.1** |
| KUR | | | | | A | A | 09 40 27.5 | |
| | 670nm,0.5s | | | | | | | |
| KUR | | | | | A | A | 09 40 27.5 | |
| | 460nm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.69** | **313** | *d* iPN | | **Pn** | **09 39 59.7** | **-1.8** |
| KUR | | | | *e*S | | **Sn** | **09 40 21.9** | **-0.1** |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,174nm,0.4s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=N,82nm,0.5s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=E,67nm,0.6s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=N,467nm,0.3s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=E,288nm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **2.02** | **265** | *e*P | | **Pn** | **09 40 06.0** | **-0.1** |
| SHO | | | | | AMB | AMB | 09 40 08.0 | |
| | comp=E,30nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **09 40 28.7** | **-1.5** |
| SHO | | | | | A | A | 09 40 30.6 | |
| | comp=E,170nm,0.4s | | | | | | | |
| SHO | | | | | A | A | 09 40 30.6 | |
| | comp=E,220nm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **2.02** | **265** | *e*PN | | **Pn** | **09 40 06.3** | **+0.2** |
| SHO | | | | *e*S | | **Sn** | **09 40 28.7** | **-1.5** |
| SHO | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.3s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=N,13nm,0.2s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=E,15nm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=N,115nm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=E,240nm,0.2s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.71** | **270** | *e*P | | **Pn** | **09 40 16.2** | **+0.7** |
| YUK | | | | | AMB | AMB | 09 40 19.1 | |
| | comp=E,70nm,0.3s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **09 40 47.0** | **0.0** |
| YUK | | | | | A | A | 09 40 49.0 | |
| | comp=E,190nm,0.5s | | | | | | | |
| YUK | | | | | A | A | 09 40 49.0 | |
| | comp=E,260nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.71** | **270** | *e*PN | | **Pn** | **09 40 16.9** | **+1.4** |
| YUK | | | | *e*S | | **Sn** | **09 40 47.5** | **+0.5** |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,87nm,0.2s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=N,173nm,0.4s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=E,260nm,0.4s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.90** | **257** | P | | **Pn** | **09 40 16.6** | **-1.5** |
| NEM2 | | | | *e*S | | **Sn** | **09 40 50.1** | **-1.7** |
| **JRA** | **Rausu** | **3.25** | **269** | *e*P | | **Pn** | **09 40 23.0** | **+0.1** |
| **JNK** | **Nakash** | **3.58** | **263** | P | | **Pn** | **09 40 26.6** | **-0.8** |
| JNK | | | | S | | **Sn** | **09 41 07.3** | **-1.1** |
| **JAK** | **Akkeshi** | **3.74** | **255** | *e*P | | **Pn** | **09 40 28.8** | **-0.8** |
| JAK | | | | *e*S | | **Sn** | **09 41 10.9** | **-1.5** |
| **JTKR** | **Abashiri--Toko** | **4.12** | **270** | *e*P | | **Pn** | **09 40 34.6** | **-0.2** |
| **JAR** | **Ashorobuto** | **4.32** | **261** | P | | **Pn** | **09 40 38.0** | **+0.4** |
| JAR | | | | *e*S | | **Sn** | **09 41 26.1** | **-0.5** |
| **JCH** | **Churui** | **4.80** | **254** | P | | **Pn** | **09 40 44.1** | **0.0** |
| JCH | | | | S | | **Sn** | **09 41 36.6** | **-1.8** |
| **JKA** | **Kamikawa-asahi** | **5.05** | **273** | Pn | | **Pn** | **09 40 49.0** | **+1.4** |
| **JKA** | **Kamikawa-asahi** | **5.05** | **273** | *e*P | | **Pn** | **09 40 49.5** | **+1.8** |
| **ASAJ** | **Asahikawa** | **5.06** | **273** | P | | **Pn** | **09 40 49.5** | **+1.8** |
| | comp=E,0.5nm,0.3s,baz=28,slow=22,SNR=4.6 | | | | | | | |
| | comp=E,3.2nm,0.5s | | | | | | | |
| **ERM** | **Erimo** | **5.17** | **249** | Pn | | **Pn** | **09 40 48.4** | **-0.9** |
| **ERM** | **Erimo** | **5.17** | **249** | *i* PN | | **Pn** | **09 40 50.7** | **+1.5** |
| **JNBK** | **Urakawa-nobuka** | **5.34** | **252** | *e*P | | **Pn** | **09 40 53.0** | **+1.5** |
| JNBK | | | | *e*S | | **Sn** | **09 41 53.3** | **+1.6** |
| **YSS** | **Yuzh-Sakhalins** | **5.61** | **303** | *e*P | | **Pn** | **09 40 55.3** | **+0.1** |
| YSS | | | | | AMB | AMB | 09 41 00.5 | |
| **YSS** | **Yuzh-Sakhalins** | **5.61** | **303** | *e*PN | | **Pn** | **09 40 55.3** | **+0.1** |
| **JANG** | **Nango** | **7.07** | **241** | *e*P | | **Pn** | **09 41 14.3** | **-1.1** |
| JANG | | | | *e*S | | Sn | 09 42 27.2 | -7.1 |
| **JTM** | **Tenmabayashi** | **7.14** | **245** | Pn | | **Pn** | **09 41 12.7** | **-3.5** |
| **JMM** | **Marumori** | **9.12** | **230** | Pn | | Pn | 09 41 39.6 | -3.8 |
| **PEA0B** | **Petropavlovsk-** | **10.48** | **28** | Pn | | **Pn** | **09 42 04.2** | **+2.3** |
| **PEA0B** | **Petropavlovsk-** | **10.48** | **28** | PN | | **Pn** | **09 42 04.2** | **+2.3** |
| **PETK** | **Petropavlovsk-** | **10.48** | **28** | Pn | | **Pn** | **09 42 03.3** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **10.48** | **28** | PN | | **Pn** | **09 42 03.3** | **+1.4** |
| **JSD** | **Sado** | **10.49** | **239** | Pn | | Pn | 09 41 57.6 | -4.6 |
| **PET** | **Petropavlovsk** | **10.74** | **31** | Pn | | **Pn** | **09 42 02.3** | **-3.2** |
| **USA0B** | **Ussuriysk Arra** | **12.67** | **277** | Pn | | **Pn** | **09 42 31.1** | **-0.7** |
| **USA0B** | **Ussuriysk Arra** | **12.67** | **277** | PN | | **Pn** | **09 42 31.1** | **-0.7** |
| **USRK** | **Ussuriysk Ar.** | **12.67** | **277** | P | | **Pn** | **09 42 32.0** | **+0.2** |
| | comp=E,0.2nm,0.3s,baz=79,slow=13,SNR=6.7 | | | | | | | |
| | comp=E,0.7nm,0.6s | | | | | | | |
| **ZEA** | **Zeya** | **17.51** | **311** | *i* P | | **P** | **09 43 35.5** | **0.0** |
| **JOW** | **Kunigami** | **24.36** | **232** | P | | P | 09 44 39.6 | -8.2 |
| **H11N2** | **WAKE ISLAND Hy** | **28.26** | **144** | T | | T | 10 16 23.7 | |
| | baz=334,slow=75,SNR=17 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.27** | **144** | T | | T | 10 16 37.8 | |
| | baz=334,slow=75,SNR=14 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.28** | **144** | T | | T | 10 16 36.0 | |
| | baz=334,slow=75,SNR=16 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.27** | **145** | T | | T | 10 17 46.4 | |
| | baz=335,slow=76,SNR=20 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.27** | **145** | T | | T | 10 17 51.3 | |
| | baz=335,slow=76,SNR=15 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.29** | **145** | T | | T | 10 17 54.8 | |
| | baz=335,slow=76,SNR=8.8 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.54** | **293** | P | | **P** | **09 45 34.8** | **+0.4** |
| ULN | | | | lAmb | | lAmb | 09 45 35.7 | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.54** | **293** | *e*P | | **P** | **09 45 34.8** | **+0.4** |
| **ULN** | **Ulaanbaatar** | **29.54** | **293** | P | | **P** | **09 45 34.8** | **+0.4** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **TATO** | **Taipei** | **29.79** | **239** | P | | P | 09 45 28.3 | -8.2 |
| **SONM** | **Songino Array** | **29.98** | **293** | P | | **P** | **09 45 34.4** | **-3.8** |
| **SONM** | **Songino Array** | **29.98** | **293** | P | | **P** | **09 45 38.8** | **+0.6** |
| | comp=Z,0.8nm,0.6s,baz=90,slow=9.7,SNR=4.2 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **L16K** | **Owhat River** | **34.30** | **41** | P | | **P** | **09 46 15.1** | **-0.6** |
| **C18K** | **Utukok River** | **35.14** | **29** | P | | **P** | **09 46 21.7** | **-1.3** |
| **G18K** | **Tagagawik** | **35.36** | **34** | P | | **P** | **09 46 23.8** | **-1.1** |
| G18K | | | | lAmb | | lAmb | 09 47 02.2 | |
| | comp=Z,7.0nm,1.5s | | | | | | | |
| **C19K** | **Lookout Ridge** | **35.84** | **28** | P | | **P** | **09 46 28.8** | **-0.2** |
| **F19K** | **Shaleruckik Mo** | **35.91** | **32** | P | | **P** | **09 46 29.0** | **-0.5** |
| F19K | | | | lAmb | | lAmb | 09 46 48.0 | |
| | comp=Z,4.4nm,1.2s | | | | | | | |
| **D19K** | **Kuna River** | **36.18** | **30** | P | | **P** | **09 46 31.0** | **-0.8** |
| D19K | | | | lAmb | | lAmb | 09 46 46.6 | |
| | comp=Z,6.2nm,1.1s | | | | | | | |
| **H19K** | **Roundabout Mou** | **36.18** | **35** | P | | **P** | **09 46 31.1** | **-0.8** |
| H19K | | | | lAmb | | lAmb | 09 46 54.5 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **E19K** | **Redstone River** | **36.25** | **31** | P | | **P** | **09 46 32.9** | **+0.4** |
| E19K | | | | lAmb | | lAmb | 09 46 39.9 | |
| | comp=Z,3.8nm,1.2s | | | | | | | |
| **B20K** | **Meade River** | **36.92** | **27** | P | | **P** | **09 46 37.6** | **-0.4** |
| **E21K** | **Killik River** | **37.66** | **30** | P | | **P** | **09 46 43.3** | **-1.1** |
| E21K | | | | lAmb | | lAmb | 09 46 56.0 | |
| | comp=Z,5.5nm,1.4s | | | | | | | |
| **D22K** | **Ayikyak River** | **38.20** | **30** | P | | **P** | **09 46 48.4** | **-0.6** |
| D22K | | | | lAmb | | lAmb | 09 46 50.5 | |
| | comp=Z,5.8nm,1.3s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **38.40** | **31** | P | | **P** | **09 46 51.1** | **+0.5** |
| E22K | | | | lAmb | | lAmb | 09 47 04.0 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **D23K** | **Nanushuk River** | **38.93** | **30** | P | | **P** | **09 46 55.6** | **+0.5** |
| D23K | | | | lAmb | | lAmb | 09 46 56.0 | |
| | comp=Z,6.8nm,1.4s | | | | | | | |
| **E24K** | **Your Creek** | **39.63** | **31** | P | | **P** | **09 47 01.3** | **+0.4** |
| **G24K** | **Hadweenzic Riv** | **39.94** | **33** | P | | **P** | **09 47 03.3** | **-0.1** |
| **MCARA** | **McCarthy VSAT** | **42.15** | **41** | P | | **P** | **09 47 20.9** | **-0.9** |
| MCARA | | | | lAmb | | lAmb | 09 48 00.8 | |
| | comp=Z,6.1nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.21** | **307** | P | | **P** | **09 47 23.0** | **+0.7** |
| | comp=Z,0.5nm,0.5s,baz=96,slow=7.7,SNR=2.5 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.21** | **307** | P | | **P** | **09 47 23.0** | **+0.7** |
| **I28M** | **Miner Creek** | **43.05** | **35** | P | | **P** | **09 47 30.0** | **+1.0** |
| **MK31** | **Makanchi Array** | **46.00** | **298** | P | | **P** | **09 47 53.4** | **+0.7** |
| MK31 | | | | lAmb | | lAmb | 09 47 54.0 | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **46.00** | **298** | P | | **P** | **09 47 53.4** | **+0.7** |
| MK31 | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.00** | **298** | P | | **P** | **09 47 53.3** | **+0.6** |
| | comp=Z,2.1nm,0.7s,baz=72,slow=8.0,SNR=18 | | | | | | | |
| MKAR | | | | pP | | **pP** | **09 48 05.7** | **+1.2** |
| | comp=Z,1.8nm,0.8s,baz=71,slow=7.0,SNR=7.8 | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.00** | **298** | *e*P | | **P** | **09 47 53.2** | **+0.5** |
| **MKAR** | **Makanchi Array** | **46.00** | **298** | *i* P | | **P** | **09 47 53.2** | **+0.5** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **46.81** | **304** | P | | **P** | **09 47 58.9** | **-0.1** |
| **KURK** | **Kurchatov** | **46.81** | **304** | *e*P | | **P** | **09 47 58.9** | **-0.1** |
| **KURK** | **Kurchatov** | **46.81** | **304** | P | | **P** | **09 47 58.9** | **-0.1** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.90** | **304** | P | | **P** | **09 47 59.1** | **-0.5** |
| | comp=Z,0.7nm,0.4s,baz=72,slow=8.0,SNR=6.3 | | | | | | | |
| KURBB | | | | pP | | **pP** | **09 48 12.1** | **+0.7** |
| | comp=Z,0.6nm,0.6s,baz=69,slow=8.5,SNR=2.8 | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **52.81** | **296** | *e*P | | **P** | **09 48 45.0** | **+0.1** |
| **AAK** | **Ala-Archa** | **52.81** | **296** | *i* P | | **P** | **09 48 45.0** | **+0.1** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.36** | **334** | P | | **P** | **09 50 10.4** | **-0.8** |
| | comp=Z,2.1nm,0.5s,baz=36,slow=8.0,SNR=16 | | | | | | | |
| FINES | | | | pP | | **pP** | **09 50 22.4** | **-1.0** |
| | comp=Z,1.8nm,0.7s,baz=46,slow=5.5,SNR=2.7 | | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.36** | **334** | *i* P | | **P** | **09 50 11.0** | **-0.2** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.91** | **340** | P | | **P** | **09 50 39.8** | **-0.1** |
| | comp=Z,6.1nm,1.2s,baz=30,slow=6.2 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.91** | **340** | P | | **P** | **09 50 39.3** | **-0.6** |
| | comp=Z,1.5nm,0.8s,baz=31,slow=6.6,SNR=8.1 | | | | | | | |
| NOA | | | | pP | | **pP** | **09 50 52.4** | **+0.1** |
| | comp=Z,0.9nm,0.7s,baz=30,slow=6.2,SNR=4.1 | | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **70.05** | **338** | P | | **P** | **09 50 40.1** | **-0.6** |
| | comp=Z,1.1nm,0.4s,baz=60,slow=8.8,SNR=6.2 | | | | | | | |
| HFS | | | | pP | | **pP** | **09 50 53.0** | **-0.1** |
| | comp=Z,3.5nm,0.8s,baz=79,slow=7.7,SNR=3.7 | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| **KBZ** | **Khabaz** | **70.89** | **313** | P | | **P** | **09 50 47.0** | **+0.9** |
| | comp=Z,1.6nm,0.6s,baz=62,slow=5.7,SNR=4.7 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **KBZ** | **Khabaz** | **70.89** | **313** | *e*P | | **P** | **09 50 47.0** | **+0.9** |
| **KBZ** | **Khabaz** | **70.89** | **313** | P | | **P** | **09 50 47.0** | **+0.9** |
| **CLL** | **Collm** | **77.81** | **334** | *i* P | | **P** | **09 51 27.4** | **+1.2** |
| **TXAR** | **Lajitas Array** | **80.97** | **58** | P | | **P** | **09 51 44.6** | **+0.6** |
| **TXAR** | **Lajitas Array** | **80.97** | **58** | P | | **P** | **09 51 43.4** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=296,slow=3.9,SNR=5.0 | | | | | | | |
| TXAR | | | | pP | | **pP** | **09 51 57.1** | **+0.9** |
| | comp=Z,0.3nm,0.7s,baz=299,slow=3.7,SNR=4.0 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.97** | **58** | P | | **P** | **09 51 44.6** | **+0.6** |

*DJA* ***26*** *09:40:18.2±1.7, 3°.S±52°.×14°.0E±°, h10km, M4.2/3, MLv4.2/3*
*IDC* ***26*** *09:40:19.0±1.8, 3°.29S×141°.80E, h0km, mb3.7/3, mbtmp3.7/4, ML3.8/1, MS3.2/1, Error ellipse: s-maj=156.6km s-min=30.6km az=112.0*
**ISC 26 09:40:18.8±0.9, 2°.7S±0°.1×140°.48E±0°.05, h10km, n10, σ1§07/8, mb3.6/3, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **0.28** | **54** | P | | **Pg** | **09 40 24.5** | **+0.1** |
| JAY | | | | S | | **Sb** | **09 40 29.1** | **-1.6** |
| **GENI** | **Genyem** | **0.32** | **286** | P | | **Pg** | **09 40 24.8** | **-0.4** |
| GENI | | | | S | | **Sg** | **09 40 29.8** | **+0.2** |
| **WRA** | **Warramunga Arr** | **18.17** | **199** | P | | **Pn** | **09 44 31.4** | **0.0** |
| | 0.3nm,0.3s,baz=24,slow=12,SNR=19 | | | | | | | |
| | 1.1nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **21.81** | **196** | P | | **P** | **09 45 10.6** | **-0.7** |
| | 1.2nm,0.5s,baz=30,slow=10,SNR=22 | | | | | | | |
| | 1.2nm,0.5s | | | | | | | |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SKR | | | | | *e*S | | **Sn** | **09 56 27.8 +1.4** |
| **KDTR** | **Khodutka, Kamc** | **3.99** | **28** | *e*P | | | **Pn** | **09 56 18.7 -0.3** |
| KDTR | | | | | *e*S | | **Sn** | **09 57 01.6 -2.9** |
| **ASAK** | **Asacha** | **4.44** | **23** | *e*P | | | **Pn** | **09 56 26.7 +1.4** |
| **MTVR** | **Mutnovka** | **4.61** | **25** | *e*P | | | **Pn** | **09 56 28.6 +0.9** |
| MTVR | | | | | *e*S | | **Sn** | **09 57 20.0 0.0** |
| **GRL** | **Gorelyy** | **4.64** | **24** | *e*P | | | **Pn** | **09 56 29.8 +1.7** |
| GRL | | | | | *e*S | | **Sn** | **09 57 22.1 +1.3** |
| **KRMR** | **Karymshinskiy** | **4.91** | **23** | *e*P | | | **Pn** | **09 56 33.2 +1.6** |
| **PETK** | **Petropavlovsk-** 1.5nm,0.3s,baz=175,slow=13,SNR=41 | **5.06** | **19** | P | | | **Pn** | **09 56 35.1 +1.3** |
| PETK | | | | | S | | Sn | 09 57 45.0 +14 |
| PETK | 1.5nm,0.5s,baz=213,slow=18,SNR=1.3 | | | | LR | | LR | 09 58 46.6 |
| | comp=Z,56nm,21.7s,baz=257,slow=41 5.0nm,0.5s | | | | | | | |
| **PET** | **Petropavlovsk** | **5.22** | **25** | *e*P | | | **Pn** | **09 56 37.5 +1.6** |
| PET | | | | | *e*S | | **Sn** | **09 57 35.0 +0.2** |
| **DALK** | **Dalny** | **5.26** | **25** | *e*P | | | **Pn** | **09 56 37.3 +0.9** |
| DALK | | | | | *e*S | | **Sn** | **09 57 35.3 -0.4** |
| **UGLR** | **Uglovaya** | **5.43** | **25** | *e*P | | | **Pn** | **09 56 40.5 +1.5** |
| **KOK** | **Koryaka** | **5.46** | **23** | *e*P | | | **Pn** | **09 56 41.4 +2.1** |
| **AVH** | **Avacha** | **5.46** | **24** | *e*P | | | **Pn** | **09 56 40.9 +1.6** |
| **SMAR** | **Somma** | **5.47** | **25** | *e*P | | | **Pn** | **09 56 40.9 +1.2** |
| **KRER** | **Koryakskii** | **5.50** | **24** | *e*P | | | **Pn** | **09 56 42.7 +2.7** |
| KRER | | | | | *e*S | | **Sn** | **09 57 43.0 +1.1** |
| **GNL** | **Ganaly** | **5.66** | **18** | *e*P | | | **Pn** | **09 56 44.3 +2.2** |
| **SPN** | **Mys Shipunski** | **5.72** | **32** | *e*P | | | **Pn** | **09 56 42.8 0.0** |
| SPN | | | | | *e*S | | **Sn** | **09 57 43.8 -3.3** |
| **KSRS** | **Korea Array** 0.8nm,0.5s,baz=47,slow=9.5,SNR=4.8 0.8nm,0.5s | **22.52** | **251** | P | | | **P** | **10 00 17.2 +0.1** |
| **H11N2** | **WAKE ISLAND Hy** baz=345,slow=77,SNR=16 | **30.12** | **157** | T | | | T | 10 33 14.0 |
| **H11N1** | **WAKE ISLAND Hy** baz=345,slow=77,SNR=18 | **30.13** | **157** | T | | | T | 10 33 12.9 |
| **H11N3** | **WAKE ISLAND Hy** baz=345,slow=77,SNR=8.9 | **30.13** | **157** | T | | | T | 10 33 11.5 |
| **H11S1** | **WAKE ISLAND Hy** baz=345,slow=76,SNR=149 | **31.24** | **158** | T | | | T | 10 34 38.8 |
| **H11S3** | **WAKE ISLAND Hy** baz=345,slow=76,SNR=146 | **31.25** | **158** | T | | | T | 10 34 34.9 |
| **H11S2** | **WAKE ISLAND Hy** baz=345,slow=76,SNR=148 | **31.26** | **158** | T | | | T | 10 34 33.4 |
| **KURBB** | **Kurchatov Arra** 0.3nm,0.5s,baz=68,slow=8.2,SNR=4.1 0.3nm,0.5s | **47.66** | **303** | P | | | **P** | **10 03 52.4 -0.6** |
| **FINES** | **FINESS Array B** 0.3nm,0.3s,baz=27,slow=9.4,SNR=5.7 0.3nm,0.3s | **63.14** | **335** | P | | | **P** | **10 05 41.3 -2.8** |
| **ASAR** | **Alice Springs** 1.1nm,1.2s,baz=19,slow=4.8,SNR=2.3 1.1nm,1.2s | **74.14** | **200** | P | | | **P** | **10 06 54.4 +1.3** |
| **EKA** | **Eskdalemuir Ar** 1.1nm,0.6s,baz=23,slow=5.6,SNR=3.5 1.1nm,0.6s | **75.08** | **347** | P | | | **P** | **10 06 58.6 +0.4** |
| **TXAR** | **Lajitas Array** 0.3nm,0.7s,baz=297,slow=4.5,SNR=5.0 0.3nm,0.7s | **75.59** | **62** | P | | | **P** | **10 07 03.0 +1.2** |
| **BRTR** | **Keskin Array B** 0.3nm,0.4s,baz=49,slow=3.8,SNR=3.6 0.3nm,0.4s | **78.10** | **318** | P | | | **P** | **10 07 14.6 -1.2** |

*ISN **26** 10:13:10.4±0.9,35.08N×46.06E,h7km±12km,ML2.7*
*TEH **26** 10:13:17.7,34.64N×46.22E,h8km±28km,ML2.7*
**ISC 26 10:13:12.4±1.4,34.95N±0.07×46.09E±0.06,h10km,n9, σ1s74/14,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.35** | **136** | Pg | **Pg** | **10 13 21.1** | **+0.2** |
| IDHR | | | | Sg | **Sg** | **10 13 23.9** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.85** | **190** | Pg | **Pg** | **10 13 29.5** | **+0.6** |
| **KCHF** | **Cheshme Sefid,** | **1.04** | **131** | Sg | **Sg** | **10 13 44.2** | **-1.6** |
| **ILBA** | **Ilam Banvizeh** | **1.33** | **176** | Sg | **Sb** | **10 13 51.9** | **-2.7** |
| **IKRK** | **Kirkuk** | **1.50** | **288** | *e*Pn | **Pn** | **10 13 38.5** | **-0.9** |
| IKRK | | | | *e*Sn | **Sn** | **10 13 59.6** | **+0.6** |
| **IBDR** | **Badra** | **1.84** | **184** | *e*Pn | **Pb** | **10 13 45.8** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **10 14 12.0** | **+0.3** |
| IBDR | comp=N,77nm,0.9s | | | AML | AML | 10 14 20.0 | |
| IBDR | comp=E,68nm,0.6s | | | AML | AML | 10 14 22.8 | |
| **IDOB** | **Doab** | **2.08** | **123** | Pn | **Pb** | **10 13 51.5** | **+1.0** |
| **BHD** | **Baghdad** | **2.20** | **221** | *e*Pn | **Pn** | **10 13 51.0** | **+2.0** |
| BHD | | | | *e*Sn | **Sb** | **10 14 19.0** | **-0.5** |
| **RAFI** | **Al-Rafai** | **3.22** | **180** | *e*Pn | **Pn** | **10 14 05.0** | **+1.9** |
| RAFI | | | | *e*Sn | **Sb** | **10 14 45.5** | **-3.5** |

**TAP 26 10:14:06.1,24.11N×122.26E,h24km,ML2.7,C,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EOS4** | **EOS4** baz=83 | **0.06** | **83** | *e*P | Pb | 10 14 10.0 | +0.2 |
| EOS4 | baz=83 | | | *e*S | Sb | 10 14 13.0 | +0.6 |
| **EOS3** | **EOS3** baz=351 | **0.18** | **18** | *e*P | Pb | 10 14 11.4 | +0.1 |
| EOS3 | baz=351 | | | *e*S | Sb | 10 14 15.6 | +0.9 |
| **EOS2** | **EOS2** baz=339 | **0.30** | **356** | *e*P | Pb | 10 14 13.3 | +0.2 |
| EOS2 | baz=339 | | | *e*S | Sb | 10 14 18.8 | +1.1 |
| **EWUT** | **Wuta** baz=312 | **0.55** | **307** | *e*P | Pb | 10 14 17.1 | -0.1 |
| **ENA** | **Nanau** baz=309 | **0.56** | **304** | *e*P | Pb | 10 14 17.6 | +0.2 |
| **TWD** | **Chiawan** baz=267 | **0.60** | **267** | *e*P | Pb | 10 14 17.6 | -0.4 |
| **NACB** | **Ninganchiao** baz=276 | **0.61** | **276** | *e*P | Pb | 10 14 17.8 | -0.4 |
| **TWC** | **Suao** baz=329 | **0.62** | **323** | *e*P | Pb | 10 14 18.2 | -0.1 |
| **YOJ** | **Yonaguni jima** baz=62 | **0.77** | **63** | *e*P | Pn | 10 14 21.5 | -0.1 |

**JMA 26 10:14:27.5±0.1,24.3N±0.4×123.8E±0.3,h12km±1km, MV1.5/10,NEAR ISHIGAKIJIMA ISLAND,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.11** | **317** | P | Pg | 10 14 30.5 | 0.0 |
| **JKRS** | **Kuro-shima** | **0.18** | **95** | *i* P | Pg | 10 14 31.7 | +0.2 |
| JKRS | | | | *e*S | Sg | 10 14 35.2 | +0.9 |
| **HATJ** | **Hateruma jima** | **0.20** | **182** | P | Pg | 10 14 31.7 | -0.1 |
| HATJ | | | | *e*S | Sg | 10 14 35.0 | +0.3 |
| **JIJ** | **Ishigaki jima** | **0.32** | **70** | P | Pg | 10 14 33.8 | -0.2 |
| JIJ | | | | *e*S | Sg | 10 14 38.6 | +0.2 |
| **JISG** | **Ishigakijimahi** | **0.56** | **54** | *e*P | Pg | 10 14 38.6 | +0.1 |
| JISG | | | | *e*S | Sb | 10 14 46.7 | -0.6 |
| **YOJ** | **Yonaguni jima** | **0.76** | **286** | *e*P | Pg | 10 14 42.4 | +0.2 |
| **JYNG** | **Yonagunijimaku** | **0.81** | **284** | *e*P | Pg | 10 14 43.2 | -0.1 |
| **JTJ** | **Tarama** | **0.90** | **64** | *e*P | Pg | 10 14 44.7 | -0.2 |
| JTJ | | | | S | Sb | 10 14 57.1 | +0.2 |

*RSNC **26** 10:22:49.6±0.7,1°S±3°×81°W±°,h9km±3km,M4.0,mb4.1, mB4.6,ML3.6,Mw(mB)3.8*
*IGQ **26** 10:22:51.6±0.4,1°S±2°×81°W±°,h3km,M4.0/24*
**ISC 26 10:22:52.1±0.9,1.20S±0.03×80.71W±0.05,h10km,n71, σ2s30/85,Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APO2** | **Ecuador-Portov** | **0.29** | **62** | P | **Pb** | **10 22 59.0** | **-0.4** |
| **PPLP** | **Puerto Lpez** | **0.35** | **190** | P | **Pb** | **10 22 59.5** | **-0.9** |
| PPLP | | | | S | **Sb** | **10 23 05.8** | **-0.2** |
| **PPLP** | **Puerto Lpez** | **0.35** | **190** | P | **Pb** | **10 22 59.5** | **-0.9** |
| PPLP | | | | S | **Sb** | **10 23 06.1** | **0.0** |
| **PPLP** | **Puerto Lpez** | **0.35** | **190** | P | **Pb** | **10 22 59.4** | **-1.0** |
| PPLP | | | | S | **Sb** | **10 23 06.0** | **0.0** |
| **PECV** | **Mancha de Ca P** | **0.79** | **58** | P | Pg | 10 23 01.5 | -5.7 |
| **ACHN** | **Ecuador-Chone-** | **0.80** | **52** | P | **Pg** | **10 23 06.9** | **-0.7** |
| **SALI** | **Salinas** | **1.02** | **196** | S | **Sn** | **10 23 26.3** | **-0.5** |
| SALI | | | | P | **Pg** | **10 23 10.8** | **-0.9** |
| **JAMA** | **Jama** | **1.06** | **29** | P | **Pg** | **10 23 09.7** | **-2.9** |
| JAMA | | | | S | **Sg** | **10 23 24.7** | **-1.7** |
| **FLF1** | **Flavio Alfaro-** | **1.21** | **46** | P | **Pb** | **10 23 12.6** | **-2.5** |
| FLF1 | | | | S | **Sn** | **10 23 35.6** | **+4.0** |
| **AQUE** | **Quevedo** | **1.23** | **83** | P | **Pg** | **10 23 15.5** | **-0.3** |
| **MORR** | **Playas El Morr** | **1.48** | **165** | P | **Pg** | **10 23 20.5** | **0.0** |
| **MILO** | **Milagro-Astudi** | **1.58** | **133** | P | **Pn** | **10 23 19.3** | **-0.8** |
| MILO | | | | S | **Sg** | **10 23 40.7** | **-2.2** |
| **JSCH** | **Cashca Tororas** | **1.81** | **107** | P | **Pn** | **10 23 23.2** | **-0.5** |
| **ISPG** | **Isla Puna-Puer** | **1.84** | **163** | P | **Pg** | **10 23 27.9** | **+0.6** |
| **CHSH** | **Refugio Sur-Vo** | **1.87** | **99** | P | **Pb** | **10 23 24.7** | **-1.9** |
| **PORT** | **Chimborazo Vol** | **1.96** | **98** | P | **Pn** | **10 23 25.6** | **-0.3** |
| **TAMH** | **Tambohuasha Ch** | **1.96** | **100** | P | **Pb** | **10 23 26.2** | **-2.0** |
| **IGUA** | **Igualata** | **2.09** | **98** | P | **Pb** | **10 23 29.0** | **-1.5** |
| **PAST** | **Pastocalle** | **2.13** | **76** | P | **Pb** | **10 23 30.1** | **-0.9** |
| **BBIL** | **Ulba Tungurahu** | **2.24** | **96** | P | **Pb** | **10 23 30.8** | **-2.0** |
| **JUI6** | **Juive** | **2.25** | **96** | P | **Pb** | **10 23 31.0** | **-2.1** |
| **TUYU** | **G.Yuibug Volc** | **2.26** | **97** | P | **Pb** | **10 23 31.3** | **-1.9** |
| **SLOR** | **San Lorenzo -** | **2.27** | **78** | P | **Pn** | **10 23 30.2** | **+0.2** |
| **CAMI** | **Rancho Maria** | **2.27** | **77** | P | **Pn** | **10 23 30.6** | **+0.5** |
| **ARRY** | **Arrayan** | **2.28** | **98** | P | **Pb** | **10 23 31.0** | **-2.6** |
| **BNAS** | **Cotopaxi Volca** | **2.29** | **77** | P | **Pb** | **10 23 31.9** | **-2.0** |
| **BPAT** | **Tungurahua Vol** | **2.30** | **98** | P | **Pb** | **10 23 33.3** | **-0.6** |
| **GGPT** | **Toaza - Volcan** | **2.31** | **65** | P | **Pn** | **10 23 30.5** | **0.0** |
| **BULB** | **Ulba Tungurahu** | **2.31** | **96** | P | **Pb** | **10 23 31.5** | **-2.7** |
| **JUA2** | **San Juan 2** | **2.33** | **65** | P | **Pn** | **10 23 30.2** | **-0.7** |
| **BREF** | **Cotopaxi Volca** | **2.33** | **77** | P | **Pb** | **10 23 32.1** | **-2.5** |
| **TERV** | **Terraza Guagua** | **2.34** | **64** | P | **Pn** | **10 23 31.3** | **+0.2** |
| **PINO** | **Pino** | **2.35** | **64** | P | **Pn** | **10 23 31.3** | **0.0** |
| **BVC2** | **Cotopaxi Volca** | **2.36** | **77** | P | **Pn** | **10 23 32.0** | **+0.5** |
| **PITA** | **Cotopaxi Volc** | **2.37** | **74** | P | **Pn** | **10 23 32.1** | **+0.7** |
| **BTAM** | **Cotopaxi Volca** | **2.37** | **77** | P | **Pb** | **10 23 33.1** | **-2.2** |
| **VC1** | **Cotopaxi 1** | **2.38** | **77** | P | **Pb** | **10 23 32.9** | **-2.4** |
| **YANA** | **Yana** | **2.40** | **63** | P | **Pn** | **10 23 31.8** | **-0.1** |
| **TAMB** | **Tambo** | **2.40** | **78** | P | **Pb** | **10 23 34.0** | **-1.7** |
| **PAC1** | **Pacto, Paraso** | **2.41** | **53** | P | **Pn** | **10 23 29.8** | **-1.9** |
| PAC1 | | | | S | **Sn** | **10 24 02.4** | **+1.0** |
| **PAC1** | **Pacto, Paraso** | **2.41** | **53** | P | **Pn** | **10 23 30.0** | **-1.7** |
| **PULU** | **Pululahua** | **2.52** | **61** | P | **Pn** | **10 23 34.0** | **+0.5** |
| **RVRD** | **Rio Verde** | **2.62** | **31** | P | **Pn** | **10 23 34.2** | **-0.2** |
| **ANTI** | **Antisana** | **2.66** | **74** | P | **Pb** | **10 23 38.7** | **-1.5** |
| **OTAV** | **Otavalo** | **2.67** | **58** | P | **Pn** | **10 23 34.3** | **-1.3** |
| OTAV | | | | S | **Sb** | **10 24 10.7** | **-2.8** |
| **OTAV** | **Otavalo** | **2.67** | **58** | P | **Pn** | **10 23 35.1** | **-0.5** |
| **CUIC** | **Cuicocha-Domo** | **2.79** | **58** | P | **Pn** | **10 23 37.0** | **-0.1** |
| **IMBA** | **Imbabura, San** | **2.91** | **60** | P | **Pn** | **10 23 39.9** | **+1.0** |
| **ARDO** | **Archidona, Ten** | **2.92** | **86** | P | **Pb** | **10 23 41.7** | **-2.6** |
| **BOSC** | **San Juan Bosco** | **2.94** | **131** | P | **Pb** | **10 23 42.1** | **-2.7** |
| **URCU** | **Urcuqui** | **2.95** | **56** | P | **Pn** | **10 23 40.1** | **+0.8** |
| **ANGU** | **Angureal** | **2.98** | **65** | P | **Pn** | **10 23 42.3** | **-3.3** |
| **YAHU** | **Yahuarcocha** | **3.07** | **59** | P | **Pn** | **10 23 42.9** | **+1.9** |
| **LITE1** | **Lita** | **3.08** | **50** | P | **Pn** | **10 23 42.6** | **+1.7** |
| **MCRA** | **Macar, Loja** | **3.24** | **166** | P | **Pn** | **10 23 43.7** | **+0.7** |
| MCRA | | | | S | **Sn** | **10 24 21.3** | **-0.4** |
| **CHL2** | **Volcn Chiles** | **3.43** | **55** | P | **Pn** | **10 23 47.7** | **+1.6** |
| **ZUMB** | **Zumba** | **3.96** | **157** | P | **Pn** | **10 23 56.2** | **+3.1** |
| **CRUC** | **La Cruz** | **4.66** | **54** | P | **Pn** | **10 24 05.1** | **+2.2** |
| CRUC | | | | S | **Sb** | **10 25 09.5** | **-1.0** |
| **BBAC** | **Balboa, Cauca** 19nm,0.5s,558nm | **4.72** | **47** | P | **Pn** | **10 24 01.7** | **-1.8** |
| BBAC | 19nm,0.5s,558nm | | | S | **Sn** | **10 25 02.4** | **+3.9** |
| **BBAC** | **Balboa, Cauca** | **4.72** | **47** | P | **Pn** | **10 24 03.4** | **-0.1** |
| **GR1C** | **Gorgona, Isla** | **4.89** | **31** | P | Pn | 10 24 11.1 | +5.4 |
| **POPC** | **Popayan, Colom** 10nm,0.6s | **5.49** | **47** | P | **Pn** | **10 24 12.1** | **-2.0** |
| POPC | 10nm,0.6s | | | S | **Sn** | **10 25 24.1** | **+6.6** |
| **FLOC** | **Florencia** 11nm,1.1s | **5.77** | **61** | P | **Pn** | **10 24 18.9** | **+1.1** |
| **JAMC** | **Jamundi, Valle** 21nm,0.5s,1µm | **5.96** | **43** | P | **Pn** | **10 24 22.6** | **+1.9** |
| JAMC | 21nm,0.5s,1µm | | | S | **Sn** | **10 25 35.1** | **+5.9** |
| **GARC** | **Garzon, Huila** 16nm,1.1s | **6.21** | **57** | P | Pn | 10 24 29.0 | +4.9 |
| **YOTC** | **Yotoco, Valle** 7.3nm,0.6s | **6.75** | **40** | P | **Pn** | **10 24 33.1** | **+1.7** |
| YOTC | 7.3nm,0.6s | | | S | **Sn** | **10 25 53.7** | **+5.2** |
| **ORTC** | **Ortega, Tolima** 17nm,1.4s | **7.46** | **47** | P | **Pn** | **10 24 42.3** | **+1.2** |
| ORTC | 17nm,1.4s | | | S | Sn | 10 26 16.5 | +11 |
| **PLMC** | **San Jos del P** 13nm,0.9s | **7.51** | **36** | P | **Pn** | **10 24 41.7** | **-0.1** |
| PLMC | 13nm,0.9s | | | S | **Sn** | **10 26 12.6** | **+5.5** |
| **PRAC** | **Prado** 6.3nm,0.9s | **7.60** | **50** | P | **Pn** | **10 24 43.8** | **+0.8** |
| **MACC** | **Macarena, Meta** 14nm,0.7s | **7.63** | **64** | P | **Pn** | **10 24 45.6** | **+2.2** |
| **CBOC** | **Ciudad Bolivar** | **8.44** | **34** | P | **Pn** | **10 24 51.7** | **-3.0** |
| CBOC | | | | S | **Sn** | **10 26 38.7** | **+8.5** |

*ISN **26** 10:23:42.5±0.6,34.72N×46.06E,h2km±5km,ML2.6*
*TEH **26** 10:23:44.3,34.71N×46.10E,h18km,ML2.9*
**ISC 26 10:23:45.0±1.2,34.73N±0.06×46.08E±0.05,h10km,n8, σ0s96/12,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.26** | **97** | Pg | **Pg** | **10 23 50.5** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.57** | **135** | Pg | **Pg** | **10 23 55.2** | **-0.7** |
| **GLG1** | **Gilan-e-Gharb** | **0.63** | **193** | Pg | **Pg** | **10 23 56.2** | **-1.1** |
| **KCHF** | **Cheshme Sefid,** | **0.92** | **120** | Pg | **Pg** | **10 24 01.0** | **-1.7** |
| **IKRK** | **Kirkuk** | **1.57** | **296** | *e*Pn | **Pn** | **10 24 13.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **10 24 35.6** | **-0.1** |
| IKRK | comp=E,83nm,0.4s | | | AML | AML | 10 24 47.8 | |
| IKRK | comp=N,98nm,0.5s | | | AML | AML | 10 24 50.7 | |
| **IBDR** | **Badra** | **1.62** | **184** | *e*Pn | **Pn** | **10 24 13.8** | **+0.1** |
| IBDR | | | | *e*Sn | **Sb** | **10 24 36.0** | **+0.4** |
| **BHD** | **Baghdad** | **2.03** | **225** | *e*Pn | **Pn** | **10 24 19.0** | **-0.3** |
| BHD | | | | *e*Sn | **Sn** | **10 24 46.0** | **+1.4** |
| **RAFI** | **Al-Rafai** | **3.00** | **179** | *e*Pn | **Pn** | **10 24 33.0** | **+0.4** |
| RAFI | | | | *e*Sn | **Sn** | **10 25 09.8** | **+1.2** |

*IDC **26** 10:24:04.2±1.1,18.25S×177.41W,h0km,mb3.8/5, mbtmp3.8/5,Error ellipse: s-maj=55.7km s-min=25.9km az=156.0*
*NEIC **26** 10:24:59.5±0.7,17.8S±0.2×177.9W±0.2,h574km±8km, mb4.1/13,Error ellipse: s-maj=23.8km s-min=20.2km az=163.0*
**ISC 26 10:24:59.4±0.7,18.0S±0.1×178.1W±0.1,h550km,n22, σ1s57/22,mb4.0/11,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.69** | **274** | P | **P** | **10 26 21.9** | **+2.7** |
| **AFI** | **Afiamalu** | **7.30** | **57** | P | **P** | **10 26 50.2** | **-0.3** |
| **NIUE** | **Niue** | **7.81** | **99** | P | **P** | **10 26 52.8** | **-2.5** |
| **MLZ** | **Mavora Lakes** | **29.62** | **200** | P | **P** | **10 30 21.0** | **+0.6** |
| **CTAO** | **Charters Tower** | **33.74** | **261** | P | **P** | **10 30 54.5** | **-1.4** |
| CTAO | comp=Z,7.4nm,1.1s | | | IAmb | IAmb | 10 31 32.2 | |
| **TOO** | **Toolangi** | **37.35** | **231** | P | **P** | **10 31 26.0** | **+0.4** |
| **COEN** | **Coen** | **37.41** | **270** | P | **P** | **10 31 25.2** | **-1.2** |
| COEN | comp=Z,12nm,1.2s | | | IAmb | IAmb | 10 31 35.1 | |
| **WR0** | **Warramunga Arr** | **44.73** | **260** | P | **P** | **10 32 24.5** | **+0.2** |
| **WB0** | **Warramunga Arr** | **44.89** | **260** | P | **P** | **10 32 25.2** | **-0.3** |
| WB0 | comp=Z,8.7nm,1.5s | | | IAmb | IAmb | 10 32 52.1 | |
| **WB2** | **Warramunga Arr** | **44.91** | **260** | P | **P** | **10 32 25.0** | **-0.7** |
| WB2 | comp=Z,7.5nm,1.4s | | | IAmb | IAmb | 10 32 50.7 | |
| **WRAB** | **Tennant Creek** | **44.91** | **260** | P | **P** | **10 32 24.9** | **-0.8** |
| WRAB | comp=Z,7.0nm,1.4s | | | IAmb | IAmb | 10 32 38.9 | |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | **P** | **10 32 25.1** | **-0.7** |
| **WRA** | **Warramunga Arr** comp=Z,0.6nm,0.4s,baz=96,slow=7.0,SNR=34 comp=Z,0.6nm,0.4s | **44.92** | **260** | P | **P** | **10 32 25.2** | **-0.6** |
| **AS31** | **Alice Springs** | **45.06** | **254** | P | **P** | **10 32 27.0** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.06** | **254** | P | **P** | **10 32 26.4** | **-0.5** |
| **ASAR** | **Alice Springs** comp=Z,3.4nm,0.5s,baz=88,slow=9.4,SNR=128 comp=Z,3.4nm,0.5s | **45.06** | **254** | P | **P** | **10 32 27.1** | **+0.2** |
| **SOEI** | **Soe** | **56.38** | **270** | P | **P** | **10 33 47.8** | **-1.6** |
| SOEI | comp=Z,12nm,0.6s | | | IAmb | IAmb | 10 33 50.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **72.06** | **180** | P | | | **P** | **10 35 28.0 +0.1** |
| QSPA | comp=Z,6.5nm,1.5s | | | IAmb | | | IAmb | 10 35 36.6 |
| **QSPA** | **South Pole Qui** comp=Z,0.4nm,0.5s,baz=354,slow=2.0,SNR=1.4 comp=Z,0.4nm,0.5s | **72.06** | **180** | P | | | **P** | **10 35 28.4 +0.5** |
| **CNBA** | **Chernabura Isl** | **74.23** | **11** | P | | | **P** | **10 35 36.8 -3.3** |
| **NVAR** | **Mina Array Bea** comp=Z,0.4nm,0.8s,baz=216,slow=9.0,SNR=3.6 comp=Z,0.4nm,0.8s | **79.28** | **44** | P | | | **P** | **10 36 09.8 +1.4** |
| **TXAR** | **Lajitas Array** comp=Z,0.4nm,0.8s,baz=230,slow=5.9,SNR=5.1 comp=Z,0.4nm,0.8s | **85.78** | **57** | P | | | **P** | **10 36 44.6 +3.3** |

*ISN **26** 10:37:20.9±0.6,34.63N×46.24E,h4km±5km,ML3.0*
*TEH **26** 10:37:21.7,34.62N×46.24E,h8km±47km,ML2.9*
**ISC 26 10:37:21.9±1.2,34.65N±0.04×46.24E±0.03,h4km±12km, n15,σ0s66/19,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.13** | **66** | Pg | **Pg** | **10 37 25.1** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.42** | **139** | Pg | **Pg** | **10 37 29.9** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **256** | Pg | **Pg** | **10 37 32.6** | **0.0** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **207** | Pg | **Pg** | **10 37 32.9** | **-0.4** |
| **ILIN** | **Lien** | **0.66** | **65** | Pg | **Pg** | **10 37 34.4** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **119** | Pg | **Pg** | **10 37 35.7** | **-0.8** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **181** | Pg | **Pg** | **10 37 40.8** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **79** | Pg | **Pb** | **10 37 44.1** | **-0.6** |
| **IBZA** | **Bozab** | **1.35** | **97** | Pg | **Pb** | **10 37 47.3** | **-0.5** |
| **IBDR** | **Badra** | **1.55** | **190** | *e*Pn | **Pb** | **10 37 50.7** | **-0.5** |
| IBDR | | | | *e*Sn | **Sg** | **10 38 12.3** | **+0.5** |
| **IKRK** | **Kirkuk** | **1.73** | **296** | *e*Pn | **Pb** | **10 37 53.5** | **-0.7** |
| IKRK | | | | *e*Sn | **Sg** | **10 38 17.8** | **+0.3** |
| **IKFM** | **Kafar-mosalman** | **1.74** | **130** | Pg | **Pb** | **10 37 54.1** | **-0.3** |
| **IDOB** | **Doab** | **1.82** | **118** | Pn | **Pb** | **10 37 56.1** | **+0.2** |
| **BHD** | **Baghdad** | **2.07** | **229** | *e*Pn | **Pn** | **10 37 58.0** | **+0.7** |
| BHD | | | | *e*Sn | **Sb** | **10 38 25.0** | **-0.9** |
| **RAFI** | **Al-Rafai** | **2.92** | **182** | *e*Pn | **Pn** | **10 38 10.0** | **+1.0** |
| RAFI | | | | *e*Sn | **Sn** | **10 38 45.5** | **+1.0** |

*IDC **26** 10:47:53.7±2.5,43.56N×144.51E,h0km,mb3.6/5, mbtmp3.6/5,MS2.4/1,Error ellipse: s-maj=86.6km s-min=27.2km az=66.0*
*JMA **26** 10:47:55.4±0.1,43.6N±0.2×144.3E±0.3,h0km,MV3.1/20, TESHIKAGA REGION*
*JMA Felt II J1 at TESHIKAGA REGION .*
**ISC 26 10:47:55.2±1.2,43.58N±0.04×144.31E±0.04,h9km±9km, n20,σ0s77/18,mb3.5/5,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JNK** | **Nakash** | **0.30** | **88** | *i* P | **Pg** | **10 48 01.3** | **+0.2** |
| **JAR** | **Ashorobuto** | **0.48** | **235** | *i* P | **Pg** | **10 48 04.9** | **+0.3** |
| JAR | | | | S | **Sb** | **10 48 12.4** | **-0.7** |
| **JTKR** | **Abashiri--Toko** | **0.49** | **324** | *i* P | **Pg** | **10 48 04.6** | **-0.2** |
| JTKR | | | | S | **Sg** | **10 48 11.5** | **+0.2** |
| **JAK** | **Akkeshi** | **0.64** | **154** | *i* P | **Pb** | **10 48 08.0** | **-0.6** |
| JAK | | | | S | **Sb** | **10 48 17.3** | **-0.4** |
| **JRA** | **Rausu** | **0.69** | **58** | P | **Pb** | **10 48 08.6** | **-0.8** |
| **JOB** | **Onbets** | **0.76** | **208** | *i* P | **Pb** | **10 48 10.4** | **-0.1** |
| JOB | | | | S | **Sn** | **10 48 22.0** | **-1.6** |
| **JKHN** | **Kushirohamanak** | **0.79** | **128** | *i* P | **Pb** | **10 48 10.6** | **-0.5** |
| JKHN | | | | S | **Sb** | **10 48 21.9** | **0.0** |
| **JMP** | **Maruseppu** | **0.81** | **302** | *i* P | **Pb** | **10 48 10.7** | **-0.9** |
| **MJAR** | **Matsushiro Arr** comp=Z,27nm,19.8s,baz=300,slow=42 | **8.44** | **216** | LR | LR | 10 53 48.0 | |
| **SONM** | **Songino Array** 0.6nm,0.6s,baz=93,slow=7.2,SNR=2.4 0.6nm,0.6s | **26.64** | **293** | P | **P** | **10 53 35.2** | **+1.1** |
| **H11N2** | **WAKE ISLAND Hy** baz=326,slow=76,SNR=11 | **30.39** | **134** | T | T | 11 25 21.0 | |
| **H11N1** | **WAKE ISLAND Hy** baz=326,slow=76,SNR=9.7 | **30.40** | **134** | T | T | 11 25 21.9 | |
| **H11N3** | **WAKE ISLAND Hy** baz=326,slow=76,SNR=8.6 | **30.40** | **134** | T | T | 11 25 18.6 | |
| **H11S1** | **WAKE ISLAND Hy** baz=328,slow=76,SNR=20 | **31.31** | **136** | T | T | 11 26 30.8 | |
| **H11S3** | **WAKE ISLAND Hy** baz=328,slow=76,SNR=12 | **31.31** | **136** | T | T | 11 26 29.8 | |
| **H11S2** | **WAKE ISLAND Hy** baz=328,slow=76,SNR=8.0 | **31.32** | **136** | T | T | 11 26 32.0 | |
| **MKAR** | **Makanchi Array** 0.4nm,0.8s,baz=88,slow=10,SNR=4.6 0.4nm,0.8s | **42.83** | **297** | P | **P** | **10 55 54.2** | **+0.8** |
| **WRA** | **Warramunga Arr** 0.4nm,1.0s,baz=7.7,slow=6.8,SNR=2.1 0.4nm,1.0s | **63.86** | **190** | P | **P** | **10 58 27.3** | **-0.8** |
| **FINES** | **FINESS Array B** 3.4nm,1.1s,baz=52,slow=9.0,SNR=3.4 3.4nm,1.1s | **64.08** | **332** | P | **P** | **10 58 29.5** | **+0.5** |
| **ASAR** | **Alice Springs** 0.3nm,0.8s,baz=18,slow=6.2,SNR=7.1 0.3nm,0.8s | **67.59** | **190** | P | **P** | **10 58 52.6** | **+0.5** |

**IDC 26 11:14:23.4±2.3,7.03S×155.68E,h0km,mb3.7/4, mbtmp3.7/4,MS2.7/1,Error ellipse: s-maj=59.5km s-min=43.0km az=113.0,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** comp=Z,51nm,19.7s,baz=176,slow=33 | **8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WBSI** | **Waikabubak, Su** | **0.74** | **51** | P | | **Pn** | **11 34 37.1** | **-1.1** |
| **PLAI** | **Plampang** | **1.64** | **321** | P | | **Pb** | **11 34 51.6** | **-2.0** |
| PLAI | | | | S | | **Sb** | **11 35 13.2** | **-0.7** |
| **BASI** | **Baing, Sumba** | **1.74** | **94** | P | | **Pb** | **11 34 55.1** | **-0.3** |
| **TWSI** | **Taliwang, Sumb** | **2.34** | **306** | P | | **Pn** | **11 35 01.2** | **+1.0** |
| TWSI | | | | S | | **Sb** | **11 35 30.8** | **-3.3** |
| **EDFI** | **Ende, Flores** | **3.15** | **65** | P | | **Pn** | **11 35 12.7** | **+1.3** |
| **BSSI** | **Bau Bau, Buton** | **4.28** | **23** | P | | **Pn** | **11 35 29.2** | **+2.3** |
| **JAGI** | **Jajag, Banyuwa** | **4.88** | **289** | P | | **Pn** | **11 35 38.3** | **+3.2** |
| **KAPI** | **Kappang** | **5.15** | **11** | P | | Pn | 11 35 41.7 | +2.8 |
| | 2.3nm,0.3s,baz=179,slow=6.5,SNR=5.5 | | | | | | | |
| KAPI | | | | S | | **Sn** | **11 36 39.5** | **+2.3** |
| | 21nm,0.5s,baz=265,slow=23,SNR=5.8 | | | | | | | |
| | 9.6nm,0.4s | | | | | | | |
| **BNSI** | **Bone** | **5.82** | **13** | P | | **Pn** | **11 35 50.0** | **+1.9** |
| | 22nm,1.2s,0.1nm | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.89** | **125** | P | | **Pn** | **11 38 27.7** | **-2.7** |
| | baz=300,slow=13,SNR=2.4 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **19.73** | **135** | P | | **P** | **11 38 52.1** | **+1.1** |
| | 0.1nm,0.3s,baz=313,slow=10,SNR=15 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **58.74** | **350** | P | | **P** | **11 44 19.3** | **+0.6** |
| | 0.4nm,0.6s,baz=164,slow=8.9,SNR=2.2 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |

*IDC **26** 11:35:12.1±4.0,5.84S×102.89E,h0km,mb3.8/6,*
*mbtmp3.8/6,Error ellipse: s-maj=104.6km s-min=60.2km*
*az=39.0*
*DJA **26** 11:35:13.7±1.3,6.3S±4.1×103.0E±0.1,h11km±13km,M4.3/8,*
*mb4.7/2,MLv4.1/8*
**ISC 26 11:35:14.6±1.3,6.2S±0.1×103.0E±0.1,h33km,n20,**
**σ0°79/15,mb3.8/6,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **LWLI** | **Liwa** | **1.61** | **43** | P | | **Pn** | **11 35 40.5** | **-0.3** |
| LWLI | | | | S | | **Sn** | **11 36 00.9** | **+0.4** |
| **KASI** | **Kota Agung** | **1.67** | **67** | P | | **Pn** | **11 35 40.9** | **-0.7** |
| **MNAI** | **Manna** | **1.82** | **0** | P | | **Pn** | **11 35 43.9** | **+0.2** |
| **CNJI** | **Cibinong** | **4.29** | **105** | P | | **Pn** | **11 36 17.4** | **-0.3** |
| **PPSI** | **Pulau Pagai** | **4.50** | **319** | P | | **Pn** | **11 36 21.0** | **+0.5** |
| **CMJI** | **Cimerak** | **5.68** | **106** | P | | **Pn** | **11 36 37.4** | **+0.7** |
| | 51nm,0.9s,0.3nm | | | | | | | |
| **UGM** | **Wanagama** | **7.70** | **103** | P | | **Pn** | **11 37 05.2** | **+0.6** |
| **CMAR** | **Chiang Mai Arr** | **24.82** | **351** | P | | **P** | **11 40 32.6** | **-1.4** |
| | 0.5nm,0.3s,baz=178,slow=8.1,SNR=4.4 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **30.27** | **265** | T | | T | 12 13 03.4 | |
| | baz=91,slow=74,SNR=5.4 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **30.28** | **266** | T | | T | 12 13 10.1 | |
| | baz=91,slow=74,SNR=12 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **30.29** | **265** | T | | T | 12 13 03.8 | |
| | baz=91 | | | | | | | |
| **SONM** | **Songino Array** | **53.88** | **3** | P | | **P** | **11 44 35.6** | **+0.8** |
| | 1.4nm,0.7s,baz=178,slow=8.8,SNR=8.5 | | | | | | | |
| | 1.4nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.86** | **343** | P | | **P** | **11 44 49.6** | **+0.6** |
| | 0.5nm,0.5s,baz=151,slow=8.1,SNR=6.4 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.58** | **25** | P | | **P** | **11 44 53.8** | **-0.3** |
| | 0.6nm,0.6s,baz=183,slow=5.8,SNR=4.3 | | | | | | | |
| | 0.6nm,0.6s | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **59.30** | **219** | T | | T | 12 49 42.5 | |
| | baz=63,slow=75,SNR=46 | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **59.31** | **219** | T | | T | 12 49 41.8 | |
| | baz=63,slow=75,SNR=61 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **59.32** | **219** | T | | T | 12 49 41.6 | |
| | baz=63,slow=75,SNR=39 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.40** | **342** | P | | **P** | **11 45 19.9** | **-0.7** |
| | 0.3nm,0.6s,baz=146,slow=6.7,SNR=2.9 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.84** | **348** | P | | **P** | **11 45 29.4** | **-0.9** |
| | 0.9nm,0.4s,baz=151,slow=3.4,SNR=4.0 | | | | | | | |
| | 0.9nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.93** | **44** | PKPbc | | **PKPab** | **11 54 53.2** | **+1.0** |
| | 0.6nm,0.8s,baz=318,slow=1.7,SNR=4.5 | | | | | | | |

*ISN **26** 11:36:33.8±0.5,34.67N×46.05E,h10km±20km,ML2.8*
*TEH **26** 11:36:35.3,34.67N×46.04E,h10km±580km,ML2.8*
**ISC 26 11:36:36.4±1.1,34.73N±0.06×46.14E±0.06,h10km,n8,**
**σ0°46/11,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.21** | **98** | Pg | | **Pg** | **11 36 41.3** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.54** | **138** | Pg | | **Pg** | **11 36 46.4** | **-0.4** |
| **ILIN** | **Lien** | **0.70** | **74** | Pg | | **Pn** | **11 36 52.0** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.87** | **121** | Pg | | **Pb** | **11 36 54.0** | **+0.3** |
| **IKRK** | **Kirkuk** | **1.62** | **295** | *e*Pn | | **Pn** | **11 37 05.0** | **0.0** |
| IKRK | | | | *e*Sn | | **Sg** | **11 37 28.0** | **-0.4** |
| **IBDR** | **Badra** | **1.62** | **186** | *e*Pn | | **Pn** | **11 37 04.5** | **-0.5** |
| IBDR | | | | *e*Sn | | **Sb** | **11 37 27.0** | **0.0** |
| **IKFM** | **Kafar-mosalman** | **1.86** | **130** | Pn | | **Pg** | **11 37 11.9** | **-0.1** |
| **RAFI** | **Al-Rafai** | **3.00** | **180** | *e*Pn | | **Pn** | **11 37 24.0** | **+0.1** |
| RAFI | | | | *e*Sn | | **Sn** | **11 38 00.5** | **+0.6** |

*SKHL **26** 11:48:50.0±0.1,44.10N×149.80E,h44km±1km,mb4.3/3*
*IDC **26** 11:48:53.6±2.2,44.48N×149.71E,h40km±6km,mb3.8/7,*
*mbtmp3.9/9,ML3.0/2,MS2.9/1,Error ellipse: s-maj=63.6km*
*s-min=21.2km az=177.0*
*MOS **26** 11:48:53.2±2.7,44.76N×149.36E,h40km,mb3.8/1,Error*
*ellipse: s-maj=22.0km s-min=13.7km az=13.9*
**ISC 26 11:48:51.8±1.1,44.2N±0.1×149.67E±0.09,h35km,n20,**
**σ0°84/28,mb3.9/7,1D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.66** | **310** | *e*P | | **Pn** | **11 49 17.9** | **-0.4** |
| KUR | | | | AMB | | AMB | 11 49 18.9 | |
| | 140nm,0.5s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **11 49 38.9** | **+0.5** |
| KUR | | | | A | | A | 11 49 47.7 | |
| | 530nm,0.6s | | | | | | | |
| KUR | | | | A | | A | 11 49 47.7 | |
| | 220nm,0.6s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.66** | **310** | *e*PN | | **Pn** | **11 49 18.0** | **-0.4** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,178nm,0.6s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=N,71nm,0.5s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=E,17nm,0.8s | | | | | | | |
| **SHO** | **Shikotan** | **2.07** | **262** | *e*P | | **Pn** | **11 49 23.0** | **-1.0** |
| SHO | | | | AMB | | AMB | 11 49 25.8 | |
| | comp=E,20nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **11 49 47.1** | **-1.5** |
| SHO | | | | A | | A | 11 49 48.8 | |
| | comp=E,250nm,0.6s | | | | | | | |
| SHO | | | | A | | A | 11 49 48.8 | |
| | comp=E,260nm,0.6s | | | | | | | |
| **SHO** | **Shikotan** | **2.07** | **262** | *e*PN | | **Pn** | **11 49 24.9** | **+0.9** |
| SHO | | | | *e*S | | **Sn** | **11 49 47.0** | **-1.5** |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,22nm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,138nm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,239nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.75** | **268** | *e*P | | **Pn** | **11 49 33.2** | **-0.1** |
| YUK | | | | AMB | | AMB | 11 49 34.2 | |
| | comp=E,60nm,0.3s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **11 50 05.5** | **+0.3** |
| YUK | | | | A | | A | 11 50 14.0 | |
| | comp=E,100nm,0.5s | | | | | | | |
| YUK | | | | A | | A | 11 50 14.0 | |
| | comp=E,200nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.75** | **268** | *e*PN | | **Pn** | **11 49 33.2** | **-0.1** |
| YUK | | | | *e*S | | **Sn** | **11 50 05.5** | **+0.3** |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,58nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=N,7.0nm,0.1s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,89nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,211nm,0.5s | | | | | | | |
| **ASAJ** | **Asahikawa** | **5.09** | **272** | P | | **Pn** | **11 50 07.6** | **+2.1** |
| | comp=E,0.3nm,0.3s,baz=41,slow=20,SNR=2.4 | | | | | | | |
| | comp=E,11nm,1.1s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.59** | **302** | *e*PN | | Pn | 11 50 03.0 | -9.4 |
| **USRK** | **Ussuriysk Ar.** | **12.69** | **276** | P | | **Pn** | **11 51 49.5** | **-0.2** |
| | comp=E,0.2nm,0.3s,baz=80,slow=15,SNR=5.4 | | | | | | | |
| | comp=E,0.7nm,0.5s | | | | | | | |
| **KLR** | **Kul'dur** | **13.28** | **299** | LR | | LR | 11 58 04.5 | |
| | comp=E,50nm,18.0s,baz=180,slow=42 | | | | | | | |
| **SONM** | **Songino Array** | **29.98** | **292** | P | | **P** | **11 54 57.7** | **+0.8** |
| | comp=E,1.1nm,0.8s,baz=80,slow=8.1,SNR=5.4 | | | | | | | |
| | comp=E,1.1nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.99** | **298** | P | | **P** | **11 57 12.1** | **+0.6** |
| | comp=E,2.1nm,0.7s,baz=70,slow=7.5,SNR=15 | | | | | | | |
| MKAR | | | | pP | | **sP** | **11 57 24.0** | **0.0** |
| | comp=E,1.6nm,0.7s,baz=70,slow=7.1,SNR=6.6 | | | | | | | |
| | comp=E,2.1nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **46.79** | **304** | *e*P | | **P** | **11 57 17.7** | **+0.1** |
| **KURK** | **Kurchatov** | **46.79** | **304** | P | | **P** | **11 57 17.7** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **46.88** | **304** | P | | **P** | **11 57 17.7** | **-0.6** |
| | comp=E,0.5nm,0.4s,baz=73,slow=7.9,SNR=4.9 | | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.30** | **334** | P | | **P** | **11 59 28.6** | **-1.1** |
| | comp=E,1.5nm,0.6s,baz=36,slow=9.6,SNR=12 | | | | | | | |
| FINES | | | | pP | | **sP** | **11 59 41.9** | **-0.3** |
| | comp=E,2.2nm,0.7s,baz=45,slow=8.4,SNR=3.2 | | | | | | | |
| | comp=E,1.5nm,0.6s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.84** | **340** | P | | **P** | **11 59 58.3** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=30,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.84** | **340** | P | | **P** | **11 59 58.3** | **-0.1** |
| | comp=Z,1.2nm,0.8s,baz=32,slow=6.1,SNR=5.4 | | | | | | | |
| NOA | | | | pP | | **sP** | **12 00 09.8** | **-1.2** |
| | comp=Z,1.1nm,0.7s,baz=30,slow=6.3,SNR=3.0 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **69.98** | **338** | P | | **P** | **11 59 59.1** | **-0.2** |
| | comp=Z,2.6nm,0.7s,baz=54,slow=7.7,SNR=4.7 | | | | | | | |
| HFS | | | | pP | | **sP** | **12 00 10.7** | **-1.0** |
| | comp=Z,1.3nm,0.6s,baz=28,slow=6.7,SNR=2.3 | | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.89** | **58** | P | | **P** | **12 01 03.3** | **+0.8** |
| | comp=Z,0.4nm,0.7s,baz=293,slow=3.7,SNR=6.4 | | | | | | | |
| TXAR | | | | pP | | **sP** | **12 01 14.2** | **-0.5** |
| | comp=Z,0.3nm,0.6s,baz=318,slow=5.1,SNR=4.2 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |

*FUNV **26** 11:53:24.0,12.16N×70.72W,h34km,MW3.8*
*RSNC **26** 11:53:25.8±0.0,12.12N±2.7×70.78W±0.9,h25km±3km,M4.2,mb4.5,*
*mB4.9,ML3.6,Mw(mB)4.2*
**ISC 26 11:53:22.5±1.2,12.12N±0.06×70.78W±0.04,h74km±24km,**
**n33,σ2°13/49,1C,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AUA1** | **Aruba** | **0.84** | **63** | P | | **Pn** | **11 53 40.9** | **+1.7** |
| AUA1 | | | | S | | **Sn** | **11 53 52.7** | **+1.0** |
| **URIC** | **Uribia, Colomb** | **1.26** | **251** | P | | **Pn** | **11 53 45.5** | **+1.0** |
| URIC | | | | S | | **Sn** | **11 54 01.6** | **+0.6** |
| **JACV** | **Jacura** | **2.17** | **118** | *e*P | | **Pn** | **11 53 57.1** | **+0.6** |
| JACV | | | | *e*S | | **Sn** | **11 54 21.1** | **-1.4** |
| **CRJC** | **Cerrejon, Guaj** | **2.34** | **242** | P | | **Pn** | **11 53 59.6** | **+0.7** |
| CRJC | | | | S | | **Sn** | **11 54 26.4** | **-0.3** |
| **TEPV** | **Terepaima** | **2.65** | **144** | *e*P | | **Pn** | **11 54 03.6** | **+0.5** |
| TEPV | | | | *e*S | | **Sn** | **11 54 32.0** | **-2.2** |
| **MCQV** | **Machiques** | **2.69** | **220** | *e*P | | **Pn** | **11 54 04.6** | **+1.1** |
| MCQV | | | | *e*S | | **Sn** | **11 54 35.3** | **+0.2** |
| **SDV** | **Santo Domingo** | **3.22** | **177** | P | | **Pn** | **11 54 11.9** | **+0.9** |
| SDV | | | | S | | **Sn** | **11 54 46.3** | **-2.0** |
| **TURV** | **Turiamo** | **3.33** | **120** | *e*P | | Pn | 11 54 11.4 | -0.8 |
| TURV | | | | *e*S | | **Sn** | **11 54 47.1** | **-3.5** |
| **SMRC** | **Santa Marta, M** | **3.51** | **255** | P | | **Pn** | **11 54 16.9** | **+2.2** |
| SMRC | | | | S | | **Sn** | **11 54 53.2** | **-1.9** |
| **BENV** | **Beln** | **3.79** | **124** | *e*P | | **Pn** | **11 54 19.9** | **+1.4** |
| BENV | | | | *e*S | | **Sn** | **11 54 58.9** | **-3.1** |
| **SOCV** | **Socops** | **3.82** | **181** | *e*P | | **Pn** | **11 54 20.1** | **+1.2** |
| SOCV | | | | *e*S | | **Sn** | **11 55 00.8** | **-1.8** |
| **ARGC** | **Ariguani, Magd** | **4.08** | **237** | P | | **Pn** | **11 54 23.0** | **+0.5** |
| ARGC | | | | S | | **Sn** | **11 55 07.5** | **-1.7** |
| **BAUV** | **El Baul** | **4.15** | **139** | *e*P | | **Pn** | **11 54 23.8** | **+0.3** |
| BAUV | | | | *e*S | | **Sn** | **11 55 07.7** | **-3.1** |
| **TACV** | **Tcata** | **4.17** | **118** | *e*P | | Pn | 11 54 23.3 | -0.5 |
| TACV | | | | *e*S | | **Sn** | **11 55 07.9** | **-3.6** |
| **FUNV** | **FUNVISIS** | **4.22** | **113** | *e*P | | Pn | 11 54 22.9 | -1.6 |
| FUNV | | | | *e*S | | Sn | 11 55 08.8 | -3.9 |
| **CAPV** | **Capacho** | **4.50** | **200** | *e*P | | **Pn** | **11 54 29.0** | **+0.6** |
| CAPV | | | | *e*S | | **Sn** | **11 55 17.2** | **-2.3** |
| **OCAC** | **Ocana** | **4.60** | **213** | P | | **Pn** | **11 54 30.1** | **+0.3** |
| OCAC | | | | S | | **Sn** | **11 55 19.5** | **-2.5** |
| **SJCC** | **San Jacinto, C** | **4.86** | **243** | P | | **Pn** | **11 54 34.7** | **+1.5** |
| SJCC | | | | S | | **Sn** | **11 55 26.9** | **-1.3** |
| **PAMC** | **Pamplona, Colo** | **5.12** | **202** | P | | **Pn** | **11 54 38.0** | **+0.9** |
| PAMC | | | | S | | **Sn** | **11 55 32.5** | **-2.6** |
| **BARC** | **Barichara** | **5.99** | **204** | P | | **Pn** | **11 54 50.2** | **+1.4** |
| BARC | | | | S | | **Sn** | **11 55 55.2** | **-0.9** |
| **ZARC** | **Zaragoza, Cauc** | **6.11** | **222** | P | | **Pn** | **11 54 50.1** | **-0.2** |
| | 35nm,0.9s,623nm | | | | | | | |
| ZARC | | | | S | | Sn | 11 55 54.5 | -4.3 |
| | 35nm,0.9s,623nm | | | | | | | |
| **CACV** | **CAICARA DEL OR** | **6.16** | **137** | *e*P | | Pn | 11 54 55.8 | +4.9 |
| CACV | | | | *e*S | | **Sn** | **11 56 04.4** | **+4.5** |
| **PCRV** | **Puerto La Cruz** | **6.33** | **107** | *e*P | | Pn | 11 54 52.6 | -0.6 |
| PCRV | | | | *e*S | | Sn | 11 55 59.1 | -5.0 |
| **UREC** | **San Jos de Ur** | **6.39** | **228** | P | | Pn | 11 54 58.9 | +4.8 |
| UREC | | | | S | | **Sn** | **11 56 02.0** | **-3.7** |
| **RUSC** | **La Rusia** | **6.60** | **200** | P | | **Pn** | **11 54 58.3** | **+1.0** |
| **PTBC** | **PUERTO BERRIO,** | **6.63** | **214** | P | | Pn | 11 54 56.9 | -0.5 |
| | 26nm,0.6s | | | | | | | |
| **SDDR** | **Presa de Saban** | **6.84** | **356** | P | | Pn | 11 55 05.6 | +5.4 |
| | 32nm,0.9s | | | | | | | |
| SDDR | | | | S | | **Sn** | **11 56 13.8** | **-2.8** |
| | 32nm,0.9s | | | | | | | |
| **SPBC** | **San Pablo de B** | **7.21** | **207** | P | | **Pn** | **11 55 06.0** | **+0.7** |
| | 15nm,0.4s | | | | | | | |
| SPBC | | | | S | | **Sn** | **11 56 23.9** | **-1.9** |
| | 15nm,0.4s | | | | | | | |
| **CHIC** | **Chingaza** | **8.00** | **202** | P | | **Pn** | **11 55 17.6** | **+1.2** |
| | 15nm,0.7s | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **8.81** | **332** | P | | **Pn** | **11 55 29.6** | **+2.6** |
| | 19nm,1.0s | | | | | | | |
| GTBY | | | | S | | Sn | 11 56 58.3 | -6.4 |
| | 19nm,1.0s | | | | | | | |
| **MTDJ** | **Mount Denham** | **8.91** | **314** | P | | **Pn** | **11 55 30.5** | **+2.0** |
| | 44nm,1.3s | | | | | | | |
| MTDJ | | | | S | | **Sn** | **11 57 01.6** | **-5.8** |
| | 44nm,1.3s | | | | | | | |
| **ORTC** | **Ortega, Tolima** | **9.28** | **209** | P | | **Pn** | **11 55 35.7** | **+2.0** |
| | 11nm,0.5s | | | | | | | |
| ORTC | | | | S | | **Sn** | **11 57 16.8** | **+0.2** |
| | 11nm,0.5s | | | | | | | |
| **PRAC** | **Prado** | **9.29** | **206** | P | | Pn | 11 55 33.7 | -0.1 |

*SKHL **26** 11:54:36.1±0.7,44.10N×149.80E,h47km±3km,mb4.3/3*
*MOS **26** 11:54:38.1±1.1,44.31N×149.47E,h58km,mb3.8/1,Error*
*ellipse: s-maj=27.0km s-min=15.1km az=20.0*
*IDC **26** 11:54:42.7±11.0,44.94N×149.25E,h42km±8km,mb3.8/6,*
*mbtmp3.9/8,ML2.8/2,Error ellipse: s-maj=262.6km*
*s-min=30.9km az=152.0*
**ISC 26 11:54:36.6±1.5,44.2N±0.1×149.7E±0.1,h35km,n17,**
**σ0°84/26,mb4.0/6,1D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.70** | **310** | *i*P | | **Pn** | **11 55 03.4** | **-0.3** |
| KUR | | | | AMB | | AMB | 11 55 05.1 | |
| | 140nm,0.5s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **11 55 24.5** | **+0.2** |
| KUR | | | | A | | A | 11 55 32.6 | |
| | 340nm,0.6s | | | | | | | |
| KUR | | | | A | | A | 11 55 32.6 | |
| | 340nm,0.6s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.70** | **310** | *d i*PN | | **Pn** | **11 55 03.3** | **-0.4** |
| KUR | | | | *e*S | | **Sn** | **11 55 24.8** | **+0.5** |
| KUR | | | | pmax | | pmax | | |
| | comp=N,42nm,0.5s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,137nm,0.5s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,395nm,0.6s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,219nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **2.09** | **263** | *e*P | | **Pn** | **11 55 08.6** | **-0.5** |
| SHO | | | | AMB | | AMB | 11 55 11.0 | |
| | comp=N,20nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **11 55 32.5** | **-1.4** |
| SHO | | | | A | | A | 11 55 33.9 | |
| | comp=N,170nm,0.5s | | | | | | | |
| SHO | | | | A | | A | 11 55 33.9 | |
| | comp=N,170nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **2.09** | **263** | *e*PN | | **Pn** | **11 55 09.7** | **+0.6** |
| SHO | | | | *e*S | | **Sn** | **11 55 31.9** | **-2.0** |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,21nm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,116nm,0.4s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,162nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.77** | **269** | *e*P | | **Pn** | **11 55 19.6** | **+1.2** |
| YUK | | | | AMB | | AMB | 11 55 20.9 | |
| | comp=E,90nm,0.4s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **11 55 50.8** | **+0.1** |
| YUK | | | | A | | A | 11 55 52.0 | |
| | comp=E,210nm,0.5s | | | | | | | |
| YUK | | | | A | | A | 11 55 52.0 | |
| | comp=E,260nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.77** | **269** | *e*PN | | **Pn** | **11 55 19.9** | **+1.5** |
| YUK | | | | *e*S | | **Sn** | **11 55 50.4** | **-0.3** |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,61nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,158nm,0.4s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,149nm,0.6s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **5.12** | **272** | *e*P | | **Pn** | **11 55 51.7** | **+1.0** |
| **ASAJ** | **Asahikawa** | **5.12** | **272** | P | | **Pn** | **11 55 51.6** | **+1.0** |
| | comp=N,0.2nm,0.3s,baz=250,slow=12,SNR=1.8 | | | | | | | |
| | comp=N,9.6nm,1.1s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.72** | **276** | P | | **Pn** | **11 57 33.9** | **-1.0** |
| | comp=N,0.1nm,0.3s,baz=80,slow=14,SNR=4.2 | | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **30.02** | **293** | P | | **P** | **12 00 42.4** | **+0.3** |
| | comp=N,0.4nm,0.4s,baz=95,slow=7.8,SNR=4.2 | | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.03** | **298** | P | | **P** | **12 02 57.2** | **+0.7** |
| | comp=N,1.5nm,0.7s,baz=71,slow=8.4,SNR=13 | | | | | | | |
| MKAR | | | | pP | | **sP** | **12 03 09.2** | **+0.6** |
| | comp=N,1.3nm,0.8s,baz=72,slow=7.8,SNR=7.4 | | | | | | | |
| | comp=N,1.5nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **46.83** | **304** | *e*P | | **P** | **12 03 02.8** | **+0.1** |
| **KURK** | **Kurchatov** | **46.83** | **304** | P | | **P** | **12 03 02.8** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **46.92** | **304** | P | | **P** | **12 03 02.8** | **-0.6** |
| | comp=N,0.5nm,0.4s,baz=72,slow=8.0,SNR=5.0 | | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.34** | **334** | P | | **P** | **12 05 14.4** | **-0.3** |
| | comp=N,1.6nm,0.6s,baz=41,slow=10,SNR=10.0 | | | | | | | |
| FINES | | | | pP | | **sP** | **12 05 27.0** | **-0.3** |
| | comp=N,0.9nm,0.6s,baz=38,slow=9.6,SNR=1.7 | | | | | | | |
| | comp=N,1.6nm,0.6s | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.88** | **340** | P | | **P** | **12 05 42.9** | **-0.5** |
| | comp=N,1.0nm,0.8s,baz=30,slow=6.6,SNR=4.1 | | | | | | | |
| NOA | | | | pP | | **sP** | **12 05 55.3** | **-0.8** |
| | comp=N,1.0nm,0.7s,baz=31,slow=6.2,SNR=3.2 | | | | | | | |
| | comp=N,1.0nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **70.02** | **338** | P | | **P** | **12 05 44.4** | **+0.2** |
| | comp=N,3.9nm,0.8s,baz=104,slow=6.3,SNR=4.7 | | | | | | | |
| | comp=N,3.9nm,0.8s | | | | | | | |

*ISN **26** 11:54:42.8±1.3,34.62N×46.18E,h5km±12km,ML2.9*
*TEH **26** 11:54:43.6,34.62N×46.18E,h7km±185km,ML2.8*
**ISC 26 11:54:44.7±1.1,34.63N±0.04×46.20E±0.05,h10km,n10,**
**σ0°95/14,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.17** | **66** | Pg | | **Pg** | **11 54 48.0** | **-0.6** |
| **IGHG** | **Ghaleghazi** | **0.43** | **134** | Pg | | **Pg** | **11 54 52.6** | **-0.7** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **205** | Pg | | **Pg** | **11 54 54.6** | **-1.2** |
| **ILIN** | **Lien** | **0.69** | **65** | Pg | | **Pg** | **11 54 57.3** | **-0.9** |
| **KCHF** | **Cheshme Sefid,** | **0.78** | **117** | Pg | | **Pg** | **11 54 58.9** | **-1.0** |
| **IBZA** | **Bozab** | **1.38** | **96** | Pg | | **Pn** | **11 55 10.3** | **-0.1** |
| **IBDR** | **Badra** | **1.53** | **188** | *e*Pn | | **Pn** | **11 55 12.0** | **-0.1** |
| IBDR | | | | *e*Sn | | **Sb** | **11 55 33.2** | **+0.5** |
| **IKRK** | **Kirkuk** | **1.71** | **297** | *e*Pn | | **Pn** | **11 55 15.0** | **+0.4** |
| IKRK | | | | *e*Sn | | **Sb** | **11 55 38.3** | **+0.5** |
| IKRK | | | | AML | | AML | 11 55 45.9 | |
| | comp=E,107nm,0.5s | | | | | | | |
| IKRK | | | | AML | | AML | 11 55 46.5 | |
| | comp=N,210nm,0.5s | | | | | | | |
| **BHD** | **Baghdad** | **2.03** | **229** | *e*Pn | | **Pn** | **11 55 19.0** | **0.0** |
| BHD | | | | *e*Sn | | **Sb** | **11 55 46.0** | **-1.0** |
| **RAFI** | **Al-Rafai** | **2.90** | **181** | *e*Pn | | **Pn** | **11 55 32.0** | **+1.0** |
| RAFI | | | | *e*Sn | | **Sn** | **11 56 07.6** | **+1.7** |

*NEIC **26** 11:57:56.2±1.4,20.7S±0.1×173.8W±0.1,h10km±1km,*
*mb4.4/11,Error ellipse: s-maj=22.9km s-min=19.8km*
*az=345.0*
*IDC **26** 11:57:58.1±0.8,20.82S×174.26W,h0km,mb4.1/8,*
*mbtmp4.1/9,ML4.2/1,MS3.5/10,Error ellipse:*
*s-maj=30.7km s-min=22.5km az=125.0*
**ISC 26 11:57:57.2±0.6,20.8S±0.1×173.79W±0.10,h10km,n38,**
**σ2°29/27,mb4.3/14,MS3.5/8,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **NIUE** | **Niue** | **4.01** | **66** | | | **Pn** | **11 58 58.0** | **-0.6** |
| **AFI** | **Afiamalu** | **7.10** | **16** | Pn | | **Pn** | **11 59 38.9** | **-2.4** |
| **MSVF** | **Nonsavu** | **8.29** | **290** | Pn | | Pn | 12 00 04.0 | +6.5 |
| **MSVF** | **Nonsavu** | **8.29** | **290** | LR | | LR | 12 02 51.9 | |
| | comp=Z,518nm,19.3s,baz=163,slow=37 | | | | | | | |
| **RAR** | **Rarotonga** | **13.10** | **94** | Pn | | **Pn** | **12 01 02

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,0.1nm,0.3s | | | | | | | |
| **SNAA** | **Sanae** | **87.57** | **177** | P | **P** | **12 10 40.9** | **-4.3** |
| SNAA | | | | IAmb | IAmb | 12 10 55.1 | |
| | comp=Z,3.3nm,1.3s | | | | | | |
| **N23A** | **Red Feather La** | **87.85** | **45** | P | P | 12 10 40.5 | -6.8 |
| **NNA** | **Nana** | **92.17** | **104** | LR | LR | 12 47 38.6 | |
| | comp=Z,10nm,18.5s,baz=26,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.94** | **288** | P | **P** | **12 11 17.7** | **+1.9** |
| | comp=Z,0.4nm,0.2s,baz=148,slow=3.3,SNR=6.8 | | | | | | |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **116.94** | **317** | PKP | **PKiKP** | **12 16 43.6** | **+1.7** |
| | comp=Z,0.2nm,0.3s,baz=79,slow=1.7,SNR=4.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **121.83** | **320** | PKP | **PKiKP** | **12 16 52.7** | **+1.2** |
| | comp=Z,0.9nm,0.6s,baz=126,slow=2.6,SNR=4.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.08** | **334** | PKP | **PKiKP** | **12 17 35.9** | **-2.7** |
| | comp=Z,2.5nm,0.6s,baz=42,slow=4.3,SNR=10 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.90** | **315** | PKPbc | **PKPab** | **12 17 50.5** | **-3.2** |
| | comp=Z,1.6nm,0.8s,baz=133,slow=2.5,SNR=12 | | | | | | |

*CATAC **26** 12:02:16.9±0.6, 13°.65N×91°.41W, h10km, ML3.7*
*GCG **26** 12:02:23.1±0.6, 14°.13N×91°.47W, h49km±5km, MD3.9*
**ISC 26 12:02:16.9**±2.2, **13.74N**±0.09×**91.40W**±0.06, **h7**km±11km, **n23**, σ1§**06**/35, **Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SULM** | **Suchitepequez,** | **0.58** | **344** | *eP* | | **Pb** | | **12 02 31.0** | **+1.6** |
| SULM | | | | *eS* | | **Sb** | | **12 02 37.7** | **-0.2** |
| **RTAL** | **Retalhuleu** | **0.83** | **340** | *i* S | | **Sn** | | **12 02 46.5** | **-1.0** |
| **FUG** | **Fuego 3** | **0.89** | **38** | *eP* | | **Pn** | | **12 02 37.0** | **+1.0** |
| FUG | | | | *eS* | | **Sn** | | **12 02 48.2** | **-1.1** |
| **STG3** | **Santiaguito 3,** | **0.98** | **350** | *eP* | | **Pg** | | **12 02 36.2** | **+0.5** |
| STG3 | | | | *eS* | | **Sg** | | **12 02 45.9** | **-2.5** |
| **SOKI** | **Kika Raxquin** | **1.07** | **360** | *i* P | | **Pg** | | **12 02 36.8** | **-0.7** |
| SOKI | | | | *i* S | | **Sn** | | **12 02 54.0** | **-0.1** |
| SOKI | | | | IAML | | | | 12 02 56.8 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **CHTG** | **Tecpan** | **1.09** | **22** | *i* P | | **Pb** | | **12 02 38.3** | **0.0** |
| CHTG | | | | *i* S | | **Sn** | | **12 02 56.0** | **+1.6** |
| CHTG | | | | IAML | | | | 12 03 06.5 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| **GUMI** | **Mixco** | **1.17** | **41** | *i* P | | **Pg** | | **12 02 39.3** | **-0.1** |
| GUMI | | | | IAML | | | | 12 03 01.8 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **NBG** | **Las Nubes** | **1.33** | **50** | *eP* | | **Pg** | | **12 02 45.2** | **+2.8** |
| **HUEH** | **Huehuetenango** | **1.57** | **356** | *i* P | | **Pb** | | **12 02 46.5** | **+0.1** |
| HUEH | | | | IAML | | | | 12 03 20.8 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **NUBE** | **Las Nubes** | **1.58** | **84** | *i* P | | **Pn** | | **12 02 45.4** | **-0.1** |
| NUBE | | | | IAML | | | | 12 03 16.8 | |
| | comp=Z,270nm,1.0s | | | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.60** | **81** | *i* S | | **Sb** | | **12 03 05.9** | **-1.3** |
| **CEVE** | **Cerro Verde** | **1.73** | **87** | *i* P | | **Pn** | | **12 02 48.0** | **+0.4** |
| CEVE | | | | *i* S | | **Sn** | | **12 03 09.3** | **-0.8** |
| CEVE | | | | IAML | | | | 12 03 19.6 | |
| | comp=Z,580nm,1.0s | | | | | | | | |
| **JUAM** | **Asuncion Mita** | **1.75** | **70** | *i* P | | **Pn** | | **12 02 47.0** | **-0.7** |
| JUAM | | | | *i* S | | **Sg** | | **12 03 12.7** | **-0.5** |
| JUAM | | | | IAML | | | | 12 03 16.1 | |
| | comp=Z,520nm,1.0s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.90** | **92** | *i* P | | **Pn** | | **12 02 48.0** | **-1.9** |
| JAYA | | | | *i* S | | **Sn** | | **12 03 14.6** | **+0.4** |
| JAYA | | | | IAML | | | | 12 03 28.9 | |
| | comp=Z,650nm,1.0s | | | | | | | | |
| **PMON** | **Piamonte** | **2.03** | **91** | *i* P | | **Pn** | | **12 02 51.0** | **-0.6** |
| PMON | | | | *i* S | | **Sn** | | **12 03 18.0** | **+0.7** |
| PMON | | | | IAML | | | | 12 03 34.4 | |
| | comp=Z,540nm,1.0s | | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **2.07** | **87** | *i* S | | **Sn** | | **12 03 18.1** | **-0.2** |
| **MTO3** | **Montecristo** | **2.09** | **71** | *i* P | | **Pn** | | **12 02 52.8** | **+0.3** |
| MTO3 | | | | IAML | | | | 12 03 23.4 | |
| | comp=Z,180nm,1.0s | | | | | | | | |
| **ESQI** | **Esquipulas** | **2.16** | **68** | *i* P | | **Pn** | | **12 02 54.2** | **+0.8** |
| ESQI | | | | *i* S | | **Sb** | | **12 03 22.8** | **-0.6** |
| ESQI | | | | IAML | | | | 12 03 27.8 | |
| | comp=Z,330nm,1.0s | | | | | | | | |
| **LOMA** | **Loma Larga** | **2.17** | **92** | *i* P | | **Pn** | | **12 02 53.6** | **0.0** |
| LOMA | | | | *i* S | | **Sn** | | **12 03 20.3** | **-0.5** |
| LOMA | | | | IAML | | | | 12 03 31.8 | |
| | comp=Z,420nm,1.0s | | | | | | | | |
| **LLGN** | **La Laguna** | **2.42** | **80** | *i* P | | **Pn** | | **12 02 57.8** | **+0.8** |
| LLGN | | | | IAML | | | | 12 03 15.2 | |
| | comp=Z,520nm,1.0s | | | | | | | | |
| **COEG** | **Centro de Oper** | **2.46** | **92** | *i* P | | **Pn** | | **12 02 57.6** | **+0.2** |
| COEG | | | | *i* S | | **Sn** | | **12 03 27.2** | **-0.6** |
| COEG | | | | IAML | | | | 12 03 38.4 | |
| | comp=Z,180nm,1.0s | | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.60** | **91** | *i* P | | **Pn** | | **12 03 00.1** | **+0.7** |
| SCLA | | | | IAML | | | | 12 03 49.8 | |
| | comp=Z,92nm,1.0s | | | | | | | | |
| **CCIG** | **Comitan** | **2.62** | **344** | *i* P | | **Pn** | | **12 03 00.8** | **+0.9** |
| CCIG | | | | IAML | | | | 12 03 50.6 | |
| | comp=Z,190nm,1.0s | | | | | | | | |

*SJA **26** 12:02:14.8±0.8, 33°.10S×72°.46W, h15km, ML3.2, MW3.5*
*GUC **26** 12:02:16.8±0.7, 33°.11S×72°.16W, h22km±8km, ML3.1*
**ISC 26 12:02:17.9**±2.1, **33°24S**±0°.04×**72°09W**±0°.10, **h9**km±9km, **n31**, σ1§**80**/61, **7D**, **Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VA01** | **Torpederas** | **0.43** | **60** | ⇓ *iP* | | **Pg** | | **12 02 25.5** | **-0.8** |
| VA01 | | | | *i* S | | **Sg** | | **12 02 32.0** | **+0.1** |
| VA01 | | | | IAML | | | | 12 02 32.9 | |
| | comp=E,2μm,0.1s | | | | | | | | |
| **VA05** | **Santo Domingo** | **0.58** | **137** | ⇓ *iP* | | **Pg** | | **12 02 30.1** | **+0.9** |
| VA05 | | | | *i* S | | **Sg** | | **12 02 40.2** | **+3.4** |
| VA05 | | | | IAML | | | | 12 02 41.6 | |
| | comp=N,1μm,0.1s | | | | | | | | |
| **MT02** | **Curacav** | **0.80** | **92** | ⇓ *iP* | | **Pb** | | **12 02 32.2** | **-1.7** |
| MT02 | | | | *i* S | | **Sb** | | **12 02 43.9** | **-0.9** |
| **MT01** | **Popeta** | **0.94** | **132** | *eP* | | **Pn** | | **12 02 35.6** | **-1.7** |
| MT01 | | | | *i* S | | **Sb** | | **12 02 49.3** | **+0.4** |
| MT01 | | | | IAML | | | | 12 02 50.4 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| **ROCH** | **El Roble** | **0.94** | **74** | ⇓ *iP* | | **Pb** | | **12 02 34.1** | **-2.4** |
| ROCH | | | | *i* S | | **Sb** | | **12 02 46.9** | **-2.3** |
| **VA06** | **Catapilco** | **0.95** | **45** | ⇓ *iP* | | **Pb** | | **12 02 33.3** | **-3.1** |
| VA06 | | | | *i* S | | **Sb** | | **12 02 45.3** | **-3.7** |
| VA06 | | | | IAML | | | | 12 02 48.2 | |
| | comp=E,1μm,0.4s | | | | | | | | |
| **MT09** | **Talagante** | **1.07** | **121** | ⇓ *iP* | | **Pn** | | **12 02 37.6** | **-1.5** |
| MT09 | | | | *i* S | | **Sb** | | **12 02 52.8** | **+0.1** |
| MT09 | | | | IAML | | | | 12 02 53.8 | |
| | comp=E,789nm,0.2s | | | | | | | | |
| **MT05** | **Renca** | **1.14** | **98** | *eP* | | **Pn** | | **12 02 40.0** | **-0.1** |
| MT05 | | | | *i* S | | **Sn** | | **12 02 56.1** | **+0.2** |
| MT05 | | | | IAML | | | | 12 02 58.4 | |
| | comp=N,261nm,0.4s | | | | | | | | |
| **PEL** | **Peldehue** | **1.18** | **86** | ⇓ *iP* | | **Pn** | | **12 02 38.7** | **-1.9** |
| PEL | | | | *i* S | | **Sn** | | **12 02 55.5** | **-1.3** |
| PEL | | | | IAML | | | | 12 03 00.4 | |
| | comp=E,368nm,0.4s | | | | | | | | |
| **MT10** | **Hacienda Santa** | **1.30** | **92** | *eP* | | **Pn** | | **12 02 40.4** | **-2.0** |
| MT10 | | | | *i* S | | **Sn** | | **12 02 58.9** | **-1.0** |
| MT10 | | | | IAML | | | | 12 03 02.7 | |
| | comp=N,1μm,0.3s | | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **1.31** | **97** | *eP* | | **Pn** | | **12 02 41.2** | **-1.2** |
| MT14 | | | | *i* S | | **Sn** | | **12 02 59.0** | **-1.1** |
| MT14 | | | | IAML | | | | 12 03 00.7 | |
| | comp=E,577nm,0.5s | | | | | | | | |
| **MT16** | **CCHEN** | **1.32** | **99** | *eP* | | **Pn** | | **12 02 41.4** | **-1.2** |
| MT16 | | | | *i* S | | **Sn** | | **12 03 00.0** | **-0.4** |
| MT16 | | | | IAML | | | | 12 03 05.8 | |
| | comp=E,246nm,0.5s | | | | | | | | |
| **MT03** | **Universidad Ad** | **1.35** | **101** | *eP* | | **Pn** | | **12 02 41.8** | **-1.1** |
| MT03 | | | | *i* S | | **Sn** | | **12 03 00.0** | **-1.0** |
| MT03 | | | | IAML | | | | 12 03 05.3 | |
| | comp=E,818nm,0.2s | | | | | | | | |
| **MT15** | **Las Vizcachas** | **1.37** | **106** | *eP* | | **Pn** | | **12 02 42.1** | **-1.1** |
| MT15 | | | | *eS* | | **Sn** | | **12 03 01.2** | **-0.4** |
| MT15 | | | | IAML | | | | 12 03 09.0 | |
| | comp=E,747nm,0.3s | | | | | | | | |
| **VA03** | **San Esteban** | **1.38** | **70** | *eP* | | **Pn** | | **12 02 40.8** | **-2.5** |
| VA03 | | | | *i* S | | **Sn** | | **12 02 59.5** | **-2.2** |
| VA03 | | | | IAML | | | | 12 03 04.0 | |
| | comp=N,541nm,0.3s | | | | | | | | |
| **MT12** | **Pirque** | **1.38** | **112** | *eP* | | **Pn** | | **12 02 42.3** | **-1.1** |
| MT12 | | | | *i* S | | **Sn** | | **12 03 01.6** | **-0.1** |
| MT12 | | | | IAML | | | | 12 03 07.8 | |
| | comp=E,556nm,0.4s | | | | | | | | |
| **FCH** | **Farellones** | **1.51** | **94** | *eP* | | **Pn** | | **12 02 44.4** | **-1.0** |
| FCH | | | | *i* S | | **Sn** | | **12 03 05.1** | **-0.2** |
| FCH | | | | IAML | | | | 12 03 09.2 | |
| | comp=N,323nm,0.2s | | | | | | | | |
| **MT13** | **San Alfonso** | **1.59** | **109** | *eP* | | **Pn** | | **12 02 45.8** | **-0.5** |
| MT13 | | | | *i* S | | **Sn** | | **12 03 07.7** | **+0.7** |
| MT13 | | | | IAML | | | | 12 03 13.5 | |
| | comp=E,607nm,0.3s | | | | | | | | |
| **MT04** | **Ro Olivares** | **1.64** | **96** | *eP* | | **Pn** | | **12 02 46.2** | **-0.9** |
| MT04 | | | | *i* S | | **Sn** | | **12 03 08.9** | **+0.4** |
| MT04 | | | | IAML | | | | 12 03 12.3 | |
| | comp=N,375nm,0.4s | | | | | | | | |
| **LMEL** | **Las Melosas** | **1.69** | **112** | *eP* | | **Pn** | | **12 02 47.4** | **-0.3** |
| LMEL | | | | *eS* | | **Sn** | | **12 03 10.7** | **+1.2** |
| LMEL | | | | IAML | | | | 12 03 15.5 | |
| | comp=N,549nm,0.2s | | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.75** | **97** | *eP* | | **Pn** | | **12 02 48.4** | **-0.2** |
| MT08 | | | | *i* S | | **Sn** | | **12 03 11.9** | **+0.8** |
| MT08 | | | | IAML | | | | 12 03 17.4 | |
| | comp=N,220nm,0.5s | | | | | | | | |
| **AUSP** | **Uspallata** | **2.49** | **67** | *eP* | | **Pn** | | **12 03 00.4** | **+1.6** |
| AUSP | | | | *eS* | | **Sn** | | **12 03 32.5** | **+3.0** |
| **ARCO** | **CERRO ARCO** | **2.68** | **82** | *eP* | | **Pb** | | **12 03 04.4** | **-1.7** |
| ARCO | | | | *eS* | | **Sb** | | **12 03 41.2** | **+2.0** |
| **AAGR** | **Agrelo** | **2.74** | **88** | *eP* | | **Pb** | | **12 03 05.7** | **-1.4** |
| AAGR | | | | *eS* | | **Sb** | | **12 03 42.9** | **+2.1** |
| AAGR | | | | IAML | | | | 12 03 51.2 | |
| | comp=Z,54nm,1.8s | | | | | | | | |
| **RTLS** | **Leoncito** | **2.76** | **59** | *eP* | | **Pn** | | **12 03 04.6** | **+2.0** |
| RTLS | | | | *eS* | | **Sb** | | **12 03 42.5** | **+0.9** |
| RTLS | | | | IAML | | | | 12 03 50.6 | |
| | comp=Z,83nm,0.5s | | | | | | | | |
| **ASAL** | **Salagasta** | **2.81** | **78** | *eP* | | **Pn** | | **12 03 06.2** | **+3.1** |
| ASAL | | | | *eS* | | **Sb** | | **12 03 44.0** | **+1.2** |
| **ACCO** | **Cerro Coronel** | **3.69** | **45** | *eP* | | **Pn** | | **12 03 14.0** | **-1.3** |
| ACCO | | | | *eS* | | **Sn** | | **12 04 03.2** | **+4.2** |
| **AROD** | **Rodeo** | **3.79** | **37** | *eP* | | **Pn** | | **12 03 18.4** | **+1.8** |
| **ACDV** | **Cuesta del Vie** | **3.97** | **40** | *eP* | | **Pn** | | **12 03 19.2** | **+0.2** |
| ACDV | | | | *eS* | | **Sn** | | **12 04 08.7** | **+3.0** |
| **AVFE** | **Valle Fertil** | **4.70** | **58** | *eP* | | **Pn** | | **12 03 31.2** | **+2.2** |
| AVFE | | | | *eS* | | **Sn** | | **12 04 26.2** | **+2.4** |
| **ACHE** | **Chepes** | **5.04** | **67** | *eP* | | **Pn** | | **12 03 35.0** | **+1.2** |
| ACHE | | | | *eS* | | **Sn** | | **12 04 35.2** | **+2.9** |

*UPP **26** 12:10:20.2±0.2, 59°.87N×19°.40E, h0km, ML2.1, Unknown*
*HEL **26** 12:10:20.1±0.0, 59°.81N×19°.48E, h0km, ML1.7, Explosion*
*DNK **26** 12:10:20.4±0.4, 59°.86N×19°.41E, h0km, ML2.1(UPP), Explosion*
*IDC **26** 12:10:20.6±1.9, 59°.74N×19°.46E, h0km, mbtmp2.8/4, ML1.3/3, Error ellipse: s-maj=34.0km s-min=8.5km az=170.0*
**ISC 26 12:10:18.8**±0.8, **59°87N**±0°.03×**19°56E**±0°.02, **h0**km, **n36**, σ1§**00**/50, **Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AAL** | **Aland** | **0.38** | **35** | P | | **Pb** | | **12 10 28.4** | **0.0** |
| AAL | | | | S | | **Sb** | | **12 10 34.2** | **-0.6** |
| **AAL** | **Aland** | **0.38** | **35** | P | | **Pb** | | **12 10 28.4** | **0.0** |
| AAL | | | | S | | **Sb** | | **12 10 34.2** | **-0.6** |
| **AAL** | **Aland** | **0.38** | **35** | *eP* | | **Pb** | | **12 10 28.4** | **0.0** |
| AAL | | | | *eS* | | **Sb** | | **12 10 34.1** | **-0.7** |
| **NRTU** | **Norrtaelje** | **0.51** | **248** | *eP* | | **Pg** | | **12 10 28.2** | **-0.3** |
| NRTU | | | | *eS* | | **Sg** | | **12 10 34.0** | **-1.1** |
| **GRAU** | **Graesoe** | **0.69** | **313** | P | | **Pg** | | **12 10 32.0** | **0.0** |
| GRAU | | | | S | | **Sg** | | **12 10 41.0** | **0.0** |
| **GRAU** | **Graesoe** | **0.69** | **313** | P | | **Pg** | | **12 10 32.0** | **0.0** |
| GRAU | | | | S | | **Sg** | | **12 10 41.0** | **0.0** |
| **FORU** | **Forsmark** | **0.86** | **308** | P | | **Pg** | | **12 10 35.1** | **-0.3** |
| **FORU** | **Forsmark** | **0.86** | **308** | P | | **Pg** | | **12 10 35.1** | **-0.3** |
| **FLYU** | **Flymyra** | **0.88** | **288** | P | | **Pg** | | **12 10 35.4** | **-0.3** |
| **FLYU** | **Flymyra** | **0.88** | **288** | P | | **Pg** | | **12 10 35.4** | **-0.3** |
| **FIBU** | **Brunna** | **1.11** | **273** | P | | **Pg** | | **12 10 39.4** | **-0.8** |
| **FIBU** | **Brunna** | **1.11** | **273** | P | | **Pg** | | **12 10 39.4** | **-0.8** |
| **NYNU** | **Nynaeshamn** | **1.18** | **223** | P | | **Pg** | | **12 10 40.9** | **-0.4** |
| **NYNU** | **Nynaeshamn** | **1.18** | **223** | P | | **Pg** | | **12 10 41.0** | **-0.4** |
| **OSTU** | **Oestervaala** | **1.27** | **288** | P | | **Pg** | | **12 10 42.6** | **-0.5** |
| **OSTU** | **Oestervaala** | **1.27** | **288** | P | | **Pg** | | **12 10 42.6** | **-0.5** |
| **IGGU** | **Iggoen** | **1.50** | **313** | P | | **Pn** | | **12 10 46.6** | **-0.4** |
| **IGGU** | **Iggoen** | **1.50** | **313** | P | | **Pn** | | **12 10 46.6** | **-0.4** |
| **RAF** | **Rauma** | **1.59** | **42** | *eP* | | **Pn** | | **12 10 48.2** | **+0.1** |
| **RAF** | **Rauma** | **1.59** | **42** | *eP* | | **Pg** | | **12 10 49.4** | **+0.1** |
| RAF | | | | *eS* | | **Sg** | | **12 11 11.3** | **+1.4** |
| RAF | | | | MSG | | | | 12 11 16.6 | |
| | comp=Z,3.9nm,0.1s | | | | | | | | |
| **ARNU** | **Arnoeviken** | **2.12** | **331** | *eP* | | **Pb** | | **12 10 57.0** | **-1.1** |
| ARNU | | | | *eSB* | | **Sb** | | **12 11 25.1** | **+0.3** |
| **GOTU** | **Gotland** | **2.25** | **194** | *ePB* | | **Pn** | | **12 10 58.1** | **+0.9** |
| GOTU | | | | *eSG* | | **Sb** | | **12 11 27.7** | **-0.8** |
| **KPF** | **Kankaanpaa** | **2.32** | **31** | *ePB* | | **Pb** | | **12 11 01.9** | **+0.4** |
| KPF | | | | MSG | | | | 12 11 34.5 | |
| | comp=Z,2.4nm,0.2s | | | | | | | | |
| **MEF** | **Metsahovi** | **2.45** | **80** | *ePG* | | **Pb** | | **12 11 04.3** | **+0.6** |
| MEF | | | | *eSG* | | **Sg** | | **12 11 37.6** | **+0.2** |
| MEF | | | | MSG | | | | 12 11 39.7 | |
| | comp=Z,2.6nm,0.2s | | | | | | | | |
| **MTSE** | **Matsula** | **2.47** | **116** | *eP* | | **Pn** | | **12 10 57.9** | **-2.3** |
| **MTSE** | **Matsula** | **2.47** | **116** | *ePG* | | **Pb** | | **12 11 04.6** | **+0.6** |
| **NUR** | **Nurmijrvi** | **2.62** | **74** | *ePG* | | **Pb** | | **12 11 07.8** | **+1.2** |
| NUR | | | | *eSG* | | **Sg** | | **12 11 42.4** | **-0.6** |
| NUR | | | | MSG | | | | 12 11 44.1 | |
| | comp=Z,2.2nm,0.2s | | | | | | | | |
| **SLIT** | **Siltere, Latvi** | **2.66** | **146** | *ePG* | | **Pb** | | **12 11 06.6** | **-0.6** |
| **HEMU** | **Hemsoen** | **2.91** | **346** | *eP* | | **Pn** | | **12 11 08.0** | **+1.6** |
| **HFS** | **Hagfors** | **2.96** | **278** | Pn | | **Pn** | | **12 11 07.7** | **+0.7** |
| | comp=Z,0.2nm,0.3s,baz=100,slow=15,SNR=10 | | | | | | | | |
| HFS | | | | Sn | | **Sn** | | **12 11 44.6** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=94,slow=31,SNR=2.1 | | | | | | | | |
| | comp=Z,0.6nm,0.2s | | | | | | | | |
| **KEF** | **Keuruu** | **3.46** | **46** | *eP* | | **Pn** | | **12 11 15.4** | **+1.5** |
| **VAF** | **Ylistaro** | **3.52** | **24** | *eP* | | **Pb** | | **12 11 18.8** | **-3.1** |
| **VAF** | **Ylistaro** | **3.52** | **24** | *ePB* | | **Pb** | | **12 11 21.4** | **-0.4** |
| **FINES** | **FINESS Array B** | **3.58** | **61** | Pn | | **Pn** | | **12 11 18.4** | **+2.9** |
| | comp=Z,0.1nm,0.3s,baz=241,slow=12,SNR=11 | | | | | | | | |
| FINES | | | | Pg | | **Pg** | | **12 11 25.9** | **-1.4** |
| | comp=Z,0.1nm,0.3s,baz=237,slow=13,SNR=11 | | | | | | | | |
| | comp=Z,2.4nm,1.0s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **4.30** | **289** | Pn | | **Pn** | | **12 11 25.2** | **-0.2** |
| | baz=70,slow=18,SNR=1.4 | | | | | | | | |
| NOA | | | | Pg | | **Pb** | | **12 11 35.0** | **-0.1** |
| | baz=101,slow=12,SNR=4.6 | | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **10.03** | **12** | Pn | | **Pn** | | **12 12 43.0** | **-0.9** |
| | comp=Z,2.3nm,1.0s,baz=196,slow=14,SNR=6.0 | | | | | | | | |

*NEIC **26** 12:11:26.2±1.8, 5°.6S±0°.1×128°.6E±0°.1, h302km±13km, mb4.1/10, Error ellipse: s-maj=21.4km s-min=14.3km az=114.0*
*DJA **26** 12:11:27.0±0.6, 6°.3S×12°.9E±°, h308km±12km, M4.0/11, mb3.8/7, mB4.5/1, MLv4.0/11, Mw(mB)3.7/1*
*IDC **26** 12:11:35.6±5.6, 6°.56S×129°.2E, h251km±55km, mb3.4/1, mbtmp4.3/3, Error ellipse: s-maj=94.4km s-min=23.9km az=83.0*
**ISC 26 12:11:26.5**±0.8, **5°74S**±0°.08×**128°78E**±0°.08, **h300**km, **n36**, σ1§**30**/36, **mb4.0**/3, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSAI** | **Masohi** | **2.38** | **3** | P | | **Pn** | | **12 12 16.9** | **+0.3** |
| **NLAI** | **Namlea** | **3.00** | **326** | P | | Pn | | 12 12 27.7 | +5.4 |
| **SAUI** | **Saumlaki** | **3.35** | **132** | Pn | | **Pn** | | **12 12 28.4** | **+2.7** |
| **SAUI** | **Saumlaki** | **3.35** | **132** | P | | **Pn** | | **12 12 26.9** | **+1.1** |
| **FAKI** | **Fak Fak** | **4.45** | **51** | P | | **Pn** | | **12 12 38.4** | **+1.0** |
| **FAKI** | **Fak Fak** | **4.45** | **51** | Pn | | **Pn** | | **12 12 39.0** | **+1.2** |
| **FAKI** | **Fak Fak** | **4.45** | **51** | P | | **Pn** | | **12 12 38.6** | **+0.8** |
| **SANI** | **Sanana** | **4.61** | **323** | P | | **Pn** | | **12 12 41.2** | **+1.6** |
| **SANI** | **Sanana** | **4.61** | **323** | P | | **Pn** | | **12 12 40.5** | **+0.9** |
| **KMPI** | **Kaimana, Papua** | **5.32** | **67** | P | | **Pn** | | **12 12 48.6** | **+0.8** |
| **SWI** | **Sorong** | **5.44** | **27** | P | | **Pn** | | **12 12 49.5** | **+0.3** |
| | 13nm,0.8s,0.2nm | | | | | | | | |
| **SOEI** | **Soe** | **5.99** | **228** | Pn | | **Pn** | | **12 12 56.7** | **+0.8** |
| **SOEI** | **Soe** | **5.99** | **228** | P | | **Pn** | | **12 12 56.7** | **+0.8** |
| | 14nm,0.7s,0.1nm | | | | | | | | |
| **DRS** | **Darwin Rock St** | **6.97** | **163** | P | | **Pn** | | **12 13 08.3** | **+0.8** |
| **MTN** | **Manton Dam** | **7.43** | **162** | P | | **Pn** | | **12 13 12.9** | **-0.2** |
| **MTN** | **Manton Dam** | **7.43** | **162** | Pn | | **Pn** | | **12 13 13.2** | **0.0** |
| **KDU** | **Kakadu** | **7.80** | **152** | P | | **Pn** | | **12 13 17.9** | **+0.2** |
| **KNRA** | **Kununurra** | **9.87** | **180** | Pn | | **Pn** | | **12 13 43.0** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **12.66** | **194** | P | | **P** | | **12 14 18.3** | **+0.5** |
| | 9.2nm,1.5s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.66** | **194** | | | **Pn** | | **12 14 16.9** | **-0.2** |
| **WB0** | **Warramunga Arr** | **14.97** | **159** | P | | **Pn** | | **12 14 44.2** | **-0.5** |
| WB0 | | | | IAmb | IAmb | | | 12 14 46.3 | |
| | comp=Z,6.3nm,0.6s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **15.11** | **160** | P | | **Pn** | | **12 14 45.9** | **-0.4** |
| **WRA** | **Warramunga Arr** | **15.11** | **160** | P | | **P** | | **12 14 44.7** | **-0.2** |
| **WRA** | **Warramunga Arr** | **15.11** | **160** | P | | **Pn** | | **12 14 45.9** | **-0.5** |
| | comp=Z,5.1nm,0.4s,baz=341,slow=12,SNR=148 | | | | | | | | |
| WRA | | | | S | | **S** | | **12 17 26.3** | **-3.3** |
| | comp=Z,0.3nm,0.4s,baz=337,slow=23,SNR=2.5 | | | | | | | | |
| **WB2** | **Warramunga Arr** | **15.12** | **160** | P | | **Pn** | | **12 14 46.0** | **-0.4** |
| WB2 | | | | IAmb | IAmb | | | 12 14 46.5 | |
| | comp=Z,5.4nm,0.8s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **15.20** | **159** | P | | **Pn** | | **12 14 46.8** | **-0.6** |
| **COEN** | **Coen** | **16.35** | **121** | P | | **Pn** | | **12 15 00.6** | **-0.3** |
| **COEN** | **Coen** | **16.35** | **121** | P | | **Pn** | | **12 15 00.1** | **-0.8** |
| COEN | | | | IAmb | IAmb | | | 12 15 01.1 | |
| | comp=Z,7.7nm,0.7s | | | | | | | | |
| **QIS** | **Mount Isa** | **18.09** | **145** | P | | **P** | | **12 15 19.3** | **+2.0** |
| **AS31** | **Alice Springs** | **18.49** | **165** | | | **P** | | **12 15 22.8** | **+1.3** |
| AS31 | | | | IAmb | IAmb | | | 12 15 23.9 | |
| | comp=Z,5.4nm,0.7s | | | | | | | | |
| **ASAR** | **Alice Springs** | **18.49** | **165** | P | | **P** | | **12 15 23.1** | **+1.6** |
| | comp=Z,7.9nm,0.4s,baz=346,slow=12,SNR=296 | | | | | | | | |
| ASAR | | | | S | | **S** | | **12 18 34.0** | **-2.6** |
| | comp=Z,1.0nm,1.0s,baz=343,slow=18,SNR=8.3 | | | | | | | | |
| **BBOO** | **Buckleboo** | **27.77** | **167** | P | | **P** | | **12 16 49.4** | **+1.0** |
| BBOO | | | | IAmb | IAmb | | | 12 17 12.4 | |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **80.78** | **322** | P | | **P** | | **12 23 05.3** | **-1.6** |
| **ABKAR** | **Akbulak array** | **80.78** | **322** | P | | **P** | | **12 23 04.4** | **-2.5** |
| ABKAR | | | | IAmb | IAmb | | | 12 23 38.1 | |
| | comp=Z,1.7nm,1.0s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.23** | **180** | P | | **P** | | **12 23 25.0** | **+0.5** |
| QSPA | | | | IAmb | IAmb | | | 12 23 32.5 | |
| | comp=Z,3.8nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **92.73** | **25** | P | | P | | 12 24 21.8 | +17 |
| | comp=Z,0.3nm,0.6s,baz=249,slow=5.1,SNR=7.0 | | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | | |

*PRU **26** 12:12:36.4, 44°.60N×17°.43E, h1km*
*BEO **26** 12:12:37.8±0.4, 44°.51N×16°.86E, h0km±2km, ML2.4/9*
*RHSSO **26** 12:12:37.8±0.2, 44°.48N×16°.86E, h4km±1km, ML2.5/13*
*VIE **26** 12:12:38.7±0.7, 44°.77N×17°.12E, h2km, mb2.6/8, ml2.3/15, Error ellipse: s-maj=13.6km s-min=4.7km az=39.0*
**ISC 26 12:12:36.4**±1.0, **44°47N**±0°.02×**16°96E**±0°.02, **h5**km±9km, **n69**, σ1§**13**/118, **2C-1D**, **Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **A050A** | **Klekovaca** | **0.30** | **272** | ⇑ *iPg* | | **Pg** | | **12 12 41.9** | **-0.4** |
| A050A | | | | *eSg* | | **Sg** | | **12 12 45.5** | **-0.9** |
| **BLY** | **Banja Luka** | **0.32** | **30** | *ePg* | | **Pb** | | **12 12 43.8** | **-0.8** |
| BLY | | | | *eSg* | | **Sb** | | **12 12 49.6** | **-0.4** |
| **BLY** | **Banja Luka** | **0.32** | **30** | *ePg* | | **Pb** | | **12 12 43.8** | **-0.8** |
| BLY | | | | *eSg* | | **Sb** | | **12 12 49.3** | **-0.7** |
| **PRIJ** | **Prijedor** | **0.53** | **341** | *ePg* | | **Pg** | | **12 12 47.4** | **+0.8** |
| PRIJ | | | | *eSg* | | **Sg** | | **12 12 54.2** | **+0.7** |
| **A051A** | **Mrakovica** | **0.54** | **356** | ⇓ *iPg* | | **Pb** | | **12 12 48.0** | **-0.4** |
| A051A | | | | *eSg* | | **Sg** | | **12 12 54.9** | **+1.0** |
| **KIJV** | **Kijevo** | **0.61** | **221** | *ePg* | | **Pg** | | **12 12 47.9** | **-0.3** |
| KIJV | | | | Sg | | **Sg** | | **12 12 56.4** | **+0.3** |
| **UDBI** | **Udbina** | **0.85** | **274** | *ePg* | | **Pg** | | **12 12 51.5** | **-1.3** |
| UDBI | | | | Sg | | **Sg** | | **12 13 03.0** | **-0.8** |
| **DOB** | **Doboj** | **0.86** | **72** | *ePg* | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KBA | Koelnbreinsper | 3.63 | 317 | *e*Pn | | Pn | 12 13 34.3 | +1.0 | |
| | 0.8nm,0.2s | | | | | | | | |
| ABTA | Abfaltersbach | 3.86 | 308 | *i* Pn | | Pn | 12 13 37.4 | +1.0 | |
| | 0.7nm,0.2s | | | | | | | | |
| MOA | Molln | 3.86 | 332 | *i* Pn | | Pn | 12 13 36.7 | +0.3 | |
| | 1.6nm,0.3s,SNR=6.8 | | | | | | | | |
| MOA | Molln | 3.86 | 332 | *e*Pn | | Pn | 12 13 36.7 | +0.3 | |
| LESA | Schwarzleotal | 4.20 | 316 | *e*Pn | | Pn | 12 13 43.2 | +2.1 | |
| | 1.1nm,0.3s | | | | | | | | |
| VYHS | Vyhne | 4.23 | 17 | *e* | | Pn | 12 13 41.9 | +0.5 | |
| VYHS | | | | *e* | | | 12 14 28.6 | | |
| WTTA | Wattenberg | 4.65 | 309 | *i* Pn | | Pn | 12 13 49.8 | +2.5 | |
| | 1.2nm,0.3s | | | | | | | | |
| CKRC | Cesky Krumlov | 4.71 | 338 | *e*SN | | Sn | 12 14 42.8 | -0.3 | |
| WATA | Walderalm | 4.72 | 309 | *i* Pn | | Pn | 12 13 48.3 | 0.0 | |
| | 2.8nm,0.5s | | | | | | | | |
| SQTA | Sankt Quirin | 4.87 | 306 | *e*Pn | | Pn | 12 13 52.8 | +2.6 | |
| | 1.6nm,0.2s | | | | | | | | |
| MOTA | Moosalm | 4.99 | 307 | *i* Pn | | Pn | 12 13 54.1 | +2.1 | |
| | 1.9nm,0.4s | | | | | | | | |
| FETA | Feichten | 5.05 | 303 | *e*Pn | | Pn | 12 13 54.3 | +1.5 | |
| | 0.5nm,0.3s | | | | | | | | |
| KHC | Kasperske Hory | 5.21 | 335 | *e*PN | | Pn | 12 13 55.5 | +0.7 | |
| KHC | | | | *e*SN | | Sn | 12 14 53.7 | -1.5 | |

*IDC **26** 12:16:34.1±1.0,6°65S×143°27E±0°1,h0km,mb4.1/5, mbtmp4.0/8,ML3.0/3,Error ellipse: s-maj=39.2km s-min=22.4km az=81.0*

**ISC 26 12:16:39.3±0.9,6°8S±0°1×143°2E±0°1,h35km,n8,σ1§39/9, mb3.9/5,New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.70 | 124 | Pn | Pn | 12 17 48.5 | +0.8 |
| | 5.9nm,0.3s,baz=354,slow=9.1,SNR=16 | | | | | | |
| PMG | | | | Sn | Sn | 12 18 40.4 | -0.7 |
| | 1.2nm,0.3s,baz=338,slow=16,SNR=2.3 15nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 15.71 | 213 | Pn | Pn | 12 20 16.1 | -2.0 |
| | 0.1nm,0.3s,baz=34,slow=13,SNR=7.6 2.4nm,0.2s | | | | | | |
| ASAR | Alice Springs | 19.07 | 207 | P | P | 12 20 59.9 | +1.0 |
| | 0.2nm,0.3s,baz=35,slow=10,SNR=18 2.2nm,0.8s | | | | | | |
| STKA | Stephens Creek | 25.05 | 183 | P | P | 12 22 00.2 | -0.2 |
| | 1.6nm,0.5s,baz=335,slow=13,SNR=3.7 1.6nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 75.72 | 322 | P | P | 12 28 22.2 | +0.8 |
| | 1.0nm,0.8s,baz=119,slow=4.3,SNR=6.6 1.0nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 83.23 | 180 | P | P | 12 29 03.1 | +1.1 |
| | 3.1nm,1.0s,baz=206,slow=1.6,SNR=11 3.1nm,1.0s | | | | | | |
| BVAR | Borovoye Array | 85.19 | 325 | P | P | 12 29 12.5 | +0.5 |
| | 1.8nm,0.7s,baz=111,slow=7.1,SNR=8.7 1.8nm,0.7s | | | | | | |
| ILAR | Eielson Array | 87.65 | 24 | P | P | 12 29 21.9 | -1.9 |
| | 0.6nm,0.8s,baz=231,slow=5.7,SNR=3.1 0.6nm,0.8s | | | | | | |

*ISN **26** 12:21:13.2±0.4,34°60N×46°23E,h8km±5km,ML2.6*
*TEH **26** 12:21:14.2,34°60N×46°23E,h8km±73km,ML2.7*

**ISC 26 12:21:14.1±1.1,34°61N±0°04×46°22E±0°04,h13km±12km, n9,σ0§74/12,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IDHR | Dehrash | 0.16 | 55 | Pg | Pg | 12 21 18.3 | +0.2 |
| IGHG | Ghaleghazi | 0.40 | 134 | Pg | Pb | 12 21 22.6 | -0.6 |
| GLG1 | Gilan-e-Gharb | 0.56 | 208 | Pg | Pb | 12 21 25.2 | -0.6 |
| ILIN | Lien | 0.68 | 63 | Pg | Pg | 12 21 27.2 | -0.3 |
| KCHF | Cheshme Sefid, | 0.75 | 116 | Pg | Pg | 12 21 28.5 | -0.2 |
| SNQR | Sonqor, Kerman | 1.18 | 77 | Pg | Pn | 12 21 37.1 | +0.4 |
| IBDR | Badra | 1.51 | 189 | *e*Pn | Pg | 12 21 42.5 | -0.7 |
| IBDR | | | | *e*Sn | Sg | 12 22 03.5 | +0.7 |
| IKRK | Kirkuk | 1.74 | 298 | *e*Pn | Pb | 12 21 45.5 | -0.4 |
| IKRK | | | | *e*Sn | Sg | 12 22 09.5 | -0.5 |
| IKRK | | | | AML | AML | 12 22 13.2 | |
| | comp=E,72nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 12 22 13.4 | |
| | comp=N,75nm,0.6s | | | | | | |
| BHD | Baghdad | 2.03 | 230 | *e*Pn | Pn | 12 21 49.5 | +1.4 |
| BHD | | | | *e*Sn | Sb | 12 22 16.0 | -0.1 |

*IDC **26** 12:23:05.2±1.4,57°07N×145°66W,h0km,mb3.7/4, mbtmp3.7/9,ML3.6/5,MS3.2/11,Error ellipse: s-maj=26.2km s-min=20.2km az=29.0*
*NEIC **26** 12:23:05.2±1.6,56°94N±0°07×145°8W±0°1,h16km±7km, ML4.0/98,ML3.7(AEIC),Error ellipse: s-maj=10.7km s-min=9.1km az=177.0*
*AEIC **26** 12:23:09.9±1.6,57°01N±0°07×145°8W±0°1,h12km±7km, Error ellipse: s-maj=9.9km s-min=9.1km az=145.0*

**ISC 26 12:23:04.5±0.8,56°99N±0°07×145°64W±0°05,h10km, n243,σ1§36/233,mb4.0/4,MS3.2/7,Gulf of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MID | Middleton Isla | 2.47 | 352 | | Pn | 12 23 44.2 | -0.6 |
| MID | | | | IAML | | 12 24 15.2 | |
| | comp=N,430nm,0.5s | | | | | | |
| Q23K | Middleton Isla | 2.47 | 352 | | Pn | 12 23 44.0 | -0.8 |
| KAIM | Kayak Island | 3.01 | 12 | | Pn | 12 23 52.4 | +0.1 |
| KAIM | | | | IAML | | 12 24 28.2 | |
| | comp=N,417nm,1.1s | | | | | | |
| KAIM | | | | IAML | | 12 24 29.3 | |
| | comp=E,460nm,0.7s | | | | | | |
| P23K | Montague Islan | 3.15 | 344 | | Pn | 12 23 53.8 | -0.4 |
| SUCK | Suckling Hills | 3.24 | 17 | | Pn | 12 23 56.0 | +0.7 |
| SUCK | | | | IAML | | 12 24 33.8 | |
| | comp=E,223nm,1.0s | | | | | | |
| SUCK | | | | IAML | | 12 24 33.9 | |
| | comp=N,316nm,0.4s | | | | | | |
| NICHA | Nichawak Mount | 3.37 | 14 | | Pn | 12 23 58.0 | +0.8 |
| BGLC | Bering Glacier | 3.37 | 20 | | Pn | 12 23 58.1 | +1.0 |
| BGLC | | | | | Sn | 12 24 35.5 | -1.6 |
| HMT | Hamilton | 3.43 | 12 | | Pn | 12 23 58.7 | +0.7 |
| RAGM | Ragged Mountai | 3.44 | 8 | | Pn | 12 23 58.7 | +0.6 |
| HIN | Hinchinbrook I | 3.44 | 353 | | Pn | 12 23 58.4 | +0.2 |
| HIN | Hinchinbrook I | 3.44 | 353 | | Sn | 12 24 36.5 | -2.6 |
| CYK | Cape Yakataga | 3.51 | 27 | | Pn | 12 24 00.1 | +1.0 |
| GRIN | Grindle Hills | 3.51 | 19 | | Pn | 12 24 00.2 | +1.1 |
| SNH | Sunshine Point | 3.52 | 23 | | Pn | 12 24 00.1 | +0.9 |
| SNH | | | | | Sn | 12 24 38.5 | -2.4 |
| EYAK | Cordova Ski Ar | 3.57 | 359 | | Pn | 12 23 59.9 | +0.1 |
| GOAT | Goat Mountain | 3.63 | 7 | | Pn | 12 24 01.3 | +0.5 |
| GOAT | | | | | Sn | 12 24 40.9 | -2.7 |
| KHIT | Khitrov Hills | 3.68 | 19 | | Pn | 12 24 02.0 | +0.6 |
| SEW | Seward | 3.71 | 329 | | Pn | 12 24 00.7 | -1.0 |
| MESA | MESA | 3.73 | 30 | | Pn | 12 24 02.8 | +0.5 |
| MESA | | | | IAML | | 12 24 47.7 | |
| | comp=N,190nm,0.4s | | | | | | |
| MESA | | | | IAML | | 12 25 00.2 | |
| | comp=E,136nm,0.6s | | | | | | |
| WAX | Waxell Ridge | 3.76 | 22 | | Pn | 12 24 03.2 | +0.6 |
| WAX | | | | IAML | | 12 24 50.6 | |
| | comp=E,240nm,0.5s | | | | | | |
| WAX | | | | IAML | | 12 24 51.4 | |
| | comp=N,460nm,0.5s | | | | | | |
| BARK | Barkley Ridge | 3.79 | 24 | | Pn | 12 24 03.9 | +0.9 |
| FID | Port Fidalgo | 3.79 | 354 | | Pn | 12 24 02.8 | -0.1 |
| FID | | | | IAML | | 12 24 46.6 | |
| | comp=N,457nm,0.5s | | | | | | |
| FID | | | | IAML | | 12 24 46.9 | |
| | comp=E,456nm,0.4s | | | | | | |
| KDAK | Kodiak Island | 3.84 | 285 | | Pn | 12 24 03.0 | -0.6 |
| KDAK | | | | IAML | | 12 24 55.9 | |
| | comp=E,148nm,0.6s | | | | | | |
| KDAK | Kodiak Island | 3.84 | 285 | Pn | Pn | 12 24 02.2 | -1.4 |
| | comp=E,32nm,0.3s,baz=86,slow=5.9,SNR=489 | | | | | | |
| KDAK | | | | Sn | Sn | 12 24 44.1 | -4.7 |
| | comp=E,16nm,0.3s,baz=312,slow=23,SNR=11 comp=E,88nm,0.5s | | | | | | |
| CNPM | China Poot | 3.90 | 313 | | Pn | 12 24 03.6 | -0.8 |
| CNPM | | | | IAML | | 12 24 49.6 | |
| | comp=E,207nm,0.5s | | | | | | |
| CNPM | | | | IAML | | 12 24 50.1 | |
| | comp=N,227nm,0.7s | | | | | | |
| SYI | Shuyak Island | 3.96 | 297 | | Pn | 12 24 04.6 | -0.6 |
| BAGL | Bagley Icefiel | 3.96 | 26 | | Pn | 12 24 06.2 | +0.9 |
| GLI | Glacier Island | 3.97 | 350 | | Pn | 12 24 05.0 | -0.4 |
| GLI | | | | IAML | | 12 24 51.2 | |
| | comp=N,207nm,0.3s | | | | | | |
| GLI | | | | IAML | | 12 24 51.6 | |
| | comp=E,293nm,0.4s | | | | | | |
| CRQM | Cirque | 3.99 | 18 | | Pn | 12 24 06.8 | +0.9 |
| CRQM | | | | IAML | | 12 24 56.7 | |
| | comp=E,251nm,0.7s | | | | | | |
| CRQM | | | | IAML | | 12 24 57.4 | |
| | comp=N,193nm,0.7s | | | | | | |
| RKAV | Rock Avalanche | 4.00 | 32 | | Pn | 12 24 07.3 | +1.3 |
| ISLE | Juniper Island | 4.00 | 24 | | Pn | 12 24 06.6 | +0.6 |
| BMRM | Bremner River | 4.02 | 7 | | Pn | 12 24 06.5 | +0.3 |
| SAMH | Samovar Hills | 4.04 | 37 | | Pn | 12 24 07.9 | +1.4 |
| TGL | Tana Glacier | 4.04 | 20 | | Pn | 12 24 07.5 | +0.9 |
| TGL | | | | IAML | | 12 24 52.7 | |
| | comp=E,128nm,0.7s | | | | | | |
| TGL | | | | IAML | | 12 24 57.6 | |
| | comp=N,109nm,1.1s | | | | | | |
| O22K | Cooper Landing | 4.09 | 330 | | Pn | 12 24 07.1 | 0.0 |
| PWL | Port Wells | 4.12 | 341 | | Pn | 12 24 07.2 | -0.3 |
| PWL | | | | IAML | | 12 24 53.0 | |
| | comp=E,353nm,0.5s | | | | | | |
| PWL | | | | IAML | | 12 24 53.8 | |
| | comp=N,293nm,0.4s | | | | | | |
| HOM | Homer | 4.14 | 313 | | Pn | 12 24 07.3 | -0.4 |
| DIV | Divide | 4.15 | 359 | | Pn | 12 24 08.1 | +0.2 |
| TABL | Table Mountain | 4.17 | 32 | | Pn | 12 24 09.5 | +1.1 |
| TABL | | | | IAML | | 12 24 59.1 | |
| | comp=E,104nm,0.7s | | | | | | |
| OHAK | Old Harbor | 4.18 | 276 | | Pn | 12 24 07.2 | -1.0 |
| OHAK | | | | IAML | | 12 25 00.9 | |
| | comp=E,118nm,0.5s | | | | | | |
| PNL | Peninsula | 4.24 | 48 | | Pn | 12 24 10.0 | +0.8 |
| GRNC | Granite Creek | 4.26 | 27 | | Pn | 12 24 10.2 | +0.6 |
| GRNC | | | | IAML | | 12 25 06.4 | |
| | comp=E,95nm,0.7s | | | | | | |
| SLKM | Skilak Lake | 4.26 | 328 | | Pn | 12 24 08.7 | -0.7 |
| KIAG | Kiagna River | 4.29 | 22 | | Pn | 12 24 10.6 | +0.6 |
| BCPM | Bancas Point | 4.33 | 44 | | Pn | 12 24 11.5 | +1.2 |
| BCPM | | | | IAML | | 12 24 59.6 | |
| | comp=E,94nm,0.5s | | | | | | |
| VRDI | Verde Repeater | 4.39 | 14 | Pn | Pn | 12 24 11.6 | +0.2 |
| BALM | Baldy | 4.40 | 21 | | Pn | 12 24 12.1 | +0.8 |
| PTPK | Patty Peak | 4.51 | 20 | | Pn | 12 24 13.9 | +0.9 |
| KLU | Klutina | 4.51 | 358 | | Pn | 12 24 13.0 | +0.1 |
| KLU | | | | IAML | | 12 25 04.5 | |
| | comp=E,111nm,0.4s | | | | | | |
| KLU | | | | IAML | | 12 25 06.5 | |
| | comp=N,165nm,0.5s | | | | | | |
| LOGN | Logan Glacier | 4.53 | 30 | | Pn | 12 24 14.2 | +0.9 |
| GLB | Gilahina Butte | 4.56 | 11 | Pn | Pn | 12 24 13.8 | +0.3 |
| CTGM | Chitina Glacie | 4.56 | 27 | | Pn | 12 24 14.6 | +1.0 |
| MCARA | McCarthy VSAT | 4.60 | 16 | | Pn | 12 24 14.7 | +0.6 |
| MCARA | McCarthy VSAT | 4.60 | 16 | IAML | | 12 25 17.6 | |
| | comp=N,123nm,0.8s | | | | | | |
| MCARA | | | | IAML | | 12 25 20.2 | |
| | comp=E,131nm,0.7s | | | | | | |
| RC01 | Rabbit Creek A | 4.62 | 334 | | Pn | 12 24 13.9 | -0.4 |
| RC01 | | | | IAML | | 12 25 07.2 | |
| | comp=E,126nm,0.6s | | | | | | |
| RC01 | | | | IAML | | 12 25 09.0 | |
| | comp=N,141nm,0.4s | | | | | | |
| N25K | Chitina, Valde | 4.66 | 6 | Pn | Pn | 12 24 15.6 | +0.7 |
| N25K | | | | IAML | | 12 25 07.9 | |
| | comp=E,72nm,0.7s | | | | | | |
| N25K | | | | IAML | | 12 25 08.0 | |
| | comp=N,72nm,1.0s | | | | | | |
| KNK | Knik Glacier | 4.66 | 343 | | Pn | 12 24 14.9 | 0.0 |
| KNK | | | | IAML | | 12 25 08.5 | |
| | comp=N,236nm,0.4s | | | | | | |
| KNK | | | | IAML | | 12 25 09.0 | |
| | comp=E,164nm,0.4s | | | | | | |
| Q19K | Cape Douglas, | 4.69 | 298 | | Pn | 12 24 14.9 | -0.4 |
| SII | Sitkinak Islan | 4.72 | 268 | | Pn | 12 24 13.2 | -2.5 |
| SII | | | | IAML | | 12 25 17.9 | |
| | comp=E,179nm,0.8s | | | | | | |
| O28M | Mount Upton | 4.72 | 34 | | Pn | 12 24 17.3 | +1.3 |
| CAPN | Captain Cook N | 4.75 | 325 | | Pn | 12 24 16.5 | +0.5 |
| O20K | Slope Mountain | 4.79 | 313 | | Pn | 12 24 16.3 | -0.5 |
| P19K | Oil Pt | 4.81 | 307 | Pn | Pn | 12 24 16.8 | -0.1 |
| R18K | Karluk | 4.82 | 281 | | Pn | 12 24 16.4 | -0.6 |
| IVE | Iliamna Volcan | 4.92 | 311 | | Pn | 12 24 17.4 | -1.1 |
| M23K | Glacier View | 4.93 | 348 | | Pn | 12 24 19.7 | +1.1 |
| SCM | Sheep Creek Mo | 4.93 | 351 | | Pn | 12 24 19.1 | +0.4 |
| SCM | | | | IAML | | 12 25 22.4 | |
| | comp=N,128nm,0.9s | | | | | | |
| SCM | | | | IAML | | 12 25 32.2 | |
| | comp=E,141nm,0.8s | | | | | | |
| P29M | Windy Craggy | 4.93 | 54 | Pn | Pn | 12 24 19.2 | +0.6 |
| P29M | | | | IAML | | 12 25 16.3 | |
| | comp=E,86nm,0.5s | | | | | | |
| P29M | | | | IAML | | 12 25 19.1 | |
| | comp=N,70nm,0.4s | | | | | | |
| PMR | Palmer | 4.95 | 340 | | Pn | 12 24 18.8 | +0.1 |
| PMR | | | | IAML | | 12 25 15.0 | |
| | comp=E,59nm,0.6s | | | | | | |
| O29M | Mount Kennedy | 4.96 | 45 | | Pn | 12 24 20.6 | +1.5 |
| O29M | | | | IAML | | 12 26 34.1 | |
| | comp=N,134nm,0.3s | | | | | | |
| KAHG | Katmai Hook Gl | 5.00 | 291 | | Pn | 12 24 19.6 | -0.1 |
| SML | Sawmill | 5.02 | 345 | Pn | Pn | 12 24 21.0 | +1.2 |
| RDT | Redoubt | 5.03 | 318 | | Pn | 12 24 18.8 | -1.2 |
| RED | Redoubt Volcan | 5.06 | 316 | | Pn | 12 24 19.6 | -0.9 |
| GHO | Glory Hole Cre | 5.08 | 342 | | Pn | 12 24 21.7 | +1.0 |
| GHO | | | | IAML | | 12 25 21.9 | |
| | comp=E,155nm,0.6s | | | | | | |
| GHO | | | | IAML | | 12 25 22.7 | |
| | comp=N,138nm,0.6s | | | | | | |
| RDWB | Redoubt West | 5.13 | 316 | | Pn | 12 24 20.7 | -0.8 |
| M24K | Tolsona, Glenn | 5.14 | 357 | | Pn | 12 24 22.7 | +1.3 |
| M24K | | | | IAML | | 12 25 22.0 | |
| | comp=E,128nm,1.0s | | | | | | |
| M24K | | | | IAML | | 12 25 53.1 | |
| | comp=N,94nm,1.0s | | | | | | |
| DFR | Drift River | 5.14 | 317 | | Pn | 12 24 20.4 | -1.2 |
| S31K | Pelican | 5.17 | 75 | Pn | Pn | 12 24 20.6 | -1.2 |
| S31K | Pelican | 5.17 | 75 | IAML | | 12 25 15.2 | |
| | comp=E,97nm,0.6s | | | | | | |
| S31K | | | | IAML | | 12 25 16.9 | |
| | comp=N,48nm,0.4s | | | | | | |
| RDJH | Redoubt Jeurge | 5.19 | 317 | | Pn | 12 24 21.5 | -0.7 |
| SUA | Susitna One | 5.19 | 332 | Pn | Pn | 12 24 22.4 | +0.1 |
| SUA | | | | IAML | | 12 25 20.7 | |
| | comp=E,66nm,0.8s | | | | | | |
| YUK8 | Steele Glacier | 5.26 | 33 | | Pn | 12 24 26.7 | +3.4 |
| YUK7 | Dusty Glacier | 5.27 | 45 | | Pn | 12 24 25.5 | +2.0 |
| KAHC | Katmai Hardscr | 5.28 | 292 | | Pn | 12 24 23.1 | -0.3 |
| M22K | Willow | 5.29 | 336 | | Pn | 12 24 23.2 | -0.4 |
| SPU | Mount Spurr | 5.34 | 324 | | Pn | 12 24 23.7 | -0.6 |
| ACHA | Angle Creek He | 5.35 | 287 | | Pn | 12 24 24.8 | +0.4 |
| YUK2 | White River | 5.39 | 25 | | Pn | 12 24 27.1 | +2.1 |
| SPCR | Spurr Chakacha | 5.41 | 324 | | Pn | 12 24 24.6 | -0.7 |
| ANCK | Angle Creek | 5.44 | 287 | | Pn | 12 24 26.2 | +0.6 |
| SPCP | Crater Peak Br | 5.44 | 325 | | Pn | 12 24 25.5 | -0.2 |
| YUK6 | Outpost Mounta | 5.46 | 40 | | Pn | 12 24 28.0 | +1.9 |
| YUK3 | Moose Creek | 5.48 | 27 | | Pn | 12 24 28.4 | +2.1 |
| PLBC | Pleasant Camp | 5.49 | 59 | | Pn | 12 24 27.1 | +0.9 |
| SPBG | Spurr Blockage | 5.50 | 324 | | Pn | 12 24 26.3 | -0.3 |
| STLK | Strandline Lak | 5.52 | 327 | | Pn | 12 24 26.9 | +0.1 |
| O19K | Port Alsworth | 5.56 | 309 | | Pn | 12 24 26.2 | -1.0 |
| SPWE | Spurr West | 5.58 | 323 | | Pn | 12 24 27.5 | -0.1 |
| M26K | Nabesna, AK | 5.59 | 13 | Pn | Pn | 12 24 28.4 | +0.8 |
| P18K | Big Mountain, | 5.61 | 299 | | Pn | 12 24 26.9 | -1.1 |
| SIT | Sitka | 5.63 | 85 | Pn | Pn | 12 24 26.6 | -1.6 |
| CNTC | Contact Creek | 5.65 | 287 | | Pn | 12 24 28.5 | -0.1 |
| SPNN | North Nagishla | 5.69 | 323 | | Pn | 12 24 29.2 | 0.0 |
| WAT6 | Susitna Watana | 5.71 | 350 | | Pn | 12 24 29.9 | +0.5 |
| M27K | Edge Creek, AK | 5.71 | 18 | | Pn | 12 24 30.2 | +0.8 |
| YUK5 | Granite Creek | 5.77 | 41 | | Pn | 12 24 32.5 | +2.3 |
| O18K | Koktuh Hills | 5.79 | 304 | | Pn | 12 24 28.9 | -1.4 |
| PLK3 | Peulik 3 | 5.80 | 281 | | Pn | 12 24 30.8 | +0.3 |
| SKT | Skwentna | 5.83 | 331 | | Pn | 12 24 31.6 | +0.7 |
| PLK2 | Peulik 2 | 5.83 | 282 | | Pn | 12 24 31.4 | +0.4 |
| PLK4 | Peulik 4 | 5.85 | 281 | Pn | Pn | 12 24 31.8 | +0.5 |
| CUT | Chulitna | 5.91 | 339 | | Pn | 12 24 32.1 | +0.1 |
| N19K | Bonanza Creek | 5.97 | 314 | | Pn | 12 24 31.9 | -1.0 |
| SKAG | Skagway | 5.98 | 61 | | Pn | 12 24 35.1 | +2.1 |
| BESE | Bessie Mountai | 5.98 | 70 | | Pn | 12 24 34.0 | +0.9 |
| S32K | Killisnoo | 6.03 | 81 | | Pn | 12 24 33.2 | -0.4 |
| WAT1 | Susitna Watana | 6.04 | 347 | | Pn | 12 24 35.2 | +1.5 |
| WAT7 | Susitna Watana | 6.08 | 346 | | Pn | 12 24 35.6 | +1.3 |
| R32K | Eaglecrest | 6.11 | 73 | | Pn | 12 24 35.8 | +1.0 |
| P17K | Kvichak River | 6.14 | 296 | | Pn | 12 24 34.2 | -0.9 |
| L26K | Log Cabin Wild | 6.16 | 10 | | Pn | 12 24 37.6 | +2.1 |
| DHY | Denali Highway | 6.16 | 353 | | Pn | 12 24 36.7 | +1.1 |
| JIS | Juneau Island | 6.18 | 73 | | Pn | 12 24 36.8 | +1.1 |
| M20K | Styx River | 6.21 | 325 | | Pn | 12 24 36.9 | +0.6 |
| O30N | Mendenhall | 6.23 | 49 | | Pn | 12 24 38.0 | +1.6 |
| N30M | Aishikik Lake | 6.27 | 41 | | Pn | 12 24 38.9 | +1.9 |
| L27K | Beaver Creek, | 6.38 | 16 | | Pn | 12 24 39.1 | +0.6 |
| BCAR | Beaver Creek A | 6.39 | 16 | Pn | Pn | 12 24 39.4 | +0.8 |
| N18K | Kilae Creek | 6.48 | 309 | Pn | Pn | 12 24 38.8 | -1.0 |
| M29M | Somme Creek | 6.56 | 31 | Pn | Pn | 12 24 43.1 | +2.1 |
| SVW2 | Sparrevohn | 6.57 | 313 | | Pn | 12 24 40.5 | -0.7 |
| RND | Reindeer | 6.63 | 347 | | Pn | 12 24 43.1 | +1.2 |
| O17K | Koliganek Bris | 6.64 | 300 | | Pn | 12 24 40.8 | -1.2 |
| M19K | Big River Lodg | 6.64 | 321 | | Pn | 12 24 41.6 | -0.5 |
| WHY | Whitehorse | 6.68 | 52 | Pn | Pn | 12 24 45.0 | +2.3 |
| N31M | Braeburn, Yuko | 6.77 | 44 | Pn | Pn | 12 24 46.0 | +2.2 |
| RIDG | Independent Ri | 6.78 | 3 | | Pn | 12 24 45.1 | +1.1 |
| P32M | Atlin | 6.80 | 63 | Pn | Pn | 12 24 45.9 | +1.6 |
| K24K | Donnelly Dome | 6.83 | 359 | | Pn | 12 24 46.2 | +1.5 |
| M18K | Stony River | 6.90 | 315 | | Pn | 12 24 44.2 | -1.3 |
| ANPB | Aniakchak Plen | 6.93 | 274 | | Pn | 12 24 46.8 | +0.7 |
| MCK | McKinley | 6.96 | 348 | | Pn | 12 24 48.3 | +1.9 |
| N17K | Nushagak Hills | 6.97 | 305 | | Pn | 12 24 45.5 | -1.0 |
| U33K | Whale Pass | 6.98 | 92 | Pn | Pn | 12 24 44.8 | -1.8 |
| L19K | White Mountain | 6.99 | 322 | | Pn | 12 24 46.8 | -0.1 |
| SCRK | Sand Creek | 7.05 | 6 | Pn | Pn | 12 24 48.5 | +0.6 |
| O16K | Kokwok River B | 7.06 | 297 | | Pn | 12 24 46.9 | -0.9 |
| CHGN | Chignik | 7.08 | 270 | Pn | Pn | 12 24 46.8 | -1.3 |
| CRAG | Craig | 7.14 | 97 | Pn | Pn | 12 24 47.0 | -1.9 |
| K27K | Chicken | 7.27 | 12 | | Pn | 12 24 51.5 | +0.8 |
| WRAK | Wrangell Islan | 7.34 | 89 | | Pn | 12 24 51.0 | -0.6 |
| Q32M | Nakina River | 7.38 | 69 | | Pn | 12 24 53.9 | +1.6 |
| P33M | Teslin, Yukon | 7.43 | 59 | | Pn | 12 24 54.8 | +1.8 |
| BWN | Browne | 7.44 | 347 | | Pn | 12 24 52.7 | -0.3 |
| HDA | Harding Lake | 7.47 | 356 | | Pn | 12 24 53.1 | -0.2 |
| M17K | Holitna River | 7.49 | 311 | Pn | Pn | 12 24 52.8 | -0.9 |
| BPAW | Bear Paw Mtn. | 7.60 | 342 | | Pn | 12 24 55.9 | +0.7 |
| J26L | Joseph Creek | 7.60 | 7 | Pn | Pn | 12 24 56.5 | +1.2 |
| K20K | Telida | 7.64 | 330 | | Pn | 12 24 55.6 | -0.1 |
| J25K | Salcha River, | 7.65 | 1 | | Pn | 12 24 55.8 | -0.1 |
| L18K | Granite Mounta | 7.67 | 318 | | Pn | 12 24 55.3 | -0.8 |
| N16K | Nishlik Lake | 7.67 | 303 | | Pn | 12 24 55.7 | -0.5 |
| N32M | Quiet Lake | 7.69 | 52 | | Pn | 12 24 58.1 | +1.6 |
| M31M | Drury Creek, Y | 7.73 | 43 | | Pn | 12 24 59.0 | +2.0 |
| DAWY | Dawson | 7.73 | 21 | | Pn | 12 24 58.2 | +1.2 |
| CCB | Clear Creek Bu | 7.75 | 353 | | Pn | 12 24 57.8 | +0.6 |
| NEA2 | Nenana | 7.81 | 349 | | Pn | 12 24 58.8 | +0.8 |
| IL31 | | 7.83 | 356 | | Pn | 12 24 56.6 | -1.7 |
| ILAR | Eielson Array | 7.83 | 356 | Pn | Pn | 12 24 57.2 | -1.1 |
| | comp=E,0.2nm,0.3s,baz=191,slow=14,SNR=9.6 | | | Sn | Sn | 12 26 21.6 | -5.3 |
| ILAR | comp=E,0.5nm,0.3s,baz=210,slow=11,SNR=4.5 comp=E,0.3nm,0.4s | | | | | | |
| O15K | Ungalikthiuk R | 7.83 | 292 | | Pn | 12 24 57.6 | -0.7 |
| K29M | Barlow Dome | 7.95 | 27 | Pn | Pn | 12 25 02.0 | +1.9 |
| M16K | Timber Creek | 7.97 | 306 | | Pn | 12 24 59.6 | -0.7 |
| COLA | College | 7.98 | 353 | | Pn | 12 25 01.2 | +0.9 |
| V35K | Ketchikan | 8.01 | 96 | Pn | Pn | 12 24 59.3 | -1.4 |
| MDM | Murphy Dome | 8.09 | 352 | | Pn | 12 25 03.0 | +1.0 |
| EGAK | Eagle | 8.11 | 14 | Pn | Pn | 12 25 03.4 | +1.3 |
| R33M | Jennings River | 8.11 | 67 | | Pn | 12 25 04.2 | +1.8 |
| FARO | Faro, Yukon | 8.14 | 45 | | Pn | 12 25 05.5 | +2.8 |
| N15K | Kwethluk River | 8.19 | 299 | Pn | Pn | 12 25 03.5 | +0.2 |
| J20K | Kowinta River | 8.33 | 333 | Pn | Pn | 12 25 04.9 | +0.2 |
| I23K | Minto, Yukon-K | 8.38 | 349 | | Pn | 12 25 07.2 | +1.4 |
| I26K | Coal Creek Min | 8.43 | 7 | | Pn | 12 25 07.8 | +1.3 |
| MLY | Manley | 8.43 | 345 | | Pn | 12 25 07.5 | +0.9 |
| DLBC | Dease Lake | 8.48 | 74 | | Pn | 12 25 08.9 | +1.6 |
| DLBC | Dease Lake | 8.48 | 74 | Pn | Pn | 12 25 09.1 | +1.8 |
| | comp=E,0.6nm,0.3s,baz=261,slow=8.7,SNR=35 comp=E,2.6nm,0.4s | | | | | | |
| L16K | Owhat River | 8.50 | 310 | Pn | Pn | 12 25 06.2 | -1.3 |
| K17K | Iditarod | 8.56 | 317 | | Pn | 12 25 07.7 | -0.7 |
| J19K | Poorman | 8.57 | 329 | | Pn | 12 25 08.5 | +0.1 |
| O14K | Tigyukauivet M | 8.57 | 292 | Pn | Pn | 12 25 08.3 | -0.3 |
| M15K | Kasigluk River | 8.63 | 302 | | Pn | 12 25 08.5 | -0.9 |
| I27K | Kandik River | 8.85 | 11 | | Pn | 12 25 14.1 | +1.8 |
| J30M | Hart River | 8.85 | 27 | | Pn | 12 25 14.6 | +2.2 |
| N14K | Kuskokwak Cree | 8.91 | 296 | | Pn | 12 25 13.0 | 0.0 |
| I28M | Miner Creek | 8.91 | 16 | Pn | Pn | 12 25 15.5 | +2.3 |
| I20K | Naaghedeneel | 8.93 | 335 | | Pn | 12 25 14.3 | +1.0 |
| H24K | Noodor Dome | 8.94 | 354 | Pn | Pn | 12 25 14.9 | +1.3 |
| H23K | Yukon River | 9.06 | 350 | | Pn | 12 25 15.5 | +0.4 |
| I29M | Ogilvie Camp, | 9.10 | 20 | | Pn | 12 25 17.6 | +1.8 |
| S12K | Black Hills | 9.21 | 269 | Pn | Pn | 12 25 17.4 | +0.1 |
| M14K | Bethel | 9.25 | 301 | Pn | Pn | 12 25 17.7 | 0.0 |
| J17K | VABM Dome | 9.26 | 319 | Pn | Pn | 12 25 17.1 | -0.8 |
| H21K | Melozitna Rive | 9.34 | 341 | Pn | Pn | 12 25 19.3 | +0.3 |
| I30M | Mount Dempster | 9.38 | 25 | | Pn | 12 25 22.5 | +2.8 |
| HG4B | Hotspring | 9.60 | 113 | Pn | Pn | 12 25 21.3 | -1.3 |
| K15K | Wolf Creek Mou | 9.63 | 310 | Pn | Pn | 12 25 21.9 | -1.0 |
| J16K | Anvik River | 9.75 | 316 | Pn | Pn | 12 25 23.8 | -0.9 |
| L14K | Kuka Creek | 9.77 | 304 | | Pn | 12 25 24.4 | -0.4 |
| H29M | Whitestone | 9.87 | 17 | Pn | Pn | 12 25 27.8 | +1.4 |
| G23K | Bananza Creek | 9.97 | 350 | Pn | Pn | 12 25 29.1 | +1.5 |
| H19K | Roundabout Mou | 10.00 | 333 | | Pn | 12 25 27.8 | -0.3 |
| H18K | Honhosa River | 10.22 | 328 | | Pn | 12 25 31.3 | +0.2 |
| G21K | Allakaket | 10.24 | 342 | | Pn | 12 25 32.3 | +0.9 |
| EPYK | Eagle Plains | 10.30 | 20 | | Pn | 12 25 34.6 | +2.3 |
| G29M | Pine Creek | 10.57 | 17 | Pn | Pn | 12 25 37.6 | +1.8 |
| G18K | Tagagawik | 10.86 | 331 | | Pn | 12 25 40.0 | +0.2 |
| F21K | Alatna River | 10.89 

*ISN* ***26*** *12:26:31.8±0.6,34.˚68N×46.˚22E,h6km±5km,ML2.7*
*TEH* ***26*** *12:26:33.1,34.˚67N×46.˚21E,h10km±45km,ML2.9*
**ISC 26 12:26:33.0**±1.3,**34.˚68N**±0.˚05×**46.˚19E**±0.˚04,**h6**km±14km,
**n9,**σ1ᵗ**21**/13,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.16** | **81** | Pg | **Pg** | **12 26 37.0** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **0.46** | **138** | Pg | **Pb** | **12 26 42.3** | **-1.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **203** | Pg | **Pb** | **12 26 45.2** | **-1.0** |
| **ILIN** | **Lien** | **0.68** | **69** | Pg | **Pb** | **12 26 46.2** | **-1.3** |
| **KCHF** | **Cheshme Sefid,** | **0.81** | **119** | Pg | **Pb** | **12 26 48.6** | **-1.0** |
| **IBDR** | **Badra** | **1.58** | **188** | *e*Pn | **Pb** | **12 27 02.0** | **-0.6** |
| IBDR | | | | *e*Sn | **Sg** | **12 27 24.0** | **+0.3** |
| **IKRK** | **Kirkuk** | **1.68** | **296** | *e*Pn | **Pb** | **12 27 04.0** | **-0.5** |
| IKRK | | | | *e*Sn | **Sg** | **12 27 27.2** | **0.0** |
| IKRK | | | | AML | AML | 12 27 34.1 | |
| | comp=N,137nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 12 27 38.6 | |
| | comp=E,88nm,0.4s | | | | | | |
| **BHD** | **Baghdad** | **2.06** | **228** | *e*Pn | **Pb** | **12 27 09.0** | **-1.8** |
| BHD | | | | *e*Sn | **Sb** | **12 27 36.0** | **-0.6** |
| **RAFI** | **Al-Rafai** | **2.94** | **181** | *e*Pn | **Pn** | **12 27 21.0** | **+0.6** |
| RAFI | | | | *e*Sn | **Sn** | **12 27 57.5** | **+1.4** |

*TEH* ***26*** *12:33:27.9,34.˚64N×46.˚18E,h6km±28km,ML3.7*
*ISN* ***26*** *12:33:27.7±1.3,34.˚63N×46.˚16E,h4km±12km,ML3.7*
*IDC* ***26*** *12:33:29.0±2.2,34.˚97N×46.˚23E,h0km,mb3.7/5, mbtmp3.7/5,MS2.3/1,Error ellipse: s-maj=47.5km s-min=31.6km az=149.0*
**ISC 26 12:33:29.0**±1.2,**34.˚64N**±0.˚03×**46.˚13E**±0.˚03,**h6**km±9km,
**n29,**σ1ᵗ**18**/33,**mb3.7**/5,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.22** | **75** | Pg | **Pg** | **12 33 33.4** | **0.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.47** | **253** | Pg | **Pb** | **12 33 38.9** | **-0.8** |
| **IGHG** | **Ghaleghazi** | **0.48** | **131** | Pg | **Pg** | **12 33 38.0** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **199** | Pg | **Pg** | **12 33 39.9** | **+0.1** |
| **ILIN** | **Lien** | **0.74** | **68** | Pg | **Pg** | **12 33 42.5** | **-0.7** |
| **KCHF** | **Cheshme Sefid,** | **0.84** | **116** | Pg | **Pg** | **12 33 44.1** | **-1.0** |
| KCHF | | | | Sg | **Sg** | **12 33 56.9** | **+0.9** |
| **SNQR** | **Sonqor, Kerman** | **1.25** | **80** | Pg | **Pg** | **12 33 52.5** | **-0.5** |
| **IBZA** | **Bozab** | **1.44** | **96** | Pg | **Pn** | **12 33 55.6** | **-0.3** |
| **IBDR** | **Badra** | **1.54** | **186** | *e*Pn | **Pn** | **12 33 57.0** | **0.0** |
| IBDR | | | | *e*Sn | **Sg** | **12 34 18.5** | **+0.1** |
| IBDR | | | | AML | AML | 12 34 30.5 | |
| | comp=E,1μm,0.3s | | | | | | |
| IBDR | | | | AML | AML | 12 34 31.6 | |
| | comp=N,905nm,0.7s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.59** | **341** | Pg | **Pb** | **12 33 58.8** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.65** | **298** | *e*Pn | **Pg** | **12 34 00.0** | **-0.7** |
| IKRK | | | | *e*Sn | **Sg** | **12 34 23.0** | **+0.9** |
| IKRK | | | | AML | AML | 12 34 27.5 | |
| | comp=N,914nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 12 34 27.6 | |
| | comp=E,933nm,0.6s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.81** | **128** | Pg | **Pn** | **12 34 01.8** | **+1.1** |
| **IDOB** | **Doab** | **1.90** | **116** | Pn | **Pn** | **12 34 03.3** | **+1.1** |
| **BHD** | **Baghdad** | **2.00** | **227** | *e*Pn | **Pn** | **12 34 04.0** | **+0.7** |
| BHD | | | | *e*Sn | **Sb** | **12 34 31.0** | **+0.1** |
| **HSAM** | **Samen** | **2.09** | **101** | Pn | **Pn** | **12 34 06.3** | **+1.5** |
| **MAHB** | **Mahabad** | **2.15** | **351** | Pn | **Pb** | **12 34 07.9** | **-0.5** |
| **HAGD** | **Aghdareh** | **2.48** | **85** | Pn | **Pn** | **12 34 11.9** | **+1.6** |
| **IHSH** | **Hashtrud** | **2.81** | **19** | Pn | **Pn** | **12 34 16.5** | **+1.6** |
| **RAFI** | **Al-Rafai** | **2.91** | **180** | *e*Pn | **Pn** | **12 34 17.0** | **+1.1** |
| RAFI | | | | *e*Sn | **Sn** | **12 34 53.0** | **+1.7** |
| **ISHB** | **Shabestar** | **3.66** | **354** | Pn | **Pn** | **12 34 28.6** | **+2.2** |
| **JHBN** | **Jahan bin** | **4.49** | **121** | Pn | **Pn** | **12 34 39.3** | **+1.4** |
| **IVRN** | **Varamin** | **4.62** | **84** | Pn | **Pn** | **12 34 40.7** | **+1.2** |
| **IZEF** | **Zefreh** | **5.45** | **107** | Pn | **Pn** | **12 34 51.8** | **+0.8** |
| **GNI** | **Garni** | **5.61** | **349** | LR | LR | 12 36 50.0 | |
| | comp=E,25nm,18.7s,baz=282,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **29.71** | **55** | P | **P** | **12 39 34.4** | **-1.5** |
| | comp=E,0.3nm,0.7s,baz=253,slow=10,SNR=2.2 | | | | | | |
| | comp=E,0.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **29.73** | **341** | P | **P** | **12 39 34.6** | **-1.2** |
| | comp=E,3.3nm,1.1s,baz=148,slow=8.7,SNR=3.6 | | | | | | |
| | comp=E,3.3nm,1.1s | | | | | | |
| **HFS** | **Hagfors** | **33.05** | **331** | P | **P** | **12 40 03.1** | **-2.0** |
| | comp=E,1.2nm,0.6s,baz=120,slow=8.7,SNR=5.1 | | | | | | |
| | comp=E,1.2nm,0.6s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.50** | **317** | P | **P** | **12 40 59.5** | **-0.7** |
| | comp=E,0.9nm,0.5s,baz=103,slow=8.4,SNR=6.0 | | | | | | |
| | comp=E,0.9nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.46** | **253** | P | **P** | **12 41 51.3** | **+2.1** |
| | comp=E,0.2nm,0.5s,baz=42,slow=5.8,SNR=2.8 | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | |

*IDC* ***26*** *12:56:54.9±7.0,6.˚88S×130.˚30E,h60km±74km,mb3.6/6, mbtmp4.0/8,ML4.3/2,MS3.6/2,Error ellipse: s-maj=74.8km s-min=27.6km az=81.0*
*DJA* ***26*** *12:57:00.1±0.4,7.˚5S±4.˚×12.˚9E±.˚,h178km±15km,M4.7/10, mb4.6/8,mB5.1/4,MLv4.8/10,Mw(mB)4.4/4*
*NEIC* ***26*** *12:57:00.9±1.6,7.˚1S±0.˚1×128.˚90E±0.˚07,h158km±7km, mb4.6/14,Error ellipse: s-maj=15.5km s-min=10.2km az=173.0*
**ISC 26 12:57:00.6**±0.5,**7.˚27S**±0.˚05×**128.˚95E**±0.˚06,**h150**km,**n83,**
σ1ᵗ**85**/81,**mb4.6**/16,**1D,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.44** | **107** | Pn | **Pn** | **12 57 43.2** | **+2.3** |
| **SAUI** | **Saumlaki** | **2.44** | **107** | P | **Pn** | **12 57 41.3** | **+0.4** |
| **SOEI** | **Soe** | **5.25** | **242** | P | **Pn** | **12 58 18.8** | **+1.4** |
| **SOEI** | **Soe** | **5.25** | **242** | | **Pn** | **12 58 18.4** | **+1.1** |
| **SOEI** | **Soe** | **5.25** | **242** | P | **Pn** | **12 58 18.5** | **+1.1** |
| | 104nm,0.7s,2μm1.2nm | | | | | | |
| **FAKI** | **Fak Fak** | **5.43** | **37** | Pn | **Pn** | **12 58 18.5** | **-1.4** |
| **FAKI** | **Fak Fak** | **5.43** | **37** | P | **Pn** | **12 58 18.4** | **-1.4** |
| **DRS** | **Darwin Rock St** | **5.47** | **160** | P | **Pn** | **12 58 21.0** | **+0.7** |
| **MTN** | **Manton Dam** | **5.94** | **159** | P | **Pn** | **12 58 27.1** | **+0.6** |
| **MTN** | **Manton Dam** | **5.94** | **159** | | **Pn** | **12 58 27.0** | **+0.5** |
| **KMPI** | **Kaimana, Papua** | **5.94** | **53** | P | **Pn** | **12 58 26.0** | **-0.5** |
| | 214nm,0.8s,3μm1.9nm | | | | | | |
| **BATI** | **Baumata** | **5.98** | **240** | P | **Pn** | **12 58 27.6** | **+0.5** |
| | 154nm,0.8s,3μm1.1nm | | | | | | |
| **KDU** | **Kakadu** | **6.40** | **147** | P | **Pn** | **12 58 32.9** | **+0.2** |
| **SWI** | **Sorong** | **6.77** | **20** | P | **Pn** | **12 58 36.6** | **-1.1** |
| | 19nm,0.6s,0.3nm | | | | | | |
| **MMRI** | **Maumere** | **6.78** | **258** | Pn | **Pn** | **12 58 40.7** | **+2.9** |
| **EDFI** | **Ende, Flores** | **7.34** | **258** | P | **Pn** | **12 58 46.8** | **+1.5** |
| **KNRA** | **Kununurra** | **8.35** | **181** | | **Pn** | **12 58 57.8** | **-0.9** |
| **BASI** | **Baing, Sumba** | **8.78** | **250** | P | **Pn** | **12 59 04.6** | **+0.2** |
| | 94nm,1.0s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **9.74** | **255** | P | **Pn** | **12 59 16.8** | **-0.5** |
| **PLAI** | **Plampang** | **11.17** | **261** | P | **Pn** | **12 59 34.8** | **-1.3** |
| **FITZ** | **Fitzroy Crossi** | **11.23** | **196** | P | **Pn** | **12 59 35.7** | **-1.2** |
| **FITZ** | **Fitzroy Crossi** | **11.23** | **196** | | **Pn** | **12 59 34.2** | **-2.6** |
| **TABU** | **Tabubil** | **12.36** | **81** | P | **P** | **12 59 59.9** | **+2.2** |
| **WB0** | **Warramunga Arr** | **13.50** | **157** | | **Pn** | **13 00 03.4** | **-2.8** |
| **WRAB** | **Tennant Creek** | **13.63** | **158** | | **Pn** | **13 00 04.7** | **-3.2** |
| **WRA** | **Warramunga Arr** | **13.64** | **158** | | **Pn** | **13 00 04.7** | **-3.3** |
| **WRA** | **Warramunga Arr** | **13.64** | **158** | P | **Pn** | **13 00 05.2** | **-2.8** |
| | 1.0nm,0.3s,baz=328,slow=14,SNR=36 | | | | | | |
| WRA | | | | S | Sn | 13 02 28.1 | -11 |
| | 16nm,0.8s,baz=330,slow=24,SNR=15 | | | | | | |
| | 3.2nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **13.64** | **158** | | **Pn** | **13 00 05.1** | **-2.9** |
| **WR0** | **Warramunga Arr** | **13.73** | **157** | | **Pn** | **13 00 06.3** | **-2.8** |
| **JAGI** | **Jajag, Banyuwa** | **14.71** | **264** | P | **P** | **13 00 24.7** | **+1.0** |
| **COEN** | **Coen** | **15.47** | **117** | P | **P** | **13 00 33.8** | **+1.6** |
| **COEN** | **Coen** | **15.47** | **117** | P | **P** | **13 00 32.3** | **+0.1** |
| COEN | | | | IAmb | IAmb | 13 00 34.7 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **16.43** | **212** | P | **Pn** | **13 00 43.6** | **+1.0** |
| **MBWA** | **Marble Bar** | **16.43** | **212** | P | **P** | **13 00 43.3** | **+0.6** |
| **PSA00** | **Pilbara Seismi** | **16.71** | **211** | P | **P** | **13 00 46.0** | **+0.2** |
| **PSA00** | **Pilbara Seismi** | **16.71** | **211** | | **P** | **13 00 46.2** | **+0.4** |
| PSA00 | | | | IAmb | IAmb | 13 00 47.5 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **QIS** | **Mount Isa** | **16.76** | **143** | P | **Pn** | **13 00 47.9** | **+1.2** |
| **AS31** | **Alice Springs** | **16.98** | **164** | | **Pn** | **13 00 49.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **16.98** | **164** | P | **P** | **13 00 49.6** | **+0.8** |
| **ASAR** | **Alice Springs** | **16.98** | **164** | P | **P** | **13 00 49.5** | **+0.7** |
| | comp=Z,2.1nm,0.3s,baz=337,slow=9.3,SNR=251 | | | | | | |
| ASAR | | | | S | **S** | **13 03 50.3** | **-7.9** |
| | comp=Z,1.6nm,0.8s,baz=340,slow=21,SNR=5.3 | | | | | | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **AS01** | **Alice Springs** | **16.99** | **164** | P | **P** | **13 00 49.6** | **+0.7** |
| **WRKA** | **Warakurna** | **17.68** | **182** | P | **Pn** | **13 00 57.9** | **+0.3** |
| **MTSU** | **Mount Surprise** | **18.46** | **127** | P | **Pn** | **13 01 07.4** | **+0.5** |
| **MANU** | **Manus Island** | **19.07** | **75** | P | **Pn** | **13 01 14.1** | **0.0** |
| MANU | | | | IAmb | IAmb | 13 01 15.4 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **GIRL** | **Giralia** | **20.84** | **221** | P | **P** | **13 01 31.2** | **+0.6** |
| **OOD** | **Oodnadatta** | **21.39** | **163** | P | **P** | **13 01 36.8** | **+0.4** |
| **MEEK** | **Meekatharra** | **21.62** | **206** | P | **P** | **13 01 40.1** | **+1.1** |
| **INKA** | **Innaminka** | **23.22** | **153** | P | **P** | **13 01 57.3** | **+2.9** |
| **MULG** | **Mulgathing** | **23.39** | **169** | P | **P** | **13 01 56.7** | **+0.8** |
| **FORT** | **Forrest** | **23.40** | **182** | P | **P** | **13 01 58.5** | **+2.5** |
| **FORT** | **Forrest** | **23.40** | **182** | P | **P** | **13 01 56.7** | **+0.7** |
| FORT | | | | IAmb | IAmb | 13 01 58.3 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **QLP** | **Quilpie** | **24.09** | **145** | P | **P** | **13 02 06.1** | **+3.8** |
| **LCRK** | **Leigh Creek** | **24.64** | **161** | P | **P** | **13 02 08.5** | **+1.2** |
| **MORW** | **Morawa** | **24.86** | **208** | P | **P** | **13 02 11.7** | **+2.4** |
| **MORW** | **Morawa** | **24.86** | **208** | P | **P** | **13 02 11.4** | **+2.0** |
| MORW | | | | IAmb | IAmb | 13 02 12.0 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **BLDU** | **Ballidu** | **25.90** | **205** | P | **P** | **13 02 19.5** | **+0.8** |
| **BBOO** | **Buckleboo** | **26.25** | **166** | P | **P** | **13 02 22.6** | **+0.7** |
| **BBOO** | **Buckleboo** | **26.25** | **166** | P | **P** | **13 02 22.4** | **+0.5** |
| **KLBR** | **Kellerberrin** | **26.36** | **202** | P | **P** | **13 02 23.3** | **+0.5** |
| **STKA** | **Stephens Creek** | **27.17** | **156** | P | **P** | **13 02 31.0** | **+0.9** |
| | comp=Z,2.3nm,0.6s,baz=351,slow=7.0,SNR=5.0 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **MUN** | **Mundaring** | **27.30** | **204** | P | **P** | **13 02 31.3** | **+0.1** |
| **NWAO** | **Narrogin (SRO)** | **27.75** | **202** | P | **P** | **13 02 35.7** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **27.75** | **202** | P | **P** | **13 02 35.6** | **+0.4** |
| NWAO | | | | IAmb | IAmb | 13 03 06.0 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.76** | **149** | P | **P** | **13 02 46.4** | **+2.2** |
| **ARPS** | **Mount Arapiles** | **31.63** | **160** | P | **P** | **13 03 11.4** | **+2.0** |
| **MGCD** | **Mangrove Creek** | **32.98** | **144** | P | **P** | **13 03 24.8** | **+3.5** |
| **TOO** | **Toolangi** | **33.70** | **156** | P | **P** | **13 03 29.5** | **+2.1** |
| **GYA** | **Guiyang** | **39.90** | **328** | ⇓P | **P** | **13 04 20.0** | **-0.2** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| **NJ2** | **Nanjing** | **40.27** | **347** | *e*P | **P** | **13 04 23.3** | **+0.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| **PZH** | **PanZhiHua** | **42.71** | **323** | P | **P** | **13 04 44.3** | **+1.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,130nm,4.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.44** | **11** | P | **P** | **13 04 55.2** | **-1.5** |
| | comp=Z,1.4nm,0.9s,baz=165,slow=11,SNR=4.2 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **44.51** | **359** | P | **P** | **13 04 57.0** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=170,slow=7.9,SNR=6.7 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **MSVF** | **Nonsavu** | **48.92** | **107** | P | **P** | **13 05 28.5** | **-3.4** |
| MSVF | | | | IAmb | IAmb | 13 06 03.4 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **PALK** | **Pallekele** | **50.24** | **286** | LR | LR | 13 29 02.0 | |
| | comp=Z,45nm,18.2s,baz=202,slow=38 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.49** | **343** | *e*P | **P** | **13 05 45.3** | **+1.9** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.31** | **3** | P | **P** | **13 05 48.5** | **-0.8** |
| | comp=Z,0.8nm,0.6s,baz=182,slow=7.2,SNR=2.0 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **MDJ** | **Mudanjiang** | **51.65** | **1** | P | **P** | **13 05 51.5** | **-0.4** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **64.91** | **19** | P | **P** | **13 07 23.6** | **-0.2** |
| | comp=Z,1.7nm,0.5s,baz=180,slow=4.4,SNR=4.1 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.89** | **327** | P | **P** | **13 07 42.7** | **-0.2** |
| **MKAR** | **Makanchi Array** | **67.89** | **327** | P | P | 13 07 50.1 | +7.2 |
| | comp=Z,0.4nm,0.5s,baz=116,slow=9.8,SNR=3.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **74.32** | **201** | LR | LR | 13 39 06.0 | |
| | comp=Z,34nm,18.3s,baz=116,slow=34 | | | | | | |
| **VOI** | **Vohitsoka** | **80.07** | **249** | P | **P** | **13 08 51.6** | **-2.8** |
| VOI | | | | IAmb | IAmb | 13 09 27.7 | |
| | comp=Z,20nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.70** | **180** | P | **P** | **13 09 07.3** | **-0.1** |

*ISN* ***26*** *13:07:08.1±0.5,34.˚70N×46.˚17E,h6km±5km,ML3.0*
*TEH* ***26*** *13:07:09.2,34.˚66N×46.˚20E,h8km±42km,ML3.0*
**ISC 26 13:07:09.1**±1.3,**34.˚70N**±0.˚04×**46.˚15E**±0.˚04,**h3**km±13km,
**n10,**σ0ᵗ**78**/15,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.19** | **91** | Pg | **Pg** | **13 07 13.2** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.51** | **137** | Pg | **Pg** | **13 07 18.2** | **-0.6** |
| **GLG1** | **Gilan-e-Gharb** | **0.62** | **199** | Pg | **Pg** | **13 07 20.8** | **-0.2** |
| GLG1 | | | | Sg | **Sg** | **13 07 30.2** | **+1.1** |
| **ILIN** | **Lien** | **0.70** | **72** | Pg | **Pg** | **13 07 22.4** | **-0.2** |
| **IBDR** | **Badra** | **1.60** | **187** | *e*Pn | **Pb** | **13 07 38.5** | **-0.8** |
| IBDR | | | | *e*Sn | **Sg** | **13 08 00.8** | **+0.3** |
| **IKRK** | **Kirkuk** | **1.64** | **296** | *e*Pn | **Pb** | **13 07 39.3** | **-0.7** |
| IKRK | | | | *e*Sn | **Sg** | **13 08 02.5** | **+0.6** |
| IKRK | | | | AML | AML | 13 08 12.5 | |
| | comp=N,238nm,0.7s | | | | | | |
| IKRK | | | | AML | AML | 13 08 14.5 | |
| | comp=E,152nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.83** | **129** | Pg | **Pn** | **13 07 41.8** | **+0.4** |
| **IDOB** | **Doab** | **1.91** | **118** | Pn | **Pb** | **13 07 43.9** | **-0.8** |
| **BHD** | **Baghdad** | **2.05** | **226** | *e*Pn | **Pn** | **13 07 45.0** | **+0.5** |
| BHD | | | | *e*Sn | **Sb** | **13 08 12.0** | **-0.9** |
| **RAFI** | **Al-Rafai** | **2.97** | **181** | *e*Pn | **Pn** | **13 07 58.0** | **+0.9** |
| RAFI | | | | *e*Sn | **Sn** | **13 08 34.0** | **+0.7** |

**IDC 26 13:23:60.0**±6.9,**10.˚08N**×**91.˚08E**,**h0**km,**mb3.3**/3,
**mbtmp3.3**/3,**Error ellipse: s-maj=338.0km s-min=31.2km az=60.0,Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S3** | **Diego Garcia H** | **25.54** | **227** | T | T | 13 56 51.3 | |
| | baz=46,slow=75,SNR=283 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.55** | **227** | T | T | 13 56 48.5 | |
| | baz=46,slow=75,SNR=89 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.56** | **227** | T | T | 13 56 49.5 | |
| | baz=46,slow=75,SNR=57 | | | | | | |
| **MKAR** | **Makanchi Array** | **37.34** | **350** | P | P | 13 31 14.1 | -0.1 |
| | 0.4nm,0.6s,baz=173,slow=7.3,SNR=3.0 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **52.00** | **125** | P | P | 13 33 11.1 | -0.5 |
| | 0.3nm,0.8s,baz=300,slow=10.0,SNR=8.4 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **53.64** | **129** | P | P | 13 33 24.0 | +0.3 |
| | 0.3nm,0.6s,baz=305,slow=7.3,SNR=8.3 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.12** | **209** | T | T | 14 47 33.2 | |
| | baz=44,slow=75,SNR=237 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.13** | **209** | T | T | 14 47 34.0 | |
| | baz=44,slow=75,SNR=160 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.14** | **209** | T | T | 14 47 40.1 | |
| | baz=44,slow=75,SNR=214 | | | | | | |

*ISN* ***26*** *13:29:09.0±0.6,34.˚61N×46.˚17E,h4km±6km,ML2.9*
*TEH* ***26*** *13:29:09.9,34.˚62N×46.˚20E,h8km±70km,ML2.9*
**ISC 26 13:29:10.4**±1.7,**34.˚63N**±0.˚05×**46.˚21E**±0.˚05,**h2**km±15km,
**n9,**σ0ᵗ**49**/12,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.17** | **64** | Pg | **Pg** | **13 29 14.2** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.42** | **134** | Pg | **Pg** | **13 29 18.8** | **+0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **206** | Pg | **Pg** | **13 29 20.9** | **-0.3** |
| **ILIN** | **Lien** | **0.69** | **65** | Pg | **Pg** | **13 29 23.3** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.77** | **117** | Pg | **Pg** | **13 29 24.6** | **-0.6** |
| **IBZA** | **Bozab** | **1.38** | **96** | Pg | **Pn** | **13 29 36.3** | **-0.5** |
| **IKRK** | **Kirkuk** | **1.71** | **297** | *e*Pn | **Pn** | **13 29 41.0** | **-0.3** |
| IKRK | | | | *e*Sn | **Sb** | **13 30 05.0** | **+0.3** |
| IKRK | | | | AML | AML | 13 30 10.5 | |
| | comp=E,121nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 13 30 12.6 | |
| | comp=N,262nm,0.5s | | | | | | |
| **BHD** | **Baghdad** | **2.03** | **229** | *e*Pn | **Pn** | **13 29 45.3** | **-0.3** |
| BHD | | | | *e*Sn | **Sn** | **13 30 12.0** | **+0.4** |
| **RAFI** | **Al-Rafai** | **2.90** | **182** | *e*Pn | **Pn** | **13 29 58.0** | **+0.5** |
| RAFI | | | | *e*Sn | **Sn** | **13 30 33.0** | **+0.1** |

*IDC* ***26*** *13:35:29.7±8.0,20.˚92S×178.˚38W,h462km±78km,mb3.2/4, mbtmp4.1/5,Error ellipse: s-maj=55.0km s-min=24.2km az=41.0*
**ISC 26 13:35:37.4**±1.1,**21.˚1S**±0.˚2×**178.˚6W**±0.˚2,**h550**km,**n11,**
σ1ᵗ**22**/14,**mb3.8**/4,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **17.45** | **191** | P | **P** | **13 39 07.8** | **-2.3** |
| | 2.5nm,0.5s,baz=315,slow=16,SNR=1.3 | | | | | | |
| **STKA** | **Stephens Creek** | **36.98** | **245** | P | **P** | **13 42 01.6** | **+0.9** |
| | 0.9nm,0.4s,baz=333,slow=22,SNR=3.6 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **43.80** | **257** | P | **P** | **13 42 55.9** | **+0.7** |
| | 2.5nm,0.6s,baz=94,slow=8.1,SNR=78 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 44 30.6** | **+1.1** |
| | 1.1nm,0.7s,baz=102,slow=3.9,SNR=16 | | | | | | |
| ASAR | | | | S | **S** | **13 48 45.2** | **-1.1** |
| | 1.0nm,1.1s,baz=98,slow=14,SNR=4.4 | | | | | | |
| | 2.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.93** | **263** | P | **P** | **13 42 56.2** | **0.0** |
| | 0.7nm,0.5s,baz=97,slow=7.5,SNR=27 | | | | | | |
| WRA | | | | PcP | **PcP** | **13 44 30.2** | **+0.1** |
| | 0.5nm,0.9s,baz=95,slow=3.2,SNR=2.9 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.93** | **180** | P | **P** | **13 45 49.0** | **+1.6** |
| | 2.1nm,0.7s,baz=277,slow=0.9,SNR=12 | | | | | | |
| | 2.1nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **119.19** | **320** | PKP | **PKiKP** | **13 53 24.2** | **+0.1** |
| | 0.6nm,0.4s,baz=113,slow=3.7,SNR=3.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.44** | **349** | PKP | **PKiKP** | **13 53 43.3** | **-0.6** |
| | 2.2nm,0.9s,baz=48,slow=1.3,SNR=4.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.28** | **330** | PKP | **PKPdf** | **13 54 07.7** | **-1.4** |
| | 3.5nm,0.5s,baz=44,slow=4.2,SNR=15 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.82** | **311** | PKPbc | **PKiKP** | **13 54 19.4** | **-1.1** |
| | 1.3nm,0.6s,baz=125,slow=4.4,SNR=9.9 | | | | | | |
| **MLR** | **Muntele Rosu** | **148.43** | **326** | PKPbc | **PKiKP** | **13 54 24.6** | **+1.0** |
| | 1.9nm,0.5s,baz=353,slow=1.4,SNR=4.2 | | | | | | |
| **GERES** | **GERESS Array B** | **150.65** | **343** | PKPbc | **PKiKP** | **13 54 28.3** | **+0.3** |
| | 0.9nm,0.6s,baz=17,slow=1.4,SNR=4.6 | | | | | | |

*TAP* ***26*** *13:44:22.1,23.˚01N×120.˚20E,h13km,ML3.5,C*
**ISC 26 13:44:22.7**±0.8,**23.˚03N**±0.˚02×**120.˚20E**±0.˚02,**h15**km±4km,
**n101,**σ0ᵗ**67**/154,**2C-1D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAI1** | **Yung-k'ang** | **0.03** | **61** | ⇑*i*P | **Pg** | **13 44 25.0** | **-0.4** |
| | baz=51 | | | | | | |
| TAI1 | | | | *i* S | **Sg** | **13 44 27.7** | **+0.5** |
| | baz=51 | | | | | | |
| **TAI** | **Tainan** | **0.03** | **186** | *i* P | **Pg** | **13 44 25.0** | **-0.4** |
| | baz=159 | | | | | | |
| TAI | | | | *i* S | **Sg** | **13 44 27.4** | **+0.2** |
| | baz=159 | | | | | | |
| **SSHA** | **Shanhua** | **0.14** | **36** | ⇓*i*P | **Pb** | **13 44 26.9** | **0.0** |
| | baz=34 | | | | | | |
| SSHA | | | | *i* S | **Sb** | **13 44 31.0** | **+1.2** |
| | baz=34 | | | | | | |
| **SCLT** | **Jiali** | **0.15** | **358** | P | **Pb** | **13 44 27.1** | **0.0** |
| | baz=1.0 | | | | | | |
| SCLT | | | | *i* S | **Sb** | **13 44 31.3** | **+1.2** |
| | baz=1.0 | | | | | | |
| **TSCK** | **Chigu Township** | **0.16** | **319** | *e*P | **Pb** | **13 44 27.4** | **+0.1** |
| | baz=316 | | | | | | |
| TSCK | | | | *e*S | **Sb** | **13 44 31.9** | **+1.4** |
| | baz=316 | | | | | | |
| **TWM1** | **Shoushan** | **0.29** | **134** | ⇑*i*P | **Pb** | **13 44 29.9** | **+0.4** |
| | baz=131 | | | | | | |
| TWM1 | | | | *e*S | **Sb** | **13 44 34.4** | **+0.2** |
| | baz=131 | | | | | | |
| **SNJT** | **Kaohsiung City** | **0.30** | **155** | *e*P | **Pb** | **13 44 30.2** | **+0.5** |
| | baz=159 | | | | | | |
| SNJT | | | | *e*S | **Sn** | **13 44 36.4** | **-2.2** |
| | baz=159 | | | | | | |
| **SCST** | **Cishan** | **0.30** | **117** | *i* P | **Pb** | **13 44 30.7** | **+0.9** |
| |

baz=130
ELDTW **Lidau** 0.77 78 P Pb 13 44 37.9 +0.1
baz=89
ELDTW *i* S Sn 13 44 49.6 -0.8
baz=89
**PNG Penghu** 0.80 312 P Pg 13 44 37.8 -0.5
baz=314
PNG *i* S Sb 13 44 49.2 +0.3
baz=314
**ECL Taimali** 0.82 121 *e*P Pn 13 44 38.6 -1.0
baz=121
ECL *e*S Sn 13 44 50.6 -0.8
baz=121
**TWG Pinlang** 0.83 104 *i* P Pn 13 44 39.5 -0.3
baz=104
TWG *e*S Sn 13 44 51.6 -0.1
baz=104
TWGBT **Beinan** 0.84 104 P Pn 13 44 39.4 -0.5
TWGBT **Beinan** 0.84 104 *e*P Pn 13 44 39.1 -0.8
baz=103
**WTCT Ta-ch'eng** 0.84 5 *e*P Pb 13 44 39.0 +0.1
baz=7.0
WTCT *i* S Sn 13 44 51.5 -0.4
baz=7.0
**LONT Longtian** 0.86 98 *e*P Pn 13 44 39.8 -0.5
baz=98
LONT *e*S Sn 13 44 51.7 -1.0
baz=98
**EAST Anshuo** 0.88 137 *i* P Pn 13 44 40.4 -0.1
baz=124
EAST *e*S Sn 13 44 53.5 +0.5
baz=124
**WRL Guolierlin Hig** 0.89 11 *e*P Pn 13 44 40.1 -0.5
baz=9.0
**WHYT Xinyi Township** 0.90 42 *e*P Pb 13 44 39.9 0.0
baz=42
WHYT *e*S Sn 13 44 52.8 -0.7
baz=42
**TTN Taitung** 0.91 107 *e*P Pn 13 44 39.9 -0.3
baz=106
**TAW Tawu** 0.93 136 *e*P Pn 13 44 41.0 -0.1
baz=123
TAW *e*S Sn 13 44 53.6 -0.5
baz=123
**WJS Zhushan** 0.93 31 *e*P Pb 13 44 40.2 -0.2
baz=32
WJS *e*S Sn 13 44 54.6 +0.4
baz=32
**TAWH Dawu Township** 0.93 137 *e*P Pn 13 44 41.3 +0.2
baz=127
**EHD Haiduan** 0.93 82 *e*P Pn 13 44 41.0 -0.2
baz=82
EHD *e*S Sn 13 44 54.6 +0.3
baz=82
**ECS Chishang** 0.94 86 *e*P Pb 13 44 40.3 -0.4
baz=85
**WNT Mingjian** 0.96 28 *e*P Pn 13 44 41.4 -0.2
baz=29
WNT *e*S Sn 13 44 55.0 0.0
baz=29
**SLIU Shizi** 0.98 145 P Pn 13 44 41.6 -0.2
baz=145
SLIU S Sn 13 44 56.0 +0.6
baz=145
**EDH Donghe** 1.02 93 *e*P Pn 13 44 42.4 0.0
baz=92
**FULB Fuli** 1.02 80 *e*P Pn 13 44 42.7 +0.3
baz=80
FULB *e*S Sn 13 44 57.8 +1.3
baz=80
**SSLB Suanglung** 1.03 42 P Pg 13 44 42.1 -0.5
**SSLB Suanglung** 1.03 42 *e*P Pb 13 44 41.2 -0.9
baz=43
SSLB *e*S Sn 13 44 56.5 -0.2
baz=43
**TWF1 Yuli** 1.06 72 P Pn 13 44 43.2 +0.2
baz=73
TWF1 *i* S Sn 13 44 57.8 +0.4
baz=73
**TYC Yuchr** 1.06 34 *e*P Pb 13 44 42.3 -0.4
baz=33
**YULB Yu-li** 1.07 70 P Pg 13 44 43.1 -0.3
**YULB Yu-li** 1.07 70 P Pb 13 44 42.7 -0.2
baz=70
YULB *e*S Sn 13 44 57.4 -0.4
baz=70
**CHKT Chengkung** 1.08 86 *e*P Pn 13 44 42.8 -0.4
baz=86
CHKT *e*S Sn 13 45 00.0 +2.2
baz=86
**EYUL Yuli** 1.08 73 *i* P Pg 13 44 43.6 +0.1
baz=73
EYUL *e*S Sn 13 44 58.5 +0.6
baz=73
**WCHH Zhanghua** 1.10 17 *e*P Pb 13 44 42.9 -0.4
baz=6.0
WCHH *e*S Sn 13 44 59.0 +0.6
baz=6.0
**CHKH Chenggong** 1.11 81 *e*P Pg 13 44 44.0 -0.2
baz=82
CHKH *e*S Sn 13 44 59.1 +0.4
baz=82
**VWDT VWDT** 1.13 50 *e*P Pg 13 44 44.2 -0.3
baz=36
**HEN Hengchun** 1.13 154 *e*P Pg 13 44 44.3 -0.2
baz=154
**EHY Hungye** 1.14 65 P Pg 13 44 44.4 -0.3
baz=76
EHY S Sn 13 44 59.8 +0.4
baz=76
**HGSD Ruisui** 1.22 67 *e*P Pg 13 44 45.8 -0.4
baz=67
**WCS Beigang Elemen** 1.22 32 *e*P Pn 13 44 45.0 -0.2
baz=31
**LDUT Ludao** 1.22 106 *e*P Pn 13 44 44.8 -0.4
baz=95
**WUSB Renai** 1.28 41 *i* P Pb 13 44 46.4 -0.1
baz=42
WUSB *e*S Sg 13 45 03.5 -0.5
baz=42
**OWD Renai** 1.29 44 *e*P Pb 13 44 46.3 -0.4
baz=30
WARBT **Fenglin Townsh** 1.29 57 *e*P Pn 13 44 45.9 -0.3
baz=56
**EGFH Guangfu** 1.30 60 *e*P Pb 13 44 46.9 +0.1
baz=49
EGFH *e*S Sg 13 45 04.2 -0.4
baz=49
**CHGB Renai** 1.36 41 *e*P Pb 13 44 48.1 +0.1
baz=42
CHGB *e*S Sn 13 45 04.8 -0.4
baz=42
**ESL Shilin** 1.38 55 *e*P Pb 13 44 47.8 -0.3
baz=54
**TWQ1 Liyutan** 1.42 22 *e*P Pn 13 44 48.0 +0.1
baz=23
TWQ1 *e*S Sg 13 45 08.0 -0.5
baz=23
**WHP Taichung City** 1.42 29 *e*P Pn 13 44 48.2 +0.1
baz=27
**WHF Hehuan Shan** 1.48 41 *e*P Pb 13 44 50.3 +0.2
baz=40
**LXIB Xiulin Townshi** 1.49 48 *e*P Pn 13 44 49.1 +0.1
baz=35
**ETM Tongmen** 1.51 52 *e*P Pn 13 44 49.4 +0.3
baz=39
**FUSS Fushou** 1.55 38 *e*P Pn 13 44 50.2 +0.3
baz=36
**NACB Ninganchiao** 1.71 48 P Pn 13 44 52.5 +0.5
**NACB Ninganchiao** 1.71 48 *e*P Pn 13 44 52.3 +0.3
baz=66
**NNSB Datong** 1.77 38 *e*P Pn 13 44 53.0 +0.2
baz=22
**NNS Nan Shan** 1.77 37 *e*P Pn 13 44 53.5 +0.6
baz=17
**LIOB Emei** 1.78 25 *e*P Pb 13 44 53.9 -1.1
baz=23
**NFF Wufeng Townshi** 1.81 28 *e*P Pb 13 44 54.9 -0.6
baz=26
**LATG Datong** 1.93 39 *e*P Pn 13 44 56.1 +1.0
baz=22
**NSK Sanguang** 1.96 33 *e*P Pn 13 44 56.4 +1.1
baz=14
**YHNB Yeheng** 1.96 33 P Pb 13 44 56.9 -1.2
**YHNB Yeheng** 1.96 33 *e*P Pn 13 44 55.6 +0.2
baz=14
**NDT Datong Townshi** 1.98 37 *e*P Pn 13 44 56.7 +1.1
baz=18

**ENA Nanau** 1.98 45 *e*P Pn 13 44 56.9 +1.2
baz=63
**VWUC VWUC** 2.07 341 *e*P Pb 13 44 58.6 -1.4
baz=339
**FUSB Fushanzhiwuyua** 2.14 36 *e*P Pb 13 44 59.9 -1.3
baz=17
**TWE Neicheng** 2.16 38 *e*P Pb 13 45 00.0 -1.4
baz=19
**KNMB Chin-men Tao** 2.19 311 *e*P Pn 13 44 58.1 -0.4
baz=310
**PTMZ Houxiangcun** 2.23 334 *e*P Pn 13 44 59.4 +0.3
baz=333

*SOME **26** 13:45:09.3, 38.47N×73.07E, h0km*
*MOS **26** 13:45:12.0±0.7, 37.48N×72.27E, h196km, mb4.0/2, Error ellipse: s-maj=16.2km s-min=6.4km az=88.7*
*NEIC **26** 13:45:13.4±0.6, 37.50N±0.02×72.1E±0.1, h184km±6km, mb4.1/1, Error ellipse: s-maj=12.6km s-min=2.6km az=84.0*
*NNC **26** 13:45:14.7±3.9, 37.92N×72.07E, h0km, mb4.4, mpv4.0, Error ellipse: s-maj=30.6km s-min=23.4km az=161.0*
*IDC **26** 13:45:16.6±7.9, 37.74N×72.32E, h197km±51km, mb3.3/2, mbtmp3.9/8, Error ellipse: s-maj=73.4km s-min=44.7km az=3.0*
**ISC 26 13:45:11.5**±0.7, **37.38N**±0.04×**72.26E**±0.05, **h176**km, **n71**, σ1§**86**/88, **mb3.9**/4, **6C-1D**, **Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **DRK** | **Karamyk** | **2.13** | **350** | | | **Pn** | **13 45 51.5** | **+1.5** |
| **DRK** | **Karamyk** | **2.13** | **350** | Pn | | **Pn** | **13 45 51.5** | **+1.5** |
| **GAR** | **Garm** | **2.23** | **317** | Pn | | **Pn** | **13 45 51.9** | **+0.9** |
| **CHGR** | **Chuyangaron** | **2.76** | **298** | Pn | | **Pn** | **13 45 57.9** | **+0.7** |
| **CHGR** | **Chuyangaron** | **2.76** | **298** | PN | | **Pn** | **13 45 57.9** | **+0.7** |
| **SIMJ** | **Simíganj** | **2.87** | **297** | Pn | | **Pn** | **13 45 59.1** | **+0.6** |
| **BTK** | **Batken** | **2.90** | **338** | | | **Pn** | **13 46 00.5** | **+1.6** |
| **BTK** | **Batken** | **2.90** | **338** | PN | | **Pn** | **13 46 00.5** | **+1.6** |
| **NIL** | **Nilore** | **3.81** | **167** | Pn | | **Pn** | **13 46 13.7** | **+3.5** |
| **NIL** | **Nilore** | **3.81** | **167** | PN | | **Pn** | **13 46 13.7** | **+3.5** |
| **KBL** | **Kabul** | **3.85** | **224** | Pn | | **Pn** | **13 46 13.4** | **+2.5** |
| **KBL** | **Kabul** | **3.85** | **224** | PN | | **Pn** | **13 46 13.4** | **+2.5** |
| **AML** | **Almayashu** SNR=15 | **4.87** | **13** | P | | **Pn** | **13 46 24.7** | **+0.7** |
| **NRN** | **Naryn** | **4.98** | **34** | Pn | | **Pn** | **13 46 24.9** | **-0.5** |
| **NRN** | **Naryn** | **4.98** | **34** | PN | | **Pn** | **13 46 24.9** | **-0.5** |
| **JMU** | **Jammu** | **5.13** | **154** | *e*P | | **Pn** | **13 46 29.1** | **+1.9** |
| JMU | | | | *e*S | | **Sn** | **13 47 26.8** | **+0.4** |
| JMU | comp=E,125nm,0.5s | | | IAML | | | 13 47 28.5 | |
| JMU | comp=N,77nm,0.3s | | | IAML | | | 13 47 29.4 | |
| **UCH** | **Uchtor** SNR=6.5 | **5.14** | **19** | P | | **Pn** | **13 46 28.6** | **+1.0** |
| **CHM** | **Chimkent** comp=N,148nm,0.2s | **5.34** | **338** | *e*P | | Pn | 13 46 35.4 | +5.6 |
| CHM | comp=N,237nm,0.7s | | | *e*S | | **Sn** | **13 47 37.3** | **+6.0** |
| **EKS2** | **Erkin-Say** SNR=29 | **5.40** | **12** | P | | **Pn** | **13 46 31.5** | **+0.8** |
| **MRKS** | **Merke** comp=N,84nm,0.4s | **5.41** | **8** | *e*P | | **Pn** | **13 46 31.0** | **+0.2** |
| MRKS | comp=N,107nm,0.9s | | | *e*S | | **Sn** | **13 47 29.9** | **-3.2** |
| **AAK** | **Ala-Archa** SNR=25 | **5.52** | **17** | P | | **Pn** | **13 46 33.5** | **+1.1** |
| **AAK** | **Ala-Archa** | **5.52** | **17** | Pn | | **Pn** | **13 46 33.0** | **+0.7** |
| **AAK** | **Ala-Archa** comp=N,28nm,0.4s,baz=182,slow=5.8,SNR=42 | **5.52** | **17** | P | | **Pn** | **13 46 33.4** | **+1.1** |
| AAK | comp=N,21nm,0.4s,baz=198,slow=10,SNR=25 | | | S | | **Sn** | **13 47 34.0** | **-1.9** |
| **AAK** | **Ala-Archa** comp=N,19nm,0.5s | **5.52** | **17** | ⇑P | | **Pn** | **13 46 33.1** | **+0.7** |
| AAK | comp=N,42nm,0.8s | | | S | | **Sn** | **13 47 33.2** | **-2.7** |
| **THN** | **Thein Dam** | **5.69** | **149** | *e*P | | **Pn** | **13 46 37.3** | **+2.8** |
| THN | | | | *e*S | | **Sn** | **13 47 39.9** | **+0.3** |
| THN | comp=N,118nm,0.3s | | | IAML | | | 13 47 43.5 | |
| THN | comp=E,111nm,0.3s | | | IAML | | | 13 47 44.0 | |
| **BOOM** | **Boomskoye usch** | **5.83** | **28** | Pn | | **Pn** | **13 46 37.3** | **+0.9** |
| **BOOM** | **Boomskoye usch** | **5.83** | **28** | PN | | **Pn** | **13 46 37.3** | **+0.9** |
| **KK31** | **Karatay Array** | **5.87** | **347** | Pn | | **Pn** | **13 46 36.7** | **0.0** |
| **KK31** | **Karatay Array** comp=E,16nm,0.4s,baz=158,slow=11,SNR=341 | **5.87** | **347** | ⇑P | | **Pn** | **13 46 36.5** | **-0.2** |
| KK31 | comp=E,4.7nm,0.2s,baz=169,slow=2.4,SNR=8.0 | | | ⇑S | | **Sn** | **13 47 39.0** | **-4.8** |
| **KK31** | **Karatay Array** | **5.87** | **347** | PN | | **Pn** | **13 46 36.7** | **0.0** |
| **KKAR** | **Karatay Array** | **5.87** | **347** | Pn | | **Pn** | **13 46 36.6** | **-0.1** |
| **KKAR** | **Karatay Array** | **5.87** | **347** | PN | | **Pn** | **13 46 36.6** | **-0.1** |
| **CHMS** | **Chumysh** SNR=7.4 | **5.93** | **18** | P | | **Pn** | **13 46 38.5** | **+1.0** |
| **CHMS** | **Chumysh** comp=E,5.1nm,0.3s | **5.93** | **18** | ⇑P | | **Pn** | **13 46 37.1** | **-0.4** |
| CHMS | comp=E,26nm,0.6s | | | ⇓S | | **Sn** | **13 47 41.9** | **-3.3** |
| **CHMS** | **Chumysh** | **5.93** | **18** | PN | | **Pn** | **13 46 37.7** | **+0.2** |
| **TKM2** | **Tokmak 2** SNR=5.2 | **6.09** | **24** | P | | **Pn** | **13 46 40.9** | **+1.1** |
| **TKM2** | **Tokmak 2** comp=E,2.7nm,0.5s | **6.09** | **24** | ⇑P | | **Pn** | **13 46 40.0** | **+0.1** |
| TKM2 | comp=E,8.7nm,0.6s | | | ⇑S | | **Sn** | **13 47 45.8** | **-3.6** |
| **TKM2** | **Tokmak 2** | **6.09** | **24** | PN | | **Pn** | **13 46 40.0** | **+0.1** |
| **DHRM** | **DHARAMSHALA** | **6.10** | **146** | *e*P | | **Pn** | **13 46 41.9** | **+1.8** |
| DHRM | | | | *e*S | | **Sn** | **13 47 48.8** | **-0.9** |
| DHRM | comp=N,247nm,0.3s | | | IAML | | | 13 47 50.5 | |
| DHRM | comp=E,276nm,0.6s | | | IAML | | | 13 47 52.5 | |
| **USP** | **Ospenovka** SNR=8.2 | **6.12** | **16** | P | | **Pn** | **13 46 40.6** | **+0.5** |
| **KST** | **Kastek** comp=E,5.8nm,1.6s | **6.33** | **25** | *e*P | | **Pn** | **13 46 43.9** | **+1.1** |
| KST | comp=E,32nm,0.7s | | | *e*S | | **Sn** | **13 47 52.1** | **-2.6** |
| **DGS** | **Degeres** comp=E,3.9nm,0.9s | **6.44** | **24** | *e*P | | **Pn** | **13 46 44.9** | **+0.6** |
| DGS | comp=E,8.6nm,0.9s | | | *e*S | | **Sn** | **13 47 53.7** | **-3.7** |
| **TNSS** | **Tian-Shan** comp=E,3.8nm,0.3s | **6.69** | **31** | *e*P | | **Pn** | **13 46 48.3** | **+0.4** |
| TNSS | comp=E,3.4nm,1.1s | | | *e*S | | **Sn** | **13 47 59.5** | **-4.3** |
| **KRBS** | **Karabastau** comp=E,1.0nm,0.6s | **6.82** | **21** | *e*P | | Pn | 13 46 54.1 | +4.8 |
| KRBS | comp=E,4.5nm,1.1s | | | *e*S | | **Sn** | **13 48 09.4** | **+3.0** |
| **BHK** | **Bhakra** | **6.87** | **149** | *e*S | | **Sn** | **13 48 05.7** | **-1.9** |
| **HNLY** | **HANLEY** | **7.16** | **128** | *e*P | | **Pn** | **13 46 55.1** | **+0.8** |
| HNLY | | | | *e*S | | **Sn** | **13 48 14.4** | **-1.0** |
| **KTBS** | **Karatobe** comp=E,1.1nm,1.0s | **7.16** | **27** | *e*P | | Pn | 13 46 58.6 | +4.8 |
| KTBS | comp=E,4.8nm,0.1s | | | *e*S | | **Sn** | **13 48 17.1** | **+2.6** |
| **SMLA** | **Simla** | **7.44** | **146** | *e*P | | **Pn** | **13 46 58.4** | **+0.9** |
| SMLA | | | | *e*S | | **Sn** | **13 48 18.4** | **-2.8** |
| SMLA | comp=N,100nm,0.3s | | | IAML | | | 13 48 21.7 | |
| SMLA | comp=E,121nm,0.4s | | | IAML | | | 13 48 22.0 | |
| **KLP** | **Kalpa** | **7.65** | **138** | *e*P | | **Pn** | **13 47 01.4** | **+0.9** |
| KLP | | | | *e*S | | **Sn** | **13 48 24.3** | **-2.2** |
| KLP | comp=E,114nm,0.5s | | | IAML | | | 13 48 27.2 | |
| KLP | comp=N,126nm,0.8s | | | IAML | | | 13 48 32.7 | |
| **MKAR** | **Makanchi Array** | **11.99** | **35** | Pn | | **Pn** | **13 47 57.6** | **+0.8** |
| **MKAR** | **Makanchi Array** comp=N,0.4nm,0.6s,baz=204,slow=11,SNR=4.6 | **11.99** | **35** | P | | **Pn** | **13 47 56.7** | **-0.1** |
| **MKAR** | **Makanchi Array** | **11.99** | **35** | *i* P | | **P** | **13 47 59.7** | **-2.7** |
| **WMQ** | **Urumqi** | **13.37** | **56** | *e*P | | **P** | **13 48 16.8** | **-1.0** |
| KURBB | **Kurchatov Arra** comp=N,0.8nm,0.7s,baz=207,slow=9.9,SNR=6.1 | **13.98** | **17** | P | | **Pn** | **13 48 23.1** | **+1.2** |
| **KURK** | **Kurchatov** | **14.09** | **17** | *i* P | | **Pn** | **13 48 22.1** | **-1.1** |
| **AB31** | **Akbulak array** comp=N,3.0nm,0.5s,baz=133,slow=12,SNR=88 | **14.85** | **327** | P | | **P** | **13 48 34.7** | **+0.6** |
| AB31 | comp=N,1.2nm,0.5s,baz=150,slow=23,SNR=7.2 | | | S | | **Sn** | **13 51 15.3** | **-2.9** |
| **AB31** | **Akbulak array** | **14.85** | **327** | P | | **P** | **13 48 34.7** | **+0.6** |
| AB31 | | | | S | | **Sn** | **13 51 15.3** | **-2.9** |
| ABKAR | **Akbulak array** | **14.85** | **327** | Pn | | **Pn** | **13 48 31.7** | **-1.0** |
| **BVAR** | **Borovoye Array** | **15.70** | **356** | P | | **Pn** | **13 48 42.1** | **-1.0** |
| | comp=N,5.0nm,0.7s,baz=163,slow=12,SNR=21 | | | | | | | |
| **BRVK** | **Borovoye** | **15.74** | **356** | *i* P | | **Pn** | **13 48 42.8** | **-0.8** |
| **DGZ** | **Jazzator, Alta** | **16.47** | **37** | *i* P | | **P** | **13 48 51.6** | **-0.6** |
| **AKTO** | **Aktyubinsk** comp=N,3.9nm,0.4s,baz=122,slow=8.4,SNR=12 | **16.56** | **326** | P | | **P** | **13 48 53.7** | **+0.7** |
| AKTO | comp=N,1.3nm,0.6s,baz=3.6,slow=16,SNR=2.4 | | | S | | S | 13 51 45.9 | -10 |
| **ZALV** | **Zalesovo Beam** comp=N,1.6nm,0.5s,baz=217,slow=11,SNR=6.7 | **18.70** | **24** | P | | **P** | **13 49 16.8** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **18.70** | **24** | *i* P | | **P** | **13 49 17.2** | **+0.9** |
| ZALV | comp=Z,2.0nm,0.5s | | | pmax | | pmax | | |
| **ARU** | **Arti** comp=Z,1.7nm,0.5s,baz=142,slow=6.2,SNR=3.3 | **21.16** | **339** | P | | **P** | **13 49 42.6** | **0.0** |
| **ARU** | **Arti** comp=Z,1.7nm,0.5s | **21.16** | **339** | *e*P | | **P** | **13 49 41.0** | **-1.6** |
| ARU | comp=Z,2.0nm,0.6s | | | pmax | | pmax | | |
| **HHC** | **Hu-ho-hao-te** | **30.52** | **71** | *e*P | | **P** | **13 51 09.0** | **+0.8** |
| HHC | comp=Z,12nm,0.6s | | | pmax | | pmax | | |
| HHC | comp=Z,79nm,4.9s | | | pmax | | pmax | | |
| **MLR** | **Muntele Rosu** | **35.24** | **298** | P | | **P** | **13 51 48.0** | **-1.3** |
| MLR | comp=Z,6.5nm,1.5s | | | IAmb | | IAmb | 13 52 02.5 | |
| **MLR** | **Muntele Rosu** | **35.24** | **298** | P | | **P** | **13 51 48.0** | **-1.3** |
| MLR | comp=Z,7.0nm,1.5s | | | pmax | | pmax | | |
| **ARCES** | **ARCESS Array B** comp=Z,1.5nm,0.9s,baz=101,slow=9.3,SNR=5.0 | **40.73** | **337** | P | | **P** | **13 52 35.0** | **+0.4** |
| **ARCES** | **ARCESS Array B** comp=Z,1.5nm,0.9s | **40.73** | **337** | P | | **P** | **13 52 35.0** | **+0.4** |

*ISN **26** 13:54:15.8±0.4, 34.67N×46.16E, h11km±4km, ML2.8*
*TEH **26** 13:54:16.1, 34.67N×46.20E, h9km±50km, ML2.8*
**ISC 26 13:54:15.9**±1.3, **34.69N**±0.05×**46.16E**±0.04, **h5**km±13km, **n9**, σ0§**86**/13, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.19** | **87** | Pg | | **Pg** | **13 54 20.1** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **0.49** | **136** | Pg | | **Pg** | **13 54 25.2** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **200** | Pg | | **Pg** | **13 54 28.0** | **+0.4** |
| **ILIN** | **Lien** | **0.70** | **71** | Pg | | **Pg** | **13 54 29.2** | **-0.3** |
| **IBZA** | **Bozab** | **1.42** | **98** | Pg | | **Pb** | **13 54 42.3** | **-0.7** |
| **IBDR** | **Badra** | **1.59** | **187** | *e*Pn | | **Pb** | **13 54 45.5** | **-0.2** |
| IBDR | | | | *e*Sn | | **Sg** | **13 55 07.0** | **+0.1** |
| **IKRK** | **Kirkuk** | **1.65** | **296** | *e*Pn | | **Pb** | **13 54 46.5** | **-0.3** |
| IKRK | | | | *e*Sn | | **Sg** | **13 55 09.5** | **+0.5** |
| IKRK | comp=N,161nm,0.4s | | | AML | | AML | 13 55 14.8 | |
| IKRK | comp=E,97nm,0.2s | | | AML | | AML | 13 55 19.6 | |
| **BHD** | **Baghdad** | **2.04** | **227** | *e*Pn | | **Pb** | **13 54 52.0** | **-1.5** |
| BHD | | | | *e*Sn | | **Sb** | **13 55 18.0** | **-1.2** |
| **RAFI** | **Al-Rafai** | **2.96** | **181** | *e*Pn | | **Pn** | **13 55 04.5** | **+1.0** |
| RAFI | | | | *e*Sn | | **Sn** | **13 55 40.0** | **+0.7** |

*IDC **26** 13:59:31.8±0.8, 37.48N±0.06×72.2E±0.1, h192km±7km, mb4.3/5, Error ellipse: s-maj=12.6km s-min=8.1km az=113.0*
*SOME **26** 14:00:12.7, 40.85N×74.12E, h5km*
**ISC 26 13:59:31.0**±0.7, **37.33N**±0.06×**72.22E**±0.08, **h200**km, **n41**, σ1§**38**/45, **mb4.3**/5, **Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **DRK** | **Karamyk** | **2.17** | **351** | | | **Pn** | **14 00 10.3** | **-1.2** |
| **GAR** | **Garm** | **2.24** | **319** | Pn | | **Pn** | **14 00 11.0** | **-1.1** |
| **CHGR** | **Chuyangaron** | **2.75** | **300** | Pn | | **Pn** | **14 00 16.8** | **-1.0** |
| **SIMJ** | **Simíganj** | **2.86** | **299** | Pn | | **Pn** | **14 00 17.6** | **-1.4** |
| **BTK** | **Batken** | **2.93** | **339** | Pn | | **Pn** | **14 00 19.6** | **-0.3** |
| **NIL** | **Nilore** | **3.77** | **167** | Pn | | **Pn** | **14 00 32.5** | **+2.5** |
| **KBL** | **Kabul** | **3.79** | **224** | Pn | | **Pn** | **14 00 32.1** | **+1.7** |
| **NRN** | **Naryn** | **5.04** | **34** | Pn | | **Pn** | **14 00 43.9** | **-2.2** |
| **MRKS** | **Merke** 7.7nm,0.3s | **5.46** | **8** | *e*P | | **Pn** | **14 00 50.2** | **-1.1** |
| MRKS | 45nm,0.2s | | | *e*S | | Sn | 14 01 17.2 | -38 |
| **AAK** | **Ala-Archa** | **5.58** | **18** | Pn | | **Pn** | **14 00 51.7** | **-1.2** |
| **AAK** | **Ala-Archa** 4.2nm,0.3s,baz=189,slow=6.8,SNR=8.4 | **5.58** | **18** | P | | **Pn** | **14 00 52.6** | **-0.3** |
| **THN** | **Thein Dam** | **5.67** | **148** | *e*P | | **Pn** | **14 00 55.7** | **+1.8** |
| THN | | | | *e*S | | **Sn** | **14 01 58.7** | **-0.9** |
| THN | comp=E,51nm,0.4s | | | IAML | | | 14 02 01.4 | |
| THN | comp=N,28nm,0.2s | | | IAML | | | 14 02 01.6 | |
| **BOOM** | **Boomskoye usch** | **5.89** | **28** | Pn | | **Pn** | **14 00 56.1** | **-0.8** |
| **KK31** | **Karatay Array** | **5.91** | **348** | Pn | | **Pn** | **14 00 55.3** | **-1.7** |
| **KKAR** | **Karatay Array** | **5.91** | **348** | Pn | | **Pn** | **14 00 54.9** | **-2.0** |
| **KKAR** | **Karatay Array** | **5.91** | **348** | | | **Pn** | **14 00 55.0** | **-2.0** |
| **DHRM** | **DHARAMSHALA** | **6.08** | **145** | *e*P | | **Pn** | **14 01 00.8** | **+1.2** |
| DHRM | | | | *e*S | | **Sn** | **14 02 07.8** | **-1.7** |
| DHRM | comp=N,86nm,0.3s | | | IAML | | | 14 02 11.8 | |
| DHRM | comp=E,93nm,0.6s | | | IAML | | | 14 02 12.2 | |
| **KST** | **Kastek** comp=E,6.0nm,0.4s | **6.38** | **26** | *e*P | | **Pn** | **14 01 01.9** | **-1.3** |
| KST | comp=E,5.6nm,0.3s | | | *e*S | | Sn | 14 01 37.4 | -39 |
| **DGS** | **Degeres** comp=E,4.3nm,0.6s | **6.50** | **24** | *e*P | | **Pn** | **14 01 03.6** | **-1.1** |
| DGS | comp=E,10nm,0.4s | | | *e*S | | Sn | 14 01 40.2 | -39 |
| **KRBS** | **Karabastau** comp=E,1.0nm,0.3s | **6.88** | **21** | *e*P | | **Pn** | **14 01 10.3** | **+0.7** |
| KRBS | comp=E,1.6nm,0.0s | | | *e*S | | Sn | 14 01 51.7 | -36 |
| **KOTS** | **Kotyrbulak** comp=E,4.3nm,0.1s | **6.98** | **31** | *e*P | | **Pn** | **14 01 12.7** | **+1.6** |
| KOTS | comp=E,9.1nm,0.5s | | | *e*S | | Sn | 14 01 55.8 | -35 |
| **SMLA** | **Simla** | **7.42** | **145** | *e*P | | **Pn** | **14 01 17.6** | **+0.9** |
| SMLA | | | | *e*S | | **Sn** | **14 02 36.5** | **-4.2** |
| SMLA | comp=N,40nm,0.3s | | | IAML | | | 14 02 42.5 | |
| SMLA | comp=E,54nm,0.4s | | | IAML | | | 14 02 43.1 | |
| **MAKZ** | **Makanchi** | **11.92** | **34** | Pn | | **Pn** | **14 02 13.3** | **-1.4** |
| **MK31** | **Makanchi Array** MK31 | **12.05** | **35** | Pn | | **Pn** | **14 02 16.1** | **-0.3** |
| | | | | P | | **P** | **14 02 21.3** | **+0.3** |
| **MKAR** | **Makanchi Array** MKAR | **12.05** | **35** | Pn | | **Pn** | **14 02 16.0** | **-0.3** |
| | | | | P | | **P** | **14 02 21.2** | **+0.2** |
| **MKAR** | **Makanchi Array** comp=E,0.2nm,0.3s,baz=214,slow=9.6,SNR=2.4 | **12.05** | **35** | P | | **Pn** | **14 02 17.4** | **+1.0** |
| **WMQ** | **Urumqi** | **13.43** | **56** | *e*P | | **P** | **14 02 35.5** | **-0.8** |
| KURBB | **Kurchatov Arra** comp=E,1.7nm,0.5s,baz=202,slow=10,SNR=15 | **14.04** | **17** | P | | **P** | **14 02 43.1** | **+0.1** |
| **KURK** | **Kurchatov** | **14.14** | **17** | P | | **P** | **14 02 43.5** | **-0.6** |
| ABKAR | **Akbulak array** | **14.87** | **327** | Pn | | **Pn** | **14 02 50.2** | **-1.2** |
| **BVAR** | **Borovoye Array** comp=E,1.2nm,0.7s,baz=165,slow=12,SNR=6.3 | **15.74** | **356** | P | | **Pn** | **14 03 00.8** | **-1.2** |
| **ZAA0** | **Zalesovo Array** | **18.76** | **24** | P | | **P** | **14 03 34.3** | **-0.4** |
| ZAA0 | comp=Z,7.2nm,0.8s | | | IAmb | | IAmb | 14 03 35.6 | |
| **ZALV** | **Zalesovo Beam** | **18.76** | **24** | P | | **P** | **14 03 34.5** | **-0.3** |
| **ZALV** | **Zalesovo Beam** comp=Z,4.3nm,0.4s,baz=220,slow=10,SNR=36 | **18.76** | **24** | P | | **P** | **14 03 35.1** | **+0.3** |
| **HHC** | **Hu-ho-hao-te** | **30.57** | **71** | *e*P | | **P** | **14 05 27.0** | **+1.1** |
| HHC | comp=Z,29nm,0.7s | | | pmax | | pmax | | |
| HHC | comp=Z,91nm,5.3s | | | pmax | | pmax | | |
| **LYN** | **LuoYang** | **32.54** | **83** | P | | P | 14 05 49.3 | +6.2 |
| LYN | comp=Z,18nm,0.5s | | | pmax | | pmax | | |
| **NB201** | **NORSAR Array S** | **44.27** | **322** | P | | **P** | **14 07 21.7** | **+1.3** |
| **NBO00** | **NORSAR Array S** NBO00 | **44.52** | **322** | P | | **P** | **14 07 22.8** | **+0.5** |
| | comp=Z,12nm,1.2s | | | IAmb | | IAmb | 14 07 41.8 | |
| **TORD** | **Torodi Ar. Bea** | **66.71** | **269** | P | | **P** | **14 10 00.4** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.5nm,0.4s,baz=44,slow=6.1,SNR=13 | **66.71** | **269** | P | | **P** | **14 10 00.8** | **0.0** |
| **A36M** | **Sachs Harbour** comp=Z,0.5nm,0.4s | **70.29** | **6** | P | | **P** | **14 10 23.4** | **+1.4** |
| A36M | | | | IAmb | | IAmb | 14 10 49.9 | |

comp=Z,7.0nm,1.1s

*IDC **26** 14:00:00.9±4.3,67.96N×26.21E,h0km,Error ellipse: s-maj=30.8km s-min=23.9km az=86.0*
*HEL **26** 14:00:00.6±0.1,67.94N×25.88E,h0km,ML1.6,Suspected explosion*
*UPP **26** 14:00:01.9±1.0,67.92N×25.57E,h0km,ML1.8*
*KOLA **26** 14:00:01.3,67.95N×25.70E,h0km,ML2.0,Error ellipse: s-maj=16.0km s-min=5.4km az=60.0,Finland, Lapland*
**ISC 26 13:59:59.4±0.7,67.90N±0.02×25.83E±0.02,h0km,n37, σ0s79/58,Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SGF** | **Sodankyl** | **0.53** | **149** | PG | | **Pg** | **14 00 09.3** | **-0.3** |
| SGF | | | | SG | | **Sg** | **14 00 16.8** | **+0.5** |
| **HEF** | **Hetta** | **0.96** | **303** | *e*P | | **Pg** | **14 00 17.5** | **-0.3** |
| **HEF** | **Hetta** baz=118 | **0.96** | **303** | PG | | **Pg** | **14 00 17.8** | **0.0** |
| HEF | comp=Z,4.3nm,0.2s | | | MSG | | | 14 00 29.9 | |
| HEF | | | | SG | | **Sg** | **14 00 30.3** | **0.0** |
| **KLF** | **Kolari** baz=45 | **0.98** | **228** | PG | | **Pb** | **14 00 18.5** | **-0.7** |
| KLF | comp=Z,4.1nm,0.2s | | | MSG | | | 14 00 31.7 | |
| KLF | | | | SG | | **Sb** | **14 00 32.0** | **-0.7** |
| **RAJF** | **Raja-Jooseppi** | **1.09** | **57** | PG | | **Pg** | **14 00 19.8** | **-0.5** |
| RAJF | | | | SB | | **Sg** | **14 00 33.8** | **-0.7** |
| **RNF** | **Rovaniemi** | **1.30** | **177** | PG | | **Pn** | **14 00 24.7** | **0.0** |
| RNF | | | | SG | | **Sn** | **14 00 42.4** | **-0.4** |
| **PAJU** | **Pajala** | **1.36** | **231** | P | | **Pb** | **14 00 25.9** | **0.0** |
| PAJU | | | | S | | **Sn** | **14 00 45.0** | **+0.5** |
| **PAJU** | **Pajala** baz=48 | **1.36** | **231** | PG | | **Pb** | **14 00 25.9** | **0.0** |
| PAJU | | | | SG | | **Sn** | **14 00 44.3** | **-0.2** |
| **VRF** | **Varrio** | **1.44** | **94** | PN | | **Pb** | **14 00 27.4** | **+0.2** |
| VRF | comp=Z,4.2nm,0.2s | | | MSG | | | 14 00 43.6 | |
| VRF | | | | SG | | **Sg** | **14 00 45.4** | **-0.4** |
| **LANU** | **Lannavaara** | **1.45** | **278** | P | | **Pn** | **14 00 26.9** | **-0.1** |
| LANU | | | | S | | **Sn** | **14 00 46.7** | **0.0** |
| **LANU** | **Lannavaara** | **1.45** | **278** | PG | | **Pn** | **14 00 26.8** | **-0.2** |
| LANU | | | | SG | | **Sb** | **14 00 46.4** | **0.0** |
| **KTK1** | **Kautokeino** | **1.47** | **321** | *e*P | | **Pn** | **14 00 27.0** | **-0.3** |
| **KTK1** | **Kautokeino** | **1.47** | **321** | PG | | **Pn** | **14 00 26.9** | **-0.3** |
| KTK1 | | | | SG | | **Sg** | **14 00 46.3** | **-0.4** |
| **MASU** | **Masugnsbyn** | **1.53** | **255** | P | | **Pb** | **14 00 28.5** | **-0.2** |
| MASU | | | | S | | **Sn** | **14 00 49.1** | **+0.6** |
| **ARA0** | **ARCESS Array S** baz=172 | **1.65** | **356** | PN | | **Pn** | **14 00 30.0** | **+0.3** |
| ARA0 | | | | SN | | **Sg** | **14 00 52.9** | **+0.5** |
| **ARCES** | **ARCESS Array B** | **1.65** | **356** | P | | **Pn** | **14 00 29.9** | **+0.3** |
| ARCES | | | | S | | **Sn** | **14 00 50.6** | **-0.9** |
| **ARCES** | **ARCESS Array B** comp=Z,0.8nm,0.3s,baz=174,slow=15,SNR=46 | **1.65** | **356** | Pg | | **Pn** | **14 00 29.7** | **0.0** |
| ARCES | | | | Lg | | Lg | 14 00 51.0 | |
| | comp=Z,0.8nm,0.3s,baz=170,slow=30,SNR=12 | | | | | | | |
| **KEV** | **Kevo** | **1.92** | **12** | PG | | **Pn** | **14 00 34.1** | **+0.8** |
| KEV | | | | MSG | | | 14 00 56.3 | |
| KEV | comp=Z,3.6nm,0.2s | | | SG | | **Sn** | **14 00 58.4** | **+0.4** |
| **TOF** | **Tornio** baz=17 | **1.92** | **199** | PG | | **Pg** | **14 00 35.9** | **-0.3** |
| TOF | comp=Z,3.1nm,0.2s | | | MSG | | | 14 00 58.9 | |
| TOF | | | | SG | | **Sg** | **14 01 01.5** | **+0.5** |
| **RANF** | **Ranua** baz=351 | **1.93** | **168** | PG | | **Pg** | **14 00 35.9** | **-0.5** |
| RANF | | | | SG | | **Sg** | **14 01 01.1** | **-0.2** |
| **OLKF** | **Oulanka, Finla** | **2.11** | **137** | PG | | **Pb** | **14 00 38.6** | **+0.1** |
| OLKF | comp=Z,2.3nm,0.2s | | | MSG | | | 14 01 03.8 | |
| OLKF | | | | SG | | **Sg** | **14 01 06.6** | **-0.5** |
| **DUNU** | **Dundret** | **2.17** | **251** | P | | **Pb** | **14 00 38.9** | **-0.7** |
| **KALU** | **Kalix** | **2.27** | **207** | P | | **Pb** | **14 00 40.7** | **-0.4** |
| **KALU** | **Kalix** | **2.27** | **207** | PG | | **Pb** | **14 00 41.1** | **-0.1** |
| KALU | | | | SG | | **Sg** | **14 01 11.6** | **-0.5** |
| **MSF** | **Maaselka** baz=331 | **2.36** | **146** | PG | | **Pb** | **14 00 43.0** | **+0.1** |
| MSF | | | | SG | | **Sg** | **14 01 13.8** | **-1.5** |
| **KU6** | **Riekki** baz=323 | **2.47** | **138** | PB | | **Pb** | **14 00 43.6** | **-1.0** |
| KU6 | comp=Z,3.7nm,0.2s | | | MSG | | | 14 01 13.9 | |
| KU6 | | | | SG | | **Sg** | **14 01 17.0** | **-1.6** |
| **VADS** | **Vadso** | **2.57** | **28** | P | | **Pn** | **14 00 43.2** | **+1.0** |
| VADS | | | | S | | **Sn** | **14 01 14.6** | **+0.4** |
| **HARU** | **Harads** | **2.58** | **230** | P | | **Pn** | **14 00 44.2** | **+1.9** |
| **APA0** | **Apatity Array** | **2.74** | **93** | P | | **Pn** | **14 00 46.9** | **+2.3** |
| APA0 | | | | S | | **Sb** | **14 01 21.9** | **-1.5** |
| **OUL** | **Oulu** | **2.83** | **179** | SG | | **Sb** | **14 01 27.0** | **+1.2** |
| **I37NO** | **I37NO** comp=Z,0.2nm,0.8s,baz=108,slow=324,SNR=8.6 | **2.91** | **297** | I | | I | 14 18 10.0 | |
| **TRO** | **Tromso** | **3.06** | **308** | SB | | **Sn** | **14 01 28.0** | **+1.9** |
| **LVZ** | **Lovozero** | **3.34** | **86** | P | | **Pn** | **14 00 54.0** | **+1.2** |
| LVZ | | | | S | | **Sn** | **14 01 33.0** | **-0.1** |
| **LVZ** | **Lovozero** | **3.34** | **86** | PN | | **Pn** | **14 00 54.4** | **+1.5** |
| LVZ | | | | SN | | **Sn** | **14 01 33.4** | **+0.2** |
| **I43RU** | **DUBNA INFRASON** baz=342,slow=320,SNR=2.4 | **2.37** | **149** | I | | I | 15 12 50.0 | |
| **I31KZ** | **AKTYUBINSK INF** baz=333,slow=311,SNR=3.8 | **23.62** | **122** | I | | I | 16 19 45.0 | |
| **I46RU** | **ZALESOVO INFRA** baz=324,slow=312,SNR=2.0 | **30.48** | **87** | I | | I | 17 07 10.0 | |

*KRNET **26** 14:00:35.5±0.1,40.74N×74.20E,h12km,mb2.7*
*NNC **26** 14:00:41.8±0.9,40.94N×74.15E,h0km,mb3.6,mpv3.4, Error ellipse: s-maj=5.6km s-min=5.0km az=40.0*
*SOME **26** 14:00:41.4,41.00N×74.17E,h0km*
**ISC 26 14:00:35.6±1.2,40.74N±0.04×74.17E±0.02,h17km±11km, n48,σ0s98/76,20C-5D,Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SFK** | **Sufi-Kurgan** baz=16 | **0.89** | **215** | ⇑*i*P | | **Pb** | **14 00 52.5** | **-0.1** |
| SFK | | | | ⇑*i*S | | **Sn** | **14 01 05.2** | **-0.8** |
| **OHH** | **Osh** baz=59 | **1.07** | **259** | ⇑*i*P | | **Pg** | **14 00 56.5** | **+0.1** |
| OHH | | | | ⇑*i*S | | **Sn** | **14 01 11.5** | **+1.1** |
| **ARLS** | **Aral** baz=5.0 | **1.12** | **6** | ⇑*i*P | | **Pn** | **14 00 56.7** | **0.0** |
| ARLS | | | | ⇑*i*S | | **Sn** | **14 01 12.0** | **+0.1** |
| **AML** | **Almayashu** baz=45 | **1.43** | **346** | ⇑*e*P | | **Pb** | **14 01 02.5** | **+0.4** |
| AML | | | | ⇑*i*S | | **Sg** | **14 01 22.1** | **+0.1** |
| **NRN** | **Naryn** baz=63 | **1.55** | **63** | ⇑*i*P | | **Pb** | **14 01 03.8** | **-0.2** |
| NRN | | | | ⇑*i*S | | **Sb** | **14 01 24.2** | **+0.8** |
| **AAK** | **Ala-Archa** 7.7nm,0.6s | **1.91** | **7** | P | | **Pg** | **14 01 13.2** | **+0.8** |
| AAK | 10nm,0.3s | | | S | | **Sg** | **14 01 35.9** | **-1.3** |
| **ARK** | **Arkit** baz=3.0 | **1.97** | **303** | ⇑*e*P | | **Pg** | **14 01 12.3** | **-1.1** |
| ARK | baz=3.0 | | | ⇑*e*S | | **Sg** | **14 01 39.3** | **+0.3** |
| **MRKS** | **Merke** 36nm,0.0s | **2.12** | **341** | *e*P | | **Pg** | **14 01 18.1** | **+1.7** |
| MRKS | 74nm,0.4s | | | *e*S | | **Sg** | **14 01 44.5** | **+0.6** |
| **MNAS** | **Manas** baz=25 | **2.14** | **325** | ⇓*e*P | | **Pb** | **14 01 14.4** | **+0.4** |
| MNAS | baz=25 | | | ⇓*e*S | | **Sg** | **14 01 42.9** | **-1.7** |
| **BOOM** | **Boomskoye usch** baz=36 | **2.20** | **37** | ⇑*i*P | | **Pb** | **14 01 14.8** | **-0.1** |
| BOOM | baz=36 | | | ⇑*i*S | | **Sb** | **14 01 43.4** | **+1.5** |
| **CHMS** | **Chumysh** 11nm,0.6s | **2.30** | **11** | ⇓Pg | | **Pg** | **14 01 20.0** | **+0.3** |
| CHMS | 27nm,1.1s | | | ⇓Lg | | Lg | 14 01 48.8 | |
| CHMS | 92nm,0.4s | | | Pg | | **Sg** | **14 01 49.0** | **-0.5** |
| CHMS | 187nm,0.7s | | | Lg | | Lg | 14 02 37.7 | |
| **TRKS** | **Terek-Say** baz=88 | **2.42** | **290** | ⇑*i*P | | **Pb** | **14 01 17.9** | **-0.8** |
| TRKS | baz=88 | | | ⇑*i*S | | **Sb** | **14 01 48.5** | **+0.2** |
| **TKM2** | **Tokmak 2** 2.3nm,0.3s | **2.43** | **26** | ⇑Pg | | **Pg** | **14 01 22.2** | **+0.1** |
| TKM2 | 18nm,0.4s | | | ⇑Lg | | Lg | 14 01 54.4 | |
| **KDJ** | **Kajisay** baz=57 | **2.66** | **58** | ⇑*e*P | | **Pb** | **14 01 21.2** | **-1.6** |
| KDJ | baz=57 | | | ⇑*e*S | | **Sb** | **14 01 54.6** | **-0.6** |
| **KST** | **Kastek** 5.0nm,0.3s | **2.66** | **30** | *e*P | | **Pg** | **14 01 28.4** | **+1.7** |
| KST | 44nm,0.4s | | | *e*S | | **Sg** | **14 02 02.2** | **+1.0** |
| **KST** | **Kastek** 5.0nm,0.3s | **2.66** | **30** | Pg | | **Pg** | **14 01 28.4** | **+1.7** |
| KST | | | | Lg | | Lg | 14 02 02.2 | |
| **SGDS** | **Sogindy** 4.9nm,0.4s | **2.73** | **7** | Pg | | **Pg** | **14 01 28.3** | **+0.4** |
| SGDS | 15nm,0.5s | | | Lg | | Lg | 14 02 02.1 | |
| **DGS** | **Degeres** 8.0nm,0.7s | **2.77** | **25** | *e*P | | **Pg** | **14 01 30.0** | **+1.3** |
| DGS | 49nm,0.5s | | | *e*S | | **Sg** | **14 02 05.0** | **+0.3** |
| **DGS** | **Degeres** 8.0nm,0.7s | **2.77** | **25** | Pg | | **Pg** | **14 01 30.0** | **+1.3** |
| DGS | 49nm,0.5s | | | Lg | | Lg | 14 02 05.0 | |
| **MTBS** | **Maitube** 6.3nm,0.5s | **2.92** | **35** | *e*P | | **Pg** | **14 01 33.0** | **+1.4** |
| MTBS | 21nm,0.6s | | | *e*S | | **Sg** | **14 02 09.9** | **+0.4** |
| **MTBS** | **Maitube** 6.3nm,0.5s | **2.92** | **35** | Pg | | **Pg** | **14 01 33.0** | **+1.4** |
| MTBS | 21nm,0.6s | | | Lg | | Lg | 14 02 09.9 | |
| **TNSS** | **Tian-Shan** 4.9nm,0.2s | **3.09** | **41** | *e*P | | **Pg** | **14 01 35.8** | **+0.9** |
| TNSS | 12nm,0.7s | | | *e*S | | **Sg** | **14 02 15.0** | **-0.1** |
| **TNSS** | **Tian-Shan** 4.9nm,0.2s | **3.09** | **41** | Pg | | **Pg** | **14 01 35.8** | **+0.9** |
| TNSS | 12nm,0.7s | | | Lg | | Lg | 14 02 15.0 | |
| **KRBS** | **Karabastau** 6.8nm,0.2s | **3.16** | **20** | *e*P | | **Pg** | **14 01 36.4** | **+0.3** |
| KRBS | 18nm,0.4s | | | *e*S | | **Sg** | **14 02 16.1** | **-0.9** |
| **KRBS** | **Karabastau** 6.8nm,0.2s | **3.16** | **20** | Pg | | **Pg** | **14 01 36.4** | **+0.3** |
| KRBS | 18nm,0.4s | | | Lg | | Lg | 14 02 16.1 | |
| **MDOK** | **Medeo** 2.4nm,0.0s | **3.24** | **41** | *e*P | | **Pg** | **14 01 38.4** | **+0.8** |
| MDOK | 18nm,0.7s | | | *e*S | | **Sg** | **14 02 19.3** | **-0.3** |
| **MDOK** | **Medeo** 2.4nm,0.0s | **3.24** | **41** | Pg | | **Pg** | **14 01 38.4** | **+0.8** |
| MDOK | 18nm,0.7s | | | Lg | | Lg | 14 02 19.3 | |
| **KOTS** | **Kotyrbulak** 4.2nm,0.3s | **3.32** | **40** | *e*P | | **Pg** | **14 01 40.4** | **+1.2** |
| KOTS | 60nm,0.6s | | | *e*S | | **Sg** | **14 02 22.7** | **+0.5** |
| **KOTS** | **Kotyrbulak** 4.2nm,0.3s | **3.32** | **40** | Pg | | **Pg** | **14 01 40.4** | **+1.2** |
| KOTS | 60nm,0.6s | | | Lg | | Lg | 14 02 22.7 | |
| **KTBS** | **Karatobe** 2.1nm,0.7s | **3.51** | **31** | *e*P | | **Pg** | **14 01 42.6** | **-0.2** |
| KTBS | 19nm,0.5s | | | *e*S | | **Sg** | **14 02 26.6** | **-1.7** |
| **KTBS** | **Karatobe** 2.1nm,0.7s | **3.51** | **31** | Pg | | **Pg** | **14 01 42.6** | **-0.2** |
| KTBS | 19nm,0.5s | | | Lg | | Lg | 14 02 26.6 | |
| **KUU** | **Kurty** 4.4nm,0.1s | **3.54** | **26** | *e*P | | **Pg** | **14 01 43.1** | **-0.3** |
| KUU | 30nm,0.3s | | | *e*S | | **Sg** | **14 02 27.5** | **-1.7** |
| **KUU** | **Kurty** 4.4nm,0.1s | **3.54** | **26** | Pg | | **Pg** | **14 01 43.1** | **-0.3** |
| KUU | 30nm,0.3s | | | Lg | | Lg | 14 02 27.5 | |
| **KK31** | **Karatay Array** 4.1nm,0.3s,baz=131,slow=28 | **3.61** | **312** | ⇓Lg | | Lg | 14 02 29.9 | |
| **CHKK** | **Chushkaly** 1.3nm,0.2s | **3.75** | **33** | *e*P | | **Pg** | **14 01 47.0** | **-0.4** |
| CHKK | 11nm,0.1s | | | *e*S | | **Sg** | **14 02 34.1** | **-1.9** |
| **CHKK** | **Chushkaly** 1.3nm,0.2s | **3.75** | **33** | Pg | | **Pg** | **14 01 47.0** | **-0.4** |
| CHKK | 11nm,0.1s | | | Lg | | Lg | 14 02 34.1 | |
| **CHM** | **Chimkent** 92nm,0.4s | **3.77** | **296** | *e*P | | **Pg** | **14 01 49.0** | **+1.2** |
| CHM | 187nm,0.7s | | | *e*S | | **Sg** | **14 02 37.7** | **+1.0** |
| **SATY** | **Saty** 3.1nm,0.4s | **3.92** | **52** | *e*P | | **Pg** | **14 01 52.1** | **+1.4** |
| SATY | 12nm,0.5s | | | *e*S | | **Sg** | **14 02 42.6** | **+1.1** |
| **SATY** | **Saty** 3.1nm,0.4s | **3.92** | **52** | Pg | | **Pg** | **14 01 52.1** | **+1.4** |
| SATY | 12nm,0.5s | | | Lg | | Lg | 14 02 42.6 | |
| **KURS** | **Kuram** 3.5nm,0.5s | **4.05** | **46** | *e*P | | **Pg** | **14 01 54.0** | **+0.8** |
| KURS | 5.0nm,0.4s | | | *e*S | | **Sg** | **14 02 46.0** | **+0.4** |
| **KURS** | **Kuram** 3.5nm,0.5s | **4.05** | **46** | Pg | | **Pg** | **14 01 54.0** | **+0.8** |
| KURS | 5.0nm,0.4s | | | Lg | | Lg | 14 02 46.0 | |
| **BTLS** | **Baital** 2.0nm,0.4s | **4.30** | **359** | *e*P | | **Pg** | **14 01 56.9** | **-1.0** |
| BTLS | 1.6nm,0.5s | | | *e*S | | **Sg** | **14 02 51.2** | **-2.4** |
| **BTLS** | **Baital** 2.0nm,0.4s | **4.30** | **359** | Pg | | **Pg** | **14 01 56.9** | **-1.0** |
| BTLS | 1.6nm,0.5s | | | Lg | | Lg | 14 02 51.2 | |
| **KPKS** | **Kokpek** 2.1nm,0.6s | **4.33** | **50** | *e*P | | **Pg** | **14 01 58.1** | **-0.3** |
| KPKS | 12nm,0.3s | | | *e*S | | **Sg** | **14 02 53.1** | **-1.4** |
| **KPKS** | **Kokpek** 2.1nm,0.6s | **4.33** | **50** | Pg | | **Pg** | **14 01 58.1** | **-0.3** |
| KPKS | 12nm,0.3s | | | Lg | | Lg | 14 02 53.1 | |
| **UZB** | **Uzynbulak** 1.7nm,0.4s | **4.35** | **55** | *e*P | | **Pg** | **14 01 58.9** | **+0.1** |
| UZB | 5.5nm,0.3s | | | *e*S | | **Sg** | **14 02 54.6** | **-0.6** |
| **UZB** | **Uzynbulak** 1.7nm,0.4s | **4.35** | **55** | Pg | | **Pg** | **14 01 58.9** | **+0.1** |
| UZB | 5.5nm,0.3s | | | Lg | | Lg | 14 02 54.6 | |
| **PDGK** | **Podgornoye** 0.9nm,0.1s | **4.73** | **55** | Pg | | **Pg** | **14 02 05.8** | **-0.4** |
| PDGK | 3.3nm,0.9s | | | Lg | | Lg | 14 03 06.3 | |

*TEH **26** 14:08:45.8,34.61N×46.25E,h6km±36km,ML3.2*
*ISN **26** 14:08:46.8±0.9,34.62N×46.22E,h12km±9km,ML3.3*
**ISC 26 14:08:47.0±1.0,34.67N±0.04×46.22E±0.03,h8km±9km, n16,σ0s91/22,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **IDHR** | **Dehrash** | **0.14** | **78** | Pg | | **Pg** | **14 08 50.3** | **+0.2** |
| IDHR | | | | Sg | | **Sg** | **14 08 53.1** | **+0.8** |
| **IGHG** | **Ghaleghazi** | **0.44** | **140** | Pg | | **Pg** | **14 08 54.9** | **-0.8** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **205** | Pg | | **Pg** | **14 08 57.7** | **-1.2** |
| **ILIN** | **Lien** | **0.66** | **68** | Pg | | **Pg** | **14 08 59.5** | **-0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.78** | **120** | Pg | | **Pg** | **14 09 00.7** | **-1.4** |
| KCHF | | | | Sg | | **Sg** | **14 09 12.8** | **+0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.17** | **80** | Pg | | **Pg** | **14 09 09.3** | **-0.2** |
| **IBZA** | **Bozab** | **1.36** | **98** | Pg | | **Pn** | **14 09 12.0** | **-0.5** |
| **IBDR** | **Badra** | **1.58** | **189** | *e*Pn | | **Pn** | **14 09 15.5** | **+0.3** |
| IBDR | | | | *e*Sn | | **Sn** | **14 09 36.3** | **+0.5** |
| IBDR | comp=E,447nm,0.3s | | | AML | | AML | 14 09 42.2 | |
| IBDR | comp=N,317nm,0.7s | | | AML | | AML | 14 09 48.8 | |
| **SDS1** | **Sardasht. Az.** | **1.59** | **338** | Pg | | **Pg** | **14 09 17.2** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.71** | **296** | *e*Pn | | **Pb** | **14 09 18.3** | **-0.4** |
| IKRK | | | | *e*Sn | | **Sg** | **14 09 42.0** | **+0.1** |
| IKRK | comp=E,408nm,0.8s | | | AML | | AML | 14 09 47.2 | |
| IKRK | comp=N,501nm,0.4s | | | AML | | AML | 14 09 50.1 | |
| **IDOB** | **Doab** | **1.84** | **118** | Pg | | **Pb** | **14 09 20.7** | **-0.3** |
| **HSAM** | **Samen** | **2.02** | **102** | Pn | | **Pb** | **14 09 23.9** | **-0.2** |
| **BHD** | **Baghdad** | **2.07** | **228** | *e*Pn | | **Pn** | **14 09 23.0** | **+0.9** |
| BHD | | | | *e*Sn | | **Sn** | **14 09 49.0** | **+1.0** |
| **MAHB** | **Mahabad** | **2.13** | **349** | Pn | | **Pb** | **14 09 26.6** | **+0.6** |
| **RAFI** | **Al-Rafai** | **2.94** | **182** | *e*Pn | | **Pn** | **14 09 35.0** | **+1.0** |
| RAFI | | | | *e*Sn | | **Sn** | **14 10 10.0** | **+0.5** |
| **IAZR** | **Azarshahr** | **3.01** | **356** | Pn | | **Pb** | **14 09 38.7** | **-2.3** |

**IDC 26 14:09:54.2±3.7,13.53N×124.85E,h0km,mb3.5/3, mbtmp3.5/3,Error ellipse: s-maj=292.3km s-min=27.2km az=64.0,Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** 0.4nm,0.6s,baz=345,slow=9.0,SNR=6.2 0.4nm,0.6s | **34.55** | **164** | P | | P | 14 16 45.4 | +0.8 |
| **ASAR** | **Alice Springs** 0.2nm,0.4s,baz=340,slow=8.2,SNR=10 0.2nm,0.4s | **38.01** | **166** | P | | P | 14 17 13.5 | -0.8 |
| **MKAR** | **Makanchi Array** 0.6nm,0.6s,baz=128,slow=9.3,SNR=5.5 0.6nm,0.6s | **48.62** | **322** | P | | P | 14 18 39.7 | -0.1 |

*IDC **26** 14:12:24.6±1.5,2.23N×128.70E,h0km,mb3.6/7, mbtmp3.6/7,Error ellipse: s-maj=130.5km s-min=18.9km az=70.0*
**ISC 26 14:12:29.4±2.3,2.2N±0.5×12.9E±,h35km,n7,σ0s84/7, mb3.7/7,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** 0.7nm,0.5s,baz=346,slow=11,SNR=9.1 0.7nm,0.5s | **22.68** | **167** | P | | **P** | **14 17 27.8** | **-0.3** |
| **ASAR** | **Alice Springs** 0.3nm,0.7s,baz=2.4,slow=9.1,SNR=4.4 0.3nm,0.7s | **26.21** | **170** | P | | **P** | **14 18 02.5** | **+1.4** |
| **SONM** | **Songino Array** 0.2nm,0.4s,baz=151,slow=9.1,SNR=2.1 0.2nm,0.4s | **49.41** | **340** | P | | **P** | **14 21 16.1** | **+0.2** |
| **MKAR** | **Makanchi Array** 0.8nm,0.5s,baz=118,slow=8.5,SNR=14 0.8nm,0.5s | **60.01** | **325** | P | | **P** | **14 22 32.9** | **+0.2** |
| **KURBB** | **Kurchatov Arra** 0.7nm,0.5s,baz=126,slow=6.1,SNR=13 0.7nm,0.5s | **64.15** | **327** | P | | **P** | **14 22 60.0** | **-0.4** |
| **BVAR** | **Borovoye Array** 0.4nm,0.6s,baz=153,slow=9.7,SNR=2.7 0.4nm,0.6s | **69.74** | **327** | P | | **P** | **14 23 35.7** | **-0.2** |
| **QSPA** | **South Pole Qui** 0.5nm,1.0s,baz=270,slow=6.1,SNR=1.0 0.5nm,1.0s | **92.16** | **180** | P | | **P** | **14 25 34.5** | **-0.7** |

*IDC **26** 14:12:47.6±1.0,2.21N×128.32E,h0km,mb3.9/8, mbtmp3.9/8,Error ellipse: s-maj=61.1km s-min=18.9km az=72.0*
*NEIC **26** 14:12:52.4±2.4,2.16N±0.04×128.3E±0.1,h35km±1km, mb4.6/17,Error ellipse: s-maj=23.3km s-min=6.4km az=79.0*
**ISC 26 14:12:51.7±0.6,2.08N±0.08×128.3E±0.1,h35km,n36, σ1s34/30,mb4.2/15,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TNTI** | **Ternate** | **1.59** | **215** | Pn | | **Pn** | **14 13 17.4** | **0.0** |
| **FAKI** | **Fak Fak** | **6.35** | **141** | Pn | | **Pn** | **14 14 19.7** | **-3.2** |
| **TOLI2** | **Tolitoli** | **7.56** | **263** | Pn | | **Pn** | **14 14 36.6** | **-3.0** |
| **MYLDM** | **Lahad Datu** | **10.24** | **288** | Pn | | **Pn** | **14 15 14.8** | **-1.5** |
| **SBUM** | **Sibu** | **16.06** | **272** | Pn | | **Pn** | **14 16 34.1** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** comp=Z,41nm,0.9s | **20.22** | **187** | P | | **P** | **14 17 24.2** | **+0.4** |
| FITZ | | | | IAmb | | IAmb | 14 17 34.5 | |
| **WB0** | **Warramunga Arr** comp=Z,8.6nm,1.3s | **22.52** | **165** | P | | **P** | **14 17 48.1** | **-0.6** |
| WB0 | | | | IAmb | | IAmb | 14 17 55.3 | |
| **WRA** | **Warramunga Arr** comp=Z,1.3nm,0.5s,baz=340,slow=11,SNR=9.9 comp=Z,1.3nm,0.5s | **22.68** | **165** | P | | **P** | **14 17 50.7** | **+0.4** |
| **WB2** | **Warramunga Arr** | **22.68** | **165** | P | | **P** | **14 17 50.4** | **+0.1** |
| **ASAR** | **Alice Springs** comp=Z,0.5nm,0.5s,baz=350,slow=7.9,SNR=7.2 comp=Z,0.5nm,0.5s | **26.17** | **168** | P | | **P** | **14 18 26.4** | **+3.3** |
| **MORW** | **Morawa** comp=Z,15nm,1.5s | **33.12** | **200** | P | | **P** | **14 19 26.4** | **+1.7** |
| MORW | | | | IAmb | | IAmb | 14 19 43.8 | |
| **EIDS** | **Eidsvold** comp=Z,20nm,1.4s | **35.10** | **142** | P | | **P** | **14 19 40.8** | **-1.2** |
| EIDS | | | | IAmb | | IAmb | 14 19 42.8 | |
| **BBOO** | **Buckleboo** comp=Z,20nm,1.4s | **35.47** | **169** | P | | **P** | **14 19 44.7** | **-0.3** |
| BBOO | | | | IAmb | | IAmb | 14 20 25.4 | |
| **STKA** | **Stephens Creek** | **36.05** | **161** | P | | **P** | **14 19 50.9** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **36.35** | **196** | P | | **P** | **14 19 53.8** | **+1.2** |
| **H11S3** | **WAKE ISLAND Hy** baz=252,slow=74,SNR=5.0 | **41.01** | **64** | T | | T | 15 03 46.7 | |
| **H11S2** | **WAKE ISLAND Hy** baz=252,slow=74,SNR=4.2 | **41.03** | **64** | T | | T | 15 03 48.1 | |
| **H11S1** | **WAKE ISLAND Hy** baz=252 | **41.03** | **64** | T | | T | 15 03 50.8 | |
| **H11N1** | **WAKE ISLAND Hy** baz=250,slow=75,SNR=5.3 | **41.60** | **62** | T | | T | 15 04 30.4 | |
| **H11N2** | **WAKE ISLAND Hy** baz=250,slow=75,SNR=3.6 | **41.61** | **62** | T | | T | 15 04 30.8 | |
| **H11N3** | **WAKE ISLAND Hy** baz=250,slow=75,SNR=4.6 | **41.62** | **62** | T | | T | 15 04 31.6 | |
| **CAN** | **Canberra** | **41.96** | **154** | P | | **P** | **14 20 40.5** | **+1.1** |
| **DZM** | **Mont Dzumac** | **44.32** | **125** | P | | **P** | **14 20 58.5** | **-0.4** |
| **SONM** | **Songino Array** comp=Z,0.7nm,0.6s,baz=162,slow=7.8,SNR=3.9 comp=Z,0.7nm,0.6s | **49.35** | **341** | P | | **P** | **14 21 38.9** | **+1.1** |
| **PETK** | **Petropavlovsk-** comp=Z,0.6nm,0.6s,baz=213,slow=3.3,SNR=4.9 comp=Z,0.6nm,0.6s | **56.39** | **21** | P | | **P** | **14 22 29.6** | **+0.1** |
| **MK31** | **Makanchi Array** comp=Z,1.2nm,0.6s | **59.79** | **325** | P | | **P** | **14 22 54.2** | **+0.7** |
| MK31 | | | | IAmb | | IAmb | 14 22 55.9 | |
| **MKAR** | **Makanchi Array** | **59.79** | **325** | P | | **P** | **14 22 54.2** | **+0.7** |
| **MKAR** | **Makanchi Array** comp=Z,1.6nm,0.5s,baz=118,slow=7.9,SNR=16 comp=Z,1.6nm,0.5s | **59.79** | **325** | P | | **P** | **14 22 54.7** | **+1.2** |
| **MAKZ** | **Makanchi** comp=Z,2.3nm,0.6s | **59.98** | **325** | P | | **P** | **14 22 55.1** | **+0.3** |
| MAKZ | | | | IAmb | | IAmb | 14 22 57.1 | |
| **KURBB** | **Kurchatov Arra** comp=Z,1.2nm,0.5s,baz=127,slow=6.2,SNR=15 comp=Z,1.2nm,0.5s | **63.96** | **327** | P | | **P** | **14 23 21.6** | **+0.2** |
| **KURK** | **Kurchatov** comp=Z,2.2nm,0.6s | **63.96** | **327** | P | | **P** | **14 23 21.2** | **-0.2** |
| KURK | | | | IAmb | | IAmb | 14 23 24.9 | |
| **BVAR** | **Borovoye Array** comp=Z,0.9nm,0.7s,baz=123,slow=10,SNR=4.8 comp=Z,0.9nm,0.7s | **69.54** | **327** | P | | **P** | **14 23 56.7** | **-0.2** |
| **I17K** | **Unalakleet** | **79.86** | **25** | P | | **P** | **14 24 55.3** | **-1.1** |
| **Q19K** | **Cape Douglas,** | **82.07** | **31** | P | | **P** | **14 25 08.4** | **-0.1** |
| **KDAK** | **Kodiak Island** | **82.45** | **32** | P | | **P** | **14 25 11.5** | **+1.1** |
| **FINES** | **FINESS Array B** comp=Z,1.8nm,0.9s,baz=75,slow=2.2,SNR=3.5 comp=Z,1.8nm,0.9s | **94.01** | **332** | P | | **P** | **14 26 06.1** | **+0.1** |

**IDC 26 14:18:18.6±2.2,11.45S×162.52E,h0km,mb3.6/4, mbtmp3.7/5,ML3.1/1,MS3.6/3,Error ellipse: s-maj=53.7km s-min=36.4km az=93.0, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HNR** | **Honiara** comp=Z,3μm,19.3s,baz=50,slow=46 | **3.23** | **308** | LR | | LR | 14 20 48.2 | |
| **DZM** | **Mont Dzumac** | **11.21** | **161** | Pn | | Pn | 14 20 60.0 | -0.3 |

0.1nm,0.3s,baz=66,slow=18,SNR=1.6
6.2nm,1.0s
**PMG Port Moresby 15.25 276** LR LR 14 27 40.9
comp=Z,87nm,19.7s,baz=78,slow=37
**CTA Charters Tower 17.84 239** LR LR 14 28 15.6
comp=Z,4.9nm,19.7s,baz=58,slow=34
**WRA Warramunga Arr 28.38 249** P P 14 24 15.2 +0.3
0.2nm,0.5s,baz=80,slow=9.3,SNR=2.5
0.2nm,0.5s
**ASAR Alice Springs 29.80 242** P P 14 24 27.3 -0.2
0.4nm,0.6s,baz=61,slow=10.0,SNR=9.6
0.4nm,0.6s
**H11S2 WAKE ISLAND Hy 30.04 8** T T 14 55 15.1
baz=187,slow=76,SNR=29
**H11S3 WAKE ISLAND Hy 30.04 8** T T 14 55 15.2
baz=187,slow=76,SNR=23
**H11S1 WAKE ISLAND Hy 30.05 8** T T 14 55 10.8
baz=187,slow=76,SNR=21
**H11N1 WAKE ISLAND Hy 31.27 8** T T 14 56 47.2
baz=188,slow=76,SNR=8.1
**H11N3 WAKE ISLAND Hy 31.27 8** T T 14 56 41.1
baz=188,slow=76,SNR=6.8
**H11N2 WAKE ISLAND Hy 31.28 8** T T 14 56 44.7
baz=188,slow=76,SNR=8.5
**SONM Songino Array 77.15 325** P P 14 30 13.9 -0.5
0.4nm,0.6s,baz=141,slow=4.8,SNR=2.7
0.4nm,0.6s
**MKAR Makanchi Array 91.66 317** P P 14 31 28.6 +0.6
0.4nm,0.7s,baz=90,slow=4.3,SNR=3.7
MKAR LR LR 15 13 55.5
comp=Z,22nm,19.8s,baz=74,slow=36
0.4nm,0.7s

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*ISN **26** 14:30:06.3±0.5,34˚.70N×46˚.19E,h6$^{km}$±5$^{km}$,ML2.7*
*TEH **26** 14:30:07.9,34˚.68N×46˚.15E,h8$^{km}$±38$^{km}$,ML2.7*
**ISC 26 14:30:08.1±1.1,34˚.68N±0˚.04×46˚.16E±0˚.04,h10$^{km}$±10$^{km}$,**
**n12,σ0$^{s}$84/17,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.19** | **84** | Pg | **Pg** | **14 30 12.5** | **+0.3** |
| IDHR | | | | Sg | **Sg** | **14 30 15.6** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **0.49** | **136** | Pg | **Pb** | **14 30 17.6** | **-1.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **200** | Pg | **Pb** | **14 30 19.9** | **-0.8** |
| **ILIN** | **Lien** | **0.70** | **70** | Pg | **Pb** | **14 30 21.8** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **1.05** | **178** | Pg | **Pn** | **14 30 28.1** | **-0.8** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **81** | Pg | **Pn** | **14 30 31.7** | **+0.2** |
| **IBZA** | **Bozab** | **1.42** | **98** | Pg | **Pg** | **14 30 35.3** | **0.0** |
| **IBDR** | **Badra** | **1.58** | **187** | *e*Pn | **Pb** | **14 30 37.0** | **-0.3** |
| IBDR | | | | *e*Sn | **Sg** | **14 30 59.0** | **+0.2** |
| **IKRK** | **Kirkuk** | **1.66** | **296** | *e*Pn | **Pb** | **14 30 38.0** | **-0.7** |
| IKRK | | | | *e*Sn | **Sg** | **14 31 01.0** | **-0.4** |
| IKRK | | | | AML | AML | 14 31 08.2 | |
| | comp=N,118nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 14 31 09.6 | |
| | comp=E,78nm,0.6s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.81** | **129** | Pn | **Pg** | **14 30 42.2** | **-0.7** |
| **BHD** | **Baghdad** | **2.04** | **227** | *e*Pn | **Pn** | **14 30 43.0** | **+0.6** |
| BHD | | | | *e*Sn | **Sb** | **14 31 10.5** | **-0.2** |
| **RAFI** | **Al-Rafai** | **2.95** | **181** | *e*Pn | **Pn** | **14 30 56.0** | **+1.1** |
| RAFI | | | | *e*Sn | **Sn** | **14 31 32.0** | **+1.6** |

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*BJI **26** 14:32:49.8±0.0,3˚.55S×137˚.28E,h12$^{km}$,mb4.9/58,*
*mB5.0/17,Ms4.5/4,Ms7.4,2/3*
*IDC **26** 14:32:54.0±0.5,3˚.10S×136˚.83E,h0$^{km}$,mb4.5/15,*
*mbtmp4.5/17,ML4.4/2,MS3.7/36,Error ellipse:*
*s-maj=28.8km s-min=11.9km az=75.0*
*MOS **26** 14:32:57.4±0.8,3˚.08S×136˚.74E,h36$^{km}$,mb5.0/29,Error*
*ellipse: s-maj=11.9km s-min=5.6km az=113.0*
*DJA **26** 14:33:00.8±0.3,3˚S±3˚×13˚7E±˚,h57$^{km}$±3$^{km}$,M4.7/32,*
*mB5.1/14,mb5.0/32,MLv5.2/8,Mw(mB)4.5/14*
*NEIC **26** 14:33:01.5±1.3,3.˚10S±0˚.08×136˚.78E±0˚.08,h48$^{km}$±5$^{km}$,*
*mb5.0/91,Error ellipse: s-maj=12.8km s-min=10.5km*
*az=215.0*
**ISC 26 14:33:00.5±0.4,3˚.15S±0˚.04×136˚.83E±0˚.05,h46$^{km}$±3$^{km}$,**
**h46$^{km}$:pP-P,n334,σ1$^{s}$46/311,mb5.0/97,MS3.7/32,12C-5D,**
**Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMPI** | **Kaimana, Papua** | **3.16** | **261** | P | **Pn** | **14 33 51.3** | **+3.6** |
| **GENI** | **Genyem** | **3.38** | **81** | P | **Pn** | **14 33 55.5** | **+4.8** |
| **GENI** | **Genyem** | **3.38** | **81** | P | **Pn** | **14 33 50.0** | **-0.7** |
| **JAY** | **Jayapura** | **3.92** | **81** | P | **Pn** | **14 33 56.8** | **-1.4** |
| **FAKI** | **Fak Fak** | **4.58** | **273** | P | **Pn** | **14 34 08.5** | **+1.2** |
| **FAKI** | **Fak Fak** | **4.58** | **273** | Pn | **Pn** | **14 34 08.2** | **+0.9** |
| **FAKI** | **Fak Fak** | **4.58** | **273** | P | **Pn** | **14 34 08.4** | **+1.2** |
| **TABU** | **Tabubil** | **4.86** | **116** | P | **Pn** | **14 34 15.7** | **+4.6** |
| **SWI** | **Sorong** | **6.01** | **292** | P | **Pn** | **14 34 27.8** | **+0.9** |
| | 193nm,0.6s,3µm1.4nm | | | | | | |
| **MMPI** | **Merauke** | **6.35** | **146** | P | **Pn** | **14 34 34.0** | **+2.4** |
| **BNDI** | **Bandanaira** | **7.04** | **259** | P | **Pn** | **14 34 41.8** | **+0.7** |
| | 202nm,0.6s | | | | | | |
| **SAUI** | **Saumlaki** | **7.30** | **229** | P | **Pn** | **14 34 46.4** | **+1.8** |
| | 266nm,1.1s,1.9nm | | | | | | |
| **MSAI** | **Masohi** | **7.89** | **268** | P | **Pn** | **14 34 53.8** | **+1.1** |
| | 53nm,0.5s,0.3nm | | | | | | |
| **NLAI** | **Namlea** | **9.72** | **269** | P | **Pn** | **14 35 18.9** | **+1.2** |
| | 57nm,0.8s,502nm | | | | | | |
| **TNTI** | **Ternate** | **10.23** | **292** | P | **Pn** | **14 35 26.8** | **+2.0** |
| **KDU** | **Kakadu** | **10.41** | **204** | P | **Pn** | **14 35 28.1** | **+0.9** |
| **MANU** | **Manus Island** | **10.58** | **84** | Pn | **Pn** | **14 35 30.4** | **+0.8** |
| **SANI** | **Sanana** | **10.89** | **276** | P | **Pn** | **14 35 35.6** | **+1.8** |
| **SANI** | **Sanana** | **10.89** | **276** | P | **Pn** | **14 35 33.7** | **-0.1** |
| **DRS** | **Darwin Rock St** | **10.93** | **212** | P | **Pn** | **14 35 36.2** | **+1.9** |
| **MTN** | **Manton Dam** | **11.16** | **210** | P | **Pn** | **14 35 40.2** | **+2.8** |
| **MTN** | **Manton Dam** | **11.16** | **210** | Pn | **Pn** | **14 35 38.5** | **+1.1** |
| **PMG** | **Port Moresby** | **11.99** | **122** | P | **Pn** | **14 35 52.7** | **+3.8** |
| **PMG** | **Port Moresby** | **11.99** | **122** | P | **Pn** | **14 35 52.0** | **+3.1** |
| **PMG** | **Port Moresby** | **11.99** | **122** | Pn | **Pn** | **14 35 50.4** | **+1.5** |
| **PMG** | **Port Moresby** | **11.99** | **122** | Pn | **Pn** | **14 35 50.4** | **+1.5** |
| | 1.4nm,0.3s,baz=360,slow=4.2,SNR=6.5 | | | | | | |
| PMG | | | | Sn | **Sn** | **14 37 59.3** | **-2.1** |
| | 1.0nm,0.3s,baz=338,slow=19,SNR=1.5 | | | | | | |
| PMG | | | | LR | LR | 14 42 08.3 | |
| | comp=Z,318nm,18.0s,baz=300,slow=46 | | | | | | |
| **PMG** | **Port Moresby** | **11.99** | **122** | *i* P | **Pn** | **14 35 49.8** | **+0.9** |
| **COEN** | **Coen** | **12.43** | **150** | Pn | **Pn** | **14 35 54.2** | **-0.7** |
| **KMSI** | **Cibinong** | **13.37** | **286** | P | **Pn** | **14 36 08.0** | **+0.3** |
| **SOEI** | **Soe** | **14.10** | **242** | P | **Pn** | **14 36 19.1** | **+1.4** |
| **SOEI** | **Soe** | **14.10** | **242** | Pn | **Pn** | **14 36 15.8** | **-1.9** |
| **SOEI** | **Soe** | **14.10** | **242** | P | **Pn** | **14 36 19.3** | **+1.6** |
| | 105nm,0.6s,1µm | | | | | | |
| **LUWI** | **Luwuk** | **14.21** | **278** | Pn | **Pn** | **14 36 19.1** | **0.0** |
| **LUWI** | **Luwuk** | **14.21** | **278** | P | **Pn** | **14 36 18.3** | **-0.8** |
| **KNRA** | **Kununurra** | **14.76** | **212** | Pn | **Pn** | **14 36 26.6** | **+0.1** |
| **BATI** | **Baumata** | **14.83** | **241** | P | **Pn** | **14 36 29.1** | **+1.7** |
| **DAV** | **Davao City (W)** | **15.14** | **312** | LR | LR | 14 42 56.8 | |
| | comp=Z,126nm,19.4s,baz=118,slow=40 | | | | | | |
| **MRSI** | **Marisa** | **15.31** | **283** | P | **P** | **14 36 36.7** | **-1.1** |
| **EDFI** | **Ende, Flores** | **16.05** | **249** | P | **Pn** | **14 36 44.4** | **+1.2** |
| **BSSI** | **Bau Bau, Buton** | **16.55** | **259** | P | **P** | **14 36 51.3** | **-0.2** |
| | 76nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **16.59** | **285** | P | **P** | **14 36 51.9** | **-0.1** |
| **TOLI2** | **Tolitoli** | **16.59** | **285** | Pn | **Pn** | **14 36 48.7** | **-1.4** |
| TOLI2 | | | | IAmb | IAmb | 14 36 55.0 | |
| | comp=Z,82nm,0.9s | | | | | | |
| **MTSU** | **Mount Surprise** | **16.60** | **154** | P | **Pn** | **14 36 50.6** | **+0.5** |
| **WB0** | **Warramunga Arr** | **16.68** | **188** | | **Pn** | **14 36 48.2** | **-2.9** |
| **BNSI** | **Bone** | **16.73** | **265** | P | **P** | **14 36 53.3** | **-0.2** |
| | comp=Z,33nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **16.85** | **188** | *i* P | **Pn** | **14 36 50.0** | **-3.3** |
| **WR0** | **Warramunga Arr** | **16.85** | **187** | | **Pn** | **14 36 51.3** | **-2.0** |
| **WB2** | **Warramunga Arr** | **16.86** | **188** | | **Pn** | **14 36 50.3** | **-3.1** |
| WB2 | | | | IAmb | IAmb | 14 36 58.7 | |
| | comp=Z,65nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.86** | **188** | Pn | **Pn** | **14 36 51.0** | **-2.4** |
| | comp=Z,2.1nm,0.3s,baz=6.1,slow=13,SNR=63 | | | | | | |
| WRA | | | | Sn | **Sn** | **14 39 51.1** | **-8.9** |
| | comp=Z,5.2nm,0.3s,baz=10,slow=21,SNR=13 | | | | | | |
| WRA | | | | LR | LR | 14 43 54.2 | |
| | comp=Z,704nm,21.4s,baz=9.5,slow=39 | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **16.86** | **188** | P | **Pn** | **14 36 51.0** | **-2.4** |
| **KAPI** | **Kappang** | **17.14** | **263** | | **Pn** | **14 36 56.4** | **-0.4** |
| **KAPI** | **Kappang** | **17.14** | **263** | LR | LR | 14 44 39.5 | |
| | comp=Z,92nm,19.1s,baz=78,slow=41 | | | | | | |
| **KAPI** | **Kappang** | **17.14** | **263** | P | **Pn** | **14 36 56.4** | **-0.4** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,40nm,1.8s | | | | | | |
| **MPSI** | **Mapaga** | **17.28** | **281** | P | **P** | **14 36 59.7** | **+0.2** |
| | comp=Z,24nm,0.6s | | | | | | |
| **GUMO** | **Guam** | **18.45** | **25** | LR | LR | 14 43 35.8 | |
| | comp=Z,111nm,19.4s,baz=190,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.46** | **216** | P | **P** | **14 37 12.0** | **-0.5** |
| **WBSI** | **Waikabubak, Su** | **18.48** | **249** | P | **Pn** | **14 37 14.6** | **+1.2** |
| **TV1H** | **Townsville Har** | **18.74** | **149** | P | **Pn** | **14 37 17.3** | **+0.9** |
| **CTA** | **Charters Tower** | **19.18** | **152** | P | **Pn** | **14 37 22.1** | **+0.4** |
| **CTA** | **Charters Tower** | **19.18** | **152** | P | **Pn** | **14 37 21.6** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=330,slow=10,SNR=67 | | | | | | |
| CTA | | | | LR | LR | 14 45 12.8 | |
| | comp=Z,20nm,19.9s,baz=336,slow=38 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **19.18** | **152** | P | **Pn** | **14 37 21.7** | **0.0** |
| **CTAO** | **Charters Tower** | **19.18** | **152** | P | **Pn** | **14 37 21.7** | **0.0** |
| **CTAO** | **Charters Tower** | **19.18** | **152** | P | **P** | **14 37 21.3** | **+0.8** |
| **CTAO** | **Charters Tower** | **19.18** | **152** | P | **P** | **14 37 21.3** | **+0.8** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| **AUAYR** | **Ayr State High** | **19.32** | **148** | P | **Pn** | **14 37 23.9** | **+0.5** |
| **BKB** | **Balikpapan** | **20.01** | **275** | P | **Pn** | **14 37 31.2** | **-0.4** |
| **AS01** | **Alice Springs** | **20.58** | **188** | P | **P** | **14 37 37.3** | **+1.6** |
| **AS31** | **Alice Springs** | **20.59** | **188** | P | **P** | **14 37 37.2** | **+1.4** |
| **ASAR** | **Alice Springs** | **20.59** | **188** | P | **P** | **14 37 37.3** | **+1.5** |
| **ASAR** | **Alice Springs** | **20.59** | **188** | P | **P** | **14 37 36.7** | **+0.9** |
| | comp=Z,124nm,0.4s,baz=14,slow=11,SNR=1670 | | | | | | |
| ASAR | | | | LR | LR | 14 47 03.3 | |
| | comp=Z,154nm,21.2s,baz=1.5,slow=41 | | | | | | |
| **ASAR** | **Alice Springs** | **20.59** | **188** | P | **P** | **14 37 37.3** | **+1.5** |
| **TWSI** | **Taliwang, Sumb** | **20.59** | **253** | P | **P** | **14 37 36.3** | **+0.4** |
| **SRBI** | **Singaraja** | **22.06** | **256** | P | **P** | **14 37 52.8** | **+1.2** |
| **KKM** | **Kota Kinabalu** | **22.52** | **294** | P | **P** | **14 37 58.6** | **+1.8** |
| **KKM** | **Kota Kinabalu** | **22.52** | **294** | P | **P** | **14 37 57.1** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **23.16** | **256** | P | **P** | **14 38 01.6** | **-1.6** |
| JAGI | | | | IAmb | IAmb | 14 38 06.6 | |
| | comp=Z,178nm,1.9s | | | | | | |
| **WRKA** | **Warakurna** | **23.26** | **200** | P | **P** | **14 38 04.6** | **+0.5** |
| **RK1H** | **Rockhampton Ha** | **24.07** | **148** | P | **P** | **14 38 12.9** | **+1.2** |
| **QLP** | **Quilpie** | **24.35** | **164** | P | **P** | **14 38 15.0** | **+0.7** |
| **MBWA** | **Marble Bar** | **24.44** | **222** | P | **P** | **14 38 16.6** | **+1.5** |
| **MBWA** | **Marble Bar** | **24.44** | **222** | P | **P** | **14 38 16.0** | **+0.9** |
| **OOD** | **Oodnadatta** | **24.53** | **182** | P | **P** | **14 38 16.6** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **24.65** | **221** | P | **P** | **14 38 18.7** | **+1.6** |
| **PSA00** | **Pilbara Seismi** | **24.65** | **221** | P | **P** | **14 38 18.0** | **+0.9** |
| **INKA** | **Innaminka** | **24.73** | **172** | P | **P** | **14 38 18.2** | **+0.5** |
| **SBUM** | **Sibu** | **25.22** | **282** | P | **P** | **14 38 22.7** | **+0.4** |
| **EIDS** | **Eidsvold** | **26.00** | **149** | P | **P** | **14 38 31.6** | **+2.4** |
| **EIDS** | **Eidsvold** | **26.00** | **149** | P | **P** | **14 38 31.5** | **+2.3** |
| **SMRI** | **Semarang** | **26.56** | **261** | P | **P** | **14 38 38.5** | **+4.0** |
| **MULG** | **Mulgathing** | **27.11** | **185** | P | **P** | **14 38 39.7** | **+0.5** |
| **LCRK** | **Leigh Creek** | **27.18** | **177** | P | **P** | **14 38 40.0** | **+0.2** |
| **AULRC** | **Lightning Ridg** | **28.20** | **159** | P | **P** | **14 38 50.1** | **+1.2** |
| **FORT** | **Forrest** | **28.70** | **196** | P | **P** | **14 38 54.0** | **+0.6** |
| **FORT** | **Forrest** | **28.70** | **196** | P | **P** | **14 38 53.3** | **-0.1** |
| **STKA** | **Stephens Creek** | **28.92** | **172** | P | **P** | **14 38 55.1** | **-0.2** |
| **STKA** | **Stephens Creek** | **28.92** | **172** | P | **P** | **14 38 54.2** | **-1.1** |
| **STKA** | **Stephens Creek** | **28.92** | **172** | P | **P** | **14 38 54.5** | **-0.9** |
| | comp=Z,7.8nm,0.6s,baz=342,slow=8.6,SNR=24 | | | | | | |
| STKA | | | | LR | LR | 14 51 47.9 | |
| | comp=Z,69nm,18.2s,baz=359,slow=39 | | | | | | |
| | comp=Z,7.8nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **28.92** | **172** | *i* P | **P** | **14 38 54.2** | **-1.1** |
| **CMSA** | **Cobar Meteorol** | **29.44** | **164** | P | **P** | **14 39 00.4** | **+0.4** |
| **BBOO** | **Buckleboo** | **29.51** | **181** | P | **P** | **14 39 00.1** | **-0.4** |
| BBOO | | | | IAmb | IAmb | 14 39 56.1 | |
| | comp=Z,44nm,1.6s | | | | | | |
| **JCJ** | **Chichijima** | **30.51** | **9** | LR | LR | 14 48 40.5 | |
| | comp=Z,111nm,21.9s,baz=172,slow=31 | | | | | | |
| **ARMA** | **Armidale** | **30.52** | **154** | P | **P** | **14 39 10.5** | **+0.9** |
| ARMA | | | | IAmb | IAmb | 14 39 13.0 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **JOW** | **Kunigami** | **30.94** | **345** | LR | LR | 14 49 45.4 | |
| | comp=Z,164nm,21.6s,baz=102,slow=33 | | | | | | |
| **AUDCS** | **Dubbo College** | **30.98** | **160** | P | **P** | **14 39 14.7** | **+1.2** |
| **MORW** | **Morawa** | **32.48** | **215** | P | **P** | **14 39 27.6** | **+0.8** |
| **MORW** | **Morawa** | **32.48** | **215** | P | **P** | **14 39 27.5** | **+0.8** |
| MORW | | | | IAmb | IAmb | 14 39 28.4 | |
| | comp=Z,40nm,1.5s | | | | | | |
| **YNG** | **Young** | **32.81** | **162** | P | **P** | **14 39 31.2** | **+1.6** |
| **KLBR** | **Kellerberrin** | **33.51** | **210** | P | **P** | **14 39 36.3** | **+0.5** |
| **CAN** | **Canberra** | **33.94** | **162** | P | **P** | **14 39 40.8** | **+1.3** |
| CAN | | | | IAmb | IAmb | 14 39 41.8 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **CAN** | **Canberra** | **33.94** | **162** | P | **P** | **14 39 40.8** | **+1.3** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **34.35** | **126** | *e*LR | LR | 14 48 56.0 | |
| | comp=Z,146nm,25.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.85** | **210** | P | **P** | **14 39 48.5** | **+1.1** |
| **NWAO** | **Narrogin (SRO)** | **34.85** | **210** | LR | LR | 14 55 09.3 | |
| | comp=Z,484nm,20.8s,baz=50,slow=38 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.85** | **210** | P | **P** | **14 39 48.5** | **+1.1** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,67nm,1.7s | | | | | | |
| **TOO** | **Toolangi** | **35.16** | **168** | P | **P** | **14 39 51.0** | **+1.0** |
| **TOO** | **Toolangi** | **35.16** | **168** | P | **P** | **14 39 51.0** | **+1.0** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,71nm,1.6s | | | | | | |
| **JNU** | **Nakatsue** | **36.52** | **352** | P | **P** | **14 40 00.6** | **-1.0** |
| **JNU** | **Nakatsue** | **36.52** | **352** | LR | LR | 14 53 09.4 | |
| | comp=Z,118nm,20.0s,baz=150,slow=33 | | | | | | |
| **IPM** | **Ipoh** | **36.57** | **282** | P | **P** | **14 40 03.6** | **+1.2** |
| **IPM** | **Ipoh** | **36.57** | **282** | P | **P** | **14 40 01.9** | **-0.5** |
| IPM | | | | IAmb | IAmb | 14 40 04.3 | |
| | comp=Z,32nm,1.3s | | | | | | |
| **KULM** | **Kulim** | **37.10** | **283** | IAmb | IAmb | 14 40 07.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **RPSI** | **Rantau Prapat** | **38.33** | **278** | P | **P** | **14 40 16.5** | **-0.8** |
| RPSI | | | | IAmb | IAmb | 14 40 18.0 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **PSI** | **Prapat** | **38.35** | **278** | P | **P** | **14 40 18.2** | **+0.6** |
| **PSI** | **Prapat** | **38.35** | **278** | P | **P** | **14 40 16.5** | **-1.1** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| **SRIT** | **Nakonsritamara** | **38.91** | **288** | P | **P** | **14 40 23.1** | **+0.9** |
| **NJ2** | **Nanjing** | **38.95** | **335** | *e*P | **P** | **14 40 23.8** | **+1.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| **GSI** | **Gunungsitoli** | **39.49** | **276** | P | **P** | **14 40 27.7** | **+0.7** |
| **GSI** | **Gunungsitoli** | **39.49** | **276** | P | **P** | **14 40 25.8** | **-1.2** |
| GSI | | | | IAmb | IAmb | 14 40 26.7 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.51** | **2** | P | **P** | **14 40 26.4** | **-0.4** |
| | comp=Z,1.6nm,0.9s,baz=172,slow=6.7,SNR=4.0 | | | | | | |
| MJAR | | | | PcP | **PcP** | **14 42 33.7** | **-0.1** |
| | comp=Z,1.1nm,1.0s,baz=177,slow=4.1,SNR=4.0 | | | | | | |
| MJAR | | | | LR | LR | 14 54 21.8 | |
| | comp=Z,132nm,20.3s,baz=175,slow=33 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.51** | **2** | P | **P** | **14 40 26.4** | **-0.4** |
| MJAR | | | | | | 14 42 33.7 | |
| **TAU** | **Tasmania Unive** | **40.67** | **168** | P | **P** | **14 40 37.8** | **+1.4** |
| **TAU** | **Tasmania Unive** | **40.67** | **168** | P | **P** | **14 40 37.8** | **+1.4** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,148nm,1.7s | | | | | | |
| **KSRS** | **Korea Array** | **41.24** | **349** | P | **P** | **14 40 41.0** | **-0.1** |
| **KSRS** | **Korea Array** | **41.24** | **349** | P | **P** | **14 40 41.0** | **-0.1** |
| | comp=Z,1.9nm,0.8s,baz=168,slow=8.7,SNR=9.0 | | | | | | |
| KSRS | | | | PcP | **PcP** | **14 42 39.7** | **+0.3** |
| | comp=Z,1.2nm,0.7s,baz=183,slow=3.6,SNR=4.0 | | | | | | |
| KSRS | | | | LR | LR | 14 56 17.2 | |
| | comp=Z,70nm,20.9s,baz=140,slow=34 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **41.24** | **349** | P | **P** | **14 40 41.0** | **-0.1** |
| KSRS | | | | | | 14 42 39.7 | |
| **GYA** | **Guiyang** | **41.44** | **317** | ⇓P | **P** | **14 40 44.0** | **+0.9** |
| GYA | | | | S | **S** | **14 46 58.0** | **+2.6** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,17nm,0.5s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,110nm,4.5s | | | | | | |
| **PHRA** | **Phrae** | **41.97** | **302** | P | **P** | **14 40 47.0** | **-0.4** |
| **ENH** | **Enshi** | **42.28** | **324** | P | **P** | **14 40 51.7** | **+1.9** |
| **ENH** | **Enshi** | **42.28** | **324** | P | **P** | **14 40 49.0** | **-0.8** |
| **MSVF** | **Nonsavu** | **42.91** | **113** | LR | LR | 14 56 14.2 | |
| | comp=Z,85nm,19.8s,baz=235,slow=33 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **43.05** | **301** | IAmb | IAmb | 14 40 57.8 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.05** | **301** | P | **P** | **14 40 55.3** | **-0.8** |
| **CMAR** | **Chiang Mai Arr** | **43.05** | **301** | P | **P** | **14 40 56.7** | **+0.6** |
| | comp=Z,12nm,0.8s,baz=123,slow=6.5,SNR=58 | | | | | | |
| CMAR | | | | PcP | **PcP** | **14 42 46.3** | **+0.5** |
| | comp=Z,2.2nm,0.7s,baz=142,slow=2.2,SNR=6.6 | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.05** | **301** | P | **P** | **14 40 55.3** | **-0.8** |
| **KMI** | **Kunming** | **43.41** | **312** | ⇑P | **P** | **14 40 59.8** | **+0.6** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,36nm,0.8s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,110nm,4.0s | | | | | | |
| **LYN** | **LuoYang** | **43.95** | **331** | P | **P** | **14 41 04.0** | **+0.8** |
| LYN | | | | sP | pP | 14 41 10.8 | -5.0 |
| LYN | | | | pmax | pmax | | |
| | comp=Z,29nm,0.5s | | | | | | |
| **PZH** | **PanZhiHua** | **44.94** | **313** | P | **P** | **14 41 11.8** | **+0.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,120nm,3.7s | | | | | | |
| **HNS** | **HongShan** | **45.28** | **335** | ⇓P | **P** | **14 41 13.3** | **-0.4** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **XAN** | **Xi'an** | **45.39** | **327** | P | **P** | **14 41 14.5** | **-0.2** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **MSHR** | **Mys Shultsa** | **45.81** | **354** | *i* P | **P** | **14 41 17.8** | **0.0** |
| **CD2** | **Chengdu** | **46.27** | **320** | P | **P** | **14 41 22.0** | **+0.3** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| **TNCH** | **TengChong** | **46.55** | **309** | ⇑*i*P | **P** | **14 41 24.5** | **+0.3** |
| TNCH | | | | S | **S** | **14 48 13.3** | **+3.3** |
| TNCH | | | | sS | sS | 14 48 29.5 | -1.7 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.3s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,140nm,4.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,110nm,4.2s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **47.34** | **355** | P | **P** | **14 41 30.0** | **+0.2** |
| USA0B | | | | IAmb | IAmb | 14 41 42.2 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **47.34** | **355** | *i* P | **P** | **14 41 28.8** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **47.34** | **355** | P | **P** | **14 41 29.8** | **0.0** |
| | comp=Z,2.9nm,0.5s,baz=175,slow=7.4,SNR=20 | | | | | | |
| USRK | | | | LR | LR | 14 58 02.7 | |
| | comp=Z,124nm,21.2s,baz=214,slow=32 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.34** | **355** | P | **P** | **14 41 29.8** | **0.0** |
| **ASAJ** | **Asahikawa** | **47.34** | **6** | LR | LR | 14 59 01.7 | |
| | comp=Z,72nm,21.2s,baz=190,slow=33 | | | | | | |
| **ASAJ** | **Asahikawa** | **47.34** | **6** | P | **P** | **14 41 30.3** | **+0.5** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,138nm,2.0s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **47.34** | **6** | P | **P** | **14 41 30.2** | **+0.5** |
| **MDJ** | **Mudanjiang** | **48.00** | **353** | P | **P** | **14 41 38.0** | **+3.1** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,270nm,5.2s | | | | | | |
| **TOZ** | **Tahuroa Road** | **49.35** | **139** | P | **P** | **14 41 47.0** | **+1.6** |
| TOZ | | | | IAmb | IAmb | 14 41 59.0 | |
| | comp=Z,38nm,1.7s | | | | | | |
| **BNX** | **BinXian** | **49.40** | **351** | ⇓P | **P** | **14 41 45.3** | **-0.3** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.50** | **335** | *e*P | **P** | **14 41 49.3** | **+2.6** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,95nm,4.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,110nm,16.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,120nm,16.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,120nm,15.9s | | | | | | |
| **LZH** | **Lanzhou** | **49.73** | **325** | *e*P | **P** | **14 41 47.0** | **-1.6** |
| LZH | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| **TKNZ** | **Takaka Hill** | **49.77** | **144** | P | **P** | **14 41 50.1** | **+1.5** |
| **MRNZ** | **Matariki Terra** | **49.89** | **145** | P | **P** | **14 41 50.3** | **+0.8** |
| **NNZ** | **Nelson** | **50.13** | **144** | P | **P** | **14 41 51.8** | **+0.5** |
| **MLZ** | **Mavora Lakes** | **50.19** | **152** | P | **P** | **14 41 52.7** | **+1.0** |
| MLZ | | | | IAmb | IAmb | 14 42 54.6 | |
| | comp=Z,43nm,1.3s | | | | | | |
| **URZ** | **Urewera** | **50.70** | **139** | P | **P** | **14 41 55.1** | **-0.5** |
| | comp=Z,6.7nm,0.5s,baz=324,slow=3.7,SNR=3.1 | | | | | | |
| URZ | | | | LR | LR | 15 02 17.3 | |
| | comp=Z,102nm,21.6s,baz=36,slow=35 | | | | | | |
| | comp=Z,6.7nm,0.5s | | | | | | |
| **OXZ** | **Oxford** | **50.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| YAK | | | | pmax | pmax | | |
| | comp=N,95nm,4.6s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,69nm,4.8s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,85nm,5.3s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,68nm,6.3s | | | | | | |
| **YAK** | **Yakutsk** | **65.23** | **356** | P | **P** | 14 43 36.9 | -0.1 |
| YAK | | | | pP | **pP** | 14 43 48.6 | -1.5 |
| **SEY** | **Seymchan** | **66.95** | **8** | *i* P | **P** | 14 43 48.7 | +0.7 |
| SEY | | | | pmax | pmax | | |
| | comp=Z,14nm,1.5s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **67.64** | **328** | *i* P | **P** | 14 43 52.4 | -0.5 |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **ZSN** | **Zaisan** | **67.83** | **325** | *e*P | **P** | 14 43 53.1 | -0.9 |
| | baz=325 | | | | | | |
| **ZSN** | **Zaisan** | **67.83** | **325** | *e*P | **P** | 14 43 53.0 | -0.9 |
| **MK31** | **Makanchi Array** | **69.00** | **323** | P | **P** | 14 44 00.7 | -0.6 |
| **MK31** | **Makanchi Array** | **69.00** | **323** | *ce*P | **P** | 14 44 00.7 | -0.6 |
| **MKAR** | **Makanchi Array** | **69.00** | **323** | P | **P** | 14 44 00.9 | -0.4 |
| **MKAR** | **Makanchi Array** | **69.00** | **323** | P | **P** | 14 44 01.2 | -0.1 |
| | comp=Z,2.8nm,0.4s,baz=102,slow=8.7,SNR=80 | | | | | | |
| | comp=Z,2.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **69.00** | **323** | *ce*P | **P** | 14 44 01.2 | -0.1 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **69.10** | **319** | *e*P | **P** | 14 43 59.1 | -3.0 |
| | comp=Z,7.8nm,0.8s,baz=319 | | | | | | |
| **SHLS** | **Shalkode** | **69.10** | **319** | *e*P | **P** | 14 43 59.1 | -3.0 |
| SHLS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **69.20** | **323** | P | **P** | 14 44 02.2 | -0.3 |
| **MAKZ** | **Makanchi** | **69.20** | **323** | P | **P** | 14 44 02.2 | -0.3 |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | **69.20** | **323** | P | **P** | 14 44 02.2 | -0.3 |
| MAKZ | | | | sP | **sP** | 14 44 19.5 | -1.7 |
| **UZB** | **Uzynbulak** | **69.39** | **319** | *e*P | **P** | 14 44 02.5 | -1.4 |
| | comp=Z,5.7nm,0.6s,baz=319 | | | | | | |
| **UZB** | **Uzynbulak** | **69.39** | **319** | *e*P | **P** | 14 44 02.5 | -1.4 |
| UZB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **KPKS** | **Kokpek** | **69.74** | **319** | *e*P | **P** | 14 44 05.0 | -1.1 |
| | comp=Z,5.1nm,0.7s,baz=319 | | | | | | |
| **KPKS** | **Kokpek** | **69.74** | **319** | *e*P | **P** | 14 44 04.9 | -1.1 |
| KPKS | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **SATY** | **Saty** | **69.76** | **318** | *e*P | **P** | 14 44 04.8 | -1.3 |
| | comp=Z,10nm,0.8s,baz=318 | | | | | | |
| **SATY** | **Saty** | **69.76** | **318** | *e*P | **P** | 14 44 04.8 | -1.3 |
| SATY | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **70.03** | **314** | P | **P** | 14 44 09.3 | +1.4 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| **NIL** | **Nilore** | **70.09** | **307** | P | **P** | 14 44 08.9 | +0.6 |
| NIL | | | | pP | **pP** | 14 44 22.2 | +0.5 |
| **TDK** | **Taldyqorghan** | **70.58** | **320** | *e*P | **P** | 14 44 09.9 | -1.2 |
| | comp=Z,10nm,0.8s,baz=320 | | | | | | |
| **TDK** | **Taldyqorghan** | **70.58** | **320** | *e*P | **P** | 14 44 09.8 | -1.2 |
| TDK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **MDOK** | **Medeo** | **70.70** | **318** | *e*P | **P** | 14 44 10.5 | -1.6 |
| | baz=318 | | | | | | |
| **MDOK** | **Medeo** | **70.70** | **318** | *e*P | **P** | 14 44 10.4 | -1.6 |
| **NRN** | **Naryn** | **70.74** | **316** | IAmb | IAmb | 14 44 13.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **CHKK** | **Chushkaly** | **71.03** | **319** | *e*P | **P** | 14 44 12.4 | -1.4 |
| | baz=319 | | | | | | |
| **CHKK** | **Chushkaly** | **71.03** | **319** | *e*P | **P** | 14 44 12.3 | -1.4 |
| **ZAA0** | **Zalesovo Array** | **71.39** | **331** | P | **P** | 14 44 14.2 | -1.5 |
| **ZALV** | **Zalesovo Beam** | **71.39** | **331** | P | **P** | 14 44 13.9 | -1.7 |
| **ZALV** | **Zalesovo Beam** | **71.39** | **331** | P | **P** | 14 44 14.6 | -1.1 |
| | comp=Z,5.1nm,0.5s,baz=111,slow=6.5,SNR=24 | | | | | | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.39** | **331** | *i* P | **P** | 14 44 14.3 | -1.4 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **KUU** | **Kurty** | **71.47** | **318** | *e*P | **P** | 14 44 15.2 | -1.3 |
| | comp=Z,6.9nm,0.8s,baz=318 | | | | | | |
| **KUU** | **Kurty** | **71.47** | **318** | *e*P | **P** | 14 44 15.1 | -1.3 |
| KUU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **SEM** | **Semipalatinsk** | **71.95** | **326** | *e*P | **P** | 14 44 18.1 | -1.3 |
| | baz=326 | | | | | | |
| **SEM** | **Semipalatinsk** | **71.95** | **326** | *e*P | **P** | 14 44 18.1 | -1.3 |
| **AAK** | **Ala-Archa** | **72.23** | **317** | P | **P** | 14 44 21.1 | -0.2 |
| AAK | | | | IAmb | IAmb | 14 44 22.8 | |
| | comp=Z,24nm,1.6s | | | | | | |
| **AAK** | **Ala-Archa** | **72.23** | **317** | LR | LR | 15 17 54.6 | |
| | comp=Z,48nm,20.9s,baz=123,slow=37 | | | | | | |
| **AAK** | **Ala-Archa** | **72.23** | **317** | *ce*P | **P** | 14 44 19.1 | -2.1 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **SGDS** | **Sogindy** | **72.44** | **317** | *e*P | **P** | 14 44 20.9 | -1.4 |
| | baz=318 | | | | | | |
| **SGDS** | **Sogindy** | **72.44** | **317** | *e*P | **P** | 14 44 20.9 | -1.4 |
| **KURK** | **Kurchatov** | **73.01** | **326** | P | **P** | 14 44 24.6 | -0.8 |
| **KURK** | **Kurchatov** | **73.01** | **326** | P | **P** | 14 44 24.6 | -0.8 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.02** | **325** | P | **P** | 14 44 24.9 | -0.6 |
| | comp=Z,3.8nm,0.7s,baz=117,slow=5.2,SNR=35 | | | | | | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **PPT2** | **Papeete2** | **73.42** | **107** | *e*LR | LR | 15 07 05.9 | |
| | comp=Z,125nm,31.5s | | | | | | |
| **BTLS** | **Baital** | **73.43** | **319** | *e*P | **P** | 14 44 26.9 | -1.2 |
| | comp=Z,6.0nm,0.7s,baz=319 | | | | | | |
| **BTLS** | **Baital** | **73.43** | **319** | *e*P | **P** | 14 44 26.9 | -1.2 |
| BTLS | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **KBL** | **Kabul** | **73.69** | **307** | P | **P** | 14 44 29.2 | -0.9 |
| KBL | | | | IAmb | IAmb | 14 44 30.3 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **KBL** | **Kabul** | **73.69** | **307** | P | **P** | 14 44 29.2 | -0.9 |
| KBL | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| **TBI** | **Tubuai** | **73.80** | **113** | *e*LR | LR | 15 07 08.4 | |
| | comp=Z,451nm,30.2s | | | | | | |
| **BTK** | **Batken** | **73.95** | **313** | IAmb | IAmb | 14 44 32.3 | |
| | comp=Z,59nm,2.0s | | | | | | |
| **GAR** | **Garm** | **73.99** | **312** | P | **P** | 14 44 31.2 | -0.5 |
| **CHGR** | **Chuyangaron** | **74.75** | **311** | P | **P** | 14 44 35.3 | -0.8 |
| **CHGR** | **Chuyangaron** | **74.75** | **311** | P | **P** | 14 44 35.3 | -0.8 |
| CHGR | | | | pmax | pmax | | |
| | comp=Z,40nm,0.7s | | | | | | |
| **TIXI** | **Tiksi** | **74.85** | **357** | LR | LR | 15 14 55.9 | |
| | comp=Z,110nm,21.6s,baz=186,slow=34 | | | | | | |
| **TIXI** | **Tiksi** | **74.85** | **357** | *ce*P | **P** | 14 44 34.5 | -1.3 |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **SIMJ** | **Simiganj** | **74.86** | **311** | P | **P** | 14 44 35.9 | -0.8 |
| SIMJ | | | | IAmb | IAmb | 14 44 37.4 | |
| | comp=Z,24nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **75.14** | **316** | P | **P** | 14 44 37.6 | -0.5 |
| KK31 | | | | IAmb | IAmb | 14 44 38.4 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **75.14** | **316** | P | **P** | 14 44 37.6 | -0.5 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **KKAR** | **Karatay Array** | **75.14** | **316** | P | **P** | 14 44 37.5 | -0.6 |
| **KKAR** | **Karatay Array** | **75.14** | **316** | IAmb | IAmb | 14 44 38.4 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **KKAR** | **Karatay Array** | **75.14** | **316** | P | **P** | 14 44 37.5 | -0.6 |
| **SBA** | **Scott Base** | **76.31** | **174** | P | **P** | 14 44 45.3 | +1.2 |
| **SBA** | **Scott Base** | **76.31** | **174** | P | **P** | 14 44 45.3 | +1.2 |
| SBA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **78.61** | **326** | P | **P** | 14 44 57.0 | -0.3 |
| | comp=Z,19nm,0.7s,baz=114,slow=7.3,SNR=109 | | | | | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **78.61** | **326** | P | **P** | 14 44 57.1 | -0.3 |
| **BRVK** | **Borovoye** | **78.68** | **326** | P | **P** | 14 44 57.5 | -0.2 |
| BRVK | | | | IAmb | IAmb | 14 44 58.3 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **78.68** | **326** | *ce*P | **P** | 14 44 57.0 | -0.8 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **81.01** | **202** | P | **P** | 14 45 10.9 | +0.8 |
| | comp=Z,6.5nm,1.2s,baz=76,slow=4.1,SNR=5.4 | | | | | | |
| MAW | | | | LR | LR | 15 18 30.0 | |
| | comp=Z,75nm,20.1s,baz=69,slow=34 | | | | | | |
| | comp=Z,6.5nm,1.2s | | | | | | |
| **MAW** | **Mawson** | **81.01** | **202** | P | **P** | 14 45 10.9 | +0.8 |
| **KDAK** | **Kodiak Island** | **82.44** | **31** | LR | LR | 15 18 36.5 | |
| | comp=Z,51nm,19.2s,baz=262,slow=33 | | | | | | |
| **E18K** | **Tukpahlearik C** | **82.69** | **20** | P | **P** | 14 45 20.5 | +1.6 |
| **H19K** | **Roundabout Mou** | **83.41** | **23** | P | **P** | 14 45 23.0 | +0.3 |
| H19K | | | | IAmb | IAmb | 14 46 22.2 | |
| | comp=Z,24nm,1.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **83.85** | **320** | P | **P** | 14 45 24.1 | -1.2 |
| **ABKAR** | **Akbulak array** | **83.85** | **320** | IAmb | IAmb | 14 45 25.4 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **SVE** | **Sverdlovsk** | **85.10** | **328** | *e*P | **P** | 14 45 31.1 | -0.4 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **SML** | **Sawmill** | **85.64** | **27** | IAmb | IAmb | 14 45 35.6 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **RND** | **Reindeer** | **85.83** | **26** | IAmb | IAmb | 14 45 36.2 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **86.05** | **21** | P | **P** | 14 45 36.6 | +0.6 |
| E22K | | | | IAmb | IAmb | 14 45 38.2 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **86.09** | **24** | IAmb | IAmb | 14 45 38.3 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **86.11** | **27** | IAmb | IAmb | 14 45 38.1 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **ARU** | **Arti** | **86.14** | **327** | P | **P** | 14 45 35.2 | -1.4 |
| ARU | | | | IAmb | IAmb | 14 45 36.7 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **ARU** | **Arti** | **86.14** | **327** | LR | LR | 15 25 10.7 | |
| | comp=Z,26nm,21.3s,baz=97,slow=36 | | | | | | |
| **ARU** | **Arti** | **86.14** | **327** | *d* P | **P** | 14 45 35.2 | -1.4 |
| ARU | | | | S | **SKSac** | 14 55 57.0 | -1.9 |
| ARU | | | | SS | **SS** | 15 01 48.2 | +1.1 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **FID** | **Port Fidalgo** | **86.26** | **29** | P | **P** | 14 45 36.8 | -0.3 |
| FID | | | | IAmb | IAmb | 14 46 00.2 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **DHY** | **Denali Highway** | **86.39** | **26** | P | **P** | 14 45 38.0 | 0.0 |
| DHY | | | | IAmb | IAmb | 14 45 39.8 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **86.60** | **25** | IAmb | IAmb | 14 45 38.7 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **COLA** | **College** | **86.64** | **24** | *i* P | **P** | 14 45 38.2 | -0.6 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,2.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.80** | **180** | P | **P** | 14 45 39.9 | 0.0 |
| QSPA | | | | IAmb | IAmb | 14 45 41.2 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **86.80** | **180** | P | **P** | 14 45 39.8 | 0.0 |
| | comp=Z,4.8nm,0.6s,baz=295,slow=1.0,SNR=75 | | | | | | |
| QSPA | | | | LR | LR | 15 25 37.0 | |
| | comp=Z,73nm,18.1s,baz=10,slow=36 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **E23K** | **Chandalar** | **86.81** | **21** | IAmb | IAmb | 14 45 44.8 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **H24K** | **Noodor Dome** | **86.87** | **23** | IAmb | IAmb | 14 45 41.3 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **87.01** | **25** | P | **P** | 14 45 39.6 | -1.1 |
| **ILAR** | **Eielson Array** | **87.01** | **25** | P | **P** | 14 45 39.5 | -1.3 |
| | comp=Z,2.2nm,0.9s,baz=269,slow=4.7,SNR=13 | | | | | | |
| ILAR | | | | LR | LR | 15 18 55.8 | |
| | comp=Z,39nm,20.8s,baz=269,slow=32 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **87.01** | **25** | P | **P** | 14 45 39.5 | -1.3 |
| **RKT** | **Rikitea** | **87.12** | **113** | *e*LR | LR | 15 13 28.3 | |
| | comp=Z,863nm,42.2s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **87.25** | **23** | P | **P** | 14 45 42.4 | +0.6 |
| **RIDG** | **Independent Ri** | **87.65** | **26** | IAmb | IAmb | 14 45 44.7 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **FYU** | **Fort Yukon** | **88.09** | **23** | P | **P** | 14 45 46.4 | +0.6 |
| **CTGM** | **Chitina Glacie** | **88.77** | **29** | IAmb | IAmb | 14 45 51.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **L27K** | **Beaver Creek,** | **88.86** | **27** | P | **P** | 14 45 50.2 | +0.6 |
| L27K | | | | IAmb | IAmb | 14 45 51.7 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **BCAR** | **Beaver Creek A** | **88.89** | **27** | P | **P** | 14 45 49.9 | +0.2 |
| **KIRV** | **Kirov** | **91.32** | **328** | LR | LR | 15 29 49.4 | |
| | comp=Z,32nm,19.3s,baz=81,slow=37 | | | | | | |
| **KIRV** | **Kirov** | **91.32** | **328** | *ce*P | **P** | 14 45 58.2 | -2.9 |
| **AKT** | **Akhty** | **91.39** | **311** | *e*P | **P** | 14 45 57.5 | -4.5 |
| **BELG** | **Belogornoye** | **91.99** | **322** | LR | LR | 15 30 43.0 | |
| | comp=Z,28nm,20.2s,baz=47,slow=38 | | | | | | |
| **BELG** | **Belogornoye** | **91.99** | **322** | *i* P | **P** | 14 46 01.6 | -2.7 |
| BELG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **92.78** | **22** | LR | LR | 15 22 55.4 | |
| | comp=Z,35nm,21.0s,baz=318,slow=32 | | | | | | |
| **GNI** | **Garni** | **93.61** | **310** | LR | LR | 15 33 05.3 | |
| | comp=Z,13nm,18.4s,baz=112,slow=39 | | | | | | |
| **ELIB** | **Princess Elisa** | **94.14** | **197** | *d*P | **P** | 14 46 15.0 | +0.9 |
| | comp=Z,2.7nm,0.0s | | | | | | |
| **BBB** | **Bella Bella** | **95.58** | **38** | LR | LR | 15 21 58.3 | |
| | comp=Z,24nm,20.4s,baz=236,slow=31 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **99.08** | **350** | LR | LR | 15 31 48.3 | |
| | comp=Z,22nm,21.8s,baz=60,slow=36 | | | | | | |
| **TROLL** | **Troll, Antarti** | **99.48** | **193** | ⇑Pdiff | **Pdif** | 14 46 38.3 | 0.0 |
| | comp=Z,34nm,0.5s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **99.90** | **48** | LR | LR | 15 23 44.0 | |
| | comp=Z,16nm,21.3s,baz=280,slow=30 | | | | | | |
| **ARCES** | **ARCESS Array B** | **100.30** | **341** | P | **Pdif** | 14 46 40.6 | -1.2 |
| | comp=Z,0.6nm,0.3s,baz=82,slow=5.5,SNR=18 | | | | | | |
| **ARCES** | **ARCESS Array B** | **100.30** | **341** | P | **Pdif** | 14 46 40.6 | -1.2 |
| **SNAA** | **Sanae** | **100.89** | **192** | ⇑Pdiff | **Pdif** | 14 46 44.2 | -0.2 |
| | comp=Z,19nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **102.59** | **333** | P | **Pdif** | 14 46 50.2 | -1.9 |
| | comp=Z,1.8nm,0.9s,baz=103,slow=10,SNR=2.0 | | | | | | |
| **FINES** | **FINESS Array B** | **102.59** | **333** | P | **Pdif** | 14 46 50.2 | -1.9 |
| **TXAR** | **Lajitas Array** | **117.13** | **59** | PKP | **PKPdf** | 14 51 40.9 | -0.5 |
| | comp=Z,0.3nm,0.6s,baz=269,slow=3.2,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **117.13** | **59** | PKIKP | **PKPdf** | 14 51 40.9 | -0.5 |
| **EKA** | **Eskdalemuir Ar** | **118.81** | **335** | | **PKPdf** | 14 51 43.3 | -0.4 |
| **EKA** | **Eskdalemuir Ar** | **118.81** | **335** | PKP | **PKPdf** | 14 51 43.3 | -0.4 |
| | comp=Z,0.5nm,0.4s,baz=67,slow=4.2,SNR=3.6 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **118.81** | **335** | PKIKP | **PKPdf** | 14 51 43.3 | -0.4 |
| **S39A** | **Bolivar** | **122.74** | **46** | | **PKPdf** | 14 51 50.7 | -1.1 |
| **T42A** | **Van Buren** | **124.63** | **46** | | **PKPdf** | 14 51 54.4 | -1.1 |
| **PLCA** | **Paso Flores** | **129.66** | **153** | PKP | **PKPdf** | 14 52 04.9 | -0.2 |
| | comp=Z,2.7nm,0.7s,baz=207,slow=3.7,SNR=6.3 | | | | | | |
| **PLCA** | **Paso Flores** | **129.66** | **153** | PKIKP | **PKPdf** | 14 52 04.9 | -0.2 |
| **TORD** | **Torodi Ar. Bea** | **134.57** | **285** | PKP | **PKPdf** | 14 52 14.5 | -0.4 |
| | comp=Z,5.8nm,0.6s,baz=68,slow=2.1,SNR=24 | | | | | | |
| **DBIC** | **Dimbokro** | **141.68** | **277** | PKhKP | PKPpre | 14 52 21.7 | |
| | comp=Z,2.4nm,0.5s,baz=88,slow=2.4,SNR=5.6 | | | | | | |
| **CPUP** | **Villa Florida** | **147.65** | **156** | | **PKPbc** | 14 52 41.6 | +0.8 |
| **CPUP** | **Villa Florida** | **147.65** | **156** | PKP | **PKPdf** | 14 52 38.7 | +0.7 |
| | comp=Z,14nm,0.7s,baz=212,slow=2.3,SNR=16 | | | | | | |
| CPUP | | | | PKPbc | **PKPbc** | 14 52 41.5 | +0.8 |
| | comp=Z,11nm,0.6s,baz=210,slow=1.5,SNR=22 | | | | | | |
| **CPUP** | **Villa Florida** | **147.65** | **156** | PKP2 | **PKPdf** | 14 52 38.7 | +0.7 |
| **LPAZ** | **La Paz** | **148.66** | **129** | | **PKPdf** | 14 52 42.0 | +1.2 |
| **LPAZ** | **La Paz** | **148.66** | **129** | PKP | **PKPdf** | 14 52 41.8 | +1.1 |
| | comp=Z,6.9nm,0.8s,baz=275,slow=0.9,SNR=5.8 | | | | | | |
| LPAZ | | | | PKPbc | **PKiKP** | 14 52 45.3 | -0.6 |
| | comp=Z,6.9nm,0.8s,baz=336,slow=0.5,SNR=26 | | | | | | |
| **LPAZ** | **La Paz** | **148.66** | **129** | PKIKP | **PKPdf** | 14 52 41.8 | +1.1 |
| LPAZ | | | | | | 14 52 45.3 | |

*ISN **26** 14:55:30.4±1.1,34.˚62N×46.˚15E,h5km±9km,ML3.1*
*TEH **26** 14:55:31.4,34.˚62N×46.˚18E,h10km±50km,ML2.9*
**ISC 26 14:55:31.4**±1.0,**34.˚65N**±0.˚06×**46.˚16E**±0.˚04,**h13**km±11km,
**n13**,σ0.˚93/19,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.19** | **76** | Pg | **Pg** | 14 55 36.2 | +0.3 |
| IDHR | | | | Sg | **Sg** | 14 55 39.7 | +0.7 |
| **IGHG** | **Ghaleghazi** | **0.47** | **134** | Pg | **Pb** | 14 55 40.5 | -1.1 |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **201** | Pg | **Pb** | 14 55 42.3 | -1.1 |
| GLG1 | | | | Sg | **Sb** | 14 55 50.7 | -0.8 |
| **ILIN** | **Lien** | **0.71** | **68** | Pg | **Pg** | 14 55 45.1 | -0.2 |
| **KCHF** | **Cheshme Sefid,** | **0.82** | **117** | Pg | **Pg** | 14 55 46.4 | -0.9 |
| **ILBA** | **Ilam Banvizeh** | **1.03** | **178** | Pg | **Pn** | 14 55 51.0 | -0.6 |
| **SNQR** | **Sonqor, Kerman** | **1.23** | **80** | Pg | **Pg** | 14 55 54.2 | -0.9 |
| **IBZA** | **Bozab** | **1.42** | **97** | Pg | **Pg** | 14 55 58.4 | -0.2 |
| **IBDR** | **Badra** | **1.55** | **187** | *e*Pn | **Pb** | 14 55 59.5 | -0.4 |
| IBDR | | | | *e*Sn | **Sg** | 14 56 21.5 | +0.2 |
| IBDR | | | | AML | AML | 14 56 25.5 | |
| | comp=E,329nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 14 56 34.1 | |
| | comp=N,260nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.67** | **297** | *e*Pn | **Pg** | 14 56 03.0 | -0.4 |
| IKRK | | | | *e*Sn | **Sg** | 14 56 25.0 | -0.1 |
| **IDOB** | **Doab** | **1.88** | **117** | Pn | **Pg** | 14 56 07.3 | -0.3 |
| **BHD** | **Baghdad** | **2.02** | **227** | *e*Pn | **Pn** | 14 56 06.0 | +0.8 |
| BHD | | | | *e*Sn | **Sb** | 14 56 33.0 | 0.0 |
| **RAFI** | **Al-Rafai** | **2.92** | **181** | *e*Pn | **Pn** | 14 56 19.0 | +1.5 |
| RAFI | | | | *e*Sn | **Sn** | 14 56 54.5 | +2.0 |

*ISN **26** 15:01:04.2±0.6,34.˚64N×46.˚20E,h9km±6km,ML3.3*
*TEH **26** 15:01:04.9,34.˚64N×46.˚22E,h8km±37km,ML3.2*
**ISC 26 15:01:05.3**±1.4,**34.˚60N**±0.˚04×**46.˚25E**±0.˚04,**h2**km±13km,
**n18**,σ0.˚80/22,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.15** | **48** | Pg | **Pg** | 15 01 08.5 | +0.3 |
| **IGHG** | **Ghaleghazi** | **0.38** | **136** | Pg | **Pb** | 15 01 13.7 | -1.1 |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **210** | Pg | **Pg** | 15 01 16.1 | 0.0 |
| **ILIN** | **Lien** | **0.67** | **61** | Pg | **Pg** | 15 01 17.8 | -0.3 |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **116** | Pg | **Pb** | 15 01 20.0 | -0.8 |
| **ILBA** | **Ilam Banvizeh** | **0.97** | **182** | Pg | **Pb** | 15 01 24.3 | -0.6 |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **77** | Pg | **Pb** | 15 01 27.7 | -0.6 |
| **IBZA** | **Bozab** | **1.33** | **95** | Pg | **Pn** | 15 01 31.1 | -0.1 |
| **IBDR** | **Badra** | **1.51** | **190** | *e*Pn | **Pb** | 15 01 33.3 | -0.7 |
| IBDR | | | | *e*Sn | **Sg** | 15 01 55.0 | +1.2 |
| IBDR | | | | AML | AML | 15 02 00.7 | |
| | comp=E,514nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 15 02 15.8 | |
| | comp=N,209nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.70** | **129** | Pg | **Pg** | 15 01 37.8 | -0.2 |
| **IKRK** | **Kirkuk** | **1.76** | **298** | *e*Pn | **Pn** | 15 01 36.0 | -0.8 |
| IKRK | | | | *e*Sn | **Sn** | 15 01 59.2 | -0.7 |
| IKRK | | | | AML | AML | 15 02 08.0 | |
| | comp=N,554nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 15 02 12.8 | |
| | comp=E,460nm,0.5s | | | | | | |
| **IDOB** | **Doab** | **1.79** | **116** | Pn | **Pg** | 15 01 39.6 | 0.0 |
| **HSAM** | **Samen** | **1.98** | **101** | Pn | **Pg** | 15 01 42.3 | -1.0 |
| **BHD** | **Baghdad** | **2.04** | **230** | *e*Pn | **Pn** | 15 01 40.5 | -0.2 |
| BHD | | | | *e*Sn | **Sn** | 15 02 07.0 | +0.2 |
| BHD | | | | AML | AML | 15 02 14.9 | |
| | comp=E,388nm,0.4s | | | | | | |
| **MAHB** | **Mahabad** | **2.21** | **349** | Pn | **Pn** | 15 01 44.0 | +0.9 |
| **RAFI** | **Al-Rafai** | **2.87** | **182** | *e*Pn | **Pn** | 15 01 53.0 | +0.9 |
| RAFI | | | | *e*Sn | **Sn** | 15 02 28.1 | +0.9 |
| **IAZR** | **Azarshahr** | **3.08** | **356** | Pn | **Pn** | 15 01 56.1 | +0.9 |
| **ISRB** | **Sarab** | **3.42** | **19** | Pn | **Pn** | 15 02 00.9 | +1.1 |

**IDC 26 15:07:16.2**±1.8,**7.˚96S×119.˚84E,h0**km,**mb3.6**/3,
**mbtmp3.6**/5,**ML3.5**/2,**Error ellipse: s-maj=56.0km**
**s-min=14.4km az=56.0,Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **2.93** | **358** | Pn | Pn | 15 08 04.0 | -0.1 |
| | 3.2nm,0.3s,baz=199,slow=5.2,SNR=8.9 | | | | | | |
| KAPI | | | | Sn | Sn | 15 08 39.8 | -0.2 |
| | 4.9nm,0.3s,baz=270,slow=21,SNR=8.3 | | | | | | |
| | 8.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.42** | **132** | P | P | 15 11 33.8 | +0.6 |
| | 0.2nm,0.3s,baz=304,slow=13,SNR=16 | | | | | | |
| WRA | | | | S | Sn | 15 15 01.2 | +1.5 |
| | 0.3nm,0.9s,baz=310,slow=26,SNR=2.2 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **20.63** | **141** | P | P | 15 11 57.5 | 0.0 |
| | 2.2nm,0.6s,baz=316,slow=9.5,SNR=52 | | | | | | |
| | 2.2nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **31.25** | **143** | P | P | 15 13 36.7 | -1.0 |
| | 0.5nm,0.4s,baz=321,slow=9.9,SNR=3.9 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.92** | **332** | P | P | 15 17 51.5 | +0.4 |
| | 0.3nm,0.7s,baz=151,slow=6.3,SNR=2.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*DJA **26** 15:17:17.9±0.2,3.˚5S±2.˚×10.˚2E±.˚,h106km±4km,M4.8/25,*
*mB5.5/7,mb4.7/18,MLv4.7/25,Mw(mB)5.0/7*
*NEIC **26** 15:17:17.9±1.6,3.˚27S±0.˚08×102.˚03E±0.˚09,h99km±7km,*
*mb4.5/42,Error ellipse: s-maj=15.4km s-min=8.4km*
*az=57.0*
*IDC **26** 15:17:18.7±0.8,3.˚16S×102.˚28E,h102km±6km,mb3.9/23,*
*mbtmp4.2/23,MS3.3/4,Error ellipse: s-maj=16.4km*
*s-min=9.1km az=58.0*
**ISC 26 15:17:18.1**±0.4,**3.˚24S**±0.˚05×**102.˚14E**±0.˚04,**h100**km,**n131**,
σ1.**s20**/135,**mb4.4**/43,**Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **1.38** | **144** | P | **Pn** | 15 17 43.9 | +0.9 |
| **MNAI** | **Manna** | **1.38** | **144** | | **Pn** | 15 17 42.6 | -0.4 |

PZH pmax pmax
comp=Z,130nm,4.9s
**NWAO Narrogin (SRO) 32.75 156** LR LR 15 37 04.2
comp=Z,49nm,18.3s,baz=246,slow=36
**WB0 Warramunga Arr 35.51 120** P **P** **15 24 04.8 -0.7**
**WRA Warramunga Arr 35.53 120** P **P** **15 24 05.1 -0.7**
comp=Z,1.2nm,0.5s,baz=300,slow=9.2,SNR=24
WRA pP **pP** **15 24 28.6 -0.2**
comp=Z,0.9nm,0.5s,baz=301,slow=9.0,SNR=3.7
WRA PcP **PcP** **15 26 32.9 -0.2**
comp=Z,0.5nm,0.5s,baz=308,slow=2.3,SNR=3.2
comp=Z,1.2nm,0.5s
**WB2 Warramunga Arr 35.54 120** P **P** **15 24 04.4 -1.4**
WB2 IAmb IAmb 15 24 42.4
comp=Z,4.8nm,1.2s
**WR0 Warramunga Arr 35.71 120** P **P** **15 24 06.7 -0.6**
**AS31 Alice Springs 36.80 126** P **P** **15 24 16.1 -0.5**
**ASAR Alice Springs 36.80 126** P **P** **15 24 16.4 -0.2**
**ASAR Alice Springs 36.80 126** P **P** **15 24 16.2 -0.4**
comp=Z,2.0nm,0.5s,baz=298,slow=7.8,SNR=78
ASAR pP **pP** **15 24 39.7 0.0**
comp=Z,1.3nm,0.5s,baz=297,slow=7.7,SNR=4.7
ASAR PcP **PcP** **15 26 37.0 +0.1**
comp=Z,0.5nm,0.4s,baz=321,slow=3.7,SNR=5.4
ASAR S **S** **15 29 52.0 -1.7**
comp=Z,0.9nm,0.7s,baz=293,slow=17,SNR=8.5
comp=Z,2.0nm,0.5s
**NJ2 Nanjing 38.52 23** *e*P **P** **15 24 34.3 +3.5**
NJ2 pmax pmax
comp=Z,17nm,1.2s
**NJ2 Nanjing 38.52 23** pmax pmax
comp=Z,15nm,1.6s
**BBOO Buckleboo 43.29 137** P **P** **15 25 09.6 -0.4**
BBOO IAmb IAmb 15 25 17.7
comp=Z,14nm,1.4s
**HHC Hu-ho-hao-te 44.71 10** *e*P **P** **15 25 24.3 +2.9**
HHC pmax pmax
comp=Z,21nm,0.6s
HHC pmax pmax
comp=Z,67nm,4.1s
**NIL Nilore 45.71 326** P **P** **15 25 29.0 -0.3**
NIL IAmb IAmb 15 25 30.8
comp=Z,9.3nm,0.8s
**STKA Stephens Creek 46.74 132** P **P** **15 25 37.5 +0.1**
**STKA Stephens Creek 46.74 132** P **P** **15 25 37.6 +0.2**
comp=Z,1.0nm,0.4s,baz=310,slow=9.8,SNR=8.2
comp=Z,1.0nm,0.4s
**KSRS Korea Array 47.04 28** P **P** **15 25 38.9 -0.7**
comp=Z,0.7nm,0.7s,baz=222,slow=8.5,SNR=4.3
comp=Z,0.7nm,0.7s
**KSH Kashi 48.88 333** P **P** **15 25 53.0 -0.9**
KSH pP pP 15 26 16.5 -1.8
KSH pmax pmax
comp=Z,8.0nm,0.7s
**NRN Naryn 50.43 335** P **P** **15 26 05.8 -0.1**
NRN IAmb IAmb 15 26 07.6
comp=Z,4.6nm,0.9s
**SONM Songino Array 50.99 4** P **P** **15 26 10.4 +0.6**
**SONM Songino Array 50.99 4** P **P** **15 26 10.7 +0.9**
comp=Z,2.1nm,0.6s,baz=187,slow=11,SNR=11
SONM pP **pP** **15 26 34.9 +0.9**
comp=Z,1.5nm,0.7s,baz=183,slow=9.5,SNR=4.4
comp=Z,2.1nm,0.6s
**SIMJ Simiganj 51.70 327** P **P** **15 26 14.1 -1.2**
SIMJ IAmb IAmb 15 26 16.0
comp=Z,3.8nm,0.7s
**MJAR Matsushiro Arr 51.92 37** P **P** **15 26 15.8 -1.0**
comp=Z,0.8nm,0.8s,baz=207,slow=8.1,SNR=4.0
comp=Z,0.8nm,0.8s
**AAK Ala-Archa 52.06 334** LR LR 15 53 52.4
comp=Z,23nm,18.1s,baz=176,slow=42
**MK31 Makanchi Array 52.81 343** P **P** **15 26 22.6 -0.5**
MK31 IAmb IAmb 15 26 23.8
comp=Z,3.4nm,1.4s
**MKAR Makanchi Array 52.81 343** P **P** **15 26 22.6 -0.5**
**MKAR Makanchi Array 52.81 343** P **P** **15 26 22.9 -0.2**
comp=Z,1.3nm,0.4s,baz=153,slow=9.3,SNR=28
comp=Z,1.3nm,0.4s
**MAKZ Makanchi 52.91 343** P **P** **15 26 23.9 0.0**
MAKZ IAmb IAmb 15 26 25.8
comp=Z,2.6nm,1.1s
**CAN Canberra 53.80 132** P **P** **15 26 30.0 -0.7**
**KK31 Karatay Array 54.23 332** P **P** **15 26 32.3 -1.4**
**KKAR Karatay Array 54.23 332** P **P** **15 26 33.2 -0.5**
**USA0B Ussuriysk Arra 54.27 26** P **P** **15 26 34.0 +0.2**
**USRK Ussuriysk Ar. 54.27 26** P **P** **15 26 33.8 0.0**
**USRK Ussuriysk Ar. 54.27 26** P **P** **15 26 34.0 +0.1**
comp=Z,5.8nm,0.6s,baz=214,slow=5.1,SNR=37
comp=Z,5.8nm,0.6s
**KURBB Kurchatov Arra 57.35 342** P **P** **15 26 55.1 -0.5**
comp=Z,2.3nm,0.8s,baz=160,slow=6.6,SNR=18
comp=Z,2.3nm,0.8s
**KURK Kurchatov 57.40 342** P **P** **15 26 55.3 -0.8**
KURK IAmb IAmb 15 26 56.8
comp=Z,4.7nm,0.9s
**KLR Kul'dur 58.22 22** P **P** **15 27 01.6 -0.2**
comp=Z,2.3nm,0.7s,baz=229,slow=5.5,SNR=11
comp=Z,2.3nm,0.7s
**ZAA0 Zalesovo Array 58.79 348** P **P** **15 27 05.0 -0.7**
ZAA0 IAmb IAmb 15 27 06.0
comp=Z,3.6nm,0.6s
**ZALV Zalesovo Beam 58.79 348** P **P** **15 27 05.0 -0.7**
**ZALV Zalesovo Beam 58.79 348** P **P** **15 27 05.1 -0.6**
comp=Z,3.0nm,0.4s,baz=169,slow=4.1,SNR=14
comp=Z,3.0nm,0.4s
**ASAJ Asahikawa 59.45 33** P **P** **15 27 10.6 +0.2**
comp=Z,4.3nm,0.7s,baz=266,slow=14,SNR=7.4
comp=Z,4.3nm,0.7s
**BVAR Borovoye Array 62.09 339** P **P** **15 27 27.6 -0.6**
comp=Z,6.0nm,0.6s,baz=141,slow=8.8,SNR=33
comp=Z,6.0nm,0.6s
**BRVK Borovoye 62.15 339** P **P** **15 27 27.5 -1.1**
BRVK IAmb IAmb 15 27 28.7
comp=Z,4.6nm,0.8s
**ABKAR Akbulak array 63.75 331** P **P** **15 27 38.5 -0.8**
**ARU Arti 69.19 336** P **P** **15 28 12.8 -1.0**
ARU IAmb IAmb 15 28 14.2
comp=Z,10nm,1.1s
**MAW Mawson 69.64 195** P **P** **15 28 19.0 +2.7**
comp=Z,2.0nm,0.6s,baz=30,slow=12,SNR=4.8
comp=Z,2.0nm,0.6s
**KBZ Khabaz 70.64 319** P **P** **15 28 23.1 +0.3**
comp=Z,3.3nm,0.8s,baz=112,slow=7.2,SNR=7.8
comp=Z,3.3nm,0.8s
**EIL Elat 71.98 302** LR LR 15 59 08.0
comp=Z,32nm,20.8s,baz=244,slow=35
**MMAI Mount Meron Ar 72.49 306** P **P** **15 28 36.3 +2.0**
comp=Z,1.8nm,0.6s,baz=108,slow=9.3,SNR=2.6
comp=Z,1.8nm,0.6s
**INZ Inchbonnie 72.67 134** P **P** **15 28 35.6 +0.4**
INZ IAmb IAmb 15 29 04.0
comp=Z,16nm,1.2s
**BR131 Keskin Array S 75.73 312** P **P** **15 28 52.1 -1.1**
BR131 IAmb IAmb 15 28 53.5
comp=Z,3.4nm,0.8s
**BRTR Keskin Array B 75.73 312** P **P** **15 28 52.2 -1.0**
**BRTR Keskin Array B 75.73 312** P **P** **15 28 52.9 -0.3**
comp=Z,2.4nm,0.6s,baz=136,slow=6.8,SNR=19
comp=Z,2.4nm,0.6s
**BKZ Black Stump Fm 75.84 129** P **P** **15 28 53.3 -0.5**
BKZ IAmb IAmb 15 29 07.8
comp=Z,14nm,1.3s
**TIXI Tiksi 76.75 8** P **P** **15 28 56.8 -1.3**
**BOSA Boshof 76.94 242** P **P** **15 29 01.7 +1.4**
comp=Z,6.9nm,1.1s,baz=101,slow=5.2,SNR=2.3
comp=Z,6.9nm,1.1s
**ALN Alexandroupoli 81.64 312** P **P** **15 29 22.5 -2.8**
ALN IAmb IAmb 15 29 22.9
comp=Z,4.1nm,0.8s
**AKASG Malin Array Be 81.76 322** P **P** **15 29 24.1 -1.7**
AKASG IAmb IAmb 15 29 31.3
comp=Z,5.5nm,1.4s
**AKASG Malin Array Be 81.76 322** P **P** **15 29 25.0 -0.8**
comp=Z,0.5nm,0.4s,baz=97,slow=4.7,SNR=3.1
comp=Z,0.5nm,0.4s
**BURAR Bucovina Array 83.59 318** P **P** **15 29 34.9 -0.6**
**BUR08 Bucovina Ar. S 83.61 318** P **P** **15 29 34.2 -1.4**
BUR08 IAmb IAmb 15 29 50.2
comp=Z,9.0nm,1.5s
**FINES FINESS Array B 86.19 332** P **P** **15 29 48.0 -0.1**
**FINES FINESS Array B 86.19 332** P **P** **15 29 48.3 +0.3**
comp=Z,1.8nm,0.8s,baz=145,slow=4.7,SNR=6.0
comp=Z,1.8nm,0.8s
**QSPA South Pole Qui 86.73 180** P **P** **15 29 51.7 +0.9**
QSPA IAmb IAmb 15 30 00.5
comp=Z,5.9nm,1.5s
**QSPA South Pole Qui 86.73 180** P **P** **15 29 51.9 +1.0**
comp=Z,1.3nm,0.8s,baz=256,slow=0.9,SNR=11
comp=Z,1.3nm,0.8s
**KEV Kevo 87.90 340** P **P** **15 29 54.8 -1.3**
**ARCES ARCESS Array B 88.36 340** P **P** **15 29 58.1 -0.2**
ARCES IAmb IAmb 15 30 38.8
comp=Z,7.7nm,1.2s
**ARCES ARCESS Array B 88.36 340** P **P** **15 29 58.4 +0.1**
comp=Z,2.6nm,0.7s,baz=100,slow=5.1,SNR=7.6
comp=Z,2.6nm,0.7s
**MORC Moravsky Berou 88.95 320** P **P** **15 30 00.2 -1.4**
MORC IAmb IAmb 15 30 13.9
comp=Z,5.1nm,1.5s
**NVAR Mina Array Bea 129.16 41** PKP **PKiKP** **15 36 15.6 -0.4**
comp=Z,0.6nm,0.8s,baz=270,slow=1.5,SNR=4.8
**PDAR Pinedale Array 131.57 31** PKP **PKPdf** **15 36 19.7 -0.1**
comp=Z,0.3nm,0.3s,baz=298,slow=2.5,SNR=2.8
**TXAR Lajitas Array 144.31 41** PKP **PKPdf** **15 36 42.2 -1.1**
comp=Z,1.5nm,0.5s,baz=253,slow=1.1,SNR=27
TXAR pPKP **pPKPdf** **15 37 09.0 -2.1**
comp=Z,0.9nm,0.6s,baz=292,slow=0.9,SNR=5.8
**CPUP Villa Florida 144.53 213** PKP **PKPdf** **15 36 43.5 -0.1**
comp=Z,10nm,0.9s,baz=108,slow=7.0,SNR=16
**BDFB Brasilia 145.02 237** PKPbc **PKPdf** **15 36 45.7 +0.8**
comp=Z,3.9nm,0.4s,baz=134,slow=2.0,SNR=10

*IDC **26** 15:26:30.9±4.4, 7°.51S×127°.86E, h140km±41km, mb3.6/14, mbtmp4.1/14, MS3.4/2, Error ellipse: s-maj=27.9km s-min=11.3km az=75.0*
*NEIC **26** 15:26:32.4±1.4, 7°.59S±0°.08×127°.93E±0°.07, h160km±7km, mb4.5/24, Error ellipse: s-maj=11.7km s-min=9.5km az=188.0*
*DJA **26** 15:26:33.8±1.2, 8°.5S±3°×12°.8E±°, h29km±11km, M4.5/18, mB4.9/5, mb4.6/8, MLv4.5/18, Mw(mB)4.2/5*
**ISC 26 15:26:31.0±0.4, 7°.58S±0°.05×127°.90E±0°.05, h142km, n101, σ1§74/102, mb4.1/24, 2C, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **3.40** | **97** | Pn | **Pn** | **15 27 25.0** | **+1.8** |
| **SAUI** | **Saumlaki** | **3.40** | **97** | P | **Pn** | **15 27 26.3** | **+3.1** |
| SAUI | | | | S | **Sn** | **15 28 05.0** | **+1.4** |
| **BNDI** | **Bandanaira** | **3.63** | **33** | P | **Pn** | **15 27 29.6** | **+3.3** |
| **SOEI** | **Soe** | **4.19** | **239** | P | **Pn** | **15 27 37.1** | **+3.4** |
| **SOEI** | **Soe** | **4.19** | **239** | | **Pn** | **15 27 36.3** | **+2.5** |
| **SOEI** | **Soe** | **4.19** | **239** | P | **Pn** | **15 27 37.2** | **+3.5** |
| SOEI | | | | S | **Sn** | **15 28 24.5** | **+2.1** |
| **MSAI** | **Masohi** | **4.33** | **14** | P | **Pn** | **15 27 39.9** | **+4.4** |
| **NLAI** | **Namlea** | **4.38** | **350** | P | Pn | 15 27 41.1 | +4.9 |
| **BATI** | **Baumata** | **4.93** | **238** | P | **Pn** | **15 27 46.5** | **+3.0** |
| **DRS** | **Darwin Rock St** | **5.66** | **149** | P | **Pn** | **15 27 54.3** | **+1.2** |
| **BBSI** | **Bau Bau** | **5.69** | **291** | P | **Pn** | **15 27 56.2** | **+2.7** |
| | 86nm,0.9s,740nn0.3nm | | | | | | |
| **MMRI** | **Maumere** | **5.70** | **259** | P | **Pn** | **15 27 56.1** | **+2.4** |
| **MMRI** | **Maumere** | **5.70** | **259** | | **Pn** | **15 27 53.3** | **-0.4** |
| **MMRI** | **Maumere** | **5.70** | **259** | P | **Pn** | **15 27 55.8** | **+2.1** |
| | 67nm,1.1s,0.3nm | | | | | | |
| **SANI** | **Sanana** | **5.81** | **341** | P | **Pn** | **15 27 58.6** | **+3.4** |
| | 21nm,0.6s,0.1nm | | | | | | |
| **MTN** | **Manton Dam** | **6.12** | **149** | P | **Pn** | **15 28 01.2** | **+1.8** |
| **MTN** | **Manton Dam** | **6.12** | **149** | | **Pn** | **15 27 59.9** | **+0.5** |
| **EDFI** | **Ende, Flores** | **6.25** | **259** | P | **Pn** | **15 28 04.2** | **+3.0** |
| | 34nm,1.0s,681nm0.1nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.34** | **43** | Pn | **Pn** | **15 28 03.1** | **+0.8** |
| **FAKI** | **Fak Fak** | **6.34** | **43** | P | **Pn** | **15 28 03.9** | **+1.6** |
| | 17nm,0.5s,0.2nm | | | | | | |
| **KDU** | **Kakadu** | **6.79** | **139** | P | **Pn** | **15 28 09.2** | **+1.0** |
| **KMPI** | **Kaimana, Papua** | **6.97** | **56** | P | **Pn** | **15 28 12.4** | **+1.7** |
| | 159nm,0.8s | | | | | | |
| **SWI** | **Sorong** | **7.47** | **27** | P | **Pn** | **15 28 19.2** | **+1.8** |
| **KNRA** | **Kununurra** | **8.09** | **174** | | **Pn** | **15 28 25.7** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **10.69** | **192** | Pn | **Pn** | **15 28 58.3** | **-2.0** |
| **TOLI2** | **Tolitoli** | **11.18** | **320** | Pn | **Pn** | **15 29 06.2** | **-0.6** |
| **BKB** | **Balikpapan** | **12.63** | **299** | P | **P** | **15 29 32.9** | **+1.4** |
| **WB0** | **Warramunga Arr** | **13.66** | **153** | | **Pn** | **15 29 36.6** | **-2.4** |
| **WRA** | **Warramunga Arr** | **13.79** | **154** | P | **Pn** | **15 29 38.0** | **-2.7** |
| **WRA** | **Warramunga Arr** | **13.79** | **154** | P | **Pn** | **15 29 39.6** | **-1.0** |
| | 43nm,0.6s,baz=322,slow=14,SNR=209 | | | | | | |
| WRA | | | | S | Sn | 15 32 03.0 | -10 |
| | 74nm,0.8s,baz=325,slow=24,SNR=18 | | | | | | |
| **WB2** | **Warramunga Arr** | **13.79** | **154** | | **Pn** | **15 29 38.2** | **-2.5** |
| **WR0** | **Warramunga Arr** | **13.89** | **153** | | **Pn** | **15 29 39.6** | **-2.4** |
| **PSA00** | **Pilbara Seismi** | **15.94** | **208** | | **Pn** | **15 30 07.0** | **-0.4** |
| PSA00 | | | | IAmb | IAmb | 15 30 50.6 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **COEN** | **Coen** | **16.29** | **114** | P | **Pn** | **15 30 12.4** | **+0.6** |
| **COEN** | **Coen** | **16.29** | **114** | P | **Pn** | **15 30 11.6** | **-0.3** |
| COEN | | | | IAmb | IAmb | 15 30 26.5 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **17.00** | **161** | | **P** | **15 30 19.2** | **-0.8** |
| AS31 | | | | IAmb | IAmb | 15 30 24.6 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **17.00** | **161** | | **P** | **15 30 19.2** | **-0.8** |
| **ASAR** | **Alice Springs** | **17.00** | **161** | P | **P** | **15 30 21.0** | **+0.9** |
| | comp=Z,31nm,0.6s,baz=337,slow=10,SNR=317 | | | | | | |
| ASAR | | | | S | S | 15 33 15.3 | -15 |
| | comp=Z,3.6nm,0.5s,baz=324,slow=15,SNR=4.3 | | | | | | |
| ASAR | | | | LR | LR | 15 38 20.5 | |
| | comp=Z,51nm,20.4s,baz=339,slow=42 | | | | | | |
| **AS01** | **Alice Springs** | **17.02** | **161** | P | **P** | **15 30 21.8** | **+1.6** |
| **QIS** | **Mount Isa** | **17.17** | **140** | P | **P** | **15 30 23.6** | **+1.7** |
| **WRKA** | **Warakurna** | **17.37** | **179** | P | **P** | **15 30 25.7** | **+1.7** |
| **SBUM** | **Sibu** | **18.54** | **302** | | **P** | **15 30 39.5** | **+2.5** |
| **MTSU** | **Mount Surprise** | **19.12** | **125** | P | **P** | **15 30 45.1** | **+1.8** |
| **PMG** | **Port Moresby** | **19.14** | **97** | P | **Pn** | **15 30 47.8** | **+2.0** |
| **PMG** | **Port Moresby** | **19.14** | **97** | P | **P** | **15 30 41.8** | **-1.6** |
| **PMG** | **Port Moresby** | **19.14** | **97** | P | **Pn** | **15 30 47.3** | **+1.5** |
| | comp=Z,54nm,0.8s,baz=252,slow=4.0,SNR=19 | | | | | | |
| **KSM** | **Kuching** | **19.71** | **296** | P | **P** | **15 30 53.8** | **+4.1** |
| **OOD** | **Oodnadatta** | **21.42** | **161** | P | **P** | **15 31 09.2** | **+1.4** |
| **CTA** | **Charters Tower** | **21.70** | **127** | P | **P** | **15 31 12.7** | **+1.7** |
| **CTA** | **Charters Tower** | **21.70** | **127** | P | **P** | **15 31 12.3** | **+1.3** |
| | comp=Z,0.7nm,0.8s,baz=303,slow=12,SNR=15 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **21.70** | **127** | P | **P** | **15 31 12.5** | **+1.5** |
| **CTAO** | **Charters Tower** | **21.70** | **127** | P | **P** | **15 31 11.5** | **+0.6** |
| CTAO | | | | IAmb | IAmb | 15 31 14.5 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **TV1H** | **Townsville Har** | **21.71** | **124** | P | **P** | **15 31 12.7** | **+1.6** |
| **AUAYR** | **Ayr State High** | **22.38** | **124** | P | **P** | **15 31 19.7** | **+2.0** |
| **FORT** | **Forrest** | **23.08** | **180** | P | **P** | **15 31 24.5** | **+0.2** |
| FORT | | | | IAmb | IAmb | 15 31 49.7 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **MULG** | **Mulgathing** | **23.31** | **166** | P | **P** | **15 31 28.4** | **+2.0** |
| **MORW** | **Morawa** | **24.12** | **206** | P | **P** | **15 31 34.9** | **+1.2** |
| MORW | | | | IAmb | IAmb | 15 31 35.9 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **QLP** | **Quilpie** | **24.46** | **143** | P | **P** | **15 31 39.6** | **+2.7** |
| **LCRK** | **Leigh Creek** | **24.72** | **158** | P | **P** | **15 31 40.3** | **+1.1** |
| **MYKOM** | **Kota Tinggi** | **25.73** | **290** | P | **P** | **15 31 48.1** | **-0.5** |
| MYKOM | | | | IAmb | IAmb | 15 31 50.1 | |
| | comp=Z,20nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **27.34** | **154** | P | **P** | **15 32 01.4** | **-1.4** |
| **STKA** | **Stephens Creek** | **27.34** | **154** | P | **P** | **15 32 03.6** | **+0.8** |
| | comp=Z,7.0nm,0.6s,baz=326,slow=8.9,SNR=11 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **IPM** | **Ipoh** | **29.37** | **293** | P | **P** | **15 32 20.1** | **-0.9** |
| IPM | | | | IAmb | IAmb | 15 32 22.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **KULM** | **Kulim** | **30.04** | **294** | P | **P** | **15 32 26.1** | **-0.8** |
| **RPSI** | **Rantau Prapat** | **30.66** | **288** | P | **P** | **15 32 31.6** | **-0.8** |
| **CMAR** | **Chiang Mai Arr** | **38.54** | **312** | P | **P** | **15 33 40.2** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=142,slow=6.9,SNR=8.1 | | | | | | |
| CMAR | | | | PcP | **PcP** | **15 35 49.7** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=148,slow=4.3,SNR=5.3 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **42.02** | **15** | LR | LR | 15 49 27.5 | |
| | comp=Z,111nm,21.0s,baz=98,slow=33 | | | | | | |
| **PZH** | **PanZhiHua** | **42.33** | **324** | P | **P** | **15 34 11.0** | **-0.3** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,6.3s | | | | | | |
| **KSRS** | **Korea Array** | **44.80** | **0** | P | **P** | **15 34 30.8** | **+0.2** |
| | comp=Z,2.6nm,0.7s,baz=178,slow=9.9,SNR=17 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **KS19** | **Wonju Array Si** | **44.84** | **360** | P | **P** | **15 34 30.8** | **-0.3** |
| KS19 | | | | IAmb | IAmb | 15 35 04.4 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.94** | **12** | P | **P** | **15 34 29.8** | **-2.1** |
| | comp=Z,1.0nm,0.8s,baz=187,slow=9.8,SNR=4.1 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.48** | **344** | *e*P | **P** | **15 35 17.3** | **+2.7** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,24nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,150nm,5.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.67** | **4** | P | **P** | **15 35 22.6** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** | **51.67** | **4** | P | **P** | **15 35 23.1** | **-0.2** |
| | comp=Z,1.6nm,0.7s,baz=178,slow=6.0,SNR=6.9 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **GTA** | **Gaotai** | **53.50** | **333** | P | **P** | **15 35 36.8** | **-0.3** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **58.36** | **343** | P | **P** | **15 36 10.9** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=168,slow=5.8,SNR=3.4 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **65.54** | **19** | P | **P** | **15 36 58.0** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **65.54** | **19** | P | **P** | **15 36 58.0** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **65.54** | **19** | P | **P** | **15 36 59.0** | **-0.2** |
| | comp=Z,1.2nm,0.7s,baz=180,slow=3.0,SNR=6.3 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **NIL** | **Nilore** | **66.03** | **312** | P | **P** | **15 37 01.5** | **-1.2** |
| **MK31** | **Makanchi Array** | **67.58** | **328** | P | **P** | **15 37 11.3** | **-1.0** |
| **MKAR** | **Makanchi Array** | **67.58** | **328** | P | **P** | **15 37 11.4** | **-0.9** |
| **MKAR** | **Makanchi Array** | **67.58** | **328** | P | **P** | **15 37 11.8** | **-0.6** |
| | comp=Z,1.3nm,0.6s,baz=119,slow=8.4,SNR=19 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **67.76** | **328** | P | **P** | **15 37 12.1** | **-1.3** |
| **RAR** | **Rarotonga** | **70.86** | **110** | P | **P** | **15 37 31.1** | **-1.9** |
| **ZALV** | **Zalesovo Beam** | **71.19** | **335** | P | **P** | **15 37 32.3** | **-2.0** |
| **ZALV** | **Zalesovo Beam** | **71.19** | **335** | P | **P** | **15 37 32.8** | **-1.5** |
| | comp=Z,1.5nm,0.5s,baz=121,slow=5.2,SNR=6.2 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.93** | **329** | P | **P** | **15 37 37.9** | **-0.9** |
| | comp=Z,1.8nm,0.6s,baz=134,slow=5.2,SNR=17 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **73.66** | **201** | P | **P** | **15 37 49.5** | **+0.8** |
| | comp=Z,1.8nm,0.5s,baz=82,slow=18,SNR=6.3 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **77.45** | **329** | P | **P** | **15 38 10.8** | **+0.2** |
| | comp=Z,1.2nm,0.7s,baz=130,slow=6.0,SNR=9.4 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **TIXI** | **Tiksi** | **79.06** | **0** | P | **P** | **15 38 17.9** | **-1.1** |
| **ABKAR** | **Akbulak array** | **81.67** | **322** | P | **P** | **15 38 31.9** | **-1.5** |
| **QSPA** | **South Pole Qui** | **82.40** | **180** | P | **P** | **15 38 37.3** | **+0.1** |
| **QSPA** | **South Pole Qui** | **82.40** | **180** | P | **P** | **15 38 37.0** | **-0.1** |
| | comp=Z,2.8nm,0.8s,baz=325,slow=3.5,SNR=20 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **RAYN** | **Ar Rayn** | **86.07** | **294** | P | **P** | **15 38 54.2** | **-2.2** |
| RAYN | | | | IAmb | IAmb | 15 38 56.1 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **93.08** | **195** | ⇑P | **P** | **15 39 29.5** | **+0.9** |
| | comp=Z,103nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **94.12** | **184** | P | **P** | **15 39 31.7** | **-1.4** |
| BELA | | | | IAmb | IAmb | 15 39 33.4 | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **94.61** | **194** | ⇑P | **P** | **15 39 35.9** | **+0.4** |
| | comp=Z,30nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **126.87** | **281** | PKP | **PKPdf** | **15 45 18.4** | **-0.7** |
| | comp=Z,1.0nm,0.7s,baz=74,slow=2.4,SNR=4.5 | | | | | | |
| **CPUP** | **Villa Florida** | **145.91** | **172** | PKPbc | **PKPdf** | **15 45 54.2** | **+0.4** |
| | comp=Z,1.3nm,0.4s,baz=208,slow=2.4,SNR=3.6 | | | | | | |
| **LPAZ** | **La Paz** | **151.47** | **146** | PKPbc | **PKPbc** | **15 46 10.4** | **+0.4** |
| | comp=Z,0.9nm,0.4s,baz=233,slow=4.0,SNR=3.3 | | | | | | |

*TEH **26** 15:31:28.8, 34°.57N×46°.22E, h6km±19km, ML3.1*
*ISN **26** 15:31:29.4±0.7, 34°.61N×46°.19E, h12km±7km, ML3.1*
**ISC 26 15:31:30.1±1.3, 34°.58N±0°.03×46°.19E±0°.03, h1km±13km, n21, σ0§93/27, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.20** | **52** | Pg | **Pg** | **15 31 33.8** | **-0.3** |
| **IGHG** | **Ghaleghazi** | **0.40** | **128** | Pg | **Pg** | **15 31 37.4** | **-0.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **262** | Pg | **Pg** | **15 31 39.6** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.52** | **207** | Pg | **Pg** | **15 31 39.9** | **-0.1** |
| GLG1 | | | | Sg | **Sg** | **15 31 47.7** | **+1.1** |
| **ILIN** | **Lien** | **0.72** | **61** | Pg | **Pg** | **15 31 43.1** | **-0.8** |
| ILIN | | | | Sg | **Sg** | **15 31 54.4** | **+1.0** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **113** | Pg | **Pg** | **15 31 44.2** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.95** | **179** | Pg | **Pg** | **15 31 48.2** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **76** | Pg | **Pb** | **15 31 53.0** | **-1.1** |
| **IBZA** | **Bozab** | **1.38** | **94** | Pg | **Pn** | **15 31 56.1** | **-0.7** |
| **IBDR** | **Badra** | **1.48** | **189** | *e*Pn | **Pb** | **15 31 58.0** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **15 32 18.5** | **+0.9** |
| IBDR | | | | AML | AML | 15 32 29.9 | |
| | comp=E,361nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 15 32 40.0 | |
| | comp=N,244nm,0.7s | | | | | | |
| **IKRK** | **Kirkuk** | **1.73** | **299** | *e*Pn | **Pn** | **15 32 01.0** | **-0.3** |
| IKRK | | | | *e*Sn | **Sb** | **15 32 24.0** | **-0.9** |
| IKRK | | | | AML | AML | 15 32 33.0 | |
| | comp=E,284nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 15 32 33.1 | |
| | comp=N,310nm,0.9s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.73** | **127** | Pg | **Pb** | **15 32 02.2** | **-0.5** |
| **IDOB** | **Doab** | **1.82** | **115** | Pg | **Pb** | **15 32 03.7** | **-0.8** |
| **BHD** | **Baghdad** | **1.99** | **230** | *e*Pn | **Pn** | **15 32 05.0** | **+0.1** |
| BHD | | | | *e*Sn | **Sb** | **15 32 31.0** | **-1.4** |
| **HSAM** | **Samen** | **2.03** | **100** | Pn | **Pb** | **15 32 07.1** | **-0.8** |
| **MAHB** | **Mahabad** | **2.22** | **350** | Pn | **Pn** | **15 32 09.1** | **+0.8** |
| **HAGD** | **Aghdareh** | **2.44** | **83** | Pn | **Pn** | **15 32 12.7** | **+1.4** |
| **RAFI** | **Al-Rafai** | **2.84** | **181** | *e*Pn | **Pn** | **15 32 17.0** | **+0.3** |
| RAFI | | | | *e*Sn | **Sn** | **15 32 52.3** | **+0.7** |
| **IHSH** | **Hashtrud** | **2.86** | **17** | Pn | **Pn** | **15 32 18.8** | **+1.6** |
| **IAZR** | **Azarshahr** | **3.10** | **357** | Pn | **Pn** | **15 32 21.8** | **+1.3** |
| **KRSH** | **Karshahi** | **4.96** | **95** | Pn | **Pn** | **15 32 47.3** | **+1.4** |

*IDC **26** 15:44:24.5±6.6, 18°.20S×178°.25W, h414km±70km, mb3.3/8, mbtmp4.1/8, Error ellipse: s-maj=26.5km s-min=22.6km az=10.0*
*NEIC **26** 15:44:27.5±1.4, 17°.5S±0°.3×177°.7W±0°.2, h525km±17km, mb4.1/17, Error ellipse: s-maj=43.3km s-min=21.8km az=175.0*
**ISC 26 15:44:35.6±0.8, 18°.3S±0°.2×178°.5W±0°.1, h550km, n29, σ1§33/29, mb4.1/16, Fiji Islands region**

| Code |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FORT | | | | IAmb | IAmb | 15 52 55.1 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **50.38** | **265** | P | **P** | **15 52 42.3** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 15 53 15.0 | | |
| | comp=Z,9.1nm,1.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.89** | **261** | P | **P** | **15 53 01.2** | **+0.2** |
| **QSPA** | **South Pole Qui** | **71.77** | **180** | P | **P** | **15 55 02.8** | **+0.4** |
| **QSPA** | **South Pole Qui** | **71.77** | **180** | P | **P** | **15 55 02.6** | **+0.2** |
| | comp=Z,1.2nm,0.6s,baz=44,slow=0.3,SNR=10 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.74** | **44** | P | **P** | **15 55 47.3** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=224,slow=8.6,SNR=4.9 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **BELA** | **Belgrano 2** | **81.81** | **173** | P | **P** | **15 55 56.0** | **-0.8** |
| **TXAR** | **Lajitas Array** | **86.26** | **58** | P | **P** | **15 56 21.0** | **+1.3** |
| | comp=Z,0.5nm,0.8s,baz=212,slow=6.8,SNR=5.1 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.27** | **13** | P | **P** | **15 56 18.8** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=220,slow=6.8,SNR=4.3 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |

*IDC **26** 15:51:39.3±1.0,34˚.50N×46˚.17E,h0km,mb3.8/12, mbtmp3.8/18,ML3.8/4,Error ellipse: s-maj=19.8km s-min=14.1km az=179.0*
*TEH **26** 15:51:39.9,34˚.63N×46˚.25E,h6km±26km,ML3.7*
*ISN **26** 15:51:40.5±0.7,34˚.64N×46˚.20E,h10km±7km,ML3.7*
*NEIC **26** 15:51:41.8±3.1,34˚.62N±0˚.05×46˚.12E±0˚.09,h10km±1km, mb4.2/13,Error ellipse: s-maj=13.7km s-min=7.0km az=65.0*

**ISC 26 15:51:40.8±1.1,34˚.61N±0˚.02×46˚.22E±0˚.03,h9km±7km, n95,σ1s76/99,mb3.9/16,5D,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.16** | **58** | Pg | **Pg** | **15 51 44.2** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **0.40** | **135** | Pg | **Pg** | **15 51 48.9** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.53** | **259** | Pg | **Pb** | **15 51 51.7** | **-0.7** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **207** | Pg | **Pb** | **15 51 52.2** | **-0.7** |
| **ILIN** | **Lien** | **0.68** | **63** | Pg | **Pg** | **15 51 53.5** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **116** | Pg | **Pg** | **15 51 55.1** | **-0.3** |
| KCHF | | | | Sg | **Sb** | **15 52 07.1** | **+0.4** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **181** | Pg | **Pb** | **15 52 00.0** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.18** | **78** | Pg | **Pb** | **15 52 03.0** | **-0.6** |
| **IBZA** | **Bozab** | **1.36** | **96** | Pg | **Pb** | **15 52 06.5** | **-0.1** |
| **IBDR** | **Badra** | **1.52** | **189** | *e*Pn | **Pg** | **15 52 09.6** | **-0.3** |
| IBDR | | | | *e*Sn | **Sg** | **15 52 31.0** | **+1.4** |
| IBDR | | | | AML | AML | 15 52 36.4 | |
| | comp=E,1μm,0.8s | | | | | | |
| IBDR | | | | AML | AML | 15 52 42.9 | |
| | comp=N,654nm,0.6s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.65** | **339** | Pg | **Pg** | **15 52 11.7** | **-0.6** |
| **IKFM** | **Kafar-mosalman** | **1.73** | **128** | Pg | **Pb** | **15 52 13.3** | **+0.6** |
| **IKRK** | **Kirkuk** | **1.73** | **297** | *e*Pn | **Pb** | **15 52 12.0** | **-0.8** |
| IKRK | | | | *e*Sn | **Sg** | **15 52 35.5** | **-1.0** |
| IKRK | | | | AML | AML | 15 52 43.7 | |
| | comp=N,1μm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 15 52 48.5 | |
| | comp=E,1μm,0.5s | | | | | | |
| **IDOB** | **Doab** | **1.82** | **116** | Pg | **Pg** | **15 52 15.1** | **-0.6** |
| **HSAM** | **Samen** | **2.01** | **101** | Pn | **Pb** | **15 52 17.3** | **-0.3** |
| **BHD** | **Baghdad** | **2.04** | **229** | *e*Pn | **Pb** | **15 52 17.0** | **-0.9** |
| BHD | | | | *e*Sn | **Sb** | **15 52 43.0** | **-0.3** |
| BHD | | | | AML | AML | 15 52 56.8 | |
| | comp=E,764nm,0.6s | | | | | | |
| **MAHB** | **Mahabad** | **2.19** | **349** | Pn | **Pb** | **15 52 19.6** | **-1.0** |
| **HAGD** | **Aghdareh** | **2.41** | **84** | Pn | **Pb** | **15 52 23.3** | **-1.2** |
| **IHSH** | **Hashtrud** | **2.81** | **17** | Pn | **Pb** | **15 52 28.8** | **-2.6** |
| **RAFI** | **Al-Rafai** | **2.88** | **182** | *e*Pn | **Pn** | **15 52 29.0** | **+2.1** |
| RAFI | | | | *e*Sn | **Sn** | **15 53 04.4** | **+2.7** |
| **QABG** | **Abgarm-Qazvin** | **2.96** | **67** | Pn | **Pn** | **15 52 30.3** | **+2.1** |
| **IAZR** | **Azarshahr** | **3.06** | **356** | Pn | **Pb** | **15 52 32.4** | **-3.3** |
| **ISRB** | **Sarab** | **3.41** | **20** | Pn | **Pn** | **15 52 36.5** | **+2.2** |
| **ISHB** | **Shabestar** | **3.69** | **353** | Pn | **Pn** | **15 52 40.3** | **+2.0** |
| **IQOM** | **Qom** | **4.00** | **85** | Pn | **Pn** | **15 52 44.6** | **+2.2** |
| **IPIR** | **Pirpir** | **4.34** | **115** | Pn | **Pn** | **15 52 48.9** | **+1.6** |
| **QAMS** | **Qamsar** | **4.38** | **100** | Pn | **Pn** | **15 52 49.8** | **+2.1** |
| **GRMI** | **Germi** | **4.40** | **17** | Pn | **Pn** | **15 52 50.5** | **+2.7** |
| **JHBN** | **Jahan bin** | **4.41** | **121** | Pn | **Pn** | **15 52 50.4** | **+2.2** |
| **GEVA** | **Gevas** | **4.49** | **326** | Pn | **Pn** | **15 52 49.7** | **+0.6** |
| **IVRN** | **Varamin** | **4.54** | **84** | Pn | **Pn** | **15 52 51.8** | **+2.0** |
| **ZNGN** | **Zangian** | **4.61** | **121** | Pn | **Pn** | **15 52 53.2** | **+2.4** |
| **IDMV** | **Damavand** | **4.86** | **77** | Pn | **Pn** | **15 52 55.8** | **+1.4** |
| **KRSH** | **Karshahi** | **4.94** | **96** | Pn | **Pn** | **15 52 57.7** | **+2.4** |
| **ISFB** | **Sefidab** | **4.98** | **91** | Pn | **Pn** | **15 52 57.7** | **+1.9** |
| **MARD** | **Mardin** | **5.17** | **303** | Pn | **Pn** | **15 52 59.3** | **+0.8** |
| **GURO** | **Guroymak-BITLI** | **5.18** | **321** | Pn | **Pn** | **15 52 59.0** | **+0.4** |
| **IZEF** | **Zefreh** | **5.37** | **107** | Pn | **Pn** | **15 53 03.3** | **+2.0** |
| **ILAS** | **Lasjerd** | **5.58** | **80** | Pn | **Pn** | **15 53 06.2** | **+1.9** |
| **GNI** | **Garni** | **5.65** | **348** | Pg | **Pb** | **15 53 21.4** | **+1.8** |
| | comp=E,0.6nm,0.3s,baz=173,slow=11,SNR=1.8 | | | | | | | |
| GNI | | | | Lg | Lg | 15 54 42.6 | | |
| | comp=E,0.4nm,0.3s,baz=8.1,slow=21,SNR=1.0 | | | | | | | |
| **KLNJ** | **Kolanjah** | **5.73** | **127** | Pn | **Pn** | **15 53 08.8** | **+1.8** |
| **IRAM** | **Ramesheh** | **5.87** | **117** | Pn | **Pn** | **15 53 10.6** | **+2.4** |
| **ASF** | **Jabal al Asfar** | **8.17** | **255** | Pn | **Pn** | **15 53 38.5** | **-1.1** |
| | comp=E,1.1nm,0.3s,baz=154,slow=0.0,SNR=3.2 | | | | | | | |
| | comp=E,2.2nm,0.3s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.14** | **263** | Pn | **Pn** | **15 53 52.2** | **-0.7** |
| | comp=E,1.5nm,0.3s,baz=69,slow=16,SNR=5.0 | | | | | | | |
| | comp=E,0.7nm,0.3s | | | | | | | |
| **RAYN** | **Ar Rayn** | **11.07** | **183** | | **Pn** | **15 54 17.7** | **-1.7** |
| **RAYN** | **Ar Rayn** | **11.07** | **183** | Pn | **Pn** | **15 54 16.9** | **-2.5** |
| **BRTR** | **Keskin Array B** | **11.26** | **301** | Pn | **Pn** | **15 54 25.6** | **+3.6** |
| | comp=E,1.1nm,0.9s,baz=121,slow=14,SNR=6.4 | | | | | | | |
| **SHME** | **Shamm** | **12.09** | **132** | Pn | **Pn** | **15 54 32.2** | **-1.0** |
| **NAZ** | **Nazwa, Dubai** | **12.61** | **137** | Pn | **Pn** | **15 54 40.2** | **-0.2** |
| **MSFE** | **Esma-Masafi** | **12.61** | **134** | Pn | **Pn** | **15 54 39.1** | **-1.3** |
| **ASUD** | **Al Ashush, Dub** | **12.71** | **139** | Pn | **Pn** | **15 54 40.6** | **-1.2** |
| **MDH** | **Madha** | **12.74** | **134** | Pn | **Pn** | **15 54 41.1** | **-1.0** |
| **FAQ** | **Al Faqa, Dubai** | **12.76** | **138** | Pn | **Pn** | **15 54 41.7** | **-0.7** |
| **UOSS** | **Minazif** | **12.95** | **135** | Pn | **Pn** | **15 54 44.0** | **-1.0** |
| **UOSS** | **Minazif** | **12.95** | **135** | Pn | **Pn** | **15 54 43.2** | **-1.9** |
| **HATD** | **Hatta, Dubai** | **13.00** | **136** | Pn | **Pn** | **15 54 43.9** | **-1.9** |
| **ASHO** | **Ashiyiah** | **13.07** | **137** | Pn | **Pn** | **15 54 45.4** | **-1.3** |
| ASHO | | | | Sn | **Sn** | **15 57 03.5** | **-8.8** |
| **WSAR** | **Wadi Sarin** | **15.68** | **133** | Pn | **Pn** | **15 55 20.1** | **-1.9** |
| | comp=E,0.5nm,0.3s,baz=321,slow=9.7,SNR=6.0 | | | | | | | |
| | comp=E,3.1nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **17.50** | **278** | Pn | **Pn** | **15 55 44.2** | **-0.9** |
| **IDI** | **Anoyia** | **17.50** | **278** | P | **P** | **15 55 45.2** | **-1.0** |
| | comp=E,11nm,0.9s,baz=74,slow=12,SNR=2.0 | | | | | | | |
| **ABKAR** | **Akbulak array** | **17.80** | **31** | Pn | **Pn** | **15 55 48.5** | **-0.1** |
| **AKTO** | **Aktyubinsk** | **18.00** | **25** | P | **P** | **15 55 51.8** | **+0.1** |
| | comp=E,0.2nm,0.3s,baz=196,slow=7.3,SNR=1.9 | | | | | | | |
| | comp=E,0.6nm,0.3s | | | | | | | |
| **TURR** | **Turia** | **19.12** | **313** | ⇓P | **Pn** | **15 56 06.3** | **+1.5** |
| **VOIR** | | **19.43** | **310** | ⇓P | **Pn** | **15 56 09.9** | **+1.3** |
| **AKASG** | **Malin Array Be** | **20.29** | **328** | P | **P** | **15 56 16.6** | **0.0** |
| | comp=E,0.6nm,0.4s,baz=140,slow=8.8,SNR=4.7 | | | | | | | |
| | comp=E,0.6nm,0.4s | | | | | | | |
| **AKBB** | **Malin Array Si** | **20.29** | **328** | P | **P** | **15 56 16.6** | **0.0** |
| AKBB | | | | IAmb | IAmb | 15 56 19.9 | | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **KIEV** | **Kiev** | **20.29** | **328** | P | **P** | **15 56 15.6** | **-0.2** |
| **BURAR** | **Bucovina Array** | **20.39** | **316** | P | **P** | **15 56 18.1** | **+0.2** |
| **BURAR** | **Bucovina Array** | **20.39** | **316** | ⇓P | Pn | 15 56 19.3 | -0.7 |
| **BUR08** | **Bucovina Ar. S** | **20.42** | **316** | P | **P** | **15 56 18.1** | **-0.2** |
| **FNA** | **Florina** | **20.57** | **295** | P | **P** | **15 56 20.3** | **+0.4** |
| FNA | | | | IAmb | IAmb | 15 56 21.9 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **GZR** | **Gura Zlata** | **20.87** | **308** | ⇓P | **P** | **15 56 23.0** | **-0.1** |
| **BOVS** | **Bovan** | **20.98** | **303** | ⇓P | Pn | 15 56 25.4 | -1.4 |
| **KOLS** | **Kolonicke sedl** | **22.76** | **316** | *e*P | **P** | **15 56 48.3** | **+5.1** |
| **VYHS** | **Vyhne** | **24.58** | **313** | *e*P | **P** | **15 57 03.9** | **+2.8** |
| VYHS | | | | *e* | | 16 28 22.3 | | |
| **BVAR** | **Borovoye Array** | **25.15** | **36** | P | **P** | **15 57 07.8** | **+1.7** |
| | comp=Z,1.1nm,0.5s,baz=234,slow=7.4,SNR=9.0 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Area** | **28.37** | **46** | P | **P** | **15 57 36.7** | **+1.6** |
| | comp=Z,0.9nm,0.7s,baz=253,slow=9.0,SNR=4.6 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **29.67** | **55** | P | **P** | **15 57 48.3** | **+1.6** |
| MK31 | | | | IAmb | IAmb | 15 58 03.1 | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **29.67** | **55** | P | **P** | **15 57 48.0** | **+1.3** |
| **MKAR** | **Makanchi Array** | **29.67** | **55** | P | **P** | **15 57 48.1** | **+1.4** |
| | comp=Z,0.5nm,0.6s,baz=248,slow=8.5,SNR=5.1 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **29.78** | **341** | P | **P** | **15 57 48.2** | **+0.8** |
| **FINES** | **FINESS Array B** | **29.78** | **341** | P | **P** | **15 57 47.7** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=152,slow=8.6,SNR=5.5 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BNI** | **Bardonecchia** | **31.82** | **301** | P | **P** | **15 58 05.5** | **-0.4** |
| **HFS** | **Hagfors** | **33.11** | **330** | P | **P** | **15 58 16.8** | **-0.1** |
| | comp=Z,1.2nm,0.4s,baz=123,slow=11,SNR=7.9 | | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.16** | **42** | P | **P** | **15 58 18.2** | **+0.8** |
| | comp=Z,0.8nm,0.6s,baz=264,slow=7.8,SNR=4.1 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.37** | **317** | P | **P** | **15 59 12.5** | **+0.4** |
| | comp=Z,1.4nm,0.5s,baz=106,slow=8.5,SNR=6.2 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **39.90** | **292** | P | **P** | **15 59 14.8** | **-0.4** |
| | comp=Z,0.9nm,0.8s,baz=63,slow=8.8,SNR=8.0 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.53** | **253** | P | **P** | **16 00 00.3** | **-0.7** |
| | comp=Z,1.0nm,0.9s,baz=55,slow=7.1,SNR=3.9 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.30** | **95** | P | **P** | **16 00 29.9** | **-0.4** |
| | comp=Z,1.0nm,0.8s,baz=294,slow=8.5,SNR=6.8 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **KSRS** | **Korea Array** | **64.08** | **61** | P | **P** | **16 02 15.1** | **0.0** |
| | comp=Z,0.5nm,0.6s,baz=287,slow=7.5,SNR=3.4 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **76.67** | **7** | P | **P** | **16 03 32.5** | **+0.7** |
| E22K | | | | IAmb | IAmb | 16 04 13.6 | | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| **E19K** | **Redstone River** | **76.70** | **9** | P | **P** | **16 03 32.4** | **+0.6** |
| E19K | | | | IAmb | IAmb | 16 04 02.0 | | |
| | comp=Z,6.7nm,1.4s | | | | | | | |
| **H21K** | **Melozitna Rive** | **78.97** | **8** | P | **P** | **16 03 45.0** | **+0.6** |
| H21K | | | | IAmb | IAmb | 16 04 00.8 | | |
| | comp=Z,4.0nm,1.3s | | | | | | | |
| **I30M** | **Mount Dempster** | **80.47** | **1** | P | **P** | **16 03 53.1** | **+0.3** |
| I30M | | | | IAmb | IAmb | 16 03 56.7 | | |
| | comp=Z,5.3nm,1.4s | | | | | | | |
| **WRGLY** | **Wrigley** | **82.14** | **355** | P | **P** | **16 04 02.5** | **+1.0** |

*SJA **26** 15:56:20.2±0.7,23˚.08S×66˚.62W,h243km±8km,ML3.1, MW3.5*
*NEIC **26** 15:56:22.8±1.3,23˚.09S±0˚.06×66˚.9W±0˚.2,h255km±11km, mb4.5/2,Error ellipse: s-maj=22.2km s-min=7.9km az=78.0*

**ISC 26 15:56:21.7±0.9,23˚.12S±0˚.06×66˚.64W±0˚.05,h231km±9km, n35,σ0s66/44,3C,Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YJA** | **Yavi** | **1.40** | **48** | *i* P | **Pn** | **15 56 58.1** | **+0.1** |
| YJA | | | | *i* S | **S** | **15 57 26.1** | **-0.1** |
| **AF01** | **San Pedro de A** | **1.43** | **276** | | **Pn** | **15 56 59.1** | **+1.1** |
| **AZAP** | **Zapla** | **1.81** | **128** | *i* P | **Pn** | **15 57 00.9** | **-0.3** |
| AZAP | | | | *i* S | **S** | **15 57 32.1** | **+0.1** |
| AZAP | | | | IAML | | 15 57 33.6 | |
| | comp=Z,94nm,0.7s | | | | | | |
| **SLA** | **San Lorenzo** | **1.90** | **147** | *i* P | **Pn** | **15 57 02.6** | **+0.7** |
| SLA | | | | *i* S | **S** | **15 57 32.9** | **-0.5** |
| SLA | | | | IAML | | 15 57 36.1 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **LVC** | **Limon Verde** | **2.15** | **283** | | **Pn** | **15 57 05.1** | **+0.6** |
| **LVC** | **Limon Verde** | **2.15** | **283** | *e*P | **Pn** | **15 57 05.0** | **+0.5** |
| LVC | | | | *e*S | **S** | **15 57 37.3** | **-0.6** |
| LVC | | | | IAML | | 15 57 45.5 | |
| | comp=Z,554nm,0.3s | | | | | | |
| **ALOL** | **LOMAS DE OLMED** | **2.54** | **106** | *i* P | **Pn** | **15 57 07.6** | **-0.5** |
| **PB09** | **IPOC Station P** | **2.74** | **298** | | **Pn** | **15 57 11.5** | **+1.1** |
| **PB09** | **IPOC Station P** | **2.74** | **298** | *e*P | **Pn** | **15 57 11.2** | **+0.8** |
| PB09 | | | | *e*S | **S** | **15 57 48.0** | **-0.6** |
| **FSA** | **Cafayete** | **3.04** | **169** | *i* P | **Pn** | **15 57 14.1** | **+0.4** |
| FSA | | | | *i* S | **S** | **15 57 53.5** | **-1.0** |
| **PB04** | **IPOC Station P** | **3.33** | **283** | | **Pn** | **15 57 17.4** | **+0.4** |
| **PB04** | **IPOC Station P** | **3.33** | **283** | *e*P | **Pn** | **15 57 17.4** | **+0.4** |
| PB04 | | | | *e*S | **S** | **15 57 59.2** | **-1.2** |
| PB04 | | | | IAML | | 15 58 03.2 | |
| | comp=N,862nm,0.1s | | | | | | |
| **PB01** | **IPOC Station P** | **3.35** | **307** | | **Pn** | **15 57 17.6** | **+0.5** |
| **PB01** | **IPOC Station P** | **3.35** | **307** | *e*P | **Pn** | **15 57 17.4** | **+0.2** |
| PB01 | | | | *e*S | **S** | **15 57 59.4** | **-1.3** |
| PB01 | | | | IAML | | 15 58 02.5 | |
| | comp=E,450nm,0.2s | | | | | | |
| **GO02** | **Mina Guanaco** | **3.38** | **232** | | **Pn** | **15 57 18.4** | **+0.8** |
| **GO02** | **Mina Guanaco** | **3.38** | **232** | *e*P | **Pn** | **15 57 18.6** | **+1.0** |
| GO02 | | | | *e*S | **S** | **15 58 01.4** | **-0.2** |
| **PB14** | **IPOC Station P** | **3.76** | **246** | | **Pn** | **15 57 22.5** | **+0.4** |
| **PATCX** | **Punta Patache** | **3.98** | **304** | | **Pn** | **15 57 24.5** | **-0.1** |
| **PATCX** | **Punta Patache** | **3.98** | **304** | *e*P | **Pn** | **15 57 24.8** | **+0.2** |
| **HMBC** | **Humberstone** | **4.14** | **312** | | **Pn** | **15 57 26.0** | **-0.5** |
| **HMBC** | **Humberstone** | **4.14** | **312** | *e*P | **Pn** | **15 57 26.4** | **-0.1** |
| **TA01** | **Diego Aracena** | **4.16** | **307** | Pn | **Pn** | **15 57 25.9** | **-0.7** |
| **TA01** | **Diego Aracena** | **4.16** | **307** | *e*P | **Pn** | **15 57 26.2** | **-0.4** |
| **GO01** | **Chusmiza** | **4.18** | **325** | Pn | **Pn** | **15 57 27.8** | **+0.4** |
| **GO01** | **Chusmiza** | **4.18** | **325** | *e*P | **Pn** | **15 57 28.0** | **+0.7** |
| **TA02** | **Huaiquique** | **4.31** | **310** | | **Pn** | **15 57 28.5** | **0.0** |
| **LPAZ** | **La Paz** | **6.94** | **348** | Pn | **Pn** | **15 58 02.8** | **+0.7** |
| **CO03** | **El Pedregal** | **8.49** | **204** | Pn | **Pn** | **15 58 20.2** | **-1.1** |
| **CO02** | **Combarbal** | **8.94** | **205** | Pn | **Pn** | **15 58 27.3** | **+0.3** |
| **MT02** | **Curacav** | **10.85** | **200** | Pn | **Pn** | **15 58 51.4** | **+0.2** |
| **MT13** | **San Alfonso** | **11.06** | **196** | Pn | **Pn** | **15 58 54.1** | **+0.1** |
| **BO02** | **Sierra Bellavi** | **12.18** | **196** | | **Pn** | **15 59 09.1** | **+1.1** |
| **ETMB** | **Extrema** | **13.23** | **2** | | **Pn** | **15 59 21.0** | **-0.2** |
| **TRQA** | **Tornquist** | **15.42** | **166** | P | **P** | **15 59 46.7** | **-0.4** |
| TRQA | | | | IAmb | IAmb | 16 00 27.5 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **VAO** | **Valinhos** | **18.11** | **94** | P | **P** | **16 00 17.4** | **+0.6** |
| VAO | | | | IAmb | IAmb | 16 00 51.3 | |
| | comp=Z,45nm,1.5s | | | | | | |

*IDC **26** 16:00:35.6±14.0,16˚.56S×176˚.72W,h224km±132km, mb3.5/5,mbtmp4.1/5,Error ellipse: s-maj=48.5km s-min=40.2km az=150.0*
*NEIC **26** 16:01:15.0±0.9,17˚.7S±0˚.4×177˚.9W±0˚.2,h574km±23km, mb4.1/11,Error ellipse: s-maj=64.1km s-min=27.5km az=193.0*

**ISC 26 16:01:15.4±2.4,18˚.1S±0˚.4×178˚.0W±0˚.2,h550km,n19, σ1s22/20,mb4.0/12,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.76** | **275** | | **P** | **16 02 37.7** | **+2.1** |
| **DZM** | **Mont Dzumac** | **15.13** | **252** | P | **P** | **16 04 28.6** | **+2.3** |
| **CTAO** | **Charters Tower** | **33.79** | **261** | P | **P** | **16 07 11.2** | **-1.0** |
| CTAO | | | | IAmb | IAmb | 16 07 49.4 | |
| | comp=Z,6.7nm,1.3s | | | | | | |
| **COEN** | **Coen** | **37.48** | **271** | P | **P** | **16 07 42.6** | **-0.3** |
| **STKA** | **Stephens Creek** | **38.88** | **241** | P | **P** | **16 07 54.0** | **0.0** |
| | comp=Z,2.2nm,0.7s,baz=78,slow=9.3,SNR=3.9 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **43.65** | **241** | P | **P** | **16 08 31.1** | **-0.7** |
| BBOO | | | | IAmb | IAmb | 16 08 49.0 | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **16 08 40.4** | **-1.5** |
| WB0 | | | | IAmb | IAmb | 16 09 02.4 | | |
| | comp=Z,5.0nm,1.3s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.96** | **260** | P | **P** | **16 08 40.7** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 16 08 55.7 | | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **16 08 40.6** | **-1.6** |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **16 08 40.9** | **-1.3** |
| | comp=Z,0.9nm,0.5s,baz=97,slow=7.0,SNR=37 | | | | | | | |
| WRA | | | | PcP | **PcP** | **16 10 11.3** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=87,slow=3.4,SNR=1.4 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **AS31** | **Alice Springs** | **45.10** | **254** | P | **P** | **16 08 42.2** | **-0.9** |
| AS31 | | | | IAmb | IAmb | 16 08 43.6 | | |
| | comp=Z,3.3nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **16 08 42.1** | **-1.1** |
| **ASAR** | **Alice Springs** | **45.10** | **254** | P | **P** | **16 08 42.6** | **-0.5** |
| | comp=Z,8.0nm,0.5s,baz=88,slow=9.1,SNR=398 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 10 11.8** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=106,slow=3.9,SNR=4.6 | | | | | | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| **FORT** | **Forrest** | **50.27** | **245** | P | **P** | **16 09 20.5** | **-1.2** |
| FORT | | | | IAmb | IAmb | 16 09 31.6 | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **KNRA** | **Kununurra** | **50.84** | **264** | P | **P** | **16 09 24.8** | **-1.2** |
| KNRA | | | | IAmb | IAmb | 16 09 45.1 | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | **P** | **16 11 43.7** | **+0.3** |
| **QSPA** | **South Pole Qui** | **71.98** | **180** | P | **P** | **16 11 44.1** | **+0.8** |
| | comp=Z,1.7nm,1.1s,baz=359,slow=10,SNR=2.2 | | | | | | | |
| | comp=Z,1.7nm,1.1s | | | | | | | |
| **BELA** | **Belgrano 2** | **81.95** | **173** | P | **P** | **16 12 37.3** | **-0.1** |
| **PDAR** | **Pinedale Array** | **87.22** | **43** | P | P | 16 12 47.5 | -16 |
| | comp=Z,0.2nm,0.3s,baz=226,slow=2.4,SNR=4.7 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |

*IDC **26** 16:08:41.9±0.8,22˚.33S×170˚.28E,h0km,mb4.1/13, mbtmp4.1/14,ML4.0/1,Error ellipse: s-maj=23.0km s-min=20.3km az=134.0*
*NEIC **26** 16:08:42.9±1.7,22˚.32S±0˚.06×170˚.4E±0˚.1,h10km±1km, mb4.5/19,Error ellipse: s-maj=18.8km s-min=10.1km az=81.0*

**ISC 26 16:08:46.7±0.6,22˚.40S±0˚.10×170˚.28E±0˚.08,h33km,n58, σ0s80/59,mb4.3/24,7D,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.63** | **265** | | **Pn** | **16 09 26.2** | **-0.6** |
| **LIFNC** | **LIFOU** | **3.26** | **299** | Pn | **Pn** | **16 09 33.8** | **-1.7** |
| **DZM** | **Mont Dzumac** | **3.57** | **275** | Pn | **Pn** | **16 09 39.1** | **-0.8** |
| | 12nm,0.3s,baz=124,slow=13,SNR=540 | | | | | | | |
| DZM | | | | Sn | **Sn** | **16 10 22.7** | **+1.7** |
| | 49nm,0.3s,baz=95,slow=18,SNR=7.4 | | | | | | | |
| | 36nm,0.5s | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **5.88** | **287** | | **Pn** | **16 10 10.9** | **-0.7** |
| **EIDS** | **Eidsvold** | **17.81** | **257** | | **Pn** | **16 12 51.8** | **-0.3** |
| **BFZ** | **Birch Farm** | **18.91** | **166** | P | **P** | **16 13 03.3** | **-1.2** |
| BFZ | | | | IAmb | IAmb | 16 13 04.3 | | |
| | comp=Z,51nm,1.5s | | | | | | | |
| **BHW** | **Baring Head** | **19.34** | **170** | P | **P** | **16 13 08.6** | **-0.6** |
| BHW | | | | IAmb | IAmb | 16 13 22.9 | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **22.51** | **271** | P | **P** | **16 13 44.1** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 16 13 56.0 | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **22.59** | **231** | P | **P** | **16 13 43.8** | **-0.8** |
| **STKA** | **Stephens Creek** | **27.15** | **244** | P | **P** | **16 14 28.5** | **+1.5** |
| **STKA** | **Stephens Creek** | **27.15** | **244** | P | **P** | **16 14 27.9** | **+0.9** |
| | comp=Z,1.9nm,0.6s,baz=85,slow=11,SNR=6.5 | | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | | |
| **WR0** | **Warramunga Arr** | **33.37** | **267** | P | **P** | **16 15 21.7** | **-0.5** |
| WR0 | | | | IAmb | IAmb | 16 15 28.1 | | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **AS31** | **Alice Springs** | **33.45** | **261** | P | **P** | **16 15 22.7** | **-0.2** |
| **ASAR** | **Alice Springs** | **33.45** | **261** | P | **P** | **16 15 23.1** | **+0.3** |
| | comp=Z,3.2nm,0.8s,baz=81,slow=8.2,SNR=24 | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.54** | **268** | P | **P** | **16 15 22.9** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 16 15 34.8 | | |
| | comp=Z,7.4nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.55** | **267** | P | **P** | **16 15 23.0** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 16 15 28.9 | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.55** | **267** | P | **P** | **16 15 23.8** | **0.0** |
| WRAB | | | | IAmb | IAmb | 16 15 28.1 | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.56** | **267** | P | **P** | **16 15 23.2** | **-0.6** |
| **WRA** | **Warramunga Arr** | **33.56** | **267** | P | **P** | **16 15 23.2** | **-0.6** |
| | comp=Z,2.1nm,0.8s,baz=98,slow=8.5,SNR=13 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **MTN**

*couple: $M_0$1.64200×10$^{17}$ NP1:$\phi_s$125.00000°,δ63.00000°, λ87.00000°. NP2:$\phi_s$311.00000°,δ27.00000°,λ95.00000°. Principal axes: T 1.5780, Plg72.0000°, Azm29.0000°; N 0.1350, Plg2.0000°, Azm126.0000°; P -1.7070, Plg18.0000°, Azm217.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NOU* ***26*** *16:09:16.7,22°.23S×170°.30E,h44km,mb5.0/77, Southeast of Loyalty Islands*

**ISC 26 16:09:09.4±0.3,22°20S±0'.05×170°40E±0'.04,h10km,n296, σ1$^{9}_{9}$99/304,mb5.0/76,MS4.7/30,20C-12D,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.77** | **261** | Pn | | **Pn** | **16 09 52.4** | **-1.4** |
| **DZM** | **Mont Dzumac** | **3.67** | **271** | *e*Pn | | **Pn** | **16 10 02.7** | **-3.7** |
| | 1μm,1.1s | | | | | | | |
| DZM | | | | *e*Sn | | Sn | 16 10 35.3 | -15 |
| | 5μm,1.2s | | | | | | | |
| **DZM** | **Mont Dzumac** | **3.67** | **271** | Pn | | **Pn** | **16 10 04.8** | **-1.5** |
| **DZM** | **Mont Dzumac** | **3.67** | **271** | Pn | | **Pn** | **16 10 05.4** | **-1.0** |
| | 46nm,0.3s,baz=128,slow=13,SNR=14 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **16 10 46.0** | **-3.8** |
| | 36nm,0.3s,baz=340,slow=22,SNR=5.9 | | | | | | | |
| | 192nm,0.5s | | | | | | | |
| **RTV** | **Rentapao** | **4.76** | **337** | P | | **Pn** | **16 10 25.0** | **+3.8** |
| **DVP** | **Devils Point** | **4.91** | **335** | P | | Pn | 16 10 28.5 | +5.2 |
| **MSVF** | **Nonsavu** | **8.45** | **60** | P | | Pn | 16 11 18.4 | +6.4 |
| **KUZ** | **Kuaotunu** | **15.21** | **164** | P | | **Pn** | **16 12 48.0** | **+3.7** |
| **TOZ** | **Tahuroa Road** | **16.09** | **165** | | | **P** | **16 13 00.1** | **+1.1** |
| **HNR** | **Honiara** | **16.18** | **320** | P | | **P** | **16 13 02.0** | **+1.8** |
| **HNR** | **Honiara** | **16.18** | **320** | Pn | | **Pn** | **16 12 55.8** | **-1.2** |
| HNR | | | | IAmb | | IAmb | 16 13 03.1 | |
| | comp=Z,171nm,1.0s | | | | | | | |
| **HNR** | **Honiara** | **16.18** | **320** | LR | | LR | 16 18 25.7 | |
| | comp=Z,23μm,20.0s,baz=144,slow=34 | | | | | | | |
| **HNR** | **Honiara** | **16.18** | **320** | P | | **Pn** | **16 12 55.8** | **-1.2** |
| HNR | | | | pmax | | pmax | | |
| | comp=Z,171nm,1.0s | | | | | | | |
| **GC1S** | **Gold Coast 1 S** | **16.40** | **245** | P | | **P** | **16 13 04.1** | **+1.6** |
| **AUWSH** | **Wavell State H** | **16.59** | **248** | P | | **Pn** | **16 13 03.3** | **+1.1** |
| **URZ** | **Urewera** | **17.02** | **162** | Pn | | **Pn** | **16 13 05.9** | **-1.5** |
| | comp=Z,0.2nm,0.3s,baz=119,slow=9.1,SNR=1.9 | | | | | | | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **RTZ** | **Ruatahuna** | **17.31** | **162** | | | **Pn** | **16 13 13.2** | **+1.9** |
| **BKZ** | **Black Stump Fm** | **17.70** | **164** | P | | **Pn** | **16 13 18.2** | **+2.2** |
| **BKZ** | **Black Stump Fm** | **17.70** | **164** | | | **Pn** | **16 13 17.3** | **+1.3** |
| **EIDS** | **Eidsvold** | **17.96** | **256** | P | | **P** | **16 13 21.6** | **+1.7** |
| **EIDS** | **Eidsvold** | **17.96** | **256** | | | **Pn** | **16 13 17.9** | **-1.4** |
| **RK1H** | **Rockhampton Ha** | **18.40** | **262** | P | | **P** | **16 13 27.3** | **+2.6** |
| **ARMA** | **Armidale** | **18.70** | **240** | P | | **Pn** | **16 13 29.9** | **+1.5** |
| **ARMA** | **Armidale** | **18.70** | **240** | P | | **P** | **16 13 28.2** | **+0.1** |
| **MRZ** | **Mangatainoka R** | **18.92** | **168** | P | | **P** | **16 13 32.3** | **+2.0** |
| **BFZ** | **Birch Farm** | **19.08** | **166** | P | | **Pn** | **16 13 36.8** | **+4.0** |
| **NNZ** | **Nelson** | **19.13** | **173** | P | | **Pn** | **16 13 35.3** | **+1.9** |
| NNZ | | | | IAmb | | IAmb | 16 13 37.4 | |
| | comp=Z,110nm,1.3s | | | | | | | |
| **TUWZ** | **Tuamarina** | **19.41** | **172** | P | | **P** | **16 13 38.0** | **+2.4** |
| **AUPHS** | **Peel High Scho** | **19.54** | **239** | P | | **Pn** | **16 13 39.5** | **+1.0** |
| **MSWZ** | **Moikau Station** | **19.59** | **169** | P | | **P** | **16 13 39.2** | **+1.6** |
| **THZ** | **Tophouse** | **19.62** | **174** | P | | **P** | **16 13 39.7** | **+1.6** |
| **MGCD** | **Mangrove Creek** | **20.27** | **233** | P | | Pn | 16 13 48.6 | +1.5 |
| **KHZ** | **Kahutara** | **20.33** | **173** | P | | **P** | **16 13 46.1** | **+0.5** |
| KHZ | | | | IAmb | | IAmb | 16 13 50.0 | |
| | comp=Z,104nm,1.2s | | | | | | | |
| **RIV** | **Riverview** | **20.53** | **231** | P | | Pn | 16 13 50.6 | +0.5 |
| **LTZ** | **Lake Taylor** | **20.59** | **176** | P | | **P** | **16 13 49.6** | **+1.1** |
| **SYDH** | **Sydney Hard Ro** | **20.80** | **232** | P | | Pn | 16 13 53.2 | -0.1 |
| **OXZ** | **Oxford** | **21.11** | **177** | P | | **P** | **16 13 54.8** | **+0.6** |
| OXZ | | | | IAmb | | IAmb | 16 14 03.8 | |
| | comp=Z,142nm,1.5s | | | | | | | |
| **RPZ** | **Rata Peaks** | **21.46** | **179** | IAmb | | IAmb | 16 14 15.5 | |
| | comp=Z,64nm,1.1s | | | | | | | |
| **RPZ** | **Rata Peaks** | **21.46** | **179** | P | | **P** | **16 13 56.6** | **-1.4** |
| | comp=Z,18nm,0.9s,baz=0.0,slow=19,SNR=5.0 | | | | | | | |
| RPZ | | | | LR | | LR | 16 21 08.6 | |
| | comp=Z,2μm,21.9s,baz=350,slow=34 | | | | | | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **AUAYR** | **Ayr State High** | **21.64** | **273** | P | | **P** | **16 14 03.6** | **+3.6** |
| **AUDCS** | **Dubbo College** | **21.75** | **238** | P | | **P** | **16 14 04.8** | **+3.6** |
| **JCZ** | **Jackson Bay** | **21.86** | **183** | P | | **P** | **16 14 05.6** | **+3.3** |
| **TV1H** | **Townsville Har** | **22.27** | **273** | P | | **P** | **16 14 09.0** | **+2.2** |
| **CNB** | **Canberra Magne** | **22.55** | **230** | P | | **P** | **16 14 11.3** | **+1.6** |
| **CTA** | **Charters Tower** | **22.62** | **271** | P | | **P** | **16 14 12.9** | **+2.4** |
| **YNG** | **Young** | **22.77** | **233** | P | | **P** | **16 14 14.8** | **+2.7** |
| **CAN** | **Canberra** | **22.81** | **230** | P | | **P** | **16 14 14.8** | **+2.3** |
| **CAN** | **Canberra** | **22.81** | **230** | P | | **P** | **16 14 11.9** | **-0.6** |
| CAN | | | | IAmb | | IAmb | 16 14 17.9 | |
| | comp=Z,59nm,1.2s | | | | | | | |
| **CAN** | **Canberra** | **22.81** | **230** | P | | **P** | **16 14 11.9** | **-0.6** |
| CAN | | | | pmax | | pmax | | |
| | comp=Z,59nm,1.2s | | | | | | | |
| **MILA** | **Mila** | **23.60** | **226** | P | | **P** | **16 14 22.5** | **+2.0** |
| **MTSU** | **Mount Surprise** | **24.81** | **275** | P | | **P** | **16 14 33.1** | **+1.2** |
| **RABL** | **Rabaul** | **25.16** | **313** | P | | **P** | **16 14 34.9** | **-0.2** |
| RABL | | | | IAmb | | IAmb | 16 15 04.5 | |
| | comp=Z,82nm,1.4s | | | | | | | |
| **BULU** | **Kimbe** | **25.53** | **308** | P | | **P** | **16 14 41.2** | **+2.8** |
| **PMG** | **Port Moresby** | **25.68** | **296** | *i* P | | **P** | **16 14 38.0** | **-1.8** |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **AUMAG** | **Moama Anglican** | **26.24** | **232** | P | | **P** | **16 14 46.6** | **+1.9** |
| **TOO** | **Toolangi** | **26.37** | **229** | P | | **P** | **16 14 49.5** | **+3.6** |
| **COEN** | **Coen** | **27.12** | **283** | P | | **P** | **16 14 55.4** | **+2.6** |
| **COEN** | **Coen** | **27.12** | **283** | P | | **P** | **16 14 52.1** | **-0.7** |
| COEN | | | | IAmb | | IAmb | 16 15 07.0 | |
| | comp=Z,32nm,1.0s | | | | | | | |
| **KAVG** | **Kavieng** | **27.25** | **313** | P | | **P** | **16 14 55.7** | **+1.8** |
| **STKA** | **Stephens Creek** | **27.34** | **243** | P | | **P** | **16 14 55.4** | **+0.7** |
| **STKA** | **Stephens Creek** | **27.34** | **243** | P | | **P** | **16 14 53.7** | **-0.9** |
| **STKA** | **Stephens Creek** | **27.34** | **243** | P | | **P** | **16 14 54.2** | **-0.5** |
| | comp=Z,11nm,0.9s,baz=74,slow=7.7,SNR=10 | | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.34** | **243** | *i* P | | **P** | **16 14 52.5** | **-2.2** |
| **INKA** | **Innaminka** | **27.41** | **252** | P | | **P** | **16 14 57.7** | **+2.4** |
| **BRAT** | **Ballarat** | **27.46** | **230** | P | | **P** | **16 14 57.3** | **+1.7** |
| **RAR** | **Rarotonga** | **27.71** | **94** | LR | | LR | 16 24 21.1 | |
| | comp=Z,294nm,19.6s,baz=266,slow=33 | | | | | | | |
| **QIS** | **Mount Isa** | **28.70** | **267** | P | | **P** | **16 15 08.3** | **+1.3** |
| **HTT** | **Hallett** | **29.90** | **241** | P | | **P** | **16 15 19.4** | **+1.9** |
| **LCRK** | **Leigh Creek** | **29.92** | **247** | P | | **P** | **16 15 19.5** | **+1.9** |
| **WHYH** | **Whyalla** | **30.91** | **242** | P | | **P** | **16 15 27.5** | **+1.2** |
| **BBOO** | **Buckleboo** | **32.12** | **243** | P | | **P** | **16 15 38.8** | **+1.8** |
| **BBOO** | **Buckleboo** | **32.12** | **243** | P | | **P** | **16 15 34.3** | **-2.7** |
| **WR0** | **Warramunga Arr** | **33.49** | **267** | IAmb | | IAmb | 16 15 58.5 | |
| | comp=Z,19nm,1.1s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.59** | **260** | P | | **P** | **16 15 48.4** | **-1.7** |
| **ASAR** | **Alice Springs** | **33.59** | **260** | P | | **P** | **16 15 48.5** | **-1.5** |
| | comp=Z,14nm,1.0s,baz=85,slow=9.0,SNR=18 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **16 18 30.0** | **-0.6** |
| | comp=Z,1.9nm,1.0s,baz=98,slow=4.4,SNR=1.8 | | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.66** | **267** | IAmb | | IAmb | 16 16 00.4 | |
| | comp=Z,25nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.67** | **267** | P | | **P** | **16 15 48.4** | **-2.3** |
| WB2 | | | | IAmb | | IAmb | 16 16 05.3 | |
| | comp=Z,35nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.67** | **267** | P | | **P** | **16 15 48.3** | **-2.5** |
| WRAB | | | | IAmb | | IAmb | 16 16 04.5 | |
| | comp=Z,36nm,1.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.67** | **267** | *i* P | | **P** | **16 15 47.4** | **-3.4** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.68** | **267** | P | | **P** | **16 15 47.8** | **-3.0** |
| **WRA** | **Warramunga Arr** | **33.68** | **267** | P | | **P** | **16 15 49.2** | **-1.6** |
| | comp=Z,11nm,1.0s,baz=96,slow=8.5,SNR=16 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **16 18 30.0** | **-0.8** |
| | comp=Z,2.7nm,1.1s,baz=84,slow=2.2,SNR=2.7 | | | | | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **GENI** | **Genyem** | **35.24** | **299** | P | | **P** | **16 16 07.1** | **+2.8** |
| **TBI** | **Tubuai** | **36.94** | **100** | *e*P | | P | 16 16 14.7 | -4.1 |
| | comp=Z,511nm,31.2s | | | | | | | |
| TBI | | | | *e*S | | **S** | **16 22 05.1** | **+1.0** |
| | comp=Z,850nm,25.0s | | | | | | | |
| TBI | | | | *e*SS | | **SnSn** | **16 24 43.7** | **+7.0** |
| | comp=Z,5μm,41.2s | | | | | | | |
| TBI | | | | *e*LR | | LR | 16 26 20.9 | |
| | comp=Z,3μm,24.0s | | | | | | | |
| **KDU** | **Kakadu** | **37.31** | **278** | P | | **P** | **16 16 23.5** | **+1.4** |
| **PPT2** | **Papeete2** | **37.83** | **90** | *e*P | | P | 16 16 23.7 | -2.9 |
| | comp=Z,111nm,27.0s | | | | | | | |
| PPT2 | | | | *e*S | | **S** | **16 22 14.3** | **-3.6** |
| | comp=Z,290nm,25.5s | | | | | | | |
| PPT2 | | | | *e*SS | | **SnSn** | **16 25 03.6** | **+5.1** |
| | comp=Z,2μm,27.8s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 16 26 44.3 | |
| | comp=Z,271nm,22.0s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 16 26 44.7 | |
| | comp=Z,220nm,22.8s | | | | | | | |
| **MTN** | **Manton Dam** | **38.49** | **277** | P | | **P** | **16 16 32.6** | **+0.6** |
| **WRKA** | **Warakurna** | **38.58** | **257** | P | | **P** | **16 16 34.7** | **+2.0** |
| **FORT** | **Forrest** | **38.67** | **248** | P | | **P** | **16 16 35.9** | **+2.5** |
| **DRS** | **Darwin Rock St** | **38.84** | **278** | P | | **P** | **16 16 37.7** | **+2.7** |
| **KNRA** | **Kununurra** | **39.82** | **272** | IAmb | | IAmb | 16 16 53.6 | |
| | comp=Z,40nm,1.1s | | | | | | | |
| **FAKI** | **Fak Fak** | **41.68** | **292** | P | | **P** | **16 17 00.6** | **+2.0** |
| **FITZ** | **Fitzroy Crossi** | **42.11** | **267** | P | | **P** | **16 17 02.4** | **+0.4** |
| **KMBL** | **Kambalda** | **43.98** | **247** | P | | **P** | **16 17 19.3** | **+2.3** |
| **SOEI** | **Soe** | **45.87** | **278** | P | | **P** | **16 17 34.4** | **+2.0** |
| **PSA00** | **Pilbara Seismi** | **46.74** | **261** | P | | **P** | **16 17 40.1** | **+1.1** |
| **MBWA** | **Marble Bar** | **46.92** | **261** | P | | **P** | **16 17 40.7** | **+0.2** |
| **MBWA** | **Marble Bar** | **46.92** | **261** | P | | **P** | **16 17 38.4** | **-2.1** |
| MBWA | | | | IAmb | | IAmb | 16 17 53.9 | |
| | comp=Z,24nm,1.0s | | | | | | | |
| **MEEK** | **Meekatharra** | **47.11** | **254** | P | | **P** | **16 17 44.1** | **+2.2** |
| **KLBR** | **Kellerberrin** | **47.50** | **247** | P | | **P** | **16 17 48.1** | **+3.2** |
| **SANI** | **Sanana** | **47.55** | **289** | P | | **P** | **16 17 45.9** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **47.90** | **245** | P | | **P** | **16 17 47.9** | **-0.1** |
| **NWAO** | **Narrogin (SRO)** | **47.90** | **245** | P | | **P** | **16 17 46.9** | **-1.1** |
| **NWAO** | **Narrogin (SRO)** | **47.90** | **245** | P | | **P** | **16 17 46.9** | **-1.1** |
| NWAO | | | | pmax | | pmax | | |
| | comp=Z,28nm,1.0s | | | | | | | |
| **MORW** | **Morawa** | **49.14** | **250** | P | | **P** | **16 17 59.2** | **+1.6** |
| **MORW** | **Morawa** | **49.14** | **250** | P | | **P** | **16 17 56.3** | **-1.3** |
| **TAOE** | **Nuku Hiva Isla** | **49.24** | **82** | *e*S | | **S** | **16 25 01.3** | **-3.7** |
| | comp=Z,721nm,25.8s | | | | | | | |
| TAOE | | | | *e*LR | | LR | 16 31 57.6 | |
| | comp=Z,535nm,23.1s | | | | | | | |
| **RKT** | **Rikitea** | **50.16** | **102** | *e*P | | P | 16 18 01.4 | -4.0 |
| | comp=Z,322nm,29.8s | | | | | | | |
| RKT | | | | *e*S | | **S** | **16 25 20.0** | **+2.5** |
| | comp=Z,1μm,28.0s | | | | | | | |
| RKT | | | | *e*SS | | **SS** | **16 28 49.8** | **-1.0** |
| | comp=Z,4μm,29.0s | | | | | | | |
| RKT | | | | *e*LR | | LR | 16 32 18.6 | |
| | comp=Z,2μm,25.8s | | | | | | | |
| **KAPI** | **Kappang** | **51.83** | **282** | P | | **P** | **16 18 19.8** | **+1.7** |
| **KAPI** | **Kappang** | **51.83** | **282** | *i* P | | **P** | **16 18 15.2** | **-2.9** |
| **TOLI2** | **Tolitoli** | **53.63** | **289** | P | | **P** | **16 18 34.0** | **+2.6** |
| **TOLI2** | **Tolitoli** | **53.63** | **289** | P | | **P** | **16 18 30.0** | **-1.4** |
| TOLI2 | | | | IAmb | | IAmb | 16 18 45.9 | |
| | comp=Z,33nm,1.0s | | | | | | | |
| **SBA** | **Scott Base** | **55.73** | **181** | P | | **P** | **16 18 46.0** | **+0.3** |
| SBA | | | | IAmb | | IAmb | 16 19 03.2 | |
| | comp=Z,24nm,1.2s | | | | | | | |
| **SBA** | **Scott Base** | **55.73** | **181** | P | | **P** | **16 18 46.0** | **+0.3** |
| SBA | | | | pmax | | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **60.00** | **291** | P | | **P** | **16 19 18.4** | **+1.6** |
| **KSM** | **Kuching** | **63.11** | **284** | P | | **P** | **16 19 38.5** | **+0.8** |
| **KSM** | **Kuching** | **63.11** | **284** | P | | **P** | **16 19 36.4** | **-1.3** |
| KSM | | | | IAmb | | IAmb | 16 19 56.9 | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **JGF** | **Kuroka** | **65.46** | **331** | P | | **P** | **16 19 51.2** | **-1.5** |
| JGF | | | | IAmb | | IAmb | 16 19 54.6 | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.86** | **332** | P | | **P** | **16 19 54.3** | **-0.9** |
| | comp=Z,14nm,1.1s,baz=164,slow=6.9,SNR=14 | | | | | | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **MAJO** | **Matsushiro** | **65.87** | **332** | P | | **P** | **16 19 55.6** | **+0.4** |
| **MAJO** | **Matsushiro** | **65.87** | **332** | *i* P | | **P** | **16 19 53.3** | **-1.9** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **65.87** | **332** | IAmb | | IAmb | 16 20 02.1 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **NACB** | **Ninganchiao** | **66.14** | **311** | P | | **P** | **16 19 59.6** | **+2.4** |
| **JNU** | **Nakatsue** | **66.70** | **324** | P | | **P** | **16 20 03.7** | **+3.0** |
| **JNU** | **Nakatsue** | **66.70** | **324** | P | | **P** | **16 19 59.5** | **-1.1** |
| **QSPA** | **South Pole Qui** | **67.87** | **180** | P | | **P** | **16 20 06.7** | **-1.1** |
| | comp=Z,16nm,0.9s,baz=20,slow=4.4,SNR=16 | | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **QZH** | **Quanzhou** | **68.74** | **310** | P | | **P** | **16 20 15.5** | **+1.8** |
| QZH | | | | S | | **S** | **16 29 22.5** | **+5.2** |
| **TJN** | **Taejon** | **71.05** | **324** | P | | **P** | **16 20 30.4** | **+2.8** |
| **TJN** | **Taejon** | **71.05** | **324** | *ce*P | | **P** | **16 20 26.1** | **-1.5** |
| **KSRS** | **Korea Array** | **71.55** | **325** | P | | **P** | **16 20 30.9** | **+0.3** |
| | comp=Z,9.3nm,0.9s,baz=144,slow=6.3,SNR=20 | | | | | | | |
| | comp=Z,9.3nm,0.9s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **71.56** | **325** | | | **P** | **16 20 30.3** | **-0.4** |
| **KSAR** | **Wonju Array Be** | **71.56** | **325** | P | | **P** | **16 20 30.3** | **-0.4** |
| **QIZ** | **Qiongzhong** | **71.99** | **300** | P | | **P** | **16 20 34.0** | **+0.3** |
| QIZ | | | | S | | **S** | **16 29 54.3** | **-1.2** |
| QIZ | | | | LR | | LR | | |
| | comp=Z,280nm,14.6s | | | | | | | |
| QIZ | | | | LR | | LR | | |
| | comp=Z,280nm,16.1s | | | | | | | |
| **INCN** | **Inchon** | **72.26** | **325** | P | | **P** | **16 20 36.7** | **+1.8** |
| **INCN** | **Inchon** | **72.26** | **325** | P | | **P** | **16 20 34.7** | **-0.2** |
| **INCN** | **Inchon** | **72.26** | **325** | P | | **P** | **16 20 34.7** | **-0.2** |
| INCN | | | | pmax | | pmax | | |
| | comp=Z,51nm,1.1s | | | | | | | |
| **IPM** | **Ipoh** | **72.77** | **282** | P | | **P** | **16 20 40.7** | **+2.2** |
| **NJ2** | **Nanjing** | **73.08** | **316** | *e*P | | **P** | **16 20 42.0** | **+2.1** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **73.22** | **341** | *e*P | | **P** | **16 20 38.5** | **-1.9** |
| YSS | | | | *e*S | | **S** | **16 30 03.6** | **-4.8** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,200nm,4.8s | | | | | | | |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,400nm,16.0s | | | | | | | |
| **PSI** | **Prapat** | **73.99** | **280** | P | | **P** | **16 20 47.3** | **+1.4** |
| **PSTR** | **Posyet** | **74.14** | **331** | *i* P | | **P** | **16 20 46.1** | **+0.2** |
| **GSI** | **Gunungsitoli** | **74.63** | **278** | P | | **P** | **16 20 50.5** | **+1.0** |
| **USA0B** | **Ussuriysk Arra** | **74.85** | **332** | *e*P | | **P** | **16 20 48.8** | **-1.2** |
| **USRK** | **Ussuriysk Ar.** | **74.85** | **332** | P | | **P** | **16 20 50.1** | **+0.1** |
| | comp=Z,8.4nm,1.0s,baz=162,slow=5.2,SNR=8.5 | | | | | | | |
| | comp=Z,8.4nm,1.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **75.60** | **353** | *e*P | | **P** | **16 20 55.0** | **+0.9** |
| PET | | | | pmax | | pmax | | |
| | comp=Z,200nm,7.9s | | | | | | | |
| PET | | | | pmax | | pmax | | |
| | comp=Z,200nm,5.9s | | | | | | | |
| PET | | | | MLR | | MLR | | |
| | comp=Z,200nm,19.0s | | | | | | | |
| PET | | | | MLR | | MLR | | |
| | comp=Z,300nm,19.0s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **75.80** | **352** | *ce*P | | **P** | **16 20 53.0** | **-2.3** |
| **PETK** | **Petropavlovsk-** | **75.80** | **352** | P | | **P** | **16 20 54.2** | **-1.1** |
| **PETK** | **Petropavlovsk-** | **75.80** | **352** | P | | **P** | **16 20 55.3** | **+0.1** |
| | comp=Z,16nm,1.1s,baz=104,slow=4.7,SNR=11 | | | | | | | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **DL2** | **Dalian** | **76.02** | **323** | P | | **P** | **16 20 57.8** | **+1.0** |
| DL2 | | | | pmax | | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | | |
| DL2 | | | | pmax | | pmax | | |
| | comp=Z,230nm,3.7s | | | | | | | |
| DL2 | | | | LR | | LR | | |
| | comp=Z,310nm,14.0s | | | | | | | |
| DL2 | | | | LR | | LR | | |
| | comp=Z,290nm,10.5s | | | | | | | |
| DL2 | | | | LR | | LR | | |
| | comp=Z,290nm,21.8s | | | | | | | |
| **MAW** | **Mawson** | **76.11** | **202** | P | | **P** | **16 20 56.1** | **-0.9** |
| | comp=Z,8.8nm,0.9s,baz=106,slow=8.3,SNR=12 | | | | | | | |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| **MDJ** | **Mudanjiang** | **76.23** | **331** | P | | **P** | **16 20 59.1** | **+1.2** |
| **MDJ** | **Mudanjiang** | **76.23** | **331** | P | | **P** | **16 21 00.0** | **+2.1** |
| MDJ | | | | S | | **S** | **16 30 41.0** | **-1.2** |
| MDJ | | | | SS | | **SS** | **16 35 34.8** | **-1.8** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,370nm,5.3s | | | | | | | |
| MDJ | | | | LR | | LR | | |
| | comp=Z,370nm,21.3s | | | | | | | |
| **MDJ** | **Mudanjiang** | **76.23** | **331** | IAmb | | IAmb | 16 21 00.6 | |
| | comp=Z,25nm,1.3s | | | | | | | |
| **TYV** | **Tymovskoe** | **76.75** | **342** | *e*P | | **P** | **16 21 01.0** | **+0.3** |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,100nm,6.7s | | | | | | | |
| TYV | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **CN2** | **Changchun** | **77.54** | **328** | *e*P | | **P** | **16 21 04.8** | **-0.5** |
| CN2 | | | | *e*S | | **S** | **16 30 55.0** | **-1.6** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,200nm,6.5s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,100nm,12.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,200nm,12.0s | | | | | | | |
| CN2 | | | | LR | | LR | | |
| | comp=Z,200nm,14.0s | | | | | | | |
| **BNX** | **BinXian** | **78.08** | **331** | ⇑P | | **P** | **16 21 08.0** | **-0.3** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **ENH** | **Enshi** | **78.39** | **309** | P | | **P** | **16 21 13.5** | **+3.1** |
| **GYA** | **Guiyang** | **78.40** | **305** | ⇑P | | **P** | **16 21 11.8** | **+1.1** |
| GYA | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **GRNR** | **Gornyy** | **78.59** | **339** | ⇓*i* P | | **P** | **16 21 07.8** | **-3.2** |
| GRNR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | | |
| **LYN** | **LuoYang** | **78.81** | **315** | P | | **P** | **16 21 14.0** | **+1.4** |
| LYN | | | | sP | | pwP | 16 21 20.8 | +0.4 |
| LYN | | | | S | | **S** | **16 31 15.3** | **+4.6** |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | | |
| LYN | | | | pmax | | pmax | | |
| | comp=Z,350nm,6.3s | | | | | | | |
| LYN | | | | LR | | LR | | |
| | comp=Z,230nm,16.2s | | | | | | | |
| LYN | | | | LR | | LR | | |
| | comp=Z,290nm,17.5s | | | | | | | |
| LYN | | | | LR | | LR | | |
| | comp=Z,850nm,23.4s | | | | | | | |
| **KLR** | **Kul'dur** | **79.00** | **335** | P | | **P** | **16 21 13.2** | **-0.1** |
| | comp=Z,3.7nm,1.0s,baz=125,slow=6.8,SNR=6.4 | | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **79.00** | **335** | *ce*P | | **P** | **16 21 12.0** | **-1.3** |
| KLR | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **HNS** | **HongShan** | **79.12** | **318** | ⇑P | | **P** | **16 21 14.3** | **+0.1** |
| HNS | | | | S | | **S** | **16 31 09.0** | **-4.8** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.6s | | | | | | | |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,320nm,9.8s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,160nm,19.1s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,220nm,20.7s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,310nm,19.9s | | | | | | | |
| **BJI** | **Beijing** | **79.91** | **321** | P | | **P** | **16 21 18.8** | **+0.4** |
| BJI | | | | S | | **S** | **16 31 22.5** | **+0.5** |
| BJI | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| BJI | | | | pmax | | pmax | | |
| | comp=Z,92nm,6.2s | | | | | | | |
| BJI | | | | LR | | LR | | |
| | comp=Z,100nm,20.2s | | | | | | | |
| BJI | | | | LR | | LR | | |
| | comp=Z,76nm,17.8s | | | | | | | |
| BJI | | | | LR | | LR | | |
| | comp=Z,140nm,20.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.71** | **294** | P | | **P** | **16 21 21.9** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **80.71** | **294** | P | | **P** | **16 21 23.1** | **-0.2** |
| | comp=Z,4.7nm,0.8s,baz=136,slow=4.0,SNR=15 | | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **TIY** | **Taiyuan** | **80.74** | **317** | P | | **P** | **16 21 22.5** | **-0.6** |
| TIY | | | | S | | **S** | **16 31 34.5** | **+3.5** |
| TIY | | | | pmax | | pmax | | |
| | comp=Z,200nm,7.8s | | | | | | | |
| TIY | | | | LR | | LR | | |
| | comp=Z,190nm,15.8s | | | | | | | |
| TIY | | | | LR | | LR | | |
| | comp=Z,220nm,17.2s | | | | | | | |
| **KMI** | **Kunming** | **80.75** | **302** | ⇑P | | **P** | **16 21 24.8** | **+1.1** |
| KMI | | | | S | | **S** | **16 31 30.5** | **-1.6** |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| KMI | | | | LR | | LR | | |
| | comp=Z,200nm,18.9s | | | | | | | |
| KMI | | | | LR | | LR | | |
| | comp=Z,200nm,17.3s | | | | | | | |
| **XAN** | **Xi'an** | **80.90** | **312** | P | | **P** | **16 21 25.0** | **+1.0** |
| XAN | | | | sP | | pwP | 16 21 39.5 | +7.7 |
| XAN | | | | S | | **S** | **16 31 35.8** | **+2.9** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | | |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,490nm,5.8s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,310nm,12.8s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,280nm,17.7s | | | | | | | |
| XAN | | | | LR | | LR | | |
| | comp=Z,500nm,16.6s | | | | | | | |
| **HEH** | **HeiHe** | **81.54** | **334** | *e*P | | **P** | **16 21 27.8** | **+0.9** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| HEH | | | | LR | | LR | | |
| | comp=Z,270nm,18.1s | | | | | | | |
| HEH | | | | LR | | LR | | |
| | comp=Z,230nm,18.7s | | | | | | | |
| HEH | | | | LR | | LR | | |
| | comp=Z,410nm,19.2s | | | | | | | |
| **PZH** | **PanZhiHua** | **82.22** | **303** | P | | **P** | **16 21 30.5** | **-0.7** |
| PZH | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SEY** | **Seymchan** | **86.04** | **352** | P | | **P** | | **16 21 49.0** | **-0.7** |
| | comp=Z,6.7nm,0.9s,baz=164,slow=6.4,SNR=9.6 | | | | | | | | |
| | comp=Z,6.7nm,0.9s | | | | | | | | |
| **SEY** | **Seymchan** | **86.04** | **352** | *ce*P | | **P** | | **16 21 49.8** | **+0.1** |
| SEY | | | | pmax | | pmax | | | |
| | comp=Z,30nm,2.5s | | | | | | | | |
| **NVL** | **N'lazarevskaya** | **86.07** | **187** | *e*P | | P | | 16 21 45.5 | -4.5 |
| NVL | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| NVL | | | | MLR | | MLR | | | |
| | comp=Z,298nm,18.0s | | | | | | | | |
| **SNAA** | **Sanae** | **86.26** | **182** | P | | **P** | | **16 21 48.3** | **-2.8** |
| SNAA | | | | IAmb | | IAmb | | 16 21 52.8 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **SNAA** | **Sanae** | **86.26** | **182** | ⇑P | | **P** | | **16 21 49.4** | **-1.7** |
| | comp=Z,210nm,1.0s | | | | | | | | |
| **SNAA** | **Sanae** | **86.26** | **182** | P | | **P** | | **16 21 49.6** | **-1.4** |
| | comp=Z,12nm,1.1s,baz=190,slow=6.9,SNR=14 | | | | | | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **SNAA** | **Sanae** | **86.26** | **182** | *ce*P | | P | | 16 21 47.6 | -3.4 |
| SNAA | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.81** | **180** | ⇑P | | **P** | | **16 21 52.0** | **-1.7** |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.12** | **181** | ⇑P | | **P** | | **16 21 53.8** | **-1.3** |
| | comp=Z,14nm,0.8s,baz=180,slow=4.3 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.40** | **180** | ⇑P | | **P** | | **16 21 54.7** | **-1.8** |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **SHL** | **Shillong** | **89.69** | **298** | P | | **P** | | **16 22 07.0** | **-1.3** |
| **SHL** | **Shillong** | **89.69** | **298** | P | | **P** | | **16 22 07.0** | **-1.3** |
| SHL | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **89.88** | **323** | P | | **P** | | **16 22 06.8** | **-1.8** |
| ULN | | | | IAmb | | IAmb | | 16 22 27.9 | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **89.88** | **323** | *ce*P | | **P** | | **16 22 07.7** | **-0.9** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **GTA** | **Gaotai** | **89.94** | **313** | P | | **P** | | **16 22 13.3** | **+4.2** |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.5s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,100nm,13.9s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,210nm,18.7s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,200nm,16.7s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.95** | **48** | P | | **P** | | **16 22 08.5** | **-0.7** |
| | comp=Z,1.2nm,0.7s,baz=220,slow=7.9,SNR=9.2 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| **YAK** | **Yakutsk** | **90.01** | **342** | P | | **P** | | **16 22 06.4** | **-2.2** |
| YAK | | | | IAmb | | IAmb | | 16 22 09.6 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **YAK** | **Yakutsk** | **90.01** | **342** | P | | **P** | | **16 22 07.9** | **-0.7** |
| | comp=Z,12nm,0.9s,baz=147,slow=2.2,SNR=7.0 | | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **YAK** | **Yakutsk** | **90.01** | **342** | *e*P | | **P** | | **16 22 06.7** | **-1.9** |
| YAK | | | | *e**PP | | **pwP** | | **16 22 15.0** | **-1.5** |
| YAK | | | | *e* | | | | 16 25 39.7 | |
| YAK | | | | *e*PPP | | PPP | | 16 27 37.6 | |
| YAK | | | | *e*S | | **SKSac** | | **16 32 35.2** | **-4.0** |
| YAK | | | | *e**SS | | **SKKSac** | | **16 32 50.1** | **-2.3** |
| YAK | | | | *e*SS | | **SS** | | **16 38 58.5** | **-1.6** |
| YAK | | | | *e*SSS | | SSS | | 16 42 36.4 | |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=N,4.0nm,1.4s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=E,1.0nm,1.1s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,188nm,7.6s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=N,119nm,8.1s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=E,93nm,7.6s | | | | | | | | |
| YAK | | | | smax | | smax | | | |
| | comp=N,90nm,5.3s | | | | | | | | |
| YAK | | | | smax | | smax | | | |
| | comp=E,73nm,4.5s | | | | | | | | |
| YAK | | | | MLR | | MLR | | | |
| | comp=Z,312nm,29.0s | | | | | | | | |
| YAK | | | | MLR | | MLR | | | |
| | comp=N,213nm,21.0s | | | | | | | | |
| YAK | | | | MLR | | MLR | | | |
| | comp=E,137nm,26.0s | | | | | | | | |
| **BILL** | **Bilibino** | **90.02** | **358** | P | | **P** | | **16 22 07.7** | **-1.0** |
| BILL | | | | IAmb | | IAmb | | 16 22 09.8 | |
| | comp=Z,21nm,1.3s | | | | | | | | |
| **BILL** | **Bilibino** | **90.02** | **358** | ⇑*e*P | | **P** | | **16 22 07.8** | **-0.8** |
| BILL | | | | *e* | | | | 16 25 39.5 | |
| BILL | | | | *e*S | | **S** | | **16 32 53.8** | **-7.4** |
| BILL | | | | *e*SS | | **SS** | | **16 39 04.4** | **+4.2** |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| BILL | | | | MLR | | MLR | | | |
| | comp=Z,147nm,18.0s | | | | | | | | |
| **SONM** | **Songino Array** | **90.23** | **323** | P | | **P** | | **16 22 09.1** | **-1.2** |
| SONM | | | | IAmb | | IAmb | | 16 22 29.3 | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **SONM** | **Songino Array** | **90.23** | **323** | P | | **P** | | **16 22 10.3** | **0.0** |
| | comp=Z,7.1nm,1.0s,baz=140,slow=3.7,SNR=15 | | | | | | | | |
| | comp=Z,7.1nm,1.0s | | | | | | | | |
| **KVN** | **Kaiserville** | **90.38** | **48** | P | | **P** | | **16 22 10.8** | **-0.5** |
| **KVN** | **Kaiserville** | **90.38** | **48** | P | | **P** | | **16 22 10.8** | **-0.5** |
| KVN | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **92.51** | **13** | IAmb | | IAmb | | 16 22 22.2 | |
| | comp=Z,7.3nm,1.2s | | | | | | | | |
| **MDM** | **Murphy Dome** | **92.52** | **16** | IAmb | | IAmb | | 16 22 21.2 | |
| | comp=Z,7.5nm,1.1s | | | | | | | | |
| **COLA** | **College** | **92.55** | **17** | P | | **P** | | **16 22 23.4** | **+3.0** |
| **COLA** | **College** | **92.55** | **17** | *i* P | | **P** | | **16 22 18.2** | **-2.2** |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| **ILAR** | **Eielson Array** | **92.72** | **17** | P | | **P** | | **16 22 19.6** | **-1.6** |
| **ILAR** | **Eielson Array** | **92.72** | **17** | P | | **P** | | **16 22 20.6** | **-0.6** |
| | comp=Z,1.8nm,1.0s,baz=232,slow=5.6,SNR=8.9 | | | | | | | | |
| | comp=Z,1.8nm,1.0s | | | | | | | | |
| **F21K** | **Alatna River** | **93.12** | **13** | P | | **P** | | **16 22 22.8** | **-0.2** |
| F21K | | | | IAmb | | IAmb | | 16 22 41.2 | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **ZAK** | **Zakamensk** | **93.32** | **324** | *e*P | | **P** | | **16 22 22.8** | **-1.7** |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.5s | | | | | | | | |
| **J26L** | **Joseph Creek** | **93.45** | **18** | IAmb | | IAmb | | 16 22 49.4 | |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **K27K** | **Chicken** | **93.54** | **19** | IAmb | | IAmb | | 16 22 49.4 | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **IRK** | **Irkutsk** | **93.77** | **326** | *e*P | | **P** | | **16 22 24.1** | **-2.3** |
| IRK | | | | pmax | | pmax | | | |
| | comp=Z,30nm,2.3s | | | | | | | | |
| **E21K** | **Killik River** | **94.05** | **12** | P | | P | | **16 22 27.4** | **0.0** |
| **E22K** | **Anaktuvuk Pass** | **94.24** | **13** | IAmb | | IAmb | | 16 22 54.7 | |
| | comp=Z,10nm,1.2s | | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **96.65** | **322** | *i* P | | **P** | | **16 22 37.4** | **-2.3** |
| KNGR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **E28M** | **Babbage River** | **97.53** | **16** | IAmb | | IAmb | | 16 23 01.4 | |
| | comp=Z,8.0nm,1.4s | | | | | | | | |
| **WMQ** | **Urumqi** | **100.02** | **313** | *e*P | | **Pdif** | | **16 22 56.0** | **+1.0** |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,130nm,21.5s | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **102.24** | **319** | *i* P | | **Pdif** | | **16 23 04.0** | **-0.8** |
| DGZ | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.6s | | | | | | | | |
| **HUMP** | **Col San Antoni** | **127.29** | **84** | | | **PKPdf** | | **16 28 13.2** | **-1.8** |
| **G65A** | **Princeton** | **127.82** | **49** | | | **PKPdf** | | **16 28 14.3** | **-0.9** |
| **BATG** | **Bathurst New B** | **128.59** | **47** | | | **PKPdf** | | **16 28 15.7** | **-1.0** |
| **LMN** | **Caledonia Moun** | **129.66** | **48** | | | **PKPdf** | | **16 28 17.7** | **-1.1** |
| **KIV** | **Kislovodsk** | **132.01** | **310** | *i* PKIKP | | **PKPdf** | | **16 28 20.1** | **-3.3** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | | |
| **NACGM** | **Naroch** | **137.53** | **330** | *e*PKP | | **PKPdf** | | **16 28 28.1** | **-5.1** |
| | comp=Z,7.0nm,0.9s,baz=54 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **139.45** | **306** | PKP | | **PKPdf** | | **16 28 37.1** | **-0.3** |
| | comp=Z,0.9nm,0.9s,baz=101,slow=5.4,SNR=4.2 | | | | | | | | |
| **SZH** | **Strazhitsa** | **143.82** | **314** | *e*P | | PKPbc | | 16 28 43.4 | +0.8 |
| **PVL** | **Pavlikeni** | **144.42** | **314** | *e*P | | **PKPdf** | | **16 28 46.3** | **+0.3** |
| **LANS** | **Liptovska Anna** | **144.61** | **327** | *e*PKIKP | | **PKiKP** | | **16 28 49.0** | **-0.9** |
| **LANS** | **Liptovska Anna** | **144.61** | **327** | *e*PKP | | **PKiKP** | | **16 28 49.0** | **-0.9** |
| **BSEG** | **Bad Segeberg** | **144.90** | **339** | *e*PKPab | | **PKPab** | | **16 28 45.3** | **-0.2** |
| | baz=38,slow=4.0 | | | | | | | | |
| **KDZ** | **Kurdzhali** | **144.90** | **312** | *e*P | | **PKPab** | | **16 28 44.9** | **-1.1** |
| **PLD** | **Plovdiv** | **145.10** | **313** | *e*P | | PKPbc | | 16 28 47.6 | +0.9 |
| **OSTC** | **Ostas** | **145.23** | **331** | *e*PKP | | **PKiKP** | | **16 28 50.3** | **-0.8** |
| **OSTC** | **Ostas** | **145.23** | **331** | *e*PKIKP | | **PKiKP** | | **16 28 50.3** | **-0.8** |
| **MPEP** | **Malo Peshtene** | **145.26** | **315** | *e*P | | **PKPbc** | | **16 28 47.7** | **+0.6** |
| **DPC** | **Dobruska-Polom** | **145.33** | **331** | *e*PKP | | **PKPbc** | | **16 28 47.2** | **0.0** |
| **DPC** | **Dobruska-Polom** | **145.33** | **331** | *e*PKIKP | | **PKPbc** | | **16 28 47.2** | **0.0** |
| **PGB** | **Panagyurishte** | **145.34** | **314** | *e*P | | **PKPdf** | | **16 28 48.6** | **+0.9** |
| **VYHS** | **Vyhne** | **145.35** | **326** | *e*PKP | | **PKPbc** | | **16 28 47.6** | **+0.3** |
| **FLTG** | **Flechtingen** | **145.91** | **337** | *e*PKPab | | **PKPdf** | | **16 28 48.5** | **+0.3** |
| | baz=38,slow=4.0 | | | | | | | | |
| **VTS** | **Vitosha** | **145.92** | **314** | *e*P | | **PKPdf** | | **16 28 48.9** | **+0.1** |
| **VRAC** | **Vranov** | **145.93** | **329** | PKPbc | | **PKPdf** | | **16 28 48.8** | **+0.4** |
| | comp=Z,7.2nm,1.0s,baz=70,slow=4.7,SNR=4.5 | | | | | | | | |
| **VRAC** | **Vranov** | **145.93** | **329** | ⇑P | | PKPdf | | 16 28 35.2 | -13 |
| **BRG** | **Berggiesshubel** | **145.99** | **333** | P | | PKPdf | | 16 28 36.3 | -12 |
| BRG | | | | Amp | | | | 16 28 37.3 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.99** | **333** | *e*P | | **PKPbc** | | **16 28 49.9** | **+0.6** |
| BRG | | | | Amp | | | | 16 28 51.5 | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.99** | **333** | *e*PKP2 | | **PKPbc** | | **16 28 49.8** | **+0.6** |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.99** | **333** | *e*PKPab | | **PKPdf** | | **16 28 49.2** | **+0.7** |
| | baz=38,slow=4.0 | | | | | | | | |
| **MMB** | **Musomishta** | **146.03** | **312** | *e*P | | **PKPab** | | **16 28 50.9** | **+0.7** |
| **CLL** | **Collm** | **146.05** | **334** | PKPdf | | **PKPdf** | | **16 28 48.6** | **+0.1** |
| **CLL** | **Collm** | **146.05** | **334** | ⇓*i*PKPbc | | **PKPdf** | | **16 28 49.3** | **+0.8** |
| | comp=Z,38nm,1.5s | | | | | | | | |
| CLL | | | | *e*PKPlp | | | | 16 28 51.0 | |
| | comp=Z,200nm,18.4s | | | | | | | | |
| CLL | | | | *i* PKiKP | | **PKiKP** | | **16 28 53.4** | **+0.7** |
| CLL | | | | *e*PP | | **PP** | | **16 32 13.0** | **+2.4** |
| CLL | | | | *e*SKPdf | | **SKPdf** | | **16 32 24.0** | **+1.1** |
| CLL | | | | *e*SKKSac | | **SKKSac** | | **16 39 00.0** | **-3.2** |
| CLL | | | | *e*PSKS | | | | 16 42 23.0 | |
| CLL | | | | *e*PPS | | PPS | | 16 44 44.0 | |
| CLL | | | | *e*SS | | SS | | 16 50 54.0 | -12 |
| CLL | | | | *ex* | | x | | 16 52 42.0 | |
| CLL | | | | *ex* | | x | | 16 54 00.0 | |
| CLL | | | | *e*SSS | | SSS | | 16 56 24.0 | |
| CLL | | | | *e*SSSS | | | | 17 00 30.0 | |
| CLL | | | | AMS | | AMS | | 17 36 00.0 | |
| | comp=Z,200nm,20.7s | | | | | | | | |
| **CLL** | **Collm** | **146.05** | **334** | ⇓*i*PKP2 | | **PKPdf** | | **16 28 49.3** | **+0.8** |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,38nm,1.5s | | | | | | | | |
| **CLL** | **Collm** | **146.05** | **334** | *e*PKPab | | **PKPdf** | | **16 28 49.3** | **+0.8** |
| | baz=38,slow=4.0 | | | | | | | | |
| **KKB** | **Krupnik** | **146.33** | **313** | *e*P | | **PKPbc** | | **16 28 51.0** | **+0.5** |
| **PRU** | **Pruhonice** | **146.39** | **332** | AMS | | AMS | | 17 37 30.0 | |
| | comp=Z,300nm,22.8s | | | | | | | | |
| **HSKC** | **Hora Svate Kat** | **146.41** | **333** | AMS | | AMS | | 17 39 00.0 | |
| | comp=Z,300nm,21.9s | | | | | | | | |
| **BOVS** | **Bovan** | **146.43** | **317** | ⇑P | | **PKPdf** | | **16 28 50.7** | **+1.2** |
| **EKA** | **Eskdalemuir Ar** | **146.56** | **353** | PKPbc | | **PKPdf** | | **16 28 50.1** | **+0.9** |
| | comp=Z,11nm,0.8s,baz=342,slow=2.7,SNR=9.4 | | | | | | | | |
| **ZVC** | **Zvikov** | **146.94** | **331** | *e*PKP | | **PKPbc** | | **16 28 52.9** | **+0.8** |
| ZVC | | | | AMS | | AMS | | 17 38 30.0 | |
| | comp=Z,300nm,21.1s | | | | | | | | |
| **TANN** | **Tannenbergstha** | **146.95** | **334** | *e*PKPab | | **PKPbc** | | **16 28 53.3** | **+1.1** |
| | baz=38,slow=4.0 | | | | | | | | |
| **PLN** | **Plauen** | **147.02** | **334** | *e*PKPab | | **PKPbc** | | **16 28 53.5** | **+1.3** |
| | baz=38,slow=4.0 | | | | | | | | |
| **IBBN** | **Ibbenburen** | **147.10** | **340** | *e*PKPab | | **PKPbc** | | **16 28 53.6** | **+1.3** |
| | baz=38,slow=4.0 | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.16** | **327** | *i* PKP | | **PKPbc** | | **16 28 54.2** | **+1.4** |
| | comp=Z,7.8nm,0.9s | | | | | | | | |
| **CONA** | **Conrad Observa** | **147.22** | **328** | *i* PKiKP | | **PKPab** | | **16 28 55.4** | **+0.7** |
| | comp=Z,8.2nm,1.1s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **147.34** | **330** | *e*PKP | | **PKPbc** | | **16 28 53.5** | **+0.3** |
| CKRC | | | | AMS | | AMS | | 17 38 40.0 | |
| | comp=Z,200nm,22.5s | | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **147.34** | **330** | *e*PKP2 | | **PKPbc** | | **16 28 53.5** | **+0.3** |
| CKRC | | | | MLR | | MLR | | | |
| | comp=Z,200nm,22.5s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.44** | **331** | PKPab | | **PKPbc** | | **16 28 54.8** | **+1.2** |
| **KHC** | **Kasperske Hory** | **147.44** | **331** | *e*PKP | | **PKPbc** | | **16 28 53.8** | **+0.3** |
| KHC | | | | AMS | | AMS | | 17 42 10.0 | |
| | comp=Z,300nm,21.6s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.44** | **331** | *c i*PKP2 | | **PKPab** | | **16 28 56.1** | **+0.6** |
| KHC | | | | pmax | | pmax | | | |
| | comp=Z,53nm,1.7s | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **147.56** | **333** | *e*PKPab | | **PKPbc** | | **16 28 55.7** | **-0.1** |
| | baz=38,slow=4.0 | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.60** | **331** | PKPbc | | **PKPbc** | | **16 28 54.6** | **+0.5** |
| | comp=Z,3.1nm,0.7s,baz=35,slow=4.9,SNR=11 | | | | | | | | |
| **ARSA** | **Arzberg** | **147.85** | **327** | *e*PKiKP | | **PKiKP** | | **16 28 57.0** | **+0.4** |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **FNA** | **Florina** | **147.98** | **313** | PKPdf | | **PKPdf** | | **16 28 51.7** | **-0.5** |
| **FNA** | **Florina** | **147.98** | **313** | PKIKP | | **PKPdf** | | **16 28 51.7** | **-0.5** |
| **MOA** | **Molln** | **148.05** | **329** | *i* PKP | | **PKPab** | | **16 28 58.2** | **+0.3** |
| | comp=Z,7.8nm,1.1s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.46** | **329** | *i* PKP | | **PKiKP** | | **16 28 58.7** | **+0.9** |
| | comp=Z,3.6nm,0.6s | | | | | | | | |
| **SOKA** | **Soboth** | **148.48** | **327** | *e*PKP | | **PKiKP** | | **16 28 58.7** | **+0.7** |
| | comp=Z,15nm,1.4s | | | | | | | | |
| **OBKA** | **Obir** | **148.84** | **327** | *e*PKP | | **PKPbc** | | **16 28 57.0** | **-0.4** |
| | comp=Z,19nm,1.4s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.04** | **329** | *e*PKiKP | | **PKPbc** | | **16 28 59.3** | **+1.3** |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **BTNL** | **Ternell** | **149.10** | **340** | *d*PcP | | **PKiKP** | | **16 29 00.5** | **+1.4** |
| **LESA** | **Schwarzleotal** | **149.10** | **330** | *i* PKiKP | | **PKPbc** | | **16 28 58.8** | **+0.8** |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **MEM** | **Membach** | **149.12** | **340** | *d*P | | **PKPab** | | **16 29 03.8** | **+1.7** |
| **MYKA** | **Terra Mystica** | **149.21** | **328** | *e*PKiKP | | **PKPbc** | | **16 28 58.9** | **+0.6** |
| | comp=Z,4.5nm,0.7s | | | | | | | | |
| **BCLA** | **Clavier** | **149.50** | **341** | *d*PKP | | **PKiKP** | | **16 29 02.1** | **+2.2** |
| **ABTA** | **Abfaltersbach** | **149.67** | **329** | *e*PKiKP | | **PKPbc** | | **16 28 59.8** | **+0.4** |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **WATA** | **Walderalm** | **149.68** | **331** | *i* PKiKP | | **PKiKP** | | **16 29 01.0** | **+0.5** |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **WTTA** | **Wattenberg** | **149.70** | **331** | *i* PKP | | **PKPab** | | **16 29 03.5** | **-1.3** |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **RCHB** | **Rochefort** | **149.76** | **341** | *d*PKP | | PKPab | | 16 29 12.8 | +8.1 |
| **BMRD** | **Maredsous** | **149.76** | **342** | *d*PKP | | **PKPab** | | **16 29 03.5** | **-1.1** |
| **MOTA** | **Moosalm** | **149.88** | **331** | *i* PKiKP | | **PKPbc** | | **16 29 00.3** | **+0.3** |
| | comp=Z,7.3nm,0.9s | | | | | | | | |
| **WLF** | **Walferdange** | **149.90** | **339** | *d*PKP | | **PKPab** | | **16 29 05.0** | **-0.3** |
| **RETA** | **Reutte** | **149.92** | **332** | *i* PKP | | **PKPab** | | **16 29 04.4** | **-1.1** |
| | comp=Z,10nm,1.3s | | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.93** | **331** | *i* PKP | | **PKPbc** | | **16 28 58.7** | **-1.3** |
| | comp=Z,4.2nm,0.7s | | | | | | | | |
| **DOU** | **Dourbes** | **150.00** | **342** | *d*PKP | | **PKPab** | | **16 29 13.0** | **+7.4** |
| **FETA** | **Feichten** | **150.29** | **331** | *i* PKP | | **PKPbc** | | **16 29 00.4** | **-0.7** |
| | comp=Z,7.9nm,0.9s | | | | | | | | |
| **DAVA** | **Damuels** | **150.46** | **333** | *i* pPKP | | **PKPab** | | **16 29 08.0** | **+0.1** |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.98** | **232** | PKP | | **PKPdf** | | **16 29 14.6** | **-0.9** |
| | comp=Z,1.2nm,0.9s,baz=124,slow=2.6,SNR=4.8 | | | | | | | | |

**KRSC 26 16:18:18.0±1.6, 48°34N×155°56E, h75km±32km, MI3.7, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDTR** | **Khodutka, Kamc** | **3.83** | **24** | *e*P | Pn | 16 19 16.2 | +1.7 |
| KDTR | | | | *e*S | Sn | 16 20 00.2 | +1.9 |
| **ASAK** | **Asacha** | **4.32** | **19** | *e*P | Pn | 16 19 24.5 | +3.3 |
| **MTVR** | **Mutnovka** | **4.47** | **21** | *e*P | Pn | 16 19 25.8 | +2.4 |
| MTVR | | | | *e*S | Sn | 16 20 17.3 | +3.1 |
| **GRL** | **Gorelyy** | **4.51** | **20** | *e*P | Pn | 16 19 27.2 | +3.3 |
| **KRMR** | **Karymshinskiy** | **4.78** | **19** | *e*P | Pn | 16 19 30.5 | +3.1 |
| KRMR | | | | *e*S | Sn | 16 20 24.7 | +3.1 |
| **DALK** | **Dalny** | **5.12** | **22** | *e*P | Pn | 16 19 35.5 | +3.5 |
| DALK | | | | *e*S | Sn | 16 20 32.8 | +3.1 |
| **UGLR** | **Uglovaya** | **5.29** | **22** | *e*P | Pn | 16 19 38.0 | +3.4 |
| **AVH** | **Avacha** | **5.33** | **21** | *e*P | Pn | 16 19 39.6 | +4.6 |
| **KOK** | **Koryaka** | **5.33** | **20** | *e*P | Pn | 16 19 38.9 | +4.0 |
| **SMAR** | **Somma** | **5.34** | **21** | *e*P | Pn | 16 19 39.5 | +4.2 |
| **SPN** | **Mys Shipunski** | **5.54** | **29** | *e*S | Sn | 16 20 41.8 | +1.7 |
| **GNL** | **Ganaly** | **5.57** | **15** | *e*P | Pn | 16 19 41.1 | +2.8 |
| **KPT** | **Kopyto** | **8.15** | **19** | *e*P | Pn | 16 20 17.2 | +3.6 |
| **KIRR** | **Kirishev** | **8.17** | **19** | *e*P | Pn | 16 20 16.0 | +2.2 |

*IDC **26** 16:42:12.7±12.0, 32°24N×47°95E, h0km, mb3.8/6, mbtmp3.8/6, MS4.1/3, Error ellipse: s-maj=253.1km s-min=33.2km az=8.0*
*NEIC **26** 16:42:13.9±1.4, 32°08N±0°06×47°93E±0°07, h10km±2km, mb4.4/6, Error ellipse: s-maj=13.4km s-min=5.5km az=135.0*
*ISN **26** 16:42:14.1±0.7, 32°14N×47°99E, h3km±18km, ML3.4*
*TEH **26** 16:42:15.2, 32°11N×48°03E, h18km±28km, ML3.4*

*OMAN **26** 16:42:25.5±0.1, 31°37N×48°49E, h16km, mb3.7/8, ms2.5/2, Error ellipse: s-maj=1.8km s-min=1.6km az=29.0*

**ISC 26 16:42:13.2±0.5, 31°97N±0°04×48°09E±0°03, h10km, n89, σ=2.947/109, mb3.9/9, MS4.0/3, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AHWZ** | **Ahwaz** | **0.79** | **143** | Pg | **Pn** | **16 42 33.6** | **+3.2** |
| **IKFH** | **Kafar-mosalman** | **1.56** | **353** | Pg | **Pn** | **16 42 41.4** | **+0.4** |
| **RAFI** | **Al-Rafai** | **1.70** | **262** | *e*Pn | **Pg** | **16 42 46.0** | **+0.2** |
| RAFI | | | | *e*Sn | **Sg** | **16 43 09.0** | **+1.2** |
| RAFI | | | | AML | AML | 16 43 12.1 | |
| | comp=N,450nm,0.5s | | | | | | |
| RAFI | | | | AML | AML | 16 43 17.9 | |
| | comp=E,746nm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.81** | **2** | Pg | **Pn** | **16 42 45.3** | **+0.7** |
| **IBDR** | **Badra** | **2.15** | **302** | *e*Pn | **Pn** | **16 42 50.5** | **+1.4** |
| IBDR | | | | *e*Sn | **Sn** | **16 43 17.0** | **+1.2** |
| **JHBN** | **Jahan bin** | **2.20** | **83** | Pn | **Pn** | **16 42 53.7** | **+0.5** |
| **HSAM** | **Samen** | **2.28** | **11** | Pn | **Pn** | **16 42 51.8** | **+0.8** |
| **ILBA** | **Ilam Banvizeh** | **2.29** | **317** | Pn | **Pn** | **16 42 52.3** | **+1.3** |
| **ZNGN** | **Zangian** | **2.35** | **86** | Pn | **Pb** | **16 42 56.0** | **+0.2** |
| **KCHF** | **Cheshme Sefid,** | **2.46** | **339** | Pn | **Pn** | **16 42 54.4** | **+0.9** |
| **IBZA** | **Bozab** | **2.50** | **356** | Pn | **Pn** | **16 42 55.0** | **+0.9** |
| **IBRJ** | **Brojen** | **2.69** | **90** | Pn | **Pn** | **16 43 00.3** | **+3.4** |
| **KBD** | **Kabd** | **2.81** | **187** | P | **Pb** | **16 43 03.8** | **+0.4** |
| KBD | | | | S | **Sn** | **16 43 31.9** | **-0.1** |
| **GLG1** | **Gilan-e-Gharb** | **2.81** | **320** | Pn | **Pn** | **16 42 59.3** | **+1.0** |
| **SNQR** | **Sonqor, Kerman** | **2.91** | **352** | Pn | **Pn** | **16 43 00.8** | **+1.1** |
| **HAGD** | **Aghdareh** | **2.98** | **17** | Pn | **Pn** | **16 43 01.6** | **+0.9** |
| **ILIN** | **Lien** | **3.09** | **343** | Pn | **Pn** | **16 43 02.0** | **-0.2** |
| **KLNJ** | **Kolanjah** | **3.14** | **107** | Pn | **Pn** | **16 43 06.6** | **+3.5** |
| **IKLH** | **Kolahrood** | **3.23** | **65** | Pn | **Pn** | **16 43 07.6** | **+3.3** |
| **QAMS** | **Qamsar** | **3.29** | **57** | Pn | **Pn** | **16 43 08.4** | **+3.4** |
| **IGAR** | **Gharneh** | **3.38** | **82** | Pn | **Pn** | **16 43 09.8** | **+3.6** |
| **BHD** | **Baghdad** | **3.39** | **293** | *e*Pn | **Pn** | **16 43 07.5** | **+1.4** |
| BHD | | | | *e*Sn | **Sn** | **16 43 47.5** | **+1.2** |
| **IRAM** | **Ramesheh** | **3.65** | **91** | Pn | **Pn** | **16 43 13.4** | **+3.4** |
| **IZEF** | **Zefreh** | **3.70** | **74** | Pn | **Pn** | **16 43 13.8** | **+3.2** |
| **IQOM** | **Qom** | **3.80** | **40** | Pn | **Pn** | **16 43 13.8** | **+1.9** |
| **QABG** | **Abgarm-Qazvin** | **3.93** | **18** | Pn | **Pn** | **16 43 15.2** | **+1.5** |
| **KRSH** | **Karshahi** | **3.94** | **59** | Pn | **Pn** | **16 43 17.0** | **+3.1** |
| **ISFB** | **Sefidab** | **4.21** | **55** | Pn | **Pn** | **16 43 19.9** | **+2.4** |
| **IVRN** | **Varamin** | **4.28** | **44** | Pn | **Pn** | **16 43 20.3** | **+1.9** |
| **DSBU** | **Dashti - Bushe** | **4.52** | **142** | Pn | **Pn** | **16 43 26.2** | **+4.4** |
| **IKRK** | **Kirkuk** | **4.63** | **319** | *e*Pn | **Pn** | **16 43 25.0** | **+1.8** |
| IKRK | | | | *e*Sn | **Sn** | **16 44 16.0** | **-1.1** |
| IKRK | | | | AML | AML | 16 44 35.8 | |
| | comp=E,78nm,0.6s | | | | | | |
| IKRK | | | | AML | AML | 16 44 36.3 | |
| | comp=N,73nm,0.4s | | | | | | |
| **IGZV** | **Ghazvin** | **4.74** | **21** | Pn | **Pn** | **16 43 26.6** | **+1.6** |
| **ISAD** | **Sadrabad** | **4.76** | **89** | Pn | **Pn** | **16 43 28.9** | **+3.7** |
| **IDMV** | **Damavand** | **4.87** | **41** | Pn | **Pn** | **16 43 28.4** | **+1.6** |
| **ANAR** | **Anarak** | **4.91** | **74** | Pn | **Pn** | **16 43 29.9** | **+2.7** |
| **ILAS** | **Lasjerd** | **5.30** | **49** | Pn | **Pn** | **16 43 34.1** | **+1.6** |
| **MZPU** | **Pul - Mazandar** | **5.31** | **32** | Pn | **Pn** | **16 43 34.4** | **+1.7** |
| **IPRN** | **Peran** | **5.53** | **38** | Pn | **Pn** | **16 43 38.2** | **+2.6** |
| **IGLO** | **Ghaloghah** | **6.56** | **45** | Pn | **Pn** | **16 43 52.2** | **+2.3** |
| **GRMI** | **Germi** | **6.82** | **359** | P

| | | | | | | |
|---|---|---|---|---|---|---|
| KOUNC | **Koumac, New Ca** | **5.05** | **216** | P | Pn | 16 44 10.0 -1.9 |
| YATNC | **Mamie plateau,** | **5.57** | **186** | P | Pn | 16 44 19.7 +0.7 |
| DZM | **Mont Dzumac** | **5.64** | **190** | P | Pn | 16 44 20.3 +0.3 |
| NOUC | **Port Laguerre** | **5.69** | **191** | P | Pn | 16 44 21.4 +0.7 |
| PINNC | **Pines Island,** | **6.09** | **180** | P | Pn | 16 44 26.9 +0.8 |

*IDC **26** 16:45:02.6±2.4,24˚.14N×141˚.78E, h72km±21km, mb3.6/8, mbtmp3.8/11, Error ellipse: s-maj=25.3km s-min=15.6km az=87.0*
*NEIC **26** 16:45:03.0±1.1,24˚.2N±0˚.1×141˚.8E±0˚.5, h67km±13km, mb4.2/9, Error ellipse: s-maj=61.4km s-min=15.4km az=84.0*
*JMA **26** 16:45:10.3±0.1,24˚.6N±0˚.3×140˚.8E±0˚.6, h104km, MV4.5/10, IOTO ISLANDS REGION*

**ISC 26 16:45:08.0±1.1,24˚.3N±0˚.1×141˚.5E±0˚.2, h100km, n35, σ2s02/23, mb4.1/13, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **2.36** | **15** | P | **Pn** | **16 45 47.9** | **+2.6** |
| JHH2 | | | | *e*S | **Sn** | **16 46 16.4** | **+2.5** |
| **CBIJ** | **Chichi jima** | **2.81** | **12** | *e*P | **Pn** | **16 45 53.3** | **+2.1** |
| CBIJ | | | | *e*S | **Sn** | **16 46 26.4** | **+1.9** |
| **JCJ** | **Chichijima** | **2.81** | **12** | Pn | Pn | 16 45 46.6 | -4.7 |
| **JCJ** | **Chichijima** | **2.81** | **12** | P | **Pn** | **16 45 48.4** | **-2.8** |
| | 44nm,0.3s,baz=262,slow=11,SNR=17 | | | | | | |
| JCJ | | | | S | **Sn** | **16 46 22.0** | **-2.6** |
| | 175nm,0.4s,baz=313,slow=23,SNR=10 | | | | | | |
| **JHJ2** | **Mitsune** | **8.87** | **351** | Pn | **Pn** | **16 47 11.2** | **-2.0** |
| **JHO** | **Hitachi** | **12.26** | **356** | *e*P | **Pn** | **16 47 57.3** | **-1.7** |
| **MJAR** | **Matsushiro Arr** | **12.49** | **348** | P | **Pn** | **16 48 01.6** | **-0.5** |
| | 0.2nm,0.3s,baz=160,slow=10,SNR=4.8 | | | | | | |
| **KSRS** | **Korea Array** | **17.49** | **322** | P | **P** | **16 49 07.1** | **+1.9** |
| | 0.4nm,0.6s,baz=142,slow=12,SNR=4.4 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.96** | **96** | T | T | 17 15 17.5 | |
| | baz=283 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.96** | **96** | T | T | 17 14 53.2 | |
| | baz=283 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.98** | **96** | T | T | 17 15 01.5 | |
| | baz=283 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **24.13** | **99** | T | T | 17 15 43.6 | |
| | baz=288,slow=75,SNR=5.3 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **24.14** | **99** | T | T | 17 15 35.5 | |
| | baz=288,slow=75,SNR=5.2 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **24.15** | **99** | T | T | 17 15 43.9 | |
| | baz=288,slow=75,SNR=5.8 | | | | | | |
| **WB0** | **Warramunga Arr** | **44.38** | **190** | P | P | 16 53 04.9 | -3.8 |
| WB0 | | | | IAmb | IAmb | 16 53 39.5 | |
| | comp=Z,8.4nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.55** | **189** | P | P | 16 53 06.4 | -3.6 |
| WR0 | | | | IAmb | IAmb | 16 53 34.5 | |
| | comp=Z,7.7nm,1.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.56** | **190** | P | P | 16 53 06.5 | -3.6 |
| WB2 | | | | IAmb | IAmb | 16 53 07.2 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.56** | **190** | P | P | 16 53 06.6 | -3.5 |
| **WRA** | **Warramunga Arr** | **44.56** | **190** | P | P | 16 53 06.3 | -3.9 |
| | comp=Z,2.8nm,0.5s,baz=10.0,slow=8.7,SNR=44 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 54 48.5** | **-3.1** |
| | comp=Z,0.6nm,0.7s,baz=2.2,slow=3.5,SNR=3.7 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.93** | **202** | P | P | 16 53 10.5 | -2.5 |
| **AS31** | **Alice Springs** | **48.28** | **189** | P | P | 16 53 33.8 | -5.4 |
| **ASAR** | **Alice Springs** | **48.29** | **189** | P | P | 16 53 34.7 | -4.5 |
| | comp=Z,0.5nm,0.6s,baz=14,slow=9.7,SNR=16 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **51.79** | **311** | P | **P** | **16 54 06.2** | **+0.6** |
| MK31 | | | | IAmb | IAmb | 16 54 14.9 | |
| | comp=Z,1.9nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.79** | **311** | P | **P** | **16 54 06.2** | **+0.6** |
| | comp=Z,0.8nm,0.4s,baz=88,slow=9.3,SNR=20 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **52.01** | **311** | P | **P** | **16 54 07.8** | **+0.7** |
| MAKZ | | | | IAmb | IAmb | 16 54 15.7 | |
| | comp=Z,3.1nm,1.2s | | | | | | |
| KURBB | **Kurchatov Arra** | **54.56** | **316** | P | **P** | **16 54 25.3** | **-0.4** |
| | comp=Z,0.7nm,0.5s,baz=95,slow=7.8,SNR=11 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **59.67** | **319** | P | **P** | **16 55 01.1** | **-0.6** |
| | comp=Z,1.1nm,0.5s,baz=98,slow=9.3,SNR=9.5 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **59.74** | **319** | P | **P** | **16 55 02.6** | **+0.4** |
| **KKAR** | **Karatay Array** | **60.23** | **307** | P | **P** | **16 55 05.5** | **-0.2** |
| **ILAR** | **Eielson Array** | **60.42** | **28** | P | **P** | **16 55 04.9** | **-1.7** |
| | comp=Z,0.6nm,0.8s,baz=245,slow=5.3,SNR=5.8 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **80.14** | **334** | P | **P** | **16 57 06.9** | **+0.1** |
| **FINES** | **FINESS Array B** | **80.14** | **334** | P | **P** | **16 57 04.9** | **-1.9** |
| | comp=Z,1.2nm,0.8s,baz=40,slow=3.2,SNR=6.8 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.71** | **51** | P | P | 16 57 18.6 | -2.6 |
| | comp=Z,0.5nm,0.8s,baz=256,slow=6.0,SNR=4.2 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **148.63** | **129** | PKPbc | **PKPdf** | **17 04 41.2** | **+1.4** |
| | comp=Z,1.5nm,0.6s,baz=247,slow=5.5,SNR=6.1 | | | | | | |
| **LPAZ** | **La Paz** | **151.12** | **80** | PKPbc | **PKPdf** | **17 04 49.0** | **+3.9** |
| | comp=Z,0.5nm,0.4s,baz=270,slow=0.4,SNR=2.9 | | | | | | |

**IDC 26 16:58:22.6±17.0, 20˚.73S×76˚.69E, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=560.8km s-min=40.7km az=50.0, South Indian Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** | **13.63** | **342** | T | T | 17 15 46.3 | |
| | baz=167 | | | | | | |
| **H08S1** | **Diego Garcia H** | **13.63** | **342** | T | T | 17 15 45.2 | |
| | baz=167 | | | | | | |
| **H08S3** | **Diego Garcia H** | **13.65** | **342** | T | T | 17 15 46.8 | |
| | baz=167,SNR=7.5 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **32.53** | **213** | T | T | 17 38 13.2 | |
| | baz=47,slow=75,SNR=4.2 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **32.53** | **213** | T | T | 17 38 12.9 | |
| | baz=47,slow=75,SNR=5.6 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **32.54** | **213** | T | T | 17 38 08.0 | |
| | baz=47,slow=75,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **52.76** | **104** | P | P | 17 07 39.4 | -0.4 |
| | 1.0nm,0.8s,baz=266,slow=7.1,SNR=24 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.80** | **100** | P | P | 17 07 47.8 | +0.3 |
| | 1.6nm,0.9s,baz=257,slow=9.2,SNR=16 | | | | | | |
| | 1.6nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.39** | **4** | P | P | 17 09 19.7 | 0.0 |
| | 0.5nm,0.7s,baz=201,slow=7.7,SNR=2.1 | | | | | | |
| | 0.5nm,0.7s | | | | | | |

*NEIC **26** 17:00:03.3±0.3,43˚.61N±0˚.09×105˚.44W±0˚.06, h0km±1km, ML2.5/8, Error ellipse: s-maj=15.4km s-min=7.1km az=166.0*
*IDC **26** 17:00:06.1±2.1,43˚.77N×105˚.55W, h0km, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=49.9km s-min=10.4km az=150.0*

**ISC 26 17:00:03.7±1.0, 43˚.64N±0˚.09×105˚.42W±0˚.07, h0km, n9, σ0s99/8, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RSSD** | **Black Hills** | **1.11** | **64** | Pg | **Pg** | **17 00 25.1** | **+0.1** |
| **PHWY** | **Pilot Hill** | **2.34** | **181** | Pn | **Pn** | **17 00 44.0** | **+0.3** |
| PHWY | | | | IAML | | 17 01 26.0 | |
| | 20nm,0.8s | | | | | | |
| PHWY | | | | IAML | | 17 01 57.9 | |
| | 13nm,2.7s | | | | | | |
| **N23A** | **Red Feather La** | **2.77** | **188** | Pn | **Pn** | **17 00 50.2** | **+0.5** |
| N23A | | | | IAML | | 17 01 33.9 | |
| | comp=N,31nm,0.9s | | | | | | |
| N23A | | | | IAML | | 17 01 38.5 | |
| | comp=E,22nm,0.8s | | | | | | |
| **PD31** | **Pinedale Array** | **3.15** | **255** | Pn | **Pn** | **17 00 55.6** | **+0.8** |
| **PDAR** | **Pinedale Array** | **3.15** | **255** | | **Pn** | **17 00 56.5** | **+1.7** |
| **PDAR** | **Pinedale Array** | **3.15** | **255** | Pn | **Pb** | **17 00 59.6** | **-1.0** |
| | comp=E,0.7nm,0.3s,baz=79,slow=17,SNR=9.3 | | | | | | |
| PDAR | | | | Lg | Lg | 17 01 42.6 | |
| | comp=E,1.1nm,0.3s,baz=72,slow=35,SNR=6.3 | | | | | | |
| | comp=E,1.0nm,0.4s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.84** | **278** | Pn | **Pn** | **17 01 04.4** | **+0.1** |
| **ULM** | **Lac du Bonnet** | **9.29** | **41** | Pn | **Pn** | **17 02 18.7** | **-0.1** |
| | comp=E,0.2nm,0.3s,baz=222,slow=12,SNR=1.5 | | | | | | |
| ULM | | | | Lg | Lg | 17 04 50.5 | |
| | comp=E,0.1nm,0.3s,baz=129,slow=22,SNR=2.6 | | | | | | |
| | comp=E,0.6nm,0.3s | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **9.37** | **304** | I | I | 17 56 05.1 | |
| | baz=117,slow=317,SNR=1.9 | | | | | | |

**IDC 26 17:03:01.5±7.8, 24˚.68S×179˚.63W, h0km, mb3.5/2, mbtmp3.5/2, Error ellipse: s-maj=331.2km s-min=61.8km az=150.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **42.25** | **261** | P | P | 17 10 56.5 | -0.3 |
| | 0.5nm,0.8s,baz=97,slow=8.0,SNR=11 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.70** | **267** | P | P | 17 11 00.5 | +0.1 |
| | 0.7nm,0.9s,baz=104,slow=7.8,SNR=2.4 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| AKASG | **Malin Array Be** | **145.81** | **327** | PKPbc | PKPdf | 17 22 41.5 | -0.3 |
| | 0.2nm,0.3s,baz=48,slow=1.4,SNR=5.3 | | | | | | |

**IDC 26 17:11:22.2±2.1, 13˚.22S×46˚.93E, h0km, mb3.9/2, mbtmp4.0/4, ML4.0/2, Error ellipse: s-maj=62.9km s-min=33.9km az=83.0, Northwest of Madagascar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPO** | **Ambohidratompo** | **5.32** | **177** | Pn | Pn | 17 12 43.1 | 0.0 |
| | 0.7nm,0.3s,baz=333,slow=12,SNR=17 | | | | | | |
| OPO | | | | Sn | Sn | 17 13 46.5 | +1.1 |
| | 1.5nm,0.3s,baz=86,slow=21,SNR=13 | | | | | | |
| | 12nm,0.3s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **15.37** | **321** | Pn | Pn | 17 15 00.9 | +0.1 |
| | 0.5nm,0.3s,baz=207,slow=23,SNR=6.7 | | | | | | |
| | 1.7nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **82.08** | **112** | P | P | 17 23 45.4 | +0.2 |
| | 0.7nm,0.6s,baz=261,slow=4.9,SNR=22 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **83.19** | **109** | P | P | 17 23 50.8 | -0.3 |
| | 0.8nm,0.8s,baz=261,slow=3.3,SNR=6.9 | | | | | | |
| | 0.8nm,0.8s | | | | | | |

**IDC 26 17:12:10.7±2.3, 10˚.51S×124˚.57E, h0km, mb3.6/1, mbtmp3.5/3, ML3.1/2, Error ellipse: s-maj=197.2km s-min=34.4km az=54.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.29** | **136** | Pn | Pn | 17 15 20.1 | -0.7 |
| | 0.1nm,0.3s,baz=312,slow=14,SNR=4.7 | | | | | | |
| WRA | | | | Sn | Sn | 17 17 39.6 | -10 |
| | 0.1nm,0.3s,baz=26,slow=25,SNR=2.4 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **15.82** | **147** | Pn | Pn | 17 15 55.8 | +0.7 |
| | 0.2nm,0.3s,baz=321,slow=12,SNR=21 | | | | | | |
| ASAR | | | | Sn | Sn | 17 18 43.6 | -7.7 |
| | 0.1nm,0.3s,baz=318,slow=22,SNR=5.8 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.39** | **330** | P | P | 17 23 14.3 | 0.0 |
| | 0.6nm,0.9s,baz=141,slow=7.3,SNR=2.6 | | | | | | |
| | 0.6nm,0.9s | | | | | | |

*NEIC **26** 17:31:01.5±1.4, 18˚.93N±0˚.08×64˚.48W±0˚.07, h24km±16km, ML2.6/21, Md3.4/4(RSPR), Error ellipse: s-maj=14.3km s-min=5.3km az=142.0*
*RSPR **26** 17:31:02.7, 19˚.18N×64˚.53W, h39km, σ34km, MD3.4/4*

**ISC 26 17:31:02.6±2.4, 19˚.1N±0˚.2×64˚.53W±0˚.05, h42km, n30, σ0s79/29, 5C-2D, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUMP** | **Col San Antoni** | **1.56** | **233** | *e*P | **Pn** | **17 31 27.5** | **-0.4** |
| **HUMP** | **Col San Antoni** | **1.56** | **233** | *e*S | **Sn** | **17 31 47.4** | **+0.5** |
| **HUMP** | **Col San Antoni** | **1.56** | **233** | | **Pn** | **17 31 27.5** | **-0.4** |
| HUMP | | | | | **Sn** | **17 31 47.4** | **+0.5** |
| **HUMP** | **Col San Antoni** | **1.56** | **233** | IAML | | 17 31 49.1 | |
| | comp=N,61nm,0.5s | | | | | | |
| HUMP | | | | IAML | | 17 31 49.3 | |
| | comp=E,80nm,0.3s | | | | | | |
| **GCPR** | **Guaynabo City** | **1.66** | **243** | Pn | **Pn** | **17 31 27.6** | **-1.6** |
| **PDPR** | **Patillas Dam,** | **1.76** | **233** | Pn | **Pn** | **17 31 31.4** | **+0.8** |
| **IGPR** | **InterUniversit** | **1.86** | **234** | *e*P | **Pn** | **17 31 32.6** | **+0.6** |
| **IGPR** | **InterUniversit** | **1.86** | **234** | | **Pn** | **17 31 32.6** | **+0.6** |
| **IGPR** | **InterUniversit** | **1.86** | **234** | IAML | | 17 32 03.9 | |
| | comp=E,84nm,0.3s | | | | | | |
| IGPR | | | | IAML | | 17 32 03.9 | |
| | comp=N,71nm,0.3s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **1.98** | **253** | *e*P | **Pn** | **17 31 34.2** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **1.98** | **253** | *e*S | **Sn** | **17 31 57.2** | **-0.1** |
| **EMPR** | **Esperanza - Ma** | **1.98** | **253** | | **Pn** | **17 31 34.2** | **+0.5** |
| EMPR | | | | | **Sn** | **17 31 57.2** | **-0.1** |
| **CELP** | **Cerrillos** | **2.18** | **243** | *e*P | **Pn** | **17 31 36.0** | **-0.5** |
| **CELP** | **Cerrillos** | **2.18** | **243** | *e*S | **Sn** | **17 32 01.7** | **-0.6** |
| **CELP** | **Cerrillos** | **2.18** | **243** | | **Pn** | **17 31 36.0** | **-0.5** |
| CELP | | | | | **Sn** | **17 32 01.7** | **-0.6** |
| **CELP** | **Cerrillos** | **2.18** | **243** | IAML | | 17 32 12.0 | |
| | comp=N,30nm,1.0s | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.22** | **243** | Pn | **Pn** | **17 31 35.0** | **-1.9** |
| OBIP | | | | IAML | | 17 32 05.9 | |
| | comp=E,47nm,0.5s | | | | | | |
| OBIP | | | | IAML | | 17 32 09.7 | |
| | comp=N,35nm,0.7s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.23** | **251** | *e*P | **Pn** | **17 31 37.4** | **+0.3** |
| **AOPR** | **Arecibo Observ** | **2.23** | **251** | *e*S | **Sn** | **17 32 04.8** | **+1.4** |
| **AOPR** | **Arecibo Observ** | **2.23** | **251** | | **Pn** | **17 31 37.4** | **+0.3** |
| AOPR | | | | | **Sn** | **17 32 04.8** | **+1.4** |
| **AOPR** | **Arecibo Observ** | **2.23** | **251** | *e*P | **Pn** | **17 31 36.2** | **-0.9** |
| **UUPR** | **Utuado, UPR, P** | **2.23** | **249** | | **Pn** | **17 31 37.0** | **-0.2** |
| **MLPR** | **Magueyes Islan** | **2.62** | **246** | *e*P | **Pn** | **17 31 42.1** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **2.62** | **246** | | **Pn** | **17 31 42.1** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **2.62** | **246** | IAML | | 17 32 16.6 | |
| | comp=N,31nm,2.5s | | | | | | |
| MLPR | | | | IAML | | 17 32 49.0 | |
| | comp=E,24nm,2.4s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **247** | *e*P | **Pn** | **17 31 42.6** | **-0.5** |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **247** | | **Pn** | **17 31 42.6** | **-0.5** |
| **CRPR** | **Cabo Rojo, PR** | **2.67** | **247** | IAML | | 17 32 31.3 | |
| | comp=N,38nm,2.5s | | | | | | |
| CRPR | | | | IAML | | 17 33 24.3 | |
| | comp=E,25nm,3.1s | | | | | | |
| **ANWB** | **Willy Bob** | **2.96** | **118** | *e*P | Pn | 17 32 01.4 | +14 |
| **ANBD** | **Bethesda, Anti** | **3.32** | **127** | *e*P | **Pn** | **17 31 52.2** | **+0.1** |
| ANBD | | | | *e*S | **Sn** | **17 32 30.1** | **-0.1** |

*NEIC **26** 17:35:11.2±1.6, 18˚.03S±0˚.06×178˚.4W±0˚.1, h587km±11km, mb4.3/30, Error ellipse: s-maj=20.1km s-min=7.9km az=84.0*
*IDC **26** 17:35:14.9±15.0, 17˚.43S×178˚.93W, h617km±210km, mb3.2/6, mbtmp4.2/6, Error ellipse: s-maj=97.4km s-min=61.3km az=146.0*

**ISC 26 17:35:12.3±0.7, 18˚.0S±0˚.1×178˚.5W±0˚.1, h600km, n41, σ0s96/40, mb4.2/22, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.29** | **275** | | **P** | **17 36 31.6** | **-1.7** |
| **DZM** | **Mont Dzumac** | **14.70** | **252** | P | **P** | **17 38 19.6** | **+1.8** |
| KOUNC | **Koumac, New Ca** | **16.43** | **258** | P | **P** | **17 38 35.0** | **+1.2** |
| **THZ** | **Tophouse** | **24.76** | **195** | P | **P** | **17 39 48.8** | **+0.5** |
| THZ | | | | IAmb | IAmb | 17 40 20.0 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **LTZ** | **Lake Taylor** | **25.88** | **196** | P | **P** | **17 39 58.7** | **+0.6** |
| LTZ | | | | IAmb | IAmb | 17 40 25.0 | |
| | comp=Z,9.4nm,1.0s | | | | | | |
| **INZ** | **Inchbonnie** | **26.05** | **197** | P | **P** | **17 39 58.1** | **-1.5** |
| **EIDS** | **Eidsvold** | **29.14** | **250** | P | **P** | **17 40 25.8** | **-1.0** |
| EIDS | | | | IAmb | IAmb | 17 41 03.7 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **29.79** | **240** | P | **P** | **17 40 32.4** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 17 40 43.3 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **33.33** | **261** | P | **P** | **17 41 01.8** | **-0.8** |
| | comp=Z,0.2nm,0.7s,baz=107,slow=8.7,SNR=6.9 | | | | | | |
| **CTAO** | **Charters Tower** | **33.33** | **261** | P | **P** | **17 41 01.7** | **-0.8** |
| CTAO | | | | IAmb | IAmb | 17 41 02.7 | |
| | comp=Z,9.8nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **33.55** | **233** | P | **P** | **17 41 03.7** | **-0.5** |
| **COEN** | **Coen** | **37.01** | **271** | P | **P** | **17 41 32.5** | **-0.5** |
| COEN | | | | IAmb | IAmb | 17 41 34.2 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **37.02** | **231** | P | **P** | **17 41 34.2** | **+1.5** |
| **STKA** | **Stephens Creek** | **38.48** | **241** | P | **P** | **17 41 45.5** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.48** | **241** | P | **P** | **17 41 45.7** | **+1.0** |
| | comp=Z,5.5nm,0.9s,baz=85,slow=7.3,SNR=8.4 | | | | | | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **BBOO** | **Buckleboo** | **43.26** | **241** | P | **P** | **17 42 22.5** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 17 42 36.9 | |
| | comp=Z,27nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.33** | **260** | P | **P** | **17 42 30.0** | **-0.9** |
| **WB0** | **Warramunga Arr** | **44.48** | **260** | P | **P** | **17 42 31.9** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 17 42 32.2 | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.51** | **260** | P | **P** | **17 42 31.4** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 17 42 32.6 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.52** | **260** | P | **P** | **17 42 31.4** | **-0.9** |
| **WRA** | **Warramunga Arr** | **44.52** | **260** | P | **P** | **17 42 31.4** | **-0.9** |
| | comp=Z,2.8nm,0.6s,baz=93,slow=7.3,SNR=85 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **44.66** | **254** | P | **P** | **17 42 33.5** | **0.0** |
| AS31 | | | | IAmb | IAmb | 17 42 34.1 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **44.67** | **254** | P | **P** | **17 42 33.2** | **-0.2** |
| **ASAR** | **Alice Springs** | **44.67** | **254** | P | **P** | **17 42 33.5** | **+0.1** |
| | comp=Z,15nm,0.6s,baz=87,slow=8.6,SNR=460 | | | | | | |
| | comp=Z,15nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **48.70** | **269** | P | **P** | **17 43 03.5** | **-0.3** |
| MTN | | | | IAmb | IAmb | 17 43 47.9 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **FORT** | **Forrest** | **49.87** | **245** | P | **P** | **17 43 12.0** | **-0.1** |
| FORT | | | | IAmb | IAmb | 17 43 48.4 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **50.38** | **264** | P | **P** | **17 43 15.9** | **-0.2** |
| KNRA | | | | IAmb | IAmb | 17 43 18.5 | |
| | comp=Z,9.6nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.91** | **261** | P | **P** | **17 43 34.6** | **+0.3** |
| **PSA00** | **Pilbara Seismi** | **57.79** | **256** | P | **P** | **17 44 07.4** | **-0.5** |
| **MBWA** | **Marble Bar** | **57.95** | **256** | P | **P** | **17 44 07.1** | **-1.9** |
| MBWA | | | | IAmb | IAmb | 17 44 24.5 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **MORW** | **Morawa** | **60.34** | **246** | P | **P** | **17 44 24.6** | **-0.2** |
| **GIRL** | **Giralia** | **62.77** | **253** | P | **P** | **17 44 41.9** | **+1.2** |
| **VA02** | **Isla de Pascua** | **63.73** | **112** | P | **P** | **17 44 44.7** | **-2.1** |
| **QSPA** | **South Pole Qui** | **72.02** | **180** | P | **P** | **17 45 37.5** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **79.58** | **44** | P | **P** | **17 46 19.2** | **+0.5** |
| | comp=Z,0.6nm,0.7s,baz=228,slow=8.5,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **CUT** | **Chulitna** | **83.23** | **13** | | pwP | 17 48 45.5 | +0.1 |
| **RND** | **Reindeer** | **84.42** | **13** | P | **P** | **17 46 42.2** | **-0.1** |
| **TXAR** | **Lajitas Array** | **86.14** | **58** | P | **P** | **17 46 52.7** | **+1.3** |
| | comp=Z,0.6nm,0.7s,baz=216,slow=6.4,SNR=7.7 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.51** | **43** | P | **P** | **17 46 57.7** | **0.0** |
| | comp=Z,0.4nm,0.6s,baz=235,slow=4.3,SNR=4.0 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **88.62** | **11** | P | **P** | **17 47 02.4** | **+0.4** |
| E24K | | | | IAmb | IAmb | 17 47 37.1 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **F25K** | **Christian Rive** | **88.73** | **12** | P | **P** | **17 47 03.3** | **+0.7** |
| F25K | | | | IAmb | IAmb | 17 47 36.6 | |
| | comp=Z,8.0nm,1.2s | | | | | | |

*IDC **26** 17:38:39.0±1.4, 34˚.57N×46˚.12E, h0km, mb3.7/10, mbtmp3.7/13, ML3.3/3, Error ellipse: s-maj=25.2km s-min=14.7km az=159.0*
*ISN **26** 17:38:39.7±0.7, 34˚.60N×46˚.22E, h5km±7km, ML3.8*
*TEH **26** 17:38:39.6, 34˚.61N×46˚.23E, h6km±32km, ML3.8*
*AFAD **26** 17:38:40.0±0.0, 34˚.49N×45˚.81E, h6km±3km, MW4.0*

**ISC 26 17:38:40.8±0.6, 34˚.54N±0˚.02×46˚.18E±0˚.03, h10km, n88, σ1s52/102, mb3.6/9, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.23** | **47** | Pg | **Pg** | **17 38 44.9** | **-0.9** |
| **IGHG** | **Ghaleghazi** | **0.39** | **123** | Pg | **Pg** | **17 38 49.3** | **+0.7** |
| **GLG1** | **Gilan-e-Gharb** | **0.48** | **208** | Pg | **Pb** | **17 38 51.3** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.49** | **266** | Pg | **Pb** | **17 38 50.9** | **-0.6** |
| **ILIN** | **Lien** | **0.75** | **60** | Pg | **Pg** | **17 38 53.8** | **-1.6** |
| ILIN | | | | Sg | **Sg** | **17 39 04.2** | **-0.9** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **110** | Pg | **Pg** | **17 38 55.2** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **0.92** | **178** | Pg | **Pn** | **17 38 59.6** | **-0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.24** | **75** | Pg | **Pn** | **17 39 03.4** | **-1.0** |
| **IBZA** | **Bozab** | **1.39** | **92** | Pg | **Pn** | **17 39 06.4** | **-0.2** |
| **IBDR** | **Badra** | **1.44** | **188** | *e*Pn | **Pg** | **17 39 09.0** | **+0.5** |
| IBDR | | | | *e*Sn | **Sg** | **17 39 30.0** | **+2.8** |
| IBDR | | | | AML | AML | 17 39 35.6 | |
| | comp=N,929nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 17 39 40.3 | |
| | comp=E,2μm,0.5s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.70** | **341** | Pg | **Pn** | **17 39 10.8** | **0.0** |
| **IKFM** | **Kalar-mosalman** | **1.72** | **126** | Pg | **Pb** | **17 39 13.3** | **+0.8** |
| **IKRK** | **Kirkuk** | **1.74** | **300** | *e*Pn | **Pb** | **17 39 12.5** | **-0.3** |
| IKRK | | | | *e*Sn | **Sg** | **17 39 36.0** | **-0.7** |
| IKRK | | | | AML | AML | 17 39 44.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 17 39 44.2 | |
| | comp=N,4μm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.82** | **114** | Pn | **Pb** | **17 39 14.5** | **+0.1** |
| **BHD** | **Baghdad** | **1.96** | **230** | *e*Pn | **Pb** | **17 39 16.0** | **-0.6** |
| BHD | | | | *e*Sn | **Sg** | **17 39 43.0** | **-0.9** |
| **HSAM** | **Samen** | **2.03** | **99** | Pn | **Pb** | **17 39 17.4** | **-0.7** |
| **MAHB** | **Mahabad** | **2.25** | **350** | Pn | **P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASF | | | | Lg | Lg | 17 42 55.1 | |
| | comp=N,1.1nm,0.3s,baz=37,slow=0.0,SNR=3.2 | | | | | | |
| | comp=N,1.5nm,0.4s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.10** | **263** | Pn | **Pn** | **17 40 51.6** | **-0.7** |
| | comp=N,0.7nm,0.3s,baz=76,slow=12,SNR=2.1 | | | | | | |
| MMAI | | | | Lg | Lg | 17 43 25.5 | |
| | comp=N,1.1nm,0.3s,baz=125,slow=29,SNR=2.6 | | | | | | |
| | comp=N,1.7nm,0.6s | | | | | | |
| **EIL** | **Elat** | **10.69** | **246** | Lg | Lg | 17 44 16.2 | |
| | comp=N,0.2nm,0.3s,baz=63,slow=15,SNR=1.9 | | | | | | |
| **BR104** | **Keskin Array S** | **11.26** | **301** | P | **Pn** | **17 41 26.2** | **+4.3** |
| | comp=N,2.4nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **11.26** | **301** | Pn | **Pn** | **17 41 24.7** | **+2.7** |
| | comp=N,0.1nm,0.3s,baz=116,slow=11,SNR=12 | | | | | | |
| | comp=N,1.5nm,0.8s | | | | | | |
| **BR105** | **Keskin Array S** | **11.28** | **301** | P | **Pn** | **17 41 26.4** | **+4.2** |
| | comp=N,2.5nm,0.9s | | | | | | |
| **BR106** | **Keskin Array S** | **11.28** | **301** | P | **Pn** | **17 41 26.0** | **+3.8** |
| | comp=N,2.3nm,1.0s | | | | | | |
| **SORM** | **Soroca** | **19.01** | **321** | P | **P** | **17 43 02.9** | **+0.3** |
| | comp=N,2.8nm,0.5s | | | | | | |
| **VOIR** | | **19.45** | **310** | P | **P** | **17 43 08.2** | **+0.6** |
| | comp=N,6.8nm,1.1s | | | | | | |
| **AK09** | **Malin Array Si** | **20.24** | **328** | P | **P** | **17 43 14.1** | **-1.9** |
| **AK10** | **Malin Array Si** | **20.24** | **328** | P | **P** | **17 43 14.4** | **-1.7** |
| **KMPD** | **K-Podol'skiy** | **20.27** | **320** | P | Pn | 17 43 15.2 | -3.1 |
| KMPD | | | | P | **P** | **17 43 15.0** | **-1.3** |
| **AKASG** | **Malin Array Be** | **20.33** | **328** | P | **P** | **17 43 15.4** | **-1.6** |
| | comp=N,1.5nm,0.6s,baz=137,slow=10,SNR=4.8 | | | | | | |
| | comp=N,1.5nm,0.6s | | | | | | |
| **AKBB** | **Malin Array Si** | **20.33** | **328** | P | **P** | **17 43 16.3** | **-0.7** |
| **KIEV** | **Kiev** | **20.33** | **328** | P | **P** | **17 43 16.5** | **-0.5** |
| **LUBAR** | **Lubar, Ukraine** | **20.46** | **324** | P | **P** | **17 43 19.3** | **+0.8** |
| **MI30** | **MI30,Zelenitsa** | **20.82** | **327** | P | **P** | **17 43 22.1** | **-0.3** |
| **KSV** | **Kosov** | **20.88** | **318** | P | **P** | **17 43 20.8** | **-2.3** |
| **MI28** | **Mi28,Pidlybu** | **21.19** | **326** | P | **P** | **17 43 26.8** | **+0.5** |
| **BVAR** | **Borovoye Array** | **25.23** | **36** | P | **P** | **17 44 06.4** | **-0.4** |
| | comp=N,0.6nm,0.5s,baz=223,slow=7.7,SNR=4.3 | | | | | | |
| | comp=N,0.6nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.44** | **46** | P | **P** | **17 44 35.7** | **+0.1** |
| | comp=N,0.7nm,0.2s,baz=241,slow=25,SNR=1.2 | | | | | | |
| | comp=N,0.7nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.74** | **55** | P | **P** | **17 44 47.3** | **0.0** |
| | comp=N,0.6nm,0.7s,baz=253,slow=7.5,SNR=5.2 | | | | | | |
| | comp=N,0.6nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **29.83** | **341** | P | **P** | **17 44 47.4** | **-0.5** |
| | comp=N,1.3nm,0.8s,baz=144,slow=10,SNR=1.3 | | | | | | |
| | comp=N,1.3nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **33.16** | **331** | P | **P** | **17 45 15.9** | **-1.3** |
| | comp=N,1.3nm,0.6s,baz=116,slow=14,SNR=5.8 | | | | | | |
| | comp=N,1.3nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.24** | **42** | P | **P** | **17 45 17.5** | **-0.5** |
| | comp=N,0.4nm,0.5s,baz=264,slow=8.4,SNR=1.8 | | | | | | |
| | comp=N,0.4nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.60** | **317** | P | **P** | **17 46 11.7** | **-0.5** |
| | comp=N,1.5nm,0.5s,baz=103,slow=9.2,SNR=9.0 | | | | | | |
| | comp=N,1.5nm,0.5s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.90** | **293** | P | **P** | **17 46 14.0** | **-1.0** |
| | comp=N,0.5nm,0.8s,baz=65,slow=10.0,SNR=3.4 | | | | | | |
| | comp=N,0.5nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.47** | **253** | P | **P** | **17 46 59.7** | **-0.8** |
| | comp=N,0.4nm,0.9s,baz=46,slow=7.4,SNR=1.9 | | | | | | |
| | comp=N,0.4nm,0.9s | | | | | | |

*DSN **26** 17:40:08.1±0.2,27°.78N×55°.94E,h36$^{km}$±0.37$^{km}$,ML3.0/6,*
*Error ellipse: s-maj=16.4km s-min=3.5km az=263.0*
*TEH **26** 17:40:10.0,27°.32N×56°.47E,h8$^{km}$,37$^{km}$,ML3.2*
**ISC 26 17:40:09.0**±1.0,**27°.60N**±0°.04×**56°.42E**±0°.05,**h18**$^{km}$,**n17,**
**σ1°14/19,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBND** | **Bandar-abas** | **0.18** | **144** | Pg | **Pg** | **17 40 13.4** | **-0.2** |
| **GENO** | **Geno** | **0.29** | **229** | Pg | **Pb** | **17 40 15.5** | **-0.3** |
| **KHNJ** | **Kahnooj** | **1.19** | **73** | Pg | **Pg** | **17 40 34.0** | **+1.9** |
| **SHME** | **Shamm** | **1.56** | **189** | P | **Pn** | **17 40 35.1** | **-0.8** |
| SHME | | | | S | **Sn** | **17 40 55.3** | **-0.3** |
| **BANOM** | **Banah** | **1.67** | **184** | P | **Pn** | **17 40 36.7** | **-0.6** |
| **LAR1** | **LAR** | **1.82** | **273** | Pn | **Pg** | **17 40 45.2** | **+1.3** |
| **NGRK** | **Negar Kerman** | **2.06** | **8** | Pn | **Pg** | **17 40 50.9** | **+2.2** |
| **JASK** | **Jask - Hormozg** | **2.15** | **143** | Pn | **Pn** | **17 40 44.2** | **+0.2** |
| **MSFE** | **Esma-Masafi** | **2.24** | **186** | P | **Pn** | **17 40 45.6** | **+0.4** |
| MSFE | | | | S | **Sb** | **17 41 15.8** | **-0.6** |
| **KBAM** | **BAM** | **2.36** | **49** | Pn | **Pg** | **17 40 54.1** | **-0.2** |
| **CHMN** | **Cheshme madani** | **2.46** | **23** | Pn | **Pg** | **17 40 55.8** | **-0.5** |
| **UOSS** | **Minazif** | **2.65** | **184** | P | **Pn** | **17 40 51.1** | **+0.3** |
| **HATD** | **Hatta, Dubai** | **2.77** | **185** | P | **Pn** | **17 40 52.3** | **-0.2** |
| **ASHO** | **Ashiyiah** | **2.92** | **186** | P | **Pn** | **17 40 55.0** | **+0.4** |
| **SOHO** | **SOHO** | **3.45** | **178** | P | **Pn** | **17 41 03.4** | **+1.5** |
| **IMEH** | **Mehriz** | **4.10** | **338** | Pn | **Pb** | **17 41 18.9** | **-1.9** |
| **WBK** | **Wadi Bani Khal** | **5.47** | **154** | Pn | **Pn** | **17 41 31.2** | **+1.5** |

*TEH **26** 17:50:02.6,34°.62N×46°.23E,h8$^{km}$±1.46$^{km}$,ML2.9*
*ISN **26** 17:50:02.6±0.9,34°.62N×46°.22E,h10$^{km}$±10$^{km}$,ML3.1*
**ISC 26 17:50:02.6**±1.3,**34°.63N**±0°.04×**46°.22E**±0°.03,**h3**$^{km}$±13$^{km}$,
**n15,σ0°73/19,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.15** | **64** | Pg | **Pg** | **17 50 06.2** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **0.42** | **136** | Pg | **Pg** | **17 50 10.6** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.54** | **257** | Pg | **Pg** | **17 50 13.3** | **+0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **206** | Pg | **Pg** | **17 50 13.7** | **0.0** |
| **ILIN** | **Lien** | **0.68** | **65** | Pg | **Pg** | **17 50 15.3** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **181** | Pg | **Pg** | **17 50 21.5** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.18** | **79** | Pg | **Pn** | **17 50 25.7** | **-0.5** |
| **IBZA** | **Bozab** | **1.36** | **96** | Pg | **Pg** | **17 50 28.6** | **-0.1** |
| **IBDR** | **Badra** | **1.54** | **189** | *e*Pn | **Pb** | **17 50 31.0** | **-0.6** |
| IBDR | | | | *e*Sn | **Sg** | **17 50 52.5** | **+0.5** |
| IBDR | | | | AML | AML | 17 50 58.3 | |
| | comp=N,275nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 17 51 06.7 | |
| | comp=E,312nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.72** | **297** | *e*Pn | **Pb** | **17 50 34.5** | **-0.3** |
| IKRK | | | | *e*Sn | **Sg** | **17 50 58.0** | **+0.1** |
| IKRK | | | | AML | AML | 17 51 04.8 | |
| | comp=N,284nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 17 51 05.4 | |
| | comp=E,299nm,0.4s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.75** | **129** | Pg | **Pg** | **17 50 35.6** | **-0.4** |
| **IDOB** | **Doab** | **1.83** | **117** | Pn | **Pb** | **17 50 36.7** | **0.0** |
| **HSAM** | **Samen** | **2.01** | **101** | Pn | **Pb** | **17 50 39.6** | **-0.3** |
| **BHD** | **Baghdad** | **2.05** | **229** | *e*Pn | **Pb** | **17 50 39.0** | **-1.3** |
| BHD | | | | *e*Sn | **Sb** | **17 51 05.0** | **-1.1** |
| **RAFI** | **Al-Rafai** | **2.90** | **182** | *e*Pn | **Pn** | **17 51 05.0** | **+1.4** |
| RAFI | | | | *e*Sn | **Sn** | **17 51 26.0** | **+1.0** |

*NEIC **26** 17:57:50.7±2.1,40°.33N±0°.04×124°.40W±0°.08,*
*h28$^{km}$±10$^{km}$, Error ellipse: s-maj=9.4km s-min=4.4km*
*az=70.0*
**NCEDC 26 17:57:49.1**±2.2,**40°.29N**±0°.03×**124°.58W**±0°.06,**h18**$^{km}$±6$^{km}$,
**ML3.0**/21,**ML2.8**/56(NEIC),**Error ellipse: s-maj=6.7km**
**s-min=4.7km az=83.0,Near coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KCTM** | **Capetown** | **0.26** | **45** | | Pb | 17 57 55.7 | +0.4 |
| KCTM | | | | | Sb | 17 58 00.8 | +1.4 |
| **KSMM** | **Slide Mountain** | **0.33** | **109** | | Pb | 17 57 56.4 | -0.1 |
| **KMPM** | **Mount Pierce** | **0.37** | **70** | Pg | Pg | 17 57 57.1 | +0.1 |
| **KMPM** | **Mount Pierce** | **0.37** | **70** | | Sb | 17 58 03.0 | +0.2 |
| **FER** | **Ferndale** | **0.38** | **40** | | Pb | 17 57 57.3 | +0.1 |
| **KCRM** | **Chalk Rock** | **0.60** | **77** | | Pg | 17 58 00.8 | -0.1 |
| **KMRM** | **Mail Ridge** | **0.67** | **96** | | Pb | 17 58 02.1 | -0.2 |
| **JCC** | **Jacoby Creek,** | **0.67** | **38** | | Pb | 17 58 01.0 | -1.2 |
| JCC | | | | IAML | | 17 58 10.3 | |
| | comp=N,291nm,0.9s | | | | | | |
| **KHMM** | **Horse Mountain** | **0.87** | **48** | | Pb | 17 58 04.5 | -1.3 |
| **KRPM** | **Rodgers** | **0.96** | **26** | | Pb | 17 58 05.5 | -1.8 |
| KRPM | | | | IAML | | 17 58 17.8 | |
| | comp=N,253nm,0.8s | | | | | | |
| KRPM | | | | IAML | | 17 58 32.0 | |
| | comp=E,406nm,0.9s | | | | | | |
| **KIPM** | **Iron Peak** | **0.97** | **119** | | Pb | 17 58 06.1 | -1.3 |
| **KFPM** | **Farley Peak** | **1.10** | **126** | | Pb | 17 58 07.9 | -1.8 |
| **KHBM** | **Hayfork Bally** | **1.10** | **70** | | Pb | 17 58 07.8 | -1.9 |
| **KBNM** | **Bluenose Ridge** | **1.14** | **110** | | Pn | 17 58 08.7 | -1.5 |
| **GTC** | **Three Chop Rid** | **1.19** | **138** | | Pn | 17 58 09.0 | -1.8 |
| **DCMP** | **DeCamp, Califo** | **1.26** | **130** | | Pn | 17 58 09.9 | -1.9 |
| **LBPM** | **Beegum Peak** | **1.30** | **88** | | Pn | 17 58 11.1 | -1.4 |
| **KOMM** | **Orleans Mounta** | **1.31** | **41** | | Pn | 17 58 10.5 | -2.0 |
| **KRMB** | **Red Mountain** | **1.33** | **22** | | Pn | 17 58 10.7 | -2.2 |
| KRMB | | | | IAML | | 17 58 26.7 | |
| | comp=E,176nm,0.2s | | | | | | |
| KRMB | | | | IAML | | 17 58 26.9 | |
| | comp=N,136nm,0.4s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **1.38** | **94** | | Pn | 17 58 12.3 | -1.2 |
| O02D | | | | IAML | | 17 58 44.8 | |
| | comp=N,132nm,1.0s | | | | | | |
| O02D | | | | IAML | | 17 58 45.7 | |
| | comp=E,103nm,0.8s | | | | | | |
| **GWRM** | **Wonder Ranch** | **1.47** | **137** | | Pn | 17 58 12.8 | -1.8 |
| **LGPM** | **Granite Peak** | **1.47** | **64** | | Pn | 17 58 13.0 | -1.8 |
| **GROM** | **Round Mountain** | **1.51** | **104** | | Pn | 17 58 13.9 | -1.4 |
| **GVV** | **Valley View** | **1.55** | **109** | | Pn | 17 58 14.3 | -1.6 |
| **N02D** | **Trinity Center** | **1.58** | **64** | | Pn | 17 58 14.6 | -1.7 |
| **KSXB** | **Camp Six Broad** | **1.63** | **19** | | Pn | 17 58 14.8 | -2.2 |
| KSXB | | | | IAML | | 17 58 34.7 | |
| | comp=N,116nm,0.3s | | | | | | |
| **LBKM** | **Bonanza King** | **1.66** | **61** | | Pn | 17 58 15.7 | -1.7 |
| **GGUM** | **Gualala** | **1.66** | **149** | | Pn | 17 58 15.3 | -2.0 |
| **M02C** | **Callahan** | **1.71** | **49** | | Pn | 17 58 16.3 | -1.8 |
| **GSNM** | **Snow Mountain** | **1.72** | **141** | | Pn | 17 58 16.5 | -1.8 |
| **HOPS** | **Hopland Field** | **1.74** | **138** | Pn | Pn | 17 58 16.8 | -1.7 |
| **GCK** | **Clark Valley** | **1.81** | **114** | | Pn | 17 58 18.4 | -0.9 |
| **LTCM** | **Tuscan Springs** | **1.88** | **92** | | Pn | 17 58 19.2 | -1.1 |
| **GPMM** | **Pine Mountain** | **1.92** | **138** | | Pn | 17 58 19.4 | -1.4 |
| **KBO** | **Bosley Butte** | **1.94** | **8** | Pn | Pn | 17 58 18.7 | -2.5 |
| **L02F** | **Cave Junction** | **1.98** | **22** | | Pn | 17 58 20.0 | -1.7 |
| L02F | | | | IAML | | 17 58 44.4 | |
| | comp=E,92nm,0.4s | | | | | | |
| L02F | | | | IAML | | 17 58 45.2 | |
| | comp=N,90nm,0.7s | | | | | | |
| **LAMM** | **Antelope Mount** | **1.98** | **48** | | Pn | 17 58 20.4 | -1.5 |
| **GHCM** | **House Creek** | **2.00** | **147** | | Pn | 17 58 20.4 | -1.6 |
| **LSHM** | **Sage Hen Hill** | **2.00** | **75** | | Pn | 17 58 21.1 | -1.0 |
| **GFC** | **Funks Creek** | **2.01** | **118** | | Pn | 17 58 21.1 | -1.0 |
| **YBH** | **Yreka Blue Hor** | **2.02** | **44** | | Pn | 17 58 20.7 | -1.6 |
| YBH | | | | IAML | | 17 58 46.9 | |
| | comp=E,51nm,0.5s | | | | | | |
| **LGBM** | **Gray Butte** | **2.10** | **59** | | Pn | 17 58 23.0 | -0.6 |
| **M03C** | **McCloud** | **2.11** | **61** | | Pn | 17 58 22.8 | -0.8 |
| **O03E** | **Paynes Creek** | **2.12** | **89** | | Pn | 17 58 22.3 | -1.5 |
| **LDBM** | **Digger Butte** | **2.14** | **85** | | Pn | 17 58 22.4 | -1.7 |
| **LMPM** | **Military Pass** | **2.19** | **56** | | Pn | 17 58 24.6 | -0.2 |
| **NMTM** | **Middletown** | **2.22** | **131** | | Pn | 17 58 24.4 | -0.6 |
| **LHEM** | **Herd Peak** | **2.23** | **52** | | Pn | 17 58 24.7 | -0.7 |
| **NHSM** | **Mount Saint He** | **2.23** | **136** | | Pn | 17 58 23.9 | -1.4 |
| **B040** | **Montague** | **2.24** | **46** | | Pn | 17 58 24.4 | -0.9 |
| **LBFM** | **Black Fox Moun** | **2.30** | **62** | | Pn | 17 58 25.8 | -0.5 |
| **OSUM** | **Sutter Buttes** | **2.34** | **115** | | Pn | 17 58 24.6 | -2.0 |
| **LCMM** | **Colby Mountain** | **2.35** | **93** | | Pn | 17 58 25.9 | -1.1 |
| **OGOM** | **Van Goodin Ran** | **2.37** | **105** | | Pn | 17 58 25.5 | -1.5 |
| **LRDM** | **Redding Peak** | **2.39** | **85** | | Pn | 17 58 26.7 | -0.7 |
| LRDM | | | | IAML | | 17 59 00.5 | |
| | comp=N,51nm,0.7s | | | | | | |
| LRDM | | | | IAML | | 17 59 15.8 | |
| | comp=E,56nm,1.1s | | | | | | |
| **SUTB** | **Sutter Butte** | **2.40** | **115** | | Pn | 17 58 25.3 | -2.2 |
| **HATC** | **Hat Creek Radi** | **2.43** | **77** | | Pn | 17 58 27.5 | -0.5 |
| HATC | | | | IAML | | 17 59 17.1 | |
| | comp=N,66nm,1.5s | | | | | | |
| HATC | | | | IAML | | 17 59 24.7 | |
| | comp=E,52nm,1.6s | | | | | | |
| **LGMM** | **Garner Mountai** | **2.46** | **57** | | Pn | 17 58 27.7 | -0.7 |
| **OSTM** | **Stimpson Lane** | **2.48** | **111** | | Pn | 17 58 26.3 | -2.1 |
| **ORV** | **Oroville** | **2.48** | **106** | Pn | Pn | 17 58 27.6 | -1.0 |
| **LTIM** | **Timbered Crate** | **2.51** | **68** | | Pn | 17 58 28.1 | -1.0 |
| **MCCM** | **Marconi Confer** | **2.52** | **148** | Pn | Pn | 17 58 27.4 | -1.6 |
| MCCM | | | | IAML | | 17 58 59.7 | |
| | comp=E,42nm,1.2s | | | | | | |
| MCCM | | | | IAML | | 17 59 27.6 | |
| | comp=N,36nm,1.9s | | | | | | |
| **LBCM** | **Butte Creek Ri** | **2.52** | **76** | | Pn | 17 58 28.4 | -0.9 |
| **LMHM** | **Little Mount H** | **2.56** | **59** | | Pn | 17 58 28.9 | -1.0 |
| **NPRM** | **Point Reyes** | **2.59** | **152** | | Pn | 17 58 28.8 | -1.3 |
| **HUMO** | **Hull Mountain** | **2.62** | **27** | | Pn | 17 58 29.3 | -1.2 |
| **KPK** | **Kanaka Peak** | **2.62** | **105** | | Pn | 17 58 29.5 | -1.1 |
| **LASM** | **Arra Sink** | **2.62** | **59** | | Pn | 17 58 29.6 | -1.1 |
| **FARB** | **Farallon Islan** | **2.87** | **154** | | Pn | 17 58 32.7 | -1.2 |
| **J01E** | **Myrtle Point** | **2.91** | **9** | Pn | Pn | 17 58 34.4 | -0.1 |
| J01E | | | | IAML | | 17 59 06.5 | |
| | comp=N,32nm,0.3s | | | | | | |
| J01E | | | | IAML | | 17 59 08.3 | |
| | comp=E,35nm,1.4s | | | | | | |
| **DBO** | **Dodson Butte** | **3.00** | **19** | Pn | Pn | 17 58 35.2 | -0.6 |
| DBO | | | | IAML | | 17 59 17.1 | |
| | comp=N,22nm,3.3s | | | | | | |
| DBO | | | | IAML | | 18 00 05.2 | |
| | comp=E,22nm,3.4s | | | | | | |
| **AFDM** | **Forest Hills D** | **3.09** | **115** | | Pn | 17 58 36.4 | -0.7 |
| **MPK** | **Martis Peak** | **3.64** | **104** | Pn | Pn | 17 58 45.9 | +1.1 |
| **EMB** | **Emerald Bay** | **3.70** | **109** | Pn | Pn | 17 58 46.5 | +1.0 |
| EMB | | | | IAML | | 17 59 35.6 | |
| | comp=E,21nm,0.9s | | | | | | |
| **I04A** | **Tendick Farm,** | **3.85** | **24** | Pn | Pn | 17 58 47.7 | +0.2 |
| I04A | | | | IAML | | 17 59 32.4 | |
| | comp=E,14nm,0.2s | | | | | | |
| I04A | | | | IAML | | 18 01 08.7 | |
| | comp=N,12nm,3.6s | | | | | | |
| **J05D** | **Fort Rock, OR** | **3.90** | **39** | | Pn | 17 58 48.3 | +0.1 |
| J05D | | | | IAML | | 17 59 44.2 | |
| | comp=N,15nm,3.8s | | | | | | |
| J05D | | | | IAML | | 18 00 37.7 | |
| | comp=E,13nm,3.3s | | | | | | |
| **CMB** | **Columbia Colle** | **3.96** | **123** | Pn | Pn | 17 58 49.4 | +0.4 |
| **PNTR** | **Pine Nut** | **4.03** | **106** | | Pn | 17 58 50.9 | +0.8 |
| PNTR | | | | IAML | | 17 59 51.2 | |
| | comp=E,12nm,2.0s | | | | | | |
| PNTR | | | | IAML | | 18 00 14.4 | |
| | comp=N,12nm,1.4s | | | | | | |
| **PAHR** | **Pah Rah Range** | **4.03** | **97** | | Pn | 17 58 49.0 | -1.1 |
| **SAO** | **San Andreas Ge** | **4.29** | **144** | Pn | Pn | 17 58 51.3 | -2.2 |
| **H04A** | **Detroit Lake** | **4.73** | **21** | Pn | Pn | 17 58 59.5 | 0.0 |
| **PMPB** | **Monarch Peak** | **5.04** | **143** | Pn | Pn | 17 59 03.2 | -0.7 |
| **KVN** | **Kaiserville** | **5.15** | **102** | Pn | Pn | 17 59 04.8 | -0.7 |
| **ISA** | **Isabella, Lake** | **6.68** | **132** | Pn | Pn | 17 59 27.5 | +1.1 |

*ISN **26** 17:58:05.2±0.7,34°.67N×46°.27E,h7$^{km}$±8$^{km}$,ML3.5*
*TEH **26** 17:58:06.1,34°.62N×46°.31E,h7$^{km}$±44$^{km}$,ML3.6*
**ISC 26 17:58:06.6**±1.2,**34°.63N**±0°.03×**46°.29E**±0°.03,**h2**$^{km}$±11$^{km}$,
**n37,σ0°93/43,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.10** | **50** | Pg | **Pg** | **17 58 08.7** | **0.0** |
| IDHR | | | | Sg | **Sg** | **17 58 11.1** | **+1.1** |
| **IGHG** | **Ghaleghazi** | **0.38** | **143** | Pg | **Pg** | **17 58 14.0** | **+0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.59** | **258** | Pg | **Pg** | **17 58 18.1** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **211** | Pg | **Pg** | **17 58 18.2** | **0.0** |
| **ILIN** | **Lien** | **0.62** | **63** | Pg | **Pg** | **17 58 17.9** | **-0.6** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **120** | Pg | **Pg** | **17 58 19.8** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **184** | Pg | **Pg** | **17 58 25.7** | **-0.2** |
| ILBA | | | | Sg | **Sg** | **17 58 39.5** | **+0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.12** | **78** | Pg | **Pg** | **17 58 27.4** | **-0.7** |
| **IBZA** | **Bozab** | **1.31** | **97** | Pg | **Pn** | **17 58 30.9** | **-1.2** |
| **IBDR** | **Badra** | **1.55** | **191** | *e*Pn | **Pb** | **17 58 35.5** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **17 58 57.0** | **+0.7** |
| IBDR | | | | AML | AML | 17 59 03.8 | |
| | comp=E,939nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 17 59 13.4 | |
| | comp=N,678nm,0.8s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.65** | **337** | Pg | **Pn** | **17 58 37.1** | **+0.4** |
| **IKFM** | **Kafar-mosalman** | **1.70** | **130** | Pg | **Pb** | **17 58 38.0** | **-0.5** |
| **IKRK** | **Kirkuk** | **1.77** | **296** | *e*Pn | **Pn** | **17 58 37.5** | **-0.8** |
| IKRK | | | | *e*Sn | **Sn** | **17 59 01.5** | **+0.1** |
| **IDOB** | **Doab** | **1.78** | **118** | Pg | **Pb** | **17 58 39.2** | **-0.7** |
| **HSAM** | **Samen** | **1.96** | **102** | Pn | **Pb** | **17 58 41.8** | **-1.3** |
| **BHD** | **Baghdad** | **2.09** | **230** | *e*Pn | **Pn** | **17 58 42.5** | **-0.1** |
| BHD | | | | *e*Sn | **Sb** | **17 59 10.0** | **-1.6** |
| **MAHB** | **Mahabad** | **2.18** | **348** | Pn | **Pb** | **17 58 45.5** | **-1.3** |
| **QABG** | **Abgarm-Qazvin** | **2.90** | **67** | Pn | **Pn** | **17 58 54.6** | **+0.6** |
| **RAFI** | **Al-Rafai** | **2.91** | **183** | *e*Pn | **Pn** | **17 58 54.5** | **+0.7** |
| RAFI | | | | *e*Sn | **Sn** | **17 59 30.5** | **+1.2** |
| **IAZR** | **Azarshahr** | **3.05** | **355** | Pn | **Pn** | **17 58 57.5** | **+1.4** |
| **ISRB** | **Sarab** | **3.37** | **19** | Pn | **Pn** | **17 59 01.9** | **+1.4** |
| **ISHB** | **Shabestar** | **3.68** | **352** | Pn | **Pn** | **17 59 05.9** | **+1.2** |
| **IHRS** | **Heris** | **3.73** | **9** | Pn | **Pn** | **17 59 06.8** | **+1.5** |
| **IQOM** | **Qom** | **3.94** | **86** | Pn | **Pn** | **17 59 08.2** | **-0.1** |
| **IPIR** | **Pirpir** | **4.30** | **116** | Pn | **Pn** | **17 59 13.4** | **+0.1** |
| **QAMS** | **Qamsar** | **4.33** | **101** | Pn | **Pn** | **17 59 14.7** | **+1.1** |
| **GRMI** | **Germi** | **4.36** | **17** | Pn | **Pn** | **17 59 15.2** | **+1.2** |
| **JHBN** | **Jahan bin** | **4.37** | **122** | Pn | **Pn** | **17 59 15.2** | **+0.9** |
| **IVRN** | **Varamin** | **4.49** | **84** | Pn | **Pn** | **17 59 16.8** | **+1.1** |
| **ZNGN** | **Zangian** | **4.57** | **122** | Pn | **Pn** | **17 59 18.0** | **+1.0** |
| **IDMV** | **Damavand** | **4.80** | **77** | Pn | **Pn** | **17 59 20.8** | **+0.6** |
| **KRSH** | **Karshahi** | **4.88** | **96** | Pn | **Pn** | **17 59 22.3** | **+1.1** |
| **ISFB** | **Sefidab** | **4.92** | **92** | Pn | **Pn** | **17 59 21.6** | **0.0** |
| **IGAR** | **Gharneh** | **5.29** | **113** | Pn | **Pn** | **17 59 27.9** | **+1.0** |
| **IZEF** | **Zefreh** | **5.32** | **107** | Pn | **Pn** | **17 59 28.3** | **+1.1** |
| **IFIR** | **Firoozkooh** | **5.39** | **77** | Pn | **Pn** | **17 59 29.2** | **+1.0** |
| **IRAM** | **Ramesheh** | **5.83** | **117** | Pn | **Pn** | **17 59 35.1** | **+0.8** |

*SDD **26** 18:18:19.5±1.9, 18°.87N×73°.34W,h17$^{km}$±78$^{km}$,MD3.5,*
*ML3.0,MW3.2*
*OSPL **26** 18:18:20.1±1.9, 18°.76N×73°.37W,h0$^{km}$±8$^{km}$,ML2.7*
*SSNC **26** 18:18:22.8±1.9, 18°.92N×73°.28W,h5$^{km}$±21$^{km}$,MD3.2*
**ISC 26 18:18:18.2**±1.3,**18°.89N**±0°.06×**73°.30W**±0°.03,**h5**$^{km}$±11$^{km}$,
**n21,σ1°39/39,9C-6D,Haiti region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAPH** | **Port-au-Prince** | **1.02** | **111** | ↑*e*Pg | **Pg** | **18 18 37.3** | **-0.5** |
| PAPH | | | | ↓*e*Sg | **Sg** | **18 18 52.0** | **+1.0** |
| PAPH | | | | IAML | | 18 18 53.8 | |
| | comp=N,757nm,0.2s | | | | | | |
| PAPH | | | | IAML | | 18 18 55.4 | |
| | comp=E,762nm,0.1s | | | | | | |
| **PAPH** | **Port-au-Prince** | **1.02** | **111** | *i* P | **Pg** | **18 18 37.7** | **-0.1** |
| PAPH | | | | *e*S | **Sg** | **18 18 51.9** | **+1.0** |
| PAPH | | | | IAML | | 18 18 53.0 | |
| | comp=Z,168nm,0.1s | | | | | | |
| **JIDR** | **Jimani** | **1.43** | **106** | ↑*e*Pg | **Pn** | **18 18 44.8** | **-0.1** |
| JIDR | | | | ↑*e*Sg | **Sn** | **18 19 03.8** | **-0.1** |
| JIDR | | | | IAML | | 18 19 06.4 | |
| | comp=E,148nm,0.3s | | | | | | |
| JIDR | | | | IAML | | 18 19 07.0 | |
| | comp=N,384nm,1.9s | | | | | | |
| JIDR | | | | IAML | | 18 19 08.7 | |
| | comp=N,108nm,0.3s | | | | | | |
| **MASC** | **Masc** | **1.55** | **326** | *e*P | **Pb** | **18 18 47.5** | **+0.1** |
| MASC | | | | *e*S | **Sg** | **18 19 07.7** | **-0.4** |
| **MASC** | **Masc** | **1.55** | **326** | *i* P | **Pb** | **18 18 47.5** | **+0.1** |
| MASC | | | | *e*S | **Sg** | **18 19 08.0** | **0.0** |
| MASC | | | | IAML | | 18 19 11.7 | |
| | comp=Z,23nm,0.5s | | | | | | |
| **REDR** | **Restauracion** | **1.82** | **81** | ↑*e*Pg | **Pn** | **18 18 47.7** | **-2.5** |
| REDR | | | | ↓*e*Sg | **Sn** | **18 19 08.5** | **-5.1** |
| REDR | | | | IAML | | 18 19 10.2 | |
| | comp=N,309nm,0.2s | | | | | | |
| REDR | | | | IAML | | 18 19 10.3 | |
| | comp=E,500nm,0.2s | | | | | | |
| **MCDR** | **Montecristi** | **1.84** | **57** | ↑*e*Pg | **Pn** | **18 18 51.2** | **+0.8** |
| MCDR | | | | ↑*e*Sg | **Sn** | **18 19 15.1** | **+1.0** |
| MCDR | | | | IAML | | 18 19 18.8 | |
| | comp=N,93nm,0.6s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.91** | **87** | ↓*e*Pg | **Pb** | **18 18 53.1** | **-0.5** |
| SDDR | | | | ↑*e*Sg | **Sb** | **18 19 18.1** | **+0.4** |
| SDDR | | | | IAML | | 18 19 18.7 | |
| | comp=N,116nm,0.5s | | | | | | |
| SDDR | | | | IAML | | 18 19 19.0 | |
| | comp=E,113nm,0.6s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.91** | **87** | *e*P | **Pb** | **18 18 53.0** | **-0.5** |
| SDDR | | | | *e*S | **Sb** | **18 19 17.8** | **+0.1** |
| **SDDR** | **Presa de Saban** | **1.91** | **87** | *i* P | **Pb** | **18 18 53.1** | **-0.5** |
| SDDR | | | | *e*S | **Sb** | **18 19 18.0** | **+0.4** |
| SDDR | | | | IAML | | 18 19 18.6 | |
| | comp=Z,74nm,0.5s | | | | | | |
| **QMBU** | **Quimbuelo** | **1.93** | **313** | *e*P | **Pn** | **18 18 51.6** | **-0.1** |
| QMBU | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AHAN | | | | S | **Sg** | **18 21 14.2** | **-0.1** | |
| **DBAD** | **Bademkaya** | **1.37** | **333** | P | **Pg** | **18 20 56.1** | **-0.5** | |
| DBAD | | | | S | **Sg** | **18 21 15.1** | **+0.7** | |
| **VANB** | **Van** | **1.38** | **150** | Pn | **Pg** | **18 20 57.3** | **+0.6** | |
| **BLIS** | **Bitlis-Merkez** | **1.42** | **193** | P | **Pb** | **18 20 56.5** | **-0.7** | |
| BLIS | | | | S | **Sg** | **18 21 16.8** | **+1.0** | |
| **TVAN** | **Van** | **1.44** | **151** | P | **Pg** | **18 20 57.9** | **-0.1** | |
| TVAN | | | | S | **Sg** | **18 21 18.5** | **+1.8** | |
| **AMBZ** | **Amberd** | **1.46** | **66** | *e*P | **Pg** | **18 20 58.8** | **+0.6** | |
| AMBZ | | | | *e*S | **Sg** | **18 21 20.7** | **+3.5** | |
| **AKDM** | **Akdamar-Van** | **1.51** | **166** | Pn | **Pb** | **18 20 58.0** | **-0.8** | |
| **YEDI** | **Yedisu-Bingol** | **1.57** | **257** | Pn | **Pb** | **18 20 59.2** | **-0.6** | |
| **KOPT** | **Kop Dagi** | **1.57** | **279** | P | **Pg** | **18 21 00.8** | **+0.4** | |
| KOPT | | | | S | **Sg** | **18 21 27.3** | **+6.5** | |
| **BNGB** | **Bingl** | **1.64** | **241** | Pn | **Pg** | **18 21 00.4** | **-0.5** | |
| **NRKZ** | **NAREK** | **1.66** | **82** | *e*P | **Pg** | **18 21 01.4** | **-0.7** | |
| NRKZ | | | | *e*S | **Sg** | **18 21 25.9** | **+2.4** | |
| **GNI** | **Garni** | **1.74** | **78** | *e*P | **Pg** | **18 21 02.9** | **-0.8** | |
| GNI | | | | *e*S | **Sg** | **18 21 28.6** | **+2.3** | |
| **KAPZ** | **Kaputan** | **1.75** | **72** | *e*P | **Pg** | **18 21 03.3** | **-0.6** | |
| KAPZ | | | | *e*S | **Sg** | **18 21 29.5** | **+2.9** | |
| **AKH** | **Akhalkalaki** | **1.77** | **24** | Pn | **Pn** | **18 21 01.0** | **-0.6** | |
| **AKH** | **Akhalkalaki** | **1.77** | **24** | P | **Pg** | **18 21 03.4** | **-0.9** | |
| **BCA** | **Borcka** | **1.78** | **338** | Pn | **Pb** | **18 21 01.8** | **-1.5** | |
| **BATM** | **Batumi** | **1.91** | **341** | P | **Pb** | **18 21 04.7** | **-0.8** | |
| **SVAN** | **Silvan-Diyarba** | **1.94** | **212** | Pn | **Pb** | **18 21 04.7** | **-1.4** | |
| **ABS** | **Abastumani** | **1.97** | **6** | P | **Pb** | **18 21 06.2** | **-0.4** | |
| **DMNI** | **Dmanisi** | **1.99** | **39** | P | **Pb** | **18 21 06.5** | **-0.4** | |
| **TRLG** | **Trialeti** | **2.12** | **34** | P | **Pb** | **18 21 08.6** | **-0.5** | |
| **TKB** | **Tkibuli** | **2.58** | **8** | P | **Pb** | **18 21 14.8** | **-2.1** | |
| **CHRG** | **Chargali** | **3.12** | **35** | P | **Pb** | **18 21 22.5** | **-3.6** | |
| **MTEO** | **Meteo** | **3.25** | **27** | P | **Pb** | **18 21 25.4** | **-3.3** | |
| **VSHL** | **Vashlovani** | **3.29** | **63** | P | **Pb** | **18 21 25.7** | **-3.3** | |
| **SHTL** | **Shatili** | **3.48** | **34** | P | **Pn** | **18 21 28.0** | **+3.0** | |
| **LGD** | **Lagodekhi** | **3.48** | **53** | P | **Pn** | **18 21 27.1** | **+2.2** | |

*ISN **26** 18:28:31.1±0.3,34°.62N×46°.30E,h8km±4km,ML2.8*
*TEH **26** 18:28:31.6,34°.62N×46°.28E,h8km±56km,ML2.8*
**ISC 26 18:28:32.2**±1.2,**34°.62N**±0°.04×**46°.30E**±0°.04,**h5km**±11km,
**n13,σ0ˢ59**/16,**Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.11** | **39** | Pg | **Pg** | **18 28 34.7** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.36** | **142** | Pg | **Pg** | **18 28 39.5** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **213** | Pg | **Pg** | **18 28 42.8** | **-0.8** |
| **KGS1** | **Ghasr-e-Shirin** | **0.60** | **260** | Sg | **Sg** | **18 28 51.9** | **+0.4** |
| **ILIN** | **Lien** | **0.62** | **61** | Pg | **Pg** | **18 28 43.6** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **185** | Pg | **Pg** | **18 28 50.4** | **-0.8** |
| **IBZA** | **Bozab** | **1.29** | **96** | Pg | **Pg** | **18 28 56.2** | **-0.8** |
| **IBDR** | **Badra** | **1.53** | **192** | *e*Pn | **Pn** | **18 29 00.5** | **+0.3** |
| IBDR | | | | *e*Sn | **Sg** | **18 29 22.0** | **+0.6** |
| **IKFM** | **Kafar-mosalman** | **1.68** | **130** | Pg | **Pg** | **18 29 04.1** | **-0.3** |
| **IDOB** | **Doab** | **1.76** | **117** | Pg | **Pg** | **18 29 05.7** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.79** | **296** | *e*Pn | **Pn** | **18 29 04.0** | **+0.2** |
| IKRK | | | | *e*Sn | **Sb** | **18 29 28.0** | **-0.3** |
| IKRK | | | | AML | AML | 18 29 36.0 | |
| | comp=E,153nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 18 29 36.7 | |
| | comp=N,103nm,0.5s | | | | | | |
| **HSAM** | **Samen** | **1.94** | **101** | Pn | **Pb** | **18 29 07.9** | **-0.4** |
| **BHD** | **Baghdad** | **2.09** | **231** | *e*Pn | **Pn** | **18 29 08.0** | **+0.2** |
| BHD | | | | *e*Sn | **Sn** | **18 29 35.0** | **+0.8** |

*IDC **26** 18:31:34.7±1.5,13°.15N×143°.62E,h223km±20km,mb2.8/4,*
*mbtmp3.4/4,Error ellipse: s-maj=61.3km s-min=18.4km*
*az=99.0*
**ISC 26 18:31:33.2**±1.0,**13°.2N**±0°.2×**143°.2E**±0°.1,**h200km**,**n6,**
**σ1ˢ51/7,mb3.1/5,South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.69** | **76** | P | **Pn** | **18 32 10.2** | **+1.6** |
| | 21nm,0.3s,baz=198,slow=6.4,SNR=11 | | | | | | |
| GUMO | | | | S | **Sn** | **18 32 35.4** | **-0.7** |
| | 59nm,0.3s,baz=48,slow=22,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.06** | **195** | P | **P** | **18 37 58.7** | **-0.1** |
| | 0.7nm,0.6s,baz=14,slow=9.3,SNR=12 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **37.74** | **194** | P | **P** | **18 38 29.6** | **-0.5** |
| | 0.2nm,0.7s,baz=18,slow=10,SNR=4.2 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.87** | **320** | P | **P** | **18 41 45.9** | **+1.5** |
| | 0.1nm,0.3s,baz=103,slow=6.6,SNR=2.5 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **69.62** | **25** | P | **P** | **18 42 18.8** | **-1.7** |
| | 0.2nm,0.6s,baz=250,slow=5.7,SNR=2.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **90.82** | **335** | P | **P** | **18 44 12.9** | **-0.7** |
| | 3.5nm,1.1s,baz=66,slow=3.4,SNR=5.2 | | | | | | |

*IDC **26** 18:32:36.8±1.6,27°.88N×111°.68W,h0km,mbtmp3.4/6,*
*ML3.5/6,Error ellipse: s-maj=18.7km s-min=12.2km*
*az=44.0*
*MEX **26** 18:32:36.2±0.3,27°.75N×112°.85W,h10km,MD4.2*
**ISC 26 18:32:36.7**±0.8,**27°.86N**±0°.05×**111°.85W**±0°.07,**h10km**,**n15,**
**σ1ˢ74/16,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRIG** | **Santa Rosalia** | **0.64** | **213** | *e*P | **Pg** | **18 32 48.0** | **-1.2** |
| SRIG | | | | *e*S | **Sg** | **18 32 57.1** | **-0.6** |
| **LAPR** | **La Primavera** | **2.66** | **351** | *e*P | **Pn** | **18 33 17.9** | **-1.8** |
| LAPR | | | | *e*S | **Sn** | **18 33 50.7** | **-1.2** |
| **NZIG** | **Nacozari, Sono** | **3.21** | **38** | *e*P | **Pb** | **18 33 32.7** | **-1.2** |
| NZIG | | | | *e*S | **Sb** | **18 34 13.6** | **+0.5** |
| NZIG | | | | *e*S | **Sb** | **18 34 13.7** | **+0.5** |
| **LPIG** | **La Paz** | **4.00** | **159** | Pn | **Pn** | **18 33 40.0** | **+2.0** |
| | 0.4nm,0.3s,baz=14,slow=3.3,SNR=0.9 | | | | | | |
| LPIG | | | | Lg | Lg | 18 34 39.9 | |
| | 2.5nm,0.3s,baz=270,slow=22,SNR=1.0 | | | | | | |
| | 21nm,0.8s | | | | | | |
| **SLBS** | **Sierra La Lagu** | **4.50** | **157** | *e*P | **Pn** | **18 33 45.9** | **+0.8** |
| **TUC** | **Tucson** | **4.53** | **11** | *e*P | **Pn** | **18 33 44.5** | **-0.9** |
| **PFO** | **Pinyon Flats O** | **6.97** | **326** | Lg | Lg | 18 36 22.1 | |
| | 0.2nm,0.3s,baz=110,slow=9.8,SNR=2.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **7.34** | **77** | Pn | **Pn** | **18 34 24.5** | **+0.4** |
| | 1.0nm,0.3s,baz=256,slow=15,SNR=56 | | | | | | |
| TXAR | | | | Sn | **Sn** | **18 35 45.5** | **-2.1** |
| | 0.4nm,0.3s,baz=260,slow=28,SNR=3.9 | | | | | | |
| TXAR | | | | Lg | Lg | 18 36 22.4 | |
| | 1.4nm,0.3s,baz=268,slow=29,SNR=5.5 | | | | | | |
| | 1.5nm,0.4s | | | | | | |
| **ANMO** | **Albuquerque** | **8.43** | **32** | Pn | **Pn** | **18 34 38.9** | **-0.2** |
| | 0.1nm,0.3s,baz=332,slow=4.3,SNR=1.7 | | | | | | |
| ANMO | | | | Lg | Lg | 18 36 58.3 | |
| | 0.9nm,0.3s,baz=92,slow=18,SNR=8.1 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.84** | **335** | Pn | **Pn** | **18 35 29.6** | **+3.7** |
| | 0.1nm,0.3s,baz=158,slow=7.3,SNR=4.5 | | | | | | |
| NVAR | | | | Lg | Lg | 18 38 55.2 | |
| | baz=293,slow=28 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ELK** | **Elko** | **13.15** | **349** | Pn | **Pn** | **18 35 46.3** | **+2.6** |
| | 0.1nm,0.3s,baz=188,slow=9.7,SNR=3.4 | | | | | | |
| ELK | | | | Lg | Lg | 18 39 33.1 | |
| | 0.1nm,0.3s,baz=214,slow=9.5,SNR=1.4 | | | | | | |
| | 1.4nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **14.99** | **7** | Pn | **P** | **18 36 14.5** | **+0.2** |
| | 0.2nm,0.3s,baz=178,slow=11,SNR=11 | | | | | | |
| PDAR | | | | Lg | Lg | 18 40 27.0 | |
| | 0.1nm,0.3s,baz=188,slow=24,SNR=1.6 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **H03N2** | **Juan Fernandez** | **68.50** | **151** | T | T | 19 58 16.4 | |
| | baz=324 | | | | | | |
| **H03N1** | **Juan Fernandez** | **68.51** | **151** | T | T | 19 58 28.7 | |
| | baz=324 | | | | | | |
| **H03N3** | **Juan Fernandez** | **68.52** | **151** | T | T | 19 58 26.6 | |
| | baz=324 | | | | | | |

**DJA 26 18:39:10.2**±0.4,**6°.S**×3°×**13°.1E**±°,**h90km**±14km,**M4.0**/13,
**mb4.1/4,mB5.2/3,MLv3.8/13,Mw(mB)4.6/3,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.59** | **313** | P | Pn | 18 39 38.0 | +0.9 |
| BNDI | | | | S | Sn | 18 39 58.6 | +1.0 |
| **SAUI** | **Saumlaki** | **2.36** | **174** | P | Pn | 18 39 47.2 | 0.0 |
| **FAKI** | **Fak Fak** | **2.93** | **24** | P | Pn | 18 39 55.4 | +0.6 |
| FAKI | | | | S | Sn | 18 40 28.5 | -0.7 |
| **MSAI** | **Masohi** | **3.11** | **317** | P | Pn | 18 39 57.5 | +0.3 |
| MSAI | | | | S | Sn | 18 40 31.5 | -2.0 |
| **KMPI** | **Kaimana, Papua** | **3.27** | **54** | P | Pn | 18 40 00.5 | +1.1 |
| KMPI | | | | S | Sn | 18 40 37.3 | 0.0 |
| **NLAI** | **Namlea** | **4.61** | **301** | P | Pn | 18 40 18.8 | +1.2 |
| **SWI** | **Sorong** | **4.73** | **2** | P | Pn | 18 40 18.4 | -0.8 |
| **SANI** | **Sanana** | **6.19** | **305** | P | Pn | 18 40 39.3 | +0.3 |
| | 15nm,0.8s,0.1nm | | | | | | |

*IDC **26** 18:44:43.2±1.0,34°.58N×46°.12E,h0km,mb3.8/15,*
*mbtmp3.8/23,ML3.9/5,MS3.1/10,Error ellipse:*
*s-maj=22.4km s-min=11.4km az=167.0*
*TEH **26** 18:44:44.4,34°.61N×46°.19E,h8km±27km,ML3.8*
*ISN **26** 18:44:44.6±1.0,34°.62N×46°.17E,h10km±11km,ML3.8*
**ISC 26 18:44:44.8**±1.1,**34°.61N**±0°.03×**46°.18E**±0°.02,**h11km**±8km,
**n67,σ1ˢ48/68,mb3.9/19,MS3.1/6,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.20** | **62** | Pg | **Pg** | **18 44 49.0** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **0.42** | **130** | Pg | **Pg** | **18 44 53.3** | **+0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **259** | Pg | **Pg** | **18 44 54.6** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **204** | Pg | **Pg** | **18 44 55.1** | **-0.2** |
| **ILIN** | **Lien** | **0.72** | **64** | Pg | **Pg** | **18 44 58.3** | **-0.4** |
| ILIN | | | | Sg | **Sb** | **18 45 09.0** | **-0.4** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **115** | Pg | **Pg** | **18 44 59.4** | **-0.6** |
| KCHF | | | | Sg | **Sb** | **18 45 11.7** | **+0.4** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **179** | Pg | **Pg** | **18 45 03.4** | **-0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **78** | Pg | **Pg** | **18 45 07.5** | **-0.8** |
| **IBZA** | **Bozab** | **1.40** | **95** | Pg | **Pb** | **18 45 11.1** | **+0.1** |
| **IBDR** | **Badra** | **1.51** | **188** | *e*Pn | **Pg** | **18 45 13.4** | **-0.3** |
| IBDR | | | | *e*Sn | **Sg** | **18 45 34.0** | **+0.8** |
| IBDR | | | | AML | AML | 18 45 39.1 | |
| | comp=N,1μm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 18 45 43.8 | |
| | comp=E,2μm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.70** | **298** | *e*Pn | **Pb** | **18 45 16.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **18 45 39.0** | **-0.6** |
| IKRK | | | | AML | AML | 18 45 44.0 | |
| | comp=E,964nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 18 45 44.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.76** | **127** | Pg | **Pb** | **18 45 16.9** | **-0.1** |
| **IDOB** | **Doab** | **1.85** | **116** | Pn | **Pb** | **18 45 18.8** | **+0.1** |
| **BHD** | **Baghdad** | **2.00** | **229** | *e*Pn | **Pb** | **18 45 20.0** | **-1.2** |
| BHD | | | | *e*Sn | **Sb** | **18 45 46.6** | **+0.4** |
| BHD | | | | AML | AML | 18 46 00.3 | |
| | comp=E,1μm,0.4s | | | | | | |
| **HSAM** | **Samen** | **2.04** | **100** | Pn | **Pb** | **18 45 21.7** | **-0.4** |
| **MAHB** | **Mahabad** | **2.19** | **350** | Pn | **Pb** | **18 45 23.8** | **-0.7** |
| **HAGD** | **Aghdareh** | **2.45** | **84** | Pn | **Pb** | **18 45 27.7** | **-1.3** |
| **RAFI** | **Al-Rafai** | **2.88** | **181** | *e*Pn | **Pn** | **18 45 33.0** | **+2.4** |
| RAFI | | | | *e*Sn | **Sn** | **18 46 08.0** | **+2.8** |
| **IAZR** | **Azarshahr** | **3.07** | **357** | Pn | **Pn** | **18 45 35.7** | **+2.2** |
| **ISRB** | **Sarab** | **3.43** | **20** | Pn | **Pn** | **18 45 40.6** | **+2.2** |
| **IHRS** | **Heris** | **3.77** | **10** | Pn | **Pn** | **18 45 45.4** | **+2.3** |
| **IMRD** | **Marand** | **4.12** | **355** | Pn | **Pn** | **18 45 50.7** | **+2.9** |
| **GAS1** | **Astara - Iran** | **4.34** | **29** | Pn | **Pn** | **18 45 52.6** | **+1.9** |
| **QAMS** | **Qamsar** | **4.41** | **100** | Pn | **Pn** | **18 45 54.0** | **+2.0** |
| **GRMI** | **Germi** | **4.41** | **18** | Pn | **Pn** | **18 45 54.1** | **+2.2** |
| **IVRN** | **Varamin** | **4.58** | **84** | Pn | **Pn** | **18 45 56.1** | **+2.0** |
| **IKLH** | **Kolahrood** | **4.67** | **104** | Pn | **Pn** | **18 45 57.2** | **+1.8** |
| **IDMV** | **Damavand** | **4.90** | **77** | Pn | **Pn** | **18 46 00.8** | **+2.1** |
| **KRSH** | **Karshahi** | **4.97** | **96** | Pn | **Pn** | **18 46 01.5** | **+1.9** |
| **IZEF** | **Zefreh** | **5.40** | **107** | Pn | **Pn** | **18 46 08.1** | **+2.5** |
| **IFIR** | **Firoozkooh** | **5.49** | **77** | Pn | **Pn** | **18 46 08.8** | **+2.0** |
| **ILAS** | **Lasjerd** | **5.62** | **80** | Pn | **Pn** | **18 46 10.1** | **+1.6** |
| **GNI** | **Garni** | **5.65** | **349** | Pn | **Pn** | **18 46 12.0** | **+3.2** |
| | comp=E,7.9nm,0.8s,baz=163,slow=22,SNR=2.0 | | | | | | |
| **ASF** | **Jabal al Asfar** | **8.13** | **255** | Pn | **Pn** | **18 46 42.3** | **-0.6** |
| | comp=E,1.0nm,0.3s,baz=283,slow=0.0,SNR=6.0 | | | | | | |
| ASF | | | | Lg | Lg | 18 48 59.8 | |
| | comp=E,0.8nm,0.3s,baz=335,slow=0.2,SNR=3.7 | | | | | | |
| | comp=E,2.4nm,0.4s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.11** | **263** | Pn | **Pn** | **18 46 56.7** | **+0.4** |
| | comp=E,1.3nm,0.3s,baz=80,slow=17,SNR=7.4 | | | | | | |
| MMAI | | | | Lg | Lg | 18 49 33.2 | |
| | comp=E,0.7nm,0.3s,baz=212,slow=30,SNR=1.3 | | | | | | |
| MMAI | | | | LR | LR | 18 50 49.3 | |
| | comp=E,68nm,21.4s,baz=30,slow=40 | | | | | | |
| | comp=E,1.4nm,0.5s | | | | | | |
| **EIL** | **Elat** | **10.71** | **246** | Pn | **Pn** | **18 47 17.9** | **-0.3** |
| | comp=E,0.6nm,0.3s,baz=139,slow=10,SNR=2.1 | | | | | | |
| EIL | | | | Lg | Lg | 18 50 18.6 | |
| | comp=E,0.2nm,0.3s,baz=20,slow=14,SNR=1.7 | | | | | | |
| EIL | | | | LR | LR | 18 52 12.6 | |
| | comp=E,76nm,20.6s,baz=69,slow=42 | | | | | | |
| | comp=E,1.7nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **11.23** | **301** | Pn | **Pn** | **18 47 29.1** | **+3.7** |
| | comp=E,1.3nm,1.0s,baz=118,slow=12,SNR=6.6 | | | | | | |
| BRTR | | | | LR | LR | 18 52 41.6 | |
| | comp=E,66nm,18.9s,baz=116,slow=43 | | | | | | |
| **WSAR** | **Wadi Sarin** | **15.70** | **133** | Pn | **Pn** | **18 48 22.9** | **-3.1** |
| | comp=E,1.4nm,0.3s,baz=309,slow=13,SNR=16 | | | | | | |
| WSAR | | | | Sn | Sn | 18 51 06.7 | -14 |
| | comp=E,0.2nm,0.3s,baz=168,slow=23,SNR=1.8 | | | | | | |
| **IDI** | **Anoyia** | **17.47** | **278** | P | **Pn** | **18 48 48.0** | **-0.5** |
| | comp=E,10nm,0.8s,baz=76,slow=12,SNR=2.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.03** | **25** | P | **P** | **18 48 55.7** | **+0.1** |
| | comp=E,0.1nm,0.3s,baz=190,slow=4.7,SNR=2.5 | | | | | | |
| | comp=E,1.1nm,0.5s | | | | | | |
| **MLR** | **Muntele Rosu** | **18.87** | **311** | P | **P** | **18 49 05.0** | **-0.2** |
| | comp=E,0.2nm,0.3s,baz=137,slow=5.1,SNR=3.0 | | | | | | |
| MLR | | | | LR | LR | 18 58 11.7 | |
| | comp=E,34nm,20.6s,baz=104,slow=43 | | | | | | |
| | comp=E,0.8nm,0.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **20.27** | **328** | P | **P** | **18 49 19.6** | **-0.6** |
| | comp=E,0.5nm,0.3s,baz=136,slow=10.0,SNR=6.8 | | | | | | |
| | comp=E,0.5nm,0.3s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **22.74** | **316** | *e*P | **P** | **18 49 50.1** | **+3.3** |
| **BVAR** | **Borovoye Array** | **25.18** | **36** | P | **P** | **18 50 11.8** | **+1.7** |
| | comp=E,1.3nm,0.5s,baz=244,slow=8.3,SNR=7.7 | | | | | | |
| | comp=E,1.3nm,0.5s | | | | | | |
| **FURI** | **Furi** | **26.50** | **197** | LR | LR | 19 00 38.8 | |
| | comp=E,45nm,20.0s,baz=307,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **27.86** | **311** | P | **P** | **18 50 34.4** | **0.0** |
| | comp=E,0.2nm,0.3s,baz=140,slow=7.7,SNR=2.1 | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.40** | **46** | P | **P** | **18 50 40.1** | **+1.0** |
| | comp=E,1.3nm,0.7s,baz=253,slow=9.0,SNR=14 | | | | | | |
| | comp=E,1.3nm,0.7s | | | | | | |
| **WTTA** | **Wattenberg** | **28.75** | **307** | *i* P | **P** | **18 50 42.3** | **-0.2** |
| | comp=E,0.9nm,0.3s | | | | | | |
| **SQTA** | **Sankt Quirin** | **29.03** | **306** | *i* P | **P** | **18 50 44.5** | **-0.4** |
| | comp=E,1.2nm,0.3s | | | | | | |
| **MOTA** | **Moosalm** | **29.12** | **307** | *i* P | **P** | **18 50 45.2** | **-0.5** |
| | comp=E,1.3nm,0.3s | | | | | | |
| **FETA** | **Feichten** | **29.30** | **306** | *i* P | **P** | **18 50 47.3** | **-0.1** |
| | comp=E,0.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.70** | **55** | P | **P** | **18 50 51.7** | **+1.0** |
| | comp=E,1.5nm,0.8s,baz=252,slow=7.2,SNR=13 | | | | | | |
| MKAR | | | | LR | LR | 19 05 34.3 | |
| | comp=E,28nm,19.6s,baz=228,slow=42 | | | | | | |
| | comp=E,1.5nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **29.77** | **341** | P | **P** | **18 50 50.5** | **-0.7** |
| | comp=E,2.6nm,0.9s,baz=137,slow=10,SNR=6.5 | | | | | | |
| | comp=E,2.6nm,0.9s | | | | | | |
| **DAVA** | **Damuels** | **29.92** | **306** | *i* P | **P** | **18 50 52.1** | **-0.8** |
| | comp=E,2.4nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **33.10** | **331** | P | **P** | **18 51 20.1** | **-0.3** |
| | comp=E,3.7nm,0.7s,baz=121,slow=10,SNR=13 | | | | | | |
| | comp=E,3.7nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.19** | **42** | P | **P** | **18 51 21.6** | **+0.3** |
| | comp=E,1.2nm,0.7s,baz=252,slow=9.5,SNR=6.5 | | | | | | |
| | comp=E,1.2nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **34.63** | **331** | P | **P** | **18 51 32.6** | **-1.2** |
| | comp=E,0.3nm,0.6s,baz=121,slow=7.9,SNR=2.4 | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **36.52** | **195** | LR | LR | 19 06 09.2 | |
| | comp=E,45nm,18.8s,baz=91,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **36.81** | **348** | P | **P** | **18 51 52.8** | **+0.5** |
| | comp=E,1.5nm,0.9s,baz=163,slow=6.6,SNR=1.5 | | | | | | |
| | comp=E,1.5nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.55** | **317** | P | **P** | **18 52 15.3** | **-0.3** |
| | comp=E,0.7nm,0.3s,baz=104,slow=8.7,SNR=7.6 | | | | | | |
| | comp=E,0.7nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.87** | **292** | P | **P** | **18 52 17.9** | **-0.7** |
| | comp=E,1.6nm,0.9s,baz=62,slow=8.7,SNR=11 | | | | | | |
| | comp=E,1.6nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.49** | **253** | P | **P** | **18 53 04.1** | **-0.3** |
| | comp=E,1.4nm,1.1s,baz=52,slow=8.7,SNR=4.4 | | | | | | |
| | comp=E,1.4nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **46.07** | **54** | LR | LR | 19 16 13.5 | |
| | comp=E,38nm,18.7s,baz=15,slow=41 | | | | | | |
| **JMIC** | **Jan Mayen** | **46.34** | **338** | LR | LR | 19 11 38.6 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,14nm,20.6s,baz=316,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.33** | **95** | P | **P** | **18 53 34.0** | **-0.4** |
| | comp=E,1.1nm,0.5s,baz=297,slow=12,SNR=5.6 | | | | | | |
| | comp=E,1.1nm,0.5s | | | | | | |
| **YAK** | **Yakutsk** | **57.14** | **34** | LR | LR | 19 22 52.1 | |
| | comp=E,46nm,18.7s,baz=301,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **64.11** | **61** | P | **P** | **18 55 19.0** | **-0.1** |
| | comp=E,0.5nm,0.7s,baz=289,slow=7.4,SNR=2.3 | | | | | | |
| | comp=E,0.5nm,0.7s | | | | | | |

*IDC **26** 18:47:43.0±1.2,31°.12N×130°.35E,h162km±15km,mb3.2/5,*
*mbtmp3.6/8,Error ellipse: s-maj=39.3km s-min=14.2km*
*az=82.0*
*JMA **26** 18:47:44.3±0.2,31°.1N±0°.4×130°.3E±0°.8,h158km±1km,*
*MV3.0/32,SATSUMA PENINSULA REGION*
**ISC 26 18:47:43.3**±0.8,**31°.07N**±0°.04×**130°.25E**±0°.10,**h165km**±6km,
**n18,σ0ˢ93/29,mb3.3/5,Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSU** | **Suzuyama** | **0.47** | **22** | *i* P | **Pn** | **18 48 06.5** | **+0.3** |
| **JTSR** | **Tashiro 2** | **0.59** | **81** | *i* P | **Pn** | **18 48 06.7** | **-0.1** |
| JTSR | | | | S | **Sn** | **18 48 23.5** | **-1.3** |
| **JKC** | **Kuchinoerabu** | **0.61** | **184** | P | **Pn** | **18 48 07.4** | **+0.4** |
| JKC | | | | *e*S | **Sn** | **18 48 25.3** | **+0.3** |
| **JSJ** | **Shimokoshiki** | **0.76** | **323** | P | **Pn** | **18 48 07.8** | **0.0** |
| JSJ | | | | *e*S | **Sn** | **18 48 26.1** | **-0.6** |
| **JTN** | **Tanegashima 3** | **0.76** | **123** | *i* P | **Pn** | **18 48 08.0** | **+0.2** |
| JTN | | | | S | **Sn** | **18 48 25.9** | **-0.6** |
| **JYAK** | **Yakushimahirau** | **0.86** | **165** | *i* P | **Pn** | **18 48 08.8** | **+0.3** |
| JYAK | | | | *e*S | **Sn** | **18 48 27.3** | **-0.6** |
| **JMTN** | **Minamitane** | **0.88** | **140** | P | **Pn** | **18 48 08.9** | **+0.2** |
| JMTN | | | | S | **Sn** | **18 48 27.7** | **-0.3** |
| **JTZ** | **Takazaki** | **1.09** | **41** | *i* P | **Pn** | **18 48 10.6** | **+0.3** |
| JTZ | | | | S | **Sn** | **18 48 31.2** | **+0.1** |
| **JNN** | **Nakanoshima** | **1.27** | **195** | *e*P | **Pn** | **18 48 12.6** | **+0.7** |
| JNN | | | | *e*S | **Sn** | **18 48 34.8** | **+1.0** |
| **JIU3** | **Izumi3** | **1.55** | **18** | P | **Pn** | **18 48 15.1** | **+0.6** |
| JIU3 | | | | *e*S | **Sn** | **18 48 38.1** | **-0.5** |
| **JNU** | **Nakatsue** | **2.11** | **15** | P | **Pn** | **18 48 20.8** | **+0.1** |
| | 46nm,0.9s,baz=182,slow=5.4,SNR=27 | | | | | | |
| JNU | | | | S | **Sn** | **18 48 47.5** | **-2.1** |
| | 5.7nm,0.6s,baz=257,slow=21,SNR=1.1 | | | | | | |
| **JOW** | **Kunigami** | **4.56** | **203** | P | **Pn** | **18 48 51.2** | **-0.2** |
| | 22nm,1.0s,baz=117,slow=9.5,SNR=1.5 | | | | | | |
| JOW | | | | S | **Sn** | **18 49 41.2** | **-3.3** |
| | 11nm,0.5s,baz=117,slow=25,SNR=7.1 | | | | | | |
| **KSRS** | **Korea Array** | **6.65** | **344** | P | **Pn** | **18 49 19.0** | **+0.3** |
| | 0.9nm,0.7s,baz=169,slow=13,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.83** | **307** | P | **P** | **18 55 00.8** | **+0.3** |
| | 0.7nm,1.1s,baz=81,slow=8.9,SNR=2.7 | | | | | | |
| | 0.7nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.88** | **175** | P | **P** | **18 56 27.6** | **+0.1** |
| | 0.3nm,0.5s,baz=354,slow=8.0,SNR=5.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **54.54** | **176** | P | **P** | **18 56 54.6** | **+0.2** |
| | 0.2nm,0.4s,baz=357,slow=6.4,SNR=12 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **69.54** | **330** | P | **P** | **18 58 33.6** | **-0.3** |
| | 1.2nm,0.5s,baz=61,slow=5.5,SNR=14 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **75.48** | **308** | P | **P** | **18 59 10.1** | **+0.5** |
| | 0.8nm,0.9s,baz=60,slow=4.8,SNR=5.8 | | | | | | |
| | 0.8nm,0.9s | | | | | | |

**AFAD 26 19:07:01.

EPOS *i* AML AML 19 08 29.0
comp=N,574nm,0.6s
EPOS *i* AML AML 19 08 30.0
comp=E,365nm,0.3s
**DDEM Demirkent 1.63 160** P **Pn** **19 08 06.0 +0.6**
DDEM S **Sn** **19 08 26.3 -0.3**
DDEM *i* AML AML 19 08 28.0
comp=Z,161nm,0.2s
DDEM *i* AML AML 19 08 30.0
comp=E,540nm,0.2s
DDEM *i* AML AML 19 08 33.0
comp=N,688nm,0.4s
**IZDR Rize 1.67 192** P **Pn** **19 08 05.8 -0.1**
IZDR S **Sn** **19 08 25.2 -2.4**
IZDR *i* AML AML 19 08 27.0
comp=N,239nm,0.3s
IZDR *i* AML AML 19 08 30.0
comp=E,237nm,0.3s
IZDR *i* AML AML 19 08 33.0
comp=Z,190nm,0.7s
**GUZR Guzeripl' 1.70 338** *e*Pg **Pb** **19 08 08.3 +0.4**
GUZR *e*Sg **Sb** **19 08 30.0 +0.5**
**GUZR Guzeripl' 1.70 338** *i* PN **Pb** **19 08 08.3 +0.4**
GUZR *i* S **Sb** **19 08 30.0 +0.5**
**AHAN Ardahan-Merkez 1.74 136** P **Pb** **19 08 09.2 +0.6**
AHAN S **Sb** **19 08 30.6 -0.2**
AHAN *i* AML AML 19 08 37.0
comp=Z,177nm,0.3s
AHAN *i* AML AML 19 08 37.0
comp=N,194nm,0.2s
AHAN *i* AML AML 19 08 40.0
comp=E,302nm,0.5s
**SHA1 Shidzhatmaz 1.79 42** *e*Pg **Pb** **19 08 09.7 +0.3**
SHA1 *e*Sg **Sg** **19 08 34.0 +0.4**
**SHA1 Shidzhatmaz 1.79 42** *i* PN **Pb** **19 08 09.8 +0.3**
**MRNR Maryino 1.88 324** *e*Pg **Pn** **19 08 10.0 +1.2**
MRNR *e*Sg **Sb** **19 08 34.3 -0.3**
**MRNR Maryino 1.88 324** *e*PN **Pn** **19 08 10.0 +1.2**
**KBZ Khabaz 1.90 46** *i* Pg **Pb** **19 08 12.0 +0.8**
KBZ *e*Sg **Sg** **19 08 36.3 -1.0**
**KBZ Khabaz 1.90 46** Pn **Pb** **19 08 10.8 -0.4**
20nm,0.3s,baz=146,slow=6.1,SNR=159
KBZ Sn **Sg** **19 08 36.9 -0.5**
28nm,0.3s,baz=275,slow=6.9,SNR=10
**KBZ Khabaz 1.90 46** *e*PN **Pg** **19 08 12.2 -0.5**
**DIGR Digorskoe uzhe 1.96 75** *e*Pg **Pb** **19 08 12.7 +0.4**
DIGR *e*Sg **Sg** **19 08 38.1 -1.0**
**DIGR Digorskoe uzhe 1.96 75** *e*PN **Pb** **19 08 12.7 +0.4**
**KIV Kislovodsk 1.96 38** *e*Pg **Pb** **19 08 13.1 +0.7**
KIV *e*Sg **Sg** **19 08 38.1 -1.2**
**KIV Kislovodsk 1.96 38** *e*PN **Pb** **19 08 13.1 +0.7**
**KIV Kislovodsk 1.96 38** Pn **Pb** **19 08 12.0 -0.4**
**KIV0 Kislovodsk Arr 1.97 38** *e*Pg **Pb** **19 08 13.1 +0.6**
KIV0 *e*Sg **Sg** **19 08 38.4 -1.0**
**GOLE Ardahan-G¶le 1.98 143** P **Pb** **19 08 12.7 0.0**
GOLE S **Sb** **19 08 38.7 +1.0**
GOLE *i* AML AML 19 08 43.0
comp=Z,37nm,0.2s
GOLE *i* AML AML 19 08 43.0
comp=E,84nm,0.2s
GOLE *i* AML AML 19 08 46.0
comp=N,104nm,0.4s
**BEYR Belyy Ugol+ 2.07 39** *e*Pg **Pg** **19 08 15.2 -0.6**
BEYR *e*Sg **Sg** **19 08 41.9 -0.8**
**BEYR Belyy Ugol+ 2.07 39** *e*PN **Pg** **19 08 15.2 -0.6**
BEYR *e*S **Sg** **19 08 41.8 -0.8**
**AKH Akhalkalaki 2.11 118** Pn **Pb** **19 08 14.6 -0.3**
**AKH Akhalkalaki 2.11 118** P **Pb** **19 08 14.6 -0.3**
AKH S **Sg** **19 08 44.5 +0.4**
**AKH Akhalkalaki 2.11 118** PN **Pb** **19 08 14.6 -0.3**
AKH S **Sg** **19 08 44.5 +0.4**
**SENK Senkaya-Erzuru 2.12 151** Pn **Pn** **19 08 13.9 +1.7**
**BAYT Aydıntepe-Bayb 2.13 198** Pn **Pn** **19 08 13.0 +0.6**
**GOYR Goytkh 2.18 327** *e*Pg **Pb** **19 08 15.3 -0.7**
GOYR *e*Sg **Sb** **19 08 42.5 -0.6**
**GOYR Goytkh 2.18 327** PN **Pb** **19 08 16.5 +0.6**
**NCK Nalchik 2.18 60** *e*Pg **Pg** **19 08 18.7 +0.7**
NCK *e*Sg **Sg** **19 08 45.2 -1.1**
**NCK Nalchik 2.18 60** *e*PN **Pg** **19 08 18.7 +0.7**
NCK *e*S **Sg** **19 08 45.2 -1.1**
**LABN Labinsk 2.23 355** PN **Pn** **19 08 13.4 -0.2**
**PYA1 Pyatigorsk 2.24 42** *e*Pg **Pb** **19 08 17.6 +0.6**
PYA1 *e*Sg **Sb** **19 08 45.9 +0.9**
**PYA1 Pyatigorsk 2.24 42** *e*PN **Pb** **19 08 17.6 +0.6**
PYA1 *e*S **Sb** **19 08 45.8 +0.9**
**LSNR Lesken 2.24 67** *e*Pg **Pg** **19 08 18.4 -0.8**
LSNR *e*Sg **Sg** **19 08 49.4 +1.2**
**LSNR Lesken 2.24 67** *e*PN **Pg** **19 08 18.4 -0.8**
LSNR *e*S **Sg** **19 08 49.4 +1.2**
**KBTC Kuba-Taba 2.24 51** *e*Pg **Pb** **19 08 16.0 -1.1**
KBTC *e*Sg **Sb** **19 08 45.2 +0.1**
**KBTC Kuba-Taba 2.24 51** *e*PN **Pb** **19 08 16.0 -1.1**
KBTC *e*S **Sb** **19 08 45.2 +0.1**
**GUMT Gumushane 2.27 211** Pn **Pn** **19 08 14.4 +0.1**
**ESPY Espiye-Giresun 2.28 229** Pn **Pn** **19 08 14.2 0.0**
**KORR Kora 2.35 73** *e*Pn **Pb** **19 08 19.9 +1.1**
KORR *e*Sn **Sg** **19 08 51.8 +0.1**
**KORR Kora 2.35 73** *e*PN **Pb** **19 08 20.0 +1.1**
KORR *e*S **Sg** **19 08 51.8 +0.1**
**BOZK Kars-Merkez-Bo 2.35 140** P **Pb** **19 08 18.8 -0.3**
BOZK S **Sg** **19 08 52.2 +0.4**
BOZK *i* AML AML 19 09 02.0
comp=N,43nm,0.5s
BOZK *i* AML AML 19 09 03.0
comp=Z,34nm,0.8s
BOZK *i* AML AML 19 09 06.0
comp=E,59nm,0.9s
**KARS Kars 2.37 138** Pn **Pn** **19 08 17.0 +1.3**
**KOPT Kop Dagi 2.43 189** P **Pb** **19 08 19.6 -0.9**
KOPT S **Sn** **19 08 48.5 +1.8**
KOPT *i* AML AML 19 08 53.0
comp=E,65nm,0.5s
KOPT *i* AML AML 19 09 10.0
comp=N,57nm,0.7s
KOPT *i* AML AML 19 09 11.0
comp=Z,47nm,0.9s
**STDR Stavd-Durt 2.44 66** *e*Pn **Pg** **19 08 22.8 -0.1**
STDR *e*Sn **Sb** **19 08 51.0 +0.4**
**STDR Stavd-Durt 2.44 66** *e*PN **Pg** **19 08 22.8 -0.1**
STDR *e*S **Sb** **19 08 51.0 +0.4**
**LACR Lac 2.46 79** *e*Pn **Pb** **19 08 21.8 +0.9**
LACR *e*Sn **Sg** **19 08 53.5 -1.8**
**LACR Lac 2.46 79** *e*PN **Pb** **19 08 21.8 +0.9**
LACR *e*S **Sg** **19 08 53.5 -1.8**
**TRLG Trialeti 2.47 110** P **Pb** **19 08 20.1 -0.9**
TRLG S **Sg** **19 08 54.4 -1.2**
**TRLG Trialeti 2.47 110** PN **Pb** **19 08 20.1 -0.9**
TRLG S **Sg** **19 08 54.4 -1.2**
**KOPR Koprukoy-ERZUR 2.51 165** Pn **Pn** **19 08 19.0 +1.4**
**ARNR Ardon 2.53 71** *e*Pn **Pg** **19 08 23.8 -0.8**
ARNR *e*Sn **Sb** **19 08 54.1 +0.9**
**ARNR Ardon 2.53 71** *e*PN **Pg** **19 08 23.8 -0.8**
ARNR *e*S **Sb** **19 08 54.1 +0.9**
**ERZM Erzurum 2.53 174** P **Pn** **19 08 20.2 +2.3**
ERZM S **Sb** **19 08 55.1 +1.6**
**GUDG Gudauri 2.57 88** *e*Pn **Pb** **19 08 21.8 -0.9**
GUDG *e*Sn **Sb** **19 08 53.9 -0.7**
**GUDG Gudauri 2.57 88** *e*PN **Pb** **19 08 21.8 -0.9**
GUDG *e*S **Sb** **19 08 53.9 -0.7**
**EAK Akyaka 2.61 131** P **Pn** **19 08 21.2 +2.2**
EAK S **Sb** **19 08 57.5 +1.8**
EAK *i* AML AML 19 08 59.0
comp=E,79nm,0.8s
EAK *i* AML AML 19 09 09.0
comp=N,93nm,0.5s
EAK *i* AML AML 19 09 17.0
comp=Z,46nm,0.7s
**DMNI Dmanisi 2.62 114** S **Sg** **19 08 58.6 -1.6**
**DMNI Dmanisi 2.62 114** PN **Pb** **19 08 22.8 -0.7**
DMNI S **Sg** **19 08 58.6 -1.6**
**DMNI Dmanisi 2.62 114** P **Pb** **19 08 22.8 -0.7**
**MTEO Meteo 2.62 83** P **Pn** **19 08 21.1 +1.8**
MTEO S **Sg** **19 08 59.0 -1.3**
**MTEO Meteo 2.62 83** PN **Pn** **19 08 21.1 +1.8**
MTEO S **Sg** **19 08 59.0 -1.3**
**ETEKE Tekederesi - E 2.63 178** P **Pb** **19 08 22.8 -0.9**
ETEKE S **Sb** **19 08 58.6 +2.3**
ETEKE *i* AML AML 19 09 11.0
comp=N,56nm,0.7s
ETEKE *i* AML AML 19 09 22.0
comp=E,50nm,0.7s
ETEKE *i* AML AML 19 09 27.0
comp=Z,27nm,0.6s
**ALER Alexandrovskoy 2.72 30** *e*Pn **Pn** **19 08 22.4 +2.1**
ALER *e*Sn **Sb** **19 08 56.0 -2.7**
**ALER Alexandrovskoy 2.72 30** *e*PN **Pn** **19 08 22.4 +2.1**
ALER *e*S **Sb** **19 08 56.0 -2.7**
**BTKR Batakoyurt 2.77 69** *e*Pn **Pg** **19 08 29.5 +0.3**
BTKR *e*Sn **Sb** **19 08 58.9 -1.2**
**BTKR Batakoyurt 2.77 69** *e*PN **Pg** **19 08 29.5 +0.3**
BTKR *e*S **Sb** **19 08 58.9 -1.2**
**VLKR Vladikavkaz 2.77 76** *e*Pn **Pn** **19 08 22.6 +1.5**
VLKR *e*Sn **Sb** **19 08 58.2 -2.1**
**VLKR Vladikavkaz 2.77 76** *e*PN **Pn** **19 08 22.6 +1.5**
VLKR *e*S **Sb** **19 08 58.2 -2.1**
**EATA Eleskirt 2.79 156** P **Pn** **19 08 24.1 +2.5**
EATA *i* AML AML 19 09 04.0
comp=N,12nm,0.5s
EATA *i* AML AML 19 09 16.0
comp=E,8.3nm,0.5s
EATA *i* AML AML 19 09 26.0
comp=Z,8.5nm,0.9s
**CHRG Chargali 2.90 91** P **Pb** **19 08 25.8 -2.7**
CHRG S **Sg** **19 09 07.6 -1.9**
**GOF Gofitskoye 3.02 29** *e*Pn **Pb** **19 08 27.7 -2.6**
GOF *e*Sn **Sb** **19 09 05.4 -2.0**
**GOF Gofitskoye 3.02 29** *e*PN **Pg** **19 08 34.5 +0.4**
GOF *e*S **Sg** **19 09 13.0 -0.2**
**SHTL Shatili 3.07 84** P **Pb** **19 08 28.3 -3.0**
SHTL S **Sg** **19 09 17.6 +2.7**
**SHTL Shatili 3.07 84** PN **Pb** **19 08 28.3 -3.0**
SHTL S **Sg** **19 09 17.6 +2.7**
**GELR Gelenjik 3.08 315** *e*Pn **Pn** **19 08 27.9 +2.7**
GELR *e*Sn **Sn** **19 09 04.3 +2.0**
**GELR Gelenjik 3.08 315** *e*PN **Pn** **19 08 27.9 +2.7**
GELR *e*S **Sn** **19 09 04.3 +2.0**
**SPGR Shapsug 3.15 318** *e*Pn **Pn** **19 08 28.8 +2.6**
SPGR *e*Sn **Sn** **19 09 05.7 +1.7**
**SPGR Shapsug 3.15 318** *e*PN **Pn** **19 08 28.8 +2.6**
SPGR *e*S **Sn** **19 09 05.7 +1.7**
**DGRG David-gareji 3.40 105** S **Sg** **19 09 23.4 -1.9**
**DGRG David-gareji 3.40 105** PN **Pb** **19 08 34.8 -2.0**
DGRG S **Sg** **19 09 23.4 -1.9**
**DGRG David-gareji 3.40 105** P **Pb** **19 08 34.8 -2.0**
**ANN Anapa 3.52 314** *e*Pn **Pb** **19 08 36.0 -2.8**
ANN *e*Sn **Sn** **19 09 16.3 +3.1**
**ANN Anapa 3.52 314** *e*PN **Pb** **19 08 36.0 -2.8**
ANN *e*S **Sb** **19 09 17.9 -3.8**
**GNI Garni 3.62 128** *e*Pn **Pb** **19 08 40.8 +0.2**
GNI *e*Sn **Sb** **19 09 23.4 -1.2**
**GNI Garni 3.62 128** *e*PN **Pb** **19 08 40.8 +0.2**
GNI *e*S **Sb** **19 09 23.4 -1.2**
**GNI Garni 3.62 128** Pn **Pb** **19 08 40.6 +0.1**
**SVSK Karacayir 3.93 232** Pn **Pn** **19 08 37.9 +1.0**
**KVT Kavak 3.95 252** Pn **Pn** **19 08 37.9 +0.7**
**VSHL Vashlovani 4.20 105** P **Pb** **19 08 50.2 -0.3**
VSHL S **Sg** **19 09 47.8 -3.3**
**SNOP Sinop 4.33 267** Pn **Pn** **19 08 43.1 +0.7**
**DIKM Dikmen 4.35 262** Pn **Pn** **19 08 44.0 +1.3**
**DIKM Dikmen 4.35 262** Pn **Pn** **19 08 43.7 +1.0**
**SUDU Sudak 5.01 302** *e*PN **Pn** **19 08 52.4 +0.7**
**SUDU Sudak 5.01 302** *e*P **Pn** **19 08 52.4 +0.7**
SUDU Pm 19 08 53.9
comp=Z,4.0nm,0.3s
SUDU *i* S **Sn** **19 09 47.9 -1.9**
SUDU Sm 19 09 52.5
comp=N,11nm,0.3s
SUDU Sm 19 09 52.5
comp=E,9.0nm,0.2s
**AKT Akhty 5.10 98** *e*PN **Pb** **19 09 08.4 +2.6**
**BZK Bozkurt 5.22 267** Pn **Pn** **19 08 56.0 +1.3**
**ALU Alushta 5.30 297** *e*P **Pn** **19 08 56.7 +0.9**
ALU Pm 19 08 57.2
comp=Z,9.0nm,0.2s
ALU *e*S **Sn** **19 09 55.3 -1.8**
ALU Sm 19 09 57.9
comp=N,36nm,0.3s
ALU Sm 19 09 57.9
comp=E,8.0nm,0.2s
**ALU Alushta 5.30 297** *e*PN **Pn** **19 08 56.7 +0.9**
**YAL Yalta 5.40 295** *e*S **Sn** **19 09 58.1 -1.3**
YAL Sm 19 10 02.6
comp=N,15nm,0.3s
YAL Sm 19 10 02.6
comp=E,13nm,0.3s
**SIM Simferopol' 5.60 299** *e*S **Sn** **19 10 02.9 -1.5**
SIM Sm 19 10 08.8
comp=N,10.0nm,0.4s
SIM Sm 19 10 08.8
comp=E,3.0nm,0.3s
**SIM Simferopol' 5.60 299** *e*P **Pn** **19 09 00.2 +0.3**
SIM *e*S **Sn** **19 10 03.0 -1.5**
SIM pmax pmax
comp=Z,4.0nm,0.6s
SIM smax smax
comp=E,14nm,1.2s
SIM smax smax
comp=N,20nm,1.1s
**SEV Sevastopol' 5.75 294** *e*P **Pn** **19 09 02.6 +0.7**
SEV Pm 19 08 08.4
comp=Z,3.0nm,0.3s
SEV *e*S **Sn** **19 10 06.8 -1.2**
SEV Sm 19 10 10.5
comp=N,6.0nm,0.3s
SEV Sm 19 10 10.5
comp=E,5.0nm,0.3s
**SEV Sevastopol' 5.75 294** *e*P **Pn** **19 09 02.6 +0.7**
SEV *e*S **Sn** **19 10 06.8 -1.2**
SEV pmax pmax
comp=Z,3.0nm,0.3s
SEV smax smax
comp=N,6.0nm,0.3s
SEV smax smax
comp=E,5.0nm,0.3s
**BRTR Keskin Array B 6.19 247** Pn **Pn** **19 09 08.9 +0.9**
comp=E,0.1nm,0.3s,baz=52,slow=9.5,SNR=1.7
BRTR Sn **Sn** **19 10 18.8 -0.3**
comp=E,0.2nm,0.3s,baz=45,slow=17,SNR=5.5
comp=E,0.2nm,0.5s
**BR104 Keskin Array S 6.19 246** Pn **Pn** **19 09 09.5 +1.3**
comp=E,1.1nm,1.2s,comp=E,0.0nm
BR104 Sn **Sn** **19 10 18.9 -0.4**
comp=E,1.1nm,1.2s,comp=E,0.0nm
**BR106 Keskin Array S 6.20 247** Pn **Pn** **19 09 09.4 +1.2**
comp=E,1.4nm,1.2s,comp=E,0.0nm
BR106 Sn **Sn** **19 10 19.7 +0.4**
comp=E,1.4nm,1.2s,comp=E,0.0nm
**BR105 Keskin Array S 6.20 247** Pn **Pn** **19 09 09.4 +1.1**
comp=E,1.6nm,1.0s,comp=E,0.0nm
**SORM Soroca 10.59 307** Pn **Pn** **19 10 07.7 -0.5**
**AK10 Malin Array Si 11.50 319** Pn **Pn** **19 10 21.9 +1.2**
**AK08 Malin Array Si 11.52 319** Pn **Pn** **19 10 22.2 +1.2**
**AK12 Malin Array Si 11.57 319** Pn **Pn** **19 10 22.7 +1.0**
**AKASG Malin Array Be 11.58 320** Pn **Pn** **19 10 18.9 -2.9**
comp=E,0.5nm,0.3s,baz=133,slow=11,SNR=1.6
comp=E,0.2nm,0.3s
**KIEV Kiev 11.58 320** Pn **Pn** **19 10 23.8 +2.0**
**VOIR 11.90 290** Pn **Pn** **19 10 28.8 +2.6**
**KMPD K-Podol'skiy 11.90 306** Pn **Pn** **19 10 24.2 -2.1**
KMPD Pn **Pn** **19 10 24.2 -2.1**
**KURBB Kurchatov Arra 26.85 59** P **P** **19 13 17.0 -0.1**
comp=E,0.3nm,0.5s,baz=275,slow=9.4,SNR=4.8
comp=E,0.3nm,0.5s
**KURK Kurchatov 26.91 59** P **P** **19 13 17.0 -0.7**

*IDC **26** 19:07:58.3±2.6, 43.˚27N×105.˚07W, h0km, mbtmp3.2/2, ML3.1/2, Error ellipse: s-maj=51.6km s-min=10.4km az=155.0*
*NEIC **26** 19:08:01.6±2.8, 43.˚6N±0.˚1×105.˚31W±0.˚10, h0km±1km, ML3.1/30, Error ellipse: s-maj=23.2km s-min=4.1km az=29.0*
**ISC 26 19:07:57.3±1.1, 43.˚58N±0.˚06×105.˚21W±0.˚05, h0km, n17, σ2°03/16, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.01** | **57** | | **Pn** | **19 08 20.5** | **+1.6** |
| **K22A** | **Casper** | **1.34** | **227** | | **Pn** | **19 08 26.4** | **+3.0** |
| K22A | | | | IAML | | 19 08 54.6 | |
| comp=E,194nm,0.4s | | | | | | | |
| **PHWY** | **Pilot Hill** | **2.28** | **185** | | **Pg** | **19 08 42.3** | **+1.2** |
| **RWWY** | **Rawlins** | **2.40** | **219** | | **Pg** | **19 08 44.4** | **+1.1** |
| RWWY | | | | IAML | | 19 09 22.3 | |
| comp=E,100nm,1.3s | | | | | | | |
| **N23A** | **Red Feather La** | **2.74** | **192** | Pn | **Pg** | **19 08 48.8** | **-1.0** |
| N23A | | | | IAML | | 19 09 31.7 | |
| comp=N,68nm,0.7s | | | | | | | |
| N23A | | | | IAML | | 19 09 34.0 | |
| comp=E,69nm,1.0s | | | | | | | |
| **BRIGG** | **Briggsdale** | **3.07** | **167** | | **Pg** | **19 08 55.7** | **-0.4** |
| BRIGG | | | | IAML | | 19 09 46.5 | |
| comp=N,53nm,0.8s | | | | | | | |
| BRIGG | | | | IAML | | 19 09 49.1 | |
| comp=E,68nm,0.8s | | | | | | | |
| **PD31** | **Pinedale Array** | **3.28** | **257** | Pn | **Pb** | **19 08 54.9** | **-1.7** |
| **PDAR** | **Pinedale Array** | **3.28** | **257** | Pn | **Pg** | **19 08 60.0** | **-0.3** |
| **PDAR** | **Pinedale Array** | **3.28** | **257** | Pn | **Pb** | **19 08 54.9** | **-1.7** |
| comp=E,1.7nm,0.3s,baz=83,slow=17,SNR=10 | | | | | | | |
| PDAR | | | | Lg | Lg | 19 09 42.2 | |
| comp=E,6.5nm,0.3s,baz=82,slow=34,SNR=6.6 | | | | | | | |
| comp=E,1.0nm,0.3s | | | | | | | |
| **RLMT** | **Red Lodge** | **3.29** | **299** | | **Pb** | **19 08 54.7** | **-2.1** |
| RLMT | | | | IAML | | 19 10 25.8 | |
| comp=E,29nm,2.9s | | | | | | | |
| RLMT | | | | IAML | | 19 10 51.0 | |
| comp=E,35nm,3.3s | | | | | | | |
| **OGNE** | **Ogallala** | **3.53** | **137** | Pn | **Pb** | **19 08 59.1** | **-1.7** |
| **REDW** | **Red Top Meadow** | **4.11** | **269** | | **Pg** | **19 09 16.9** | **+0.7** |
| **O20A** | **White River Ci** | **4.12** | **214** | Pn | **Pb** | **19 09 07.3** | **-3.5** |
| O20A | | | | IAML | | 19 11 34.2 | |
| comp=E,31nm,3.4s | | | | | | | |
| **FXWY** | **Fox Creek** | **4.23** | **273** | Pn | **Pb** | **19 09 09.5** | **-3.1** |
| **RDMU** | **Red Mountain** | **4.42** | **229** | | **Pb** | **19 09 14.6** | **-1.5** |
| RDMU | | | | IAML | | 19 10 31.5 | |
| comp=E,22nm,1.4s | | | | | | | |
| RDMU | | | | IAML | | 19 10 32.0 | |
| comp=N,16nm,1.9s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.23** | **40** | Pn | **Pn** | **19 10 12.2** | **+0.5** |
| comp=N,0.4nm,0.3s,baz=229,slow=13,SNR=4.7 | | | | | | | |
| ULM | | | | Lg | Lg | 19 12 49.7 | |
| comp=N,0.3nm,0.3s,baz=318,slow=22,SNR=1.9 | | | | | | | |
| comp=N,0.9nm,0.3s | | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **9.53** | **304** | I | I | 20 01 55.0 | |
| baz=115,slow=317,SNR=4.6 | | | | | | | |

**IDC 26 19:25:52.5±2.3, 17.˚01S×177.˚88W, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=128.6km s-min=28.3km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.29** | **259** | P | P | 19 34 12.3 | -0.1 |
| 0.2nm,0.5s,baz=96,slow=7.4,SNR=7.8 | | | | | | | |
| 0.2nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.52** | **253** | P | P | 19 34 14.2 | 0.0 |
| 1.0nm,0.5s,baz=88,slow=9.1,SNR=42 | | | | | | | |
| 1.0nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **84.91** | **13** | P | P | 19 38 28.5 | -0.4 |
| 0.2nm,0.4s,baz=225,slow=5.0,SNR=7.4 | | | | | | | |
| 0.2nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.09** | **57** | P | P | 19 38 31.2 | +0.4 |
| 0.3nm,0.7s,baz=235,slow=6.3,SNR=3.8 | | | | | | | |
| 0.3nm,0.7s | | | | | | | |

*IDC **26** 19:51:25.0±1.5, 6.˚21N×126.˚99E, h0km, mb3.3/5, mbtmp3.3/5, Error ellipse: s-maj=82.5km s-min=21.3km az=61.0*
**ISC 26 19:51:31.6±1.6, 5.˚7N±0.˚3×12.˚6E±˚, h35km, n6, σ0°94/7, mb3.6/5, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **1.39** | **342** | Pn | **Pn** | **19 51 54.7** | **+0.2** |
| 29nm,0.3s,baz=68,slow=14,SNR=1.5 | | | | | | | |
| DAV | | | | Sn | **Sn** | **19 52 11.2** | **-0.5** |
| 102nm,0.3s,baz=256,slow=22,SNR=8.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.80** | **162** | P | **P** | **19 57 10.0** | **+1.3** |
| 0.2nm,0.7s,baz=346,slow=10,SNR=2.4 | | | | | | | |
| 0.2nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **30.22** | **166** | P | **P** | **19 57 38.1** | **-1.0** |
| 0.1nm,0.4s,baz=349,slow=7.2,SNR=1.9 | | | | | | | |
| 0.1nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.51** | **325** | P | **P** | **20 01 03.6** | **+0.4** |
| 0.3nm,0.5s,baz=118,slow=6.1,SNR=4.3 | | | | | | | |
| 0.3nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.67** | **327** | P | **P** | **20 01 31.8** | **-0.7** |
| 0.3nm,0.5s,baz=129,slow=6.4,SNR=5.9 | | | | | | | |
| 0.3nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.26** | **327** | P | **P** | **20 02 09.7** | **0.0** |
| 0.2nm,0.4s,baz=125,slow=12,SNR=2.2 | | | | | | | |
| 0.2nm,0.4s | | | | | | | |

*IDC **26** 19:58:24.9±0.5, 11.˚18S×70.˚61W, h631km±5km, mb3.8/23, mbtmp4.7/28, Error ellipse: s-maj=10.9km s-min=7.5km az=64.0*
*NEIC **26** 19:58:24.6±2.5, 11.˚25S±0.˚09×70.˚6W±0.˚1, h606km±5km, mb4.5/184, Error ellipse: s-maj=16.6km s-min=12.5km az=80.0*
*VAO **26** 19:58:25.6±0.3, 11.˚21S×70.˚59W, h636km±3km, mb4.6*
**ISC 26 19:58:25.3±0.4, 11.˚23S±0.˚04×70.˚65W±0.˚05, h632km±4km, n395, σ0°83/378, mb4.4/121, 6D, Peru-Brazil border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CZSB** | **Cruzeiro do Su** | **4.02** | **330** | P | **P** | **19 59 53.0** | **-0.4** |
| **CZSB** | **Cruzeiro do Su** | **4.02** | **330** | *e*P | **P** | **19 59 53.3** | **-0.2** |
| CZSB | | | | *e*S | **S** | **20 01 03.6** | **-1.5** |
| **ETMB** | **Extrema** | **4.58** | **73** | P | **P** | **19 59 57.6** | **+0.3** |
| **ETMB** | **Extrema** | **4.58** | **73** | *e*P | **P** | **19 59 57.5** | **+0.3** |
| ETMB | | | | *e*S | **S** | **20 01 12.0** | **-0.1** |
| **LPAZ** | **La Paz** | **5.60** | **154** | P | **P** | **20 00 05.9** | **+0.3** |
| **LPAZ** | **La Paz** | **5.60** | **154** | P | **P** | **20 00 06.1** | **+0.5** |
| 211nm,0.5s,baz=337,slow=5.0,SNR=811 | | | | | | | |
| LPAZ | | | | S | **S** | **20 01 26.0** | **-1.4** |
| 104nm,0.7s,baz=94,slow=18,SNR=9.8 | | | | | | | |
| **LPAZ** | **La Paz** | **5.60** | **154** | *e*P | **P** | **20 00 06.3** | **+0.7** |
| LPAZ | | | | *e*S | **S** | **20 01 26.3** | **-1.2** |
| **NNA** | **Nana** | **6.11** | **262** | P | **P** | **20 00 09.0** | **-0.2** |
| **NNA** | **Nana** | **6.11** | **262** | P | **P** | **20 00 09.7** | **+0.4** |
| 40nm,0.3s,baz=69,slow=6.8,SNR=18 | | | | | | | |
| NNA | | | | S | **S** | **20 01 33.2** | **-1.0** |
| 53nm,0.9s,baz=346,slow=22,SNR=11 | | | | | | | |
| **PB18** | **Visviri** | **6.43** | **170** | P | **P** | **20 00 11.9** | **-0.4** |
| **TBTG** | **Tabatinga, AM** | **7.03** | **6** | P | **P** | **20 00 18.1** | **+0.9** |
| **TBTG** | **Tabatinga, AM** | **7.03** | **6** | *e*P | **P** | **20 00 18.3** | **+1.1** |
| TBTG | | | | *e*S | **S** | **20 01 48.9** | **+0.4** |
| **SAML** | **Samuel** | **7.69** | **74** | P | **P** | **20 00 23.4** | **+0.3** |
| **SAML** | **Samuel** | **7.69** | **74** | *e*P | **P** | **20 00 23.4** | **+0.3** |
| SAML | | | | *e*S | **S** | **20 01 59.7** | **+0.3** |
| **GO01** | **Chusmiza** | **8.51** | **171** | P | **P** | **20 00 30.8** | **-0.3** |
| **ATAH** | **Atahualpa** | **8.66** | **297** | P | **P** | **20 00 34.7** | **+2.2** |
| 4.4nm,0.3s,baz=129,slow=6.0,SNR=13 | | | | | | | |
| ATAH | | | | S | **S** | **20 02 16.5** | **-0.1** |
| 33nm,1.0s,baz=110,slow=16,SNR=12 | | | | | | | |
| **HMBC** | **Humberstone** | **9.03** | **175** | P | **P** | **20 00 34.9** | **-0.6** |
| **TA01** | **Diego Aracena** | **9.30** | **177** | P | **P** | **20 00 37.7** | **-0.2** |
| **PATCX** | **Punta Patache** | **9.55** | **177** | P | **P** | **20 00 40.5** | **-0.1** |
| **TEFE** | **Tefe** | **9.71** | **38** | *e*P | **P** | **20 00 42.5** | **+0.4** |
| TEFE | | | | *e*S | **S** | **20 02 34.7** | **+0.5** |
| **PB01** | **IPOC Station P** | **9.83** | **174** | P | **P** | **20 00 42.6** | **-0.6** |
| **VILB** | **Vilhena** | **10.36** | **101** | P | **P** | **20 00 48.5** | **+0.1** |
| **VILB** | **Vilhena** | **10.36** | **101** | *e*P | **P** | **20 00 48.8** | **+0.4** |
| **SIV** | **San Ignacio** | **10.45** | **118** | P | **P** | **20 00 49.1** | **-0.1** |
| 55nm,0.5s,baz=295,slow=9.3,SNR=332 | | | | | | | |
| SIV | | | | S | **S** | **20 02 46.8** | **-0.4** |
| 37nm,0.9s,baz=270,slow=21,SNR=7.4 | | | | | | | |
| **PB09** | **IPOC Station P** | **10.60** | **173** | P | **P** | **20 00 50.8** | **0.0** |
| **VBST** | **Vila Bela da S** | **10.88** | **109** | *e*P | **P** | **20 00 53.3** | **-0.1** |
| VBST | | | | *e*S | **S** | **20 02 54.8** | **0.0** |
| **PB04** | **IPOC Station P** | **11.06** | **178** | P | **P** | **20 00 55.2** | **-0.1** |
| **BBSD** | **Serra de San D** | **11.39** | **122** | *e*P | **P** | **20 00 58.3** | **0.0** |
| BBSD | | | | *e*S | **S** | **20 03 04.4** | **+0.7** |
| **LVC** | **Limon Verde** | **11.44** | **172** | P | **P** | **20 00 59.8** | **+0.7** |
| **LVC** | **Limon Verde** | **11.44** | **172** | P | **P** | **20 00 59.6** | **+0.5** |
| 9.4nm,0.4s,baz=335,slow=3.8,SNR=15 | | | | | | | |
| LVC | | | | S | **S** | **20 03 04.0** | **-1.0** |
| 9.4nm,0.5s,baz=296,slow=15,SNR=4.1 | | | | | | | |
| **LVC** | **Limon Verde** | **11.44** | **172** | *e*P | **P** | **20 00 59.9** | **+0.7** |
| LVC | | | | *e*S | **S** | **20 03 05.9** | **+0.9** |
| **YJA** | **Yavi** | **11.95** | **156** | *e*P | **P** | **20 01 02.5** | **-1.5** |
| **PTLB** | **Pontes e Lacer** | **11.96** | **112** | P | **P** | **20 01 04.1** | **+0.4** |
| **PTLB** | **Pontes e Lacer** | **11.96** | **112** | *e*P | **P** | **20 01 04.2** | **+0.4** |
| PTLB | | | | *e*S | **S** | **20 03 14.2** | **+0.7** |
| **MACA** | **Manacapuru-AM** | **12.72** | **52** | P | **P** | **20 01 11.5** | **+0.6** |
| **MACA** | **Manacapuru-AM** | **12.72** | **52** | *e*P | **P** | **20 01 11.3** | **+0.3** |

MACA eS S 20 03 27.4 +0.8
**PB14 IPOC Station P** 13.33 179 P P 20 01 17.0 0.0
**BBLB La Banda, Boli** 13.63 124 eP P 20 01 20.1 +0.6
BBLB eS S 20 03 42.2 +0.3
**PDRB Porto dos Gac** 13.65 93 eP P 20 01 20.6 +0.7
PDRB eS S 20 03 43.2 +0.7
**PTET Porto Estrela** 13.76 109 eP P 20 01 21.5 +0.7
**OTAV Otavalo** 13.78 325 eP P 20 01 22.8 +1.3
**GO02 Mina Guanaco** 13.90 176 P P 20 01 23.8 +1.4
**POCN Pocone** 14.53 113 eP P 20 01 29.1 +1.1
POCN eS S 20 03 59.3 +2.4
**CLDB Colider** 14.58 90 eP P 20 01 29.2 +0.7
CLDB eS S 20 03 58.7 +0.8
**NBRS Nobres** 14.83 104 eP P 20 01 32.2 +1.4
NBRS eS S 20 04 03.0 +1.1
**AC01 Pan de Azucar** 14.84 180 P P 20 01 31.0 +0.3
**SALV Santo Antonio** 15.26 109 eP P 20 01 35.5 +0.8
**NPGB Novo Progresso** 15.66 76 eP P 20 01 38.4 +0.1
NPGB eS S 20 04 15.0 -0.5
**AC06 Mina Casimiro** 16.05 179 P P 20 01 42.2 +0.5
AC06 IAmb IAmb 20 01 44.6
comp=Z,16nm,0.8s
**MURT Porto Murtinho** 16.24 131 eP P 20 01 43.9 +0.4
**PP1B Ponte de Pedra** 16.53 114 eP P 20 01 47.5 +1.3
**BOAV Boa Vista** 16.87 37 P P 20 01 50.6 +1.2
**BOAV Boa Vista** 16.87 37 eP P 20 01 50.6 +1.2
**RVDE Rio Verde (Bra** 17.03 119 eP P 20 01 51.5 +0.8
**AQDB Aquidauana** 17.06 124 eP P 20 01 51.4 +0.4
**PAPY Pozo Azul** 17.41 139 eP P 20 01 54.4 +0.3
**AC05 El Transito** 17.52 179 P P 20 01 55.1 -0.1
AC05 IAmb IAmb 20 01 59.4
comp=Z,34nm,1.5s
**CO01 Juntas del Tor** 18.67 178 P P 20 02 06.6 +0.8
CO01 IAmb IAmb 20 02 27.8
comp=Z,19nm,1.5s
**MAL2 Monte Alegre,** 18.73 62 P P 20 02 07.3 +1.0
**ARAG Araguaiana, MT** 18.85 106 eP P 20 02 07.8 +0.5
**SNDB Serra Nova Dou** 18.98 94 eP P 20 02 09.0 +0.5
SNDB eS S 20 05 08.6 -0.4
**CO06 Fray Jorge** 19.38 183 P P 20 02 12.5 +0.7
**SJPY San Joaquin** 19.43 137 eP P 20 02 12.2 -0.3
**CO03 El Pedregal** 19.52 180 P P 20 02 13.6 +0.3
CO03 IAmb IAmb 20 02 42.6
comp=Z,27nm,1.2s
**CPUP Villa Florida** 19.59 142 P P 20 02 13.4 -0.4
CPUP IAmb IAmb 20 02 14.1
comp=Z,8.3nm,0.7s
**CPUP Villa Florida** 19.59 142 P P 20 02 13.4 -0.4
comp=Z,7.7nm,0.6s,baz=325,slow=9.1,SNR=15
**CPUP Villa Florida** 19.59 142 eP P 20 02 13.2 -0.6
**CO02 Combarbal** 19.88 181 P P 20 02 16.5 -0.1
**TRCB Terra Rica** 20.69 126 eP P 20 02 24.2 +0.4
**PRPB Parauapebas** 21.19 78 eP P 20 02 28.7 +0.3
**MCPB Macapa, AP** 21.39 61 eP P 20 02 31.1 +0.9
**VA03 San Esteban** 21.44 180 P P 20 02 31.5 +1.0
**MT02 Curacav** 21.93 181 P P 20 02 35.3 +0.5
**MT08 Bocatoma Ro** 22.12 179 P P 20 02 39.2 +2.5
**MT03 Universidad Ad** 22.16 180 P P 20 02 38.6 +1.7
**MT13 San Alfonso** 22.42 179 P P 20 02 40.4 +1.2
MT13 IAmb IAmb 20 02 40.9
comp=Z,13nm,0.7s
**BDFB Brasilia** 22.44 104 P P 20 02 39.5 -0.2
BDFB IAmb IAmb 20 03 08.4
comp=Z,18nm,1.4s
**BDFB Brasilia** 22.44 104 P P 20 02 39.3 -0.3
comp=Z,3.3nm,0.6s,baz=276,slow=6.5,SNR=5.1
comp=Z,3.3nm,0.6s
**MT09 Talagante** 22.45 181 P P 20 02 40.0 +0.6
**ITQB Itaqui** 22.53 147 P P 20 02 39.9 -0.2
**MT01 Popeta** 22.54 181 P P 20 02 39.7 -0.4
**BO04 La Punta** 22.66 180 P P 20 02 41.8 +0.6
BO04 IAmb IAmb 20 02 42.7
comp=Z,14nm,0.7s
**IPMB Ipameri, GO** 22.71 110 eP P 20 02 41.4 -0.5
**SMTB Santa Maria do** 22.83 86 eP P 20 02 44.0 +1.0
**BO01 Tunca** 23.06 181 P P 20 02 43.9 -0.8
BO01 IAmb IAmb 20 03 03.5
comp=Z,22nm,1.4s
**BO02 Sierra Bellavi** 23.46 180 P P 20 02 49.0 +0.6
BO02 IAmb IAmb 20 02 49.9
comp=Z,17nm,1.1s
**VA04 Juan Fernndez** 23.54 197 P P 20 02 48.8 -0.1
**ITAB Concordia** 23.60 135 P P 20 02 48.9 -0.7
ITAB IAmb IAmb 20 02 49.7
comp=Z,18nm,0.9s
**GO05 Huala** 23.71 183 P P 20 02 51.0 +0.6
**MDP Montagnes des** 24.17 49 P P 20 02 54.1 -0.8
comp=Z,2.5nm,0.6s,baz=212,slow=7.5,SNR=1.4
comp=Z,2.5nm,0.6s
**TBOT Tacuarembo** 24.48 148 eP P 20 02 56.6 -0.6
**SDBA SAO DESIDERIO** 25.23 95 eP P 20 03 04.5 +0.3
**BI02 San Fabin de** 25.33 181 P P 20 03 06.1 +1.3
BI02 IAmb IAmb 20 03 18.4
comp=Z,16nm,1.5s
**BI05 Punta Hualpn** 25.51 185 P P 20 03 06.0 -0.3
**PLTB Pedras Altas** 25.80 145 P P 20 03 08.1 -0.9
**JANB Januaria** 25.92 101 eP P 20 03 10.1 -0.2
**DIAM Diamantina, MG** 26.99 108 eP P 20 03 19.5 -0.2
**TRQA Tornquist** 27.82 165 P P 20 03 26.3 -0.2
TRQA IAmb IAmb 20 03 31.8
comp=Z,27nm,1.5s
**LR05 Currie** 28.91 182 P P 20 03 36.2 +0.4
**OBIP Obispado Ponce** 29.36 8 P P 20 03 38.7 -1.2
**CELP Cerrillos** 29.39 8 P P 20 03 40.5 +0.3
**PLCA Paso Flores** 29.39 180 P P 20 03 40.5 +0.5
PLCA PcP PcP 20 06 25.6 +0.7
**PLCA Paso Flores** 29.39 180 P P 20 03 40.5 +0.5
comp=Z,2.6nm,0.6s,baz=357,slow=8.5,SNR=15
PLCA PcP PcP 20 06 25.1 +0.2
comp=Z,2.8nm,0.7s,baz=301,slow=2.2,SNR=5.2
PLCA ScP ScP 20 09 07.8 -0.2
comp=Z,3.6nm,0.8s,baz=6.4,slow=5.0,SNR=8.6
comp=Z,2.6nm,0.6s
**PDPR Patillas Dam,** 29.41 9 P P 20 03 40.0 -0.4
PDPR IAmb IAmb 20 03 41.5
comp=Z,19nm,1.4s
**UUPR Utuado, UPR, P** 29.55 8 P P 20 03 41.4 -0.1
**HUMP Col San Antoni** 29.56 9 P P 20 03 42.2 +0.6
HUMP IAmb IAmb 20 03 51.9
comp=Z,18nm,0.9s
**LL04 Puerto Octay** 29.61 183 P P 20 03 41.5 -0.3
LL04 IAmb IAmb 20 03 42.2
comp=Z,8.1nm,0.6s
LL04 PcP PcP 20 06 25.9 +0.5
**GCPR Guaynabo City** 29.69 9 P P 20 03 42.2 -0.5
**NBPN Ponto Novo - B** 29.88 92 eP P 20 03 44.8 +0.2
**RIB01 Linhares ES** 30.24 109 eP P 20 03 47.0 -0.5
**NBPB Pedra_Branca-C** 31.23 82 eP P 20 03 56.6 +0.5
**GO07 Milladeo Hill,** 31.88 184 P P 20 04 00.6 -0.5
**NBTA Tacaratu-PE** 32.13 89 eP P 20 04 04.1 +0.4
**NBLA Lagarto - SE** 32.24 93 eP P 20 04 04.3 -0.2
**GRTK Grand Turk** 32.54 359 P P 20 04 07.5 +0.6
**NBAN Anadia - AL** 33.83 91 eP P 20 04 17.7 -0.2
**CCIG Comitan** 34.63 322 P P 20 04 25.5 +0.9
CCIG IAmb IAmb 20 04 29.1
comp=Z,28nm,1.4s
**CAMR Camarioca** 35.66 343 P P 20 04 33.5 +0.7
CAMR IAmb IAmb 20 04 58.9
comp=Z,76nm,1.2s
**EFI East Falkland** 41.62 168 P P 20 05 21.0 +0.9
**MG03 Isla Dawson** 42.51 180 P P 20 05 28.6 +1.5
**BIRD Birdtown, Kers** 46.56 349 P P 20 05 58.4 +0.1
**W57A Gilead** 46.97 350 IAmb IAmb 20 06 01.8
comp=Z,14nm,0.8s
**Y49A Blount Mountai** 47.27 342 IAmb IAmb 20 06 03.5
comp=Z,9.3nm,0.8s
**V55A Taylorsville** 47.87 348 P P 20 06 08.3 +0.2
V55A IAmb IAmb 20 06 09.2
comp=Z,18nm,0.8s
**X48A Hartselle** 48.02 342 IAmb IAmb 20 06 09.2
comp=Z,15nm,0.8s
**833A Chaparral WMA,** 48.16 325 P P 20 06 10.8 +0.5
baz=141
**CPCT Cooper Cave** 48.24 345 IAmb IAmb 20 06 11.0
comp=Z,12nm,1.0s
**TKL Tuckaleechee C** 48.25 346 IAmb IAmb 20 06 11.0
comp=Z,13nm,0.9s
**TKL Tuckaleechee C** 48.25 346 P P 20 06 10.0 -0.9
comp=Z,9.0nm,0.8s,baz=161,slow=10.0,SNR=13
comp=Z,9.0nm,0.8s
**T59A Double "B" Far** 48.38 353 IAmb IAmb 20 06 12.1
comp=Z,16nm,0.9s
**T57A Hurt** 48.64 351 IAmb IAmb 20 06 14.3
comp=Z,13nm,0.9s
**OXF Oxford** 48.85 339 IAmb IAmb 20 06 15.7
comp=Z,15nm,0.9s
**TZTN Tazewell** 49.04 346 P P 20 06 16.0 -0.7
TZTN IAmb IAmb 20 06 16.9
comp=Z,8.0nm,0.8s
**435B Jarrell** 49.13 329 P P 20 06 17.6 +0.2
baz=144
**V48A Smith Brothers** 49.15 343 P P 20 06 17.0 -0.5
**S57A Dark Hollow, R** 49.34 351 P P 20 06 17.9 -0.9
S57A IAmb IAmb 20 06 19.6
comp=Z,7.4nm,0.7s
**U49A Red Boiling Sp** 49.58 344 IAmb IAmb 20 06 20.3
comp=Z,9.3nm,0.8s
**WVT Waverly** 49.81 342 P 20 06 21.0 -1.3
WVT IAmb IAmb 20 06 21.5
comp=Z,16nm,0.8s
**MIAR Mount Ida** 50.45 335 P P 20 06 26.4 -0.5
MIAR PcP PcP 20 07 34.4 +1.0
**Q56A Snyder Ridge,** 50.63 351 IAmb IAmb 20 06 29.5
comp=Z,11nm,0.9s
**HOPE Hope Point** 50.75 155 P P 20 06 29.4 +0.6
**FCAR Ozark Folk Cen** 51.06 338 P P 20 06 30.1 -1.2
FCAR IAmb IAmb 20 06 30.9
comp=Z,12nm,0.7s
**WCI Wyandotte Cave** 51.33 344 P P 20 06 31.9 -1.3
WCI IAmb IAmb 20 06 32.7
comp=Z,18nm,0.8s
**TXAR Lajitas Array** 51.39 322 P P 20 06 34.2 +0.3
**TXAR Lajitas Array** 51.39 322 P P 20 06 33.5 -0.4
comp=Z,0.8nm,0.6s,baz=149,slow=8.6,SNR=2.3
TXAR PcP PcP 20 07 37.1 -0.1
comp=Z,1.1nm,0.6s,baz=144,slow=5.8,SNR=6.0
TXAR ScP ScP 20 10 33.1 -1.2
comp=Z,0.2nm,0.5s,baz=142,slow=3.1,SNR=2.3
comp=Z,0.8nm,0.6s
**CGM3 Cape Girardeau** 51.46 341 P P 20 06 33.1 -1.0
**S44A Carbondale** 51.70 341 P P 20 06 35.0 -0.8
**SIUC Southern Illin** 51.70 341 P P 20 06 35.1 -0.8
**T42A Van Buren** 51.70 339 IAmb IAmb 20 06 35.4
comp=Z,12nm,0.7s
**P52A Corning** 51.71 349 P P 20 06 34.7 -1.3
baz=166,SNR=8.4
**O52A Adamsville** 52.12 349 IAmb IAmb 20 06 39.1
comp=Z,13nm,0.7s
**O53A New Philadelph** 52.14 350 P P 20 06 38.3 -0.7
baz=167,SNR=6.7
**P49A Miami Univ. Ec** 52.17 346 P P 20 06 37.6 -1.5
baz=162
**MGMO Mountain Grove** 52.24 338 IAmb IAmb 20 06 39.8
comp=Z,18nm,0.9s
**P48A Milroy** 52.27 346 IAmb IAmb 20 06 38.9
comp=Z,9.0nm,0.8s
**FVM French Village** 52.34 340 P P 20 06 39.9 -0.5
**TUL3 Leonard** 52.55 334 IAmb IAmb 20 06 42.6
comp=Z,16nm,1.1s
**O49A Covington** 52.70 347 IAmb IAmb 20 06 42.6
comp=Z,20nm,0.9s
**Q44A Meyer Farm, Va** 52.73 342 IAmb IAmb 20 06 42.4
comp=Z,25nm,0.8s
**OK052 Battle Ridge R** 53.06 333 IAmb IAmb 20 06 46.1
comp=Z,15nm,0.7s
**S39A Bolivar** 53.10 338 IAmb IAmb 20 06 45.7
comp=Z,17nm,0.8s
S39A PcP PcP 20 07 43.6 +0.2
**M53A WI Miller and** 53.21 351 P P 20 06 45.7 -0.9
baz=168
**R40A Maddies Statio** 53.25 339 IAmb IAmb 20 06 46.6
comp=Z,14nm,0.7s
**N49A Columbus Grove** 53.37 347 P P 20 06 46.6 -1.1
**BINY Binghamton** 53.39 355 IAmb IAmb 20 06 48.5
comp=Z,17nm,0.9s
**L61B Northampton** 53.44 358 P P 20 06 46.7 -1.4
baz=177
**SMWD Samnorwood** 53.93 330 IAmb IAmb 20 06 52.7
comp=Z,24nm,0.7s
**P40A Paris** 54.28 340 IAmb IAmb 20 06 53.8
comp=Z,19nm,0.8s
**P38A Dawn** 54.88 338 IAmb IAmb 20 06 57.9
comp=Z,11nm,0.6s
**L44A Lake County Fo** 55.46 344 P P 20 07 01.9 -0.2
baz=159
**121A Cookes Peak, D** 56.14 322 P P 20 07 07.3 0.0
baz=135
**G62A West of Eustis** 56.18 0 IAmb IAmb 20 07 08.5
comp=Z,27nm,0.9s
**G65A Princeton** 56.23 3 P P 20 07 07.3 0.0
G65A IAmb IAmb 20 07 08.4
comp=Z,16nm,0.7s
**PKME Peaks-Kenny Pk** 56.24 1 P P 20 07 06.8 -0.6
PKME IAmb IAmb 20 07 08.4
comp=Z,14nm,0.8s
**SADO Sadowa** 56.26 353 P P 20 07 06.5 -1.1
comp=Z,7.5nm,0.8s,baz=205,slow=4.4,SNR=4.8
comp=Z,7.5nm,0.8s
**JFWS Jewell Farm** 56.78 343 IAmb IAmb 20 07 10.8
comp=Z,18nm,0.8s
**F64A Sherman** 56.86 2 P P 20 07 11.8 +0.2
**SMAI San Martin Ant** 56.89 178 P P 20 07 12.7 +1.2
**ANMO Albuquerque** 57.09 325 P P 20 07 13.7 0.0
**T25A Trinidad** 57.62 328 P P 20 07 18.4 +1.1
baz=140
**D62A Allapoint, All** 58.06 1 IAmb IAmb 20 07 20.7
comp=Z,22nm,0.8s
**BATG Bathurst New B** 58.38 4 P P 20 07 21.8 -0.1
BATG IAmb IAmb 20 07 22.7
comp=Z,15nm,0.8s
**E46A Sault Ste Mari** 58.62 349 IAmb IAmb 20 07 23.5
comp=Z,22nm,1.0s
**SDCO Great Sand Dun** 58.64 328 P P 20 07 25.0 +0.7
**214A Organ Pipe Nat** 58.91 318 P P 20 07 26.7 +0.9
baz=130
**LDAQ Lac Daran** 58.93 360 IAmb IAmb 20 07 26.4
comp=Z,18nm,0.8s
**W18A Petrified Fore** 59.10 323 P P 20 07 27.7 +0.5
baz=134
**S22A 4UR Ranch, Cre** 59.34 327 P P 20 07 29.8 +0.9
baz=138
**OGNE Ogalla** 59.45 333 IAmb IAmb 20 07 30.7
comp=Z,25nm,1.0s
**BBTS Babate** 59.47 66 P P 20 07 29.2 -0.6
comp=Z,35nm,0.9s,baz=262,slow=7.1,SNR=3.9
comp=Z,35nm,0.9s
**F33A 5 Mile Ranch,** 61.31 340 IAmb IAmb 20 07 41.2
comp=Z,13nm,0.7s
**SRU San Rafael Swe** 62.34 326 IAmb IAmb 20 07 49.8
comp=Z,9.1nm,0.7s
**RSSD Black Hills** 62.88 334 P P 20 07 52.7 +1.0
RSSD IAmb IAmb 20 07 53.3
comp=Z,9.0nm,0.8s
**AGMN Agassiz Nation** 63.34 341 IAmb IAmb 20 07 54.4
comp=Z,15nm,0.7s
**GWY Greenwater Val** 64.06 320 P P 20 08 00.2 +0.9
**DUG Dugway, Tooele** 64.36 325 IAmb IAmb 20 08 03.2
comp=Z,11nm,0.8s
**PDAR Pinedale Array** 64.45 329 P P 20 08 01.6 -0.1
**PDAR Pinedale Array** 64.45 329 P P 20 08 01.4 -0.3
comp=Z,1.5nm,0.5s,baz=120,slow=8.9,SNR=22
PDAR PcP PcP 20 08 28.8 -0.5
comp=Z,1.9nm,1.0s,baz=144,slow=6.3,SNR=5.6
PDAR pP pP 20 10 04.0 -1.0
comp=Z,0.2nm,0.4s,baz=108,slow=5.8,SNR=1.9
comp=Z,1.5nm,0.5s
**R11B Troy Canyon, C** 64.75 322 P P 20 08 04.9 +1.3
baz=130
**ULM Lac du Bonnet** 65.07 342 IAmb IAmb 20 08 04.9
comp=Z,16nm,0.7s
**ULM Lac du Bonnet** 65.07 342 P P 20 08 04.1 -1.0
comp=Z,15nm,0.6s,baz=158,slow=7.7,SNR=31
comp=Z,15nm,0.6s
**HVU Hansel Valley** 65.43 327 IAmb IAmb 20 08 09.5
comp=Z,8.9nm,0.8s
**DSP Deep Springs** 65.61 320 P P 20 08 10.3 +1.6
**SCHQ Schefferville** 65.88 2 P P 20 08 09.6 -0.5
SCHQ IAmb IAmb 20 08 09.9
comp=Z,15nm,1.0s
**SCHQ Schefferville** 65.88 2 P P 20 08 09.1 -1.0
comp=Z,8.3nm,0.8s,baz=175,slow=5.1,SNR=8.4
comp=Z,8.3nm,0.8s
**NVAR Mina Array Bea** 66.46 321 P P 20 08 15.0 +0.7
comp=Z,1.5nm,0.8s,baz=126,slow=6.8,SNR=12
NVAR PcP PcP 20 08 37.7 -0.1
comp=Z,1.7nm,0.7s,baz=137,slow=4.5,SNR=8.0
comp=Z,1.5nm,0.8s
**YHL Hebgen Lake** 66.77 330 IAmb IAmb 20 08 18.9
comp=Z,20nm,1.2s
**PMOZ Porto Moniz, M** 67.19 47 eP P 20 08 19.6 +0.9
**PMAR Madeira** 67.35 47 eP P 20 08 20.2 +0.4
**HLID Hailey** 67.53 327 IAmb IAmb 20 08 22.8
comp=Z,9.1nm,1.0s
**DBIC Dimbokro** 67.83 78 P P 20 08 22.5 -0.4
comp=Z,30nm,0.6s,baz=246,slow=6.2,SNR=46
comp=Z,30nm,0.6s
**MFID Camas Ranch** 68.19 326 IAmb IAmb 20 08 26.8
comp=Z,20nm,0.9s
**BELA Belgrano 2** 69.10 172 P P 20 08 29.7 +0.4
**VNA3 Neumayer Olymp** 70.31 163 ⇓P P 20 08 36.7 +0.2
comp=Z,10nm,0.8s
**VNA1 Neumayer--Stat** 70.49 162 ⇓P P 20 08 38.2 +0.6
comp=Z,16nm,1.0s
**FFC Flin Flon** 70.82 341 P P 20 08 39.6 -0.1
FFC IAmb IAmb 20 08 40.3
comp=Z,9.5nm,0.8s
**VNA2 Neumayer--Watz** 70.86 162 ⇓P P 20 08 39.9 +0.1
comp=Z,8.5nm,0.6s,baz=292,slow=5.4
**PINE Pine Mountain** 71.30 324 IAmb IAmb 20 08 45.5
comp=Z,11nm,0.9s
**D08A Wollman Farm,** 72.22 328 IAmb IAmb 20 08 50.2
comp=Z,8.9nm,0.8s
**SNAA Sanae** 72.50 162 P P 20 08 49.3 -0.1
SNAA IAmb IAmb 20 08 50.5
comp=Z,16nm,0.8s
**SNAA Sanae** 72.50 162 ⇓P P 20 08 49.6 +0.2
comp=Z,256nm,0.5s
**SNAA Sanae** 72.50 162 P P 20 08 49.5 +0.2
comp=Z,18nm,0.8s,baz=280,slow=6.9,SNR=152
comp=Z,18nm,0.8s
**H04A Detroit Lake** 72.56 324 P P 20 08 50.6 +0.6
H04A IAmb IAmb 20 08 51.1
comp=Z,7.5nm,0.7s
**TROLL Troll, Antarti** 74.21 162 ⇓P P 20 08 59.7 +0.5
comp=Z,452nm,0.6s
**MORF Marmelete** 75.49 47 eP P 20 09 08.1 +1.4
**MORF Marmelete** 75.49 47 eP P 20 09 08.2 +1.5
MORF IAmb IAmb 20 09 09.3
comp=Z,28nm,1.0s
**PTEO Sao Teotonio** 75.54 46 eP P 20 09 08.7 +1.8
**TORD Torodi Ar. Bea** 75.75 73 P P 20 09 08.0 -0.6
**TORD Torodi Ar. Bea** 75.75 73 P P 20 09 08.0 -0.6
comp=Z,42nm,0.7s,baz=274,slow=5.1,SNR=204
TORD pP pP 20 11 16.6 -1.3
comp=Z,2.9nm,0.9s,baz=260,slow=5.4,SNR=4.9
comp=Z,42nm,0.7s
**PNCL Nicolau / Gran** 75.94 46 eP P 20 09 10.4 +1.3
**MESJ Messejana** 76.03 46 eP P 20 09 11.3 +1.7
**MESJ Messejana** 76.03 46 eP P 20 09 11.0 +1.4
MESJ IAmb IAmb 20 09 11.6
comp=Z,11nm,0.9s
**PCVE Castro Verde** 76.07 47 eP P 20 09 11.3 +1.5
**PVAQ Vaqueiros** 76.20 47 eP P 20 09 11.8 +1.3
**PBEJ Beja** 76.37 46 eP P 20 09 13.0 +1.6
**PSBE So Bento** 76.38 45 eP P 20 09 12.9 +1.4
**EVO Evora** 76.49 46 eP P 20 09 13.2 +1.1
**PMTG Montargil** 76.58 45 eP P 20 09 13.4 +0.8
**PCAS Casmilo, Conde** 76.83 44 eP P 20 09 16.8 +2.9
**PESTR Estremoz** 76.93 46 eP P 20 09 16.3 +1.8
**PBAR Barrancos** 77.02 46 eP P 20 09 16.1 +1.1
**PMRV Marv??o** 77.32 45 eP P 20 09 16.3 -0.3
**PCBR Castelo Branco** 77.44 45 eP P 20 09 18.0 +0.8
comp=Z,22nm,1.4s
**PVIS Viseu** 77.54 44 eP P 20 09 18.4 +0.6
**MTE Manteigas** 77.64 44 eP P 20 09 20.0 +1.6
**PCAB Cabril** 77.90 43 eP P 20 09 20.4 +0.7
**POLO Lamas de Olo** 77.91 43 eP P 20 09 20.1 +0.3
**PVRL Vila Real** 77.91 43 eP P 20 09 20.7 +0.9
**MVO Moncorvo** 78.33 44 eP P 20 09 22.4 +0.4
comp=Z,16nm,0.7s
**PBRG Braganca** 78.80 43 eP P 20 09 25.3 +0.8
comp=Z,23nm,1.5s
**QSPA South Pole Qui** 78.91 180 P P 20 09 25.2 +0.5
QSPA IAmb IAmb 20 09 26.2
comp=Z,14nm,0.8s
**QSPA South Pole Qui** 78.91 180 P P 20 09 25.2 +0.5
comp=Z,14nm,0.7s,baz=159,slow=2.0,SNR=113
comp=Z,14nm,0.7s
**PAB San Pablo** 79.50 46 P P 20 09 29.1 +0.9
PAB IAmb IAmb 20 09 30.2
comp=Z,10nm,0.8s
**ESDC Sonseca Array** 79.82 46 P P 20 09 30.6 +0.7
ESDC IAmb IAmb 20 09 31.8
comp=Z,9.7nm,0.9s
**ESDC Sonseca Array** 79.82 46 P P 20 09 30.7 +0.8
comp=Z,9.7nm,0.8s,baz=253,slow=5.2,SNR=65
comp=Z,9.7nm,0.8s
**ESBB Sonseca Array** 79.83 46 P P 20 09 31.0 +1.0
ESBB IAmb IAmb 20 09 31.8
comp=Z,13nm,0.8s
**ELIB Princess Elisa** 80.65 162 dP P 20 09 34.0 +0.3
comp=Z,7.4nm,0.9s
**YKA Yellowknife Ar** 80.99 341 P P 20 09 35.2 -0.1
comp=Z,12nm,0.7s,baz=136,slow=4.8,SNR=85
YKA pP pP 20 11 46.7 -0.5
comp=Z,0.9nm,0.9s,baz=97,slow=10,SNR=4.1
comp=Z,12nm,0.7s
**TOAD Toad River Com** 82.51 335 P P 20 09 43.9 +0.7
baz=126
**T35M Bob Quinn** 83.69 332 P P 20 09 50.4 +1.4
baz=122
**DLBC Dease Lake** 84.36 333 IAmb IAmb 20 09 53.6
comp=Z,8.3nm,0.8s
**DLBC Dease Lake** 84.36 333 P P 20 09 53.1 +0.8
baz=122,SNR=5.3
**S34M Telegraph Cree** 84.58 332 P P 20 09 54.3 +1.0
baz=121
**U33K Whale Pass** 84.62 330 P P 20 09 54.0 +0.5
baz=119
**WTLY Watson Lake, Y** 84.73 335 P P 20 09 55.6 +1.6
baz=123
**R33M Jennings River** 85.27 334 P P 20 09 57.9 +1.0
baz=121
**TGTN Hyland Airport** 85.30 336 P P 20 09 57.9 +1.1
baz=124
**Q32M Nakina River** 85.63 333 P P 20 09 59.6 +1.0
baz=120
**SUMG Summit** 86.23 9 P P 20 10 01.9 +0.5
**R32K Eaglecrest** 86.32 332 P P 20 10 02.4 +0.8
baz=118
**P33M Teslin, Yukon** 86.50 334 IAmb IAmb 20 10 04.1
comp=Z,5.7nm,0.8s
**P33M Teslin, Yukon** 86.50 334 P P 20 10 03.3 +0.8
baz=120,SNR=6.5
**P32M Atlin** 86.58 333 P P 20 10 03.7 +0.8
baz=119
**EKA Eskdalemuir Ar** 86.80 32 P P 20 10 03.2 -0.7
comp=Z,5.2nm,0.8s,baz=248,slow=5.2,SNR=10
comp=Z,5.2nm,0.8s
**S31K Pelican** 86.99 331 P P 20 10 05.9 +1.2
baz=116
**N32M Quiet Lake** 87.07 335 P P 20 10 06.2 +1.0
baz=119
**SKAG Skagway** 87.25 332 P P 20 10 06.7 +0.8
baz=117
**WHY Whitehorse** 87.61 334 P P 20 10 08.3 +0.6
baz=118
**FARO Faro, Yukon** 87.71 335 P P 20 10 09.0 +0.9
baz=119,SNR=7.8
**PLBC Pleasant Camp** 87.72 332 P P 20 10 09.6 +1.5
baz=116
**M31M Drury Creek, Y** 88.13 335 P P 20 10 11.2 +1.2
baz=118
**O30N Mendenhall** 88.19 333 P P 20 10 11.3 +1.0
baz=117
**P30M Million Dollar** 88.28 333 P P 20 10 12.2 +1.4
baz=116
**N31M Braeburn, Yuko** 88.38 334 P P 20 10 12.2 +1.0
baz=117
**P29M Windy Craggy** 88.42 332 IAmb IAmb 20 10 13.5
comp=Z,8.2nm,0.8s
**P29M Windy Craggy** 88.42 332 P P 20 10 12.6 +1.2
baz=115
**KEST Kesra** 88.50 53 P P 20 10 11.4 -1.0
comp=Z,5.1nm,0.8s,baz=279,slow=1.1,SNR=5.5
comp=Z,5.1nm,0.8s
**N30M Aishikik Lake** 88.93 334 P P 20 10 14.6 +0.8
baz=116
**YUK6 Outpost Mounta** 89.26 333 P P 20 10 15.8 +0.2
baz=115
**YUK4 Talbot Arm** 89.56 333 P P 20 10 17.0 +0.1
baz=115
**BOSA Boshof** 89.81 119 P P 20 10 17.8 -1.0
comp=Z,5.9nm,0.9s,baz=293,slow=4.3,SNR=4.5
comp=Z,5.9nm,0.9s
**H31M Peel River** 89.83 338 IAmb IAmb 20 10 19.0
comp=Z,7.1nm,0.8s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| H31M | **Peel River** | **89.83** | **338** | P | | **P** | | **20 10 18.4** | **+0.5** |
| | baz=118,SNR=7.6 | | | | | | | | |
| M29M | **Somme Creek** | **89.94** | **334** | IAmb | | IAmb | | 20 10 20.1 | |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| M29M | **Somme Creek** | **89.94** | **334** | P | | **P** | | **20 10 19.4** | **+0.9** |
| | baz=115 | | | | | | | | |
| J30M | **Hart River** | **90.00** | **337** | IAmb | | IAmb | | 20 10 20.3 | |
| | comp=Z,2.6nm,0.7s | | | | | | | | |
| J30M | **Hart River** | **90.00** | **337** | P | | **P** | | **20 10 19.9** | **+1.0** |
| | baz=117,SNR=5.1 | | | | | | | | |
| O28M | **Mount Upton** | **90.01** | **333** | P | | **P** | | **20 10 18.5** | **-0.7** |
| | baz=113 | | | | | | | | |
| K29M | **Barlow Dome** | **90.15** | **336** | P | | **P** | | **20 10 19.8** | **+0.3** |
| | baz=116 | | | | | | | | |
| I30M | **Mount Dempster** | **90.31** | **337** | IAmb | | IAmb | | 20 10 21.5 | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| I30M | **Mount Dempster** | **90.31** | **337** | P | | **P** | | **20 10 19.9** | **-0.3** |
| | baz=116,SNR=7.3 | | | | | | | | |
| G31M | **Satah River** | **90.34** | **339** | IAmb | | IAmb | | 20 10 21.3 | |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| G31M | **Satah River** | **90.34** | **339** | P | | **P** | | **20 10 19.7** | **-0.4** |
| | baz=118,SNR=5.0 | | | | | | | | |
| A36M | **Sachs Harbour** | **90.40** | **345** | P | | **P** | | **20 10 20.1** | **-0.2** |
| | baz=127 | | | | | | | | |
| F31M | **Tsiigehtchic** | **90.41** | **340** | P | | **P** | | **20 10 20.7** | **+0.3** |
| | baz=119 | | | | | | | | |
| YUK3 | **Moose Creek** | **90.53** | **334** | P | | **P** | | **20 10 21.8** | **+0.5** |
| | baz=113 | | | | | | | | |
| INK | **Inuvik** | **90.76** | **341** | IAmb | | IAmb | | 20 10 22.9 | |
| | comp=Z,8.3nm,0.9s | | | | | | | | |
| INK | **Inuvik** | **90.76** | **341** | P | | **P** | | **20 10 21.8** | **-0.2** |
| | baz=119,SNR=5.1 | | | | | | | | |
| DAWY | **Dawson** | **90.99** | **336** | P | | **P** | | **20 10 23.1** | **-0.2** |
| | baz=114 | | | | | | | | |
| I29M | **Ogilvie Camp,** | **91.10** | **337** | P | | **P** | | **20 10 23.9** | **+0.2** |
| | baz=115 | | | | | | | | |
| F30M | **Barrier River** | **91.18** | **340** | P | | **P** | | **20 10 24.5** | **+0.5** |
| | baz=117,SNR=7.2 | | | | | | | | |
| M27K | **Edge Creek, AK** | **91.37** | **334** | P | | **P** | | **20 10 25.1** | **0.0** |
| | baz=112 | | | | | | | | |
| H29M | **Whitestone** | **91.49** | **338** | IAmb | | IAmb | | 20 10 26.6 | |
| | comp=Z,6.2nm,0.9s | | | | | | | | |
| H29M | **Whitestone** | **91.49** | **338** | P | | **P** | | **20 10 26.2** | **+0.7** |
| | baz=115 | | | | | | | | |
| L27K | **Beaver Creek,** | **91.61** | **334** | IAmb | | IAmb | | 20 10 27.2 | |
| | comp=Z,5.5nm,1.2s | | | | | | | | |
| L27K | **Beaver Creek,** | **91.61** | **334** | P | | **P** | | **20 10 25.5** | **-0.6** |
| | baz=112 | | | | | | | | |
| G29M | **Pine Creek** | **91.65** | **339** | P | | **P** | | **20 10 25.8** | **-0.4** |
| | baz=115,SNR=5.8 | | | | | | | | |
| DAVA | **Damuels** | **91.82** | **42** | *i* P | | **P** | | **20 10 27.8** | **+0.2** |
| | comp=Z,2.6nm,0.7s | | | | | | | | |
| K27K | **Chicken** | **92.07** | **335** | P | | **P** | | **20 10 28.1** | **-0.1** |
| | baz=112 | | | | | | | | |
| E29M | **Blow River** | **92.24** | **340** | IAmb | | IAmb | | 20 10 29.5 | |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| E29M | **Blow River** | **92.24** | **340** | P | | **P** | | **20 10 28.0** | **-0.8** |
| | baz=115,SNR=5.8 | | | | | | | | |
| FETA | **Feichten** | **92.32** | **43** | *i* P | | **P** | | **20 10 29.5** | **-0.4** |
| | comp=Z,0.4nm,0.4s | | | | | | | | |
| I27K | **Kandik River** | **92.47** | **337** | P | | **P** | | **20 10 29.6** | **-0.5** |
| | baz=112 | | | | | | | | |
| F28M | **Old Crow** | **92.60** | **339** | P | | **P** | | **20 10 30.4** | **-0.1** |
| | baz=113 | | | | | | | | |
| MOTA | **Moosalm** | **92.64** | **42** | *i* P | | **P** | | **20 10 30.7** | **-0.7** |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| H27K | **Steamboat Moun** | **92.67** | **337** | P | | **P** | | **20 10 30.6** | **-0.3** |
| | baz=112 | | | | | | | | |
| SQTA | **Sankt Quirin** | **92.68** | **42** | *i* P | | **P** | | **20 10 31.2** | **-0.4** |
| | comp=Z,2.2nm,0.7s | | | | | | | | |
| SCRK | **Sand Creek** | **92.84** | **335** | P | | **P** | | **20 10 30.8** | **-1.1** |
| | baz=110 | | | | | | | | |
| J26L | **Joseph Creek** | **92.84** | **336** | P | | **P** | | **20 10 30.9** | **-0.9** |
| | baz=110 | | | | | | | | |
| KLU | **Klutina** | **92.87** | **332** | P | | **P** | | **20 10 30.7** | **-1.3** |
| | baz=108 | | | | | | | | |
| E28M | **Babbage River** | **92.88** | **340** | P | | **P** | | **20 10 31.6** | **-0.2** |
| | baz=114 | | | | | | | | |
| G27K | **Doyon Strip** | **92.93** | **338** | P | | **P** | | **20 10 31.9** | **-0.2** |
| | baz=112 | | | | | | | | |
| WATA | **Walderalm** | **92.95** | **42** | *i* P | | **P** | | **20 10 32.2** | **-0.6** |
| | comp=Z,1.6nm,0.5s | | | | | | | | |
| I26K | **Coal Creek Min** | **92.96** | **336** | P | | **P** | | **20 10 31.8** | **-0.4** |
| | baz=110 | | | | | | | | |
| WTTA | **Wattenberg** | **92.98** | **43** | *e*P | | **P** | | **20 10 32.5** | **-0.5** |
| | comp=Z,1.7nm,0.8s | | | | | | | | |
| PAX | **Paxson** | **93.13** | **334** | P | | **P** | | **20 10 32.2** | **-1.0** |
| | baz=108 | | | | | | | | |
| E27K | **Coleen River** | **93.42** | **339** | P | | **P** | | **20 10 33.8** | **-0.5** |
| | baz=112 | | | | | | | | |
| ABTA | **Abfaltersbach** | **93.44** | **43** | *i* P | | **P** | | **20 10 34.7** | **-0.3** |
| | comp=Z,5.8nm,0.9s | | | | | | | | |
| D27M | **Malcolm River** | **93.61** | **340** | P | | **P** | | **20 10 34.7** | **-0.4** |
| | baz=112 | | | | | | | | |
| J25K | **Salcha River,** | **93.62** | **335** | P | | **P** | | **20 10 34.5** | **-0.8** |
| | baz=108 | | | | | | | | |
| LESA | **Schwarzleotal** | **93.70** | **43** | *e*P | | **P** | | **20 10 35.7** | **-0.5** |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| M23K | **Glacier View** | **93.78** | **332** | P | | **P** | | **20 10 35.2** | **-0.8** |
| | baz=107 | | | | | | | | |
| PRP | **Porcupine Dome** | **93.97** | **336** | P | | **P** | | **20 10 36.0** | **-1.0** |
| | baz=108 | | | | | | | | |
| WAT6 | **Susitna Watana** | **94.01** | **333** | P | | **P** | | **20 10 36.0** | **-1.2** |
| | baz=106 | | | | | | | | |
| SML | **Sawmill** | **94.06** | **332** | P | | **P** | | **20 10 36.7** | **-0.7** |
| | baz=106 | | | | | | | | |
| MYKA | **Terra Mystica** | **94.18** | **43** | *e*P | | **P** | | **20 10 37.8** | **-0.5** |
| | comp=Z,1.2nm,0.5s | | | | | | | | |
| ILAR | **Eielson Array** | **94.28** | **335** | P | | **P** | | **20 10 36.9** | **-1.3** |
| | comp=Z,0.5nm,0.9s,baz=134,slow=5.2,SNR=3.5 | | | | | | | | |
| ILAR | | | | PP | | **PP** | | **20 14 38.6** | **+1.8** |
| | comp=Z,1.7nm,1.1s,baz=90,slow=5.3,SNR=8.6 comp=Z,0.5nm,0.9s | | | | | | | | |
| G25K | **Bearman Lake** | **94.58** | **337** | P | | **P** | | **20 10 39.2** | **-0.3** |
| | baz=108 | | | | | | | | |
| MAW | **Mawson** | **94.60** | **164** | P | | **P** | | **20 10 39.5** | **-0.2** |
| | comp=Z,3.6nm,0.7s,baz=227,slow=8.0,SNR=6.8 comp=Z,3.6nm,0.7s | | | | | | | | |
| POKR | **Poker Plat Res** | **94.61** | **336** | P | | **P** | | **20 10 38.7** | **-1.0** |
| | baz=107 | | | | | | | | |
| F25K | **Christian Rive** | **94.66** | **338** | P | | **P** | | **20 10 40.2** | **+0.3** |
| | baz=108 | | | | | | | | |
| GERES | **GERESS Array B** | **94.67** | **41** | P | | **P** | | **20 10 39.8** | **-0.7** |
| | comp=Z,1.4nm,0.6s,baz=274,slow=2.8,SNR=10 comp=Z,1.4nm,0.6s | | | | | | | | |
| OBKA | **Obir** | **94.77** | **44** | *e*P | | **P** | | **20 10 40.6** | **-0.4** |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| MOA | **Molln** | **94.84** | **42** | *i* P | | **P** | | **20 10 40.8** | **-0.4** |
| | comp=Z,2.8nm,0.7s | | | | | | | | |
| MCK | **McKinley** | **94.85** | **334** | P | | **P** | | **20 10 41.6** | **+0.8** |
| | baz=105 | | | | | | | | |
| G24K | **Hadweenzic Riv** | **95.08** | **337** | P | | **P** | | **20 10 41.5** | **-0.3** |
| | baz=106 | | | | | | | | |
| SOKA | **Soboth** | **95.13** | **44** | *i* P | | **P** | | **20 10 42.0** | **-0.6** |
| | comp=Z,0.6nm,0.4s | | | | | | | | |
| I23K | **Minto, Yukon-K** | **95.40** | **335** | P | | **P** | | **20 10 42.6** | **-0.6** |
| | baz=105 | | | | | | | | |
| D25K | **Kavik River** | **95.44** | **340** | P | | **P** | | **20 10 43.3** | **-0.2** |
| | baz=107 | | | | | | | | |
| F24K | **Squaw Lake** | **95.46** | **338** | P | | **P** | | **20 10 42.9** | **-0.7** |
| | baz=106 | | | | | | | | |
| SKT | **Skwentna** | **95.57** | **332** | P | | **P** | | **20 10 43.1** | **-1.0** |
| | baz=103 | | | | | | | | |
| H23K | **Yukon River** | **95.65** | **336** | P | | **P** | | **20 10 43.7** | **-0.7** |
| | baz=105 | | | | | | | | |
| O20K | **Slope Mountain** | **95.66** | **330** | P | | **P** | | **20 10 43.5** | **-1.2** |
| | baz=102 | | | | | | | | |
| N20K | **Mount Spurr** | **95.71** | **331** | P | | **P** | | **20 10 44.1** | **-0.8** |
| | baz=103 | | | | | | | | |
| SPCR | **Spurr Chakacha** | **95.71** | **331** | P | | **P** | | **20 10 44.5** | **-0.4** |
| | baz=103 | | | | | | | | |
| SII | **Sitkinak Islan** | **95.73** | **326** | P | | **P** | | **20 10 44.9** | **-0.1** |
| | baz=102 | | | | | | | | |
| BPAW | **Bear Paw Mtn.** | **95.82** | **334** | P | | **P** | | **20 10 45.0** | **-0.2** |
| | baz=104 | | | | | | | | |
| E24K | **Your Creek** | **95.83** | **338** | P | | **P** | | **20 10 44.8** | **-0.5** |
| | baz=105 | | | | | | | | |
| CONA | **Conrad Observa** | **95.91** | **42** | *e*PcP | | **P** | | **20 10 46.0** | **-0.1** |
| | comp=Z,0.4nm,0.3s | | | | | | | | |
| MLY | **Manley** | **95.94** | **335** | P | | **P** | | **20 10 45.6** | **-0.2** |
| | baz=104 | | | | | | | | |
| C23K | **Itkillik River** | **97.02** | **340** | P | | Pdif | | 20 10 50.3 | -0.1 |
| | baz=103 | | | | | | | | |
| E22K | **Anaktuvuk Pass** | **97.06** | **338** | P | | Pdif | | 20 10 50.2 | -0.5 |
| | baz=102 | | | | | | | | |
| F22K | **John River** | **97.06** | **337** | P | | Pdif | | 20 10 49.9 | -0.7 |
| | baz=102 | | | | | | | | |
| ARCES | **ARCESS Array B** | **102.59** | **21** | PKKPbc | | PKKPbc | | 20 27 11.5 | -3.5 |
| | comp=Z,1.3nm,0.9s,baz=92,slow=2.7,SNR=3.6 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KBZ | **Khabaz** | **114.67** | **47** | PKP | | PKPdf | | 20 15 55.1 | -0.3 |
| | comp=Z,1.6nm,0.7s,baz=272,slow=1.0,SNR=4.6 | | | | | | | | |
| PETK | **Petropavlovsk-** | **123.19** | **327** | PKP | | **PKPdf** | | **20 16 10.8** | **-0.7** |
| | comp=Z,1.7nm,0.9s,baz=42,slow=6.6,SNR=3.6 | | | | | | | | |
| ABKAR | **Akbulak array** | **124.36** | **37** | PKPdf | | **PKiKP** | | **20 16 14.4** | **+0.2** |
| STKA | **Stephens Creek** | **127.18** | **215** | PKP | | **PKPdf** | | **20 16 19.7** | **-0.2** |
| | comp=Z,6.6nm,0.7s,baz=107,slow=2.1,SNR=13 | | | | | | | | |
| STKA | | | | SKP | | | | 20 18 54.8 | |
| | comp=Z,1.3nm,0.6s,baz=196,slow=3.1,SNR=4.5 | | | | | | | | |
| BRVK | **Borovoye** | **127.88** | **29** | PKPdf | | **PKiKP** | | **20 16 21.4** | **+0.3** |
| BVAR | **Borovoye Array** | **127.95** | **29** | PKP | | **PKPdf** | | **20 16 20.6** | **0.0** |
| | comp=Z,2.7nm,0.7s,baz=283,slow=2.4,SNR=22 | | | | | | | | |
| BVAR | | | | SKPbc | | SKPbc | | 20 18 41.2 | |
| | comp=Z,0.4nm,0.6s,baz=249,slow=2.4,SNR=3.5 | | | | | | | | |
| ZALV | **Zalesovo Beam** | **133.12** | **20** | PKhKP | | PKPpre | | 20 16 23.7 | |
| | comp=Z,1.0nm,0.6s,baz=269,slow=0.7,SNR=6.0 | | | | | | | | |
| ZALV | | | | PKP | | **PKPdf** | | **20 16 30.4** | **0.0** |
| | comp=Z,15nm,0.6s,baz=293,slow=2.7,SNR=60 | | | | | | | | |
| ZALV | | | | SKPbc | | **SKPbc** | | **20 18 59.7** | **-0.7** |
| | comp=Z,1.1nm,0.4s,baz=318,slow=3.9,SNR=5.7 | | | | | | | | |
| KURK | **Kurchatov** | **133.27** | **26** | PKPdf | | **PKPdf** | | **20 16 31.3** | **+0.6** |
| KURBB | **Kurchatov Arra** | **133.30** | **27** | PKP | | **PKPdf** | | **20 16 30.9** | **+0.2** |
| | comp=Z,3.2nm,0.7s,baz=311,slow=2.7,SNR=40 | | | | | | | | |
| KURBB | | | | SKPbc | | **SKPbc** | | **20 19 00.7** | **-0.4** |
| | comp=Z,1.6nm,0.9s,baz=315,slow=3.7,SNR=8.2 | | | | | | | | |
| MKAR | **Makanchi Array** | **137.80** | **28** | PKhKP | | PKPpre | | 20 16 30.7 | |
| | comp=Z,0.6nm,0.6s,baz=330,slow=2.2,SNR=6.3 | | | | | | | | |
| MKAR | | | | PKP | | **PKPdf** | | **20 16 39.0** | **-0.3** |
| | comp=Z,2.4nm,0.7s,baz=281,slow=2.2,SNR=9.0 | | | | | | | | |
| MKAR | | | | SKPbc | | **SKPbc** | | **20 19 13.9** | **-1.1** |
| | comp=Z,1.3nm,0.8s,baz=342,slow=3.1,SNR=5.0 | | | | | | | | |
| ASAR | **Alice Springs** | **137.82** | **215** | PKhKP | | PKPpre | | 20 16 32.1 | |
| | comp=Z,0.4nm,0.5s,baz=138,slow=2.2,SNR=12 | | | | | | | | |
| ASAR | | | | PKP | | **PKPdf** | | **20 16 39.4** | **-0.7** |
| | comp=Z,2.1nm,0.6s,baz=125,slow=2.0,SNR=20 | | | | | | | | |
| ASAR | | | | SKPbc | | **SKPbc** | | **20 19 13.9** | **-1.9** |
| | comp=Z,5.3nm,0.7s,baz=132,slow=4.0,SNR=40 | | | | | | | | |
| WRA | **Warramunga Arr** | **140.45** | **219** | PKhKP | | PKPpre | | 20 16 38.8 | |
| | comp=Z,1.0nm,0.5s,baz=143,slow=2.5,SNR=20 | | | | | | | | |
| WRA | | | | PKP | | **PKPdf** | | **20 16 43.8** | **-1.1** |
| | comp=Z,5.9nm,0.6s,baz=135,slow=2.0,SNR=21 | | | | | | | | |
| WRA | | | | SKPbc | | **SKPbc** | | **20 19 21.4** | **-1.6** |
| | comp=Z,2.4nm,0.7s,baz=44,slow=1.9,SNR=10 | | | | | | | | |
| SONM | **Songino Array** | **143.42** | **3** | PKP | | PKPab | | 20 16 48.4 | +0.1 |
| SONM | **Songino Array** | **143.42** | **3** | PKP | | PKPbc | | 20 16 48.7 | +0.3 |
| | comp=Z,26nm,0.7s,baz=329,slow=3.2,SNR=185 | | | | | | | | |
| SONM | | | | SKPbc | | **SKPbc** | | **20 19 28.7** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=346,slow=2.4,SNR=4.1 | | | | | | | | |
| ULN | **Ulaanbaatar** | **143.43** | **3** | | | **PKPdf** | | **20 16 49.2** | **-0.4** |
| MJAR | **Matsushiro Arr** | **143.77** | **319** | PKP | | PKPbc | | 20 16 49.4 | -0.3 |
| | comp=Z,21nm,0.8s,baz=63,slow=3.0,SNR=65 | | | | | | | | |
| MJAR | | | | SKPbc | | **SKPbc** | | **20 19 29.7** | **-0.9** |
| | comp=Z,1.7nm,1.0s,baz=74,slow=2.7,SNR=4.5 | | | | | | | | |
| MAJO | **Matsushiro** | **143.77** | **319** | | | PKPab | | 20 16 49.9 | 0.0 |
| MJB9 | **Matsu-Tunnel** | **143.77** | **319** | | | PKPab | | 20 16 49.9 | 0.0 |
| KSRS | **Korea Array** | **149.01** | **331** | PKP | | **PKPdf** | | **20 16 58.7** | **-0.2** |
| | comp=Z,13nm,0.8s,baz=40,slow=2.5,SNR=9.5 | | | | | | | | |
| KSRS | | | | PKPbc | | **PKPbc** | | **20 17 03.6** | **-0.3** |
| | comp=Z,13nm,0.8s,baz=19,slow=2.2,SNR=33 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **167.64** | **53** | PKP | | **PKPdf** | | **20 17 21.1** | **-0.1** |
| | comp=Z,1.1nm,0.5s,baz=297,slow=1.6,SNR=7.9 | | | | | | | | |
| CMAR | | | | PKPab | | **PKPab** | | **20 18 30.6** | **-1.6** |
| | comp=Z,1.0nm,0.9s,baz=305,slow=5.4,SNR=2.0 | | | | | | | | |

*TRN **26** 20:18:40.5, 10°.87N×62°.85W, h106km, MD3.2, North of the Paria peninsula.*
*FUNV **26** 20:18:41.6, 10°.54N×62°.81W, h14km, MW3.6*
**ISC 26 20:18:36.4±1.8, 10°.75N±0°.07×62°.80W±0°.05, h150km±17km, n12, σ2s35/20, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TCE** | **Chacachacare** | **1.03** | **93** | *e*P | **Pn** | **20 19 03.6** | **+2.2** |
| TCE | | | | *e*S | **Sn** | **20 19 18.6** | **-1.8** |
| **TRN** | **Trinidad (W)** | **1.38** | **94** | *e*P | **Pn** | **20 19 06.8** | **+2.2** |
| TRN | | | | *e*S | **Sn** | **20 19 24.8** | **-1.4** |
| **TPP** | **Pointe-a-Pierr** | **1.39** | **108** | *e*P | **Pn** | **20 19 07.4** | **+2.6** |
| **GRFF** | **Grenada Fort F** | **1.66** | **39** | *e*P | **Pn** | **20 19 08.7** | **+1.0** |
| GRFF | | | | *e*S | **Sn** | **20 19 29.1** | **-2.5** |
| **TBH** | **Brigand Hill** | **1.72** | **99** | *e*S | **Sn** | **20 19 32.3** | **-0.6** |
| **GRGR** | **Grenville** | **1.77** | **39** | *e*P | **Pn** | **20 19 10.1** | **+1.2** |
| GRGR | | | | *e*S | **Sn** | **20 19 30.8** | **-3.1** |
| **PCRV** | **Puerto La Cruz** | **1.90** | **253** | *e*P | **Pn** | **20 19 12.0** | **+1.6** |
| PCRV | | | | *e*S | **Sn** | **20 19 34.1** | **-2.3** |
| **PCRV** | **Puerto La Cruz** | **1.90** | **253** | *e*P | **Pn** | **20 19 12.7** | **+2.3** |
| PCRV | | | | *e*S | **Sn** | **20 19 35.1** | **-1.3** |
| **CACV** | **CAICARA DEL OR** | **4.87** | **230** | *e*P | **Pn** | **20 19 45.9** | **-2.2** |
| CACV | | | | *e*S | Sn | 20 20 33.9 | -10 |
| **LUEV** | **Luepa** | **5.05** | **165** | *e*P | **Pn** | **20 19 52.6** | **+1.8** |
| LUEV | | | | *e*S | **Sn** | **20 20 45.6** | **-3.1** |
| **BAUV** | **El Baul** | **5.47** | **251** | *e*P | **Pn** | **20 19 59.7** | **+3.6** |
| BAUV | | | | *e*S | **Sn** | **20 20 57.8** | **-0.6** |
| **BAUV** | **El Baul** | **5.47** | **251** | *e*S | **Sn** | **20 20 56.9** | **-1.4** |

*IDC **26** 20:28:33.8±1.1, 22°.31S×170°.28E, h0km, mb4.0/9, mbtmp4.0/10, ML3.6/1, MS3.5/19, Error ellipse: s-maj=32.8km s-min=25.8km az=144.0*
**ISC 26 20:28:37.1±0.8, 22°.3S±0°.2×170°.2E±0°.1, h21km, n41, σ0s83/26, mb4.0/10, MS3.5/18, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.52** | **273** | Pn | **Pn** | **20 29 30.7** | **0.0** |
| | 5.8nm,0.3s,baz=113,slow=16,SNR=424 | | | | | | |
| DZM | | | | Sn | **Sn** | **20 30 11.3** | **-0.5** |
| | 22nm,0.3s,baz=127,slow=22,SNR=9.3 | | | | | | |
| DZM | | | | LR | LR | 20 30 25.3 | |
| | comp=Z,193nm,21.1s,baz=14,slow=31 20nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **16.98** | **161** | LR | LR | 20 37 52.1 | |
| | comp=Z,253nm,19.3s,baz=58,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **22.46** | **271** | P | **P** | **20 33 36.2** | **+1.1** |
| | 0.1nm,0.6s,baz=100,slow=13,SNR=1.9 | | | | | | |
| CTA | | | | LR | LR | 20 40 42.9 | |
| | comp=Z,6.4nm,19.6s,baz=84,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **25.58** | **296** | LR | LR | 20 43 01.2 | |
| | comp=Z,142nm,19.6s,baz=108,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **27.16** | **243** | LR | LR | 20 43 56.8 | |
| | comp=Z,130nm,19.6s,baz=36,slow=34 | | | | | | |
| **RAR** | **Rarotonga** | **27.86** | **93** | LR | LR | 20 45 31.8 | |
| | comp=Z,61nm,18.2s,baz=273,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **33.42** | **260** | P | **P** | **20 35 14.5** | **-0.1** |
| | 0.9nm,0.8s,baz=92,slow=8.6,SNR=9.1 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 37 56.6** | **+0.7** |
| | 0.3nm,0.8s,baz=92,slow=2.8,SNR=2.0 | | | | | | |
| ASAR | | | | LR | LR | 20 48 27.7 | |
| | comp=Z,38nm,20.1s,baz=98,slow=36 0.9nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.52** | **267** | P | **P** | **20 35 14.7** | **-0.8** |
| | 0.4nm,0.4s,baz=99,slow=8.2,SNR=5.1 0.4nm,0.4s | | | | | | |
| **GUMO** | **Guam** | **43.47** | **323** | LR | LR | 20 53 21.9 | |
| | comp=Z,38nm,19.8s,baz=124,slow=34 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.72** | **245** | LR | LR | 20 57 25.7 | |
| | comp=Z,132nm,18.1s,baz=72,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **51.70** | **282** | LR | LR | 20 58 46.4 | |
| | comp=Z,37nm,21.4s,baz=72,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.87** | **332** | P | **P** | **20 39 20.7** | **-0.5** |
| | 1.8nm,0.7s,baz=167,slow=5.5,SNR=6.9 1.8nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.78** | **180** | P | **P** | **20 39 33.2** | **-0.1** |
| | 1.4nm,0.9s,baz=48,slow=1.1,SNR=3.1 1.4nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **71.54** | **326** | P | **P** | **20 39 57.3** | **+0.8** |
| | 2.3nm,1.0s,baz=156,slow=6.1,SNR=5.8 2.3nm,1.0s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **74.78** | **2** | LR | LR | 21 07 51.8 | |
| | comp=Z,32nm,20.9s,baz=292,slow=32 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.86** | **333** | P | **P** | **20 40 17.1** | **+1.1** |
| | 1.3nm,0.7s,baz=119,slow=9.0,SNR=3.4 1.3nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.87** | **352** | LR | LR | 21 07 50.3 | |
| | comp=Z,33nm,21.2s,baz=153,slow=31 | | | | | | |
| **MAW** | **Mawson** | **75.97** | **202** | LR | LR | 21 10 10.5 | |
| | comp=Z,23nm,21.1s,baz=98,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.60** | **294** | P | **P** | **20 40 48.8** | **+0.2** |
| | 1.2nm,0.9s,baz=124,slow=4.9,SNR=6.8 1.2nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **83.12** | **350** | LR | LR | 21 12 26.3 | |
| | comp=Z,37nm,19.5s,baz=218,slow=32 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **88.84** | **44** | LR | LR | 21 14 56.3 | |
| | comp=Z,16nm,18.6s,baz=280,slow=31 | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.18** | **53** | LR | LR | 21 17 36.3 | |
| | comp=Z,30nm,18.3s,baz=138,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **90.20** | **323** | P | **P** | **20 41 36.3** | **+0.3** |
| | 1.7nm,1.0s,baz=148,slow=4.4,SNR=8.4 1.7nm,1.0s | | | | | | |
| **BBB** | **Bella Bella** | **91.51** | **33** | LR | LR | 21 17 11.9 | |
| | comp=Z,17nm,18.6s,baz=192,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **92.86** | **17** | P | **P** | **20 41 47.7** | **-0.1** |
| | 0.3nm,0.7s,baz=243,slow=6.0,SNR=2.8 0.3nm,0.7s | | | | | | |
| **NEW** | **Newport** | **95.51** | **40** | LR | LR | 21 22 05.7 | |
| | comp=Z,20nm,18.1s,baz=170,slow=34 | | | | | | |
| **TIXI** | **Tiksi** | **97.91** | **348** | LR | LR | 21 27 49.4 | |
| | comp=Z,21nm,18.2s,baz=158,slow=36 | | | | | | |
| **PDAR** | **Pinedale Array** | **98.00** | **47** | LR | LR | 21 20 05.7 | |
| | comp=Z,8.0nm,19.2s,baz=360,slow=32 | | | | | | |
| **MORC** | **Moravsky Berou** | **145.15** | **329** | *e*PKP | **PKPdf** | **20 48 13.2** | **+0.2** |
| **VYHS** | **Vyhne** | **145.33** | **326** | *e* | **PKPdf** | **20 48 14.3** | **+1.0** |
| **JAVC** | **Velka Javorina** | **145.69** | **327** | *e*PKP | **PKiKP** | **20 48 15.8** | **-2.2** |
| **VRAC** | **Vranov** | **145.92** | **329** | *e*PKP | **PKPab** | **20 48 16.1** | **+0.6** |
| **BRG** | **Berggiesshubel** | **146.00** | **333** | *e*P | **PKPab** | **20 48 15.7** | **0.0** |
| BRG | | | | Amp | | 20 48 17.8 | |
| | comp=Z,4.5nm,0.9s | | | | | | |
| **KRUC** | **Moravsky** | **146.19** | **329** | *e*PKP | **PKPab** | **20 48 15.8** | **-0.6** |
| **EKA** | **Eskdalemuir Ar** | **146.63** | **353** | PKPbc | **PKPbc** | **20 48 16.6** | **-0.3** |
| | comp=Z,1.0nm,0.5s,baz=9.5,slow=2.3,SNR=5.4 | | | | | | |
| **GERES** | **GERESS Array B** | **147.60** | **331** | PKPbc | **PKPbc** | **20 48 19.8** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=353,slow=4.0,SNR=4.0 | | | | | | |
| **MOA** | **Molln** | **148.05** | **329** | *e*PKP | **PKPab** | **20 48 24.2** | **+0.4** |
| | comp=Z,13nm,1.9s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.67** | **329** | *e*PKP | **PKiKP** | **20 48 25.5** | **-0.9** |
| | comp=Z,11nm,1.7s | | | | | | |
| **MOTA** | **Moosalm** | **149.88** | **331** | *e*PKP | **PKiKP** | **20 48 27.7** | **+0.8** |
| | comp=Z,8.5nm,1.6s | | | | | | |
| **FETA** | **Feichten** | **150.29** | **331** | *e*PKP | **PKPab** | **20 48 31.8** | **-1.3** |
| | comp=Z,9.6nm,1.2s | | | | | | |
| **ESDC** | **Sonseca Array** | **161.98** | **345** | PKPab | **PKPab** | **20 49 22.2** | **-0.9** |
| | comp=Z,0.5nm,1.0s,baz=343,slow=4.0,SNR=2.8 | | | | | | |

*ATH **26** 20:36:50.5, 34°.84N×24°.07E, h16km±1km, ML2.7/6, Error ellipse: s-maj=4.4km s-min=1.8km az=206.0*
*IDC **26** 20:36:56.1±15.0, 35°.14N×24°.06E, h100km±73km, mb3.3/5, mbtmp3.5/8, ML3.1/2, MS2.8/3, Error ellipse: s-maj=182.9km s-min=30.1km az=24.0*
**ISC 26 20:36:38.6±2.1, 34°.2N±0°.2×23°.64E±0°.09, h10km, n21, σ1s25/19, mb3.7/5, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GVD** | **Gavdhos** | **0.78** | **28** | P | **Pg** | **20 36 53.3** | **-0.3** |
| **KNDR** | **Palaiochora Ch** | **1.08** | **2** | P | **Pn** | **20 37 00.7** | **+1.0** |
| KNDR | | | | AML | AML | 20 37 24.0 | |
| | comp=N,3488μm,1.1s | | | | | | |
| KNDR | | | | AML | AML | 20 37 27.8 | |
| | comp=E,3720μm,0.9s | | | | | | |
| **TMBK** | **Timbaki Herakl** | **1.30** | **45** | P | **Pn** | **20 37 01.9** | **-0.9** |
| **IMMV** | **Iera Moni Meta** | **1.33** | **12** | P | **Pn** | **20 37 02.2** | **-1.1** |
| IMMV | | | | AML | AML | 20 37 29.4 | |
| | comp=E,1833μm,1.0s | | | | | | |
| IMMV | | | | AML | AML | 20 37 37.7 | |
| | comp=N,1699μm,0.9s | | | | | | |
| **CHAN** | **Chania** | **1.40** | **14** | P | **Pn** | **20 37 04.1** | **-0.1** |
| CHAN | | | | AML | AML | 20 37 31.6 | |
| | comp=E,1882μm,0.6s | | | | | | |
| CHAN | | | | AML | AML | 20 37 34.5 | |
| | comp=N,2287μm,0.7s | | | | | | |
| **IDI** | **Anoyia** | **1.53** | **42** | P | **Pn** | **20 37 05.8** | **-0.2** |
| IDI | | | | AML | AML | 20 37 40.2 | |
| | comp=E,424μm,0.7s | | | | | | |
| IDI | | | | AML | AML | 20 37 42.1 | |
| | comp=N,411μm,0.7s | | | | | | |
| **KSTL** | **Kastelli Herak** | **1.64** | **45** | P | **Pb** | **20 37 10.1** | **+1.2** |
| KSTL | | | | AML | AML | 20 37 54.0 | |
| | comp=E,318μm,1.1s | | | | | | |
| KSTL | | | | AML | AML | 20 37 56.7 | |
| | comp=N,548μm,1.0s | | | | | | |
| **ANKY** | **Antikythira Is** | **1.73** | **351** | P | **Pg** | **20 37 11.9** | **+0.1** |
| ANKY | | | | AML | AML | 20 37 46.9 | |
| | comp=N,804μm,1.2s | | | | | | |
| ANKY | | | | AML | AML | 20 37 47.3 | |
| | comp=E,733μm,1.0s | | | | | | |
| **KTHA**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ZOMB** | **Zomba** | | **9.73** | **153** | *e*PN | **Pn** | **20 49 02.2** | **+2.1** |
| ZOMB | | | | | *e*SN | **Sn** | **20 50 48.9** | **-0.7** |
| **KRI** | **Karoi** | | **10.18** | **187** | *i*P | **Pn** | **20 49 09.7** | **+3.4** |
| KRI | | | | | *e*S | **Sn** | **20 50 58.8** | **-1.9** |
| **KRI** | **Karoi** | | **10.18** | **187** | *i* P | **Pn** | **20 49 10.4** | **+4.1** |
| **KRI** | **Karoi** | | **10.18** | **187** | *i* P | **Pn** | **20 49 10.4** | **+4.1** |
| **LODK** | **Lodwar** | | **10.98** | **24** | | Pn | 20 49 11.4 | -5.8 |
| **BLWY** | **Bulawayo** | | **13.58** | **189** | *e*P | **Pn** | **20 49 52.4** | **-0.3** |
| **BLWY** | **Bulawayo** | | **13.58** | **189** | *i* P | Pn | 20 49 48.6 | -4.1 |
| **BLWY** | **Bulawayo** | | **13.58** | **189** | *i* P | Pn | 20 49 48.6 | -4.1 |
| **CHIPN** | **CHIPINGE** | | **13.61** | **173** | *i* P | **Pn** | **20 49 55.1** | **+2.0** |
| **CHIPN** | **CHIPINGE** | | **13.61** | **173** | *i* P | **Pn** | **20 49 55.1** | **+2.0** |
| **MATP** | **Matopo** | | **13.88** | **189** | Pn | **Pn** | **20 49 58.6** | **+1.8** |
| | comp=Z,0.3nm,0.3s,baz=9.3,slow=15,SNR=13 | | | | | | | |
| MATP | | | | | Sn | **Sn** | **20 52 30.2** | **-1.0** |
| | comp=Z,0.3nm,0.3s,baz=53,slow=13,SNR=1.6 | | | | | | | |
| MATP | | | | | Lg | Lg | 20 54 04.0 | |
| | comp=Z,1.0nm,0.3s,baz=105,slow=20,SNR=11 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **MATP** | **Matopo** | | **13.88** | **189** | *i* P | **Pn** | **20 49 53.1** | **-3.7** |
| **MATP** | **Matopo** | | **13.88** | **189** | *i* P | **Pn** | **20 49 53.1** | **-3.7** |
| **MUSN** | **Musina, Limpop** | | **15.57** | **183** | *e*P | **Pn** | **20 50 18.3** | **-1.3** |
| **MUSN** | **Musina, Limpop** | | **15.57** | **183** | *i* P | **Pn** | **20 50 17.0** | **-2.6** |
| MUSN | | | | | *i* S | Sn | 20 52 54.8 | -18 |
| **MUSN** | **Musina, Limpop** | | **15.57** | **183** | *i* P | **Pn** | **20 50 17.0** | **-2.6** |
| MUSN | | | | | *i* S | Sn | 20 52 54.8 | -18 |
| **CRAIL** | **Swartwater, Li** | | **16.25** | **189** | *e*P | **Pn** | **20 50 30.5** | **+2.1** |
| **MOPA** | **Mopani** | | **16.77** | **178** | *i* P | **P** | **20 50 37.7** | **+0.5** |
| MOPA | | | | | *i* S | **Sn** | **20 53 35.4** | **-6.1** |
| **MOPA** | **Mopani** | | **16.77** | **178** | *i* P | **P** | **20 50 37.7** | **+0.5** |
| MOPA | | | | | *i* S | **Sn** | **20 53 35.4** | **-6.1** |
| **FURI** | **Furi** | | **17.31** | **27** | LR | LR | 20 58 20.8 | |
| | comp=Z,81nm,18.6s,baz=190,slow=41 | | | | | | | |
| **LEPH** | **Lephalale, Lim** | | **17.35** | **189** | *e*P | **P** | **20 50 45.2** | **+1.5** |
| **WTBG** | **Waterberg Wild** | | **17.56** | **186** | *e*P | **Pn** | **20 50 45.5** | **+0.6** |
| **HOED** | **Hoedspruit, Li** | | **17.66** | **180** | *e*P | **P** | **20 50 51.4** | **+4.4** |
| **TSUM** | **Tsumeb** | | **17.95** | **225** | | **P** | **20 50 52.8** | **+2.5** |
| **TSUM** | **Tsumeb** | | **17.95** | **225** | P | **P** | **20 50 51.2** | **+0.9** |
| | comp=Z,0.4nm,0.3s,baz=212,slow=16,SNR=1.8 | | | | | | | |
| TSUM | | | | | S | **Sn** | **20 54 06.1** | **-4.1** |
| | comp=Z,2.4nm,0.5s,baz=351,slow=23,SNR=1.3 | | | | | | | |
| TSUM | | | | | Lg | Lg | 20 56 12.1 | |
| | comp=Z,0.6nm,0.3s,baz=242,slow=21,SNR=1.3 | | | | | | | |
| TSUM | | | | | LR | LR | 20 58 21.7 | |
| | comp=Z,378nm,21.5s,baz=329,slow=39 | | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | | |
| **TSUM** | **Tsumeb** | | **17.95** | **225** | *i* P | **Pn** | **20 50 46.4** | **-3.3** |
| TSUM | | | | | *i* S | Sn | 20 53 48.1 | -22 |
| **TSUM** | **Tsumeb** | | **17.95** | **225** | *i* P | **Pn** | **20 50 46.4** | **-3.3** |
| TSUM | | | | | *i* S | Sn | 20 53 48.1 | -22 |
| **PILG** | **Pilgrimsrest,** | | **18.17** | **180** | *e*P | **P** | **20 50 57.0** | **+4.1** |
| **LBTB** | **Lobatse** | | **18.94** | **195** | P | **Pn** | **20 51 02.2** | **+0.4** |
| LBTB | | | | | IAmb | IAmb | 20 51 18.5 | |
| | comp=Z,43nm,1.5s | | | | | | | |
| **LBTB** | **Lobatse** | | **18.94** | **195** | *e*P | **Pn** | **20 51 04.3** | **+2.6** |
| **LBTB** | **Lobatse** | | **18.94** | **195** | P | **Pn** | **20 51 03.5** | **+1.7** |
| | comp=Z,0.4nm,0.3s,baz=16,slow=15,SNR=4.3 | | | | | | | |
| LBTB | | | | | S | **Sn** | **20 54 27.1** | **-6.8** |
| | comp=Z,4.7nm,0.6s,baz=34,slow=20,SNR=1.7 | | | | | | | |
| LBTB | | | | | Lg | Lg | 20 56 37.7 | |
| | comp=Z,0.6nm,0.3s,baz=286,slow=18,SNR=4.5 | | | | | | | |
| LBTB | | | | | LR | LR | 20 58 42.9 | |
| | comp=Z,325nm,20.3s,baz=18,slow=38 | | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **LBTB** | **Lobatse** | | **18.94** | **195** | *i* P | **P** | **20 50 58.9** | **-2.3** |
| **LBTB** | **Lobatse** | | **18.94** | **195** | *i* P | **P** | **20 50 58.9** | **-2.3** |
| **OPO** | **Ambohidratompo** | | **19.84** | **128** | P | **Pn** | **20 51 14.7** | **+2.0** |
| | comp=Z,2.4nm,0.8s,baz=294,slow=16,SNR=2.1 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **ABPO** | **Ambohimpanom** | | **20.12** | **129** | *e*P | Pn | 20 51 16.2 | +0.1 |
| **PRYS** | **Parys** | | **20.43** | **189** | *e*P | Pn | 20 51 29.0 | +9.4 |
| PRYS | | | | | IAmb | IAmb | 20 51 35.3 | |
| | comp=Z,514nm,2.9s | | | | | | | |
| **SNKL** | **Senekal, Frees** | | **21.70** | **187** | *e*P | **P** | **20 51 38.1** | **+6.8** |
| SNKL | | | | | IAmb | IAmb | 20 52 06.8 | |
| | comp=Z,2µm,3.6s | | | | | | | |
| **BOSA** | **Boshof** | | **22.47** | **193** | P | **P** | **20 51 43.0** | **+3.5** |
| BOSA | | | | | IAmb | IAmb | 20 51 50.2 | |
| | comp=Z,46nm,1.2s | | | | | | | |
| **BOSA** | **Boshof** | | **22.47** | **193** | *e*P | **P** | **20 51 43.6** | **+4.1** |
| BOSA | | | | | IAmb | IAmb | 20 51 49.9 | |
| | comp=Z,50nm,1.2s | | | | | | | |
| **BOSA** | **Boshof** | | **22.47** | **193** | P | **P** | **20 51 42.6** | **+3.1** |
| | comp=Z,11nm,0.9s,baz=19,slow=12,SNR=12 | | | | | | | |
| BOSA | | | | | LR | LR | 21 00 30.7 | |
| | comp=Z,332nm,18.5s,baz=24,slow=37 | | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **BOSA** | **Boshof** | | **22.47** | **193** | *i* P | **P** | **20 51 39.7** | **+0.2** |
| **BOSA** | **Boshof** | | **22.47** | **193** | *i* P | **P** | **20 51 39.7** | **+0.2** |
| **FOMA** | **Nahampoana Res** | | **23.88** | **141** | P | **P** | **20 51 54.0** | **+0.4** |
| **SUR** | **Sutherland** | | **27.25** | **199** | LR | LR | 21 03 26.0 | |
| | comp=Z,361nm,18.5s,baz=22,slow=37 | | | | | | | |
| **ROCAM** | **Rodrigues Isla** | | **34.15** | **116** | P | **P** | **20 53 25.5** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** | | **35.01** | **304** | P | **P** | **20 53 33.1** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | | **35.01** | **304** | P | **P** | **20 53 33.0** | **+0.1** |
| | comp=Z,2.0nm,0.8s,baz=104,slow=7.0,SNR=15 | | | | | | | |
| TORD | | | | | PcP | **PcP** | **20 56 06.4** | **+1.2** |
| | comp=Z,1.3nm,0.8s,baz=64,slow=3.4,SNR=3.1 | | | | | | | |
| TORD | | | | | LR | LR | 21 09 02.0 | |
| | comp=Z,75nm,18.5s,baz=129,slow=39 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **DBIC** | **Dimbokro** | | **38.01** | **290** | LR | LR | 21 08 45.2 | |
| | comp=Z,96nm,20.2s,baz=107,slow=35 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | | **39.69** | **6** | LR | LR | 21 09 49.9 | |
| | comp=Z,22nm,20.4s,baz=132,slow=35 | | | | | | | |
| **IDI** | **Anoyia** | | **42.10** | **353** | P | **P** | **20 54 32.1** | **0.0** |
| IDI | | | | | IAmb | IAmb | 20 54 33.6 | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **SANT** | **Santorini** | | **43.10** | **354** | P | **P** | **20 54 39.3** | **-1.0** |
| **ARPR** | **Arapgir-MALATY** | | **46.04** | **8** | P | **P** | **20 55 04.4** | **+0.4** |
| ARPR | | | | | IAmb | IAmb | 20 55 17.8 | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **BR131** | **Keskin Array S** | | **46.22** | **3** | P | **P** | **20 55 04.5** | **-0.8** |
| BR131 | | | | | IAmb | IAmb | 20 55 10.7 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | | **46.22** | **3** | P | **P** | **20 55 05.2** | **-0.1** |
| **BRTR** | **Keskin Array B** | | **46.22** | **3** | P | **P** | **20 55 04.7** | **-0.6** |
| | comp=Z,2.4nm,0.8s,baz=175,slow=9.8,SNR=17 | | | | | | | |
| BRTR | | | | | LR | LR | 21 17 00.4 | |
| | comp=Z,34nm,20.2s,baz=243,slow=40 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **VAE** | **Valguarnera** | | **46.51** | **342** | LR | LR | 21 17 48.3 | |
| | comp=Z,157nm,18.2s,baz=151,slow=40 | | | | | | | |
| **KEST** | **Kesra** | | **46.77** | **336** | P | **P** | **20 55 10.2** | **+0.6** |
| | comp=Z,3.8nm,0.9s,baz=288,slow=1.5,SNR=3.1 | | | | | | | |
| KEST | | | | | LR | LR | 21 16 54.1 | |
| | comp=Z,49nm,20.2s,baz=296,slow=39 | | | | | | | |
| | comp=Z,3.8nm,0.9s | | | | | | | |
| **MDUB** | **Mudurnu** | | **46.89** | **0** | P | **P** | **20 55 10.3** | **-0.2** |
| **ALN** | **Alexandroupoli** | | **47.52** | **355** | P | **P** | **20 55 14.7** | **-0.6** |
| ALN | | | | | IAmb | IAmb | 20 55 38.5 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **SCTE** | **Santa Cesarea** | | **47.88** | **347** | P | **P** | **20 55 15.9** | **-2.2** |
| **GNI** | **Garni** | | **48.30** | **14** | LR | LR | 21 16 18.5 | |
| | comp=Z,40nm,20.7s,baz=188,slow=37 | | | | | | | |
| **KBZ** | **Khabaz** | | **51.32** | **11** | LR | LR | 21 18 10.7 | |
| | comp=Z,35nm,18.1s,baz=174,slow=37 | | | | | | | |
| **PALK** | **Pallekele** | | **51.62** | **75** | P | **P** | **20 55 46.0** | **-1.1** |
| **MDT** | **Midelt** | | **51.74** | **322** | LR | LR | 21 19 11.4 | |
| | comp=Z,70nm,19.5s,baz=148,slow=38 | | | | | | | |
| **MLR** | **Muntele Rosu** | | **52.10** | **356** | P | **P** | **20 55 50.1** | **-0.1** |
| **MLR** | **Muntele Rosu** | | **52.10** | **356** | LR | LR | 21 21 31.3 | |
| | comp=Z,22nm,18.2s,baz=162,slow=40 | | | | | | | |
| **BURAR** | **Bucovina Array** | | **54.27** | **355** | P | **P** | **20 56 05.6** | **-0.5** |
| **BUR08** | **Bucovina Ar. S** | | **54.30** | **355** | P | **P** | **20 56 05.9** | **-0.4** |
| BUR08 | | | | | IAmb | IAmb | 20 56 15.2 | |
| | comp=Z,6.5nm,1.2s | | | | | | | |
| **TEOL** | **Teolo** | | **54.56** | **343** | P | **P** | **20 56 07.9** | **-0.3** |
| TEOL | | | | | IAmb | IAmb | 20 56 20.0 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **PSZ** | **Piszkesteto** | | **55.19** | **351** | P | **P** | **20 56 11.1** | **-1.7** |
| **BNI** | **Bardonecchia** | | **55.86** | **339** | P | **P** | **20 56 18.8** | **+1.1** |
| BNI | | | | | IAmb | IAmb | 20 56 39.5 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **CONA** | **Conrad Observa** | | **55.94** | **348** | *e*P | **P** | **20 56 22.6** | **+4.5** |
| | comp=Z,4.1nm,1.4s | | | | | | | |
| **LESA** | **Schwarzleotal** | | **56.20** | **345** | *e*P | **P** | **20 56 22.8** | **+2.8** |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | | **56.21** | **328** | P | **P** | **20 56 20.2** | **-0.1** |
| | comp=Z,0.7nm,0.9s,baz=139,slow=8.0,SNR=4.8 | | | | | | | |
| ESDC | | | | | LR | LR | 21 23 25.4 | |
| | comp=Z,48nm,21.5s,baz=134,slow=39 | | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | | |
| **MOA** | **Molln** | | **56.21** | **347** | *e*P | **P** | **20 56 24.0** | **+4.0** |
| | comp=Z,2.8nm,0.7s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DAVOX** | **Davos/Dischmat** | | **56.37** | **343** | LR | LR | 21 21 55.5 | |
| | comp=Z,38nm,20.4s,baz=110,slow=38 | | | | | | | |
| **MOTA** | **Moosalm** | | **56.54** | **344** | *e*P | **P** | **20 56 22.4** | **-0.2** |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **DAVA** | **Damuels** | | **56.83** | **343** | *i* P | **P** | **20 56 28.4** | **+3.8** |
| | comp=Z,3.2nm,0.7s | | | | | | | |
| **VRAC** | **Vranov** | | **57.11** | **349** | LR | LR | 21 23 53.3 | |
| | comp=Z,23nm,18.3s,baz=186,slow=39 | | | | | | | |
| **KIEV** | **Kiev** | | **57.13** | **359** | P | **P** | **20 56 25.8** | **-0.7** |
| KIEV | | | | | IAmb | IAmb | 20 56 33.2 | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | | **57.14** | **359** | P | **P** | **20 56 25.5** | **-1.0** |
| | comp=Z,1.0nm,0.7s,baz=178,slow=6.2,SNR=2.0 | | | | | | | |
| AKASG | | | | | LR | LR | 21 22 56.1 | |
| | comp=Z,19nm,19.1s,baz=223,slow=38 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **AKBB** | **Malin Array Si** | | **57.14** | **359** | P | **P** | **20 56 25.8** | **-0.7** |
| AKBB | | | | | IAmb | IAmb | 20 56 33.2 | |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| **GEC2** | **GERESS Array S** | | **57.28** | **347** | P | **P** | **20 56 27.5** | **-0.2** |
| **GERES** | **GERESS Array B** | | **57.28** | **347** | P | **P** | **20 56 27.3** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=152,slow=6.4,SNR=2.9 | | | | | | | |
| GERES | | | | | LR | LR | 21 24 30.0 | |
| | comp=Z,19nm,18.3s,baz=162,slow=40 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **KHC** | **Kasperske Hory** | | **57.57** | **347** | P | **P** | **20 56 28.8** | **-0.9** |
| KHC | | | | | IAmb | IAmb | 20 56 38.2 | |
| | comp=Z,8.0nm,1.5s | | | | | | | |
| **PMOZ** | **Porto Moniz, M** | | **60.20** | **314** | P | **P** | **20 56 48.3** | **-0.1** |
| **AKTO** | **Aktyubinsk** | | **61.53** | **19** | LR | LR | 21 25 52.3 | |
| | comp=Z,26nm,19.9s,baz=253,slow=38 | | | | | | | |
| **MAW** | **Mawson** | | **64.59** | **167** | P | **P** | **20 57 20.4** | **+3.4** |
| | comp=Z,1.5nm,0.6s,baz=331,slow=13,SNR=7.0 | | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | | |
| **ARU** | **Arti** | | **66.87** | **16** | P | **P** | **20 57 31.2** | **-0.7** |
| ARU | | | | | IAmb | IAmb | 20 57 37.1 | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | | **67.91** | **340** | P | **P** | **20 57 38.6** | **+0.1** |
| | comp=Z,1.2nm,0.7s,baz=150,slow=5.8,SNR=1.9 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | | **67.95** | **351** | P | **P** | **20 57 38.6** | **0.0** |
| | comp=Z,2.1nm,0.6s,baz=120,slow=8.5,SNR=9.8 | | | | | | | |
| | comp=Z,2.1nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | | **68.00** | **358** | P | **P** | **20 57 38.8** | **-0.1** |
| | comp=Z,1.3nm,0.6s,baz=156,slow=7.0,SNR=7.3 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | | **68.22** | **24** | P | **P** | **20 57 40.2** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=198,slow=4.1,SNR=3.4 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **NB2** | **NORSAR Subarra** | | **69.22** | **350** | P | **P** | **20 57 46.5** | **-0.1** |
| | comp=Z,5.4nm,1.1s,baz=160,slow=5.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | | **69.22** | **350** | P | **P** | **20 57 45.6** | **-1.0** |
| | comp=Z,1.2nm,0.8s,baz=162,slow=5.7,SNR=4.2 | | | | | | | |
| NOA | | | | | LR | LR | 21 31 47.3 | |
| | comp=Z,16nm,18.8s,baz=40,slow=39 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | | **70.02** | **35** | P | **P** | **20 57 52.1** | **+0.2** |
| | comp=Z,0.8nm,0.6s,baz=243,slow=8.3,SNR=6.6 | | | | | | | |
| MKAR | | | | | LR | LR | 21 31 40.4 | |
| | comp=Z,41nm,18.4s,baz=238,slow=39 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | | **70.29** | **30** | P | **P** | **20 57 53.9** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=236,slow=6.6,SNR=7.9 | | | | | | | |
| KURBB | | | | | LR | LR | 21 31 24.6 | |
| | comp=Z,66nm,18.1s,baz=170,slow=38 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | **71.61** | **68** | P | **P** | **20 58 03.4** | **+1.4** |
| | comp=Z,0.4nm,0.6s,baz=267,slow=5.2,SNR=1.5 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | | **75.37** | **30** | P | **P** | **20 58 24.0** | **+0.5** |
| | comp=Z,0.3nm,0.4s,baz=204,slow=3.2,SNR=2.1 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | | **76.11** | **358** | P | **P** | **20 58 27.1** | **-0.3** |
| | comp=Z,5.4nm,1.1s,baz=186,slow=4.4,SNR=2.1 | | | | | | | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **BORG** | **Borgarnes** | | **80.95** | **340** | LR | LR | 21 38 09.8 | |
| | comp=Z,22nm,19.2s,baz=137,slow=38 | | | | | | | |
| **QSPA** | **South Pole Qui** | | **83.42** | **180** | P | **P** | **20 59 10.9** | **+3.6** |
| | comp=Z,8nm,0.8s,baz=264,slow=2.2,SNR=2.1 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | | **85.30** | **41** | P | **P** | **20 59 19.3** | **+2.1** |
| | comp=Z,0.3nm,0.7s,baz=279,slow=3.8,SNR=1.9 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **JOW** | **Kunigami** | | **13.88** | **287** | LR | LR | 21 10 27.5 | |
| | comp=Z,62nm,18.2s,baz=106,slow=37 | | | | | | | | |
| **KSRS** | **Korea Array** | | **19.04** | **320** | LR | LR | 21 13 03.5 | | |
| | comp=Z,22nm,20.3s,baz=125,slow=35 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | **41.49** | **272** | LR | LR | 21 27 00.8 | | |
| | comp=Z,10nm,18.0s,baz=280,slow=36 | | | | | | | | |
| **WRA** | **Warramunga Arr** | | **44.12** | **192** | P | **P** | **21 09 45.1** | **-1.3** | |
| | 0.5nm,0.6s,baz=16,slow=9.5,SNR=9.2 | | | | | | | | |
| WRA | | | | | PcP | **PcP** | **21 11 31.1** | **-0.1** | |
| | 0.5nm,0.8s,baz=3.0,slow=3.4,SNR=3.4 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | | **47.83** | **192** | P | **P** | **21 10 13.9** | **-1.7** | |
| | 0.1nm,0.5s,baz=17,slow=9.7,SNR=5.0 | | | | | | | | |
| | 0.1nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | | **53.44** | **312** | P | P | 21 11 02.9 | +5.1 | |
| | 0.1nm,0.4s,baz=90,slow=9.3,SNR=4.6 | | | | | | | | |
| | 0.1nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | | **56.16** | **316** | P | **P** | **21 11 19.8** | **+2.4** | |
| | 0.2nm,0.4s,baz=88,slow=7.8,SNR=4.3 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | | **60.37** | **28** | P | **P** | **21 11 47.4** | **+0.8** | |
| | 0.5nm,0.9s,baz=250,slow=7.3,SNR=4.5 | | | | | | | | |
| | 0.5nm,0.9s | | | | | | | | |
| **BVAR** | **Borovoye Array** | | **61.25** | **319** | P | **P** | **21 11 55.2** | **+2.5** | |
| | 0.6nm,0.5s,baz=77,slow=6.5,SNR=4.7 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |

*SKHL **26** 21:19:27.5±0.2, 44.00N×149.80E, h35km±4km, mb4.3/2*
*JMA **26** 21:19:30.9±0.9, 45.4°N±4.4°×15.0°E±1.1°, h30km, MV3.8/12, SE OFF ETOROFU*

**ISC 26 21:19:31.0±4.1, 44.1N±0.1°×149.6E±0.2, h35km, n13, σ2s04/20, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.71** | **313** | *e*P | **Pn** | **21 19 57.6** | **-0.6** |
| KUR | | | | AMB | AMB | 21 19 58.1 | |
| | 100nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **21 20 18.4** | **-0.4** |
| KUR | | | | A | A | 21 20 22.0 | |
| | 160nm,0.4s | | | | | | |
| KUR | | | | A | A | 21 20 22.0 | |
| | 210nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.04** | **265** | *e*P | **Pn** | **21 20 00.9** | **-1.9** |
| SHO | | | | AMB | AMB | 21 20 04.5 | |
| | 10.0nm,0.2s | | | | | | |
| SHO | | | | *e*S | **Sn** | **21 20 26.1** | **-0.9** |
| SHO | | | | A | A | 21 20 28.1 | |
| | 70nm,0.4s | | | | | | |
| SHO | | | | A | A | 21 20 28.1 | |
| | 300nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.72** | **270** | *e*P | **Pn** | **21 20 11.2** | **-1.0** |
| YUK | | | | AMB | AMB | 21 20 13.3 | |
| | 60nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **21 20 43.8** | **-0.1** |
| YUK | | | | A | A | 21 20 50.7 | |
| | 230nm,0.5s | | | | | | |
| YUK | | | | A | A | 21 20 50.7 | |
| | 170nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.92** | **257** | P | **Pn** | **21 20 15.0** | **+0.2** |
| NEM2 | | | | *e*S | **Sn** | **21 20 46.8** | **-1.8** |
| **JRA** | **Rausu** | **3.26** | **269** | *e*P | **Pn** | **21 20 21.4** | **+1.8** |
| **JNK** | **Nakash** | **3.59** | **264** | *e*S | **Sn** | **21 21 04.7** | **-0.7** |
| **JAK** | **Akkeshi** | **3.76** | **255** | *e*S | **Sn** | **21 21 10.4** | **+1.1** |
| **JTKR** | **Abashiri--Toko** | **4.13** | **270** | *e*P | **Pn** | **21 20 33.2** | **+1.6** |
| **JAR** | **Ashorobuto** | **4.33** | **262** | P | **Pn** | **21 20 36.0** | **+1.8** |
| JAR | | | | *e*S | **Sn** | **21 21 24.9** | **+1.4** |
| **JOB** | **Onbets** | **4.39** | **256** | *e*S | **Sn** | **21 21 25.3** | **+0.4** |
| **JCH** | **Churui** | **4.81** | **254** | *e*P | **Pn** | **21 20 42.5** | **+1.6** |
| JCH | | | | *e*S | **Sn** | **21 21 36.0** | **+0.7** |
| **JNBK** | **Urakawa-nobuka** | **5.35** | **253** | P | **Pn** | **21 20 51.4** | **+3.0** |
| JNBK | | | | *e*S | **Sn** | **21 21 48.0** | **-0.6** |
| **JANG** | **Nango** | **7.08** | **241** | *e*S | **Sn** | **21 22 25.3** | **-6.0** |

*IDC **26** 21:36:58.8±0.7, 22.32S×170.27E, h0km, mb4.4/14, mbtmp4.4/15, ML4.4/1, MS4.1/42, Error ellipse: s-maj=19.7km s-min=16.7km az=89.0*
*NEIC **26** 21:37:01.8±1.8, 22.41S±0.07×170.10E±0.06, h10km±1km, mb4.9/39, Error ellipse: s-maj=13.6km s-min=7.7km az=331.0*
*GCMT **26** 21:37:05.8±0.1, 22.34S±0.01×170.18E±0.01, h18km, MW5.2/111, Moment Tensor Solution. s88,c127; s111,c170; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=5.30±.13; Mθθ=2.59±.10; Mφφ=-2.71±.10; Mrθ=2.55±.23; Mrφ=2.90±.07; Mθφ=-2.87±.23; Best double couple: Mo=6.64600×10¹⁶ NP1=φs137.00000°, δ63.00000°, λ92.00000°. NP2=φs314.00000°, δ27.00000°, λ87.00000°. Principal axes: T 6.5230, Plg72.0000°, Azm51.0000°; N 0.2460, Plg1.0000°, Azm317.0000°; P -6.7690, Plg18.0000°, Azm226.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 26 21:37:02.7±0.3, 22.51S±0.06×170.18E±0.05, h21km, n176, σ1s75/151, mb4.8/42, MS4.3/41, 19C-11D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.53** | **267** | Pn | **Pn** | **21 37 42.4** | **-0.1** |
| **LIFNC** | **LIFOU** | **3.23** | **302** | Pn | **Pn** | **21 37 50.7** | **-1.5** |
| **DZM** | **Mont Dzumac** | **3.49** | **277** | *e*Pn | **Pn** | **21 37 55.0** | **-0.8** |
| | 910nm,1.6s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **21 38 31.8** | **-4.7** |
| | 2µm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **3.49** | **277** | Pn | **Pn** | **21 37 55.2** | **-0.6** |
| **DZM** | **Mont Dzumac** | **3.49** | **277** | Pn | **Pn** | **21 37 55.5** | **-0.3** |
| | 33nm,0.3s,baz=106,slow=18,SNR=28 | | | | | | |
| DZM | | | | Sn | **Sn** | **21 38 37.4** | **+0.9** |
| | 73nm,0.3s,baz=130,slow=20,SNR=8.7 | | | | | | |
| | 68nm,0.3s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **5.82** | **288** | Pn | **Pn** | **21 38 28.1** | **+0.3** |
| **MSVF** | **Nonsavu** | **8.79** | **59** | | **Pn** | **21 39 10.6** | **+1.9** |
| **RAO** | **Raoul Island** | **12.64** | **125** | LR | LR | 21 43 59.1 | |
| | comp=Z,1µm,18.4s,baz=318,slow=33 | | | | | | |
| **TOZ** | **Tahuroa Road** | **15.85** | **164** | Pn | **Pn** | **21 40 46.0** | **+1.5** |
| **HNR** | **Honiara** | **16.29** | **321** | LR | LR | 21 46 18.6 | |
| | comp=Z,8µm,18.6s,baz=149,slow=35 | | | | | | |
| **URZ** | **Urewera** | **16.79** | **161** | Pn | **P** | **21 41 01.0** | **+2.5** |
| | 0.4nm,0.3s,baz=342,slow=7.6,SNR=5.5 | | | | | | |
| URZ | | | | LR | LR | 21 46 07.5 | |
| | comp=Z,940nm,21.5s,baz=66,slow=32 | | | | | | |
| **RTZ** | **Ruatahuna** | **17.08** | **162** | | **P** | **21 41 03.5** | **+1.6** |
| **BKZ** | **Black Stump Fm** | **17.46** | **163** | | **P** | **21 41 05.6** | **-0.4** |
| **MRZ** | **Mangatainoka R** | **18.66** | **167** | P | **P** | **21 41 18.0** | **-1.2** |
| MRZ | | | | IAmb | IAmb | 21 41 29.2 | |
| | comp=Z,99nm,1.4s | | | | | | |
| **MRNZ** | **Matariki Terra** | **18.96** | **174** | P | **P** | **21 41 22.4** | **-0.1** |
| **KHZ** | **Kahutara** | **20.05** | **173** | P | **P** | **21 41 33.0** | **-1.4** |
| KHZ | | | | IAmb | IAmb | 21 41 40.7 | |
| | comp=Z,68nm,1.1s | | | | | | |
| **INZ** | **Inchbonnie** | **20.19** | **177** | P | **P** | **21 41 35.9** | **0.0** |
| **OXZ** | **Oxford** | **20.82** | **176** | P | **P** | **21 41 43.2** | **+0.5** |
| OXZ | | | | IAmb | IAmb | 21 41 49.3 | |
| | comp=Z,105nm,1.6s | | | | | | |
| **FOZ** | **Fox Glacier** | **20.97** | **181** | P | **P** | **21 41 45.5** | **+1.2** |
| FOZ | | | | IAmb | IAmb | 21 41 49.6 | |
| | comp=Z,49nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **21.16** | **178** | P | **P** | **21 41 49.3** | **+2.8** |
| | comp=Z,6.3nm,0.5s,baz=38,slow=17,SNR=2.3 | | | | | | |
| RPZ | | | | S | **S** | **21 45 36.9** | **-4.0** |
| | comp=Z,5.3nm,0.4s,baz=93,slow=23,SNR=8.1 | | | | | | |
| RPZ | | | | LR | LR | 21 49 11.4 | |
| | comp=Z,702nm,20.4s,baz=332,slow=34 | | | | | | |
| | comp=Z,6.3nm,0.5s | | | | | | |
| **CTA** | **Charters Tower** | **22.41** | **272** | P | **P** | **21 42 01.8** | **+1.6** |
| | comp=Z,0.6nm,0.8s,baz=96,slow=11,SNR=9.9 | | | | | | |
| CTA | | | | LR | LR | 21 50 46.7 | |
| | comp=Z,80nm,18.1s,baz=94,slow=37 | | | | | | |
| **CTAO** | **Charters T

comp=Z,191nm,18.0s,baz=267,slow=35
**BBOO Buckleboo 31.79 244** P **P** **21 43 26.3 +0.5**
BBOO IAmb IAmb 21 43 51.6
comp=Z,30nm,1.4s
**WR0 Warramunga Arr 33.27 268** P **P** **21 43 38.6 -0.3**
**AS31 Alice Springs 33.33 261** P **P** **21 43 39.4 0.0**
**ASAR Alice Springs 33.33 261** P **P** **21 43 38.5 -0.9**
**ASAR Alice Springs 33.33 261** P **P** **21 43 39.0 -0.4**
comp=Z,6.1nm,0.8s,baz=89,slow=9.2,SNR=48
ASAR PcP **PcP** **21 46 21.2 0.0**
comp=Z,0.8nm,0.8s,baz=92,slow=4.4,SNR=3.1
ASAR LR LR 21 57 44.2
comp=Z,592nm,18.2s,baz=98,slow=37
comp=Z,6.1nm,0.8s
**WB0 Warramunga Arr 33.44 268** P **P** **21 43 40.6 +0.3**
WB0 IAmb IAmb 21 44 00.3
comp=Z,24nm,1.6s
**WB2 Warramunga Arr 33.45 268** P **P** **21 43 39.9 -0.5**
WB2 IAmb IAmb 21 43 52.4
comp=Z,44nm,2.0s
**WRA Warramunga Arr 33.46 268** P **P** **21 43 39.1 -1.4**
**WRA Warramunga Arr 33.46 268** P **P** **21 43 39.4 -1.2**
comp=Z,2.9nm,0.6s,baz=99,slow=8.4,SNR=37
WRA PcP **PcP** **21 46 21.5 -0.1**
comp=Z,0.5nm,0.6s,baz=109,slow=3.1,SNR=2.9
WRA LR LR 21 57 52.6
comp=Z,1μm,18.5s,baz=104,slow=37
comp=Z,2.9nm,0.6s
**TBI Tubuai 37.10 99** *e*P P 21 44 17.0 +5.2
comp=Z,298nm,32.5s
TBI *e*S **S** **21 49 49.5 -7.5**
comp=Z,584nm,26.2s
TBI *e*SS **SS** **21 52 38.8 -1.0**
comp=Z,3μm,43.5s
TBI *e*LR LR 21 54 20.3
comp=Z,903nm,25.0s
**PPT2 Papeete2 38.04 90** *e*P **P** **21 44 20.6 +0.6**
comp=Z,44nm,29.0s
PPT2 *e*S **S** **21 50 04.3 -7.3**
comp=Z,175nm,25.8s
PPT2 *e*SS **SS** **21 53 02.2 +3.1**
comp=Z,662nm,26.8s
PPT2 *e*LR LR 21 54 49.6
comp=Z,164nm,23.0s
**MTN Manton Dam 38.32 278** P **P** **21 44 22.1 -0.1**
**KNRA Kununurra 39.63 272** P **P** **21 44 32.9 -0.3**
KNRA IAmb IAmb 21 45 03.1
comp=Z,44nm,1.8s
**FITZ Fitzroy Crossi 41.89 268** P **P** **21 44 51.6 -0.3**
**GUMO Guam 43.62 323** LR LR 22 04 36.0
comp=Z,165nm,18.1s,baz=135,slow=38
**PSA00 Pilbara Seismi 46.48 261** P **P** **21 45 27.6 -1.1**
PSA00 IAmb IAmb 21 45 54.8
comp=Z,12nm,1.0s
**MBWA Marble Bar 46.67 262** P **P** **21 45 30.5 +0.4**
MBWA IAmb IAmb 21 45 49.4
comp=Z,23nm,1.2s
**NWAO Narrogin (SRO) 47.58 245** P **P** **21 45 37.7 +0.7**
**NWAO Narrogin (SRO) 47.58 245** LR LR 22 05 40.2
comp=Z,822nm,19.5s,baz=101,slow=36
**TAOE Nuku Hiva Isla 49.49 82** *e*S **S** **21 53 01.6 +2.7**
comp=Z,331nm,24.9s
TAOE *e*LR LR 22 00 10.5
comp=Z,286nm,23.1s
**RKT Rikitea 50.30 102** *e*S **S** **21 53 10.8 +0.9**
comp=Z,792nm,31.5s
RKT *e*LR LR 22 00 10.0
comp=Z,470nm,24.0s
**KAPI Kappang 51.69 282** LR LR 22 10 45.5
comp=Z,119nm,18.4s,baz=112,slow=39
**DAV Davao City (W) 52.63 299** LR LR 22 09 19.0
comp=Z,111nm,18.5s,baz=122,slow=37
**TOLI2 Tolitoli 53.53 289** P **P** **21 46 21.2 -1.1**
TOLI2 IAmb IAmb 21 46 34.9
comp=Z,12nm,0.9s
**SBA Scott Base 55.42 181** P **P** **21 46 36.4 +1.4**
SBA IAmb IAmb 21 46 49.9
comp=Z,9.9nm,1.1s
**JCJ Chichijima 56.26 330** LR LR 22 07 30.3
comp=Z,84nm,20.8s,baz=110,slow=33
**CASY Casey 57.51 204** P **P** **21 46 50.8 +0.8**
CASY IAmb IAmb 21 47 27.9
comp=Z,18nm,1.4s
**JGF Kuroka 65.63 331** P **P** **21 47 44.6 -0.7**
JGF IAmb IAmb 21 48 16.1
comp=Z,35nm,1.7s
**MJAR Matsushiro Arr 66.04 332** P **P** **21 47 46.0 -2.0**
comp=Z,3.8nm,0.7s,baz=167,slow=6.7,SNR=14
MJAR LR LR 22 20 11.7
comp=Z,26nm,18.1s,baz=147,slow=39
comp=Z,3.8nm,0.7s
**MAJO Matsushiro 66.04 332** P **P** **21 47 47.3 -0.6**
**MJB9 Matsu-Tunnel 66.05 332** P **P** **21 47 47.1 -0.9**
**JNU Nakatsue 66.83 325** LR LR 22 16 55.0
comp=Z,38nm,18.1s,baz=123,slow=36
**JSD Sado 67.28 333** P **P** **21 47 55.7 -0.1**
**QSPA South Pole Qui 67.56 180** P **P** **21 47 58.1 +0.7**
QSPA IAmb IAmb 21 48 15.0
comp=Z,16nm,1.2s
**QSPA South Pole Qui 67.56 180** P **P** **21 47 57.7 +0.3**
comp=Z,3.0nm,0.7s,baz=57,slow=0.7,SNR=21
QSPA LR LR 22 14 23.8
comp=Z,187nm,19.1s,baz=30,slow=33
comp=Z,3.0nm,0.7s
**JKA Kamikawa-asahi 70.96 339** P **P** **21 48 18.7 +0.3**
**ASAJ Asahikawa 70.96 339** LR LR 22 14 18.5
comp=Z,184nm,21.8s,baz=160,slow=32
**KSRS Korea Array 71.69 326** P **P** **21 48 21.9 -1.1**
comp=Z,3.6nm,0.8s,baz=139,slow=6.0,SNR=14
KSRS LR LR 22 17 21.0
comp=Z,50nm,20.0s,baz=125,slow=34
comp=Z,3.6nm,0.8s
**RPN Rapa Nui 72.01 112** LR LR 22 12 29.3
comp=Z,127nm,18.4s,baz=203,slow=30
**NJ2 Nanjing 73.16 316** *e*P **P** **21 48 35.3 +3.4**
NJ2 pmax pmax
comp=Z,8.0nm,1.4s
**SHEM Shemya Is, Ala 75.00 2** LR LR 22 16 29.4
comp=Z,153nm,20.6s,baz=144,slow=32
**USRK Ussuriysk Ar. 75.03 333** P **P** **21 48 41.2 -1.3**
comp=Z,1.5nm,0.7s,baz=177,slow=5.8,SNR=3.4
comp=Z,1.5nm,0.7s
**MAW Mawson 75.75 202** P **P** **21 48 47.3 +0.8**
comp=Z,3.2nm,0.7s,baz=130,slow=5.2,SNR=6.6
MAW LR LR 22 20 19.1
comp=Z,103nm,18.2s,baz=101,slow=34
comp=Z,3.2nm,0.7s
**PETK Petropavlovsk- 76.08 352** P **P** **21 48 45.8 -2.6**
comp=Z,4.1nm,0.9s,baz=170,slow=8.8,SNR=6.0
PETK LR LR 22 17 00.6
comp=Z,138nm,20.8s,baz=149,slow=32
comp=Z,4.1nm,0.9s
**CN2 Changchun 77.69 329** *e*P **P** **21 49 00.5 +2.8**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**BNX BinXian 78.25 331** ⇓P **P** **21 48 58.8 -1.9**
BNX pmax pmax
comp=Z,5.0nm,0.9s
**BELA Belgrano 2 78.78 175** P **P** **21 49 03.2 -0.2**
**LYN LuoYang 78.88 315** ⇑P P 21 49 12.5 +8.0
LYN pmax pmax
comp=Z,24nm,0.5s
**KLR Kul'dur 79.20 335** LR LR 22 18 32.3
comp=Z,80nm,21.9s,baz=143,slow=32
**CMAR Chiang Mai Arr 80.64 294** P **P** **21 49 14.1 -0.4**
**CMAR Chiang Mai Arr 80.64 294** P **P** **21 49 15.3 +0.9**
comp=Z,3.0nm,0.7s,baz=134,slow=4.1,SNR=19
comp=Z,3.0nm,0.7s
**KMI Kunming 80.74 302** ⇓P **P** **21 49 17.5 +2.4**
KMI pmax pmax
comp=Z,9.0nm,1.6s
**XAN Xi'an 80.96 313** P **P** **21 49 17.5 +1.7**
XAN sP pwP 21 49 32.0 +3.2
XAN pmax pmax
comp=Z,19nm,1.1s
**PZH PanZhiHua 82.21 303** P **P** **21 49 25.3 +2.6**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,210nm,5.7s
**ELIB Princess Elisa 83.09 190** *d*P **P** **21 49 26.3 -0.3**
comp=Z,3.2nm,0.9s
**HHC Hu-ho-hao-te 83.26 319** *e*P **P** **21 49 30.5 +2.6**
HHC pmax pmax
comp=Z,8.0nm,0.7s
HHC pmax pmax
comp=Z,150nm,5.7s
HHC LR LR
comp=N,130nm,15.3s
HHC LR LR
comp=E,100nm,15.3s
HHC LR LR
comp=Z,130nm,16.1s
**MA2 Magadan 83.33 350** LR LR 22 21 56.2
comp=Z,124nm,20.6s,baz=157,slow=32
**PMSA Palmer Station 83.55 160** LR LR 22 23 51.5
comp=Z,142nm,19.3s,baz=222,slow=34
**HIA Hailar 84.36 330** P **P** **21 49 33.5 +0.3**
HIA IAmb IAmb 21 51 10.6
comp=Z,10nm,0.9s
**TROLL Troll, Antarti 85.35 184** ⇑P **P** **21 49 37.7 -0.4**
comp=Z,315nm,0.6s
**LZH Lanzhou 85.56 312** *e*P **P** **21 49 40.0 +0.3**
LZH sP sP 21 49 45.5 -0.8
LZH pmax pmax
comp=Z,13nm,1.1s
**KDAK Kodiak Island 85.82 19** P **P** **21 49 39.8 -0.4**
**KDAK Kodiak Island 85.82 19** LR LR 22 21 23.2
comp=Z,145nm,20.4s,baz=229,slow=31
**SNAA Sanae 85.94 182** P **P** **21 49 40.4 -0.6**
SNAA IAmb IAmb 21 49 54.3
comp=Z,33nm,1.6s
**SNAA Sanae 85.94 182** ⇑P **P** **21 49 40.0 -1.0**
comp=Z,51nm,0.6s
**SNAA Sanae 85.94 182** P **P** **21 49 40.3 -0.6**
comp=Z,2.4nm,0.7s,baz=194,slow=5.5,SNR=15
SNAA LR LR 22 26 54.8
comp=Z,180nm,18.1s,baz=110,slow=35
comp=Z,2.4nm,0.7s
**VNA3 Neumayer Olymp 86.50 180** ⇑P **P** **21 49 43.4 -0.3**
comp=Z,13nm,0.8s
**VNA2 Neumayer--Watz 86.80 181** ⇑P **P** **21 49 44.7 -0.4**
comp=Z,9.2nm,0.6s,baz=178,slow=5.0
**VNA1 Neumayer--Stat 87.09 181** ⇑P **P** **21 49 45.3 -1.2**
comp=Z,4.9nm,0.7s
**YBH Yreka Blue Hor 89.04 44** LR LR 22 21 36.5
comp=Z,80nm,20.9s,baz=258,slow=30
**PFO Pinyon Flats O 89.36 53** LR LR 22 21 47.4
comp=Z,181nm,20.4s,baz=235,slow=30
**SHL Shillong 89.65 298** P **P** **21 49 57.9 -1.7**
SHL IAmb IAmb 21 50 01.1
comp=Z,6.6nm,0.7s
**GTA Gaotai 90.00 313** *e*P P 21 50 06.3 +5.4
GTA pP pwP 21 50 17.0 +3.1
GTA pmax pmax
comp=Z,2.0nm,1.2s
**ULN Ulaanbaatar 90.00 323** P **P** **21 50 00.6 -0.1**
**LPIG La Paz 90.05 64** LR LR 22 21 09.7
comp=Z,130nm,21.0s,baz=240,slow=30
**NVAR Mina Array Bea 90.31 48** P **P** **21 50 02.9 +0.4**
comp=Z,0.5nm,0.7s,baz=210,slow=5.2,SNR=2.0
NVAR LR LR 22 25 08.0
comp=Z,173nm,18.4s,baz=269,slow=32
comp=Z,0.5nm,0.7s
**SONM Songino Array 90.35 323** P **P** **21 50 01.6 -0.7**
comp=Z,2.2nm,0.8s,baz=141,slow=4.4,SNR=8.5
SONM LR LR 22 33 05.6
comp=Z,30nm,18.0s,baz=129,slow=37
comp=Z,2.2nm,0.8s
**BBB Bella Bella 91.73 33** LR LR 22 22 25.2
comp=Z,88nm,21.5s,baz=190,slow=30
**PALK Pallekele 92.26 277** LR LR 22 34 29.2
comp=Z,211nm,18.7s,baz=219,slow=37
**ILAR Eielson Array 93.08 17** LR LR 22 26 23.7
comp=Z,149nm,20.5s,baz=224,slow=32
**DLBC Dease Lake 94.53 27** LR LR 22 26 09.6
comp=Z,94nm,18.9s,baz=280,slow=31
**NEW Newport 95.71 40** LR LR 22 30 14.6
comp=Z,105nm,18.0s,baz=232,slow=34
**ANMO Albuquerque 97.43 55** LR LR 22 26 01.8
comp=Z,146nm,20.4s,baz=339,slow=30
**TXAR Lajitas Array 97.55 62** LR LR 22 25 16.8
comp=Z,145nm,21.6s,baz=248,slow=30
**TIXI Tiksi 98.11 348** LR LR 22 36 15.0
comp=Z,64nm,18.2s,baz=144,slow=36
**PDAR Pinedale Array 98.19 47** LR LR 22 26 36.3
comp=Z,60nm,21.4s,baz=212,slow=30
**INK Inuvik 99.36 18** LR LR 22 30 00.3
comp=Z,109nm,20.9s,baz=256,slow=32
**ARCES ARCESS Array B 128.44 345** PKP **PKPdf** **21 56 06.2 -1.0**
comp=Z,1.9nm,0.9s,baz=338,slow=3.9,SNR=1.9
**VOIR 143.56 317** ⇑P PKPab 21 56 32.3 -0.1
**ARR Arges 143.85 317** ⇑P PKPbc 21 56 33.6 -0.6
**HUMR Humele 144.01 316** ⇓P **PKPdf** **21 56 35.9 -0.8**
**ELND Elena 144.09 313** ⇑P **PKPdf** **21 56 36.8 -0.1**
**DRGR 144.31 321** ⇑P **PKPab** **21 56 34.4 -0.8**
**LOT Lotru 144.35 318** ⇑P **PKPdf** **21 56 36.2 -1.3**
**LANS Liptovska Anna 144.75 326** *e*PKP **PKPdf** **21 56 38.8 +0.9**
**GZR Gura Zlata 144.99 319** ⇓P PKPbc 21 56 37.5 -0.2
**SURR Surduc 145.20 320** ⇑P **PKPdf** **21 56 39.2 +0.5**
**SIRR Siria 145.21 321** ⇑P **PKPdf** **21 56 38.3 -0.4**
**PSZ Piszkesteto 145.27 324** ⇓P **PKPbc** **21 56 37.7 -0.9**
**MORC Moravsky Berou 145.31 328** *e*PKP **PKPbc** **21 56 38.2 -0.4**
**MORC Moravsky Berou 145.31 328** ⇑P **PKPbc** **21 56 37.9 -0.7**
**OSTC Ostas 145.40 330** *e*PKP **PKPab** **21 56 38.8 -0.2**
**CHVC Chvalec 145.45 331** *e*PKP **PKPdf** **21 56 38.6 -0.4**
**HERR Herculane 145.46 318** ⇑P **PKPbc** **21 56 38.6 -0.6**
**KRLC Kraliky 145.47 329** *e*PKP **PKPdf** **21 56 38.7 -0.4**
**VYHS Vyhne 145.49 326** *e*PKP **PKPab** **21 56 39.2 -0.2**
**DPC Dobruska-Polom 145.50 330** *e*PKP **PKPdf** **21 56 38.6 -0.5**
DPC *ex* x 21 56 49.9
**UPC Upice 145.53 331** *e*PKP **PKPab** **21 56 39.0 -0.5**
**BZS Buzias 145.58 320** ⇑P **PKPbc** **21 56 39.0 -0.5**
**JAVC Velka Javorina 145.85 327** *e*PKP **PKPab** **21 56 40.8 0.0**
**MDVR Moldovita 145.95 318** ⇑P **PKPab** **21 56 41.5 +0.2**
**VRAC Vranov 146.08 329** *e*PKP **PKPab** **21 56 41.3 -0.3**
**VRAC Vranov 146.08 329** ⇑P **PKPab** **21 56 41.0 -0.6**
**BRG Berggiesshubel 146.17 333** *e*PKP **PKPab** **21 56 41.5 -0.3**
BRG Amp 21 56 43.1
comp=Z,12nm,1.0s
**BRG Berggiesshubel 146.17 333** P **PKiKP** **21 56 51.1 +6.6**
BRG Amp 21 56 53.2
comp=Z,15nm,0.9s
**CLL Collm 146.23 334** *i* PKPbc **PKPab** **21 56 41.3 -0.8**
comp=Z,22nm,1.4s
CLL *i* PKiKP pPKPbc 21 56 46.1 -0.3
CLL *i* x x 21 56 51.0
comp=Z,90nm,2.3s
CLL *e*PP **PP** **22 00 06.0 +2.7**
**KRUC Moravsky 146.34 328** *e*PKP **PKPab** **21 56 41.9 -0.7**
**BOVS Bovan 146.52 317** ⇑P **PKPdf** **21 56 40.0 -1.0**
**PRU Pruhonice 146.56 331** *e*PKP **PKPbc** **21 56 41.7 -0.7**
**TREC Trest 146.62 329** *ex* x 21 56 53.2
**EKA Eskdalemuir Ar 146.85 353** PKPbc **PKPdf** **21 56 41.3 +0.1**
comp=Z,4.2nm,0.7s,baz=1.7,slow=2.3,SNR=11
**MORH Mrgy, Hungar 146.97 323** ⇓P **PKPbc** **21 56 43.1 -0.6**
**ZVC Zvikov 147.11 331** *e*PKP **PKPbc** **21 56 43.9 -0.1**
**RONA Rosalia, Austr 147.30 327** *e*PKP **PKPbc** **21 56 44.5 -0.2**
comp=Z,6.1nm,0.8s
**CONA Conrad Observa 147.37 327** *e*PKP **PKiKP** **21 56 47.0 -0.1**
comp=Z,4.0nm,1.1s
**CKRC Cesky Krumlov 147.50 330** *e*PKP **PKPbc** **21 56 44.7 -0.4**
CKRC *ex* x 21 56 55.6
**KHC Kasperske Hory 147.62 331** *e*PKP **PKPbc** **21 56 44.8 -0.6**
**GERES GERESS Array B 147.77 330** PKPbc **PKPbc** **21 56 44.9 -1.0**
comp=Z,1.5nm,0.7s,baz=98,slow=4.1,SNR=7.3
**ARSA Arzberg 147.99 327** *e*PKiKP **PKPab** **21 56 49.4 +0.2**
comp=Z,3.4nm,0.9s
**MOA Molln 148.21 329** *i* PKP **PKPab** **21 56 53.4 +3.3**
comp=Z,7.2nm,1.0s
**BIOA Bad Ischl, Aus 148.62 329** *e*PKP **PKPab** **21 56 51.9 +0.2**
comp=Z,4.9nm,0.7s
**SOKA Soboth 148.62 326** *e*PKP **PKPab** **21 56 52.0 +0.2**
comp=Z,6.2nm,1.0s
**OBKA Obir 148.99 326** *ep*PKP **PKPab** **21 56 59.4 +6.1**
comp=Z,17nm,1.5s
**KBA Konlbreinsper 149.19 328** *e*PKP **PKPab** **21 56 55.3 +1.0**
comp=Z,2.4nm,0.6s
**LESA Schwarzleotal 149.27 329** *i* PKP **PKiKP** **21 56 50.7 -0.4**
comp=Z,5.1nm,0.9s
**MEM Membach 149.34 340** *d*PKP **PKPab** **21 56 59.2 +4.8**
**MYKA Terra Mystica 149.36 327** *e*PKP **PKiKP** **21 56 50.5 -0.8**
comp=Z,5.0nm,0.8s
**ABTA Abfaltersbach 149.83 329** *e*PKP **PKPbc** **21 56 50.5 -0.8**
comp=Z,7.9nm,1.3s
**WATA Walderalm 149.84 330** *i* PKP **PKPdf** **21 56 48.3 +1.7**
comp=Z,2.5nm,0.5s
**WTTA Wattenberg 149.87 330** *e*PKiKP **PKiKP** **21 56 53.1 +0.7**
comp=Z,12nm,1.5s
**BMRD Maredsous 149.99 341** *d*PKP **PKPab** **21 56 55.7 -1.4**
**MOTA Moosalm 150.05 331** *i* PKP **PKPbc** **21 56 51.7 -0.2**
comp=Z,8.8nm,0.9s
**RETA Reutte 150.09 331** *i* PKP **PKPab** **21 56 56.5 -1.3**
comp=Z,2.4nm,0.9s
**SQTA Sankt Quirin 150.09 331** *i* PKP **PKPbc** **21 56 51.4 -0.6**
comp=Z,3.6nm,0.5s
**WLF Walferdange 150.11 339** *d*PKP **PKiKP** **21 56 53.3 +0.7**
**DOU Dourbes 150.23 341** *d*PKP **PKPab** **21 56 55.4 -2.7**
**FETA Feichten 150.46 331** *i* PKP **PKPbc** **21 56 52.6 -0.3**
comp=Z,9.5nm,0.9s
**DAVA Damuels 150.63 332** *i* PKiKP **PKiKP** **21 56 56.3 +2.3**
comp=Z,5.3nm,0.7s
**ESDC Sonseca Array 162.18 345** PKPab **PKPab** **21 57 47.9 -1.7**
comp=Z,1.0nm,1.2s,baz=48,slow=2.4,SNR=4.2
**TORD Torodi Ar. Bea 165.62 232** PKP **PKPdf** **21 57 05.9 -0.8**
comp=Z,0.8nm,1.0s,baz=132,slow=2.1,SNR=2.8
TORD PKPab **PKPab** **21 58 05.2 -0.2**
comp=Z,0.6nm,0.9s,baz=111,slow=2.0,SNR=2.0

*IDC **26** 21:41:28.4±1.6,22.70S×169.92E,h0km,mb3.8/5, mbtmp3.8/6,ML3.9/1,Error ellipse: s-maj=47.4km s-min=31.1km az=22.0*
*NEIC **26** 21:41:28.4±1.9,22.7S±0.2×170.04E±0.03,h10km±2km, mb4.6/10,Error ellipse: s-maj=26.4km s-min=4.5km az=5.0*
**ISC 26 21:41:30.1±0.9,22.7S±0.1×170.01E±0.10,h21km,n22, σ1s31/24,mb4.3/10,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.37** | **272** | Pn | **Pn** | **21 42 08.4** | **+0.6** |
| PINNC | | | | Sn | **Sn** | **21 42 36.9** | **+0.7** |
| **DZM** | **Mont Dzumac** | **3.37** | **280** | Pn | **Pn** | **21 42 22.3** | **+0.7** |
| **DZM** | **Mont Dzumac** | **3.37** | **280** | Pn | **Pn** | **21 42 22.5** | **+1.0** |
| | 12nm,0.3s,baz=119,slow=18,SNR=15 | | | | | | |
| DZM | | | | Sn | **Sn** | **21 43 00.6** | **-0.3** |
| | 16nm,0.3s,baz=137,slow=23,SNR=11 | | | | | | |
| | 24nm,0.3s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **5.75** | **291** | Pn | **Pn** | **21 42 53.7** | **-0.5** |
| **PLWZ** | **Palliser** | **19.30** | **168** | P | **P** | **21 45 53.2** | **-0.5** |
| **RABL** | **Rabaul** | **25.25** | **314** | P | **P** | **21 46 52.2** | **-2.7** |
| RABL | | | | IAmb | IAmb | 21 47 05.1 | |
| | comp=Z,15nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **26.78** | **244** | P | **P** | **21 47 06.0** | **-2.8** |
| **BBOO** | **Buckleboo** | **31.56** | **244** | P | **P** | **21 47 51.5** | **+0.3** |
| BBOO | | | | IAmb | IAmb | 21 48 05.8 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **33.15** | **261** | P | **P** | **21 48 04.3** | **-1.0** |
| **ASAR** | **Alice Springs** | **33.15** | **261** | P | **P** | **21 48 06.6** | **+1.3** |
| | comp=Z,1.1nm,0.8s,baz=90,slow=8.7,SNR=4.8 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.28** | **268** | P | **P** | **21 48 07.4** | **+1.0** |
| WB0 | | | | IAmb | IAmb | 21 48 21.5 | |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.28** | **268** | P | **P** | **21 48 06.6** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 21 48 25.2 | |
| | comp=Z,6.3nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.30** | **268** | P | **P** | **21 48 06.0** | **-0.5** |
| **WRA** | **Warramunga Arr** | **33.30** | **268** | P | **P** | **21 48 06.0** | **-0.5** |
| | comp=Z,0.7nm,0.8s,baz=99,slow=8.4,SNR=3.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.73** | **268** | P | **P** | **21 49 16.6** | **-1.3** |
| **CASY** | **Casey** | **57.25** | **204** | P | **P** | **21 51 14.5** | **-1.2** |
| CASY | | | | IAmb | IAmb | 21 51 22.2 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.35** | **180** | P | **P** | **21 52 23.4** | **-0.1** |
| QSPA | | | | IAmb | IAmb | 21 52 36.4 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.35** | **180** | P | **P** | **21 52 25.4** | **+1.9** |
| | comp=Z,1.7nm,1.1s,baz=326,slow=3.4,SNR=2.4 | | | | | | |
| | comp=Z,1.7nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.59** | **294** | P | **P** | **21 53 42.7** | **+1.1** |
| | comp=Z,0.4nm,0.5s,baz=139,slow=4.5,SNR=1.8 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **K13K** | **Kusilvak Mount** | **86.77** | **12** | P | **P** | **21 54 12.2** | **0.0** |
| **SONM** | **Songino Array** | **90.42** | **323** | P | **P** | **21 54 32.2** | **+2.2** |
| | comp=Z,0.6nm,0.7s,baz=142,slow=5.4,SNR=3.4 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **147.88** | **330** | PKPbc | **PKiKP** | **22 01 14.5** | **-1.0** |
| | comp=Z,0.4nm,0.6s,baz=15,slow=4.1,SNR=3.7 | | | | | | |

*TEH **26** 21:53:57.3,34.64N×46.27E,h8km±57km,ML2.9*
*ISN **26** 21:53:57.5±0.4,34.64N×46.26E,h15km±5km,ML3.0*
**ISC 26 21:53:57.4±1.3,34.65N±0.04×46.26E±0.04,h5km±12km, n14,σ0s68/18,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehram** | **0.12** | **62** | Pg | **Pg** | **21 54 00.1** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.40** | **141** | Pg | **Pg** | **21 54 05.5** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **209** | Pg | **Pg** | **21 54 09.1** | **+0.1** |
| **ILIN** | **Lien** | **0.64** | **64** | Pg | **Pg** | **21 54 09.6** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.74** | **120** | Pg | **Pg** | **21 54 10.7** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **183** | Pg | **Pg** | **21 54 16.7** | **-0.3** |
| **IBZA** | **Bozab** | **1.33** | **97** | Pg | **Pb** | **21 54 22.4** | **-0.5** |
| **IBDR** | **Badra** | **1.56** | **190** | *e*Pn | **Pb** | **21 54 26.5** | **-0.1** |
| IBDR | | | | *e*Sn | **Sg** | **21 54 47.5** | **+0.1** |
| IBDR | | | | AML | AML | 21 54 53.4 | |
| | comp=E,206nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 21 54 54.7 | |
| | comp=N,114nm,0.5s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.73** | **130** | Pg | **Pg** | **21 54 30.4** | **-0.1** |
| **IKRK** | **Kirkuk** | **1.75** | **296** | *e*Pn | **Pb** | **21 54 29.2** | **-0.7** |
| IKRK | | | | *e*Sn | **Sb** | **21 54 52.5** | **+0.3** |
| IKRK | | | | AML | AML | 21 54 59.9 | |
| | comp=E,340nm,0.7s | | | | | | |
| IKRK | | | | AML | AML | 21 55 00.7 | |
| | comp=N,281nm,0.9s | | | | | | |
| **IDOB** | **Doab** | **1.80** | **118** | Pg | **Pg** | **21 54 31.4** | **-0.6** |
| **HSAM** | **Samen** | **1.98** | **102** | Pn | **Pb** | **21 54 34.0** | **-0.1** |
| **BHD** | **Baghdad** | **2.08** | **229** | *e*Pn | **Pn** | **21 54 33.5** | **+0.6** |
| BHD | | | | *e*Sn | **Sb** | **21 55 00.1** | **-1.6** |
| **RAFI** | **Al-Rafai** | **2.92** | **182** | *e*Pn | **Pn** | **21 54 45.5** | **+1.1** |
| RAFI | | | | *e*Sn | **Sn** | **21 55 20.1** | **+0.3** |

*IDC **26** 21:56:27.8±1.1,16.60S×178.67W,h0km,mb4.2/5, mbtmp4.3/6,ML3.6/1,Error ellipse: s-maj=54.7km s-min=22.4km az=157.0*
*NEIC **26** 21:57:16.6±1.6,16.7S±0.2×178.3W±0.1,h543km±10km, mb4.2/9,Error ellipse: s-maj=26.4km s-min=14.2km az=179.0*
**ISC 26 21:57:17.2±0.9,16.7S±0.2×178.5W±0.2,h550km,n20, σ0s83/17,mb4.1/10,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.49** | **253** | P | **P** | **21 58 35.2** | **-0.3** |
| **RAR** | **Rarotonga** | **18.23** | **107** | P | **P** | 22 00 44.9 | -12 |
| | 1.9nm,0.3s,baz=148,slow=13,SNR=5.3 | | | | | | |
| | 13nm,0.6s | | | | | | |
| **HNR** | **Honiara** | **22.23** | **286** | P | **P** | **22 01 34.1** | **+0.5** |
| **STKA** | **Stephens Creek** | **39.18** | **240** | P | **P** | **22 03 57.0** | **-1.3** |
| | 4.7nm,0.7s,baz=100,slow=12,SNR=8.6 | | | | | | |
| | 4.7nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.80** | **258** | P | **P** | **22 04 42.3** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 22 04 42.4 | |
| | comp=Z,5.1nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.82** | **258** | P | **P** | **22 04 42.2** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=96,slow=7.1,SNR=20 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.08** | **253** | P | **P** | **22 04 44.8** | **-0.1** |
| AS31 | | | | IAmb | IAmb | 22 04 45.2 | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **253** | P | **P** | **22 04 44.9** | **+0.1** |
| **ASAR** | **Alice Springs** | **45.08** | **253** | P | **P** | **22 04 44.5** | **-0.4** |
| | comp=Z,11nm,0.5s,baz=89,slow=8.1,SNR=190 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **GIRL** | **Giralia** | **63.20** | **253** | P | **P** | **22 06 53.9** | **+1.6** |
| **QSPA** | **South Pole Qui** | **73.34** | **180** | P | **P** | **22 07 53.6** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **78.60** | **44** | P | **P** | 22 08 33.0 | +10 |
| | comp=Z,0.6nm,0.8s,baz=220,slow=8.3,SNR=4.6 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **WVOR** | **Wild Horse Val** | **80.53** | **40** | P | **P** | **22 08 32.4** | **-0.2** |
| WVOR | | | | IAmb | IAmb | 22 08 32.4 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **KLU** | **Klutina** | **82.13** | **15** | P | **P** | **22 08 40.9** | **+0.6** |
| **N25K** | **Chitina, Valde** | **82.56** | **16** | P | **P** | **22 08 43.5** | **+1.0** |
| N25K | | | | IAmb | IAmb | 22 08 44.1 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **G16K** | **Koyuk River** | **82.76** | **7** | P | **P** | **22 08 42.5** | **-0.7** |
| G16K | | | | IAmb | IAmb | 22 08 45.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **BELA** | **Belgrano 2** | **83.35** | **173** | P | **P** | **22 08 46.2** | **-0.1** |
| **O30N** | **Mendenhall** | **84.34** | **19** | P | **P** | **22 08 50.6** | **-0.7** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **84.74** | **13** | P | | P | | 22 09 02.0 | +8.9 |
| | comp=Z,0.2nm,0.4s,baz=224,slow=5.0,SNR=2.7 | | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | | |
| **P33M** | **Teslin, Yukon** | **85.01** | **21** | P | | **P** | | **22 08 53.4** | **-1.3** |

*TEH **26** 22:01:46.7, 34°.62N × 46°.21E, h6km ± 39km, ML2.9*
*ISN **26** 22:01:46.5 ± 0.6, 34°.62N × 46°.20E, h12km ± 6km, ML3.2*
**ISC 26 22:01:46.9 ± 1.3, 34°.60N ± 0°.04 × 46°.18E ± 0°.03, h5km ± 13km, n16, σ 978/20, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.20** | **61** | Pg | **Pg** | **22 01 51.7** | **+0.8** |
| **IGHG** | **Ghaleghazi** | **0.42** | **130** | Pg | **Pb** | **22 01 56.0** | **-1.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.49** | **259** | Pg | **Pb** | **22 01 57.7** | **-0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **204** | Pg | **Pb** | **22 01 58.5** | **-0.4** |
| **ILIN** | **Lien** | **0.72** | **64** | Pg | **Pb** | **22 02 01.4** | **-0.7** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **114** | Pg | **Pb** | **22 02 02.4** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **178** | Pg | **Pn** | **22 02 06.6** | **-0.7** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **78** | Pg | **Pn** | **22 02 11.4** | **+0.5** |
| **IBZA** | **Bozab** | **1.40** | **95** | Pg | **Pg** | **22 02 14.3** | **+0.6** |
| **IBDR** | **Badra** | **1.50** | **188** | *e*Pn | **Pg** | **22 02 15.5** | **-0.2** |
| IBDR | | | | *e*Sn | **Sg** | **22 02 36.0** | **+0.8** |
| IBDR | | | | AML | AML | 22 02 46.5 | |
| | comp=E,450nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 22 02 56.6 | |
| | comp=N,256nm,0.4s | | | | | | |
| **IKRK** | **Kirkuk** | **1.71** | **298** | *e*Pn | **Pb** | **22 02 18.0** | **-0.8** |
| IKRK | | | | *e*Sn | **Sg** | **22 02 41.2** | **-0.5** |
| IKRK | | | | AML | AML | 22 02 48.2 | |
| | comp=E,270nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 22 02 50.0 | |
| | comp=N,332nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.75** | **127** | Pg | **Pg** | **22 02 20.8** | **+0.3** |
| **IDOB** | **Doab** | **1.85** | **116** | Pn | **Pg** | **22 02 21.8** | **-0.6** |
| **BHD** | **Baghdad** | **2.00** | **229** | *e*Pn | **Pn** | **22 02 22.0** | **+0.6** |
| BHD | | | | *e*Sn | **Sb** | **22 02 48.5** | **-0.5** |
| BHD | | | | AML | AML | 22 02 58.8 | |
| | comp=E,254nm,0.4s | | | | | | |
| **HSAM** | **Samen** | **2.04** | **100** | Pn | **Pg** | **22 02 25.3** | **-0.8** |
| **RAFI** | **Al-Rafai** | **2.87** | **181** | *e*Pn | **Pn** | **22 02 34.5** | **+1.1** |
| RAFI | | | | *e*Sn | **Sn** | **22 03 09.3** | **+1.0** |
| RAFI | | | | AML | AML | 22 03 25.6 | |
| | comp=N,130nm,0.4s | | | | | | |
| RAFI | | | | AML | AML | 22 03 25.8 | |
| | comp=E,105nm,0.3s | | | | | | |

*IDC **26** 22:16:46.9 ± 5.7, 36°.57N × 71°.38E, h77km ± 51km, mb3.4/8, mbtmp3.8/13, ML3.7/5, Error ellipse: s-maj=37.7km s-min=21.0km az=29.0*
*NNC **26** 22:16:51.3 ± 4.8, 37°.22N × 71°.16E, h0km, mb4.5, mpv4.2, Error ellipse: s-maj=38.2km s-min=30.4km az=157.0*
**ISC 26 22:16:50.6 ± 1.1, 36°.82N ± 0°.09 × 71°.3E ± 0°.1, h106km, n27, σ 1§30/33, mb3.5/8, 9C-1D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **5.63** | **19** | P | **Pn** | **22 18 12.9** | **+0.7** |
| | SNR=36 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.15** | **18** | P | **Pn** | **22 18 20.3** | **+1.3** |
| | SNR=12 | | | | | | |
| **KK31** | **Karatay Array** | **6.31** | **355** | ⇑P | **Pn** | **22 18 21.0** | **0.0** |
| | 10nm,0.3s,baz=198,slow=19,SNR=278 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **22 19 31.1** | **-0.5** |
| | 4.1nm,0.3s,baz=356,slow=62,SNR=5.0 | | | | | | |
| **AAK** | **Ala-Archa** | **6.32** | **22** | P | **Pn** | **22 18 22.5** | **+1.1** |
| | SNR=17 | | | | | | |
| **AAK** | **Ala-Archa** | **6.32** | **22** | P | **Pn** | **22 18 22.3** | **+0.9** |
| | 7.3nm,0.3s,baz=200,slow=4.9,SNR=27 | | | | | | |
| AAK | | | | S | **Sn** | **22 19 32.3** | **0.0** |
| | 9.0nm,0.4s,baz=341,slow=21,SNR=9.7 | | | | | | |
| | 14nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **6.32** | **22** | ⇑P | **Pn** | **22 18 22.3** | **+0.9** |
| | 12nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **22 19 32.5** | **+0.3** |
| | 12nm,0.5s | | | | | | |
| **KBK** | **Karagaybulak** | **6.49** | **25** | P | **Pn** | **22 18 25.6** | **+2.0** |
| | SNR=5.3 | | | | | | |
| **CHMS** | **Chumysh** | **6.73** | **22** | P | **Pn** | **22 18 27.6** | **+0.8** |
| | SNR=18 | | | | | | |
| **CHMS** | **Chumysh** | **6.73** | **22** | ⇑P | **Pn** | **22 18 27.3** | **+0.5** |
| | 19nm,0.7s | | | | | | |
| CHMS | | | | ⇑S | **Sn** | **22 19 39.5** | **-2.5** |
| | 9.0nm,0.7s | | | | | | |
| **USP** | **Ospenovka** | **6.90** | **20** | P | **Pn** | **22 18 29.5** | **+0.3** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.95** | **27** | P | **Pn** | **22 18 31.1** | **+1.2** |
| | SNR=5.4 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.95** | **27** | ⇓P | **Pn** | **22 18 30.2** | **+0.3** |
| | 9.1nm,0.8s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **22 19 47.1** | **-0.4** |
| | 8.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.91** | **36** | P | **Pn** | **22 19 49.7** | **-0.3** |
| | 0.1nm,0.3s,baz=223,slow=17,SNR=4.4 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.76** | **18** | P | **P** | **22 20 16.8** | **-0.2** |
| | 1.5nm,0.6s,baz=206,slow=10,SNR=4.3 | | | | | | |
| **AB31** | **Akbulak array** | **14.91** | **330** | ⇑P | **Pn** | **22 20 13.3** | **-2.5** |
| | 1.0nm,0.3s,baz=137,slow=13,SNR=120 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **22 22 57.4** | **-2.9** |
| | 0.6nm,0.5s,baz=151,slow=23,SNR=3.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.22** | **358** | P | **Pn** | **22 20 31.9** | **-0.2** |
| | 0.1nm,0.3s,baz=164,slow=11,SNR=12 | | | | | | |
| | 1.3nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.61** | **329** | P | **Pn** | **22 20 37.2** | **+0.3** |
| | 1.1nm,0.3s,baz=146,slow=7.5,SNR=13 | | | | | | |
| | 2.2nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.54** | **24** | P | **P** | **22 21 10.1** | **+0.5** |
| | 0.7nm,0.3s,baz=216,slow=9.2,SNR=11 | | | | | | |
| | 1.9nm,0.4s | | | | | | |
| **ARU** | **Arti** | **21.40** | **340** | P | **P** | **22 21 30.6** | **+1.0** |
| | 1.1nm,0.4s,baz=358,slow=22,SNR=3.2 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **37.34** | **326** | P | **P** | **22 23 54.1** | **+1.8** |
| | 1.9nm,1.0s,baz=119,slow=8.7,SNR=5.3 | | | | | | |
| | 1.9nm,1.0s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.93** | **337** | P | **P** | **22 24 24.2** | **+2.0** |
| | 2.1nm,1.0s,baz=110,slow=7.8,SNR=4.1 | | | | | | |
| | 2.1nm,1.0s | | | | | | |
| **HFS** | **Hagfors** | **42.95** | **322** | P | **P** | **22 24 39.9** | **+1.2** |
| | 1.2nm,0.6s,baz=94,slow=11,SNR=9.2 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.26** | **323** | P | **P** | **22 24 50.5** | **+1.3** |
| | comp=Z,0.9nm,0.7s,baz=98,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.26** | **323** | P | **P** | **22 24 50.4** | **+1.3** |
| | comp=Z,0.3nm,0.5s,baz=96,slow=7.7,SNR=3.6 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.94** | **269** | P | **P** | **22 27 25.2** | **-0.4** |
| | comp=Z,0.3nm,0.5s,baz=38,slow=7.0,SNR=9.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **81.98** | **122** | P | **P** | **22 28 57.4** | **-1.5** |
| | comp=Z,0.4nm,0.4s,baz=328,slow=4.8,SNR=5.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **84.26** | **125** | P | **P** | **22 29 09.1** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=311,slow=4.6,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |

*IDC **26** 22:21:29.2 ± 1.1, 46°.64N × 155°.89E, h0km, mb3.6/7, mbtmp3.7/10, ML3.2/3, Error ellipse: s-maj=28.4km s-min=25.2km az=116.0*
**ISC 26 22:21:31.9 ± 1.1, 46°.7N ± 0°.2 × 155°.9E ± 0°.2, h17km, n13, σ 1§19/10, mb3.7/7, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PETK** | **Petropavlovsk-** | **6.49** | **10** | Pn | **Pn** | **22 23 05.8** | **-0.9** |
| | 0.4nm,0.3s,baz=186,slow=8.7,SNR=2.8 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **ASAJ** | **Asahikawa** | **9.69** | **259** | Pn | **Pn** | **22 23 50.9** | **+0.5** |
| | 0.5nm,0.3s,baz=108,slow=9.6,SNR=2.0 | | | | | | |
| | 2.9nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **16.92** | **270** | Pn | **Pn** | **22 25 25.8** | **-2.0** |
| | 0.1nm,0.3s,baz=64,slow=15,SNR=4.0 | | | | | | |
| | 1.6nm,0.8s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.41** | **158** | T | T | 22 57 09.9 | |
| | baz=340 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.42** | **158** | T | T | 22 57 13.0 | |
| | baz=340 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.42** | **158** | T | T | 22 57 08.0 | |
| | baz=340 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.62** | **299** | P | **P** | **22 30 15.6** | **+1.1** |
| | 0.2nm,0.7s,baz=91,slow=5.8,SNR=1.7 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **49.03** | **305** | P | | **P** | | **22 30 17.5** | **-0.1** |
| | 0.4nm,0.6s,baz=68,slow=8.8,SNR=4.6 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |
| **FINES** | **FINESS Array B** | **64.85** | **336** | P | | **P** | | **22 32 10.4** | **+1.0** |
| | 1.7nm,0.8s,baz=43,slow=8.4,SNR=4.6 | | | | | | | | |
| | 1.7nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **69.15** | **202** | P | | **P** | | **22 32 35.7** | **-1.5** |
| | 0.4nm,0.7s,baz=23,slow=6.7,SNR=3.5 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |
| **ASAR** | **Alice Springs** | **72.83** | **201** | P | | **P** | | **22 32 59.8** | **+0.2** |
| | 0.3nm,0.7s,baz=26,slow=6.7,SNR=4.1 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **75.84** | **62** | P | | **P** | | **22 33 17.8** | **+0.5** |
| | 0.4nm,0.6s,baz=302,slow=4.1,SNR=6.4 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **84.22** | **313** | P | | **P** | | **22 34 02.6** | **+0.1** |
| | 0.8nm,0.6s,baz=60,slow=5.8,SNR=1.7 | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | |

*IDC **26** 22:35:36.5 ± 1.0, 18°.47N × 147°.60E, h0km, mb3.7/7, mbtmp3.7/7, Error ellipse: s-maj=40.2km s-min=23.2km az=94.0*
**ISC 26 22:35:41.8 ± 1.0, 18°.5N ± 0°.2 × 147°.6E ± 0°.3, h35km, n13, σ 0§76/8, mb3.6/7, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H11S3** | **WAKE ISLAND Hy** | **18.12** | **87** | T | T | 22 58 39.2 | |
| | baz=274,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **18.13** | **87** | T | T | 22 58 34.9 | |
| | baz=274,slow=74 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **18.13** | **87** | T | T | 22 58 38.1 | |
| | baz=274,slow=74 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **18.29** | **83** | T | T | 22 58 55.3 | |
| | baz=267 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **18.29** | **83** | T | T | 22 59 00.3 | |
| | baz=267 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **18.30** | **83** | T | T | 22 59 01.0 | |
| | baz=267 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.31** | **199** | P | **P** | **22 43 15.3** | **-0.7** |
| | 0.9nm,0.8s,baz=23,slow=9.2,SNR=5.4 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 45 20.7** | **+1.5** |
| | 0.2nm,0.8s,baz=12,slow=3.1,SNR=1.4 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **43.95** | **198** | P | **P** | **22 43 45.4** | **-0.2** |
| | 0.5nm,0.6s,baz=19,slow=8.8,SNR=2.7 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.30** | **322** | P | **P** | **22 45 40.0** | **0.0** |
| | 0.3nm,0.3s,baz=96,slow=7.3,SNR=1.7 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.70** | **318** | P | **P** | **22 46 02.9** | **-0.3** |
| | 0.5nm,0.5s,baz=92,slow=7.2,SNR=7.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **63.07** | **26** | P | **P** | **22 46 05.0** | **-0.3** |
| | 0.4nm,0.8s,baz=270,slow=6.3,SNR=4.1 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **67.80** | **320** | P | **P** | **22 46 36.4** | **+0.2** |
| | 1.1nm,0.6s,baz=93,slow=6.5,SNR=5.3 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.87** | **52** | P | **P** | **22 47 58.1** | **0.0** |
| | 0.3nm,0.5s,baz=273,slow=5.8,SNR=1.5 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**TRN 26 22:47:35.5, 16°.15N × 61°.67W, h165km, MD3.5, Basse-Terre, Guadeloupe., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TBG** | **Guadaloupe-3** | **0.29** | **176** | *e*P | Pn | 22 47 59.2 | +1.3 |
| TBG | | | | *e*S | Sn | 22 48 16.5 | +1.5 |
| **MBWH** | | **0.78** | **320** | *e*P | Pn | 22 48 01.1 | +1.0 |
| MBWH | | | | *e*S | Sn | 22 48 20.0 | +0.9 |
| **MBFL** | **Flemmings, Mon** | **0.79** | **319** | *e*P | Pn | 22 48 01.6 | +1.4 |
| **ANBD** | **Bethesda, Anti** | **0.90** | **354** | *e*P | Pn | 22 48 02.4 | +1.4 |
| ANBD | | | | *e*S | Sn | 22 48 20.1 | -0.5 |
| **SVN** | **Savane Anatole** | **1.39** | **160** | *e*P | Pn | 22 48 06.8 | +1.6 |
| SVN | | | | *e*S | Sn | 22 48 28.4 | +0.3 |
| **ANWB** | **Willy Bob** | **1.52** | **356** | *e*P | Pn | 22 48 08.3 | +1.9 |
| ANWB | | | | *e*S | Sn | 22 48 30.3 | 0.0 |
| **SKOC** | **St. Kitts, UWI** | **1.53** | **318** | *e*P | Pn | 22 48 06.9 | +0.5 |
| SKOC | | | | *e*S | Sn | 22 48 30.5 | +0.1 |
| **SKI** | **Saint Kitts** | **1.56** | **319** | *e*P | Pn | 22 48 08.4 | +1.5 |
| SKI | | | | *e*S | Sn | 22 48 31.5 | +0.4 |
| **ILAM** | **Ilet Lapin Mar** | **1.56** | **151** | *e*P | Pn | 22 48 07.2 | +0.3 |
| ILAM | | | | *e*S | Sn | 22 48 31.3 | +0.2 |
| **BIM** | **Bigot** | **1.72** | **160** | *e*P | Pn | 22 48 09.6 | +1.0 |
| BIM | | | | *e*S | Sn | 22 48 34.5 | +0.4 |
| **SLBI** | **Saint Lucia, B** | **2.22** | **162** | *e*P | Pn | 22 48 14.6 | +0.6 |
| SLBI | | | | *e*S | Sn | 22 48 44.0 | +0.1 |
| **SLAC** | **Saint Lucia, A** | **2.36** | **161** | *e*P | Pn | 22 48 16.1 | +0.4 |
| SLAC | | | | *e*S | Sn | 22 48 47.0 | 0.0 |

*IDC **26** 22:48:04.8 ± 1.8, 8°.05S × 116°.55E, h0km, mb3.5/3, mbtmp3.6/4, ML3.3/1, Error ellipse: s-maj=28.8km s-min=23.7km az=95.0*
*DJA **26** 22:48:05.6 ± 0.3, 8°.S ± 4°.4 × 11°.6E ± °, h10km, M4.0/10, mb4.2/1, MLv3.9/10*
**ISC 26 22:48:05.5 ± 0.9, 8°.07S ± 0°.07 × 116°.44E ± 0°.04, h10km, n14, σ 0§59/18, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.80** | **147** | P | **Pb** | **22 48 21.3** | **-0.2** |
| TWSI | | | | S | **Sb** | **22 48 32.6** | **+0.3** |
| **SRBI** | **Singaraja** | **1.21** | **269** | P | **Pn** | **22 48 28.2** | **-0.3** |
| SRBI | | | | S | **Sn** | **22 48 45.4** | **+0.3** |
| **DNP** | **Denpasar** | **1.36** | **243** | P | **Pb** | **22 48 30.7** | **-0.3** |
| **PLAI** | **Plampang** | **1.52** | **120** | P | **Pb** | **22 48 33.8** | **-0.1** |
| PLAI | | | | S | **Sg** | **22 48 54.0** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.30** | **260** | P | **Pn** | **22 48 43.0** | **-0.5** |
| **WBSI** | **Waikabubak, Su** | **3.31** | **118** | P | **Pn** | **22 48 57.3** | **-0.2** |
| **BWJI** | **Bawean** | **4.35** | **300** | P | **Pn** | **22 49 11.0** | **-0.8** |
| **BSSI** | **Bau Bau, Buton** | **4.45** | **65** | P | **Pn** | **22 49 13.6** | **+0.4** |
| **KAPI** | **Kappang** | **4.48** | **48** | Pn | **Pn** | **22 49 12.4** | **-1.1** |
| | 1.6nm,0.3s,baz=240,slow=12,SNR=2.2 | | | | | | |
| KAPI | | | | Sn | **Sn** | **22 50 05.5** | **-0.2** |
| | 3.3nm,0.3s,baz=231,slow=23,SNR=3.8 | | | | | | |
| KAPI | | | | Lg | Lg | 22 50 24.3 | |
| | 2.1nm,0.3s,baz=133,slow=20,SNR=3.2 | | | | | | |
| | 3.9nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.59** | **270** | P | **Pn** | **22 49 14.6** | **-0.4** |
| **EDFI** | **Ende, Flores** | **5.24** | **98** | P | **Pn** | **22 49 23.5** | **-0.6** |
| **WRA** | **Warramunga Arr** | **20.97** | **126** | P | **P** | **22 52 48.7** | **-0.3** |
| | 1.8nm,0.8s,baz=301,slow=12,SNR=13 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.82** | **135** | P | **P** | **22 53 08.8** | **0.0** |
| | 1.9nm,0.8s,baz=315,slow=8.4,SNR=16 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.50** | **334** | P | **P** | **22 58 30.6** | **+1.3** |
| | 0.4nm,0.7s,baz=146,slow=7.1,SNR=4.2 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*IDC **26** 22:48:52.5 ± 1.9, 17°.15S × 176°.33W, h0km, mb4.1/4, mbtmp4.1/4, Error ellipse: s-maj=51.8km s-min=39.5km az=29.0*
**ISC 26 22:48:57.4 ± 2.0, 17°.0S ± 0°.3 × 176°.4W ± 0°.3, h35km, n6, σ 0§33/6, mb4.1/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **40.78** | **241** | P | **P** | **22 56 35.8** | **+0.3** |
| | 0.9nm,0.5s,baz=94,slow=14,SNR=3.5 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.73** | **258** | P | **P** | **22 57 23.4** | **-0.2** |
| | 0.9nm,0.5s,baz=97,slow=6.8,SNR=18 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.92** | **253** | P | **P** | **22 57 24.7** | **-0.3** |
| | 2.6nm,0.5s,baz=90,slow=8.2,SNR=8.1 | | | | | | |
| | 2.6nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.03** | **180** | P | **P** | **23 00 23.6** | **-0.1** |
| | 1.3nm,0.6s,baz=230,slow=1.2,SNR=16 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.52** | **317** | PKPbc | **PKPab** | **23 08 33.0** | **+0.2** |
| | 0.5nm,0.8s,baz=89,slow=3.2,SNR=2.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.28** | **305** | PKPbc | **PKPbc** | **23 08 37.7** | **-0.1** |
| | 2.7nm,0.9s,baz=57,slow=10,SNR=2.0 | | | | | | |

*IDC **26** 23:10:39.3 ± 0.6, 44°.21N × 149°.68E, h0km, mb4.3/22, mbtmp4.3/27, ML3.8/4, MS3.6/21, Error ellipse: s-maj=15.6km s-min=14.1km az=168.0*

*SKHL **26** 23:10:40.8 ± 0.8, 44°.00N × 149°.90E, h28km ± 3km, mb4.7/5*
*MOS **26** 23:10:40.4 ± 1.1, 44°.02N × 149°.66E, h21km, mb4.8/34, MS3.3/6, Error ellipse: s-maj=9.0km s-min=5.7km az=132.1*
*JMA **26** 23:10:41.8 ± 0.8, 44°N ± 3° × 15°0E ± °, h30km, MV4.4/14, SE OFF ETOROFU*
*NEIC **26** 23:10:41.8 ± 1.1, 44°.19N ± 0°.09 × 149°.5E ± 0°.1, h10km ± 1km, mb4.7/86, Error ellipse: s-maj=17.6km s-min=14.4km az=133.0*
*NIED **26** 23:10:41.8, 44°.46N × 149°.71E, h30km, MW4.2, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$2.38; $M_{\theta\theta}$-0.35; $M_{\phi\phi}$-2.03; $M_{r\theta}$-0.54; $M_{r\phi}$-1.05; $M_{\theta\phi}$0.42; Fault plane solution: $M_0$2.56000×$10^{15}$ NP1:$\phi_s$11.00000°, δ49.00000°, λ69.00000°. NP2:$\phi_s$221.00000°, δ45.00000°, λ112.00000°.*
**ISC 26 23:10:41.0 ± 0.9, 43°.98N ± 0°.05 × 149°.70E ± 0°.04, h16km ± 5km, n324, σ 1§51/323, mb4.6/108, MS3.7/22, 44C-8D, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.81** | **314** | *i* P | **Pn** | **23 11 10.7** | **-0.8** |
| KUR | | | | AMB | AMB | 23 11 11.3 | |
| | 630nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **23 11 33.7** | **-0.4** |
| KUR | | | | A | A | 23 11 45.7 | |
| | 1μm,0.7s | | | | | | |
| KUR | | | | A | A | 23 11 45.7 | |
| | 2μm,0.7s | | | | | | |
| **KUR** | **Kuril'sk** | **1.81** | **314** | *c* iPN | **Pn** | **23 11 10.5** | **-1.0** |
| KUR | | | | *e*S | **Sn** | **23 11 33.8** | **-0.4** |
| KUR | | | | pmax | pmax | | |
| | comp=N,206nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,625nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,51nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,2μm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,1μm,0.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,6μm,1.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,2μm,1.2s | | | | | | |
| **SHO** | **Shikotan** | **2.07** | **268** | *e*P | **Pn** | **23 11 14.9** | **-0.3** |
| SHO | | | | AMB | AMB | 23 11 15.9 | |
| | comp=N,90nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **23 11 40.1** | **-0.6** |
| SHO | | | | A | A | 23 11 51.3 | |
| | comp=N,860nm,0.6s | | | | | | |
| SHO | | | | A | A | 23 11 51.3 | |
| | comp=N,590nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.07** | **268** | *e*PN | **Pn** | **23 11 15.1** | **-0.1** |
| SHO | | | | *e*S | **Sn** | **23 11 39.6** | **-1.1** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,62nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,31nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,42nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,345nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,181nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.77** | **272** | *e*P | **Pn** | **23 11 25.0** | **+0.3** |
| YUK | | | | AMB | AMB | 23 11 26.2 | |
| | comp=E,230nm,0.5s | | | | | | |
| YUK | | | | *e*S | **Sn** | **23 11 57.5** | **-0.3** |
| YUK | | | | A | A | 23 12 09.1 | |
| | comp=E,300nm,0.6s | | | | | | |
| YUK | | | | A | A | 23 12 09.1 | |
| | comp=E,590nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.77** | **272** | *i* PN | **Pn** | **23 11 26.0** | **+1.3** |
| **NEM2** | **Nemuro 2** | **2.93** | **259** | P | **Pn** | **23 11 27.4** | **+0.4** |
| NEM2 | | | | *e*S | **Sn** | **23 12 00.1** | **-1.8** |
| **JRA** | **Rausu** | **3.30** | **271** | P | **Pn** | **23 11 33.8** | **+1.8** |
| **JNK** | **Nakash** | **3.63** | **265** | P | **Pn** | **23 11 37.3** | **+0.8** |
| JNK | | | | *e*S | **Sn** | **23 12 19.4** | **+0.4** |
| **JAK** | **Akkeshi** | **3.77** | **257** | P | **Pn** | **23 11 39.5** | **+1.0** |
| JAK | | | | S | **Sn** | **23 12 22.2** | **-0.3** |
| **JTKR** | **Abashiri--Toko** | **4.18** | **272** | *e*P | **Pn** | **23 11 45.3** | **+1.2** |
| **JAR** | **Ashorobuto** | **4.36** | **263** | P | **Pn** | **23 11 48.1** | **+1.6** |
| JAR | | | | *e*S | **Sn** | **23 12 37.1** | **+0.2** |
| **JOB** | **Onbets** | **4.40** | **258** | *e*P | **Pn** | **23 11 48.6** | **+1.4** |
| JOB | | | | *e*S | **Sn** | **23 12 36.9** | **-1.2** |
| **JCH** | **Churui** | **4.82** | **256** | P | **Pn** | **23 11 54.3** | **+1.3** |
| JCH | | | | *e*S | **Sn** | **23 12 49.0** | **+0.6** |
| **JKA** | **Kamikawa-asahi** | **5.12** | **274** | Pn | **Pn** | **23 11 59.0** | **+2.0** |
| **JKA** | **Kamikawa-asahi** | **5.12** | **274** | *e*P | **Pn** | **23 11 59.0** | **+2.0** |
| **ASAJ** | **Asahikawa** | **5.12** | **274** | Pn | **Pn** | **23 11 58.7** | **+1.7** |
| | comp=E,1.9nm,0.3s,baz=53,slow=11,SNR=10 | | | | | | |
| ASAJ | | | | LR | LR | 23 14 10.4 | |
| | comp=E,323nm,19.2s,baz=152,slow=41 | | | | | | |
| | comp=E,7.1nm,0.5s | | | | | | |
| **ASAJ** | **Asahikawa** | **5.12** | **274** | PN | **Pn** | **23 11 59.0** | **+2.0** |
| **ERM** | **Erimo** | **5.18** | **250** | | **Pn** | **23 12 01.0** | **+3.1** |
| **ERM** | **Erimo** | **5.18** | **250** | PN | **Pn** | **23 12 01.0** | **+3.1** |
| **JNBK** | **Urakawa-nobuka** | **5.36** | **254** | P | **Pn** | **23 12 01.6** | **+1.3** |
| **JAB** | **Ashibetsu** | **5.43** | **268** | P | **Pn** | **23 12 02.9** | **+1.5** |
| **YSS** | **Yuzh-Sakhalins** | **5.71** | **304** | Pn | **Pn** | **23 12 04.5** | **-0.7** |
| **YSS** | **Yuzh-Sakhalins** | **5.71** | **304** | *e*P | **Pn** | **23 12 06.7** | **+1.5** |
| YSS | | | | AMB | AMB | 23 12 07.5 | |
| | comp=E,10.0nm,0.3s | | | | | | |
| YSS | | | | *e*S | **Sn** | **23 13 11.4** | **+1.0** |
| YSS | | | | A | A | 23 13 22.9 | |
| | comp=E,10.0nm,0.5s | | | | | | |
| YSS | | | | A | A | 23 13 22.9 | |
| | comp=E,20nm,0.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.71

comp=Z,0.1nm,0.3s,baz=114,slow=14,SNR=5.5
KLR LR LR 23 19 35.9
comp=Z,248nm,18.5s,baz=102,slow=40
**KLR Kul'dur 13.40 299** *e*P **Pn 23 13 52.3 +1.9**
**KLR Kul'dur 13.40 299** *e*PN **Pn 23 13 52.7 +2.3**
KLR pmax pmax
comp=Z,5.0nm,1.6s
**MDJ Mudanjiang 14.41 280** P **Pn 23 14 05.5 +1.2**
MDJ PP **PnPn 23 14 14.3 +2.2**
MDJ S **Sn 23 16 42.5 -1.2**
MDJ pmax pmax
comp=Z,190nm,0.5s
MDJ pmax pmax
comp=Z,190nm,4.5s
MDJ LR LR
comp=N,200nm,12.0s
MDJ LR LR
comp=E,180nm,7.9s
MDJ LR LR
comp=Z,390nm,17.5s
**MA2 Magadan 15.63 2** LR LR 23 20 45.7
comp=Z,151nm,19.1s,baz=170,slow=39
**BNX BinXian 15.90 284** ⇑P **Pn 23 14 23.3 -0.7**
BNX pmax pmax
comp=Z,11nm,0.9s
**HEH HeiHe 16.38 300** *e*P **Pn 23 14 30.0 -0.2**
HEH pmax pmax
comp=Z,4.0nm,0.5s
HEH LR LR
comp=N,170nm,14.2s
HEH LR LR
comp=E,330nm,14.8s
HEH LR LR
comp=Z,380nm,16.5s
**CN2 Changchun 17.47 278** *e*P **P 23 14 44.8 -0.2**
CN2 *e*S **Sn 23 17 51.8 -6.1**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 pmax pmax
comp=Z,100nm,3.0s
CN2 LR LR
comp=N,200nm,12.0s
CN2 LR LR
comp=E,200nm,12.0s
CN2 LR LR
comp=Z,200nm,13.0s
**ZEA Zeya 17.63 312** *e*P **Pn 23 14 45.5 -0.3**
**ZEA Zeya 17.63 312** *e*P **P 23 14 46.8 +0.1**
ZEA pmax pmax
comp=Z,10.0nm,1.1s
ZEA MLR MLR
comp=N,100nm,12.0s
ZEA MLR MLR
comp=Z,200nm,16.0s
**KSRS Korea Array 17.72 256** P **Pn 23 14 46.9 -0.1**
comp=Z,0.2nm,0.3s,baz=61,slow=12,SNR=6.6
comp=Z,1.0nm,0.5s
**JNU Nakatsue 18.24 240** LR LR 23 23 07.3
comp=Z,125nm,19.2s,baz=22,slow=41
**SHEM Shemya Is, Ala 18.35 53** LR LR 23 23 31.1
comp=Z,60nm,18.4s,baz=277,slow=42
**SEY Seymchan 19.05 4** P **P 23 15 00.1 -2.1**
comp=Z,0.7nm,0.3s,baz=180,slow=9.1,SNR=10
comp=Z,8.9nm,0.8s
**SEY Seymchan 19.05 4***ce*P **P 23 14 59.9 -2.4**
SEY pmax pmax
comp=Z,15nm,1.3s
**YAK Yakutsk 21.55 334** P **P 23 15 26.8 -2.6**
YAK IAmb IAmb 23 15 29.7
comp=Z,19nm,0.6s
**YAK Yakutsk 21.55 334** P **P 23 15 26.7 -2.7**
comp=Z,19nm,0.5s,baz=113,slow=1.3,SNR=4.2
YAK LR LR 23 24 27.8
comp=Z,71nm,19.2s,baz=136,slow=39
comp=Z,19nm,0.5s
**YAK Yakutsk 21.55 334** *i*P **P 23 15 25.8 -3.6**
YAK pmax pmax
comp=Z,15nm,0.6s
**BILL Bilibino 25.65 14**⇑ *e*P **P 23 16 05.1 -4.5**
BILL *e* 23 16 50.3
BILL pmax pmax
comp=Z,4.0nm,1.0s
BILL MLR MLR
comp=Z,179nm,17.0s
**NJ2 Nanjing 26.90 254** *e*P **P 23 16 23.3 +2.0**
NJ2 pmax pmax
comp=Z,11nm,0.9s
**H11N2 WAKE ISLAND Hy 28.14 144** T T 23 47 36.9
baz=334,slow=76,SNR=27
**H11N1 WAKE ISLAND Hy 28.15 144** T T 23 47 43.6
baz=334,slow=76,SNR=25
**H11N3 WAKE ISLAND Hy 28.15 144** T T 23 47 44.4
baz=334,slow=76,SNR=26
**HHC Hu-ho-hao-te 28.16 277** *e*P **P 23 16 33.3 +0.7**
HHC pmax pmax
comp=Z,9.0nm,0.6s
HHC LR LR
comp=N,120nm,15.3s
HHC LR LR
comp=E,190nm,16.8s
HHC LR LR
comp=Z,190nm,16.0s
**H11S1 WAKE ISLAND Hy 29.14 145** T T 23 48 59.0
baz=334,slow=76,SNR=42
**H11S3 WAKE ISLAND Hy 29.15 145** T T 23 49 00.6
baz=334,slow=76,SNR=30
**H11S2 WAKE ISLAND Hy 29.16 145** T T 23 49 03.6
baz=334,slow=76,SNR=28
**BTO Baotou 29.35 277** *e*P **P 23 16 44.5 +1.3**
BTO pP **pwP 23 16 56.3 +0.6**
BTO sP sP 23 17 02.0 +15
BTO S **S 23 21 36.8 +0.8**
BTO sS sS 23 21 54.0 +13
BTO SS **SnSn 23 23 04.8 +2.7**
BTO pmax pmax
comp=Z,14nm,0.4s
BTO pmax pmax
comp=Z,200nm,4.7s
BTO LR LR
comp=N,280nm,17.4s
BTO LR LR
comp=E,380nm,15.6s
BTO LR LR
comp=Z,370nm,13.7s
**TIXI Tiksi 29.53 347***ce*P **P 23 16 40.3 -4.0**
TIXI pmax pmax
comp=Z,3.0nm,0.8s
**ULN Ulaanbaatar 29.64 293** P **P 23 16 45.1 -0.7**
ULN IAmb IAmb 23 16 46.9
comp=Z,7.9nm,0.8s
**ULN Ulaanbaatar 29.64 293** *e*P **P 23 16 46.2 +0.5**
**ULN Ulaanbaatar 29.64 293***ce*P **P 23 16 46.2 +0.5**
ULN pmax pmax
comp=Z,11nm,1.0s
**SONM Songino Array 30.08 293** P **P 23 16 48.2 -1.5**
**SONM Songino Array 30.08 293** P **P 23 16 49.7 +0.1**
comp=Z,5.3nm,0.9s,baz=83,slow=7.9,SNR=24
SONM LR LR 23 30 35.3
comp=Z,139nm,18.4s,baz=84,slow=40
comp=Z,5.3nm,0.9s
**GUMO Guam 30.57 189** LR LR 23 31 21.7
comp=Z,38nm,18.5s,baz=334,slow=40
**ZAK Zakamensk 31.76 298** *e*P **P 23 17 03.7 -0.7**
ZAK pmax pmax
comp=Z,4.0nm,1.0s
**XAN Xi'an 32.91 267** *e*P **P 23 17 15.5 +0.9**
XAN pmax pmax
comp=Z,10.0nm,0.7s
**LZH Lanzhou 35.60 273** *e*P **P 23 17 39.5 +1.5**
LZH sP pwP 23 17 52.5 +2.0
LZH pmax pmax
comp=Z,36nm,1.0s
**H19K Roundabout Mou 36.25 35** P **P 23 17 43.8 +0.9**
H19K IAmb IAmb 23 17 45.3
comp=Z,7.4nm,0.9s
**D19K Kuna River 36.25 30** P **P 23 17 43.7 +0.6**
D19K IAmb IAmb 23 17 49.6
comp=Z,16nm,0.9s
**E19K Redstone River 36.32 31** P **P 23 17 44.3 +0.7**
E19K IAmb IAmb 23 17 46.0
comp=Z,10.0nm,1.1s
**GTA Gaotai 37.07 281** P **P 23 17 51.8 +1.3**
GTA pP pwP 23 18 04.3 +1.3
GTA pmax pmax
comp=Z,8.0nm,0.7s
GTA LR LR
comp=N,67nm,12.3s

GTA LR LR
comp=E,100nm,13.9s
GTA LR LR
comp=Z,110nm,13.1s
**B21K Ikpikpuk River 37.75 28** P **P 23 17 56.5 +0.8**
B21K IAmb IAmb 23 17 59.8
comp=Z,20nm,0.8s
**E22K Anaktuvuk Pass 38.47 31** P **P 23 18 02.5 +0.7**
E22K IAmb IAmb 23 18 03.7
comp=Z,10nm,0.8s
**C23K Itkillik River 39.16 28** P **P 23 18 07.9 +0.4**
C23K IAmb IAmb 23 18 09.3
comp=Z,16nm,1.0s
**E23K Chandalar 39.28 31** P **P 23 18 09.7 +1.0**
**COLA College 39.80 36** *i*P **P 23 18 12.8 -0.1**
COLA pmax pmax
comp=Z,10.0nm,1.6s
**G24K Hadweenzic Riv 40.00 33** P **P 23 18 15.7 +1.0**
**ILAR Eielson Array 40.21 36** P **P 23 18 16.6 +0.2**
comp=Z,0.7nm,0.8s,baz=276,slow=8.6,SNR=7.4
comp=Z,0.7nm,0.8s
**D25K Kavik River 40.57 29** P **P 23 18 19.7 +0.3**
D25K IAmb IAmb 23 18 24.1
comp=Z,9.6nm,1.0s
**HIN Hinchinbrook I 40.63 43** P **P 23 18 20.6 +0.7**
**KLU Klutina 40.81 41** P **P 23 18 21.9 +0.4**
KLU IAmb IAmb 23 18 24.3
comp=Z,17nm,1.2s
**RIDG Independent Ri 41.13 38** P **P 23 18 25.6 +1.5**
**BMAR Burnt Mountain 41.15 32** P **P 23 18 25.1 +1.0**
**F26K Sheenjek River 41.32 32** P **P 23 18 26.3 +0.7**
**C27K Jago River 41.53 29** P **P 23 18 28.4 +1.2**
C27K IAmb IAmb 23 18 32.5
comp=Z,8.0nm,0.8s
**RAGM Ragged Mountai 41.53 43** P **P 23 18 28.7 +1.4**
**DGZ Jazzator, Alta 41.89 301** *i*P **P 23 18 30.3 -0.3**
DGZ pmax pmax
comp=Z,3.0nm,0.9s
**M26K Nabesna, AK 42.09 40** P **P 23 18 32.1 +0.1**
**PZH PanZhiHua 42.23 262** P **P 23 18 34.0 +0.4**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,120nm,5.1s
**ZALV Zalesovo Beam 42.32 307** P **P 23 18 32.4 -1.5**
comp=Z,1.0nm,0.5s,baz=96,slow=5.9,SNR=5.3
ZALV PcP **PcP 23 20 27.4 +0.3**
comp=Z,2.0nm,0.7s,baz=90,slow=2.9,SNR=8.5
ZALV LR LR 23 37 34.4
comp=Z,88nm,18.2s,baz=338,slow=38
comp=Z,1.0nm,0.5s
**ZALV Zalesovo Beam 42.32 307** *i*P **P 23 18 34.0 +0.1**
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**D27M Malcolm River 42.49 30** P **P 23 18 35.7 +0.6**
**L27K Beaver Creek, 42.55 39** P **P 23 18 36.5 +0.8**
**BCAR Beaver Creek A 42.57 39** P **P 23 18 36.9 +1.1**
**F28M Old Crow 42.96 32** P **P 23 18 39.7 +0.8**
**E29M Blow River 43.65 31** P **P 23 18 46.2 +1.8**
**WMQ Urumqi 43.72 292** *e*P **P 23 18 46.5 +1.1**
WMQ pmax pmax
comp=Z,17nm,1.1s
WMQ LR LR
comp=N,270nm,18.9s
WMQ LR LR
comp=Z,92nm,18.9s
**I29M Ogilvie Camp, 43.80 35** P **P 23 18 46.9 +1.2**
**O29M Mount Kennedy 44.53 42** P **P 23 18 53.8 +2.0**
O29M IAmb IAmb 23 19 07.0
comp=Z,6.1nm,0.8s
**P29M Windy Craggy 45.09 43** P **P 23 18 57.8 +1.6**
P29M IAmb IAmb 23 18 59.6
comp=Z,12nm,0.9s
**F31M Tsiigehtchic 45.32 32** P **P 23 18 58.4 +0.6**
F31M IAmb IAmb 23 19 05.0
comp=Z,5.0nm,0.8s
**MK31 Makanchi Array 46.10 298** P **P 23 19 03.5 -0.8**
MK31 IAmb IAmb 23 19 05.3
comp=Z,11nm,0.8s
**MK31 Makanchi Array 46.10 298***ce*P **P 23 19 04.5 +0.2**
**MKAR Makanchi Array 46.10 298** P **P 23 19 03.6 -0.7**
**MKAR Makanchi Array 46.10 298** P **P 23 19 04.2 0.0**
comp=Z,11nm,0.8s,baz=73,slow=8.2,SNR=88
MKAR LR LR 23 39 45.6
comp=Z,168nm,18.6s,baz=68,slow=38
comp=Z,11nm,0.8s
**MKAR Makanchi Array 46.10 298** *e*P **P 23 19 04.6 +0.3**
**MKAR Makanchi Array 46.10 298***ce*P **P 23 19 04.6 +0.3**
MKAR pmax pmax
comp=Z,11nm,0.8s
**MAKZ Makanchi 46.30 298** P **P 23 19 05.2 -0.6**
**MAKZ Makanchi 46.30 298** P **P 23 19 05.2 -0.6**
MAKZ pmax pmax
comp=Z,12nm,0.8s
**KURK Kurchatov 46.92 305** P **P 23 19 09.4 -1.2**
KURK IAmb IAmb 23 19 10.9
comp=Z,4.4nm,0.6s
**KURK Kurchatov 46.92 305** *e*P **P 23 19 10.6 0.0**
**KURK Kurchatov 46.92 305***ce*P **P 23 19 10.6 0.0**
KURK pmax pmax
comp=Z,3.0nm,0.8s
**KURBB Kurchatov Arra 47.01 304** P **P 23 19 10.0 -1.2**
comp=Z,2.3nm,0.4s,baz=75,slow=8.2,SNR=25
KURBB PcP **PcP 23 20 42.3 -1.0**
comp=Z,1.3nm,0.7s,baz=72,slow=3.2,SNR=6.7
comp=Z,2.3nm,0.4s
**P33M Teslin, Yukon 47.34 42** P **P 23 19 15.0 +1.2**
P33M IAmb IAmb 23 19 17.1
comp=Z,7.4nm,1.1s
**A36M Sachs Harbour 47.39 25** P **P 23 19 14.7 +0.8**
A36M IAmb IAmb 23 19 17.7
comp=Z,8.1nm,0.8s
**R33M Jennings River 48.48 42** P **P 23 19 24.3 +1.6**
R33M IAmb IAmb 23 19 38.7
comp=Z,5.7nm,1.1s
**SHL Shillong 49.88 268** P **P 23 19 33.3 -0.7**
SHL IAmb IAmb 23 19 35.2
comp=Z,5.3nm,0.8s
**SHL Shillong 49.88 268** P **P 23 19 33.3 -0.7**
SHL pmax pmax
comp=Z,5.0nm,0.8s
**BVAR Borovoye Array 50.77 310** P **P 23 19 40.2 0.0**
comp=Z,1.5nm,0.7s,baz=58,slow=8.7,SNR=11
comp=Z,1.5nm,0.7s
**BRVK Borovoye 50.82 310** P **P 23 19 39.8 -0.6**
**BRVK Borovoye 50.82 310** *e*P **P 23 19 40.6 +0.2**
**BRVK Borovoye 50.82 310***ce*P **P 23 19 40.6 +0.2**
BRVK pmax pmax
comp=Z,2.0nm,0.8s
**FRU1 Bishkek 52.74 297** P **P 23 19 54.5 -0.5**
FRU1 IAmb IAmb 23 19 56.7
comp=Z,8.4nm,0.5s
**FRU1 Bishkek 52.74 297** P **P 23 19 54.6 -0.5**
FRU1 pmax pmax
comp=Z,8.0nm,0.5s
**AAK Ala-Archa 52.91 297** P **P 23 19 55.7 -0.7**
AAK IAmb IAmb 23 20 10.8
comp=Z,6.2nm,0.9s
**AAK Ala-Archa 52.91 297** LR LR 23 44 43.4
comp=Z,51nm,18.6s,baz=54,slow=39
**AAK Ala-Archa 52.91 297** *e*P **P 23 19 57.8 +1.4**
**AAK Ala-Archa 52.91 297***ce*P **P 23 19 57.8 +1.4**
AAK pmax pmax
comp=Z,7.0nm,1.3s
**HNR Honiara 53.97 167** LR LR 23 43 41.9
comp=Z,768nm,18.8s,baz=20,slow=37
**SVE Sverdlovsk 54.23 317** *e*P **P 23 20 05.1 -0.5**
SVE pmax pmax
comp=Z,7.0nm,0.9s
**YKA Yellowknife Ar 54.58 35** P **P 23 20 06.4 -1.7**
comp=Z,1.4nm,0.9s,baz=301,slow=6.8,SNR=6.8
comp=Z,1.4nm,0.9s
**YKA Yellowknife Ar 54.58 35** *i*P **P 23 20 08.8 +0.7**
YKA pmax pmax
comp=Z,2.0nm,0.9s
**KK31 Karatay Array 55.22 299** IAmb IAmb 23 20 14.1
comp=Z,6.0nm,0.7s
**KKAR Karatay Array 55.22 299** P **P 23 20 13.3 +0.2**
**KKAR Karatay Array 55.22 299** IAmb IAmb 23 20 14.1
comp=Z,6.0nm,0.7s
**KKAR Karatay Array 55.22 299** P **P 23 20 13.3 +0.2**
**ARU Arti 55.43 318** P **P 23 20 13.7 -0.6**
ARU IAmb IAmb 23 20 14.6
comp=Z,6.7nm,0.9s
**ARU Arti 55.43 318** LR LR 23 46 20.7
comp=Z,128nm,18.2s,baz=61,slow=39

**ARU Arti 55.43 318** *e*P **P 23 20 14.1 -0.2**
**ARU Arti 55.43 318***d i*P **P 23 20 14.1 -0.2**
ARU S **S 23 27 59.7 +1.5**
ARU SS **SS 23 31 43.3 +1.1**
ARU pmax pmax
comp=Z,8.0nm,1.0s
**BTK Batken 56.60 296** P **P 23 20 23.6 +0.5**
BTK IAmb IAmb 23 20 37.3
comp=Z,6.4nm,0.9s
**BTK Batken 56.60 296** P **P 23 20 23.6 +0.5**
BTK pmax pmax
comp=Z,6.0nm,1.0s
**GAR Garm 57.49 295** P **P 23 20 29.5 0.0**
**KULM Kulim 57.69 243** P **P 23 20 32.6 +1.7**
KULM IAmb IAmb 23 20 35.4
comp=Z,12nm,1.1s
**ABKAR Akbulak array 58.34 310** P **P 23 20 35.1 0.0**
**ABKAR Akbulak array 58.34 310** IAmb IAmb 23 20 36.1
comp=Z,9.5nm,0.8s
**PBA Port Blair 58.36 255** P **P 23 20 35.1 -0.6**
**CHGR Chuyangaron 58.44 295** P **P 23 20 36.4 +0.3**
**CHGR Chuyangaron 58.44 295** P **P 23 20 36.4 +0.3**
CHGR pmax pmax
comp=Z,21nm,1.0s
**SIMJ Simiganj 58.53 295** P **P 23 20 36.5 -0.3**
**KBL Kabul 60.83 291** P **P 23 20 52.2 -0.6**
KBL IAmb IAmb 23 20 53.2
comp=Z,6.3nm,0.9s
**KBL Kabul 60.83 291** P **P 23 20 52.2 -0.6**
KBL pmax pmax
comp=Z,6.0nm,1.0s
**JOF Joensuu 62.73 333** *e*P **P 23 21 04.6 -0.2**
**BELG Belogornoye 62.98 318** LR LR 23 50 44.8
comp=Z,70nm,19.2s,baz=48,slow=38
**BELG Belogornoye 62.98 318** *i*P **P 23 21 06.8 +0.2**
BELG pmax pmax
comp=Z,3.0nm,0.9s
**SUMG Summit 63.60 3** P **P 23 21 10.9 -0.1**
**SUMG Summit 63.60 3** P **P 23 21 10.9 -0.1**
SUMG pmax pmax
comp=Z,10.0nm,1.0s
**WRA Warramunga Arr 65.15 196** P **P 23 21 23.1 +1.9**
**WRA Warramunga Arr 65.15 196** P **P 23 21 23.0 +1.8**
comp=Z,2.9nm,1.0s,baz=14,slow=6.7,SNR=13
comp=Z,2.9nm,1.0s
**WRA Warramunga Arr 65.15 196** *i*P **P 23 21 23.0 +1.8**
WRA pmax pmax
comp=Z,3.0nm,1.0s
**VAF Ylistaro 65.30 336** *e*P **P 23 21 21.3 -0.4**
**KEF Keuruu 65.32 335** *e*P **P 23 21 21.1 -0.7**
**FIA1 FINESS Array S 65.49 334** P **P 23 21 22.6 -0.3**
**FINES FINESS Array B 65.49 334** P **P 23 21 21.5 -1.4**
**FINES FINESS Array B 65.49 334** P **P 23 21 21.9 -1.0**
comp=Z,11nm,0.6s,baz=34,slow=8.4,SNR=69
comp=Z,11nm,0.6s
**FINES FINESS Array B 65.49 334** *i*P **P 23 21 22.6 -0.4**
FINES pmax pmax
comp=Z,11nm,0.6s
**NVAR Mina Array Bea 65.89 59** P **P 23 21 27.2 +1.0**
comp=Z,0.9nm,0.8s,baz=277,slow=7.2,SNR=4.8
comp=Z,0.9nm,0.8s
**OBN Obninsk 66.20 325**⇑ *e*P **P 23 21 24.5 -3.1**
OBN *e* 23 23 52.4
OBN *e*S **S 23 30 21.8 +6.2**
OBN pmax pmax
comp=Z,28nm,1.3s
OBN MLR MLR
comp=Z,47nm,17.0s
**VRH Novokhopyorsk 66.56 319** *e*P **P 23 21 27.6 -2.4**
VRH pmax pmax
comp=Z,10.0nm,0.9s
**LPSR Galich'ya Gora 66.90 322** *e*P **P 23 21 30.8 -1.4**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**MEF Metsahovi 66.96 334** *e*P **P 23 21 32.2 -0.2**
**ARBE Arbavere 67.04 333** *e*P **P 23 21 32.8 -0.1**
**RAF Rauma 67.15 335** *e*P **P 23 21 33.2 -0.4**
**VORR Voronezh 67.41 321** *e*P **P 23 21 33.6 -1.8**
VORR pmax pmax
comp=Z,10.0nm,1.0s
**VSR Storozhevoye 67.74 320** *e*P **P 23 21 35.7 -1.8**
VSR pmax pmax
comp=Z,10.0nm,0.9s
**VORD Divnogorie 67.85 320** *e*P **P 23 21 37.3 -0.9**
VORD pmax pmax
comp=Z,20nm,0.8s
**MTSE Matsula 68.31 333** *e*P **P 23 21 41.0 +0.1**
**PDAR Pinedale Array 68.34 51** P **P 23 21 41.6 -0.2**
comp=Z,0.5nm,0.6s,baz=282,slow=4.4,SNR=4.2
comp=Z,0.5nm,0.6s
**ASAR Alice Springs 68.86 196** P **P 23 21 47.3 +2.5**
comp=Z,1.0nm,0.8s,baz=13,slow=6.1,SNR=9.2
comp=Z,1.0nm,0.8s
**SHPR Sheep Range 69.04 59** P **P 23 21 48.1 +2.0**
**NC303 NORSAR Array S 69.83 340** IAmb IAmb 23 21 50.9
comp=Z,7.8nm,0.9s
**AKT Akhty 69.87 308** *e*P **P 23 21 50.7 -0.4**
AKT *e* 23 22 13.4
AKT pmax pmax
comp=Z,12nm,0.9s
**NB201 NORSAR Array S 70.00 340** P **P 23 21 51.0 -0.5**
**NB2 NORSAR Subarra 70.03 340** P **P 23 21 51.0 -0.7**
comp=Z,5.4nm,0.7s,baz=29,slow=6.5
**NOA NORSAR Array B 70.03 340** P **P 23 21 51.1 -0.6**
comp=Z,8.9nm,0.7s,baz=31,slow=6.2,SNR=42
NOA LR LR 23 57 32.0
comp=Z,17nm,18.5s,baz=230,slow=40
comp=Z,8.9nm,0.7s
**HFS Hagfors 70.17 338** P **P 23 21 51.4 -1.0**
comp=Z,12nm,0.7s,baz=43,slow=6.7,SNR=27
comp=Z,12nm,0.7s
**U15A North Rim 70.85 58** P **P 23 21 58.5 +1.1**
U15A IAmb IAmb 23 22 00.0
comp=Z,3.8nm,1.0s
**KIV Kislovodsk 70.97 313** P **P 23 21 58.1 +0.4**
**KIV Kislovodsk 70.97 313** ⇑P **P 23 21 57.5 -0.2**
**KIV Kislovodsk 70.97 313** *e*P **P 23 21 57.5 -0.2**
**KIV Kislovodsk 70.97 313** ⇑P **P 23 21 57.5 -0.2**
**KBZ Khabaz 71.01 313** P **P 23 21 58.7 +0.9**
comp=Z,8.5nm,0.8s,baz=44,slow=5.1,SNR=21
KBZ LR LR 23 57 57.8
comp=Z,141nm,18.6s,baz=48,slow=40
comp=Z,8.5nm,0.8s
**KBZ Khabaz 71.01 313** *e*P **P 23 21 59.0 +1.2**
**KBZ Khabaz 71.01 313***ce*P **P 23 21 59.0 +1.2**
KBZ pmax pmax
comp=Z,9.0nm,0.9s
**SHA1 Shidzhatmaz 71.13 313***ce*P **P 23 22 00.6 +1.7**
**GNI Garni 72.44 309** LR LR 23 57 29.9
comp=Z,42nm,18.4s,baz=26,slow=39
**AKASG Malin Array Be 72.47 325** P **P 23 22 05.9 -0.6**
comp=Z,1.8nm,0.5s,baz=37,slow=6.3,SNR=8.1
comp=Z,1.8nm,0.5s
**AKBB Malin Array Si 72.47 325** **PcP 23 22 19.4 -4.9**
**AKBB Malin Array Si 72.47 325***ce*P **P 23 22 05.4 -1.1**
AKBB pmax pmax
comp=Z,9.0nm,1.1s
**KIEV Kiev 72.48 325** P **P 23 22 06.0 -0.6**
KIEV IAmb IAmb 23 22 20.1
comp=Z,4.4nm,0.8s
**KIEV Kiev 72.48 325** ⇓P **P 23 22 04.9 -1.7**
**KIEV Kiev 72.48 325** ⇓P **P 23 22 04.9 -1.7**
**VSLR Vesyoloye 72.69 314** *i*P **P 23 22 07.5 -0.5**
VSLR pmax pmax
comp=Z,12nm,1.0s
**X16A Lo Mia Camp, P 72.70 59** P **P 23 22 10.1 +1.6**
**SORM Soroca 74.80 324** ⇑P **P 23 22 19.0 -1.2**
**SORM Soroca 74.80 324** ⇑P **P 23 22 19.0 -1.2**
**GURO Guroymak-BITLI 75.06 309** P **P 23 22 22.5 +0.4**
**121A Cookes Peak, D 76.22 58** P **P 23 22 28.8 -0.1**
121A IAmb IAmb 23 22 31.6
comp=Z,3.7nm,0.9s
**BUR08 Bucovina Ar. S 76.50 325** P **P 23 22 29.8 -0.4**
BUR08 IAmb IAmb 23 22 44.3
comp=Z,4.2nm,0.8s
**BURAR Bucovina Array 76.52 325** P **P 23 22 29.7 -0.6**
BURAR IAmb IAmb 23 22 32.1
comp=Z,3.1nm,0.8s
**BURAR Bucovina Array 76.52 325** ⇑P **P 23 22 29.9 -0.4**
**OJC Ojcow 76.53 330** P **P 23 22 30.4 +0.2**
OJC IAmb IAmb 23 22 31.5
comp=Z,4.8nm,0.8s
**OJC Ojcow 76.53 330** P **P 23 22 30.4 +0.2**
OJC pmax pmax
comp=Z,5.0nm,0.8s

| | | | | | | |
|---|---|---|---|---|---|---|
| **KOLS** | **Kolonicke sedl** | **76.65 327** | *e*P | | **P** | **23 22 31.2 +0.3** |
| KOLS | | | | pmax | pmax | |
| | comp=Z,5.0nm,0.8s | | | | | |
| **KOLS** | **Kolonicke sedl** | **76.65 327** | *e*P | | **P** | **23 22 31.2 +0.3** |
| **CRVS** | **Cervenica-Dubn** | **76.99 328** | *e*P | | **P** | **23 22 33.2 +0.4** |
| CRVS | | | | pmax | pmax | |
| | comp=Z,62nm,2.3s | | | | | |
| **CRVS** | **Cervenica-Dubn** | **76.99 328** | *e*P | | **P** | **23 22 33.2 +0.4** |
| **CFR** | **Carcaliu** | **77.17 322** | ⇑P | | **P** | **23 22 34.0 +0.2** |
| **CFR** | **Carcaliu** | **77.17 322** | ⇑P | | **P** | **23 22 34.0 +0.2** |
| **VRI** | **Vrincioaia** | **77.26 323** | ⇑P | | **P** | **23 22 35.3 +0.9** |
| **VRI** | **Vrincioaia** | **77.26 323** | ⇑P | | **P** | **23 22 35.3 +0.9** |
| **TPGR** | **Topolog** | **77.30 321** | ⇑P | | **P** | **23 22 34.8 +0.2** |
| **OZUR** | | **77.48 324** | ⇑P | | **P** | **23 22 36.1 +0.4** |
| **COVR** | **Voineasa-Covas** | **77.50 323** | ⇑P | | **P** | **23 22 35.9 +0.2** |
| **LANS** | **Liptovska Anna** | **77.53 329** | *e*P | | **P** | **23 22 37.7 +1.8** |
| LANS | | | | pmax | pmax | |
| | comp=Z,3.0nm,0.7s | | | | | |
| **LANS** | **Liptovska Anna** | **77.53 329** | *e*P | | **P** | **23 22 37.7 +1.8** |
| **CHVC** | **Chvalec** | **77.55 332** | *e*P | | **P** | **23 22 36.6 +0.7** |
| **CHVC** | **Chvalec** | **77.55 332** | *e*P | | **P** | **23 22 36.6 +0.7** |
| **DPC** | **Dobruska-Polom** | **77.66 332** | *e*P | | **P** | **23 22 36.8 +0.3** |
| **DPC** | **Dobruska-Polom** | **77.66 332** | *e*P | | **P** | **23 22 36.8 +0.3** |
| **MORC** | **Moravsky Berou** | **77.71 331** | IAmb | | IAmb | 23 22 39.2 |
| | comp=Z,4.6nm,0.8s | | | | | |
| **MORC** | **Moravsky Berou** | **77.71 331** | *e*P | | **P** | **23 22 37.2 +0.3** |
| **MORC** | **Moravsky Berou** | **77.71 331** | ⇑P | | **P** | **23 22 38.0 +1.1** |
| **MORC** | **Moravsky Berou** | **77.71 331** | ⇑P | | **P** | **23 22 38.0 +1.1** |
| **KRLC** | **Kraliky** | **77.73 331** | *e*P | | **P** | **23 22 37.5 +0.6** |
| KRLC | | | *e*P | | **P** | **23 22 37.6 +0.6** |
| **KRLC** | **Kraliky** | **77.73 331** | *e*P | | **P** | **23 22 37.5 +0.6** |
| **MLR** | **Muntele Rosu** | **77.89 323** | ⇑P | | **P** | **23 22 39.1 +1.1** |
| **MLR** | **Muntele Rosu** | **77.89 323** | ⇑P | | **P** | **23 22 39.1 +1.1** |
| **ISR** | **Istrita** | **77.92 323** | ⇑P | | **P** | **23 22 37.3 -0.8** |
| **ISR** | **Istrita** | **77.92 323** | ⇑P | | **P** | **23 22 37.3 -0.8** |
| **CLL** | **Collm** | **77.94 334** | IAmb | | IAmb | 23 22 39.9 |
| | comp=Z,9.5nm,0.9s | | | | | |
| **CLL** | **Collm** | **77.94 334** | *i* P | | **P** | **23 22 37.4 -0.6** |
| | comp=Z,9.0nm,0.8s | | | | | |
| CLL | | | *e*PcP | | **PcP** | **23 22 47.0 -0.8** |
| CLL | | | *e*PP | | **PP** | **23 25 35.0 +1.8** |
| **CLL** | **Collm** | **77.94 334** | *i* P | | **P** | **23 22 37.4 -0.6** |
| CLL | | | *e**PP | | **pwP** | **23 22 51.0 +0.9** |
| CLL | | | | pmax | pmax | |
| | comp=Z,9.0nm,0.8s | | | | | |
| **ICOR** | **Ion Corvin** | **78.15 321** | ⇑P | | **P** | **23 22 37.0 -2.3** |
| **BNN** | **Bunyan** | **78.20 313** | P | | **P** | **23 22 39.2 -0.7** |
| **DRGR** | | **78.20 326** | ⇑P | | **P** | **23 22 40.0 +0.3** |
| **DRGR** | | **78.20 326** | ⇑P | | **P** | **23 22 40.0 +0.3** |
| **VYHS** | **Vyhne** | **78.31 329** | *e*P | | **P** | **23 22 41.3 +1.1** |
| **VYHS** | **Vyhne** | **78.31 329** | *e*P | | **P** | **23 22 41.3 +1.1** |
| **VOIR** | | **78.32 324** | ⇓P | | **P** | **23 22 41.6 +1.3** |
| **VOIR** | | **78.32 324** | ⇓P | | **P** | **23 22 41.6 +1.3** |
| **EKA** | **Eskdalemuir Ar** | **78.41 345** | P | | **P** | **23 22 40.6 +0.1** |
| | comp=Z,9.9nm,0.8s,baz=14,slow=3.6,SNR=4.2 | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | |
| **JAVC** | **Velka Javorina** | **78.44 330** | *e*P | | **P** | **23 22 41.8 +0.9** |
| **VRAC** | **Vranov** | **78.44 331** | *e*P | | **P** | **23 22 41.5 +0.6** |
| **MTUR** | **Matau** | **78.48 324** | ⇑P | | P | 23 22 36.4 -4.9 |
| **MTUR** | **Matau** | **78.48 324** | ⇑P | | P | 23 22 36.4 -4.9 |
| **ARR** | **Arges** | **78.55 324** | ⇑P | | **P** | **23 22 43.4 +1.8** |
| **PRU** | **Pruhonice** | **78.57 332** | *e*P | | **P** | **23 22 42.4 +0.9** |
| **PRU** | **Pruhonice** | **78.57 332** | *e*P | | **P** | **23 22 42.4 +0.9** |
| **KAN08** | **Anthony NE Sta** | **78.58 49** | P | | **P** | **23 22 42.3 +0.5** |
| **BR131** | **Keskin Array S** | **78.70 315** | *e*P | | **P** | **23 22 41.4 -1.2** |
| **BRTR** | **Keskin Array B** | **78.70 315** | P | | **P** | **23 22 43.0 +0.4** |
| | comp=Z,1.2nm,0.8s,baz=76,slow=2.6,SNR=8.5 | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | |
| **BRTR** | **Keskin Array B** | **78.70 315** | *i* P | | **P** | **23 22 43.4 +0.8** |
| BRTR | | | | pmax | pmax | |
| | comp=Z,1.0nm,0.6s | | | | | |
| **KRUC** | **Moravsky** | **78.72 331** | *e*P | | **P** | **23 22 42.6 +0.2** |
| **SMOL** | **Smolenice** | **78.81 330** | *e*P | | **P** | **23 22 43.1 +0.2** |
| **KIRS** | **Kirsehir-Merke** | **79.00 314** | ⇑P | | **P** | **23 22 42.7 -1.5** |
| **SIRR** | **Siria** | **79.05 326** | ⇓P | | P | 23 22 38.2 -6.1 |
| **SURR** | **Surduc** | **79.28 326** | ⇑P | | **P** | **23 22 42.3 -3.2** |
| **GZR** | **Gura Zlata** | **79.31 325** | ⇑P | | **P** | **23 22 44.4 -1.4** |
| **GZR** | **Gura Zlata** | **79.31 325** | ⇑P | | **P** | **23 22 44.4 -1.4** |
| **BZS** | **Buzias** | **79.60 326** | ⇓P | | **P** | **23 22 47.7 +0.4** |
| **BZS** | **Buzias** | **79.60 326** | ⇓P | | **P** | **23 22 47.7 +0.4** |
| **KHC** | **Kasperske Hory** | **79.63 332** | IAmb | | IAmb | 23 22 48.9 |
| | comp=Z,6.3nm,0.9s | | | | | |
| **KHC** | **Kasperske Hory** | **79.63 332** | *e*P | | **P** | **23 22 47.8 +0.4** |
| KHC | | | *ex* | | x | 23 23 00.8 |
| **KHC** | **Kasperske Hory** | **79.63 332** | *ce*P | | **P** | **23 22 48.5 +1.1** |
| KHC | | | | pmax | pmax | |
| | comp=Z,13nm,1.0s | | | | | |
| **CKRC** | **Cesky Krumlov** | **79.65 332** | *e*P | | **P** | **23 22 47.7 +0.2** |
| **CKRC** | **Cesky Krumlov** | **79.65 332** | *e*P | | **P** | **23 22 47.7 +0.2** |
| **GERES** | **GERESS Array B** | **79.83 332** | P | | **P** | **23 22 48.4 -0.2** |
| | comp=Z,0.9nm,0.6s,baz=46,slow=5.6,SNR=5.9 | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | |
| **CONA** | **Conrad Observa** | **79.87 330** | *e*P | | **P** | **23 22 49.8 +1.0** |
| | comp=Z,4.5nm,1.1s | | | | | |
| **RONA** | **Rosalia, Austr** | **79.91 330** | *i* P | | **P** | **23 22 50.1 +1.2** |
| | comp=Z,6.5nm,1.1s | | | | | |
| **WMOK** | **Wichita Mounta** | **79.95 51** | P | | **P** | **23 22 50.6 +1.2** |
| **WMOK** | **Wichita Mounta** | **79.95 51** | P | | **P** | **23 22 50.6 +1.2** |
| WMOK | | | | pmax | pmax | |
| | comp=Z,4.0nm,1.0s | | | | | |
| **MOA** | **Molln** | **80.50 331** | *e*P | | **P** | **23 22 52.6 +0.5** |
| | comp=Z,5.3nm,1.2s | | | | | |
| **ARSA** | **Arzberg** | **80.57 330** | *e*P | | **P** | **23 22 51.5 -1.0** |
| | comp=Z,3.3nm,1.4s | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **80.85 332** | *e*P | | **P** | **23 22 55.2 +1.2** |
| | comp=Z,5.7nm,1.1s | | | | | |
| **TX31** | **Lajitas Ar. Si** | **80.98 58** | | | pwP | 23 23 09.0 +2.3 |
| **TXAR** | **Lajitas Array** | **80.98 58** | P | | **P** | **23 22 56.3 +1.2** |
| **TXAR** | **Lajitas Array** | **80.98 58** | P | | **P** | **23 22 56.0 +0.9** |
| | comp=Z,1.7nm,0.7s,baz=304,slow=3.7,SNR=20 | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | |
| **TXAR** | **Lajitas Array** | **80.98 58** | P | | **P** | **23 22 56.0 +0.9** |
| **SOKA** | **Soboth** | **81.23 330** | *e*P | | **P** | **23 22 56.9 +0.7** |
| | comp=Z,9.7nm,1.2s | | | | | |
| **LESA** | **Schwarzleotal** | **81.41 332** | *i* PcP | | **PcP** | **23 23 00.1 -3.0** |
| | comp=Z,4.9nm,1.0s | | | | | |
| **KBA** | **Koelnbreinsper** | **81.48 332** | *e*P | | **P** | **23 22 58.5 +1.0** |
| | comp=Z,4.6nm,0.8s | | | | | |
| **OBKA** | **Obir** | **81.55 330** | *e*P | | **P** | **23 22 58.7 +0.9** |
| | comp=Z,12nm,1.6s | | | | | |
| **SFIN** | **Lafayette** | **81.69 40** | | | pwP | 23 23 10.7 +0.4 |
| **MYKA** | **Terra Mystica** | **81.76 331** | *e*P | | **P** | **23 22 57.2 -1.7** |
| | comp=Z,7.4nm,1.2s | | | | | |
| **WATA** | **Walderalm** | **81.85 333** | *i* P | | **P** | **23 22 59.9 +0.4** |
| | comp=Z,5.4nm,0.8s | | | | | |
| **WTTA** | **Wattenberg** | **81.89 333** | *i* P | | **P** | **23 23 00.2 +0.5** |
| | comp=Z,12nm,1.6s | | | | | |
| **RETA** | **Reutte** | **81.99 333** | *e*P | | **P** | **23 22 58.4 -1.7** |
| | comp=Z,9.1nm,1.7s | | | | | |
| **MOTA** | **Moosalm** | **82.00 333** | *e*P | | **P** | **23 23 00.4 +0.1** |
| | comp=Z,6.5nm,0.9s | | | | | |
| **SQTA** | **Sankt Quirin** | **82.07 333** | *e*P | | **P** | **23 23 00.9 +0.3** |
| | comp=Z,4.0nm,0.9s | | | | | |
| **FETA** | **Feichten** | **82.41 333** | *e*P | | **P** | **23 23 02.9 +0.5** |
| | comp=Z,5.8nm,1.6s | | | | | |
| **DAVA** | **Damuels** | **82.45 334** | *i* P | | **P** | **23 23 02.9 +0.3** |
| | comp=Z,4.2nm,1.0s | | | | | |
| **PPT** | **Papeete** | **82.58 123** | LR | | LR | 23 53 14.6 |
| | comp=Z,35nm,20.7s,baz=306,slow=31 | | | | | |
| **DRIO** | **Del Rio** | **82.76 56** | P | | **P** | **23 23 04.2 -0.1** |
| DRIO | | | IAmb | | IAmb | 23 23 18.6 |
| | comp=Z,4.9nm,0.8s | | | | | |
| **MMAI** | **Mount Meron Ar** | **82.78 309** | P | | **P** | **23 23 05.8 +1.3** |
| | comp=Z,1.6nm,0.6s,baz=29,slow=6.6,SNR=3.6 | | | | | |
| MMAI | | | LR | | LR | 00 06 14.2 |
| | comp=Z,33nm,18.5s,baz=230,slow=40 | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | |
| **DAVOX** | **Davos/Dischmat** | **82.89 333** | LR | | LR | 00 04 52.4 |
| | comp=Z,15nm,18.9s,baz=91,slow=39 | | | | | |
| **EIL** | **Elat** | **85.53 308** | LR | | LR | 00 07 26.9 |
| | comp=Z,33nm,20.2s,baz=256,slow=40 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.10 325** | PP | | **PP** | **23 30 22.1 -5.5** |
| | comp=Z,0.6nm,0.8s,baz=23,slow=8.5,SNR=3.7 | | | | | |
| **DBIC** | **Dimbokro** | **124.58 329** | PKP | | **PKiKP** | **23 29 42.6 +2.3** |
| | comp=Z,8.3nm,1.0s,baz=153,slow=4.5,SNR=2.7 | | | | | |
| **QSPA** | **South Pole Qui** | **133.72 180** | PKP | | **PKiKP** | **23 29 58.1 +1.0** |
| | comp=Z,1.5nm,1.1s,baz=43,slow=2.9,SNR=2.1 | | | | | |
| **BDFB** | **Brasilia** | **147.99 34** | PKPbc | | **PKPbc** | **23 30 26.4 +0.4** |
| | comp=Z,2.8nm,0.9s,baz=94,slow=7.7,SNR=3.9 | | | | | |
| **SNAA** | **Sanae** | **149.22 197** | PKPbc | | **PKiKP** | **23 30 28.9 +0.1** |
| | comp=Z,1.6nm,1.1s,baz=90,slow=1.0,SNR=3.3 | | | | | |
| **PLCA** | **Paso Flores** | **150.29 98** | PKPbc | | **PKPbc** | **23 30 30.0 -1.1** |
| | comp=Z,2.2nm,0.9s,baz=235,slow=6.6,SNR=3.9 | | | | | |
| **CPUP** | **Villa Florida** | **151.93 60** | PKPbc | | **PKPbc** | **23 30 33.5 -1.8** |
| | comp=Z,2.4nm,1.0s,baz=124,slow=3.6,SNR=3.2 | | | | | |

**HEL 26 23:14:33.4±0.2, 67.81N×20.17E, h0km, ML1.1, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LANU** | **Lannavaara** | **0.73** | **70** | PG | Pg | 23 14 46.5 | -0.9 |
| LANU | | | | SG | Sg | 23 14 55.9 | -0.9 |
| **PAJU** | **Pajala** | **1.38** | **123** | PG | Pg | 23 14 58.2 | -1.6 |
| | baz=303 | | | | | | |
| PAJU | | | | SG | Sg | 23 15 16.4 | -1.2 |
| **HEF** | **Hetta** | **1.44** | **64** | PG | Pn | 23 14 59.2 | -1.5 |
| HEF | | | | MSG | | 23 15 16.7 | |
| | comp=Z,1.7nm,0.2s | | | | | | |
| HEF | | | | SG | Sg | 23 15 17.7 | -1.9 |
| **KLF** | **Kolari** | **1.57** | **110** | PG | Pn | 23 15 01.5 | -0.9 |
| | baz=304 | | | | | | |
| KLF | | | | MSG | | 23 15 20.3 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| KLF | | | | SN | Sn | 23 15 22.4 | -1.0 |
| **KTK1** | **Kautokeino** | **1.66** | **42** | PG | Pn | 23 15 03.2 | -0.6 |
| KTK1 | | | | SN | Sg | 23 15 27.4 | +0.8 |
| **TRO** | **Tromso** | **1.89** | **347** | PG | Pn | 23 15 07.3 | +0.4 |
| **KALU** | **Kalix** | **2.33** | **146** | PB | Pn | 23 15 13.6 | +0.8 |
| KALU | | | | SG | Sb | 23 15 45.1 | -0.2 |
| **TOF** | **Tornio** | **2.38** | **135** | PG | Pn | 23 15 14.5 | +0.9 |
| TOF | | | | MSG | | 23 15 43.9 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| TOF | | | | SG | Sb | 23 15 45.8 | -1.1 |
| **SGF** | **Sodankyl** | **2.46** | **96** | SB | Sn | 23 15 46.8 | +1.4 |
| **RNF** | **Rovaniemi** | **2.57** | **115** | PB | Pn | 23 15 17.7 | +1.5 |
| | baz=310 | | | | | | |
| RNF | | | | SG | Sb | 23 15 50.9 | -1.5 |
| **RAJF** | **Raja-Jooseppi** | **3.12** | **74** | SB | Sb | 23 16 06.0 | -2.2 |
| **KEV** | **Kevo** | **3.16** | **49** | SN | Sn | 23 16 02.6 | -0.1 |
| **RANF** | **Ranua** | **3.17** | **122** | SG | Sb | 23 16 09.4 | -0.1 |

**IDC 26 23:31:29.5±4.2, 6.06S×142.04E, h0km, mb3.5/2, mbtmp3.5/4, ML3.3/2, Error ellipse: s-maj=146.3km s-min=25.6km az=101.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.70** | **208** | Pn | Pn | 23 35 10.2 | -1.9 |
| | 0.1nm,0.3s,baz=28,slow=13,SNR=3.4 | | | | | | |
| WRA | | | | Sn | Sn | 23 38 00.8 | -6.1 |
| | baz=30,slow=23,SNR=1.0 | | | | | | |
| WRA | | | | Lg | Lg | 23 39 48.2 | |
| | 0.1nm,0.3s,baz=101,slow=36,SNR=2.2 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **19.17** | **203** | P | Pn | 23 35 55.3 | -0.4 |
| | 0.2nm,0.3s,baz=33,slow=9.9,SNR=23 | | | | | | |
| ASAR | | | | Lg | Lg | 23 41 40.9 | |
| | 0.1nm,0.3s,baz=18,slow=34,SNR=1.6 | | | | | | |
| | 2.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **74.45** | **322** | P | P | 23 43 10.1 | +0.4 |
| | 0.3nm,0.7s,baz=108,slow=9.5,SNR=2.1 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **83.94** | **325** | P | P | 23 44 01.1 | -0.3 |
| | 0.3nm,0.6s,baz=105,slow=6.9,SNR=2.4 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*NEIC **26** 23:33:56.2±1.4, 69.71N±0.06×145.3W±0.1, h10km±2km, Error ellipse: s-maj=10.5km s-min=6.2km az=7.0*

**AEIC 26 23:33:55.2±1.6, 69.62N±0.06×145.4W±0.1, h15km±6km, ML3.1, ML3.3/**114(NEIC)**, Error ellipse: s-maj=9.0km s-min=5.5km az=189.0, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.34** | **29** | | Pg | 23 34 02.6 | +0.4 |
| C26K | | | | | Sb | 23 34 07.8 | -0.5 |
| **C26K** | **Camden Bay** | **0.34** | **29** | IAML | | 23 34 09.0 | |
| | comp=N,4μm,0.3s | | | | | | |
| **D25K** | **Kavik River** | **0.46** | **230** | | Pg | 23 34 04.0 | -0.3 |
| D25K | | | | IAML | | 23 34 11.2 | |
| | comp=E,2μm,0.4s | | | | | | |
| D25K | | | | IAML | | 23 34 11.2 | |
| | comp=N,2μm,0.5s | | | | | | |
| **D25K** | **Kavik River** | **0.46** | **230** | | Sg | 23 34 10.9 | +0.3 |
| **C27K** | **Jago River** | **0.59** | **89** | Pg | Pg | 23 34 06.6 | -0.2 |
| **C27K** | **Jago River** | **0.59** | **89** | | Sb | 23 34 15.1 | -0.3 |
| **C24K** | **Franklin Bluff** | **1.16** | **277** | | Pg | 23 34 17.6 | +0.1 |
| C24K | | | | | Sg | 23 34 34.3 | +1.7 |
| **D24K** | **Happy Valley** | **1.30** | **251** | | Pg | 23 34 20.6 | +0.4 |
| D24K | | | | | Sg | 23 34 39.8 | +2.7 |
| **D27M** | **Malcolm River** | **1.61** | **102** | Pn | Pb | 23 34 24.9 | +0.3 |
| D27M | | | | IAML | | 23 34 51.4 | |
| | comp=E,312nm,0.5s | | | | | | |
| D27M | | | | IAML | | 23 34 52.6 | |
| | comp=N,366nm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.61** | **102** | | Sg | 23 34 47.6 | +0.6 |
| **TOLK** | **Toolik Lake Re** | **1.79** | **239** | | Pb | 23 34 27.6 | -0.1 |
| **TOLK** | **Toolik Lake Re** | **1.79** | **239** | IAML | | 23 34 58.1 | |
| | comp=E,366nm,0.9s | | | | | | |
| TOLK | | | | IAML | | 23 35 03.1 | |
| | comp=N,229nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **1.83** | **279** | Pn | Pb | 23 34 28.3 | -0.1 |
| **E24K** | **Your Creek** | **1.92** | **217** | | Pb | 23 34 30.1 | +0.3 |
| **E24K** | **Your Creek** | **1.92** | **217** | IAML | | 23 34 58.9 | |
| | comp=E,195nm,0.7s | | | | | | |
| E24K | | | | IAML | | 23 35 03.9 | |
| | comp=N,206nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **1.99** | **166** | | Pb | 23 34 30.9 | -0.1 |
| F26K | | | | IAML | | 23 35 03.4 | |
| | comp=E,197nm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.99** | **135** | Pn | Pb | 23 34 30.6 | -0.5 |
| E27K | | | | IAML | | 23 35 01.5 | |
| | comp=E,238nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **1.99** | **253** | | Pb | 23 34 30.2 | -0.8 |
| **F25K** | **Christian Rive** | **2.04** | **183** | | Pb | 23 34 31.5 | -0.4 |
| F25K | | | | IAML | | 23 35 03.7 | |
| | comp=N,190nm,0.6s | | | | | | |
| F25K | | | | IAML | | 23 35 05.5 | |
| | comp=E,196nm,0.8s | | | | | | |
| **E23K** | **Chandalar** | **2.19** | **226** | | Pb | 23 34 33.2 | -1.3 |
| **E23K** | **Chandalar** | **2.19** | **226** | IAML | | 23 35 10.2 | |
| | comp=E,140nm,1.1s | | | | | | |
| **BMAR** | **Burnt Mountain** | **2.22** | **172** | | Pb | 23 34 34.2 | -0.8 |
| **F24K** | **Squaw Lake** | **2.30** | **205** | | Pb | 23 34 35.2 | -1.2 |
| **F24K** | **Squaw Lake** | **2.30** | **205** | IAML | | 23 35 12.9 | |
| | comp=E,127nm,0.7s | | | | | | |
| F24K | | | | IAML | | 23 35 15.0 | |
| | comp=N,132nm,0.7s | | | | | | |
| **E28M** | **Babbage River** | **2.33** | **113** | Pn | Pb | 23 34 35.9 | -1.0 |
| E28M | | | | IAML | | 23 35 13.7 | |
| | comp=E,132nm,0.8s | | | | | | |
| E28M | | | | IAML | | 23 35 19.8 | |
| | comp=N,145nm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **2.36** | **94** | | Pb | 23 34 36.3 | -1.1 |
| **G26K** | **Porcupine Rive** | **2.75** | **167** | | Pb | 23 34 41.4 | -2.6 |
| **E22K** | **Anaktuvuk Pass** | **2.76** | **240** | | Pn | 23 34 40.5 | +1.6 |
| **F28M** | **Old Crow** | **2.85** | **132** | Pn | Pn | 23 34 42.2 | +2.1 |
| F28M | | | | IAML | | 23 35 33.1 | |
| | comp=N,128nm,0.6s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **2.86** | **288** | | Pn | 23 34 41.8 | +1.6 |
| **E29M** | **Blow River** | **2.97** | **111** | | Pn | 23 34 43.8 | +2.1 |
| **E29M** | **Blow River** | **2.97** | **111** | IAML | | 23 35 40.1 | |
| | comp=E,92nm,0.7s | | | | | | |
| **COLD** | **Coldfoot** | **2.99** | **219** | | Pn | 23 34 44.8 | +2.8 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **196** | | Pn | 23 34 44.7 | +2.0 |
| **G24K** | **Hadweenzic Riv** | **3.03** | **196** | IAML | | 23 35 40.7 | |
| | comp=E,86nm,0.8s | | | | | | |
| G24K | | | | IAML | | 23 35 43.9 | |
| | comp=N,120nm,1.0s | | | | | | |
| **FYU** | **Fort Yukon** | **3.07** | **179** | Pn | Pn | 23 34 45.7 | +2.6 |
| FYU | | | | IAML | | 23 35 43.6 | |
| | comp=E,91nm,1.0s | | | | | | |
| FYU | | | | IAML | | 23 35 44.7 | |
| | comp=N,94nm,1.0s | | | | | | |
| **G27K** | **Doyon Strip** | **3.15** | **152** | | Pn | 23 34 46.6 | +2.4 |
| **B21K** | **Ikpikpuk River** | **3.23** | **274** | | Pn | 23 34 46.4 | +1.2 |
| B21K | | | | IAML | | 23 35 47.5 | |
| | comp=E,65nm,1.1s | | | | | | |
| B21K | | | | IAML | | 23 35 54.8 | |
| | comp=N,91nm,0.8s | | | | | | |
| **F22K** | **John River** | **3.27** | **233** | | Pn | 23 34 48.6 | +2.7 |
| **E21K** | **Killik River** | **3.30** | **253** | | Pn | 23 34 47.6 | +1.2 |
| **E21K** | **Killik River** | **3.30** | **253** | IAML | | 23 35 50.4 | |
| | comp=N,76nm,0.9s | | | | | | |
| E21K | | | | IAML | | 23 35 53.5 | |
| | comp=E,94nm,1.2s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.35** | **266** | | Pn | 23 34 49.4 | +2.4 |
| **H25L** | **Birch Creek** | **3.37** | **183** | | Pn | 23 34 49.4 | +2.2 |
| **G23K** | **Bananza Creek** | **3.40** | **213** | | Pn | 23 34 50.4 | +2.8 |
| G23K | | | | IAML | | 23 35 57.1 | |
| | comp=E,77nm,1.1s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.53** | **298** | | Pn | 23 34 50.5 | +1.1 |
| **F21K** | **Alatna River** | **3.84** | **235** | | Pn | 23 34 54.9 | +1.3 |
| **F21K** | **Alatna River** | **3.84** | **235** | IAML | | 23 36 01.0 | |
| | comp=E,40nm,0.8s | | | | | | |
| F21K | | | | IAML | | 23 36 07.9 | |
| | comp=N,39nm,0.7s | | | | | | |
| **G29M** | **Pine Creek** | **3.86** | **131** | Pn | Pn | 23 34 56.5 | +2.6 |
| **H24K** | **Noodor Dome** | **3.92** | **195** | | Pn | 23 34 57.0 | +2.3 |
| **H24K** | **Noodor Dome** | **3.92** | **195** | IAML | | 23 36 07.8 | |
| | comp=E,39nm,0.9s | | | | | | |
| **F30M** | **Barrier River** | **4.05** | **115** | | Pn | 23 34 59.9 | +3.3 |
| **B20K** | **Meade River** | **4.10** | **281** | | Pn | 23 34 59.0 | +1.9 |
| **B20K** | **Meade River** | **4.10** | **281** | IAML | | 23 36 22.1 | |
| | comp=E,47nm,1.0s | | | | | | |
| **D20K** | **Etivluk River** | **4.11** | **262** | | Pn | 23 35 00.3 | +2.9 |
| **PRP** | **Porcupine Dome** | **4.12** | **181** | | Pn | 23 35 00.0 | +2.4 |
| **E20K** | **Nigu River** | **4.13** | **256** | | Pn | 23 35 00.9 | +3.2 |
| **I27K** | **Kandik River** | **4.29** | **159** | | Pn | 23 35 02.4 | +2.6 |
| **G30M** | **tAoh Zraii Nji** | **4.31** | **124** | | Pn | 23 35 03.2 | +3.0 |
| G30M | | | | IAML | | 23 36 16.7 | |
| | comp=N,31nm,1.0s | | | | | | |
| G30M | | | | IAML | | 23 36 27.3 | |
| | comp=E,27nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **4.32** | **139** | | Pn | 23 35 03.0 | +2.7 |
| **G21K** | **Allakaket** | **4.35** | **228** | | Pn | 23 35 02.6 | +1.9 |
| G21K | | | | IAML | | 23 36 22.1 | |
| | comp=N,34nm,0.7s | | | | | | |
| G21K | | | | IAML | | 23 36 39.7 | |
| | comp=E,28nm,1.0s | | | | | | |
| **POKR** | **Poker Plat Res** | **4.59** | **191** | Pn | Pn | 23 35 07.0 | +3.0 |
| POKR | | | | IAML | | 23 36 34.0 | |
| | comp=N,20nm,1.1s | | | | | | |
| **EPYK** | **Eagle Plains** | **4.61** | **131** | | Pn | 23 35 07.4 | +3.1 |
| **F20K** | **Avaraart Lake** | **4.62** | **241** | | Pn | 23 35 05.7 | +1.4 |
| **F20K** | **Avaraart Lake** | **4.62** | **241** | IAML | | 23 36 35.9 | |
| | comp=N,22nm,0.9s | | | | | | |
| **I28M** | **Miner Creek** | **4.68** | **151** | | Pn | 23 35 08.0 | +2.7 |
| I28M | | | | IAML | | 23 36 37.3 | |
| | comp=E,23nm,1.1s | | | | | | |
| I28M | | | | IAML | | 23 36 39.3 | |
| | comp=N,21nm,0.8s | | | | | | |
| **D19K** | **Kuna River** | **4.70** | **262** | | Pn | 23 35 07.8 | +2.3 |
| **I23K** | **Minto, Yukon-K** | **4.75** | **201** | IAML | | 23 36 38.5 | |
| | comp=E,18nm,1.1s | | | | | | |
| I23K | | | | IAML | | 23 36 45.8 | |
| | comp=N,29nm,1.1s | | | | | | |
| **MDM** | **Murphy Dome** | **4.81** | **195** | | Pn | 23 35 09.8 | +2.8 |
| MDM | | | | IAML | | 23 36 29.2 | |
| | comp=E,18nm,1.1s | | | | | | |
| MDM | | | | IAML | | 23 36 29.9 | |
| | comp=N,17nm,0.7s | | | | | | |
| **E19K** | **Redstone River** | **4.86** | **249** | | Pn | 23 35 10.0 | +2.4 |
| E19K | | | | IAML | | 23 36 41.7 | |
| | comp=N,27nm,0.7s | | | | | | |
| E19K | | | | IAML | | 23 36 45.3 | |
| | comp=E,21nm,0.7s | | | | | | |
| **COLA** | **College** | **4.86** | **192** | Pn | Pn | 23 35 09.9 | +2.2 |
| **H21K** | **Melozitna Rive** | **4.88** | **219** | Pn | Pn | 23 35 10.7 | +2.7 |
| H21K | | | | IAML | | 23 36 33.2 | |
| | comp=N,16nm,0.8s | | | | | | |
| H21K | | | | IAML | | 23 36 40.4 | |
| | comp=E,20nm,0.9s | | | | | | |
| **IL31** | | **4.91** | **188** | | Pn | 23 35 10.7 | +2.4 |
| **ILAR** | **Eielson Array** | **4.91** | **188** | | Pn | 23 35 11.1 | +2.8 |
| **G31M** | **Satah River** | **4.94** | **118** | | Pn | 23 35 11.0 | +2.3 |
| **J25K** | **Salcha River,** | **5.03** | **180** | | Pn | 23 35 12.7 | +2.6 |
| **J25K** | **Salcha River,** | **5.03** | **180** | IAML | | 23 36 43.0 | |
| | comp=E,17nm,0.8s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.05** | **271** | Pn | Pn | 23 35 11.4 | +1.1 |
| C19K | | | | IAML | | 23 36 11.8 | |
| | comp=E,14nm,0.5s | | | | | | |
| C19K | | | | IAML | | 23 36 58.1 | |
| | comp=N,14nm,1.1s | | | | | | |
| **MLY** | **Manley** | **5.05** | **207** | | Pn | 23 35 13.1 | +2.8 |
| **I29M** | **Ogilvie Camp,** | **5.07** | **144** | IAML | | 23 36 50.4 | |
| | comp=E,23nm,1.1s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.08** | **192** | | Pn | 23 35 12.7 | +2.0 |
| **EGAK** | **Eagle** | **5.13** | **159** | Pn | Pn | 23 35 13.9 | +2.5 |
| EGAK | | | | IAML | | 23 36 17.7 | |
| | comp=E,19nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.19** | **171** | IAML | | 23 36 24.6 | |
| | comp=N,13nm,0.6s | | | | | | |
| **NEA2** | **Nenana** | **5.25** | **198** | Pn | Pn | 23 35 15.3 | +2.3 |
| **HDA** | **Harding Lake** | **5.27** | **187** | | Pn | 23 35 16.7 | +3.4 |
| HDA | | | | IAML | | 23 36 47.3 | |
| | comp=E,17nm,1.1s | | | | | | |
| HDA | | | | IAML | | 23 36 54.5 | |
| | comp=N,14nm,0.8s | | | | | | |
| **WRH** | **Wood River Hil** | **5.28** | **193** | | Pn | 23 35 16.0 | +2.6 |
| **F19K** | **Shaleruckik Mo** | **5.39** | **245** | Pn | Pn | 23 35 17.7 | +2.8 |
| F19K | | | | IAML | | 23 36 54.8 | |
| | comp=E,13nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **5.61** | **138** | | Pn | 23 35 20.7 | +2.6 |
| **C18K** | **Utukok River** | **5.73** | **268** | | Pn | 23 35 21.7 | +2.1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KAPI | **Kappang** | **6.21** | **323** | Pn | | **Pn** | **23 48 06.9** | **-0.8** |
| KAPI | **Kappang** | **6.21** | **323** | Pn | | Pn | 23 48 12.2 | +4.5 |
| | 9.8nm,0.3s,baz=186,slow=8.6,SNR=15 | | | | | | | |
| KAPI | | | | Sn | | **Sn** | **23 49 20.8** | **+3.3** |
| | 1.1nm,0.3s,baz=211,slow=20,SNR=0.9 | | | | | | | |
| KAPI | | | | LR | | LR | 23 50 52.7 | |
| | comp=Z,611nm,20.4s,baz=118,slow=43 | | | | | | | |
| **BNSI** | **Bone** | **6.52** | **329** | P | | Pn | 23 48 16.5 | +4.5 |
| | 106nm,1.4s,1μm0.4nm | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **6.67** | **280** | P | | **Pn** | **23 48 15.4** | **+1.4** |
| | 193nm,0.7s,7μm0.8nm | | | | | | | |
| **KNRA** | **Kununurra** | **7.60** | **138** | Pn | | **Pn** | **23 48 26.6** | **-0.1** |
| **NLAI** | **Namlea** | **7.61** | **28** | P | | Pn | 23 48 39.4 | +12 |
| **DRS** | **Darwin Rock St** | **7.63** | **109** | P | | **Pn** | **23 48 27.8** | **+0.7** |
| **MTN** | **Manton Dam** | **7.97** | **111** | P | | **Pn** | **23 48 32.5** | **+0.6** |
| **MTN** | **Manton Dam** | **7.97** | **111** | Pn | | **Pn** | **23 48 32.2** | **+0.4** |
| **SANI** | **Sanana** | **8.29** | **17** | P | | Pn | 23 48 40.9 | +4.8 |
| | 55nm,0.9s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.29** | **166** | P | | **Pn** | **23 48 36.2** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **8.29** | **166** | Pn | | **Pn** | **23 48 35.6** | **-0.7** |
| **MSAI** | **Masohi** | **8.53** | **39** | P | | Pn | 23 48 56.0 | +17 |
| **LUWI** | **Luwuk** | **8.95** | **355** | Pn | | **Pn** | **23 48 43.8** | **-1.4** |
| **KDU** | **Kakadu** | **9.17** | **108** | P | | **Pn** | **23 48 49.9** | **+1.6** |
| **JAGI** | **Jajag, Banyuwa** | **9.37** | **279** | Pn | | **Pn** | **23 48 49.0** | **-2.1** |
| **JAGI** | **Jajag, Banyuwa** | **9.37** | **279** | P | | **Pn** | **23 48 52.3** | **+1.2** |
| | 60nm,1.1s,1μm | | | | | | | |
| **MPSI** | **Mapaga** | **10.90** | **340** | P | | Pn | 23 49 22.8 | +11 |
| **TOLI2** | **Tolitoli** | **11.38** | **346** | | | **Pn** | **23 49 18.1** | **-0.6** |
| **MBWA** | **Marble Bar** | **11.66** | **198** | P | | **Pn** | **23 49 22.4** | **0.0** |
| **MBWA** | **Marble Bar** | **11.66** | **198** | Pn | | **Pn** | **23 49 19.9** | **-2.5** |
| **PSA00** | **Pilbara Seismi** | **12.02** | **197** | P | | **Pn** | **23 49 28.3** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **12.02** | **197** | | | Pn | 23 49 24.7 | -2.6 |
| **PSA00** | **Pilbara Seismi** | **12.02** | **197** | | | **Pn** | **23 49 24.9** | **-2.5** |
| **UGM** | **Wanagama** | **13.01** | **278** | P | | **Pn** | **23 49 45.0** | **+4.1** |
| **UGM** | **Wanagama** | **13.01** | **278** | Pn | | **Pn** | **23 49 39.0** | **-1.9** |
| **WB0** | **Warramunga Arr** | **14.29** | **134** | Pn | | **Pn** | **23 49 54.8** | **-3.5** |
| **WRA** | **Warramunga Arr** | **14.37** | **135** | Pn | | **Pn** | **23 49 56.1** | **-3.3** |
| **WRA** | **Warramunga Arr** | **14.37** | **155** | Pn | | Pn | 23 49 54.6 | -4.7 |
| | 4.1nm,0.3s,baz=306,slow=14,SNR=143 | | | | | | | |
| WRA | | | | Sn | | Sn | 23 52 27.3 | -10 |
| | 3.8nm,0.3s,baz=305,slow=24,SNR=12 | | | | | | | |
| WRA | | | | LR | | LR | 23 56 15.8 | |
| | comp=Z,222nm,21.7s,baz=261,slow=40 | | | | | | | |
| **WRAB** | **Tennant Creek** | **14.37** | **135** | Pn | | **Pn** | **23 49 56.7** | **-2.6** |
| **WB2** | **Warramunga Arr** | **14.38** | **135** | Pn | | **Pn** | **23 49 56.2** | **-3.3** |
| **WR0** | **Warramunga Arr** | **14.52** | **134** | Pn | | **Pn** | **23 49 58.0** | **-3.5** |
| **KPJI** | **Karang Pucung** | **14.66** | **279** | P | | **Pn** | **23 50 05.3** | **+1.9** |
| **CMJI** | **Cimerak** | **15.05** | **277** | P | | **Pn** | **23 50 10.7** | **+2.2** |
| | 120nm,0.6s | | | | | | | |
| **GIRL** | **Giralia** | **15.39** | **214** | P | | **Pn** | **23 50 14.5** | **+1.6** |
| **GIRL** | **Giralia** | **15.39** | **214** | | | **Pn** | **23 50 13.6** | **+0.8** |
| GIRL | | | | IAmb | | IAmb | 23 50 25.9 | |
| | comp=Z,74nm,0.9s | | | | | | | |
| **BBJI** | **Bungbulang** | **15.89** | **278** | P | | **P** | **23 50 23.1** | **+0.4** |
| **CNJI** | **Cibinong** | **16.42** | **278** | P | | **Pn** | **23 50 26.6** | **+0.4** |
| | comp=Z,112nm,1.1s,comp=Z,1μm | | | | | | | |
| **AS31** | **Alice Springs** | **16.81** | **145** | | | **Pn** | **23 50 30.0** | **-1.0** |
| **ASAR** | **Alice Springs** | **16.81** | **145** | | | **Pn** | **23 50 30.0** | **-1.1** |
| **ASAR** | **Alice Springs** | **16.81** | **145** | Pn | | **Pn** | **23 50 29.3** | **-1.8** |
| | comp=Z,4.3nm,0.3s,baz=319,slow=12,SNR=220 | | | | | | | |
| ASAR | | | | Sn | | Sn | 23 53 25.8 | -11 |
| | comp=Z,2.3nm,0.3s,baz=317,slow=22,SNR=7.8 | | | | | | | |
| ASAR | | | | LR | | LR | 23 57 42.7 | |
| | comp=Z,167nm,21.9s,baz=332,slow=39 | | | | | | | |
| **DAV** | **Davao City (W)** | **17.10** | **7** | LR | | LR | 23 57 31.4 | |
| | comp=Z,74nm,20.7s,baz=159,slow=39 | | | | | | | |
| **MEEK** | **Meekatharra** | **17.17** | **195** | P | | **Pn** | **23 50 37.0** | **+1.4** |
| **KKM** | **Kota Kinabalu** | **17.53** | **335** | P | | **Pn** | **23 50 39.3** | **-0.9** |
| **JAY** | **Jayapura** | **18.63** | **68** | P | | **Pn** | **23 50 56.2** | **+2.7** |
| **KASI** | **Kota Agung** | **19.36** | **282** | P | | **P** | **23 51 02.0** | **+1.0** |
| | comp=Z,181nm,1.1s,comp=Z,3μm | | | | | | | |
| **COEN** | **Coen** | **19.62** | **103** | P | | **Pn** | **23 51 07.1** | **+1.7** |
| **COEN** | **Coen** | **19.62** | **103** | P | | **P** | **23 51 04.2** | **+0.4** |
| **PMBI** | **Palembang** | **19.90** | **289** | P | | Pn | 23 51 25.1 | +16 |
| **LWLI** | **Liwa** | **19.92** | **283** | P | | **P** | **23 51 08.1** | **+0.9** |
| | comp=Z,135nm,0.7s | | | | | | | |
| **MORW** | **Morawa** | **20.21** | **199** | P | | **P** | **23 51 12.4** | **+2.3** |
| **MORW** | **Morawa** | **20.21** | **199** | P | | **P** | **23 51 08.8** | **-1.3** |
| **OOD** | **Oodnadatta** | **21.07** | **149** | P | | **P** | **23 51 21.4** | **+2.0** |
| **FORT** | **Forrest** | **21.09** | **169** | P | | **P** | **23 51 20.9** | **+1.3** |
| **FORT** | **Forrest** | **21.09** | **169** | P | | **P** | **23 51 20.4** | **+0.8** |
| **MNAI** | **Manna** | **21.15** | **284** | P | | **P** | **23 51 22.8** | **+2.4** |
| **MNAI** | **Manna** | **21.15** | **284** | P | | **P** | **23 51 19.0** | **-1.4** |
| **KMBL** | **Kambalda** | **21.30** | **184** | P | | **P** | **23 51 24.1** | **+2.2** |
| **BLDU** | **Balldu** | **21.46** | **196** | P | | **P** | **23 51 26.0** | **+2.5** |
| **MULG** | **Mulgathing** | **22.43** | **156** | P | | **P** | **23 51 35.4** | **+1.4** |
| **PMG** | **Port Moresby** | **23.31** | **91** | LR | | LR | 00 02 34.3 | |
| | comp=Z,158nm,19.3s,baz=327,slow=41 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **23.53** | **193** | P | | **P** | **23 51 44.1** | **-1.0** |
| NWAO | | | | IAmb | | IAmb | 23 52 21.2 | |
| | comp=Z,44nm,1.2s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **23.53** | **193** | P | | **P** | **23 51 45.8** | **+0.7** |
| | comp=Z,13nm,1.1s,baz=336,slow=12,SNR=1.4 | | | | | | | |
| NWAO | | | | S | | **S** | **23 56 01.6** | **+5.1** |
| | comp=Z,14nm,0.7s,baz=146,slow=10,SNR=2.7 | | | | | | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **CTA** | **Charters Tower** | **24.10** | **117** | P | | **P** | **23 51 53.6** | **+2.9** |
| | comp=Z,0.4nm,0.8s,baz=279,slow=12,SNR=3.7 | | | | | | | |
| CTA | | | | LR | | LR | 00 02 24.0 | |
| | comp=Z,18nm,19.2s,baz=276,slow=39 | | | | | | | |
| **LCRK** | **Leigh Creek** | **24.51** | **148** | P | | **P** | **23 51 57.2** | **+2.9** |
| **BBOO** | **Buckleboo** | **25.46** | **155** | P | | **P** | **23 52 04.0** | **+1.1** |
| **BBOO** | **Buckleboo** | **25.46** | **155** | P | | **P** | **23 52 02.7** | **-0.2** |
| BBOO | | | | IAmb | | IAmb | 23 52 25.0 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.45** | **145** | P | | **P** | **23 52 22.3** | **+1.5** |
| | comp=Z,1.4nm,0.4s,baz=333,slow=11,SNR=4.3 | | | | | | | |
| STKA | | | | LR | | LR | 00 03 28.6 | |
| | comp=Z,136nm,20.6s,baz=12,slow=37 | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | |
| **GUMO** | **Guam** | **31.61** | **42** | LR | | LR | 00 07 35.3 | |
| | comp=Z,8.4nm,18.2s,baz=300,slow=40 | | | | | | | |
| **HNR** | **Honiara** | **35.90** | **92** | LR | | LR | 00 09 30.3 | |
| | comp=Z,1μm,19.9s,baz=57,slow=38 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.26** | **319** | P | | **P** | **23 53 45.4** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **37.26** | **319** | P | | **P** | **23 53 45.9** | **-0.9** |
| | comp=Z,5.0nm,0.9s,baz=144,slow=6.7,SNR=21 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **23 56 07.4** | **+1.4** |
| | comp=Z,1.0nm,0.3s,baz=188,slow=3.6,SNR=1.7 | | | | | | | |
| CMAR | | | | LR | | LR | 00 10 31.9 | |
| | comp=Z,32nm,19.0s,baz=200,slow=39 | | | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **GYA** | **Guiyang** | **39.78** | **336** | ⇑P | | **P** | **23 54 07.5** | **-0.5** |
| GYA | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **KMI** | **Kunming** | **40.37** | **330** | ⇓P | | **P** | **23 54 13.5** | **+0.5** |
| KMI | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **JCJ** | **Chichijima** | **41.09** | **26** | LR | | LR | 00 11 27.7 | |
| | comp=Z,13nm,20.4s,baz=102,slow=36 | | | | | | | |
| **PZH** | **PanZhiHua** | **42.02** | **330** | P | | **P** | **23 54 26.8** | **+0.4** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,110nm,4.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **42.81** | **112** | LR | | LR | 00 12 45.2 | |
| | comp=Z,137nm,18.2s,baz=228,slow=37 | | | | | | | |
| **JNU** | **Nakatsue** | **43.47** | **9** | LR | | LR | 00 16 34.3 | |
| | comp=Z,22nm,18.1s,baz=156,slow=42 | | | | | | | |
| **JMN** | **Monobe** | **44.60** | **12** | P | | **P** | **23 54 46.3** | **-0.7** |
| **XAN** | **Xi'an** | **45.95** | **343** | P | | **P** | **23 54 56.5** | **-1.3** |
| XAN | | | | pP | | sP | 23 55 11.3 | -1.2 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **PALK** | **Pallekele** | **45.97** | **290** | LR | | LR | 00 13 48.6 | |
| | comp=Z,76nm,22.0s,baz=215,slow=36 | | | | | | | |
| **SHL** | **Shillong** | **46.90** | **320** | P | | **P** | **23 55 03.6** | **-1.9** |
| SHL | | | | IAmb | | IAmb | 23 55 04.3 | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| **HNS** | **HongShan** | **47.88** | **351** | ⇑P | | **P** | **23 55 11.5** | **-1.2** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.33** | **16** | P | | **P** | **23 55 14.1** | **-2.1** |
| | comp=Z,1.7nm,0.6s,baz=195,slow=9.4,SNR=2.5 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **LZH** | **Lanzhou** | **49.46** | **339** | *e*P | | **P** | **23 55 25.0** | **-0.1** |
| LZH | | | | sP | | pP | 23 55 36.5 | +0.4 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **LSA** | **Lhasa** | **50.31** | **323** | P | | **P** | **23 55 32.3** | **+0.3** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **LSA** | **Lhasa** | **50.31** | **323** | P | | **P** | **23 55 30.0** | **-2.1** |
| **HHC** | **Hu-ho-hao-te** | **51.80** | **348** | *e*P | | **P** | **23 55 43.0** | **+0.4** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,33nm,3.9s | | | | | | | |
| **MCQ** | **Macquarie Isla** | **52.52** | **155** | P | | **P** | **23 55 47.8** | **+0.1** |
| **GTA** | **Gaotai** | **53.88** | **337** | P | | **P** | **23 55 58.0** | **0.0** |
| GTA | | | | pP | | sP | 23 56 13.8 | +0.9 |
| GTA | | | | sP | | pP | 23 56 19.3 | +10 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.50** | **7** | P | | **P** | **23 56 01.6** | **-0.6** |
| | comp=Z,2.9nm,0.7s,baz=194,slow=8.3,SNR=7.5 | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **MDJ** | **Mudanjiang** | **54.65** | **5** | P | | **P** | **23 56 03.3** | **0.0** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,190nm,4.5s | | | | | | | |
| **URZ** | **Urewera** | **55.48** | **130** | LR | | LR | 00 20 24.7 | |
| | comp=Z,117nm,18.4s,baz=38,slow=36 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **59.45** | **347** | P | | **P** | **23 56 35.9** | **-1.6** |
| ULN | | | | IAmb | | IAmb | 23 56 38.1 | |
| | comp=Z,4.1nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **59.57** | **347** | P | | **P** | **23 56 36.8** | **-1.5** |
| **SONM** | **Songino Array** | **59.57** | **347** | P | | **P** | **23 56 37.5** | **-0.7** |
| | comp=Z,2.5nm,0.8s,baz=164,slow=8.2,SNR=12 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **HEH** | **HeiHe** | **60.11** | **3** | *e*P | | **P** | **23 56 41.0** | **-0.7** |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **KSH** | **Kashi** | **66.12** | **321** | P | | **P** | **23 57 21.5** | **-0.5** |
| KSH | | | | pP | | sP | 23 57 40.0 | +2.8 |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **MK31** | **Makanchi Array** | **67.45** | **331** | P | | **P** | **23 57 29.1** | **-1.2** |
| MK31 | | | | IAmb | | IAmb | 23 57 31.8 | |
| | comp=Z,5.6nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.45** | **331** | P | | **P** | **23 57 28.6** | **-1.6** |
| **MKAR** | **Makanchi Array** | **67.45** | **331** | P | | **P** | **23 57 29.3** | **-1.0** |
| | comp=Z,5.4nm,0.7s,baz=136,slow=7.7,SNR=37 | | | | | | | |
| | comp=Z,5.4nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **67.62** | **330** | P | | **P** | **23 57 29.9** | **-1.4** |
| **KBL** | **Kabul** | **67.98** | **314** | P | | **P** | **23 57 31.3** | **-2.7** |
| KBL | | | | IAmb | | IAmb | 23 57 33.3 | |
| | comp=Z,6.4nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **68.90** | **323** | P | | **P** | **23 57 37.6** | **-2.0** |
| **GAR** | **Garm** | **69.43** | **318** | P | | **P** | **23 57 40.5** | **-2.4** |
| GAR | | | | IAmb | | IAmb | 23 58 04.5 | |
| | comp=Z,8.1nm,0.7s | | | | | | | |
| **CHGR** | **Chuyangaron** | **70.01** | **317** | P | | **P** | **23 57 44.7** | **-1.8** |
| **SIMJ** | **Simiganj** | **70.11** | **317** | P | | **P** | **23 57 45.1** | **-2.0** |
| SIMJ | | | | IAmb | | IAmb | 23 58 03.5 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **71.55** | **322** | P | | **P** | **23 57 54.0** | **-1.6** |
| **KKAR** | **Karatay Array** | **71.55** | **322** | P | | **P** | **23 57 54.6** | **-1.0** |
| **ZAA0** | **Zalesovo Array** | **71.64** | **337** | P | | **P** | **23 57 54.5** | **-1.4** |
| ZAA0 | | | | IAmb | | IAmb | 23 58 04.0 | |
| | comp=Z,5.9nm,1.1s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.64** | **337** | P | | **P** | **23 57 54.8** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **71.64** | **337** | P | | **P** | **23 57 53.2** | **-2.6** |
| | comp=Z,3.7nm,0.5s,baz=134,slow=5.0,SNR=15 | | | | | | | |
| ZALV | | | | LR | | LR | 00 31 06.8 | |
| | comp=Z,20nm,18.5s,baz=185,slow=37 | | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.91** | **332** | P | | **P** | **23 57 55.7** | **-1.8** |
| | comp=Z,1.7nm,0.2s,baz=150,slow=5.4,SNR=7.0 | | | | | | | |
| | comp=Z,1.7nm,0.2s | | | | | | | |
| **KURK** | **Kurchatov** | **71.93** | **332** | P | | **P** | **23 57 56.3** | **-1.4** |
| KURK | | | | IAmb | | IAmb | 23 57 59.2 | |
| | comp=Z,6.2nm,0.9s | | | | | | | |
| **ABPO** | **Ambohimpanom** | **73.93** | **253** | P | | **P** | **23 58 07.6** | **-2.8** |
| ABPO | | | | IAmb | | IAmb | 23 58 36.5 | |
| | comp=Z,10nm,1.3s | | | | | | | |
| **VOI** | **Vohitsoka** | **74.09** | **250** | P | | **P** | **23 58 08.8** | **-2.5** |
| VOI | | | | IAmb | | IAmb | 23 58 17.4 | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **RAR** | **Rarotonga** | **74.13** | **109** | LR | | LR | 00 28 43.6 | |
| | comp=Z,35nm,20.2s,baz=140,slow=34 | | | | | | | |
| **BVAR** | **Borovoye Array** | **77.33** | **330** | P | | **P** | **23 58 28.3** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=142,slow=4.9,SNR=3.9 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **BRVK** | **Borovoye** | **77.40** | **330** | P | | **P** | **23 58 27.7** | **-1.6** |
| **XMAS** | **Kiritimati** | **79.57** | **86** | P | | **P** | **23 58 41.0** | **-1.2** |
| **QSPA** | **South Pole Qui** | **79.98** | **180** | P | | **P** | **23 58 43.4** | **-0.2** |
| **QSPA** | **South Pole Qui** | **79.98** | **180** | P | | **P** | **23 58 45.2** | **+1.7** |
| | comp=Z,2.0nm,0.8s,baz=252,slow=3.9,SNR=8.2 | | | | | | | |
| QSPA | | | | LR | | LR | 00 32 51.2 | |
| | comp=Z,23nm,21.8s,baz=344,slow=35 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **ABKAR** | **Akbulak array** | **80.99** | **324** | P | | **P** | **23 58 47.8** | **-1.2** |
| **AKTO** | **Aktyubinsk** | **82.63** | **324** | LR | | LR | 00 40 02.1 | |
| | comp=Z,23nm,20.2s,baz=199,slow=39 | | | | | | | |
| **RAYN** | **Ar Rayn** | **83.16** | **295** | P | | **P** | **23 58 59.3** | **-1.8** |
| RAYN | | | | IAmb | | IAmb | 23 59 02.4 | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **ELIB** | **Princess Elisa** | **83.69** | **198** | *d*P | | **P** | **23 59 05.5** | **+2.5** |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **86.13** | **270** | P | | **P** | **23 59 18.2** | **+1.7** |
| | comp=Z,2.8nm,0.6s,baz=53,slow=8.0,SNR=8.7 | | | | | | | |
| KMBO | | | | LR | | LR | 00 33 49.1 | |
| | comp=Z,14nm,18.8s,baz=98,slow=33 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **GNI** | **Garni** | **87.94** | **311** | LR | | LR | 00 50 36.7 | |
| | comp=Z,8.9nm,18.1s,baz=138,slow=44 | | | | | | | |
| **BELG** | **Belogornoye** | **89.39** | **324** | LR | | LR | 00 45 44.8 | |
| | comp=Z,18nm,19.0s,baz=141,slow=40 | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **89.59** | **309** | P | | **P** | **23 59 29.8** | **-2.6** |
| GURO | | | | IAmb | | IAmb | 23 59 34.1 | |
| | comp=Z,7.5nm,1.4s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.62** | **195** | ⇑P | | **P** | **23 59 34.7** | **+2.7** |
| | comp=Z,106nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **91.19** | **195** | P | | **P** | **23 59 38.3** | **-0.9** |
| SNAA | | | | IAmb | | IAmb | 23 59 42.3 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **91.19** | **195** | ⇑P | | **P** | **23 59 41.7** | **+2.5** |
| | comp=Z,78nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **91.19** | **195** | P | | **P** | **23 59 41.4** | **+2.2** |
| | comp=Z,3.3nm,0.7s,baz=156,slow=5.8,SNR=21 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **91.40** | **185** | P | | **P** | **23 59 39.8** | **-0.2** |
| **BOSA** | **Boshof** | **92.42** | **241** | P | | **P** | **23 59 46.5** | **+0.7** |
| | comp=Z,2.7nm,0.9s,baz=29,slow=10,SNR=6.5 | | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.80** | **194** | ⇑P | | **P** | **23 59 48.7** | **+2.2** |
| | comp=Z,1.7nm,0.6s,baz=138,slow=5.5 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.13** | **194** | ⇑P | | **P** | **23 59 49.4** | **+1.3** |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **93.20** | **194** | ⇑P | | **P** | **23 59 49.7** | **+1.3** |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **KDAK** | **Kodiak Island** | **95.15** | **32** | LR | | LR | 00 41 11.8 | |
| | comp=Z,21nm,18.7s,baz=234,slow=34 | | | | | | | |
| **BRTR** | **Keskin Array B** | **96.22** | **309** | P | | **P** | **00 00 01.4** | **-1.6** |
| | comp=Z,0.9nm,0.9s,baz=141,slow=3.9,SNR=5.4 | | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **98.81** | **26** | P | | **P** | **00 00 12.0** | **-1.8** |
| | comp=Z,0.2nm,0.6s,baz=195,slow=8.2,SNR=1.7 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **113.24** | **25** | PKiKP | | **PKiKP** | **00 05 10.0** | **-1.6** |
| | comp=Z,0.6nm,0.9s,baz=297,slow=1.8,SNR=2.4 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **118.18** | **52** | PKP | | **PKiKP** | **00 05 22.9** | **+0.7** |
| | comp=Z,0.8nm,0.8s,baz=243,slow=5.6,SNR=3.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.03** | **279** | PKP | | **PKPdf** | **00 05 32.4** | **+0.7** |
| | comp=Z,1.7nm,0.6s,baz=49,slow=1.9,SNR=13 | | | | | | | |
| **PDAR** | **Pinedale Array** | **123.55** | **45** | PKP | | **PKiKP** | **00 05 34.5** | **+2.0** |
| | comp=Z,0.1nm,0.4s,baz=301,slow=3.1,SNR=3.0 | | | | | | | |
| **ESDC** | **Sonseca Array** | **124.92** | **312** | PKP | | **PKiKP** | **00 05 36.2** | **+1.1** |
| | comp=Z,1.0nm,0.7s,baz=20,slow=3.0,SNR=10 | | | | | | | |
| **TXAR** | **Lajitas Array** | **131.97** | **59** | PKP | | **PKiKP** | **00 05 50.6** | **+1.0** |
| | comp=Z,0.5nm,0.9s,baz=270,slow=0.9,SNR=5.9 | | | | | | | |
| TXAR | | | | SKPbc | | **SKPab** | **00 09 13.5** | **+0.9** |
| | comp=Z,0.5nm,1.0s,baz=254,slow=3.4,SNR=2.8 | | | | | | | |
| **SCHQ** | **Schefferville** | **134.55** | **8** | PKP | | **PKPdf** | **00 05 52.4** | **-0.2** |
| | comp=Z,1.6nm,0.7s,baz=201,slow=8.6,SNR=4.1 | | | | | | | |
| **CPUP** | **Villa Florida** | **143.86** | **179** | PKP | | PKPbc | 00 06 09.0 | +0.9 |
| | comp=Z,3.0nm,0.9s,baz=193,slow=4.7,SNR=4.3 | | | | | | | |
| **LPAZ** | **La Paz** | **151.44** | **156** | PKPbc | | **PKiKP** | **00 06 31.1** | **+0.6** |
| | comp=Z,3.9nm,0.7s,baz=206,slow=5.5,SNR=4.9 | | | | | | | |
| **BDFB** | **Brasilia** | **153.16** | **198** | PKPbc | | **PKiKP** | **00 06 34.8** | **+1.4** |
| | comp=Z,3.0nm,0.8s,baz=135,slow=5.7,SNR=3.3 | | | | | | | |
| BDFB | | | | PKPab | | **PKPab** | **00 06 45.5** | **+0.8** |
| | comp=Z,3.8nm,0.9s,baz=135,slow=4.3,SNR=3.2 | | | | | | | |

*AEIC **26** 23:52:00.9±0.9, 69.°60N±0.°04×145.°2W±0.°1, h15$^{km}$±3$^{km}$, ML3.6, ML3.7/112(NEIC), Mwr3.6/43(NEIC), Error ellipse: s-maj=6.7km s-min=5.6km az=198.0*
*NEIC **26** 23:52:01.9±0.7, 69.°66N±0.°04×145.°19W±0.°10, h10$^{km}$±1$^{km}$,*

*Error ellipse: s-maj=7.2km s-min=4.7km az=214.0, Moment Tensor Solution. Moment tensor: Scale 10$^{14}$Nm; $M_{rr}$-2.83; $M_{tt}$0.76; $M_{pp}$2.08; $M_{rt}$-0.86; $M_{rp}$-0.68; $M_{tp}$0.17; Fault plane solution: $M_0$2.77000×10$^{14}$ NP1: $\phi_s$144.64000°, $\delta$51.70000°, $\lambda$-104.68000°. NP2: $\phi_s$347.56000°, $\delta$40.61000°, $\lambda$-72.21000°. Principal axes: T 2.4099, Plg6.0000°, Azm245.0000°; N 0.6201, Plg11.0000°, Azm154.0000°; P -3.0300, Plg77.0000°, Azm1.0000°;*
*IDC **26** 23:52:01.6±0.8, 69.°73N×145.°15W, h0$^{km}$, mb3.8/10, mbtmp3.8/14, ML3.8/4, MS3.2/1 Error ellipse: s-maj=20.3km s-min=12.7km az=79.0*
*NEIC **26** 23:52:02, 69.°66N×145.°20W, h10$^{km}$*

**ISC 26 23:52:01.3±1.3, 69.°63N±0.°03×145.°15W±0.°02, h3$^{km}$±9$^{km}$, n100, $_{\sigma}$0$\frac{9}{77}$, mb3.9/10, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.30** | **16** | | **Pg** | **23 52 08.3** | **+1.3** |
| C26K | | | | | **Sb** | **23 52 14.2** | **-0.6** |
| **C27K** | **Jago River** | **0.50** | **89** | | **Pg** | **23 52 11.1** | **+0.2** |
| C27K | | | | | **Sg** | **23 52 18.0** | **+0.6** |
| **D25K** | **Kavik River** | **0.53** | **235** | Pg | **Pg** | **23 52 10.2** | **-1.2** |
| D25K | | | | | **Sg** | **23 52 17.7** | **-0.6** |
| **C24K** | **Franklin Bluff** | **1.24** | **276** | | **Pn** | **23 52 24.5** | **-1.1** |
| C24K | | | | | **Sn** | **23 52 42.5** | **-0.3** |
| C24K | | | | IAML | | 23 52 44.6 | |
| | comp=N,1μm,0.5s | | | | | | |
| C24K | | | | IAML | | 23 52 46.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.39** | **252** | | **Pn** | **23 52 27.1** | **-0.3** |
| **D24K** | **Happy Valley** | **1.39** | **252** | | **Sg** | **23 52 46.5** | **+0.8** |
| **D27M** | **Malcolm River** | **1.53** | **103** | Pn | **Pn** | **23 52 28.9** | **-0.6** |
| D27M | | | | | **Sg** | **23 52 50.8** | **+0.5** |
| D27M | | | | IAML | | 23 52 54.4 | |
| | comp=N,1μm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.87** | **240** | | **Pn** | **23 52 33.9** | **-0.3** |
| TOLK | | | | | **Sb** | **23 53 01.0** | **+1.2** |
| TOLK | | | | IAML | | 23 53 09.5 | |
| | comp=E,795nm,0.7s | | | | | | |
| **C23K** | **Itkillik River** | **1.91** | **279** | Pn | **Pn** | **23 52 34.4** | **-0.4** |
| C23K | | | | IAML | | 23 53 09.4 | |
| | comp=N,744nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.94** | **137** | | **Pn** | **23 52 35.4** | **+0.3** |
| E27K | | | | | **Sb** | **23 53 01.2** | **-0.5** |
| E27K | | | | IAML | | 23 53 04.1 | |
| | comp=N,599nm,0.6s | | | | | | |
| E27K | | | | IAML | | 23 53 04.2 | |
| | comp=E,759nm,0.6s | | | | | | |
| **E24K** | **Your Creek** | **1.98** | **219** | | **Pn** | **23 52 36.1** | **+0.5** |
| E24K | | | | IAML | | 23 53 06.5 | |
| | comp=E,751nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.98** | **169** | | **Pn** | **23 52 36.2** | **+0.5** |
| F26K | | | | IAML | | 23 53 07.2 | |
| | comp=E,620nm,0.5s | | | | | | |
| **F25K** | **Christian River** | **2.05** | **185** | | **Pn** | **23 52 37.2** | **+0.5** |
| F25K | | | | IAML | | 23 53 09.1 | |
| | comp=E,502nm,0.7s | | | | | | |
| F25K | | | | IAML | | 23 53 10.8 | |
| | comp=N,624nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **2.08** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I23K | | | | IAML | | | 23 54 44.2 | |
| | comp=E,54nm,1.2s | | | | | | | |
| **D19K** | **Kuna River** | **4.79** | **262** | Pn | **Pn** | **23 53 14.3** | **+0.1** | |
| D19K | | | | IAML | | 23 55 01.5 | | |
| | comp=N,69nm,1.5s | | | | | | | |
| **MDM** | **Murphy Dome** | **4.84** | **196** | | **Pn** | **23 53 14.9** | **0.0** | |
| MDM | | | | IAML | | 23 54 37.7 | | |
| | comp=N,54nm,0.6s | | | | | | | |
| MDM | | | | IAML | | 23 54 40.0 | | |
| | comp=E,70nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **4.87** | **119** | Pn | **Pn** | **23 53 15.3** | **+0.1** | |
| **IL31** | | **4.92** | **189** | | **Pn** | **23 53 16.0** | **-0.1** | |
| **ILAR** | **Eielson Array** | **4.92** | **189** | Pn | **Pn** | **23 53 16.2** | **+0.1** | |
| | comp=E,3.1nm,0.3s,baz=358,slow=10.0,SNR=96 | | | | | | | |
| ILAR | | | | Sn | **Sn** | **23 54 13.8** | **+0.3** | |
| | comp=E,5.4nm,0.3s,baz=6.2,slow=22,SNR=12 | | | | | | | |
| ILAR | | | | Lg | Lg | 23 54 38.5 | | |
| | comp=E,4.1nm,0.3s,baz=1.6,slow=32,SNR=6.3 | | | | | | | |
| | comp=E,5.9nm,0.6s | | | | | | | |
| **E19K** | **Redstone River** | **4.94** | **250** | Pn | **Pn** | **23 53 16.3** | **0.0** | |
| **H21K** | **Melozitna Rive** | **4.94** | **220** | Pn | **Pn** | **23 53 16.8** | **+0.4** | |
| H21K | | | | IAML | | 23 54 39.0 | | |
| | comp=E,58nm,1.3s | | | | | | | |
| H21K | | | | IAML | | 23 54 47.5 | | |
| | comp=N,57nm,1.1s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **5.03** | **145** | | **Pn** | **23 53 17.5** | **0.0** | |
| I29M | | | | IAML | | 23 54 44.8 | | |
| | comp=E,51nm,0.7s | | | | | | | |
| **J25K** | **Salcha River,** | **5.04** | **181** | | **Pn** | **23 53 18.0** | **+0.3** | |
| J25K | | | | IAML | | 23 54 45.3 | | |
| | comp=E,44nm,0.9s | | | | | | | |
| **MLY** | **Manley** | **5.10** | **208** | Pn | **Pn** | **23 53 18.5** | **0.0** | |
| **CCB** | **Clear Creek Bu** | **5.11** | **193** | | **Pn** | **23 53 18.7** | **+0.1** | |
| CCB | | | | IAML | | 23 54 19.0 | | |
| | comp=N,41nm,0.7s | | | | | | | |
| **EGAK** | **Eagle** | **5.11** | **160** | Pn | **Pn** | **23 53 19.0** | **+0.3** | |
| EGAK | | | | IAML | | 23 54 22.1 | | |
| | comp=N,47nm,0.9s | | | | | | | |
| **C19K** | **Lookout Ridge** | **5.13** | **271** | Pn | **Pn** | **23 53 18.8** | **-0.2** | |
| C19K | | | | IAML | | 23 54 23.5 | | |
| | comp=N,46nm,0.5s | | | | | | | |
| **J26L** | **Joseph Creek** | **5.19** | **172** | Pn | **Pn** | **23 53 19.6** | **-0.2** | |
| J26L | | | | IAML | | 23 54 24.4 | | |
| | comp=N,38nm,0.6s | | | | | | | |
| J26L | | | | IAML | | 23 54 49.2 | | |
| | comp=E,41nm,0.8s | | | | | | | |
| **NEA2** | **Nenana** | **5.28** | **199** | | **Pn** | **23 53 20.9** | **-0.2** | |
| **HDA** | **Harding Lake** | **5.29** | **188** | | **Pn** | **23 53 21.4** | **+0.3** | |
| HDA | | | | IAML | | 23 54 56.2 | | |
| | comp=N,35nm,1.1s | | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **194** | | **Pn** | **23 53 21.4** | **+0.1** | |
| **F19K** | **Shaleruckik Mo** | **5.47** | **245** | Pn | **Pn** | **23 53 24.3** | **+0.8** | |
| **A19K** | **Wainwright** | **5.51** | **283** | | **Pn** | **23 53 23.7** | **-0.4** | |
| **I30M** | **Mount Dempster** | **5.56** | **138** | Pn | **Pn** | **23 53 25.1** | **+0.1** | |
| **H31M** | **Peel River** | **5.62** | **128** | Pn | **Pn** | **23 53 25.0** | **-0.7** | |
| **K27K** | **Chicken** | **5.75** | **166** | Pn | **Pn** | **23 53 27.9** | **+0.5** | |
| **C18K** | **Utukok River** | **5.81** | **268** | Pn | **Pn** | **23 53 27.8** | **-0.5** | |
| **B18K** | **Kokolik River** | **5.86** | **275** | | **Pn** | **23 53 28.5** | **-0.4** | |
| **H19K** | **Roundabout Mou** | **5.96** | **232** | Pn | **Pn** | **23 53 29.9** | **-0.4** | |
| **BPAW** | **Bear Paw Mtn.** | **6.01** | **205** | | **Pn** | **23 53 30.9** | **-0.1** | |
| **E18K** | **Tukpahlearik C** | **6.09** | **256** | Pn | **Pn** | **23 53 31.9** | **-0.1** | |
| **J30M** | **Hart River** | **6.12** | **142** | Pn | **Pn** | **23 53 33.0** | **+0.3** | |
| **F18K** | **Selawik** | **6.21** | **248** | | **Pn** | **23 53 33.2** | **-0.4** | |
| **J20K** | **Nowinta River** | **6.51** | **217** | Pn | **Pn** | **23 53 37.7** | **-0.1** | |
| **E17K** | **Hotham Inlet** | **6.67** | **255** | | **Pn** | **23 53 39.1** | **-0.9** | |
| **D17K** | **Noatak River** | **6.81** | **262** | | **Pn** | **23 53 40.4** | **-1.6** | |
| **A36M** | **Sachs Harbour** | **6.96** | **61** | Pn | **Pn** | **23 53 43.1** | **-0.8** | |
| **WAT7** | **Susitna Watana** | **6.99** | **194** | | **Pn** | **23 53 45.9** | **+1.5** | |
| **G17K** | **Kiwalik Mounta** | **7.22** | **242** | | **Pn** | **23 53 47.5** | **0.0** | |
| **YUK2** | **White River** | **8.07** | **165** | | **Pn** | **23 54 00.4** | **+1.1** | |
| **YUK3** | **Moose Creek** | **8.12** | **164** | | **Pn** | **23 54 01.1** | **+1.0** | |
| **DLBC** | **Dease Lake** | **12.98** | **142** | Pn | **Pn** | **23 55 06.8** | **+0.3** | |
| | comp=N,0.6nm,0.3s,baz=346,slow=12,SNR=5.4 | | | | | | | |
| | comp=N,1.4nm,0.4s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.16** | **105** | Pn | **Pn** | **23 55 18.0** | **-4.4** | |
| | comp=N,0.5nm,0.3s,baz=315,slow=13,SNR=20 | | | | | | | |
| YKA | | | | Sn | Sn | 23 57 46.5 | -13 | |
| | comp=N,0.4nm,0.3s,baz=319,slow=23,SNR=6.6 | | | | | | | |
| | comp=N,1.5nm,0.6s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.48** | **267** | P | **P** | **23 58 16.7** | **+1.8** | |
| | comp=N,2.0nm,0.9s,baz=90,slow=4.8,SNR=1.7 | | | | | | | |
| | comp=N,2.0nm,0.9s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.50** | **127** | P | **P** | **23 58 34.5** | **+1.4** | |
| | comp=N,1.6nm,0.7s,baz=10,slow=5.5,SNR=9.0 | | | | | | | |
| | comp=N,1.6nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.39** | **141** | P | **P** | **23 58 52.0** | **+2.5** | |
| | comp=N,1.2nm,0.9s,baz=306,slow=7.7,SNR=6.6 | | | | | | | |
| | comp=N,1.2nm,0.9s | | | | | | | |
| **ASAJ** | **Asahikawa** | **43.39** | **273** | LR | LR | 00 19 53.7 | | |
| | comp=N,26nm,19.6s,baz=177,slow=38 | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.72** | **127** | P | **P** | **00 00 32.0** | **+0.7** | |
| | comp=N,0.2nm,0.5s,baz=350,slow=5.6,SNR=7.9 | | | | | | | |
| TXAR | | | | PcP | **PcP** | **00 02 04.8** | **+0.1** | |
| | comp=N,0.1nm,0.3s,baz=14,slow=1.9,SNR=1.4 | | | | | | | |
| | comp=N,0.2nm,0.5s | | | | | | | |
| **FINES** | **FINESS Array** | **49.07** | **6** | P | **P** | **00 00 48.6** | **-0.4** | |
| | comp=N,0.5nm,0.3s,baz=3.9,slow=9.0,SNR=11 | | | | | | | |
| | comp=N,0.5nm,0.3s | | | | | | | |
| **HFS** | **Hagfors** | **49.65** | **14** | P | **P** | **00 00 53.0** | **-0.5** | |
| | comp=N,1.3nm,0.6s,baz=347,slow=6.1,SNR=14 | | | | | | | |
| | comp=N,1.3nm,0.6s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.33** | **26** | P | **P** | **00 01 13.6** | **-0.1** | |
| | comp=N,1.3nm,0.6s,baz=331,slow=6.5,SNR=4.4 | | | | | | | |
| | comp=N,1.3nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.81** | **324** | P | **P** | **00 01 59.8** | **-0.6** | |
| | comp=N,0.5nm,0.7s,baz=49,slow=9.7,SNR=3.5 | | | | | | | |
| | comp=N,0.5nm,0.7s | | | | | | | |
| **GERES** | **GERESS Array B** | **60.83** | **16** | P | **P** | **00 02 14.8** | **+0.4** | |
| | comp=N,0.4nm,0.6s,baz=354,slow=3.0,SNR=3.6 | | | | | | | |
| | comp=N,0.4nm,0.6s | | | | | | | |
| **ESDC** | **Sonseca Array** | **67.36** | **32** | P | **P** | **00 02 57.4** | **+0.1** | |
| | comp=N,0.4nm,0.9s,baz=340,slow=7.5,SNR=2.6 | | | | | | | |
| | comp=N,0.4nm,0.9s | | | | | | | |

*IDC **26** 23:59:51.5±1.1,28°.83S×74°.63E,h0km,mb3.9/6, mbtmp3.9/6,Error ellipse: s-maj=38.2km s-min=30.8km az=33.0*

**ISC 26 23:59:53.2**±1.0,**28°.9S**±0°.2×**74°.6E**±0°.2,**h10**km,**n18,** σ0**30**/6,**mb3.9**/6,**Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **21.19** | **354** | T | T | 00 26 32.7 | |
| | baz=175,slow=76,SNR=33 | | | | | | |
| **H08S1** | **Diego Garcia H** | **21.20** | **354** | T | T | 00 26 33.2 | |
| | baz=175,slow=76,SNR=13 | | | | | | |
| **H08S3** | **Diego Garcia H** | **21.21** | **354** | T | T | 00 26 34.3 | |
| | baz=175,slow=76,SNR=37 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **24.90** | **220** | T | T | 00 31 12.5 | |
| | baz=54,slow=74,SNR=171 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **24.91** | **220** | T | T | 00 31 19.3 | |
| | baz=54,slow=74,SNR=111 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **24.91** | **220** | T | T | 00 31 17.9 | |
| | baz=54,slow=74,SNR=158 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.24** | **218** | T | T | 00 31 40.0 | |
| | baz=52,slow=76,SNR=31 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **25.25** | **218** | T | T | 00 31 39.8 | |
| | baz=52,slow=76,SNR=40 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **25.26** | **218** | T | T | 00 31 39.8 | |
| | baz=52,slow=76,SNR=38 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.92** | **110** | T | T | 00 42 22.6 | |
| | baz=270 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.92** | **110** | T | T | 00 42 24.3 | |
| | baz=270 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.94** | **110** | T | T | 00 42 23.9 | |
| | baz=270 | | | | | | |
| **ASAR** | **Alice Springs** | **52.94** | **99** | P | **P** | **00 09 09.9** | **-0.1** |
| | 1.8nm,1.0s,baz=256,slow=6.4,SNR=10 | | | | | | |
| | 1.8nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **54.61** | **95** | P | **P** | **00 09 22.2** | **-0.1** |
| | 1.7nm,1.0s,baz=252,slow=7.2,SNR=6.0 | | | | | | |
| | 1.7nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.28** | **180** | P | **P** | **00 10 08.6** | **0.0** |
| | 2.0nm,1.0s,baz=328,slow=1.3,SNR=2.9 | | | | | | |
| | 2.0nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **75.61** | **5** | P | **P** | **00 11 37.7** | **-0.3** |
| | 0.5nm,0.9s,baz=191,slow=6.6,SNR=3.0 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **81.50** | **21** | P | **P** | **00 12 11.0** | **+0.4** |
| | 0.2nm,0.2s,baz=217,slow=3.6,SNR=4.0 | | | | | | |
| | 0.2nm,0.2s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.83** | **290** | P | **P** | **00 12 12.9** | **0.0** |
| | 1.0nm,1.0s,baz=112,slow=4.1,SNR=3.8 | | | | | | |
| | 1.0nm,1.0s | | | | | | |

**NOU 27 00:18:23.1,14°.90S×167°.77E,h143km,MLv4.3/7, Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **2.84** | **172** | P | Pn | 00 19 08.8 | +0.7 |
| **YATNC** | **Mamie plateau,** | **7.17** | **187** | P | Pn | 00 20 04.4 | -1.0 |
| **DZM** | **Mont Dzumac** | **7.24** | **190** | P | Pn | 00 20 06.5 | 0.0 |
| **NOUC** | **Port Laguerre** | **7.30** | **191** | P | Pn | 00 20 07.8 | +0.7 |

*IDC **27** 00:24:48.6±1.0,28°.79S×74°.56E,h0km,mb4.0/9, mbtmp4.0/9,MS3.5/5,Error ellipse: s-maj=34.3km s-min=25.2km az=49.0*

**ISC 27 00:24:50.3**±1.0,**28°.8S**±0°.2×**74°.6E**±0°.2,**h10**km,**n22,** σ0**37**/9,**mb4.1**/9,**MS3.5**/5,**Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **21.14** | **354** | T | T | 00 51 22.5 | |
| | baz=176,slow=76,SNR=16 | | | | | | |
| **H08S1** | **Diego Garcia H** | **21.14** | **354** | T | T | 00 51 30.3 | |
| | baz=176,slow=76,SNR=16 | | | | | | |
| **H08S3** | **Diego Garcia H** | **21.16** | **354** | T | T | 00 51 31.9 | |
| | baz=176,slow=76,SNR=11 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **24.90** | **220** | T | T | 00 56 16.2 | |
| | baz=55,slow=74,SNR=198 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **24.91** | **220** | T | T | 00 56 16.8 | |
| | baz=55,slow=74,SNR=195 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **24.92** | **220** | T | T | 00 56 15.4 | |
| | baz=55,slow=74,SNR=188 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.24** | **218** | T | T | 00 56 32.2 | |
| | baz=52,slow=75,SNR=26 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **25.25** | **218** | T | T | 00 56 37.3 | |
| | baz=52,slow=75,SNR=39 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **25.26** | **218** | T | T | 00 56 37.3 | |
| | baz=52,slow=75,SNR=47 | | | | | | |
| **MAW** | **Mawson** | **39.46** | **187** | LR | LR | 00 45 33.1 | |
| | comp=Z,56nm,19.4s,baz=107,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **43.00** | **258** | LR | LR | 00 47 19.4 | |
| | comp=Z,87nm,18.7s,baz=189,slow=31 | | | | | | |
| **SUR** | **Sutherland** | **46.02** | **252** | LR | LR | 00 48 18.9 | |
| | comp=Z,70nm,18.6s,baz=153,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **53.00** | **99** | P | **P** | **00 34 07.7** | **+0.1** |
| | 3.1nm,1.0s,baz=249,slow=6.2,SNR=17 | | | | | | |
| | 3.1nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **54.67** | **95** | P | **P** | **00 34 20.0** | **+0.2** |
| | 2.6nm,1.0s,baz=252,slow=7.3,SNR=8.4 | | | | | | |
| | 2.6nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.34** | **180** | P | **P** | **00 35 05.7** | **-0.3** |
| | 2.2nm,1.0s,baz=284,slow=3.1,SNR=4.1 | | | | | | |
| | 2.2nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **75.56** | **5** | P | **P** | **00 36 34.3** | **-0.6** |
| | 1.5nm,1.1s,baz=188,slow=4.4,SNR=4.9 | | | | | | |
| MKAR | | | | LR | LR | 01 07 24.0 | |
| | comp=Z,16nm,18.4s,baz=277,slow=34 | | | | | | |
| | 1.5nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **79.15** | **3** | P | **P** | **00 36 54.9** | **+0.1** |
| | 0.6nm,0.3s,baz=198,slow=4.9,SNR=0.9 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **81.48** | **21** | P | **P** | **00 37 07.9** | **+0.3** |
| | 0.3nm,0.5s,baz=207,slow=2.9,SNR=3.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **JNU** | **Nakatsue** | **81.49** | **45** | LR | LR | 01 11 40.9 | |
| | comp=Z,19nm,18.6s,baz=229,slow=34 | | | | | | |
| **BVAR** | **Borovoye Array** | **81.56** | **357** | P | **P** | **00 37 07.5** | **-0.2** |
| | 0.4nm,0.4s,baz=207,slow=18,SNR=4.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.76** | **290** | P | **P** | **00 37 10.1** | **+0.4** |
| | 1.5nm,1.0s,baz=114,slow=5.4,SNR=5.8 | | | | | | |
| | 1.5nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.88** | **6** | P | **P** | **00 37 14.8** | **+0.2** |
| | 0.6nm,0.3s,baz=186,slow=7.2,SNR=1.8 | | | | | | |
| | 0.6nm,0.3s | | | | | | |

*IDC **27** 00:36:25.5±1.8,28°.44S×74°.75E,h0km,mb3.7/6, mbtmp3.7/6,Error ellipse: s-maj=68.5km s-min=29.7km az=29.0*

**ISC 27 00:36:26.9**±1.8,**28°.5S**±0°.5×**74°.7E**±0°.3,**h10**km,**n15,** σ0**89**/6,**mb3.8**/6,**Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **20.89** | **354** | T | T | 01 03 01.6 | |
| | baz=176,slow=76,SNR=22 | | | | | | |
| **H08S1** | **Diego Garcia H** | **20.89** | **354** | T | T | 01 03 01.6 | |
| | baz=176,slow=76,SNR=9.9 | | | | | | |
| **H08S3** | **Diego Garcia H** | **20.91** | **354** | T | T | 01 03 03.6 | |
| | baz=176,slow=76,SNR=27 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **25.19** | **220** | T | T | 01 07 45.0 | |
| | baz=55,slow=74 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **25.20** | **220** | T | T | 01 07 45.9 | |
| | baz=55,slow=74 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **25.21** | **219** | T | T | 01 07 47.2 | |
| | baz=55,slow=74 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.54** | **218** | T | T | 01 08 08.7 | |
| | baz=52,slow=75,SNR=15 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **25.55** | **218** | T | T | 01 08 07.3 | |
| | baz=52,slow=75,SNR=20 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **25.56** | **218** | T | T | 01 08 08.7 | |
| | baz=52,slow=75,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **52.91** | **99** | P | **P** | **00 45 43.7** | **+0.2** |
| | 1.0nm,0.8s,baz=251,slow=6.6,SNR=8.6 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **54.56** | **95** | P | **P** | **00 45 55.5** | **-0.1** |
| | 1.3nm,1.0s,baz=256,slow=7.2,SNR=4.9 | | | | | | |
| | 1.3nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **75.29** | **5** | P | **P** | **00 48 10.1** | **+0.3** |
| | 0.2nm,0.5s,baz=187,slow=10.0,SNR=3.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **78.88** | **2** | P | **P** | **00 48 30.7** | **+0.8** |
| | 0.1nm,0.4s,baz=185,slow=6.3,SNR=1.6 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.80** | **290** | P | **P** | **00 48 46.5** | **0.0** |
| | 0.6nm,0.7s,baz=120,slow=5.7,SNR=3.8 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.60** | **6** | P | **P** | **00 48 48.5** | **-1.2** |
| | 0.2nm,0.3s,baz=174,slow=4.3,SNR=1.9 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**IDC 27 00:47:56.5**±1.5,**28°.81S**×**74°.53E**,**h0**km,**mb3.8**/4, **mbtmp3.8**/4,**Error ellipse: s-maj=56.2km s-min=33.7km az=6.0**,**Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **21.14** | **354** | T | T | 01 14 35.9 | |
| | baz=175,slow=76,SNR=22 | | | | | | |
| **H08S1** | **Diego Garcia H** | **21.14** | **354** | T | T | 01 14 39.1 | |
| | baz=175,slow=76,SNR=8.3 | | | | | | |
| **H08S3** | **Diego Garcia H** | **21.16** | **354** | T | T | 01 14 34.8 | |
| | baz=175,slow=76,SNR=19 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **24.87** | **220** | T | T | 01 19 21.1 | |
| | baz=54,slow=74,SNR=36 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **24.88** | **220** | T | T | 01 19 15.8 | |
| | baz=54,slow=74,SNR=50 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **24.89** | **220** | T | T | 01 19 15.6 | |
| | baz=54,slow=74,SNR=40 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.22** | **218** | T | T | 01 19 45.4 | |
| | baz=52,slow=75,SNR=7.3 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **25.23** | **218** | T | T | 01 19 42.2 | |
| | baz=52,slow=75,SNR=9.3 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **25.23** | **218** | T | T | 01 19 41.1 | |
| | baz=52,slow=75,SNR=9.3 | | | | | | |
| **ASAR** | **Alice Springs** | **53.04** | **99** | P | P | 00 57 15.6 | 0.0 |
| | 0.5nm,0.6s,baz=248,slow=6.7,SNR=8.0 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **54.71** | **95** | P | P | 00 57 27.7 | -0.2 |
| | 0.5nm,0.7s,baz=250,slow=7.0,SNR=2.9 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.33** | **180** | P | P | 00 58 13.7 | -0.1 |
| | 1.6nm,0.9s,baz=280,slow=5.6,SNR=3.8 | | | | | | |
| | 1.6nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.72** | **290** | P | P | 01 00 17.4 | +0.1 |
| | 1.3nm,1.1s,baz=104,slow=4.1,SNR=4.3 | | | | | | |
| | 1.3nm,1.1s | | | | | | |

**NOU 27 00:58:03.0,19°.22S×168°.93E,h0km,MLv3.9/11,Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **1.50** | **341** | P | Pn | 00 58 30.7 | -0.5 |
| **DVP** | **Devils Point** | **1.65** | **335** | P | Pn | 00 58 32.7 | -0.5 |
| **LIFNC** | **LIFOU** | **2.22** | **225** | P | Pn | 00 58 39.8 | -1.3 |
| **MARNC** | **Mare, Loyalty** | **2.40** | **200** | P | Pn | 00 58 43.6 | 0.0 |
| **YATNC** | **Mamie plateau,** | **3.41** | **214** | P | Pn | 00 58 56.4 | -1.1 |
| **PINNC** | **Pines Island,** | **3.65** | **202** | P | Pn | 00 59 02.0 | +1.2 |
| **DZM** | **Mont Dzumac** | **3.67** | **219** | P | Pn | 00 59 01.5 | +0.4 |
| **NOUC** | **Port Laguerre** | **3.78** | **220** | P | Pn | 00 59 03.7 | +1.2 |
| **KOUNC** | **Koumac, New Ca** | **4.57** | **252** | P | Pn | 00 59 12.7 | -0.7 |

*IDC **27** 01:26:22.9±0.9,28°.79S×74°.59E,h0km,mb3.9/9, mbtmp3.9/9,MS3.4/4,Error ellipse: s-maj=32.1km s-min=24.6km az=55.0*

**ISC 27 01:26:24.5**±0.9,**28°.8S**±0°.2×**74°.6E**±0°.2,**h10**km,**n23,** σ0**72**/10,**mb4.0**/9,**MS3.5**/4,**Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **21.12** | **354** | T | T | 01 53 02.2 | |
| | baz=175,slow=76,SNR=36 | | | | | | |
| **H08S1** | **Diego Garcia H** | **21.12** | **354** | T | T | 01 53 01.0 | |
| | baz=175,slow=76,SNR=14 | | | | | | |
| **H08S3** | **Diego Garcia H** | **21.14** | **354** | T | T | 01 53 12.4 | |
| | baz=175,slow=76,SNR=44 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **24.93** | **220** | T | T | 01 57 50.6 | |
| | baz=55,slow=74,SNR=117 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **24.94** | **220** | T | T | 01 57 47.7 | |
| | baz=55,slow=74,SNR=91 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **24.95** | **220** | T | T | 01 57 46.5 | |
| | baz=55,slow=74,SNR=68 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.28** | **218** | T | T | 01 58 13.5 | |
| | baz=52,slow=76 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **25.29** | **218** | T | T | 01 58 09.6 | |
| | baz=52,slow=76 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **25.30** | **218** | T | T | 01 58 11.0 | |
| | baz=52,slow=76 | | | | | | |
| **BOSA** | **Boshof** | **43.04** | **258** | LR | LR | 01 50 23.9 | |
| | comp=Z,102nm,18.6s,baz=124,slow=34 | | | | | | |
| **SUR** | **Sutherland** | **46.05** | **252** | LR | LR | 01 49 20.3 | |
| | comp=Z,76nm,21.9s,baz=132,slow=30 | | | | | | |
| **KAPI** | **Kappang** | **48.82** | **70** | LR | LR | 01 56 56.9 | |
| | comp=Z,35nm,18.1s,baz=48,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **52.97** | **99** | P | **P** | **01 35 41.6** | **0.0** |
| | 2.8nm,0.9s,baz=249,slow=6.4,SNR=13 | | | | | | |
| | 2.8nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **54.64** | **95** | P | **P** | **01 35 53.7** | **-0.1** |
| | 2.5nm,0.8s,baz=251,slow=7.2,SNR=9.2 | | | | | | |
| | 2.5nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.35** | **180** | P | **P** | **01 36 40.6** | **+0.2** |
| | 1.2nm,0.7s,baz=315,slow=11,SNR=7.7 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **64.95** | **100** | LR | LR | 02 04 22.7 | |
| | comp=Z,6.2nm,18.1s,baz=262,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.55** | **5** | P | **P** | **01 38 08.7** | **-0.3** |
| | 0.8nm,0.9s,baz=180,slow=5.2,SNR=4.3 | | | | | | |
| | 0.8nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **79.13** | **3** | P | **P** | **01 38 30.6** | **+1.6** |
| | 0.2nm,0.5s,baz=184,slow=5.2,SNR=2.0 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **81.45** | **21** | P | **P** | **01 38 41.4** | **-0.3** |
| | 0.4nm,0.7s,baz=207,slow=6.1,SNR=2.4 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **81.55** | **357** | P | **P** | **01 38 42.4** | **+0.4** |
| | 0.7nm,0.6s,baz=152,slow=6.5,SNR=3.4 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.78** | **290** | P | **P** | **01 38 43.6** | **-0.4** |
| | 1.6nm,1.0s,baz=102,slow=5.1,SNR=7.1 | | | | | | |
| | 1.6nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.86** | **6** | P | **P** | **01 38 48.1** | **-0.7** |
| | 0.6nm,0.5s,baz=204,slow=9.5,SNR=2.3 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.75** | **8** | PKPbc | **PKPdf** | **01 46 02.8** | **+0.2** |
| | 0.1nm,0.3s,baz=353,slow=3.4,SNR=4.1 | | | | | | |

*AEIC **27** 01:40:18.6±1.9,50°.97N±0°.07×176°.09W±0°.07,h41km±8km, Error ellipse: s-maj=10.0km s-min=6.6km az=172.0*
*NEIC **27** 01:40:19±1.1,50°.96N±0°.02×176°.08W±0°.06,h29km±7km, mb4.0/28,ML3.7(AEIC),Error ellipse: s-maj=5.7km s-min=2.3km az=64.0*
*IDC **27** 01:40:27.3±6.0,51°.27N×176°.32W,h92km±52km,mb3.6/12, mbtmp4.0/13,ML3.6/1,MS3.3/12,Error ellipse: s-maj=41.8km s-min=16.8km az=1.0*

**ISC 27 01:40:20.6**±1.7,**51°.0N**±0°.1×**176°.15W**±0°.05,**h41**km±15km, **n90**,σ0**82**/80,**mb4.0**/13,**MS3.4**/11,**Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSCK** | **Great Sitkin C** | **1.00** | **360** | | **Pn** | **01 40 37.0** | **-1.1** |
| **GSMY** | **Great Sitkin M** | **1.03** | **3** | | **Pn** | **01 40 37.5** | **-1.1** |
| **GSTD** | **Great Sitkin T** | **1.04** | **0** | | **Pn** | **01 40 38.1** | **-0.7** |
| GSTD | | | | | **Sn** | **01 40 53.2** | **+1.0** |
| **KIWB** | **Kanaga Island** | **1.05** | **324** | | **Pn** | **01 40 37.6** | **-1.2** |
| KIWB | | | | | **Sn** | **01 40 53.1** | **+0.9** |
| **KIRH** | **Kanaga Island** | **1.06** | **327** | | **Pn** | **01 40 38.2** | **-0.9** |
| KIRH | | | | | **Sn** | **01 40 54.1** | **+1.5** |
| **GSSP** | **Great Sitkin S** | **1.08** | **359** | | **Pn** | **01 40 38.6** | **-0.7** |
| GSSP | | | | | **Sn** | **01 40 54.2** | **+1.2** |
| **GSTR** | **Great Sitkin T** | **1.08** | **3** | | **Pn** | **01 40 38.8** | **-0.5** |
| **KICM** | **Kanaga Island** | **1.12** | **325** | | **Pn** | **01 40 39.0** | **-0.8** |
| **TASE** | **Tanaga Southea** | **1.44** | **306** | | **Pn** | **01 40 43.6** | **-0.6** |
| TASE | | | | | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MA2** | **Magadan** | **20.50** | **308** | LR | LR | 01 53 02.2 | |
| | comp=Z,66nm,18.2s,baz=119,slow=37 | | | | | | |
| **IL31** | | **20.51** | **37** | P | **P** | **01 44 55.2** | **+0.3** |
| IL31 | | | | IAmb | IAmb | 01 45 23.8 | |
| | comp=Z,7.3nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **20.51** | **37** | P | **P** | **01 44 55.6** | **+0.7** |
| **ILAR** | **Eielson Array** | **20.51** | **37** | P | **P** | **01 44 55.9** | **+1.0** |
| | comp=Z,0.3nm,0.4s,baz=230,slow=11,SNR=11 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **E21K** | **Killik River** | **20.52** | **23** | P | **P** | **01 44 54.5** | **-0.6** |
| E21K | | | | IAmb | IAmb | 01 45 36.4 | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **20.64** | **317** | P | **P** | **01 44 56.2** | **0.0** |
| | comp=Z,3.1nm,0.7s,baz=104,slow=15,SNR=4.7 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **20.69** | **33** | P | **P** | **01 44 56.3** | **-0.6** |
| **RIDG** | **Independent Ri** | **20.87** | **40** | P | **P** | **01 44 58.0** | **-0.8** |
| RIDG | | | | IAmb | IAmb | 01 45 21.5 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **21.02** | **38** | P | **P** | **01 44 58.2** | **-2.3** |
| J25K | | | | IAmb | IAmb | 01 45 33.3 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **SCRK** | **Sand Creek** | **21.31** | **40** | P | **P** | **01 45 03.3** | **-0.4** |
| **K29M** | **Barlow Dome** | **23.99** | **43** | P | **P** | **01 45 31.6** | **+0.5** |
| **I30M** | **Mount Dempster** | **24.82** | **40** | P | **P** | **01 45 38.1** | **-0.6** |
| I30M | | | | IAmb | IAmb | 01 46 05.7 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **26.82** | **34** | P | **P** | **01 45 55.4** | **-1.1** |
| INK | | | | IAmb | IAmb | 01 46 31.8 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **DLBC** | **Dease Lake** | **27.18** | **56** | LR | LR | 01 58 33.2 | |
| | comp=Z,92nm,18.2s,baz=262,slow=40 | | | | | | |
| **ASAJ** | **Asahikawa** | **28.38** | **272** | LR | LR | 01 59 52.8 | |
| | comp=Z,29nm,18.4s,baz=104,slow=41 | | | | | | |
| **YAK** | **Yakutsk** | **30.91** | **312** | LR | LR | 02 00 30.5 | |
| | comp=Z,45nm,18.4s,baz=24,slow=39 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.97** | **209** | T | T | 02 23 40.4 | |
| | baz=18,slow=76,SNR=15 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.98** | **209** | T | T | 02 23 40.5 | |
| | baz=18,slow=76,SNR=14 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.98** | **209** | T | T | 02 23 41.2 | |
| | baz=18,slow=76,SNR=19 | | | | | | |
| **YKA** | **Yellowknife Ar** | **34.27** | **46** | LR | LR | 02 03 34.6 | |
| | comp=Z,96nm,19.4s,baz=287,slow=40 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.18** | **209** | T | T | 02 25 16.8 | |
| | baz=18,slow=76,SNR=9.1 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.19** | **209** | T | T | 02 25 20.3 | |
| | baz=18,slow=76,SNR=4.7 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.19** | **209** | T | T | 02 25 21.4 | |
| | baz=18,slow=76,SNR=4.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.39** | **264** | LR | LR | 02 00 39.5 | |
| | comp=Z,31nm,19.4s,baz=70,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **41.32** | **273** | P | **P** | **01 48 02.5** | **+0.5** |
| | comp=Z,1.5nm,0.8s,baz=60,slow=7.9,SNR=3.2 | | | | | | |
| KSRS | | | | LR | LR | 02 06 28.4 | |
| | comp=Z,12nm,19.0s,baz=80,slow=38 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **44.82** | **73** | P | **P** | **01 48 32.0** | **+1.4** |
| | comp=Z,0.3nm,0.3s,baz=308,slow=4.9,SNR=5.7 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **48.29** | **298** | P | **P** | **01 48 57.1** | **-0.5** |
| | comp=Z,1.1nm,0.9s,baz=49,slow=9.6,SNR=7.3 | | | | | | |
| SONM | | | | LR | LR | 02 11 23.8 | |
| | comp=Z,90nm,18.5s,baz=22,slow=39 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.48** | **315** | LR | LR | 02 15 07.3 | |
| | comp=Z,31nm,18.2s,baz=324,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **57.05** | **83** | P | **P** | **01 50 04.6** | **+2.0** |
| | comp=Z,0.5nm,1.1s,baz=289,slow=7.7,SNR=3.4 | | | | | | |
| | comp=Z,0.5nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.57** | **315** | P | **P** | **01 50 26.2** | **-0.4** |
| | comp=Z,6.4nm,0.7s,baz=43,slow=6.8,SNR=35 | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.55** | **310** | P | **P** | **01 50 32.6** | **-0.8** |
| | comp=Z,1.0nm,0.7s,baz=47,slow=6.6,SNR=7.9 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.23** | **321** | P | **P** | **01 50 37.0** | **-0.7** |
| | comp=Z,4.8nm,0.9s,baz=40,slow=7.7,SNR=17 | | | | | | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **68.92** | **355** | P | **P** | **01 51 19.8** | **-1.0** |
| | comp=Z,1.7nm,0.8s,baz=0.0,slow=2.9,SNR=5.1 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **BELG** | **Belogornoye** | **70.54** | **333** | LR | LR | 02 26 00.1 | |
| | comp=Z,18nm,19.1s,baz=139,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.71** | **278** | P | **P** | **01 51 44.1** | **-0.3** |
| | comp=Z,0.8nm,0.3s,baz=24,slow=4.9,SNR=1.2 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **GNI** | **Garni** | **82.42** | **330** | LR | LR | 02 34 46.8 | |
| | comp=Z,23nm,19.5s,baz=31,slow=40 | | | | | | |
| **BRTR** | **Keskin Array B** | **85.95** | **337** | P | **P** | **01 52 56.1** | **-0.2** |
| | comp=Z,1.3nm,0.8s,baz=29,slow=3.3,SNR=10 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |

**IDC 27 01:41:14.3±1.4, 10°.94N×144°.77E, h0km, mb3.7/5, mbtmp3.7/5, Error ellipse: s-maj=60.0km s-min=24.6km az=96.0, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H11S3** | **WAKE ISLAND Hy** | **22.47** | **68** | T | T | 02 09 44.8 | |
| | baz=253,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.49** | **68** | T | T | 02 09 46.0 | |
| | baz=253,slow=75 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.49** | **68** | T | T | 02 09 46.2 | |
| | baz=253,slow=75 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.03** | **65** | T | T | 02 10 27.1 | |
| | baz=249,slow=75,SNR=13 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.04** | **65** | T | T | 02 10 30.0 | |
| | baz=249,slow=75,SNR=3.5 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.04** | **65** | T | T | 02 10 29.9 | |
| | baz=249,slow=75,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.36** | **199** | P | P | 01 47 45.3 | -0.4 |
| | 0.3nm,0.6s,baz=21,slow=9.7,SNR=6.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **36.00** | **197** | P | P | 01 48 17.7 | +0.4 |
| | 0.3nm,0.5s,baz=30,slow=9.6,SNR=1.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.58** | **321** | P | P | 01 52 06.2 | -0.2 |
| | 1.1nm,0.7s,baz=106,slow=6.3,SNR=5.9 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **70.99** | **25** | P | P | 01 52 33.6 | 0.0 |
| | 0.2nm,0.6s,baz=266,slow=5.7,SNR=5.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **71.94** | **322** | P | P | 01 52 40.0 | +0.4 |
| | 1.4nm,0.6s,baz=103,slow=6.6,SNR=5.3 | | | | | | |
| | 1.4nm,0.6s | | | | | | |

*ISN 27 01:46:56.0±0.9, 34°.63N×46°.18E, h10km±27km, ML2.8*
*TEH 27 01:46:57.4, 34°.63N×46°.25E, h10km±28km, ML2.8*
**ISC 27 01:46:58.3±1.3, 34°.63N±0°.04×46°.24E±0°.03, h2km±12km, n11, σ8°.87/17, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.14** | **62** | Pg | **Pg** | **01 47 01.0** | **0.0** |
| IDHR | | | | Sg | **Sg** | **01 47 03.9** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **0.41** | **138** | Pg | **Pg** | **01 47 06.1** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **257** | Pg | **Pg** | **01 47 08.4** | **-0.4** |
| KGS1 | | | | Sg | **Sg** | **01 47 16.8** | **+0.9** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **208** | Pg | **Pg** | **01 47 08.7** | **-0.8** |
| **ILIN** | **Lien** | **0.66** | **64** | Pg | **Pg** | **01 47 10.1** | **-0.9** |
| ILIN | | | | Sg | **Sg** | **01 47 20.5** | **+0.9** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **118** | Pg | **Pg** | **01 47 11.5** | **-1.3** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **181** | Pg | **Pg** | **01 47 17.0** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.17** | **79** | Pg | **Pg** | **01 47 19.9** | **-0.7** |
| **IBDR** | **Badra** | **1.54** | **190** | *e*Pn | **Pn** | **01 47 26.0** | **-0.7** |
| IBDR | | | | *e*Sn | **Sg** | **01 47 48.5** | **+0.7** |
| IBDR | | | | AML | AML | 01 47 52.4 | |
| | comp=E,129nm,0.3s | | | | | | |
| **IKRK** | **Kirkuk** | **1.73** | **297** | *e*Pn | **Pn** | **01 47 28.5** | **-0.9** |
| IKRK | | | | *e*Sn | **Sn** | **01 47 53.0** | **+0.9** |
| IKRK | | | | AML | AML | 01 48 00.1 | |
| | comp=E,162nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 01 48 00.3 | |
| | comp=N,133nm,0.4s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.91** | **182** | *e*Pn | **Pn** | **01 47 46.0** | **+0.5** |
| RAFI | | | | *e*Sn | **Sn** | **01 48 21.5** | **+0.5** |

**TEH 27 01:51:49.3, 39°.58N×53°.90E, h10km, ML3.6, Turkmenistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRVT** | **Maraveh tapeh** | **2.57** | **137** | Pn | Pb | 01 52 33.5 | -2.1 |
| **IMND** | **Minoodasht** | **2.60** | **152** | Pn | Pb | 01 52 34.8 | -1.3 |
| **IGLO** | **Ghaloghah** | **3.07** | **181** | Pn | Pn | 01 52 40.6 | +2.5 |
| **IALA** | **Alasht** | **3.59** | **194** | Pn | Pn | 01 52 48.8 | +3.4 |
| **KLST** | **Kelardasht - M** | **3.79** | **217** | Pn | Pn | 01 52 50.9 | +2.9 |
| **LKRN** | **Lenkeran, Azer** | **4.07** | **259** | Pn | Pn | 01 52 55.7 | +4.1 |
| **ASTR** | **Astara** | **4.10** | **257** | Pn | Pn | 01 52 55.1 | +3.1 |
| **SIZA** | **Siyzn** | **4.10** | **293** | Pn | Pn | 01 52 55.5 | +3.4 |
| **SAAT** | **Saatly** | **4.23** | **276** | Pn | Pn | 01 52 55.5 | +1.7 |
| **PQL** | **Pirkuli** | **4.24** | **288** | Pn | Pn | 01 52 58.5 | +4.5 |
| **GLBA** | **Clilabad** | **4.28** | **267** | Pn | Pn | 01 52 58.5 | +4.1 |
| **JIR1** | **Jirandeh** | **4.32** | **230** | Pn | Pn | 01 52 58.1 | +3.0 |
| **LRK** | **Lerik** | **4.42** | **260** | Pn | Pn | 01 53 00.6 | +4.0 |
| **YRD** | **Yardimli** | **4.44** | **263** | Pn | Pn | 01 52 58.7 | +1.8 |
| **QUB** | **Quba** | **4.59** | **295** | Pn | Pn | 01 53 01.7 | +2.9 |
| **GRMI** | **Germi** | **4.73** | **263** | Pn | Pn | 01 53 02.7 | +2.0 |
| **IHRS** | **Heris** | **5.49** | **259** | Pn | Pn | 01 53 14.7 | +3.3 |

*ISN 27 01:52:54.6±1.2, 34°.61N×46°.24E, h10km±32km, ML3.5*
*TEH 27 01:52:54.7, 34°.61N×46°.24E, h6km±32km, ML3.6*
*AFAD 27 01:52:55.5±0.0, 34°.53N×45°.87E, h6km±5km, MW3.9*
*IDC 27 01:52:56.3±1.8, 34°.75N×45°.97E, h0km, mb3.7/10, mbtmp3.6/11, ML3.4/1, MS2.6/5, Error ellipse: s-maj=46.1km s-min=18.6km az=165.0*
**ISC 27 01:52:56.2±1.1, 34°.59N±0°.03×46°.24E±0°.03, h6km±8km, n71, σ1°.45/80, mb3.8/15, 5C-4D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.16** | **48** | Pg | **Pg** | **01 52 59.2** | **-0.3** |
| **IGHG** | **Ghaleghazi** | **0.38** | **134** | Pg | **Pg** | **01 53 03.7** | **+0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **261** | Pg | **Pg** | **01 53 06.1** | **-0.7** |
| KGS1 | | | | Sg | **Sg** | **01 53 15.2** | **+1.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **210** | Pg | **Pg** | **01 53 06.3** | **-0.5** |
| **ILIN** | **Lien** | **0.68** | **61** | Pg | **Pg** | **01 53 08.7** | **-1.8** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **116** | Pg | **Pb** | **01 53 10.0** | **-1.4** |
| KCHF | | | | Sg | **Sb** | **01 53 22.2** | **+0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.97** | **182** | Pg | **Pb** | **01 53 14.5** | **-0.8** |
| **SNQR** | **Sonqor, Kerman** | **1.17** | **77** | Pg | **Pn** | **01 53 18.5** | **-0.8** |
| **IBZA** | **Bozab** | **1.34** | **95** | Pg | **Pn** | **01 53 21.5** | **-0.2** |
| **IBDR** | **Badra** | **1.50** | **190** | *e*Pn | **Pb** | **01 53 25.0** | **+0.6** |
| IBDR | | | | *e*Sn | **Sg** | **01 53 46.4** | **+1.9** |
| IBDR | | | | AML | AML | 01 53 57.4 | |
| | comp=N,582nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 01 53 58.6 | |
| | comp=E,721nm,0.5s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.67** | **338** | Pg | **Pn** | **01 53 25.8** | **-0.3** |
| **IKFM** | **Kafar-mosalman** | **1.71** | **128** | Pg | **Pn** | **01 53 28.0** | **+1.6** |
| **IKRK** | **Kirkuk** | **1.76** | **298** | *e*Pn | **Pn** | **01 53 27.5** | **+0.4** |
| IKRK | | | | *e*Sn | **Sg** | **01 53 53.0** | **+0.3** |
| IKRK | | | | AML | AML | 01 53 56.2 | |
| | comp=N,1μm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 01 53 56.9 | |
| | comp=E,1μm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.79** | **116** | Pg | **Pn** | **01 53 29.7** | **+1.9** |
| **HSAM** | **Samen** | **1.99** | **100** | Pn | **Pb** | **01 53 33.5** | **+0.7** |
| **MAHB** | **Mahabad** | **2.21** | **349** | Pn | **Pn** | **01 53 35.3** | **+1.8** |
| **IHSH** | **Hashtrud** | **2.83** | **17** | Pn | **Pn** | **01 53 43.6** | **+1.5** |
| **RAFI** | **Al-Rafai** | **2.87** | **182** | *e*Pn | **Pn** | **01 53 44.0** | **+1.7** |
| RAFI | | | | *e*Sn | **Sb** | **01 54 20.2** | **-2.7** |
| RAFI | | | | AML | AML | 01 54 45.6 | |
| | comp=E,143nm,0.4s | | | | | | |
| RAFI | | | | AML | AML | 01 54 50.5 | |
| | comp=N,136nm,0.1s | | | | | | |
| **IAZR** | **Azarshahr** | **3.09** | **356** | Pn | **Pn** | **01 53 47.2** | **+1.6** |
| **YOVA** | **Hakkari_Yksek** | **3.38** | **333** | P | **Pn** | **01 53 51.0** | **+1.4** |
| YOVA | | | | S | **Sn** | **01 54 33.2** | **+3.0** |
| **CUKT** | **Cukurca** | **3.40** | **322** | P | **Pn** | **01 53 50.7** | **+0.8** |
| CUKT | | | | S | **Sn** | **01 54 32.4** | **+1.8** |
| **ISRB** | **Sarab** | **3.42** | **19** | Pn | **Pn** | **01 53 52.5** | **+2.2** |
| **HAKT** | **HAKKARI** | **3.60** | **326** | P | **Pn** | **01 53 53.2** | **+0.5** |
| HAKT | | | | S | **Sn** | **01 54 34.8** | **-0.9** |
| **SIRN** | **Sırnak** | **4.25** | **314** | P | **Pn** | **01 54 01.2** | **-0.2** |
| SIRN | | | | S | **Sn** | **01 54 51.1** | **-0.2** |
| **IPIR** | **Pirpir** | **4.32** | **115** | Pn | **Pn** | **01 54 04.3** | **+1.6** |
| **JHBN** | **Jahan bin** | **4.38** | **121** | Pn | **Pn** | **01 54 05.6** | **+2.1** |
| **OZAP** | **Van, Ozalp-Mer** | **4.45** | **337** | P | **Pn** | **01 54 07.6** | **+3.3** |
| **PERV** | **Siirt/Pervari-** | **4.49** | **319** | P | **Pn** | **01 54 05.7** | **+1.0** |
| PERV | | | | S | **Sn** | **01 54 55.8** | **-1.5** |
| **GEVA** | **Gevas** | **4.51** | **326** | P | **Pn** | **01 54 06.2** | **+1.0** |
| GEVA | | | | S | **Sb** | **01 55 13.1** | **+2.6** |
| **TVAN** | **Van** | **4.54** | **331** | P | **Pn** | **01 54 07.9** | **+2.3** |
| TVAN | | | | S | **Sg** | **01 55 19.3** | **-2.8** |
| **MIDY** | **Mardin/Midyat-** | **4.83** | **307** | P | **Pn** | **01 54 10.2** | **+0.8** |
| MIDY | | | | S | **Sn** | **01 55 06.4** | **+0.7** |
| **SRTM** | **Siirt_Merkez** | **4.87** | **315** | P | **Pn** | **01 54 09.6** | **-0.4** |
| SRTM | | | | S | **Sn** | **01 55 06.9** | **+0.3** |
| **VMUR** | **Van-Muradiye** | **4.88** | **335** | P | **Pn** | **01 54 11.3** | **+1.1** |
| **CLDR** | **Caldiran** | **4.91** | **338** | P | Pn | 01 54 06.4 | -4.3 |
| **BLIS** | **Bitlis-Merkez** | **5.06** | **320** | P | **Pn** | **01 54 11.9** | **-0.7** |
| **ADCV** | **BITLIS_Adilcev** | **5.07** | **327** | P | **Pn** | **01 54 13.4** | **+0.6** |
| **IZEF** | **Zefreh** | **5.34** | **107** | Pn | **Pn** | **01 54 18.7** | **+2.0** |
| **SVAN** | **Silvan-Diyarba** | **5.40** | **313** | P | **Pn** | **01 54 16.2** | **-1.0** |
| **MUSM** | **Mu-Merkez** | **5.61** | **319** | P | **Pn** | **01 54 19.4** | **-0.8** |
| **GNI** | **Garni** | **5.67** | **348** | LR | LR | 01 56 33.0 | |
| | comp=N,41nm,19.7s,baz=172,slow=40 | | | | | | |
| **KOTA** | **Agri, Merkez-K** | **5.74** | **336** | P | **Pn** | **01 54 24.2** | **+2.2** |
| **MMAI** | **Mount Meron Ar** | **9.16** | **263** | Pn | **Pn** | **01 55 08.1** | **-0.8** |
| | comp=N,0.4nm,0.3s,baz=77,slow=15,SNR=2.0 | | | | | | |
| | comp=N,0.4nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **11.28** | **301** | LR | LR | 02 00 39.8 | |
| | comp=N,59nm,21.6s,baz=123,slow=42 | | | | | | |
| **PURM** | **Purcari** | **17.19** | **319** | ||P | **Pn** | **01 56 57.7** | **+0.9** |
| **BELG** | **Belogornoye** | **17.82** | **3** | LR | LR | 02 05 54.5 | |
| | comp=N,14nm,21.6s,baz=113,slow=44 | | | | | | |
| **SORM** | **Soroca** | **19.00** | **321** | ||P | **P** | **01 57 18.0** | **-0.3** |
| **VOIR** | | **19.46** | **310** | ↑↑P | **P** | **01 57 24.2** | **+0.8** |
| **ARR** | **Arges** | **19.69** | **310** | ↑↑P | **P** | **01 57 25.7** | **-0.3** |
| **AKASG** | **Malin Array Be** | **20.31** | **328** | P | **P** | **01 57 31.0** | **-1.6** |
| | comp=N,0.5nm,0.4s,baz=140,slow=8.5,SNR=2.8 | | | | | | |
| AKASG | | | | LR | LR | 02 07 03.5 | |
| | comp=N,20nm,20.9s,baz=87,slow=42 | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | |
| **BUR01** | **Bucovina Ar. S** | **20.42** | **316** | ↑↑P | **P** | **01 57 34.1** | **+0.1** |
| **GZR** | **Gura Zlata** | **20.89** | **308** | ||P | **P** | **01 57 38.8** | **-0.3** |
| **BOVS** | **Bovan** | **21.01** | **303** | ↑↑P | **P** | **01 57 39.7** | **-0.6** |
| **DRGR** | | **21.51** | **312** | ||P | **P** | **01 57 46.1** | **+0.3** |
| **SIRR** | **Siria** | **21.95** | **309** | ↑↑P | **P** | **01 57 50.4** | **0.0** |
| **KOLS** | **Kolonicke sedl** | **22.78** | **316** | *e*P | **P** | **01 58 02.4** | **+3.1** |
| **BVAR** | **Borovoye Array** | **25.16** | **36** | P | **P** | **01 58 23.5** | **+1.5** |
| | comp=N,1.4nm,0.6s,baz=255,slow=8.8,SNR=1.4 | | | | | | |
| | comp=N,1.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.37** | **46** | P | **P** | **01 58 52.8** | **+1.9** |
| | comp=N,0.6nm,0.6s,baz=251,slow=8.7,SNR=6.4 | | | | | | |
| | comp=N,0.6nm,0.6s | | | | | | |
| **WATA** | **Waldviertalm** | **28.86** | **307** | *i* pP | **P** | **01 58 56.2** | **+0.7** |
| | comp=N,1.0nm,0.5s | | | | | | |
| **SQTA** | **Sankt Quirin** | **29.08** | **306** | *i* P | **P** | **01 58 56.1** | **-1.3** |
| | comp=N,1.1nm,0.3s | | | | | | |
| **MOTA** | **Moosalm** | **29.18** | **307** | *i* P | **P** | **01 58 56.8** | **-1.5** |
| | comp=N,0.4nm,0.3s | | | | | | |
| **FETA** | **Feichten** | **29.35** | **306** | *i* P | **P** | **01 58 58.9** | **-1.0** |
| | comp=N,0.6nm,0.5s | | | | | | |
| **RETA** | **Reutte** | **29.43** | **307** | *i* P | **P** | **01 58 58.8** | **-1.7** |
| | comp=N,0.6nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.66** | **55** | P | **P** | **01 59 04.2** | **+1.8** |
| | comp=N,0.6nm,0.6s,baz=255,slow=6.6,SNR=5.4 | | | | | | |
| | comp=N,0.6nm,0.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **29.88** | **305** | LR | LR | 02 11 44.7 | |
| | comp=N,16nm,18.2s,baz=88,slow=38 | | | | | | |
| **DAVA** | **Damuels** | **29.98** | **306** | *i* P | **P** | **01 59 03.5** | **-1.8** |
| | comp=N,1.2nm,0.3s | | | | | | |
| **HFS** | **Hagfors** | **33.14** | **330** | P | **P** | **01 59 31.3** | **-1.6** |
| | comp=N,0.9nm,0.4s,baz=127,slow=11,SNR=9.5 | | | | | | |
| | comp=N,0.9nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.16** | **42** | P | **P** | **01 59 34.1** | **+1.0** |
| | comp=N,1.1nm,0.5s,baz=248,slow=7.6,SNR=3.9 | | | | | | |
| | comp=N,1.1nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.59** | **317** | P | **P** | **02 00 26.9** | **-1.2** |
| | comp=N,0.7nm,0.4s,baz=105,slow=8.4,SNR=5.3 | | | | | | |
| | comp=N,0.7nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.93** | **292** | P | **P** | **02 00 29.9** | **-1.2** |
| | comp=N,0.5nm,0.9s,baz=57,slow=9.0,SNR=6.4 | | | | | | |
| | comp=N,0.5nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.54** | **253** | P | **P** | **02 01 16.0** | **-0.8** |
| | comp=N,0.5nm,0.8s,baz=41,slow=6.5,SNR=2.3 | | | | | | |
| | comp=N,0.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **80.43** | **6** | P | **P** | **02 05 09.0** | **+0.8** |
| | comp=N,0.2nm,0.7s,baz=350,slow=4.7,SNR=2.4 | | | | | | |
| | comp=N,0.2nm,0.7s | | | | | | |

*WEL 27 02:09:59.2±1.3, 46°.5±9°.1×16°.6E±°, h12km, M3.8/8, ML4.0/9, MLv3.8/8, Error ellipse: s-maj=0.0km s-min=0.0km az=36.1,*

*confirmed*
*NOU 27 02:10:06.5, 46°.03S×166°.90E, h0km, mb4.6/7, Off W. Coast of S. Island, N.Z.*
**ISC 27 02:10:00.9±3.0, 46°.25S±0°.08×166°.1E±0°.1, h27km±15km, n38, σ1°.10/43, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.44** | **79** | P | **Pb** | **02 10 10.4** | **+0.2** |
| **PYZ** | **Puysegur Point** | **0.44** | **79** | P | **Pb** | **02 10 10.4** | **+0.2** |
| PYZ | | | | S | **Sn** | **02 10 18.0** | **-0.6** |
| **RRKS** | **Rarakau** | **0.99** | **85** | P | **Pb** | **02 10 19.0** | **-0.4** |
| **DCZ** | **Deep Cove** | **1.10** | **45** | P | **Pn** | **02 10 19.1** | **-1.4** |
| **WHZ** | **Wether Hill Ro** | **1.36** | **76** | P | **Pn** | **02 10 24.6** | **+0.5** |
| WHZ | | | | S | **Sb** | **02 10 44.5** | **+1.7** |
| **APZ** | **The Paps** | **1.46** | **114** | P | **Pn** | **02 10 25.7** | **+0.3** |
| APZ | | | | S | **Sb** | **02 10 44.8** | **-0.6** |
| **MLZ** | **Mavora Lakes** | **1.69** | **59** | P | **Pn** | **02 10 30.6** | **+2.0** |
| **MSZ** | **Milford Sound** | **2.05** | **41** | P | **Pn** | **02 10 33.7** | **+0.1** |
| **SYZ** | **Scrubby Hill** | **2.15** | **99** | P | **Pn** | **02 10 36.0** | **+1.0** |
| **SYZ** | **Scrubby Hill** | **2.15** | **99** | P | **Pn** | **02 10 35.9** | **+1.0** |
| **EAZ** | **Earnscleugh** | **2.50** | **67** | P | **Pn** | **02 10 41.7** | **+2.0** |
| **TUZ** | **Tuapeka** | **2.50** | **85** | P | **Pn** | **02 10 41.4** | **+1.6** |
| TUZ | | | | S | **Sb** | **02 11 14.0** | **-1.5** |
| **WKZ** | **Wanaka** | **2.52** | **57** | P | **Pn** | **02 10 42.6** | **+2.5** |
| **JCZ** | **Jackson Bay** | **2.91** | **43** | P | **Pn** | **02 10 47.3** | **+1.8** |
| **JCZ** | **Jackson Bay** | **2.91** | **43** | P | **Pn** | **02 10 46.9** | **+1.4** |
| JCZ | | | | S | **Sb** | **02 11 25.7** | **-1.5** |
| **ODZ** | **Otahua Downs** | **3.44** | **71** | P | **Pn** | **02 10 52.5** | **-0.1** |
| **ODZ** | **Otahua Downs** | **3.44** | **71** | P | **Pn** | **02 10 52.6** | **-0.1** |
| **LBZ** | **Lake Benmore** | **3.46** | **59** | P | **Pn** | **02 10 53.7** | **+0.7** |
| **FOZ** | **Fox Glacier** | **3.81** | **46** | P | **Pn** | **02 10 58.1** | **+0.4** |
| **TMZ** | **Timaru** | **3.96** | **64** | P | **Pn** | **02 11 00.5** | **+0.6** |
| **GCSZ** | **Gaunt Creek Bo** | **4.22** | **48** | P | **Pn** | **02 11 03.6** | **+0.2** |
| **ARCZ** | **Arundel** | **4.29** | **59** | P | **Pn** | **02 11 04.2** | **-0.3** |
| **RPZ** | **Rata Peaks** | **4.36** | **56** | P | **Pn** | **02 11 05.2** | **-0.1** |
| **RPZ** | **Rata Peaks** | **4.36** | **56** | P | **Pn** | **02 11 05.2** | **-0.1** |
| **WVZ** | **Waitaha Valley** | **4.61** | **48** | P | **Pn** | **02 11 09.4** | **+0.7** |
| **LTZ** | **Lake Taylor** | **5.64** | **54** | P | **Pn** | **02 11 24.6** | **+1.8** |
| **GVZ** | **Greta Valley S** | **5.96** | **59** | P | **Pn** | **02 11 27.1** | **-0.3** |
| **DSZ** | **Denniston Nort** | **6.12** | **45** | P | **Pn** | **02 11 29.0** | **-0.5** |
| **THZ** | **Tophouse** | **6.67** | **50** | P | **Pn** | **02 11 38.5** | **+1.4** |
| **MRNZ** | **Matariki Terra** | **6.85** | **47** | P | **Pn** | **02 11 40.2** | **+0.6** |
| **QRZ** | **Quartz Range** | **7.17** | **43** | P | **Pn** | **02 11 44.2** | **+0.2** |
| **QRZ** | **Quartz Range** | **7.17** | **43** | P | **Pn** | **02 11 44.1** | **+0.2** |
| **KHEZ** | **Kahui Hut** | **9.08** | **43** | P | **Pn** | **02 12 11.0** | **+0.8** |
| **KHEZ** | **Kahui Hut** | **9.08** | **43** | P | **Pn** | **02 12 11.2** | **+1.0** |
| **PKE** | **Pukeiti** | **9.15** | **42** | P | **Pn** | **02 12 12.3** | **+1.2** |
| **WIAZ** | **Waiheke Island** | **11.63** | **39** | P | **Pn** | **02 12 46.3** | **+1.2** |
| **WCZ** | **Waipu Caves** | **12.04** | **34** | P | **Pn** | **02 12 50.3** | **-0.3** |
| **OUZ** | **Omahuta** | **12.40** | **30** | P | **Pn** | **02 12 55.1** | **-0.5** |

*KRSC 27 03:18:58.3±1.3, 58°.80N×158°.61E, h31km±16km, Mc5.5, Ml5.3, Felt [II-III] at Palana.*
*IDC 27 03:18:59.6±0.3, 58°.74N×158°.87E, h0km, mb4.9/36, mbtmp4.9/42, ML4.3/6, MS4.3/75, Error ellipse: s-maj=9.0km s-min=8.5km az=5.0*
*MOS 27 03:18:59.8±0.9, 58°.74N×158°.80E, h13km, mb5.5/86, MS4.6/37, Error ellipse: s-maj=7.1km s-min=2.7km az=96.8*
*NEIC 27 03:19:01.1±1.7, 58°.73N±0°.07×158°.7E±0°.1, h10km±

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KII | Karymskiy | 4.72 | 176 | PN | Pn | 03 20 12.0 | -0.4 | P08K | Saint George I | 16.95 | 84 | P | Pn | 03 22 58.4 | +0.2 |
| GNL | Ganaly | 5.07 | 186 | eP | Pn | 03 20 17.2 | -0.2 | | baz=290 | | | | | | |
| GNL | Ganaly | 5.07 | 186 | PN | Pn | 03 20 17.1 | -0.2 | F14K | Arctic Creek | 17.44 | 53 | P | Pn | 03 23 03.9 | -0.3 |
| SEY | Seymchan | 5.27 | 326 | Pn | Pn | 03 20 19.6 | -0.3 | | baz=264 | | | | | | |
| | 1.7nm,0.3s,baz=134,slow=13,SNR=40 | | | | | | | M11K | Mekoryuk | 17.66 | 70 | P | Pn | 03 23 06.5 | -0.5 |
| SEY | | | | Lg | Lg | 03 21 46.2 | | | baz=280 | | | | | | |
| | 22nm,0.3s,baz=29,slow=19,SNR=4.3 | | | | | | | JKA | Kamikawa-asahi | 17.72 | 221 | | P | 03 23 07.7 | -1.1 |
| SEY | | | | LR | LR | 03 22 32.6 | | ASAJ | Asahikawa | 17.72 | 221 | P | P | 03 23 07.9 | -0.8 |
| | comp=Z,4µm,19.9s,baz=147,slow=40 35nm,0.8s | | | | | | | | comp=N,0.2nm,0.3s,baz=20,slow=14,SNR=9.6 comp=N,16nm,0.9s | | | | | | |
| SEY | Seymchan | 5.27 | 326 | ePN | Pn | 03 20 17.2 | -2.8 | ASAJ | Asahikawa | 17.72 | 221 | P | P | 03 23 07.7 | -1.0 |
| SEY | | | | pmax | pmax | | | ASAJ | | | | pmax | pmax | | |
| | comp=Z,233nm,1.7s | | | | | | | | comp=Z,96nm,1.4s | | | | | | |
| KOK | Koryaka | 5.45 | 181 | eP | Pn | 03 20 23.4 | +0.8 | TIXI | Tiksi | 17.76 | 329 | | Pn | 03 23 06.9 | -1.2 |
| KOK | Koryaka | 5.45 | 181 | PN | Pn | 03 20 23.4 | +0.8 | TIXI | Tiksi | 17.76 | 329 | P | P | 03 23 08.9 | 0.0 |
| AVH | Avacha | 5.48 | 181 | eP | Pn | 03 20 23.6 | +0.6 | | comp=Z,0.6nm,0.3s,baz=130,slow=13,SNR=26 | | | | | | |
| AVH | Avacha | 5.48 | 181 | PN | Pn | 03 20 23.5 | +0.6 | TIXI | | | | Lg | Lg | 03 28 22.9 | |
| SMAR | Somma | 5.48 | 180 | eP | Pn | 03 20 23.6 | +0.6 | | comp=Z,0.3nm,0.3s,baz=113,slow=3.6,SNR=3.0 | | | | | | |
| SMAR | Somma | 5.48 | 180 | PN | Pn | 03 20 23.6 | +0.6 | TIXI | | | | LR | LR | 03 30 57.5 | |
| UGLR | Uglovaya | 5.53 | 180 | eP | Pn | 03 20 24.4 | +0.7 | | comp=Z,789nm,18.8s,baz=146,slow=40 comp=Z,36nm,0.8s | | | | | | |
| UGLR | Uglovaya | 5.53 | 180 | PN | Pn | 03 20 24.4 | +0.7 | TIXI | Tiksi | 17.76 | 329 | *i* P | Pn | 03 23 07.6 | -0.6 |
| PEA0B | Petropavlovsk- | 5.67 | 187 | Pn | Pn | 03 20 24.2 | -1.3 | TIXI | | | | pmax | pmax | | |
| PEA0B | Petropavlovsk- | 5.67 | 187 | *i* PN | Pn | 03 20 25.1 | -0.4 | | comp=Z,55nm,0.9s | | | | | | |
| PETK | Petropavlovsk- | 5.67 | 187 | Pn | Pn | 03 20 25.1 | -0.4 | ANM | Nome | 17.77 | 56 | P | Pn | 03 23 07.5 | -0.8 |
| PETK | Petropavlovsk- | 5.67 | 187 | Pn | Pn | 03 20 24.8 | -0.7 | | baz=268 | | | | | | |
| | comp=Z,2.3nm,0.3s,baz=37,slow=14,SNR=14 | | | | | | | ZEA | Zeya | 18.15 | 268 | eP | P | 03 23 12.7 | -0.7 |
| PETK | | | | Lg | Lg | 03 22 03.7 | | ZEA | | | | pmax | pmax | | |
| | baz=22,slow=34 | | | | | | | | comp=E,500nm,4.0s | | | | | | |
| PETK | | | | LR | LR | 03 23 10.2 | | ZEA | | | | pmax | pmax | | |
| | comp=Z,778nm,20.1s,baz=346,slow=44 | | | | | | | | comp=N,300nm,8.4s | | | | | | |
| PETK | Petropavlovsk- | 5.67 | 187 | PN | Pn | 03 20 25.1 | -0.4 | ZEA | | | | pmax | pmax | | |
| SPN | Mys Shipunski | 5.68 | 173 | eP | Pn | 03 20 27.2 | +1.5 | | comp=Z,500nm,5.3s | | | | | | |
| SPN | Mys Shipunski | 5.68 | 173 | PN | Pn | 03 20 27.1 | +1.5 | ZEA | | | | MLR | MLR | | |
| DALK | Dalny | 5.71 | 181 | eP | Pn | 03 20 26.5 | +0.4 | | comp=E,1µm,16.0s | | | | | | |
| DALK | Dalny | 5.71 | 181 | PN | Pn | 03 20 26.4 | +0.4 | ZEA | | | | MLR | MLR | | |
| PET | Petropavlovsk | 5.72 | 181 | P | Pn | 03 20 29.8 | +3.7 | | comp=N,1µm,17.0s | | | | | | |
| PET | Petropavlovsk | 5.72 | 181 | Pn | Pn | 03 20 26.2 | +0.1 | ZEA | | | | MLR | MLR | | |
| PET | Petropavlovsk | 5.72 | 181 | eP | Pn | 03 20 26.6 | +0.5 | | comp=Z,2µm,14.0s | | | | | | |
| PET | Petropavlovsk | 5.72 | 181 | ePN | Pn | 03 20 27.4 | +1.3 | F15K | North Star Dit | 18.16 | 52 | | P | 03 23 16.7 | +3.3 |
| PET | | | | pmax | pmax | | | F15K | North Star Dit | 18.16 | 52 | P | Pn | 03 23 12.7 | -0.4 |
| | comp=Z,207nm,1.4s | | | | | | | | baz=265,SNR=6.2 | | | | | | |
| PET | | | | MLR | MLR | | | K13K | Kusilvak Mount | 18.18 | 64 | | P | 03 23 14.7 | +1.0 |
| | comp=Z,3µm,9.0s | | | | | | | K13K | Kusilvak Mount | 18.18 | 64 | P | Pn | 03 23 12.9 | -0.6 |
| PET | | | | MLR | MLR | | | | baz=276 | | | | | | |
| | comp=Z,5µm,7.0s | | | | | | | C16K | Lisburne Hills | 18.32 | 44 | P | Pn | 03 23 14.9 | -0.1 |
| PET | Petropavlovsk | 5.72 | 181 | P | Pn | 03 20 25.4 | -0.7 | | baz=276 | | | | | | |
| | comp=Z,223nm,1.8s,comp=Z,3µmcomp=Z,1.1nm | | | | | | | G15K | Niukluk | 18.36 | 54 | P | P | 03 23 15.1 | -0.6 |
| APC | Apacha | 5.89 | 190 | eP | Pn | 03 20 29.8 | +1.2 | | baz=268 | | | | | | |
| APC | Apacha | 5.89 | 190 | PN | Pn | 03 20 29.7 | +1.2 | KLR | Kul'dur | 18.44 | 251 | P | P | 03 23 17.5 | +0.9 |
| KRMR | Karymshinskiy | 5.93 | 184 | eP | Pn | 03 20 29.1 | +0.1 | | comp=Z,1.2nm,0.3s,baz=48,slow=11,SNR=103 | | | | | | |
| KRMR | Karymshinskiy | 5.93 | 184 | PN | Pn | 03 20 29.0 | +0.1 | KLR | | | | LR | LR | 03 31 36.3 | |
| GRL | Gorelyy | 6.21 | 184 | eP | Pn | 03 20 33.0 | +0.1 | | comp=Z,3µm,18.8s,baz=52,slow=41 comp=Z,45nm,0.8s | | | | | | |
| GRL | Gorelyy | 6.21 | 184 | PN | Pn | 03 20 33.0 | +0.1 | KLR | Kul'dur | 18.44 | 251 | eP | P | 03 23 15.9 | -0.7 |
| MTVR | Mutnovka | 6.27 | 184 | eP | Pn | 03 20 35.1 | +1.2 | KLR | | | | pmax | pmax | | |
| MTVR | Mutnovka | 6.27 | 184 | PN | Pn | 03 20 35.0 | +1.2 | | comp=Z,46nm,0.8s | | | | | | |
| ASAK | Asacha | 6.38 | 185 | eP | Pn | 03 20 35.7 | +0.4 | J14K | Nanvaranak Lak | 18.62 | 62 | P | P | 03 23 19.0 | +0.6 |
| ASAK | Asacha | 6.38 | 185 | PN | Pn | 03 20 35.7 | +0.4 | J14K | Nanvaranak Lak | 18.62 | 62 | P | P | 03 23 18.4 | -0.1 |
| KDTR | Khodutka, Kamc | 6.95 | 184 | eP | Pn | 03 20 43.5 | +0.5 | | baz=275 | | | | | | |
| KDTR | Khodutka, Kamc | 6.95 | 184 | PN | Pn | 03 20 43.4 | +0.5 | NIKH | Nikolski High | 18.89 | 94 | P | Pn | 03 23 23.2 | +1.1 |
| SKR | Severo-Kuril's | 8.22 | 192 | ePN | Pn | 03 21 01.2 | +0.8 | NIKH | Nikolski High | 18.89 | 94 | P | P | 03 23 21.6 | 0.0 |
| BILL | Bilibino | 9.91 | 16 | Pn | Pn | 03 21 25.7 | +2.2 | | baz=301 | | | | | | |
| BILL | Bilibino | 9.91 | 16 | *i* PN | Pn | 03 21 24.0 | +0.5 | D17K | Noatak River | 19.03 | 46 | P | P | 03 23 22.4 | -0.6 |
| BILL | | | | pmax | pmax | | | | baz=261,SNR=5.3 | | | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | M13K | Dall Lake | 19.05 | 69 | P | P | 03 23 22.7 | -0.4 |
| BILL | | | | MLR | MLR | | | | baz=282 | | | | | | |
| | comp=Z,65nm,1.0s | | | | | | | G16K | Koyuk River | 19.09 | 53 | P | P | 03 23 23.4 | -0.2 |
| OKH | Okha | 10.28 | 247 | dePN | Pn | 03 21 21.6 | -7.0 | | baz=268 | | | | | | |
| OKH | | | | pmax | pmax | | | H16K | Elim | 19.12 | 56 | P | P | 03 23 23.9 | -0.1 |
| | comp=Z,200nm,6.8s | | | | | | | | baz=270 | | | | | | |
| OKH | | | | MLR | MLR | | | C17K | DeLong Mountai | 19.14 | 44 | P | P | 03 23 23.3 | -0.9 |
| | comp=E,8µm,14.0s | | | | | | | | baz=258 | | | | | | |
| OKH | | | | MLR | MLR | | | RDOG | Red Dog Mine | 19.16 | 45 | P | Pn | 03 23 26.2 | +1.0 |
| | comp=N,4µm,16.0s | | | | | | | RDOG | Red Dog Mine | 19.16 | 45 | P | P | 03 23 23.8 | -0.6 |
| OKH | | | | MLR | MLR | | | | baz=260,SNR=6.2 | | | | | | |
| | comp=Z,4µm,13.0s | | | | | | | L14K | Kuka Creek | 19.20 | 66 | P | Pn | 03 23 26.3 | +0.6 |
| SHEM | Shemya Is, Ala | 10.47 | 118 | LR | LR | 03 24 53.2 | | L14K | Kuka Creek | 19.20 | 66 | P | P | 03 23 24.3 | -0.5 |
| | comp=Z,2µm,21.4s,baz=333,slow=34 | | | | | | | | baz=280 | | | | | | |
| TYV | Tymovskoe | 12.20 | 237 | ePN | Pn | 03 21 58.6 | +3.8 | E17K | Hotham Inlet | 19.43 | 48 | P | P | 03 23 27.0 | -0.4 |
| TYV | | | | eS | Sn | 03 24 19.2 | +8.5 | | baz=264 | | | | | | |
| TYV | | | | pmax | pmax | | | F17K | Baldwin Pennin | 19.60 | 50 | P | Pn | 03 23 30.7 | +0.2 |
| | comp=Z,200nm,3.9s | | | | | | | F17K | Baldwin Pennin | 19.60 | 50 | P | P | 03 23 28.5 | -0.7 |
| TYV | | | | pmax | pmax | | | | baz=266 | | | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | K15K | Wolf Creek Mou | 19.60 | 63 | P | P | 03 23 29.9 | +0.7 |
| TYV | | | | smax | smax | | | K15K | Wolf Creek Mou | 19.60 | 63 | P | P | 03 23 28.5 | -0.7 |
| | comp=N,10.0nm,1.2s | | | | | | | | baz=278 | | | | | | |
| TYV | | | | smax | smax | | | M14K | Bethel | 19.65 | 67 | P | P | 03 23 30.7 | +0.9 |
| | comp=E,7.0nm,1.2s | | | | | | | M14K | Bethel | 19.65 | 67 | P | P | 03 23 29.3 | -0.4 |
| TYV | | | | smax | smax | | | | baz=282 | | | | | | |
| | comp=N,100nm,5.0s | | | | | | | UNV | Unalaska Valle | 19.68 | 89 | P | Pn | 03 23 32.3 | +0.7 |
| TYV | | | | smax | smax | | | UNV | Unalaska Valle | 19.68 | 89 | P | P | 03 23 29.8 | -0.4 |
| | comp=E,100nm,5.0s | | | | | | | | baz=298,SNR=5.6 | | | | | | |
| TYV | | | | MLR | MLR | | | L15K | Ungalak Mounta | 19.71 | 64 | P | P | 03 23 30.2 | -0.3 |
| | comp=Z,2µm,15.0s | | | | | | | | baz=279,SNR=14 | | | | | | |
| TYV | | | | MLR | MLR | | | G17K | Kiwalik Mounta | 19.80 | 53 | P | P | 03 23 31.6 | +0.2 |
| | comp=E,2µm,15.0s | | | | | | | | baz=269,SNR=13 | | | | | | |
| YAK | Yakutsk | 14.73 | 295 | Pn | Pn | 03 22 30.4 | +1.0 | B18K | Kokolik River | 19.82 | 42 | P | P | 03 23 31.0 | -0.5 |
| YAK | Yakutsk | 14.73 | 295 | Pn | Pn | 03 22 30.8 | +1.5 | | baz=257,SNR=5.2 | | | | | | |
| | comp=E,4.2nm,0.3s,baz=84,slow=17,SNR=17 | | | | | | | I17K | Unalakleet | 19.82 | 58 | P | P | 03 23 32.2 | +0.6 |
| YAK | | | | Lg | Lg | 03 26 37.1 | | I17K | | | | IAmb | IAmb | 03 23 36.7 | |
| | comp=E,4.9nm,0.3s,baz=323,slow=21,SNR=1.9 | | | | | | | | comp=Z,279nm,1.9s | | | | | | |
| YAK | | | | LR | LR | 03 28 44.4 | | I17K | Unalakleet | 19.82 | 58 | P | P | 03 23 31.6 | -0.1 |
| | comp=E,2µm,21.6s,baz=91,slow=40 comp=E,49nm,1.0s | | | | | | | | baz=274 | | | | | | |
| YAK | Yakutsk | 14.73 | 295 | eP | Pn | 03 22 29.8 | +0.4 | C18K | Utukok River | 19.89 | 44 | P | P | 03 23 32.7 | +0.2 |
| YAK | | | | eS | Sn | 03 25 10.2 | -2.2 | C18K | Utukok River | 19.89 | 44 | P | P | 03 23 31.8 | -0.6 |
| YAK | | | | pmax | pmax | | | | baz=280,SNR=17 | | | | | | |
| | comp=Z,37nm,1.0s | | | | | | | J16K | Anvik River | 19.91 | 60 | P | P | 03 23 33.8 | +1.1 |
| YAK | | | | pmax | pmax | | | J16K | Anvik River | 19.91 | 60 | P | P | 03 23 32.6 | -0.1 |
| | comp=N,3.0nm,0.8s | | | | | | | | baz=276,SNR=12 | | | | | | |
| YAK | | | | pmax | pmax | | | E18K | Tukpahlearik C | 19.94 | 47 | P | P | 03 23 33.0 | +0.1 |
| | comp=E,42nm,1.3s | | | | | | | E18K | Tukpahlearik C | 19.94 | 47 | P | P | 03 23 32.5 | -0.4 |
| YAK | | | | pmax | pmax | | | | baz=264 | | | | | | |
| | comp=Z,264nm,2.1s | | | | | | | N14K | Kuskokwak Cree | 19.97 | 70 | P | P | 03 23 33.8 | +0.6 |
| YAK | | | | pmax | pmax | | | | baz=284 | | | | | | |
| | comp=N,89nm,1.9s | | | | | | | HEH | HeiHe | 19.97 | 259 | eP | P | 03 23 33.0 | -0.4 |
| YAK | | | | pmax | pmax | | | HEH | | | | PP | PnPn | 03 23 52.5 | +3.5 |
| | comp=E,70nm,1.0s | | | | | | | HEH | | | | S | S | 03 27 16.5 | -1.2 |
| YAK | | | | smax | smax | | | HEH | | | | sS | sS | 03 27 21.3 | -0.9 |
| | comp=E,52nm,1.6s | | | | | | | HEH | | | | pmax | pmax | | |
| YAK | | | | smax | smax | | | | comp=Z,92nm,0.9s | | | | | | |
| | comp=N,24nm,1.3s | | | | | | | HEH | | | | pmax | pmax | | |
| YAK | | | | MLR | MLR | | | | comp=Z,600nm,5.6s | | | | | | |
| | comp=Z,4µm,15.0s | | | | | | | HEH | | | | LR | LR | | |
| YAK | | | | MLR | MLR | | | | comp=Z,3µm,14.0s | | | | | | |
| | comp=E,4µm,20.0s | | | | | | | HEH | | | | LR | LR | | |
| GAMB | Gambell | 14.95 | 58 | P | Pn | 03 22 31.8 | -0.4 | | comp=Z,3µm,14.7s | | | | | | |
| | baz=264 | | | | | | | HEH | | | | LR | LR | | |
| KUR | Kuril'sk | 15.08 | 211 | eP | Pn | 03 22 34.8 | +0.6 | | comp=Z,5µm,14.7s | | | | | | |
| KUR | | | | S | Sn | 03 25 23.5 | +2.4 | H17K | Granite Mounta | 20.12 | 55 | P | P | 03 23 35.2 | +0.3 |
| KUR | | | | pmax | pmax | | | | baz=272 | | | | | | |
| | comp=Z,491nm,1.1s | | | | | | | F18K | Selawik | 20.25 | 50 | P | P | 03 23 36.4 | +0.2 |
| KUR | | | | MLR | MLR | | | | baz=267,SNR=8.8 | | | | | | |
| | comp=Z,1µm,11.0s | | | | | | | A19K | Wainwright | 20.26 | 39 | P | P | 03 23 36.8 | +0.5 |
| GRNR | Gornyy | 15.15 | 248⇑ | *i* P | Pn | 03 22 36.1 | +1.1 | | baz=256 | | | | | | |
| GRNR | | | | pmax | pmax | | | M15K | Kasigluk River | 20.27 | 67 | P | P | 03 23 36.5 | 0.0 |
| | comp=Z,7.0nm,1.1s | | | | | | | | baz=282 | | | | | | |
| GRNR | | | | MLR | MLR | | | O14K | Tigyukauivet M | 20.35 | 71 | P | Pn | 03 23 39.1 | -0.3 |
| | comp=E,2µm,13.0s | | | | | | | O14K | | | | IAmb | IAmb | 03 23 44.2 | |
| GRNR | | | | MLR | MLR | | | | comp=Z,310nm,1.9s | | | | | | |
| | comp=N,2µm,12.0s | | | | | | | O14K | Tigyukauivet M | 20.35 | 71 | P | P | 03 23 38.0 | +0.7 |
| GRNR | | | | MLR | MLR | | | | baz=286 | | | | | | |
| | comp=Z,3µm,12.0s | | | | | | | C19K | Lookout Ridge | 20.54 | 43 | P | P | 03 23 39.8 | +0.3 |
| YSS | Yuzh-Sakhalins | 15.23 | 226 | P | P | 03 22 38.4 | -2.7 | | baz=261,SNR=25 | | | | | | |
| YSS | Yuzh-Sakhalins | 15.23 | 226 | Pn | Pn | 03 22 36.0 | -0.1 | J17K | VABM Dome | 20.59 | 59 | P | P | 03 23 40.4 | +0.4 |
| YSS | Yuzh-Sakhalins | 15.23 | 226 | dePN | Pn | 03 22 37.7 | +1.5 | J17K | | | | IAmb | IAmb | 03 23 46.9 | |
| YSS | | | | eS | Sn | 03 25 22.2 | -2.5 | | comp=Z,202nm,1.4s | | | | | | |
| YSS | | | | pmax | pmax | | | J17K | VABM Dome | 20.59 | 59 | P | P | 03 23 39.9 | 0.0 |
| | comp=Z,400nm,3.5s | | | | | | | | baz=276,SNR=23 | | | | | | |
| YSS | | | | pmax | pmax | | | G18K | Tagagawik | 20.63 | 52 | IAmb | IAmb | 03 23 44.0 | |
| | comp=N,400nm,3.8s | | | | | | | | comp=Z,158nm,1.4s | | | | | | |
| YSS | | | | pmax | pmax | | | G18K | Tagagawik | 20.63 | 52 | P | P | 03 23 40.4 | -0.1 |
| | comp=E,300nm,4.0s | | | | | | | | baz=270 | | | | | | |
| YSS | | | | pmax | pmax | | | L16K | Owhat River | 20.65 | 64 | P | P | 03 23 39.9 | -0.8 |
| | comp=Z,30nm,0.9s | | | | | | | | baz=281,SNR=11 | | | | | | |
| YSS | | | | pmax | pmax | | | N15K | Kwethluk River | 20.68 | 68 | P | P | 03 23 42.5 | +1.4 |
| | comp=N,40nm,1.0s | | | | | | | N15K | | | | IAmb | IAmb | 03 23 47.8 | |
| YSS | | | | pmax | pmax | | | | comp=Z,158nm,1.2s | | | | | | |
| | comp=E,30nm,1.1s | | | | | | | N15K | Kwethluk River | 20.68 | 68 | P | P | 03 23 41.0 | -0.1 |
| YSS | | | | MLR | MLR | | | | baz=284,SNR=14 | | | | | | |
| | comp=Z,2µm,16.0s | | | | | | | H18K | Honhosa River | 20.77 | 54 | IAmb | IAmb | 03 23 45.6 | |
| YSS | | | | MLR | MLR | | | | comp=Z,253nm,1.6s | | | | | | |
| | comp=N,2µm,14.0s | | | | | | | H18K | Honhosa River | 20.77 | 54 | P | P | 03 23 42.5 | +0.6 |
| SPIA | Saint Paul Isl | 16.40 | 82 | P | Pn | 03 22 51.3 | +0.1 | | baz=272 | | | | | | |
| | baz=288 | | | | | | | FALS | False Pass | 20.83 | 84 | P | Pn | 03 23 44.7 | -0.4 |
| TNA | Tin City | 16.79 | 52 | P | Pn | 03 22 55.5 | -0.6 | FALS | False Pass | 20.83 | 84 | P | P | 03 23 42.6 | 0.0 |
| | baz=262 | | | | | | | | baz=296 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D19K | Kuna River | 20.99 | 45 | P | P | 03 23 44.7 | +0.4 |
| D19K | Kuna River | 20.99 | 45 | P | P | 03 23 44.0 | -0.3 |
| | baz=264,SNR=17 | | | | | | |
| F19K | Shaleruckik Mo | 21.00 | 49 | P | P | 03 23 43.0 | -1.4 |
| F19K | Shaleruckik Mo | 21.00 | 49 | P | P | 03 23 44.2 | -0.2 |
| | baz=268,SNR=20 | | | | | | |
| K17K | Iditarod | 21.02 | 61 | IAmb | IAmb | 03 23 51.6 | |
| | comp=Z,166nm,1.2s | | | | | | |
| K17K | Iditarod | 21.02 | 61 | P | P | 03 23 45.3 | +0.6 |
| | baz=279 | | | | | | |
| M16K | Timber Creek | 21.03 | 66 | P | P | 03 23 44.4 | -0.3 |
| | baz=283 | | | | | | |
| O15K | Ungalikthiuk R | 21.08 | 71 | P | P | 03 23 44.9 | -0.4 |
| | baz=287 | | | | | | |
| L17K | Donlin | 21.12 | 62 | P | P | 03 23 45.3 | -0.5 |
| | baz=280 | | | | | | |
| S12K | Black Hills | 21.17 | 81 | P | P | 03 23 47.2 | +0.8 |
| S12K | | | | IAmb | IAmb | 03 23 52.8 | |
| | comp=Z,140nm,1.1s | | | | | | |
| S12K | Black Hills | 21.17 | 81 | P | P | 03 23 45.9 | -0.5 |
| | baz=294 | | | | | | |
| E19K | Redstone River | 21.24 | 48 | P | P | 03 23 46.6 | -0.4 |
| | baz=267,SNR=34 | | | | | | |
| N16K | Nishlik Lake | 21.25 | 67 | P | P | 03 23 47.2 | +0.1 |
| | baz=284,SNR=9.1 | | | | | | |
| G19K | Purcell Mounta | 21.27 | 51 | P | P | 03 23 47.1 | -0.2 |
| | baz=271,SNR=10 | | | | | | |
| GCSA | Galena City Sc | 21.42 | 55 | P | P | 03 23 48.9 | 0.0 |
| | baz=275 | | | | | | |
| B20K | Meade River | 21.53 | 41 | P | P | 03 23 49.6 | -0.5 |
| | baz=261 | | | | | | |
| H19K | Roundabout Mou | 21.55 | 53 | IAmb | IAmb | 03 23 56.0 | |
| | comp=Z,361nm,1.7s | | | | | | |
| H19K | Roundabout Mou | 21.55 | 53 | P | P | 03 23 49.7 | -0.6 |
| | baz=273,SNR=45 | | | | | | |
| D20K | Etivluk River | 21.56 | 44 | P | P | 03 23 49.9 | -0.5 |
| | baz=265,SNR=22 | | | | | | |
| J18K | Innoko River | 21.63 | 59 | IAmb | IAmb | 03 23 55.3 | |
| | comp=Z,309nm,1.8s | | | | | | |
| J18K | Innoko River | 21.63 | 59 | P | P | 03 23 51.0 | -0.2 |
| | baz=278 | | | | | | |
| M17K | Holitna River | 21.67 | 64 | P | P | 03 23 51.5 | -0.1 |
| | baz=283,SNR=11 | | | | | | |
| E20K | Nigu River | 21.68 | 45 | P | P | 03 23 50.9 | -0.9 |
| | baz=266,SNR=16 | | | | | | |
| O16K | Kokwok River B | 21.81 | 69 | P | P | 03 23 53.3 | +0.2 |
| | baz=287 | | | | | | |
| F20K | Avaraart Lake | 21.81 | 49 | P | P | 03 23 52.9 | -0.2 |
| | baz=270 | | | | | | |
| L18K | Granite Mounta | 21.85 | 62 | IAmb | IAmb | 03 23 58.0 | |
| | comp=Z,171nm,1.6s | | | | | | |
| L18K | Granite Mounta | 21.85 | 62 | P | P | 03 23 53.4 | -0.1 |
| | baz=281,SNR=17 | | | | | | |
| A21K | Barrow | 21.95 | 37 | P | P | 03 23 54.5 | -0.1 |
| | baz=258 | | | | | | |
| USA0B | Ussuriysk Arra | 21.96 | 240 | P | P | 03 23 53.6 | -1.3 |
| USA0B | Ussuriysk Arra | 21.96 | 240 | *i* P | P | 03 23 53.6 | -1.3 |
| USRK | Ussuriysk Ar. | 21.96 | 240 | P | P | 03 23 53.8 | -1.1 |
| USRK | Ussuriysk Ar. | 21.96 | 240 | P | P | 03 23 55.1 | +0.2 |
| | comp=Z,34nm,0.9s,baz=46,slow=8.2,SNR=60 | | | | | | |
| USRK | | | | LR | LR | 03 33 44.0 | |
| | comp=Z,2µm,18.3s,baz=40,slow=40 comp=Z,34nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 21.96 | 240 | P | P | 03 23 53.8 | -1.1 |
| N17K | Nushagak Hills | 21.99 | 66 | P | P | 03 23 54.7 | -0.4 |
| | baz=285,SNR=7.0 | | | | | | |
| P16K | Nushagak River | 22.02 | 71 | P | P | 03 23 55.5 | 0.0 |
| | baz=288 | | | | | | |
| J19K | Poorman | 22.04 | 57 | P | P | 03 23 55.1 | -0.5 |
| | baz=278,SNR=24 | | | | | | |
| SDPT | Sand Point | 22.14 | 81 | P | P | 03 23 56.4 | -0.2 |
| | baz=296 | | | | | | |
| H20K | Anotleneega Mo | 22.21 | 53 | P | P | 03 23 57.2 | -0.2 |
| | baz=274,SNR=31 | | | | | | |
| S14K | Fog Glacier | 22.22 | 78 | P | P | 03 23 57.3 | -0.4 |
| | baz=294 | | | | | | |
| O17K | Koliganek Bris | 22.24 | 68 | P | P | 03 23 57.8 | 0.0 |
| | baz=287,SNR=6.8 | | | | | | |
| C21K | Knifeblade Rid | 22.26 | 43 | P | P | 03 23 57.5 | -0.4 |
| | baz=266,SNR=18 | | | | | | |
| B21K | Ikpikpuk River | 22.36 | 42 | P | P | 03 23 58.4 | -0.5 |
| | baz=264 | | | | | | |
| M18K | Stony River | 22.40 | 64 | P | P | 03 23 59.2 | -0.3 |
| | baz=283,SNR=6.4 | | | | | | |
| A22K | Sinclair Lake | 22.42 | 38 | P | P | 03 23 59.0 | -0.6 |
| | baz=261 | | | | | | |
| I20K | Naaghedeneel | 22.44 | 55 | IAmb | IAmb | 03 24 15.9 | |
| | comp=Z,136nm,1.4s | | | | | | |
| I20K | Naaghedeneel | 22.44 | 55 | P | P | 03 23 59.5 | -0.3 |
| | baz=276,SNR=15 | | | | | | |
| E21K | Killik River | 22.51 | 45 | P | P | 03 24 00.0 | -0.6 |
| | baz=268 | | | | | | |
| N18K | Kilae Creek | 22.57 | 66 | P | P | 03 24 01.0 | -0.3 |
| | baz=285 | | | | | | |
| J20K | Nowinta River | 22.66 | 56 | IAmb | IAmb | 03 24 06.5 | |
| | comp=Z,187nm,1.2s | | | | | | |
| J20K | Nowinta River | 22.66 | 56 | P | P | 03 24 01.6 | -0.6 |
| | baz=278,SNR=47 | | | | | | |
| F21K | Alatna River | 22.69 | 48 | P | P | 03 24 01.6 | -1.0 |
| F21K | Alatna River | 22.69 | 48 | P | P | 03 24 02.2 | -0.4 |
| | baz=271,SNR=39 | | | | | | |
| L19K | White Mountain | 22.70 | 62 | P | P | 03 24 02.5 | -0.2 |
| | baz=282,SNR=8.7 | | | | | | |
| G21K | Allakaket | 22.70 | 50 | IAmb | IAmb | 03 24 06.9 | |
| | comp=Z,107nm,1.1s | | | | | | |
| G21K | Allakaket | 22.70 | 50 | P | P | 03 24 02.4 | -0.3 |
| | baz=273,SNR=42 | | | | | | |
| P17K | Kvichak River | 22.73 | 70 | P | P | 03 24 02.6 | -0.4 |
| | baz=288,SNR=5.6 | | | | | | |
| MDJ | Mudanjiang | 22.75 | 245 | P | P | 03 24 02.4 | -0.9 |
| MDJ | Mudanjiang | 22.75 | 245 | P | P | 03 24 00.0 | -3.3 |
| MDJ | | | | pP | sP | 03 24 09.5 | +2.1 |
| MDJ | | | | sP | pP | 03 24 15.0 | +8.8 |
| MDJ | | | | PP | PnPn | 03 24 34.0 | +6.9 |
| MDJ | | | | S | S | 03 28 10.5 | -1.4 |
| MDJ | | | | SS | SnSn | 03 28 49.0 | +7.3 |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,480nm,5.0s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,4µm,12.8s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,4µm,12.4s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,7µm,12.5s | | | | | | |
| CHGN | Chignik | 22.79 | 78 | P | P | 03 24 03.0 | -0.6 |
| | baz=294 | | | | | | |
| Q16K | King Salmon | 22.80 | 71 | P | P | 03 24 03.5 | -0.1 |
| | baz=289 | | | | | | |
| CHNA | Chernabura Isl | 22.82 | 82 | P | P | 03 24 03.2 | -0.7 |
| | baz=297 | | | | | | |
| K20K | Telida | 22.82 | 58 | P | P | 03 24 03.7 | -0.3 |
| | baz=280 | | | | | | |
| B22K | Teshekpuk Lake | 22.84 | 40 | P | P | 03 24 03.4 | -0.7 |
| | baz=264,SNR=7.2 | | | | | | |
| M19K | Big River Lodg | 22.97 | 62 | P | P | 03 24 05.3 | -0.2 |
| | baz=283,SNR=8.3 | | | | | | |
| BNX | BinXian | 22.98 | 249⇑ | P | P | 03 24 04.3 | -1.4 |
| BNX | | | | pP | pP | 03 24 07.3 | -1.2 |
| BNX | | | | pmax | pmax | | |
| | comp=Z,81nm,1.3s | | | | | | |
| BNX | | | | pmax | pmax | | |
| | comp=Z,540nm,5.4s | | | | | | |
| BNX | | | | LR | LR | | |
| | comp=Z,5µm,15.2s | | | | | | |
| BNX | | | | LR | LR | | |
| | comp=Z,4µm,13.6s | | | | | | |
| BNX | | | | LR | LR | | |
| | comp=Z,8µm,14.7s | | | | | | |
| D22K | Ayikyak River | 23.00 | 44 | P | P | 03 24 05.2 | -0.6 |
| | baz=268,SNR=26 | | | | | | |
| H21K | Melozitna Rive | 23.05 | 52 | P | P | 03 24 06.2 | -0.2 |
| | baz=276,SNR=14 | | | | | | |
| L20K | Farewell, AK | 23.08 | 61 | P | P | 03 24 06.6 | 0.0 |
| | baz=282 | | | | | | |
| O18K | Koktuh Hills | 23.13 | 67 | P | P | 03 24 07.2 | +0.1 |
| O18K | Koktuh Hills | 23.13 | 67 | P | P | 03 24 06.7 | -0.5 |
| | baz=288 | | | | | | |
| F22K | John River | 23.18 | 47 | P | P | 03 24 07.4 | -0.3 |
| | baz=272 | | | | | | |
| N19K | Bonanza Creek | 23.20 | 65 | IAmb | IAmb | 03 24 10.9 | |
| | comp=Z,245nm,1.9s | | | | | | |
| N19K | Bonanza Creek | 23.20 | 65 | P | P | 03 24 07.3 | -0.7 |
| | baz=286,SNR=6.4 | | | | | | |
| P18K | Big Mountain, | 23.26 | 69 | IAmb | IAmb | 03 24 12.3 | |
| | comp=Z,105nm,1.2s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| P18K | **Big Mountain,** baz=288,SNR=7.3 | 23.26 | 69 | P | | **P** | 03 24 08.2 | -0.4 |
| BOD | **Bodaibo** | 23.27 | 287 | *e*P | | **P** | 03 24 07.7 | -0.9 |
| BOD | comp=Z,118nm,1.7s | | | pmax | | pmax | | |
| E22K | **Anaktuvuk Pass** baz=271,SNR=46 | 23.31 | 46 | P | | **P** | 03 24 08.2 | -0.7 |
| R17L | **Mt. Peulik Vol** baz=292 | 23.31 | 73 | P | | **P** | 03 24 08.2 | -0.8 |
| Q17K | **Contact Creek** baz=291 | 23.32 | 72 | P | | **P** | 03 24 08.9 | -0.3 |
| I21K | **Tanana** baz=278 | 23.45 | 53 | P | | **P** | 03 24 09.8 | -0.5 |
| O19K | **Port Alsworth** comp=Z,122nm,1.6s | 23.45 | 66 | IAmb | | IAmb | 03 24 13.0 | |
| O19K | **Port Alsworth** baz=287 | 23.45 | 66 | P | | **P** | 03 24 09.8 | -0.5 |
| G22K | **Bettles** baz=274,SNR=35 | 23.47 | 49 | P | | **P** | 03 24 09.7 | -0.8 |
| M20K | **Styx River** comp=Z,240nm,1.8s | 23.56 | 62 | IAmb | | IAmb | 03 24 14.5 | |
| M20K | **Styx River** baz=284 | 23.56 | 62 | P | | **P** | 03 24 11.5 | 0.0 |
| MSHR | **Mys Shultsa** | 23.61 | 239 | *ce*P | | **P** | 03 24 09.9 | -2.1 |
| MSHR | comp=Z,24nm,2.5s | | | pmax | | pmax | | |
| H22K | **Ishtalitna Cre** baz=276,SNR=56 | 23.61 | 52 | P | | **P** | 03 24 11.7 | -0.3 |
| Q18K | **Katmai Hardscr** baz=290,SNR=11 | 23.62 | 70 | P | | **P** | 03 24 11.7 | -0.4 |
| D23K | **Nanushuk River** comp=Z,196nm,1.8s | 23.72 | 44 | IAmb | | IAmb | 03 24 15.3 | |
| D23K | **Nanushuk River** baz=270,SNR=18 | 23.72 | 44 | P | | **P** | 03 24 12.8 | -0.2 |
| C23K | **Itkillik River** | 23.77 | 42 | P | | **P** | 03 24 13.2 | -0.2 |
| C23K | **Itkillik River** baz=268,SNR=30 | 23.77 | 42 | P | | **P** | 03 24 12.9 | -0.4 |
| COLD | **Coldfoot** baz=274,SNR=61 | 23.96 | 48 | P | | **P** | 03 24 14.7 | -0.6 |
| MLY | **Manley** comp=Z,238nm,1.6s | 23.99 | 54 | IAmb | | IAmb | 03 24 18.1 | |
| MLY | **Manley** baz=279,SNR=59 | 23.99 | 54 | P | | **P** | 03 24 15.4 | -0.2 |
| BPAW | **Bear Paw Mtn.** baz=281,SNR=55 | 24.04 | 56 | P | | **P** | 03 24 16.5 | +0.4 |
| G23K | **Bananza Creek** comp=Z,92nm,1.1s | 24.08 | 49 | IAmb | | IAmb | 03 24 18.3 | |
| G23K | **Bananza Creek** baz=276,SNR=38 | 24.08 | 49 | P | | **P** | 03 24 16.0 | -0.4 |
| TOLK | **Toolik Lake Re** baz=272,SNR=93 | 24.13 | 45 | P | | **P** | 03 24 16.5 | -0.4 |
| E23K | **Chandalar** baz=273,SNR=108 | 24.14 | 46 | P | | **P** | 03 24 16.8 | -0.2 |
| P19K | **Oil Pt** baz=289 | 24.14 | 67 | P | | **P** | 03 24 17.0 | -0.1 |
| N20K | **Mount Spurr** baz=286,SNR=8.5 | 24.16 | 63 | P | | **P** | 03 24 17.2 | -0.1 |
| SPCR | **Spurr Chakacha** baz=286,SNR=7.4 | 24.16 | 63 | P | | **P** | 03 24 17.2 | -0.1 |
| Q19K | **Cape Douglas,** baz=290 | 24.19 | 69 | P | | **P** | 03 24 17.6 | +0.1 |
| SKT | **Skwentna** | 24.27 | 61 | P | | **P** | 03 24 18.6 | +0.5 |
| SKT | comp=Z,197nm,1.9s | | | IAmb | | IAmb | 03 24 22.3 | |
| SKT | **Skwentna** baz=285,SNR=14 | 24.27 | 61 | P | | **P** | 03 24 18.2 | +0.1 |
| R18K | **Karluk** baz=293 | 24.29 | 72 | P | | **P** | 03 24 18.1 | -0.2 |
| O20K | **Slope Mountain** baz=288 | 24.30 | 66 | P | | **P** | 03 24 17.9 | -0.6 |
| H23K | **Yukon River** baz=278 | 24.37 | 51 | P | | **P** | 03 24 19.1 | 0.0 |
| D24K | **Happy Valley** comp=Z,153nm,1.2s | 24.39 | 43 | IAmb | | IAmb | 03 24 22.4 | |
| D24K | **Happy Valley** baz=271 | 24.39 | 43 | P | | **P** | 03 24 18.9 | -0.3 |
| CHIR | **Chirikof Islan** baz=296 | 24.41 | 77 | P | | **P** | 03 24 19.1 | -0.5 |
| C24K | **Franklin Bluff** baz=270 | 24.43 | 42 | P | | **P** | 03 24 19.3 | -0.2 |
| I23K | **Minto, Yukon-K** baz=280,SNR=32 | 24.55 | 53 | P | | **P** | 03 24 20.2 | -0.5 |
| E24K | **Your Creek** baz=274 | 24.56 | 46 | P | | **P** | 03 24 20.4 | -0.4 |
| JSD | **Sado** | 24.62 | 222 | P | | **P** | 03 24 20.6 | -0.9 |
| JSD | **Sado** comp=Z,94nm,1.1s | 24.62 | 222 | IAmb | | IAmb | 03 24 22.9 | |
| CUT | **Chulitna** baz=285 | 24.73 | 60 | P | | **P** | 03 24 21.8 | -0.5 |
| SUA | **Susitna One** baz=286 | 24.77 | 62 | P | | **P** | 03 24 21.9 | -0.9 |
| NEA2 | **Nenana** comp=Z,71nm,1.2s | 24.77 | 54 | IAmb | | IAmb | 03 24 25.7 | |
| NEA2 | **Nenana** baz=281,SNR=28 | 24.77 | 54 | P | | **P** | 03 24 22.2 | -0.5 |
| CAPN | **Captain Cook N** baz=288 | 24.78 | 64 | P | | **P** | 03 24 22.5 | -0.3 |
| SII | **Sitkinak Islan** baz=295 | 24.83 | 75 | P | | **P** | 03 24 22.7 | -0.6 |
| F24K | **Squaw Lake** | 24.83 | 47 | P | | **P** | 03 24 23.3 | +0.1 |
| F24K | **Squaw Lake** baz=276,SNR=60 | 24.83 | 47 | P | | **P** | 03 24 23.1 | -0.1 |
| HOM | **Homer** baz=290 | 24.90 | 66 | P | | **P** | 03 24 23.1 | -0.8 |
| Q20K | **Shuyak Island** baz=292 | 24.91 | 69 | P | | **P** | 03 24 23.8 | -0.1 |
| M22K | **Willow** | 24.97 | 61 | P | | **P** | 03 24 23.5 | -0.9 |
| M22K | **Willow** baz=286 | 24.97 | 61 | P | | **P** | 03 24 23.7 | -0.7 |
| OHAK | **Old Harbor** baz=294 | 25.00 | 73 | P | | **P** | 03 24 23.9 | -0.9 |
| MCK | **McKinley** baz=283,SNR=39 | 25.00 | 56 | P | | **P** | 03 24 24.5 | -0.3 |
| H24K | **Noodor Dome** baz=279 | 25.05 | 51 | P | | **P** | 03 24 24.9 | -0.3 |
| G24K | **Hadweenzic Riv** baz=278,SNR=31 | 25.08 | 49 | P | | **P** | 03 24 24.9 | -0.6 |
| RND | **Reindeer** comp=Z,210nm,1.9s | 25.11 | 57 | IAmb | | IAmb | 03 24 29.7 | |
| KDAK | **Kodiak Island** comp=Z,1µm,20.9s,baz=308,slow=37 | 25.13 | 71 | LR | | LR | 03 34 21.3 | |
| KDAK | **Kodiak Island** baz=293 | 25.13 | 71 | P | | **P** | 03 24 25.4 | -0.6 |
| KDAK | **Kodiak Island** | 25.13 | 71 | *i* P | | **P** | 03 24 25.8 | -0.1 |
| KDAK | comp=Z,61nm,1.2s | | | pmax | | pmax | | |
| WRH | **Wood River Hil** comp=Z,159nm,1.4s | 25.21 | 54 | IAmb | | IAmb | 03 24 29.4 | |
| COLA | **College** | 25.23 | 53 | P | | **P** | 03 24 26.4 | -0.4 |
| COLA | **College** | 25.23 | 53 | P | | **P** | 03 24 26.6 | -0.1 |
| COLA | **College** baz=281 | 25.23 | 53 | P | | **P** | 03 24 26.0 | -0.8 |
| COLA | **College** | 25.23 | 53 | *i* P | | **P** | 03 24 26.3 | -0.5 |
| COLA | comp=Z,55nm,1.3s | | | pmax | | pmax | | |
| D25K | **Kavik River** baz=273 | 25.26 | 43 | P | | **P** | 03 24 26.5 | -0.6 |
| CCB | **Clear Creek Bu** comp=Z,91nm,1.5s | 25.29 | 54 | IAmb | | IAmb | 03 24 30.0 | |
| RC01 | **Rabbit Creek A** baz=288 | 25.34 | 63 | P | | **P** | 03 24 26.6 | -1.2 |
| CN2 | **Changchun** | 25.34 | 249 | *e*P | | **P** | 03 24 28.5 | +0.5 |
| CN2 | | | | *e*PP | | **PnPn** | 03 25 06.8 | +4.3 |
| CN2 | | | | *e*S | | **S** | 03 28 50.8 | -3.2 |
| CN2 | | | | *es*S | | sS | 03 28 57.8 | -1.2 |
| CN2 | comp=Z,30nm,1.0s | | | pmax | | pmax | | |
| CN2 | comp=Z,2µm,14.0s | | | LR | | LR | | |
| CN2 | comp=Z,2µm,14.0s | | | LR | | LR | | |
| CN2 | comp=Z,2µm,15.0s | | | LR | | LR | | |
| POKR | **Poker Plat Res** baz=281,SNR=6.5 | 25.36 | 53 | P | | **P** | 03 24 26.7 | -1.3 |
| WAT1 | **Susitna Watana** baz=285 | 25.39 | 58 | P | | **P** | 03 24 27.1 | -1.2 |
| PMR | **Palmer** baz=287 | 25.47 | 61 | P | | **P** | 03 24 28.2 | -0.7 |
| GHO | **Glory Hole Cre** | 25.51 | 61 | P | | **P** | 03 24 30.1 | +0.6 |
| O22K | **Cooper Landing** baz=289 | 25.54 | 64 | P | | **P** | 03 24 28.6 | -1.1 |
| G25K | **Bearman Lake** baz=279,SNR=12 | 25.61 | 49 | P | | **P** | 03 24 29.5 | -0.7 |
| ILAR | **Eielson Array** | 25.65 | 53 | P | | **P** | 03 24 29.4 | -1.2 |
| ILAR | **Eielson Array** comp=Z,12nm,0.9s,baz=267,slow=8.1,SNR=86 | 25.65 | 53 | P | | **P** | 03 24 29.9 | -0.8 |
| ILAR | comp=Z,0.9nm,0.4s,baz=272,slow=3.7,SNR=9.5 | | | PcP | | **PcP** | 03 28 01.2 | +0.5 |
| ILAR | comp=Z,497nm,19.9s,baz=277,slow=37 | | | LR | | LR | 03 34 40.3 | |
| F25K | comp=Z,12nm,0.9s **Christian Rive** baz=277,SNR=36 | 25.68 | 47 | P | | **P** | 03 24 29.6 | -1.3 |
| HDA | **Harding Lake** comp=Z,88nm,1.6s | 25.71 | 54 | IAmb | | IAmb | 03 24 35.0 | |
| HDA | **Harding Lake** baz=283,SNR=17 | 25.71 | 54 | P | | **P** | 03 24 30.1 | -1.1 |
| C26K | **Camden Bay** baz=273 | 25.74 | 41 | P | | **P** | 03 24 30.9 | -0.4 |
| SML | **Sawmill** baz=287,SNR=13 | 25.77 | 60 | P | | **P** | 03 24 31.2 | -0.7 |
| SEW | **Seward** baz=290,SNR=5.8 | 25.79 | 65 | P | | **P** | 03 24 30.8 | -1.1 |
| H25L | **Birch Creek** baz=280,SNR=19 | 25.81 | 50 | P | | **P** | 03 24 30.8 | -1.2 |
| WAT6 | **Susitna Watana** baz=286,SNR=11 | 25.82 | 59 | P | | **P** | 03 24 30.7 | -1.7 |
| KNK | **Knik Glacier** comp=Z,44nm,0.8s | 25.83 | 61 | IAmb | | IAmb | 03 24 34.0 | |
| KNK | **Knik Glacier** baz=288,SNR=7.6 | 25.83 | 61 | P | | **P** | 03 24 31.6 | -0.7 |
| DHY | **Denali Highway** baz=285,SNR=40 | 25.84 | 57 | P | | **P** | 03 24 31.5 | -1.1 |
| MJB9 | **Matsu-Tunnel** comp=Z,98nm,1.1s | 25.98 | 220 | IAmb | | IAmb | 03 24 36.5 | |
| MAJO | **Matsushiro** | 25.99 | 220 | P | | **P** | 03 24 33.0 | -0.9 |
| MAJO | **Matsushiro** | 25.99 | 220 | P | | **P** | 03 24 32.3 | -1.6 |
| MAJO | comp=Z,101nm,1.1s | | | IAmb | | IAmb | 03 24 36.6 | |
| MAJO | **Matsushiro** | 25.99 | 220 | *i* P | | **P** | 03 24 31.5 | -2.4 |
| MAJO | comp=Z,119nm,1.1s | | | pmax | | pmax | | |
| MJAR | **Mashiro Arr** comp=Z,97nm,1.1s,baz=18,slow=7.2,SNR=55 | 25.99 | 220 | P | | **P** | 03 24 33.4 | -0.5 |
| MJAR | comp=Z,4.5nm,0.9s,baz=56,slow=1.0,SNR=7.3 | | | PcP | | **PcP** | 03 28 03.0 | +1.1 |
| MJAR | comp=Z,1µm,19.2s,baz=30,slow=37 | | | LR | | LR | 03 35 01.4 | |
| FYU | comp=Z,97nm,1.1s **Fort Yukon** comp=Z,153nm,1.4s | 25.99 | 49 | IAmb | | IAmb | 03 24 37.6 | |
| M23K | **Glacier View** baz=288,SNR=12 | 26.05 | 60 | P | | **P** | 03 24 33.8 | -0.5 |
| PWL | **Port Wells** comp=Z,65nm,0.8s | 26.06 | 63 | IAmb | | IAmb | 03 24 36.3 | |
| PWL | **Port Wells** baz=289,SNR=14 | 26.06 | 63 | P | | **P** | 03 24 33.3 | -1.2 |
| PRP | **Porcupine Dome** comp=Z,56nm,1.0s | 26.06 | 52 | IAmb | | IAmb | 03 24 37.1 | |
| PRP | **Porcupine Dome** baz=282,SNR=20 | 26.06 | 52 | P | | **P** | 03 24 34.0 | -0.6 |
| BMAR | **Burnt Mountain** | 26.11 | 47 | P | | **P** | 03 24 34.5 | -0.3 |
| CIT | **Chita** | 26.17 | 275 | *e*P | | **P** | 03 24 35.8 | +0.3 |
| CIT | | | | *e* | | | 03 25 16.8 | |
| CIT | | | | *e* | | | 03 25 24.4 | |
| CIT | | | | *e* | | | 03 30 32.4 | |
| CIT | comp=Z,141nm,1.6s | | | pmax | | pmax | | |
| C27K | **Jago River** baz=275,SNR=34 | 26.17 | 42 | P | | **P** | 03 24 34.6 | -0.7 |
| SCM | **Sheep Creek Mo** comp=Z,87nm,0.9s | 26.22 | 60 | IAmb | | IAmb | 03 24 40.3 | |
| SCM | **Sheep Creek Mo** baz=288,SNR=17 | 26.22 | 60 | P | | **P** | 03 24 35.1 | -0.8 |
| F26K | **Sheenjek River** baz=278,SNR=30 | 26.23 | 46 | P | | **P** | 03 24 34.5 | -1.4 |
| J25K | **Salcha River,** baz=284,SNR=8.2 | 26.32 | 53 | P | | **P** | 03 24 35.2 | -1.6 |
| K24K | **Donnelly Dome** baz=285 | 26.35 | 55 | P | | **P** | 03 24 35.9 | -1.1 |
| G26K | **Porcupine Rive** baz=280 | 26.49 | 48 | P | | **P** | 03 24 37.2 | -1.0 |
| GLI | **Glacier Island** baz=290 | 26.63 | 62 | P | | **P** | 03 24 38.4 | -1.2 |
| M24K | **Tolsona, Glenn** baz=288,SNR=6.9 | 26.65 | 59 | P | | **P** | 03 24 38.4 | -1.4 |
| PAX | **Paxson** baz=287,SNR=6.7 | 26.71 | 57 | P | | **P** | 03 24 38.6 | -1.8 |
| RIDG | **Independent Ri** comp=Z,75nm,1.3s | 26.77 | 55 | IAmb | | IAmb | 03 24 42.4 | |
| RIDG | **Independent Ri** baz=286,SNR=22 | 26.77 | 55 | P | | **P** | 03 24 38.6 | -2.2 |
| P23K | **Montague Islan** baz=291 | 26.79 | 64 | P | | **P** | 03 24 39.5 | -1.5 |
| KLU | **Klutina** baz=289 | 26.96 | 60 | P | | **P** | 03 24 40.9 | -1.8 |
| HARP | **HAARP** baz=288 | 27.02 | 58 | P | | **P** | 03 24 41.3 | -1.7 |
| SCRK | **Sand Creek** baz=286,SNR=25 | 27.07 | 55 | P | | **P** | 03 24 42.3 | -1.4 |
| I26K | **Coal Creek Min** baz=284 | 27.08 | 51 | P | | **P** | 03 24 42.4 | -1.1 |
| E27K | **Coleen River** baz=279,SNR=28 | 27.11 | 45 | P | | **P** | 03 24 42.6 | -1.2 |
| J26L | **Joseph Creek** baz=285 | 27.11 | 53 | P | | **P** | 03 24 42.5 | -1.5 |
| JGF | **Kuroka** | 27.13 | 221 | P | | **P** | 03 24 44.3 | 0.0 |
| JGF | **Kuroka** comp=Z,130nm,1.3s | 27.13 | 221 | IAmb | | IAmb | 03 24 46.9 | |
| D27M | **Malcolm River** baz=278 | 27.18 | 43 | P | | **P** | 03 24 43.3 | -1.2 |
| G27K | **Doyon Strip** baz=282,SNR=39 | 27.34 | 48 | P | | **P** | 03 24 44.6 | -1.3 |
| EYAK | **Cordova Ski Ar** | 27.36 | 62 | P | | **P** | 03 24 46.8 | +0.7 |
| EYAK | **Cordova Ski Ar** baz=291 | 27.36 | 62 | P | | **P** | 03 24 45.4 | -0.7 |
| INU | **Inuyama** | 27.47 | 221 | P | | **P** | 03 24 47.1 | -0.2 |
| INU | **Inuyama** | 27.47 | 221 | P | | **P** | 03 24 45.4 | -1.9 |
| INU | comp=Z,136nm,1.6s | | | IAmb | | IAmb | 03 24 51.2 | |
| Q23K | **Middleton Isla** baz=293 | 27.50 | 65 | P | | **P** | 03 24 45.9 | -1.4 |
| H27K | **Steamboat Moun** baz=283,SNR=26 | 27.52 | 49 | P | | **P** | 03 24 46.7 | -0.8 |
| N25K | **Chitina, Valde** baz=290 | 27.52 | 60 | P | | **P** | 03 24 45.9 | -1.8 |
| L26K | **Log Cabin Wild** baz=288 | 27.62 | 56 | P | | **P** | 03 24 46.8 | -1.6 |
| I27K | **Kandik River** baz=284,SNR=20 | 27.63 | 51 | P | | **P** | 03 24 47.2 | -1.4 |
| SNY | **Shenyang** | 27.73 | 248 | ‖P | | **P** | 03 24 49.5 | -0.1 |
| SNY | | | | S | | **S** | 03 29 32.8 | +1.1 |
| SNY | comp=Z,18nm,1.6s | | | pmax | | pmax | | |
| SNY | comp=Z,83nm,3.7s | | | pmax | | pmax | | |
| SNY | comp=Z,2µm,14.9s | | | LR | | LR | | |
| SNY | comp=Z,2µm,16.1s | | | LR | | LR | | |
| SNY | comp=Z,4µm,15.4s | | | LR | | LR | | |
| BMRM | **Bremner River** baz=291 | 27.74 | 61 | P | | **P** | 03 24 48.4 | -1.2 |
| E28M | **Babbage River** baz=280 | 27.79 | 44 | P | | **P** | 03 24 49.1 | -0.8 |
| F28M | **Old Crow** baz=282,SNR=9.5 | 27.86 | 46 | P | | **P** | 03 24 49.9 | -0.6 |
| K27K | **Chicken** baz=287 | 27.86 | 54 | P | | **P** | 03 24 49.3 | -1.3 |
| RAGM | **Ragged Mountai** | 27.92 | 62 | P | | **P** | 03 24 51.3 | +0.2 |
| D28M | **Stokes Point** baz=280 | 27.95 | 42 | P | | **P** | 03 24 50.2 | -1.1 |
| M26K | **Nabesna, AK** baz=289,SNR=14 | 27.97 | 58 | P | | **P** | 03 24 50.3 | -1.3 |
| EGAK | **Eagle** baz=286,SNR=30 | 28.03 | 52 | P | | **P** | 03 24 50.0 | -2.1 |
| KAIM | **Kayak Island** baz=293 | 28.21 | 63 | P | | **P** | 03 24 51.8 | -1.9 |
| L27K | **Beaver Creek,** comp=Z,77nm,1.5s | 28.27 | 56 | IAmb | | IAmb | 03 24 56.5 | |
| L27K | **Beaver Creek,** baz=289,SNR=28 | 28.27 | 56 | P | | **P** | 03 24 53.5 | -0.8 |
| BCAR | **Beaver Creek A** | 28.28 | 56 | P | | **P** | 03 24 53.8 | -0.6 |
| MCARA | **McCarthy VSAT** baz=291,SNR=5.5 | 28.31 | 60 | P | | **P** | 03 24 53.8 | -0.8 |
| I28M | **Miner Creek** comp=Z,62nm,1.2s | 28.35 | 50 | IAmb | | IAmb | 03 24 57.8 | |
| I28M | **Miner Creek** baz=286,SNR=35 | 28.35 | 50 | P | | **P** | 03 24 53.9 | -1.1 |
| E29M | **Blow River** baz=282,SNR=12 | 28.43 | 44 | P | | **P** | 03 24 54.5 | -1.0 |
| M27K | **Edge Creek, AK** baz=290,SNR=7.4 | 28.48 | 57 | P | | **P** | 03 24 55.0 | -1.2 |
| CRQM | **Cirque** comp=Z,64nm,1.5s | 28.48 | 61 | IAmb | | IAmb | 03 25 20.8 | |
| CRQE | **Cirque** baz=292 | 28.51 | 61 | P | | **P** | 03 24 55.0 | -1.5 |
| BGLC | **Bering Glacier** baz=293 | 28.66 | 62 | P | | **P** | 03 24 56.7 | -1.0 |
| G29M | **Pine Creek** | 28.72 | 47 | P | | **P** | 03 24 58.0 | -0.2 |
| G29M | comp=Z,52nm,1.2s | | | IAmb | | IAmb | 03 25 01.1 | |
| G29M | **Pine Creek** baz=285,SNR=20 | 28.72 | 47 | P | | **P** | 03 24 56.8 | -1.4 |
| H29M | **Whitestone** baz=286,SNR=22 | 28.76 | 49 | P | | **P** | 03 24 57.5 | -1.0 |
| DAWY | **Dawson** baz=289,SNR=9.2 | 28.98 | 53 | P | | **P** | 03 24 59.4 | -1.2 |
| I29M | **Ogilvie Camp,** baz=287,SNR=17 | 29.03 | 50 | P | | **P** | 03 25 00.0 | -0.9 |
| KS19 | **Wonju Array Si** | 29.21 | 237 | P | | **P** | 03 25 02.9 | +0.2 |
| KS19 | comp=Z,162nm,1.9s | | | IAmb | | IAmb | 03 25 50.8 | |
| CTG | **Chitna Glacier** baz=293,SNR=8.4 | 29.22 | 60 | P | | **P** | 03 25 01.9 | -1.0 |
| KSRS | **Korea Array** comp=Z,23nm,1.0s,baz=29,slow=8.4,SNR=31 | 29.22 | 237 | P | | **P** | 03 25 02.6 | -0.2 |
| KSRS | comp=Z,5.3nm,0.9s,baz=25,slow=2.1,SNR=12 | | | PcP | | **PcP** | 03 28 09.6 | -0.1 |
| KSRS | comp=Z,477nm,20.9s,baz=35,slow=35 | | | LR | | LR | 03 36 03.3 | |
| KSAR | **Wonju Array Be** | 29.25 | 237 | P | | **P** | 03 25 01.9 | -1.2 |
| KSAR | **Wonju Array Be** | 29.25 | 237 | P | | **P** | 03 25 01.9 | -1.2 |
| MESA | **MESA** baz=294 | 29.25 | 61 | P | | **P** | 03 25 02.0 | -1.2 |
| YUK3 | **Moose Creek** baz=292 | 29.31 | 58 | P | | **P** | 03 25 02.3 | -1.4 |
| J29N | **Klondike Camp** baz=289 | 29.34 | 52 | P | | **P** | 03 25 03.0 | -0.7 |
| EPYK | **Eagle Plains** comp=Z,55nm,1.3s | 29.36 | 48 | IAmb | | IAmb | 03 25 06.2 | |
| EPYK | **Eagle Plains** baz=286,SNR=17 | 29.36 | 48 | P | | **P** | 03 25 03.0 | -1.0 |
| F30M | **Barrier River** baz=285,SNR=28 | 29.38 | 45 | P | | **P** | 03 25 02.7 | -1.3 |
| G30M | **tAoh Zraii Nji** baz=286,SNR=16 | 29.38 | 47 | P | | **P** | 03 25 03.5 | -0.6 |
| TABL | **Table Mountain** comp=Z,116nm,2.0s | 29.52 | 61 | IAmb | | IAmb | 03 25 10.1 | |
| YUK8 | **Steele Glacier** baz=293 | 29.80 | 59 | P | | **P** | 03 25 07.2 | -0.9 |
| O28M | **Mount Upton** baz=294,SNR=8.1 | 29.82 | 60 | P | | **P** | 03 25 07.5 | -0.7 |
| K29M | **Barlow Dome** baz=290 | 29.83 | 53 | P | | **P** | 03 25 07.2 | -1.0 |
| I30M | **Mount Dempster** baz=289,SNR=14 | 29.84 | 50 | P | | **P** | 03 25 07.4 | -0.8 |
| M29M | **Somme Creek** | 29.93 | 56 | P | | **P** | 03 25 09.6 | +0.5 |
| M29M | comp=Z,92nm,1.9s | | | IAmb | | IAmb | 03 25 12.2 | |
| M29M | **Somme Creek** baz=292,SNR=12 | 29.93 | 56 | P | | **P** | 03 25 08.8 | -0.3 |
| XLT | **XiLinHaoTe** | 29.97 | 259 | *e*P | | P | 03 25 16.5 | +6.9 |
| XLT | | | | S | | S | 03 30 16.0 | +8.9 |
| XLT | comp=Z,150nm,4.1s | | | pmax | | pmax | | |
| XLT | comp=N,270nm,14.9s | | | LR | | LR | | |
| XLT | comp=E,2µm,13.1s | | | LR | | LR | | |
| XLT | comp=Z,3µm,16.3s | | | LR | | LR | | |
| INK | **Inuvik** | 30.02 | 43 | P | | **P** | 03 25 08.3 | -1.4 |
| INK | comp=Z,88nm,1.5s | | | IAmb | | IAmb | 03 25 12.1 | |
| INK | **Inuvik** comp=Z,1µm,19.4s,baz=272,slow=39 | 30.02 | 43 | LR | | LR | 03 38 18.4 | |
| INK | **Inuvik** baz=286,SNR=26 | 30.02 | 43 | P | | **P** | 03 25 08.7 | -0.9 |
| JMN | **Monobe** | 30.05 | 225 | P | | **P** | 03 25 12.9 | +2.6 |
| JMN | **Monobe** comp=Z,59nm,1.5s | 30.05 | 225 | IAmb | | IAmb | 03 25 27.7 | |
| J30M | **Hart River** | 30.07 | 51 | P | | **P** | 03 25 09.6 | -0.8 |
| J30M | **Hart River** baz=290,SNR=16 | 30.07 | 51 | P | | **P** | 03 25 09.5 | -0.8 |
| G31M | **Satah River** baz=287,SNR=9.9 | 30.14 | 46 | P | | **P** | 03 25 10.4 | -0.2 |
| F31M | **Tsiigehtchic** baz=287,SNR=9.3 | 30.18 | 45 | P | | **P** | 03 25 10.6 | -0.5 |
| YUK4 | **Talbot Arm** baz=293 | 30.27 | 58 | P | | **P** | 03 25 11.4 | -0.8 |
| H31M | **Peel River** baz=289,SNR=10 | 30.46 | 48 | P | | **P** | 03 25 13.2 | -0.4 |
| YUK6 | **Outpost Mounta** baz=294 | 30.56 | 59 | P | | **P** | 03 25 13.9 | -0.9 |
| M30M | **Minto, Yukon** comp=Z,60nm,1.6s | 30.60 | 55 | IAmb | | IAmb | 03 25 18.0 | |
| M30M | **Minto, Yukon** baz=293,SNR=11 | 30.60 | 55 | P | | **P** | 03 25 13.9 | -1.0 |
| PNL | **Peninsula** | 30.64 | 61 | P | | **P** | 03 25 17.1 | +1.9 |
| PNL | **Peninsula** baz=296 | 30.64 | 61 | P | | **P** | 03 25 14.0 | -1.3 |
| O29M | **Mount Kennedy** baz=295,SNR=6.6 | 30.74 | 60 | P | | **P** | 03 25 14.6 | -1.6 |
| IRK | **Irkutsk** | 30.83 | 282 | *e*P | | **P** | 03 25 17.4 | +0.4 |
| IRK | comp=Z,93nm,2.2s | | | pmax | | pmax | | |
| N30M | **Aishikik Lake** baz=294 | 30.91 | 57 | P | | **P** | 03 25 16.6 | -1.1 |
| DL2 | **Dalian** | 30.94 | 247 | P | | **P** | 03 25 18.0 | 0.0 |
| DL2 | | | | S | | **S** | 03 30 26.0 | +3.9 |
| DL2 | comp=Z,33nm,1.2s | | | pmax | | pmax | | |
| DL2 | comp=Z,2µm,15.1s | | | LR | | LR | | |
| DL2 | comp=Z,2µm,14.5s | | | LR | | LR | | |
| DL2 | comp=Z,3µm,14.5s | | | LR | | LR | | |
| P29M | **Windy Craggy** | 31.41 | 61 | P | | **P** | 03 25 22.3 | +0.3 |
| P29M | **Windy Craggy** baz=297 | 31.41 | 61 | P | | **P** | 03 25 21.3 | -0.7 |
| N31M | **Braeburn, Yuko** baz=295,SNR=7.4 | 31.48 | 57 | P | | **P** | 03 25 21.3 | -1.3 |
| P30M | **Million Dollar** baz=296 | 31.54 | 59 | P | | **P** | 03 25 22.4 | -0.9 |
| O30N | **Mendenhall** baz=296,SNR=5.1 | 31.64 | 58 | P | | **P** | 03 25 23.6 | -0.6 |
| JNU | **Nakatsue** comp=Z,879nm,19.4s,baz=40,slow=37 | 31.72 | 228 | LR | | LR | 03 38 43.9 | |
| A36M | **Sachs Harbour** | 31.75 | 35 | P | | **P** | 03 25 24.3 | -0.5 |
| A36M | comp=Z,59nm,0.9s | | | IAmb | | IAmb | 03 25 28.1 | |
| A36M | **Sachs Harbour** baz=286,SNR=20 | 31.75 | 35 | P | | **P** | 03 25 23.9 | -1.0 |
| M31M | **Drury Creek, Y** baz=295,SNR=7.1 | 31.78 | 55 | P | | **P** | 03 25 24.0 | -1.2 |
| ULN | **Ulaanbaatar** | 32.01 | 273 | P | | **P** | 03 25 27.2 | -0.4 |
| ULN | **Ulaanbaatar** | 32.01 | 273 | P | | **P** | 03 25 27.9 | +0.3 |
| ULN | | | | P | | **P** | 03 25 27.9 | +0.3 |
| ULN | **Ulaanbaatar** | 32.01 | 273 | *ce*P | | **P** | 03 25 27.8 | +0.2 |
| ULN | comp=Z,23nm,1.3s | | | pmax | | pmax | | |
| PLBC | **Pleasant Camp** baz=298,SNR=6.0 | 32.11 | 60 | P | | **P** | 03 25 27.6 | -0.6 |
| FARO | **Faro, Yukon** baz=295,SNR=12 | 32.21 | 54 | P | | **P** | 03 25 28.7 | -0.4 |
| WHY | **Whitehorse** baz=297,SNR=9.3 | 32.23 | 58 | P | | **P** | 03 25 28.7 | -0.7 |
| SONM | **Songino Array** | 32.37 | 274 | P | | **P** | 03 25 30.8 | 0.0 |
| SONM | **Songino Array** comp=Z,11nm,0.8s,baz=59,slow=8.2,SNR=40 | 32.37 | 274 | P | | **P** | 03 25 31.3 | +0.5 |
| SONM | comp=Z,9.3nm,0.9s,baz=50,slow=1.7,SNR=16 | | | PcP | | **PcP** | 03 28 17.7 | -0.3 |
| SONM | comp=Z,2µm,18.4s,baz=51,slow=38 | | | LR | | LR | 03 39 12.5 | |
| ZAK | comp=Z,11nm,0.8s **Zakamensk** | 32.41 | 280 | *e*P | | **P** | 03 25 31.1 | 0.0 |
| ZAK | | | | *e* | | | 03 28 19.2 | |
| ZAK | | | | *e* | | | 03 36 03.8 | |
| ZAK | comp=Z,12nm,1.2s | | | pmax | | pmax | | |
| SKAG | **Skagway** | 32.58 | 60 | P | | **P** | 03 25 35.1 | +2.9 |
| SKAG | **Skagway** comp=Z,34nm,1.0s | 32.58 | 60 | IAmb | | IAmb | 03 25 35.8 | |
| SKAG | **Skagway** baz=298,SNR=5.4 | 32.58 | 60 | P | | **P** | 03 25 31.9 | -0.4 |
| BJI | **Beijing** | 32.74 | 254 | P | | **P** | 03 25 33.8 | -0.1 |
| BJI | | | | pP | | **sP** | 03 25 37.5 | -0.6 |

BJI S **S** **03 30 49.8 -0.4**
BJI pmax pmax
comp=Z,9.0nm,1.1s
BJI pmax pmax
comp=Z,100nm,3.8s
BJI LR LR
comp=Z,560nm,13.7s
BJI LR LR
comp=Z,570nm,11.8s
BJI LR LR
comp=Z,930nm,11.7s
**BJT Baijiatuau 32.76 254** P **P** **03 25 34.8 +0.7**
**N32M Quiet Lake 32.79 56** P **P** **03 25 32.6 -1.7**
baz=297
**MOY Mondy 32.83 283** *e*P **P** **03 25 36.0 +1.3**
MOY pmax pmax
comp=Z,63nm,2.3s
**S31K Pelican 32.89 63** P **P** **03 25 33.8 -1.1**
baz=300
**C36M Paulatuk 32.96 39** P **P** **03 25 34.6 -0.8**
**C36M Paulatuk 32.96 39** P **P** **03 25 34.6 -0.8**
baz=291,SNR=21
**P32M Atlin 33.24 59** P **P** **03 25 36.4 -1.8**
baz=299
**P33M Teslin, Yukon 33.34 58** P **P** **03 25 37.8 -1.3**
baz=298,SNR=5.2
**R32K Eaglecrest 33.52 61** P **P** **03 25 39.9 -0.6**
**R32K Eaglecrest 33.52 61** P **P** **03 25 39.2 -1.4**
baz=300,SNR=7.3
**JIS Juneau Island 33.58 61** P **P** **03 25 43.7 +2.7**
**JCJ Chichijima 33.69 207** LR LR 03 39 43.8
comp=Z,166nm,20.4s,baz=352,slow=37
**SIT Sitka 33.77 64** P **P** **03 25 44.7 +2.1**
**SIT Sitka 33.77 64** IAmb IAmb 03 25 46.4
comp=Z,74nm,1.2s
**SIT Sitka 33.77 64** P **P** **03 25 41.7 -0.9**
baz=301
**S32K Killisnoo 33.90 63** P **P** **03 25 42.7 -1.1**
baz=301
**Q32M Nakina River 34.20 59** IAmb IAmb 03 25 50.4
comp=Z,81nm,1.6s
**Q32M Nakina River 34.20 59** P **P** **03 25 45.3 -1.3**
baz=300,SNR=7.6
**HHC Hu-ho-hao-te 34.48 260** *e*P **P** **03 25 49.8 +0.6**
HHC pP sP 03 25 53.8 +0.3
HHC sP pP 03 25 57.3 +5.1
HHC S **S** **03 31 19.3 +1.8**
HHC pmax pmax
comp=Z,15nm,0.5s
HHC pmax pmax
comp=Z,97nm,4.5s
HHC LR LR
comp=Z,2µm,15.3s
HHC LR LR
comp=Z,2µm,15.1s
HHC LR LR
comp=Z,4µm,14.3s
**R33M Jennings River 34.56 58** P **P** **03 25 48.3 -1.4**
baz=300,SNR=13
**TGTN Hyland Airport 34.67 54** P **P** **03 25 48.9 -1.7**
baz=299
**WTLY Watson Lake, Y 35.15 56** P **P** **03 25 55.9 +1.3**
**KNGR Kungurtug, Tuv 35.22 284** *i*P **P** **03 25 55.6 +0.2**
KNGR pmax pmax
comp=Z,17nm,1.0s
**S34M Telegraph Cree 35.25 60** P **P** **03 25 54.3 -1.2**
baz=302,SNR=5.5
**U33K Whale Pass 35.30 64** P **P** **03 25 54.8 -1.1**
baz=303
**BTO Baotou 35.46 261** *e*P **P** **03 25 57.0 -0.6**
BTO pP **sP** **03 26 01.3 -0.6**
BTO sP **pP** **03 26 04.3 +3.7**
BTO S **S** **03 31 33.0 +0.6**
BTO sS **sS** **03 31 38.8 +1.3**
BTO SS **SnSn** **03 33 43.3 -8.1**
BTO pmax pmax
comp=Z,44nm,1.9s
BTO pmax pmax
comp=Z,450nm,4.3s
BTO LR LR
comp=Z,3µm,12.3s
BTO LR LR
comp=Z,2µm,15.8s
BTO LR LR
comp=Z,3µm,18.2s
**DLBC Dease Lake 35.47 59** LR LR 03 41 16.6
comp=Z,1µm,19.7s,baz=312,slow=38
**DLBC Dease Lake 35.47 59** P **P** **03 25 55.6 -1.9**
baz=302,SNR=12
**WRAK Wrangell Islan 35.50 63** P **P** **03 25 55.9 -1.7**
baz=303
**HNS HongShan 35.50 253** ⇑P **P** **03 25 59.3 +1.5**
HNS *e*S **S** **03 31 36.3 +3.4**
HNS pmax pmax
comp=Z,26nm,1.4s
HNS LR LR
comp=Z,4µm,14.3s
HNS LR LR
comp=Z,2µm,15.5s
HNS LR LR
comp=Z,5µm,14.1s
**CRAG Craig 35.66 65** P **P** **03 25 56.7 -2.3**
baz=304
**WRGLY Wrigley 35.80 49** IAmb IAmb 03 26 03.4
comp=Z,72nm,1.6s
**WRGLY Wrigley 35.80 49** P **P** **03 25 59.0 -1.2**
baz=300
**T35M Bob Quinn 36.16 61** P **P** **03 26 04.6 +1.3**
T35M IAmb IAmb 03 26 08.0
comp=Z,42nm,1.0s
**T35M Bob Quinn 36.16 61** P **P** **03 26 02.0 -1.3**
baz=304,SNR=14
**TIY Taiyuan 36.40 255** *e*P **P** **03 26 07.8 +2.2**
TIY S **S** **03 31 45.3 -1.6**
TIY pmax pmax
comp=Z,39nm,0.5s
TIY pmax pmax
comp=Z,140nm,3.8s
TIY LR LR
comp=Z,1µm,11.8s
TIY LR LR
comp=Z,1µm,12.2s
TIY LR LR
comp=Z,1µm,13.2s
**V35K Ketchikan 36.45 64** P **P** **03 26 04.1 -1.6**
baz=305
**LIRD Liard River Hi 36.68 56** P **P** **03 26 06.2 -1.5**
baz=303
**KOTAN Kotaneelee Air 37.16 54** P **P** **03 26 10.9 -0.9**
baz=303
**TOAD Toad River Com 37.36 56** P **P** **03 26 13.1 -0.5**
baz=304,SNR=17
**SSE Sheshan 37.56 239** P **P** **03 26 16.3 +0.8**
SSE S **S** **03 32 01.8 -2.7**
SSE pmax pmax
comp=Z,24nm,0.8s
SSE pmax pmax
comp=Z,290nm,3.6s
SSE LR LR
comp=Z,550nm,12.5s
SSE LR LR
comp=Z,480nm,13.1s
**NJ2 Nanjing 37.82 243** ⇑P **P** **03 26 17.5 -0.2**
NJ2 pmax pmax
comp=Z,22nm,1.0s
NJ2 pmax pmax
comp=Z,320nm,4.5s
NJ2 LR LR
comp=Z,2µm,16.1s
NJ2 LR LR
comp=Z,1µm,16.1s
NJ2 LR LR
comp=Z,2µm,13.3s
**JOW Kunigami 38.34 227** LR LR 03 43 46.9
comp=Z,329nm,18.1s,baz=289,slow=39
**LYN LuoYang 38.86 252** P **P** **03 26 27.0 +0.6**
LYN S **S** **03 32 29.8 +5.7**
LYN pmax pmax
comp=Z,59nm,1.3s
LYN LR LR
comp=Z,5µm,14.2s
LYN LR LR
comp=Z,3µm,14.1s
LYN LR LR
comp=Z,6µm,14.5s
**ZALV Zalesovo Beam 39.38 296** P **P** **03 26 29.2 -1.3**
**ZALV Zalesovo Beam 39.38 296** P **P** **03 26 31.2 +0.7**
comp=Z,1.2nm,0.4s,baz=55,slow=7.8,SNR=6.0
ZALV PP **PP** **03 27 59.5 -1.0**
comp=Z,2.6nm,0.7s,baz=44,slow=8.6,SNR=2.4
ZALV PcP **PcP** **03 28 38.7 +0.2**
comp=Z,9.2nm,0.9s,baz=45,slow=2.2,SNR=7.2
ZALV LR LR 03 44 45.5
comp=Z,640nm,19.4s,baz=45,slow=39
comp=Z,1.2nm,0.4s
**ZALV Zalesovo Beam 39.38 296** P **P** **03 26 29.2 -1.3**
**YKA Yellowknife Ar 39.62 47** P **P** **03 26 31.5 -1.0**
**YKA Yellowknife Ar 39.62 47** P **P** **03 26 32.5 0.0**
comp=Z,7.2nm,0.9s,baz=306,slow=8.5,SNR=46
YKA PcP **PcP** **03 28 39.2 +0.1**
comp=Z,2.7nm,0.8s,baz=318,slow=4.2,SNR=9.8
YKA LR LR 03 44 31.2
comp=Z,464nm,18.4s,baz=304,slow=39
comp=Z,7.2nm,0.9s
**YKA Yellowknife Ar 39.62 47** *i*P P 03 26 24.0 -8.4
**NOR Nord 39.88 359** *i*P **P** **03 26 34.6 +0.2**
NOR IAmb IAmb 03 26 52.8
comp=Z,22nm,1.6s
**BBB Bella Bella 40.00 66** LR LR 03 42 56.9
comp=Z,741nm,20.1s,baz=324,slow=36
**DGZ Jazzator, Alta 40.82 290** *i*P **P** **03 26 42.4 -0.3**
DGZ pmax pmax
comp=Z,43nm,1.1s
**XAN Xi'an 41.05 255** P **P** **03 26 44.5 -0.1**
XAN sP sP 03 26 51.0 +2.1
XAN S **S** **03 33 00.0 +3.1**
XAN pmax pmax
comp=Z,17nm,1.4s
XAN LR LR
comp=Z,2µm,12.9s
XAN LR LR
comp=Z,3µm,14.1s
XAN LR LR
comp=Z,4µm,13.6s
**KBS Kingsbay 41.19 351** *ce*P **P** **03 26 46.5 +1.3**
KBS pmax pmax
comp=Z,61nm,2.5s
**KBS Kingsbay 41.19 351** *i*P **P** **03 26 46.0 +0.8**
**WHN Wuhan 41.20 247** P **P** **03 26 46.3 +0.5**
WHN pmax pmax
comp=Z,140nm,0.9s
**SPITS Spitsbergen Ar 41.45 349** P **P** **03 26 46.9 -0.5**
comp=Z,39nm,0.8s,baz=63,slow=14,SNR=21
comp=Z,39nm,0.8s
**SPB2 Spitsbergen Ar 41.45 349** P **P** **03 26 48.2 +0.8**
SPB2 IAmb IAmb 03 26 50.3
comp=Z,57nm,0.8s
**GTA Gaotai 41.64 269** P **P** **03 26 49.5 0.0**
GTA pP sP 03 26 53.3 -0.5
GTA S **S** **03 33 09.0 +3.2**
GTA sS sS 03 33 18.3 +7.4
GTA pmax pmax
comp=Z,27nm,1.8s
GTA pmax pmax
comp=Z,84nm,7.2s
GTA LR LR
comp=Z,2µm,13.9s
GTA LR LR
comp=Z,1µm,18.3s
GTA LR LR
comp=Z,3µm,16.3s
**TULEG Thule 41.66 15** *i*P **P** **03 26 49.0 -0.1**
TULEG IAmb IAmb 03 26 49.4
comp=Z,264nm,2.2s
**LZH Lanzhou 42.05 262** ⇑P **P** **03 26 53.5 +0.6**
LZH sP sP 03 27 02.5 +5.2
LZH S **S** **03 33 14.3 +2.4**
LZH pmax pmax
comp=Z,90nm,1.2s
LZH pmax pmax
comp=Z,410nm,4.8s
LZH LR LR
comp=Z,2µm,14.7s
LZH LR LR
comp=Z,2µm,15.2s
LZH LR LR
comp=Z,3µm,14.8s
**NEEM North Greenlan 42.81 9** *i*P **P** **03 26 57.6 -1.2**
NEEM IAmb IAmb 03 27 00.6
comp=Z,79nm,0.9s
**ZSN Zaisan 43.59 289** *e*P **P** **03 27 05.0 -0.3**
baz=289
**ZSN Zaisan 43.59 289** *e*P **P** **03 27 04.9 -0.3**
**BRLDA Berland Lookou 43.70 58** IAmb IAmb 03 27 09.2
comp=Z,66nm,1.0s
**ENH Enshi 43.80 252** P **P** **03 27 07.1 +0.1**
**SEM Semipalatinsk 43.81 295** *e*P **P** **03 27 06.4 -0.8**
baz=295
SEM LR LR 03 45 35.5
comp=Z,489nm,11.8s,baz=295
**SEM Semipalatinsk 43.81 295** *e*P **P** **03 27 06.3 -0.8**
SEM MLR MLR
comp=Z,489nm,12.0s
**CNSH ChangSha 43.85 246** P **P** **03 27 06.5 -0.9**
CNSH pmax pmax
comp=Z,30nm,1.2s
**KURK Kurchatov 44.37 296** P **P** **03 27 10.3 -1.0**
**KURK Kurchatov 44.37 296** P **P** **03 27 11.2 -0.2**
**KURK Kurchatov 44.37 296** *ce*P **P** **03 27 10.7 -0.6**
KURK pmax pmax
comp=Z,150nm,1.3s
KURK MLR MLR
comp=Z,1µm,15.0s
**KURBB Kurchatov Arra 44.48 296** P **P** **03 27 11.9 -0.3**
comp=Z,57nm,0.9s,baz=50,slow=8.1,SNR=89
KURBB PP **PP** **03 28 54.5 -1.1**
comp=Z,6.0nm,0.9s,baz=54,slow=11,SNR=6.0
comp=Z,57nm,0.9s
**PGC Sidney 44.58 67** P **P** **03 27 13.5 +0.5**
**WMQ Urumqi 44.72 283** *e*P **P** **03 27 15.3 +1.0**
WMQ pmax pmax
comp=Z,40nm,2.3s
WMQ pmax pmax
comp=Z,250nm,3.7s
WMQ LR LR
comp=Z,1µm,12.5s
WMQ LR LR
comp=Z,1µm,13.9s
WMQ LR LR
comp=Z,560nm,15.9s
**DAG Danmarks Havn 44.75 359** *i*P **P** **03 27 13.6 -0.4**
DAG IAmb IAmb 03 27 15.6
comp=Z,24nm,0.9s
**KULLO Kullorsuaq 44.83 13** *i*P **P** **03 27 15.3 +0.6**
KULLO IAmb IAmb 03 27 16.9
comp=Z,29nm,0.6s
**MK31 Makanchi Array 45.32 290** *ce*P **P** **03 27 18.1 -0.9**
**MKAR Makanchi Array 45.32 290** P **P** **03 27 17.1 -1.8**
**MKAR Makanchi Array 45.32 290** P **P** **03 27 18.1 -0.9**
comp=Z,15nm,0.9s,baz=52,slow=8.1,SNR=44
MKAR PcP **PcP** **03 28 57.9 -0.6**
comp=Z,3.5nm,0.9s,baz=54,slow=3.7,SNR=3.3
MKAR LR LR 03 46 51.3
comp=Z,1µm,19.1s,baz=47,slow=37
comp=Z,15nm,0.9s
**MKAR Makanchi Array 45.32 290** *i*P **P** **03 27 18.3 -0.7**
MKAR pmax pmax
comp=Z,15nm,0.9s
**MAKZ Makanchi 45.46 290** P **P** **03 27 18.3 -1.8**
**MAKZ Makanchi 45.46 290** P **P** **03 27 18.3 -1.8**
MAKZ pmax pmax
comp=Z,30nm,1.3s
**E03A Lebam 45.99 70** IAmb IAmb 03 27 28.1
comp=Z,62nm,1.1s
**CD2 Chengdu 46.16 258** P **P** **03 27 25.5 -0.3**
CD2 S **S** **03 34 12.3 +0.6**
CD2 pmax pmax
comp=Z,60nm,0.7s
CD2 LR LR
comp=Z,1µm,12.4s
CD2 LR LR
comp=Z,1µm,13.5s
CD2 LR LR
comp=Z,1µm,14.5s
**GUMO Guam 46.26 199** LR LR 03 43 21.0
comp=Z,165nm,21.7s,baz=12,slow=32
**BVAR Borovoye Array 46.50 304** P **P** **03 27 27.9 -0.2**
comp=Z,30nm,0.8s,baz=52,slow=8.0,SNR=75
BVAR PcP **PcP** **03 29 02.2 -0.2**
comp=Z,7.8nm,0.9s,baz=83,slow=4.1,SNR=5.0
comp=Z,30nm,0.8s
**BRVK Borovoye 46.52 304** P **P** **03 27 27.8 -0.5**
BRVK IAmb IAmb 03 27 30.7
comp=Z,50nm,0.9s
**BRVK Borovoye 46.52 304** P **P** **03 27 28.6 +0.2**
**BRVK Borovoye 46.52 304** *ce*P **P** **03 27 28.2 -0.1**
BRVK pmax pmax
comp=Z,105nm,1.7s
BRVK MLR MLR
comp=Z,1µm,17.0s
**GOMU GeErMu 46.66 270** P **P** **03 27 29.5 -0.6**
GOMU pP sP 03 27 38.0 +3.6
GOMU sP pP 03 27 41.3 +8.1
GOMU pmax pmax
comp=Z,69nm,1.0s
GOMU LR LR
comp=Z,3µm,15.1s
GOMU LR LR
comp=Z,2µm,15.6s
GOMU LR LR
comp=Z,5µm,17.0s
**LON Longmire 46.70 68** P **P** **03 27 30.4 +0.5**
LON IAmb IAmb 03 27 32.9
comp=Z,49nm,1.8s
**LON Longmire 46.70 68** P **P** **03 27 30.4 +0.5**
LON pmax pmax
comp=Z,49nm,1.8s
**B08A Colville Reser 46.75 65** IAmb IAmb 03 27 32.9
comp=Z,27nm,1.0s
**LTY Liberty 46.89 67** IAmb IAmb 03 27 34.1
comp=Z,56nm,1.4s
**DBG Daneborg 47.23 360** *i*P **P** **03 27 31.4 -2.2**
DBG IAmb IAmb 03 27 37.0
comp=Z,24nm,1.2s
**LVZ Lovozero 47.25 335** P **P** **03 27 34.1 +0.1**
LVZ IAmb IAmb 03 27 35.4
comp=Z,23nm,0.9s
**LVZ Lovozero 47.25 335** *ce*P **P** **03 27 33.6 -0.3**
LVZ pmax pmax
comp=Z,48nm,2.5s
**MXC Moxie City 47.55 67** IAmb IAmb 03 27 39.5
comp=Z,54nm,1.4s
**C09A Chrisman Ranch 47.64 65** IAmb IAmb 03 27 39.6
comp=Z,30nm,1.4s
**ARCES ARCESS Array B 47.72 340** P **P** **03 27 36.2 -1.3**
**ARCES ARCESS Array B 47.72 340** P **P** **03 27 36.6 -0.9**
comp=Z,6.8nm,0.8s,baz=27,slow=8.2,SNR=10
ARCES LR LR 03 51 22.5
comp=Z,163nm,18.7s,baz=64,slow=41
comp=Z,6.8nm,0.8s
**ARCES ARCESS Array B 47.72 340** P **P** **03 27 36.2 -1.3**
**E07A Sunnyside 47.78 67** IAmb IAmb 03 27 41.1
comp=Z,48nm,1.3s
**HOOD Mount Hood Mea 47.80 69** P **P** **03 27 39.2 +0.6**
**SVE Sverdlovsk 47.80 313** *de*P **P** **03 27 38.9 +0.6**
SVE pmax pmax
comp=Z,70nm,1.1s
SVE MLR MLR
comp=Z,1µm,15.0s
**NEW Newport 47.85 64** LR LR 03 47 30.6
comp=Z,759nm,20.7s,baz=320,slow=36
**D08A Wollman Farm, 47.87 66** IAmb IAmb 03 27 41.5
comp=Z,44nm,1.3s
**H04A Detroit Lake 48.00 70** IAmb IAmb 03 27 42.7
comp=Z,63nm,1.5s
**HAWA Hanford 48.05 67** IAmb IAmb 03 27 43.0
comp=Z,34nm,1.2s
**E08A Dider Farm, El 48.21 67** P **P** **03 27 41.9 +0.3**
E08A IAmb IAmb 03 27 44.1
comp=Z,34nm,1.2s
**F07A Phinny Hill Vi 48.22 68** P **P** **03 27 41.7 0.0**
F07A IAmb IAmb 03 27 44.7
comp=Z,46nm,1.2s
**GYA Guiyang 48.34 251** ⇓P **P** **03 27 43.0 +0.1**
GYA S **S** **03 34 46.0 +3.0**
GYA pmax pmax
comp=Z,120nm,0.8s
GYA LR LR
comp=Z,2µm,14.8s
GYA LR LR
comp=Z,1µm,18.5s
GYA LR LR
comp=Z,3µm,16.2s
**G06A Carlson Farm, 48.36 69** IAmb IAmb 03 27 45.7
comp=Z,42nm,1.6s
**SUMG Summit 48.43 7** P **P** **03 27 42.8 -0.6**
**SUMG Summit 48.43 7** P **P** **03 27 42.8 -0.6**
SUMG pmax pmax
comp=Z,84nm,1.3s
**SUMG Summit 48.43 7** *i*P **P** **03 27 43.0 -0.4**
SUMG IAmb IAmb 03 27 44.6
comp=Z,401nm,2.3s
**TDK Taldyqorghan 48.50 291** *e*P **P** **03 27 43.3 -0.5**
comp=Z,24nm,1.1s,baz=291
TDK LR LR 03 48 23.3
comp=Z,453nm,11.8s,baz=291
**TDK Taldyqorghan 48.50 291** *e*P **P** **03 27 43.3 -0.5**
TDK pmax pmax
comp=Z,24nm,1.1s
TDK MLR MLR
comp=Z,453nm,12.0s
**I04A Tendick Farm, 48.53 71** P **P** **03 27 44.9 +0.8**
**E09A Wood Farm, Sta 48.63 66** IAmb IAmb 03 27 48.0
comp=Z,57nm,1.3s
**I05D Terrebonne, OR 48.66 70** IAmb IAmb 03 29 12.7
comp=Z,52nm,1.8s
**ARU Arti 48.88 313** P **P** **03 27 46.0 -0.6**
**ARU Arti 48.88 313** P **P** **03 27 46.5 -0.1**
comp=Z,45nm,0.7s,baz=36,slow=4.0,SNR=50
ARU LR LR 03 51 18.1
comp=Z,1µm,18.6s,baz=44,slow=40
comp=Z,45nm,0.7s
**ARU Arti 48.88 313** *c i*P **P** **03 27 46.6 0.0**
ARU 03 29 40.0
ARU S **S** **03 34 51.9 +2.2**
ARU pmax pmax
comp=Z,67nm,0.9s
ARU MLR MLR
comp=Z,1µm,16.0s
**ARU Arti 48.88 313** P **P** **03 27 44.9 -1.7**
comp=Z,78nm,1.0s,comp=Z,635nm
**PINE Pine Mountain 49.26 70** IAmb IAmb 03 27 53.2
comp=Z,54nm,1.2s
**SHLS Shalkode 49.33 288** *e*P **P** **03 27 48.1 -2.2**
comp=Z,50nm,0.9s,baz=288
**SHLS Shalkode 49.33 288** *e*P **P** **03 27 48.1 -2.2**
SHLS pmax pmax
comp=Z,50nm,0.9s
**ARXS Arharly 49.35 291** *e*P **P** **03 27 50.3 -0.2**
**F10A Beach Ranch, E 49.46 66** P **P** **03 27 51.3 0.0**
F10A IAmb IAmb 03 27 53.9
comp=Z,35nm,1.1s
**KPKS Kokpek 49.48 289** *e*P **P** **03 27 51.1 -0.5**
comp=Z,26nm,1.3s,baz=289
**KPKS Kokpek 49.48 289** *e*P **P** **03 27 51.0 -0.5**
KPKS pmax pmax
comp=Z,26nm,1.3s
**J05D Fort Rock, OR 49.49 71** IAmb IAmb 03 27 55.0
comp=Z,47nm,1.2s
**UZB Uzynbulak 49.55 289** *e*P **P** **03 27 51.8 -0.4**
baz=289
**UZB Uzynbulak 49.55 289** *e*P **P** **03 27 51.7 -0.4**
**ADZR Andozero 49.60 330** ⇑*i*P **P** **03 27 52.7 +0.8**
ADZR pmax pmax
comp=Z,34nm,0.6s
**FFC Flin Flon 49.70 49** P **P** **03 27 53.4 +0.5**
FFC IAmb IAmb 03 27 55.5
comp=Z,68nm,1.4s
**FFC Flin Flon 49.70 49** P **P** **03 27 53.4 +0.5**
FFC pmax pmax
comp=Z,68nm,1.4s
**ZHN Zhinishke 49.83 289** *e*P **P** **03 27 53.7 -0.4**
comp=Z,24nm,0.9s,baz=289
**ZHN Zhinishke 49.83 289** *e*P **P** **03 27 53.7 -0.4**
ZHN pmax pmax
comp=Z,25nm,0.9s
**YBH Yreka Blue Hor 49.91 73** P **P** **03 27 56.2 +1.5**
**YBH Yreka Blue Hor 49.91 73** LR LR 03 46 06.7
comp=Z,572nm,21.9s,baz=313,slow=33
**YBH Yreka Blue Hor 49.91 73** P **P** **03 27 56.3 +1.5**
YBH pmax pmax
comp=Z,29nm,1.5s
**SATY Saty 49.92 289** *e*P **P** **03 27 54.1 -0.8**
comp=Z,44nm,1.2s,baz=289
**SATY Saty 49.92 289** *e*P **P** **03 27 54.1 -0.8**
SATY pmax pmax
comp=Z,44nm,1.2s
**CHKK Chushkaly 50.03 291** *e*P **P** **03 27 55.3 -0.3**
baz=291
**CHKK Chushkaly 50.03 291** *e*P **P** **03 27 55.2 -0.3**

**KUU Kurty 50.31 291** *e*P P **03 27 57.3 -0.4**
baz=291
KUU LR LR 03 49 31.5
comp=Z,579nm,12.1s,baz=291
**KUU Kurty 50.31 291** *e*P P **03 27 57.3 -0.4**
KUU MLR MLR
comp=Z,579nm,12.0s
**MSO Missoula 50.38 63** IAmb IAmb 03 28 01.0
comp=Z,43nm,1.3s
**MDOK Medeo 50.51 290** *e*P P **03 27 58.9 -0.5**
baz=290
MDOK LR LR 03 49 37.8
comp=Z,497nm,12.4s,baz=290
**MDOK Medeo 50.51 290** *e*P P **03 27 58.8 -0.5**
MDOK MLR MLR
comp=Z,497nm,12.0s
**KIRV Kirov 50.52 320** LR LR 03 49 57.6
comp=Z,382nm,20.2s,baz=40,slow=37
**KIRV Kirov 50.52 320** *ce*P P **03 27 59.0 0.0**
**AAA Alma-Ata 50.54 290** *e*P P **03 27 59.0 -0.6**
comp=Z,56nm,1.1s,baz=290
AAA LR LR 03 49 42.8
baz=290
**AAA Alma-Ata 50.54 290** *e*P P **03 27 58.9 -0.6**
AAA pmax pmax
comp=Z,56nm,1.1s
**BTLS Baital 50.57 294** *e*P P **03 27 59.0 -0.6**
baz=294
**BTLS Baital 50.57 294** *e*P P **03 27 59.0 -0.6**
**TNSS Tian-Shan 50.65 290** *e*P P **03 27 59.8 -1.0**
baz=290
**TNSS Tian-Shan 50.65 290** *e*P P **03 27 59.8 -1.0**
**PZH PanZhiHua 50.77 256** P P **03 28 01.8 +0.4**
PZH S S **03 35 15.8 -1.2**
PZH pmax pmax
comp=Z,60nm,1.3s
PZH pmax pmax
comp=Z,160nm,4.0s
PZH LR LR
comp=Z,610nm,15.7s
PZH LR LR
comp=Z,590nm,16.2s
PZH LR LR
comp=Z,900nm,15.5s
**J08A Circle Bar Ran 50.79 69** P P **03 28 01.8 +0.4**
**LYMT Lyon Mountain 51.04 62** P P **03 28 03.9 +0.5**
**WVOR Wild Horse Val 51.40 70** IAmb IAmb 03 28 09.1
comp=Z,45nm,1.3s
**KMI Kunming 51.40 254** ⇑P P **03 28 06.0 -0.3**
KMI pmax pmax
comp=Z,40nm,0.8s
KMI LR LR
comp=Z,2μm,13.7s
KMI LR LR
comp=Z,480nm,14.3s
KMI LR LR
comp=Z,2μm,14.2s
**TKM2 Tokmak 2 51.40 291** P P **03 28 06.1 -0.1**
SNR=12
**EGMT Eagleton 51.40 59** IAmb IAmb 03 28 08.3
comp=Z,63nm,1.4s
**SGDS Sogindy 51.47 292** *e*P P **03 28 06.1 -0.4**
baz=292
**SGDS Sogindy 51.47 292** *e*P P **03 28 06.1 -0.4**
**LRDM Redding Peak 51.48 74** P P **03 28 07.7 +1.1**
**ULHL Ulahol 51.59 290** P P **03 28 09.9 +2.3**
SNR=6.1
**USP Ospenovka 51.67 292** P P **03 28 08.3 +0.3**
SNR=35
**CHMS Chumysh 51.75 292** P P **03 28 11.0 +2.5**
SNR=8.2
**ICESG Greenland Ices 51.78 8** *i*P P **03 28 08.4 -0.4**
ICESG IAmb IAmb 03 28 10.5
comp=Z,62nm,1.3s
**KBK Karagaybulak 51.91 291** P P **03 28 12.4 +2.5**
SNR=8.1
**DLMT Dillon 52.09 63** IAmb IAmb 03 28 14.1
comp=Z,53nm,1.4s
**AAK Ala-Archa 52.15 292** P P **03 28 11.9 +0.3**
SNR=11
**AAK Ala-Archa 52.15 292** P P **03 28 11.5 -0.2**
AAK IAmb IAmb 03 28 14.4
comp=Z,42nm,1.1s
**AAK Ala-Archa 52.15 292** *i*P P **03 28 11.8 +0.1**
SNR=11
**AAK Ala-Archa 52.15 292** P P **03 28 11.4 -0.2**
comp=Z,21nm,0.9s,baz=72,slow=6.4,SNR=27
AAK LR LR 03 51 24.9
comp=Z,328nm,19.4s,baz=42,slow=37
comp=Z,21nm,0.9s
**AAK Ala-Archa 52.15 292** P P **03 28 11.7 +0.1**
**AAK Ala-Archa 52.15 292** *ce*P P **03 28 11.6 -0.1**
AAK pmax pmax
comp=Z,70nm,1.7s
AAK MLR MLR
comp=Z,399nm,16.0s
**JOF Joensuu 52.19 333** *e*P P **03 28 11.2 -0.3**
**EKS2 Erkin-Say 52.48 292** P P **03 28 14.5 +0.4**
SNR=22
**FRB Frobisher Bay 52.62 24** LR LR 03 54 57.6
comp=Z,205nm,18.6s,baz=54,slow=41
**SFJD Kangerlussuaq 52.70 14** LR LR 03 52 00.3
comp=Z,118nm,19.2s,baz=340,slow=38
**SFJD Kangerlussuaq 52.70 14** *i*P P **03 28 15.1 -0.1**
**PAHR Pah Rah Range 53.09 73** IAmb IAmb 03 28 21.6
comp=Z,48nm,1.5s
**QIZ Qiongzhong 53.12 243** P P **03 28 19.5 +0.6**
QIZ S S **03 35 51.3 +2.2**
QIZ pmax pmax
comp=Z,27nm,1.6s
QIZ LR LR
comp=Z,1μm,13.3s
QIZ LR LR
comp=Z,490nm,12.4s
QIZ LR LR
comp=Z,1μm,11.8s
**YHL Hebgen Lake 53.14 63** P P **03 28 20.0 +0.9**
**SOEG Soedalen 53.15 5** *i*P P **03 28 19.1 +0.6**
SOEG IAmb IAmb 03 28 21.3
comp=Z,75nm,1.4s
**PNTR Pine Nut 53.45 73** P P **03 28 22.4 +0.9**
PNTR IAmb IAmb 03 28 24.8
comp=Z,108nm,1.8s
**YNR Norris Junctio 53.47 63** IAmb IAmb 03 28 25.9
comp=Z,38nm,1.4s
**DGMT Dagmar 53.50 55** IAmb IAmb 03 28 24.1
comp=Z,88nm,1.6s
**YFT Old Faithful 53.60 63** P P **03 28 23.1 +0.6**
**AKTO Aktyubinsk 53.62 309** P P **03 28 22.0 -0.2**
comp=Z,36nm,0.9s,baz=11,slow=4.9,SNR=58
AKTO LR LR 03 53 53.9
comp=Z,746nm,18.8s,baz=44,slow=39
comp=Z,36nm,0.9s
**TNCH TengChong 53.62 258** P P **03 28 23.0 +0.3**
TNCH pP pP 03 28 25.0 -0.9
TNCH sP sP 03 28 27.8 +0.7
TNCH S S **03 35 49.0 -7.2**
TNCH sS sS 03 35 59.8 -1.6
TNCH SS SS **03 39 31.8 -4.6**
TNCH pmax pmax
comp=Z,52nm,0.5s
TNCH pmax pmax
comp=Z,230nm,3.0s
TNCH LR LR
comp=Z,480nm,13.4s
TNCH LR LR
comp=Z,520nm,14.9s
TNCH LR LR
comp=Z,630nm,15.4s
**VALR Valaam 53.63 332** *i*P P **03 28 22.3 +0.2**
VALR pmax pmax
comp=Z,76nm,0.9s
**LSA Lhasa 53.65 268** P P **03 28 25.0 +1.7**
LSA pmax pmax
comp=Z,35nm,0.7s
**LSA Lhasa 53.65 268** IAmb IAmb 03 28 25.8
comp=Z,25nm,0.7s
**LSA Lhasa 53.65 268** P P **03 28 23.1 -0.1**
**KK31 Karatay Array 53.70 295** IAmb IAmb 03 28 25.8
comp=Z,55nm,1.0s
**KKAR Karatay Array 53.70 295** P P **03 28 22.1 -0.9**
**KKAR Karatay Array 53.70 295** P P **03 28 22.1 -0.9**
**DY2G Dye2 53.72 12** *i*P P **03 28 19.8 -3.1**
DY2G IAmb IAmb 03 28 24.6
comp=Z,216nm,1.8s
**ABKAR Akbulak array 53.73 307** P P **03 28 22.0 -1.0**
ABKAR IAmb IAmb 03 28 25.3
comp=Z,24nm,0.8s
**H17A Grant Village 53.76 63** P P **03 28 22.3 -1.4**
baz=320,SNR=6.7
**KSH Kashi 53.79 288** P P **03 28 27.8 +4.0**
KSH pP sP 03 28 32.8 +4.6
KSH pmax pmax
comp=Z,40nm,1.3s
KSH LR LR
comp=Z,730nm,17.9s
KSH LR LR
comp=Z,1μm,13.7s
KSH LR LR
comp=Z,1μm,13.1s
**RLMT Red Lodge 53.81 61** IAmb IAmb 03 28 27.4
comp=Z,53nm,1.1s
**FLWY Flagg Ranch 53.95 63** IAmb IAmb 03 28 28.8
comp=Z,44nm,1.1s
**LAO LASA Array 53.98 58** IAmb IAmb 03 28 28.2
comp=Z,34nm,1.1s
**WAKR Walker 53.98 74** P P **03 28 26.9 +1.6**
WAKR IAmb IAmb 03 28 29.0
comp=Z,51nm,1.5s
**SLVN Son La 53.99 251** P P **03 28 24.6 -0.7**
SLVN IAmb IAmb 03 28 28.8
comp=Z,37nm,1.3s
**VAF Ylistaro 53.99 337** *e*P P **03 28 24.3 -0.4**
**BRLS Borolday 54.08 295** *e*P P **03 28 27.2 +1.5**
baz=295
**BRLS Borolday 54.08 295** *e*P P **03 28 27.2 +1.5**
**KVN Kaiserville 54.23 72** IAmb IAmb 03 28 30.6
comp=Z,64nm,1.6s
**TPAW Teton Pass 54.28 64** IAmb IAmb 03 28 30.1
comp=Z,44nm,1.4s
**KEF Keuruu 54.31 335** *e*P P **03 28 27.2 +0.1**
**LOHW Long Hollow 54.35 63** IAmb IAmb 03 28 31.4
comp=Z,36nm,1.3s
**SNOW Snow King Moun 54.39 64** P P **03 28 28.8 +0.5**
SNOW IAmb IAmb 03 28 32.1
comp=Z,63nm,1.6s
**NVAR Mina Array Bea 54.61 73** P P **03 28 29.3 -0.6**
**NVAR Mina Array Bea 54.61 73** P P **03 28 29.6 -0.2**
comp=Z,12nm,1.0s,baz=308,slow=7.8,SNR=36
NVAR LR LR 03 49 01.8
comp=Z,404nm,21.6s,baz=282,slow=33
comp=Z,12nm,1.0s
**LHV Little Huntoon 54.65 73** IAmb IAmb 03 28 33.9
comp=Z,52nm,1.2s
**BBGB Big Mountain B 54.66 76** P P **03 28 31.5 +1.3**
BBGB IAmb IAmb 03 28 44.7
comp=Z,47nm,1.0s
**NV11 Mina Array Sit 54.68 73** IAmb IAmb 03 28 33.8
comp=Z,32nm,1.3s
**FINES FINESS Array B 54.69 334** P P **03 28 28.8 -1.1**
**FINES FINESS Array B 54.69 334** P P **03 28 29.2 -0.7**
comp=Z,28nm,0.8s,baz=32,slow=7.1,SNR=54
FINES LR LR 03 58 18.5
comp=Z,204nm,18.1s,baz=48,slow=43
comp=Z,28nm,0.8s
**HVU Hansel Valley 54.73 66** IAmb IAmb 03 28 34.1
comp=Z,30nm,1.2s
**CHM Chimkent 54.74 295** LR LR 03 52 17.1
comp=Z,316nm,13.1s,baz=295
**PMPB Monarch Peak 55.07 77** IAmb IAmb 03 28 44.6
comp=Z,37nm,1.2s
**SPUT South Promonto 55.25 66** IAmb IAmb 03 28 37.8
comp=Z,41nm,1.4s
**TPH Tonopah 55.42 72** P P **03 28 35.7 0.0**
**TPH Tonopah 55.42 72** P P **03 28 35.7 0.0**
TPH pmax pmax
comp=Z,128nm,0.9s
**HWUT Hardware Ranch 55.44 66** IAmb IAmb 03 28 39.3
comp=Z,67nm,1.5s
**PD31 Pinedale Array 55.49 63** IAmb IAmb 03 28 39.1
comp=Z,30nm,1.2s
**PDAR Pinedale Array 55.49 63** P P **03 28 35.7 -0.5**
**PDAR Pinedale Array 55.49 63** P P **03 28 36.5 +0.2**
comp=Z,6.7nm,0.8s,baz=330,slow=3.5,SNR=44
PDAR LR LR 03 53 11.9
comp=Z,310nm,20.5s,baz=336,slow=37
comp=Z,6.7nm,0.8s
**ULM Lac du Bonnet 55.53 49** IAmb IAmb 03 28 38.5
comp=Z,42nm,1.1s
**ULM Lac du Bonnet 55.53 49** P P **03 28 35.9 -0.2**
comp=Z,14nm,0.9s,baz=314,slow=9.1,SNR=12
ULM PcP **PcP** **03 29 37.0 +1.1**
comp=Z,10nm,0.8s,baz=339,slow=4.0,SNR=5.2
ULM LR LR 03 55 54.8
comp=Z,416nm,18.2s,baz=316,slow=40
comp=Z,14nm,0.9s
**ULM Lac du Bonnet 55.53 49** *i*P P **03 28 35.7 -0.4**
**DSP Deep Springs 55.60 73** IAmb IAmb 03 28 40.9
comp=Z,50nm,1.3s
**Q12A Willow Creek R 55.85 70** P P **03 28 39.0 +0.2**
Q12A IAmb IAmb 03 28 42.4
comp=Z,61nm,1.4s
**TCUT Toone Canyon 55.90 66** IAmb IAmb 03 28 44.1
comp=Z,37nm,1.3s
**DUG Dugway, Tooele 55.94 68** IAmb IAmb 03 28 42.8
comp=Z,34nm,1.2s
**RAF Rauma 56.00 336** *e*P P **03 28 39.4 +0.1**
**R11B Troy Canyon, C 56.02 71** IAmb IAmb 03 28 43.4
comp=Z,67nm,1.9s
**R11B Troy Canyon, C 56.02 71** P P **03 28 38.9 -1.1**
baz=321,SNR=21
**BELG Belogornoye 56.05 316** LR LR 03 56 12.5
comp=Z,765nm,18.1s,baz=43,slow=40
**BELG Belogornoye 56.05 316** *i*P P **03 28 39.7 0.0**
BELG pmax pmax
comp=Z,42nm,1.0s
**HEL Helsinki 56.07 334** P P 03 28 44.2 +4.4
HEL pmax pmax
comp=Z,26nm,1.1s
**SPR3 Spring Creek 3 56.13 70** P P **03 28 41.9 +0.9**
SPR3 IAmb IAmb 03 28 45.3
comp=Z,55nm,1.0s
**MEF Metsahovi 56.16 335** *e*P P **03 28 40.0 -0.4**
**NLU North Lily Min 56.48 67** IAmb IAmb 03 28 46.7
comp=Z,32nm,1.1s
**ARBE Arbavere 56.50 333** *e*P P **03 28 43.6 +0.8**
**MOS Moscow 56.59 325** *e*P P **03 28 42.6 -0.9**
MOS pmax pmax
comp=Z,63nm,0.7s
MOS MLR MLR
comp=Z,300nm,18.0s
**MPU Maple Canyon 56.65 67** IAmb IAmb 03 28 48.0
comp=Z,50nm,1.4s
**CRAI Chingrai 56.68 253** IAmb IAmb 03 28 47.2
comp=Z,37nm,1.0s
**PSUT Pine Spring 56.73 70** IAmb IAmb 03 28 48.6
comp=Z,52nm,1.4s
**BCW Bitter Crk WRg 56.77 76** IAmb IAmb 03 28 49.1
comp=Z,91nm,1.9s
**BORG Borgarnes 56.84 0** LR LR 03 54 32.3
comp=Z,118nm,19.5s,baz=349,slow=38
**RSSD Black Hills 56.95 58** P P **03 28 46.2 -0.3**
RSSD IAmb IAmb 03 28 49.4
comp=Z,42nm,1.1s
**RSSD Black Hills 56.95 58** P P **03 28 46.3 -0.3**
RSSD pmax pmax
comp=Z,42nm,1.1s
**K22A Casper 56.98 61** IAmb IAmb 03 28 49.5
comp=Z,72nm,1.5s
**PRN Pahroc Range 57.02 71** P P **03 28 47.8 +0.7**
PRN IAmb IAmb 03 28 50.8
comp=Z,40nm,1.2s
**AGMN Agassiz Nation 57.09 50** IAmb IAmb 03 28 49.5
comp=Z,31nm,1.1s
**NONG Nongkai 57.14 249** P P **03 28 48.5 +0.5**
**GWY Greenwater Val 57.17 73** IAmb IAmb 03 28 51.6
comp=Z,50nm,1.5s
**VSU Vasula 57.19 332** *ce*P P **03 28 46.7 -1.0**
VSU pmax pmax
comp=Z,49nm,0.7s
**RDMU Red Mountain 57.19 65** IAmb IAmb 03 28 51.9
comp=Z,58nm,1.4s
**TCRU Three Creeks R 57.35 68** IAmb IAmb 03 28 53.5
comp=Z,81nm,1.7s
**TMUT Trail Mountain 57.41 67** IAmb IAmb 03 28 53.5
comp=Z,38nm,1.1s
**OBN Obninsk 57.44 325** LR LR 03 55 52.2
comp=Z,380nm,18.7s,baz=6.5,slow=38
**OBN Obninsk 57.44 325** *di*P P **03 28 49.5 0.0**
OBN *i* 03 29 41.8
OBN pmax pmax
comp=Z,82nm,1.3s
OBN MLR MLR
comp=Z,265nm,16.0s
**P17A Butcher Ranch, 57.50 67** IAmb IAmb 03 28 54.0
comp=Z,39nm,1.2s
**DAV Davao City (W) 57.51 220** LR LR 03 55 46.7
comp=Z,204nm,18.3s,baz=0.0,slow=38
**P18A Preston Nutter 57.61 66** IAmb IAmb 03 28 55.1
comp=Z,50nm,1.2s
**MTSE Matsula 57.65 334** *e*P P **03 28 51.0 +0.1**
**Q16A Castle Valley 57.73 67** IAmb IAmb 03 28 55.8
comp=Z,27nm,1.0s
**CCUT Cedar City 57.74 70** IAmb IAmb 03 28 55.9
comp=Z,34nm,1.3s
**NC204 NORSAR Array S 57.78 342** IAmb IAmb 03 28 53.7
comp=Z,34nm,1.1s
**NC405 NORSAR Array S 57.79 342** IAmb IAmb 03 28 53.6
comp=Z,32nm,1.0s
**CHGR Chuyangaron 57.80 292** P P **03 28 51.8 -0.7**
**CHGR Chuyangaron 57.80 292** P P **03 28 51.8 -0.7**
CHGR pmax pmax
comp=Z,107nm,0.7s
**SZCU Shurtz Canyon 57.84 70** IAmb IAmb 03 28 56.4
comp=Z,47nm,1.3s
**SIMJ Simiganj 57.87 292** P P **03 28 52.4 -0.7**
SIMJ IAmb IAmb 03 28 55.0
comp=Z,46nm,0.8s
**NB201 NORSAR Array S 57.92 342** IAmb IAmb 03 28 54.5
comp=Z,23nm,0.8s
**NB2 NORSAR Subarra 57.94 342** P P **03 28 52.0 -1.1**
comp=Z,27nm,0.9s,baz=19,slow=7.4
**NB2 NORSAR Subarra 57.94 342** P P **03 28 52.0 -1.1**
baz=19,slow=7.4
**NOA NORSAR Array B 57.94 342** P P **03 28 52.1 -1.1**
comp=Z,13nm,0.8s,baz=19,slow=7.0,SNR=37
NOA LR LR 03 57 56.7
comp=Z,81nm,18.4s,baz=320,slow=40
comp=Z,13nm,0.8s
**PHRA Phrae 58.21 252** P P **03 28 55.2 -0.3**
**LCMT Little Creek M 58.22 70** IAmb IAmb 03 28 59.3
comp=Z,33nm,1.4s
**PKCU Pink Cliffs 58.34 69** IAmb IAmb 03 28 60.0
comp=Z,79nm,1.8s
**HFS Hagfors 58.38 340** P P **03 28 55.1 -1.0**
comp=Z,8.1nm,0.6s,baz=45,slow=4.8,SNR=22
HFS LR LR 03 57 00.9
comp=Z,120nm,19.5s,baz=24,slow=39
comp=Z,8.1nm,0.6s
**UBPT Khong Chiam 58.42 245** P P **03 28 57.3 +0.4**
**UBPT Khong Chiam 58.42 245** P P **03 28 56.4 -0.5**
**KNB Kanab 58.42 70** IAmb IAmb 03 29 01.0
comp=Z,75nm,1.5s
**N23A Red Feather La 58.63 62** IAmb IAmb 03 29 01.6
comp=Z,36nm,1.2s
**N23A Red Feather La 58.63 62** P P **03 28 57.3 -1.3**
baz=323,SNR=14
**ELS Elsinore Mount 58.79 76** IAmb IAmb 03 29 02.4
comp=Z,58nm,1.9s
**LPSR Galich'ya Gora 58.84 322** *e*P P **03 28 58.6 -0.8**
LPSR pmax pmax
comp=Z,90nm,0.9s
**CMAR Chiang Mai Arr 58.89 254** P P **03 28 59.5 -0.7**
comp=Z,7.9nm,0.7s,baz=11,slow=6.9,SNR=37
CMAR PcP **PcP** **03 29 49.5 +0.1**
comp=Z,2.0nm,0.4s,baz=7.9,slow=4.8,SNR=4.9
CMAR LR LR 03 58 00.8
comp=Z,586nm,18.7s,baz=25,slow=40
comp=Z,7.9nm,0.7s
**CMAR Chiang Mai Arr 58.89 254** *i*P P **03 29 00.7 +0.5**
CMAR pmax pmax
comp=Z,8.0nm,0.6s
**F33A 5 Mile Ranch, 58.90 52** IAmb IAmb 03 29 02.4
comp=Z,42nm,1.1s
**SLIT Slitere, Latvi 58.98 334** *e*P P **03 29 00.7 +0.5**
**VRH Novokhopyorsk 59.10 319** *e*P P **03 28 59.3 -2.0**
VRH pmax pmax
comp=Z,60nm,0.8s
**U15A North Rim 59.15 70** IAmb IAmb 03 29 05.8
comp=Z,34nm,1.1s
**PFO Pinyon Flats O 59.31 75** P P **03 29 03.8 +0.7**
**PFO Pinyon Flats O 59.31 75** LR LR 03 54 23.2
comp=Z,188nm,18.8s,baz=332,slow=36
**PFO Pinyon Flats O 59.31 75** *i*P P **03 29 03.3 +0.2**
PFO pmax pmax
comp=Z,27nm,1.4s
**TPFO Pinon Flats 59.32 75** P P **03 29 02.3 -0.9**
baz=323
**KONO Kongsberg 59.52 342** P P **03 29 04.0 0.0**
**VORR Voronezh 59.55 321** *e*P P **03 29 03.1 -1.2**
VORR pmax pmax
comp=Z,30nm,0.9s
**NIL Nilore 59.74 286** P P **03 29 05.0 -1.0**
**NIL Nilore 59.74 286** P P **03 29 06.2 +0.2**
**NIL Nilore 59.74 286** P P **03 29 05.0 -1.0**
NIL pmax pmax
comp=Z,89nm,0.8s
**VSR Storozhevoye 59.95 321** *e*P P **03 29 06.0 -1.1**
VSR pmax pmax
comp=Z,70nm,0.9s
**VORD Divnogorie 60.12 321** *e*P P **03 29 06.6 -1.7**
VORD pmax pmax
comp=Z,40nm,1.0s
**WUAZ Wupatki 60.32 70** P P **03 29 10.7 +0.6**
WUAZ IAmb IAmb 03 29 13.9
comp=Z,34nm,1.1s
**NACGM Naroch 60.35 330** *e*P P **03 29 11.2 +1.4**
**ECSD EROS Data Cent 60.47 54** P P **03 29 09.9 -1.0**
ECSD IAmb IAmb 03 29 13.0
comp=Z,34nm,0.8s
**PABE Paberze 60.51 332** P P **03 29 09.5 -1.4**
PABE IAmb IAmb 03 29 13.0
comp=Z,26nm,0.8s
**PABE Paberze 60.51 332** *e*P P **03 29 11.0 +0.1**
**Q24A Divide 60.54 63** IAmb IAmb 03 29 15.2
comp=Z,27nm,1.1s
**Q24A Divide 60.54 63** P P **03 29 10.5 -1.3**
baz=324,SNR=11
**GLA Glamis 60.58 74** IAmb IAmb 03 29 15.2
comp=Z,38nm,1.2s
**S22A 4UR Ranch, Cre 60.73 65** IAmb IAmb 03 29 16.9
comp=Z,42nm,1.2s
**S22A 4UR Ranch, Cre 60.73 65** P P **03 29 12.0 -1.0**
baz=324,SNR=44
**SPMN Marine on St. 60.82 50** IAmb IAmb 03 29 15.1
comp=Z,58nm,1.6s
**ESJX Sierra Juarez 60.85 76** P P **03 29 13.9 +0.1**
ESJX IAmb IAmb 03 29 17.0
comp=Z,32nm,1.3s
**SCHQ Schefferville 60.98 28** IAmb IAmb 03 29 15.4
comp=Z,30nm,1.1s
**SCHQ Schefferville 60.98 28** P P **03 29 12.7 -1.4**
comp=Z,18nm,1.1s,baz=359,slow=9.4,SNR=12
SCHQ LR LR 03 57 39.3
comp=Z,288nm,20.6s,baz=342,slow=38
comp=Z,18nm,1.1s
**KBL Kabul 61.12 289** P P **03 29 13.5 -2.2**
**KBL Kabul 61.12 289** P P **03 29 14.6 -1.1**
SNR=16
**KBL Kabul 61.12 289** P P **03 29 13.5 -2.2**
KBL pmax pmax
comp=Z,54nm,1.1s
**SDCO Great Sand Dun 61.35 64** IAmb IAmb 03 29 20.8
comp=Z,27nm,1.1s
**W18A Petrified Fore 61.44 69** P P **03 29 17.2 -0.5**
baz=324
**KSCO Kaye Shedlock' 61.66 61** P P **03 29 19.2 +0.1**
**X18A Snowflake 61.81 69** IAmb IAmb 03 29 24.1
comp=Z,38nm,1.0s
**SUW Suwalki 62.06 332** *e*P P **03 29 20.9 -0.5**
**SUW Suwalki 62.06 332** P P **03 29 21.1 -0.3**
**SUW Suwalki 62.06 332** *e*P P **03 29 21.6 +0.1**
**SUW Suwalki 62.06 332** P P **03 29 21.1 -0.3**
SUW pmax pmax
comp=Z,54nm,0.7s
**F42A Maple Grove Fa 62.20 47** IAmb IAmb 03 29 24.1
comp=Z,32nm,1.1s
**SRDT SRDT 62.29 251** P P **03 29 25.5 +2.1**
**T25A Trinidad 62.35 64** IAmb IAmb 03 29 27.8
comp=Z,44nm,1.4s
**T25A Trinidad 62.35 64** P P **03 29 23.6 -0.3**
baz=324,SNR=20
**214A Organ Pipe Nat 62.47 73** IAmb IAmb 03 29 27.9
comp=Z,29nm,1.2s
**214A Organ Pipe Nat 62.47 73** P P **03 29 24.1 -0.4**
baz=324,SNR=6.7
**I40A Norwalk 62.80 50** IAmb IAmb 03 29 28.3
comp=Z,30nm,0.9s
**E46A Sault Ste Mari 63.10 44** IAmb IAmb 03 29 29.2
comp=Z,43nm,1.4s

**ANMO Albuquerque 63.16 67** P **P** **03 29 29.0 -0.3**
**ANMO Albuquerque 63.16 67** LR LR 03 58 46.1
comp=Z,330nm,19.4s,baz=73,slow=38
**ANMO Albuquerque 63.16 67** *i* P **P** **03 29 29.0 -0.3**
ANMO pmax pmax
comp=Z,9.0nm,1.1s
**AK03 Malin Array Si 63.44 327** P **P** **03 29 29.5 -1.1**
**AK21 Malin Array Si 63.44 327** P **P** **03 29 29.4 -1.2**
**AK22 Malin Array Si 63.45 327** P **P** **03 29 29.7 -1.0**
**AK04 Malin Array Si 63.45 327** P **P** **03 29 29.5 -1.2**
**AKASG Malin Array Be 63.46 327** P **P** **03 29 30.2 -0.5**
AKASG IAmb IAmb 03 29 32.7
comp=Z,32nm,1.6s
**AKASG Malin Array Be 63.46 327** P **P** **03 29 30.0 -0.8**
comp=Z,18nm,0.7s,baz=30,slow=6.6,SNR=39
AKASG LR LR 04 00 02.7
comp=Z,268nm,19.5s,baz=30,slow=39
comp=Z,18nm,0.7s
**AKBB Malin Array Si 63.46 327** IAmb IAmb 03 29 32.4
comp=Z,33nm,0.9s
**AKBB Malin Array Si 63.46 327** *ce* P **P** **03 29 30.3 -0.5**
AKBB pmax pmax
comp=Z,42nm,0.9s
**AKBB Malin Array Si 63.46 327** P **P** **03 29 30.0 -0.8**
**KIEV Kiev 63.47 327** P **P** **03 29 29.3 -1.5**
KIEV IAmb IAmb 03 29 32.4
comp=Z,30nm,0.9s
**KIEV Kiev 63.47 327** *i* P **P** **03 29 29.7 -1.2**
SNR=17
**KIEV Kiev 63.47 327** ⇑P **P** **03 29 30.6 -0.2**
**KIEV Kiev 63.47 327** P **P** **03 29 29.3 -1.5**
KIEV pmax pmax
comp=Z,30nm,0.9s
**KIEV Kiev 63.47 327** P **P** **03 29 29.5 -1.3**
comp=Z,147nm,0.9s
**AK01 Malin Array Si 63.47 327** P **P** **03 29 29.6 -1.2**
**AK20 Malin Array Si 63.48 327** P **P** **03 29 29.8 -1.1**
**AK18 Malin Array Si 63.48 327** P **P** **03 29 29.6 -1.3**
**AK11 Malin Array Si 63.49 327** P **P** **03 29 29.9 -1.1**
**AK19 Malin Array Si 63.50 327** P **P** **03 29 30.4 -0.6**
**AK02 Malin Array Si 63.50 327** P **P** **03 29 29.9 -1.1**
**AK08 Malin Array Si 63.51 327** P **P** **03 29 30.1 -1.0**
**AK09 Malin Array Si 63.52 327** P **P** **03 29 29.9 -1.2**
**AK12 Malin Array Si 63.53 327** P **P** **03 29 30.0 -1.2**
**AK05 Malin Array Si 63.54 327** P **P** **03 29 30.0 -1.3**
**AK10 Malin Array Si 63.54 327** P **P** **03 29 29.7 -1.6**
**AK14 Malin Array Si 63.55 327** P **P** **03 29 29.8 -1.6**
**AK13 Malin Array Si 63.58 327** P **P** **03 29 30.5 -1.1**
**AK07 Malin Array Si 63.60 327** P **P** **03 29 30.6 -1.1**
**MI28 Mi28,Pidlybu 63.69 328** P **P** **03 29 32.1 -0.2**
**MI30 MI30,Zelenitsa 63.71 327** P **P** **03 29 31.7 -0.7**
**GOF Gofitskoye 63.84 315** *ce* P **P** **03 29 33.1 -0.3**
**MAK Makhachkala 63.90 310** *c i* P P 03 29 28.6 -5.2
MAK *e* 03 31 49.2
MAK *e*S **S** **03 38 01.6 -7.4**
MAK *e*SS **SS** **03 42 14.7 -1.7**
MAK *e*SSS SSS 03 45 12.4
MAK pmax pmax
comp=Z,131nm,1.1s
MAK MLR MLR
comp=Z,1μm,15.0s
**MI29 MI29, Kamyanyy 64.10 328** P **P** **03 29 35.1 +0.1**
**ERBR Yeremizino-Bor 64.21 317** *e*P **P** **03 29 34.5 -1.3**
ERBR *e**PP **pP** **03 29 38.8 -0.2**
ERBR *e*S **S** **03 38 13.2 +0.4**
ERBR pmax pmax
comp=Z,146nm,1.1s
ERBR MLR MLR
comp=Z,493nm,13.0s
ERBR MLR MLR
comp=N,2μm,13.0s
ERBR MLR MLR
comp=E,1μm,13.0s
**KSU1 Kansas State U 64.28 57** P **P** **03 29 35.4 -1.0**
**121A Cookes Peak, D 64.48 69** IAmb IAmb 03 29 41.8
comp=Z,36nm,1.2s
**121A Cookes Peak, D 64.48 69** P **P** **03 29 37.3 -0.7**
baz=325,SNR=8.2
**LUBAR Lubar, Ukraine 64.58 327** P **P** **03 29 37.1 -1.0**
**BEL Belsk 64.64 333** *e*P **P** **03 29 38.8 +0.3**
**319A Douglas 64.69 71** P **P** **03 29 40.0 +0.7**
319A IAmb IAmb 03 29 42.9
comp=Z,33nm,1.1s
**TOLI2 Tolitoli 64.72 223** P **P** **03 29 40.8 +1.3**
**TOLI2 Tolitoli 64.72 223** P **P** **03 29 37.5 -1.9**
TOLI2 IAmb IAmb 03 29 41.5
comp=Z,18nm,1.0s
**KIV Kislovodsk 64.92 314** P **P** **03 29 40.3 -0.3**
KIV IAmb IAmb 03 29 45.0
comp=Z,29nm,0.9s
**KIV Kislovodsk 64.92 314** *i* P **P** **03 29 41.2 +0.6**
SNR=12
**KIV Kislovodsk 64.92 314** P **P** **03 29 41.9 +1.3**
**KIV Kislovodsk 64.92 314** ⇑P **P** **03 29 41.1 +0.6**
**KIV Kislovodsk 64.92 314** *e*P **P** **03 29 40.7 +0.1**
KIV pmax pmax
comp=Z,26nm,1.1s
**KIV Kislovodsk 64.92 314** P **P** **03 29 41.1 +0.6**
comp=Z,39nm,1.9s,comp=Z,682nm
**NCK Nalchik 64.97 313** *e*P **P** **03 29 41.1 +0.3**
NCK pmax pmax
comp=Z,48nm,1.0s
**FAKI Fak Fak 65.00 210** P **P** **03 29 42.3 +1.1**
**FAKI Fak Fak 65.00 210** P **P** **03 29 41.1 -0.2**
**KBZ Khabaz 65.03 314** P **P** **03 29 41.8 +0.7**
comp=Z,41nm,0.8s,baz=40,slow=2.7,SNR=70
KBZ LR LR 04 02 05.1
comp=Z,600nm,20.2s,baz=23,slow=40
comp=Z,41nm,0.8s
**KBZ Khabaz 65.03 314** *ce* P **P** **03 29 41.2 +0.1**
KBZ pmax pmax
comp=Z,62nm,1.0s
**LABN Labinsk 65.05 316** *e*P **P** **03 29 39.4 -1.9**
LABN *e**PP **pP** **03 29 42.8 -1.7**
LABN *e*S **S** **03 38 22.4 -0.8**
LABN pmax pmax
comp=Z,15nm,0.3s
LABN MLR MLR
comp=E,761nm,20.0s
LABN MLR MLR
comp=Z,689nm,20.0s
LABN MLR MLR
comp=N,268nm,11.0s
**AKT Akhty 65.06 309** *e*P **P** **03 29 41.7 +0.1**
AKT *e* 03 30 14.9
AKT *e* 03 32 04.7
AKT pmax pmax
comp=Z,56nm,0.8s
**SHA1 Shidzhatmaz 65.11 314** *ce* P **P** **03 29 42.3 +0.3**
**P38A Dawn 65.16 54** IAmb IAmb 03 29 43.8
comp=Z,31nm,1.1s
**KAN08 Anthony NE Sta 65.23 59** P **P** **03 29 42.4 -0.2**
KAN08 IAmb IAmb 03 32 00.9
comp=Z,22nm,0.8s
**L44A Lake County Fo 65.31 49** P **P** **03 29 41.7 -1.3**
baz=328
**TABU Tabubil 65.34 199** P **P** **03 29 46.6 +3.1**
**EKA Eskdalemuir Ar 65.38 349** P **P** **03 29 43.2 0.0**
comp=Z,8.7nm,0.7s,baz=15,slow=4.8,SNR=23
comp=Z,8.7nm,0.7s
**AMTX Amarillo 65.47 63** IAmb IAmb 03 29 46.6
comp=Z,19nm,0.9s
**HORU Horodok 65.58 328** P **P** **03 29 44.5 -0.2**
**LVV L'vov 65.68 330** *e*P **P** **03 29 44.7 -0.6**
LVV MLR MLR
comp=N,200nm,17.0s
LVV MLR MLR
comp=E,100nm,17.0s
LVV MLR MLR
comp=Z,300nm,16.0s
**CROK Carrier 65.82 59** P **P** **03 29 46.6 +0.2**
CROK IAmb IAmb 03 29 47.9
comp=Z,42nm,1.2s
**NDNU Novodnistrovsk 65.88 327** P **P** **03 29 46.0 -0.6**
**LDAQ Lac Daran 65.99 34** IAmb IAmb 03 29 49.0
comp=Z,24nm,1.0s
**SORM Soroca 66.01 326** ⇑P **P** **03 29 47.4 -0.1**
**SORM Soroca 66.01 326** P **P** **03 29 46.7 -0.8**
**SORM Soroca 66.01 326** P **P** **03 29 46.5 -1.0**
comp=Z,55nm,0.8s,comp=Z,678nm
**ANN Anapa 66.08 318** *e*P **P** **03 29 46.0 -1.9**
ANN *e**PP **pP** **03 29 49.4 -1.7**
ANN *e*S **S** **03 38 34.7 -1.0**
ANN pmax pmax
comp=Z,64nm,1.6s
ANN MLR MLR
comp=Z,363nm,13.0s
ANN MLR MLR
comp=E,396nm,14.0s
ANN MLR MLR
comp=N,26nm,10.0s
**HDIL Hopedale 66.13 51** IAmb IAmb 03 29 49.5
comp=Z,20nm,0.7s
**KMPD K-Podol'skiy 66.17 328** P **pP** **03 29 47.6 -4.0**
KMPD P **P** **03 29 47.1 -1.3**
**KWP Kalwaria Pacla 66.20 331** *e*P **P** **03 29 49.1 +0.4**
**KWP Kalwaria Pacla 66.20 331** P **P** **03 29 48.7 0.0**
comp=Z,141nm,1.3s,comp=Z,2μm
**CSTR Hydro, Custer 66.21 60** P **P** **03 29 49.0 0.0**
**SADO Sadowa 66.30 41** LR LR 03 59 40.9
comp=Z,277nm,21.4s,baz=40,slow=37
**VSLR Vesyoloye 66.32 316** *e*P **P** **03 29 48.6 -0.9**
VSLR pmax pmax
comp=Z,82nm,1.1s
**SOC Sochi 66.33 316** *e*P **P** **03 29 48.3 -1.2**
SOC *e* 03 32 15.0
SOC *e*PPP PPP 03 33 48.8
SOC *e*S **S** **03 38 38.8 0.0**
SOC *e*SS **SS** **03 42 57.8 +3.7**
SOC pmax pmax
comp=Z,49nm,1.3s
SOC MLR MLR
comp=Z,279nm,18.0s
**MORS Morshin 66.34 330** P **P** **03 29 48.8 -0.8**
**OJC Ojcow 66.38 333** *e*P **P** **03 29 49.6 -0.3**
**OJC Ojcow 66.38 333** P **P** **03 29 49.5 -0.3**
comp=Z,79nm,1.2s,comp=Z,788nm
**SHIU Shidnytsya 66.40 330** P **P** **03 29 50.0 0.0**
**STNU Starunia 66.57 329** P **P** **03 29 51.2 +0.1**
**KSP Ksiaz 66.60 335** *e*P **P** **03 29 51.0 -0.2**
**KSP Ksiaz 66.60 335** P **P** **03 29 50.4 -0.8**
comp=Z,34nm,1.1s
**LMQ La Malbaie 66.64 34** IAmb IAmb 03 29 53.1
comp=Z,32nm,1.0s
**OK029 Liberty Lake 66.64 59** IAmb IAmb 03 29 53.7
comp=Z,39nm,1.2s
**OK052 Battle Ridge R 66.77 59** IAmb IAmb 03 29 54.3
comp=Z,45nm,1.3s
**KSV Kosov 66.78 328** P **P** **03 29 51.9 -0.5**
**P43A Skaggs, Pawnee 66.82 51** IAmb IAmb 03 29 53.9
comp=Z,21nm,0.8s
**R40A Maddies Statio 66.82 54** IAmb IAmb 03 29 54.1
comp=Z,31nm,0.9s
**DKNS Dickens 66.82 63** P **P** **03 29 52.0 -1.0**
**AAM Ann Arbor 66.83 46** IAmb IAmb 03 29 54.5
comp=Z,48nm,1.3s
**CLZ Clausthal 66.84 339** *e*P **P** **03 29 52.9 +0.1**
comp=Z,46nm,1.3s,baz=17,slow=6.4
**CLL Collm 66.85 337** P **P** **03 29 51.7 -1.0**
CLL IAmb IAmb 03 29 54.8
comp=Z,34nm,1.0s
**CLL Collm 66.85 337** *i* P **P** **03 29 52.2 -0.6**
comp=Z,45nm,1.1s
CLL *ex* x 03 30 18.0
CLL *e*PP **PP** **03 32 21.0 +1.7**
**CLL Collm 66.85 337** *i* P **P** **03 29 52.2 -0.6**
CLL pmax pmax
comp=Z,45nm,1.1s
**CLL Collm 66.85 337** P **P** **03 29 51.4 -1.4**
comp=Z,38nm,1.8s,comp=Z,502nm
**CLL Collm 66.85 337** *e*P **P** **03 29 52.2 -0.6**
comp=Z,34nm,1.0s,baz=17,slow=6.4
**S39A Bolivar 66.87 55** IAmb IAmb 03 29 54.1
comp=Z,53nm,1.4s
**OSTC Ostas 66.88 335** *e*P **P** **03 29 54.6 +1.6**
OSTC AMS AMS 04 05 50.0
comp=Z,300nm,12.6s
**OSTC Ostas 66.88 335** *e*P **P** **03 29 54.6 +1.6**
OSTC MLR MLR
comp=Z,300nm,12.6s
**CHVC Chvalec 66.89 335** *e*P **P** **03 29 54.7 +1.6**
CHVC AMS AMS 04 06 10.0
comp=Z,300nm,12.7s
**CHVC Chvalec 66.89 335** *e*P **P** **03 29 54.7 +1.6**
CHVC MLR MLR
comp=Z,300nm,12.7s
**KIS Kishinev 66.90 325** ⇓ *i* P **P** **03 29 52.6 -0.6**
comp=Z,210nm,1.8s
KIS *e*L L 03 57 56.0
KIS LRM MLR 04 03 34.0
comp=Z,500nm,14.5s
**KIS Kishinev 66.90 325** *e*P **P** **03 29 52.8 -0.4**
comp=Z,130nm,2.1s
KIS *e*L L 04 02 08.0
KIS LRM MLR 04 03 25.0
comp=Z,300nm,14.0s
**KIS Kishinev 66.90 325** *e*P **P** **03 29 52.8 -0.4**
KIS pmax pmax
comp=Z,130nm,2.1s
KIS MLR MLR
comp=Z,300nm,14.0s
**KOLS Kolonicke sedl 66.95 330** *e*P **P** **03 29 54.9 +1.4**
KOLS pmax pmax
comp=Z,26nm,0.8s
**KOLS Kolonicke sedl 66.95 330** *e*P **P** **03 29 54.9 +1.4**
**MILM Milestii Mici 66.97 325** ⇑P **P** **03 29 53.7 +0.1**
**MILM Milestii Mici 66.97 325** *e*P **P** **03 29 52.0 -1.6**
MILM pmax pmax
comp=Z,210nm,1.8s
MILM MLR MLR
comp=Z,500nm,14.2s
**UPC Upice 66.97 335** *e*P **P** **03 29 55.8 +2.2**
UPC AMS AMS 04 06 10.0
comp=Z,300nm,14.4s
**UPC Upice 66.97 335** *e*P **P** **03 29 55.8 +2.2**
UPC MLR MLR
comp=Z,300nm,14.4s
**OKCSW OKLAHOMA CITY 66.98 60** P **P** **03 29 53.9 0.0**
**NIE Niedzica 67.00 332** *e*P **P** **03 29 54.4 +0.6**
**NIE Niedzica 67.00 332** P **P** **03 29 54.5 +0.7**
comp=Z,15nm,1.8s
**MEZ Mezhgor'ye 67.01 329** P **P** **03 29 53.8 -0.1**
**DELO Deloro Mine 67.05 40** IAmb IAmb 03 29 55.3
comp=Z,44nm,1.5s
**POST Post 67.05 64** P **P** **03 29 54.4 0.0**
**DPC Dobruska-Polom 67.05 335** *e*P **P** **03 29 56.2 +2.0**
DPC AMS AMS 04 04 00.0
comp=Z,300nm,11.7s
**DPC Dobruska-Polom 67.05 335** *e*P **P** **03 29 56.2 +2.0**
DPC MLR MLR
comp=Z,300nm,11.7s
**DPC Dobruska-Polom 67.05 335** P **P** **03 29 53.7 -0.5**
comp=Z,36nm,1.7s,comp=Z,687nm
**BRG Berggiesshubel 67.07 337** *e*P **P** **03 29 55.2 +1.0**
BRG Amp 03 29 56.5
comp=Z,12nm,1.0s
**BRG Berggiesshubel 67.07 337** *e*P **P** **03 29 55.1 +1.0**
BRG pmax pmax
comp=Z,12nm,1.0s
BRG MLR MLR
comp=E,129nm,11.7s
**BRG Berggiesshubel 67.07 337** *e*P **P** **03 29 53.6 -0.6**
comp=E,12nm,1.0s,baz=17,slow=6.4
**SIM Simferopol' 67.07 321** *e*P **P** **03 29 55.4 +1.1**
SIM *e*S **S** **03 38 55.3 +7.5**
SIM pmax pmax
comp=Z,30nm,1.1s
SIM smax smax
comp=N,21nm,1.1s
SIM MLR MLR
comp=Z,400nm,17.0s
**FNO Franklin 67.12 60** IAmb IAmb 03 29 57.1
comp=Z,23nm,1.2s
**OKC Ostrava-Krasne 67.12 334** AMS AMS 04 02 50.0
comp=Z,300nm,17.0s
**SFIN Lafayette 67.16 49** IAmb IAmb 03 29 56.1
comp=Z,27nm,1.1s
**CRVS Cervenica-Dubn 67.19 331** *e*P **P** **03 29 55.3 +0.3**
CRVS pmax pmax
comp=Z,124nm,1.9s
**CRVS Cervenica-Dubn 67.19 331** *e*P **P** **03 29 55.3 +0.3**
**KRLC Kraliky 67.21 335** *e*P **P** **03 29 57.0 +1.8**
KRLC AMS AMS 04 04 10.0
comp=Z,400nm,13.9s
**KRLC Kraliky 67.21 335** *e*P **P** **03 29 57.0 +1.8**
KRLC MLR MLR
comp=Z,400nm,13.9s
**PVCC Panska Ves 67.27 336** AMS AMS 04 05 00.0
comp=Z,300nm,12.6s
**VHRN Van Horn 67.27 68** IAmb IAmb 03 29 59.2
comp=Z,36nm,1.4s
**MUKU Mukachevo 67.29 330** P **P** **03 29 55.8 +0.2**
**RAKU Rahkiv 67.29 329** P **P** **03 29 54.2 -1.4**
**HOLU Holmets 67.30 330** P **P** **03 29 55.7 +0.1**
**BRIU Brid 67.31 330** P **P** **03 29 55.7 0.0**
**SN07 Snyder 07 67.32 64** P **P** **03 29 54.7 -1.4**
**MORC Moravsky Berou 67.32 334** IAmb IAmb 03 29 58.8
comp=Z,36nm,1.0s
**MORC Moravsky Berou 67.32 334** *e*P **P** **03 29 56.1 +0.3**
**MORC Moravsky Berou 67.32 334** ⇓P **P** **03 29 56.9 +1.1**
**MORC Moravsky Berou 67.32 334** P **P** **03 29 56.9 +1.1**
**PECS Pecos 67.33 67** IAmb IAmb 03 29 59.0
comp=Z,43nm,1.6s
**RICC Richard 67.35 336** *e*P **P** **03 29 57.8 +1.8**
**BUR08 Bucovina Ar. S 67.35 328** IAmb IAmb 03 29 58.7
comp=Z,16nm,0.8s
**BUR01 Bucovina Ar. S 67.38 328** ⇑P **P** **03 29 56.4 +0.1**
**BURAR Bucovina Array 67.38 328** P **P** **03 29 55.1 -1.2**
BURAR IAmb IAmb 03 29 59.1
comp=Z,18nm,0.8s
**BURAR Bucovina Array 67.38 328** P **P** **03 29 56.3 0.0**
**GNI Garni 67.38 311** P **P** **03 29 57.0 +0.4**
**GNI Garni 67.38 311** P **P** **03 29 57.6 +1.0**
**GNI Garni 67.38 311** LR LR 04 04 37.9
comp=Z,609nm,18.7s,baz=38,slow=41
**GNI Garni 67.38 311** P **P** **03 29 57.7 +1.2**
GNI P **P** **03 29 57.7 +1.2**
**GNI Garni 67.38 311** *ce* P **P** **03 29 57.3 +0.8**
GNI pmax pmax
comp=Z,96nm,1.7s
**RLO Rose Lookout 67.42 57** IAmb IAmb 03 29 58.4
comp=Z,44nm,1.2s
**HSKC Hora Svate Kat 67.43 337** *e*P **P** **03 29 57.9 +1.4**
HSKC AMS AMS 04 05 30.0
comp=Z,300nm,13.3s
**D62A Allapoint, All 67.43 33** IAmb IAmb 03 29 58.2
comp=Z,22nm,0.9s
**CCM Cathedral Cave 67.45 53** P **P** **03 29 56.3 -0.5**
CCM IAmb IAmb 03 29 58.1
comp=Z,26nm,0.9s
**CCM Cathedral Cave 67.45 53** P **P** **03 29 56.3 -0.5**
CCM pmax pmax
comp=Z,26nm,0.9s
**LANS Liptovska Anna 67.45 332** *e*P **P** **03 29 58.1 +1.4**
LANS pmax pmax
comp=Z,32nm,0.9s
**LANS Liptovska Anna 67.45 332** *e*P **P** **03 29 58.1 +1.4**
**SN05 Snyder 5 67.50 64** P **P** **03 29 56.7 -0.6**
SN05 IAmb IAmb 03 29 59.4
comp=Z,58nm,1.6s
**BERU Beregovo 67.50 330** P **P** **03 29 57.9 +1.0**
**TRSU Trosnyk 67.55 330** P **P** **03 29 58.4 +1.2**
**Q44A Meyer Farm, Va 67.65 51** IAmb IAmb 03 29 59.9
comp=Z,34nm,1.2s
**PRA Prague 67.73 336** *e*P **P** **03 30 00.2 +1.9**
PRA AMS AMS 04 03 00.0
comp=Z,300nm,13.2s
**PRA Prague 67.73 336** *e*P **P** **03 30 00.2 +1.9**
PRA MLR MLR
comp=Z,300nm,13.2s
**MOX Moxa 67.75 338** *e*P **P** **03 29 58.3 -0.2**
comp=Z,29nm,1.3s,baz=17,slow=6.4
MOX *e*L L 04 09 50.6
comp=Z,112nm,18.6s
**PECO Prince Edward 67.77 40** IAmb IAmb 03 29 59.8
comp=Z,32nm,1.3s
**MGMO Mountain Grove 67.78 55** IAmb IAmb 03 30 00.1
comp=Z,26nm,0.8s
**PRU Pruhonice 67.78 336** *e*P **P** **03 30 00.5 +1.8**
PRU AMS AMS 04 03 00.0
comp=Z,300nm,15.7s
**PRU Pruhonice 67.78 336** *e*P **P** **03 30 00.5 +1.8**
PRU MLR MLR
comp=Z,300nm,15.7s
**PLN Plauen 67.80 338** *e*P **P** **03 29 58.6 -0.3**
comp=Z,54nm,1.5s,baz=17,slow=6.4
**GOPC GO Pecny, Ondr 67.80 336** *e*P **P** **03 30 00.9 +2.0**
GOPC AMS AMS 04 03 00.0
comp=Z,300nm,11.0s
**GOPC GO Pecny, Ondr 67.80 336** *e*P **P** **03 30 00.9 +2.0**
GOPC MLR MLR
comp=Z,300nm,11.0s
**TANN Tannenbergstha 67.80 338** *e*P **P** **03 29 58.6 -0.4**
comp=Z,134nm,2.1s,baz=17,slow=6.4
**KECS Kecovo 67.82 331** *e*P **P** **03 30 01.4 +2.4**
KECS pmax pmax
comp=Z,27nm,0.9s
**KECS Kecovo 67.82 331** *e*P **P** **03 30 01.4 +2.4**
**N49A Columbus Grove 67.82 47** IAmb IAmb 03 30 00.4
comp=Z,24nm,1.1s
**FVM French Village 67.85 53** IAmb IAmb 03 30 00.6
comp=Z,28nm,0.8s
**MNHN Monahans 67.88 66** IAmb IAmb 03 30 02.2
comp=Z,47nm,1.6s
**UBBA Unterbreizbach 67.89 339** *e*P **P** **03 29 59.1 -0.1**
comp=Z,99nm,1.9s,baz=17,slow=6.4
**HNR Honiara 67.93 179** LR LR 03 54 35.1
comp=Z,1μm,21.8s,baz=16,slow=31
**VRAC Vranov 67.97 334** *e*P **P** **03 30 00.3 +0.4**
**VRAC Vranov 67.97 334** LR LR 04 03 38.7
comp=Z,211nm,18.0s,baz=27,slow=39
**VRAC Vranov 67.97 334** ⇓P **P** **03 30 00.5 +0.6**
**VRAC Vranov 67.97 334** P **P** **03 30 00.5 +0.6**
**BATG Bathurst New B 68.08 31** P **P** **03 29 59.9 -0.8**
**J55A Hilton 68.08 41** IAmb IAmb 03 30 01.6
comp=Z,22nm,1.0s
**PQI Presque Isle 68.09 33** IAmb IAmb 03 30 02.7
comp=Z,36nm,1.5s
**JAVC Velka Javorina 68.15 334** *e*P **P** **03 30 02.5 +1.4**
**OLIL Olney 68.17 51** IAmb IAmb 03 30 02.5
comp=Z,36nm,1.1s
**SGCY Sterling City 68.18 64** IAmb IAmb 03 30 03.8
comp=Z,33nm,1.1s
**ONER Baraj Valea Uz 68.21 327** ⇑P **P** **03 30 02.5 +1.0**
**VYHS Vyhne 68.21 333** *e*P **P** **03 30 02.1 +0.6**
VYHS pmax pmax
comp=Z,52nm,1.3s
**VYHS Vyhne 68.21 333** *e*P **P** **03 30 02.1 +0.6**
**TREC Trest 68.23 335** AMS AMS 04 05 30.0
comp=Z,300nm,11.1s
**KRUC Moravsky 68.25 334** *e*P **P** **03 30 02.0 +0.3**
**ALPN Alpine 68.26 67** IAmb IAmb 03 30 04.9
comp=Z,42nm,1.5s
**MANZ Manzenberg 68.28 338** *e*P **P** **03 30 01.9 0.0**
comp=Z,7.1nm,1.4s,baz=17,slow=6.4
**ABTX Abilene, Hawle 68.28 63** P **P** **03 30 01.4 -0.7**
**DRLN Deer Lake 68.33 25** IAmb IAmb 03 30 03.4
comp=Z,29nm,1.2s
**M52A Chesterland 68.34 45** IAmb IAmb 03 30 03.8
comp=Z,39nm,1.1s
**ZVC Zvikov 68.38 336** *e*P **P** **03 30 04.2 +1.8**
**T42A Van Buren 68.38 54** IAmb IAmb 03 30 04.0
comp=Z,29nm,0.9s
**J56A Wolcott 68.40 40** IAmb IAmb 03 30 03.5
comp=Z,24nm,1.1s
**O49A Covington 68.40 47** P **P** **03 30 01.7 -1.0**
**PSZ Piszkesteto 68.49 332** IAmb IAmb 03 30 06.6
comp=Z,39nm,1.1s
**PSZ Piszkesteto 68.49 332** ⇓P **P** **03 30 04.8 +1.5**
**PSZ Piszkesteto 68.49 332** P **P** **03 30 04.7 +1.5**
**N51A Ashland 68.51 46** IAmb IAmb 03 30 04.5
comp=Z,34nm,0.9s
**SMOL Smolenice 68.53 334** *e*P **P** **03 30 04.2 +0.8**
SMOL pmax pmax
comp=Z,23nm,1.2s
**TLCR 68.54 324** ⇑P **P** **03 30 05.2 +1.6**
**TLCR 68.54 324** P **P** **03 30 05.1 +1.6**
**VRI Vrincioaia 68.54 326** ⇑P **P** **03 30 04.0 +0.4**
**VRI Vrincioaia 68.54 326** P **P** **03 30 04.0 +0.4**
**VRI Vrincioaia 68.54 326** P **P** **03 30 04.2 +0.6**
comp=Z,5.6nm,0.8s
**PMG Port Moresby 68.56 192** LR LR 03 57 52.4
comp=Z,56nm,20.8s,baz=138,slow=34
**PMG Port Moresby 68.56 192** *ce* P **P** **03 30 05.4 +1.5**
PMG pmax pmax
comp=Z,17nm,1.0s
**J57A Williamstown 68.57 40** IAmb IAmb 03 30 04.9
comp=Z,42nm,1.3s
**TURR Turia 68.57 327** ⇑P **P** **03 30 05.3 +1.5**
**PLOR3 Plostina Array 68.58 326** P **P** **03 30 03.7 -0.1**
comp=Z,10nm,1.2s
**PLOR Plostina 68.58 326** ⇑P **P** **03 30 04.6 +0.8**
**PLOR Plostina 68.58 326** P **P** **03 30 04.6 +0.8**
**PLOR5 Plostina Array 68.58 326** P **P** **03 30 03.7 -0.1**
comp=Z,19nm,0.7s,comp=Z,785nm
**SIUC Southern Illin 68.58 52** IAmb IAmb 03 30 05.0

comp=Z,25nm,0.8s
**S44A Carbondale** 68.58 52 P P 03 30 02.0 -1.9
S44A IAmb IAmb 03 30 05.1
comp=Z,23nm,0.8s
**OZUR** 68.60 327 ⇑P P 03 30 05.2 +1.2
**CJR Cluj-Napoca** 68.64 329 ⇑P P 03 30 05.4 +1.2
**CJR Cluj-Napoca** 68.64 329 P P 03 30 05.4 +1.2
**NCB Newcomb** 68.65 38 IAmb IAmb 03 30 06.0
comp=Z,59nm,1.6s
**F63A Nahmakanta, Br** 68.67 34 IAmb IAmb 03 30 05.9
comp=Z,25nm,1.1s
**M53A WI Miller and** 68.68 44 P P 03 30 03.2 -1.3
baz=331,SNR=10
**G62A West of Eustis** 68.68 35 IAmb IAmb 03 30 06.4
comp=Z,38nm,1.3s
**F64A Sherman** 68.74 33 IAmb IAmb 03 30 06.2
comp=Z,20nm,1.1s
**GRF Grafenberg Arr** 68.74 338 eL L 04 10 06.3
comp=Z,112nm,19.7s
**GRFO Grafenberg** 68.74 338 P P 03 30 03.7 -1.0
**GRFO Grafenberg** 68.74 338 P P 03 30 03.7 -1.0
GRFO pmax pmax
comp=Z,80nm,1.4s
**CFR Carcaliu** 68.75 325 ⇑P P 03 30 05.4 +0.6
**CFR Carcaliu** 68.75 325 P P 03 30 05.1 +0.3
**MEM Membach** 68.79 342 dP P 03 30 05.0 0.0
comp=Z,32nm,1.0s
**BTNL Ternell** 68.79 342 dP P 03 30 05.0 0.0
comp=Z,26nm,1.0s
**KHC Kasperske Hory** 68.80 336 IAmb IAmb 03 30 08.2
comp=Z,51nm,1.4s
**KHC Kasperske Hory** 68.80 336 eP P 03 30 07.1 +2.0
KHC AMS AMS 04 03 40.0
comp=Z,300nm,14.6s
**KHC Kasperske Hory** 68.80 336 ceP P 03 30 05.5 +0.3
KHC pmax pmax
comp=Z,106nm,1.7s
**KHC Kasperske Hory** 68.80 336 P P 03 30 05.4 +0.3
comp=Z,28nm,1.8s
**VT1 Waterbury** 68.80 37 P P 03 30 04.3 -0.9
**DRGR** 68.81 329 ⇓P P 03 30 05.3 0.0
**DRGR** 68.81 329 P P 03 30 05.3 0.0
**P49A Miami Univ. Ec** 68.82 48 P P 03 30 03.8 -1.5
baz=330,SNR=12
**J58A Remsen** 68.85 39 IAmb IAmb 03 30 06.7
comp=Z,50nm,1.4s
**PBMO Poplar Bluff** 68.87 54 IAmb IAmb 03 30 07.2
comp=Z,45nm,1.4s
**ACSO Alum Creek Sta** 68.88 46 IAmb IAmb 03 30 07.0
comp=Z,32nm,1.1s
**BSTI Sart Tilman** 68.88 342 dP P 03 30 05.9 +0.3
comp=Z,8.3nm,1.0s
**ZST Bratislava** 68.90 334 eP P 03 30 08.5 +2.8
**ZST Bratislava** 68.90 334 eP P 03 30 08.5 +2.8
**WET Wettzell** 68.93 337 eP P 03 30 06.0 0.0
comp=Z,33nm,1.1s,baz=17,slow=6.4
**CKRC Cesky Krumlov** 68.94 336 eP P 03 30 07.6 +1.6
CKRC AMS AMS 04 05 10.0
comp=Z,300nm,11.7s
**CKRC Cesky Krumlov** 68.94 336 eP P 03 30 07.6 +1.6
CKRC MLR MLR
comp=Z,300nm,11.7s
**FW06 Azle** 68.95 61 IAmb IAmb 03 30 08.4
comp=Z,36nm,1.2s
**TPGR Topolog** 68.95 325 ⇑P P 03 30 06.2 0.0
**OZNA Ozona** 69.01 65 IAmb IAmb 03 30 09.0
comp=Z,40nm,1.5s
**PKME Peaks-Kenny Pk** 69.01 34 IAmb IAmb 03 30 08.2
comp=Z,23nm,1.0s
**J59A Piesco** 69.01 39 IAmb IAmb 03 30 07.9
comp=Z,41nm,1.4s
**BHOU Houvegnez** 69.03 342 dP P 03 30 07.8 +1.2
comp=Z,14nm,1.4s
**GEC2 GERESS Array S** 69.04 336 IAmb IAmb 03 30 09.3
comp=Z,28nm,1.1s
**GEC2 GERESS Array S** 69.04 336 eP P 03 30 06.6 -0.1
comp=Z,29nm,1.1s,baz=17,slow=6.4
**GERES GERESS Array B** 69.04 336 P P 03 30 06.1 -0.6
**GERES GERESS Array B** 69.04 336 P P 03 30 06.8 +0.1
comp=Z,7.6nm,0.8s,baz=33,slow=5.1,SNR=32
comp=Z,7.6nm,0.8s
**GERES GERESS Array B** 69.04 336 P P 03 30 06.1 -0.6
**H62A Milan** 69.08 36 IAmb IAmb 03 30 08.9
comp=Z,47nm,1.4s
**BCLA Clavier** 69.08 342 dP P 03 30 06.4 -0.5
comp=Z,9.0nm,1.3s
**MLR Muntele Rosu** 69.11 327 IAmb IAmb 03 30 11.1
comp=Z,42nm,1.1s
**MLR Muntele Rosu** 69.11 327 LR LR 04 05 16.3
comp=Z,331nm,18.2s,baz=40,slow=40
**MLR Muntele Rosu** 69.11 327 ⇑P P 03 30 08.8 +1.6
**MLR Muntele Rosu** 69.11 327 P P 03 30 08.0 +0.7
**MLR Muntele Rosu** 69.11 327 P P 03 30 07.4 +0.1
comp=Z,37nm,1.6s
**TX31 Lajitas Ar. Si** 69.11 68 IAmb IAmb 03 30 10.6
comp=Z,53nm,1.4s
**TXAR Lajitas Array** 69.11 68 P P 03 30 07.3 -0.2
**TXAR Lajitas Array** 69.11 68 P P 03 30 08.1 +0.6
comp=Z,7.9nm,1.0s,baz=330,slow=3.4,SNR=59
TXAR LR LR 04 00 36.5
comp=Z,208nm,20.9s,baz=327,slow=36
comp=Z,7.9nm,1.0s
**TXAR Lajitas Array** 69.11 68 P P 03 30 07.3 -0.2
**BGES Gesves** 69.15 342 dP P 03 30 06.3 -0.9
comp=Z,8.9nm,1.4s
**HARR Harsova** 69.25 325 ⇑P P 03 30 08.2 +0.2
**HARR Harsova** 69.25 325 P P 03 30 08.1 +0.2
**ISR Istrita** 69.28 326 ⇑P P 03 30 09.4 +1.2
**ISR Istrita** 69.28 326 P P 03 30 09.4 +1.2
**ISR Istrita** 69.28 326 P P 03 30 08.2 0.0
comp=Z,57nm,1.4s
**BMRD Maredsous** 69.28 343 dP P 03 30 08.5 +0.5
comp=Z,10nm,1.3s
**WCI Wyandotte Cave** 69.32 50 P P 03 30 07.3 -1.2
WCI IAmb IAmb 03 30 09.9
comp=Z,27nm,1.0s
**WCI Wyandotte Cave** 69.32 50 P P 03 30 07.3 -1.2
WCI pmax pmax
comp=Z,27nm,1.0s
**SAND Sanderson** 69.34 66 IAmb IAmb 03 30 11.3
comp=Z,38nm,1.4s
**RCHB Rochefort** 69.35 342 dP P 03 30 08.5 +0.1
**ACCN Adirondack Com** 69.36 38 IAmb IAmb 03 30 10.3
comp=Z,51nm,1.4s
**KULM Kulim** 69.40 245 P P 03 30 09.2 -0.1
KULM IAmb IAmb 03 30 11.2
comp=Z,33nm,1.1s
**O52A Adamsville** 69.41 46 IAmb IAmb 03 30 10.1
comp=Z,28nm,1.1s
**MIAR Mount Ida** 69.41 57 IAmb IAmb 03 30 11.5
comp=Z,44nm,1.2s
**VOIR** 69.41 327 ⇑P P 03 30 10.5 +1.4
**VOIR** 69.41 327 P P 03 30 09.9 +0.8
**VOIR** 69.41 327 P P 03 30 09.0 -0.1
comp=Z,19nm,1.7s,comp=Z,348nm
**CONA Conrad Observa** 69.44 334 i pP P 03 30 10.0 +0.8
comp=Z,55nm,1.4s,SNR=18
**HNH Hanover** 69.51 37 IAmb IAmb 03 30 12.0
comp=Z,32nm,1.2s
**DOU Dourbes** 69.51 343 dP P 03 30 09.0 -0.4
comp=Z,9.3nm,1.3s
**O53A New Philadelph** 69.52 45 IAmb IAmb 03 30 10.9
comp=Z,26nm,1.0s
**O53A New Philadelph** 69.52 45 P P 03 30 07.8 -1.9
baz=331,SNR=7.7
**FW13 Cleburne** 69.53 61 P P 03 30 09.5 -0.4
**RONA Rosalia, Austr** 69.55 334 i pP pP 03 30 11.3 -1.8
comp=Z,47nm,1.4s,SNR=14
**G65A Princeton** 69.57 33 IAmb IAmb 03 30 11.6
comp=Z,41nm,1.2s
**ARR Arges** 69.59 327 ⇑P P 03 30 11.8 +1.6
**DIKM Dikmen** 69.60 318 ⇑P P 03 30 11.7 +1.5
**DIKM Dikmen** 69.60 318 P P 03 30 10.4 +0.2
comp=Z,48nm,1.3s,comp=Z,524nm
**FW14 Alvarado** 69.60 61 IAmb IAmb 03 30 12.5
comp=Z,48nm,1.2s
**I62A Tamworth** 69.65 36 IAmb IAmb 03 30 12.8
comp=Z,43nm,1.3s
**BRDY Brady** 69.70 63 IAmb IAmb 03 30 13.9
comp=Z,59nm,1.7s
**P52A Corning** 69.72 46 IAmb IAmb 03 30 11.7
comp=Z,69nm,1.9s
**P52A Corning** 69.72 46 P P 03 30 08.7 -2.2
baz=331
**I63A Otisfield** 69.72 36 IAmb IAmb 03 30 20.4
comp=Z,58nm,1.6s

**LMN Caledonia Moun** 69.73 31 P P 03 30 10.1 -0.8
**J61A Chester** 69.75 37 IAmb IAmb 03 30 13.3
comp=Z,36nm,1.4s
**UALR University of** 69.76 56 IAmb IAmb 03 30 13.2
comp=Z,32nm,1.2s
**MPLH Magyarpolny** 69.76 333 P P 03 30 11.1 0.0
comp=Z,106nm,1.8s,comp=Z,2µm
**X40A Basin Creek Fa** 69.79 57 P P 03 30 10.4 -1.0
X40A IAmb IAmb 03 30 13.5
comp=Z,28nm,1.0s
**ICOR Ion Corvin** 69.81 325 ⇑P P 03 30 12.8 +1.4
**GURO Guroymak-BITLI** 69.82 312 IAmb IAmb 03 30 15.9
comp=Z,52nm,1.7s
**WHTX Lake Whitney,** 69.82 62 IAmb IAmb 03 30 13.9
comp=Z,46nm,1.1s
**GGN Saint George** 69.85 33 IAmb IAmb 03 30 13.8
comp=Z,54nm,1.3s
**MOA Molln** 69.86 335 i pP pP 03 30 13.1 -1.9
comp=Z,30nm,1.3s,SNR=7.2
**SURR Surduc** 69.93 329 ⇑P P 03 30 11.9 -0.2
**IPM Ipoh** 69.93 244 P P 03 30 12.1 -0.5
**IPM Ipoh** 69.93 244 IAmb IAmb 03 30 14.0
comp=Z,25nm,0.8s
**L59A Walton** 69.97 40 IAmb IAmb 03 30 13.9
comp=Z,55nm,1.3s
**JCT Junction City** 70.00 64 IAmb IAmb 03 30 15.0
comp=Z,53nm,1.3s
**M57A Sunshine Farm,** 70.03 42 IAmb IAmb 03 30 14.0
comp=Z,35nm,1.2s
**EMMW Eamachias** 70.05 33 IAmb IAmb 03 30 14.4
comp=Z,20nm,1.0s
**R50A Paris** 70.05 48 IAmb IAmb 03 30 14.7
comp=Z,29nm,0.9s
**GZR Gura Zlata** 70.08 329 ⇑P P 03 30 13.9 +0.7
**GZR Gura Zlata** 70.08 329 P P 03 30 13.8 +0.7
**P53A Whipple** 70.12 46 IAmb IAmb 03 30 14.6
comp=Z,25nm,1.2s
**HPIG** 70.13 71 IAmb IAmb 03 30 17.0
comp=Z,39nm,1.6s
**PSN Preselentsi** 70.15 324 P P 03 30 13.3 -0.2
**BIOA Bad Ischl, Aus** 70.15 336 i pP P 03 30 14.0 +0.5
comp=Z,36nm,2.0s,SNR=7.9
**ARSA Arzberg** 70.15 334 i pP P 03 30 14.7 +1.2
comp=Z,27nm,1.3s,SNR=7.5
**LPIG La Paz** 70.16 76 LR LR 03 57 03.3
comp=Z,62nm,21.6s,baz=342,slow=33
**BZS Buzias** 70.19 330 ⇑P P 03 30 14.2 +0.5
**BZS Buzias** 70.19 330 P P 03 30 13.9 +0.2
**Q52A Bidwel** 70.25 46 IAmb IAmb 03 30 15.2
comp=Z,22nm,0.9s
**RJOB Jochberg** 70.28 336 eP P 03 30 14.7 +0.3
comp=Z,21nm,0.9s,baz=17,slow=6.4
**WLAR White Oak Lake** 70.34 57 P P 03 30 15.9 +1.0
**SSPA Standing Stone** 70.38 42 P P 03 30 12.9 -2.1
SSPA IAmb IAmb 03 30 16.2
comp=Z,33nm,1.3s
**MORH Mrgy, Hungar** 70.39 332 ⇑P P 03 30 15.5 +0.5
**MORH Mrgy, Hungar** 70.39 332 P P 03 30 13.9 -1.0
comp=Z,8.3nm,1.6s
**DRIO Del Rio** 70.50 65 IAmb IAmb 03 30 17.7
comp=Z,26nm,0.9s
**WVT Waverly** 70.51 52 P P 03 30 14.4 -1.4
WVT IAmb IAmb 03 30 17.5
comp=Z,31nm,0.8s
**WVT Waverly** 70.51 52 P P 03 30 14.4 -1.4
WVT pmax pmax
comp=Z,31nm,0.8s
**L61B Northampton** 70.51 38 P P 03 30 14.5 -1.2
baz=334
**MCWV Mont Orbateau** 70.54 44 IAmb IAmb 03 30 17.6
comp=Z,23nm,1.2s
**BFO Black Forest** 70.59 340 P P 03 30 15.5 -0.7
BFO IAmb IAmb 03 30 18.4
comp=Z,44nm,1.6s
**BFO Black Forest** 70.59 340 P P 03 30 15.5 -0.7
BFO pmax pmax
comp=Z,44nm,1.6s
**LESA Schwarzleotal** 70.61 336 i pP P 03 30 17.4 +1.0
comp=Z,27nm,1.6s
**N58A Sunbury** 70.61 42 IAmb IAmb 03 30 17.3
comp=Z,25nm,1.2s
**HERR Herculane** 70.66 329 ⇑P P 03 30 16.9 +0.3
**SLBS Sierra La Lagu** 70.68 76 P P 03 30 17.3 +0.2
SLBS IAmb IAmb 03 30 20.7
comp=Z,60nm,1.6s
**NEF NEVSHA** 70.75 325 P P 03 30 17.9 +0.7
**ARPR Arapgir-MALATY** 70.75 315 IAmb IAmb 03 30 21.5
comp=Z,43nm,1.1s
**435B Jarrell** 70.78 62 P P 03 30 17.9 +0.3
435B IAmb IAmb 03 30 20.6
comp=Z,45nm,1.1s
**435B Jarrell** 70.78 62 P P 03 30 16.9 -0.6
baz=328
**KAPI Kappang** 70.78 222 LR LR 04 00 48.7
comp=Z,67nm,21.1s,baz=40,slow=35
**KBA Koelnbreinsper** 70.79 336 i pP pP 03 30 19.0 -1.8
comp=Z,56nm,1.3s,SNR=14
**PRD Provadia** 70.80 324 P P 03 30 17.9 +0.4
**SOKA Soboth** 70.80 335 i pP pP 03 30 19.3 -1.6
comp=Z,24nm,1.2s,SNR=6.2
**PERS Pernice** 70.83 334 i P P 03 30 18.0 +0.3
**UBR Ueberruth** 70.88 338 eP P 03 30 17.8 -0.2
comp=Z,25nm,1.1s,baz=17,slow=6.4
**S51A Beattyville** 70.90 48 IAmb IAmb 03 30 19.8
comp=Z,22nm,0.9s
**ECH Echery** 70.91 340 IAmb IAmb 03 30 20.3
comp=Z,29nm,1.3s
**WATA Walderalm** 70.92 337 i pP P 03 30 19.1 +0.7
comp=Z,34nm,1.4s,SNR=7.0
**RETA Reutte** 70.94 338 i pP P 03 30 19.4 +1.1
comp=Z,17nm,1.8s
**T50A Nancy** 70.95 49 IAmb IAmb 03 30 20.1
comp=Z,22nm,1.0s
**WTTA Wattenberg** 70.97 337 i pP P 03 30 19.8 +1.0
comp=Z,56nm,1.6s,SNR=13
**GBN Guysborough** 71.00 29 P P 03 30 18.9 +0.2
**MOTA Moosalm** 71.00 337 i pP P 03 30 19.2 +0.3
comp=Z,29nm,1.7s
**OBKA Obir** 71.07 335 i pP P 03 30 20.3 +1.1
comp=Z,62nm,1.0s,SNR=11
**SQTA Sankt Quirin** 71.10 337 i pP P 03 30 20.2 +0.8
comp=Z,48nm,1.6s,SNR=11
**ODNJ Ogdensburg** 71.11 40 IAmb IAmb 03 30 20.4
comp=Z,56nm,1.7s
**SZH Strazhitsa** 71.13 326 P P 03 30 19.2 -0.3
**CLTN Cedars of Leba** 71.15 51 IAmb IAmb 03 30 21.4
comp=Z,24nm,0.8s
**MYKA Terra Mystica** 71.16 335 i pP pP 03 30 21.0 -2.0
comp=Z,26nm,1.3s,SNR=6.1
**HAL Halifax** 71.18 31 IAmb IAmb 03 30 21.5
comp=Z,36nm,0.9s
**TRNY Table Rock, Ra** 71.18 40 IAmb IAmb 03 30 21.1
comp=Z,56nm,1.6s
**UCCT U. Connecticut** 71.25 38 P P 03 30 20.0 -0.2
**V48A Smith Brothers** 71.26 52 IAmb IAmb 03 30 21.8
comp=Z,22nm,0.9s
**ABTA Abfaltersbach** 71.29 336 i pP P 03 30 21.2 +0.7
comp=Z,35nm,1.2s,SNR=9.6
**DAVA Damuels** 71.30 338 i pP pP 03 30 22.7 -1.2
comp=Z,22nm,1.5s
**Q56A Snyder Ridge,** 71.33 44 IAmb IAmb 03 30 22.4
comp=Z,28nm,1.2s
**PRED Cave del Predi** 71.35 335 IAmb IAmb 03 30 22.0
comp=Z,29nm,1.0s
**P57A Homestead Farm** 71.36 43 P P 03 30 20.0 -1.0
**FETA Feichten** 71.39 338 i pP P 03 30 21.8 +0.6
comp=Z,29nm,1.1s,SNR=10
**PLAL Pickwick Lake** 71.39 53 IAmb IAmb 03 30 22.6
comp=Z,27nm,0.9s
**ELND Elka** 71.47 325 ⇑P P 03 30 23.0 +1.4
**VALD Valchedram** 71.47 328 P P 03 30 21.9 +0.4
**PVL Pavlikeni** 71.50 326 P P 03 30 22.3 +0.6
**S54A Dingess, Beckl** 71.63 46 IAmb IAmb 03 30 24.2
comp=Z,76nm,1.6s
**R55A Marlinton** 71.65 45 IAmb IAmb 03 30 24.4
comp=Z,25nm,1.2s
**JMB Yambol** 71.68 325 P P 03 30 23.8 +1.0
**MPEP Malo Peshtene** 71.70 327 P P 03 30 23.0 +0.1
**DAVOX Davos/Dischmat** 71.79 338 LR LR 04 05 29.2
comp=Z,122nm,18.6s,baz=42,slow=39
**FUORN Ofenpass-Fuorn** 71.86 338 IAmb IAmb 03 30 27.3
comp=Z,33nm,1.4s
**TZTN Tazewell** 71.87 49 IAmb IAmb 03 30 26.0
comp=Z,22nm,0.9s
**BR106 Keskin Array S** 71.87 318 P P 03 30 24.1 -0.1
comp=Z,12nm,1.3s,comp=Z,117nm
**BR131 Keskin Array S** 71.87 318 IAmb IAmb 03 30 27.0
comp=Z,23nm,1.1s
**BR131 Keskin Array S** 71.87 318 i P P 03 30 23.4 -0.8
**BRTR Keskin Array B** 71.87 318 P P 03 30 23.0 -1.3
**BRTR Keskin Array B** 71.87 318 P P 03 30 24.8 +0.5
comp=Z,9.4nm,1.1s,baz=29,slow=3.2,SNR=34
BRTR LR LR 04 05 17.1
comp=Z,172nm,19.5s,baz=46,slow=39
comp=Z,9.4nm,1.1s
**BRTR Keskin Array B** 71.87 318 i P P 03 30 24.7 +0.5
BRTR pmax pmax
comp=Z,10.0nm,1.1s
**BR105 Keskin Array S** 71.89 318 P P 03 30 24.1 -0.2
comp=Z,13nm,1.6s,comp=Z,133nm
**BR104 Keskin Array S** 71.89 318 P P 03 30 24.2 -0.1
comp=Z,12nm,1.3s,comp=Z,116nm
**GBRS Gornja Briga** 71.94 334 i P P 03 30 24.6 +0.2
**833A Chaparral WMA,** 72.00 65 P P 03 30 24.1 -0.9
baz=328
**BOVS Bovan** 72.00 329 ⇑P P 03 30 24.6 -0.1
**ANTO Ankara** 72.04 319 P P 03 30 25.4 +0.3
ANTO IAmb IAmb 03 30 28.4
comp=Z,25nm,0.9s
**ANTO Ankara** 72.04 319 P P 03 30 26.4 +1.3
**ANTO Ankara** 72.04 319 ⇓P P 03 30 25.9 +0.8
**ANTO Ankara** 72.04 319 P P 03 30 25.4 +0.3
ANTO pmax pmax
comp=Z,25nm,0.9s
**ANTO Ankara** 72.04 319 P P 03 30 25.2 +0.1
comp=Z,15nm,1.2s
**SWET Sewanee** 72.07 51 IAmb IAmb 03 30 26.4
comp=Z,29nm,0.8s
**CTI Castel Tesino** 72.13 337 IAmb IAmb 03 30 27.6
comp=Z,31nm,1.3s
**X48A Hartselle** 72.28 52 IAmb IAmb 03 30 27.8
comp=Z,32nm,1.2s
**HKT Hockley** 72.29 61 P P 03 30 26.4 -0.2
HKT IAmb IAmb 03 30 29.5
comp=Z,70nm,1.5s
**HKT Hockley** 72.29 61 i P P 03 30 27.2 +0.6
HKT pmax pmax
comp=Z,53nm,1.5s
**KIRS Kirsehir-Merke** 72.31 318 ⇑P P 03 30 26.9 +0.2
**PGB Panagyurishte** 72.35 327 P P 03 30 27.7 +0.8
**PSI Prapat** 72.39 245 P P 03 30 28.2 +0.6
**BLA Blacksburg** 72.48 46 IAmb IAmb 03 30 29.3
comp=Z,32nm,1.1s
**RPSI Rantau Prapat** 72.49 245 IAmb IAmb 03 30 28.9
comp=Z,24nm,0.9s
**PLD Plovdiv** 72.52 326 P P 03 30 28.2 +0.3
**VTS Vitosha** 72.52 327 P P 03 30 27.7 -0.4
**YLV Yalova** 72.54 322 P P 03 30 27.8 -0.3
comp=Z,40nm,1.4s,comp=Z,539nm
**S57A Dark Hollow, R** 72.54 45 IAmb IAmb 03 30 29.9
comp=Z,27nm,1.1s
**TKL Tuckaleechee C** 72.55 49 P P 03 30 27.5 -0.7
TKL IAmb IAmb 03 30 29.7
comp=Z,36nm,1.4s
**TKL Tuckaleechee C** 72.55 49 LR LR 04 05 48.6
comp=Z,482nm,18.1s,baz=334,slow=39
**TKL Tuckaleechee C** 72.55 49 P P 03 30 27.5 -0.7
TKL pmax pmax
comp=Z,36nm,1.4s
**U54A Nelsons Funny** 72.56 47 IAmb IAmb 03 30 30.0
comp=Z,20nm,0.8s
**CBN Corbin Frederi** 72.72 43 IAmb IAmb 03 30 30.7
comp=Z,39nm,1.2s
**R58B Mineral** 72.75 44 IAmb IAmb 03 30 31.0
comp=Z,38nm,1.3s
**FPAL Fort Paine** 72.79 51 IAmb IAmb 03 30 31.0
comp=Z,33nm,1.0s
**KDZ Kurdzhali** 72.82 325 P P 03 30 29.5 -0.2
**GAZ Gaziantep** 72.86 315 IAmb IAmb 03 30 33.5
comp=Z,40nm,1.0s
**V53A Saluda** 72.92 49 P P 03 30 29.9 -0.5
**W52A Murphy** 72.98 50 IAmb IAmb 03 30 32.4
comp=Z,24nm,0.9s
**Y49A Blount Mountai** 73.05 52 IAmb IAmb 03 30 32.5
comp=Z,26nm,0.8s
**X51A Calhoun** 73.07 51 IAmb IAmb 03 30 32.8
comp=Z,32nm,0.9s
**U56A King** 73.26 46 IAmb IAmb 03 30 34.2
comp=Z,36nm,1.2s
**KKB Krupnik** 73.27 327 P P 03 30 32.0 -0.3
**ALN Alexandroupoli** 73.28 325 P P 03 30 31.5 -0.9
ALN IAmb IAmb 03 30 35.1
comp=Z,38nm,1.2s
**ALN Alexandroupoli** 73.28 325 P P 03 30 31.5 -0.9
ALN pmax pmax
comp=Z,38nm,1.2s
**MMB Musomishta** 73.36 326 P P 03 30 32.8 -0.1
**V55A Taylorsville** 73.38 47 IAmb IAmb 03 30 34.8
comp=Z,57nm,1.6s
**BG3 Lake Jocassee** 73.47 49 IAmb IAmb 03 30 35.4
comp=Z,32nm,1.1s
**T59A Double "B" Far** 73.75 44 IAmb IAmb 03 30 37.0
comp=Z,38nm,1.4s
**KMSC Kings Mountain** 73.96 48 IAmb IAmb 03 30 38.0
comp=Z,26nm,0.9s
**Y52A Lilburn** 74.00 50 IAmb IAmb 03 30 38.5
comp=Z,18nm,0.8s
**BNI Bardonecchia** 74.05 340 P P 03 30 36.4 -0.7
BNI IAmb IAmb 03 30 40.2
comp=Z,41nm,1.4s
**BNI Bardonecchia** 74.05 340 P P 03 30 36.4 -0.7
BNI pmax pmax
comp=Z,41nm,1.4s
**PAULI Pauline** 74.05 48 IAmb IAmb 03 30 38.4
comp=Z,38nm,1.5s
**EZN Ezine** 74.17 324 P P 03 30 37.6 0.0
comp=Z,23nm,1.3s,comp=Z,461nm
**V58A Windy Hill, Pi** 74.22 46 IAmb IAmb 03 30 39.9
comp=Z,34nm,1.1s
**KDU Kakadu** 74.34 207 P P 03 30 40.2 +1.5
**SHME Shamm** 74.37 294 P P 03 30 39.7 +0.7
**SHME Shamm** 74.37 294 P P 03 30 38.9 -0.1
SHME P P 03 30 38.9 -0.1
**W57A Gilead** 74.46 47 P P 03 30 38.1 -1.3
W57A IAmb IAmb 03 30 41.1
comp=Z,26nm,0.9s
**DRS Darwin Rock St** 74.48 208 P P 03 30 41.8 +2.3
**BIRD Birdtown, Kers** 74.73 47 IAmb IAmb 03 30 42.7
comp=Z,25nm,1.0s
**250A Grady** 74.74 53 IAmb IAmb 03 30 42.6
comp=Z,43nm,0.8s
**152A Waverly Hall** 74.78 52 IAmb IAmb 03 30 42.5
comp=Z,27nm,1.1s
**MTN Manton Dam** 74.82 208 P P 03 30 43.2 +1.7
**MTN Manton Dam** 74.82 208 IAmb IAmb 03 30 43.2
comp=Z,49nm,1.1s
**W59A Clinton** 75.03 46 IAmb IAmb 03 30 44.9
comp=Z,47nm,1.1s
**KBN Korca** 75.05 328 P P 03 30 41.6 -1.2
**KBN Korca** 75.05 328 P P 03 30 41.6 -1.2
KBN pmax pmax
comp=Z,26nm,1.2s
**CNNC Cliffs of the** 75.17 45 IAmb IAmb 03 30 45.6
comp=Z,46nm,1.1s
**X58A Rowland** 75.24 46 IAmb IAmb 03 30 45.9
comp=Z,47nm,0.9s
**UOSS Minazif** 75.28 294 P P 03 30 43.7 -0.6
UOSS IAmb IAmb 03 33 17.8
comp=Z,30nm,0.8s
**UOSS Minazif** 75.28 294 i P P 03 30 44.7 +0.4
SNR=6.2
**HATD Hatta, Dubai** 75.41 294 P P 03 30 44.6 -0.4
**HATD Hatta, Dubai** 75.41 294 P P 03 30 45.2 +0.1
**INTR Introdacqua** 75.48 334 IAmb IAmb 03 30 49.2
comp=Z,30nm,1.2s
**NAZ Nazwa, Dubai** 75.50 294 P P 03 30 44.2 -1.4
**WSAR Wadi Sarin** 75.55 291 LR LR 04 08 12.0
comp=Z,208nm,18.1s,baz=56,slow=39
**BIDO Bidbid** 75.56 291 P P 03 30 47.9 +2.0
BIDO P P 03 30 47.9 +2.0
**ASHO Ashiyiah** 75.57 294 P P 03 30 47.0 +1.0
**KBD Kabd** 75.58 303 P P 03 30 47.4 +1.5
**352A Blakely** 75.73 52 P P 03 30 46.2 -0.6
352A IAmb IAmb 03 30 48.4
comp=Z,33nm,0.8s
**FAQ Al Faqa, Dubai** 75.74 294 P P 03 30 45.9 -1.0
**FAQ Al Faqa, Dubai** 75.74 294 P P 03 30 47.4 +0.5
FAQ P P 03 30 47.4 +0.5
**SOHO SOHO** 75.81 293 i P P 03 30 46.5 -0.8
SNR=7.8
**SOHO SOHO** 75.81 293 P P 03 30 47.4 +0.1
SOHO P P 03 30 47.4 +0.1
**HOQ Hoqain** 75.90 292 P P 03 30 48.4 +0.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HOQ | | | | P | **P** | **03 30 48.4** | **+0.5** |
| **WBK** | **Wadi Bani Khal** | **75.91** | **290** | P | **P** | **03 30 49.7** | **+1.7** |
| WBK | | | | P | **P** | **03 30 49.7** | **+1.7** |
| **ASUD** | **Al Ashush, Dub** | **75.97** | **294** | P | **P** | **03 30 48.2** | **0.0** |
| **ASUD** | **Al Ashush, Dub** | **75.97** | **294** | P | **P** | **03 30 49.3** | **+1.1** |
| ASUD | | | | P | **P** | **03 30 49.3** | **+1.1** |
| **SMDO** | **Samad** | **75.98** | **291** | P | **P** | **03 30 49.6** | **+1.1** |
| SMDO | | | | P | **P** | **03 30 49.6** | **+1.1** |
| **JLN** | **Jalan Bani Buh** | **76.08** | **290** | P | **P** | **03 30 50.2** | **+1.3** |
| JLN | | | | P | **P** | **03 30 50.2** | **+1.3** |
| **AJN** | **Ajban** | **76.18** | **294** | P | **P** | **03 30 50.1** | **+0.6** |
| **CSS** | **Mathiatis** | **76.25** | **317** | P | **P** | **03 30 49.4** | **-0.3** |
| | comp=Z,44nm,1.8s,comp=Z,736nm | | | | | | |
| **ALNE** | **Al Ain** | **76.25** | **294** | P | **P** | **03 30 50.0** | **+0.1** |
| **ALNE** | **Al Ain** | **76.25** | **294** | P | **P** | **03 30 50.8** | **+1.0** |
| **ARQ** | **Araqi** | **76.49** | **293** | P | **P** | **03 30 52.1** | **+0.9** |
| | SNR=5.8 | | | | | | |
| ARQ | | | | P | **P** | **03 30 52.1** | **+0.9** |
| | SNR=5.8 | | | | | | |
| **JMDO** | **Jabal Madar** | **76.54** | **291** | P | **P** | **03 30 51.5** | **-0.1** |
| | SNR=6.3 | | | | | | |
| JMDO | | | | P | **P** | **03 30 51.5** | **-0.1** |
| | SNR=6.3 | | | | | | |
| **BSY** | **Bisya** | **76.66** | **292** | P | **P** | **03 30 52.2** | **0.0** |
| | SNR=5.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **77.23** | **314** | P | **P** | **03 30 55.4** | **+0.1** |
| | comp=Z,14nm,1.0s,baz=34,slow=3.6,SNR=8.1 | | | | | | |
| MMAI | | | | LR | LR | 04 07 33.8 | |
| | comp=Z,300nm,18.7s,baz=336,slow=38 | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **CEST** | **Esterri de Car** | **77.33** | **343** | lAmb | lAmb | 03 30 58.8 | |
| | comp=Z,76nm,1.8s | | | | | | |
| **PALK** | **Pallekele** | **77.67** | **264** | LR | LR | 04 11 31.2 | |
| | comp=Z,258nm,18.3s,baz=129,slow=41 | | | | | | |
| **MHTO** | **MHTO** | **77.78** | **290** | P | **P** | **03 30 58.1** | **-0.3** |
| MHTO | | | | P | **P** | **03 30 58.1** | **-0.3** |
| **TRNA** | **Turayna** | **77.80** | **298** | P | **P** | **03 30 59.5** | **+1.0** |
| **MSVF** | **Nonsavu** | **77.81** | **161** | P | P | 03 30 53.1 | -5.4 |
| | comp=Z,16nm,0.6s,baz=107,slow=2.2,SNR=13 | | | | | | |
| **SMRA** | **Abu-Samra** | **77.97** | **298** | P | **P** | **03 30 59.6** | **+0.1** |
| **KNRA** | **Kununurra** | **78.13** | **210** | lAmb | lAmb | 03 31 01.6 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **MZR** | **Muzera** | **78.23** | **295** | *i* P | **P** | **03 31 00.8** | **-0.2** |
| | SNR=6.6 | | | | | | |
| **MZR** | **Muzera** | **78.23** | **295** | P | **P** | **03 31 01.6** | **+0.6** |
| MZR | | | | P | **P** | **03 31 01.6** | **+0.6** |
| **PGAV** | **Gavieira, Arco** | **79.10** | **350** | *e*P | **P** | **03 31 06.6** | **+1.0** |
| | comp=Z,47nm,1.8s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **79.10** | **350** | *e*LR | LR | 04 06 40.3 | |
| | comp=Z,87nm,16.0s | | | | | | |
| **PBRG** | **Braganca** | **79.11** | **349** | *e*P | **P** | **03 31 06.3** | **+0.7** |
| | comp=Z,38nm,1.6s | | | | | | |
| **CTA** | **Charters Tower** | **79.21** | **192** | P | **P** | **03 31 07.7** | **+1.6** |
| **CTA** | **Charters Tower** | **79.21** | **192** | P | **P** | **03 31 06.6** | **+0.5** |
| | comp=Z,0.9nm,1.1s,baz=344,slow=8.2,SNR=7.1 | | | | | | |
| **PCAB** | **Cabril** | **79.33** | **350** | *e*P | **P** | **03 31 07.2** | **+0.4** |
| | comp=Z,44nm,1.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **79.64** | **350** | *e*P | **P** | **03 31 09.0** | **+0.4** |
| | comp=Z,14nm,1.6s | | | | | | |
| **VAE** | **Valguarnera** | **79.67** | **332** | LR | LR | 04 11 33.3 | |
| | comp=Z,260nm,18.6s,baz=326,slow=40 | | | | | | |
| **PVRL** | **Vila Real** | **79.73** | **350** | *e*P | **P** | **03 31 10.4** | **+1.4** |
| | comp=Z,56nm,1.5s | | | | | | |
| **MVO** | **Moncorvo** | **79.78** | **349** | *e*P | **P** | **03 31 09.8** | **+0.5** |
| | comp=Z,41nm,1.7s | | | | | | |
| **MVO** | **Moncorvo** | **79.78** | **349** | A | A | 04 13 00.5 | |
| | comp=Z,107nm,16.0s | | | | | | |
| **PVIS** | **Viseu** | **80.30** | **350** | *e*P | **P** | **03 31 12.7** | **+0.6** |
| | comp=Z,26nm,1.8s | | | | | | |
| **EIL** | **Elat** | **80.39** | **313** | LR | LR | 04 12 17.5 | |
| | comp=Z,276nm,19.0s,baz=52,slow=40 | | | | | | |
| **MTE** | **Manteigas** | **80.58** | **350** | *e*P | **P** | **03 31 14.3** | **+0.7** |
| | comp=Z,47nm,1.7s | | | | | | |
| **MTE** | **Manteigas** | **80.58** | **350** | *e*LR | LR | 04 08 01.4 | |
| | comp=Z,100nm,18.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **80.74** | **173** | *e*LR | LR | 03 56 21.2 | |
| | comp=Z,111nm,23.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **80.74** | **173** | P | **P** | **03 31 16.0** | **+1.5** |
| | comp=Z,13nm,1.0s,baz=344,slow=13,SNR=4.2 | | | | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **80.77** | **203** | lAmb | lAmb | 03 31 16.2 | |
| | comp=Z,59nm,1.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **80.92** | **347** | P | **P** | **03 31 13.9** | **-1.5** |
| **ESDC** | **Sonseca Array** | **80.92** | **347** | P | **P** | **03 31 15.1** | **-0.3** |
| | comp=Z,8.6nm,0.9s,baz=0.4,slow=6.0,SNR=58 | | | | | | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **80.93** | **203** | lAmb | lAmb | 03 33 56.7 | |
| | comp=Z,28nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **80.94** | **203** | P | **P** | **03 31 14.8** | **-0.7** |
| WRAB | | | | lAmb | lAmb | 03 31 17.2 | |
| | comp=Z,43nm,1.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **80.94** | **203** | P | **P** | **03 31 14.8** | **-0.7** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,43nm,1.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **80.95** | **203** | lAmb | lAmb | 03 31 17.3 | |
| | comp=Z,60nm,1.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **80.95** | **203** | P | **P** | **03 31 14.3** | **-1.3** |
| **WRA** | **Warramunga Arr** | **80.95** | **203** | P | **P** | **03 31 14.2** | **-1.3** |
| | comp=Z,19nm,1.2s,baz=13,slow=5.6,SNR=23 | | | | | | |
| WRA | | | | LR | LR | 04 05 49.9 | |
| | comp=Z,65nm,21.0s,baz=316,slow=35 | | | | | | |
| | comp=Z,19nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **80.95** | **203** | *i* P | **P** | **03 31 15.1** | **-0.5** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **81.02** | **350** | *e*P | **P** | **03 31 16.9** | **+1.0** |
| | comp=Z,33nm,1.4s | | | | | | |
| **PAB** | **San Pablo** | **81.09** | **347** | P | **P** | **03 31 15.2** | **-1.2** |
| **PAB** | **San Pablo** | **81.09** | **347** | P | **P** | **03 31 15.2** | **-1.2** |
| PAB | | | | pmax | pmax | | |
| | comp=Z,22nm,1.3s | | | | | | |
| **PCBR** | **Castelo Branco** | **81.13** | **349** | *e*P | **P** | **03 31 17.6** | **+1.1** |
| | comp=Z,31nm,1.7s | | | | | | |
| **RAYN** | **Ar Rayn** | **81.44** | **302** | P | **P** | **03 31 17.2** | **-1.3** |
| RAYN | | | | lAmb | lAmb | 03 31 20.0 | |
| | comp=Z,59nm,1.5s | | | | | | |
| **RAYN** | **Ar Rayn** | **81.44** | **302** | *i* P | **P** | **03 31 17.7** | **-0.7** |
| | SNR=13 | | | | | | |
| **RAYN** | **Ar Rayn** | **81.44** | **302** | P | **P** | **03 31 18.7** | **+0.2** |
| **RAYN** | **Ar Rayn** | **81.44** | **302** | P | **P** | **03 31 17.2** | **-1.3** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,59nm,1.5s | | | | | | |
| **PMRV** | **Marv??o** | **81.53** | **349** | *e*P | **P** | **03 31 19.1** | **+0.5** |
| | comp=Z,26nm,1.6s | | | | | | |
| **PMRV** | **Marv??o** | **81.53** | **349** | *e*LR | LR | 04 10 05.0 | |
| | comp=Z,119nm,18.0s | | | | | | |
| **PMTG** | **Montargil** | **81.97** | **350** | *e*P | **P** | **03 31 21.9** | **+1.0** |
| | comp=Z,26nm,1.3s | | | | | | |
| **PESTR** | **Estremoz** | **82.11** | **349** | *e*P | **P** | **03 31 22.0** | **+0.3** |
| | comp=Z,26nm,1.6s | | | | | | |
| **BBSR** | **BB Station** | **82.26** | **36** | P | **P** | **03 31 22.9** | **+0.4** |
| BBSR | | | | lAmb | lAmb | 03 31 24.6 | |
| | comp=Z,27nm,1.1s | | | | | | |
| **WHFO** | **Wadi Hawf** | **82.44** | **292** | P | **P** | **03 31 23.6** | **-0.1** |
| **EVO** | **Evora** | **82.48** | **350** | *e*P | **P** | **03 31 24.4** | **+0.8** |
| | comp=Z,21nm,1.7s | | | | | | |
| **KEST** | **Kesra** | **82.51** | **335** | lAmb | lAmb | 03 31 27.0 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **KEST** | **Kesra** | **82.51** | **335** | P | **P** | **03 31 25.0** | **+1.0** |
| | comp=Z,9.9nm,1.0s,baz=41,slow=3.9,SNR=6.2 | | | | | | |
| KEST | | | | LR | LR | 04 14 07.6 | |
| | comp=Z,155nm,18.4s,baz=310,slow=40 | | | | | | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **PBAR** | **Barrancos** | **82.74** | **349** | *e*P | **P** | **03 31 25.4** | **+0.4** |
| | comp=Z,26nm,1.5s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **83.14** | **119** | *e*LR | LR | 03 57 29.2 | |
| | comp=Z,380nm,23.5s | | | | | | |
| **PCVE** | **Castro Verde** | **83.38** | **350** | *e*P | **P** | **03 31 29.9** | **+1.6** |
| | comp=Z,31nm,2.0s | | | | | | |
| **PVAQ** | **Vaqueiros** | **83.57** | **349** | *e*P | **P** | **03 31 31.1** | **+1.8** |
| | comp=Z,34nm,2.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **83.57** | **349** | *e*LR | LR | 04 10 42.4 | |
| | comp=Z,79nm,18.0s | | | | | | |
| **CMIG** | **Matias Romero** | **83.71** | **67** | LR | LR | 04 08 29.2 | |
| | comp=Z,125nm,21.8s,baz=5.0,slow=36 | | | | | | |
| **AS01** | **Alice Springs** | **84.65** | **203** | P | **P** | **03 31 35.6** | **+0.9** |
| **ASAR** | **Alice Springs** | **84.66** | **203** | P | **P** | **03 31 33.3** | **-1.5** |
| **ASAR** | **Alice Springs** | **84.66** | **203** | P | **P** | **03 31 34.0** | **-0.8** |
| | comp=Z,8.7nm,1.0s,baz=9.8,slow=4.4,SNR=33 | | | | | | |
| ASAR | | | | LR | LR | 04 07 44.5 | |
| | comp=Z,42nm,21.8s,baz=360,slow=34 | | | | | | |
| | comp=Z,8.7nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **84.66** | **203** | P | **P** | **03 31 33.3** | **-1.5** |
| **QLP** | **Quilpie** | **85.86** | **193** | P | **P** | **03 31 42.8** | **+2.2** |
| **PETF** | **Flores** | **86.24** | **63** | lAmb | lAmb | 03 31 46.0 | |
| | comp=Z,43nm,1.4s | | | | | | |
| **RAR** | **Rarotonga** | **86.66** | **142** | LR | LR | 04 06 05.0 | |
| | comp=Z,69nm,18.1s,baz=322,slow=33 | | | | | | |
| **PPT** | **Papeete** | **86.94** | **132** | LR | LR | 04 04 11.3 | |
| | comp=Z,44nm,19.4s,baz=334,slow=31 | | | | | | |
| **PPT2** | **Papeete2** | **86.96** | **132** | *e*LR | LR | 03 59 08.4 | |
| | comp=Z,321nm,31.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 03 59 12.1 | |
| | comp=Z,187nm,30.5s | | | | | | |
| **WRKA** | **Warakurna** | **87.23** | **207** | P | **P** | **03 31 47.9** | **+0.4** |
| **INKA** | **Innaminka** | **87.45** | **196** | P | **P** | **03 31 50.4** | **+2.0** |
| **APG** | **El Apazote** | **87.62** | **65** | LR | LR | 04 14 58.9 | |
| | comp=Z,11nm,19.2s,baz=31,slow=38 | | | | | | |
| **MDT** | **Midelt** | **87.76** | **346** | LR | LR | 04 15 00.6 | |
| | comp=Z,99nm,19.7s,baz=30,slow=38 | | | | | | |
| **OOD** | **Oodnadatta** | **88.33** | **200** | P | **P** | **03 31 53.9** | **+1.3** |
| **MTO3** | **Montecristo** | **88.67** | **64** | lAmb | lAmb | 03 31 58.1 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **88.73** | **357** | A | A | 04 22 12.5 | |
| | comp=Z,50nm,18.0s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **89.94** | **63** | P | **P** | **03 32 01.9** | **+1.1** |
| **LCRK** | **Leigh Creek** | **90.49** | **198** | P | **P** | **03 32 04.5** | **+1.8** |
| **CMSA** | **Cobar Meteorol** | **90.59** | **191** | P | **P** | **03 32 04.9** | **+1.8** |
| **STKA** | **Stephens Creek** | **91.41** | **195** | P | **P** | **03 32 08.3** | **+1.4** |
| **STKA** | **Stephens Creek** | **91.41** | **195** | P | **P** | **03 32 07.7** | **+0.8** |
| | comp=Z,8.8nm,0.8s,baz=333,slow=7.4,SNR=14 | | | | | | |
| STKA | | | | LR | LR | 04 16 21.2 | |
| | comp=Z,56nm,18.4s,baz=23,slow=38 | | | | | | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **TBI** | **Tubuai** | **92.23** | **134** | *e*LR | LR | 04 01 37.0 | |
| | comp=Z,899nm,33.2s | | | | | | |
| **ATD** | **Arta Tunnel** | **93.14** | **298** | LR | LR | 04 19 24.9 | |
| | comp=Z,13nm,18.5s,baz=172,slow=39 | | | | | | |
| **JTS** | **Las Juntas de** | **94.31** | **62** | LR | LR | 04 19 50.5 | |
| | comp=Z,67nm,18.5s,baz=324,slow=39 | | | | | | |
| **FURI** | **Furi** | **97.36** | **301** | LR | LR | 04 21 12.6 | |
| | comp=Z,198nm,18.6s,baz=20,slow=38 | | | | | | |
| **RKT** | **Rikitea** | **98.00** | **122** | *e*LR | LR | 04 04 21.2 | |
| | comp=Z,861nm,31.5s | | | | | | |
| **LPAZ** | **La Paz** | **125.42** | **60** | PKP | **PKPdf** | **03 38 03.0** | **0.0** |
| | comp=Z,1.9nm,0.9s,baz=358,slow=3.2,SNR=8.3 | | | | | | |
| **BDFB** | **Brasilia** | **132.60** | **36** | PKP | **PKPdf** | **03 38 15.5** | **-0.5** |
| | comp=Z,7.4nm,1.1s,baz=11,slow=5.2,SNR=4.6 | | | | | | |
| **CPUP** | **Villa Florida** | **138.96** | **54** | PKP | **PKPdf** | **03 38 26.5** | **-1.0** |
| | comp=Z,3.0nm,1.1s,baz=325,slow=1.4,SNR=6.3 | | | | | | |
| **MAW** | **Mawson** | **143.99** | **220** | PKP | PKPbc | 03 38 33.3 | +0.2 |
| | comp=Z,29nm,1.0s,baz=61,slow=3.1,SNR=23 | | | | | | |
| **PLCA** | **Paso Flores** | **144.34** | **82** | PKPdf | PKPbc | 03 38 36.0 | +0.8 |
| **PLCA** | **Paso Flores** | **144.34** | **82** | PKP | **PKPab** | **03 38 34.9** | **0.0** |
| | comp=Z,4.5nm,0.9s,baz=343,slow=5.1,SNR=9.6 | | | | | | |
| **LL01** | **San Ignacio de** | **144.57** | **86** | PKPdf | **PKPab** | **03 38 35.6** | **+0.2** |
| **PLTB** | **Pedras Altas** | **145.27** | **53** | | **PKPbc** | **03 38 36.4** | **-1.9** |
| **LL02** | **Futaleuf** | **145.43** | **86** | PKPdf | **PKPdf** | **03 38 37.1** | **-1.3** |
| **TRQA** | **Tornquist** | **146.65** | **70** | PKPdf | **PKPdf** | **03 38 39.9** | **-0.8** |
| **TRQA** | **Tornquist** | **146.65** | **70** | PKP2 | **PKPdf** | **03 38 39.9** | **-0.8** |
| **AY03** | **Cochrane** | **147.79** | **92** | | **PKiKP** | **03 38 46.3** | **-0.8** |
| **QSPA** | **South Pole Qui** | **148.49** | **180** | PKPdf | **PKPdf** | **03 38 42.8** | **-0.1** |
| **QSPA** | **South Pole Qui** | **148.49** | **180** | PKPbc | **PKPdf** | **03 38 44.0** | **+1.1** |
| | comp=Z,62nm,1.0s,baz=342,slow=1.6,SNR=57 | | | | | | |
| **ELIB** | **Princess Elisa** | **157.92** | **216** | *d*PKP | **PKPab** | **03 39 29.1** | **-0.7** |
| **TROLL** | **Troll, Antarti** | **163.61** | **206** | ⇓PKPab | **PKPab** | **03 39 53.2** | **-1.4** |
| | comp=Z,286nm,1.3s | | | | | | |
| TROLL | | | | ⇑PKPdf | **PKPdf** | **03 39 03.0** | **+0.4** |
| | comp=Z,111nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **165.02** | **203** | ⇑PKPab | **PKPab** | **03 40 00.5** | **-0.3** |
| | comp=Z,51nm,1.2s | | | | | | |
| SNAA | | | | ⇑PKPdf | **PKPdf** | **03 39 03.6** | **-0.2** |
| | comp=Z,22nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **165.02** | **203** | PKP | **PKPdf** | **03 39 03.4** | **-0.4** |
| | comp=Z,0.9nm,0.8s,baz=173,slow=4.7,SNR=3.4 | | | | | | |
| SNAA | | | | PKPab | **PKPab** | **03 40 00.9** | **+0.2** |
| | comp=Z,4.0nm,1.1s,baz=175,slow=8.7,SNR=4.3 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **166.49** | **200** | ⇑PKPab | **PKPab** | **03 40 06.9** | **-0.2** |
| | comp=Z,3.1nm,0.7s,baz=148,slow=4.8 | | | | | | |
| VNA2 | | | | ⇑PKPdf | **PKPdf** | **03 39 04.9** | **0.0** |
| | comp=Z,3.3nm,0.9s,baz=8.1,slow=1.1 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **166.57** | **196** | ⇑PKPab | **PKPab** | **03 40 07.1** | **-0.5** |
| | comp=Z,4.0nm,0.7s | | | | | | |
| VNA3 | | | | ⇑PKPdf | **PKPdf** | **03 39 04.9** | **-0.1** |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **166.87** | **199** | ⇑PKPab | **PKPab** | **03 40 08.7** | **-0.1** |
| | comp=Z,4.7nm,0.9s | | | | | | |
| VNA1 | | | | ⇑PKPdf | **PKPdf** | **03 39 05.5** | **+0.3** |
| | comp=Z,6.0nm,1.1s | | | | | | |

*IDC* **27** *03:28:29.1±7.6,* **17°.57S×177°.26W,h0km,mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=333.5km s-min=37.7km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.77** | **259** | P | P | 03 36 52.6 | -0.3 |
| | 0.4nm,0.5s,baz=95,slow=7.3,SNR=8.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.94** | **254** | P | P | 03 36 54.1 | 0.0 |
| | 1.0nm,0.6s,baz=88,slow=8.8,SNR=12 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **85.32** | **13** | P | P | 03 41 07.5 | 0.0 |
| | 0.2nm,0.4s,baz=228,slow=4.1,SNR=5.1 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*NAM* **27** *03:33:13.7±4.3,* **19°.71S×14°.46E,h10km±40km, ML1.0, 3C-4D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST6N** | **ST6** | **0.11** | **210** | ⇓*i* P | Pg | 03 33 19.8 | +3.2 |
| ST6N | | | | *i* S | Sg | 03 33 22.1 | +3.5 |
| ST6N | | | | lAML | | 03 33 22.5 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **ST6N** | **ST6** | **0.11** | **210** | *i* P | Pg | 03 33 19.7 | +3.1 |
| ST6N | | | | lAML | | 03 33 22.5 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **ST6N** | **ST6** | **0.11** | **210** | *i* P | Pg | 03 33 19.6 | +3.1 |
| ST6N | | | | *i* S | Sg | 03 33 22.1 | +3.5 |
| ST6N | | | | lAML | | 03 33 22.5 | |
| | comp=Z,28nm,0.3s | | | | | | |
| **ST9N** | **ST9** | **0.12** | **139** | *i* P | Pg | 03 33 17.5 | +0.7 |
| ST9N | | | | *i* S | Sg | 03 33 18.5 | -0.4 |
| ST9N | | | | lAML | | 03 33 18.7 | |
| | comp=Z,65nm,0.3s | | | | | | |
| **ST8N** | **ST8** | **0.13** | **276** | ⇓*i* P | Pg | 03 33 21.9 | +5.1 |
| ST8N | | | | *i* S | Sg | 03 33 25.6 | +6.5 |
| ST8N | | | | lAML | | 03 33 26.0 | |
| | comp=Z,14nm,0.3s | | | | | | |
| **ST8N** | **ST8** | **0.13** | **276** | *i* P | Pg | 03 33 21.9 | +5.0 |
| ST8N | | | | *i* S | Sg | 03 33 25.6 | +6.5 |
| ST8N | | | | lAML | | 03 33 26.0 | |
| | comp=Z,14nm,0.3s | | | | | | |
| **ST8N** | **ST8** | **0.13** | **276** | *i* P | Pg | 03 33 22.0 | +5.1 |
| ST8N | | | | *i* S | Sg | 03 33 25.5 | +6.4 |
| ST8N | | | | lAML | | 03 33 26.5 | |
| | comp=Z,13nm,0.3s | | | | | | |
| **ST1N** | **ST1** | **0.15** | **103** | ⇑*i* P | Pg | 03 33 18.4 | +1.2 |
| ST1N | | | | *i* S | Sg | 03 33 19.5 | 0.0 |
| ST1N | | | | lAML | | 03 33 20.2 | |
| | comp=Z,54nm,0.3s | | | | | | |
| **ST1N** | **ST1** | **0.15** | **103** | *i* P | Pg | 03 33 18.3 | +1.2 |
| ST1N | | | | *i* S | Sg | 03 33 19.5 | 0.0 |
| **ST1N** | **ST1** | **0.15** | **103** | *i* P | Pg | 03 33 18.3 | +1.2 |
| ST1N | | | | *i* S | Sg | 03 33 19.4 | -0.1 |
| ST1N | | | | lAML | | 03 33 20.2 | |
| | comp=Z,53nm,0.3s | | | | | | |
| **ST2N** | **ST2** | **0.26** | **150** | ⇑*i* P | Pg | 03 33 18.8 | -0.3 |
| ST2N | | | | *i* S | Sg | 03 33 20.3 | -2.3 |
| ST2N | | | | lAML | | 03 33 20.6 | |
| | comp=Z,21nm,0.3s | | | | | | |
| **ST2N** | **ST2** | **0.26** | **150** | *i* P | Pg | 03 33 18.7 | -0.3 |
| ST2N | | | | *i* S | Sg | 03 33 20.2 | -2.4 |
| ST2N | | | | lAML | | 03 33 20.6 | |
| | comp=Z,20nm,0.3s | | | | | | |
| **ST2N** | **ST2** | **0.26** | **150** | *i* P | Pg | 03 33 18.7 | -0.3 |
| ST2N | | | | *i* S | Sg | 03 33 20.3 | -2.3 |
| ST2N | | | | lAML | | 03 33 20.6 | |
| | comp=Z,21nm,0.3s | | | | | | |
| **ST5N** | **ST5** | **0.29** | **107** | ⇑*i* P | Pg | 03 33 19.8 | +0.1 |
| ST5N | | | | *i* S | Sg | 03 33 21.9 | -1.7 |
| ST5N | | | | lAML | | 03 33 22.3 | |
| | comp=Z,29nm,0.3s | | | | | | |
| **ST5N** | **ST5** | **0.29** | **107** | *i* P | Pg | 03 33 19.6 | -0.1 |
| ST5N | | | | *i* S | Sg | 03 33 22.1 | -1.6 |
| ST5N | | | | lAML | | 03 33 22.2 | |
| | comp=Z,28nm,0.3s | | | | | | |
| **ST5N** | **ST5** | **0.29** | **107** | *i* P | Pg | 03 33 19.7 | 0.0 |
| ST5N | | | | *i* S | Sg | 03 33 22.0 | -1.7 |
| ST5N | | | | lAML | | 03 33 22.2 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **193** | ⇓*i* P | Pb | 03 33 21.2 | 0.0 |
| ST10N | | | | *i* S | Sb | 03 33 25.2 | -1.0 |
| ST10N | | | | lAML | | 03 33 25.2 | |
| | comp=Z,27nm,0.3s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **193** | *i* P | Pb | 03 33 21.1 | -0.2 |
| ST10N | | | | *i* S | Sb | 03 33 25.2 | -1.1 |
| ST10N | | | | lAML | | 03 33 25.4 | |
| | comp=Z,26nm,0.3s | | | | | | |
| **ST10N** | **ST10** | **0.30** | **193** | *i* P | Pb | 03 33 21.1 | -0.2 |
| ST10N | | | | *i* S | Sb | 03 33 25.2 | -1.0 |
| ST10N | | | | lAML | | 03 33 25.3 | |
| | comp=Z,28nm,0.3s | | | | | | |
| **ST11N** | **ST11** | **0.37** | **82** | ⇓*i* P | Pb | 03 33 22.4 | -0.1 |
| ST11N | | | | *i* S | Sg | 03 33 26.7 | +0.8 |
| ST11N | | | | lAML | | 03 33 28.5 | |
| | comp=Z,5.5nm,0.3s | | | | | | |
| **ST11N** | **ST11** | **0.37** | **82** | *i* P | Pb | 03 33 22.3 | -0.1 |
| ST11N | | | | *i* S | Sg | 03 33 26.7 | +0.8 |
| ST11N | | | | lAML | | 03 33 28.5 | |
| | comp=Z,5.4nm,0.3s | | | | | | |
| **ST11N** | **ST11** | **0.37** | **82** | *i* P | Pb | 03 33 22.4 | 0.0 |
| ST11N | | | | lAML | | 03 33 28.6 | |
| | comp=Z,5.9nm,0.3s | | | | | | |
| **ST4N** | **ST4** | **0.52** | **111** | *i* P | Pg | 03 33 23.5 | -0.4 |
| ST4N | | | | *i* S | Sg | 03 33 28.6 | -2.2 |
| ST4N | | | | lAML | | 03 33 29.1 | |
| | comp=Z,9.9nm,0.3s | | | | | | |

*NEIC* **27** *03:59:51.9±1.3,* **18°.77S±0°.05×174°.6W±0°.1,h109km±14km, mb4.6/21, Error ellipse: s-maj=20.3km s-min=6.6km az=85.0**

*IDC* **27** *04:00:02.0±3.9,* **18°.93S×174°.92W,h193km±33km, mb3.7/7, mbtmp4.2/8, MS3.2/1, Error ellipse: s-maj=26.2km s-min=20.1km az=120.0**

**ISC 27 03:59:56.3±0.8, 18°.9S±0°.1×174°.8W±0°.1, h147km, n49, σ0°64/40, mb4.5/17, 5C, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **4.63** | **93** | Pn | Pn | 04 00 57.6 | -7.3 |
| **AFI** | **Afiamalu** | **5.76** | **31** | Pn | Pn | 04 01 12.1 | -7.8 |
| **MSVF** | **Nonsavu** | **6.87** | **279** | Pn | Pn | 04 01 41.9 | +7.1 |
| **MSVF** | **Nonsavu** | **6.87** | **279** | P | Pn | 04 01 41.1 | +6.3 |
| | 12nm,0.7s,baz=123,slow=17,SNR=7.0 | | | | | | |
| **PINNC** | **Pines Island,** | **16.99** | **254** | P | **Pn** | **04 03 46.2** | **+0.9** |
| **DZM** | **Mont Dzumac** | **17.83** | **257** | | **Pn** | **04 03 54.7** | **-0.8** |
| **MXZ** | **Matakaoa Point** | **19.54** | **197** | Pn | **Pn** | **04 04 14.5** | **-0.8** |
| MXZ | | | | lAmb | lAmb | 04 04 45.6 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **TOZ** | **Tahuroa Road** | **20.58** | **202** | P | **P** | **04 04 24.7** | **+1.0** |
| TOZ | | | | lAmb | lAmb | 04 04 26.5 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.90** | **198** | P | **P** | **04 04 27.1** | **-0.1** |
| RTZ | | | | lAmb | lAmb | 04 04 29.0 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **HIZ** | **Hauiti** | **21.51** | **203** | P | **P** | **04 04 34.5** | **+0.9** |
| HIZ | | | | lAmb | lAmb | 04 04 36.3 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.55** | **199** | P | **P** | **04 04 32.6** | **-1.6** |
| **BFZ** | **Birch Farm** | **23.03** | **198** | P | **P** | **04 04 48.3** | **-0.2** |
| BFZ | | | | lAmb | lAmb | 04 05 25.1 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **PPT** | **Papeete** | **24.01** | **91** | LR | LR | 04 13 46.4 | |
| | comp=Z,53nm,18.6s,baz=48,slow=34 | | | | | | |
| **TCW** | **Tory Channel** | **24.12** | **200** | P | **P** | **04 04 57.5** | **-1.0** |
| **EIDS** | **Eidsvold** | **32.17** | **252** | P | **P** | **04 06 10.9** | **+0.6** |
| EIDS | | | | lAmb | lAmb | 04 06 40.8 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **32.46** | **243** | P | **P** | **04 06 14.0** | **+1.1** |
| ARMA | | | | lAmb | lAmb | 04 06 26.1 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **CTAO** | **Charters Tower** | **36.66** | **262** | P | **P** | **04 06 49.5** | **+0.4** |
| CTAO | | | | lAmb | lAmb | 04 06 50.2 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **41.18** | **243** | P | **P** | **04 07 26.1** | **-0.4** |
| | comp=Z,2.8nm,0.8s,baz=85,slow=12,SNR=3.9 | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **45.94** | **242** | P | **P** | **04 08 04.7** | **0.0** |
| **WR0** | **Warramunga Arr** | **47.62** | **260** | P | **P** | **04 08 17.3** | **-0.6** |
| **WB0** | **Warramunga Arr** | **47.78** | **260** | P | **P** | **04 08 18.5** | **-0.6** |
| **WB2** | **Warramunga Arr** | **47.80** | **260** | P | **P** | **04 08 18.8** | **-0.5** |
| **WRAB** | **Tennant Creek** | **47.80** | **260** | P | **P** | **04 08 18.9** | **-0.4** |
| WRAB | | | | lAmb | lAmb | 04 08 53.6 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.81** | **260** | P | **P** | **04 08 18.7** | **-0.6** |
| | comp=Z,2.2nm,0.7s,baz=97,slow=7.9,SN

| | | | | | | |
|---|---|---|---|---|---|---|
| TIPB | Shuangxi baz=304 | 0.37 300 | *e*P | Pg | 04 08 20.7 | +0.1 |
| ESAO | Su ao baz=227 | 0.37 235 | *i* P | Pg | 04 08 20.6 | 0.0 |
| EOS2 | EOS2 baz=175 | 0.37 172 | *i* P | Pb | 04 08 21.6 | -0.1 |
| EOS2 | baz=175 | | *e*S | Sb | 04 08 29.6 | +2.2 |
| SXI1 | Grass Mountain baz=325 | 0.41 318 | *e*P | Pb | 04 08 21.6 | -0.8 |
| NDS | Dongshan baz=231 | 0.45 250 | *e*P | Pb | 04 08 22.4 | -0.6 |
| WFSB | Wu-fen Shan baz=313 | 0.46 308 | *e*P | Pb | 04 08 23.9 | +0.7 |
| TWE | Neicheng baz=258 | 0.47 262 | *i* P | Pg | 04 08 22.3 | -0.1 |
| TWE | baz=258 | | *e*S | Sg | 04 08 29.0 | +0.4 |
| EWUT | Wuta baz=219 | 0.50 227 | *e*P | Pg | 04 08 22.9 | 0.0 |
| EWUT | baz=219 | | *e*S | Sg | 04 08 29.7 | +0.1 |
| TNOU | National Taiwa baz=320 | 0.51 315 | *e*P | Pb | 04 08 24.3 | +0.2 |
| EOS3 | EOS3 baz=177 | 0.52 165 | *e*P | Pb | 04 08 24.2 | +0.1 |
| ENA | Nanau baz=220 | 0.53 228 | *e*P | Pg | 04 08 23.7 | 0.0 |
| ENA | baz=220 | | *e*S | Sg | 04 08 30.5 | -0.3 |
| FUSB | Fushanzhiwuyua baz=266 | 0.54 267 | *e*P | Pb | 04 08 24.1 | -0.5 |
| TWA | Mucha baz=292 | 0.57 290 | *e*P | Pb | 04 08 25.7 | +0.6 |
| ENTT | Nioudou baz=252 | 0.57 255 | *e*P | Pb | 04 08 24.7 | -0.5 |
| EAHA | Aohua baz=215 | 0.61 221 | *e*P | Pb | 04 08 25.4 | -0.4 |
| NWLT | Wulai baz=269 | 0.61 269 | *e*P | Pb | 04 08 25.6 | -0.3 |
| EHP | Heping Village baz=212 | 0.62 220 | *e*S | Sb | 04 08 34.3 | -0.4 |
| NDT | Datong Townshi baz=251 | 0.63 253 | *e*P | Pb | 04 08 25.9 | -0.3 |
| LATG | Datong baz=244 | 0.64 247 | *e*P | Pg | 04 08 25.8 | +0.1 |
| TATO | Taipei | 0.65 287 | P | Pn | 04 08 27.7 | -0.6 |
| YM01 | YM01 baz=306 | 0.65 303 | *e*P | Pb | 04 08 27.1 | +0.5 |
| YM01 | baz=306 | | *e*S | Sb | 04 08 36.6 | +0.9 |
| YM08 | YM08 baz=310 | 0.66 307 | *e*P | Pb | 04 08 27.0 | +0.2 |
| EOS4 | EOS4 baz=162 | 0.68 169 | *e*P | Pb | 04 08 27.0 | +0.3 |
| TWY | Chenhua baz=317 | 0.71 313 | *e*P | Pb | 04 08 28.1 | +0.5 |
| TWY | baz=317 | | *e*S | Sb | 04 08 38.2 | +0.9 |
| ANP | Anpu baz=307 | 0.71 304 | *e*P | Pb | 04 08 27.9 | +0.2 |
| YHNB | Yeheng | 0.74 261 | P | Pb | 04 08 27.7 | -0.3 |
| YHNB | Yeheng baz=271 | 0.74 261 | *e*P | Pg | 04 08 27.4 | -0.1 |
| NSK | Sanguang baz=272 | 0.75 262 | *e*P | Pg | 04 08 27.6 | -0.2 |
| TWS1 | Kuangyinshan baz=297 | 0.75 294 | *e*P | Pb | 04 08 28.0 | -0.3 |
| TWS1 | baz=297 | | *e*S | Sb | 04 08 39.1 | +0.6 |
| NTST | Danshui baz=302 | 0.76 300 | *e*P | Pb | 04 08 28.5 | +0.1 |
| JYNG | Yonagunijimaku | 0.78 115 | *e*P | Pb | 04 08 28.6 | -0.1 |
| JYNG | | | *e*S | Sb | 04 08 39.4 | +0.2 |
| ETL | Fush Village baz=204 | 0.80 219 | *e*P | Pg | 04 08 28.6 | -0.1 |
| NNSH | Datong baz=242 | 0.81 244 | *e*P | Pb | 04 08 28.9 | -0.3 |
| NNS | Nan Shan baz=241 | 0.81 245 | *e*P | Pb | 04 08 29.1 | -0.2 |
| NNS | baz=241 | | *i* S | Sn | 04 08 41.3 | -1.3 |
| NACB | Ninganchiao | 0.81 221 | P | Pg | 04 08 28.7 | -0.2 |
| NACB | Ninganchiao baz=215 | 0.81 221 | *e*P | Pg | 04 08 28.4 | -0.4 |
| NACB | baz=215 | | *e*S | Sg | 04 08 39.4 | 0.0 |
| YOJ | Yonaguni jima baz=111 | 0.83 113 | *e*P | Pg | 04 08 29.4 | +0.1 |
| YOJ | Yonaguni jima | 0.83 113 | P | Pg | 04 08 29.2 | 0.0 |
| YOJ | | | S | Sg | 04 08 40.1 | +0.1 |
| PCYT | Pengchaiyu baz=9.0 | 0.84 354 | *e*P | Pg | 04 08 29.1 | -0.4 |
| ETLH | Xiulin Townshi baz=224 | 0.86 228 | *e*P | Pb | 04 08 29.8 | -0.3 |
| TWD | Chiawan baz=213 | 0.88 217 | *e*P | Pb | 04 08 30.3 | -0.2 |
| NFF | Wufeng Townshi baz=261 | 0.97 261 | *e*P | Pn | 04 08 32.9 | +0.1 |
| FUSS | Fushou baz=236 | 1.00 238 | *e*P | Pn | 04 08 33.0 | -0.4 |
| ETM | Tongmen baz=206 | 1.03 217 | *e*P | Pb | 04 08 32.8 | -0.2 |
| LXIB | Xiulin Townshi baz=218 | 1.03 222 | *e*P | Pg | 04 08 32.4 | -0.7 |
| LXIB | baz=218 | | *e*S | Sn | 04 08 47.9 | -0.3 |
| WHF | Hehuan Shan baz=228 | 1.05 232 | *i* P | Pb | 04 08 33.6 | 0.0 |
| WHF | baz=228 | | S | Sb | 04 08 47.6 | +0.2 |
| TWT | Tachien baz=227 | 1.05 240 | *e*P | Pn | 04 08 34.5 | +0.5 |
| LIOB | Emei baz=263 | 1.06 263 | *e*P | Pn | 04 08 34.9 | +0.9 |
| TDCB | Techi baz=228 | 1.07 240 | *e*P | Pn | 04 08 34.1 | 0.0 |
| NSTT | Nanjuang baz=262 | 1.08 262 | *e*P | Pn | 04 08 35.1 | +0.9 |
| SHUL | Shoufeng baz=215 | 1.14 209 | *e*P | Pg | 04 08 36.4 | +1.2 |
| CHGB | Renai baz=228 | 1.17 232 | P | Pg | 04 08 36.0 | +0.3 |
| CHGB | baz=228 | | S | Sn | 04 08 51.6 | +0.1 |
| ESL | Shilin baz=212 | 1.18 215 | *e*P | Pg | 04 08 36.1 | +0.1 |
| WHP | Taichung City baz=245 | 1.23 246 | *e*P | Pg | 04 08 37.2 | +0.3 |
| OWD | Renai baz=213 | 1.23 228 | *e*P | Pg | 04 08 36.7 | -0.2 |
| WUSB | Renai baz=229 | 1.25 231 | *e*P | Pg | 04 08 37.0 | -0.2 |
| WARBT | Fenglin Townsh baz=212 | 1.29 214 | *e*P | Pb | 04 08 37.4 | 0.0 |
| TWQ1 | Liyutan baz=251 | 1.35 251 | *e*P | Pg | 04 08 39.3 | +0.1 |
| WCS | Beigang Elemen baz=237 | 1.36 238 | *e*P | Pg | 04 08 40.3 | +0.9 |
| VWDT | VWDT baz=221 | 1.40 223 | *e*P | Pg | 04 08 39.7 | -0.4 |
| HGSD | Ruisui baz=222 | 1.46 208 | *e*P | Pg | 04 08 41.0 | -0.3 |
| TYC | Yuchr baz=232 | 1.49 234 | *e*P | Pg | 04 08 41.5 | -0.3 |
| SSLB | Suanglung | 1.50 228 | P | Pg | 04 08 41.5 | -0.4 |
| SSLB | Suanglung baz=226 | 1.50 228 | *e*P | Pb | 04 08 41.2 | +0.3 |
| EHY | Hungye baz=221 | 1.50 212 | *e*P | Pb | 04 08 41.1 | +0.2 |
| YULB | Yu-li baz=219 | 1.60 210 | *e*P | Pb | 04 08 42.3 | -0.5 |
| TWF1 | Yuli baz=221 | 1.64 209 | *e*P | Pb | 04 08 43.2 | -0.2 |
| JKRS | Kuro-shima | 1.76 108 | *e*P | Pn | 04 08 43.7 | +0.2 |
| JKRS | | | *e*S | Sn | 04 09 04.5 | -1.3 |
| JIJ | Ishigaki jima | 1.84 103 | *e*P | Pn | 04 08 44.4 | -0.3 |

*VAO* ***27*** *04:15:56.4±2.0,9.°98S×78.°76W,h10km,mb4.5*
*IDC* ***27*** *04:16:05.7±0.8,9.°82S×78.°66W,h62km±6km,mb3.6/10, mbtmp3.9/14,MS3.1/8,Error ellipse: s-maj=15.2km s-min=6.6km az=63.0*
*NEIC* ***27*** *04:16:07.8±2.0,9.°73S±0.°05×78.°27W±0.°07,h58km±16km, mb4.2/6,Error ellipse: s-maj=11.4km s-min=4.6km az=126.0*

**ISC 27 04:16:05.4±0.6,9.°75S±0.°06×78.°44W±0.°09,h53km,n61, σ1§60/54,mb4.0/11,MS3.3/5,Near coast of northern Peru**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| ATAH | Atahualpa | 2.59 | 1 | P | | Pn | 04 16 48.1 | +2.8 |
| | 54nm,0.3s,baz=194,slow=4.4,SNR=118 | | | | | | | |
| ATAH | | | | S | | Sn | 04 17 20.3 | +4.5 |
| | 521nm,0.7s,baz=26,slow=15,SNR=13 | | | | | | | |
| ATAH | | | | LR | | LR | 04 18 02.0 | |
| | comp=Z,330nm,21.5s,baz=127,slow=43 | | | | | | | |
| NNA | Nana | 2.72 | 145 | P | | Pn | 04 16 48.4 | +1.7 |
| | 195nm,0.3s,baz=323,slow=11,SNR=132 | | | | | | | |
| NNA | | | | S | | Sn | 04 17 22.9 | +4.3 |
| | 353nm,0.2s,baz=193,slow=19,SNR=12 | | | | | | | |
| NNA | | | | LR | | LR | 04 18 17.3 | |
| | comp=Z,110nm,19.7s,baz=358,slow=47 | | | | | | | |
| CZSB | Cruzeiro do Su | 6.01 | 71 | Pn | | Pn | 04 17 34.0 | +2.2 |
| CZSB | Cruzeiro do Su | 6.01 | 71 | *e*P | | Pn | 04 17 30.9 | -0.9 |
| ARNL | Arenillas | 6.37 | 345 | Pn | | Pn | 04 17 37.9 | +1.2 |
| SLOR | San Lorenzo - | 8.96 | 360 | Pn | | Pn | 04 18 12.5 | -0.1 |
| ANTS | Antisana-Sarah | 9.19 | 2 | Pn | | Pn | 04 18 18.3 | +2.4 |
| PULU | Pululahua | 9.70 | 360 | Pn | | Pn | 04 18 24.8 | +2.1 |
| OTAV | Otavalo | 9.92 | 360 | Pn | | Pn | 04 18 26.7 | +0.9 |
| IMBA | Imbabura, San | 9.96 | 1 | Pn | | Pn | 04 18 28.3 | +2.0 |
| TBTG | Tabatinga, AM | 10.11 | 57 | Pn | | Pn | 04 18 27.8 | -0.1 |
| TBTG | Tabatinga, AM | 10.11 | 57 | *e*P | | Pn | 04 18 28.1 | +0.2 |
| TULM | Tulcn-Chalpat | 10.41 | 4 | Pn | | Pn | 04 18 34.1 | +1.6 |
| LPAZ | La Paz | 11.96 | 124 | Pn | | Pn | 04 18 53.2 | -0.6 |
| LPAZ | La Paz | 11.96 | 124 | P | | Pn | 04 18 55.0 | +1.2 |
| | 1.0nm,0.7s,baz=321,slow=13,SNR=6.2 | | | | | | | |
| LPAZ | | | | LR | | LR | 04 23 40.8 | |
| | comp=Z,56nm,19.4s,baz=322,slow=38 | | | | | | | |
| ETMB | Extrema | 12.05 | 91 | Pn | | Pn | 04 18 53.2 | -1.3 |
| ETMB | Extrema | 12.05 | 91 | *e*P | | Pn | 04 18 52.9 | -1.6 |
| PB16 | IPOC Station P | 12.16 | 136 | Pn | | Pn | 04 18 56.0 | -0.5 |
| HMBC | Humberstone | 13.33 | 143 | Pn | | Pn | 04 19 11.2 | -0.9 |
| TEFE | Tefe | 15.04 | 67 | *e*P | | Pn | 04 19 34.8 | 0.0 |
| SAML | Samuel | 15.07 | 88 | Pn | | Pn | 04 19 32.7 | -2.5 |
| SAML | Samuel | 15.07 | 88 | *e*P | | Pn | 04 19 32.0 | -3.2 |
| SIV | San Ignacio | 18.02 | 112 | P | | Pn | 04 20 12.5 | +0.2 |
| | 2.9nm,0.8s,baz=291,slow=10,SNR=12 | | | | | | | |
| SIV | | | | S | | S | 04 23 35.8 | -0.5 |
| | 1.0nm,0.7s,baz=217,slow=21,SNR=1.8 | | | | | | | |
| VILB | Vilhena | 18.16 | 102 | | | P | 04 20 13.2 | -0.5 |
| VILB | | | | | IAmb | IAmb | 04 20 54.0 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| VILB | Vilhena | 18.16 | 102 | *e*P | | P | 04 20 12.2 | -1.5 |
| MACA | Manacapuru-AM | 18.81 | 71 | | | P | 04 20 20.5 | -0.3 |
| MACA | | | | | IAmb | IAmb | 04 20 43.5 | |
| | comp=Z,29nm,0.7s | | | | | | | |
| BBSD | Serra de San D | 18.84 | 115 | *e*P | | P | 04 20 18.1 | -3.0 |
| PTLB | Pontes e Lacer | 19.66 | 109 | P | | P | 04 20 30.6 | +0.5 |
| PTLB | | | | | IAmb | IAmb | 04 20 32.3 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| PTLB | Pontes e Lacer | 19.66 | 109 | *e*P | | P | 04 20 28.4 | -1.7 |
| BAUV | El Baul | 21.26 | 29 | P | | P | 04 20 47.7 | +0.4 |
| PDRB | Porto dos Gac | 21.41 | 97 | *e*P | | P | 04 20 48.0 | -1.0 |
| BOAV | Boa Vista | 21.54 | 57 | P | | P | 04 20 49.4 | -1.0 |
| BOAV | | | | | IAmb | IAmb | 04 20 52.0 | |
| | comp=Z,6.4nm,1.0s | | | | | | | |
| BOAV | Boa Vista | 21.54 | 57 | *e*P | | P | 04 20 49.3 | -1.1 |
| NPGB | Novo Progresso | 22.99 | 85 | *e*P | | P | 04 21 05.0 | -0.9 |
| H03N2 | Juan Fernandez | 23.59 | 181 | T | | T | 04 45 14.9 | |
| | baz=0.9,slow=75,SNR=96 | | | | | | | |
| H03N1 | Juan Fernandez | 23.59 | 181 | T | | T | 04 45 15.7 | |
| | baz=0.9,slow=75,SNR=137 | | | | | | | |
| H03N3 | Juan Fernandez | 23.60 | 181 | T | | T | 04 45 21.5 | |
| | baz=0.9,slow=75,SNR=61 | | | | | | | |
| PCRV | Puerto La Cruz | 24.09 | 35 | LR | | LR | 04 31 37.5 | |
| | comp=Z,113nm,20.6s,slow=38 | | | | | | | |
| CPUP | Villa Florida | 25.91 | 132 | P | | P | 04 21 33.9 | +1.3 |
| | comp=Z,1.2nm,0.7s,baz=314,slow=8.7,SNR=4.1 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| PLCA | Paso Flores | 31.64 | 169 | P | | P | 04 22 24.9 | +1.3 |
| RPN | Rapa Nui | 33.89 | 235 | LR | | LR | 04 33 20.7 | |
| | comp=Z,27nm,18.8s,baz=30,slow=31 | | | | | | | |
| TXAR | Lajitas Array | 45.84 | 329 | P | | P | 04 24 23.3 | +0.7 |
| | comp=Z,0.2nm,0.7s,baz=145,slow=11,SNR=2.7 | | | | | | | |
| TXAR | | | | | pP | pP | 04 24 36.5 | 0.0 |
| | comp=Z,0.5nm,0.8s,baz=144,slow=11,SNR=4.7 | | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | | |
| PDAR | Pinedale Array | 59.49 | 334 | P | | P | 04 26 01.8 | -1.6 |
| | comp=Z,0.5nm,0.7s,baz=126,slow=9.1,SNR=5.1 | | | | | | | |
| PDAR | | | | | pP | pP | 04 26 17.2 | -0.7 |
| | comp=Z,0.7nm,0.8s,baz=141,slow=9.6,SNR=4.4 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| NVAR | Mina Array Bea | 60.65 | 325 | P | | P | 04 26 11.1 | -0.3 |
| | comp=Z,1.1nm,0.8s,baz=155,slow=6.9,SNR=5.5 | | | | | | | |
| NVAR | | | | | pP | pP | 04 26 26.1 | +0.2 |
| | comp=Z,1.0nm,0.8s,baz=130,slow=7.2,SNR=4.7 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| DBIC | Dimbokro | 75.09 | 80 | P | | P | 04 27 42.4 | 0.0 |
| | comp=Z,4.9nm,0.9s,baz=258,slow=3.6,SNR=5.6 | | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| SNAA | Sanae | 76.28 | 162 | P | | P | 04 27 47.5 | -0.7 |
| | comp=Z,1.2nm,0.8s,baz=292,slow=4.3,SNR=4.4 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| YKA | Yellowknife Array | 77.26 | 344 | P | | P | 04 27 52.3 | -1.4 |
| | comp=Z,0.5nm,0.8s,baz=143,slow=6.2,SNR=5.5 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| SFJD | Kangerlussuaq | 79.16 | 11 | LR | | LR | 05 04 39.2 | |
| | comp=Z,23nm,18.8s,baz=266,slow=37 | | | | | | | |
| QSPA | South Pole Qui | 80.37 | 180 | P | | P | 04 28 10.8 | -0.1 |
| | comp=Z,3.8nm,1.1s,baz=176,slow=3.3,SNR=5.4 | | | | | | | |
| | comp=Z,3.8nm,1.1s | | | | | | | |
| MDT | Midelt | 81.93 | 55 | LR | | LR | 05 04 24.7 | |
| | comp=Z,18nm,19.8s,baz=228,slow=35 | | | | | | | |
| TORD | Torodi Ar. Bea | 82.73 | 75 | P | | P | 04 28 23.9 | -0.4 |
| | comp=Z,2.3nm,0.9s,baz=271,slow=5.0,SNR=9.0 | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | |
| ESDC | Sonseca Array | 84.45 | 48 | P | | P | 04 28 32.7 | +0.1 |
| | comp=Z,1.4nm,0.9s,baz=258,slow=5.4,SNR=8.7 | | | | | | | |
| ESDC | | | | LR | | LR | 05 03 59.1 | |
| | comp=Z,9.5nm,19.0s,baz=188,slow=34 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| H11N3 | WAKE ISLAND Hyl | 16.34 | 287 | T | | T | 06 41 02.3 | |
| | baz=96,slow=74,SNR=3.6 | | | | | | | |
| H11N2 | WAKE ISLAND Hyl | 16.36 | 287 | T | | T | 06 41 12.8 | |
| | baz=96,slow=74,SNR=5.0 | | | | | | | |
| H11N1 | WAKE ISLAND Hyl | 16.36 | 287 | T | | T | 06 41 22.1 | |
| | baz=96,slow=74,SNR=2.3 | | | | | | | |
| H11S2 | WAKE ISLAND Hyl | 16.50 | 286 | T | | T | 06 41 39.3 | |
| | baz=92 | | | | | | | |
| H11S1 | WAKE ISLAND Hyl | 16.51 | 286 | T | | T | 06 41 38.2 | |
| | baz=92 | | | | | | | |
| H11S3 | WAKE ISLAND Hyl | 16.52 | 286 | T | | T | 06 41 36.6 | |
| | baz=92 | | | | | | | |
| ASAR | Alice Springs | 134.15 | 223 | PKP | | PKPdf | 04 35 17.2 | -0.7 |
| | comp=Z,0.6nm,0.8s,baz=119,slow=1.8,SNR=5.0 | | | | | | | |
| KURBB | Kurchatov Arra | 135.03 | 21 | PKP | | PKPdf | 04 35 17.6 | -1.1 |
| | comp=Z,0.8nm,0.8s,baz=321,slow=2.3,SNR=6.5 | | | | | | | |
| WRA | Warramunga Arr | 136.28 | 227 | PKP | | PKPdf | 04 35 20.6 | -1.4 |
| | comp=Z,1.5nm,0.9s,baz=119,slow=2.1,SNR=9.0 | | | | | | | |

*ISN* ***27*** *04:25:15.9±0.6,34.°57N×46.°16E,h8km±16km,ML3.4*
*TEH* ***27*** *04:25:16.0,34.°59N×46.°18E,h6km±35km,ML3.4*
**ISC 27 04:25:17.1±1.1,34.°59N±0.°03×46.°16E±0.°03,h13km±10km, n22,σ1§67/27,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| IDHR | Dehrash | 0.22 | 59 | Pg | | Pg | 04 25 21.5 | -0.6 |
| IGHG | Ghaleghazi | 0.42 | 127 | Pg | | Pb | 04 25 25.8 | -0.9 |
| KGS1 | Ghasr-e-Shirin | 0.47 | 261 | Pg | | Pb | 04 25 26.4 | -0.9 |
| GLG1 | Gilan-e-Gharb | 0.51 | 204 | Pg | | Pb | 04 25 27.3 | -0.8 |
| GLG1 | | | | Sg | | Sb | 04 25 35.6 | +0.1 |
| ILIN | Lien | 0.74 | 63 | Pg | | Pb | 04 25 30.9 | -1.2 |
| KCHF | Cheshme Sefid, | 0.79 | 113 | Pg | | Pb | 04 25 32.5 | -0.4 |
| ILBA | Ilam Banvizeh | 0.96 | 177 | Pg | | Pn | 04 25 35.9 | -0.5 |
| ILBA | | | | Sg | | Sn | 04 25 49.4 | -0.6 |
| SNQR | Sonqor, Kerman | 1.24 | 77 | Pg | | Pn | 04 25 41.3 | +0.8 |
| IBZA | Bozab | 1.41 | 94 | Pg | | Pg | 04 25 44.2 | -0.1 |
| IBDR | Badra | 1.48 | 187 | *e*Pn | | Pg | 04 25 45.5 | -0.1 |
| IBDR | | | | *e*Sn | | Sg | 04 26 07.0 | +2.1 |
| IBDR | | | | | AML | AML | 04 26 11.1 | |
| | comp=E,449nm,0.8s | | | | | | | |
| IBDR | | | | | AML | AML | 04 26 24.7 | |
| | comp=N,446nm,0.6s | | | | | | | |
| SDS1 | Sardasht. Az. | 1.66 | 341 | Pg | | Pg | 04 25 47.9 | -1.0 |
| IKRK | Kirkuk | 1.70 | 299 | *e*Pn | | Pg | 04 25 49.0 | -0.7 |
| IKRK | | | | *e*Sn | | Sg | 04 26 13.0 | +1.2 |
| IKRK | | | | | AML | AML | 04 26 20.4 | |
| | comp=E,648nm,0.2s | | | | | | | |
| IKRK | | | | | AML | AML | 04 26 22.7 | |
| | comp=N,709nm,0.5s | | | | | | | |
| IKFM | Kafar-mosalman | 1.76 | 127 | Pg | | Pg | 04 25 49.5 | -1.3 |
| IDOB | Doab | 1.85 | 115 | Pn | | Pg | 04 25 51.9 | -0.8 |
| HSAM | Samen | 2.06 | 100 | Pn | | Pb | 04 25 54.3 | -0.2 |
| MAHB | Mahabad | 2.21 | 351 | Pn | | Pb | 04 25 56.9 | -0.2 |
| RAFI | Al-Rafai | 2.85 | 181 | *e*Pn | | Pn | 04 26 04.5 | +2.1 |
| RAFI | | | | *e*Sn | | Sb | 04 26 40.5 | -2.3 |
| IHSH | Hashtrud | 2.86 | 18 | Pn | | Pb | 04 26 05.8 | -2.4 |
| IAZR | Azarshahr | 3.09 | 357 | Pn | | Pb | 04 26 08.9 | -3.2 |
| ISRB | Sarab | 3.46 | 20 | Pn | | Pn | 04 26 13.6 | +2.7 |
| IHRS | Heris | 3.79 | 11 | Pn | | Pn | 04 26 18.4 | +2.8 |
| GRMI | Germi | 4.44 | 18 | Pn | | Pn | 04 26 27.1 | +2.8 |

**IDC 27 04:39:26.7±376.0,1.°50S×141.°43E,h0km,Error ellipse: s-maj=163.7km s-min=154.7km az=102.0,Ninigo Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| I40PG | Keravat | 10.92 | 105 | I | | I | 05 43 40.0 | |
| | baz=282,slow=316,SNR=2.2 | | | | | | | |
| I39PW | PALAU INFRASON | 11.30 | 323 | I | | I | 05 44 50.0 | |
| | baz=144,slow=312,SNR=5.0 | | | | | | | |
| I07AU | WARRAMUNGA INF | 59.60 | 200 | I | | I | 06 41 40.0 | |
| | baz=24,slow=311,SNR=1.3 | | | | | | | |

**TRN 27 04:46:26.0,14.°39N×60.°27W,h38km,MD3.6,East of Martinique.,Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MPOM | Morne Pois Mar | 0.58 | 276 | *e*P | | Pn | 04 46 38.8 | +1.0 |
| MVM | Montagne Vaucl | 0.63 | 285 | *e*P | | Pn | 04 46 39.7 | +1.1 |
| ILAM | Ilet Lapin Mar | 0.70 | 303 | *e*P | | Pn | 04 46 40.3 | +0.8 |
| ILAM | | | | *e*S | | Sn | 04 46 51.1 | +2.1 |
| LPMF | Morne Lapointe | 0.70 | 286 | *e*P | | Pn | 04 46 40.5 | +1.0 |
| SLW | Petit Monier | 0.75 | 241 | *e*P | | Pn | 04 46 41.6 | +1.6 |
| SLW | | | | *e*S | | Sn | 04 46 52.1 | +2.0 |
| TRMF | Trois Ilets | 0.77 | 281 | *e*P | | Pn | 04 46 41.7 | +1.3 |
| SLBI | Saint Lucia, B | 0.78 | 242 | *e*P | | Pn | 04 46 40.8 | +0.4 |
| SLBI | | | | *e*S | | Sn | 04 46 52.6 | +1.8 |
| SLAC | Saint Lucia, A | 0.78 | 232 | *e*P | | Pn | 04 46 41.1 | +0.6 |
| SLAC | | | | *e*S | | Sn | 04 46 52.7 | +1.8 |
| BIM | Bigot | 0.79 | 280 | *e*P | | Pn | 04 46 42.2 | +1.5 |
| BIM | | | | *e*S | | Sn | 04 46 53.3 | +2.0 |
| FDF | Fort de France | 0.92 | 292 | *e*P | | Pn | 04 46 43.7 | +1.3 |
| SLB | Belfond | 0.94 | 234 | *e*P | | Pn | 04 46 43.9 | +1.2 |
| SLB | | | | *e*S | | Sn | 04 46 56.8 | +2.0 |
| GBMF | Grand Be | 0.96 | 295 | *e*P | | Pn | 04 46 44.7 | +1.7 |
| CXM | Morne La Croix | 0.97 | 296 | *e*P | | Pn | 04 46 45.2 | +2.0 |
| PML | Morne Lenard | 0.97 | 294 | *e*P | | Pn | 04 46 44.8 | +1.7 |
| SVN | Savane Anatole | 0.98 | 298 | *e*P | | Pn | 04 46 44.4 | +1.1 |
| SVN | | | | *e*S | | Sn | 04 46 58.4 | +2.4 |
| PCM | Pelee Case Pet | 1.01 | 295 | *e*P | | Pn | 04 46 44.4 | +0.8 |
| PCM | Pelee Case Pet | 1.01 | 295 | *e*P | | Pn | 04 46 45.5 | +1.8 |
| SSV | Crater Summit | 1.39 | 221 | *e*P | | Pn | 04 46 50.0 | +1.1 |
| SSV | | | | *e*S | | Sn | 04 47 06.8 | +0.8 |
| SVV | Soufriere Volc | 1.41 | 221 | *e*P | | Pn | 04 46 51.1 | +2.0 |
| SVV | | | | *e*S | | Sn | 04 47 09.9 | +3.5 |
| BBGH | Gun Hill | 1.41 | 151 | *e*P | | Pn | 04 46 50.9 | +1.8 |
| SVB | Belmont | 1.46 | 221 | *e*P | | Pn | 04 46 50.6 | +0.8 |
| SVB | | | | *e*S | | Sn | 04 47 09.8 | +2.0 |
| SVT | Saint Vincent | 1.54 | 218 | *e*P | | Pn | 04 46 51.5 | +0.6 |
| SVT | | | | *e*S | | Sn | 04 47 11.8 | +2.3 |
| SVOC | Richmond Hill, | 1.54 | 217 | *e*P | | Pn | 04 46 51.3 | +0.4 |
| SVOC | | | | *e*S | | Sn | 04 47 12.2 | +2.6 |
| MAGL | Barre de l'ile | 1.84 | 328 | *e*P | | Pn | 04 46 56.0 | +1.0 |
| TDBA | Terre de Bas, | 1.97 | 318 | *e*P | | Pn | 04 46 59.2 | +2.4 |
| TBG | Guadaloupe-3 | 1.97 | 318 | *e*P | | Pn | 04 46 58.0 | +1.2 |
| TBG | | | | *e*S | | Sn | 04 47 21.7 | +1.4 |
| CBE | Ff, Capester | 2.12 | 322 | *e*P | | Pn | 04 47 00.8 | +1.9 |
| GCMP | Grenada, Carri | 2.20 | 211 | *e*P | | Pn | 04 47 01.2 | +1.2 |
| GCMP | | | | *e*S | | Sn | 04 47 28.4 | +2.5 |
| ABD | La Joyeuse, An | 2.39 | 331 | *e*P | | Pn | 04 47 04.2 | +1.7 |
| GRSS | Sisters | 2.45 | 212 | *e*P | | Pn | 04 47 04.9 | +1.4 |
| GRHS | Sauteurs | 2.53 | 212 | *e*P | | Pn | 04 47 07.0 | +2.4 |
| GRHS | | | | *e*S | | Sn | 04 47 36.2 | +2.0 |
| GRW | Mount Saint Ca | 2.60 | 212 | *e*P | | Pn | 04 47 07.0 | +1.4 |
| GRFF | Grenada Fort F | 2.73 | 212 | *e*P | | Pn | 04 47 09.4 | +2.1 |
| GRFF | | | | *e*S | | Sn | 04 47 40.1 | +1.0 |
| MBWH | | 2.99 | 322 | *e*P | | Pn | 04 47 12.7 | +1.9 |
| MBWH | | | | *e*S | | Sn | 04 47 46.8 | +1.4 |
| MBFL | Flemmings, Mon | 3.00 | 322 | *e*P | | Pn | 04 47 13.3 | +2.3 |
| MBFL | | | | *e*S | | Sn | 04 47 47.8 | +1.9 |
| ANBD | Bethesda, Anti | 3.01 | 332 | *e*P | | Pn | 04 47 12.7 | +1.5 |
| ANBD | | | | *e*S | | Sn | 04 47 46.2 | +0.2 |
| TRN | Trinidad (W) | 3.88 | 197 | *e*P | | Pn | 04 47 24.4 | +1.3 |
| TRN | | | | *e*S | | Sn | 04 48 07.1 | -0.3 |

*AFAD* ***27*** *05:00:05.6±0.0,38.°68N×44.°43E,h1km,ML2.6*
*AZER* ***27*** *05:00:06.0,38.°76N×44.°56E,h2km,ml2.9*
*TEH* ***27*** *05:00:07.2,38.°56N×44.°53E,h10km,ML2.8*
*ISK* ***27*** *05:00:08.7,38.°75N×44.°17E,h5km,ML2.6/10*
**ISC 27 05:00:05.9±1.1,38.°72N±0.°02×44.°44E±0.°02,h7km±10km, n39,σ1§49/63,Turkey-Iran border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| OZAP | Van, Ozalp-Mer | 0.35 | 261 | P | | Pg | 05 00 13.3 | +0.4 |
| OZAP | | | | S | | Sg | 05 00 18.8 | +1.2 |
| OZAP | | | | *i* AML | | AML | 05 00 20.0 | |
| | comp=N,621nm,0.6s | | | | | | | |
| OZAP | | | | *i* AML | | AML | 05 00 21.0 | |
| | comp=E,752nm,0.4s | | | | | | | |
| CLDR | Caldiran | 0.59 | 316 | Pg | | Pg | 05 00 11.8 | -5.5 |
| CLDR | | | | Sg | | Sg | 05 00 21.8 | -3.3 |
| CLDR | Caldiran | 0.59 | 316 | P | | Pg | 05 00 11.9 | -5.4 |
| CLDR | | | | S | | Sg | 05 00 20.7 | -4.4 |
| VMUR | Van-Muradiye | 0.73 | 292 | P | | Pg | 05 00 20.4 | +0.4 |
| VMUR | | | | S | | Sb | 05 00 31.7 | +0.2 |
| VMUR | | | | *i* AML | | AML | 05 00 36.0 | |
| | comp=E,276nm,0.3s | | | | | | | |
| TVAN | Van | 0.83 | 257 | P | | Pg | 05 00 21.9 | +0.1 |
| TVAN | | | | S | | Sn | 05 00 35.0 | -2.0 |
| TVAN | | | | *i* AML | | AML | 05 00 46.0 | |
| | comp=E,179nm,0.4s | | | | | | | |
| VANB | Van | 0.83 | 262 | Pg | | Pg | 05 00 21.8 | -0.1 |
| VANB | | | | Sg | | Sg | 05 00 32.5 | -0.2 |
| IMRD | Marand | 0.99 | 90 | Pg | | Pb | 05 00 24.8 | -0.7 |
| ISHB | Shabestar | 1.02 | 115 | Pg | | Pg | 05 00 24.5 | -0.9 |
| HYR | Heyderabad | 1.05 | 18 | P | | Pn | 05 00 27.8 | +0.6 |
| HYR | | | | S | | Sn | 05 00 43.5 | +1.3 |
| SBZ | Shahbuz | 1.10 | 51 | P | | Pn | 05 00 28.2 | +0.3 |
| SBZ | | | | S | | Sn | 05 00 44.8 | +1.4 |
| GEVA | Gevas | 1.16 | 250 | P | | Pb | 05 00 26.7 | -1.7 |
| GEVA | | | | S | | Sn | 05 00 44.4 | -0.5 |
| GEVA | | | | *i* AML | | AML | 05 00 52.0 | |
| | comp=N,119nm,0.4s | | | | | | | |
| IGDI | IGDIR | 1.19 | 346 | P | | Pg | 05 00 30.7 | +2.0 |
| IGDI | | | | S | | Sn | 05 00 46.9 | +1.4 |
| AKDM | Akdamar-Van | 1.21 | 252 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CUKT | | | | *i* AML | AML | 05 01 04.0 | |
| | comp=Z,77nm,0.6s | | | | | | |
| CUKT | | | | *i* AML | AML | 05 01 06.0 | |
| | comp=E,141nm,0.7s | | | | | | |
| **PERV** | **Siirt/Pervari-** | **1.68** | **243** | P | **Pg** | **05 00 39.1** | **+1.0** |
| PERV | | | | S | **Sg** | **05 01 02.6** | **+2.7** |
| PERV | | | | *i* AML | AML | 05 01 04.0 | |
| | comp=Z,51nm,1.0s | | | | | | |
| PERV | | | | *i* AML | AML | 05 01 04.0 | |
| | comp=E,124nm,0.5s | | | | | | |
| PERV | | | | *i* AML | AML | 05 01 08.0 | |
| | comp=N,130nm,0.9s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **1.89** | **266** | Pn | **Pb** | **05 00 39.9** | **-1.0** |
| **EATA** | **Eleskirt** | **1.90** | **308** | P | **Pb** | **05 00 40.3** | **-0.8** |
| EATA | | | | S | **Sg** | **05 01 09.0** | **+2.1** |
| **SRTM** | **Siirt_Merkez** | **2.11** | **251** | P | **Pb** | **05 00 44.1** | **-0.4** |
| SRTM | | | | S | **Sb** | **05 01 09.8** | **-1.1** |
| SRTM | | | | *i* AML | AML | 05 01 27.0 | |
| | comp=N,48nm,1.0s | | | | | | |
| SRTM | | | | *i* AML | AML | 05 01 27.0 | |
| | comp=E,53nm,0.9s | | | | | | |
| **GDB** | **GEDABAY** | **2.24** | **26** | P | **Pb** | **05 00 47.8** | **+0.9** |
| GDB | | | | S | **Sg** | **05 01 19.4** | **+1.4** |
| **QRD** | **Qoradiz** | **2.36** | **71** | P | **Pb** | **05 00 48.1** | **-0.7** |
| QRD | | | | S | **Sg** | **05 01 20.9** | **-0.8** |
| **KOPR** | **Koprukoy-ERZUR** | **2.38** | **303** | Pn | **Pb** | **05 00 47.2** | **-2.0** |
| **GANJ** | **Ganja** | **2.41** | **36** | P | **Pb** | **05 00 48.3** | **-1.4** |
| GANJ | | | | S | **Sg** | **05 01 22.9** | **-0.5** |
| **QZX** | **Qazax, Azerbai** | **2.45** | **17** | S | **Sg** | **05 01 24.1** | **-0.4** |
| **SENK** | **Senkaya-Erzuru** | **2.45** | **319** | Pn | **Pb** | **05 00 49.5** | **-0.9** |
| **AGDM** | **Agdam** | **2.49** | **55** | P | **Pb** | **05 00 49.5** | **-1.5** |
| **GRMI** | **Germi** | **2.70** | **87** | Pn | **Pb** | **05 00 52.9** | **-1.7** |
| **YRD** | **Yardimli** | **2.98** | **85** | P | **Pb** | **05 00 57.0** | **-2.4** |
| YRD | | | | S | **Sb** | **05 01 33.9** | **-2.1** |
| **LRK** | **Lerik** | **3.05** | **90** | P | **Pb** | **05 00 58.7** | **-1.9** |

*IDC **27** 05:02:21.9±57.0, 19.°96S×179.°11W, h0km, mb4.2/3, mbtmp4.2/3, Error ellipse: s-maj=1040.0km s-min=155.6km az=82.0*
*NEIC **27** 05:02:21.1±2.6, 19.°86S±0.°10×179.°0W±0.°1, h10km±2km, mb4.6/15, Error ellipse: s-maj=24.4km s-min=14.2km az=64.0*
**ISC 27 05:02:20.0**±1.6, **19.°8S**±0.°1×**178.°9W**±0.°2, **h10**km, **n22**, σ1§**06**/22, **mb4.4**/10, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.55** | **306** | Pn | **Pn** | **05 03 15.1** | **-0.1** |
| **RAO** | **Raoul Island** | **9.42** | **175** | Pn | **Pn** | **05 04 35.7** | **-0.1** |
| **FUNA** | **Funafuti** | **11.39** | **351** | Pn | **Pn** | **05 05 02.8** | **-0.2** |
| **CTAO** | **Charters Tower** | **32.69** | **264** | P | **P** | **05 08 53.2** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 05 09 01.5 | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **34.35** | **283** | P | **P** | **05 09 05.3** | **-2.0** |
| PMG | | | | IAmb | IAmb | 05 09 26.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PATS** | **Pohnpei** | **34.70** | **318** | P | **P** | **05 09 11.4** | **+1.0** |
| **COEN** | **Coen** | **36.67** | **273** | P | **P** | **05 09 26.2** | **-1.2** |
| COEN | | | | IAmb | IAmb | 05 09 46.6 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **37.30** | **243** | P | **P** | **05 09 33.7** | **+1.2** |
| | comp=Z,1.9nm,0.6s,baz=107,slow=8.7,SNR=3.8 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **42.07** | **243** | P | **P** | **05 10 11.6** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 05 10 24.9 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.64** | **262** | P | **P** | **05 10 25.4** | **+0.3** |
| **WB0** | **Warramunga Arr** | **43.81** | **262** | P | **P** | **05 10 26.0** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 05 10 31.6 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.82** | **262** | P | **P** | **05 10 26.9** | **+0.3** |
| **WRAB** | **Tennant Creek** | **43.82** | **262** | P | **P** | **05 10 26.5** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 05 10 29.8 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **43.82** | **256** | P | **P** | **05 10 27.6** | **+0.9** |
| **ASAR** | **Alice Springs** | **43.83** | **256** | P | **P** | **05 10 27.1** | **+0.5** |
| **ASAR** | **Alice Springs** | **43.83** | **256** | P | **P** | **05 10 28.6** | **+1.9** |
| | comp=Z,2.4nm,0.5s,baz=93,slow=8.0,SNR=16 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.83** | **262** | P | **P** | **05 10 28.6** | **+1.9** |
| | comp=Z,1.0nm,0.4s,baz=97,slow=7.5,SNR=42 | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **48.28** | **270** | P | **P** | **05 11 02.7** | **+0.9** |
| **FORT** | **Forrest** | **48.76** | **246** | P | **P** | **05 11 04.2** | **-1.1** |
| **KNRA** | **Kununurra** | **49.83** | **266** | P | **P** | **05 11 14.4** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **52.25** | **262** | P | **P** | **05 11 31.7** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **56.97** | **257** | P | **P** | **05 12 04.8** | **-1.3** |
| PSA00 | | | | IAmb | IAmb | 05 12 05.4 | |
| | comp=Z,6.0nm,1.1s | | | | | | |

*VAO **27** 05:09:21.0±0.9, 23.°40S×67.°76W, h10km, mb4.4*
*IDC **27** 05:09:23.0±0.9, 23.°26S×67.°98W, h109km±7km, mb3.6/10, mbtmp4.0/13, Error ellipse: s-maj=17.0km s-min=14.5km az=14.0*
*GUC **27** 05:09:23.0±0.8, 23.°37S×68.°19W, h126km±6km, ML3.8*
*NEIC **27** 05:09:23.6±2.5, 23.°35S±0.°06×68.°22W±0.°09, h117km±5km, mb4.3/16, ML3.8(GUC), Error ellipse: s-maj=11.5km s-min=8.1km az=92.0*
**ISC 27 05:09:22.5**±0.6, **23.°40S**±0.°04×**68.°09W**±0.°05, **h112**km±5km, **n76**, σ1§**44**/87, **mb4.2**/16, **2C-1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **0.45** | **350** | | **Pn** | **05 09 41.0** | **+1.4** |
| AF01 | | | | Sn | **Sn** | **05 09 54.5** | **+2.0** |
| **AF01** | **San Pedro de A** | **0.45** | **350** | ⇓*i*P | **Pn** | **05 09 41.0** | **+1.4** |
| AF01 | | | | *e*S | **Sn** | **05 09 54.3** | **+1.8** |
| AF01 | | | | IAML | | 05 09 57.2 | |
| | comp=N,8μm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **1.09** | **316** | | **Pn** | **05 09 46.0** | **+0.8** |
| LVC | | | | Sn | **Sn** | **05 10 02.6** | **+0.4** |
| **LVC** | **Limon Verde** | **1.09** | **316** | P | **Pn** | **05 09 46.0** | **+0.8** |
| | comp=N,147nm,0.3s,baz=179,slow=4.9,SNR=1436 | | | | | | |
| LVC | | | | S | **Sn** | **05 10 02.1** | **-0.1** |
| | comp=N,1μm,0.7s,baz=29,slow=19,SNR=33 | | | | | | |
| LVC | | | | LR | LR | 05 10 19.0 | |
| | comp=N,183nm,18.7s,baz=194,slow=52 | | | | | | |
| **LVC** | **Limon Verde** | **1.09** | **316** | ⇑*i*P | **Pn** | **05 09 45.9** | **+0.8** |
| LVC | | | | *e*S | **Sn** | **05 10 02.3** | **+0.1** |
| LVC | | | | IAML | | 05 10 04.5 | |
| | comp=N,4μm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **1.09** | **316** | *e*P | **Pn** | **05 09 45.9** | **+0.8** |
| LVC | | | | *e*S | **Sn** | **05 10 02.6** | **+0.4** |
| **PB09** | **IPOC Station P** | **1.91** | **326** | | **Pn** | **05 09 55.8** | **+1.1** |
| PB09 | | | | Sn | **Sn** | **05 10 20.7** | **+1.5** |
| **PB04** | **IPOC Station P** | **2.17** | **299** | Pn | **Pn** | **05 09 57.8** | **-0.1** |
| **PB04** | **IPOC Station P** | **2.17** | **299** | *i* P | **Pn** | **05 09 57.8** | **-0.1** |
| PB04 | | | | *e*S | **Sn** | **05 10 24.7** | **-0.3** |
| PB04 | | | | IAML | | 05 10 29.1 | |
| | comp=E,532nm,0.2s | | | | | | |
| **GO02** | **Mina Guanaco** | **2.23** | **218** | | **Pn** | **05 10 00.3** | **+1.5** |
| **GO02** | **Mina Guanaco** | **2.23** | **218** | ⇑*i*P | **Pn** | **05 10 00.3** | **+1.5** |
| GO02 | | | | *e*S | **Sn** | **05 10 28.1** | **+1.6** |
| **PB14** | **IPOC Station P** | **2.44** | **239** | | **Pn** | **05 10 01.7** | **+0.2** |
| **PB14** | **IPOC Station P** | **2.44** | **239** | *e*P | **Pn** | **05 10 01.7** | **+0.2** |
| PB14 | | | | *e*S | **Sn** | **05 10 30.9** | **-0.6** |
| PB14 | | | | IAML | | 05 10 41.7 | |
| | comp=N,171nm,0.6s | | | | | | |
| **YJA** | **Yavi** | **2.67** | **63** | *e*P | **Pn** | **05 10 08.2** | **+3.6** |
| **PATCX** | **Punta Patache** | **3.20** | **323** | | **Pn** | **05 10 10.2** | **-1.1** |
| **PATCX** | **Punta Patache** | **3.20** | **323** | *e*P | **Pn** | **05 10 10.2** | **-1.1** |
| **TA01** | **Diego Aracena** | **3.42** | **325** | Pn | **Pn** | **05 10 13.7** | **-0.5** |
| **TA01** | **Diego Aracena** | **3.42** | **325** | *e*P | **Pn** | **05 10 12.9** | **-1.2** |
| **HMBC** | **Humberstone** | **3.52** | **331** | | **Pn** | **05 10 14.5** | **-1.1** |
| **AC01** | **Pan de Azucar** | **3.56** | **219** | Pn | **Pn** | **05 10 15.7** | **-0.4** |
| **AC01** | **Pan de Azucar** | **3.56** | **219** | *e*P | **Pn** | **05 10 15.7** | **-0.4** |
| **GO01** | **Chusmiza** | **3.85** | **344** | Pn | **Pn** | **05 10 20.8** | **+0.5** |
| **GO01** | **Chusmiza** | **3.85** | **344** | *e*P | **Pn** | **05 10 20.7** | **+0.5** |
| **AC06** | **Mina Casimiro** | **4.44** | **207** | Pn | **Pn** | **05 10 27.1** | **-0.8** |
| **AC06** | **Mina Casimiro** | **4.44** | **207** | *e*P | **Pn** | **05 10 27.1** | **-0.8** |
| **GO03** | **Copiap** | **4.61** | **204** | | **Pn** | **05 10 29.4** | **-0.6** |
| **GO03** | **Copiap** | **4.61** | **204** | *e*P | **Pn** | **05 10 29.3** | **-0.7** |
| **PB16** | **IPOC Station P** | **5.21** | **345** | | **Pn** | **05 10 38.2** | **-0.5** |
| **AC04** | **Llanos de Chal** | **5.49** | **209** | Pn | **Pn** | **05 10 39.2** | **-2.8** |
| **AC04** | **Llanos de Chal** | **5.49** | **209** | *e*P | **Pn** | **05 10 39.1** | **-2.8** |
| **AC05** | **El Transito** | **5.76** | **199** | Pn | **Pn** | **05 10 44.8** | **-0.9** |
| **LCO** | **Las Campanas** | **6.06** | **202** | | **Pn** | **05 10 47.8** | **-2.1** |
| **CO01** | **Juntas del Tor** | **6.79** | **195** | | **Pn** | **05 10 59.7** | **-0.1** |
| **LPAZ** | **La Paz** | **7.07** | **360** | Pn | **Pn** | **05 11 04.8** | **+0.8** |
| **LPAZ** | **La Paz** | **7.07** | **360** | P | **Pn** | **05 11 04.0** | **0.0** |
| | comp=N,4.8nm,0.5s,baz=184,slow=7.8,SNR=26 | | | | | | |
| LPAZ | | | | S | Sn | 05 12 08.1 | -15 |
| | comp=N,4.8nm,0.8s,baz=201,slow=13,SNR=5.0 | | | | | | |
| **LPAZ** | **La Paz** | **7.07** | **360** | *e*P | **Pn** | **05 11 04.2** | **+0.3** |
| LPAZ | | | | *e*S | **Sn** | **05 12 27.3** | **+4.1** |
| **CO03** | **El Pedregal** | **7.77** | **197** | Pn | **Pn** | **05 11 10.4** | **-2.4** |
| **CO02** | **Combarbal** | **8.20** | **198** | Pn | Pn | 05 11 15.3 | -3.4 |
| **BBSD** | **Serra de San D** | **9.35** | **50** | *e*P | **Pn** | **05 11 32.0** | **-2.3** |
| **SIV** | **San Ignacio** | **9.90** | **43** | P | **Pn** | **05 11 39.6** | **-2.1** |
| | comp=N,11nm,0.5s,baz=237,slow=11,SNR=107 | | | | | | |
| SIV | | | | S | **Sn** | **05 13 25.1** | **-5.9** |
| | comp=N,3.8nm,0.4s,baz=296,slow=22,SNR=4.6 | | | | | | |
| **CPUP** | **Villa Florida** | **10.20** | **109** | P | **Pn** | **05 11 45.6** | **-0.2** |
| | comp=N,2.4nm,0.9s,baz=279,slow=11,SNR=6.2 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **11.57** | **48** | Pn | **Pn** | **05 12 03.1** | **-1.1** |
| **PTLB** | **Pontes e Lacer** | **11.57** | **48** | *e*P | **Pn** | **05 12 01.9** | **-2.3** |
| **VILB** | **Vilhena** | **12.80** | **37** | Pn | **Pn** | **05 12 19.1** | **-1.5** |
| **VILB** | **Vilhena** | **12.80** | **37** | *e*P | **Pn** | **05 12 19.6** | **-1.0** |
| **SALV** | **Santo Antonio** | **13.85** | **60** | *e*P | **Pn** | **05 12 34.8** | **+0.7** |
| **TRQA** | **Tornquist** | **15.52** | **162** | P | **P** | **05 12 58.5** | **+1.4** |
| **VAO** | **Valinhos** | **19.43** | **93** | P | **Pn** | **05 13 41.0** | **-1.5** |
| VAO | | | | IAmb | IAmb | 05 13 51.8 | |
| | comp=Z,29nm,1.4s | | | | | | |
| **BDFB** | **Brasilia** | **20.42** | **71** | P | **P** | **05 13 50.6** | **-0.4** |
| | comp=Z,3.3nm,0.8s,baz=272,slow=10,SNR=3.6 | | | | | | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **MACA** | **Manacapuru-AM** | **21.36** | **21** | P | **P** | **05 13 59.7** | **-1.2** |
| **V55A** | **Taylorsville** | **60.22** | **348** | P | **P** | **05 19 19.4** | **+0.6** |
| **SNAA** | **Sanae** | **60.25** | **161** | P | **P** | **05 19 19.8** | **+1.2** |
| | comp=Z,0.9nm,0.8s,baz=278,slow=4.7,SNR=3.9 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **TKL** | **Tuckaleechee C** | **60.58** | **345** | P | **P** | **05 19 20.8** | **-0.4** |
| TKL | | | | IAmb | IAmb | 05 19 21.8 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **WVT** | **Waverly** | **62.08** | **342** | | **P** | **05 19 30.3** | **-1.0** |
| WVT | | | | IAmb | IAmb | 05 19 31.3 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **62.61** | **325** | P | **P** | **05 19 35.5** | **+0.4** |
| | comp=Z,0.3nm,0.6s,baz=148,slow=8.8,SNR=6.5 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **VHRN** | **Van Horn** | **64.45** | **325** | | **P** | **05 19 47.9** | **+0.7** |
| VHRN | | | | IAmb | IAmb | 05 19 48.4 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **64.88** | **340** | P | **P** | **05 19 48.5** | **-1.2** |
| **S39A** | **Bolivar** | **65.23** | **338** | | **P** | **05 19 51.6** | **-0.4** |
| **QSPA** | **South Pole Qui** | **66.81** | **180** | P | **P** | **05 20 03.6** | **+1.6** |
| **QSPA** | **South Pole Qui** | **66.81** | **180** | P | **P** | **05 20 03.5** | **+1.6** |
| | comp=Z,1.3nm,0.5s,baz=161,slow=1.0,SNR=15 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **WBO** | **Williamsburg** | **68.38** | **355** | P | **P** | **05 20 12.5** | **+0.7** |
| WBO | | | | IAmb | IAmb | 05 20 12.7 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **ANMO** | **Albuquerque** | **68.49** | **327** | P | **P** | **05 20 14.0** | **+1.1** |
| ANMO | | | | IAmb | IAmb | 05 20 15.0 | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **68.57** | **72** | P | **P** | **05 20 14.2** | **+0.5** |
| **DBIC** | **Dimbokro** | **68.57** | **72** | P | **P** | **05 20 14.0** | **+0.4** |
| | comp=Z,4.9nm,1.0s,baz=239,slow=4.9,SNR=4.5 | | | | | | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **TRQ** | **Mont Tremblant** | **69.53** | **355** | P | **P** | **05 20 19.4** | **+0.4** |
| TRQ | | | | IAmb | IAmb | 05 20 19.9 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **70.25** | **329** | P | **P** | **05 20 25.0** | **+1.1** |
| SDCO | | | | IAmb | IAmb | 05 20 25.9 | |
| | comp=Z,4.8nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **76.12** | **330** | P | **P** | **05 20 58.9** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=134,slow=8.4,SNR=3.6 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.29** | **70** | P | **P** | **05 21 05.3** | **+0.2** |
| **TORD** | **Torodi Ar. Bea** | **77.29** | **70** | P | **P** | **05 21 05.3** | **+0.2** |
| | comp=Z,1.4nm,0.5s,baz=258,slow=5.3,SNR=21 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **ULM** | **Lac du Bonnet** | **77.34** | **342** | P | **P** | **05 21 04.6** | **+0.1** |
| | comp=Z,3.8nm,0.6s,baz=147,slow=4.4,SNR=4.6 | | | | | | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.44** | **322** | P | **P** | **05 21 07.2** | **+1.5** |
| | comp=Z,0.3nm,0.7s,baz=156,slow=4.7,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **93.22** | **340** | P | **P** | **05 22 23.8** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=138,slow=3.9,SNR=5.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **128.57** | **206** | PKP | **PKPdf** | **05 28 17.4** | **+0.3** |
| | comp=Z,0.5nm,0.4s,baz=156,slow=3.7,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.32** | **27** | PKP | **PKPdf** | **05 28 41.8** | **-1.5** |
| | comp=Z,1.4nm,0.6s,baz=310,slow=5.4,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.68** | **38** | PKPbc | **PKPbc** | **05 28 50.2** | **-1.0** |
| | comp=Z,2.1nm,0.7s,baz=326,slow=2.8,SNR=12 | | | | | | |
| **KLR** | **Kul'dur** | **149.85** | **334** | PKPbc | **PKPbc** | **05 28 59.7** | **+0.4** |
| | comp=Z,1.2nm,0.5s,baz=90,slow=2.0,SNR=3.9 | | | | | | |

*ISN **27** 05:16:50.5±0.6, 34.°62N×46.°25E, h8km±16km, ML3.5*
*TEH **27** 05:16:52.4, 34.°60N×46.°25E, h8km±23km, ML3.5*
**ISC 27 05:16:52.7**±1.2, **34.°61N**±0.°03×**46.°25E**±0.°03, **h1**km±12km, **n28**, σ1§**23**/34, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.14** | **52** | Pg | **Pg** | **05 16 55.8** | **+0.3** |
| IDHR | | | | Sg | **Sg** | **05 16 58.6** | **+1.2** |
| **IGHG** | **Ghaleghazi** | **0.39** | **137** | Pg | **Pg** | **05 17 00.5** | **+0.5** |
| **KGS1** | **Ghasr-e-Shirin** | **0.55** | **259** | Pg | **Pg** | **05 17 03.5** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **210** | Pg | **Pg** | **05 17 03.5** | **-0.1** |
| **ILIN** | **Lien** | **0.66** | **62** | Pg | **Pg** | **05 17 05.0** | **-0.4** |
| ILIN | | | | Sg | **Sb** | **05 17 15.1** | **-1.9** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **117** | Pg | **Pg** | **05 17 06.4** | **-0.3** |
| KCHF | | | | Sg | **Sb** | **05 17 17.9** | **-1.0** |
| **ILBA** | **Ilam Banvizeh** | **0.98** | **182** | Pg | **Pg** | **05 17 11.0** | **-0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **77** | Pg | **Pn** | **05 17 15.2** | **-1.1** |
| **IBZA** | **Bozab** | **1.34** | **96** | Pg | **Pg** | **05 17 18.0** | **-0.4** |
| **IBDR** | **Badra** | **1.52** | **190** | *e*Pn | **Pb** | **05 17 20.5** | **-1.1** |
| IBDR | | | | *e*Sn | **Sg** | **05 17 43.0** | **+1.5** |
| IBDR | | | | AML | AML | 05 17 47.4 | |
| | comp=E,578nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 05 17 54.6 | |
| | comp=N,471nm,0.8s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.66** | **338** | Pg | **Pb** | **05 17 22.8** | **-1.2** |
| **IKFM** | **Kafkan-mosalman** | **1.71** | **129** | Pg | **Pg** | **05 17 25.1** | **-0.3** |
| **IKRK** | **Kirkuk** | **1.75** | **297** | *e*Pn | **Pn** | **05 17 24.0** | **-0.2** |
| IKRK | | | | *e*Sn | **Sg** | **05 17 48.5** | **-0.5** |
| IKRK | | | | AML | AML | 05 17 52.8 | |
| | comp=E,829nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 05 17 55.8 | |
| | comp=N,1μm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.80** | **117** | Pg | **Pg** | **05 17 26.2** | **-0.9** |
| **HSAM** | **Samen** | **1.99** | **101** | Pn | **Pb** | **05 17 28.6** | **-1.1** |
| **MAHB** | **Mahabad** | **2.20** | **349** | Pn | **Pb** | **05 17 32.0** | **-1.3** |
| **RAFI** | **Al-Rafai** | **2.88** | **182** | *e*Pn | **Pn** | **05 17 40.0** | **+0.4** |
| RAFI | | | | *e*Sn | **Sn** | **05 18 16.0** | **+1.1** |
| **IAZR** | **Azarshahr** | **3.07** | **356** | Pn | **Pn** | **05 17 44.4** | **+1.9** |
| **ISHB** | **Shabestar** | **3.70** | **352** | Pn | **Pn** | **05 17 52.9** | **+1.7** |
| **IHRS** | **Heris** | **3.76** | **10** | Pn | **Pn** | **05 17 53.8** | **+1.9** |
| **IPIR** | **Pirpir** | **4.32** | **115** | Pn | **Pn** | **05 18 00.4** | **+0.7** |
| **QAMS** | **Qamsar** | **4.36** | **100** | Pn | **Pn** | **05 18 01.8** | **+1.7** |
| **JHBN** | **Jahan bin** | **4.39** | **121** | Pn | **Pn** | **05 18 02.4** | **+1.7** |
| **GRMI** | **Germi** | **4.39** | **17** | Pn | **Pn** | **05 18 01.7** | **+1.1** |
| **KRSH** | **Karshahi** | **4.92** | **96** | Pn | **Pn** | **05 18 09.6** | **+1.8** |
| **ISFB** | **Sefidab** | **4.96** | **91** | Pn | **Pn** | **05 18 09.7** | **+1.5** |
| **IBRJ** | **Brojen** | **4.99** | **121** | Pn | **Pn** | **05 18 09.9** | **+1.0** |
| **IFIR** | **Firoozkooh** | **5.43** | **77** | Pn | **Pn** | **05 18 16.7** | **+1.8** |

*CNRM **27** 05:19:32.7, 34.°92N×5.°26W, h84km, ML2.6*
*MDD **27** 05:19:33.8±0.5, 34.°97N×5.°17W, h14km±4km, mb_Lg2.3/7, Error ellipse: s-maj=3.9km s-min=3.1km az=116.0*
*INMG **27** 05:19:35.2±1.0, 34.°95N×5.°17W, h74km±4km, ML1.9, Error ellipse: s-maj=3.8km s-min=2.0km az=80.0*
*SFS **27** 05:19:35.6, 34.°94N×5.°16W, h29km, ML2.3/9, ML2.9/6, MLv2.0/9*
*IGIL **27** 05:19:36.2, 34.°92N×5.°15W, h84km*
**ISC 27 05:19:32.4**±0.9, **34.°95N**±0.°03×**5.°16W**±0.°03, **h15**km, **n52**, σ1§**48**/69, **Morocco**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHEFC** | **Chefchaouen** | **0.22** | **316** | P | Pb | 05 19 44.6 | +6.5 |
| **CHEFC** | **Chefchaouen** | **0.22** | **316** | S | Sb | 05 19 53.8 | +12 |
| **RSA** | **Sarsar** | **0.55** | **263** | P | **Pn** | **05 19 48.4** | **+2.7** |
| **RSA** | **Sarsar** | **0.55** | **263** | S | **Sn** | **05 19 57.5** | **+2.9** |
| **PVLZ** | **Peæn de** | **0.74** | **72** | Sg | **Sn** | **05 19 59.3** | **+0.1** |
| **CEU** | **Ceuta** | **0.96** | **350** | Pg | **Pn** | **05 19 53.6** | **+2.3** |
| **PALE** | **Palemas** | **1.03** | **75** | P | **Pg** | **05 19 53.0** | **+0.6** |
| **PALE** | **Palemas** | **1.03** | **75** | S | **Sn** | **05 20 08.0** | **+1.4** |
| **AKLM** | **AKL** | **1.15** | **112** | P | **Pb** | **05 19 54.6** | **+0.5** |
| **AKLM** | **AKL** | **1.15** | **112** | S | **Sg** | **05 20 10.4** | **+0.7** |
| **IFR** | **Ifrane** | **1.43** | **179** | Pn | **Pn** | **05 19 57.7** | **-0.2** |
| IFR | | | | Sn | **Sn** | **05 20 16.3** | **-0.2** |
| **GOG** | **Mont Gurugu** | **1.79** | **81** | P | **Pn** | **05 20 03.5** | **+0.6** |
| **GOG** | **Mont Gurugu** | **1.79** | **81** | S | **Sb** | **05 20 27.1** | **-0.2** |
| **ZHG** | **ZHG** | **1.94** | **220** | P | **Pn** | **05 20 03.5** | **-1.4** |
| **ZHG** | **ZHG** | **1.94** | **220** | S | **Sn** | **05 20 29.3** | **+0.2** |
| **MD31** | **MD31** | **2.10** | **171** | P | **Pn** | **05 20 05.3** | **-1.8** |
| **MD31** | **MD31** | **2.10** | **171** | S | **Sn** | **05 20 33.5** | **+0.4** |
| **MDT** | **Midelt** | **2.18** | **168** | P | **Pn** | **05 20 06.1** | **-2.0** |
| **MDT** | **Midelt** | **2.18** | **168** | S | **Sn** | **05 20 34.5** | **-0.5** |
| **TAF** | **Taforalt** | **2.26** | **93** | P | **Pn** | **05 20 07.9** | **-1.3** |
| **TAF** | **Taforalt** | **2.26** | **93** | S | **Sn** | **05 20 37.6** | **+0.7** |
| **ELGU** | **Los Guajares,** | **2.28** | **33** | Pn | **Pn** | **05 20 10.0** | **+0.4** |
| ELGU | | | | Sn | **Sn** | **05 20 35.1** | **-2.4** |
| ELGU | | | | *i* Vmb_Lg | | 05 20 41.1 | |
| **EBER** | **Berja** | **2.68** | **43** | Sn | **Sn** | **05 20 45.7** | **-1.7** |
| EBER | | | | *i* Vmb_Lg | | 05 20 51.5 | |
| **EMIN** | **Mina Concepcio** | **3.07** | **337** | Pn | **Pn** | **05 20 20.7** | **+0.4** |
| EMIN | | | | Pg | **Pb** | **05 20 27.4** | **+0.8** |
| EMIN | | | | Sn | **Sn** | **05 20 55.0** | **-1.8** |
| EMIN | | | | *i* Vmb_Lg | | 05 20 55.6 | |
| **ECAB** | **El Cabril** | **3.13** | **356** | Pn | **Pn** | **05 20 22.4** | **+1.3** |
| **ECAB** | **El Cabril** | **3.13** | **356** | Pn | **Pn** | **05 20 21.7** | **+0.5** |
| ECAB | | | | Sn | **Sn** | **05 20 56.9** | **-1.4** |
| ECAB | | | | *i* Vmb_Lg | | 05 21 01.0 | |
| **EGRO** | **El Granado** | **3.19** | **325** | Pn | **Pn** | **05 20 22.8** | **+0.7** |
| EGRO | | | | Sn | **Sn** | **05 20 57.8** | **-2.0** |
| **EGRO** | **El Granado** | **3.19** | **325** | Pn | **Pn** | **05 20 22.8** | **+0.7** |
| EGRO | | | | Sn | **Sn** | **05 20 58.2** | **-1.6** |
| EGRO | | | | *i* Vmb_Lg | | 05 20 59.4 | |
| **PBDV** | **Barranco-do-Ve** | **3.21** | **316** | *e*P | **Pn** | **05 20 23.3** | **+1.0** |
| PBDV | | | | *e*S | **Sn** | **05 20 58.6** | **-1.6** |
| **PVAQ** | **Vaqueiros** | **3.21** | **321** | *e*P | **Pn** | **05 20 23.0** | **+0.7** |
| PVAQ | | | | A | A | 05 21 00.2 | |
| | 3.1nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.21** | **321** | Pn | **Pn** | **05 20 23.0** | **+0.7** |
| PVAQ | | | | Sn | **Sn** | **05 20 57.9** | **-2.3** |
| **PVAQ** | **Vaqueiros** | **3.21** | **321** | P | **Pn** | **05 20 22.8** | **+0.6** |
| **PVAQ** | **Vaqueiros** | **3.21** | **321** | S | **Sn** | **05 20 58.6** | **-1.6** |
| **EADA** | **Adamuz** | **3.25** | **8** | Pn | **Pn** | **05 20 23.0** | **+0.1** |
| EADA | | | | Sn | **Sn** | **05 20 59.4** | **-1.8** |
| EADA | | | | *i* Vmb_Lg | | 05 21 06.1 | |
| **PCVE** | **Castro Verde** | **3.55** | **320** | *e*P | **Pn** | **05 20 27.6** | **+0.7** |
| PCVE | | | | *e*S | **Sn** | **05 21 07.3** | **-1.3** |
| PCVE | | | | A | A | 05 21 09.8 | |
| | 1.8nm,0.7s | | | | | | |
| **PCVE** | **Castro Verde** | **3.55** | **320** | Pn | **Pn** | **05 20 27.5** | **+0.5** |
| **PBAR** | **Barrancos** | **3.56** | **335** | *e*P | **Pn** | **05 20 27.8** | **+0.7** |
| PBAR | | | | *e*S | **Sn** | **05 21 07.7** | **-1.1** |
| **PBAR** | **Barrancos** | **3.56** | **335** | Pn | **Pn** | **05 20 28.8** | **+1.7** |
| PBAR | | | | Sn | **Sn** | **05 21 06.9** | **-2.0** |
| **MORF** | **Marmelete** | **3.68** | **311** | *e*S | **Sn** | **05 21 09.8** | **-2.1** |
| **PFVI** | **Vila Bisbo** | **3.69** | **307** | *e*P | **Pn** | **05 20 29.2** | **+0.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 6.2nm,0.6s | | | | | | | |
| **BCIP** | **Isla Barro Col** | **6.54** | **250** | P | | Pn | 05 33 50.5 | +3.9 |
| | 54nm,1.8s | | | | | | | |
| **PRAC** | **Prado** | **7.85** | **189** | P | | Pn | 05 34 07.2 | +2.7 |

**KRSC 27 05:34:37.3±1.9, 48°32N×155°59E, h40km±33km, MI3.6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **2.39** | **8** | *e*P | Pn | 05 35 17.3 | +3.3 |
| **KDTR** | **Khodutka, Kamc** | **3.85** | **24** | *e*P | Pn | 05 35 37.2 | +3.3 |
| KDTR | | | | *e*S | Sn | 05 36 20.8 | +3.0 |
| **ASAK** | **Asacha** | **4.33** | **19** | *e*P | Pn | 05 35 45.5 | +4.8 |
| **MTVR** | **Mutnovka** | **4.49** | **21** | *e*P | Pn | 05 35 46.9 | +4.0 |
| MTVR | | | | *e*S | Sn | 05 36 38.8 | +4.9 |
| **GRL** | **Gorelyy** | **4.53** | **20** | *e*P | Pn | 05 35 48.1 | +4.7 |
| GRL | | | | *e*S | Sn | 05 36 40.1 | +5.3 |
| **APC** | **Apacha** | **4.72** | **12** | *e*P | Pn | 05 35 50.0 | +4.0 |
| **KRMR** | **Karymshinskiy** | **4.80** | **19** | *e*P | Pn | 05 35 52.8 | +5.8 |
| **DALK** | **Dalny** | **5.13** | **22** | *e*P | Pn | 05 35 55.6 | +4.0 |
| **UGLR** | **Uglovaya** | **5.31** | **22** | *e*P | Pn | 05 35 58.6 | +4.4 |
| **AVH** | **Avacha** | **5.34** | **21** | *e*P | Pn | 05 35 59.3 | +4.8 |
| **KOK** | **Koryaka** | **5.34** | **20** | *e*P | Pn | 05 35 58.4 | +3.8 |
| **SMAR** | **Somma** | **5.35** | **21** | *e*P | Pn | 05 35 59.9 | +5.1 |
| **SPN** | **Mys Shipunski** | **5.55** | **29** | *e*S | Sn | 05 37 04.7 | +4.9 |
| **GNL** | **Ganaly** | **5.59** | **15** | *e*P | Pn | 05 36 01.4 | +3.5 |

*UPA* ***27*** *05:40:23.6±1.6, 8°.99N×83°.07W, h58km±11km, ML3.1*
*CATAC* ***27*** *05:40:23.0±1.1, 8°.86N×83°.15W, h35km±14km, ML2.2*
**ISC 27 05:40:24.8±1.5, 8°.92N±0°.04×83°.10W±0°.04, h18km±7km, n11, σ0°90/22, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLIR3** | **Monte Lirio, C** | **0.30** | **114** | *e*P | **Pn** | **05 40 33.8** | **-0.6** |
| MLIR3 | | | | *e*S | **Sn** | **05 40 42.3** | **+1.9** |
| **DRK0** | **Durika** | **0.37** | **337** | *i* P | **Pb** | **05 40 34.1** | **+0.9** |
| DRK0 | | | | *i* S | **Sn** | **05 40 41.6** | **-0.8** |
| DRK0 | | | | IAML | | 05 40 42.7 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.37** | **337** | *e*P | **Pb** | **05 40 34.0** | **+0.9** |
| DRK0 | | | | *e*S | **Sn** | **05 40 42.0** | **-0.4** |
| **CDITO** | **Canoas** | **0.41** | **147** | *i* P | **Pg** | **05 40 33.5** | **+0.3** |
| CDITO | | | | *i* S | **Sn** | **05 40 41.7** | **-1.3** |
| CDITO | | | | IAML | | 05 40 44.5 | |
| | comp=Z,100nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.42** | **107** | *i* P | **Pb** | **05 40 34.1** | **+0.2** |
| BRU2 | | | | *i* S | **Sn** | **05 40 42.5** | **-1.0** |
| BRU2 | | | | IAML | | 05 40 43.8 | |
| | comp=Z,97nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.42** | **107** | *e*P | **Pb** | **05 40 34.4** | **+0.6** |
| BRU2 | | | | AMP | | 05 40 34.9 | |
| | comp=Z,798nm,0.1s | | | | | | |
| BRU2 | | | | *e*S | **Sn** | **05 40 42.5** | **-1.0** |
| **PTJ1** | **Puerto Jimnez** | **0.43** | **208** | *e*P | **Pb** | **05 40 34.4** | **+0.5** |
| PTJ1 | | | | *e*S | **Sn** | **05 40 43.9** | **+0.4** |
| **OCHAL** | **Ojochal** | **0.57** | **289** | *i* P | **Pb** | **05 40 35.3** | **-0.9** |
| OCHAL | | | | *i* S | **Sb** | **05 40 44.1** | **+0.1** |
| OCHAL | | | | IAML | | 05 40 48.4 | |
| | comp=Z,72nm,1.0s | | | | | | |
| **BCO2** | **Palmira** | **0.60** | **109** | *e*P | **Pb** | **05 40 36.5** | **-0.2** |
| BCO2 | | | | AMP | | 05 40 38.3 | |
| | comp=Z,813nm,0.1s | | | | | | |
| BCO2 | | | | *e*S | **Sn** | **05 40 46.7** | **-1.1** |
| **LNBQ3** | **Los Naranjos,** | **0.66** | **101** | *e*P | **Pb** | **05 40 37.8** | **-0.1** |
| LNBQ3 | | | | *e*S | **Sg** | **05 40 47.5** | **+0.7** |
| **PTPM** | **Petroterminale** | **0.74** | **163** | *e*P | **Pb** | **05 40 39.2** | **0.0** |
| PTPM | | | | *e*S | **Sn** | **05 40 52.0** | **+0.8** |

*IDC* ***27*** *05:54:22.6±1.5, 39°.39N×25°.12E, h0km, mb3.4/2, mbtmp3.3/5, ML3.0/2, MS2.5/4, Error ellipse: s-maj=28.9km s-min=20.8km az=116.0*
*ISK* ***27*** *05:54:23.5, 39°.30N×24°.80E, h10km, ML3.4/37*
*ATH* ***27*** *05:54:24.9, 39°.28N×24°.81E, h15km±1km, ML3.3/23, Error ellipse: s-maj=1.5km s-min=0.8km az=48.0*
*THE* ***27*** *05:54:24.4, 39°.29N×24°.80E, h8km, ML3.5/17, Error ellipse: s-maj=0.5km s-min=0.2km az=158.0*
*AFAD* ***27*** *05:54:25.9±0.0, 39°.30N×24°.98E, h9km±3km, ML3.2*
*BEO* ***27*** *05:54:44.2±2.3, 40°.37N×23°.35E, h9km±9km, ML3.0/2*
**ISC 27 05:54:24.2±1.0, 39°.31N±0°.02×24°.81E±0°.02, h7km±8km, n165, σ1°00/216, 11C-5D, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EFSA** | **Agios Efstrati** | **0.27** | **31** | P | **Pb** | **05 54 31.2** | **-0.3** |
| EFSA | | | | S | **Sb** | **05 54 35.8** | **-0.5** |
| EFSA | | | | AML | AML | 05 54 35.9 | |
| | comp=N,29882μm,0.5s | | | | | | |
| EFSA | | | | AML | AML | 05 54 37.0 | |
| | comp=E,18788μm,0.2s | | | | | | |
| **SKY** | **Skiros Island** | **0.47** | **205** | P | **Pg** | **05 54 33.1** | **-0.2** |
| SKY | | | | S | **Sg** | **05 54 39.7** | **+0.2** |
| | comp=E,17μm,0.3s | | | | | | |
| **SKY** | **Skiros Island** | **0.47** | **205** | P | **Pg** | **05 54 33.2** | **-0.1** |
| SKY | | | | S | **Sg** | **05 54 39.4** | **-0.1** |
| SKY | | | | AML | AML | 05 54 40.3 | |
| | comp=E,42224μm,0.3s | | | | | | |
| SKY | | | | AML | AML | 05 54 40.8 | |
| | comp=N,24016μm,0.2s | | | | | | |
| **LIA** | **Limnos Island** | **0.66** | **26** | P | **Pg** | **05 54 37.4** | **+0.5** |
| LIA | | | | S | **Sb** | **05 54 47.0** | **-0.4** |
| | comp=N,10μm,0.3s | | | | | | |
| **LIA** | **Limnos Island** | **0.66** | **26** | P | **Pb** | **05 54 38.1** | **+0.1** |
| LIA | | | | S | **Sb** | **05 54 47.2** | **-0.2** |
| LIA | | | | AML | AML | 05 54 47.8 | |
| | comp=N,23024μm,0.3s | | | | | | |
| LIA | | | | AML | AML | 05 54 49.7 | |
| | comp=E,16663μm,0.4s | | | | | | |
| **SIGR** | **SIGRI** | **0.82** | **96** | Pg | **Pg** | **05 54 39.8** | **-0.1** |
| SIGR | | | | Sg | **Sb** | **05 54 52.2** | **+0.2** |
| **SIGR** | **SIGRI** | **0.82** | **96** | P | **Pg** | **05 54 40.2** | **+0.3** |
| SIGR | | | | S | **Sb** | **05 54 52.0** | **0.0** |
| | comp=E,5μm,0.5s | | | | | | |
| **SIGR** | **SIGRI** | **0.82** | **96** | P | **Pg** | **05 54 40.1** | **+0.2** |
| SIGR | | | | S | **Sg** | **05 54 51.5** | **+1.0** |
| SIGR | | | | AML | AML | 05 54 54.6 | |
| | comp=N,11816μm,0.5s | | | | | | |
| SIGR | | | | AML | AML | 05 54 55.2 | |
| | comp=E,8572μm,0.4s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **0.87** | **220** | P | **Pg** | **05 54 40.8** | **-0.1** |
| KYMI | | | | S | **Sg** | **05 54 52.8** | **+0.6** |
| | comp=E,5μm,0.6s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **0.87** | **220** | P | **Pg** | **05 54 40.6** | **-0.2** |
| KYMI | | | | S | **Sg** | **05 54 52.0** | **-0.2** |
| KYMI | | | | AML | AML | 05 54 54.3 | |
| | comp=E,9601μm,0.7s | | | | | | |
| KYMI | | | | AML | AML | 05 54 54.4 | |
| | comp=N,10935μm,0.5s | | | | | | |
| **GPNR** | **Gulpinar-Canak** | **1.04** | **81** | Pg | **Pb** | **05 54 44.1** | **-0.4** |
| GPNR | | | | Sg | **Sg** | **05 54 58.4** | **+0.8** |
| **KOCA** | **Canakkale, Ayv** | **1.05** | **79** | P | **Pb** | **05 54 44.7** | **0.0** |
| KOCA | | | | S | **Sn** | **05 54 59.1** | **-1.1** |
| KOCA | | | | *i* AML | AML | 05 55 04.0 | |
| | comp=N,1μm,0.7s | | | | | | |
| KOCA | | | | *i* AML | AML | 05 55 07.0 | |
| | comp=N,1μm,0.6s | | | | | | |
| **PAIG** | **Paliouri** | **1.07** | **306** | Pg | **Pb** | **05 54 44.7** | **-0.4** |
| PAIG | | | | Sg | **Sn** | **05 55 00.0** | **-0.8** |
| **PAIG** | **Paliouri** | **1.07** | **306** | P | **Pb** | **05 54 44.5** | **-0.6** |
| PAIG | | | | S | **Sn** | **05 55 00.2** | **-0.6** |
| | comp=N,1μm,0.7s | | | | | | |
| **BOZC** | **Bozcaada** | **1.10** | **60** | P | **Pb** | **05 54 45.4** | **-0.2** |
| BOZC | | | | S | **Sb** | **05 54 59.4** | **-0.7** |
| BOZC | | | | *i* AML | AML | 05 55 00.0 | |
| | comp=N,957nm,0.4s | | | | | | |
| **PRK** | **Paraskevi** | **1.14** | **93** | P | **Pb** | **05 54 45.9** | **-0.3** |
| PRK | | | | S | **Sn** | **05 55 01.9** | **-0.5** |
| | comp=N,3μm,0.6s | | | | | | |
| **PRK** | **Paraskevi** | **1.14** | **93** | P | **Pb** | **05 54 45.7** | **-0.5** |
| PRK | | | | S | **Sb** | **05 55 00.2** | **-0.9** |
| PRK | | | | AML | AML | 05 55 06.3 | |
| | comp=E,8632μm,0.5s | | | | | | |
| PRK | | | | AML | AML | 05 55 07.5 | |
| | comp=N,4798μm,0.7s | | | | | | |
| **GOAD** | **anakkale-G¶** | **1.21** | **44** | P | **Pn** | **05 54 47.1** | **-0.4** |
| GOAD | | | | S | **Sn** | **05 55 04.0** | **-0.1** |
| GOAD | | | | *i* AML | AML | 05 55 05.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| GOAD | | | | *i* AML | AML | 05 55 06.0 | |
| | comp=N,2μm,0.5s | | | | | | |
| **OUR** | **Ouranopolis** | **1.21** | **329** | Pn | **Pn** | **05 54 46.8** | **-0.7** |
| **OUR** | **Ouranopolis** | **1.21** | **329** | P | **Pn** | **05 54 46.6** | **-0.9** |
| OUR | | | | S | **Sg** | **05 55 03.9** | **+0.8** |
| | comp=N,618nm,0.4s | | | | | | |
| **OUR** | **Ouranopolis** | **1.21** | **329** | P | **Pn** | **05 54 46.8** | **-0.7** |
| OUR | | | | S | **Sb** | **05 55 02.8** | **-0.4** |
| OUR | | | | AML | AML | 05 55 06.8 | |
| | comp=E,1372μm,0.3s | | | | | | |
| OUR | | | | AML | AML | 05 55 11.8 | |
| | comp=N,1110μm,0.4s | | | | | | |
| **GADA** | **Gvkgeada** | **1.22** | **43** | Pn | **Pn** | **05 54 46.9** | **-0.8** |
| GADA | | | | Sn | **Sg** | **05 55 04.3** | **+0.9** |
| **EZN** | **Ezine** | **1.28** | **66** | Pn | **Pn** | **05 54 47.7** | **-0.8** |
| **EZN** | **Ezine** | **1.28** | **66** | P | **Pn** | **05 54 47.8** | **-0.8** |
| EZN | | | | S | **Sg** | **05 55 06.0** | **+0.6** |
| **EZNE** | **Ezine-Canakkal** | **1.29** | **69** | Pn | **Pn** | **05 54 47.9** | **-0.7** |
| **ECEA** | **Canakkale, Ece** | **1.29** | **55** | P | **Pn** | **05 54 48.5** | **-0.1** |
| ECEA | | | | S | **Sb** | **05 55 03.6** | **-1.9** |
| ECEA | | | | *i* AML | AML | 05 55 08.0 | |
| | comp=N,591nm,0.6s | | | | | | |
| ECEA | | | | *i* AML | AML | 05 55 16.0 | |
| | comp=N,646nm,0.4s | | | | | | |
| **SMTH** | **Samothraki Isl** | **1.29** | **25** | P | **Pn** | **05 54 47.7** | **-1.0** |
| SMTH | | | | S | **Sg** | **05 55 06.3** | **+0.6** |
| **SMTH** | **Samothraki Isl** | **1.29** | **25** | P | **Pn** | **05 54 47.5** | **-1.2** |
| **THAS** | **Thassos island** | **1.30** | **357** | P | **Pn** | **05 54 47.7** | **-1.1** |
| THAS | | | | S | **Sg** | **05 55 06.5** | **+0.5** |
| | comp=N,480nm,0.5s | | | | | | |
| **THAS** | **Thassos island** | **1.30** | **357** | P | **Pn** | **05 54 47.8** | **-1.1** |
| THAS | | | | AML | AML | 05 55 12.7 | |
| | comp=E,1082μm,0.5s | | | | | | |
| THAS | | | | AML | AML | 05 55 12.8 | |
| | comp=N,836μm,0.4s | | | | | | |
| **CHOS** | **Chios island** | **1.34** | **133** | Pn | **Pn** | **05 54 48.2** | **-1.2** |
| **CHOS** | **Chios island** | **1.34** | **133** | P | **Pn** | **05 54 48.1** | **-1.3** |
| CHOS | | | | S | **Sb** | **05 55 06.9** | **-0.1** |
| | comp=N,2μm,0.5s | | | | | | |
| **CHOS** | **Chios island** | **1.34** | **133** | P | **Pn** | **05 54 48.3** | **-1.0** |
| CHOS | | | | S | **Sb** | **05 55 04.7** | **-2.3** |
| CHOS | | | | AML | AML | 05 55 09.9 | |
| | comp=N,4585μm,0.6s | | | | | | |
| CHOS | | | | AML | AML | 05 55 09.9 | |
| | comp=E,4653μm,0.5s | | | | | | |
| **DION** | **Dionisos Attik** | **1.40** | **209** | P | **Pn** | **05 54 49.6** | **-0.6** |
| DION | | | | S | **Sn** | **05 55 08.6** | **-0.4** |
| | comp=E,4μm,0.4s | | | | | | |
| **DION** | **Dionisos Attik** | **1.40** | **209** | P | **Pn** | **05 54 49.7** | **-0.6** |
| DION | | | | AML | AML | 05 55 13.3 | |
| | comp=E,5358μm,0.4s | | | | | | |
| DION | | | | AML | AML | 05 55 15.1 | |
| | comp=N,4195μm,0.3s | | | | | | |
| **KARB** | **zmir-Karabur** | **1.41** | **117** | P | **Pn** | **05 54 49.5** | **-0.8** |
| KARB | | | | S | **Sn** | **05 55 08.1** | **-1.0** |
| **BAYC** | **CANAKKALE_Bayr** | **1.41** | **72** | P | **Pn** | **05 54 49.8** | **-0.6** |
| BAYC | | | | S | **Sn** | **05 55 06.6** | **-2.6** |
| BAYC | | | | *i* AML | AML | 05 55 11.0 | |
| | comp=N,397nm,0.6s | | | | | | |
| **CNKL** | **anakkale-Mer** | **1.44** | **58** | P | **Pn** | **05 54 50.3** | **-0.3** |
| CNKL | | | | S | **Sn** | **05 55 07.8** | **-2.0** |
| CNKL | | | | *i* AML | AML | 05 55 16.0 | |
| | comp=N,421nm,1.1s | | | | | | |
| CNKL | | | | *i* AML | AML | 05 55 24.0 | |
| | comp=N,354nm,0.8s | | | | | | |
| **AYVA** | **Ayvalik** | **1.46** | **89** | P | **Pn** | **05 54 50.8** | **-0.2** |
| AYVA | | | | S | **Sn** | **05 55 09.9** | **-0.5** |
| AYVA | | | | *i* AML | AML | 05 55 14.0 | |
| | comp=N,588nm,0.6s | | | | | | |
| AYVA | | | | *i* AML | AML | 05 55 17.0 | |
| | comp=N,356nm,0.9s | | | | | | |
| **COMU** | **Canakkale** | **1.51** | **58** | Pn | **Pn** | **05 54 51.4** | **-0.3** |
| **CESE** | **eme** | **1.52** | **129** | Pn | **Pn** | **05 54 51.4** | **-0.4** |
| **ATHU** | **Athens Univers** | **1.56** | **211** | P | **Pn** | **05 54 51.2** | **-1.2** |
| ATHU | | | | S | **Sn** | **05 55 12.2** | **-0.6** |
| | comp=N,465nm,0.7s | | | | | | |
| **ATHU** | **Athens Univers** | **1.56** | **211** | P | **Pn** | **05 54 51.4** | **-0.9** |
| **ATH** | **Athens Observa** | **1.58** | **213** | P | **Pn** | **05 54 51.9** | **-0.8** |
| ATH | | | | S | **Sn** | **05 55 12.6** | **-0.8** |
| | comp=N,2μm,0.4s | | | | | | |
| **ATH** | **Athens Observa** | **1.58** | **213** | P | **Pn** | **05 54 51.1** | **-1.5** |
| ATH | | | | AML | AML | 05 55 15.4 | |
| | comp=E,2376μm,0.5s | | | | | | |
| ATH | | | | AML | AML | 05 55 17.7 | |
| | comp=N,2545μm,0.4s | | | | | | |
| **CAND** | **Candarli** | **1.59** | **102** | Pn | **Pn** | **05 54 52.6** | **-0.2** |
| **FOCM** | **Foa** | **1.61** | **111** | Pn | **Pn** | **05 54 52.6** | **-0.4** |
| **VIL2** | **Platees** | **1.62** | **228** | P | **Pn** | **05 54 51.6** | **-1.7** |
| VIL2 | | | | AML | AML | 05 55 19.3 | |
| | comp=N,1781μm,0.5s | | | | | | |
| VIL2 | | | | AML | AML | 05 55 26.6 | |
| | comp=E,3261μm,0.5s | | | | | | |
| **KOKK** | **Kokkinochori,** | **1.63** | **338** | P | **Pn** | **05 54 52.6** | **-0.7** |
| KOKK | | | | S | **Sb** | **05 55 14.8** | **-0.7** |
| | comp=E,250nm,0.6s | | | | | | |
| **KOKK** | **Kokkinochori,** | **1.63** | **338** | P | **Pn** | **05 54 52.7** | **-0.7** |
| **VILL** | **Villia** | **1.63** | **226** | P | **Pn** | **05 54 51.6** | **-1.8** |
| VILL | | | | S | **Sn** | **05 55 14.3** | **-0.4** |
| | comp=E,1μm,0.5s | | | | | | |
| **DKL** | **Dikili** | **1.65** | **98** | Pn | **Pn** | **05 54 52.5** | **-1.0** |
| **ENZZ** | **Sultanice-Enez** | **1.66** | **38** | Pn | **Pn** | **05 54 53.3** | **-0.4** |
| **KVLA** | **Kavala** | **1.66** | **349** | P | **Pn** | **05 54 53.0** | **-0.8** |
| **GELI** | **Tayfur-Gelibol** | **1.68** | **49** | Pn | **Pn** | **05 54 53.8** | **-0.3** |
| **URLA** | **Izmir** | **1.69** | **124** | Pn | **Pn** | **05 54 53.7** | **-0.4** |
| **URLA** | **Izmir** | **1.69** | **124** | P | **Pb** | **05 54 56.1** | **+0.6** |
| URLA | | | | S | **Sb** | **05 55 17.9** | **+0.9** |
| URLA | | | | *i* AML | AML | 05 55 20.0 | |
| | comp=E,340nm,0.5s | | | | | | |
| URLA | | | | *i* AML | AML | 05 55 32.0 | |
| | comp=E,466nm,1.0s | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **1.70** | **128** | P | **Pb** | **05 54 56.5** | **+0.8** |
| ZEYE | | | | S | **Sb** | **05 55 17.2** | **-0.2** |
| ZEYE | | | | *i* AML | AML | 05 55 25.0 | |
| | comp=E,318nm,0.6s | | | | | | |
| **KAVA** | **Kavala** | **1.70** | **352** | P | **Pn** | **05 54 53.4** | **-1.0** |
| KAVA | | | | S | **Sb** | **05 55 16.5** | **-1.0** |
| **KAVA** | **Kavala** | **1.70** | **352** | P | **Pn** | **05 54 53.6** | **-0.8** |
| **CAVK** | **Edirne/Enez-Ca** | **1.73** | **37** | ⇓P | **Pb** | **05 54 55.8** | **-0.5** |
| **AXAR** | **Agios Charalam** | **1.76** | **253** | P | **Pn** | **05 54 54.0** | **-1.1** |
| **AXAR** | **Agios Charalam** | **1.76** | **253** | P | **Pn** | **05 54 54.3** | **-0.8** |
| AXAR | | | | AML | AML | 05 55 29.5 | |
| | comp=N,1472μm,0.9s | | | | | | |
| AXAR | | | | AML | AML | 05 55 36.1 | |
| | comp=E,1309μm,0.6s | | | | | | |
| **ENEZ** | **Enez** | **1.76** | **35** | Pn | **Pn** | **05 54 54.8** | **-0.4** |
| **ENEZ** | **Enez** | **1.76** | **35** | P | **Pn** | **05 54 54.2** | **-1.0** |
| ENEZ | | | | S | **Sb** | **05 55 18.3** | **-0.9** |
| | comp=E,2μm,0.7s | | | | | | |
| **BUHA** | **Balikesir, Bur** | **1.77** | **83** | P | **Pb** | **05 54 57.0** | **0.0** |
| BUHA | | | | S | **Sg** | **05 55 20.6** | **-0.4** |
| BUHA | | | | *i* AML | AML | 05 55 22.0 | |
| | comp=E,306nm,0.7s | | | | | | |
| BUHA | | | | *i* AML | AML | 05 55 22.0 | |
| | comp=E,254nm,0.9s | | | | | | |
| **TNSA** | **Tinos** | **1.79** | **171** | P | **Pn** | **05 54 53.5** | **-1.9** |
| **ZEDA** | **zmir-Bergama** | **1.80** | **100** | P | **Pn** | **05 54 55.6** | **0.0** |
| ZEDA | | | | S | **Sb** | **05 55 20.8** | **+0.7** |
| **HORT** | **Hortiatis** | **1.84** | **315** | Pn | **Pn** | **05 54 55.6** | **-0.7** |
| **HORT** | **Hortiatis** | **1.84** | **315** | P | **Pn** | **05 54 56.1** | **-0.3** |
| **LPK** | **Lapseki** | **1.84** | **54** | Pn | **Pn** | **05 54 56.2** | **-0.1** |
| **ALN** | **Alexandroupoli** | **1.85** | **30** | Pn | **Pn** | **05 54 55.2** | **-1.1** |
| **ALN** | **Alexandroupoli** | **1.85** | **30** | P | **Pn** | **05 54 55.3** | **-1.1** |
| ALN | | | | S | **Sn** | **05 55 20.3** | **+0.2** |
| **ALN** | **Alexandroupoli** | **1.85** | **30** | P | **Pn** | **05 54 55.3** | **-1.1** |
| ALN | | | | AML | AML | 05 55 27.0 | |
| | comp=N,884μm,0.7s | | | | | | |
| ALN | | | | AML | AML | 05 55 27.7 | |
| | comp=E,672μm,0.6s | | | | | | |
| **SOH** | **Sokhos** | **1.88** | **324** | P | **Pn** | **05 54 56.7** | **-0.2** |
| SOH | | | | AML | AML | 05 55 29.7 | |
| | comp=N,1358μm,0.6s | | | | | | |
| SOH | | | | AML | AML | 05 55 29.8 | |
| | comp=E,1607μm,0.7s | | | | | | |
| **ERIK** | **Erikli-Kesan** | **1.89** | **43** | Pn | **Pn** | **05 54 56.0** | **-0.9** |
| **LOUT** | **Loutraki** | **1.95** | **228** | P | **Pn** | **05 54 56.7** | **-1.0** |
| LOUT | | | | S | **Sn** | **05 55 22.0** | **-0.4** |
| | comp=E,1μm,0.5s | | | | | | |
| **LOUT** | **Loutraki** | **1.95** | **228** | P | **Pn** | **05 54 57.0** | **-0.7** |
| **TYRN** | **Tyrnavos** | **2.03** | **282** | P | **Pn** | **05 54 58.4** | **-0.5** |
| **SRS** | **Serrai** | **2.04** | **333** | P | **Pn** | **05 54 57.2** | **-1.7** |
| SRS | | | | S | **Sn** | **05 55 24.5** | **-0.1** |
| **SRS** | **Serrai** | **2.04** | **333** | *e*Pg | **Pn** | **05 54 57.2** | **-1.7** |
| **SRS** | **Serrai** | **2.04** | **333** | P | **Pn** | **05 54 57.4** | **-1.5** |
| SRS | | | | AML | AML | 05 55 32.9 | |
| | comp=E,393μm,0.5s | | | | | | |
| SRS | | | | AML | AML | 05 55 42.0 | |
| | comp=N,384μm,0.6s | | | | | | |
| **DGB** | **zmir** | **2.05** | **127** | P | **Pb** | **05 55 01.7** | **-0.1** |
| DGB | | | | S | **Sg** | **05 55 29.4** | **-0.6** |
| DGB | | | | *i* AML | AML | 05 55 35.0 | |
| | comp=N,189nm,1.1s | | | | | | |
| **GMLD** | **Gumuldur** | **2.06** | **126** | Pn | **Pn** | **05 54 59.1** | **-0.1** |
| **MAKR** | **Makrakomi, Fth** | **2.10** | **263** | P | **Pn** | **05 54 58.9** | **-0.9** |
| **MAKR** | **Makrakomi, Fth** | **2.10** | **263** | P | **Pn** | **05 54 59.6** | **-0.3** |
| **NVR** | **Nevrokopi** | **2.17** | **341** | P | **Pn** | **05 55 00.8** | **0.0** |
| NVR | | | | AML | AML | 05 55 37.9 | |
| | comp=E,191μm,0.7s | | | | | | |
| NVR | | | | AML | AML | 05 55 39.9 | |
| | comp=N,219μm,0.6s | | | | | | |
| **KRBG** | **Karabiga-Canak** | **2.20** | **60** | Pn | **Pn** | **05 55 01.0** | **-0.2** |
| **BALY** | **Balya** | **2.22** | **78** | P | **Pn** | **05 55 01.9** | **+0.4** |
| BALY | | | | S | **Sb** | **05 55 32.9** | **+0.6** |
| BALY | | | | *i* AML | AML | 05 55 35.0 | |
| | comp=N,255nm,0.6s | | | | | | |
| BALY | | | | *i* AML | AML | 05 55 38.0 | |
| | comp=N,133nm,0.6s | | | | | | |
| **STEP** | **BALIKESIR_Sava** | **2.26** | **87** | P | **Pn** | **05 55 03.2** | **+1.2** |
| STEP | | | | S | **Sn** | **05 55 27.1** | **-3.0** |
| STEP | | | | *i* AML | AML | 05 55 46.0 | |
| | comp=N,252nm,0.8s | | | | | | |
| STEP | | | | *i* AML | AML | 05 55 46.0 | |
| | comp=N,190nm,1.0s | | | | | | |
| **RKY** | **Sarkoy-Tekirda** | **2.28** | **52** | Pn | **Pn** | **05 55 02.2** | **-0.2** |
| **UKOP** | **Uzunkopru-Edir** | **2.29** | **37** | Pn | **Pn** | **05 55 02.3** | **-0.2** |
| **APE** | **Apeiranthos** | **2.30** | **165** | Pn | **Pn** | **05 55 00.8** | **-1.8** |
| **APE** | **Apeiranthos** | **2.30** | **165** | ⇓P | **Pn** | **05 54 59.2** | **-3.4** |
| **APE** | **Apeiranthos** | **2.30** | **165** | P | **Pn** | **05 55 00.8** | **-1.8** |
| APE | | | | AML | AML | 05 55 40.3 | |
| | comp=N,248μm,0.4s | | | | | | |
| APE | | | | AML | AML | 05 55 41.1 | |
| | comp=E,344μm,0.5s | | | | | | |
| **KRND** | **KRANIDI** | **2.32** | **215** | P | **Pn** | **05 55 01.8** | **-1.0** |
| **GONE** | **Gonen-Balikesi** | **2.34** | **71** | Pn | **Pn** | **05 55 02.9** | **-0.2** |
| **ANX** | **Ano Chora** | **2.36** | **253** | P | **Pn** | **05 55 02.9** | **-0.6** |
| **ANX** | **Ano Chora** | **2.36** | **253** | P | **Pn** | **05 55 03.3** | **-0.2** |
| ANX | | | | AML | AML | 05 55 17.8 | |
| | comp=E,283μm,0.5s | | | | | | |
| ANX | | | | AML | AML | 05 55 21.1 | |
| | comp=N,322μm,0.6s | | | | | | |
| **EVR** | **Evrytania** | **2.37** | **261** | P | **Pn** | **05 55 03.6** | **0.0** |
| EVR | | | | AML | AML | 05 55 21.7 | |
| | comp=N,130μm,1.0s | | | | | | |
| EVR | | | | AML | AML | 05 55 25.6 | |
| | comp=E,162μm,0.9s | | | | | | |
| **GUR** | **Goura** | **2.37** | **235** | P | **Pn** | **05 55 02.2** | **-1.4** |
| GUR | | | | S | **Sn** | **05 55 32.6** | **-0.3** |
| | comp=E,392nm,0.6s | | | | | | |
| **GUR** | **Goura** | **2.37** | **235** | P | **Pn** | **05 55 02.4** | **-1.2** |
| GUR | | | | AML | AML | 05 55 43.5 | |
| | comp=E,717μm,0.7s | | | | | | |
| GUR | | | | AML | AML | 05 55 43.9 | |
| | comp=N,800μm,0.4s | | | | | | |
| **MMB** | **Musomishta** | **2.38** | **340** | P | **Pn** | **05 55 03.7** | **0.0** |
| **RZN** | **Rozhen** | **2.39** | **359** | P | **Pn** | **05 55 03.7** | **-0.2** |
| **EFP** | **Efpalio** | **2.43** | **250** | P | **Pn** | **05 55 03.3** | **-1.0** |
| EFP | | | | AML | AML | 05 55 52.6 | |
| | comp=E,296μm,0.7s | | | | | | |
| EFP | | | | AML | AML | 05 55 53.2 | |
| | comp=N,255μm,1.2s | | | | | | |
| **KLV** | **Kalavryta, Ach** | **2.43** | **240** | P | **Pn** | **05 55 03.5** | **-0.9** |
| **BKES** | **Balkesir-Mer** | **2.45** | **79** | P | **Pb** | **05 55 08.7** | **0.0** |
| BKES | | | | S | **Sg** | **05 55 41.4** | **-1.6** |
| BKES | | | | *i* AML | AML | 05 55 52.0 | |
| | comp=N,124nm,0.6s | | | | | | |
| **GCAM** | **G?zelcaml?** | **2.49** | **129** | Pn | **Pn** | **05 55 05.0** | **-0.1** |
| **MRMT** | **Marmara Adasi** | **2.50** | **58** | Pn | **Pn** | **05 55 05.4** | **0.0** |
| **EDC** | **Edincik** | **2.57** | **65** | Pn | **Pn** | **05 55 06.4** | **+0.1** |
| **SUSR** | **Susurluk-Balik** | **2.61** | **74** | Pn | **Pn** | **05 55 07.1** | **+0.2** |
| **MHLO** | **Agia Marina, M** | **2.63** | **187** | P | **Pn** | **05 55 06.9** | **-0.2** |
| **PVO** | **Paravola** | **2.65** | **256** | P | **Pn** | **05 55 06.2** | **-1.1** |
| **GORD** | **Gordes-Manisa** | **2.65** | **98** | Pn | **Pn** | **05 55 07.4** | **0.0** |
| **BAND** | **Balkesir-Ban** | **2.74** | **66** | P | **Pb** | **05 55 11.5** | **-2.1** |
| BAND | | | | S | **Sb** | **05 55 47.5** | **+0.1** |
| **BAND** | **Balkesir-Ban** | **2.74** | **66** | ⇑P | **Pn** | **05 55 10.0** | **+1.4** |
| **ODEM** | **Odemis-Izmir** | **2.75** | **111** | Pn | **Pn** | **05 55 08.8** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.77** | **118** | Pn | **Pn** | **05 55 09.4** | **+0.3** |
| **DRO** | **Drossia** | **2.78** | **242** | P | **Pn** | **05 55 08.7** | **-0.4** |
| DRO | | | | AML | AML | 05 55 55.0 | |
| | comp=N,259μm,0.5s | | | | | | |
| DRO | | | | AML | AML | 05 56 02.3 | |
| | comp=E,376μm,0.5s | | | | | | |
| **DIM** | **Dimitrovgrad** | **2.80** | **12** | P | **Pn** | **05 55 09.5** | **+0.1** |
| **KKB** | **Krupnik** | **2.84** | **334** | P | **Pn** | **05 55 10.8** | **+0.8** |
| **PLD** | **Plovdiv** | **2.84** | **359** | *e*Pn | **Pg** | **05 55 17.8** | **-0.8** |
| **DURS** | **Dursunbey** | **2.85** | **83** | P | **Pn** | **05 55 12.9** | **+2.6** |
| DURS | | | | S | **Sb** | **05 55 48.7** | **-2.0** |
| DURS | | | | *i* AML | AML | 05 56 02.0 | |
| | comp=E,99nm,0.5s | | | | | | |
| **VLI** | **Veliai** | **2.98** | **210** | P | **Pn** | **05 55 10.2** | **-1.7** |
| **BODT** | **Bodrum** | **2.98** | **138** | Pn | **Pn** | **05 55 11.4** | **-0.6** |
| **FNA** | **Florina** | **3.02** | **300** | *e*Pn | **Pn** | **05 55 11.8** | **-0.7** |
| FNA | | | | *e*Sn | Sn | 05 55 31.2 | -18 |
| **KIRK** | **Kirklareli** | **3.03** | **34** | P | **Pb** | **05 55 18.5** | **+0.1** |
| KIRK | | | | S | **Sg** | **05 55 59.4** | **-2.0** |
| **NAZL** | **Nazilli-Aydin** | **3.04** | **115** | Pn | **Pn** | **05 55 13.1** | **+0.3** |
| **KUL

*az=111.0*

**ISC 27 06:03:41.2±0.5, 25°.53S±0°.09×179°.7E±0°.1, h507km, n47, σ1§07/43, mb3.9/18, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **7.91** | **348** | P | **P** | **06 05 35.6** | **-1.5** |
| **MSVF** | **Nonsavu** | **7.91** | **348** | P | **P** | **06 05 35.8** | **-1.2** |
| | 19nm,0.4s,baz=264,slow=23,SNR=77 | | | | | | |
| **PINNC** | **Pines Island,** | **11.58** | **282** | P | **P** | **06 06 16.7** | **+1.4** |
| **MXZ** | **Matakaoa Point** | **12.06** | **185** | P | **P** | **06 06 20.9** | **+0.8** |
| **URZ** | **Urewera** | **12.89** | **189** | P | **P** | **06 06 27.9** | **-1.0** |
| | 29nm,0.5s,baz=101,slow=1.4,SNR=45 | | | | | | |
| KOUNC | **Koumac, New Ca** | **15.04** | **286** | P | **P** | **06 06 55.1** | **+3.3** |
| KOUNC | | | | IAmb | IAmb | 06 07 12.2 | |
| | comp=Z,27nm,1.2s | | | | | | |
| **TCW** | **Tory Channel** | **16.28** | **195** | P | **P** | **06 07 02.9** | **-1.5** |
| **SNZO** | **South Karori** | **16.28** | **194** | P | **P** | **06 07 03.2** | **-1.2** |
| **QRZ** | **Quartz Range** | **16.39** | **200** | P | **P** | **06 07 04.7** | **-0.9** |
| **DSZ** | **Denniston Nort** | **17.45** | **200** | P | **P** | **06 07 15.6** | **-0.5** |
| **CTAO** | **Charters Tower** | **31.27** | **273** | P | **P** | **06 09 19.6** | **+0.4** |
| CTAO | | | | IAmb | IAmb | 06 09 20.4 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **XMAS** | **Kiritimati** | **35.22** | **42** | P | **P** | **06 09 52.9** | **+0.2** |
| **ASAR** | **Alice Springs** | **41.54** | **262** | P | **P** | **06 10 43.2** | **-0.9** |
| | comp=Z,0.5nm,0.5s,baz=92,slow=8.4,SNR=8.4 comp=Z,0.5nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.06** | **268** | P | **P** | **06 10 47.1** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 06 10 55.3 | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.07** | **268** | P | **P** | **06 10 46.9** | **-1.4** |
| **WRA** | **Warramunga Arr** | **42.07** | **268** | P | **P** | **06 10 47.2** | **-1.1** |
| | comp=Z,0.6nm,0.5s,baz=100,slow=6.8,SNR=16 comp=Z,0.6nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **64.56** | **180** | P | **P** | **06 13 28.8** | **+1.0** |
| **QSPA** | **South Pole Qui** | **64.56** | **180** | P | **P** | **06 13 28.7** | **+0.9** |
| | comp=Z,1.5nm,0.6s,baz=27,slow=1.2,SNR=14 comp=Z,1.5nm,0.6s | | | | | | |
| **BELA** | **Belgrano 2** | **74.86** | **173** | P | **P** | **06 14 28.8** | **-0.1** |
| BELA | | | | IAmb | IAmb | 06 14 29.3 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **83.05** | **179** | P | **P** | **06 15 12.5** | **-0.2** |
| **SNAA** | **Sanae** | **83.05** | **179** | P | **P** | **06 15 12.3** | **-0.4** |
| | comp=Z,1.1nm,0.8s,baz=186,slow=8.1,SNR=7.9 comp=Z,1.1nm,0.8s | | | | | | |
| **SLBS** | **Sierra La Lagu** | **83.83** | **60** | P | **P** | **06 15 17.8** | **+0.4** |
| SLBS | | | | IAmb | IAmb | 06 15 19.4 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **84.45** | **40** | P | **P** | **06 15 21.0** | **+0.9** |
| O02D | | | | IAmb | IAmb | 06 15 22.6 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **GMN** | **Gold Mountain** | **86.09** | **45** | P | **P** | **06 15 28.0** | **-0.3** |
| **NVAR** | **Mina Array Bea** | **86.09** | **44** | P | **P** | **06 15 28.8** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **86.09** | **44** | P | **P** | **06 15 28.9** | **+0.7** |
| | comp=Z,1.4nm,0.7s,baz=225,slow=8.6,SNR=6.7 comp=Z,1.4nm,0.7s | | | | | | |
| **TPH** | **Tonopah** | **86.57** | **45** | P | **P** | **06 15 31.1** | **+0.5** |
| TPH | | | | IAmb | IAmb | 06 15 31.9 | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **KVN** | **Kaiserville** | **86.59** | **44** | P | **P** | **06 15 30.6** | **0.0** |
| KVN | | | | IAmb | IAmb | 06 15 31.8 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **PLCA** | **Paso Flores** | **87.32** | **134** | P | **P** | **06 15 34.6** | **+0.6** |
| | comp=Z,1.6nm,0.8s,baz=225,slow=7.1,SNR=4.1 comp=Z,1.6nm,0.8s | | | | | | |
| **PINE** | **Pine Mountain** | **87.82** | **39** | P | **P** | **06 15 37.2** | **+1.0** |
| PINE | | | | IAmb | IAmb | 06 15 38.3 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **88.37** | **50** | P | **P** | **06 15 40.5** | **+1.5** |
| X16A | | | | IAmb | IAmb | 06 15 41.2 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **I07A** | **Izee** | **88.81** | **39** | P | **P** | **06 15 41.8** | **+1.1** |
| I07A | | | | IAmb | IAmb | 06 15 42.2 | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **91.50** | **58** | P | **P** | **06 15 54.6** | **+1.0** |
| | comp=Z,1.1nm,0.9s,baz=211,slow=6.0,SNR=13 comp=Z,1.1nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **94.03** | **44** | P | **P** | **06 16 04.8** | **-0.2** |
| | comp=Z,0.1nm,0.5s,baz=243,slow=0.2,SNR=2.0 comp=Z,0.1nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **116.23** | **316** | PKP | **PKPdf** | **06 21 24.7** | **-1.6** |
| | comp=Z,0.1nm,0.4s,baz=114,slow=1.8,SNR=4.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **121.48** | **318** | PKP | **PKPdf** | **06 21 35.3** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=95,slow=1.6,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.42** | **348** | PKP | **PKPdf** | **06 21 57.6** | **-1.0** |
| | comp=Z,1.8nm,0.9s,baz=5.2,slow=1.0,SNR=6.2 | | | | | | |
| **NB201** | **NORSAR Array S** | **143.62** | **351** | | PKPab | 06 22 15.5 | -0.6 |
| **NB2** | **NORSAR Subarra** | **143.64** | **351** | PKP | PKPab | 06 22 15.2 | -0.9 |
| | comp=Z,1.6nm,0.6s,baz=15,slow=3.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **143.64** | **351** | PKP | PKPab | 06 22 14.9 | -1.2 |
| | comp=Z,2.4nm,0.7s,baz=21,slow=3.8,SNR=8.9 | | | | | | |
| **HFS** | **Hagfors** | **144.08** | **348** | PKP | PKPbc | 06 22 16.3 | -1.3 |
| | comp=Z,3.4nm,0.5s,baz=64,slow=3.4,SNR=18 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.18** | **326** | PKPbc | **PKPdf** | **06 22 22.6** | **+0.6** |
| | comp=Z,0.4nm,0.4s,baz=48,slow=1.4,SNR=4.0 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **148.10** | **292** | PKPbc | **PKPbc** | **06 22 29.4** | **-0.5** |
| | comp=Z,2.2nm,0.3s,baz=72,slow=4.7,SNR=5.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.32** | **305** | PKPbc | **PKPbc** | **06 22 30.6** | **+0.3** |
| **BRTR** | **Keskin Array B** | **148.32** | **305** | PKPbc | **PKPbc** | **06 22 29.7** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=134,slow=3.3,SNR=3.9 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **150.15** | **3** | PKPbc | **PKPbc** | **06 22 32.9** | **-1.2** |
| | comp=Z,0.6nm,0.4s,baz=352,slow=3.2,SNR=5.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **167.55** | **189** | PKPab | **PKPab** | **06 23 58.2** | **-0.5** |
| | comp=Z,0.5nm,0.6s,baz=168,slow=2.7,SNR=2.9 | | | | | | |

*IDC **27** 06:07:08.7±2.1,24°.33S×179°.81E,h523km±23km, mb3.3/9, mbtmp4.1/11, Error ellipse: s-maj=25.2km s-min=14.7km az=137.0*

*NEIC **27** 06:07:11.1±1.6,24°.3S±0°.2×179°.8E±0°.2,h540km±11km, mb4.2/16, Error ellipse: s-maj=24.9km s-min=17.0km az=143.0*

**ISC 27 06:07:08.1±0.6, 24°.39S±0°.08×179°.9E±0°.1, h517km, n35, σ1§36/36, mb4.0/17, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **6.85** | **345** | P | **P** | **06 08 54.2** | **+0.6** |
| **MSVF** | **Nonsavu** | **6.85** | **345** | P | **P** | **06 08 53.6** | **0.0** |
| | 16nm,0.6s,baz=106,slow=7.2,SNR=9.9 | | | | | | |
| MSVF | | | | S | **S** | **06 10 17.7** | **-2.2** |
| | 7.4nm,0.8s,baz=321,slow=13,SNR=2.6 | | | | | | |
| **PINNC** | **Pines Island,** | **11.59** | **276** | P | **P** | **06 09 44.4** | **+2.1** |
| **DZM** | **Mont Dzumac** | **12.61** | **278** | P | **P** | **06 09 54.6** | **+1.4** |
| **DZM** | **Mont Dzumac** | **12.61** | **278** | P | **P** | **06 09 54.0** | **+0.8** |
| | 16nm,0.7s,baz=89,slow=16,SNR=15 | | | | | | |
| **URZ** | **Urewera** | **14.03** | **189** | S | **S** | **06 12 33.0** | **-2.9** |
| | 4.0nm,0.7s,baz=312,slow=23,SNR=2.6 | | | | | | |
| **DCZ** | **Deep Cove** | **23.43** | **203** | P | **P** | **06 11 40.1** | **+3.7** |
| **EIDS** | **Eidsvold** | **26.16** | **262** | P | **P** | **06 12 01.5** | **+0.4** |
| EIDS | | | | IAmb | IAmb | 06 12 15.6 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **31.41** | **271** | P | **P** | **06 12 47.1** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 06 12 48.0 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **34.48** | **249** | P | **P** | **06 13 12.9** | **+0.2** |
| **STKA** | **Stephens Creek** | **34.48** | **249** | P | **P** | **06 13 12.4** | **-0.2** |
| | comp=Z,3.3nm,0.5s,baz=97,slow=11,SNR=8.1 comp=Z,3.3nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **39.19** | **247** | P | **P** | **06 13 50.4** | **-1.0** |
| **AS31** | **Alice Springs** | **41.89** | **261** | P | **P** | **06 14 12.7** | **-0.4** |
| **ASAR** | **Alice Springs** | **41.89** | **261** | P | **P** | **06 14 12.6** | **-0.5** |
| **ASAR** | **Alice Springs** | **41.89** | **261** | P | **P** | **06 14 12.8** | **-0.4** |
| | comp=Z,3.8nm,1.0s,baz=93,slow=8.6,SNR=15 comp=Z,3.8nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.12** | **267** | P | **P** | **06 14 13.9** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 06 14 14.5 | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.30** | **267** | P | **P** | **06 14 15.7** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 06 14 16.6 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.31** | **267** | P | **P** | **06 14 15.5** | **-0.9** |
| | comp=Z,5.2nm,0.6s,baz=104,slow=8.0,SNR=33 comp=Z,5.2nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **46.08** | **250** | P | **P** | **06 14 44.2** | **-1.2** |
| **KNRA** | **Kununurra** | **48.62** | **270** | P | **P** | **06 15 04.4** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 06 15 05.0 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.72** | **266** | | **P** | **06 15 20.3** | **0.0** |
| **QSPA** | **South Pole Qui** | **65.70** | **180** | P | **P** | **06 17 01.4** | **+0.4** |
| **QSPA** | **South Pole Qui** | **65.70** | **180** | P | **P** | **06 17 01.1** | **+0.1** |
| | comp=Z,1.8nm,0.8s,baz=298,slow=0.5,SNR=10 comp=Z,1.8nm,0.8s | | | | | | |
| **CBX** | **Cerro Bola** | **82.70** | **50** | P | **P** | **06 18 38.9** | **+1.3** |
| CBX | | | | IAmb | IAmb | 06 18 44.6 | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **84.18** | **179** | P | **P** | **06 18 43.3** | **-1.0** |
| SNAA | | | | IAmb | IAmb | 06 19 12.4 | |
| | comp=Z,5.1nm,1.5s | | | | | | |
| **SNAA** | **Sanae** | **84.18** | **179** | P | **P** | **06 18 43.5** | **-0.8** |
| | comp=Z,0.4nm,0.6s,baz=213,slow=11,SNR=1.7 comp=Z,0.4nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.15** | **44** | P | **P** | **06 18 50.9** | **+1.1** |
| | comp=Z,0.7nm,0.7s,baz=226,slow=8.0,SNR=5.8 comp=Z,0.7nm,0.7s | | | | | | |
| **I07A** | **Izee** | **87.81** | **39** | P | **P** | **06 19 03.6** | **+1.5** |
| I07A | | | | IAmb | IAmb | 06 19 04.6 | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **90.75** | **58** | P | **P** | **06 19 17.3** | **+1.3** |
| TX31 | | | | IAmb | IAmb | 06 19 18.3 | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.75** | **58** | P | **P** | **06 19 17.6** | **+1.5** |
| | comp=Z,1.3nm,0.8s,baz=212,slow=6.6,SNR=19 comp=Z,1.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **92.52** | **14** | P | **P** | **06 19 22.0** | **-1.3** |
| | comp=Z,0.2nm,0.6s,baz=220,slow=5.5,SNR=4.4 comp=Z,0.2nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **93.09** | **44** | P | **P** | **06 19 27.1** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=165,slow=4.5,SNR=4.2 comp=Z,0.3nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **143.01** | **349** | PKP | **PKPdf** | **06 25 39.6** | **-2.7** |
| | comp=Z,3.7nm,0.4s,baz=64,slow=3.4,SNR=25 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.81** | **307** | PKPbc | **PKPbc** | **06 25 54.4** | **-0.6** |
| | comp=Z,0.7nm,0.7s,baz=168,slow=1.3,SNR=2.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **149.01** | **3** | PKPbc | **PKPbc** | **06 25 56.1** | **-1.2** |
| | comp=Z,0.7nm,0.5s,baz=1.1,slow=4.2,SNR=4.9 | | | | | | |

**IDC 27 06:29:54.9±1.4, 27°.93N×104°.96E, h0km, mb3.6/3, mbtmp3.5/4, ML3.5/1, Error ellipse: s-maj=90.5km s-min=23.7km az=63.0, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **19.90** | **3** | P | P | 06 34 28.3 | +0.2 |
| | 0.1nm,0.3s,baz=187,slow=12,SNR=3.6 0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **25.91** | **323** | P | P | 06 35 28.5 | -0.1 |
| | 0.9nm,0.7s,baz=133,slow=11,SNR=7.2 0.9nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.43** | **146** | P | P | 06 39 30.9 | -0.5 |
| | 0.6nm,0.8s,baz=331,slow=8.2,SNR=5.2 0.6nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **58.40** | **149** | P | P | 06 39 52.8 | +0.4 |
| | 0.5nm,0.7s,baz=340,slow=6.9,SNR=5.8 0.5nm,0.7s | | | | | | |

*NEIC **27** 06:33:29.3±1.1, 17°.88S±0°.09×177°.9W±0°.2, h576km±14km, mb4.1/16, Error ellipse: s-maj=21.3km s-min=13.0km az=87.0*

*IDC **27** 06:33:31.2±3.0, 17°.96S×178°.11W, h589km±21km, mb3.3/4, mbtmp4.3/5, Error ellipse: s-maj=67.3km s-min=29.5km az=27.0*

**ISC 27 06:33:29.8±1.2, 17°.9S±0°.2×178°.0W±0°.1, h590km, n25, σ0§71/27, mb4.1/11, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.80** | **271** | P | **P** | **06 34 53.7** | **+0.4** |
| | 44nm,0.8s,baz=125,slow=12,SNR=21 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.25** | **251** | P | **P** | **06 36 41.9** | **+1.2** |
| DZM | | | | IAmb | IAmb | 06 36 59.6 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| KOUNC | **Koumac, New Ca** | **16.98** | **258** | P | **P** | **06 36 57.4** | **+0.8** |
| **RAR** | **Rarotonga** | **17.47** | **104** | P | **P** | **06 37 00.0** | **-1.1** |
| **EIDS** | **Eidsvold** | **29.68** | **250** | P | **P** | **06 38 49.4** | **-0.1** |
| EIDS | | | | IAmb | IAmb | 06 39 14.8 | |
| | comp=Z,5.1nm,1.1s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.32** | **200** | P | **P** | **06 38 54.7** | **+0.1** |
| **ARMA** | **Armidale** | **30.34** | **240** | P | **P** | **06 38 55.2** | **+0.1** |
| ARMA | | | | IAmb | IAmb | 06 39 09.8 | |
| | comp=Z,9.2nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **33.87** | **260** | P | **P** | **06 39 24.2** | **-0.8** |
| CTAO | | | | IAmb | IAmb | 06 39 37.3 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **34.08** | **233** | P | **P** | **06 39 26.5** | **-0.1** |
| **COEN** | **Coen** | **37.53** | **270** | P | **P** | **06 39 54.0** | **-1.2** |
| COEN | | | | IAmb | IAmb | 06 39 55.5 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **37.54** | **231** | P | **P** | **06 39 55.1** | **0.0** |
| TOO | | | | IAmb | IAmb | 06 40 05.6 | |
| | comp=Z,7.5nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **39.03** | **241** | P | **P** | **06 40 06.8** | **-0.4** |
| **STKA** | **Stephens Creek** | **39.03** | **241** | P | **P** | **06 40 07.6** | **+0.4** |
| | comp=Z,2.0nm,0.5s,baz=88,slow=10,SNR=5.1 comp=Z,2.0nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.80** | **241** | P | **P** | **06 40 43.6** | **-1.2** |
| BBOO | | | | IAmb | IAmb | 06 41 12.2 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.87** | **259** | P | **P** | **06 40 52.6** | **-0.5** |
| **WRA** | **Warramunga Arr** | **45.06** | **259** | P | **P** | **06 40 54.3** | **-0.4** |
| **WRA** | **Warramunga Arr** | **45.06** | **259** | P | **P** | **06 40 54.2** | **-0.4** |
| | comp=Z,1.5nm,0.3s,baz=96,slow=7.3,SNR=72 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 42 23.5** | **+0.9** |
| | comp=Z,0.3nm,0.5s,baz=94,slow=3.4,SNR=2.3 comp=Z,1.5nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **45.21** | **254** | P | **P** | **06 40 55.9** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 06 40 56.7 | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.21** | **254** | P | **P** | **06 40 55.5** | **-0.3** |
| **ASAR** | **Alice Springs** | **45.21** | **254** | P | **P** | **06 40 55.8** | **0.0** |
| | comp=Z,7.1nm,0.5s,baz=87,slow=8.8,SNR=112 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 42 23.8** | **+0.7** |
| | comp=Z,0.6nm,0.5s,baz=107,slow=3.8,SNR=5.2 comp=Z,7.1nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **50.41** | **245** | P | **P** | **06 41 33.9** | **-0.4** |
| **QSPA** | **South Pole Qui** | **72.21** | **180** | P | **P** | **06 43 56.3** | **+0.5** |
| **QSPA** | **South Pole Qui** | **72.21** | **180** | P | **P** | **06 43 56.5** | **+0.7** |
| | comp=Z,0.9nm,0.5s,baz=18,slow=6.4,SNR=10 comp=Z,0.9nm,0.5s | | | | | | |
| **BR131** | **Keskin Array S** | **145.04** | **315** | PKPbc | **PKPdf** | **06 52 01.7** | **+0.5** |
| **BRTR** | **Keskin Array B** | **145.04** | **315** | PKPbc | **PKPdf** | **06 52 02.5** | **+1.3** |

*IDC **27** 06:38:21.6±1.0, 9°.60N×122°.19E, h0km, mb3.8/7, mbtmp3.8/7, MS3.0/3, Error ellipse: s-maj=65.3km s-min=19.4km az=69.0*

**ISC 27 06:38:26.7±1.0, 9°.6N±0°.2×122°.2E±0°.4, h37km, n9, σ0§93/7, mb3.9/7, Negros**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **4.15** | **127** | LR | LR | 06 41 33.0 | |
| | comp=Z,288nm,19.9s,baz=340,slow=46 | | | | | | |
| **JNU** | **Nakatsue** | **24.73** | **18** | LR | LR | 06 54 03.9 | |
| | comp=Z,24nm,19.0s,baz=146,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.68** | **158** | P | **P** | **06 44 46.1** | **-0.8** |
| | 0.4nm,0.7s,baz=337,slow=9.4,SNR=1.4 0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **34.97** | **161** | P | **P** | **06 45 16.6** | **+1.0** |
| | 0.9nm,0.6s,baz=338,slow=6.9,SNR=10 0.9nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.49** | **12** | P | **P** | **06 45 20.0** | **+0.2** |
| | 1.3nm,0.7s,baz=198,slow=8.9,SNR=2.7 1.3nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **40.39** | **344** | P | **P** | **06 46 00.8** | **-0.4** |
| | 0.5nm,0.6s,baz=159,slow=9.1,SNR=4.3 0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.22** | **325** | P | **P** | **06 47 20.0** | **+0.9** |
| | 1.6nm,0.8s,baz=128,slow=8.0,SNR=9.2 1.6nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **54.42** | **327** | P | **P** | **06 47 50.5** | **+0.4** |
| | 0.8nm,0.6s,baz=119,slow=9.3,SNR=9.0 0.8nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **82.88** | **309** | P | **P** | **06 50 47.2** | **-0.7** |
| | 0.7nm,0.6s,baz=100,slow=6.5,SNR=4.1 | | | | | | |
| BRTR | | | | LR | LR | 07 31 14.8 | |
| | comp=Z,10.0nm,19.9s,baz=190,slow=38 0.7nm,0.6s | | | | | | |

*SDD **27** 06:38:38.0±2.5, 19°.80N×70°.40W, h18km±44km, MD3.5, ML2.7, MW3.4*

*OSPL **27** 06:38:38.1±3.0, 19°.74N×70°.42W, h0km±13km, ML2.3*

**ISC 27 06:38:35.0±1.4, 19°.78N±0°.03×70°.41W±0°.03, h7km±14km, n17, σ0§77/27, 12C-3D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SC01** | **Santiago de lo** | **0.46** | **220** | *i* P | **Pb** | **06 38 45.3** | **-0.2** |
| SC01 | | | | *e*S | **Sb** | **06 38 52.5** | **+0.1** |
| SC01 | | | | IAML | | 06 39 01.2 | |
| | comp=Z,168nm,0.3s | | | | | | |
| **ABDR** | **Alto Bandera** | **0.98** | **192** | IAML | | 06 39 10.0 | |
| | comp=E,348nm,0.3s | | | | | | |
| **REDR** | **Restauracion** | **1.11** | **237** | IAML | | 06 39 16.8 | |
| | comp=N,421nm,0.1s | | | | | | |
| REDR | | | | IAML | | 06 39 17.3 | |
| | comp=E,280nm,0.1s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.14** | **226** | *i* P | **Pb** | **06 38 56.8** | **-0.4** |
| SDDR | | | | *e*S | **Sb** | **06 39 12.2** | **-0.1** |
| SDDR | | | | IAML | | 06 39 13.3 | |
| | comp=Z,60nm,0.3s | | | | | | |
| **SDD** | **Santo Domingo** | **1.40** | **160** | ↑*e*Sg | **Sn** | **06 39 18.6** | **-1.0** |
| SDD | | | | IAML | | 06 39 20.8 | |
| | comp=E,41nm,0.8s | | | | | | |
| SDD | | | | IAML | | 06 39 21.7 | |
| | comp=N,26nm,0.7s | | | | | | |
| **SDD** | **Santo Domingo** | **1.40** | **160** | *i* P | **Pb** | **06 39 01.2** | **-0.3** |
| SDD | | | | *e*S | **Sb** | **06 39 19.4** | **-0.1** |
| **MIDR** | **Miches** | **1.51** | **121** | ↓*e*Pg | **Pb** | **06 39 03.7** | **+0.3** |
| MIDR | | | | ↑*e*Sg | **Sg** | **06 39 24.7** | **+1.0** |
| MIDR | | | | IAML | | 06 39 25.4 | |
| | comp=E,72nm,1.0s | | | | | | |
| MIDR | | | | IAML | | 06 39 26.0 | |
| | comp=N,80nm,0.5s | | | | | | |
| MIDR | | | | IAML | | 06 39 26.1 | |
| | comp=N,80nm,0.5s | | | | | | |
| **PODR** | **Polo** | **1.80** | **207** | ↑*e*Pg | **Pb** | **06 39 08.8** | **+0.3** |
| PODR | | | | IAML | | 06 39 39.8 | |
| | comp=N,60nm,1.3s | | | | | | |
| **PODR** | **Polo** | **1.80** | **207** | *i* P | **Pb** | **06 39 08.6** | **+0.1** |
| PODR | | | | *e*S | **Sg** | **06 39 33.1** | **+0.1** |
| PODR | | | | IAML | | 06 39 38.1 | |
| | comp=Z,7.2nm,0.1s | | | | | | |
| LOBA2 | **Hotel Casa Bon** | **1.81** | **201** | ↓*e*Pg | **Pg** | **06 39 09.5** | **-0.2** |
| LOBA2 | | | | ↑*e*Sg | **Sg** | **06 39 34.3** | **+1.2** |
| LOBA2 | | | | IAML | | 06 39 36.6 | |
| | comp=E,15nm,2.0s | | | | | | |
| LOBA2 | | | | IAML | | 06 39 39.2 | |
| | comp=N,11nm,2.7s | | | | | | |
| **GRTK** | **Grand Turk** | **1.85** | **339** | ↑*e*Pg | **Pb** | **06 39 09.1** | **-0.2** |
| GRTK | | | | ↑*e*Sg | **Sg** | **06 39 34.0** | **-0.6** |
| GRTK | | | | IAML | | 06 39 37.2 | |
| | comp=N,50nm,1.8s | | | | | | |
| GRTK | | | | IAML | | 06 39 37.6 | |
| | comp=E,40nm,0.8s | | | | | | |
| **GRTK** | **Grand Turk** | **1.85** | **339** | *i* P | **Pb** | **06 39 09.6** | **+0.4** |
| GRTK | | | | *e*S | **Sb** | **06 39 33.3** | **+0.7** |
| GRTK | | | | IAML | | 06 39 34.6 | |
| | comp=Z,64nm,1.3s | | | | | | |
| **JIDR** | **Jimani** | **1.87** | **227** | ↑*e*Pg | **Pb** | **06 39 09.8** | **+0.3** |
| JIDR | | | | ↓*e*Sg | **Sg** | **06 39 35.2** | **+0.1** |
| JIDR | | | | IAML | | 06 39 37.3 | |
| | comp=N,82nm,0.6s | | | | | | |
| **HIDR** | **Higuey Centro** | **1.99** | **126** | ↑*e*Pg | **Pb** | **06 39 11.4** | **-0.2** |
| HIDR | | | | ↑*e*Sg | **Sg** | **06 39 38.2** | **-0.9** |
| HIDR | | | | ↑*e*Sg | **Sb** | **06 39 38.9** | **+2.2** |
| HIDR | | | | IAML | | 06 39 40.0 | |
| | comp=E,252nm,0.2s | | | | | | |
| HIDR | | | | IAML | | 06 39 40.5 | |
| | comp=N,291nm,0.2s | | | | | | |
| **SADR** | **Isla Saona** | **2.21** | **135** | ↑*e*Sg | **Sb** | **06 39 43.8** | **+0.9** |
| SADR | | | | IAML | | 06 39 54.1 | |
| | comp=E,57nm,0.7s | | | | | | |
| SADR | | | | IAML | | 06 39 57.0 | |
| | comp=N,126nm,1.5s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.30** | **123** | ↑*e*Pg | **Pb** | **06 39 16.4** | **-0.4** |
| PCDR | | | | *e*Sg | **Sg** | **06 39 47.5** | **-1.3** |
| PCDR | | | | IAML | | 06 39 54.6 | |
| | comp=N,116nm,1.1s | | | | | | |
| PCDR | | | | IAML | | 06 39 60.0 | |
| | comp=N,150nm,1.2s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.30** | **123** | *i* P | **Pb** | **06 39 16.5** | **-0.4** |
| PCDR | | | | IAML | | 06 39 53.6 | |
| | comp=Z,107nm,0.8s | | | | | | |

*IDC **27** 06:50:41.2±1.1, 0°.88N×125°.84E, h0km, mb3.8/5, mbtmp3.8/5, MS2.7/1, Error ellipse: s-maj=75.5km s-min=19.3km az=70.0*

*DJA **27** 06:50:46.5±0.8, 1°.1±3°×12°.6E±°, h11km±6km, M4.1/8, mb4.3/2, mB5.7/1, MLv3.9/8, Mw(mB)5.2/1*

**ISC 27 06:50:48.4±0.9, 0°.9N±0°.1×125°.89E±0°.05, h44km, n11, σ2§01/13, mb3.9/5, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.48** | **95** | P | **Pn** | **06 51 13.5** | **+0.9** |
| TNTI | | | | S | **Sn** | **06 51 34.0** | **+3.3** |
| **KMSI** | **Cibinong** | **1.94** | **260** | P | **Pn** | **06 51 18.9** | **0.0** |
| KMSI | | | | S | **Sn** | **06 51 43.0** | **+0.9** |
| **GTOI** | **Gorontalo** | **2.89** | **265** | P | **Pn** | **06 51 33.9** | **+1.9** |
| GTOI | | | | S | **Sn** | **06 52 08.8** | **+3.2** |
| **LUWI** | **Luwuk** | **3.67** | **238** | P | **Pn** | **06 51 43.4** | **+0.7** |
| **MSAI** | **Masohi** | **5.20** | **144** | P | **Pn** | **06 52 04.3** | **+0.6** |
| **DAV** | **Davao City (W)** | **6.14** | **357** | LR | LR | 06 54 51.5 | |
| | comp=Z,61nm,20.4s,baz=170,slow=41 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.31** | **159** | P | **P** | **06 55 39.5** | **-2.8** |
| | 0.6nm,0.3s,baz=338,slow=11,SNR=31 0.6nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **25.63** | **163** | P | **P** | **06 56 13.3** | **-0.8** |
| | 0.5nm,0.3s,baz=342,slow=8.8,SNR=14 0.5nm,0.3s | | | | | | |
| **US

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **3.52** | **347** | *e*P | | **Pb** | **07 06 55.2** | **+0.3** |
| | 4.1nm,0.3s | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **07 07 45.5** | **-0.1** |
| | 13nm,0.4s | | | | | | | |
| **KDJ** | **Kajisay** | **3.58** | **37** | ⇓*e*P | | **Pn** | **07 06 49.1** | **+0.9** |
| | baz=36 | | | | | | | |
| KDJ | | | | ⇓*e*S | | **Sn** | **07 07 32.7** | **+2.1** |
| | baz=36 | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.74** | **15** | ⇑Pn | | **Pn** | **07 06 53.7** | **+3.2** |
| | 4.0nm,0.5s | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sb** | **07 07 40.7** | **-3.5** |
| | 8.1nm,0.8s | | | | | | | |
| **DGS** | **Degeres** | **4.09** | **16** | *e*P | | **Pb** | **07 07 05.3** | **+0.7** |
| | 6.9nm,0.6s | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **07 08 02.8** | **-0.9** |
| | 12nm,0.6s | | | | | | | |
| **DGS** | **Degeres** | **4.09** | **16** | Pg | | **Pb** | **07 07 05.3** | **+0.7** |
| | 6.9nm,0.6s | | | | | | | |
| DGS | | | | Lg | | Lg | 07 08 02.8 | |
| | 12nm,0.6s | | | | | | | |
| **IZV** | **Izvestkoviy** | **4.12** | **25** | *e*P | | **Pb** | **07 07 05.1** | **0.0** |
| | 0.2nm,0.0s | | | | | | | |
| IZV | | | | *e*S | | **Sg** | **07 08 02.3** | **-2.4** |
| | 3.6nm,0.1s | | | | | | | |
| **IZV** | **Izvestkoviy** | **4.12** | **25** | Pg | | **Pb** | **07 07 03.1** | **-2.0** |
| | 0.1nm,0.1s | | | | | | | |
| IZV | | | | Lg | | Lg | 07 07 59.1 | |
| | 4.5nm,0.2s | | | | | | | |
| **MTBS** | **Maitube** | **4.15** | **22** | *e*P | | **Pb** | **07 07 06.3** | **+0.7** |
| | 7.1nm,0.5s | | | | | | | |
| MTBS | | | | *e*S | | **Sg** | **07 08 04.8** | **-0.8** |
| | 7.0nm,0.5s | | | | | | | |
| **MTBS** | **Maitube** | **4.15** | **22** | Pg | | **Pb** | **07 07 06.3** | **+0.7** |
| | 7.1nm,0.5s | | | | | | | |
| MTBS | | | | Lg | | Lg | 07 08 04.8 | |
| | 7.0nm,0.5s | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.24** | **28** | *e*P | | **Pb** | **07 07 08.1** | **+0.9** |
| | 2.0nm,0.5s | | | | | | | |
| TNSS | | | | *e*S | | **Sg** | **07 08 07.7** | **-0.7** |
| | 5.9nm,0.8s | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.24** | **28** | Pg | | **Pb** | **07 07 08.1** | **+0.9** |
| | 7.5nm,0.5s | | | | | | | |
| TNSS | | | | Lg | | Lg | 07 08 08.4 | |
| | 6.2nm,0.6s | | | | | | | |
| **MDOK** | **Medeo** | **4.38** | **28** | *e*P | | **Pb** | **07 07 11.5** | **+1.9** |
| | 4.8nm,0.3s | | | | | | | |
| MDOK | | | | *e*S | | **Sg** | **07 08 13.3** | **+0.2** |
| | 6.2nm,0.4s | | | | | | | |
| **MDOK** | **Medeo** | **4.38** | **28** | Pg | | **Pb** | **07 07 11.5** | **+1.9** |
| | 4.8nm,0.5s | | | | | | | |
| MDOK | | | | Lg | | Lg | 07 08 12.0 | |
| | 13nm,0.7s | | | | | | | |
| **KRBS** | **Karabastau** | **4.51** | **13** | *e*P | | **Pb** | **07 07 14.5** | **+2.9** |
| | 1.4nm,0.3s | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **07 08 18.2** | **+1.1** |
| | 8.9nm,0.9s | | | | | | | |
| **KRBS** | **Karabastau** | **4.51** | **13** | Pg | | **Pb** | **07 07 14.8** | **+3.1** |
| | 4.7nm,0.4s | | | | | | | |
| KRBS | | | | Lg | | Lg | 07 08 19.1 | |
| | 8.9nm,0.8s | | | | | | | |
| **KK31** | **Karatay Array** | **4.74** | **324** | ⇑Pn | | **Pn** | **07 07 06.0** | **+2.1** |
| | 0.6nm,0.3s,baz=131,slow=12,SNR=9.6 | | | | | | | |
| KK31 | | | | ⇑Pg | | **Pb** | **07 07 18.9** | **+3.3** |
| | 1.1nm,0.4s,baz=126,slow=15,SNR=5.8 | | | | | | | |
| KK31 | | | | ⇓Sn | | **Sb** | **07 08 06.8** | **-5.8** |
| | 1.6nm,0.4s,baz=149,slow=25,SNR=3.6 | | | | | | | |
| **KTBS** | **Karatobe** | **4.76** | **22** | *e*P | | **Pb** | **07 07 18.3** | **+2.4** |
| | 2.9nm,0.4s | | | | | | | |
| KTBS | | | | *e*S | | **Sg** | **07 08 24.7** | **-0.4** |
| | 13nm,0.7s | | | | | | | |
| **KTBS** | **Karatobe** | **4.76** | **22** | Pg | | **Pb** | **07 07 17.1** | **+1.3** |
| | 7.9nm,0.6s | | | | | | | |
| KTBS | | | | Lg | | Lg | 07 08 24.0 | |
| | 13nm,0.6s | | | | | | | |
| **SATY** | **Saty** | **4.87** | **38** | *e*P | | **Pb** | **07 07 19.7** | **+1.8** |
| | 5.0nm,0.5s | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **07 08 27.6** | **-1.2** |
| | 17nm,0.7s | | | | | | | |
| **SATY** | **Saty** | **4.87** | **38** | Pg | | **Pb** | **07 07 19.7** | **+1.8** |
| | 5.0nm,0.5s | | | | | | | |
| SATY | | | | Lg | | Lg | 07 08 27.6 | |
| | 17nm,0.7s | | | | | | | |
| **BRLS** | **Boroldaу** | **5.00** | **319** | *e*P | | **Pb** | **07 07 21.5** | **+1.4** |
| | 2.9nm,0.3s | | | | | | | |
| BRLS | | | | *e*S | | **Sg** | **07 08 30.9** | **-2.2** |
| | 5.0nm,0.4s | | | | | | | |
| **BRLS** | **Boroldaу** | **5.00** | **319** | Pg | | **Pb** | **07 07 21.5** | **+1.4** |
| | 2.9nm,0.3s | | | | | | | |
| BRLS | | | | Lg | | Lg | 07 08 30.9 | |
| | 5.0nm,0.4s | | | | | | | |
| **UZB** | **Uzynbulak** | **5.24** | **41** | *e*P | | **Pb** | **07 07 25.5** | **+1.2** |
| | 2.2nm,0.7s | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **07 08 37.1** | **-3.6** |
| | 6.6nm,0.9s | | | | | | | |
| **UZB** | **Uzynbulak** | **5.24** | **41** | Pg | | **Pb** | **07 07 25.5** | **+1.2** |
| | 2.2nm,0.7s | | | | | | | |
| UZB | | | | Lg | | Lg | 07 08 37.1 | |
| | 6.6nm,0.9s | | | | | | | |
| **SHLS** | **Shalkode** | **5.48** | **44** | *e*P | | **Pg** | **07 07 34.4** | **-3.0** |
| | 4.9nm,0.3s | | | | | | | |
| SHLS | | | | *e*S | | **Sg** | **07 08 52.4** | **+4.0** |
| | 7.5nm,0.6s | | | | | | | |
| **SHLS** | **Shalkode** | **5.48** | **44** | Pg | | **Pg** | **07 07 34.4** | **-3.0** |
| | 4.9nm,0.3s | | | | | | | |
| SHLS | | | | Lg | | Lg | 07 08 52.4 | |
| | 7.5nm,0.6s | | | | | | | |
| **ARXS** | **Arharly** | **5.57** | **27** | *e*P | | **Pb** | **07 07 33.0** | **+3.2** |
| | 2.2nm,0.3s | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **07 08 49.9** | **-1.4** |
| | 3.8nm,0.4s | | | | | | | |
| **ARXS** | **Arharly** | **5.57** | **27** | Pg | | **Pb** | **07 07 33.0** | **+3.2** |
| | 4.3nm,0.8s | | | | | | | |
| ARXS | | | | Lg | | Lg | 07 08 51.2 | |
| | 4.1nm,0.8s | | | | | | | |
| **PDGK** | **Podgornoye** | **5.62** | **43** | Pg | | **Pb** | **07 07 32.0** | **+1.5** |
| | 1.8nm,0.8s | | | | | | | |
| PDGK | | | | Lg | | Lg | 07 08 48.9 | |
| | 3.6nm,0.9s | | | | | | | |
| **BLB** | **Baldybastay** | **5.72** | **32** | Pg | | **Pb** | **07 07 35.3** | **+2.8** |
| | 12nm,0.6s | | | | | | | |
| BLB | | | | Lg | | Lg | 07 08 54.5 | |
| | 12nm,0.9s | | | | | | | |
| **AB31** | **Akbulak array** | **14.27** | **319** | ⇓P | | **Pn** | **07 09 13.7** | **-0.7** |
| | 0.2nm,0.3s,baz=129,slow=14,SNR=6.0 | | | | | | | |

**IDC 27 07:09:08.9±3.3, 54°.35N×87°.22E, h0km, mbtmp3.0/2, ML2.7/2, Error ellipse: s-maj=29.3km s-min=20.7km az=45.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.47** | **255** | I | I | 07 18 05.0 | |
| | baz=75,slow=318,SNR=7.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.47** | **255** | Pg | Pn | 07 09 34.4 | -2.2 |
| | 0.6nm,0.3s,baz=76,slow=16,SNR=2.5 | | | | | | |
| ZALV | | | | Lg | Lg | 07 09 55.3 | |
| | 1.1nm,0.3s,baz=73,slow=30,SNR=4.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.48** | **238** | Pn | Pn | 07 10 46.2 | +0.7 |
| | 0.2nm,0.3s,baz=50,slow=13,SNR=5.3 | | | | | | |
| KURBB | | | | Lg | Lg | 07 12 36.8 | |
| | baz=47,slow=33 | | | | | | |
| | 0.9nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.19** | **204** | Pn | Pn | 07 11 10.1 | +1.2 |
| | 0.1nm,0.3s,baz=22,slow=13,SNR=4.2 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**IDC 27 07:18:51.4±3.2, 54°.29N×87°.08E, h0km, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=28.7km s-min=20.5km az=51.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.37** | **256** | I | I | 07 27 30.0 | |
| | baz=75,slow=320,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.37** | **256** | Pg | Pg | 07 19 15.8 | -1.9 |
| | 0.4nm,0.3s,baz=71,slow=14,SNR=6.8 | | | | | | |
| ZALV | | | | Lg | Lg | 07 19 34.7 | |
| | 0.6nm,0.3s,baz=76,slow=36,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.38** | **238** | Pn | Pn | 07 20 27.8 | +1.1 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=7.0 | | | | | | |
| KURBB | | | | Lg | Lg | 07 22 15.4 | |
| | baz=57,slow=32,SNR=1.5 | | | | | | |
| | 0.5nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.10** | **204** | Pn | Pn | 07 20 51.2 | +1.0 |
| | 0.1nm,0.3s,baz=24,slow=15,SNR=2.0 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

**IDC 27 07:23:56.9±1.9, 17°.77E×177°.38W, h0km, mb4.1/4, mbtmp4.1/4, Error ellipse: s-maj=164.8km s-min=32.1km az=156.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **39.56** | **241** | P | P | 07 31 29.2 | -0.8 |
| | 0.9nm,0.3s,baz=90,slow=10,SNR=3.7 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.62** | **259** | P | P | 07 32 19.4 | 0.0 |
| | 1.7nm,0.6s,baz=94,slow=7.2,SNR=45 | | | | | | |
| | 1.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **45.77** | **254** | P | P | 07 32 20.9 | +0.2 |
| | 5.1nm,0.6s,baz=87,slow=8.7,SNR=78 | | | | | | |
| | 5.1nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.09** | **57** | P | P | 07 36 35.2 | 0.0 |
| | 0.4nm,0.7s,baz=216,slow=6.2,SNR=4.0 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

*VAO **27** 07:38:53.8±0.4, 21°.02S×68°.43W, h110km±5km, mb4.4*
*GUC **27** 07:38:54.6±0.6, 21°.15S×68°.69W, h116km±5km, ML4.0*
*NEIC **27** 07:38:54.8±1.6, 21°.10S±0°.04×68°.68W±0°.07, h125km±6km, mb4.5/19, ML4.0(GUC), Error ellipse: s-maj=9.1km s-min=4.5km az=107.0*
*IDC **27** 07:38:55.3±0.7, 21°.17S×68°.35W, h120km±5km, mb4.0/5, mbtmp4.3/9, MS2.7/1, Error ellipse: s-maj=24.6km s-min=8.8km az=109.0*

**ISC 27 07:38:53.6±0.5, 21°.11S±0°.03×68°.59W±0°.05, h120km±6km, n92, σ1°59/105, mb4.4/11, 7C-2D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.91** | **221** | | **Pn** | **07 39 16.1** | **+1.2** |
| PB09 | | | | Sn | **Sn** | **07 39 32.8** | **+1.7** |
| **PX03** | **IPOC Station P** | **1.20** | **306** | ⇑*e*P | **Pn** | **07 39 18.0** | **+0.2** |
| PX03 | | | | *e*S | **Sn** | **07 39 36.2** | **+0.2** |
| PX03 | | | | IAML | | 07 39 39.5 | |
| | comp=N,3μm,0.2s | | | | | | |
| **HMBC** | **Humberstone** | **1.47** | **304** | | **Pn** | **07 39 20.9** | **+0.2** |
| **HMBC** | **Humberstone** | **1.47** | **304** | ⇓*e*P | **Pn** | **07 39 21.4** | **+0.7** |
| HMBC | | | | *e*S | **Sn** | **07 39 41.8** | **+0.4** |
| HMBC | | | | IAML | | 07 39 43.5 | |
| | comp=E,5μm,0.5s | | | | | | |
| **PATCX** | **Punta Patache** | **1.49** | **281** | | **Pn** | **07 39 21.9** | **+1.0** |
| PATCX | | | | Sn | **Sn** | **07 39 42.2** | **+0.5** |
| **PATCX** | **Punta Patache** | **1.49** | **281** | *e*P | **Pn** | **07 39 21.7** | **+0.8** |
| PATCX | | | | *e*S | **Sn** | **07 39 41.8** | **+0.1** |
| PATCX | | | | IAML | | 07 39 45.7 | |
| | comp=E,7μm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **1.52** | **191** | P | **Pn** | **07 39 22.9** | **+1.2** |
| | comp=E,888nm,0.5s,baz=16,slow=10.0,SNR=1697 | | | | | | |
| LVC | | | | S | **Sn** | **07 39 43.9** | **+0.9** |
| | comp=E,237nm,0.3s,baz=283,slow=20,SNR=3.8 | | | | | | |
| LVC | | | | LR | LR | 07 40 01.1 | |
| | comp=E,149nm,20.7s,baz=2.5,slow=43 | | | | | | |
| **LVC** | **Limon Verde** | **1.52** | **191** | ⇑*e*P | **Pn** | **07 39 22.5** | **+0.9** |
| LVC | | | | *i* S | **Sn** | **07 39 43.8** | **+0.9** |
| LVC | | | | IAML | | 07 39 45.3 | |
| | comp=E,4μm,0.2s | | | | | | |
| **LVC** | **Limon Verde** | **1.52** | **191** | *e*P | **Pn** | **07 39 22.8** | **+1.2** |
| **GO01** | **Chusmiza** | **1.54** | **338** | Pn | **Pn** | **07 39 23.4** | **+1.4** |
| GO01 | | | | Sn | **Sn** | **07 39 45.5** | **+2.0** |
| **GO01** | **Chusmiza** | **1.54** | **338** | ⇓*e*P | **Pn** | **07 39 23.4** | **+1.4** |
| GO01 | | | | *i* S | **Sn** | **07 39 45.7** | **+2.2** |
| GO01 | | | | IAML | | 07 39 47.9 | |
| | comp=N,4μm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **1.58** | **290** | Pn | **Pn** | **07 39 22.5** | **+0.6** |
| **TA01** | **Diego Aracena** | **1.58** | **290** | *e*P | **Pn** | **07 39 22.4** | **+0.6** |
| TA01 | | | | *e*S | **Sn** | **07 39 44.0** | **+0.5** |
| TA01 | | | | IAML | | 07 39 45.7 | |
| | comp=E,3μm,0.4s | | | | | | |
| **TA02** | **Huaiquique** | **1.67** | **300** | | **Pn** | **07 39 23.6** | **+0.6** |
| **TA02** | **Huaiquique** | **1.67** | **300** | *e*P | **Pn** | **07 39 23.4** | **+0.5** |
| TA02 | | | | *e*S | **Sn** | **07 39 45.4** | **+0.1** |
| TA02 | | | | IAML | | 07 39 49.8 | |
| | comp=N,1μm,0.1s | | | | | | |
| **AF01** | **San Pedro de A** | **1.87** | **168** | | **Pn** | **07 39 28.0** | **+2.2** |
| **AF01** | **San Pedro de A** | **1.87** | **168** | ⇑*e*P | **Pn** | **07 39 27.6** | **+1.8** |
| AF01 | | | | *e*S | **Sn** | **07 39 52.1** | **+1.8** |
| AF01 | | | | IAML | | 07 39 57.3 | |
| | comp=E,2μm,0.8s | | | | | | |
| **PB04** | **IPOC Station P** | **1.89** | **230** | Pn | **Pn** | **07 39 26.2** | **+0.3** |
| **PB04** | **IPOC Station P** | **1.89** | **230** | ⇑*e*P | **Pn** | **07 39 26.2** | **+0.3** |
| PB04 | | | | *e*S | **Sn** | **07 39 50.3** | **-0.2** |
| PB04 | | | | IAML | | 07 39 58.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| **PB14** | **IPOC Station P** | **3.88** | **205** | | **Pn** | **07 39 51.2** | **-0.6** |
| **GO02** | **Mina Guanaco** | **4.14** | **193** | | **Pn** | **07 39 55.3** | **+0.1** |
| **LPAZ** | **La Paz** | **4.82** | **5** | | **Pn** | **07 40 07.0** | **+2.4** |
| **LPAZ** | **La Paz** | **4.82** | **5** | P | **Pn** | **07 40 06.8** | **+2.1** |
| | comp=E,24nm,0.5s,baz=171,slow=2.1,SNR=220 | | | | | | |
| LPAZ | | | | S | **Sn** | **07 41 03.0** | **+3.2** |
| | comp=E,9.5nm,0.6s,baz=356,slow=21,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **4.82** | **5** | *e*P | **Pn** | **07 40 03.6** | **-1.0** |
| **AC01** | **Pan de Azucar** | **5.34** | **200** | Pn | **Pn** | **07 40 09.4** | **-1.8** |
| **AC06** | **Mina Casimiro** | **6.42** | **194** | Pn | **Pn** | **07 40 22.8** | **-3.0** |
| **AC04** | **Llanos de Chal** | **7.42** | **197** | | **Pn** | **07 40 34.7** | **-4.4** |
| **AC05** | **El Transito** | **7.84** | **191** | Pn | **Pn** | **07 40 42.4** | **-2.7** |
| **LCO** | **Las Campanas** | **8.10** | **193** | | **Pn** | **07 40 44.6** | **-4.0** |
| **FDPY** | **Filadelfia** | **8.12** | **100** | *e*P | **Pn** | **07 40 47.0** | **-1.7** |
| **BBSD** | **Serra de San D** | **8.49** | **64** | *e*P | **Pn** | **07 40 51.1** | **-2.7** |
| **SIV** | **San Ignacio** | **8.76** | **56** | P | **Pn** | **07 40 55.1** | **-2.4** |
| | comp=E,40nm,0.5s,baz=248,slow=9.5,SNR=375 | | | | | | |
| SIV | | | | LR | LR | 07 45 06.2 | |
| | comp=E,47nm,18.6s,baz=42,slow=43 | | | | | | |
| **CO01** | **Juntas del Tor** | **9.93** | **188** | | **Pn** | **07 40 57.4** | **-2.4** |
| **CO03** | **El Pedregal** | **9.87** | **191** | Pn | **Pn** | **07 41 08.1** | **-4.3** |
| **CO06** | **Fray Jorge** | **9.91** | **195** | Pn | Pn | 07 41 07.1 | -5.7 |
| **CO02** | **Combarbal** | **10.28** | **192** | Pn | Pn | 07 41 13.0 | -5.0 |
| **PTLB** | **Pontes e Lacer** | **10.60** | **59** | Pn | **Pn** | **07 41 19.7** | **-2.4** |
| **PTLB** | **Pontes e Lacer** | **10.60** | **59** | *e*P | **Pn** | **07 41 19.4** | **-2.7** |
| **VILB** | **Vilhena** | **11.41** | **46** | Pn | **Pn** | **07 41 31.3** | **-1.7** |
| **ETMB** | **Extrema** | **11.46** | **12** | | **Pn** | **07 41 31.8** | **-1.9** |
| **ETMB** | **Extrema** | **11.46** | **12** | *e*P | **Pn** | **07 41 31.4** | **-2.3** |
| **CPUP** | **Villa Florida** | **11.55** | **119** | P | **Pn** | **07 41 34.9** | **+0.1** |
| | comp=E,1.5nm,0.9s,baz=312,slow=13,SNR=3.5 | | | | | | |
| **VA06** | **Catapilco** | **11.66** | **191** | Pn | Pn | 07 41 30.6 | -5.6 |
| **VA03** | **San Esteban** | **11.74** | **188** | Pn | **Pn** | **07 41 33.2** | **-4.2** |
| **SAML** | **Samuel** | **13.17** | **24** | Pn | **Pn** | **07 41 56.2** | **+0.1** |
| **SAML** | **Samuel** | **13.17** | **24** | *e*P | **Pn** | **07 41 54.2** | **-1.9** |
| **SALV** | **Santo Antonio** | **13.28** | **69** | *e*P | **Pn** | **07 41 56.5** | **-1.0** |
| **BO01** | **Tunca** | **13.41** | **189** | Pn | **Pn** | **07 41 59.5** | **+0.3** |
| **CZSB** | **Cruzeiro do Su** | **13.88** | **343** | P | **P** | **07 42 10.5** | **+0.9** |
| **CZSB** | **Cruzeiro do Su** | **13.88** | **343** | *e*P | **P** | **07 42 05.8** | **+0.5** |
| **CRSM** | **Crissiumal (Br** | **14.70** | **118** | *e*P | **Pn** | **07 42 15.4** | **-0.3** |
| **PDRB** | **Porto dos Gac** | **14.78** | **52** | *e*P | **Pn** | **07 42 15.5** | **-1.2** |
| **ITAB** | **Concordia** | **16.20** | **115** | | **P** | **07 42 35.5** | **+0.2** |
| ITAB | | | | IAmb | IAmb | 07 42 36.4 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **CPSB** | **Cacapava Do Su** | **16.48** | **127** | *e*P | **Pn** | **07 42 37.0** | **-0.7** |
| **ARAG** | **Araguaiana, MT** | **16.80** | **74** | *e*P | **P** | **07 42 41.7** | **-0.2** |
| **TBTG** | **Tabatinga, AM** | **16.87** | **355** | P | **P** | **07 42 42.9** | **+0.2** |
| **TBTG** | **Tabatinga, AM** | **16.87** | **355** | *e*P | **P** | **07 42 42.4** | **-0.3** |
| **TRQA** | **Tornquist** | **17.83** | **163** | P | **Pn** | **07 42 53.6** | **-0.5** |
| **SNDB** | **Serra Nova Dou** | **18.89** | **64** | *e*P | **P** | **07 43 04.3** | **-0.5** |
| **NPGB** | **Novo Progresso** | **18.96** | **44** | *e*P | **P** | **07 43 03.9** | **-1.7** |
| **MACA** | **Manacapuru-AM** | **19.43** | **24** | P | **P** | **07 43 09.5** | **-1.2** |
| **MACA** | **Manacapuru-AM** | **19.43** | **24** | *e*P | **P** | **07 43 09.1** | **-1.6** |
| **IPMB** | **Ipameri, GO** | **19.45** | **84** | *e*P | **P** | **07 43 10.4** | **-0.7** |
| **PLCA** | **Paso Flores** | **19.63** | **184** | P | **Pn** | **07 43 14.8** | **-0.6** |
| **PLCA** | **Paso Flores** | **19.63** | **184** | *e*P | **Pn** | **07 43 14.1** | **-1.2** |
| | comp=Z,9.2nm,0.9s,baz=354,slow=12,SNR=18 | | | | | | |
| **PLCA** | **Paso Flores** | **19.63** | **184** | *e*P | **Pn** | **07 43 13.8** | **-1.5** |
| **LL04** | **Puerto Octay** | **20.00** | **188** | P | **Pn** | **07 43 17.8** | **-1.7** |
| LL04 | | | | IAmb | IAmb | 07 43 18.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **BDFB** | **Brasilia** | **20.26** | **78** | P | **P** | **07 43 20.2** | **+0.3** |
| **BDFB** | **Brasilia** | **20.26** | **78** | *e*P | **P** | **07 43 19.3** | **-0.5** |
| | comp=Z,4.2nm,0.5s,baz=252,slow=10,SNR=15 | | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **OTAV** | **Otavalo** | **23.30** | **334** | *e*P | **P** | **07 43 52.6** | **+1.1** |
| **MAL2** | **Monte Alegre,** | **23.61** | **38** | P | **P** | **07 43 53.1** | **-0.8** |
| MAL2 | | | | IAmb | IAmb | 07 43 54.1 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **BOAV** | **Boa Vista** | **24.66** | **20** | P | **P** | **07 44 03.6** | **+0.3** |
| BOAV | | | | IAmb | IAmb | 07 44 04.3 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **BOAV** | **Boa Vista** | **24.66** | **20** | *e*P | **P** | **07 44 03.9** | **+0.6** |
| **BAUV** | **El Baul** | **29.87** | **1** | P | **P** | **07 44 49.3** | **-0.6** |
| BAUV | | | | IAmb | IAmb | 07 44 50.6 | |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **MG03** | **Isla Dawson** | **32.72** | **182** | P | **P** | **07 45 16.3** | **+1.8** |
| **OBIP** | **Obispado Ponce** | **38.96** | **3** | P | **P** | **07 46 06.9** | **-1.2** |
| OBIP | | | | IAmb | IAmb | 07 46 33.8 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **PDPR** | **Patillas Dam,** | **38.97** | **4** | P | **P** | **07 46 06.6** | **-1.5** |
| PDPR | | | | IAmb | IAmb | 07 46 38.8 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **CELP** | **Cerrillos** | **38.99** | **3** | P | **P** | **07 46 08.1** | **-0.3** |
| CELP | | | | IAmb | IAmb | 07 46 08.8 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **UTMT** | **University of** | **60.27** | **341** | P | **P** | **07 48 47.8** | **-1.5** |
| **VNA2** | **Neumayer--Watz** | **60.92** | **161** | ⇑P | **P** | **07 48 54.9** | **+1.5** |
| | comp=Z,2.7nm,0.6s,baz=284,slow=7.7 | | | | | | |
| **SNAA** | **Sanae** | **62.55** | **161** | P | **P** | **07 49 05.8** | **+1.4** |
| SNAA | | | | IAmb | IAmb | 07 49 06.2 | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **62.55** | **161** | ⇑P | **P** | **07 49 05.8** | **+1.4** |
| | comp=Z,73nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **62.55** | **161** | P | **P** | **07 49 05.6** | **+1.2** |
| | comp=Z,2.9nm,0.6s,baz=288,slow=7.4,SNR=24 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **64.27** | **161** | ⇑P | **P** | **07 49 17.0** | **+1.2** |
| | comp=Z,162nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.08** | **180** | P | **P** | **07 49 48.3** | **+1.9** |
| QSPA | | | | IAmb | IAmb | 07 49 49.5 | |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.08** | **180** | P | **P** | **07 49 48.3** | **+1.9** |
| | comp=Z,2.5nm,0.6s,baz=174,slow=0.6,SNR=22 | | | | | | |
| QSPA | | | | pP | **pP** | **07 50 18.9** | **+1.8** |
| | comp=Z,1.2nm,0.6s,baz=136,slow=1.7,SNR=2.9 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.94** | **70** | P | **P** | **07 50 33.7** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **76.94** | **70** | P | **P** | **07 50 33.2** | **-0.2** |
| | comp=Z,2.2nm,0.6s,baz=257,slow=5.2,SNR=18 | | | | | | |
| TORD | | | | pP | **pP** | **07 51 03.8** | **-1.2** |
| | comp=Z,0.4nm,0.6s,baz=253,slow=5.1,SNR=1.1 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **84.62** | **163** | P | **P** | **07 51 14.0** | **+0.7** |
| | comp=Z,2.4nm,0.7s,baz=275,slow=9.0,SNR=2.7 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **130.39** | **207** | PKP | **PKiKP** | **07 57 52.0** | **+0.4** |
| | comp=Z,0.8nm,0.9s,baz=137,slow=2.0,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **133.44** | **210** | PKP | **PKiKP** | **07 57 57.7** | **0.0** |
| | comp=Z,0.6nm,0.6s,baz=159,slow=1.5,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.14** | **36** | PKPbc | **PKPdf** | **07 58 18.2** | **+1.3** |
| | comp=Z,0.5nm,0.6s,baz=297,slow=5.0,SNR=5.2 | | | | | | |
| MKAR | | | | pPKPbc | pPKPab | 07 58 49.8 | +0.1 |
| | comp=Z,0.7nm,0.8s,baz=274,slow=4.7,SNR=4.2 | | | | | | |

*NEIC **27** 07:44:55.0±0.6, 37°.37N±0°.01×98°.00W±0°.02, h5km±1km, mb_Lg3.4/143, ML3.6/38, Error ellipse: s-maj=3.7km s-min=3.0km az=66.0*
*IDC **27** 07:44:56.8±1.6, 37°.52N×98°.40W, h0km, mb3.1/1, mbtmp3.3/4, ML3.9/2, MS2.4/1, Error ellipse: s-maj=26.1km s-min=10.0km az=100.0*

**ISC 27 07:44:55.2±0.7, 37°.39N±0°.03×98°.04W±0°.03, h10km, n108, σ1°01/55, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.10** | **161** | | **Pg** | **07 44 57.2** | **-0.6** |
| KAN12 | | | | Sg | **Sg** | **07 44 58.5** | **-1.2** |
| KAN12 | | | | IAML | | 07 44 58.7 | |
| | comp=N,46μm,0.4s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.17** | **162** | | **Pg** | **07 44 58.5** | **-0.5** |
| KAN08 | | | | Sg | **Sg** | **07 45 00.6** | **-0.9** |
| **KAN05** | **Bluff City Nor** | **0.31** | **155** | Pg | **Pg** | **07 45 01.0** | **-0.5** |
| KAN05 | | | | Sg | **Sg** | **07 45 05.1** | **-0.5** |
| **KS21** | **Milan North St** | **0.32** | **109** | IAML | | 07 45 05.4 | |
| | comp=N,6μm,0.1s | | | | | | |
| KS21 | | | | IAML | | 07 45 06.6 | |
| | comp=N,14μm,0.3s | | | | | | |
| **KS21** | **Milan North St** | **0.32** | **109** | | **Pg** | **07 45 01.0** | **-0.6** |
| **KAN01** | **Argonia South** | **0.33** | **137** | | **Pg** | **07 45 01.2** | **-0.6** |
| **KAN17** | **Caldwell West** | **0.41** | **148** | | **Pg** | **07 45 02.7** | **-0.6** |
| KAN17 | | | | IAML | | 07 45 09.9 | |
| | comp=N,5μm,0.4s | | | | | | |
| KAN17 | | | | IAML | | 07 45 15.0 | |
| | comp=E,5μm,0.3s | | | | | | |
| **KAN09** | **Caldwell North** | **0.42** | **127** | | **Pg** | **07 45 02.9** | **-0.6** |
| KAN09 | | | | IAML | | 07 45 08.3 | |
| | comp=N,8μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 07 45 08.6 | |
| | comp=E,9μm,0.4s | | | | | | |
| **KAN14** | **Manchester OK** | **0.44** | **172** | | **Pg** | **07 45 03.5** | **-0.3** |
| KAN14 | | | | IAML | | 07 45 11.3 | |
| | comp=E,4μm,0.6s | | | | | | |
| **GC02** | **Grant County #** | **0.56** | **165** | Pg | **Pg** | **07 45 05.5** | **-0.5** |
| **KAN13** | **South Haven SW** | **0.59** | **130** | | **Pg** | **07 45 05.9** | **-0.7** |
| KAN13 | | | | IAML | | 07 45 13.6 | |
| | comp=N,5μm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.60** | **193** | Pg | **Pg** | **07 45 06.7** | **-0.2** |
| **CROK** | **Carrier** | **0.89** | **177** | Pg | **Pg** | **07 45 11.5** | **-0.8** |
| CRO

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Z35A** | **Perchaven, San** | **4.10** | **171** | Pn | **Pn** | **07 45 57.8** | **-0.2** |
| Z35A | | | | IAmb_Lg | | 07 47 14.9 | |
| | comp=Z,79nm,1.0s | | | | | | |
| **P38A** | **Dawn** | **4.18** | **56** | Pn | **Pn** | **07 45 60.0** | **+0.9** |
| P38A | | | | IAmb_Lg | | 07 47 13.5 | |
| | comp=Z,71nm,0.7s | | | | | | |
| **DKNS** | **Dickens** | **4.40** | **213** | IAmb_Lg | | 07 47 16.9 | |
| | comp=Z,82nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **4.66** | **77** | IAmb_Lg | | 07 47 27.1 | |
| | comp=Z,63nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **4.71** | **320** | IAmb_Lg | | 07 47 36.2 | |
| | comp=Z,59nm,0.7s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.82** | **148** | IAmb_Lg | | 07 47 31.7 | |
| | comp=Z,67nm,0.9s | | | | | | |
| **SN07** | **Snyder 07** | **4.88** | **209** | IAmb_Lg | | 07 47 32.9 | |
| | comp=Z,65nm,0.8s | | | | | | |
| **TREL** | **Terrell** | **4.92** | **160** | IAmb_Lg | | 07 47 39.9 | |
| | comp=Z,54nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.99** | **106** | IAmb_Lg | | 07 47 31.1 | |
| | comp=Z,80nm,0.8s | | | | | | |
| **FW16** | **Waxahatchie** | **4.99** | **169** | IAmb_Lg | | 07 47 41.0 | |
| | comp=Z,41nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **5.05** | **46** | IAmb_Lg | | 07 47 45.5 | |
| | comp=Z,102nm,0.8s | | | | | | |
| **SN05** | **Snyder 5** | **5.07** | **208** | IAmb_Lg | | 07 47 36.5 | |
| | comp=Z,43nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.12** | **123** | IAmb_Lg | | 07 47 42.7 | |
| | comp=Z,84nm,0.9s | | | | | | |
| **POST** | **Post** | **5.16** | **214** | IAmb_Lg | | 07 47 51.0 | |
| | comp=Z,44nm,0.7s | | | | | | |
| **P40A** | **Paris** | **5.16** | **64** | IAmb_Lg | | 07 47 44.3 | |
| | comp=Z,75nm,0.9s | | | | | | |
| **UALR** | **University of** | **5.30** | **118** | IAmb_Lg | | 07 47 52.2 | |
| | comp=Z,66nm,0.8s | | | | | | |
| **K30B** | **Basset** | **5.41** | **348** | IAmb_Lg | | 07 48 00.5 | |
| | comp=Z,68nm,0.7s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.43** | **81** | IAmb_Lg | | 07 47 47.2 | |
| | comp=Z,59nm,0.7s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.46** | **131** | IAmb_Lg | | 07 47 48.8 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **T42A** | **Van Buren** | **5.56** | **92** | IAmb_Lg | | 07 47 52.3 | |
| | comp=Z,74nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **5.68** | **160** | IAmb_Lg | | 07 48 06.8 | |
| | comp=Z,58nm,1.0s | | | | | | |
| **Q24A** | **Divide** | **5.82** | **288** | IAmb_Lg | | 07 48 14.4 | |
| | comp=Z,47nm,0.9s | | | | | | |
| **BRIGG** | **Briggsdale** | **5.84** | **305** | IAmb_Lg | | 07 48 05.6 | |
| | comp=Z,41nm,1.0s | | | | | | |
| **Z41A** | **Richland Creek** | **5.94** | **132** | IAmb_Lg | | 07 48 13.4 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **SGCY** | **Sterling City** | **6.03** | **206** | IAmb_Lg | | 07 48 20.2 | |
| | comp=Z,82nm,1.0s | | | | | | |
| **FVM** | **French Village** | **6.07** | **82** | IAmb_Lg | | 07 48 17.6 | |
| | comp=Z,47nm,0.7s | | | | | | |
| **CCAR** | **Cane Creek** | **6.17** | **122** | IAmb_Lg | | 07 48 22.5 | |
| | comp=Z,67nm,0.9s | | | | | | |
| **SLM** | **Saint Louis** | **6.29** | **76** | IAmb_Lg | | 07 48 15.3 | |
| | comp=Z,73nm,1.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.43** | **9** | IAmb_Lg | | 07 48 19.8 | |
| | comp=Z,37nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **6.60** | **177** | IAmb_Lg | | 07 48 35.4 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.68** | **88** | IAmb_Lg | | 07 48 29.7 | |
| | comp=Z,64nm,0.7s | | | | | | |
| **OZNA** | **Ozona** | **6.94** | **203** | IAmb_Lg | | 07 48 50.4 | |
| | comp=Z,49nm,1.2s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **6.99** | **276** | IAmb_Lg | | 07 48 50.6 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **7.05** | **69** | IAmb_Lg | | 07 48 46.7 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **SUSD** | **Miller** | **7.08** | **355** | IAmb_Lg | | 07 48 50.2 | |
| | comp=Z,47nm,0.9s | | | | | | |
| **143A** | **Socs Landing,** | **7.17** | **129** | IAmb_Lg | | 07 48 55.8 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.27** | **75** | IAmb_Lg | | 07 48 59.3 | |
| | comp=Z,65nm,0.9s | | | | | | |
| **UTMT** | **University of** | **7.43** | **95** | IAmb_Lg | | 07 48 53.5 | |
| | comp=Z,153nm,0.9s | | | | | | |
| **HDIL** | **Hopedale** | **7.51** | **62** | IAmb_Lg | | 07 49 00.5 | |
| | comp=Z,61nm,0.8s | | | | | | |
| **PECS** | **Pecos** | **7.70** | **220** | IAmb_Lg | | 07 49 11.8 | |
| | comp=Z,54nm,1.2s | | | | | | |
| **HNDO** | **Hondo** | **7.91** | **188** | IAmb_Lg | | 07 49 20.5 | |
| | comp=Z,26nm,0.9s | | | | | | |
| **L42A** | **Oliver, Polo** | **7.93** | **52** | IAmb_Lg | | 07 49 08.2 | |
| | comp=Z,53nm,0.8s | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **7.94** | **248** | IAmb_Lg | | 07 49 29.2 | |
| | comp=Z,56nm,1.1s | | | | | | |
| **VBMS** | **Vicksburg** | **8.05** | **128** | IAmb_Lg | | 07 49 29.4 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **SAND** | **Sanderson** | **8.16** | **206** | IAmb_Lg | | 07 49 33.7 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **DRIO** | **Del Rio** | **8.23** | **196** | IAmb_Lg | | 07 49 28.7 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **K22A** | **Casper** | **8.36** | **312** | IAmb_Lg | | 07 49 36.4 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **ALPN** | **Alpine** | **8.40** | **215** | IAmb_Lg | | 07 49 33.6 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.41** | **104** | IAmb_Lg | | 07 49 18.3 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **8.54** | **8** | IAmb_Lg | | 07 49 29.4 | |
| | comp=Z,28nm,0.9s | | | | | | |
| **I40A** | **Norwalk** | **8.60** | **39** | IAmb_Lg | | 07 49 34.3 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **VHRN** | **Van Horn** | **8.75** | **223** | IAmb_Lg | | 07 49 44.3 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **SPMN** | **Marine on St.** | **8.76** | **25** | IAmb_Lg | | 07 49 40.7 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **146A** | **Union** | **8.76** | **120** | IAmb_Lg | | 07 49 51.1 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **Z47A** | **Carrollton** | **9.16** | **114** | IAmb_Lg | | 07 49 59.0 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **9.31** | **212** | Pn | **Pn** | **07 47 09.6** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=37,slow=14,SNR=13 | | | | | | |
| TXAR | | | | Sn | **Sn** | **07 48 51.5** | **-2.9** |
| | comp=Z,0.3nm,0.3s,baz=293,slow=28,SNR=3.7 | | | | | | |
| TXAR | | | | Lg | Lg | 07 49 45.4 | |
| | comp=Z,0.5nm,0.3s,baz=34,slow=27,SNR=6.1 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **E28A** | **Huff** | **9.39** | **349** | IAmb_Lg | | 07 50 05.3 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **G40A** | **Rib Lake** | **9.83** | **34** | IAmb_Lg | | 07 50 09.1 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **10.33** | **305** | Pn | **Pn** | **07 47 23.3** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=118,slow=15,SNR=7.9 | | | | | | |
| PDAR | | | | Lg | Lg | 07 50 09.3 | |
| | comp=Z,0.2nm,0.3s,baz=120,slow=31,SNR=2.3 | | | | | | |
| PDAR | | | | LR | LR | 07 51 40.6 | |
| | comp=Z,20nm,19.7s,baz=68,slow=40 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ULM** | **Lac du Bonnet** | **12.95** | **6** | Pn | **Pn** | **07 47 56.0** | **-3.2** |
| | comp=Z,3.0nm,0.9s,baz=186,slow=16,SNR=2.7 | | | | | | |
| ULM | | | | Sn | Sn | 07 50 12.8 | -10 |
| | comp=Z,0.5nm,0.3s,baz=232,slow=17,SNR=2.1 | | | | | | |
| ULM | | | | Lg | Lg | 07 51 33.0 | |
| | comp=Z,0.2nm,0.3s,baz=180,slow=20,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **39.56** | **330** | P | **P** | **07 52 27.9** | **+1.8** |
| | comp=Z,0.2nm,0.6s,baz=109,slow=8.5,SNR=2.3 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |

*NEIC* ***27*** *08:07:20.6±2.5,24.°05S±0.°08×67.°0W±0.°1,h201km±9km, mb4.0/6,ML4.1(GUC),Error ellipse: s-maj=18.0km s-min=10.7km az=98.0*
*IDC* ***27*** *08:07:20.2±1.2,23.°95S×66.°79W,h182km±13km,mb3.2/4, mbtmp3.7/10,Error ellipse: s-maj=17.2km s-min=15.8km az=132.0*
*GUC* ***27*** *08:07:20.9±0.5,24.°05S×67.°21W,h225km±6km,ML4.0*
**ISC 27 08:07:20.3**±0.7**,24.°03S**±0.°04×**66.°97W**±0.°07**,h198**km±8km**, n45**,σ1°53/58**,mb3.6**/4,**4C,Salta Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **1.54** | **314** | | **Pn** | **08 07 56.0** | **+1.3** |
| AF01 | | | | Sn | **S** | **08 08 23.4** | **+2.3** |
| **AF01** | **San Pedro de A** | **1.54** | **314** | *e*P | **Pn** | **08 07 55.9** | **+1.3** |
| AF01 | | | | e*S* | **S** | **08 08 22.6** | **+1.4** |
| AF01 | | | | IAML | | 08 08 33.6 | |
| | comp=E,269nm,0.3s | | | | | | |
| **LVC** | **Limon Verde** | **2.27** | **308** | P | **Pn** | **08 08 02.9** | **+0.9** |
| | comp=E,43nm,0.2s,baz=99,slow=9.5,SNR=174 | | | | | | |
| LVC | | | | S | **S** | **08 08 33.5** | **-0.8** |
| | comp=E,50nm,0.3s,baz=112,slow=7.0,SNR=4.9 | | | | | | |
| **LVC** | **Limon Verde** | **2.27** | **308** | *e*P | **Pn** | **08 08 03.0** | **+0.9** |
| LVC | | | | e*S* | **S** | **08 08 34.6** | **+0.3** |
| LVC | | | | IAML | | 08 08 35.9 | |
| | comp=E,1μm,0.4s | | | | | | |
| **YJA** | **Yavi** | **2.28** | **36** | *e*P | **Pn** | **08 08 02.4** | **+0.2** |
| **GO02** | **Mina Guanaco** | **2.64** | **244** | | **Pn** | **08 08 06.5** | **+0.5** |
| **GO02** | **Mina Guanaco** | **2.64** | **244** | *e*P | **Pn** | **08 08 06.5** | **+0.5** |
| GO02 | | | | e*S* | **S** | **08 08 41.3** | **-0.3** |
| GO02 | | | | IAML | | 08 08 42.2 | |
| | comp=N,746nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **3.05** | **316** | Pn | **Pn** | **08 08 12.0** | **+1.3** |
| **PB14** | **IPOC Station P** | **3.19** | **259** | | **Pn** | **08 08 12.6** | **+0.2** |
| **PB14** | **IPOC Station P** | **3.19** | **259** | *e*P | **Pn** | **08 08 12.6** | **+0.2** |
| PB14 | | | | e*S* | **S** | **08 08 51.0** | **-2.1** |
| PB14 | | | | IAML | | 08 08 55.0 | |
| | comp=E,60nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **3.37** | **299** | | **Pn** | **08 08 14.8** | **+0.2** |
| **PB04** | **IPOC Station P** | **3.37** | **299** | *e*P | **Pn** | **08 08 14.6** | **0.0** |
| PB04 | | | | e*S* | **S** | **08 08 55.0** | **-1.9** |
| **AC01** | **Pan de Azucar** | **3.91** | **237** | Pn | **Pn** | **08 08 20.1** | **-0.8** |
| **AC01** | **Pan de Azucar** | **3.91** | **237** | *e*P | **Pn** | **08 08 20.3** | **-0.6** |
| AC01 | | | | e*S* | **S** | **08 09 06.0** | **-2.4** |
| **PATCX** | **Punta Patache** | **4.34** | **317** | | **Pn** | **08 08 26.8** | **+0.3** |
| **PATCX** | **Punta Patache** | **4.34** | **317** | *e*P | **Pn** | **08 08 26.5** | **+0.1** |
| PATCX | | | | e*S* | **S** | **08 09 15.1** | **-3.3** |
| **AC06** | **Mina Casimiro** | **4.51** | **222** | | **Pn** | **08 08 27.4** | **-1.0** |
| **AC06** | **Mina Casimiro** | **4.51** | **222** | *e*P | **Pn** | **08 08 27.5** | **-1.0** |
| AC06 | | | | e*S* | **S** | **08 09 19.7** | **-2.4** |
| **TA01** | **Diego Aracena** | **4.55** | **319** | | **Pn** | **08 08 28.6** | **-0.4** |
| **TA01** | **Diego Aracena** | **4.55** | **319** | *e*P | **Pn** | **08 08 28.3** | **-0.7** |
| TA01 | | | | e*S* | **S** | **08 09 19.8** | **-3.1** |
| **HMBC** | **Humberstone** | **4.61** | **324** | | **Pn** | **08 08 26.6** | **-3.3** |
| **HMBC** | **Humberstone** | **4.61** | **324** | *e*P | **Pn** | **08 08 26.6** | **-3.3** |
| **GO03** | **Copiap** | **4.61** | **219** | Pn | **Pn** | **08 08 28.7** | **-1.1** |
| **GO03** | **Copiap** | **4.61** | **219** | *e*P | **Pn** | **08 08 28.9** | **-0.9** |
| GO03 | | | | e*S* | **S** | **08 09 22.0** | **-2.5** |
| **LPAZ** | **La Paz** | **7.78** | **352** | P | **Pn** | **08 09 11.9** | **+0.6** |
| | comp=E,2.2nm,0.3s,baz=138,slow=4.8,SNR=32 | | | | | | |
| LPAZ | | | | S | **S** | **08 10 38.3** | **-1.2** |
| | comp=E,0.9nm,0.6s,baz=162,slow=25,SNR=1.7 | | | | | | |
| **CPUP** | **Villa Florida** | **9.03** | **107** | P | **Pn** | **08 09 24.9** | **-2.1** |
| | comp=E,0.5nm,0.5s,baz=290,slow=7.0,SNR=1.7 | | | | | | |
| **SIV** | **San Ignacio** | **9.73** | **36** | P | **Pn** | **08 09 34.3** | **-1.9** |
| | comp=E,1.4nm,0.3s,baz=208,slow=11,SNR=18 | | | | | | |
| **ETMB** | **Extrema** | **14.15** | | 3 | **Pn** | **08 10 32.8** | **+0.5** |
| **TRQA** | **Tornquist** | **14.62** | **164** | Pn | **Pn** | **08 10 36.0** | **-1.9** |
| **PLCA** | **Paso Flores** | **16.93** | **189** | P | **P** | **08 11 04.1** | **-0.4** |
| PLCA | | | | IAmb | IAmb | 08 11 28.4 | |
| | comp=Z,4.9nm,1.4s | | | | | | |
| **PLCA** | **Paso Flores** | **16.93** | **189** | P | **Pn** | **08 11 07.2** | **+1.4** |
| | comp=Z,1.8nm,0.8s,baz=351,slow=9.0,SNR=4.4 | | | | | | |
| **VAO** | **Valinhos** | **18.38** | **91** | P | **P** | **08 11 19.8** | **-0.8** |
| **BDFB** | **Brasilia** | **19.67** | **68** | P | **P** | **08 11 34.0** | **-0.6** |
| BDFB | | | | IAmb | IAmb | 08 11 35.5 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **BDFB** | **Brasilia** | **19.67** | **68** | P | **P** | **08 11 33.6** | **-0.9** |
| | comp=Z,5.1nm,0.7s,baz=239,slow=12,SNR=7.9 | | | | | | |
| **SNAA** | **Sanae** | **59.32** | **161** | P | **P** | **08 17 02.2** | **+1.2** |
| SNAA | | | | IAmb | IAmb | 08 17 05.4 | |
| | comp=Z,5.3nm,1.5s | | | | | | |
| **SNAA** | **Sanae** | **59.32** | **161** | P | **P** | **08 17 02.7** | **+1.7** |
| | comp=Z,0.7nm,0.8s,baz=346,slow=1.9,SNR=2.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.71** | **324** | P | **P** | **08 17 33.0** | **+2.0** |
| | comp=Z,0.1nm,0.6s,baz=169,slow=5.2,SNR=1.9 | | | | | | |
| | comp=Z,0.1nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.18** | **180** | P | **P** | **08 17 48.5** | **+2.0** |
| QSPA | | | | IAmb | IAmb | 08 17 49.3 | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.18** | **180** | P | **P** | **08 17 48.7** | **+2.3** |
| | comp=Z,1.0nm,0.5s,baz=303,slow=0.8,SNR=11 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.56** | **69** | P | **P** | **08 18 48.9** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **76.56** | **69** | P | **P** | **08 18 49.4** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=260,slow=5.4,SNR=11 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **128.44** | **205** | PKP | **PKiKP** | **08 26 05.8** | **+1.0** |
| | comp=Z,0.1nm,0.5s,baz=135,slow=2.6,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.61** | **207** | PKP | **PKiKP** | **08 26 11.5** | **+0.2** |
| | comp=Z,0.4nm,0.9s,baz=152,slow=2.0,SNR=8.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **142.38** | **36** | PKP | **PKPdf** | **08 26 28.1** | **-0.9** |
| | comp=Z,0.6nm,0.2s,baz=315,slow=0.4,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.53** | **40** | PKPbc | **PKPab** | **08 26 39.8** | **+0.2** |
| | comp=Z,0.3nm,0.4s,baz=306,slow=2.7,SNR=4.0 | | | | | | |

*ISN* ***27*** *08:09:53.5±0.4,34.°69N×46.°13E,h4km±15km,ML2.8*
*TEH* ***27*** *08:09:54.6,34.°65N×46.°12E,h10km±33km,ML2.9*
**ISC 27 08:09:54.9**±1.0**,34.°64N**±0.°04×**46.°11E**±0.°03**,h10**km**,n11,**
**σ1°26/15,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.23** | **76** | Pg | **Pg** | **08 09 59.9** | **+0.1** |
| IDHR | | | | Sg | **Sg** | **08 10 03.9** | **+0.7** |
| **KGS1** | **Ghasr-e-Shirin** | **0.45** | **252** | Pg | **Pg** | **08 10 03.6** | **-0.2** |
| **IGHG** | **Ghaleghazi** | **0.49** | **130** | Pg | **Pg** | **08 10 04.3** | **-0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **198** | Pg | **Pb** | **08 10 06.4** | **-0.3** |
| **ILIN** | **Lien** | **0.75** | **68** | Pg | **Pg** | **08 10 09.2** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.85** | **115** | Pg | **Pg** | **08 10 10.6** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **175** | Pg | **Pg** | **08 10 14.3** | **-0.2** |
| **IBDR** | **Badra** | **1.54** | **186** | *e*Pn | **Pg** | **08 10 24.0** | **-0.4** |
| IBDR | | | | e*S*n | **Sg** | **08 10 46.5** | **+2.1** |
| IBDR | | | | AML | AML | 08 10 49.8 | |
| | comp=N,138nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 08 10 55.6 | |
| | comp=E,134nm,0.8s | | | | | | |
| **IKRK** | **Kirkuk** | **1.64** | **298** | *e*Pn | **Pb** | **08 10 25.0** | **-0.2** |
| IKRK | | | | e*S*n | **Sg** | **08 10 47.5** | **-0.1** |
| IKRK | | | | AML | AML | 08 10 54.1 | |
| | comp=N,196nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 08 10 57.0 | |
| | comp=E,140nm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.91** | **116** | Pn | **Pb** | **08 10 29.6** | **-0.4** |
| **RAFI** | **Al-Rafai** | **2.91** | **180** | *e*Pn | **Pn** | **08 10 43.0** | **+1.7** |
| RAFI | | | | e*S*n | **Sb** | **08 11 19.5** | **-3.1** |

*BUT* ***27*** *08:22:15.9±1.6,44.°79N±0.°03×112.°02W±0.°05,h6km±6km, Error ellipse: s-maj=5.9km s-min=3.8km az=120.0*
**NEIC 27 08:22:15.2**±1.8**,44.°75N**±0.°03×**112.°04W**±0.°03**,h5**km±1km**, ML2.5**/58**,ML2.9**/28(BUT),**Error ellipse: s-maj=5.6km s-min=3.1km az=328.0,Eastern Idaho**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMI** | **Centennial Mou** | **0.38** | **127** | | Pg | 08 22 23.4 | +0.8 |
| **YPDC** | **Denny Creek** | **0.57** | **94** | | Pg | 08 22 26.6 | +0.3 |
| YPDC | | | | | Sg | 08 22 34.8 | +1.1 |
| **YHB** | **Horse Butte** | **0.60** | **90** | | Pg | 08 22 27.1 | +0.3 |
| **YHL** | **Hebgen Lake** | **0.62** | **81** | | Pg | 08 22 27.2 | +0.1 |
| YHL | | | | Sg | Sg | 08 22 35.5 | +0.3 |
| YHL | | | | IAML | | 08 22 36.2 | |
| | comp=E,333nm,0.5s | | | | | | |
| YHL | | | | IAML | | 08 22 38.5 | |
| | comp=N,226nm,0.5s | | | | | | |
| **GCR** | **Grayling Creek** | **0.67** | **86** | | Pg | 08 22 28.5 | +0.4 |
| **YPWB** | **West Boundary** | **0.69** | **102** | | Pb | 08 22 29.2 | -0.6 |
| **DLMT** | **Dillon** | **0.72** | **327** | | Pg | 08 22 29.5 | +0.3 |
| DLMT | | | | Sg | Sg | 08 22 39.2 | +0.6 |
| DLMT | | | | IAML | | 08 22 39.8 | |
| | comp=N,182nm,0.6s | | | | | | |
| DLMT | | | | IAML | | 08 22 39.8 | |
| | comp=N,213nm,0.7s | | | | | | |
| **YMC** | **Maple Creek** | **0.74** | **89** | | Pg | 08 22 29.7 | +0.3 |
| **MCID** | **Moose Creek** | **0.83** | **132** | | Pb | 08 22 32.2 | -0.1 |
| **YPM** | **Purple Mountai** | **0.84** | **96** | | Pb | 08 22 32.1 | -0.4 |
| **YHH** | **Holmes Hill** | **0.85** | **87** | | Pg | 08 22 31.6 | +0.1 |
| **BOZ** | **Bozeman (W)** | **0.89** | **19** | | Pg | 08 22 31.4 | -1.0 |
| BOZ | | | | Sg | Sg | 08 22 43.2 | -0.7 |
| BOZ | | | | IAML | | 08 22 44.4 | |
| | comp=N,252nm,0.6s | | | | | | |
| BOZ | | | | IAML | | 08 22 48.9 | |
| | comp=N,136nm,0.3s | | | | | | |
| **YFT** | **Old Faithful** | **0.91** | **109** | | Pg | 08 22 33.2 | +0.5 |
| **YNM** | **Yellowstone No** | **0.95** | **91** | | Pg | 08 22 33.8 | +0.3 |
| YNM | | | | IAML | | 08 22 48.0 | |
| | comp=N,135nm,0.2s | | | | | | |
| YNM | | | | IAML | | 08 22 48.6 | |
| | comp=E,142nm,0.3s | | | | | | |
| **YNR** | **Norris Junctio** | **0.97** | **92** | | Pg | 08 22 34.1 | +0.3 |
| YNR | | | | IAML | | 08 22 48.8 | |
| | comp=N,102nm,0.5s | | | | | | |
| YNR | | | | IAML | | 08 22 50.2 | |
| | comp=E,89nm,0.6s | | | | | | |
| **YMV** | **Mammoth Vault** | **0.99** | **77** | | Pb | 08 22 34.7 | -0.2 |
| **YPP** | **Pitchstone Pla** | **1.01** | **118** | | Pb | 08 22 35.0 | -0.3 |
| YPP | | | | IAML | | 08 22 52.5 | |
| | comp=E,84nm,0.4s | | | | | | |
| **YML** | **Mary Lake** | **1.01** | **98** | | Pb | 08 22 35.0 | -0.3 |
| **H17A** | **Grant Village** | **1.11** | **108** | Pg | Pb | 08 22 36.9 | -0.1 |
| **IMW** | **Indian Meadow** | **1.17** | **137** | | Pg | 08 22 37.7 | +0.1 |
| IMW | | | | IAML | | 08 22 57.3 | |
| | comp=E,272nm,0.5s | | | | | | |
| IMW | | | | IAML | | 08 23 00.6 | |
| | comp=E,228nm,0.7s | | | | | | |
| **FLWY** | **Flagg Ranch** | **1.17** | **124** | | Pb | 08 22 38.0 | -0.1 |
| FLWY | | | | IAML | | 08 23 00.4 | |
| | comp=E,78nm,0.9s | | | | | | |
| **LKWY** | **Lake** | **1.19** | **99** | Pg | Pg | 08 22 37.5 | -0.4 |
| **YTP** | **The Promontory** | **1.31** | **105** | | Pb | 08 22 40.5 | +0.1 |
| **FXWY** | **Fox Creek** | **1.33** | **146** | | Pn | 08 22 40.4 | -0.3 |
| **YMP** | **Mirror Lake Pl** | **1.34** | **90** | Pg | Pb | 08 22 41.5 | +0.5 |
| YMP | | | | IAML | | 08 23 06.2 | |
| | comp=N,52nm,0.6s | | | | | | |
| YMP | | | | IAML | | 08 23 12.7 | |
| | comp=E,62nm,0.5s | | | | | | |
| **YPSB** | **Soda Butte** | **1.35** | **84** | | Pb | 08 22 41.4 | +0.3 |
| **TPAW** | **Teton Pass** | **1.49** | **148** | | Pn | 08 22 42.2 | -0.7 |
| TPAW | | | | IAML | | 08 23 08.1 | |
| | comp=E,79nm,0.5s | | | | | | |
| TPAW | | | | IAML | | 08 23 11.2 | |
| | comp=E,73nm,0.7s | | | | | | |
| **YPK** | **Parker Peak, Y** | **1.51** | **90** | | Pb | 08 22 43.8 | -0.1 |
| **LOHW** | **Long Hollow** | **1.54** | **137** | | Pb | 08 22 44.0 | -0.4 |
| LOHW | | | | IAML | | 08 23 08.6 | |
| | comp=E,40nm,0.6s | | | | | | |
| LOHW | | | | IAML | | 08 23 09.7 | |
| | comp=E,63nm,0.6s | | | | | | |
| **SNOW** | **Snow King Moun** | **1.59** | **144** | | Pb | 08 22 44.9 | -0.3 |
| SNOW | | | | IAML | | 08 23 16.7 | |
| | comp=E,61nm,0.7s | | | | | | |
| SNOW | | | | IAML | | 08 23 19.4 | |
| | comp=E,52nm,0.8s | | | | | | |
| **REDW** | **Red Top Meadow** | **1.63** | **148** | | Pb | 08 22 45.8 | -0.2 |
| **BPMT** | **Black Pine Rid** | **1.95** | **330** | | Pn | 08 22 49.5 | +0.2 |
| **RLMT** | **Red Lodge** | **2.00** | **78** | Pn | Pn | 08 22 50.1 | +0.2 |
| RLMT | | | | IAML | | 08 23 28.4 | |
| | comp=E,64nm,0.5s | | | | | | |
| **HLID** | **Hailey** | **2.08** | **236** | | Pb | 08 22 52.6 | -1.0 |
| HLID | | | | IAML | | 08 23 24.2 | |
| | comp=E,54nm,0.6s | | | | | | |
| **AHID** | **Auburn Hatcher** | **2.10** | **161** | Pn | Pb | 08 22 52.7 | -1.2 |
| AHID | | | | IAML | | 08 23 28.4 | |
| | comp=E,28nm,0.7s | | | | | | |
| AHID | | | | IAML | | 08 23 30.4 | |
| | comp=E,31nm,0.8s | | | | | | |
| **LYMT** | **Lyon Mountain** | **2.22** | **356** | | Pn | 08 22 54.0 | +1.0 |
| **OVMT** | **Ovando** | **2.41** | **344** | | Pn | 08 22 55.6 | +0.3 |
| **MSO** | **Missoula** | **2.46** | **328** | | Pn | 08 22 56.6 | +0.4 |
| **BW06** | **Boulder Array** | **2.68** | **137** | Pn | Pn | 08 22 59.5 | +0.3 |
| **PD31** | **Pinedale Array** | **2.68** | **137** | Pn | Pn | 08 22 59.5 | +0.2 |
| **PDAR** | **Pinedale Array** | **2.68** | **137** | Pn | Pn | 08 22 59.9 | +0.7 |
| **HVU** | **Hansel Valley** | **3.02** | **190** | Pn | Pn | 08 23 03.9 | 0.0 |
| **MFID** | **Camas Ranch** | **3.04** | **245** | | Pn | 08 23 06.1 | +2.0 |
| **HWUT** | **Hardware Ranch** | **3.16** | **174** | Pn | Pn | 08 23 06.5 | +0.6 |
| **SPUT** | **South Promonto** | **3.46** | **185** | Pn | Pn | 08 23 10.7 | +0.8 |
| **EGMT** | **Eagleton** | **3.63** | **25** | | Pn | 08 23 12.8 | +0.6 |
| **TCUT** | **Toone Canyon** | **3.66** | **173** | Pn | Pn | 08 23 13.9 | +1.1 |
| **BMO** | **Blue Mountains** | **3.75** | **273** | | Pn | 08 23 14.8 | +1.0 |
| BMO | | | | IAML | | 08 24 15.3 | |
| | comp=E,9.6nm,0.4s | | | | | | |
| BMO | | | | IAML | | 08 24 19.2 | |
| | comp=E,8.0nm,1.1s | | | | | | |
| **F10A** | **Beach Ranch, E** | **3.85** | **290** | | Pn | 08 23 16.4 | +1.1 |
| **LAO** | **LASA Array** | **4.51** | **63** | Pn | Pn | 08 23 24.8 | +0.6 |
| **J08A** | **Circle Bar Ran** | **4.84** | **256** | Pn | Pn | 08 23 30.3 | +2.0 |
| **G08A** | **Pilot Rock** | **4.94** | **279** | Pn | Pn | 08 23 30.5 | +0.4 |
| **NEW** | **Newport** | **4.96** | **317** | Pn | Pn | 08 23 30.7 | +0.3 |
| **P18A** | **Preston Nutter** | **5.29** | **165** | Pn | Pn | 08 23 35.2 | 0.0 |
| **WVOR** | **Wild Horse Val** | **5.32** | **246** | Pn | Pn | 08 23 35.6 | +0.1 |
| WVOR | | | | IAML | | 08 25 30.8 | |
| | comp=E,6.2nm,4.3s | | | | | | |
| WVOR | | | | IAML | | 08 25 48.4 | |
| | comp=E,4.7nm,4.2s | | | | | | |
| **I07A** | **Izee** | **5.39** | **265** | Pn | Pn | 08 23 37.0 | +0.7 |

*SJA* ***27*** *08:26:46.9±0.5,30.°89S×72.°53W,h11km,ML3.9,MW3.9*
*GUC* ***27*** *08:26:51.2±0.6,31.°05S×72.°18W,h36km±2km,ML3.7*
*NEIC* ***27*** *08:26:51.0±1.3,31.°05S±0.°05×72.°21W±0.°05,h18km±6km, mb4.2/2,ML3.7(GUC),Error ellipse: s-maj=8.6km s-min=3.6km az=140.0*
*IDC* ***27*** *08:26:57.1±3.0,31.°27S×71.°91W,h46km±28km,mb3.3/4, mbtmp3.6/7,ML3.3/3,MS2.9/2,Error ellipse: s-maj=38.4km s-min=19.7km az=95.0*
**ISC 27 08:26:49.1**±1.7**,31.°08S**±0.°03×**72.°18W**±0.°05**,h2**km±10km**, n79,**σ1°33/103**,mb4.0**/5**,4C-3D,Off coast of central

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RTLS | | | | *e*P | | | 08 27 35.7 | | |
| RTLS | | | | *e*S | | **Sg** | **08 28 13.0** | **+1.5** | |
| **MT05** | **Renca** | **2.61** | **153** | Pn | | **Pn** | **08 27 32.5** | **0.0** | |
| **VA05** | **Santo Domingo** | **2.62** | **170** | Pn | | **Pn** | **08 27 32.7** | **+0.3** | |
| **AUSP** | **Uspallata** | **2.64** | **116** | *e*P | | **Pn** | **08 27 31.0** | **-2.0** | |
| AUSP | | | | *e*S | | **Sg** | **08 28 13.0** | **-0.9** | |
| **DOCA** | **Reserva Natura** | **2.66** | **88** | *e*P | | **Pb** | **08 27 36.6** | **-1.0** | |
| DOCA | | | | *e*S | | **Sb** | **08 28 08.5** | **-2.4** | |
| DOCA | | | | IAML | | | 08 28 16.7 | | |
| | comp=Z,898nm,0.8s | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.72** | **80** | *e*P | | **Pb** | **08 27 37.7** | **-1.0** | |
| ACCO | | | | *e*S | | **Sb** | **08 28 12.0** | **-0.6** | |
| ACCO | | | | IAML | | | 08 28 17.9 | | |
| | comp=Z,389nm,0.6s | | | | | | | | |
| **MT16** | **CCHEN** | **2.73** | **150** | Pn | | **Pn** | **08 27 35.4** | **+1.3** | |
| **FCH** | **Farellones** | **2.76** | **145**⇑ | *e*P | | **Pn** | **08 27 35.9** | **+1.3** | |
| FCH | | | | *e*S | | **Sn** | **08 28 10.0** | **+1.3** | |
| FCH | | | | IAML | | | 08 28 20.4 | | |
| | comp=E,228nm,0.7s | | | | | | | | |
| **AC05** | **El Transito** | **2.78** | **37** | | | **Pn** | **08 27 35.0** | **+0.3** | |
| **ACDV** | **Cuesta del Vie** | **2.78** | **72** | *e*P | | **Pb** | **08 27 38.1** | **-1.6** | |
| ACDV | | | | *e*S | | **Sb** | **08 28 15.8** | **+1.5** | |
| ACDV | | | | IAML | | | 08 28 24.1 | | |
| | comp=Z,144nm,0.5s | | | | | | | | |
| **MT03** | **Universidad Ad** | **2.79** | **150** | | | **Pn** | **08 27 35.9** | **+0.9** | |
| **MT09** | **Talagante** | **2.87** | **160** | | | **Pn** | **08 27 37.1** | **+1.0** | |
| **MT01** | **Popeta** | **2.89** | **165** | | | **Pn** | **08 27 36.3** | **+0.1** | |
| **MT08** | **Bocatoma Ro** | **2.99** | **143** | Pn | | **Pn** | **08 27 37.8** | **+0.1** | |
| **AC04** | **Llanos de Chal** | **3.02** | **19** | | | **Pn** | **08 27 36.5** | **-1.4** | |
| **MT13** | **San Alfonso** | **3.10** | **150** | | | **Pn** | **08 27 39.8** | **+0.5** | |
| **BO04** | **La Punta** | **3.19** | **156** | Pn | | **Pn** | **08 27 40.7** | **+0.3** | |
| **RTCV** | **Cerro Valdivia** | **3.20** | **105** | *e*P | | **Pn** | **08 27 43.0** | **+2.4** | |
| **ASAL** | **Salagasta** | **3.22** | **119** | *e*P | | **Pn** | **08 27 40.5** | **-0.3** | |
| ASAL | | | | *e*P | | | 08 27 45.5 | | |
| ASAL | | | | *e*S | | **Sg** | **08 28 33.2** | **+0.7** | |
| ASAL | | | | IAML | | | 08 28 41.4 | | |
| | comp=Z,165nm,0.6s | | | | | | | | |
| **LMEL** | **Las Melosas** | **3.23** | **149** | | | **Pn** | **08 27 41.6** | **+0.6** | |
| **ARCO** | **CERRO ARCO** | **3.27** | **123** | *e*P | | **Pb** | **08 27 46.2** | **-1.8** | |
| ARCO | | | | *e*S | | **Sb** | **08 28 30.0** | **+1.6** | |
| ARCO | | | | IAML | | | 08 28 45.0 | | |
| | comp=Z,225nm,0.5s | | | | | | | | |
| **BO01** | **Tunca** | **3.43** | **165** | | | **Pn** | **08 27 44.2** | **+0.5** | |
| **AAGR** | **Agrelo** | **3.48** | **126** | *e*P | | **Pb** | **08 27 49.1** | **-2.4** | |
| AAGR | | | | *e*S | | **Sg** | **08 28 40.5** | **-0.3** | |
| AAGR | | | | IAML | | | 08 28 51.3 | | |
| | comp=Z,192nm,0.6s | | | | | | | | |
| **GO03** | **Copiap** | **3.86** | **27** | Pn | | **Pn** | **08 27 48.6** | **-1.0** | |
| **BO02** | **Sierra Bellavi** | **3.89** | **163** | Pn | | **Pn** | **08 27 50.7** | **+0.7** | |
| **GO05** | **Huala** | **3.93** | **177** | Pn | | **Pn** | **08 27 49.8** | **-0.8** | |
| **AC06** | **Mina Casimiro** | **4.03** | **24** | Pn | | **Pn** | **08 27 51.3** | **-0.6** | |
| **AC01** | **Pan de Azucar** | **5.10** | **16** | Pn | | **Pn** | **08 28 03.8** | **-2.8** | |
| **BI02** | **San Fabin de** | **5.62** | **173** | Pn | | **Pn** | **08 28 14.0** | **+0.1** | |
| **BI05** | **Punta Hualpn** | **5.72** | **188** | Pn | | **Pn** | **08 28 14.9** | **-0.2** | |
| **CYA** | **Choya** | **6.13** | **66** | *e*P | | **Pn** | **08 28 21.9** | **+1.0** | |
| CYA | | | | *e*S | | **Sn** | **08 29 35.5** | **+3.9** | |
| CYA | | | | IAML | | | 08 30 13.8 | | |
| | comp=Z,22nm,2.0s | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **6.17** | **246** | T | | T | 08 35 12.6 | | |
| | baz=76,slow=72,SNR=133 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **6.19** | **246** | T | | T | 08 35 08.9 | | |
| | baz=76,slow=72,SNR=124 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **6.19** | **246** | T | | T | 08 35 13.3 | | |
| | baz=76,slow=72,SNR=154 | | | | | | | | |
| **GO02** | **Mina Guanaco** | **6.32** | **22** | Pn | | **Pn** | **08 28 23.1** | **-0.5** | |
| **PB14** | **IPOC Station P** | **6.61** | **14** | Pn | | **Pn** | **08 28 29.2** | **+1.5** | |
| **FSA** | **Cafayete** | **7.36** | **49** | *e*P | | **Pn** | **08 28 35.5** | **-2.3** | |
| **LVC** | **Limon Verde** | **8.92** | **20** | P | | Pn | 08 29 05.9 | +6.5 | |
| | comp=Z,0.2nm,0.3s,baz=204,slow=12,SNR=1.6 | | | | | | | | |
| LVC | | | | S | | **Sn** | **08 30 45.9** | **+5.2** | |
| | comp=Z,3.3nm,0.6s,baz=27,slow=11,SNR=2.5 | | | | | | | | |
| LVC | | | | LR | | LR | 08 32 15.7 | | |
| | comp=Z,73nm,18.0s,baz=214,slow=35 | | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | | |
| **PLCA** | **Paso Flores** | **9.73** | **173** | Pn | | **Pn** | **08 29 10.9** | **+0.8** | |
| **PLCA** | **Paso Flores** | **9.73** | **173** | P | | **Pn** | **08 29 10.4** | **+0.3** | |
| | comp=Z,0.1nm,0.3s,baz=336,slow=13,SNR=3.2 | | | | | | | | |
| | comp=Z,1.2nm,1.0s | | | | | | | | |
| **TRQA** | **Tornquist** | **10.91** | **132** | Pn | | **Pn** | **08 29 26.8** | **+0.5** | |
| **ITQB** | **Itaqui** | **13.50** | **88** | Pn | | **Pn** | **08 30 00.8** | **-1.0** | |
| **PB18** | **Visviri** | **13.65** | **11** | Pn | | **Pn** | **08 30 03.9** | **-0.4** | |
| **CPUP** | **Villa Florida** | **13.86** | **74** | P | | **Pn** | **08 30 08.4** | **+1.8** | |
| | baz=239,slow=12,SNR=1.6 | | | | | | | | |
| CPUP | | | | S | | **Sn** | **08 32 41.5** | **+0.3** | |
| | comp=Z,1.5nm,0.8s,baz=22,slow=3.1,SNR=1.9 | | | | | | | | |
| CPUP | | | | LR | | LR | 08 35 09.0 | | |
| | comp=Z,55nm,20.0s,baz=224,slow=36 | | | | | | | | |
| | comp=Z,1.6nm,1.0s | | | | | | | | |
| **LPAZ** | **La Paz** | **15.18** | **15** | P | | **Pn** | **08 30 24.8** | **-0.4** | |
| | comp=Z,0.6nm,0.6s,baz=204,slow=5.6,SNR=4.1 | | | | | | | | |
| **SIV** | **San Ignacio** | **18.12** | **37** | P | | **Pn** | **08 31 00.7** | **-1.5** | |
| | comp=Z,1.0nm,0.9s,baz=240,slow=13,SNR=4.4 | | | | | | | | |
| **BDFB** | **Brasilia** | **26.89** | **61** | P | | **P** | **08 32 29.1** | **-2.6** | |
| | comp=Z,2.0nm,0.5s,baz=244,slow=10.0,SNR=3.2 | | | | | | | | |
| **SNAA** | **Sanae** | **54.34** | **159** | P | | **P** | **08 36 17.0** | **+0.2** | |
| SNAA | | | | IAmb | | IAmb | 08 36 32.0 | | |
| | comp=Z,3.3nm,1.3s | | | | | | | | |
| **SNAA** | **Sanae** | **54.34** | **159** | P | | **P** | **08 36 16.7** | **-0.1** | |
| | comp=Z,0.9nm,0.8s,baz=264,slow=11,SNR=3.0 | | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.15** | **180** | P | | **P** | **08 36 50.6** | **-0.6** | |
| QSPA | | | | IAmb | | IAmb | 08 37 26.6 | | |
| | comp=Z,3.4nm,1.4s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **59.15** | **180** | P | | **P** | **08 36 52.1** | **+0.9** | |
| | comp=Z,1.4nm,1.1s,baz=136,slow=9.8,SNR=2.1 | | | | | | | | |
| | comp=Z,1.4nm,1.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **67.14** | **330** | P | | **P** | **08 37 47.9** | **+3.4** | |
| | comp=Z,0.1nm,0.5s,baz=160,slow=5.6,SNR=1.8 | | | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.33** | **70** | P | | **P** | **08 39 17.8** | **-0.2** | |
| | comp=Z,0.8nm,1.1s,baz=283,slow=4.8,SNR=2.2 | | | | | | | | |
| | comp=Z,0.8nm,1.1s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **145.17** | **40** | PKPbc | | **PKPdf** | **08 46 28.1** | **+0.2** | |
| | comp=Z,0.5nm,0.5s,baz=236,slow=4.4,SNR=2.2 | | | | | | | | |

**IDC 27 08:36:36.5±3.6, 53.85N×88.23E, h0km, mbtmp2.8/2, ML2.4/2, Error ellipse: s-maj=31.6km s-min=20.5km az=43.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **2.02** | **274** | I | I | 08 49 30.0 | |
| | 0.1nm,0.9s,baz=90,slow=321,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.02** | **274** | Pg | Pn | 08 37 12.9 | +1.1 |
| | 0.8nm,0.3s,baz=88,slow=11,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 08 37 41.2 | |
| | 1.2nm,0.3s,baz=93,slow=26,SNR=8.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.78** | **245** | Pn | Pn | 08 38 17.8 | +0.7 |
| | 0.1nm,0.3s,baz=57,slow=14,SNR=4.1 | | | | | | |
| KURBB | | | | Sn | Sn | 08 39 33.8 | -1.2 |
| | baz=142,slow=45,SNR=1.2 | | | | | | |
| KURBB | | | | Lg | Lg | 08 40 08.3 | |
| | baz=54,slow=31,SNR=4.8 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.02** | **211** | Pn | Pn | 08 38 35.2 | +1.0 |
| | 0.1nm,0.3s,baz=21,slow=12,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

**RSNC 27 09:08:13.0±0.0, 5°N±1°×7°4W±°, h146km±2km, M3.1, mb4.1, ML3.1, Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPBC** | **San Pablo de B** | **0.53** | **319** | P | Pn | 09 08 33.3 | -0.9 |
| SPBC | | | | S | Sn | 09 08 49.4 | -0.9 |
| **CHIC** | **Chingaza** | **0.62** | **181** | P | Pn | 09 08 34.3 | -0.8 |
| CHIC | | | | S | Sn | 09 08 51.1 | -0.7 |
| **ROSC** | **El Rosal** | **0.72** | **236** | P | Pn | 09 08 36.0 | +0.3 |
| ROSC | | | | S | Sn | 09 08 53.5 | +0.6 |
| **RUSC** | **La Rusia** | **0.90** | **45** | P | Pn | 09 08 36.6 | -0.5 |
| RUSC | | | | S | Sn | 09 08 54.7 | -0.8 |
| **VILC** | **Villavicencio,** | **1.13** | **179** | P | Pn | 09 08 37.7 | -1.1 |
| VILC | | | | S | Sn | 09 08 57.5 | -0.9 |
| **NORC** | **Norcasia** | **1.19** | **285** | P | Pn | 09 08 38.1 | -1.0 |
| NORC | | | | S | Sn | 09 08 57.8 | -1.3 |
| **BARC** | **Barichara** | **1.44** | **22** | P | Pn | 09 08 40.5 | -1.4 |
| BARC | | | | S | Sn | 09 09 02.6 | -1.4 |
| **PTBC** | **PUERTO BERRIO,** | **1.48** | **330** | P | Pn | 09 08 40.0 | -2.0 |
| PTBC | | | | S | Sn | 09 09 02.2 | -2.1 |
| **BRJC** | **Barrancabermej** | **1.71** | **359** | P | Pn | 09 08 43.5 | -1.1 |
| BRJC | | | | S | Sn | 09 09 08.7 | -0.2 |
| **PTGC** | **Puerto Gaitan,** | **1.89** | **123** | P | Pn | 09 08 45.5 | -1.2 |
| PTGC | | | | S | Sn | 09 09 10.9 | -1.6 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PRAC** | **Prado** | **1.92** | **217** | P | | Pn | 09 08 46.0 | -1.0 | |
| PRAC | | | | S | | Sn | 09 09 11.9 | -1.2 | |
| **ORTC** | **Ortega, Tolima** | **2.02** | **229** | P | | Pn | 09 08 47.0 | -1.2 | |
| ORTC | | | | S | | Sn | 09 09 13.5 | -1.7 | |
| **TAMC** | **Tame, Arauca** | **2.25** | **58** | P | | Pn | 09 08 50.1 | -0.8 | |
| TAMC | | | | S | | Sn | 09 09 18.8 | -1.3 | |
| **PAMC** | **Pamplona, Colo** | **2.31** | **26** | P | | Pn | 09 08 51.5 | -0.6 | |
| PAMC | | | | S | | Sn | 09 09 21.6 | -0.5 | |
| **CBOC** | **Ciudad Bolivar** | **2.36** | **285** | P | | Pn | 09 08 51.2 | -1.2 | |
| CBOC | | | | S | | Sn | 09 09 21.8 | -0.9 | |
| **ZARC** | **Zaragoza, Cauc** | **2.50** | **333** | P | | Pn | 09 08 50.9 | -3.0 | |
| ZARC | | | | S | | Sn | 09 09 21.9 | -3.6 | |
| **YOTC** | **Yotoco, Valle** | **2.90** | **244** | P | | Pn | 09 08 59.3 | +0.2 | |
| YOTC | | | | S | | Sn | 09 09 34.1 | -0.6 | |
| **OCAC** | **Ocana** | **3.00** | **8** | P | | Pn | 09 08 58.8 | -1.5 | |
| OCAC | | | | S | | Sn | 09 09 35.1 | -1.8 | |
| **DBBC** | **Dabeiba** | **3.04** | **305** | P | | Pn | 09 08 59.5 | -1.3 | |
| DBBC | | | | S | | Sn | 09 09 36.0 | -1.7 | |
| **UREC** | **San Jos de Ur** | **3.07** | **324** | P | | Pn | 09 08 57.6 | -3.5 | |
| UREC | | | | S | | Sn | 09 09 33.7 | -4.7 | |
| **MACC** | **Macarena, Meta** | **3.09** | **182** | P | | Pn | 09 08 58.9 | -2.5 | |
| MACC | | | | S | | Sn | 09 09 35.1 | -3.7 | |
| **APAC** | **Apartado, Choc** | **3.87** | **313** | P | | Pn | 09 09 09.8 | -1.7 | |
| APAC | | | | S | | Sn | 09 09 56.0 | -1.0 | |
| **SJCC** | **San Jacinto, C** | **4.84** | **343** | P | | Pn | 09 09 19.7 | -4.6 | |
| SJCC | | | | S | | Sn | 09 10 12.0 | -7.9 | |
| **CAPC** | **Capurgana** | **4.93** | **313** | P | | Pn | 09 09 22.8 | -2.7 | |
| CAPC | | | | S | | Sn | 09 10 16.9 | -5.0 | |
| **CRJC** | **Cerrejon, Guaj** | **5.79** | **8** | P | | Pn | 09 09 35.1 | -1.9 | |
| | 26nm,0.8s | | | | | | | | |
| CRJC | | | | S | | Sn | 09 10 35.7 | -7.0 | |
| | 26nm,0.8s | | | | | | | | |
| **SMRC** | **Santa Marta, M** | **5.90** | **355** | P | | Pn | 09 09 35.3 | -3.0 | |
| SMRC | | | | S | | Sn | 09 10 38.2 | -6.9 | |

*SJA **27** 09:16:00.6±1.2, 29.°62S×71.°66W, h25km, ML5.0, MW5.0*
*GUC **27** 09:16:03.8±0.9, 29.°73S×71.°48W, h57km±2km, ML5.1*
*NEIC **27** 09:16:04.7±3.0, 29.°72S±0.°05×71.°55W±0.°09, h55km±5km, mb4.9/274, Mwr5.0/91, Mwr5.0(GUC), Error ellipse: s-maj=11.3km s-min=7.0km az=94.0, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$2.89; $M_{\theta\theta}$0.81; $M_{\phi\phi}$-3.69; $M_{r\theta}$-1.02; $M_{r\phi}$-0.61; $M_{\theta\phi}$1.34; Fault plane solution: $M_o$3.81000×$10^{16}$ NP1:$\phi_s$210.46000°, δ39.95000°, λ126.71000°. NP2:$\phi_s$346.26000°, δ59.02000°, λ63.40000°. Principal axes: T 3.6015, Plg65.0000°, Azm208.0000°; N 0.3879, Plg23.0000°, Azm1.0000°; P -3.9894, Plg10.0000°, Azm95.0000°;*
*NEIC **27** 09:16:04.7, 29.°72S×71.°55W, h55km*
*IDC **27** 09:16:04.2±0.6, 29.°75S×71.°35W, h46km±5km, mb4.4/17, mbtmp4.6/23, MS4.1/45, Error ellipse: s-maj=15.9km s-min=10.9km az=78.0*
*VAO **27** 09:16:05.0±0.6, 29.°85S×71.°30W, h56km±5km, mb5.0*
*MOS **27** 09:16:05.3±1.2, 29.°65S×71.°21W, h66km, mb5.1/10, Error ellipse: s-maj=13.2km s-min=7.3km az=97.9*
*GCMT **27** 09:16:06.7±0.2, 29.°65S±0.°01×71.°61W±0.°02, h49km±1km, MW5.0/92, Moment Tensor Solution. s70,c85; s92,c131; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.62±.14; $M_{\theta\theta}$0.66±.10; $M_{\phi\phi}$-4.27±.13; $M_{r\theta}$-1.20±.08; $M_{r\phi}$-1.16±.09; $M_{\theta\phi}$0.90±.13; Best double couple: $M_o$4.40200×$10^{16}$ NP1:$\phi_s$352.00000°, δ53.00000°, λ62.00000°. NP2: $\phi_s$214.00000°, δ45.00000°, λ122.00000°. Principal axes: T 4.2270, Plg67.0000°, Azm202.0000°; N 0.3560, Plg22.0000°, Azm10.0000°; P -4.5770, Plg4.0000°, Azm102.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 27 09:16:04.2±0.3, 29.°71S±0.°02×71.°58W±0.°04, h51km±2km, h51km:pP-P, n418, σ1§40/411, mb4.9/123, MS4.2/39, 41C-20D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.36** | **125** | | **Pn** | **09 16 13.3** | **-0.8** |
| **CO05** | **La Serena** | **0.36** | **125**⇓ | *i*P | **Pn** | **09 16 13.2** | **-0.8** |
| CO05 | | | | ⇓*i*P | **Pn** | **09 16 13.2** | **-0.8** |
| CO05 | | | | *e*S | **Sn** | **09 16 19.7** | **-1.4** |
| CO05 | | | | *e*S | **Sn** | **09 16 19.7** | **-1.4** |
| CO05 | | | | IAML | | 09 16 21.7 | |
| | comp=E,490μm,0.5s | | | | | | |
| CO05 | | | | IAML | | 09 16 21.7 | |
| | comp=E,490μm,0.5s | | | | | | |
| **GO04** | **Tololo Observa** | **0.82** | **124** | | **Pn** | **09 16 18.5** | **-1.3** |
| **GO04** | **Tololo Observa** | **0.82** | **124**⇓ | *i*P | **Pn** | **09 16 18.6** | **-1.3** |
| GO04 | | | | ⇓*i*P | **Pn** | **09 16 18.6** | **-1.3** |
| GO04 | | | | *e*S | **Sn** | **09 16 29.3** | **-1.8** |
| GO04 | | | | *e*S | **Sn** | **09 16 29.3** | **-1.8** |
| **CO06** | **Fray Jorge** | **0.96** | **183** | | **Pn** | **09 16 21.3** | **-0.1** |
| **CO06** | **Fray Jorge** | **0.96** | **183**⇓ | *e*P | **Pn** | **09 16 21.0** | **-0.4** |
| CO06 | | | | ⇓*e*P | **Pn** | **09 16 21.0** | **-0.4** |
| CO06 | | | | *e*S | **Sn** | **09 16 33.9** | **-0.2** |
| CO06 | | | | *e*S | **Sn** | **09 16 33.9** | **-0.2** |
| CO06 | | | | IAML | | 09 16 36.6 | |
| | comp=E,41μm,0.3s | | | | | | |
| CO06 | | | | IAML | | 09 16 36.6 | |
| | comp=E,41μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.04** | **48** | | **Pn** | **09 16 22.2** | **-0.5** |
| **LCO** | **Las Campanas** | **1.04** | **48**⇓ | *e*P | **Pn** | **09 16 22.2** | **-0.5** |
| LCO | | | | ⇓*e*P | **Pn** | **09 16 22.2** | **-0.5** |
| LCO | | | | *e*S | **Sn** | **09 16 35.6** | **-0.8** |
| LCO | | | | *e*S | **Sn** | **09 16 35.6** | **-0.8** |
| **LCO** | **Las Campanas** | **1.04** | **48** | P | **Pn** | **09 16 22.2** | **-0.5** |
| **CO01** | **Juntas del Tor** | **1.32** | **102** | | **Pn** | **09 16 25.9** | **-0.6** |
| **CO01** | **Juntas del Tor** | **1.32** | **102**⇑ | *e*P | **Pn** | **09 16 25.8** | **-0.7** |
| CO01 | | | | ⇑*e*P | **Pn** | **09 16 25.8** | **-0.7** |
| CO01 | | | | *e*S | **Sn** | **09 16 41.7** | **-1.4** |
| CO01 | | | | *e*S | **Sn** | **09 16 41.7** | **-1.4** |
| **CO03** | **El Pedregal** | **1.36** | **146** | Pn | **Pn** | **09 16 26.2** | **-0.7** |
| **CO03** | **El Pedregal** | **1.36** | **146**⇓ | *i*P | **Pn** | **09 16 26.2** | **-0.7** |
| CO03 | | | | ⇓*i*P | **Pn** | **09 16 26.2** | **-0.7** |
| CO03 | | | | *e*S | **Sn** | **09 16 42.6** | **-1.3** |
| CO03 | | | | *e*S | **Sn** | **09 16 42.6** | **-1.3** |
| CO03 | | | | IAML | | 09 16 43.6 | |
| | comp=N,74μm,0.4s | | | | | | |
| CO03 | | | | IAML | | 09 16 43.6 | |
| | comp=N,74μm,0.4s | | | | | | |
| **AC05** | **El Transito** | **1.44** | **53** | | **Pn** | **09 16 28.0** | **-0.1** |
| **AC05** | **El Transito** | **1.44** | **53**⇓ | *i*P | **Pn** | **09 16 27.9** | **-0.1** |
| AC05 | | | | ⇓*i*P | **Pn** | **09 16 27.9** | **-0.1** |
| AC05 | | | | *e*S | **Sn** | **09 16 45.8** | **-0.1** |
| AC05 | | | | *e*S | **Sn** | **09 16 45.8** | **-0.1** |
| AC05 | | | | IAML | | 09 16 47.2 | |
| | comp=N,26μm,0.4s | | | | | | |
| AC05 | | | | IAML | | 09 16 47.2 | |
| | comp=N,26μm,0.4s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.57** | **17** | | **Pn** | **09 16 29.6** | **-0.1** |
| **AC04** | **Llanos de Chal** | **1.57** | **17**⇑ | *e*P | **Pn** | **09 16 29.4** | **-0.3** |
| AC04 | | | | ⇑*e*P | **Pn** | **09 16 29.4** | **-0.3** |
| AC04 | | | | *e*S | **Sn** | **09 16 48.0** | **-0.9** |
| AC04 | | | | *e*S | **Sn** | **09 16 48.0** | **-0.9** |
| **CO02** | **Combarbal** | **1.57** | **162** | | **Pn** | **09 16 29.6** | **-0.3** |
| **CO02** | **Combarbal** | **1.57** | **162**⇓ | *i*P | **Pn** | **09 16 29.5** | **-0.3** |
| CO02 | | | | ⇓*i*P | **Pn** | **09 16 29.5** | **-0.3** |
| CO02 | | | | *e*S | **Sn** | **09 16 48.6** | **-0.4** |
| CO02 | | | | *e*S | **Sn** | **09 16 48.6** | **-0.4** |
| CO02 | | | | IAML | | 09 16 54.4 | |
| | comp=E,83μm,0.3s | | | | | | |
| CO02 | | | | IAML | | 09 16 54.4 | |
| | comp=E,83μm,0.3s | | | | | | |
| **AROD** | **Rodeo** | **1.88** | **104** | *i*P | **Pn** | **09 16 35.3** | **+1.0** |
| **ACDV** | **Cuesta del Vie** | **2.18** | **103** | *i*P | **Pn** | **09 16 39.6** | **+1.3** |
| ACDV | | | | *i*S | **Sn** | **09 17 08.0** | **+3.8** |
| ACDV | | | | IAML | | 09 17 10.4 | |
| | comp=Z,5μm,0.4s | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.34** | **112** | *i*P | **Pn** | **09 16 42.3** | **+1.7** |
| ACCO | | | | *i*S | **Sn** | **09 17 13.4** | **+5.1** |
| **CO04** | **Los Peladeros** | **2.38** | **168**⇑ | *i*P | **Pn** | **09 16 41.5** | **+0.5** |
| CO04 | | | | ⇑*i*P | **Pn** | **09 16 41.5** | **+0.5** |
| CO04 | | | | *e*S | **Sn** | **09 17 09.6** | **+0.4** |
| CO04 | | | | *e*S | **Sn** | **09 17 09.6** | **+0.4** |
| CO04 | | | | IAML | | 09 17 11.4 | |
| | comp=E,31μm,0.3s | | | | | | |
| CO04 | | | | IAML | | 09 17 11.4 | |
| | comp=E,31μm,0.3s | | | | | | |
| **GO03** | **Copiap** | **2.42** | **30** | | **Pn** | **09 16 41.8** | **+0.4** |
| **GO03** | **Copiap** | **2.42** | **30** | *e*P | **Pn** | **09 16 40.7** | **-0.7** |
| GO03 | | | | *e*P | **Pn** | **09 16 40.7** | **-0.7** |
| GO03 | | | | *e*S | **Sn** | **09 17 09.2** | **-0.7** |
| GO03 | | | | *e*S | **Sn** | **09 17 09.2** | **-0.7** |
| GO03 | | | | IAML | | 09 17 29.4 | |
| | comp=E,7μm,0.3s | | | | | | |
| GO03 | | | | IAML | | 09 17 29.4 | |
| | comp=E,7μm,0.3s | | | | | | |
| **DOCA** | **Reserva Natura** | **2.48** | **120** | *i*P | **Pn** | **09 16 44.5** | **+1.9** |
| **AC06** | **Mina Casimiro** | **2.58** | **25** | | **Pn** | **09 16 43.5** | **-0.1** |
| **AC06** | **Mina Casimiro** | **2.58** | **25**⇑ | *e*P | **Pn** | **09 16 43.4** | **-0.3** |
| AC06 | | | | ⇑*e*P | **Pn** | **09 16 43.4** | **-0.3** |
| AC06 | | | | *e*S | **Sn** | **09 17 13.9** | **+0.1** |
| AC06 | | | | *e*S | **Sn** | **09 17 13.9** | **+0.1** |
| AC06 | | | | IAML | | 09 17 34.9 | |
| | comp=E,4μm,0.5s | | | | | | |
| AC06 | | | | IAML | | 09 17 34.9 | |
| | comp=E,4μm,0.5s | | | | | | |
| **VA06** | **Catapilco** | **2.85** | **175** | | **Pn** | **09 16 47.1** | **-0.1** |
| **VA06** | **Catapilco** | **2.85** | **175**⇑ | *e*P | **Pn** | **09 16 47.0** | **-0.2** |
| VA06 | | | | ⇑*e*P | **Pn** | **09 16 47.0** | **-0.2** |
| VA06 | | | | *e*S | **Sn** | **09 17 19.7** | **-0.5** |
| VA06 | | | | *e*S | **Sn** | **09 17 19.7** | **-0.5** |
| **ZON** | **Zonda** | **3.10** | **127** | | **Pn** | **09 16 51.9** | **+1.2** |
| **ZON** | **Zonda** | **3.10** | **127** | P | **Pn** | **09 16 51.9** | **+1.2** |
| **AUSP** | **Uspallata** | **3.13** | **144** | *i*P | **Pn** | **09 16 53.7** | **+2.3** |
| **VA03** | **San Esteban** | **3.17** | **164** | | **Pn** | **09 16 52.5** | **+0.9** |
| **VA03** | **San Esteban** | **3.17** | **164**⇑ | *e*P | **Pn** | **09 16 52.4** | **+0.7** |
| VA03 | | | | ⇑*e*P | **Pn** | **09 16 52.4** | **+0.7** |
| VA03 | | | | *e*S | **Sn** | **09 17 27.8** | **-0.4** |
| VA03 | | | | *e*S | **Sn** | **09 17 27.8** | **-0.4** |
| **SJA** | **San Juan** | **3.17** | **126** | *i*P | **Pn** | **09 16 53.9** | **+2.3** |
| SJA | | | | *i*S | **Sn** | **09 17 33.2** | **+5.0** |
| SJA | | | | IAML | | 09 17 59.6 | |
| | comp=Z,3μm,1.7s | | | | | | |
| **ROCH** | **El Roble** | **3.28** | **172**⇑ | *i*P | **Pn** | **09 16 53.3** | **-0.1** |
| ROCH | | | | ⇑*i*P | **Pn** | **09 16 53.3** | **-0.1** |
| ROCH | | | | *e*S | **Sn** | **09 17 31.1** | **-0.3** |
| ROCH | | | | *e*S | **Sn** | **09 17 31.1** | **-0.3** |
| ROCH | | | | IAML | | 09 17 34.8 | |
| | comp=N,7μm,0.3s | | | | | | |
| ROCH | | | | IAML | | 09 17 34.8 | |
| | comp=N,7μm,0.3s | | | | | | |
| **VA01** | **Torpederas** | **3.30** | **181** | | **Pn** | **09 16 52.4** | **-1.1** |
| **VA01** | **Torpederas** | **3.30** | **181**⇑ | *e*P | **Pn** | **09 16 52.3** | **-1.1** |
| VA01 | | | | ⇑*e*P | **Pn** | **09 16 52.3** | **-1.1** |
| **RTCV** | **Cerro Valdivia** | **3.38** | **130** | *i*P | **Pn** | **09 16 56.5** | **+1.9** |
| RTCV | | | | *i*S | **Sn** | **09 17 37.7** | **+4.2** |
| **PEL** | **Peldehue** | **3.50** | **168** | | **Pn** | **09 16 56.8** | **+0.5** |
| **PEL** | **Peldehue** | **3.50** | **168**⇑ | *e*P | **Pn** | **09 16 56.4** | **+0.1** |
| PEL | | | | ⇑*e*P | **Pn** | **09 16 56.4** | **+0.1** |
| PEL | | | | *e*S | **Sn** | **09 17 36.0** | **-0.5** |
| PEL | | | | *e*S | **Sn** | **09 17 36.0** | **-0.5** |
| **PEL** | **Peldehue** | **3.50** | **168** | P | **Pn** | **09 16 56.8** | **+0.5** |
| **MT02** | **Curacav** | **3.55** | **174** | | **Pn** | **09 16 56.4** | **-0.5** |
| **MT02** | **Curacav** | **3.55** | **174**⇑ | *e*P | **Pn** | **09 16 56.2** | **-0.7** |
| MT02 | | | | ⇑*e*P | **Pn** | **09 16 56.2** | **-0.7** |
| MT02 | | | | *e*S | **Sn** | **09 17 37.1** | **-0.6** |
| MT02 | | | | *e*S | **Sn** | **09 17 37.1** | **-0.6** |
| MT02 | | | | IAML | | 09 17 57.6 | |
| | comp=E,4μm,0.3s | | | | | | |
| MT02 | | | | IAML | | 09 17 57.6 | |
| | comp=E,4μm,0.3s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.66** | **14** | Pn | **Pn** | **09 16 56.6** | **-1.7** |
| **ASAL** | **Salagasta** | **3.71** | **141** | *i*P | **Pn** | **09 17 01.2** | **+2.1** |
| ASAL | | | | IAML | | 09 18 06.5 | |
| | comp=Z,2μm,2.2s | | | | | | |
| **MT05** | **Renca** | **3.74** | **169** | | **Pn** | **09 17 01.2** | **+1.7** |
| **FCH** | **Farellones** | **3.77** | **163**⇑ | *e*P | **Pn** | **09 17 01.1** | **+1.0** |
| FCH | | | | ⇑*e*P | **Pn** | **09 17 01.1** | **+1.0** |
| FCH | | | | *e*S | **Sn** | **09 17 43.4** | **0.0** |
| FCH | | | | *e*S | **Sn** | **09 17 43.4** | **0.0** |
| **MT16** | **CCHEN** | **3.81** | **167** | | **Pn** | **09 17 01.1** | **+0.6** |
| **ARCO** | **CERRO ARCO** | **3.85** | **145** | *i*P | **Pn** | **09 17 03.6** | **+2.5** |
| ARCO | | | | *i*S | **Sn** | **09 17 48.4** | **+3.2** |
| ARCO | | | | IAML | | 09 18 14.5 | |
| | comp=Z,3μm,0.7s | | | | | | |
| **MT08** | **Bocatoma Ro** | **3.95** | **161** | | **Pn** | **09 17 04.5** | **

NNA LR LR 09 25 55.5
comp=Z,541nm,21.2s,baz=173,slow=32
**GO08 Villa O'Higgin 18.74 182** IAmb IAmb 09 20 22.2
comp=Z,87nm,1.5s
**LDASE Londrina, Braz 19.34 76** *e*P **P 09 20 24.0 -1.5**
**SALV Santo Antonio 20.05 50** *e*P **P 09 20 33.1 -0.1**
**ETMB Extrema 20.42 15** P **P 09 20 38.2 +1.0**
ETMB IAmb IAmb 09 21 06.3
comp=Z,63nm,1.2s
**ETMB Extrema 20.42 15** *e*P **P 09 20 38.4 +1.2**
**GO09 Cerro Castillo 21.54 181** P **P 09 20 49.3 +0.2**
**ITRB Iturama 21.67 67** *e*P **P 09 20 49.5 -1.2**
**CZSB Cruzeiro do Su 21.89 357** P **P 09 20 54.5 +1.5**
**CZSB Cruzeiro do Su 21.89 357** *e*P **P 09 20 54.5 +1.5**
**MG05 Puerto Natales 21.95 182** P **P 09 20 55.4 +2.0**
**SAML Samuel 22.11 23** P **P 09 20 54.4 -0.9**
**SAML Samuel 22.11 23** P **P 09 20 54.4 -0.9**
SAML pmax pmax
comp=Z,23nm,1.0s
**SAML Samuel 22.11 23** *e*P **P 09 20 55.2 -0.1**
**SPB Sao Paulo 22.41 80** P **P 09 20 58.2 -0.3**
SPB IAmb IAmb 09 21 00.1
comp=Z,76nm,1.2s
**PDRB Porto dos Gac 22.70 41** *e*P **P 09 20 59.9 -1.8**
**RCLB Rio Claro- Sao 22.76 77** *e*P **P 09 21 00.6 -1.8**
**ARAG Araguaiana, MT 22.90 57** *e*P **P 09 21 03.1 -0.8**
**VAO Valinhos 23.02 79** P **P 09 21 03.3 -1.8**
VAO IAmb IAmb 09 21 21.9
comp=Z,60nm,1.0s
**VAO Valinhos 23.02 79** *e*P **P 09 21 03.8 -1.2**
**ATAH Atahualpa 23.36 343** P **P 09 21 10.7 +1.9**
comp=Z,3.1nm,0.6s,baz=251,slow=7.5,SNR=4.0
ATAH LR LR 09 28 43.7
comp=Z,355nm,20.8s,baz=209,slow=32
comp=Z,3.1nm,0.6s
**GO10 Punta Arenas 23.43 179** P **P 09 21 09.1 +0.4**
**CLDB Colider 23.83 41** *e*P **P 09 21 13.1 +0.3**
**MG03 Isla Dawson 24.13 178** P **P 09 21 14.3 -0.8**
**IPMB Ipameri, GO 24.30 67** *e*P **P 09 21 15.9 -1.2**
**USHA Ushuaia 25.20 176** P **P 09 21 24.8 -0.1**
comp=Z,31nm,0.5s,baz=0.3,slow=8.2,SNR=26
comp=Z,31nm,0.5s
**TBTG Tabatinga, AM 25.44 4** *e*P **P 09 21 28.8 +1.4**
**BDFB Brasilia 25.79 62** P **P 09 21 29.1 -1.7**
BDFB IAmb IAmb 09 21 50.2
comp=Z,31nm,0.8s
**BDFB Brasilia 25.79 62** P **P 09 21 29.7 -1.0**
comp=Z,12nm,0.6s,baz=234,slow=11,SNR=20
BDFB LR LR 09 32 46.6
comp=Z,843nm,20.3s,baz=228,slow=39
comp=Z,12nm,0.6s
**SNDB Serra Nova Dou 25.83 51** *e*P **P 09 21 30.1 -0.8**
**TEFE Tefe 26.88 15** *e*P **P 09 21 40.6 +0.2**
**NPGB Novo Progresso 27.23 37** *e*P **P 09 21 41.9 -1.6**
**JANB Januaria 29.03 66** *e*P **P 09 21 58.1 -1.5**
**SDBA SAO DESIDERIO 30.15 61** *e*P **P 09 22 08.5 -1.1**
**SMTB Santa Maria do 30.58 52** *e*P **P 09 22 13.2 -0.2**
**RPN Rapa Nui 33.21 265** LR LR 09 32 09.1
comp=Z,553nm,20.0s,baz=106,slow=29
**BOAV Boa Vista 33.63 20** P **P 09 22 39.1 -0.9**
BOAV IAmb IAmb 09 22 40.7
comp=Z,12nm,0.7s
**BOAV Boa Vista 33.63 20** *e*P **P 09 22 39.2 -0.9**
**ROSC El Rosal 34.46 355** P **P 09 22 47.9 +0.2**
comp=Z,7.1nm,0.3s,baz=125,slow=21,SNR=2.4
ROSC LR LR 09 38 29.2
comp=Z,201nm,19.1s,baz=256,slow=39
comp=Z,7.1nm,0.3s
**TMAB Tom-Au,PA,Br 35.17 44** *e*P **P 09 22 52.4 -1.0**
**PMSA Palmer Station 35.40 174** LR LR 09 37 08.9
comp=Z,545nm,20.2s,baz=27,slow=36
**SDV Santo Domingo 38.39 2** LR LR 09 40 49.0
comp=Z,299nm,20.0s,baz=220,slow=39
**SDV Santo Domingo 38.39 2** *e*P **P 09 23 22.7 +1.8**
**MDP Montagnes des 39.10 31** LR LR 09 41 48.4
comp=Z,370nm,18.5s,baz=198,slow=40
**MPGF Montagnes des 39.10 31** P **P 09 23 26.0 -0.7**
MPGF pP **pP 09 23 40.3 +0.1**
MPGF sP **sP 09 23 46.2 0.0**
**PCRV Puerto La Cruz 40.22 11** LR LR 09 41 50.3
comp=Z,311nm,18.2s,slow=38
**RCBR Riachuelo 41.17 62** LR LR 09 41 12.0
comp=Z,165nm,20.3s,baz=220,slow=37
**RCBR Riachuelo 41.17 62** P **P 09 23 47.4 +3.4**
**JTS Las Juntas de 41.81 340** LR LR 09 37 58.7
comp=Z,88nm,19.7s,baz=254,slow=31
**OBIP Obispado Ponce 47.72 6** P **P 09 24 35.0 -1.0**
**CELP Cerrillos 47.75 6** P **P 09 24 35.5 -0.8**
**BELA Belgrano 2 51.02 171** P **P 09 24 59.7 -0.9**
**CMIG Matias Romero 51.68 331** LR LR 09 42 25.6
comp=Z,126nm,21.0s,baz=188,slow=30
**VNA3 Neumayer Olymp 53.19 159** ⇑P **P 09 25 16.7 -0.1**
comp=Z,3.9nm,0.7s
**VNA1 Neumayer--Stat 53.48 158** ⇑P **P 09 25 18.8 0.0**
comp=Z,9.8nm,1.2s
**VNA2 Neumayer--Watz 53.82 158** ⇑P **P 09 25 21.3 -0.1**
comp=Z,5.2nm,0.5s,baz=280,slow=7.5
**SNAA Sanae 55.41 159** P **P 09 25 32.6 -0.4**
**SNAA Sanae 55.41 159** ⇑P **P 09 25 32.7 -0.3**
comp=Z,122nm,0.8s
**SNAA Sanae 55.41 159** P **P 09 25 32.7 -0.3**
comp=Z,22nm,1.2s,baz=281,slow=7.8,SNR=31
SNAA LR LR 09 49 09.5
comp=Z,159nm,20.1s,baz=288,slow=36
comp=Z,22nm,1.2s
**RKT Rikitea 56.55 261** *e*LR LR 09 42 15.1
comp=Z,1μm,26.2s
**TROLL Troll, Antarti 57.13 159** ⇑P **P 09 25 45.1 -0.2**
comp=Z,302nm,0.9s
**NVL N'lazarevskaya 60.11 158** *e*P **P 09 26 02.4 -3.4**
NVL *e*S **S 09 34 16.5 +1.6**
NVL pmax pmax
comp=Z,50nm,1.5s
**QSPA South Pole Qui 60.51 180** P **P 09 26 08.5 -0.4**
**QSPA South Pole Qui 60.51 180** P **P 09 26 09.3 +0.5**
comp=Z,10.0nm,0.7s,baz=173,slow=1.0,SNR=103
QSPA LR LR 09 52 27.0
comp=Z,144nm,19.8s,baz=149,slow=36
comp=Z,10.0nm,0.7s
**QSPA South Pole Qui 60.51 180** P **P 09 26 09.1 +0.3**
QSPA pP **pP 09 26 22.5 -0.4**
QSPA sP **sP 09 26 29.2 +0.5**
**H06E1 SOCORRO T-PHAS 61.34 317** T T 10 32 48.6
SNR=4.4
**152A Waverly Hall 63.28 348** IAmb IAmb 09 26 44.4
comp=Z,13nm,1.2s
**HKT Hockley 63.68 337** ⇑*e*P **P 09 26 31.6 +1.4**
HKT pmax pmax
comp=Z,19nm,1.8s
**Y52A Lillburn 64.33 348** IAmb IAmb 09 26 55.4
comp=Z,9.7nm,1.0s
**Z47A Carrollton 64.49 345** IAmb IAmb 09 26 37.5
comp=Z,12nm,0.8s
**DRIO Del Rio 65.01 332** IAmb IAmb 09 26 41.9
comp=Z,12nm,1.2s
**LPIG La Paz 65.17 321** LR LR 09 50 51.5
comp=Z,47nm,18.1s,baz=178,slow=32
**BG3 Lake Jocassee 65.25 350** IAmb IAmb 09 26 56.3
comp=Z,8.6nm,1.0s
**W52A Murphy 65.50 349** IAmb IAmb 09 27 00.4
comp=Z,13nm,1.2s
**V58A Windy Hill, Pi 65.55 353** IAmb IAmb 09 26 58.0
comp=Z,7.1nm,0.8s
**V55A Taylorsville 65.84 351** IAmb IAmb 09 27 00.1
comp=Z,11nm,1.0s
**CPCT Cooper Cave 65.95 348** IAmb IAmb 09 27 03.1
comp=Z,16nm,1.2s
**BRDY Brady 66.03 334** IAmb IAmb 09 27 03.8
comp=Z,16nm,1.0s
**TKL Tuckaleechee C 66.03 349** IAmb IAmb 09 27 03.3
comp=Z,18nm,1.1s
**PLAL Pickwick Lake 66.20 345** IAmb IAmb 09 27 03.0
comp=Z,13nm,1.1s
**TXAR Lajitas Array 66.22 330** P **P 09 26 48.3 +1.4**
**TXAR Lajitas Array 66.22 330** P **P 09 26 48.6 +1.7**
comp=Z,1.4nm,0.5s,baz=154,slow=8.4,SNR=24
TXAR pP **pP 09 27 02.0 +1.3**
comp=Z,4.4nm,0.8s,baz=146,slow=8.1,SNR=16
TXAR LR LR 09 51 30.4
comp=Z,74nm,20.2s,baz=148,slow=32
comp=Z,1.4nm,0.5s
**WLAR White Oak Lake 66.27 340** P **P 09 26 47.5 +0.5**
**OZNA Ozona 66.53 332** P **P 09 26 50.6 +1.8**
**CLTN Cedars of Leba 66.91 347** IAmb IAmb 09 27 09.2
comp=Z,17nm,1.2s
**TAOE Nuku Hiva Isla 67.08 273** *e*LR LR 09 46 59.4
comp=Z,246nm,25.3s
**PLPT Palo Pinto 67.15 336** P **P 09 26 51.4 -1.2**
PLPT IAmb IAmb 09 26 54.6
comp=Z,11nm,0.7s
**MIAR Mount Ida 67.20 340** P **P 09 26 53.3 +0.4**
MIAR IAmb IAmb 09 27 10.9
comp=Z,15nm,1.1s
**MIAR Mount Ida 67.20 340** P **P 09 26 53.3 +0.4**
MIAR pmax pmax
comp=Z,15nm,1.1s
**U49A Red Boiling Sp 67.22 348** IAmb IAmb 09 27 10.3
comp=Z,18nm,1.3s
**WVT Waverly 67.25 346** P **P 09 26 52.4 -0.8**
WVT IAmb IAmb 09 27 08.8
comp=Z,16nm,1.0s
**WVT Waverly 67.25 346** P **P 09 26 52.4 -0.8**
WVT pmax pmax
comp=Z,17nm,1.0s
**WVT Waverly 67.25 346** P **P 09 26 53.1 -0.1**
WVT pP **pP 09 27 07.2 -0.2**
WVT sP **sP 09 27 12.6 -0.5**
**SBA Scott Base 67.34 191** P **P 09 26 54.9 +1.6**
SBA IAmb IAmb 09 26 56.6
comp=Z,13nm,1.1s
**SBA Scott Base 67.34 191** P **P 09 26 54.9 +1.6**
SBA pmax pmax
comp=Z,13nm,1.2s
**SBA Scott Base 67.34 191** P **P 09 26 55.0 +1.6**
SBA pP **pP 09 27 09.5 +2.2**
**S57A Dark Hollow, R 67.48 354** IAmb IAmb 09 27 10.8
comp=Z,12nm,1.1s
**WHAR Wooly Hollow 67.54 342** IAmb IAmb 09 27 11.4
comp=Z,11nm,1.0s
**MNHN Monahans 67.57 331** IAmb IAmb 09 27 12.4
comp=Z,16nm,1.0s
**S54A Dingess, Beckl 67.78 352** IAmb IAmb 09 27 14.4
comp=Z,14nm,1.2s
**APMT Aspermont 68.27 334** IAmb IAmb 09 27 18.1
comp=Z,17nm,0.9s
**TBI Tubuai 68.77 255** *e*LR LR 09 47 54.2
comp=Z,1μm,25.5s
TBI *e*LR LR 09 47 57.6
comp=Z,982nm,30.2s
**Q56A Snyder Ridge, 68.77 354** IAmb IAmb 09 27 05.5
comp=Z,22nm,1.4s
**CGM3 Cape Girardeau 68.78 345** IAmb IAmb 09 27 18.1
comp=Z,16nm,1.0s
**HHAR Hobbs 68.93 341** IAmb IAmb 09 27 20.0
comp=Z,14nm,1.0s
**WCI Wyandotte Cave 68.98 348** P **P 09 27 02.7 -1.3**
WCI pP **pP 09 27 17.4 -0.7**
**BBTS Babate 69.00 58** LR LR 09 57 49.6
comp=Z,114nm,19.0s,baz=112,slow=36
**P57A Homestead Farm 69.10 355** IAmb IAmb 09 27 21.8
comp=Z,17nm,1.0s
**TUL3 Leonard 69.14 339** IAmb IAmb 09 27 22.7
comp=Z,23nm,1.1s
**MVL Millersville 69.50 356** IAmb IAmb 09 27 29.1
comp=Z,14nm,1.0s
**OK052 Battle Ridge R 69.53 338** IAmb IAmb 09 27 25.2
comp=Z,26nm,1.2s
**QUOK Quay 69.67 339** IAmb IAmb 09 27 26.1
comp=Z,21nm,1.2s
**P52A Corning 69.69 351** IAmb IAmb 09 27 23.8
comp=Z,12nm,0.9s
**CCM Cathedral Cave 69.88 344** P **P 09 27 09.5 -0.1**
**CCM Cathedral Cave 69.88 344** P **P 09 27 09.5 -0.1**
CCM pmax pmax
comp=Z,24nm,0.9s
**CCM Cathedral Cave 69.88 344** P **P 09 27 10.4 +0.8**
CCM pP **pP 09 27 24.4 +0.6**
**SMWD Samnorwood 69.91 335** IAmb IAmb 09 27 26.5
comp=Z,21nm,1.1s
**S39A Bolivar 70.08 342** IAmb IAmb 09 27 28.7
comp=Z,28nm,1.3s
**SSPA Standing Stone 70.24 355** P **P 09 27 10.2 -1.5**
SSPA IAmb IAmb 09 27 14.3
comp=Z,24nm,1.4s
**SSPA Standing Stone 70.24 355** P **P 09 27 11.6 -0.1**
SSPA pP **pP 09 27 25.7 -0.1**
SSPA sP **sP 09 27 31.8 +0.3**
**319A Douglas 70.54 326** IAmb IAmb 09 27 31.8
comp=Z,12nm,0.9s
**121A Cookes Peak, D 70.79 328** IAmb IAmb 09 27 19.4
comp=Z,20nm,1.3s
**PPT2 Papeete2 71.30 260** *e*P **P 09 27 19.6 +0.7**
PPT2 *e*S **S 09 36 31.0 -2.1**
comp=Z,98nm,30.2s
**PPT2 Papeete2 71.30 260** *e*LR LR 09 49 04.5
comp=Z,237nm,23.2s
PPT2 *e*LR LR 09 49 05.1
comp=Z,386nm,23.8s
**PPT Papeete 71.31 260** LR LR 09 50 02.0
comp=Z,214nm,18.8s,baz=129,slow=28
**HRV Adam Dziewonsk 71.86 0** P **P 09 27 22.8 +1.3**
HRV pP **pP 09 27 36.6 +0.7**
**RTBA Rita Blanca 72.02 334** IAmb IAmb 09 27 25.8
comp=Z,18nm,1.5s
**ANMO Albuquerque 72.24 330** P **P 09 27 26.0 +1.8**
ANMO **pP 09 27 39.4 +1.3**
**ANMO Albuquerque 72.24 330** LR LR 09 55 08.2
comp=Z,148nm,20.4s,baz=248,slow=32
**ANMO Albuquerque 72.24 330** ⇑*e*P **P 09 27 25.5 +1.3**
ANMO pmax pmax
comp=Z,9.0nm,1.6s
**214A Organ Pipe Nat 72.76 324** P **P 09 27 28.6 +1.4**
214A pP **pP 09 27 42.9 +1.7**
**X18A Snowflake 73.45 328** P **P 09 27 32.6 +1.2**
X18A **PcP 09 27 47.3 0.0**
**DBIC Dimbokro 73.47 72** P **P 09 27 31.4 -0.3**
comp=Z,5.4nm,0.4s,baz=220,slow=5.4,SNR=13
DBIC LR LR 09 58 08.2
comp=Z,217nm,19.5s,baz=184,slow=34
comp=Z,5.4nm,0.4s
**X16A Lo Mia Camp, P 74.06 327** IAmb IAmb 09 27 53.1
comp=Z,14nm,1.1s
**KSCO Kaye Shedlock' 74.25 335** P **P 09 27 36.8 +1.0**
KSCO pP **pP 09 27 51.7 +1.3**
**WBO Williamsburg 74.43 357 PcP 09 27 51.2 +0.3**
**SADO Sadowa 74.45 354 PcP 09 27 50.8 -0.3**
SADO IAmb IAmb 09 27 51.5
comp=Z,15nm,0.9s
**WUAZ Wupatki 74.93 327** IAmb IAmb 09 27 58.2
comp=Z,12nm,1.0s
**MVCO Mesa Verde 75.03 330** IAmb IAmb 09 27 44.8
comp=Z,19nm,1.2s
**Q24A Divide 75.15 334** IAmb IAmb 09 27 59.0
comp=Z,18nm,0.9s
**TRQ Mont Tremblant 75.63 358** IAmb IAmb 09 27 58.5
comp=Z,18nm,0.9s
**W13A Hualapai Mount 75.80 325** P **P 09 27 45.8 +0.7**
W13A **pP 09 28 01.0 +2.0**
**PFO Pinyon Flats O 75.95 323** P **P 09 27 47.0 +1.2**
**PFO Pinyon Flats O 75.95 323** LR LR 09 54 25.1
comp=Z,870nm,21.2s,baz=153,slow=30
**PFO Pinyon Flats O 75.95 323** *c i*P **P 09 27 48.2 +2.4**
PFO pmax pmax
comp=Z,31nm,1.6s
**SMCO Snowmass 76.06 332** IAmb IAmb 09 28 08.1
comp=Z,21nm,1.0s
**U15A North Rim 76.10 327** IAmb IAmb 09 28 04.6
comp=Z,11nm,1.1s
**BRIGG Briggsdale 76.25 335** P **P 09 27 48.5 +1.2**
BRIGG pP **pP 09 28 03.5 +1.7**
BRIGG IAmb IAmb 09 28 04.8
comp=Z,16nm,1.0s
**ELS Elsinore Mount 76.50 322** P **P 09 27 49.3 +0.4**
ELS IAmb IAmb 09 27 52.7
comp=Z,13nm,1.1s
ELS pP **pP 09 28 05.2 +2.3**
**SUR Sutherland 76.58 120** LR LR 09 56 42.3
comp=Z,138nm,18.5s,baz=238,slow=32
**BATG Bathurst New B 76.80 4** P **P 09 27 51.3 +1.2**
BATG IAmb IAmb 09 28 05.9
comp=Z,14nm,0.9s
**N23A Red Feather La 77.13 334** IAmb IAmb 09 28 11.7
comp=Z,12nm,1.0s
**MAW Mawson 77.17 164** P **P 09 27 52.4 +0.3**
comp=Z,8.9nm,0.5s,baz=212,slow=6.8,SNR=26
MAW LR LR 10 04 17.4
comp=Z,176nm,19.6s,baz=218,slow=38
comp=Z,8.9nm,0.5s
**PHWY Pilot Hill 77.30 334** IAmb IAmb 09 27 55.9
comp=Z,7.6nm,0.8s
**MTPU Mount Pierson 77.36 328** IAmb IAmb 09 28 11.3
comp=Z,9.4nm,0.9s
**GSC Goldstone, Bar 77.44 323** IAmb IAmb 09 27 58.0
comp=Z,22nm,1.4s
**SRU San Rafael Swe 77.49 330** IAmb IAmb 09 28 12.0
comp=Z,12nm,0.9s
**CCUT Cedar City 77.51 327** IAmb IAmb 09 28 13.4
comp=Z,15nm,1.0s
**Q16A Castle Valley 77.62 329** IAmb IAmb 09 27 59.5
comp=Z,14nm,1.0s
**MSU Marysvale 77.74 329** P **P 09 27 55.9 0.0**
MSU pP **pP 09 28 11.8 +2.0**
**P17A Butcher Ranch, 77.89 330** IAmb IAmb 09 28 14.3
comp=Z,18nm,1.0s
**PRN Pahroc Range 78.20 326** IAmb IAmb 09 28 16.8
comp=Z,16nm,1.0s
**RAR Rarotonga 78.29 252** LR LR 09 54 10.5
comp=Z,113nm,20.9s,baz=133,slow=29
**F33A 5 Mile Ranch, 78.47 343** IAmb IAmb 09 28 00.4
comp=Z,19nm,1.4s
**ISA Isabella, Lake 78.59 323** IAmb IAmb 09 28 18.8
comp=Z,11nm,1.1s
**MPU Maple Canyon 78.72 330** IAmb IAmb 09 28 19.0
comp=Z,14nm,1.0s
**S11A Rachel 78.73 326** IAmb IAmb 09 28 19.2
comp=Z,20nm,1.2s
**NLU North Lily Min 78.87 329** IAmb IAmb 09 28 05.7
comp=Z,22nm,1.4s
**JLU Jordanelle 79.12 330** IAmb IAmb 09 28 21.1
comp=Z,10nm,0.9s
**RSSD Black Hills 79.25 337** P **P 09 28 04.1 0.0**
**RSSD Black Hills 79.25 337** P **P 09 28 04.1 0.0**
RSSD pmax pmax
comp=Z,10.0nm,1.0s
**DUG Dugway, Tooele 79.39 329** IAmb IAmb 09 28 08.4
comp=Z,20nm,1.2s
**TCUT Toone Canyon 79.53 331** IAmb IAmb 09 28 30.1
comp=Z,12nm,0.9s
**TSUM Tsumeb 80.02 106** P **P 09 28 09.1 +0.2**
TSUM IAmb IAmb 09 28 10.1
comp=Z,13nm,0.9s
**TSUM Tsumeb 80.02 106** LR LR 09 59 34.8
comp=Z,239nm,21.9s,baz=161,slow=33
**BGU Big Grassy Mou 80.08 329** IAmb IAmb 09 28 12.3
comp=Z,17nm,1.3s
**PDAR Pinedale Array 80.14 333** P **P 09 28 09.3 +0.4**
**PDAR Pinedale Array 80.14 333** P **P 09 28 10.1 +1.1**
comp=Z,2.0nm,0.6s,baz=136,slow=6.9,SNR=27
PDAR PKKPbc **PKKPbc 09 46 52.2 -2.3**
comp=Z,0.4nm,0.5s,baz=214,slow=0.7,SNR=6.0
PDAR LR LR 10 00 37.8
comp=Z,64nm,20.9s,baz=138,slow=33
comp=Z,2.0nm,0.6s
**OMMB Old Mammoth Mi 80.35 324** IAmb IAmb 09 28 13.8
comp=Z,18nm,1.3s
**LHV Little Huntoon 80.58 324** IAmb IAmb 09 28 15.1
comp=Z,24nm,1.4s
**NVAR Mina Array Bea 80.61 325** P **P 09 28 13.0 +1.4**
**NVAR Mina Array Bea 80.61 325** P **P 09 28 13.6 +2.0**
comp=Z,1.0nm,0.6s,baz=145,slow=5.9,SNR=14
NVAR pP **pP 09 28 27.9 +2.2**
comp=Z,1.8nm,0.8s,baz=146,slow=8.9,SNR=8.8
NVAR PKKPbc **PKKPbc 09 46 51.5 -1.6**
comp=Z,0.4nm,0.6s,baz=341,slow=3.1,SNR=3.8
NVAR LR LR 09 57 57.4
comp=Z,78nm,21.9s,baz=108,slow=31
comp=Z,1.0nm,0.6s
**AGMN Agassiz Nation 80.65 344** IAmb IAmb 09 28 28.6
comp=Z,13nm,1.1s
**HVU Hansel Valley 80.66 330** IAmb IAmb 09 28 29.6
comp=Z,12nm,0.9s
**AHID Auburn Hatcher 80.76 332** IAmb IAmb 09 28 15.0
comp=Z,14nm,1.1s
**RYN Ryan 80.88 325** IAmb IAmb 09 28 16.5
comp=Z,17nm,1.5s
**KVN Kaiserville 80.99 325** IAmb IAmb 09 28 16.6
comp=Z,16nm,1.4s
**WAKR Walker 81.25 324** IAmb IAmb 09 28 19.0
comp=Z,27nm,1.4s
**TPAW Teton Pass 81.30 332** IAmb IAmb 09 28 17.0
comp=Z,19nm,1.4s
**FLWY Flagg Ranch 81.69 333** IAmb IAmb 09 28 34.9
comp=Z,15nm,1.0s
**BOSA Boshof 81.72 118** P **P 09 28 17.4 -0.4**
comp=Z,6.7nm,0.6s,baz=246,slow=2.0,SNR=12
BOSA LR LR 10 00 58.5
comp=Z,106nm,21.2s,baz=208,slow=33
comp=Z,6.7nm,0.6s
**RLMT Red Lodge 82.00 334** IAmb IAmb 09 28 35.5
comp=Z,8.1nm,0.9s
**AFDM Forest Hills D 82.37 323** IAmb IAmb 09 28 23.7
comp=Z,21nm,1.4s
**TORD Torodi Ar. Bea 82.39 70** P **P 09 28 20.9 -0.3**
comp=Z,4.9nm,0.6s,baz=282,slow=5.1,SNR=43
TORD LR LR 10 03 33.6
comp=Z,173nm,19.2s,baz=224,slow=35
comp=Z,4.9nm,0.6s
**ULM Lac du Bonnet 82.48 345** P **P 09 28 21.1 +0.3**
comp=Z,4.4nm,0.8s,baz=160,slow=4.9,SNR=4.9
comp=Z,4.4nm,0.8s
**ULM Lac du Bonnet 82.48 345** *c i*P **P 09 28 20.7 -0.1**
**HLID Hailey 82.81 330** IAmb IAmb 09 28 40.9
comp=Z,11nm,0.9s
**ORV Oroville 83.09 323** P **P 09 28 25.1 +0.8**
ORV **pP 09 28 41.3 +2.8**
**MFID Camas Ranch 83.32 329** IAmb IAmb 09 28 28.6
comp=Z,15nm,1.4s
**LBTB Lobatse 83.75 115** LR LR 10 01 01.0
comp=Z,168nm,20.9s,baz=208,slow=32
**WVOR Wild Horse Val 83.85 327** IAmb IAmb 09 28 31.3
comp=Z,17nm,1.4s
**SCHQ Schefferville 84.30 3** P **P 09 28 29.2 -0.9**
**SCHQ Schefferville 84.30 3** P **P 09 28 30.3 +0.2**
comp=Z,6.1nm,0.8s,baz=190,slow=6.3,SNR=8.2
SCHQ pP **pP 09 28 44.0 -0.8**
comp=Z,12nm,1.0s,baz=98,slow=3.3,SNR=6.9
SCHQ LR LR 10 05 12.1
comp=Z,29nm,21.6s,baz=208,slow=35
comp=Z,6.1nm,0.8s
**CASY Casey 84.30 181** P **P 09 28 30.3 +0.1**
CASY **pP 09 28 46.9 +2.0**
**EGMT Eagleton 84.63 335** IAmb IAmb 09 28 33.4
comp=Z,21nm,1.4s
**MSO Missoula 85.25 332** IAmb IAmb 09 28 39.2
comp=Z,9.2nm,1.3s
**YBH Yreka Blue Hor 85.32 324** LR LR 10 00 38.7
comp=Z,62nm,21.2s,baz=141,slow=31
**I07A Izee 85.51 328** IAmb IAmb 09 28 53.9
comp=Z,6.7nm,1.0s
**J05D Fort Rock, OR 85.74 326** P **P 09 28 38.5 +0.8**
J05D **pP 09 28 54.6 +2.6**
**F10A Beach Ranch, E 85.95 330** IAmb IAmb 09 28 57.5
comp=Z,13nm,1.1s
**G08A Pilot Rock 86.19 329** IAmb IAmb 09 28 42.8
comp=Z,11nm,1.5s
**URZ Urewera 86.83 227** LR LR 09 59 29.8
comp=Z,112nm,18.2s,baz=210,slow=30
**G06A Carlson Farm, 86.92 328** IAmb IAmb 09 29 00.8
comp=Z,12nm,1.3s
**LTZ Lake Taylor 87.05 221** P **P 09 28 44.3 -0.1**
**RPZ Rata Peaks 87.16 220** P **P 09 28 46.1 +1.2**
**HAWA Hanford 87.29 329** IAmb IAmb 09 29 02.6
comp=Z,10nm,0.9s
**D08A Wollman Farm, 87.53 330** IAmb IAmb 09 28 48.9
comp=Z,12nm,1.3s
**NEW Newport 87.70 331** LR LR 10 05 16.0
comp=Z,93nm,18.9s,baz=144,slow=34
**MXC Moxie City 87.77 329** IAmb IAmb 09 28 50.4
comp=Z,7.6nm,1.1s
**C09A Chrisman Ranch 87.82 331** IAmb IAmb 09 29 04.7
comp=Z,5.4nm,0.8s
**TOZ Tahuroa Road 88.17 227** P **P 09 28 50.1 +0.3**
TOZ IAmb IAmb 09 28 52.2
comp=Z,7.6nm,0.9s
**B08A Colville Reser 88.70 330** IAmb IAmb 09 28 53.8
comp=Z,8.7nm,1.4s
**MDT Midelt 88.82 51** LR LR 10 10 07.7
comp=Z,92nm,18.6s,baz=238,slow=37
**FRB Frobisher Bay 93.17 1** LR LR 10 13 52.5
comp=Z,71nm,20.0s,baz=268,slow=37
**ESDC Sonseca Array 93.32 46** P **P 09 29 14.8 +1.3**
comp=Z,0.3nm,0.5s,baz=289,slow=3.9,SNR=4.2
ESDC LR LR 10 12 05.5
comp=Z,135nm,18.1s,baz=217,slow=36
comp=Z,0.3nm,0.5s
**BBB Bella Bella 95.35 329** LR LR 10 08 22.9
comp=Z,23nm,21.1s,baz=186,slow=33
**SFJD Kangerlussuaq 97.71 8** LR LR 10 15 38.8
comp=Z,30nm,19.2s,baz=186,slow=37

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| YKA | **Yellowknife Ar** | **98.14** | **341** | P | | Pdif | 09 29 35.3 | +0.5 | |
| | comp=Z,0.5nm,0.6s,baz=132,slow=4.8,SNR=3.9 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| KEST | **Kesra** | **100.08** | **55** | LR | | LR | 10 17 36.4 | | |
| | comp=Z,233nm,18.9s,baz=204,slow=37 | | | | | | | | |
| MBAR | **Mbarara** | **100.39** | **97** | ⇓*i*P | | **Pdif** | **09 29 43.7** | **-2.7** | |
| MBAR | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| DZM | **Mont Dzumac** | **104.07** | **234** | *e*LR | | LR | 10 04 17.5 | | |
| | comp=Z,247nm,24.1s | | | | | | | | |
| VSU | **Vasula** | **119.06** | **37** | ⇓*i*PKIKP | | **PKiKP** | **09 34 47.1** | **+0.5** | |
| ASAR | **Alice Springs** | **121.55** | **208** | PKP | | **PKPdf** | **09 34 51.9** | **-0.9** | |
| | comp=Z,0.8nm,0.6s,baz=126,slow=1.7,SNR=14 | | | | | | | | |
| ASAR | | | | pPKP | | **pPKPdf** | **09 35 06.6** | **-1.1** | |
| | comp=Z,1.7nm,1.0s,baz=143,slow=1.7,SNR=6.6 | | | | | | | | |
| WRA | **Warramunga Arr** | **124.67** | **210** | PKP | | **PKPdf** | **09 34 58.3** | **-0.5** | |
| | comp=Z,2.3nm,0.5s,baz=160,slow=1.7,SNR=98 | | | | | | | | |
| WRA | | | | pPKP | | **pPKPdf** | **09 35 12.7** | **-1.1** | |
| | comp=Z,3.1nm,0.6s,baz=161,slow=1.6,SNR=12 | | | | | | | | |
| WRAB | **Tennant Creek** | **124.68** | **210** | ⇑*e*PKIKP | | **PKPdf** | **09 34 58.2** | **-0.6** | |
| VSLR | **Vesyoloye** | **124.84** | **56** | ⇑*e*PKIKP | | **PKPdf** | **09 34 55.8** | **-2.4** | |
| H11S2 | **WAKE ISLAND Hyl** | **126.12** | **272** | T | | T | 11 54 04.3 | | |
| | baz=115,slow=75,SNR=127 | | | | | | | | |
| H11S1 | **WAKE ISLAND Hyl** | **126.13** | **272** | T | | T | 11 54 07.7 | | |
| | baz=115,slow=75,SNR=111 | | | | | | | | |
| H11S3 | **WAKE ISLAND Hyl** | **126.14** | **272** | T | | T | 11 54 05.1 | | |
| | baz=115,slow=75,SNR=100 | | | | | | | | |
| H11N3 | **WAKE ISLAND Hyl** | **126.42** | **273** | T | | T | 11 54 33.4 | | |
| | baz=116,slow=75,SNR=40 | | | | | | | | |
| H11N1 | **WAKE ISLAND Hyl** | **126.44** | **273** | T | | T | 11 54 31.6 | | |
| | baz=116,slow=75,SNR=14 | | | | | | | | |
| H11N2 | **WAKE ISLAND Hyl** | **126.44** | **273** | T | | T | 11 54 30.4 | | |
| | baz=116,slow=75,SNR=61 | | | | | | | | |
| KIV | **Kislovodsk** | **126.82** | **55** | *i* PKIKP | | **PKiKP** | **09 35 02.4** | **-0.2** | |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| BILL | **Bilibino** | **129.13** | **336** | ⇓*i*PKIKP | | **PKiKP** | **09 35 06.8** | **+0.4** | |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | | |
| ARU | **Arti** | **136.19** | **38** | *i* PKIKP | | **PKiKP** | **09 35 20.3** | **-0.7** | |
| ARU | | | | | | | 09 37 59.2 | | |
| ARU | | | | SS | | SS | 09 55 48.1 | -8.6 | |
| SEY | **Seymchan** | **136.47** | **333** | ⇑*e*PKIKP | | **PKPdf** | **09 35 20.6** | **+1.0** | |
| TIXI | **Tiksi** | **136.55** | **351** | ⇑*e*PKIKP | | **PKPdf** | **09 35 18.4** | **-1.1** | |
| PEA0B | **Petropavlovsk-** | **137.36** | **318** | ⇑*e*PKIKP | | **PKiKP** | **09 35 23.7** | **+0.2** | |
| BRVK | **Borovoye** | **143.72** | **39** | ⇑*e*PKIKP | | PKPbc | 09 35 31.1 | +0.3 | |
| BVAR | **Borovoye Array** | **143.80** | **39** | PKP | | **PKPdf** | **09 35 32.1** | **-1.1** | |
| | comp=Z,3.0nm,0.6s,baz=302,slow=2.8,SNR=12 | | | | | | | | |
| KAPI | **Kappang** | **143.80** | **199** | PKP | | PKPbc | 09 35 33.0 | +0.9 | |
| | comp=Z,22nm,0.6s,baz=211,slow=2.6,SNR=5.8 | | | | | | | | |
| KAPI | **Kappang** | **143.80** | **199** | PKIKP | | PKPbc | 09 35 33.0 | +0.9 | |
| YAK | **Yakutsk** | **144.80** | **343** | *c* *i*PKIKP | | **PKPdf** | **09 35 34.4** | **-0.2** | |
| CHM | **Chimkent** | **146.46** | **57** | *e*PKP | | **PKPdf** | **09 35 37.7** | **-0.6** | |
| | baz=57 | | | | | | | | |
| CHM | | | | *e*PKPab | | **PKPab** | **09 35 40.2** | **-0.4** | |
| | baz=57 | | | | | | | | |
| CHM | **Chimkent** | **146.46** | **57** | *e*PKP2 | | **PKPdf** | **09 35 37.6** | **-0.6** | |
| BRLS | **Borolday** | **146.51** | **56** | *e*PKP | | **PKPdf** | **09 35 37.6** | **-0.7** | |
| | baz=56 | | | | | | | | |
| BRLS | | | | *e*PKPbc | | **PKPbc** | **09 35 38.9** | **-0.8** | |
| | baz=56 | | | | | | | | |
| BRLS | | | | *e*PKPab | | **PKPab** | **09 35 39.9** | **-1.0** | |
| | baz=56 | | | | | | | | |
| BRLS | **Borolday** | **146.51** | **56** | *e*PKIKP | | **PKPdf** | **09 35 37.6** | **-0.7** | |
| YSS | **Yuzh-Sakhalins** | **148.36** | **313** | *e*PKP2 | | **PKPbc** | **09 35 44.2** | **-0.4** | |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| BTLS | **Baital** | **148.96** | **51** | *e*PKP | | **PKPdf** | **09 35 42.1** | **-0.2** | |
| | baz=51 | | | | | | | | |
| BTLS | | | | *e*PKPbc | | **PKPbc** | **09 35 46.1** | **-0.1** | |
| | baz=51 | | | | | | | | |
| BTLS | **Baital** | **148.96** | **51** | *e*PKIKP | | **PKPdf** | **09 35 42.0** | **-0.2** | |
| ASAJ | **Asahikawa** | **149.37** | **307** | PKPbc | | **PKPbc** | **09 35 48.1** | **+0.8** | |
| | comp=Z,7.7nm,1.1s,baz=222,slow=2.4,SNR=4.4 | | | | | | | | |
| KURBB | **Kurchatov Arra** | **149.38** | **39** | PKPbc | | **PKiKP** | **09 35 47.6** | **-0.6** | |
| | comp=Z,6.7nm,0.5s,baz=301,slow=3.1,SNR=11 | | | | | | | | |
| KURK | **Kurchatov** | **149.38** | **38** | ⇓*e*PKHKP | | PKPpre | 09 35 40.1 | | |
| EKS2 | **Erkin-Say** | **149.42** | **56** | P | | **PKiKP** | **09 35 48.9** | **+0.1** | |
| | SNR=7.6 | | | | | | | | |
| USP | **Ospenovka** | **149.78** | **54** | P | | **PKiKP** | **09 35 49.4** | **0.0** | |
| | SNR=7.2 | | | | | | | | |
| SGDS | **Sogindy** | **149.82** | **54** | *e*PKP | | **PKPdf** | **09 35 43.3** | **-0.5** | |
| | baz=54 | | | | | | | | |
| SGDS | | | | *e*PKPbc | | **PKPbc** | **09 35 48.5** | **-0.1** | |
| | baz=54 | | | | | | | | |
| SGDS | | | | *e*PKPab | | **PKPab** | **09 35 53.8** | **-0.3** | |
| | baz=54 | | | | | | | | |
| SGDS | **Sogindy** | **149.82** | **54** | *e*PKHKP | | PKPpre | 09 35 43.2 | | |
| AAK | **Ala-Archa** | **149.94** | **55** | P | | **PKiKP** | **09 35 50.4** | **+0.5** | |
| | SNR=11 | | | | | | | | |
| AAK | **Ala-Archa** | **149.94** | **55** | ⇓*e*PKHKP | | PKPpre | 09 35 45.6 | | |
| ZALV | **Zalesovo Beam** | **150.34** | **29** | PKPbc | | **PKiKP** | **09 35 50.1** | **0.0** | |
| | comp=Z,51nm,0.6s,baz=305,slow=3.4,SNR=88 | | | | | | | | |
| SEM | **Semipalatinsk** | **150.42** | **38** | *e*PKP | | **PKPdf** | **09 35 44.2** | **-0.4** | |
| | baz=38 | | | | | | | | |
| SEM | | | | *e*PKPbc | | **PKPbc** | **09 35 49.8** | **-0.2** | |
| | baz=38 | | | | | | | | |
| SEM | | | | *e*PKPab | | **PKPab** | **09 35 56.6** | **0.0** | |
| | baz=38 | | | | | | | | |
| SEM | **Semipalatinsk** | **150.42** | **38** | *e*PKIKP | | **PKPdf** | **09 35 44.2** | **-0.4** | |
| TKM2 | **Tokmak 2** | **150.65** | **54** | P | | **PKiKP** | **09 35 51.5** | **+0.1** | |
| | SNR=8.8 | | | | | | | | |
| KUU | **Kurty** | **150.88** | **52** | *e*PKP | | **PKPdf** | **09 35 44.8** | **-0.5** | |
| | baz=52 | | | | | | | | |
| KUU | | | | *e*PKPbc | | **PKPbc** | **09 35 50.9** | **-0.1** | |
| | baz=52 | | | | | | | | |
| KUU | | | | *e*PKPab | | **PKPab** | **09 35 58.1** | **-0.4** | |
| | baz=52 | | | | | | | | |
| KUU | **Kurty** | **150.88** | **52** | *e*PKIKP | | **PKPdf** | **09 35 44.8** | **-0.5** | |
| ULHL | **Ulahol** | **151.29** | **55** | P | | **PKiKP** | **09 35 53.6** | **+0.8** | |
| | SNR=10 | | | | | | | | |
| CHKK | **Chushkaly** | **151.34** | **52** | *e*PKP | | **PKPdf** | **09 35 45.5** | **-0.5** | |
| | baz=52 | | | | | | | | |
| CHKK | | | | *e*PKPab | | **PKPab** | **09 36 00.4** | **0.0** | |
| | baz=52 | | | | | | | | |
| CHKK | **Chushkaly** | **151.34** | **52** | *e*PKIKP | | **PKPdf** | **09 35 45.5** | **-0.5** | |
| AAA | **Alma-Ata** | **151.49** | **53** | *e*PKP | | **PKPdf** | **09 35 45.7** | **-0.6** | |
| | baz=53 | | | | | | | | |
| AAA | | | | *e*PKPbc | | **PKPbc** | **09 35 52.3** | **-0.2** | |
| | baz=53 | | | | | | | | |
| AAA | | | | *e*PKPab | | **PKPab** | **09 36 00.8** | **-0.3** | |
| | baz=53 | | | | | | | | |
| AAA | **Alma-Ata** | **151.49** | **53** | *e*PKIKP | | **PKPdf** | **09 35 45.7** | **-0.6** | |
| MDOK | **Medeo** | **151.60** | **53** | *e*PKP | | **PKPdf** | **09 35 45.9** | **-0.8** | |
| | baz=53 | | | | | | | | |
| MDOK | | | | *e*PKPbc | | **PKPbc** | **09 35 52.7** | **-0.2** | |
| | baz=53 | | | | | | | | |
| MDOK | | | | *e*PKPab | | **PKPab** | **09 36 01.4** | **-0.2** | |
| | baz=53 | | | | | | | | |
| MDOK | **Medeo** | **151.60** | **53** | *e*PKIKP | | **PKPdf** | **09 35 45.8** | **-0.8** | |
| BOD | **Bodaibo** | **151.64** | **354** | *e*PKIKP | | **PKPbc** | **09 35 51.2** | **-1.0** | |
| BOD | | | | pmax | | pmax | | | |
| | comp=Z,31nm,1.6s | | | | | | | | |
| ZEA | **Zeya** | **152.36** | **336** | *e*PKIKP | | **PKiKP** | **09 35 55.0** | **+0.7** | |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,1.5s | | | | | | | | |
| ZHN | **Zhinishke** | **152.56** | **53** | *e*PKPbc | | **PKiKP** | **09 35 55.3** | **+0.1** | |
| | baz=53 | | | | | | | | |
| ZHN | | | | *e*PKPab | | **PKPab** | **09 36 05.6** | **0.0** | |
| | baz=53 | | | | | | | | |
| ZHN | **Zhinishke** | **152.56** | **53** | *e*PKIKP | | **PKiKP** | **09 35 55.3** | **+0.1** | |
| SATY | **Saty** | **152.57** | **53** | *e*PKP | | **PKPdf** | **09 35 47.5** | **-0.5** | |
| | baz=53 | | | | | | | | |
| SATY | | | | *e*PKPbc | | **PKiKP** | **09 35 55.6** | **+0.3** | |
| | baz=53 | | | | | | | | |
| SATY | | | | *e*PKPab | | **PKPab** | **09 36 05.3** | **-0.4** | |
| | baz=53 | | | | | | | | |
| SATY | **Saty** | **152.57** | **53** | *e*PKIKP | | **PKPdf** | **09 35 47.5** | **-0.5** | |
| KPKS | **Kokpek** | **152.63** | **52** | *e*PKP | | **PKPdf** | **09 35 47.4** | **-0.7** | |
| | baz=52 | | | | | | | | |
| KPKS | | | | *e*PKPbc | | **PKPbc** | **09 35 55.0** | **-0.1** | |
| | baz=52 | | | | | | | | |
| KPKS | | | | *e*PKPab | | **PKPab** | **09 36 05.7** | **-0.2** | |
| | baz=52 | | | | | | | | |
| KPKS | **Kokpek** | **152.63** | **52** | *e*PKIKP | | **PKPdf** | **09 35 47.3** | **-0.7** | |
| UZB | **Uzynbulak** | **152.97** | **52** | *e*PKP | | **PKPdf** | **09 35 48.0** | **-0.7** | |
| | baz=52 | | | | | | | | |
| UZB | | | | *e*PKPbc | | **PKPbc** | **09 35 55.8** | **-0.2** | |
| | baz=52 | | | | | | | | |
| UZB | | | | *e*PKPab | | **PKPab** | **09 36 07.0** | **-0.4** | |
| | baz=52 | | | | | | | | |
| UZB | **Uzynbulak** | **152.97** | **52** | *e*PKIKP | | **PKPdf** | **09 35 47.9** | **-0.7** | |
| SHLS | **Shalkode** | **153.27** | **52** | *e*PKP | | **PKPdf** | **09 35 48.8** | **-0.2** | |
| | baz=52 | | | | | | | | |
| SHLS | | | | *e*PKPbc | | **PKiKP** | **09 35 57.4** | **+0.7** | |
| | baz=52 | | | | | | | | |
| SHLS | | | | *e*PKPab | | **PKPab** | **09 36 09.5** | **+0.9** | |
| SHLS | **Shalkode** | **153.27** | **52** | *e*PKIKP | | **PKPdf** | **09 35 48.8** | **-0.2** | |
| MK31 | **Makanchi Array** | **153.50** | **43** | *c* *i*PKIKP | | **PKiKP** | **09 35 56.9** | **0.0** | |
| MKAR | **Makanchi Array** | **153.50** | **43** | PKP | | **PKPdf** | **09 35 49.0** | **-0.1** | |
| | comp=Z,0.8nm,0.9s,baz=268,slow=4.2,SNR=4.1 | | | | | | | | |
| MKAR | | | | PKPbc | | **PKiKP** | **09 35 56.9** | **0.0** | |
| | comp=Z,1.9nm,0.7s,baz=326,slow=2.0,SNR=14 | | | | | | | | |
| MKAR | | | | PKPab | | **PKPab** | **09 36 09.4** | **0.0** | |
| | comp=Z,2.3nm,0.7s,baz=318,slow=1.6,SNR=3.9 | | | | | | | | |
| KLR | **Kul'dur** | **153.65** | **324** | PKPbc | | **PKiKP** | **09 35 57.3** | **+0.2** | |
| | comp=Z,0.6nm,0.3s,baz=67,slow=1.3,SNR=4.9 | | | | | | | | |
| KLR | **Kul'dur** | **153.65** | **324** | ⇓*e*PKIKP | | **PKPdf** | **09 35 47.6** | **-1.6** | |
| MJAR | **Matsushiro Arr** | **154.21** | **293** | PKPab | | **PKPab** | **09 36 13.8** | **+1.1** | |
| | comp=Z,1.9nm,0.8s,baz=112,slow=2.5,SNR=4.7 | | | | | | | | |
| MJAR | | | | pPKPab | | **pPKPab** | **09 36 28.3** | **+1.1** | |
| | comp=Z,7.3nm,0.9s,baz=111,slow=2.3,SNR=9.9 | | | | | | | | |
| ZSN | **Zaisan** | **154.61** | **39** | *e*PKP | | **PKPdf** | **09 35 50.2** | **-0.5** | |
| | baz=39 | | | | | | | | |
| ZSN | | | | *e*PKPbc | | **PKiKP** | **09 35 59.5** | **+0.3** | |
| | baz=39 | | | | | | | | |
| ZSN | | | | *e*PKPab | | **pPKPbc** | **09 36 14.6** | **+0.3** | |
| | baz=39 | | | | | | | | |
| ZSN | **Zaisan** | **154.61** | **39** | *e*PKIKP | | **PKPdf** | **09 35 50.2** | **-0.5** | |
| HEH | **HeiHe** | **154.98** | **330** | *e*P | | PKPab | 09 36 06.8 | -8.6 | |
| HEH | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.4s | | | | | | | | |
| USRK | **Ussuriysk Ar.** | **156.37** | **314** | PKPab | | **PKPab** | **09 36 20.1** | **-1.5** | |
| | comp=Z,0.8nm,0.6s,baz=64,slow=9.8,SNR=2.7 | | | | | | | | |
| ZAK | **Zakamensk** | **159.00** | **9** | *e*PKIKP | | **PKPdf** | **09 35 56.8** | **+0.5** | |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.4s | | | | | | | | |
| SONM | **Songino Array** | **161.84** | **4** | PKPab | | **PKPab** | **09 36 46.1** | **+0.8** | |
| | comp=Z,1.7nm,0.7s,baz=331,slow=4.3,SNR=7.8 | | | | | | | | |
| SONM | | | | pPKPab | | **pPKPab** | **09 37 00.3** | **+0.2** | |
| | comp=Z,2.5nm,0.8s,baz=334,slow=3.9,SNR=6.0 | | | | | | | | |
| SONM | | | | PP | | **PP** | **09 40 30.6** | **+2.2** | |
| | comp=Z,0.3nm,0.3s,baz=328,slow=5.1,SNR=5.9 | | | | | | | | |
| KSRS | **Korea Array** | **162.03** | **301** | PKPab | | **PKPab** | **09 36 48.0** | **+1.6** | |
| | comp=Z,0.5nm,0.5s,baz=46,slow=7.1,SNR=1.9 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **165.85** | **140** | PKPab | | **PKPab** | **09 37 02.8** | **-0.8** | |
| | comp=Z,0.8nm,0.4s,baz=222,slow=5.9,SNR=5.9 | | | | | | | | |
| GTA | **Gaotai** | **168.01** | **34** | PKP | | **PKPdf** | **09 36 07.0** | **+1.9** | |
| GTA | | | | pPKP | | pPKPdf | 09 36 17.8 | -2.6 | |
| HHC | **Hu-ho-hao-te** | **168.60** | **348** | *e*P | | **PKPdf** | **09 36 11.0** | **+5.6** | |
| HNS | **HongShan** | **170.72** | **327** | *e*PKP | | **PKPdf** | **09 36 05.0** | **-1.6** | |
| HNS | | | | PKPab | | **PKPab** | **09 37 25.8** | **+1.2** | |
| HNS | | | | LR | | LR | | | |
| | comp=N,130nm,15.9s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,120nm,18.3s | | | | | | | | |
| NJ2 | **Nanjing** | **170.74** | **287** | *e*P | | **PKPdf** | **09 36 08.0** | **+1.2** | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.5s | | | | | | | | |
| PZH | **PanZhiHua** | **173.29** | **117** | PKP | | **PKPdf** | **09 36 07.5** | **-0.8** | |

*NEIC **27** 09:16:15.5±1.1,5.8S±0.1°×154.7°E±0.7,h140km±9km, mb4.2/17, Error ellipse: s-maj=18.3km s-min=3.8km az=210.0*
*IDC **27** 09:16:24.7±3.9,6.0°S×154.8°E,h242km±38km, mb3.5/11, mbtmp4.1/13, Error ellipse: s-maj=22.9km s-min=20.4km az=96.0*
**ISC 27 09:16:15.7**±0.6,**5.86°S**±0.0°08×**154.86°E**±0.0°09,**h150km**,**n36**, σ1=**27**/36,**mb3.9**/16,**Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | **Rabaul** | **3.15** | **302** | | **Pn** | **09 17 03.0** | **-2.0** |
| PMG | **Port Moresby** | **8.40** | **245** | Pn | **Pn** | **09 18 13.1** | **-1.5** |
| PMG | **Port Moresby** | **8.40** | **245** | P | Pn | 09 18 21.8 | +7.2 |
| | 21nm,0.8s,baz=45,slow=14,SNR=5.3 | | | | | | |
| PMG | | | | S | **Sn** | **09 19 52.7** | **+4.6** |
| | 19nm,0.8s,baz=49,slow=20,SNR=4.2 | | | | | | |
| COEN | **Coen** | **14.04** | **234** | P | **P** | **09 19 30.8** | **-0.5** |
| CTA | **Charters Tower** | **16.43** | **210** | P | **P** | **09 19 59.0** | **+1.2** |
| | 0.2nm,0.6s,baz=197,slow=22,SNR=1.7 | | | | | | |
| CTAO | **Charters Tower** | **16.43** | **210** | P | **P** | **09 19 58.7** | **+0.9** |
| CTAO | | | | IAmb | IAmb | 09 20 05.3 | |
| | comp=Z,19nm,1.4s | | | | | | |
| DZM | **Mont Dzumac** | **19.63** | **146** | P | **P** | **09 20 33.8** | **+0.9** |
| DZM | | | | IAmb | IAmb | 09 20 38.0 | |
| | comp=Z,27nm,1.3s | | | | | | |
| DZM | **Mont Dzumac** | **19.63** | **146** | P | **P** | **09 20 33.4** | **+0.5** |
| | comp=Z,9.2nm,1.0s,baz=147,slow=18,SNR=2.5 | | | | | | |
| EIDS | **Eidsvold** | **19.74** | **190** | P | **P** | **09 20 34.2** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 09 20 39.4 | |
| | comp=Z,12nm,1.1s | | | | | | |
| PINNC | **Pines Island,** | **20.62** | **145** | P | **P** | **09 20 43.4** | **0.0** |
| WR0 | **Warramunga Arr** | **24.22** | **233** | P | **P** | **09 21 18.6** | **-0.1** |
| WR0 | | | | IAmb | IAmb | 09 21 20.8 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| WB0 | **Warramunga Arr** | **24.23** | **233** | P | **P** | **09 21 18.8** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 09 21 50.4 | |
| | comp=Z,4.6nm,1.1s | | | | | | |
| WB2 | **Warramunga Arr** | **24.36** | **233** | P | **P** | **09 21 19.6** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 09 21 22.0 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| WRA | **Warramunga Arr** | **24.37** | **233** | P | **P** | **09 21 19.4** | **-0.7** |
| WRA | **Warramunga Arr** | **24.37** | **233** | P | **P** | **09 21 19.8** | **-0.3** |
| | comp=Z,1.4nm,0.3s,baz=58,slow=9.9,SNR=58 | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| ARMA | **Armidale** | **24.62** | **187** | P | **P** | **09 21 22.4** | **0.0** |
| AS31 | **Alice Springs** | **26.83** | **227** | P | **P** | **09 21 41.5** | **-0.8** |
| ASAR | **Alice Springs** | **26.84** | **227** | P | **P** | **09 21 41.3** | **-1.1** |
| | comp=Z,0.5nm,0.3s,baz=56,slow=9.3,SNR=15 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| STKA | **Stephens Creek** | **28.71** | **204** | P | **P** | **09 21 57.5** | **-1.3** |
| | comp=Z,3.0nm,1.1s,baz=31,slow=10,SNR=2.1 | | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| FITZ | **Fitzroy Crossi** | **31.00** | **244** | | **P** | **09 22 18.0** | **-1.3** |
| TOLI2 | **Tolitoli** | **34.72** | **280** | P | **P** | **09 22 50.4** | **-1.3** |
| TOLI2 | | | | IAmb | IAmb | 09 22 51.8 | |
| | comp=Z,14nm,1.3s | | | | | | |
| BKZ | **Black Stump Fm** | **38.49** | **153** | P | **P** | **09 23 22.6** | **-0.7** |
| ERM | **Erimo** | **48.82** | **348** | P | **P** | **09 24 47.2** | **+1.5** |
| PETK | **Petropavlovsk-** | **58.79** | **2** | P | **P** | **09 25 59.6** | **+1.6** |
| | comp=Z,2.9nm,0.8s,baz=180,slow=6.3,SNR=2.7 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| CMAR | **Chiang Mai Arr** | **60.18** | **295** | P | **P** | **09 26 08.7** | **+0.5** |
| | comp=Z,0.6nm,0.3s,baz=106,slow=6.7,SNR=1.4 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| SONM | **Songino Array** | **68.31** | **327** | P | **P** | **09 27 00.8** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=20,slow=43,SNR=1.7 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| K15K | **Wolf Creek Mou** | **75.70** | **19** | P | **P** | **09 27 45.7** | **+1.4** |
| E19K | **Redstone River** | **80.58** | **17** | P | **P** | **09 28 12.5** | **+1.4** |
| E19K | | | | IAmb | IAmb | 09 28 27.5 | |
| | comp=Z,7.1nm,1.4s | | | | | | |
| ILAR | **Eielson Array** | **82.37** | **22** | P | **P** | **09 28 20.4** | **-0.2** |
| | comp=Z,0.2nm,0.5s,baz=247,slow=4.8,SNR=2.9 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| MK31 | **Makanchi Array** | **82.47** | **319** | P | **P** | **09 28 21.6** | **+0.1** |
| MKAR | **Makanchi Array** | **82.47** | **319** | P | **P** | **09 28 20.6** | **-0.9** |
| MKAR | **Makanchi Array** | **82.47** | **319** | P | **P** | **09 28 21.3** | **-0.2** |
| | comp=Z,1.7nm,0.7s,baz=97,slow=5.5,SNR=15 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| ZALV | **Zalesovo Beam** | **83.17** | **326** | P | **P** | **09 28 23.6** | **-1.2** |
| | comp=Z,0.7nm,0.3s,baz=101,slow=7.5,SNR=1.8 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| KURBB | **Kurchatov Arra** | **85.89** | **322** | P | **P** | **09 28 37.8** | **-0.8** |
| | comp=Z,0.3nm,0.5s,baz=103,slow=4.4,SNR=4.2 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| BVAR | **Borovoye Array** | **91.31** | **323** | P | **P** | **09 29 02.8** | **-1.4** |
| | comp=Z,1.0nm,0.6s,baz=105,slow=3.3,SNR=3.8 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| LPAZ | **La Paz** | **132.12** | **118** | PKP | **PKPdf** | **09 35 13.2** | **-0.2** |
| | comp=Z,0.4nm,0.3s,baz=284,slow=7.0,SNR=6.2 | | | | | | |

*TEH **27** 09:37:42.6,30.25N×51.70E,h5km,ML3.6*
*DSN **27** 09:37:50.2±1.0,29.92N×51.97E,h15km,ML3.4/6, Error ellipse: s-maj=20.0km s-min=8.6km az=44.0*
**ISC 27 09:37:43.7**±0.9,**30.24N**±0.0°04×**51.73E**±0.06,**h8km**,**n29**, σ1=**77**/31,**Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KAZ2 | **Kazeron-Fars-I** | **0.63** | **185** | Pg | **Pg** | **09 37 56.3** | **+0.4** |
| KLNJ | **Kolanjah** | **0.78** | **351** | Pg | **Pg** | **09 37 57.9** | **-0.8** |
| SHI | **Shiraz** | **0.90** | **131** | Pg | **Pb** | **09 38 01.9** | **+0.1** |
| ABEH | **Behbahan** | **1.32** | **286** | Pg | **Pn** | **09 38 09.5** | **+0.9** |
| IRAM | **Ramesheh** | **1.66** | **20** | Pg | **Pn** | **09 38 14.1** | **+0.6** |
| IBRJ | **Brojen** | **1.71** | **347** | Pg | **Pn** | **09 38 15.6** | **+1.5** |
| DSBU | **Dashti - Bushe** | **1.92** | **192** | Pn | **Pb** | **09 38 19.2** | **+0.2** |
| ZNGN | **Zangian** | **2.02** | **338** | Pn | **Pn** | **09 38 19.9** | **+1.6** |
| QIR1 | **Qir** | **2.10** | **147** | Pn | **Pb** | **09 38 21.6** | **-0.5** |
| IGAR | **Gharneh** | **2.17** | **7** | Pn | **Pn** | **09 38 23.2** | **+2.8** |
| JHBN | **Jahan bin** | **2.19** | **336** | Pn | **Pn** | **09 38 22.8** | **+2.1** |
| ISAD | **Sadrabad** | **2.37** | **45** | Pn | **Pb** | **09 38 26.0** | **-0.8** |
| IPIR | **Pirpir** | **2.54** | **344** | Pn | **Pn** | **09 38 27.2** | **+1.7** |
| IZEF | **Zefreh** | **2.70** | **11** | Pn | **Pn** | **09 38 29.9** | **+2.2** |
| ICHK | **Chekchek** | **3.04** | **48** | Pn | **Pn** | **09 38 35.0** | **+2.6** |
| IKLH | **Kolahrood** | **3.07** | **358** | Pn | **Pn** | **09 38 34.9** | **+2.0** |
| ANAR | **Anarak** | **3.40** | **30** | Pn | **Pn** | **09 38 39.6** | **+2.4** |
| QAMS | **Qamsar** | **3.50** | **355** | Pn | **Pn** | **09 38 41.1** | **+2.4** |
| IBAF | **Bafgh** | **3.56** | **67** | Pn | **Pn** | **09 38 42.2** | **+2.7** |
| KRSH | **Karshahi** | **3.73** | **5** | Pn | **Pn** | **09 38 43.7** | **+1.9** |
| ISFB | **Sefidab** | **4.12** | **6** | Pn | **Pn** | **09 38 48.7** | **+1.6** |
| IQOM | **Qom** | **4.62** | **353** | Pn | **Pn** | **09 38 55.2** | **+1.1** |
| SHME | **Shamm** | **5.71** | **136** | P | **Pn** | **09 39 10.3** | **+1.5** |
| MSFE | **Esma-Masafi** | **6.25** | **140** | P | **Pn** | **09 39 16.8** | **+0.5** |
| MSFE | | | | S | **Sn** | **09 40 24.2** | **-3.7** |
| UOSS | **Minazif** | **6.60** | **142** | P | **Pn** | **09 39 21.2** | **+0.1** |
| HATD | **Hatta, Dubai** | **6.66** | **143** | P | **Pn** | **09 39 22.5** | **+0.5** |
| ASHO | **Ashiyiah** | **6.74** | **144** | P | **Pn** | **09 39 23.8** | **+0.7** |
| ASHO | | | | S | **Sn** | **09 40 37.8** | **-2.2** |
| MZR | **Muzera** | **7.38** | **167** | P | **Pn** | **09 39 32.8** | **+1.1** |
| SOHO | **SOHO** | **7.43** | **144** | P | **Pn** | **09 39 32.3** | **-0.2** |

*DJA **27** 09:38:09.9±2.3,4.7°N±28.7°×12.5°E±1.0°,h34km±73km, M3.8/5, mb3.7/1, MLv3.9/5*
*IDC **27** 09:38:17.8±2.5,4.74N×125.36E,h97km±22km, mb3.4/6, mbtmp3.8/7, MS3.3/2, Error ellipse: s-maj=57.8km s-min=15.8km az=81.0*
**ISC 27 09:38:10.9**±0.8,**4.50N**±0.08×**124.76E**±0.2,**h35km**,**n11**, σ2=**19**/11,**mb3.7**/6,**Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DAV | **Davao City (W)** | **2.72** | **20** | P | **Pn** | **09 38 55.2** | **+3.0** |
| | 146nm,0.5s,baz=268,slow=23,SNR=1.2 | | | | | | |
| DAV | | | | S | **Sn** | **09 39 23.2** | **-0.8** |
| | 273nm,0.4s,baz=291,slow=22,SNR=5.9 | | | | | | |
| GTOI | **Gorontalo** | **4.16** | **203** | P | **Pn** | **09 39 11.1** | **-0.9** |
| GTOI | | | | S | **Sn** | **09 40 01.0** | **+1.6** |
| MRSI | **Marisa** | **4.81** | **214** | P | **Pn** | **09 39 21.8** | **+0.9** |
| KAPI | **Kappang** | **10.63** | **207** | LR | LR | 09 45 20.7 | |
| | comp=Z,52nm,21.3s,baz=22,slow=38 | | | | | | |
| WRA | **Warramunga Arr** | **26.10** | **159** | P | **P** | **09 43 41.8** | **+0.2** |
| | 2.6nm,1.0s,baz=334,slow=11,SNR=15 | | | | | | |
| | 2.6nm,1.0s | | | | | | |
| ASAR | **Alice Springs** | **29.42** | **162** | P | **P** | **09 44 12.7** | **+1.3** |
| | 0.3nm,0.7s,baz=347,slow=7.0,SNR=6.5 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| MJAR | **Matsushiro Arr** | **34.25** | **20** | P | **P** | **09 44 49.9** | **-3.7** |
| | 1.7nm,0.7s,baz=189,slow=8.4,SNR=5.6 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| STKA | **Stephens Creek** | **39.62** | **157** | P | **P** | **09 45 40.3** | **+1.0** |
| | 0.9nm,0.6s,baz=320,slow=5.9,SNR=2.8 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| DZM | **Mont Dzumac** | **48.69** | **125** | LR | LR | 10 06 21.2 | |
| | comp=Z,129nm,21.7s,baz=182,slow=35 | | | | | | |
| MKAR | **Makanchi Array** | **55.74** | **326** | P | **P** | **09 47 45.9** | **+1.7** |
| | 0.3nm,0.4s,baz=117,slow=8.0,SNR=4

comp=Z,1.1nm,0.5s,baz=90,slow=3.3,SNR=5.1
WRA S S 10 00 18.1 -2.4
comp=Z,0.5nm,0.9s,baz=91,slow=13,SNR=4.7
comp=Z,11nm,0.7s
**AS01 Alice Springs 44.67 254** P P 09 54 26.8 +0.1
**MULG Mulgathing 44.71 245** P P 09 54 27.2 +0.4
**AS31 Alice Springs 44.71 254** P P 09 54 27.0 0.0
AS31 IAmb IAmb 09 54 28.1
comp=Z,19nm,0.7s
**ASAR Alice Springs 44.71 254** P P 09 54 27.2 +0.2
**ASAR Alice Springs 44.71 254** P P 09 54 27.1 +0.1
comp=Z,69nm,0.6s,baz=88,slow=8.4,SNR=1060
ASAR PcP PcP 09 55 54.4 -2.4
comp=Z,1.5nm,0.7s,baz=97,slow=5.0,SNR=4.2
ASAR S S 10 00 20.8 -1.7
comp=Z,3.7nm,1.1s,baz=87,slow=16,SNR=12
**KDU Kakadu 47.52 269** P P 09 54 48.0 -0.3
**GUMO Guam 47.96 309** P P 09 54 51.0 -0.5
comp=Z,33nm,0.7s,baz=128,slow=9.7,SNR=4.2
comp=Z,33nm,0.7s
**MTN Manton Dam 48.76 269** P P 09 54 56.7 -0.8
**MTN Manton Dam 48.76 269** P P 09 54 56.9 -0.6
MTN IAmb IAmb 09 54 57.4
comp=Z,15nm,0.7s
**WRKA Warakurna 49.76 252** P P 09 55 04.8 0.0
**FORT Forrest 49.90 245** P P 09 55 05.5 -0.1
**FORT Forrest 49.90 245** P P 09 55 05.6 -0.1
FORT IAmb IAmb 09 55 06.2
comp=Z,19nm,0.7s
**KNRA Kununurra 50.44 264** P P 09 55 09.4 -0.3
KNRA IAmb IAmb 09 55 10.2
comp=Z,19nm,0.7s
**FITZ Fitzroy Crossi 52.97 261** P P 09 55 27.8 -0.2
**PSA00 Pilbara Seismi 57.83 256** P P 09 56 01.3 -0.4
PSA00 IAmb IAmb 09 56 02.1
comp=Z,13nm,0.7s
**MBWA Marble Bar 58.00 256** P P 09 56 02.3 -0.4
**MORW Morawa 60.38 246** P P 09 56 18.5 0.0
**GIRL Giralia 62.81 253** P P 09 56 35.4 +1.0
**MJAR Matsushiro Arr 68.03 323** P P 09 57 05.6 -1.0
comp=Z,3.9nm,0.7s,baz=161,slow=5.5,SNR=11
comp=Z,3.9nm,0.7s
**UGM Wanagama 69.61 268** P P 09 57 16.6 0.0
**QSPA South Pole Qui 71.97 180** P P 09 57 31.1 +1.4
**QSPA South Pole Qui 71.97 180** P P 09 57 31.1 +1.4
comp=Z,1.9nm,0.9s,baz=136,slow=1.4,SNR=6.2
comp=Z,1.9nm,0.9s
**KSM Kuching 72.67 277** P P 09 57 34.5 0.0
KSM IAmb IAmb 09 57 36.5
comp=Z,21nm,0.8s
**PETK Petropavlovsk- 73.84 345** P P 09 57 38.8 -1.5
comp=Z,1.6nm,0.7s,baz=123,slow=5.3,SNR=2.7
comp=Z,1.6nm,0.7s
**KSRS Korea Array 74.81 318** P P 09 57 46.3 +0.2
comp=Z,0.9nm,0.7s,baz=131,slow=6.8,SNR=4.8
comp=Z,0.9nm,0.7s
**USRK Ussuriysk Ar. 76.74 326** P P 09 57 57.2 +0.7
comp=Z,1.2nm,0.6s,baz=86,slow=7.4,SNR=2.6
comp=Z,1.2nm,0.6s
**NVAR Mina Array Bea 79.57 44** P P 09 58 12.5 +0.3
comp=Z,1.7nm,0.8s,baz=224,slow=8.2,SNR=16
comp=Z,1.7nm,0.8s
**J05D Fort Rock, OR 80.48 38** P P 09 58 17.4 +0.7
**WVOR Wild Horse Val 81.56 40** P P 09 58 21.8 -0.4
**U15A North Rim 82.66 48** P P 09 58 28.9 +0.8
**ILAR Eielson Array 86.06 13** P P 09 58 42.3 -1.4
comp=Z,0.4nm,0.4s,baz=221,slow=5.1,SNR=12
comp=Z,0.4nm,0.4s
**TXAR Lajitas Array 86.11 58** P P 09 58 46.2 +1.2
comp=Z,1.6nm,0.7s,baz=218,slow=5.9,SNR=17
comp=Z,1.6nm,0.7s
**PDAR Pinedale Array 87.50 43** P P 09 58 51.3 0.0
comp=Z,1.1nm,0.6s,baz=207,slow=3.4,SNR=11
comp=Z,1.1nm,0.6s
**CMAR Chiang Mai Arr 88.91 290** P P 09 58 59.5 +1.4
comp=Z,0.9nm,0.3s,baz=99,slow=3.3,SNR=7.9
comp=Z,0.9nm,0.3s
**TROLL Troll, Antarti 90.14 180** ⇑P P 09 59 03.1 +0.1
comp=Z,46nm,0.5s
**SNAA Sanae 90.43 179** ⇑P P 09 59 03.6 -0.6
comp=Z,25nm,1.1s
**SNAA Sanae 90.43 179** P P 09 59 04.2 0.0
comp=Z,0.7nm,0.8s,baz=322,slow=6.3,SNR=2.3
comp=Z,0.7nm,0.8s
**VNA3 Neumayer Olymp 90.57 176** ⇑P P 09 59 05.1 +0.2
comp=Z,0.5nm,0.3s
**VNA2 Neumayer--Watz 91.01 177** ⇑P P 09 59 07.4 +0.5
comp=Z,1.7nm,0.8s,baz=164,slow=3.5
**BVAR Borovoye Array 116.96 321** PKP PKPdf 10 04 42.8 -0.8
comp=Z,0.7nm,0.5s,baz=127,slow=0.7,SNR=3.6
**BNN Bunyan 143.74 312** PKPab 10 05 33.8 +0.2
**LODK Lodwar 143.83 250** PKPbc PKPbc 10 05 34.3 -0.1
**KWP Kalwaria Pacla 144.21 336** PKPbc PKPbc 10 05 34.4 -0.1
**BR131 Keskin Array S 144.88 315** PKPdf 10 05 36.1 -0.2
**BRTR Keskin Array B 144.88 315** PKPdf 10 05 35.9 -0.4
**BRTR Keskin Array B 144.88 315** PKP PKPdf 10 05 36.6 +0.3
comp=Z,4.4nm,0.7s,baz=149,slow=2.6,SNR=14
**MMAI Mount Meron Ar 146.21 303** PKPbc PKPdf 10 05 39.5 +0.8
comp=Z,0.8nm,0.3s,baz=2.6,slow=3.2,SNR=2.7
**GERES GERESS Array B 147.77 345** PKPbc PKPbc 10 05 44.6 +0.1
comp=Z,0.4nm,0.4s,baz=20,slow=3.2,SNR=6.4
**FUORN Ofenpass-Fuorn 150.64 348** PKPbc 10 05 51.5 -0.2

**NEIC 27 09:54:05.1±1.0, 37°40N±0.02×97°87W±0.01, h5km±1km, mb_Lg2.4/42, ML2.8/37, Error ellipse: s-maj=4.1km s-min=2.6km az=188.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.15** | **227** | | Pg | 09 54 08.9 | +0.9 |
| KAN12 | | | | IAML | | 09 54 11.1 | |
| | comp=E,3µm,0.2s | | | | | | |
| KAN12 | | | | Sg | Sg | 09 54 11.2 | +1.2 |
| KAN12 | | | | IAML | | 09 54 12.7 | |
| | comp=N,3µm,0.4s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.19** | **206** | | Pg | 09 54 09.4 | +0.5 |
| KAN08 | | | | Sg | Sg | 09 54 11.8 | +0.5 |
| KAN08 | | | | IAML | | 09 54 11.9 | |
| | comp=E,2µm,0.2s | | | | | | |
| KAN08 | | | | IAML | | 09 54 11.9 | |
| | comp=N,3µm,0.3s | | | | | | |
| **KS21** | **Milan North St** | **0.20** | **124** | | Pg | 09 54 09.5 | +0.6 |
| **KAN01** | **Argonia South** | **0.26** | **161** | | Pg | 09 54 10.3 | +0.2 |
| KAN01 | | | | Sg | Sg | 09 54 13.1 | -0.4 |
| KAN01 | | | | IAML | | 09 54 16.7 | |
| | comp=N,2µm,0.4s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.29** | **181** | Pg | Pg | 09 54 10.9 | +0.3 |
| **KAN09** | **Caldwell North** | **0.33** | **143** | | Pg | 09 54 11.6 | +0.2 |
| KAN09 | | | | IAML | | 09 54 18.9 | |
| | comp=E,1µm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.36** | **167** | | Pg | 09 54 12.3 | +0.2 |
| KAN17 | | | | IAML | | 09 54 22.3 | |
| | comp=E,952nm,0.4s | | | | | | |
| **KAN14** | **Manchester OK** | **0.45** | **190** | | Pg | 09 54 13.9 | +0.2 |
| KAN14 | | | | IAML | | 09 54 27.4 | |
| | comp=N,740nm,0.5s | | | | | | |
| **KAN13** | **South Haven SW** | **0.49** | **141** | | Pg | 09 54 14.4 | -0.2 |
| KAN13 | | | | IAML | | 09 54 24.5 | |
| | comp=E,538nm,0.4s | | | | | | |
| **GC02** | **Grant County #** | **0.55** | **180** | Pg | Pg | 09 54 15.7 | +0.1 |
| **OK032** | **Salt Plains WL** | **0.65** | **205** | Pg | Pg | 09 54 17.8 | +0.1 |
| **BLOK** | **Blackwell** | **0.82** | **141** | | Pg | 09 54 20.6 | -0.2 |
| BLOK | | | | Sg | Sg | 09 54 31.6 | +0.1 |
| BLOK | | | | IAML | | 09 54 31.8 | |
| | comp=E,235nm,0.4s | | | | | | |
| **CROK** | **Carrier** | **0.90** | **186** | Pg | Pg | 09 54 21.9 | -0.3 |
| CROK | | | | Sg | Sg | 09 54 34.6 | +0.7 |
| CROK | | | | IAML | | 09 54 39.4 | |
| | comp=E,294nm,0.4s | | | | | | |
| **NOKA** | **Waynoka** | **1.14** | **229** | | Pg | 09 54 26.7 | -0.3 |
| NOKA | | | | IAML | | 09 54 49.6 | |
| | comp=N,211nm,0.2s | | | | | | |
| NOKA | | | | IAML | | 09 54 53.5 | |
| | comp=E,179nm,0.2s | | | | | | |
| **OK038** | **West end E0370** | **1.16** | **218** | | Pg | 09 54 27.3 | +0.1 |
| **T35A** | **Sooner Cattle** | **1.18** | **114** | Pg | Pg | 09 54 27.7 | -0.1 |
| **OK051** | **E0350 and S346** | **1.21** | **137** | | Pg | 09 54 28.0 | -0.3 |
| OK051 | | | | Sg | Sg | 09 54 43.5 | -0.5 |
| OK051 | | | | IAmb_Lg | | 09 54 44.8 | |
| | comp=Z,26nm,1.1s | | | | | | |
| OK051 | | | | IAML | | 09 54 48.4 | |
| | comp=Z,201nm,0.4s | | | | | | |
| OK051 | | | | IAML | | 09 54 48.5 | |
| | comp=Z,213nm,0.2s | | | | | | |
| **R32A** | **Long Quarter,** | **1.22** | **327** | | Pn | 09 54 29.4 | +0.5 |
| **OK048** | **Pawnee Station** | **1.23** | **143** | Pg | Pg | 09 54 28.1 | -0.5 |
| OK048 | | | | IAML | | 09 54 48.6 | |
| | comp=Z,212nm,0.3s | | | | | | |
| OK048 | | | | IAML | | 09 54 48.8 | |
| | comp=Z,137nm,0.4s | | | | | | |
| **QUOK** | **Quay** | **1.54** | **142** | | Pn | 09 54 33.5 | +0.4 |
| QUOK | | | | | Sn | 09 54 53.1 | -0.4 |
| **OK029** | **Liberty Lake** | **1.63** | **168** | | Pn | 09 54 34.9 | +0.5 |
| **OK052** | **Battle Ridge R** | **1.64** | **148** | | Pn | 09 54 33.9 | -0.6 |
| **OK031** | **S. Brethren Rd** | **1.66** | **150** | | Pn | 09 54 35.4 | +0.5 |
| **CSTR** | **Hydro, Custer** | **1.87** | **201** | Pn | Pb | 09 54 38.8 | -0.9 |
| **DEOK** | **Depew** | **1.90** | **144** | | Pn | 09 54 38.1 | 0.0 |
| **KSU1** | **Kansas State U** | **1.97** | **30** | | Pn | 09 54 40.0 | +0.9 |
| KSU1 | | | | IAmb_Lg | | 09 55 09.0 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **2.02** | **170** | | Pn | 09 54 41.0 | +1.2 |
| **CBKS** | **Cedar Bluff** | **2.04** | **314** | Pn | Pb | 09 54 42.0 | -0.7 |
| **FNO** | **Franklin** | **2.17** | **170** | Pn | Pn | 09 54 43.1 | +1.2 |
| **TUL3** | **Leonard** | **2.23** | **131** | | Pb | 09 54 44.3 | -1.6 |
| **RLO** | **Rose Lookout** | **2.59** | **117** | IAmb_Lg | | 09 55 31.7 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.76** | **196** | Pn | Pn | 09 54 50.9 | +1.0 |
| **X34A** | **Smith Ranch, M** | **2.79** | **179** | Pn | Pn | 09 54 52.5 | +2.1 |
| **U38A** | **Gravette** | **2.95** | **108** | Pn | Pn | 09 54 54.1 | +1.5 |
| **SMWD** | **Samnorwood** | **2.99** | **221** | | Pn | 09 54 54.8 | +1.7 |
| **HHAR** | **Hobbs** | **3.34** | **108** | IAmb_Lg | | 09 55 51.6 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.46** | **143** | Pn | Pn | 09 55 01.3 | +1.8 |
| X37A | | | | IAmb_Lg | | 09 55 59.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **N35A** | **Tabor** | **3.87** | **26** | IAmb_Lg | | 09 56 13.7 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.02** | **258** | | Pn | 09 55 09.9 | +2.5 |
| **P38A** | **Dawn** | **4.06** | **55** | IAmb_Lg | | 09 56 21.7 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **MGMO** | **Mcmain Grove** | **4.47** | **91** | IAmb_Lg | | 09 56 32.2 | |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **DKNS** | **Dickens** | **4.48** | **215** | IAmb_Lg | | 09 56 33.8 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.49** | **128** | IAmb_Lg | | 09 56 27.5 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.52** | **77** | IAmb_Lg | | 09 56 30.3 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.86** | **106** | IAmb_Lg | | 09 56 46.6 | |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.97** | **113** | IAmb_Lg | | 09 56 46.8 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.01** | **124** | IAmb_Lg | | 09 56 45.5 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.04** | **63** | IAmb_Lg | | 09 56 48.1 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.23** | **269** | IAmb_Lg | | 09 56 58.1 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.42** | **92** | IAmb_Lg | | 09 57 08.9 | |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.98** | **94** | IAmb_Lg | | 09 57 16.5 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.40** | **8** | IAmb_Lg | | 09 57 30.9 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **6.60** | **178** | IAmb_Lg | | 09 57 39.6 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.06** | **306** | IAmb_Lg | | 09 57 56.2 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **7.08** | **194** | IAmb_Lg | | 09 58 02.5 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **7.18** | **302** | IAmb_Lg | | 09 58 03.5 | |
| | comp=Z,6.0nm,0.9s | | | | | | |

*IDC 27 09:57:19.6±7.0, 5.°95S×150.°58E, h86km±53km, mb3.4/4, mbtmp3.7/5, ML1.6/1, MS3.2/2, Error ellipse: s-maj=65.9km s-min=29.9km az=94.0*

**ISC 27 09:57:14.8±1.5, 6.°0S±0.°2×150.°9E±0.°3, h43km, n8, σ1°30/7, mb3.7/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.07** | **227** | P | Pn | 09 58 30.0 | +1.6 |
| | 1.9nm,0.3s,baz=49,slow=14,SNR=5.6 | | | | | | |
| PMG | | | | S | Sn | 09 59 24.6 | -1.1 |
| | 16nm,0.4s,baz=97,slow=8.7,SNR=2.8 | | | | | | |
| | 5.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.29** | **228** | P | P | 10 01 57.1 | -0.9 |
| | 2.4nm,0.5s,baz=52,slow=10,SNR=39 | | | | | | |
| | 2.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.05** | **221** | P | P | 10 02 25.9 | -0.3 |
| | 0.6nm,0.5s,baz=52,slow=8.7,SNR=21 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **DAV** | **Davao City (W)** | **28.42** | **297** | LR | LR | 10 14 34.7 | |
| | comp=Z,25nm,18.2s,baz=134,slow=37 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **40.28** | **345** | LR | LR | 10 18 47.1 | |
| | comp=Z,61nm,19.9s,baz=64,slow=32 | | | | | | |
| **KSRS** | **Korea Array** | **48.23** | **335** | P | P | 10 05 50.9 | -0.5 |
| | 0.3nm,0.4s,baz=145,slow=7.4,SNR=1.9 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.01** | **180** | P | P | 10 09 40.0 | -0.7 |
| | 0.5nm,0.7s,baz=34,slow=0.5,SNR=5.0 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.86** | **286** | PKPbc | PKPdf | 10 16 56.2 | +1.2 |
| | 0.2nm,0.4s,baz=98,slow=1.4,SNR=1.6 | | | | | | |

*IDC 27 09:59:58.4±2.8, 67.°92N×26.°06E, h0km, Error ellipse: s-maj=28.6km s-min=16.6km az=85.0*
*HEL 27 09:59:59.6±0.1, 67.°93N×25.°92E, h0km, ML1.5, Explosion*

**ISC 27 09:59:58.7±0.8, 67.°92N±0.°02×25.°85E±0.°03, h0km, n22, σ0°66/35, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGF** | **Sodankyl** | **0.55** | **152** | PG | Pg | 10 00 08.6 | -0.5 |
| SGF | | | | SG | Sg | 10 00 15.9 | -0.3 |
| **HEF** | **Hetta** | **0.95** | **302** | eP | Pg | 10 00 17.0 | +0.1 |
| **HEF** | **Hetta** | **0.95** | **302** | PG | Pg | 10 00 16.9 | +0.1 |
| | baz=115 | | | | | | |
| HEF | | | | SG | Sg | 10 00 29.4 | +0.2 |
| HEF | | | | MSG | | 10 00 29.4 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| **KLF** | **Kolari** | **1.00** | **227** | PG | Pg | 10 00 17.6 | -0.2 |
| | baz=44 | | | | | | |
| KLF | | | | MSG | | 10 00 31.0 | |
| | comp=Z,3.9nm,0.2s | | | | | | |
| KLF | | | | SG | Sg | 10 00 31.0 | +0.3 |
| **RNF** | **Rovaniemi** | **1.32** | **177** | PG | Pb | 10 00 24.0 | -0.4 |
| | baz=3.0 | | | | | | |
| RNF | | | | SG | Sb | 10 00 41.5 | -0.3 |
| **PAJU** | **Pajala** | **1.39** | **231** | PG | Pg | 10 00 25.1 | -0.2 |
| | baz=47 | | | | | | |
| PAJU | | | | SB | Sb | 10 00 43.6 | -0.1 |
| **VRF** | **Varrio** | **1.44** | **95** | PN | Pb | 10 00 26.4 | +0.1 |
| | baz=282 | | | | | | |
| VRF | | | | MSG | | 10 00 42.1 | |
| | comp=Z,4.3nm,0.2s | | | | | | |
| VRF | | | | SB | Sg | 10 00 44.6 | -0.2 |
| **KTK1** | **Kautokeino** | **1.46** | **320** | eP | Pn | 10 00 25.8 | -0.4 |
| **KTK1** | **Kautokeino** | **1.46** | **320** | PG | Pn | 10 00 26.2 | -0.1 |
| KTK1 | | | | SN | Sb | 10 00 45.8 | +0.1 |
| **LANU** | **Lannavaara** | **1.46** | **277** | PG | Pn | 10 00 26.0 | -0.3 |
| LANU | | | | SG | Sb | 10 00 45.6 | -0.2 |
| **ARA0** | **ARCESS Array S** | **1.62** | **356** | PN | Pb | 10 00 29.2 | -0.3 |
| | baz=176 | | | | | | |
| ARA0 | | | | SN | Sg | 10 00 51.3 | +0.5 |
| **ARCES** | **ARCESS Array B** | **1.62** | **356** | Pn | Pn | 10 00 28.8 | +0.3 |
| | comp=Z,0.8nm,0.3s,baz=173,slow=15,SNR=49 | | | | | | |
| ARCES | | | | Lg | Lg | 10 00 49.8 | |
| | comp=Z,1.0nm,0.3s,baz=173,slow=33,SNR=16 | | | | | | |
| **KEV** | **Kevo** | **1.89** | **12** | PG | Pb | 10 00 33.2 | -0.8 |
| | baz=190 | | | | | | |
| KEV | | | | MSG | | 10 00 55.3 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| KEV | | | | SG | Sn | 10 00 57.0 | +0.4 |
| **TOF** | **Tornio** | **1.95** | **199** | PG | Pb | 10 00 35.2 | +0.3 |
| TOF | | | | MSG | | 10 00 57.9 | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| TOF | | | | SG | Sg | 10 01 00.6 | -0.6 |
| **RANF** | **Ranua** | **1.95** | **169** | PG | Pb | 10 00 34.8 | -0.2 |
| | baz=351 | | | | | | |
| RANF | | | | SG | Sb | 10 01 00.2 | +0.3 |
| **KALU** | **Kalix** | **2.29** | **207** | PG | Pb | 10 00 40.4 | -0.5 |
| KALU | | | | SG | Sb | 10 01 10.4 | +0.6 |
| **MSF** | **Maaselka** | **2.38** | **147** | PG | Pb | 10 00 42.2 | -0.2 |
| | baz=331 | | | | | | |
| MSF | | | | SG | Sb | 10 01 13.1 | +0.9 |
| **KU6** | **Riekki** | **2.48** | **138** | PG | Pb | 10 00 43.2 | -0.9 |
| | baz=327 | | | | | | |
| KU6 | | | | MSG | | 10 01 12.7 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| KU6 | | | | SG | Sb | 10 01 15.9 | +0.8 |
| **OUL** | **Oulu** | **2.85** | **180** | SG | Sb | 10 01 26.6 | +0.9 |
| **I37NO** | **I37NO** | **2.91** | **297** | I | I | 10 18 10.0 | |
| | comp=Z,1.1nm,0.8s,baz=108,slow=316,SNR=15 | | | | | | |
| **OUF** | **Merijarvi** | **3.60** | **188** | SG | Sb | 10 01 50.0 | +2.7 |
| **I18DK** | **QAANAAQ INFRAS** | **26.35** | **331** | I | I | 12 41 28.6 | |
| | baz=57,slow=326,SNR=1.9 | | | | | | |

*NEIC 27 10:27:32.1±1.6, 17.°2S±0.°1×179.°3W±0.°1, h539km±7km, mb4.7/31, Error ellipse: s-maj=16.8km s-min=14.3km az=126.0*
*IDC 27 10:27:32.2±0.8, 16.°95S×179.°33W, h549km±7km, mb3.5/19, mbtmp4.4/21, Error ellipse: s-maj=14.3km s-min=12.1km az=129.0*
*NOU 27 10:27:39.3, 17.°09S×179.°68W, h617km, mb4.7/27, Fiji Islands Region*

**ISC 27 10:27:32.0±0.4, 17.°06S±0.°07×179.°29W±0.°07, h550km, n164, σ1°20/165, mb4.5/52, 26C-7D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.63** | **255** | P | P | 10 28 43.5 | -1.4 |
| **MSVF** | **Nonsavu** | **2.63** | **255** | P | P | 10 28 44.8 | -0.2 |
| | 173nm,0.7s,baz=262,slow=23,SNR=175 | | | | | | |
| MSVF | | | | S | S | 10 29 45.1 | +0.8 |
| | 41nm,1.0s,baz=122,slow=24,SNR=9.2 | | | | | | |
| **AFI** | **Afiamalu** | **7.89** | **68** | P | P | 10 29 27.4 | -1.4 |
| **NIUE** | **Niue** | **9.13** | **104** | P | P | 10 29 39.7 | -1.4 |
| **DZM** | **Mont Dzumac** | **14.34** | **247** | P | P | 10 30 38.1 | +3.3 |
| **DZM** | **Mont Dzumac** | **14.34** | **247** | P | P | 10 30 33.9 | -0.9 |
| **DZM** | **Mont Dzumac** | **14.34** | **247** | P | P | 10 30 34.2 | -0.6 |
| | 16nm,0.7s,baz=114,slow=23,SNR=15 | | | | | | |
| **NOUC** | **Port Laguerre** | **14.47** | **247** | P | P | 10 30 38.5 | +2.4 |
| **KOUNC** | **Koumac, New Ca** | **15.94** | **255** | P | P | 10 30 52.8 | +1.8 |
| **KOUNC** | **Koumac, New Ca** | **15.94** | **255** | P | P | 10 30 51.5 | +0.5 |
| **URZ** | **Urewera** | **21.36** | **188** | P | P | 10 31 38.7 | -1.5 |
| | 2.3nm,0.4s,baz=55,slow=1.7,SNR=6.1 | | | | | | |
| URZ | | | | S | S | 10 34 58.1 | -2.5 |
| | 3.3nm,0.7s,baz=14,slow=22,SNR=1.1 | | | | | | |
| **BKZ** | **Black Stump Fm** | **22.33** | **189** | P | P | 10 31 47.6 | -1.4 |
| BKZ | | | | IAmb | IAmb | 10 32 12.2 | |
| | comp=Z,31nm,1.5s | | | | | | |
| **QRZ** | **Quartz Range** | **24.72** | **195** | P | P | 10 32 12.9 | +2.8 |
| **QRZ** | **Quartz Range** | **24.72** | **195** | P | P | 10 32 10.8 | +0.7 |
| QRZ | | | | IAmb | IAmb | 10 32 53.2 | |
| | comp=Z,40nm,1.3s | | | | | | |
| **AUWSH** | **Wavell State H** | **27.55** | **243** | P | P | 10 32 36.0 | +0.8 |
| **FOZ** | **Fox Glacier** | **27.96** | **197** | P | P | 10 32 38.1 | -0.5 |
| **PPT** | **Papeete** | **28.36** | **95** | P | P | 10 32 42.8 | +0.4 |
| | comp=Z,40nm,0.9s,baz=82,slow=6.4,SNR=4.9 | | | | | | |
| | comp=Z,40nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **28.79** | **248** | P | P | 10 32 46.0 | -0.1 |
| **EIDS** | **Eidsvold** | **28.79** | **248** | P | P | 10 32 46.0 | -0.1 |
| EIDS | | | | IAmb | IAmb | 10 32 46.3 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **29.66** | **238** | P | P | 10 32 54.3 | +0.6 |
| ARMA | | | | IAmb | IAmb | 10 33 15.7 | |
| | comp=Z,52nm,1.4s | | | | | | |
| **AULRC** | **Lightning Ridg** | **32.38** | **242** | P | P | 10 33 17.0 | +0.1 |
| **CTAO** | **Charters Tower** | **32.77** | **259** | P | P | 10 33 20.0 | -0.3 |
| CTAO | | | | IAmb | IAmb | 10 33 20.6 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **33.50** | **279** | P | P | 10 33 26.2 | -0.2 |
| PMG | | | | IAmb | IAmb | 10 33 27.9 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **MTSU** | **Mount Surprise** | **34.67** | **263** | P | P | 10 33 36.4 | +0.1 |
| **CMSA** | **Cobar Meteorol** | **34.85** | **239** | P | P | 10 33 37.9 | +0.3 |
| **QLP** | **Quilpie** | **35.06** | **248** | P | P | 10 33 39.3 | -0.1 |
| **COEN** | **Coen** | **36.27** | **270** | P | P | 10 33 48.6 | -0.9 |
| COEN | | | | IAmb | IAmb | 10 33 50.7 | |
| | comp=Z,52nm,1.5s | | | | | | |
| **TOO** | **Toolangi** | **37.07** | **229** | P | P | 10 33 56.8 | +0.9 |
| **TOO** | **Toolangi** | **37.07** | **229** | P | P | 10 33 56.2 | +0.3 |
| **BRAT** | **Ballarat** | **38.20** | **230** | P | P | 10 34 06.4 | +1.4 |
| **INKA** | **Innaminka** | **38.30** | **247** | P | P | 10 34 07.0 | +1.0 |
| **STKA** | **Stephens Creek** | **38.31** | **240** | P | P | 10 34 07.0 | +0.9 |
| **STKA** | **Stephens Creek** | **38.31** | **240** | P | P | 10 34 06.0 | -0.1 |
| **STKA** | **Stephens Creek** | **38.31** | **240** | P | P | 10 34 06.8 | +0.7 |
| | comp=Z,33nm,0.9s,baz=74,slow=8.2,SNR=21 | | | | | | |
| | comp=Z,33nm,0.9s | | | | | | |
| **ARPS** | **Mount Arapiles** | **39.49** | **232** | P | P | 10 34 16.2 | +0.7 |
| **HTT** | **Hallett** | **40.86** | **238** | P | P | 10 34 27.4 | +0.8 |
| **LCRK** | **Leigh Creek** | **40.88** | **243** | P | P | 10 34 26.9 | +0.2 |
| **OOD** | **Oodnadatta** | **42.76** | **247** | P | P | 10 34 42.1 | +0.6 |
| **BBOO** | **Buckleboo** | **43.09** | **240** | P | P | 10 34 44.4 | +0.3 |
| **BBOO** | **Buckleboo** | **43.09** | **240** | P | P | 10 34 43.2 | -0.9 |
| BBOO | | | | IAmb | IAmb | 10 34 45.0 | |
| | comp=Z,33nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.78** | **259** | P | P | 10 34 48.4 | -1.2 |
| **WB0** | **Warramunga Arr** | **43.93** | **259** | P | P | 10 34 48.6 | -2.1 |
| WB0 | | | | IAmb | IAmb | 10 34 50.6 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.96** | **259** | P | P | 10 34 49.2 | -1.7 |
| WB2 | | | | IAmb | IAmb | 10 34 50.8 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.97** | **259** | P | P | 10 34 48.7 | -2.4 |
| **WRA** | **Warramunga Arr** | **43.97** | **259** | P | P | 10 34 49.9 | -1.2 |
| | comp=Z,5.0nm,0.6s,baz=96,slow=7.6,SNR=80 | | | | | | |
| WRA | | | | PcP | PcP | 10 36 24.6 | -0.2 |
| | comp=Z,0.8nm,0.3s,baz=87,slow=3.5,SNR=6.7 | | | | | | |
| WRA | | | | ScP | ScP | 10 39 25.5 | +1.1 |
| | comp=Z,1.3nm,0.9s,baz=83,slow=5.2,SNR=4.7 | | | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **44.18** | **253** | P | P | 10 34 52.5 | -0.2 |
| **AS31** | **Alice Springs** | **44.22** | **253** | P | P | 10 34 51.9 | -1.1 |
| AS31 | | | | IAmb | IAmb | 10 34 53.3 | |
| | comp=Z,17nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.22** | **253** | P | P | 10 34 52.4 | -0.7 |
| | comp=Z,41nm,0.5s,baz=86,slow=8.5,SNR=756 | | | | | | |
| ASAR | | | | PcP | PcP | 10 36 25.8 | +0.2 |
| | comp=Z,3.0nm,0.8s,baz=104,slow=3.9,SNR=7.8 | | | | | | |
| ASAR | | | | ScP | ScP | 10 39 25.6 | +0.2 |
| | comp=Z,2.3nm,1.0s,baz=98,slow=5.0,SNR=5.8 | | | | | | |
| ASAR | | | | S | S | 10 40 41.6 | -5.4 |
| | comp=Z,1.3nm,0.8s,baz=86,slow=16,SNR=7.2 | | | | | | |
| **MULG** | **Mulgathing** | **44.42** | **244** | P | P | 10 34 54.3 | -0.1 |
| **KDU** | **Kakadu** | **46.74** | **268** | P | P | 10 35 12.1 | -0.1 |
| **MTN** | **Manton Dam** | **47.99** | **268** | P | P | 10 35 21.3 | -0.3 |
| **MTN** | **Manton Dam** | **47.99** | **268** | P | P | 10 35 20.6 | -1.1 |
| **WRKA** | **Warakurna** | **49.31** | **251** | P | P | 10 35 31.0 | -0.4 |
| **FORT** | **Forrest** | **49.62** | **244** | P | P | 10 35 33.2 | -0.3 |
| **FORT** | **Forrest** | **49.62** | **244** | P | P | 10 35 32.6 | -0.9 |
| **KNRA** | **Kununurra** | **49.74** | **264** | P | P | 10 35 33.9 | -0.7 |
| KNRA | | | | IAmb | IAmb | 10 35 35.0 | |
| | comp=Z,26nm,0.8s | | | | | |

**KSRS Korea Array 73.51 319** P **P** **10 38 09.5 +0.5**
comp=Z,1.7nm,0.9s,baz=140,slow=7.0,SNR=8.0
comp=Z,1.7nm,0.9s
**USRK Ussuriysk Ar. 75.44 326** P **P** **10 38 20.0 +0.2**
comp=Z,0.7nm,0.6s,baz=108,slow=5.1,SNR=3.9
comp=Z,0.7nm,0.6s
**NJ2 Nanjing 76.75 310** *e*P **P** **10 38 30.3 +3.0**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**MDJ Mudanjiang 77.01 325** P **P** **10 38 29.3 +0.9**
MDJ pmax pmax
comp=Z,9.0nm,1.1s
**CN2 Changchun 78.84 323** *e*P **P** **10 38 39.3 +1.0**
CN2 pmax pmax
comp=Z,10.0nm,1.2s
**BNX BinXian 78.92 325** ⇑P **P** **10 38 38.8 +0.1**
BNX pmax pmax
comp=Z,7.0nm,1.0s
**KLR Kul'dur 78.96 330** P **P** **10 38 40.1 +1.4**
comp=Z,0.5nm,0.4s,baz=352,slow=2.4,SNR=2.6
comp=Z,0.5nm,0.4s
**NVAR Mina Array Bea 79.40 44** P **P** **10 38 41.4 -0.3**
comp=Z,0.5nm,0.6s,baz=221,slow=8.4,SNR=5.2
comp=Z,0.5nm,0.6s
**BJI Beijing 82.59 316** P **P** **10 38 58.8 +1.0**
BJI pmax pmax
comp=Z,4.0nm,0.5s
**BELA Belgrano 2 83.11 173** P **P** **10 39 00.3 +0.5**
**MAW Mawson 84.37 200** P **P** **10 39 07.8 +1.6**
comp=Z,6.1nm,0.8s,baz=111,slow=5.5,SNR=7.4
comp=Z,6.1nm,0.8s
**XAN Xi'an 85.08 308** P **P** **10 39 11.5 +1.2**
XAN pmax pmax
comp=Z,23nm,1.3s
**ILAR Eielson Array 85.25 13** P **P** **10 39 08.7 -1.7**
comp=Z,0.5nm,0.4s,baz=221,slow=5.3,SNR=17
comp=Z,0.5nm,0.4s
**HHC Hu-ho-hao-te 86.08 315** *e*P **P** **10 39 19.0 +4.0**
HHC pmax pmax
comp=Z,10.0nm,0.5s
HHC pmax pmax
comp=Z,67nm,4.8s
**TXAR Lajitas Array 86.25 58** P **P** **10 39 17.2 +1.1**
comp=Z,0.4nm,0.9s,baz=262,slow=2.5,SNR=4.1
comp=Z,0.4nm,0.9s
**PDAR Pinedale Array 87.32 44** P **P** **10 39 21.3 +0.3**
comp=Z,0.6nm,0.7s,baz=226,slow=2.5,SNR=6.9
comp=Z,0.6nm,0.7s
**CMAR Chiang Mai Arr 87.81 290** P **P** **10 39 23.4 -0.1**
comp=Z,1.1nm,0.3s,baz=125,slow=2.5,SNR=9.2
comp=Z,1.1nm,0.3s
**PZH PanZhiHua 88.02 298** P **P** **10 39 28.0 +3.5**
PZH pmax pmax
comp=Z,20nm,0.9s
PZH pmax pmax
comp=Z,100nm,4.9s
**LZH Lanzhou 89.71 308** *e*P P 10 39 38.0 +5.8
LZH pmax pmax
comp=Z,24nm,1.1s
**ELIB Princess Elisa 89.90 187** *d*P **P** **10 39 33.0 +0.6**
comp=Z,4.7nm,0.8s
ELIB *d*PcP **PcP** **10 39 33.5 +0.3**
**TROLL Troll, Antarti 91.15 181** ⇑P **P** **10 39 39.0 +0.9**
comp=Z,378nm,0.7s
TROLL ⇓sP **sP** **10 42 33.6 +0.2**
comp=Z,5.3nm,0.2s
**SNAA Sanae 91.46 179** ⇑P **P** **10 39 40.1 +0.6**
comp=Z,38nm,0.6s
**SNAA Sanae 91.46 179** P **P** **10 39 39.4 -0.1**
comp=Z,1.6nm,0.6s,baz=198,slow=6.4,SNR=13
comp=Z,1.6nm,0.6s
**VNA3 Neumayer Olymp 91.64 177** ⇑P **P** **10 39 41.0 +0.8**
comp=Z,7.4nm,0.6s
VNA3 ⇑sP **sP** **10 42 31.6 -4.1**
comp=Z,0.4nm,0.3s
**VNA2 Neumayer--Watz 92.06 177** ⇑P **P** **10 39 43.1 +0.9**
comp=Z,3.6nm,0.5s,baz=176,slow=5.3
**VNA1 Neumayer--Stat 92.30 177** ⇑P **P** **10 39 44.6 +1.4**
comp=Z,6.5nm,1.0s
**SONM Songino Array 92.36 320** P **P** **10 39 44.3 +0.2**
comp=Z,0.5nm,0.6s,baz=124,slow=7.4,SNR=4.0
comp=Z,0.5nm,0.6s
**BVAR Borovoye Array 115.66 321** PKP **PKPdf** **10 45 09.9 -1.9**
comp=Z,0.7nm,0.3s,baz=92,slow=3.2,SNR=5.1
**ARCES ARCESS Array B 125.33 350** PKP **PKPdf** **10 45 28.6 -1.4**
comp=Z,0.7nm,0.3s,baz=34,slow=1.2,SNR=15
**FINES FINESS Array B 132.14 344** PKP **PKPdf** **10 45 41.9 -1.2**
comp=Z,0.6nm,0.3s,baz=101,slow=1.4,SNR=1.9
**NACGM Naroch 137.24 338**⇑ *e*PKP **PKPdf** **10 45 51.7 -1.0**
**SNOP Sinop 141.43 317** **PKPdf** **10 45 58.3 -2.5**
**LODK Lodwar 143.40 252** PKPdf PKPab 10 46 02.9 -0.7
**BURAR Bucovina Array 143.47 332** PKPbc PKPbc 10 46 03.1 +0.1
**BURAR Bucovina Array 143.47 332** ⇑P **PKPdf** **10 46 04.4 +0.1**
**BR131 Keskin Array S 143.59 315** PKPbc 10 46 04.1 +0.4
**BRTR Keskin Array B 143.59 315** PKPab 10 46 03.2 -0.4
**BRTR Keskin Array B 143.59 315** PKP PKPbc 10 46 03.9 +0.2
comp=Z,7.5nm,0.9s,baz=110,slow=1.4,SNR=35
**KIRS Kirsehir-Merke 143.68 314** ⇓P PKPbc 10 46 04.2 +0.3
**KOLS Kolonicke sedl 143.69 336** *e*PKP **PKPdf** **10 46 04.9 +0.3**
**CFR Carcaliu 143.77 327** ⇑P **PKPdf** **10 46 05.3 +0.5**
**TPGR Topolog 143.83 326** ⇑P **PKPdf** **10 46 05.0 +0.1**
**ONER Baraj Valea Uz 143.85 329** ⇑P **PKPdf** **10 46 05.1 +0.2**
**VRI Vrincioaia 144.02 329** ⇓P **PKPdf** **10 46 05.9 +0.6**
**CRVS Cervenica-Dubn 144.03 337** *e*PKP **PKPdf** **10 46 05.1 -0.1**
**KSP Ksiaz 144.06 343** *e*PKP **PKPdf** **10 46 05.1 0.0**
**PLOR Plostina 144.07 329** ⇑P **PKPdf** **10 46 05.3 -0.1**
**COVR Voineasa-Covas 144.29 329** ⇑P **PKPab** **10 46 05.9 0.0**
**OZUR 144.32 330** ⇑P **PKPab** **10 46 07.0 +1.0**
**CLL Collm 144.45 347** *i* PKPbc **PKPdf** **10 46 05.5 -0.3**
comp=Z,22nm,1.2s
**DOPR Dopca 144.60 330** ⇑P **PKPab** **10 46 07.3 +0.2**
**MORC Moravsky Berou 144.64 341** *e*PKP PKPbc 10 46 06.6 +0.1
**MORC Moravsky Berou 144.64 341** ⇑P **PKPab** **10 46 08.1 +1.0**
**MLR Muntele Rosu 144.67 329** PKPdf **PKPdf** **10 46 05.4 -1.2**
**MLR Muntele Rosu 144.67 329** ⇑P **PKPdf** **10 46 06.7 +0.1**
**KECS Kecovo 144.74 337** *e*PKP PKPbc 10 46 06.6 -0.2
**MMAI Mount Meron Ar 144.98 304** PKP **PKPab** **10 46 08.9 -0.1**
comp=Z,4.6nm,0.4s,baz=77,slow=4,5,SNR=11
**VOIR 145.15 329** ⇑P **PKPdf** **10 46 07.6 +0.3**
**DRGR 145.21 333** ⇑P **PKPbc** **10 46 08.8 +0.4**
**VYHS Vyhne 145.33 339** *e*PKP **PKPbc** **10 46 09.0 +0.4**
**VRAC Vranov 145.34 342** *e*PKP **PKPab** **10 46 09.3 -0.5**
**JAVC Velka Javorina 145.40 340** *e*PKP **PKPab** **10 46 10.4 +0.3**
**ARR Arges 145.40 330** ⇑P **PKPbc** **10 46 08.5 -0.4**
**PSZ Piszkesteto 145.43 337** PKPdf **PKPbc** **10 46 08.5 -0.4**
**KRUC Moravsky 145.62 342** *e*PKP **PKPbc** **10 46 09.5 +0.1**
**SIRR Siria 146.07 334** ⇑P **PKPbc** **10 46 10.3 -0.4**
**GZR Gura Zlata 146.25 332** ⇑P **PKPbc** **10 46 11.4 +0.1**
**SURR Surduc 146.27 333** ⇑P **PKPdf** **10 46 09.7 +0.7**
**KHC Kasperske Hory 146.34 345** PKPdf **PKPdf** **10 46 09.4 +0.2**
**KHC Kasperske Hory 146.34 345** *e*PKP **PKPdf** **10 46 09.0 -0.1**
**GERES GERESS Array B 146.57 344** PKPbc **PKPbc** **10 46 12.3 +0.1**
comp=Z,0.9nm,0.3s,baz=129,slow=3.6,SNR=6.0
**BZS Buzias 146.60 333** ⇓P **PKPbc** **10 46 11.0 -1.2**
**CONA Conrad Observa 146.79 341** *i* PKP **PKPbc** **10 46 13.5 +0.8**
comp=Z,17nm,1.3s
**HERR Herculane 146.81 331** ⇑P **PKPdf** **10 46 10.9 +0.9**
**RONA Rosalia, Austr 146.86 341** *i* PKP **PKPbc** **10 46 13.7 +0.8**
comp=Z,10.0nm,1.1s
**MORH Mrgy, Hungar 147.32 337** ⇑P **PKPbc** **10 46 13.2 -0.8**
**MOA Molln 147.34 343** *i* PKP **PKiKP** **10 46 15.0 -0.8**
comp=Z,9.4nm,1.2s
**BIOA Bad Ischl, Aus 147.65 344** *i* PKP **PKiKP** **10 46 15.8 -0.7**
comp=Z,2.2nm,0.5s
**BOVS Bovan 148.09 331** ⇓P **PKPbc** **10 46 14.7 -1.4**
**LESA Schwarzleotal 148.15 345** *e*PKP **PKPbc** **10 46 16.4 +0.2**
comp=Z,2.9nm,0.4s
**SOKA Soboth 148.17 341** *i* PKP **PKPbc** **10 46 15.4 -1.0**
comp=Z,2.6nm,0.9s
**KBA Koelnbreinsper 148.29 343** *e*PKP **PKPbc** **10 46 16.6 -0.2**
comp=Z,1.7nm,0.4s
**WATA Walderalm 148.50 346** *i* PKP **PKPbc** **10 46 17.0 -0.3**
comp=Z,5.1nm,0.7s
**RETA Reutte 148.54 347** *i* PKP **PKiKP** **10 46 18.3 -0.1**
comp=Z,4.0nm,0.8s
**WTTA Wattenberg 148.56 346** *i* PKP **PKPbc** **10 46 17.5 +0.1**
comp=Z,3.1nm,0.3s
**MOTA Moosalm 148.60 346** *i* PKP **PKiKP** **10 46 18.3 -0.2**
comp=Z,6.7nm,1.1s
**SQTA Sankt Quirin 148.70 346** *e*PKP **PKiKP** **10 46 18.3 -0.5**
comp=Z,3.1nm,0.5s
**ABTA Abfaltersbach 148.82 344** *e*PKP **PKPbc** **10 46 17.2 -0.8**
comp=Z,11nm,1.2s
**DAVA Damuels 148.92 348** *i* PKP **PKiKP** **10 46 18.9 -0.4**
comp=Z,7.4nm,0.8s
**FETA Feichten 148.99 347** *i* PKP **PKPdf** **10 46 15.0 +1.3**
comp=Z,6.5nm,1.4s
**FUORN Ofenpass-Fuorn 149.47 347** **PKPbc** **10 46 19.6 -0.2**
**TORD Torodi Ar. Bea 176.00 194** PKPab **PKPab** **10 48 25.6 +2.5**
comp=Z,0.6nm,0.9s,baz=177,slow=2.4,SNR=2.4

*IDC **27** 10:37:12.7±2.2, 18°.04S×177°.99W, h578km±21km, mb2.7/4, mbtmp3.7/5, Error ellipse: s-maj=35.4km s-min=30.2km az=143.0*
**ISC 27 10:37:13.4±1.3, 18°.0S±0°.3×178°.1W±0°.3, h590km, n6, σ0§69/8, mb3.2/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.69** | **273** | P | **P** | **10 38 35.4** | **-0.8** |
| | 24nm,0.7s,baz=107,slow=6.1,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.94** | **260** | P | **P** | **10 44 37.2** | **0.0** |
| | 0.2nm,0.3s,baz=97,slow=7.7,SNR=11 | | | | | | |
| WRA | | | | PcP | **PcP** | **10 46 06.2** | **+0.4** |
| | 0.4nm,1.1s,baz=90,slow=3.5,SNR=1.3 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | **P** | **10 44 38.8** | **+0.4** |
| | 1.1nm,0.6s,baz=88,slow=8.7,SNR=21 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 46 07.1** | **+0.8** |
| | 0.3nm,0.5s,baz=101,slow=4.6,SNR=4.7 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.11** | **180** | P | **P** | **10 47 38.6** | **-0.3** |
| | 1.4nm,1.0s,baz=155,slow=4.4,SNR=5.2 | | | | | | |
| | 1.4nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **85.85** | **13** | P | **P** | **10 48 50.8** | **-0.3** |
| | 0.1nm,0.4s,baz=224,slow=4.3,SNR=4.5 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.03** | **315** | PKPbc | **PKPbc** | **10 55 46.5** | **+0.8** |
| | 0.4nm,0.5s,baz=39,slow=2.8,SNR=2.3 | | | | | | |

*IDC **27** 10:45:14.8±1.6, 24°.70S×180°.00W, h483km±17km, mb3.5/13, mbtmp4.4/16, Error ellipse: s-maj=15.7km s-min=14.1km az=122.0*
*NOU **27** 10:45:15.7, 24°.66S×179°.81W, h512km, mb4.3/25, South of Fiji Islands*
*NEIC **27** 10:45:16.7±1.4, 24°.7S±0°.1×180°.0E±0°.1, h502km±9km, mb4.5/32, Error ellipse: s-maj=19.6km s-min=18.4km az=120.0*
**ISC 27 10:45:17.5±0.6, 24°.67S±0°.08×179°.91E±0°.09, h517km, n117, σ1§34/119, mb4.3/29, 4C, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **7.12** | **346** | P | **P** | **10 47 02.2** | **-3.5** |
| | 11nm,0.5s,baz=271,slow=23,SNR=5.8 | | | | | | |
| **PINNC** | **Pines Island,** | **11.61** | **278** | P | **P** | **10 47 52.5** | **+0.5** |
| **YATNC** | **Mamie plateau,** | **12.24** | **280** | P | **P** | **10 47 59.3** | **+0.6** |
| **KUZ** | **Kuaotunu** | **12.56** | **196** | P | **P** | **10 48 01.2** | **-0.6** |
| **DZM** | **Mont Dzumac** | **12.64** | **279** | P | **P** | **10 48 03.4** | **+0.5** |
| **DZM** | **Mont Dzumac** | **12.64** | **279** | P | **P** | **10 48 02.9** | **-0.1** |
| **DZM** | **Mont Dzumac** | **12.64** | **279** | P | **P** | **10 48 03.2** | **+0.3** |
| | 11nm,0.6s,baz=84,slow=18,SNR=12 | | | | | | |
| **NOUC** | **Port Laguerre** | **12.76** | **279** | P | **P** | **10 48 04.9** | **+0.8** |
| **TOZ** | **Tahuroa Road** | **13.55** | **195** | P | **P** | **10 48 11.7** | **-0.5** |
| **URZ** | **Urewera** | **13.75** | **189** | P | **P** | **10 48 12.8** | **-1.4** |
| **URZ** | **Urewera** | **13.75** | **189** | P | **P** | **10 48 10.0** | **-4.2** |
| | 12nm,0.8s,baz=21,slow=3.3,SNR=11 | | | | | | |
| URZ | | | | S | **S** | **10 50 38.5** | **-1.5** |
| | 7.7nm,0.7s,baz=90,slow=18,SNR=2.3 | | | | | | |
| **CNGZ** | **Carnagh Statio** | **13.85** | **186** | P | P | 10 48 22.4 | +7.2 |
| **RRRZ** | **Republican Roa** | **13.93** | **191** | P | **P** | **10 48 16.0** | **-0.2** |
| **TLZ** | **Tolley Road** | **14.12** | **194** | P | **P** | **10 48 20.3** | **+2.2** |
| **RTZ** | **Ruatahuna** | **14.12** | **189** | P | **P** | **10 48 17.3** | **-0.9** |
| **RTZ** | **Ruatahuna** | **14.12** | **189** | P | **P** | **10 48 18.0** | **-0.2** |
| **MTHZ** | **Maungataniwha** | **14.38** | **190** | P | **P** | **10 48 20.6** | **-0.3** |
| **HIZ** | **Hauiti** | **14.45** | **196** | P | **P** | **10 48 20.5** | **-1.1** |
| **HIZ** | **Hauiti** | **14.45** | **196** | P | **P** | **10 48 25.8** | **+4.2** |
| **RATZ** | **Rangitukua** | **14.58** | **193** | P | **P** | **10 48 21.9** | **-1.1** |
| **NMHZ** | **Naumai** | **14.62** | **190** | P | **P** | **10 48 23.2** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **14.74** | **191** | P | **P** | **10 48 23.1** | **-1.5** |
| **BKZ** | **Black Stump Fm** | **14.74** | **191** | P | **P** | **10 48 22.2** | **-2.4** |
| **TMVZ** | **Te Maari** | **14.84** | **193** | P | **P** | **10 48 24.7** | **-1.1** |
| **TWVZ** | **Taurewa** | **14.85** | **194** | P | **P** | **10 48 25.1** | **-0.7** |
| **ETVZ** | **East Tongariro** | **14.85** | **193** | P | **P** | **10 48 24.2** | **-1.7** |
| **NNVZ** | **North Ngauruho** | **14.87** | **193** | P | **P** | **10 48 27.5** | **+1.4** |
| **NGZ** | **Ngauruhoe** | **14.91** | **193** | P | **P** | **10 48 26.7** | **+0.1** |
| **SNVZ** | **South Ngauruho** | **14.92** | **193** | P | **P** | **10 48 25.4** | **-1.2** |
| **MCHZ** | **McNeill Hill** | **14.98** | **190** | P | **P** | **10 48 28.0** | **+0.9** |
| **TUVZ** | **Tukino** | **14.99** | **193** | P | **P** | **10 48 26.4** | **-1.0** |
| **VRZ** | **Vera Road** | **15.05** | **196** | P | **P** | **10 48 29.8** | **+2.0** |
| **WNVZ** | **Wahianoa** | **15.06** | **193** | P | **P** | **10 48 25.7** | **-2.4** |
| **MOVZ** | **Moawhango** | **15.11** | **192** | P | **P** | **10 48 26.0** | **-2.5** |
| **KRHZ** | **Kereru** | **15.22** | **190** | P | **P** | **10 48 27.1** | **-2.5** |
| **NEZ** | **Lake Egmont** | **15.36** | **197** | P | **P** | **10 48 33.7** | **+2.5** |
| **PNHZ** | **Pukenui** | **15.52** | **191** | P | **P** | **10 48 30.6** | **-2.1** |
| **NMEZ** | **Namu Road** | **15.56** | **198** | P | **P** | **10 48 36.2** | **+3.1** |
| **WPHZ** | **Waipukurau** | **15.62** | **190** | P | **P** | **10 48 34.8** | **+1.0** |
| **ANWZ** | **Angora Road** | **16.01** | **190** | P | **P** | **10 48 36.7** | **-1.0** |
| **MRZ** | **Mangatainoka R** | **16.35** | **192** | P | **P** | **10 48 38.8** | **-2.4** |
| **SNZO** | **South Karori** | **17.15** | **193** | P | **P** | **10 48 48.2** | **-0.8** |
| **QRZ** | **Quartz Range** | **17.25** | **199** | P | **P** | **10 48 49.1** | **-0.9** |
| **PLWZ** | **Palliser** | **17.29** | **192** | P | **P** | **10 48 48.1** | **-2.3** |
| **TKNZ** | **Takaka Hill** | **17.32** | **198** | P | **P** | **10 48 49.3** | **-1.4** |
| **TUWZ** | **Tuamarina** | **17.44** | **195** | P | **P** | **10 48 49.8** | **-1.9** |
| **THZ** | **Tophouse** | **18.01** | **197** | P | **P** | **10 48 55.7** | **-1.3** |
| **KHZ** | **Kahutara** | **18.47** | **195** | P | **P** | **10 48 59.7** | **-1.4** |
| **INZ** | **Inchbonnie** | **19.32** | **199** | P | **P** | **10 49 08.0** | **-0.8** |
| **OXZ** | **Oxford** | **19.70** | **197** | P | **P** | **10 49 10.7** | **-1.6** |
| OXZ | | | | IAmb | IAmb | 10 49 11.3 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **20.34** | **199** | P | **P** | **10 49 17.5** | **-0.6** |
| **RPZ** | **Rata Peaks** | **20.34** | **199** | P | **P** | **10 49 17.1** | **-1.0** |
| | comp=Z,9.5nm,0.5s,baz=284,slow=3.4,SNR=13 | | | | | | |
| | comp=Z,9.5nm,0.5s | | | | | | |
| **JCZ** | **Jackson Bay** | **21.39** | **202** | P | **P** | **10 49 26.7** | **-1.0** |
| **ARMA** | **Armidale** | **25.69** | **251** | P | **P** | **10 50 05.7** | **-0.6** |
| **EIDS** | **Eidsvold** | **26.12** | **262** | P | **P** | **10 50 10.6** | **+0.6** |
| **EIDS** | **Eidsvold** | **26.12** | **262** | P | **P** | **10 50 10.1** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 10 50 11.2 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **28.69** | **241** | P | **P** | **10 50 32.0** | **-0.6** |
| **CTA** | **Charters Tower** | **31.41** | **272** | P | **P** | **10 50 56.6** | **+0.4** |
| | comp=Z,2.2nm,0.4s,baz=95,slow=10,SNR=77 | | | | | | |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **CTAO** | **Charters Tower** | **31.41** | **272** | P | **P** | **10 50 56.4** | **+0.2** |
| **CTAO** | **Charters Tower** | **31.41** | **272** | P | **P** | **10 50 56.7** | **+0.5** |
| **TOO** | **Toolangi** | **31.97** | **238** | P | **P** | **10 51 01.5** | **+0.7** |
| **TOO** | **Toolangi** | **31.97** | **238** | P | **P** | **10 51 01.4** | **+0.6** |
| TOO | | | | IAmb | IAmb | 10 51 43.1 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **QLP** | **Quilpie** | **32.16** | **259** | P | **P** | **10 51 02.7** | **+0.2** |
| **MOO** | **Moorlands** | **32.26** | **229** | P | **P** | **10 51 03.1** | **0.0** |
| **TAU** | **Tasmania Unive** | **32.35** | **228** | P | **P** | **10 51 04.6** | **+0.7** |
| **MTSU** | **Mount Surprise** | **33.71** | **274** | P | **P** | **10 51 16.2** | **+0.5** |
| **STKA** | **Stephens Creek** | **34.37** | **249** | P | **P** | **10 51 21.6** | **+0.5** |
| **STKA** | **Stephens Creek** | **34.37** | **249** | P | **P** | **10 51 21.6** | **+0.5** |
| **STKA** | **Stephens Creek** | **34.37** | **249** | P | **P** | **10 51 21.6** | **+0.5** |
| | comp=Z,5.3nm,0.4s,baz=94,slow=10,SNR=33 | | | | | | |
| | comp=Z,5.3nm,0.4s | | | | | | |
| **ARPS** | **Mount Arapiles** | **34.67** | **241** | P | **P** | **10 51 24.2** | **+0.7** |
| **COEN** | **Coen** | **36.17** | **280** | P | **P** | **10 51 37.2** | **+0.9** |
| **COEN** | **Coen** | **36.17** | **280** | P | **P** | **10 51 36.6** | **+0.4** |
| COEN | | | | IAmb | IAmb | 10 51 41.8 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **HTT** | **Hallett** | **36.69** | **247** | P | **P** | **10 51 40.5** | **0.0** |
| **LCRK** | **Leigh Creek** | **37.26** | **252** | P | **P** | **10 51 45.1** | **0.0** |
| **QIS** | **Mount Isa** | **37.34** | **268** | P | **P** | **10 51 46.2** | **+0.2** |
| **BBOO** | **Buckleboo** | **39.08** | **248** | P | **P** | **10 51 59.1** | **-0.8** |
| **BBOO** | **Buckleboo** | **39.08** | **248** | P | **P** | **10 51 59.4** | **-0.5** |
| BBOO | | | | IAmb | IAmb | 10 51 59.6 | |
| | comp=Z,11nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **41.84** | **261** | P | **P** | **10 52 21.9** | **-0.3** |
| **ASAR** | **Alice Springs** | **41.84** | **261** | P | **P** | **10 52 21.5** | **-0.7** |
| **ASAR** | **Alice Springs** | **41.84** | **261** | P | **P** | **10 52 21.9** | **-0.3** |
| | comp=Z,2.9nm,0.4s,baz=90,slow=6.6,SNR=196 | | | | | | |
| ASAR | | | | ScP | **ScP** | **10 57 10.6** | **+3.4** |
| | comp=Z,0.6nm,1.0s,baz=105,slow=3.9,SNR=2.9 | | | | | | |
| ASAR | | | | S | **S** | **10 58 01.8** | **-0.7** |
| | comp=Z,0.5nm,0.8s,baz=99,slow=15,SNR=1.5 | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.09** | **267** | P | **P** | **10 52 23.5** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 10 52 23.7 | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **WB2** | **Warramunga Arr** | **42.27** | **267** | P | **P** | **10 52 24.9** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 10 52 25.2 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **42.27** | **267** | P | **P** | **10 52 25.0** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 10 52 25.2 | |
| | comp=Z,12nm,0.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **42.28** | **267** | P | **P** | **10 52 24.9** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 10 52 25.5 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.28** | **267** | P | **P** | **10 52 24.0** | **-1.7** |
| **WRA** | **Warramunga Arr** | **42.28** | **267** | P | **P** | **10 52 24.7** | **-1.0** |
| | comp=Z,11nm,0.5s,baz=99,slow=6.9,SNR=381 | | | | | | |
| WRA | | | | ScP | **ScP** | **10 57 12.9** | **+3.9** |
| | comp=Z,2.3nm,0.8s,baz=104,slow=4.1,SNR=13 | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **FORT** | **Forrest** | **45.97** | **250** | P | **P** | **10 52 53.4** | **-0.7** |
| **KNRA** | **Kununurra** | **48.61** | **270** | P | **P** | **10 53 14.0** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 10 53 14.3 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.70** | **266** | P | **P** | **10 53 29.4** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **54.95** | **260** | P | **P** | **10 53 59.2** | **-0.7** |
| **MBWA** | **Marble Bar** | **55.17** | **261** | P | **P** | **10 54 00.5** | **-0.8** |
| **MORW** | **Morawa** | **56.54** | **250** | P | **P** | **10 54 10.2** | **-0.6** |
| MORW | | | | IAmb | IAmb | 10 54 13.0 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **CASY** | **Casey** | **59.39** | **206** | P | **P** | **10 54 29.5** | **+0.1** |
| CASY | | | | IAmb | IAmb | 10 54 30.0 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.41** | **180** | P | **P** | **10 55 09.7** | **+1.0** |
| **QSPA** | **South Pole Qui** | **65.41** | **180** | P | **P** | **10 55 09.4** | **+0.8** |
| | comp=Z,4.0nm,0.7s,baz=355,slow=0.6,SNR=34 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **75.68** | **173** | P | **P** | **10 56 09.2** | **+0.1** |
| **MAW** | **Mawson** | **77.00** | **201** | P | **P** | **10 56 16.6** | **+0.2** |
| | comp=Z,2.1nm,0.5s,baz=145,slow=4.0,SNR=4.2 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **SLBS** | **Sierra La Lagu** | **83.25** | **60** | P | **P** | **10 56 50.5** | **+0.5** |
| SLBS | | | | IAmb | IAmb | 10 56 50.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **TROLL** | **Troll, Antarti** | **83.56** | **181** | ⇑P | **P** | **10 56 51.0** | **+0.2** |
| | comp=Z,106nm,0.4s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **83.69** | **40** | P | **P** | **10 56 52.9** | **+1.1** |
| O02D | | | | IAmb | IAmb | 10 57 32.8 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **83.90** | **179** | P | **P** | **10 56 52.0** | **-0.3** |
| **SNAA** | **Sanae** | **83.90** | **179** | ⇑P | **P** | **10 56 51.7** | **-0.7** |
| | comp=Z,11nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **83.90** | **179** | P | **P** | **10 56 50.6** | **-1.8** |
| | comp=Z,0.4nm,0.5s,baz=193,slow=12,SNR=5.8 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **84.11** | **177** | ⇑P | **P** | **10 56 53.2** | **-0.2** |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **84.53** | **178** | ⇑P | **P** | **10 56 55.5** | **+0.1** |
| | comp=Z,1.2nm,0.4s,baz=179,slow=4.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.36** | **44** | P | **P** | **10 57 00.1** | **-0.1** |
| | comp=Z,1.3nm,0.9s,baz=227,slow=8.9,SNR=9.1 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **TUC** | **Tucson** | **87.05** | **52** | P | **P** | **10 57 09.4** | **+1.3** |
| **CMAR** | **Chiang Mai Arr** | **89.72** | **290** | P | **P** | **10 57 22.0** | **+1.2** |
| | comp=Z,0.4nm,0.3s,baz=117,slow=3.1,SNR=1.4 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **TMUT** | **Trail Mountain** | **90.43** | **46** | P | **P** | **10 57 24.8** | **+0.7** |
| TMUT | | | | IAmb | IAmb | 10 57 25.6 | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **SRU** | **San Rafael Swe** | **90.78** | **47** | P | **P** | **10 57 25.9** | **+0.4** |
| SRU | | | | IAmb | IAmb | 10 57 26.5 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **90.90** | **58** | P | **P** | **10 57 27.0** | **+0.8** |
| | comp=Z,1.5nm,0.8s,baz=213,slow=6.5,SNR=21 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **92.80** | **14** | P | **P** | **10 57 34.9** | **+0.9** |
| | comp=Z,0.1nm,0.5s,baz=217,slow=5.3,SNR=1.9 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **93.30** | **44** | P | **P** | **10 57 37.0** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=132,slow=2.2,SNR=5.1 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B 132.62 348** | | | SKPbc | **SKPab** | **11 06 13.5** | **+0.2** |
| | comp=Z,1.6nm,0.7s,baz=19,slow=4.1,SNR=5.7 | | | | | | |
| **FINES** | **FINESS Array B 139.15 341** | | | SKPbc | **SKiKP** | **11 06 33.3** | **-0.7** |
| | comp=Z,0.8nm,0.8s,baz=12,slow=7.1,SNR=4.3 | | | | | | |
| **HFS** | **Hagfors 143.28 348** | | | PKhKP | PKPpre | 11 03 49.3 | |
| | comp=Z,2.2nm,0.4s,baz=67,slow=3.9,SNR=13 | | | | | | |
| **EKA** | **Eskdalemuir Ar 149.29 3** | | | PKPbc | **PKPbc** | **11 04 06.6** | **-0.8** |
| | comp=Z,0.3nm,0.4s,baz=329,slow=1.7,SNR=4.1 | | | | | | |

*IDC **27** 10:55:13.5±1.1, 27°.14N×54°.17E, h0km, mb3.8/11, mbtmp3.8/12, ML3.3/1, MS3.1/2, Error ellipse: s-maj=27.8km s-min=19.0km az=159.0*
*DSN **27** 10:55:15.9±1.1, 27°.10N×54°.11E, h15km, ML3.1/10, Error ellipse: s-maj=13.7km s-min=7.4km az=16.0*
*TEH **27** 10:55:15.6, 27°.15N×54°.33E, h11km±36km, ML3.5*
*OMAN **27** 10:55:19.3±0.2, 27°.07N×54°.23E, h29km±3km, mb3.8/2, ml3.3/19, Error ellipse: s-maj=5.0km s-min=1.2km az=8.0*
**ISC 27 10:55:15.2±1.6, 27°.13N±0°.04×54°.27E±0°.04, h11km±11km, n73, σ1§41/86, mb3.9/18, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JLN** | **Jalan Bani Buh** | **6.81** | **136** | P | **Pn** | **10 56 55.6** | **+0.5** |
| **MHTO** | **MHTO** | **6.99** | **150** | P | **Pn** | **10 56 57.9** | **+0.4** |
| **RAYN** | **Ar Rayn** | **8.71** | **248** | P | **Pn** | **10 57 21.0** | **-0.1** |
| **MMAI** | **Mount Meron Ar** | **17.34** | **294** | P | **P** | **10 59 18.4** | **-0.3** |
| | 2.1nm,0.5s,baz=102,slow=20,SNR=2.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **21.25** | **311** | P | **P** | **11 00 01.6** | **+0.1** |
| | 3.1nm,0.8s,baz=133,slow=11,SNR=11 | | | | | | |
| BRTR | | | | PcP | **PcP** | **11 04 08.3** | **+2.0** |
| | 1.0nm,0.9s,baz=136,slow=3.0,SNR=3.6 | | | | | | |
| | 3.1nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **23.45** | **6** | LR | LR | 11 11 26.3 | |
| | comp=Z,39nm,19.3s,baz=72,slow=42 | | | | | | |
| **BVAR** | **Borovoye Array** | **28.52** | **21** | P | **P** | **11 01 10.7** | **+0.2** |
| | 0.4nm,0.4s,baz=191,slow=6.9,SNR=4.6 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.53** | **41** | P | **P** | **11 01 20.0** | **+0.3** |
| | 0.2nm,0.5s,baz=236,slow=7.8,SNR=1.8 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.86** | **32** | P | **P** | **11 01 22.4** | **-0.2** |
| | 0.2nm,0.4s,baz=148,slow=45,SNR=1.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.96** | **32** | P | **P** | **11 02 07.0** | **-0.1** |
| | 0.6nm,0.3s,baz=243,slow=9.5,SNR=3.8 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **38.14** | **312** | *e*P | **P** | **11 02 34.6** | **+0.1** |
| | 4.7nm,0.8s | | | | | | |
| **LESA** | **Schwarzleotal** | **38.23** | **313** | *i* P | **P** | **11 02 34.7** | **-0.4** |
| | 0.9nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **38.86** | **313** | *e*P | **P** | **11 02 41.4** | **+0.8** |
| | 4.5nm,0.8s | | | | | | |
| **SQTA** | **Sankt Quirin** | **39.13** | **312** | *i* P | **P** | **11 02 42.0** | **-0.8** |
| | 3.5nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **39.17** | **339** | P | **P** | **11 02 42.1** | **-0.7** |
| | 0.7nm,0.5s,baz=141,slow=9.0,SNR=5.6 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **39.23** | **313** | *i* P | **P** | **11 02 43.6** | **-0.1** |
| | 3.4nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **39.39** | **312** | *i* P | **P** | **11 02 44.1** | **-1.0** |
| | 2.2nm,0.5s | | | | | | |
| **DAVA** | **Damuels** | **40.02** | **312** | *i* P | **P** | **11 02 49.2** | **-1.1** |
| | 11nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **45.27** | **48** | P | **P** | **11 03 33.1** | **+0.2** |
| | 0.2nm,0.3s,baz=261,slow=3.8,SNR=1.7 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **45.62** | **346** | P | **P** | **11 03 35.3** | **+0.1** |
| | 0.5nm,0.6s,baz=151,slow=7.7,SNR=4.7 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **49.42** | **300** | P | **P** | **11 04 04.5** | **-0.7** |
| | 0.9nm,0.8s,baz=68,slow=8.6,SNR=6.7 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **50.94** | **265** | P | **P** | **11 04 15.4** | **-1.6** |
| | 1.7nm,0.8s,baz=46,slow=7.3,SNR=9.1 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **59.56** | **261** | P | **P** | **11 05 18.3** | **-0.9** |
| | 12nm,1.2s,baz=83,slow=8.1,SNR=4.1 | | | | | | |
| | 12nm,1.2s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **84.81** | **32** | LR | LR | 11 47 25.5 | |
| | comp=Z,12nm,18.1s,baz=140,slow=37 | | | | | | |

*IDC **27** 10:57:31.9±3.1,26.°13S×29.°19E,h0km,mb3.4/1,*
*mbtmp3.4/5,ML3.0/4,Error ellipse: s-maj=43.1km*
*s-min=20.0km az=119.0*
*BUL **27** 10:57:38.0±0.5,25.°84S×29.°44E,h6km±7km,MD3.2*
**ISC 27 10:57:29.5±1.1,26.°02S±0.°06×29.°50E±0.°06,h10km,n21,**
**σ1s81/25,South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MOPA** | **Mopani** | **3.03** | **35** | *i* P | | **Pb** | | **10 58 23.2** | **-0.4** |
| MOPA | | | | *i* S | | **Sn** | | **10 58 56.1** | **+2.3** |
| **MOPA** | **Mopani** | **3.03** | **35** | *i* P | | **Pb** | | **10 58 23.2** | **-0.4** |
| MOPA | | | | *i* S | | **Sn** | | **10 58 56.1** | **+2.3** |
| **LBTB** | **Lobatse** | **3.66** | **285** | Pn | | **Pn** | | **10 58 26.7** | **+0.3** |
| | 0.8nm,0.3s,baz=94,slow=13,SNR=21 | | | | | | | | |
| LBTB | | | | Pg | | **Pb** | | **10 58 34.8** | **+0.3** |
| | 6.8nm,0.3s,baz=103,slow=17,SNR=17 | | | | | | | | |
| LBTB | | | | Lg | | Lg | | 10 59 18.1 | |
| | 23nm,0.3s,baz=17,slow=23,SNR=16 | | | | | | | | |
| | 2.4nm,0.3s | | | | | | | | |
| **LBTB** | **Lobatse** | **3.66** | **285** | *i* P | | **Pb** | | **10 58 33.7** | **-0.7** |
| **LBTB** | **Lobatse** | **3.66** | **285** | *i* P | | **Pb** | | **10 58 33.7** | **-0.7** |
| **MUSN** | **Musina, Limpop** | **3.73** | **5** | *i* P | | **Pb** | | **10 58 33.8** | **-1.7** |
| MUSN | | | | *i* S | | **Sn** | | **10 59 14.1** | **+2.9** |
| **MUSN** | **Musina, Limpop** | **3.73** | **5** | *i* P | | **Pb** | | **10 58 33.8** | **-1.7** |
| MUSN | | | | *i* S | | **Sn** | | **10 59 14.1** | **+2.9** |
| **BOSA** | **Boshof** | **4.58** | **235** | Pn | | **Pn** | | **10 58 38.3** | **-0.7** |
| | 0.3nm,0.3s,baz=57,slow=12,SNR=8.3 | | | | | | | | |
| BOSA | | | | Pg | | **Pb** | | **10 58 48.9** | **-1.1** |
| | 1.1nm,0.3s,baz=60,slow=13,SNR=15 | | | | | | | | |
| BOSA | | | | Lg | | Lg | | 10 59 47.1 | |
| | 13nm,0.3s,baz=149,slow=17,SNR=15 | | | | | | | | |
| | 0.8nm,0.3s | | | | | | | | |
| **I47ZA** | **BOSHOF INFRASO** | **4.59** | **235** | I | | I | | 11 23 55.0 | |
| | 0.3nm,0.8s,baz=53,slow=350,SNR=0.8 | | | | | | | | |
| **MATP** | **Matopo** | **5.64** | **350** | Pn | | Pn | | 10 58 58.7 | +5.1 |
| | 0.6nm,0.3s,baz=171,slow=12,SNR=21 | | | | | | | | |
| MATP | | | | Sn | | **Sn** | | **11 00 00.7** | **+2.2** |
| | 0.4nm,0.3s,baz=266,slow=23,SNR=1.8 | | | | | | | | |
| MATP | | | | Lg | | Lg | | 11 00 24.1 | |
| | 2.8nm,0.3s,baz=92,slow=21,SNR=8.9 | | | | | | | | |
| | 1.3nm,0.3s | | | | | | | | |
| **MATP** | **Matopo** | **5.64** | **350** | *i* P | | Pn | | 10 58 59.0 | +5.5 |
| MATP | | | | *i* S | | **Sn** | | **10 59 58.7** | **+0.2** |
| **MATP** | **Matopo** | **5.64** | **350** | *i* P | | Pn | | 10 58 59.0 | +5.5 |
| MATP | | | | *i* S | | **Sn** | | **10 59 58.7** | **+0.2** |
| **BLWY** | **Bulawayo** | **5.91** | **352** | *i* P | | Pn | | 10 59 02.6 | +5.3 |
| BLWY | | | | *i* S | | **Sn** | | **11 00 04.6** | **-0.5** |
| **BLWY** | **Bulawayo** | **5.91** | **352** | *i* P | | Pn | | 10 59 02.6 | +5.3 |
| BLWY | | | | *i* S | | **Sn** | | **11 00 04.6** | **-0.5** |
| **CHIPN** | **CHIPINGE** | **6.44** | **27** | *i* P | | Pn | | 10 59 11.8 | +7.2 |
| CHIPN | | | | *i* S | | **Sn** | | **11 00 20.0** | **+1.8** |
| **CHIPN** | **CHIPINGE** | **6.44** | **27** | *i* P | | Pn | | 10 59 11.8 | +7.2 |
| CHIPN | | | | *i* S | | **Sn** | | **11 00 20.0** | **+1.8** |
| **KRI** | **Karoi** | **9.14** | **1** | *i* P | | **Pn** | | **10 59 38.9** | **-2.8** |
| KRI | | | | *i* S | | Sn | | 11 01 07.5 | -17 |
| **KRI** | **Karoi** | **9.14** | **1** | *i* P | | **Pn** | | **10 59 38.9** | **-2.8** |
| KRI | | | | *i* S | | Sn | | 11 01 07.5 | -17 |
| **SUR** | **Sutherland** | **9.89** | **228** | Pn | | **Pn** | | **10 59 53.0** | **+1.1** |
| | 0.3nm,0.3s,baz=17,slow=8.3,SNR=8.8 | | | | | | | | |
| SUR | | | | Sn | | Sn | | 11 01 33.3 | -10 |
| | 0.2nm,0.3s,baz=157,slow=14,SNR=1.7 | | | | | | | | |
| SUR | | | | Lg | | Lg | | 11 02 32.5 | |
| | 0.4nm,0.3s,baz=299,slow=14,SNR=1.8 | | | | | | | | |
| | 7.6nm,0.8s | | | | | | | | |
| **I35NA** | **TSUMEB INFRASO** | **12.93** | **299** | I | | I | | 12 22 25.0 | |
| | baz=120,slow=321,SNR=1.0 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **47.41** | **322** | P | | **P** | | **11 06 07.3** | **+2.9** |
| | 0.3nm,0.5s,baz=132,slow=4.7,SNR=4.4 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |

*ISN **27** 11:06:51.9±0.5,34.°59N×46.°17E,h10km±15km,ML2.8*
*TEH **27** 11:06:53.2,34.°61N×46.°19E,h10km±76km,ML2.7*
**ISC 27 11:06:53.9±1.2,34.°62N±0.°04×46.°18E±0.°04,h3km±13km,**
**n7,σ0s72/12,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.19** | **64** | Pg | | **Pg** | | **11 06 57.3** | **-0.3** |
| IDHR | | | | Sg | | **Sg** | | **11 07 01.0** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **0.43** | **132** | Pg | | **Pg** | | **11 07 01.8** | **-0.3** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **258** | Pg | | **Pg** | | **11 07 03.5** | **0.0** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **204** | Pg | | **Pg** | | **11 07 03.8** | **-0.6** |
| GLG1 | | | | Sg | | **Sg** | | **11 07 12.4** | **+0.8** |
| **IBDR** | **Badra** | **1.52** | **188** | *e*Pn | | **Pb** | | **11 07 21.8** | **-0.9** |
| IBDR | | | | *e*Sn | | **Sg** | | **11 07 43.5** | **+0.9** |
| IBDR | | | | AML | | AML | | 11 07 57.8 | |
| | comp=E,114nm,0.7s | | | | | | | | |
| IBDR | | | | AML | | AML | | 11 08 00.7 | |
| | comp=N,131nm,0.5s | | | | | | | | |
| **IKRK** | **Kirkuk** | **1.70** | **298** | *e*Pn | | **Pn** | | **11 07 24.5** | **0.0** |
| IKRK | | | | *e*Sn | | **Sg** | | **11 07 49.0** | **+0.4** |
| IKRK | | | | AML | | AML | | 11 07 51.3 | |
| | comp=E,156nm,0.4s | | | | | | | | |
| IKRK | | | | AML | | AML | | 11 07 59.4 | |
| | comp=N,148nm,0.4s | | | | | | | | |
| **RAFI** | **Al-Rafai** | **2.89** | **181** | *e*Pn | | **Pn** | | **11 07 41.0** | **+0.3** |
| RAFI | | | | *e*Sn | | **Sn** | | **11 08 16.5** | **+0.6** |

**IDC 27 11:09:39.4±1.9,17.°75S×178.°85W,h0km,mb3.8/4,**
**mbtmp3.8/4,Error ellipse: s-maj=123.6km**
**s-min=34.3km az=105.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **QSPA** | **South Pole Qui** | **72.30** | **180** | P | | P | | 11 21 06.9 | +0.1 |
| | 1.5nm,1.0s,baz=318,slow=1.2,SNR=7.5 | | | | | | | | |
| | 1.5nm,1.0s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.60** | **44** | P | | P | | 11 21 49.8 | +0.9 |
| | 0.5nm,0.8s,baz=229,slow=8.2,SNR=4.3 | | | | | | | | |
| | 0.5nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.83** | **13** | P | | P | | 11 22 20.2 | -0.2 |
| | 0.2nm,0.4s,baz=218,slow=5.1,SNR=9.0 | | | | | | | | |
| | 0.2nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.27** | **58** | P | | P | | 11 22 22.9 | -0.7 |
| | 0.4nm,0.8s,baz=217,slow=6.0,SNR=5.4 | | | | | | | | |
| | 0.4nm,0.8s | | | | | | | | |

**DJA 27 11:10:04.0±1.4,9.°3S±5.°×12.°4E±.°,h106km±15km,M4.2/10,**
**mb4.7/1,mB6.6/1,MLv3.9/10,Mw(mB)6.4/1,Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **0.76** | **174** | P | | Pn | | 11 10 24.2 | +1.5 |
| **BATI** | **Baumata** | **1.32** | **203** | P | | Pn | | 11 10 29.6 | +1.1 |
| BATI | | | | S | | Sn | | 11 10 49.1 | +2.2 |
| **MMRI** | **Maumere** | **1.96** | **280** | P | | Pn | | 11 10 36.8 | +0.5 |
| **EDFI** | **Ende, Flores** | **2.48** | **275** | P | | Pn | | 11 10 43.4 | +0.2 |
| **BASI** | **Baing, Sumba** | **3.77** | **251** | P | | Pn | | 11 10 58.9 | -1.2 |
| **BSSI** | **Bau Bau, Buton** | **4.63** | **307** | P | | Pn | | 11 11 11.9 | +0.1 |
| **WBSI** | **Waikabubak, Su** | **4.78** | **262** | P | | Pn | | 11 11 12.6 | -1.3 |
| **PLAI** | **Plampang** | **6.34** | **271** | P | | Pn | | 11 11 35.0 | 0.0 |

*ISN **27** 11:11:08.3±0.5,34.°58N×46.°15E,h10km±15km,ML2.8*
*TEH **27** 11:11:09.5,34.°59N×46.°18E,h10km±83km,ML2.9*
**ISC 27 11:11:09.5±1.0,34.°61N±0.°05×46.°16E±0.°05,h15km±12km,**
**n8,σ1s41/13,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.20** | **65** | Pg | | **Pg** | | **11 11 14.2** | **-0.2** |
| IDHR | | | | Sg | | **Sg** | | **11 11 17.9** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.44** | **130** | Pg | | **Pb** | | **11 11 18.3** | **-0.8** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **203** | Pg | | **Pb** | | **11 11 19.8** | **-0.9** |
| GLG1 | | | | Sg | | **Sb** | | **11 11 28.2** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **115** | Pg | | **Pb** | | **11 11 24.5** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **178** | Pg | | **Pb** | | **11 11 27.9** | **-0.4** |
| **IBDR** | **Badra** | **1.51** | **187** | *e*Pn | | **Pg** | | **11 11 38.0** | **-0.6** |
| IBDR | | | | *e*Sn | | **Sg** | | **11 11 59.5** | **+1.3** |
| IBDR | | | | AML | | AML | | 11 12 03.6 | |
| | comp=N,109nm,0.3s | | | | | | | | |
| IBDR | | | | AML | | AML | | 11 12 03.8 | |
| | comp=E,184nm,0.6s | | | | | | | | |
| **IKRK** | **Kirkuk** | **1.69** | **298** | *e*Pn | | **Pg** | | **11 11 41.0** | **-1.0** |
| IKRK | | | | *e*Sn | | **Sg** | | **11 12 05.0** | **+1.1** |
| IKRK | | | | AML | | AML | | 11 12 11.6 | |
| | comp=N,142nm,0.2s | | | | | | | | |
| IKRK | | | | AML | | AML | | 11 12 14.8 | |
| | comp=E,113nm,0.4s | | | | | | | | |
| **RAFI** | **Al-Rafai** | **2.88** | **181** | *e*Pn | | **Pn** | | **11 11 57.0** | **+2.2** |
| RAFI | | | | *e*Sn | | **Sb** | | **11 12 33.0** | **-2.6** |

**IDC 27 11:14:51.1±4.1,53.°63N×90.°51E,h0km,mbtmp3.1/2,**
**ML2.7/2,Error ellipse: s-maj=37.1km s-min=25.6km**
**az=40.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.39** | **278** | I | | I | | 11 37 40.0 | |
| | baz=90,slow=326,SNR=4.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.39** | **278** | Pg | | Pb | | 11 15 51.0 | -1.0 |
| | 1.0nm,0.3s,baz=95,slow=16,SNR=7.6 | | | | | | | | |
| ZALV | | | | Lg | | Lg | | 11 16 40.3 | |
| | 1.0nm,0.3s,baz=96,slow=28,SNR=6.3 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.96** | **253** | Pn | | Pn | | 11 16 48.5 | +0.5 |
| | 0.1nm,0.3s,baz=66,slow=14,SNR=5.4 | | | | | | | | |
| KURBB | | | | Sn | | Sn | | 11 18 16.6 | -2.2 |
| | baz=280,slow=27,SNR=1.0 | | | | | | | | |
| KURBB | | | | Lg | | Lg | | 11 19 08.3 | |
| | 0.1nm,0.3s,baz=63,slow=32,SNR=6.5 | | | | | | | | |
| | 0.7nm,0.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.63** | **221** | Pn | | Pn | | 11 16 57.9 | +0.6 |
| | 0.1nm,0.3s,baz=32,slow=14,SNR=3.6 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 11 19 24.0 | |
| | 0.1nm,0.3s,baz=32,slow=36,SNR=3.1 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |

*IDC **27** 11:20:53.4±1.0,43.°50N×83.°10E,h0km,mb3.7/5,*
*mbtmp3.6/8,ML3.0/3,MS2.8/1,Error ellipse: s-maj=21.5km*
*s-min=11.2km az=72.0*
*SOME **27** 11:20:53.1,43.°60N×83.°27E,h20km*
*NNC **27** 11:20:56.3±1.9,43.°53N×83.°03E,h2km±11km,mb4.2,*
*mpv3.9,Error ellipse: s-maj=16.3km s-min=8.0km*
*az=140.0*
**ISC 27 11:20:54.9±0.9,43.°51N±0.°05×83.°35E±0.°05,h10km,n57,**
**σ2s50/82,mb3.6/5,10C-9D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **2.18** | **269** | *e*P | | **Pn** | | **11 21 31.6** | **+0.2** |
| | 56nm,0.1s | | | | | | | | |
| KTMS | | | | *e*S | | **Sn** | | **11 21 59.3** | **+0.8** |
| | 270nm,0.4s | | | | | | | | |
| **KTMS** | **Ketmen** | **2.18** | **269** | Pg | | **Pn** | | **11 21 29.7** | **-1.7** |
| | 76nm,0.4s | | | | | | | | |
| KTMS | | | | Lg | | Lg | | 11 21 57.2 | |
| | 194nm,0.5s | | | | | | | | |
| **PDGK** | **Podgornoye** | **2.82** | **268** | Pg | | **Pn** | | **11 21 40.8** | **+0.7** |
| | 19nm,0.2s | | | | | | | | |
| PDGK | | | | Lg | | Lg | | 11 22 15.7 | |
| | 50nm,0.5s | | | | | | | | |
| **PDGK** | **Podgornoye** | **2.82** | **268** | ⇑Pg | | **Pn** | | **11 21 43.9** | **+3.8** |
| | 18nm,0.3s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | | 11 22 16.3 | |
| | 57nm,0.5s | | | | | | | | |
| **SHLS** | **Shalkode** | **2.86** | **264** | *e*P | | **Pn** | | **11 21 38.0** | **-2.6** |
| | 184nm,0.2s | | | | | | | | |
| SHLS | | | | *e*S | | **Sn** | | **11 22 10.9** | **-4.2** |
| | 565nm,0.2s | | | | | | | | |
| **SHLS** | **Shalkode** | **2.86** | **264** | Pg | | **Pn** | | **11 21 38.0** | **-2.6** |
| | 184nm,0.2s | | | | | | | | |
| SHLS | | | | Lg | | Lg | | 11 22 10.9 | |
| | 565nm,0.2s | | | | | | | | |
| **KNOS** | **Konyrlen** | **3.13** | **287** | Pg | | **Pn** | | **11 21 47.8** | **+3.4** |
| | 28nm,0.2s | | | | | | | | |
| KNOS | | | | Lg | | Lg | | 11 22 27.4 | |
| | 141nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **3.18** | **265** | *e*P | | **Pb** | | **11 21 50.4** | **-1.1** |
| | 30nm,0.3s | | | | | | | | |
| UZB | | | | *e*S | | **Sb** | | **11 22 32.4** | **+2.0** |
| | 72nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **3.18** | **265** | Pg | | **Pb** | | **11 21 50.4** | **-1.1** |
| | 30nm,0.3s | | | | | | | | |
| UZB | | | | Lg | | Lg | | 11 22 32.4 | |
| | 72nm,0.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **3.37** | **348** | Pn | | **Pn** | | **11 21 50.0** | **+2.3** |
| | 1.3nm,0.2s,baz=177,slow=13,SNR=80 | | | | | | | | |
| MK31 | | | | ⇑Pg | | **Pg** | | **11 22 00.2** | **+0.7** |
| | 14nm,0.6s,baz=157,slow=17,SNR=21 | | | | | | | | |
| MK31 | | | | ⇑Sn | | **Sn** | | **11 22 31.3** | **+3.5** |
| | 18nm,0.4s,baz=178,slow=18,SNR=7.1 | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | | 11 22 44.0 | |
| | 9.5nm,0.3s,baz=171,slow=33,SNR=5.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **3.37** | **348** | Pn | | **Pn** | | **11 21 50.4** | **+2.7** |
| | 3.4nm,0.3s,baz=178,slow=15,SNR=52 | | | | | | | | |
| MKAR | | | | Sn | | **Sn** | | **11 22 29.7** | **+2.0** |
| | 15nm,0.3s,baz=236,slow=13,SNR=12 | | | | | | | | |
| MKAR | | | | Lg | | Lg | | 11 22 39.4 | |
| | 14nm,0.3s,baz=169,slow=27,SNR=2.9 | | | | | | | | |
| | 3.7nm,0.3s | | | | | | | | |
| **KPKS** | **Kokpek** | **3.39** | **271** | *e*P | | **Pb** | | **11 21 54.0** | **-1.2** |
| | 18nm,0.2s | | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | | **11 22 37.9** | **+1.3** |
| | 126nm,0.4s | | | | | | | | |
| **KPKS** | **Kokpek** | **3.39** | **271** | Pg | | **Pb** | | **11 21 53.9** | **-1.2** |
| | 18nm,0.2s | | | | | | | | |
| KPKS | | | | Lg | | Lg | | 11 22 37.9 | |
| | 126nm,0.4s | | | | | | | | |
| **MAKZ** | **Makanchi** | **3.44** | **344** | ⇑Pn | | **Pn** | | **11 21 51.0** | **+2.5** |
| | 1.5nm,0.2s | | | | | | | | |
| MAKZ | | | | ⇓Pg | | **Pg** | | **11 22 00.3** | **-0.5** |
| | 22nm,0.6s | | | | | | | | |
| MAKZ | | | | ⇓Sn | | **Sn** | | **11 22 32.2** | **+2.8** |
| | 11nm,0.3s | | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | | 11 22 44.5 | |
| | 11nm,0.3s | | | | | | | | |
| **SATY** | **Saty** | **3.63** | **265** | *e*P | | **Pb** | | **11 21 59.0** | **-0.4** |
| | 19nm,0.2s | | | | | | | | |
| SATY | | | | *e*S | | **Sb** | | **11 22 46.7** | **+3.2** |
| | 94nm,0.2s | | | | | | | | |
| **SATY** | **Saty** | **3.63** | **265** | Pg | | **Pb** | | **11 21 59.0** | **-0.4** |
| | 19nm,0.2s | | | | | | | | |
| SATY | | | | Lg | | Lg | | 11 22 46.7 | |
| | 94nm,0.2s | | | | | | | | |
| **KURS** | **Kuram** | **3.77** | **271** | *e*P | | **Pb** | | **11 22 00.6** | **-0.9** |
| | 2.5nm,0.2s | | | | | | | | |
| KURS | | | | *e*S | | **Sb** | | **11 22 49.1** | **+1.8** |
| | 20nm,0.4s | | | | | | | | |
| **KURS** | **Kuram** | **3.77** | **271** | Pg | | **Pb** | | **11 22 02.3** | **+0.8** |
| | 15nm,0.5s | | | | | | | | |
| KURS | | | | Lg | | Lg | | 11 22 52.3 | |
| | 29nm,0.6s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.85** | **295** | *e*P | | **Pb** | | **11 22 01.7** | **-1.3** |
| | 38nm,0.2s | | | | | | | | |
| TDK | | | | *e*S | | **Sb** | | **11 22 50.8** | **+1.2** |
| | 82nm,0.1s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **3.85** | **295** | Pg | | **Pb** | | **11 22 03.5** | **+0.6** |
| | 70nm,0.4s | | | | | | | | |
| TDK | | | | Lg | | Lg | | 11 22 54.6 | |
| | 91nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **4.05** | **282** | *e*P | | **Pb** | | **11 22 06.1** | **-0.4** |
| | 5.5nm,0.2s | | | | | | | | |
| ARXS | | | | *e*S | | **Sb** | | **11 22 58.4** | **+2.9** |
| | 64nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **4.05** | **282** | Pg | | **Pb** | | **11 22 07.7** | **+1.3** |
| | 24nm,0.4s | | | | | | | | |
| ARXS | | | | Lg | | Lg | | 11 23 00.8 | |
| | 64nm,0.4s | | | | | | | | |
| **ZSN** | **Zaisan** | **4.09** | **15** | *e*P | | **Pb** | | **11 22 04.8** | **-2.1** |
| | 21nm,0.4s | | | | | | | | |
| ZSN | | | | *e*S | | **Sb** | | **11 22 57.2** | **+0.9** |
| | 45nm,1.3s | | | | | | | | |
| **ZSN** | **Zaisan** | **4.09** | **15** | Pg | | **Pb** | | **11 22 04.8** | **-2.1** |
| | 21nm,0.4s | | | | | | | | |
| ZSN | | | | Lg | | Lg | | 11 22 57.2 | |
| | 45nm,1.3s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.55** | **269** | *e*P | | **Pb** | | **11 22 15.6** | **+0.6** |
| | 17nm,0.5s | | | | | | | | |
| KOTS | | | | *e*S | | **Sb** | | **11 23 15.5** | **+5.6** |
| | 107nm,0.4s | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **4.55** | **269** | Pg | | **Pb** | | **11 22 15.6** | **+0.6** |
| | 17nm,0.5s | | | | | | | | |
| KOTS | | | | Lg | | Lg | | 11 23 15.5 | |
| | 107nm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **4.61** | **268** | *e*P | | **Pb** | | **11 22 16.3** | **+0.4** |
| | 8.6nm,0.6s | | | | | | | | |
| MDOK | | | | *e*S | | **Sb** | | **11 23 16.0** | **+4.5** |
| | 27nm,0.6s | | | | | | | | |
| **MDOK** | **Medeo** | **4.61** | **268** | Pg | | **Pb** | | **11 22 16.0** | **+0.1** |
| | 7.9nm,0.4s | | | | | | | | |
| MDOK | | | | Pg | | Pg | | 11 22 17.6 | -5.6 |
| | 13nm,0.4s | | | | | | | | |
| MDOK | | | | Lg | | Lg | | 11 23 16.8 | |
| | 19nm,0.4s | | | | | | | | |
| MDOK | | | | Lg | | Lg | | 11 23 18.6 | |
| | 30nm,0.8s | | | | | | | | |
| **CHKK** | **Chushkaly** | **4.62** | **276** | *e*P | | **Pb** | | **11 22 15.4** | **-0.7** |
| | 12nm,0.4s | | | | | | | | |
| CHKK | | | | *e*S | | **Sb** | | **11 23 14.7** | **+2.8** |
| | 31nm,0.3s | | | | | | | | |
| **CHKK** | **Chushkaly** | **4.62** | **276** | Pg | | **Pb** | | **11 22 15.4** | **-0.7** |
| | 12nm,0.4s | | | | | | | | |
| CHKK | | | | Lg | | Lg | | 11 23 14.7 | |
| | 31nm,0.3s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.70** | **266** | *e*P | | **Pb** | | **11 22 18.5** | **+0.9** |
| | 4.1nm,0.2s | | | | | | | | |
| TNSS | | | | *e*S | | **Sb** | | **11 23 19.6** | **+5.3** |
| | 9.7nm,0.2s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **4.70** | **266** | Pg | | **Pb** | | **11 22 19.0** | **+1.5** |
| | 16nm,0.3s | | | | | | | | |
| TNSS | | | | Lg | | Lg | | 11 23 21.3 | |
| | 10.0nm,0.3s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.84** | **275** | *e*P | | **Pb** | | **11 22 20.1** | **+0.2** |
| | 4.9nm,0.4s | | | | | | | | |
| KTBS | | | | *e*S | | **Sb** | | **11 23 22.6** | **+4.4** |
| | 39nm,0.6s | | | | | | | | |
| **KTBS** | **Karatobe** | **4.84** | **275** | Pg | | **Pb** | | **11 22 20.1** | **+0.2** |
| | 4.9nm,0.4s | | | | | | | | |
| KTBS | | | | Lg | | Lg | | 11 23 22.6 | |
| | 39nm,0.6s | | | | | | | | |
| **KUU** | **Kurty** | **5.10** | **277** | *e*P | | **Pb** | | **11 22 25.0** | **+0.9** |
| | 4.8nm,0.0s | | | | | | | | |
| KUU | | | | *e*S | | **Sb** | | **11 23 31.1** | **+5.7** |
| | 14nm,0.1s | | | | | | | | |
| **KUU** | **Kurty** | **5.10** | **277** | Pg | | **Pb** | | **11 22 22.7** | **-1.4** |
| | 2.9nm,0.1s | | | | | | | | |
| KUU | | | | Lg | | Lg | | 11 23 27.2 | |
| | 20nm,0.5s | | | | | | | | |
| **KST** | **Kastek** | **5.41** | **268** | *e*P | | **Pb** | | **11 22 32.8** | **+3.2** |
| | 4.7nm,0.6s | | | | | | | | |
| KST | | | | *e*S | | **Sg** | | **11 23 44.4** | **-4.2** |
| | 31nm,0.6s | | | | | | | | |
| **KST** | **Kastek** | **5.41** | **268** | Pg | | **Pb** | | **11 22 32.8** | **+3.2** |
| | 4.7nm,0.6s | | | | | | | | |
| KST | | | | Lg | | Lg | | 11 23 44.4 | |
| | 31nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **5.53** | **270** | *e*P | | **Pb** | | **11 22 35.2** | **+3.6** |
| | 6.4nm,0.4s | | | | | | | | |
| DGS | | | | *e*S | | **Sg** | | **11 23 48.3** | **-4.0** |
| | 24nm,0.4s | | | | | | | | |
| **DGS** | **Degeres** | **5.53** | **270** | Pg | | **Pb** | | **11 22 33.0** | **+1.4** |
| | 6.4nm,0.5s | | | | | | | | |
| DGS | | | | Lg | | Lg | | 11 23 44.8 | |
| | 16nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **5.58** | **275** | *e*P | | **Pb** | | **11 22 35.6** | **+3.3** |
| | 2.7nm,0.4s | | | | | | | | |
| KRBS | | | | *e*S | | **Sg** |

0.8nm,0.8s,baz=331,slow=5.4,SNR=7.0
0.8nm,0.8s
**ASAR Alice Springs 81.37 134** P **P** **11 33 12.2 +0.3**
0.4nm,0.6s,baz=321,slow=5.3,SNR=7.6
0.4nm,0.6s

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*IDC* ***27*** *12:08:60.0±0.6,24˚.89N×63˚.01E,h0km,mb4.5/34, mbtmp4.5/35,ML3.9/1,MS4.1/42,Error ellipse: s-maj=14.5km s-min=11.6km az=178.0*
*BJI* ***27*** *12:09:00.9±0.0,24˚.94N×63˚.06E,h14km, mb4.8/55, mB5.0/29,Ms4.5/42,Ms7 4.2/42*
*DSN* ***27*** *12:09:00.9±2.4,24˚.84N×63˚.12E,h15km,mb4.8/2, ML4.3/13,Ms3.3/8,Error ellipse: s-maj=56.4km s-min=8.7km az=155.0*
*MOS* ***27*** *12:09:00.0±1.0,25˚.03N×63˚.01E,h9km,mb5.0/54, MS4.2/12,Error ellipse: s-maj=5.6km s-min=3.4km az=85.6*
*NEIC* ***27*** *12:09:02.7±1.8,25˚.08N±0˚.10×62˚.91E±0˚.08,h10km±1km, mb4.9/89,Error ellipse: s-maj=17.3km s-min=11.3km az=162.0*
*BGR* ***27*** *12:09:10.0,24˚.52N×61˚.64E,h31km,mb5.1,Ms3.9*
*OMAN* ***27*** *12:09:10.4±0.1,24˚.88N×62˚.25E,h10km,mb5.2/25, ml4.5/8,ms3.9/8,Error ellipse: s-maj=1.2km s-min=1.1km az=230.0*
**ISC 27 12:09:01.6±0.3,24˚.95N±0˚.04×62˚.91E±0˚.03,h10km, h10km:pP-P,n518,σ1§93/549,mb4.8/169,MS4.2/74, 42C-8D,Off coast of Pakistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NGCH** | **Negor - Chabah** | **1.66** | **284** | P | **Pb** | **12 09 32.2** | **0.0** |
| | SNR=74 | | | | | | |
| NGCH | | | | S | **Sn** | **12 09 47.7** | **-4.5** |
| **JLN** | **Jalan Bani Buh** | **4.26** | **230** | P | **Pn** | **12 10 06.7** | **+0.2** |
| | SNR=14 | | | | | | |
| JLN | | | | S | **Sn** | **12 10 52.4** | **-3.8** |
| **WSAR** | **Wadi Sarin** | **4.27** | **247** | Pn | **Pn** | **12 10 06.8** | **+0.1** |
| | 6.3nm,0.3s,baz=91,slow=8.2,SNR=61 | | | | | | |
| WSAR | | | | Sn | **Sn** | **12 10 50.8** | **-5.8** |
| | 18nm,0.3s,baz=18,slow=9.6,SNR=8.9 | | | | | | |
| WSAR | | | | LR | LR | 12 12 30.4 | |
| | comp=Z,2μm,18.9s,baz=104,slow=49 43nm,0.6s | | | | | | |
| **WBK** | **Wadi Bani Khal** | **4.30** | **238** | P | **Pn** | **12 10 07.5** | **+0.4** |
| | SNR=21 | | | | | | |
| WBK | | | | S | **Sn** | **12 10 53.1** | **-4.3** |
| **SMDO** | **Samad** | **4.83** | **248** | P | **Pn** | **12 10 15.2** | **+0.7** |
| | SNR=37 | | | | | | |
| SMDO | | | | S | **Sn** | **12 11 07.5** | **-3.1** |
| **JMDO** | **Jabal Madar** | **5.11** | **241** | P | **Pn** | **12 10 20.0** | **+1.8** |
| | SNR=34 | | | | | | |
| JMDO | | | | S | **Sn** | **12 11 15.0** | **-2.2** |
| **HOQ** | **Hoqain** | **5.29** | **256** | P | **Pn** | **12 10 21.3** | **+0.6** |
| | SNR=18 | | | | | | |
| HOQ | | | | S | **Sn** | **12 11 17.7** | **-4.2** |
| **BSY** | **Bisya** | **5.67** | **248** | P | **Pn** | **12 10 28.0** | **+2.0** |
| | SNR=28 | | | | | | |
| BSY | | | | S | **Sn** | **12 11 29.5** | **-1.8** |
| **SOHO** | **SOHO** | **5.87** | **263** | P | **Pn** | **12 10 29.0** | **+0.4** |
| **SOHO** | **SOHO** | **5.87** | **263** | P | **Pn** | **12 10 29.3** | **+0.7** |
| SOHO | | | | S | **Sn** | **12 11 31.4** | **-4.6** |
| **MDH** | **Madha** | **6.01** | **275** | *i* P | **Pn** | **12 10 30.7** | **+0.2** |
| | SNR=11 | | | | | | |
| **MDH** | **Madha** | **6.01** | **275** | P | **Pn** | **12 10 31.3** | **+0.7** |
| | SNR=11 | | | | | | |
| MDH | | | | S | **Sn** | **12 11 32.3** | **-7.1** |
| **MHTO** | **MHTO** | **6.03** | **230** | P | **Pn** | **12 10 32.0** | **+1.1** |
| | SNR=27 | | | | | | |
| MHTO | | | | S | **Sn** | **12 11 36.4** | **-3.5** |
| **ARQ** | **Araqi** | **6.06** | **256** | P | **Pn** | **12 10 34.0** | **+2.7** |
| | SNR=38 | | | | | | |
| ARQ | | | | S | **Sn** | **12 11 39.1** | **-1.6** |
| **BANOM** | **Banah** | **6.06** | **281** | *i* P | **Pn** | **12 10 32.0** | **+0.8** |
| | SNR=7.1 | | | | | | |
| **BANOM** | **Banah** | **6.06** | **281** | P | **Pn** | **12 10 32.3** | **+1.1** |
| BANOM | | | | S | **Sn** | **12 11 34.6** | **-6.1** |
| **UOSS** | **Minazif** | **6.09** | **271** | Pn | **Pn** | **12 10 31.7** | **0.0** |
| UOSS | | | | Sn | **Sn** | **12 11 34.4** | **-7.1** |
| **UOSS** | **Minazif** | **6.09** | **271** | P | **Pn** | **12 10 31.8** | **+0.1** |
| **UOSS** | **Minazif** | **6.09** | **271** | P | **Pn** | **12 10 32.0** | **+0.3** |
| UOSS | | | | S | **Sn** | **12 11 35.2** | **-6.3** |
| **MSFE** | **Esma-Masafi** | **6.13** | **275** | P | **Pn** | **12 10 32.8** | **+0.5** |
| **MASF** | **Masafi** | **6.13** | **275** | P | **Pn** | **12 10 33.2** | **+0.8** |
| MASF | | | | S | **Sn** | **12 11 36.2** | **-6.5** |
| **HATD** | **Hatta, Dubai** | **6.16** | **270** | *i* P | **Pn** | **12 10 33.6** | **+0.9** |
| | SNR=7.9 | | | | | | |
| **HATD** | **Hatta, Dubai** | **6.16** | **270** | P | **Pn** | **12 10 34.0** | **+1.3** |
| | SNR=8.4 | | | | | | |
| HATD | | | | S | **Sn** | **12 11 37.6** | **-5.6** |
| **SHME** | **Shamm** | **6.22** | **282** | *i* P | **Pn** | **12 10 34.6** | **+1.2** |
| | SNR=88 | | | | | | |
| **SHME** | **Shamm** | **6.22** | **282** | P | **Pn** | **12 10 35.2** | **+1.8** |
| | SNR=88 | | | | | | |
| SHME | | | | S | **Sn** | **12 11 41.5** | **-3.1** |
| **ASHO** | **Ashiyiah** | **6.24** | **269** | *i* P | **Pn** | **12 10 34.9** | **+1.2** |
| | SNR=160 | | | | | | |
| **ASHO** | **Ashiyiah** | **6.24** | **269** | P | **Pn** | **12 10 35.7** | **+2.0** |
| | SNR=55 | | | | | | |
| ASHO | | | | S | **Sn** | **12 11 43.6** | **-1.5** |
| **BHUJ** | **Bhuj** | **6.39** | **104** | *e*P | **Pn** | **12 10 34.8** | **-0.9** |
| BHUJ | | | | *e*S | **Sn** | **12 11 42.8** | **-5.9** |
| BHUJ | | | | IAML | | 12 11 46.4 | |
| | comp=E,420nm,1.1s | | | | | | |
| BHUJ | | | | IAML | | 12 11 48.4 | |
| | comp=E,326nm,0.8s | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **6.58** | **272** | P | **Pn** | **12 10 41.8** | **+3.4** |
| **NAZ** | **Nazwa, Dubai** | **6.58** | **272** | P | **Pn** | **12 10 42.7** | **+4.2** |
| | SNR=13 | | | | | | |
| NAZ | | | | S | **Sn** | **12 11 51.8** | **-1.8** |
| **ALNE** | **Al Ain** | **6.58** | **264** | *i* P | **Pn** | **12 10 40.5** | **+2.0** |
| | SNR=10 | | | | | | |
| **ALNE** | **Al Ain** | **6.58** | **264** | P | **Pn** | **12 10 41.5** | **+3.0** |
| | SNR=33 | | | | | | |
| ALNE | | | | S | **Sn** | **12 11 50.5** | **-3.2** |
| **FAQ** | **Al Faqa, Dubai** | **6.65** | **270** | *i* P | **Pn** | **12 10 42.2** | **+2.7** |
| | SNR=39 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **6.65** | **270** | P | **Pn** | **12 10 42.6** | **+3.2** |
| | SNR=39 | | | | | | |
| FAQ | | | | S | **Sn** | **12 11 53.4** | **-2.0** |
| **ASUD** | **Al Ashush, Dub** | **6.90** | **269** | *i* P | **Pn** | **12 10 45.6** | **+2.8** |
| | SNR=27 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **6.90** | **269** | P | **Pn** | **12 10 46.3** | **+3.5** |
| | SNR=27 | | | | | | |
| ASUD | | | | S | **Sn** | **12 11 59.9** | **-1.5** |
| **DQM** | **DQM** | **7.05** | **226** | P | **Pn** | **12 10 45.2** | **+0.3** |
| **AJN** | **Ajban** | **7.22** | **269** | *i* P | **Pn** | **12 10 49.4** | **+2.3** |
| | SNR=6.7 | | | | | | |
| **AJN** | **Ajban** | **7.22** | **269** | P | **Pn** | **12 10 50.1** | **+3.0** |
| | SNR=8.6 | | | | | | |
| AJN | | | | S | **Sn** | **12 12 06.3** | **-2.9** |
| **UMZA** | **Um Al Zommool** | **7.44** | **254** | P | **Pn** | **12 10 52.2** | **+1.9** |
| UMZA | | | | S | **Sn** | **12 12 11.3** | **-3.5** |
| **MZR** | **Muzera** | **8.84** | **259** | P | **Pn** | **12 11 10.3** | **+0.8** |
| **MZR** | **Muzera** | **8.84** | **259** | P | **Pn** | **12 11 10.4** | **+0.8** |
| | SNR=9.7 | | | | | | |
| **JRN** | **Qarnain Island** | **9.13** | **272** | P | **Pn** | **12 11 14.3** | **+0.8** |
| JRN | | | | S | **Sn** | **12 12 49.0** | **-7.3** |
| **HRA** | **Herat** | **9.42** | **357** | Pn | **Pn** | **12 11 15.8** | **-1.8** |
| **SLWR** | **Sila** | **10.26** | **267** | P | **Pn** | **12 11 30.1** | **+1.2** |
| SLWR | | | | P | **Pn** | **12 11 30.1** | **+1.2** |
| SLWR | | | | S | **Sn** | **12 13 17.1** | **-6.9** |
| SLWR | | | | S | **Sn** | **12 13 17.1** | **-6.9** |
| **DOK** | **Doka** | **10.31** | **234** | P | **Pn** | **12 11 31.3** | **+1.7** |
| DOK | | | | S | **Sn** | **12 13 19.8** | **-5.5** |
| **DMTO** | **DMTO** | **10.34** | **227** | P | **Pn** | **12 11 32.6** | **+2.6** |
| DMTO | | | | P | **Pn** | **12 11 32.6** | **+2.6** |
| **TRNA** | **Turayna** | **10.63** | **271** | P | **Pn** | **12 11 35.3** | **+1.4** |
| TRNA | | | | S | Sn | 12 13 24.9 | -8.2 |
| **AJM** | **Ajmer** | **10.69** | **79** | *e*P | **Pn** | **12 11 31.2** | **-3.5** |
| AJM | | | | *e*S | Sn | 12 13 25.3 | -9.2 |
| AJM | | | | IAML | | 12 13 42.4 | |
| | comp=N,60nm,0.9s | | | | | | |
| AJM | | | | IAML | | 12 13 42.9 | |
| | comp=E,60nm,0.9s | | | | | | |
| **SHMA** | **Al-Shehemyia** | **10.84** | **277** | P | **Pn** | **12 11 37.9** | **+1.1** |
| | SNR=10 | | | | | | |
| SHMA | | | | S | **Sn** | **12 13 30.4** | **-7.9** |
| **KBL** | **Kabul** | **10.94** | **28** | Pn | **Pn** | **12 11 37.0** | **-1.3** |
| **KBL** | **Kabul** | **10.94** | **28** | P | **Pn** | **12 11 37.0** | **-1.3** |
| **SMRA** | **Abu-Samra** | **10.98** | **271** | P | **Pn** | **12 11 40.2** | **+1.4** |
| SMRA | | | | S | Sn | 12 13 33.1 | -8.6 |
| **RBK** | **Rabkut** | **10.99** | **229** | P | **Pn** | **12 11 40.1** | **+1.1** |
| RBK | | | | P | **Pn** | **12 11 40.1** | **+1.1** |
| RBK | | | | S | **Sn** | **12 13 37.2** | **-4.9** |
| RBK | | | | S | **Sn** | **12 13 37.2** | **-4.9** |
| **WHFO** | **Wadi Hawf** | **11.02** | **232** | P | **Pn** | **12 11 39.7** | **+0.3** |
| **SAKB** | **Bahrain** | **11.23** | **278** | P | **Pn** | **12 11 43.0** | **+0.8** |
| **ABTO** | **Aybut** | **11.73** | **232** | P | **Pn** | **12 11 48.9** | **-0.2** |
| **NIL** | **Nílore** | **12.50** | **44** | Pn | **Pn** | **12 11 57.5** | **-2.1** |
| **NIL** | **Nilore** | **12.50** | **44** | P | **Pn** | **12 11 57.5** | **-2.1** |
| **KUDL** | **Kundal** | **12.56** | **72** | *e*P | **Pn** | **12 11 56.5** | **-3.8** |
| KUDL | | | | *e*S | Sn | 12 14 06.0 | -14 |
| **JMU** | **Jammu** | **13.04** | **51** | *e*P | **Pn** | **12 12 05.1** | **-1.8** |
| JMU | | | | IAmb | IAmb | 12 12 06.3 | |
| | comp=Z,200nm,0.7s | | | | | | |
| JMU | | | | *e*S | Sn | 12 14 18.7 | -13 |
| **BHPL** | **Bhopal** | **13.36** | **94** | *e*P | **Pn** | **12 12 10.7** | **-0.8** |
| BHPL | | | | IAmb | IAmb | 12 12 21.1 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **THN** | **Thein Dam** | **13.48** | **54** | *e*P | **Pn** | **12 12 11.0** | **-1.9** |
| THN | | | | *e*S | Sn | 12 14 30.7 | -12 |
| **BHK** | **Bhakra** | **13.53** | **59** | *e*P | **Pn** | **12 12 10.4** | **-3.3** |
| BHK | | | | *e*S | Sn | 12 14 31.4 | -13 |
| BHK | | | | IAML | | 12 14 34.2 | |
| | comp=E,61nm,0.6s | | | | | | |
| BHK | | | | IAML | | 12 14 38.5 | |
| | comp=N,60nm,0.8s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **13.82** | **55** | *e*P | **Pn** | **12 12 15.5** | **-2.2** |
| DHRM | | | | *e*S | Sn | 12 14 39.0 | -12 |
| DHRM | | | | IAML | | 12 14 42.8 | |
| | comp=E,153nm,0.6s | | | | | | |
| DHRM | | | | IAML | | 12 14 46.0 | |
| | comp=N,152nm,0.9s | | | | | | |
| **SMLA** | **Simla** | **14.00** | **61** | *e*P | **Pn** | **12 12 17.1** | **-2.9** |
| SMLA | | | | *e*S | Sn | 12 14 40.7 | -15 |
| **KBD** | **Kabd** | **14.20** | **291** | P | **Pn** | **12 12 20.9** | **-1.8** |
| **SIMJ** | **Simiganj** | **14.61** | **19** | Pn | **Pn** | **12 12 25.1** | **-3.3** |
| **CHGR** | **Chuyangaron** | **14.65** | **20** | Pn | **Pn** | **12 12 26.3** | **-2.7** |
| **CHGR** | **Chuyangaron** | **14.65** | **20** | P | **Pn** | **12 12 26.3** | **-2.7** |
| **KLP** | **Kalpa** | **15.01** | **61** | *e*P | **Pn** | **12 12 31.6** | **-2.6** |
| KLP | | | | *e*S | Sn | 12 15 08.8 | -12 |
| **GAR** | **Garm** | **15.34** | **22** | | **Pn** | **12 12 35.5** | **-2.8** |
| **RAYN** | **Ar Rayn** | **15.95** | **268** | Pn | **Pn** | **12 12 43.6** | **-2.6** |
| **RAYN** | **Ar Rayn** | **15.95** | **268** | *i* P | **Pn** | **12 12 43.6** | **-2.6** |
| | SNR=10.0 | | | | | | |
| **RAYN** | **Ar Rayn** | **15.95** | **268** | P | **Pn** | **12 12 43.6** | **-2.6** |
| **RAYN** | **Ar Rayn** | **15.95** | **268** | P | **Pn** | **12 12 43.7** | **-2.6** |
| RAYN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **LGTI** | **Lohaghat** | **16.05** | **70** | *e*P | **Pn** | **12 12 41.0** | **-6.4** |
| LGTI | | | | *e*S | Sn | 12 15 27.6 | -18 |
| **HNLY** | **HANLEY** | **16.07** | **57** | *e*P | **Pn** | **12 12 44.6** | **-3.6** |
| HNLY | | | | *e*S | Sn | 12 15 28.4 | -18 |
| **DRK** | **Karamyk** | **16.30** | **25** | | **Pn** | **12 12 49.5** | **-1.4** |
| DRK | | | | IAmb | IAmb | 12 12 54.9 | |
| | comp=Z,80nm,0.8s | | | | | | |
| **DRK** | **Karamyk** | **16.30** | **25** | P | **Pn** | **12 12 49.5** | **-1.4** |
| DRK | | | | pmax | pmax | | |
| | comp=Z,80nm,0.8s | | | | | | |
| **HYB** | **Hyderabad** | **16.39** | **114** | *e*P | **Pn** | **12 12 54.3** | **+2.4** |
| **BTK** | **Batken** | **16.46** | **22** | Pn | **Pn** | **12 12 51.3** | **-1.4** |
| **BTK** | **Batken** | **16.46** | **22** | P | **Pn** | **12 12 51.3** | **-1.4** |
| BTK | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | |
| **OHH** | **Osh** | **17.59** | **26** | P | **Pn** | **12 13 07.2** | **+0.3** |
| **TRKS** | **Terek-Say** | **17.89** | **20** | P | **Pn** | **12 13 08.5** | **-2.2** |
| **CHM** | **Chimkent** | **18.18** | **16** | *e*P | **Pn** | **12 13 13.4** | **-0.7** |
| | baz=16 | | | | | | |
| **CHM** | **Chimkent** | **18.18** | **16** | *e*P | **Pn** | **12 13 13.4** | **-0.7** |
| **LKRN** | **Lenkeran, Azer** | **18.20** | **322** | P | **P** | **12 13 15.7** | **+1.2** |
| **KSH** | **Kashi** | **18.21** | **34** | P | **Pn** | **12 13 08.0** | **-6.6** |
| KSH | | | | sP | P | 12 13 15.8 | +0.9 |
| KSH | | | | SS | **S** | **12 16 44.5** | **+1.0** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,89nm,1.3s | | | | | | |
| KSH | | | | pmax | pmax | | |
| | comp=Z,230nm,3.1s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,680nm,14.1s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,1μm,13.7s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,1μm,15.8s | | | | | | |
| **ARK** | **Arkit** | **18.40** | **22** | P | **Pn** | **12 13 15.5** | **-1.4** |
| **KK31** | **Karatay Array** | **19.15** | **17** | | **P** | **12 13 24.4** | **-0.6** |
| **KK31** | **Karatay Array** | **19.15** | **17** | *i* P | **P** | **12 13 23.9** | **-1.1** |
| **KKAR** | **Karatay Array** | **19.15** | **17** | P | **P** | **12 13 24.4** | **-0.6** |
| **KKAR** | **Karatay Array** | **19.15** | **17** | P | **P** | **12 13 23.8** | **-1.2** |
| **KKAR** | **Karatay Array** | **19.15** | **17** | P | **P** | **12 13 23.8** | **-1.2** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| **AML** | **Almayashu** | **19.32** | **25** | P | **Pn** | **12 13 28.4** | **+0.1** |
| | SNR=54 | | | | | | |
| **ARLS** | **Aral** | **19.34** | **27** | P | **P** | **12 13 26.5** | **-0.7** |
| **NRN** | **Naryn** | **19.71** | **30** | P | **P** | **12 13 30.4** | **-1.1** |
| **NRN** | **Naryn** | **19.71** | **30** | P | **P** | **12 13 30.4** | **-1.1** |
| NRN | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **UCH** | **Uchtor** | **19.72** | **26** | P | **Pn** | **12 13 33.6** | **+0.5** |
| | SNR=7.7 | | | | | | |
| **EKS2** | **Erkin-Say** | **19.80** | **24** | P | **P** | **12 13 32.1** | **-0.2** |
| | SNR=23 | | | | | | |
| **AAK** | **Ala-Archa** | **20.06** | **26** | P | **Pn** | **12 13 36.6** | **-0.2** |
| | SNR=20 | | | | | | |
| **AAK** | **Ala-Archa** | **20.06** | **26** | P | **P** | **12 13 34.7** | **-0.4** |
| AAK | | | | IAmb | IAmb | 12 13 38.5 | |
| | comp=Z,170nm,1.6s | | | | | | |
| **AAK** | **Ala-Archa** | **20.06** | **26** | *i* P | **P** | **12 13 35.7** | **+0.6** |
| | SNR=21 | | | | | | |
| **AAK** | **Ala-Archa** | **20.06** | **26** | P | **Pn** | **12 13 36.0** | **-0.9** |
| | comp=Z,32nm,0.8s,baz=218,slow=12,SNR=50 | | | | | | |
| AAK | | | | LR | LR | 12 22 46.8 | |
| | comp=Z,446nm,19.3s,baz=204,slow=41 comp=Z,32nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **20.06** | **26** | *c* iP | **Pn** | **12 13 36.0** | **-0.9** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,115nm,1.7s | | | | | | |
| **KBK** | **Karagaybulak** | **20.25** | **26** | P | Pn | 12 13 38.7 | -0.5 |
| | SNR=12 | | | | | | |
| **FRU1** | **Bishkek** | **20.26** | **26** | P | **P** | **12 13 37.9** | **+0.8** |
| FRU1 | | | | IAmb | IAmb | 12 13 40.1 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **FRU1** | **Bishkek** | **20.26** | **26** | P | **P** | **12 13 37.9** | **+0.8** |
| FRU1 | | | | pmax | pmax | | |
| | comp=Z,41nm,0.7s | | | | | | |
| **CHMS** | **Chumysh** | **20.46** | **25** | P | **P** | **12 13 39.8** | **+0.4** |
| | SNR=14 | | | | | | |
| **ULHL** | **Ulahol** | **20.47** | **29** | P | Pn | 12 13 41.0 | -0.7 |
| | SNR=50 | | | | | | |
| **BOOM** | **Boomskoye usch** | **20.53** | **28** | P | **P** | **12 13 40.5** | **+0.2** |
| **BOOM** | **Boomskoye usch** | **20.53** | **28** | P | **P** | **12 13 40.5** | **+0.2** |
| BOOM | | | | pmax | pmax | | |
| | comp=Z,175nm,1.4s | | | | | | |
| **MNGR** | **Mingechevir, A** | **20.58** | **324** | P | Pn | 12 13 43.0 | +0.2 |
| **USP** | **Ospenovka** | **20.59** | **25** | P | **P** | **12 13 41.1** | **+0.3** |
| | SNR=66 | | | | | | |
| **TKM2** | **Tokmak 2** | **20.74** | **27** | P | **P** | **12 13 42.5** | **-0.1** |
| | SNR=27 | | | | | | |
| **TKM2** | **Tokmak 2** | **20.74** | **27** | P | **P** | **12 13 41.5** | **-1.0** |
| **AKT** | **Akhty** | **20.76** | **326** | *c* iP | Pn | 12 13 44.1 | -0.9 |
| AKT | | | | *e* | | 12 14 02.4 | |
| AKT | | | | *e*PPP | PPP | 12 14 10.1 | |
| AKT | | | | *e*S | Sn | 12 17 36.8 | -2.5 |
| AKT | | | | pmax | pmax | | |
| | comp=Z,180nm,0.7s | | | | | | |
| AKT | | | | MLR | MLR | | |
| | comp=Z,296nm,17.0s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **20.80** | **33** | P | **P** | **12 13 42.4** | **-1.0** |
| **TARG** | **Taragay, Kyrgy** | **20.80** | **33** | P | **P** | **12 13 42.4** | **-1.0** |
| TARG | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **SGDS** | **Sogindy** | **20.80** | **25** | *e*P | **P** | **12 13 42.6** | **-0.5** |
| | comp=Z,23nm,0.9s,baz=24 | | | | | | |
| **SGDS** | **Sogindy** | **20.80** | **25** | *e*P | **P** | **12 13 42.6** | **-0.5** |
| SGDS | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **SEKA** | **Sheki** | **20.83** | **325** | P | Pn | 12 13 44.9 | -0.9 |
| **GANJ** | **Ganja** | **20.91** | **322** | P | Pn | 12 13 45.7 | -1.0 |
| **TNSS** | **Tian-Shan** | **21.41** | **29** | *e*P | **P** | **12 13 49.2** | **-0.9** |
| | baz=29 | | | | | | |
| **TNSS** | **Tian-Shan** | **21.41** | **29** | *e*P | **P** | **12 13 49.1** | **-0.9** |
| **GNI** | **Garni** | **21.48** | **319** | P | **P** | **12 13 52.5** | **+1.9** |
| **GNI** | **Garni** | **21.48** | **319** | P | **P** | **12 13 52.8** | **+2.2** |
| | comp=Z,53nm,0.7s,baz=144,slow=3.7,SNR=21 comp=Z,53nm,0.7s | | | | | | |
| **GNI** | **Garni** | **21.48** | **319** | *c* iP | **P** | **12 13 53.8** | **+3.3** |
| **GNI** | **Garni** | **21.48** | **319** | *c* iP | **P** | **12 13 52.8** | **+2.2** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,58nm,0.8s | | | | | | |
| **AAA** | **Alma-Ata** | **21.53** | **29** | *e*P | **P** | **12 13 50.1** | **-0.9** |
| | comp=Z,68nm,1.0s,baz=29 | | | | | | |
| **AAA** | **Alma-Ata** | **21.53** | **29** | *e*P | **P** | **12 13 50.1** | **-0.9** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,68nm,1.0s | | | | | | |
| **MDOK** | **Medeo** | **21.56** | **29** | *e*P | **P** | **12 13 50.7** | **-0.7** |
| | baz=29 | | | | | | |
| MDOK | | | | *e*S | **S** | **12 17 49.2** | **-1.1** |
| | baz=29 | | | | | | |
| **MDOK** | **Medeo** | **21.56** | **29** | *e*P | **P** | **12 13 50.6** | **-0.7** |
| MDOK | | | | *e*S | **S** | **12 17 49.2** | **-1.1** |
| **KUU** | **Kurty** | **21.85** | **27** | *e*P | **P** | **12 13 53.6** | **-0.6** |
| | baz=27 | | | | | | |
| **KUU** | **Kurty** | **21.85** | **27** | *e*P | **P** | **12 13 53.6** | **-0.6** |
| **BTLS** | **Baital** | **21.98** | **21** | *e*P | **P** | **12 13 55.3** | **-0.3** |
| | baz=21 | | | | | | |
| **BTLS** | **Baital** | **21.98** | **21** | *e*P | **P** | **12 13 55.3** | **-0.3** |
| **MAK** | **Makhachkala** | **21.98** | **329** | *c* iP | **P** | **12 13 51.8** | **-3.8** |
| MAK | | | | *e*S | **S** | **12 17 53.6** | **-4.6** |
| MAK | | | | pmax | pmax | | |
| | comp=Z,170nm,0.9s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,580nm,14.0s | | | | | | |
| **SATY** | **Saty** | **22.10** | **31** | *e*P | **P** | **12 13 55.1** | **-2.0** |
| | baz=31 | | | | | | |
| SATY | | | | *e*S | **S** | **12 17 59.4** | **-1.3** |
| | baz=31 | | | | | | |
| **SATY** | **Saty** | **22.10** | **31** | *e*P | **P** | **12 13 55.9** | **-1.2** |
| SATY | | | | *e*S | **S** | **12 17 59.4** | **-1.3** |
| **GURO** | **Guroymak-BITLI** | **22.27** | **312** | P | **P** | **12 14 00.1** | **+1.1** |
| **UZB** | **Uzynbulak** | **22.46** | **32** | *e*P | **P** | **12 13 59.9** | **-1.1** |
| | baz=32 | | | | | | |
| **UZB** | **Uzynbulak** | **22.46** | **32** | *e*P | **P** | **12 13 59.9** | **-1.1** |
| **KPKS** | **Kokpek** | **22.54** | **31** | *e*P | **P** | **12 14 00.5** | **-1.2** |
| | baz=31 | | | | | | |
| KPKS | | | | *e*S | **S** | **12 18 07.3** | **-1.7** |
| | baz=31 | | | | | | |
| **KPKS** | **Kokpek** | **22.54** | **31** | *e*P | **P** | **12 14 00.5** | **-1.2** |
| KPKS | | | | *e*S | **S** | **12 18 07.3** | **-1.7** |
| **SHLS** | **Shalkode** | **22.68** | **33** | *e*P | **P** | **12 14 04.8** | **+1.5** |
| | baz=33 | | | | | | |
| **SHLS** | **Shalkode** | **22.68** | **33** | *e*P | **P** | **12 14 04.7** | **+1.5** |
| **ARXS** | **Arharly** | **22.73** | **29** | *e*P | **P** | **12 14 01.5** | **-2.3** |
| **KARS** | **Kars** | **22.78** | **318** | P | **P** | **12 14 06.3** | **+2.0** |
| **KARS** | **Kars** | **22.78** | **318** | P | **P** | **12 14 06.3** | **+2.0** |
| KARS | | | | pmax | pmax | | |
| | comp=Z,207nm,1.0s | | | | | | |
| **PDGK** | **Podgornoye** | **22.82** | **32** | P | **P** | **12 14 02.5** | **-2.3** |
| **ATD** | **Arta Tunnel** | **23.23** | **239** | LR | LR | 12 24 14.2 | |
| | comp=Z,12nm,20.5s,baz=40,slow=39 | | | | | | |
| **TDK** | **Taldyqorghan** | **23.61** | **28** | *e*P | **P** | **12 14 12.2** | **-0.5** |
| | baz=28 | | | | | | |
| **TDK** | **Taldyqorghan** | **23.61** | **28** | *e*P | **P** | **12 14 12.2** | **-0.5** |
| **AB31** | **Akbulak array** | **24.37** | **355** | *i* P | **P** | **12 14 19.8** | **+0.1** |
| **ABKAR** | **Akbulak array** | **24.37** | **355** | P | **P** | **12 14 20.1** | **+0.3** |
| ABKAR | | | | IAmb | IAmb | 12 14 23.5 | |
| | comp=Z,52nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **24.37** | **355** | P | **P** | **12 14 20.0** | **+0.3** |
| **PALK** | **Pallekele** | **24.46** | **133** | LR | LR | 12 23 43.5 | |
| | comp=Z,444nm,18.2s,baz=54,slow=36 | | | | | | |
| **KBZ** | **Khabaz** | **24.87** | **324** | P | **P** | **12 14 27.1** | **+2.8** |
| | comp=Z,57nm,0.8s,baz=135,slow=8.4,SNR=105 | | | | | | |
| KBZ | | | | LR | LR | 12 27 22.3 | |
| | comp=Z,185nm,21.0s,baz=130,slow=44 | | | | | | |
| **KBZ** | **Khabaz** | **24.87** | **324** | *c* iP | **P** | **12 14 26.8** | **+2.5** |
| **SHA1** | **Shidzhatmaz** | **25.00** | **324** | *c* iP | **P** | **12 14 28.7** | **+2.9** |
| **ARPR** | **Arapgir-MALATY** | **25.06** | **310** | P | **P** | **12 14 28.6** | **+2.3** |
| ARPR | | | | IAmb | IAmb | 12 14 56.1 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **GAZ** | **Gaziantep** | **25.08** | **305** | P | **P** | **12 14 28.8** | **+2.4** |
| **KVAR** | **Kislovodsk Arr** | **25.13** | **324** | P | **P** | **12 14 29.4** | **+2.6** |
| | comp=Z,22nm,0.9s,baz=180,slow=4.6 comp=Z,22nm,0.9s | | | | | | |
| **KIV** | **Kislovodsk** | **25.13** | **324** | P | **P** | **12 14 30.1** | **+3.3** |
| **KIV** | **Kislovodsk** | **25.13** | **324** | *e*P | **P** | **12 14 29.4** | **+2.6** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,149nm,1.1s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,79nm,15.0s | | | | | | |
| **KIV** | **Kislovodsk** | **25.13** | **324** | P | **P** | **12 14 29.9** | **+3.1** |
| | comp=Z,131nm,1.2s,comp=Z,1μm | | | | | | |
| **EIL** | **Elat** | **25.26** | **287** | LR | LR | 12 27 01.2 | |
| | comp=Z,370nm,20.8s,baz=70,slow=43 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **25.32** | **295** | P | **P** | **12 14 31.4** | **+2.8** |
| | comp=Z,2.3nm,0.5s,baz=97,slow=14,SNR=5.0 | | | | | | |
| MMAI | | | | LR | LR | 12 26 56.3 | |
| | comp=Z,114nm,20.1s,baz=46,slow=42 comp=Z,2.3nm,0.5s | | | | | | |
| **LSA** | **Lhasa** | **25.50** | **73** | P | **P** | **12 14 29.0** | **-1.7** |
| **AKTO** | **Aktyubinsk** | **25.72** | **353** | LR | LR | 12 26 44.6 | |
| | comp=Z,926nm,18.1s,baz=252,slow=41 | | | | | | |
| **SHL** | **Shillong** | **26.19** | **82** | P | **P** | **12 14 35.6** | **-1.1** |
| **SHL** | **Shillong** | **26.19** | **82** | P | **P** | **12 14 35.6** | **-1.1** |
| SHL | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **VSLR** | **Vesyoloye** | **26.30** | **320** | *c*eP | **P** | **12 14 38.6** | **+1.3** |
| **SOC** | **Sochi** | **26.55** | **320** | *e*P | **P** | **12 14 38.9** | **-0.7** |
| SOC | | | | *e* | | 12 15 18.2 | |
| SOC | | | | *e*PPP | PPP | 12 15 28.7 | |
| SOC | | | | *e*S | **S** | **12 19 15.0** | **+1.0** |
| SOC | | | | *e*SS | **SnSn** | **12 20 18.2** | **+2.4** |
| SOC | | | | *e*SSS | SSS | 12 20 32.6 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| SOC | | | | MLR | MLR | | |
| | comp=Z,201nm,14.0s | | | | | | |
| **MAKZ**

comp=Z,32nm,1.3s
**BR104 Keskin Array S 28.62 308** P **P** **12 14 58.6 +0.2**
comp=Z,6.8nm,0.9s,comp=Z,61nm
**BR131 Keskin Array S 28.63 308** P **P** **12 14 58.0 -0.4**
**BR131 Keskin Array S 28.63 308⇓** *eP* **P** **12 14 59.2 +0.8**
**BRTR Keskin Array B 28.63 308** P **P** **12 14 59.0 +0.6**
comp=Z,1.2nm,0.8s,baz=119,slow=10,SNR=6.7
comp=Z,1.2nm,0.8s
**BR105 Keskin Array S 28.64 308** P **P** **12 14 58.6 0.0**
comp=Z,5.9nm,1.1s,comp=Z,58nm
**BR106 Keskin Array S 28.65 308** P **P** **12 14 59.2 +0.6**
comp=Z,5.7nm,1.0s,comp=Z,53nm
**SEM Semipalatinsk 28.73 23** *eP* **P** **12 14 59.1 -0.2**
baz=23
**SEM Semipalatinsk 28.73 23** *eP* **P** **12 14 59.1 -0.2**
**BELG Belogornoye 29.76 341** P **P** **12 15 08.1 +0.1**
comp=Z,15nm,0.6s,baz=180,slow=20,SNR=5.6
comp=Z,15nm,0.6s
**BELG Belogornoye 29.76 341** *c iP* **P** **12 15 08.0 -0.1**
BELG pmax pmax
comp=Z,3.0nm,0.8s
**SIM Simferopol' 30.65 318** *eP* **P** **12 15 16.7 +0.6**
SIM pmax pmax
comp=Z,25nm,1.0s
**VRH Novokhopyorsk 30.84 334** *eP* **P** **12 15 17.6 -0.1**
VRH pmax pmax
comp=Z,16nm,0.7s
**DGZ Jazzator, Alta 31.20 31⇑** *eP* **P** **12 15 21.9 +0.8**
DGZ pmax pmax
comp=Z,17nm,1.8s
**ARU Arti 31.61 355** P **P** **12 15 24.0 -0.3**
ARU IAmb IAmb 12 15 49.8
comp=Z,14nm,1.2s
**ARU Arti 31.61 355** LR LR 12 30 04.4
comp=Z,467nm,19.0s,baz=154,slow=40
**ARU Arti 31.61 355** *c iP* **P** **12 15 24.7 +0.4**
ARU 12 16 23.9
ARU S **S** **12 20 34.7 +1.6**
ARU SS **SnSn** **12 22 18.8 +0.2**
ARU pmax pmax
comp=Z,9.0nm,0.9s
ARU MLR MLR
comp=Z,643nm,15.0s
**ARU Arti 31.61 355** P **P** **12 15 25.1 +0.8**
comp=Z,11nm,1.3s
**VSR Storozhevoye 31.92 331** *eP* **P** **12 15 25.0 -2.2**
VSR pmax pmax
comp=Z,10.0nm,1.0s
**VORR Voronezh 32.24 332** *eP* **P** **12 15 28.9 -1.0**
VORR pmax pmax
comp=Z,57nm,0.4s
**KARP Karpathos 32.48 297** P **P** **12 15 34.2 +1.8**
comp=Z,81nm,1.1s
**ZAA0 Zalesovo Array 33.26 24** P **P** **12 15 38.7 -0.1**
**ZALV Zalesovo Beam 33.26 24** P **P** **12 15 38.5 -0.3**
**ZALV Zalesovo Beam 33.26 24** P **P** **12 15 38.6 -0.2**
comp=Z,8.6nm,0.7s,baz=226,slow=9.6,SNR=34
comp=Z,8.6nm,0.7s
**ZALV Zalesovo Beam 33.26 24** *i* P **P** **12 15 38.5 -0.3**
ZALV pmax pmax
comp=Z,9.0nm,0.7s
**CMAR Chiang Mai Arr 34.02 94** P **P** **12 15 45.6 -0.4**
comp=Z,0.8nm,0.3s,baz=279,slow=8.9,SNR=3.4
CMAR LR LR 12 31 40.0
comp=Z,153nm,21.4s,baz=285,slow=40
comp=Z,0.8nm,0.3s
**GTA Gaotai 34.14 56** P **P** **12 15 48.5 +1.6**
GTA pP sP 12 15 56.0 +4.9
GTA pmax pmax
comp=Z,10.0nm,0.9s
GTA LR LR
comp=Z,760nm,22.3s
GTA LR LR
comp=Z,340nm,19.9s
GTA LR LR
comp=Z,380nm,22.3s
**TPGR Topolog 34.20 314** ⇑P **P** **12 15 47.6 +0.4**
**HARR Harsova 34.46 314** ⇑P **P** **12 15 50.2 +0.7**
**HARR Harsova 34.46 314** P **P** **12 15 50.1 +0.7**
**MILM Milestii Mici 34.84 318** *eP* **P** **12 15 51.0 -1.7**
MILM pmax pmax
comp=Z,80nm,1.6s
MILM MLR MLR
comp=Z,300nm,15.5s
**KIS Kishinev 34.88 318** *eP* **P** **12 15 51.0 -2.0**
comp=Z,80nm,1.6s
KIS LRM MLR 12 34 15.0
comp=Z,300nm,15.5s
**PZH PanZhiHua 34.93 79** P **P** **12 15 54.5 +0.6**
PZH S **S** **12 21 26.0 +0.4**
PZH pmax pmax
comp=Z,20nm,0.8s
PZH pmax pmax
comp=Z,140nm,4.4s
PZH LR LR
comp=Z,220nm,16.2s
PZH LR LR
comp=Z,210nm,15.7s
PZH LR LR
comp=Z,220nm,16.7s
**KIRV Kirov 34.94 348** LR LR 12 32 53.8
comp=Z,1μm,18.2s,baz=161,slow=41
**KIRV Kirov 34.94 348** *ce* P **P** **12 15 53.7 +0.3**
**ODBI Odobesti 35.45 315** P **P** **12 15 58.0 0.0**
comp=Z,32nm,0.4s
**SORM Soroca 35.68 319** ⇑P **P** **12 16 00.0 +0.1**
**SORM Soroca 35.68 319** P **P** **12 16 00.0 +0.1**
**SORM Soroca 35.68 319** P **P** **12 15 59.9 0.0**
comp=Z,26nm,0.7s
**VRI Vrincioaia 35.70 315** ⇑P **P** **12 16 00.9 +0.7**
**VRI Vrincioaia 35.70 315** P **P** **12 16 00.8 +0.7**
**VRI Vrincioaia 35.70 315** P **P** **12 16 01.1 +0.9**
comp=Z,7.3nm,1.1s,comp=Z,707nm
**PLOR5 Plostina Array 35.73 315** P **P** **12 16 02.0 +1.5**
comp=Z,12nm,1.2s,comp=Z,2μm
**PLOR Plostina 35.75 315** ⇑P **P** **12 16 01.3 +0.7**
**PLOR Plostina 35.75 315** P **P** **12 16 01.3 +0.7**
**PLOR3 Plostina Array 35.75 315** P **P** **12 16 01.2 +0.6**
comp=Z,14nm,0.9s
**OBN Obninsk 35.83 334** P **P** **12 16 01.1 0.0**
**OBN Obninsk 35.83 334** P **P** **12 16 01.8 +0.7**
comp=Z,8.0nm,0.3s,baz=120,slow=20,SNR=6.9
comp=Z,8.0nm,0.3s
**OBN Obninsk 35.83 334⇓** *iP* **P** **12 16 00.3 -0.8**
OBN pmax pmax
comp=Z,37nm,1.3s
OBN MLR MLR
comp=Z,284nm,16.0s
**OBN Obninsk 35.83 334** P **P** **12 16 02.2 +1.1**
comp=Z,25nm,0.5s
**MOS Moscow 35.89 336** *eP* **P** **12 16 01.3 -0.3**
MOS *e* 12 17 20.5
MOS pmax pmax
comp=Z,32nm,0.6s
**KMBO Kilima Mbogo 35.92 228** P **P** **12 16 02.4 -0.2**
comp=Z,1.1nm,0.3s,baz=41,slow=14,SNR=1.5
KMBO LR LR 12 30 59.7
comp=Z,160nm,18.2s,baz=90,slow=37
comp=Z,1.1nm,0.3s
**TESR Tescani 36.01 316** ⇑P **P** **12 16 03.0 +0.2**
**TESR Tescani 36.01 316** P **P** **12 16 03.7 +0.9**
comp=Z,17nm,0.8s
**COVR Voineasa-Covas 36.03 315** ⇑P **P** **12 16 03.3 +0.3**
**MLR Muntele Rosu 36.06 314** P **P** **12 16 04.2 +0.8**
**MLR Muntele Rosu 36.06 314** P **P** **12 16 04.5 +1.0**
comp=Z,5.3nm,0.9s,baz=99,slow=5.1,SNR=8.6
comp=Z,5.3nm,0.9s
**MLR Muntele Rosu 36.06 314** ⇓P **P** **12 16 03.8 +0.4**
**MLR Muntele Rosu 36.06 314** P **P** **12 16 05.4 +2.0**
comp=Z,11nm,0.9s
**ONER Baraj Valea Uz 36.10 316** ⇑P **P** **12 16 04.7 +1.1**
**TURR Turia 36.23 315** ⇑P **P** **12 16 06.0 +1.2**
**AK09 Malin Array Si 36.40 324** P **P** **12 16 06.3 +0.3**
**AK07 Malin Array Si 36.41 323** P **P** **12 16 06.3 +0.2**
**AK10 Malin Array Si 36.41 323** P **P** **12 16 06.2 +0.1**
**AK05 Malin Array Si 36.45 323** P **P** **12 16 06.6 +0.2**
**AKASG Malin Array Be 36.48 324** P **P** **12 16 05.8 -0.9**
**AKASG Malin Array Be 36.48 324** P **P** **12 16 06.8 0.0**
comp=Z,21nm,0.7s,baz=127,slow=7.4,SNR=78
comp=Z,21nm,0.7s
**AKASG Malin Array Be 36.48 324** *i* P **P** **12 16 07.0 +0.3**
AKASG pmax pmax
comp=Z,21nm,0.7s
**AKBB Malin Array Si 36.48 324** P **P** **12 16 06.9 +0.2**
**AKBB Malin Array Si 36.48 324** *c iP* **P** **12 16 07.0 +0.3**
AKBB pmax pmax
comp=Z,57nm,0.9s
**AKBB Malin Array Si 36.48 324** P **P** **12 16 07.0 +0.3**
**KIEV Kiev 36.48 324** P **P** **12 16 06.6 -0.1**
**KIEV Kiev 36.48 324** ⇑P **P** **12 16 07.1 +0.4**
**KIEV Kiev 36.48 324** P **P** **12 16 07.1 +0.4**
**KIEV Kiev 36.48 324** P **P** **12 16 06.8 +0.1**
comp=Z,263nm,0.9s
**DOPR Dopca 36.60 315** ⇑P **P** **12 16 08.4 +0.5**
**VOIR 36.63 314** ⇓P **P** **12 16 09.2 +0.9**
**VOIR 36.63 314** P **P** **12 16 09.1 +0.9**
**LZH Lanzhou 36.72 63** *eP* **P** **12 16 10.3 +1.1**
LZH sP sP 12 16 16.0 +2.6
LZH pmax pmax
comp=Z,19nm,1.1s
LZH LR LR
comp=Z,690nm,19.6s
LZH LR LR
comp=Z,450nm,16.5s
LZH LR LR
comp=Z,500nm,20.6s
**ARR Arges 36.88 313** ⇑P **P** **12 16 10.4 +0.1**
**LUBAR Lubar, Ukraine 36.89 322** P **P** **12 16 10.1 -0.1**
**KNGR Kungurtug, Tuv 36.92 37⇑** *iP* **P** **12 16 12.2 +1.5**
KNGR pmax pmax
comp=Z,31nm,0.9s
**KMPD K-Podol'skiy 37.00 319** P **P** **12 16 10.0 -1.2**
**MI30 MI30,Zelenitsa 37.06 323** P **P** **12 16 12.0 +0.3**
**MI29 MI29, Kamyanyy 37.08 322** P **P** **12 16 12.2 +0.3**
**BURAR Bucovina Array 37.35 317** P **P** **12 16 14.7 +0.3**
**BURAR Bucovina Array 37.35 317** ⇑P **P** **12 16 14.3 -0.1**
**BURAR Bucovina Array 37.35 317** P **P** **12 16 14.3 -0.1**
**BUR08 Bucovina Ar. S 37.38 317** P **P** **12 16 14.7 +0.1**
**MI28 Mi28,Pidlybu 37.44 323** P **P** **12 16 15.3 +0.4**
**FNA Florina 37.91 305** P **P** **12 16 19.7 +0.6**
FNA IAmb IAmb 12 16 29.6
comp=Z,18nm,0.7s
**FNA Florina 37.91 305** P **P** **12 16 19.7 +0.6**
FNA pmax pmax
comp=Z,18nm,0.7s
**KRAR Krasnoyarsk 37.93 27⇑** *eP* **P** **12 16 20.8 +1.9**
**GZR Gura Zlata 38.12 313** ⇑P **P** **12 16 21.1 +0.2**
**GZR Gura Zlata 38.12 313** P **P** **12 16 21.1 +0.2**
**BOVS Bovan 38.34 310** ⇑P **P** **12 16 22.4 -0.2**
**RNPP5 Staryi Chortor 38.57 323** P **P** **12 16 25.1 +0.7**
**RNPP8 Varash 38.63 323** P **P** **12 16 25.7 +0.7**
**RNPP9 Sopachiv 38.65 323** P **P** **12 16 26.0 +0.9**
**MDVR Moldovita 38.66 311** ⇑P **P** **12 16 25.7 +0.4**
**MEZ Mezhgor'ye 38.76 318** P **P** **12 16 27.5 +1.4**
**MORS Morshin 38.78 319** P **P** **12 16 26.7 +0.5**
**BRIU Brid 39.00 317** P **P** **12 16 29.7 +1.7**
**SHIU Shidnytsya 39.13 319** P **P** **12 16 30.7 +1.5**
**BERU Beregovo 39.19 317** P **P** **12 16 29.8 +0.2**
**MNK Minsk 39.26 328** *i* P **P** **12 16 29.0 -1.1**
comp=E,17nm,0.9s
MNK *i* P **P** **12 16 29.0 -1.1**
comp=N,14nm,0.9s
MNK *i* P **P** **12 16 29.0 -1.1**
comp=Z,9.0nm,0.9s,baz=124
MNK *i* PP **PP** **12 18 00.4 +0.3**
MNK *i* PPP PPP 12 18 21.1
MNK *i* S **S** **12 22 30.7 +0.1**
MNK *i* SS **SS** **12 25 23.8 +0.1**
MNK *i* SSS SSS 12 25 43.7
MNK *i* LQ LQ 12 29 20.9
MNK *i* LR LR 12 32 36.7
MNK *i* LRM MLR 12 35 40.3
comp=E,207nm,18.2s
MNK *i* LRM MLR 12 36 03.5
comp=N,267nm,18.5s
MNK *i* LRM MLR 12 36 03.5
comp=Z,287nm,18.2s
**MNK Minsk 39.26 328** *i* P **P** **12 16 29.0 -1.1**
MNK *i* 12 18 00.3
MNK *i* PPP PPP 12 18 21.1
MNK *i* S **S** **12 22 30.7 +0.1**
MNK *i* SSS SSS 12 25 43.6
MNK pmax pmax
comp=Z,9.0nm,0.9s
MNK pmax pmax
comp=N,14nm,0.9s
MNK pmax pmax
comp=E,17nm,0.9s
MNK MLR MLR
comp=E,207nm,18.0s
MNK MLR MLR
comp=Z,287nm,18.0s
MNK MLR MLR
comp=N,267nm,19.0s
**MOY Mondy 39.35 37** *eP* **P** **12 16 32.3 +1.2**
MOY pmax pmax
comp=Z,24nm,1.6s
**HOLU Holmets 39.46 317** P **P** **12 16 33.0 +1.1**
**KOLS Kolonicke sedl 39.68 318** *eP* **P** **12 16 35.5 +1.7**
KOLS pmax pmax
comp=Z,21nm,1.3s
**KOLS Kolonicke sedl 39.68 318** *eP* **P** **12 16 35.5 +1.7**
KOLS *e* 12 16 44.6
**KWP Kalwaria Pacla 39.69 319** P **P** **12 16 34.7 +0.8**
comp=Z,57nm,0.6s
**NACGM Naroch 40.01 328** *eP* **P** **12 16 36.5 +0.1**
**ZAK Zakamensk 40.09 40** *eP* **P** **12 16 37.4 +0.1**
ZAK pmax pmax
comp=Z,9.0nm,1.5s
**CRVS Cervenica-Dubn 40.17 317** *eP* **P** **12 16 39.3 +1.5**
CRVS pmax pmax
comp=Z,61nm,2.0s
**CRVS Cervenica-Dubn 40.17 317** *eP* **P** **12 16 39.3 +1.5**
CRVS *e* 12 16 49.3
**XAN Xi'an 40.77 66** P **P** **12 16 42.8 -0.3**
XAN sP sP 12 16 50.5 +3.2
XAN pmax pmax
comp=Z,21nm,1.2s
XAN LR LR
comp=Z,730nm,17.5s
XAN LR LR
comp=Z,250nm,17.7s
XAN LR LR
comp=Z,430nm,18.5s
**NIE Niedzica 41.06 318** *eP* **P** **12 16 47.0 +1.8**
**SONM Songino Array 41.08 45** P **P** **12 16 46.9 +1.4**
**SONM Songino Array 41.08 45** P **P** **12 16 46.7 +1.1**
comp=Z,10nm,0.9s,baz=248,slow=8.5,SNR=42
SONM LR LR 12 37 04.8
comp=Z,555nm,18.6s,baz=256,slow=41
comp=Z,10nm,0.9s
**PSI Prapat 41.08 117** P **P** **12 16 46.8 +0.9**
PSI pmax pmax
comp=Z,16nm,1.1s
**KULM Kulim 41.12 112** P **P** **12 16 47.5 +1.4**
KULM IAmb IAmb 12 16 58.2
comp=Z,60nm,1.6s
**RPSI Rantau Prapat 41.14 117** P **P** **12 16 46.8 +0.6**
**TIP Timpagrande 41.17 302** P **P** **12 16 47.9 +1.5**
TIP IAmb IAmb 12 16 58.6
comp=Z,26nm,1.1s
**TIP Timpagrande 41.17 302** P **P** **12 16 48.7 +2.3**
comp=Z,20nm,1.3s
**SUW Suwalki 41.35 325** *eP* **P** **12 16 47.3 -0.1**
**SUW Suwalki 41.35 325** P **P** **12 16 47.2 -0.3**
**SUW Suwalki 41.35 325** *eP* **P** **12 16 48.1 +0.6**
**SUW Suwalki 41.35 325** P **P** **12 16 47.2 -0.3**
SUW pmax pmax
comp=Z,45nm,0.8s
**IRK Irkutsk 41.43 38** *eP* **P** **12 16 44.2 -4.0**
IRK pmax pmax
comp=Z,26nm,2.2s
**LANS Liptovska Anna 41.48 317** *eP* **P** **12 16 50.7 +2.0**
LANS *e* 12 16 57.5
LANS pmax pmax
comp=Z,7.0nm,1.5s
**LANS Liptovska Anna 41.48 317** *eP* **P** **12 16 50.7 +2.0**
LANS *e* 12 16 57.5
**ULN Ulaanbaatar 41.51 45** P **P** **12 16 49.2 +0.1**
**ULN Ulaanbaatar 41.51 45** *c iP* **P** **12 16 50.1 +1.0**
ULN pmax pmax
comp=Z,28nm,1.7s
**OJC Ojcow 41.65 319** *eP* **P** **12 16 50.9 +0.8**
**OJC Ojcow 41.65 319** P **P** **12 16 50.3 +0.2**
OJC IAmb IAmb 12 16 51.7
comp=Z,16nm,0.8s
**OJC Ojcow 41.65 319** P **P** **12 16 50.3 +0.2**
OJC pmax pmax
comp=Z,16nm,0.8s
**OJC Ojcow 41.65 319** P **P** **12 16 50.8 +0.7**
comp=Z,26nm,1.0s
**VYHS Vyhne 41.66 316** *eP* **P** **12 16 51.1 +0.9**
VYHS pmax pmax
comp=Z,9.0nm,1.3s
**VYHS Vyhne 41.66 316** *eP* **P** **12 16 51.1 +0.9**
**CUC Castrocucco 41.99 303** P **P** **12 16 54.1 +1.1**
**BTO Baotou 42.06 56⇓** *iP* **P** **12 16 54.5 +0.8**
BTO pP **sP** **12 16 59.3 +1.4**
BTO sP **pP** **12 17 01.5 +4.8**
BTO PP **PP** **12 18 34.3 +3.3**
BTO S **S** **12 23 13.0 -0.1**
BTO sS **sS** **12 23 21.0 +2.8**
BTO SS **SS** **12 26 12.5 -7.7**
BTO pmax pmax
comp=Z,38nm,0.8s
BTO pmax pmax
comp=Z,240nm,5.1s
BTO LR LR
comp=Z,1μm,21.9s
BTO LR LR
comp=Z,360nm,20.9s
BTO LR LR
comp=Z,810nm,18.5s
**VSU Vasula 42.09 332⇑** *eP* **P** **12 16 56.7 +3.2**
VSU pmax pmax
comp=Z,31nm,1.4s
**MPLH Magyarpolny 42.12 314** P **P** **12 16 54.7 +0.8**
comp=Z,23nm,1.0s
**JAVC Velka Javorina 42.51 316** *eP* **P** **12 16 58.7 +1.5**
**OKC Ostrava-Krasne 42.52 318** AMS AMS 12 39 00.0
comp=Z,300nm,16.0s
**MORC Moravsky Berou 42.87 317** P **P** **12 17 00.0 -0.1**
**MORC Moravsky Berou 42.87 317** *eP* **P** **12 17 00.6 +0.5**
MORC *e* 12 17 08.2
**MORC Moravsky Berou 42.87 317** P **P** **12 17 00.0 -0.1**
MORC pmax pmax
comp=Z,10.0nm,0.7s
**RONA Rosalia, Austr 43.07 314** *i* P **P** **12 17 02.4 +0.7**
comp=Z,14nm,1.1s
**HHC Hu-ho-hao-te 43.26 56** *eP* **P** **12 17 05.5 +2.1**
HHC sP sP 12 17 12.0 +4.4
HHC PP **PP** **12 18 48.8 +5.0**
HHC *e* S **S** **12 23 33.5 +2.9**
HHC sS sS 12 23 44.0 +8.2
HHC pmax pmax
comp=Z,12nm,0.7s
HHC pmax pmax
comp=Z,100nm,4.6s
HHC LR LR
comp=Z,350nm,20.0s
HHC LR LR
comp=Z,200nm,17.6s
HHC LR LR
comp=Z,320nm,20.0s
**VRAC Vranov 43.32 316** *eP* **P** **12 17 04.2 +0.5**
**VRAC Vranov 43.32 316** LR LR 12 39 30.2
comp=Z,176nm,18.1s,baz=120,slow=42
**JOF Joensuu 43.37 340** *eP* **P** **12 17 04.0 +0.1**
**KRUC Moravsky 43.38 316** *eP* **P** **12 17 04.2 +0.1**
KRUC *e* 12 17 12.8
**CONA Conrad Observa 43.41 314** *i* P **P** **12 17 05.2 +0.7**
comp=Z,7.9nm,1.0s
**KRLC Kraliky 43.43 317** *eP* **P** **12 17 05.4 +0.8**
**KRLC Kraliky 43.43 317** *eP* **P** **12 17 05.4 +0.8**
KRLC MLR MLR
comp=Z,300nm,6.8s
**ARSA Arzberg 43.47 313** *i* P **P** **12 17 05.9 +1.0**
comp=Z,8.9nm,1.1s
**SOKA Soboth 43.66 312** *i* P **P** **12 17 07.3 +0.8**
comp=Z,6.7nm,1.1s
**QIZ Qiongzhong 43.75 88** P **P** **12 17 06.8 -0.7**
QIZ S **S** **12 23 38.0 -0.1**
QIZ LR LR
comp=Z,210nm,22.7s
QIZ LR LR
comp=Z,190nm,11.8s
QIZ LR LR
comp=Z,200nm,20.2s
**DPC Dobruska-Polom 43.80 318** AMS AMS 12 40 10.0
comp=Z,200nm,16.0s
**DPC Dobruska-Polom 43.80 318** P **P** **12 17 08.3 +0.8**
comp=Z,9.3nm,1.1s
**OSTC Ostas 43.93 318** AMS AMS 12 40 00.0
comp=Z,200nm,14.9s
**OBKA Obir 43.95 312** *i* P **P** **12 17 09.4 +0.5**
comp=Z,8.4nm,1.3s
**KSP Ksiaz 43.97 318** *eP* **P** **12 17 10.1 +1.3**
KSP *e* S **S** **12 23 35.7 -4.9**
**KSP Ksiaz 43.97 318** P **P** **12 17 09.9 +1.1**
comp=Z,24nm,1.3s
**TREC Trest 44.01 316** AMS AMS 12 39 30.0
comp=Z,300nm,19.9s
**CHVC Chvalec 44.03 318** AMS AMS 12 40 20.0
comp=Z,200nm,12.9s
**MEF Metsahovi 44.10 333** *eP* **P** **12 17 10.9 +1.2**
**FINES FINESS Array B 44.19 336** P **P** **12 17 10.3 -0.1**
comp=Z,3.1nm,0.6s,baz=131,slow=9.1,SNR=22
FINES PP **PP** **12 18 52.1 -1.1**
comp=Z,1.8nm,0.7s,baz=149,slow=11,SNR=2.0
comp=Z,3.1nm,0.6s
**NRCA Norcia 44.34 306** P **P** **12 17 13.0 +1.0**
**MOA Molln 44.43 314** *eP* **P** **12 17 13.5 +0.8**
comp=Z,20nm,0.8s,SNR=6.5
**MYKA Terra Mystica 44.59 312** *eP* **P** **12 17 14.5 +0.6**
comp=Z,2.2nm,0.4s
**PRED Cave del Predi 44.60 312** P **P** **12 17 14.3 +0.3**
PRED IAmb IAmb 12 17 25.1
comp=Z,14nm,1.1s
**GOPC GO Pecny, Ondr 44.62 317** AMS AMS 12 40 40.0
comp=Z,200nm,13.6s
**CKRC Cesky Krumlov 44.64 315** *eP* **P** **12 17 15.7 +1.4**
CKRC AMS AMS 12 40 30.0
comp=Z,200nm,15.3s
**CKRC Cesky Krumlov 44.64 315** *eP* **P** **12 17 15.7 +1.4**
CKRC MLR MLR
comp=Z,200nm,15.3s
**PRU Pruhonice 44.79 317** AMS AMS 12 40 30.0
comp=Z,200nm,16.1s
**BIOA Bad Ischl, Aus 44.81 313** *i* P **P** **12 17 16.6 +0.9**
comp=Z,20nm,0.7s,SNR=6.4
**ZVC Zvikov 44.87 316** *eP* **P** **12 17 16.9 +0.9**
ZVC AMS AMS 12 40 20.0
comp=Z,300nm,20.1s
**KBA Koelnbreinsper 44.88 312** *i* P **P** **12 17 17.3 +0.9**
comp=Z,10nm,0.9s
**PRA Prague 44.88 317** AMS AMS 12 40 40.0
comp=Z,200nm,14.1s
**GEC2 GERESS Array S 45.03 315** P **P** **12 17 17.7 +0.2**
GEC2 IAmb IAmb 12 17 19.2
comp=Z,16nm,0.9s
**GEC2 GERESS Array S 45.03 315** *eP* **P** **12 17 18.2 +0.7**
comp=Z,16nm,0.9s,baz=104,slow=7.9
**GERES GERESS Array B 45.03 315** P **P** **12 17 18.0 +0.5**
**GERES GERESS Array B 45.03 315** P **P** **12 17 17.9 +0.5**
comp=Z,10.0nm,0.8s,baz=98,slow=7.1,SNR=27
GERES LR LR 12 40 46.7
comp=Z,87nm,18.4s,baz=117,slow=42
comp=Z,10.0nm,0.8s
**GERES GERESS Array B 45.03 315** P **P** **12 17 18.0 +0.5**
**KEF Keuruu 45.09 336** *eP* **P** **12 17 17.9 +0.3**
**STAL STALIGIAL 45.15 311** P **P** **12 17 18.7 +0.3**
STAL IAmb IAmb 12 17 27.4
comp=Z,22nm,1.3s
**KHC Kasperske Hory 45.18 315** P **P** **12 17 18.6 0.0**
KHC IAmb IAmb 12 17 39.2
comp=Z,12nm,1.1s
**KHC Kasperske Hory 45.18 315** *eP* **P** **12 17 19.4 +0.8**
KHC x x 12 17 27.0
KHC AMS AMS 12 40 40.0
comp=Z,200nm,15.9s
**KHC Kasperske Hory 45.18 315** *ce* P **P** **12 17 18.9 +0.3**
KHC pmax pmax
comp=Z,31nm,1.2s
**KHC Kasperske Hory 45.18 315** P **P** **12 17 19.4 +0.8**
comp=Z,11nm,2.4s
**ABTA Abfaltersbach 45.37 312** *i* P **P** **12 17 20.9 +0.7**
comp=Z,17nm,0.7s,SNR=6.8
**RJOB Jochberg 45.38 313** *eP* **P** **12 17 20.7 +0.5**
comp=Z,28nm,0.7s,baz=104,slow=7.9
**LESA Schwarzleotal 45.39 313** *i* P **P** **12 17 20.9 +0.6**
comp=Z,21nm,0.6s
**BRG Berggiesshubel 45.40 318** *i* P **P** **12 17 21.6 +1.4**
BRG Amp 12 17 23.3
comp=Z,4.8nm,0.8s
**BRG Berggiesshubel 45.40 318** *i* P **P** **12 17 21.6 +1.4**
BRG pmax pmax

BRG MLR MLR
comp=Z,5.0nm,0.8s
HNS **HongShan** 45.50 61 ⇓P **P** **12 17 22.5 +1.2**
comp=Z,275nm,23.4s
HNS pmax pmax
comp=Z,9.0nm,1.3s
HNS LR LR
comp=Z,600nm,19.1s
HNS LR LR
comp=Z,320nm,18.3s
**HSKC Hora Svate Kat** 45.64 317 AMS AMS 12 40 20.0
comp=Z,200nm,18.3s
**OPO Ambohidratompo** 45.89 201 LR LR 12 34 36.0
comp=Z,240nm,18.2s,baz=196,slow=34
**WTTA Wattenberg** 46.06 312 *i* P **P** **12 17 26.0 +0.3**
comp=Z,26nm,0.7s,SNR=12
**ZCCA Zocca** 46.07 308 P **P** **12 17 25.6 -0.1**
**CLL Collm** 46.09 318 P **P** **12 17 26.1 +0.5**
**CLL Collm** 46.09 318 *i* P **P** **12 17 26.8 +1.1**
comp=Z,53nm,1.3s
CLL *i* x x 12 17 34.6
CLL *e*S **S** **12 24 12.0 +0.8**
CLL *e*SS **SS** **12 27 36.0 -0.1**
**CLL Collm** 46.09 318 *i* P **P** **12 17 26.8 +1.1**
CLL pmax pmax
comp=Z,53nm,1.3s
**CLL Collm** 46.09 318 P **P** **12 17 27.0 +1.4**
comp=Z,43nm,1.1s
**CLL Collm** 46.09 318 *e*P **P** **12 17 27.1 +1.4**
comp=Z,37nm,1.1s,baz=104,slow=7.9
**WATA Walderalm** 46.11 313 *i* P **P** **12 17 25.6 -0.5**
comp=Z,23nm,1.2s,SNR=7.2
**ROTZ Rotzenmuhle** 46.20 316 *e*P **P** **12 17 27.4 +0.8**
comp=Z,2.4nm,0.8s,baz=104,slow=7.9
ROTZ *e*pP **sP** **12 17 35.8 +5.0**
**SQTA Sankt Quirin** 46.34 312 *i* P **P** **12 17 27.8 -0.1**
comp=Z,10nm,0.6s,SNR=7.0
**MOTA Moosalm** 46.43 312 *i* P **P** **12 17 28.5 -0.2**
comp=Z,13nm,0.8s
**FETA Feichten** 46.63 312 *i* P **P** **12 17 30.4 +0.2**
comp=Z,24nm,0.8s,SNR=17
**RETA Reutte** 46.68 313 *i* P **P** **12 17 30.2 -0.3**
comp=Z,16nm,0.6s,SNR=7.2
**MOX Moxa** 46.77 317 *e*L L 12 41 18.0
comp=Z,167nm,18.2s
**GRF Grafenberg Arr** 46.81 316 *e*L L 12 41 43.9
comp=Z,126nm,21.6s
**FUORN Ofenpass-Fuorn** 46.88 311 P **P** **12 17 32.6 +0.3**
FUORN lAmb lAmb 12 17 43.8
comp=Z,8.1nm,0.8s
**XLT XiLinHaoTe** 46.90 52 *e*P **P** **12 17 33.8 +1.5**
XLT sP sP 12 17 41.5 +5.0
XLT pmax pmax
comp=Z,16nm,1.1s
XLT pmax pmax
comp=Z,68nm,4.5s
XLT LR LR
comp=Z,260nm,18.4s
XLT LR LR
comp=Z,310nm,18.1s
**KEST Kesra** 46.96 296 P **P** **12 17 32.9 0.0**
comp=Z,4.3nm,0.9s,baz=130,slow=4.8,SNR=2.8
KEST LR LR 12 40 37.2
comp=Z,80nm,20.9s,baz=221,slow=40
comp=Z,4.3nm,0.9s
**UBR Ueberruh** 47.15 313 *e*P **P** **12 17 34.2 +0.1**
comp=Z,30nm,1.0s,baz=104,slow=7.9
**DAVOX Davos/Dischmat** 47.16 312 LR LR 12 39 28.8
comp=Z,137nm,21.2s,baz=76,slow=39
**DAVA Damuels** 47.24 312 *i* P **P** **12 17 35.1 +0.2**
comp=Z,38nm,0.7s,SNR=10
**FLTG Flechtingen** 47.41 319 *e*P **P** **12 17 36.9 +0.8**
comp=Z,14nm,0.7s,baz=104,slow=7.9
FLTG *e*pP **sP** **12 17 45.1 +4.9**
**CLZ Clausthal** 47.81 318 *e*P **P** **12 17 40.6 +1.4**
comp=Z,14nm,0.9s,baz=104,slow=7.9
**NRDL Niedersach Rie** 48.13 319 *e*P **P** **12 17 43.0 +1.5**
comp=Z,20nm,0.9s,baz=104,slow=7.9
**HFS Hagfors** 48.70 330 P **P** **12 17 45.5 -0.4**
comp=Z,3.6nm,0.7s,baz=112,slow=10,SNR=7.5
comp=Z,3.6nm,0.7s
**KASTN Kahler Asten** 48.87 317 *e*pP pP 12 17 57.1 +6.8
**SENIN Lac Senin/Sane** 48.88 311 P **P** **12 17 47.8 +0.1**
**BNI Bardonecchia** 49.19 309 P **P** **12 17 49.9 -0.2**
BNI lAmb lAmb 12 17 58.7
comp=Z,19nm,0.8s
**BNI Bardonecchia** 49.19 309 P **P** **12 17 49.9 -0.2**
BNI pmax pmax
comp=Z,19nm,0.8s
**ECH Echery** 49.19 313 P **P** **12 17 49.8 -0.1**
ECH lAmb lAmb 12 17 59.7
comp=Z,20nm,1.1s
**ECH Echery** 49.19 313 P **P** **12 17 49.8 -0.1**
ECH pmax pmax
comp=Z,20nm,1.1s
**NJ2 Nanjing** 49.21 68 *e*P **P** **12 17 50.5 +0.3**
NJ2 pmax pmax
comp=Z,14nm,0.5s
**ARCES ARCESS Array B** 49.73 344 P **P** **12 17 53.4 -0.3**
comp=Z,4.2nm,0.7s,baz=130,slow=6.5,SNR=8.7
ARCES LR LR 12 42 20.6
comp=Z,514nm,18.8s,baz=126,slow=40
comp=Z,4.2nm,0.7s
**NC602 NORSAR Array S** 49.92 330 P **P** **12 17 54.8 -0.4**
**NB2 NORSAR Subarra** 50.18 330 P **P** **12 17 56.6 -0.7**
comp=Z,1.1nm,0.6s,baz=109,slow=7.9
**NOA NORSAR Array B** 50.18 330 P **P** **12 17 56.8 -0.5**
comp=Z,2.1nm,0.7s,baz=111,slow=7.5,SNR=5.9
comp=Z,2.1nm,0.7s
**SSB Saint Sauveur** 50.71 309 P **P** **12 18 01.7 +0.2**
SSB lAmb lAmb 12 18 11.0
comp=Z,21nm,1.0s
**SSB Saint Sauveur** 50.71 309 P **P** **12 18 01.7 +0.2**
SSB pmax pmax
comp=Z,21nm,1.0s
**BMRD Maredsous** 51.01 316 *d*P **P** **12 18 04.5 +0.9**
**CN2 Changchun** 53.66 53 *e*P **P** **12 18 22.3 -1.1**
CN2 *e*sP sP 12 18 29.3 +1.6
CN2 *e*S **S** **12 25 51.8 -5.5**
CN2 LR LR
comp=Z,100nm,13.0s
CN2 LR LR
comp=Z,130nm,13.0s
**BNX BinXian** 55.02 50 ⇑P **P** **12 18 33.5 +0.2**
BNX pmax pmax
comp=Z,15nm,1.1s
**HEH HeiHe** 55.07 45 *e*P **P** **12 18 33.3 -0.2**
HEH pmax pmax
comp=Z,15nm,0.9s
**ZEA Zeya** 55.18 41 *e*P **P** **12 18 35.1 +0.8**
ZEA pmax pmax
comp=Z,10.0nm,0.9s
**KSRS Korea Array** 56.00 60 P **P** **12 18 39.6 -0.8**
comp=Z,3.3nm,0.9s,baz=274,slow=7.4,SNR=15
comp=Z,3.3nm,0.9s
**EKA Eskdalemuir Ar** 56.31 321 P **P** **12 18 42.4 0.0**
comp=Z,1.7nm,0.5s,baz=104,slow=7.6,SNR=9.9
comp=Z,1.7nm,0.5s
**MDJ Mudanjiang** 56.61 52 P **P** **12 18 45.3 +0.6**
MDJ pmax pmax
comp=Z,6.0nm,1.0s
**ESDC Sonseca Array** 57.19 302 P **P** **12 18 49.5 +0.5**
**ESDC Sonseca Array** 57.19 302 P **P** **12 18 49.0 0.0**
comp=Z,1.4nm,0.8s,baz=72,slow=7.2,SNR=6.3
ESDC LR LR 12 45 34.2
comp=Z,42nm,21.6s,baz=96,slow=38
comp=Z,1.4nm,0.8s
**SPITS Spitsbergen Ar** 57.37 350 P **P** **12 18 50.3 +0.7**
comp=Z,7.7nm,0.7s,baz=125,slow=14,SNR=6.1
SPITS LR LR 12 47 23.3
comp=Z,478nm,18.6s,baz=94,slow=40
comp=Z,7.7nm,0.7s
**YAK Yakutsk** 57.40 31 P **P** **12 18 49.0 -0.9**
**YAK Yakutsk** 57.40 31 LR LR 12 46 38.6
comp=Z,158nm,19.3s,baz=256,slow=39
**YAK Yakutsk** 57.40 31 *e*P **P** **12 18 49.5 -0.4**
YAK *e**PP **sP** **12 18 57.9 +3.7**
YAK *e* 12 20 58.3
YAK *e*S **S** **12 26 43.8 -2.7**
YAK *e**SS **sS** **12 26 58.0 +6.2**
YAK *e* 12 28 33.2
YAK *e*SS **SS** **12 30 37.2 +1.5**
YAK *e*SSS SSS 12 32 55.5
YAK pmax pmax
comp=Z,25nm,0.8s
YAK pmax pmax
comp=N,4.0nm,1.0s

YAK pmax pmax
comp=E,12nm,1.1s
YAK pmax pmax
comp=Z,33nm,2.0s
YAK smax smax
comp=E,29nm,3.2s
YAK MLR MLR
comp=Z,168nm,14.0s
YAK MLR MLR
comp=E,113nm,13.0s
**KLR Kul'dur** 57.88 46 LR LR 12 47 19.4
comp=E,309nm,19.0s,baz=272,slow=40
**KLR Kul'dur** 57.88 46*c* *i*P **P** **12 18 53.4 -0.2**
KLR pmax pmax
comp=E,16nm,1.3s
**JOW Kunigami** 58.23 73 LR LR 12 48 22.9
comp=Z,94nm,18.5s,baz=272,slow=41
**USA0B Ussuriysk Arra** 58.35 52 ⇑*i*P **P** **12 18 57.7 +0.7**
**USRK Ussuriysk Ar.** 58.35 52 P **P** **12 18 56.2 -0.7**
comp=Z,3.1nm,0.8s,baz=231,slow=13,SNR=5.8
USRK LR LR 12 47 51.5
comp=Z,273nm,19.4s,baz=267,slow=40
comp=Z,3.1nm,0.8s
**TORD Torodi Ar. Bea** 58.63 271 P **P** **12 18 59.0 -0.3**
**TORD Torodi Ar. Bea** 58.63 271 P **P** **12 18 59.7 +0.4**
comp=Z,4.4nm,0.7s,baz=56,slow=7.4,SNR=30
comp=Z,4.4nm,0.7s
**MDT Midelt** 58.77 294 P **P** **12 19 00.8 +0.6**
comp=Z,4.1nm,0.7s,baz=90,slow=9.4,SNR=7.6
MDT LR LR 12 49 54.9
comp=Z,75nm,19.8s,baz=104,slow=42
comp=Z,4.1nm,0.7s
**TIXI Tiksi** 58.99 20 P **P** **12 18 59.9 -1.0**
TIXI lAmb lAmb 12 19 01.6
comp=Z,35nm,2.0s
**TIXI Tiksi** 58.99 20 LR LR 12 47 05.2
comp=Z,360nm,18.4s,baz=269,slow=39
**TIXI Tiksi** 58.99 20 ⇑*i*P **P** **12 19 00.0 -1.0**
TIXI pmax pmax
comp=Z,7.0nm,1.0s
**LBTB Lobatse** 61.41 219 LR LR 12 45 18.2
comp=Z,115nm,19.4s,baz=34,slow=36
**TSUM Tsumeb** 62.23 229 LR LR 12 49 34.0
comp=Z,128nm,18.5s,baz=333,slow=39
**MAJO Matsushiro** 64.26 60⇓*e*P **P** **12 19 36.4 -0.8**
MAJO pmax pmax
comp=Z,4.0nm,0.9s
**MJAR Matsushiro Arr** 64.26 60 LR LR 12 50 52.5
comp=Z,48nm,18.4s,baz=281,slow=39
**BOSA Boshof** 64.41 217 P **P** **12 19 39.6 +1.4**
comp=Z,3.1nm,0.6s,baz=28,slow=3.0,SNR=6.4
BOSA LR LR 12 46 07.7
comp=Z,85nm,21.0s,baz=26,slow=35
comp=Z,3.1nm,0.6s
**TYV Tymovskoe** 64.72 44 *e*P **P** **12 19 40.8 +0.9**
TYV pmax pmax
comp=Z,4.0nm,1.3s
TYV pmax pmax
comp=Z,100nm,4.2s
**YSS Yuzh-Sakhalins** 65.46 48 P **P** **12 19 43.7 -1.1**
**YSS Yuzh-Sakhalins** 65.46 48 *e*P **P** **12 19 44.6 -0.1**
YSS *e*S **S** **12 28 22.0 -7.4**
YSS pmax pmax
comp=Z,20nm,1.0s
YSS pmax pmax
comp=Z,100nm,3.7s
YSS MLR MLR
comp=N,300nm,14.0s
YSS MLR MLR
comp=Z,300nm,14.0s
YSS MLR MLR
comp=E,100nm,17.0s
**ASAJ Asahikawa** 65.91 51 LR LR 12 51 27.4
comp=E,175nm,19.6s,baz=286,slow=39
**DBIC Dimbokro** 67.08 267 LR LR 12 51 33.1
comp=E,202nm,19.3s,baz=55,slow=38
**MA2 Magadan** 67.76 33 LR LR 12 54 12.1
comp=E,141nm,18.2s,baz=270,slow=40
**SEY Seymchan** 67.86 30*c*e P **P** **12 20 00.2 +0.4**
SEY pmax pmax
comp=Z,12nm,0.9s
**SUR Sutherland** 69.74 217 LR LR 12 49 49.6
comp=Z,89nm,20.1s,baz=20,slow=35
**SUMG Summit** 69.75 342 P **P** **12 20 10.6 -1.3**
SUMG lAmb lAmb 12 20 21.9
comp=Z,9.3nm,0.9s
**SUMG Summit** 69.75 342 P **P** **12 20 10.6 -1.3**
SUMG pmax pmax
comp=Z,9.0nm,0.9s
**H04N1 CROZET ISLANDS** 71.49 188 T T 13 38 14.5
baz=10,slow=75,SNR=909
**H04N2 CROZET ISLANDS** 71.50 188 T T 13 38 13.3
baz=10,slow=75,SNR=888
**H04N3 CROZET ISLANDS** 71.51 188 T T 13 38 13.5
baz=10,slow=75,SNR=932
**BILL Bilibino** 71.95 23 *i* P **P** **12 20 29.0 +4.1**
BILL pmax pmax
comp=Z,5.0nm,1.0s
**BBTS Babate** 74.55 279 LR LR 12 57 54.4
comp=Z,72nm,18.8s,baz=322,slow=39
**D19K Kuna River** 82.10 14 P **P** **12 21 21.8 -0.2**
D19K lAmb lAmb 12 21 22.8
comp=Z,9.3nm,0.8s
**SHEM Shemya Is, Ala** 82.33 35 LR LR 13 02 00.8
comp=Z,99nm,19.7s,baz=142,slow=39
**WRA Warramunga Arr** 82.54 116 P **P** **12 21 24.2 -0.9**
comp=Z,1.5nm,0.9s,baz=308,slow=4.5,SNR=9.8
comp=Z,1.5nm,0.9s
**WRA Warramunga Arr** 82.54 116 *i* P **P** **12 21 24.7 -0.4**
WRA pmax pmax
comp=Z,2.0nm,0.9s
**WRAB Tennant Creek** 82.55 116⇑*e*P **P** **12 21 25.2 +0.1**
WRAB pmax pmax
comp=Z,13nm,2.0s
**E21K Killik River** 83.02 13 P **P** **12 21 26.7 -0.2**
E21K lAmb lAmb 12 21 27.9
comp=Z,9.7nm,0.9s
**E19K Redstone River** 83.13 14 P **P** **12 21 27.1 -0.3**
E19K lAmb lAmb 12 21 28.2
comp=Z,7.4nm,0.9s
**D25K Kavik River** 83.63 10 P **P** **12 21 31.1 +1.1**
D25K lAmb lAmb 12 21 31.8
comp=Z,8.9nm,0.8s
**TOLK Toolik Lake Re** 83.69 11 P **P** **12 21 31.0 +0.7**
TOLK lAmb lAmb 12 21 32.0
comp=Z,17nm,1.3s
**ASAR Alice Springs** 84.05 119 P **P** **12 21 31.7 -1.2**
comp=Z,1.0nm,1.0s,baz=302,slow=3.7,SNR=5.6
comp=Z,1.0nm,1.0s
**E23K Chandalar** 84.19 12 P **P** **12 21 32.9 0.0**
E23K lAmb lAmb 12 21 34.1
comp=Z,6.8nm,1.1s
**E24K Your Creek** 84.38 11 P **P** **12 21 34.4 +0.6**
E24K lAmb lAmb 12 21 43.2
comp=Z,9.7nm,1.2s
**G23K Bananza Creek** 85.29 13 P **P** **12 21 38.6 +0.2**
G23K lAmb lAmb 12 21 39.7
comp=Z,6.3nm,0.9s
**BMAR Burnt Mountain** 85.63 10 P **P** **12 21 41.1 +1.0**
**G24K Hadweenzic Riv** 85.79 12 P **P** **12 21 41.4 +0.6**
G24K lAmb lAmb 12 21 43.0
comp=Z,10nm,1.2s
**H23K Yukon River** 86.16 13 P **P** **12 21 43.8 +1.1**
H23K lAmb lAmb 12 21 45.0
comp=Z,25nm,1.4s
**INK Inuvik** 86.23 6 P **P** **12 21 42.7 -0.2**
INK lAmb lAmb 12 21 44.5
comp=Z,21nm,1.9s
**INK Inuvik** 86.23 6 P **P** **12 21 42.7 -0.2**
INK pmax pmax
comp=Z,21nm,1.9s
**MLY Manley** 86.61 14 P **P** **12 21 44.6 -0.4**
MLY lAmb lAmb 12 21 46.4
comp=Z,13nm,1.4s
**G27K Doyon Strip** 86.66 9 P **P** **12 21 45.3 +0.1**
G27K lAmb lAmb 12 21 47.3
comp=Z,7.6nm,1.3s
**I23K Minto, Yukon-K** 86.80 13 P **P** **12 21 46.2 +0.4**
**F31M Tsiigehtchic** 87.05 6 P **P** **12 21 46.5 -0.4**
**MDM Murphy Dome** 87.19 13 P **P** **12 21 47.3 -0.5**
MDM lAmb lAmb 12 21 49.1
comp=Z,15nm,1.0s
**G30M tAoh Zraii Nji** 87.22 7 P **P** **12 21 47.4 -0.6**
G30M lAmb lAmb 12 21 48.8
comp=Z,7.7nm,0.8s
**NEA2 Nenana** 87.34 13 P **P** **12 21 48.7 +0.2**
NEA2 lAmb lAmb 12 21 49.5
comp=Z,8.2nm,1.1s
**BPAW Bear Paw Mtn.** 87.36 14 P **P** **12 21 48.7 +0.1**
**ILAR Eielson Array** 87.62 12 P **P** **12 21 48.9 -1.0**
comp=Z,1.4nm,0.8s,baz=322,slow=4.4,SNR=12
ILAR PP **PP** **12 25 14.8 +0.5**
comp=Z,1.1nm,1.0s,baz=326,slow=7.6,SNR=6.0
comp=Z,1.4nm,0.8s
**I28M Miner Creek** 88.19 9 P **P** **12 21 52.4 -0.2**
I28M lAmb lAmb 12 21 56.3
comp=Z,8.8nm,1.2s
**J26L Joseph Creek** 88.48 11 P **P** **12 21 54.5 +0.5**
J26L lAmb lAmb 12 21 54.7
comp=Z,4.3nm,0.8s
**SCRK Sand Creek** 88.89 12 P **P** **12 21 56.2 +0.2**
SCRK lAmb lAmb 12 21 57.0
comp=Z,5.7nm,0.8s
**I30M Mount Dempster** 88.89 8 P **P** **12 21 56.0 0.0**
I30M lAmb lAmb 12 21 56.8
comp=Z,4.5nm,0.8s
**K27K Chicken** 89.17 11 P **P** **12 21 57.6 +0.4**
K27K lAmb lAmb 12 21 59.2
comp=Z,18nm,1.6s
**DAWY Dawson** 89.57 10 P **P** **12 21 59.1 0.0**
DAWY lAmb lAmb 12 22 00.5
comp=Z,5.2nm,1.0s
**KDAK Kodiak Island** 92.39 18 LR LR 13 08 48.7
comp=Z,127nm,18.1s,baz=328,slow=39
**YKA Yellowknife Ar** 92.84 359 P **P** **12 22 14.4 +0.2**
comp=Z,1.6nm,0.9s,baz=350,slow=5.5,SNR=6.9
YKA LR LR 13 09 05.4
comp=Z,157nm,19.5s,baz=353,slow=39
comp=Z,1.6nm,0.9s
**YKA Yellowknife Ar** 92.84 359 *i* P **P** **12 22 15.8 +1.6**
YKA pmax pmax
comp=Z,1.0nm,0.9s
**STKA Stephens Creek** 93.95 123 LR LR 13 03 22.0
comp=Z,65nm,21.0s,baz=231,slow=35
**NVAR Mina Array Bea** 116.94 1 PKP **PKiKP** **12 27 48.5 +1.3**
comp=Z,2.5nm,0.8s,baz=312,slow=2.9,SNR=3.9
**TXAR Lajitas Array** 124.50 346 PKP **PKPdf** **12 28 01.9 +0.1**
comp=Z,0.4nm,0.3s,baz=17,slow=6.6,SNR=2.4
**PPT2 Papeete2** 148.91 83 *e*LR LR 13 17 52.3
comp=Z,42nm,22.2s

**IDC 27 12:15:39.3±2.4, 18°19S×178°10W, h587km±23km, mb2.5/4, mbtmp3.4/5, Error ellipse: s-maj=43.7km s-min=34.9km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.69** | **276** | P | P | 12 17 01.8 | 0.0 |
| | 14nm,0.6s,baz=79,slow=10,SNR=17 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.87** | **260** | P | P | 12 23 02.1 | -0.7 |
| | 0.2nm,0.7s,baz=96,slow=7.8,SNR=4.8 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.00** | **254** | P | P | 12 23 04.1 | +0.3 |
| | 0.3nm,0.5s,baz=88,slow=9.0,SNR=13 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.87** | **180** | P | P | 12 26 03.5 | -0.1 |
| | 0.5nm,0.9s,baz=20,slow=6.9,SNR=1.3 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **86.09** | **13** | P | P | 12 27 18.3 | 0.0 |
| | 0.1nm,0.4s,baz=216,slow=4.0,SNR=1.6 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*EST **27** 12:17:05.7, 60°00N×23°94E, h0km, ML1.4(HEL), Explosion*

**HEL 27 12:17:05.6±0.1, 59°99N×23°96E, h0km, ML1.3, Explosion, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.32** | **44** | *e*S | Sg | 12 17 15.3 | -0.4 |
| **HEL1** | **Helsinki** | **0.50** | **68** | *e*P | Pg | 12 17 14.8 | -0.3 |
| **NUR** | **Nurmijrvi** | **0.62** | **33** | *e*P | Pg | 12 17 16.8 | -0.8 |
| NUR | | | | MSG | | 12 17 25.5 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| **EE01** | **Perakula, Nova** | **0.80** | **192** | *e*PB | Pg | 12 17 20.8 | -0.2 |
| **EE02** | **Kiisa, Saku** | **0.89** | **155** | *e*PB | Pg | 12 17 22.4 | -0.1 |
| **PVF** | **Pernaja** | **1.10** | **59** | *e*P | Pg | 12 17 25.5 | -1.2 |
| | baz=245 | | | | | | |
| PVF | | | | MSG | | 12 17 39.2 | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| PVF | | | | *e*SN | Sn | 12 17 47.0 | +2.9 |
| **ARBE** | **Arbavere** | **1.17** | **118** | *e*SN | Sb | 12 17 44.9 | +0.6 |
| **MTSE** | **Matsula** | **1.28** | **183** | *e*PN | Pg | 12 17 30.3 | +0.2 |
| MTSE | | | | *e*SN | Sb | 12 17 47.5 | 0.0 |
| **RAF** | **Rauma** | **1.50** | **315** | *e*P | Pn | 12 17 32.3 | -1.4 |
| RAF | | | | MSG | | 12 17 50.3 | |
| | comp=Z,3.1nm,0.2s | | | | | | |
| RAF | | | | *e*S | Sg | 12 17 51.6 | -2.2 |
| **FIA0** | **FINESS Array S** | **1.79** | **35** | *e*P | Pn | 12 17 37.4 | -0.3 |
| | baz=220 | | | | | | |
| FIA0 | | | | MSG | | 12 17 59.1 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| FIA0 | | | | *e*SN | Sb | 12 18 02.4 | +0.2 |
| **VJF** | **Virojoki** | **1.88** | **71** | *e*PG | Pn | 12 17 39.5 | +0.6 |
| VJF | | | | MSG | | 12 18 01.5 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| **AAL** | **Aland** | **2.00** | **277** | *e*PG | Pb | 12 17 42.2 | -0.5 |
| AAL | | | | *e*SG | Sb | 12 18 08.2 | +0.1 |
| **KPF** | **Kankaanpaa** | **2.07** | **334** | *e*PG | Pn | 12 17 42.5 | +1.0 |
| KPF | | | | *e*SG | Sb | 12 18 09.7 | -0.5 |
| **KEF** | **Keuruu** | **2.23** | **11** | *e*PG | Pb | 12 17 45.7 | -1.0 |
| KEF | | | | MSG | | 12 18 11.6 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| KEF | | | | *e*SG | Sb | 12 18 14.4 | -0.4 |
| **KAF** | **Kangasniemi** | **2.42** | **27** | *e*PG | Pb | 12 17 48.9 | -1.0 |
| KAF | | | | MSG | | 12 18 17.0 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| KAF | | | | *e*SG | Sb | 12 18 20.3 | +0.1 |
| **VAF** | **Ylistaro** | **3.12** | **349** | MSG | | 12 18 37.5 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| VAF | | | | *e*SB | Sb | 12 18 38.8 | -1.8 |
| **NIF** | **Nilsia** | **3.87** | **27** | *e*PG | Pb | 12 18 14.4 | -0.3 |

*IDC **27** 12:22:16.1±0.6, 4°81S×134°13E, h0km, mb4.2/15, mbtmp4.2/17, ML2.7/2, MS3.4/9, Error ellipse: s-maj=31.8km s-min=13.9km az=75.0*
*NEIC **27** 12:22:17.9±1.6, 4°84S±0°07×134°15E±0°10, h10km±1km, mb4.5/18, Error ellipse: s-maj=17.5km s-min=11.1km az=66.0*
*DJA **27** 12:22:19.6±0.5, 5°S±2°×13°4E±°, h38km±10km, M4.8/18, mB5.3/13, mb4.7/18, MLv5.0/12, Mw(mB)4.7/13*

**ISC 27 12:22:19.9±0.4, 4°91S±0°05×134°08E±0°06, h28km, n107, σ1s62/104, mb4.3/26, MS3.9/3, 1C-1D, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMPI** | **Kaimana, Papua** | **1.30** | **343** | P | **Pn** | **12 22 41.0** | **-1.2** |
| KMPI | | | | S | **Sn** | **12 22 55.5** | **-3.1** |
| **FAKI** | **Fak Fak** | **2.69** | **317** | P | **Pn** | **12 23 01.6** | **+0.2** |
| **FAKI** | **Fak Fak** | **2.69** | **317** | Pn | **Pn** | **12 23 01.5** | **0.0** |
| **FAKI** | **Fak Fak** | **2.69** | **317** | P | **Pn** | **12 23 01.1** | **-0.3** |
| FAKI | | | | S | **Sn** | **12 23 30.2** | **-2.9** |
| **SAUI** | **Saumlaki** | **4.11** | **222** | Pn | **Pn** | **12 23 20.3** | **-0.7** |
| **SAUI** | **Saumlaki** | **4.11** | **222** | P | **Pn** | **12 23 21.3** | **+0.3** |
| **BNDI** | **Bandanaira** | **4.17** | **275** | P | **Pn** | **12 23 23.9** | **+2.1** |
| **BNDI** | **Bandanaira** | **4.17** | **275** | P | **Pn** | **12 23 22.3** | **+0.5** |
| **SWI** | **Sorong** | **4.91** | **325** | P | **Pn** | **12 23 30.1** | **-1.8** |
| **MSAI** | **Masohi** | **5.37** | **287** | P | **Pn** | **12 23 38.5** | **+0.3** |
| **GENI** | **Genyem** | **6.50** | **69** | P | **Pn** | **12 23 51.8** | **-2.0** |
| | 62nm,0.7s,2μm0.4nm | | | | | | |
| **JAY** | **Jayapura** | **7.03** | **70** | P | **Pn** | **12 23 59.1** | **-2.0** |
| | 31nm,1.0s | | | | | | |
| **TABU** | **Tabubil** | **7.13** | **93** | P | **Pn** | **12 24 03.5** | **+1.0** |
| **NLAI** | **Namlea** | **7.15** | **283** | P | **Pn** | **12 24 03.2** | **+0.4** |
| **KDU** | **Kakadu** | **7.88** | **191** | P | **Pn** | **12 24 14.9** | **+2.1** |
| **DRS** | **Darwin Rock St** | **8.10** | **203** | P | **Pn** | **12 24 18.5** | **+2.7** |
| **MTN** | **Manton Dam** | **8.40** | **200** | P | **Pn** | **12 24 22.4** | **+2.5** |
| **MTN** | **Manton Dam** | **8.40** | **200** | Pn | **Pn** | **12 24 22.0** | **+2.1** |
| **SANI** | **Sanana** | **8.56** | **289** | P | **Pn** | **12 24 20.6** | **-1.5** |
| **TNTI** | **Ternate** | **8.76** | **310** | Pn | **Pn** | **12 24 24.1** | **-0.8** |
| **TNTI** | **Ternate** | **8.76** | **310** | P | **Pn** | **12 24 24.6** | **-0.3** |
| | 28nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **10.85** | **243** | P | **Pn** | **12 24 55.0** | **+1.4** |
| **SOEI** | **Soe** | **10.85** | **243** | Pn | **Pn** | **12 24 54.2** | **+0.5** |
| **SOEI** | **Soe** | **10.85** | **243** | P | **Pn** | **12 24 53.8** | **+0.2** |
| | 54nm,0.5s | | | | | | |
| **BATI** | **Baumata** | **11.58** | **242** | P | **Pn** | **12 25 03.8** | **+0.2** |
| **KNRA** | **Kununurra** | **11.90** | **206** | Pn | **Pn** | **12 25 08.1** | **+0.2** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LUWI | Luwuk | 11.92 288 | | | Pn | | 12 25 08.4 | +0.2 | |
| LUWI | Luwuk | 11.92 288 | P | | Pn | | 12 25 08.2 | 0.0 | |
| | 99nm,1.3s,1μm | | | | | | | | |
| COEN | Coen | 12.70 136 | Pn | | Pn | | 12 25 17.3 | -1.5 | |
| EDFI | Ende, Flores | 12.87 252 | P | | Pn | | 12 25 20.9 | -0.4 | |
| | 20nm,0.7s | | | | | | | | |
| MRSI | Marisa | 13.25 294 | P | | Pn | | 12 25 24.9 | -1.5 | |
| | 37nm,0.5s,1μm | | | | | | | | |
| PMG | Port Moresby | 13.72 110 | Pn | | Pn | | 12 25 31.5 | -1.3 | |
| PMG | Port Moresby | 13.72 110 | Pn | | Pn | | 12 25 33.2 | +0.4 | |
| | 0.7nm,0.3s,baz=312,slow=14,SNR=1.7 | | | | | | | | |
| PMG | | | Sn | | Sn | | 12 27 50.9 | -14 | |
| | 0.6nm,0.3s,baz=272,slow=18,SNR=2.2 | | | | | | | | |
| PMG | | | LR | | LR | | 12 32 11.4 | | |
| | comp=Z,168nm,19.7s,baz=280,slow=43 5.8nm,0.6s | | | | | | | | |
| KAPI | Kappang | 14.27 269 | LR | | LR | | 12 31 05.9 | | |
| | comp=Z,79nm,18.6s,baz=96,slow=37 | | | | | | | | |
| TOLI2 | Tolitoli | 14.57 294 | P | | Pn | | 12 25 44.4 | +0.1 | |
| TOLI2 | Tolitoli | 14.57 294 | Pn | | Pn | | 12 25 43.4 | -0.9 | |
| DAV | Davao City (W) | 14.62 324 | LR | | LR | | 12 32 20.7 | | |
| | comp=Z,500nm,18.1s,baz=155,slow=42 | | | | | | | | |
| WB0 | Warramunga Arr | 14.77 179 | Pn | | Pn | | 12 25 45.9 | -1.1 | |
| WRAB | Tennant Creek | 14.93 179 | | | Pn | | 12 25 47.5 | -1.7 | |
| WRAB | | | IAmb | | IAmb | | 12 26 13.6 | | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| WB2 | Warramunga Arr | 14.94 179 | Pn | | Pn | | 12 25 48.3 | -1.1 | |
| WB2 | | | IAmb | | IAmb | | 12 26 13.4 | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| WRA | Warramunga Arr | 14.94 179 | | | Pn | | 12 25 47.6 | -1.8 | |
| WRA | Warramunga Arr | 14.94 179 | Pn | | Pn | | 12 25 46.8 | -2.5 | |
| | comp=Z,0.4nm,0.3s,baz=358,slow=13,SNR=22 | | | | | | | | |
| WRA | | | Sn | | Sn | | 12 28 23.6 | -11 | |
| | comp=Z,0.7nm,0.3s,baz=358,slow=23,SNR=5.4 | | | | | | | | |
| WRA | | | Lg | | Lg | | 12 30 13.2 | | |
| | baz=351,slow=30 | | | | | | | | |
| WRA | | | LR | | LR | | 12 32 14.9 | | |
| | comp=Z,122nm,19.6s,baz=1.0,slow=40 | | | | | | | | |
| WR0 | Warramunga Arr | 14.96 178 | | | Pn | | 12 25 49.2 | -0.5 | |
| WR0 | | | IAmb | | IAmb | | 12 26 13.7 | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| MPSI | Mapaga | 15.09 290 | P | | Pn | | 12 25 50.7 | -0.7 | |
| | comp=Z,8.7nm,0.7s | | | | | | | | |
| WBSI | Waikabubak, Su | 15.30 251 | P | | Pn | | 12 25 51.6 | -2.6 | |
| | comp=Z,31nm,0.9s | | | | | | | | |
| FITZ | Fitzroy Crossi | 15.48 212 | Pn | | Pn | | 12 25 55.5 | -1.0 | |
| QIS | Mount Isa | 16.45 161 | P | | P | | 12 26 10.7 | -0.8 | |
| TWSI | Taliwang, Sumb | 17.49 257 | P | | Pn | | 12 26 21.7 | -0.3 | |
| AS01 | Alice Springs | 18.64 180 | P | | Pn | | 12 26 37.5 | +1.4 | |
| AS31 | Alice Springs | 18.64 180 | P | | Pn | | 12 26 36.6 | +0.5 | |
| ASAR | Alice Springs | 18.64 180 | P | | Pn | | 12 26 36.2 | 0.0 | |
| ASAR | Alice Springs | 18.64 180 | P | | Pn | | 12 26 36.5 | +0.4 | |
| | comp=Z,6.1nm,0.6s,baz=5.3,slow=11,SNR=103 | | | | | | | | |
| ASAR | | | S | | Sn | | 12 29 55.0 | -9.0 | |
| | comp=Z,2.7nm,0.9s,baz=360,slow=26,SNR=2.6 | | | | | | | | |
| ASAR | | | Lg | | Lg | | 12 32 09.3 | | |
| | baz=8.7,slow=30 | | | | | | | | |
| ASAR | | | LR | | LR | | 12 34 21.7 | | |
| | comp=Z,93nm,21.0s,baz=352,slow=39 | | | | | | | | |
| CTA | Charters Tower | 19.18 143 | P | | Pn | | 12 26 43.5 | +0.8 | |
| | baz=333,slow=9.7,SNR=5.8 | | | | | | | | |
| CTA | | | LR | | LR | | 12 35 12.1 | | |
| | comp=Z,16nm,18.2s,baz=322,slow=40 | | | | | | | | |
| CTAO | Charters Tower | 19.18 143 | P | | Pn | | 12 26 43.1 | +0.5 | |
| JAGI | Jajag, Banyuwa | 20.10 259 | P | | Pn | | 12 26 53.8 | +0.2 | |
| WRKA | Warakurna | 20.77 195 | P | | Pn | | 12 27 00.9 | -0.4 | |
| MBWA | Marble Bar | 21.32 219 | | | P | | 12 27 07.1 | +2.2 | |
| PSA00 | Pilbara Seismi | 21.55 219 | P | | P | | 12 27 07.8 | +0.5 | |
| PSA00 | | | IAmb | | IAmb | | 12 27 19.7 | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| OOD | Oodnadatta | 22.81 176 | P | | P | | 12 27 22.9 | +2.3 | |
| INKA | Innaminka | 23.57 165 | P | | P | | 12 27 30.7 | +2.4 | |
| QLP | Quilpie | 23.63 157 | P | | P | | 12 27 31.2 | +2.2 | |
| MULG | Mulgathing | 25.23 180 | P | | P | | 12 27 46.6 | +3.0 | |
| LCRK | Leigh Creek | 25.70 172 | P | | P | | 12 27 50.1 | +2.3 | |
| FORT | Forrest | 26.35 192 | P | | P | | 12 27 55.3 | +1.6 | |
| FORT | Forrest | 26.35 192 | P | | P | | 12 27 55.3 | +1.6 | |
| BBJI | Bungbulang | 26.39 263 | P | | P | | 12 27 55.6 | +1.2 | |
| STKA | Stephens Creek | 27.73 166 | P | | P | | 12 28 08.2 | +2.0 | |
| | comp=Z,1.5nm,1.0s,baz=31,slow=15,SNR=1.8 | | | | | | | | |
| STKA | | | LR | | LR | | 12 40 06.0 | | |
| | comp=Z,125nm,19.4s,baz=22,slow=38 | | | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | | | |
| PPBI | Pangkal Pinang | 28.02 275 | P | | P | | 12 28 23.5 | +15 | |
| NJ2 | Nanjing | 39.51 339 | *eP* | | P | | 12 29 49.5 | +1.2 | |
| NJ2 | | | pmax | | pmax | | | | |
| | comp=Z,11nm,0.5s | | | | | | | | |
| MJAR | Matsushiro Arr | 41.42 5 | P | | P | | 12 30 03.5 | -0.6 | |
| | comp=Z,0.6nm,0.5s,baz=196,slow=10,SNR=2.1 | | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | | |
| CMAR | Chiang Mai Arr | 41.70 305 | P | | P | | 12 30 06.5 | -0.1 | |
| CMAR | Chiang Mai Arr | 41.70 305 | P | | P | | 12 30 07.1 | +0.4 | |
| | comp=Z,0.6nm,0.3s,baz=133,slow=7.0,SNR=6.2 | | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | | |
| KSRS | Korea Array | 42.54 353 | P | | P | | 12 30 12.8 | -0.3 | |
| | comp=Z,3.2nm,0.9s,baz=172,slow=10,SNR=14 | | | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | | | |
| PZH | PanZhiHua | 44.22 317 | P | | P | | 12 30 28.5 | +1.4 | |
| PZH | | | pmax | | pmax | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| HNS | HongShan | 45.80 338 | ⇓P | | P | | 12 30 41.0 | +1.7 | |
| HNS | | | pmax | | pmax | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| BJI | Beijing | 47.67 341 | P | | P | | 12 30 54.5 | +0.6 | |
| BJI | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| USRK | Ussuriysk Ar. | 48.92 358 | P | | P | | 12 31 03.1 | -0.4 | |
| USRK | Ussuriysk Ar. | 48.92 358 | P | | P | | 12 31 03.7 | +0.1 | |
| | comp=Z,1.1nm,0.6s,baz=175,slow=7.3,SNR=3.7 | | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | | |
| CN2 | Changchun | 49.11 352 | *eP* | | P | | 12 31 06.8 | +1.8 | |
| CN2 | | | *eS* | | S | | 12 38 10.5 | +2.1 | |
| HHC | Hu-ho-hao-te | 50.00 338 | *eP* | | P | | 12 31 14.3 | +2.4 | |
| HHC | | | pmax | | pmax | | | | |
| | comp=Z,16nm,0.6s | | | | | | | | |
| HHC | | | pmax | | pmax | | | | |
| | comp=Z,64nm,4.5s | | | | | | | | |
| BNX | BinXian | 50.78 354 | ⇑P | | P | | 12 31 17.5 | -0.1 | |
| BNX | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,1.6s | | | | | | | | |
| KLR | Kul'dur | 53.96 358 | P | | P | | 12 31 41.5 | +0.3 | |
| | comp=Z,1.7nm,0.7s,baz=233,slow=1.3,SNR=4.1 | | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | | |
| GTA | Gaotai | 54.26 327 | P | | P | | 12 31 45.0 | +1.3 | |
| GTA | | | sP | | pwP | | 12 31 59.3 | +4.3 | |
| GTA | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,1.4s | | | | | | | | |
| ULN | Ulaanbaatar | 57.67 339 | P | | P | | 12 32 08.5 | +0.4 | |
| ULN | | | IAmb | | IAmb | | 12 32 09.9 | | |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| SONM | Songino Array | 57.89 338 | P | | P | | 12 32 10.0 | +0.5 | |
| SONM | | | IAmb | | IAmb | | 12 32 25.2 | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| SONM | Songino Array | 57.89 338 | P | | P | | 12 32 10.3 | +0.8 | |
| | comp=Z,2.0nm,0.8s,baz=152,slow=8.2,SNR=7.0 | | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| PETK | Petropavlovsk- | 61.15 16 | P | | P | | 12 32 29.8 | -2.0 | |
| | comp=Z,2.1nm,0.8s,baz=246,slow=9.3,SNR=1.7 | | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | | |
| WMQ | Urumqi | 63.97 324 | *eP* | | P | | 12 32 53.3 | +2.4 | |
| MKAR | Makanchi Array | 68.80 325 | P | | P | | 12 33 21.9 | +0.3 | |
| MKAR | Makanchi Array | 68.80 325 | P | | P | | 12 33 22.6 | +0.9 | |
| | comp=Z,4.1nm,0.7s,baz=116,slow=8.2,SNR=16 | | | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | | | |
| MAKZ | Makanchi | 68.99 325 | P | | P | | 12 33 23.0 | +0.1 | |
| NIL | Nilore | 69.01 309 | P | | P | | 12 33 22.9 | -0.3 | |
| ZAA0 | Zalesovo Array | 71.59 332 | P | | P | | 12 33 38.0 | -0.6 | |
| ZAA0 | | | IAmb | | IAmb | | 12 33 39.0 | | |
| | comp=Z,3.2nm,0.7s | | | | | | | | |
| ZALV | Zalesovo Beam | 71.59 332 | P | | P | | 12 33 37.8 | -0.8 | |
| ZALV | Zalesovo Beam | 71.59 332 | P | | P | | 12 33 38.1 | -0.5 | |
| | comp=Z,2.4nm,0.6s,baz=112,slow=5.7,SNR=9.8 | | | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | | | |
| KURBB | Kurchatov Arra | 72.93 327 | P | | P | | 12 33 46.8 | +0.2 | |
| | comp=Z,2.8nm,0.8s,baz=117,slow=5.5,SNR=8.7 | | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| KK31 | Karatay Array | 74.52 317 | P | | P | | 12 33 56.2 | +0.1 | |
| KKAR | Karatay Array | 74.52 317 | P | | P | | 12 33 56.2 | +0.1 | |
| KKAR | Karatay Array | 74.52 317 | P | | P | | 12 33 56.4 | +0.2 | |
| KKAR | | | IAmb | | IAmb | | 12 33 57.7 | | |
| | comp=Z,3.1nm,0.8s | | | | | | | | |
| TIXI | Tiksi | 76.49 358 | P | | P | | 12 34 06.6 | -0.2 | |
| TIXI | | | IAmb | | IAmb | | 12 34 07.9 | | |
| | comp=Z,5.2nm,1.1s | | | | | | | | |
| BVAR | Borovoye Array | 78.52 326 | P | | P | | 12 34 18.3 | -0.3 | |
| | comp=Z,1.8nm,0.5s,baz=133,slow=6.5,SNR=6.3 | | | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | | | |
| QSPA | South Pole Qui | 85.05 180 | P | | P | | 12 34 53.3 | +0.3 | |
| | comp=Z,1.0nm,0.6s,baz=302,slow=2.0,SNR=12 | | | | | | | | |
| QSPA | | | LR | | LR | | 13 10 56.6 | | |
| | comp=Z,122nm,19.5s,baz=306,slow=34 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| ILAR | Eielson Array | 89.75 25 | P | | P | | 12 35 14.4 | -1.0 | |
| | comp=Z,0.7nm,0.8s,baz=260,slow=5.1,SNR=4.8 | | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | | |
| SNAA | Sanae | 98.60 193 | P | | Pdif | | 12 35 56.7 | +0.7 | |
| | comp=Z,1.2nm,1.1s,baz=100,slow=19,SNR=2.0 | | | | | | | | |
| | comp=Z,1.2nm,1.1s | | | | | | | | |
| BBB | Bella Bella | 98.65 38 | LR | | LR | | 13 16 40.7 | | |
| | comp=Z,35nm,19.1s,baz=11,slow=33 | | | | | | | | |
| TORD | Toroci Ar. Bea | 132.34 283 | PKP | | PKPdf | | 12 41 32.8 | +0.2 | |
| | comp=Z,0.6nm,0.7s,baz=62,slow=3.3,SNR=3.3 | | | | | | | | |
| CPUP | Villa Florida | 147.03 161 | PKPbc | | PKPbc | | 12 42 01.1 | +0.3 | |
| | comp=Z,1.7nm,0.7s,baz=123,slow=1.7,SNR=4.8 | | | | | | | | |

*IDC **27** 12:22:20.1±1.4, 14.°91N×146.°96E, h0km, mb4.1/12, mbtmp4.1/13, ML4.3/1, MS2.9/1, Error ellipse: s-maj=31.2km s-min=23.2km az=140.0*
*NEIC **27** 12:22:21.4±1.4, 14.°8N±0.°1×147.°2E±0.°1, h10km±1km, mb4.6/13, Error ellipse: s-maj=21.9km s-min=16.3km az=156.0*

**ISC 27 12:22:24.6±0.9, 14.°8N±0.°1×146.°9E±0.°1, h32km, n38, σ1°10/32, mb4.4/18, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| GUMO | Guam | 2.35 | 238 | Pn | | Pn | | 12 23 00.5 | -0.6 |
| | 76nm,0.3s,baz=34,slow=3.3,SNR=33 | | | | | | | | |
| GUMO | | | | Sn | | Sn | | 12 23 30.3 | +1.4 |
| | 35nm,0.3s,baz=0.0,slow=20,SNR=8.9 | | | | | | | | |
| GUMO | | | | LR | | LR | | 12 23 37.0 | |
| | comp=Z,46nm,20.5s,baz=42,slow=32 128nm,0.3s | | | | | | | | |
| PATS | Pohnpei | 13.71 | 124 | Pn | | Pn | | 12 25 27.1 | -10 |
| H11S3 | WAKE ISLAND Hy | 19.27 | 76 | T | | T | | 12 46 28.1 | |
| | baz=261 | | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 19.29 | 76 | T | | T | | 12 46 27.5 | |
| | baz=261 | | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 19.29 | 76 | T | | T | | 12 46 22.5 | |
| | baz=261 | | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 19.66 | 73 | T | | T | | 12 46 49.6 | |
| | baz=258,slow=75,SNR=5.5 | | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 19.67 | 73 | T | | T | | 12 46 53.7 | |
| | baz=258,slow=75,SNR=4.5 | | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 19.68 | 73 | T | | T | | 12 46 55.3 | |
| | baz=258,slow=75,SNR=5.9 | | | | | | | | |
| JOW | Kunigami | 21.09 | 307 | P | | P | | 12 27 07.7 | +1.2 |
| JOW | Kunigami | 21.09 | 307 | P | | P | | 12 27 08.0 | +1.5 |
| | 8.6nm,0.4s,baz=122,slow=15,SNR=16 | | | | | | | | |
| | 8.6nm,0.4s | | | | | | | | |
| FAKI | Fak Fak | 22.87 | 221 | P | | P | | 12 27 26.1 | +0.5 |
| FAKI | | | | IAmb | | IAmb | | 12 28 04.2 | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| MJAR | Matsushiro Arr | 22.97 | 342 | P | | P | | 12 27 23.5 | -3.0 |
| | comp=Z,1.4nm,0.6s,baz=167,slow=9.8,SNR=2.6 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| JNU | Nakatsue | 23.32 | 324 | P | | P | | 12 27 30.6 | +0.6 |
| JNU | | | | IAmb | | IAmb | | 12 27 35.1 | |
| | comp=Z,26nm,1.3s | | | | | | | | |
| JNU | Nakatsue | 23.32 | 324 | P | | P | | 12 27 30.6 | +0.6 |
| | comp=Z,9.2nm,1.0s,baz=107,slow=3.4,SNR=4.8 | | | | | | | | |
| | comp=Z,9.2nm,1.0s | | | | | | | | |
| KSRS | Korea Array | 28.14 | 327 | P | | P | | 12 28 13.1 | -0.8 |
| | comp=Z,1.4nm,0.8s,baz=154,slow=11,SNR=4.2 | | | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| TOLI2 | Tolitoli | 29.21 | 245 | P | | P | | 12 28 21.3 | -2.3 |
| TOLI2 | | | | IAmb | | IAmb | | 12 28 32.1 | |
| | comp=Z,7.4nm,0.9s | | | | | | | | |
| AS31 | Alice Springs | 40.33 | 199 | P | | P | | 12 29 59.3 | -0.1 |
| CMAR | Chiang Mai Arr | 46.02 | 281 | P | | P | | 12 30 46.2 | +0.7 |
| | comp=Z,0.4nm,0.3s,baz=87,slow=7.3,SNR=4.0 | | | | | | | | |
| CMAR | | | | LR | | LR | | 12 51 22.2 | |
| | comp=Z,13nm,18.5s,baz=275,slow=38 | | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | | |
| SONM | Songino Array | 46.90 | 323 | P | | P | | 12 30 52.7 | +0.6 |
| | comp=Z,1.9nm,0.7s,baz=135,slow=9.6,SNR=7.4 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| ZALV | Zalesovo Beam | 61.79 | 324 | P | | P | | 12 32 39.9 | -0.3 |
| | comp=Z,1.0nm,0.6s,baz=116,slow=7.4,SNR=5.7 | | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| MK31 | Makanchi Array | 62.00 | 315 | P | | P | | 12 32 42.7 | +0.9 |
| MK31 | | | | IAmb | | IAmb | | 12 33 23.5 | |
| | comp=Z,6.6nm,1.2s | | | | | | | | |
| MKAR | Makanchi Array | 62.00 | 315 | P | | P | | 12 32 42.6 | +0.8 |
| MKAR | Makanchi Array | 62.00 | 315 | P | | P | | 12 32 42.3 | +0.5 |
| | comp=Z,1.7nm,0.4s,baz=89,slow=8.6,SNR=21 | | | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | | | |
| MAKZ | Makanchi | 62.21 | 315 | P | | P | | 12 32 43.6 | +0.4 |
| KURK | Kurchatov | 64.93 | 319 | P | | P | | 12 33 01.4 | +0.3 |
| KURBB | Kurchatov Arra | 64.98 | 319 | P | | P | | 12 33 01.3 | -0.1 |
| | comp=Z,5.2nm,0.6s,baz=98,slow=6.9,SNR=46 | | | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| MDM | Murphy Dome | 66.09 | 25 | P | | P | | 12 33 10.7 | +2.4 |
| MDM | | | | IAmb | | IAmb | | 12 33 24.1 | |
| | comp=Z,8.0nm,1.5s | | | | | | | | |
| ILAR | Eielson Array | 66.59 | 25 | P | | P | | 12 33 11.5 | 0.0 |
| | comp=Z,0.5nm,0.7s,baz=257,slow=6.3,SNR=6.3 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| J26L | Joseph Creek | 67.91 | 26 | P | | P | | 12 33 20.8 | +0.8 |
| KK31 | Karatay Array | 70.15 | 311 | P | | P | | 12 33 34.5 | +0.3 |
| KK31 | | | | IAmb | | IAmb | | 12 33 57.7 | |
| | comp=Z,3.1nm,0.8s | | | | | | | | |
| KKAR | Karatay Array | 70.15 | 311 | P | | P | | 12 33 34.9 | +0.7 |
| KKAR | Karatay Array | 70.15 | 311 | P | | P | | 12 33 34.5 | +0.3 |
| BVAR | Borovoye Array | 70.20 | 321 | P | | P | | 12 33 34.1 | -0.2 |
| | comp=Z,1.5nm,0.5s,baz=90,slow=7.4,SNR=10 | | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | | |
| G31M | Satah River | 72.06 | 24 | P | | P | | 12 33 46.2 | +0.9 |
| G31M | | | | IAmb | | IAmb | | 12 34 01.1 | |
| | comp=Z,8.5nm,1.5s | | | | | | | | |
| ABKAR | Akbulak array | 76.96 | 318 | P | | P | | 12 34 13.6 | -0.5 |
| FINES | FINESS Array B | 90.86 | 336 | P | | P | | 12 35 23.5 | -1.3 |
| | comp=Z,0.6nm,0.5s,baz=48,slow=8.3,SNR=2.0 | | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | | |
| DBIC | Dimbokro | 144.80 | 305 | PKP | | PKPab | | 12 41 58.4 | +0.1 |
| | comp=Z,3.4nm,0.6s,baz=317,slow=3.2,SNR=2.0 | | | | | | | | |
| LPAZ | La Paz | 146.22 | 97 | PKPbc | | PKPab | | 12 42 04.9 | +0.6 |
| | comp=Z,0.8nm,0.4s,baz=214,slow=3.6,SNR=3.0 | | | | | | | | |

*NOU **27** 12:23:06.9, 43.°26S×173.°01E, h11km, MLv3.6/8, Off E. Coast of S. Island, N.Z.*
*WEL **27** 12:23:07.1±0.6, 43.°3S×17.°3E±1°, h11km±4km, M3.1/6, ML3.2/7, MLv3.1/6, Error ellipse: s-maj=0.0km s-min=0.0km az=103.4, confirmed*

**ISC 27 12:23:07.0±1.0, 43.°22S±0.°02×172.°98E±0.°03, h11km±7km, n57, σ0°91/72, South Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| AMBC | Amberley HDC | 0.19 | 291 | P | | Pg | | 12 23 10.1 | -1.0 |
| AMBC | | | | S | | Sg | | 12 23 13.7 | -0.3 |
| AMCZ | Amberley | 0.24 | 281 | P | | Pg | | 12 23 12.3 | +0.3 |
| AMCZ | | | | S | | Sg | | 12 23 16.3 | +0.9 |
| GVZ | Greta Valley S | 0.26 | 9 | P | | Pg | | 12 23 12.3 | -0.1 |
| GVZ | | | | S | | Sg | | 12 23 16.6 | +0.6 |
| KPOC | Kaiapoi North | 0.28 | 236 | P | | Pg | | 12 23 12.8 | +0.2 |
| KPOC | | | | S | | Sb | | 12 23 18.8 | +0.2 |
| ASHY | Ashley | 0.28 | 259 | P | | Pg | | 12 23 12.1 | -0.6 |
| ASHY | | | | S | | Sg | | 12 23 17.3 | +0.6 |
| SCAC | Scargill | 0.29 | 352 | P | | Pg | | 12 23 11.4 | -1.4 |
| SCAC | | | | S | | Sg | | 12 23 16.7 | 0.0 |
| WAKC | Waikari | 0.33 | 322 | P | | Pg | | 12 23 13.6 | 0.0 |
| WAKC | | | | S | | Sg | | 12 23 18.9 | +1.0 |
| CECS | Cheviot Emerge | 0.46 | 28 | P | | Pb | | 12 23 17.0 | -0.2 |
| CECS | | | | S | | Sb | | 12 23 24.7 | +0.7 |
| OKCZ | Okains Bay | 0.50 | 173 | P | | Pb | | 12 23 18.4 | +0.5 |
| OKCZ | | | | S | | Sb | | 12 23 26.9 | +1.7 |
| MQZ | McQueen's Vall | 0.54 | 206 | P | | Pb | | 12 23 18.3 | -0.1 |
| MQZ | | | | S | | Sb | | 12 23 26.7 | +0.6 |
| AKCZ | Akaroa Harbour | 0.65 | 184 | P | | Pb | | 12 23 20.9 | +0.5 |
| AKCZ | | | | S | | Sn | | 12 23 32.1 | -0.4 |
| LTZ | Lake Taylor | 0.68 | 310 | P | | Pg | | 12 23 20.4 | +0.2 |
| LTZ | | | | S | | Sb | | 12 23 30.2 | -0.2 |
| OXZ | Oxford | 0.69 | 261 | P | | Pb | | 12 23 20.9 | -0.2 |
| OXZ | | | | S | | Sb | | 12 23 31.0 | +0.3 |
| RACZ | Rakaia | 0.79 | 230 | P | | Pb | | 12 23 23.1 | +0.4 |
| KHZ | Kahutara | 0.91 | 27 | P | | Pb | | 12 23 24.9 | +0.2 |
| KHZ | Kahutara | 0.91 | 27 | P | | Pb | | 12 23 24.8 | +0.1 |
| MHCZ | Mount Hutt | 1.07 | 253 | P | | Pb | | 12 23 27.2 | -0.4 |
| WACZ | Wakanui South | 1.10 | 229 | P | | Pb | | 12 23 27.6 | -0.4 |
| INZ | Inchbonnie | 1.23 | 293 | P | | Pn | | 12 23 29.7 | -0.4 |
| THZ | Tophouse | 1.46 | 358 | P | | Pn | | 12 23 32.9 | -0.5 |
| RPZ | Rata Peaks | 1.48 | 250 | P | | Pn | | 12 23 33.0 | -0.7 |
| RPZ | Rata Peaks | 1.48 | 250 | P | | Pn | | 12 23 33.0 | -0.7 |
| RPZ | | | | S | | Sn | | 12 23 52.4 | -0.6 |
| ARCZ | Arundel | 1.50 | 240 | P | | Pn | | 12 23 33.0 | -0.8 |
| WVZ | Waitaha Valley | 1.65 | 274 | P | | Pn | | 12 23 35.7 | -0.2 |
| BSWZ | Blackbirch Sta | 1.65 | 24 | P | | Pn | | 12 23 35.9 | 0.0 |
| DSZ | Denniston Nort | 1.71 | 329 | P | | Pn | | 12 23 36.7 | -0.1 |
| DSZ | | | | S | | Sn | | 12 23 58.0 | -0.7 |
| MRNZ | Matariki Terra | 1.83 | 355 | P | | Pn | | 12 23 39.3 | +0.9 |
| TMZ | Timaru | 1.84 | 230 | P | | Pn | | 12 23 37.9 | -0.7 |
| TUWZ | Tuamarina | 1.93 | 22 | P | | Pn | | 12 23 40.3 | +0.5 |
| GCSZ | Gaunt Creek Bo | 1.94 | 266 | P | | Pn | | 12 23 40.7 | +0.9 |
| NNZ | Nelson | 2.03 | 9 | P | | Pn | | 12 23 41.3 | +0.2 |
| TCW | Tory Channel | 2.23 | 26 | P | | Pn | | 12 23 43.7 | -0.2 |
| FOZ | Fox Glacier | 2.33 | 261 | P | | Pn | | 12 23 46.3 | +1.2 |
| LBZ | Lake Benmore | 2.33 | 239 | P | | Pn | | 12 23 45.1 | -0.2 |
| QRZ | Quartz Range | 2.42 | 352 | P | | Pn | | 12 23 47.1 | +0.6 |
| QRZ | Quartz Range | 2.42 | 352 | P | | Pn | | 12 23 46.9 | +0.4 |
| ODZ | Otahua Downs | 2.48 | 222 | P | | Pn | | 12 23 46.7 | -0.6 |
| ODZ | Otahua Downs | 2.48 | 222 | P | | Pn | | 12 23 46.7 | -0.6 |
| DUWZ | D'Urville Isla | 2.52 | 17 | P | | Pb | | 12 23 50.9 | -1.4 |
| CAW | Cannon Point | 2.62 | 37 | P | | Pn | | 12 23 48.0 | -1.3 |
| OGWZ | Otaki Gorge | 2.91 | 35 | P | | Pn | | 12 23 52.1 | -1.1 |
| JCZ | Jackson Bay | 3.16 | 253 | P | | Pn | | 12 23 56.6 | -0.1 |
| JCZ | Jackson Bay | 3.16 | 253 | P | | Pn | | 12 23 57.1 | +0.4 |
| MRZ | Mangatainoka R | 3.21 | 38 | P | | Pn | | 12 23 57.0 | -0.4 |
| EAZ | Earnscleugh | 3.31 | 231 | P | | Pn | | 12 23 58.1 | -0.7 |
| BFZ | Birch Farm | 3.52 | 45 | P | | Pn | | 12 24 01.4 | -0.2 |
| BFZ | Birch Farm | 3.52 | 45 | P | | Pn | | 12 23 59.6 | -2.1 |
| TUZ | Tuapeka | 3.63 | 220 | P | | Pn | | 12 24 02.5 | -0.5 |
| KHEZ | Kahui Hut | 4.00 | 12 | P | | Pn | | 12 24 11.1 | +2.8 |
| MLZ | Mavora Lakes | 4.09 | 237 | P | | Pn | | 12 24 08.6 | -1.0 |
| PKE | Pukeiti | 4.10 | 11 | P | | Pn | | 12 24 11.9 | +2.3 |
| SYZ | Scrubby Hill | 4.29 | 218 | P | | Pn | | 12 24 12.3 | +0.1 |
| SYZ | Scrubby Hill | 4.29 | 218 | P | | Pn | | 12 24 11.9 | -0.3 |
| VRZ | Vera Road | 4.31 | 19 | P | | Pn | | 12 24 14.6 | +2.2 |
| PKVZ | Pokaka | 4.32 | 25 | P | | Pn | | 12 24 14.5 | +1.9 |
| BKZ | Black Stump Fm | 4.84 | 34 | P | | Pn | | 12 24 19.8 | -0.1 |
| BKZ | Black Stump Fm | 4.84 | 34 | P | | Pn | | 12 24 17.6 | -2.3 |

*IDC **27** 12:25:46.6±2.1, 26.°67N×143.°52E, h0km, mb3.7/3, mbtmp3.9/5, ML2.7/1, Error ellipse: s-maj=35.3km s-min=24.0km az=70.0*

**ISC 27 12:25:51.1±1.6, 26.°8N±0.°1×143.°6E±0.°1, h35km, n6, σ2°05/8, mb3.8/3, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| JCJ | Chichijima | 1.27 | 284 | Pn | | Pn | | 12 26 10.6 | -1.6 |
| | 21nm,0.3s,baz=15,slow=16,SNR=14 | | | | | | | | |
| JCJ | | | | Sn | | Sn | | 12 26 29.4 | +1.4 |
| | 31nm,0.3s,baz=103,slow=23,SNR=7.0 | | | | | | | | |
| JHJ | Hachijo jima 2 | 7.11 | 333 | Pn | | Pn | | 12 27 32.8 | +0.2 |
| | 138nm,1.0s,baz=131,slow=19,SNR=3.1 | | | | | | | | |
| JHJ | | | | Sn | | Sn | | 12 28 49.6 | -2.6 |
| | 4.2nm,0.3s,baz=187,slow=19,SNR=1.0 | | | | | | | | |
| MJAR | Matsushiro Arr | 10.74 | 336 | Pn | | Pn | | 12 28 22.3 | -0.1 |
| | 0.1nm,0.3s,baz=153,slow=8.2,SNR=2.0 | | | | | | | | |
| | 1.7nm,0.8s | | | | | | | | |
| WRA | Warramunga Arr | 47.30 | 192 | P | | P | | 12 34 20.2 | -1.2 |
| | 0.6nm,0.6s,baz=20,slow=8.9,SNR=2.0 | | | | | | | | |
| | 0.6nm,0.6s | | | | | | | | |
| MKAR | Makanchi Array | 51.62 | 310 | P | | P | | 12 34 56.4 | +2.3 |
| | 0.8nm,0.8s,baz=99,slow=9.2,SNR=2.3 | | | | | | | | |
| | 0.8nm,0.8s | | | | | | | | |
| KURBB | Kurchatov Arra | 54.13 | 315 | P | | P | | 12 35 14.3 | +1.8 |
| | 0.4nm,0.3s,baz=92,slow=7.3,SNR=2.3 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |

*IDC **27** 12:28:35.4±2.9, 9.°17S×118.°42E, h86km±22km, mb3.7/9, mbtmp4.0/11, Error ellipse: s-maj=31.6km s-min=17.2km az=65.0*
*NEIC **27** 12:28:37.9±2.0, 9.°2S±0.°1×118.°58E±0.°08, h108km±11km, mb4.0/10, Error ellipse: s-maj=19.7km s-min=10.3km az=194.0*
*DJA **27** 12:28:38.1±0.5, 9.°5S±

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | **Makanchi Array** | **64.45** | **333** | P | **P** | **12 39 02.2** | **-0.6** |
| | comp=Z,1.3nm,0.5s,baz=152,slow=7.2,SNR=14 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| GAR | **Garm** | **65.66** | **320** | P | **P** | **12 39 09.4** | **-1.5** |
| KURBB | **Kurchatov Arra** | **68.97** | **334** | P | **P** | **12 39 30.6** | **-0.8** |
| | comp=Z,0.4nm,0.4s,baz=146,slow=6.0,SNR=6.0 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| ZALV | **Zalesovo Beam** | **69.07** | **339** | P | **P** | **12 39 30.6** | **-1.3** |
| ZALV | **Zalesovo Beam** | **69.07** | **339** | P | **P** | **12 39 30.8** | **-1.2** |
| | comp=Z,0.6nm,0.5s,baz=140,slow=5.3,SNR=4.1 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| PETK | **Petropavlovsk-** | **70.34** | **24** | P | **P** | **12 39 42.4** | **+2.6** |
| | comp=Z,2.4nm,0.9s,baz=289,slow=5.8,SNR=2.0 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| BVAR | **Borovoye Array** | **74.28** | **332** | P | **P** | **12 40 02.6** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=189,slow=7.5,SNR=4.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| ABKAR | **Akbulak array** | **77.50** | **325** | P | **P** | **12 40 20.5** | **-1.1** |
| ABKAR | | | | IAmb | IAmb | 12 40 22.1 | |
| | comp=Z,2.1nm,1.1s | | | | | | |

*NOU **27** 12:34:28.3,22°.03S×176°.40W,h459km,mb4.2/9, South of Fiji Islands*
*IDC **27** 12:34:40.8±2.1,22°.06S×179°.30W,h549km±25km,mb3.2/7, mbtmp4.2/8, Error ellipse: s-maj=26.7km s-min=21.7km az=1.0*
*NEIC **27** 12:34:41.0±1.3,21°.8S±0°.1×179°.1W±0°.2,h572km±12km, mb4.2/20, Error ellipse: s-maj=21.9km s-min=20.6km az=203.0*

**ISC 27 12:34:41.4±0.6, 21°.97S±0°.09×179°.1W±0°.1, h576km, n59, σ2§35/60, mb4.2/18, 5C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | **Nonsavu** | **5.00** | **327** | P | **P** | **12 36 10.8** | **-2.1** |
| MSVF | **Nonsavu** | **5.00** | **327** | P | **P** | **12 36 10.9** | **-2.1** |
| MSVF | **Nonsavu** | **5.00** | **327** | P | **P** | **12 36 10.5** | **-2.5** |
| | 82nm,0.4s,baz=131,slow=16,SNR=138 | | | | | | |
| NIUE | **Niue** | **9.06** | **73** | P | **P** | **12 36 48.4** | **-2.0** |
| AFI | **Afiamalu** | **10.62** | **42** | P | **P** | **12 37 02.6** | **-3.6** |
| OUZ | **Omahuta** | **14.67** | **204** | P | **P** | **12 37 47.6** | **+0.7** |
| KUZ | **Kuaotunu** | **15.39** | **196** | P | **P** | **12 37 52.3** | **-1.6** |
| MXZ | **Matakaoa Point** | **15.70** | **188** | P | **P** | **12 37 52.2** | **-4.6** |
| MXZ | **Matakaoa Point** | **15.70** | **188** | P | **P** | **12 37 59.8** | **+3.0** |
| URZ | **Urewera** | **16.56** | **191** | P | **P** | **12 38 00.7** | **-4.1** |
| URZ | **Urewera** | **16.56** | **191** | P | **P** | **12 38 00.7** | **-4.1** |
| | 4.5nm,0.4s,baz=344,slow=1.9,SNR=4.8 | | | | | | |
| URZ | | | | S | **S** | **12 40 42.4** | **-8.0** |
| | 4.3nm,0.6s,baz=240,slow=18,SNR=2.5 | | | | | | |
| RTZ | **Ruatahuna** | **16.93** | **191** | P | P | 12 38 21.5 | +13 |
| BKZ | **Black Stump Fm** | **17.55** | **191** | P | **P** | **12 38 10.4** | **-3.5** |
| BKZ | **Black Stump Fm** | **17.55** | **191** | P | **P** | **12 38 10.3** | **-3.5** |
| ETVZ | **East Tongariro** | **17.68** | **193** | P | **P** | **12 38 13.2** | **-1.8** |
| NEZ | **North Egmont** | **18.20** | **197** | P | **P** | **12 38 22.7** | **+3.0** |
| PXZ | **Pawanui** | **18.33** | **190** | P | **P** | **12 38 18.8** | **-2.0** |
| BFZ | **Birch Farm** | **19.07** | **191** | P | **P** | **12 38 26.1** | **-1.5** |
| BFZ | **Birch Farm** | **19.07** | **191** | P | **P** | **12 38 26.0** | **-1.6** |
| MRZ | **Mangatainoka R** | **19.17** | **192** | P | **P** | **12 38 25.6** | **-2.9** |
| OGWZ | **Otaki Gorge** | **19.41** | **193** | P | **P** | **12 38 28.3** | **-2.3** |
| HOWZ | **Holdsworth Sta** | **19.41** | **192** | P | **P** | **12 38 23.6** | **-7.1** |
| CAW | **Cannon Point** | **19.71** | **193** | P | **P** | **12 38 32.4** | **-1.0** |
| TCW | **Tory Channel** | **19.98** | **195** | P | **P** | **12 38 35.5** | **-0.4** |
| QRZ | **Quartz Range** | **20.09** | **199** | P | **P** | **12 38 37.7** | **+0.9** |
| QRZ | **Quartz Range** | **20.09** | **199** | P | **P** | **12 38 37.5** | **+0.7** |
| KHZ | **Kahutara** | **21.30** | **195** | P | **P** | **12 38 47.6** | **-0.1** |
| ARMA | **Armidale** | **27.52** | **246** | P | **P** | **12 39 43.4** | **+0.3** |
| TOO | **Toolangi** | **34.21** | **235** | P | **P** | **12 40 39.7** | **-0.3** |
| STKA | **Stephens Creek** | **36.24** | **246** | P | **P** | **12 40 56.9** | **-0.1** |
| STKA | **Stephens Creek** | **36.24** | **246** | P | **P** | **12 40 57.0** | **+0.1** |
| | 1.5nm,0.5s,baz=87,slow=12,SNR=4.9 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| BBOO | **Buckleboo** | **40.99** | **245** | P | **P** | **12 41 34.3** | **-0.9** |
| AS31 | **Alice Springs** | **43.20** | **258** | P | **P** | **12 41 52.0** | **-0.8** |
| ASAR | **Alice Springs** | **43.20** | **258** | P | **P** | **12 41 52.1** | **-0.6** |
| | 2.1nm,0.8s,baz=92,slow=8.0,SNR=17 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 43 30.1** | **+1.1** |
| | 0.7nm,0.7s,baz=113,slow=3.3,SNR=6.1 | | | | | | |
| | 2.1nm,0.8s | | | | | | |
| WR0 | **Warramunga Arr** | **43.21** | **264** | P | **P** | **12 41 52.0** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 12 42 02.2 | |
| | comp=Z,6.6nm,1.2s | | | | | | |
| WB0 | **Warramunga Arr** | **43.39** | **264** | P | **P** | **12 41 53.6** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 12 42 14.8 | |
| | comp=Z,13nm,1.5s | | | | | | |
| WB2 | **Warramunga Arr** | **43.39** | **264** | P | **P** | **12 41 53.4** | **-0.8** |
| WRA | **Warramunga Arr** | **43.40** | **264** | P | **P** | **12 41 53.4** | **-0.9** |
| | comp=Z,1.2nm,0.6s,baz=97,slow=7.7,SNR=23 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| FORT | **Forrest** | **47.78** | **248** | P | **P** | **12 42 26.8** | **-0.6** |
| FORT | | | | IAmb | IAmb | 12 42 41.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| FITZ | **Fitzroy Crossi** | **51.83** | **264** | P | **P** | **12 42 57.4** | **+0.1** |
| SBA | **Scott Base** | **56.34** | **184** | P | **P** | **12 43 31.1** | **+3.1** |
| PSA00 | **Pilbara Seismi** | **56.35** | **258** | P | **P** | **12 43 28.7** | **-0.3** |
| MBWA | **Marble Bar** | **56.55** | **259** | P | **P** | **12 43 30.0** | **-0.3** |
| MBWA | | | | IAmb | IAmb | 12 43 31.0 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| MORW | **Morawa** | **58.33** | **249** | P | **P** | **12 43 42.0** | **-0.4** |
| MORW | | | | IAmb | IAmb | 12 44 11.2 | |
| | comp=Z,21nm,1.5s | | | | | | |
| CASY | **Casey** | **62.20** | **206** | P | **P** | **12 44 07.2** | **0.0** |
| CASY | | | | IAmb | IAmb | 12 44 21.9 | |
| | comp=Z,11nm,1.3s | | | | | | |
| QSPA | **South Pole Qui** | **68.10** | **180** | P | **P** | **12 44 46.1** | **+1.8** |
| QSPA | | | | IAmb | IAmb | 12 44 47.1 | |
| | comp=Z,12nm,0.8s | | | | | | |
| QSPA | **South Pole Qui** | **68.10** | **180** | P | **P** | **12 44 45.9** | **+1.6** |
| | comp=Z,11nm,0.7s,baz=59,slow=6.5,SNR=76 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| JKA | **Kamikawa-asahi** | **74.54** | **332** | P | **P** | **12 45 22.6** | **+0.7** |
| JKA | | | | IAmb | IAmb | 12 45 33.5 | |
| | comp=Z,26nm,1.5s | | | | | | |
| SMAI | **San Martin Ant** | **77.61** | **159** | P | **P** | **12 45 40.5** | **+2.1** |
| SMAI | | | | IAmb | IAmb | 12 45 41.7 | |
| | comp=Z,9.6nm,0.8s | | | | | | |
| NVAR | **Mina Array Bea** | **82.79** | **44** | P | **P** | **12 46 09.0** | **+2.9** |
| | comp=Z,0.3nm,0.6s,baz=216,slow=7.3,SNR=3.8 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| TROLL | **Troll, Antarti** | **86.26** | **181** | ⇑P | **P** | **12 46 22.7** | **+0.3** |
| | comp=Z,150nm,0.5s | | | | | | |
| SNAA | **Sanae** | **86.57** | **179** | P | **P** | **12 46 23.7** | **-0.1** |
| SNAA | | | | IAmb | IAmb | 12 46 37.7 | |
| | comp=Z,5.7nm,1.5s | | | | | | |
| SNAA | **Sanae** | **86.57** | **179** | ⇑P | **P** | **12 46 24.0** | **+0.2** |
| | comp=Z,19nm,0.5s | | | | | | |
| SNAA | **Sanae** | **86.57** | **179** | P | **P** | **12 46 24.0** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=192,slow=11,SNR=12 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| VNA3 | **Neumayer Olymp** | **86.75** | **177** | ⇑P | **P** | **12 46 24.9** | **+0.4** |
| | comp=Z,4.9nm,0.8s | | | | | | |
| VNA2 | **Neumayer--Watz** | **87.17** | **177** | ⇑P | **P** | **12 46 27.0** | **+0.4** |
| | comp=Z,3.3nm,0.6s,baz=189,slow=5.3 | | | | | | |
| VNA1 | **Neumayer--Stat** | **87.41** | **177** | ⇑P | **P** | **12 46 27.4** | **-0.2** |
| | comp=Z,4.9nm,1.0s | | | | | | |
| CMAR | **Chiang Mai Arr** | **89.64** | **290** | P | **P** | **12 46 41.0** | **+2.0** |
| | comp=Z,0.6nm,0.3s,baz=128,slow=3.8,SNR=4.5 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| TORD | **Torodi Ar. Bea** | **171.19** | **185** | PKPab | **PKPab** | **12 55 09.5** | **+0.8** |
| | comp=Z,0.8nm,0.7s,baz=168,slow=3.4,SNR=5.7 | | | | | | |

*NOU **27** 12:41:29.7,29°.96S×178°.86E,h631km,mb4.3/37, Kermadec Islands Region*
*IDC **27** 12:41:30.3±1.2,29°.92S×178°.46E,h595km±12km,mb3.2/6, mbtmp4.4/11, Error ellipse: s-maj=18.9km s-min=16.3km az=8.0*
*NEIC **27** 12:41:30.8±2.0,29°.6S±0°.2×178°.6E±0°.2,h629km±16km, mb4.5/21, Error ellipse: s-maj=32.6km s-min=15.4km az=219.0*

**ISC 27 12:41:30.0±0.6, 29°.98S±0°.08×178°.58E±0°.1, h600km, n93, σ1§57/96, mb4.5/17, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | **Raoul Island** | **3.13** | **77** | P | **P** | **12 42 51.8** | **+1.9** |
| RAO | **Raoul Island** | **3.13** | **77** | P | **P** | **12 42 52.2** | **+2.3** |
| RAO | **Raoul Island** | **3.13** | **77** | P | **P** | **12 42 50.9** | **+1.1** |
| | 310nm,0.3s,baz=225,slow=20,SNR=3.1 | | | | | | |
| OUZ | **Omahuta** | **6.71** | **218** | P | **P** | **12 43 19.8** | **+2.6** |
| GRZ | **Great Barrier** | **6.78** | **202** | P | **P** | **12 43 20.1** | **+2.3** |
| KUZ | **Kuaotunu** | **7.16** | **199** | P | **P** | **12 43 23.5** | **+2.3** |
| KUZ | **Kuaotunu** | **7.16** | **199** | P | **P** | **12 43 23.5** | **+2.3** |
| ABAZ | **Army Bay** | **7.31** | **204** | P | **P** | **12 43 25.3** | **+2.7** |
| WIAZ | **Waiheke Island** | **7.38** | **202** | P | **P** | **12 43 25.8** | **+2.5** |
| MBAZ | **Motutapu North** | **7.44** | **204** | P | **P** | **12 43 26.4** | **+2.6** |
| RVAZ | **Riverhead Bore** | **7.55** | **205** | P | **P** | **12 43 27.1** | **+2.3** |
| MXZ | **Matakaoa Point** | **7.56** | **182** | P | **P** | **12 43 24.7** | **-0.3** |
| MXZ | **Matakaoa Point** | **7.56** | **182** | P | **P** | **12 43 24.9** | **-0.1** |
| HBAZ | **Herne Bay Bore** | **7.57** | **204** | P | **P** | **12 43 27.6** | **+2.6** |
| EPAZ | **Eden Park BICE** | **7.59** | **204** | P | **P** | **12 43 27.7** | **+2.5** |
| ETAZ | **East Tamaki Re** | **7.59** | **203** | P | **P** | **12 43 27.9** | **+2.6** |
| WTAZ | **Waiatarua** | **7.70** | **205** | P | **P** | **12 43 28.8** | **+2.5** |
| HAZ | **Te Kaha** | **7.78** | **185** | P | **P** | **12 43 26.8** | **-0.2** |
| AWAZ | **Awhitu Peninsu** | **7.79** | **204** | P | **P** | **12 43 29.4** | **+2.3** |
| RUGZ | **Raukumara Rang** | **8.00** | **185** | P | **P** | **12 43 28.7** | **-0.5** |
| URZ | **Urewera** | **8.35** | **188** | P | **P** | **12 43 31.9** | **-0.5** |
| URZ | **Urewera** | **8.35** | **188** | P | **P** | **12 43 31.3** | **-1.0** |
| | 10nm,0.3s,baz=336,slow=4.2,SNR=22 | | | | | | |
| URZ | | | | S | **S** | **12 45 08.3** | **-4.5** |
| | 12nm,0.5s,baz=319,slow=20,SNR=16 | | | | | | |
| HIZ | **Hauiti** | **9.05** | **199** | P | **P** | **12 43 41.9** | **+2.7** |
| BKZ | **Black Stump Fm** | **9.32** | **190** | P | **P** | **12 43 41.2** | **-0.7** |
| NFK | **Norfolk Island** | **9.32** | **273** | P | **P** | **12 43 45.2** | **+3.1** |
| KHEZ | **Kahui Hut** | **10.02** | **201** | P | **P** | **12 43 50.2** | **+1.4** |
| SNZO | **South Karori** | **11.73** | **195** | P | **P** | **12 44 07.5** | **+1.7** |
| QRZ | **Quartz Range** | **11.89** | **203** | P | **P** | **12 44 08.4** | **+1.0** |
| MSVF | **Nonsavu** | **12.20** | **358** | P | **P** | **12 44 10.8** | **-0.2** |
| MSVF | **Nonsavu** | **12.20** | **358** | P | **P** | **12 44 10.1** | **-0.9** |
| MSVF | **Nonsavu** | **12.20** | **358** | P | **P** | **12 44 09.8** | **-1.2** |
| | 2.5nm,0.4s,baz=235,slow=23,SNR=4.8 | | | | | | |
| KHZ | **Kahutara** | **13.06** | **197** | P | **P** | **12 44 18.5** | **-0.6** |
| YATNC | **Mamie plateau,** | **13.14** | **304** | P | **P** | **12 44 21.8** | **+1.5** |
| DZM | **Mont Dzumac** | **13.45** | **303** | P | **P** | **12 44 24.0** | **+0.4** |
| DZM | **Mont Dzumac** | **13.45** | **303** | P | **P** | **12 44 23.3** | **-0.3** |
| | 12nm,0.6s,baz=152,slow=8.2,SNR=13 | | | | | | |
| NOUC | **Port Laguerre** | **13.54** | **303** | P | **P** | **12 44 24.4** | **+0.1** |
| LIFNC | **LIFOU** | **13.74** | **309** | P | **P** | **12 44 22.5** | **-4.0** |
| RPZ | **Rata Peaks** | **14.96** | **202** | P | **P** | **12 44 38.2** | **+0.6** |
| RPZ | **Rata Peaks** | **14.96** | **202** | P | **P** | **12 44 37.8** | **+0.3** |
| | 26nm,0.5s,baz=8.5,slow=3.2,SNR=18 | | | | | | |
| RPZ | | | | S | **S** | **12 47 10.8** | **+0.1** |
| | 9.0nm,0.8s,baz=107,slow=23,SNR=2.2 | | | | | | |
| DVP | **Devils Point** | **15.46** | **320** | P | **P** | **12 44 43.0** | **+0.6** |
| KOUNC | **Koumac, New Ca** | **15.97** | **303** | P | **P** | **12 44 48.5** | **+1.4** |
| JCZ | **Jackson Bay** | **16.08** | **206** | P | **P** | **12 44 48.9** | **+1.0** |
| ODZ | **Otahua Downs** | **16.29** | **200** | P | **P** | **12 44 50.0** | **+0.3** |
| ARMA | **Armidale** | **23.29** | **262** | P | **P** | **12 45 54.6** | **+1.5** |
| ARMA | **Armidale** | **23.29** | **262** | P | **P** | **12 45 54.7** | **+1.5** |
| MGCD | **Mangrove Creek** | **23.60** | **255** | P | **P** | **12 45 57.1** | **+1.3** |
| EIDS | **Eidsvold** | **24.76** | **274** | P | **P** | **12 46 07.3** | **+1.2** |
| EIDS | **Eidsvold** | **24.76** | **274** | P | **P** | **12 46 06.4** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 12 46 06.8 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| CAN | **Canberra** | **25.42** | **250** | P | **P** | **12 46 13.3** | **+1.4** |
| RK1H | **Rockhampton Ha** | **25.90** | **278** | P | **P** | **12 46 16.5** | **+0.3** |
| CMSA | **Cobar Meteorol** | **28.25** | **258** | P | **P** | **12 46 37.8** | **+1.2** |
| TOO | **Toolangi** | **28.42** | **246** | P | **P** | **12 46 39.5** | **+1.4** |
| TOO | | | | IAmb | IAmb | 12 47 12.5 | |
| | comp=Z,22nm,1.4s | | | | | | |
| QLP | **Quilpie** | **30.37** | **268** | P | **P** | **12 46 54.8** | **-0.2** |
| CTA | **Charters Tower** | **30.81** | **281** | P | **P** | **12 46 59.0** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=99,slow=10,SNR=23 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| CTAO | **Charters Tower** | **30.81** | **281** | P | **P** | **12 46 59.4** | **+0.6** |
| CTAO | **Charters Tower** | **30.81** | **281** | P | **P** | **12 46 58.3** | **-0.5** |
| ARPS | **Mount Arapiles** | **31.29** | **248** | P | **P** | **12 47 02.7** | **+0.1** |
| STKA | **Stephens Creek** | **31.69** | **257** | P | **P** | **12 47 07.0** | **+0.9** |
| STKA | **Stephens Creek** | **31.69** | **257** | P | **P** | **12 47 06.5** | **+0.4** |
| STKA | **Stephens Creek** | **31.69** | **257** | P | **P** | **12 47 06.2** | **+0.1** |
| | comp=Z,5.2nm,0.6s,baz=109,slow=8.9,SNR=13 | | | | | | |
| | comp=Z,5.2nm,0.6s | | | | | | |
| HTT | **Hallett** | **33.78** | **254** | P | **P** | **12 47 24.4** | **+0.7** |
| LCRK | **Leigh Creek** | **34.76** | **259** | P | **P** | **12 47 32.1** | **+0.2** |
| BBOO | **Buckleboo** | **36.23** | **254** | P | **P** | **12 47 43.5** | **-0.6** |
| BBOO | **Buckleboo** | **36.23** | **254** | P | **P** | **12 47 43.4** | **-0.6** |
| BBOO | | | | IAmb | IAmb | 12 47 43.5 | |
| | comp=Z,22nm,1.3s | | | | | | |
| OOD | **Oodnadatta** | **37.47** | **262** | P | **P** | **12 47 54.4** | **+0.3** |
| MULG | **Mulgathing** | **38.32** | **258** | P | **P** | **12 48 00.4** | **-0.6** |
| AS31 | **Alice Springs** | **40.17** | **268** | P | **P** | **12 48 14.9** | **-1.1** |
| ASAR | **Alice Springs** | **40.17** | **268** | P | **P** | **12 48 15.2** | **-0.7** |
| | comp=Z,4.5nm,0.4s,baz=104,slow=7.5,SNR=28 | | | | | | |
| ASAR | | | | ScP | **ScP** | **12 52 58.5** | **+0.7** |
| | comp=Z,0.4nm,0.7s,baz=108,slow=5.0,SNR=2.2 | | | | | | |
| | comp=Z,4.5nm,0.4s | | | | | | |
| WR0 | **Warramunga Arr** | **40.94** | **274** | P | **P** | **12 48 20.3** | **-1.8** |
| WR0 | | | | IAmb | IAmb | 12 48 22.2 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| WB2 | **Warramunga Arr** | **41.11** | **274** | P | **P** | **12 48 21.8** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 12 48 23.5 | |
| | comp=Z,16nm,0.8s | | | | | | |
| WRAB | **Tennant Creek** | **41.12** | **274** | P | **P** | **12 48 21.3** | **-2.1** |
| WRAB | | | | IAmb | IAmb | 12 48 23.4 | |
| | comp=Z,11nm,0.7s | | | | | | |
| WRA | **Warramunga Arr** | **41.12** | **274** | P | **P** | **12 48 22.7** | **-0.8** |
| WRA | **Warramunga Arr** | **41.12** | **274** | P | **P** | **12 48 22.7** | **-0.8** |
| | comp=Z,12nm,0.6s,baz=110,slow=7.7,SNR=34 | | | | | | |
| WRA | | | | ScP | **ScP** | **12 53 01.4** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=101,slow=3.4,SNR=2.7 | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| WB0 | **Warramunga Arr** | **41.14** | **274** | P | **P** | **12 48 22.6** | **-1.1** |
| WB0 | | | | IAmb | IAmb | 12 48 23.6 | |
| | comp=Z,15nm,0.8s | | | | | | |
| FORT | **Forrest** | **43.29** | **256** | P | **P** | **12 48 39.6** | **-0.7** |
| FORT | **Forrest** | **43.29** | **256** | P | **P** | **12 48 39.2** | **-1.1** |
| MTN | **Manton Dam** | **47.00** | **281** | P | **P** | **12 49 05.7** | **-3.0** |
| MTN | | | | IAmb | IAmb | 12 49 08.2 | |
| | comp=Z,13nm,0.7s | | | | | | |
| KNRA | **Kununurra** | **47.72** | **276** | P | **P** | **12 49 11.8** | **-2.2** |
| KNRA | | | | IAmb | IAmb | 12 49 14.1 | |
| | comp=Z,10nm,0.5s | | | | | | |
| MBWA | **Marble Bar** | **53.32** | **265** | P | **P** | **12 49 52.8** | **-1.8** |
| MBWA | | | | IAmb | IAmb | 12 49 54.4 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| MORW | **Morawa** | **53.81** | **254** | P | **P** | **12 49 56.0** | **-1.9** |
| MORW | | | | IAmb | IAmb | 12 50 37.0 | |
| | comp=Z,26nm,1.4s | | | | | | |
| GIRL | **Giralia** | **57.50** | **261** | P | **P** | **12 50 21.2** | **-2.3** |
| QSPA | **South Pole Qui** | **60.12** | **180** | P | **P** | **12 50 42.0** | **+1.5** |
| QSPA | **South Pole Qui** | **60.12** | **180** | P | **P** | **12 50 42.2** | **+1.7** |
| | comp=Z,0.4nm,0.5s,baz=42,slow=12,SNR=6.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| SNAA | **Sanae** | **78.62** | **180** | P | **P** | **12 52 30.9** | **+0.5** |
| NVAR | **Mina Array Bea** | **89.98** | **44** | P | **P** | **12 53 28.1** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=229,slow=8.2,SNR=6.5 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| KURBB | **Kurchatov Arra** | **118.67** | **314** | PKP | **PKPdf** | **12 59 10.1** | **-0.3** |
| | comp=Z,0.6nm,0.2s,baz=112,slow=1.9,SNR=1.4 | | | | | | |
| BVAR | **Borovoye Array** | **124.05** | **316** | PKP | **PKPdf** | **12 59 20.6** | **-0.1** |
| | comp=Z,1.2nm,0.6s,baz=151,slow=3.4,SNR=4.2 | | | | | | |
| FINES | **FINESS Array B** | **143.69** | **338** | PKP | PKPbc | 12 59 55.5 | -0.5 |
| | comp=Z,6.0nm,0.5s,baz=55,slow=3.8,SNR=57 | | | | | | |
| HFS | **Hagfors** | **148.18** | **346** | PKPbc | **PKPbc** | **13 00 08.2** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=54,slow=13,SNR=1.7 | | | | | | |
| MMAI | **Mount Meron Ar** | **148.56** | **285** | PKPbc | **PKiKP** | **13 00 11.5** | **-0.1** |
| | comp=Z,2.8nm,0.6s,baz=117,slow=0.3,SNR=2.0 | | | | | | |
| AKASG | **Malin Array Be** | **149.14** | **321** | PKPbc | **PKPbc** | **13 00 11.6** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=63,slow=1.8,SNR=5.3 | | | | | | |
| BRTR | **Keskin Array B** | **149.80** | **298** | PKPbc | **PKPbc** | **13 00 13.3** | **-0.2** |
| | comp=Z,1.0nm,0.5s,baz=134,slow=3.6,SNR=5.7 | | | | | | |
| TORD | **Torodi Ar. Bea** | **163.00** | **190** | PKPab | **PKPab** | **13 01 19.8** | **+1.0** |
| | comp=Z,0.3nm,0.5s,baz=182,slow=2.9,SNR=2.3 | | | | | | |

*IDC **27** 12:43:16.0±2.2,8°.01S×129°.13E,h0km,mb3.3/1, mbtmp3.5/3, ML3.7/2, Error ellipse: s-maj=105.2km s-min=33.4km az=66.0*

**ISC 27 12:43:21.4±1.1, 8°.17S±0°.08×129°.3E±0°.1, h35km, n11, σ2§28/11, Timor Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNDI | **Bandanaira** | **3.68** | **10** | P | **Pn** | **12 44 16.9** | **+1.2** |
| DRS | **Darwin Rock St** | **4.52** | **160** | P | Pn | 12 44 33.3 | +6.0 |
| MTN | **Manton Dam** | **4.98** | **159** | P | Pn | 12 44 39.4 | +5.7 |
| KDU | **Kakadu** | **5.47** | **145** | P | **Pn** | **12 44 44.3** | **+3.9** |
| FAKI | **Fak Fak** | **5.99** | **30** | P | **Pn** | **12 44 46.8** | **-0.8** |
| WRA | **Warramunga Arr** | **12.68** | **158** | Pn | **Pn** | **12 46 20.5** | **+1.2** |
| | 0.5nm,0.3s,baz=336,slow=14,SNR=34 | | | | | | |
| WRA | | | | Sn | **Sn** | **12 48 36.5** | **-2.9** |
| | 1.7nm,0.3s,baz=334,slow=21,SNR=11 | | | | | | |
| | 0.7nm,0.2s | | | | | | |
| COEN | **Coen** | **14.78** | **114** | P | **Pn** | **12 46 48.2** | **+0.2** |
| ASAR | **Alice Springs** | **16.03** | **165** | Pn | **Pn** | **12 47 05.8** | **+1.5** |
| | 0.2nm,0.3s,baz=336,slow=9.0,SNR=24 | | | | | | |
| ASAR | | | | Sn | **Sn** | **12 49 57.9** | **-3.1** |
| | 0.5nm,0.3s,baz=335,slow=19,SNR=7.0 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| PSA00 | **Pilbara Seismi** | **16.14** | **213** | P | **Pn** | **12 47 05.9** | **+0.2** |
| WRKA | **Warakurna** | **16.80** | **183** | P | Pn | **12 47 15.1** | **+1.1** |
| MKAR | **Makanchi Array** | **68.82** | **327** | P | **P** | **12 54 20.9** | **-1.3** |
| | 0.1nm,0.4s,baz=126,slow=7.3,SNR=2.0 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*THE **27** 12:50:07.7,38°.31N×21°.84E,h7km±1km,ML2.5/5, Error ellipse: s-maj=1.4km s-min=0.4km az=267.0*
*ATH **27** 12:50:08.0,38°.32N×21°.85E,h10km±2km,ML2.3/8, Error ellipse: s-maj=2.9km s-min=0.9km az=319.0*

**ISC 27 12:50:07.5±1.0, 38°.31N±0°.02×21°.83E±0°.03, h8km±6km, n19, σ0§61/33, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| UPR | **University Cam** | **0.04** | **231** | P | **Pg** | **12 50 08.8** | **-0.3** |
| UPR | | | | S | **Sg** | **12 50 10.3** | **0.0** |
| EFP | **Efpalio** | **0.13** | **28** | P | **Pg** | **12 50 10.4** | **0.0** |
| EFP | | | | S | **Sg** | **12 50 12.9** | **+0.5** |
| | 2µm,0.3s | | | | | | |
| EFP | **Efpalio** | **0.13** | **28** | P | **Pg** | **12 50 10.5** | **0.0** |
| EFP | | | | S | **Sg** | **12 50 13.0** | **+0.5** |
| EFP | | | | AML | AML | 12 50 13.5 | |
| | comp=E,10510µm,0.2s | | | | | | |
| EFP | | | | AML | AML | 12 50 14.2 | |
| | comp=N,6322µm,0.5s | | | | | | |
| ANX | **Ano Chora** | **0.29** | **15** | P | **Pg** | **12 50 13.3** | **-0.1** |
| ANX | | | | S | **Sg** | **12 50 18.2** | **+0.9** |
| | comp=N,2µm,0.3s | | | | | | |
| ANX | **Ano Chora** | **0.29** | **15** | P | **Pg** | **12 50 13.4** | **-0.1** |
| ANX | | | | S | **Sg** | **12 50 18.2** | **+0.9** |
| ANX | | | | AML | AML | 12 50 18.6 | |
| | comp=E,4527µm,0.3s | | | | | | |
| ANX | | | | AML | AML | 12 50 20.1 | |
| | comp=N,3955µm,0.3s | | | | | | |
| DRO | **Drossia** | **0.37** | **194** | P | **Pg** | **12 50 14.9** | **+0.2** |
| DRO | | | | S | **Sg** | **12 50 20.6** | **+1.0** |
| | comp=N,788nm,0.2s | | | | | | |
| DRO | **Drossia** | **0.37** | **194** | P | **Pg** | **12 50 15.1** | **+0.4** |
| DRO | | | | S | **Sb** | **12 50 21.5** | **-0.7** |
| DRO | | | | AML | AML | 12 50 22.3 | |
| | comp=E,2309µm,0.3s | | | | | | |
| DRO | | | | AML | AML | 12 50 23.6 | |
| | comp=N,1132µm,0.3s | | | | | | |
| KLV | **Kalavryta, Ach** | **0.37** | **136** | P | **Pg** | **12 50 14.8** | **+0.1** |
| KLV | | | | S | **Sg** | **12 50 20.1** | **+0.5** |
| | comp=N,210nm,0.3s | | | | | | |
| KLV | **Kalavryta, Ach** | **0.37** | **136** | P | **Pg** | **12 50 14.8** | **+0.1** |
| KLV | | | | S | **Sg** | **12 50 20.3** | **+0.7** |
| KLV | | | | AML | AML | 12 50 21.9 | |
| | comp=N,492µm,0.3s | | | | | | |
| KLV | | | | AML | AML | 12 50 21.9 | |
| | comp=E,337µm,0.3s | | | | | | |
| PVO | **Paravola** | **0.39** | **323** | P | **Pg** | **12 50 14.8** | **-0.3** |
| PVO | | | | S | **Sg** | **12 50 21.2** | **+1.0** |
| | comp=E,1µm,0.3s | | | | | | |
| PVO | **Paravola** | **0.39** | **323** | P | **Pg** | **12 50 14.8** | **-0.3** |
| PVO | | | | S | **Sg** | **12 50 21.6** | **+1.4** |
| GUR | **Goura** | **0.55** | **132** | P | **Pg** | **12 50 17.9** | **-0.3** |
| GUR | | | | S | **Sg** | **12 50 25.8** | **+0.4** |
| GUR | **Goura** | **0.55** | **132** | P | **Pg** | **12 50 17.8** | **-0.3** |
| GUR | | | | S | **Sg** | **12 50 26.4** | **+1.0** |
| GUR | | | | AML | AML | 12 50 27.2 | |
| | comp=N,1414µm,0.3s | | | | | | |
| GUR | | | | AML | AML | 12 50 28.2 | |
| | comp=E,972µm,0.3s | | | | | | |
| EVR | **Evrytania** | **0.61** | **359** | P | **Pg** | **12 50 19.9** | **+0.6** |
| EVR | | | | AML | AML | 12 50 34.0 | |
| | comp=E,360µm,0.5s | | | | | | |
| EVR | | | | AML | AML | 12 50 34.5 | |
| | comp=N,315µm,0.4s | | | | | | |
| MAKR | **Makrakomi, Fth** | **0.74** | **19** | P | **Pg** | **12 50 21.4** | **-0.5** |
| MAKR | | | | S | **Sg** | **12 50 32.1** | **+0.6** |
| MAKR | | | | AML | AML | 12 50 35.3 | |
| | comp=N,732µm,0.4s | | | | | | |
| MAKR | | | | AML | AML | 12 50 35.3 | |
| | comp=E,853µm,0.5s | | | | | | |
| AXAR | **Agios Charalam** | **0.80**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BPAT** | **Tungurahua Vol** | **0.90** | **302** | P | **Pg** | **12 50 43.7** | **-0.5** |
| BPAT | | | | S | **Sg** | **12 50 55.6** | **-0.5** |
| **BULB** | **Ulba Tungurahu** | **0.92** | **306** | S | **Sg** | **12 50 56.2** | **-0.4** |
| BULB | | | | P | **Pg** | **12 50 43.8** | **-0.7** |
| **TUYU** | **Q. Yuibug Volc** | **0.95** | **302** | P | **Pg** | **12 50 44.3** | **-0.8** |
| TUYU | | | | S | **Sg** | **12 50 56.6** | **-0.9** |
| **JUI6** | **Juive** | **0.98** | **305** | P | **Pg** | **12 50 44.5** | **-1.1** |
| **BBIL** | **Ulba Tungurahu** | **0.98** | **303** | P | **Pg** | **12 50 44.7** | **-0.9** |
| BBIL | | | | S | **Sg** | **12 50 57.6** | **-0.9** |
| **BIL2** | **Estacion Bilba** | **0.99** | **302** | P | **Pg** | **12 50 45.2** | **-0.6** |
| **ARDO** | **Archidona, Ten** | **0.99** | **352** | S | **Sg** | **12 50 59.1** | **+0.2** |
| ARDO | | | | P | **Pg** | **12 50 45.5** | **-0.5** |
| **IGUA** | **Igualata** | **1.09** | **297** | P | **Pg** | **12 50 47.4** | **-0.4** |
| **PIAT** | **Ana Tenorio** | **1.15** | **329** | P | **Pg** | **12 50 47.8** | **-1.1** |
| PIAT | | | | S | **Sg** | **12 51 03.1** | **-0.8** |
| **PIAT** | **Ana Tenorio** | **1.15** | **329** | P | **Pg** | **12 50 48.0** | **-0.8** |
| **APSY** | **Ecuador-Napo A** | **1.17** | **329** | P | **Pg** | **12 50 48.0** | **-1.2** |
| **TAMH** | **Tambohuasha Ch** | **1.20** | **292** | P | **Pg** | **12 50 49.1** | **-0.7** |
| **PORT** | **Chimborazo Vol** | **1.22** | **295** | P | **Pg** | **12 50 49.5** | **-0.8** |
| **CHSH** | **Refugio Sur-Vo** | **1.30** | **292** | P | **Pn** | **12 50 50.1** | **-1.3** |
| **JSCH** | **Cashca Tororas** | **1.34** | **282** | P | **Pn** | **12 50 51.0** | **-0.8** |
| **AZOG** | **Ecuador-Azogue** | **1.40** | **237** | P | **Pn** | **12 50 51.7** | **-1.0** |
| **BOSC** | **San Juan Bosco** | **1.42** | **216** | P | **Pn** | **12 50 52.0** | **-0.8** |
| **TAMB** | **Tambo** | **1.46** | **331** | P | **Pn** | **12 50 53.4** | **-0.3** |
| **BMOR** | **Cotopaxi Volca** | **1.48** | **328** | P | **Pn** | **12 50 53.9** | **-0.1** |
| **BTAM** | **Cotopaxi Volca** | **1.49** | **331** | P | **Pn** | **12 50 54.0** | **-0.1** |
| **SLOR** | **San Lorenzo -** | **1.50** | **326** | P | **Pn** | **12 50 54.1** | **0.0** |
| **BVC2** | **Cotopaxi Volca** | **1.52** | **331** | P | **Pn** | **12 50 54.7** | **+0.2** |
| **BREF** | **Cotopaxi Volca** | **1.52** | **329** | P | **Pn** | **12 50 54.9** | **+0.3** |
| **VC1** | **Cotopaxi 1** | **1.52** | **331** | P | **Pn** | **12 50 54.8** | **+0.2** |
| **BNAS** | **Cotopaxi Volca** | **1.54** | **328** | P | **Pg** | **12 50 56.0** | **-0.4** |
| **ANTM** | **Antisana-La Mi** | **1.54** | **339** | P | **Pb** | **12 50 55.8** | **0.0** |
| **CAMI** | **Rancho Maria** | **1.55** | **327** | P | **Pn** | **12 50 55.2** | **+0.4** |
| **ANTS** | **Antisana-Sarah** | **1.56** | **341** | P | **Pb** | **12 50 56.1** | **0.0** |
| **ANTG** | **Antisana-Guama** | **1.59** | **338** | P | **Pb** | **12 50 56.2** | **-0.3** |
| **ANTI** | **Antisana** | **1.60** | **342** | P | **Pn** | **12 50 55.5** | **-0.2** |
| **PAST** | **Pastocalle** | **1.61** | **323** | P | **Pb** | **12 50 56.5** | **-0.4** |
| **PITA** | **Cotopaxi Volc** | **1.61** | **332** | P | **Pb** | **12 50 56.9** | **0.0** |
| **ILLI** | **Illinizas Sur** | **1.65** | **320** | P | **Pn** | **12 50 56.6** | **+0.3** |
| **REVS** | **Reventador Sur** | **1.87** | **1** | P | **Pn** | **12 50 59.5** | **+0.5** |
| **LAV4** | **Lava4-Reventad** | **1.88** | **1** | P | **Pn** | **12 50 60.0** | **+0.7** |
| **REVN** | **San Rafael** | **1.90** | **1** | P | **Pn** | **12 51 00.6** | **+1.1** |
| **MILO** | **Milagro-Astudi** | **1.91** | **261** | P | **Pb** | **12 51 01.1** | **-0.6** |
| **JUA2** | **San Juan 2** | **2.00** | **332** | P | **Pb** | **12 51 03.4** | **-0.1** |
| **TERV** | **Terraza Guagua** | **2.03** | **332** | P | **Pb** | **12 51 03.8** | **-0.3** |
| **PINO** | **Pino** | **2.04** | **333** | P | **Pb** | **12 51 04.0** | **-0.4** |
| **ANGU** | **Angureal** | **2.05** | **350** | P | **Pb** | **12 51 03.6** | **-0.9** |
| **YANA** | **Yana** | **2.06** | **334** | P | **Pb** | **12 51 04.2** | **-0.4** |
| **PULU** | **Pululahua** | **2.16** | **337** | P | **Pb** | **12 51 06.0** | **-0.3** |
| **PCRA** | **Pucara 2** | **2.20** | **236** | P | **Pb** | **12 51 06.3** | **-0.5** |
| **IMBA** | **Imbabura, San** | **2.31** | **347** | P | **Pb** | **12 51 10.0** | **+1.3** |
| **OTAV** | **Otavalo** | **2.34** | **340** | P | **Pb** | **12 51 10.3** | **+0.9** |
| OTAV | | | | S | **Sg** | **12 51 42.3** | **+0.1** |
| **OTAV** | **Otavalo** | **2.34** | **340** | P | **Pb** | **12 51 08.7** | **-0.7** |
| **YAHU** | **Yahuarcocha** | **2.38** | **350** | P | **Pb** | **12 51 09.7** | **-0.2** |
| **CUIC** | **Cuicocha-Domo** | **2.38** | **343** | P | **Pb** | **12 51 09.8** | **-0.2** |
| **URCU** | **Urcuqui** | **2.48** | **346** | P | **Pb** | **12 51 12.2** | **+0.5** |
| **PAC1** | **Pacto, Paraso** | **2.50** | **333** | P | **Pg** | **12 51 13.4** | **-1.4** |
| PAC1 | | | | S | **Sg** | **12 51 47.0** | **-0.3** |
| **PAC1** | **Pacto, Paraso** | **2.50** | **333** | P | **Pb** | **12 51 11.0** | **-0.9** |
| **PECV** | **Mancha de Ca P** | **2.67** | **297** | P | **Pg** | **12 51 17.8** | **-0.1** |
| **FLF1** | **Flavio Alfaro-** | **2.71** | **307** | P | **Pb** | **12 51 15.2** | **-0.1** |
| **LNGL** | **El Angel-Carch** | **2.73** | **353** | P | **Pg** | **12 51 17.8** | **-1.3** |
| **CHL2** | **Volc¡n Chiles** | **2.78** | **355** | P | **Pb** | **12 51 18.8** | **+1.9** |
| **ARNL** | **Arenillas** | **2.85** | **237** | P | **Pn** | **12 51 14.0** | **+1.6** |
| **PPLP** | **Puerto Lpez** | **3.14** | **278** | P | **Pn** | **12 51 18.6** | **+2.3** |
| **ZUMB** | **Zumba** | **3.21** | **207** | P | **Pn** | **12 51 15.4** | **+1.0** |
| **MCRA** | **Macar, Loja** | **3.29** | **224** | P | **Pn** | **12 51 19.4** | **+0.9** |
| MCRA | | | | S | **Sb** | **12 52 06.3** | **+0.9** |
| **MCRA** | **Macar, Loja** | **3.29** | **224** | P | **Pn** | **12 51 19.3** | **+0.9** |
| **PTLC** | **Puerto Leguiza** | **3.58** | **53** | P | **Pn** | **12 51 20.0** | **-2.4** |
| **PTLC** | **Puerto Leguiza** | **3.58** | **53** | P | **Pn** | **12 51 19.8** | **-2.6** |
| **CRUC** | **La Cruz** | **3.60** | **11** | P | **Pb** | **12 51 30.2** | **-0.6** |
| CRUC | | | | S | **Sb** | **12 52 19.1** | **+4.4** |
| **BBAC** | **Balboa, Cauca** | **4.00** | **6** | P | **Pg** | **12 51 43.7** | **+0.2** |
| BBAC | | | | S | **Sg** | **12 52 32.1** | **-3.4** |
| **FLOC** | **Florencia** | **4.08** | **30** | P | **Pn** | **12 51 28.8** | **-0.4** |
| **FLOC** | **Florencia** | **4.08** | **30** | P | **Pn** | **12 51 28.8** | **-0.4** |
| **POPC** | **Popayan, Colom** | **4.61** | **12** | P | **Pb** | **12 51 46.6** | **-1.2** |
| **GARC** | **Garzon, Huila** | **4.68** | **28** | P | **Pn** | **12 51 37.6** | **-0.1** |
| **MACC** | **Macarena, Meta** 109nm,0.6s,11µm | **5.61** | **43** | P | **Pn** | **12 51 51.5** | **+1.2** |
| **PRAC** | **Prado** 15nm,0.6s | **6.31** | **26** | P | **Pn** | **12 52 01.2** | **+1.3** |
| **ORTC** | **Ortega, Tolima** | **6.34** | **22** | P | **Pn** | **12 52 04.3** | **+4.0** |

*IDC **27** 13:11:59.8±1.9, 40˚.27N×142˚.29E, h45km±17km, mb3.4/9, mbtmp3.7/13, ML3.2/3, MS2.9/3, Error ellipse: s-maj=27.1km s-min=13.0km az=99.0*
*NIED **27** 13:12:00.3, 40˚.22N×142˚.30E, h39km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$1.67; $M_{\theta\theta}$0.25; $M_{\phi\phi}$-1.93; $M_{r\theta}$2.82; $M_{\theta\phi}$0.10; $M_{r\phi}$3.80; Fault plane solution: $M_0$5.05000×$10^{14}$ NP1:φs33.00000°, δ81.00000°, λ102.00000°. NP2:φs157.00000°, δ15.00000°, λ35.00000°.*
*JMA **27** 13:12:00.3±0.1, 40˚.2N±0˚.2×142˚.3E±0˚.6, h39km, MV3.9/40, NE OFF IWATE PREF*
*JMA Felt I J1 at NE OFF IWATE PREF .*

**ISC 27 13:11:59.1**±1.5, **40˚20N**±0˚.04×**142˚41E**±0˚.09, **h43**km±13km, **n33**,σ1**s29**/37, **mb3.6**/9, **15D**, **Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JTH** | **Tanohata** | **0.50** | **238** | ⇓*i*P | | **Pn** | **13 12 10.2** | **+0.4** |
| JTH | | | | ⇓S | | **Sn** | **13 12 17.4** | **-0.1** |
| **JKEN** | **Kujiedanarisaw** | **0.54** | **271** | ⇓*i*P | | **Pn** | **13 12 10.1** | **-0.3** |
| JKEN | | | | ⇓S | | **Sn** | **13 12 17.1** | **-1.4** |
| **JANG** | **Nango** | **0.71** | **284** | ⇓P | | **Pn** | **13 12 12.5** | **-0.2** |
| JANG | | | | ⇓S | | **Sn** | **13 12 21.3** | **-1.1** |
| **MIYJ** | **Miyakonagasawa** | **0.77** | **216** | *i* P | | **Pn** | **13 12 14.3** | **+0.7** |
| MIYJ | | | | S | | **Sn** | **13 12 24.2** | **+0.2** |
| **JKZ** | **Kuzumaki** | **0.86** | **256** | ⇓*i*P | | **Pn** | **13 12 15.2** | **+0.4** |
| JKZ | | | | ⇓S | | **Sn** | **13 12 25.6** | **-0.6** |
| **JOM** | **Ohasama** | **1.13** | **230** | ⇓*i*P | | **Pn** | **13 12 19.4** | **+1.0** |
| JOM | | | | ⇓S | | **Sn** | **13 12 33.3** | **+0.6** |
| **JARK** | **Aomorirokkasho** | **1.13** | **316** | ⇓*i*P | | **Pn** | **13 12 18.8** | **+0.4** |
| JARK | | | | ⇓S | | **Sn** | **13 12 32.5** | **-0.3** |
| **JTM** | **Tenmabayashi** | **1.18** | **300** | ⇓*i*P | | **Pn** | **13 12 19.4** | **+0.3** |
| JTM | | | | ⇓S | | **Sn** | **13 12 33.4** | **-0.5** |
| **JAH** | **Hinai** | **1.36** | **270** | ⇓*i*P | | **Pn** | **13 12 22.2** | **+0.6** |
| **JMK** | **Ichinoseki** | **1.55** | **217** | *i* P | | **Pn** | **13 12 25.7** | **+1.5** |
| **JOT** | **Ohata** | **1.57** | **319** | *i* P | | **Pn** | **13 12 25.1** | **+0.7** |
| JOT | | | | S | | **Sn** | **13 12 44.0** | **+0.5** |
| **JRG** | **Rokugo** | **1.59** | **240** | *i* P | | **Pn** | **13 12 26.1** | **+1.4** |
| **ASAJ** | **Asahikawa** 1.5nm,0.3s,baz=220,slow=8.8,SNR=16 | **3.91** | **2** | P | | **Pn** | **13 12 58.4** | **+1.8** |
| ASAJ | 12nm,0.6s,baz=212,slow=21,SNR=4.3 7.1nm,0.4s | | | S | | **Sn** | **13 13 40.0** | **-1.3** |
| **MJAR** | **Matsushiro Arr** 0.2nm,0.3s,baz=31,slow=13,SNR=6.3 3.0nm,0.5s | **4.93** | **223** | P | | **Pn** | **13 13 12.9** | **+2.3** |
| **JHJ** | **Hachijo jima 2** 3.1nm,0.3s,baz=324,slow=24,SNR=8.3 | **7.38** | **197** | P | | **Pn** | **13 13 44.6** | **+0.4** |
| JHJ | 65nm,0.8s,baz=73,slow=20,SNR=2.1 47nm,0.8s | | | S | | **Sn** | **13 15 02.6** | **-4.0** |
| **USRK** | **Ussuriysk Ar.** 5.1nm,0.7s,baz=98,slow=14,SNR=9.4 | **8.71** | **301** | P | | **Pn** | **13 14 05.4** | **+3.0** |
| USRK | comp=Z,64nm,19.5s,baz=358,slow=33 | | | LR | | LR | 13 16 45.8 | |
| **KSRS** | **Korea Array** 0.4nm,0.5s,baz=69,slow=14,SNR=2.0 | **11.63** | **261** | P | | **Pn** | **13 14 42.0** | **-0.4** |
| KSRS | comp=Z,31nm,20.2s,baz=15,slow=35 | | | LR | | LR | 13 18 47.9 | |
| **SONM** | **Songino Array** 0.6nm,0.7s,baz=101,slow=9.0,SNR=3.6 0.6nm,0.7s | **26.81** | **299** | P | | **P** | **13 17 33.3** | **-2.0** |
| **H11N2** | **WAKE ISLAND Hy** baz=319,slow=76,SNR=139 | **29.26** | **127** | T | | T | 13 48 54.2 | |
| **H11N1** | **WAKE ISLAND Hy** baz=319,slow=76,SNR=132 | **29.27** | **127** | T | | T | 13 48 43.9 | |
| **H11N3** | **WAKE ISLAND Hy** baz=319,slow=76,SNR=131 | **29.28** | **127** | T | | T | 13 48 51.9 | |
| **H11S1** | **WAKE ISLAND Hy** baz=321,slow=76,SNR=36 | **30.08** | **129** | T | | T | 13 49 57.5 | |
| **H11S3** | **WAKE ISLAND Hy** baz=321,slow=76,SNR=34 | **30.08** | **129** | T | | T | 13 49 57.7 | |
| **H11S2** | **WAKE ISLAND Hy** | **30.10** | **129** | T | | T | 13 49 58.9 | |
| | baz=321,slow=76,SNR=28 | | | | | | | |
| **ZALV** | **Zalesovo Beam** 1.2nm,0.6s,baz=81,slow=9.2,SNR=5.5 1.2nm,0.6s | **40.43** | **310** | P | | **P** | **13 19 32.1** | **-0.8** |
| **MKAR** | **Makanchi Array** 0.4nm,0.5s,baz=87,slow=9.1,SNR=4.3 0.4nm,0.5s | **43.17** | **299** | P | | **P** | **13 19 54.6** | **-0.9** |
| **KURBB** | **Kurchatov Arra** 1.5nm,0.5s,baz=80,slow=8.6,SNR=12 1.5nm,0.5s | **44.73** | **306** | P | | **P** | **13 20 07.8** | **-0.1** |
| **ILAR** | **Eielson Array** 0.2nm,0.8s,baz=269,slow=7.9,SNR=2.7 0.2nm,0.8s | **46.42** | **34** | P | | **P** | **13 20 22.0** | **+0.9** |
| **BVAR** | **Borovoye Array** 0.9nm,0.4s,baz=58,slow=8.6,SNR=5.8 0.9nm,0.4s | **49.07** | **310** | P | | **P** | **13 20 41.8** | **+0.1** |
| **DLBC** | **Dease Lake** comp=Z,18nm,20.3s,baz=178,slow=36 | **55.67** | **40** | LR | | LR | 13 45 32.2 | |
| **WRA** | **Warramunga Arr** 0.3nm,0.7s,baz=5.7,slow=6.9,SNR=2.8 0.3nm,0.7s | **60.30** | **189** | P | | **P** | **13 22 03.0** | **-0.3** |
| **ASAR** | **Alice Springs** 0.2nm,0.7s,baz=359,slow=7.0,SNR=2.4 0.2nm,0.7s | **64.03** | **189** | P | | **P** | **13 22 28.9** | **+0.5** |
| **FINES** | **FINESS Array B** 2.9nm,1.0s,baz=44,slow=10,SNR=2.9 2.9nm,1.0s | **66.38** | **332** | P | | **P** | **13 22 43.8** | **+0.6** |

*SOME **27** 13:22:05.8, 40˚.95N×69˚.88E, h0km*
*ISU **27** 13:22:07.2, 41˚.03N×69˚.63E, h5km*
*KRNET **27** 13:22:08.6±0.1, 41˚.04N×69˚.83E, h21km, mb3.0*

**ISC 27 13:22:07.3**±0.8, **41˚04N**±0˚.02×**69˚70E**±0˚.02, **h10**km, **n28**, σ1**s99**/56, **19C-4D**, **Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KUMR** | **Kumaryk** | **0.39** | **301** | P | | **Pg** | **13 22 14.5** | **-0.5** |
| KUMR | | | | S | | **Sg** | **13 22 19.9** | **-0.3** |
| **TGS** | **TashGRES** | **0.41** | **341** | P | | **Pb** | **13 22 16.0** | **-0.7** |
| TGS | | | | S | | **Sb** | **13 22 22.5** | **-0.5** |
| **TAS** | **Tashkent** | **0.42** | **313** | P | | **Pg** | **13 22 15.5** | **-0.1** |
| TAS | | | | S | | **Sg** | **13 22 21.7** | **+0.5** |
| **CHMG** | **Chimgan** | **0.56** | **24** | P | | **Pb** | **13 22 19.7** | **+0.3** |
| CHMG | | | | S | | **Sn** | **13 22 29.0** | **-2.0** |
| **CHDK** | **Chadak** | **0.80** | **94** | P | | **Pn** | **13 22 24.2** | **-0.5** |
| CHDK | | | | S | | **Sn** | **13 22 36.9** | **+0.2** |
| **TRKS** | **Terek-Say** baz=67 | **1.19** | **65** | ⇑*e*P | | **Pb** | **13 22 29.0** | **-1.1** |
| TRKS | baz=67 | | | ⇑*e*S | | **Sb** | **13 22 43.7** | **-1.9** |
| **CHM** | **Chimkent** 64nm,0.1s | **1.28** | **357** | *e*P | | **Pg** | **13 22 33.1** | **+1.1** |
| CHM | 191nm,0.2s | | | *e*S | | **Sg** | **13 22 52.7** | **+4.1** |
| **BTK** | **Batken** baz=42 | **1.30** | **139** | ⇑*e*P | | **Pg** | **13 22 31.6** | **-0.6** |
| BTK | baz=42 | | | ⇑*i*S | | **Sg** | **13 22 48.1** | **-1.0** |
| **KSNS** | **Kasansay** | **1.38** | **84** | P | | **Pg** | **13 22 34.8** | **+1.0** |
| KSNS | | | | S | | **Sg** | **13 22 55.3** | **+3.5** |
| **FRG** | **Fergana** | **1.72** | **112** | P | | **Pg** | **13 22 40.8** | **+0.6** |
| FRG | | | | S | | **Sg** | **13 23 05.4** | **+2.9** |
| **KRSA** | **Karasay** | **1.75** | **239** | P | | **Pg** | **13 22 40.2** | **-0.7** |
| KRSA | | | | S | | **Sg** | **13 23 04.5** | **+0.8** |
| **ARK** | **Arkit** baz=64 | **1.86** | **65** | ⇑*i*P | | **Pb** | **13 22 40.8** | **-0.7** |
| ARK | baz=64 | | | ⇑*e*S | | **Sb** | **13 23 04.2** | **-0.7** |
| **BRLS** | **Borolday** 26nm,0.3s | **1.99** | **3** | *e*P | | **Pn** | **13 22 40.8** | **-0.4** |
| BRLS | 116nm,0.4s | | | *e*S | | **Sn** | **13 23 05.8** | **-0.3** |
| **GAR** | **Garm** baz=69 | **2.09** | **167** | ⇑*e*P | | **Pb** | **13 22 44.9** | **-0.5** |
| GAR | baz=69 | | | ⇑*i*S | | **Sb** | **13 23 11.5** | **+0.1** |
| **KK31** | **Karatay Array** 4.8nm,0.3s,baz=203,slow=15,SNR=86 | **2.15** | **16** | P | | **Pb** | **13 22 46.9** | **+0.5** |
| KK31 | 20nm,0.3s,baz=199,slow=28,SNR=22 | | | ⇑S | | **Sg** | **13 23 17.0** | **+0.5** |
| **KKAR** | **Karatay Array** baz=14 | **2.15** | **16** | ⇑*e*P | | **Pb** | **13 22 45.6** | **-0.8** |
| KKAR | baz=14 | | | ⇑*i*S | | **Sb** | **13 23 12.4** | **-0.7** |
| **OHH** | **Osh** baz=2.0 | **2.40** | **101** | ⇓*e*P | | **Pb** | **13 22 48.2** | **-2.4** |
| OHH | baz=2.0 | | | ⇓*e*S | | **Sn** | **13 23 17.1** | **+0.9** |
| **CHGR** | **Chuyangaron** baz=92 | **2.41** | **190** | ⇓*i*P | | **Pb** | **13 22 50.1** | **-0.8** |
| CHGR | baz=92 | | | ⇓*e*S | | **Sb** | **13 23 20.2** | **-0.5** |
| **MNAS** | **Manas** baz=53 | **2.55** | **54** | ⇑*e*P | | **Pn** | **13 22 50.5** | **+1.6** |
| MNAS | baz=53 | | | ⇑*i*S | | **Sn** | **13 23 21.0** | **+1.0** |
| **SFK** | **Sufi-Kurgan** baz=9.0 | **3.07** | **108** | ⇑*i*P | | **Pn** | **13 22 57.7** | **+1.5** |
| SFK | 7.7nm,0.5s | | | ⇑*i*S | | **Sn** | **13 23 33.3** | **+0.2** |
| **MRKS** | **Merke** 14nm,0.5s | **3.14** | **56** | *e*P | | **Pb** | **13 23 03.8** | **+0.6** |
| MRKS | | | | *e*S | | **Sg** | **13 23 45.8** | **-2.2** |
| **AML** | **Almayashu** baz=68 | **3.19** | **69** | ⇑*e*P | | **Pn** | **13 22 59.4** | **+1.5** |
| AML | baz=68 | | | ⇑*e*S | | **Sn** | **13 23 36.4** | **+0.2** |
| **AAK** | **Ala-Archa** 2.8nm,0.4s | **3.92** | **64** | ⇑Pn | | **Pb** | **13 23 17.9** | **+1.3** |
| AAK | 6.1nm,0.5s | | | ⇑Sn | | **Sb** | **13 24 07.7** | **+3.4** |
| **DGS** | **Degeres** 5.2nm,0.6s | **5.02** | **62** | *e*P | | **Pb** | **13 23 37.9** | **+2.5** |
| DGS | 12nm,0.4s | | | *e*S | | **Sg** | **13 24 44.5** | **-4.1** |
| **KST** | **Kastek** 2.8nm,0.6s | **5.08** | **65** | *e*P | | **Pb** | **13 23 39.0** | **+2.7** |
| KST | 5.2nm,0.4s | | | *e*S | | **Sg** | **13 24 46.2** | **-4.1** |
| **BTLS** | **Baital** 2.3nm,0.3s | **5.11** | **37** | *e*P | | **Pg** | **13 23 41.5** | **-3.8** |
| BTLS | 9.2nm,0.4s | | | *e*S | | **Sg** | **13 24 50.9** | **-0.6** |
| **KRBS** | **Karabastau** 2.5nm,0.5s | **5.16** | **57** | *e*P | | **Pb** | **13 23 40.7** | **+3.0** |
| KRBS | 4.9nm,0.4s | | | *e*S | | **Sg** | **13 24 49.2** | **-3.8** |
| **KTBS** | **Karatobe** 2.3nm,0.4s | **5.82** | **60** | *e*P | | **Pb** | **13 23 52.7** | **+3.8** |
| KTBS | 4.2nm,0.7s | | | *e*S | | **Sg** | **13 25 09.6** | **-4.5** |

*TRN **27** 13:24:31.8, 10˚.59N×62˚.76W, h109km, MD2.8, Paria peninsula.*
*FUNV **27** 13:24:35.0, 10˚.47N×62˚.76W, h27km, MW3.5*

**ISC 27 13:24:30.3**±1.7, **10˚54N**±0˚.07×**62˚76W**±0˚.05, **h124**km±18km, **n9**, σ1**s81**/16, **Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TCE** | **Chacachacare** | **1.00** | **81** | *e*P | | **Pn** | **13 24 53.9** | **+1.2** |
| TCE | | | | *e*S | | **Sn** | **13 25 08.8** | **-0.9** |
| **TRN** | **Trinidad (W)** | **1.34** | **85** | *e*P | | **Pn** | **13 24 56.6** | **+0.5** |
| TRN | | | | *e*S | | **Sn** | **13 25 14.6** | **-1.2** |
| **PCRV** | **Puerto La Cruz** | **1.88** | **259** | *e*P | | **Pn** | **13 25 04.2** | **+1.7** |
| PCRV | | | | *e*S | | **Sn** | **13 25 26.5** | **-0.6** |
| **PCRV** | **Puerto La Cruz** | **1.88** | **259** | *e*P | | **Pn** | **13 25 03.0** | **+0.5** |
| PCRV | | | | *e*S | | **Sn** | **13 25 26.9** | **-0.2** |
| **GCMP** | **Grenada, Carri** | **2.34** | **34** | *e*P | | **Pn** | **13 25 09.1** | **+0.9** |
| GCMP | | | | *e*S | | **Sn** | **13 25 35.4** | **-1.9** |
| **MERV** | **Las Mercedes** | **3.71** | **250** | *e*S | | **Sn** | **13 26 08.8** | **-0.5** |
| **CACV** | **CAICARA DEL OR** | **4.76** | **232** | *e*P | | **Pn** | **13 25 37.9** | **-2.2** |
| CACV | | | | *e*S | | Sn | 13 26 25.0 | -9.3 |
| **LUEV** | **Luepa** | **4.84** | **164** | *e*P | | **Pn** | **13 25 44.0** | **+2.7** |
| LUEV | | | | *e*S | | **Sn** | **13 26 34.3** | **-2.2** |
| **BAUV** | **El Baul** | **5.44** | **254** | *e*P | | **Pn** | **13 25 51.6** | **+2.4** |
| BAUV | | | | *e*S | | **Sn** | **13 26 48.7** | **-2.0** |

*CATAC **27** 13:39:02.8±0.3, 13˚.53N×88˚.49W, h5km±2km, ML3.3*
*SNET **27** 13:39:02.7±1.7, 13˚.54N×88˚.50W, h2km±3km, ML3.5*

**ISC 27 13:39:02.8**±0.8, **13˚58N**±0˚.04×**88˚47W**±0˚.02, **h14**km±3km, **n34**, σ0**s96**/58, **El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **TECA** | **Tecapa** | **0.09** | **199** | *i* P | | **Pg** | **13 39 04.0** | **-2.0** |
| **PQSS** | **Presa 15 de Se** | **0.10** | **296** | *e*P | | **Pb** | **13 39 05.4** | **-0.4** |
| PQSS | | | | *e*S | | **Sg** | **13 39 08.2** | **+0.3** |
| **PQSS** | **Presa 15 de Se** | **0.10** | **296** | *e*P | | **Pb** | **13 39 05.4** | **-0.4** |
| **PQSS** | **Presa 15 de Se** | **0.10** | **296** | *i* P | | **Pb** | **13 39 05.4** | **-0.4** |
| PQSS | comp=Z,15µm,1.0s | | | IAML | | | 13 39 06.2 | |
| PQSS | | | | *i* S | | **Sg** | **13 39 08.0** | **+0.1** |
| **PACA** | **Pacayal** | **0.18** | **128** | *e*P | | **Pg** | **13 39 07.5** | **+0.4** |
| PACA | | | | *e*S | | **Sg** | **13 39 10.7** | **+0.6** |
| **PACA** | **Pacayal** | **0.18** | **128** | *e*P | | **Pg** | **13 39 07.8** | **+0.7** |
| PACA | | | | *e*S | | **Sg** | **13 39 10.5** | **+0.4** |
| PACA | comp=Z,32µm,0.5s | | | IAML | | | 13 39 19.9 | |
| **PACA** | **Pacayal** | **0.18** | **128** | *i* P | | **Pb** | **13 39 07.0** | **-1.0** |
| PACA | | | | *i* S | | **Sb** | **13 39 09.4** | **-2.1** |
| PACA | comp=Z,33µm,1.0s | | | IAML | | | 13 39 42.2 | |
| **RANC** | **El Ranchito** | **0.23** | **130** | *i* P | | **Pg** | **13 39 08.2** | **+0.3** |
| RANC | | | | *i* S | | **Sb** | **13 39 11.1** | **-1.8** |
| RANC | comp=Z,4µm,1.0s | | | IAML | | | 13 39 42.0 | |
| **LCY** | **Lacayo** | **0.23** | **132** | *e*P | | **Pg** | **13 39 08.1** | **+0.2** |
| **ALJI** | **Alcalda de J** | **0.27** | **201** | *e*P | | **Pg** | **13 39 10.5** | **+2.0** |
| ALJI | | | | *e* | | **Sg** | **13 39 15.1** | **+2.8** |
| ALJI | | | | *e*S | | **Sg** | **13 39 15.1** | **+2.8** |
| ALJI | comp=Z,4µm,0.6s | | | IAML | | | 13 39 18.6 | |
| **SCLA** | **Alcaldia de Sa** | **0.28** | **296** | *e*P | | **Pg** | **13 39 08.9** | **+0.3** |
| SCLA | | | | *e*S | | **Sg** | **13 39 14.0** | **+1.4** |
| **SCLA** | **Alcaldia de Sa** | **0.28** | **296** | *i* P | | **Pg** | **13 39 09.0** | **+0.3** |
| SCLA | | | | *e*S | | **Sg** | **13 39 14.0** | **+1.4** |
| **SCLA** | **Alcaldia de Sa** | **0.28** | **296** | *i* P | | **Pg** | **13 39 08.7** | **0.0** |
| SCLA | | | | *i* S | | **Sg** | **13 39 13.8** | **+1.2** |
| SCLA | comp=Z,2µm,1.0s | | | IAML | | | 13 39 20.4 | |
| **TECO** | **Alcaldia de Te** | **0.30** | **262** | *i* P | | **Pg** | **13 39 08.7** | **-0.4** |
| TECO | | | | *i* S | | **Sg** | **13 39 12.9** | **-0.5** |
| TECO | comp=Z,3µm,1.0s | | | IAML | | | 13 39 16.1 | |
| **UESV** | **Universidad de** | **0.31** | **280** | *i* P | | **Pg** | **13 39 09.4** | **+0.1** |
| UESV | | | | *i* S | | **Sg** | **13 39 14.5** | **+0.9** |
| UESV | comp=Z,10µm,1.0s | | | IAML | | | 13 39 17.9 | |
| **CAHU** | **Cacacuatique** | **0.32** | **53** | *e*P | | **Pg** | **13 39 10.7** | **+1.3** |
| **COEG** | **Centro de Oper** | **0.40** | **276** | *e*P | | **Pg** | **13 39 10.8** | **-0.1** |
| COEG | | | | *e*S | | **Sg** | **13 39 16.7** | **+0.4** |
| COEG | comp=Z,4µm,0.5s | | | IAML | | | 13 39 19.7 | |
| **COEG** | **Centro de Oper** | **0.40** | **276** | *i* P | | **Pg** | **13 39 10.8** | **-0.1** |
| COEG | | | | *i* S | | **Sg** | **13 39 16.6** | **+0.3** |
| COEG | comp=Z,3µm,1.0s | | | IAML | | | 13 39 20.0 | |
| **PAVA** | **Las Pavas** | **0.47** | **286** | *e*P | | **Pg** | **13 39 12.3** | **+0.2** |
| PAVA | | | | *e*S | | **Sb** | **13 39 19.7** | **-0.2** |
| **PAVA** | **Las Pavas** | **0.47** | **286** | *e*P | | **Pg** | **13 39 12.4** | **+0.2** |
| **INTP** | **Intipuca** | **0.56** | **133** | *e*P | | **Pb** | **13 39 13.8** | **-0.6** |
| INTP | | | | *e*S | | **Sb** | **13 39 22.0** | **-0.2** |
| **INTP** | **Intipuca** | **0.56** | **133** | *e*P | | **Pb** | **13 39 13.7** | **-0.6** |
| INTP | comp=Z,161nm,0.3s | | | IAML | | | 13 39 17.8 | |
| INTP | | | | *e*S | | **Sb** | **13 39 22.0** | **-0.2** |
| **LFRS** | **El Faro** | **0.58** | **274** | *e*P | | **Pb** | **13 39 14.3** | **-0.5** |
| **LOMA** | **Loma Larga** | **0.68** | **275** | *i* P | | **Pb** | **13 39 16.2** | **-0.4** |
| LOMA | | | | *i* S | | **Sg** | **13 39 25.9** | **+0.7** |
| LOMA | comp=Z,2µm,1.0s | | | IAML | | | 13 39 26.7 | |
| **CNCH** | **Conchagua** | **0.69** | **116** | *e*P | | **Pg** | **13 39 16.9** | **+0.6** |
| **CNCH** | **Conchagua** | **0.69** | **116** | *i* P | | **Pg** | **13 39 16.6** | **+0.3** |
| CNCH | comp=Z,1µm,1.0s | | | IAML | | | 13 39 59.2 | |
| **PANCS** | **Alcalda de** | **0.69** | **273** | *i* P | | **Pb** | **13 39 15.9** | **-0.8** |
| PANCS | | | | IAML | | | 13 39 17.4 | |
| PANCS | comp=Z,6µm,1.0s | | | *i* S | | **Sb** | **13 39 24.9** | **-1.2** |
| **PMON** | **Piamonte** | **0.83** | **279** | *e*P | | **Pb** | **13 39 19.0** | **-0.1** |
| PMON | | | | *e*S | | **Sg** | **13 39 30.8** | **+1.0** |
| **PMON** | **Piamonte** | **0.83** | **279** | *i* P | | **Pg** | **13 39 19.2** | **+0.3** |
| PMON | comp=Z,1µm,1.0s | | | IAML | | | 13 39 37.1 | |
| **JAYA** | **Jayaque - finc** | **0.95** | **274** | *e*P | | **Pb** | **13 39 20.8** | **-0.5** |
| JAYA | | | | *e*S | | **Sb** | **13 39 33.5** | **-0.3** |
| **JAYA** | **Jayaque - finc** | **0.95** | **274** | *i* P | | **Pb** | **13 39 20.9** | **-0.3** |
| JAYA | | | | *i* S | | **Sg** | **13 39 33.8** | **0.0** |
| JAYA | comp=Z

130nm,0.3s
**YUK Yuzh-Kuril'sk 1.21 285** *e*P **Pn 13 56 28.7 -0.5**
YUK AMB AMB 13 56 29.3
30nm,0.3s
YUK *e*S **Sn 13 56 43.6 -0.8**
YUK A A 13 56 45.1
120nm,0.3s
YUK A A 13 56 45.1
100nm,0.3s
**NEM2 Nemuro 2 1.31 255** *e*P **Pn 13 56 30.1 -0.5**
NEM2 *e*S **Sn 13 56 46.2 -0.7**
**KUR Kuril'sk 1.53 10** *e*P **Pn 13 56 33.6 -0.1**
KUR AMB AMB 13 56 35.6
20nm,0.4s
KUR *e*S **Sn 13 56 52.6 +0.2**
KUR A A 13 56 53.9
40nm,0.3s
KUR A A 13 56 53.9
20nm,0.3s
**JNSB Nemuroshibetsu 1.79 272** *e*S **Sn 13 57 00.4 +1.6**
**JKHN Kushirohamanak 1.81 250** *e*P **Pn 13 56 37.6 +0.2**
**JNK Nakash 2.01 267** *e*P **Pn 13 56 40.7 +0.5**
JNK *e*S **Sn 13 57 04.1 0.0**

*SNET **27** 14:01:01.2±0.4, 13°.49N×88°.53W, h5km±999km, ML2.6*
*CATAC **27** 14:01:02.4±0.4, 13°.53N×88°.53W, h4km±2km, ML2.3*
**ISC 27 14:01:02.2±1.1, 13°.51N±0°.07×88°.54W±0.05, h7km±8km, n12, σ0s74/18, 1D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TECA** | **Tecapa** | **0.04** | **112** | *i* P | **Pg** | **14 01 03.3** | **-0.6** |
| **PQSS** | **Presa 15 de Se** | **0.11** | **352** | *e*P | **Pg** | **14 01 04.6** | **-0.1** |
| PQSS | | | | *e*S | **Sg** | **14 01 07.2** | **+0.8** |
| PQSS | | | | IAML | | 14 01 09.5 | |
| | comp=Z,873nm,0.2s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.11** | **352** | *i* P | **Pg** | **14 01 04.5** | **-0.1** |
| PQSS | | | | IAML | | 14 01 05.3 | |
| | comp=Z,2μm,1.0s | | | | | | |
| PQSS | | | | *i* S | **Sg** | **14 01 06.8** | **+0.4** |
| **PACA** | **Pacayal** | **0.22** | **101** | IAML | | 14 01 10.5 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **PACA** | **Pacayal** | **0.22** | **101** | *i* P | **Pg** | **14 01 07.3** | **+0.8** |
| PACA | | | | *i* S | **Sg** | **14 01 09.8** | **+0.3** |
| PACA | | | | IAML | | 14 01 22.5 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **RANC** | **El Ranchito** | **0.26** | **107** | *i* P | **Pg** | **14 01 07.2** | **-0.1** |
| RANC | | | | *i* S | **Sg** | **14 01 11.2** | **+0.4** |
| RANC | | | | IAML | | 14 01 14.2 | |
| | comp=Z,390nm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.26** | **317** | *e*P | **Pg** | **14 01 08.1** | **+0.8** |
| SCLA | | | | *e*S | **Sb** | **14 01 13.1** | **-1.0** |
| **SCLA** | **Alcaldia de Sa** | **0.26** | **317** | *i* P | **Pg** | **14 01 08.1** | **+0.8** |
| SCLA | | | | *i* S | **Sg** | **14 01 11.5** | **+0.6** |
| SCLA | | | | IAML | | 14 01 19.1 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **0.34** | **288** | *i* P | **Pb** | **14 01 10.0** | **-0.7** |
| COEG | | | | *i* S | **Sg** | **14 01 14.7** | **+1.2** |
| COEG | | | | IAML | | 14 01 19.1 | |
| | comp=Z,250nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.89** | **279** | *i* P | **Pb** | **14 01 20.0** | **-0.1** |
| JAYA | | | | IAML | | 14 01 34.0 | |
| | comp=Z,240nm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **1.19** | **318** | *i* P | **Pg** | **14 01 23.9** | **-1.1** |
| MTO3 | | | | IAML | | 14 01 24.6 | |
| | comp=Z,51nm,1.0s | | | | | | |
| **YUSH** | **Yuscaran** | **1.71** | **75** | *i* P | **Pn** | **14 01 32.9** | **+0.4** |

**DJA 27 14:12:28.2±0.2, 8°S±3°×117°7E±°, h10km, M4.1/12, mb4.3/3, MLv4.1/12, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.55** | **152** | P | Pb | 14 12 39.7 | -0.3 |
| TWSI | | | | S | Sb | 14 12 47.9 | 0.0 |
| **SRBI** | **Singaraja** | **1.40** | **277** | P | Pn | 14 12 52.7 | -1.1 |
| SRBI | | | | S | Sg | 14 13 13.0 | -0.4 |
| **DNP** | **Denpasar** | **1.46** | **253** | P | Pn | 14 12 54.8 | +0.2 |
| DNP | | | | S | Sb | 14 13 14.4 | +0.3 |
| **JAGI** | **Jajag, Banyuwa** | **2.45** | **265** | P | Pn | 14 13 07.7 | -0.6 |
| JAGI | | | | S | Sn | 14 13 38.9 | +0.5 |
| **WBSI** | **Waikabubak, Su** | **3.07** | **117** | P | Pn | 14 13 16.0 | -0.8 |
| WBSI | | | | S | Sn | 14 13 54.3 | +0.7 |
| **BASI** | **Baing, Sumba** | **4.37** | **117** | P | Pn | 14 13 36.1 | +1.4 |
| **BSSI** | **Bau Bau, Buton** | **4.37** | **62** | P | Pn | 14 13 34.8 | 0.0 |
| **PWJI** | **Pagerwojo** | **4.77** | **272** | P | Pn | 14 13 40.2 | 0.0 |
| **EDFI** | **Ende, Flores** | **5.04** | **96** | P | Pn | 14 13 44.6 | +0.6 |
| | 13nm,0.7s | | | | | | |
| **BNSI** | **Bone** | **5.16** | **42** | P | Pn | 14 13 47.0 | +1.4 |
| | 24nm,0.5s,0.1nm | | | | | | |
| **MMRI** | **Maumere** | **5.57** | **94** | P | Pn | 14 13 49.7 | -1.5 |

*IDC **27** 14:14:24.7±0.9, 5°.22N×73°.56W, h156km±5km, mb3.2/4, mbtmp3.7/5, Error ellipse: s-maj=32.3km s-min=12.1km az=135.0*
*RSNC **27** 14:14:27.9±0.0, 5°N±1°×7°4W±°, h144km±2km, M4.3, mb4.5, mB4.8, ML4.0, Mw(mB)4.0*
**ISC 27 14:14:25.2±0.7, 5°.30N±0°.03×73°.69W±0°.03, h158km±5km, n53, σ1s46/84, mb3.3/4, Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPBC** | **San Pablo de B** | **0.51** | **312** | P | **Pn** | **14 14 47.7** | **0.0** |
| SPBC | | | | S | **Sn** | **14 15 03.8** | **-1.1** |
| **CHIC** | **Chingaza** | **0.67** | **184** | P | **Pn** | **14 14 48.8** | **-0.2** |
| CHIC | | | | S | **Sn** | **14 15 05.4** | **-1.7** |
| **ROSC** | **El Rosal** | **0.78** | **234** | P | **Pn** | **14 14 50.5** | **+0.9** |
| | 1μm,0.3s,baz=117,slow=10,SNR=344 | | | | | | |
| ROSC | | | | S | **Sn** | **14 15 08.5** | **+0.2** |
| | 1μm,0.3s,baz=18,slow=23,SNR=8.6 | | | | | | |
| **ROSC** | **El Rosal** | **0.78** | **234** | P | **Pn** | **14 14 50.5** | **+0.9** |
| ROSC | | | | S | **Sn** | **14 15 08.4** | **+0.2** |
| **RUSC** | **La Rusia** | **0.84** | **46** | P | **Pn** | **14 14 51.1** | **+0.9** |
| RUSC | | | | S | **Sn** | **14 15 09.5** | **+0.3** |
| **VILC** | **Villavicencio,** | **1.18** | **180** | P | **Pn** | **14 14 52.2** | **-0.4** |
| VILC | | | | S | **Sn** | **14 15 12.3** | **-1.3** |
| **NORC** | **Norcasia** | **1.20** | **282** | P | **Pn** | **14 14 52.3** | **-0.3** |
| NORC | | | | S | **Sn** | **14 15 12.3** | **-1.3** |
| **BARC** | **Barichara** | **1.38** | **22** | P | **Pn** | **14 14 54.9** | **+0.4** |
| BARC | | | | S | **Sn** | **14 15 17.9** | **+0.9** |
| **PTBC** | **PUERTO BERRIO,** | **1.45** | **328** | P | **Pn** | **14 14 54.4** | **-0.5** |
| PTBC | | | | S | **Sn** | **14 15 16.4** | **-1.4** |
| **BRJC** | **Barrancabermej** | **1.66** | **358** | P | **Pn** | **14 14 57.9** | **+0.8** |
| BRJC | | | | S | **Sn** | **14 15 22.4** | **+0.7** |
| **PTGC** | **Puerto Gaitan,** | **1.90** | **125** | P | **Pn** | **14 15 00.1** | **+0.3** |
| PTGC | | | | S | **Sn** | **14 15 25.2** | **-1.2** |
| **PRAC** | **Prado** | **1.98** | **217** | P | **Pn** | **14 15 00.5** | **-0.2** |
| PRAC | | | | S | **Sn** | **14 15 26.6** | **-1.5** |
| **ORTC** | **Ortega, Tolima** | **2.08** | **228** | P | **Pn** | **14 15 01.4** | **-0.5** |
| ORTC | | | | S | **Sn** | **14 15 28.4** | **-1.7** |
| **URMC** | **La Uribe, Meta** | **2.16** | **199** | P | **Pn** | **14 15 03.2** | **+0.4** |
| URMC | | | | S | **Sn** | **14 15 30.9** | **-0.9** |
| **TAMC** | **Tame, Arauca** | **2.20** | **59** | P | **Pn** | **14 15 04.6** | **+1.4** |
| TAMC | | | | S | **Sn** | **14 15 33.6** | **+1.1** |
| **PAMC** | **Pamplona, Colo** | **2.25** | **26** | P | **Pn** | **14 15 05.6** | **+1.3** |
| PAMC | | | | S | **Sn** | **14 15 36.5** | **+2.1** |
| **CBOC** | **Ciudad Bolivar** | **2.38** | **284** | P | **Pn** | **14 15 05.8** | **+0.3** |
| CBOC | | | | S | **Sn** | **14 15 35.6** | **-0.9** |
| **ZARC** | **Zaragoza, Cauc** | **2.46** | **332** | P | **Pn** | **14 15 05.2** | **-1.2** |
| ZARC | | | | S | **Sn** | **14 15 37.2** | **-1.0** |
| **PLMC** | **San Jos del P** | **2.61** | **261** | P | **Pn** | **14 15 08.9** | **+0.7** |
| **GUVC** | **San Jose del G** | **2.94** | **159** | P | **Pn** | **14 15 11.8** | **-0.4** |
| GUVC | | | | S | **Sn** | **14 15 46.2** | **-2.5** |
| **OCAC** | **Ocana** | **2.94** | **7** | P | **Pn** | **14 15 13.5** | **+1.1** |
| **YOTC** | **Yotoco, Valle** | **2.95** | **244** | P | **Pn** | **14 15 11.8** | **-0.7** |
| **DBBC** | **Dabeiba** | **3.03** | **304** | P | **Pn** | **14 15 13.8** | **+0.4** |
| **UREC** | **San Jos de Ur** | **3.04** | **323** | P | **Pn** | **14 15 12.2** | **-1.3** |
| **BETC** | **Betania** | **3.14** | **214** | P | **Pn** | **14 15 14.3** | **-0.5** |
| **MACC** | **Macarena, Meta** | **3.14** | **183** | P | **Pn** | **14 15 13.7** | **-1.1** |
| **GARC** | **Garzon, Huila** | **3.58** | **210** | P | **Pn** | **14 15 19.7** | **-0.9** |
| **JAMC** | **Jamundi, Valle** | **3.63** | **235** | P | **Pn** | **14 15 20.3** | **-0.9** |
| **PIZC** | **Pizarro, Choco** | **3.67** | **265** | P | **Pn** | **14 15 23.1** | **+1.6** |
| PIZC | | | | S | **Sn** | **14 16 07.2** | **+2.0** |
| **MALC** | **Bahia Malaga** | **3.85** | **251** | P | **Pn** | **14 15 25.1** | **+1.3** |
| MALC | | | | S | **Sn** | **14 16 12.1** | **+2.7** |
| **APAC** | **Apartado, Choc** | **3.86** | **312** | P | **Pn** | **14 15 23.9** | **0.0** |
| APAC | | | | S | **Sn** | **14 16 10.0** | **+0.4** |
| **POPC** | **Popayan, Colom** | **4.05** | **227** | P | **Pn** | **14 15 27.4** | **+0.8** |
| **FLOC** | **Florencia** | **4.18** | **208** | P | **Pn** | **14 15 28.1** | **-0.1** |
| **LCBC** | **Los crdobas,** | **4.42** | **323** | P | **Pn** | **14 15 30.1** | **-1.1** |
| LCBC | | | | S | **Sn** | **14 16 23.0** | **+0.3** |
| **PTAC** | **Punta Ardita,** | **4.49** | **294** | P | **Pn** | **14 15 32.0** | **-0.1** |
| **ARGC** | **Ariguani, Magd** | **4.56** | **353** | P | **Pn** | **14 15 33.9** | **+0.8** |
| ARGC | | | | S | **Sn** | **14 16 26.5** | **+0.5** |
| **SDV** | **Santo Domingo** | **4.68** | **40** | P | **Pn** | **14 15 35.4** | **+0.7** |
| | 27nm,0.3s,baz=236,slow=13,SNR=17 | | | | | | |
| SDV | | | | S | **Sn** | **14 16 27.9** | **-1.1** |
| | 57nm,0.5s,baz=267,slow=17,SNR=12 | | | | | | |
| **SDV** | **Santo Domingo** | **4.68** | **40** | P | **Pn** | **14 15 35.5** | **+0.7** |
| SDV | | | | S | **Sn** | **14 16 28.2** | **-0.8** |
| **SJCC** | **San Jacinto, C** | **4.80** | **342** | P | **Pn** | **14 15 34.3** | **-1.9** |
| SJCC | | | | S | **Sn** | **14 16 27.9** | **-3.8** |
| **BBAC** | **Balboa, Cauca** | **4.82** | **228** | P | **Pn** | **14 15 37.1** | **+0.4** |
| BBAC | | | | S | **Sn** | **14 16 34.4** | **+2.0** |
| **CAPC** | **Capurgana** | **4.92** | **313** | P | **Pn** | **14 15 36.2** | **-1.5** |
| CAPC | | | | S | **Sn** | **14 16 31.9** | **-2.4** |
| **CRJC** | **Cerrejon, Guaj** | **5.74** | **8** | P | **Pn** | **14 15 48.2** | **-0.5** |
| | 22nm,0.6s,1μm | | | | | | |
| CRJC | | | | S | **Sn** | **14 16 49.0** | **-5.0** |
| | 22nm,0.6s,1μm | | | | | | |
| **SMRC** | **Santa Marta, M** | **5.85** | **355** | P | **Pn** | **14 15 49.6** | **-0.4** |
| | 32nm,0.5s,1μm | | | | | | |
| SMRC | | | | S | **Sn** | **14 16 52.9** | **-3.6** |
| | 32nm,0.5s,1μm | | | | | | |
| **AZU** | **Azuero** | **6.99** | **291** | P | **Pn** | **14 16 05.1** | **-0.2** |
| | 42nm,0.6s | | | | | | |
| **CACAO** | **El Cacao, Vera** | **7.41** | **286** | P | **Pn** | **14 16 10.1** | **-0.7** |
| **PCRV** | **Puerto La Cruz** | **10.19** | **61** | P | **Pn** | **14 16 49.8** | **+2.0** |
| | 2.9nm,0.5s,baz=351,slow=4.2,SNR=2.2 | | | | | | |
| **BOAV** | **Boa Vista** | **13.45** | **102** | P | **Pn** | **14 17 29.0** | **-1.0** |
| **PDAR** | **Pinedale Array** | **48.98** | **325** | P | **P** | **14 22 55.3** | **-0.8** |
| | 0.1nm,0.5s,baz=132,slow=4.0,SNR=2.0 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **64.49** | **340** | P | **P** | **14 24 45.5** | **+0.8** |
| | 1.2nm,0.7s,baz=139,slow=5.7,SNR=5.9 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.60** | **78** | P | **P** | **14 25 45.5** | **-2.2** |
| | 0.3nm,0.4s,baz=270,slow=4.3,SNR=2.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **78.09** | **335** | P | **P** | **14 26 07.2** | **+0.8** |
| | 0.3nm,0.5s,baz=95,slow=4.8,SNR=6.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **147.76** | **233** | PKPbc | **PKPdf** | **14 33 51.6** | **+2.4** |
| | 0.3nm,0.4s,baz=124,slow=3.4,SNR=17 | | | | | | |
| **WRA** | **Warramunga Arr** | **149.10** | **239** | PKPbc | **PKPdf** | **14 33 55.3** | **+3.8** |
| | 0.6nm,0.5s,baz=108,slow=2.8,SNR=16 | | | | | | |

*ISN **27** 14:22:02.3±0.6, 34°.63N×46°.19E, h10km±17km, ML3.0*
*TEH **27** 14:22:03.9, 34°.62N×46°.21E, h10km±28km, ML2.8*
**ISC 27 14:22:03.9±1.0, 34°.63N±0°.04×46°.21E±0°.04, h16km±9km, n13, σ1s15/17, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.16** | **63** | Pg | **Pg** | **14 22 08.0** | **-0.3** |
| IDHR | | | | Sg | **Sg** | **14 22 11.4** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.42** | **135** | Pg | **Pb** | **14 22 12.7** | **-0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.53** | **257** | Pg | **Pb** | **14 22 14.4** | **-0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **206** | Pg | **Pb** | **14 22 15.3** | **-0.2** |
| **ILIN** | **Lien** | **0.68** | **65** | Pg | **Pb** | **14 22 17.1** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **0.77** | **117** | Pg | **Pb** | **14 22 18.6** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **180** | Pg | **Pn** | **14 22 23.0** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.19** | **78** | Pg | **Pn** | **14 22 27.0** | **+0.9** |
| **IBDR** | **Badra** | **1.53** | **189** | *e*Pn | **Pg** | **14 22 32.7** | **-0.7** |
| IBDR | | | | *e*Sn | **Sg** | **14 22 54.8** | **+1.5** |
| IBDR | | | | AML | AML | 14 22 58.4 | |
| | comp=E,262nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 14 23 05.0 | |
| | comp=N,180nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.72** | **297** | *e*Pn | **Pb** | **14 22 35.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **14 22 59.5** | **+0.2** |
| **IKFM** | **Kafar-mosalman** | **1.75** | **129** | Pg | **Pg** | **14 22 37.4** | **0.0** |
| **IDOB** | **Doab** | **1.83** | **117** | Pn | **Pg** | **14 22 39.0** | **-0.1** |
| **RAFI** | **Al-Rafai** | **2.90** | **182** | *e*Pn | **Pn** | **14 22 52.0** | **+2.6** |
| RAFI | | | | *e*Sn | **Sb** | **14 23 28.0** | **-2.4** |

*NEIC **27** 14:39:13.7±0.4, 31°.62S±0°.08×179°.0W±0°.2, h38km±10km, mb4.2/8, Error ellipse: s-maj=29.6km s-min=2.7km az=112.0*
*IDC **27** 14:39:16.0±2.6, 31°.44S×179°.09W, h65km±25km, mb3.6/3, mbtmp4.0/5, ML4.1/2, MS3.3/2, Error ellipse: s-maj=31.0km s-min=23.6km az=106.0*
**ISC 27 14:39:13.1±0.9, 31°.6S±0°.1×179°.2W±0°.2, h35km, n22, σ0s65/20, mb4.1/6, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **2.59** | **25** | Pn | **Pn** | **14 39 52.4** | **-0.1** |
| **RAO** | **Raoul Island** | **2.59** | **25** | P | **Pn** | **14 39 52.9** | **+0.4** |
| | 78nm,0.3s,baz=241,slow=23,SNR=2.5 | | | | | | |
| | 178nm,0.3s | | | | | | |
| **URZ** | **Urewera** | | | **7.30 204** | P | Pn | 14 41 03.0 +5.8 |
| | 1.5nm,0.3s,baz=105,slow=6.2,SNR=9.7 | | | | | | |
| URZ | | | | S | **Sn** | **14 42 17.8** | **-1.0** |
| | 8.5nm,0.5s,baz=328,slow=18,SNR=9.3 | | | | | | |
| | 3.0nm,0.3s | | | | | | |
| **RTZ** | **Ruatahuna** | **7.66** | **203** | Pn | **Pn** | **14 41 03.1** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **8.32** | **204** | Pn | **Pn** | **14 41 12.0** | **+0.7** |
| **BFZ** | **Birch Farm** | **9.78** | **201** | Pn | **Pn** | **14 41 32.1** | **+0.9** |
| **TUWZ** | **Tuamarina** | **11.25** | **207** | Pn | **Pn** | **14 41 50.7** | **-0.5** |
| **RAR** | **Rarotonga** | **20.21** | **64** | LR | LR | 14 50 49.7 | |
| | comp=Z,98nm,18.7s,baz=257,slow=35 | | | | | | |
| **AS31** | **Alice Springs** | **42.05** | **269** | P | **P** | **14 47 02.1** | **+0.6** |
| **ASAR** | **Alice Springs** | **42.05** | **269** | P | **P** | **14 47 02.1** | **+0.5** |
| | 1.0nm,0.7s,baz=105,slow=7.3,SNR=32 | | | | | | |
| | 1.0nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **42.97** | **274** | P | **P** | **14 47 09.6** | **+0.5** |
| **WB2** | **Warramunga Arr** | **43.13** | **274** | P | **P** | **14 47 10.8** | **+0.4** |
| **WRAB** | **Tennant Creek** | **43.14** | **274** | P | **P** | **14 47 10.6** | **+0.1** |
| WRAB | | | | IAmb | IAmb | 14 47 25.3 | |
| | comp=Z,7.9nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.15** | **274** | P | **P** | **14 47 10.6** | **+0.1** |
| | comp=Z,1.2nm,0.4s,baz=112,slow=7.8,SNR=44 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.17** | **274** | P | **P** | **14 47 11.2** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 14 47 50.1 | |
| | comp=Z,6.3nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **49.18** | **281** | P | **P** | **14 47 58.2** | **+0.2** |
| **QSPA** | **South Pole Qui** | **58.50** | **180** | P | **P** | **14 49 06.0** | **+0.4** |
| QSPA | | | | IAmb | IAmb | 14 49 30.1 | |
| | comp=Z,3.2nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **58.50** | **180** | P | **P** | **14 49 06.0** | **+0.4** |
| | comp=Z,0.8nm,0.7s,baz=45,slow=2.9,SNR=9.7 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **75.14** | **325** | LR | LR | 15 19 15.2 | |
| | comp=Z,36nm,19.8s,baz=75,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **76.98** | **179** | P | **P** | **14 51 01.5** | **-0.2** |
| SNAA | | | | IAmb | IAmb | 14 51 31.4 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **FINES** | **FINESS Array B** | **145.91** | **339** | PKPbc | **PKPdf** | **14 58 46.2** | **-1.2** |
| | comp=Z,0.7nm,0.3s,baz=43,slow=3.6,SNR=2.7 | | | | | | |
| **HFS** | **Hagfors** | **150.21** | **347** | PKPbc | **PKPbc** | **14 58 58.9** | **-0.8** |
| | comp=Z,1.3nm,0.6s,baz=10.0,slow=3.5,SNR=6.0 | | | | | | |

**IDC 27 14:39:26.9±4.1, 1°.23S×98°.53E, h0km, mb3.5/2, mbtmp3.5/3, ML3.7/1, Error ellipse: s-maj=149.6km s-min=28.5km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **19.57** | **1** | P | Pn | 14 43 57.9 | +0.2 |
| | 0.1nm,0.3s,baz=192,slow=10,SNR=5.5 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.72** | **255** | T | T | 15 13 17.3 | |
| | baz=76 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.73** | **255** | T | T | 15 13 20.4 | |
| | baz=76 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.74** | **255** | T | T | 15 13 15.1 | |
| | baz=56,slow=74 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.64** | **120** | P | P | 14 47 00.6 | -0.2 |
| | 0.4nm,0.4s,baz=302,slow=8.8,SNR=12 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **49.91** | **345** | P | P | 14 48 21.5 | -0.8 |
| | 0.4nm,0.7s,baz=144,slow=9.6,SNR=4.8 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **60.56** | **216** | T | T | 15 55 22.9 | |
| | baz=56,slow=74 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.57** | **216** | T | T | 15 55 26.2 | |
| | baz=56,slow=74 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.57** | **216** | T | T | 15 55 26.1 | |
| | baz=56 | | | | | | |

**IDC 27 14:58:19.0±8.7, 18°.55S×177°.80W, h550km±39km, mb2.7/3, mbtmp3.6/4, Error ellipse: s-maj=247.3km s-min=31.1km az=141.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.03** | **281** | P | P | 14 59 41.2 | 0.0 |
| | 28nm,0.8s,baz=119,slow=8.4,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.09** | **260** | P | P | 15 05 46.1 | -0.7 |
| | 0.1nm,0.3s,baz=96,slow=6.9,SNR=9.6 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **45.18** | **255** | P | P | 15 05 47.7 | +0.3 |
| | 1.2nm,0.6s,baz=88,slow=8.2,SNR=30 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.38** | **13** | P | P | 15 10 02.7 | -0.1 |
| | 0.1nm,0.4s,baz=222,slow=5.1,SNR=5.7 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*MOS **27** 15:08:31.5±1.1, 42°.55N×144°.09E, h104km, mb4.2/1, Error ellipse: s-maj=21.4km s-min=13.9km az=101.3*
*SKHL **27** 15:08:32.3±0.1, 42°.60N×144°.10E, h101km±3km, mb4.4/3, msha5.1/3*
*JMA **27** 15:08:32.1±0.1, 42°.6N±0°.4×144°.0E±0°.5, h90km±1km, MV3.3/40, SE OFF TOKACHI*
*IDC **27** 15:08:33.6±6.0, 42°.72N×144°.10E, h100km±34km, mb3.6/8, mbtmp3.9/8, Error ellipse: s-maj=62.7km s-min=27.3km az=171.0*
**ISC 27 15:08:31.8±0.9, 42°.52N±0°.05×144°.07E±0°.03, h89km±6km, n45, σ0s83/66, mb3.9/8, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOB** | **Onbets** | **0.42** | **336** | P | **Pn** | **15 08 46.5** | **+0.6** |
| JOB | | | | S | **Sn** | **15 08 56.8** | **+0.5** |
| **JCH** | **Churui** | **0.53** | **281** | P | **Pn** | **15 08 46.7** | **0.0** |
| JCH | | | | S | **Sn** | **15 08 56.9** | **-0.8** |
| **JTHR** | **Tokachihiroo** | **0.61** | **249** | *i* P | **Pn** | **15 08 47.5** | **+0.1** |
| JTHR | | | | *e*S | **Sn** | **15 08 58.3** | **-0.6** |
| **JAK** | **Akkeshi** | **0.67** | **44** | P | **Pn** | **15 08 48.4** | **+0.6** |
| JAK | | | | S | **Sn** | **15 09 00.6** | **+0.7** |
| **JAR** | **Ashorobuto** | **0.81** | **344** | P | **Pn** | **15 08 49.4** | **+0.1** |
| JAR | | | | S | **Sn** | **15 09 02.3** | **-0.1** |
| **JEM** | **Erimo** | **0.84** | **234** | *e*P | **Pn** | **15 08 49.9** | **+0.3** |
| JEM | | | | *e*S | **Sn** | **15 09 03.5** | **+0.6** |
| **JKHN** | **Kushirohamanak** | **0.98** | **55** | P | **Pn** | **15 08 51.9** | **+0.7** |
| JKHN | | | | *e*S | **Sn** | **15 09 06.2** | **+0.5** |
| **JNBK** | **Urakawa-nobuka** | **1.00** | **257** | P | **Pn** | **15 08 51.4** | **0.0** |
| JNBK | | | | S | **Sn** | **15 09 05.2** | **-0.9** |
| **JNK** | **Nakash** | **1.17** | **24** | P | **Pn** | **15 08 53.5** | **+0.1** |
| JNK | | | | S | **Sn** | **15 09 09.1** | **-0.6** |
| **JFR** | **Furan** | **1.26** | **301** | P | **Pn** | **15 08 54.0** | **-0.6** |
| JFR | | | | S | **Sn** | **15 09 10.7** | **-1.0** |
| **JBT2** | **Biratori 2** | **1.28** | **282** | P | **Pn** | **15 08 54.3** | **-0.5** |
| JBT2 | | | | *e*S | **Sn** | **15 09 10.8** | **-1.3** |
| **JTKR** | **Abashiri--Toko** | **1.46** | **355** | P | **Pn** | **15 08 57.3** | **+0.4** |
| JTKR | | | | S | **Sn** | **15 09 16.2** | **+0.2** |
| **NEM2** | **Nemuro 2** | **1.50** | **55** | P | **Pn** | **15 08 57.2** | **-0.2** |
| NEM2 | | | | S | **Sn** | **15 09 15.2** | **-1.6** |
| **JMP** | **Maruseppu** | **1.58** | **341** | P | **Pn** | **15 08 58.5** | **0.0** |
| JMP | | | | S | **Sn** | **15 09 18.1** | **-0.6** |
| **JIAM** | **Iburiatsuma** | **1.59** | **275** | P | **Pn** | **15 09 00.8** | **+2.2** |
| **JRA** | **Rausu** | **1.62** | **28** | P | **Pn** | **15 08 59.8** | **+0.8** |
| JRA | | | | *e*S | **Sn** | **15 09 19.6** | **+0.1** |
| **JKK2** | **Kamakawa 2** | **1.66** | **325** | P | **Pn** | **15 08 59.7** | **+0.1** |
| JKK2 | | | | S | **Sn** | **15 09 20.6** | **0.0** |
| **JAB** | **Ashibetsu** | **1.68** | **307** | P | **Pn** | **15 09 00.3** | **+0.6** |
| JAB | | | | *e*S | **Sn** | **15 09 21.7** | **+0.8** |
| **JKA** | **Kamikawa-asahi** | **1.93** | **327** | *e*P | **Pn** | **15 09 03.1** | **+0.1** |
| JKA | | | | *e*S | **Sn** | **15 09 26.1** | **-0.6** |
| **ASAJ** | **Asahikawa** | **1.93** | **327** | P | **Pn** | **15 09 03.0** | **+0.1** |
| | 16nm,0.3s,baz=193,slow=13,SNR=126 | | | | | | |
| ASAJ | | | | S | **Sn** | **15 09 26.1** | **-0.6** |
| | 46nm,0.5s,baz=186,slow=21,SNR=5.8 | | | | | | |
| **JEW** | **Eniwo** | **1.96** | **280** | *e*P | **Pn** | **15 09 04.3** | **+0.9** |
| JEW | | | | S | **Sn** | **15 09 28.2** | **+0.8** |
| **YUK** | **Yuzh-Kuril'sk** | **2.00** | **40** | *e*P | **Pn** | **15 09 05.0** | **+1.0** |
| YUK | | | | AMB | AMB | 15 09 05.3 | |
| | 70nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **15 09 28.5** | **0.0** |
| YUK | | | | A | A | 15 09 32.3 | |
| | 300nm,0.5s | | | | | | |
| YUK | | | | A | A | 15 09 32.3 | |
| | 610nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.00** | **40** | *e*PN | **Pn** | **15 09 05.0** | **+1.0** |
| YUK | | | | *e*S | **Sn** | **15 09 28.3** | **-0.2** |
| YUK | | | | smax | smax | | |
| | comp=N,290nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,628nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.43** | **55** | *e*P | **Pn** | **15 09 09.8** | **+0.2** |
| SHO | | | | AMB | AMB | 15 09 11.5 | |
| | comp=E,20nm,0.2s | | | | | | |
| SHO | | | | *e*S | **Sn** | **15 09 36.9** | **-1.7** |
| SHO | | | | A | A | 15 09 38.9 | |
| | comp=E,300nm,0.4s | | | | | | |
| SHO | | | | A | A | 15 09 38.9 | |
| | comp=E,150nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.43** | **55** | *e*PN | **Pn** | **15 09 09.8** | **+0.2** |
| SHO | | | | *e*S | **Sn** | **15 09 36.8** | **-1.8** |
| SHO | | | | smax | smax | | |
| | comp=N,288nm,0.3s | | | | | | |
| SHO | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **HFS** | **Hagfors** | **69.93** | **336** | P | | **P** | | **15 19 32.9** | **0.0** |
| | comp=E,3.8nm,1.0s,baz=71,slow=6.6,SNR=4.3 | | | | | | | | |
| | comp=E,3.8nm,1.0s | | | | | | | | |

**IDC 27 15:21:26.3±1.5, 7.03S×129.73E, h0km, mb4.1/2, mbtmp3.7/4, ML3.4/2, Error ellipse: s-maj=71.6km s-min=30.2km az=74.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.59** | **161** | Pn | Pn | | 15 24 40.2 | -0.3 |
| | 0.2nm,0.3s,baz=344,slow=13,SNR=15 | | | | | | | |
| WRA | | | | Sn | Sn | | 15 26 55.3 | -17 |
| | 0.2nm,0.3s,baz=333,slow=22,SNR=4.6 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **17.02** | **167** | P | Pn | | 15 25 26.1 | +0.2 |
| | 0.2nm,0.3s,baz=347,slow=9.9,SNR=18 | | | | | | | |
| ASAR | | | | S | Sn | | 15 28 20.9 | -15 |
| | 0.3nm,0.6s,baz=329,slow=37,SNR=3.4 | | | | | | | |
| | 0.8nm,0.6s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **64.44** | **18** | P | P | | 15 32 04.3 | 0.0 |
| | 3.6nm,1.0s,baz=205,slow=15,SNR=2.3 | | | | | | | |
| | 3.6nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.11** | **327** | P | P | | 15 32 28.1 | 0.0 |
| | 0.5nm,0.4s,baz=117,slow=8.1,SNR=12 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |

*ISN 27 15:28:38.2±0.8, 34.59N×46.22E, h8km±22km, ML3.7*
*TEH 27 15:28:39.6, 34.62N×46.24E, h8km±32km, ML3.7*
*NEIC 27 15:28:41±1.1, 34.70N±0.08×46.3E±0.1, h10km±2km, mb4.2/9, Error ellipse: s-maj=18.8km s-min=6.1km az=225.0*
*AFAD 27 15:28:41.7±0.0, 34.70N×45.86E, h6km±3km, MW4.0*
*IDC 27 15:28:46.8±3.4, 34.87N×45.59E, h0km, mb3.8/3, mbtmp3.7/5, ML3.2/2, Error ellipse: s-maj=69.8km s-min=29.5km az=175.0*
*DSN 27 15:28:47.0±1.4, 34.29N×46.90E, h15km, Error ellipse: s-maj=76.7km s-min=13.5km az=43.0*

**ISC 27 15:28:39.9±0.6, 34.59N±0.03×46.26E±0.03, h10km, n64, σ1.9s75/74, mb3.9/4, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **IDHR** | **Dehrash** | **0.16** | **43** | Pg | **Pg** | | **15 28 43.2** | **-0.3** |
| **IGHG** | **Ghaleghazi** | **0.36** | **135** | Pg | **Pb** | | **15 28 48.3** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **211** | Pg | **Pg** | | **15 28 50.5** | **-0.1** |
| GLG1 | | | | Sg | **Sb** | | **15 28 59.6** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.56** | **262** | Pg | **Pg** | | **15 28 50.6** | **0.0** |
| **ILIN** | **Lien** | **0.67** | **60** | Pg | **Pg** | | **15 28 52.6** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **115** | Pg | **Pg** | | **15 28 54.0** | **+0.2** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **182** | Pg | **Pg** | | **15 28 58.6** | **+0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.16** | **76** | Pg | **Pb** | | **15 29 01.9** | **-0.3** |
| **IBZA** | **Bozab** | **1.33** | **95** | Pg | **Pg** | | **15 29 05.3** | **-0.1** |
| **IBDR** | **Badra** | **1.50** | **191** | *e*Pn | **Pb** | | **15 29 08.0** | **+0.3** |
| IBDR | | | | *e*Sn | **Sg** | | **15 29 30.0** | **+2.0** |
| IBDR | | | | AML | AML | | 15 29 34.4 | |
| | comp=E,978nm,0.3s | | | | | | | |
| IBDR | | | | AML | AML | | 15 29 36.2 | |
| | comp=N,687nm,0.6s | | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.68** | **338** | Pg | **Pb** | | **15 29 10.4** | **-0.6** |
| **IKFM** | **Kafar-mosalman** | **1.69** | **128** | Pg | **Pb** | | **15 29 11.1** | **0.0** |
| **IKRK** | **Kirkuk** | **1.77** | **298** | *e*Pn | **Pb** | | **15 29 12.0** | **-0.4** |
| IKRK | | | | *e*Sn | **Sg** | | **15 29 36.0** | **-0.8** |
| IKRK | | | | AML | AML | | 15 29 39.3 | |
| | comp=E,2μm,0.4s | | | | | | | |
| IKRK | | | | AML | AML | | 15 29 41.2 | |
| | comp=N,1μm,0.6s | | | | | | | |
| **IDOB** | **Doab** | **1.78** | **116** | Pn | **Pb** | | **15 29 13.4** | **+0.7** |
| **HSAM** | **Samen** | **1.98** | **100** | Pn | **Pb** | | **15 29 16.3** | **+0.2** |
| **MAHB** | **Mahabad** | **2.22** | **349** | Pn | **Pb** | | **15 29 19.1** | **-1.1** |
| **HAGD** | **Aghdareh** | **2.39** | **84** | Pn | **Pb** | | **15 29 22.2** | **-0.9** |
| **RAFI** | **Al-Rafai** | **2.86** | **182** | *e*Pn | **Pn** | | **15 29 27.0** | **+1.5** |
| RAFI | | | | *e*Sn | **Sb** | | **15 30 03.5** | **-2.5** |
| **IAZR** | **Azarshahr** | **3.09** | **356** | Pn | **Pb** | | **15 29 30.8** | **+1.8** |
| **YOVA** | **Hakkari_Yksek** | **3.39** | **333** | P | **Pn** | | **15 29 35.5** | **+2.5** |
| YOVA | | | | S | **Sn** | | **15 30 14.3** | **+0.8** |
| YOVA | | | | *i* AML | AML | | 15 30 33.0 | |
| | comp=N,72nm,0.7s | | | | | | | |
| YOVA | | | | *i* AML | AML | | 15 30 41.0 | |
| | comp=N,95nm,0.8s | | | | | | | |
| **CUKT** | **Cukurca** | **3.42** | **322** | P | **Pn** | | **15 29 34.2** | **+0.9** |
| CUKT | | | | S | **Sn** | | **15 30 14.5** | **+0.5** |
| CUKT | | | | *i* AML | AML | | 15 30 30.0 | |
| | comp=N,402nm,0.8s | | | | | | | |
| CUKT | | | | *i* AML | AML | | 15 30 46.0 | |
| | comp=N,290nm,0.6s | | | | | | | |
| **ISRB** | **Sarab** | **3.43** | **19** | Pn | **Pn** | | **15 29 36.2** | **+2.6** |
| **HAKT** | **HAKKARI** | **3.61** | **326** | P | **Pn** | | **15 29 38.0** | **+1.9** |
| HAKT | | | | S | **Sn** | | **15 30 19.4** | **+0.4** |
| HAKT | | | | *i* AML | AML | | 15 30 39.0 | |
| | comp=N,105nm,0.4s | | | | | | | |
| HAKT | | | | *i* AML | AML | | 15 30 41.0 | |
| | comp=N,113nm,0.6s | | | | | | | |
| **ISHB** | **Shabestar** | **3.73** | **352** | Pn | **Pn** | | **15 29 39.6** | **+1.9** |
| **IPIR** | **Pirpir** | **4.31** | **115** | Pn | **Pn** | | **15 29 47.9** | **+2.1** |
| **QAMS** | **Qamsar** | **4.34** | **100** | Pn | **Pn** | | **15 29 48.6** | **+2.4** |
| **JHBN** | **Jahan bin** | **4.37** | **121** | Pn | **Pn** | | **15 29 49.3** | **+2.7** |
| **GRMI** | **Germi** | **4.41** | **17** | Pn | **Pn** | | **15 29 49.6** | **+2.6** |
| **IVRN** | **Varamin** | **4.52** | **83** | Pn | **Pn** | | **15 29 51.4** | **+2.9** |
| **ZNGN** | **Zangjan** | **4.57** | **121** | Pn | **Pn** | | **15 29 51.7** | **+2.4** |
| **IDMV** | **Damavand** | **4.84** | **77** | Pn | **Pn** | | **15 29 55.4** | **+2.4** |
| **MIDY** | **Mardin/Midyat-** | **4.84** | **307** | P | **Pn** | | **15 29 54.2** | **+1.3** |
| MIDY | | | | S | **Sn** | | **15 30 48.4** | **-0.6** |
| MIDY | | | | *i* AML | AML | | 15 30 51.0 | |
| | comp=N,146nm,0.9s | | | | | | | |
| MIDY | | | | *i* AML | AML | | 15 31 19.0 | |
| | comp=N,71nm,0.5s | | | | | | | |
| **SRTM** | **Siirt_Merkez** | **4.88** | **315** | P | **Pn** | | **15 29 54.4** | **+1.0** |
| SRTM | | | | S | **Sn** | | **15 30 48.4** | **-1.6** |
| SRTM | | | | *i* AML | AML | | 15 30 51.0 | |
| | comp=N,79nm,0.8s | | | | | | | |
| SRTM | | | | *i* AML | AML | | 15 30 58.0 | |
| | comp=N,115nm,0.7s | | | | | | | |
| **KRSH** | **Karshahi** | **4.91** | **96** | Pn | **Pn** | | **15 29 56.5** | **+2.7** |
| **ISFB** | **Sefidab** | **4.95** | **91** | Pn | **Pn** | | **15 29 56.6** | **+2.2** |
| **IBRJ** | **Brojen** | **4.97** | **121** | Pn | **Pn** | | **15 29 57.6** | **+2.8** |
| **MARD** | **Mardin** | **5.21** | **303** | P | **Pn** | | **15 29 58.4** | **+0.5** |
| MARD | | | | S | **Sn** | | **15 30 57.2** | **-1.0** |
| MARD | | | | *i* AML | AML | | 15 31 38.0 | |
| | comp=N,141nm,0.7s | | | | | | | |
| MARD | | | | *i* AML | AML | | 15 31 46.0 | |
| | comp=N,93nm,0.7s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **5.22** | **321** | Pn | **Pn** | | **15 29 58.3** | **+0.2** |
| **IZEF** | **Zefreh** | **5.33** | **107** | Pn | **Pn** | | **15 30 02.4** | **+2.7** |
| **MUSM** | **Mu-Merkez** | **5.62** | **319** | P | **Pn** | | **15 30 04.3** | **+0.7** |
| MUSM | | | | S | **Sn** | | **15 31 06.4** | **-1.9** |
| MUSM | | | | *i* AML | AML | | 15 31 49.0 | |
| | comp=N,9.2nm,1.0s | | | | | | | |
| MUSM | | | | *i* AML | AML | | 15 31 53.0 | |
| | comp=N,12nm,0.9s | | | | | | | |
| **IRAM** | **Rameshed** | **5.83** | **117** | Pn | **Pn** | | **15 30 08.8** | **+2.1** |
| **MMAI** | **Mount Meron Ar** | **9.17** | **263** | Pn | **Pn** | | **15 30 53.1** | **+0.8** |
| | comp=N,0.7nm,0.3s,baz=81,slow=19,SNR=4.4 | | | | | | | |
| | comp=N,2.1nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **11.30** | **301** | Pn | Pn | | 15 31 25.9 | +4.5 |
| | comp=N,0.1nm,0.3s,baz=110,slow=12,SNR=7.9 | | | | | | | |
| | comp=N,1.2nm,0.8s | | | | | | | |
| **SHME** | **Shamm** | **12.05** | **132** | P | **Pn** | | **15 31 31.2** | **-0.4** |
| **NAZ** | **Nazwa, Dubai** | **12.57** | **137** | P | **Pn** | | **15 31 38.5** | **-0.2** |
| **MSFE** | **Esma-Masafi** | **12.57** | **134** | P | **Pn** | | **15 31 37.3** | **-1.5** |
| MSFE | | | | S | **Sn** | | **15 33 52.4** | **-6.6** |
| **MDH** | **Madha** | **12.70** | **134** | P | **Pn** | | **15 31 39.4** | **-1.2** |
| **UOSS** | **Minazif** | **12.91** | **135** | P | **Pn** | | **15 31 41.0** | **-2.5** |
| **HATD** | **Hatta, Dubai** | **12.96** | **136** | P | **Pn** | | **15 31 43.2** | **-1.0** |
| **ASHO** | **Ashiyiah** | **13.03** | **137** | P | **Pn** | | **15 31 44.0** | **-1.1** |
| **ALNE** | **Al Ain** | **13.36** | **139** | P | **Pn** | | **15 31 49.3** | **-0.3** |
| **SOHO** | **SOHO** | **13.73** | **137** | P | **Pn** | | **15 31 52.5** | **-2.1** |
| **KARP** | **Karpathos** | **15.67** | **279** | P | **P** | | **15 32 25.6** | **+0.7** |
| **SANT** | **Santorini** | **17.04** | **282** | P | **P** | | **15 32 39.8** | **-0.2** |
| SANT | | | | IAmb | IAmb | | 15 33 20.4 | |
| | comp=Z,37nm,1.0s | | | | | | | |
| **IDI** | **Anoyia** | **17.54** | **278** | P | **P** | | **15 32 46.4** | **+0.8** |
| IDI | | | | IAmb | IAmb | | 15 32 52.6 | |
| | comp=Z,45nm,1.2s | | | | | | | |
| **AKBB** | **Malin Array Si** | **20.32** | **328** | P | **P** | | **15 33 15.8** | **-0.1** |
| AKBB | | | | IAmb | IAmb | | 15 33 18.7 | |
| | comp=Z,7.8nm,1.4s | | | | | | | |
| **KIEV** | **Kiev** | **20.33** | **328** | P | **P** | | **15 33 15.9** | **0.0** |
| **BUR08** | **Bucovina Ar. S** | **20.46** | **316** | P | **P** | | **15 33 17.4** | **-0.2** |
| **FNA** | **Florina** | **20.61** | **295** | P | **P** | | **15 33 18.8** | **-0.4** |
| FNA | | | | IAmb | IAmb | | 15 33 49.9 | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **29.66** | **55** | P | P | | 15 34 57.2 | +12 |
| | comp=Z,0.3nm,0.6s,baz=258,slow=7.2,SNR=3.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **29.81** | **341** | P | **P** | | **15 34 50.9** | **+4.2** |
| | comp=Z,0.9nm,0.7s,baz=141,slow=9.0,SNR=3.7 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **BNI** | **Bardonecchia** | **31.86** | **301** | P | **P** | | **15 35 05.2** | **+0.1** |
| BNI | | | | IAmb | IAmb | | 15 35 08.5 | |
| | comp=Z,5.1nm,1.1s | | | | | | | |
| **HFS** | **Hagfors** | **33.15** | **330** | P | **P** | | **15 35 19.0** | **+2.9** |
| | comp=Z,1.2nm,0.5s,baz=134,slow=8.3,SNR=5.2 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **NB201** | **NORSAR Array S** | **34.65** | **331** | P | **P** | | **15 35 28.5** | **-0.6** |

*KRSC 27 15:40:06.0±1.8, 50.21N×153.72E, h6km±40km, Ml5.1*
*IDC 27 15:40:07.0±0.6, 50.15N×153.83E, h0km, mb4.1/19, mbtmp4.1/27, ML3.1/6, MS3.7/54, Error ellipse: s-maj=14.7km s-min=11.3km az=140.0*
*MOS 27 15:40:09.8±1.0, 49.97N×153.96E, h32km, mb4.7/15, MS3.9/10, Error ellipse: s-maj=8.2km s-min=4.9km az=63.6*
*NEIC 27 15:40:10.1±1.4, 50.0N±0.1×153.9E±0.1, h23km±6km, mb4.7/101, Error ellipse: s-maj=17.0km s-min=5.1km az=148.0*

**ISC 27 15:40:11.7±0.4, 49.90N±0.05×153.95E±0.04, h35km, n373, σ1.9s33/321, mb4.6/88, MS3.9/60, 11C-13D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.60** | **60** | *e*P | **Pn** | | **15 40 34.8** | **-2.6** |
| SKR | | | | *e*S | **Sn** | | **15 40 56.9** | **+0.1** |
| **SKR** | **Severo-Kuril's** | **1.60** | **60** | *e*PN | **Pn** | | **15 40 35.3** | **-2.1** |
| SKR | | | | *e*S | **Sn** | | **15 40 55.3** | **-1.5** |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,251nm,0.6s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=E,9μm,0.9s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=N,11μm,0.8s | | | | | | | |
| **KDTR** | **Khodutka, Kamc** | **3.24** | **52** | *e*P | **Pn** | | **15 40 57.9** | **-2.2** |
| **KDTR** | **Khodutka, Kamc** | **3.24** | **52** | PN | **Pn** | | **15 40 57.8** | **-2.2** |
| **ASAK** | **Asacha** | **3.52** | **43** | *e*P | **Pn** | | **15 41 02.0** | **-1.9** |
| **ASAK** | **Asacha** | **3.52** | **43** | PN | **Pn** | | **15 41 02.0** | **-1.9** |
| **APC** | **Apacha** | **3.64** | **32** | *e*P | **Pn** | | **15 41 04.0** | **-1.5** |
| **APC** | **Apacha** | **3.64** | **32** | PN | **Pn** | | **15 41 04.0** | **-1.5** |
| **GRL** | **Gorelyy** | **3.71** | **43** | *e*P | **Pn** | | **15 41 05.0** | **-1.6** |
| **GRL** | **Gorelyy** | **3.71** | **43** | PN | **Pn** | | **15 41 05.0** | **-1.6** |
| **MTVR** | **Mutnovka** | **3.71** | **44** | *e*P | **Pn** | | **15 41 05.6** | **-1.1** |
| **MTVR** | **Mutnovka** | **3.71** | **44** | PN | **Pn** | | **15 41 05.6** | **-1.1** |
| **PEA0B** | **Petropavlovsk-** | **3.98** | **35** | Pn | **Pn** | | **15 41 08.9** | **-1.3** |
| **PEA0B** | **Petropavlovsk-** | **3.98** | **35** | *ce*PN | **Pn** | | **15 41 08.6** | **-1.6** |
| **PETK** | **Petropavlovsk-** | **3.98** | **35** | Pn | **Pn** | | **15 41 07.8** | **-2.4** |
| | comp=N,1.6nm,0.3s,baz=197,slow=11,SNR=90 | | | | | | | |
| PETK | | | | Sn | **Sn** | | **15 42 01.0** | **+5.5** |
| | comp=N,21nm,0.3s,baz=253,slow=31,SNR=2.0 | | | | | | | |
| PETK | | | | LR | LR | | 15 42 56.8 | |
| | comp=N,3μm,18.9s,baz=231,slow=44 | | | | | | | |
| | comp=N,8.4nm,0.6s | | | | | | | |
| **PET** | **Petropavlovsk** | **4.30** | **41** | | **Pn** | | **15 41 14.0** | **-0.5** |
| **PET** | **Petropavlovsk** | **4.30** | **41** | *e*PN | Pn | | 15 41 17.3 | +2.8 |
| PET | | | | *e*S | **Sn** | | **15 42 06.3** | **+3.0** |
| PET | | | | pmax | pmax | | | |
| | comp=Z,207nm,0.6s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=E,361nm,0.8s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=N,364nm,0.9s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,2μm,14.0s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,3μm,13.0s | | | | | | | |
| **DALK** | **Dalny** | **4.34** | **42** | *e*P | **Pn** | | **15 41 16.2** | **+1.1** |
| **DALK** | **Dalny** | **4.34** | **42** | PN | **Pn** | | **15 41 16.2** | **+1.1** |
| **KOK** | **Koryaka** | **4.48** | **39** | *e*P | **Pn** | | **15 41 17.0** | **-0.3** |
| **KOK** | **Koryaka** | **4.48** | **39** | PN | **Pn** | | **15 41 16.9** | **-0.3** |
| **AVH** | **Avacha** | **4.50** | **40** | *e*P | **Pn** | | **15 41 17.5** | **0.0** |
| **AVH** | **Avacha** | **4.50** | **40** | PN | **Pn** | | **15 41 17.4** | **0.0** |
| **GNL** | **Ganaly** | **4.54** | **32** | *e*P | **Pn** | | **15 41 16.9** | **-1.1** |
| **GNL** | **Ganaly** | **4.54** | **32** | PN | **Pn** | | **15 41 16.8** | **-1.1** |
| **TUMR** | **Tumrok** | **6.58** | **33** | *e*P | **Pn** | | **15 41 45.6** | **-0.5** |
| **TUMR** | **Tumrok** | **6.58** | **33** | PN | **Pn** | | **15 41 45.5** | **-0.5** |
| **TYV** | **Tymovskoe** | **7.29** | **282** | *e*P | **Pn** | | **15 41 56.0** | **+0.4** |
| **TYV** | **Tymovskoe** | **7.29** | **282** | *e*PN | **Pn** | | **15 41 56.3** | **+0.7** |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,100nm,2.9s | | | | | | | |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| TYV | | | | MLR | MLR | | | |
| | comp=Z,1μm,15.0s | | | | | | | |
| TYV | | | | MLR | MLR | | | |
| | comp=E,800nm,15.0s | | | | | | | |
| **OKH** | **Okha** | **7.76** | **302** | *e*P | **Pn** | | **15 41 59.1** | **-2.8** |
| OKH | | | | *e*S | **Sn** | | **15 43 25.2** | **-3.3** |
| **OKH** | **Okha** | **7.76** | **302** | PN | **Pn** | | **15 41 59.1** | **-2.8** |
| **UGL** | **Uglegorsk** | **7.78** | **268** | *e*PN | **Pn** | | **15 42 03.5** | **+1.1** |
| UGL | | | | pmax | pmax | | | |
| | comp=Z,127nm,0.7s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=Z,2μm,13.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=N,1μm,12.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=E,500nm,6.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **8.01** | **253** | | **Pn** | | **15 42 04.9** | **-0.5** |
| **YSS** | **Yuzh-Sakhalins** | **8.01** | **253** | *ce*PN | **Pn** | | **15 42 06.8** | **+1.4** |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **8.06** | **226** | ⇓*e*PN | **Pn** | | **15 42 08.4** | **+2.2** |
| **JKA** | **Kamikawa-asahi** | **9.67** | **238** | Pn | **Pn** | | **15 42 28.9** | **+0.7** |
| **ASAJ** | **Asahikawa** | **9.67** | **238** | Pn | **Pn** | | **15 42 29.2** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=356,slow=11,SNR=2.0 | | | | | | | |
| ASAJ | | | | Sn | **Sn** | | **15 44 11.9** | **-3.5** |
| | baz=318,slow=27 | | | | | | | |
| ASAJ | | | | LR | LR | | 15 45 40.9 | |
| | comp=Z,335nm,21.1s,baz=52,slow=34 | | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| **MA2** | **Magadan** | **9.87** | **351** | Pn | **Pn** | | **15 42 28.0** | **-2.9** |
| **MA2** | **Magadan** | **9.87** | **351** | Pn | **Pn** | | **15 42 28.4** | **-2.5** |
| | comp=Z,7.2nm,0.6s,baz=174,slow=11,SNR=6.7 | | | | | | | |
| MA2 | | | | LR | LR | | 15 46 43.2 | |
| | comp=Z,558nm,18.2s,baz=176,slow=41 | | | | | | | |
| **MA2** | **Magadan** | **9.87** | **351** | ⇓*e*PN | **Pn** | | **15 42 29.9** | **-1.0** |
| **ERM** | **Erimo** | **10.88** | **228** | ⇓*e*PN | **Pn** | | **15 42 47.6** | **+2.8** |
| **GRNR** | **Gornyy** | **11.24** | **281** | ⇓*i*PN | **Pn** | | **15 42 50.9** | **+1.2** |
| GRNR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=N,410nm,14.0s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=E,280nm,14.0s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=Z,350nm,19.0s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **12.92** | **70** | Pn | **Pn** | | **15 43 10.8** | **-1.8** |
| | comp=Z,9.6nm,0.5s,baz=173,slow=18,SNR=1.4 | | | | | | | |
| SHEM | | | | Sn | Sn | | 15 45 20.4 | -14 |
| | comp=Z,1.1nm,0.3s,baz=256,slow=22,SNR=1.1 | | | | | | | |
| SHEM | | | | LR | LR | | 15 47 44.1 | |
| | comp=Z,278nm,21.1s,baz=294,slow=35 | | | | | | | |
| **SEY** | **Seymchan** | **13.10** | **357** | Pn | **Pn** | | **15 43 12.7** | **-2.3** |
| | comp=Z,0.1nm,0.3s,baz=161,slow=14,SNR=4.6 | | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | | |
| **SEY** | **Seymchan** | **13.10** | **357** | *e*PN | **Pn** | | **15 43 13.3** | **-1.7** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **14.42** | **276** | Pn | **Pn** | | **15 43 32.5** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=79,slow=13,SNR=11 | | | | | | | |
| KLR | | | | LR | LR | | 15 49 26.6 | |
| | comp=Z,437nm,19.1s,baz=90,slow=39 | | | | | | | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **KLR** | **Kul'dur** | **14.42** | **276** | *e*P | **Pn** | | **15 43 33.4** | **+0.3** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **15.99** | **258** | *ce*P | **P** | | **15 43 55.1** | **-1.9** |
| **USRK** | **Ussuriysk Ar.** | **15.99** | **258** | Pn | **Pn** | | **15 43 51.2** | **-2.6** |
| | comp=Z,0.2nm,0.3s,baz=94,slow=14,SNR=1.5 | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| **ZEA** | **Zeya** | **16.91** | **293** | *e*P | **P** | | **15 44 06.5** | **-0.5** |
| ZEA | | | | pmax | pmax | | | |
| | comp=E,10.0nm,1.4s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| ZEA | | | | MLR | MLR | | | |
| | comp=E,200nm,15.0s | | | | | | | |
| ZEA | | | | MLR | MLR | | | |
| | comp=N,300nm,20.0s | | | | | | | |
| ZEA | | | | MLR | MLR | | | |
| | comp=Z,200nm,20.0s | | | | | | | |
| **HEH** | **HeiHe** | **17.01** | **281** | *e*P | **P** | | **15 44 06.5** | **-1.7** |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| HEH | | | | LR | LR | | | |
| | comp=N,1μm,14.6s | | | | | | | |
| HEH | | | | LR | LR | | | |
| | comp=E,640nm,15.4s | | | | | | | |
| HEH | | | | LR | LR | | | |
| | comp=Z,620nm,13.0s | | | | | | | |
| **MDJ** | **Mudanjiang** | **17.32** | **262** | P | **P** | | **15 44 13.0** | **+1.3** |
| MDJ | | | | pP | pwP | | 15 44 21.5 | -1.0 |
| MDJ | | | | sP | sP | | 15 44 28.3 | +3.7 |
| MDJ | | | | S | **Sn** | | **15 47 21.0** | **-1.1** |
| MDJ | | | | SS | **SnSn** | | **15 47 34.8** | **-0.5** |
| MDJ | | | | PcP | PcP | | 15 48 58.5 | +7.1 |
| MDJ | | | | ScP | **ScP** | | **15 52 28.8** | **+5.4** |
| MDJ | | | | PcS | PcS | | 15 52 35.0 | +7.5 |
| **MDJ** | **Mudanjiang** | **17.32** | **262** | ScS | ScS | | 15 56 09.3 | +6.1 |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.0s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=N,1μm,13.9s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=E,1μm,15.0s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,830nm,15.1s | | | | | | | |
| **MDJ** | **Mudanjiang** | **17.32** | **262** | P | **P** | | **15 44 11.4** | **-0.3** |
| MDJ | | | | IAmb | IAmb | | 15 44 17.1 | |
| | comp=Z,41nm,0.9s | | | | | | | |
| **PSTR** | **Posyet** | **17.52** | **254** | ⇓*e*P | **P** | | **15 44 15.1** | **+1.2** |
| **MAJO** | **Matsushiro** | **17.55** | **226** | Pn | **Pn** | | **15 44 12.6** | **-0.8** |
| **MAJO** | **Matsushiro** | **17.55** | **226** | ⇓*e*P | **Pn** | | **15 44 12.5** | **-1.0** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **17.55** | **226** | P | **P** | | **15 44 13.2** | **-1.1** |
| | baz=27,slow=12,SNR=8.6 | | | | | | | |
| MJAR | | | | LR | LR | | 15 51 02.5 | |
| | comp=Z,213nm,20.3s,baz=34,slow=37 | | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **YAK** | **Yakutsk** | **18.08** | **321** | *e*P | **P** | | **15 44 22.3** | **+2.4** |
| YAK | | | | *e*S | **S** | | **15 47 45.6** | **+0.5** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,2.0nm,0.8s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,7.0nm,1.0s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=E,42nm,2.2s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=N,40nm,2.2s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=Z,181nm,17.0s | | | | | | | |
| **BNX** | **BinXian** | **18.26** | **267** | ⇑P | **Pn** | | **15 44 24.0** | **+1.9** |
| BNX | | | | S | **S** | | **15 47 53.5** | **+4.5** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=N,1μm,17.6s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=E,470nm,17.9s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=Z,650nm,16.3s | | | | | | | |
| **JGF** | **Kuroka** | **18.71** | **226** | P | **P** | | **15 44 25.9** | **-1.3** |
| **BILL** | **Bilibino** | **19.20** | **14** | *c*P | **Pn** | | **15 44 34.1** | **+0.8** |
| BILL | | | | *i* SS | **S** | | **15 48 06.0** | **-1.5** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,500nm,12.0s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **19.78** | **217** | LR | LR | | 15 53 15.4 | |
| | comp=Z,102nm,18.8s,baz=116,slow=40 | | | | | | | |
| **CN2** | **Changchun** | **20.35** | **264** | *e*P | **P** | | **15 44 44.0** | **-0.9** |
| CN2 | | | | *e*S | **S** | | **15 48 23.5** | **-7.3** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=N,590nm,15.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=E,230nm,15.0s | | | | | | | |
| **HIA** | **Hailar** | **22.08** | **282** | P | **P** | | **15 45 03.1** | **-0.4** |
| **HIA** | **Hailar** | **22.08** | **282** | P | **P** | | **15 45 03.1** | **-0.4** |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **22.43** | **246** | P | **P** | | **15 45 06.9** | **-0.4** |
| | comp=Z,3.2nm,0.9s,baz=46,slow=10,SNR=10 | | | | | | | |
| KSRS | | | | LR | LR | | 15 52 58.3 | |
| | comp=Z,214nm,19.4s,baz=55,slow=34 | | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | | |
| **JNU** | **Nakatsue** | **23.92** | **234** | LR | LR | | 15 55 38.8 | |
| | comp=Z,198nm,18.0s,baz=80,slow=39 | | | | | | | |
| **JCJ** | **Chichijima** | **24.50** | **206** | LR | LR | | 15 56 59.3 | |
| | comp=Z,39nm,18.0s,baz=26,slow=41 | | | | | | | |
| **TIXI** | **Tiksi** | **24.63** | **341** | P | **P** | | **15 45 28.6** | **+0.2** |
| **TIXI** | **Tiksi** | **24.63** | **341** | ⇓*i*P | **P** | | **15 45 29.2** | **+0.8** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **26.28** | **45** | P | **P** | | **15 45 40.4** | **-3.0** |
| | baz=261 | | | | | | | |
| **XLT** | **XiLinHaoTe** | **26.35** | **271** | *e*P | **P** | | **15 45 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **G19K** | **Purcell Mounta** | **29.60** | **38** | P | **P** | **15 46 11.9** | **-1.2** |
| | baz=261 | | | | | | |
| **D19K** | **Kuna River** | **29.69** | **34** | P | **P** | **15 46 12.9** | **-0.9** |
| | baz=256 | | | | | | |
| **H19K** | **Roundabout Mou** | **29.77** | **40** | P | **P** | **15 46 13.8** | **-0.8** |
| H19K | | | | IAmb | IAmb | 15 46 14.8 | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **H19K** | **Roundabout Mou** | **29.77** | **40** | P | **P** | **15 46 14.2** | **-0.4** |
| | baz=263,SNR=7.7 | | | | | | |
| **E19K** | **Redstone River** | **29.78** | **36** | P | **P** | **15 46 14.6** | **0.0** |
| | baz=258 | | | | | | |
| **N18K** | **Kilae Creek** | **29.79** | **50** | P | **P** | **15 46 15.0** | **+0.2** |
| | baz=272 | | | | | | |
| **M18K** | **Stony River** | **29.80** | **48** | P | **P** | **15 46 14.6** | **-0.3** |
| | baz=270 | | | | | | |
| **Q17K** | **Contact Creek** | **29.95** | **54** | P | **P** | **15 46 17.1** | **+0.7** |
| | baz=276 | | | | | | |
| **J19K** | **Poorman** | **29.98** | **43** | P | **P** | **15 46 15.9** | **-0.5** |
| | baz=266 | | | | | | |
| **P18K** | **Big Mountain,** | **30.19** | **52** | P | **P** | **15 46 18.2** | **-0.2** |
| | baz=274 | | | | | | |
| **D20K** | **Etivluk River** | **30.27** | **33** | P | **P** | **15 46 17.9** | **-1.1** |
| | baz=257 | | | | | | |
| **F20K** | **Avaraart Lake** | **30.28** | **37** | P | **P** | **15 46 18.6** | **-0.4** |
| | baz=261 | | | | | | |
| **JOW** | **Kunigami** | **30.32** | **230** | LR | LR | 15 58 24.9 | |
| | comp=Z,138nm,21.4s,baz=326,slow=36 | | | | | | |
| **E20K** | **Nigu River** | **30.33** | **34** | P | **P** | **15 46 18.6** | **-1.0** |
| | baz=258,SNR=9.7 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **30.37** | **54** | P | **P** | **15 46 19.7** | **-0.4** |
| | baz=276 | | | | | | |
| **B20K** | **Meade River** | **30.41** | **31** | P | **P** | **15 46 19.4** | **-0.7** |
| | baz=254 | | | | | | |
| **H20K** | **Anotleneega Mo** | **30.42** | **40** | P | **P** | **15 46 19.2** | **-1.1** |
| | baz=264 | | | | | | |
| **M19K** | **Big River Lodg** | **30.48** | **47** | P | **P** | **15 46 20.7** | **-0.2** |
| | baz=271 | | | | | | |
| **ULN** | **Ulaanbaatar** | **30.52** | **285** | *e*P | **P** | **15 46 22.0** | **+0.5** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **J20K** | **Nowinta River** | **30.63** | **43** | P | **P** | **15 46 21.5** | **-0.7** |
| **J20K** | **Nowinta River** | **30.63** | **43** | P | **P** | **15 46 21.5** | **-0.7** |
| | baz=267 | | | | | | |
| **K20K** | **Telida** | **30.64** | **44** | P | **P** | **15 46 22.2** | **0.0** |
| | baz=269 | | | | | | |
| **HNS** | **HongShan** | **30.66** | **261** | *e*P | P | 15 46 28.8 | +6.1 |
| HNS | | | | *e*S | S | 15 51 30.8 | +8.1 |
| HNS | | | | LR | LR | | |
| | comp=N,170nm,13.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,550nm,15.5s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,350nm,16.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **30.76** | **269** | *e*P | **P** | **15 46 26.0** | **+2.3** |
| HHC | | | | pP | pP | 15 46 32.3 | -0.9 |
| HHC | | | | sP | sP | 15 46 41.5 | +4.3 |
| HHC | | | | *e*S | **S** | **15 51 29.0** | **+4.6** |
| HHC | | | | sS | sS | 15 51 37.0 | -3.1 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,43nm,4.5s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,470nm,13.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,320nm,12.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,350nm,15.2s | | | | | | |
| **R18K** | **Karluk** | **30.80** | **56** | P | **P** | **15 46 24.1** | **+0.5** |
| | baz=278 | | | | | | |
| **IRK** | **Irkutsk** | **30.82** | **294** | *e*P | **P** | **15 46 23.0** | **-0.9** |
| IRK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **30.94** | **285** | P | **P** | **15 46 25.3** | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=81,slow=9.5,SNR=5.0 | | | | | | |
| SONM | | | | LR | LR | 15 59 47.1 | |
| | comp=Z,168nm,18.5s,baz=86,slow=38 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **C21K** | **Knifeblade Rid** | **31.02** | **33** | P | **P** | **15 46 25.6** | **+0.1** |
| | baz=258 | | | | | | |
| **M20K** | **Styx River** | **31.08** | **47** | P | **P** | **15 46 26.2** | **-0.1** |
| | baz=272 | | | | | | |
| **G21K** | **Allakaket** | **31.08** | **38** | P | **P** | **15 46 25.6** | **-0.5** |
| G21K | | | | IAmb | IAmb | 15 46 26.5 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **G21K** | **Allakaket** | **31.08** | **38** | P | **P** | **15 46 26.3** | **+0.2** |
| | baz=264,SNR=6.4 | | | | | | |
| **SII** | **Sitkinak Islan** | **31.10** | **57** | P | **P** | **15 46 27.3** | **+0.8** |
| | baz=280 | | | | | | |
| **B21K** | **Ikpikpuk River** | **31.17** | **32** | P | **P** | **15 46 26.2** | **-0.6** |
| **B21K** | **Ikpikpuk River** | **31.17** | **32** | P | **P** | **15 46 26.9** | **0.0** |
| | baz=258,SNR=5.3 | | | | | | |
| **E21K** | **Killik River** | **31.17** | **34** | P | **P** | **15 46 25.1** | **-1.8** |
| E21K | | | | IAmb | IAmb | 15 46 54.3 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **E21K** | **Killik River** | **31.17** | **34** | P | **P** | **15 46 26.8** | **-0.2** |
| | baz=260 | | | | | | |
| **F21K** | **Alatna River** | **31.17** | **37** | P | **P** | **15 46 26.4** | **-0.6** |
| | baz=263 | | | | | | |
| **H21K** | **Melozitna Rive** | **31.29** | **40** | P | **P** | **15 46 26.4** | **-1.6** |
| **H21K** | **Melozitna Rive** | **31.29** | **40** | P | **P** | **15 46 27.7** | **-0.3** |
| | baz=266 | | | | | | |
| **OHAK** | **Old Harbor** | **31.47** | **56** | P | **P** | **15 46 30.6** | **+1.0** |
| | baz=280 | | | | | | |
| **NJ2** | **Nanjing** | **31.55** | **249** | *e*P | **P** | **15 46 31.8** | **+1.2** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **SPCR** | **Spurr Chakacha** | **31.56** | **48** | P | **P** | **15 46 29.5** | **-1.0** |
| | baz=274 | | | | | | |
| **D22K** | **Ayikyak River** | **31.71** | **34** | P | **P** | **15 46 30.4** | **-1.2** |
| | baz=261 | | | | | | |
| **F22K** | **John River** | **31.71** | **36** | P | **P** | **15 46 31.5** | **-0.1** |
| | baz=264 | | | | | | |
| **B22K** | **Teshekpuk Lake** | **31.73** | **31** | P | **P** | **15 46 31.9** | **+0.2** |
| | baz=258 | | | | | | |
| **SKT** | **Skwentna** | **31.83** | **47** | P | **P** | **15 46 31.3** | **-1.5** |
| | baz=273 | | | | | | |
| **BTO** | **Baotou** | **31.88** | **270** | *e*P | **P** | **15 46 31.8** | **-1.8** |
| BTO | | | | pmax | pmax | | |
| | comp=Z,16nm,0.4s | | | | | | |
| BTO | | | | pmax | pmax | | |
| | comp=Z,90nm,3.7s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=N,3µm,16.1s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=E,1µm,14.4s | | | | | | |
| BTO | | | | LR | LR | | |
| | comp=Z,1µm,17.1s | | | | | | |
| **H22K** | **Ishtalitna Cre** | **31.89** | **39** | P | **P** | **15 46 32.9** | **-0.4** |
| | baz=267 | | | | | | |
| **G22K** | **Bettles** | **31.91** | **37** | P | **P** | **15 46 32.9** | **-0.5** |
| | baz=265 | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **31.92** | **35** | P | **P** | **15 46 32.8** | **-0.7** |
| E22K | | | | IAmb | IAmb | 15 47 10.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **31.92** | **35** | P | **P** | **15 46 33.1** | **-0.5** |
| | baz=263,SNR=5.9 | | | | | | |
| **ZAK** | **Zakamensk** | **31.97** | **291** | *e*P | **P** | **15 46 33.6** | **-0.6** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **HOM** | **Homer** | **31.98** | **51** | P | **P** | **15 46 35.1** | **+1.0** |
| | baz=277 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **32.02** | **43** | P | **P** | **15 46 33.9** | **-0.5** |
| | baz=270 | | | | | | |
| **MLY** | **Manley** | **32.13** | **41** | P | **P** | **15 46 35.9** | **+0.4** |
| | baz=269 | | | | | | |
| **SUA** | **Susitna One** | **32.24** | **48** | P | **P** | **15 46 36.6** | **+0.1** |
| | baz=275 | | | | | | |
| **D23K** | **Nanushuk River** | **32.44** | **34** | P | **P** | **15 46 37.6** | **-0.4** |
| | baz=263 | | | | | | |
| **COLD** | **Coldfoot** | **32.45** | **37** | P | **P** | **15 46 37.5** | **-0.6** |
| | baz=266,SNR=9.2 | | | | | | |
| **G23K** | **Bananza Creek** | **32.48** | **38** | P | **P** | **15 46 37.2** | **-1.3** |
| **G23K** | **Bananza Creek** | **32.48** | **38** | P | **P** | **15 46 38.5** | **0.0** |
| | baz=267,SNR=5.7 | | | | | | |
| **M22K** | **Willow** | **32.52** | **47** | P | **P** | **15 46 38.7** | **0.0** |
| | baz=275 | | | | | | |
| **C23K** | **Itkillik River** | **32.58** | **32** | P | **P** | **15 46 39.0** | **-0.2** |
| | baz=262 | | | | | | |
| **H23K** | **Yukon River** | **32.65** | **40** | P | **P** | **15 46 39.8** | **-0.1** |
| | baz=269 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **32.72** | **41** | P | **P** | **15 46 39.9** | **-0.5** |
| | baz=270 | | | | | | |
| **E23K** | **Chandalar** | **32.73** | **35** | P | **P** | **15 46 40.1** | **-0.6** |
| **E23K** | **Chandalar** | **32.73** | **35** | P | **P** | **15 46 40.4** | **-0.3** |
| | baz=265,SNR=14 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **32.80** | **34** | P | **P** | **15 46 40.6** | **-0.7** |
| TOLK | | | | lAmb | lAmb | 15 46 41.4 | |
| | comp=Z,5.8nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **32.80** | **34** | P | **P** | **15 46 41.0** | **-0.2** |
| | baz=264 | | | | | | |
| **NEA2** | **Nenana** | **32.84** | **42** | P | **P** | **15 46 40.8** | **-0.8** |
| NEA2 | | | | lAmb | lAmb | 15 46 42.8 | |
| | comp=Z,6.6nm,0.6s | | | | | | |
| **NEA2** | **Nenana** | **32.84** | **42** | P | **P** | **15 46 41.1** | **-0.5** |
| | baz=271,SNR=7.0 | | | | | | |
| **MCK** | **McKinley** | **32.93** | **43** | P | **P** | **15 46 42.1** | **-0.3** |
| | baz=273 | | | | | | |
| **D24K** | **Happy Valley** | **33.12** | **33** | P | **P** | **15 46 43.5** | **-0.5** |
| | baz=264 | | | | | | |
| **E24K** | **Your Creek** | **33.16** | **35** | P | **P** | **15 46 43.6** | **-0.7** |
| **E24K** | **Your Creek** | **33.16** | **35** | P | **P** | **15 46 44.2** | **-0.2** |
| | baz=266,SNR=12 | | | | | | |
| **MDM** | **Murphy Dome** | **33.20** | **41** | P | **P** | **15 46 43.9** | **-0.8** |
| **WRH** | **Wood River Hil** | **33.27** | **42** | lAmb | lAmb | 15 46 46.3 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| **H24K** | **Noodor Dome** | **33.33** | **40** | P | **P** | **15 46 45.8** | **-0.1** |
| | baz=270 | | | | | | |
| **KNK** | **Knik Glacier** | **33.34** | **48** | P | **P** | **15 46 46.1** | **+0.1** |
| | baz=277 | | | | | | |
| **F24K** | **Squaw Lake** | **33.36** | **36** | P | **P** | **15 46 44.9** | **-1.2** |
| F24K | | | | lAmb | lAmb | 15 46 46.2 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **F24K** | **Squaw Lake** | **33.36** | **36** | P | **P** | **15 46 45.1** | **-1.0** |
| | baz=268,SNR=7.3 | | | | | | |
| **SML** | **Sawmill** | **33.36** | **47** | P | **P** | **15 46 45.8** | **-0.3** |
| | baz=276 | | | | | | |
| **COLA** | **College** | **33.36** | **41** | *ce*P | **P** | **15 46 45.6** | **-0.5** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **33.50** | **38** | | **P** | **15 46 46.5** | **-0.7** |
| **G24K** | **Hadweenzic Riv** | **33.50** | **38** | P | **P** | **15 46 47.0** | **-0.2** |
| | baz=269,SNR=16 | | | | | | |
| **POKR** | **Poker Plat Res** | **33.53** | **41** | P | **P** | **15 46 47.5** | **-0.1** |
| | baz=272 | | | | | | |
| **M23K** | **Glacier View** | **33.64** | **47** | P | **P** | **15 46 48.8** | **+0.2** |
| | baz=277 | | | | | | |
| **DHY** | **Denali Highway** | **33.68** | **45** | P | **P** | **15 46 48.2** | **-0.9** |
| | baz=275 | | | | | | |
| **HDA** | **Harding Lake** | **33.77** | **42** | lAmb | lAmb | 15 46 49.6 | |
| | comp=Z,5.4nm,0.5s | | | | | | |
| **HDA** | **Harding Lake** | **33.77** | **42** | P | **P** | **15 46 49.3** | **-0.4** |
| | baz=273,SNR=5.7 | | | | | | |
| **ILAR** | **Eielson Array** | **33.78** | **41** | P | **P** | **15 46 48.9** | **-0.8** |
| | comp=Z,4.3nm,0.7s,baz=264,slow=8.1,SNR=51 | | | | | | |
| ILAR | | | | LR | LR | 16 00 37.0 | |
| | comp=Z,81nm,21.0s,baz=275,slow=37 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **33.83** | **47** | P | **P** | **15 46 50.0** | **-0.3** |
| | baz=277 | | | | | | |
| **D25K** | **Kavik River** | **34.01** | **33** | P | **P** | **15 46 51.2** | **-0.6** |
| | baz=266,SNR=15 | | | | | | |
| **G25K** | **Bearman Lake** | **34.04** | **38** | P | **P** | **15 46 51.4** | **-0.6** |
| | baz=270 | | | | | | |
| **H25L** | **Birch Creek** | **34.16** | **39** | P | **P** | **15 46 53.1** | **0.0** |
| | baz=272 | | | | | | |
| **F25K** | **Christian Rive** | **34.22** | **36** | P | **P** | **15 46 53.3** | **-0.3** |
| | baz=270 | | | | | | |
| **PRP** | **Porcupine Dome** | **34.31** | **40** | lAmb | lAmb | 15 46 55.1 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **34.31** | **40** | P | **P** | **15 46 53.8** | **-0.7** |
| | baz=273,SNR=5.7 | | | | | | |
| **K24K** | **Donnelly Dome** | **34.33** | **43** | P | **P** | **15 46 53.9** | **-0.7** |
| | baz=275 | | | | | | |
| **M24K** | **Tolsona, Glenn** | **34.33** | **46** | P | **P** | **15 46 54.3** | **-0.4** |
| | baz=277 | | | | | | |
| **FYU** | **Fort Yukon** | **34.39** | **38** | P | **P** | **15 46 54.7** | **-0.3** |
| **J25K** | **Salcha River,** | **34.44** | **42** | lAmb | lAmb | 15 46 55.1 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **J25K** | **Salcha River,** | **34.44** | **42** | P | **P** | **15 46 53.9** | **-1.7** |
| | baz=274 | | | | | | |
| **PAX** | **Paxson** | **34.55** | **45** | P | **P** | **15 46 55.9** | **-0.7** |
| | baz=277 | | | | | | |
| **RIDG** | **Independent Ri** | **34.75** | **43** | P | **P** | **15 46 56.7** | **-1.5** |
| | baz=276 | | | | | | |
| **F26K** | **Sheenjek River** | **34.79** | **36** | lAmb | lAmb | 15 47 00.3 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **34.79** | **36** | P | **P** | **15 46 58.3** | **-0.2** |
| | baz=271,SNR=7.6 | | | | | | |
| **G26K** | **Porcupine Rive** | **34.95** | **37** | P | **P** | **15 46 59.9** | **0.0** |
| | baz=272,SNR=6.6 | | | | | | |
| **C27K** | **Jago River** | **34.96** | **33** | P | **P** | **15 46 59.8** | **-0.1** |
| | baz=269 | | | | | | |
| **SCRK** | **Sand Creek** | **35.10** | **43** | P | **P** | **15 46 59.4** | **-1.9** |
| SCRK | | | | lAmb | lAmb | 15 47 02.5 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **SCRK** | **Sand Creek** | **35.10** | **43** | P | **P** | **15 47 00.2** | **-1.1** |
| | baz=276,SNR=7.0 | | | | | | |
| **N25K** | **Chitina, Valde** | **35.15** | **47** | P | **P** | **15 47 00.9** | **-0.8** |
| | baz=279 | | | | | | |
| **J26L** | **Joseph Creek** | **35.23** | **42** | P | **P** | **15 47 00.7** | **-1.7** |
| | baz=276 | | | | | | |
| **I26K** | **Coal Creek Min** | **35.32** | **40** | P | **P** | **15 47 02.2** | **-0.8** |
| | baz=275 | | | | | | |
| **E27K** | **Coleen River** | **35.74** | **35** | P | **P** | **15 47 06.7** | **+0.1** |
| | baz=273 | | | | | | |
| **M26K** | **Nabesna, AK** | **35.76** | **45** | P | **P** | **15 47 06.9** | **-0.1** |
| | baz=280 | | | | | | |
| **G27K** | **Doyon Strip** | **35.80** | **38** | P | **P** | **15 47 07.1** | **-0.1** |
| | baz=274 | | | | | | |
| **H27K** | **Steamboat Moun** | **35.90** | **39** | P | **P** | **15 47 08.1** | **0.0** |
| | baz=275,SNR=6.8 | | | | | | |
| **K27K** | **Chicken** | **35.93** | **42** | P | **P** | **15 47 08.2** | **-0.1** |
| | baz=278 | | | | | | |
| **D27M** | **Malcolm River** | **35.93** | **33** | P | **P** | **15 47 08.2** | **-0.1** |
| | baz=272 | | | | | | |
| **I27K** | **Kandik River** | **35.93** | **40** | P | **P** | **15 47 07.7** | **-0.7** |
| | baz=276 | | | | | | |
| **CRQE** | **Cirque** | **36.02** | **48** | P | **P** | **15 47 09.6** | **+0.4** |
| | baz=282 | | | | | | |
| **L27K** | **Beaver Creek,** | **36.18** | **44** | lAmb | lAmb | 15 47 11.8 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **L27K** | **Beaver Creek,** | **36.18** | **44** | P | **P** | **15 47 11.2** | **+0.6** |
| | baz=280,SNR=11 | | | | | | |
| **KRAR** | **Krasnoyarsk** | **36.22** | **304** | *de*P | **P** | **15 47 11.8** | **+1.0** |
| **EGAK** | **Eagle** | **36.22** | **41** | lAmb | lAmb | 15 47 11.8 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **36.22** | **41** | P | **P** | **15 47 09.9** | **-0.8** |
| | baz=278,SNR=7.6 | | | | | | |
| **M27K** | **Edge Creek, AK** | **36.28** | **45** | lAmb | lAmb | 15 47 31.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **M27K** | **Edge Creek, AK** | **36.28** | **45** | P | **P** | **15 47 11.5** | **0.0** |
| | baz=280 | | | | | | |
| **F28M** | **Old Crow** | **36.43** | **36** | lAmb | lAmb | 15 47 13.5 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **36.43** | **36** | P | **P** | **15 47 13.1** | **+0.6** |
| | baz=275,SNR=6.3 | | | | | | |
| **E28M** | **Babbage River** | **36.48** | **34** | P | **P** | **15 47 13.2** | **+0.3** |
| | baz=274 | | | | | | |
| **I28M** | **Miner Creek** | **36.64** | **40** | P | **P** | **15 47 14.6** | **+0.1** |
| | baz=278,SNR=6.4 | | | | | | |
| **D28M** | **Stokes Point** | **36.72** | **33** | P | **P** | **15 47 15.1** | **+0.2** |
| | baz=274 | | | | | | |
| **CTG** | **Chitna Glacier** | **36.81** | **47** | P | **P** | **15 47 16.5** | **+0.4** |
| | baz=283 | | | | | | |
| **GUMO** | **Guam** | **36.96** | **195** | LR | LR | 16 03 08.9 | |
| | comp=Z,57nm,18.5s,baz=11,slow=37 | | | | | | |
| **DAWY** | **Dawson** | **37.09** | **42** | P | **P** | **15 47 18.4** | **+0.2** |
| | baz=280 | | | | | | |
| **E29M** | **Blow River** | **37.10** | **35** | P | **P** | **15 47 18.3** | **+0.1** |
| | baz=276 | | | | | | |
| **H29M** | **Whitestone** | **37.17** | **38** | P | **P** | **15 47 18.7** | **-0.2** |
| | baz=278 | | | | | | |
| **G29M** | **Pine Creek** | **37.22** | **37** | lAmb | lAmb | 15 47 21.1 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **G29M** | **Pine Creek** | **37.22** | **37** | P | **P** | **15 47 19.9** | **+0.6** |
| | baz=278,SNR=6.1 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **37.33** | **40** | lAmb | lAmb | 15 47 20.8 | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **37.33** | **40** | P | **P** | **15 47 19.8** | **-0.4** |
| | baz=279,SNR=7.5 | | | | | | |
| **O28M** | **Mount Upton** | **37.41** | **48** | P | **P** | **15 47 21.0** | **-0.2** |
| | baz=284 | | | | | | |
| **EPYK** | **Eagle Plains** | **37.81** | **38** | P | **P** | **15 47 24.6** | **+0.3** |
| | baz=279 | | | | | | |
| **M29M** | **Somme Creek** | **37.82** | **45** | P | **P** | **15 47 24.5** | **0.0** |
| **M29M** | **Somme Creek** | **37.82** | **45** | P | **P** | **15 47 25.1** | **+0.5** |
| | baz=283 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **37.91** | **37** | P | **P** | **15 47 24.9** | **-0.2** |
| | baz=279 | | | | | | |
| **K29M** | **Barlow Dome** | **37.94** | **42** | P | **P** | **15 47 25.3** | **-0.3** |
| | baz=282 | | | | | | |
| **F30M** | **Barrier River** | **37.98** | **36** | P | **P** | **15 47 26.6** | **+0.9** |
| | baz=278,SNR=8.6 | | | | | | |
| **I30M** | **Mount Dempster** | **38.15** | **40** | P | **P** | **15 47 26.9** | **-0.4** |
| I30M | | | | lAmb | lAmb | 15 47 28.0 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **38.15** | **40** | P | **P** | **15 47 27.3** | **0.0** |
| | baz=281,SNR=15 | | | | | | |
| **YUK6** | **Outpost Mounta** | **38.23** | **47** | P | **P** | **15 47 25.2** | **-3.0** |
| | baz=285 | | | | | | |
| **J30M** | **Hart River** | **38.30** | **41** | P | **P** | **15 47 27.4** | **-1.1** |
| | baz=282 | | | | | | |
| **LZH** | **Lanzhou** | **38.44** | **268** | *e*P | **P** | **15 47 31.5** | **+1.4** |
| LZH | | | | sP | pP | 15 47 39.0 | -0.8 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,890nm,18.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,570nm,19.6s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,510nm,19.6s | | | | | | |
| **M30M** | **Minto, Yukon** | **38.55** | **44** | P | **P** | **15 47 31.3** | **+0.8** |
| | baz=284 | | | | | | |
| **G31M** | **Satah River** | **38.68** | **37** | P | **P** | **15 47 31.3** | **-0.2** |
| | baz=281 | | | | | | |
| **N30M** | **Aishikik Lake** | **38.69** | **46** | P | **P** | **15 47 31.9** | **+0.1** |
| | baz=285 | | | | | | |
| **INK** | **Inuvik** | **38.72** | **35** | P | **P** | **15 47 32.2** | **+0.4** |
| | baz=280 | | | | | | |
| **F31M** | **Tsiigehtchic** | **38.78** | **36** | P | **P** | **15 47 32.4** | **0.0** |
| | baz=280 | | | | | | |
| **H31M** | **Peel River** | **38.87** | **39** | lAmb | lAmb | 15 47 35.4 | |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **H31M** | **Peel River** | **38.87** | **39** | P | **P** | **15 47 33.6** | **+0.4** |
| | baz=282 | | | | | | |
| **GTA** | **Gaotai** | **39.12** | **276** | P | **P** | **15 47 37.3** | **+1.6** |
| GTA | | | | pP | pP | 15 47 44.0 | -1.4 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,560nm,16.3s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,310nm,17.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,410nm,14.7s | | | | | | |
| **N31M** | **Braeburn, Yuko** | **39.29** | **46** | P | **P** | **15 47 37.7** | **+0.9** |
| | baz=286 | | | | | | |
| **O30N** | **Mendenhall** | **39.35** | **47** | P | **P** | **15 47 37.7** | **+0.4** |
| | baz=287 | | | | | | |
| **PLBC** | **Pleasant Camp** | **39.61** | **49** | P | **P** | **15 47 40.2** | **+0.8** |
| | baz=288 | | | | | | |
| **M31M** | **Drury Creek, Y** | **39.73** | **44** | P | **P** | **15 47 40.0** | **-0.4** |
| | baz=286 | | | | | | |
| **WHY** | **Whitehorse** | **39.95** | **47** | P | **P** | **15 47 42.0** | **-0.3** |
| | baz=288 | | | | | | |
| **SKAG** | **Skagway** | **40.11** | **48** | P | **P** | **15 47 43.5** | **0.0** |
| | baz=289 | | | | | | |
| **S31K** | **Pelican** | **40.16** | **51** | P | **P** | **15 47 45.0** | **+1.1** |
| | baz=290 | | | | | | |
| **FARO** | **Faro, Yukon** | **40.19** | **44** | P | **P** | **15 47 44.2** | **0.0** |
| | baz=287 | | | | | | |
| **SIT** | **Sitka** | **40.94** | **52** | P | **P** | **15 47 51.4** | **+1.1** |
| | baz=291 | | | | | | |
| **P33M** | **Teslin, Yukon** | **41.06** | **47** | P | **P** | **15 47 52.3** | **+0.7** |
| | baz=290 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.29** | **303** | P | **P** | **15 47 52.9** | **-0.4** |
| | comp=Z,0.9nm,0.5s,baz=59,slow=7.0,SNR=4.7 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **41.63** | **296** | ⇑*i*P | **P** | **15 47 57.5** | **+1.1** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| DGZ | | | | MLR | MLR | | |
| | comp=Z,159nm,14.0s | | | | | | |
| **R33M** | **Jennings River** | **42.23** | **47** | P | **P** | **15 48 00.1** | **-1.0** |
| R33M | | | | lAmb | lAmb | 15 48 18.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **R33M** | **Jennings River** | **42.23** | **47** | P | **P** | **15 48 01.6** | **+0.5** |
| | baz=292 | | | | | | |
| **WTLY** | **Watson Lake, Y** | **42.98** | **46** | P | **P** | **15 48 07.5** | **+0.4** |
| | baz=292 | | | | | | |
| **WMQ** | **Urumqi** | **44.38** | **289** | *e*P | **P** | **15 48 19.0** | **+0.4** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=N,650nm,12.9s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,250nm,16.5s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,150nm,16.5s | | | | | | |
| **TOAD** | **Toad River Com** | **45.15** | **46** | P | **P** | **15 48 25.2** | **+0.7** |
| | baz=296 | | | | | | |
| **EUNU** | **Eureka** | **45.93** | **12** | P | **P** | **15 48 29.9** | **-0.5** |
| EUNU | | | | lAmb | lAmb | 15 49 01.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **46.05** | **295** | *d*i P | **P** | **15 48 32.0** | **+0.2** |
| **MKAR** | **Makanchi Array** | **46.05** | **295** | P | **P** | **15 48 31.8** | **+0.1** |
| | comp=Z,2.3nm,0.9s,baz=61,slow=7.5,SNR=18 | | | | | | |
| MKAR | | | | LR | LR | 16 08 47.6 | |
| | comp=Z,357nm,18.2s,baz=48,slow=38 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **PZH** | **PanZhiHua** | **46.08** | **259** | P | **P** | **15 48 33.5** | **+1.2** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.3s | | | | | | |
| **KURK** | **Kurchatov** | **46.14** | **301** | P | **P** | **15 48 32.0** | **-0.3** |
| KURK | | | | lAmb | lAmb | 15 49 06.8 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.14** | **301** | *c i*P | **P** | **15 48 32.9** | **+0.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| KURK | | | | MLR | MLR | | |
| | comp=Z,113nm,16.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.23** | **301** | P | **P** | **15 48 33.4** | **+0.3** |
| | comp=Z,2.0nm,0.5s,baz=67,slow=8.7,SNR=14 | | | | | | |
| KURBB | | | | LR | LR | 16 08 32.5 | |
| | comp=Z,144nm,18.2s,baz=172,slow=37 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **QIZ** | **Qiongzhong** | **46.65** | **245** | P | **P** | **15 48 37.3** | **+0.6** |
| QIZ | | | | S | **S** | **15 55 23.8** | **+0.3** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,24nm,1.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=N,170nm,16.0s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=E,230nm,14.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,190nm,14.3s | | | | | | |
| **BBB** | **Bella Bella** | **46.82** | **56** | LR | LR | 16 05 24.7 | |
| | comp=Z,58nm,21.5s,baz=264,slow=32 | | | | | | |
| **YKA** | **Yellowknife Ar** | **48.09** | **39** | P | **P** | **15 48 47.0** | **-0.3** |
| | comp=Z,3.2nm,1.0s,baz=305,slow=7.9,SNR=6.3 | | | | | | |
| YKA | | | | LR | LR | 16 11 29.2 | |
| | comp=Z,155nm,21.1s,baz=314,slow=39 | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **DAV** | **Davao City (W)** | **48.85** | **219** | LR | LR | 16 09 33.5 | |
| | comp=Z,60nm,19.4s,baz=360,slow=36 | | | | | | |
| **BVAR** | **Borovoye Array** | **49.33** | **308** | P | **P** | **15 48 57.5** | **+0.4** |
| | comp=Z,2.6nm,0.5s,baz=57,slow=7.8,SNR=15 | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **49.37** | **308** | *de*P | **P** | **15 48 59.5** | **+2.2** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **52.98** | **295** | LR | LR | 16 13 07.5 | |
| | comp=Z,243nm,18.4s,baz=40,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **52.98** | **295** | ⇓*e*P | **P** | **15 49 25.9** | **+1.1** |
| AAK | | | | pmax | pmax

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **J05D** | **Fort Rock, OR** | **55.68** | **62** | P | **P** | **15 49 45.6** | **+1.2** |
| **YBH** | **Yreka Blue Hor** | **55.81** | **64** | LR | LR | 16 14 12.2 | |
| | comp=Z,31nm,18.0s,baz=318,slow=37 | | | | | | |
| **ABKAR** | **Akbulak array** | **56.86** | **309** | P | **P** | **15 49 52.2** | **-0.4** |
| **J08A** | **Circle Bar Ran** | **57.20** | **60** | IAmb | IAmb | 15 49 58.7 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **WVOR** | **Wild Horse Val** | **57.70** | **61** | IAmb | IAmb | 15 50 08.3 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **HNR** | **Honiara** | **59.31** | **173** | LR | LR | 16 12 37.4 | |
| | comp=Z,750nm,21.5s,baz=338,slow=33 | | | | | | |
| **PNTR** | **Pine Nut** | **59.33** | **65** | P | **P** | **15 50 08.1** | **-2.1** |
| **PMG** | **Port Moresby** | **59.35** | **188** | LR | LR | 16 16 18.4 | |
| | comp=Z,32nm,18.6s,baz=76,slow=36 | | | | | | |
| **WAKR** | **Walker** | **59.81** | **65** | IAmb | IAmb | 15 50 15.8 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **YHL** | **Hebgen Lake** | **60.19** | **55** | IAmb | IAmb | 15 50 22.6 | |
| | comp=Z,6.5nm,1.1s | | | | | | |
| **KVN** | **Kaiserville** | **60.23** | **64** | IAmb | IAmb | 15 50 25.8 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **RYN** | **Ryan** | **60.26** | **64** | IAmb | IAmb | 15 50 21.5 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.52** | **64** | P | **P** | **15 50 19.5** | **+1.1** |
| | comp=Z,2.3nm,0.5s,baz=296,slow=7.5,SNR=22 | | | | | | |
| NVAR | | | | LR | LR | 16 11 54.9 | |
| | comp=Z,22nm,20.0s,baz=286,slow=32 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **LHV** | **Little Huntoon** | **60.52** | **65** | IAmb | IAmb | 15 50 28.3 | |
| | comp=Z,7.8nm,1.0s | | | | | | |
| **YFT** | **Old Faithful** | **60.65** | **55** | IAmb | IAmb | 15 50 22.7 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **ELK** | **Elko** | **60.73** | **61** | P | **P** | **15 50 20.9** | **+1.1** |
| **ELK** | **Elko** | **60.73** | **61** | LR | LR | 16 12 49.0 | |
| | comp=Z,43nm,21.6s,baz=292,slow=32 | | | | | | |
| **ELK** | **Elko** | **60.73** | **61** | P | **P** | **15 50 20.9** | **+1.1** |
| ELK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **H17A** | **Grant Village** | **60.82** | **55** | IAmb | IAmb | 15 50 31.9 | |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **RLMT** | **Red Lodge** | **61.01** | **53** | IAmb | IAmb | 15 50 37.7 | |
| | comp=Z,6.7nm,1.0s | | | | | | |
| **TPAW** | **Teton Pass** | **61.23** | **56** | IAmb | IAmb | 15 50 38.7 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **DSP** | **Deep Springs** | **61.43** | **65** | IAmb | IAmb | 15 50 34.1 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **61.43** | **334** | P | **P** | **15 50 22.5** | **-1.4** |
| | comp=Z,1.2nm,0.8s,baz=32,slow=11,SNR=1.6 | | | | | | |
| FINES | | | | LR | LR | 16 18 44.2 | |
| | comp=Z,160nm,18.6s,baz=32,slow=38 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **61.95** | **11** | LR | LR | 16 19 36.2 | |
| | comp=Z,101nm,18.9s,baz=358,slow=38 | | | | | | |
| **GRAC** | **Grapevine Rang** | **62.04** | **65** | IAmb | IAmb | 15 50 30.8 | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **R11B** | **Troy Canyon, C** | **62.15** | **63** | P | **P** | **15 50 30.1** | **+0.7** |
| | baz=313 | | | | | | |
| **KAPI** | **Kappang** | **62.18** | **219** | LR | LR | 16 18 26.5 | |
| | comp=Z,24nm,19.3s,baz=50,slow=37 | | | | | | |
| **HWUT** | **Hardware Ranch** | **62.18** | **58** | IAmb | IAmb | 15 50 33.0 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **SPR3** | **Spring Creek 3** | **62.42** | **61** | P | **P** | **15 50 32.3** | **+0.9** |
| SPR3 | | | | IAmb | IAmb | 15 50 33.9 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **62.47** | **56** | P | **P** | **15 50 32.5** | **+0.9** |
| | comp=Z,4.4nm,0.8s,baz=329,slow=2.2,SNR=34 | | | | | | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **GWY** | **Greenwater Val** | **63.00** | **65** | IAmb | IAmb | 15 50 44.1 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **NLU** | **North Lily Min** | **63.04** | **59** | IAmb | IAmb | 15 50 38.6 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **TMUT** | **Trail Mountain** | **63.98** | **59** | IAmb | IAmb | 15 50 44.9 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **RSSD** | **Black Hills** | **64.39** | **51** | P | **P** | **15 50 43.6** | **-0.6** |
| RSSD | | | | IAmb | IAmb | 15 50 52.8 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **RSSD** | **Black Hills** | **64.39** | **51** | P | **P** | **15 50 43.6** | **-0.6** |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KNB** | **Kanab** | **64.65** | **62** | IAmb | IAmb | 15 51 14.4 | |
| | comp=Z,9.7nm,1.5s | | | | | | |
| **PFO** | **Pinyon Flats O** | **64.91** | **67** | LR | LR | 16 16 31.0 | |
| | comp=Z,35nm,18.9s,baz=234,slow=34 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.43** | **341** | P | **P** | **15 50 48.3** | **-2.2** |
| | comp=Z,0.8nm,0.9s,baz=108,slow=16,SNR=2.0 | | | | | | |
| NOA | | | | LR | LR | 16 21 41.7 | |
| | comp=Z,64nm,18.9s,baz=25,slow=38 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **BORG** | **Borgarnes** | **65.64** | **358** | LR | LR | 16 19 09.8 | |
| | comp=Z,28nm,21.1s,baz=3.6,slow=36 | | | | | | |
| **HFS** | **Hagfors** | **65.70** | **339** | P | **P** | **15 50 50.6** | **-1.5** |
| | comp=Z,1.4nm,0.7s,baz=69,slow=14,SNR=1.5 | | | | | | |
| HFS | | | | LR | LR | 16 22 14.0 | |
| | comp=Z,104nm,18.5s,baz=24,slow=39 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **SMCO** | **Snowmass** | **66.39** | **57** | IAmb | IAmb | 15 50 58.9 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **MNK** | **Minsk** | **66.58** | **329** | *i* P | P | 15 51 01.9 | +4.1 |
| MNK | | | | *i* | | 15 53 29.7 | |
| MNK | | | | *i* PPP | PPP | 15 55 09.3 | |
| MNK | | | | pmax | pmax | | |
| | comp=N,15nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,16nm,0.7s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,172nm,20.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,94nm,16.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,115nm,17.0s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **67.49** | **58** | IAmb | IAmb | 15 51 14.5 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **67.49** | **58** | P | **P** | **15 51 05.6** | **+1.3** |
| | baz=316 | | | | | | |
| **214A** | **Organ Pipe Nat** | **68.24** | **66** | P | **P** | **15 51 08.8** | **0.0** |
| | baz=316 | | | | | | |
| **KBZ** | **Khabaz** | **69.08** | **314** | P | P | 15 51 22.3 | +8.5 |
| | comp=Z,2.3nm,0.7s,baz=313,slow=2.8,SNR=2.9 | | | | | | |
| KBZ | | | | LR | LR | 16 23 13.3 | |
| | comp=Z,92nm,18.6s,baz=34,slow=38 | | | | | | |
| **KBZ** | **Khabaz** | **69.08** | **314** | *e*P | **P** | **15 51 14.1** | **+0.3** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,114nm,16.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **69.24** | **326** | P | **P** | **15 51 13.3** | **-1.3** |
| | comp=Z,0.4nm,0.3s,baz=36,slow=7.7,SNR=1.9 | | | | | | |
| AKASG | | | | LR | LR | 16 22 47.4 | |
| | comp=Z,83nm,18.8s,baz=33,slow=37 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **T25A** | **Trinidad** | **69.25** | **57** | P | **P** | **15 51 14.0** | **-1.3** |
| | baz=318 | | | | | | |
| **ANMO** | **Albuquerque** | **69.73** | **60** | LR | LR | 16 21 13.5 | |
| | comp=Z,20nm,19.5s,baz=64,slow=35 | | | | | | |
| **SCHQ** | **Schefferville** | **70.19** | **24** | P | **P** | **15 51 19.4** | **-1.1** |
| | comp=Z,2.8nm,0.4s,baz=317,slow=5.0,SNR=8.2 | | | | | | |
| SCHQ | | | | LR | LR | 16 24 57.7 | |
| | comp=Z,39nm,19.1s,baz=356,slow=38 | | | | | | |
| | comp=Z,2.8nm,0.4s | | | | | | |
| **MSVF** | **Nonsavu** | **70.63** | **156** | LR | LR | 16 15 20.8 | |
| | comp=Z,48nm,21.3s,baz=167,slow=30 | | | | | | |
| **SOC** | **Sochi** | **70.66** | **315** | *e*P | **P** | **15 51 25.4** | **+1.9** |
| SOC | | | | *e* | | 15 54 06.0 | |
| SOC | | | | *e*S | **S** | **16 00 35.9** | **+1.0** |
| SOC | | | | *e*SS | **SS** | **16 05 03.5** | **-2.5** |
| SOC | | | | *e*SSS | SSS | 16 08 11.5 | |
| SOC | | | | MLR | MLR | | |
| | comp=Z,23nm,5.0s | | | | | | |
| **GNI** | **Garni** | **70.92** | **310** | LR | LR | 16 26 10.5 | |
| | comp=Z,75nm,18.1s,baz=31,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **71.67** | **199** | P | **P** | **15 51 30.1** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=12,slow=6.7,SNR=8.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **PALK** | **Pallekele** | **73.69** | **262** | LR | LR | 16 27 12.0 | |
| | comp=Z,51nm,19.7s,baz=142,slow=38 | | | | | | |
| **VRAC** | **Vranov** | **74.61** | **333** | LR | LR | 16 30 47.9 | |
| | comp=Z,112nm,18.1s,baz=16,slow=41 | | | | | | |
| **MLR** | **Muntele Rosu** | **74.81** | **325** | LR | LR | 16 26 35.8 | |
| | comp=Z,150nm,18.3s,baz=34,slow=37 | | | | | | |
| **SADO** | **Sadowa** | **75.01** | **36** | LR | LR | 16 27 23.7 | |
| | comp=Z,99nm,18.4s,baz=354,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **75.37** | **199** | P | **P** | **15 51 52.6** | **+1.2** |
| | comp=Z,0.9nm,0.7s,baz=11,slow=5.3,SNR=20 | | | | | | |
| ASAR | | | | LR | LR | 16 23 18.2 | |
| | comp=Z,24nm,21.8s,baz=16,slow=34 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **75.48** | **62** | P | **P** | **15 51 53.4** | **+1.0** |
| | comp=Z,4.3nm,0.5s,baz=286,slow=3.7,SNR=15 | | | | | | |
| **LPIG** | **La Paz** | **75.49** | **70** | LR | LR | 16 21 03.8 | |
| | comp=Z,8.4nm,18.8s,baz=262,slow=33 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.48** | **317** | P | P | 15 52 04.5 | +6.5 |
| | comp=Z,0.7nm,0.9s,baz=119,slow=1.5,SNR=5.0 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **78.80** | **336** | LR | LR | 16 32 22.9 | |
| | comp=Z,69nm,18.7s,baz=70,slow=40 | | | | | | |
| **S51A** | **Beattyville** | **79.15** | **43** | IAmb | IAmb | 15 56 06.8 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **81.14** | **312** | LR | LR | 16 34 00.4 | |
| | comp=Z,50nm,18.5s,baz=354,slow=40 | | | | | | |
| **STKA** | **Stephens Creek** | **82.15** | **191** | LR | LR | 16 26 40.0 | |
| | comp=Z,20nm,21.4s,baz=23,slow=34 | | | | | | |
| **EIL** | **Elat** | **84.10** | **310** | LR | LR | 16 34 49.3 | |
| | comp=Z,58nm,18.2s,baz=71,slow=39 | | | | | | |
| **ESDC** | **Sonseca Array** | **88.71** | **343** | LR | LR | 16 35 40.9 | |
| | comp=Z,52nm,21.6s,baz=29,slow=38 | | | | | | |
| **URZ** | **Urewera** | **90.13** | **162** | LR | LR | 16 26 29.3 | |
| | comp=Z,49nm,21.4s,baz=30,slow=31 | | | | | | |
| **MDT** | **Midelt** | **95.48** | **342** | LR | LR | 16 41 31.5 | |
| | comp=Z,40nm,18.5s,baz=352,slow=39 | | | | | | |
| **FURI** | **Furi** | **98.95** | **295** | LR | LR | 16 41 24.8 | |
| | comp=Z,53nm,18.7s,baz=30,slow=37 | | | | | | |
| **QSPA** | **South Pole Qui** | **139.63** | **180** | PKP | **PKiKP** | **15 59 35.4** | **-1.3** |
| | comp=Z,1.3nm,0.9s,baz=298,slow=1.9,SNR=6.9 | | | | | | |
| **BI02** | **San Fabin de** | **145.06** | **85** | PKPbc | **PKPdf** | **15 59 44.5** | **-0.4** |
| **CPUP** | **Villa Florida** | **146.36** | **57** | PKPbc | **PKPab** | **15 59 48.7** | **-0.8** |
| | comp=Z,0.9nm,0.4s,baz=52,slow=4.4,SNR=3.6 | | | | | | |
| **ELIB** | **Princess Elisa** | **148.86** | **207** | *d*PKPdf | **PKPbc** | **15 59 51.4** | **-2.8** |
| ELIB | | | | *d*PKP | **PKPab** | **15 59 57.1** | **-1.2** |

*SSNC **27** 15:44:33.8±1.1, 18°.92N×73°.24W, h2km±6km, MD3.3, ML2.9, MW3.0*
*SDD **27** 15:44:33.0±1.9, 18°.43N×73°.39W, h85km±27km, MD3.6, ML3.3, MW3.7*
*OSPL **27** 15:44:34.0±2.1, 18°.83N×73°.31W, h0km±10km, ML2.9*
**ISC 27 15:44:31.5±1.4, 18°.82N±0°.08×73°.30W±0°.04, h10km±13km, n20, σ1s07/34, 4C-1D, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAPH** | **Port-au-Prince** | **1.00** | **107** | *e*Pg | **Pg** | **15 44 50.8** | **+0.2** |
| PAPH | | | | *e*Sg | **Sb** | **15 45 05.4** | **+1.4** |
| PAPH | | | | IAML | | 15 45 07.1 | |
| | comp=N,2μm,0.2s | | | | | | |
| **PAPH** | **Port-au-Prince** | **1.00** | **107** | *e*P | **Pg** | **15 44 50.4** | **-0.3** |
| PAPH | | | | *e*S | **Sg** | **15 45 03.6** | **0.0** |
| PAPH | | | | IAML | | 15 45 07.0 | |
| | comp=E,490nm,0.1s | | | | | | |
| PAPH | | | | IAML | | 15 45 07.3 | |
| | comp=N,710nm,0.2s | | | | | | |
| **PAPH** | **Port-au-Prince** | **1.00** | **107** | *i* P | **Pg** | **15 44 50.9** | **+0.2** |
| PAPH | | | | *e*S | **Sb** | **15 45 05.0** | **+1.0** |
| PAPH | | | | IAML | | 15 45 07.4 | |
| | comp=Z,296nm,0.2s | | | | | | |
| **JIDR** | **Jimani** | **1.42** | **103** | ⇑*e*Pg | **Pn** | **15 44 57.3** | **0.0** |
| JIDR | | | | ⇑*e*Pg | **Pb** | **15 44 57.9** | **0.0** |
| JIDR | | | | *e*Sg | **Sb** | **15 45 16.1** | **0.0** |
| JIDR | | | | IAML | | 15 45 21.9 | |
| | comp=N,331nm,0.3s | | | | | | |
| **MASC** | **Masc** | **1.61** | **327** | *e*P | **Pn** | **15 45 00.2** | **+0.3** |
| MASC | | | | *e*S | **Sn** | **15 45 17.9** | **-2.9** |
| MASC | | | | IAML | | 15 45 24.2 | |
| | comp=E,123nm,0.3s | | | | | | |
| MASC | | | | IAML | | 15 45 25.0 | |
| | comp=N,60nm,0.2s | | | | | | |
| **MASC** | **Masc** | **1.61** | **327** | *i* P | **Pn** | **15 45 00.6** | **+0.7** |
| MASC | | | | *e*S | **Sn** | **15 45 20.9** | **+0.1** |
| MASC | | | | IAML | | 15 45 24.2 | |
| | comp=Z,66nm,0.5s | | | | | | |
| **MCDR** | **Montecristi** | **1.88** | **55** | ⇓*e*Pg | **Pb** | **15 45 06.3** | **+0.3** |
| MCDR | | | | *e*Sg | **Sb** | **15 45 30.5** | **+0.9** |
| MCDR | | | | IAML | | 15 45 37.1 | |
| | comp=N,251nm,0.7s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.91** | **85** | *e*P | **Pb** | **15 45 06.3** | **-0.2** |
| SDDR | | | | *e*S | **Sb** | **15 45 31.0** | **+0.4** |
| SDDR | | | | IAML | | 15 45 32.0 | |
| | comp=N,321nm,0.5s | | | | | | |
| SDDR | | | | IAML | | 15 45 32.1 | |
| | comp=N,373nm,0.5s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.91** | **85** | *i* P | **Pb** | **15 45 06.3** | **-0.2** |
| SDDR | | | | *e*S | **Sb** | **15 45 31.1** | **+0.6** |
| SDDR | | | | IAML | | 15 45 31.9 | |
| | comp=Z,244nm,0.5s | | | | | | |
| **QMBU** | **Quimbuelo** | **1.98** | **314** | *e*P | **Pn** | **15 45 04.6** | **-0.5** |
| QMBU | | | | *e*S | **Sn** | **15 45 28.6** | **-1.3** |
| QMBU | | | | IAML | | 15 45 34.6 | |
| | comp=E,103nm,0.2s | | | | | | |
| QMBU | | | | IAML | | 15 45 34.9 | |
| | comp=N,119nm,0.2s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **2.03** | **303** | ⇑*e*Pg | **Pn** | **15 45 06.0** | **+0.2** |
| GTBY | | | | *e*Sg | **Sn** | **15 45 32.1** | **+0.9** |
| GTBY | | | | IAML | | 15 45 37.9 | |
| | comp=N,149nm,0.6s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **2.03** | **303** | *e*P | **Pn** | **15 45 06.2** | **+0.5** |
| GTBY | | | | *e*S | **Sn** | **15 45 30.7** | **-0.5** |
| **GTBY** | **Guantanamo Bay** | **2.03** | **303** | *i* P | **Pb** | **15 45 08.5** | **0.0** |
| GTBY | | | | *e*S | **Sb** | **15 45 33.1** | **-0.8** |
| GTBY | | | | IAML | | 15 45 37.8 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **2.22** | **109** | ⇑*e*Pg | **Pn** | **15 45 06.4** | **-2.0** |
| LOBA2 | | | | IAML | | 15 45 51.6 | |
| | comp=N,23nm,1.1s | | | | | | |
| **ABDR** | **Alto Bandera** | **2.53** | **90** | IAML | | 15 45 53.4 | |
| | comp=E,139nm,0.5s | | | | | | |
| **RCC** | **Rio Carpintero** | **2.54** | **298** | *e*P | **Pn** | **15 45 13.1** | **+0.3** |
| RCC | | | | *e*S | **Sn** | **15 45 43.4** | **-0.5** |
| RCC | | | | IAML | | 15 45 51.6 | |
| | comp=E,43nm,0.3s | | | | | | |
| RCC | | | | IAML | | 15 45 51.9 | |
| | comp=N,40nm,0.2s | | | | | | |
| **MARVS** | **Santiago de Cu** | **2.72** | **296** | *e*P | **Pb** | **15 45 18.6** | **-1.6** |
| **CHIV** | **Chivirico** | **3.15** | **292** | *e*P | **Pn** | **15 45 23.3** | **+2.0** |
| **YAR** | **Yar** | **3.27** | **299** | *e*P | **Pn** | **15 45 24.0** | **+1.1** |
| YAR | | | | *e*S | **Sn** | **15 46 04.0** | **+2.2** |
| YAR | | | | IAML | | 15 46 09.8 | |
| | comp=E,3.9nm,0.5s | | | | | | |
| YAR | | | | IAML | | 15 46 10.4 | |
| | comp=N,4.8nm,0.6s | | | | | | |
| **GRTK** | **Grand Turk** | **3.37** | **37** | IAML | | 15 46 07.2 | |
| | comp=N,81nm,0.5s | | | | | | |

*ISN **27** 15:52:02.7±0.7, 34°.63N×46°.14E, h0km±23km, ML2.8*
*TEH **27** 15:52:04.2, 34°.63N×46°.18E, h10km±40km, ML2.9*
**ISC 27 15:52:04.4±1.0, 34°.63N±0°.04×46°.17E±0°.03, h10km, n11, σ1s18/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.19** | **69** | Pg | **Pg** | **15 52 08.6** | **+0.1** |
| IDHR | | | | Sg | **Sg** | **15 52 12.3** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **0.45** | **133** | Pg | **Pg** | **15 52 13.4** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **255** | Pg | **Pg** | **15 52 14.4** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **203** | Pg | **Pg** | **15 52 15.3** | **-0.1** |
| **ILIN** | **Lien** | **0.71** | **66** | Pg | **Pg** | **15 52 17.8** | **-0.4** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **116** | Pg | **Pg** | **15 52 19.7** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **178** | Pg | **Pb** | **15 52 23.7** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **79** | Pg | **Pb** | **15 52 27.5** | **-0.3** |
| **IBDR** | **Badra** | **1.53** | **188** | *e*Pn | **Pb** | **15 52 32.8** | **-0.1** |
| IBDR | | | | *e*Sn | **Sg** | **15 52 55.3** | **+1.6** |
| IBDR | | | | AML | AML | 15 52 59.0 | |
| | comp=E,144nm,0.9s | | | | | | |
| IBDR | | | | AML | AML | 15 53 02.2 | |
| | comp=N,132nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.69** | **297** | *e*Pn | **Pb** | **15 52 35.5** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **15 52 58.5** | **-0.2** |
| IKRK | | | | AML | AML | 15 53 01.5 | |
| | comp=N,171nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 15 53 09.4 | |
| | comp=E,170nm,0.4s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.90** | **181** | *e*Pn | **Pn** | **15 52 52.0** | **+1.3** |
| RAFI | | | | *e*Sn | **Sb** | **15 53 28.5** | **-3.3** |

*NEIC **27** 15:55:01.1±1.9, 3°.46S±0°.06×140°.83E±0°.08, h38km±9km, mb4.1/14, Error ellipse: s-maj=12.5km s-min=8.0km az=106.0*
*IDC **27** 15:55:07.0±10.0, 3°.73S×140°.95E, h105km±129km, mb3.8/4, mbtmp4.1/6, ML4.3/1, MS2.1/1, Error ellipse: s-maj=106.7km s-min=33.7km az=116.0*
**ISC 27 15:55:00.5±0.8, 3°.55S±0°.08×140°.80E±0°.09, h35km, n35, σ1s46/28, mb4.3/7, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **1.14** | **326** | P | Pn | 15 55 16.3 | -3.6 |
| **TABU** | **Tabubil** | **1.76** | **166** | P | Pn | 15 55 34.4 | +5.8 |
| **MANU** | **Manus Island** | **6.72** | **77** | Pn | **Pn** | **15 56 35.1** | **-1.6** |
| **FAKI** | **Fak Fak** | **8.56** | **274** | Pn | **Pn** | **15 57 03.4** | **+1.3** |
| **PMG** | **Port Moresby** | **8.59** | **133** | P | Pn | 15 57 07.2 | +4.8 |
| **PMG** | **Port Moresby** | **8.59** | **133** | Pn | **Pn** | **15 57 03.5** | **+1.1** |
| **PMG** | **Port Moresby** | **8.59** | **133** | P | **Pn** | **15 57 04.5** | **+2.1** |
| | 11nm,0.8s,baz=311,slow=11,SNR=2.4 | | | | | | |
| **COEN** | **Coen** | **10.61** | **167** | P | Pn | 15 57 34.7 | +4.6 |
| **COEN** | **Coen** | **10.61** | **167** | Pn | **Pn** | **15 57 31.4** | **+1.3** |
| **KDU** | **Kakadu** | **12.26** | **222** | P | **Pn** | **15 57 53.5** | **+0.8** |
| **MTN** | **Manton Dam** | **13.30** | **225** | P | **Pn** | **15 58 07.4** | **+0.5** |
| **MTN** | **Manton Dam** | **13.30** | **225** | | **Pn** | **15 58 07.0** | **+0.1** |
| **KNRA** | **Kununurra** | **16.90** | **224** | Pn | **Pn** | **15 58 54.6** | **+0.1** |
| KNRA | | | | IAmb | IAmb | 15 59 15.6 | |
| | comp=Z,7.3nm,0.7s | | | | | | |
| **CTA** | **Charters Tower** | **17.28** | **163** | LR | LR | 16 04 55.4 | |
| | comp=Z,5.5nm,18.3s,baz=343,slow=34 | | | | | | |
| **WB0** | **Warramunga Arr** | **17.30** | **201** | | **P** | **15 59 00.2** | **-0.3** |
| **WR0** | **Warramunga Arr** | **17.42** | **200** | | **P** | **15 59 02.3** | **+0.4** |
| **WRAB** | **Tennant Creek** | **17.46** | **201** | P | **P** | **15 59 02.6** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 15 59 16.6 | |
| | comp=Z,6.2nm,0.6s | | | | | | |
| **WB2** | **Warramunga Ar** | **17.47** | **201** | | **P** | **15 59 02.6** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 15 59 23.4 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.48** | **201** | P | **P** | **15 59 02.3** | **-0.2** |
| | comp=Z,1.0nm,0.3s,baz=22,slow=12,SNR=54 | | | | | | |
| WRA | | | | S | **Sn** | **16 02 09.7** | **-5.6** |
| | comp=Z,1.4nm,0.7s,baz=21,slow=22,SNR=3.2 | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | |
| **SOEI** | **Soe** | **17.54** | **249** | P | **Pn** | **15 59 03.6** | **+1.1** |
| SOEI | | | | IAmb | IAmb | 15 59 17.4 | |
| | comp=Z,32nm,0.8s | | | | | | |
| **TOLI2** | **Tolitoli** | **20.54** | **283** | P | **P** | **15 59 34.8** | **-1.3** |
| TOLI2 | | | | IAmb | IAmb | 15 59 39.1 | |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.73** | **225** | P | **P** | **15 59 38.6** | **+0.4** |
| **AS31** | **Alice Springs** | **21.08** | **198** | P | **P** | **15 59 43.1** | **+1.1** |
| **ASAR** | **Alice Springs** | **21.09** | **198** | P | **P** | **15 59 41.7** | **-0.3** |
| | comp=Z,1.1nm,0.6s,baz=27,slow=10.0,SNR=35 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **26.95** | **228** | P | **P** | **16 00 38.7** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 16 00 45.7 | |
| | comp=Z,13nm,1.3s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **33.61** | **48** | T | T | 16 36 22.7 | |
| | baz=232,slow=75,SNR=26 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **33.62** | **48** | T | T | 16 36 23.4 | |
| | baz=232,slow=75,SNR=15 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **33.63** | **48** | T | T | 16 36 20.9 | |
| | baz=232,slow=75,SNR=8.5 | | | | | | |
| **MORW** | **Morawa** | **34.60** | **220** | P | **P** | **16 01 46.9** | **+0.5** |
| **YAK** | **Yakutsk** | **65.95** | **354** | P | **P** | **16 05 42.6** | **-0.2** |
| **MKAR** | **Makanchi Array** | **71.73** | **322** | P | **P** | **16 06 19.3** | **+0.1** |
| | comp=Z,0.5nm,0.3s,baz=103,slow=7.2,SNR=15 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **71.92** | **322** | P | **P** | **16 06 20.2** | **-0.1** |
| MAKZ | | | | IAmb | IAmb | 16 06 20.9 | |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **72.63** | **316** | P | **P** | **16 06 22.9** | **-2.3** |
| TARG | | | | IAmb | IAmb | 16 06 23.7 | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **75.61** | **324** | P | **P** | **16 06 41.6** | **-0.2** |
| | comp=Z,1.3nm,0.2s,baz=111,slow=5.1,SNR=4.3 | | | | | | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **81.19** | **325** | P | **P** | **16 07 12.4** | **-0.2** |
| | comp=Z,1.8nm,0.4s,baz=114,slow=7.1,SNR=12 | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | |

**TRN 27 16:00:21.8, 14°.23N×58°.97W, h48km, MD3.7, Far North-east of Barbados., North Atlantic Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BBGH** | **Gun Hill** | **1.22** | **208** | *e*P | Pn | 16 00 44.6 | +2.2 |
| BBGH | | | | *e*S | Sn | 16 01 00.6 | +2.9 |
| **BCHC** | **Barbados, Cave** | **1.26** | **211** | *e*P | Pn | 16 00 44.3 | +1.3 |
| BCHC | | | | *e*S | Sn | 16 01 00.3 | +1.5 |
| **MPOM** | **Morne Pois Mar** | **1.84** | **277** | *e*P | Pn | 16 00 51.6 | +0.7 |
| **SLAC** | **Saint Lucia, A** | **1.89** | **260** | *e*P | Pn | 16 00 52.4 | +0.8 |
| SLAC | | | | *e*S | Sn | 16 01 15.6 | +1.2 |
| **SLW** | **Petit Monier** | **1.92** | **264** | *e*P | Pn | 16 00 53.6 | +1.6 |
| **ILAM** | **Ilet Lapin Mar** | **1.92** | **287** | *e*P | Pn | 16 00 53.4 | +1.4 |
| **SLBI** | **Saint Lucia, B** | **1.95** | **264** | *e*P | Pn | 16 00 52.9 | +0.5 |
| SLBI | | | | *e*S | Sn | 16 01 17.6 | +1.9 |
| **LPMF** | **Morne Lapointe** | **1.96** | **280** | *e*P | Pn | 16 00 53.5 | +0.9 |
| **BIM** | **Bigot** | **2.05** | **278** | *e*P | Pn | 16 00 55.4 | +1.6 |
| BIM | | | | *e*S | Sn | 16 01 19.7 | +1.4 |
| **FDF** | **Fort de France** | **2.17** | **284** | *e*P | Pn | 16 00 57.2 | +1.8 |
| **GBMF** | **Grand Be** | **2.20** | **285** | *e*P | Pn | 16 00 57.4 | +1.5 |
| **CXM** | **Morne La Croix** | **2.20** | **286** | *e*P | Pn | 16 00 58.1 | +2.0 |
| **SVN** | **Savane Anatole** | **2.21** | **286** | *e*P | Pn | 16 00 57.5 | +1.5 |
| SVN | | | | *e*S | Sn | 16 01 23.5 | +1.3 |
| **PCM** | **Pelee Case Pet** | **2.24

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PB04** | **IPOC Station P** | **1.02** | **194** | *e*P | **Pb** | **16 19 56.1** | **+0.7** |
| PB04 | | | | *i* S | **Sn** | **16 20 11.1** | **+1.1** |
| PB04 | | | | IAML | | 16 20 13.1 | |
| | comp=E,1μm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **1.09** | **348** | *e*P | **Pn** | **16 19 57.0** | **+0.4** |
| TA02 | | | | *e*S | **Sg** | **16 20 11.2** | **-0.1** |
| TA02 | | | | IAML | | 16 20 12.8 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **1.09** | **348** | *e*P | **Pb** | **16 19 56.3** | **-0.2** |
| TA02 | | | | *i* S | **Sb** | **16 20 10.5** | **+0.1** |
| **LVC** | **Limon Verde** | **1.56** | **145** | *e*P | **Pn** | **16 20 04.6** | **+1.1** |
| LVC | | | | *e*S | **Sg** | **16 20 26.2** | **-0.2** |
| **LVC** | **Limon Verde** | **1.56** | **145** | *e*P | **Pn** | **16 20 04.5** | **+1.1** |
| LVC | | | | *e*S | **Sn** | **16 20 24.3** | **+0.9** |
| LVC | | | | IAML | | 16 20 28.1 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **GO01** | **Chusmiza** | **1.78** | **21** | *e*P | **Pn** | **16 20 06.6** | **-0.1** |
| GO01 | | | | *e*S | **Sn** | **16 20 28.9** | **-0.3** |
| **GO01** | **Chusmiza** | **1.78** | **21** | *e*P | **Pn** | **16 20 06.6** | **-0.1** |
| GO01 | | | | *i* S | **Sn** | **16 20 28.1** | **-1.1** |
| **PB14** | **IPOC Station P** | **3.31** | **188** | *e*P | **Pn** | **16 20 26.9** | **-0.5** |
| PB14 | | | | IAML | | 16 21 28.8 | |
| | comp=Z,48nm,0.5s | | | | | | |
| **GO02** | **Mina Guanaco** | **3.82** | **176** | *e*P | **Pn** | **16 20 34.7** | **+0.3** |
| **AC01** | **Pan de Azucar** | **4.83** | **188** | *e*P | **Pn** | **16 20 45.9** | **-2.2** |
| AC01 | | | | *e*S | **Sb** | **16 21 56.0** | **-2.2** |
| AC01 | | | | IAML | | 16 22 02.1 | |
| | comp=Z,33nm,3.7s | | | | | | |

*NEIC **27** 16:25:03.3±0.7,36˚.46N±0˚.02×98˚.81W±0˚.03,h6km±2km, mb_Lg2.7/72,ML2.7,ML3.0/28,Error ellipse: s-maj=4.0km s-min=2.3km az=127.0*

**NEIC 27 16:25:02.9±0.8,36˚.44N±0˚.01×98˚.82W±0˚.03,h5km±1km, Error ellipse: s-maj=4.0km s-min=2.9km az=100.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OK038** | **West end E0370** | **0.07** | **57** | Pg | Pg | 16 25 05.3 | +0.6 |
| OK038 | | | | Sg | Sg | 16 25 06.7 | +0.9 |
| **NOKA** | **Waynoka** | **0.22** | **335** | Pg | Pg | 16 25 07.6 | +0.4 |
| NOKA | | | | IAML | | 16 25 11.4 | |
| | comp=N,4μm,0.3s | | | | | | |
| NOKA | | | | IAML | | 16 25 12.3 | |
| | comp=E,3μm,0.2s | | | | | | |
| **ELIS** | **Ellis County** | **0.61** | **233** | | Pg | 16 25 15.3 | +0.6 |
| ELIS | | | | IAML | | 16 25 31.1 | |
| | comp=E,922nm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.61** | **53** | Pg | Pg | 16 25 14.3 | -0.4 |
| **CROK** | **Carrier** | **0.68** | **84** | Pg | Pg | 16 25 14.9 | -1.0 |
| CROK | | | | IAML | | 16 25 32.6 | |
| | comp=E,533nm,0.3s | | | | | | |
| CROK | | | | IAML | | 16 25 35.9 | |
| | comp=N,530nm,0.3s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.80** | **172** | Pg | Pb | 16 25 18.8 | -0.5 |
| **KAN14** | **Manchester OK** | **0.86** | **53** | Pg | Pg | 16 25 19.2 | -0.2 |
| KAN14 | | | | IAML | | 16 25 39.3 | |
| | comp=N,406nm,0.1s | | | | | | |
| **GC02** | **Grant County #** | **0.88** | **62** | Pg | Pg | 16 25 19.4 | -0.3 |
| **KAN05** | **Bluff City Nor** | **1.01** | **48** | Pg | Pg | 16 25 22.4 | 0.0 |
| KAN05 | | | | IAML | | 16 25 36.6 | |
| | comp=N,354nm,0.2s | | | | | | |
| KAN05 | | | | IAML | | 16 25 40.2 | |
| | comp=E,396nm,0.2s | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.08** | **37** | Pg | Pg | 16 25 23.2 | -0.5 |
| **KAN01** | **Argonia South** | **1.11** | **50** | Pg | Pg | 16 25 24.0 | -0.3 |
| KAN01 | | | | IAML | | 16 25 39.2 | |
| | comp=N,280nm,0.4s | | | | | | |
| KAN01 | | | | IAML | | 16 25 41.1 | |
| | comp=E,290nm,0.3s | | | | | | |
| **KAN09** | **Caldwell North** | **1.19** | **54** | Pg | Pg | 16 25 25.2 | -0.6 |
| **OK029** | **Liberty Lake** | **1.28** | **120** | Pg | Pg | 16 25 26.7 | -0.7 |
| OK029 | | | | IAML | | 16 25 45.0 | |
| | comp=E,241nm,0.6s | | | | | | |
| OK029 | | | | IAML | | 16 25 47.4 | |
| | comp=E,323nm,0.5s | | | | | | |
| **ADOK** | **Arcadia Dam** | **1.41** | **123** | | Pn | 16 25 29.2 | -0.1 |
| **OK048** | **Pawnee Station** | **1.51** | **90** | | Pn | 16 25 30.6 | -0.1 |
| **FNO** | **Franklin** | **1.65** | **135** | | Pb | 16 25 33.4 | -0.4 |
| **OK052** | **Battle Ridge R** | **1.69** | **105** | | Pb | 16 25 33.9 | -0.6 |
| **WMOK** | **Wichita Mounta** | **1.70** | **179** | | Pn | 16 25 33.5 | +0.3 |
| **SMWD** | **Samnorwood** | **1.76** | **221** | | Pb | 16 25 35.8 | 0.0 |
| **R32A** | **Long Quarter,** | **1.98** | **2** | | Pn | 16 25 38.0 | +0.8 |
| R32A | | | | IAmb_Lg | | 16 26 05.7 | |
| | comp=Z,49nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **2.80** | **237** | IAmb_Lg | | 16 26 39.4 | |
| | comp=Z,34nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **3.26** | **213** | IAmb_Lg | | 16 26 55.3 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **APMT** | **Aspermont** | **3.29** | **199** | IAmb_Lg | | 16 26 49.9 | |
| | comp=Z,18nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **3.36** | **122** | IAmb_Lg | | 16 26 58.5 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **3.58** | **89** | IAmb_Lg | | 16 27 02.6 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **FW06** | **Azle** | **3.61** | **163** | IAmb_Lg | | 16 27 03.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **3.64** | **173** | IAmb_Lg | | 16 27 00.8 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **3.75** | **208** | IAmb_Lg | | 16 27 06.2 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **3.87** | **190** | IAmb_Lg | | 16 27 06.5 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **SN05** | **Snyder 5** | **3.94** | **206** | IAmb_Lg | | 16 27 11.1 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **3.96** | **312** | IAmb_Lg | | 16 27 14.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **POST** | **Post** | **4.02** | **214** | IAmb_Lg | | 16 27 13.8 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **4.07** | **234** | IAmb_Lg | | 16 27 20.0 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **T25A** | **Trinidad** | **4.54** | **281** | IAmb_Lg | | 16 27 27.1 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **S39A** | **Bolivar** | **4.57** | **72** | IAmb_Lg | | 16 27 29.2 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **P38A** | **Dawn** | **5.25** | **51** | IAmb_Lg | | 16 27 58.8 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.26** | **110** | IAmb_Lg | | 16 28 01.9 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.43** | **100** | IAmb_Lg | | 16 28 05.8 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **5.44** | **94** | IAmb_Lg | | 16 28 02.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **UALR** | **University of** | **5.53** | **106** | IAmb_Lg | | 16 28 05.9 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **5.62** | **299** | IAmb_Lg | | 16 28 02.9 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **P40A** | **Paris** | **6.17** | **58** | IAmb_Lg | | 16 28 26.5 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **6.25** | **73** | IAmb_Lg | | 16 28 23.3 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **FVM** | **French Village** | **6.87** | **75** | IAmb_Lg | | 16 28 43.5 | |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.10** | **315** | IAmb_Lg | | 16 28 51.1 | |
| | comp=Z,8.7nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **7.13** | **311** | IAmb_Lg | | 16 28 59.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **7.48** | **12** | IAmb_Lg | | 16 29 01.1 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **N41A** | **Harden Midland** | **7.55** | **53** | IAmb_Lg | | 16 29 08.8 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **7.75** | **78** | IAmb_Lg | | 16 29 21.1 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **SIUC** | **Southern Illin** | **7.78** | **78** | IAmb_Lg | | 16 29 12.2 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| **L40A** | **Anamosa** | **8.14** | **44** | IAmb_Lg | | 16 29 22.5 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **JFWS** | **Jewell Farm** | **9.24** | **43** | IAmb_Lg | | 16 30 19.3 | |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.58** | **11** | IAmb_Lg | | 16 30 11.6 | |
| | comp=Z,5.7nm,0.9s | | | | | | |

*IDC **27** 16:35:19.3±3.1,34˚.21S×178˚.85W,h0km,mb4.0/2, mbtmp4.1/3,ML3.9/1,Error ellipse: s-maj=71.7km s-min=36.1km az=121.0*

*WEL **27** 16:35:21.2±0.8,34˚.5˚.7˚×17˚.9W±1˚.5,h33km,M4.0/17, mB4.6/7,ML4.5/19,MLv4.2/17,Mw(mB)3.8/7,Error ellipse: s-maj=0.0km s-min=0.0km az=112.6,confirmed*

**ISC 27 16:35:20.0±1.6,34˚.28S±0˚.08×178˚.3W±0˚.2,h35km,n30, σ1s22/40,South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **4.27** | **219** | P | **Pn** | **16 36 22.2** | **-0.2** |
| MXZ | | | | S | **Sn** | **16 37 10.4** | **-0.6** |
| **PKGZ** | **Pakihiroa** | **4.62** | **218** | P | **Pn** | **16 36 27.6** | **+0.4** |
| PKGZ | | | | S | **Sn** | **16 37 19.5** | **-0.1** |
| **PUZ** | **Puketiti** | **4.69** | **215** | P | **Pn** | **16 36 28.5** | **+0.3** |
| PUZ | | | | S | **Sn** | **16 37 21.8** | **+0.4** |
| **HAZ** | **Te Kaha** | **4.69** | **221** | P | **Pn** | **16 36 29.1** | **+0.9** |
| HAZ | | | | S | **Sn** | **16 37 22.1** | **+0.7** |
| **RUGZ** | **Raukumara Rang** | **4.90** | **220** | P | **Pn** | **16 36 32.2** | **+0.9** |
| RUGZ | | | | S | **Sn** | **16 37 26.8** | **0.0** |
| **TWGZ** | **Tauwhareparae** | **4.91** | **217** | P | **Pn** | **16 36 32.9** | **+1.7** |
| TWGZ | | | | S | **Sn** | **16 37 27.7** | **+1.0** |
| **GLKZ** | **Green Lake** | **5.02** | **4** | S | **Sn** | **16 37 28.2** | **-1.3** |
| **CNGZ** | **Carnagh Statio** | **5.04** | **213** | P | **Pn** | **16 36 33.9** | **+0.8** |
| **TKGZ** | **Te Karaka** | **5.17** | **216** | P | **Pn** | **16 36 36.4** | **+1.5** |
| TKGZ | | | | S | **Sn** | **16 37 31.2** | **-2.1** |
| **MWZ** | **Matawai** | **5.25** | **219** | P | **Pn** | **16 36 35.7** | **-0.3** |
| **URZ** | **Urewera** | **5.42** | **222** | Pn | **Pn** | **16 36 38.3** | **0.0** |
| | 4.6nm,0.3s,baz=61,slow=2.0,SNR=46 | | | | | | |
| URZ | | | | Sn | **Sn** | **16 37 38.3** | **-1.1** |
| | 3.7nm,0.3s,baz=14,slow=8.3,SNR=6.8 12nm,0.3s | | | | | | |
| **URZ** | **Urewera** | **5.42** | **222** | P | **Pn** | **16 36 38.2** | **0.0** |
| **RIGZ** | **Rimuhau** | **5.43** | **214** | P | **Pn** | **16 36 39.2** | **+0.8** |
| **OPRZ** | **Ohinepanea** | **5.47** | **228** | P | **Pn** | **16 36 40.1** | **+1.2** |
| **MARZ** | **Manawahe** | **5.49** | **226** | P | **Pn** | **16 36 40.4** | **+1.2** |
| **SNGZ** | **Shannon Statio** | **5.69** | **217** | P | **Pn** | **16 36 43.0** | **+1.0** |
| **MHGZ** | **Mahia Peninsul** | **5.73** | **211** | P | **Pn** | **16 36 43.3** | **+0.8** |
| **MUGZ** | **Murupara** | **5.76** | **222** | P | **Pn** | **16 36 43.1** | **+0.2** |
| **MTHZ** | **Maungataniwha** | **6.00** | **219** | P | **Pn** | **16 36 47.5** | **+1.3** |
| **MRHZ** | **Matea Rd** | **6.21** | **222** | P | **Pn** | **16 36 49.5** | **+0.4** |
| MRHZ | | | | S | **Sn** | **16 37 56.1** | **-2.9** |
| **BKZ** | **Black Stump Fm** | **6.41** | **219** | P | **Pn** | **16 36 48.3** | **-3.6** |
| BKZ | | | | S | **Sn** | **16 38 01.3** | **-2.6** |
| **MCHZ** | **McNeill Hill** | **6.52** | **216** | P | **Pn** | **16 36 54.4** | **+1.0** |
| **KAHZ** | **Kahuranaki** | **6.71** | **214** | P | **Pn** | **16 36 56.0** | **0.0** |
| **OUZ** | **Omahuta** | **6.72** | **260** | P | **Pn** | **16 36 56.9** | **+0.7** |
| **TMVZ** | **Te Maari** | **6.81** | **223** | P | **Pn** | **16 36 57.6** | **+0.1** |
| **NTVZ** | **North Tongarir** | **6.81** | **223** | P | **Pn** | **16 36 57.6** | **+0.2** |
| **ETVZ** | **East Tongariro** | **6.82** | **223** | P | **Pn** | **16 36 57.8** | **+0.3** |
| **ASAR** | **Alice Springs** | **42.78** | **271** | P | **P** | **16 43 15.4** | **+1.0** |
| | 1.3nm,0.7s,baz=114,slow=7.2,SNR=24 1.3nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.12** | **276** | P | **P** | **16 43 25.7** | **+0.6** |
| | 1.3nm,0.4s,baz=116,slow=7.8,SNR=38 1.3nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **148.66** | **338** | PKPbc | **PKPab** | **16 55 06.2** | **0.0** |
| | 2.4nm,0.8s,baz=50,slow=2.2,SNR=5.9 | | | | | | |

*JMA **27** 16:38:28.8±0.4,25˚.N±2˚.×122˚.4E±0˚.8,h3km,MV3.0/7,NW OFF ISHIGAKIJIMA IS*

*TAP **27** 16:38:28.5,24˚.93N×122˚.45E,h26km±1km,ML2.8,D*

**ISC 27 16:38:28.4±1.1,24˚.89N±0˚.04×122˚.44E±0˚.02,h14km±9km, n43,σ0s37/68,2C-2D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.43** | **286** | *e*P | **Pb** | **16 38 37.7** | **-0.1** |
| | baz=280 | | | | | | |
| TWB1 | | | | S | **Sb** | **16 38 43.8** | **-0.3** |
| | baz=280 | | | | | | |
| **EOS2** | **EOS2** | **0.51** | **202** | P | **Pb** | **16 38 39.5** | **+0.4** |
| | baz=210 | | | | | | |
| EOS2 | | | | S | **Sb** | **16 38 47.5** | **+1.2** |
| | baz=210 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.55** | **291** | ⇓*i*P | **Pb** | **16 38 40.1** | **+0.1** |
| | baz=287 | | | | | | |
| **TIPB** | **Shuangxi** | **0.56** | **278** | P | **Pb** | **16 38 40.2** | **+0.1** |
| | baz=274 | | | | | | |
| TIPB | | | | S | **Sb** | **16 38 48.5** | **+0.5** |
| | baz=274 | | | | | | |
| **TWC** | **Suao** | **0.61** | **242** | ⇓P | **Pg** | **16 38 40.6** | **+0.3** |
| | baz=239 | | | | | | |
| TWC | | | | S | **Sg** | **16 38 47.5** | **-0.9** |
| | baz=239 | | | | | | |
| **EOS3** | **EOS3** | **0.61** | **191** | P | **Pb** | **16 38 41.5** | **+0.7** |
| | baz=198 | | | | | | |
| EOS3 | | | | S | **Sn** | **16 38 51.3** | **-1.0** |
| | baz=198 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.62** | **287** | *e*P | **Pb** | **16 38 41.8** | **+0.6** |
| | baz=282 | | | | | | |
| WFSB | | | | *e*S | **Sb** | **16 38 49.9** | **+0.1** |
| | baz=282 | | | | | | |
| **ESAO** | **Su ao** | **0.63** | **240** | *e*P | **Pg** | **16 38 41.1** | **+0.4** |
| | baz=227 | | | | | | |
| ESAO | | | | S | **Sg** | **16 38 48.8** | **-0.2** |
| | baz=227 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.64** | **134** | *e*P | **Pb** | **16 38 41.3** | **0.0** |
| JYNG | | | | S | **Sg** | **16 38 49.8** | **+0.5** |
| **TNOU** | **National Taiwa** | **0.66** | **293** | *e*P | **Pg** | **16 38 41.5** | **+0.2** |
| | baz=289 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.67** | **130** | P | **Pg** | **16 38 41.4** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **0.67** | **130** | ⇑P | **Pg** | **16 38 41.7** | **+0.1** |
| | baz=123 | | | | | | |
| YOJ | | | | S | **Sg** | **16 38 50.1** | **-0.3** |
| | baz=123 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.67** | **130** | P | **Pg** | **16 38 41.3** | **-0.2** |
| YOJ | | | | S | **Sg** | **16 38 50.1** | **-0.3** |
| **TWE** | **Neicheng** | **0.72** | **256** | *e*P | **Pg** | **16 38 42.7** | **+0.2** |
| | baz=253 | | | | | | |
| **EWUT** | **Wuta** | **0.75** | **234** | *e*P | **Pg** | **16 38 43.2** | **+0.2** |
| | baz=232 | | | | | | |
| EWUT | | | | *e*S | **Sg** | **16 38 52.6** | **-0.2** |
| | baz=232 | | | | | | |
| **EOS4** | **EOS4** | **0.78** | **188** | *e*P | **Pn** | **16 38 44.3** | **-0.3** |
| | baz=189 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.79** | **260** | *e*P | **Pg** | **16 38 43.7** | **0.0** |
| | baz=258 | | | | | | |
| **ENA** | **Nanau** | **0.79** | **234** | *e*P | **Pg** | **16 38 43.6** | **-0.1** |
| | baz=232 | | | | | | |
| ENA | | | | *e*S | **Sg** | **16 38 53.9** | **-0.2** |
| | baz=232 | | | | | | |
| **YM08** | **YM08** | **0.83** | **291** | *e*P | **Pg** | **16 38 44.1** | **-0.3** |
| | baz=288 | | | | | | |
| **YM01** | **YM01** | **0.83** | **288** | *e*P | **Pg** | **16 38 44.5** | **0.0** |
| | baz=285 | | | | | | |
| **ENTT** | **Nioudou** | **0.83** | **253** | *e*P | **Pg** | **16 38 44.7** | **+0.1** |
| | baz=235 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **16 38 56.4** | **+0.5** |
| | baz=235 | | | | | | |
| **EAHA** | **Aohua** | **0.85** | **229** | *e*P | **Pg** | **16 38 44.8** | **-0.1** |
| | baz=236 | | | | | | |
| EAHA | | | | *e*S | **Sg** | **16 38 56.0** | **-0.1** |
| | baz=236 | | | | | | |
| **TWY** | **Chenhua** | **0.85** | **297** | *e*P | **Pg** | **16 38 45.1** | **+0.1** |
| | baz=293 | | | | | | |
| **NWLT** | **Wulai** | **0.86** | **262** | *e*P | **Pg** | **16 38 45.1** | **0.0** |
| | baz=260 | | | | | | |
| **NDT** | **Datong Townshi** | **0.89** | **251** | *e*P | **Pb** | **16 38 46.0** | **+0.3** |
| | baz=249 | | | | | | |
| **LATG** | **Datong** | **0.91** | **247** | ⇑*i*P | **Pb** | **16 38 45.9** | **-0.1** |
| | baz=245 | | | | | | |
| LATG | | | | S | **Sg** | **16 38 57.9** | **+0.1** |
| | baz=245 | | | | | | |
| **YHNB** | **Yeheng** | **0.99** | **257** | P | **Pb** | **16 38 47.8** | **+0.3** |
| **YHNB** | **Yeheng** | **0.99** | **257** | *e*P | **Pb** | **16 38 47.5** | **0.0** |
| | baz=243 | | | | | | |
| YHNB | | | | *e*S | **Sb** | **16 39 00.5** | **0.0** |
| | baz=243 | | | | | | |
| **NSK** | **Sanguang** | **1.01** | **258** | *e*P | **Pb** | **16 38 47.6** | **-0.1** |
| | baz=265 | | | | | | |
| **NACB** | **Ninganchiao** | **1.05** | **227** | P | **Pb** | **16 38 48.7** | **+0.3** |
| **NACB** | **Ninganchiao** | **1.05** | **227** | *e*P | **Pb** | **16 38 48.4** | **-0.1** |
| | baz=233 | | | | | | |
| NACB | | | | *e*S | **Sb** | **16 39 01.5** | **-0.6** |
| | baz=233 | | | | | | |
| **NNSB** | **Datong** | **1.07** | **245** | *e*P | **Pb** | **16 38 49.2** | **+0.4** |
| | baz=243 | | | | | | |
| NNSB | | | | *e*S | **Sb** | **16 39 03.1** | **+0.4** |
| | baz=243 | | | | | | |
| **NNS** | **Nan Shan** | **1.07** | **245** | *e*P | **Pb** | **16 38 49.0** | **+0.1** |
| | baz=243 | | | | | | |
| NNS | | | | *e*S | **Sb** | **16 39 02.2** | **-0.6** |
| | baz=243 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.11** | **232** | *e*P | **Pb** | **16 38 49.4** | **-0.1** |
| | baz=241 | | | | | | |
| ETLH | | | | *e*S | **Sb** | **16 39 04.1** | **+0.3** |
| | baz=241 | | | | | | |
| **FUSS** | **Fushou** | **1.27** | **240** | *e*P | **Pb** | **16 38 52.6** | **+0.3** |
| | baz=239 | | | | | | |
| FUSS | | | | *e*S | **Sb** | **16 39 08.9** | **+0.4** |
| | baz=239 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.28** | **227** | *e*P | **Pn** | **16 38 52.3** | **+0.2** |
| | baz=226 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.30** | **115** | *e*P | **Pg** | **16 38 53.6** | **+0.2** |
| **WHF** | **Hehuan Shan** | **1.30** | **235** | *e*P | **Pb** | **16 38 53.3** | **+0.3** |
| | baz=244 | | | | | | |
| WHF | | | | *e*S | **Sb** | **16 39 09.8** | **0.0** |
| | baz=244 | | | | | | |
| **TWT** | **Tachien** | **1.32** | **241** | *e*P | **Pb** | **16 38 53.2** | **+0.1** |
| | baz=240 | | | | | | |
| **TDCB** | **Techi** | **1.33** | **242** | *e*P | **Pn** | **16 38 53.1** | **+0.3** |
| | baz=240 | | | | | | |
| TDCB | | | | *e*S | **Sb** | **16 39 09.5** | **-0.8** |
| | baz=240 | | | | | | |
| **CHGB** | **Renai** | **1.42** | **235** | *e*P | **Pb** | **16 38 55.0** | **+0.1** |
| | baz=244 | | | | | | |
| CHGB | | | | *e*S | **Sg** | **16 39 14.2** | **-0.1** |
| | baz=244 | | | | | | |
| **WUSB** | **Renai** | **1.50** | **234** | *e*P | **Pb** | **16 38 56.0** | **-0.2** |
| | baz=242 | | | | | | |
| WUSB | | | | *e*S | **Sn** | **16 39 14.9** | **+0.3** |
| | baz=242 | | | | | | |
| **SSLB** | **Suanglung** | **1.75** | **231** | P | **Pg** | **16 39 01.7** | **-0.3** |

**JMA 27 16:41:33.1±0.1,24˚.2N±0˚.3×123˚.8E±0˚.4,h18km±1km, MV0.7/7,NEAR ISHIGAKIJIMA ISLAND,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.13** | **318** | P | Pb | 16 41 37.0 | 0.0 |
| IRIF | | | | *e*S | Sg | 16 41 39.7 | +0.1 |
| **JKRS** | **Kuro-shima** | **0.17** | **91** | P | Pg | 16 41 37.5 | 0.0 |
| JKRS | | | | *e*S | Sb | 16 41 41.0 | +0.2 |
| **HATJ** | **Hateruma jima** | **0.18** | **185** | P | Pg | 16 41 37.6 | -0.1 |
| HATJ | | | | *e*S | Sg | 16 41 40.5 | -0.3 |
| **JIJ** | **Ishigaki jima** | **0.32** | **67** | P | Pg | 16 41 39.6 | -0.3 |
| JIJ | | | | *e*S | Sg | 16 41 44.1 | -0.3 |
| **JISG** | **Ishigakijimahi** | **0.56** | **52** | P | Pg | 16 41 44.2 | -0.1 |
| JISG | | | | *e*S | Sb | 16 41 52.3 | +0.1 |

**TAP 27 16:42:32.0,24˚.95N×122˚.46E,h36km±1km,ML2.4,1C,D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.44** | **278** | *e*P | Pn | 16 42 41.2 | -0.3 |
| | baz=278 | | | | | | |
| TWB1 | | | | S | Sn | 16 42 46.5 | -1.9 |
| | baz=278 | | | | | | |
| **EGS** | | **0.49** | **258** | *e*P | Pn | 16 42 42.9 | +0.4 |
| | baz=254 | | | | | | |
| EGS | | | | *e*S | Sn | 16 42 50.1 | +0.3 |
| | baz=254 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.55** | **285** | P | Pn | 16 42 43.6 | +0.1 |
| | baz=282 | | | | | | |
| **EOS2** | **EOS2** | **0.57** | **202** | *e*P | Pn | 16 42 43.0 | -0.5 |
| | baz=210 | | | | | | |
| EOS2 | | | | *e*S | Sn | 16 42 50.7 | -0.9 |
| | baz=210 | | | | | | |
| **TIPB** | **Shuangxi** | **0.58** | **272** | *e*P | Pn | 16 42 43.8 | -0.1 |
| | baz=272 | | | | | | |
| TIPB | | | | S | Sn | 16 42 51.6 | -0.5 |
| | baz=272 | | | | | | |
| **TWC** | **Suao** | **0.65** | **239** | *e*P | Pn | 16 42 44.2 | -0.6 |
| | baz=238 | | | | | | |
| **EOS3** | **EOS3** | **0.67** | **191** | *i* P | Pn | 16 42 45.1 | +0.2 |
| | baz=188 | | | | | | |
| EOS3 | | | | S | Sn | 16 42 54.6 | +0.5 |
| | baz=188 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.69** | **134** | ⇑*i*P | Pn | 16 42 45.3 | 0.0 |
| | baz=134 | | | | | | |
| **NDS** | **Dongshan** | **0.75** | **245** | *e*P | Pn | 16 42 46.2 | +0.2 |
| | baz=246 | | | | | | |
| NDS | | | | *e*S | Sn | 16 42 56.1 | 0.0 |
| | baz=246 | | | | | | |
| **TWE** | **Neicheng** | **0.76** | **253** | P | Pn | 16 42 46.5 | +0.4 |
| | baz=252 | | | | | | |
| TWE | | | | *e*S | Sn | 16 42 56.4 | 0.0 |
| | baz=252 | | | | | | |
| **EWUT** | **Wuta** | **0.80** | **231** | *e*P | Pn | 16 42 46.7 | 0.0 |
| | baz=232 | | | | | | |
| EWUT | | | | S | Sn | 16 42 56.3 | -1.1 |
| | baz=232 | | | | | | |
| **TWA** | **Mucha** | **0.80** | **272** | *e*S | Sn | 16 42 58.2 | +0.7 |
| | baz=282 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.82** | **257** | *e*P | Pn | 16 42 47.0 | -0.1 |
| | baz=257 | | | | | | |
| **YM08** | **YM08** | **0.83** | **287** | *e*P | Pn | 16 42 47.5 | +0.4 |
| | baz=296 | | | | | | |
| **EOS4** | **EOS4** | **0.83** | **189** | P | Pn | 16 42 47.7 | +0.8 |
| | baz=189 | | | | | | |
| **ENA** | **Nanau** | **0.84** | **232** | *e*P | Pn | 16 42 47.2 | 0.0 |
| | baz=232 | | | | | | |
| ENA | | | | *e*S | Sn | 16 42 57.5 | -0.9 |
| | baz=232 | | | | | | |
| **TWY** | **Chenhua** | **0.85** | **293** | *e*P | Pn | 16 42 48.0 | +0.7 |
| | baz=292 | | | | | | |
| TWY | | | | *e*S | Sn | 16 43 00.5 | +1.9 |
| | baz=292 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.85** | **271** | *e*S | Sn | 16 42 59.2 | +0.5 |
| | baz=271 | | | | | | |
| **ENTT** | **Nioudou** | **0.87** | **250** | *e*P | Pn | 16 42 48.6 | +0.9 |
| | baz=237 | | | | | | |
| ENTT | | | | *e*S | Sn | 16 43 00.4 | +1.2 |
| | baz=237 | | | | | | |
| **ANP** | **Anpu** | **0.89** | **286** | *e*P | Pn | 16 42 49.2 | +1.2 |
| | baz=285 | | | | | | |
| **NWLT** | **Wulai** | **0.89** | **259** | *e*P | Pn | 16 42 48.6 | +0.6 |
| | baz=259 | | | | | | |
| **EAHA** | **Aohua** | **0.90** | **227** | *e*S | Sn | 16 42 59.5 | -0.4 |
| | baz=234 | | | | | | |
| **LATG** | **Datong** | **0.95** | **244** | *e*P | Pn | 16 42 49.3 | +0.5 |
| | baz=235 | | | | | | |
| LATG | | | | S | Sn | 16 43 01.3 | +0.1 |
| | baz=235 | | | | | | |
| **YHNB** | **Yeheng** | **1.03** | **255** | *e*P | Pn | 16 42 50.9 | +1.0 |
| | baz=260 | | | | | | |
| **NSK** | **Sanguang** | **1.04** | **255** | *e*P | Pn | 16 42 50.8 | +0.7 |
| | baz=259 | | | | | | |
| **NACB** | **Ninganchiao** | **1.10** | **226** | *e*P | Pn | 16 42 51.6 | +0.7 |
| | baz=230 | | | | | | |
| NACB | | | | *e*S | Sn | 16 43 05.4 | +0.5 |
| | baz=230 | | | | | | |
| **NNSB** | **Datong** | **1.11** | **242** | *e*P | Pn | 16 42 52.0 | +0.9 |
| | baz=234 | | | | | | |
| **NNS** | **Nan Shan** | **1.11** | **243** | *e*P | Pn | 16 42 52.0 | +0.9 |
| | baz=243 | | | | | | |
| NNS | | | | *e*S | Sn | 16 43 06.2 | +0.9 |
| | baz=243 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.16** | **231** | *e*P | Pn | 16 42 52.9 | +1.1 |
| | baz=238 | | | | | | |
| ETLH | | | | *e*S | Sn | 16 43 07.6 | +1.3 |
| | baz=238 | | | | | | |
| **FUSS** | **Fushou** | **1.31** | **238** | *e*P | Pn | 16 42 55.4 | +1.4 |
| | baz=238 | | | | | | |
| FUSS | | | | *e*S | Sn | 16 43 12.3 | +1.9 |
| | baz=238 |

**IDC 27 16:53:06.7±1.7, 3°54N×122°69E, h0km, mb3.4/4, mbtmp3.4/4, Error ellipse: s-maj=305.1km s-min=21.8km az=63.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **25.99** | **154** | P | P | 16 58 41.6 | +0.1 |
| | 0.6nm,0.7s,baz=336,slow=9.6,SNR=9.4 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **29.17** | **159** | P | P | 16 59 09.8 | -0.1 |
| | 0.1nm,0.4s,baz=329,slow=7.1,SNR=5.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.47** | **327** | P | P | 17 02 44.0 | +0.6 |
| | 0.4nm,0.3s,baz=123,slow=7.9,SNR=8.5 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.77** | **329** | P | P | 17 03 12.8 | -0.8 |
| | 0.1nm,0.3s,baz=112,slow=7.4,SNR=4.4 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*TAP **27** 16:56:32.2, 24°.93N×122°.44E, h25km, ML2.9, C*
*JMA **27** 16:56:32.1±0.3, 25°.N±2°.×122°.4E±0°.8, h7km, MV3.3/8, NW OFF ISHIGAKIJIMA IS*
**ISC 27 16:56:31.9±1.0, 24°.91N±0°.03×122°.44E±0°.02, h16km±8km, n58, σ0°44/93, 4C-1D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.42** | **284** | P | **Pb** | **16 56 41.2** | **+0.1** |
| | baz=281 | | | | | | |
| TWB1 | | | | S | **Sb** | **16 56 47.1** | **-0.1** |
| | baz=281 | | | | | | |
| **EGS** | | **0.47** | **263** | *e*P | **Pb** | **16 56 42.2** | **+0.4** |
| | baz=254 | | | | | | |
| EGS | | | | *e*S | **Sb** | **16 56 48.7** | **+0.2** |
| | baz=254 | | | | | | |
| **EOS2** | **EOS2** | **0.52** | **202** | *e*P | **Pb** | **16 56 43.1** | **+0.4** |
| | baz=209 | | | | | | |
| EOS2 | | | | S | **Sb** | **16 56 51.0** | **+1.1** |
| | baz=209 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.55** | **290** | ⇓P | **Pb** | **16 56 43.6** | **+0.4** |
| | baz=288 | | | | | | |
| **TIPB** | **Shuangxi** | **0.56** | **277** | P | **Pb** | **16 56 43.9** | **+0.4** |
| | baz=274 | | | | | | |
| TIPB | | | | *e*S | **Sb** | **16 56 51.7** | **+0.4** |
| | baz=274 | | | | | | |
| **TWC** | **Suao** | **0.61** | **241** | P | **Pg** | **16 56 44.1** | **0.0** |
| | baz=239 | | | | | | |
| TWC | | | | S | **Sg** | **16 56 51.6** | **-0.6** |
| | baz=239 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.62** | **285** | *e*P | **Pb** | **16 56 44.9** | **+0.4** |
| | baz=283 | | | | | | |
| NWF | | | | S | **Sb** | **16 56 53.3** | **+0.3** |
| | baz=283 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.62** | **285** | *e*P | **Pb** | **16 56 44.7** | **+0.2** |
| | baz=283 | | | | | | |
| WFSB | | | | *e*S | **Sb** | **16 56 53.2** | **+0.2** |
| | baz=283 | | | | | | |
| **EOS3** | **EOS3** | **0.63** | **190** | P | **Pb** | **16 56 45.0** | **+0.6** |
| | baz=197 | | | | | | |
| EOS3 | | | | S | **Sn** | **16 56 54.7** | **-1.0** |
| | baz=197 | | | | | | |
| **ESAO** | **Su ao** | **0.64** | **239** | *e*P | **Pg** | **16 56 44.6** | **+0.2** |
| | baz=227 | | | | | | |
| ESAO | | | | *e*S | **Sb** | **16 56 53.6** | **+0.2** |
| | baz=227 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.64** | **135** | *e*P | **Pg** | **16 56 44.5** | **0.0** |
| JYNG | | | | *e*S | **Sg** | **16 56 53.2** | **+0.1** |
| **TNOU** | **National Taiwa** | **0.65** | **292** | *e*P | **Pg** | **16 56 45.0** | **+0.2** |
| | baz=290 | | | | | | |
| TNOU | | | | *e*S | **Sb** | **16 56 54.1** | **+0.2** |
| | baz=290 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.68** | **130** | P | **Pg** | **16 56 45.0** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **0.68** | **130** | ⇑P | **Pg** | **16 56 45.1** | **-0.2** |
| | baz=132 | | | | | | |
| YOJ | | | | S | **Sg** | **16 56 53.8** | **-0.5** |
| | baz=132 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.68** | **130** | *e*P | **Pg** | **16 56 44.7** | **-0.5** |
| YOJ | | | | *e*S | **Sg** | **16 56 53.8** | **-0.5** |
| **NDS** | **Dongshan** | **0.71** | **248** | *e*P | **Pb** | **16 56 46.3** | **+0.2** |
| | baz=246 | | | | | | |
| NDS | | | | *e*S | **Sg** | **16 56 55.5** | **+0.2** |
| | baz=246 | | | | | | |
| **TWE** | **Neicheng** | **0.73** | **256** | *e*P | **Pg** | **16 56 46.3** | **+0.2** |
| | baz=253 | | | | | | |
| TWE | | | | *e*S | **Sb** | **16 56 57.0** | **+0.9** |
| | baz=253 | | | | | | |
| **EWUT** | **Wuta** | **0.76** | **233** | *e*P | **Pg** | **16 56 46.6** | **-0.1** |
| | baz=232 | | | | | | |
| EWUT | | | | *e*S | **Sg** | **16 56 56.4** | **-0.3** |
| | baz=232 | | | | | | |
| **TWA** | **Mucha** | **0.78** | **276** | *e*P | **Pb** | **16 56 47.1** | **-0.2** |
| | baz=273 | | | | | | |
| TWA | | | | *e*S | **Sb** | **16 56 58.1** | **+0.4** |
| | baz=273 | | | | | | |
| **EOS4** | **EOS4** | **0.79** | **188** | *e*P | **Pg** | **16 56 47.6** | **+0.4** |
| | baz=180 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **16 56 59.2** | **-0.2** |
| | baz=180 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.79** | **260** | ⇑*e*P | **Pb** | **16 56 47.2** | **-0.1** |
| | baz=258 | | | | | | |
| FUSB | | | | *e*S | **Sg** | **16 56 57.7** | **-0.1** |
| | baz=258 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.80** | **335** | *e*S | **Sb** | **16 56 56.6** | **-1.3** |
| | baz=334 | | | | | | |
| **ENA** | **Nanau** | **0.80** | **233** | *e*P | **Pb** | **16 56 47.0** | **-0.4** |
| | baz=232 | | | | | | |
| ENA | | | | *e*S | **Sb** | **16 56 57.2** | **-0.7** |
| | baz=232 | | | | | | |
| **YM08** | **YM08** | **0.82** | **290** | *e*P | **Pb** | **16 56 47.5** | **-0.3** |
| | baz=288 | | | | | | |
| **YM01** | **YM01** | **0.83** | **287** | *e*P | **Pb** | **16 56 48.1** | **+0.1** |
| | baz=285 | | | | | | |
| **ENTT** | **Nioudou** | **0.84** | **252** | *e*P | **Pb** | **16 56 48.2** | **+0.1** |
| | baz=242 | | | | | | |
| ENTT | | | | *e*S | **Sg** | **16 57 00.1** | **+0.8** |
| | baz=242 | | | | | | |
| **TWY** | **Chenhua** | **0.85** | **296** | *e*P | **Pb** | **16 56 48.3** | **0.0** |
| | baz=294 | | | | | | |
| TWY | | | | *e*S | **Sn** | **16 57 00.8** | **-0.5** |
| | baz=294 | | | | | | |
| **EAHA** | **Aohua** | **0.86** | **228** | *e*P | **Pb** | **16 56 48.2** | **-0.3** |
| | baz=236 | | | | | | |
| EAHA | | | | *e*S | **Sb** | **16 56 59.3** | **-0.5** |
| | baz=236 | | | | | | |
| **NWLT** | **Wulai** | **0.86** | **262** | ⇑*e*P | **Pb** | **16 56 48.7** | **+0.1** |
| | baz=260 | | | | | | |
| **TATO** | **Taipei** | **0.87** | **275** | P | **Pg** | **16 56 49.0** | **+0.2** |
| **ANP** | **Anpu** | **0.88** | **289** | *e*P | **Pn** | **16 56 49.9** | **+0.1** |
| | baz=287 | | | | | | |
| **NDT** | **Datong Townshi** | **0.90** | **251** | *e*P | **Pg** | **16 56 49.5** | **+0.1** |
| | baz=249 | | | | | | |
| **LATG** | **Datong** | **0.91** | **246** | ⇑P | **Pb** | **16 56 49.5** | **0.0** |
| | baz=245 | | | | | | |
| LATG | | | | S | **Sb** | **16 57 01.3** | **-0.1** |
| | baz=245 | | | | | | |
| **YHNB** | **Yeheng** | **1.00** | **257** | P | **Pg** | **16 56 51.3** | **0.0** |
| **YHNB** | **Yeheng** | **1.00** | **257** | *e*P | **Pb** | **16 56 50.7** | **-0.2** |
| | baz=268 | | | | | | |
| YHNB | | | | *e*S | **Sb** | **16 57 03.7** | **-0.1** |
| | baz=268 | | | | | | |
| **NSK** | **Sanguang** | **1.01** | **257** | *e*P | **Pb** | **16 56 51.1** | **0.0** |
| | baz=266 | | | | | | |
| **NACB** | **Ninganchiao** | **1.06** | **227** | P | **Pb** | **16 56 52.1** | **+0.1** |
| **NACB** | **Ninganchiao** | **1.06** | **227** | *e*P | **Pb** | **16 56 51.3** | **-0.6** |
| | baz=233 | | | | | | |
| NACB | | | | *e*S | **Sb** | **16 57 05.0** | **-0.6** |
| | baz=233 | | | | | | |
| **NNSB** | **Datong** | **1.07** | **244** | *e*P | **Pb** | **16 56 51.9** | **-0.4** |
| | baz=243 | | | | | | |
| NNSB | | | | *e*S | **Sb** | **16 57 06.5** | **+0.3** |
| | baz=243 | | | | | | |
| **NNS** | **Nan Shan** | **1.08** | **245** | *e*P | **Pb** | **16 56 51.8** | **-0.5** |
| | baz=243 | | | | | | |
| NNS | | | | *e*S | **Sb** | **16 57 06.2** | **0.0** |
| | baz=243 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.12** | **232** | *e*P | **Pb** | **16 56 52.6** | **-0.4** |
| | baz=241 | | | | | | |
| ETLH | | | | *e*S | **Sb** | **16 57 07.8** | **+0.4** |
| | baz=241 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.23** | **258** | *e*P | **Pn** | **16 56 54.5** | **-0.1** |
| | baz=256 | | | | | | |
| **FUSS** | **Fushou** | **1.27** | **239** | *e*P | **Pb** | **16 56 55.7** | **0.0** |
| | baz=239 | | | | | | |
| FUSS | | | | *e*S | **Sn** | **16 57 12.4** | **+0.2** |
| | baz=239 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.29** | **227** | *e*P | **Pn** | **16 56 55.8** | **+0.3** |
| | baz=227 | | | | | | |
| LXIB | | | | *e*S | **Sn** | **16 57 12.9** | **+0.5** |
| | baz=227 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.30** | **116** | P | **Pg** | **16 56 57.0** | **-0.1** |
| **WHF** | **Hehuan Shan** | **1.31** | **235** | *e*P | **Pb** | **16 56 56.4** | **-0.1** |
| | baz=244 | | | | | | |
| WHF | | | | *e*S | **Sb** | **16 57 13.4** | **+0.1** |
| | baz=244 | | | | | | |
| **LIOB** | **Emei** | **1.32** | **259** | *e*P | **Pn** | **16 56 55.6** | **-0.2** |
| | baz=258 | | | | | | |
| **TWT** | **Tachien** | **1.32** | **241** | *e*P | **Pb** | **16 56 56.5** | **0.0** |
| | baz=240 | | | | | | |
| **TDCB** | **Techi** | **1.34** | **241** | *e*P | **Pb** | **16 56 56.6** | **-0.2** |
| | baz=241 | | | | | | |
| TDCB | | | | *e*S | **Sn** | **16 57 13.0** | **-0.7** |
| | baz=241 | | | | | | |
| **CHGB** | **Renai** | **1.43** | **234** | *e*P | **Pb** | **16 56 58.7** | **+0.3** |
| | baz=244 | | | | | | |
| CHGB | | | | *e*S | **Sb** | **16 57 16.8** | **+0.4** |
| | baz=244 | | | | | | |
| **OWD** | **Renai** | **1.49** | **231** | *e*P | **Pb** | **16 56 59.3** | **-0.1** |
| | baz=216 | | | | | | |
| **WUSB** | **Renai** | **1.51** | **233** | *e*P | **Pb** | **16 56 59.5** | **-0.2** |
| | baz=243 | | | | | | |
| WUSB | | | | *e*S | **Sb** | **16 57 18.8** | **+0.1** |
| | baz=243 | | | | | | |
| **VWDT** | **VWDT** | **1.65** | **226** | *e*P | **Pb** | **16 57 01.3** | **-0.7** |
| | baz=211 | | | | | | |
| **SSLB** | **Suanglung** | **1.76** | **231** | P | **Pg** | **16 57 05.1** | **-0.6** |
| **SSLB** | **Suanglung** | **1.76** | **231** | *e*P | **Pb** | **16 57 04.2** | **+0.4** |
| | baz=214 | | | | | | |
| **TYC** | **Yuchr** | **1.76** | **236** | *e*P | **Pb** | **16 57 03.0** | **-0.8** |
| | baz=221 | | | | | | |
| **YULB** | **Yu-li** | **1.83** | **215** | P | **Pb** | **16 57 05.1** | **-0.1** |
| **JMJ** | **Miyako jima 2** | **2.59** | **91** | P | **Pn** | **16 57 14.5** | **+1.3** |

*ISN **27** 17:27:45.1±0.4, 34°.60N×46°.15E, h7km±13km, ML2.9*
*TEH **27** 17:27:46.5, 34°.59N×46°.20E, h7km±224km, ML2.9*
**ISC 27 17:27:46.6±1.0, 34°.61N±0°.04×46°.17E±0°.04, h10km, n11, σ1s24/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.20** | **63** | Pg | **Pg** | **17 27 50.6** | **-0.4** |
| IDHR | | | | Sg | **Sg** | **17 27 54.1** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.43** | **130** | Pg | **Pg** | **17 27 55.0** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.49** | **258** | Pg | **Pb** | **17 27 57.1** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **204** | Pg | **Pg** | **17 27 56.7** | **-0.4** |
| **ILIN** | **Lien** | **0.72** | **64** | Pg | **Pg** | **17 27 60.0** | **-0.7** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **114** | Pg | **Pg** | **17 28 01.6** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.23** | **78** | Pg | **Pg** | **17 28 10.6** | **+0.4** |
| **IBZA** | **Bozab** | **1.40** | **95** | Pg | **Pg** | **17 28 13.0** | **-0.6** |
| **IBDR** | **Badra** | **1.51** | **188** | *e*Pn | **Pg** | **17 28 15.0** | **-0.5** |
| IBDR | | | | *e*Sn | **Sg** | **17 28 37.0** | **+1.9** |
| IBDR | | | | AML | AML | 17 28 45.5 | |
| | comp=E,241nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 17 28 47.1 | |
| | comp=N,122nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.70** | **298** | *e*Pn | **Pb** | **17 28 18.0** | **+0.1** |
| IKRK | | | | *e*Sn | **Sg** | **17 28 41.5** | **+0.3** |
| IKRK | | | | AML | AML | 17 28 47.7 | |
| | comp=E,203nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 17 28 50.4 | |
| | comp=N,183nm,0.6s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.88** | **181** | *e*Pn | **Pn** | **17 28 34.0** | **+1.5** |
| RAFI | | | | *e*Sn | **Sb** | **17 29 10.0** | **-3.2** |

**IDC 27 17:27:48.2±3.7, 20°.35S×177°.92W, h555km±29km, mb3.0/4, mbtmp3.9/5, Error ellipse: s-maj=75.2km s-min=25.6km az=144.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.62** | **304** | P | P | 17 29 15.4 | +0.1 |
| | 6.4nm,0.5s,baz=134,slow=23,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **44.63** | **257** | P | P | 17 35 12.0 | 0.0 |
| | 3.5nm,0.8s,baz=97,slow=7.6,SNR=45 | | | | | | |
| ASAR | | | | PcP | PcP | 17 36 43.1 | +0.4 |
| | 0.2nm,0.6s,baz=116,slow=3.9,SNR=2.0 | | | | | | |
| | 3.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.70** | **262** | P | P | 17 35 12.2 | -0.4 |
| | 1.6nm,0.6s,baz=98,slow=8.0,SNR=33 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.13** | **324** | P | P | 17 38 04.9 | -0.4 |
| | 0.8nm,0.6s,baz=170,slow=6.7,SNR=2.9 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.86** | **43** | P | P | 17 39 04.7 | -0.3 |
| | 0.2nm,0.6s,baz=226,slow=7.5,SNR=2.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*SOME **27** 17:36:15.8, 39°.13N×74°.52E, h5km*
*NNC **27** 17:36:17.9±3.2, 39°.22N×74°.51E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=27.7km s-min=20.9km az=109.0*
*KRNET **27** 17:36:21.1±0.1, 39°.10N×74°.52E, mb2.5*
**ISC 27 17:36:17.4±1.9, 39°.19N±0°.09×74°.62E±0°.04, h10km, n29, σ2s31/45, 15C-9D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.19** | **314** | ⇑*e*P | **Pn** | **17 36 43.3** | **+2.9** |
| | baz=19 | | | | | | |
| SFK | | | | ⇑*e*S | **Sn** | **17 37 00.0** | **+3.2** |
| | baz=19 | | | | | | |
| **OHH** | **Osh** | **1.94** | **314** | ⇑*e*P | **Pg** | **17 36 56.6** | **+1.9** |
| | baz=17 | | | | | | |
| OHH | | | | ⇑*e*S | **Sg** | **17 37 22.0** | **+2.1** |
| | baz=17 | | | | | | |
| **NRN** | **Naryn** | **2.48** | **25** | ⇓*e*P | **Pg** | **17 37 04.9** | **-0.1** |
| | baz=25 | | | | | | |
| NRN | | | | ⇓*e*S | **Sg** | **17 37 36.8** | **-0.3** |
| | baz=25 | | | | | | |
| **ARLS** | **Aral** | **2.68** | **355** | ⇑*e*P | **Pg** | **17 37 07.6** | **-1.2** |
| | baz=57 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sg** | **17 37 41.4** | **-2.2** |
| | baz=57 | | | | | | |
| **BTK** | **Batken** | **3.06** | **288** | ⇑*e*P | **Pg** | **17 37 11.4** | **-4.7** |
| | baz=90 | | | | | | |
| BTK | | | | ⇑*e*S | **Sb** | **17 37 47.5** | **-2.0** |
| | baz=90 | | | | | | |
| **AAK** | **Ala-Archa** | **3.45** | **358** | ⇑Pg | **Pb** | **17 37 19.8** | **+1.1** |
| | 2.8nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 17 38 10.2 | |
| | 6.0nm,0.8s | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.45** | **16** | ⇓*e*P | **Pb** | **17 37 18.6** | **-0.1** |
| | baz=17 | | | | | | |
| BOOM | | | | ⇓*e*S | **Sb** | **17 38 00.4** | **-0.3** |
| | baz=17 | | | | | | |
| **KDJ** | **Kajisay** | **3.53** | **33** | ⇓*e*P | **Pb** | **17 37 19.7** | **-0.3** |
| | baz=33 | | | | | | |
| KDJ | | | | ⇓*e*S | **Sb** | **17 38 02.7** | **-0.3** |
| | baz=33 | | | | | | |
| **MNAS** | **Manas** | **3.67** | **335** | ⇑*e*P | **Pb** | **17 37 20.5** | **-1.9** |
| | baz=36 | | | | | | |
| MNAS | | | | ⇑*e*S | **Sb** | **17 38 04.6** | **-2.4** |
| | baz=36 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.80** | **11** | ⇑Pg | **Pb** | **17 37 23.3** | **-1.4** |
| | 2.3nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 17 38 12.8 | |
| | 2.9nm,0.7s | | | | | | |
| **KST** | **Kastek** | **3.98** | **14** | *e*P | **Pg** | **17 37 30.9** | **-2.8** |
| | 1.2nm,0.2s | | | | | | |
| KST | | | | *e*S | **Sg** | **17 38 24.6** | **-0.8** |
| | 4.0nm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.98** | **14** | Pg | **Pb** | **17 37 28.7** | **+0.9** |
| | 2.0nm,0.4s | | | | | | |
| KST | | | | Lg | Lg | 17 38 21.0 | |
| | 13nm,0.6s | | | | | | |
| **IZV** | **Izvestkoviy** | **4.13** | **21** | *e*P | **Pg** | **17 37 33.6** | **-2.9** |
| | 0.1nm,0.1s | | | | | | |
| IZV | | | | *e*S | **Sg** | **17 38 29.2** | **-0.8** |
| | 12nm,0.1s | | | | | | |
| **IZV** | **Izvestkoviy** | **4.13** | **21** | Pg | **Pg** | **17 37 33.5** | **-3.1** |
| IZV | | | | Lg | Lg | 17 38 28.6 | |
| **DGS** | **Degeres** | **4.14** | **12** | *e*P | **Pg** | **17 37 34.5** | **-2.3** |
| | 2.3nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sg** | **17 38 31.0** | **+0.5** |
| | 3.7nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.14** | **12** | Pg | **Pg** | **17 37 34.5** | **-2.3** |
| | 2.3nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 17 38 31.0 | |
| | 3.7nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.23** | **24** | *e*P | **Pg** | **17 37 36.8** | **-1.7** |
| | 1.9nm,0.4s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **17 38 35.0** | **+1.8** |
| | 2.4nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **4.23** | **24** | Pg | **Pg** | **17 37 36.8** | **-1.7** |
| | 1.9nm,0.4s | | | | | | |
| TNSS | | | | Lg | Lg | 17 38 35.0 | |
| | 2.4nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **4.38** | **24** | *e*P | **Pg** | **17 37 39.1** | **-2.1** |
| | 2.0nm,0.2s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **17 38 38.9** | **+1.0** |
| | 6.1nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **4.38** | **24** | ⇑Pg | **Pg** | **17 37 37.8** | **-3.4** |
| | 1.9nm,0.5s | | | | | | |
| MDOK | | | | Pg | Pb | 17 37 39.1 | +4.6 |
| | 2.0nm,0.2s | | | | | | |
| MDOK | | | | ⇑Lg | Lg | 17 38 38.7 | |
| | 6.9nm,0.8s | | | | | | |
| MDOK | | | | Lg | Lg | 17 38 38.8 | |
| | 6.1nm,0.7s | | | | | | |
| **KTBS** | **Karatobe** | **4.78** | **18** | *e*P | **Pg** | **17 37 46.1** | **-2.8** |
| | 0.8nm,0.2s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **17 38 50.8** | **-0.1** |
| | 5.3nm,0.7s | | | | | | |
| **KTBS** | **Karatobe** | **4.78** | **18** | Pg | **Pg** | **17 37 46.1** | **-2.8** |
| | 1.0nm,0.5s | | | | | | |
| KTBS | | | | Lg | Lg | 17 38 51.2 | |
| | 5.2nm,0.8s | | | | | | |
| **SATY** | **Saty** | **4.81** | **35** | *e*P | **Pg** | **17 37 47.3** | **-2.3** |
| | 0.9nm,0.2s | | | | | | |
| SATY | | | | *e*S | **Sg** | **17 38 52.6** | **+0.8** |
| | 2.2nm,0.1s | | | | | | |
| **SATY** | **Saty** | **4.81** | **35** | Pg | **Pg** | **17 37 47.3** | **-2.3** |
| | 1.5nm,0.4s | | | | | | |
| SATY | | | | Lg | Lg | 17 38 53.3 | |
| | 4.2nm,0.5s | | | | | | |
| **CHKK** | **Chushkaly** | **4.99** | **20** | *e*P | **Pg** | **17 37 50.6** | **-2.4** |
| | 0.5nm,0.2s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **17 38 58.1** | **+0.5** |
| | 1.2nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **4.99** | **20** | Pg | **Pg** | **17 37 50.6** | **-2.4** |
| | 0.5nm,0.2s | | | | | | |
| CHKK | | | | Lg | Lg | 17 38 58.1 | |
| | 1.2nm,0.2s | | | | | | |
| **PDGK** | **Podgornoye** | **5.53** | **40** | Pg | **Pg** | **17 37 59.2** | **-4.1** |
| | 0.4nm,0.3s | | | | | | |
| PDGK | | | | Lg | Lg | 17 39 13.1 | |
| | 1.7nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **5.53** | **40** | ⇑Pg | **Pb** | **17 37 58.1** | **+4.0** |
| | 1.7nm,0.7s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 17 39 06.9 | |
| | 7.3nm,0.9s | | | | | | |
| **BLB** | **Baldybastay** | **5.69** | **29** | Pg | **Pg** | **17 38 02.2** | **-4.2** |
| | 1.4nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 17 39 18.7 | |
| | 2.2nm,0.6s | | | | | | |

*ISN **27** 17:37:46.2±1.0, 34°.59N×46°.16E, h10km±30km, ML2.8*
*TEH **27** 17:37:47.8, 34°.58N×46°.19E, h10km±53km, ML2.9*
**ISC 27 17:37:48.0±1.0, 34°.58N±0°.04×46°.19E±0°.03, h10km, n11, σ1s04/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.20** | **55** | Pg | **Pg** | **17 37 52.5** | **+0.1** |
| IDHR | | | | Sg | **Sg** | **17 37 56.2** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **0.41** | **129** | Pg | **Pb** | **17 37 56.6** | **-0.8** |
| **KGS1** | **Ghasr-e-Shirin** | **0.50** | **261** | Pg | **Pg** | **17 37 57.8** | **+0.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.52** | **206** | Pg | **Pg** | **17 37 58.3** | **+0.2** |
| **ILIN** | **Lien** | **0.72** | **62** | Pg | **Pg** | **17 38 01.8** | **-0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.77** | **113** | Pg | **Pg** | **17 38 02.4** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **179** | Pg | **Pb** | **17 38 06.4** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **77** | Pg | **Pb** | **17 38 11.1** | **-0.2** |
| **IBDR** | **Badra** | **1.48** | **188** | *e*Pn | **Pg** | **17 38 16.0** | **-0.5** |
| IBDR | | | | *e*Sn | **Sg** | **17 38 37.3** | **+1.6** |
| IBDR | | | | AML | AML | 17 38 41.2 | |
| | comp=E,124nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 17 38 43.1 | |
| | comp=N,128nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.72** | **299** | *e*Pn | **Pb** | **17 38 19.0** | **-0.7** |
| IKRK | | | | *e*Sn | **Sg** | **17 38 43.2** | **-0.1** |
| IKRK | | | | AML | AML | 17 38 46.8 | |
| | comp=N,165nm,0.1s | | | | | | |
| IKRK | | | | AML | AML | 17 38 50.8 | |
| | comp=E,170nm,0.5s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.85** | **181** | *e*Pn | **Pn** | **17 38 35.0** | **+1.5** |
| RAFI | | | | *e*Sn | **Sb** | **17 39 11.5** | **-2.4** |

*NOU **27** 17:52:24.7, 22°.99S×172°.02E, h0km, mb5.0/19, Southeast of Loyalty Islands*
*NEIC **27** 17:52:26.5±2.4, 22°.5S±0°.1×172°.1E±0°.1, h38km±8km, mb4.6/31, Error ellipse: s-maj=17.1km s-min=12.6km az=210.0*
*IDC **27** 17:52:28.2±2.6, 22°.65S×172°.07E, h56km±22km, mb3.9/12, mbtmp4.2/15, ML4.6/3, MS3.6/17, Error ellipse: s-maj=19.1km s-min=16.3km az=159.0*
**ISC 27 17:52:27.6±0.5, 22°.81S±0°.07×172°.09E±0°.06, h47km, n94, σ1s36/81, mb4.5/22, MS3.6/14, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **3.98** | **289** | P | **Pn** | **17 53 27.6** | **+1.4** |
| **PINNC** | **Pines Island,** | **4.29** | **272** | P | **Pn** | **17 53 31.1** | **+0.7** |
| **PINNC** | **Pines Island,** | **4.29** | **272** | | **Pn** | **17 53 29.6** | **-0.8** |
| PINNC | | | | Sn | **Sn** | **17 54 18.9** | **-0.3** |
| **YATNC** | **Mamie plateau,** | **4.86** | **278** | P | **Pn** | **17 53 38.7** | **+0.4** |
| **LIFNC** | **LIFOU** | **4.94** | **293** | Pn | **Pn** | **17 53 34.7** | **-4.5** |
| **DZM** | **Mont Dzumac** | **5.27** | **277** | P | **Pn** | **17 53 43.8** | **-0.2** |
| **DZM** | **Mont Dzumac** | **5.27** | **277** | *e*Pn | **Pn** | **17 53 43.5** | **-0.4** |
| | 124nm,1.1s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **17 54 44.0** | **+0.5** |
| | 418nm,1.1s | | | | | | |
| DZM | | | | *e*LR | LR | 17 54 57.7 | |
| | 1μm,22.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **5.27** | **277** | | **Pn** | **17 53 43.7** | **-0.2** |
| DZM | | | | Sn | **Sn** | **17 54 43.0** | **-0.5** |
| **DZM** | **Mont Dzumac** | **5.27** | **277** | P | **Pn** | **17 53 43.6** | **-0.4** |
| | 8.8nm,0.3s,baz=122,slow=13,SNR=122 | | | | | | |
| DZM | | | | S | **Sn** | **17 54 43.2** | **-0.3** |
| | 42nm,0.5s,baz=176,slow=15,SNR=2.5 | | | | | | |
| | 32nm,0.4s | | | | | | |
| **NOUC** | **Port Laguerre** | **5.40** | **276** | P | **Pn** | **17 53 45.6** | **0.0** |
| **RTV** | **Rentapao** | **6.06** | **325** | P | **Pn** | **17 53 57.3** | **+2.7** |
| **DVP** | **Devils Point** | **6.24** | **323** | P | **Pn** | **17 53 59.9** | **+2.7** |
| **NFK** | **Norfolk Island** | **7.25** | **210** | P | **Pn** | **17 54 09.1** | **-1.8** |
| **MSVF** | **Nonsavu** | **7.54** | **49** | P | **Pn** | **17 54 17.7** | **+2.7** |
| **MSVF** | **Nonsavu** | **7.54** | **49** | Pn | **Pn** | **17 54 16.5** | **+1.5** |
| **MSVF** | **Nonsavu** | **7.54** | **49** | P | **Pn** | **17 54 15.8** | **+0.8** |
| | 1.8nm,0.3s,baz=238,slow=7.5,SNR=23 | | | | | | |
| MSVF | | | | LR | LR | 17 56 24.3 | |
| | comp=Z,781nm,18.2s,baz=257,slow=32 | | | | | | |
| | 39nm,0.7s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **7.59** | **286** | P | **Pn** | **17 54 17.7** | **+2.0** |
| **KOUNC** | **Koumac, New Ca** | **7.59** | **286** | | **Pn** | **17 54 15.7** | **0.0** |
| **RAO** | **Raoul Island** | **11.04** | **128** | LR | LR | 17 58 19.9 | |
| | comp=Z,630nm,20.0s,baz=278,slow=32 | | | | | | |
| **URZ** | **Urewera** | **15.99** | **166** | P | **P** | **17 56 11.7** | **-0.4** |
| | 0.3nm,0.3s,baz=330,slow=20,SNR=6.5 | | | | | | |
| URZ | | | | LR | LR | 18 01 09.0 | |
| | comp=Z,340nm,19.4s,baz=58,slow=32 | | | | | | |
| | 11nm,0.8s | | | | | | |
| **RTZ** | **Ruatahuna** | **16.31** | **166** | | **P** | **17 56 14.7** | **-1.0** |
| RTZ |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,22nm,1.3s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **24.99** | **244** | P | | **P** | **17 57 49.1** | **+2.0** |
| **RAR** | **Rarotonga** | **26.12** | **92** | LR | | LR | 18 08 11.3 | |
| | comp=Z,81nm,18.1s,baz=264,slow=36 | | | | | | | |
| **MTSU** | **Mount Surprise** | **26.41** | **275** | P | | **P** | **17 58 01.6** | **+1.6** |
| **STKA** | **Stephens Creek** | **28.48** | **245** | P | | **P** | **17 58 17.4** | **-1.0** |
| **STKA** | **Stephens Creek** | **28.48** | **245** | P | | **P** | **17 58 20.1** | **+1.6** |
| | comp=Z,2.1nm,0.8s,baz=86,slow=15,SNR=4.2 | | | | | | | |
| STKA | | | | LR | | LR | 18 08 51.2 | |
| | comp=Z,141nm,19.7s,baz=56,slow=34 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **LCRK** | **Leigh Creek** | **31.13** | **249** | P | | **P** | **17 58 43.8** | **+1.9** |
| **MULG** | **Mulgathing** | **34.70** | **249** | P | | **P** | **17 59 14.8** | **+1.7** |
| **AS01** | **Alice Springs** | **34.98** | **261** | P | | **P** | **17 59 16.5** | **+0.8** |
| **AS31** | **Alice Springs** | **35.03** | **261** | P | | **P** | **17 59 15.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **35.03** | **261** | P | | **P** | **17 59 16.4** | **+0.3** |
| | comp=Z,5.0nm,0.7s,baz=94,slow=10,SNR=55 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **18 01 47.3** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=107,slow=3.1,SNR=5.6 | | | | | | | |
| ASAR | | | | LR | | LR | 18 13 19.3 | |
| | comp=Z,173nm,19.3s,baz=103,slow=36 | | | | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **35.19** | **268** | P | | **P** | **17 59 17.5** | **0.0** |
| WB0 | | | | IAmb | | IAmb | 17 59 33.5 | |
| | comp=Z,9.2nm,1.3s | | | | | | | |
| **WB2** | **Warramunga Arr** | **35.19** | **267** | P | | **P** | **17 59 17.1** | **-0.4** |
| WB2 | | | | IAmb | | IAmb | 17 59 34.5 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **35.20** | **267** | P | | **P** | **17 59 17.6** | **+0.1** |
| WRAB | | | | IAmb | | IAmb | 17 59 34.4 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.21** | **267** | P | | **P** | **17 59 16.1** | **-1.5** |
| | comp=Z,1.1nm,0.7s,baz=96,slow=8.4,SNR=22 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **18 01 47.9** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=89,slow=2.5,SNR=4.0 | | | | | | | |
| WRA | | | | LR | | LR | 18 13 41.5 | |
| | comp=Z,217nm,19.2s,baz=35,slow=36 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **TBI** | **Tubuai** | **35.31** | **99** | *e*LR | | LR | 18 08 44.2 | |
| | comp=Z,805nm,30.5s | | | | | | | |
| **PPT2** | **Papeete2** | **36.28** | **89** | *e*LR | | LR | 18 09 14.4 | |
| | comp=Z,134nm,25.5s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 18 09 19.8 | |
| | comp=Z,125nm,23.2s | | | | | | | |
| **FORT** | **Forrest** | **39.89** | **249** | P | | **P** | **17 59 59.5** | **+2.4** |
| **FORT** | **Forrest** | **39.89** | **249** | P | | **P** | **17 59 57.3** | **+0.2** |
| **WRKA** | **Warakurna** | **39.96** | **258** | P | | **P** | **17 59 58.9** | **+1.1** |
| **MTN** | **Manton Dam** | **40.11** | **277** | P | | **P** | **17 59 57.4** | **-1.6** |
| MTN | | | | IAmb | | IAmb | 17 59 58.7 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.38** | **352** | T | | T | 18 44 15.8 | |
| | baz=173 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.39** | **352** | T | | T | 18 44 11.7 | |
| | baz=173 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.40** | **352** | T | | T | 18 44 09.3 | |
| | baz=173 | | | | | | | |
| **KNRA** | **Kununurra** | **41.40** | **272** | P | | **P** | **18 00 08.8** | **-0.8** |
| **H11N1** | **WAKE ISLAND Hy** | **42.56** | **353** | T | | T | 18 45 47.2 | |
| | baz=175,slow=74 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.57** | **353** | T | | T | 18 45 52.9 | |
| | baz=175 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.58** | **353** | T | | T | 18 45 58.1 | |
| | baz=175,slow=74 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **43.64** | **267** | P | | **P** | **18 00 28.4** | **+0.5** |
| **GUMO** | **Guam** | **44.93** | **321** | LR | | LR | 18 17 55.1 | |
| | comp=Z,92nm,18.9s,baz=100,slow=34 | | | | | | | |
| **MBWA** | **Marble Bar** | **48.37** | **261** | P | | **P** | **18 01 03.9** | **-1.2** |
| **RKT** | **Rikitea** | **48.52** | **101** | *e*LR | | LR | 18 14 57.9 | |
| | comp=Z,312nm,25.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **49.06** | **246** | LR | | LR | 18 20 44.0 | |
| | comp=Z,140nm,20.7s,baz=156,slow=34 | | | | | | | |
| **MMRI** | **Maumere** | **49.77** | **278** | P | | **P** | **18 01 16.2** | **+0.3** |
| **MORW** | **Morawa** | **50.40** | **250** | P | | **P** | **18 01 21.6** | **+1.1** |
| **KAPI** | **Kappang** | **53.48** | **281** | LR | | LR | 18 25 22.0 | |
| | comp=Z,54nm,19.2s,baz=100,slow=37 | | | | | | | |
| **SBA** | **Scott Base** | **55.16** | **181** | P | | **P** | **18 01 57.2** | **+2.4** |
| SBA | | | | IAmb | | IAmb | 18 02 05.8 | |
| | comp=Z,8.4nm,1.1s | | | | | | | |
| **JCJ** | **Chichijima** | **57.42** | **328** | LR | | LR | 18 25 40.7 | |
| | comp=Z,38nm,19.9s,baz=122,slow=35 | | | | | | | |
| **JOW** | **Kunigami** | **65.04** | **317** | LR | | LR | 18 29 33.4 | |
| | comp=Z,42nm,19.7s,baz=71,slow=34 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.14** | **331** | LR | | LR | 18 31 15.9 | |
| | comp=Z,12nm,19.4s,baz=129,slow=35 | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.27** | **180** | P | | **P** | **18 03 18.0** | **+0.8** |
| QSPA | | | | IAmb | | IAmb | 18 03 34.4 | |
| | comp=Z,7.9nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.27** | **180** | P | | **P** | **18 03 17.1** | **-0.1** |
| | comp=Z,1.5nm,0.7s,baz=319,slow=1.1,SNR=12 | | | | | | | |
| QSPA | | | | LR | | LR | 18 28 21.7 | |
| | comp=Z,56nm,21.9s,baz=42,slow=32 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **JNU** | **Nakatsue** | **68.10** | **323** | LR | | LR | 18 33 16.5 | |
| | comp=Z,11nm,18.2s,baz=120,slow=36 | | | | | | | |
| **KSRS** | **Korea Array** | **72.94** | **325** | P | | **P** | **18 03 49.8** | **-2.2** |
| | comp=Z,1.0nm,0.8s,baz=147,slow=6.1,SNR=5.3 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **MAW** | **Mawson** | **76.14** | **202** | P | | **P** | **18 04 11.4** | **+1.2** |
| | comp=Z,2.4nm,0.7s,baz=124,slow=6.8,SNR=6.2 | | | | | | | |
| MAW | | | | LR | | LR | 18 33 26.7 | |
| | comp=Z,42nm,18.4s,baz=118,slow=32 | | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.62** | **351** | P | | **P** | **18 04 12.6** | **-0.4** |
| | comp=Z,2.0nm,0.8s,baz=164,slow=7.2,SNR=1.6 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **BELA** | **Belgrano 2** | **78.32** | **174** | P | | **P** | **18 04 21.4** | **-0.9** |
| **SMAI** | **San Martin Ant** | **79.61** | **161** | P | | **P** | **18 04 30.1** | **+0.5** |
| SMAI | | | | IAmb | | IAmb | 18 04 30.8 | |
| | comp=Z,5.7nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **82.38** | **294** | P | | **P** | **18 04 45.9** | **+0.8** |
| | comp=Z,0.6nm,0.7s,baz=135,slow=4.7,SNR=4.4 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.16** | **183** | ⇑P | | **P** | **18 04 58.3** | **-0.4** |
| | comp=Z,176nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **85.71** | **182** | P | | **P** | **18 04 59.9** | **-1.3** |
| SNAA | | | | IAmb | | IAmb | 18 05 05.8 | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **85.71** | **182** | ⇑P | | **P** | **18 05 00.4** | **-0.9** |
| | comp=Z,27nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **85.71** | **182** | P | | **P** | **18 05 00.3** | **-0.9** |
| | comp=Z,2.1nm,0.8s,baz=206,slow=8.7,SNR=9.3 | | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.20** | **179** | ⇑P | | **P** | **18 05 02.5** | **-1.2** |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **VNA2** | **Neumayer–Watz** | **86.52** | **180** | ⇑P | | **P** | **18 05 04.4** | **-0.8** |
| | comp=Z,2.0nm,0.6s,baz=183,slow=5.0 | | | | | | | |
| **SEY** | **Seymchan** | **86.86** | **351** | P | | **P** | **18 05 04.8** | **-1.8** |
| | comp=Z,1.1nm,0.7s,baz=121,slow=5.9,SNR=2.7 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.20** | **47** | P | | **P** | **18 05 17.8** | **-0.9** |
| | comp=Z,1.9nm,1.1s,baz=226,slow=7.7,SNR=5.8 | | | | | | | |
| | comp=Z,1.9nm,1.1s | | | | | | | |
| **KVN** | **Kaiserville** | **89.65** | **47** | P | | **P** | **18 05 19.3** | **-1.5** |
| KVN | | | | IAmb | | IAmb | 18 05 23.2 | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **TPH** | **Tonopah** | **89.76** | **48** | P | | **P** | **18 05 21.0** | **-0.3** |
| **R11B** | **Troy Canyon, C** | **91.03** | **49** | P | | **P** | **18 05 27.6** | **+0.4** |
| **ILAR** | **Eielson Array** | **92.86** | **16** | P | | **P** | **18 05 32.3** | **-2.5** |
| | comp=Z,1.2nm,0.9s,baz=239,slow=5.9,SNR=7.9 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **J26L** | **Joseph Creek** | **93.54** | **18** | P | | **P** | **18 05 35.4** | **-2.6** |
| **TORD** | **Torodi Ar. Bea** | **166.75** | **225** | PKPab | | **PKPab** | **18 13 32.5** | **+0.8** |
| | comp=Z,0.5nm,0.8s,baz=125,slow=3.4,SNR=2.3 | | | | | | | |

*SOME **27** 18:04:53.4,49°.52N×84°.77E,h0km*
*NNC **27** 18:04:56.6±3.4,49°.47N×85°.85E,h0km,mb3.0,mpv2.6,*
*Error ellipse: s-maj=26.6km s-min=11.5km az=75.0*
**ISC 27 18:04:55.7±3.8,49°.5N±0°.1×86°.1E±0°.2,h10km,n4,**
**σ0°89/11,7C-4D,Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZSN** | **Zaisan** | **2.23** | **202** | *e*P | **Pn** | **18 05 33.1** | **+0.4** |
| | 2.1nm,0.3s | | | | | | |
| ZSN | | | | *e*S | **Sn** | **18 05 59.7** | **-0.6** |
| | 6.0nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **3.74** | **225** | ⇑Pn | **Pn** | **18 05 54.7** | **+1.2** |
| | baz=38,slow=14,SNR=7.4 | | | | | | |
| MK31 | | | | Pg | **Pg** | **18 06 06.8** | **-0.6** |
| | 0.3nm,0.4s,baz=44,slow=15,SNR=3.9 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **18 06 36.8** | **-0.8** |
| | 0.4nm,0.4s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 18 06 47.2 | |
| | 0.8nm,0.5s,baz=54,slow=29,SNR=4.2 | | | | | | |
| **KURK** | **Kurchatov** | **4.97** | **287** | ⇑Pn | **Pn** | **18 06 09.7** | **-0.7** |
| | 0.8nm,0.5s | | | | | | |
| KURK | | | | ⇓Pg | **Pb** | **18 06 22.6** | **-0.2** |
| | 1.0nm,0.7s | | | | | | |
| KURK | | | | ⇓Sn | **Sn** | **18 07 08.7** | **+0.8** |
| | 0.7nm,0.4s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 18 07 29.3 | |
| | 1.5nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.01** | **286** | ⇓Pn | **Pn** | **18 06 10.2** | **-0.8** |
| | 0.5nm,0.3s | | | | | | |
| KURBB | | | | ⇑Pg | **Pb** | **18 06 24.6** | **+1.1** |
| | 0.8nm,0.8s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **18 07 09.4** | **+0.6** |
| | 1.2nm,0.5s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 18 07 31.3 | |
| | 4.6nm,0.6s | | | | | | |

*IDC **27** 18:07:45.5±2.1,28°.83N×53°.61E,h0km,mb3.7/8,*
*mbtmp3.7/9,ML3.3/1,MS3.5/2,Error ellipse: s-maj=45.9km*
*s-min=23.4km az=162.0*
*TEH **27** 18:07:49.4,28°.91N×53°.51E,h11km±26km,ML3.4*
*OMAN **27** 18:07:51.1±0.6,28°.81N×53°.56E,h10km,mb5.0/6,ml3.2/9,*
*Error ellipse: s-maj=6.6km s-min=3.2km az=31.0*
**ISC 27 18:07:48.4±0.6,29°.00N±0°.03×53°.56E±0°.03,h10km,n65,**
**σ1°56/76,mb3.9/12,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHRM** | **Jahrom** | **0.50** | **178** | Pg | **Pg** | **18 07 57.5** | **-0.7** |
| **QIR1** | **Qir** | **0.69** | **221** | Pg | **Pg** | **18 08 01.7** | **-0.2** |
| **SHI** | **Shiraz** | **1.11** | **305** | Pg | **Pn** | **18 08 11.0** | **+0.7** |
| **LAR1** | **LAR** | **1.51** | **151** | Pg | **Pg** | **18 08 17.3** | **-0.1** |
| **LMD1** | **Lamerd** | **1.69** | **192** | Pg | **Pb** | **18 08 20.1** | **+0.4** |
| **KAZ2** | **Kazeron-Fars-I** | **1.77** | **291** | Pg | **Pb** | **18 08 21.3** | **+0.3** |
| **AHBU** | **AHRAM** | **1.99** | **267** | Pn | **Pb** | **18 08 24.0** | **-0.8** |
| **DSBU** | **Dashti - Bushe** | **2.12** | **253** | Pn | **Pn** | **18 08 25.8** | **+1.8** |
| **IMEH** | **Mehriz** | **2.55** | **21** | Pn | **Pb** | **18 08 34.7** | **+0.3** |
| **KLNJ** | **Kolanjah** | **2.63** | **320** | Pn | **Pn** | **18 08 33.2** | **+1.9** |
| **GENO** | **Geno** | **2.80** | **124** | Pn | **Pn** | **18 08 36.2** | **+2.7** |
| **NGRK** | **Negar Kerman** | **2.84** | **76** | Pn | **Pb** | **18 08 38.6** | **-0.8** |
| **KHGB** | **Koh Gabri** | **2.88** | **61** | Pn | **Pb** | **18 08 38.7** | **-1.4** |
| **ISAD** | **Sadrabad** | **2.90** | **2** | Pn | **Pb** | **18 08 39.6** | **-0.9** |
| **TVBK** | **TV Kerman** | **2.96** | **70** | Pn | **Pb** | **18 08 39.8** | **-1.7** |
| **IRAM** | **Ramesheh** | **2.98** | **340** | Pn | **Pb** | **18 08 40.2** | **-1.5** |
| **IBAF** | **Bafgh** | **3.11** | **33** | Pn | **Pb** | **18 08 41.8** | **-2.1** |
| **ZRDN** | **Zarand Kerman** | **3.24** | **52** | Pn | **Pn** | **18 08 43.1** | **+3.5** |
| **IBRJ** | **Brojen** | **3.51** | **326** | Pn | **Pn** | **18 08 45.6** | **+2.2** |
| **KRM1** | **Kerman Provinc** | **3.56** | **64** | Pn | **Pn** | **18 08 47.3** | **+3.3** |
| **ZNGN** | **Zangian** | **3.88** | **324** | Pn | **Pn** | **18 08 50.7** | **+2.1** |
| **IZEF** | **Zefreh** | **4.02** | **345** | Pn | **Pn** | **18 08 53.3** | **+2.9** |
| **ANAR** | **Anarak** | **4.18** | **2** | Pn | **Pn** | **18 08 55.8** | **+3.4** |
| **KBAM** | **BAM** | **4.28** | **87** | Pn | **Pn** | **18 08 56.8** | **+3.0** |
| **MASF** | **Masafi** | **4.29** | **147** | P | **Pn** | **18 08 55.9** | **+2.0** |
| | SNR=6.3 | | | | | | |
| MASF | | | | S | **Sn** | **18 09 45.0** | **+0.9** |
| **IPIR** | **Pirpir** | **4.33** | **329** | Pn | **Pn** | **18 08 57.3** | **+2.7** |
| **MDH** | **Madha** | **4.42** | **146** | P | **Pn** | **18 08 57.2** | **+1.5** |
| MDH | | | | S | **Sn** | **18 09 47.0** | **-0.2** |
| **AJN** | **Ajban** | **4.60** | **164** | P | **Pn** | **18 08 58.6** | **+0.5** |
| AJN | | | | S | **Sn** | **18 09 50.9** | **-0.7** |
| **FAQ** | **Al Faqa, Dubai** | **4.61** | **156** | P | **Pn** | **18 08 58.9** | **+0.6** |
| FAQ | | | | S | **Sn** | **18 09 51.9** | **-0.1** |
| **IKLH** | **Kolahrood** | **4.62** | **339** | Pn | **Pn** | **18 09 01.9** | **+3.2** |
| **ASUD** | **Al Ashush, Dub** | **4.64** | **160** | P | **Pn** | **18 09 00.9** | **+2.3** |
| | SNR=24 | | | | | | |
| **UOSS** | **Minazif** | **4.68** | **149** | P | **Pn** | **18 08 59.9** | **+0.8** |
| UOSS | | | | S | **Sn** | **18 09 53.8** | **+0.2** |
| **HATD** | **Hatta, Dubai** | **4.75** | **151** | P | **Pn** | **18 09 01.7** | **+1.5** |
| HATD | | | | S | **Sn** | **18 09 55.5** | **+0.1** |
| **TPRV** | **Parvadeh(Tabas** | **4.83** | **33** | Pn | **Pn** | **18 09 04.8** | **+3.5** |
| **ASHO** | **Ashiyiah** | **4.85** | **152** | P | **Pn** | **18 09 02.7** | **+1.2** |
| ASHO | | | | S | **Sn** | **18 09 57.8** | **+0.1** |
| **SMRA** | **Abu-Samra** | **4.89** | **211** | P | **Pn** | **18 09 04.3** | **+2.2** |
| SMRA | | | | S | **Sn** | **18 09 59.1** | **+0.2** |
| **QAMS** | **Qamsar** | **5.07** | **339** | Pn | **Pn** | **18 09 08.5** | **+3.7** |
| **KBD** | **Kabd** | **5.14** | **273** | P | **Pn** | **18 09 07.9** | **+2.4** |
| **ALNE** | **Al Ain** | **5.30** | **158** | P | **Pn** | **18 09 08.4** | **+0.6** |
| ALNE | | | | S | **Sn** | **18 10 08.9** | **-0.1** |
| **SOHO** | **SOHO** | **5.53** | **151** | P | **Pn** | **18 09 11.7** | **+0.8** |
| SOHO | | | | S | **Sn** | **18 10 14.3** | **-0.3** |
| **ARQ** | **Araqi** | **6.24** | **154** | P | **Pn** | **18 09 21.3** | **+0.7** |
| | SNR=18 | | | | | | |
| ARQ | | | | S | **Sn** | **18 10 31.5** | **-0.5** |
| **HOQ** | **Hoqain** | **6.36** | **147** | P | **Pn** | **18 09 23.2** | **+0.9** |
| **UMZA** | **Um Al Zommool** | **6.43** | **167** | P | **Pn** | **18 09 23.7** | **+0.5** |
| **BSY** | **Bisya** | **7.04** | **151** | P | **Pn** | **18 09 32.4** | **+0.8** |
| **SMDO** | **Samad** | **7.16** | **145** | P | **Pn** | **18 09 34.2** | **+0.8** |
| | SNR=5.9 | | | | | | |
| SMDO | | | | S | **Sn** | **18 10 54.6** | **-0.4** |
| **JMDO** | **Jabal Madar** | **7.77** | **147** | P | **Pn** | **18 09 42.7** | **+1.0** |
| **JLN** | **Jalan Bani Buh** | **8.63** | **141** | P | **Pn** | **18 09 53.9** | **+0.5** |
| **MHTO** | **MHTO** | **8.93** | **152** | P | **Pn** | **18 09 56.9** | **-0.6** |
| **RAYN** | **Ar Rayn** | **9.06** | **235** | P | **Pn** | **18 09 59.6** | **+0.2** |
| **DOK** | **Doka** | **10.35** | **177** | P | **Pn** | **18 10 15.8** | **-1.2** |
| **BRTR** | **Keskin Array B** | **19.58** | **308** | P | **P** | **18 12 16.8** | **+0.1** |
| | 0.1nm,0.3s,baz=129,slow=13,SNR=6.4 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **27.01** | **23** | P | **P** | **18 13 29.2** | **-1.3** |
| | 20nm,0.6s,baz=153,slow=3.6,SNR=108 | | | | | | |
| BVAR | | | | PcP | **PcP** | **18 16 50.6** | **-1.1** |
| | 0.4nm,0.6s,baz=224,slow=4.0,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **28.57** | **44** | P | **P** | **18 13 44.5** | **-0.1** |
| | 0.7nm,0.8s,baz=236,slow=9.4,SNR=5.2 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.64** | **34** | P | **P** | **18 13 45.5** | **+0.5** |
| | 0.2nm,0.4s,baz=306,slow=6.8,SNR=2.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **OBN** | **Obninsk** | **28.82** | **340** | LR | LR | 18 26 58.9 | |
| | comp=Z,78nm,20.6s,baz=102,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.73** | **34** | P | **P** | **18 14 29.3** | **-0.5** |
| | 0.4nm,0.3s,baz=242,slow=9.4,SNR=3.8 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **37.21** | **338** | P | **P** | **18 14 60.0** | **+0.3** |
| | 1.7nm,0.7s,baz=140,slow=12,SNR=11 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **37.42** | **311** | *i* PcP | **P** | **18 15 01.7** | **-0.1** |
| | 2.6nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **37.69** | **310** | *i* PcP | **P** | **18 15 04.2** | **+0.1** |
| | 2.3nm,0.7s | | | | | | |
| **DAVA** | **Damuels** | **38.32** | **311** | *i* PcP | **P** | **18 15 09.2** | **-0.2** |
| | 2.9nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **41.05** | **331** | P | **P** | **18 15 31.8** | **0.0** |
| | 1.4nm,0.6s,baz=133,slow=11,SNR=5.6 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **42.57** | **331** | P | **P** | **18 15 43.9** | **-0.3** |
| | 0.6nm,0.7s,baz=122,slow=8.4,SNR=1.9 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **43.66** | **346** | P | **P** | **18 15 53.4** | **+0.4** |
| | 0.7nm,0.5s,baz=64,slow=9.5,SNR=4.0 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **50.51** | **263** | P | **P** | **18 16 45.7** | **-1.4** |
| | 0.8nm,0.6s,baz=62,slow=8.0,SNR=5.7 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **TIXI** | **Tiksi** | **58.13** | **21** | LR | LR | 18 45 42.2 | |
| | comp=Z,46nm,18.4s,baz=145,slow=39 | | | | | | |

*NEIC **27** 18:13:47.6±1.3,69°.64N±0°.02×145°.42W±0°.05,h10km±1km,*
*Error ellipse: s-maj=3.7km s-min=2.7km az=344.0*
*AEIC **27** 18:13:47.0±2.6,69°.66N±0°.04×145°.37W±0°.04,h21km±7km,*
*ML3.5,ML3.6/122(NEIC),Error ellipse: s-maj=5.3km*
*s-min=1.9km az=189.0*
*IDC **27** 18:13:49.4±4.8,69°.62N×144°.99W,h0km,mb3.3/3.2,*
*mbtmp3.5/4,ML3.7/2,MS2.8/2,Error ellipse: s-maj=68.2km*
*s-min=29.7km az=145.0*
**ISC 27 18:13:48.1±0.8,69°.64N±0°.04×145°.41W±0°.03,h10km,**
**n129,σ0°87/100,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C26K** | **Camden Bay** | **0.33** | **31** | | **Pg** | **18 13 54.3** | **-0.4** |
| C26K | | | | | **Sg** | **18 13 59.6** | **+0.6** |
| **C26K** | **Camden Bay** | **0.33** | **31** | IAML | | 18 14 00.8 | |
| | comp=E,8μm,0.5s | | | | | | |
| C26K | | | | IAML | | 18 14 01.1 | |
| | comp=N,6μm,0.7s | | | | | | |
| **D25K** | **Kavik River** | **0.47** | **227** | | **Sg** | **18 14 02.3** | **-1.1** |
| **D25K** | **Kavik River** | **0.47** | **227** | | **Pg** | **18 13 55.5** | **-1.7** |
| **D25K** | **Kavik River** | **0.47** | **227** | IAML | | 18 14 02.9 | |
| | comp=E,2μm,0.6s | | | | | | |
| D25K | | | | IAML | | 18 14 02.9 | |
| | comp=N,3μm,0.7s | | | | | | |
| **C27K** | **Jago River** | **0.59** | **91** | | **Pg** | **18 13 57.9** | **-1.8** |
| C27K | | | | | **Sg** | **18 14 06.2** | **-1.2** |
| **C24K** | **Franklin Bluff** | **1.15** | **276** | | **Sn** | **18 14 27.2** | **+1.1** |
| **C24K** | **Franklin Bluff** | **1.15** | **276** | | **Pb** | **18 14 09.3** | **-0.8** |
| **C24K** | **Franklin Bluff** | **1.15** | **276** | IAML | | 18 14 28.3 | |
| | comp=N,2μm,0.8s | | | | | | |
| C24K | | | | IAML | | 18 14 29.2 | |
| | comp=E,1μm,0.5s | | | | | | |
| **D24K** | **Happy Valley** | **1.30** | **250** | | **Sg** | **18 14 31.1** | **+1.1** |
| **D24K** | **Happy Valley** | **1.30** | **250** | | **Pn** | **18 14 12.1** | **-0.2** |
| **D24K** | **Happy Valley** | **1.30** | **250** | IAML | | 18 14 33.3 | |
| | comp=E,3μm,0.9s | | | | | | |
| D24K | | | | IAML | | 18 14 33.5 | |
| | comp=N,1μm,0.5s | | | | | | |
| **D27M** | **Malcolm River** | **1.62** | **102** | | **Sg** | **18 14 39.0** | **-1.0** |
| **D27M** | **Malcolm River** | **1.62** | **102** | | **Pn** | **18 14 14.8** | **-2.0** |
| **D27M** | **Malcolm River** | **1.62** | **102** | IAML | | 18 14 43.3 | |
| | comp=N,777nm,0.6s | | | | | | |
| D27M | | | | IAML | | 18 14 45.1 | |
| | comp=E,497nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.80** | **238** | | **Pn** | **18 14 18.6** | **-0.6** |
| TOLK | | | | IAML | | 18 14 47.5 | |
| | comp=E,536nm,0.8s | | | | | | |
| TOLK | | | | IAML | | 18 14 50.4 | |
| | comp=N,488nm,0.9s | | | | | | |
| **C23K** | **Itkillik River** | **1.82** | **279** | | **Pn** | **18 14 19.1** | **-0.4** |
| **E24K** | **Your Creek** | **1.93** | **217** | | **Pn** | **18 14 20.7** | **-0.3** |
| **D23K** | **Nanushuk River** | **1.99** | **253** | | **Pn** | **18 14 20.9** | **-1.0** |
| D23K | | | | IAML | | 18 14 59.7 | |
| | comp=E,430nm,0.9s | | | | | | |
| D23K | | | | IAML | | 18 15 05.5 | |
| | comp=N,380nm,1.0s | | | | | | |
| **E27K** | **Coleen River** | **2.01** | **135** | | **Sb** | **18 14 48.0** | **-1.8** |
| **E27K** | **Coleen River** | **2.01** | **135** | | **Pn** | **18 14 21.5** | **-0.6** |
| **E27K** | **Coleen River** | **2.01** | **135** | IAML | | 18 14 52.5 | |
| | comp=E,446nm,0.6s | | | | | | |
| E27K | | | | IAML | | 18 14 54.3 | |
| | comp=N,288nm,1.1s | | | | | | |
| **F26K** | **Sheenjek River** | **2.01** | **166** | | **Pn** | **18 14 21.9** | **-0.2** |
| F26K | | | | IAML | | 18 14 52.6 | |
| | comp=E,504nm,0.6s | | | | | | |
| **F25K** | **Christian Rive** | **2.06** | **183** | | **Sb** | **18 14 50.3** | **-0.9** |
| **F25K** | **Christian Rive** | **2.06** | **183** | | **Pn** | **18 14 22.2** | **-0.6** |
| **F25K** | **Christian Rive** | **2.06** | **183** | IAML | | 18 14 54.6 | |
| | comp=N,573nm,0.5s | | | | | | |
| F25K | | | | IAML | | 18 14 55.0 | |
| | comp=E,549nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.20** | **226** | | **Pn** | **18 14 24.8** | **0.0** |
| E23K | | | | IAML | | 18 15 01.8 | |
| | comp=N,446nm,0.8s | | | | | | |
| E23K | | | | IAML | | 18 15 02.0 | |
| | comp=E,426nm,0.4s | | | | | | |
| **F24K** | **Squaw Lake** | **2.32** | **204** | | **Pn** | **18 14 26.0** | **-0.3** |
| F24K | | | | IAML | | 18 15 03.3 | |
| | comp=E,405nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.35** | **114** | Pn | **Pn** | **18 14 26.4** | **-0.3** |
| **D28M** | **Stokes Point** | **2.37** | **94** | | **Pn** | **18 14 26.9** | **-0.1** |
| **D22K** | **Ayikyak River** | **2.70** | **257** | | **Pn** | **18 14 31.2** | **-0.4** |
| D22K | | | | IAML | | 18 15 23.9 | |
| | comp=N,302nm,0.8s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.77** | **240** | | **Pn** | **18 14 31.8** | **-0.8** |
| **G26K** | **Porcupine Rive** | **2.77** | **167** | | **Pn** | **18 14 33.2** | **+0.7** |
| **B22K** | **Teshekpuk Lake** | **2.84** | **288** | Pn | **Pn** | **18 14 32.2** | **-1.3** |
| **F28M** | **Old Crow** | **2.87** | **133** | Pn | **Pn** | **18 14 32.8** | **-1.2** |
| F28M | | | | IAML | | 18 15 22.5 | |
| | comp=E,246nm,1.1s | | | | | | |
| F28M | | | | IAML | | 18 15 23.3 | |
| | comp=N,197nm,0.8s | | | | | | |
| **G25K** | **Bearman Lake** | **2.90** | **185** | | **Sn** | **18 15 10.2** | **+1.1** |
| **E29M** | **Blow River** | **2.98** | **111** | | **Pn** | **18 14 35.3** | **-0.1** |
| E29M | | | | IAML | | 18 15 27.6 | |
| | comp=N,218nm,1.0s | | | | | | |
| E29M | | | | IAML | | 18 15 28.0 | |
| | comp=E,237nm,0.9s | | | | | | |
| **COLD** | **Coldfoot** | **3.00** | **218** | | **Pn** | **18 14 35.0** | **-0.6** |
| **G24K** | **Hadweenzic Riv** | **3.05** | **196** | | **Pn** | **18 14 35.9** | **-0.5** |
| G24K | | | | IAML | | 18 15 28.8 | |
| | comp=E,231nm,0.8s | | | | | | |
| G24K | | | | IAML | | 18 15 32.6 | |
| | comp=N,196nm,0.8s | | | | | | |
| **FYU** | **Fort Yukon** | **3.09** | **179** | | **Pn** | **18 14 37.6** | **+0.7** |
| FYU | | | | IAML | | 18 15 29.3 | |
| | comp=N,195nm,1.0s | | | | | | |
| FYU | | | | IAML | | 18 15 37

comp=N,39nm,0.9s
**IL31** **4.92 187** **Pn** **Pn** **18 15 02.3 +0.2**
**ILAR** **Eielson Array** **4.92 187** Pn **Pn** **18 15 02.2 +0.1**
comp=N,1.8nm,0.3s,baz=9.2,slow=14,SNR=51
ILAR Sn **Sn** **18 15 59.5 +0.5**
comp=N,2.3nm,0.3s,baz=4.8,slow=24,SNR=6.5
ILAR LR LR 18 17 24.2
comp=N,39nm,19.2s,baz=72,slow=44
comp=N,4.5nm,0.5s
**G31M** **Satah River** **4.95 118** **Pn** **18 15 01.9 -0.5**
**G31M** **Satah River** **4.95 118** IAML 18 16 30.5
comp=E,50nm,1.0s
**C19K** **Lookout Ridge** **5.04 271** **Pn** **18 15 03.7 -0.1**
**C19K** **Lookout Ridge** **5.04 271** IAML 18 16 02.3
comp=E,37nm,0.6s
C19K IAML 18 16 02.5
comp=N,43nm,0.7s
**J25K** **Salcha River,** **5.05 180** **Pn** **18 15 04.1 +0.2**
**J25K** **Salcha River,** **5.05 180** IAML 18 16 36.0
comp=E,48nm,1.1s
J25K IAML 18 16 42.6
comp=N,32nm,1.1s
**CCB** **Clear Creek Bu** **5.10 192** IAML 18 16 37.9
comp=E,31nm,1.0s
**EGAK** **Eagle** **5.16 159** **Pn** **18 15 06.1 +0.9**
**EGAK** **Eagle** **5.16 159** IAML 18 16 06.8
comp=E,45nm,0.7s
EGAK IAML 18 17 02.6
comp=E,32nm,0.9s
**HDA** **Harding Lake** **5.29 187** **Pn** **18 15 07.8 +0.6**
**HDA** **Harding Lake** **5.29 187** IAML 18 16 48.9
comp=N,28nm,1.2s
**WRH** **Wood River Hil** **5.30 193** **Pn** **18 15 07.7 +0.5**
**WRH** **Wood River Hil** **5.30 193** IAML 18 16 38.1
comp=E,37nm,1.1s
**F19K** **Shaleruckik Mo** **5.39 244** **Pn** **18 15 07.3 -1.2**
**A19K** **Wainwright** **5.42 283** **Pn** **18 15 09.2 +0.3**
**I30M** **Mount Dempster** **5.63 138** **Pn** **18 15 11.5 -0.4**
**H31M** **Peel River** **5.70 127** **Pn** **18 15 12.3 -0.5**
**SCRK** **Sand Creek** **5.72 174** **Pn** **18 15 14.0 +0.9**
**C18K** **Utukok River** **5.72 267** **Pn** **18 15 12.7 -0.4**
**B18K** **Kokolik River** **5.76 275** **Pn** **18 15 13.1 -0.5**
**K27K** **Chicken** **5.79 165** **Pn** **18 15 14.2 +0.3**
**RIDG** **Independent Ri** **5.93 178** **Pn** **18 15 17.5 +1.5**
**DAWY** **Dawson** **6.08 154** **Pn** **18 15 19.3 +1.3**
**F18K** **Selawik** **6.13 247** **Pn** **18 15 18.3 -0.3**
**J20K** **Nowinta River** **6.47 216** **Pn** **18 15 23.1 -0.1**
**C17K** **DeLong Mountai** **6.47 268** **Pn** **18 15 22.0 -1.3**
**K29M** **Barlow Dome** **6.60 148** **Pn** **18 15 26.1 +0.9**
**DHY** **Denali Highway** **6.64 188** **Pn** **18 15 27.4 +1.7**
**L26K** **Log Cabin Wild** **6.70 172** **Pn** **18 15 27.7 +1.3**
**PAX** **Paxson** **6.70 180** **Pn** **18 15 27.4 +0.8**
**F17K** **Baldwin Pennin** **6.74 249** **Pn** **18 15 26.7 -0.3**
**L27K** **Beaver Creek,** **6.76 166** **Pn** **18 15 28.4 +1.1**
**J19K** **Poorman** **6.95 220** **Pn** **18 15 29.4 -0.4**
**M27K** **Edge Creek, AK** **7.45 167** **Pn** **18 15 37.9 +0.9**
**G16K** **Koyuk River** **7.75 245** **Pn** **18 15 39.5 -1.3**
**M29M** **Somme Creek** **7.75 155** **Pn** **18 15 41.9 +0.9**
**M30M** **Minto, Yukon** **7.90 150** **Pn** **18 15 43.5 +0.6**
**L20K** **Farewell, AK** **7.96 210** **Pn** **18 15 43.9 +0.1**
**YKA** **Yellowknife Ar** **14.25 105** Pn Pn 18 17 03.5 -6.1
comp=E,0.4nm,0.3s,baz=318,slow=14,SNR=5.1
YKA Sn Sn 18 19 32.9 -15
comp=E,0.2nm,0.3s,baz=318,slow=4.7,SNR=2.5
comp=E,1.2nm,0.5s
**PDAR** **Pinedale Array** **32.58 127** P **P** **18 20 21.4 +1.9**
comp=E,0.3nm,0.6s,baz=7.1,slow=6.0,SNR=3.8
comp=E,0.3nm,0.6s
**NVAR** **Mina Array Bea** **34.46 141** P **P** **18 20 38.9 +3.0**
comp=E,0.2nm,0.5s,baz=0.9,slow=5.8,SNR=1.7
comp=E,0.2nm,0.5s
**MKAR** **Makanchi Array** **58.75 324** LR LR 18 51 59.1
comp=E,22nm,19.7s,baz=138,slow=39

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*IDC **27** 18:24:57.8±0.6, 15°.25S×173°.47W, h0$^{km}$, mb4.5/14, mbtmp4.5/15, ML3.6/1, MS3.9/51, Error ellipse: s-maj=23.0km s-min=16.7km az=133.0*

*NEIC **27** 18:25:02.9±2.5, 15°.18S±0°.08×172°.96W±0°.10, h10$^{km}$±1$^{km}$, mb4.8/128, Error ellipse: s-maj=17.9km s-min=11.3km az=124.0*

*GCMT **27** 18:25:09.9±0.2, 15°.20S±0°.02×173°.21W±0°.01, h53$^{km}$±3$^{km}$, MW5.0/99, Moment Tensor Solution. s27,c29; s99,c138; Duration: 0 Moment tensor: Scale 10$^{16}$Nm; M$_{rr}$1.63±.17; M$_{\theta\theta}$-2.04±.15; M$_{\phi\phi}$0.40±.15; M$_{r\theta}$-3.37±.15; M$_{\theta\phi}$0.02±.10; M$_{\phi r}$0.86±.07; Best double couple: M$_o$3.94100×10$^{16}$ NP1:$\phi$283.00000°, $\delta$77.00000°, $\lambda$98.00000°. NP2: $\phi$73.00000°, $\delta$16.00000°, $\lambda$61.00000°. Principal axes: T 3.7920, Plg58.0000°, Azm204.0000°; N 0.2920, Plg7.0000°, Azm101.0000°; P -4.0900, Plg31.0000°, Azm7.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NOU **27** 18:25:11.2, 15°.67S×172°.98W, h73$^{km}$, mb4.8/7, Samoa Islands Region*

**ISC 27 18:25:03.0±0.4, 15°.18S±0°.07×173°.32W±0°.07, h30$^{km}$, n213, $\sigma$1$^s$30/106, mb4.8/86, MS4.0/50, 5C-2D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **1.96** | **50** | | | **Pn** | **18 25 33.3** | **-1.0** |
| **NIUE** | **Niue** | **5.05** | **141** | P | | **Pn** | **18 26 16.5** | **-0.3** |
| **NIUE** | **Niue** | **5.05** | **141** | | | **Pn** | **18 26 16.4** | **-0.3** |
| **MSVF** | **Nonsavu** | **8.66** | **252** | P | | Pn | 18 27 16.0 | +10 |
| **MSVF** | **Nonsavu** | **8.66** | **252** | Pn | | Pn | 18 27 13.5 | +7.1 |
| **MSVF** | **Nonsavu** | **8.66** | **252** | LR | | LR | 18 30 08.1 | |
| comp=Z,2µm,21.7s,baz=91,slow=36 | | | | | | | | |
| **RAR** | **Rarotonga** | **14.20** | **117** | | | **Pn** | **18 28 22.4** | **+0.3** |
| **RAR** | **Rarotonga** | **14.20** | **117** | Pn | | **Pn** | **18 28 22.1** | **0.0** |
| 2.7nm,0.3s,baz=207,slow=4.5,SNR=2.7 | | | | | | | | |
| RAR | | | | Sn | | Sn | 18 30 42.9 | -16 |
| 1.9nm,0.3s,baz=62,slow=21,SNR=1.6 | | | | | | | | |
| RAR | | | | LR | | LR | 18 32 49.6 | |
| comp=Z,151nm,21.7s,baz=294,slow=33 | | | | | | | | |
| 15nm,0.6s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.35** | **247** | P | | Pn | 18 29 43.0 | +3.6 |
| **DZM** | **Mont Dzumac** | **20.35** | **247** | *eP* | | Pn | 18 29 39.7 | +0.3 |
| 139nm,1.4s | | | | | | | | |
| DZM | | | | *eS* | | **S** | **18 33 23.4** | **-0.6** |
| 169nm,28.0s | | | | | | | | |
| DZM | | | | *e*LR | | LR | 18 34 32.5 | |
| 2µm,26.5s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.35** | **247** | LR | | LR | 18 36 22.9 | |
| comp=Z,715nm,20.4s,baz=70,slow=34 | | | | | | | | |
| **NOUC** | **Port Laguerre** | **20.48** | **247** | P | | Pn | 18 29 44.9 | +4.0 |
| **PPT** | **Papeete** | **22.90** | **99** | LR | | LR | 18 38 20.3 | |
| comp=Z,47nm,18.4s,baz=295,slow=35 | | | | | | | | |
| **PPT2** | **Papeete2** | **22.90** | **99** | *eP* | | **P** | **18 30 04.9** | **+0.3** |
| 67nm,41.2s | | | | | | | | |
| PPT2 | | | | *e*S | | **S** | **18 34 09.5** | **-3.3** |
| 671nm,28.0s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 18 35 32.4 | |
| 286nm,25.0s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 18 35 34.2 | |
| 249nm,26.5s | | | | | | | | |
| **KUZ** | **Kuaotunu** | **23.59** | **202** | P | | **P** | **18 30 13.2** | **+2.0** |
| **TBI** | **Tubuai** | **23.92** | **114** | *e*S | | **S** | **18 34 28.3** | **-0.9** |
| 2µm,29.2s | | | | | | | | |
| TBI | | | | *e*LR | | LR | 18 36 03.1 | |
| 2µm,26.2s | | | | | | | | |
| TBI | | | | *e*LR | | LR | 18 36 05.9 | |
| 1µm,30.0s | | | | | | | | |
| **URZ** | **Urewera** | **24.49** | **198** | P | | **P** | **18 30 20.6** | **+1.0** |
| **URZ** | **Urewera** | **24.49** | **198** | LR | | LR | 18 38 39.8 | |
| comp=Z,533nm,21.0s,baz=112,slow=34 | | | | | | | | |
| **TOZ** | **Tahuroa Road** | **24.55** | **202** | P | | **P** | **18 30 20.6** | **+0.5** |
| **RTZ** | **Ruatahuna** | **24.86** | **198** | P | | **P** | **18 30 24.6** | **+1.6** |
| RTZ | | | | IAmb | | IAmb | 18 30 25.1 | |
| comp=Z,16nm,0.9s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **25.51** | **199** | P | | **P** | **18 30 28.6** | **-0.3** |
| **HNR** | **Honiara** | **26.72** | **279** | LR | | LR | 18 39 35.2 | |
| comp=Z,2µm,20.9s,baz=92,slow=33 | | | | | | | | |
| **BFZ** | **Birch Farm** | **26.98** | **198** | P | | **P** | **18 30 43.7** | **+1.6** |
| **MRZ** | **Mangatainoka R** | **27.16** | **199** | P | | **P** | **18 30 43.5** | **-0.3** |
| MRZ | | | | IAmb | | IAmb | 18 30 46.7 | |
| comp=Z,14nm,0.7s | | | | | | | | |
| **TCW** | **Tory Channel** | **28.08** | **200** | P | | **P** | **18 30 52.3** | **+0.4** |
| **QRZ** | **Quartz Range** | **28.36** | **203** | P | | **P** | **18 30 54.5** | **0.0** |
| **QRZ** | **Quartz Range** | **28.36** | **203** | P | | **P** | **18 30 54.4** | **0.0** |
| **TUWZ** | **Tuamarina** | **28.39** | **200** | P | | **P** | **18 30 54.9** | **+0.2** |
| **MRNZ** | **Matariki Terra** | **28.77** | **202** | P | | **P** | **18 30 58.0** | **-0.1** |
| **THZ** | **Tophouse** | **29.04** | **202** | | | **P** | **18 31 00.4** | **-0.2** |
| **KHZ** | **Kahutara** | **29.40** | **200** | P | | **P** | **18 31 05.4** | **+1.8** |
| **LTZ** | **Lake Taylor** | **30.16** | **201** | | | **P** | **18 31 08.9** | **-1.5** |
| **INZ** | **Inchbonnie** | **30.41** | **202** | | | **P** | **18 31 11.6** | **-1.0** |
| **OXZ** | **Oxford** | **30.72** | **201** | P | | **P** | **18 31 14.5** | **-0.8** |
| **RPZ** | **Rata Peaks** | **31.41** | **202** | LR | | LR | 18 43 42.3 | |
| comp=Z,584nm,19.5s,baz=345,slow=36 | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **33.02** | **83** | *e*LR | | LR | 18 40 12.2 | |
| comp=Z,519nm,24.2s | | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **34.42** | **203** | P | | **P** | **18 31 48.5** | **+0.8** |
| **RKT** | **Rikitea** | **36.99** | **108** | *e*LR | | LR | 18 42 02.6 | |
| comp=Z,752nm,25.5s | | | | | | | | |
| **CTA** | **Charters Tower** | **38.77** | **257** | LR | | LR | 18 47 16.9 | |
| comp=Z,4.5nm,18.4s,baz=90,slow=35 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.82** | **329** | T | | T | 19 12 53.2 | |
| baz=147,slow=75,SNR=148 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.83** | **329** | T | | T | 19 12 55.9 | |
| baz=147,slow=75,SNR=81 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.84** | **329** | T | | T | 19 13 03.4 | |
| baz=147,slow=75,SNR=92 | | | | | | | | |
| **PMG** | **Port Moresby** | **39.00** | **274** | LR | | LR | 18 46 28.1 | |
| comp=Z,130nm,18.8s,baz=77,slow=33 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.76** | **330** | T | | T | 19 14 14.7 | |
| baz=147,slow=76,SNR=6.4 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.77** | **330** | T | | T | 19 14 21.9 | |
| baz=147,slow=76,SNR=7.3 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.78** | **330** | T | | T | 19 14 16.2 | |
| baz=147,slow=76,SNR=5.7 | | | | | | | | |
| **STKA** | **Stephens Creek** | **44.21** | **240** | P | | **P** | **18 33 08.1** | **-1.6** |
| comp=Z,7.4nm,0.8s,baz=94,slow=7.2,SNR=11 | | | | | | | | |
| STKA | | | | LR | | LR | 18 48 59.0 | |
| comp=Z,162nm,21.0s,baz=42,slow=33 | | | | | | | | |
| comp=Z,7.4nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.97** | **257** | P | | **P** | **18 33 51.3** | **-3.4** |
| comp=Z,3.6nm,0.9s,baz=92,slow=6.8,SNR=44 | | | | | | | | |
| WRA | | | | LR | | LR | 18 52 16.4 | |
| comp=Z,125nm,21.0s,baz=34,slow=33 | | | | | | | | |
| comp=Z,3.6nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **50.25** | **252** | P | | **P** | **18 33 54.1** | **-2.7** |
| **ASAR** | **Alice Springs** | **50.25** | **252** | P | | **P** | **18 33 54.6** | **-2.3** |
| comp=Z,18nm,0.7s,baz=85,slow=8.2,SNR=232 | | | | | | | | |
| ASAR | | | | LR | | LR | 18 53 25.7 | |
| comp=Z,365nm,21.9s,baz=96,slow=34 | | | | | | | | |
| comp=Z,18nm,0.7s | | | | | | | | |
| **GUMO** | **Guam** | **50.28** | **303** | LR | | LR | 18 53 08.0 | |
| comp=Z,25nm,19.6s,baz=112,slow=34 | | | | | | | | |
| **RPN** | **Rapa Nui** | **60.30** | **113** | LR | | LR | 18 54 05.8 | |
| comp=Z,54nm,18.3s,baz=202,slow=29 | | | | | | | | |
| **SBA** | **Scott Base** | **63.47** | **185** | P | | **P** | **18 35 31.7** | **+2.0** |
| **DAV** | **Davao City (W)** | **64.45** | **286** | LR | | LR | 19 02 20.4 | |
| comp=Z,43nm,18.0s,baz=92,slow=35 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **64.79** | **241** | LR | | LR | 19 01 50.7 | |
| comp=Z,127nm,21.9s,baz=162,slow=34 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.82** | **320** | P | | **P** | **18 36 03.5** | **-1.2** |
| comp=Z,4.3nm,1.1s,baz=149,slow=6.3,SNR=6.4 | | | | | | | | |
| MJAR | | | | LR | | LR | 19 00 51.1 | |
| comp=Z,98nm,21.9s,baz=120,slow=31 | | | | | | | | |
| comp=Z,4.3nm,1.1s | | | | | | | | |
| **H06S1** | **SOCORRO T** | **70.04** | **63** | T | | T | 19 52 55.7 | |
| SNR=5.3 | | | | | | | | |
| **JOW** | **Kunigami** | **70.42** | **306** | LR | | LR | 19 01 04.7 | |
| comp=Z,77nm,21.2s,baz=147,slow=31 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **71.40** | **328** | LR | | LR | 19 01 50.3 | |
| comp=Z,43nm,21.8s,baz=162,slow=31 | | | | | | | | |
| **JNU** | **Nakatsue** | **71.71** | **313** | LR | | LR | 19 01 25.9 | |
| comp=Z,57nm,21.8s,baz=121,slow=30 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.45** | **342** | P | | **P** | **18 36 25.7** | **-0.7** |
| comp=Z,2.5nm,0.8s,baz=131,slow=8.1,SNR=3.1 | | | | | | | | |
| PETK | | | | LR | | LR | 19 03 51.6 | |
| comp=Z,44nm,20.9s,baz=138,slow=32 | | | | | | | | |
| comp=Z,2.5nm,0.8s | | | | | | | | |
| **CMB** | **Columbia Colle** | **72.55** | **41** | P | | **P** | **18 36 28.9** | **+1.5** |
| **PFO** | **Pinyon Flats O** | **72.72** | **47** | LR | | LR | 19 00 20.2 | |
| comp=Z,234nm,21.4s,baz=242,slow=29 | | | | | | | | |
| **AFDM** | **Forest Hills D** | **72.72** | **40** | P | | **P** | **18 36 29.6** | **+1.3** |
| **LPIG** | **La Paz** | **72.86** | **58** | LR | | LR | 18 59 36.7 | |
| comp=Z,137nm,21.7s,baz=230,slow=28 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **73.38** | **37** | P | | **P** | **18 36 33.7** | **+1.4** |
| YBH | | | | IAmb | | IAmb | 18 36 35.3 | |
| comp=Z,11nm,0.9s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **73.38** | **37** | LR | | LR | 19 01 06.9 | |
| comp=Z,172nm,21.8s,baz=232,slow=30 | | | | | | | | |
| **GSC** | **Goldstone, Bar** | **73.38** | **45** | P | | **P** | **18 36 33.5** | **+1.1** |
| **WAKR** | **Walker** | **73.43** | **41** | P | | **P** | **18 36 34.4** | **+1.6** |
| WAKR | | | | IAmb | | IAmb | 18 36 35.0 | |
| comp=Z,19nm,1.5s | | | | | | | | |
| **DSP** | **Deep Springs** | **73.74** | **43** | P | | **P** | **18 36 36.0** | **+1.7** |
| **HUMO** | **Hull Mountain** | **73.79** | **36** | P | | **P** | **18 36 32.6** | **+1.6** |
| HUMO | | | | IAmb | | IAmb | 18 36 37.7 | |
| comp=Z,8.5nm,1.0s | | | | | | | | |
| **LHV** | **Little Huntoon** | **73.89** | **42** | P | | **P** | **18 36 36.5** | **+1.3** |
| LHV | | | | IAmb | | IAmb | 18 36 37.6 | |
| comp=Z,10nm,1.2s | | | | | | | | |
| **GWY** | **Greenwater Val** | **73.95** | **45** | P | | **P** | **18 36 36.8** | **+0.9** |
| **NVAR** | **Mina Array Bea** | **74.12** | **42** | P | | **P** | **18 36 37.2** | **+0.4** |
| comp=Z,3.8nm,0.7s,baz=228,slow=9.9,SNR=29 | | | | | | | | |
| NVAR | | | | LR | | LR | 19 01 34.1 | |
| comp=Z,195nm,21.5s,baz=270,slow=30 | | | | | | | | |
| comp=Z,3.8nm,0.7s | | | | | | | | |
| **PAHR** | **Pah Rah Range** | **74.17** | **40** | IAmb | | IAmb | 18 36 39.7 | |
| comp=Z,8.4nm,1.0s | | | | | | | | |
| **NV11** | **Mina Array Sit** | **74.21** | **42** | IAmb | | IAmb | 18 36 40.0 | |
| comp=Z,11nm,1.1s | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **74.52** | **50** | IAmb | | IAmb | 18 36 41.2 | |
| comp=Z,8.8nm,1.1s | | | | | | | | |
| **KVN** | **Kaiserville** | **74.60** | **42** | IAmb | | IAmb | 18 36 42.1 | |
| comp=Z,8.5nm,1.0s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.86** | **180** | P | | **P** | **18 36 41.4** | **+0.8** |
| **QSPA** | **South Pole Qui** | **74.86** | **180** | P | | **P** | **18 36 40.5** | **-0.1** |
| comp=Z,7.6nm,0.8s,baz=31,slow=1.6,SNR=40 | | | | | | | | |
| QSPA | | | | LR | | LR | 19 03 06.2 | |
| comp=Z,68nm,21.8s,baz=29,slow=31 | | | | | | | | |
| comp=Z,7.6nm,0.8s | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **75.20** | **37** | P | | **P** | **18 36 43.7** | **+0.7** |
| **Y14A** | **Wickenburg** | **75.35** | **48** | IAmb | | IAmb | 18 36 46.4 | |
| comp=Z,8.3nm,1.0s | | | | | | | | |
| **H04A** | **Detroit Lake** | **75.53** | **35** | IAmb | | IAmb | 18 36 46.4 | |
| comp=Z,18nm,1.2s | | | | | | | | |
| **BMN** | **Battle Mountai** | **75.94** | **41** | IAmb | | IAmb | 18 36 49.8 | |
| comp=Z,10nm,0.9s | | | | | | | | |
| **KSRS** | **Korea Array** | **76.06** | **315** | LR | | LR | 19 04 46.8 | |
| comp=Z,39nm,21.7s,baz=100,slow=31 | | | | | | | | |
| **TUC** | **Tucson** | **76.19** | **51** | P | | **P** | **18 36 48.5** | **-0.3** |
| TUC | | | | IAmb | | IAmb | 18 36 51.8 | |
| comp=Z,7.4nm,0.9s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **76.22** | **38** | IAmb | | IAmb | 18 36 51.4 | |
| comp=Z,14nm,1.1s | | | | | | | | |
| **I07A** | **Izee** | **76.68** | **37** | IAmb | | IAmb | 18 36 54.1 | |
| comp=Z,15nm,1.2s | | | | | | | | |
| **X16A** | **Lo Mia Camp, P** | **76.72** | **49** | IAmb | | IAmb | 18 36 54.9 | |
| comp=Z,9.4nm,1.0s | | | | | | | | |
| **Q12A** | **Willow Creek R** | **76.72** | **43** | IAmb | | IAmb | 18 36 53.7 | |
| comp=Z,7.8nm,1.0s | | | | | | | | |
| **LCMT** | **Little Creek M** | **76.73** | **45** | IAmb | | IAmb | 18 37 12.6 | |
| comp=Z,5.5nm,0.7s | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **76.85** | **38** | IAmb | | IAmb | 18 36 55.0 | |
| comp=Z,17nm,1.1s | | | | | | | | |
| **319A** | **Douglas** | **76.90** | **52** | IAmb | | IAmb | 18 36 55.7 | |
| comp=Z,14nm,1.0s | | | | | | | | |
| **KNB** | **Kanab** | **77.02** | **46** | IAmb | | IAmb | 18 36 56.0 | |
| comp=Z,7.7nm,1.1s | | | | | | | | |
| **U15A** | **North Rim** | **77.10** | **46** | IAmb | | IAmb | 18 36 56.6 | |
| comp=Z,9.5nm,1.1s | | | | | | | | |
| **PSUT** | **Pine Spring** | **77.10** | **44** | IAmb | | IAmb | 18 36 55.9 | |
| comp=Z,7.4nm,1.1s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.26** | **323** | P | | **P** | **18 36 55.7** | **+1.3** |
| comp=Z,2.7nm,1.0s,baz=180,slow=1.5,SNR=4.4 | | | | | | | | |
| USRK | | | | LR | | LR | 19 04 18.7 | |
| comp=Z,121nm,21.9s,baz=130,slow=31 | | | | | | | | |
| comp=Z,2.7nm,1.0s | | | | | | | | |
| **ELK** | **Elko** | **77.37** | **41** | LR | | LR | 19 03 22.9 | |
| comp=Z,154nm,21.9s,baz=222,slow=30 | | | | | | | | |
| **BBB** | **Bella Bella** | **77.66** | **27** | LR | | LR | 19 03 35.5 | |
| comp=Z,114nm,18.9s,baz=217,slow=30 | | | | | | | | |
| **G08A** | **Pilot Rock** | **77.71** | **36** | IAmb | | IAmb | 18 36 59.7 | |
| comp=Z,14nm,1.2s | | | | | | | | |
| **MTPU** | **Mount Pierson** | **77.98** | **45** | IAmb | | IAmb | 18 37 02.0 | |
| comp=Z,9.8nm,1.1s | | | | | | | | |
| **MFID** | **Camas Ranch** | **78.47** | **39** | IAmb | | IAmb | 18 37 03.6 | |
| comp=Z,8.8nm,1.1s | | | | | | | | |
| **121A** | **Cooks Peak, D** | **78.55** | **52** | IAmb | | IAmb | 18 37 05.2 | |
| comp=Z,10nm,0.9s | | | | | | | | |
| **DUG** | **Dugway, Tooele** | **78.65** | **43** | IAmb | | IAmb | 18 37 04.8 | |
| comp=Z,8.1nm,1.1s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.90** | **322** | P | | **P** | **18 37 04.3** | **+0.8** |
| **MDJ** | **Mudanjiang** | **78.90** | **322** | pmax | | pmax | | |
| comp=Z,110nm,6.2s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **78.90** | **322** | pmax | | pmax | | |
| comp=Z,7.0nm,1.4s | | | | | | | | |
| **F10A** | **Beach Ranch, E** | **79.10** | **36** | IAmb | | IAmb | 18 37 28.0 | |
| comp=Z,17nm,1.6s | | | | | | | | |
| **HLID** | **Hailey** | **79.41** | **39** | IAmb | | IAmb | 18 37 09.3 | |
| comp=Z,11nm,1.0s | | | | | | | | |
| **HVU** | **Hansel Valley** | **79.49** | **41** | IAmb | | IAmb | 18 37 09.5 | |
| comp=Z,7.5nm,0.9s | | | | | | | | |
| **SRU** | **San Rafael Swe** | **79.64** | **45** | IAmb | | IAmb | 18 37 10.7 | |
| comp=Z,9.7nm,1.1s | | | | | | | | |
| **VHRN** | **Van Horn** | **79.97** | **54** | IAmb | | IAmb | 18 37 12.1 | |
| comp=Z,17nm,1.3s | | | | | | | | |
| **MA2** | **Magadan** | **79.98** | **342** | LR | | LR | 19 08 04.3 | |
| comp=Z,42nm,19.6s,baz=135,slow=32 | | | | | | | | |
| **NJ2** | **Nanjing** | **80.10** | **307** | *eP* | | P | 18 37 16.0 | +5.7 |
| NJ2 | | | | pmax | | pmax | | |
| comp=Z,11nm,0.5s | | | | | | | | |
| **KLR** | **Kul'dur** | **80.38** | **327** | LR | | LR | 19 07 27.9 | |
| comp=Z,52nm,20.9s,baz=131,slow=32 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.43** | **56** | P | | **P** | **18 37 13.0** | **+0.7** |
| comp=Z,6.1nm,1.2s,baz=224,slow=4.9,SNR=20 | | | | | | | | |
| TXAR | | | | LR | | LR | 19 04 28.2 | |
| comp=Z,66nm,21.5s,baz=250,slow=29 | | | | | | | | |
| comp=Z,6.1nm,1.2s | | | | | | | | |
| **NEW** | **Newport** | **80.49** | **34** | LR | | LR | 19 04 52.7 | |
| comp=Z,98nm,21.9s,baz=221,slow=30 | | | | | | | | |
| **ANMO** | **Albuquerque** | **80.60** | **50** | P | | **P** | **18 37 11.9** | **-1.4** |
| **ANMO** | **Albuquerque** | **80.60** | **50** | LR | | LR | 19 04 59.8 | |
| comp=Z,149nm,21.8s,baz=326,slow=30 | | | | | | | | |
| **BNX** | **BinXian** | **80.81** | **322** | ⇓P | | **P** | **18 37 14.5** | **+0.7** |
| **BNX** | **BinXian** | **80.81** | **322** | pmax | | pmax | | |
| comp=Z,8.0nm,0.9s | | | | | | | | |
| **ALPN** | **Alpine** | **80.86** | **55** | IAmb | | IAmb | 18 37 17.3 | |
| comp=Z,9.3nm,1.1s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **80.92** | **14** | IAmb | | IAmb | 18 37 35.6 | |
| comp=Z,18nm,1.4s | | | | | | | | |
| **CN2** | **Changchun** | **80.97** | **320** | *eP* | | **P** | **18 37 15.5** | **+0.8** |
| CN2 | | | | pmax | | pmax | | |
| comp=Z,10.0nm,1.0s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **81.14** | **14** | P | | **P** | **18 37 15.7** | **+0.2** |
| M27K | | | | IAmb | | IAmb | 18 37 17.9 | |
| comp=Z,27nm,1.6s | | | | | | | | |
| **MSO** | **Missoula** | **81.46** | **37** | IAmb | | IAmb | 18 37 19.1 | |
| comp=Z,9.3nm,1.2s | | | | | | | | |
| **DLMT** | **Dillon** | **81.47** | **38** | IAmb | | IAmb | 18 37 19.6 | |
| comp=Z,12nm,1.4s | | | | | | | | |
| **TPAW** | **Teton Pass** | **81.52** | **41** | IAmb | | IAmb | 18 37 19.1 | |
| comp=Z,16nm,1.2s | | | | | | | | |
| **FXWY** | **Fox Creek** | **81.55** | **41** | IAmb | | IAmb | 18 37 20.9 | |
| comp=Z,9.7nm,1.2s | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **81.57** | **47** | IAmb | | IAmb | 18 37 52.3 | |
| comp=Z,10.0nm,0.8s | | | | | | | | |
| **WRH** | **Wood River Hil** | **81.72** | **11** | IAmb | | IAmb | 18 37 20.9 | |
| comp=Z,16nm,1.1s | | | | | | | | |
| **IMW** | **Indian Meadow** | **81.73** | **40** | IAmb | | IAmb | 18 37 21.9 | |
| comp=Z,12nm,1.2s | | | | | | | | |
| **HDA** | **Harding Lake** | **81.88** | **11** | IAmb | | IAmb | 18 37 21.1 | |
| comp=Z,8.2nm,1.0s | | | | | | | | |
| **SAND** | **Sanderson** | **81.91** | **56** | IAmb | | IAmb | 18 37 21.8 | |
| comp=Z,9.5nm,1.3s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **81.94** | **11** | IAmb | | IAmb | 18 37 21.3 | |
| comp=Z,11nm,0.9s | | | | | | | | |
| **PD31** | **Pinedale Array** | **82.05** | **42** | IAmb | | IAmb | 18 37 22.2 | |
| comp=Z,8.4nm,1.2s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **82.05** | **42** | P | | **P** | **18 37 20.3** | **-0.5** |
| comp=Z,3.0nm,1.0s,baz=208,slow=2.9,SNR=18 | | | | | | | | |
| PDAR | | | | LR | | LR | 19 08 26.7 | |
| comp=Z,86nm,19.4s,baz=224,slow=32 | | | | | | | | |
| comp=Z,3.0nm,1.0s | | | | | | | | |
| **SMCO** | **Snowmass** | **82.11** | **46** | IAmb | | IAmb | 18 37 27.7 | |
| comp=Z,8.1nm,1.2s | | | | | | | | |
| **MDM** | **Murphy Dome** | **82.15** | **10** | IAmb | | IAmb | 18 37 23.1 | |
| comp=Z,8.9nm,1.3s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **82.17** | **39** | IAmb | | IAmb | 18 37 23.2 | |
| comp=Z,11nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.22** | **11** | P | | **P** | **18 37 20.2** | **-0.7** |
| **ILAR** | **Eielson Array** | **82.22** | **11** | P | | **P** | **18 37 20.5** | **-0.4** |
| comp=Z,1.5nm,0.7s,baz=209,slow=4.8,SNR=15 | | | | | | | | |
| ILAR | | | | LR | | LR | 19 06 56.2 | |
| comp=Z,98nm,21.9s,baz=218,slow=31 | | | | | | | | |
| comp=Z,1.5nm,0.7s | | | | | | | | |
| **G21K** | **Allakaket** | **82.78** | **8** | IAmb | | IAmb | 18 37 30.6 | |
| comp=Z,22nm,1.8s | | | | | | | | |
| **DRIO** | **Del Rio** | **82.92** | **57** | IAmb | | IAmb | 18 37 26.9 | |
| comp=Z,18nm,1.5s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **83.14** | **11** | IAmb | | IAmb | 18 37 46.2 | |
| comp=Z,9.2nm,1.1s | | | | | | | | |
| **E19K** | **Redstone River** | **83.25** | **6** | IAmb | | IAmb | 18 37 28.5 | |
| comp=Z,5.0nm,0.9s | | | | | | | | |
| **RLMT** | **Red Lodge** | **83.38** | **40** | IAmb | | IAmb | 18 37 29.8 | |
| comp=Z,7.4nm,1.1s | | | | | | | | |
| **K29M** | **Barlow Dome** | **83.47** | **15** | IAmb | | IAmb | 18 40 20.5 | |
| comp=Z,12nm,1.6s | | | | | | | | |
| **CMIG** | **Matias Romero** | **83.74** | **70** | LR | | LR | 19 06 40.3 | |
| comp=Z,59nm,20.0s,baz=189,slow=30 | | | | | | | | |
| **BELA** | **Belgrano 2** | **84.20** | **172** | P | | **P** | **18 37 31.8** | **+0.7** |
| BELA | | | | IAmb | | IAmb | 18 37 32.4 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **97.04** | **116** | LR | LR | 19 11 24.1 | |
| | comp=E,29nm,20.7s,baz=231,slow=29 | | | | | | |
| **TKL** | **Tuckaleechee C** | **98.33** | **55** | LR | LR | 19 16 03.9 | |
| | comp=E,68nm,21.9s,baz=275,slow=31 | | | | | | |
| **WMQ** | **Urumqi** | **106.78** | **312** | Pdif | **Pdif** | **18 39 21.3** | **+5.7** |
| **BVAR** | **Borovoye Array** | **117.76** | **322** | PKP | **PKPdf** | **18 43 44.5** | **-1.7** |
| | comp=Z,0.7nm,0.6s,baz=29,slow=3.4,SNR=5.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **124.41** | **352** | PKP | **PKPdf** | **18 43 58.1** | **-0.4** |
| | comp=Z,3.3nm,1.0s,baz=13,slow=1.6,SNR=8.4 | | | | | | |
| **FINES** | **FINESS Array B** | **131.75** | **348** | PKP | **PKPdf** | **18 44 12.1** | **-0.6** |
| | comp=Z,6.4nm,1.3s,baz=2.9,slow=3.8,SNR=4.0 | | | | | | |
| **DPC** | **Dobruska-Polom** | **144.06** | **349** | *e*PKP | **PKPdf** | **18 44 34.8** | **-1.0** |
| **PVCC** | **Panska Ves** | **144.17** | **351** | *e*PKP | **PKPab** | **18 44 32.9** | **-0.7** |
| **KIBK** | **Kibwezi** | **144.41** | **243** | PKPdf | **PKPab** | **18 44 35.6** | **-0.1** |
| **GAZ** | **Gaziantep** | **145.17** | **315** | | **PKPdf** | **18 44 38.4** | **+0.3** |
| **BNN** | **Bunyan** | **145.18** | **318** | | **PKPdf** | **18 44 38.0** | **-0.1** |
| **KHC** | **Kasperske Hory** | **145.68** | **352** | x | x | 18 44 23.5 | |
| KHC | | | | *e*PKP | **PKPdf** | **18 44 38.5** | **-0.1** |
| **MLR** | **Muntele Rosu** | **145.70** | **336** | PKPdf | **PKPdf** | **18 44 38.8** | **-0.1** |
| **GERES** | **GERESS Array B** | **145.94** | **352** | PKPbc | **PKPdf** | **18 44 39.3** | **+0.2** |
| | comp=Z,1.1nm,0.6s,baz=346,slow=4.4,SNR=7.3 | | | | | | |
| **BR131** | **Keskin Array S** | **146.04** | **321** | PKPdf | **PKPdf** | **18 44 39.8** | **+0.2** |
| **BRTR** | **Keskin Array B** | **146.04** | **321** | PKPbc | **PKPdf** | **18 44 39.9** | **+0.2** |
| | comp=Z,9.6nm,0.9s,baz=91,slow=1.4,SNR=38 | | | | | | |
| **CONA** | **Conrad Observa** | **146.47** | **349** | *e*PKP | **PKPbc** | **18 44 41.8** | **+0.4** |
| | comp=Z,14nm,1.4s | | | | | | |
| **RONA** | **Rosalia, Austr** | **146.61** | **348** | *e*PKP | **PKPbc** | **18 44 41.5** | **-0.3** |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **MOA** | **Molln** | **146.83** | **351** | *i* PKP | **PKPbc** | **18 44 42.6** | **+0.2** |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **147.08** | **351** | *i* PKP | **PKPbc** | **18 44 42.4** | **-0.7** |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **ARSA** | **Arzberg** | **147.19** | **349** | *i* PKP | **PKPbc** | **18 44 43.1** | **-0.3** |
| | comp=Z,9.6nm,1.3s | | | | | | |
| **LESA** | **Schwarzleotal** | **147.47** | **352** | *e*PKP | **PKPbc** | **18 44 44.0** | **-0.3** |
| | comp=Z,6.7nm,1.3s | | | | | | |
| **RETA** | **Reutte** | **147.61** | **355** | *e*PKP | **PKPbc** | **18 44 44.1** | **-0.5** |
| | comp=Z,6.1nm,1.3s | | | | | | |
| **WATA** | **Walderalm** | **147.68** | **354** | *e*PKP | **PKPbc** | **18 44 44.6** | **-0.3** |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **KBA** | **Koelnbreinsper** | **147.72** | **351** | *e*PKP | **PKPbc** | **18 44 44.3** | **-0.8** |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **147.72** | **354** | *e*PKP | **PKPbc** | **18 44 44.6** | **-0.4** |
| | comp=Z,11nm,1.1s | | | | | | |
| **WTTA** | **Wattenberg** | **147.75** | **354** | *i* pPKP | **PKPbc** | **18 44 45.0** | **-0.1** |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **SOKA** | **Soboth** | **147.83** | **349** | *e*PKP | **PKPbc** | **18 44 44.6** | **-0.7** |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **147.84** | **354** | *i* pPKP | **PKPbc** | **18 44 45.2** | **-0.1** |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **FETA** | **Feichten** | **148.08** | **355** | *i* pPKP | **PKPbc** | **18 44 45.8** | **-0.2** |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **MYKA** | **Terra Mystica** | **148.11** | **351** | *i* pPKP | **PKPbc** | **18 44 45.6** | **-0.4** |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **148.16** | **352** | *i* PKP | **PKPbc** | **18 44 45.2** | **-0.9** |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **148.49** | **309** | PKPbc | **PKiKP** | **18 44 48.4** | **-0.6** |
| | comp=Z,3.5nm,0.8s,baz=75,slow=6.4,SNR=3.0 | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **148.51** | **355** | PKPdf | **PKPbc** | **18 44 46.8** | **-0.5** |
| **SENIN** | **Lac Senin/Sane** | **148.91** | **359** | | **PKiKP** | **18 44 49.3** | **-0.3** |
| **BNI** | **Bardonecchia** | **150.23** | **0** | | **PKiKP** | **18 44 53.0** | **+0.7** |

**NOU 27 18:26:11.1, 14.85S×167.45E, h114km, MLv4.5/12, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **2.94** | **166** | P | Pn | 18 26 56.5 | 0.0 |
| **RTV** | **Rentapao** | **3.07** | **162** | P | Pn | 18 26 58.9 | +0.7 |
| **LIFNC** | **LIFOU** | **5.90** | **182** | P | Pn | 18 27 35.8 | -0.3 |
| KOUNC | **Koumac, New Ca** | **6.42** | **208** | P | Pn | 18 27 42.9 | -0.3 |
| MARNC | **Mare, Loyalty** | **6.62** | **175** | P | Pn | 18 27 44.4 | -1.5 |
| YATNC | **Mamie plateau,** | **7.19** | **184** | P | Pn | 18 27 53.6 | 0.0 |
| **DZM** | **Mont Dzumac** | **7.25** | **187** | P | Pn | 18 27 54.4 | -0.1 |
| **NOUC** | **Port Laguerre** | **7.29** | **188** | P | Pn | 18 27 56.4 | +1.4 |
| **PINNC** | **Pines Island,** | **7.72** | **180** | P | Pn | 18 28 00.8 | 0.0 |

**SNET 27 19:23:35.8±0.3, 13.52N×88.52W, h0km, ML2.9, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TECA** | **Tecapa** | **0.03** | **145** | *e*P | Pg | 19 23 37.2 | +0.8 |
| TECA | | | | *e*S | Sg | 19 23 38.2 | +1.4 |
| **PQSS** | **Presa 15 de Se** | **0.11** | **339** | *e*P | Pg | 19 23 38.7 | +0.7 |
| **PACA** | **Pacayal** | **0.20** | **105** | *e*P | Pg | 19 23 41.0 | +1.4 |

*NEIC **27** 19:37:26.9±1.4, 33.885N±0.009×116.23W±0.01, h5km±1km, Error ellipse: s-maj=3.0km s-min=1.6km az=299.0*

**PAS 27 19:37:27.4±1.4, 33.898N±0.007×116.22W±0.01, h7km±4km, ML3.0/156, ML2.7/54(NEIC), Error ellipse: s-maj=1.5km s-min=0.8km az=124.0, Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BELC** | **Belle Mtn. Jos** | **0.21** | **60** | | Pg | 19 37 31.6 | 0.0 |
| BELC | | | | | Sg | 19 37 34.8 | +0.3 |
| **BLAC** | **Blackrock camp** | **0.22** | **320** | | Pg | 19 37 32.0 | 0.0 |
| BLAC | | | | | Sg | 19 37 35.5 | +0.4 |
| **TPC** | **Twentynine Pal** | **0.25** | **33** | | Pg | 19 37 32.2 | -0.2 |
| **PMD** | **Palm Desert** | **0.28** | **209** | | Pg | 19 37 32.7 | -0.3 |
| PMD | | | | | Sg | 19 37 37.1 | +0.3 |
| **DEVC** | **Devers** | **0.30** | **277** | | Pg | 19 37 33.6 | +0.2 |
| DEVC | | | | | Sg | 19 37 38.2 | +0.7 |
| **CTCC** | **Cactus City** | **0.31** | **142** | | Sg | 19 37 37.6 | +0.1 |
| **XPFO** | **Pion Flat** | **0.35** | **215** | | Pg | 19 37 33.9 | -0.4 |
| **PFO** | **Pinyon Flats O** | **0.35** | **216** | Pg | Pg | 19 37 33.8 | -0.5 |
| **PFO** | **Pinyon Flats O** | **0.35** | **216** | | Sg | 19 37 38.7 | -0.3 |
| **CTW** | **Cottonwood Mou** | **0.36** | **128** | | Pg | 19 37 34.6 | +0.1 |
| CTW | | | | | Sg | 19 37 40.0 | +0.8 |
| **GTM** | **Goat Mountain** | **0.41** | **344** | | Pg | 19 37 35.4 | -0.2 |
| GTM | | | | | Sg | 19 37 41.2 | +0.3 |
| **GVDA** | **Garner Valley** | **0.45** | **239** | | Pg | 19 37 35.8 | -0.4 |
| GVDA | | | | | Sg | 19 37 41.6 | -0.3 |
| **SNDA** | **J Saunders Pla** | **0.48** | **224** | | Sg | 19 37 43.3 | +0.3 |
| **HAY** | **Hayfield** | **0.48** | **113** | | Pg | 19 37 37.2 | +0.5 |
| HAY | | | | | Sg | 19 37 44.0 | +1.0 |
| **FRD** | **Ford Ranch, An** | **0.52** | **219** | | Sg | 19 37 44.0 | -0.2 |
| **FRD** | **Ford Ranch, An** | **0.52** | **219** | | Sg | 19 37 44.0 | -0.2 |
| **CRY** | **Cary Ranch** | **0.55** | **233** | | Sg | 19 37 45.2 | 0.0 |
| **BZNA** | **Buzz No.'s Pla** | **0.55** | **223** | | Sg | 19 37 45.2 | -0.2 |
| **POB** | **Polly Butte** | **0.63** | **251** | | Pg | 19 37 39.1 | -0.4 |
| POB | | | | | Sg | 19 37 47.4 | -0.3 |
| **BBSC** | **Beaumont Base** | **0.64** | **272** | | Sg | 19 37 39.4 | -0.3 |
| BBSC | | | | | Sg | 19 37 47.9 | -0.2 |
| **SALN** | **Salton City** | **0.65** | **163** | | Pg | 19 37 40.1 | +0.2 |
| **BORC** | **Borrego Spring** | **0.65** | **195** | | Pg | 19 37 39.5 | -0.4 |
| BORC | | | | | Sg | 19 37 48.1 | -0.4 |
| **BOMB** | **Bombay Beach** | **0.67** | **143** | | Pg | 19 37 40.1 | -0.2 |
| BOMB | | | | | Sb | 19 37 50.2 | -0.6 |
| **BC3** | **Big Chuckawall** | **0.68** | **111** | | Sg | 19 37 49.7 | +0.3 |
| **HMTC** | **Hemet** | **0.68** | **254** | | Pg | 19 37 40.1 | -0.5 |
| HMTC | | | | | Sg | 19 37 48.8 | -0.7 |
| **BBRC** | **Big Bear Solar** | **0.69** | **302** | | Pg | 19 37 39.9 | -0.8 |
| BBRC | | | | | Sg | 19 37 50.2 | +0.4 |
| **SLH** | **Sleepy Hollow** | **0.70** | **183** | | Pg | 19 37 40.7 | -0.2 |
| SLH | | | | | Sg | 19 37 50.3 | +0.1 |
| **BACC** | **Bachelor Mtn.** | **0.74** | **248** | | Sg | 19 37 50.9 | -0.6 |
| **CFT** | **Crafton Hills** | **0.76** | **281** | | Pg | 19 37 41.9 | -0.1 |
| **SVD** | **Seven Oaks Dam** | **0.76** | **286** | | Pg | 19 37 41.5 | -0.7 |
| SVD | | | | | Sg | 19 37 51.5 | -0.5 |
| **PLM** | **Palomar** | **0.77** | **225** | | Sg | 19 37 52.0 | -0.2 |
| **MATG** | **Mataguay Scout** | **0.79** | **208** | | Pg | 19 37 42.1 | -0.5 |
| MATG | | | | | Sg | 19 37 52.3 | -0.5 |
| **PEC** | **Perris** | **0.79** | **270** | | Pg | 19 37 42.0 | -0.6 |
| PEC | | | | | Sg | 19 37 52.3 | -0.5 |
| **ERRC** | **Elmore Ranch** | **0.84** | **157** | | Pg | 19 37 42.8 | -0.9 |
| **MURC** | **Murrieta** | **0.87** | **250** | | Sg | 19 37 54.6 | -0.9 |
| **JUEM** | **Julian Eagle M** | **0.88** | **202** | | Sg | 19 37 55.3 | -0.3 |
| **IRM** | **Iron Mountain** | **0.93** | **73** | | Pg | 19 37 44.6 | -0.6 |
| IRM | | | | | Sg | 19 37 56.8 | -0.4 |
| **RSBC** | **Riverside Bore** | **0.93** | **275** | | Pg | 19 37 44.3 | -1.0 |
| RSBC | | | | | Sg | 19 37 56.4 | -1.0 |
| **DANC** | **Danby, Needles** | **1.01** | **43** | | Pg | 19 37 46.3 | -0.5 |
| **ELS** | **Elsinore Mount** | **1.04** | **256** | Pg | Pg | 19 37 46.3 | -1.1 |
| ELS | | | | IAML | | 19 37 59.9 | |
| | comp=N,219nm,0.2s | | | | | | |
| ELS | | | | IAML | | 19 38 00.0 | |
| | comp=E,189nm,0.4s | | | | | | |
| **YUH** | **Yuha Desert** | **1.27** | **169** | | Pn | 19 37 48.8 | -2.8 |
| YUH | | | | IAML | | 19 38 08.3 | |
| | comp=E,100nm,0.4s | | | | | | |
| **RMX** | **La Rumorosa** | **1.30** | **175** | | Pn | 19 37 50.1 | -2.0 |
| RMX | | | | IAML | | 19 38 11.0 | |
| | comp=N,89nm,0.2s | | | | | | |
| RMX | | | | IAML | | 19 38 12.0 | |
| | comp=E,147nm,0.6s | | | | | | |
| **SDRC** | **San Diego Road** | **1.31** | **208** | | Pn | 19 37 51.0 | -1.1 |
| **TKX** | **Tecate** | **1.37** | **194** | | Pn | 19 37 51.2 | -1.8 |
| TKX | | | | IAML | | 19 38 11.7 | |
| | comp=N,198nm,0.4s | | | | | | |
| **RUN** | **Ruthven** | **1.39** | **131** | | Pn | 19 37 53.4 | +0.2 |
| **BLYC** | **Blythe** | **1.42** | **95** | Pg | Pn | 19 37 53.5 | 0.0 |
| BLYC | | | | IAML | | 19 38 16.4 | |
| | comp=N,188nm,0.3s | | | | | | |
| **GLA** | **Glamis** | **1.43** | **126** | | Pn | 19 37 51.8 | -2.1 |
| **GSC** | **Goldstone, Bar** | **1.48** | **341** | | Pn | 19 37 54.5 | -0.1 |
| GSC | | | | IAML | | 19 38 17.4 | |
| | comp=N,126nm,0.5s | | | | | | |
| GSC | | | | IAML | | 19 38 21.6 | |
| | comp=E,178nm,0.6s | | | | | | |
| **CBX** | **Cerro Bola** | **1.62** | **194** | | Pn | 19 37 55.2 | -1.4 |
| **PASC** | **Pasadena Art C** | **1.66** | **280** | | Pn | 19 37 54.6 | -2.4 |
| PASC | | | | IAML | | 19 38 18.8 | |
| | comp=N,129nm,0.5s | | | | | | |
| PASC | | | | IAML | | 19 38 20.6 | |
| | comp=E,72nm,0.8s | | | | | | |
| **ESJX** | **Sierra Juarez** | **1.90** | **173** | | Pn | 19 37 59.1 | -1.3 |
| **PDE** | **Pardee, Santa** | **2.04** | **286** | | Pn | 19 37 59.5 | -2.6 |
| **V12A** | **Nelson** | **2.14** | **31** | | Pn | 19 38 03.0 | -0.7 |
| V12A | | | | IAML | | 19 38 38.3 | |
| | comp=N,56nm,0.4s | | | | | | |
| V12A | | | | IAML | | 19 38 42.1 | |
| | comp=E,43nm,0.4s | | | | | | |
| **W13A** | **Hualapai Mount** | **2.27** | **57** | | Pb | 19 38 08.6 | -0.2 |
| W13A | | | | IAML | | 19 38 43.5 | |
| | comp=N,43nm,0.5s | | | | | | |
| W13A | | | | IAML | | 19 38 45.4 | |
| | comp=E,37nm,0.6s | | | | | | |
| **GWY** | **Greenwater Val** | **2.31** | **351** | Pn | Pn | 19 38 05.2 | -0.9 |
| **113A** | **Mohawk Valley,** | **2.34** | **118** | | Pn | 19 38 06.1 | -0.1 |
| **ISA** | **Isabella, Lake** | **2.56** | **314** | | Pn | 19 38 09.2 | -0.2 |
| **Y14A** | **Wickenburg** | **2.67** | **88** | Pn | Pn | 19 38 09.8 | -1.1 |
| Y14A | | | | IAML | | 19 38 55.9 | |
| | comp=E,42nm,0.5s | | | | | | |
| **SHPR** | **Sheep Range** | **2.74** | **18** | | Pn | 19 38 10.6 | -1.4 |
| **BCW** | **Bitter Crk WRg** | **2.84** | **292** | | Pb | 19 38 20.0 | +1.4 |
| BCW | | | | IAML | | 19 39 02.6 | |
| | comp=N,46nm,0.7s | | | | | | |
| BCW | | | | IAML | | 19 39 08.7 | |
| | comp=E,39nm,1.0s | | | | | | |
| **WCT** | **Wildcat Mounta** | **2.91** | **353** | | Pb | 19 38 20.8 | +1.1 |
| WCT | | | | IAML | | 19 38 59.9 | |
| | comp=E,19nm,0.5s | | | | | | |
| WCT | | | | IAML | | 19 39 00.1 | |
| | comp=N,18nm,0.5s | | | | | | |
| **TPNV** | **Topopah Spring** | **3.04** | **359** | Pn | Pn | 19 38 15.8 | -0.3 |
| TPNV | | | | IAML | | 19 39 06.1 | |
| | comp=N,31nm,0.5s | | | | | | |
| TPNV | | | | IAML | | 19 39 06.5 | |
| | comp=N,29nm,0.5s | | | | | | |
| **GRAC** | **Grapevine Rang** | **3.23** | **343** | Pn | Pn | 19 38 19.9 | +1.3 |
| **214A** | **Organ Pipe Nat** | **3.46** | **123** | Pg | Pb | 19 38 30.9 | +1.9 |
| 214A | | | | IAML | | 19 39 21.1 | |
| | comp=N,11nm,0.8s | | | | | | |
| 214A | | | | IAML | | 19 39 28.0 | |
| | comp=E,11nm,1.1s | | | | | | |
| **GMN** | **Gold Mountain** | **3.50** | **346** | Pn | Pn | 19 38 20.9 | -1.6 |
| **LCMT** | **Little Creek M** | **3.94** | **37** | Pn | Pn | 19 38 26.7 | -1.7 |
| **X16A** | **Lo Mia Camp, P** | **3.99** | **81** | Pn | Pn | 19 38 26.7 | -2.5 |
| **U15A** | **North Rim** | **4.09** | **51** | Pn | Pn | 19 38 29.3 | -1.3 |
| **PKCU** | **Pink Cliffs** | **4.75** | **41** | | Pn | 19 38 39.9 | 0.0 |
| **X18A** | **Snowflake** | **5.23** | **81** | Pn | Pn | 19 38 44.8 | -1.4 |

*IDC **27** 19:41:14.1±0.8, 2.25N×126.36E, h0km, mb4.0/9, mbtmp4.0/9, MS2.6/1, Error ellipse: s-maj=67.0km s-min=15.0km az=71.0*

*DJA **27** 19:41:18.7±0.3, 3.3N±2.2×12.7E±, h10km, M4.2/16, mb4.5/7, mB4.8/5, MLv4.2/16, Mw(mB)4.0/5*

*NEIC **27** 19:41:23.1±1.8, 2.27N±0.10×126.73E±0.09, h70km±10km, mb4.3/16, Error ellipse: s-maj=16.0km s-min=10.1km az=219.0*

**ISC 27 19:41:21.0±0.7, 2.53N±0.07×127.01E±0.09, h53km, n45, σ2s17/46, mb4.3/15, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.79** | **168** | | Pn | 19 41 49.3 | -0.2 |
| **TNTI** | **Ternate** | **1.79** | **168** | P | Pn | 19 41 49.3 | -0.2 |
| TNTI | | | | S | Sn | 19 42 16.0 | +4.9 |
| **LBMI** | **Labuha** | **3.19** | **171** | P | Pn | 19 42 09.5 | +0.8 |
| LBMI | | | | S | Sn | 19 42 51.1 | +5.6 |
| **KMSI** | **Cibinong** | **3.60** | **237** | P | Pn | 19 42 16.0 | +1.7 |
| **GTOI** | **Gorontalo** | **4.42** | **245** | P | Pn | 19 42 27.9 | +2.4 |
| **SANI** | **Sanana** | **4.67** | **193** | P | Pn | 19 42 30.1 | +1.1 |
| **SWI** | **Sorong** | **5.43** | **128** | P | Pn | 19 42 40.2 | +0.8 |
| **MRSI** | **Marisa** | **5.46** | **248** | P | Pn | 19 42 42.3 | +2.4 |
| | 100nm,0.8s,681nm0.3nm | | | | | | |
| **LUWI** | **Luwuk** | **5.53** | **230** | Pn | Pn | 19 42 37.0 | -3.8 |
| **LUWI** | **Luwuk** | **5.53** | **230** | P | Pn | 19 42 43.9 | +3.1 |
| | 62nm,0.6s,0.6nm | | | | | | |
| **NLAI** | **Namlea** | **5.73** | **179** | P | Pn | 19 42 45.5 | +1.9 |
| | 20nm,0.6s,415nm0.1nm | | | | | | |
| **MSAI** | **Masohi** | **6.15** | **162** | P | Pn | 19 42 51.6 | +2.3 |
| | 41nm,0.7s,1μm0.1nm | | | | | | |
| **TOLI2** | **Tolitoli** | **6.38** | **257** | | Pn | 19 42 53.3 | +0.8 |
| **MPSI** | **Mapaga** | **7.43** | **253** | P | Pn | 19 43 10.1 | +3.2 |
| **FAKI** | **Fak Fak** | **7.54** | **136** | Pn | Pn | 19 43 10.2 | +1.8 |
| **MYLDM** | **Lahad Datu** | **8.88** | **287** | Pn | Pn | 19 43 27.3 | +0.5 |
| **SBUM** | **Sibu** | **14.77** | **270** | | Pn | 19 44 45.4 | -1.5 |
| **MTN** | **Manton Dam** | **15.82** | **165** | Pn | Pn | 19 44 58.1 | -2.3 |
| **JAGI** | **Jajag, Banyuwa** | **16.84** | **229** | | Pn | 19 45 09.7 | -3.7 |
| JAGI | | | | IAmb | IAmb | 19 45 46.4 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **18.18** | **175** | P | P | 19 45 28.6 | -0.8 |
| KNRA | | | | IAmb | IAmb | 19 45 33.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.55** | **184** | P | P | 19 45 54.7 | -0.6 |
| **GUMO** | **Guam** | **20.80** | **57** | LR | LR | 19 52 38.8 | |
| | comp=Z,16nm,19.1s,baz=247,slow=32 | | | | | | |
| **WB0** | **Warramunga Arr** | **23.32** | **162** | P | P | 19 46 22.3 | -2.4 |
| WB0 | | | | IAmb | IAmb | 19 46 29.8 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.46** | **162** | P | P | 19 46 24.2 | -1.8 |
| WRAB | | | | IAmb | IAmb | 19 46 29.5 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.47** | **162** | P | P | 19 46 24.2 | -1.9 |
| **WRA** | **Warramunga Arr** | **23.47** | **162** | P | P | 19 46 24.8 | -1.3 |
| | comp=Z,8.7nm,0.7s,baz=339,slow=11,SNR=54 | | | | | | |
| | comp=Z,8.7nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **23.47** | **162** | P | P | 19 46 24.4 | -1.7 |
| WB2 | | | | IAmb | IAmb | 19 46 29.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **23.55** | **162** | P | P | 19 46 24.7 | -2.1 |
| WR0 | | | | IAmb | IAmb | 19 46 28.0 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **26.89** | **166** | P | P | 19 46 56.5 | -0.8 |
| **ASAR** | **Alice Springs** | **26.89** | **166** | P | P | 19 46 56.1 | -1.2 |
| | comp=Z,1.2nm,0.6s,baz=338,slow=6.3,SNR=21 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **33.14** | **178** | P | P | 19 47 49.1 | -3.3 |
| **KSRS** | **Korea Array** | **34.76** | **1** | P | P | 19 48 08.4 | +2.0 |
| | comp=Z,1.1nm,0.8s,baz=176,slow=9.8,SNR=2.7 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **36.18** | **167** | P | P | 19 48 15.5 | -3.2 |
| **STKA** | **Stephens Creek** | **36.92** | **159** | P | P | 19 48 23.8 | -1.1 |
| **STKA** | **Stephens Creek** | **36.92** | **159** | P | P | 19 48 24.6 | -0.3 |
| | comp=Z,5.6nm,0.7s,baz=324,slow=9.8,SNR=10 | | | | | | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.73** | **5** | P | P | 19 49 07.8 | +3.0 |
| | comp=Z,1.5nm,0.7s,baz=190,slow=9.2,SNR=4.4 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **48.51** | **342** | P | P | 19 49 59.3 | +0.5 |
| | comp=Z,0.2nm,0.4s,baz=157,slow=8.8,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **58.69** | **326** | P | P | 19 51 12.8 | -0.5 |
| MK31 | | | | IAmb | IAmb | 19 51 42.0 | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.69** | **326** | P | P | 19 51 12.5 | -0.7 |
| **MKAR** | **Makanchi Array** | **58.69** | **326** | P | P | 19 51 12.7 | -0.5 |
| | comp=Z,0.8nm,0.5s,baz=114,slow=8.2,SNR=13 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **58.88** | **325** | P | P | 19 51 13.0 | -1.5 |
| MAKZ | | | | IAmb | IAmb | 19 51 19.4 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.77** | **333** | P | P | 19 51 34.5 | +0.3 |
| | comp=Z,0.5nm,0.3s,baz=143,slow=8.4,SNR=2.8 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.89** | **328** | P | P | 19 51 41.2 | -0.5 |
| | comp=Z,1.7nm,0.6s,baz=131,slow=6.4,SNR=25 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **62.89** | **328** | P | P | 19 51 41.5 | -0.2 |
| **ABKAR** | **Akbulak array** | **73.25** | **321** | P | P | 19 52 46.8 | +0.2 |

*IDC **27** 19:50:10.7±2.2, 10.91S×124.18E, h0km, mb3.3/1, mbtmp3.5/3, ML3.4/2, Error ellipse: s-maj=192.1km s-min=32.6km az=53.0*

*DJA **27** 19:50:14.7±1.0, 11.3S×12.4E±, h18km±8km, M3.9/11, mb4.4/3, mB5.0/1, MLv3.6/11, Mw(mB)4.3/1*

**ISC 27 19:50:14.4±0.9, 11.01S±0.07×124.28E±0.08, h35km, n11, σ1s17/15, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **1.00** | **323** | P | **Pn** | **19 50 30.9** | **-1.1** |
| BATI | | | | S | **Sn** | **19 50 44.3** | **-0.7** |
| **SOEI** | **Soe** | **1.25** | **359** | P | **Pn** | **19 50 35.1** | **-0.4** |
| SOEI | | | | S | **Sn** | **19 50 51.9** | **+0.8** |
| **MMRI** | **Maumere** | **3.10** | **319** | P | **Pn** | **19 51 01.3** | **+0.4** |
| **EDFI** | **Ende, Flores** | **3.40** | **311** | P | **Pn** | **19 51 05.3** | **+0.2** |
| **BASI** | **Baing, Sumba** | **3.73** | **282** | P | **Pn** | **19 51 10.2** | **+0.7** |
| **WBSI** | **Waikabubak, Su** | **5.00** | **285** | P | **Pn** | **19 51 25.4** | **-1.7** |
| **BSSI** | **Bau Bau, Buton** | **6.12** | **322** | P | **Pn** | **19 51 41.0** | **-1.4** |
| | 43nm,1.2s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **7.63** | **287** | P | **Pn** | **19 52 03.4** | **+0.2** |
| **WRA** | **Warramunga Arr** | **13.14** | **134** | Pn | **Pn** | **19 53 20.2** | **+1.5** |
| | 0.2nm,0.3s,baz=310,slow=15,SNR=17 | | | | | | |
| WRA | | | | Sn | **Sn** | **19 55 41.7** | **-2.0** |
| | 0.3nm,0.3s,baz=302,slow=23,SNR=7.2 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **15.57** | **145** | Pn | **P** | **19 53 54.1** | **-1.2** |
| | 0.2nm,0.3s,baz=318,slow=12,SNR=25 | | | | | | |
| ASAR | | | | Sn | **Sn** | **19 56 43.1** | **+0.2** |
| | 0.2nm,0.3s,baz=309,slow=21,SNR=5.2 | | | | | | |
| | 1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.68** | **330** | P | **P** | **20 01 15.2** | **+0.9** |
| | 0.2nm,0.6s,baz=129,slow=7.7,SNR=6.4 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **27** 20:01:08.1±1.0, 27.34N×140.49E, h170km±10km, mb3.5/13, mbtmp3.9/14, Error ellipse: s-maj=20.6km s-min=13.5km az=69.0*

*NEIC **27** 20:01:10.1±2.6, 27.3N±0.1×140.38E±0.07, h183km±9km, mb4.4/15, Error ellipse: s-maj=16.7km s-min=9.6km az=185.0*

*JMA **27** 20:01:11.7±0.1, 27.1N±1.1×140.1E±, h236km, MV4.1/36, NEAR CHICHIJIMA ISLAND*

**ISC 27 20:01:11.2±0.6, 27.34N±0.07×140.60E±0.09, h200km, n61, σ1s69/68, mb3.9/22, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **1.43** | **99** | P | **Pn** | **20 01 44.2** | **0.0** |
| CBIJ | | | | *e*S | **Sn** | **20 02 10.2** | **+0.3** |
| **JCJ** | **Chichijima** | **1.43** | **99** | | **Pn** | **20 01 44.2** | **-0.1** |
| JCJ | | | | Sn | **Sn** | **20 02 07.7** | **-2.3** |
| **JCJ** | **Chichijima** | **1.43** | **99** | P | **Pn** | **20 01 39.8** | **-4.5** |
| | 110nm,0.3s,baz=109,slow=3.1,SNR=46 | | | | | | |
| JCJ | | | | S | **Sn** | **20 02 03.4** | **-6.5** |
| | 1μm,0.3s,baz=265,slow=21,SNR=32 | | | | | | |
| **JHH2** | **Haha-jima-NKT2** | **1.57** | **116** | P | **Pn** | **20 01 46.1** | **+0.6** |
| JHH2 | | | | S | **Sn** | **20 02 11.4** | **-0.7** |
| **JHH2** | **Haha-jima-NKT2** | **1.57** | **116** | A | A | 20 01 46.1 | |
| | comp=E,12nm,0.4s,comp=N,11nm,0.3s | | | | | | |
| **JHJ2** | **Mitsune** | **5.79** | **353** | Pn | **Pn** | **20 02 34.5** | **-1.1** |
| **JHJ** | **Hachijo jima 2** | **5.81** | **353** | P | **Pn** | **20 02 36.0** | **+0.1** |
| | comp=N,101nm,1.0s,baz=244,slow=24,SNR=2.0 | | | | | | |
| JHJ | | | | S | **Sn** | **20 03 42.2** | **-0.7** |
| | comp=N,46nm,0.5s,baz=142,slow=24,SNR=7.2 | | | | | | |
| **BSO1** | **Boso 1** | **7.30** | **2** | P | **Pn** | **20 02 54.7** | **0.0** |
| BSO1 | | | | *e*S | **Sn** | **20 04 14.1** | **-3.0** |
| **BSO3** | **Boso 3** | **7.44** | **359** | P | **Pn** | **20 02 56.7** | **-0.1** |
| BSO3 | | | | *e*S | **Sn** | **20 04 18.7** | **-2.2** |
| **BSO4** | **Boso 4** | **7.63** | **358** | *e*P | **Pn** | **20 03 00.1** | **+0.7** |
| BSO4 | | | | *e*S | **Sn** | **20 04 24.8** | **-0.9** |
| **JKN2** | **Miekihoku** | **7.82** | **333** | *e*P | Pn | 20 03 06.1 | +4

comp=Z,1.7nm,0.7s,baz=293,slow=5.9,SNR=12
comp=Z,1.7nm,0.7s
**NC405 NORSAR Array S 82.64 338** P **P** **20 13 11.1 -0.8**
NC405 IAmb IAmb 20 13 32.8
comp=Z,13nm,1.3s
**HFS Hagfors 82.64 336** P **P** **20 13 11.2 -0.6**
comp=Z,1.0nm,0.5s,baz=92,slow=4.5,SNR=14
comp=Z,1.0nm,0.5s
**NC303 NORSAR Array S 82.67 338** P **P** **20 13 12.1 +0.1**
**NB2 NORSAR Subarra 82.86 338** P **P** **20 13 12.1 -0.9**
comp=Z,0.7nm,0.5s,baz=44,slow=5.3
**NOA NORSAR Array B 82.86 338** P **P** **20 13 11.6 -1.4**
comp=Z,0.8nm,0.6s,baz=49,slow=4.9,SNR=4.9
comp=Z,0.8nm,0.6s
**HVU Hansel Valley 83.52 46** P **P** **20 13 19.0 +2.1**
HVU IAmb IAmb 20 13 19.7
comp=Z,3.3nm,0.6s
**BRTR Keskin Array B 84.80 312** P **P** **20 13 23.2 -0.1**
comp=Z,0.5nm,0.7s,baz=93,slow=4.1,SNR=3.9
comp=Z,0.5nm,0.7s
**PDAR Pinedale Array 85.03 44** P **P** **20 13 25.4 +0.8**
**PDAR Pinedale Array 85.03 44** P **P** **20 13 25.7 +1.1**
comp=Z,0.6nm,0.5s,baz=227,slow=2.6,SNR=8.8
comp=Z,0.6nm,0.5s

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*NEIC* ***27*** *20:09:22.0±2.6, 61°.79S×0°.05×58°.1W±0°.2, h49km±1km, mb5.5/133,Ms_20 5.0/612,Mwb5.5/25,Mww5.6/27,Error ellipse: s-maj=12.8km s-min=8.0km az=263.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; $M_{rr}$2.28; $M_{\theta\theta}$-1.26; $M_{\phi\phi}$-1.02; $M_{r\theta}$-0.21; $M_{\theta\phi}$1.30; $M_{\phi r}$-1.15; Fault plane solution: $M_0$2.64000×10¹⁷ NP1: $\phi_s$152.64000°,δ56.03000°,λ114.76000°. NP2: $\phi_s$293.10000°,δ41.14000°,λ58.13000°. Principal axes: T 2.7361, Plg68.0000°, Azm115.0000°; N -0.2073, Plg20.0000°, Azm318.0000°; P -2.5289, Plg8.0000°, Azm225.0000°;*

*GUC* ***27*** *20:09:21.0, 61°.77S×57°.78W, h30km, MW5.7*

*NEIC* ***27*** *20:09:22.8, 61°.76S×58°.09W, h46km*

*IPGP* ***27*** *20:09:22.0, 61°.76S×58°.13W, h48km, Mw5.6, Fault plane solution: NP1:$\phi_s$148.00000°,δ57.00000°,λ123.00000°. NP2:$\phi_s$279.00000°,δ45.00000°,λ50.00000°.*

*NEIC* ***27*** *20:09:22.8, 61°.86S×58°.09W, h46km, Moment Tensor Solution. Duration: 3ˢ1 Moment tensor: Scale 10¹⁷Nm; $M_{rr}$1.38; $M_{\theta\theta}$-2.20; $M_{\phi\phi}$0.82; $M_{r\theta}$-0.74; $M_{\theta\phi}$1.27; $M_{\phi r}$-1.40; Fault plane solution: $M_0$2.79000×10¹⁷ NP1: $\phi_s$255.02000°,δ62.38000°,λ38.60000°. NP2: $\phi_s$144.71000°,δ56.44000°,λ146.19000°. Principal axes: T 2.9064, Plg46.0000°, Azm112.0000°; N -0.2305, Plg44.0000°, Azm285.0000°; P -2.6759, Plg4.0000°, Azm19.0000°;*

*NEIC* ***27*** *20:09:22.8, 61°.76S×58°.09W, h53km*

*MOS* ***27*** *20:09:24.4±1.3, 61°.74S×58°.59W, h76km, mb5.7/11, MS4.9/18, Error ellipse: s-maj=27.5km s-min=8.0km az=92.5*

*IDC* ***27*** *20:09:24.9±1.0, 61°.83S×58°.45W, h77km±7km, mb4.9/23, mbtmp5.2/25, MS4.8/40, Error ellipse: s-maj=14.1km s-min=8.7km az=84.0*

*GCMT* ***27*** *20:09:25.0±0.1, 61°.83S±0°.01×58°.41W±0°.02, h53km, MW5.6/141, Moment Tensor Solution. s141,c261; s141,c273; Duration: 1ˢ5 Moment tensor: Scale 10¹⁷ Nm; $M_{rr}$1.86±.03; $M_{\theta\theta}$-2.07±.03; $M_{\phi\phi}$0.21±.03; $M_{r\theta}$-0.68±.03; $M_{\theta\phi}$1.75±.03; $M_{\phi r}$-1.26±.04; Best double couple: $M_0$3.00200×10¹⁷ NP1:$\phi_s$267.00000°,δ56.00000°, λ42.00000°. NP2:$\phi_s$150.00000°,δ56.00000°,λ138.00000°. Principal axes: T 2.9870, Plg52.0000°, Azm118.0000°; N 0.0370, Plg38.0000°, Azm298.0000°; P -3.0170, Plg0.0000°, Azm28.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 27 20:09:16.2±0.2, 61°.74S±0°.04×58°.19W±0°.05, h10km, n1065, σ1ˢ94/757, mb5.6/139, MS5.0/372, 66C-43D, South Shetland Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ESPZ** | **Base Esperanza** | **1.75** | **162** | Pn | **Pn** | **20 09 48.9** | **+2.3** |
| **PMSA** | **Palmer Station** | **4.03** | **218** | Pn | **Pn** | **20 10 22.0** | **+4.1** |
| **PMSA** | **Palmer Station** | **4.03** | **218** | P | Pn | 20 10 22.1 | +4.3 |
| | 1μm,0.6s,baz=39,slow=11,SNR=736 | | | | | | |
| PMSA | | | | LR | LR | 20 11 58.2 | |
| | comp=Z,32μm,19.3s,baz=63,slow=39 | | | | | | |
| **PMSA** | **Palmer Station** | **4.03** | **218** | *e*P | Pn | 20 10 22.1 | +4.3 |
| **SMAI** | **San Martin Ant** | **7.44** | **207** | Pn | Pn | 20 11 09.3 | +4.7 |
| **MG01** | **Puerto William** | **8.43** | **320** | Pn | Pn | 20 11 22.9 | +4.7 |
| **USHA** | **Ushuaia** | **8.77** | **318** | P | Pn | 20 11 28.1 | +5.3 |
| | 56nm,0.7s,baz=360,slow=0.8,SNR=18 | | | | | | |
| USHA | | | | S | **Sn** | **20 13 01.0** | **-0.6** |
| | 98nm,0.5s,baz=310,slow=20,SNR=13 | | | | | | |
| **EFI** | **East Falkland** | **10.09** | **0** | Pn | Pn | 20 11 46.7 | +5.8 |
| **EFI** | **East Falkland** | **10.09** | **0** | *d*P | Pn | 20 11 47.3 | +6.3 |
| EFI | | | | pmax | pmax | | |
| | comp=Z,596nm,1.7s | | | | | | |
| **MG03** | **Isla Dawson** | **10.25** | **315** | | **Pn** | **20 11 47.0** | **+3.8** |
| **MG04** | **Isla Riesco** | **11.45** | **315** | Pn | **Pn** | **20 12 02.3** | **+2.8** |
| **MG05** | **Puerto Natales** | **12.75** | **316** | | **Pn** | **20 12 20.4** | **+3.1** |
| **GO09** | **Cerro Castillo** | **13.04** | **317** | | **Pn** | **20 12 24.5** | **+3.1** |
| **GO08** | **Villa O'Higgin** | **15.58** | **322** | | **P** | **20 13 02.6** | **+2.7** |
| **AY03** | **Cochrane** | **16.69** | **324** | P | **P** | **20 13 15.3** | **+3.1** |
| **BELA** | **Belgrano 2** | **17.86** | **164** | P | **P** | **20 13 27.6** | **+2.7** |
| **COYC** | **Coyhaique** | **18.10** | **327** | | **P** | **20 13 31.1** | **+3.3** |
| **LL02** | **Futaleuf** | **20.28** | **330** | | Pn | 20 13 54.7 | +1.1 |
| **VNA3** | **Neumayer Olymp** | **20.91** | **137** | ⇑P | **P** | **20 14 03.1** | **+4.8** |
| | comp=Z,586nm,0.9s | | | | | | |
| VNA3 | | | | ⇑S | Sn | 20 18 00.1 | +3.5 |
| | comp=Z,7.0nm,0.8s | | | | | | |
| VNA3 | | | | ⇑ScP | **ScP** | **20 21 35.2** | **-6.7** |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **21.36** | **136** | ⇑P | **P** | **20 14 08.1** | **+5.0** |
| | comp=Z,331nm,0.8s | | | | | | |
| VNA1 | | | | ⇑ScP | **ScP** | **20 21 36.8** | **-6.1** |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **21.64** | **136** | ⇑P | **P** | **20 14 10.9** | **+4.7** |
| | comp=Z,156nm,0.6s,baz=273,slow=6.6 | | | | | | |
| VNA2 | | | | ⇑S | **S** | **20 18 11.3** | **+5.8** |
| | comp=Z,8.1nm,0.6s,baz=262,slow=4.7 | | | | | | |
| VNA2 | | | | ⇑ScP | **ScP** | **20 21 36.6** | **-7.1** |
| | comp=Z,0.8nm,0.6s,baz=292,slow=2.6 | | | | | | |
| **PLCA** | **Paso Flores** | **22.34** | **335** | | **P** | **20 14 12.8** | **-1.2** |
| PLCA | | | | IAmb | IAmb | 20 14 33.8 | |
| | comp=Z,274nm,1.6s | | | | | | |
| **PLCA** | **Paso Flores** | **22.34** | **335** | P | **P** | **20 14 16.4** | **+2.5** |
| | comp=Z,42nm,1.1s,baz=167,slow=9.2,SNR=30 | | | | | | |
| PLCA | | | | PcP | **PcP** | **20 18 09.2** | **+0.3** |
| | comp=Z,2.2nm,0.5s,baz=242,slow=0.6,SNR=1.6 | | | | | | |
| PLCA | | | | ScP | **ScP** | **20 21 39.2** | **-6.8** |
| | comp=Z,5.0nm,0.9s,baz=189,slow=4.7,SNR=5.6 | | | | | | |
| PLCA | | | | LR | LR | 20 23 05.9 | |
| | comp=Z,3μm,18.4s,baz=174,slow=37 | | | | | | |
| | comp=Z,42nm,1.1s | | | | | | |
| **PLCA** | **Paso Flores** | **22.34** | **335** | *e*P | **P** | **20 14 16.2** | **+2.3** |
| **LL03** | **Petrohue** | **22.35** | **331** | P | **P** | **20 14 13.9** | **-0.1** |
| LL03 | | | | IAmb | IAmb | 20 14 39.2 | |
| | comp=Z,147nm,0.8s | | | | | | |
| **LL05** | **Los Muermos** | **22.36** | **329** | P | **P** | **20 14 16.1** | **+2.0** |
| LL05 | | | | IAmb | IAmb | 20 14 35.7 | |
| | comp=Z,200nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **23.09** | **138** | P | **P** | **20 14 25.5** | **+3.9** |
| SNAA | | | | IAms_20 | IAms_20 | 20 21 46.3 | |
| | comp=Z,5μm,22.0s | | | | | | |
| **SNAA** | **Sanae** | **23.09** | **138** | ⇑*i*P | **P** | **20 14 25.5** | **+3.9** |
| SNAA | | | | IAmb | IAmb | 20 14 28.3 | |
| | comp=Z,19μm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **23.09** | **138** | ⇑S | **S** | **20 18 32.7** | **+0.4** |
| | comp=Z,124nm,0.9s | | | | | | |
| SNAA | | | | ⇑ScP | **ScP** | **20 21 40.4** | **-7.1** |
| | comp=Z,18nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **23.09** | **138** | P | **P** | **20 14 25.4** | **+3.8** |
| | comp=Z,323nm,1.1s,baz=266,slow=7.2,SNR=236 | | | | | | |
| SNAA | | | | ScP | **ScP** | **20 21 40.3** | **-7.2** |
| | comp=Z,7.6nm,1.0s,baz=246,slow=2.0,SNR=6.1 | | | | | | |
| SNAA | | | | LR | LR | 20 22 19.8 | |
| | comp=Z,4μm,21.2s,baz=278,slow=34 | | | | | | |
| | comp=Z,323nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **23.09** | **138** | *c*P | **P** | **20 14 25.5** | **+3.9** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,659nm,1.7s | | | | | | |
| **LR05** | **Currie** | **23.13** | **332** | IAmb | IAmb | 20 14 40.4 | |
| | comp=Z,316nm,1.5s | | | | | | |
| **GO06** | **Curarrehue** | **23.63** | **334** | IAmb | IAmb | 20 14 47.4 | |
| | comp=Z,173nm,1.2s | | | | | | |
| **TRQA** | **Tornquist** | **23.83** | **353** | | **P** | **20 14 31.1** | **+1.9** |
| **TRQA** | **Tornquist** | **23.83** | **353** | *e*P | **P** | **20 14 31.1** | **+1.9** |
| **TROLL** | **Troll, Antarti** | **24.73** | **140** | ⇑P | **P** | **20 14 41.2** | **+3.8** |
| | comp=Z,5μm,0.7s | | | | | | |
| TROLL | | | | ⇑S | **S** | **20 18 56.9** | **-2.2** |
| | comp=Z,7μm,3.1s | | | | | | |
| TROLL | | | | ⇑ScP | **ScP** | **20 21 46.5** | **-5.6** |
| | comp=Z,24nm,0.6s | | | | | | |
| **BI02** | **San Fabin de** | **26.41** | **336** | P | **P** | **20 14 54.5** | **+1.7** |
| BI02 | | | | IAmb | IAmb | 20 15 12.8 | |
| | comp=Z,301nm,1.9s | | | | | | |
| **BO02** | **Sierra Bellavi** | **28.14** | **338** | P | **P** | **20 15 10.2** | **+2.0** |
| BO02 | | | | IAms_20 | IAms_20 | 20 25 11.5 | |
| | comp=Z,3μm,22.0s | | | | | | |
| **GO05** | **Huala** | **28.14** | **336** | P | **P** | **20 15 10.3** | **+2.0** |
| GO05 | | | | IAmb | IAmb | 20 15 28.1 | |
| | comp=Z,95nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **28.49** | **180** | P | **P** | **20 15 12.9** | **+1.6** |
| QSPA | | | | IAmb | IAmb | 20 15 16.0 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **28.49** | **180** | P | **P** | **20 15 13.3** | **+2.0** |
| | comp=Z,128nm,1.0s,baz=180,slow=0.7,SNR=203 | | | | | | |
| QSPA | | | | PcP | **PcP** | **20 18 22.8** | **+0.4** |
| | comp=Z,24nm,0.8s,baz=303,slow=1.4,SNR=6.5 | | | | | | |
| QSPA | | | | ScP | **ScP** | **20 21 56.2** | **-7.1** |
| | comp=Z,3.3nm,0.7s,baz=273,slow=3.5,SNR=3.6 | | | | | | |
| QSPA | | | | LR | LR | 20 27 45.1 | |
| | comp=Z,2μm,19.8s,baz=166,slow=39 | | | | | | |
| | comp=Z,128nm,1.0s | | | | | | |
| **BO04** | **La Punta** | **28.89** | **338** | P | **P** | **20 15 15.4** | **+0.5** |
| **LMEL** | **Las Melosas** | **28.95** | **339** | IAms_20 | IAms_20 | 20 26 08.2 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **MT01** | **Popeta** | **29.12** | **337** | IAmb | IAmb | 20 15 49.5 | |
| | comp=Z,132nm,1.4s | | | | | | |
| **MT08** | **Bocatoma Ro** | **29.32** | **340** | IAms_20 | IAms_20 | 20 26 41.7 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **MT03** | **Universidad Ad** | **29.35** | **339** | IAmb | IAmb | 20 15 43.9 | |
| | comp=Z,113nm,0.9s | | | | | | |
| MT03 | | | | IAms_20 | IAms_20 | 20 26 44.7 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **MT16** | **CCHEN** | **29.42** | **339** | IAmb | IAmb | 20 15 47.0 | |
| | comp=Z,143nm,0.9s | | | | | | |
| MT16 | | | | IAms_20 | IAms_20 | 20 26 35.4 | |
| | comp=Z,3μm,22.0s | | | | | | |
| **MT02** | **Curacav** | **29.69** | **338** | IAmb | IAmb | 20 15 46.5 | |
| | comp=Z,66nm,0.8s | | | | | | |
| **PEL** | **Peldehue** | **29.72** | **339** | IAms_20 | IAms_20 | 20 27 06.5 | |
| | comp=Z,3μm,19.0s | | | | | | |
| **VA01** | **Torpederas** | **30.02** | **337** | IAms_20 | IAms_20 | 20 26 39.2 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **VA03** | **San Esteban** | **30.07** | **339** | IAms_20 | IAms_20 | 20 27 16.7 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **PLTB** | **Pedras Altas** | **30.14** | **8** | *e*P | **P** | **20 15 28.6** | **+2.6** |
| **PSAL** | **Palomas, Salto** | **30.67** | **1** | *e*P | **P** | **20 15 33.5** | **+2.9** |
| **ELIB** | **Princess Elisa** | **30.96** | **143** | *d*P | **P** | **20 15 36.2** | **+3.2** |
| | comp=Z,74nm,0.8s | | | | | | |
| ELIB | | | | *d*PcP | **PcP** | **20 18 29.3** | **+0.6** |
| **RODS** | **Rosario do Sul** | **31.46** | **5** | *e*P | **P** | **20 15 39.9** | **+2.3** |
| **CPSB** | **Cacapava Do Su** | **31.50** | **8** | *e*P | **P** | **20 15 40.0** | **+2.1** |
| **CO02** | **Combarbal** | **31.67** | **339** | IAmb | IAmb | 20 15 58.8 | |
| | comp=Z,66nm,0.8s | | | | | | |
| CO02 | | | | IAms_20 | IAms_20 | 20 28 25.8 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **CO03** | **El Pedregal** | **31.98** | **339** | IAmb | IAmb | 20 16 02.0 | |
| | comp=Z,46nm,0.8s | | | | | | |
| CO03 | | | | | **PcP** | **20 18 31.6** | **-0.5** |
| CO03 | | | | IAms_20 | IAms_20 | 20 28 48.8 | |
| | comp=Z,3μm,19.0s | | | | | | |
| **ITQB** | **Itaqui** | **32.09** | **3** | P | **P** | **20 15 44.9** | **+1.7** |
| ITQB | | | | IAmb | IAmb | 20 16 54.1 | |
| | comp=Z,95nm,1.2s | | | | | | |
| **ITQB** | **Itaqui** | **32.09** | **3** | *e*P | **P** | **20 15 45.2** | **+2.1** |
| **CO06** | **Fray Jorge** | **32.30** | **338** | IAmb | IAmb | 20 16 04.0 | |
| | comp=Z,153nm,1.8s | | | | | | |
| CO06 | | | | IAms_20 | IAms_20 | 20 28 25.4 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **GO04** | **Tololo Observa** | **32.65** | **339** | IAmb | IAmb | 20 16 07.9 | |
| | comp=Z,64nm,0.6s | | | | | | |
| **CO01** | **Juntas del Tor** | **32.72** | **341** | IAmb | IAmb | 20 16 01.4 | |
| | comp=Z,89nm,1.3s | | | | | | |
| CO01 | | | | IAms_20 | IAms_20 | 20 28 56.6 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **CNLB** | **Canela** | **32.79** | **12** | *e*P | **P** | **20 15 52.6** | **+3.2** |
| **CO05** | **La Serena** | **32.97** | **339** | IAms_20 | IAms_20 | 20 27 51.1 | |
| | comp=Z,2μm,22.0s | | | | | | |
| **ALGR** | **Alto Alegre (B** | **33.12** | **8** | *e*P | **P** | **20 15 55.5** | **+3.2** |
| **LCO** | **Las Campanas** | **33.77** | **340** | P | **P** | **20 16 00.3** | **+2.2** |
| LCO | | | | IAmb | IAmb | 20 16 16.9 | |
| | comp=Z,39nm,0.8s | | | | | | |
| **LCO** | **Las Campanas** | **33.77** | **340** | *e*P | **P** | **20 16 00.3** | **+2.2** |
| **AC05** | **El Transito** | **33.87** | **341** | IAmb | IAmb | 20 16 19.1 | |
| | comp=Z,42nm,0.8s | | | | | | |
| AC05 | | | | IAms_20 | IAms_20 | 20 29 59.9 | |
| | comp=Z,3μm,20.0s | | | | | | |
| **CRSM** | **Crissiumal (Br** | **34.36** | **7** | *e*P | **P** | **20 16 05.7** | **+2.7** |
| **AC04** | **Llanos de Chal** | **34.62** | **340** | IAms_20 | IAms_20 | 20 30 30.7 | |
| | comp=Z,2μm,19.0s | | | | | | |
| **ITAB** | **Concordia** | **34.74** | **9** | P | **P** | **20 16 08.2** | **+2.0** |
| ITAB | | | | IAmb | IAmb | 20 16 12.0 | |
| | comp=Z,49nm,1.1s | | | | | | |
| **ITAB** | **Concordia** | **34.74** | **9** | *e*P | **P** | **20 16 09.1** | **+2.9** |
| **AC06** | **Mina Casimiro** | **35.33** | **341** | IAmb | IAmb | 20 16 31.3 | |
| | comp=Z,47nm,0.8s | | | | | | |
| AC06 | | | | IAms_20 | IAms_20 | 20 30 27.7 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **CPUP** | **Villa Florida** | **35.41** | **1** | P | **P** | **20 16 13.3** | **+1.3** |
| **CPUP** | **Villa Florida** | **35.41** | **1** | P | **P** | **20 16 13.8** | **+1.8** |
| | comp=Z,16nm,0.9s,baz=175,slow=7.5,SNR=26 | | | | | | |
| CPUP | | | | ScP | **ScP** | **20 22 20.9** | **-6.2** |
| | comp=Z,2.1nm,0.6s,baz=182,slow=3.7,SNR=3.0 | | | | | | |
| CPUP | | | | LR | LR | 20 30 01.7 | |
| | comp=Z,2μm,21.7s,baz=176,slow=35 | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **CPUP** | **Villa Florida** | **35.41** | **1** | P | **P** | **20 16 14.0** | **+2.0** |
| CPUP | | | | pP | sP | 20 16 29.1 | +13 |
| CPUP | | | | sP | pP | 20 16 34.5 | +19 |
| CPUP | | | | PcP | **PcP** | **20 18 41.7** | **0.0** |
| CPUP | | | | ScP | **ScP** | **20 22 21.4** | **-5.7** |
| **AC01** | **Pan de Azucar** | **36.56** | **341** | IAms_20 | IAms_20 | 20 30 52.1 | |
| | comp=Z,3μm,21.0s | | | | | | |
| **SJPY** | **San Joaquin** | **36.76** | **3** | *e*P | **P** | **20 16 25.9** | **+2.4** |
| **GO02** | **Mina Guanaco** | **37.38** | **343** | IAmb | IAmb | 20 16 48.9 | |
| | comp=Z,59nm,0.8s | | | | | | |
| GO02 | | | | IAms_20 | IAms_20 | 20 30 40.8 | |
| | comp=Z,2μm,21.0s | | | | | | |
| **SBA** | **Scott Base** | **37.98** | **194** | P | **P** | **20 16 36.1** | **+2.6** |
| **SBA** | **Scott Base** | **37.98** | **194** | P | **P** | **20 16 36.1** | **+2.6** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,26nm,0.8s | | | | | | |
| SBA | | | | MLR | MLR | | |
| | comp=Z,2μm,20.0s | | | | | | |
| **SBA** | **Scott Base** | **37.98** | **194** | P | **P** | **20 16 36.7** | **+3.3** |
| SBA | | | | pP | sP | 20 16 52.1 | +14 |
| SBA | | | | PcP | **PcP** | **20 18 50.2** | **+1.5** |
| **PB14** | **IPOC Station P** | **38.02** | **342** | IAmb | IAmb | 20 16 54.0 | |
| | comp=Z,55nm,0.9s | | | | | | |
| **LDASE** | **Londrina, Braz** | **38.63** | **10** | *e*P | **P** | **20 16 41.9** | **+2.4** |
| **SPB** | **Sao Paulo** | **38.84** | **16** | IAmb | IAmb | 20 17 04.2 | |
| | comp=Z,45nm,0.8s | | | | | | |
| SPB | | | | IAms_20 | IAms_20 | 20 30 34.7 | |
| | comp=Z,2μm,22.0s | | | | | | |
| **SPB** | **Sao Paulo** | **38.84** | **16** | *e*P | **P** | **20 16 44.2** | **+3.1** |
| **VAO** | **Valinhos** | **39.48** | **16** | IAms_20 | IAms_20 | 20 30 52.7 | |
| | comp=Z,3μm,22.0s | | | | | | |
| **VAO** | **Valinhos** | **39.48** | **16** | *e*P | **P** | **20 16 49.6** | **+2.9** |
| **LVC** | **Limon Verde** | **39.80** | **344** | P | **P** | **20 16 51.6** | **+2.0** |
| LVC | | | | IAmb | IAmb | 20 17 09.4 | |
| | comp=Z,202nm,1.8s | | | | | | |
| **LVC** | **Limon Verde** | **39.80** | **344** | LR | LR | 20 34 02.3 | |
| | comp=Z,4μm,20.0s,baz=200,slow=37 | | | | | | |
| **LVC** | **Limon Verde** | **39.80** | **344** | *e*P | **P** | **20 16 51.6** | **+2.0** |
| **PB04** | **IPOC Station P** | **40.24** | **343** | P | **P** | **20 16 53.8** | **+0.8** |
| PB04 | | | | IAmb | IAmb | 20 17 13.5 | |
| | comp=Z,68nm,0.9s | | | | | | |
| PB04 | | | | IAms_20 | IAms_20 | 20 33 37.6 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **PB09** | **IPOC Station P** | **40.64** | **344** | P | **P** | **20 16 59.2** | **+2.8** |
| PB09 | | | | IAmb | IAmb | 20 17 17.8 | |
| | comp=Z,116nm,1.1s | | | | | | |
| **VAS01** | **Vassouras-RJ** | **40.73** | **21** | *e*P | **P** | **20 16 59.2** | **+2.3** |
| **AQDB** | **Aquidauana** | **41.27** | **4** | P | **P** | **20 17 02.1** | **+0.7** |
| **AQDB** | **Aquidauana** | **41.27** | **4** | *e*P | **P** | **20 17 03.1** | **+1.8** |
| **PB01** | **IPOC Station P** | **41.42** | **344** | IAmb | IAmb | 20 17 23.2 | |
| | comp=Z,66nm,0.8s | | | | | | |
| PB01 | | | | IAms_20 | IAms_20 | 20 33 26.8 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **CAM01** | **Campos-RJ** | **41.49** | **24** | *e*P | **P** | **20 17 05.4** | **+2.2** |
| **TA01** | **Diego Aracena** | **41.98** | **343** | IAms_20 | IAms_20 | 20 34 50.8 | |
| | comp=Z,1μm,20.0s | | | | | | |
| **HMBC** | **Humberstone** | **42.22** | **344** | IAms_20 | IAms_20 | 20 33 33.8 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **GO01** | **Chusmiza** | **42.73** | **345** | IAmb | IAmb | 20 17 35.1 | |
| | comp=Z,60nm,1.0s | | | | | | |
| **CCD** | **Concordia, Ant** | **43.41** | **181** | P | **P** | **20 17 19.8** | **+1.1** |
| CCD | | | | pP | sP | 20 17 34.6 | +12 |
| CCD | | | | PcP | **PcP** | **20 19 07.3** | **+0.5** |
| CCD | | | | ScP | **ScP** | **20 22 57.0** | **-0.8** |
| **MAW** | **Mawson** | **44.09** | **152** | P | **P** | **20 17 25.6** | **+1.9** |
| | comp=Z,222nm,1.0s,baz=212,slow=9.1,SNR=139 | | | | | | |
| MAW | | | | PcP | **PcP** | **20 19 09.6** | **+0.9** |
| | comp=Z,16nm,0.4s,baz=208,slow=5.0,SNR=11 | | | | | | |
| MAW | | | | LR | LR | 20 35 35.6 | |
| | comp=Z,2μm,21.5s,baz=216,slow=36 | | | | | | |
| | comp=Z,222nm,1.0s | | | | | | |
| **IPMB** | **Ipameri, GO** | **44.28** | **14** | *e*P | **P** | **20 17 28.1** | **+2.2** |
| **DIAM** | **Diamantina, MG** | **44.59** | **20** | *e*P | **P** | **20 17 30.6** | **+2.2** |
| **SJMB** | **Sao Joao De Ma** | **44.63** | **23** | *e*P | **P** | **20 17 30.5** | **+1.9** |
| **NAN01** | **Guarapari, ES** | **45.67** | **24** | *e*P | **P** | **20 17 38.6** | **+1.8** |
| **SIV** | **San Ignacio** | **45.74** | **356** | LR | LR | 20 36 52.1 | |
| | comp=Z,3μm,22.0s,baz=200,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **45.95** | **347** | P | **P** | **20 17 42.2** | **+2.4** |
| | comp=Z,7.3nm,0.8s,baz=154,slow=5.8,SNR=24 | | | | | | |
| LPAZ | | | | PcP | **PcP** | **20 19 17.1** | **+0.6** |
| | comp=Z,23nm,0.8s,baz=90,slow=3.5,SNR=6.2 | | | | | | |
| LPAZ | | | | ScP | **ScP** | **20 23 04.0** | **-5.3** |
| | comp=Z,7.1nm,0.8s,baz=153,slow=4.6,SNR=6.2 | | | | | | |
| LPAZ | | | | LR | LR | 20 39 03.9 | |
| | comp=Z,1μm,18.4s,baz=169,slow=39 | | | | | | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **45.95** | **347** | *e*P | **P** | **20 17 42.0** | **+2.2** |
| **LPAZ** | **La Paz** | **45.95** | **347** | P | **P** | **20 17 42.1** | **+2.4** |
| LPAZ | | | | sP | sP | 20 18 02.9 | +19 |
| LPAZ | | | | PcP | **PcP** | **20 19 17.4** | **+0.8** |
| LPAZ | | | | ScP | **ScP** | **20 23 04.1** | **-5.1** |
| **ARAG** | **Araguaiana, MT** | **46.20** | **9** | *e*P | **P** | **20 17 43.0** | **+2.0** |
| **PTLB** | **Pontes e Lacer** | **46.23** | **359** | P | **P** | **20 17 42.0** | **+0.7** |
| **PTLB** | **Pontes e Lacer** | **46.23** | **359** | *e*P | **P** | **20 17 43.0** | **+1.7** |
| **BDFB** | **Brasilia** | **46.61** | **14** | P | **P** | **20 17 46.0** | **+1.6** |
| BDFB | | | | IAmb | IAmb | 20 17 49.0 | |
| | comp=Z,51nm,0.7s | | | | | | |
| **BDFB** | **Brasilia** | **46.61** | **14** | P | **P** | **20 17 46.7** | **+2.3** |
| | comp=Z,50nm,0.8s,baz=179,slow=4.6,SNR=38 | | | | | | |
| BDFB | | | | LR | LR | 20 36 16.9 | |
| | comp=Z,2μm,21.8s,baz=179,slow=34 | | | | | | |
| | comp=Z,50nm,0.8s | | | | | | |
| **GUA01** | **Guaratinga, BA** | **46.96** | **24** | *e*P | **P** | **20 17 49.0** | **+2.0** |
| **JANB** | **Januaria** | **47.67** | **18** | *e*P | **P** | **20 17 54.7** | **+2.1** |
| **CMC01** | **Camacan, BA** | **48.20** | **24** | *e*P | **P** | **20 17 58.8** | **+2.2** |
| **RPN** | **Rapa Nui** | **48.32** | **292** | LR | LR | 20 33 04.6 | |
| | comp=Z,490nm,19.1s,baz=134,slow=29 | | | | | | |
| **VILB** | **Vilhena** | **48.73** | **357** | IAms_20 | IAms_20 | 20 38 58.4 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **VILB** | **Vilhena** | **48.73** | **357** | *e*P | **P** | **20 18 02.7** | **+1.9** |
| **GDU01** | **Guandu, BA** | **49.79** | **24** | *e*P | **P** | **20 18 10.4** | **+1.6** |
| **SNDB** | **Serra Nova Dou** | **49.94** | **9** | *e*P | **P** | **20 18 12.0** | **+2.0** |
| **PDRB** | **Porto dos Gac** | **50.05** | **2** | *e*P | **P** | **20 18 12.4** | **+1.6** |
| **CLDB** | **Colider** | **50.81** | **3** | *e*P | **P** | **20 18 17.9** | **+1.3** |
| **DRV** | **Dumont d'Urvil** | **51.20** | **189** | P | **P** | **20 18 20.4** | **+1.4** |
| DRV | | | | pP | sP | 20 18 36.4 | +13 |
| DRV | | | | PcP | **PcP** | **20 19 33.4** | **-0.7** |
| **NNA** | **Nana** | **51.48** | **336** | P | **P** | **20 18 23.7** | **+2.0** |
| **NNA** | **Nana** | **51.48** | **336** | P | **P** | **20 18 22.6** | **+0.9** |
| | comp=Z,11nm,0.7s,baz=186,slow=11,SNR=3.1 | | | | | | |
| NNA | | | | LR | LR | 20 37 57.4 | |
| | comp=Z,592nm,20.1s,baz=166,slow=33 | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **NNA** | **Nana** | **51.48** | **336** | *ce*P | **P** | **20 18 23.3** | **+1.6** |
| NNA | | | | pmax | pmax | | |
| | comp=Z,120nm,1.5s | | | | | | |
| **CASY** | **Casey** | **52.01** | **174** | P | **P** | **20 18 25.6** | **+0.6** |
| CASY | | | | IAmb | IAmb | 20 18 28.0 | |
| | comp=Z,63nm,1.1s | | | | | | |
| **ETMB** | **Extrema** | **52.16** | **350** | IAmb | IAmb | 20 19 40.0 | |
| | comp=Z,51nm,1.1s | | | | | | |
| **NBLA** | **Lagarto - SE** | **52.80** | **25** | *e*P | **P** | **20 18 32.5** | **+1.0** |
| **SAML** | **Samuel** | **52.82** | **354** | P | **P** | **20 18 32.9** | **+1.3** |
| SAML | | | | IAmb | IAmb | 20 18 34.5 | |
| | comp=Z,58nm,1.1s | | | | | | |
| **SAML** | **Samuel** | **52.82** | **354** | P | **P** | **20 18 32.9** | **+1.3** |
| SAML | | | | pmax | pmax | | |
| | comp=Z,58nm,1.2s | | | | | | |
| SAML | | | | MLR | MLR | | |
| | comp=Z,2μm,20.0s | | | | | | |
| **SMTB** | **Santa Maria do** | **53.35** | **13** | *e*P | **P** | **20 18 37.3** | **+1.8** |
| **NBAN** | **Anadia - AL** | **54.40** | **27** | *e*P | **P** | **20 18 44.5** | **+1.4** |
| **CZSB** | **Cruzeiro do Su** | **54.96** | **342** | *e*P | **P** | **20 18 48.8** | **+1.6** |
| **PRTV** | **Porterville,We** | **55.56** | **97** | *e*P | **P** | **20 18 52.9** | **+1.4** |
| PRTV | | | | IAmb | IAmb | 20 18 54.4 | |
| | comp=Z,194nm,1.2s | | | | | | |
| **NBCA** | **Caruaru-PE** | **55.86** | **27** | *e*P | **P** | **20 18 55

BOSA LR LR 20 41 27.1
comp=Z,2µm,21.5s,baz=216,slow=31
comp=Z,34nm,0.8s
**BOSA Boshof 62.18 99** *i* P **P 20 19 38.0 +0.4**
**BOSA Boshof 62.18 99** *i* P **P 20 19 39.3 +1.7**
**H10N3 ASCENSION HYDR 62.60 50** T T 21 28 09.9
baz=202,slow=75,SNR=1563
**H10N1 ASCENSION HYDR 62.61 50** T T 21 28 11.6
baz=202,slow=75,SNR=1728
**H10N2 ASCENSION HYDR 62.62 50** T T 21 28 12.7
baz=202,slow=75,SNR=1564
**SWZ Schweizer 63.42 98** *e*P **P 20 19 45.2 -0.7**
SWZ IAmb IAmb 20 19 47.4
comp=Z,169nm,1.3s
**SNKL Senekal, Frees 63.64 101** *e*P **P 20 19 48.8 +1.3**
SNKL IAmb IAmb 20 19 49.5
comp=Z,101nm,1.0s
**RKT Rikitea 63.67 270** *e*P **P 20 19 46.0 -1.4**
comp=Z,492nm,24.8s
RKT *e*S S 20 28 09.6 -12
comp=Z,1µm,27.8s
RKT *e*SS **SS 20 32 21.5 -7.1**
comp=Z,807nm,38.2s
RKT *e*LR LR 20 38 47.6
comp=Z,11µm,29.8s
**OTAV Otavalo 63.71 337** P **P 20 19 48.9 +0.6**
**OTAV Otavalo 63.71 337** IAMs_20 IAMs_20 20 51 00.8
comp=Z,869nm,21.0s
**OTAV Otavalo 63.71 337** *e*P **P 20 19 48.9 +0.6**
**OTAV Otavalo 63.71 337** *e*P **P 20 19 50.7 +2.4**
**BOAV Boa Vista 63.98 357** P **P 20 19 50.3 +0.8**
BOAV IAmb IAmb 20 19 53.2
comp=Z,30nm,0.6s
**BOAV Boa Vista 63.98 357** *e*P **P 20 19 50.3 +0.8**
**TULM Tulcn-Chalpat 64.06 338** IAMs_20 IAMs_20 20 51 44.0
comp=Z,942nm,21.0s
**PRYS Parys 64.59 100** *e*P **P 20 19 54.0 +0.3**
PRYS IAmb IAmb 20 19 55.0
comp=Z,186nm,1.2s
**WDLM Western Deep L 65.05 100** *e*P **P 20 19 56.7 0.0**
WDLM IAmb IAmb 20 19 58.0
comp=Z,175nm,1.3s
**NWCL Newcastle 65.08 102** *e*P **P 20 19 57.4 +0.5**
NWCL IAmb IAmb 20 19 58.7
comp=Z,69nm,1.1s
**LBTB Lobatse 65.38 97** IAmb IAmb 20 20 00.7
comp=Z,228nm,1.3s
**LBTB Lobatse 65.38 97**⇑ *i*P **P 20 19 59.4 +0.6**
LBTB IAmb IAmb 20 20 00.4
comp=Z,263nm,1.4s
**LBTB Lobatse 65.38 97** LR LR 20 43 51.2
comp=Z,1µm,20.5s,baz=212,slow=32
**LBTB Lobatse 65.38 97** *i* P **P 20 19 59.9 +1.1**
**LBTB Lobatse 65.38 97** *i* P **P 20 20 00.5 +1.8**
**LBTB Lobatse 65.38 97** P **P 20 19 59.4 +0.6**
LBTB sP PcP 20 20 20.1 -11
LBTB PcP sP 20 20 31.6 +29
**HRAO HartRAO 65.62 99** *e*P **P 20 20 00.9 +0.5**
**NYAT Nyati, Northwe 66.01 99** *e*P **P 20 20 03.2 +0.4**
NYAT IAmb IAmb 20 20 04.2
comp=Z,113nm,1.3s
**TSWA Tswaing Meteor 66.20 100** *e*P **P 20 20 04.8 +0.8**
TSWA IAmb IAmb 20 20 05.6
comp=Z,175nm,1.3s
**POGA Pongola 66.26 104** IAmb IAmb 20 20 06.4
comp=Z,152nm,1.2s
**POGA Pongola 66.26 104** *e*P **P 20 20 04.7 +0.4**
POGA IAmb IAmb 20 20 06.1
comp=Z,121nm,1.1s
**NHAM Northam, North 66.28 99**⇑ *i*P **P 20 20 05.1 +0.6**
NHAM IAmb IAmb 20 20 06.1
comp=Z,170nm,1.3s
**TSUM Tsumeb 66.54 87** P **P 20 20 06.1 -0.2**
TSUM IAmb IAmb 20 20 08.5
comp=Z,41nm,1.2s
**TSUM Tsumeb 66.54 87** *e*P **P 20 20 07.2 +0.8**
TSUM IAmb IAmb 20 20 07.4
comp=Z,52nm,1.4s
**TSUM Tsumeb 66.54 87** LR LR 20 44 14.3
comp=Z,320nm,20.6s,baz=176,slow=31
**TSUM Tsumeb 66.54 87** *i* P **P 20 20 06.1 -0.2**
**TSUM Tsumeb 66.54 87** *i* P **P 20 20 07.6 +1.3**
**RUST Rust De Winter 66.57 100**⇑ *i*P **P 20 20 07.2 +0.9**
RUST IAmb IAmb 20 20 08.2
comp=Z,114nm,1.1s
**CRLN Carolina, Mapu 66.63 101** *e*P **P 20 20 07.6 +0.7**
CRLN IAmb IAmb 20 20 08.5
comp=Z,22nm,0.8s
**MDP Montagnes des 66.79 6** P **P 20 20 07.9 +0.3**
comp=Z,21nm,0.4s,baz=195,slow=7.8,SNR=50
MDP LR LR 20 49 42.6
comp=Z,582nm,21.9s,baz=180,slow=36
comp=Z,21nm,0.4s
**MPGF Montagnes des 66.80 6** P **P 20 20 07.6 0.0**
MPGF pP sP 20 20 23.4 +11
MPGF PcP **PcP 20 20 35.5 -1.0**
**MTLB Matlabas, Limp 67.09 98**⇑ *i*P **P 20 20 10.5 +0.8**
MTLB IAmb IAmb 20 20 11.2
comp=Z,212nm,1.2s
**DULL Dullstroom, Mp 67.23 101** *e*P **P 20 20 11.8 +1.0**
DULL IAmb IAmb 20 20 12.6
comp=Z,45nm,1.1s
**LEPH Lephalale, Lim 67.41 98** *e*P **P 20 20 12.0 +0.3**
LEPH IAmb IAmb 20 20 13.2
comp=Z,180nm,1.2s
**ROSC El Rosal 67.55 343** IAmb IAmb 20 20 32.9
comp=Z,62nm,1.0s
**ROSC El Rosal 67.55 343** P **P 20 20 14.5 +1.6**
comp=Z,51nm,0.8s,baz=150,slow=3.8,SNR=12
ROSC LR LR 20 52 32.3
comp=Z,1µm,19.3s,baz=193,slow=38
comp=Z,51nm,0.8s
**WTBG Waterberg Wild 67.61 100**⇑ *i*P **P 20 20 13.3 +0.2**
WTBG IAmb IAmb 20 20 14.2
comp=Z,66nm,1.1s
**RPZ Rata Peaks 67.64 216** P **P 20 20 12.3 -0.6**
comp=Z,18nm,0.7s,baz=16,slow=11,SNR=4.2
RPZ LR LR 20 46 21.1
comp=Z,566nm,19.2s,baz=142,slow=33
comp=Z,18nm,0.7s
**PILG Pilgrimsrest, 67.85 101**⇑ *i*P **P 20 20 15.5 +0.8**
PILG IAmb IAmb 20 20 16.6
comp=Z,118nm,1.0s
**LTZ Lake Taylor 68.15 218** P **P 20 20 16.2 +0.1**
LTZ IAmb IAmb 20 20 18.0
comp=Z,44nm,1.0s
**HOED Hoedspruit, Li 68.40 101** *e*P **P 20 20 18.6 +0.7**
HOED IAmb IAmb 20 20 19.6
comp=Z,141nm,1.1s
**CRAIL Swartwater, Li 68.52 98**⇑ *i*P **P 20 20 19.2 +0.5**
**BFZ Birch Farm 68.86 222** IAmb IAmb 20 20 38.4
comp=Z,49nm,0.7s
**THZ Tophouse 68.90 219** IAmb IAmb 20 20 47.3
comp=Z,56nm,0.7s
**MRZ Mangatainoka R 69.09 221** IAmb IAmb 20 20 39.6
comp=Z,30nm,0.7s
**NNZ Nelson 69.26 219** IAmb IAmb 20 20 24.1
comp=Z,85nm,1.1s
**MPHEP Siloam, Limpop 69.34 100**⇑ *i*P **P 20 20 24.8 +0.9**
MPHEP IAmb IAmb 20 20 25.6
comp=Z,176nm,1.2s
**MOPA Mopani 69.39 101** *e*P **P 20 20 25.1 +1.0**
MOPA IAmb IAmb 20 20 26.1
comp=Z,362nm,1.2s
**MOPA Mopani 69.39 101** *i* P **P 20 20 25.4 +1.4**
**MOPA Mopani 69.39 101** *i* P **P 20 20 25.9 +1.8**
**MUSN Musina, Limpop 69.72 99**⇑ *i*P **P 20 20 27.2 +1.1**
MUSN IAmb IAmb 20 20 28.1
comp=Z,168nm,1.2s
**MUSN Musina, Limpop 69.72 99** *i* P **P 20 20 28.3 +2.1**
**MUSN Musina, Limpop 69.72 99** *i* P **P 20 20 28.3 +2.1**
**BKZ Black Stump Fm 70.16 222** P **P 20 20 27.7 -0.9**
BKZ IAmb IAmb 20 20 46.7
comp=Z,35nm,0.7s
**TBI Tubuai 70.31 257** *e*P **P 20 20 27.7 -2.0**
comp=Z,643nm,26.5s
TBI *e*S S 20 29 31.8 -10
comp=Z,2µm,31.2s
TBI *e*LQ LQ 20 38 36.0
comp=Z,2µm,31.0s
TBI *e*LR LR 20 41 47.3
comp=Z,13µm,27.8s
TBI *e*LR LR 20 41 50.6
comp=Z,3µm,27.8s
**RTZ Ruatahuna 70.51 223** IAmb IAmb 20 20 48.7
comp=Z,58nm,0.7s

**MATP Matopo 70.68 97** LR LR 20 47 03.4
comp=Z,507nm,20.7s,baz=234,slow=32
**MATP Matopo 70.68 97** *i* P **P 20 20 34.1 +2.0**
**MATP Matopo 70.68 97** *i* P **P 20 20 35.2 +3.1**
**URZ Urewera 70.79 223** P **P 20 20 30.9 -1.5**
comp=Z,8.2nm,0.6s,baz=302,slow=0.8,SNR=4.9
URZ LR LR 20 46 50.4
comp=Z,476nm,18.6s,baz=242,slow=32
comp=Z,8.2nm,0.6s
**BLWY Bulawayo 70.97 97**⇑ *i*P **P 20 20 34.4 +0.5**
BLWY IAmb IAmb 20 20 35.2
comp=Z,1µm,1.2s
**BLWY Bulawayo 70.97 97** *i* P **P 20 20 36.0 +2.0**
**BLWY Bulawayo 70.97 97** *i* P **P 20 20 35.2 +1.3**
**SDV Santo Domingo 71.08 347** P **P 20 20 33.0 -1.5**
**SDV Santo Domingo 71.08 347** P **P 20 20 33.3 -1.2**
comp=Z,14nm,0.4s,baz=181,slow=9.1,SNR=5.9
SDV LR LR 20 54 46.9
comp=Z,1µm,18.2s,baz=160,slow=38
comp=Z,14nm,0.4s
**TOZ Tahuroa Road 71.79 222** P **P 20 20 38.0 -0.4**
TOZ IAmb IAmb 20 20 39.5
comp=Z,79nm,1.3s
**PCRV Puerto La Cruz 71.87 353** P **P 20 20 41.0 +1.9**
comp=Z,43nm,0.7s,baz=179,slow=2.0,SNR=32
PCRV LR LR 20 53 55.9
comp=Z,1µm,20.6s,slow=37
comp=Z,43nm,0.7s
**CHIPN CHIPINGE 72.79 101** *i* P **P 20 20 47.6 +2.8**
**CHIPN CHIPINGE 72.79 101** *i* P **P 20 20 46.6 +1.8**
**LCR2 La Lucha 2 74.07 333** IAmb IAmb 20 20 54.8
comp=Z,89nm,1.6s
**MOO Moorlands 74.15 199** P **P 20 20 52.2 -0.2**
comp=Z,99nm,1.2s
**KRI Karoi 74.30 96** *e*P **P 20 20 53.4 -0.4**
**KRI Karoi 74.30 96** *i* P **P 20 20 54.8 +1.0**
**KRI Karoi 74.30 96** *i* P **P 20 20 55.5 +1.7**
**JTS Las Juntas de 74.81 333** P **P 20 20 56.7 +0.3**
JTS IAmb IAmb 20 20 59.0
comp=Z,85nm,1.6s
**JTS Las Juntas de 74.81 333** P **P 20 20 55.7 -0.6**
comp=Z,13nm,0.7s,baz=154,slow=2.1,SNR=8.3
comp=Z,13nm,0.7s
**JTS Las Juntas de 74.81 333***c* *i*P **P 20 20 57.3 +0.9**
JTS pmax pmax
comp=Z,48nm,1.5s
**LSZ Lusaka 74.97 94** P **P 20 20 58.4 +0.8**
**LSZ Lusaka 74.97 94**⇑ *i*P **P 20 20 58.9 +1.3**
LSZ IAmb IAmb 20 21 00.3
comp=Z,208nm,0.9s
**LSZ Lusaka 74.97 94** P **P 20 20 58.4 +0.8**
LSZ pmax pmax
comp=Z,155nm,0.9s
**PPT2 Papeete2 75.33 260** *e*PKIKP **P 20 20 59.4 -0.2**
comp=Z,118nm,26.0s
PPT2 *e*S **SKiKP 20 30 28.7 +6.7**
comp=Z,468nm,33.8s
**PPT2 Papeete2 75.33 260** *e*LQ LQ 20 40 59.8
comp=Z,312nm,37.8s
PPT2 *e*LR LR 20 44 07.6
comp=Z,4µm,27.5s
PPT2 *e*LR LR 20 44 09.2
comp=Z,2µm,29.2s
**ACON Acoyapa 76.48 333** IAmb IAmb 20 21 07.1
comp=Z,52nm,1.3s
**RAO Raoul Island 77.21 231** LR LR 20 46 36.3
comp=Z,400nm,21.9s,baz=138,slow=29
**VOI Vohitsoka 77.76 113** IAMs_20 IAMs_20 20 47 02.2
comp=Z,85nm,22.0s
**VOI Vohitsoka 77.76 113** *e*P **P 20 21 14.3 +0.9**
comp=Z,792nm,22.0s
**TAOE Nuku Hiva Isla 78.44 273** *e*PKIKP P 20 21 13.2 -4.0
comp=Z,152nm,25.8s
TAOE *e*S S 20 31 05.0 -8.2
comp=Z,252nm,30.6s
TAOE *e*SS SS 20 36 03.4 -12
comp=Z,88nm,23.9s
TAOE *e*LR LR 20 45 43.9
comp=Z,2µm,27.2s
**SEUS St. Eustatius 79.06 355** IAMs_20 IAMs_20 20 58 16.9
comp=Z,843nm,20.0s
**SNET Serv Nac Est T 79.07 329** IAMs_20 IAMs_20 20 49 27.3
comp=Z,603nm,20.0s
**TOO Toolangi 79.18 199** P **P 20 21 20.6 -0.3**
TOO IAmb IAmb 20 21 22.2
comp=Z,88nm,1.4s
**TOO Toolangi 79.18 199** P **P 20 21 20.9 0.0**
comp=Z,41nm,1.2s
**TOO Toolangi 79.18 199** P **P 20 21 20.6 -0.3**
TOO pmax pmax
comp=Z,88nm,1.4s
**DBIC Dimbokro 79.58 54** P **P 20 21 23.6 +0.3**
DBIC IAmb IAmb 20 21 25.1
comp=Z,89nm,1.4s
**DBIC Dimbokro 79.58 54**⇑ *i*P **P 20 21 23.5 +0.3**
**DBIC Dimbokro 79.58 54** P **P 20 21 23.9 +0.6**
comp=Z,8.1nm,0.5s,baz=175,slow=5.3,SNR=16
DBIC LR LR 20 49 16.1
comp=Z,483nm,21.6s,baz=190,slow=30
comp=Z,8.1nm,0.5s
**SMRT St. Maarten 79.61 355** IAMs_20 IAMs_20 20 56 07.7
comp=Z,629nm,22.0s
**IGPR InterUniversit 79.69 352** IAMs_20 IAMs_20 20 59 15.6
comp=Z,551nm,19.0s
**MLPR Magueyes Islan 79.75 351** IAmb IAmb 20 21 46.6
comp=Z,66nm,0.8s
MLPR IAMs_20 IAMs_20 20 57 10.3
comp=Z,569nm,22.0s
**MTO3 Montecristo 79.79 329** IAmb IAmb 20 21 26.3
comp=Z,95nm,1.5s
MTO3 IAMs_20 IAMs_20 20 49 39.3
comp=Z,731nm,21.0s
**CRPR Cabo Rojo, PR 79.79 351** IAMs_20 IAMs_20 21 03 12.4
comp=Z,814nm,21.0s
**OBIP Obispado Ponce 79.79 352** IAmb IAmb 20 21 24.6
comp=Z,45nm,0.9s
OBIP IAMs_20 IAMs_20 20 56 02.5
comp=Z,622nm,21.0s
**CELP Cerrillos 79.82 352** IAmb IAmb 20 21 25.1
comp=Z,72nm,1.2s
**HUMP Col San Antoni 79.84 353** IAMs_20 IAMs_20 20 57 38.8
comp=Z,579nm,21.0s
**ESQI Esquipulas 79.94 329** IAMs_20 IAMs_20 20 49 45.2
comp=Z,709nm,22.0s
**AGPR Aguadilla, PR 80.25 351** IAMs_20 IAMs_20 21 00 55.5
comp=Z,603nm,19.0s
**ABPO Ambohimpanom 80.49 112** P **P 20 21 29.9 +1.4**
ABPO IAmb IAmb 20 21 31.7
comp=Z,72nm,1.3s
**ABPO Ambohimpanom 80.49 112** *e*P **P 20 21 30.0 +1.6**
ABPO IAmb IAmb 20 21 31.4
comp=Z,72nm,1.3s
**ABPO Ambohimpanom 80.49 112** P **P 20 21 29.9 +1.4**
ABPO pmax pmax
comp=Z,72nm,1.3s
**ARPS Mount Arapiles 80.49 196** P **P 20 21 27.1 -0.9**
comp=Z,33nm,1.2s
**APG El Apazote 80.64 328** P **P 20 21 30.1 +1.0**
comp=Z,1.1nm,0.4s,baz=210,slow=4.5,SNR=15
APG LR LR 20 50 17.1
comp=Z,68nm,21.3s,baz=166,slow=30
**CNB Canberra Magne 80.73 203** P **P 20 21 29.6 +0.2**
comp=Z,64nm,1.2s
**CAN Canberra 80.79 202** IAmb IAmb 20 21 31.7
comp=Z,68nm,1.3s
**CAN Canberra 80.79 202** P **P 20 21 29.4 -0.3**
comp=Z,49nm,1.4s
**OPO Ambohidratompo 80.87 112** LR LR 20 51 21.6
comp=Z,549nm,20.8s,baz=1.5,slow=31
**SDDR Presa de Saban 81.12 347** IAMs_20 IAMs_20 20 58 43.3
comp=Z,828nm,22.0s
**MTDJ Mount Denham 81.18 341** IAMs_20 IAMs_20 21 01 23.1
comp=Z,542nm,21.0s
**YNG Young 81.90 202** P **P 20 21 35.3 -0.2**
comp=Z,184nm,1.2s
**RER Riviere de l'E 82.22 121** P **P 20 21 38.6 +1.2**
**CCIG Comitan 82.29 327** IAmb IAmb 20 21 57.7
comp=Z,29nm,0.7s
CCIG IAMs_20 IAMs_20 20 50 57.2
comp=Z,568nm,20.0s
**CHIV Chivirico 82.73 343** IAMs_20 IAMs_20 20 55 11.9
comp=Z,272nm,21.0s
**CMIG Matias Romero 83.80 325** LR LR 20 51 29.6
comp=Z,653nm,21.5s,baz=160,slow=30
**HTT Hallett 84.15 194** P **P 20 21 46.4 -0.9**
comp=Z,88nm,1.2s

**ARMA Armidale 85.04 206** P **P 20 21 52.0 +0.1**
comp=Z,27nm,1.2s
**CMSA Cobar Meteorol 85.06 200** P **P 20 21 51.2 -0.6**
comp=Z,27nm,1.1s
**BBOO Buckleboo 85.08 192** P **P 20 21 50.5 -1.4**
**BBOO Buckleboo 85.08 192** P **P 20 21 50.7 -1.2**
comp=Z,47nm,0.9s
**TLIG Tlapa 85.29 322** IAmb IAmb 20 21 56.2
comp=Z,70nm,1.4s
TLIG IAMs_20 IAMs_20 20 51 03.6
comp=Z,691nm,22.0s
**STKA Stephens Creek 85.34 197** P **P 20 21 52.3 -0.9**
**STKA Stephens Creek 85.34 197** P **P 20 21 52.5 -0.7**
comp=Z,14nm,0.7s,baz=157,slow=6.3,SNR=22
STKA LR LR 20 56 56.2
comp=Z,821nm,18.8s,baz=163,slow=34
comp=Z,14nm,0.7s
**STKA Stephens Creek 85.34 197***c* *i*P **P 20 21 52.3 -0.9**
**NWAO Narrogin (SRO) 85.59 176** LR LR 20 58 18.4
comp=Z,2µm,21.7s,baz=174,slow=34
**CAMR Camarioca 86.54 339** IAMs_20 IAMs_20 21 03 57.7
comp=Z,761nm,21.0s
**KLBR Kellerberrin 86.94 177** P **P 20 22 00.5 -0.6**
**KMBL Kambalda 87.22 180** P **P 20 22 01.9 -0.6**
**FORT Forrest 87.67 185** P **P 20 22 04.0 -0.6**
**BLDU Ballidu 87.88 176** P **P 20 22 05.0 -0.7**
**TORD Torodi Ar. Bea 88.06 57** P **P 20 22 06.0 -0.5**
TORD IAmb IAmb 20 22 09.2
comp=Z,30nm,1.2s
**TORD Torodi Ar. Bea 88.06 57** P **P 20 22 06.8 +0.2**
comp=Z,8.1nm,0.6s,baz=209,slow=4.3,SNR=119
TORD PP **PP 20 25 30.2 -3.2**
comp=Z,5.0nm,1.1s,baz=211,slow=5.6,SNR=5.6
TORD LR LR 20 53 46.1
comp=Z,885nm,22.0s,baz=196,slow=30
comp=Z,8.1nm,0.6s
**MOIG Morelia 88.07 320** IAMs_20 IAMs_20 20 53 00.8
comp=Z,730nm,22.0s
**MBAR Mbarara 88.97 89***c* *i*P **P 20 22 13.5 +2.3**
MBAR pmax pmax
comp=Z,35nm,1.1s
**DZM Mont Dzumac 89.17 221** *e*P P 20 22 04.5 -7.5
comp=Z,106nm,28.9s
**DZM Mont Dzumac 89.17 221** *e*S **SKSac 20 32 41.2 -0.7**
comp=Z,204nm,27.6s
DZM *e*SS SS 20 38 41.4 -12
comp=Z,291nm,38.1s
**DZM Mont Dzumac 89.17 221** *e*LR LR 20 50 22.7
comp=Z,2µm,25.3s
**DZM Mont Dzumac 89.17 221** P **P 20 22 10.6 -1.4**
comp=Z,7.9nm,0.8s,baz=182,slow=5.5,SNR=3.1
comp=Z,7.9nm,0.8s
**MSVF Nonsavu 89.19 232** LR LR 20 54 21.9
comp=Z,229nm,19.8s,baz=168,slow=30
**061Z Ochoppi 89.20 340** IAMs_20 IAMs_20 21 05 21.3
comp=Z,507nm,20.0s
**QLP Quilpie 90.14 200** P **P 20 22 15.9 -0.5**
**060A Indiantown 90.26 340** IAMs_20 IAMs_20 21 05 00.3
comp=Z,479nm,21.0s
**KIBK Kibwezi 90.92 97** IAmb IAmb 20 22 24.8
comp=Z,35nm,1.3s
**ZAIG Zacatecas 91.40 320** P **P 20 22 23.5 +1.2**
ZAIG IAmb IAmb 20 22 25.9
comp=Z,36nm,1.3s
**DWPF Disney Wildern 91.49 340** IAMs_20 IAMs_20 21 04 41.8
comp=Z,442nm,22.0s
**KMBO Kilima Mbogo 91.60 95** P **P 20 22 24.0 +0.5**
KMBO IAmb IAmb 20 22 27.5
comp=Z,18nm,1.4s
**KMBO Kilima Mbogo 91.60 95** *e*P **P 20 22 26.5 +2.9**
KMBO IAmb IAmb 20 22 27.2
comp=Z,65nm,1.4s
**KMBO Kilima Mbogo 91.60 95** P **P 20 22 26.7 +3.1**
comp=Z,4.8nm,1.0s,baz=227,slow=3.0,SNR=11
KMBO LR LR 21 00 07.5
comp=Z,856nm,20.4s,baz=206,slow=33
**BBSR BB Station 93.93 354** IAMs_20 IAMs_20 21 03 54.4
comp=Z,431nm,22.0s
**553A Crawfordville 94.04 337** IAMs_20 IAMs_20 21 08 31.1
comp=Z,668nm,20.0s
**456A Hilliard 94.14 340** IAMs_20 IAMs_20 21 07 22.1
comp=Z,613nm,21.0s
**ASAR Alice Springs 94.34 191** P **P 20 22 33.5 -2.3**
**ASAR Alice Springs 94.34 191** P **P 20 22 34.3 -1.6**
comp=Z,7.5nm,0.5s,baz=172,slow=4.5,SNR=68
ASAR PP **PP 20 26 21.3 -0.7**
comp=Z,5.5nm,1.1s,baz=176,slow=7.9,SNR=11
ASAR S SKSac 20 33 01.4 -10
comp=Z,1.1nm,0.9s,baz=178,slow=7.3,SNR=5.4
ASAR PKKPbc **PKKPbc 20 39 33.6 +1.0**
comp=Z,0.6nm,0.5s,baz=352,slow=2.2,SNR=11
ASAR LR LR 21 03 13.9
comp=Z,394nm,21.8s,baz=186,slow=34
comp=Z,7.5nm,0.5s
**451A Vernon 94.70 336** IAMs_20 IAMs_20 21 07 06.9
comp=Z,572nm,22.0s
**LPIG La Paz 95.17 314** LR LR 20 56 53.0
comp=Z,99nm,20.7s,baz=158,slow=30
**352A Blakely 95.39 337** IAMs_20 IAMs_20 21 10 14.1
comp=Z,408nm,21.0s
**255A Hazlehurst 95.39 339** IAMs_20 IAMs_20 21 08 19.2
comp=Z,678nm,22.0s
**833A Chaparral WMA, 95.71 324** P **P 20 22 42.3 +0.7**
baz=162
**250A Grady 96.12 336** IAMs_20 IAMs_20 21 10 25.6
comp=Z,592nm,21.0s
**CTA Charters Tower 96.14 203** P **P 20 22 41.7 -2.4**
comp=Z,0.6nm,1.1s,baz=172,slow=8.3,SNR=4.1
CTA LR LR 20 59 20.1
comp=Z,40nm,21.9s,baz=164,slow=31
**154A Montrose 96.17 339** IAMs_20 IAMs_20 21 08 56.8
comp=Z,569nm,21.0s
**NHSC New Hope 96.18 342** IAMs_20 IAMs_20 21 07 41.2
comp=Z,402nm,20.0s
**HKT Hockley 96.30 328**⇓ *i*P **P 20 22 45.1 +0.9**
HKT pmax pmax
comp=Z,14nm,1.3s
**152A Waverly Hall 96.51 338** IAMs_20 IAMs_20 21 12 59.8
comp=Z,350nm,19.0s
**Y60A Bolivia 96.78 343** IAMs_20 IAMs_20 21 07 35.1
comp=Z,505nm,22.0s
**Y58A Scranton 96.89 342** IAMs_20 IAMs_20 21 07 38.9
comp=Z,466nm,22.0s
**GOGA Godfrey 97.01 339** IAMs_20 IAMs_20 21 09 21.1
comp=Z,634nm,21.0s
**Y57A Sumter 97.11 342** IAMs_20 IAMs_20 21 08 36.7
comp=Z,380nm,20.0s
**X58A Rowland 97.48 343** IAMs_20 IAMs_20 21 07 51.6
comp=Z,530nm,22.0s
**JSC Jenkinsville 97.50 341** IAMs_20 IAMs_20 21 08 03.1
comp=Z,590nm,22.0s
**Y52A Lilburn 97.56 339** IAMs_20 IAMs_20 21 09 51.5
comp=Z,631nm,21.0s
**HODGE Hodges 97.61 340** IAMs_20 IAMs_20 21 09 11.0
comp=Z,590nm,22.0s
**BIRD Birdtown, Kers 97.73 342** IAMs_20 IAMs_20 21 08 53.3
comp=Z,482nm,22.0s
**TXAR Lajitas Array 97.89 321** P **P 20 22 51.7 +0.1**
comp=Z,0.6nm,0.4s,baz=168,slow=7.2,SNR=6.4
TXAR PKKPbc **PKKPbc 20 39 25.0 +0.9**
comp=Z,2.5nm,0.8s,baz=258,slow=1.7,SNR=9.9
TXAR LR LR 20 59 26.0
comp=Z,216nm,21.6s,baz=138,slow=31
comp=Z,0.6nm,0.4s
**W59A Clinton 97.96 343** IAMs_20 IAMs_20 21 07 57.2
comp=Z,640nm,22.0s
**Y49A Blount Mountai 97.98 337** IAMs_20 IAMs_20 21 10 47.7
comp=Z,567nm,22.0s
**WB2 Warramunga Arr 97.98 192** IAmb IAmb 20 22 51.4
comp=Z,8.6nm,0.7s
**WRA Warramunga Arr 97.98 192** P **P 20 22 50.0 -2.4**
**WRA Warramunga Arr 97.98 192** P **P 20 22 50.9 -1.5**
comp=Z,5.3nm,0.6s,baz=177,slow=4.1,SNR=83
WRA PP **PP 20 26 46.8 -3.4**
comp=Z,2.2nm,1.0s,baz=183,slow=6.1,SNR=5.1
WRA S **SKSac 20 33 21.1 -9.0**
comp=Z,0.9nm,0.8s,baz=197,slow=6.2,SNR=4.3
WRA PKKPbc **PKKPbc 20 39 23.8 +0.9**
comp=Z,0.2nm,0.4s,baz=351,slow=2.8,SNR=7.3
WRA LR LR 21 03 20.4
comp=Z,870nm,21.9s,baz=131,slow=33
comp=Z,5.3nm,0.6s
**WRAB Tennant Creek 97.99 192** P **P 20 22 50.6 -1.9**
WRAB IAmb IAmb 20 22 51.4
comp=Z,9.1nm,0.7s
**WRAB Tennant Creek 97.99 192**⇑ *i*P **P 20 22 50.5 -1.9**
WRAB pmax pmax
comp=Z,8.0nm,0.6s

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PAULI | **Pauline** | **98.12** | **341** | IAMs_20 | IAMs_20 | 21 08 36.4 | | | | | |
| | comp=Z,555nm,22.0s | | | | | | | | | | |
| WB0 | **Warramunga Arr** | **98.15** | **192** | IAmb | IAmb | 20 22 52.0 | | | | | |
| | comp=Z,8.8nm,0.7s | | | | | | | | | | |
| W57A | **Gilead** | **98.16** | **342** | IAMs_20 | IAMs_20 | 21 08 14.6 | | | | | |
| | comp=Z,439nm,22.0s | | | | | | | | | | |
| V61A | **Roper** | **98.33** | **345** | IAMs_20 | IAMs_20 | 21 07 21.1 | | | | | |
| | comp=Z,405nm,22.0s | | | | | | | | | | |
| KMSC | **Kings Mountain** | **98.36** | **341** | IAMs_20 | IAMs_20 | 21 12 19.7 | | | | | |
| | comp=Z,403nm,19.0s | | | | | | | | | | |
| X51A | **Calhoun** | **98.38** | **338** | IAMs_20 | IAMs_20 | 21 10 31.3 | | | | | |
| | comp=Z,482nm,20.0s | | | | | | | | | | |
| BG3 | **Lake Jocassee** | **98.47** | **340** | IAMs_20 | IAMs_20 | 21 10 01.6 | | | | | |
| | comp=Z,520nm,22.0s | | | | | | | | | | |
| V58A | **Windy Hill, Pi** | **98.67** | **343** | IAMs_20 | IAMs_20 | 21 08 55.0 | | | | | |
| | comp=Z,513nm,21.0s | | | | | | | | | | |
| X48A | **Hartselle** | **98.67** | **336** | IAMs_20 | IAMs_20 | 21 11 00.1 | | | | | |
| | comp=Z,591nm,22.0s | | | | | | | | | | |
| V55A | **Taylorsville** | **99.03** | **341** | IAMs_20 | IAMs_20 | 21 09 43.6 | | | | | |
| | comp=Z,429nm,21.0s | | | | | | | | | | |
| V53A | **Saluda** | **99.11** | **340** | IAmb | IAmb | 20 25 05.1 | | | | | |
| | comp=Z,9.3nm,0.6s | | | | | | | | | | |
| V53A | | | | IAMs_20 | IAMs_20 | 21 09 33.6 | | | | | |
| | comp=Z,564nm,22.0s | | | | | | | | | | |
| SWET | **Sewanee** | **99.21** | **337** | IAMs_20 | IAMs_20 | 21 11 14.2 | | | | | |
| | comp=Z,366nm,20.0s | | | | | | | | | | |
| WLAR | **White Oak Lake** | **99.22** | **331** | IAMs_20 | IAMs_20 | 21 16 03.5 | | | | | |
| | comp=Z,374nm,18.0s | | | | | | | | | | |
| TKL | **Tuckaleechee C** | **99.26** | **339** | LR | LR | 21 10 32.7 | | | | | |
| | comp=Z,502nm,21.8s,baz=152,slow=37 | | | | | | | | | | |
| U56A | **King** | **99.39** | **342** | IAMs_20 | IAMs_20 | 21 09 02.2 | | | | | |
| | comp=Z,568nm,22.0s | | | | | | | | | | |
| T59A | **Double "B" Far** | **99.62** | **344** | IAMs_20 | IAMs_20 | 21 08 25.1 | | | | | |
| | comp=Z,561nm,22.0s | | | | | | | | | | |
| U54A | **Nelsons Funny** | **99.78** | **341** | IAMs_20 | IAMs_20 | 21 10 29.5 | | | | | |
| | comp=Z,391nm,22.0s | | | | | | | | | | |
| TZTN | **Tazewell** | **100.08** | **339** | IAMs_20 | IAMs_20 | 21 10 05.4 | | | | | |
| | comp=Z,515nm,21.0s | | | | | | | | | | |
| CLTN | **Cedars of Leba** | **100.13** | **337** | IAMs_20 | IAMs_20 | 21 11 43.7 | | | | | |
| | comp=Z,495nm,21.0s | | | | | | | | | | |
| BLA | **Blacksburg** | **100.25** | **342** | IAMs_20 | IAMs_20 | 21 09 25.8 | | | | | |
| | comp=Z,529nm,22.0s | | | | | | | | | | |
| WVT | **Waverly** | **100.45** | **336** | IAMs_20 | IAMs_20 | 21 12 57.2 | | | | | |
| | comp=Z,491nm,21.0s | | | | | | | | | | |
| S57A | **Dark Hollow, R** | **100.58** | **343** | IAMs_20 | IAMs_20 | 21 08 47.6 | | | | | |
| | comp=Z,626nm,22.0s | | | | | | | | | | |
| R58B | **Mineral** | **100.64** | **344** | IAMs_20 | IAMs_20 | 21 08 55.1 | | | | | |
| | comp=Z,584nm,22.0s | | | | | | | | | | |
| R61A | **Willards** | **100.69** | **346** | IAMs_20 | IAMs_20 | 21 12 24.5 | | | | | |
| | comp=Z,449nm,21.0s | | | | | | | | | | |
| CBN | **Corbin Frederi** | **100.81** | **345** | IAMs_20 | IAMs_20 | 21 08 46.7 | | | | | |
| | comp=Z,473nm,21.0s | | | | | | | | | | |
| UTMT | **University of** | **100.86** | **335** | IAMs_20 | IAMs_20 | 21 10 18.2 | | | | | |
| | comp=Z,497nm,21.0s | | | | | | | | | | |
| GLAT | **Glass** | **100.88** | **335** | IAMs_20 | IAMs_20 | 21 10 52.4 | | | | | |
| | comp=Z,371nm,20.0s | | | | | | | | | | |
| S54A | **Dingess, Beckl** | **100.96** | **342** | IAMs_20 | IAMs_20 | 21 09 52.6 | | | | | |
| | comp=Z,527nm,22.0s | | | | | | | | | | |
| FURI | **Furi** | **101.03** | **92** | IAMs_20 | IAMs_20 | 21 04 41.7 | | | | | |
| | comp=Z,610nm,22.0s | | | | | | | | | | |
| HICK | **Hickman** | **101.13** | **335** | IAMs_20 | IAMs_20 | 21 11 34.1 | | | | | |
| | comp=Z,450nm,22.0s | | | | | | | | | | |
| T47A | **Sharon Grove** | **101.15** | **337** | IAMs_20 | IAMs_20 | 21 12 14.6 | | | | | |
| | comp=Z,509nm,21.0s | | | | | | | | | | |
| S51A | **Beattyville** | **101.16** | **340** | IAMs_20 | IAMs_20 | 21 10 35.0 | | | | | |
| | comp=Z,475nm,21.0s | | | | | | | | | | |
| R55A | **Marlinton** | **101.25** | **343** | IAMs_20 | IAMs_20 | 21 10 11.5 | | | | | |
| | comp=Z,612nm,21.0s | | | | | | | | | | |
| PARMO | **Parma** | **101.35** | **335** | IAMs_20 | IAMs_20 | 21 13 44.0 | | | | | |
| | comp=Z,349nm,21.0s | | | | | | | | | | |
| T45A | **Paducah** | **101.47** | **336** | IAMs_20 | IAMs_20 | 21 13 39.2 | | | | | |
| | comp=Z,445nm,21.0s | | | | | | | | | | |
| Q56A | **Snyder Ridge** | **101.87** | **343** | IAMs_20 | IAMs_20 | 21 09 37.7 | | | | | |
| | comp=Z,530nm,22.0s | | | | | | | | | | |
| R50A | **Paris** | **101.91** | **339** | IAMs_20 | IAMs_20 | 21 09 49.6 | | | | | |
| | comp=Z,472nm,22.0s | | | | | | | | | | |
| P61A | **Hammonton** | **101.96** | **347** | IAMs_20 | IAMs_20 | 21 10 12.1 | | | | | |
| | comp=Z,356nm,21.0s | | | | | | | | | | |
| Q54A | **Coxs Mills** | **102.05** | **342** | IAMs_20 | IAMs_20 | 21 10 50.4 | | | | | |
| | comp=Z,640nm,22.0s | | | | | | | | | | |
| R49A | **Shelbyville** | **102.06** | **339** | IAMs_20 | IAMs_20 | 21 11 45.9 | | | | | |
| | comp=Z,385nm,22.0s | | | | | | | | | | |
| 121A | **Cookes Peak, D** | **102.13** | **319** | IAMs_20 | IAMs_20 | 21 01 23.6 | | | | | |
| | comp=Z,576nm,21.0s | | | | | | | | | | |
| P57A | **Homestead Farm** | **102.15** | **344** | IAMs_20 | IAMs_20 | 21 09 38.2 | | | | | |
| | comp=Z,427nm,22.0s | | | | | | | | | | |
| Q52A | **Bidwell** | **102.24** | **341** | IAMs_20 | IAMs_20 | 21 11 09.6 | | | | | |
| | comp=Z,428nm,22.0s | | | | | | | | | | |
| S44A | **Carbondale** | **102.25** | **335** | IAMs_20 | IAMs_20 | 21 13 53.7 | | | | | |
| | comp=Z,519nm,22.0s | | | | | | | | | | |
| SIUC | **Southern Illin** | **102.26** | **335** | IAMs_20 | IAMs_20 | 21 13 54.0 | | | | | |
| | comp=Z,448nm,20.0s | | | | | | | | | | |
| OK031 | **S. Brethren Rd** | **102.27** | **329** | IAMs_20 | IAMs_20 | 21 09 19.3 | | | | | |
| | comp=Z,579nm,20.0s | | | | | | | | | | |
| MCWV | **Mont Chateau** | **102.57** | **343** | IAMs_20 | IAMs_20 | 21 10 25.2 | | | | | |
| | comp=Z,523nm,22.0s | | | | | | | | | | |
| FVM | **French Village** | **102.76** | **334** | IAMs_20 | IAMs_20 | 21 13 45.3 | | | | | |
| | comp=Z,444nm,21.0s | | | | | | | | | | |
| P52A | **Corning** | **102.88** | **341** | IAMs_20 | IAMs_20 | 21 11 13.2 | | | | | |
| | comp=Z,617nm,22.0s | | | | | | | | | | |
| N62A | **Caumsett State** | **103.07** | **348** | IAMs_20 | IAMs_20 | 21 08 47.3 | | | | | |
| | comp=Z,359nm,22.0s | | | | | | | | | | |
| BLO | **Bloomington** | **103.16** | **338** | IAMs_20 | IAMs_20 | 21 13 34.9 | | | | | |
| | comp=Z,540nm,21.0s | | | | | | | | | | |
| P49A | **Miami Univ. Ec** | **103.20** | **339** | IAMs_20 | IAMs_20 | 21 11 48.7 | | | | | |
| | comp=Z,398nm,21.0s | | | | | | | | | | |
| AVE | **Averroes** | **103.21** | **42** | IAMs_20 | IAMs_20 | 21 03 23.3 | | | | | |
| | comp=Z,382nm,20.0s | | | | | | | | | | |
| SSPA | **Standing Stone** | **103.27** | **345** | IAMs_20 | IAMs_20 | 21 12 26.8 | | | | | |
| | comp=Z,363nm,20.0s | | | | | | | | | | |
| Y22D | **IRIS PASSCAL I** | **103.29** | **320** | IAMs_20 | IAMs_20 | 21 01 42.2 | | | | | |
| | comp=Z,347nm,21.0s | | | | | | | | | | |
| O53A | **New Philadelph** | **103.34** | **342** | IAMs_20 | IAMs_20 | 21 11 06.6 | | | | | |
| | comp=Z,492nm,22.0s | | | | | | | | | | |
| Q44A | **Meyer Farm, Va** | **103.37** | **336** | IAMs_20 | IAMs_20 | 21 14 09.2 | | | | | |
| | comp=Z,346nm,20.0s | | | | | | | | | | |
| M63A | **Gales Ferry** | **103.41** | **349** | IAMs_20 | IAMs_20 | 21 09 53.2 | | | | | |
| | comp=Z,355nm,22.0s | | | | | | | | | | |
| OK032 | **Salt Plains WL** | **103.42** | **328** | IAMs_20 | IAMs_20 | 21 00 08.8 | | | | | |
| | comp=Z,530nm,22.0s | | | | | | | | | | |
| ACSO | **Alum Creek Sta** | **103.59** | **341** | IAMs_20 | IAMs_20 | 21 11 39.2 | | | | | |
| | comp=Z,498nm,22.0s | | | | | | | | | | |
| O49A | **Covington** | **103.77** | **340** | IAMs_20 | IAMs_20 | 21 14 22.9 | | | | | |
| | comp=Z,338nm,20.0s | | | | | | | | | | |
| UCCT | **U. Connecticut** | **103.81** | **349** | IAMs_20 | IAMs_20 | 21 09 28.9 | | | | | |
| | comp=Z,459nm,22.0s | | | | | | | | | | |
| L64A | **Middleborough** | **103.83** | **350** | IAMs_20 | IAMs_20 | 21 09 34.5 | | | | | |
| | comp=Z,540nm,21.0s | | | | | | | | | | |
| M57A | **Sunshine Farm,** | **103.87** | **345** | IAMs_20 | IAMs_20 | 21 14 15.5 | | | | | |
| | comp=Z,333nm,20.0s | | | | | | | | | | |
| KSPA | **Keystone Colle** | **103.93** | **346** | IAMs_20 | IAMs_20 | 21 11 47.0 | | | | | |
| | comp=Z,382nm,21.0s | | | | | | | | | | |
| ANMO | **Albuquerque** | **103.96** | **321** | IAMs_20 | IAMs_20 | 21 03 00.9 | | | | | |
| | comp=Z,441nm,21.0s | | | | | | | | | | |
| WES | **Weston** | **104.32** | **350** | IAMs_20 | IAMs_20 | 21 09 50.3 | | | | | |
| | comp=Z,584nm,22.0s | | | | | | | | | | |
| GUVIX | **Guadalupe Vict** | **104.33** | **313** | IAMs_20 | IAMs_20 | 21 00 38.7 | | | | | |
| | comp=Z,374nm,22.0s | | | | | | | | | | |
| M53A | **WI Miller and** | **104.43** | **343** | IAMs_20 | IAMs_20 | 21 11 22.4 | | | | | |
| | comp=Z,607nm,22.0s | | | | | | | | | | |
| SFIN | **Lafayette** | **104.43** | **338** | IAMs_20 | IAMs_20 | 21 13 16.5 | | | | | |
| | comp=Z,337nm,21.0s | | | | | | | | | | |
| N49A | **Columbus Grove** | **104.46** | **340** | IAMs_20 | IAMs_20 | 21 12 46.1 | | | | | |
| | comp=Z,374nm,21.0s | | | | | | | | | | |
| L59A | **Walton** | **104.48** | **347** | IAMs_20 | IAMs_20 | 21 09 13.5 | | | | | |
| | comp=Z,408nm,22.0s | | | | | | | | | | |
| L61B | **Northampton** | **104.50** | **349** | IAMs_20 | IAMs_20 | 21 10 03.2 | | | | | |
| | comp=Z,428nm,22.0s | | | | | | | | | | |
| ALLY | **Alegheny Colle** | **104.56** | **343** | IAMs_20 | IAMs_20 | 21 09 29.9 | | | | | |
| | comp=Z,596nm,21.0s | | | | | | | | | | |
| BINY | **Binghamton** | **104.59** | **346** | IAMs_20 | IAMs_20 | 21 14 21.5 | | | | | |
| | comp=Z,347nm,20.0s | | | | | | | | | | |
| P40A | **Paris** | **104.59** | **334** | IAMs_20 | IAMs_20 | 21 15 18.6 | | | | | |
| | comp=Z,392nm,21.0s | | | | | | | | | | |
| M52A | **Chesterland** | **104.63** | **342** | IAMs_20 | IAMs_20 | 21 10 57.6 | | | | | |
| | comp=Z,621nm,22.0s | | | | | | | | | | |
| N47A | **Urbana** | **104.67** | **339** | IAMs_20 | IAMs_20 | 21 12 43.8 | | | | | |
| | comp=Z,331nm,21.0s | | | | | | | | | | |
| K62A | **Royalston** | **104.67** | **349** | IAMs_20 | IAMs_20 | 21 10 17.8 | | | | | |
| | comp=Z,483nm,21.0s | | | | | | | | | | |
| M50A | **Fremont** | **104.75** | **341** | IAMs_20 | IAMs_20 | 21 12 09.8 | | | | | |
| | comp=Z,564nm,22.0s | | | | | | | | | | |
| ERPA | **Erie** | **105.00** | **343** | IAMs_20 | IAMs_20 | 21 11 09.5 | | | | | |
| | comp=Z,459nm,22.0s | | | | | | | | | | |
| W18A | **Petrified Fore** | **105.13** | **318** | IAMs_20 | IAMs_20 | 21 04 19.8 | | | | | |
| | comp=Z,359nm,22.0s | | | | | | | | | | |
| K57A | **Scipio Center** | **105.17** | **346** | IAMs_20 | IAMs_20 | 21 15 10.0 | | | | | |
| | comp=Z,348nm,20.0s | | | | | | | | | | |
| J61A | **Chester** | **105.38** | **349** | IAMs_20 | IAMs_20 | 21 10 27.4 | | | | | |
| | comp=Z,573nm,22.0s | | | | | | | | | | |
| N41A | **Harden Midland** | **105.47** | **335** | IAMs_20 | IAMs_20 | 21 12 38.0 | | | | | |
| | comp=Z,400nm,22.0s | | | | | | | | | | |
| L48A | **N Adams** | **105.50** | **340** | IAMs_20 | IAMs_20 | 21 13 24.6 | | | | | |
| | comp=Z,560nm,21.0s | | | | | | | | | | |
| HNH | **Hanover** | **105.71** | **349** | IAMs_20 | IAMs_20 | 21 10 45.2 | | | | | |
| | comp=Z,580nm,22.0s | | | | | | | | | | |
| J56A | **Wolcott** | **105.75** | **346** | IAMs_20 | IAMs_20 | 21 15 38.2 | | | | | |
| | comp=Z,358nm,20.0s | | | | | | | | | | |
| I62A | **Tamworth** | **105.80** | **350** | IAMs_20 | IAMs_20 | 21 09 21.5 | | | | | |
| | comp=Z,474nm,22.0s | | | | | | | | | | |
| J55A | **Hilton** | **105.85** | **345** | IAMs_20 | IAMs_20 | 21 13 05.0 | | | | | |
| | comp=Z,312nm,20.0s | | | | | | | | | | |
| L46A | **Eue Claire** | **105.88** | **339** | IAMs_20 | IAMs_20 | 21 13 08.7 | | | | | |
| | comp=Z,432nm,22.0s | | | | | | | | | | |
| J54A | **Appleton** | **105.96** | **345** | IAMs_20 | IAMs_20 | 21 08 58.9 | | | | | |
| | comp=Z,352nm,22.0s | | | | | | | | | | |
| K50A | **Casco** | **106.03** | **342** | IAMs_20 | IAMs_20 | 21 13 04.6 | | | | | |
| | comp=Z,566nm,22.0s | | | | | | | | | | |
| S22A | **4UR Ranch, Cre** | **106.67** | **322** | IAMs_20 | IAMs_20 | 21 04 39.6 | | | | | |
| | comp=Z,404nm,20.0s | | | | | | | | | | |
| GGN | **Saint George** | **106.74** | **354** | IAMs_20 | IAMs_20 | 21 12 30.3 | | | | | |
| | comp=Z,338nm,21.0s | | | | | | | | | | |
| GBN | **Guysborough** | **106.83** | **358** | IAMs_20 | IAMs_20 | 21 10 59.7 | | | | | |
| | comp=Z,526nm,21.0s | | | | | | | | | | |
| LONY | **Lake Ozonia** | **106.83** | **348** | IAMs_20 | IAMs_20 | 21 14 42.9 | | | | | |
| | comp=Z,335nm,21.0s | | | | | | | | | | |
| L40A | **Anamosa** | **106.85** | **335** | IAMs_20 | IAMs_20 | 21 16 10.5 | | | | | |
| | comp=Z,549nm,21.0s | | | | | | | | | | |
| K43A | **Burlington** | **106.91** | **337** | IAMs_20 | IAMs_20 | 21 17 57.1 | | | | | |
| | comp=Z,416nm,20.0s | | | | | | | | | | |
| G62A | **West of Eustis** | **107.07** | **351** | IAMs_20 | IAMs_20 | 21 12 06.2 | | | | | |
| | comp=Z,531nm,22.0s | | | | | | | | | | |
| MESJ | **Messejana** | **107.15** | **39** | *e*PP | PP | **20 28 00.8** | **+0.9** | | | | |
| MESJ | | | | *e*SS | SS | 20 43 06.4 | -1.0 | | | | |
| LMN | **Caledonia Moun** | **107.37** | **355** | IAMs_20 | IAMs_20 | 21 12 52.2 | | | | | |
| | comp=Z,362nm,21.0s | | | | | | | | | | |
| F63A | **Nahmakanta, Br** | **107.45** | **352** | IAMs_20 | IAMs_20 | 21 10 06.3 | | | | | |
| | comp=Z,427nm,22.0s | | | | | | | | | | |
| I45A | **Fountain** | **107.83** | **339** | IAMs_20 | IAMs_20 | 21 17 06.4 | | | | | |
| | comp=Z,454nm,20.0s | | | | | | | | | | |
| I42A | **Draeger Farm,** | **108.17** | **337** | IAMs_20 | IAMs_20 | 21 18 34.3 | | | | | |
| | comp=Z,363nm,21.0s | | | | | | | | | | |
| SZCU | **Shurtz Canyon** | **108.48** | **317** | IAMs_20 | IAMs_20 | 21 14 28.4 | | | | | |
| | comp=Z,489nm,20.0s | | | | | | | | | | |
| I40A | **Norwalk** | **108.49** | **336** | IAMs_20 | IAMs_20 | 21 17 11.9 | | | | | |
| | comp=Z,482nm,20.0s | | | | | | | | | | |
| H43A | **Windswept, Lux** | **108.52** | **338** | IAMs_20 | IAMs_20 | 21 15 19.6 | | | | | |
| | comp=Z,406nm,21.0s | | | | | | | | | | |
| MTPU | **Mount Pierson** | **108.59** | **318** | IAMs_20 | IAMs_20 | 21 06 11.4 | | | | | |
| | comp=Z,360nm,21.0s | | | | | | | | | | |
| TARA | **Tarawa** | **108.62** | **235** | IAMs_20 | IAMs_20 | 21 01 46.0 | | | | | |
| | comp=Z,395nm,19.0s | | | | | | | | | | |
| I37A | **Lemond, Wasseca** | **109.17** | **334** | IAMs_20 | IAMs_20 | 21 17 27.9 | | | | | |
| | comp=Z,480nm,22.0s | | | | | | | | | | |
| TCRU | **Three Creeks R** | **109.19** | **318** | IAMs_20 | IAMs_20 | 21 06 23.4 | | | | | |
| | comp=Z,455nm,22.0s | | | | | | | | | | |
| COI | **Coimbra** | **109.28** | **38** | IAMs_20 | IAMs_20 | 21 05 13.0 | | | | | |
| | comp=Z,386nm,22.0s | | | | | | | | | | |
| N23A | **Red Feather La** | **109.33** | **324** | P | **PKiKP** | **20 27 45.9** | **0.0** | | | | |
| | baz=158 | | | | | | | | | | |
| LMQ | **La Malbaie** | **109.37** | **351** | IAMs_20 | IAMs_20 | 21 12 26.1 | | | | | |
| | comp=Z,436nm,22.0s | | | | | | | | | | |
| ECSD | **EROS Data Cent** | **109.61** | **331** | IAMs_20 | IAMs_20 | 21 18 27.4 | | | | | |
| | comp=Z,324nm,20.0s | | | | | | | | | | |
| MTE | **Manteigas** | **109.71** | **39** | IAMs_20 | IAMs_20 | 21 06 39.4 | | | | | |
| | comp=Z,326nm,22.0s | | | | | | | | | | |
| G40A | **Rib Lake** | **109.74** | **337** | IAMs_20 | IAMs_20 | 21 15 59.8 | | | | | |
| | comp=Z,353nm,22.0s | | | | | | | | | | |
| E46A | **Sault Ste Mari** | **109.79** | **341** | IAMs_20 | IAMs_20 | 21 14 19.2 | | | | | |
| | comp=Z,419nm,22.0s | | | | | | | | | | |
| F42A | **Maple Grove Fa** | **109.83** | **338** | IAMs_20 | IAMs_20 | 21 18 41.4 | | | | | |
| | comp=Z,379nm,20.0s | | | | | | | | | | |
| LDAQ | **Lac Daran** | **109.86** | **351** | IAMs_20 | IAMs_20 | 21 13 04.8 | | | | | |
| | comp=Z,491nm,20.0s | | | | | | | | | | |
| R11B | **Troy Canyon, C** | **109.98** | **315** | P | **PKiKP** | **20 27 47.4** | **+0.3** | | | | |
| | baz=155 | | | | | | | | | | |
| RDMU | **Red Mountain** | **110.09** | **321** | IAMs_20 | IAMs_20 | 21 05 51.1 | | | | | |
| | comp=Z,417nm,21.0s | | | | | | | | | | |
| ESDC | **Sonseca Array** | **110.15** | **42** | PKiKP | **PKiKP** | **20 27 46.4** | **-0.8** | | | | |
| | comp=Z,0.8nm,0.9s,baz=69,slow=1.4,SNR=5.2 | | | | | | | | | | |
| ESDC | | | | PP | **PP** | **20 28 20.5** | **-1.4** | | | | |
| | comp=Z,3.5nm,1.3s,baz=236,slow=5.8,SNR=4.4 | | | | | | | | | | |
| COWI | **Conover** | **110.34** | **338** | IAMs_20 | IAMs_20 | 21 16 05.8 | | | | | |
| | comp=Z,362nm,22.0s | | | | | | | | | | |
| VLDQ | **Val d'Or** | **110.59** | **346** | IAMs_20 | IAMs_20 | 21 15 21.3 | | | | | |
| | comp=Z,307nm,21.0s | | | | | | | | | | |
| NVAR | **Mina Array Bea** | **110.99** | **313** | PKiKP | **PKiKP** | **20 27 48.9** | **-0.1** | | | | |
| | comp=Z,0.8nm,0.8s,baz=149,slow=4.1,SNR=5.5 | | | | | | | | | | |
| NVAR | | | | PKKPbc | **PKKPbc** | **20 38 46.4** | **+1.6** | | | | |
| | comp=Z,1.0nm,0.7s,baz=312,slow=2.7,SNR=8.8 | | | | | | | | | | |
| K22A | **Casper** | **111.12** | **324** | IAMs_20 | IAMs_20 | 21 13 06.3 | | | | | |
| | comp=Z,315nm,22.0s | | | | | | | | | | |
| ICQ | **Pointe Anglais** | **111.15** | **354** | IAMs_20 | IAMs_20 | 21 14 29.1 | | | | | |
| | comp=Z,312nm,20.0s | | | | | | | | | | |
| E38A | **The Farm, Brul** | **111.28** | **336** | IAMs_20 | IAMs_20 | 21 16 47.7 | | | | | |
| | comp=Z,419nm,22.0s | | | | | | | | | | |
| PDAR | **Pinedale Array** | **112.10** | **322** | PKiKP | **PKiKP** | **20 27 49.5** | **-1.5** | | | | |
| | comp=Z,0.3nm,0.5s,baz=151,slow=4.7,SNR=4.7 | | | | | | | | | | |
| PDAR | | | | PP | **PP** | **20 28 35.9** | **-0.1** | | | | |
| | comp=Z,0.6nm,0.7s,baz=165,slow=6.2,SNR=4.6 | | | | | | | | | | |
| PDAR | | | | PKKPbc | **PKKPbc** | **20 38 42.1** | **+0.9** | | | | |
| | comp=Z,1.0nm,0.7s,baz=17,slow=1.5,SNR=11 | | | | | | | | | | |
| EYMN | **Ely** | **112.56** | **336** | IAMs_20 | IAMs_20 | 21 17 33.5 | | | | | |
| | comp=Z,440nm,22.0s | | | | | | | | | | |
| E28A | **Huff** | **113.25** | **330** | IAMs_20 | IAMs_20 | 21 20 41.6 | | | | | |
| | comp=Z,504nm,21.0s | | | | | | | | | | |
| YPP | **Pitchstone Pla** | **113.84** | **321** | IAMs_20 | IAMs_20 | 21 09 37.4 | | | | | |
| | comp=Z,318nm,22.0s | | | | | | | | | | |
| LKWY | **Lake** | **113.99** | **322** | IAMs_20 | IAMs_20 | 21 09 53.4 | | | | | |
| | comp=Z,301nm,20.0s | | | | | | | | | | |
| YMP | **Mirror Lake Pl** | **114.08** | **322** | IAMs_20 | IAMs_20 | 21 08 48.7 | | | | | |
| | comp=Z,384nm,21.0s | | | | | | | | | | |
| MDND | **Maddock** | **114.18** | **331** | IAMs_20 | IAMs_20 | 21 19 04.4 | | | | | |
| | comp=Z,388nm,22.0s | | | | | | | | | | |
| YNR | **Norris Junctio** | **114.21** | **322** | IAMs_20 | IAMs_20 | 21 09 39.2 | | | | | |
| | comp=Z,324nm,20.0s | | | | | | | | | | |
| YHL | **Hebgen Lake** | **114.48** | **321** | IAMs_20 | IAMs_20 | 21 09 46.4 | | | | | |
| | comp=Z,272nm,19.0s | | | | | | | | | | |
| CEST | **Esterri de Car** | **114.49** | **44** | IAMs_20 | IAMs_20 | 21 09 28.6 | | | | | |
| | comp=Z,274nm,21.0s | | | | | | | | | | |
| VSL | **Villasalto** | **114.62** | **52** | IAMs_20 | IAMs_20 | 21 14 01.0 | | | | | |
| | comp=Z,435nm,19.0s | | | | | | | | | | |
| FAKI | **Fak Fak** | **115.02** | **192** | IAMs_20 | IAMs_20 | 21 15 17.6 | | | | | |
| | comp=Z,508nm,22.0s | | | | | | | | | | |
| BOZ | **Bozeman (W)** | **115.29** | **321** | IAMs_20 | IAMs_20 | 21 09 16.8 | | | | | |
| | comp=Z,264nm,21.0s | | | | | | | | | | |
| ULM | **Lac du Bonnet** | **115.63** | **334** | PKKPbc | PKKPbc | 20 38 28.0 | -1.1 | | | | |
| | comp=Z,2.7nm,0.4s,baz=344,slow=4.8,SNR=7.7 | | | | | | | | | | |
| BMO | **Blue Mountains** | **116.39** | **317** | PKPdf | **PKPdf** | **20 27 57.1** | **-1.9** | | | | |
| BMO | | | | IAMs_20 | IAMs_20 | 21 09 38.8 | | | | | |
| | comp=Z,286nm,20.0s | | | | | | | | | | |
| BMO | **Blue Mountains** | **116.39** | **317** | PKIKP | **PKPdf** | **20 27 57.1** | **-1.9** | | | | |
| BMO | | | | MLR | MLR | | | | | | |
| | comp=Z,300nm,20.0s | | | | | | | | | | |
| OVMT | **Ovando** | **117.02** | **321** | | **PKPdf** | **20 27 58.3** | **-1.9** | | | | |
| TIP | **Timpagrande** | **117.21** | **58** | IAMs_20 | IAMs_20 | 21 09 37.5 | | | | | |
| | comp=Z,489nm,22.0s | | | | | | | | | | |
| G08A | **Pilot Rock** | **117.32** | **316** | PKPdf | **PKPdf** | **20 28 00.2** | **-0.6** | | | | |
| CUC | **Castrocucco** | **117.53** | **56** | IAMs_20 | IAMs_20 | 21 11 33.0 | | | | | |
| | comp=Z,463nm,22.0s | | | | | | | | | | |
| INTR | **Introdacqua** | **118.52** | **54** | IAMs_20 | IAMs_20 | 21 08 16.1 | | | | | |
| | comp=Z,308nm,22.0s | | | | | | | | | | |
| MSSA | **Maissana** | **118.86** | **49** | IAMs_20 | IAMs_20 | 21 14 20.4 | | | | | |
| | comp=Z,376nm,20.0s | | | | | | | | | | |
| SBUM | **Sibu** | **120.41** | **169** | IAMs_20 | IAMs_20 | 21 19 56.3 | | | | | |
| | comp=Z,298nm,21.0s | | | | | | | | | | |
| IPM | **Ipoh** | **120.79** | **156** | PKPdf | **PKPdf** | **20 28 06.6** | **-1.8** | | | | |
| PDG | **Podgorica** | **120.97** | **57** | IAMs_20 | IAMs_20 | 21 15 04.0 | | | | | |
| | comp=Z,367nm,22.0s | | | | | | | | | | |
| FUORN | **Ofenpass-Fuorn** | **121.11** | **48** | | **PKPdf** | **20 28 06.8** | **-1.4** | | | | |
| FUORN | | | | IAMs_20 | IAMs_20 | 21 15 29.9 | | | | | |
| | comp=Z,265nm,21.0s | | | | | | | | | | |
| DAVOX | **Davos/Dischmat** | **121.11** | **48** | PKP | **PKPdf** | **20 28 07.6** | **-0.5** | | | | |
| | comp=Z,10nm,0.6s,baz=187,slow=3.6,SNR=24 | | | | | | | | | | |
| DAVA | **Damuels** | **121.55** | **48** | *e*PKP | **PKPdf** | **20 28 08.5** | **-0.4** | | | | |
| | comp=Z,7.6nm,0.5s,SNR=6.9 | | | | | | | | | | |
| FETA | **Feichten** | **121.62** | **49** | *i* PKP | **PKPdf** | **20 28 07.9** | **-1.1** | | | | |
| | comp=Z,9.1nm,1.3s | | | | | | | | | | |
| SABO | **M.te Sabotino** | **121.78** | **51** | IAMs_20 | IAMs_20 | 21 17 10.0 | | | | | |
| | comp=Z,257nm,20.0s | | | | | | | | | | |
| JAVS | **Javornik** | **121.88** | **52** | *i* PKPdf | **PKPdf** | **20 28 08.7** | **-0.9** | | | | |
| SQTA | **Sankt Quirin** | **121.96** | **49** | *e*PKP | **PKPdf** | **20 28 08.9** | **-0.8** | | | | |
| | comp=Z,12nm,0.8s,SNR=7.0 | | | | | | | | | | |
| ROBS | **Robic** | **121.97** | **51** | *i* PKPdf | **PKPdf** | **20 28 08.7** | **-0.9** | | | | |
| RETA | **Reutte** | **122.03** | **48** | *i* PKP | **PKPdf** | **20 28 09.2** | **-0.6** | | | | |
| | comp=Z,4.2nm,0.4s | | | | | | | | | | |
| ABTA | **Abfaltersbach** | **122.03** | **50** | *i* PKP | **PKPdf** | **20 28 08.7** | **-1.1** | | | | |
| | comp=Z,7.1nm,1.3s | | | | | | | | | | |
| MOTA | **Moosalm** | **122.03** | **49** | *e*PKP | **PKPdf** | **20 28 08.9** | **-0.9** | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | | | | | |
| WTTA | **Wattenberg** | **122.15** | **49** | *e*PKP | **PKPdf** | **20 28 09.3** | **-0.8** | | | | |
| | comp=Z,13nm,0.9s,SNR=7.1 | | | | | | | | | | |
| WATA | **Walderalm** | **122.19** | **49** | *e*PKP | **PKPdf** | **20 28 09.1** | **-1.0** | | | | |
| | comp=Z,15nm,1.7s | | | | | | | | | | |
| WLF | **Walferdange** | **122.32** | **44** | IAMs_20 | IAMs_20 | 21 12 33.9 | | | | | |
| | comp=Z,379nm,22.0s | | | | | | | | | | |
| MYKA | **Terra Mystica** | **122.35** | **51** | *i* PKP | **PKPdf** | **20 28 09.6** | **-0.8** | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | | |
| OBKA | **Obir** | **122.58** | **52** | *e*PKP | **PKPdf** | **20 28 10.5** | **-0.4** | | | | |
| | comp=Z,14nm,1.1s | | | | | | | | | | |
| KBA | **Koelnbreinsper** | **122.62** | **50** | *i* PKP | **PKPdf** | **20 28 09.6** | **-1.4** | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | | | | | |
| LESA | **Schwarzleotal** | **122.67** | **50** | *i* PKP | **PKPdf** | **20 28 09.7** | **-1.3** | | | | |
| | comp=Z,4.5nm,0.5s | | | | | | | | | | |
| PERS | **Pernice** | **122.90** | **52** | *i* PKPdf | **PKPdf** | **20 28 10.8** | **-0.6** | | | | |
| SOKA | **Soboth** | **122.90** | **52** | *e*PKP | **PKPdf** | **20 28 11.1** | **-0.4** | | | | |
| | comp=Z,13nm,1.1s,SNR=5.7 | | | | | | | | | | |
| BOVS | **Bovan** | **122.97** | **58** | ⇓P | **PKPdf** | **20 28 10.0** | **-1.5** | | | | |
| BIOA | **Bad Ischl, Aus** | **123.24** | **50** | *i* PKP | **PKPdf** | **20 28 10.6** | **-1.3** | | | | |
| | comp=Z,4.9nm,0.6s | | | | | | | | | | |
| TNS | **Taunus Mts** | **123.56** | **45** | *e*PKPdf | **PKPdf** | **20 28 12.4** | **-0.1** | | | | |
| | baz=212,slow=1.9 | | | | | | | | | | |
| ARSA | **Arzberg** | **123.57** | **52** | *e*PKP | **PKPdf** | **20 28 11.8** | **-0.8** | | | | |
| | comp=Z,9.1nm,0.8s,SNR=5.6 | | | | | | | | | | |
| MOA | **Molln** | **123.60** | **50** | *e*PKP | **PKPdf** | **20 28 11.6** | **-1.1** | | | | |
| | comp=Z,10.0nm,0.9s,SNR=6.1 | | | | | | | | | | |
| MORH | **Mrgy, Hungar** | **123.89** | **55** | ⇓P | **PKPdf** | **20 28 11.7** | **-1.5** | | | | |
| MDVR | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,200nm,13.6s | | | | | | | | |
| **KRLC** | **Kraliky** | **126.38** | **51** | *e*PKIKP | **PKPdf** | **20 28 17.7** | **-0.2** | | |
| KRLC | | | | MLR | MLR | | | | |
| | comp=Z,200nm,13.6s | | | | | | | | |
| **HARR** | **Harsova** | **126.40** | **62** | ⇑P | **PKPdf** | **20 28 14.9** | **-3.2** | | |
| **HARR** | **Harsova** | **126.40** | **62** | ⇑PKIKP | **PKPdf** | **20 28 14.9** | **-3.2** | | |
| **MORC** | **Moravsky Berou** | **126.41** | **51** | *e*PKP | **PKPdf** | **20 28 17.6** | **-0.4** | | |
| **MORC** | **Moravsky Berou** | **126.41** | **51** | ⇓P | **PKPdf** | **20 28 18.5** | **+0.5** | | |
| **MORC** | **Moravsky Berou** | **126.41** | **51** | ⇓PKIKP | **PKPdf** | **20 28 18.5** | **+0.5** | | |
| **DPC** | **Dobruska-Polom** | **126.43** | **50** | *e*PKPDF | **PKPdf** | **20 28 18.2** | **+0.2** | | |
| DPC | | | | AMS | AMS | 21 19 10.0 | | | |
| | comp=Z,300nm,24.2s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **126.43** | **50** | *e*PKIKP | **PKPdf** | **20 28 18.2** | **+0.2** | | |
| DPC | | | | MLR | MLR | | | | |
| | comp=Z,300nm,24.2s | | | | | | | | |
| **UPC** | **Upice** | **126.45** | **50** | AMS | AMS | 21 17 40.0 | | | |
| | comp=Z,400nm,23.3s | | | | | | | | |
| **CHVC** | **Chvalec** | **126.53** | **50** | *e*PKPDF | **PKPdf** | **20 28 18.0** | **-0.2** | | |
| CHVC | | | | AMS | AMS | 21 17 20.0 | | | |
| | comp=Z,400nm,23.9s | | | | | | | | |
| **CHVC** | **Chvalec** | **126.53** | **50** | *e*PKIKP | **PKPdf** | **20 28 18.0** | **-0.2** | | |
| CHVC | | | | MLR | MLR | | | | |
| | comp=Z,400nm,23.9s | | | | | | | | |
| **OSTC** | **Ostas** | **126.56** | **50** | *e*PKPDF | **PKPdf** | **20 28 18.5** | **+0.3** | | |
| OSTC | | | | AMS | AMS | 21 17 40.0 | | | |
| | comp=Z,400nm,23.3s | | | | | | | | |
| **OSTC** | **Ostas** | **126.56** | **50** | *e*PKIKP | **PKPdf** | **20 28 18.5** | **+0.3** | | |
| OSTC | | | | MLR | MLR | | | | |
| | comp=Z,400nm,23.3s | | | | | | | | |
| **BOSR** | **Bodos** | **126.58** | **60** | ⇓P | **PKPdf** | **20 28 18.0** | **-0.4** | | |
| **COVR** | **Voineasa-Covas** | **126.62** | **60** | ⇓P | **PKPdf** | **20 28 17.1** | **-1.4** | | |
| **OZUR** | | **126.65** | **60** | ⇑P | **PKPdf** | **20 28 18.0** | **-0.5** | | |
| **OKC** | **Ostrava-Krasne** | **126.69** | **52** | *e*PKPDF | **PKPdf** | **20 28 18.4** | **-0.1** | | |
| OKC | | | | AMS | AMS | 21 20 10.0 | | | |
| | comp=Z,200nm,18.6s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **126.69** | **52** | *e*PKIKP | **PKPdf** | **20 28 18.4** | **-0.1** | | |
| OKC | | | | MLR | MLR | | | | |
| | comp=Z,200nm,18.6s | | | | | | | | |
| **PLOR** | **Plostina** | **126.81** | **60** | ⇓P | **PKPdf** | **20 28 17.1** | **-1.8** | | |
| **PLOR** | **Plostina** | **126.81** | **60** | ⇓PKIKP | **PKPdf** | **20 28 17.1** | **-1.8** | | |
| **KSP** | **Ksiaz** | **126.83** | **50** | *e*PKPdf | **PKPdf** | **20 28 18.6** | **-0.1** | | |
| **VRI** | **Vrincioaia** | **126.85** | **60** | ⇑P | **PKPdf** | **20 28 17.3** | **-1.6** | | |
| **VRI** | **Vrincioaia** | **126.85** | **60** | ⇑PKIKP | **PKPdf** | **20 28 17.3** | **-1.6** | | |
| **CFR** | **Carcaliu** | **126.88** | **62** | ⇓P | **PKPdf** | **20 28 17.9** | **-1.1** | | |
| **CFR** | **Carcaliu** | **126.88** | **62** | ⇓PKIKP | **PKPdf** | **20 28 17.9** | **-1.1** | | |
| **ODBI** | **Odobesti** | **126.90** | **61** | ⇑P | **PKPdf** | **20 28 17.8** | **-1.2** | | |
| **NEGRR** | **Negrea** | **127.06** | **61** | ⇓P | **PKPdf** | **20 28 18.3** | **-1.0** | | |
| **CRVS** | **Cervenica-Dubn** | **127.19** | **55** | *e*PKIKP | **PKPdf** | **20 28 19.4** | **-0.1** | | |
| **CRVS** | **Cervenica-Dubn** | **127.19** | **55** | *e*PKP | **PKPdf** | **20 28 19.4** | **-0.1** | | |
| CRVS | | | | *e* | | 21 05 35.5 | | | |
| **GHRR** | | **127.29** | **61** | ⇑P | **PKPdf** | **20 28 19.1** | **-0.6** | | |
| **TESR** | **Tescani** | **127.34** | **60** | ⇓P | **PKPdf** | **20 28 18.3** | **-1.6** | | |
| **BURAR** | **Bucovina Array** | **127.64** | **58** | PKPdf | **PKPdf** | **20 28 19.7** | **-0.8** | | |
| **BURAR** | **Bucovina Array** | **127.64** | **58** | ⇓P | **PKPdf** | **20 28 20.6** | **+0.1** | | |
| **BURAR** | **Bucovina Array** | **127.64** | **58** | ⇓PKIKP | **PKPdf** | **20 28 20.6** | **+0.1** | | |
| **MILM** | **Milestii Mici** | **128.56** | **61** | ⇑P | **PKPdf** | **20 28 21.8** | **-0.3** | | |
| **MILM** | **Milestii Mici** | **128.56** | **61** | ⇑PKIKP | **PKPdf** | **20 28 21.8** | **-0.3** | | |
| **LVV** | **L'vov** | **128.93** | **56** | *e*PKIKP | **PKPdf** | **20 28 20.9** | **-1.8** | | |
| **GKP** | **Gorka Klasztor** | **129.14** | **49** | *e*PKPdf | **PKPdf** | **20 28 23.0** | **0.0** | | |
| **SIM** | **Simferopol'** | **129.26** | **66** | *e*PKIKP | **PKPdf** | **20 28 23.0** | **-0.5** | | |
| SIM | | | | | | 20 30 39.0 | | | |
| SIM | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| SIM | | | | pmax | pmax | | | | |
| | comp=Z,34nm,23.0s | | | | | | | | |
| **SORM** | **Soroca** | **129.33** | **60** | ⇑P | **PKPdf** | **20 28 22.0** | **-1.5** | | |
| **SORM** | **Soroca** | **129.33** | **60** | ⇑PKIKP | **PKPdf** | **20 28 22.0** | **-1.5** | | |
| **BCA** | **Borcka** | **129.86** | **75** | ⇓P | **PKPdf** | **20 28 23.8** | **-1.0** | | |
| **GNI** | **Garni** | **130.28** | **78** | IAMs_20 | IAMs_20 | 21 22 39.8 | | | |
| | comp=Z,319nm,20.0s | | | | | | | | |
| **ANN** | **Anapa** | **130.60** | **69** | *i* PKIKP | **PKPdf** | **20 28 24.9** | **-1.2** | | |
| ANN | | | | *e* | | 20 28 42.8 | | | |
| ANN | | | | *e* | | 20 30 41.9 | | | |
| ANN | | | | *e* | | 20 35 26.6 | | | |
| ANN | | | | *e*SS | SS | 20 48 07.4 | -2.9 | | |
| ANN | | | | pmax | pmax | | | | |
| | comp=Z,44nm,1.1s | | | | | | | | |
| **BLS5** | **Blasjo** | **130.67** | **38** | *e*PKPdf | **PKiKP** | **20 28 27.1** | **+0.4** | | |
| **SOC** | **Sochi** | **130.68** | **72** | *e*PKIKP | **PKiKP** | **20 28 27.6** | **+0.5** | | |
| SOC | | | | *e* | | 20 30 45.6 | | | |
| SOC | | | | *e*PPP | PPP | 20 33 31.5 | | | |
| SOC | | | | *e*SSS | SSS | 20 53 02.0 | | | |
| SOC | | | | MLR | MLR | | | | |
| | comp=Z,94nm,19.0s | | | | | | | | |
| **VSLR** | **Vesyoloye** | **130.72** | **72** | *c i*PKIKP | **PKPdf** | **20 28 25.1** | **-1.3** | | |
| **TOAD** | **Toad River Com** | **130.91** | **321** | P | **PKPdf** | **20 28 25.6** | **-0.7** | | |
| | baz=145 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **131.05** | **329** | PKPdf | **PKPdf** | **20 28 24.4** | **-2.0** | | |
| **YKA** | **Yellowknife Ar** | **131.05** | **329** | PKP | **PKPdf** | **20 28 26.0** | **-0.3** | | |
| | comp=Z,2.4nm,0.4s,baz=288,slow=4.6,SNR=15 | | | | | | | | |
| YKA | | | | SKPbc | **SKPbc** | **20 31 42.9** | **-7.6** | | |
| | comp=Z,5.5nm,0.9s,baz=142,slow=3.4,SNR=8.0 | | | | | | | | |
| **ICESG** | **Greenland Ices** | **131.21** | **9** | *e*P | **PKPdf** | **20 28 24.8** | **-2.2** | | |
| **WRAK** | **Wrangell Islan** | **131.22** | **315** | P | **PKPdf** | **20 28 27.0** | **+0.2** | | |
| | baz=143 | | | | | | | | |
| **U33K** | **Whale Pass** | **131.24** | **314** | P | **PKPdf** | **20 28 27.2** | **+0.3** | | |
| | baz=142 | | | | | | | | |
| **SUE** | **Sulen** | **131.54** | **35** | *e*PKPdf | **PKiKP** | **20 28 28.5** | **+0.2** | | |
| **KIEV** | **Kiev** | **131.68** | **58** | PKPdf | **PKPdf** | **20 28 26.0** | **-1.9** | | |
| **KIEV** | **Kiev** | **131.68** | **58** | ⇓P | **PKPdf** | **20 28 26.9** | **-1.0** | | |
| **KIEV** | **Kiev** | **131.68** | **58** | ⇓PKIKP | **PKPdf** | **20 28 26.9** | **-1.0** | | |
| **AKASG** | **Malin Array Be** | **131.69** | **58** | | **PKPdf** | **20 28 25.8** | **-2.1** | | |
| **AKASG** | **Malin Array Be** | **131.69** | **58** | PKP | **PKPdf** | **20 28 26.5** | **-1.5** | | |
| | comp=Z,5.5nm,0.5s,baz=252,slow=1.8,SNR=16 | | | | | | | | |
| AKASG | | | | SKPbc | **SKPbc** | **20 31 44.9** | **-8.3** | | |
| | comp=Z,2.0nm,0.5s,baz=229,slow=3.6,SNR=7.4 | | | | | | | | |
| **AKBB** | **Malin Array Si** | **131.69** | **58** | *c i*PKIKP | **PKPdf** | **20 28 26.3** | **-1.6** | | |
| **SUW** | **Suwalki** | **131.90** | **52** | *e*PKPdf | **PKPdf** | **20 28 27.7** | **-0.5** | | |
| **S34M** | **Telegraph Cree** | **132.00** | **317** | P | **PKPdf** | **20 28 28.7** | **+0.4** | | |
| | baz=142 | | | | | | | | |
| **DLBC** | **Dease Lake** | **132.06** | **318** | P | **PKPdf** | **20 28 28.6** | **0.0** | | |
| | baz=142 | | | | | | | | |
| **FOO** | **Floro** | **132.06** | **35** | *e*PKPdf | **PKPdf** | **20 28 28.8** | **+0.6** | | |
| **UBPT** | **Khong Chiam** | **132.15** | **159** | | **PKPdf** | **20 28 27.9** | **-2.0** | | |
| **KBZ** | **Khabaz** | **132.23** | **74** | PKP | **PKPdf** | **20 28 28.4** | **-0.8** | | |
| | comp=Z,2.1nm,0.7s,baz=173,slow=4.7,SNR=5.3 | | | | | | | | |
| KBZ | | | | SKPbc | **SKPbc** | **20 31 48.0** | **-7.3** | | |
| | comp=Z,6.8nm,1.0s,baz=236,slow=6.6,SNR=4.8 | | | | | | | | |
| **KBZ** | **Khabaz** | **132.23** | **74** | ⇑*e*PKIKP | **PKPdf** | **20 28 29.4** | **+0.2** | | |
| **KIV** | **Kislovodsk** | **132.31** | **74** | *i* PKIKP | **PKPdf** | **20 28 27.7** | **-1.8** | | |
| KIV | | | | *e*SS | SS | 20 48 22.2 | -9.3 | | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| **NCK** | **Nalchik** | **132.37** | **75** | ⇑*e*PKIKP | **PKPdf** | **20 28 29.2** | **-0.3** | | |
| **AKT** | **Akhty** | **132.72** | **80** | *i* PKIKP | **PKPdf** | **20 28 30.4** | **0.0** | | |
| AKT | | | | *e* | | 20 28 48.8 | | | |
| AKT | | | | *e* | | 20 30 56.7 | | | |
| AKT | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.3s | | | | | | | | |
| **SIT** | **Sitka** | **132.74** | **314** | P | **PKPdf** | **20 28 29.9** | **+0.2** | | |
| | baz=141 | | | | | | | | |
| **WTLY** | **Watson Lake, Y** | **133.01** | **320** | P | **PKPdf** | **20 28 30.6** | **+0.5** | | |
| | baz=142 | | | | | | | | |
| **R33M** | **Jennings River** | **133.12** | **318** | PKPdf | **PKPdf** | **20 28 30.3** | **-0.2** | | |
| **R33M** | **Jennings River** | **133.12** | **318** | P | **PKPdf** | **20 28 30.9** | **+0.4** | | |
| | baz=142 | | | | | | | | |
| **Q32M** | **Nakina River** | **133.20** | **317** | P | **PKPdf** | **20 28 31.1** | **+0.2** | | |
| | baz=141 | | | | | | | | |
| **NC602** | **NORSAR Array S** | **133.24** | **39** | *e*PKPdf | **PKPdf** | **20 28 30.4** | **-0.2** | | |
| **NB2** | **NORSAR Subarra** | **133.38** | **39** | PKPdf | **PKPdf** | **20 28 30.3** | **-0.6** | | |
| | comp=Z,15nm,1.4s,baz=218,slow=1.9 | | | | | | | | |
| NB2 | | | | pPKP | **SKPab** | **20 31 55.4** | **-5.6** | | |
| | comp=Z,19nm,1.1s,baz=216,slow=4.6 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **133.38** | **39** | PKPdf | **PKPdf** | **20 28 30.3** | **-0.6** | | |
| | baz=218,slow=1.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **133.38** | **39** | PKP | **PKPdf** | **20 28 30.5** | **-0.4** | | |
| | comp=Z,0.4nm,0.5s,baz=215,slow=1.7,SNR=11 | | | | | | | | |
| NOA | | | | SKPbc | **SKPbc** | **20 31 50.6** | **-8.2** | | |
| | comp=Z,4.8nm,1.1s,baz=45,slow=3.7,SNR=9.7 | | | | | | | | |
| **NB201** | **NORSAR Array S** | **133.41** | **39** | | **PKPdf** | **20 28 29.6** | **-1.3** | | |
| **HFS** | **Hagfors** | **133.42** | **41** | PKP | **PKPdf** | **20 28 29.7** | **-1.2** | | |
| | comp=Z,6.8nm,0.7s,baz=151,slow=3.4,SNR=17 | | | | | | | | |
| HFS | | | | SKPbc | **SKPbc** | **20 31 51.9** | **-7.0** | | |
| | comp=Z,4.0nm,0.6s,baz=183,slow=3.0,SNR=7.2 | | | | | | | | |
| **DOMB** | **Dombas** | **133.55** | **37** | *e*PKPdf | **PKPdf** | **20 28 31.5** | **+0.3** | | |
| **CMAR** | **Chiang Mai Arr** | **133.87** | **149** | PKhKP | PKPpre | 20 28 21.7 | | | |
| | comp=Z,1.4nm,1.0s,baz=235,slow=3.1,SNR=5.4 | | | | | | | | |
| CMAR | | | | PKP | **PKPdf** | **20 28 33.0** | **-0.1** | | |
| | comp=Z,3.9nm,0.4s,baz=222,slow=3.5,SNR=21 | | | | | | | | |
| CMAR | | | | SKPbc | **SKPbc** | **20 31 53.0** | **-8.8** | | |
| | comp=Z,0.5nm,0.4s,baz=199,slow=1.9,SNR=1.5 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **133.87** | **149** | PKIKP | **PKPdf** | **20 28 33.0** | **-0.1** | | |
| **TGTN** | **Hyland Airport** | **133.97** | **321** | P | **PKPdf** | **20 28 32.3** | **+0.3** | | |
| | baz=142 | | | | | | | | |
| **MNK** | **Minsk** | **134.06** | **54** | *i* PKIKP | **PKPdf** | **20 28 31.7** | **-0.6** | | |
| MNK | | | | *i* | | 20 28 49.0 | | | |
| MNK | | | | *i* | | 20 31 03.1 | | | |
| MNK | | | | *i* | | 20 35 38.3 | | | |
| MNK | | | | *i* SS | SS | 20 48 45.8 | -6.4 | | |
| MNK | | | | *i* SSS | SSS | 20 53 45.3 | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,1.0s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=Z,19nm,0.8s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=N,11nm,1.0s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=Z,186nm,21.0s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=E,90nm,17.0s | | | | | | | | |
| MNK | | | | MLR | MLR | | | | |
| | comp=N,122nm,21.0s | | | | | | | | |
| **P32M** | **Atlin** | **134.16** | **317** | P | **PKPdf** | **20 28 32.3** | **-0.1** | | |
| | baz=140 | | | | | | | | |
| **PHRA** | **Phrae** | **134.22** | **151** | PKPdf | **PKPdf** | **20 28 34.0** | **+0.3** | | |
| **P33M** | **Teslin, Yukon** | **134.35** | **318** | P | **PKPdf** | **20 28 32.5** | **-0.3** | | |
| | baz=140 | | | | | | | | |
| **SUMG** | **Summit** | **134.72** | **8** | PKPdf | **PKPdf** | **20 28 32.3** | **-1.2** | | |
| **SUMG** | **Summit** | **134.72** | **8** | PKIKP | **PKPdf** | **20 28 32.3** | **-1.2** | | |
| **SUMG** | **Summit** | **134.72** | **8** | *e*P | **PKPdf** | **20 28 31.5** | **-2.1** | | |
| **TBLU** | **Trondheim** | **134.85** | **36** | *e*PKPdf | **PKiKP** | **20 28 35.6** | **+0.7** | | |
| **PLBC** | **Pleasant Camp** | **134.94** | **315** | P | **PKPdf** | **20 28 33.8** | **+0.1** | | |
| | baz=139 | | | | | | | | |
| **N32M** | **Quiet Lake** | **135.15** | **318** | P | **PKPdf** | **20 28 33.9** | **-0.3** | | |
| | baz=139 | | | | | | | | |
| **WHY** | **Whitehorse** | **135.35** | **317** | P | **PKPdf** | **20 28 34.5** | **-0.2** | | |
| | baz=139 | | | | | | | | |
| **P29M** | **Windy Craggy** | **135.53** | **314** | P | **PKPdf** | **20 28 35.0** | **+0.1** | | |
| | baz=138 | | | | | | | | |
| **P30M** | **Million Dollar** | **135.63** | **315** | P | **PKPdf** | **20 28 35.0** | **-0.2** | | |
| | baz=138 | | | | | | | | |
| **MTSE** | **Matsula** | **135.70** | **48** | *e*P | PKPpre | 20 28 27.5 | | | |
| **O30N** | **Mendenhall** | **135.83** | **316** | P | **PKPdf** | **20 28 35.4** | **-0.1** | | |
| | baz=138 | | | | | | | | |
| **FARO** | **Faro, Yukon** | **136.05** | **319** | P | **PKPdf** | **20 28 36.3** | **+0.4** | | |
| | baz=138 | | | | | | | | |
| **PNL** | **Peninsula** | **136.13** | **314** | P | **PKPdf** | **20 28 36.0** | **0.0** | | |
| | baz=137 | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **136.26** | **317** | IAMs_20 | IAMs_20 | 21 34 30.0 | | | |
| | comp=Z,370nm,21.0s | | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **136.26** | **317** | P | **PKPdf** | **20 28 36.8** | **+0.5** | | |
| | baz=138 | | | | | | | | |
| **M31M** | **Drury Creek, Y** | **136.35** | **319** | P | **PKPdf** | **20 28 36.7** | **+0.3** | | |
| | baz=138 | | | | | | | | |
| **QIZ** | **Qiongzhong** | **136.51** | **163** | PKP | **PKPdf** | **20 28 38.3** | **+0.3** | | |
| QIZ | | | | PP | **PP** | **20 31 19.3** | **+0.3** | | |
| QIZ | | | | SS | SS | 20 49 22.5 | +1.9 | | |
| QIZ | | | | AMB | AMB | | | | |
| | comp=Z,270nm,14.9s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=Z,440nm,16.7s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=Z,320nm,15.7s | | | | | | | | |
| QIZ | | | | LR | LR | | | | |
| | comp=Z,650nm,20.2s | | | | | | | | |
| **VSU** | **Vasula** | **136.56** | **50** | *ce*PKIKP | **PKPdf** | **20 28 35.8** | **-1.0** | | |
| **N30M** | **Aishikik Lake** | **136.67** | **317** | P | **PKPdf** | **20 28 37.5** | **+0.4** | | |
| | baz=137 | | | | | | | | |
| **RAF** | **Rauma** | **136.70** | **44** | *e*P | PKPpre | 20 28 30.6 | | | |
| **YUK6** | **Outpost Mounta** | **136.71** | **315** | P | **PKPdf** | **20 28 37.1** | **-0.3** | | |
| | baz=137 | | | | | | | | |
| **ARBE** | **Arbavere** | **137.00** | **48** | *e*P | PKPpre | 20 28 30.3 | | | |
| **MEF** | **Metsahovi** | **137.00** | **47** | *e*P | PKPpre | 20 28 29.5 | | | |
| **YUK4** | **Talbot Arm** | **137.10** | **316** | P | **PKPdf** | **20 28 38.9** | **+0.9** | | |
| | baz=136 | | | | | | | | |
| **O28M** | **Mount Upton** | **137.20** | **314** | P | **PKPdf** | **20 28 38.5** | **+0.1** | | |
| | baz=136 | | | | | | | | |
| **M30M** | **Minto, Yukon** | **137.39** | **318** | P | **PKPdf** | **20 28 38.8** | **+0.5** | | |
| | baz=136 | | | | | | | | |
| **YUK8** | **Steele Glacier** | **137.43** | **315** | P | **PKPdf** | **20 28 39.0** | **+0.3** | | |
| | baz=136 | | | | | | | | |
| **LOGN** | **Logan Glacier** | **137.52** | **314** | IAMs_20 | IAMs_20 | 21 15 27.3 | | | |
| | comp=Z,316nm,20.0s | | | | | | | | |
| **M29M** | **Somme Creek** | **137.83** | **317** | IAMs_20 | IAMs_20 | 21 37 37.4 | | | |
| | comp=Z,327nm,21.0s | | | | | | | | |
| **M29M** | **Somme Creek** | **137.83** | **317** | P | **PKPdf** | **20 28 39.5** | **+0.2** | | |
| | baz=136 | | | | | | | | |
| **OBN** | **Obninsk** | **137.95** | **59** | ⇓*i*PKIKP | **PKPdf** | **20 28 37.7** | **-1.7** | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| OBN | | | | MLR | MLR | | | | |
| | comp=Z,189nm,22.0s | | | | | | | | |
| **STOK** | **Stokkvaagen** | **137.97** | **35** | *e*PKPdf | **PKiKP** | **20 28 41.3** | **+0.1** | | |
| **VAF** | **Ylistaro** | **138.45** | **43** | *e*P | PKPpre | 20 28 33.0 | | | |
| **FINES** | **FINESS Array B** | **138.46** | **46** | PKhKP | PKPpre | 20 28 27.1 | | | |
| | comp=Z,0.7nm,0.3s,baz=271,slow=3.0,SNR=13 | | | | | | | | |
| FINES | | | | SKPbc | **SKPbc** | **20 32 08.3** | **-6.1** | | |
| | comp=Z,6.7nm,0.9s,baz=258,slow=1.3,SNR=4.9 | | | | | | | | |
| **K29M** | **Barlow Dome** | **138.53** | **319** | | PKPpre | 20 28 29.6 | | | |
| **KEF** | **Keuruu** | **138.56** | **45** | *e*P | PKPpre | 20 28 32.4 | | | |
| **MCARA** | **McCarthy VSAT** | **138.61** | **314** | P | **PKPdf** | **20 28 40.9** | **+0.4** | | |
| | baz=134 | | | | | | | | |
| **J30M** | **Hart River** | **138.69** | **320** | | PKPpre | 20 28 30.2 | | | |
| J30M | | | | IAMs_20 | IAMs_20 | 21 35 26.8 | | | |
| | comp=Z,336nm,21.0s | | | | | | | | |
| **J30M** | **Hart River** | **138.69** | **320** | P | **PKPdf** | **20 28 41.4** | **+0.7** | | |
| | baz=135 | | | | | | | | |
| **MOS** | **Moscow** | **138.82** | **59** | *i* PKIKP | **PKPdf** | **20 28 37.7** | **-3.3** | | |
| **M27K** | **Edge Creek, AK** | **138.90** | **315** | IAMs_20 | IAMs_20 | 21 38 01.7 | | | |
| | comp=Z,292nm,20.0s | | | | | | | | |
| **M27K** | **Edge Creek, AK** | **138.90** | **315** | P | **PKPdf** | **20 28 40.9** | **-0.3** | | |
| | baz=134 | | | | | | | | |
| **H31M** | **Peel River** | **138.97** | **322** | IAMs_20 | IAMs_20 | 21 35 40.3 | | | |
| | comp=Z,333nm,21.0s | | | | | | | | |
| **NEEM** | **North Greenlan** | **139.01** | **2** | *e*P | PKPpre | 20 28 32.2 | | | |
| **I30M** | **Mount Dempster** | **139.16** | **321** | IAMs_20 | IAMs_20 | 21 38 19.3 | | | |
| | comp=Z,284nm,20.0s | | | | | | | | |
| **M26K** | **Nabesna, AK** | **139.31** | **315** | IAMs_20 | IAMs_20 | 21 36 26.5 | | | |
| | comp=Z,324nm,22.0s | | | | | | | | |
| **N25K** | **Chitina, Valde** | **139.31** | **313** | IAMs_20 | IAMs_20 | 21 36 22.7 | | | |
| | comp=Z,304nm,21.0s | | | | | | | | |
| **FAUS** | **Fauske** | **139.35** | **35** | *e* | PKPpre | 20 28 32.9 | | | |
| **L27K** | **Beaver Creek,** | **139.37** | **316** | IAMs_20 | IAMs_20 | 21 34 24.2 | | | |
| | comp=Z,321nm,22.0s | | | | | | | | |
| **LOF** | **Lofoten** | **139.42** | **33** | *e* | PKPpre | 20 28 33.5 | | | |
| LOF | | | | *e*PKPdf | **PKPdf** | **20 28 43.0** | **+1.2** | | |
| **STEI** | **Steigen** | **139.73** | **34** | *e*PKPdf | **PKPdf** | **20 28 44.1** | **+1.8** | | |
| **TNCH** | **TengChong** | **140.05** | **146** | PKP | PKPpre | 20 28 37.0 | | | |
| TNCH | | | | sPKP | | 20 28 57.0 | | | |
| TNCH | | | | PP | **PP** | **20 31 38.3** | **-3.0** | | |
| TNCH | | | | AMB | AMB | | | | |
| | comp=Z,160nm,5.0s | | | | | | | | |
| TNCH | | | | LR | LR | | | | |
| | comp=N,240nm,21.1s | | | | | | | | |
| TNCH | | | | LR | LR | | | | |
| | comp=E,210nm,18.0s | | | | | | | | |
| TNCH | | | | LR | LR | | | | |
| | comp=Z,430nm,24.6s | | | | | | | | |
| **VALR** | **Valaam** | **140.08** | **49** | ⇓*e*PKIKP | **PKPdf** | **20 28 43.9** | **+0.7** | | |
| **K27K** | **Chicken** | **140.11** | **317** | IAMs_20 | IAMs_20 | 21 36 18.8 | | | |
| | comp=Z,330nm,21.0s | | | | | | | | |
| **PWL** | **Port Wells** | **140.13** | **310** | IAMs_20 | IAMs_20 | 21 36 47.5 | | | |
| | comp=Z,311nm,22.0s | | | | | | | | |
| **G30M** | **tAoh Zrail Nji** | **140.34** | **323** | | PKPpre | 20 28 39.0 | | | |
| **O22K** | **Cooper Landing** | **140.39** | **309** | IAMs_20 | IAMs_20 | 21 40 27.3 | | | |
| | comp=Z,357nm,22.0s | | | | | | | | |
| **I28M** | **Miner Creek** | **140.40** | **320** | IAMs_20 | IAMs_20 | 21 37 22.1 | | | |
| | comp=Z,359nm,21.0s | | | | | | | | |
| **H29M** | **Whitestone** | **140.44** | **321** | | PKPpre | 20 28 35.5 | | | |
| **INK** | **Inuvik** | **140.50** | **326** | | PKPpre | 20 28 36.3 | | | |
| **INK** | **Inuvik** | **140.50** | **326** | PKHKP | PKPpre | 20 28 36.3 | | | |
| **SCRK** | **Sand Creek** | **140.71** | **316** | IAMs_20 | IAMs_20 | 21 37 29.5 | | | |
| | comp=Z,318nm,22.0s | | | | | | | | |
| **BELG** | **Belogornoye** | **140.76** | **69** | PKhKP | PKPpre | 20 28 36.5 | | | |
| | comp=Z,9.5nm,0.5s,baz=228,slow=4.7,SNR=9.3 | | | | | | | | |
| **SML** | **Sawmill** | **140.76** | **311** | IAMs_20 | IAMs_20 | 21 37 28.1 | | | |
| | comp=Z,364nm,22.0s | | | | | | | | |
| **RIDG** | **Independent Ri** | **140.83** | **315** | IAMs_20 | IAMs_20 | 21 38 25.9 | | | |
| | comp=Z,284nm,21.0s | | | | | | | | |
| **J26L** | **Joseph Creek** | **140.91** | **317** | IAMs_20 | IAMs_20 | 21 41 02.9 | | | |
| | comp=Z,267nm,20.0s | | | | | | | | |
| **A36M** | **Sachs Harbour** | **141.09** | **333** | IAMs_20 | IAMs_20 | 21 35 32.7 | | | |
| | comp=Z,299nm,20.0s | | | | | | | | |
| **KMI** | **Kunming** | **141.18** | **152** | ⇓PKP | PKPpre | 20 28 40.0 | | | |
| KMI | | | | PP | **PP** | **20 31 47.5** | **-0.7** | | |
| **DHY** | **Denali Highway** | **141.26** | **313** | IAMs_20 | IAMs_20 | 21 36 16.2 | | | |
| | comp=Z,332nm,22.0s | | | | | | | | |
| **JOF** | **Joensuu** | **141.27** | **47** | *e*P | PKPpre | 20 28 36.6 | | | |
| **I26K** | **Coal Creek Min** | **141.31** | **318** | IAMs_20 | IAMs_20 | 21 41 07.4 | | | |
| | comp=Z,276nm,20.0s | | | | | | | | |
| **M22K** | **Willow** | **141.37** | **310** | IAMs_20 | IAMs_20 | 21 38 51.3 | | | |
| | comp=Z,371nm,22.0s | | | | | | | | |
| **J25K** | **Salcha River,** | **141.58** | **316** | IAMs_20 | IAMs_20 | 21 36 15.5 | | | |
| | comp=Z,294nm,22.0s | | | | | | | | |
| **E29M** | **Blow River** | **141.76** | **324** | | PKPpre | 20 28 40.0 | | | |
| **P18K** | **Big Mountain,** | **141.76** | **305** | IAMs_20 | IAMs_20 | 21 37 42.9 | | | |
| | comp=Z,250nm,21.0s | | | | | | | | |
| **TRO** | **Tromso** | **141.88** | **34** | *e* | PKPpre | 20 28 41.1 | | | |
| **O19K** | **Port Alsworth** | **141.93** | **306** | IAMs_20 | IAMs_20 | 21 17 24.2 | | | |
| | comp=Z,260nm,21.0s | | | | | | | | |
| **HDA** | **Harding Lake** | **141.97** | **315** | IAMs_20 | IAMs_20 | 21 38 20.0 | | | |
| | comp=Z,251nm,20.0s | | | | | | | | |
| **RND** | **Reindeer** | **141.99** | **313** | IAMs_20 | IAMs_20 | 21 40 05.4 | | | |
| | comp=Z,290nm,20.0s | | | | | | | | |
| **SKT** | **Skwentna** | **142.03** | **310** | IAMs_20 | IAMs_20 | 21 38 10.7 | | | |
| | comp=Z,271nm,22.0s | | | | | | | | |
| **LSA** | **Lhasa** | **142.16** | **134** | PKP | **PKPdf** | **20 28 44.5** | **-4.1** | | |
| **ILAR** | **Eielson Array** | **142.18** | **316** | PKhKP | PKPpre | 20 28 41.5 | | | |
| | comp=Z,15nm,0.6s,baz=162,slow=1.7,SNR=132 | | | | | | | | |
| ILAR | | | | SKPbc | **SKPbc** | **20 32 15.2** | **-9.0** | | |
| | comp=Z,3.3nm,0.8s,baz=163,slow=2.5,SNR=5.9 | | | | | | | | |
| **PRP** | **Porcupine Dome** | **142.21** | **317** | IAMs_20 | IAMs_20 | 21 37 08.1 | | | |
| | comp=Z,327nm,21.0s | | | | | | | | |
| **PZH** | **PanZhiHua** | **142.27** | **150** | PKP | **PKPdf** | **20 28 47.8** | **-0.7** | | |
| PZH | | | | PP | **PP** | **20 32 02.0** | **+7.2** | | |
| PZH | | | | AMB | AMB | | | | |
| | comp=Z,130nm,5.5s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,280nm,23.0s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,320nm,22.6s | | | | | | | | |
| PZH | | | | LR | LR | | | | |
| | comp=Z,400nm,22.6s | | | | | | | | |
| **WRH** | **Wood River Hil** | **142.40** | **315** | IAMs_20 | IAMs_20 | 21 38 33.2 | | | |
| | comp=Z,300nm,20.0s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **142.41** | **315** | IAMs_20 | IAMs_20 | 21 38 19.6 | | | |
| | comp=Z,298nm,22.0s | | | | | | | | |
| **M20K** | **Styx River** | **142.56** | **309** | IAMs_20 | IAMs_20 | 21 18 44.6 | | | |
| | comp=Z,241nm,20.0s | | | | | | | | |
| **POKR** | **Poker Plat Res** | **142.58** | **316** | IAMs_20 | IAMs_20 | 21 37 24.0 | | | |
| | comp=Z,320nm,21.0s | | | | | | | | |
| **KTK1** | **Kautokeino** | **142.64** | **36** | *e* | PKPpre | 20 28 43.0 | | | |
| **GULI** | **GuiLin** | **142.74** | **163** | ⇑PKP | **PKPdf** | **20 28 46.3** | **-2.9** | | |
| **MDM** | **Murphy Dome** | **142.75** | **315** | IAMs_20 | IAMs_20 | 21 37 46.5 | | | |
| | comp=Z,332nm,22.0s | | | | | | | | |
| **NEA2** | **Nenana** | **142.81** | **314** | IAMs_20 | IAMs_20 | 21 37 59.0 | | | |
| | comp=Z,320nm,21.0s | | | | | | | | |

TOLK Toolik Lake Re 145.34 320 P PKPbc 20 28 52.7 +0.4
baz=123,SNR=107
LVZ Lovozero 145.39 42 PKPbc 20 28 50.2 -2.2
LVZ Lovozero 145.39 42c i PKIKP PKPbc 20 28 51.6 -0.9
D24K Happy Valley 145.40 321 IAMs_20 IAMs_20 21 40 37.1
comp=Z,360nm,22.0s
D24K Happy Valley 145.40 321 P PKPbc 20 28 52.6 +0.1
baz=123
G21K Allakaket 145.43 315 PKPdf PKPbc 20 28 50.8 -1.8
G21K IAMs_20 IAMs_20 21 39 27.4
comp=Z,310nm,21.0s
G21K Allakaket 145.43 315 P PKPab 20 28 53.5 +0.7
baz=123,SNR=106
AML Almayashu 145.50 102 P PKPdf 20 28 54.0 0.0
SNR=183
F22K John River 145.54 317 P PKPbc 20 28 53.6 +0.6
baz=123
KIRV Kirov 145.55 62 PKPbc PKPdf 20 28 52.1 -0.8
comp=Z,50nm,0.6s,baz=244,slow=1.9,SNR=52
KIRV Kirov 145.55 62c i PKIKP PKPdf 20 28 51.5 -1.4
L15K Ungalak Mounta 145.61 305 P PKPdf 20 28 53.7 +0.8
baz=125,SNR=51
GCSA Galena City Sc 145.62 311 P PKPab 20 28 54.4 +0.9
baz=124,SNR=5.9
M13K Dall Lake 145.62 302 PKPdf 20 28 52.9 -0.1
M13K Dall Lake 145.62 302 P PKPbc 20 28 53.9 +0.6
baz=126,SNR=12
J17K VABM Dome 145.67 308 PKPbc 20 28 54.0 +0.5
J17K IAMs_20 IAMs_20 21 43 08.9
comp=Z,320nm,20.0s
J17K VABM Dome 145.67 308 P PKPbc 20 28 54.2 +0.8
baz=124,SNR=47
HSPB Hornsund (broa 145.74 23 ePKPdf PKPab 20 28 54.6 +0.9
E22K Anaktuvuk Pass 145.76 318 IAMs_20 IAMs_20 21 43 14.0
comp=Z,344nm,21.0s
E22K Anaktuvuk Pass 145.76 318 P PKPbc 20 28 54.3 +0.6
baz=122
F21K Alatna River 145.81 316 P PKPbc 20 28 54.5 +0.7
baz=122,SNR=38
D23K Nanushuk River 145.86 320 P PKPab 20 28 54.9 +0.5
baz=122,SNR=58
L14K Kuka Creek 145.89 304 P PKPdf 20 28 54.1 +0.6
baz=125,SNR=26
H19K Roundabout Mou 145.90 313 IAMs_20 IAMs_20 21 40 19.8
comp=Z,328nm,21.0s
H19K Roundabout Mou 145.90 313 P PKPbc 20 28 54.8 +0.8
baz=123,SNR=56
CNSH ChangSha 145.92 166 PKPbc PKPdf 20 28 55.5 +0.9
EKS2 Erkin-Say 145.95 102 P PKPdf 20 28 55.0 +0.6
SNR=159
P08K Saint George I 145.96 293 P PKPdf 20 28 54.3 +0.6
baz=128
UCH Uchtor 145.96 103 P PKPdf 20 28 55.7 +0.9
SNR=33
K15K Wolf Creek Mou 145.98 306 P PKPbc 20 28 55.2 +0.8
baz=124,SNR=30
J16K Anvik River 146.18 308 IAMs_20 IAMs_20 21 40 15.4
comp=Z,310nm,22.0s
J16K Anvik River 146.18 308 P PKPbc 20 28 55.7 +0.7
baz=123,SNR=15
KBS Kingsbay 146.27 19 PKPbc 20 28 55.4 +0.5
KBS Kingsbay 146.27 19 ePKPdf PKPbc 20 28 55.5 +0.7
KBS Kingsbay 146.27 19c i PKP2 PKPbc 20 28 55.6 +0.7
KBS Kingsbay 146.27 19 i P PKPbc 20 28 55.8 +0.9
AAK Ala-Archa 146.27 102 P PKPdf 20 28 55.7 +0.7
SNR=32
AAK Ala-Archa 146.27 102 PKPdf 20 28 54.4 -0.6
AAK Ala-Archa 146.27 102c i PKP2 PKPdf 20 28 55.8 +0.8
C23K Itkillik River 146.29 321 PKPdf PKPdf 20 28 55.2 +1.3
C23K Itkillik River 146.29 321 P PKPbc 20 28 55.6 +0.4
baz=121,SNR=62
H18K Honhosa River 146.37 311 IAMs_20 IAMs_20 21 41 43.4
comp=Z,306nm,21.0s
H18K Honhosa River 146.37 311 P PKPbc 20 28 56.4 +0.8
baz=122,SNR=30
D22K Ayikyak River 146.43 319 P PKPbc 20 28 56.6 +1.0
baz=121,SNR=77
G19K Purcell Mounta 146.45 313 IAMs_20 IAMs_20 21 46 07.3
comp=Z,205nm,19.0s
G19K Purcell Mounta 146.45 313 P PKPbc 20 28 56.4 +0.6
baz=122,SNR=43
F20K Avaraart Lake 146.46 315 P PKPbc 20 28 56.2 +0.5
baz=121,SNR=48
KBK Karagaybulak 146.50 103 P PKPdf 20 28 56.5 +1.1
SNR=64
I17K Unalakleet 146.54 308 IAMs_20 IAMs_20 21 43 43.0
comp=Z,232nm,20.0s
I17K Unalakleet 146.54 308 P PKPbc 20 28 56.6 +0.6
baz=123
SPA0 Spitsbergen Ar 146.56 21 ePKPdf PKPdf 20 28 55.5 +1.3
SPB2 Spitsbergen Ar 146.56 21 PKPdf 20 28 55.3 +1.1
SPITS Spitsbergen Ar 146.56 21 PKPbc PKPbc 20 28 55.8 0.0
comp=Z,10nm,0.4s,baz=134,slow=3.6,SNR=79
SPITS Spitsbergen Ar 146.56 21 PKP2 PKPdf 20 28 55.3 +1.1
E21K Killik River 146.61 318 IAMs_20 IAMs_20 21 39 35.4
comp=Z,332nm,22.0s
E21K Killik River 146.61 318 P PKPbc 20 28 56.7 +0.5
baz=121
SPIA Saint Paul Isl 146.61 293 P PKPbc 20 28 56.4 0.0
baz=127
CHMS Chumysh 146.67 102 P PKPdf 20 28 56.5 +1.1
SNR=45
USP Ospenovka 146.76 102 P PKPdf 20 28 56.6 +1.0
SNR=70
M11K Mekoryuk 146.76 300 P PKPbc 20 28 57.2 +0.4
baz=124
ULHL Ulahol 146.77 105 P PKPdf 20 28 57.5 +1.6
SNR=5.9
H17K Granite Mounta 146.81 310 IAMs_20 IAMs_20 21 42 23.1
comp=Z,304nm,21.0s
H17K Granite Mounta 146.81 310 P PKPbc 20 28 57.1 +0.3
baz=122
G18K Tagagawik 146.87 312 IAMs_20 IAMs_20 21 43 04.4
comp=Z,228nm,20.0s
G18K Tagagawik 146.87 312 P PKPbc 20 28 57.6 +0.7
baz=121,SNR=26
SGDS Sogindy 146.96 102 ePKP PKPdf 20 28 57.6 +1.5
baz=101
SGDS Sogindy 146.96 102 ePKP2 PKPdf 20 28 57.5 +1.5
CD2 Chengdu 146.98 151 PKPbc PKPdf 20 28 57.8 +1.4
CD2 PP PP 20 32 22.5 -0.3
CD2 AMB AMB
comp=Z,130nm,6.0s
CD2 LR LR
comp=Z,350nm,15.2s
TKM2 Tokmak 2 147.00 103 P PKPdf 20 28 56.8 +0.5
SNR=44
K13K Kusilvak Mount 147.00 304 IAMs_20 IAMs_20 21 40 22.4
comp=Z,304nm,22.0s
K13K Kusilvak Mount 147.00 304 P PKPbc 20 28 57.9 +0.4
baz=123,SNR=26
J14K Nanvaranak Lak 147.01 305 IAMs_20 IAMs_20 21 38 29.6
comp=Z,279nm,22.0s
J14K Nanvaranak Lak 147.01 305 P PKPbc 20 28 57.7 +0.3
baz=123,SNR=9.8
F19K Shaleruckik Mo 147.04 314 IAMs_20 IAMs_20 21 39 58.0
comp=Z,255nm,22.0s
F19K Shaleruckik Mo 147.04 314 P PKPbc 20 28 57.8 +0.5
baz=120,SNR=20
E19K Redstone River 147.17 315 IAMs_20 IAMs_20 21 43 39.4
comp=Z,300nm,21.0s
E19K Redstone River 147.17 315 P PKPbc 20 28 58.0 +0.2
baz=120,SNR=20
C21K Knifeblade Rid 147.22 319 P PKPbc 20 28 58.5 +0.6
baz=119,SNR=44
E20K Nigu River 147.23 317 P PKPbc 20 28 58.7 +0.7
baz=120,SNR=63
HOPEN Hopen 147.32 26 ePKPdf PKPbc 20 28 57.6 -0.3
G17K Kiwalik Mounta 147.37 311 P PKPbc 20 28 58.7 +0.3
baz=120,SNR=14
B22K Teshekpuk Lake 147.38 321 P PKPbc 20 28 58.7 +0.5
baz=118,SNR=15
B21K Ikpikpuk River 147.40 320 P PKPbc 20 28 58.8 +0.5
baz=119
H16K Elim 147.51 309 P PKPbc 20 28 59.1 +0.3
baz=121
F18K Selawik 147.57 313 P PKPbc 20 28 59.5 +0.7
baz=120,SNR=24
D20K Etivluk River 147.59 318 P PKPbc 20 28 59.7 +0.8
baz=119,SNR=35
TNSS Tian-Shan 147.72 104 ePKP PKPdf 20 28 59.2 +1.4
baz=104
TNSS Tian-Shan 147.72 104 ePKIKP PKPdf 20 28 59.1 +1.4
AAA Alma-Ata 147.83 104 ePKP PKPdf 20 28 59.5 +2.0
baz=104
AAA Alma-Ata 147.83 104 ePKIKP PKPdf 20 28 59.4 +2.0
MDOK Medeo 147.86 104 ePKP PKPdf 20 28 59.4 +1.8
baz=104
MDOK Medeo 147.86 104 ePKIKP PKPdf 20 28 59.3 +1.7
BTLS Baital 147.89 99 ePKP PKPdf 20 28 58.9 +1.4
baz=99
BTLS Baital 147.89 99 ePKIKP PKPdf 20 28 58.8 +1.4
G16K Koyuk River 147.94 310 IAMs_20 IAMs_20 21 45 15.8
comp=Z,272nm,21.0s
G16K Koyuk River 147.94 310 P PKPbc 20 29 00.4 +0.5
baz=120,SNR=8.5
D19K Kuna River 147.97 317 P PKPbc 20 29 00.7 +0.7
baz=118,SNR=36
F17K Baldwin Pennin 148.05 312 IAMs_20 IAMs_20 21 40 27.8
comp=Z,223nm,20.0s
F17K Baldwin Pennin 148.05 312 P PKPbc 20 29 00.3 +0.2
baz=119
KUU Kurty 148.09 103 ePKP PKPdf 20 28 59.8 +1.9
baz=103
KUU Kurty 148.09 103 ePKIKP PKPdf 20 28 59.7 +1.9
A22K Sinclair Lake 148.15 322 P PKPbc 20 29 00.8 +0.5
baz=116
ARU Arti 148.24 70 PKPdf PKPdf 20 28 58.3 +0.7
ARU Arti 148.24 70 PKPbc PKPdf 20 28 59.9 +2.3
comp=Z,24nm,0.5s,baz=211,slow=2.3,SNR=62
ARU Arti 148.24 70 i PKIKP PKPdf 20 28 57.7 +0.1
ARU SS SS 20 51 28.6 -8.9
E18K Tukpahlearik C 148.29 314 P PKPbc 20 29 01.4 +0.6
baz=118,SNR=23
G15K Niukluk 148.36 309 P PKPbc 20 29 01.4 +0.4
baz=119,SNR=9.5
B20K Meade River 148.36 320 P PKPbc 20 29 01.3 +0.4
baz=116,SNR=8.3
CHKK Chushkaly 148.37 104 ePKP PKPdf 20 29 00.0 +1.8
baz=103
CHKK Chushkaly 148.37 104 ePKIKP PKPdf 20 29 00.0 +1.8
SATY Saty 148.40 106 ePKP PKPdf 20 29 00.5 +2.0
baz=106
SATY ePP PP 20 32 34.5 +2.9
baz=106
SATY Saty 148.40 106 ePKIKP PKPdf 20 29 00.5 +2.0
SATY e 20 32 34.5
WHN Wuhan 148.41 168 PKPbc PKPbc 20 29 01.8 -0.4
ZHN Zhinishke 148.50 106 ePKP PKPdf 20 29 00.7 +2.0
baz=106
ZHN ePP PP 20 32 34.5 +2.3
baz=106
ZHN Zhinishke 148.50 106 ePKIKP PKPdf 20 29 00.6 +2.0
ZHN e 20 32 34.5
E17K Hotham Inlet 148.56 313 P PKPbc 20 29 01.6 +0.2
baz=118,SNR=5.6
ANM Nome 148.65 308 P PKPbc 20 29 01.9 +0.1
baz=119
C19K Lookout Ridge 148.72 317 P PKPbc 20 29 02.8 +0.9
baz=116,SNR=25
UZB Uzynbulak 148.75 107 ePKP PKPdf 20 29 01.1 +2.0
baz=106
UZB ePP PP 20 32 36.2 +2.5
baz=106
UZB Uzynbulak 148.75 107 ePKIKP PKPdf 20 29 01.0 +2.0
UZB e 20 32 36.2
A21K Barrow 148.77 322 P PKPbc 20 29 02.5 +0.6
baz=115
KPKS Kokpek 148.85 106 ePKP PKPdf 20 29 01.1 +1.9
baz=106
KPKS ePP PP 20 32 36.9 +2.6
baz=106
KPKS Kokpek 148.85 106 ePKIKP PKPdf 20 29 01.0 +1.9
KPKS e 20 32 36.8
F15K North Star Dit 148.92 310 P PKPbc 20 29 03.0 +0.5
baz=118
SHLS Shalkode 148.96 107 ePKP PKPdf 20 29 01.7 +2.3
baz=107
SHLS Shalkode 148.96 107 ePKHKP PKPpre 20 29 01.6
ARXS Arharly 149.03 104 ePKHKP PKPpre 20 29 02.1
C18K Utukok River 149.05 316 P PKPbc 20 29 03.0 +0.3
baz=116,SNR=26
D17K Noatak River 149.27 314 P PKPbc 20 29 03.7 +0.5
baz=116,SNR=12
GOMU GeErMu 149.33 134 PKPbc PKPdf 20 29 01.0 +0.5
RDOG Red Dog Mine 149.37 314 P PKPbc 20 29 03.8 +0.3
baz=115,SNR=9.9
SVE Sverdlovsk 149.41 71 ePKHKP PKPpre 20 29 03.0
SVE pmax pmax
comp=Z,44nm,1.1s
F14K Arctic Creek 149.43 309 P PKPbc 20 29 04.3 +0.6
baz=117
B18K Kokolik River 149.55 317 P PKPbc 20 29 04.7 +0.8
baz=114,SNR=10
C17K DeLong Mountai 149.63 315 P PKPbc 20 29 04.5 +0.4
baz=115,SNR=11
A19K Wainwright 149.66 319 P PKPbc 20 29 04.7 +0.7
baz=113
TDK Taldyqorghan 149.90 104 ePKP PKPdf 20 29 02.4 +1.7
baz=103
TDK Taldyqorghan 149.90 104 ePKIKP PKPdf 20 29 02.3 +1.7
TNA Tin City 150.07 308 P PKPbc 20 29 05.5 +0.3
baz=116
NJ2 Nanjing 150.24 175 ⇑PKPbc PKPbc 20 29 06.3 -0.4
C16K Lisburne Hills 150.29 314 P PKPbc 20 29 05.6 -0.1
baz=114
GAMB Gambell 150.72 304 P PKPbc 20 29 07.1 +0.3
baz=117
XAN Xi'an 151.08 157 PKPbc PKPdf 20 29 02.0 -0.9
XAN sPKP 20 29 26.0
XAN LR LR
comp=Z,530nm,17.3s
XAN LR LR
comp=Z,530nm,18.6s
XAN LR LR
comp=Z,1μm,24.1s
BRVK Borovoye 151.63 84 PKPbc 20 29 08.5 -0.8
BRVK Borovoye 151.63 84c i PKIKP PKPbc 20 29 08.3 -1.0
BVAR Borovoye Array 151.66 84 PKPbc PKPbc 20 29 08.8 -0.6
comp=Z,67nm,0.4s,baz=175,slow=3.1,SNR=342
INU Inuyama 151.88 207 PKPbc 20 29 09.5 -1.0
INU IAMs_20 IAMs_20 21 40 12.8
comp=Z,184nm,21.0s
LZH Lanzhou 151.94 148 ePKPbc PKPbc 20 29 10.8 0.0
LZH pPKP PKPab 20 29 20.5 +0.4
LZH PP PP 20 32 49.8 -1.9
LZH AMB AMB
comp=Z,180nm,7.9s
LZH LR LR
comp=N,360nm,16.2s
LZH LR LR
comp=E,300nm,15.1s
LZH LR LR
comp=Z,630nm,17.9s
JGF Kuroka 152.05 208 PKPbc 20 29 10.0 -0.9
LYN LuoYang 152.15 163 PKPbc PKPbc 20 29 11.3 +0.2
LYN PP PP 20 33 05.0 +12
LYN AMB AMB
comp=Z,370nm,10.6s
LYN LR LR
comp=N,660nm,19.0s
LYN LR LR
comp=E,340nm,21.0s
LYN LR LR
comp=Z,830nm,20.2s
MJAR Matsushiro Arr 152.76 210 PKPbc PKPbc 20 29 11.2 -1.2
comp=Z,8.2nm,1.0s,baz=165,slow=2.1,SNR=16
MAJO Matsushiro 152.76 210 PKPbc 20 29 11.4 -1.0
MAJO Matsushiro 152.76 210 IAMs_20 IAMs_20 21 40 33.3
comp=Z,226nm,20.0s
MAJO Matsushiro 152.76 210 PKIKP PKPbc 20 29 11.4 -1.0
MAKZ Makanchi 152.90 105 PKPdf 20 29 04.2 -1.0
MAKZ IAMs_20 IAMs_20 21 35 56.0
comp=Z,245nm,22.0s
MAKZ Makanchi 152.90 105 PKIKP PKPdf 20 29 04.2 -1.0
MAKZ MLR MLR
comp=Z,200nm,22.0s
MK31 Makanchi Array 153.03 105 dePKIKP PKPdf 20 29 03.9 -1.5
MKAR Makanchi Array 153.03 105 PKPdf PKPdf 20 29 03.6 -1.8
MKAR Makanchi Array 153.03 105 PKP PKPdf 20 29 03.8 -1.6
comp=Z,0.4nm,0.5s,baz=178,slow=1.5,SNR=7.5
MKAR PKPbc sPKPdf 20 29 11.8 +1.9
comp=Z,10nm,0.5s,baz=236,slow=2.5,SNR=83
MKAR PKPab PKPab 20 29 24.8 +0.5
comp=Z,28nm,0.8s,baz=233,slow=4.7,SNR=18
WMQ Urumqi 153.13 116 PKPbc PKPdf 20 29 02.0 -3.7
WMQ AMB AMB
comp=Z,190nm,6.9s
WMQ LR LR
comp=Z,180nm,24.2s
GTA Gaotai 153.90 139 PKPbc PKPdf 20 29 06.8 -0.2
GTA PKPab PKPab 20 29 28.3 +0.1
GTA PP PP 20 33 01.3 -1.5
GTA LR LR
comp=Z,200nm,20.3s
GTA LR LR
comp=Z,190nm,21.1s
GTA LR LR
comp=Z,250nm,20.3s
KURBB Kurchatov Arra 153.99 95 PKP PKPdf 20 29 05.2 -1.4
comp=Z,2.5nm,1.1s,baz=232,slow=1.8,SNR=13
KURBB PKPbc sPKPdf 20 29 13.5 +2.5
comp=Z,4.6nm,0.6s,baz=226,slow=2.8,SNR=60
KURBB PKPab PKPab 20 29 27.9 -0.2
comp=Z,14nm,0.7s,baz=235,slow=4.6,SNR=27
KURBB PP PP 20 32 58.7 -4.8
comp=Z,1.1nm,0.5s,baz=234,slow=6.5,SNR=4.0
KURK Kurchatov 154.09 95 PKPdf PKPdf 20 29 05.1 -1.6
KURK Kurchatov 154.09 95‖ ePKIKP PKPdf 20 29 05.1 -1.6
TIA Tai'an 154.28 171 eP PKPbc 20 29 15.0 -0.7
TIA pmax pmax
comp=Z,26nm,0.7s
TIA LR LR
comp=N,460nm,23.5s
TIA LR LR
comp=E,310nm,23.0s
TIA LR LR
comp=Z,770nm,23.5s
TJN Taejon 154.37 190 PKPbc 20 29 14.7 -1.2
TJN Taejon 154.37 190 PKIKP PKPbc 20 29 14.7 -1.2
ZSN Zaisan 154.70 107 ePKP PKPdf 20 29 09.6 +1.8
baz=107
ZSN ePKPbc PKiKP 20 29 17.8 +1.5
baz=107
ZSN ePKPab PKPab 20 29 32.5 +1.3
baz=107
ZSN Zaisan 154.70 107 ePKIKP PKPdf 20 29 09.5 +1.8
HNS HongShan 155.23 166 ⇑PKP PKPdf 20 29 05.0 -3.7
HNS PKPab PKPab 20 29 34.0 +0.3
HNS PP PP 20 33 07.8 -2.1
HNS SS SS 20 52 47.5 -6.1
HNS LR LR
comp=Z,400nm,20.7s
HNS LR LR
comp=Z,240nm,21.5s
HNS LR LR
comp=Z,470nm,21.0s
KSAR Wonju Array Be 155.38 192 PKPdf 20 29 08.2 -0.7
KSAR Wonju Array Be 155.38 192 PKIKP PKPdf 20 29 08.2 -0.7
KSRS Korea Array 155.39 192 PKP PKPdf 20 29 08.9 0.0
comp=Z,0.4nm,0.3s,baz=236,slow=1.4,SNR=4.7
KSRS PKPbc sPKPdf 20 29 17.4 +4.1
comp=Z,4.4nm,0.6s,baz=181,slow=2.3,SNR=11
KSRS PKPab PKPab 20 29 32.7 -1.6
comp=Z,3.8nm,0.7s,baz=174,slow=4.4,SNR=9.5
KSRS PP PP 20 33 08.4 -2.3
comp=Z,2.7nm,1.2s,baz=179,slow=5.8,SNR=4.5
DL2 Dalian 157.14 180 PKP PKPab 20 29 41.5 -0.3
BTO Baotou 157.65 156 ePKP PKPdf 20 29 09.5 -2.4
BTO PP PP 20 33 23.0 -0.5
BTO SS SS 20 53 12.8 -7.2
BTO LR LR
comp=Z,1μm,24.3s
BTO LR LR
comp=Z,670nm,22.6s
BTO LR LR
comp=Z,2μm,22.4s
BJT Baijiatuan 157.98 168 PKPab 20 29 45.2 -0.3
BJT Baijiatuan 157.98 168 PKP2 PKPab 20 29 45.2 -0.3
BJT MLR MLR
comp=Z,600nm,22.0s
BJI Beijing 158.00 168 PKP PKPdf 20 29 12.3 +0.1
BJI SS SS 20 53 19.0 -4.3
BJI LR LR
comp=Z,210nm,22.5s
BJI LR LR
comp=Z,87nm,20.0s
BJI LR LR
comp=Z,340nm,21.0s
HHC Hu-ho-hao-te 158.17 159 ePKP PKPdf 20 29 14.3 +1.7
HHC PP PP 20 33 25.0 -1.4
HHC SS SS 20 53 21.0 -4.6
HHC AMB AMB
comp=Z,130nm,7.1s
HHC LR LR
comp=Z,360nm,18.6s
HHC LR LR
comp=Z,210nm,19.1s
HHC LR LR
comp=Z,450nm,21.2s
ZALV Zalesovo Beam 159.08 95 PKP PKPdf 20 29 12.4 -0.6
comp=Z,1.3nm,0.8s,baz=259,slow=1.5,SNR=5.2
ZALV PKPab PKPab 20 29 48.9 -1.1
comp=Z,17nm,0.5s,baz=215,slow=4.5,SNR=39
ZALV PP PP 20 33 32.4 +0.7
comp=Z,5.2nm,1.0s,baz=255,slow=5.7,SNR=7.0
PETK Petropavlovsk- 159.09 262 PKPab PKPab 20 29 49.8 -0.2
comp=Z,10nm,0.6s,baz=98,slow=8.3,SNR=9.0
BILL Bilibino 160.50 308 i PKP2 PKPab 20 29 54.2 -1.6
BILL pmax pmax
comp=Z,16nm,1.1s
YSS Yuzh-Sakhalins 160.94 229 i PKIKP PKPdf 20 29 14.7 -0.6
YSS e 20 33 47.0
YSS pmax pmax
comp=Z,10.0nm,0.8s
USRK Ussuriysk Ar. 161.43 204 PKPab PKPab 20 29 58.7 -1.7
USRK Ussuriysk Ar. 161.43 204 PKPab PKPab 20 29 59.5 -0.9
comp=Z,4.0nm,0.9s,baz=191,slow=2.3,SNR=8.6
XLT XiLinHaoTe 161.81 167 ePKP PKPdf 20 29 14.0 -2.5
XLT PKPab PKPab 20 30 01.3 -0.9
XLT SS SS 20 54 03.5 -0.2
XLT AMB AMB
comp=Z,96nm,8.8s
XLT LR LR
comp=Z,28nm,20.8s
XLT LR LR
comp=Z,130nm,16.6s
XLT LR LR
comp=Z,360nm,19.0s
MDJ Mudanjiang 162.25 198 P PKPab 20 30 04.0 +0.1
MDJ pmax pmax
comp=Z,23nm,1.3s
MDJ pmax pmax
comp=Z,67nm,4.0s
MDJ Mudanjiang 162.25 198 PKPab 20 30 03.9 -0.1
SONM Songino Array 163.54 141 PKPdf 20 29 16.7 -1.4
SONM PKPab PKPab 20 30 08.5 -1.2
SONM Songino Array 163.54 141 PKP PKPdf 20 29 16.8 -1.4
comp=Z,1.5nm,1.0s,baz=177,slow=2.3,SNR=10
SONM PKPab PKPab 20 30 09.7 0.0
comp=Z,9.8nm,0.6s,baz=208,slow=5.0,SNR=35
ULN Ulaanbaatar 163.76 142 PKPab 20 30 10.3 -0.5
ULN Ulaanbaatar 163.76 142 PKP2 PKPab 20 30 10.3 -0.5
ZAK Zakamensk 164.69 130 ePKP2 PKPab 20 30 13.6 -1.1
ZAK pmax pmax
comp=Z,12nm,1.2s
MOY Mondy 164.83 122 ePKP2 PKPab 20 30 15.4 0.0
MOY pmax pmax
comp=Z,25nm,1.9s
KLR Kul'dur 166.28 208 PKP PKPdf 20 29 18.2 -2.0
comp=Z,1.2nm,0.7s,baz=329,slow=4.0,SNR=4.9
KLR PKPab PKPab 20 30 19.3 -2.3
comp=Z,7.5nm,1.1s,baz=152,slow=2.3,SNR=7.0
KLR Kul'dur 166.28 208 ePKIKP PKPdf 20 29 18.6 -1.7
KLR pmax pmax
comp=Z,3.0nm,1.0s
IRK Irkutsk 166.56 127 ePKIKP PKPdf 20 29 17.3 -3.1
IRK e 20 30 19.7
IRK pmax pmax
comp=Z,37nm,1.1s
CIT Chita 169.27 152 ePKIKP PKPdf 20 29 21.1 -1.2
CIT e 20 30 34.1
CIT e 20 34 20.9
TIXI Tiksi 169.68 347 PKPab PKPab 20 30 34.7 -1.3
TIXI Tiksi 169.68 347 PKPab PKPab 20 30 35.0 -1.1
comp=Z,18nm,1.0s,baz=50,slow=5.4,SNR=22
TIXI PP PP 20 34 28.3 +1.7
comp=Z,5.5nm,1.1s,baz=50,slow=7.6,SNR=6.8
TIXI Tiksi 169.68 347 PKP2 PKPab 20 30 35.0 -1.1
ZEA Zeya 171.47 202 i PKIKP PKPdf 20 29 21.3 -2.1
ZEA e 20 34 33.2
ZEA e 20 55 29.7
ZEA pmax pmax
comp=Z,100nm,6.4s
ZEA MLR MLR
comp=E,200nm,24.0s
YAK Yakutsk 176.26 278 PKPab PKPab 20 31 03.9 -1.7
comp=E,5.9nm,0.7s,baz=147,slow=6.9,SNR=7.4

*IDC **27** 20:09:30.9±2.4,7.60S×127.86E,h0km,mb3.6/1, mbtmp3.7/3,ML3.9/2,MS3.5/2,Error ellipse: s-maj=289.2km s-min=32.5km az=64.0*
**ISC 27 20:09:34.3±2.5,7.6S±0.1×128.3E±0.3,h35km,n13, σ5≥27/8,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.99** | **97** | P | **Pn** | **20 10 20.9** | **+1.6** |
| **DRS** | **Darwin Rock St** | **5.44** | **152** | P | Pn | 20 11 02.4 | +10 |
| **MTN** | **Manton Dam** | **5.91** | **152** | P | Pn | 20 11 07.7 | +8.4 |
| **FAKI** | **Fak Fak** | **6.09** | **40** | P | **Pn** | **20 10 59.7** | **-2.2** |
| **WRA** | **Warramunga Arr** | **13.59** | **155** | Pn | **Pn** | **20 12 46.9** | **+2.2** |
| | 0.6nm,0.3s,baz=331,slow=13,SNR=24 | | | | | | |
| WRA | | | | Sn | Sn | 20 15 06.3 | -8.2 |
| | 1.2nm,0.3s,baz=334,slow=22,SNR=15 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **16.85** | **162** | Pn | **P** | **20 13 31.1** | **+1.7** |
| | 0.5nm,0.3s,baz=337,slow=9.4,SNR=24 | | | | | | |
| ASAR | | | | Sn | **Sn** | **20 16 23.4** | **-10** |
| | 0.1nm,0.3s,baz=319,slow=15,SNR=2.5 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **AS01** | **Alice Springs** | **16.86** | **162** | P | **P** | **20 13 32.4** | **+2.8** |
| **QIS** | **Mount Isa** | **16.90** | **141** | P | **P** | **20 13 30.6** | **+0.7** |
| **WRKA** | **Warakurna** | **17.34** | **180** | P | P | 20 13 40.6 | +5.8 |
| **OOD** | **Oodnadatta** | **21.27** | **162** | P | **P** | **20 14 19.9** | **+2.3** |
| **JCJ** | **Chichijima** | **37.02** | **21** | LR | LR | 20 30 18.3 | |
| | comp=Z,14nm,20.9s,baz=95,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.82** | **328** | P | P | 20 20 29.4 | +0.5 |
| | 0.4nm,0.7s,baz=122,slow=6.6,SNR=4.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **RAR** | **Rarotonga** | **70.47** | **110** | LR | LR | 20 51 16.4 | |
| | comp=Z,154nm,18.5s,baz=152,slow=35 | | | | | | |

*NEIC **27** 20:14:39.9±0.7,18.0S±0.2×178.3W±0.2,h542km±24km, mb4.2/12,Error ellipse: s-maj=42.0km s-min=18.8km az=221.0*
*IDC **27** 20:14:39.5±2.5,18.16S×178.30W,h535km±20km,mb3.2/7, mbtmp4.1/8,Error ellipse: s-maj=39.5km s-min=25.4km az=60.0*
**ISC 27 20:14:43.5±1.9,18.2S±0.2×178.5W±0.3,h579km,n22, σ0≤82/20,mb4.0/10,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.29** | **277** | P | P | 20 15 57.0 | -5.8 |
| | 56nm,0.7s,baz=119,slow=8.5,SNR=28 | | | | | | |
| **NIUE** | **Niue** | **8.21** | **98** | P | P | 20 16 32.8 | -11 |
| **URZ** | **Urewera** | **20.37** | **190** | P | **P** | **20 18 39.1** | **-2.3** |
| | 2.5nm,0.3s,baz=335,slow=4.4,SNR=2.9 | | | | | | |
| | 2.5nm,0.3s | | | | | | |
| **EIDS** | **Eidsvold** | **29.07** | **250** | P | **P** | **20 19 58.1** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 20 20 11.6 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **ARMA** | **Armidale** | **29.71** | **240** | P | **P** | **20 20 03.9** | **-0.2** |
| **WHZ** | **Wether Hill Ro** | **29.83** | **199** | P | **P** | **20 20 05.3** | **+0.6** |
| **CTA** | **Charters Tower** | **33.29** | **261** | P | **P** | **20 20 35.0** | **+0.4** |
| | comp=Z,0.3nm,0.6s,baz=91,slow=12,SNR=5.8 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **33.29** | **261** | P | **P** | **20 20 33.8** | **-0.8** |
| CTAO | | | | IAmb | IAmb | 20 21 12.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **COEN** | **Coen** | **36.99** | **271** | P | **P** | **20 21 05.6** | **+0.3** |
| **STKA** | **Stephens Creek** | **38.40** | **241** | P | **P** | **20 21 17.8** | **+1.3** |
| STKA | | | | IAmb | IAmb | 20 21 53.2 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.40** | **241** | P | **P** | **20 21 16.7** | **+0.2** |
| | comp=Z,1.8nm,0.7s,baz=90,slow=11,SNR=4.4 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.44** | **260** | P | **P** | **20 22 04.2** | **-0.1** |
| WB0 | | | | IAmb | IAmb | 20 22 34.0 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.46** | **260** | P | **P** | **20 22 04.3** | **-0.2** |
| **WRA** | **Warramunga Arr** | **44.47** | **260** | P | **P** | **20 22 04.0** | **-0.5** |
| **WRA** | **Warramunga Arr** | **44.47** | **260** | P | **P** | **20 22 04.7** | **+0.2** |
| | comp=Z,1.5nm,0.5s,baz=97,slow=6.7,SNR=59 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.61** | **254** | P | **P** | **20 22 05.7** | **+0.1** |
| AS31 | | | | IAmb | IAmb | 20 22 36.1 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.61** | **254** | P | **P** | **20 22 05.6** | **0.0** |
| **ASAR** | **Alice Springs** | **44.61** | **254** | P | **P** | **20 22 06.2** | **+0.7** |
| | comp=Z,9.2nm,0.6s,baz=88,slow=8.3,SNR=164 | | | | | | |
| | comp=Z,9.2nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **50.35** | **264** | P | **P** | **20 22 47.9** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 20 23 01.6 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.05** | **323** | P | **P** | **20 24 45.8** | **-0.4** |
| | comp=Z,1.1nm,0.5s,baz=168,slow=6.6,SNR=2.8 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **20 25 09.6** | **+1.1** |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **20 25 09.3** | **+0.7** |
| | comp=Z,1.0nm,0.7s,baz=135,slow=3.4,SNR=1.8 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |

*ISN **27** 20:24:05.6±0.5,34.63N×46.30E,h10km±13km,ML3.7*
*TEH **27** 20:24:06.5,34.63N×46.32E,h8km±32km,ML3.5*
*AFAD **27** 20:24:08.7±0.0,34.49N×45.75E,h7km±2km,MW4.0*
**ISC 27 20:24:07.3±0.7,34.63N±0.03×46.30E±0.03,h10km,n63, σ1≥80/78,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.10** | **47** | Pg | **Pg** | **20 24 10.2** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.38** | **144** | Pg | **Pb** | **20 24 15.5** | **-0.8** |
| **KGS1** | **Ghasr-e-Shirin** | **0.60** | **258** | Pg | **Pb** | **20 24 19.1** | **-0.9** |
| **GLG1** | **Gilan-e-Gharb** | **0.61** | **212** | Pg | **Pb** | **20 24 19.0** | **-1.1** |
| GLG1 | | | | Sg | **Sb** | **20 24 28.8** | **0.0** |
| **ILIN** | **Lien** | **0.61** | **62** | Pg | **Pb** | **20 24 19.2** | **-1.2** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **120** | Pg | **Pb** | **20 24 21.1** | **-0.8** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **184** | Pg | **Pn** | **20 24 27.1** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.12** | **78** | Pg | **Pn** | **20 24 28.9** | **-0.4** |
| **IBZA** | **Bozab** | **1.30** | **97** | Pg | **Pg** | **20 24 32.5** | **+0.2** |
| **IBDR** | **Badra** | **1.55** | **192** | *e*Pn | **Pg** | **20 24 36.5** | **-0.6** |
| IBDR | | | | *e*Sn | **Sg** | **20 24 58.5** | **+1.3** |
| IBDR | | | | AML | AML | 20 25 03.6 | |
| | comp=E,813nm,0.4s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.65** | **337** | Pg | **Pb** | **20 24 37.8** | **-0.2** |
| **IKFM** | **Kafar-mosalman** | **1.69** | **130** | Pg | **Pg** | **20 24 39.5** | **-0.3** |
| **IDOB** | **Doab** | **1.77** | **118** | Pg | **Pg** | **20 24 40.9** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.78** | **296** | *e*Pn | **Pb** | **20 24 39.5** | **-0.6** |
| IKRK | | | | *e*Sn | **Sg** | **20 25 04.5** | **-0.1** |
| IKRK | | | | AML | AML | 20 25 08.0 | |
| | comp=E,1μm,0.8s | | | | | | |
| IKRK | | | | AML | AML | 20 25 08.3 | |
| | comp=N,1μm,0.1s | | | | | | |
| **HSAM** | **Samen** | **1.95** | **102** | Pn | **Pg** | **20 24 43.9** | **-0.9** |
| **MAHB** | **Mahabad** | **2.18** | **347** | Pn | **Pb** | **20 24 46.9** | **-0.1** |
| **IHSH** | **Hashtrud** | **2.78** | **16** | Pn | **Pb** | **20 24 55.5** | **-1.8** |
| **QABG** | **Abgarm-Qazvin** | **2.90** | **67** | Pn | **Pb** | **20 24 57.5** | **-1.8** |
| **RAFI** | **Al-Rafai** | **2.91** | **183** | *e*Pn | **Pn** | **20 24 55.0** | **+1.4** |
| RAFI | | | | *e*Sn | **Sb** | **20 25 31.5** | **-3.3** |
| RAFI | | | | AML | AML | 20 25 40.5 | |
| | comp=E,278nm,0.6s | | | | | | |
| **IAZR** | **Azarshahr** | **3.05** | **355** | Pn | **Pb** | **20 24 59.0** | **-2.9** |
| **YOVA** | **Hakkari_Yksek** | **3.37** | **332** | P | **Pb** | **20 25 03.5** | **-3.8** |
| YOVA | | | | S | **Sb** | **20 25 45.2** | **-3.2** |
| YOVA | | | | *i* AML | AML | 20 26 03.0 | |
| | comp=E,70nm,0.9s | | | | | | |
| YOVA | | | | *i* AML | AML | 20 26 12.0 | |
| | comp=E,77nm,0.9s | | | | | | |
| **CUKT** | **Cukurca** | **3.40** | **321** | P | **Pn** | **20 25 03.1** | **+2.6** |
| CUKT | | | | S | **Sn** | **20 25 42.1** | **+1.0** |
| CUKT | | | | *i* AML | AML | 20 26 03.0 | |
| | comp=E,296nm,0.9s | | | | | | |
| CUKT | | | | *i* AML | AML | 20 26 06.0 | |
| | comp=E,293nm,0.6s | | | | | | |
| **HAKT** | **HAKKARI** | **3.59** | **325** | P | **Pn** | **20 25 05.0** | **+1.7** |
| HAKT | | | | S | **Sn** | **20 25 47.9** | **+1.9** |
| HAKT | | | | *i* AML | AML | 20 26 08.0 | |
| | comp=E,90nm,0.5s | | | | | | |
| HAKT | | | | *i* AML | AML | 20 26 10.0 | |
| | comp=E,105nm,0.5s | | | | | | |
| **ISHB** | **Shabestar** | **3.68** | **352** | Pn | **Pn** | **20 25 07.1** | **+2.6** |
| **IHRS** | **Heris** | **3.73** | **9** | Pn | **Pb** | **20 25 08.6** | **-4.8** |
| **IQOM** | **Qom** | **3.93** | **86** | Pn | **Pn** | **20 25 10.8** | **+2.8** |
| **SIRN** | **Sirnak** | **4.25** | **313** | P | **Pn** | **20 25 14.2** | **+2.0** |
| SIRN | | | | S | **Sn** | **20 26 04.2** | **+2.2** |
| SIRN | | | | *i* AML | AML | 20 26 32.0 | |
| | comp=E,151nm,0.7s | | | | | | |
| SIRN | | | | *i* AML | AML | 20 26 42.0 | |
| | comp=E,102nm,1.4s | | | | | | |
| **IPIR** | **Pirpir** | **4.29** | **116** | Pn | **Pn** | **20 25 15.9** | **+2.9** |
| **GRMI** | **Germi** | **4.36** | **17** | Pn | **Pn** | **20 25 17.3** | **+3.6** |
| **JHBN** | **Jahan bin** | **4.37** | **122** | Pn | **Pn** | **20 25 17.2** | **+3.2** |
| **PERV** | **Siirt/Pervari-** | **4.49** | **319** | P | **Pn** | **20 25 18.1** | **+2.5** |
| PERV | | | | S | **Sn** | **20 26 10.7** | **+2.8** |
| PERV | | | | *i* AML | AML | 20 26 37.0 | |
| | comp=E,74nm,1.0s | | | | | | |
| PERV | | | | *i* AML | AML | 20 26 49.0 | |
| | comp=E,76nm,0.7s | | | | | | |
| **ZNGN** | **Zangian** | **4.56** | **122** | Pn | **Pn** | **20 25 19.3** | **+2.5** |
| **IKLH** | **Kolahrood** | **4.58** | **105** | Pn | **Pn** | **20 25 20.2** | **+3.3** |
| **MIDY** | **Mardin/Midyat-** | **4.84** | **306** | P | **Pn** | **20 25 22.4** | **+2.1** |
| MIDY | | | | S | **Sn** | **20 26 15.8** | **-0.7** |
| **SRTM** | **Siirt_Merkez** | **4.87** | **315** | P | **Pn** | **20 25 22.9** | **+2.1** |
| SRTM | | | | S | **Sn** | **20 26 18.4** | **+1.2** |
| SRTM | | | | *i* AML | AML | 20 26 51.0 | |
| | comp=E,88nm,0.8s | | | | | | |
| SRTM | | | | *i* AML | AML | 20 27 02.0 | |
| | comp=E,56nm,0.8s | | | | | | |
| **ISFB** | **Sefidab** | **4.91** | **92** | Pn | **Pn** | **20 25 24.0** | **+2.7** |
| **BTMN** | **Batman** | **5.20** | **310** | P | **Pn** | **20 25 27.2** | **+1.8** |
| BTMN | | | | S | **Sn** | **20 26 26.1** | **+0.6** |
| BTMN | | | | *i* AML | AML | 20 27 04.0 | |
| | comp=E,67nm,1.7s | | | | | | |
| BTMN | | | | *i* AML | AML | 20 27 05.0 | |
| | comp=E,58nm,1.1s | | | | | | |
| **MARD** | **Mardin** | **5.21** | **302** | P | **Pn** | **20 25 26.1** | **+0.6** |
| MARD | | | | S | **Sn** | **20 26 24.5** | **-1.3** |
| MARD | | | | *i* AML | AML | 20 27 03.0 | |
| | comp=E,80nm,0.7s | | | | | | |
| MARD | | | | *i* AML | AML | 20 27 03.0 | |
| | comp=E,56nm,0.6s | | | | | | |
| **IGAR** | **Gharneh** | **5.29** | **113** | Pn | **Pn** | **20 25 29.2** | **+2.6** |
| **IZEF** | **Zefreh** | **5.31** | **107** | Pn | **Pn** | **20 25 29.8** | **+2.8** |
| **KBD** | **Kabd** | **5.57** | **167** | P | **Pn** | **20 25 32.1** | **+1.8** |
| KBD | | | | S | **Sn** | **20 26 35.4** | **+1.1** |
| **MUSM** | **Mu-Merkez** | **5.61** | **318** | P | **Pn** | **20 25 32.3** | **+1.4** |
| MUSM | | | | *i* AML | AML | 20 27 26.0 | |
| | comp=E,9.7nm,0.9s | | | | | | |
| MUSM | | | | *i* AML | AML | 20 27 35.0 | |
| | comp=E,6.3nm,1.1s | | | | | | |
| **IRAM** | **Rameshesh** | **5.82** | **117** | Pn | **Pn** | **20 25 37.1** | **+3.2** |
| **SAKB** | **Bahrain** | **9.37** | **156** | P | **Pn** | **20 26 22.7** | **+0.3** |
| **RAYN** | **Ar Rayn** | **11.09** | **184** | P | **Pn** | **20 26 45.2** | **-1.0** |
| **SHME** | **Shamm** | **12.05** | **133** | P | **Pn** | **20 26 58.5** | **-0.7** |
| **MASF** | **Masafi** | **12.57** | **135** | P | **Pn** | **20 27 06.4** | **+0.1** |
| **NAZ** | **Nazwa, Dubai** | **12.58** | **137** | P | **Pn** | **20 27 06.5** | **+0.1** |
| **ASUD** | **Al Ashush, Dub** | **12.69** | **139** | P | **Pn** | **20 27 08.3** | **+0.5** |
| | SNR=22 | | | | | | |
| **MDH** | **Madha** | **12.71** | **134** | P | **Pn** | **20 27 08.1** | **-0.1** |
| **FAQ** | **Al Faqa, Dubai** | **12.73** | **138** | P | **Pn** | **20 27 07.6** | **-0.9** |
| **UOSS** | **Minazif** | **12.92** | **136** | P | **Pn** | **20 27 10.8** | **-0.3** |
| **HATD** | **Hatta, Dubai** | **12.97** | **136** | P | **Pn** | **20 27 12.1** | **+0.4** |
| **ASHO** | **Ashiyiah** | **13.04** | **137** | P | **Pn** | **20 27 12.5** | **-0.2** |
| | SNR=15 | | | | | | |
| **MZR** | **Muzera** | **13.18** | **150** | P | **Pn** | **20 27 14.5** | **-0.1** |
| **ALNE** | **Al Ain** | **13.37** | **140** | P | **Pn** | **20 27 17.1** | **-0.1** |
| **SOHO** | **SOHO** | **13.74** | **137** | P | **Pn** | **20 27 21.3** | **-0.9** |
| SOHO | | | | P | **Pn** | **20 27 21.3** | **-0.9** |
| **UMZA** | **Um Al Zommool** | **14.19** | **145** | P | **Pn** | **20 27 28.1** | **-0.2** |
| **ARQ** | **Araqi** | **14.37** | **139** | P | **Pn** | **20 27 30.6** | **-0.2** |
| | SNR=9.3 | | | | | | |
| **HOQ** | **Hoqain** | **14.61** | **136** | P | **Pn** | **20 27 34.0** | **-0.1** |
| **BSY** | **Bisya** | **15.21** | **138** | P | **Pn** | **20 27 42.1** | **-0.2** |
| **SMDO** | **Samad** | **15.44** | **135** | P | **Pn** | **20 27 45.3** | **-0.1** |
| **MHTO** | **MHTO** | **17.05** | **140** | P | **Pn** | **20 28 05.2** | **-0.7** |

*IDC **27** 20:27:22.1±7.9,20.10S×177.32W,h0km,mb4.0/4, mbtmp4.0/4,Error ellipse: s-maj=204.1km s-min=37.8km az=29.0*
*NEIC **27** 20:28:29.9±1.2,22.0S±0.3×179.2W±0.3,h559km±29km, mb4.5/17,Error ellipse: s-maj=49.6km s-min=25.3km az=45.0*
**ISC 27 20:28:29.2±1.6,21.6S±0.1×179.0W±0.2,h602km,n24, σ1≥76/24,mb4.2/12,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.79** | **324** | | **P** | **20 29 58.6** | **-2.2** |
| **MRZ** | **Mangatainoka R** | **19.51** | **192** | P | **P** | **20 32 14.0** | **-4.2** |
| MRZ | | | | IAmb | IAmb | 20 32 49.0 | |
| | comp=Z,41nm,1.5s | | | | | | |
| **MSWZ** | **Moikau Station** | **20.31** | **193** | P | **P** | **20 32 24.3** | **-1.1** |
| **QRZ** | **Quartz Range** | **20.43** | **199** | P | **P** | **20 32 25.5** | **-1.0** |
| **THZ** | **Tophouse** | **21.19** | **197** | P | **P** | **20 32 31.8** | **-1.6** |
| **LTZ** | **Lake Taylor** | **22.31** | **197** | P | **P** | **20 32 41.1** | **-2.3** |
| LTZ | | | | IAmb | IAmb | 20 33 21.9 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **32.48** | **266** | P | **P** | **20 34 12.4** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 20 34 22.5 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **34.49** | **235** | P | **P** | **20 34 29.3** | **+0.6** |
| TOO | | | | IAmb | IAmb | 20 34 29.4 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **36.47** | **245** | P | **P** | **20 34 43.4** | **-1.7** |
| **STKA** | **Stephens Creek** | **36.47** | **245** | P | **P** | **20 34 46.0** | **+0.9** |
| | comp=Z,2.6nm,1.0s,baz=90,slow=9.1,SNR=3.6 | | | | | | |
| | comp=Z,2.6nm,1.0s | | | | | | |
| **MCQ** | **Macquarie Isla** | **36.79** | **201** | P | **P** | **20 34 45.6** | **-1.6** |
| **BBOO** | **Buckleboo** | **41.22** | **245** | P | **P** | **20 35 23.6** | **+0.4** |
| BBOO | | | | IAmb | IAmb | 20 35 34.5 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.36** | **263** | P | **P** | **20 35 40.6** | **+0.6** |
| WR0 | | | | IAmb | IAmb | 20 35 44.3 | |
| | comp=Z,7.4nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **43.38** | **258** | P | **P** | **20 35 41.4** | **+1.2** |
| | comp=Z,1.4nm,0.8s,baz=97,slow=9.0,SNR=10 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.53** | **264** | P | **P** | **20 35 42.3** | **+0.9** |
| WB0 | | | | IAmb | IAmb | 20 35 55.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.54** | **263** | P | **P** | **20 35 42.1** | **+0.7** |
| WB2 | | | | IAmb | IAmb | 20 35 55.1 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.55** | **263** | P | **P** | **20 35 42.1** | **+0.5** |
| | comp=Z,0.4nm,0.3s,baz=96,slow=7.9,SNR=19 | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | |
| **FORT** | **Forrest** | **48.01** | **248** | P | **P** | **20 36 15.5** | **+0.4** |
| FORT | | | | IAmb | IAmb | 20 36 33.8 | |
| | comp=Z,31nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **49.68** | **267** | P | **P** | **20 36 28.2** | **+0.6** |
| **FITZ** | **Fitzroy Crossi** | **51.98** | **264** | P | **P** | **20 36 43.0** | **-1.2** |
| **MBWA** | **Marble Bar** | **56.72** | **258** | P | **P** | **20 37 18.6** | **+1.3** |
| **QSPA** | **South Pole Qui** | **68.43** | **180** | P | **P** | **20 38 34.8** | **+2.9** |
| **QSPA** | **South Pole Qui** | **68.43** | **180** | P | **P** | **20 38 35.2** | **+3.3** |
| | comp=Z,1.6nm,0.7s,baz=345,slow=0.6,SNR=13 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **CLL** | **Collm** | **148.95** | **345** | *i* PKPbc | **PKPab** | **20 47 16.9** | **+0.3** |

**KRSC 27 20:46:44.3±1.4,49.56N×156.72E,h50km±22km,MI3.8, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.16** | **341** | *e*P | Pn | 20 47 05.2 | +1.0 |
| SKR | | | | *e*S | Sn | 20 47 20.0 | +1.0 |
| **KDTR** | **Khodutka, Kamc** | **2.39** | **21** | *e*P | Pn | 20 47 23.7 | +2.9 |
| KDTR | | | | *e*S | Sn | 20 47 52.4 | +3.5 |
| **ASAK** | **Asacha** | **2.90** | **14** | *e*P | Pn | 20 47 33.3 | +3.3 |
| ASAK | | | | *e*S | Sn | 20 48 05.5 | +3.9 |
| **MTVR** | **Mutnovka** | **3.04** | **17** | *e*P | Pn | 20 47 33.3 | +3.3 |
| MTVR | | | | *e*S | Sn | 20 48 08.5 | +3.3 |
| **GRL** | **Gorelyy** | **3.09** | **16** | *e*P | Pn | 20 47 34.1 | +3.5 |
| GRL | | | | *e*S | Sn | 20 48 10.4 | +4.1 |
| **APC** | **Apacha** | **3.35** | **5** | *e*P | Pn | 20 47 37.7 | +3.6 |
| **UGLR** | **Uglovaya** | **3.86** | **19** | *e*P | Pn | 20 47 45.3 | +4.2 |
| UGLR | | | | *e*S | Sn | 20 48 31.2 | +5.9 |
| **AVH** | **Avacha** | **3.89** | **18** | *e*P | Pn | 20 47 45.9 | +4.3 |
| **KOK** | **Koryaka** | **3.90** | **17** | *e*P | Pn | 20 47 46.2 | +4.5 |
| **SMAR** | **Somma** | **3.91** | **19** | *e*P | Pn | 20 47 45.5 | +3.6 |
| **SPN** | **Mys Shipunski** | **4.08** | **29** | *e*P | Pn | 20 47 47.3 | +3.3 |
| SPN | | | | *e*S | Sn | 20 48 33.5 | +3.0 |
| **GNL** | **Ganaly** | **4.18** | **10** | *e*P | Pn | 20 47 48.9 | +3.2 |
| **TUMR** | **Tumrok** | **6.08** | **19** | *e*P | Pn | 20 48 15.2 | +3.7 |

*NEIC **27** 20:47:01.4±1.7,18.04S±0.09×178.0W±0.1,h580km±8km, mb4.6/53,Error ellipse: s-maj=17.8km s-min=9.6km az=54.0*

*IDC **27** 20:47:03.1±1.1,18.14S×178.14W,h599km±10km, mb3.6/13,mbtmp4.5/15,Error ellipse: s-maj=17.2km s-min=12.6km az=132.0*
**ISC 27 20:47:01.8±0.4,18.16S±0.09×178.07W±0.08,h590km, n143,σ1≤13/142,mb4.5/39,12C-11D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.72** | **276** | P | **P** | **20 48 25.7** | **+1.0** |
| **MSVF** | **Nonsavu** | **3.72** | **276** | P | **P** | **20 48 26.0** | **+1.3** |
| | 166nm,0.6s,baz=153,slow=4.2,SNR=151 | | | | | | |
| MSVF | | | | S | **S** | **20 49 34.6** | **+2.3** |
| | 28nm,1.0s,baz=145,slow=20,SNR=6.3 | | | | | | |
| **AFI** | **Afiamalu** | **7.38** | **56** | P | **P** | **20 48 51.7** | **-3.3** |
| **NIUE** | **Niue** | **7.77** | **98** | P | **P** | **20 48 58.4** | **-0.2** |
| **PINNC** | **Pines Island,** | **14.29** | **250** | P | **P** | **20 49 59.8** | **-3.8** |
| **DZM** | **Mont Dzumac** | **15.06** | **252** | P | **P** | **20 50 08.3** | **-2.6** |
| DZM | | | | IAmb | IAmb | 20 50 35.6 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.06** | **252** | P | **P** | **20 50 10.8** | **-0.2** |
| | comp=Z,3.3nm,0.5s,baz=132,slow=21,SNR=7.7 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.82** | **259** | P | **P** | **20 50 24.4** | **-2.8** |
| KOUNC | | | | IAmb | IAmb | 20 50 47.3 | |
| | comp=Z,43nm,1.3s | | | | | | |
| **MXZ** | **Matakaoa Point** | **19.59** | **189** | P | **P** | **20 50 51.1** | **-1.0** |
| **TOZ** | **Tahuroa Road** | **20.30** | **195** | P | **P** | **20 50 58.5** | **0.0** |
| TOZ | | | | IAmb | IAmb | 20 51 03.2 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **URZ** | **Urewera** | **20.47** | **191** | P | **P** | **20 50 57.3** | **-2.6** |
| | comp=Z,11nm,0.4s,baz=228,slow=2.5,SNR=3.2 | | | | | | |
| **RTZ** | **Ruatahuna** | **20.84** | **191** | P | **P** | **20 51 01.9** | **-1.5** |
| RTZ | | | | IAmb | IAmb | 20 51 04.4 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.46** | **192** | P | **P** | **20 51 06.0** | **-3.0** |
| BKZ | | | | IAmb | IAmb | 20 51 27.0 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.08** | **192** | P | **P** | **20 51 20.3** | **-3.1** |
| MRZ | | | | IAmb | IAmb | 20 51 39.5 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **MSWZ** | **Moikau Station** | **23.88** | **192** | P | **P** | **20 51 29.1** | **-1.3** |
| **BHW** | **Baring Head** | **23.95** | **193** | P | **P** | **20 51 29.6** | **-1.4** |
| **QRZ** | **Quartz Range** | **24.00** | **198** | P | **P** | **20 51 31.3** | **-0.1** |
| **PLWZ** | **Palliser** | **24.02** | **192** | P | **P** | **20 51 30.4** | **-1.3** |
| **BSWZ** | **Blackbirch Sta** | **24.47** | **195** | P | **P** | **20 51 35.8** | **+0.2** |
| **THZ** | **Tophouse** | **24.76** | **196** | P | **P** | **20 51 36.8** | **-1.4** |
| **DSZ** | **Denniston Nort** | **25.05** | **198** | P | **P** | **20 51 40.0** | **-0.8** |
| **KHZ** | **Kahutara** | **25.21** | **195** | P | **P** | **20 51 40.4** | **-1.7** |
| **LTZ** | **Lake Taylor** | **25.88** | **196** | P | **P** | **20 51 45.7** | **-2.4** |
| LTZ | | | | IAmb | IAmb | 20 52 20.7 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.47** | **200** | P | **P** | **20 52 18.6** | **-0.7** |
| MLZ | | | | IAmb | IAmb | 20 53 01.7 | |
| | comp=Z,40nm,1.4s | | | | | | |
| **EIDS** | **Eidsvold** | **29.49** | **250** | P | **P** | **20 52 19.1** | **-0.7** |
| EIDS | | | | IAmb | IAmb | 20 52 20.3 | |
| | comp=Z,7.7nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **30.10** | **240** | P | **P** | **20 52 25.4** | **+0.4** |
| ARMA | | | | IAmb | IAmb | 20 52 49.4 | |
| | comp=Z,42nm,1.5s | | | | | | |
| **CTA** | **Charters Tower** | **33.73** | **261** | P | **P** | **20 52 55.7** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=99,slow=10.0,SNR=16 | | | | | | |
| **CTAO** | **Charters Tower** | **33.73** | **261** | P | **P** | **20 52 55.6** | **-0.3** |
| CTAO | | | | IAmb | IAmb | 20 52 56.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.81** | **233** | P | **P** | **20 52 57.1** | **+0.7** |
| **PMG** | **Port Moresby** | **34.82** | **280** | P | **P** | **20 53 04.9** | **-0.1** |
| **PMG** | **Port Moresby** | **34.82** | **280** | P | **P** | **20 53 05.8** | **+0.8** |
| | comp=Z,37nm,0.9s,baz=55,slow=8.1,SNR=5.2 | | | | | | |
| | comp=Z,37nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **37.27** | **231** | P | **P** | **20 53 25.8** | **+0.9** |
| TOO | | | | IAmb | IAmb | 20 53 26.8 | |
| | comp=Z,26nm,1.3s | | | | | | |
| **COEN** | **Coen** | **37.43** | **271** | P | **P** | **20 53 27.0** | **+0.5** |
| COEN | | | | IAmb | IAmb | 20 53 27.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **38.80** | **242** | P | **P** | **20 53 37.8** | **+0.6** |
| **STKA** | **Stephens Creek** | **38.80** | **242** | P | **P** | **20 53 38.1** | **+0.8** |
| | comp=Z,4.2nm,0.4s,baz=87,slow=6.5,SNR=26 | | | | | | |
| | comp=Z,4.2nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.57** | **241** | P | **P** | **20 54 14.9** | **0.0** |
| BBOO | | | | IAmb | IAmb | 20 54 16.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.72** | **260** | P | **P** | **20 54 23.1** | **-0.8** |
| **WB0** | **Warramunga Arr** | **44.88** | **260** | P | **P** | **20 54 24.1** | **-1.1** |
| WB0 | | | | IAmb | IAmb | 20 54 25.2 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.90** | **260** | P | **P** | **20 54 24.4** | **-0.9** |
| WB2 | | | | IAmb | IAmb | 20 54 25.4 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.90** | **260** | P | **P** | **20 54 24.7** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 20

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,1.4nm,0.8s | | | | | | | |
| D24K | **Happy Valley** | 89.56 | 10 | IAmb | IAmb | 20 59 10.4 | | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| TROLL | **Troll, Antarti** | 90.06 | 180 | ⇑P | **P** | **20 58 59.2** | **-0.1** | |
| | comp=Z,50nm,0.4s | | | | | | | |
| SNAA | **Sanae** | 90.34 | 178 | ⇑P | **P** | **20 59 00.0** | **-0.5** | |
| | comp=Z,12nm,0.6s | | | | | | | |
| SNAA | **Sanae** | 90.34 | 178 | P | **P** | **20 59 00.4** | **-0.1** | |
| | comp=Z,0.4nm,0.5s,baz=191,slow=11,SNR=9.0 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| VNA3 | **Neumayer Olymp** | 90.47 | 176 | ⇑P | **P** | **20 59 00.7** | **-0.4** | |
| | comp=Z,1.1nm,0.4s | | | | | | | |
| VNA2 | **Neumayer--Watz** | 90.91 | 177 | ⇑P | **P** | **20 59 03.1** | **0.0** | |
| | comp=Z,2.4nm,0.8s,baz=188,slow=4.6 | | | | | | | |
| VNA1 | **Neumayer--Stat** | 91.14 | 177 | ⇑P | **P** | **20 59 03.6** | **-0.5** | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| SONM | **Songino Array** | 93.95 | 319 | P | **P** | **20 59 18.1** | **+0.6** | |
| | comp=Z,0.3nm,0.5s,baz=104,slow=4.2,SNR=3.1 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| MKAR | **Makanchi Array** | 109.54 | 314 | PKiKP | **PKiKP** | **21 04 25.4** | **-0.7** | |
| | comp=Z,0.3nm,0.5s,baz=170,slow=1.0,SNR=6.2 | | | | | | | |
| BVAR | **Borovoye Array** | 117.25 | 321 | PKP | **PKPdf** | **21 04 40.0** | **-0.6** | |
| | comp=Z,0.8nm,0.4s,baz=104,slow=3.0,SNR=3.8 | | | | | | | |
| ARCES | **ARCESS Array B** | 126.62 | 350 | PKP | **PKPdf** | **21 04 58.0** | **-0.2** | |
| | comp=Z,2.0nm,0.7s,baz=131,slow=0.5,SNR=12 | | | | | | | |
| FINES | **FINESS Array B** | 133.52 | 344 | PKP | **PKPdf** | **21 05 10.8** | **-0.6** | |
| | comp=Z,1.1nm,0.9s,baz=318,slow=2.6,SNR=4.2 | | | | | | | |
| EKA | **Eskdalemuir Ar** | 142.69 | 5 | PKhKP | PKPpre | 21 05 25.1 | | |
| | comp=Z,0.2nm,0.4s,baz=345,slow=2.5,SNR=4.1 | | | | | | | |
| SORM | **Soroca** | 143.17 | 330 | ⇑P | PKPab | 21 05 26.9 | -0.6 | |
| GAZ | **Gaziantep** | 143.75 | 309 | | PKPbc | 21 05 28.8 | -1.3 | |
| BNN | **Bunyan** | 144.06 | 312 | PKPdf | PKPbc | 21 05 31.4 | +0.3 | |
| KWP | **Kalwaria Pacla** | 144.43 | 337 | | **PKPdf** | **21 05 31.7** | **+0.1** | |
| PRAR | **RASCA** | 144.72 | 331 | ⇓P | **PKiKP** | **21 05 41.8** | **+5.6** | |
| BUR08 | **Bucovina Ar. S** | 144.97 | 332 | PKPdf | **PKPdf** | **21 05 31.7** | **-1.0** | |
| BURAR | **Bucovina Array** | 144.99 | 332 | PKPdf | PKPbc | **21 05 34.1** | **+0.5** | |
| BURAR | **Bucovina Array** | 144.99 | 332 | ⇓P | **PKPab** | **21 05 34.7** | **+0.1** | |
| TESR | **Tescani** | 145.14 | 330 | ⇓P | **PKPbc** | **21 05 34.3** | **+0.3** | |
| BR131 | **Keskin Array S** | 145.19 | 315 | PKPdf | **PKPdf** | **21 05 34.0** | **+0.6** | |
| BRTR | **Keskin Array B** | 145.19 | 315 | | **PKPdf** | **21 05 33.9** | **+0.5** | |
| BRTR | **Keskin Array B** | 145.19 | 315 | PKPbc | **PKPbc** | **21 05 34.3** | **-0.2** | |
| | comp=Z,1.6nm,0.4s,baz=128,slow=4.4,SNR=15 | | | | | | | |
| KIRS | **Kirsehir-Merke** | 145.28 | 314 | ⇑P | **PKPbc** | **21 05 34.7** | **0.0** | |
| CFR | **Carcaliu** | 145.32 | 327 | ⇑P | **PKPbc** | **21 05 35.1** | **+0.7** | |
| ONER | **Baraj Valea Uz** | 145.39 | 330 | ⇑P | **PKPab** | **21 05 35.9** | **-0.2** | |
| TPGR | **Topolog** | 145.39 | 326 | ⇑P | **PKPbc** | **21 05 35.1** | **+0.4** | |
| VRI | **Vrincioaia** | 145.56 | 329 | ⇑P | **PKPbc** | **21 05 35.1** | **-0.1** | |
| OSTC | **Ostas** | 145.72 | 344 | *e*P | **PKPab** | **21 05 36.9** | **-0.4** | |
| HARR | **Harsova** | 145.76 | 326 | ⇓P | **PKPbc** | **21 05 36.7** | **+1.0** | |
| TURR | **Turia** | 145.77 | 330 | ⇓P | **PKPab** | **21 05 37.3** | **-0.4** | |
| CLL | **Collm** | 145.78 | 348 | | **PKPbc** | **21 05 35.4** | **-0.2** | |
| CLL | **Collm** | 145.78 | 348 | *i* PKPdf | **PKPdf** | **21 05 34.7** | **+0.9** | |
| CLL | | | | ⇓*i*PKPbc | **PKPbc** | **21 05 35.8** | **+0.2** | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| UPC | **Upice** | 145.82 | 344 | *e*P | **PKPbc** | **21 05 36.6** | **+0.8** | |
| DPC | **Dobruska-Polom** | 145.88 | 344 | *e*P | **PKPbc** | **21 05 36.9** | **+0.9** | |
| BRG | **Berggiesshubel** | 145.99 | 346 | *i* P | **PKPbc** | **21 05 36.9** | **+0.7** | |
| BRG | | | | Amp | | 21 05 37.5 | | |
| | comp=Z,4.4nm,0.7s | | | | | | | |
| KRLC | **Kraliky** | 146.00 | 343 | *e*P | **PKPbc** | **21 05 36.9** | **+0.5** | |
| MORC | **Moravsky Berou** | 146.05 | 342 | *e*PKP | **PKPbc** | **21 05 37.0** | **+0.5** | |
| MLR | **Muntele Rosu** | 146.22 | 329 | | **PKPdf** | **21 05 35.9** | **+0.9** | |
| MLR | **Muntele Rosu** | 146.22 | 329 | ⇓P | **PKPbc** | **21 05 37.0** | **-0.2** | |
| HSKC | **Hora Svate Kat** | 146.35 | 347 | *e*P | **PKPbc** | **21 05 36.8** | **-0.5** | |
| MMAI | **Mount Meron Ar** | 146.55 | 303 | PKPbc | **PKPbc** | **21 05 38.9** | **+0.5** | |
| | comp=Z,2.7nm,0.5s,baz=66,slow=8.3,SNR=9.1 | | | | | | | |
| DRGR | | 146.71 | 334 | ⇓P | **PKPbc** | **21 05 38.1** | **-0.3** | |
| ARR | **Arges** | 146.94 | 330 | ⇓P | **PKPbc** | **21 05 39.8** | **+0.8** | |
| BUC1 | **Bucharest** | 146.99 | 327 | ⇓P | **PKiKP** | **21 05 40.3** | **-0.6** | |
| KHC | **Kasperske Hory** | 147.70 | 346 | | **PKPbc** | **21 05 41.0** | **+0.2** | |
| GERES | **GERESS Array B** | 147.94 | 345 | PKPbc | **PKPbc** | **21 05 41.7** | **+0.1** | |
| GERES | **GERESS Array B** | 147.94 | 345 | PKPbc | **PKPbc** | **21 05 42.0** | **+0.4** | |
| | comp=Z,1.9nm,0.5s,baz=35,slow=4.9,SNR=11 | | | | | | | |
| VLAD | **Vladila** | 148.05 | 329 | ⇑P | **PKPdf** | **21 05 38.6** | **+0.8** | |
| CONA | **Conrad Observa** | 148.20 | 342 | *e*PKP | **PKiKP** | **21 05 43.2** | **-0.3** | |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| RONA | **Rosalia, Austr** | 148.28 | 341 | *e*PKP | **PKiKP** | **21 05 43.2** | **-0.4** | |
| | comp=Z,4.6nm,1.2s | | | | | | | |
| BAND | **Balkesir-Ban** | 148.42 | 320 | ⇓P | **PKPbc** | **21 05 41.5** | **-1.4** | |
| BIOA | **Bad Ischl, Aus** | 149.03 | 345 | *e*PKP | **PKPbc** | **21 05 44.3** | **+0.1** | |
| | comp=Z,5.6nm,1.3s | | | | | | | |
| LESA | **Schwarzleotal** | 149.51 | 346 | *i* PKP | **PKPbc** | **21 05 45.7** | **+0.3** | |
| | comp=Z,1.8nm,0.5s | | | | | | | |
| SOKA | **Soboth** | 149.57 | 342 | *i* PKP | **PKPbc** | **21 05 45.5** | **-0.1** | |
| | comp=Z,4.5nm,1.2s | | | | | | | |
| KBA | **Koelnbreinsper** | 149.67 | 344 | *i* PKP | **PKPbc** | **21 05 44.7** | **-1.3** | |
| | comp=Z,5.1nm,1.3s | | | | | | | |
| WATA | **Walderalm** | 149.84 | 347 | *i* PKP | **PKPbc** | **21 05 46.5** | **+0.2** | |
| | comp=Z,2.7nm,0.5s | | | | | | | |
| RETA | **Reutte** | 149.87 | 348 | *i* PKP | **PKPbc** | **21 05 46.7** | **+0.5** | |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| WTTA | **Wattenberg** | 149.90 | 347 | *i* PKP | **PKPbc** | **21 05 46.8** | **+0.3** | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| MOTA | **Moosalm** | 149.93 | 348 | *i* PKP | **PKPbc** | **21 05 46.7** | **+0.2** | |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| MYKA | **Terra Mystica** | 150.01 | 344 | *i* PKP | **PKPbc** | **21 05 46.4** | **-0.3** | |
| | comp=Z,2.2nm,0.4s | | | | | | | |
| SQTA | **Sankt Quirin** | 150.03 | 347 | *i* PKP | **PKPbc** | **21 05 47.1** | **+0.4** | |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| ABTA | **Abfaltersbach** | 150.18 | 345 | *i* PKP | **PKPbc** | **21 05 46.9** | **-0.1** | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| DAVA | **Damuels** | 150.23 | 349 | *i* PKP | **PKiKP** | **21 05 48.0** | **+0.2** | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| FETA | **Feichten** | 150.32 | 348 | *i* PKP | **PKPbc** | **21 05 47.8** | **+0.4** | |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| FUORN | **Ofenpass-Fuorn** | 150.80 | 348 | | **PKiKP** | **21 05 49.1** | **0.0** | |
| FNA | **Florina** | 151.93 | 328 | PKPbc | **PKPbc** | **21 05 50.7** | **-0.4** | |

*ISK **27** 20:55:39.1, 38.°55N×25.°45E, h14km, ML2.5/24*
*ATH **27** 20:55:40.3, 38.°53N×25.°50E, h15km±2km, ML2.5/4, Error ellipse: s-maj=3.2km s-min=1.2km az=99.0*
*THE **27** 20:55:40.5, 38.°55N×25.°51E, h1km±1km, ML2.5/4, Error ellipse: s-maj=1.0km s-min=0.4km az=75.0*
*AFAD **27** 20:55:41.3±0.0, 38.°66N×25.°60E, h19km±2km, ML2.5*

**ISC 27 21:55:40.2±1.0, 38.°55N±0.°02×25.°50E±0.°03, h16km±8km, n48, σ0°60/68, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHOS** | **Chios island** | **0.47** | **110** | Pg | **Pg** | **20 55 49.4** | **-0.2** |
| CHOS | | | | Sg | **Sg** | **20 55 56.1** | **+0.1** |
| **CHOS** | **Chios island** | **0.47** | **110** | P | **Pg** | **20 55 49.6** | **0.0** |
| CHOS | | | | S | **Sg** | **20 55 56.1** | **+0.1** |
| | 538nm,0.2s | | | | | | |
| **CHOS** | **Chios island** | **0.47** | **110** | P | **Pg** | **20 55 49.6** | **0.0** |
| CHOS | | | | S | **Sg** | **20 55 55.9** | **-0.1** |
| CHOS | | | | AML | AML | 20 56 00.4 | |
| | comp=E,1363μm,0.3s | | | | | | |
| CHOS | | | | AML | AML | 20 56 01.8 | |
| | comp=N,925μm,0.2s | | | | | | |
| **CESE** | **eme** | **0.67** | **109** | Pg | **Pb** | **20 55 53.6** | **+0.1** |
| **SIGR** | **SIGRI** | **0.72** | **23** | Pg | **Pg** | **20 55 53.6** | **-0.7** |
| SIGR | | | | Sg | **Sb** | **20 56 04.6** | **+0.5** |
| **SIGR** | **SIGRI** | **0.72** | **23** | P | **Pg** | **20 55 54.0** | **-0.3** |
| SIGR | | | | S | **Sb** | **20 56 04.9** | **+0.8** |
| | comp=N,458nm,0.4s | | | | | | |
| **SIGR** | **SIGRI** | **0.72** | **23** | P | **Pg** | **20 55 54.1** | **-0.3** |
| SIGR | | | | S | **Sb** | **20 56 04.3** | **+0.2** |
| SIGR | | | | AML | AML | 20 56 06.1 | |
| | comp=E,994μm,0.4s | | | | | | |
| SIGR | | | | AML | AML | 20 56 08.1 | |
| | comp=N,829μm,0.4s | | | | | | |
| **KARB** | **zmir-Karabur** | **0.73** | **80** | P | **Pg** | **20 55 54.4** | **-0.1** |
| KARB | | | | S | **Sg** | **20 56 03.5** | **-0.6** |
| **ZEYE** | **Izmir, Urla-Ze** | **0.85** | **111** | P | **Pn** | **20 55 57.3** | **-0.2** |
| ZEYE | | | | *i* AML | AML | 20 56 09.0 | |
| | comp=N,176nm,0.3s | | | | | | |
| ZEYE | | | | S | **Sn** | **20 56 09.2** | **-0.5** |
| ZEYE | | | | *i* AML | AML | 20 56 11.0 | |
| | comp=N,160nm,0.3s | | | | | | |
| **URLA** | **Izmir** | **0.88** | **102** | Pg | **Pg** | **20 55 57.6** | **+0.2** |
| URLA | | | | Sg | **Sn** | **20 56 10.5** | **-0.1** |
| **URLA** | **Izmir** | **0.88** | **102** | P | **Pg** | **20 55 57.4** | **0.0** |
| URLA | | | | S | **Sg** | **20 56 09.1** | **+0.1** |
| URLA | | | | *i* AML | AML | 20 56 10.0 | |
| | comp=N,154nm,0.6s | | | | | | |
| URLA | | | | *i* AML | AML | 20 56 12.0 | |
| | comp=N,230nm,0.6s | | | | | | |
| **PRK** | **Paraskevi** | **0.93** | **41** | P | **Pb** | **20 55 57.8** | **-0.1** |
| PRK | | | | S | **Sn** | **20 56 11.5** | **-0.1** |
| | comp=N,352nm,0.4s | | | | | | |
| **PRK** | **Paraskevi** | **0.93** | **41** | P | **Pb** | **20 55 57.5** | **-0.4** |
| PRK | | | | S | **Sg** | **20 56 10.4** | **+0.1** |
| PRK | | | | AML | AML | 20 56 13.8 | |
| | comp=N,609μm,0.4s | | | | | | |
| PRK | | | | AML | AML | 20 56 15.2 | |
| | comp=E,802nm,0.4s | | | | | | |
| **FOCM** | **Foa** | **0.98** | **80** | Pg | **Pb** | **20 55 58.8** | **-0.1** |
| FOCM | | | | Sg | **Sn** | **20 56 13.8** | **+0.8** |
| **GPNR** | **Gulpinar-Canak** | **1.04** | **29** | Pg | **Pb** | **20 55 59.4** | **-0.4** |
| **TNSA** | **Tinos** | **1.04** | **195** | P | **Pb** | **20 55 58.9** | **-0.9** |
| **KYMI** | **Kymi, Euboea I** | **1.10** | **275** | P | **Pb** | **20 56 01.3** | **+0.5** |
| **KYMI** | **Kymi, Euboea I** | **1.10** | **275** | P | **Pb** | **20 56 00.9** | **0.0** |
| **DGB** | **zmir** | **1.20** | **114** | P | **Pn** | **20 56 02.2** | **-0.1** |
| DGB | | | | S | **Sb** | **20 56 16.3** | **-1.6** |
| **IZMD** | **zmir-Dikili-** | **1.20** | **68** | P | **Pn** | **20 56 01.7** | **-0.8** |
| IZMD | | | | S | **Sb** | **20 56 17.1** | **-1.0** |
| **DKL** | **Dikili** | **1.22** | **64** | Pn | **Pn** | **20 56 02.4** | **-0.2** |
| **ZEDA** | **zmir-Bergama** | **1.31** | **71** | P | **Pn** | **20 56 03.0** | **-0.8** |
| **DION** | **Dionisos Attik** | **1.31** | **250** | P | **Pb** | **20 56 05.0** | **+0.4** |
| DION | | | | S | **Sg** | **20 56 24.3** | **+1.6** |
| | comp=E,208nm,0.6s | | | | | | |
| **LIA** | **Limnos Island** | **1.37** | **350** | P | **Pn** | **20 56 04.6** | **-0.2** |
| LIA | | | | S | **Sn** | **20 56 21.6** | **-1.0** |
| LIA | | | | AML | AML | 20 56 26.6 | |
| | comp=E,314μm,0.3s | | | | | | |
| LIA | | | | AML | AML | 20 56 27.7 | |
| | comp=N,275μm,0.3s | | | | | | |
| **EZNE** | **Ezine-Canakkal** | **1.39** | **29** | Pn | **Pn** | **20 56 04.8** | **-0.1** |
| **EZN** | **Ezine** | **1.43** | **27** | Pn | **Pn** | **20 56 04.9** | **-0.7** |
| EZN | | | | Sn | **Sb** | **20 56 24.6** | **+0.1** |
| **APE** | **Apeiranthos** | **1.48** | **179** | Pn | **Pn** | **20 56 05.1** | **-1.1** |
| APE | | | | Sn | **Sn** | **20 56 25.6** | **+0.4** |
| **APE** | **Apeiranthos** | **1.48** | **179** | P | **Pn** | **20 56 05.0** | **-1.1** |
| **GCAM** | **G?zelcaml?** | **1.61** | **121** | Pn | **Pn** | **20 56 08.4** | **+0.4** |
| **GADA** | **Gvkgeada** | **1.67** | **11** | Pn | **Pn** | **20 56 08.5** | **-0.4** |
| **SOMA** | **Soma-Manisa** | **1.71** | **68** | Pn | **Pn** | **20 56 09.7** | **+0.4** |
| **COMU** | **Canakkale** | **1.73** | **26** | Pn | **Pn** | **20 56 09.9** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **1.92** | **1** | P | **Pn** | **20 56 12.1** | **-0.3** |
| **IZMR** | **zmir-demi** | **1.98** | **101** | P | **Pb** | **20 56 16.9** | **+1.1** |
| IZMR | | | | S | **Sb** | **20 56 41.8** | **+1.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.98** | **107** | Pn | **Pn** | **20 56 13.7** | **+0.5** |
| **GELI** | **Tayfur-Gelibol** | **2.00** | **22** | Pn | **Pn** | **20 56 13.8** | **+0.4** |
| **ODEM** | **Odemis-Izmir** | **2.04** | **97** | Pn | **Pn** | **20 56 14.5** | **+0.4** |
| **LPK** | **Lapseki** | **2.07** | **28** | Pn | **Pn** | **20 56 14.6** | **+0.2** |
| **GORD** | **Gordes-Manisa** | **2.13** | **79** | Pn | **Pn** | **20 56 15.9** | **+0.7** |
| **OUR** | **Ouranopolis** | **2.13** | **327** | Pn | **Pn** | **20 56 15.1** | **-0.1** |
| **THAS** | **Thassos island** | **2.14** | **344** | P | **Pn** | **20 56 14.8** | **-0.6** |
| **ENEZ** | **Enez** | **2.25** | **13** | Pn | **Pn** | **20 56 16.9** | **+0.2** |
| **ERIK** | **Erikli-Kesan** | **2.26** | **20** | Pn | **Pn** | **20 56 17.3** | **+0.3** |
| **KRBG** | **Karabiga-Canak** | **2.31** | **37** | Pn | **Pn** | **20 56 17.9** | **+0.2** |
| **ALN** | **Alexandroupoli** | **2.39** | **10** | Pn | **Pn** | **20 56 19.1** | **+0.4** |
| **SUSR** | **Susurluk-Balik** | **2.46** | **54** | Pn | **Pn** | **20 56 19.9** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **2.50** | **31** | Pn | **Pn** | **20 56 20.8** | **+0.4** |
| **MRMT** | **Marmara Adasi** | **2.62** | **38** | Pn | **Pn** | **20 56 22.4** | **+0.4** |

**IDC 27 21:05:55.6±2.1, 1.°83N×126.°53E, h0km, mb3.8/3, mbtmp3.8/3, Error ellipse: s-maj=178.3km s-min=24.2km az=66.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.95** | **161** | P | P | 21 11 01.4 | -0.4 |
| | 2.7nm,0.7s,baz=339,slow=10,SNR=22 | | | | | | |
| | 2.7nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **26.34** | **165** | P | P | 21 11 33.6 | +0.1 |
| | 0.8nm,0.5s,baz=348,slow=13,SNR=17 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.00** | **326** | P | P | 21 15 57.4 | +0.1 |
| | 0.3nm,0.3s,baz=120,slow=8.0,SNR=7.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

**IDC 27 21:06:22.8±45.0, 16.°25S×172.°60W, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=867.8km s-min=191.9km az=79.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **44.29** | **241** | P | P | 21 14 35.0 | +0.4 |
| | 1.1nm,0.7s,baz=108,slow=9.6,SNR=1.6 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.41** | **257** | P | P | 21 15 22.1 | -0.3 |
| | 0.4nm,0.5s,baz=96,slow=6.8,SNR=14 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **50.59** | **253** | P | P | 21 15 23.6 | -0.2 |
| | 2.8nm,0.6s,baz=88,slow=8.4,SNR=34 | | | | | | |
| | 2.8nm,0.6s | | | | | | |

**TEH 27 21:43:13.6, 30.°19N×57.°52E, h9km±25km, ML3.5, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHMN** | **Cheshme madani** | **0.33** | **177** | Pg | Pg | 21 43 20.8 | +0.5 |
| CHMN | | | | Sg | Sg | 21 43 25.3 | +0.6 |
| **KRM1** | **Kerman Provinc** | **0.38** | **325** | Pg | Pg | 21 43 21.7 | +0.5 |
| KRM1 | | | | Sg | Sg | 21 43 27.0 | +0.8 |
| **TVBK** | **TV Kerman** | **0.69** | **253** | Pg | Pb | 21 43 27.7 | -0.4 |
| **NGRK** | **Negar Kerman** | **0.88** | **232** | Pg | Pb | 21 43 31.2 | -0.1 |
| NGRK | | | | Sg | Sb | 21 43 43.4 | +0.1 |
| **KHGB** | **Koh Gabri** | **0.92** | **282** | Pg | Pg | 21 43 31.4 | 0.0 |
| **ZRDN** | **Zarand Kerman** | **1.15** | **312** | Pg | Pn | 21 43 36.1 | -0.1 |
| **KBAM** | **BAM** | **1.33** | **142** | Pg | Pg | 21 43 39.2 | +0.1 |
| **IBAF** | **Bafgh** | **2.18** | **310** | Pn | Pb | 21 43 52.9 | -0.5 |
| **BSRN** | **Basiran** | **2.24** | **37** | Pn | Pn | 21 43 52.5 | +1.5 |
| **NHDN** | **Nehbandan** | **2.48** | **61** | Pn | Pn | 21 43 56.2 | +1.8 |
| **ITEG** | **Tejag** | **2.89** | **21** | Pn | Pn | 21 44 02.0 | +1.9 |
| **TPRV** | **Parvadeh(Tabas** | **2.92** | **346** | Pn | Pn | 21 44 02.7 | +2.4 |
| **ZHDN** | **Zahedan** | **2.96** | **105** | Pn | Pn | 21 44 03.1 | +2.0 |
| **IDAH** | **Dahanechah** | **3.23** | **38** | Pn | Pn | 21 44 06.4 | +1.6 |
| **TKDS** | **Koohdasht(Taba** | **3.43** | **354** | Pn | Pn | 21 44 09.8 | +2.4 |
| **AFRZ** | **Afriz** | **3.46** | **21** | Pn | Pn | 21 44 09.6 | +1.7 |
| **TNSJ** | **Nastanj** | **3.84** | **349** | Pn | Pn | 21 44 15.6 | +2.5 |
| **TBJM** | **Torbat-e-JAM** | **5.59** | **24** | Pn | Pn | 21 44 39.4 | +2.3 |

*IDC **27** 21:43:44.9±2.3, 17.°76S×178.°37W, h526km±20km, mb3.2/7, mbtmp4.0/8, Error ellipse: s-maj=80.6km s-min=16.8km az=149.0*
*NEIC **27** 21:43:46.6±1.4, 18.°3S±0.°2×178.°5W±0.°2, h522km±9km, mb4.3/17, Error ellipse: s-maj=32.7km s-min=10.7km az=129.0*

**ISC 27 21:43:44.5±1.2, 18.°3S±0.°2×178.°3W±0.°2, h500km, n38, σ1°87/33, mb4.2/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.50** | **279** | P | **P** | **21 45 01.6** | **+2.5** |
| **MSVF** | **Nonsavu** | **3.50** | **279** | P | **P** | **21 45 01.3** | **+2.2** |
| | 19nm,0.8s,baz=113,slow=5.4,SNR=8.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.77** | **253** | P | **P** | **21 46 54.2** | **+1.9** |
| **THZ** | **Tophouse** | **24.52** | **196** | | **P** | **21 48 23.6** | **0.0** |
| **EIDS** | **Eidsvold** | **29.19** | **251** | P | **P** | **21 49 04.5** | **-0.4** |
| EIDS | | | | IAmb | IAmb | 21 49 33.0 | |
| | comp=Z,9.5nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **29.79** | **240** | P | **P** | **21 49 11.3** | **+1.0** |
| **CTAO** | **Charters Tower** | **33.45** | **261** | P | **P** | **21 49 40.6** | **-0.9** |
| CTAO | | | | IAmb | IAmb | 21 49 46.3 | |
| | comp=Z,14nm,1.2s | | | | | | |
| **TOO** | **Toolangi** | **36.96** | **231** | | **P** | **21 50 11.0** | **+0.3** |
| TOO | | | | IAmb | IAmb | 21 50 24.6 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **COEN** | **Coen** | **37.18** | **271** | P | **P** | **21 50 11.0** | **-1.7** |
| COEN | | | | IAmb | IAmb | 21 50 12.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **38.49** | **242** | P | **P** | **21 50 24.0** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.49** | **242** | P | **P** | **21 50 23.9** | **+0.7** |
| | comp=Z,1.4nm,0.4s,baz=80,slow=7.9,SNR=7.4 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.27** | **241** | P | **P** | **21 51 01.3** | **0.0** |
| **WR0** | **Warramunga Arr** | **44.44** | **260** | P | **P** | **21 51 08.2** | **-2.5** |
| **WB0** | **Warramunga Arr** | **44.60** | **260** | P | **P** | **21 51 09.8** | **-2.1** |
| WB0 | | | | IAmb | IAmb | 21 51 13.9 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.62** | **260** | P | **P** | **21 51 10.1** | **-1.9** |
| WB2 | | | | IAmb | IAmb | 21 51 11.0 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.62** | **260** | P | **P** | **21 51 10.6** | **-1.5** |
| WRAB | | | | IAmb | IAmb | 21 51 13.3 | |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.63** | **260** | P | **P** | **21 51 09.9** | **-2.2** |
| **WRA** | **Warramunga Arr** | **44.63** | **260** | P | **P** | **21 51 10.4** | **-1.7** |
| | comp=Z,1.7nm,0.5s,baz=95,slow=6.9,SNR=59 | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS31** | **Alice Springs** | **44.75** | **255** | P | **P** | **21 51 11.8** | **-1.2** | |
| AS31 | | | | IAmb | IAmb | 21 51 12.8 | | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.75** | **255** | P | **P** | **21 51 12.1** | **-0.9** | |
| **ASAR** | **Alice Springs** | **44.75** | **255** | P | **P** | **21 51 12.2** | **-0.8** | |
| | comp=Z,17nm,0.6s,baz=89,slow=8.2,SNR=292 | | | | | | | |
| | comp=Z,17nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **49.89** | **245** | P | **P** | **21 51 50.5** | **-1.1** | |
| FORT | | | | IAmb | IAmb | 21 51 55.9 | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **KNRA** | **Kununurra** | **50.52** | **265** | P | **P** | **21 51 54.4** | **-2.1** | |
| **FITZ** | **Fitzroy Crossi** | **53.03** | **261** | P | **P** | **21 52 13.3** | **-1.3** | |
| **GSTR** | **Great Sitkin T** | **70.16** | **1** | P | **P** | **21 54 06.1** | **+0.1** | |
| **PETK** | **Petropavlovsk-** | **74.11** | **345** | P | P | 21 54 24.5 | -4.4 | |
| **NVAR** | **Mina Array Bea** | **79.68** | **44** | P | P | 21 54 56.1 | -4.0 | |
| | comp=Z,0.6nm,0.6s,baz=205,slow=8.0,SNR=7.3 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.16** | **58** | P | P | 21 55 28.8 | -3.9 | |
| | comp=Z,0.5nm,0.6s,baz=224,slow=3.5,SNR=5.0 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.28** | **13** | P | P | 21 55 26.9 | -5.4 | |
| | comp=Z,0.3nm,0.4s,baz=220,slow=5.4,SNR=4.9 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.61** | **43** | P | P | 21 55 35.3 | -4.1 | |
| | comp=Z,0.2nm,0.5s,baz=155,slow=4.9,SNR=3.7 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **145.01** | **332** | | | **22 02 22.2** | **-2.4** | |
| **BURAR** | **Bucovina Array** | **145.02** | **332** | PKPdf | **PKPdf** | **22 02 22.5** | **-2.1** | |
| **BRTR** | **Keskin Array B** | **145.13** | **314** | PKP | **PKPdf** | **22 02 22.1** | **-2.9** | |
| | comp=Z,0.8nm,0.6s,baz=144,slow=5.8,SNR=5.9 | | | | | | | |
| **CLL** | **Collm** | **145.89** | **347** | | **PKPdf** | **22 02 25.7** | **-0.1** | |
| **MMAI** | **Mount Meron Ar** | **146.43** | **302** | PKPbc | **PKPdf** | **22 02 27.4** | **0.0** | |
| | comp=Z,0.8nm,0.4s,baz=92,slow=4.9,SNR=2.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **148.04** | **345** | PKPbc | **PKPdf** | **22 02 29.4** | **-0.1** | |
| | comp=Z,0.6nm,0.5s,baz=62,slow=3.2,SNR=4.3 | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.91** | **348** | | **PKPdf** | **22 02 37.5** | **+3.2** | |
| **BNI** | **Bardonecchia** | **153.03** | **352** | | **PKPdf** | **22 02 42.0** | **+4.6** | |

*NEIC **27** 21:46:18.2±1.6, 17.°61S±0.°06×69.°84W±0.°08, h123km±4km, mb4.8/61, Mwr4.7(GUC), Error ellipse: s-maj=11.0km s-min=8.9km az=98.0*
*VAO **27** 21:46:18.8±0.4, 17.°56S×69.°58W, h114km±4km, mb4.9*
*GUC **27** 21:46:19.4±0.9, 17.°63S×69.°89W, h113km±6km, ML4.5*
*IDC **27** 21:46:20.0±0.6, 17.°60S×69.°65W, h128km±5km, mb4.1/12, mbtmp4.6/15, MS3.6/4, Error ellipse: s-maj=12.8km s-min=10.8km az=136.0*

**ISC 27 21:46:18.1±0.5, 17.°63S±0.°04×69.°76W±0.°05, h121km±4km, n195, σ1°82/196, mb4.7/30, 2C-4D, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB18** | **Visviri** | **0.27** | **83** | | **Pn** | **21 46 36.9** | **+1.1** |
| PB18 | | | | Sn | **Sn** | **21 46 51.7** | **+2.6** |
| **PB18** | **Visviri** | **0.27** | **83** | ⇓*i* P | **Pn** | **21 46 37.5** | **+1.7** |
| PB18 | | | | *e*S | **Sn** | **21 46 51.1** | **+2.0** |
| **AP01** | **Chacallu

comp=Z,64nm,0.8s
**MT01 Popeta 16.23 184 Pn Pn 21 49 59.0 -0.1**
**BO04 La Punta 16.31 183 Pn Pn 21 50 00.1 -0.1**
BO04 IAmb IAmb 21 50 05.2
comp=Z,42nm,0.8s
**BO01 Tunca 16.74 184 Pn Pn 21 50 05.0 -0.4**
BO01 IAmb IAmb 21 50 10.1
comp=Z,84nm,1.4s
**MACA Manacapuru-AM 16.91 33 Pn Pn 21 50 06.9 -0.6**
MACA IAmb IAmb 21 50 09.5
comp=Z,43nm,0.5s
**MACA Manacapuru-AM 16.91 33 eP P 21 50 07.6 0.0**
**ITQB Itaqui 16.97 137 P P 21 50 07.4 -0.7**
**ITQB Itaqui 16.97 137 eP Pn 21 50 09.2 +1.0**
**BO02 Sierra Bellavi 17.12 183 P Pn 21 50 10.7 +0.6**
BO02 IAmb IAmb 21 50 15.1
comp=Z,54nm,1.1s
**ARAG Araguaiana, MT 17.30 86 eP Pn 21 50 11.7 -0.6**
**PSAL Palomas, Salto 17.36 143 eP Pn 21 50 13.5 +0.6**
**GO05 Huala 17.42 186 P P 21 50 13.9 +0.8**
**CRSM Crissiumal (Br 17.51 127 eP Pn 21 50 14.9 +0.1**
**NPGB Novo Progresso 17.55 55 eP P 21 50 14.0 -0.7**
**H03N1 Juan Fernandez 17.77 206 P Pn 21 50 23.6 +6.1**
baz=111,slow=14,SNR=6.0
H03N1 T T 22 08 06.5
baz=28,slow=73,SNR=21
**H03N2 Juan Fernandez 17.77 206 P Pn 21 50 21.6 +4.0**
baz=111,slow=14,SNR=5.1
H03N2 T T 22 08 00.3
baz=28,slow=73,SNR=16
**H03N3 Juan Fernandez 17.78 206 P Pn 21 50 24.1 +6.3**
baz=111,slow=14,SNR=6.5
H03N3 T T 22 08 03.6
baz=28,slow=73,SNR=20
**H03S3 Juan Fernandez 18.10 205 P Pn 21 50 26.7 +5.2**
baz=20,slow=20,SNR=6.4
**H03S1 Juan Fernandez 18.11 205 P Pn 21 50 27.7 +6.1**
baz=20,slow=20,SNR=2.9
**H03S2 Juan Fernandez 18.12 205 P Pn 21 50 28.8 +7.1**
baz=20,slow=20,SNR=4.1
**RODS Rosario do Sul 18.34 136 eP Pn 21 50 23.8 -0.9**
**LDASE Londrina, Braz 18.38 111 eP P 21 50 23.7 0.0**
**ITRB Iturama 18.50 99 eP Pn 21 50 25.4 -1.3**
**SNDB Serra Nova Dou 18.71 75 eP P 21 50 27.4 0.0**
**TBOT Tacuaremb 18.78 141 eP P 21 50 28.4 +0.5**
**ITAB Concordia 18.88 124 P P 21 50 28.9 -0.1**
**ITAB Concordia 18.88 124 eP P 21 50 28.9 -0.1**
**ALGR Alto Alegre (B 18.95 129 eP P 21 50 30.1 +0.1**
**BI02 San Fabín de 19.01 184 P P 21 50 29.2 -1.3**
**CPSB Cacapava Do Su 19.57 134 eP P 21 50 35.1 -1.4**
**OTAV Otavalo 19.70 333 eP P 21 50 39.2 +0.6**
**FRTB Fartura 19.75 110 eP P 21 50 38.6 0.0**
**PLTB Pedras Altas 20.30 137 P P 21 50 44.0 -0.5**
**IPMB Ipameri, GO 20.52 94 eP P 21 50 46.4 -0.6**
**CNLB Canela 20.85 127 eP P 21 50 50.7 +0.2**
**BDFB Brasilia 20.93 88 P P 21 50 50.3 -1.2**
BDFB IAmb IAmb 21 50 55.0
comp=Z,44nm,1.2s
**BDFB Brasília 20.93 88 P P 21 50 50.7 -0.8**
comp=Z,24nm,0.5s,baz=266,slow=11,SNR=23
comp=Z,24nm,0.5s
**TRQA Tornquist 21.47 163 P P 21 50 56.6 -0.3**
TRQA IAmb IAmb 21 51 38.3
comp=Z,56nm,1.4s
**SPB Sao Paulo 21.71 110 P P 21 50 58.4 -1.3**
**SPB Sao Paulo 21.71 110 eP P 21 50 59.1 -0.5**
**MAL2 Monte Alegre, 21.79 46 P P 21 51 00.5 0.0**
MAL2 IAmb IAmb 21 51 02.0
comp=Z,38nm,0.8s
**TER01 Tubaro-SC 21.83 124 eP P 21 50 59.1 -1.7**
**BOAV Boa Vista 21.88 25 P P 21 51 00.6 -0.9**
**BOAV Boa Vista 21.88 25 eP P 21 51 00.8 -0.7**
**GO06 Curarrehue 21.93 184 P P 21 51 00.9 -1.0**
**PET01 Itanhaem-SP 22.00 111 eP P 21 51 03.3 +0.6**
**VAO Valinhos 22.03 108 eP P 21 51 02.5 -0.6**
**PRPB Parauapebas 22.56 62 eP P 21 51 07.4 -1.1**
**LR05 Currie 22.61 184 P P 21 51 08.4 -0.2**
LR05 IAmb IAmb 21 51 11.3
comp=Z,33nm,1.1s
**PLCA Paso Flores 23.04 182 P P 21 51 13.8 +1.0**
**PLCA Paso Flores 23.04 182 P P 21 51 14.4 +1.5**
comp=Z,14nm,0.7s,baz=355,slow=11,SNR=7.8
comp=Z,14nm,0.7s
**PLCA Paso Flores 23.04 182 eP P 21 51 14.4 +1.5**
**SMTB Santa Maria do 23.25 71 eP P 21 51 14.6 -0.4**
**LL04 Puerto Octay 23.32 185 P P 21 51 16.4 +1.1**
LL04 IAmb IAmb 21 51 17.4
comp=Z,50nm,1.5s
**MCPB Macapa, AP 24.45 47 eP P 21 51 25.5 -0.4**
**JANB Januaria 24.55 88 eP P 21 51 26.3 -0.5**
**SDBA SAO DESIDERIO 24.55 81 eP P 21 51 26.9 0.0**
**DIAM Diamantina, MG 24.82 96 eP P 21 51 30.0 +0.6**
**BAUV El Baul 26.45 4 P P 21 51 43.0 -0.9**
**MDP Montagnes des 28.21 38 LR LR 22 02 51.1**
comp=Z,37nm,20.1s,baz=197,slow=35
**NAN01 Guarapari, ES 28.22 95 eP P 21 51 59.7 -0.1**
**CELP Cerrillos 35.61 5 P P 21 53 03.7 -0.6**
CELP IAmb IAmb 21 53 05.0
comp=Z,18nm,0.9s
**RPN Rapa Nui 37.66 248 LR LR 22 05 33.6**
comp=Z,68nm,21.0s,baz=220,slow=30
**SLBS Sierra La Lagu 56.79 315 P P 21 55 47.0 -3.0**
SLBS IAmb IAmb 21 56 10.8
comp=Z,8.6nm,1.1s
**TXAR Lajitas Array 57.02 325 P P 21 55 52.5 +0.9**
comp=Z,0.5nm,0.6s,baz=152,slow=7.9,SNR=4.8
TXAR pP **pP 21 56 22.4 +0.3**
comp=Z,0.5nm,0.6s,baz=144,slow=10.0,SNR=3.6
comp=Z,0.5nm,0.6s
**LCAR Lake Charles 57.11 339 P P 21 55 51.1 -0.9**
**T45A Paducah 57.20 342 P P 21 55 52.1 -0.4**
**FCAR Ozark Folk Cen 57.28 338 P P 21 55 52.2 -1.0**
**PBMO Poplar Bluff 57.52 340 P P 21 55 54.0 -0.8**
PBMO IAmb IAmb 21 55 55.1
comp=Z,13nm,1.0s
**T42A Van Buren 57.97 340 P P 21 55 56.6 -1.3**
**WTFS Witchita Falls 57.97 332 P P 21 55 59.2 +1.1**
**S44A Carbondale 58.00 342 P P 21 55 56.3 -1.9**
**SIUC Southern Illin 58.01 342 P P 21 55 56.3 -1.9**
**APMT Aspermont 58.37 330 P P 21 56 01.0 +0.1**
**MGMO Mountain Grove 58.47 339 P P 21 56 00.8 -0.6**
MGMO IAmb IAmb 21 56 02.1
comp=Z,8.1nm,1.1s
**FVM French Village 58.63 341 P P 21 56 01.7 -0.8**
**CCM Cathedral Cave 58.95 340 P P 21 56 03.3 -1.4**
CCM IAmb IAmb 21 56 05.6
comp=Z,9.3nm,0.9s
**S39A Bolivar 59.32 338 P P 21 56 06.2 -1.1**
S39A IAmb IAmb 21 56 08.4
comp=Z,9.2nm,1.0s
**R40A Maddies Statio 59.50 340 P P 21 56 08.0 -0.5**
R40A IAmb IAmb 21 56 31.8
comp=Z,9.4nm,0.8s
**P40A Paris 60.55 340 P P 21 56 14.8 -0.9**
P40A IAmb IAmb 21 56 16.5
comp=Z,6.6nm,0.9s
**KSU1 Kansas State U 61.77 336 P P 21 56 23.8 -0.1**
KSU1 IAmb IAmb 21 56 26.6
comp=Z,7.5nm,0.6s
**SADO Sadowa 62.68 352 LR LR 22 26 49.3**
comp=Z,66nm,20.1s,baz=1,0,slow=39
**L34A Svendsen Farm, 64.19 338 P P 21 56 39.8 -0.1**
L34A IAmb IAmb 21 56 42.0
comp=Z,14nm,0.8s
**ECSD EROS Data Cent 65.83 339 P P 21 56 49.3 -1.2**
**SPMN Marine on St. 65.97 342 P P 21 56 51.3 +0.1**
SPMN IAmb IAmb 21 56 52.4
comp=Z,10nm,0.6s
**SNAA Sanae 66.19 161 ⇑P P 21 56 52.7 +0.2**
comp=Z,27nm,0.5s
**SNAA Sanae 66.19 161 P P 21 56 54.0 +1.5**
comp=Z,1.2nm,0.6s,baz=289,slow=9.1,SNR=12
comp=Z,1.2nm,0.6s
**TROLL Troll, Antarti 67.90 161 ⇑P P 21 57 04.9 +1.5**
comp=Z,111nm,0.7s
**EYMN Ely 68.11 344 P P 21 57 04.1 -0.7**
EYMN IAmb IAmb 21 57 10.5
comp=Z,13nm,1.1s
**DBIC Dimbokro 68.47 75 P P 21 57 07.5 -0.2**
**DBIC Dimbokro 68.47 75 P P 21 57 07.9 +0.2**
comp=Z,61nm,0.6s,baz=239,slow=6.3,SNR=95
**ULM Lac du Bonnet 71.40 343 P P 21 57 24.6 -0.3**
**ULM Lac du Bonnet 71.40 343 P P 21 57 25.1 +0.2**
comp=Z,4.2nm,0.4s,baz=150,slow=6.8,SNR=11
comp=Z,4.2nm,0.4s
**NVAR Mina Array Bea 71.97 322 P P 21 57 30.7 +1.9**
comp=Z,0.9nm,0.8s,baz=133,slow=6.3,SNR=4.2
comp=Z,0.9nm,0.8s
**QSPA South Pole Qui 72.55 180 P P 21 57 33.5 +1.7**
**QSPA South Pole Qui 72.55 180 P P 21 57 33.8 +2.0**
comp=Z,1.6nm,0.4s,baz=223,slow=0.2,SNR=24
comp=Z,1.6nm,0.4s
**TORD Torodi Ar. Bea 76.86 72 P P 21 57 56.5 -0.8**
TORD IAmb IAmb 21 57 58.1
comp=Z,22nm,0.8s
**TORD Torodi Ar. Bea 76.86 72 P P 21 57 57.2 -0.2**
comp=Z,24nm,0.8s,baz=266,slow=5.1,SNR=123
TORD LR LR 22 31 47.5
comp=Z,97nm,18.6s,baz=355,slow=36
comp=Z,24nm,0.8s
**MORF Marmelete 79.29 45 eP P 21 58 12.3 +1.9**
**PNCL Nicolau / Gran 79.80 45 eP P 21 58 14.1 +1.0**
**PCVE Castro Verde 79.88 45 eP P 21 58 15.3 +1.8**
**PMTG Montargil 80.51 44 eP P 21 58 18.0 +1.2**
**POLO Lamas de Olo 82.00 42 eP P 21 58 25.5 +0.7**
**MVO Moncorvo 82.38 43 eP P 21 58 28.1 +1.3**
**PAB San Pablo 83.34 45 P P 21 58 32.5 +0.8**
PAB IAmb IAmb 21 58 33.9
comp=Z,8.2nm,0.7s
**ESDC Sonseca Array 83.66 45 P P 21 58 34.5 +1.1**
**ESDC Sonseca Array 83.66 45 P P 21 58 34.2 +0.8**
comp=Z,3.3nm,0.8s,baz=257,slow=5.6,SNR=19
comp=Z,3.3nm,0.8s
**ESBB Sonseca Array 83.67 45 P P 21 58 33.2 -0.2**
ESBB IAmb IAmb 21 58 37.1
comp=Z,14nm,1.5s
**BOSA Boshof 85.98 119 P P 21 58 46.3 +0.8**
comp=Z,4.1nm,0.9s,baz=260,slow=6.1,SNR=2.1
comp=Z,4.1nm,0.9s
**YKA Yellowknife Ar 87.28 341 P P 21 58 52.3 +1.6**
comp=Z,2.6nm,0.8s,baz=129,slow=4.9,SNR=4.9
YKA pP **pP 21 59 24.4 +0.9**
comp=Z,2.6nm,0.8s,baz=136,slow=4.2,SNR=3.4
comp=Z,2.6nm,0.8s
**MAW Mawson 88.25 164 P P 21 58 57.1 +1.7**
comp=Z,1.7nm,0.6s,baz=214,slow=5.8,SNR=7.0
comp=Z,1.7nm,0.6s
**KBZ Khabaz 118.27 49 PKP PKiKP 22 04 52.5 +1.3**
comp=Z,1.5nm,0.7s,baz=310,slow=2.0,SNR=3.9
**H11S2 WAKE ISLAND Hyl 126.50 280 T T 00 24 47.0**
baz=98,slow=75,SNR=9.5
**H11S1 WAKE ISLAND Hyl 126.51 280 T T 00 24 46.5**
baz=98
**H11S3 WAKE ISLAND Hyl 126.52 280 T T 00 24 47.6**
baz=98,slow=75,SNR=7.2
**ABKAR Akbulak array 128.79 40 PKPdf PKiKP 22 05 13.1 +1.2**
**ASAR Alice Springs 132.90 210 PKP PKPdf 22 05 20.4 +0.5**
comp=Z,0.5nm,0.6s,baz=130,slow=1.4,SNR=7.8
**WRA Warramunga Arr 135.80 213 PKP PKPdf 22 05 26.0 +0.7**
comp=Z,0.6nm,0.4s,baz=145,slow=1.7,SNR=6.9
**KURBB Kurchatov Arra 138.48 30 PKP PKPdf 22 05 29.9 +0.6**
comp=Z,0.6nm,0.7s,baz=312,slow=2.6,SNR=5.5
**ZALV Zalesovo Beam 138.75 23 PKP PKPdf 22 05 30.0 +0.3**
comp=Z,1.5nm,0.6s,baz=317,slow=3.9,SNR=6.7
**MAKZ Makanchi 142.72 32 PKPpre PKPpre 22 05 32.1**
**MKAR Makanchi Array 142.89 32 PKPdf 22 05 34.0 -3.4**
**MKAR Makanchi Array 142.89 32 PKhKP PKPpre 22 05 34.6**
comp=Z,0.6nm,0.8s,baz=354,slow=3.2,SNR=5.3
**MTN Manton Dam 143.37 216 PKPdf PKPbc 22 05 37.5 +1.0**
**MJAR Matsushiro Arr 148.95 313 PKPbc PKPbc 22 05 53.1 +0.9**
comp=Z,2.9nm,0.9s,baz=132,slow=1.2,SNR=5.6
MJAR pPKPbc **pPKPbc 22 06 25.8 -0.6**
comp=Z,1.8nm,0.6s,baz=82,slow=2.4,SNR=3.4
**SONM Songino Array 149.71 5 PKPbc PKiKP 22 05 54.8 0.0**
comp=Z,0.9nm,0.5s,baz=337,slow=1.2,SNR=8.5
SONM pPKPbc **pPKPbc 22 06 29.2 +1.1**
comp=Z,2.0nm,0.7s,baz=330,slow=1.6,SNR=4.1
**CMAR Chiang Mai Arr 169.22 84 PKPab PKPab 22 07 25.5 +0.8**
comp=Z,0.4nm,0.3s,baz=272,slow=5.8,SNR=4.0

*NEIC* ***27*** *21:56:27.9±1.1, 45.°03N±0.°04×106.°74W±0.°08, h0km±1km, ML2.8/32, Error ellipse: s-maj=9.0km s-min=7.3km az=273.0*
*IDC* ***27*** *21:56:28.9±1.4, 44.°65N×106.°33W, h0km, mbtmp3.3/2, ML3.9/1, Error ellipse: s-maj=59.2km s-min=9.8km az=141.0*
**ISC 27 21:56:28.4**±1.2**, 45.°06N**±0.°05×**106.°70W**±0.°06**, h0**km**, n28,** σ0**93**/28**, Montana**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAO** | **LASA Array** | **1.66** | **11** | Pg | **Pb** | **21 56 59.3** | **-0.5** |
| LAO | | | | | **Sg** | **21 57 21.8** | **+0.1** |
| LAO | | | | IAML | | 21 57 24.6 | |
| | 131nm,0.8s | | | | | | |
| LAO | | | | IAML | | 21 57 34.9 | |
| | 149nm,0.8s | | | | | | |
| **RLMT** | **Red Lodge** | **1.82** | **273** | Pn | **Pn** | **21 57 01.0** | **-0.1** |
| RLMT | | | | IAML | | 21 57 30.8 | |
| | 51nm,0.6s | | | | | | |
| **RSSD** | **Black Hills** | **2.12** | **115** | Pn | **Pn** | **21 57 06.2** | **+0.9** |
| RSSD | | | | IAML | | 21 57 38.5 | |
| | 69nm,0.5s | | | | | | |
| RSSD | | | | IAML | | 21 57 46.9 | |
| | 84nm,0.6s | | | | | | |
| **K22A** | **Casper** | **2.42** | **177** | Pn | **Pn** | **21 57 09.3** | **0.0** |
| K22A | | | | IAML | | 21 57 45.8 | |
| | comp=N,76nm,0.6s | | | | | | |
| K22A | | | | IAML | | 21 57 52.0 | |
| | comp=E,49nm,0.7s | | | | | | |
| **YMP** | **Mirror Lake Pl** | **2.48** | **264** | Pn | **Pn** | **21 57 11.0** | **+0.7** |
| **YNR** | **Norris Junctio** | **2.85** | **264** | Pn | **Pn** | **21 57 16.2** | **+0.9** |
| YNR | | | | IAML | | 21 57 57.4 | |
| | comp=E,27nm,0.6s | | | | | | |
| **YHH** | **Holmes Hill** | **2.96** | **266** | Pn | **Pn** | **21 57 18.0** | **+1.1** |
| **FLWY** | **Flagg Ranch** | **3.02** | **252** | Pn | **Pn** | **21 57 17.4** | **-0.2** |
| FLWY | | | | IAML | | 21 58 24.7 | |
| | comp=E,31nm,1.0s | | | | | | |
| FLWY | | | | IAML | | 21 58 28.0 | |
| | comp=E,22nm,1.0s | | | | | | |
| **YPP** | **Pitchstone Pla** | **3.03** | **256** | Pn | **Pn** | **21 57 18.2** | **+0.3** |
| **PD31** | **Pinedale Array** | **3.09** | **223** | Pn | **Pn** | **21 57 19.2** | **+0.7** |
| **PDAR** | **Pinedale Array** | **3.09** | **223** | Pn | **Pn** | **21 57 19.1** | **+0.5** |
| **PDAR** | **Pinedale Array** | **3.09** | **223** | Pn | **Pn** | **21 57 21.4** | **+2.8** |
| | comp=E,1.8nm,0.3s,baz=57,slow=16,SNR=45 | | | | | | |
| PDAR | | | | Lg | Lg | 21 58 01.9 | |
| | comp=E,2.9nm,0.3s,baz=57,slow=30,SNR=7.6 | | | | | | |
| | comp=E,1.8nm,0.3s | | | | | | |
| **LOHW** | **Long Hollow** | **3.15** | **244** | Pn | **Pn** | **21 57 20.1** | **+0.7** |
| **YHL** | **Hebgen Lake** | **3.19** | **268** | Pn | **Pn** | **21 57 21.0** | **+1.0** |
| YHL | | | | IAML | | 21 58 17.0 | |
| | comp=N,32nm,0.8s | | | | | | |
| YHL | | | | IAML | | 21 58 18.9 | |
| | comp=E,35nm,0.8s | | | | | | |
| **IMW** | **Indian Meadow** | **3.25** | **250** | Pn | **Pn** | **21 57 21.4** | **+0.6** |
| IMW | | | | IAML | | 21 58 19.1 | |
| | comp=E,21nm,0.7s | | | | | | |
| IMW | | | | IAML | | 21 58 27.8 | |
| | comp=E,25nm,0.6s | | | | | | |
| **REDW** | **Red Top Meadow** | **3.43** | **242** | Pn | **Pn** | **21 57 23.2** | **-0.1** |
| **BOZ** | **Bozeman (W)** | **3.52** | **280** | Pn | **Pn** | **21 57 24.8** | **+0.4** |
| **EGMT** | **Eagleton** | **3.63** | **326** | Pn | **Pn** | **21 57 26.8** | **+0.9** |
| **N23A** | **Red Feather La** | **4.20** | **172** | Pn | **Pn** | **21 57 34.5** | **+0.6** |
| **LYMT** | **Lyon Mountain** | **4.33** | **298** | Pn | **Pn** | **21 57 35.3** | **-0.4** |
| **BPMT** | **Black Pine Rid** | **4.92** | **289** | Pn | **Pn** | **21 57 43.4** | **-0.4** |
| **HWUT** | **Hardware Ranch** | **4.95** | **227** | Pn | **Pn** | **21 57 42.0** | **-2.2** |
| HWUT | | | | IAML | | 21 59 03.9 | |
| | comp=E,7.6nm,0.8s | | | | | | |
| HWUT | | | | IAML | | 21 59 14.3 | |
| | comp=E,6.9nm,0.9s | | | | | | |
| **OGNE** | **Ogallala** | **5.35** | **139** | Pn | **Pn** | **21 57 50.4** | **+0.9** |
| **SUSD** | **Miller** | **5.55** | **94** | Pn | **Pn** | **21 57 52.0** | **-0.2** |
| **SPUT** | **South Promonto** | **5.63** | **230** | Pn | **Pn** | **21 57 52.9** | **-0.6** |
| **SRU** | **San Rafael Swe** | **6.59** | **207** | Pn | **Pn** | **21 58 07.0** | **+0.3** |
| **I56US** | **NEWPORT INFRAS** | **7.85** | **298** | I | I | 22 45 20.0 | |
| | baz=112,slow=318,SNR=1.7 | | | | | | |
| **ULM** | **Lac du Bonnet** | **8.96** | **51** | Pn | **Pn** | **21 58 38.6** | **-0.3** |
| | comp=E,2.5nm,0.8s,baz=238,slow=9.5,SNR=1.5 | | | | | | |
| ULM | | | | Lg | Lg | 22 01 05.5 | |
| | comp=E,0.1nm,0.3s,baz=307,slow=20,SNR=1.4 | | | | | | |

*GII* ***27*** *22:01:40.4±0.6, 26.°458N±0.°005×35.°725E±0.°002, h1km, Mws3.0, confirmed*
*SGS* ***27*** *22:01:40.9, 26.°30N×35.°49E, h17km, Ml2.3*
*HLW* ***27*** *22:01:41.6, 26.°21N×35.°33E, h32km±36km, Md3.6, Ml3.5*
**ISC 27 22:01:37.8**±0.9**, 26.°25N**±0.°03×**35.°42E**±0.°03**, h10**km**, n49,** σ1**§70**/52**, 3D, Red Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WJHS** | | **0.99** | **61** | P | **Pn** | **22 01 57.6** | **-0.2** |
| **WJHS** | | **0.99** | **61** | S | **Sb** | **22 02 09.6** | **-0.7** |
| **NQSR** | **New Quseer** | **1.05** | **262** | P | **Pb** | **22 01 58.1** | **+0.1** |
| | baz=265 | | | | | | |
| **EWJHS** | **Al Wajh** | **1.11** | **95** | P | **Pb** | **22 01 59.4** | **+0.3** |
| **EWJHS** | **Al Wajh** | **1.11** | **95** | S | **Sg** | **22 02 13.2** | **-0.5** |
| **NADB** | **Abo Dabab** | **1.23** | **222** | P | **Pn** | **22 02 00.7** | **-0.3** |
| | baz=221 | | | | | | |
| NADB | | | | S | **Sb** | **22 02 15.3** | **-1.7** |
| | baz=221 | | | | | | |
| **MWLHS** | **Almuwaylih** | **1.49** | **3** | P | **Pn** | **22 02 04.2** | **-0.4** |
| **MWLHS** | **Almuwaylih** | **1.49** | **3** | S | **Sn** | **22 02 21.3** | **-2.8** |
| **BIDS** | **Bi'r al Bayda'** | **1.51** | **66** | P | **Pb** | **22 02 05.7** | **-0.1** |
| **BIDS** | **Bi'r al Bayda'** | **1.51** | **66** | S | **Sb** | **22 02 24.4** | **-0.7** |
| **WTBKS** | **WTBKS** | **1.88** | **13** | S | **Sn** | **22 02 33.6** | **-0.2** |
| **WTBKS** | **WTBKS** | **1.88** | **13** | P | **Pn** | **22 02 10.6** | **+0.6** |
| **HAGS** | **Hagol** | **1.91** | **192** | P | **Pn** | **22 02 10.8** | **+0.5** |
| | baz=190 | | | | | | |
| HAGS | | | | S | **Sn** | **22 02 31.7** | **-2.7** |
| | baz=190 | | | | | | |
| **HHRG** | **Al Ghardaqah** | **1.91** | **301** | P | **Pn** | **22 02 08.9** | **-1.6** |
| | baz=299 | | | | | | |
| HHRG | | | | S | **Sn** | **22 02 28.9** | **-5.7** |
| | baz=299 | | | | | | |
| **AYUS** | **`Aynunah** | **1.93** | **356** | P | **Pn** | **22 02 10.4** | **-0.3** |
| **TR1** | **Tor 1** | **2.18** | **324** | P | **Pn** | **22 02 14.5** | **+0.3** |
| | baz=326 | | | | | | |
| **BDAS** | **Al Bad`** | **2.19** | **353** | P | **Pn** | **22 02 14.0** | **-0.2** |
| **TBKS** | **Tabuk** | **2.20** | **27** | P | **Pn** | **22 02 15.7** | **+1.4** |
| **JLOS** | | **2.47** | **1** | P | **Pn** | **22 02 18.8** | **+0.5** |
| **HKAT** | **Jabal Katrina** | **2.59** | **331** | P | **Pn** | **22 02 20.8** | **+0.8** |
| | baz=334 | | | | | | |
| **BRNS** | **Bernies** | **2.67** | **207** | P | **Pn** | **22 02 22.1** | **+1.3** |
| | baz=206 | | | | | | |
| **NUB** | **Nuweibaa** | **2.85** | **346** | P | **Pn** | **22 02 23.4** | **+0.1** |
| | baz=348 | | | | | | |
| **HBST** | **Basata** | **3.01** | **349** | P | **Pn** | **22 02 27.2** | **+1.6** |
| | baz=351 | | | | | | |
| **GRB** | **Gharib** | **3.09** | **311** | P | **Pn** | **22 02 27.7** | **+1.1** |
| | baz=313 | | | | | | |
| **KASR** | **Kasr** | **3.38** | **219** | ⇓P | **Pn** | **22 02 32.6** | **+2.0** |
| | baz=219 | | | | | | |
| **EIL** | **Elat** | **3.43** | **353** | P | **Pn** | **22 02 31.6** | **+0.3** |
| **MBRI** | **Mt Berech** | **3.56** | **353** | P | **Pn** | **22 02 33.8** | **+0.7** |
| **ASUT** | | **3.63** | **289** | P | **Pn** | **22 02 36.1** | **+2.1** |
| | baz=291 | | | | | | |
| **HRFI** | **Mount Harif** | **3.78** | **355** | S | **Sn** | **22 03 20.6** | **-0.2** |
| **HRFI** | **Mount Harif** | **3.78** | **355** | P | **Pn** | **22 02 36.8** | **+0.6** |
| **NNAL** | **NNAL** | **3.87** | **221** | ⇓P | **Pn** | **22 02 41.0** | **+3.6** |
| | baz=221 | | | | | | |
| **KRMI** | **Paran Flat** | **3.90** | **351** | S | **Sn** | **22 03 25.2** | **+1.5** |
| **KRMI** | **Paran Flat** | **3.90** | **351** | P | **Pn** | **22 02 39.1** | **+1.3** |
| **PRNI** | **Paran** | **4.10** | **355** | S | **Sn** | **22 03 29.4** | **+0.8** |
| **PRNI** | **Paran** | **4.10** | **355** | P | **Pn** | **22 02 42.1** | **+1.6** |
| **ZFRI** | **Zfri** | **4.29** | **357** | P | **Pn** | **22 02 44.4** | **+1.3** |
| **ZFRI** | **Zfri** | **4.29** | **357** | S | **Sn** | **22 03 32.7** | **-0.6** |
| **GTR** | **Jabal at Tayr** | **4.44** | **261** | ⇓P | **Pn** | **22 02 46.9** | **+1.7** |
| | baz=262 | | | | | | |
| **AKRG** | **Al Kharijah** | **4.50** | **262** | ⇑P | **Pn** | **22 02 47.5** | **+1.5** |
| | baz=262 | | | | | | |
| **ASHG** | **Umm Shaghir** | **4.53** | **230** | P | **Pn** | **22 02 49.2** | **+2.7** |
| | baz=230 | | | | | | |
| **HMSM** | **Jabal Masmas** | **4.65** | **224** | P | **Pn** | **22 02 50.6** | **+2.5** |
| | baz=225 | | | | | | |
| **KZIT** | **Kziot** | **4.72** | **349** | P | **Pn** | **22 02 51.2** | **+2.1** |
| **KZIT** | **Kziot** | **4.72** | **349** | S | **Sn** | **22 03 45.4** | **+1.5** |
| **GHAJ** | **Ghor Haditha** | **5.03** | **1** | P | **Pn** | **22 02 55.0** | **+1.7** |
| **YTIR** | **Yattir** | **5.10** | **357** | P | **Pn** | **22 02 56.3** | **+1.9** |
| **AMAZ** | **Amatzia** | **5.28** | **355** | P | **Pn** | **22 02 58.7** | **+2.0** |
| **DSI** | **Dead Sea** | **5.30** | **360** | P | **Pn** | **22 02 58.4** | **+1.4** |
| **RYAN** | **Fayoum** | **5.36** | **303** | P | **Pn** | **22 02 59.7** | **+1.9** |
| | baz=304 | | | | | | |
| **HDK1** | **Dakhla** | **5.46** | **264** | P | **Pn** | **22 03 01.2** | **+1.9** |
| | baz=265 | | | | | | |

*IDC* ***27*** *22:08:11.2±2.4, 36.°50N×142.°90E, h0km, mb3.5/3, mbtmp3.5/5, ML2.8/2, Error ellipse: s-maj=45.9km s-min=30.5km az=68.0*
*JMA* ***27*** *22:08:14.9±0.3, 36.°5N±0.°7×14.°3E±.°, h76km, MV3.0/28, FAR E OFF KANTO*
**ISC 27 22:08:16.2**±1.3**, 36.°49N**±0.°05×**142.°74E**±0.°09**, h35**km**, n19,** σ1**§24**/31**, mb3.6/3, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ONAJ** | **Iwakimizuishiy** | **1.68** | **292** | P | **Pn** | **22 08 42.0** | **-1.0** |
| ONAJ | | | | S | **Sn** | **22 09 02.1** | **-1.2** |
| **JFK** | **Kawauchi** | **1.73** | **301** | P | **Pn** | **22 08 42.7** | **-1.1** |
| JFK | | | | eS | **Sn** | **22 09 03.6** | **-1.1** |
| **JHYU** | **Hitachinakayam** | **1.75** | **266** | P | **Pn** | **22 08 43.2** | **-0.8** |
| JHYU | | | | eS | **Sn** | **22 09 04.1** | **-0.8** |
| **JHO** | **Hitachi** | **1.75** | **275** | P | **Pn** | **22 08 43.0** | **-1.1** |
| JHO | | | | eS | **Sn** | **22 09 03.6** | **-1.6** |
| **JOTO** | **OTAMA OYAMA** | **2.20** | **300** | P | **Pn** | **22 08 50.3** | **0.0** |
| **BSO1** | **Boso 1** | **2.33** | **219** | eP | **Pn** | **22 08 51.1** | **-0.4** |
| BSO1 | | | | eS | **Sn** | **22 09 18.7** | **0.0** |
| **JAG** | **Ashikaga** | **2.65** | **270** | P | **Pn** | **22 08 56.0** | **-0.4** |
| JAG | | | | eS | **Sn** | **22 09 26.4** | **-1.0** |
| **JMK** | **Ichinoseki** | **2.74** | **334** | P | **Pn** | **22 08 57.0** | **-0.6** |
| JMK | | | | eS | **Sn** | **22 09 28.2** | **-1.2** |
| **JYK** | **Kaneyama** | **3.07** | **323** | eP | **Pn** | **22 09 02.2** | **0.0** |
| **JRY** | **Ryogami san** | **3.14** | **262** | P | **Pn** | **22 09 02.5** | **-0.7** |
| JRY | | | | eS | **Sn** | **22 09 38.7** | **-0.8** |
| **JOM** | **Ohasama** | **3.19** | **339** | P | **Pn** | **22 09 03.5** | **-0.3** |
| **JOD2** | **Odawara 2** | **3.21** | **249** | eP | **Pn** | **22 09 03.9** | **-0.3** |
| JOD2 | | | | eS | **Sn** | **22 09 40.9** | **-0.3** |
| **JYN** | **Shimob** | **3.54** | **255** | P | **Pn** | **22 09 08.9** | **+0.1** |
| JYN | | | | eS | **Sn** | **22 09 49.1** | **-0.4** |
| **MJAR** | **Matsushiro Arr** | **3.65** | **272** | Pn | **Pn** | **22 09 10.5** | **+0.2** |
| | 0.3nm,0.3s,baz=85,slow=9.0,SNR=8.2 | | | | | | |
| MJAR | | | | Sn | **Sn** | **22 09 56.4** | **+4.3** |
| | baz=88,slow=15 | | | | | | |
| | 2.4nm,0.5s | | | | | | |
| **MAT** | **Matsushiro** | **3.65** | **272** | eP | **Pn** | **22 09 11.3** | **+1.0** |
| **JHJ** | **Hachijo jima 2** | **4.15** | **217** | Pn | **Pn** | **22 09 16.8** | **-0.3** |
| | 4.5nm,0.3s,baz=76,slow=19,SNR=6.9 | | | | | | |
| JHJ | | | | Sn | **Sn** | **22 10 01.7** | **-2.7** |
| | 14nm,0.3s,baz=83,slow=23,SNR=6.2 | | | | | | |
| | 26nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.31** | **303** | P | **P** | **22 16 31.4** | **+0.9** |
| | 0.3nm,0.6s,baz=90,slow=9.7,SNR=4.0 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **47.17** | **309** | P | **P** | **22 16 45.9** | **+0.8** |
| | 0.4nm,0.5s,baz=82,slow=7.6,SNR=5.9 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **56.69** | **189** | P | **P** | **22 17 56.6** | **+0.4** |
| | 0.7nm,1.1s,baz=4.5,slow=7.5,SNR=2.4 | | | | | | |
| | 0.7nm,1.1s | | | | | | |

*JMA* ***27*** *22:10:01.9±0.2, 40.°0N±0.°8×14.°4E±.°, h40km, MV3.0/30, FAR E OFF SANRIKU*
*IDC* ***27*** *22:10:14.1±6.7, 38.°13N×140.°92E, h0km, mb3.5/5, mbtmp3.4/6, ML3.0/1, Error ellipse: s-maj=247.1km s-min=30.7km az=63.0*
**ISC 27 22:10:00.8**±1.4**, 40.°1N**±0.°06×**143.°88E**±0.°09**, h16**km**, n19,** σ1**§34**/21**, mb3.4/5, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTH** | **Tanohata** | **1.56** | **264** | P | **Pb** | **22 10 28.6** | **-0.6** |
| **JKEN** | **Kujiedanarisaw** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JAR | | | | S | Sn | 22 11 28.5 | +0.7 | |
| **USRK** | **Ussuriysk Ar.** | **9.73** | **299** | Pn | Pn | 22 12 25.5 | +5.5 | |
| | 0.1nm,0.3s,baz=112,slow=16,SNR=2.6 | | | | | | | |
| | 1.0nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **27.84** | **299** | P | P | 22 15 56.8 | +7.3 | |
| | 0.1nm,0.3s,baz=109,slow=13,SNR=2.2 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.20** | **300** | P | P | 22 18 16.4 | +7.6 | |
| | 0.3nm,0.6s,baz=98,slow=7.4,SNR=2.8 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.70** | **306** | P | P | 22 18 30.2 | +10 | |
| | 0.4nm,0.4s,baz=80,slow=9.3,SNR=4.4 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.98** | **311** | P | P | 22 19 07.2 | +13 | |
| | 0.6nm,0.5s,baz=79,slow=10,SNR=4.1 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.40** | **190** | P | **P** | **22 20 09.2** | **-0.1** | |
| | 0.3nm,1.0s,baz=7.5,slow=7.2,SNR=1.6 | | | | | | | |
| | 0.3nm,1.0s | | | | | | | |

*AFAD* ***27*** *22:42:55.5±0.0,39.08N×25.94E,h7km±4km,ML2.1*
*ISK* ***27*** *22:42:55.5,39.10N×25.98E,h11km,ML2.5/11*
*ATH* ***27*** *22:42:56.1,39.19N×25.95E,h17km±1km,ML2.4/3,*
*Manual Solution by M.Charalampakis This location: 2020/07/01 18:07:00 ML Amplitudes are expressed in micrometers, All distances are expressed in degrees Latitude uncertainty: 3 km; Longitude uncertainty: 0 km*

**ISC 27 22:42:54.8±0.8,39.08N±0.02×25.91E±0.03,h12km,n29,**
**σ0.98/46,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIGR** | **SIGRI** | **0.13** | **343** | Pg | **Pg** | **22 42 59.5** | **+1.5** |
| SIGR | | | | Sg | **Sg** | **22 43 02.0** | **+1.6** |
| **SIGR** | **SIGRI** | **0.13** | **343** | P | **Pg** | **22 42 59.6** | **+1.5** |
| SIGR | | | | S | **Sg** | **22 43 01.9** | **+1.5** |
| **PRK** | **Paraskevi** | **0.33** | **60** | P | **Pg** | **22 43 01.9** | **+0.5** |
| PRK | | | | S | **Sg** | **22 43 05.8** | **0.0** |
| **GPNR** | **Gulpinar-Canak** | **0.41** | **25** | Pg | **Pg** | **22 43 03.6** | **+0.7** |
| **KOCA** | **Canakkale, Ayv** | **0.46** | **23** | P | **Pg** | **22 43 04.2** | **+0.4** |
| KOCA | | | | S | **Sb** | **22 43 11.3** | **-0.2** |
| KOCA | | | | *i* AML | AML | 22 43 13.0 | |
| | comp=N,178nm,0.2s | | | | | | |
| KOCA | | | | *i* AML | AML | 22 43 14.0 | |
| | comp=E,303nm,0.1s | | | | | | |
| **KARB** | **zmir-Karabur** | **0.58** | **137** | P | **Pg** | **22 43 06.5** | **+0.5** |
| KARB | | | | S | **Sg** | **22 43 14.2** | **+0.6** |
| KARB | | | | *i* AML | AML | 22 43 17.0 | |
| | comp=N,238nm,0.2s | | | | | | |
| **AYVA** | **Ayvalik** | **0.65** | **70** | P | **Pb** | **22 43 08.5** | **+0.5** |
| AYVA | | | | S | **Sg** | **22 43 16.3** | **+0.3** |
| AYVA | | | | *i* AML | AML | 22 43 20.0 | |
| | comp=E,177nm,0.6s | | | | | | |
| **DKL** | **Dikili** | **0.78** | **91** | Pg | **Pb** | **22 43 10.3** | **+0.1** |
| **IZMD** | **zmir-Dikili-** | **0.80** | **97** | P | **Pb** | **22 43 11.1** | **+0.4** |
| IZMD | | | | S | **Sb** | **22 43 21.8** | **+0.3** |
| **EZN** | **Ezine** | **0.81** | **23** | Pg | **Pg** | **22 43 10.8** | **+0.4** |
| **BAYC** | **CANAKKALE_Bayr** | **0.82** | **37** | P | **Pg** | **22 43 10.8** | **+0.1** |
| BAYC | | | | S | **Sb** | **22 43 22.2** | **+0.1** |
| BAYC | | | | *i* AML | AML | 22 43 24.0 | |
| | comp=N,119nm,0.4s | | | | | | |
| BAYC | | | | *i* AML | AML | 22 43 24.0 | |
| | comp=E,146nm,0.2s | | | | | | |
| **URLA** | **Izmir** | **0.90** | **143** | Pg | **Pg** | **22 43 12.5** | **+0.3** |
| URLA | | | | Sg | **Sb** | **22 43 25.5** | **+1.2** |
| **URLA** | **Izmir** | **0.90** | **143** | P | **Pg** | **22 43 12.0** | **-0.2** |
| URLA | | | | S | **Sg** | **22 43 23.6** | **-0.3** |
| URLA | | | | *i* AML | AML | 22 43 26.0 | |
| | comp=N,63nm,0.6s | | | | | | |
| URLA | | | | *i* AML | AML | 22 43 26.0 | |
| | comp=E,99nm,0.4s | | | | | | |
| **ZEDA** | **zmir-Bergama** | **0.92** | **97** | P | **Pb** | **22 43 13.2** | **+0.5** |
| ZEDA | | | | S | **Sg** | **22 43 24.5** | **0.0** |
| ZEDA | | | | *i* AML | AML | 22 43 26.0 | |
| | comp=N,48nm,0.2s | | | | | | |
| ZEDA | | | | *i* AML | AML | 22 43 26.0 | |
| | comp=E,37nm,0.2s | | | | | | |
| **ZEYE** | **Izmir, Urla-Ze** | **0.96** | **151** | P | **Pg** | **22 43 13.8** | **+0.4** |
| ZEYE | | | | S | **Sg** | **22 43 26.3** | **+0.4** |
| ZEYE | | | | *i* AML | AML | 22 43 28.0 | |
| | comp=E,67nm,0.4s | | | | | | |
| ZEYE | | | | *i* AML | AML | 22 43 29.0 | |
| | comp=N,58nm,0.4s | | | | | | |
| **LIA** | **Limnos Island** | **0.99** | **326** | P | **Pb** | **22 43 13.8** | **0.0** |
| LIA | | | | S | **Sg** | **22 43 23.8** | **-2.9** |
| **BUHA** | **Balikesir, Bur** | **1.00** | **65** | P | **Pg** | **22 43 14.2** | **+0.2** |
| BUHA | | | | S | **Sg** | **22 43 26.5** | **-0.5** |
| BUHA | | | | *i* AML | AML | 22 43 30.0 | |
| | comp=E,98nm,0.5s | | | | | | |
| BUHA | | | | *i* AML | AML | 22 43 31.0 | |
| | comp=N,54nm,0.4s | | | | | | |
| **COMU** | **Canakkale** | **1.10** | **23** | Pg | **Pg** | **22 43 16.4** | **+0.4** |
| **GADA** | **Gvkgeada** | **1.10** | **360** | Pn | **Pb** | **22 43 16.1** | **+0.3** |
| **DGB** | **zmir** | **1.28** | **143** | P | **Pn** | **22 43 18.6** | **+0.1** |
| DGB | | | | S | **Sb** | **22 43 33.3** | **-2.0** |
| DGB | | | | *i* AML | AML | 22 43 39.0 | |
| | comp=N,24nm,0.3s | | | | | | |
| DGB | | | | *i* AML | AML | 22 43 39.0 | |
| | comp=E,24nm,0.6s | | | | | | |
| **YENI** | **Yenice-Canakka** | **1.34** | **50** | Pn | **Pn** | **22 43 19.8** | **+0.5** |
| **GELI** | **Tayfur-Gelibol** | **1.38** | **18** | Pn | **Pb** | **22 43 20.8** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **1.42** | **348** | P | **Pn** | **22 43 19.9** | **-0.5** |
| SMTH | | | | S | **Sn** | **22 43 37.0** | **-2.0** |
| **LPK** | **Lapseki** | **1.45** | **27** | Pn | **Pn** | **22 43 21.4** | **+0.7** |
| **ERIK** | **Erikli-Kesan** | **1.65** | **16** | Pn | **Pn** | **22 43 24.7** | **+1.1** |
| **ENEZ** | **Enez** | **1.66** | **6** | Pn | **Pn** | **22 43 24.9** | **+1.2** |
| **ALN** | **Alexandroupoli** | **1.81** | **3** | P | **Pn** | **22 43 25.8** | **0.0** |
| ALN | | | | S | **Sn** | **22 43 46.1** | **-2.6** |
| **OUR** | **Ouranopolis** | **1.94** | **311** | P | **Pn** | **22 43 28.5** | **+0.9** |
| **KAVA** | **Kavala** | **2.19** | **331** | P | **Pn** | **22 43 31.0** | **+0.1** |

**IDC 27 22:46:41.0±2.3,1.55N×126.82E,h0km,mb3.4/3,**
**mbtmp3.5/3,Error ellipse: s-maj=177.7km**
**s-min=28.4km az=66.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.60** | **161** | P | P | 22 51 43.6 | +0.2 |
| | 1.1nm,0.4s,baz=340,slow=10,SNR=19 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **25.99** | **165** | P | P | 22 52 15.3 | -0.5 |
| | 0.4nm,0.5s,baz=347,slow=13,SNR=2.4 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.39** | **326** | P | P | 22 56 45.4 | +0.1 |
| | 0.2nm,0.6s,baz=120,slow=8.5,SNR=2.3 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**DJA 27 22:48:26.8±0.3,8°S±4°×117°E±°,h10km,M3.8/9,mb4.1/2,**
**MLv3.6/9,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.34** | **170** | P | Pb | 22 48 35.4 | +0.4 |
| **PLAI** | **Plampang** | **1.04** | **114** | P | Pg | 22 48 46.1 | -0.7 |
| PLAI | | | | S | Sg | 22 48 59.5 | -0.8 |
| **SRBI** | **Singaraja** | **1.62** | **281** | P | Pn | 22 48 55.0 | -0.5 |
| SRBI | | | | S | Sb | 22 49 17.4 | 0.0 |
| **JAGI** | **Jajag, Banyuwa** | **2.64** | **268** | P | Pn | 22 49 10.1 | +0.6 |
| JAGI | | | | S | Sn | 22 49 42.6 | +1.0 |
| **WBSI** | **Waikabubak, Su** | **2.82** | **116** | P | Pn | 22 49 12.0 | -0.1 |
| WBSI | | | | S | Sn | 22 49 47.6 | +1.4 |
| **BSSI** | **Bau Bau, Buton** | **4.28** | **59** | P | Pn | 22 49 31.7 | -0.3 |
| **GRJI** | **Gresik** | **4.55** | **289** | P | Pn | 22 49 35.8 | +0.1 |
| **EDFI** | **Ende, Flores** | **4.83** | **94** | P | Pn | 22 49 40.3 | +0.6 |
| **BNSI** | **Bone** | **5.14** | **40** | P | Pn | 22 49 44.1 | +0.2 |
| | 13nm,1.9s,0.1nm | | | | | | |

*IDC* ***27*** *22:53:51.1±1.5,86.14N×27.33E,h0km,mb3.4/5,*
*mbtmp3.6/7,ML4.4/2,MS3.0/21,Error ellipse:*
*s-maj=34.7km s-min=26.0km az=94.0*
*NEIC* ***27*** *22:53:53.3±1.6,85.88N±0.04×2.4E±°,h10km±2km,*
*mb4.1/7,Error ellipse: s-maj=30.5km s-min=4.8km az=82.0*
*FCIAR* ***27*** *22:54:02.7,85.20N×29.04E,h10km,station OMEGA has station magnitude of 3.10 station ZFI2 has station magnitude of 2.90*
**ISC 27 22:53:52.6±0.8,85.80N±0.06×27.26E±0.07,h10km,n52,**
**σ2.25/43,mb3.8/10,MS2.9/20,North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZFI2** | **Zemlya Franca-** | **5.49** | **144** | *e*P | **Pn** | **22 55 15.8** | **+1.6** |
| ZFI2 | | | | *e*S | **Sn** | **22 56 13.0** | **-4.1** |
| | 9.0nm,0.2s | | | | | | |
| **OMEGA** | **Omega** | **5.52** | **144** | *e*P | **Pn** | **22 55 15.7** | **+1.2** |
| OMEGA | | | | *e*S | **Sn** | **22 56 13.2** | **-4.7** |
| | 12nm,0.2s | | | | | | |
| **KBS** | **Kingsbay** | **7.16** | **204** | Pn | **Pn** | **22 55 37.7** | **+0.7** |
| **KBS** | **Kingsbay** | **7.16** | **204** | *e*P | **Pn** | **22 55 38.0** | **+0.9** |
| KBS | | | | *e*S | **Sn** | **22 56 57.2** | **-1.0** |
| KBS | | | | IAML | | 22 57 11.0 | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| **KBS** | **Kingsbay** | **7.16** | **204** | *e*P | **Pn** | **22 55 37.8** | **+0.8** |
| KBS | | | | *e*S | **Sn** | **22 56 57.0** | **-1.2** |
| **SPA0** | **Spitsbergen Ar** | **7.79** | **197** | *e*P | **Pn** | **22 55 47.1** | **+1.4** |
| SPA0 | | | | IAML | | 22 57 11.3 | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| SPA0 | | | | *e*S | **Sn** | **22 57 13.0** | **-0.8** |
| **SPA0** | **Spitsbergen Ar** | **7.79** | **197** | *e*P | **Pn** | **22 55 47.1** | **+1.4** |
| SPA0 | | | | *e*S | **Sn** | **22 57 11.5** | **-2.3** |
| **SPITS** | **Spitsbergen Ar** | **7.79** | **197** | Pn | **Pn** | **22 55 47.2** | **+1.4** |
| | baz=29,slow=12 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **SPB2** | **Spitsbergen Ar** | **7.79** | **197** | Pn | **Pn** | **22 55 46.9** | **+1.2** |
| **BRBB** | **Barentsburg B** | **7.92** | **200** | *e*P | **Pn** | **22 55 49.2** | **+1.7** |
| BRBB | | | | *e*S | **Sn** | **22 57 14.6** | **-2.4** |
| **BRBA** | **Barentsburg A** | **7.96** | **200** | *e*P | **Pn** | **22 55 48.5** | **+0.5** |
| BRBA | | | | IAML | | 22 57 03.5 | |
| | comp=Z,5.1nm,0.5s | | | | | | |
| BRBA | | | | *e*S | **Sn** | **22 57 18.0** | **+0.2** |
| **HSPB** | **Hornsund (broa** | **8.98** | **197** | *e*P | **Pn** | **22 56 04.1** | **+2.1** |
| HSPB | | | | *e*S | **Sn** | **22 57 41.6** | **-1.4** |
| HSPB | | | | IAML | | 22 57 57.2 | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **HOPEN** | **Hopen** | **9.35** | **183** | *e*P | **Pn** | **22 56 08.5** | **+1.4** |
| HOPEN | | | | IAML | | 22 57 46.6 | |
| | comp=Z,10nm,0.9s | | | | | | |
| HOPEN | | | | *e*S | **Sn** | **22 57 48.2** | **-4.0** |
| **HOPEN** | **Hopen** | **9.35** | **183** | *e*P | **Pn** | **22 56 08.1** | **+1.0** |
| HOPEN | | | | *e*S | **Sn** | **22 57 47.3** | **-4.8** |
| **EUNU** | **Eureka** | **12.33** | **312** | Pn | **Pn** | **22 56 45.3** | **-2.5** |
| **KEV** | **Kevo** | **16.14** | **180** | Pn | **Pn** | **22 57 40.9** | **+1.8** |
| **ARCES** | **ARCESS Array B** | **16.36** | **182** | Pn | **Pn** | **22 57 43.7** | **+1.8** |
| | comp=Z,0.3nm,0.3s,baz=1.1,slow=10,SNR=22 | | | | | | |
| ARCES | | | | LR | LR | 23 03 53.0 | |
| | comp=Z,44nm,19.4s,baz=323,slow=36 | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **24.49** | **181** | P | **P** | **22 59 13.6** | **+2.3** |
| **FINES** | **FINESS Array B** | **24.49** | **181** | LR | LR | 23 08 45.7 | |
| | comp=Z,28nm,20.3s,baz=25,slow=36 | | | | | | |
| **NOA** | **NORSAR Array B** | **25.09** | **198** | LR | LR | 23 07 46.1 | |
| | comp=Z,15nm,21.1s,baz=85,slow=33 | | | | | | |
| **D19K** | **Kuna River** | **25.85** | **5** | P | **P** | **22 59 23.7** | **+0.1** |
| D19K | | | | IAmb | IAmb | 22 59 51.3 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **INK** | **Innik** | **25.86** | **344** | LR | LR | 23 11 46.0 | |
| | comp=Z,33nm,18.5s,baz=356,slow=42 | | | | | | |
| **HFS** | **Hagfors** | **25.94** | **196** | LR | LR | 23 09 38.4 | |
| | comp=Z,28nm,18.8s,baz=350,slow=36 | | | | | | |
| **G21K** | **Allakaket** | **27.85** | **1** | P | **P** | **22 59 40.4** | **-1.3** |
| G21K | | | | IAmb | IAmb | 23 00 01.9 | |
| | comp=Z,2.5nm,1.1s | | | | | | |
| **I30M** | **Mount Dempster** | **29.00** | **346** | P | **P** | **22 59 51.0** | **-1.0** |
| I30M | | | | IAmb | IAmb | 23 00 28.7 | |
| | comp=Z,6.3nm,1.5s | | | | | | |
| **YAK** | **Yakutsk** | **29.31** | **70** | LR | LR | 23 10 51.0 | |
| | comp=Z,25nm,21.1s,baz=317,slow=35 | | | | | | |
| **MDM** | **Murphy Dome** | **29.41** | **356** | P | **P** | **22 59 57.5** | **+2.0** |
| MDM | | | | IAmb | IAmb | 23 00 18.3 | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **29.59** | **355** | P | **P** | **22 59 54.3** | **-2.7** |
| | comp=Z,0.1nm,0.4s,baz=355,slow=6.3,SNR=2.4 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **ARU** | **Arti** | **30.21** | **145** | LR | LR | 23 15 39.5 | |
| | comp=Z,18nm,18.1s,baz=25,slow=43 | | | | | | |
| **YKA** | **Yellowknife Ar** | **31.09** | **326** | LR | LR | 23 13 44.8 | |
| | comp=Z,19nm,18.8s,baz=266,slow=39 | | | | | | |
| **MA2** | **Magadan** | **33.10** | **51** | LR | LR | 23 15 10.3 | |
| | comp=Z,23nm,18.3s,baz=294,slow=39 | | | | | | |
| **BELG** | **Belogornoye** | **33.86** | **157** | LR | LR | 23 16 29.1 | |
| | comp=Z,26nm,21.8s,baz=38,slow=40 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **34.13** | **117** | P | **P** | **23 00 39.0** | **+2.1** |
| ZAA0 | | | | IAmb | IAmb | 23 01 12.2 | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.13** | **117** | P | **P** | **23 00 40.4** | **+3.5** |
| **ZALV** | **Zalesovo Beam** | **34.13** | **117** | P | **P** | **23 00 38.7** | **+1.7** |
| | comp=Z,0.6nm,0.5s,baz=355,slow=8.7,SNR=2.6 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **CLL** | **Collm** | **34.80** | **196** | *e*P | **P** | **23 00 40.0** | **-2.7** |
| **AKASG** | **Malin Array Be** | **35.26** | **178** | LR | LR | 23 15 25.0 | |
| | comp=Z,42nm,19.1s,baz=14,slow=36 | | | | | | |
| **DLBC** | **Dease Lake** | **35.67** | **340** | LR | LR | 23 15 06.0 | |
| | comp=Z,24nm,21.9s,baz=91,slow=36 | | | | | | |
| **KDAK** | **Kodiak Island** | **36.62** | **360** | LR | LR | 23 15 22.0 | |
| | comp=Z,15nm,21.3s,baz=44,slow=36 | | | | | | |
| **VRAC** | **Vrnov** | **36.73** | **192** | LR | LR | 23 15 39.3 | |
| | comp=Z,13nm,19.3s,baz=342,slow=35 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **37.04** | **124** | P | **P** | **23 01 03.0** | **+1.0** |
| | comp=Z,0.1nm,0.4s,baz=353,slow=8.3,SNR=4.2 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **41.06** | **121** | P | **P** | **23 01 38.0** | **+2.3** |
| **MKAR** | **Makanchi Array** | **41.09** | **121** | P | **P** | **23 01 39.7** | **+3.8** |
| **MKAR** | **Makanchi Array** | **41.09** | **121** | P | **P** | **23 01 37.4** | **+1.4** |
| | comp=Z,0.2nm,0.5s,baz=350,slow=7.6,SNR=2.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **BBB** | **Bella Bella** | **41.88** | **337** | LR | LR | 23 21 11.3 | |
| | comp=Z,24nm,18.4s,baz=58,slow=40 | | | | | | |
| **KBZ** | **Khabaz** | **42.40** | **163** | LR | LR | 23 21 01.0 | |
| | comp=Z,34nm,19.0s,baz=12,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **44.77** | **130** | LR | LR | 23 23 36.1 | |
| | comp=Z,27nm,19.0s,baz=340,slow=40 | | | | | | |
| **NEW** | **Newport** | **45.42** | **327** | LR | LR | 23 22 03.2 | |
| | comp=Z,30nm,18.9s,baz=16,slow=38 | | | | | | |
| **ASAJ** | **Asahikawa** | **48.00** | **61** | LR | LR | 23 22 10.5 | |
| | comp=Z,18nm,20.8s,baz=38,slow=36 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **52.15** | **332** | LR | LR | 23 25 49.1 | |
| | comp=Z,15nm,18.2s,baz=340,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **58.21** | **316** | LR | LR | 23 27 56.0 | |
| | comp=Z,33nm,20.4s,baz=120,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.13** | **206** | P | **P** | **23 05 24.4** | **+1.6** |
| | comp=Z,0.3nm,0.7s,baz=5.6,slow=7.4,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |

**DJA 27 22:54:36.6±0.3,8°S±5°×117°E±°,h10km,M3.6/7,mb3.8/1,**
**MLv3.5/7,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.40** | **185** | P | Pg | 22 54 44.7 | +0.2 |
| **PLAI** | **Plampang** | **0.98** | **120** | P | Pb | 22 54 55.9 | +0.3 |
| PLAI | | | | S | Sb | 22 55 08.9 | +0.3 |
| **SRBI** | **Singaraja** | **1.71** | **278** | P | Pn | 22 55 06.3 | -0.2 |
| SRBI | | | | S | Sn | 22 55 29.0 | +0.6 |
| **JAGI** | **Jajag, Banyuwa** | **2.74** | **267** | P | Pn | 22 55 21.5 | +0.8 |
| JAGI | | | | S | Sn | 22 55 54.3 | +0.4 |
| **WBSI** | **Waikabubak, Su** | **2.76** | **118** | P | Pn | 22 55 20.2 | -0.8 |
| **BSSI** | **Bau Bau, Buton** | **4.16** | **59** | P | Pn | 22 55 39.1 | -1.1 |
| **EDFI** | **Ende, Flores** | **4.74** | **95** | P | Pn | 22 55 49.7 | +1.5 |
| **PWJI** | **Pagerwojo** | **5.08** | **273** | P | Pn | 22 55 52.1 | -0.7 |

*SOME* ***27*** *23:30:34.9,40.93N×71.15E,h0km*
**KRNET 27 23:30:36.9±0.1,40.94N×71.25E,h13km,mb2.0,11C-9D,**
**Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRKS** | **Terek-Say** | **0.60** | **352** | *i*P | Pg | 23 30 47.2 | -1.5 |
| | baz=54 | | | | | | |
| TRKS | | | | ⇑*e*S | Sg | 23 30 54.8 | -1.9 |
| | baz=54 | | | | | | |
| **BTK** | **Batken** | **0.94** | **201** | ⇑*i*P | Pg | 23 30 54.9 | -0.1 |
| | baz=1.0 | | | | | | |
| BTK | | | | ⇑*e*S | Sb | 23 31 07.8 | +0.4 |
| | baz=1.0 | | | | | | |
| **ARK** | **Arkit** | **1.02** | **32** | ⇓*e*P | Pb | 23 30 56.4 | -0.1 |
| | baz=32 | | | | | | |
| ARK | | | | ⇓*e*S | Sn | 23 31 10.6 | -0.7 |
| | baz=32 | | | | | | |
| **OHH** | **Osh** | **1.24** | **109** | ⇑*e*P | Pb | 23 31 00.4 | +0.2 |
| | baz=9.0 | | | | | | |
| OHH | | | | ⇑*e*S | Sg | 23 31 17.6 | +0.7 |
| | baz=9.0 | | | | | | |
| **MNAS** | **Manas** | **1.81** | **31** | ⇓*e*P | Pb | 23 31 10.7 | +0.6 |
| | baz=31 | | | | | | |
| MNAS | | | | ⇓*e*S | Sg | 23 31 35.3 | 0.0 |
| | baz=31 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.95** | **117** | ⇓*e*P | Pb | 23 31 12.9 | +0.4 |
| | baz=17 | | | | | | |
| SFK | | | | ⇓*e*S | Sg | 23 31 39.8 | +0.1 |
| | baz=17 | | | | | | |
| **AML** | **Almayashu** | **2.19** | **56** | ⇑*e*P | Pb | 23 31 16.8 | +0.1 |
| | baz=56 | | | | | | |
| AML | | | | ⇑*e*S | Sg | 23 31 45.8 | -1.6 |
| | baz=56 | | | | | | |
| **KK31** | **Karatay Array** | **2.24** | **346** | ⇑Pn | Pb | 23 31 16.8 | -0.4 |
| | 1.7nm,0.4s,baz=162,slow=14,SNR=14 | | | | | | |
| KK31 | | | | ⇓Sn | Sg | 23 31 47.7 | -1.1 |
| | 2.8nm,0.3s,baz=164,slow=25,SNR=13 | | | | | | |
| **KKAR** | **Karatay Array** | **2.24** | **346** | ⇓*e*P | Pb | 23 31 16.9 | -0.3 |
| | baz=46 | | | | | | |
| KKAR | | | | ⇓*e*S | Sb | 23 31 46.2 | +1.4 |
| | baz=46 | | | | | | |
| **MRKS** | **Merke** | **2.34** | **39** | *e*P | Pb | 23 31 20.2 | +1.2 |
| | 0.8nm,0.2s | | | | | | |
| MRKS | | | | *e*S | Sg | 23 31 52.2 | +0.2 |
| | 9.7nm,0.5s | | | | | | |
| **BRLS** | **Borolday** | **2.34** | **334** | *e*P | Pn | 23 31 16.4 | +1.2 |
| | 2.9nm,0.2s | | | | | | |
| BRLS | | | | *e*S | Sb | 23 31 45.9 | -2.0 |
| | 4.2nm,0.2s | | | | | | |
| **ARLS** | **Aral** | **2.49** | **67** | ⇑*e*P | Pb | 23 31 20.7 | -1.0 |
| | baz=67 | | | | | | |
| ARLS | | | | ⇑*e*S | Sb | 23 31 52.6 | +0.3 |
| | baz=67 | | | | | | |

**ISU 27 23:30:58.9,40.10N×72.15E,h16km,Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRG** | **Fergana** | **0.39** | **314** | P | Pg | 23 31 07.2 | +0.2 |
| FRG | | | | S | Sb | 23 31 13.3 | -0.1 |
| **ANR** | **Andizhan** | **0.67** | **14** | P | Pg | 23 31 12.0 | -0.1 |
| ANR | | | | S | Sb | 23 31 21.8 | +0.4 |

*ISN* ***27*** *23:39:42.7±1.2,35.15N×46.69E,h6km±13km,ML2.8*
*TEH* ***27*** *23:39:44.2,35.15N×46.65E,h8km±66km,ML2.9*
**ISC 27 23:39:44.6±1.2,35.14N±0.05×46.63E±0.05,h10km,n11,**
**σ0.51/14,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ILIN** | **Lien** | **0.35** | **130** | Pg | **Pg** | **23 39 51.6** | **-0.1** |
| **IDHR** | **Dehrash** | **0.49** | **205** | Pg | **Pg** | **23 39 53.8** | **-0.4** |
| IDHR | | | | Sg | **Sb** | **23 40 02.0** | **-0.6** |
| **IGHG** | **Ghaleghazi** | **0.81** | **184** | Pg | **Pb** | **23 40 00.5** | **-0.5** |
| **SNQR** | **Sonqor, Kerman** | **0.86** | **109** | Pg | **Pg** | **23 40 01.0** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.93** | **159** | Pg | **Pg** | **23 40 02.0** | **-0.6** |
| **KGS1** | **Ghasr-e-Shirin** | **1.07** | **234** | Pg | **Pb** | **23 40 05.2** | **0.0** |
| **IBZA** | **Bozab** | **1.21** | **123** | Pg | **Pg** | **23 40 07.7** | **-0.2** |
| **SDS1** | **Sardasht. Az.** | **1.37** | **317** | Pg | **Pg** | **23 40 10.5** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.56** | **193** | Pg | **Pg** | **23 40 14.3** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.89** | **278** | *e*Pg | **Pb** | **23 40 19.0** | **-0.3** |
| | baz=97 | | | | | | |
| IKRK | | | | *e*Sg | **Sg** | **23 40 46.0** | **+0.5** |
| IKRK | | | | AML | AML | 23 40 51.3 | |
| | comp=N,123nm,0.8s | | | | | | |
| IKRK | | | | AML | AML | 23 41 00.1 | |
| | comp=E,85nm,0.3s | | | | | | |
| **IBDR** | **Badra** | **2.11** | **196** | *e*Pn | **Pn** | **23 40 21.0** | **+1.0** |
| IBDR | | | | *e*Sn | **Sb** | **23 40 49.0** | **-0.2** |

*PGC* ***27*** *23:46:04.4±0.6,49.00N×129.54W,h10km,MLSn3.1/38,*
*Mw3.7/38, Mw3.7/38,242km southwest of Pt. Hardy, Bc Vancouver Island, Canada Region*
*IDC* ***27*** *23:46:08.6±2.8,49.32N×128.94W,h0km,mb4.3/1,*
*mbtmp3.7/6,ML3.6/5,Error ellipse: s-maj=37.2km s-min=26.6km az=66.0*
**ISC 27 23:46:03.7±2.1,49.03N±0.06×129.33W±0.09,h1km±18km,**
**n73,σ1.977/82,Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NCHR** | **NEPTUNE Canada** | **1.07** | **171** | P | **Pg** | **23 46 22.9** | **-1.4** |
| **KEMF** | **NEPTUNE Canada** | **1.10** | **172** | P | **Pg** | **23 46 23.2** | **-1.5** |
| **NC27** | **ODP1027** | **1.65** | **140** | Pn | **Pn** | **23 46 31.8** | **-1.7** |
| **NC89** | **ODP889** | **1.68** | **102** | Pn | **Pn** | **23 46 33.7** | **-0.4** |
| **HOLB** | **Holberg** | **1.79** | **25** | Pn | **Pn** | **23 46 34.6** | **-1.1** |
| HOLB | | | | Sn | **Sn** | **23 46 54.9** | **-4.3** |
| **PACB** | **Port Alice, BC** | **1.84** | **40** | Pn | **Pn** | **23 46 35.4** | **-1.1** |
| PACB | | | | Sn | **Sn** | **23 46 56.2** | **-4.2** |
| **ETB** | **Estevan Point** | **1.86** | **78** | Pn | **Pn** | **23 46 36.5** | **-0.3** |
| **PHC** | **Port Hardy** | **2.08** | **36** | Pn | **Pn** | **23 46 39.0** | **-0.7** |
| PHC | | | | Sn | **Sn** | **23 47 02.6** | **-3.6** |
| **WOSB** | **Woss** | **2.12** | **57** | Pn | **Pn** | **23 46 40.2** | **-0.2** |
| **NCBC** | **Barkley Canyon** | **2.18** | **105** | Pn | **Pn** | **23 46 39.8** | **-1.2** |
| NCBC | | | | Sn | **Sn** | **23 47 07.2** | **-1.4** |
| **GDR** | **Gold River** | **2.28** | **70** | Pn | **Pn** | **23 46 42.1** | **-0.5** |
| GDR | | | | Sn | **Sn** | **23 47 09.0** | **-2.3** |
| **B012** | **Ucluelet** | **2.50** | **91** | Pn | **Pn** | **23 46 44.9** | **-0.6** |
| B012 | | | | Sn | **Sn** | **23 47 13.5** | **-3.1** |
| **OZB** | **Mount Ozzard** | **2.53** | **90** | Pn | **Pn** | **23 46 45.1** | **-0.9** |
| **NCRB** | **Newcastle Ridg** | **2.53** | **56** | Pn | **Pn** | **23 46 46.3** | **+0.2** |
| NCRB | | | | Sn | **Sn** | **23 47 16.8** | **-0.8** |
| **NCSB** | **Newcastle Ridg** | **2.53** | **56** | Pn | **Pn** | **23 46 46.3** | **+0.3** |
| NCSB | | | | Sn | **Sn** | **23 47 16.0** | **-1.6** |
| **CBB** | **Campbell River** | **2.77** | **67** | Pn | **Pn** | **23 46 49.8** | **+0.6** |
| CBB | | | | Sn | **Sn** | **23 47 22.3** | **-1.0** |
| **BFSB** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JTMT | **Jette** | **10.10** | **92** | P | | **Pn** | **23 48 31.2** | **+1.3** |
| OVMT | **Ovando** | **11.11** | **94** | P | | **Pn** | **23 48 45.4** | **+1.6** |
| LYMT | **Lyon Mountain** | **11.61** | **94** | P | | **Pn** | **23 48 53.0** | **+2.4** |
| NVAR | **Mina Array Bea** | **13.25** | **139** | Pn | | **P** | **23 49 22.7** | **-0.6** |
| | 0.1nm,0.3s,baz=321,slow=13,SNR=2.1 | | | | | | | |
| | 0.1nm,0.2s | | | | | | | |
| PDAR | **Pinedale Array** | **15.11** | **107** | Pn | | **Pn** | **23 49 43.4** | **+4.9** |
| | 0.1nm,0.3s,baz=309,slow=11,SNR=9.0 | | | | | | | |
| | 0.9nm,0.7s | | | | | | | |
| ILAR | **Eielson Array** | **18.34** | **336** | P | | **P** | **23 50 22.1** | **+2.8** |
| | 0.1nm,0.3s,baz=142,slow=10,SNR=2.9 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| ULM | **Lac du Bonnet** | **21.60** | **74** | P | | **P** | **23 50 56.3** | **+1.5** |
| | 10nm,0.7s,baz=266,slow=11,SNR=13 | | | | | | | |
| | 10nm,0.7s | | | | | | | |
| H11N2 | **WAKE ISLAND Hy** | **58.22** | **264** | T | | T | 00 59 05.2 | |
| | baz=43,slow=75,SNR=15 | | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | **58.22** | **264** | T | | T | 00 59 05.1 | |
| | baz=43,slow=75,SNR=16 | | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | **58.23** | **264** | T | | T | 00 59 06.4 | |
| | baz=43,slow=75,SNR=13 | | | | | | | |

**TAP 28 00:14:42.9,24.54N×121.59E,h3km,ML0.8,B,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LATG | **Datong** | **0.06** | **267** | *i* P | Pg | 00 14 44.7 | +0.5 |
| | baz=267 | | | | | | |
| LATG | | | | *i* S | Sg | 00 14 46.0 | +0.8 |
| | baz=267 | | | | | | |
| ENTT | **Nioudou** | **0.10** | **346** | *i* P | Pg | 00 14 45.7 | +0.7 |
| | baz=348 | | | | | | |
| ENTT | | | | *i* S | Sg | 00 14 47.5 | +1.1 |
| | baz=348 | | | | | | |
| ENA | **Nanau** | **0.17** | **129** | *e*P | Pg | 00 14 46.5 | +0.2 |
| | baz=129 | | | | | | |
| ENA | | | | *e*S | Sg | 00 14 50.4 | +1.8 |
| | baz=129 | | | | | | |
| EWUT | **Wuta** | **0.19** | **119** | *e*P | Pg | 00 14 46.5 | -0.1 |
| | baz=119 | | | | | | |
| EWUT | | | | *e*S | Sg | 00 14 49.2 | 0.0 |
| | baz=119 | | | | | | |
| NNSB | **Datong** | **0.22** | **240** | *e*P | Pg | 00 14 48.4 | +1.2 |
| | baz=255 | | | | | | |
| FUSB | **Fushanzhiwuyua** | **0.22** | **359** | *e*P | Pg | 00 14 48.5 | +1.3 |
| | baz=349 | | | | | | |
| NNS | **Nan Shan** | **0.22** | **244** | *e*P | Pg | 00 14 48.1 | +0.8 |
| | baz=249 | | | | | | |
| NNS | | | | *e*S | Sg | 00 14 53.4 | +3.2 |
| | baz=249 | | | | | | |
| YHNB | **Yeheng** | **0.24** | **304** | *e*P | Pg | 00 14 48.1 | +0.5 |
| | baz=303 | | | | | | |
| YHNB | | | | *e*S | Sg | 00 14 51.4 | +0.8 |
| | baz=303 | | | | | | |
| TWC | **Suao** | **0.24** | **73** | *e*P | Pg | 00 14 49.3 | +1.7 |
| | baz=70 | | | | | | |
| NACB | **Ninganchiao** | **0.36** | **180** | *e*P | Pg | 00 14 50.6 | +0.7 |
| | baz=180 | | | | | | |
| NACB | | | | *e*S | Sg | 00 14 54.6 | 0.0 |
| | baz=180 | | | | | | |

**JMA 28 00:15:42.6±0.2,24°N±1°,12°3E±°,h47km,NW OFF ISHIGAKIJIMA IS,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| YOJ | **Yonaguni jima** | **0.35** | **58** | *e*P | Pn | 00 15 51.9 | 0.0 |
| YOJ | | | | *e*S | Sn | 00 15 58.8 | +0.3 |
| IRIF | **Iriomote-Funau** | **0.95** | **86** | *e*P | Pn | 00 15 59.4 | -0.2 |
| IRIF | | | | *e*S | Sn | 00 16 12.1 | 0.0 |
| HATJ | **Hateruma jima** | **1.05** | **102** | *e*P | Pn | 00 16 01.3 | +0.4 |
| HATJ | | | | *e*S | Sn | 00 16 14.2 | -0.1 |
| JKRS | **Kuro-shima** | **1.21** | **92** | *e*P | Pn | 00 16 04.0 | +1.0 |
| JKRS | | | | *e*S | Sn | 00 16 19.2 | +0.9 |
| JIJ | **Ishigaki jima** | **1.33** | **86** | *e*P | Pn | 00 16 05.3 | +0.5 |
| JIJ | | | | *e*S | Sn | 00 16 22.6 | +1.3 |

**IDC 28 00:26:12.8±3.2,2.26S×141.71E,h0km,mb3.6/3, mbtmp3.6/4,ML3.9/1,MS3.1/2,Error ellipse: s-maj=109.5km s-min=16.4km az=99.0,Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | **Warramunga Arr** | **18.99** | **202** | P | P | 00 30 35.1 | -1.2 |
| | 0.4nm,0.3s,baz=23,slow=12,SNR=15 | | | | | | |
| WRA | | | | S | S | 00 34 11.7 | -1.2 |
| | 0.7nm,1.1s,baz=22,slow=27,SNR=1.8 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | **22.58** | **199** | P | P | 00 31 15.2 | +0.1 |
| | 1.6nm,0.7s,baz=29,slow=9.5,SNR=20 | | | | | | |
| | 1.6nm,0.7s | | | | | | |
| PETK | **Petropavlovsk-** | **56.78** | **11** | LR | LR | 00 59 47.2 | |
| | comp=Z,15nm,20.0s,baz=72,slow=36 | | | | | | |
| MKAR | **Makanchi Array** | **71.29** | **321** | P | P | 00 37 34.9 | +0.6 |
| | 0.6nm,0.7s,baz=104,slow=7.6,SNR=4.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| TIXI | **Tiksi** | **74.25** | **356** | LR | LR | 01 11 32.7 | |
| | comp=Z,12nm,18.1s,baz=32,slow=37 | | | | | | |
| KURBB | **Kurchatov Arra** | **75.11** | **324** | P | P | 00 37 56.4 | -0.4 |
| | 0.3nm,0.7s,baz=120,slow=4.6,SNR=1.7 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

*NEIC **28** 01:23:07.4±1.3,22.6S±0.1×170.07E±0.08,h10km±1km, mb4.5/23,Error ellipse: s-maj=20.8km s-min=11.9km az=347.0*

*NOU **28** 01:23:09.2,22.29S×169.89E,h0km,MLv4.4/10, Southeast of Loyalty Islands*

*IDC **28** 01:23:10.3±2.4,22.60S×170.16E,h43km±20km,mb4.0/12, mbtmp4.3/15,ML4.3/3,MS4.0/8,Error ellipse: s-maj=17.8km s-min=15.5km az=38.0*

**ISC 28 01:23:07.5±0.4,22.54S±0.07×170.16E±0.06,h21km,n90, σ1§12/92,mb4.4/25,MS4.1/9,5C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | **2.24** | **298** | P | **Pn** | **01 23 42.3** | **-1.1** |
| PINNC | **Pines Island,** | **2.51** | **268** | P | **Pn** | **01 23 47.8** | **+0.7** |
| PINNC | **Pines Island,** | **2.51** | **268** | | **Pn** | **01 23 46.7** | **-0.3** |
| YATNC | **Mamie plateau,** | **3.06** | **278** | P | **Pn** | **01 23 54.3** | **-0.5** |
| LIFNC | **LIFOU** | **3.23** | **302** | P | **Pn** | **01 23 56.1** | **-0.9** |
| DZM | **Mont Dzumac** | **3.47** | **277** | P | **Pn** | **01 24 00.7** | **+0.3** |
| DZM | **Mont Dzumac** | **3.47** | **277** | Pn | **Pn** | **01 24 00.8** | **+0.4** |
| DZM | **Mont Dzumac** | **3.47** | **277** | P | **Pn** | **01 24 01.4** | **+0.9** |
| | 11nm,0.3s,baz=136,slow=14,SNR=682 | | | | | | |
| DZM | | | | LR | LR | 01 24 41.0 | |
| | comp=Z,264nm,21.5s,baz=118,slow=26 | | | | | | |
| DZM | | | | S | **Sn** | **01 24 42.3** | **+1.3** |
| | 32nm,0.3s,baz=66,slow=15,SNR=3.9 | | | | | | |
| | 31nm,0.3s | | | | | | |
| NOUC | **Port Laguerre** | **3.60** | **276** | P | **Pn** | **01 24 02.6** | **+0.5** |
| RTV | **Rentapao** | **4.99** | **341** | P | **Pn** | **01 24 21.7** | **+0.4** |
| DVP | **Devils Point** | **5.13** | **338** | P | **Pn** | **01 24 22.1** | **-1.1** |
| KOUNC | **Koumac, New Ca** | **5.81** | **289** | P | **Pn** | **01 24 33.8** | **+1.2** |
| | 80nm,0.8s | | | | | | |
| KOUNC | **Koumac, New Ca** | **5.81** | **289** | | **Pn** | **01 24 33.1** | **+0.5** |
| MSVF | **Nonsavu** | **8.82** | **59** | | **Pn** | **01 25 16.2** | **+2.4** |
| MSVF | **Nonsavu** | **8.82** | **59** | P | **Pn** | **01 25 16.6** | **+2.8** |
| | 0.4nm,0.3s,baz=223,slow=11,SNR=8.9 | | | | | | |
| | 32nm,0.9s | | | | | | |
| URZ | **Urewera** | **16.77** | **161** | P | **Pn** | **01 27 00.2** | **-0.9** |
| | 0.3nm,0.3s,baz=193,slow=15,SNR=1.6 | | | | | | |
| URZ | | | | LR | LR | 01 32 25.8 | |
| | comp=Z,558nm,18.5s,baz=60,slow=33 | | | | | | |
| | 1.7nm,0.5s | | | | | | |
| RTZ | **Ruatahuna** | **17.06** | **162** | | **P** | **01 27 06.8** | **+0.3** |
| RTZ | | | | IAmb | IAmb | 01 27 27.1 | |
| | comp=Z,33nm,1.1s | | | | | | |
| BKZ | **Black Stump Fm** | **17.44** | **163** | | **P** | **01 27 10.9** | **+0.3** |
| BKZ | | | | IAmb | IAmb | 01 27 36.5 | |
| | comp=Z,39nm,1.4s | | | | | | |
| EIDS | **Eidsvold** | **17.67** | **257** | P | **Pn** | **01 27 11.3** | **-1.1** |
| ARMA | **Armidale** | **18.34** | **241** | Pn | **P** | **01 27 18.7** | **-2.0** |
| MRZ | **Mangatainoka R** | **18.64** | **167** | P | **P** | **01 27 23.6** | **-0.3** |
| MRZ | | | | IAmb | IAmb | 01 27 44.2 | |
| | comp=Z,59nm,1.3s | | | | | | |
| TCW | **Tory Channel** | **18.94** | **170** | P | **Pn** | **01 27 27.7** | **-0.1** |
| TUWZ | **Tuamarina** | **19.11** | **171** | P | **P** | **01 27 28.2** | **-0.7** |
| SNZO | **South Karori** | **19.11** | **169** | P | **P** | **01 27 29.2** | **+0.3** |
| SNZO | | | | IAmb | IAmb | 01 28 11.9 | |
| | comp=Z,34nm,0.9s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RPZ | **Rata Peaks** | **21.14** | **178** | P | | **P** | **01 27 51.5** | **+0.5** |
| | comp=Z,10nm,0.9s,baz=108,slow=22,SNR=1.9 | | | | | | | |
| | comp=Z,10nm,0.9s | | | | | | | |
| MQZ | **McQueen's Vall** | **21.21** | **175** | P | | **P** | **01 27 53.9** | **+2.1** |
| CTA | **Charters Tower** | **22.40** | **272** | P | | **P** | **01 28 06.2** | **+1.3** |
| | comp=Z,0.4nm,0.8s,baz=98,slow=14,SNR=4.2 | | | | | | | |
| CTA | | | | LR | | LR | 01 36 43.3 | |
| | comp=Z,15nm,19.1s,baz=84,slow=36 | | | | | | | |
| CTAO | **Charters Tower** | **22.40** | **272** | P | | **P** | **01 28 06.1** | **+1.3** |
| COEN | **Coen** | **26.98** | **284** | P | | **P** | **01 28 46.5** | **-1.5** |
| COEN | | | | IAmb | | IAmb | 01 29 06.2 | |
| | comp=Z,15nm,1.1s | | | | | | | |
| STKA | **Stephens Creek** | **26.99** | **244** | P | | **P** | **01 28 48.4** | **+0.4** |
| STKA | **Stephens Creek** | **26.99** | **244** | P | | **P** | **01 28 48.1** | **+0.1** |
| | comp=Z,1.6nm,0.4s,baz=84,slow=11,SNR=4.8 | | | | | | | |
| STKA | | | | LR | | LR | 01 39 08.0 | |
| | comp=Z,255nm,18.8s,baz=58,slow=36 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| BBOO | **Buckleboo** | **31.77** | **244** | P | | **P** | **01 29 32.0** | **+1.6** |
| WR0 | **Warramunga Arr** | **33.25** | **268** | P | | **P** | **01 29 43.3** | **-0.2** |
| WR0 | | | | IAmb | | IAmb | 01 29 59.6 | |
| | comp=Z,7.9nm,1.1s | | | | | | | |
| ASAR | **Alice Springs** | **33.31** | **261** | P | | **P** | **01 29 44.8** | **+0.6** |
| | comp=Z,2.2nm,0.8s,baz=84,slow=8.9,SNR=16 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 32 25.8** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=93,slow=3.7,SNR=2.4 | | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| WB0 | **Warramunga Arr** | **33.42** | **268** | P | | **P** | **01 29 45.0** | **-0.1** |
| WB0 | | | | IAmb | | IAmb | 01 30 14.2 | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| WB2 | **Warramunga Arr** | **33.43** | **268** | P | | **P** | **01 29 45.2** | **+0.1** |
| WB2 | | | | IAmb | | IAmb | 01 30 01.1 | |
| | comp=Z,4.2nm,1.0s | | | | | | | |
| WRA | **Warramunga Arr** | **33.44** | **268** | P | | **P** | **01 29 44.8** | **-0.4** |
| WRA | **Warramunga Arr** | **33.44** | **268** | P | | **P** | **01 29 45.0** | **-0.3** |
| | comp=Z,1.6nm,0.7s,baz=93,slow=8.5,SNR=22 | | | | | | | |
| WRA | | | | LR | | LR | 01 43 57.5 | |
| | comp=Z,327nm,18.0s,baz=113,slow=37 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| KNRA | **Kununurra** | **39.61** | **272** | P | | **P** | **01 30 37.4** | **-0.4** |
| KNRA | | | | IAmb | | IAmb | 01 30 52.8 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| FITZ | **Fitzroy Crossi** | **41.87** | **268** | P | | **P** | **01 30 57.4** | **+0.9** |
| PSA00 | **Pilbara Seismi** | **46.46** | **261** | P | | **P** | **01 31 33.3** | **0.0** |
| PSA00 | | | | IAmb | | IAmb | 01 31 59.7 | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| MBWA | **Marble Bar** | **46.65** | **262** | P | | **P** | **01 31 35.9** | **+1.1** |
| MBWA | | | | IAmb | | IAmb | 01 31 47.4 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| NWAO | **Narrogin (SRO)** | **47.55** | **245** | LR | | LR | 01 51 54.5 | |
| | comp=Z,282nm,18.4s,baz=84,slow=36 | | | | | | | |
| MJAR | **Matsushiro Arr** | **66.06** | **332** | P | | **P** | **01 33 51.6** | **-1.2** |
| | comp=Z,1.2nm,0.3s,baz=167,slow=7.6,SNR=4.3 | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| MJB9 | **Matsu-Tunnel** | **66.06** | **332** | P | | **P** | **01 33 52.6** | **-0.3** |
| QSPA | **South Pole Qui** | **67.53** | **180** | P | | **P** | **01 34 03.1** | **+1.0** |
| QSPA | **South Pole Qui** | **67.53** | **180** | P | | **P** | **01 34 01.6** | **-0.5** |
| | comp=Z,3.0nm,0.9s,baz=41,slow=2.1,SNR=8.7 | | | | | | | |
| QSPA | | | | LR | | LR | 02 00 16.0 | |
| | comp=Z,85nm,19.4s,baz=38,slow=33 | | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| KSRS | **Korea Array** | **71.70** | **326** | P | | **P** | **01 34 28.4** | **+0.5** |
| | comp=Z,1.1nm,0.6s,baz=151,slow=5.5,SNR=4.0 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| MAW | **Mawson** | **75.72** | **202** | P | | **P** | **01 34 49.9** | **-1.2** |
| | comp=Z,2.5nm,0.8s,baz=105,slow=14,SNR=5.6 | | | | | | | |
| MAW | | | | LR | | LR | 02 04 26.8 | |
| | comp=Z,45nm,19.6s,baz=106,slow=33 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| PETK | **Petropavlovsk-** | **76.10** | **352** | P | | **P** | **01 34 53.6** | **+0.3** |
| | comp=Z,5.5nm,0.9s,baz=201,slow=7.7,SNR=2.6 | | | | | | | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| BELA | **Belgrano 2** | **78.75** | **175** | P | | **P** | **01 35 07.8** | **-0.2** |
| BELA | | | | IAmb | | IAmb | 01 35 19.3 | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| CMAR | **Chiang Mai Arr** | **80.64** | **294** | P | | **P** | **01 35 19.8** | **+0.6** |
| | comp=Z,1.1nm,0.3s,baz=134,slow=3.2,SNR=5.3 | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| TROLL | **Troll, Antarti** | **85.32** | **184** | ⇑P | | **P** | **01 35 42.5** | **-0.3** |
| | comp=Z,178nm,0.7s | | | | | | | |
| SNAA | **Sanae** | **85.92** | **182** | P | | **P** | **01 35 44.9** | **-0.7** |
| SNAA | **Sanae** | **85.92** | **182** | ⇑P | | **P** | **01 35 44.6** | **-1.0** |
| | comp=Z,44nm,0.8s | | | | | | | |
| SNAA | **Sanae** | **85.92** | **182** | P | | **P** | **01 35 44.9** | **-0.7** |
| | comp=Z,2.9nm,1.0s,baz=197,slow=4.3,SNR=9.9 | | | | | | | |
| SNAA | | | | LR | | LR | 02 12 37.6 | |
| | comp=Z,67nm,18.2s,baz=210,slow=35 | | | | | | | |
| | comp=Z,2.9nm,1.0s | | | | | | | |
| VNA3 | **Neumayer Olymp** | **86.47** | **180** | ⇑P | | **P** | **01 35 48.0** | **-0.4** |
| | comp=Z,6.2nm,0.7s | | | | | | | |
| VNA2 | **Neumayer--Watz** | **86.78** | **181** | ⇑P | | **P** | **01 35 49.7** | **-0.1** |
| | comp=Z,7.0nm,0.7s,baz=175,slow=4.7 | | | | | | | |
| VNA1 | **Neumayer--Stat** | **87.06** | **181** | ⇑P | | **P** | **01 35 50.0** | **-1.2** |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| SONM | **Songino Array** | **90.36** | **323** | P | | **P** | **01 36 07.3** | **+0.2** |
| | comp=Z,0.7nm,0.8s,baz=124,slow=4.4,SNR=6.0 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| ILAR | **Eielson Array** | **93.11** | **17** | P | | **P** | **01 36 16.7** | **-2.6** |
| | comp=Z,0.4nm,0.7s,baz=226,slow=4.8,SNR=2.4 | | | | | | | |
| ILAR | | | | LR | | LR | 02 13 09.6 | |
| | comp=Z,74nm,19.1s,baz=230,slow=32 | | | | | | | |
| ARCES | **ARCESS Array B** | **128.46** | **345** | PKP | | **PKPdf** | **01 42 11.4** | **-0.7** |
| | comp=Z,1.9nm,0.8s,baz=58,slow=2.2,SNR=5.7 | | | | | | | |
| MORC | **Moravsky Berou** | **145.32** | **328** | *e*PKP | | **PKPbc** | **01 42 40.7** | **-2.8** |
| OSTC | **Ostas** | **145.41** | **330** | *e*PKP | | **PKPab** | **01 42 45.5** | **+1.6** |
| CHVC | **Chvalec** | **145.47** | **331** | *e*PKP | | **PKPdf** | **01 42 43.8** | **-0.1** |
| KRLC | **Kraliky** | **145.49** | **329** | *e*PKP | | **PKPab** | **01 42 44.1** | **-0.1** |
| DPC | **Dobruska-Polom** | **145.51** | **330** | *e*PKP | | **PKPdf** | **01 42 43.2** | **-0.8** |
| UPC | **Upice** | **145.54** | **331** | *e*PKP | | **PKPdf** | **01 42 43.8** | **-0.2** |
| JAVC | **Velka Javorina** | **145.86** | **327** | *e*PKP | | **PKPab** | **01 42 45.8** | **+0.1** |
| VRAC | **Vranov** | **146.10** | **329** | *e*PKP | | **PKPab** | **01 42 46.5** | **0.0** |
| BRG | **Berggiesshubel** | **146.19** | **333** | *e*P | | **PKPab** | **01 42 46.5** | **-0.3** |
| BRG | | | | Amp | | | 01 42 47.9 | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| BRG | **Berggiesshubel** | **146.19** | **333** | P | | **PKiKP** | **01 42 54.9** | **+5.6** |
| BRG | | | | Amp | | | 01 42 58.3 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| CLL | **Collm** | **146.25** | **334** | *e*PKPbc | | **PKPab** | **01 42 47.0** | **0.0** |
| CLL | | | | *i* x | | x | 01 42 49.4 | |
| CLL | | | | *i* PKiKP | | pPKPbc | 01 42 50.9 | -0.5 |
| CLL | | | | *i* x | | x | 01 42 53.4 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| CLL | | | | *e*SSS | | SSS | 02 10 42.0 | |
| CLL | | | | AMS | | AMS | 02 56 00.0 | |
| | comp=Z,100nm,19.3s | | | | | | | |
| KRUC | **Moravsky** | **146.36** | **328** | *e*PKP | | **PKPbc** | **01 42 46.6** | **-0.1** |
| EKA | **Eskdalemuir Ar** | **146.87** | **353** | PKPbc | | **PKPdf** | **01 42 46.3** | **+0.3** |
| | comp=Z,1.1nm,0.4s,baz=356,slow=2.7,SNR=16 | | | | | | | |
| ZVC | **Zvikov** | **147.13** | **331** | *e*PKP | | **PKPbc** | **01 42 49.4** | **+0.5** |
| RONA | **Rosalia, Austr** | **147.32** | **327** | *e*PKP | | **PKPab** | **01 42 51.1** | **-0.3** |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| CONA | **Conrad Observa** | **147.38** | **327** | *e*PKiKP | | **PKiKP** | **01 42 52.1** | **+0.2** |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| CKRC | **Cesky Krumlov** | **147.52** | **330** | *e*PKP | | **PKPbc** | **01 42 50.5** | **+0.5** |
| KHC | **Kasperske Hory** | **147.63** | **331** | *e*PKP | | **PKPbc** | **01 42 51.2** | **+0.9** |
| GERES | **GERESS Array B** | **147.78** | **330** | PKPbc | | **PKPbc** | **01 42 51.6** | **+0.8** |
| | comp=Z,1.2nm,0.6s,baz=72,slow=4.3,SNR=7.7 | | | | | | | |
| SOKA | **Soboth** | **148.64** | **326** | *e*PKiKP | | **PKiKP** | **01 42 54.7** | **+0.1** |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| LESA | **Schwarzleotal** | **149.28** | **329** | *e*PKP | | **PKPbc** | **01 42 55.0** | **+0.2** |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| ABTA | **Abfaltersbach** | **149.85** | **329** | *e*PKP | | **PKPbc** | **01 42 55.8** | **-0.4** |
| | comp=Z,5.9nm,1.3s | | | | | | | |
| WATA | **Walderalm** | **149.86** | **330** | *i* PKP | | **PKPbc** | **01 42 56.3** | **+0.1** |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| WTTA | **Wattenberg** | **149.88** | **330** | *e*PKP | | **PKPbc** | **01 42 56.3** | **0.0** |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| MOTA | **Moosalm** | **150.06** | **331** | *e*PKP | | **PKPbc** | **01 42 56.5** | **-0.2** |
| | comp=Z,5.5nm,1.0s | | | | | | | |
| SQTA | **Sankt Quirin** | **150.11** | **331** | *e*PKP | | **PKPbc** | **01 42 56.3** | **-0.5** |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| ESDC | **Sonseca Array** | **162.20** | **345** | PKPab | | **PKPab** | **01 43 53.9** | **-0.6** |
| | comp=Z,1.1nm,1.2s,baz=341,slow=1.7,SNR=2.4 | | | | | | | |
| TORD | **Torodi Ar. Bea** | **165.59** | **232** | PKP | | **PKPdf** | **01 43 09.6** | **-1.8** |
| | comp=Z,0.3nm,0.8s,baz=116,slow=3.4,SNR=2.1 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **01 44 09.7** | **-0.4** |
| | comp=Z,0.6nm,1.0s,baz=136,slow=4.4,SNR=1.3 | | | | | | | |

*IDC **28** 01:30:45.6±0.7,14.64S×179.56W,h0km,mb4.2/14, mbtmp4.2/16,ML3.2/1,MS4.0/33,Error ellipse: s-maj=26.9km s-min=16.2km az=129.0*

*GCMT **28** 01:30:50.7±0.3,14.35S±0.02×179.49W±0.02,h21km±1km, MW4.9/94,Moment Tensor Solution. s28,c33; s94,c122; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr-0.99±.15; Mθθ-0.42±.12; Mφφ1.42±.12; Mrθ0.27±.20; Mθφ3.12±.10; Mφr0.41±.20; Best double couple: M0:3.27900×10^16^ NP1:φ352.00000°,δ87.00000°,λ175.00000°. NP2: φ82.00000°,δ85.00000°,λ3.00000°. Principal axes: T 3.8030, Plg6.0000°, Azm307.0000°; N -1.0450, Plg84.0000°, Azm136.0000°; P -2.7550, Plg1.0000°, Azm37.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **28** 01:30:57.6±0.5,15.0S±0.1×179.82W±0.07,h79km±7km, mb4.6/24 Error ellipse: s-maj=22.6km s-min=6.2km az=156.0*

**ISC 28 01:30:52.2±0.6,14.8S±0.1×179.8W±0.1,h35km,n73, σ1§61/49,mb4.5/26,MS4.1/31,4C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | **3.59** | **215** | | **Pn** | **01 31 48.5** | **+3.1** |
| MSVF | **Nonsavu** | **3.59** | **215** | Pn | **Pn** | **01 31 48.0** | **+2.6** |
| | 67nm,0.3s,baz=84,slow=3.2,SNR=213 | | | | | | |
| MSVF | | | | LR | LR | 01 33 15.7 | |
| | comp=Z,4μm,19.7s,baz=357,slow=39 | | | | | | |
| RAO | **Raoul Island** | **14.51** | **173** | LR | LR | 01 38 43.7 | |
| | comp=Z,287nm,21.1s,baz=344,slow=33 | | | | | | |
| DZM | **Mont Dzumac** | **14.92** | **239** | Pn | **P** | **01 34 23.4** | **-2.5** |
| | 0.1nm,0.3s,baz=102,slow=20,SNR=1.4 | | | | | | |
| DZM | | | | LR | LR | 01 39 16.2 | |
| | comp=Z,791nm,19.2s,baz=68,slow=34 | | | | | | |
| | 8.1nm,1.1s | | | | | | |
| RAR | **Rarotonga** | **20.09** | **111** | LR | LR | 01 41 14.1 | |
| | comp=Z,594nm,20.6s,baz=286,slow=32 | | | | | | |
| URZ | **Urewera** | **23.55** | **186** | P | **P** | **01 35 57.6** | **-1.7** |
| | 4.0nm,0.7s,baz=126,slow=15,SNR=2.3 | | | | | | |
| URZ | | | | LR | LR | 01 44 43.4 | |
| | comp=Z,383nm,18.2s,baz=90,slow=35 | | | | | | |
| | 4.0nm,0.7s | | | | | | |
| PPT | **Papeete** | **29.15** | **100** | LR | LR | 01 45 18.9 | |
| | comp=Z,188nm,20.1s,baz=200,slow=30 | | | | | | |
| PMG | **Port Moresby** | **32.72** | **276** | LR | LR | 01 49 28.6 | |
| | comp=Z,115nm,18.4s,baz=78,slow=34 | | | | | | |
| CTA | **Charters Tower** | **32.77** | **256** | LR | LR | 01 49 45.0 | |
| | comp=Z,13nm,19.3s,baz=80,slow=34 | | | | | | |
| STKA | **Stephens Creek** | **39.07** | **237** | P | **P** | **01 38 17.1** | **+1.1** |
| | 2.7nm,0.8s,baz=54,slow=8.7,SNR=4.1 | | | | | | |
| STKA | | | | LR | LR | 01 52 51.0 | |
| | comp=Z,188nm,19.4s,baz=53,slow=34 | | | | | | |
| | 2.7nm,0.8s | | | | | | |
| WR0 | **Warramunga Arr** | **43.77** | **256** | P | **P** | **01 38 54.6** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 01 39 04.6 | |
| | comp=Z,11nm,1.4s | | | | | | |
| BBOO | **Buckleboo** | **43.83** | **238** | P | **P** | **01 38 55.8** | **+0.7** |
| WB0 | **Warramunga Arr** | **43.92** | **257** | P | **P** | **01 38 55.2** | **-0.7** |
| WRA | **Warramunga Arr** | **43.97** | **257** | P | **P** | **01 38 56.1** | **-0.2** |
| | comp=Z,1.6nm,1.1s,baz=92,slow=7.4,SNR=5.0 | | | | | | |
| WRA | | | | LR | LR | 01 56 10.3 | |
| | comp=Z,202nm,18.7s,baz=90,slow=34 | | | | | | |
| | comp=Z,1.6nm,1.1s | | | | | | |
| ASAR | **Alice Springs** | **44.43** | **251** | P | **P** | **01 39 00.2** | **+0.2** |
| | comp=Z,1.5nm,0.8s,baz=88,slow=8.2,SNR=9.9 | | | | | | |
| ASAR | | | | LR | LR | 01 56 50.5 | |
| | comp=Z,147nm,19.8s,baz=92,slow=35 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| MTN | **Manton Dam** | **47.61** | **266** | P | **P** | **01 39 24.9** | **-0.2** |
| FORT | **Forrest** | **50.20** | **242** | P | **P** | **01 39 44.0** | **-0.9** |
| JCJ | **Chichijima** | **55.63** | **318** | LR | LR | 02 00 56.3 | |
| | comp=Z,220nm,19.9s,baz=144,slow=32 | | | | | | |
| NWAO | **Narrogin (SRO)** | **59.54** | **240** | LR | LR | 02 04 39.3 | |
| | comp=Z,286nm,21.3s,baz=86,slow=34 | | | | | | |
| KAPI | **Kappang** | **60.17** | **273** | LR | LR | 02 06 06.0 | |
| | comp=Z,60nm,18.7s,baz=84,slow=35 | | | | | | |
| MJAR | **Matsushiro Arr** | **64.61** | **323** | P | **P** | **01 41 24.1** | **-2.2** |
| | comp=Z,2.2nm,0.7s,baz=148,slow=7.2,SNR=1.6 | | | | | | |
| MJAR | | | | LR | LR | 02 04 42.1 | |
| | comp=Z,144nm,21.7s,baz=112,slow=32 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| JOW | **Kunigami** | **65.21** | **309** | LR | LR | 02 03 47.3 | |
| | comp=Z,124nm,20.2s,baz=105,slow=30 | | | | | | |
| JSD | **Sado** | **65.63** | **325** | P | **P** | **01 41 33.9** | **+1.1** |
| RPN | **Rapa Nui** | **66.22** | **113** | LR | LR | 02 02 47.1 | |
| | comp=Z,138nm,21.8s,baz=272,slow=29 | | | | | | |
| JNU | **Nakatsue** | **66.97** | **316** | LR | LR | 02 05 42.6 | |
| | comp=Z,83nm,21.4s,baz=124,slow=31 | | | | | | |
| ASAJ | **Asahikawa** | **67.90** | **332** | LR | LR | 02 05 10.3 | |
| | comp=Z,228nm,21.9s,baz=164,slow=30 | | | | | | |
| PETK | **Petropavlovsk-** | **70.33** | **346** | P | **P** | **01 42 04.6** | **+2.5** |
| PETK | **Petropavlovsk-** | **70.33** | **346** | P | **P** | **01 42 01.0** | **-1.1** |
| | comp=Z,4.2nm,0.9s,baz=130,slow=5.8,SNR=3.7 | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| KSRS | **Korea Array** | **71.49** | **318** | LR | LR | 02 07 47.5 | |
| | comp=Z,114nm,21.9s,baz=125,slow=31 | | | | | | |
| QSPA | **South Pole Qui** | **75.25** | **180** | P | **P** | **01 42 30.5** | **-0.9** |
| QSPA | | | | IAmb | IAmb | 01 42 39.9 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| QSPA | **South Pole Qui** | **75.25** | **180** | P | **P** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,82nm,21.2s,baz=133,slow=32 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **93.41** | **181** | ⇑P | | **P** | **01 44 03.8** | **+0.1** |
| | comp=Z,92nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **93.73** | **179** | P | | **P** | **01 44 05.0** | **-0.1** |
| SNAA | | | | IAmb | | IAmb | 01 44 18.8 | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **SNAA** | **Sanae** | **93.73** | **179** | ⇑P | | **P** | **01 44 04.5** | **-0.5** |
| | comp=Z,12nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **93.73** | **179** | P | | **P** | **01 44 04.6** | **-0.5** |
| | comp=Z,1.4nm,1.0s,baz=305,slow=11,SNR=2.7 | | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **93.92** | **177** | ⇑P | | **P** | **01 44 05.0** | **-0.9** |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **94.35** | **178** | ⇑P | | **P** | **01 44 07.5** | **-0.4** |
| | comp=Z,1.4nm,0.6s,baz=178,slow=4.6 | | | | | | | |
| **PLCA** | **Paso Flores** | **94.45** | **134** | LR | | LR | 02 17 33.5 | |
| | comp=Z,72nm,20.5s,baz=230,slow=30 | | | | | | | |
| **JTS** | **Las Juntas de** | **97.21** | **81** | LR | | LR | 02 17 21.1 | |
| | comp=Z,26nm,20.6s,baz=282,slow=29 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **97.40** | **40** | LR | | LR | 02 22 24.6 | |
| | comp=Z,69nm,19.6s,baz=318,slow=32 | | | | | | | |
| **ATAH** | **Atahualpa** | **99.13** | **100** | LR | | LR | 02 20 44.5 | |
| | comp=Z,66nm,19.0s,baz=244,slow=30 | | | | | | | |
| **NNA** | **Nana** | **99.21** | **105** | LR | | LR | 02 20 50.3 | |
| | comp=Z,23nm,20.4s,baz=253,slow=30 | | | | | | | |
| **ESDC** | **Sonseca Array** | **154.93** | **8** | PKPab | | **PKPab** | **01 51 05.7** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=336,slow=3.3,SNR=4.1 | | | | | | | |

**KRSC 28 01:31:44.4±1.2, 52°.32N×160°.42E, h19km±16km, MI3.6, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.82** | **343** | *e*P | Pg | 01 32 00.3 | 0.0 |
| SPN | | | | *e*S | Sb | 01 32 10.6 | +0.1 |
| **NLC** | **Nalytchevo** | **1.08** | **323** | *e*P | Pn | 01 32 04.4 | +0.1 |
| NLC | | | | *e*S | Sb | 01 32 18.1 | +0.1 |
| **DALK** | **Dalny** | **1.24** | **306** | *e*P | Pn | 01 32 06.7 | 0.0 |
| DALK | | | | *e*S | Sb | 01 32 22.8 | 0.0 |
| **PET** | **Petropavlovsk** | **1.29** | **304** | *e*P | Pn | 01 32 07.4 | +0.1 |
| PET | | | | *e*S | Sb | 01 32 24.1 | 0.0 |
| **UGLR** | **Uglovaya** | **1.32** | **313** | *e*P | Pb | 01 32 08.5 | 0.0 |
| UGLR | | | | *e*S | Sg | 01 32 26.6 | -0.5 |
| **SMAR** | **Somma** | **1.36** | **315** | *e*P | Pb | 01 32 09.1 | -0.4 |
| **MTVR** | **Mutnovka** | **1.38** | **278** | *e*P | Pb | 01 32 09.3 | -0.3 |
| MTVR | | | | *e*S | Sb | 01 32 27.4 | +0.5 |
| **AVH** | **Avacha** | **1.39** | **314** | *e*P | Pb | 01 32 09.9 | 0.0 |
| AVH | | | | *e*S | Sg | 01 32 28.7 | -0.7 |
| **GRL** | **Gorelyy** | **1.46** | **280** | *e*P | Pb | 01 32 11.1 | +0.2 |
| GRL | | | | *e*S | Sg | 01 32 30.4 | -1.1 |
| **KOK** | **Koryaka** | **1.46** | **313** | *e*P | Pb | 01 32 10.5 | -0.4 |
| **KRMR** | **Karymshinskiy** | **1.49** | **291** | *e*P | Pn | 01 32 10.7 | +0.6 |
| KRMR | | | | *e*S | Sb | 01 32 29.5 | -0.4 |
| **KDTR** | **Khodutka, Kamc** | **1.53** | **251** | *e*P | Pn | 01 32 10.7 | +0.1 |
| KDTR | | | | *e*S | Sn | 01 32 29.9 | -0.2 |
| **ASAK** | **Asacha** | **1.55** | **273** | *e*P | Pb | 01 32 12.2 | -0.2 |
| ASAK | | | | *e*S | Sb | 01 32 32.0 | +0.3 |
| **KII** | **Karymskiy** | **1.82** | **342** | *e*P | Pb | 01 32 16.1 | -1.0 |
| **GNL** | **Ganaly** | **2.04** | **314** | *e*P | Pb | 01 32 19.6 | -1.1 |
| **APC** | **Apacha** | **2.08** | **288** | *e*P | Pb | 01 32 20.8 | -0.6 |
| APC | | | | *e*S | Sb | 01 32 47.7 | +0.9 |
| **TUMD** | **Tumrok D** | **2.89** | **360** | *e*P | Pn | 01 32 31.3 | +1.9 |
| TUMD | | | | *e*S | Sn | 01 33 06.0 | +2.4 |
| **TUMR** | **Tumrok** | **2.98** | **357** | *e*P | Pn | 01 32 33.1 | +2.5 |
| **BZGR** | **Bezymyannyi-Gr** | **3.63** | **2** | *e*P | Pb | 01 32 44.3 | -3.7 |

**TAP 28 01:45:40.2, 24°.85N×121°.88E, h77km±1km, ML2.3, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NTC** | **Toucheng** | **0.04** | **275** | *e*P | Pn | 01 45 51.1 | 0.0 |
| | baz=274 | | | | | | |
| **TIPB** | **Shuangxi** | **0.13** | **340** | *e*P | Pn | 01 45 51.2 | -0.2 |
| | baz=339 | | | | | | |
| TIPB | | | | *e*S | Sn | 01 45 58.9 | -0.7 |
| | baz=339 | | | | | | |
| **TWC** | **Suao** | **0.24** | **186** | *e*P | Pn | 01 45 51.4 | -0.4 |
| | baz=183 | | | | | | |
| TWC | | | | *e*S | Sn | 01 46 00.6 | +0.3 |
| | baz=183 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.28** | **251** | *e*P | Pn | 01 45 52.0 | -0.1 |
| | baz=250 | | | | | | |
| FUSB | | | | *e*S | Sn | 01 46 00.2 | -0.6 |
| | baz=250 | | | | | | |
| **NWLT** | **Wulai** | **0.35** | **258** | *e*P | Pn | 01 45 52.5 | +0.1 |
| | baz=257 | | | | | | |
| NWLT | | | | *e*S | Sn | 01 46 01.2 | -0.3 |
| | baz=257 | | | | | | |
| **ENTT** | **Nioudou** | **0.35** | **233** | *e*P | Pn | 01 45 52.5 | 0.0 |
| | baz=232 | | | | | | |
| ENTT | | | | *e*S | Sn | 01 46 01.5 | +0.1 |
| | baz=232 | | | | | | |
| **EWUT** | **Wuta** | **0.41** | **192** | *e*S | Sn | 01 46 02.2 | 0.0 |
| | baz=192 | | | | | | |
| **ENA** | **Nanau** | **0.44** | **196** | *e*P | Pn | 01 45 53.1 | 0.0 |
| | baz=195 | | | | | | |
| ENA | | | | *e*S | Sn | 01 46 02.6 | 0.0 |
| | baz=195 | | | | | | |
| **LATG** | **Datong** | **0.45** | **225** | P | Pn | 01 45 53.5 | +0.2 |
| | baz=225 | | | | | | |
| LATG | | | | S | Sn | 01 46 03.6 | +0.6 |
| | baz=225 | | | | | | |
| **YHNB** | **Yeheng** | **0.49** | **248** | *e*P | Pn | 01 45 53.5 | -0.1 |
| | baz=248 | | | | | | |
| YHNB | | | | *e*S | Sn | 01 46 03.2 | -0.3 |
| | baz=248 | | | | | | |
| **NNS** | **Nan Shan** | **0.61** | **228** | *e*P | Pn | 01 45 54.8 | -0.1 |
| | baz=227 | | | | | | |
| NNS | | | | *e*S | Sn | 01 46 05.6 | -0.1 |
| | baz=227 | | | | | | |
| **NNSH** | **Datong** | **0.61** | **227** | P | Pn | 01 45 54.8 | 0.0 |
| | baz=226 | | | | | | |
| NNSH | | | | S | Sn | 01 46 05.7 | 0.0 |
| | baz=226 | | | | | | |
| **NNSB** | **Datong** | **0.61** | **227** | *e*P | Pn | 01 45 54.9 | +0.1 |
| | baz=226 | | | | | | |
| NNSB | | | | *e*S | Sn | 01 46 04.8 | -0.9 |
| | baz=226 | | | | | | |
| **EOS3** | **EOS3** | **0.69** | **144** | *e*P | Pn | 01 45 55.4 | +0.1 |
| | baz=144 | | | | | | |
| EOS3 | | | | *e*S | Sn | 01 46 06.8 | +0.3 |
| | baz=144 | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.72** | **253** | *e*P | Pn | 01 45 55.8 | -0.1 |
| | baz=252 | | | | | | |
| NFF | | | | *e*S | Sn | 01 46 07.5 | 0.0 |
| | baz=252 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.73** | **209** | *e*P | Pn | 01 45 55.3 | -0.8 |
| | baz=209 | | | | | | |
| ETLH | | | | *e*S | Sn | 01 46 06.5 | -1.3 |
| | baz=209 | | | | | | |
| **FUSS** | **Fushou** | **0.83** | **224** | *e*P | Pn | 01 45 57.5 | +0.1 |
| | baz=223 | | | | | | |
| FUSS | | | | *e*S | Sn | 01 46 09.8 | -0.2 |
| | baz=223 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.90** | **218** | *e*P | Pn | 01 45 58.1 | -0.2 |
| | baz=217 | | | | | | |
| WHF | | | | *e*S | Sn | 01 46 10.4 | -1.2 |
| | baz=217 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.93** | **207** | *e*P | Pn | 01 45 57.7 | -0.6 |
| | baz=206 | | | | | | |
| **CHGB** | **Renai** | **1.01** | **219** | *e*P | Pn | 01 45 59.6 | +0.1 |
| | baz=219 | | | | | | |
| CHGB | | | | *e*S | Sn | 01 46 13.5 | -0.3 |
| | baz=219 | | | | | | |
| **WHP** | **Taichung City** | **1.02** | **236** | *e*P | Pn | 01 45 59.1 | -0.3 |
| | baz=235 | | | | | | |
| **WUSB** | **Renai** | **1.10** | **219** | *e*P | Pn | 01 46 00.7 | +0.2 |
| | baz=218 | | | | | | |
| WUSB | | | | *e*S | Sn | 01 46 15.3 | -0.1 |
| | baz=218 | | | | | | |

**JMA 28 01:45:42.9±0.2, 25°N±1°×124°.0E±0°.7, h1km±3km, MV1.6/9, NW OFF ISHIGAKIJIMA IS, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JISG** | **Ishigakijimahi** | **0.42** | **143** | *e*P | Pg | 01 45 51.6 | +0.6 |
| JISG | | | | *e*S | Sg | 01 45 57.6 | +1.1 |
| **JIJ** | **Ishigaki jima** | **0.57** | **170** | *e*P | Pg | 01 45 54.2 | +0.4 |
| JIJ | | | | *e*S | Sg | 01 46 01.7 | +0.5 |
| **IRIF** | **Iriomote-Funau** | **0.65** | **205** | *e*S | Sg | 01 46 05.0 | +1.3 |
| **JTJ** | **Tarama** | **0.67** | **115** | *e*S | Sb | 01 46 06.2 | -1.2 |
| **JKRS** | **Kuro-shima** | **0.69** | **182** | *e*S | Sb | 01 46 06.4 | -1.3 |
| **HATJ** | **Hateruma jima** | **0.89** | **193** | *e*S | Sb | 01 46 12.8 | -0.8 |
| **JIRB** | **Irabujima** | **1.04** | **95** | *e*S | Sg | 01 46 16.5 | 0.0 |
| **JIKM** | **Ikemajima** | **1.11** | **90** | *e*P | Pg | 01 46 03.8 | -0.3 |

*IDC **28** 01:58:13.6±0.6, 44°.21N×149°.82E, h0km, mb4.2/22, mbtmp4.1/29, ML3.3/7, MS3.7/11, Error ellipse: s-maj=15.6km s-min=14.1km az=153.0*
*BJI **28** 01:58:13.6±0.0, 44°.04N×149°.77E, h14km, mb4.6/38, mB4.8/13, Ms4.1/11, Ms7 3.8/12*
*NEIC **28** 01:58:15.5±1.6, 44°.1N±0°.1×149°.7E±0°.1, h10km±1km, mb4.6/78, Error ellipse: s-maj=22.7km s-min=15.9km az=153.0*
*MOS **28** 01:58:17.1±1.0, 44°.21N×149°.69E, h31km, mb4.9/28, MS3.7/10, Error ellipse: s-maj=9.1km s-min=6.4km az=131.1*
*SKHL **28** 01:58:17.7±0.1, 44°.10N×149°.80E, h40km±4km, mb4.7/3*
*JMA **28** 01:58:19.6±0.7, 44°N±3°×14°9E±°, h30km, MV4.5/11, SE OFF ETOROFU*

**ISC 28 01:58:14.0±2.1, 44°.10N±0°.06×149°.72E±0°.05, h3km±13km, n261, σ1$27/264, mb4.6/106, MS3.7/22, 6C-15D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.74** | **311** | *i* P | **Pn** | **01 58 45.4** | **+0.4** |
| KUR | | | | AMB | AMB | 01 58 46.2 | |
| | 580nm,0.7s | | | | | | |
| KUR | | | | *i* S | **Sn** | **01 59 06.2** | **-1.5** |
| KUR | | | | A | A | 01 59 12.3 | |
| | 2μm,0.7s | | | | | | |
| KUR | | | | A | A | 01 59 12.3 | |
| | 640nm,0.7s | | | | | | |
| **KUR** | **Kuril'sk** | **1.74** | **311** | *c i*PN | **Pn** | **01 58 45.4** | **+0.4** |
| KUR | | | | *i* S | **Sn** | **01 59 06.2** | **-1.5** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,498nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,188nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,86nm,0.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,1μm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,965nm,0.7s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **265** | *e*P | **Pn** | **01 58 50.4** | **+0.5** |
| SHO | | | | AMB | AMB | 01 58 51.8 | |
| | comp=N,80nm,0.4s | | | | | | |
| SHO | | | | *e*S | **Sn** | **01 59 14.8** | **-1.6** |
| SHO | | | | A | A | 01 59 16.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| SHO | | | | A | A | 01 59 16.5 | |
| | comp=N,630nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **265** | *e*PN | **Pn** | **01 58 50.4** | **+0.5** |
| SHO | | | | *e*S | **Sn** | **01 59 14.8** | **-1.6** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,83nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,49nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,53nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,649nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,949nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.78** | **270** | *e*P | **Pn** | **01 59 00.2** | **+0.9** |
| YUK | | | | AMB | AMB | 01 59 01.6 | |
| | comp=N,120nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **01 59 32.1** | **-1.2** |
| YUK | | | | A | A | 01 59 37.3 | |
| | comp=N,480nm,0.6s | | | | | | |
| YUK | | | | A | A | 01 59 37.3 | |
| | comp=N,540nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.78** | **270** | *e*PN | **Pn** | **01 59 00.2** | **+0.9** |
| YUK | | | | *e*S | **Sn** | **01 59 32.2** | **-1.1** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,201nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,108nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,209nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,570nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,501nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.97** | **257** | *e*P | **Pn** | **01 59 02.3** | **+0.4** |
| NEM2 | | | | *e*S | **Sn** | **01 59 33.6** | **-4.4** |
| **JRA** | **Rausu** | **3.32** | **269** | *e*P | **Pn** | **01 59 08.8** | **+2.1** |
| **JNK** | **Nakash** | **3.65** | **264** | *e*P | **Pn** | **01 59 12.4** | **+1.1** |
| **JAK** | **Akkeshi** | **3.81** | **255** | *e*P | **Pn** | **01 59 14.5** | **+1.0** |
| JAK | | | | *e*S | **Sn** | **01 59 55.3** | **-3.5** |
| **JAR** | **Ashorobuto** | **4.39** | **262** | *e*P | **Pn** | **01 59 23.2** | **+1.8** |
| **JOB** | **Onbets** | **4.44** | **256** | *e*P | **Pn** | **01 59 23.8** | **+1.6** |
| JOB | | | | *e*S | **Sn** | **02 00 10.5** | **-3.8** |
| **JCH** | **Churui** | **4.87** | **254** | *e*P | **Pn** | **01 59 29.2** | **+1.3** |
| **JKA** | **Kamikawa-asahi** | **5.12** | **273** | Pn | **Pn** | **01 59 35.0** | **+3.4** |
| **JKA** | **Kamikawa-asahi** | **5.12** | **273** | *e*P | **Pn** | **01 59 35.0** | **+3.4** |
| **ASAJ** | **Asahikawa** | **5.13** | **273** | Pn | **Pn** | **01 59 34.1** | **+2.6** |
| | comp=E,2.1nm,0.3s,baz=101,slow=15,SNR=5.5 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **02 00 38.7** | **+7.5** |
| | baz=335,slow=21 | | | | | | |
| | comp=E,8.0nm,0.5s | | | | | | |
| **ASAJ** | **Asahikawa** | **5.13** | **273** | PN | **Pn** | **01 59 35.0** | **+3.4** |
| **ERM** | **Erimo** | **5.24** | **249** | | **Pn** | **01 59 35.5** | **+2.4** |
| **ERM** | **Erimo** | **5.24** | **249** | *e*PN | **Pn** | **01 59 35.7** | **+2.6** |
| **JNBK** | **Urakawa-nobuka** | **5.41** | **253** | *e*P | **Pn** | **01 59 36.1** | **+0.8** |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | *e*S | **Sn** | **02 00 43.4** | **-1.0** |
| YSS | | | | *e*P | **Pn** | **01 59 40.8** | **+1.9** |
| YSS | | | | AMB | AMB | 01 59 41.9 | |
| | comp=E,10.0nm,0.3s | | | | | | |
| YSS | | | | A | A | 02 00 46.5 | |
| | comp=E,20nm,0.3s | | | | | | |
| YSS | | | | A | A | 02 00 46.5 | |
| | comp=E,20nm,0.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.66** | **303** | *e*PN | **Pn** | **01 59 40.8** | **+1.9** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **JTM** | **Tenmabayashi** | **7.20** | **246** | Pn | **Pn** | **01 59 59.5** | **-0.5** |
| **TYV** | **Tymovskoe** | **8.28** | **327** | *e*P | **Pn** | **02 00 17.6** | **+2.8** |
| TYV | | | | AMB | AMB | 02 00 18.3 | |
| **TYV** | **Tymovskoe** | **8.28** | **327** | *e*PN | Pb | 02 00 29.1 | -8.8 |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **JMM** | **Marumori** | **9.18** | **230** | Pn | **Pn** | **02 00 25.0** | **-2.1** |
| **PETK** | **Petropavlovsk-** | **10.44** | **28** | Pn | **Pn** | **02 00 43.3** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=199,slow=12,SNR=1.9 | | | | | | |
| PETK | | | | LR | LR | 02 05 59.4 | |
| | comp=Z,225nm,19.0s,baz=196,slow=45 | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **JSD** | **Sado** | **10.55** | **239** | Pn | **Pn** | **02 00 45.3** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **11.57** | **233** | Pn | **Pn** | **02 01 00.5** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=34,slow=15,SNR=1.6 | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| **JGF** | **Kuroka** | **12.72** | **232** | Pn | **Pn** | **02 01 16.3** | **+0.6** |
| **USA0B** | **Ussuriysk Arra** | **12.74** | **277** | *ce*PN | **Pn** | **02 01 17.5** | **+1.7** |
| **USRK** | **Ussuriysk Ar.** | **12.74** | **277** | Pn | **Pn** | **02 01 16.9** | **+1.1** |
| | comp=Z,0.7nm,0.3s,baz=83,slow=13,SNR=9.2 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **13.36** | **299** | Pn | **Pn** | **02 01 25.6** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=27,slow=23,SNR=1.9 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **13.36** | **299** | *e*PN | **P** | **02 01 32.3** | **-1.7** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | | |
| **PSTR** | **Posyet** | **13.84** | **271** | ‖*e*P | **Pn** | **02 01 32.0** | **+1.2** |
| **BNX** | **BinXian** | **15.88** | **284** | ‖P | **Pn** | **02 01 58.5** | **+0.2** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **HEH** | **HeiHe** | **16.34** | **300** | *e*P | **P** | **02 02 06.0** | **-1.1** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **CN2** | **Changchun** | **17.47** | **278** | P | **P** | **02 02 19.8** | **+0.1** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,200nm,11.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,200nm,11.0s | | | | | | |
| CN2 | | | | LR | LR | | |
| | comp=Z,200nm,14.0s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZEA** | **Zeya** | **17.57** | **311** | *e*P | | **Pn** | **02 02 16.2** | **-3.4** |
| ZEA | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| ZEA | | | | MLR | | MLR | | |
| | comp=Z,100nm,20.0s | | | | | | | |
| **KSRS** | **Korea Array** | **17.76** | **256** | P | | **P** | **02 02 23.6** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=66,slow=12,SNR=2.2 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **SEY** | **Seymchan** | **18.93** | **4** | P | | **P** | **02 02 33.5** | **-2.1** |
| | comp=Z,0.3nm,0.3s,baz=176,slow=8.9,SNR=12 | | | | | | | |
| | comp=Z,4.7nm,0.7s | | | | | | | |
| **SEY** | **Seymchan** | **18.93** | **4** | ‖*i*P | | **P** | **02 02 34.4** | **-1.3** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| SEY | | | | MLR | | MLR | | |
| | comp=Z,218nm,15.0s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **24.11** | **281** | *e*P | | **P** | **02 03 30.5** | **-0.3** |
| XLT | | | | pP | | pwP | 02 03 34.8 | -3.4 |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| XLT | | | | pmax | | pmax | | |
| | comp=Z,120nm,4.5s | | | | | | | |
| **BILL** | **Bilibino** | **25.54** | **14** | ‖*e*P | | **P** | **02 03 42.2** | **-1.2** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,99nm,16.0s | | | | | | | |
| **TIA** | **Tai'an** | **26.00** | **264** | P | | **P** | **02 03 50.3** | **+2.4** |
| TIA | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **NJ2** | **Nanjing** | **26.95** | **254** | *e*P | | **P** | **02 03 56.3** | **-0.2** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,290nm,4.4s | | | | | | | |
| **HNS** | **HongShan** | **27.21** | **268** | *e*P | | P | 02 04 07.5 | +8.7 |
| HNS | | | | LR | | LR | | |
| | comp=E,150nm,19.1s | | | | | | | |
| HNS | | | | LR | | LR | | |
| | comp=Z,170nm,20.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **28.16** | **277** | *e*P | | **P** | **02 04 06.3** | **-1.1** |
| HHC | | | | pP | | pwP | 02 04 11.5 | -3.4 |
| HHC | | | | sP | | pP | 02 04 17.0 | +10 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,81nm,4.2s | | | | | | | |
| HHC | | | | LR | | LR | | |
| | comp=Z,120nm,12.9s | | | | | | | |
| HHC | | | | LR | | LR | | |
| | comp=Z,120nm,13.9s | | | | | | | |
| HHC | | | | LR | | LR | | |
| | comp=Z,150nm,18.6s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.22** | **144** | T | | T | 02 35 17.0 | |
| | baz=334,slow=75,SNR=32 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.23** | **144** | T | | T | 02 35 21.1 | |
| | baz=334,slow=75,SNR=34 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.24** | **144** | T | | T | 02 35 21.3 | |
| | baz=334,slow=75,SNR=24 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.23** | **145** | T | | T | 02 36 38.1 | |
| | baz=335,slow=76,SNR=24 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.24** | **145** | T | | T | 02 36 35.8 | |
| | baz=335,slow=76,SNR=28 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.25** | **145** | T | | T | 02 36 39.4 | |
| | baz=335,slow=76,SNR=25 | | | | | | | |
| **BTO** | **Baotou** | **29.35** | **277** | *e*P | | P | 02 04 24.5 | +6.5 |
| BTO | | | | pP | | pwP | 02 04 28.8 | +3.4 |
| BTO | | | | sP | | pP | 02 04 31.8 | +15 |
| BTO | | | | pmax | | pmax | | |
| | comp=Z,39nm,0.7s | | | | | | | |
| BTO | | | | pmax | | pmax | | |
| | comp=Z,270nm,5.3s | | | | | | | |
| **TIXI** | **Tiksi** | **29.42** | **347** | ‖*i*P | | **P** | **02 04 14.7** | **-3.5** |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| TIXI | | | | MLR | | MLR | | |
| | comp=Z,128nm,22.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.61** | **293** | P | | **P** | **02 04 20.4** | **+0.1** |
| ULN | | | | IAmb | | IAmb | 02 04 22.1 | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.61** | **293** | *e*P | | **P** | **02 04 20.4** | **+0.1** |
| **ULN** | **Ulaanbaatar** | **29.61** | **293** | P | | **P** | **02 04 20.4** | **+0.1** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **30.05** | **293** | P | | **P** | **02 04 24.5** | **+0.3** |
| | comp=Z,3.2nm,0.8s,baz=81,slow=9.0,SNR=18 | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **C16K** | **Lisburne Hills** | **33.54** | **28** | | | **P** | **02 04 54.9** | **+0.5** |
| **M16K** | **Timber Creek** | **34.42** | **42** | P | | **P** | **02 05 03.1** | **+1.0** |
| M16K | | | | IAmb | | IAmb | 02 05 03.3 | |
| | comp=Z,8.8nm,1.2s | | | | | | | |
| **C18K** | **Utukok River** | **35.11** | **29** | P | | **P** | **02 05 08.3** | **+0.2** |
| C18K | | | | IAmb | | IAmb | 02 05 09.4 | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| **G18K** | **Tagagawik** | **35.32** | **34** | P | | **P** | **02 05 09.6** | **-0.3** |
| G18K | | | | IAmb | | IAmb | 02 05 29.7 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **LZH** | **Lanzhou** | **35.61** | **273** | *e*P | | **P** | **02 05 14.8** | **+1.9** |
| LZH | | | | sP | | pwP | 02 05 26.0 | +5.7 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.1s | | | | | | | |
| **C19K** | **Lookout Ridge** | **35.80** | **28** | P | | **P** | **02 05 14.6** | **+0.5** |
| C19K | | | | IAmb | | IAmb | 02 05 19.1 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **D19K** | **Kuna River** | **36.14** | **30** | P | | **P** | **02 05 16.8** | **-0.1** |
| D19K | | | | IAmb | | IAmb | 02 05 18.7 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **H19K** | **Roundabout Mou** | **36.14** | **35** | P | | **P** | **02 05 17.5** | **+0.6** |
| H19K | | | | IAmb | | IAmb | 02 05 32.1 | |
| | comp=Z,7.7nm,0.8s | | | | | | | |
| **E19K** | **Redstone River** | **36.21** | **31** | P | | **P** | **02 05 17.8** | **+0.2** |
| E19K | | | | IAmb | | IAmb | 02 05 19.5 | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **B20K** | **Meade River** | **36.88** | **27** | P | | **P** | **02 05 23.7** | **+0.5** |
| B20K | | | | IAmb | | IAmb | 02 05 28.5 | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **J20K** | **Nowinta River** | **36.94** | **37** | P | | **P** | **02 05 24.7** | **+1.0** |
| **GTA** | **Gaotai** | **37.06** | **280** | P | | **P** | **02 05 26.8** | **+1.6** |
| GTA | | | | sP | | pwP | 02 05 38.8 | +6.1 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **G21K** | **Allakaket** | **37.48** | **33** | P | | **P** | **02 05 30.1** | **+1.7** |
| **F21K** | **Alatna River** | **37.59** | **32** | P | | **P** | **02 05 28.9** | **-0.4** |
| **E21K** | **Killik River** | **37.62** | **30** | P | | **P** | **02 05 30.4** | **+0.8** |
| **B21K** | **Ikpikpuk River** | **37.64** | **28** | P | | **P** | **02 05 30.6** | **+1.0** |
| B21K | | | | IAmb | | IAmb | 02 05 45.8 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **KDAK** | **Kodiak Island** | **37.65** | **48** | P | | **P** | **02 05 29.4** | **-0.4** |
| **KDAK** | **Kodiak Island** | **37.65** | **48** | P | | **P** | **02 05 29.4** | **-0.4** |
| KDAK | | | | pmax | | pmax | | |
| | comp=Z,60nm,1.5s | | | | | | | |
| **D22K** | **Ayikyak River** | **38.16** | **30** | P | | **P** | **02 05 34.9** | **+0.8** |
| **E22K** | **Anaktuvuk Pass** | **38.36** | **31** | P | | **P** | **02 05 36.9** | **+1.1** |
| E22K | | | | IAmb | | IAmb | 02 05 38.2 | |
| | comp=Z,9.2nm,0.7s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **38.90** | **42** | P | | **P** | **02 05 40.7** | **+0.4** |
| RC01 | | | | IAmb | | IAmb | 02 06 10.2 | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **C23K** | **Itkillik River** | **39.05** | **28** | P | | **P** | **02 05 42.4** | **+0.9** |
| C23K | | | | IAmb | | IAmb | 02 05 58.1 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **E23K** | **

PZH pmax pmax
comp=Z,110nm,4.0s
**ZALV Zalesovo Beam 42.27 307** P **P 02 06 07.3 -1.0**
comp=Z,0.6nm,0.4s,baz=69,slow=7.9,SNR=2.3
ZALV PcP **PcP 02 08 02.3 +0.4**
comp=Z,1.9nm,0.6s,baz=61,slow=1.9,SNR=7.6
comp=Z,0.6nm,0.4s
**L27K Beaver Creek, 42.45 39** P **P 02 06 10.9 +1.2**
**EGAK Eagle 42.56 36** P **P 02 06 10.9 +0.5**
**GRNC Granite Creek 42.81 42** P **P 02 06 13.9 +1.0**
GRNC IAmb IAmb 02 06 37.9
comp=Z,8.6nm,1.0s
**I28M Miner Creek 43.01 35** P **P 02 06 14.9 +0.6**
**H29M Whitestone 43.56 34** P **P 02 06 19.1 +0.4**
**WMQ Urumqi 43.69 292** *eP* **P 02 06 22.8 +2.8**
WMQ LR LR
comp=Z,120nm,21.3s
**I30M Mount Dempster 44.52 35** P **P 02 06 27.4 +1.0**
**J30M Hart River 44.64 36** P **P 02 06 28.5 +1.0**
**G31M Satah River 45.09 33** P **P 02 06 31.5 +0.7**
G31M IAmb IAmb 02 06 45.0
comp=Z,8.8nm,1.4s
**INK Inuvik 45.16 31** P **P 02 06 33.0 +1.7**
**INK Inuvik 45.16 31** P **P 02 06 33.0 +1.7**
INK pmax pmax
comp=Z,4.0nm,1.1s
**H31M Peel River 45.25 34** P **P 02 06 33.4 +1.2**
H31M IAmb IAmb 02 06 54.5
comp=Z,11nm,1.4s
**MK31 Makanchi Array 46.06 298** P **P 02 06 38.6 -0.2**
MK31 IAmb IAmb 02 06 40.4
comp=Z,7.6nm,0.8s
**MK31 Makanchi Array 46.06 298***d iP* **P 02 06 39.0 +0.2**
**MKAR Makanchi Array 46.06 298** P **P 02 06 39.2 +0.4**
comp=Z,7.2nm,0.7s,baz=72,slow=7.9,SNR=65
MKAR PcP **PcP 02 08 15.1 0.0**
comp=Z,0.6nm,0.6s,baz=57,slow=5.3,SNR=2.2
MKAR LR LR 02 27 54.8
comp=Z,147nm,18.2s,baz=82,slow=39
comp=Z,7.2nm,0.7s
**MAKZ Makanchi 46.25 298** P **P 02 06 40.7 +0.4**
MAKZ IAmb IAmb 02 06 41.5
comp=Z,7.3nm,0.8s
**MAKZ Makanchi 46.25 298** P **P 02 06 40.7 +0.4**
MAKZ pmax pmax
comp=Z,7.0nm,0.8s
**KURK Kurchatov 46.87 304** *eP* **P 02 06 44.8 -0.2**
**KURK Kurchatov 46.87 304**|| *eP* **P 02 06 44.8 -0.2**
KURK pmax pmax
comp=Z,3.0nm,1.0s
KURK MLR MLR
comp=Z,80nm,21.0s
**KURBB Kurchatov Arra 46.95 304** P **P 02 06 45.1 -0.6**
comp=Z,1.7nm,0.4s,baz=70,slow=8.0,SNR=12
KURBB PcP **PcP 02 08 18.4 +0.3**
comp=Z,0.8nm,0.7s,baz=73,slow=3.2,SNR=5.6
comp=Z,1.7nm,0.4s
**C36M Paulatuk 48.30 28** P **P 02 06 56.9 +1.0**
**CMAR Chiang Mai Arr 49.41 256** P **P 02 07 07.0 +2.0**
comp=Z,2.2nm,0.3s,baz=241,slow=9.6,SNR=4.1
comp=Z,2.2nm,0.3s
**BVAR Borovoye Array 50.71 310** P **P 02 07 14.7 +0.2**
comp=Z,1.8nm,0.9s,baz=59,slow=8.6,SNR=4.8
BVAR PcP **PcP 02 08 31.8 +0.1**
comp=Z,1.2nm,0.7s,baz=95,slow=3.4,SNR=3.7
comp=Z,1.8nm,0.9s
**BRVK Borovoye 50.75 310** *eP* **P 02 07 15.1 +0.2**
**BRVK Borovoye 50.75 310**|| *eP* **P 02 07 15.1 +0.2**
BRVK pmax pmax
comp=Z,3.0nm,0.9s
BRVK MLR MLR
comp=Z,61nm,16.0s
**BOOM Boomskoye usch 52.01 296** P **P 02 07 25.1 +0.5**
BOOM IAmb IAmb 02 07 26.6
comp=Z,8.2nm,0.8s
**BOOM Boomskoye usch 52.01 296** P **P 02 07 25.1 +0.5**
BOOM pmax pmax
comp=Z,8.0nm,0.8s
**AAK Ala-Archa 52.87 296** LR LR 02 32 25.9
comp=Z,68nm,18.3s,baz=76,slow=39
**AAK Ala-Archa 52.87 296** *eP* **P 02 07 31.9 +0.9**
**AAK Ala-Archa 52.87 296***de*P **P 02 07 31.9 +0.9**
AAK pmax pmax
comp=Z,7.0nm,1.1s
AAK MLR MLR
comp=Z,64nm,17.0s
**PMG Port Moresby 53.30 183** P **P 02 07 34.8 +0.6**
comp=Z,5.9nm,0.3s,baz=270,slow=5.4,SNR=2.1
comp=Z,5.9nm,0.3s
**KSH Kashi 53.45 292** P P 02 07 41.5 +6.2
KSH pmax pmax
comp=Z,4.0nm,0.5s
**KK31 Karatay Array 55.18 299** P **P 02 07 47.5 -0.2**
KK31 IAmb IAmb 02 07 48.8
comp=Z,3.3nm,0.8s
**KK31 Karatay Array 55.18 299** P **P 02 07 47.5 -0.2**
KK31 pmax pmax
comp=Z,3.0nm,0.8s
**KKAR Karatay Array 55.18 299** P **P 02 07 48.0 +0.3**
KKAR IAmb IAmb 02 07 48.8
comp=Z,3.3nm,0.8s
**KKAR Karatay Array 55.18 299** P **P 02 07 48.0 +0.3**
KKAR pmax pmax
comp=Z,3.0nm,0.8s
**ARU Arti 55.35 318** *eP* **P 02 07 48.5 -0.2**
**ARU Arti 55.35 318***d iP* **P 02 07 48.5 -0.2**
ARU S **S 02 15 34.2 +0.9**
ARU SS **SS 02 19 13.3 -3.7**
ARU pmax pmax
comp=Z,7.0nm,0.9s
**ARU Arti 55.35 318** P **P 02 07 48.3 -0.4**
comp=Z,8.0nm,0.9s
**ABKAR Akbulak array 58.28 310** P **P 02 08 09.7 +0.1**
ABKAR IAmb IAmb 02 08 10.6
comp=Z,5.4nm,0.8s
**CHGR Chuyangaron 58.40 295** P **P 02 08 10.4 -0.3**
**CHGR Chuyangaron 58.40 295** P **P 02 08 10.5 -0.3**
CHGR pmax pmax
comp=Z,22nm,1.3s
**SIMJ Simiganj 58.50 295** P **P 02 08 11.2 -0.3**
SIMJ IAmb IAmb 02 08 12.6
comp=Z,7.5nm,0.8s
**ARCES ARCESS Array B 59.56 340** P **P 02 08 16.7 -1.4**
comp=Z,2.9nm,0.9s,baz=45,slow=5.2,SNR=2.0
comp=Z,2.9nm,0.9s
**BELG Belogornoye 62.90 318***d iP* **P 02 08 41.1 +0.1**
BELG pmax pmax
comp=Z,3.0nm,0.8s
BELG MLR MLR
comp=Z,8.0nm,17.0s
**VALR Valaam 63.88 332**|| *eP* **P 02 08 46.9 -0.5**
VALR pmax pmax
comp=Z,20nm,0.9s
**FFC Flin Flon 64.30 38** P **P 02 08 50.8 +0.5**
FFC IAmb IAmb 02 08 52.3
comp=Z,4.9nm,0.8s
**FFC Flin Flon 64.30 38** P **P 02 08 50.8 +0.5**
FFC pmax pmax
comp=Z,5.0nm,0.9s
**WRA Warramunga Arr 65.27 196** P **P 02 08 57.7 +0.8**
comp=Z,1.3nm,0.8s,baz=17,slow=6.6,SNR=5.4
comp=Z,1.3nm,0.8s
**FIA1 FINESS Array S 65.39 334** P **P 02 08 56.0 -1.2**
**FINES FINESS Array B 65.39 334** P **P 02 08 55.8 -1.4**
comp=Z,5.6nm,0.6s,baz=32,slow=7.7,SNR=42
comp=Z,5.6nm,0.6s
**FINES FINESS Array B 65.39 334** *iP* **P 02 08 56.7 -0.6**
FINES pmax pmax
comp=Z,6.0nm,0.6s
**NVAR Mina Array Bea 65.81 59** P **P 02 09 00.3 -0.4**
comp=Z,0.8nm,0.8s,baz=312,slow=5.9,SNR=5.4
comp=Z,0.8nm,0.8s
**OBN Obninsk 66.12 325** *eP* **P 02 09 01.8 -0.2**
**OBN Obninsk 66.12 325**|| *eP* **P 02 09 01.8 -0.2**
OBN *e* 02 11 27.4
OBN pmax pmax
comp=Z,12nm,0.9s
OBN MLR MLR
comp=Z,52nm,17.0s
**VRH Novokhopyorsk 66.48 319** *eP* **P 02 09 03.0 -1.4**
VRH pmax pmax
comp=Z,10.0nm,0.8s
**LPSR Galich'ya Gora 66.82 322** *eP* **P 02 09 05.1 -1.5**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**VORR Voronezh 67.33 321** *eP* **P 02 09 08.2 -1.6**
VORR pmax pmax
comp=Z,10.0nm,0.3s
**VSR Storozhevoye 67.66 320** *eP* **P 02 09 09.9 -2.0**
VSR pmax pmax
comp=Z,9.0nm,0.6s
**PDAR Pinedale Array 68.26 51** P **P 02 09 15.7 -0.4**
comp=Z,0.4nm,0.6s,baz=270,slow=1.5,SNR=4.4
comp=Z,0.4nm,0.6s
**ASAR Alice Springs 68.97 196** P **P 02 09 21.3 +0.9**
comp=Z,0.9nm,0.7s,baz=16,slow=5.0,SNR=4.5
comp=Z,0.9nm,0.7s
**NC303 NORSAR Array S 69.73 340** P **P 02 09 24.2 -0.6**
**AKT Akhty 69.81 308** *eP* **P 02 09 25.7 0.0**
AKT pmax pmax
comp=Z,10.0nm,1.4s
**NC204 NORSAR Array S 69.84 340** P **P 02 09 25.1 -0.4**
**NB201 NORSAR Array S 69.90 340** P **P 02 09 25.1 -0.7**
**NB2 NORSAR Subarra 69.93 340** P **P 02 09 25.4 -0.6**
comp=Z,5.5nm,0.7s,baz=31,slow=6.5
**NOA NORSAR Array B 69.93 340** P **P 02 09 25.6 -0.4**
comp=Z,5.6nm,0.8s,baz=31,slow=6.2,SNR=30
comp=Z,5.6nm,0.8s
**MNK Minsk 70.02 328** *i* P **P 02 09 26.1 -0.5**
MNK *i* 02 09 47.9
MNK *i* 02 12 01.0
MNK *i* PPP PPP 02 13 42.8
MNK *i* S **S 02 18 37.7 +0.2**
MNK *i* 02 19 28.5
MNK *i* SS **SS 02 23 08.3 +2.6**
MNK pmax pmax
comp=Z,27nm,0.8s
MNK pmax pmax
comp=E,15nm,0.8s
MNK pmax pmax
comp=N,3.0nm,0.6s
MNK MLR MLR
comp=N,49nm,19.0s
MNK MLR MLR
comp=E,103nm,23.0s
MNK MLR MLR
comp=Z,99nm,21.0s
**HFS Hagfors 70.07 338** P **P 02 09 26.1 -0.7**
comp=Z,7.9nm,0.7s,baz=55,slow=5.6,SNR=18
HFS LR LR 02 45 53.7
comp=Z,23nm,19.8s,baz=26,slow=41
comp=Z,7.9nm,0.7s
**NAO01 NORSAR Array S 70.18 340** P **P 02 09 26.8 -0.7**
**NCK Nalchik 70.73 312**|| *eP* **P 02 09 32.3 +1.1**
NCK pmax pmax
comp=Z,2.0nm,0.3s
**KIV Kislovodsk 70.90 313** P **P 02 09 34.1 +1.8**
**KIV Kislovodsk 70.90 313** *eP* **P 02 09 33.7 +1.4**
**KIV Kislovodsk 70.90 313** *eP* **P 02 09 33.7 +1.4**
KIV pmax pmax
comp=Z,12nm,1.0s
KIV MLR MLR
comp=Z,45nm,18.0s
**KIV Kislovodsk 70.90 313** P **P 02 09 33.9 +1.6**
comp=Z,12nm,1.0s
**KBZ Khabaz 70.94 313** P **P 02 09 33.9 +1.5**
comp=Z,6.9nm,0.8s,baz=45,slow=3.4,SNR=19
comp=Z,6.9nm,0.8s
**KBZ Khabaz 70.94 313***d iP* **P 02 09 33.7 +1.3**
KBZ pmax pmax
comp=Z,6.0nm,0.8s
**BORG Borgarnes 71.27 356** LR LR 02 41 22.5
comp=Z,35nm,19.4s,baz=334,slow=36
**PV17 East Wray Mesa 71.55 54** P **P 02 09 37.3 +0.8**
PV17 IAmb IAmb 02 09 55.4
comp=Z,3.2nm,0.7s
**PV13 Radium Mtn., P 71.71 54** P **P 02 09 38.8 +1.3**
**AKASG Malin Array Be 72.38 325** P **P 02 09 40.7 -0.2**
comp=Z,0.9nm,0.4s,baz=38,slow=6.1,SNR=8.3
comp=Z,0.9nm,0.4s
**AKBB Malin Array Si 72.38 325** P **P 02 09 40.5 -0.4**
AKBB IAmb IAmb 02 09 41.6
comp=Z,10nm,1.1s
**AKBB Malin Array Si 72.38 325***d iP* **P 02 09 40.7 -0.2**
AKBB pmax pmax
comp=Z,12nm,1.2s
AKBB MLR MLR
comp=Z,93nm,21.0s
**AKBB Malin Array Si 72.38 325** P **P 02 09 40.5 -0.4**
**GNI Garni 72.38 309** LR LR 02 45 39.5
comp=Z,45nm,19.4s,baz=54,slow=39
**AK04 Malin Array Si 72.39 325** P **P 02 09 40.8 -0.2**
**AK01 Malin Array Si 72.39 325** P **P 02 09 40.7 -0.3**
**KIEV Kiev 72.39 325** P **P 02 09 40.4 -0.6**
KIEV IAmb IAmb 02 09 41.6
comp=Z,10nm,1.1s
**KIEV Kiev 72.39 325** P **P 02 09 40.4 -0.6**
KIEV pmax pmax
comp=Z,10.0nm,1.2s
**KIEV Kiev 72.39 325** P **P 02 09 40.6 -0.4**
comp=Z,30nm,1.0s
**RNPP9 Sopachiv 73.17 327** P **P 02 09 46.0 +0.4**
**RNPP8 Varash 73.25 327** P **P 02 09 46.3 +0.2**
**KMPD K-Podol'skiy 75.17 325** P **P 02 09 57.1 -0.3**
KMPD P **P 02 09 57.1 -0.3**
**ANMO Albuquerque 75.29 56**|| *eP* **P 02 09 58.7 +0.2**
ANMO pmax pmax
comp=Z,4.0nm,3.8s
**KWP Kalwaria Pacla 75.83 328** P **P 02 10 02.2 +1.1**
comp=Z,16nm,1.4s
**STNU Starunia 75.86 326** P **P 02 10 01.6 +0.3**
**KSV Kosov 75.94 326** P **P 02 10 02.2 +0.4**
**KOLS Kolonicke sedl 76.56 327** *eP* **P 02 10 06.1 +0.8**
**KOLS Kolonicke sedl 76.56 327** *eP* **P 02 10 06.1 +0.8**
**ARPR Arapgir-MALATY 76.64 312** P **P 02 10 07.7 +1.6**
ARPR IAmb IAmb 02 10 24.6
comp=Z,9.6nm,1.5s
**TESR Tescani 76.70 324** P **P 02 10 06.3 +0.1**
comp=Z,6.8nm,0.8s
**CRVS Cervenica-Dubn 76.90 328** *eP* **P 02 10 07.7 +0.5**
**CRVS Cervenica-Dubn 76.90 328** *eP* **P 02 10 07.7 +0.5**
**LANS Liptovska Anna 77.44 329** *eP* **P 02 10 11.6 +1.3**
**LANS Liptovska Anna 77.44 329** *eP* **P 02 10 11.6 +1.3**
**MORC Moravsky Berou 77.62 331** *eP* **P 02 10 10.5 -0.8**
**CLL Collm 77.84 334** P **P 02 10 12.2 -0.1**
CLL IAmb IAmb 02 10 14.3
comp=Z,9.0nm,0.9s
**CLL Collm 77.84 334** *i* PcP **PcP 02 10 25.1 +2.7**
**CLL Collm 77.84 334** *i* P **P 02 10 12.3 -0.1**
CLL *i* 02 10 25.1
CLL pmax pmax
comp=Z,8.0nm,0.7s
**CLL Collm 77.84 334** P **P 02 10 12.3 -0.1**
comp=Z,13nm,0.8s
**CLL Collm 77.84 334** *i* P **P 02 10 12.3 -0.1**
comp=Z,8.0nm,0.7s
**VYHS Vyhne 78.22 329** *eP* **P 02 10 15.9 +1.3**
**VYHS Vyhne 78.22 329** *eP* **P 02 10 15.9 +1.3**
**VOIR 78.23 324** P **P 02 10 15.2 +0.4**
comp=Z,3.5nm,1.5s
**EKA Eskdalemuir Ar 78.30 345** P **P 02 10 15.0 +0.1**
comp=Z,1.0nm,0.7s,baz=19,slow=5.3,SNR=4.1
comp=Z,1.0nm,0.7s
**EKB Eskdalemuir 78.31 345** P **P 02 10 14.6 -0.4**
**JAVC Velka Javorina 78.34 330** *eP* **P 02 10 16.1 +0.7**
**VRAC Vranov 78.35 331** *eP* **P 02 10 16.1 +0.8**
**VRAC Vranov 78.35 331** LR LR 02 48 11.3
comp=Z,35nm,18.7s,baz=30,slow=38
**KRUC Moravsky 78.63 331** *eP* **P 02 10 17.3 +0.5**
**ZVC Zvikov 79.06 332** *eP* **P 02 10 19.9 +0.7**
**KHC Kasperske Hory 79.53 332** P **P 02 10 21.9 +0.1**
KHC IAmb IAmb 02 10 24.8
comp=Z,8.2nm,1.3s
**KHC Kasperske Hory 79.53 332** *eP* **P 02 10 22.6 +0.7**
KHC *ex* x 02 10 35.0
**KHC Kasperske Hory 79.53 332** *eP* **P 02 10 22.6 +0.7**
KHC *e* 02 10 35.0
**KHC Kasperske Hory 79.53 332** P **P 02 10 22.8 +0.9**
comp=Z,5.4nm,0.9s
**CKRC Cesky Krumlov 79.55 332** *eP* **P 02 10 22.4 +0.4**
CKRC *ex* x 02 10 34.8
**CKRC Cesky Krumlov 79.55 332** *eP* **P 02 10 22.4 +0.4**
CKRC *e* 02 10 34.8
**GERES GERESS Array B 79.74 332** P **P 02 10 23.3 +0.2**
comp=Z,0.7nm,0.6s,baz=49,slow=4.1,SNR=4.6
comp=Z,0.7nm,0.6s
**GERES GERESS Array B 79.74 332** P **P 02 10 23.4 +0.3**
**CONA Conrad Observa 79.78 330** *ep*P **P 02 10 24.1 +0.8**
comp=Z,6.8nm,1.6s
**GRA1 Grafenberg Arr 79.81 334** P **P 02 10 23.9 +0.6**
GRA1 IAmb IAmb 02 10 27.1
comp=Z,7.2nm,0.7s
**GRF Grafenberg Arr 79.81 334** P **P 02 10 23.9 +0.6**
GRF pmax pmax
comp=Z,7.0nm,0.7s
**RONA Rosalia, Austr 79.81 330** *ep*P **P 02 10 24.1 +0.7**
comp=Z,5.4nm,1.2s
**DSB Dublin 80.88 346** P **P 02 10 29.6 +0.6**
**TX31 Lajitas Ar. Si 80.90 58** P **P 02 10 30.0 +0.4**
**TXAR Lajitas Array 80.90 58** P **P 02 10 30.0 +0.4**
**TXAR Lajitas Array 80.90 58** P **P 02 10 30.2 +0.5**
comp=Z,1.8nm,0.6s,baz=301,slow=3.9,SNR=39
comp=Z,1.8nm,0.6s
**SOKA Soboth 81.14 330** *ep*P **P 02 10 31.0 +0.4**
comp=Z,6.1nm,1.2s
**LESA Schwarzleotal 81.31 332** *ep*P **P 02 10 32.8 +1.3**
comp=Z,3.9nm,1.1s
**WATA Walderalm 81.76 333** *i* pP **P 02 10 35.0 +1.1**
comp=Z,3.9nm,0.7s
**WTTA Wattenberg 81.80 333** *i* pP **P 02 10 34.7 +0.5**
comp=Z,3.4nm,0.9s
**PRED Cave del Predi 81.86 331** P **P 02 10 34.0 -0.4**
PRED IAmb IAmb 02 10 57.5
comp=Z,4.1nm,1.1s
**RETA Reutte 81.89 333** *i* pP **P 02 10 35.6 +1.1**
comp=Z,3.3nm,0.9s
**MOTA Moosalm 81.90 333** *i* pP **P 02 10 35.1 +0.4**
comp=Z,3.9nm,0.9s
**ABTA Abfaltersbach 81.95 332** *i* pP **P 02 10 35.2 +0.3**
comp=Z,2.4nm,1.0s
**SQTA Sankt Quirin 81.98 333** *i* pP **P 02 10 36.3 +1.2**
comp=Z,4.5nm,1.1s
**FETA Feichten 82.31 333** *ep*P **P 02 10 37.8 +0.9**
comp=Z,5.4nm,1.3s
**STAL STALIGIAL 82.31 331** P **P 02 10 36.5 -0.2**
STAL IAmb IAmb 02 10 48.4
comp=Z,7.3nm,1.2s
**DAVA Damuels 82.35 334** *i* pP **P 02 10 37.9 +0.8**
comp=Z,7.4nm,1.6s
**MMAI Mount Meron Ar 82.71 309** P **P 02 10 39.2 +0.1**
comp=Z,1.9nm,0.7s,baz=51,slow=7.6,SNR=2.3
MMAI LR LR 02 51 18.9
comp=Z,41nm,19.2s,baz=348,slow=38
comp=Z,1.9nm,0.7s
**FUORN Ofenpass-Fuorn 82.81 333** P **P 02 10 40.2 +0.6**
FUORN IAmb IAmb 02 11 07.6
comp=Z,4.5nm,1.2s
**PDG Podgorica 83.11 325** P **P 02 10 41.0 +0.1**
**PUK Puka 83.17 325** P **P 02 10 41.5 +0.1**
**HNDO Hondo 83.40 55** P **P 02 10 42.2 -0.4**
HNDO IAmb IAmb 02 10 47.7
comp=Z,2.7nm,0.7s
**BATG Bathurst New B 83.69 24** P **P 02 10 44.0 +0.1**
BATG IAmb IAmb 02 11 01.9
comp=Z,9.1nm,1.1s
**KBN Korca 83.96 323** P **P 02 10 45.7 +0.3**
**KBN Korca 83.96 323** P **P 02 10 45.7 +0.3**
KBN pmax pmax
comp=Z,26nm,1.3s
**HALT Halls 84.02 44** P **P 02 10 45.3 -0.4**
**ZCCA Zocca 84.58 332** P **P 02 10 47.4 -1.0**
**FDMO Fiordimonte 84.98 330** P **P 02 10 49.1 -1.3**
**EIL Elat 85.48 308** LR LR 02 53 50.3
comp=Z,45nm,18.1s,baz=70,slow=39
**ESDC Sonseca Array 93.29 340** LR LR 02 58 00.9
comp=Z,36nm,18.6s,baz=319,slow=38
**MDT Midelt 99.95 338** LR LR 03 05 21.2
comp=Z,36nm,18.6s,baz=341,slow=40
**TORD Torodi Ar. Bea 116.01 325** PKP **PKiKP 02 16 58.2 -0.5**
comp=Z,0.2nm,0.6s,baz=8.3,slow=2.5,SNR=1.8
**BDFB Brasilia 147.88 33** PKPbc **PKPdf 02 17 58.5 +0.7**
comp=Z,1.6nm,0.6s,baz=88,slow=16,SNR=2.3
**SNAA Sanae 149.33 197** PKPbc **PKPbc 02 18 01.4 -1.5**
comp=Z,0.9nm,0.8s,baz=76,slow=1.6,SNR=4.0
**PLCA Paso Flores 150.29 98** PKPbc **PKPbc 02 18 05.6 -0.5**
comp=Z,1.2nm,0.8s,baz=274,slow=8.6,SNR=4.3

*IDC* ***28*** *02:00:59.4±2.3, 4.°94S×129.°35E, h0km, mb3.9/2, mbtmp3.7/4, ML3.5/2, Error ellipse: s-maj=188.4km s-min=28.0km az=69.0*
*NEIC* ***28*** *02:01:18.5±1.1, 5.°27S±0.°06×129.°2E±0.°2, h198km±14km, mb4.0/7, Error ellipse: s-maj=25.0km s-min=8.7km az=85.0*

**ISC 28 02:01:18.7±0.9, 5.°41S±0.°08×129.°4E±0.°1, h200km, n17, σ2s35/20, mb4.0/4, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **3.17** | **144** | Pn | **Pn** | **02 02 12.8** | **+2.3** |
| SAUI | | | | Sn | **Sn** | **02 02 54.3** | **+3.3** |
| **FAKI** | **Fak Fak** | **3.77** | **49** | Pn | **Pn** | **02 02 18.0** | **+0.3** |
| **MTN** | **Manton Dam** | **7.58** | **167** | Pn | **Pn** | **02 03 08.3** | **+1.7** |
| **KNRA** | **Kununurra** | **10.22** | **183** | Pn | **Pn** | **02 03 41.6** | **+0.7** |
| **FITZ** | **Fitzroy Crossi** | **13.13** | **196** | | **P** | **02 04 22.6** | **+1.6** |
| **WB0** | **Warramunga Arr** | **15.07** | **162** | Pn | **Pn** | **02 04 40.8** | **-1.2** |
| WB0 | | | | IAmb | IAmb | 02 04 41.9 | |
| **WRA** | **Warramunga Arr** | **15.22** | **162** | Pn | **P** | **02 04 43.4** | **-0.8** |
| **WRA** | **Warramunga Arr** | **15.22** | **162** | Pn | **Pn** | **02 04 42.2** | **-1.6** |
| WRA | | | | Sn | **S** | **02 07 26.5** | **-6.3** |
| **COEN** | **Coen** | **16.00** | **123** | | **P** | **02 04 51.7** | **-1.1** |
| COEN | | | | IAmb | IAmb | 02 05 03.7 | |
| **KKM** | **Kota Kinabalu** | **17.40** | **311** | P | **P** | **02 05 05.0** | **-3.4** |
| **AS31** | **Alice Springs** | **18.66** | **167** | P | **Pn** | **02 05 23.8** | **-0.8** |
| AS31 | | | | IAmb | IAmb | 02 05 24.4 | |
| **ASAR** | **Alice Springs** | **18.66** | **167** | | **Pn** | **02 05 23.5** | **-1.1** |
| **ASAR** | **Alice Springs** | **18.66** | **167** | P | **Pn** | **02 05 24.1** | **-0.6** |
| ASAR | | | | S | **S** | **02 08 41.4** | **-2.5** |
| **TOO** | **Toolangi** | **35.22** | **158** | P | **P** | **02 07 53.6** | **-0.4** |
| TOO | | | | IAmb | IAmb | 02 08 05.2 | |
| **MKAR** | **Makanchi Array** | **66.58** | **327** | P | **P** | **02 11 48.9** | **+1.4** |
| **KURBB** | **Kurchatov Arra** | **70.86** | **328** | P | **P** | **02 12 15.4** | **+1.7** |
| **QSPA** | **South Pole Qui** | **84.55** | **180** | P | **P** | **02 13 30.0** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 02 13 49.8 | |

comp=Z,0.2nm,0.5s
comp=Z,0.3nm,0.3s,baz=125,slow=5.1,SNR=1.2
comp=Z,0.5nm,0.3s
comp=Z,5.7nm,1.4s

**TEH 28 02:04:48.3, 31.°83N×55.°74E, h13km±22km, ML3.5, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBAF** | **Bafgh** | **0.28** | **211** | Pg | Pg | 02 04 54.2 | 0.0 |
| **ZRDN** | **Zarand Kerman** | **1.10** | **141** | Pg | Pg | 02 05 09.4 | -0.1 |
| **TPRV** | **Parvadeh(Tabas** | **1.44** | **34** | Pg | Pg | 02 05 15.9 | -0.1 |
| **KHGB** | **Koh Gabri** | **1.58** | **156** | Pg | Pb | 02 05 18.0 | +0.4 |
| **ISAD** | **Sadrabad** | **1.75** | **273** | Pg | Pb | 02 05 20.4 | 0.0 |
| **KRM1** | **Kerman Provinc** | **1.87** | **135** | Pn | Pb | 02 05 22.1 | -0.2 |
| **TVBK** | **TV Kerman** | **2.04** | **154** | Pn | Pb | 02 05 25.6 | +0.2 |
| **TKDS** | **Koohdasht(Taba** | **2.13** | **33** | Pn | Pn | 02 05 24.9 | +1.2 |
| **ANAR** | **Anarak** | **2.17** | **309** | Pn | Pb | 02 05 25.9 | -1.6 |
| **TNSJ** | **Nastanj** | **2.25** | **19** | Pn | Pn | 02 05 26.6 | +1.3 |
| **NGRK** | **Negar Kerman** | **2.34** | **158** | Pn | Pb | 02 05 29.5 | -1.1 |
| **CHMN** | **Cheshme madani** | **2.50** | **141** | Pn | Pb | 02 05 31.5 | -1.8 |
| **ITEG** | **Tejag** | **2.76** | **67** | Pn | Pn | 02 05 34.0 | +1.6 |
| **IKOO** | **Kooshah** | **2.83** | **77** | Pn | Pn | 02 05 34.9 | +1.4 |
| **IRAM** | **Ramesheh** | **2.86** | **270** | Pn | Pn | 02 05 35.7 | +2.0 |
| **BSRN** | **Basiran** | **2.88** | **86** | Pn | Pn | 02 05 35.5 | +1.5 |
| **IZEF** | **Zefreh** | **3.07** | **291** | Pn | Pn | 02 05 38.9 | +2.1 |
| **TAPT** | **Tabas- Tapeh t** | **3.27** | **21** | Pn | Pn | 02 05 40.7 | +1.4 |
| **KRSH** | **Karshahi** | **3.71** | **306** | Pn | Pn | 02 05 47.2 | +1.8 |
| **NHDN** | **Nehbandan** | **3.71** | **96** | Pn | Pn | 02 05 47.0 | +1.6 |
| **IKLH** | **Kolahrood** | **3.81** | **294** | Pn | Pn | 02 05 49.8 | +2.9 |
| **ISFB** | **Sefidab** | **3.87** | **312** | Pn | Pn | 02 05 49.2 | +1.7 |
| **IFIR** | **Firoozkooh** | **4.54** | **328** | Pn | Pn | 02 05 59.1 | +2.2 |
| **SBZV** | **Sabzevar** | **4.80** | **18** | Pn | Pn | 02 06 02.7 | +2.2 |
| **IAKL** | **Akhelmad** | **5.38** | **27** | Pn | Pn | 02 06 10.9 | +2.4 |
| **IEMG** | **Emamgholi** | **6.07** | **23** | Pn | Pn | 02 06 20.4 | +2.4 |

**VIE 28 02:08:58.9±0.8, 47.°73N×16.°19E, h8km±4km, ml-0.1/1,**

**Error ellipse: s-maj=5.1km s-min=1.9km az=43.0, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RONA** | **Rosalia, Austr** | **0.08** | **110** | *i* Pg | Pg | 02 09 01.2 | +0.2 |
| | 0.3nm,0.0s | | | | | | |
| RONA | | | | *i* Sg | Sg | 02 09 02.9 | +0.4 |
| | 1.4nm,0.0s | | | | | | |

**PRU 28 02:09:06.1, 50°.22N × 18°.97E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.53** | **90** | *e*Pg | Pg | 02 09 15.6 | -0.7 |
| OJC | | | | *e*Sg | Sg | 02 09 22.6 | -0.6 |
| **MORC** | **Moravsky Berou** | **1.02** | **245** | *e*PG | Pg | 02 09 24.8 | -0.9 |
| MORC | | | | *e*SG | Sg | 02 09 38.8 | -0.1 |
| **LANS** | **Liptovska Anna** | **1.12** | **163** | *e*PG | Pg | 02 09 27.1 | -0.4 |
| LANS | | | | *e*SG | Sg | 02 09 42.5 | +0.5 |
| LANS | | | | *e*LG | Lg | 02 09 46.0 | |
| **NIE** | **Niedzica** | **1.18** | **132** | *e*Pg | Pg | 02 09 28.2 | -0.4 |
| NIE | | | | *e*Sg | Sg | 02 09 44.2 | +0.3 |
| **KRLC** | **Kraliky** | **1.42** | **265** | *e*PG | Pn | 02 09 31.4 | -1.7 |
| KRLC | | | | *e*SG | Sg | 02 09 50.9 | -0.6 |
| | comp=Z,2.5nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.70** | **275** | *e*PG | Pn | 02 09 36.1 | -1.0 |
| DPC | | | | *e*SG | Sn | 02 09 59.5 | -0.1 |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **VYHS** | **Vyhne** | **1.73** | **183** | *e*SN | Sn | 02 09 58.2 | -2.0 |
| **VYHS** | **Vyhne** | **1.73** | **183** | *e*PN | Pn | 02 09 35.9 | -1.5 |
| **VRAC** | **Vranov** | **1.79** | **240** | *e*PN | Pn | 02 09 37.9 | -0.4 |
| VRAC | | | | *e*SG | Sb | 02 10 02.5 | -0.3 |
| **OSTC** | **Ostas** | **1.79** | **282** | *e*PG | Pn | 02 09 38.1 | -0.2 |
| **KSP** | **Ksiaz** | **1.82** | **291** | *e*Pg | Pg | 02 09 39.7 | -0.5 |
| KSP | | | | *e*Sg | Sb | 02 10 03.4 | -0.2 |
| **KHC** | **Kasperske Hory** | **3.67** | **255** | *e*SG | Sg | 02 11 03.0 | -0.9 |

*ISN **28** 02:10:51.8±0.6, 34°.64N × 46°.23E, h2km±16km, ML3.4*
*TEH **28** 02:10:52.8, 34°.59N × 46°.24E, h6km±37km, ML3.4*
*AFAD **28** 02:10:55.8±0.0, 34°.35N × 45°.71E, h7km±3km, MW3.9*
**ISC 28 02:10:53.6±1.0, 34°.59N±0°.03 × 46°.22E±0°.03, h9km±8km, n37, σ2s05/48, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.18** | **52** | Pg | **Pg** | **02 10 57.7** | **+0.2** |
| IDHR | | | | Sg | **Sg** | **02 11 01.0** | **+0.8** |
| **IGHG** | **Ghaleghazi** | **0.39** | **132** | Pg | **Pb** | **02 11 02.0** | **-0.9** |
| **KGS1** | **Ghasr-e-Shirin** | **0.53** | **261** | Pg | **Pb** | **02 11 04.5** | **-0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **208** | Pg | **Pb** | **02 11 04.4** | **-0.9** |
| **ILIN** | **Lien** | **0.69** | **62** | Pg | **Pb** | **02 11 06.9** | **-1.1** |
| **KCHF** | **Cheshme Sefid,** | **0.75** | **115** | Pg | **Pb** | **02 11 08.5** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **180** | Pg | **Pn** | **02 11 12.3** | **-1.1** |
| **SNQR** | **Sonqor, Kerman** | **1.19** | **77** | Pg | **Pn** | **02 11 16.2** | **-0.5** |
| **IBZA** | **Bozab** | **1.36** | **95** | Pg | **Pg** | **02 11 19.7** | **-0.1** |
| **IBDR** | **Badra** | **1.50** | **189** | *e*Pn | **Pg** | **02 11 22.5** | **+0.1** |
| IBDR | | | | *e*Sn | **Sg** | **02 11 44.2** | **+2.4** |
| IBDR | | | | AML | AML | 02 11 49.0 | |
| | comp=E,650nm,0.8s | | | | | | |
| IBDR | | | | AML | AML | 02 11 55.7 | |
| | comp=N,590nm,0.6s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.66** | **339** | Pg | **Pb** | **02 11 24.2** | **-0.3** |
| **IKFM** | **Kafar-mosalman** | **1.72** | **128** | Pg | **Pg** | **02 11 26.3** | **-0.3** |
| **IKRK** | **Kirkuk** | **1.74** | **298** | *e*Pn | **Pb** | **02 11 24.4** | **-1.3** |
| IKRK | | | | *e*Sn | **Sg** | **02 11 48.7** | **-0.9** |
| IKRK | | | | AML | AML | 02 11 54.0 | |
| | comp=N,690nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 02 11 56.8 | |
| | comp=E,663nm,0.5s | | | | | | |
| **IDOB** | **Doab** | **1.81** | **116** | Pg | **Pg** | **02 11 27.8** | **-0.6** |
| **HSAM** | **Samen** | **2.01** | **100** | Pn | **Pg** | **02 11 31.0** | **-1.2** |
| **MAHB** | **Mahabad** | **2.21** | **349** | Pn | **Pb** | **02 11 33.4** | **-0.5** |
| **RAFI** | **Al-Rafai** | **2.86** | **182** | *e*Pn | **Pn** | **02 11 41.0** | **+1.6** |
| RAFI | | | | *e*Sn | **Sb** | **02 12 17.2** | **-2.8** |
| RAFI | | | | AML | AML | 02 12 42.1 | |
| | comp=E,121nm,0.6s | | | | | | |
| RAFI | | | | AML | AML | 02 12 42.4 | |
| | comp=N,107nm,0.7s | | | | | | |
| **IAZR** | **Azarshahr** | **3.09** | **357** | Pn | **Pb** | **02 11 46.1** | **-2.8** |
| **YOVA** | **Hakkari_Yksek** | **3.37** | **333** | P | **Pb** | **02 11 49.6** | **-4.1** |
| YOVA | | | | S | **Sn** | **02 12 30.0** | **+3.1** |
| **CUKT** | **Cukurca** | **3.39** | **322** | P | **Pn** | **02 11 48.9** | **+2.0** |
| CUKT | | | | S | **Sn** | **02 12 27.6** | **+0.4** |
| **ISRB** | **Sarab** | **3.43** | **20** | Pn | **Pb** | **02 11 50.4** | **-4.3** |
| **HAKT** | **HAKKARI** | **3.59** | **326** | P | **Pn** | **02 11 51.9** | **+2.2** |
| HAKT | | | | S | **Sn** | **02 12 31.5** | **-0.8** |
| **ISHB** | **Shabestar** | **3.71** | **353** | Pn | **Pn** | **02 11 54.0** | **+2.6** |
| **IHRS** | **Heris** | **3.78** | **10** | Pn | **Pn** | **02 11 54.8** | **+2.5** |
| **SIRN** | **Sirnak** | **4.23** | **314** | P | **Pn** | **02 11 59.4** | **+1.1** |
| SIRN | | | | S | **Sn** | **02 12 47.5** | **-0.4** |
| **GRMI** | **Germi** | **4.42** | **17** | Pn | **Pn** | **02 12 04.0** | **+3.0** |
| **PERV** | **Siirt/Pervari-** | **4.47** | **319** | P | **Pn** | **02 12 04.1** | **+2.3** |
| PERV | | | | S | **Sn** | **02 12 55.9** | **+1.9** |
| **GEVA** | **Gevas** | **4.50** | **326** | P | **Pn** | **02 12 05.4** | **+3.3** |
| **ZNGN** | **Zangian** | **4.60** | **121** | Pn | **Pn** | **02 12 06.7** | **+3.1** |
| **IKLH** | **Kolahrood** | **4.63** | **104** | Pn | Pn | 02 12 08.1 | +4.1 |
| **SRTM** | **Siirt_Merkez** | **4.85** | **316** | P | **Pn** | **02 12 08.5** | **+1.6** |
| SRTM | | | | S | **Sn** | **02 13 03.2** | **0.0** |
| **KRSH** | **Karshahi** | **4.94** | **96** | Pn | **Pn** | **02 12 11.7** | **+3.5** |
| **ISFB** | **Sefidab** | **4.98** | **91** | Pn | **Pn** | **02 12 11.3** | **+2.7** |
| **SVAN** | **Silvan-Diyarba** | **5.38** | **313** | P | **Pn** | **02 12 14.6** | **+0.5** |
| SVAN | | | | S | **Sn** | **02 13 15.8** | **-0.5** |
| **IFIR** | **Firoozkooh** | **5.46** | **77** | Pn | **Pn** | **02 12 18.9** | **+3.5** |
| **MUSM** | **Mu-Merkez** | **5.59** | **319** | P | **Pn** | **02 12 18.1** | **+1.0** |
| MUSM | | | | S | **Sn** | **02 13 20.2** | **-1.3** |
| **IRAM** | **Ramesheh** | **5.87** | **117** | Pn | **Pn** | **02 12 23.3** | **+2.3** |

*TAP **28** 02:12:26.2, 24°.86N × 122°.43E, h15km, ML3.2, C*
*JMA **28** 02:12:27.1±0.1, 24°.8N±0°.9 × 122°.4E±0°.3, h12km±3km, MV3.0/9, NW OFF ISHIGAKIJIMA IS*
**ISC 28 02:12:26.6±1.0, 24°.83N±0°.03 × 122°.42E±0°.02, h12km±10km, n60, σ0s46/91, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.43** | **295** | P | **Pg** | **02 12 35.3** | **+0.2** |
| | baz=290 | | | | | | |
| TWB1 | | | | *e*S | **Sg** | **02 12 40.9** | **0.0** |
| | baz=290 | | | | | | |
| **EGS** | | **0.44** | **272** | *e*P | **Pg** | **02 12 35.5** | **+0.1** |
| | baz=258 | | | | | | |
| EGS | | | | *e*S | **Sb** | **02 12 42.5** | **-0.4** |
| | baz=258 | | | | | | |
| **EOS2** | **EOS2** | **0.44** | **203** | *e*P | **Pb** | **02 12 36.1** | **-0.2** |
| | baz=201 | | | | | | |
| EOS2 | | | | *e*S | **Sb** | **02 12 42.9** | **+0.2** |
| | baz=201 | | | | | | |
| **EOS3** | **EOS3** | **0.55** | **190** | P | **Pb** | **02 12 37.9** | **-0.1** |
| | baz=189 | | | | | | |
| EOS3 | | | | S | **Sb** | **02 12 46.9** | **+1.2** |
| | baz=189 | | | | | | |
| **TIPB** | **Shuangxi** | **0.56** | **285** | *e*P | **Pg** | **02 12 37.8** | **+0.3** |
| | baz=281 | | | | | | |
| TIPB | | | | *e*S | **Sb** | **02 12 45.8** | **-0.4** |
| | baz=281 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.56** | **298** | *e*P | **Pb** | **02 12 38.1** | **-0.2** |
| | baz=294 | | | | | | |
| SXI1 | | | | *e*S | **Sb** | **02 12 46.1** | **-0.2** |
| | baz=294 | | | | | | |
| **TWC** | **Suao** | **0.56** | **247** | *e*P | **Pg** | **02 12 37.4** | **-0.3** |
| | baz=252 | | | | | | |
| TWC | | | | *e*S | **Sg** | **02 12 45.6** | **+0.5** |
| | baz=252 | | | | | | |
| **ESAO** | **Su ao** | **0.58** | **244** | *e*P | **Pg** | **02 12 37.8** | **-0.1** |
| | baz=242 | | | | | | |
| ESAO | | | | *e*S | **Sb** | **02 12 47.0** | **+0.2** |
| | baz=242 | | | | | | |
| **JYNG** | **Yonaguni jima** | **0.61** | **128** | P | **Pg** | **02 12 38.5** | **+0.1** |
| JYNG | | | | S | **Sg** | **02 12 46.6** | **0.0** |
| **WFSB** | **Wu-fen Shan** | **0.63** | **293** | P | **Pb** | **02 12 39.7** | **+0.2** |
| | baz=289 | | | | | | |
| WFSB | | | | S | **Sb** | **02 12 48.2** | **0.0** |
| | baz=289 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.65** | **124** | P | **Pg** | **02 12 39.1** | **-0.1** |
| | baz=115 | | | | | | |
| YOJ | | | | S | **Sg** | **02 12 47.9** | **0.0** |
| | baz=115 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.65** | **124** | P | **Pg** | **02 12 39.2** | **-0.1** |
| YOJ | | | | S | **Sg** | **02 12 47.7** | **-0.2** |
| **TNOU** | **National Taiwa** | **0.67** | **299** | P | **Pg** | **02 12 39.9** | **+0.3** |
| | baz=296 | | | | | | |
| TNOU | | | | *e*S | **Sg** | **02 12 48.6** | **+0.2** |
| | baz=296 | | | | | | |
| **NDS** | **Dongshan** | **0.67** | **253** | *e*P | **Pg** | **02 12 39.4** | **-0.2** |
| | baz=242 | | | | | | |
| **TWE** | **Neicheng** | **0.69** | **261** | P | **Pg** | **02 12 40.2** | **+0.1** |
| | baz=258 | | | | | | |
| TWE | | | | *e*S | **Sg** | **02 12 49.0** | **-0.2** |
| | baz=258 | | | | | | |
| **EWUT** | **Wuta** | **0.70** | **237** | *e*P | **Pg** | **02 12 39.8** | **-0.3** |
| | baz=235 | | | | | | |
| **EOS4** | **EOS4** | **0.71** | **187** | *e*P | **Pb** | **02 12 41.2** | **+0.5** |
| | baz=181 | | | | | | |
| EOS4 | | | | *e*S | **Sb** | **02 12 51.0** | **+0.8** |
| | baz=181 | | | | | | |
| **ENA** | **Nanau** | **0.73** | **237** | *e*P | **Pg** | **02 12 40.5** | **-0.3** |
| | baz=235 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.76** | **265** | P | **Pg** | **02 12 41.6** | **+0.3** |
| | baz=262 | | | | | | |
| FUSB | | | | *e*S | **Sg** | **02 12 51.4** | **+0.1** |
| | baz=262 | | | | | | |
| **TWA** | **Mucha** | **0.77** | **281** | *e*P | **Pg** | **02 12 41.1** | **-0.5** |
| | baz=278 | | | | | | |
| TWA | | | | *e*S | **Sb** | **02 12 52.3** | **-0.2** |
| | baz=278 | | | | | | |
| **NWRT** | **Kuosheng** | **0.78** | **299** | *e*P | **Pg** | **02 12 41.9** | **+0.2** |
| | baz=296 | | | | | | |
| NWRT | | | | *e*S | **Sg** | **02 12 52.3** | **+0.3** |
| | baz=296 | | | | | | |
| **EAHA** | **Aohua** | **0.79** | **231** | *e*P | **Pg** | **02 12 41.8** | **-0.2** |
| | baz=243 | | | | | | |
| EAHA | | | | *e*S | **Sg** | **02 12 51.9** | **-0.5** |
| | baz=243 | | | | | | |
| **ENTT** | **Nioudou** | **0.80** | **256** | *e*P | **Pg** | **02 12 42.1** | **+0.1** |
| | baz=254 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.82** | **279** | *e*P | **Pg** | **02 12 42.3** | **-0.2** |
| | baz=277 | | | | | | |
| NHDH | | | | *e*S | **Sb** | **02 12 54.0** | **+0.2** |
| | baz=277 | | | | | | |
| **YM01** | **YM01** | **0.83** | **292** | *e*P | **Pb** | **02 12 43.5** | **+0.5** |
| | baz=290 | | | | | | |
| YM01 | | | | *e*S | **Sb** | **02 12 54.2** | **0.0** |
| | baz=290 | | | | | | |
| **YM08** | **YM08** | **0.83** | **296** | *e*P | **Pb** | **02 12 43.2** | **+0.2** |
| | baz=293 | | | | | | |
| YM08 | | | | *e*S | **Sg** | **02 12 53.6** | **-0.1** |
| | baz=293 | | | | | | |
| **NWLT** | **Wulai** | **0.83** | **267** | *e*P | **Pb** | **02 12 43.0** | **0.0** |
| | baz=264 | | | | | | |
| NWLT | | | | *e*S | **Sg** | **02 12 53.2** | **-0.4** |
| | baz=264 | | | | | | |
| **NDT** | **Datong Townshi** | **0.85** | **255** | *e*P | **Pg** | **02 12 43.2** | **0.0** |
| | baz=253 | | | | | | |
| **LATG** | **Datong** | **0.86** | **250** | *e*P | **Pg** | **02 12 43.2** | **-0.1** |
| | baz=233 | | | | | | |
| LATG | | | | *e*S | **Sg** | **02 12 54.3** | **-0.3** |
| | baz=233 | | | | | | |
| **TWY** | **Chenhua** | **0.87** | **301** | *e*P | **Pb** | **02 12 43.7** | **+0.1** |
| | baz=298 | | | | | | |
| TWY | | | | *e*S | **Sb** | **02 12 55.4** | **+0.3** |
| | baz=298 | | | | | | |
| **NTST** | **Danshui** | **0.94** | **291** | *e*S | **Sg** | **02 12 57.7** | **+0.6** |
| | baz=288 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.95** | **287** | *e*S | **Sb** | **02 12 56.6** | **-0.8** |
| | baz=284 | | | | | | |
| **YHNB** | **Yeheng** | **0.96** | **261** | *e*P | **Pb** | **02 12 45.2** | **0.0** |
| | baz=268 | | | | | | |
| YHNB | | | | *e*S | **Sg** | **02 12 57.3** | **-0.5** |
| | baz=268 | | | | | | |
| **NSK** | **Sanguang** | **0.98** | **261** | *e*P | **Pb** | **02 12 45.1** | **-0.3** |
| | baz=268 | | | | | | |
| NSK | | | | *e*S | **Sb** | **02 12 57.1** | **-1.3** |
| | baz=268 | | | | | | |
| **NACB** | **Ninganchiao** | **0.99** | **229** | *e*P | **Pb** | **02 12 45.3** | **-0.5** |
| | baz=238 | | | | | | |
| NACB | | | | *e*S | **Sb** | **02 12 57.8** | **-1.0** |
| | baz=238 | | | | | | |
| **NNSB** | **Datong** | **1.02** | **247** | *e*P | **Pb** | **02 12 45.6** | **-0.7** |
| | baz=234 | | | | | | |
| NNSB | | | | *e*S | **Sg** | **02 13 00.3** | **+0.5** |
| | baz=234 | | | | | | |
| **NNS** | **Nan Shan** | **1.03** | **248** | *e*P | **Pb** | **02 12 46.4** | **0.0** |
| | baz=234 | | | | | | |
| NNS | | | | *e*S | **Sb** | **02 12 59.7** | **-0.2** |
| | baz=234 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.05** | **234** | *e*P | **Pb** | **02 12 46.5** | **-0.3** |
| | baz=233 | | | | | | |
| **TWD** | **Chiawan** | **1.06** | **225** | *e*P | **Pb** | **02 12 46.7** | **-0.1** |
| | baz=232 | | | | | | |
| TWD | | | | *e*S | **Sb** | **02 13 00.3** | **-0.3** |
| | baz=232 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.20** | **261** | *e*P | **Pn** | **02 12 48.3** | **-0.9** |
| | baz=273 | | | | | | |
| **FUSS** | **Fushou** | **1.22** | **242** | *e*P | **Pn** | **02 12 49.6** | **0.0** |
| | baz=240 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.22** | **229** | *e*P | **Pn** | **02 12 49.2** | **-0.3** |
| | baz=227 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.25** | **237** | *e*P | **Pn** | **02 12 50.2** | **0.0** |
| | baz=236 | | | | | | |
| **TDCB** | **Tech** | **1.28** | **244** | *e*P | **Pg** | **02 12 51.3** | **0.0** |
| | baz=242 | | | | | | |
| **LIOB** | **Emei** | **1.29** | **262** | *e*P | **Pg** | **02 12 52.7** | **+1.3** |
| | baz=260 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.29** | **112** | *e*S | **Sb** | **02 13 07.1** | **-0.2** |
| **SHUL** | **Shoufeng** | **1.30** | **217** | *e*P | **Pg** | **02 12 52.2** | **+0.6** |
| | baz=199 | | | | | | |
| **NSTT** | **Nanjuang** | **1.30** | **262** | *e*P | **Pg** | **02 12 52.9** | **+1.2** |
| | baz=260 | | | | | | |
| **CHGB** | **Renai** | **1.37** | **236** | *e*P | **Pb** | **02 12 52.3** | **0.0** |
| | baz=235 | | | | | | |
| **WHP** | **Taichung City** | **1.45** | **248** | *e*P | **Pg** | **02 12 54.3** | **-0.1** |
| | baz=246 | | | | | | |
| **WUSB** | **Renai** | **1.45** | **235** | *e*P | **Pb** | **02 12 54.1** | **+0.5** |
| | baz=219 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.45** | **221** | *e*P | **Pn** | **02 12 52.2** | **-0.5** |
| | baz=202 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.48** | **121** | *e*P | **Pb** | **02 12 53.7** | **-0.3** |
| **TWQ1** | **Liyutan** | **1.57** | **253** | *e*P | **Pg** | **02 12 58.1** | **+1.3** |
| | baz=268 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.57** | **241** | *e*P | **Pb** | **02 12 56.3** | **+0.7** |
| | baz=239 | | | | | | |
| **VWDT** | **VWDT** | **1.58** | **228** | *e*P | **Pn** | **02 12 54.4** | **0.0** |
| | baz=212 | | | | | | |
| **HGSD** | **Ruisui** | **1.61** | **215** | *e*P | **Pn** | **02 12 55.4** | **+0.6** |
| | baz=199 | | | | | | |
| **SSLB** | **Suanglung** | **1.69** | **232** | *e*P | **Pb** | **02 12 58.1** | **+0.4** |
| | baz=214 | | | | | | |
| **TYC** | **Yuchr** | **1.70** | **237** | *e*P | **Pb** | **02 12 57.7** | **0.0** |
| | baz=218 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.82** | **232** | *e*P | **Pb** | **02 12 59.9** | **0.0** |
| | baz=217 | | | | | | |

*SJA **28** 02:15:15.0±0.7, 30°.45S × 72°.43W, h19km±17km, ML3.3, MW3.7*
*GUC **28** 02:15:18.7±0.8, 30°.76S × 72°.07W, h17km±3km, ML3.1*
**ISC 28 02:15:18.0±1.3, 30°.70S±0°.03 × 72°.05W±0°.06, h10km, n34, σ1s83/53, 5C-4D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **0.36** | **85** | ⇓*i*P | **Pn** | **02 15 27.1** | **-2.2** |
| CO06 | | | | *i* S | **Sb** | **02 15 32.2** | **-0.1** |
| CO06 | | | | IAML | | 02 15 36.8 | |
| | comp=E,1μm,0.7s | | | | | | |
| **CO02** | **Combarbal** | **1.03** | **119** | ⇓*i*P | **Pn** | **02 15 38.2** | **-0.5** |
| **CO05** | **La Serena** | **1.05** | **42** | ⇓*i*P | **Pn** | **02 15 38.2** | **-0.6** |
| CO05 | | | | *i* S | **Sn** | **02 15 53.7** | **+0.1** |
| **CO03** | **El Pedregal** | **1.18** | **97** | *e*P | **Pg** | **02 15 40.2** | **-0.5** |
| CO03 | | | | *i* S | **Sg** | **02 15 55.7** | **-0.4** |
| CO03 | | | | IAML | | 02 16 03.8 | |
| | comp=N,354nm,0.1s | | | | | | |
| **GO04** | **Tololo Observa** | **1.21** | **64** | ⇓*i*P | **Pg** | **02 15 40.7** | **-0.5** |
| GO04 | | | | *i* S | **Sn** | **02 15 58.4** | **+0.8** |
| GO04 | | | | IAML | | 02 16 05.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| **CO04** | **Los Peladeros** | **1.62** | **146** | ⇑*i*P | **Pb** | **02 15 47.4** | **-0.8** |
| CO04 | | | | *e*S | **Sg** | **02 16 09.1** | **-1.2** |
| **CO01** | **Juntas del Tor** | **1.84** | **67** | *e*P | **Pb** | **02 15 51.0** | **-0.9** |
| CO01 | | | | *i* S | **Sb** | **02 16 15.3** | **+0.2** |
| CO01 | | | | IAML | | 02 16 22.0 | |
| | comp=N,131nm,0.4s | | | | | | |
| **VA06** | **Catapilco** | **1.96** | **161** | ⇑*i*P | **Pn** | **02 15 50.9** | **-0.4** |
| VA06 | | | | *i* S | **Sb** | **02 16 17.1** | **-1.2** |
| VA06 | | | | IAML | | 02 16 23.5 | |
| | comp=E,402nm,0.4s | | | | | | |
| **LCO** | **Las Campanas** | **2.06** | **35** | ⇑*i*P | **Pn** | **02 15 52.8** | **0.0** |
| LCO | | | | *i* S | **Sb** | **02 16 19.6** | **-1.7** |
| LCO | | | | IAML | | 02 16 32.5 | |
| | comp=E,760nm,0.2s | | | | | | |
| **AROD** | **Rodeo** | **2.29** | **77** | *e*P | **Pb** | **02 15 59.5** | **-0.1** |
| AROD | | | | *e*S | **Sg** | **02 16 31.3** | **-0.3** |
| **VA03** | **San Esteban** | **2.42** | **148** | *e*P | **Pb** | **02 15 59.2** | **-2.5** |
| VA03 | | | | *e*S | **Sg** | **02 16 35.9** | **+0.1** |
| VA03 | | | | IAML | | 02 16 40.6 | |
| | comp=Z,134nm,0.4s | | | | | | |
| **VA03** | **San Esteban** | **2.42** | **148** | ⇑*i*P | **Pn** | **02 15 58.8** | **+1.1** |
| VA03 | | | | *i* S | **Sb** | **02 16 29.6** | **-2.0** |
| VA03 | | | | IAML | | 02 16 38.3 | |
| | comp=N,271nm,0.5s | | | | | | |
| **AC05** | **El Transito** | **2.42** | **40** | ⇑*i*P | **Pn** | **02 15 58.6** | **+0.9** |
| **ROC1** | **El Roble** | **2.43** | **159** | *e*P | **Pb** | **02 16 01.1** | **-0.9** |
| ROC1 | | | | *e*S | **Sg** | **02 16 36.2** | **0.0** |
| **ACCO** | **Cerro Coronel** | **2.58** | **88** | *e*P | **Pb** | **02 16 04.1** | **-0.4** |
| ACCO | | | | *e*S | **Sg** | **02 16 39.4** | **-1.5** |
| ACCO | | | | IAML | | 02 16 41.3 | |
| | comp=Z,69nm,0.6s | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.59** | **79** | *e*P | Pn | 02 15 49.9 | -10 |
| ACDV | | | | IAML | | 02 16 49.6 | |
| | comp=Z,55nm,0.5s | | | | | | |
| **RTLS** | **Leoncito** | **2.60** | **116** | *e*P | **Pb** | **02 16 04.6** | **-0.3** |
| RTLS | | | | *e*S | **Sg** | **02 16 42.0** | **+0.4** |
| RTLS | | | | IAML | | 02 16 43.9 | |
| | comp=Z,206nm,0.6s | | | | | | |
| **MT02** | **Curacav** | **2.66** | **163** | IAML | | 02 16 45.5 | |
| | comp=E,56nm,0.2s | | | | | | |
| **PEL** | **Peldehue** | **2.70** | **155** | *e*P | **Pb** | **02 16 05.4** | **-1.0** |
| PEL | | | | *e*S | **Sg** | **02 16 45.7** | **+1.1** |
| **PEL** | **Peldehue** | **2.70** | **155** | IAML | | 02 16 46.8 | |
| | comp=N,109nm,0.5s | | | | | | |
| **AUSP** | **Uspallata** | **2.73** | **124** | *e*P | **Pb** | **02 16 06.4** | **-0.8** |
| AUSP | | | | *e*S | **Sg** | **02 16 46.4** | **+0.4** |
| **MT10** | **Hacienda Santa** | **2.87** | **154** | *e*P | **Pn** | **02 16 04.8** | **+0.8** |
| MT10 | | | | IAML | | 02 16 54.7 | |
| | comp=N,415nm,0.8s | | | | | | |
| **MT14** | **Cerro Cal¡n** | **2.98** | **155** | IAML | | 02 16 57.1 | |
| | comp=N,294nm,0.5s | | | | | | |
| **MT16** | **CCHEN** | **3.01** | **155** | IAML | | 02 17 01.5 | |
| | comp=N,79nm,0.7s | | | | | | |
| **ZON** | **Zonda** | **3.01** | **107** | *e*P | **Pb** | **02 16 11.3** | **-0.5** |
| ZON | | | | *e*S | **Sb** | **02 16 49.0** | **+0.3** |
| ZON | | | | IAML | | 02 16 58.5 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **ASAL** | **Salagasta** | **3.33** | **125** | *e*P | **Pb** | **02 16 14.9** | **-2.3** |
| ASAL | | | | *e*S | **Sb** | **02 16 59.4** | **+1.7** |
| ASAL | | | | IAML | | 02 17 14.1 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.41** | **130** | *e*P | **Pn** | **02 16 12.5** | **+1.1** |
| ARCO | | | | *e*P | **Pb** | **02 16 17.0** | **-1.6** |
| ARCO | | | | *e*S | **Sb** | **02 17 01.9** | **+1.8** |
| ARCO | | | | IAML | | 02 17 18.8 | |
| | comp=Z,44nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **3.48** | **28** | *e*P | **Pn** | **02 16 12.9** | **+0.6** |
| GO03 | | | | *e*S | **Sb** | **02 17 04.5** | **+2.3** |
| **AAGR** | **Agrelo** | **3.63** | **132** | *e*P | **Pb** | **02 16 19.7** | **-2.6** |
| AAGR | | | | *e*S | **Sb** | **02 17 07.0** | **+0.6** |
| AAGR | | | | IAML | | 02 17 24.1 | |
| | comp=Z,36nm,1.0s | | | | | | |
| **VCA** | **Vinchina** | **3.88** | **61** | *e*P | **Pn** | **02 16 17.0** | **-0.8** |
| VCA | | | | *e*S | **Sg** | **02 17 20.0** | **-2.6** |
| VCA | | | | IAML | | 02 17 30.5 | |
| | comp=Z,70nm,0.5s | | | | | | |
| **AVFE** | **Valle Fertil** | **3.96** | **91** | *e*P | Pb | 02 16 22.9 | -5.0 |
| AVFE | | | | *e*S | **Sb** | **02 17 13.5** | **-2.4** |
| AVFE | | | | IAML | | 02 17 28.9 | |
| | comp=Z,38nm,0.6s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **4.60** | **75** | *e*P | **Pn** | **02 16 31.2** | **+3.4** |
| ACLC | | | | *e*S | **Sb** | **02 17 29.5** | **-5.0** |
| ACLC | | | | IAML | | 02 17 39.4 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **CYA** | **Choya** | **5.89** | **69** | *e*P | **Pn** | **02 16 48.4** | **+3.0** |
| CYA | | | | *e*S | **Sn** | **02 18 00.0** | **+7.0** |
| CYA | | | | IAML | | 02 18 28.4 | |
| | comp=Z,8.1nm,1.6s | | | | | | |
| **FSA** | **Cafayete** | **7.04** | **51** | *e*P | Pb | 02 17 13.4 | -7.1 |

*ISK **28** 02:27:38.0, 39°.55N × 26°.05E, h7km, ML2.5/20*
*ATH **28** 02:27:39.2, 39°.52N × 26°.05E, h15km±3km, ML2.4/4, Error ellipse: s-maj=4.3km s-min=1.0km az=174.0*
*AFAD **28** 02:27:39.0±0.0, 39°.57N × 26°.09E, h9km±1km, ML2.1*
**ISC 28 02:27:38.8±0.9, 39°.54N±0°.02 × 26°.05E±0°.03, h10km±6km, n37, σ0s62/51, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOCA** | **Canakkale, Ayv** | **0.08** | **121** | P | **Pg** | **02 27 41.3** | **+0.1** |
| KOCA | | | | S | **Sg** | **02 27 43.0** | **+0.1** |
| **GPNR** | **Gulpinar-Canak** | **0.11** | **143** | Pg | **Pg** | **02 27 41.1** | **-0.4** |
| GPNR | | | | Sg | **Sg** | **02 27 43.2** | **-0.2** |
| **BOZC** | **Bozcaada** | **0.30** | **1** | P | **Pg** | **02 27 44.8** | **0.0** |
| BOZC | | | | S | **Sg** | **02 27 49.0** | **+0.2** |
| BOZC | | | | *i* AML | AML | 02 27 49.0 | |
| | comp=N,414nm,0.3s | | | | | | |
| BOZC | | | | *i* AML | AML | 02 27 49.0 | |
| | comp=E,421nm,0.4s | | | | | | |
| **EZNE** | **Ezine-Canakkal** | **0.32** | **49** | Pg | **Pg** | **02 27 44.7** | **-0.6** |
| **PRK** | **Paraskevi** | **0.34** | **150** | P | **Pg** | **02 27 45.8** | **+0.1** |
| PRK | | | | S | **Sg** | **02 27 50.9** | **+0.7** |
| PRK | | | | AML | AML | 02 27 51.2 | |
| | comp=E,1935μm,0.4s | | | | | | |
| PRK | | | | AML | AML | 02 27 51.4 | |
| | comp=N,1912μm,0.6s | | | | | | |
| **EZN** | **Ezine** | **0.35** | **37** | Pg | **Pg** | **02 27 45.6** | **-0.2** |
| EZN | | | | Sg | **Sg** | **02 27 50.9** | **+0.4** |
| **SIGR** | **SIGRI** | **0.36** | **204** | Pg | **Pg** | **02 27 46.1** | **+0.1** |
| **SIGR** | **SIGRI** | **0.36** | **204** | P | **Pg** | **02 27 46.1** | **+0.1** |
| SIGR | | | | S | **Sg** | **02 27 51.2** | **+0.4** |
| SIGR | | | | AML | AML | 02 27 54.2 | |
| | comp=N,1796μm,0.3s | | | | | | |
| SIGR | | | | AML | AML | 02 27 54.6 | |
| | comp=E,1086μm,0.4s | | | | | | |
| **BAYC** | **CANAKKALE_Bayr** | **0.43** | **63** | P | **Pg** | **02 27 46.9** | **-0.4** |
| BAYC | | | | S | **Sg** | **02 27 52.5** | **-0.5** |
| BAYC | | | | *i* AML | AML | 02 27 53.0 | |
| | comp=E,188nm,0.2s | | | | | | |
| **AYVA** | **Ayvalik** | **0.55** | **115** | P | **Pb** | **02 27 50

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GONE** | **Gonen-Balikesi** | **1.36** | **68** | Pn | | **Pn** | **02 28 04.0** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.43** | **37** | Pn | | **Pn** | **02 28 05.0** | **+0.1** |
| **MRMT** | **Marmara Adasi** | **1.59** | **48** | Pn | | **Pn** | **02 28 06.9** | **-0.2** |
| **EDC** | **Edincik** | **1.61** | **60** | Pn | | **Pn** | **02 28 07.6** | **+0.3** |
| **SUSR** | **Susurluk-Balik** | **1.62** | **74** | Pn | | **Pn** | **02 28 07.2** | **-0.3** |
| **UKOP** | **Uzunkopru-Edir** | **1.65** | **16** | Pn | | **Pn** | **02 28 07.5** | **-0.2** |
| **GORD** | **Gordes-Manisa** | **1.77** | **110** | Pn | | **Pn** | **02 28 09.5** | **0.0** |

*ISN **28** 02:43:44.5±0.8, 34°.62N×46°.28E, h10km±20km, ML3.0*
*TEH **28** 02:43:46.0, 34°.62N×46°.29E, h10km±33km, ML2.8*
**ISC 28 02:43:46.3±1.1, 34°.62N±0°.04×46°.28E±0°.03, h14km±10km, n14, σ1§22/17, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehradun** | **0.11** | **48** | Pg | **Pg** | **02 43 49.3** | **-0.6** |
| **IGHG** | **Ghaleghazi** | **0.38** | **141** | Pg | **Pg** | **02 43 54.0** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.58** | **259** | Pg | **Pg** | **02 43 57.7** | **-0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.59** | **211** | Pg | **Pg** | **02 43 57.7** | **-0.4** |
| **ILIN** | **Lien** | **0.63** | **62** | Pg | **Pg** | **02 43 58.6** | **-0.2** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **119** | Pg | **Pg** | **02 43 59.6** | **-0.7** |
| **ILBA** | **Ilam Banvizeh** | **1.00** | **184** | Pg | **Pb** | **02 44 05.4** | **0.0** |
| **SNQR** | **Sonqor, Kerman** | **1.13** | **78** | Pg | **Pb** | **02 44 07.9** | **+0.1** |
| **IBZA** | **Bozab** | **1.31** | **96** | Pg | **Pg** | **02 44 11.3** | **-0.3** |
| **IBDR** | **Badra** | **1.54** | **191** | *e*Pn | **Pg** | **02 44 15.0** | **-0.9** |
| IBDR | | | | *e*Sn | **Sg** | **02 44 37.0** | **+1.1** |
| IBDR | | | | AML | AML | 02 44 41.6 | |
| | comp=E,181nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 02 44 50.0 | |
| | comp=N,136nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.77** | **296** | *e*Pn | **Pb** | **02 44 18.0** | **-0.6** |
| IKRK | | | | *e*Sn | **Sg** | **02 44 43.5** | **+0.1** |
| IKRK | | | | AML | AML | 02 44 50.2 | |
| | comp=E,391nm,0.9s | | | | | | |
| IKRK | | | | AML | AML | 02 44 50.3 | |
| | comp=N,284nm,0.5s | | | | | | |
| **IDOB** | **Doab** | **1.78** | **117** | Pg | **Pg** | **02 44 20.2** | **-0.3** |
| **HSAM** | **Samen** | **1.96** | **101** | Pn | **Pg** | **02 44 22.7** | **-1.3** |
| **RAFI** | **Al-Rafai** | **2.90** | **183** | *e*Pn | **Pn** | **02 44 34.2** | **+2.2** |
| RAFI | | | | *e*Sn | **Sb** | **02 45 10.0** | **-3.0** |
| RAFI | | | | AML | AML | 02 45 21.5 | |
| | comp=N,85nm,0.2s | | | | | | |
| RAFI | | | | AML | AML | 02 45 21.7 | |
| | comp=E,76nm,0.3s | | | | | | |

*IDC **28** 02:57:17.7±8.1, 14°.36N×123°.98E, h65km±76km, mb3.8/9, mbtmp4.1/9, MS3.2/10, Error ellipse: s-maj=36.2km s-min=14.7km az=66.0*
*NEIC **28** 02:57:17.6±1.7, 14°.3N±0°.1×124°.0E±0°.2, h64km±8km, mb4.5/23, Error ellipse: s-maj=23.7km s-min=17.1km az=68.0*
**ISC 28 02:57:15.4±0.6, 14°.3N±0°.1×123°.9E±0°.1, h50km, n49, σ1§01/37, mb4.4/21, MS2.9/8, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **7.35** | **167** | LR | LR | 03 02 43.1 | |
| | comp=Z,337nm,18.3s,baz=344,slow=44 | | | | | | |
| **JNU** | **Nakatsue** | **19.78** | **17** | LR | LR | 03 09 58.5 | |
| | comp=Z,56nm,18.6s,baz=111,slow=39 | | | | | | |
| **GUMO** | **Guam** | **20.32** | **89** | LR | LR | 03 09 12.8 | |
| | comp=Z,50nm,19.2s,baz=257,slow=35 | | | | | | |
| **JCJ** | **Chichijima** | **21.26** | **50** | LR | LR | 03 10 48.8 | |
| | comp=Z,28nm,18.1s,baz=132,slow=38 | | | | | | |
| **PHRA** | **Phrae** | **23.12** | **284** | P | **P** | **03 02 18.3** | **+0.9** |
| PHRA | | | | IAmb | IAmb | 03 02 30.2 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **CRAI** | **Chiangrai** | **23.26** | **288** | P | **P** | **03 02 18.2** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **24.33** | **283** | P | **P** | **03 02 29.4** | **+0.7** |
| | comp=Z,3.6nm,0.3s,baz=95,slow=7.8,SNR=19 | | | | | | |
| CMAR | | | | LR | LR | 03 12 24.8 | |
| | comp=Z,54nm,18.3s,baz=85,slow=37 | | | | | | |
| | comp=Z,3.6nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **25.57** | **27** | LR | LR | 03 11 59.8 | |
| | comp=Z,33nm,19.6s,baz=208,slow=35 | | | | | | |
| **ASAJ** | **Asahikawa** | **33.72** | **25** | LR | LR | 03 17 47.9 | |
| | comp=Z,25nm,19.0s,baz=179,slow=37 | | | | | | |
| **COEN** | **Coen** | **33.91** | **145** | P | **P** | **03 03 54.2** | **+0.2** |
| COEN | | | | IAmb | IAmb | 03 03 57.2 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **35.37** | **163** | P | **P** | **03 04 07.5** | **+1.0** |
| WB0 | | | | IAmb | IAmb | 03 04 08.9 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.52** | **163** | P | **P** | **03 04 08.4** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=341,slow=9.0,SNR=11 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 06 34.6** | **-1.7** |
| | comp=Z,0.3nm,0.9s,baz=336,slow=2.3,SNR=1.7 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **35.53** | **163** | P | **P** | **03 04 07.8** | **0.0** |
| WB2 | | | | IAmb | IAmb | 03 04 22.9 | |
| | comp=Z,8.2nm,1.2s | | | | | | |
| **WR0** | **Warramunga Arr** | **35.60** | **163** | P | **P** | **03 04 09.8** | **+1.4** |
| WR0 | | | | IAmb | IAmb | 03 04 27.8 | |
| | comp=Z,8.8nm,1.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **36.30** | **341** | P | **P** | **03 04 14.2** | **-0.1** |
| ULN | | | | IAmb | IAmb | 03 04 17.4 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **36.48** | **340** | P | **P** | **03 04 16.4** | **+0.5** |
| **SONM** | **Songino Array** | **36.48** | **340** | P | **P** | **03 04 16.1** | **+0.2** |
| | comp=Z,3.0nm,0.8s,baz=162,slow=9.0,SNR=16 | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **38.96** | **165** | P | **P** | **03 04 39.9** | **+3.0** |
| **ASAR** | **Alice Springs** | **38.96** | **165** | P | **P** | **03 04 39.0** | **+2.0** |
| | comp=Z,2.4nm,0.8s,baz=13,slow=12,SNR=22 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 06 47.8** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=343,slow=2.9,SNR=1.9 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.15** | **78** | T | T | 03 48 38.8 | |
| | baz=272,slow=74,SNR=360 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.16** | **78** | T | T | 03 48 48.0 | |
| | baz=272,slow=74,SNR=229 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.17** | **78** | T | T | 03 48 40.6 | |
| | baz=272,slow=74,SNR=273 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.34** | **76** | T | T | 03 48 58.4 | |
| | baz=267,slow=74,SNR=114 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.35** | **76** | T | T | 03 48 59.3 | |
| | baz=267,slow=74,SNR=89 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.36** | **76** | T | T | 03 48 59.7 | |
| | baz=267,slow=74,SNR=82 | | | | | | |
| **PALK** | **Palikekele** | **42.99** | **265** | LR | LR | 03 23 12.6 | |
| | comp=Z,45nm,18.2s,baz=58,slow=36 | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **47.03** | **27** | P | **P** | **03 05 41.7** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **47.03** | **27** | P | **P** | **03 05 41.5** | **-0.3** |
| | comp=Z,3.4nm,0.8s,baz=221,slow=5.7,SNR=2.7 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.39** | **188** | P | **P** | **03 05 42.5** | **-2.2** |
| **MK31** | **Makanchi Array** | **47.48** | **322** | P | **P** | **03 05 44.7** | **-0.8** |
| **MKAR** | **Makanchi Array** | **47.48** | **322** | P | **P** | **03 05 45.6** | **+0.2** |
| **MKAR** | **Makanchi Array** | **47.48** | **322** | P | **P** | **03 05 45.9** | **+0.5** |
| | comp=Z,1.6nm,0.8s,baz=115,slow=9.1,SNR=12 | | | | | | |
| MKAR | | | | PcP | **PcP** | **03 07 15.8** | **+0.7** |
| | comp=Z,0.5nm,0.8s,baz=107,slow=5.0,SNR=2.2 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **MA2** | **Magadan** | **49.35** | **18** | LR | LR | 03 25 31.0 | |
| | comp=Z,12nm,21.2s,baz=205,slow=34 | | | | | | |
| **KURK** | **Kurchatov** | **51.49** | **325** | P | **P** | **03 06 16.0** | **+0.1** |
| KURK | | | | IAmb | IAmb | 03 06 17.2 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.49** | **325** | P | **P** | **03 06 16.2** | **+0.3** |
| | comp=Z,3.2nm,0.8s,baz=122,slow=7.8,SNR=10 | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **GAR** | **Garm** | **53.01** | **308** | P | **P** | **03 06 28.2** | **+0.7** |
| **CHGR** | **Chuyangaron** | **53.82** | **308** | P | **P** | **03 06 34.3** | **+0.8** |
| CHGR | | | | IAmb | IAmb | 03 06 35.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **53.84** | **313** | P | **P** | **03 06 34.5** | **+1.1** |
| **SIMJ** | **Simiganj** | **53.94** | **308** | P | **P** | **03 06 34.1** | **-0.3** |
| SIMJ | | | | IAmb | IAmb | 03 06 37.7 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **57.09** | **325** | P | **P** | **03 06 57.4** | **+0.9** |
| | comp=Z,0.5nm,0.5s,baz=101,slow=7.5,SNR=2.4 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **62.37** | **318** | P | **P** | **03 07 33.1** | **+0.1** |
| **ABKAR** | **Akbulak array** | **62.37** | **318** | P | **P** | **03 07 33.1** | **+0.1** |
| **I17K** | **Unalakleet** | **70.83** | **27** | P | **P** | **03 08 25.9** | **-0.7** |
| **M17K** | **Holitna River** | **72.12** | **30** | P | **P** | **03 08 33.9** | **-0.6** |
| M17K | | | | IAmb | IAmb | 03 08 40.4 | |
| | comp=Z,9.5nm,1.2s | | | | | | |
| **RAYN** | **Ar Rayn** | **74.00** | **291** | P | **P** | **03 08 45.0** | **-1.4** |
| RAYN | | | | IAmb | IAmb | 03 08 48.5 | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.65** | **339** | P | **P** | **03 09 17.6** | **+0.4** |
| | comp=Z,2.3nm,0.9s,baz=60,slow=5.8,SNR=4.1 | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | |
| **FURI** | **Furi** | **83.30** | **277** | LR | LR | 03 43 34.6 | |
| | comp=Z,22nm,18.8s,baz=184,slow=33 | | | | | | |
| **BURAR** | **Bucovina Array** | **85.35** | **318** | P | **P** | **03 09 47.4** | **-0.1** |
| **BUR08** | **Bucovina Ar. S** | **85.35** | **318** | P | **P** | **03 09 46.9** | **-0.6** |
| BUR08 | | | | IAmb | IAmb | 03 09 49.5 | |
| | comp=Z,2.7nm,0.8s | | | | | | |

*RSNC **28** 03:01:33.7±0.9, 10°.N±7°.×7°.0W±1°.2, h146km±27km, M3.1, ML3.1*
*FUNV **28** 03:01:37.8, 10°.10N×70°.30W, h5km, MW3.1*
**ISC 28 03:01:35.0±1.4, 10°.29N±0°.05×70°.38W±0°.04, h9km±13km, n11, σ1§13/21, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEPV** | **Terepaima** | **1.21** | **105** | *e*P | **Pg** | **03 01 57.8** | **-0.5** |
| TEPV | | | | *e*S | **Sg** | **03 02 13.1** | **-0.9** |
| **JACV** | **Jacura** | **1.71** | **62** | *e*P | **Pg** | **03 02 07.9** | **0.0** |
| JACV | | | | *e*S | **Sg** | **03 02 30.8** | **+0.6** |
| **SOCV** | **Socops** | **2.05** | **193** | *e*P | **Pn** | **03 02 10.3** | **+0.6** |
| SOCV | | | | *e*S | **Sn** | **03 02 34.4** | **-1.1** |
| **URIC** | **Uribia, Colomb** | **2.12** | **312** | P | **Pn** | **03 02 09.5** | **-1.2** |
| URIC | | | | S | **Sb** | **03 02 42.2** | **+2.1** |
| **MCQV** | **Machiques** | **2.14** | **264** | *e*P | **Pb** | **03 02 13.7** | **-0.2** |
| MCQV | | | | *e*S | **Sb** | **03 02 42.1** | **+1.5** |
| **CRJC** | **Cerrejon, Guaj** | **2.57** | **287** | P | **Pn** | **03 02 16.2** | **-0.7** |
| CRJC | | | | S | **Sn** | **03 02 47.4** | **-1.0** |
| **BAUV** | **El Baul** | **2.66** | **120** | *e*P | **Pn** | **03 02 18.9** | **+0.7** |
| BAUV | | | | *e*S | **Sn** | **03 02 48.4** | **-2.3** |
| **BENV** | **Beln** | **2.75** | **97** | *e*P | **Pn** | **03 02 20.9** | **+1.4** |
| BENV | | | | *e*S | **Sn** | **03 02 52.4** | **-0.6** |
| **CAPV** | **Capacho** | **3.08** | **219** | *e*P | **Pn** | **03 02 24.5** | **+0.5** |
| CAPV | | | | *e*S | **Sn** | **03 03 00.4** | **-0.7** |
| **OCAC** | **Ocana** | **3.55** | **235** | P | **Pn** | **03 02 30.8** | **+0.3** |
| OCAC | | | | S | **Sn** | **03 03 12.5** | **-0.2** |
| **SJCC** | **San Jacinto, C** | **4.75** | **266** | P | **Pn** | **03 02 47.5** | **+0.6** |

*SDD **28** 03:02:31.8±1.2, 17°.86N×73°.21W, h31km±95km, MD3.4, ML2.6, MW3.3*
*OSPL **28** 03:02:32.7±1.3, 18°.39N×73°.45W, h0km±12km, ML2.5*
*SSNC **28** 03:02:33.5±2.1, 18°.71N×73°.19W, h5km, MD3.3, ML2.0, MW2.2*
**ISC 28 03:02:33.3±2.0, 18°.8N±0°.2×73°.20W±0°.07, h18km±9km, n9, σ1§11/17, 4C-2D, Haiti region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAPH** | **Port-au-Prince** | **0.89** | **108** | *e*Pg | **Pg** | **03 02 50.6** | **-0.1** |
| PAPH | | | ⇑ | *e*Sg | **Sn** | **03 03 04.6** | **+1.1** |
| PAPH | | | | IAML | | 03 03 05.9 | |
| | comp=E,332nm,0.2s | | | | | | |
| PAPH | | | | IAML | | 03 03 09.9 | |
| | comp=N,389nm,0.3s | | | | | | |
| **JIDR** | **Jimani** | **1.31** | **103** | ⇑ *e*Pg | **Pn** | **03 02 55.5** | **-1.3** |
| JIDR | | | ⇓ | *e*Sg | **Sb** | **03 03 14.3** | **+0.4** |
| JIDR | | | | IAML | | 03 03 21.4 | |
| | comp=E,68nm,0.9s | | | | | | |
| JIDR | | | | IAML | | 03 03 28.7 | |
| | comp=N,60nm,1.6s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.82** | **84** | ⇑ *e*Pg | **Pg** | **03 03 07.2** | **-1.0** |
| SDDR | | | ⇓ | *e*Sg | **Sg** | **03 03 32.0** | **+0.1** |
| SDDR | | | | IAML | | 03 03 40.1 | |
| | comp=E,18nm,0.5s | | | | | | |
| SDDR | | | | IAML | | 03 03 53.9 | |
| | comp=N,24nm,2.5s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.82** | **84** | *i* P | **Pg** | **03 03 08.2** | **-0.1** |
| SDDR | | | | *e*S | **Sg** | **03 03 33.4** | **+1.5** |
| SDDR | | | | IAML | | 03 03 37.7 | |
| | comp=Z,25nm,0.6s | | | | | | |
| **QMBU** | **Quimbuelo** | **2.06** | **313** | *e*P | **Pn** | **03 03 07.0** | **-0.1** |
| QMBU | | | | *e*S | **Sn** | **03 03 32.2** | **-0.3** |
| QMBU | | | | IAML | | 03 03 38.0 | |
| | comp=N,6.8nm,0.0s | | | | | | |
| QMBU | | | | IAML | | 03 03 40.1 | |
| | comp=E,12nm,0.2s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **2.13** | **302** | *e*P | **Pn** | **03 03 07.4** | **-0.5** |
| GTBY | | | | *e*S | **Sn** | **03 03 34.4** | **+0.4** |
| GTBY | | | | IAML | | 03 03 37.7 | |
| | comp=E,6.3nm,0.4s | | | | | | |
| GTBY | | | | IAML | | 03 03 38.7 | |
| | comp=E,16nm,0.4s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **2.13** | **302** | *i* P | **Pn** | **03 03 07.9** | **-0.1** |
| GTBY | | | | *e*S | **Sn** | **03 03 35.2** | **+1.2** |
| GTBY | | | | IAML | | 03 03 37.4 | |
| | comp=Z,20nm,2.2s | | | | | | |
| **RCC** | **Rio Carpintero** | **2.64** | **297** | *e*P | **Pn** | **03 03 14.0** | **-1.1** |
| RCC | | | | *e*S | **Sn** | **03 03 44.8** | **-1.9** |
| RCC | | | | IAML | | 03 03 53.4 | |
| | comp=N,3.9nm,0.2s | | | | | | |
| RCC | | | | IAML | | 03 03 53.8 | |
| | comp=E,7.3nm,0.2s | | | | | | |
| **MARVS** | **Santiago de Cu** | **2.82** | **296** | *e*P | **Pn** | **03 03 19.2** | **+1.8** |

*IDC **28** 03:13:26.2±1.0, 8°.42S×116°.62E, h0km, mb4.0/7, mbtmp4.0/8, ML3.5/1, MS3.2/1, Error ellipse: s-maj=21.9km s-min=15.9km az=71.0*
*DJA **28** 03:13:28.9±0.2, 8°.S±4°.×11°.7E±°, h10km, M4.3/13, mb4.5/3, mB4.7/1, MLv4.2/13, Mw(mB)3.9/1*
**ISC 28 03:13:27.8±0.6, 8°.35S±0°.06×116°.61E±0°.04, h10km, n22, σ1§73/27, mb4.1/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.47** | **145** | P | **Pg** | **03 13 37.6** | **+0.5** |
| TWSI | | | | S | **Sg** | **03 13 43.9** | **+0.6** |
| **PLAI** | **Plampang** | **1.25** | **113** | P | **Pn** | **03 13 51.5** | **+0.2** |
| **SRBI** | **Singaraja** | **1.41** | **281** | P | **Pg** | **03 13 54.5** | **-0.4** |
| **DNP** | **Denpasar** | **1.42** | **257** | P | **Pg** | **03 13 55.3** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.44** | **267** | P | **Pn** | **03 14 08.1** | **+0.4** |
| **WBSI** | **Waikabubak, Su** | **3.03** | **115** | P | **Pn** | **03 14 16.6** | **+0.6** |
| WBSI | | | | S | **Sn** | **03 14 53.8** | **+1.4** |
| **BASI** | **Baing, Sumba** | **4.34** | **116** | P | **Pn** | **03 14 35.3** | **+1.5** |
| **BSSI** | **Bau Bau, Buton** | **4.43** | **61** | P | **Pn** | **03 14 36.3** | **+1.2** |
| **KAPI** | **Kappang** | **4.55** | **43** | Pn | **Pn** | **03 14 37.7** | **+1.0** |
| | 2.1nm,0.3s,baz=220,slow=8.1,SNR=2.3 | | | | | | |
| KAPI | | | | Sn | **Sn** | **03 15 29.6** | **-0.2** |
| | 6.3nm,0.3s,baz=45,slow=17,SNR=7.7 | | | | | | |
| KAPI | | | | Lg | Lg | 03 15 53.8 | |
| | 6.1nm,0.3s,baz=60,slow=21,SNR=4.7 | | | | | | |
| | 5.6nm,0.3s | | | | | | |
| **PWJI** | **Pagerwojo** | **4.77** | **274** | P | **Pn** | **03 14 40.4** | **+0.6** |
| **EDFI** | **Ende, Flores** | **5.04** | **95** | P | **Pn** | **03 14 44.6** | **+1.0** |
| | 50nm,0.6s,695nm0.2nm | | | | | | |
| **BNSI** | **Bone** | **5.24** | **42** | P | **Pn** | **03 14 48.5** | **+2.2** |
| | 18nm,0.6s,0.2nm | | | | | | |
| **UGM** | **Wanagama** | **6.04** | **274** | P | **Pn** | **03 14 59.3** | **+2.0** |
| **WRA** | **Warramunga Arr** | **20.67** | **126** | P | **P** | **03 18 07.6** | **-0.5** |
| | 8.2nm,0.9s,baz=300,slow=12,SNR=60 | | | | | | |
| WRA | | | | S | **S** | **03 21 52.0** | **-7.3** |
| | 0.3nm,0.7s,baz=296,slow=21,SNR=2.0 | | | | | | |
| | 8.2nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **22.50** | **135** | P | **P** | **03 18 27.4** | **-0.5** |
| | 6.8nm,0.8s,baz=315,slow=8.5,SNR=41 | | | | | | |
| ASAR | | | | S | **S** | **03 22 35.4** | **+0.4** |
| | 0.3nm,0.5s,baz=317,slow=26,SNR=1.5 | | | | | | |
| | 6.8nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **32.98** | **139** | P | **P** | **03 20 02.9** | **-0.1** |
| | 1.6nm,0.6s,baz=312,slow=12,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 03 33 23.9 | |
| | comp=Z,41nm,20.3s,baz=205,slow=36 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.12** | **14** | P | **P** | **03 22 52.8** | **-0.2** |
| | 1.1nm,0.7s,baz=203,slow=7.0,SNR=4.2 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.82** | **334** | P | **P** | **03 23 53.8** | **0.0** |
| | 0.3nm,0.6s,baz=121,slow=6.9,SNR=2.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.64** | **180** | P | **P** | **03 25 45.9** | **-0.3** |
| | 1.2nm,0.8s,baz=316,slow=10,SNR=3.0 | | | | | | |
| | 1.2nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **90.98** | **196** | P | **P** | **03 26 31.9** | **-0.1** |
| | 0.8nm,0.6s,baz=17,slow=7.8,SNR=3.2 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.02** | **281** | PKP | **PKiKP** | **03 32 12.7** | **+0.5** |
| | 0.3nm,0.5s,baz=77,slow=4.5,SNR=7.1 | | | | | | |
| **CPUP** | **Villa Florida** | **145.03** | **190** | PKP | **PKPbc** | **03 33 05.5** | **-0.1** |
| | 1.4nm,0.6s,baz=86,slow=11,SNR=4.8 | | | | | | |

*ISN **28** 03:43:03.4±0.5, 34°.67N×46°.23E, h4km±15km, ML3.5*
*AFAD **28** 03:43:04.6±0.0, 34°.63N×46°.37E, h10km±4km, MW4.0*
*TEH **28** 03:43:04.6, 34°.60N×46°.21E, h7km±35km, ML3.4*
*IDC **28** 03:43:12.6±4.2, 34°.78N×45°.78E, h61km±39km, mb3.3/7, mbtmp3.5/10, ML4.0/2, Error ellipse: s-maj=38.0km s-min=22.6km az=161.0*
**ISC 28 03:43:05.1±0.9, 34°.64N±0°.03×46°.21E±0°.03, h11km±7km, n45, σ1§65/55, mb3.4/7, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehradun** | **0.16** | **66** | Pg | **Pg** | **03 43 08.6** | **-0.2** |
| IDHR | | | | Sg | **Sg** | **03 43 11.9** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **0.42** | **136** | Pg | **Pg** | **03 43 13.1** | **-0.4** |
| IGHG | | | | Sg | **Sg** | **03 43 19.8** | **+0.6** |
| **KGS1** | **Ghasr-e-Shirin** | **0.53** | **256** | Pg | **Pg** | **03 43 15.0** | **-0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **206** | Pg | **Pg** | **03 43 15.4** | **-1.0** |
| GLG1 | | | | Sg | **Sg** | **03 43 24.5** | **+0.4** |
| **ILIN** | **Lien** | **0.68** | **65** | Pg | **Pg** | **03 43 17.6** | **-0.7** |
| **KCHF** | **Cheshme Sefid,** | **0.77** | **118** | Pg | **Pg** | **03 43 19.1** | **-1.0** |
| KCHF | | | | Sg | **Sb** | **03 43 31.1** | **-0.1** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **180** | Pg | **Pg** | **03 43 23.3** | **-1.2** |
| ILBA | | | | Sg | **Sg** | **03 43 37.2** | **-0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.19** | **79** | Pg | **Pb** | **03 43 27.7** | **-0.1** |
| **IBZA** | **Bozab** | **1.37** | **97** | Pg | **Pb** | **03 43 30.7** | **-0.2** |
| **IBDR** | **Badra** | **1.54** | **189** | *e*Pn | **Pn** | **03 43 34.0** | **+1.6** |
| IBDR | | | | *e*Sn | **Sg** | **03 43 56.0** | **+1.4** |
| IBDR | | | | AML | AML | 03 43 59.1 | |
| | comp=E,549nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 03 43 59.9 | |
| | comp=N,537nm,0.5s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.62** | **339** | Pg | **Pb** | **03 43 35.1** | **0.0** |
| **IKRK** | **Kirkuk** | **1.72** | **297** | *e*Pn | **Pn** | **03 43 36.0** | **+1.1** |
| IKRK | | | | *e*Sn | **Sb** | **03 43 59.5** | **+1.3** |
| IKRK | | | | AML | AML | 03 44 07.9 | |
| | comp=N,1μm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 03 44 08.4 | |
| | comp=E,936nm,0.5s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.75** | **129** | Pg | **Pb** | **03 43 37.2** | **0.0** |
| **IDOB** | **Doab** | **1.83** | **117** | Pn | **Pb** | **03 43 38.5** | **-0.2** |
| **HSAM** | **Samen** | **2.02** | **101** | Pn | **Pb** | **03 43 41.3** | **-0.7** |
| **MAHB** | **Mahabad** | **2.17** | **349** | Pn | **Pb** | **03 43 43.7** | **-0.7** |
| **HAGD** | **Aghdareh** | **2.42** | **85** | Pn | **Pb** | **03 43 47.4** | **-1.3** |
| **IHSH** | **Hashtrud** | **2.80** | **17** | Pn | **Pb** | **03 43 52.7** | **-2.6** |
| **RAFI** | **Al-Rafai** | **2.91** | **182** | *e*Pn | **Pn** | **03 43 52.5** | **+1.3** |
| RAFI | | | | *e*Sn | **Sn** | **03 44 29.0** | **+2.9** |
| RAFI | | | | AML | AML | 03 44 46.5 | |
| | comp=N,198nm,0.5s | | | | | | |
| RAFI | | | | AML | AML | 03 44 52.1 | |
| | comp=E,177nm,0.3s | | | | | | |
| **IAZR** | **Azarshahr** | **3.04** | **357** | Pn | **Pn** | **03 43 55.6** | **+2.3** |
| **YOVA** | **Hakkari_Yksek** | **3.33** | **333** | P | **Pn** | **03 43 59.5** | **+2.2** |
| **CUKT** | **Cukurca** | **3.35** | **322** | P | **Pn** | **03 43 58.6** | **+1.1** |
| CUKT | | | | S | **Sb** | **03 44 03.0** | **-2.5** |
| **HAKT** | **HAKKARI** | **3.55** | **326** | P | **Pn** | **03 44 01.2** | **+0.8** |
| HAKT | | | | S | **Sn** | **03 44 43.4** | **+0.9** |
| **IHRS** | **Heris** | **3.73** | **10** | Pn | **Pn** | **03 44 05.5** | **+2.7** |
| **SIRN** | **Sirnak** | **4.20** | **314** | P | **Pn** | **03 44 09.8** | **+0.7** |
| **GRMI** | **Germi** | **4.38** | **17** | Pn | **Pn** | **03 44 14.3** | **+2.7** |
| **QAMS** | **Qamsar** | **4.39** | **100** | Pn | **Pn** | **03 44 14.2** | **+2.3** |
| **JHBN** | **Jahan bin** | **4.43** | **122** | Pn | **Pn** | **03 44 13.6** | **+1.1** |
| **PERV** | **Siirt/Pervari-** | **4.44** | **319** | P | **Pn** | **03 44 14.2** | **+1.8** |
| **SRTM** | **Siirt_Merkez** | **4.82** | **315** | P | **Pn** | **03 44 18.6** | **+0.9** |
| **KRSH** | **Karshahi** | **4.95** | **96** | Pn | **Pn** | **03 44 22.0** | **+2.5** |
| **MARD** | **Mardin** | **5.15** | **303** | P | **Pn** | **03 44 23.0** | **+0.7** |
| MARD | | | | S | **Sb** | **03 45 43.6** | **+6.3** |
| **MUSM** | **Mu-Merkez** | **5.56** | **319** | P | **Pn** | **03 44 28.5** | **+0.6** |
| **KLNJ** | **Kolanjah** | **5.79** | **127** | Pn | **Pn** | **03 44 32.2** | **+0.9** |
| **IRAM** | **Ramesheh** | **5.89** | **117** | Pn | **Pn** | **03 44 34.3** | **+1.8** |
| **MMAI** | **Mount Meron Ar** | **9.14** | **263** | P | **Pn** | **03 45 16.5** | **-0.4** |
| | comp=E,0.6nm,0.3s,baz=76,slow=18,SNR=2.5 | | | | | | |
| | comp=E,0.5nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **11.24** | **301** | P | **Pn** | **03 45 46.4** | **+0.6** |
| | comp=E,1.1nm,1.0s,baz=109,slow=11,SNR=4.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **20.26** | **328** | P | **P** | **03 47 39.3** | **-1.0** |
| | comp=E,1.1nm,0.3s,baz=138,slow=9.0,SNR=6.8 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.36** | **46** | P | **P** | **03 49 00.3** | **+1.4** |
| | comp=E,0.2nm,0.4s,baz=253,slow=9.0,SNR=2.5 | | | | | | |
| | comp=E,0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.66** | **55** | P | P | 03 49 16.2 | +5.5 |
| | comp=E,0.2nm,0.4s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=360 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.49** | **283** | *i* | P | **Pn** | **03 57 26.5** | **+0.1** |
| | baz=289 | | | | | | | | |
| ENTT | | | | | *e*S | **Sn** | **03 57 36.0** | **+0.4** |
| | baz=289 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.50** | **331** | *e* | P | **Pn** | **03 57 26.2** | **-0.3** |
| | baz=350 | | | | | | | | |
| TIPB | | | | | S | **Sn** | **03 57 34.9** | **-1.0** |
| | baz=350 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.51** | **296** | | P | **Pn** | **03 57 27.0** | **+0.3** |
| | baz=302 | | | | | | | | |
| FUSB | | | | *i* | S | **Sn** | **03 57 36.2** | **0.0** |
| | baz=302 | | | | | | | | |
| **LATG** | **Datong** | **0.52** | **271** | *i* | P | **Pn** | **03 57 26.6** | **-0.1** |
| | baz=265 | | | | | | | | |
| LATG | | | | | S | **Sn** | **03 57 36.1** | **-0.1** |
| | baz=265 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.53** | **278** | *i* | P | **Pn** | **03 57 27.0** | **+0.2** |
| | baz=273 | | | | | | | | |
| NDT | | | | | S | **Sn** | **03 57 36.3** | **-0.1** |
| | baz=273 | | | | | | | | |
| **ETL** | **Fush Village** | **0.57** | **229** | *e* | P | **Pn** | **03 57 26.6** | **-0.5** |
| | baz=217 | | | | | | | | |
| ETL | | | | | S | **Sn** | **03 57 36.7** | **-0.3** |
| | baz=217 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.58** | **232** | | P | **Pn** | **03 57 26.8** | **-0.4** |
| **NACB** | **Ninganchiao** | **0.58** | **232** | | P | **Pn** | **03 57 26.5** | **-0.8** |
| | baz=218 | | | | | | | | |
| NACB | | | | | *e*S | **Sn** | **03 57 36.8** | **-0.3** |
| | baz=218 | | | | | | | | |
| **NWLT** | **Wulai** | **0.59** | **295** | *e* | P | **Pn** | **03 57 27.7** | **+0.3** |
| | baz=291 | | | | | | | | |
| NWLT | | | | | *e*S | **Sn** | **03 57 37.4** | **0.0** |
| | baz=291 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.60** | **341** | *e* | P | **Pn** | **03 57 27.2** | **-0.3** |
| | baz=349 | | | | | | | | |
| SXI1 | | | | | *e*S | **Sn** | **03 57 37.0** | **-0.7** |
| | baz=349 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.61** | **332** | *i* | P | **Pn** | **03 57 27.6** | **-0.1** |
| | baz=340 | | | | | | | | |
| NWF | | | | | *e*S | **Sn** | **03 57 36.9** | **-1.0** |
| | baz=340 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.61** | **332** | *i* | P | **Pn** | **03 57 27.5** | **0.0** |
| | baz=340 | | | | | | | | |
| WFSB | | | | *i* | S | **Sn** | **03 57 36.9** | **-0.8** |
| | baz=340 | | | | | | | | |
| **TWD** | **Chiawan** | **0.64** | **225** | *i* | P | **Pn** | **03 57 27.6** | **-0.2** |
| | baz=214 | | | | | | | | |
| TWD | | | | | S | **Sn** | **03 57 37.9** | **-0.4** |
| | baz=214 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.64** | **240** | | P | **Pn** | **03 57 27.6** | **-0.5** |
| | baz=236 | | | | | | | | |
| ETLH | | | | *i* | S | **Sn** | **03 57 38.2** | **-0.3** |
| | baz=236 | | | | | | | | |
| **TWA** | **Mucha** | **0.65** | **314** | *i* | P | **Pn** | **03 57 27.9** | **-0.1** |
| | baz=329 | | | | | | | | |
| TWA | | | | | S | **Sn** | **03 57 37.9** | **-0.6** |
| | baz=329 | | | | | | | | |
| **NNSB** | **Datong** | **0.66** | **261** | ⇓ | P | **Pn** | **03 57 28.0** | **-0.1** |
| | baz=255 | | | | | | | | |
| NNSB | | | | | *e*S | **Sn** | **03 57 38.9** | **+0.1** |
| | baz=255 | | | | | | | | |
| **NNSH** | **Datong** | **0.66** | **261** | | P | **Pn** | **03 57 28.1** | **0.0** |
| | baz=253 | | | | | | | | |
| NNSH | | | | | S | **Sn** | **03 57 38.6** | **-0.3** |
| | baz=253 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.66** | **262** | ⇓ | P | **Pn** | **03 57 28.2** | **-0.1** |
| | baz=256 | | | | | | | | |
| NNS | | | | | *e*S | **Sn** | **03 57 38.5** | **-0.5** |
| | baz=256 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.67** | **282** | | P | **Pn** | **03 57 28.4** | **+0.1** |
| **YHNB** | **Yeheng** | **0.67** | **282** | *e* | P | **Pn** | **03 57 28.3** | **+0.1** |
| | baz=275 | | | | | | | | |
| YHNB | | | | | *e*S | **Sn** | **03 57 38.7** | **-0.3** |
| | baz=275 | | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.67** | **310** | *e* | P | **Pn** | **03 57 28.3** | **0.0** |
| | baz=325 | | | | | | | | |
| NHDH | | | | | S | **Sn** | **03 57 38.2** | **-0.7** |
| | baz=325 | | | | | | | | |
| **TNOU** | **National Taiwa** | **0.68** | **335** | *e* | P | **Pn** | **03 57 27.9** | **-0.4** |
| | baz=348 | | | | | | | | |
| TNOU | | | | | S | **Sn** | **03 57 38.1** | **-1.1** |
| | baz=348 | | | | | | | | |
| **NHY** | **Taipei** | **0.70** | **317** | *i* | S | **Sn** | **03 57 39.0** | **-0.4** |
| | baz=332 | | | | | | | | |
| **TATO** | **Taipei** | **0.71** | **309** | | P | **Pn** | **03 57 28.9** | **+0.3** |
| **HWA** | **Hwalien** | **0.71** | **219** | | P | **Pn** | **03 57 28.8** | **+0.2** |
| | baz=202 | | | | | | | | |
| HWA | | | | | *e*S | **Sn** | **03 57 40.8** | **+1.1** |
| | baz=202 | | | | | | | | |
| **YM01** | **YM01** | **0.78** | **322** | *e* | P | **Pn** | **03 57 29.7** | **+0.2** |
| | baz=336 | | | | | | | | |
| YM01 | | | | | *e*S | **Sn** | **03 57 41.8** | **+0.7** |
| | baz=336 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.78** | **96** | | P | **Pn** | **03 57 29.8** | **+0.3** |
| JYNG | | | | | *e*S | **Sn** | **03 57 40.9** | **-0.2** |
| **ETM** | **Tongmen** | **0.79** | **224** | *i* | P | **Pn** | **03 57 29.1** | **-0.4** |
| | baz=220 | | | | | | | | |
| ETM | | | | | S | **Sn** | **03 57 40.1** | **-1.2** |
| | baz=220 | | | | | | | | |
| **YM08** | **YM08** | **0.80** | **325** | | P | **Pn** | **03 57 29.2** | **-0.5** |
| | baz=338 | | | | | | | | |
| YM08 | | | | | *e*S | **Sn** | **03 57 42.0** | **+0.4** |
| | baz=338 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **0.80** | **215** | *e* | P | **Pn** | **03 57 29.8** | **+0.1** |
| | baz=202 | | | | | | | | |
| TEYL | | | | | *e*S | **Sn** | **03 57 41.5** | **0.0** |
| | baz=202 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **0.80** | **231** | ⇓ | P | **Pn** | **03 57 29.3** | **-0.6** |
| | baz=217 | | | | | | | | |
| LXIB | | | | | S | **Sn** | **03 57 41.1** | **-0.7** |
| | baz=217 | | | | | | | | |
| **FUSS** | **Fushou** | **0.82** | **250** | *e* | P | **Pn** | **03 57 30.3** | **+0.1** |
| | baz=245 | | | | | | | | |
| FUSS | | | | | *e*S | **Sn** | **03 57 42.0** | **-0.4** |
| | baz=245 | | | | | | | | |
| **ANP** | **Anpu** | **0.84** | **322** | *e* | P | **Pn** | **03 57 29.1** | **-1.2** |
| | baz=334 | | | | | | | | |
| ANP | | | | | *e*S | **Sn** | **03 57 38.9** | **-3.6** |
| | baz=334 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.84** | **313** | *e* | P | **Pn** | **03 57 29.3** | **-0.8** |
| | baz=323 | | | | | | | | |
| TWS1 | | | | | *e*S | **Sn** | **03 57 41.1** | **-1.2** |
| | baz=323 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.84** | **94** | | P | **Pn** | **03 57 30.3** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.84** | **94** | ⇓ | *e*P | **Pn** | **03 57 30.3** | **+0.2** |
| | baz=88 | | | | | | | | |
| YOJ | | | | | *e*S | **Sn** | **03 57 42.9** | **+0.6** |
| | baz=88 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.84** | **94** | | P | **Pn** | **03 57 30.4** | **+0.3** |
| YOJ | | | | | *e*S | **Sn** | **03 57 42.5** | **+0.2** |
| **WHF** | **Hehuan Shan** | **0.85** | **243** | ⇑ | P | **Pn** | **03 57 30.6** | **-0.1** |
| | baz=240 | | | | | | | | |
| WHF | | | | | *e*S | **Sn** | **03 57 42.8** | **-0.5** |
| | baz=240 | | | | | | | | |
| **TWY** | **Chenhua** | **0.87** | **329** | *e* | P | **Pn** | **03 57 32.4** | **+1.9** |
| | baz=344 | | | | | | | | |
| TWY | | | | | S | **Sn** | **03 57 42.5** | **-0.4** |
| | baz=344 | | | | | | | | |
| **TWT** | **Tachien** | **0.88** | **252** | *e* | P | **Pn** | **03 57 31.6** | **+0.7** |
| | baz=244 | | | | | | | | |
| TWT | | | | | *e*S | **Sn** | **03 57 43.7** | **+0.2** |
| | baz=244 | | | | | | | | |
| **SHUL** | **Shoufeng** | **0.88** | **213** | | P | **Pn** | **03 57 30.5** | **-0.2** |
| | baz=208 | | | | | | | | |
| SHUL | | | | | *e*S | **Sn** | **03 57 44.1** | **+0.8** |
| | baz=208 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **0.89** | **277** | *e* | P | **Pn** | **03 57 31.2** | **+0.3** |
| | baz=286 | | | | | | | | |
| NFF | | | | | *e*S | **Sn** | **03 57 43.5** | **-0.1** |
| | baz=286 | | | | | | | | |
| **TDCB** | **Techi** | **0.90** | **252** | *e* | P | **Pn** | **03 57 31.6** | **+0.5** |
| | baz=244 | | | | | | | | |
| TDCB | | | | | *e*S | **Sn** | **03 57 43.7** | **-0.2** |
| | baz=244 | | | | | | | | |
| **ESL** | **Shilin** | **0.93** | **220** | | P | **Pn** | **03 57 30.5** | **-0.8** |
| | baz=225 | | | | | | | | |
| ESL | | | | | *e*S | **Sn** | **03 57 43.4** | **-1.0** |
| | baz=225 | | | | | | | | |
| **NCUH** | **Zhongli** | **0.93** | **298** | *e* | P | **Pn** | **03 57 32.1** | **+0.8** |
| | baz=301 | | | | | | | | |
| NCUH | | | | | *e*S | **Sn** | **03 57 44.6** | **+0.2** |
| | baz=301 | | | | | | | | |
| **CHGB** | **Renai** | **0.96** | **241** | *e* | P | **Pn** | **03 57 32.1** | **+0.2** |
| | baz=231 | | | | | | | | |
| CHGB | | | | | S | **Sn** | **03 57 45.1** | **-0.3** |
| | baz=231 | | | | | | | | |
| **TEGC** | **Jichi Village** | **0.96** | **212** | *e* | P | **Pn** | **03 57 31.8** | **+0.1** |
| | baz=206 | | | | | | | | |
| TEGC | | | | | S | **Sn** | **03 57 44.9** | **-0.1** |
| | baz=206 | | | | | | | | |
| **LIOB** | **Emei** | **0.99** | **277** | *e* | P | **Pn** | **03 57 32.6** | **+0.6** |
| | baz=278 | | | | | | | | |
| LIOB | | | | | *e*S | **Sn** | **03 57 45.9** | **+0.3** |
| | baz=278 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.00** | **276** | *e* | P | **Pn** | **03 57 32.8** | **+0.6** |
| | baz=277 | | | | | | | | |
| NSTT | | | | | *e*S | **Sn** | **03 57 46.0** | **+0.2** |
| | baz=277 | | | | | | | | |
| **OWD** | **Renai** | **1.01** | **236** | *e* | P | **Pn** | **03 57 32.6** | **+0.1** |
| | baz=227 | | | | | | | | |
| OWD | | | | | *e*S | **Sn** | **03 57 45.6** | **-0.8** |
| | baz=227 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.03** | **219** | | P | **Pn** | **03 57 31.8** | **-0.8** |
| | baz=215 | | | | | | | | |
| WARBT | | | | | S | **Sn** | **03 57 44.5** | **-2.2** |
| | baz=215 | | | | | | | | |
| **WUSB** | **Renai** | **1.04** | **239** | | P | **Pn** | **03 57 33.1** | **+0.3** |
| | baz=230 | | | | | | | | |
| WUSB | | | | | S | **Sn** | **03 57 46.6** | **-0.4** |
| | baz=230 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.04** | **285** | *e* | S | **Sn** | **03 57 47.0** | **+0.2** |
| | baz=287 | | | | | | | | |
| **EGFH** | **Guangfu** | **1.05** | **216** | *i* | P | **Pn** | **03 57 32.3** | **-0.6** |
| | baz=221 | | | | | | | | |
| EGFH | | | | | *e*S | **Sn** | **03 57 46.2** | **-0.8** |
| | baz=221 | | | | | | | | |
| **WHP** | **Taichung City** | **1.08** | **257** | *e* | P | **Pn** | **03 57 34.4** | **+1.1** |
| | baz=255 | | | | | | | | |
| WHP | | | | | *e*S | **Sn** | **03 57 48.4** | **+0.6** |
| | baz=255 | | | | | | | | |
| **VWDT** | **VWDT** | **1.16** | **229** | | P | **Pn** | **03 57 34.4** | **+0.2** |
| | baz=220 | | | | | | | | |
| VWDT | | | | | *e*S | **Sn** | **03 57 49.0** | **-0.6** |
| | baz=220 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.18** | **247** | *e* | P | **Pn** | **03 57 35.3** | **+0.9** |
| | baz=239 | | | | | | | | |
| WCS | | | | | *e*S | **Sn** | **03 57 50.2** | **+0.3** |
| | baz=239 | | | | | | | | |
| **NMLH** | **Miaoli** | **1.19** | **271** | *e* | P | **Pn** | **03 57 35.1** | **+0.6** |
| | baz=271 | | | | | | | | |
| NMLH | | | | | *e*S | **Sn** | **03 57 50.3** | **+0.2** |
| | baz=271 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.20** | **211** | | P | **Pn** | **03 57 34.2** | **-0.5** |
| | baz=218 | | | | | | | | |
| HGSD | | | | | S | **Sn** | **03 57 50.2** | **-0.2** |
| | baz=218 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.22** | **262** | *e* | P | **Pn** | **03 57 35.8** | **+0.9** |
| | baz=261 | | | | | | | | |
| TWQ1 | | | | | *e*S | **Sn** | **03 57 51.0** | **+0.2** |
| | baz=261 | | | | | | | | |
| **NSY** | **Sanyi** | **1.22** | **265** | | P | **Pn** | **03 57 35.1** | **+0.1** |
| | baz=265 | | | | | | | | |
| NSY | | | | | *e*S | **Sn** | **03 57 51.9** | **+1.0** |
| | baz=265 | | | | | | | | |
| **EHYH** | **Wanrong** | **1.24** | **214** | *e* | P | **Pn** | **03 57 35.5** | **+0.3** |
| | baz=219 | | | | | | | | |
| EHYH | | | | | S | **Sn** | **03 57 49.4** | **-1.9** |
| | baz=219 | | | | | | | | |
| **EHY** | **Hungye** | **1.24** | **215** | *e* | P | **Pn** | **03 57 33.9** | **-1.4** |
| | baz=212 | | | | | | | | |
| EHY | | | | | *e*S | **Sn** | **03 57 49.0** | **-2.4** |
| | baz=212 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.28** | **235** | | P | **Pn** | **03 57 35.8** | **0.0** |
| **SSLB** | **Suanglung** | **1.28** | **235** | *e* | P | **Pn** | **03 57 36.1** | **+0.4** |
| | baz=228 | | | | | | | | |
| SSLB | | | | | *e*S | **Sn** | **03 57 54.2** | **+1.9** |
| | baz=228 | | | | | | | | |
| **TYC** | **Yuchr** | **1.29** | **241** | | P | **Pn** | **03 57 36.5** | **+0.7** |
| | baz=240 | | | | | | | | |
| TYC | | | | | *e*S | **Sn** | **03 57 54.8** | **+2.3** |
| | baz=240 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.34** | **263** | *e* | S | **Sn** | **03 57 53.2** | **-0.4** |
| | baz=262 | | | | | | | | |
| **ECBN** | **Changbin** | **1.34** | **206** | *e* | P | **Pn** | **03 57 36.0** | **-0.6** |
| | baz=191 | | | | | | | | |
| ECBN | | | | | *e*S | **Sn** | **03 57 52.5** | **-1.2** |
| | baz=191 | | | | | | | | |
| **YULB** | **Yu-li** | **1.35** | **213** | | P | **Pn** | **03 57 35.9** | **-0.8** |
| **YULB** | **Yu-li** | **1.35** | **213** | *e* | P | **Pn** | **03 57 35.5** | **-1.1** |
| | baz=217 | | | | | | | | |
| YULB | | | | | *e*S | **Sn** | **03 57 52.1** | **-1.7** |
| | baz=217 | | | | | | | | |
| **EYUL** | **Yuli** | **1.37** | **211** | *e* | P | **Pn** | **03 57 37.5** | **+0.5** |
| | baz=217 | | | | | | | | |
| EYUL | | | | | *e*S | **Sn** | **03 57 53.7** | **-0.8** |
| | baz=217 | | | | | | | | |
| **TWF1** | **Yuli** | **1.38** | **212** | | P | **Pn** | **03 57 36.1** | **-1.0** |
| | baz=217 | | | | | | | | |
| TWF1 | | | | | *e*S | **Sn** | **03 57 52.6** | **-2.1** |
| | baz=217 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.41** | **234** | *e* | P | **Pn** | **03 57 39.0** | **+1.5** |
| | baz=226 | | | | | | | | |
| WHYT | | | | | *e*S | **Sn** | **03 57 57.3** | **+2.0** |
| | baz=226 | | | | | | | | |
| **WJS** | **Zhushan** | **1.43** | **241** | *e* | P | **Pn** | **03 57 39.7** | **+1.9** |
| | baz=252 | | | | | | | | |
| WJS | | | | | *e*S | **Sn** | **03 57 58.4** | **+2.6** |
| | baz=252 | | | | | | | | |
| **WNT** | **Mingjian** | **1.44** | **244** | *e* | P | **Pn** | **03 57 38.3** | **+0.5** |
| | baz=254 | | | | | | | | |
| WNT | | | | | *e*S | **Sn** | **03 57 58.1** | **+2.0** |
| | baz=254 | | | | | | | | |
| **WCHH** | **Zhanghua** | **1.47** | **253** | *e* | P | **Pn** | **03 57 39.6** | **+1.3** |
| | baz=263 | | | | | | | | |
| WCHH | | | | | *e*S | **Sn** | **03 57 57.2** | **+0.5** |
| | baz=263 | | | | | | | | |
| **CHKH** | **Chenggong** | **1.48** | **206** | *e* | P | **Pn** | **03 57 37.9** | **-0.4** |
| | baz=192 | | | | | | | | |
| CHKH | | | | | *e*S | **Sn** | **03 57 55.0** | **-1.8** |
| | baz=192 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.50** | **97** | | P | **Pn** | **03 57 38.9** | **+0.3** |
| IRIF | | | | | S | **Sn** | **03 57 57.6** | **+0.1** |
| **FULB** | **Fuli** | **1.51** | **209** | | P | **Pn** | **03 57 38.6** | **-0.3** |
| | baz=215 | | | | | | | | |
| FULB | | | | | *e*S | **Sn** | **03 57 57.9** | **+0.1** |
| | baz=215 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.57** | **205** | *e* | P | **Pn** | **03 57 40.5** | **+0.8** |
| | baz=192 | | | | | | | | |
| CHKT | | | | | *e*S | **Sn** | **03 57 56.7** | **-2.4** |
| | baz=192 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.59** | **235** | *e* | P | **Pn** | **03 57 41.5** | **+1.5** |
| | baz=244 | | | | | | | | |
| CHN5 | | | | | *e*S | **Sn** | **03 58 02.0** | **+2.3** |
| | baz=244 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.63** | **106** | *e* | P | **Pn** | **03 57 41.5** | **+1.1** |
| HATJ | | | | | *e*S | **Sn** | **03 58 01.6** | **+1.0** |
| **WGK** | **Gukeng** | **1.63** | **239** | *e* | P | **Pn** | **03 57 40.3** | **-0.1** |
| | baz=249 | | | | | | | | |
| WGK | | | | | *e*S | **Sn** | **03 58 02.8** | **+2.2** |
| | baz=249 | | | | | | | | |
| **WDLH** | **Douliu** | **1.65** | **240** | | P | **Pn** | **03 57 40.6** | **0.0** |
| | baz=251 | | | | | | | | |
| WDLH | | | | | *e*S | **Sn** | **03 58 00.9** | **-0.1** |
| | baz=251 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.66** | **217** | *e* | P | **Pn** | **03 57 40.0** | **-0.9** |
| | baz=210 | | | | | | | | |
| ELDTW | | | | | *e*S | **Sn** | **03 58 00.5** | **-1.0** |
| | baz=210 | | | | | | | | |
| **EDH** | **Donghe** | **1.71** | **205** | *e* | P | **Pn** | **03 57 40.6** | **-0.9** |
| | baz=214 | | | | | | | | |
| EDH | | | | | *e*S | **Sn** | **03 58 00.4** | **-2.1** |
| | baz=214 | | | | | | | | |
| **WCKO** | **Fanlu** | **1.74** | **232** | *e* | P | **Pn** | **03 57 44.0** | **+2.1** |
| | baz=240 | | | | | | | | |
| WCKO | | | | | *e*S | **Sn** | **03 58 06.1** | **+2.8** |
| | baz=240 | | | | | | | | |
| **WTK** | **Tuku** | **1.77** | **242** | *e* | P | **Pn** | **03 57 43.2** | **+1.0** |
| | baz=242 | | | | | | | | |
| WTK | | | | | *e*S | **Sn** | **03 58 04.4** | **+0.6** |
| | baz=242 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.77** | **99** | | P | **Pn** | **03 57 43.0** | **+0.8** |
| JKRS | | | | | *e*S | **Sn** | **03 58 05.0** | **+1.1** |
| **CHN2** | **Minshiung** | **1.78** | **236** | *e*S | | **Sn** | **03 58 08.2** | **+4.0** |
| | baz=247 | | | | | | | | |
| **STYH** | **Taoyuan** | **1.81** | **222** | *e* | P | **Pn** | **03 57 44.1** | **+1.3** |
| | baz=215 | | | | | | | | |
| **TPUB** | **Ta-pu** | **1.81** | **228** | *e* | P | **Pn** | **03 57 44.8** | **+1.9** |
| | baz=240 | | | | | | | | |
| TPUB | | | | | *e*S | **Sn** | **03 58 07.4** | **+2.3** |
| | baz=240 | | | | | | | | |
| **LONT** | **Longtian** | **1.84** | **209** | *i* | P | **Pn** | **03 57 42.4** | **-0.8** |
| | baz=196 | | | | | | | | |
| LONT | | | | | S | **Sn** | **03 58 03.8** | **-1.8** |
| | baz=196 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.86** | **227** | | P | **Pn** | **03 57 44.6** | **+1.0** |
| | baz=227 | | | | | | | | |
| WTP | | | | | *e*S | **Sn** | **03 58 08.2** | **+2.0** |
| | baz=227 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.88** | **95** | | P | **Pn** | **03 57 43.9** | **+0.2** |
| JIJ | | | | | *e*S | **Sn** | **03 58 05.7** | **-0.7** |
| **TWK** | **Hsinying** | **1.93** | **230** | *e* | P | **Pn** | **03 57 46.4** | **+1.9** |
| | baz=241 | | | | | | | | |
| **LDUT** | **Ludao** | **1.94** | **197** | *e* | P | **Pn** | **03 57 43.1** | **-1.4** |
| | baz=188 | | | | | | | | |
| LDUT | | | | | *e*S | **Sn** | **03 58 05.0** | **-2.8** |
| | baz=188 | | | | | | | | |
| **TWG** | **Pinlang** | **1.94** | **209** | | P | **Pn** | **03 57 44.2** | **-0.4** |
| | baz=197 | | | | | | | | |
| TWG | | | | | S | **Sn** | **03 58 06.2** | **-1.8** |
| | baz=197 | | | | | | | | |
| **TWGBT** | **Beinan** | **1.94** | **209** | | P | **Pn** | **03 57 43.6** | **-1.0** |
| **TWGBT** | **Beinan** | **1.94** | **209** | *e* | P | **Pn** | **03 57 43.1** | **-1.5** |
| | baz=197 | | | | | | | | |
| TWGBT | | | | | *e*S | **Sn** | **03 58 06.0** | **-2.0** |
| | baz=197 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.96** | **227** | *e* | P | **Pn** | **03 57 47.1** | **+2.2** |
| | baz=239 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.02** | **88** | | P | **Pn** | **03 57 45.9** | **+0.3** |
| JISG | | | | | *e*S | **Sn** | **03 58 09.2** | **-0.7** |
| **SLGT** | **Liugui** | **2.02** | **221** | | P | **Pn** | **03 57 47.4** | **+1.7** |
| | baz=221 | | | | | | | | |
| **ICHU** | **Yijhu** | **2.03** | **235** | *e* | P | **Pn** | **03 57 46.8** | **+1.1** |
| | baz=245 | | | | | | | | |
| **MASBT** | **Mashibuluo** | **2.33** | **215** | | P | **Pn** | **03 57 51.2** | **+1.4** |
| | baz=217 | | | | | | | | |
| **EAST** | **Anshuo** | **2.42** | **208** | *e* | P | **Pn** | **03 57 53.0** | **+1.9** |
| | baz=201 | | | | | | | | |
| **VWUC** | **VWUC** | **2.45** | **281** | *e* | P | **Pn** | **03 57 50.9** | **-0.4** |
| | baz=282 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.53** | **310** | *e* | P | **Pn** | **03 57 52.2** | **-0.3** |
| | baz=311 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.56** | **191** | *e* | P | **Pn** | **03 57 51.2** | **-1.8** |
| | baz=178 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.75** | **281** | | P | **Pn** | **03 57 55.0** | **-0.5** |
| | baz=282 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.91** | **314** | *e* | P | **Pn** | **03 57 57.4** | **-0.3** |
| | baz=316 | | | | | | | | |
| **MHZQ** | **Yeshan** | **3.18** | **300** | *e* | P | **Pn** | **03 58 01.0** | **-0.4** |
| | baz=301 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.38** | **270** | *e* | P | **Pn** | **03 58 03.2** | **-0.8** |
| | baz=271 | | | | | | | | |

**IDC 28 04:01:07.5±3.5, 55.57N×86.47E, h0km, mbtmp2.5/2, ML2.4/2, Error ellipse: s-maj=30.5km s-min=28.8km az=165.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.89** | **211** | I | I | 04 12 40.0 | |
| | baz=26,slow=331,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.89** | **211** | Pn | Pn | 04 01 40.7 | -0.2 |
| | 2.3nm,0.3s,baz=32,slow=17,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 04 02 07.9 | |
| | 1.5nm,0.3s,baz=30,slow=30,SNR=3.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.88** | **227** | Pn | Pn | 04 02 50.7 | +1.2 |
| | baz=47,slow=14,SNR=4.2 | | | | | | |
| KURBB | | | | Lg | Lg | 04 04 44.4 | |
| | baz=50,slow=28,SNR=1.8 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **9.17** | **198** | Pn | Pn | 04 03 19.7 | -1.3 |
| | 0.1nm,0.3s,baz=15,slow=13,SNR=2.0 | | | | | | |
| | 0.1nm,0.5s | | | | | | |

*NEIC* ***28*** *04:05:24.5±0.7, 7.01S±0.07×155.63E±0.05, h56km±8km, mb4.6/40, Error ellipse: s-maj=10.8km s-min=5.7km az=161.0*

*IDC* ***28*** *04:05:24.1±3.5, 7.03S×155.62E, h55km±30km, mb4.1/19, mbtmp4.3/21, ML3.1/3, MS3.6/10, Error ellipse: s-maj=19.1km s-min=12.8km az=70.0*

**ISC 28 04:05:23.7±0.4, 7.01S±0.07×155.68E±0.07, h50km, n94, o076/85, mb4.6/38, MS3.6/9, Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **4.48** | **308** | Pn | **Pn** | **04 06 29.1** | **-0.1** |
| **HNR** | **Honiara** | **4.86** | **120** | Pn | **Pn** | **04 06 35.7** | **+1.3** |
| **HNR** | **Honiara** | **4.86** | **120** | LR | LR | 04 08 24.9 | |
| | comp=Z,11μm,21.2s,baz=296,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **8.76** | **254** | P | **Pn** | **04 07 28.5** | **+0.7** |
| | 4.5nm,0.3s,baz=53,slow=7.8,SNR=9.3 | | | | | | |
| PMG | | | | S | **Sn** | **04 09 08.4** | **+3.0** |
| | 11nm,0.3s,baz=31,slow=18,SNR=4.8 | | | | | | |
| PMG | | | | LR | LR | 04 10 36.6 | |
| | comp=Z,439nm,20.8s,baz=89,slow=36 | | | | | | |
| | 38nm,0.7s | | | | | | |
| **COEN** | **Coen** | **14.10** | **240** | Pn | **Pn** | **04 08 40.3** | **-0.5** |
| **CTA** | **Charters Tower** | **15.90** | **214** | P | **Pn** | **04 09 03.9** | **-0.4** |
| | baz=34,slow=15,SNR=4.9 | | | | | | |
| CTA | | | | LR | LR | 04 14 21.9 | |
| | comp=Z,19nm,19.8s,baz=71,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.23** | **146** | P | **P** | **04 09 32.9** | **-0.1** |
| **DZM** | **Mont Dzumac** | **18.23** | **146** | P | **P** | **04 09 33.2** | **+0.2** |
| | 0.3nm,0.3s,baz=311,slow=20,SNR=1.5 | | | | | | |
| | 4.1nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **23.11** | **332** | LR | LR | 04 18 36.8 | |
| | comp=Z,40nm,20.4s,baz=146,slow=34 | | | | | | |
| **WR0** | **Warramunga Arr** | **24.21** | **236** | P | **P** | **04 10 35.0** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 04 10 44.3 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **WB0** | **Warramunga Arr** | **24.24** | **236** | P | **P** | **04 10 35.2** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 04 10 45.2 | |
| | comp=Z,45nm,1.4s | | | | | | |
| **MSVF** | **Nonsavu** | **24.28** | **118** | P | **P** | **04 10 36.5** | **-0.1** |
| **MSVF** | **Nonsavu** | **24.28** | **118** | P | **P** | **04 10 36.6** | **-0.1** |
| | comp=Z,24nm,0.8s,baz=311,slow=19,SNR=9.1 | | | | | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **24.36** | **236** | P | **P** | **04 10 36.2** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 04 10 45.7 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **24.37** | **236** | P | **P** | **04 10 36.3** | **-1.1** |
| | comp=Z,3.4nm,0.7s,baz=60,slow=9.5,SNR=29 | | | | | | |
| WRA | | | | PcP | **PcP** | **04 14 15.7** | **-0.3** |
| | comp=Z,0.8nm,0.6s,baz=60,slow=1.9,SNR=4.9 | | | | | | |
| WRA | | | | LR | LR | 04 20 07.1 | |
| | comp=Z,192nm,18.1s,baz=50,slow=36 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **24.85** | **255** | P | **P** | **04 10 41.2** | **-0.6** |
| MTN | | | | IAmb | IAmb | 04 10 51.3 | |
| | comp=Z,31nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **26.67** | **229** | P | **P** | **04 10 59.1** | **+0.9** |
| **ASAR** | **Alice Springs** | **26.68** | **229** | P | **P** | **04 10 57.0** | **-1.3** |
| | comp=Z,0.5nm,0.8s,baz=56,slow=9.8,SNR=4.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 14 20.8** | **-0.4** |
| | comp=Z,1.3nm,0.7s,baz=68,slow=2.5,SNR=6.6 | | | | | | |
| ASAR | | | | LR | LR | 04 20 58.1 | |
| | comp=Z,173nm,18.4s,baz=108,slow=35 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.57** | **23** | T | T | 04 39 29.3 | |
| | baz=202,slow=75,SNR=300 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.57** | **23** | T | T | 04 39 28.8 | |
| | baz=202,slow=75,SNR=385 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.59** | **23** | T | T |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| JMN | | | | | IAmb | IAmb | 04 13 54.1 | | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **46.32** | **340** | | P | **P** | **04 13 43.3** | **-1.4** | |
| | comp=Z,1.0nm,0.4s,baz=168,slow=7.7,SNR=2.5 | | | | | | | | |
| MJAR | | | | | LR | LR | 04 31 29.1 | | |
| | comp=Z,18nm,20.0s,baz=178,slow=34 | | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **KSRS** | **Korea Array** | **51.27** | **332** | | P | **P** | **04 14 22.2** | **-0.4** | |
| | comp=Z,1.9nm,0.7s,baz=145,slow=8.0,SNR=9.0 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.28** | **339** | | P | **P** | **04 14 52.7** | **+0.7** | |
| | comp=Z,6.5nm,1.0s,baz=142,slow=7.3,SNR=12 | | | | | | | | |
| | comp=Z,6.5nm,1.0s | | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **59.91** | | **1** | P | **P** | **04 15 25.6** | **+1.2** | |
| **PETK** | **Petropavlovsk-** | **59.91** | | **1** | P | **P** | **04 15 24.9** | **+0.5** | |
| | comp=Z,2.6nm,0.6s,baz=183,slow=9.8,SNR=4.0 | | | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | | | |
| **PHRA** | **Phrae** | **60.27** | **296** | | P | **P** | **04 15 28.6** | **+1.1** | |
| **CMAR** | **Chiang Mai Arr** | **61.40** | **295** | | P | **P** | **04 15 35.6** | **+0.4** | |
| | comp=Z,7.5nm,0.7s,baz=118,slow=5.0,SNR=26 | | | | | | | | |
| | comp=Z,7.5nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **69.72** | **327** | | P | **P** | **04 16 28.8** | **+0.3** | |
| | comp=Z,5.2nm,0.8s,baz=134,slow=5.9,SNR=22 | | | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| **M16K** | **Timber Creek** | **76.48** | | **21** | P | **P** | **04 17 08.7** | **+0.7** | |
| M16K | | | | | IAmb | IAmb | 04 17 16.1 | | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **P19K** | **Oil Pt** | **77.75** | | **24** | P | **P** | **04 17 15.2** | **-0.1** | |
| **L19K** | **White Mountain** | **78.72** | | **21** | P | **P** | **04 17 20.7** | **+0.1** | |
| L19K | | | | | IAmb | IAmb | 04 17 22.3 | | |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| **SUA** | **Susitna One** | **79.82** | | **23** | P | **P** | **04 17 26.4** | **-0.3** | |
| SUA | | | | | IAmb | IAmb | 04 17 28.4 | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **SKT** | **Skwentna** | **79.83** | | **22** | P | **P** | **04 17 25.4** | **-1.2** | |
| SKT | | | | | IAmb | IAmb | 04 17 28.8 | | |
| | comp=Z,8.2nm,1.3s | | | | | | | | |
| **H19K** | **Roundabout Mou** | **80.38** | | **18** | P | **P** | **04 17 29.6** | **+0.3** | |
| H19K | | | | | IAmb | IAmb | 04 17 30.4 | | |
| | comp=Z,14nm,1.5s | | | | | | | | |
| **G19K** | **Purcell Mounta** | **80.59** | | **18** | P | **P** | **04 17 30.7** | **+0.1** | |
| G19K | | | | | IAmb | IAmb | 04 17 32.3 | | |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **80.86** | | **17** | P | **P** | **04 17 31.7** | **-0.3** | |
| F19K | | | | | IAmb | IAmb | 04 17 43.9 | | |
| | comp=Z,6.2nm,1.4s | | | | | | | | |
| **FID** | **Port Fidalgo** | **81.15** | | **25** | P | **P** | **04 17 33.3** | **-0.3** | |
| **C18K** | **Utukok River** | **81.23** | | **15** | P | **P** | **04 17 33.4** | **-0.6** | |
| C18K | | | | | IAmb | IAmb | 04 17 46.9 | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **E19K** | **Redstone River** | **81.44** | | **17** | P | **P** | **04 17 35.5** | **+0.4** | |
| E19K | | | | | IAmb | IAmb | 04 17 36.9 | | |
| | comp=Z,7.4nm,0.8s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **81.61** | | **17** | P | **P** | **04 17 36.1** | **+0.1** | |
| **H21K** | **Melozitna Rive** | **81.62** | | **19** | P | **P** | **04 17 36.4** | **+0.3** | |
| **RND** | **Reindeer** | **81.66** | | **22** | P | **P** | **04 17 36.1** | **-0.3** | |
| RND | | | | | IAmb | IAmb | 04 17 37.0 | | |
| | comp=Z,7.1nm,1.1s | | | | | | | | |
| **BWN** | **Browne** | **81.87** | | **21** | P | **P** | **04 17 37.3** | **-0.1** | |
| **D19K** | **Kuna River** | **81.91** | | **16** | P | **P** | **04 17 38.1** | **+0.5** | |
| D19K | | | | | IAmb | IAmb | 04 17 47.8 | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **G21K** | **Allakaket** | **81.93** | | **18** | P | **P** | **04 17 38.1** | **+0.4** | |
| **C19K** | **Lookout Ridge** | **81.96** | | **15** | P | **P** | **04 17 37.8** | **-0.1** | |
| C19K | | | | | IAmb | IAmb | 04 17 39.2 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | | |
| **NEA2** | **Nenana** | **82.26** | | **21** | P | **P** | **04 17 39.0** | **-0.5** | |
| **F21K** | **Alatna River** | **82.39** | | **18** | P | **P** | **04 17 40.0** | **-0.1** | |
| **GLB** | **Gilahina Butte** | **82.62** | | **25** | P | **P** | **04 17 41.5** | **+0.1** | |
| GLB | | | | | IAmb | IAmb | 04 17 42.0 | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **82.74** | | **21** | P | **P** | **04 17 40.6** | **-1.3** | |
| **H23K** | **Yukon River** | **82.80** | | **20** | P | **P** | **04 17 42.5** | **+0.2** | |
| **QSPA** | **South Pole Qui** | **82.97** | **180** | | P | **P** | **04 17 43.0** | **-0.3** | |
| QSPA | | | | | IAmb | IAmb | 04 17 43.9 | | |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **82.97** | **180** | | P | **P** | **04 17 42.7** | **-0.6** | |
| | comp=Z,7.8nm,0.8s,baz=334,slow=1.5,SNR=59 | | | | | | | | |
| | comp=Z,7.8nm,0.8s | | | | | | | | |
| **E21K** | **Killik River** | **83.02** | | **17** | P | **P** | **04 17 43.3** | **-0.1** | |
| E21K | | | | | IAmb | IAmb | 04 17 48.5 | | |
| | comp=Z,8.1nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **83.14** | | **21** | P | **P** | **04 17 42.6** | **-1.4** | |
| | comp=Z,1.2nm,0.8s,baz=243,slow=4.7,SNR=12 | | | | | | | | |
| ILAR | | | | | LR | LR | 04 49 36.7 | | |
| | comp=Z,69nm,21.9s,baz=266,slow=32 | | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **83.86** | **319** | | P | **P** | **04 17 47.6** | **-0.6** | |
| | comp=Z,2.9nm,0.7s,baz=102,slow=6.0,SNR=24 | | | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.57** | **326** | | P | **P** | **04 17 50.9** | **-0.6** | |
| | comp=Z,1.0nm,0.3s,baz=108,slow=7.6,SNR=3.6 | | | | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **MAW** | **Mawson** | **84.65** | **203** | | P | **P** | **04 17 51.2** | **-0.4** | |
| | comp=Z,7.6nm,0.9s,baz=96,slow=6.7,SNR=20 | | | | | | | | |
| | comp=Z,7.6nm,0.9s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **87.29** | **322** | | P | **P** | **04 18 03.6** | **-1.5** | |
| | comp=Z,0.4nm,0.4s,baz=96,slow=5.0,SNR=6.9 | | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | | |
| **INK** | **Inuvik** | **89.49** | | **21** | LR | LR | 04 53 46.7 | | |
| | comp=Z,69nm,20.9s,baz=292,slow=32 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.20** | | **52** | P | **P** | **04 18 25.4** | **+1.4** | |
| | comp=Z,0.1nm,0.3s,baz=256,slow=7.3,SNR=2.4 | | | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **92.71** | **323** | | P | **P** | **04 18 29.7** | **-0.7** | |
| | comp=Z,1.2nm,0.7s,baz=103,slow=4.6,SNR=5.4 | | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | | |
| **PLCA** | **Paso Flores** | **116.30** | **142** | | PKP | **PKPdf** | **04 24 02.0** | **-0.1** | |
| | comp=Z,1.3nm,0.6s,baz=238,slow=5.3,SNR=6.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **119.93** | **341** | | PKP | **PKPdf** | **04 24 07.8** | **-0.7** | |
| | comp=Z,0.5nm,0.8s,baz=37,slow=1.7,SNR=2.3 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **128.93** | **345** | | PKP | **PKPdf** | **04 24 25.6** | **-0.2** | |
| | comp=Z,1.8nm,0.9s,baz=27,slow=3.3,SNR=2.8 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **130.71** | **329** | | PKP | **PKPdf** | **04 24 29.9** | **+0.2** | |
| | comp=Z,0.9nm,0.5s,baz=323,slow=5.1,SNR=3.6 | | | | | | | | |
| **LPAZ** | **La Paz** | **130.85** | **118** | | PKP | **PKPdf** | **04 24 31.6** | **+0.3** | |
| | comp=Z,1.3nm,0.8s,baz=180,slow=2.0,SNR=4.0 | | | | | | | | |
| **CPUP** | **Villa Florida** | **133.91** | **137** | | PKP | **PKPdf** | **04 24 36.1** | **0.0** | |
| | comp=Z,1.7nm,0.7s,baz=229,slow=0.4,SNR=4.8 | | | | | | | | |
| **PESTR** | **Estremoz** | **144.87** | **337** | | *e*PKPdf | PKPbc | 04 24 55.3 | +0.5 | |
| **PMTG** | **Montargil** | **144.94** | **338** | | *e*PKPdf | PKPbc | 04 24 55.2 | +0.2 | |
| **PBAR** | **Barrancos** | **145.25** | **336** | | *e*PKPdf | **PKPdf** | **04 24 56.6** | **+0.3** | |
| **EVO** | **Evora** | **145.32** | **337** | | *e*PKPdf | **PKPdf** | **04 24 56.7** | **+0.3** | |
| **PBEJ** | **Beja** | **145.71** | **337** | | *e*PKPdf | **PKPab** | **04 24 58.7** | **+0.8** | |
| **PNCL** | **Nicolau / Gran** | **145.89** | **337** | | *e*PKPdf | **PKPab** | **04 24 58.5** | **0.0** | |
| **PCVE** | **Castro Verde** | **146.12** | **336** | | *e*PKPdf | **PKPab** | **04 25 00.6** | **+1.2** | |
| **PBDV** | **Barranco-do-Ve** | **146.41** | **336** | | *e*LQ | LQ | 04 25 11.3 | | |
| **BDFB** | **Brasilia** | **147.49** | **134** | | PKP | **PKPdf** | **04 25 00.6** | **-0.3** | |
| | comp=Z,16nm,0.7s,baz=233,slow=1.7,SNR=24 | | | | | | | | |
| BDFB | | | | | PKPbc | **PKPbc** | **04 25 03.4** | **0.0** | |
| | comp=Z,17nm,0.7s,baz=229,slow=2.7,SNR=16 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.68** | **285** | | PKP | **PKPdf** | **04 25 09.6** | **-0.7** | |
| | comp=Z,0.3nm,0.7s,baz=15,slow=2.9,SNR=2.2 | | | | | | | | |
| TORD | | | | | PKPbc | **PKPbc** | **04 25 17.5** | **-0.7** | |
| | comp=Z,0.8nm,0.7s,baz=63,slow=2.0,SNR=8.1 | | | | | | | | |

**NNC 28 04:15:10.5±11.0, 36.95N×70.73E, h0km, mb4.1, mpv3.7, 3C-1D, Error ellipse: s-maj=93.5km s-min=81.0km az=165.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **KK31** | **Karatay Array** | **6.14** | **359** | ⇓P | | Pn | 04 16 43.9 | | +1.3 |
| | 4.0nm,0.6s,baz=178,slow=13,SNR=42 | | | | | | | | |
| KK31 | | | | ⇑S | | Sn | 04 17 55.6 | | +2.1 |
| | 2.9nm,0.5s,baz=186,slow=22,SNR=6.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.37** | **26** | P | | Pn | 04 16 46.2 | | +0.4 |
| | 1.7nm,0.4s | | | | | | | | |
| AAK | | | | S | | Sn | 04 18 02.1 | | +2.7 |
| | 6.5nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.03** | **31** | ⇑P | | Pn | 04 16 54.0 | | -0.9 |
| | 4.8nm,0.6s | | | | | | | | |
| TKM2 | | | | ⇑S | | Sn | 04 18 12.9 | | -2.8 |
| | 0.7nm,0.5s | | | | | | | | |

*TEH **28** 04:17:36.8, 31.86N×52.77E, h5km, ML4.9*
*IDC **28** 04:17:37.5±0.6, 31.79N×52.69E, h0km, mb4.2/26, mbtmp4.3/34, ML4.2/8, MS4.0/51, Error ellipse: s-maj=13.0km s-min=10.7km az=129.0*
*GCMT **28** 04:17:37.9±0.3, 31.68N±0.02×52.78E±0.02, h22km±1km, MW4.8/86, Moment Tensor Solution. s15,c16; s86,c124; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.07±.09; $M_{\theta\theta}$-0.45±.07; $M_{\phi\phi}$0.51±.07; $M_{r\theta}$0.21±.11; $M_{\theta\phi}$1.75±.07;*

*$M_0$9.48±.12; Best double couple: $M_0$1.88400×$10^{16}$ NP1:$\phi_0$352.00000°, δ83.00000°, λ167.00000°. NP2: $\phi_0$83.00000°, δ77.00000°, λ7.00000°. Principal axes: T 1.9750, Plg14.0000°, Azm307.0000°; N -0.1830, Plg75.0000°, Azm145.0000°; P -1.7920, Plg4.0000°, Azm38.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*MOS **28** 04:17:37.4±1.4, 31.63N×52.64E, h10km, mb4.8/32, MS4.0/8 Error ellipse: s-maj=5.0km s-min=4.1km az=84.7*
*NEIC **28** 04:17:39.9±1.9, 31.73N±0.08×52.75E±0.09, h10km±1km, mb4.6/54, Error ellipse: s-maj=14.1km s-min=12.3km az=210.0*
*OMAN **28** 04:17:43.7±0.1, 31.65N×52.90E, h34km±1km, mb4.9/36, ms3.7/10, Error ellipse: s-maj=1.0km s-min=0.7km az=264.0*
*DSN **28** 04:17:44.5±0.7, 31.33N×52.60E, h15km, mb4.3/1, ML4.6/14, Error ellipse: s-maj=11.8km s-min=4.4km az=35.0*
*GII **28** 04:17:45.4±0.2, 31.74N×52.78E, h10km, confirmed*
**ISC 28 04:17:39.3±0.3, 31.73N±0.03×52.78E±0.03, h10km, n463, σ1.180/484, mb4.5/96, MS4.1/61, 33C-22D, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **IRAM** | **Ramesheh** | **0.35** | **283** | Pg | | **Pg** | **04 17 44.0** | | **-2.4** |
| **ISAD** | **Sadrabad** | **0.79** | **76** | Pg | | **Pg** | **04 17 52.3** | | **-2.3** |
| **IGAR** | **Gharneh** | **0.92** | **317** | Pg | | **Pg** | **04 17 54.0** | | **-3.1** |
| **IZEF** | **Zefreh** | **1.22** | **342** | Pg | | **Pn** | **04 17 58.9** | | **-3.9** |
| **KLNJ** | **Kolanjah** | **1.25** | **235** | Pg | | **Pn** | **04 18 01.0** | | **-2.2** |
| **IBRJ** | **Brojen** | **1.31** | **278** | Pg | | **Pn** | **04 18 01.2** | | **-2.7** |
| **ICHK** | **Chekchek** | **1.47** | **69** | Pg | | **Pn** | **04 18 04.6** | | **-1.6** |
| **IMEH** | **Mehriz** | **1.60** | **102** | Pg | | **Pn** | **04 18 07.1** | | **-0.8** |
| **ANAR** | **Anarak** | **1.66** | **29** | Pg | | **Pn** | **04 18 07.2** | | **-1.5** |
| **ZNGN** | **Zangian** | **1.69** | **284** | Pg | | **Pn** | **04 18 08.2** | | **-1.0** |
| **IPIR** | **Pirpir** | **1.86** | **301** | Pg | | **Pn** | **04 18 10.6** | | **-1.0** |
| **JHBN** | **Jahan bin** | **1.87** | **286** | Pn | | **Pn** | **04 18 11.0** | | **-0.6** |
| **IKLH** | **Kolahrood** | **1.88** | **328** | Pg | | **Pn** | **04 18 10.0** | | **-1.8** |
| **SHI** | **Shiraz** | **2.10** | **186** | Pn | | **Pb** | **04 18 17.5** | | **0.0** |
| **QAMS** | **Qamsar** | **2.32** | **330** | Pn | | **Pn** | **04 18 16.8** | | **-1.0** |
| **KAZ2** | **Kazeron-Fars-I** | **2.32** | **205** | Pn | | **Pn** | **04 18 19.9** | | **+2.2** |
| **IBAF** | **Bafgh** | **2.38** | **93** | Pn | | **Pn** | **04 18 19.6** | | **+1.1** |
| **ABEH** | **Behbahan** | **2.44** | **243** | Pn | | **Pn** | **04 18 21.2** | | **+1.9** |
| **ISFB** | **Sefidab** | **2.65** | **350** | Pn | | **Pn** | **04 18 21.4** | | **-0.9** |
| **AHBU** | **AHRAM** | **3.13** | **205** | Pn | | **Pn** | **04 18 31.0** | | **+2.3** |
| **JHRM** | **Jahrom** | **3.29** | **168** | Pn | | **Pn** | **04 18 33.4** | | **+2.4** |
| **ZRDN** | **Zarand Kerman** | **3.30** | **102** | Pn | | **Pn** | **04 18 32.6** | | **+1.3** |
| **IVRN** | **Varamin** | **3.37** | **345** | Pn | | **Pn** | **04 18 31.2** | | **-1.0** |
| **IQOM** | **Qom** | **3.42** | **336** | Pn | | **Pn** | **04 18 32.0** | | **-0.9** |
| **KHGB** | **Koh Gabri** | **3.44** | **112** | Pn | | **Pn** | **04 18 34.6** | | **+1.3** |
| **TPRV** | **Parvadeh(Tabas** | **3.55** | **68** | Pn | | **Pn** | **04 18 34.9** | | **+0.4** |
| **DSBU** | **Dashti - Bushe** | **3.61** | **202** | Pn | | **Pn** | **04 18 37.4** | | **+2.1** |
| **TVBK** | **TV Kerman** | **3.84** | **116** | Pn | | **Pn** | **04 18 40.4** | | **+1.6** |
| **IDMV** | **Damavand** | **3.89** | **351** | Pn | | **Pn** | **04 18 38.6** | | **-0.8** |
| **TNSJ** | **Nastanj** | **3.92** | **54** | Pn | | **Pn** | **04 18 39.5** | | **-0.2** |
| **NGRK** | **Negar Kerman** | **3.99** | **120** | Pn | | **Pn** | **04 18 43.0** | | **+2.1** |
| **KRM1** | **Kerman Provinc** | **4.04** | **106** | Pn | | **Pn** | **04 18 43.7** | | **+2.3** |
| **TKDS** | **Kouhdasht(Taba** | **4.11** | **62** | Pn | | **Pn** | **04 18 42.1** | | **-0.3** |
| **LAR1** | **LAR** | **4.28** | **161** | Pn | | **Pn** | **04 18 47.3** | | **+2.7** |
| **HSAM** | **Samen** | **4.30** | **306** | Pn | | **Pn** | **04 18 44.5** | | **-0.5** |
| **HAGD** | **Aghdareh** | **4.34** | **316** | Pn | | **Pn** | **04 18 45.2** | | **-0.4** |
| **LMD1** | **Lamerd** | **4.39** | **176** | Pn | | **Pn** | **04 18 48.3** | | **+2.2** |
| **IDOB** | **Doab** | **4.39** | **299** | Pn | | **Pn** | **04 18 46.5** | | **+0.3** |
| **CHMN** | **Cheshme madani** | **4.50** | **113** | Pn | | **Pn** | **04 18 49.7** | | **+1.9** |
| **IKFM** | **Kafar-mosalman** | **4.53** | **295** | Pn | | **Pn** | **04 18 48.0** | | **0.0** |
| **QABG** | **Abgarm-Qazvin** | **4.78** | **327** | Pn | | **Pn** | **04 18 51.4** | | **-0.3** |
| **TAPT** | **Tabas- Tapeh t** | **4.83** | **48** | Pn | | **Pn** | **04 18 52.0** | | **-0.2** |
| **KBD** | **Kabd** | **5.08** | **241** | P | | **Pn** | **04 18 56.8** | | **+1.3** |
| KBD | | | | S | | **Sn** | **04 19 57.2** | | **+3.0** |
| **IGZV** | **Ghazvin** | **5.11** | **336** | Pn | | **Pn** | **04 18 55.2** | | **-0.9** |
| **ITEG** | **Tejag** | **5.18** | **75** | Pn | | **Pn** | **04 18 57.7** | | **+0.6** |
| **GENO** | **Geno** | **5.23** | **145** | Pn | | **Pn** | **04 18 59.0** | | **+1.2** |
| **SNQR** | **Sonqor, Kerman** | **5.33** | **307** | Pn | | **Pn** | **04 18 58.0** | | **-1.2** |
| **IKOO** | **Kooshah** | **5.33** | **81** | Pn | | **Pn** | **04 19 00.9** | | **+1.7** |
| **IBND** | **Bandar-abas** | **5.38** | **142** | Pn | | **Pn** | **04 19 00.9** | | **+1.3** |
| **BSRN** | **Basiran** | **5.40** | **86** | Pn | | **Pn** | **04 19 00.2** | | **+0.1** |
| **KCHF** | **Cheshme Sefid,** | **5.45** | **299** | Pn | | **Pn** | **04 19 00.3** | | **-0.5** |
| **AFRZ** | **Afriz** | **5.53** | **71** | Pn | | **Pn** | **04 19 02.3** | | **+0.5** |
| **KBAM** | **BAM** | **5.54** | **116** | Pn | | **Pn** | **04 19 03.9** | | **+2.0** |
| **KHNJ** | **Kahnooj** | **5.70** | **130** | Pn | | **Pn** | **04 19 05.9** | | **+1.8** |
| **ILIN** | **Lien** | **5.82** | **305** | Pn | | **Pn** | **04 19 06.6** | | **+0.7** |
| **ILBA** | **Ilam Banvizeh** | **5.86** | **291** | Pn | | **Pn** | **04 19 06.2** | | **-0.1** |
| **IMND** | **Minoodasht** | **5.92** | **21** | Pn | | **Pn** | **04 19 06.4** | | **-0.7** |
| **SAKB** | **Bahrain** | **6.06** | **200** | P | | **Pn** | **04 19 10.6** | | **+1.6** |
| SAKB | | | | S | | **Sn** | **04 20 21.9** | | **+3.5** |
| **SHMA** | **Al-Shehemyia** | **6.07** | **196** | P | | **Pn** | **04 19 10.6** | | **+1.5** |
| | SNR=49 | | | | | | | | |
| SHMA | | | | S | | **Sn** | **04 20 21.2** | | **+2.7** |
| **IDAH** | **Dahanechah** | **6.09** | **79** | Pn | | **Pn** | **04 19 10.1** | | **+0.4** |
| **IDHR** | **Dehrash** | **6.12** | **301** | Pn | | **Pn** | **04 19 09.1** | | **-0.6** |
| **SBZV** | **Sabzevar** | **6.13** | **39** | Pn | | **Pn** | **04 19 09.7** | | **-0.5** |
| **NHDN** | **Nehbandan** | **6.21** | **91** | Pn | | **Pn** | **04 19 12.7** | | **+1.5** |
| **GLG1** | **Gilan-e-Gharb** | **6.25** | **294** | Pn | | **Pn** | **04 19 11.8** | | **+0.1** |
| **SHME** | **Shamm** | **6.38** | **152** | P | | **Pn** | **04 19 14.2** | | **+0.7** |
| SHME | | | | S | | **Sn** | **04 20 24.8** | | **-1.5** |
| **SHME** | **Shamm** | **6.38** | **152** | P | | **Pn** | **04 19 14.1** | | **+0.7** |
| | SNR=5.4 | | | | | | | | |
| **MRVT** | **Maraveh tapeh** | **6.51** | **24** | Pn | | **Pn** | **04 19 14.6** | | **-0.7** |
| **BANOM** | **Banah** | **6.56** | **151** | P | | **Pn** | **04 19 16.3** | | **+0.4** |
| **BANOM** | **Banah** | **6.56** | **151** | P | | **Pn** | **04 19 16.9** | | **+1.0** |
| BANOM | | | | S | | **Sn** | **04 20 30.4** | | **-0.3** |
| **SHRT** | **Shahrakht** | **6.61** | **71** | Pn | | **Pn** | **04 19 18.3** | | **+1.6** |
| **JRN** | **Qarnain Island** | **6.76** | **179** | P | | **Pn** | **04 19 20.7** | | **+2.0** |
| | SNR=5.5 | | | | | | | | |
| JRN | | | | S | | **Sn** | **04 20 35.1** | | **-0.7** |
| **ISFR** | **Sfrayin** | **6.84** | **38** | Pn | | **Pn** | **04 19 19.7** | | **-0.3** |
| **IAKL** | **Akhelmad** | **6.94** | **44** | Pn | | **Pn** | **04 19 21.6** | | **+0.3** |
| **IPAY** | **Payeh** | **6.98** | **46** | Pn | | **Pn** | **04 19 22.0** | | **+0.1** |
| **MASF** | **Masafi** | **7.00** | **154** | P | | **Pn** | **04 19 22.9** | | **+0.9** |
| | SNR=14 | | | | | | | | |
| MASF | | | | S | | **Sn** | **04 20 41.0** | | **-0.6** |
| **MSFE** | **Esma-Masafi** | **7.01** | **154** | *i* P | | **Pn** | **04 19 22.9** | | **+0.8** |
| | SNR=48 | | | | | | | | |
| **TRNA** | **Turayna** | **7.11** | **192** | P | | **Pn** | **04 19 24.3** | | **+0.9** |
| | SNR=14 | | | | | | | | |
| TRNA | | | | S | | **Sn** | **04 20 46.0** | | **+1.8** |
| **MDH** | **Madha** | **7.11** | **153** | *i* P | | **Pn** | **04 19 23.9** | | **+0.5** |
| | SNR=43 | | | | | | | | |
| **MDH** | **Madha** | **7.11** | **153** | P | | **Pn** | **04 19 24.0** | | **+0.5** |
| | SNR=14 | | | | | | | | |
| MDH | | | | S | | **Sn** | **04 20 42.8** | | **-1.7** |
| **SMRA** | **Abu-Samra** | **7.17** | **194** | P | | **Pn** | **04 19 24.8** | | **+0.6** |
| | SNR=6.6 | | | | | | | | |
| SMRA | | | | S | | **Sn** | **04 20 46.5** | | **+0.7** |
| **NAZ** | **Nazwa, Dubai** | **7.18** | **159** | *i* P | | **Pn** | **04 19 25.8** | | **+1.3** |
| | SNR=30 | | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **7.18** | **159** | P | | **Pn** | **04 19 26.0** | | **+1.6** |
| | SNR=30 | | | | | | | | |
| NAZ | | | | S | | **Sn** | **04 20 45.2** | | **-0.9** |
| **IHSH** | **Hashtrud** | **7.19** | **322** | Pn | | **Pn** | **04 19 25.0** | | **+0.2** |
| **ZHDN** | **Zahedan** | **7.30** | **106** | Pn | | **Pn** | **04 19 28.0** | | **+1.7** |
| **FAQ** | **Al Faqa, Dubai** | **7.39** | **160** | *i* P | | **Pn** | **04 19 28.1** | | **+0.8** |
| | SNR=13 | | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **7.39** | **160** | P | | **Pn** | **04 19 28.5** | | **+1.2** |
| | SNR=13 | | | | | | | | |
| FAQ | | | | S | | **Sn** | **04 20 50.0** | | **-1.2** |
| **AJN** | **Ajban** | **7.40** | **164** | *i* P | | **Pn** | **04 19 28.1** | | **+0.7** |
| | SNR=5.4 | | | | | | | | |
| **AJN** | **Ajban** | **7.40** | **164** | P | | **Pn** | **04 19 29.4** | | **+1.9** |
| | SNR=5.5 | | | | | | | | |
| AJN | | | | P | | **Pn** | **04 19 29.4** | | **+1.9** |
| | SNR=5.5 | | | | | | | | |
| AJN | | | | S | | **Sn** | **04 20 50.5** | | **-1.0** |
| AJN | | | | S | | **Sn** | **04 20 50.5** | | **-1.0** |
| **UOSS** | **Minazif** | **7.40** | **155** | Pn | | **Pn** | **04 19 27.7** | | **+0.2** |
| **UOSS** | **Minazif** | **7.40** | **155** | *i* P | | **Pn** | **04 19 27.9** | | **+0.5** |
| | SNR=26 | | | | | | | | |
| **UOSS** | **Minazif** | **7.40** | **155** | P | | **Pn** | **04 19 28.0** | | **+0.5** |
| UOSS | | | | P | | **Pn** | **04 19 28.0** | | **+0.5** |
| UOSS | | | | S | | **Sn** | **04 20 50.6** | | **-0.9** |
| UOSS | | | | S | | **Sn** | **04 20 50.6** | | **-0.9** |
| **ASUD** | **Al Ashush, Dub** | **7.42** | **162** | *i* P | | **Pn** | **04 19 28.9** | | **+1.1** |
| | SNR=9.8 | | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **7.42** | **162** | P | | **Pn** | **04 19 29.6** | | **+1.8** |
| | SNR=6.9 | | | | | | | | |
| ASUD | | | | S | | **Sn** | **04 20 52.1** | | **0.0** |
| **HATD** | **Hatta, Dubai** | **7.49** | **156** | P | | **Pn** | **04 19 29.9** | | **+1.2** |
| **HATD** | **Hatta, Dubai** | **7.49** | **156** | P | | **Pn** | **04 19 30.1** | | **+1.5** |
| | SNR=9.2 | | | | | | | | |
| HATD | | | | S | | **Sn** | **04 20 52.8** | | **-0.8** |
| **IKRD** | **Kardeh** | **7.51** | **46** | Pn | | **Pn** | **04 19 29.6** | | **+0.5** |
| **JRKH** | **Jarkhoshk** | **7.55** | **54** | Pn | | **Pn** | **04 19 29.9** | | **+0.3** |
| **ASHO** | **Ashiyiah** | **7.59** | **157** | *i* P | | **Pn** | **04 19 30.8** | | **+0.7** |
| | SNR=39 | | | | | | | | |
| **ASHO** | **Ashiyiah** | **7.59** | **157** | P | | **Pn** | **04 19 31.0** | | **+0.9** |
| | SNR=87 | | | | | | | | |
| ASHO | | | | S | | **Sn** | **04 20 54.9** | | **-1.3** |
| **IMYA** | **Miami** | **7.62** | **51** | Pn | | **Pn** | **04 19 30.9** | | **+0.4** |
| **SLWR** | **Sila** | **7.69** | **187** | P | | **Pn** | **04 19 31.9** | | **+0.5** |
| SLWR | | | | P | | **Pn** | **04 19 31.9** | | **+0.5** |
| SLWR | | | | S | | **Sn** | **04 20 58.8** | | **+0.1** |
| SLWR | | | | S | | **Sn** | **04 20 58.8** | | **+0.1** |
| **ALNE** | **Al Ain** | **8.08** | **160** | *i* P | | **Pn** | **04 19 36.7** | | **-0.1** |
| | SNR=14 | | | | | | | | |
| **ALNE** | **Al Ain** | **8.08** | **160** | P | | **Pn** | **04 19 37.2** | | **+0.4** |
| | SNR=14 | | | | | | | | |
| ALNE | | | | S | | **Sn** | **04 21 06.4** | | **-1.9** |
| **SOHO** | **SOHO** | **8.26** | **155** | *i* P | | **Pn** | **04 19 39.4** | | **+0.2** |
| | SNR=8.4 | | | | | | | | |
| **SOHO** | **SOHO** | **8.26** | **155** | P | | **Pn** | **04 19 40.0** | | **+0.7** |
| SOHO | | | | P | | **Pn** | **04 19 40.0** | | **+0.7** |
| SOHO | | | | S | | **Sn** | **04 21 09.4** | | **-3.3** |
| SOHO | | | | S | | **Sn** | **04 21 09.4** | | **-3.3** |
| **HRA** | **Herat** | **8.37** | **69** | Pn | | **Pn** | **04 19 41.3** | | **+0.4** |
| **MZR** | **Muzera** | **8.72** | **176** | *i* P | | **Pn** | **04 19 45.8** | | **+0.2** |
| | SNR=8.7 | | | | | | | | |
| **MZR** | **Muzera** | **8.72** | **176** | P | | **Pn** | **04 19 46.9** | | **+1.4** |
| | SNR=9.2 | | | | | | | | |
| MZR | | | | S | | **Sn** | **04 21 23.8** | | **-0.1** |
| **ARQ** | **Araqi** | **8.99** | **157** | P | | **Pn** | **04 19 51.0** | | **+1.7** |
| | SNR=12 | | | | | | | | |
| ARQ | | | | S | | **Sn** | **04 21 30.1** | | **-0.7** |
| **HOQ** | **Hoqain** | **9.05** | **153** | P | | **Pn** | **04 19 51.0** | | **+0.8** |
| HOQ | | | | S | | **Sn** | **04 21 29.7** | | **-3.0** |
| **SRVN** | **Saravan** | **9.42** | **115** | Pn | | **Pn** | **04 19 57.6** | | **+2.4** |
| **BIDO** | **Bidbid** | **9.45** | **149** | P | | **Pn** | **04 19 54.9** | | **-0.7** |
| | SNR=12 | | | | | | | | |
| BIDO | | | | P | | **Pn** | **04 19 54.9** | | **-0.7** |
| | SNR=12 | | | | | | | | |
| BIDO | | | | S | | **Sn** | **04 21 40.5** | | **-1.4** |
| BIDO | | | | S | | **Sn** | **04 21 40.5** | | **-1.4** |
| **NGCH** | **Negor - Chabah** | **9.71** | **129** | P | | **Pn** | **04 19 58.4** | | **-0.7** |
| NGCH | | | | S | | **Sn** | **04 21 46.3** | | **-1.8** |
| **BSY** | **Bisya** | **9.77** | **155** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **KRMI** | **Paran Flat** | **15.58** | **269** | | P | | **P** | **04 21 24.6** | **+1.1** |
| **SOC** | **Sochi** | **15.69** | **323** | *e* | P | | **Pn** | **04 21 19.3** | **-1.2** |
| SOC | | | | *e* | | | | 04 24 13.8 | |
| SOC | | | | | MLR | | MLR | | |
| | comp=Z,517nm,13.0s | | | | | | | | |
| **KZIT** | **Kziot** | **15.74** | **272** | | P | | **P** | **04 21 27.8** | **+2.7** |
| **KZIT** | **Kziot** | **15.74** | **272** | | P | | **P** | **04 21 26.9** | **+1.8** |
| **GAR** | **Garm** | **16.02** | **58** | | Pn | | **Pn** | **04 21 24.5** | **-0.4** |
| GAR | | | | | IAmb | | IAmb | 04 21 39.5 | |
| | comp=Z,55nm,1.1s | | | | | | | | |
| **CSS** | **Mathiatis** | **16.57** | **286** | | Pn | | **Pn** | **04 21 30.9** | **-0.9** |
| **CSS** | **Mathiatis** | **16.57** | **286** | | P | | **P** | **04 21 34.2** | **-0.2** |
| **BTK** | **Batken** | **16.79** | **55** | | Pn | | **Pn** | **04 21 35.2** | **+0.5** |
| **BTK** | **Batken** | **16.79** | **55** | | P | | **Pn** | **04 21 35.2** | **+0.5** |
| BTK | | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **CHM** | **Chimkent** | **17.06** | **47** | *e* | P | | **P** | **04 21 40.0** | **+0.3** |
| | baz=47 | | | | | | | | |
| **CHM** | **Chimkent** | **17.06** | **47** | *e* | P | | **P** | **04 21 40.0** | **+0.3** |
| **DRK** | **Karamyk** | **17.27** | **58** | | Pn | | **Pn** | **04 21 40.4** | **-0.5** |
| DRK | | | | | IAmb | | IAmb | 04 21 55.1 | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| **DRK** | **Karamyk** | **17.27** | **58** | | P | | **Pn** | **04 21 40.4** | **-0.5** |
| DRK | | | | | pmax | | pmax | | |
| | comp=Z,33nm,1.0s | | | | | | | | |
| **NIL** | **Nilore** | **17.34** | **78** | | Pn | | **Pn** | **04 21 41.7** | **+0.2** |
| NIL | | | | | IAmb | | IAmb | 04 22 00.3 | |
| | comp=Z,55nm,1.5s | | | | | | | | |
| **NIL** | **Nilore** | **17.34** | **78** | | P | | **Pn** | **04 21 41.7** | **+0.2** |
| NIL | | | | | pmax | | pmax | | |
| | comp=Z,55nm,1.5s | | | | | | | | |
| **BR131** | **Keskin Array S** | **17.45** | **302** | *d* | *i* P | | **Pn** | **04 21 43.9** | **+0.9** |
| **BRTR** | **Keskin Array B** | **17.45** | **302** | | P | | **Pn** | **04 21 41.9** | **-1.1** |
| | comp=Z,0.8nm,0.3s,baz=129,slow=11,SNR=28 | | | | | | | | |
| BRTR | | | | | LR | | LR | 04 29 51.4 | |
| | comp=Z,622nm,20.1s,baz=116,slow=42 | | | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **17.45** | **302** | *i* | P | | **Pn** | **04 21 42.4** | **-0.6** |
| BRTR | | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| **BRLS** | **Boroldav** | **17.60** | **45** | *e* | P | | **Pn** | **04 21 43.8** | **-0.8** |
| | baz=46 | | | | | | | | |
| **BRLS** | **Boroldav** | **17.60** | **45** | *e* | P | | **Pn** | **04 21 43.8** | **-0.8** |
| **KKAR** | **Karatay Array** | **18.05** | **46** | | Pn | | **Pn** | **04 21 49.3** | **-0.9** |
| **KKAR** | **Karatay Array** | **18.05** | **46** | | P | | **Pn** | **04 21 49.3** | **-0.9** |
| KKAR | | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **ANTO** | **Ankara** | **18.11** | **302** | | | | **Pn** | **04 21 50.3** | **-0.7** |
| ANTO | | | | | IAmb | | IAmb | 04 21 56.7 | |
| | comp=Z,38nm,0.8s | | | | | | | | |
| **ANTO** | **Ankara** | **18.11** | **302** | ⇑ | P | | **Pn** | **04 21 47.8** | **-3.2** |
| **ANTO** | **Ankara** | **18.11** | **302** | | P | | **Pn** | **04 21 50.3** | **-0.7** |
| ANTO | | | | | pmax | | pmax | | |
| | comp=Z,38nm,0.8s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **18.32** | **15** | | | | **Pn** | **04 21 53.1** | **-0.3** |
| **AKTO** | **Aktyubinsk** | **19.09** | **10** | | P | | **P** | **04 22 02.6** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=177,slow=14,SNR=17 | | | | | | | | |
| AKTO | | | | | S | | **Sn** | **04 25 32.6** | **-4.0** |
| | comp=Z,0.9nm,0.4s,baz=204,slow=19,SNR=1.4 | | | | | | | | |
| AKTO | | | | | LR | | LR | 04 31 10.5 | |
| | comp=Z,327nm,18.5s,baz=214,slow=43 | | | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | | | |
| **MDUB** | **Mudurnu** | **19.46** | **303** | | P | | **P** | **04 22 06.1** | **-0.3** |
| **ELL** | **Elmali** | **19.55** | **291** | | P | | **P** | **04 22 08.3** | **+1.1** |
| **ELL** | **Elmali** | **19.55** | **291** | | P | | **P** | **04 22 08.4** | **+1.1** |
| ELL | | | | | pmax | | pmax | | |
| | comp=Z,87nm,0.9s | | | | | | | | |
| **KSH** | **Kashi** | **20.35** | **61** | | P | | **P** | **04 22 13.3** | **-2.8** |
| KSH | | | | | pP | | Pn | 04 22 18.0 | -0.1 |
| KSH | | | | | S | | **S** | **04 25 54.8** | **-9.4** |
| KSH | | | | | pmax | | pmax | | |
| | comp=Z,15nm,1.4s | | | | | | | | |
| KSH | | | | | LR | | LR | | |
| | comp=N,1μm,17.9s | | | | | | | | |
| KSH | | | | | LR | | LR | | |
| | comp=E,660nm,17.2s | | | | | | | | |
| KSH | | | | | LR | | LR | | |
| | comp=Z,620nm,16.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | **20.38** | **52** | | P | | Pn | 04 22 18.4 | 0.0 |
| AAK | | | | | IAmb | | IAmb | 04 22 36.8 | |
| | comp=Z,42nm,1.3s | | | | | | | | |
| **AAK** | **Ala-Archa** | **20.38** | **52** | | P | | Pn | 04 22 17.9 | -0.5 |
| | comp=Z,1.6nm,0.4s,baz=246,slow=14,SNR=1.4 | | | | | | | | |
| AAK | | | | | LR | | LR | 04 31 26.8 | |
| | comp=Z,768nm,18.1s,baz=254,slow=41 | | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **20.38** | **52** | ⇑ | eP | | Pn | 04 22 19.5 | +1.1 |
| AAK | | | | | pmax | | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | | | |
| **YLV** | **Yalova** | **20.81** | **302** | | P | | **P** | **04 22 19.9** | **-1.1** |
| | comp=Z,28nm,1.1s | | | | | | | | |
| **SGDS** | **Sogindy** | **20.83** | **50** | *e* | P | | Pn | 04 22 22.7 | -0.8 |
| | baz=50 | | | | | | | | |
| **SGDS** | **Sogindy** | **20.83** | **50** | *e* | P | | Pn | 04 22 22.7 | -0.9 |
| **NRN** | **Naryn** | **20.95** | **56** | | P | | Pn | 04 22 24.4 | -0.9 |
| **NRN** | **Naryn** | **20.95** | **56** | | P | | Pn | 04 22 24.4 | -0.9 |
| NRN | | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **BELG** | **Belogornoye** | **20.99** | **351** | | P | | **P** | **04 22 22.8** | **+0.2** |
| | comp=Z,24nm,0.9s,baz=178,slow=14,SNR=9.5 | | | | | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| **BELG** | **Belogornoye** | **20.99** | **351** | *d* | *i* P | | **P** | **04 22 25.4** | **+2.8** |
| BELG | | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **21.10** | **340** | *e* | P | | **P** | **04 22 24.8** | **+0.9** |
| VRH | | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| **BTLS** | **Baital** | **21.24** | **45** | *e* | P | | **P** | **04 22 27.3** | **+1.9** |
| | baz=45 | | | | | | | | |
| **BTLS** | **Baital** | **21.24** | **45** | *e* | P | | **P** | **04 22 27.3** | **+1.9** |
| **BOOM** | **Boomskoye usch** | **21.30** | **53** | | P | | **P** | **04 22 26.0** | **-0.3** |
| BOOM | | | | | IAmb | | IAmb | 04 22 45.0 | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **21.30** | **53** | | P | | **P** | **04 22 26.0** | **-0.3** |
| BOOM | | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| **KARP** | **Karpathos** | **21.65** | **287** | | P | | **P** | **04 22 29.4** | **-0.5** |
| **VSR** | **Storozhevoye** | **21.91** | **337** | *e* | P | | **P** | **04 22 31.6** | **-1.0** |
| VSR | | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| **ATD** | **Arta Tunnel** | **22.10** | **207** | | LR | | LR | 04 32 13.2 | |
| | comp=Z,32nm,18.6s,baz=31,slow=40 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **22.19** | **53** | *e* | P | | **P** | **04 22 37.3** | **+1.2** |
| | baz=53 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **22.19** | **53** | *e* | P | | **P** | **04 22 37.3** | **+1.2** |
| **AAA** | **Alma-Ata** | **22.24** | **52** | *e* | P | | **P** | **04 22 38.0** | **+1.7** |
| | comp=Z,14nm,0.5s,baz=52 | | | | | | | | |
| **AAA** | **Alma-Ata** | **22.24** | **52** | *e* | P | | **P** | **04 22 38.0** | **+1.7** |
| AAA | | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | | | |
| **VORR** | **Voronezh** | **22.29** | **337** | *e* | P | | **P** | **04 22 34.9** | **-1.7** |
| VORR | | | | | pmax | | pmax | | |
| | comp=Z,60nm,0.4s | | | | | | | | |
| **MDOK** | **Medeo** | **22.31** | **52** | *e* | P | | **P** | **04 22 38.9** | **+1.8** |
| | baz=52 | | | | | | | | |
| **MDOK** | **Medeo** | **22.31** | **52** | *e* | P | | **P** | **04 22 38.9** | **+1.8** |
| **TARG** | **Taragay, Kyrgy** | **22.33** | **56** | | P | | **P** | **04 22 39.4** | **+1.8** |
| TARG | | | | | IAmb | | IAmb | 04 23 06.9 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **22.33** | **56** | | P | | **P** | **04 22 39.4** | **+1.8** |
| TARG | | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **CHKK** | **Chushkaly** | **22.55** | **51** | *e* | P | | **P** | **04 22 41.4** | **+1.9** |
| | baz=51 | | | | | | | | |
| **CHKK** | **Chushkaly** | **22.55** | **51** | *e* | P | | **P** | **04 22 41.4** | **+1.9** |
| **TPGR** | **Topolog** | **23.08** | **312** | ⇑ | P | | **P** | **04 22 41.8** | **-3.3** |
| **LPSR** | **Galich'ya Gora** | **23.17** | **338** | *e* | P | | **P** | **04 22 45.8** | **-0.1** |
| LPSR | | | | | pmax | | pmax | | |
| | comp=Z,50nm,0.8s | | | | | | | | |
| **SATY** | **Saty** | **23.20** | **54** | *e* | P | | **P** | **04 22 48.1** | **+1.6** |
| | baz=54 | | | | | | | | |
| **SATY** | **Saty** | **23.20** | **54** | *e* | P | | **P** | **04 22 48.0** | **+1.6** |
| **ARXS** | **Arharly** | **23.24** | **50** | *e* | P | | **P** | **04 22 47.7** | **+0.8** |
| **ZHN** | **Zhinishke** | **23.25** | **53** | *e* | P | | **P** | **04 22 48.7** | **+1.6** |
| | baz=53 | | | | | | | | |
| **ZHN** | **Zhinishke** | **23.25** | **53** | *e* | P | | **P** | **04 22 48.6** | **+1.6** |
| **CFR** | **Carcaliu** | **23.40** | **312** | ⇓ | P | | **P** | **04 22 44.8** | **-3.4** |
| **CFR** | **Carcaliu** | **23.40** | **312** | ⇓ | P | | **P** | **04 22 44.8** | **-3.4** |
| **KPKS** | **Kokpek** | **23.53** | **53** | *e* | P | | **P** | **04 22 51.1** | **+1.4** |
| | baz=53 | | | | | | | | |
| **KPKS** | **Kokpek** | **23.53** | **53** | *e* | P | | **P** | **04 22 51.1** | **+1.4** |
| **UZB** | **Uzynbulak** | **23.65** | **54** | *e* | P | | **P** | **04 22 52.4** | **+1.4** |
| | baz=54 | | | | | | | | |
| **UZB** | **Uzynbulak** | **23.65** | **54** | *e* | P | | **P** | **04 22 52.4** | **+1.4** |
| **TDK** | **Taldyqorghan** | **23.95** | **49** | *e* | P | | **P** | **04 22 55.3** | **+1.6** |
| | comp=Z,9.2nm,0.5s,baz=49 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **23.95** | **49** | *e* | P | | **P** | **04 22 55.2** | **+1.6** |
| TDK | | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | | |
| **SHLS** | **Shalkode** | **23.95** | **54** | *e* | P | | **P** | **04 22 58.2** | **+4.3** |
| | baz=54 | | | | | | | | |
| **SHLS** | **Shalkode** | **23.95** | **54** | *e* | P | | **P** | **04 22 58.2** | **+4.3** |
| **ELND** | **Elena** | **24.04** | **305** | ⇓ | P | | **P** | **04 22 52.8** | **-1.7** |
| **VRI** | **Vrincioaia** | **24.59** | **312** | ⇑ | P | | **P** | **04 22 57.6** | **-2.0** |
| **VRI** | **Vrincioaia** | **24.59** | **312** | ⇑ | P | | **P** | **04 22 57.6** | **-2.0** |
| **VRI** | **Vrincioaia** | **24.59** | **312** | | P | | **P** | **04 22 59.5** | **-0.1** |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **PLOR** | **Plostina** | **24.63** | **312** | ⇑ | P | | **P** | **04 22 58.6** | **-1.4** |
| **PLOR** | **Plostina** | **24.63** | **312** | ⇑ | P | | **P** | **04 22 58.6** | **-1.4** |
| **PLOR3** | **Plostina Array** | **24.64** | **312** | | P | | **P** | **04 23 00.3** | **+0.3** |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **SORM** | **Soroca** | **24.73** | **319** | ⇑ | P | | **P** | **04 22 57.9** | **-2.9** |
| **SORM** | **Soroca** | **24.73** | **319** | ⇑ | P | | **P** | **04 22 57.9** | **-2.9** |
| **SORM** | **Soroca** | **24.73** | **319** | | P | | **P** | **04 22 59.2** | **-1.6** |
| | comp=Z,17nm,0.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **24.80** | **26** | | P | | **P** | **04 23 01.8** | **+0.4** |
| BRVK | | | | | IAmb | | IAmb | 04 23 04.1 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **24.80** | **26** | | P | | **P** | **04 23 02.4** | **+1.1** |
| **BRVK** | **Borovoye** | **24.80** | **26** | *de* | P | | **P** | **04 23 02.4** | **+1.1** |
| BRVK | | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **24.81** | **26** | | P | | **P** | **04 23 01.9** | **+0.5** |
| | comp=Z,31nm,0.8s,baz=211,slow=4.2,SNR=82 | | | | | | | | |
| | comp=Z,31nm,0.8s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **24.81** | **26** | | P | | **P** | **04 23 02.0** | **+0.5** |
| **COVR** | **Voineasa-Covas** | **24.91** | **312** | ⇑ | P | | **P** | **04 23 00.6** | **-1.9** |
| **TESR** | **Tescani** | **24.93** | **314** | ⇓ | P | | **P** | **04 23 01.0** | **-1.6** |
| **TESR** | **Tescani** | **24.93** | **314** | | P | | **P** | **04 23 01.9** | **-0.7** |
| | comp=Z,48nm,0.8s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **24.93** | **311** | | P | | **P** | **04 23 01.5** | **-1.2** |
| **MLR** | **Muntele Rosu** | **24.93** | **311** | | LR | | LR | 04 34 34.0 | |
| | comp=Z,330nm,20.0s,baz=100,slow=41 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **24.93** | **311** | ⇑ | P | | **P** | **04 23 01.9** | **-0.9** |
| **MLR** | **Muntele Rosu** | **24.93** | **311** | ⇑ | P | | **P** | **04 23 01.9** | **-0.9** |
| **ONER** | **Baraj Valea Uz** | **25.01** | **313** | ⇑ | P | | **P** | **04 23 01.8** | **-1.5** |
| **ARU** | **Arti** | **25.02** | **8** | | P | | **P** | **04 23 04.3** | **+1.0** |
| ARU | | | | | IAmb | | IAmb | 04 23 28.0 | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **ARU** | **Arti** | **25.02** | **8** | | LR | | LR | 04 34 38.2 | |
| | comp=Z,274nm,21.2s,baz=186,slow=41 | | | | | | | | |
| **ARU** | **Arti** | **25.02** | **8** | *d* | *i* P | | **P** | **04 23 05.6** | **+2.3** |
| ARU | | | | | | | | 04 23 39.7 | |
| ARU | | | | | S | | **S** | **04 27 34.0** | **+6.8** |
| ARU | | | | | SS | | **SnSn** | **04 28 25.8** | **+10** |
| ARU | | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| ARU | | | | | MLR | | MLR | | |
| | comp=Z,326nm,16.0s | | | | | | | | |
| **TURR** | **Turia** | **25.12** | **312** | ⇓ | P | | **P** | **04 23 03.1** | **-1.3** |
| **DOPR** | **Dopca** | **25.48** | **312** | ⇑ | P | | **P** | **04 23 06.4** | **-1.3** |
| **VOIR** | | **25.49** | **310** | ⇑ | P | | **P** | **04 23 07.3** | **-0.5** |
| **VOIR** | | **25.49** | **310** | ⇑ | P | | **P** | **04 23 07.3** | **-0.5** |
| **VOIR** | | **25.49** | **310** | | P | | **P** | **04 23 07.6** | **-0.1** |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **NDNU** | **Novodnistrovsk** | **25.53** | **319** | | P | | **P** | **04 23 06.4** | **-1.6** |
| **AK09** | **Malin Array Si** | **25.68** | **324** | | P | | **P** | **04 23 07.8** | **-1.5** |
| **AK07** | **Malin Array Si** | **25.68** | **324** | | P | | **P** | **04 23 07.7** | **-1.6** |
| **SVE** | **Sverdlovsk** | **25.68** | **10** | *e* | P | | **P** | **04 23 13.1** | **+3.8** |
| SVE | | | | | pmax | | pmax | | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| **AK10** | **Malin Array Si** | **25.68** | **324** | | P | | **P** | **04 23 08.0** | **-1.4** |
| **AK08** | **Malin Array Si** | **25.70** | **324** | | P | | **P** | **04 23 07.6** | **-1.9** |
| **AK05** | **Malin Array Si** | **25.72** | **324** | | P | | **P** | **04 23 07.2** | **-2.5** |
| **AK02** | **Malin Array Si** | **25.74** | **324** | | P | | **P** | **04 23 08.0** | **-1.9** |
| **AK01** | **Malin Array Si** | **25.76** | **324** | | P | | **P** | **04 23 07.9** | **-2.1** |
| **AK12** | **Malin Array Si** | **25.76** | **324** | | P | | **P** | **04 23 08.1** | **-1.9** |
| **AKASG** | **Malin Array Be** | **25.76** | **324** | | P | | **P** | **04 23 08.2** | **-1.9** |
| | comp=Z,3.3nm,0.5s,baz=133,slow=8.4,SNR=18 | | | | | | | | |
| AKASG | | | | | LR | | LR | 04 35 31.1 | |
| | comp=Z,142nm,20.9s,baz=131,slow=42 | | | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **25.76** | **324** | *ce* | P | | **P** | **04 23 08.4** | **-1.7** |
| AKBB | | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **25.76** | **324** | | P | | **P** | **04 23 08.0** | **-2.1** |
| **KIEV** | **Kiev** | **25.77** | **324** | ⇑ | P | | **P** | **04 23 07.7** | **-2.4** |
| **KIEV** | **Kiev** | **25.77** | **324** | ⇑ | P | | **P** | **04 23 07.7** | **-2.4** |
| **KIEV** | **Kiev** | **25.77** | **324** | | P | | **P** | **04 23 08.1** | **-2.0** |
| | comp=Z,60nm,0.7s | | | | | | | | |
| **AK14** | **Malin Array Si** | **25.78** | **324** | | P | | **P** | **04 23 08.3** | **-1.9** |
| **AK03** | **Malin Array Si** | **25.78** | **324** | | P | | **P** | **04 23 08.0** | **-2.2** |
| **KMPD** | **K-Podol'skiy** | **26.03** | **318** | | P | | **P** | **04 23 11.5** | **-1.0** |
| **OBN** | **Obninsk** | **26.04** | **339** | ⇓ | *e* P | | **P** | **04 23 15.0** | **+2.5** |
| OBN | | | | | *e* | | | 04 23 50.5 | |
| OBN | | | | | *e* S | | **S** | **04 27 51.1** | **+7.8** |
| OBN | | | | | pmax | | pmax | | |
| | comp=Z,58nm,1.9s | | | | | | | | |
| OBN | | | | | MLR | | MLR | | |
| | comp=Z,128nm,15.0s | | | | | | | | |
| **LUBAR** | **Lubar, Ukraine** | **26.05** | **321** | | P | | **P** | **04 23 11.1** | **-1.6** |
| **FURI** | **Furi** | **26.23** | **213** | | LR | | LR | 04 34 09.6 | |
| | comp=Z,342nm,20.6s,baz=36,slow=38 | | | | | | | | |
| **MOS** | **Moscow** | **26.26** | **340** | *e* | P | | **P** | **04 23 14.3** | **-0.2** |
| MOS | | | | *e* | | | | 04 23 54.0 | |
| MOS | | | | *e* | | | | 04 27 48.3 | |
| **MI29** | **MI29, Kamyanyy** | **26.29** | **322** | | P | | **P** | **04 23 14.2** | **-0.7** |
| **BURAR** | **Bucovina Array** | **26.30** | **315** | ⇓ | P | | **P** | **04 23 14.4** | **-0.7** |
| **BURAR** | **Bucovina Array** | **26.30** | **315** | ⇓ | P | | **P** | **04 23 14.4** | **-0.7** |
| **MI30** | **MI30,Zelenitsa** | **26.31** | **323** | | P | | **P** | **04 23 13.6** | **-1.4** |
| **LOT** | **Lotru** | **26.33** | **310** | ⇑ | P | | **P** | **04 23 14.7** | **-0.7** |
| **MI28** | **MI28,Pidlybu** | **26.68** | **323** | | P | | **P** | **04 23 17.4** | **-1.0** |
| **KURBB** | **Kurchatov Arra** | **26.83** | **38** | | P | | **P** | **04 23 20.7** | **+0.9** |
| | comp=Z,7.8nm,0.7s,baz=238,slow=9.3,SNR=4.8 | | | | | | | | |
| KURBB | | | | | LR | | LR | 04 35 42.3 | |
| | comp=Z,320nm,20.6s,baz=200,slow=40 | | | | | | | | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| **KURK** | **Kurchatov** | **26.93** | **38** | | P | | **P** | **04 23 21.2** | **+0.5** |
| KURK | | | | | IAmb | | IAmb | 04 23 24.0 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **KURK** | **Kurchatov** | **26.93** | **38** | | P | | **P** | **04 23 21.8** | **+1.1** |
| **KURK** | **Kurchatov** | **26.93** | **38** | *de* | P | | **P** | **04 23 21.4** | **+0.8** |
| KURK | | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| **KIRV** | **Kirov** | **26.95** | **356** | | LR | | LR | 04 37 08.4 | |
| | comp=Z,229nm,18.1s,baz=170,slow=44 | | | | | | | | |
| **GZR** | **Gura Zlata** | **26.96** | **309** | ⇑ | P | | **P** | **04 23 20.5** | **-0.6** |
| **GZR** | **Gura Zlata** | **26.96** | **309** | ⇑ | P | | **P** | **04 23 20.5** | **-0.6** |
| **MAKZ** | **Makanchi** | **26.96** | **48** | | P | | **P** | **04 23 22.5** | **+1.4** |
| **MAKZ** | **Makanchi** | **26.96** | **48** | ⇑ | P | | **P** | **04 23 23.0** | **+2.0** |
| **MK31** | **Makanchi Array** | **27.15** | **48** | *d* | *i* P | | **P** | **04 23 24.7** | **+1.9** |
| **MKAR** | **Makanchi Array** | **27.15** | **48** | | P | | **P** | **04 23 24.1** | **+1.3** |
| | comp=Z,3.3nm,1.1s,baz=238,slow=9.7,SNR=10 | | | | | | | | |
| MKAR | | | | | LR | | LR | 04 35 06.8 | |
| | comp=Z,276nm,19.1s,baz=261,slow=39 | | | | | | | | |
| | comp=Z,3.3nm,1.1s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **27.15** | **48** | *ce* | P | | **P** | **04 23 24.8** | **+2.0** |
| MKAR | | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **BOVS** | **Bovan** | **27.16** | **305** | ⇑ | P | | **P** | **04 23 22.1** | **-0.7** |
| **KBN** | **Korca** | **27.19** | **298** | | P | | **P** | **04 23 23.7** | **+0.5** |
| **KBN** | **Korca** | **27.19** | **298** | | P | | **P** | **04 23 23.7** | **+0.5** |
| KBN | | | | | pmax | | pmax | | |
| | comp=Z,34nm,1.2s | | | | | | | | |
| **MDVR** | **Moldovita** | **27.48** | **307** | ⇑ | P | | **P** | **04 23 24.8** | **-0.9** |
| **SEM** | **Semipalatinsk** | **27.63** | **40** | *e* | P | | **P** | **04 23 28.7** | **+1.5** |
| | baz=40 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **27.63** | **40** | *e* | P | | **P** | **04 23 28.6** | **+1.4** |
| **SIRR** | **Siria** | **28.00** | **310** | ⇑ | P | | **P** | **04 23 29.3** | **-1.0** |
| **MNK** | **Minsk** | **28.84** | **329** | *i* | P | | **P** | **04 23 35.2** | **-2.5** |
| | comp=E,8.0nm,0.8s | | | | | | | | |
| MNK | | | | *i* | P | | **P** | **04 23 35.2** | **-2.5** |
| | comp=N,7.0nm,0.6s | | | | | | | | |
| MNK | | | | *i* | P | | **P** | **04 23 35.2** | **-2.5** |
| | comp=Z,8.0nm,0.9s,baz=132 | | | | | | | | |
| MNK | | | | *i* | PP | | **PnPn** | **04 24 26.1** | **-2.6** |
| MNK | | | | *i* | PPP | | PPP | 04 24 34.4 | |
| MNK | | | | *i* | S | | **S** | **04 28 26.0** | **-1.5** |
| MNK | | | | *i* | SS | | **SnSn** | **04 29 48.9** | **-0.3** |
| MNK | | | | *i* | SSS | | SSS | 04 30 03.3 | |
| MNK | | | | *i* | LQ | | LQ | 04 32 52.5 | |
| MNK | | | | *i* | LR | | LR | 04 35 04.1 | |
| MNK | | | | *i* | LRM | | MLR | 04 36 12.8 | |
| | comp=Z,165nm,16.6s | | | | | | | | |
| MNK | | | | *i* | LRM | | MLR | 04 36 17.3 | |
| | comp=N,98nm,16.0s | | | | | | | | |
| MNK | | | | *i* | LRM | | MLR | 04 36 41.9 | |
| | comp=E,130nm,21.2s | | | | | | | | |
| **MNK** | **Minsk** | **28.84** | **329** | *i* | P | | **P** | **04 23 35.2** | **-2.5** |
| MNK | | | | *i* | PPP | | PPP | 04 24 34.3 | |
| MNK | | | | *i* | | | | 04 26 44.4 | |
| MNK | | | | *i* | S | | **S** | **04 28 26.0** | **-1.5** |
| MNK | | | | *i* | SS | | **SnSn** | **04 29 48.8** | **-0.3** |
| MNK | | | | | pmax | | pmax | | |
| | comp=E,8.0nm,0.8s | | | | | | | | |
| MNK | | | | | pmax | | pmax | | |
| | comp=N,7.0nm,0.6s | | | | | | | | |
| MNK | | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| MNK | | | | | MLR | | MLR | | |
| | comp=Z,165nm,17.0s | | | | | | | | |
| MNK | | | | | MLR | | MLR | | |
| | comp=N,98nm,16.0s | | | | | | | | |
| MNK | | | | | MLR | | MLR | | |
| | comp=E,130nm,21.0s | | | | | | | | |
| **ZSN** | **Zaisan** | **29.03** | **48** | *e* | P | | **P** | **04 23 41.1** | **+1.6** |
| | baz=48 | | | | | | | | |
| **ZSN** | **Zaisan** | **29.03** | **48** | *e* | P | | **P** | **04 23 41.1** | **+1.6** |
| **CRVS** | **Cervenica-Dubn** | **29.12** | **315** | *e* | P | | P | 04 23 46.6 | +6.3 |
| **CRVS** | **Cervenica-Dubn** | **29.12** | **315** | *e* | P | | P | 04 23 46.6 | +6.3 |
| **WMQ** | **Urumqi** | **29.90** | **56** | *e* | P | | **P** | **04 23 50.0** | **+2.7** |
| WMQ | | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| WMQ | | | | | LR | | LR | | |
| | comp=N,450nm,13.1s | | | | | | | | |
| WMQ | | | | | LR | | LR | | |
| | comp=E,430nm,18.7s | | | | | | | | |
| WMQ | | | | | LR | | LR | | |
| | comp=Z,400nm,18.7s | | | | | | | | |
| **VYHS** | **Vyhne** | **30.57** | **313** | *e* | P | | **P** | **04 23 55.7** | **+2.6** |
| **VYHS** | **Vyhne** | **30.57** | **313** | *e* | P | | **P** | **04 23 55.7** | **+2.6** |
| **DGZ** | **Jazzator, Alta** | **31.44** | **45** | ⇑ | *e* P | | **P** | **04 24 02.7** | **+1.8** |
| DGZ | | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **31.88** | **36** | | P | | **P** | **04 24 04.9** | **+0.3** |
| | comp=Z,7.6nm,0.6s,baz=244,slow=9.8,SNR=24 | | | | | | | | |
| ZALV | | | | | LR | | LR | 04 38 39.4 | |
| | comp=Z,462nm,19.2s,baz=270,slow=40 | | | | | | | | |
| | comp=Z,7.6nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **31.88** | **36** | *i* | P | | **P** | **04 24 05.0** | **+0.4** |
| ZALV | | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **RONA** | **Rosalia, Austr** | **31.93** | **311** | *e* | pP | | **P** | **04 24 07.2** | **+2.1** |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| **VSU** | **Vasula** | **32.05** | **334** | ⇓ | *e* P | | **P** | **04 24 05.7** | **-0.2** |
| VSU | | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **VRAC** | **Vranov** | **32.24** | **314** | | LR | | LR | 04 39 10.9 | |
| | comp=Z,174nm,19.9s,baz=101,slow=40 | | | | | | | | |
| **LODK** | **Lodwar** | **32.58** | **214** | | P | | **P** | **04 24 12.0** | **+0.9** |
| **CAMP** | **Campotosto** | **32.92** | **300** | | P | | **P** | **04 24 13.6** | **-0.5** |
| **FDMO** | **Fiordimonte** | **33.22** | **301** | | P | | **P** | **04 24 15.3** | **-1.1** |
| **MOA** | **Molln** | **33.29** | **310** | *e* | P | | **P** | **04 24 17.6** | **+0.6** |
| | comp=Z,2.1nm,0.7s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **33.42** | **308** | *i* | P | | **P** | **04 24 17.8** | **-0.4** |
| | comp=Z,5.1nm,1.1s | | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **33.66** | **310** | *i* | P | | **P** | **04 24 17.8** | **-2.4** |
| | comp=Z,1.5nm,0.4s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **33.71** | **309** | *i* | pP | | **P** | **04 24 21.8** | **+0.9** |
| | comp=Z,2.1nm,0.6s | | | | | | | | |
| **GERES** | **GERESS Array B** | **33.91** | **312** | | P | | **P** | **04 24 22.4** | **-0.1** |
| | comp=Z,0.8nm,0.6s,baz=103,slow=8.4,SNR=6.1 | | | | | | | | |
| GERES | | | | | LR | | LR | 04 40 12.4 | |
| | comp=Z,130nm,18.2s,baz=109,slow=40 | | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **34.07** | **312** | *e* | P | | **P** | **04 24 24.0** | **+0.2** |
| **KHC** | **Kasperske Hory** | **34.07** | **312** | ⇓ | *e* P | | **P** | **04 24 23.1** | **-0.7** |
| KHC | | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.9s | | | | | | | | |
| **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **MOY** | **Mondy** | **40.26** | **46** | *e*P | **P** | **04 25 19.1 +2.7** | | |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.5s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.86** | **346** | P | **P** | **04 25 20.5 -0.5** | | |
| | comp=Z,1.7nm,0.7s,baz=140,slow=10,SNR=6.9 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **CEST** | **Esterri de Car** | **41.90** | **300** | P | **P** | **04 25 27.8 -2.3** | | |
| CEST | | | | IAmb | IAmb | 04 25 45.5 | | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **LZH** | **Lanzhou** | **42.21** | **70** | *e*P | **P** | **04 25 36.5 +3.8** | | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=N,350nm,15.5s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,340nm,18.2s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,460nm,20.3s | | | | | | | |
| **PZH** | **PanZhiHua** | **42.81** | **84** | P | **P** | **04 25 39.5 +1.9** | | |
| PZH | | | | S | **S** | **04 32 03.5 +1.5** | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,120nm,3.9s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=N,150nm,15.7s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,190nm,14.9s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,190nm,19.4s | | | | | | | |
| **SONM** | **Songino Array** | **43.34** | **52** | P | **P** | **04 25 41.6 -0.1** | | |
| | comp=Z,0.6nm,0.7s,baz=282,slow=7.2,SNR=4.4 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.54** | **96** | P | **P** | **04 25 42.3 -1.2** | | |
| | comp=Z,1.7nm,0.3s,baz=293,slow=7.7,SNR=2.6 | | | | | | | |
| CMAR | | | | LR | LR | 04 47 31.4 | | |
| | comp=Z,123nm,19.3s,baz=295,slow=41 | | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **43.78** | **52** | ⇓ *i*P | **P** | **04 25 46.8 +1.5** | | |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **KMI** | **Kunming** | **44.12** | **86** | ⇑P | **P** | **04 25 50.3 +2.0** | | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,250nm,37.4s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **45.40** | **318** | P | **P** | **04 25 57.5 -0.4** | | |
| | comp=Z,1.1nm,0.5s,baz=96,slow=7.8,SNR=9.9 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **46.10** | **296** | P | **P** | **04 26 02.3 -1.5** | | |
| | comp=Z,1.2nm,0.9s,baz=70,slow=8.3,SNR=8.3 | | | | | | | |
| ESDC | | | | LR | LR | 04 47 51.4 | | |
| | comp=Z,82nm,18.7s,baz=85,slow=39 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **XAN** | **Xi'an** | **46.70** | **71** | *e*P | **P** | **04 26 12.5 +4.0** | | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.5s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=N,410nm,19.2s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=E,320nm,17.6s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,520nm,17.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **47.47** | **62** | *e*P | **P** | **04 26 14.0 -0.5** | | |
| HHC | | | | pP | pP | 04 26 18.5 +0.3 | | |
| HHC | | | | sP | sP | 04 26 21.5 +1.9 | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=N,150nm,11.1s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=E,250nm,15.9s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=Z,250nm,17.7s | | | | | | | |
| **MDT** | **Midelt** | **48.01** | **287** | LR | LR | 04 50 15.3 | | |
| | comp=Z,110nm,18.6s,baz=91,slow=41 | | | | | | | |
| **MVO** | **Moncorvo** | **48.19** | **299** | *e*P | **P** | **04 26 18.8 -1.2** | | |
| **PVRL** | **Vila Real** | **48.68** | **299** | *e*P | **P** | **04 26 23.8 0.0** | | |
| **MTE** | **Manteigas** | **48.70** | **298** | P | **P** | **04 26 24.9 +0.9** | | |
| **MTE** | **Manteigas** | **48.70** | **298** | *e*P | **P** | **04 26 25.6 +1.6** | | |
| **PBAR** | **Barrancos** | **48.72** | **295** | *e*P | **P** | **04 26 24.2 +0.1** | | |
| **PCBR** | **Castelo Branco** | **48.74** | **297** | *e*P | **P** | **04 26 23.7 -0.5** | | |
| **PMRV** | **Marv??o** | **48.75** | **297** | *e*P | **P** | **04 26 23.2 -1.2** | | |
| **PVIS** | **Viseu** | **48.91** | **298** | *e*P | **P** | **04 26 26.6 +1.0** | | |
| **SPITS** | **Spitsbergen Ar** | **49.19** | **351** | P | **P** | **04 26 27.4 +0.2** | | |
| | comp=Z,2.0nm,0.5s,baz=143,slow=17,SNR=4.6 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **PBEJ** | **Beja** | **49.39** | **295** | *e*P | P | 04 26 35.3 +6.1 | | |
| **AVE** | **Averroes** | **50.16** | **289** | P | **P** | **04 26 34.7 -0.4** | | |
| **TORD** | **Torodi Ar. Bea** | **50.23** | **260** | P | **P** | **04 26 34.8 -1.1** | | |
| | comp=Z,6.2nm,0.5s,baz=55,slow=7.4,SNR=71 | | | | | | | |
| TORD | | | | LR | LR | 04 49 56.1 | | |
| | comp=Z,195nm,19.2s,baz=58,slow=39 | | | | | | | |
| | comp=Z,6.2nm,0.5s | | | | | | | |
| **HNS** | **HongShan** | **50.51** | **66** | *e*P | **P** | **04 26 41.0 +3.3** | | |
| HNS | | | | LR | LR | | | |
| | comp=N,150nm,12.7s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=E,230nm,15.9s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,250nm,18.3s | | | | | | | |
| **JMIC** | **Jan Mayen** | **51.05** | **338** | LR | LR | 04 49 31.3 | | |
| | comp=Z,83nm,20.4s,baz=248,slow=38 | | | | | | | |
| **BORG** | **Borgarnes** | **55.05** | **330** | LR | LR | 04 53 04.4 | | |
| | comp=Z,67nm,18.8s,baz=127,slow=39 | | | | | | | |
| **NJ2** | **Nanjing** | **55.26** | **71** | *e*P | **P** | **04 27 12.0 -0.9** | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,260nm,4.8s | | | | | | | |
| **TIXI** | **Tiksi** | **55.85** | **22** | LR | LR | 04 54 17.2 | | |
| | comp=Z,317nm,18.4s,baz=308,slow=39 | | | | | | | |
| **TIXI** | **Tiksi** | **55.85** | **22** | ⇓ *e*P | **P** | **04 27 17.7 +1.2** | | |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **ZEA** | **Zeya** | **56.18** | **44** | *e*P | P | 04 27 28.3 +9.1 | | |
| ZEA | | | | *e* | | 04 35 33.3 | | |
| ZEA | | | | MLR | MLR | | | |
| | comp=E,200nm,14.0s | | | | | | | |
| ZEA | | | | MLR | MLR | | | |
| | comp=N,200nm,16.0s | | | | | | | |
| ZEA | | | | MLR | MLR | | | |
| | comp=Z,200nm,13.0s | | | | | | | |
| **YAK** | **Yakutsk** | **56.45** | **33** | LR | LR | 04 55 14.8 | | |
| | comp=Z,68nm,20.0s,baz=286,slow=40 | | | | | | | |
| **HEH** | **HeiHe** | **56.89** | **48** | *e*P | **P** | **04 27 23.0 -1.3** | | |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **DBIC** | **Dimbokro** | **59.11** | **258** | P | **P** | **04 27 39.4 -1.0** | | |
| | comp=Z,3.9nm,0.5s,baz=47,slow=8.4,SNR=17 | | | | | | | |
| DBIC | | | | LR | LR | 04 55 10.5 | | |
| | comp=Z,309nm,19.2s,baz=40,slow=38 | | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| **KLR** | **Kul'dur** | **59.86** | **48** | LR | LR | 04 56 02.4 | | |
| | comp=Z,537nm,18.1s,baz=278,slow=38 | | | | | | | |
| **KSRS** | **Korea Array** | **60.60** | **62** | P | **P** | **04 27 49.9 -0.4** | | |
| | comp=Z,1.2nm,0.7s,baz=288,slow=6.4,SNR=3.2 | | | | | | | |
| KSRS | | | | LR | LR | 04 57 13.2 | | |
| | comp=Z,191nm,18.4s,baz=290,slow=39 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **61.42** | **54** | LR | LR | 04 57 50.9 | | |
| | comp=Z,216nm,18.6s,baz=295,slow=39 | | | | | | | |
| **LBTB** | **Lobatse** | **62.12** | **208** | LR | LR | 04 56 59.3 | | |
| | comp=Z,181nm,18.8s,baz=28,slow=38 | | | | | | | |
| **JNU** | **Nakatsue** | **64.40** | **66** | LR | LR | 04 59 03.8 | | |
| | comp=Z,138nm,19.2s,baz=282,slow=39 | | | | | | | |
| **JOW** | **Kunigami** | **64.80** | **73** | LR | LR | 04 56 56.2 | | |
| | comp=Z,94nm,18.3s,baz=278,slow=36 | | | | | | | |
| **BBTS** | **Babate** | **64.98** | **272** | LR | LR | 05 00 07.6 | | |
| | comp=Z,159nm,18.5s,baz=311,slow=39 | | | | | | | |
| **BOSA** | **Boshof** | **65.48** | **207** | P | **P** | **04 28 21.4 -1.4** | | |
| | comp=Z,1.0nm,0.4s,baz=25,slow=6.8,SNR=6.3 | | | | | | | |
| BOSA | | | | LR | LR | 04 59 02.1 | | |
| | comp=Z,189nm,18.1s,baz=0.5,slow=38 | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **66.20** | **335** | LR | LR | 04 59 17.7 | | |
| | comp=Z,89nm,19.5s,baz=40,slow=38 | | | | | | | |
| **SEY** | **Seymchan** | **66.40** | **29** | ⇑ *e*P | **P** | **04 28 29.9 +1.7** | | |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| **MA2** | **Magadan** | **67.03** | **33** | LR | LR | 05 01 43.1 | | |
| | comp=Z,126nm,20.0s,baz=296,slow=40 | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **67.57** | **48** | *e*P | P | 04 28 47.9 +12 | | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| YSS | | | | MLR | MLR | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,200nm,16.0s | | | | | | | |
| **ASAJ** | **Asahikawa** | **68.59** | **51** | LR | LR | 05 01 23.5 | | |
| | comp=Z,237nm,21.1s,baz=339,slow=38 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.59** | **60** | LR | LR | 05 01 07.5 | | |
| | comp=Z,110nm,19.8s,baz=304,slow=38 | | | | | | | |
| **BILL** | **Bilibino** | **69.07** | **22** | ⇓ *e*P | **P** | **04 28 47.7 +2.7** | | |
| BILL | | | | *e* | | 04 31 18.3 | | |
| BILL | | | | *e*S | **S** | **04 37 54.7 +4.8** | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,191nm,15.0s | | | | | | | |
| **SUR** | **Sutherland** | **70.57** | **208** | LR | LR | 05 01 22.6 | | |
| | comp=Z,240nm,19.3s,baz=34,slow=37 | | | | | | | |
| **KAPI** | **Kappang** | **73.34** | **107** | LR | LR | 05 04 40.4 | | |
| | comp=Z,57nm,20.1s,baz=288,slow=38 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.42** | **37** | LR | LR | 05 04 24.0 | | |
| | comp=Z,208nm,18.4s,baz=300,slow=38 | | | | | | | |
| **JCJ** | **Chichijima** | **75.81** | **67** | LR | LR | 05 07 26.2 | | |
| | comp=Z,65nm,19.2s,baz=108,slow=39 | | | | | | | |
| **C19K** | **Lookout Ridge** | **76.68** | **11** | P | **P** | **04 29 31.8 +1.6** | | |
| C19K | | | | IAmb | IAmb | 04 29 32.0 | | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **76.98** | **10** | P | **P** | **04 29 32.6 +0.8** | | |
| B21K | | | | IAmb | IAmb | 04 29 43.3 | | |
| | comp=Z,8.6nm,0.9s | | | | | | | |
| **C23K** | **Itkillik River** | **77.31** | **8** | P | **P** | **04 29 34.4 +0.8** | | |
| **D19K** | **Kuna River** | **77.47** | **11** | P | **P** | **04 29 34.8 +0.2** | | |
| D19K | | | | IAmb | IAmb | 04 29 44.7 | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **E19K** | **Redstone River** | **78.56** | **11** | P | **P** | **04 29 40.1 -0.5** | | |
| E19K | | | | IAmb | IAmb | 04 29 52.7 | | |
| | comp=Z,6.3nm,1.2s | | | | | | | |
| **F21K** | **Alatna River** | **79.37** | **10** | P | **P** | **04 29 46.1 +1.0** | | |
| F21K | | | | IAmb | IAmb | 04 29 56.1 | | |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| **SCHQ** | **Schefferville** | **79.44** | **329** | P | **P** | **04 29 44.9 -0.8** | | |
| | comp=Z,3.7nm,0.9s,baz=45,slow=7.9,SNR=1.9 | | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **E27K** | **Coleen River** | **79.81** | **5** | P | **P** | **04 29 48.8 +1.3** | | |
| E27K | | | | IAmb | IAmb | 04 30 28.8 | | |
| | comp=Z,10nm,1.4s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **80.67** | **8** | P | **P** | **04 29 54.0 +1.9** | | |
| G24K | | | | IAmb | IAmb | 04 30 03.3 | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **H21K** | **Melozitna Rive** | **80.92** | **10** | P | **P** | **04 29 55.9 +2.4** | | |
| H21K | | | | IAmb | IAmb | 04 30 04.8 | | |
| | comp=Z,4.7nm,0.9s | | | | | | | |
| **G27K** | **Doyon Strip** | **81.16** | **6** | P | **P** | **04 29 56.2 +1.4** | | |
| **H23K** | **Yukon River** | **81.24** | **9** | P | **P** | **04 29 55.5 +0.3** | | |
| **SHEM** | **Shemya Is, Ala** | **81.60** | **32** | LR | LR | 05 09 43.8 | | |
| | comp=Z,135nm,19.9s,baz=332,slow=38 | | | | | | | |
| **H29M** | **Whitestone** | **81.99** | **5** | P | **P** | **04 29 59.3 +0.2** | | |
| H29M | | | | IAmb | IAmb | 04 30 08.5 | | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.59** | **8** | P | **P** | **04 30 02.5 +0.2** | | |
| | comp=Z,0.4nm,0.7s,baz=320,slow=4.8,SNR=4.4 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **I30M** | **Mount Dempster** | **83.10** | **4** | P | **P** | **04 30 04.4 -0.7** | | |
| I30M | | | | IAmb | IAmb | 04 30 08.0 | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **J30M** | **Hart River** | **83.75** | **4** | P | **P** | **04 30 06.1 -2.4** | | |
| J30M | | | | IAmb | IAmb | 04 30 47.4 | | |
| | comp=Z,3.6nm,1.1s | | | | | | | |
| **K29M** | **Barlow Dome** | **84.40** | **5** | P | **P** | **04 30 11.2 -0.6** | | |
| K29M | | | | IAmb | IAmb | 04 30 45.8 | | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| **KDAK** | **Kodiak Island** | **88.31** | **13** | LR | LR | 05 15 11.6 | | |
| | comp=Z,66nm,18.6s,baz=13,slow=39 | | | | | | | |
| **DLBC** | **Dease Lake** | **90.15** | **1** | LR | LR | 05 15 04.8 | | |
| | comp=Z,49nm,21.6s,baz=292,slow=38 | | | | | | | |
| **WRA** | **Warramunga Arr** | **93.42** | **111** | P | **P** | **04 30 52.9 -2.4** | | |
| | comp=Z,0.2nm,0.4s,baz=317,slow=3.8,SNR=5.2 | | | | | | | |
| **QSPA** | **South Pole Qui** | **121.56** | **180** | PKP | **PKPdf** | **04 36 30.6 -1.8** | | |
| | comp=Z,0.8nm,0.5s,baz=260,slow=2.3,SNR=5.9 | | | | | | | |

**IDC 28 04:25:52.5±2.1, 24°.04N×94°.36E, h285km±22km, mb3.3/9, mbtmp3.9/10, Error ellipse: s-maj=41.2km s-min=10.6km az=59.0, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **7.01** | **142** | P | Pn | 04 27 33.7 | -0.2 |
| | 1.8nm,0.3s,baz=308,slow=13,SNR=1.3 | | | | | | |
| CMAR | | | | S | S | 04 28 56.7 | +1.1 |
| | 1.1nm,0.3s,baz=331,slow=14,SNR=1.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.68** | **340** | P | P | 04 30 48.3 | +0.4 |
| | 4.6nm,0.6s,baz=151,slow=8.6,SNR=40 | | | | | | |
| MKAR | | | | S | S | 04 34 49.1 | +1.0 |
| | 0.1nm,0.5s,baz=169,slow=23,SNR=1.7 | | | | | | |
| | 4.6nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **25.61** | **19** | P | P | 04 30 55.7 | -0.6 |
| | 0.6nm,0.4s,baz=206,slow=12,SNR=3.3 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.24** | **339** | P | P | 04 31 28.0 | -0.3 |
| | 0.8nm,0.3s,baz=150,slow=9.6,SNR=7.7 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **30.72** | **349** | P | P | 04 31 41.3 | +0.1 |
| | 0.7nm,0.4s,baz=197,slow=11,SNR=2.0 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **34.16** | **334** | P | P | 04 32 11.1 | 0.0 |
| | 0.6nm,0.4s,baz=132,slow=12,SNR=4.2 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **BRTR** | **Keskin Array B** | **52.93** | **303** | P | P | 04 34 39.4 | -0.9 |
| | 0.3nm,0.6s,baz=64,slow=6.6,SNR=2.2 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.55** | **135** | P | P | 04 35 19.8 | -0.2 |
| | 1.1nm,0.6s,baz=322,slow=7.5,SNR=36 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **61.01** | **138** | P | P | 04 35 36.8 | +0.2 |
| | 1.0nm,0.5s,baz=322,slow=6.7,SNR=10 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **64.85** | **327** | P | P | 04 36 01.9 | +0.7 |
| | 2.7nm,1.0s,baz=90,slow=5.0,SNR=1.7 | | | | | | |
| | 2.7nm,1.0s | | | | | | |

*NOU **28** 04:35:40.0, 40°.96S×176°.83E, h7km, MLv3.9/9, North Island, New Zealand*
*WEL **28** 04:35:45.2±1.4, 41°.S±4°×17°.6E±°, h27km±11km, M3.9/102, ML4.3/7, MLv3.9/102, Error ellipse: s-maj=0.0km s-min=0.0km az=117.8, confirmed*
*WEL **28** 04:35:46.4, 40°.64S×176°.35E, h26km, ML3.8, Mw3.8, Moment Tensor Solution. s7 Moment tensor: M0=41.40; M0=7.79; M0=-33.61; M0=-27.67; M0=14.75; M0=55.55; Fault plane solution: NP1:φ=23.00000°, δ=17.00000°, λ=87.00000°. NP2:φ=206.00000°, δ=73.00000°, λ=91.00000°. Principal axes: T -73.7300, Plg62.0000°, Azm117.0000°; N -1.1300, Plg1.0000°, Azm25.0000°; P 74.8600, Plg28.0000°, Azm295.0000°; NORTH ISLAND*

**ISC 28 04:35:43.1±1.3, 40°.80S±0°.03×176°.57E±0°.04, h16km±9km, n125, σ0°.87/137, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BFZ** | **Birch Farm** | **0.28** | **296** | P | **Pb** | **04 35 50.5** | **+0.9** |
| **BFZ** | **Birch Farm** | **0.28** | **296** | P | **Pb** | **04 35 50.7** | **+1.0** |
| BFZ | | | | S | **Sb** | **04 35 54.4** | **+0.3** |
| **CPFS** | **Castlepoint Fi** | **0.28** | **250** | P | **Pn** | **04 35 53.3** | **+0.8** |
| CPFS | | | | S | **Sn** | **04 35 59.5** | **+1.0** |
| **CPWZ** | **Castlepoint** | **0.30** | **249** | P | **Pn** | **04 35 53.7** | **+0.9** |
| CPWZ | | | | S | **Sn** | **04 36 00.3** | **+1.3** |
| **ANWZ** | **Angora Road** | **0.35** | **348** | P | **Pn** | **04 35 52.2** | **-1.3** |
| ANWZ | | | | S | **Sb** | **04 35 57.9** | **+1.7** |
| **WBFS** | **Weber Fire Sta** | **0.45** | **334** | P | **Pg** | **04 35 51.7** | **-0.3** |
| WBFS | | | | S | **Sg** | **04 35 57.4** | **-0.7** |
| **TRMS** | **Tiraumea** | **0.46** | **286** | P | **Pb** | **04 35 53.4** | **+0.6** |
| **PGFS** | **Porangahau Fir** | **0.50** | **4** | P | **Pn** | **04 35 55.2** | **-0.4** |
| PGFS | | | | S | **Sn** | **04 36 02.7** | **-1.1** |
| **PRWZ** | **Pori Road** | **0.52** | **298** | P | **Pb** | **04 35 54.3** | **+0.5** |
| PRWZ | | | | S | **Sg** | **04 36 00.9** | **+0.6** |
| **TIWZ** | **Tintock** | **0.52** | **273** | P | **Pn** | **04 35 55.0** | **-0.9** |
| **PRHZ** | **Porangahau** | **0.54** | **5** | P | **Pn** | **04 35 55.7** | **-0.3** |
| PRHZ | | | | S | **Sn** | **04 36 04.1** | **-0.7** |
| **DVHZ** | **Dannevirke** | **0.59** | **328** | P | **Pb** | **04 35 55.0** | **0.0** |
| DVHZ | | | | S | **Sg** | **04 36 02.9** | **+0.4** |
| **TMWZ** | **Te Maipa** | **0.60** | **239** | P | **Pn** | **04 35 57.4** | **+0.4** |
| **EKTS** | **Eketahuna Scho** | **0.67** | **283** | P | **Pg** | **04 35 55.3** | **-1.0** |
| **DVHS** | **Dannevirke Hig** | **0.70** | **329** | P | **Pb** | **04 35 55.7** | **-1.2** |
| **WDPS** | **Woodville Poli** | **0.71** | **311** | P | **Pg** | **04 35 57.0** | **+0.1** |
| **POWZ** | **Post Office Ro** | **0.74** | **304** | P | **Pg** | **04 35 57.6** | **+0.1** |
| POWZ | | | | S | **Sb** | **04 36 06.8** | **-0.6** |
| **WPHZ** | **Waipukurau** | **0.74** | **352** | P | **Pn** | **04 35 58.6** | **-0.3** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MRZ** | **Mangatainoka R** | **0.77** | **280** | P | **Pg** | **04 35 58.2** | **+0.2** | |
| MRZ | | | | S | **Sb** | **04 36 07.9** | **-0.4** | |
| **PXZ** | **Pawanui** | **0.80** | **16** | P | **Pn** | **04 35 59.6** | **-0.1** | |
| **HOWZ** | **Holdsworth Sta** | **0.81** | **263** | P | **Pn** | **04 35 59.4** | **-0.4** | |
| HOWZ | | | | S | **Sg** | **04 36 10.3** | **+0.9** | |
| **MTW** | **Mount Morrison** | **0.88** | **246** | P | **Pn** | **04 36 00.7** | **-0.2** | |
| **TRWZ** | **Traveller** | **0.89** | **228** | P | **Pn** | **04 36 01.3** | **+0.2** | |
| **PNHZ** | **Pukenui** | **0.93** | **342** | P | **Pg** | **04 36 01.1** | **-0.1** | |
| **KAHZ** | **Kahuranaki** | **1.03** | **13** | P | **Pg** | **04 36 02.8** | **-0.2** | |
| **PAWZ** | **Paruwai Farm** | **1.04** | **236** | P | **Pg** | **04 36 03.0** | **-0.2** | |
| **OGWZ** | **Otaki Gorge** | **1.06** | **269** | P | **Pb** | **04 36 02.9** | **-0.2** | |
| **OHWZ** | **Ohakea** | **1.13** | **301** | P | **Pg** | **04 36 04.6** | **-0.2** | |
| **KRHZ** | **Kereru** | **1.17** | **352** | P | **Pn** | **04 36 04.4** | **-0.3** | |
| **MSWZ** | **Moikau Station** | **1.17** | **238** | P | **Pn** | **04 36 04.5** | **-0.4** | |
| **CAW** | **Cannon Point** | **1.18** | **255** | P | **Pn** | **04 36 04.7** | **-0.3** | |
| **CKHZ** | **Cape Kidnapper** | **1.21** | **19** | P | **Pg** | **04 36 10.6** | **+4.2** | |
| **PLWZ** | **Palliser** | **1.25** | **232** | P | **Pn** | **04 36 05.5** | **-0.5** | |
| **KIW** | **Kapiti Island** | **1.26** | **267** | P | **Pn** | **04 36 05.8** | **-0.3** | |
| **MCHZ** | **McNeill Hill** | **1.36** | **4** | P | **Pb** | **04 36 07.7** | **-0.4** | |
| **KWHZ** | **Kaweka Forest** | **1.38** | **355** | P | **Pn** | **04 36 07.7** | **-0.1** | |
| **BHW** | **Baring Head** | **1.42** | **244** | P | **Pn** | **04 36 07.7** | **-0.5** | |
| **WEL** | **Wellington** | **1.45** | **250** | P | **Pb** | **04 36 08.9** | **-0.7** | |
| **SNZO** | **South Karori** | **1.50** | **250** | P | **Pn** | **04 36 09.1** | **-0.2** | |
| **MOVZ** | **Moawhango** | **1.53** | **335** | P | **Pn** | **04 36 10.0** | **+0.2** | |
| **ARHZ** | **Aropaoanui** | **1.57** | **12** | P | **Pn** | **04 36 10.3** | **0.0** | |
| **WAZ** | **Wanganui** | **1.60** | **310** | P | **Pb** | **04 36 11.5** | **-0.8** | |
| **BKZ** | **Black Stump Fm** | **1.64** | **358** | P | **Pn** | **04 36 11.0** | **-0.2** | |
| **BKZ** | **Black Stump Fm** | **1.64** | **358** | P | **Pn** | **04 36 11.1** | **-0.2** | |
| **MTVZ** | **Mangateitei** | **1.65** | **329** | P | **Pb** | **04 36 12.7** | **-0.4** | |
| **WNVZ** | **Wahianoa** | **1.65** | **333** | P | **Pn** | **04 36 12.0** | **+0.5** | |
| **TUVZ** | **Tukino** | **1.69** | **335** | P | **Pb** | **04 36 12.8** | **-1.0** | |
| **TFVZ** | **Turoa** | **1.69** | **332** | P | **Pb** | **04 36 12.8** | **+0.6** | |
| **WHVZ** | **Whangaehu Hut** | **1.69** | **333** | P | **Pb** | **04 36 13.0** | **-1.0** | |
| **NMHZ** | **Naumai** | **1.71** | **6** | P | **Pn** | **04 36 12.7** | **+0.4** | |
| **MAVZ** | **Matarangi** | **1.72** | **333** | P | **Pb** | **04 36 13.5** | **-0.9** | |
| **FWVZ** | **Far West T-bar** | **1.73** | **333** | P | **Pb** | **04 36 14.8** | **+0.2** | |
| **SNVZ** | **South Ngauruho** | **1.77** | **336** | P | **Pn** | **04 36 13.8** | **+0.7** | |
| **OTVZ** | **Oturere** | **1.78** | **337** | P | **Pn** | **04 36 13.8** | **+0.5** | |
| **PKVZ** | **Pokaka** | **1.78** | **328** | P | **Pb** | **04 36 14.2** | **-1.2** | |
| **TCW** | **Tory Channel** | **1.78** | **256** | P | **Pn** | **04 36 12.8** | **-0.4** | |
| **COVZ** | **Chateau Observ** | **1.79** | **333** | P | **Pb** | **04 36 14.6** | **-0.9** | |
| **NGZ** | **Ngauruhoe** | **1.79** | **335** | P | **Pn** | **04 36 14.2** | **+0.7** | |
| **ETVZ** | **East Tongariro** | **1.79** | **338** | P | **Pn** | **04 36 14.1** | **+0.6** | |
| **TMVZ** | **Te Maari** | **1.81** | **338** | P | **Pn** | **04 36 14.5** | **+0.8** | |
| **NNVZ** | **North Ngauruho** | **1.82** | **336** | P | **Pb** | **04 36 15.5** | **-0.7** | |
| **NTVZ** | **North Tongarir** | **1.84** | **338** | P | **Pn** | **04 36 14.8** | **+0.7** | |
| **WTVZ** | **West Tongariro** | **1.85** | **336** | P | **Pn** | **04 36 15.0** | **+0.8** | |
| **KRVZ** | **Karewarewa** | **1.85** | **337** | P | **Pb** | **04 36 16.0** | **-0.6** | |
| **TWVZ** | **Taurewa** | **1.94** | **333** | P | **Pn** | **04 36 16.1** | **+0.7** | |
| **HATZ** | **Hinemaiaia** | **1.94** | **349** | P | **Pb** | **04 36 16.5** | **-1.6** | |
| **KATZ** | **Kakaramea** | **1.95** | **339** | P | **Pb** | **04 36 16.8** | **-1.4** | |
| **MTHZ** | **Maungataniwha** | **1.96** | **6** | P | **Pn** | **04 36 15.5** | **-0.1** | |
| **KNZ** | **Kokohu** | **1.97** | **26** | P | **Pn** | **04 36 16.2** | **+0.4** | |
| **MRHZ** | **Matea Rd** | **1.97** | **356** | P | **Pn** | **04 36 16.5** | **+0.7** | |
| **DUWZ** | **D'Urville Isla** | **2.01** | **269** | P | **Pn** | **04 36 16.1** | **-0.2** | |
| **RATZ** | **Rangitukua** | **2.03** | **342** | P | **Pn** | **04 36 17.2** | **+0.5** | |
| **TUWZ** | **Tuamarina** | **2.08** | **252** | P | **Pn** | **04 36 17.1** | **-0.2** | |
| **SNGZ** | **Shannon Statio** | **2.10** | **17** | P | **Pn** | **04 36 17.8** | **+0.1** | |
| **PRGZ** | **Paritu Road** | **2.13** | **29** | P | **Pn** | **04 36 17.7** | **-0.3** | |
| **LREZ** | **Lake Rotokare** | **2.14** | **308** | P | **Pn** | **04 36 19.5** | **+1.4** | |
| **VRZ** | **Vera Road** | **2.18** | **320** | P | **Pn** | **04 36 19.4** | **+0.7** | |
| **WATZ** | **Wairara** | **2.19** | **343** | P | **Pn** | **04 36 19.4** | **+0.5** | |
| **RTZ** | **Ruatahuna** | **2.21** | **8** | P | **Pn** | **04 36 18.9** | **-0.2** | |
| **BSWZ** | **Blackbirch Sta** | **2.23** | **245** | P | **Pn** | **04 36 18.7** | **-0.6** | |
| **ALRZ** | **Allen Road** | **2.24** | **355** | P | **Pn** | **04 36 19.5** | **-0.1** | |
| **MUGZ** | **Murupara** | **2.33** | **4** | P | **Pn** | **04 36 20.4** | **-0.3** | |
| **PREZ** | **Palmer Road** | **2.36** | **307** | P | **Pn** | **04 36 23.1** | **-1.9** | |
| **KUTZ** | **Kaahu Road** | **2.38** | **346** | P | **Pn** | **04 36 21.5** | **0.0** | |
| **RAGZ** | **Rawiri** | **2.39** | **16** | P | **Pn** | **04 36 21.3** | **-0.4** | |
| **NEZ** | **North Egmont** | **2.44** | **308** | P | **Pn** | **04 36 23.7** | **+1.4** | |
| **NNZ** | **Nelson** | **2.45** | **259** | P | **Pn** | **04 36 22.6** | **+0.2** | |
| **KHEZ** | **Kahui Hut** | **2.47** | **307** | P | **Pb** | **04 36 26.3** | **-0.9** | |
| **NMEZ** | **Namu Road** | **2.49** | **303** | P | **Pg** | **04 36 30.2** | **-0.5** | |
| **HSRZ** | **Hossack Road** | **2.50** | **354** |

baz=265,slow=74,SNR=4.5
**SONM Songino Array 40.77 340** P **P** **04 45 17.3 -0.2**
comp=Z,0.3nm,0.5s,baz=155,slow=7.9,SNR=1.4
SONM PcP **PcP** **04 47 18.6 +0.7**
comp=Z,0.3nm,0.4s,baz=174,slow=2.9,SNR=2.4
comp=Z,0.3nm,0.5s
**FORT Forrest 41.00 177** P **P** **04 45 20.4 +1.0**
FORT IAmb IAmb 04 45 22.6
comp=Z,25nm,1.1s
**BBOO Buckleboo 44.05 168** P **P** **04 45 44.8 +0.7**
BBOO IAmb IAmb 04 45 57.7
comp=Z,34nm,1.4s
**YAK Yakutsk 51.60 2** P **P** **04 46 41.2 -1.0**
**MK31 Makanchi Array 51.71 323** P **P** **04 46 44.2 +0.9**
**MKAR Makanchi Array 51.71 323** P **P** **04 46 44.1 +0.8**
comp=Z,1.0nm,0.6s,baz=114,slow=8.8,SNR=14
MKAR PcP **PcP** **04 47 56.9 +0.7**
comp=Z,1.0nm,0.7s,baz=116,slow=4.3,SNR=4.8
comp=Z,1.0nm,0.6s
**ZAA0 Zalesovo Array 54.34 331** P **P** **04 47 02.8 +0.3**
ZAA0 IAmb IAmb 04 47 04.6
comp=Z,3.2nm,0.7s
**ZALV Zalesovo Beam 54.34 331** P **P** **04 47 02.5 0.0**
comp=Z,1.7nm,0.4s,baz=126,slow=7.3,SNR=6.4
comp=Z,1.7nm,0.4s
**AAK Ala-Archa 54.98 315** LR LR 05 12 02.5
comp=Z,95nm,21.5s,baz=360,slow=38
**KURBB Kurchatov Arra 55.76 325** P **P** **04 47 13.1 +0.2**
comp=Z,1.8nm,0.6s,baz=123,slow=7.0,SNR=14
comp=Z,1.8nm,0.6s
**BVAR Borovoye Array 61.36 325** P **P** **04 47 53.0 +1.2**
comp=Z,0.6nm,0.5s,baz=104,slow=12,SNR=3.8
BVAR PcP **PcP** **04 48 34.4 +0.7**
comp=Z,0.8nm,0.7s,baz=90,slow=5.8,SNR=4.1
comp=Z,0.6nm,0.5s
**S12K Black Hills 71.35 35** P **P** **04 48 56.1 +0.5**
**M14K Bethel 72.26 29** P **P** **04 49 00.9 0.0**
M14K IAmb IAmb 04 49 08.7
comp=Z,8.9nm,0.8s
**I17K Unalakleet 73.42 26** P **P** **04 49 07.2 -0.5**
**F17K Baldwin Pennin 73.68 24** P **P** **04 49 08.7 -0.5**
F17K IAmb IAmb 04 49 15.4
comp=Z,25nm,1.4s
**M17K Holitna River 74.53 29** P **P** **04 49 15.3 +1.0**
M17K IAmb IAmb 04 49 22.8
comp=Z,17nm,1.4s
**C19K Lookout Ridge 74.82 21** P **P** **04 49 16.3 +0.3**
C19K IAmb IAmb 04 49 16.5
comp=Z,7.6nm,1.4s
**O18K Koktuh Hills 75.48 31** P **P** **04 49 19.6 -0.3**
O18K IAmb IAmb 04 49 20.1
comp=Z,7.1nm,1.0s
**B20K Meade River 75.81 20** P **P** **04 49 20.2 -1.3**
**J20K Nowinta River 76.31 26** P **P** **04 49 25.3 +0.8**
**GNI Garni 76.65 309** P **P** **04 49 26.5 -0.6**
**E21K Killik River 76.75 22** P **P** **04 49 26.0 -1.0**
E21K IAmb IAmb 04 49 39.8
comp=Z,5.6nm,1.4s
**O22K Cooper Landing 78.24 30** P **P** **04 49 35.0 -0.3**
**G24K Hadweenzic Riv 79.17 24** P **P** **04 49 40.0 -0.4**
**ILAR Eielson Array 79.47 26** P **P** **04 49 40.7 -1.3**
comp=Z,0.3nm,0.6s,baz=238,slow=5.2,SNR=2.6
comp=Z,0.3nm,0.6s
**CRQM Cirque 81.47 30** P **P** **04 49 53.3 +0.2**
CRQM IAmb IAmb 04 49 55.2
comp=Z,23nm,1.2s
**ARCES ARCESS Array B 83.94 340** P **P** **04 50 05.9 +0.4**
comp=Z,2.1nm,0.7s,baz=82,slow=6.8,SNR=8.5
comp=Z,2.1nm,0.7s
**FINES FINESS Array B 85.61 332** P **P** **04 50 14.0 0.0**
comp=Z,1.9nm,0.8s,baz=79,slow=7.2,SNR=5.2
comp=Z,1.9nm,0.8s
**HFS Hagfors 91.77 332** P **P** **04 50 42.9 -0.4**
comp=Z,2.0nm,0.8s,baz=64,slow=5.0,SNR=5.1
comp=Z,2.0nm,0.8s
**NOA NORSAR Array B 92.48 334** P **P** **04 50 45.9 -0.8**
comp=Z,0.5nm,0.7s,baz=47,slow=1.7,SNR=4.1
comp=Z,0.5nm,0.7s
**TORD Torodi Ar. Bea 119.89 292** PKP **PKPdf** **04 56 27.0 0.0**
comp=Z,0.4nm,0.7s,baz=64,slow=2.4,SNR=4.1

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*SJA **28** 04:51:34.2±0.6,29.˙64S×71.˙76W,h6km±2km,ML5.4, MW4.7*
*IDC **28** 04:51:34.2±0.4,29.˙71S×71.˙18W,h0km,mb5.1/16, mbtmp5.0/22,ML4.9/6,MS4.4/49,Error ellipse: s-maj=14.1km s-min=9.1km az=74.0*
*VAO **28** 04:51:36.7±1.1,29.˙68S×71.˙24W,h13km±6km,mb5.3*
*MOS **28** 04:51:40.4±1.3,29.˙56S×71.˙28W,h45km,mb5.4/27,Error ellipse: s-maj=13.8km s-min=6.2km az=97.6*
*NEIC **28** 04:51:40.3±1.7,29.˙68S±0.˙02×71.˙36W±0.˙05,h35km±4km, mb5.4/591,Mww5.2/18,Mwr5.2(GUC),Error ellipse: s-maj=5.8km s-min=3.5km az=97.0*
*BJI **28** 04:51:40.9±0.0,29.˙52S×72.˙04W,h53km,mB5.2/6, Ms5.2/16,Ms7 5.0/17*
*GUC **28** 04:51:40.7±0.8,29.˙69S×71.˙30W,h52km±1km,ML5.2*
*NEIC **28** 04:51:40.4,29.˙67S×71.˙38W,h40km*
*NEIC **28** 04:51:40.4,29.˙67S×71.˙26W,h40km,Moment Tensor Solution. Duration: 1ŝ1.0 Moment tensor: Scale $10^{16}$ Nm; $M_{rr}$0.71±.02; $M_{\theta\theta}$-0.02±.01; $M_{\phi\phi}$-0.68±.02; $M_{r\theta}$-0.04±.01; $M_{r\phi}$-0.36±.01; $M_{\theta\phi}$0.41±.02; Best double couple: $M_0$0.88300×$10^{17}$ NP1:$\phi_s$9.00000°,$\delta$59.00000°, $\lambda$73.00000°. NP2:$\phi_s$220.00000°,$\delta$35.00000°,$\lambda$116.00000°. Principal axes: T 0.8410, Plg70.0000°, Azm241.0000°; N 0.0850, Plg15.0000°, Azm18.0000°; P -0.9260, Plg13.0000°, Azm111.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 28 04:51:39.3±0.3,29.˙69S±0.˙02×71.˙38W±0.˙03,h33km±1km, h33km:pP-P,n997,σ1ŝ37/968,mb5.4/308,MS4.5/54, 37C-18D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CO05** | **La Serena** | **0.26** | **153** | | | | **Pn** | **04 51 49.0** | **+2.5** |
| CO05 | | | | | | Sn | **Sn** | **04 51 54.9** | **+4.1** |
| **CO05** | **La Serena** | **0.26** | **153** | **i** | **P** | | **Pn** | **04 51 49.1** | **+2.5** |
| CO05 | | | | | eS | | **Sn** | **04 51 55.1** | **+4.2** |
| CO05 | | | | | IAML | | | 04 52 01.3 | |
| | comp=E,248μm,0.2s | | | | | | | | |
| **GO04** | **Tololo Observa** | **0.69** | **134** | | Pn | | **Pb** | **04 51 54.5** | **+1.2** |
| GO04 | | | | | Sn | | **Sn** | **04 52 03.2** | **+0.4** |
| **GO04** | **Tololo Observa** | **0.69** | **134** | **i** | **P** | | **Pb** | **04 51 53.5** | **+0.3** |
| **GO04** | **Tololo Observa** | **0.69** | **134** | **i** | **P** | | **Pb** | **04 51 54.2** | **+1.0** |
| GO04 | | | | | eS | | **Sn** | **04 52 04.0** | **+1.2** |
| **LCO** | **Las Campanas** | **0.90** | **41** | | Pn | | **Pb** | **04 51 57.1** | **+0.5** |
| LCO | | | | | Sn | | **Sb** | **04 52 08.3** | **0.0** |
| **LCO** | **Las Campanas** | **0.90** | **41** | **i** | **P** | | **Pb** | **04 51 56.3** | **-0.3** |
| LCO | | | | | IAML | | | 04 52 13.9 | |
| | comp=Z,80μm,0.3s | | | | | | | | |
| **LCO** | **Las Campanas** | **0.90** | **41** | **i** | **eP** | | **Pb** | **04 51 57.0** | **+0.5** |
| LCO | | | | | eS | | **Sb** | **04 52 08.6** | **+0.3** |
| **LCO** | **Las Campanas** | **0.90** | **41** | | P | | **Pb** | **04 51 57.1** | **+0.5** |
| LCO | | | | | | | | 04 52 08.4 | |
| **CO06** | **Fray Jorge** | **1.01** | **193** | | Pn | | **Pb** | **04 51 59.0** | **+0.6** |
| CO06 | | | | | Sn | | **Sb** | **04 52 12.2** | **+0.9** |
| **CO06** | **Fray Jorge** | **1.01** | **193** | **i** | **P** | | **Pb** | **04 51 58.9** | **+0.5** |
| CO06 | | | | | eS | | **Sb** | **04 52 12.7** | **+1.4** |
| CO06 | | | | | IAML | | | 04 52 16.1 | |
| | comp=N,103μm,0.3s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.15** | **105** | | Pn | | **Pb** | **04 52 01.0** | **+0.2** |
| CO01 | | | | | Sn | | **Sb** | **04 52 15.3** | **-0.3** |
| **CO01** | **Juntas del Tor** | **1.15** | **105** | **i** | **P** | | **Pb** | **04 52 01.2** | **+0.4** |
| CO01 | | | | | IAML | | | 04 52 22.9 | |
| | comp=Z,18μm,0.8s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.15** | **105** | **i** | **P** | | **Pb** | **04 52 00.9** | **+0.1** |
| CO01 | | | | | eS | | **Sb** | **04 52 15.3** | **-0.3** |
| CO01 | | | | | IAML | | | 04 52 16.2 | |
| | comp=E,97μm,0.4s | | | | | | | | |
| **AC05** | **El Transito** | **1.28** | **49** | | Pn | | **Pb** | **04 52 02.4** | **-0.6** |
| AC05 | | | | | Sn | | **Sb** | **04 52 18.5** | **-0.7** |
| **AC05** | **El Transito** | **1.28** | **49** | **i** | **P** | | **Pb** | **04 52 03.0** | **0.0** |
| AC05 | | | | | S | | **Sb** | **04 52 24.9** | **+5.7** |
| AC05 | | | | | IAML | | | 04 52 27.8 | |
| | comp=E,19μm,0.8s | | | | | | | | |
| **AC05** | **El Transito** | **1.28** | **49** | **i** | **eP** | | **Pb** | **04 52 02.8** | **-0.2** |
| AC05 | | | | | eS | | **Sb** | **04 52 19.0** | **-0.2** |
| AC05 | | | | | IAML | | | 04 52 22.4 | |
| | comp=E,52μm,0.5s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.29** | **153** | | Pn | | **Pb** | **04 52 02.4** | **-0.8** |
| CO03 | | | | | Sn | | **Sn** | **04 52 18.2** | **+0.9** |
| **CO03** | **El Pedregal** | **1.29** | **153** | **i** | **P** | | **Pb** | **04 52 02.7** | **-0.4** |
| CO03 | | | | | IAML | | | 04 52 28.6 | |
| | comp=Z,31μm,0.4s | | | | | | | | |
| **CO03** | **El Pedregal** | **1.29** | **153** | **i** | **eP** | | **Pb** | **04 52 02.3** | **-0.8** |
| CO03 | | | | | eS | | **Sn** | **04 52 18.3** | **+1.0** |
| **AC04** | **Llanos de Chal** | **1.50** | **10** | | Pn | | **Pb** | **04 52 05.6** | **-1.0** |
| AC04 | | | | | Sn | | **Sb** | **04 52 23.9** | **-1.4** |
| **AC04** | **Llanos de Chal** | **1.50** | **10** | **i** | **P** | | **Pn** | **04 52 03.9** | **0.0** |
| AC04 | | | | | S | | **Sb** | **04 52 25.4** | **+0.1** |
| AC04 | | | | | IAML | | | 04 52 30.0 | |
| | comp=E,43μm,0.6s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.50** | **10** | **i** | **eP** | | **Pb** | **04 52 05.8** | **-0.8** |
| AC04 | | | | | eS | | **Sb** | **04 52 25.0** | **-0.3** |
| AC04 | | | | | IAML | | | 04 52 30.6 | |
| | comp=E,61μm,0.6s | | | | | | | | |
| **CO02** | **Combarbal** | **1.54** | **168** | | Pn | | **Pb** | **04 52 06.3** | **-1.1** |
| **CO02** | **Combarbal** | **1.54** | **168** | **i** | **P** | | **Pb** | **04 52 06.5** | **-1.0** |
| CO02 | | | | | IAML | | | 04 52 34.4 | |
| | comp=Z,44μm,0.2s | | | | | | | | |
| **CO02** | **Combarbal** | **1.54** | **168** | **i** | **P** | | **Pn** | **04 52 06.0** | **+1.4** |
| CO02 | | | | | eS | | **Sn** | **04 52 24.9** | **+1.3** |
| **GO03** | **Copiap** | **2.31** | **26** | | Pn | | **Pn** | **04 52 16.5** | **+1.3** |
| **GO03** | **Copiap** | **2.31** | **26** | **i** | **P** | | **Pn** | **04 52 16.7** | **+1.5** |
| **GO03** | **Copiap** | **2.31** | **26** | **i** | **eP** | | **Pn** | **04 52 16.7** | **+1.5** |
| GO03 | | | | | eS | | **Sn** | **04 52 44.9** | **+2.4** |
| GO03 | | | | | IAML | | | 04 52 54.0 | |
| | comp=N,24μm,0.2s | | | | | | | | |
| **AC06** | **Mina Casimiro** | **2.49** | **21** | | Pn | | **Pn** | **04 52 18.9** | **+1.4** |
| **AC06** | **Mina Casimiro** | **2.49** | **21** | **i** | **P** | | **Pn** | **04 52 19.3** | **+1.8** |
| AC06 | | | | | eS | | **Sn** | **04 52 49.1** | **+2.3** |
| **RTLS** | **Leoncito** | **2.76** | **140** | **i** | **P** | | **Pb** | **04 52 26.3** | **-1.9** |
| RTLS | | | | | IAML | | | 04 53 09.5 | |
| | comp=Z,27μm,0.6s | | | | | | | | |
| **VA06** | **Catapilco** | **2.87** | **179** | | Pn | | **Pn** | **04 52 24.7** | **+2.0** |
| **VA06** | **Catapilco** | **2.87** | **179** | **i** | **eP** | | **Pn** | **04 52 24.6** | **+2.0** |
| VA06 | | | | | eS | | **Sn** | **04 52 58.3** | **+2.4** |
| **ZON** | **Zonda** | **2.97** | **129** | | Pn | | **Pn** | **04 52 27.3** | **+3.1** |
| **ZON** | **Zonda** | **2.97** | **129** | **i** | **P** | | **Pb** | **04 52 29.3** | **-2.3** |
| ZON | | | | | S | | **Sb** | **04 53 09.2** | **+1.7** |
| ZON | | | | | IAML | | | 04 53 25.5 | |
| | comp=Z,8μm,1.0s | | | | | | | | |
| **ZON** | **Zonda** | **2.97** | **129** | | P | | **Pn** | **04 52 27.3** | **+3.1** |
| **SJA** | **San Juan** | **3.04** | **128** | **i** | **P** | | **Pb** | **04 52 29.4** | **-3.4** |
| SJA | | | | | S | | **Sb** | **04 53 11.1** | **+1.6** |
| SJA | | | | | IAML | | | 04 53 27.9 | |
| | comp=Z,7μm,0.8s | | | | | | | | |
| **VA03** | **San Esteban** | **3.15** | **167** | | Pn | | **Pn** | **04 52 29.0** | **+2.3** |
| **VA03** | **San Esteban** | **3.15** | **167** | **i** | **P** | | **Pn** | **04 52 29.6** | **+3.0** |
| VA03 | | | | | S | | **Sb** | **04 53 09.7** | **-2.9** |
| VA03 | | | | | IAML | | | 04 53 15.6 | |
| | comp=Z,19μm,0.8s | | | | | | | | |
| **VA03** | **San Esteban** | **3.15** | **167** | **i** | **eP** | | **Pn** | **04 52 28.7** | **+2.1** |
| VA03 | | | | | eS | | **Sn** | **04 53 05.2** | **+2.1** |
| **RTCV** | **Cerro Valdivia** | **3.26** | **132** | **i** | **P** | | **Pb** | **04 52 33.0** | **-3.6** |
| RTCV | | | | | IAML | | | 04 53 30.9 | |
| | comp=Z,930nm,2.0s | | | | | | | | |
| **ROCH** | **El Roble** | **3.29** | **175** | **i** | **eP** | | **Pn** | **04 52 30.9** | **+2.2** |
| ROCH | | | | | eS | | **Sn** | **04 53 08.9** | **+2.2** |
| **VA01** | **Torpederas** | **3.33** | **184** | | Pn | | **Pn** | **04 52 30.0** | **+1.0** |
| **VA01** | **Torpederas** | **3.33** | **184** | **i** | **P** | | **Pn** | **04 52 30.5** | **+1.4** |
| VA01 | | | | | S | | **Sn** | **04 53 11.9** | **+4.4** |
| VA01 | | | | | IAML | | | 04 53 22.9 | |
| | comp=Z,7μm,1.5s | | | | | | | | |
| **VA01** | **Torpederas** | **3.33** | **184** | **i** | **eP** | | **Pn** | **04 52 30.2** | **+1.1** |
| **PEL** | **Peldehue** | **3.50** | **170** | | Pn | | **Pn** | **04 52 33.7** | **+2.3** |
| **PEL** | **Peldehue** | **3.50** | **170** | **i** | **eP** | | **Pn** | **04 52 33.6** | **+2.2** |
| PEL | | | | | eS | | **Sn** | **04 53 12.8** | **+1.2** |
| **PEL** | **Peldehue** | **3.50** | **170** | | P | | **Pn** | **04 52 33.7** | **+2.3** |
| **MT02** | **Curacav** | **3.57** | **177** | | Pn | | **Pn** | **04 52 34.0** | **+1.7** |
| **MT02** | **Curacav** | **3.57** | **177** | **i** | **P** | | **Pn** | **04 52 34.5** | **+2.2** |
| MT02 | | | | | S | | **Sn** | **04 53 18.7** | **+5.4** |
| MT02 | | | | | IAML | | | 04 53 34.7 | |
| | comp=Z,13μm,0.6s | | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.59** | **11** | | Pn | | **Pn** | **04 52 32.5** | **-0.1** |
| **AC01** | **Pan de Azucar** | **3.59** | **11** | **i** | **P** | | **Pn** | **04 52 33.8** | **+1.0** |
| AC01 | | | | | S | | **Sn** | **04 53 18.0** | **+4.0** |
| AC01 | | | | | IAML | | | 04 53 30.5 | |
| | comp=Z,6μm,0.6s | | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.59** | **11** | **i** | **eP** | | **Pn** | **04 52 32.6** | **-0.1** |
| **MT10** | **Hacienda Santa** | **3.65** | **169** | **i** | **eP** | | **Pn** | **04 52 35.7** | **+2.1** |
| **MT05** | **Renca** | **3.73** | **172** | | Pn | | **Pn** | **04 52 38.2** | **+4.2** |
| **MT05** | **Renca** | **3.73** | **172** | **i** | **P** | | **Pn** | **04 52 38.7** | **+4.0** |
| MT05 | | | | | S | | **Sn** | **04 53 23.6** | **+6.1** |
| MT05 | | | | | IAML | | | 04 53 37.6 | |
| | comp=Z,10μm,0.4s | | | | | | | | |
| **FCH** | **Farellones** | **3.75** | **166** | **e** | **P** | | **Pn** | **04 52 38.2** | **+3.2** |
| **MT14** | **Cerro Calan** | **3.77** | **169** | **e** | **P** | | **Pn** | **04 52 38.0** | **+2.9** |
| **MT16** | **CCHEN** | **3.80** | **169** | | Pn | | **Pn** | **04 52 38.8** | **+3.2** |
| **MT04** | **Ro Olivares** | **3.85** | **164** | **i** | **P** | | **Pn** | **04 52 39.9** | **+3.4** |
| MT04 | | | | | S | | **Sb** | **04 53 27.9** | **-5.2** |
| MT04 | | | | | IAML | | | 04 53 37.4 | |
| | comp=Z,14μm,0.8s | | | | | | | | |
| **MT03** | **Universidad Ad** | **3.87** | **169** | | Pn | | **Pn** | **04 52 39.5** | **+2.9** |
| **MT03** | **Universidad Ad** | **3.87** | **169** | **i** | **P** | | **Pn** | **04 52 39.0** | **+2.5** |
| MT03 | | | | | S | | **Sn** | **04 53 27.4** | **+6.6** |
| **MT08** | **Bocatoma Ro** | **3.92** | **163** | | Pn | | **Pn** | **04 52 41.6** | **+4.2** |
| **MT08** | **Bocatoma Ro** | **3.92** | **163** | **i** | **P** | | **Pn** | **04 52 40.7** | **+3.3** |
| MT08 | | | | | S | | **Sb** | **04 53 29.8** | **-5.2** |
| **VA05** | **Santo Domingo** | **3.96** | **183** | | Pn | | **Pn** | **04 52 38.5** | **+0.7** |
| **VA05** | **Santo Domingo** | **3.96** | **183** | **i** | **eP** | | **Pn** | **04 52 38.8** | **+1.0** |
| **MT09** | **Talagante** | **4.09** | **175** | | | | **Pn** | **04 52 41.8** | **+2.2** |
| **MT13** | **San Alfonso** | **4.15** | **167** | | | | **Pn** | **04 52 43.5** | **+3.0** |
| **MT13** | **San Alfonso** | **4.15** | **167** | **i** | **P** | | **Pn** | **04 52 44.6** | **+4.2** |
| MT13 | | | | | S | | **Sn** | **04 53 34.5** | **+6.7** |
| **MT01** | **Popeta** | **4.17** | **179** | | | | **Pn** | **04 52 42.1** | **+1.6** |
| **MT01** | **Popeta** | **4.17** | **179** | **i** | **P** | | **Pn** | **04 52 42.4** | **+1.8** |
| MT01 | | | | | S | | **Sn** | **04 53 33.3** | **+5.2** |
| MT01 | | | | | IAML | | | 04 53 48.1 | |
| | comp=Z,11μm,0.8s | | | | | | | | |
| **MT01** | **Popeta** | **4.17** | **179** | **i** | **eP** | | **Pn** | **04 52 42.1** | **+1.6** |
| **LMEL** | **Las Melosas** | **4.26** | **167** | | | | **Pn** | **04 52 45.1** | **+3.0** |
| **LMEL** | **Las Melosas** | **4.26** | **167** | **i** | **P** | | **Pn** | **04 52 44.9** | **+2.8** |
| LMEL | | | | | S | | **Sn** | **04 53 37.9** | **+7.1** |
| **BO04** | **La Punta** | **4.34** | **172** | | | | **Pn** | **04 52 45.1** | **+2.2** |
| **BO04** | **La Punta** | **4.34** | **172** | **e** | **P** | | **Pn** | **04 52 45.1** | **+2.2** |
| **BO01** | **Tunca** | **4.70** | **177** | | | | **Pn** | **04 52 49.1** | **+1.3** |
| **BO01** | **Tunca** | **4.70** | **177** | **i** | **P** | | **Pn** | **04 52 50.0** | **+2.1** |
| BO01 | | | | | S | | **Sn** | **04 53 46.4** | **+5.2** |
| BO01 | | | | | IAML | | | 04 54 02.8 | |
| | comp=Z,6μm,1.2s | | | | | | | | |
| **BO01** | **Tunca** | **4.70** | **177** | **i** | **eP** | | **Pn** | **04 52 49.2** | **+1.3** |
| **GO02** | **Mina Guanaco** | **4.78** | **20** | | Pn | | **Pn** | **04 52 48.9** | **-0.4** |
| **GO02** | **Mina Guanaco** | **4.78** | **20** | **i** | **P** | | **Pn** | **04 52 49.5** | **+0.2** |
| **BO03** | **Pichilemu** | **4.82** | **186** | **i** | **eP** | | **Pn** | **04 52 49.7** | **+0.2** |
| **BO02** | **Sierra Bellavi** | **5.11** | **175** | | Pn | | **Pn** | **04 52 55.2** | **+1.6** |
| **BO02** | **Sierra Bellavi** | **5.11** | **175** | **i** | **P** | | **Pn** | **04 52 56.5** | **+2.9** |
| BO02 | | | | | S | | **Sn** | **04 53 57.2** | **+5.6** |
| **PB14** | **IPOC Station P** | **5.12** | **10** | | Pn | | **Pn** | **04 52 52.8** | **-1.2** |
| **GO05** | **Huala** | **5.33** | **185** | | Pn | | **Pn** | **04 52 56.9** | **+0.4** |
| **BI02** | **San Fabin de** | **6.96** | **179** | | Pn | | **Pn** | **04 53 19.9** | **+1.0** |
| **BI05** | **Punta Hualpn** | **7.20** | **192** | | | | **Pn** | **04 53 21.9** | **-0.3** |
| **AF01** | **San Pedro de A** | **7.29** | **24** | | | | **Pn** | **04 53 24.0** | **+0.1** |
| **LVC** | **Limon Verde** | **7.39** | **18** | | Pn | | **Pn** | **04 53 24.4** | **-0.8** |
| **LVC** | **Limon Verde** | **7.39** | **18** | | Pn | | **Pn** | **04 53 23.9** | **-1.3** |
| | comp=Z,6.4nm,0.3s,baz=205,slow=11,SNR=30 | | | | | | | | |
| LVC | | | | | | Sn | **Sn** | **04 54 49.5** | **+1.5** |
| | comp=Z,23nm,0.3s,baz=210,slow=20,SNR=1.4 | | | | | | | | |
| LVC | | | | | | LR | LR | 04 56 12.4 | |
| | comp=Z,4μm,19.8s,baz=209,slow=38 | | | | | | | | |
| | comp=Z,17nm,0.3s | | | | | | | | |
| **LVC** | **Limon Verde** | **7.39** | **18** | **e** | **P** | | **Pn** | **04 53 23.8** | **-1.4** |
| LVC | | | | | eS | | **Sn** | **04 54 47.8** | **-0.3** |
| **PB04** | **IPOC Station P** | **7.41** | **9** | | Pn | | **Pn** | **04 53 22.8** | **-2.5** |
| **H03N1** | **Juan Fernandez** baz=64,slow=72 | **7.44** | **238** | | T | | T | 05 00 42.7 | |
| **H03N2** | **Juan Fernandez** baz=64,slow=72 | **7.45** | **238** | | T | | T | 05 00 45.5 | |
| **H03N3** | **Juan Fernandez** baz=64,slow=72 | **7.46** | **238** | | T | | T | 05 00 41.8 | |
| **VA04** | **Juan Fernndez** | **7.48** | **236** | | Pn | | **Pn** | **04 53 25.1** | **-0.9** |
| **VA04** | **Juan Fernndez** | **7.48** | **236** | **e** | **P** | | **Pn** | **04 53 25.5** | **-0.5** |
| **TA01** | **Diego Aracena** | **9.15** | **7** | | Pn | | **Pn** | **04 53 48.4** | **-0.6** |
| **LC02** | **Puerto Saavedr** | **9.23** | **190** | | | | **Pn** | **04 53 50.3** | **+0.2** |
| **TA02** | **Huaiquique** | **9.44** | **7** | | Pn | | **Pn** | **04 53 53.5** | **+0.4** |
| **GO06** | **Curarrehue** | **9.87** | **180** | | Pn | | **Pn** | **04 53 58.5** | **-0.5** |
| **LR03** | **Panguipulli** | **9.95** | **184** | | | | **Pn** | **04 53 59.1** | **-0.9** |
| **LR04** | **Corral** | **10.31** | **189** | | Pn | | **Pn** | **04 54 03.4** | **-1.4** |
| **LR05** | **Currie** | **10.53** | **183** | | Pn | | **Pn** | **04 54 07.6** | **-0.2** |
| **PLCA** | **Paso Flores** | **11.04** | **177** | | Pn | | **Pn** | **04 54 14.9** | **0.0** |
| | comp=Z,3.1nm,0.3s,baz=342,slow=13,SNR=43 | | | | | | | | |
| PLCA | | | | | | Sn | **Sn** | **04 56 20.6** | **+3.3** |
| | comp=Z,0.6nm,0.3s,baz=354,slow=19,SNR=2.4 | | | | | | | | |
| PLCA | | | | | | LR | LR | 04 59 08.9 | |
| | comp=Z,1μm,21.3s,baz=351,slow=41 | | | | | | | | |
| | comp=Z,11nm,0.4s | | | | | | | | |
| **LL04** | **Puerto Octay** | **11.23** | **184** | | | | **Pn** | **04 54 16.4** | **-1.1** |
| **TRQA** | **Tornquist** | **11.42** | **139** | | Pn | | **Pn** | **04 54 19.5** | **-0.6** |
| **TRQA** | **Tornquist** | **11.42** | **139** | | P | | **Pn** | **04 54 19.5** | **-0.6** |
| **LL03** | **Petrohue** | **11.46** | **184** | | Pn | | **Pn** | **04 54 18.2** | **-2.3** |
| **LL05** | **Los Muermos** | **11.81** | **188** | | | | **Pn** | **04 54 25.0** | **-0.5** |
| **PSAL** | **Palomas, Salto** | **11.97** | **100** | **e** | **P** | | **Pn** | **04 54 25.8** | **-1.7** |
| **FDPY** | **Filadelfia** | **12.65** | **57** | **e** | **P** | | **Pn** | **04 54 35.9** | **-1.0** |
| **ITQB** | **Itaqui** | **12.83** | **94** | | Pn | | **Pn** | **04 54 37.3** | **-2.0** |
| **ITQB** | **Itaqui** | **12.83** | **94** | **e** | **P** | | **Pn** | **04 54 37.2** | **-2.2** |
| **CPUP** | **Villa Florida** | **12.85** | **78** | | Pn | | **Pn** | **04 54 39.3** | **-0.4** |
| **CPUP** | **Villa Florida** | **12.85** | **78** | | Pn | | **Pn** | **04 54 37.4** | **-2.3** |
| | comp=Z,2.5nm,0.3s,baz=247,slow=15,SNR=21 | | | | | | | | |
| CPUP | | | | | | Sn | **Sn** | **04 56 59.9** | **-1.7** |
| | comp=Z,4.4nm,0.3s,baz=215,slow=15,SNR=2.1 | | | | | | | | |
| CPUP | | | | | | LR | LR | 05 00 06.0 | |
| | comp=Z,6μm,18.8s,baz=255,slow=40 | | | | | | | | |
| | comp=Z,12nm,0.4s | | | | | | | | |
| **PAPY** | **Pozo Azul** | **12.99** | **68** | **e** | **P** | | **Pn** | **04 54 40.2** | **-1.3** |
| **TBOT** | **Tucaraemb** | **13.44** | **102** | **e** | **P** | | **Pn** | **04 54 46.4** | **-1.2** |
| **LL02** | **Futaleuf** | **13.48** | **181** | | Pn | | **Pn** | **04 54 49.0** | **+0.9** |
| **LPAZ** | **La Paz** | **13.67** | **13** | | Pn | | **Pn** | **04 54 48.8** | **-2.6** |
| | comp=Z,4.8nm,0.3s,baz=191,slow=8.3,SNR=16 | | | | | | | | |
| LPAZ | | | | | | Sn | **Sn** | **04 57 22.2** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=181,slow=15,SNR=1.4 | | | | | | | | |
| LPAZ | | | | | | LR | LR | 05 00 25.8 | |
| | comp=Z,2μm,21.7s,baz=180,slow=39 | | | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | | | |
| **RODS** | **Rosario do Sul** | **14.03** | **97** | **e** | **P** | | **Pn** | **04 54 53.1** | **-2.8** |
| **SJPY** | **San Joaquin** | **14.35** | **75** | **e** | **P** | | **Pn** | **04 54 58.7** | **-1.5** |
| **CRSM** | **Crissiumal (Br** | **15.38** | **86** | **e** | **P** | | **Pn** | **04 55 10.5** | **-3.5** |
| **PLTB** | **Pedras Altas** | **15.43** | **102** | | Pn | | **Pn** | **04 55 11.9** | **-2.6** |
| **PLTB** | **Pedras Altas** | **15.43** | **102** | **e** | **P** | | **Pn** | **04 55 10.8** | **-3.7** |
| **CPSB** | **Cacapava Do Su** | **15.55** | **97** | **e** | **P** | | **Pn** | **04 55 13.0** | **-3.1** |
| **COYC** | **Coyhaique** | **15.87** | **182** | | | | **Pn** | **04 55 20.9** | **+0.8** |
| COYC | | | | | | IAmb | IAmb | 04 55 27.2 | |
| | comp=Z,199nm,0.9s | | | | | | | | |
| **BBSD** | **Serra de San D** | **15.87** | **41** | **e** | **P** | | **Pn** | **04 55 16.1** | **-4.3** |
| **ALGR** | **Alto Alegre (B** | **16.04** | **91** | **e** | **P** | | **Pn** | **04 55 21.9** | **-0.6** |
| **SIV** | **San Ignacio** | **16.60** | **37** | | Pn | | **Pn** | **04 55 26.3** | **-3.3** |
| | comp=Z,0.1nm,0.3s,baz=205,slow=7.5,SNR=35 | | | | | | | | |
| SIV | | | | | | Sn | **Sn** | **04 58 29.6** | **-3.4** |
| | baz=232,slow=18,SNR=0.7 | | | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **AY02** | **Valle Explorad** | **16.83** | **184** | | Pn | | **Pn** | **04 55 32.9** | **+0.7** |
| **AQDB** | **Aquidauana** | **16.89** | **61** | | Pn | | **Pn** | **04 55 32.7** | **-0.5** |
| **AQDB** | **Aquidauana** | **16.89** | **61** | **e** | **P** | | **Pn** | **04 55 32.0** | **-1.2** |
| **ITAB** | **Concordia** | **17.10** | **86** | | Pn | | **Pn** | **04 55 34.5** | **-1.3** |
| ITAB | | | | | | IAmb | IAmb | 04 55 40.0 | |
| | comp=Z,888nm,1.9s | | | | | | | | |
| **ITAB** | **Concordia** | **17.10** | **86** | **e** | **P** | | **Pn** | **04 55 33.4** | **-2.4** |
| **AY03** | **Cochrane** | **17.56** | **183** | | P | | **Pn** | **04 55 41.6** | **+0.2** |
| **CNLB** | **Canela** | **17.87** | **94** | **e** | **P** | | **Pn** | **04 55 41.7** | **-3.7** |
| **PTLB** | **Pontes e Lacer** | **18.10** | **41** | | | | **Pn** | **04 55 47.6** | **-0.7** |
| **PTLB** | **Pontes e Lacer** | **18.10** | **41** | **e** | **P** | | **Pn** | **04 55 47.3** | **-0.9** |
| **NNA** | **Nana** | **18.33** | **343** | | | | **Pn** | **04 55 51.0** | **-0.1** |
| **NNA** | **Nana** | **18.33** | **343** | | P | | **Pn** | **04 55 51.8** | **+0.7** |
| | comp=Z,1.2nm,0.3s,baz=188,slow=13,SNR=10 | | | | | | | | |
| NNA | | | | | | S | **S** | **04 59 18.4** | **-0.5** |
| | comp=Z,4.0nm,0.5s,baz=225,slow=20,SNR=1.6 | | | | | | | | |
| NNA | | | | | | LR | LR | 05 01 34.9 | |
| | comp=Z,1μm,20.1s,baz=173,slow=33 | | | | | | | | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| **NNA** | **Nana** | **18.33** | **343** | **i** | **eP** | | **Pn** | **04 55 52.9** | **+1.8** |
| **GO08** | **Villa

comp=Z,47nm,0.9s
**SDBA SAO DESIDERIO 29.98 61** *e*P **P** **04 57 43.8 -1.2**
**PULU Pululahua 30.32 346** P **P** **04 57 49.5 +1.2**
PULU IAmb IAmb 04 58 33.8
comp=Z,77nm,0.9s
**SMTB Santa Maria do 30.43 52** *e*P **P** **04 57 48.2 -0.7**
**IMBA Imbabura, San 30.50 346** P **P** **04 57 51.5 +1.6**
IMBA IAmb IAmb 04 58 22.6
comp=Z,59nm,1.0s
**OTAV Otavalo 30.52 346** P **P** **04 57 51.5 +1.4**
OTAV IAmb IAmb 04 58 06.5
comp=Z,82nm,1.8s
**OTAV Otavalo 30.52 346** P **P** **04 57 51.5 +1.4**
OTAV pmax pmax
comp=Z,82nm,1.8s
**OTAV Otavalo 30.52 346** *e*P **P** **04 57 50.2 +0.1**
**OTAV Otavalo 30.52 346** P **P** **04 57 52.1 +2.0**
OTAV PcP **PcP** **05 00 49.1 +0.3**
**NAN01 Guarapari, ES 30.83 75** *e*P **P** **04 57 51.6 -0.8**
**TULM Tulcn-Chalpat 30.85 347** P **P** **04 57 54.0 +1.0**
**PRPB Parauapebas 30.99 45** *e*P **P** **04 57 51.1 -2.7**
**MAL2 Monte Alegre, 32.01 34** P **P** **04 58 01.9 -0.8**
MAL2 IAmb IAmb 04 58 15.3
comp=Z,48nm,0.8s
**CMC01 Camacan, BA 32.57 71** *e*P **P** **04 58 07.2 -0.5**
**RPN Rapa Nui 33.39 265** LR LR 05 08 32.0
comp=Z,606nm,20.0s,baz=98,slow=30
**GDU01 Guandu, BA 33.40 68** *e*P **P** **04 58 14.1 -0.9**
**BOAV Boa Vista 33.55 20** P **P** **04 58 15.5 -0.7**
**BOAV Boa Vista 33.55 20** *e*P **P** **04 58 15.7 -0.5**
**PAYG Puerto Ayora 34.02 325** P **P** **04 58 24.1 +3.9**
**ROSC El Rosal 34.45 355** P **P** **04 58 25.6 +1.2**
comp=Z,18nm,0.5s,baz=146,slow=17,SNR=7.6
ROSC LR LR 05 13 56.3
comp=Z,551nm,18.4s,baz=224,slow=39
comp=Z,18nm,0.5s
**MCPB Macapa, AP 34.49 36** *e*P **P** **04 58 23.5 -0.9**
**TMAB Tom-Au,PA,Br 35.03 43** *e*P **P** **04 58 28.6 -0.5**
**PMSA Palmer Station 35.41 175** P **P** **04 58 31.0 -0.8**
PMSA IAmb IAmb 04 58 34.2
comp=Z,48nm,0.8s
**PMSA Palmer Station 35.41 175** LR LR 05 12 36.3
comp=Z,832nm,21.1s,baz=351,slow=36
**NBLA Lagarto - SE 36.38 66** *e*P **P** **04 58 39.3 -1.4**
**SDV Santo Domingo 38.36 1** P **P** **04 58 56.6 -0.9**
**SDV Santo Domingo 38.36 1** LR LR 05 16 16.1
comp=Z,628nm,21.3s,baz=232,slow=39
**SDV Santo Domingo 38.36 1** *e*P **P** **04 58 56.8 -0.8**
**NBPB Pedra_Branca-C 38.42 58** *e*P **P** **04 58 57.4 -0.5**
**BAUV El Baul 38.54 5** P **P** **04 58 57.6 -1.2**
**SMAI San Martin Ant 38.56 177** P **P** **04 58 59.0 +0.5**
**MDP Montagnes des 38.98 31** LR LR 05 17 19.0
comp=Z,919nm,18.8s,baz=198,slow=40
**MPGF Montagnes des 38.99 31** P **P** **04 59 01.9 -0.8**
MPGF pP **pP** **04 59 13.8 +1.2**
MPGF PcP **PcP** **05 01 12.2 -0.5**
**NBCA Caruaru-PE 39.42 64** *e*P **P** **04 59 05.7 -0.8**
**BCIP Isla Barro Col 39.48 347** P **P** **04 59 07.0 +0.3**
BCIP IAmb IAmb 04 59 21.9
comp=Z,86nm,1.3s
**BCIP Isla Barro Col 39.48 347** P **P** **04 59 07.0 +0.3**
BCIP pmax pmax
comp=Z,86nm,1.3s
**NBMO Morrinhos-CE 39.62 55** *e*P **P** **04 59 07.8 -0.2**
**BRU2 Volcan 39.78 342** P **P** **04 59 09.4 0.0**
**NBBL Bica de Lurdes 39.83 66** *e*P **P** **04 59 08.8 -0.9**
**NBPA Parau_RN 40.13 60** *e*P **P** **04 59 11.8 -0.4**
**PCRV Puerto La Cruz 40.16 10** LR LR 05 17 26.4
comp=Z,778nm,18.4s,slow=39
**NBCL Cascavel-CE 40.25 57** *e*P **P** **04 59 13.8 +0.5**
**RCBR Riachuelo 41.00 62** P **P** **04 59 19.6 +0.2**
**RCBR Riachuelo 41.00 62** LR LR 05 16 54.3
comp=Z,367nm,20.9s,baz=238,slow=37
**RCBR Riachuelo 41.00 62** P **P** **04 59 19.6 +0.2**
RCBR pmax pmax
comp=Z,70nm,1.4s
**RCBR Riachuelo 41.00 62** *e*P **P** **04 59 19.2 -0.3**
**RCBR Riachuelo 41.00 62** P **P** **04 59 19.7 +0.2**
RCBR pP **sP** **04 59 31.9 -1.1**
**LCR2 La Lucha 2 41.05 341** P **P** **04 59 21.5 +1.6**
**NBPV Pedro Velho 41.10 63** *e*P **P** **04 59 20.2 -0.1**
**HDC Heredia 41.32 341** P **P** **04 59 23.2 +1.1**
HDC IAmb IAmb 04 59 38.2
comp=Z,194nm,1.9s
**HDC Heredia 41.32 341** *e*P **P** **04 59 22.8 +0.7**
**SOCE Pocosol 41.83 340** **P** **04 59 27.4 +1.2**
SOCE IAmb IAmb 04 59 29.9
comp=Z,39nm,0.7s
**JTS Las Juntas de 41.84 340** P **P** **04 59 27.3 +1.0**
**JTS Las Juntas de 41.84 340** LR LR 05 13 28.5
comp=Z,228nm,20.5s,baz=175,slow=31
**JTS Las Juntas de 41.84 340** *c i*P **P** **04 59 28.4 +2.1**
JTS pmax pmax
comp=Z,44nm,2.0s
**JTS Las Juntas de 41.84 340** P **P** **04 59 28.4 +2.1**
JTS pP **sP** **04 59 40.6 +0.7**
**ESPN Las Esperanzas 43.47 341** P **P** **04 59 40.5 +1.1**
**BOAB BOACO BROADBAN 44.10 340** P **P** **04 59 45.0 +0.4**
BOAB IAmb IAmb 05 00 01.0
comp=Z,116nm,1.7s
**FDF Fort de France 45.25 14** P **P** **04 59 52.6 -1.1**
**TGUH Tegucigalpa,Un 46.12 338** P **P** **05 00 00.7 0.0**
TGUH IAmb IAmb 05 00 35.5
comp=Z,38nm,1.1s
**MTO3 Montecristo 47.14 336** P **P** **05 00 09.0 +0.2**
**ESQI Esquipulas 47.28 336** P **P** **05 00 10.0 +0.2**
ESQI IAmb IAmb 05 00 45.0
comp=Z,42nm,1.0s
**MLPR Magueyes Islan 47.56 6** P **P** **05 00 10.0 -1.7**
MLPR IAmb IAmb 05 00 11.2
comp=Z,68nm,1.0s
**IGPR InterUniversit 47.65 7** P **P** **05 00 10.7 -1.8**
IGPR IAmb IAmb 05 00 11.6
comp=Z,31nm,0.6s
**PDPR Patillas Dam, 47.71 7** P **P** **05 00 11.2 -1.7**
**CELP Cerrillos 47.71 6** P **P** **05 00 12.0 -0.9**
**PRSN Puerto Rico Se 47.80 5** P **P** **05 00 12.7 -0.9**
PRSN IAmb IAmb 05 00 13.9
comp=Z,72nm,1.5s
**HUMP Col San Antoni 47.85 7** P **P** **05 00 12.7 -1.3**
HUMP IAmb IAmb 05 00 16.3
comp=Z,77nm,1.6s
**UUPR Utuado, UPR, P 47.87 6** P **P** **05 00 12.6 -1.6**
**AOPR Arecibo Observ 47.96 6** P **P** **05 00 13.0 -1.9**
AOPR IAmb IAmb 05 00 33.3
comp=Z,90nm,1.4s
**MTDJ Mount Denham 48.00 352** P **P** **05 00 15.3 0.0**
**APG El Apazote 48.10 335** LR LR 05 15 43.7
comp=Z,24nm,21.3s,baz=164,slow=30
**PETF Flores 49.65 337** P **P** **05 00 28.2 +0.4**
PETF IAmb IAmb 05 00 30.3
comp=Z,24nm,0.7s
**CCIG Comitan 49.90 334** P **P** **05 00 30.0 0.0**
CCIG IAmb IAmb 05 00 54.7
comp=Z,70nm,1.7s
**BELA Belgrano 2 51.02 171** P **P** **05 00 37.8 +0.2**
BELA IAmb IAmb 05 00 39.7
comp=Z,52nm,1.2s
**CMIG Matias Romero 51.74 331** LR LR 05 17 55.8
comp=Z,351nm,21.7s,baz=163,slow=30
**VNA3 Neumayer Olymp 53.15 159** ⇓P **P** **05 00 54.1 +0.5**
comp=Z,45nm,0.7s
**CAMR Camarioca 53.32 349** P **P** **05 00 55.5 +0.3**
CAMR IAmb IAmb 05 00 57.0
comp=Z,138nm,0.6s
**VNA1 Neumayer--Stat 53.43 158** ⇓P **P** **05 00 56.4 +0.9**
comp=Z,44nm,0.8s
**VNA2 Neumayer--Watz 53.78 159** ⇓P **P** **05 00 58.6 +0.5**
comp=Z,73nm,0.6s,baz=288,slow=7.9
**TLIG Tlapa 53.80 327** P **P** **05 01 00.1 +1.1**
TLIG IAmb IAmb 05 01 15.6
comp=Z,62nm,1.5s
**SNAA Sanae 55.38 159** P **P** **05 01 09.8 +0.1**
**SNAA Sanae 55.38 159** ⇓P **P** **05 01 09.6 -0.2**
comp=Z,2µm,0.7s
**SNAA Sanae 55.38 159** P **P** **05 01 09.8 +0.1**
comp=Z,88nm,0.9s,baz=271,slow=8.4,SNR=361
SNAA LR LR 05 25 23.3
comp=Z,320nm,18.9s,baz=301,slow=37
comp=Z,88nm,0.9s
**SNAA Sanae 55.38 159** *c i*P **P** **05 01 09.5 -0.3**
SNAA pmax pmax
comp=Z,94nm,0.8s
**RKT Rikitea 56.73 260** *e*P **P** **05 01 22.0 +1.9**
comp=Z,634nm,31.0s
RKT *e*S **S** **05 09 05.8 -5.0**
comp=Z,1µm,35.2s
RKT *e*SS **SS** **05 12 54.4 -4.5**
comp=Z,759nm,35.5s
RKT *e*LR LR 05 17 58.2
comp=Z,4µm,26.0s
**MOIG Morelia 56.87 326** P **P** **05 01 21.9 +0.7**
MOIG IAmb IAmb 05 01 23.9
comp=Z,23nm,0.5s
**TROLL Troll, Antarti 57.09 159** ⇓P **P** **05 01 22.5 +0.4**
comp=Z,2µm,0.7s
**DWPF Disney Wildern 58.27 350** P **P** **05 01 30.8 +0.1**
**656A Willston 59.69 349** P **P** **05 01 40.5 0.0**
**ZAIG Zacatecas 60.17 327** P **P** **05 01 45.1 +0.8**
**QSPA South Pole Qui 60.54 180** P **P** **05 01 46.3 +0.2**
QSPA IAmb IAmb 05 02 11.2
comp=Z,44nm,1.0s
**QSPA South Pole Qui 60.54 180** P **P** **05 01 46.5 +0.4**
comp=Z,31nm,0.9s,baz=146,slow=2.6,SNR=148
QSPA LR LR 05 28 01.9
comp=Z,178nm,19.5s,baz=158,slow=36
QSPA PKPPKP **P'P'df** **05 31 06.6 -6.0**
comp=Z,2.1nm,0.7s,baz=263,slow=2.2,SNR=7.5
comp=Z,31nm,0.9s
**QSPA South Pole Qui 60.54 180** P **P** **05 01 46.8 +0.6**
QSPA sP **sP** **05 02 04.4 +4.3**
**553A Crawfordville 60.83 347** P **P** **05 01 48.4 +0.1**
**456A Hilliard 60.93 350** P **P** **05 01 49.0 +0.1**
**H06E1 SOCORRO T-PHAS 61.45 317** T T 06 09 05.2
SNR=6.0
**TIGA Tifton 61.89 348** P **P** **05 01 54.8 -0.6**
TIGA IAmb IAmb 05 02 10.2
comp=Z,68nm,1.4s
**BBSR BB Station 62.05 6** P **P** **05 01 56.3 -0.1**
BBSR IAmb IAmb 05 01 58.4
comp=Z,16nm,0.7s
**BBSR BB Station 62.05 6** P **P** **05 01 56.6 +0.2**
**255A Hazlehurst 62.18 349** P **P** **05 01 57.0 -0.3**
**352A Blakely 62.18 347** P **P** **05 01 56.7 -0.7**
**HBVL Hebbronville 62.19 332** P **P** **05 01 58.9 +1.4**
HBVL IAmb IAmb 05 02 00.0
comp=Z,22nm,0.7s
**KVTX Kingsville 62.31 333** P **P** **05 01 59.2 +0.9**
**BRAL Brewton 62.33 345** P **P** **05 01 58.5 +0.1**
**250A Grady 62.94 346** P **P** **05 02 01.9 -0.6**
**154A Montrose 62.95 349** P **P** **05 02 02.1 -0.4**
**NHSC New Hope 63.01 352** P **P** **05 02 03.0 +0.2**
**346A Big Creek Wild 63.13 343** P **P** **05 02 04.2 +0.5**
**152A Waverly Hall 63.30 347** P **P** **05 02 04.2 -0.5**
**735A Kenedy 63.45 334** P **P** **05 02 07.3 +1.4**
**441A DeRidder 63.59 339** P **P** **05 02 06.8 +0.1**
441A IAmb IAmb 05 02 09.2
comp=Z,44nm,0.8s
**833A Chaparral WMA, 63.60 332** P **P** **05 02 08.0 +1.1**
**833A Chaparral WMA, 63.60 332** P **P** **05 02 08.4 +1.5**
baz=153
**Y60A Bolivia 63.68 354** P **P** **05 02 07.0 -0.3**
**HKT Hockley 63.73 336** P **P** **05 02 08.9 +1.4**
HKT IAmb IAmb 05 02 23.1
comp=Z,75nm,1.6s
**HKT Hockley 63.73 336** ⇑ *e*P **P** **05 02 08.8 +1.2**
HKT pmax pmax
comp=Z,38nm,1.8s
**Y58A Scranton 63.73 352** P **P** **05 02 07.3 -0.3**
Y58A IAmb IAmb 05 02 08.9
comp=Z,38nm,0.7s
**GOGA Godfrey 63.79 349** P **P** **05 02 07.8 -0.2**
GOGA IAmb IAmb 05 02 23.5
comp=Z,43nm,1.6s
**GOGA Godfrey 63.79 349** P **P** **05 02 07.8 -0.2**
GOGA pmax pmax
comp=Z,43nm,1.6s
**Y57A Sumter 63.93 352** P **P** **05 02 09.1 +0.2**
Y57A pP **sP** **05 02 22.4 -0.5**
Y57A IAmb IAmb 05 02 24.0
comp=Z,22nm,0.8s
**MLDN Muldoon 64.01 335** P **P** **05 02 09.9 +0.3**
MLDN IAmb IAmb 05 02 12.7
comp=Z,42nm,0.8s
MLDN pP **sP** **05 02 22.2 -1.3**
**LRAL Lakeview Retre 64.11 345** P **P** **05 02 10.1 -0.1**
LRAL pP **sP** **05 02 22.9 -1.2**
LRAL IAmb IAmb 05 02 25.0
comp=Z,38nm,1.6s
**VBMS Vicksburg 64.19 342** P **P** **05 02 11.2 +0.6**
VBMS pP **sP** **05 02 23.8 -0.8**
**146A Union 64.21 343** P **P** **05 02 11.2 +0.4**
146A IAmb IAmb 05 02 12.1
comp=Z,32nm,0.6s
**JSC Jenkinsville 64.31 351** P **P** **05 02 11.0 -0.3**
JSC pP **sP** **05 02 23.9 -1.5**
**Y52A Lilburn 64.34 348** P **P** **05 02 10.7 -0.9**
Y52A pP **sP** **05 02 23.6 -2.0**
**X58A Rowland 64.34 353** P **P** **05 02 11.7 +0.1**
**HODGE Hodges 64.40 350** P **P** **05 02 11.9 -0.1**
HODGE pP **sP** **05 02 24.0 -2.0**
**Z47A Carrollton 64.51 345** P **P** **05 02 12.9 +0.2**
Z47A IAmb IAmb 05 02 13.4
comp=Z,32nm,0.6s
Z47A pP **sP** **05 02 25.0 -1.8**
**BIRD Birdtown, Kers 64.56 352** P **P** **05 02 13.1 +0.1**
BIRD pP **pP** **05 02 24.9 +1.6**
BIRD IAmb IAmb 05 02 28.1
comp=Z,36nm,1.3s
**HNDO Hondo 64.62 333** P **P** **05 02 14.7 +1.1**
**SLBS Sierra La Lagu 64.73 321** P **P** **05 02 15.8 +1.3**
SLBS IAmb IAmb 05 02 31.1
comp=Z,48nm,1.6s
**SLBS Sierra La Lagu 64.73 321** P **P** **05 02 16.3 +1.8**
SLBS pP **sP** **05 02 29.5 +1.0**
SLBS sP pP 05 02 34.5 +10
**Y49A Blount Mountai 64.78 346** P **P** **05 02 14.1 -0.4**
Y49A IAmb IAmb 05 02 15.5
comp=Z,75nm,1.9s
**W59A Clinton 64.85 354** P **P** **05 02 15.0 +0.1**
W59A IAmb IAmb 05 02 30.6
comp=Z,64nm,1.6s
**CNNC Cliffs of the 64.87 354** P **P** **05 02 15.4 +0.3**
CNNC IAmb IAmb 05 02 16.1
comp=Z,28nm,0.7s
CNNC pP **sP** **05 02 28.0 -1.0**
**143A Socs Landing, 64.89 341** P **P** **05 02 16.3 +1.0**
**PAULI Pauline 64.92 351** P **P** **05 02 15.2 -0.2**
PAULI IAmb IAmb 05 02 30.5
comp=Z,41nm,1.3s
**W57A Gilead 65.00 352** P **P** **05 02 15.7 -0.2**
W57A IAmb IAmb 05 02 31.0
comp=Z,37nm,1.2s
**DRIO Del Rio 65.07 332** P **P** **05 02 16.7 +0.2**
DRIO IAmb IAmb 05 02 18.9
comp=Z,21nm,0.8s
**435B Jarrell 65.11 335** P **P** **05 02 17.7 +1.0**
435B IAmb IAmb 05 03 05.2
comp=Z,27nm,1.1s
**435B Jarrell 65.11 335** P **P** **05 02 17.5 +0.8**
baz=155
**KMSC Kings Mountain 65.16 351** P **P** **05 02 16.4 -0.6**
KMSC IAmb IAmb 05 02 32.0
comp=Z,28nm,1.1s
**X51A Calhoun 65.17 348** P **P** **05 02 17.1 +0.1**
X51A IAmb IAmb 05 02 17.7
comp=Z,38nm,0.7s
**HPIG 65.18 326** P **P** **05 02 18.1 +0.6**
**BG3 Lake Jocassee 65.25 350** P **P** **05 02 17.5 -0.1**
BG3 IAmb IAmb 05 02 32.8
comp=Z,58nm,1.5s
**LPIG La Paz 65.26 321** LR LR 05 24 48.2
comp=Z,154nm,20.7s,baz=166,slow=30
**FPAL Fort Paine 65.28 347** P **P** **05 02 17.3 -0.6**
FPAL pP **pP** **05 02 29.6 +1.5**
**V61A Roper 65.31 355** P **P** **05 02 19.0 +1.1**
**X48A Hartselle 65.49 346** P **P** **05 02 18.9 -0.2**
X48A IAmb IAmb 05 02 19.8
comp=Z,30nm,0.7s
**Y45A Yeager Farm, C 65.50 343** P **P** **05 02 20.2 +1.0**
**W52A Murphy 65.51 349** P **P** **05 02 18.9 -0.4**
W52A IAmb IAmb 05 02 34.5
comp=Z,59nm,1.4s
**V58A Windy Hill, Pi 65.54 353** P **P** **05 02 19.1 -0.3**
V58A IAmb IAmb 05 02 20.0
comp=Z,25nm,0.7s
V58A pP **pP** **05 02 31.1 +1.5**
**237A Washetta, Mont 65.59 337** P **P** **05 02 20.4 +0.6**
**JCT Junction City 65.67 333** P **P** **05 02 20.9 +0.5**
**JCT Junction City 65.67 333** P **P** **05 02 20.9 +0.5**
JCT pmax pmax
comp=Z,58nm,0.7s
**Z41A Richland Creek 65.81 340** P **P** **05 02 21.5 +0.3**
**V55A Taylorsville 65.85 351** P **P** **05 02 21.2 -0.2**
V55A IAmb IAmb 05 02 36.6
comp=Z,53nm,1.3s
**V53A Saluda 65.90 350** P **P** **05 02 21.6 -0.1**
V53A IAmb IAmb 05 02 36.8
comp=Z,62nm,1.4s
**CPCT Cooper Cave 65.96 348** P **P** **05 02 21.8 -0.3**
CPCT IAmb IAmb 05 02 37.2
comp=Z,79nm,1.4s
**SWET Sewanee 66.00 347** P **P** **05 02 21.8 -0.6**
SWET pP **sP** **05 02 35.3 -1.1**
**TKL Tuckaleechee C 66.04 349** P **P** **05 02 22.4 -0.2**
TKL IAmb IAmb 05 02 38.2
comp=Z,84nm,1.5s
**TKL Tuckaleechee C 66.04 349** P **P** **05 02 22.4 -0.2**
TKL pmax pmax
comp=Z,84nm,1.5s
**BRDY Brady 66.08 334** P **P** **05 02 23.7 +0.6**
BRDY IAmb IAmb 05 02 24.5
comp=Z,25nm,0.7s
**OXF Oxford 66.09 344** P **P** **05 02 23.0 +0.1**
**OXF Oxford 66.09 344** P **P** **05 02 23.0 +0.1**
OXF pmax pmax
comp=Z,77nm,1.1s
**CCAR Cane Creek 66.14 342** P **P** **05 02 23.8 +0.5**
CCAR IAmb IAmb 05 02 25.0
comp=Z,33nm,0.7s
**WHTX Lake Whitney, 66.15 336** P **P** **05 02 24.1 +0.7**
**SAND Sanderson 66.16 331** P **P** **05 02 24.6 +1.0**
SAND IAmb IAmb 05 02 39.2
comp=Z,58nm,1.2s
**PLAL Pickwick Lake 66.23 345** P **P** **05 02 23.3 -0.5**
PLAL IAmb IAmb 05 02 24.1
comp=Z,19nm,0.7s
**U56A King 66.23 352** P **P** **05 02 23.9 +0.1**
U56A IAmb IAmb 05 02 39.3
comp=Z,45nm,1.2s
**TXAR Lajitas Array 66.29 329** P **P** **05 02 25.6 +1.1**
comp=Z,7.2nm,0.6s,baz=152,slow=8.2,SNR=37
TXAR LR LR 05 27 01.4
comp=Z,166nm,20.4s,baz=146,slow=32
TXAR PKP2bc 05 31 00.7
comp=Z,0.4nm,0.8s,baz=276,slow=2.6,SNR=3.5
comp=Z,7.2nm,0.6s
**TX31 Lajitas Ar. Si 66.29 329** P **P** **05 02 25.4 +0.9**
**WLAR White Oak Lake 66.30 340** P **P** **05 02 23.8 -0.5**
WLAR pP **sP** **05 02 38.0 -0.4**
**TREL Terrell 66.35 337** P **P** **05 02 24.0 -0.7**
TREL IAmb IAmb 05 02 26.4
comp=Z,21nm,0.8s
**FW16 Waxahatchie 66.40 337** P **P** **05 02 25.6 +0.6**
FW16 IAmb IAmb 05 03 14.3
comp=Z,26nm,0.6s
**FW14 Alvarado 66.43 336** P **P** **05 02 25.9 +0.7**
FW14 IAmb IAmb 05 02 41.0
comp=Z,91nm,1.7s
**FW13 Cleburne 66.47 336** P **P** **05 02 26.0 +0.6**
FW13 IAmb IAmb 05 02 26.7
comp=Z,25nm,0.6s
**Z38A Mt. Pleasant 66.48 339** P **P** **05 02 25.9 +0.5**
**T59A Double "B" Far 66.56 355** P **P** **05 02 25.9 0.0**
T59A IAmb IAmb 05 02 42.3
comp=Z,76nm,1.4s
**U54A Nelsons Funny 66.59 351** P **P** **05 02 25.8 -0.4**
U54A IAmb IAmb 05 02 41.1
comp=Z,48nm,1.1s
**OZNA Ozona 66.59 332** P **P** **05 02 26.9 +0.6**
OZNA IAmb IAmb 05 02 28.0
comp=Z,28nm,0.7s
**V48A Smith Brothers 66.69 346** P **P** **05 02 26.3 -0.5**
**T57A Hurt 66.75 353** P **P** **05 02 26.8 -0.3**
T57A IAmb IAmb 05 02 42.5
comp=Z,44nm,1.4s
**MET Memphis--Engin 66.80 344** P **P** **05 02 27.1 -0.3**
**TZTN Tazewell 66.87 349** P **P** **05 02 27.4 -0.5**
TZTN IAmb IAmb 05 02 43.5
comp=Z,59nm,1.4s
**FW07 Weatherford 66.91 336** P **P** **05 02 28.4 +0.1**
FW07 IAmb IAmb 05 02 30.5
comp=Z,22nm,0.8s
**CLTN Cedars of Leba 66.93 347** P **P** **05 02 28.2 0.0**
**X40A Basin Creek Fa 66.97 341** P **P** **05 02 28.8 +0.2**
**FW06 Azle 67.08 336** P **P** **05 02 29.5 +0.1**
FW06 IAmb IAmb 05 02 59.0
comp=Z,17nm,0.6s
**BLA Blacksburg 67.09 352** P **P** **05 02 29.5 +0.2**
BLA IAmb IAmb 05 03 01.0
comp=Z,56nm,1.6s
**BLA Blacksburg 67.09 352** P **P** **05 02 29.5 +0.2**
BLA pmax pmax
comp=Z,56nm,1.7s
**UALR University of 67.10 341** P **P** **05 02 28.8 -0.6**
UALR pP **sP** **05 02 42.4 -1.0**
UALR IAmb IAmb 05 02 44.8
comp=Z,38nm,1.4s
**ALPN Alpine 67.17 330** P **P** **05 02 30.6 +0.5**
ALPN IAmb IAmb 05 02 32.8
comp=Z,67nm,1.7s
**RCRC Randolf Colleg 67.18 353** P **P** **05 02 29.0 -0.9**
**PLPT Palo Pinto 67.20 336** P **P** **05 02 30.2 +0.1**
**U49A Red Boiling Sp 67.23 347** P **P** **05 02 30.0 -0.2**
U49A IAmb IAmb 05 02 45.2
comp=Z,66nm,1.6s
**MIAR Mount Ida 67.24 340** P **P** **05 02 30.5 +0.2**
**MIAR Mount Ida 67.24 340** P **P** **05 02 30.5 +0.2**
MIAR pmax pmax
comp=Z,20nm,1.1s
**TAOE Nuku Hiva Isla 67.25 273** *e*PKIKP **P** **05 02 30.0 -1.0**
comp=Z,92nm,25.2s
**TAOE Nuku Hiva Isla 67.25 273** *e*LR LR 05 22 52.7
comp=Z,471nm,25.2s
**WVT Waverly 67.27 346** P **P** **05 02 29.6 -0.9**
WVT pP **sP** **05 02 43.2 -1.3**
WVT IAmb IAmb 05 02 45.4
comp=Z,50nm,1.1s
**WVT Waverly 67.27 346** P **P** **05 02 30.2 -0.3**
WVT pP **sP** **05 02 43.1 -1.3**
WVT sP pP 05 02 49.0 +8.3
**Z35A Perchaven, San 67.30 337** P **P** **05 02 30.0 +0.1**
**JSRW J. Sargeant Re 67.31 354** P **P** **05 02 31.1 +0.4**
**FW03 Perrin-Whitt E 67.32 336** P **P** **05 02 31.1 +0.3**
FW03 IAmb IAmb 05 02 33.3
comp=Z,32nm,0.7s
FW03 pP **sP** **05 02 43.2 -1.7**
**HBAR Harrisburg 67.39 343** P **P** **05 02 31.7 +0.5**
HBAR pP **sP** **05 02 43.2 -2.0**
**SBA Scott Base 67.40 191** P **P** **05 02 31.7 +0.8**
**SBA Scott Base 67.40 191** P **P** **05 02 31.7 +0.8**
SBA pmax pmax
comp=Z,16nm,1.1s
**SBA Scott Base 67.40 191** P **P** **05 02 32.5 +1.6**
**HALT Halls 67.41 344** P **P** **05 02 31.4 +0.1**
HALT pP **sP** **05 02 43.7 -1.6**
**SGCY Sterling City 67.47 333** P **P** **05 02 32.0 +0.1**
SGCY pP **sP** **05 02 44.8 -1.1**
SGCY IAmb IAmb 05 02 46.7
comp=Z,32nm,1.1s
**S57A Dark Hollow, R 67.47 354** P **P** **05 02 31.8 +0.1**
S57A IAmb IAmb 05 02 47.2
comp=Z,33nm,1.1s
**ABTX Abilene, Hawle 67.52 334** P **P** **05 02 32.8 +0.6**
**T50A Nancy 67.55 348** P **P** **05 02 32.0 -0.2**
T50A IAmb IAmb 05 02 47.0
comp=Z,68nm,1.6s
**WHAR Wooly Hollow 67.57 342** P **P** **05 02 32.4 +0.1**
WHAR IAmb IAmb 05 02 47.9
comp=Z,71nm,1.4s
**R58B Mineral 67.57 354** P **P** **05 02 32.9 +0.6**
R58B IAmb IAmb 05 02 48.4
comp=Z,42nm,1.1s
**GNAR Gosnell 67.62 344** P **P** **05 02 33.3 +0.7**
**LNXT Lenox 67.62 344** P **P** **05 02 33.2 +0.5**
**MNHN Monahans 67.63 331** P **P** **05 02 33.4 +0.4**
MNHN IAmb IAmb 05 02 35.5
comp=Z,28nm,0.6s
**UTMT University of 67.71 345** P **P** **05 02 33.2 0.0**
UTMT pP **sP** **05 02 47.0 -0.2**
**PEBM Pemiscott Bayo 67.72 344** P **P** **05 02 33.7 +0.4**
**GLAT Glass 67.74 344** P **P** **05 02 34.7 +1.3**

CBN Corbin Frederi 67.77 355 P P 05 02 33.9 +0.3
S54A Dingess, Beckl 67.78 352 P P 05 02 33.5 -0.2
S54A pP pP 05 02 44.8 +0.9
S54A IAmb IAmb 05 02 49.3
comp=Z,53nm,1.4s
X37A Clayton 67.83 339 P 05 02 33.9 -0.1
X37A IAmb IAmb 05 02 36.2
comp=Z,85nm,1.9s
LOOK Love County 67.87 337 P 05 02 34.6 +0.3
LOOK IAmb IAmb 05 03 04.1
comp=Z,22nm,0.8s
S51A Beattyville 67.95 350 P P 05 02 34.3 -0.4
S51A IAmb IAmb 05 02 49.6
comp=Z,43nm,1.2s
T47A Sharon Grove 67.95 346 P P 05 02 34.4 -0.3
PVMO Portageville 67.97 344 P P 05 02 35.0 +0.1
HICK Hickman 67.98 345 P P 05 02 36.0 +1.1
LCAR Lake Charles 68.00 343 P P 05 02 34.8 -0.3
LCAR IAmb IAmb 05 02 35.9
comp=Z,35nm,0.7s
LCAR pP sP 05 02 47.8 -1.3
FCAR Ozark Folk Cen 68.09 342 P P 05 02 35.4 -0.2
FCAR IAmb IAmb 05 02 37.3
comp=Z,94nm,1.9s
R55A Marlinton 68.11 353 P P 05 02 36.1 +0.3
R55A IAmb IAmb 05 02 51.6
comp=Z,51nm,1.3s
WTFS Witchita Falls 68.12 336 P 05 02 36.3 +0.4
WTFS IAmb IAmb 05 02 37.1
comp=Z,29nm,0.6s
VHRN Van Horn 68.12 329 P P 05 02 36.3 +0.2
VHRN IAmb IAmb 05 02 38.4
comp=Z,66nm,1.8s
PECS Pecos 68.13 330 P P 05 02 36.9 +0.8
PARMO Parma 68.22 344 P P 05 02 37.2 +0.8
ODSA Odessa 68.22 332 P P 05 02 37.5 +0.8
SN05 Snyder 5 68.22 333 P P 05 02 36.4 -0.2
SN05 IAmb IAmb 05 02 51.5
comp=Z,85nm,1.8s
T45A Paducah 68.31 345 P P 05 02 36.8 -0.2
APMT Aspermont 68.33 334 P P 05 02 37.8 +0.5
APMT IAmb IAmb 05 02 39.6
comp=Z,39nm,0.7s
SN07 Snyder 07 68.41 334 P P 05 02 37.6 -0.2
SN07 IAmb IAmb 05 02 40.3
comp=Z,20nm,0.6s
PBMO Poplar Bluff 68.49 344 P P 05 02 37.8 -0.3
POST Post 68.63 333 P P 05 02 39.5 +0.3
X34A Smith Ranch, M 68.65 337 P 05 02 39.6 +0.4
X34A IAmb IAmb 05 02 40.6
comp=Z,28nm,0.8s
X34A pP pP 05 02 49.5 +0.2
R50A Paris 68.69 349 P P 05 02 38.6 -0.7
R50A IAmb IAmb 05 02 54.2
comp=Z,48nm,1.4s
Q56A Snyder Ridge, 68.76 353 P P 05 02 40.1 +0.3
Q56A IAmb IAmb 05 02 55.9
comp=Z,52nm,1.4s
CGM3 Cape Girardeau 68.80 344 P P 05 02 39.9 -0.2
BBTS Babate 68.84 58 LR LR 05 33 01.7
comp=Z,337nm,19.1s,baz=138,slow=36
R49A Shelbyville 68.85 348 P P 05 02 40.0 -0.3
R49A IAmb IAmb 05 02 55.0
comp=Z,55nm,1.4s
SRIG Santa Rosalia 68.87 321 P 05 02 41.4 +0.7
Q54A Coxs Mills 68.89 352 P P 05 02 40.0 -0.6
T42A Van Buren 68.90 343 P P 05 02 40.4 -0.3
T42A IAmb IAmb 05 02 55.8
comp=Z,39nm,1.3s
CLNB Carlsbad 68.90 331 P P 05 02 41.4 +0.4
SDMD Soldier's Deli 68.93 355 P P 05 02 41.2 +0.4
DKNS Dickens 68.94 334 P P 05 02 41.7 +0.6
TBI Tubuai 68.94 254 eP P 05 02 43.1 +1.7
comp=Z,535nm,28.8s
TBI eS S 05 11 38.1 -5.8
comp=Z,760nm,35.0s
TBI eSS SS 05 16 12.0 +2.4
comp=Z,390nm,38.5s
TBI eLR LR 05 23 38.1
comp=Z,3μm,26.0s
TBI eLR LR 05 23 40.2
comp=Z,972nm,26.2s
HHAR Hobbs 68.97 341 P P 05 02 41.5 +0.3
HHAR IAmb IAmb 05 02 56.5
comp=Z,93nm,1.6s
WCI Wyandotte Cave 68.99 347 P P 05 02 40.0 -1.1
WCI pP sP 05 02 53.9 -1.3
WCI IAmb IAmb 05 02 55.8
comp=Z,28nm,1.0s
WCI Wyandotte Cave 68.99 347 P P 05 02 40.7 -0.5
WCI pP sP 05 02 54.2 -1.0
WCI PcP PcP 05 03 05.6 +0.4
CLN7 Carlsbad 7 69.00 331 P P 05 02 42.1 +0.5
USIN University of 69.01 346 P P 05 02 40.6 -0.7
Q52A Bidwell 69.05 351 P P 05 02 41.3 -0.3
Q52A IAmb IAmb 05 02 56.5
comp=Z,65nm,1.4s
MNTX Cornudas Mount 69.07 329 P P 05 02 41.0 -0.9
P61A Hammonton 69.08 357 P P 05 02 41.9 +0.2
P61A IAmb IAmb 05 02 58.3
comp=Z,68nm,1.2s
S44A Carbondale 69.09 345 P P 05 02 41.9 +0.1
P57A Homestead Farm 69.09 355 P P 05 02 42.5 +0.7
P57A IAmb IAmb 05 02 43.6
comp=Z,24nm,0.8s
FNO Franklin 69.10 337 P P 05 02 42.3 +0.3
SIUC Southern Illin 69.10 345 P P 05 02 41.6 -0.3
WMOK Wichita Mounta 69.10 336 P 05 02 41.8 -0.3
WMOK Wichita Mounta 69.10 336 P P 05 02 41.8 -0.3
WMOK pmax pmax
comp=Z,22nm,1.4s
RLO Rose Lookout 69.18 340 P P 05 02 42.6 +0.2
RLO IAmb IAmb 05 02 57.1
comp=Z,114nm,1.8s
TUL3 Leonard 69.18 339 P P 05 02 42.2 -0.2
TUL3 IAmb IAmb 05 02 43.3
comp=Z,24nm,0.8s
U38A Gravette 69.24 340 P P 05 02 42.7 -0.1
OKCSW OKLAHOMA CITY 69.25 337 P P 05 02 43.3 +0.4
Q51A Peebles 69.27 350 P P 05 02 42.9 0.0
Q51A IAmb IAmb 05 02 58.4
comp=Z,52nm,1.2s
MGMO Mountain Grove 69.32 342 P P 05 02 43.1 -0.2
DEOK Depew 69.34 338 P P 05 02 43.6 +0.2
WUPA West Chester U 69.38 357 P P 05 02 43.8 +0.3
MCWV Mont Chateau 69.44 353 P P 05 02 43.8 -0.2
MCWV IAmb IAmb 05 02 59.5
comp=Z,35nm,1.2s
P53A Whipple 69.45 352 P P 05 02 43.9 -0.2
P53A IAmb IAmb 05 02 59.2
comp=Z,80nm,1.5s
MVL Millersville 69.49 356 P P 05 02 44.8 +0.6
OK031 S. Brethren Rd 69.55 338 P P 05 02 44.5 -0.2
OK052 Battle Ridge R 69.58 338 P 05 02 45.0 +0.1
OK029 Liberty Lake 69.61 338 P 05 02 45.3 +0.2
FVM French Village 69.64 344 P P 05 02 45.3 +0.1
FVM French Village 69.64 344 P P 05 02 45.3 +0.1
FVM pmax pmax
comp=Z,186nm,1.5s
P51A Williamsport 69.67 350 P P 05 02 45.0 -0.4
P51A IAmb IAmb 05 03 00.1
comp=Z,70nm,1.3s
P52A Corning 69.69 351 P P 05 02 44.9 -0.7
P52A pP sP 05 02 57.9 -1.7
P52A IAmb IAmb 05 03 01.0
comp=Z,53nm,1.1s
P52A Corning 69.69 351 P P 05 02 45.1 -0.4
baz=170,SNR=10
QUOK Quay 69.71 338 P 05 02 45.9 +0.2
CSTR Hydro, Custer 69.89 337 P 05 02 47.8 +0.9
CCM Cathedral Cave 69.91 343 P P 05 02 46.8 -0.1
CCM sP 05 03 00.0 -0.9
CCM Cathedral Cave 69.91 343 ⇑P P 05 02 47.1 +0.3
CCM pP sP 05 02 59.9 -0.9
CCM sP PcP 05 03 05.7 -3.4
MSTX Muleshoe 69.93 333 IAmb IAmb 05 02 48.5
comp=Z,29nm,0.8s
BLO Bloomington 69.95 348 IAmb IAmb 05 02 48.0
comp=Z,90nm,1.6s
SMWD Samnorwood 69.96 335 P P 05 02 47.5 +0.1
SMWD IAmb IAmb 05 02 48.6
comp=Z,36nm,0.6s
P49A Miami Univ. Ec 69.98 349 IAmb IAmb 05 03 02.6
comp=Z,77nm,1.6s
P49A Miami Univ. Ec 69.98 349 P P 05 02 46.7 -0.6
baz=168
OK048 Pawnee Station 70.01 338 P 05 02 47.8 +0.3
OK048 IAmb IAmb 05 02 48.6
comp=Z,25nm,0.7s
O54A Avella 70.02 353 P P 05 02 47.2 -0.3
P48A Milroy 70.03 348 IAmb IAmb 05 03 02.1
comp=Z,81nm,1.4s
S39A Bolivar 70.11 342 P P 05 02 47.7 -0.5
S39A pP pP 05 03 00.0 +1.6
S39A IAmb IAmb 05 03 03.7
comp=Z,86nm,1.5s
O52A Adamsville 70.13 351 IAmb IAmb 05 03 03.1
comp=Z,70nm,1.5s
O53A New Philadelph 70.18 352 IAmb IAmb 05 03 03.5
comp=Z,48nm,1.4s
O53A New Philadelph 70.18 352 P P 05 02 48.4 -0.1
baz=171
Q44A Meyer Farm, Va 70.19 345 IAmb IAmb 05 03 03.3
comp=Z,59nm,1.1s
SLM Saint Louis 70.22 344 IAmb IAmb 05 03 04.1
comp=Z,65nm,1.1s
SSPA Standing Stone 70.23 355 P P 05 02 48.8 0.0
SSPA IAmb IAmb 05 02 51.0
comp=Z,118nm,1.9s
SSPA Standing Stone 70.23 355 P P 05 02 49.2 +0.5
SSPA pP sP 05 03 02.3 -0.6
SSPA sP PcP 05 03 08.2 -2.2
AMTX Amarillo 70.30 334 P P 05 02 50.3 +0.8
AMTX IAmb IAmb 05 03 04.6
comp=Z,32nm,1.0s
N58A Sunbury 70.35 356 IAmb IAmb 05 02 52.6
comp=Z,31nm,1.2s
PAL Palisades 70.38 358 P P 05 02 49.8 +0.1
PAL Palisades 70.38 358 P P 05 02 49.8 +0.1
PAL pmax pmax
comp=Z,10.0nm,0.7s
ACSO Alum Creek Sta 70.40 351 P P 05 02 49.6 -0.2
BLOK Blackwell 70.41 338 P P 05 02 49.6 -0.4
P46A Rosedale 70.51 347 IAmb IAmb 05 03 05.0
comp=Z,66nm,1.1s
WSPT Westport, CT 70.53 358 IAmb IAmb 05 03 06.5
comp=Z,94nm,1.8s
O49A Covington 70.56 350 IAmb IAmb 05 03 05.7
comp=Z,75nm,1.3s
319A Douglas 70.61 326 P P 05 02 52.5 +1.0
319A IAmb IAmb 05 03 07.5
comp=Z,29nm,1.1s
OK038 West end E0370 70.66 337 P P 05 02 51.3 -0.3
OK038 IAmb IAmb 05 03 07.3
comp=Z,108nm,1.7s
N53A Lisbon 70.69 352 P P 05 02 51.2 -0.3
M63A Gales Ferry 70.74 359 P P 05 02 53.4 +1.5
OK032 Salt Plains WL 70.78 337 P P 05 02 52.9 +0.7
OK032 IAmb IAmb 05 03 08.0
comp=Z,105nm,1.9s
KAN14 Manchester OK 70.83 338 P P 05 02 52.7 +0.1
121A Cookes Peak, D 70.86 328 IAmb IAmb 05 03 09.2
comp=Z,44nm,1.3s
121A Cookes Peak, D 70.86 328 P P 05 02 54.8 +1.7
baz=147
NOKA Waynoka 70.87 337 P 05 02 53.8 +0.9
NOKA IAmb IAmb 05 02 55.1
comp=Z,24nm,0.8s
M57A Sunshine Farm, 70.87 355 IAmb IAmb 05 02 55.0
comp=Z,112nm,1.9s
KSPA Keystone Colle 71.00 357 P P 05 02 54.0 +0.5
KSPA IAmb IAmb 05 02 54.8
comp=Z,64nm,1.8s
P43A Skaggs, Pawnee 71.01 345 P P 05 02 53.8 +0.2
KAN08 Anthony NE Sta 71.08 338 P P 05 02 54.8 +0.7
KSCT Kent School, K 71.08 358 P P 05 02 54.4 +0.4
UCCT U. Connecticut 71.13 359 P P 05 02 54.6 +0.4
KAN12 Harper NE Stat 71.16 338 P P 05 02 55.0 +0.4
SFIN Lafayette 71.22 347 IAmb IAmb 05 03 09.2
comp=Z,68nm,1.4s
N49A Columbus Grove 71.25 350 P P 05 02 54.3 -0.7
N49A pP sP 05 03 07.4 -1.7
L64A Middleborough 71.27 0 P P 05 02 55.3 +0.3
M53A WI Miller and 71.29 353 P P 05 02 55.2 0.0
M53A IAmb IAmb 05 03 11.1
comp=Z,44nm,1.2s
M53A WI Miller and 71.29 353 P P 05 02 55.2 0.0
baz=172
M52A Chesterland 71.47 352 IAmb IAmb 05 03 11.4
comp=Z,45nm,1.1s
PPT2 Papete2 71.47 260 ePKIKP P 05 02 55.6 -1.5
comp=Z,125nm,28.0s
PPT2 Papeete2 71.47 260 ePP PP 05 05 35.2 -0.6
comp=Z,73nm,37.8s
PPT2 eS S 05 12 09.7 -4.2
comp=Z,156nm,26.5s
PPT2 Papeete2 71.47 260 eLR LR 05 24 47.5
comp=Z,822nm,23.8s
PPT2 eLR LR 05 24 48.5
comp=Z,1μm,23.5s
PPT Papeete 71.48 260 LR LR 05 26 17.8
comp=Z,440nm,19.3s,baz=126,slow=29
M50A Fremont 71.55 351 IAmb IAmb 05 03 12.5
comp=Z,48nm,1.1s
CRNM Carthage 71.58 330 P P 05 02 58.0 +0.5
L59A Walton 71.60 357 IAmb IAmb 05 02 59.2
comp=Z,29nm,0.7s
BCX Boston College 71.67 0 P P 05 02 58.1 +0.7
BCX IAmb IAmb 05 03 12.4
comp=Z,69nm,1.9s
L56A Greenwood 71.69 355 IAmb IAmb 05 02 58.9
comp=Z,31nm,0.8s
L56A pP pP 05 03 11.3 +3.3
BNM Barren Site 71.70 330 P P 05 02 58.8 +0.6
WES Weston 71.72 0 P P 05 02 58.3 +0.6
WES Weston 71.72 0 P P 05 02 58.3 +0.6
WES pmax pmax
comp=Z,13nm,0.9s
L61B Northampton 71.79 359 P P 05 02 59.0 +0.8
L61B IAmb IAmb 05 02 59.6
comp=Z,21nm,0.7s
L61B Northampton 71.79 359 P P 05 02 58.7 +0.5
baz=179,SNR=10
HRV Adam Dziewonsk 71.84 360 P P 05 02 59.6 +1.1
HRV pP sP 05 03 13.0 +0.5
HRV sP PcP 05 03 18.4 +1.2
HDIL Hopedale 71.84 346 IAmb IAmb 05 03 13.5
comp=Z,54nm,1.1s
LENM Lemitar 71.87 329 P P 05 02 60.0 +0.8
ERPA Erie 71.89 353 P P 05 02 58.8 0.0
P38A Dawn 71.98 342 P P 05 02 58.9 -0.5
P38A pP sP 05 03 12.2 -1.3
P38A IAmb IAmb 05 03 14.7
comp=Z,44nm,1.2s
WVNY West Valley, N 72.05 354 IAmb IAmb 05 03 01.0
comp=Z,30nm,0.7s
TRY Troy 72.09 358 P P 05 03 00.8 +0.8
TRY IAmb IAmb 05 03 01.9
comp=Z,23nm,0.8s
TUC Tucson 72.11 326 P P 05 03 00.8 +0.3
TUC Tucson 72.11 326 P P 05 03 00.8 +0.3
TUC pmax pmax
comp=Z,18nm,1.3s
K57A Scipio Center 72.22 356 P P 05 03 00.6 -0.2
ANMO Albuquerque 72.30 330 P P 05 03 01.4 -0.3
ANMO Albuquerque 72.30 330 LR LR 05 30 49.8
comp=Z,406nm,20.3s,baz=156,slow=32
ANMO Albuquerque 72.30 330 c iP P 05 03 03.1 +1.4
ANMO pmax pmax
comp=Z,14nm,1.8s
N41A Harden Midland 72.33 345 IAmb IAmb 05 03 16.6
comp=Z,68nm,1.1s
AAM Ann Arbor 72.52 350 P P 05 03 02.9 +0.3
AAM IAmb IAmb 05 03 18.3
comp=Z,106nm,1.6s
AAM Ann Arbor 72.52 350 P P 05 03 02.9 +0.3
AAM pmax pmax
comp=Z,106nm,1.7s
L46A Eue Claire 72.66 348 P P 05 03 03.0 -0.4
L46A IAmb IAmb 05 03 17.9
comp=Z,96nm,1.5s
J61A Chester 72.69 359 P P 05 03 03.8 +0.2
HQIL Hanson Quary C 72.74 347 P P 05 03 03.9 0.0
HQIL IAmb IAmb 05 03 10.9
comp=Z,42nm,1.0s
ACCN Adirondack Com 72.75 358 IAmb IAmb 05 03 19.1
comp=Z,72nm,1.9s
J56A Wolcott 72.78 356 IAmb IAmb 05 03 05.2
comp=Z,26nm,0.7s
MEDO Medina 72.79 355 P P 05 03 04.6 +0.4
J55A Hilton 72.84 355 P P 05 03 04.5 0.0
J55A IAmb IAmb 05 03 18.8
comp=Z,76nm,1.7s
214A Organ Pipe Nat 72.84 324 P P 05 03 05.6 +0.8
214A Organ Pipe Nat 72.84 324 P P 05 03 06.5 +1.6
baz=143
K50A Casco 72.84 351 IAmb IAmb 05 03 04.6
comp=Z,46nm,0.7s
J59A Piesco 72.85 358 P P 05 03 04.7 +0.1
PIX Pinacate 72.86 323 P P 05 03 04.8 -0.1
J54A Appleton 72.91 354 P P 05 03 04.7 -0.1
N38A Joes South For 73.00 343 IAmb IAmb 05 03 20.8
comp=Z,37nm,0.7s
HNH Hanover 73.04 359 P P 05 03 06.8 +1.1
CBKS Cedar Bluff 73.11 337 P P 05 03 06.9 +0.7
CBKS IAmb IAmb 05 03 07.8
comp=Z,33nm,0.7s
CBKS Cedar Bluff 73.11 337 P P 05 03 06.9 +0.7
CBKS pmax pmax
comp=Z,33nm,0.7s
L44A Lake County Fo 73.12 347 P P 05 03 05.7 -0.4
L44A IAmb IAmb 05 03 21.8
comp=Z,68nm,1.2s
L44A Lake County Fo 73.12 347 P P 05 03 05.8 -0.4
baz=165
SFX San Felipe 73.19 322 P P 05 03 07.7 +0.9
SFX IAmb IAmb 05 03 09.0
comp=Z,32nm,0.7s
DBIC Dimbokro 73.29 72 P P 05 03 07.5 -0.3
comp=Z,15nm,0.5s,baz=224,slow=6.6,SNR=43
DBIC LR LR 05 33 29.7
comp=Z,576nm,19.4s,baz=212,slow=34
comp=Z,15nm,0.5s
L42A Oliver, Polo 73.31 346 IAmb IAmb 05 03 22.4
comp=Z,58nm,1.2s
T25A Trinidad 73.34 333 IAmb IAmb 05 03 10.2
comp=Z,25nm,0.8s
T25A Trinidad 73.34 333 P P 05 03 09.5 +1.6
baz=150,SNR=20
NCB Newcomb 73.35 358 P P 05 03 07.5 0.0
NCB pP sP 05 03 20.0 -1.6
I63A Otisfield 73.39 1 IAmb IAmb 05 03 24.1
comp=Z,49nm,1.4s
PECO Prince Edward 73.44 356 IAmb IAmb 05 03 08.9
comp=Z,21nm,0.7s
X18A Snowflake 73.53 328 IAmb IAmb 05 03 12.3
comp=Z,60nm,1.7s
LBNH Lisbon 73.57 360 IAmb IAmb 05 03 24.1
comp=Z,49nm,1.6s
L40A Anamosa 73.71 345 P P 05 03 09.2 -0.5
L40A pP pP 05 03 20.6 +0.7
W18A Petrified Fore 73.91 328 P P 05 03 12.9 +1.7
baz=146
LONY Lake Ozonia 74.01 358 P P 05 03 11.2 -0.1
I49A Point Hope 74.02 351 P P 05 03 11.5 +0.2
I49A IAmb IAmb 05 03 26.0
comp=Z,73nm,1.2s
SCIA State Center 74.04 343 P P 05 03 12.2 +0.7
DELO Deloro Mine 74.07 355 IAmb IAmb 05 03 27.2
comp=Z,86nm,2.0s
JFWS Jewell Farm 74.30 346 IAmb IAmb 05 03 28.5
comp=Z,37nm,0.9s
WBO Williamsburg 74.42 357 P P 05 03 13.8 +0.1
WBO IAmb IAmb 05 03 15.1
comp=Z,31nm,0.6s
SADO Sadowa 74.44 354 LR LR 05 38 06.8
comp=Z,111nm,20.3s,baz=240,slow=38
G62A West of Eustis 74.55 1 IAmb IAmb 05 03 16.2
comp=Z,21nm,0.7s
PKME Peaks-Kenny Pk 74.62 2 IAmb IAmb 05 03 30.0
comp=Z,50nm,1.6s
GLA Glamis 74.75 323 P P 05 03 17.2 +1.3
GLA Glamis 74.75 323 P P 05 03 17.3 +1.3
GLA pmax pmax
comp=Z,16nm,0.9s
CCX Cicese 74.81 321 P P 05 03 16.4 +0.1
S22A 4UR Ranch, Cre 74.84 332 P P 05 03 17.9 +1.2
S22A IAmb IAmb 05 03 33.7
comp=Z,56nm,1.9s
S22A 4UR Ranch, Cre 74.84 332 P P 05 03 18.5 +1.8
baz=149,SNR=15
MNTQ Montreal, Queb 74.86 358 IAmb IAmb 05 03 18.0
comp=Z,95nm,1.9s
L34A Svendsen Farm, 74.94 341 IAmb IAmb 05 03 39.3
comp=Z,37nm,0.7s
I42A Draeger Farm, 74.96 347 P P 05 03 17.3 +0.4
I42A IAmb IAmb 05 03 32.3
comp=Z,41nm,1.1s
WUAZ Wupatki 75.00 327 IAmb IAmb 05 03 33.8
comp=Z,53nm,1.2s
YUH Yuha Desert 75.01 322 P P 05 03 18.8 +1.3
YUH IAmb IAmb 05 03 20.9
comp=Z,73nm,1.9s
RMX La Rumorosa 75.06 322 P P 05 03 18.4 +0.4
RMX IAmb IAmb 05 03 20.2
comp=Z,27nm,0.9s
MVCO Mesa Verde 75.10 330 P P 05 03 19.0 +0.8
MVCO IAmb IAmb 05 03 34.1
comp=Z,87nm,1.6s
BLYC Blythe 75.14 324 P P 05 03 19.5 +1.3
BLYC IAmb IAmb 05 03 21.7
comp=Z,118nm,1.9s
CBX Cerro Bola 75.15 321 P P 05 03 20.1 +1.7
Q24A Divide 75.21 333 P P 05 03 18.2 -0.6
Q24A IAmb IAmb 05 03 21.0
comp=Z,32nm,0.7s
Q24A Divide 75.21 333 P P 05 03 20.4 +1.5
baz=150
F62A Pittston Farm, 75.24 1 P P 05 03 19.2 +0.7
F64A Sherman 75.24 2 P P 05 03 19.1 +0.6
I40A Norwalk 75.31 346 P P 05 03 18.8 -0.1
I40A IAmb IAmb 05 03 34.2
comp=Z,31nm,1.0s
TKX Tecate 75.32 322 P P 05 03 20.5 +1.2
TKX IAmb IAmb 05 03 35.3
comp=Z,55nm,1.5s
LMN Caledonia Moun 75.42 5 P P 05 03 19.8 +0.3
OGNE Ogallala 75.80 337 P P 05 03 22.3 +0.4
W13A Hualapai Mount 75.88 325 P P 05 03 23.3 +0.6
PV01 Paradox Valley 75.90 331 P P 05 03 24.4 +1.6
PV01 IAmb IAmb 05 03 38.9
comp=Z,48nm,1.4s
PV13 Radium Mtn., P 76.03 330 P P 05 03 24.1 +0.7
PV13 IAmb IAmb 05 03 26.1
comp=Z,27nm,0.7s
PV02 Paradox Valley 76.03 330 P P 05 03 24.2 +0.7
PV02 IAmb IAmb 05 03 25.7
comp=Z,36nm,0.8s
TPFO Pinon Flats 76.03 322 P P 05 03 25.5 +2.1
baz=141
PFO Pinyon Flats O 76.04 322 P P 05 03 24.4 +0.9
PFO Pinyon Flats O 76.04 322 LR LR 05 30 06.7
comp=Z,196nm,20.8s,baz=166,slow=30
PFO Pinyon Flats O 76.04 322 c iP P 05 03 25.3 +1.8
PFO pmax pmax
comp=Z,50nm,1.6s
PQI Presque Isle 76.06 2 P P 05 03 23.5 +0.4
I37A Lemond, Waseca 76.07 344 IAmb IAmb 05 03 38.6
comp=Z,71nm,1.1s
PV05 Paradox Valley 76.08 330 P P 05 03 25.1 +1.4
PV05 IAmb IAmb 05 03 26.7
comp=Z,25nm,0.6s
SMCO Snowmass 76.12 332 P P 05 03 24.6 +0.5
SMCO IAmb IAmb 05 03 26.8
comp=Z,36nm,0.7s
PV03 Paradox Valley 76.12 330 P P 05 03 24.3 +0.3
PV18 Skein Mesa, Pa 76.14 330 P P 05 03 24.8 +0.7
PV18 IAmb IAmb 05 03 27.1
comp=Z,42nm,0.7s
PV12 Saucer Basin, 76.16 331 P P 05 03 25.1 +1.0
PV11 David Mesa, Pa 76.17 330 P P 05 03 25.2 +1.0
U15A North Rim 76.17 327 P P 05 03 25.9 +1.6
PV07 Paradox Valley 76.19 331 P P 05 03 25.9 +1.6
PV17 East Wray Mesa 76.19 330 P P 05 03 25.2 +0.8
PV17 IAmb IAmb 05 03 27.3
comp=Z,32nm,0.7s
PV16 Nyswonger Mesa 76.20 330 P P 05 03 24.8 +0.4
PV19 Morning Glory 76.23 330 P P 05 03 25.3 +0.7
PV19 IAmb IAmb 05 03 41.3
comp=Z,124nm,2.0s
PV20 West Nyswonger 76.25 330 P P 05 03 24.4 -0.2
PV04 Paradox Valley 76.26 330 P P 05 03 25.9 +1.2
PV04 IAmb IAmb 05 03 40.7
comp=Z,46nm,1.4s

PV14 **Lion Creek, Pa** 76.30 330 P **P** 05 03 25.7 +0.7
PV14 IAmb IAmb 05 03 28.0
comp=Z,26nm,0.7s

BRIGG **Briggsdale** 76.30 335 P **P** 05 03 26.4 +1.5
BRIGG IAmb IAmb 05 03 41.0
comp=Z,70nm,1.3s

PV10 **Paradox Valley** 76.31 330 P **P** 05 03 25.6 +0.5
PV10 IAmb IAmb 05 03 27.1
comp=Z,43nm,0.7s

PV22 **Blue Mesa, Par** 76.33 331 P **P** 05 03 25.7 +0.6
PV23 **Carpenter Ridg** 76.36 330 P **P** 05 03 25.7 +0.4
PV21 **Cone Mtn., Par** 76.43 331 P **P** 05 03 25.9 +0.1
PV21 IAmb IAmb 05 03 41.6
comp=Z,37nm,1.2s

SUR **Sutherland** 76.44 120 LR LR 05 32 43.6
comp=Z,240nm,20.8s,baz=237,slow=32

D62A **Allapoint, All** 76.44 2 P **P** 05 03 25.1 -0.1
G40A **Rib Lake** 76.54 346 **P** 05 03 25.8 -0.1
G40A IAmb IAmb 05 03 41.5
comp=Z,36nm,1.2s

K30B **Basset** 76.55 339 P **P** 05 03 26.4 +0.3
ELS **Elsinore Mount** 76.59 322 P **P** 05 03 25.9 -0.6
ELS IAmb IAmb 05 03 29.9
comp=Z,120nm,1.9s

E46A **Sault Ste Mari** 76.60 351 IAmb IAmb 05 03 41.2
comp=Z,79nm,1.4s

ECSD **EROS Data Cent** 76.64 341 IAmb IAmb 05 03 42.2
comp=Z,55nm,1.1s

HMU **Henry Mountain** 76.69 329 P **P** 05 03 28.7 +1.5
HMU IAmb IAmb 05 03 44.6
comp=Z,89nm,1.6s

LMQ **La Malbaie** 76.89 1 **P** 05 03 27.6 -0.2
LMQ IAmb IAmb 05 03 42.6
comp=Z,38nm,1.4s

KNB **Kanab** 76.90 327 IAmb IAmb 05 03 44.9
comp=Z,72nm,1.2s

PKCU **Pink Cliffs** 77.00 328 P **P** 05 03 28.6 -0.6
PKCU IAmb IAmb 05 03 34.2
comp=Z,95nm,1.9s

LCMT **Little Creek M** 77.10 327 P **P** 05 03 28.8 -0.6
MAW **Mawson** 77.14 164 P **P** 05 03 29.3 +0.2
MAW **Mawson** 77.14 164 P **P** 05 03 29.3 +0.2
comp=Z,44nm,0.6s,baz=212,slow=7.6,SNR=207
MAW LR LR 05 36 50.3
comp=Z,309nm,21.6s,baz=232,slow=35
comp=Z,44nm,0.6s

N23A **Red Feather La** 77.18 334 P **P** 05 03 30.7 +0.7
N23A IAmb IAmb 05 03 46.0
comp=Z,43nm,1.3s

N23A **Red Feather La** 77.18 334 P **P** 05 03 31.5 +1.5
baz=150

LDAQ **Lac Daran** 77.30 0 IAmb IAmb 05 03 45.0
comp=Z,50nm,1.6s

PHWY **Pilot Hill** 77.35 334 IAmb IAmb 05 03 33.7
comp=Z,21nm,0.7s

PASC **Pasadena Art C** 77.39 322 P **P** 05 03 31.7 +0.7
PASC IAmb IAmb 05 03 34.3
comp=Z,50nm,1.4s

MTPU **Mount Pierson** 77.43 328 P **P** 05 03 32.6 +1.1
O20A **White River Ci** 77.45 332 P **P** 05 03 32.1 +0.8
SZCU **Shurtz Canyon** 77.49 327 P **P** 05 03 33.0 +1.2
GSC **Goldstone, Bar** 77.53 323 P **P** 05 03 33.1 +1.4
GSC **Goldstone, Bar** 77.53 323 P **P** 05 03 33.2 +1.4
GSC pmax pmax
comp=Z,20nm,1.1s

SRU **San Rafael Swe** 77.56 330 P **P** 05 03 32.8 +0.8
SRU IAmb IAmb 05 03 34.3
comp=Z,23nm,0.6s

SRU **San Rafael Swe** 77.56 330 P **P** 05 03 32.8 +0.8
SRU pmax pmax
comp=Z,23nm,0.6s

CCUT **Cedar City** 77.58 327 P **P** 05 03 33.5 +1.2
CCUT IAmb IAmb 05 03 49.0
comp=Z,42nm,1.2s

SHPR **Sheep Range** 77.63 325 P **P** 05 03 33.1 +0.7
Q16A **Castle Valley** 77.69 329 P **P** 05 03 33.2 +0.5
Q16A IAmb IAmb 05 03 48.9
comp=Z,62nm,1.3s

MSU **Marysvale** 77.81 328 P **P** 05 03 34.5 +1.0
MSU **Marysvale** 77.81 328 P **P** 05 03 34.5 +1.0
MVU **Marysvale** 77.82 328 P **P** 05 03 34.2 +0.7
P18A **Preston Nutter** 77.87 330 P **P** 05 03 34.8 +0.9
P17A **Butcher Ranch,** 77.95 330 P **P** 05 03 34.4 +0.2
P17A IAmb IAmb 05 03 49.9
comp=Z,54nm,1.3s

SUSD **Miller** 77.96 340 IAmb IAmb 05 03 34.7
comp=Z,31nm,0.5s

TCRU **Three Creeks R** 78.01 328 P **P** 05 03 35.3 +0.7
TMUT **Trail Mountain** 78.01 329 P **P** 05 03 36.0 +1.3
PRN **Pahroc Range** 78.28 326 IAmb IAmb 05 03 52.5
comp=Z,57nm,1.3s

RWWY **Rawlins** 78.35 333 IAmb IAmb 05 03 37.5
comp=Z,44nm,0.7s

F33A **5 Mile Ranch,** 78.50 343 IAmb IAmb 05 03 51.2
comp=Z,70nm,1.8s

PSUT **Pine Spring** 78.60 327 P **P** 05 03 38.3 +0.4
MPU **Maple Canyon** 78.79 330 IAmb IAmb 05 03 54.6
comp=Z,38nm,1.1s

S11A **Rachel** 78.81 326 IAmb IAmb 05 03 42.8
comp=Z,113nm,1.9s

BSUT **Blindstream Ca** 78.84 330 IAmb IAmb 05 03 55.3
comp=Z,50nm,1.2s

NLU **North Lily Min** 78.94 329 IAmb IAmb 05 03 56.5
comp=Z,54nm,1.5s

ICQ **Pointe Anglais** 78.94 3 IAmb IAmb 05 03 40.2
comp=Z,28nm,0.7s

JLU **Jordanelle** 79.19 330 IAmb IAmb 05 03 44.0
comp=Z,27nm,0.7s

SPR3 **Spring Creek 3** 79.20 327 IAmb IAmb 05 03 57.8
comp=Z,82nm,1.7s

R11B **Troy Canyon, C** 79.28 326 P **P** 05 03 43.2 +1.6
baz=142,SNR=27

RSSD **Black Hills** 79.30 337 P **P** 05 03 40.6 -0.9
RSSD IAmb IAmb 05 03 57.0
comp=Z,48nm,1.6s

RSSD **Black Hills** 79.30 337 P **P** 05 03 40.6 -0.9
RSSD pmax pmax
comp=Z,48nm,1.6s

GMN **Gold Mountain** 79.30 324 IAmb IAmb 05 03 44.9
comp=Z,58nm,1.9s

DUG **Dugway, Tooele** 79.46 329 IAmb IAmb 05 03 59.2
comp=Z,117nm,1.8s

TCUT **Toone Canyon** 79.60 330 IAmb IAmb 05 03 46.0
comp=Z,34nm,0.7s

TSUM **Tsumeb** 79.86 106 P **P** 05 03 44.3 -0.9
TSUM IAmb IAmb 05 03 59.3
comp=Z,66nm,1.1s

TSUM **Tsumeb** 79.86 106 LR LR 05 35 51.6
comp=Z,488nm,18.0s,baz=324,slow=33

HWUT **Hardware Ranch** 80.07 331 IAmb IAmb 05 03 48.2
comp=Z,34nm,0.8s

BGU **Big Grassy Mou** 80.15 329 IAmb IAmb 05 04 02.4
comp=Z,53nm,1.5s

PDAR **Pinedale Array** 80.19 332 P **P** 05 03 46.9 +0.4
comp=Z,6.6nm,0.6s,baz=133,slow=6.6,SNR=102
PDAR PKKPbc **PKKPbc** 05 22 29.0 -2.7
comp=Z,0.8nm,0.6s,baz=280,slow=0.5,SNR=11
PDAR LR LR 05 36 28.5
comp=Z,137nm,19.6s,baz=141,slow=34
comp=Z,6.6nm,0.6s

SPUT **South Promonto** 80.20 330 IAmb IAmb 05 03 49.1
comp=Z,33nm,0.8s

PMOZ **Porto Moniz, M** 80.62 44 *e*LR LR 05 32 57.3
comp=Z,352nm,20.0s

AGMN **Agassiz Nation** 80.68 344 IAmb IAmb 05 04 03.2
comp=Z,102nm,1.8s

NVAR **Mina Array Bea** 80.69 324 P **P** 05 03 50.3 +1.1
comp=Z,2.2nm,0.6s,baz=151,slow=6.5,SNR=21
NVAR PKKPbc **PKKPbc** 05 22 29.6 -0.6
comp=Z,0.7nm,0.6s,baz=328,slow=3.3,SNR=6.7
NVAR LR LR 05 33 17.0
comp=Z,184nm,21.1s,baz=108,slow=31
comp=Z,2.2nm,0.6s

HVU **Hansel Valley** 80.73 330 P **P** 05 03 49.7 +0.4
HVU **Hansel Valley** 80.73 330 P **P** 05 03 49.7 +0.4
HVU pmax pmax
comp=Z,19nm,0.7s

AHID **Auburn Hatcher** 80.82 332 IAmb IAmb 05 04 05.9
comp=Z,73nm,1.4s

RYN **Ryan** 80.96 324 IAmb IAmb 05 03 53.5
comp=Z,53nm,1.8s

ELK **Elko** 81.01 328 LR LR 05 35 28.3
comp=Z,296nm,21.6s,baz=147,slow=32

WAKR **Walker** 81.33 324 IAmb IAmb 05 04 09.2
comp=Z,74nm,1.6s

BOSA **Boshof** 81.58 118 P **P** 05 03 53.6 -0.7
comp=Z,13nm,0.5s,baz=247,slow=4.2,SNR=50
BOSA LR LR 05 36 20.1
comp=Z,306nm,18.7s,baz=219,slow=33
comp=Z,13nm,0.5s

IMW **Indian Meadow** 81.69 332 IAmb IAmb 05 04 10.9
comp=Z,55nm,1.6s

FLWY **Flagg Ranch** 81.75 333 P **P** 05 03 55.1 +0.4
FLWY IAmb IAmb 05 04 10.6
comp=Z,71nm,1.6s

PNTR **Pine Nut** 81.85 324 IAmb IAmb 05 03 59.3
comp=Z,27nm,0.9s

H17A **Grant Village** 81.96 333 P **P** 05 03 56.6 +0.8
baz=146

PAHR **Pah Rah Range** 82.21 325 IAmb IAmb 05 04 13.4
comp=Z,38nm,1.1s

TORD **Torodi Ar. Bea** 82.21 70 P **P** 05 03 56.7 -0.8
comp=Z,9.2nm,0.6s,baz=254,slow=4.8,SNR=129
TORD LR LR 05 38 45.1
comp=Z,474nm,19.4s,baz=224,slow=34
comp=Z,9.2nm,0.6s

MPK **Martis Peak** 82.23 324 IAmb IAmb 05 04 14.0
comp=Z,39nm,1.2s

AFDM **Forest Hills D** 82.46 323 IAmb IAmb 05 04 14.8
comp=Z,94nm,1.8s

ULM **Lac du Bonnet** 82.50 344 P **P** 05 03 58.0 -0.2
comp=Z,14nm,0.6s,baz=170,slow=6.1,SNR=29
comp=Z,14nm,0.6s

ULM **Lac du Bonnet** 82.50 344 P **P** 05 03 58.0 -0.2
HLID **Hailey** 82.88 330 IAmb IAmb 05 04 16.5
comp=Z,39nm,1.4s

DGMT **Dagmar** 83.17 339 P **P** 05 04 02.3 +0.6
MFID **Camas Ranch** 83.39 329 IAmb IAmb 05 04 18.8
comp=Z,32nm,1.4s

DLMT **Dillon** 83.57 332 IAmb IAmb 05 04 20.6
comp=Z,42nm,1.4s

LBTB **Lobatse** 83.60 115 LR LR 05 36 12.8
comp=Z,607nm,21.8s,baz=235,slow=32

SCHQ **Schefferville** 84.26 3 P **P** 05 04 06.9 -0.3
comp=Z,5.6nm,0.5s,baz=194,slow=9.0,SNR=22
SCHQ LR LR 05 42 44.9
comp=Z,46nm,20.7s,baz=224,slow=36
comp=Z,5.6nm,0.5s

O02D **Mt. Diablo Mer** 84.31 323 IAmb IAmb 05 04 10.3
comp=Z,40nm,1.5s

CASY **Casey** 84.33 181 P **P** 05 04 07.7 +0.1
CASY IAmb IAmb 05 04 09.4
comp=Z,44nm,1.1s

EGMT **Eagleton** 84.68 335 IAmb IAmb 05 04 25.2
comp=Z,56nm,1.4s

BMO **Blue Mountains** 85.17 329 IAmb IAmb 05 04 14.2
comp=Z,42nm,1.7s

MSO **Missoula** 85.31 332 IAmb IAmb 05 04 28.5
comp=Z,51nm,1.8s

YBH **Yreka Blue Hor** 85.40 324 IAmb IAmb 05 04 15.0
comp=Z,55nm,1.9s

YBH **Yreka Blue Hor** 85.40 324 LR LR 05 36 19.9
comp=Z,176nm,21.4s,baz=132,slow=31

K04D **Chiloquin, OR** 85.58 325 P **P** 05 04 13.9 -0.3
K04D IAmb IAmb 05 04 30.0
comp=Z,35nm,0.8s

I07A **Izee** 85.59 327 IAmb IAmb 05 04 31.0
comp=Z,49nm,1.5s

F10A **Beach Ranch, E** 86.01 330 IAmb IAmb 05 04 33.7
comp=Z,28nm,1.6s

I04A **Tendick Farm,** 86.77 326 IAmb IAmb 05 04 35.1
comp=Z,49nm,1.4s

URZ **Urewera** 86.98 227 LR LR 05 33 44.4
comp=Z,287nm,20.9s,baz=227,slow=29

F07A **Phinny Hill Vi** 87.16 328 IAmb IAmb 05 04 37.8
comp=Z,30nm,1.4s

LTZ **Lake Taylor** 87.19 221 P **P** 05 04 23.5 +1.2
H04A **Detroit Lake** 87.31 326 IAmb IAmb 05 04 38.3
comp=Z,30nm,1.2s

THZ **Topher** 87.45 222 P **P** 05 04 25.3 +1.6
HOOD **Mount Hood Mea** 87.53 327 IAmb IAmb 05 04 40.3
comp=Z,42nm,1.1s

D08A **Wollman Farm,** 87.59 330 IAmb IAmb 05 04 25.9
comp=Z,12nm,0.8s

E07A **Sunnyside** 87.63 329 IAmb IAmb 05 04 25.6
comp=Z,50nm,1.9s

INZ **Inchbonnie** 87.70 221 P **P** 05 04 25.8 +1.2
NEW **Newport** 87.76 331 IAmb IAmb 05 04 39.1
comp=Z,28nm,1.6s

NEW **Newport** 87.76 331 LR LR 05 40 47.1
comp=Z,266nm,19.2s,baz=142,slow=34

MXC **Moxie City** 87.84 329 IAmb IAmb 05 04 27.6
comp=Z,33nm,1.5s

C09A **Chrisman Ranch** 87.89 330 IAmb IAmb 05 04 27.2
comp=Z,16nm,0.7s

MATP **Matopo** 88.22 112 LR LR 05 40 40.7
comp=Z,151nm,19.2s,baz=240,slow=34

LON **Longmire** 88.66 328 IAmb IAmb 05 04 44.6
comp=Z,26nm,1.3s

MDT **Midelt** 88.67 51 LR LR 05 43 53.7
comp=Z,173nm,20.8s,baz=233,slow=36

RAO **Raoul Island** 88.68 237 LR LR 05 34 33.0
comp=Z,139nm,21.6s,baz=120,slow=29

B08A **Colville Reser** 88.77 330 IAmb IAmb 05 04 44.9
comp=Z,42nm,1.7s

MORF **Marmelete** 88.82 45 *e*P **P** 05 04 30.6 +0.7
PTEO **Sao Teotonio** 88.93 45 *e*P **P** 05 04 31.1 +0.8
PBDV **Barranco-de-Ve** 89.23 46 *e*P **P** 05 04 32.4 +0.6
PCVE **Castro Verde** 89.40 45 *e*P **P** 05 04 32.9 +0.3
PNCL **Nicolau / Gran** 89.41 45 *e*P **P** 05 04 31.4 -1.2
MESJ **Messejana** 89.42 45 *e*P **P** 05 04 33.2 +0.5
PVAQ **Vaqueiros** 89.46 46 *e*P **P** 05 04 33.4 +0.5
PVAQ **Vaqueiros** 89.46 46 *e*S **SKSac** 05 15 01.2 +0.6
PVAQ **Vaqueiros** 89.46 46 *e*LQ LQ 05 33 17.9
PVAQ *e*LR LR 05 37 36.7
comp=Z,339nm,18.0s

GNW **Green Mountain** 89.73 328 IAmb IAmb 05 04 48.9
comp=Z,35nm,1.4s

PBEJ **Beja** 89.76 45 *e*P **P** 05 04 34.6 +0.3
PSBE **So Bento** 90.13 43 *e*P **P** 05 04 36.5 +0.5
PMTG **Montargil** 90.19 44 *e*P **P** 05 04 36.7 +0.5
comp=Z,26nm,2.1s

PBAR **Barrancos** 90.36 45 *e*P **P** 05 04 37.1 0.0
LSZ **Lusaka** 90.60 108 P **P** 05 04 40.0 +1.0
LSZ **Lusaka** 90.60 108 P **P** 05 04 40.0 +1.0
LSZ pmax pmax
comp=Z,51nm,1.3s

PMRV **Marv??o** 90.92 44 *e*S **SKSac** 05 15 09.5 +0.5
PMRV **Marv??o** 90.92 44 *e*LR LR 05 39 40.6
comp=Z,251nm,18.0s

MTE **Manteigas** 91.44 43 *e*S **S** 05 15 39.7 +0.5
MTE **Manteigas** 91.44 43 *e*LQ LQ 05 34 19.8
MTE *e*LR LR 05 38 26.0
comp=Z,559nm,20.0s

PGAV **Gavieira, Arco** 91.99 42 A A 05 45 28.5
comp=Z,382nm,20.0s

MVO **Moncorvo** 92.22 43 *e*LR LR 05 38 53.5
comp=Z,472nm,20.0s

FRB **Frobisher Bay** 93.14 1 LR LR 05 48 16.8
comp=Z,107nm,21.0s,baz=127,slow=36

ESDC **Sonseca Array** 93.17 46 P **P** 05 04 48.7 -1.4
comp=Z,1.0nm,0.6s,baz=244,slow=5.3,SNR=10
ESDC LR LR 05 46 43.0
comp=Z,378nm,18.5s,baz=231,slow=36
comp=Z,1.0nm,0.6s

BBB **Bella Bella** 95.42 329 LR LR 05 43 53.4
comp=Z,69nm,21.5s,baz=143,slow=33

SFJD **Kangerlussuaq** 97.66 8 LR LR 05 49 19.7
comp=Z,55nm,22.0s,baz=196,slow=36

YKA **Yellowknife Ar** 98.17 341 P **P** 05 05 11.8 -0.4
comp=Z,1.5nm,0.8s,baz=146,slow=3.7,SNR=4.3
comp=Z,1.5nm,0.8s

YKA **Yellowknife Ar** 98.17 341 *i* P Pdif 05 05 14.8 +2.5
YKA pmax pmax
comp=Z,1.0nm,0.5s

MSVF **Nonsavu** 98.18 244 LR LR 05 39 52.2
comp=Z,189nm,21.7s,baz=137,slow=30

TOAD **Toad River Com** 98.87 335 P Pdif 05 05 15.9 +0.3
baz=135

KOTAN **Kotaneelee Air** 99.35 336 P **Pdif** 05 05 18.3 +0.7
baz=136

LIRD **Liard River Hi** 99.58 335 P **Pdif** 05 05 19.5 +0.8
baz=134

CRAG **Craig** 99.82 329 P **Pdif** 05 05 20.1 +0.4
baz=129

KEST **Kesra** 99.92 55 LR LR 05 52 57.8
comp=Z,433nm,19.2s,baz=200,slow=37

DLBC **Dease Lake** 100.43 333 P **Pdif** 05 05 22.8 +0.2
baz=131

WTLY **Watson Lake, Y** 101.06 335 P **Pdif** 05 05 25.8 +0.5
baz=132

R33M **Jennings River** 101.42 333 P **Pdif** 05 05 27.5 +0.5
baz=130

TGTN **Hyland Airport** 101.81 336 P **Pdif** 05 05 29.7 +1.1
baz=132

FARO **Faro, Yukon** 104.11 335 P **Pdif** 05 05 40.2 +1.4
baz=128

DZM **Mont Dzumac** 104.23 234 *e*LR LR 05 39 48.6
comp=Z,643nm,24.2s

P30M **Million Dollar** 104.27 332 P **Pdif** 05 05 40.7 +1.2
baz=125

O30N **Mendenhall** 104.30 333 P **Pdif** 05 05 40.7 +1.1
baz=126

G31M **Satah River** 107.25 338 P **PKiKP** 05 10 02.2 +0.9
baz=126

KAIM **Kayak Island** 107.33 330 P **PKiKP** 05 10 02.9 +1.3
baz=119

Q23K **Middleton Isla** 107.95 329 P **PKiKP** 05 10 03.2 +0.5
baz=118

F30M **Barrier River** 108.13 339 P **PKiKP** 05 10 03.9 +1.0
baz=124

EYAK **Cordova Ski Ar** 108.21 330 P **PKiKP** 05 10 04.5 +1.3
baz=118

N25K **Chitina, Valde** 108.23 331 P **PKiKP** 05 10 04.0 +0.6
baz=119

KHC **Kasperske Hory** 108.74 44 AMS AMS 05 57 20.0
comp=Z,200nm,15.1s

CKRC **Cesky Krumlov** 109.06 44 AMS AMS 05 56 50.0
comp=Z,200nm,22.2s

J26L **Joseph Creek** 109.21 334 P **PKiKP** 05 10 05.8 +0.7
baz=119

I26K **Coal Creek Min** 109.44 335 P **PKiKP** 05 10 06.1 +0.7
baz=119

F28M **Old Crow** 109.45 338 P **PKiKP** 05 10 06.3 +0.9
baz=121

SCM **Sheep Creek Mo** 109.48 331 P **PKiKP** 05 10 06.6 +0.8
baz=116

PRA **Prague** 109.62 43 AMS AMS 05 57 20.0
comp=Z,300nm,19.9s

PRU **Pruhonice** 109.66 43 AMS AMS 05 57 20.0
comp=Z,200nm,21.6s

GOPC **GO Pecny, Ondr** 109.77 43 AMS AMS 05 57 30.0
comp=Z,200nm,23.1s

PVCC **Panska Ves** 109.88 43 AMS AMS 05 57 20.0
comp=Z,200nm,19.3s

UPC **Upice** 110.73 43 AMS AMS 05 58 00.0
comp=Z,200nm,19.2s

Q18K **Katmai Hardscr** 111.69 326 P **PKiKP** 05 10 09.8 -0.2
baz=112

O18K **Koktuh Hills** 112.22 327 P **PKiKP** 05 10 11.1 +0.3
baz=111

N19K **Bonanza Creek** 112.23 328 P **PKiKP** 05 10 11.0 +0.1
baz=111

G23K **Bananza Creek** 112.58 335 P **PKiKP** 05 10 12.6 +1.2
baz=112

CHNA **Chernabura Isl** 112.72 321 P **PKiKP** 05 10 12.6 +0.7
baz=110

H22K **Ishtalitna Cre** 112.78 334 P **PKiKP** 05 10 12.6 +0.8
baz=112

J20K **Nowinta River** 113.27 332 P **PKiKP** 05 10 13.4 +0.7
baz=110

D23K **Nanushuk River** 113.66 337 P **PKiKP** 05 10 14.3 +1.0
baz=111

L18K **Granite Mounta** 113.70 329 P **PKiKP** 05 10 14.6 +1.1
baz=109

G21K **Allakaket** 113.81 334 P **PKiKP** 05 10 14.5 +0.8
baz=110

J19K **Poorman** 113.82 331 P **PKiKP** 05 10 15.0 +1.2
baz=109

M15K **Kasigluk River** 115.08 327 P **PKiKP** 05 10 17.0 +0.8
baz=106

J17K **VABM Dome** 115.11 330 P **PKPdf** 05 10 17.2 +1.0
baz=106

C21K **Knifeblade Rid** 115.11 337 P **PKPdf** 05 10 17.1 +1.0
baz=107

B21K **Ikpikpuk River** 115.19 337 P **PKPdf** 05 10 17.4 +1.1
baz=107

E20K **Nigu River** 115.34 336 P **PKPdf** 05 10 17.1 +0.4
baz=106

N14K **Kuskokwak Cree** 115.34 326 P **PKiKP** 05 10 17.4 +0.7
baz=106

E19K **Redstone River** 115.50 335 P **PKPdf** 05 10 17.6 +0.7
baz=106

F19K **Shaleruckik Mo** 115.53 334 P **PKPdf** 05 10 18.0 +1.1
baz=106

G18K **Tagagawik** 115.61 333 P **PKiKP** 05 10 18.1 +0.9
baz=106

D20K **Etivluk River** 115.62 336 P **PKPdf** 05 10 18.6 +1.5
baz=106

A22K **Sinclair Lake** 115.71 339 P **PKiKP** 05 10 17.9 +0.7
baz=106

L15K **Ungalak Mounta** 115.72 328 P **PKiKP** 05 10 18.6 +1.1
baz=105

J16K **Anvik River** 115.74 330 P **PKiKP** 05 10 18.5 +1.0
baz=105

K15K **Wolf Creek Mou** 115.90 329 P **PKiKP** 05 10 18.4 +0.6
baz=105

D19K **Kuna River** 116.09 336 P **PKiKP** 05 10 18.9 +0.8
baz=105

B20K **Meade River** 116.15 338 P **PKiKP** 05 10 19.8 +1.7
baz=105

F18K **Selawik** 116.19 334 P **PKiKP** 05 10 19.2 +0.9
baz=104

A21K **Barrow** 116.31 339 P **PKiKP** 05 10 19.0 +0.7
baz=105

C19K **Lookout Ridge** 116.76 336 P **PKiKP** 05 10 19.9 +0.5
baz=103

H16K **Elim** 116.77 331 P **PKiKP** 05 10 19.7 +0.3
baz=103

NIKH **Nikolski High** 117.45 317 P **PKiKP** 05 10 21.6 +0.6
baz=104

A19K **Wainwright** 117.50 337 P **PKiKP** 05 10 21.5 +0.9
baz=101

B18K **Kokolik River** 117.58 336 P **PKiKP** 05 10 21.9 +1.0
baz=101

F15K **North Star Dit** 117.98 332 P **PKiKP** 05 10 22.6 +0.8
baz=100

ANM **Nome** 118.08 331 P **PKiKP** 05 10 22.3 +0.3
baz=100

SPITS **Spitsbergen Ar** 118.37 14 PKP **PKPdf** 05 10 22.2 0.0
comp=Z,5.1nm,0.9s,baz=298,slow=3.1,SNR=1.6

MMAI **Mount Meron Ar** 118.57 66 PKP **PKiKP** 05 10 24.5 +0.4
comp=Z,1.1nm,0.4s,baz=236,slow=0.5,SNR=2.2

MNK **Minsk** 118.81 41 *i* P **Pdif** 05 06 45.2 +0.9
MNK *i* 05 10 24.3
MNK *i* 05 11 44.2
MNK *i* PPP PPP 05 14 15.8
MNK *i* 05 17 32.9
MNK *i* PS **PS** 05 21 32.5 +2.3
MNK *i* SS SS 05 28 03.2 +3.4
MNK *i* SSS SSS 05 32 27.9
MNK pmax pmax
comp=E,9.0nm,0.7s
MNK pmax pmax
comp=N,9.0nm,0.7s
MNK pmax pmax
comp=Z,6.0nm,0.7s

AKASG **Malin Array Be** 118.82 46 PKP **PKPdf** 05 10 22.4 -1.3
comp=Z,2.0nm,0.6s,baz=264,slow=2.6,SNR=4.9

AKBB **Malin Array Si** 118.82 46 *c* *i* PKiKP **PKPdf** 05 10 22.3 -1.5
FINES **FINESS Array B** 119.10 33 PKP **PKPdf** 05 10 23.6 -0.4
comp=Z,1.2nm,0.6s,baz=225,slow=3.7,SNR=3.6

BR131 **Keskin Array S** 119.18 59 *i* PKiKP **PKPdf** 05 10 24.8 -0.2
BRTR **Keskin Array B** 119.18 59 PKP **PKPdf** 05 10 24.4 -0.7
comp=Z,0.3nm,0.5s,baz=248,slow=2.7,SNR=4.0

TNA **Tin City** 119.30 332 P **PKiKP** 05 10 24.8 +0.6
baz=98

ARCES **ARCESS Array B** 119.86 24 PKP **PKPdf** 05 10 24.0 -1.3
comp=Z,3.7nm,1.0s,baz=308,slow=2.2,SNR=4.3
ARCES PKKPbc **PKKPab** 05 20 35.3 +0.8
comp=Z,1.3nm,0.5s,baz=79,slow=4.7,SNR=11

ASAR **Alice Springs** 121.65 207 PKP **PKPdf** 05 10 28.9 -1.4
comp=Z,2.1nm,0.7s,baz=144,slow=2.1,SNR=17
ASAR PKKPbc **PKKPbc** 05 20 28.2 -1.0
comp=Z,1.0nm,0.6s,baz=330,slow=2.9,SNR=12
ASAR SKKPbc SKKPbc 05 24 15.2 +2.3
comp=Z,0.5nm,0.6s,baz=316,slow=2.6,SNR=1.6

OBN **Obninsk** 123.87 41 *i* PKiKP **PKiKP** 05 10 34.2 +0.6
OBN *e* 05 10 47.4
OBN *e* 05 12 19.0
OBN pmax pmax
comp=Z,9.0nm,1.1s

MOS **Moscow** 124.51 40 *e* PKiKP **PKPdf** 05 10 33.8 -0.7
VSLR **Vesoyloye** 124.68 56 *i* PKiKP **PKiKP** 05 10 37.2 +1.6
WRA **Warramunga Arr** 124.78 210 PKP **PKPdf** 05 10 35.1 -1.3
comp=Z,6.7nm,0.6s,baz=164,slow=1.6,SNR=89
WRA PKKPbc **PKKPbc** 05 20 16.5 -0.3
comp=Z,0.6nm,0.5s,baz=338,slow=4.4,SNR=13

WRAB **Tennant Creek** 124.79 210 *e* PKiKP **PKPdf** 05 10 35.3 -1.0
H11S2 **WAKE ISLAND Hy** 126.30 272 T T 07 29 40.9
baz=115,slow=75,SNR=466

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **H11S1** | **WAKE ISLAND Hyl** | **26.31** | **272** | | T | T | 07 29 44.5 | | |
| | baz=115,slow=75,SNR=443 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.31** | **272** | | T | T | 07 29 44.3 | | |
| | baz=115,slow=75,SNR=470 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **26.60** | **273** | | T | T | 07 30 05.1 | | |
| | baz=116,slow=75,SNR=39 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **26.61** | **273** | | T | T | 07 30 17.4 | | |
| | baz=116,slow=75,SNR=18 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **26.62** | **273** | | T | T | 07 30 11.5 | | |
| | baz=116,slow=75,SNR=72 | | | | | | | | |
| **KIV** | **Kislovodsk** | **126.66** | **55** | *i* | PKIKP | **PKiKP** | **05 10 40.7** | **+1.0** | |
| KIV | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| KIV | | | | | MLR | MLR | | | |
| | comp=Z,86nm,23.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **126.78** | **56** | | PKP | **PKiKP** | **05 10 39.8** | **+0.1** | |
| | comp=Z,2.1nm,0.8s,baz=233,slow=5.1,SNR=5.2 | | | | | | | | |
| **KBZ** | **Khabaz** | **126.78** | **56** | ⇓*e* | PKIKP | **PKPdf** | **05 10 39.4** | **+0.1** | |
| **GNI** | **Garni** | **127.59** | **60** | ⇑*e* | PKIKP | **PKiKP** | **05 10 42.8** | **+1.0** | |
| **PSA00** | **Pilbara Seismi** | **127.90** | **193** | | | **PKPdf** | **05 10 40.9** | **-1.3** | |
| **BILL** | **Bilibino** | **129.18** | **336** | ⇑*e* | PKIKP | **PKiKP** | **05 10 44.4** | **+0.6** | |
| BILL | | | | | *e* | | 05 10 58.2 | | |
| BILL | | | | | *e* | | 05 12 54.5 | | |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **129.74** | **201** | | PKPdf | **PKPdf** | **05 10 45.1** | **-0.7** | |
| **AKT** | **Akhty** | **130.03** | **59** | *i* | PKIKP | **PKiKP** | **05 10 48.2** | **+1.7** | |
| AKT | | | | | *e* | | 05 13 06.0 | | |
| AKT | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **BELG** | **Belogornoye** | **130.38** | **45** | ⇑*e* | PKIKP | **PKiKP** | **05 10 46.6** | **-0.1** | |
| **KIRV** | **Kirov** | **130.77** | **36** | ⇑*e* | PKIKP | **PKiKP** | **05 10 48.9** | **+1.6** | |
| **ARU** | **Arti** | **136.06** | **38** | *i* | PKIKP | **PKiKP** | **05 10 58.2** | **+0.1** | |
| ARU | | | | | | | 05 13 39.6 | | |
| ARU | | | | | SS | SS | 05 31 39.2 | +5.3 | |
| **SEY** | **Seymchan** | **136.53** | **333** | | PKP | **PKPdf** | **05 10 57.7** | **+0.6** | |
| | comp=Z,3.1nm,0.5s,baz=69,slow=4.7,SNR=8.3 | | | | | | | | |
| **SEY** | **Seymchan** | **136.53** | **333** | ⇓*i* | PKIKP | **PKiKP** | **05 10 58.3** | **-0.5** | |
| **TIXI** | **Tiksi** | **136.55** | **351** | | PKP | **PKPdf** | **05 10 57.2** | **+0.3** | |
| | comp=Z,5.2nm,0.6s,baz=25,slow=3.2,SNR=3.9 | | | | | | | | |
| **TIXI** | **Tiksi** | **136.55** | **351** | ⇓*i* | PKIKP | **PKPdf** | **05 10 56.9** | **0.0** | |
| **PETK** | **Petropavlovsk-** | **137.46** | **318** | | PKhKP | PKPpre | 05 10 54.5 | | |
| | comp=Z,2.5nm,0.7s,baz=88,slow=3.3,SNR=2.5 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **138.48** | **48** | | PKPdf | **PKPdf** | **05 11 00.2** | **-1.0** | |
| **MA2** | **Magadan** | **138.81** | **329** | ⇓*i* | PKIKP | **PKPdf** | **05 11 02.3** | **+0.9** | |
| **BRVK** | **Borovoye** | **143.59** | **39** | *ce* | PKIKP | PKPbc | 05 11 08.0 | +0.3 | |
| **BVAR** | **Borovoye Array** | **143.66** | **39** | | PKP | PKPbc | 05 11 08.2 | +0.3 | |
| | comp=Z,4.4nm,0.5s,baz=297,slow=3.6,SNR=29 | | | | | | | | |
| **KAPI** | **Kappang** | **143.88** | **199** | | PKPdf | PKPbc | 05 11 10.2 | +0.5 | |
| **KAPI** | **Kappang** | **143.88** | **199** | *c i* | PKIKP | PKPbc | 05 11 09.7 | +0.1 | |
| **YAK** | **Yakutsk** | **144.83** | **343** | | PKPdf | **PKPab** | **05 11 10.8** | **-0.3** | |
| **YAK** | **Yakutsk** | **144.83** | **343** | | PKP | **PKPdf** | **05 11 11.7** | **-0.3** | |
| | comp=Z,254nm,0.6s,baz=44,slow=0.7,SNR=40 | | | | | | | | |
| **YAK** | **Yakutsk** | **144.83** | **343** | *c i* | PKIKP | PKPbc | 05 11 11.3 | +0.1 | |
| YAK | | | | | *e* | | 05 11 24.7 | | |
| YAK | | | | | *e* | | 05 14 29.8 | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,183nm,0.8s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=N,14nm,0.9s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=E,40nm,1.3s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,120nm,4.0s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=E,48nm,3.2s | | | | | | | | |
| **SIMJ** | **Simiganj** | **146.24** | **64** | | PKPab | **PKPdf** | **05 11 15.7** | **+0.2** | |
| **CHM** | **Chimkent** | **146.30** | **57** | *e* | PKPbc | **PKPbc** | **05 11 16.9** | **+0.3** | |
| | baz=57 | | | | | | | | |
| **CHM** | **Chimkent** | **146.30** | **57** | *e* | PKP2 | **PKPbc** | **05 11 16.8** | **+0.3** | |
| **BRLS** | **Borolday** | **146.34** | **56** | *e* | PKP | **PKPdf** | **05 11 15.2** | **-0.2** | |
| | baz=57 | | | | | | | | |
| **BRLS** | **Borolday** | **146.34** | **56** | *e* | PKIKP | **PKPdf** | **05 11 15.2** | **-0.2** | |
| **CHGR** | **Chuyangaron** | **146.36** | **64** | | PKPdf | **PKPdf** | **05 11 15.9** | **+0.3** | |
| **CHGR** | **Chuyangaron** | **146.36** | **64** | | PKP2 | **PKPdf** | **05 11 15.9** | **+0.3** | |
| **LUWI** | **Luwuk** | **146.59** | **206** | | | **PKPab** | **05 11 19.1** | **-0.1** | |
| **YSS** | **Yuzh-Sakhalins** | **148.47** | **313** | *e* | PKP2 | **PKPbc** | **05 11 22.0** | **-0.3** | |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **BTLS** | **Baital** | **148.81** | **51** | *e* | PKPbc | **PKPbc** | **05 11 23.8** | **+0.6** | |
| | baz=51 | | | | | | | | |
| **BTLS** | **Baital** | **148.81** | **51** | *e* | PKP2 | **PKPbc** | **05 11 23.8** | **+0.6** | |
| **KURBB** | **Kurchatov Arra** | **149.25** | **39** | | PKP | **PKPdf** | **05 11 20.1** | **+0.3** | |
| | comp=Z,15nm,0.5s,baz=304,slow=3.1,SNR=25 | | | | | | | | |
| KURBB | | | | | PKPbc | **PKPbc** | **05 11 24.2** | **+0.1** | |
| | comp=Z,16nm,0.6s,baz=303,slow=3.1,SNR=87 | | | | | | | | |
| **KURK** | **Kurchatov** | **149.25** | **38** | | PKPdf | **PKPdf** | **05 11 19.8** | **0.0** | |
| **KURK** | **Kurchatov** | **149.25** | **38** | ⇑*e* | PKIKP | **PKPdf** | **05 11 20.2** | **+0.4** | |
| **EKS2** | **Erkin-Say** | **149.26** | **56** | | P | **PKiKP** | **05 11 25.6** | **-0.2** | |
| | SNR=18 | | | | | | | | |
| **AML** | **Almayashu** | **149.32** | **57** | | P | **PKiKP** | **05 11 25.8** | **-0.5** | |
| | SNR=18 | | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **149.50** | **308** | | | **PKPbc** | **05 11 23.7** | **-1.3** | |
| **ASAJ** | **Asahikawa** | **149.50** | **308** | | PKPbc | **PKPbc** | **05 11 25.5** | **+0.5** | |
| | comp=Z,17nm,0.9s,baz=172,slow=4.7,SNR=7.0 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **149.50** | **308** | | PKHKP | **PKPbc** | **05 11 23.7** | **-1.3** | |
| **USP** | **Ospenovka** | **149.62** | **54** | | P | **PKiKP** | **05 11 26.0** | **-0.4** | |
| | SNR=13 | | | | | | | | |
| **SGDS** | **Sogindy** | **149.66** | **54** | *e* | PKPbc | **PKPbc** | **05 11 25.9** | **+0.4** | |
| | baz=54 | | | | | | | | |
| **SGDS** | **Sogindy** | **149.66** | **54** | *e* | PKP2 | **PKPbc** | **05 11 25.9** | **+0.4** | |
| **NIL** | **Nilore** | **149.73** | **73** | | PKPbc | **PKPbc** | **05 11 25.9** | **0.0** | |
| **NIL** | **Nilore** | **149.73** | **73** | | PKP2 | **PKPbc** | **05 11 25.9** | **0.0** | |
| **AAK** | **Ala-Archa** | **149.78** | **55** | | P | **PKiKP** | **05 11 27.0** | **+0.1** | |
| | SNR=18 | | | | | | | | |
| **AAK** | **Ala-Archa** | **149.78** | **55** | | PKPdf | **PKPdf** | **05 11 21.0** | **-0.2** | |
| **AAK** | **Ala-Archa** | **149.78** | **55** | ⇑*e* | PKHKP | **PKPdf** | **05 11 21.9** | **+0.7** | |
| **CHMS** | **Chumysh** | **149.87** | **55** | | P | **PKiKP** | **05 11 26.8** | **-0.2** | |
| | SNR=7.4 | | | | | | | | |
| **UCH** | **Uchtor** | **149.89** | **56** | | P | **PKiKP** | **05 11 28.1** | **+0.5** | |
| | SNR=12 | | | | | | | | |
| **HYB** | **Hyderabad** | **149.94** | **107** | *e* | PKPbc | **PKPbc** | **05 11 26.7** | **-0.2** | |
| **ZALV** | **Zalesovo Beam** | **150.23** | **29** | | PKP | **PKPdf** | **05 11 21.1** | **-0.2** | |
| | comp=Z,2.9nm,0.5s,baz=300,slow=2.8,SNR=6.0 | | | | | | | | |
| ZALV | | | | | PKPbc | **PKPbc** | **05 11 26.5** | **+0.1** | |
| | comp=Z,80nm,0.5s,baz=308,slow=3.5,SNR=141 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **150.29** | **38** | *e* | PKPbc | **PKPbc** | **05 11 27.2** | **+0.2** | |
| | baz=38 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **150.29** | **38** | *e* | PKIKP | **PKPbc** | **05 11 27.2** | **+0.2** | |
| **TKM2** | **Tokmak 2** | **150.49** | **54** | | P | **PKiKP** | **05 11 28.1** | **-0.3** | |
| | SNR=24 | | | | | | | | |
| **ULHL** | **Ulahol** | **151.13** | **55** | | P | **PKiKP** | **05 11 30.2** | **+0.5** | |
| | SNR=12 | | | | | | | | |
| **AAA** | **Alma-Ata** | **151.33** | **53** | *e* | PKPbc | **PKiKP** | **05 11 30.2** | **+0.2** | |
| | baz=53 | | | | | | | | |
| **AAA** | **Alma-Ata** | **151.33** | **53** | *e* | PKIKP | **PKiKP** | **05 11 30.2** | **+0.2** | |
| **TNSS** | **Tian-Shan** | **151.41** | **54** | *e* | PKPbc | **PKPbc** | **05 11 30.3** | **+0.1** | |
| | baz=54 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **151.41** | **54** | *e* | PKIKP | **PKPbc** | **05 11 30.2** | **+0.1** | |
| **MDOK** | **Medeo** | **151.44** | **53** | *e* | PKPbc | **PKiKP** | **05 11 30.4** | **+0.1** | |
| | baz=53 | | | | | | | | |
| **MDOK** | **Medeo** | **151.44** | **53** | *e* | PKIKP | **PKiKP** | **05 11 30.4** | **+0.1** | |
| **KSH** | **Kashi** | **151.52** | **61** | | PKPbc | **PKPbc** | **05 11 30.0** | **-0.1** | |
| KSH | | | | | sPKP | | 05 11 43.5 | | |
| **BOD** | **Bodaibo** | **151.63** | **354** | *e* | PKIKP | **PKPbc** | **05 11 28.5** | **-1.1** | |
| BOD | | | | | pmax | pmax | | | |
| | comp=Z,63nm,1.5s | | | | | | | | |
| **ARXS** | **Arharly** | **151.63** | **51** | *e* | PKIKP | **PKPbc** | **05 11 28.8** | **-1.4** | |
| **TDK** | **Taldyqorghan** | **151.73** | **49** | *e* | PKPbc | **PKiKP** | **05 11 31.0** | **+0.3** | |
| | baz=49 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **151.73** | **49** | *e* | PKIKP | **PKiKP** | **05 11 30.9** | **+0.3** | |
| **ZEA** | **Zeya** | **152.41** | **336** | *e* | PKIKP | **PKPbc** | **05 11 30.5** | **-1.0** | |
| ZEA | | | | | *e* | | 05 11 45.8 | | |
| ZEA | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.3s | | | | | | | | |
| **KPKS** | **Kokpek** | **152.47** | **52** | *e* | PKPbc | **PKiKP** | **05 11 32.4** | **0.0** | |
| | baz=52 | | | | | | | | |
| **KPKS** | **Kokpek** | **152.47** | **52** | *e* | PKIKP | **PKiKP** | **05 11 32.4** | **0.0** | |
| **SHLS** | **Shalkode** | **153.11** | **52** | *e* | PKPbc | **PKiKP** | **05 11 34.5** | **+0.8** | |
| | baz=52 | | | | | | | | |
| **SHLS** | **Shalkode** | **153.11** | **52** | *e* | PKIKP | **PKiKP** | **05 11 34.5** | **+0.8** | |
| **MAKZ** | **Makanchi** | **153.17** | **43** | | PKPdf | **PKPdf** | **05 11 25.1** | **-0.9** | |
| MAKZ | | | | | | **PKPbc** | **05 11 32.5** | **-0.9** | |
| MAKZ | | | | | | **PKPab** | **05 11 44.8** | **-0.4** | |
| **MAKZ** | **Makanchi** | **153.17** | **43** | | PKIKP | **PKPdf** | **05 11 25.1** | **-0.9** | |
| MAKZ | | | | | | | 05 11 44.8 | | |
| **MK31** | **Makanchi Array** | **153.36** | **43** | ⇑*e* | PKIKP | **PKPdf** | **05 11 26.3** | **0.0** | |
| **MKAR** | **Makanchi Array** | **153.36** | **43** | | PKP | **PKPdf** | **05 11 25.9** | **-0.4** | |
| | comp=Z,1.0nm,0.9s,baz=324,slow=2.0,SNR=6.6 | | | | | | | | |
| MKAR | | | | | PKPbc | **PKPbc** | **05 11 33.5** | **-0.4** | |
| | comp=Z,5.8nm,0.7s,baz=304,slow=2.8,SNR=42 | | | | | | | | |
| MKAR | | | | | PKPab | **PKPab** | **05 11 46.3** | **+0.3** | |
| | comp=Z,4.2nm,0.5s,baz=307,slow=3.1,SNR=12 | | | | | | | | |
| **KLR** | **Kul'dur** | **153.73** | **324** | | PKP | **PKPdf** | **05 11 26.6** | **-0.1** | |
| | comp=Z,1.1nm,0.6s,baz=88,slow=3.4,SNR=4.6 | | | | | | | | |
| KLR | | | | | PKPbc | **PKPbc** | **05 11 34.5** | **-0.1** | |
| | comp=Z,3.4nm,0.6s,baz=39,slow=3.3,SNR=8.7 | | | | | | | | |
| KLR | | | | | PKPab | **sPKPbc** | **05 11 48.5** | **-0.6** | |
| | comp=Z,6.1nm,0.8s,baz=30,slow=4.0,SNR=9.4 | | | | | | | | |
| **KLR** | **Kul'dur** | **153.73** | **324** | *e* | PKIKP | **PKPdf** | **05 11 25.4** | **-1.3** | |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.5s | | | | | | | | |
| **IPM** | **Ipoh** | **153.92** | **163** | | PKPbc | **PKPbc** | **05 11 35.0** | **-1.1** | |
| **MJAR** | **Matsushiro Arr** | **154.36** | **293** | | PKPbc | **PKPbc** | **05 11 35.8** | **-0.5** | |
| | comp=Z,0.9nm,0.5s,baz=90,slow=1.2,SNR=5.2 | | | | | | | | |
| MJAR | | | | | PKPab | **sPKPbc** | **05 11 51.8** | **+1.0** | |
| | comp=Z,6.5nm,0.7s,baz=83,slow=2.8,SNR=10 | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **154.36** | **33** | *ce* | PKIKP | **PKPdf** | **05 11 27.5** | **-0.3** | |
| **ZSN** | **Zaisan** | **154.48** | **39** | *e* | PKPbc | **PKiKP** | **05 11 37.5** | **+1.1** | |
| | baz=39 | | | | | | | | |
| **ZSN** | **Zaisan** | **154.48** | **39** | *e* | PKIKP | **PKiKP** | **05 11 37.4** | **+1.1** | |
| **HEH** | **HeiHe** | **155.05** | **331** | | PKPbc | **PKPdf** | **05 11 28.0** | **-0.5** | |
| **USRK** | **Ussuriysk Ar.** | **156.48** | **314** | | PKPab | **PKPab** | **05 11 59.8** | **+0.4** | |
| | comp=Z,3.1nm,0.7s,baz=56,slow=1.7,SNR=7.2 | | | | | | | | |
| **MOY** | **Mondy** | **157.32** | **12** | *e* | PKIKP | **PKPdf** | **05 11 33.1** | **+1.5** | |
| MOY | | | | | pmax | pmax | | | |
| | comp=Z,24nm,2.6s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **157.70** | **318** | | PKP | **PKPdf** | **05 11 32.3** | **+0.2** | |
| **WMQ** | **Urumqi** | **158.17** | **44** | *e* | PKP | **PKPdf** | **05 11 33.5** | **+0.6** | |
| WMQ | | | | | LR | LR | | | |
| | comp=Z,130nm,23.5s | | | | | | | | |
| **BNX** | **BinXian** | **158.23** | **323** | ⇓ | P | **PKPab** | **05 12 07.5** | **+0.6** | |
| BNX | | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **ZAK** | **Zakamensk** | **158.94** | **10** | *e* | PKIKP | **PKPdf** | **05 11 34.0** | **+0.4** | |
| ZAK | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.7s | | | | | | | | |
| **SONM** | **Songino Array** | **161.80** | **5** | | PKP | **PKPdf** | **05 11 36.3** | **-0.6** | |
| | comp=Z,0.4nm,0.4s,baz=5.7,slow=1.4,SNR=5.3 | | | | | | | | |
| SONM | | | | | PKPab | **PKPab** | **05 12 22.2** | **-0.2** | |
| | comp=Z,2.1nm,0.6s,baz=326,slow=3.5,SNR=7.8 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **161.81** | **3** | | PKPdf | **PKPdf** | **05 11 36.9** | **0.0** | |
| ULN | | | | | | **PKPab** | **05 12 22.4** | **-0.1** | |
| **ULN** | **Ulaanbaatar** | **161.81** | **3** | | PKIKP | **PKPdf** | **05 11 36.9** | **0.0** | |
| ULN | | | | | | | 05 12 22.4 | | |
| **KSRS** | **Korea Array** | **162.17** | **301** | | PKP | **PKPdf** | **05 11 37.9** | **+0.5** | |
| | comp=Z,0.5nm,0.4s,baz=45,slow=1.9,SNR=4.4 | | | | | | | | |
| KSRS | | | | | PKPab | **PKPab** | **05 12 25.6** | **+1.3** | |
| | comp=Z,1.7nm,0.6s,baz=82,slow=4.5,SNR=5.4 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **165.76** | **140** | | PKP | **PKPdf** | **05 11 39.9** | **-1.4** | |
| | comp=Z,0.7nm,0.3s,baz=262,slow=1.8,SNR=5.5 | | | | | | | | |
| CMAR | | | | | PKPab | **PKPab** | **05 12 39.1** | **-1.4** | |
| | comp=Z,3.3nm,0.9s,baz=229,slow=4.4,SNR=8.9 | | | | | | | | |
| **GOMU** | **GeErMu** | **166.72** | **57** | | PKP | **PKPdf** | **05 11 43.5** | **+1.5** | |
| **GTA** | **Gaotai** | **167.89** | **34** | | PKP | **PKPdf** | **05 11 43.0** | **+0.6** | |
| GTA | | | | | pPKP | sPKPdf | 05 11 56.8 | -0.2 | |
| GTA | | | | | PKPab | **PKPab** | **05 12 49.5** | **0.0** | |
| GTA | | | | | LR | LR | | | |
| | comp=Z,120nm,17.5s | | | | | | | | |
| GTA | | | | | LR | LR | | | |
| | comp=Z,190nm,19.6s | | | | | | | | |
| GTA | | | | | LR | LR | | | |
| | comp=Z,310nm,24.4s | | | | | | | | |
| **CRAI** | **Chiangrai** | **167.98** | **140** | | | **PKPab** | **05 12 49.2** | **-1.1** | |
| **HHC** | **Hu-ho-hao-te** | **168.61** | **349** | *e* | PKP | **PKPdf** | **05 11 42.5** | **-0.3** | |
| **QIZ** | **Qiongzhong** | **169.33** | **186** | | PKP | **PKPdf** | **05 11 43.0** | **-0.8** | |
| QIZ | | | | | PP | **PP** | **05 16 46.5** | **+2.1** | |
| QIZ | | | | | SS | SS | 05 37 39.3 | +2.0 | |
| QIZ | | | | | LR | LR | | | |
| | comp=Z,310nm,26.9s | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| | comp=Z,200nm,21.0s | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| | comp=Z,260nm,17.7s | | | | | | | | |
| **HNS** | **HongShan** | **170.79** | **328** | *e* | PKP | **PKPdf** | **05 11 44.8** | **+0.8** | |
| HNS | | | | | PKPab | **PKPab** | **05 13 03.0** | **+0.8** | |
| HNS | | | | | PP | **PP** | **05 16 54.0** | **+1.8** | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,150nm,17.5s | | | | | | | | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,190nm,19.1s | | | | | | | | |
| HNS | | | | | LR | LR | | | |
| | comp=Z,210nm,17.1s | | | | | | | | |
| **NJ2** | **Nanjing** | **170.90** | **288** | *e* | PKP | **PKPdf** | **05 11 45.0** | **+0.7** | |
| **KMI** | **Kunming** | **173.07** | **130** | ⇓ | PKP | **PKPdf** | **05 11 45.0** | **-0.8** | |
| **PZH** | **PanZhiHua** | **173.14** | **116** | | PKP | **PKPdf** | **05 11 43.5** | **-2.2** | |
| PZH | | | | | PP | **PP** | **05 17 07.0** | **+1.8** | |
| PZH | | | | | AMB | AMB | | | |
| | comp=Z,100nm,8.4s | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,140nm,19.6s | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,190nm,20.6s | | | | | | | | |
| PZH | | | | | LR | LR | | | |
| | comp=Z,200nm,19.1s | | | | | | | | |
| **CD2** | **Chengdu** | **175.62** | **73** | | PKP | **PKPdf** | **05 11 46.0** | **-0.2** | |
| **XAN** | **Xi'an** | **175.65** | **357** | | PKP | **PKPdf** | **05 11 46.5** | **+0.3** | |
| XAN | | | | | PKPab | **PKPab** | **05 13 24.5** | **+0.7** | |

*JSO **28** 05:47:48,31.78N×35.58E,h12km,ML2.7/27,Mw2.6/27*
**GII 28 05:47:49.2±0.4,31.787N±0.001×35.587E±0.001,h16km, Md2.5/10,Mws2.6/16,1C-3D,confirmed,Dead Sea region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VJRH** | **Vered Jericho** | **0.14** | **287** | ⇓*i* | P | Pb | 05 47 53.6 | +0.2 |
| VJRH | | | | | S | Sb | 05 47 56.4 | +0.2 |
| **UJAP** | **Al Uja** | **0.19** | **328** | | P | Pg | 05 47 53.9 | +0.1 |
| **UJAP** | **Al Uja** | **0.19** | **328** | | S | Sb | 05 47 57.8 | 0.0 |
| **YITV** | **Yitav** | **0.21** | **319** | ⇓*i* | P | Pb | 05 47 54.5 | -0.2 |
| YITV | | | | | S | Sb | 05 47 58.4 | +0.1 |
| **DSI** | **Dead Sea** | **0.28** | **219** | | P | Pg | 05 47 55.2 | 0.0 |
| **DSI** | **Dead Sea** | **0.28** | **219** | | P | Pg | 05 47 55.0 | -0.2 |
| **DSI** | **Dead Sea** | **0.28** | **219** | | S | Sg | 05 47 59.5 | +0.2 |
| **KEGD** | **Kibutz Ein-Ged** | **0.38** | **207** | | P | Pg | 05 47 57.0 | +0.1 |
| KEGD | | | | | S | Sb | 05 48 03.4 | +0.4 |
| **SALP** | **Salfit** | **0.44** | **310** | | P | Pg | 05 47 57.7 | -0.4 |
| **HMDT** | **Nahal Hemdat** | **0.47** | **354** | | P | Pg | 05 47 58.6 | 0.0 |
| **HMDT** | **Nahal Hemdat** | **0.47** | **354** | | S | Sb | 05 48 05.5 | -0.3 |
| **GHAJ** | **Ghor Haditha** | **0.48** | **182** | | P | Pg | 05 47 58.7 | -0.1 |
| **GHAJ** | **Ghor Haditha** | **0.48** | **182** | | P | Pg | 05 47 58.7 | -0.1 |
| **GHAJ** | **Ghor Haditha** | **0.48** | **182** | | S | Sb | 05 48 05.8 | -0.3 |
| **MSBI** | **Mazada** | **0.51** | **202** | | S | Sb | 05 48 06.9 | -0.1 |
| **MSBI** | **Mazada** | **0.51** | **202** | | P | Pg | 05 47 59.0 | -0.4 |
| **QRNJ** | **Al-Qirein** | **0.55** | **359** | | P | Pg | 05 48 00.2 | +0.2 |
| **LISJ** | **El Lisan** | **0.55** | **189** | | P | Pb | 05 48 00.6 | +0.1 |
| **YTIR** | **Yattir** | **0.58** | **224** | | P | Pg | 05 48 00.3 | -0.5 |
| **YTIR** | **Yattir** | **0.58** | **224** | | S | Sb | 05 48 09.1 | -0.1 |
| **YTIR** | **Yattir** | **0.58** | **224** | ⇑*i* | P | Pg | 05 48 00.4 | -0.4 |
| **HSUJ** | **Al Zarqa** | **0.60** | **58** | | P | Pg | 05 48 00.8 | -0.4 |
| **AMAZ** | **Amatzia** | **0.63** | **246** | | S | Sb | 05 48 10.5 | +0.2 |
| **AMAZ** | **Amatzia** | **0.63** | **246** | | P | Pg | 05 48 01.0 | -0.5 |
| **SLTI** | **Sal'it** | **0.65** | **314** | | P | Pg | 05 48 01.4 | -0.5 |
| **SLTI** | **Sal'it** | **0.65** | **314** | | S | Sb | 05 48 10.8 | -0.1 |
| **SLTI** | **Sal'it** | **0.65** | **314** | ⇓*i* | P | Pg | 05 48 01.4 | -0.5 |
| **MMLI** | **Mount Malkishu** | **0.66** | **348** | | S | Sb | 05 48 11.4 | 0.0 |
| **MMLI** | **Mount Malkishu** | **0.66** | **348** | | P | Pg | 05 48 01.9 | -0.4 |
| **SWQJ** | **Swaqa** | **0.68** | **143** | | P | Pg | 05 48 00.5 | -2.0 |
| SWQJ | | | | | S | Sg | 05 48 08.6 | -2.9 |
| **NTKR** | **Neot Hakikar** | **0.87** | **192** | | P | Pn | 05 48 06.5 | -0.2 |
| NTKR | | | | | S | Sn | 05 48 18.7 | -0.3 |
| **SHMJ** | **Saham** | **0.95** | **9** | | P | Pb | 05 48 06.7 | -0.6 |
| **OFRI** | **`Ofer** | **0.97** | **329** | | P | Pb | 05 48 06.9 | -0.9 |
| **OFRI** | **`Ofer** | **0.97** | **329** | | S | Sb | 05 48 20.4 | 0.0 |
| **OFRI** | **`Ofer** | **0.97** | **329** | | P | Pb | 05 48 06.8 | -1.0 |
| **BLGI** | **Bet Lehem HaGe** | **1.00** | **341** | | P | Pb | 05 48 07.8 | -0.4 |
| **BLGI** | **Bet Lehem HaGe** | **1.00** | **341** | | S | Sb | 05 48 21.4 | +0.2 |
| **BLGI** | **Bet Lehem HaGe** | **1.00** | **341** | | P | Pb | 05 48 07.7 | -0.4 |
| **RMOT** | **Ramot** | **1.06** | **4** | | P | Pb | 05 48 08.7 | -0.6 |
| RMOT | | | | | S | Sg | 05 48 23.4 | -0.3 |
| **KNHM** | **Kefar Nahum** | **1.09** | **360** | | P | Pb | 05 48 08.7 | -1.0 |
| KNHM | | | | | S | Sg | 05 48 24.3 | -0.4 |
| **ASF** | **Jabal al Asfar** | **1.18** | **71** | | P | Pn | 05 48 10.4 | -0.7 |
| **KSHT** | **Keshet** | **1.21** | **9** | | S | Sn | 05 48 27.4 | -0.2 |
| **KSHT** | **Keshet** | **1.21** | **9** | | P | Pn | 05 48 11.0 | -0.5 |
| **MMB1** | **Mount Meron ar** | **1.23** | **353** | | P | Pn | 05 48 11.5 | -0.4 |
| **MMA0B** | **Mount Meron ar** | **1.23** | **353** | | P | Pn | 05 48 11.1 | -0.8 |
| **MMA0B** | **Mount Meron ar** | **1.23** | **353** | | S | Sb | 05 48 28.1 | +0.2 |
| **ZFRI** | **Zfri** | **1.28** | **196** | | P | Pn | 05 48 12.1 | -0.3 |
| **ZFRI** | **Zfri** | **1.28** | **196** | | S | Sb | 05 48 28.8 | -0.2 |
| **ZFRI** | **Zfri** | **1.28** | **196** | | P | Pn | 05 48 11.6 | -0.8 |
| **HNTI** | **Hanita** | **1.34** | **345** | | S | Sn | 05 48 30.6 | -0.2 |
| **HNTI** | **Hanita** | **1.34** | **345** | | P | Pn | 05 48 12.2 | -1.1 |
| **KZIT** | **Kziot** | **1.34** | **230** | | S | Sn | 05 48 30.6 | -0.3 |
| **KZIT** | **Kziot** | **1.34** | **230** | | P | Pn | 05 48 12.9 | -0.5 |
| **GEM** | **Giv'at Ha'Em** | **1.42** | **3** | | P | Pn | 05 48 14.2 | -0.2 |
| **GEM** | **Giv'at Ha'Em** | **1.42** | **3** | | S | Sn | 05 48 32.4 | -0.4 |
| **GEM** | **Giv'at Ha'Em** | **1.42** | **3** | | P | Pn | 05 48 13.9 | -0.5 |
| **NATI** | **Neve Ativ** | **1.48** | **5** | | P | Pn | 05 48 15.0 | -0.1 |
| **NATI** | **Neve Ativ** | **1.48** | **5** | | S | Sb | 05 48 34.6 | -0.1 |
| **NATI** | **Neve Ativ** | **1.48** | **5** | | P | Pn | 05 48 14.4 | -0.7 |
| **PRNI** | **Paran** | **1.52** | **199** | | P | Pn | 05 48 15.0 | -0.7 |
| **PRNI** | **Paran** | **1.52** | **199** | | S | Sn | 05 48 35.1 | 0.0 |
| **PRNI** | **Paran** | **1.52** | **199** | | P | Pn | 05 48 15.0 | -0.7 |
| **HRFI** | **Mount Harif** | **1.81** | **195** | | P | Pn | 05 48 18.8 | -0.9 |
| **HRFI** | **Mount Harif** | **1.81** | **195** | | S | Sn | 05 48 42.2 | -0.2 |
| **HRFI** | **Mount Harif** | **1.81** | **195** | | P | Pn | 05 48 18.8 | -1.0 |
| **KRMI** | **Paran Flat** | **1.82** | **204** | | P | Pn | 05 48 19.6 | -0.3 |
| **KRMI** | **Paran Flat** | **1.82** | **204** | | S | Sn | 05 48 42.5 | -0.2 |
| **KRMI** | **Paran Flat** | **1.82** | **204** | | P | Pn | 05 48 19.6 | -0.3 |
| **MBRI** | **Mt Berech** | **2.07** | **196** | | P | Pn | 05 48 22.8 | -0.6 |
| **MBRI** | **Mt Berech** | **2.07** | **196** | | P | Pn | 05 48 22.6 | -0.7 |
| **MBRI** | **Mt Berech** | **2.07** | **196** | | S | Sn | 05 48 48.9 | +0.1 |
| **EIL** | **Elat** | **2.18** | **195** | | S | Sn | 05 48 51.7 | +0.2 |
| **EIL** | **Elat** | **2.18** | **195** | | P | Pn | 05 48 24.1 | -0.7 |

**IDC 28 05:56:25.3±4.8,23.30N×101.38E,h162km±53km,mb3.4/7, mbtmp3.8/8,Error ellipse: s-maj=56.7km s-min=13.9km az=67.0,Yunnan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **5.33** | **206** | | P | Pn | 05 57 41.8 | -1.5 |
| | 11nm,0.6s,baz=26,slow=15,SNR=20 | | | | | | | |
| CMAR | | | | | S | Sn | 05 58 46.2 | +1.8 |
| | 16nm,0.7s,baz=26,slow=31,SNR=4.6 | | | | | | | |
| **SONM** | **Songino Array** | **24.81** | **8** | | P | P | 06 01 33.3 | +0.8 |
| | 0.6nm,0.7s,baz=191,slow=10,SNR=3.6 | | | | | | | |
| | 0.6nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **28.03** | **331** | | P | P | 06 02 01.1 | -0.1 |
| |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=299 | | | | | | | |
| TWA | | | | S | Sn | 05 57 38.1 | -1.1 | |
| | baz=299 | | | | | | | |
| **NHDH** | **Xindian Distri** | **1.02 299** | *e*P | | Pn | 05 57 25.9 | -0.1 | |
| | baz=297 | | | | | | | |
| NHDH | | | *e*S | | Sn | 05 57 40.0 | 0.0 | |
| | baz=297 | | | | | | | |
| **NNSB** | **Datong** | **1.02 268** | *i* P | | Pn | 05 57 26.1 | 0.0 | |
| | baz=258 | | | | | | | |
| NNSB | | | | S | Sn | 05 57 40.0 | -0.2 | |
| | baz=258 | | | | | | | |
| **NNSH** | **Datong** | **1.02 268** | *i* P | | Pn | 05 57 26.1 | 0.0 | |
| | baz=258 | | | | | | | |
| NNSH | | | | S | Sn | 05 57 40.6 | +0.4 | |
| | baz=258 | | | | | | | |
| **NNS** | **Nan Shan** | **1.03 269** | *i* P | | Pn | 05 57 26.4 | +0.2 | |
| | baz=258 | | | | | | | |
| NNS | | | *i* S | | Sn | 05 57 40.5 | +0.1 | |
| | baz=258 | | | | | | | |
| **YHNB** | **Yeheng** | **1.05 281** | *i* P | | Pn | 05 57 26.9 | +0.5 | |
| | baz=279 | | | | | | | |
| YHNB | | | | S | Sn | 05 57 41.1 | +0.4 | |
| | baz=279 | | | | | | | |
| **ETM** | **Tongmen** | **1.05 242** | P | | Pn | 05 57 25.7 | -0.6 | |
| | baz=235 | | | | | | | |
| ETM | | | | S | Sn | 05 57 39.2 | -1.4 | |
| | baz=235 | | | | | | | |
| **TATO** | **Taipei** | **1.06 299** | *e*P | | Pn | 05 57 26.1 | -0.3 | |
| | baz=297 | | | | | | | |
| TATO | | | | S | Sn | 05 57 40.6 | -0.1 | |
| | baz=297 | | | | | | | |
| **NSK** | **Sanguang** | **1.07 282** | *i* P | | Pn | 05 57 26.9 | +0.3 | |
| | baz=279 | | | | | | | |
| NSK | | | *i* S | | Sn | 05 57 41.3 | +0.3 | |
| | baz=279 | | | | | | | |
| **YM01** | **YM01** | **1.09 309** | *i* P | | Pn | 05 57 26.7 | -0.2 | |
| | baz=307 | | | | | | | |
| YM01 | | | | S | Sn | 05 57 40.9 | -0.6 | |
| | baz=307 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.09 246** | *i* P | | Pn | 05 57 26.7 | -0.3 | |
| | baz=237 | | | | | | | |
| LXIB | | | | S | Sn | 05 57 41.6 | -0.1 | |
| | baz=237 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.09 232** | *i* P | | Pn | 05 57 26.8 | -0.1 | |
| | baz=226 | | | | | | | |
| SHUL | | | *i* S | | Sn | 05 57 41.2 | -0.3 | |
| | baz=226 | | | | | | | |
| **YM08** | **YM08** | **1.10 311** | P | | Pn | 05 57 26.6 | -0.4 | |
| | baz=301 | | | | | | | |
| YM08 | | | | S | Sn | 05 57 40.8 | -1.0 | |
| | baz=301 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.12 96** | P | | Pn | 05 57 27.4 | +0.2 | |
| IRIF | | | | S | Sn | 05 57 42.2 | 0.0 | |
| **TWY** | **Chenhua** | **1.15 315** | *i* P | | Pn | 05 57 27.8 | +0.1 | |
| | baz=313 | | | | | | | |
| TWY | | | | S | Sn | 05 57 43.4 | +0.5 | |
| | baz=313 | | | | | | | |
| **FUSS** | **Fushou** | **1.17 260** | *i* P | | Pn | 05 57 28.7 | +0.6 | |
| | baz=258 | | | | | | | |
| FUSS | | | *i* S | | Sn | 05 57 43.6 | -0.1 | |
| | baz=258 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.18 303** | *i* P | | Pn | 05 57 27.1 | -0.8 | |
| | baz=301 | | | | | | | |
| TWS1 | | | *e*S | | Sn | 05 57 42.0 | -1.4 | |
| | baz=301 | | | | | | | |
| **ESL** | **Shilin** | **1.18 237** | *i* P | | Pn | 05 57 27.5 | -0.5 | |
| | baz=235 | | | | | | | |
| ESL | | | *e*S | | Sn | 05 57 42.8 | -0.7 | |
| | baz=235 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.18 255** | *i* P | | Pn | 05 57 28.5 | +0.1 | |
| | baz=253 | | | | | | | |
| WHF | | | *i* S | | Sn | 05 57 43.5 | -0.6 | |
| | baz=253 | | | | | | | |
| **TWT** | **Tachien** | **1.23 260** | *e*P | | Pn | 05 57 28.6 | -0.2 | |
| | baz=259 | | | | | | | |
| TWT | | | *i* S | | Sn | 05 57 45.2 | +0.2 | |
| | baz=259 | | | | | | | |
| **TDCB** | **Techi** | **1.25 261** | *i* P | | Pn | 05 57 30.1 | +1.1 | |
| | baz=259 | | | | | | | |
| TDCB | | | *i* S | | Sn | 05 57 45.2 | -0.1 | |
| | baz=259 | | | | | | | |
| **EGFH** | **Guangfu** | **1.27 231** | *e*P | | Pn | 05 57 29.1 | 0.0 | |
| | baz=230 | | | | | | | |
| EGFH | | | *e*S | | Sn | 05 57 46.0 | +0.5 | |
| | baz=230 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.27 234** | *i* P | | Pn | 05 57 28.5 | -0.6 | |
| | baz=233 | | | | | | | |
| WARBT | | | *e*S | | Sn | 05 57 44.2 | -1.3 | |
| | baz=233 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.28 278** | *i* P | | Pn | 05 57 29.5 | +0.2 | |
| | baz=286 | | | | | | | |
| NFF | | | *i* S | | Sn | 05 57 46.0 | +0.2 | |
| | baz=286 | | | | | | | |
| **CHGB** | **Renai** | **1.28 252** | *i* P | | Pn | 05 57 29.7 | +0.2 | |
| | baz=242 | | | | | | | |
| CHGB | | | | S | Sn | 05 57 46.3 | +0.1 | |
| | baz=242 | | | | | | | |
| **OWD** | **Renai** | **1.32 248** | *i* P | | Pn | 05 57 30.0 | +0.1 | |
| | baz=239 | | | | | | | |
| OWD | | | *i* S | | Sn | 05 57 46.1 | -0.8 | |
| | baz=239 | | | | | | | |
| **WUSB** | **Renai** | **1.35 250** | *i* P | | Pn | 05 57 30.7 | +0.4 | |
| | baz=241 | | | | | | | |
| WUSB | | | | S | Sn | 05 57 47.8 | +0.1 | |
| | baz=241 | | | | | | | |
| **LIOB** | **Emei** | **1.37 278** | *i* P | | Pn | 05 57 31.5 | +1.0 | |
| | baz=276 | | | | | | | |
| LIOB | | | | S | Sn | 05 57 49.9 | +2.0 | |
| | baz=276 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.38 277** | P | | Pn | 05 57 31.8 | +1.2 | |
| | baz=275 | | | | | | | |
| NSTT | | | *i* S | | Sn | 05 57 48.5 | +0.3 | |
| | baz=275 | | | | | | | |
| **HGSD** | **Ruisui** | **1.39 226** | *i* P | | Pn | 05 57 30.6 | 0.0 | |
| | baz=221 | | | | | | | |
| HGSD | | | | S | Sn | 05 57 48.7 | +0.4 | |
| | baz=221 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.39 99** | *e*P | | Pn | 05 57 31.5 | +0.8 | |
| JKRS | | | S | | Sn | 05 57 49.4 | +1.1 | |
| **VWDT** | **VWDT** | **1.44 241** | *i* P | | Pn | 05 57 31.5 | +0.2 | |
| | baz=232 | | | | | | | |
| VWDT | | | | S | Sn | 05 57 48.1 | -1.3 | |
| | baz=232 | | | | | | | |
| **WHP** | **Taichung City** | **1.44 263** | *i* P | | Pn | 05 57 32.7 | +1.2 | |
| | baz=257 | | | | | | | |
| WHP | | | *i* S | | Sn | 05 57 50.6 | +1.0 | |
| | baz=257 | | | | | | | |
| **EHY** | **Hungye** | **1.44 229** | *i* P | | Pn | 05 57 31.4 | 0.0 | |
| | baz=228 | | | | | | | |
| EHY | | | *e*S | | Sn | 05 57 47.8 | -1.9 | |
| | baz=228 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.50 94** | *e*P | | Pn | 05 57 32.4 | +0.3 | |
| JIJ | | | S | | Sn | 05 57 50.6 | -0.3 | |
| **WCS** | **Beigang Elemen** | **1.51 255** | *i* P | | Pn | 05 57 32.8 | +0.4 | |
| | baz=249 | | | | | | | |
| WCS | | | *i* S | | Sn | 05 57 53.0 | +1.7 | |
| | baz=249 | | | | | | | |
| **YULB** | **Yu-li** | **1.54 226** | *i* P | | Pn | 05 57 32.2 | -0.5 | |
| | baz=235 | | | | | | | |
| YULB | | | *e*S | | Sn | 05 57 49.0 | -2.9 | |
| | baz=235 | | | | | | | |
| **TWF1** | **Yuli** | **1.57 225** | *i* P | | Pn | 05 57 32.7 | -0.4 | |
| | baz=234 | | | | | | | |
| TWF1 | | | *i* S | | Sn | 05 57 51.6 | -1.0 | |
| | baz=234 | | | | | | | |
| **SSLB** | **Suanglung** | **1.57 245** | *i* P | | Pn | 05 57 34.2 | +1.0 | |
| | baz=238 | | | | | | | |
| SSLB | | | *e*S | | Sn | 05 57 53.6 | +0.9 | |
| | baz=238 | | | | | | | |
| **TYC** | **Yuchr** | **1.61 250** | *i* P | | Pn | 05 57 34.4 | +0.8 | |
| | baz=242 | | | | | | | |
| TYC | | | | S | Sn | 05 57 55.1 | +1.6 | |
| | baz=242 | | | | | | | |
| **CHKH** | **Chenggong** | **1.62 219** | *e*P | | Pn | 05 57 33.9 | 0.0 | |
| | baz=212 | | | | | | | |
| CHKH | | | | S | Sn | 05 57 52.2 | -1.7 | |
| | baz=212 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.65 85** | *e*S | | Sn | 05 57 54.3 | -0.2 | |
| **FULB** | **Fuli** | **1.68 222** | *e*P | | Pn | 05 57 35.4 | +0.8 | |
| | baz=214 | | | | | | | |
| FULB | | | | S | Sn | 05 57 55.0 | -0.3 | |
| | baz=214 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.69 243** | *i* P | | Pn | 05 57 35.8 | +1.0 | |
| | baz=238 | | | | | | | |
| WHYT | | | *i* S | | Sn | 05 57 57.5 | +1.8 | |
| | baz=238 | | | | | | | |
| **CHKT** | **Chengkung** | **1.71 218** | *e*P | | Pn | 05 57 34.8 | -0.3 | |
| | baz=211 | | | | | | | |
| CHKT | | | | S | Sn | 05 57 54.0 | -2.1 | |
| | baz=211 | | | | | | | |
| **EDH** | **Donghe** | **1.85 217** | *e*P | | Pn | 05 57 36.5 | -0.4 | |
| | baz=212 | | | | | | | |
| EDH | | | | S | Sn | 05 57 57.3 | -2.1 | |
| | baz=212 | | | | | | | |
| **ELDTW** | **Lidau** | **1.86 227** | *i* P | | Pn | 05 57 36.9 | -0.2 | |
| | baz=226 | | | | | | | |
| ELDTW | | | *e*S | | Sn | 05 57 58.4 | -1.5 | |
| | baz=226 | | | | | | | |
| **CHN5** | **Tsauling** | **1.88 243** | P | | Pn | 05 57 39.0 | +1.6 | |
| | baz=234 | | | | | | | |
| CHN5 | | | | S | Sn | 05 58 02.9 | +2.6 | |
| | baz=234 | | | | | | | |

*BJI* ***28*** *06:00:25.9±0.0, 46.00N×153.32E, h53km, mb4.7/39, mB4.7/17, Ms4.1/9, Ms7 4.0/12*
*MOS* ***28*** *06:00:26.2±1.1, 45.94N×153.14E, h46km, mb5.0/31, MS3.5/5, Error ellipse: s-maj=7.6km s-min=5.4km az=98.6*
*NEIC* ***28*** *06:00:27.9±2.2, 45.95N±0.10×153.2E±0.1, h35km±2km, mb4.6/161, Error ellipse: s-maj=18.7km s-min=12.1km az=142.0*
*SKHL* ***28*** *06:00:27.5±0.1, 45.90N×153.30E, h59km±6km, mb5.3/7*
*IDC* ***28*** *06:00:28.3±2.0, 45.99N×153.04E, h46km±17km, mb4.2/24, mbtmp4.4/32, ML3.9/6, MS3.6/28, Error ellipse: s-maj=14.9km s-min=10.7km az=148.0*
*JMA* ***28*** *06:00:28.3±0.9, 46.0N±5.5×15.3E±., h30km, MV4.5/16, KURILE ISLANDS REGION*
**ISC 28 06:00:28.8±0.7, 45.94N±0.05×153.12E±0.04, h52km±5km, n543, σ1ŝ19/493, mb4.6/153, MS3.8/34, 28C-11D, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | ISC | Res |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **3.76** | **261** | *e*P | | **Pn** | **06 01 24.4** | **+0.3** | |
| KUR | | | | | AMB | AMB | 06 01 25.5 | | |
| | 510nm,0.4s | | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **06 02 06.2** | **-0.9** | |
| KUR | | | | | A | A | 06 02 09.3 | | |
| | 990nm,0.6s | | | | | | | | |
| KUR | | | | | A | A | 06 02 09.3 | | |
| | 2µm,0.6s | | | | | | | | |
| **KUR** | **Kuril'sk** | **3.76** | **261** | *e*PN | | **Pn** | **06 01 24.4** | **+0.3** | |
| KUR | | | | *i* S | | **Sn** | **06 02 05.9** | **-1.2** | |
| KUR | | | | | pmax | pmax | | | |
| | comp=N,117nm,0.4s | | | | | | | | |
| KUR | | | | | pmax | pmax | | | |
| | comp=Z,478nm,0.4s | | | | | | | | |
| KUR | | | | | pmax | pmax | | | |
| | comp=E,88nm,0.2s | | | | | | | | |
| KUR | | | | | smax | smax | | | |
| | comp=E,2µm,0.4s | | | | | | | | |
| KUR | | | | | smax | smax | | | |
| | comp=N,815nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **4.92** | **247** | *e*P | | **Pn** | **06 01 38.4** | **-1.8** | |
| SHO | | | | | AMB | AMB | 06 01 43.8 | | |
| | comp=N,80nm,0.3s | | | | | | | | |
| SHO | | | | | *e*S | **Sn** | **06 02 30.5** | **-5.3** | |
| SHO | | | | | A | A | 06 02 32.4 | | |
| | comp=N,390nm,0.3s | | | | | | | | |
| SHO | | | | | A | A | 06 02 32.4 | | |
| | comp=N,210nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **4.92** | **247** | *e*P | | **Pn** | **06 01 38.3** | **-1.9** | |
| SHO | | | | | AMB | AMB | 06 01 43.8 | | |
| | comp=N,80nm,0.3s | | | | | | | | |
| SHO | | | | | *e*S | **Sn** | **06 02 30.5** | **-5.3** | |
| SHO | | | | | A | A | 06 02 32.4 | | |
| | comp=N,390nm,0.3s | | | | | | | | |
| SHO | | | | | A | A | 06 02 32.4 | | |
| | comp=N,210nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **4.92** | **247** | *e*PN | | **Pn** | **06 01 37.7** | **-2.5** | |
| SHO | | | | | pmax | pmax | | | |
| | comp=Z,70nm,0.3s | | | | | | | | |
| SHO | | | | | pmax | pmax | | | |
| | comp=E,24nm,0.2s | | | | | | | | |
| SHO | | | | | pmax | pmax | | | |
| | comp=N,34nm,0.3s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.15** | **22** | *e*P | | **Pn** | **06 01 42.6** | **-0.6** | |
| SKR | | | | | AMB | AMB | 06 01 45.2 | | |
| | comp=N,220nm,0.4s | | | | | | | | |
| SKR | | | | | *e*S | **Sn** | **06 02 38.8** | **-2.5** | |
| SKR | | | | | A | A | 06 02 45.0 | | |
| | comp=N,660nm,0.4s | | | | | | | | |
| SKR | | | | | A | A | 06 02 45.0 | | |
| | comp=N,380nm,0.4s | | | | | | | | |
| SKR | | | | | AMS | AMS | 06 03 22.4 | | |
| | comp=N,1µm,14.0s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.15** | **22** | *e*PN | | **Pn** | **06 01 42.6** | **-0.6** | |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,294nm,0.5s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=Z,1µm,14.0s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.49** | **252** | *e*P | | **Pn** | **06 01 48.0** | **+0.1** | |
| YUK | | | | | AMB | AMB | 06 01 48.9 | | |
| | comp=Z,100nm,0.2s | | | | | | | | |
| YUK | | | | | *e*S | **Sn** | **06 02 48.5** | **-1.2** | |
| YUK | | | | | A | A | 06 02 51.9 | | |
| | comp=Z,610nm,0.5s | | | | | | | | |
| YUK | | | | | A | A | 06 02 51.9 | | |
| | comp=Z,550nm,0.5s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.49** | **252** | *e*PN | | **Pn** | **06 01 46.4** | **-1.5** | |
| YUK | | | | | pmax | pmax | | | |
| | comp=N,77nm,0.2s | | | | | | | | |
| YUK | | | | | pmax | pmax | | | |
| | comp=E,99nm,0.2s | | | | | | | | |
| YUK | | | | | pmax | pmax | | | |
| | comp=Z,149nm,0.2s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **5.86** | **247** | *e*P | | **Pn** | **06 01 50.8** | **-2.1** | |
| NEM2 | | | | | *e*S | Sn | 06 02 51.6 | -7.1 | |
| **JRA** | **Rausu** | **6.02** | **253** | *e*P | | **Pn** | **06 01 55.1** | **-0.1** | |
| **JNK** | **Nakash** | **6.43** | **252** | *e*P | | **Pn** | **06 01 59.5** | **-1.3** | |
| JNK | | | | | *e*S | Sn | 06 03 05.6 | -7.1 | |
| **JAK** | **Akkeshi** | **6.71** | **247** | *e*P | | Pn | 06 02 01.6 | -3.0 | |
| JAK | | | | | *e*S | Sn | 06 03 11.8 | -7.8 | |
| **KDTR** | **Khodutka, Kamc** | **6.72** | **27** | *e*P | | **Pn** | **06 02 02.0** | **-2.7** | |
| KDTR | | | | | *e*S | **Sn** | **06 03 12.8** | **-7.1** | |
| **JTKR** | **Abashiri--Toko** | **6.83** | **257** | *e*P | | **Pn** | **06 02 06.0** | **-0.2** | |
| **JAR** | **Ashorobuto** | **7.18** | **252** | *e*P | | Pn | 06 02 08.2 | -2.8 | |
| **YSS** | **Yuzh-Sakhalins** | **7.24** | **282** | Pn | | **Pn** | **06 02 12.4** | **+0.6** | |
| **YSS** | **Yuzh-Sakhalins** | **7.24** | **282** | *e*P | | **Pn** | **06 02 13.9** | **+2.1** | |
| YSS | | | | | AMB | AMB | 06 02 16.6 | | |
| | comp=Z,50nm,0.5s | | | | | | | | |
| YSS | | | | | *e*S | **Sn** | **06 03 32.1** | **-0.4** | |
| YSS | | | | | A | A | 06 03 38.5 | | |
| | comp=Z,40nm,0.4s | | | | | | | | |
| YSS | | | | | A | A | 06 03 38.5 | | |
| | comp=Z,30nm,0.4s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.24** | **282** | *e*PN | | **Pn** | **06 02 14.2** | **+2.4** | |
| YSS | | | | | *e*S | **Sn** | **06 03 36.8** | **+4.3** | |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,50nm,0.8s | | | | | | | | |
| **JOB** | **Onbets** | **7.31** | **249** | *e*P | | **Pn** | **06 02 10.5** | **-2.3** | |
| JOB | | | | | *e*S | Sn | 06 03 25.8 | -8.6 | |
| **JKK2** | **Kamakawa 2** | **7.65** | **258** | *e*P | | **Pn** | **06 02 18.1** | **+0.6** | |
| **JKA** | **Kamikawa-asahi** | **7.68** | **260** | | | **Pn** | **06 02 17.3** | **-0.6** | |
| **ASAJ** | **Asahikawa** | **7.68** | **260** | P | | **Pn** | **06 02 17.2** | **-0.7** | |
| | comp=Z,1.6nm,0.3s,baz=102,slow=20,SNR=4.7 | | | | | | | | |
| | comp=Z,4.3nm,0.3s | | | | | | | | |
| **JCH** | **Churui** | **7.75** | **248** | *e*P | | **Pn** | **06 02 16.4** | **-2.5** | |
| JCH | | | | | *e*S | Sn | 06 03 35.5 | -10 | |
| **PEA0B** | **Petropavlovsk-** | **7.77** | **21** | Pn | | **Pn** | **06 02 17.9** | **-1.2** | |
| **PEA0B** | **Petropavlovsk-** | **7.77** | **21** | *ce*PN | | **Pn** | **06 02 19.1** | **0.0** | |
| **PETK** | **Petropavlovsk-** | **7.77** | **21** | P | | **Pn** | **06 02 18.2** | **-0.9** | |
| | comp=Z,7.2nm,0.3s,baz=182,slow=12,SNR=63 | | | | | | | | |
| PETK | | | | | *e*S | **Sn** | **06 03 43.9** | **-1.8** | |
| | comp=Z,9.3nm,0.9s,baz=79,slow=5.5,SNR=1.8 | | | | | | | | |
| PETK | | | | | LR | LR | 06 06 19.3 | | |
| | comp=Z,96nm,18.6s,baz=194,slow=45 | | | | | | | | |
| | comp=Z,32nm,0.5s | | | | | | | | |
| **PET** | **Petropavlovsk** | **7.95** | **25** | Pn | | **Pn** | **06 02 20.2** | **-1.4** | |
| **PET** | **Petropavlovsk** | **7.95** | **25** | *e*P | | **Pn** | **06 02 21.9** | **+0.3** | |
| PET | | | | | *e*S | **Sn** | **06 03 44.8** | **-5.2** | |
| **PET** | **Petropavlovsk** | **7.95** | **25** | *e*PN | | **Pn** | **06 02 22.1** | **+0.5** | |
| PET | | | | | MLR | MLR | | | |
| | comp=Z,100nm,16.0s | | | | | | | | |
| **UGL** | **Uglegorsk** | **8.12** | **297** | *e*P | | **Pn** | **06 02 26.0** | **+2.1** | |
| UGL | | | | | AMB | AMB | 06 02 27.7 | | |
| | comp=Z,110nm,0.6s | | | | | | | | |
| UGL | | | | | *e*S | **Sn** | **06 03 54.4** | **+0.2** | |
| UGL | | | | | A | A | 06 04 02.3 | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| UGL | | | | | A | A | 06 04 02.3 | | |
| | comp=Z,20nm,0.5s | | | | | | | | |
| **UGL** | **Uglegorsk** | **8.12** | **297** | *e*PN | | **Pn** | **06 02 27.1** | **+3.2** | |
| UGL | | | | | pmax | pmax | | | |
| | comp=Z,147nm,0.4s | | | | | | | | |
| **JAB** | **Ashibetsu** | **8.13** | **257** | *e*P | | **Pn** | **06 02 24.0** | **-0.2** | |
| **ERM** | **Erimo** | **8.19** | **245** | Pn | | **Pn** | **06 02 26.2** | **+1.4** | |
| **ERM** | **Erimo** | **8.19** | **245** | PN | | **Pn** | **06 02 26.2** | **+1.4** | |
| **JNBK** | **Urakawa-nobuka** | **8.31** | **248** | *e*P | | Pn | 06 02 23.8 | -2.7 | |
| JNBK | | | | | *e*S | Sn | 06 03 49.3 | -10 | |
| **TYV** | **Tymovskoe** | **8.53** | **309** | *e*P | | **Pn** | **06 02 30.4** | **+0.9** | |
| TYV | | | | | AMB | AMB | 06 02 31.9 | | |
| | comp=Z,100nm,3.0s | | | | | | | | |
| TYV | | | | | AMB | AMB | 06 02 32.0 | | |
| | comp=Z,10.0nm,0.3s | | | | | | | | |
| TYV | | | | | *e*S | **Sn** | **06 04 03.8** | **-0.4** | |
| TYV | | | | | A | A | 06 04 06.2 | | |
| | comp=Z,100nm,5.0s | | | | | | | | |
| TYV | | | | | A | A | 06 04 10.3 | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| TYV | | | | | A | A | 06 04 10.3 | | |
| | comp=Z,30nm,0.5s | | | | | | | | |
| **TYV** | **Tymovskoe** | **8.53** | **309** | *e*PN | | **Pn** | **06 02 31.7** | **+2.2** | |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,100nm,3.4s | | | | | | | | |
| TYV | | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **OKH** | **Okha** | **10.07** | **323** | *e*P | | **Pn** | **06 02 51.7** | **+1.2** | |
| OKH | | | | | AMB | AMB | 06 02 52.7 | | |
| | comp=Z,190nm,0.3s | | | | | | | | |
| **JANG** | **Nango** | **10.14** | **241** | *e*S | | Sn | 06 04 31.1 | -13 | |
| **JTM** | **Tenmabayashi** | **10.17** | **244** | Pn | | **Pn** | **06 02 52.3** | **+0.2** | |
| **NKL** | **Nikolayevsk** | **10.83** | **316** | *e*P | | **Pn** | **06 03 01.7** | **+0.8** | |
| NKL | | | | | AMB | AMB | 06 03 05.1 | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| **MA2** | **Magadan** | **13.74** | **355** | Pn | | **Pn** | **06 03 41.0** | **+0.5** | |
| **MA2** | **Magadan** | **13.74** | **355** | P | | **Pn** | **06 03 40.5** | **-0.1** | |
| | comp=Z,9.8nm,0.5s,baz=169,slow=9.9,SNR=7.5 | | | | | | | | |
| MA2 | | | | | S | **Sn** | **06 06 09.9** | **-1.4** | |
| | comp=Z,3.1nm,0.4s,baz=135,slow=20,SNR=1.6 | | | | | | | | |
| MA2 | | | | | LR | LR | 06 09 04.5 | | |
| | comp=Z,134nm,19.4s,baz=148,slow=38 | | | | | | | | |
| **MA2** | **Magadan** | **13.74** | **355** | P | | **Pn** | **06 03 40.2** | **-0.3** | |
| | comp=Z,21nm,0.7s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **14.61** | **235** | P | | **Pn** | **06 03 52.1** | **-0.2** | |
| | comp=Z,0.1nm,0.3s,baz=42,slow=16,SNR=1.2 | | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | | |
| **KLR** | **Kul'dur** | **14.79** | **291** | P | | **Pn** | **06 03 54.3** | **-0.2** | |
| | comp=Z,0.6nm,0.5s,baz=90,slow=12,SNR=1.8 | | | | | | | | |
| KLR | | | | | LR | LR | 06 09 35.8 | | |
| | comp=Z,231nm,21.9s,baz=74,slow=37 | | | | | | | | |
| **KLR** | **Kul'dur** | **14.79** | **291** | *e*P | | **P** | **06 03 59.1** | **-0.3** | |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **15.03** | **271** | Pn | | **Pn** | **06 03 57.0** | **-0.7** | |
| **USA0B** | **Ussuriysk Arra** | **15.03** | **271** | P | | **Pn** | **06 03 57.0** | **-0.7** | |
| USA0B | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.03** | **271** | P | | **Pn** | **06 03 57.0** | **-0.8** | |
| | comp=Z,0.4nm,0.3s,baz=76,slow=12,SNR=14 | | | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.03** | **271** | P | | **Pn** | **06 03 57.0** | **-0.8** | |
| **SHEM** | **Shemya Is, Ala** | **15.24** | **56** | P | | **Pn** | **06 04 01.3** | **+0.9** | |
| | comp=Z,2.6nm,0.3s,baz=204,slow=20,SNR=1.0 | | | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **16.61** | **274** | P | | **Pn** | **06 04 18.5** | **+0.7** | |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **SEY** | **Seymchan** | **17.04** | **359** | P | | **Pn** | **06 04 21.6** | **-1.4** | |
| | comp=Z,0.8nm,0.3s,baz=175,slow=8.6,SNR=8.1 | | | | | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | | |
| **SEY** | **Seymchan** | **17.04** | **359** | *e*P | | **Pn** | **06 04 19.9** | **-3.1** | |
| SEY | | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.6s | | | | | | | | |
| **BNX** | **BinXian** | **17.90** | **279** | ‖P | | **Pn** | **06 04 33.3** | **-0.5** | |
| BNX | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **ZEA** | **Zeya** | **18.35** | **305** | *e*P | | **Pn** | **06 04 40.3** | **+1.1** | |
| **ZEA** | **Zeya** | **18.35** | **305** | *e*P | | **Pn** | **06 04 40.3** | **+1.1** | |
| ZEA | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| **CN2** | **Changchun** | **19.70** | **274** | P | | **Pn** | **06 04 59.0** | **+3.7** | |
| CN2 | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,200nm,14.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,200nm,14.0s | | | | | | | | |
| CN2 | | | | | LR | LR | | | |
| | comp=Z,200nm,17.0s | | | | | | | | |
| **KSRS** | **Korea Array** | **20.57** | **255** | P | | **P** | **06 05 02.5** | **-0.5** | |
| | comp=Z,1.1nm,0.6s,baz=62,slow=11,SNR=5.4 | | | | | | | | |
| **YAK** | **Yakutsk** | **21.02** | **328** | P | | **P** | **06 05 06.1** | **-1.5** | |
| **YAK** | **Yakutsk** | **21.02** | **328** | P | | **P** | **06 05 06.5** | **-1.1** | |
| | comp=Z,121nm,0.6s,baz=123,slow=4.8,SNR=14 | | | | | | | | |
| YAK | | | | | LR | LR | 06 14 25.2 | | |
| | comp=Z,108nm,19.2s,baz=72,slow=40 | | | | | | | | |
| **YAK** | **Yakutsk** | **21.02** | **328** | *d* | *i*P | **P** | **06 05 06.3** | **-1.3** | |
| YAK | | | | | *e* | | 06 05 23.9 | | |
| YAK | | | | | *e*S | **S** | **06 08 54.9** | **-3.5** | |
| YAK | | | | | *e**SS | **sS** | **06 09 14.1** | **-0.5** | |
| YAK | | | | | *e* | | 06 09 15.0 | | |
| YAK | | | | | *e* | | 06 16 32.0 | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,67nm,0.8s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=E,11nm,1.0s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=N,6.0nm,0.9s | | | | | | | | |
| YAK | | | | | smax | smax | | | |
| | comp=E,102nm,2.8s | | | | | | | | |
| YAK | | | | | smax | smax | | | |
| | comp=N,49nm,2.0s | | | | | | | | |
| **BILL** | **Bilibino** | **23.18** | **13** | *e*P | | **P** | **06 05 31.0** | **+0.5** | |
| **BILL** | **Bilibino** | **23.18** | **13** | *ce*P | | **P** | **06 05 31.0** | **+0.5** | |
| BILL | | | | *e* | | | 06 05 57.3 | | |
| BILL | | | | | *e*S | **S** | **06 09 37.4** | **-0.5** | |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.7s | | | | | | | | |
| BILL | | | | | MLR | MLR | | | |
| | comp=Z,86nm,17.0s | | | | | | | | |
| **P08K** | **Saint George I** | **25.36** | **52** | P | | **P** | **06 05 51.0** | **+0.4** | |
| | baz=262 | | | | | | | | |
| **XLT** | **XiLinHaoTe** | **26.16** | **279** | *e*P | | **P** | **06 05 58.5** | **+0.4** | |
| XLT | | | | | pP | pP | 06 06 06.3 | -3.3 | |
| XLT | | | | | sP | sP | 06 06 12.0 | -3.2 | |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| XLT | | | | | pmax | pmax | | | |
| | comp=Z,50nm,4.0s | | | | | | | | |
| **TIXI** | **Tiksi** | **28.25** | **344** | P | | **P** | **06 06 14.4** | **-2.0** | |
| **TIXI** | **Tiksi** | **28.25** | **344** | LR | | LR | 06 18 34.7 | | |
| | comp=Z,136nm,19.3s,baz=129,slow=39 | | | | | | | | |
| **TIXI** | **Tiksi** | **28.25** | **344** | P | | **P** | **06 06 14.4** | **-2.0** | |
| TIXI | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.50** | **152** | T | | T | 06 38 11.8 | | |
| | baz=340,slow=76 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.51** | **152** | T | | T | 06 38 08.6 | | |
| | baz=340,slow=76 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.51** | **152** | T | | T | 06 38 08.5 | | |
| | baz=340,slow=76,SNR=731 | | | | | | | | |
| **K13K** | **Kusilvak Mount** | **28.90** | **41** | P | | **P** | **06 06 22.1** | **-0.1** | |
| K13K | | | | | IAmb | IAmb | 06 06 45.1 | | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.58** | **153** | T | | T | 06 39 

HHC LR LR
comp=Z,140nm,12.9s
HHC LR LR
comp=Z,150nm,14.7s
**M15K Kasigluk River 30.54 44 P P 06 06 37.4 +0.5**
baz=263
**H16K Elim 30.65 36 P P 06 06 37.6 -0.1**
baz=254
**J16K Anvik River 31.03 39 P P 06 06 41.6 +0.5**
baz=258
**L16K Owhat River 31.27 43 P P 06 06 44.2 +1.0**
**L16K Owhat River 31.27 43 P P 06 06 43.7 +0.6**
baz=262
**D17K Noatak River 31.32 31 P P 06 06 44.1 +0.5**
baz=249
**M16K Timber Creek 31.42 44 P P 06 06 45.2 +0.6**
M16K IAmb IAmb 06 06 46.5
comp=Z,14nm,1.1s
**M16K Timber Creek 31.42 44 P P 06 06 45.4 +0.8**
baz=264
**N16K Nishlik Lake 31.46 45 P P 06 06 45.8 +0.8**
baz=265
**RDOG Red Dog Mine 31.52 30 P P 06 06 45.2 -0.1**
baz=248
**E17K Hotham Inlet 31.56 32 P P 06 06 46.2 +0.5**
baz=251
**F17K Baldwin Pennin 31.57 33 P P 06 06 45.9 +0.1**
baz=253
**SONM Songino Array 31.62 291 P P 06 06 46.0 -0.6**
comp=Z,1.1nm,0.6s,baz=98,slow=8.1,SNR=8.5
SONM PcP PcP 06 09 37.4 -0.3
comp=Z,0.3nm,0.4s,baz=122,slow=2.2,SNR=3.6
comp=Z,1.1nm,0.6s
**J17K VABM Dome 31.72 39 P P 06 06 47.6 +0.4**
J17K IAmb IAmb 06 07 05.1
comp=Z,20nm,1.5s
**J17K VABM Dome 31.72 39 P P 06 06 47.6 +0.4**
baz=260
**O16K Kokwok River B 31.73 47 P P 06 06 48.1 +0.8**
baz=267
**L17K Donlin 31.88 42 P P 06 06 49.6 +1.0**
baz=263
**K17K Iditarod 31.96 41 P P 06 06 49.9 +0.7**
baz=262
**M17K Holitna River 32.20 43 P P 06 06 52.1 +0.7**
baz=255
**F18K Selawik 32.23 33 P P 06 06 52.0 +0.5**
baz=254
**N17K Nushagak Hills 32.24 45 P P 06 06 52.6 +0.9**
baz=266
**O17K Koliganek Bris 32.24 46 P P 06 06 52.7 +0.9**
baz=268
**C18K Utukok River 32.33 29 P P 06 06 52.6 +0.1**
baz=249
**B18K Kokolik River 32.39 28 P P 06 06 53.0 +0.1**
baz=248
**G18K Tagagawik 32.44 35 P P 06 06 53.7 +0.2**
baz=256
**P17K Kvichak River 32.56 47 P P 06 06 55.2 +0.7**
baz=269
**L18K Granite Mounta 32.64 42 P P 06 06 55.9 +0.7**
baz=264
**J18K Innoko River 32.78 40 P P 06 06 56.8 +0.3**
baz=262
**N18K Kilae Creek 32.89 45 P P 06 06 58.2 +0.6**
N18K IAmb IAmb 06 07 00.4
comp=Z,8.3nm,0.9s
**N18K Kilae Creek 32.89 45 P P 06 06 58.1 +0.6**
baz=267
**M18K Stony River 32.98 43 P P 06 06 59.0 +0.8**
baz=266
**GUMO Guam 32.99 195 LR LR** 06 18 13.9
comp=Z,31nm,19.9s,baz=41,slow=32
**F19K Shaleruckik Mo 33.01 33 P P 06 06 58.6 +0.2**
baz=256
**C19K Lookout Ridge 33.03 29 P P 06 06 58.8 +0.2**
baz=250
**G19K Purcell Mounta 33.12 35 P P 06 06 59.8 +0.4**
baz=258
**P18K Big Mountain, 33.18 47 P P 06 07 00.8 +0.8**
baz=270
**O18K Koktuh Hills 33.20 46 P P 06 07 00.8 +0.7**
baz=269
**H19K Roundabout Mou 33.25 36 P P 06 07 01.5 +1.1**
**H19K Roundabout Mou 33.25 36 P P 06 07 01.0 +0.5**
baz=259,SNR=7.4
**Q18K Katmai Hardscr 33.30 49 P P 06 07 01.9 +0.8**
baz=271
**J19K Poorman 33.34 39 P P 06 07 01.8 +0.5**
**J19K Poorman 33.34 39 P P 06 07 01.8 +0.5**
baz=262
**D19K Kuna River 33.34 30 P P 06 07 01.6 +0.2**
baz=253
**E19K Redstone River 33.38 32 P P 06 07 02.6 +1.0**
E19K IAmb IAmb 06 07 05.7
comp=Z,4.6nm,0.7s
**E19K Redstone River 33.38 32 P P 06 07 02.0 +0.4**
baz=256
**L19K White Mountain 33.49 42 P P 06 07 03.0 +0.3**
L19K IAmb IAmb 06 07 20.4
comp=Z,11nm,1.5s
**L19K White Mountain 33.49 42 P P 06 07 02.9 +0.2**
baz=266
**N19K Bonanza Creek 33.59 45 P P 06 07 04.1 +0.5**
baz=268
**R18K Karluk 33.63 50 P P 06 07 05.3 +1.5**
baz=273
**M19K Big River Lodg 33.69 43 P P 06 07 05.4 +1.0**
baz=267
**F20K Avaraart Lake 33.85 33 P P 06 07 06.7 +1.0**
baz=258
**H20K Anotleneega Mo 33.88 36 P P 06 07 06.9 +0.8**
baz=261
**D20K Etivluk River 33.94 30 P P 06 07 06.6 +0.1**
baz=254,SNR=12
**K20K Telida 33.95 40 P P 06 07 07.4 +0.7**
baz=265
**E20K Nigu River 33.96 31 P P 06 07 06.8 0.0**
baz=256,SNR=6.8
**L20K Farewell, AK 33.97 42 P P 06 07 07.3 +0.5**
baz=266
**Q19K Cape Douglas, 34.00 48 P P 06 07 07.6 +0.4**
baz=272
**J20K Nowinta River 34.01 39 P P 06 07 07.5 +0.4**
baz=264
**B20K Meade River 34.13 28 P P 06 07 09.1 +1.0**
**B20K Meade River 34.13 28 P P 06 07 08.5 +0.3**
baz=252
**M20K Styx River 34.28 43 P P 06 07 10.0 +0.3**
baz=268
**G21K Allakaket 34.61 34 P P 06 07 12.5 +0.2**
G21K IAmb IAmb 06 07 14.1
comp=Z,4.3nm,0.7s
**G21K Allakaket 34.61 34 P P 06 07 12.7 +0.4**
baz=261
**Q20K Shuyak Island 34.66 49 P P 06 07 13.1 +0.3**
baz=273
**C21K Knifeblade Rid 34.69 30 P P 06 07 13.3 +0.3**
baz=256
**N20K Mount Spurr 34.70 44 P P 06 07 14.3 +1.0**
baz=270
**SPCR Spurr Chakacha 34.70 44 P P 06 07 14.2 +0.9**
baz=270
**A21K Barrow 34.74 26 P P 06 07 13.4 +0.1**
baz=251
**F21K Alatna River 34.74 33 P P 06 07 14.0 +0.5**
baz=260
**H21K Melozitna River 34.76 36 P P 06 07 13.9 +0.3**
H21K IAmb IAmb 06 07 15.5
comp=Z,7.3nm,1.1s
**H21K Melozitna Rive 34.76 36 P P 06 07 14.5 +0.9**
baz=263,SNR=5.7
**E21K Killik River 34.81 31 IAmb IAmb** 06 07 17.2
comp=Z,12nm,1.2s
**E21K Killik River 34.81 31 P P 06 07 14.6 +0.6**
baz=258
**B21K Ikpikpuk River 34.87 29 P P 06 07 15.6 +1.2**
B21K IAmb IAmb 06 07 22.5
comp=Z,9.3nm,0.8s
**B21K Ikpikpuk River 34.87 29 P P 06 07 15.1 +0.6**
baz=255,SNR=6.6
**SKT Skwentna 35.04 43 P P 06 07 16.6 +0.5**
baz=269
**I21K Tanana 35.05 37 P P 06 07 16.5 +0.4**
baz=264
**CAPN Captain Cook N 35.22 45 P P 06 07 18.4 +0.8**
baz=271
**F22K John River 35.29 33 P P 06 07 18.2 0.0**
baz=261
**D22K Ayikyak River 35.36 31 P P 06 07 19.9 +1.1**
D22K IAmb IAmb 06 07 20.8
comp=Z,4.1nm,0.6s
**D22K Ayikyak River 35.36 31 P P 06 07 18.8 0.0**
baz=258
**H22K Ishtalitna Cre 35.38 36 P P 06 07 19.3 +0.4**
baz=264
**BPAW Bear Paw Mtn. 35.38 39 P P 06 07 20.0 +1.0**
BPAW IAmb IAmb 06 07 23.4
comp=Z,4.7nm,0.8s
**BPAW Bear Paw Mtn. 35.38 39 P P 06 07 19.2 +0.2**
baz=267
**SUA Susitna One 35.41 43 P P 06 07 19.6 +0.2**
baz=271
**B22K Teshekpuk Lake 35.45 28 P P 06 07 19.4 -0.1**
baz=256
**G22K Bettles 35.45 34 P P 06 07 20.1 +0.5**
baz=262
**XAN Xi'an 35.46 266** *e*P P 06 07 20.0 -0.1
XAN sP pwP 06 07 39.5 +0.2
XAN pmax pmax
comp=Z,9.0nm,1.1s
XAN LR LR
comp=Z,240nm,19.2s
XAN LR LR
comp=Z,260nm,20.6s
XAN LR LR
comp=Z,430nm,23.4s
**E22K Anaktuvuk Pass 35.53 32 P P 06 07 20.6 +0.3**
baz=260,SNR=16
**MLY Manley 35.55 37 IAmb IAmb** 06 07 22.5
comp=Z,5.3nm,0.8s
**MLY Manley 35.55 37 P P 06 07 21.2 +0.7**
baz=266,SNR=5.2
**RC01 Rabbit Creek A 35.91 44 P P 06 07 24.0 +0.5**
baz=272
**COLD Coldfoot 36.00 34 P P 06 07 24.9 +0.6**
baz=263
**G23K Bananza Creek 36.01 34 P P 06 07 24.8 +0.4**
baz=264
**SEW Seward 36.09 46 P P 06 07 25.8 +0.8**
baz=274
**D23K Nanushuk River 36.09 31 P P 06 07 25.5 +0.6**
baz=260
**H23K Yukon River 36.12 36 P P 06 07 25.9 +0.6**
baz=266
**I23K Minto, Yukon-K 36.15 37 P P 06 07 26.1 +0.6**
baz=267
**PMR Palmer 36.18 43 P P 06 07 26.7 +0.9**
baz=272
**NEA2 Nenana 36.24 38 P P 06 07 26.8 +0.5**
baz=268
**MCK McKinley 36.27 40 P P 06 07 27.2 +0.6**
baz=269
**C23K Itkillik River 36.27 29 P P 06 07 27.6 +1.1**
C23K IAmb IAmb 06 07 27.9
comp=Z,8.6nm,0.7s
**C23K Itkillik River 36.27 29 P P 06 07 27.1 +0.6**
baz=259,SNR=8.2
**RND Reindeer 36.30 40 P P 06 07 26.1 -0.8**
RND IAmb IAmb 06 07 28.4
comp=Z,8.7nm,0.9s
**RND Reindeer 36.30 40 P P 06 07 26.1 -0.8**
RND pmax pmax
comp=Z,9.0nm,0.9s
**E23K Chandalar 36.34 32** IAmb IAmb 06 07 29.2
comp=Z,11nm,1.3s
**E23K Chandalar 36.34 32 P P 06 07 27.8 +0.6**
baz=262,SNR=6.8
**TOLK Toolik Lake Re 36.43 31** IAmb IAmb 06 07 29.7
comp=Z,3.9nm,0.6s
**TOLK Toolik Lake Re 36.43 31 P P 06 07 28.6 +0.7**
baz=262
**KNK Knik Glacier 36.51 44 P P 06 07 29.4 +0.7**
baz=273
**SML Sawmill 36.56 43 P P 06 07 30.2 +1.0**
**SML Sawmill 36.56 43 P P 06 07 29.7 +0.6**
baz=272,SNR=8.0
**PWL Port Wells 36.60 44 P P 06 07 30.0 +0.5**
baz=274
**MDM Murphy Dome 36.62 38** IAmb IAmb 06 07 31.4
comp=Z,6.5nm,0.7s
**WRH Wood River Hil 36.66 38** IAmb IAmb 06 07 30.9
comp=Z,4.8nm,0.7s
**E24K Your Creek 36.76 32** IAmb IAmb 06 07 32.5
comp=Z,8.1nm,0.6s
**E24K Your Creek 36.76 32 P P 06 07 31.4 +0.6**
baz=264
**COLA College 36.77 38 P P 06 07 31.7 +0.9**
baz=268
**D24K Happy Valley 36.78 30** IAmb IAmb 06 07 32.1
comp=Z,7.9nm,0.6s
**D24K Happy Valley 36.78 30 P P 06 07 31.5 +0.7**
baz=262
**H24K Noodor Dome 36.80 36 P P 06 07 32.2 +1.1**
H24K IAmb IAmb 06 07 32.9
comp=Z,4.2nm,0.6s
**H24K Noodor Dome 36.80 36 P P 06 07 31.9 +0.7**
baz=267,SNR=6.7
**WAT6 Susitna Watana 36.81 42 P P 06 07 31.9 +0.4**
baz=272
**M23K Glacier View 36.85 43 P P 06 07 32.3 +0.8**
baz=273
**C24K Franklin Bluff 36.91 30 P P 06 07 32.6 +0.7**
baz=261
**F24K Squaw Lake 36.92 33** IAmb IAmb 06 07 35.4
comp=Z,4.2nm,0.7s
**F24K Squaw Lake 36.92 33 P P 06 07 33.0 +0.8**
baz=265,SNR=6.4
**POKR Poker Plat Res 36.96 37 P P 06 07 33.2 +0.8**
**POKR Poker Plat Res 36.96 37 P P 06 07 33.3 +0.8**
baz=269,SNR=6.0
**DHY Denali Highway 36.97 41 P P 06 07 33.1 +0.4**
DHY IAmb IAmb 06 07 33.8
comp=Z,5.3nm,0.6s
**DHY Denali Highway 36.97 41 P P 06 07 32.9 +0.2**
baz=271
**G24K Hadweenzic Riv 37.02 35 P P 06 07 34.1 +1.2**
baz=266,SNR=12
**SCM Sheep Creek Mo 37.03 43 P P 06 07 33.6 +0.4**
baz=273
**HDA Harding Lake 37.15 38 P P 06 07 34.3 +0.2**
baz=270,SNR=8.2
**ILAR Eielson Array 37.18 38 P P 06 07 34.1 -0.2**
comp=Z,1.9nm,0.5s,baz=254,slow=8.3,SNR=34
ILAR LR LR 06 25 49.5
comp=Z,24nm,19.1s,baz=163,slow=41
comp=Z,1.9nm,0.5s
**GLI Glacier Island 37.20 44 P P 06 07 35.5 +1.0**
baz=274
**M24K Tolsona, Glenn 37.56 42 P P 06 07 38.8 +1.2**
baz=274
**G25K Bearman Lake 37.57 35 P P 06 07 38.7 +1.1**
baz=268
**H25L Birch Creek 37.66 35 P P 06 07 39.1 +0.7**
baz=269
**D25K Kavik River 37.67 30 P P 06 07 38.9 +0.5**
D25K IAmb IAmb 06 07 39.7
comp=Z,8.4nm,0.8s
**D25K Kavik River 37.67 30 P P 06 07 38.9 +0.5**
baz=264,SNR=8.9
**K24K Donnelly Dome 37.67 39 P P 06 07 39.2 +0.7**
baz=272
**KLU Klutina 37.72 43 P P 06 07 39.7 +0.7**
baz=275
**PRP Porcupine Dome 37.77 37 P P 06 07 40.1 +0.7**
baz=270
**F25K Christian Rive 37.79 33 P P 06 07 40.8 +1.3**
**F25K Christian Rive 37.79 33 P P 06 07 40.2 +0.7**
baz=267,SNR=5.2
**J25K Salcha River, 37.84 38 P P 06 07 39.4 -0.6**
baz=271,SNR=5.6
**PAX Paxson 37.84 41 P P 06 07 40.4 +0.4**
baz=273
**LZH Lanzhou 37.93 273** *e*P P 06 07 42.5 +1.3
LZH pP pP 06 07 52.5 -0.7
LZH pmax pmax
comp=Z,25nm,1.2s
LZH LR LR
comp=Z,200nm,18.9s
LZH LR LR
comp=Z,270nm,18.9s
LZH LR LR
comp=Z,270nm,19.9s
**RIDG Independent Ri 38.09 40** IAmb IAmb 06 07 43.4
comp=Z,7.5nm,0.9s
**RIDG Independent Ri 38.09 40 P P 06 07 42.2 +0.1**
baz=273
**C26K Camden Bay 38.24 30 P P 06 07 44.1 +1.0**
baz=265
**N25K Chitina, Valde 38.35 43 P P 06 07 45.6 +1.3**
baz=276
**F26K Sheenjek River 38.37 33 P P 06 07 45.7 +1.4**
baz=268
**BMRM Bremner River 38.41 44 P P 06 07 45.8 +1.1**
baz=276
**SCRK Sand Creek 38.46 39 P P 06 07 45.6 +0.4**
baz=273,SNR=5.7
**G26K Porcupine Rive 38.49 34 P P 06 07 46.6 +1.3**
baz=270,SNR=7.6
**J26L Joseph Creek 38.62 38 P P 06 07 47.0 +0.5**
baz=273
**C27K Jago River 38.63 30 P P 06 07 47.5 +1.0**
baz=266
**I26K Coal Creek Min 38.76 37 P P 06 07 47.7 0.0**
baz=272
**L26K Log Cabin Wild 38.80 41** IAmb IAmb 06 07 50.4
comp=Z,5.4nm,0.6s
**L26K Log Cabin Wild 38.80 41 P P 06 07 49.2 +1.2**
baz=275,SNR=6.1
**M26K Nabesna, AK 39.02 42** IAmb IAmb 06 07 52.5
comp=Z,9.6nm,0.8s
**M26K Nabesna, AK 39.02 42 P P 06 07 51.2 +1.3**
baz=276,SNR=6.4
**GTA Gaotai 39.11 280 P P 06 07 52.5 +1.5**
GTA pP pP 06 08 04.5 +1.5
GTA sP sP 06 08 09.5 +1.0
GTA pmax pmax
comp=Z,10.0nm,0.9s
GTA LR LR
comp=Z,100nm,23.3s
GTA LR LR
comp=Z,190nm,18.2s
GTA LR LR
comp=Z,320nm,21.8s
**CRQE Cirque 39.17 44 P P 06 07 52.5 +1.3**
baz=278
**K27K Chicken 39.30 39** IAmb IAmb 06 07 54.2
comp=Z,15nm,0.9s
**K27K Chicken 39.30 39 P P 06 07 53.0 +0.9**
baz=275
**G27K Doyon Strip 39.33 35 P P 06 07 53.4 +1.0**
baz=272
**E27K Coleen River 39.34 32 P P 06 07 53.7 +1.3**
**E27K Coleen River 39.34 32 P P 06 07 53.7 +1.3**
baz=270
**H27K Steamboat Moun 39.40 35 P P 06 07 54.4 +1.4**
baz=272
**L27K Beaver Creek, 39.49 40** IAmb IAmb 06 07 56.3
comp=Z,9.4nm,0.7s
**L27K Beaver Creek, 39.49 40 P P 06 07 55.1 +1.4**
baz=276,SNR=12
**M27K Edge Creek, AK 39.55 42 P P 06 07 55.2 +0.8**
baz=277
**D27M Malcolm River 39.58 31 P P 06 07 55.4 +0.9**
baz=269
**EGAK Eagle 39.64 38** IAmb IAmb 06 07 56.0
comp=Z,9.8nm,0.8s
**EGAK Eagle 39.64 38 P P 06 07 55.2 +0.3**
baz=275,SNR=11
**CTG Chitna Glacier 39.99 44 P P 06 07 59.4 +1.3**
baz=279
**F28M Old Crow 40.00 33 P P 06 07 59.2 +1.2**
baz=272,SNR=7.4
**E28M Babbage River 40.10 32 P P 06 08 00.0 +1.3**
baz=271
**I28M Miner Creek 40.10 37** IAmb IAmb 06 08 01.1
comp=Z,6.9nm,0.6s
**I28M Miner Creek 40.10 37 P P 06 07 59.6 +0.8**
baz=275,SNR=9.9
**YUK3 Moose Creek 40.28 42 P P 06 08 01.5 +1.0**
baz=279
**DAWY Dawson 40.47 39 P P 06 08 02.9 +1.0**
baz=277
**O28M Mount Upton 40.57 44 P P 06 08 04.1 +1.1**
baz=280
**H29M Whitestone 40.68 35 P P 06 08 04.8 +1.3**
baz=275
**E29M Blow River 40.71 32** IAmb IAmb 06 08 07.8
comp=Z,12nm,1.2s
**E29M Blow River 40.71 32 P P 06 08 04.9 +1.2**
baz=273
**G29M Pine Creek 40.76 34** IAmb IAmb 06 08 06.9
comp=Z,8.6nm,0.8s
**G29M Pine Creek 40.76 34 P P 06 08 05.4 +1.2**
baz=275
**I29M Ogilvie Camp, 40.79 37 P P 06 08 05.7 +1.2**
**I29M Ogilvie Camp, 40.79 37 P P 06 08 05.7 +1.2**
baz=276
**M29M Somme Creek 41.11 41 P P 06 08 08.5 +1.2**
baz=280
**K29M Barlow Dome 41.31 39 P P 06 08 10.2 +1.3**
baz=279,SNR=6.0
**EPYK Eagle Plains 41.33 35 P P 06 08 10.2 +1.3**
EPYK IAmb IAmb 06 08 11.1
comp=Z,8.0nm,0.8s
**EPYK Eagle Plains 41.33 35 P P 06 08 09.9 +1.0**
baz=277,SNR=7.4
**G30M tAoh Zraii Nji 41.46 34 P P 06 08 10.9 +1.0**
baz=276
**F30M Barrier River 41.56 33 P P 06 08 11.1 +0.4**
baz=276
**I30M Mount Dempster 41.61 37** IAmb IAmb 06 08 13.2
comp=Z,10.0nm,0.7s
**I30M Mount Dempster 41.61 37 P P 06 08 12.2 +0.9**
baz=278,SNR=14
**J30M Hart River 41.72 38 P P 06 08 13.0 +0.7**
baz=279
**M30M Minto, Yukon 41.85 41 P P 06 08 14.2 +1.0**
baz=281
**P29M Windy Craggy 42.00 45 P P 06 08 16.1 +1.6**
baz=283
**G31M Satah River 42.23 34 P P 06 08 17.1 +0.9**
baz=278
**P30M Million Dollar 42.27 44 P P 06 08 17.9 +1.2**
baz=283
**INK Inuvik 42.33 32 P P 06 08 18.3 +1.3**
INK IAmb IAmb 06 08 19.0
comp=Z,7.7nm,0.7s
**INK Inuvik 42.33 32** LR LR 06 27 33.4
comp=Z,39nm,21.5s,baz=282,slow=38
**INK Inuvik 42.33 32 P P 06 08 18.0 +1.0**
baz=277,SNR=7.2
**INK Inuvik 42.33 32 P P 06 08 18.3 +1.3**
INK pmax pmax
comp=Z,8.0nm,0.7s
**H31M Peel River 42.36 36 P P 06 08 18.3 +1.0**
baz=279
**F31M Tsiigehtchic 42.36 33** IAmb IAmb 06 08 19.2
comp=Z,11nm,1.0s
**F31M Tsiigehtchic 42.36 33 P P 06 08 18.1 +0.9**
baz=278,SNR=5.3
**N31M Braeburn, Yuko 42.53 42 P P 06 08 19.7 +0.9**
baz=283
**O30N Mendenhall 42.55 43 P P 06 08 20.0 +1.1**
baz=283
**PLBC Pleasant Camp 42.72 45 P P 06 08 22.0 +1.7**
baz=284
**M31M Drury Creek, Y 43.02 41 P P 06 08 24.2 +1.5**
baz=283
**ZALV Zalesovo Beam 43.10 306 P P 06 08 21.6 -1.8**
comp=Z,1.1nm,0.5s,baz=85,slow=5.9,SNR=4.7
ZALV PcP PcP 06 10 11.8 -0.6
comp=Z,3.1nm,0.8s,baz=82,slow=3.3,SNR=8.0
comp=Z,1.1nm,0.5s
**FARO Faro, Yukon 43.49 41 P P 06 08 28.1 +1.6**
baz=284,SNR=5.7
**N32M Quiet Lake 43.88 42 P P 06 08 30.9 +1.3**
baz=285
**R32K Eaglecrest 43.96 47 P P 06 08 31.6 +1.4**
baz=287
**P33M Teslin, Yukon 44.25 43 P P 06 08 34.1 +1.4**
baz=286
**A36M Sachs Harbour 44.58 26 P P 06 08 36.1 +1.1**
baz=281
**PZH PanZhiHua 44.91 263 P P 06 08 37.0 -1.4**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,150nm,4.4s
**WMQ Urumqi 45.23 292** *e*P P 06 08 42.8 +2.1
WMQ pmax pmax
comp=Z,26nm,0.8s
WMQ LR LR
comp=Z,160nm,16.3s

**U33K Whale Pass** 45.36 49 P P 06 08 43.1 +1.7
baz=290
**R33M Jennings River** 45.39 44 IAmb IAmb 06 08 47.4
comp=Z,12nm,1.3s
**R33M Jennings River** 45.39 44 P P 06 08 43.0 +1.2
baz=288
**C36M Paulatuk** 45.52 30 P P 06 08 43.8 +1.3
baz=284
**CRAG Craig** 45.58 50 P P 06 08 44.4 +1.3
baz=291
**S34M Telegraph Cree** 45.78 46 P P 06 08 46.6 +1.8
baz=290
**TGTN Hyland Airport** 46.00 41 P P 06 08 48.1 +1.6
baz=288
**DLBC Dease Lake** 46.16 45 IAmb IAmb 06 08 51.2
comp=Z,5.2nm,0.9s
**DLBC Dease Lake** 46.16 45 P P 06 08 49.5 +1.7
baz=290
**WTLY Watson Lake, Y** 46.20 43 P P 06 08 49.6 +1.5
baz=289
**T35M Bob Quinn** 46.55 47 P P 06 08 52.3 +1.4
baz=291
**MK31 Makanchi Array** 47.33 298 P P 06 08 56.2 -0.8
MK31 IAmb IAmb 06 08 57.1
comp=Z,4.4nm,0.6s
**MK31 Makanchi Array** 47.33 298 P P 06 08 56.3 -0.8
MK31 pmax pmax
comp=Z,4.0nm,0.6s
**MKAR Makanchi Array** 47.33 298 P P 06 08 56.4 -0.7
comp=Z,3.5nm,0.5s,baz=66,slow=7.1,SNR=44
MKAR PcP PcP 06 10 27.2 0.0
comp=Z,1.0nm,0.5s,baz=79,slow=4.8,SNR=6.4
comp=Z,3.5nm,0.5s
**MAKZ Makanchi** 47.51 298 P P 06 08 57.7 -0.8
MAKZ IAmb IAmb 06 08 58.7
comp=Z,7.8nm,1.3s
**MAKZ Makanchi** 47.51 298 P P 06 08 57.7 -0.8
MAKZ pmax pmax
comp=Z,8.0nm,1.3s
**WRGLY Wrigley** 47.56 38 P P 06 08 59.9 +1.4
baz=290
**LIRD Liard River Hi** 47.73 43 P P 06 09 01.4 +1.5
baz=292
**KURK Kurchatov** 47.83 304 P P 06 08 59.6 -1.2
KURK IAmb IAmb 06 09 01.0
comp=Z,5.0nm,0.8s
**KURK Kurchatov** 47.83 304 eP P 06 08 59.6 -1.2
**KURK Kurchatov** 47.83 304 P P 06 08 59.6 -1.2
KURK pmax pmax
comp=Z,5.0nm,0.8s
**GRNB Grenville Isla** 47.89 51 P P 06 09 02.9 +1.6
**KURBB Kurchatov Arra** 47.92 304 P P 06 09 00.5 -1.0
comp=Z,3.7nm,0.2s,baz=71,slow=8.5,SNR=12
comp=Z,3.7nm,0.2s
**TOAD Toad River Com** 48.35 43 P P 06 09 06.3 +1.5
baz=293,SNR=7.4
**KOTAN Kotaneelee Air** 48.42 42 P P 06 09 06.5 +1.2
baz=293
**BVAR Borovoye Array** 51.38 310 P P 06 09 27.2 -0.6
comp=Z,10nm,0.5s,baz=58,slow=8.6,SNR=42
comp=Z,10nm,0.5s
**BRVK Borovoye** 51.42 310 P P 06 09 27.5 -0.7
**BRVK Borovoye** 51.42 310 eP P 06 09 28.3 +0.2
**BRVK Borovoye** 51.42 310 ceP P 06 09 28.3 +0.2
BRVK pmax pmax
comp=Z,7.0nm,0.6s
**YKA Yellowknife Ar** 51.57 36 P P 06 09 28.8 -0.3
comp=Z,5.8nm,1.0s,baz=61,slow=8.3,SNR=7.8
comp=Z,5.8nm,1.0s
**CMAR Chiang Mai Arr** 52.19 257 P P 06 09 34.4 +0.1
comp=Z,1.1nm,0.3s,baz=37,slow=7.8,SNR=6.1
comp=Z,1.1nm,0.3s
**KBS Kingsbay** 53.30 351 eP P 06 09 41.6 -0.1
KBS IAmb IAmb 06 09 42.3
comp=Z,20nm,0.9s
**KBS Kingsbay** 53.30 351 ceP P 06 09 42.7 +1.0
KBS pmax pmax
comp=Z,29nm,2.5s
**AAK Ala-Archa** 54.20 297 P P 06 09 48.5 -0.5
AAK IAmb IAmb 06 09 50.6
comp=Z,3.9nm,0.8s
**AAK Ala-Archa** 54.20 297 ceP P 06 09 50.5 +1.5
AAK pmax pmax
comp=Z,3.0nm,0.7s
**KSH Kashi** 54.97 293 P P 06 09 59.3 +4.7
KSH pmax pmax
comp=Z,9.0nm,0.6s
**ARU Arti** 55.62 318 P P 06 09 58.0 -0.8
**ARU Arti** 55.62 318 LR LR 06 36 14.2
comp=Z,79nm,19.1s,baz=64,slow=39
**ARU Arti** 55.62 318 eP P 06 09 57.6 -1.2
**ARU Arti** 55.62 318 c iP P 06 09 57.6 -1.2
ARU 06 11 58.8
ARU S S 06 17 40.4 -0.1
ARU SS SS 06 21 23.1 -2.4
ARU pmax pmax
comp=Z,19nm,1.1s
**B08A Colville Reser** 56.38 53 P P 06 10 05.4 +0.9
**KKAR Karatay Array** 56.40 299 IAmb IAmb 06 10 05.8
comp=Z,6.7nm,0.9s
**VADS Vadso** 57.29 340 eP P 06 10 10.8 +0.3
**E09A Wood Farm, Sta** 58.08 54 P P 06 10 17.4 +1.0
E09A IAmb IAmb 06 10 18.2
comp=Z,6.0nm,1.0s
**HAMF Hammerfest** 58.17 342 eP P 06 10 16.1 -0.5
HAMF IAmb IAmb 06 10 17.3
comp=Z,75nm,1.5s
**KIRV Kirov** 58.43 323 LR LR 06 38 06.8
comp=Z,65nm,18.3s,baz=54,slow=39
**KIRV Kirov** 58.43 323 ceP P 06 10 18.8 +0.2
**ARA0 ARCESS Array S** 58.62 341 eP P 06 10 20.3 +0.5
**ARCES ARCESS Array B** 58.62 341 P P 06 10 19.5 -0.3
comp=Z,9.0nm,0.8s,baz=34,slow=6.4,SNR=14
ARCES LR LR 06 39 11.3
comp=Z,44nm,18.9s,baz=72,slow=40
comp=Z,9.0nm,0.8s
**ABKAR Akbulak array** 58.95 310 P P 06 10 21.8 -0.7
**AKTO Aktyubinsk** 59.28 312 LR LR 06 38 13.9
comp=Z,159nm,19.1s,baz=102,slow=38
**KTK1 Kautokeino** 59.54 341 eP P 06 10 26.4 +0.3
KTK1 IAmb IAmb 06 10 26.7
comp=Z,16nm,0.7s
**SIMJ Simiganj** 59.90 296 P P 06 10 29.4 +0.1
**TRO Tromso** 59.96 343 eP P 06 10 29.1 +0.1
TRO IAmb IAmb 06 10 30.5
comp=Z,655nm,3.2s
**NIL Nilore** 60.17 289 P P 06 10 31.5 +0.4
**NIL Nilore** 60.17 289 P P 06 10 31.5 +0.4
NIL pmax pmax
comp=Z,12nm,0.8s
**MSO Missoula** 60.25 52 P P 06 10 32.5 +1.0
MSO IAmb IAmb 06 10 33.4
comp=Z,5.1nm,1.0s
**FFC Flin Flon** 61.36 40 P P 06 10 39.6 +0.8
FFC IAmb IAmb 06 10 48.5
comp=Z,6.7nm,1.2s
**FFC Flin Flon** 61.36 40 P P 06 10 39.6 +0.8
FFC pmax pmax
comp=Z,7.0nm,1.3s
**SUMG Summit** 61.51 4 P P 06 10 40.3 +0.3
**SUMG Summit** 61.51 4 P P 06 10 40.3 +0.3
SUMG pmax pmax
comp=Z,16nm,1.2s
**PNTR Pine Nut** 61.60 62 P P 06 10 42.4 +1.4
PNTR IAmb IAmb 06 10 43.3
comp=Z,4.3nm,0.8s
**YERR Yerington** 61.89 62 IAmb IAmb 06 10 45.1
comp=Z,6.1nm,1.2s
**JOF Joensuu** 62.07 334 eP P 06 10 43.4 0.0
**STEI Steigen** 62.13 343 eP P 06 10 43.6 -0.1
**BOZ Bozeman (W)** 62.28 52 IAmb IAmb 06 10 46.9
comp=Z,3.5nm,0.7s
**LOF Lofoten** 62.29 344 eP P 06 10 44.5 -0.3
**KVN Kaiserville** 62.55 61 IAmb IAmb 06 10 49.5
comp=Z,4.4nm,1.0s
**FAUS Fauske** 62.59 343 eP P 06 10 47.1 +0.3
FAUS IAmb IAmb 06 10 47.4
comp=Z,24nm,0.6s
**LHV Little Huntoon** 62.79 62 IAmb IAmb 06 10 51.5
comp=Z,4.7nm,0.9s
**NVAR Mina Array Bea** 62.81 62 P P 06 10 49.5 +0.5
comp=Z,3.3nm,0.9s,baz=289,slow=6.9,SNR=21
comp=Z,3.3nm,0.9s
**BELG Belogornoye** 63.15 319 LR LR 06 40 34.7
comp=Z,78nm,19.1s,baz=68,slow=38
**DSP Deep Springs** 63.67 63 P P 06 10 56.4 +1.9

**IMW Indian Meadow** 63.72 53 IAmb IAmb 06 10 58.3
comp=Z,4.6nm,1.2s
**KONS Konsvik** 63.79 343 eP P 06 10 55.5 +0.7
KONS IAmb IAmb 06 10 57.4
comp=Z,327nm,3.2s
**MOR8 Moi Rana** 63.80 343 eP P 06 10 53.8 -1.1
MOR8 IAmb IAmb 06 10 54.2
comp=Z,9.9nm,0.7s
**RLMT Red Lodge** 63.87 51 IAmb IAmb 06 10 57.8
comp=Z,2.9nm,0.7s
**TPAW Teton Pass** 63.98 54 IAmb IAmb 06 10 58.5
comp=Z,5.6nm,0.7s
**SNOW Snow King Moun** 64.10 54 IAmb IAmb 06 11 00.3
comp=Z,5.2nm,1.0s
**VAF Ylistaro** 64.46 337 eP P 06 10 59.4 +0.2
**LAO LASA Array** 64.49 49 IAmb IAmb 06 11 01.5
comp=Z,3.7nm,0.7s
**R11B Troy Canyon, C** 64.52 61 P P 06 11 01.7 +1.4
baz=310
**KEF Keuruu** 64.56 336 eP P 06 10 59.9 +0.1
**FINES FINESS Array B** 64.78 335 P P 06 11 01.1 -0.3
comp=Z,8.5nm,0.5s,baz=34,slow=7.3,SNR=44
FINES LR LR 06 42 04.1
comp=Z,56nm,19.3s,baz=54,slow=39
comp=Z,8.5nm,0.5s
**HWUT Hardware Ranch** 64.83 56 IAmb IAmb 06 11 04.0
comp=Z,2.9nm,0.7s
**DUG Dugway, Tooele** 65.00 57 IAmb IAmb 06 11 05.5
comp=Z,3.4nm,0.8s
**PDAR Pinedale Array** 65.22 54 P P 06 11 05.3 +0.5
comp=Z,2.2nm,0.8s,baz=265,slow=1.7,SNR=21
comp=Z,2.2nm,0.8s
**NSS Namsos** 65.75 343 eP P 06 11 08.2 +0.6
**FRB Frobisher Bay** 65.82 19 LR LR 06 42 57.3
comp=Z,30nm,18.2s,baz=274,slow=39
**SFJD Kangerlussuaq** 65.95 10 LR LR 06 42 18.7
comp=Z,32nm,19.0s,baz=14,slow=38
**OBN Obninsk** 65.98 326 eP P 06 11 09.2 0.0
**OBN Obninsk** 65.98 326 ⇓eP P 06 11 09.2 0.0
OBN e 06 13 33.5
OBN pmax pmax
comp=Z,11nm,0.5s
OBN MLR MLR
comp=Z,61nm,23.0s
**VRH Novokhopyorsk** 66.64 320 eP P 06 11 11.4 -2.1
VRH pmax pmax
comp=Z,10.0nm,0.9s
**LCMT Little Creek M** 66.80 60 IAmb IAmb 06 11 17.3
comp=Z,4.0nm,1.0s
**LPSR Galich'ya Gora** 66.85 323 eP P 06 11 13.2 -1.6
LPSR pmax pmax
comp=Z,20nm,0.9s
**SRU San Rafael Swe** 67.05 57 IAmb IAmb 06 11 18.3
comp=Z,7.0nm,0.9s
**KNB Kanab** 67.05 60 IAmb IAmb 06 11 19.7
comp=Z,5.7nm,1.1s
**RSSD Black Hills** 67.34 50 P P 06 11 19.0 +0.6
RSSD IAmb IAmb 06 11 19.3
comp=Z,4.9nm,0.7s
**RSSD Black Hills** 67.34 50 P P 06 11 19.0 +0.6
RSSD pmax pmax
comp=Z,5.0nm,0.7s
**VORR Voronezh** 67.40 322 eP P 06 11 16.6 -1.7
VORR pmax pmax
comp=Z,10.0nm,1.0s
**AAL Aland** 67.55 337 eP P 06 11 18.8 -0.2
**WB2 Warramunga Arr** 67.74 199 P P 06 11 20.6 -0.2
WB2 IAmb IAmb 06 11 43.7
comp=Z,6.5nm,0.9s
**WRA Warramunga Arr** 67.75 199 P P 06 11 20.3 -0.4
comp=Z,1.0nm,0.7s,baz=17,slow=6.5,SNR=8.1
comp=Z,1.0nm,0.7s
**VSR Storozhevoye** 67.75 322 eP P 06 11 19.0 -1.5
VSR pmax pmax
comp=Z,10.0nm,1.0s
**N23A Red Feather La** 68.48 53 P P 06 11 26.3 +0.7
N23A IAmb IAmb 06 11 27.7
comp=Z,10nm,1.4s
**N23A Red Feather La** 68.48 53 P P 06 11 26.6 +0.9
baz=313
**DOMB Dombas** 68.57 343 eP P 06 11 25.7 +0.2
**NC204 NORSAR Array S** 68.89 342 P P 06 11 26.9 -0.6
**NB2 NORSAR Subarra** 69.00 341 P P 06 11 28.0 -0.2
comp=Z,3.1nm,0.5s,baz=30,slow=6.2
**NOA NORSAR Array B** 69.00 341 P P 06 11 27.9 -0.3
comp=Z,3.9nm,0.6s,baz=28,slow=6.5,SNR=17
NOA LR LR 06 45 57.9
comp=Z,39nm,19.3s,baz=40,slow=40
comp=Z,3.9nm,0.6s
**SMCO Snowmass** 69.06 55 IAmb IAmb 06 11 45.7
comp=Z,8.6nm,1.3s
**NBO00 NORSAR Array S** 69.11 341 P P 06 11 28.9 +0.1
**NC602 NORSAR Array S** 69.20 341 IAmb IAmb 06 11 29.7
comp=Z,62nm,2.1s
NC602 eP P 06 11 29.8 +0.4
**HFS Hagfors** 69.22 340 P P 06 11 29.2 -0.4
comp=Z,5.2nm,0.3s,baz=46,slow=4.3,SNR=48
HFS LR LR 06 44 18.2
comp=Z,41nm,21.9s,baz=42,slow=38
comp=Z,5.2nm,0.3s
**MNK Minsk** 69.70 329 i P P 06 11 31.1 -1.5
MNK i *PP pP 06 11 47.5 +1.5
MNK i 06 14 05.4
MNK i PPP PPP 06 15 47.2
MNK i S S 06 20 35.4 -1.6
MNK i *SS sS 06 21 03.7 +3.3
MNK i SS SS 06 25 05.2 +0.3
MNK pmax pmax
comp=E,22nm,0.8s
MNK pmax pmax
comp=Z,15nm,0.6s
MNK pmax pmax
comp=N,10.0nm,0.7s
MNK MLR MLR
comp=E,96nm,22.0s
MNK MLR MLR
comp=N,37nm,20.0s
MNK MLR MLR
comp=Z,29nm,16.0s
**HYA Hoyanger** 69.94 344 eP P 06 11 34.6 +0.7
**OSL Oslo** 70.10 341 eP P 06 11 35.5 +0.7
**S22A 4UR Ranch, Cre** 70.12 56 P P 06 11 36.7 +0.8
baz=313
**AKT Akhty** 70.52 310 eP P 06 11 38.7 +0.7
AKT e 06 12 00.4
AKT pmax pmax
comp=Z,25nm,1.4s
**KIV Kislovodsk** 71.37 314 eP P 06 11 42.2 -0.9
**KIV Kislovodsk** 71.37 314 eP P 06 11 42.2 -0.9
KIV pmax pmax
comp=Z,21nm,1.0s
KIV MLR MLR
comp=Z,43nm,18.0s
**KBZ Khabaz** 71.43 314 P P 06 11 44.0 +0.7
comp=Z,11nm,0.9s,baz=98,slow=1.7,SNR=14
KBZ LR LR 06 48 03.6
comp=Z,55nm,18.6s,baz=34,slow=40
comp=Z,11nm,0.9s
**KBZ Khabaz** 71.43 314 eP P 06 11 44.0 +0.7
**KBZ Khabaz** 71.43 314 P P 06 11 44.0 +0.7
**ASAR Alice Springs** 71.44 199 P P 06 11 43.9 +0.4
comp=Z,0.7nm,0.7s,baz=12,slow=5.2,SNR=10
comp=Z,0.7nm,0.7s
**ECSD EROS Data Cent** 71.44 46 IAmb IAmb 06 11 44.4
comp=Z,8.2nm,1.2s
**T25A Trinidad** 71.93 55 P P 06 11 47.6 +0.8
baz=315
**AKASG Malin Array Be** 72.23 326 P P 06 11 47.6 -0.4
comp=Z,8.6nm,0.5s,baz=36,slow=6.1,SNR=32
AKASG LR LR 06 46 18.1
comp=Z,51nm,18.1s,baz=48,slow=38
comp=Z,8.6nm,0.5s
**AKBB Malin Array Si** 72.23 326 P P 06 11 47.7 -0.3
**KIEV Kiev** 72.24 326 P P 06 11 47.6 -0.3
**KIEV Kiev** 72.24 326 ⇑P P 06 11 48.4 +0.3
**KIEV Kiev** 72.24 326 P P 06 11 47.7 -0.3
KIEV pmax pmax
comp=Z,12nm,0.6s
**RNPP9 Sopachiv** 72.91 329 P P 06 11 52.4 +0.4
**MI29 MI29, Kamyanyy** 72.98 327 P P 06 11 52.9 +0.5
**RNPP8 Varash** 72.98 329 P P 06 11 52.7 +0.3
**319A Douglas** 73.01 62 IAmb IAmb 06 11 55.2
comp=Z,7.0nm,0.9s
**GNI Garni** 73.06 311 LR LR 06 47 38.6
comp=Z,52nm,18.2s,baz=46,slow=39
**121A Cookes Peak, D** 73.13 61 P P 06 11 55.2 +1.4
baz=314
**LUBAR Lubar, Ukraine** 73.42 327 P P 06 11 55.1 +0.1
**SCHQ Schefferville** 74.06 23 P P 06 11 58.8 +0.1
comp=Z,1.9nm,0.5s,baz=331,slow=6.5,SNR=6.6
comp=Z,1.9nm,0.5s
**SORM Soroca** 74.62 325 ⇓P P 06 12 02.3 +0.3
**SORM Soroca** 74.62 325 ⇓P P 06 12 02.3 +0.3
**KMPD K-Podol'skiy** 75.02 327 P P 06 12 03.4 -0.9
**P38A Dawn** 76.03 47 IAmb IAmb 06 12 10.6
comp=Z,4.4nm,0.7s
**KOLS Kolonicke sedl** 76.27 329 eP P 06 12 12.3 +0.8
KOLS pmax pmax
comp=Z,7.0nm,0.9s
**KOLS Kolonicke sedl** 76.27 329 eP P 06 12 12.3 +0.8
**BURAR Bucovina Array** 76.27 327 ⇑P P 06 12 11.9 +0.2
**BURAR Bucovina Array** 76.27 327 ⇑P P 06 12 11.9 +0.2
**VLDQ Val d'Or** 76.43 32 P P 06 12 11.0 -1.4
VLDQ IAmb IAmb 06 12 11.9
comp=Z,9.8nm,0.9s
**TESR Tescani** 76.62 325 ⇑P P 06 12 13.7 +0.2
**L44A Lake County Fo** 76.83 42 P P 06 12 15.7 +0.9
baz=322
**MNHN Monahans** 76.99 58 IAmb IAmb 06 12 17.4
comp=Z,3.2nm,0.7s
**DPC Dobruska-Polom** 77.05 333 eP P 06 12 17.5 +1.5
**DPC Dobruska-Polom** 77.05 333 eP P 06 12 17.5 +1.5
**LANS Liptovska Anna** 77.06 331 eP P 06 12 17.3 +1.2
LANS e 06 12 28.5
LANS pmax pmax
comp=Z,5.0nm,0.7s
**LANS Liptovska Anna** 77.06 331 eP P 06 12 17.3 +1.2
LANS e 06 12 28.5
**VRI Vrincioaia** 77.11 325 ⇑P P 06 12 21.4 +5.0
**VRI Vrincioaia** 77.11 325 ⇑P P 06 12 21.4 +5.0
**EKA Eskdalemuir Ar** 77.13 346 P P 06 12 16.0 -0.2
comp=Z,1.0nm,0.4s,baz=19,slow=5.5,SNR=9.8
comp=Z,1.0nm,0.4s
**KRLC Kraliky** 77.15 333 eP P 06 12 17.0 +0.5
**KRLC Kraliky** 77.15 333 eP P 06 12 17.0 +0.5
**MORC Moravsky Berou** 77.16 332 IAmb IAmb 06 12 29.1
comp=Z,6.3nm,0.9s
**MORC Moravsky Berou** 77.16 332 eP P 06 12 17.0 +0.4
MORC e 06 12 27.5
**MORC Moravsky Berou** 77.16 332 ⇑P P 06 12 17.8 +1.2
**MORC Moravsky Berou** 77.16 332 ⇑P P 06 12 17.8 +1.2
**ARPR Arapgir-MALATY** 77.17 314 P P 06 12 16.8 -0.1
**CLL Collm** 77.21 336 i P P 06 12 16.8 0.0
comp=Z,6.0nm,0.7s
CLL i pP PcP 06 12 27.6 +0.3
comp=Z,13nm,0.9s
CLL eS S 06 22 00.0 -2.0
CLL eSS SS 06 27 06.0 +6.8
**CLL Collm** 77.21 336 i P P 06 12 16.4 -0.4
CLL i *PP PcP 06 12 27.6 +0.3
CLL pmax pmax
comp=Z,6.0nm,0.7s
**TPGR Topolog** 77.24 323 ⇓P P 06 12 17.4 +0.3
**MLR Muntele Rosu** 77.73 325 ⇑P P 06 12 19.4 -0.6
**MLR Muntele Rosu** 77.73 325 ⇑P P 06 12 21.0 +1.0
**MLR Muntele Rosu** 77.73 325 ⇑P P 06 12 21.0 +1.0
**ISR Istrita** 77.80 324 ⇑P P 06 12 20.9 +0.6
**ISR Istrita** 77.80 324 ⇑P P 06 12 20.9 +0.6
**VYHS Vyhne** 77.84 331 eP P 06 12 21.0 +0.6
VYHS e 06 12 32.3
VYHS pmax pmax
comp=Z,5.0nm,0.9s
**VYHS Vyhne** 77.84 331 eP P 06 12 21.0 +0.6
VYHS e 06 12 32.3
**VRAC Vranov** 77.88 333 eP P 06 12 21.1 +0.5
VRAC e 06 12 32.2
**VRAC Vranov** 77.88 333 LR LR 06 51 56.7
comp=Z,65nm,20.0s,baz=26,slow=40
**TXAR Lajitas Array** 77.89 60 P P 06 12 21.9 +0.8
comp=Z,3.9nm,0.7s,baz=301,slow=4.3,SNR=38
comp=Z,3.9nm,0.7s
**JAVC Velka Javorina** 77.92 332 eP P 06 12 21.9 +1.1
JAVC e 06 12 33.2
**VOIR** 78.14 326 ⇑P P 06 12 22.5 +0.4
**VOIR** 78.14 326 ⇑P P 06 12 22.5 +0.4
**KRUC Moravsky** 78.16 333 eP P 06 12 23.2 +1.1
**SULR** 78.28 324 ⇑P P 06 12 16.4 -6.4
**SMOL Smolenice** 78.30 332 eP P 06 12 23.9 +1.0
SMOL pmax pmax
comp=Z,8.0nm,1.1s
**KHC Kasperske Hory** 78.97 334 IAmb IAmb 06 12 28.3
comp=Z,6.7nm,0.9s
**KHC Kasperske Hory** 78.97 334 eP P 06 12 27.2 +0.5
KHC ex x 06 12 30.9
KHC epP PcP 06 12 37.5 +2.4
**KHC Kasperske Hory** 78.97 334 eP P 06 12 27.2 +0.5
KHC e 06 12 37.5
**BRTR Keskin Array B** 78.99 317 P P 06 12 27.4 +0.4
comp=Z,2.7nm,0.9s,baz=64,slow=2.9,SNR=10
comp=Z,2.7nm,0.9s
**SURR Surduc** 79.00 327 ⇑P P 06 12 27.0 +0.2
**GZR Gura Zlata** 79.06 327 ⇑P P 06 12 27.0 -0.2
**GZR Gura Zlata** 79.06 327 ⇑P P 06 12 27.0 -0.2
**GERES GERESS Array B** 79.19 334 P P 06 12 27.9 -0.1
comp=Z,1.8nm,0.6s,baz=25,slow=7.5,SNR=7.9
GERES LR LR 06 50 05.6
comp=Z,39nm,21.6s,baz=42,slow=38
comp=Z,1.8nm,0.6s
**BZS Buzias** 79.30 328 ⇓P P 06 12 28.7 +0.2
**BZS Buzias** 79.30 328 ⇓P P 06 12 28.7 +0.2
**RAR Rarotonga** 79.31 136 LR LR 06 43 10.5
comp=Z,44nm,21.9s,baz=285,slow=32
**CONA Conrad Observa** 79.32 332 i P P 06 12 29.6 +1.0
comp=Z,4.8nm,0.8s
**KIRS Kirsehir-Merke** 79.32 316 ⇑P P 06 12 29.5 +0.8
**RONA Rosalia, Austr** 79.38 332 i P P 06 12 29.9 +1.0
comp=Z,6.0nm,0.9s
**DRIO Del Rio** 79.65 58 IAmb IAmb 06 12 31.9
comp=Z,4.4nm,0.8s
**MOA Molln** 79.90 333 i P P 06 12 32.2 +0.5
comp=Z,4.7nm,1.1s
**BMRD Maredsous** 80.30 340 dP P 06 12 34.4 +0.7
**P49A Miami Univ. Ec** 80.40 42 P P 06 12 34.9 +0.4
baz=324
**M53A WI Miller and** 80.66 38 P P 06 12 36.2 +0.4
baz=326
**SOKA Soboth** 80.69 332 i P P 06 12 36.3 +0.2
comp=Z,7.2nm,1.3s
**LESA Schwarzleotal** 80.77 334 i P P 06 12 37.1 +0.6
comp=Z,3.5nm,0.6s
**KBA Koelnbreinsper** 80.87 333 i P P 06 12 37.3 +0.2
comp=Z,6.1nm,0.5s
**BOVS Bovan** 80.95 327 ⇑P P 06 12 30.4 -7.0
**OBKA Obir** 80.99 332 i P P 06 12 39.1 +1.5
comp=Z,2.4nm,0.5s
**WATA Walderalm** 81.18 335 i P P 06 12 39.4 +0.7
comp=Z,4.8nm,0.5s
**WTTA Wattenberg** 81.23 335 i P P 06 12 39.9 +0.8
comp=Z,7.0nm,0.6s
**RETA Reutte** 81.28 335 i P P 06 12 39.6 +0.5
comp=Z,3.8nm,1.0s
**MOTA Moosalm** 81.31 335 i P P 06 12 40.1 +0.6
comp=Z,6.2nm,0.9s
**SQTA Sankt Quirin** 81.39 335 i P P 06 12 40.5 +0.7
comp=Z,5.7nm,0.7s
**O53A New Philadelph** 81.40 39 P P 06 12 40.0 +0.1
baz=325
**P52A Corning** 81.49 40 P P 06 12 40.1 -0.2
baz=325
**ECH Echery** 81.62 338 P P 06 12 40.1 -0.8
ECH IAmb IAmb 06 12 42.0
comp=Z,4.2nm,0.7s
**ECH Echery** 81.62 338 P P 06 12 40.1 -0.8
ECH pmax pmax
comp=Z,4.0nm,0.7s
**DAVA Damuels** 81.72 336 i P P 06 12 42.1 +0.5
comp=Z,3.8nm,0.4s
**DAVOX Davos/Dischmat** 82.18 335 LR LR 06 52 16.9
comp=Z,35nm,20.9s,baz=40,slow=38
**U49A Red Boiling Sp** 82.30 44 IAmb IAmb 06 12 45.7
comp=Z,4.0nm,0.8s
**L59A Walton** 82.34 34 IAmb IAmb 06 12 45.4
comp=Z,11nm,1.1s
**T50A Nancy** 82.35 43 IAmb IAmb 06 12 46.0
comp=Z,5.3nm,0.8s
**SWET Sewanee** 83.26 45 IAmb IAmb 06 12 50.3
comp=Z,4.6nm,0.8s
**MMAI Mount Meron Ar** 83.36 312 P P 06 12 50.5 +0.2
comp=Z,5.4nm,0.5s,baz=50,slow=6.6,SNR=8.2
MMAI LR LR 06 55 04.4
comp=Z,68nm,18.7s,baz=338,slow=39

comp=Z,5.4nm,0.5s
**RAYN Ar Rayn 84.82 299 P P 06 12 57.7 -0.1**
RAYN IAmb IAmb 06 12 58.7
comp=Z,4.4nm,0.7s
**RAYN Ar Rayn 84.82 299 P P 06 12 57.7 -0.1**
RAYN pmax pmax
comp=Z,4.0nm,0.7s
**VAE Valguarnera 89.04 328** LR LR 06 58 29.0
comp=Z,63nm,18.1s,baz=81,slow=39
**ESDC Sonseca Array 92.33 342** LR LR 07 01 24.5
comp=Z,24nm,18.1s,baz=18,slow=40
**TORD Torodi Ar. Bea 115.80 329** PKP **PKiKP 06 19 04.5 -1.2**
comp=Z,0.2nm,0.5s,baz=67,slow=1.8,SNR=4.4
**H03N2 Juan Fernandez 138.73 91** T T 08 55 27.5
baz=308,slow=77,SNR=21
**H03N3 Juan Fernandez 138.75 91** T T 08 55 32.7
baz=308,slow=77,SNR=42
**H03N1 Juan Fernandez 138.75 91** T T 08 55 28.7
baz=308,slow=77,SNR=23
**ELIB Princess Elisa 145.06 205** *d*PKP **PKPbc 06 19 58.8 +0.3**
**CPUP Villa Florida 148.85 62** PKPbc **PKPbc 06 20 10.4 -0.1**
comp=Z,1.4nm,0.6s,baz=32,slow=0.8,SNR=5.7
**SNAA Sanae 151.77 196** PKPbc **PKPbc 06 20 15.6 -0.5**
comp=Z,0.5nm,0.6s,baz=198,slow=6.4,SNR=1.8

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*MOS* ***28*** *06:12:30.0± 1.1, 45˚.82N× 150˚.52E, h128km, mb4.4/15, Error ellipse: s-maj=9.2km s-min=7.1km az=83.7*
*NEIC* ***28*** *06:12:30.9± 1.6, 45˚.8N± 0˚.1× 150˚.41E± 0˚.10, h112km± 9km, mb4.5/102, Error ellipse: s-maj=22.1km s-min=7.0km az=198.0*
*SKHL* ***28*** *06:12:30.4± 0.3, 45˚.60N× 150˚.60E, h129km± 6km, mb5.5/3, msha6.3/3*
*IDC* ***28*** *06:12:31.9± 0.7, 45˚.99N× 150˚.36E, h124km± 5km, mb3.8/21, mbtmp4.2/27, MS3.2/1, Error ellipse: s-maj=13.4km s-min=10.8km az=153.0*
*JMA* ***28*** *06:12:32.7± 0.4, 45˚N-2˚× 15˚1E± ˚, h127km, MV4.6/15, KURILE ISLANDS REGION*
**ISC 28 06:12:28.9± 0.5, 45.69N± 0˚.05× 150˚.59E± 0˚.05, h106km± 4km, h106km:pP-P, n376, σ1°.34/361, mb4.4/102, 7C-5D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.97** | **258** | *i* P | | **Pn** | **06 13 04.6** | **+3.3** |
| KUR | | | | AMB | | AMB | 06 13 05.0 | |
| | 630nm,0.3s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **06 13 30.0** | **+4.0** |
| KUR | | | | A | | A | 06 13 31.2 | |
| | 2μm,0.5s | | | | | | | |
| KUR | | | | A | | A | 06 13 31.2 | |
| | 10μm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.97** | **258** | *d i* PN | | **Pn** | **06 13 04.6** | **+3.3** |
| KUR | | | | *i* S | | **Sn** | **06 13 29.8** | **+3.8** |
| KUR | | | | pmax | pmax | | | |
| | comp=E,148nm,0.2s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,628nm,0.2s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=N,135nm,0.3s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=E,10μm,0.4s | | | | | | | |
| KUR | | | | smax | smax | | | |
| | comp=N,2μm,0.6s | | | | | | | |
| **SHO** | **Shikotan** | **3.24** | **237** | *e*P | | **Pn** | **06 13 19.4** | **+1.5** |
| SHO | | | | AMB | | AMB | 06 13 20.9 | |
| | comp=N,70nm,0.2s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **06 13 54.7** | **-1.1** |
| SHO | | | | A | | A | 06 13 59.6 | |
| | comp=N,990nm,0.4s | | | | | | | |
| SHO | | | | A | | A | 06 13 59.6 | |
| | comp=N,1μm,0.4s | | | | | | | |
| **SHO** | **Shikotan** | **3.24** | **237** | *e*PN | | **Pn** | **06 13 19.4** | **+1.5** |
| SHO | | | | *e*S | | **Sn** | **06 13 54.7** | **-1.1** |
| SHO | | | | pmax | pmax | | | |
| | comp=Z,74nm,0.1s | | | | | | | |
| SHO | | | | pmax | pmax | | | |
| | comp=N,32nm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=N,2μm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=E,1μm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.75** | **245** | *e*P | | **Pn** | **06 13 27.7** | **+3.0** |
| YUK | | | | AMB | | AMB | 06 13 28.6 | |
| | comp=E,760nm,0.3s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **06 14 09.5** | **+1.5** |
| YUK | | | | A | | A | 06 14 14.2 | |
| | comp=E,670nm,0.4s | | | | | | | |
| YUK | | | | A | | A | 06 14 14.2 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.75** | **245** | *e*PN | | **Pn** | **06 13 27.7** | **+3.0** |
| YUK | | | | *e*S | | **Sn** | **06 14 09.3** | **+1.3** |
| YUK | | | | pmax | pmax | | | |
| | comp=N,620nm,0.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,2μm,0.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=E,877nm,0.1s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=N,1μm,0.2s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=E,2μm,0.4s | | | | | | | |
| **NEM2** | **Nemuro 2** | **4.18** | **238** | *e*P | | **Pn** | **06 13 31.8** | **+1.3** |
| NEM2 | | | | *e*S | | **Sn** | **06 14 16.5** | **-1.8** |
| **JRA** | **Rausu** | **4.27** | **248** | *e*P | | **Pn** | **06 13 34.4** | **+2.7** |
| JRA | | | | *e*S | | **Sn** | **06 14 21.8** | **+1.3** |
| **JNK** | **Nakash** | **4.69** | **245** | *e*P | | **Pn** | **06 13 40.0** | **+2.5** |
| JNK | | | | *e*S | | **Sn** | **06 14 31.6** | **+0.9** |
| **JAK** | **Akkeshi** | **5.01** | **240** | *e*P | | **Pn** | **06 13 42.8** | **+1.0** |
| JAK | | | | *e*S | | **Sn** | **06 14 36.4** | **-2.2** |
| **JTKR** | **Abashiri--Toko** | **5.06** | **252** | P | | **Pn** | **06 13 45.2** | **+2.8** |
| JTKR | | | | *e*S | | **Sn** | **06 14 42.5** | **+3.0** |
| **JAR** | **Ashorobuto** | **5.44** | **246** | P | | **Pn** | **06 13 50.1** | **+2.6** |
| JAR | | | | *e*S | | **Sn** | **06 14 49.9** | **+1.1** |
| **YSS** | **Yuzh-Sakhalins** | **5.58** | **286** | Pn | | **Pn** | **06 13 49.3** | **0.0** |
| **YSS** | **Yuzh-Sakhalins** | **5.58** | **286** | *e*P | | **Pn** | **06 13 52.5** | **+3.2** |
| YSS | | | | AMB | | AMB | 06 13 56.0 | |
| | comp=E,20nm,0.4s | | | | | | | |
| YSS | | | | *e*S | | **Sn** | **06 14 54.3** | **+2.3** |
| YSS | | | | A | | A | 06 14 56.1 | |
| | comp=E,30nm,0.3s | | | | | | | |
| YSS | | | | A | | A | 06 14 56.1 | |
| | comp=E,20nm,0.3s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.58** | **286** | *e*PN | | **Pn** | **06 13 52.5** | **+3.2** |
| YSS | | | | *e*S | | **Sn** | **06 14 54.3** | **+2.3** |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.0s | | | | | | | |
| YSS | | | | smax | smax | | | |
| | comp=N,60nm,0.7s | | | | | | | |
| **JOB** | **Onbets** | **5.59** | **243** | P | | **Pn** | **06 13 51.3** | **+1.7** |
| JOB | | | | *e*S | | **Sn** | **06 14 51.6** | **-0.9** |
| **JKK2** | **Kamakawa 2** | **5.87** | **255** | P | | **Pn** | **06 13 56.6** | **+3.2** |
| **JKA** | **Kamikawa-asahi** | **5.89** | **257** | Pn | | **Pn** | **06 13 55.6** | **+2.0** |
| **JKA** | **Kamikawa-asahi** | **5.89** | **257** | *e*P | | **Pn** | **06 13 57.3** | **+3.6** |
| **ASAJ** | **Asahikawa** | **5.89** | **257** | P | | **Pn** | **06 13 57.3** | **+3.6** |
| | comp=N,56nm,0.6s,baz=84,slow=14,SNR=42 | | | | | | | |
| **JCH** | **Churui** | **6.04** | **242** | *e*P | | **Pn** | **06 13 57.0** | **+1.2** |
| JCH | | | | *e*S | | **Sn** | **06 15 00.3** | **-3.1** |
| **JWK2** | **Keihoku** | **6.12** | **270** | *e*P | | **Pn** | **06 14 01.1** | **+4.3** |
| **SKR** | **Severo-Kuril's** | **6.21** | **34** | *e*P | | **Pn** | **06 13 58.7** | **+0.8** |
| SKR | | | | AMB | | AMB | 06 14 01.2 | |
| | comp=N,120nm,0.8s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **6.21** | **34** | *e*PN | | **Pn** | **06 13 57.7** | **-0.2** |
| **JAB** | **Ashibetsu** | **6.36** | **253** | *e*P | | **Pn** | **06 14 03.7** | **+3.6** |
| **ERM** | **Erimo** | **6.51** | **238** | Pn | | **Pn** | **06 14 04.8** | **+2.8** |
| **ERM** | **Erimo** | **6.51** | **238** | *c i* PN | | **Pn** | **06 14 04.7** | **+2.6** |
| **JNBK** | **Urakawa-nobuka** | **6.61** | **242** | *e*P | | **Pn** | **06 14 04.0** | **+0.7** |
| JNBK | | | | *e*S | | Sn | 06 15 11.1 | -6.0 |
| **TYV** | **Tymovskoe** | **7.40** | **317** | *e*P | | **Pn** | **06 14 16.9** | **+2.8** |
| TYV | | | | AMB | | AMB | 06 14 18.5 | |
| | comp=N,10.0nm,0.5s | | | | | | | |
| **TYV** | **Tymovskoe** | **7.40** | **317** | *e*PN | | **Pn** | **06 14 16.3** | **+2.2** |
| TYV | | | | *e*S | | **Sn** | **06 15 38.7** | **+2.4** |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,100nm,4.0s | | | | | | | |
| TYV | | | | smax | smax | | | |
| | comp=N,3.0nm,1.2s | | | | | | | |
| TYV | | | | smax | smax | | | |
| | comp=E,3.0nm,1.2s | | | | | | | |
| TYV | | | | smax | smax | | | |
| | comp=N,100nm,5.1s | | | | | | | |
| **JTM** | **Tenmabayashi** | **8.51** | **238** | Pn | | **Pn** | **06 14 29.4** | **+0.3** |
| **JANG** | **Nango** | **8.51** | **235** | *e*P | | **Pn** | **06 14 27.9** | **-1.3** |
| JANG | | | | *e*S | | Sn | 06 15 56.0 | -7.4 |
| **JTH** | **Tanohata** | **8.61** | **231** | *e*S | | Sn | 06 15 55.7 | -10 |
| **PETK** | **Petropavlovsk-** | **8.74** | **29** | P | | **Pn** | **06 14 32.5** | **+0.2** |
| | comp=E,5.9nm,0.5s,baz=217,slow=13,SNR=14 | | | | | | | |
| **JMM** | **Marumori** | **10.70** | **227** | Pn | | **Pn** | **06 14 58.3** | **-0.6** |
| **MJA0** | **Matsu Arr-Jizo** | **13.03** | **230** | *e*PN | | **Pn** | **06 15 31.1** | **+1.2** |
| MJA0 | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **13.05** | **230** | P | | **Pn** | **06 15 30.6** | **+0.4** |
| | comp=Z,3.4nm,0.6s,baz=31,slow=14,SNR=10 | | | | | | | |
| **KLR** | **Kul'dur** | **13.23** | **292** | P | | **Pn** | **06 15 31.8** | **-0.5** |
| | comp=Z,2.0nm,0.7s,baz=102,slow=16,SNR=6.1 | | | | | | | |
| **KLR** | **Kul'dur** | **13.23** | **292** | *e*P | | **Pn** | **06 15 32.4** | **0.0** |
| **KLR** | **Kul'dur** | **13.23** | **292** | *e*PN | | **Pn** | **06 15 32.4** | **0.0** |
| KLR | | | | pmax | pmax | | | |
| | comp=E,5.0nm,1.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **13.27** | **270** | P | | **Pn** | **06 15 33.6** | **+0.7** |
| | comp=Z,5.7nm,0.8s,baz=75,slow=9.4,SNR=10 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **15.06** | **217** | LR | | LR | 06 20 46.0 | |
| | comp=Z,100nm,20.9s,baz=342,slow=32 | | | | | | | |
| **SEY** | **Seymchan** | **17.31** | **3** | P | | **Pn** | **06 16 21.4** | **-2.1** |
| | comp=Z,4.3nm,0.8s,baz=184,slow=10,SNR=7.7 | | | | | | | |
| **SEY** | **Seymchan** | **17.31** | **3** | *e*P | | **Pn** | **06 16 20.1** | **-3.4** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.5s | | | | | | | |
| **CN2** | **Changchun** | **17.94** | **273** | P | | **P** | **06 16 32.0** | **+1.5** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **KSRS** | **Korea Array** | **18.81** | **252** | P | | **P** | **06 16 40.8** | **+0.8** |
| | comp=Z,3.7nm,0.5s,baz=55,slow=12,SNR=14 | | | | | | | |
| KSRS | | | | pP | | **sP** | **06 17 09.0** | **-3.7** |
| | comp=Z,3.3nm,0.6s,baz=97,slow=26,SNR=6.0 | | | | | | | |
| **YAK** | **Yakutsk** | **20.33** | **331** | *i* P | | **P** | **06 16 56.0** | **-0.3** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **BILL** | **Bilibino** | **23.84** | **15** | *e*P | | **P** | **06 17 33.3** | **+1.5** |
| **BILL** | **Bilibino** | **23.84** | **15** | *i* P | | **P** | **06 17 33.3** | **+1.5** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,2.2s | | | | | | | |
| **NJ2** | **Nanjing** | **28.01** | **252** | *e*P | | **P** | **06 18 10.5** | **+0.8** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,140nm,3.5s | | | | | | | |
| **TIXI** | **Tiksi** | **28.02** | **346** | *e*P | | **P** | **06 18 10.4** | **+1.0** |
| **TIXI** | **Tiksi** | **28.02** | **346** | *e*P | | **P** | **06 18 10.4** | **+1.0** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **28.63** | **274** | *i* P | | **P** | **06 18 16.8** | **+1.5** |
| HHC | | | | pP | | pP | 06 18 39.8 | +1.0 |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.18** | **147** | T | | T | 06 50 01.1 | |
| | baz=336,slow=75 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.20** | **147** | T | | T | 06 50 05.4 | |
| | baz=336,slow=75 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.20** | **147** | T | | T | 06 50 03.5 | |
| | baz=336,slow=75 | | | | | | | |
| **M11K** | **Mekoryuk** | **29.21** | **44** | P | | **P** | **06 18 21.5** | **+1.4** |
| | baz=260 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.61** | **290** | *e*P | | **P** | **06 18 21.9** | **-2.0** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **TNA** | **Tin City** | **29.88** | **34** | P | | **P** | **06 18 27.2** | **+1.2** |
| | baz=249 | | | | | | | |
| **SONM** | **Songino Array** | **30.05** | **290** | PcP | | **PcP** | **06 21 25.8** | **-1.3** |
| | comp=Z,0.6nm,0.6s,baz=90,slow=4.3,SNR=3.2 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.23** | **148** | T | | T | 06 51 19.8 | |
| | baz=337,slow=76 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.23** | **149** | T | | T | 06 51 24.0 | |
| | baz=337,slow=76 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.24** | **148** | T | | T | 06 51 19.9 | |
| | baz=337,slow=76 | | | | | | | |
| **ANM** | **Nome** | **30.58** | **36** | P | | **P** | **06 18 32.6** | **+0.4** |
| | baz=254 | | | | | | | |
| **J14K** | **Nanvaranak Lak** | **30.92** | **40** | P | | **P** | **06 18 36.0** | **+0.9** |
| | baz=259 | | | | | | | |
| **L14K** | **Kuka Creek** | **31.07** | **43** | P | | **P** | **06 18 37.1** | **+0.6** |
| | baz=262 | | | | | | | |
| **O14K** | **Tigyukauivet M** | **31.55** | **47** | P | | **P** | **06 18 41.6** | **+0.9** |
| | baz=267 | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **31.76** | **41** | P | | **P** | **06 18 43.0** | **+0.5** |
| | baz=261 | | | | | | | |
| **M15K** | **Kasigluk River** | **31.95** | **44** | P | | **P** | **06 18 44.7** | **+0.5** |
| | baz=265 | | | | | | | |
| **D17K** | **Noatak River** | **32.44** | **31** | P | | **P** | **06 18 47.7** | **-0.7** |
| | baz=251 | | | | | | | |
| **L16K** | **Owhat River** | **32.64** | **43** | P | | **P** | **06 18 49.9** | **-0.3** |
| | baz=264 | | | | | | | |
| **E17K** | **Hotham Inlet** | **32.71** | **32** | P | | **P** | **06 18 49.4** | **-1.3** |
| | baz=254 | | | | | | | |
| **F17K** | **Baldwin Pennin** | **32.75** | **34** | P | | **P** | **06 18 51.2** | **+0.2** |
| **F17K** | **Baldwin Pennin** | **32.75** | **34** | P | | **P** | **06 18 49.8** | **-1.3** |
| | baz=255 | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **32.76** | **35** | P | | **P** | **06 18 51.3** | **+0.1** |
| | baz=257 | | | | | | | |
| **N16K** | **Nishlik Lake** | **32.88** | **45** | P | | **P** | **06 18 53.2** | **+0.8** |
| | baz=267 | | | | | | | |
| **H17K** | **Granite Mounta** | **32.94** | **37** | P | | **P** | **06 18 53.4** | **+0.5** |
| | baz=259 | | | | | | | |
| **J17K** | **VABM Dome** | **33.04** | **39** | P | | **P** | **06 18 54.0** | **+0.4** |
| | baz=262 | | | | | | | |
| **O16K** | **Kokwok River B** | **33.18** | **47** | P | | **P** | **06 18 56.1** | **+1.2** |
| | baz=269 | | | | | | | |
| **L17K** | **Donlin** | **33.24** | **42** | P | | **P** | **06 18 56.3** | **+0.9** |
| | baz=265 | | | | | | | |
| **K17K** | **Iditarod** | **33.30** | **41** | P | | **P** | **06 18 56.2** | **+0.3** |
| | baz=264 | | | | | | | |
| **F18K** | **Selawik** | **33.41** | **34** | P | | **P** | **06 18 57.2** | **+0.4** |
| | baz=257 | | | | | | | |
| **B18K** | **Kokolik River** | **33.44** | **28** | P | | **P** | **06 18 57.6** | **+0.6** |
| | baz=250 | | | | | | | |
| **M17K** | **Holitna River** | **33.59** | **43** | P | | **P** | **06 18 59.0** | **+0.6** |
| | baz=267 | | | | | | | |
| **H18K** | **Honhosa River** | **33.63** | **36** | P | | **P** | **06 18 58.7** | **-0.1** |
| | baz=260 | | | | | | | |
| **G18K** | **Tagagawik** | **33.65** | **35** | P | | **P** | **06 18 59.8** | **+0.8** |
| | baz=259 | | | | | | | |
| **N17K** | **Nushagak Hills** | **33.67** | **45** | P | | **P** | **06 18 59.2** | **0.0** |
| | baz=268 | | | | | | | |
| **XAN** | **Xi'an** | **33.68** | **265** | *e*P | | P | 06 18 50.5 | -9.1 |
| **O17K** | **Koliganek Bris** | **33.69** | **46** | P | | **P** | **06 18 59.8** | **+0.5** |
| | baz=270 | | | | | | | |
| **A19K** | **Wainwright** | **33.97** | **27** | P | | **P** | **06 19 02.1** | **+0.4** |
| | baz=250 | | | | | | | |
| **L18K** | **Granite Mounta** | **34.00** | **42** | P | | **P** | **06 19 01.3** | **-0.7** |
| | baz=266 | | | | | | | |
| **J18K** | **Innoko River** | **34.10** | **40** | P | | **P** | **06 19 02.5** | **-0.4** |
| | baz=264 | | | | | | | |
| **C19K** | **Lookout Ridge** | **34.10** | **29** | P | | **P** | **06 19 02.8** | **-0.1** |
| C19K | | | | | | IAmb | IAmb | 06 19 05.0 |
| | comp=Z,15nm,1.4s | | | | | | | |
| **C19K** | **Lookout Ridge** | **34.10** | **29** | P | | **P** | **06 19 02.7** | **-0.2** |
| | baz=253 | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **34.19** | **34** | P | | **P** | **06 19 02.8** | **-0.8** |
| **F19K** | **Shaleruckik Mo** | **34.19** | **34** | P | | **P** | **06 19 02.8** | **-0.8** |
| | baz=258 | | | | | | | |
| **N18K** | **Kilae Creek** | **34.31** | **45** | P | | **P** | **06 19 04.5** | **-0.3** |
| | baz=269 | | | | | | | |
| **G19K** | **Purcell Mounta** | **34.33** | **35** | P | | **P** | **06 19 04.1** | **-0.7** |
| | baz=260 | | | | | | | |
| **D19K** | **Kuna River** | **34.45** | **31** | P | | **P** | **06 19 06.6** | **+0.7** |
| D19K | | | | | | IAmb | IAmb | 06 19 07.4 |
| | comp=Z,10nm,0.8s | | | | | | | |
| **D19K** | **Kuna River** | **34.45** | **31** | P | | **P** | **06 19 05.6** | **-0.3** |
| | baz=256,SNR=5.9 | | | | | | | |
| **H19K** | **Roundabout Mou** | **34.48** | **36** | P | | **P** | **06 19 06.8** | **+0.7** |
| **H19K** | **Roundabout Mou** | **34.48** | **36** | P | | **P** | **06 19 05.6** | **-0.5** |
| | baz=262,SNR=8.8 | | | | | | | |
| **E19K** | **Redstone River** | **34.53** | **32** | P | | **P** | **06 19 07.6** | **+1.1** |
| E19K | | | | | | IAmb | IAmb | 06 19 08.3 |
| | comp=Z,9.5nm,1.1s | | | | | | | |
| **E19K** | **Redstone River** | **34.53** | **32** | P | | **P** | **06 19 06.1** | **-0.4** |
| | baz=258,SNR=6.7 | | | | | | | |
| **J19K** | **Poorman** | **34.64** | **39** | P | | **P** | **06 19 07.2** | **-0.3** |
| | baz=265 | | | | | | | |
| **O18K** | **Koktuh Hills** | **34.65** | **46** | P | | **P** | **06 19 07.7** | **+0.1** |
| | baz=271 | | | | | | | |
| **N19K** | **Bonanza Creek** | **35.00** | **44** | P | | **P** | **06 19 11.7** | **+0.9** |
| | baz=270 | | | | | | | |
| **F20K** | **Avaraart Lake** | **35.02** | **33** | P | | **P** | **06 19 11.3** | **+0.5** |
| | baz=260 | | | | | | | |
| **D20K** | **Etivluk River** | **35.04** | **30** | P | | **P** | **06 19 10.6** | **-0.3** |
| | baz=257,SNR=13 | | | | | | | |
| **M19K** | **Big River Lodg** | **35.06** | **42** | P | | **P** | **06 19 11.1** | **-0.1** |
| | baz=269 | | | | | | | |
| **E20K** | **Nigu River** | **35.09** | **31** | P | | **P** | **06 19 11.1** | **-0.3** |
| | baz=258,SNR=13 | | | | | | | |
| **H20K** | **Anotleneega Mo** | **35.12** | **36** | P | | **P** | **06 19 11.3** | **-0.4** |
| | baz=263 | | | | | | | |
| **B20K** | **Meade River** | **35.18** | **28** | P | | **P** | **06 19 12.2** | **+0.2** |
| | baz=254 | | | | | | | |
| **K20K** | **Telida** | **35.28** | **40** | P | | **P** | **06 19 13.5** | **+0.5** |
| | baz=267 | | | | | | | |
| **J20K** | **Nowinta River** | **35.30** | **39** | P | | **P** | **06 19 14.4** | **+1.2** |
| J20K | | | | | | IAmb | IAmb | 06 19 15.2 |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **J20K** | **Nowinta River** | **35.30** | **39** | P | | **P** | **06 19 13.3** | **+0.1** |
| | baz=266 | | | | | | | |
| **L20K** | **Farewell, AK** | **35.32** | **41** | P | | **P** | **06 19 13.6** | **+0.2** |
| | baz=268 | | | | | | | |
| **Q19K** | **Cape Douglas,** | **35.48** | **48** | P | | **P** | **06 19 15.1** | **+0.3** |
| | baz=274 | | | | | | | |
| **M20K** | **Styx River** | **35.66** | **43** | P | | **P** | **06 19 17.3** | **+0.9** |
| | baz=270 | | | | | | | |
| **A21K** | **Barrow** | **35.73** | **26** | P | | **P** | **06 19 17.0** | **+0.3** |
| | baz=253 | | | | | | | |
| **C21K** | **Knifeblade Rid** | **35.78** | **30** | P | | **P** | **06 19 17.5** | **+0.2** |
| | baz=258,SNR=8.1 | | | | | | | |
| **G21K** | **Allakaket** | **35.81** | **35** | P | | **P** | **06 19 18.6** | **+1.1** |
| G21K | | | | | | IAmb | IAmb | 06 19 19.5 |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **G21K** | **Allakaket** | **35.81** | **35** | P | | **P** | **06 19 18.1** | **+0.6** |
| | baz=263,SNR=7.4 | | | | | | | |
| **F21K** | **Alatna River** | **35.92** | **33** | P | | **P** | **06 19 19.2** | **+0.7** |
| F21K | | | | | | IAmb | IAmb | 06 19 20.1 |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **F21K** | **Alatna River** | **35.92** | **33** | P | | **P** | **06 19 19.3** | **+0.9** |
| | baz=262 | | | | | | | |
| **E21K** | **Kilik River** | **35.93** | **31** | P | | **P** | **06 19 19.3** | **+0.7** |
| | baz=260 | | | | | | | |
| **B21K** | **Ikpikpuk River** | **35.94** | **29** | P | | **P** | **06 19 18.8** | **+0.3** |
| | baz=258,SNR=21 | | | | | | | |
| **H21K** | **Melozitna River** | **36.00** | **36** | P | | **P** | **06 19 20.3** | **+1.1** |
| H21K | | | | | | IAmb | IAmb | 06 19 20.6 |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **H21K** | **Melozitna River** | **36.00** | **36** | P | | **P** | **06 19 19.4** | **+0.2** |
| | baz=265 | | | | | | | |
| **KDAK** | **Kodiak Island** | **36.12** | **50** | P | | **P** | **06 19 20.6** | **+0.3** |
| **KDAK** | **Kodiak Island** | **36.12** | **50** | *i* P | | **P** | **06 19 20.2** | **-0.1** |
| KDAK | | | | pmax | pmax | | | |
| | comp=E,61nm,3.0s | | | | | | | |
| **A22K** | **Sinclair Lake** | **36.15** | **27** | P | | **P** | **06 19 20.2** | **-0.1** |
| | baz=256 | | | | | | | |
| **LZH** | **Lanzhou** | **36.17** | **271** | *e*P | | P | 06 19 27.8 | +6.6 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.0s | | | | | | | |
| **I21K** | **Tanana** | **36.30** | **37** | P | | **P** | **06 19 21.6** | **-0.2** |
| | baz=266 | | | | | | | |
| **F22K** | **John River** | **36.45** | **33** | P | | **P** | **06 19 24.1** | **+1.1** |
| | baz=263 | | | | | | | |
| **D22K** | **Ayikyak River** | **36.47** | **31** | P | | **P** | **06 19 24.2** | **+1.0** |
| | baz=261 | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **36.50** | **28** | P | | **P** | **06 19 23.9** | **+0.6** |
| | baz=258 | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **36.61** | **36** | P | | **P** | **06 19 24.0** | **-0.4** |
| | baz=266 | | | | | | | |
| **G22K** | **Bettles** | **36.65** | **34** | P | | **P** | **06 19 24.4** | **-0.2** |
| | baz=264 | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **36.67** | **32** | P | | **P** | **06 19 24.6** | **-0.4** |
| | baz=263,SNR=29 | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **36.68** | **39** | P | | **P** | **06 19 25.4** | **+0.4** |
| | baz=269 | | | | | | | |
| **SUA** | **Susitna One** | **36.80** | **43** | P | | **P** | **06 19 26.7** | **+0.5** |
| SUA | | | | | | IAmb | IAmb | 06 19 29.5 |
| | comp=Z,5.6nm,1.0s | | | | | | | |
| **MLY** | **Manley** | **36.82** | **37** | P | | **P** | **06 19 27.3** | **+1.1** |
| **MLY** | **Manley** | **36.82** | **37** | P | | **P** | **06 19 26.3** | **+0.1** |
| | baz=268 | | | | | | | |
| **COLD** | **Coldfoot** | **37.19** | **34** | P | | **P** | **06 19 29.3** | **+0.2** |
| | baz=265,SNR=5.6 | | | | | | | |
| **D23K** | **Nanushuk River** | **37.20** | **31** | P | | **P** | **06 19 30.6** | **+1.2** |
| D23K | | | | | | IAmb | IAmb | 06 19 31.4 |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **D23K** | **Nanushuk River** | **37.20** | **31** | P | | **P** | **06 19 29.6** | **+0.3** |
| | baz=263,SNR=5.6 | | | | | | | |
| **G23K** | **Bananza Creek** | **37.21** | **34** | IAmb | | IAmb | 06 19 31.2 | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| **G23K** | **Bananza Creek** | **37.21** | **34** | P | | **P** | **06 19 29.3** | **-0.2** |
| | baz=266,SNR=5.8 | | | | | | | |
| **C23K** | **Itkillik River** | **37.35** | **29** | P | | **P** | **06 19 30.5** | **0.0** |
| | baz=262,SNR=8.5 | | | | | | | |
| **H23K** | **Yukon River** | **37.35** | **36** | P | | **P** | **06 19 30.9** | **+0.2** |
| | baz=268 | | | | | | | |
| **GTA** | **Gaotai** | **37.41** | **279** | P | | **P** | **06 19 33.0** | **+1.4** |
| GTA | | | | sP | | sP | 06 20 05.5 | -2.4 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **37.41** | **37** | P | | **P** | **06 19 32.0** | **+0.9** |
| | baz=269 | | | | | | | |
| **E23K** | **Chandalar** | **37.48** | **32** | P | | **P** | **06 19 33.1** | **+1.3** |
| **E23K** | **Chandalar** | **37.48** | **32** | P | | **P** | **06 19 32.2** | **+0.3** |
| | baz=265,SNR=10 | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **37.56** | **31** | P | | **P** | **06 19 32.8** | **+0.4** |
| | baz=264,SNR=8.5 | | | | | | | |
| **PMR** | **Palmer** | **37.57** | **43** | P | | **P** | **06 19 33.5** | **+1.0** |
| | baz=274 | | | | | | | |
| **MCK** | **McKinley** | **37.58** | **39** | P | | **P** | **06 19 33.6** | **+0.9** |
| | baz=271 | | | | | | | |
| **MDM** | **Murphy Dome** | **37.88** | **37** | P | | **P** | **06 19 36.5** | **+1.3** |
| MDM | | | | | | IAmb | IAmb | 06 19 37.1 |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| **D24K** | **Happy Valley** | **37.89** | **31** | P | | **P** | **06 19 35.4** | **+0.3** |
| | baz=264 | | | | | | | |
| **KNK** | **Knik Glacier** | **37.90** | **43** | P | | **P** | **06 19 35.7** | **+0.3** |
| | baz=274 | | | | | | | |
| **E24K** | **Your Creek** | **37.91** | **32** | P | | **P** | **06 19 36.1** | **+0.7** |
| | baz=266 | | | | | | | |
| **SML** | **Sawmill** | **37.94** | **43** | P | | **P** | **06 19 36.6** | **+0.9** |
| **SML** | **Sawmill** | **37.94** | **43** | P | | **P** | **06 19 35.8** | **+0.2** |
| | baz=274,SNR=6.7 | | | | | | | |
| **C24K** | **Franklin Bluff** | **37.99** | **30** | P | | **P** | **06 19 36.3** | **+0.4** |
| | baz=264 | | | | | | | |
| **H24K** | **Noodor Dome** | **38.04** | **36** | P | | **P** | **06 19 37.1** | **+0.6** |
| | baz=269 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **38.07** | **38** | IAmb | | IAmb | 06 19 38.5 | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| **F24K** | **Squaw Lake** | **38.10** | **33** | IAmb | | IAmb | 06 19 39.0 | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **F24K

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HARP | **HAARP** | 39.38 | 41 | P | | P | 06 19 48.4 | +0.8 |
| | baz=276 | | | | | | | |
| RIDG | **Independent Ri** | 39.40 | 39 | P | | P | 06 19 48.6 | +0.7 |
| | baz=275 | | | | | | | |
| F26K | **Sheenjek River** | 39.54 | 33 | P | | P | 06 19 50.5 | +1.6 |
| F26K | | | | IAmb | | IAmb | 06 19 51.5 | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| F26K | **Sheenjek River** | 39.54 | 33 | P | | P | 06 19 49.3 | +0.3 |
| | baz=270 | | | | | | | |
| G26K | **Porcupine Rive** | 39.69 | 34 | P | | P | 06 19 50.3 | +0.2 |
| | baz=272,SNR=8.7 | | | | | | | |
| C27K | **Jago River** | 39.73 | 30 | P | | P | 06 19 50.4 | 0.0 |
| | baz=268,SNR=10.0 | | | | | | | |
| SCRK | **Sand Creek** | 39.76 | 39 | P | | P | 06 19 50.4 | -0.5 |
| | baz=275 | | | | | | | |
| BMRM | **Bremner River** | 39.81 | 44 | P | | P | 06 19 50.9 | -0.3 |
| | baz=278 | | | | | | | |
| J26L | **Joseph Creek** | 39.90 | 38 | P | | P | 06 19 51.4 | -0.6 |
| | baz=275 | | | | | | | |
| L26K | **Log Cabin Wild** | 40.14 | 40 | P | | P | 06 19 54.5 | +0.5 |
| | baz=277 | | | | | | | |
| M26K | **Nabesna, AK** | 40.38 | 41 | P | | P | 06 19 57.7 | +1.8 |
| M26K | | | | IAmb | | IAmb | 06 19 58.7 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| M26K | **Nabesna, AK** | 40.38 | 41 | P | | P | 06 19 56.0 | 0.0 |
| | baz=278,SNR=5.3 | | | | | | | |
| E27K | **Coleen River** | 40.49 | 32 | IAmb | | IAmb | 06 19 59.0 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| E27K | **Coleen River** | 40.49 | 32 | P | | P | 06 19 57.1 | +0.3 |
| | baz=272 | | | | | | | |
| G27K | **Doyon Strip** | 40.53 | 34 | P | | P | 06 19 59.0 | +1.9 |
| G27K | **Doyon Strip** | 40.53 | 34 | P | | P | 06 19 57.6 | +0.5 |
| | baz=274 | | | | | | | |
| CRQE | **Cirque** | 40.57 | 44 | P | | P | 06 19 58.0 | +0.4 |
| | baz=280 | | | | | | | |
| K27K | **Chicken** | 40.59 | 39 | P | | P | 06 19 58.1 | +0.5 |
| | baz=277 | | | | | | | |
| H27K | **Steamboat Moun** | 40.62 | 35 | P | | P | 06 19 58.7 | +0.8 |
| | baz=275,SNR=5.5 | | | | | | | |
| I27K | **Kandik River** | 40.64 | 36 | P | | P | 06 19 58.2 | +0.1 |
| | baz=275 | | | | | | | |
| D27M | **Malcolm River** | 40.69 | 31 | P | | P | 06 19 58.2 | -0.2 |
| | baz=272 | | | | | | | |
| L27K | **Beaver Creek,** | 40.82 | 40 | P | | P | 06 20 01.5 | +2.0 |
| L27K | | | | IAmb | | IAmb | 06 20 02.2 | |
| | comp=Z,7.3nm,0.6s | | | | | | | |
| L27K | **Beaver Creek,** | 40.82 | 40 | P | | P | 06 20 00.0 | +0.5 |
| | baz=278,SNR=10 | | | | | | | |
| M27K | **Edge Creek, AK** | 40.90 | 41 | P | | P | 06 20 00.1 | -0.2 |
| | baz=279 | | | | | | | |
| EGAK | **Eagle** | 40.91 | 37 | P | | P | 06 20 00.9 | +0.7 |
| EGAK | | | | IAmb | | IAmb | 06 20 01.4 | |
| | comp=Z,6.9nm,1.1s | | | | | | | |
| EGAK | **Eagle** | 40.91 | 37 | P | | P | 06 20 00.1 | -0.1 |
| | baz=277,SNR=5.2 | | | | | | | |
| F28M | **Old Crow** | 41.17 | 33 | P | | P | 06 20 03.9 | +1.5 |
| F28M | | | | IAmb | | IAmb | 06 20 04.9 | |
| | comp=Z,6.6nm,0.8s | | | | | | | |
| F28M | **Old Crow** | 41.17 | 33 | P | | P | 06 20 01.8 | -0.6 |
| | baz=274 | | | | | | | |
| E28M | **Babbage River** | 41.23 | 32 | P | | P | 06 20 02.3 | -0.5 |
| | baz=274 | | | | | | | |
| I28M | **Miner Creek** | 41.35 | 36 | IAmb | | IAmb | 06 20 06.0 | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| I28M | **Miner Creek** | 41.35 | 36 | P | | P | 06 20 03.9 | -0.1 |
| | baz=277,SNR=9.2 | | | | | | | |
| CTG | **Chitna Glacier** | 41.38 | 43 | P | | P | 06 20 04.0 | -0.3 |
| | baz=281 | | | | | | | |
| YUK3 | **Moose Creek** | 41.65 | 42 | P | | P | 06 20 06.7 | +0.2 |
| | baz=280 | | | | | | | |
| DAWY | **Dawson** | 41.76 | 38 | P | | P | 06 20 07.3 | 0.0 |
| | baz=279 | | | | | | | |
| ZALV | **Zalesovo Beam** | 41.81 | 306 | PcP | | PcP | 06 22 01.4 | -0.3 |
| | comp=Z,1.4nm,0.6s,baz=95,slow=3.0,SNR=6.0 | | | | | | | |
| E29M | **Blow River** | 41.85 | 32 | IAmb | | IAmb | 06 20 10.5 | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| E29M | **Blow River** | 41.85 | 32 | P | | P | 06 20 08.4 | +0.5 |
| | baz=275 | | | | | | | |
| H29M | **Whitestone** | 41.90 | 35 | IAmb | | IAmb | 06 20 18.5 | |
| | comp=Z,6.9nm,1.1s | | | | | | | |
| H29M | **Whitestone** | 41.90 | 35 | P | | P | 06 20 08.3 | 0.0 |
| | baz=277 | | | | | | | |
| G29M | **Pine Creek** | 41.95 | 34 | IAmb | | IAmb | 06 20 11.6 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| G29M | **Pine Creek** | 41.95 | 34 | P | | P | 06 20 08.9 | +0.2 |
| | baz=277,SNR=5.7 | | | | | | | |
| O28M | **Mount Upton** | 41.97 | 43 | P | | P | 06 20 09.1 | -0.1 |
| | baz=282 | | | | | | | |
| I29M | **Ogilvie Camp,** | 42.03 | 36 | IAmb | | IAmb | 06 20 11.4 | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| I29M | **Ogilvie Camp,** | 42.03 | 36 | P | | P | 06 20 09.4 | 0.0 |
| | baz=278,SNR=5.9 | | | | | | | |
| M29M | **Somme Creek** | 42.45 | 41 | P | | P | 06 20 12.8 | -0.1 |
| | baz=281 | | | | | | | |
| EPYK | **Eagle Plains** | 42.54 | 35 | IAmb | | IAmb | 06 20 16.3 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| EPYK | **Eagle Plains** | 42.54 | 35 | P | | P | 06 20 13.3 | -0.2 |
| | baz=279,SNR=6.9 | | | | | | | |
| PNL | **Peninsula** | 42.59 | 45 | P | | P | 06 20 12.9 | -1.2 |
| | baz=284 | | | | | | | |
| K29M | **Barlow Dome** | 42.61 | 38 | P | | P | 06 20 13.9 | -0.3 |
| | baz=281 | | | | | | | |
| G30M | **tAoh Zraii Nji** | 42.65 | 34 | P | | P | 06 20 13.7 | -0.7 |
| | baz=278 | | | | | | | |
| F30M | **Barrier River** | 42.73 | 33 | P | | P | 06 20 13.9 | -1.1 |
| | baz=278,SNR=9.2 | | | | | | | |
| YUK6 | **Outpost Mounta** | 42.81 | 43 | P | | P | 06 20 15.2 | -0.8 |
| | baz=283 | | | | | | | |
| I30M | **Mount Dempster** | 42.86 | 36 | P | | P | 06 20 16.2 | 0.0 |
| | baz=280,SNR=15 | | | | | | | |
| J30M | **Hart River** | 42.99 | 37 | IAmb | | IAmb | 06 20 19.4 | |
| | comp=Z,8.8nm,1.4s | | | | | | | |
| J30M | **Hart River** | 42.99 | 37 | P | | P | 06 20 16.4 | -0.9 |
| | baz=281 | | | | | | | |
| PZH | **PanZhiHua** | 43.12 | 261 | P | | P | 06 20 16.5 | -2.3 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,130nm,5.1s | | | | | | | |
| M30M | **Minto, Yukon** | 43.18 | 40 | P | | P | 06 20 18.6 | -0.2 |
| | baz=282 | | | | | | | |
| G31M | **Satah River** | 43.42 | 34 | P | | P | 06 20 20.7 | +0.2 |
| | baz=280 | | | | | | | |
| P29M | **Windy Craggy** | 43.42 | 45 | P | | P | 06 20 21.0 | +0.3 |
| | baz=285 | | | | | | | |
| INK | **Inuvik** | 43.47 | 32 | P | | P | 06 20 22.0 | +1.1 |
| INK | | | | IAmb | | IAmb | 06 20 22.9 | |
| | comp=Z,13nm,1.2s | | | | | | | |
| INK | **Inuvik** | 43.47 | 32 | P | | P | 06 20 20.7 | -0.2 |
| | baz=279 | | | | | | | |
| INK | **Inuvik** | 43.47 | 32 | P | | P | 06 20 22.0 | +1.1 |
| INK | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| F31M | **Tsiigehtchic** | 43.53 | 33 | IAmb | | IAmb | 06 20 23.4 | |
| | comp=Z,9.7nm,0.9s | | | | | | | |
| F31M | **Tsiigehtchic** | 43.53 | 33 | P | | P | 06 20 21.4 | 0.0 |
| | baz=280,SNR=5.8 | | | | | | | |
| H31M | **Peel River** | 43.59 | 35 | IAmb | | IAmb | 06 20 24.0 | |
| | comp=Z,4.5nm,0.7s | | | | | | | |
| H31M | **Peel River** | 43.59 | 35 | P | | P | 06 20 21.7 | -0.3 |
| | baz=281 | | | | | | | |
| P30M | **Million Dollar** | 43.68 | 44 | P | | P | 06 20 22.5 | -0.2 |
| | baz=285 | | | | | | | |
| N31M | **Braeburn, Yuko** | 43.90 | 42 | P | | P | 06 20 24.4 | 0.0 |
| | baz=284 | | | | | | | |
| O30N | **Mendenhall** | 43.93 | 43 | P | | P | 06 20 24.5 | -0.3 |
| | baz=285 | | | | | | | |
| M31M | **Drury Creek, Y** | 44.36 | 40 | P | | P | 06 20 28.0 | -0.2 |
| | baz=285 | | | | | | | |
| FARO | **Faro, Yukon** | 44.82 | 40 | P | | P | 06 20 33.2 | +1.4 |
| FARO | **Faro, Yukon** | 44.82 | 40 | P | | P | 06 20 32.1 | +0.2 |
| | baz=286 | | | | | | | |
| SIT | **Sitka** | 45.38 | 48 | P | | P | 06 20 36.3 | +0.1 |
| | baz=289 | | | | | | | |
| P32M | **Atlin** | 45.40 | 44 | P | | P | 06 20 35.7 | -0.7 |
| | baz=288 | | | | | | | |
| A36M | **Sachs Harbour** | 45.57 | 26 | P | | P | 06 20 37.0 | -0.5 |
| | baz=283 | | | | | | | |
| P33M | **Teslin, Yukon** | 45.64 | 43 | P | | P | 06 20 38.3 | -0.1 |
| | baz=288 | | | | | | | |
| MK31 | **Makanchi Array** | 45.87 | 297 | ⇑*i*P | | P | 06 20 40.1 | -0.2 |
| MKAR | **Makanchi Array** | 45.87 | 297 | P | | P | 06 20 39.8 | -0.5 |
| | comp=Z,0.4nm,0.5s,baz=71,slow=7.8,SNR=5.1 | | | | | | | |
| MKAR | | | | PcP | | PcP | 06 22 15.5 | -0.2 |
| | comp=Z,1.3nm,0.7s,baz=76,slow=3.2,SNR=9.0 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| KURK | **Kurchatov** | 46.49 | 304 | *i* P | | P | 06 20 43.0 | -2.1 |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| C36M | **Paulatuk** | 46.60 | 29 | P | | P | 06 20 46.0 | +0.3 |
| C36M | **Paulatuk** | 46.60 | 29 | P | | P | 06 20 44.8 | -0.8 |
| | baz=286 | | | | | | | |
| KOTAN | **Kotaneelee Air** | 49.77 | 41 | P | | P | 06 21 09.9 | -0.3 |
| | baz=294 | | | | | | | |
| BVAR | **Borovoye Array** | 50.17 | 309 | P | | P | 06 21 12.5 | -0.8 |
| | comp=Z,0.4nm,0.4s,baz=89,slow=7.7,SNR=2.3 | | | | | | | |
| BVAR | | | | PcP | | PcP | 06 22 30.9 | -0.2 |
| | comp=Z,1.4nm,0.3s,baz=81,slow=4.3,SNR=8.3 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| YKA | **Yellowknife Ar** | 52.81 | 36 | P | | P | 06 21 32.6 | -0.2 |
| | comp=Z,2.8nm,0.7s,baz=303,slow=7.5,SNR=10 | | | | | | | |
| | comp=Z,2.8nm,0.7s | | | | | | | |
| SPITS | **Spitsbergen Ar** | 53.34 | 349 | P | | P | 06 21 34.9 | -1.6 |
| | comp=Z,2.8nm,0.9s,baz=33,slow=11,SNR=5.7 | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | |
| ARU | **Arti** | 54.60 | 317 | *d* iP | | P | 06 21 43.8 | -2.1 |
| ARU | | | | S | | S | 06 29 16.1 | -1.0 |
| ARU | | | | SS | | SS | 06 32 59.3 | -1.2 |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| ABKAR | **Akbulak array** | 57.75 | 309 | P | | P | 06 22 07.6 | -0.8 |
| ARCES | **ARCESS Array B** | 58.27 | 340 | P | | P | 06 22 09.4 | -2.3 |
| | comp=Z,1.6nm,0.7s,baz=34,slow=7.0,SNR=3.7 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| SIMJ | **Simiganj** | 58.40 | 295 | P | | P | 06 22 13.4 | +0.1 |
| SIMJ | | | | IAmb | | IAmb | 06 22 14.0 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| SUMG | **Summit** | 61.86 | 3 | P | | P | 06 22 36.9 | +0.2 |
| SUMG | **Summit** | 61.86 | 3 | P | | P | 06 22 36.9 | +0.2 |
| SUMG | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| BELG | **Belogornoye** | 62.15 | 318 | ⇑*i*P | | P | 06 22 39.3 | +1.0 |
| BELG | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| PNTR | **Pine Nut** | 63.27 | 61 | P | | P | 06 22 48.7 | +2.3 |
| PNTR | | | | IAmb | | IAmb | 06 22 49.2 | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| YERR | **Yerington** | 63.56 | 61 | IAmb | | IAmb | 06 22 50.9 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| KVN | **Kaiserville** | 64.21 | 60 | IAmb | | IAmb | 06 22 55.1 | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| RYN | **Ryan** | 64.22 | 60 | IAmb | | IAmb | 06 22 55.0 | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| FINES | **FINESS Array B** | 64.23 | 334 | P | | P | 06 22 49.8 | -2.2 |
| | comp=Z,3.4nm,0.6s,baz=33,slow=7.3,SNR=15 | | | | | | | |
| | comp=Z,3.4nm,0.6s | | | | | | | |
| LHV | **Little Huntoon** | 64.47 | 61 | IAmb | | IAmb | 06 22 57.2 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| NVAR | **Mina Array Bea** | 64.47 | 60 | P | | P | 06 22 56.1 | +1.8 |
| | comp=Z,3.0nm,0.6s,baz=297,slow=7.3,SNR=27 | | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| OBN | **Obninsk** | 65.18 | 325 | *e*P | | P | 06 22 57.8 | -0.4 |
| OBN | **Obninsk** | 65.18 | 325 | *e*P | | P | 06 22 57.8 | -0.4 |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| DSP | **Deep Springs** | 65.35 | 61 | P | | P | 06 23 01.6 | +2.0 |
| DSP | | | | IAmb | | IAmb | 06 23 02.6 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| TPAW | **Teton Pass** | 65.53 | 52 | IAmb | | IAmb | 06 23 03.2 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| R11B | **Troy Canyon, C** | 66.17 | 59 | P | | P | 06 23 04.9 | -0.3 |
| | baz=310 | | | | | | | |
| S11A | **Rachel** | 66.53 | 60 | IAmb | | IAmb | 06 23 09.9 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| TPNV | **Topopah Spring** | 66.67 | 61 | IAmb | | IAmb | 06 23 10.8 | |
| | comp=Z,4.0nm,0.5s | | | | | | | |
| PDAR | **Pinedale Array** | 66.78 | 52 | P | | P | 06 23 10.0 | +1.0 |
| | comp=Z,1.6nm,0.6s,baz=270,slow=1.6,SNR=24 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| GWY | **Greenwater Val** | 66.91 | 61 | IAmb | | IAmb | 06 23 12.1 | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| WRA | **Warramunga Arr** | 66.97 | 197 | P | | P | 06 23 11.7 | +1.6 |
| | comp=Z,1.7nm,0.5s,baz=14,slow=6.8,SNR=8.6 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| WRA | **Warramunga Arr** | 66.97 | 197 | *e*P | | P | 06 23 12.1 | +2.0 |
| WRA | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| SHPR | **Sheep Range** | 67.62 | 60 | P | | P | 06 23 15.0 | +0.6 |
| NB2 | **NORSAR Subarra** | 68.64 | 340 | P | | P | 06 23 18.3 | -1.9 |
| | comp=Z,1.3nm,0.5s,baz=27,slow=6.5 | | | | | | | |
| NOA | **NORSAR Array B** | 68.64 | 340 | P | | P | 06 23 18.4 | -1.8 |
| | comp=Z,2.4nm,0.4s,baz=29,slow=6.6,SNR=13 | | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| NOA | **NORSAR Array B** | 68.64 | 340 | *e*P | | P | 06 23 18.6 | -1.6 |
| NOA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| SRU | **San Rafael Swe** | 68.66 | 56 | IAmb | | IAmb | 06 23 22.9 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| PFO | **Pinyon Flats O** | 68.72 | 63 | *i* P | | P | 06 23 20.9 | -0.3 |
| PFO | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| TPFO | **Pinon Flats** | 68.73 | 63 | P | | P | 06 23 21.4 | +0.1 |
| | baz=312 | | | | | | | |
| HFS | **Hagfors** | 68.82 | 338 | P | | P | 06 23 19.3 | -1.9 |
| | comp=Z,2.5nm,0.5s,baz=66,slow=7.2,SNR=14 | | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | | |
| AKT | **Akhty** | 69.31 | 308 | *e*P | | P | 06 23 24.2 | -0.5 |
| AKT | | | | *e* | | | 06 23 47.2 | |
| AKT | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| HMU | **Henry Mountain** | 69.32 | 57 | IAmb | | IAmb | 06 23 27.4 | |
| | comp=Z,6.2nm,0.6s | | | | | | | |
| KBZ | **Khabaz** | 70.31 | 313 | P | | P | 06 23 30.7 | 0.0 |
| | comp=Z,5.1nm,0.8s,baz=58,slow=5.2,SNR=12 | | | | | | | |
| | comp=Z,5.1nm,0.8s | | | | | | | |
| KBZ | **Khabaz** | 70.31 | 313 | *e*P | | P | 06 23 31.1 | +0.4 |
| KBZ | **Khabaz** | 70.31 | 313 | ⇑*i*P | | P | 06 23 31.1 | +0.4 |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| ASAR | **Alice Springs** | 70.68 | 196 | P | | P | 06 23 35.8 | +2.8 |
| | comp=Z,0.7nm,0.7s,baz=1.1,slow=4.4,SNR=7.4 | | | | | | | |
| ASAR | | | | pP | | pP | 06 24 04.7 | +5.3 |
| | comp=Z,0.6nm,0.7s,baz=11,slow=4.5,SNR=3.8 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| AKASG | **Malin Array Be** | 71.43 | 325 | P | | P | 06 23 35.6 | -1.6 |
| | comp=Z,1.3nm,0.4s,baz=39,slow=6.1,SNR=9.1 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| S22A | **4UR Ranch, Cre** | 71.71 | 55 | P | | P | 06 23 39.7 | 0.0 |
| | baz=314 | | | | | | | |
| RNPP9 | **Sochiv** | 72.17 | 327 | P | | P | 06 23 42.8 | +1.1 |
| MI29 | **MI29, Kamyanyy** | 72.20 | 326 | P | | P | 06 23 43.0 | +1.1 |
| ECSD | **EROS Data Cent** | 72.87 | 44 | IAmb | | IAmb | 06 23 47.5 | |
| | comp=Z,9.2nm,1.4s | | | | | | | |
| T25A | **Trinidad** | 73.51 | 54 | P | | P | 06 23 49.7 | -0.5 |
| | baz=315 | | | | | | | |
| 319A | **Douglas** | 74.68 | 61 | IAmb | | IAmb | 06 23 59.4 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| 121A | **Cookes Peak, D** | 74.78 | 59 | P | | P | 06 23 57.3 | -0.3 |
| | baz=315 | | | | | | | |
| KWP | **Kalwaria Pacla** | 74.81 | 328 | P | | P | 06 23 56.5 | -0.8 |
| KWP | **Kalwaria Pacla** | 74.81 | 328 | P | | P | 06 23 56.5 | -0.8 |
| KWP | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | | |
| SCHQ | **Schefferville** | 74.95 | 21 | P | | P | 06 23 57.6 | -0.3 |
| | comp=Z,2.2nm,0.6s,baz=321,slow=5.4,SNR=7.2 | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| CRVS | **Cervenica-Dubn** | 75.87 | 328 | *e*P | | P | 06 24 03.2 | -0.2 |
| CRVS | **Cervenica-Dubn** | 75.87 | 328 | *e*P | | P | 06 24 03.2 | -0.2 |
| LANS | **Liptovska Anna** | 76.39 | 329 | *e*P | | P | 06 24 06.9 | +0.6 |
| LANS | **Liptovska Anna** | 76.39 | 329 | *e*P | | P | 06 24 06.9 | +0.6 |
| MORC | **Moravsky Berou** | 76.53 | 331 | P | | P | 06 24 06.8 | -0.3 |
| MORC | | | | IAmb | | IAmb | 06 24 08.4 | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| MORC | **Moravsky Berou** | 76.53 | 331 | *e*P | | P | 06 24 06.8 | -0.3 |
| MORC | **Moravsky Berou** | 76.53 | 331 | P | | P | 06 24 06.8 | -0.3 |
| MORC | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| KRLC | **Kraliky** | 76.54 | 331 | *e*P | | P | 06 24 06.8 | -0.3 |
| KRLC | **Kraliky** | 76.54 | 331 | *e*P | | P | 06 24 06.8 | -0.3 |
| CLL | **Collm** | 76.68 | 334 | *i* P | | P | 06 24 06.8 | -1.0 |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| CLL | **Collm** | 76.68 | 334 | *i* P | | P | 06 24 06.8 | -1.0 |
| CLL | | | | *e*PP | | sP | 06 24 39.0 | -7.1 |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| EKA | **Eskdalemuir Ar** | 76.93 | 345 | P | | P | 06 24 08.7 | -0.5 |
| | comp=Z,0.7nm,0.3s,baz=18,slow=5.4,SNR=12 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| HSKC | **Hora Svate Kat** | 77.16 | 334 | *e*P | | P | 06 24 09.6 | -1.0 |
| VRAC | **Vranov** | 77.26 | 331 | *e*P | | P | 06 24 11.7 | +0.6 |
| JAVC | **Velka Javorina** | 77.27 | 330 | *e*P | | P | 06 24 12.6 | +1.3 |
| KRUC | **Moravsky** | 77.53 | 331 | *e*P | | P | 06 24 13.0 | +0.3 |
| BRTR | **Keskin Array B** | 77.94 | 315 | P | | P | 06 24 14.8 | -0.4 |
| | comp=Z,1.7nm,0.8s,baz=70,slow=4.1,SNR=8.2 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| BRTR | **Keskin Array B** | 77.94 | 315 | *e*P | | P | 06 24 15.5 | +0.2 |
| BRTR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| KHC | **Kasperske Hory** | 78.40 | 333 | P | | P | 06 24 17.3 | -0.2 |
| KHC | | | | IAmb | | IAmb | 06 24 18.4 | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| KHC | **Kasperske Hory** | 78.40 | 333 | *e*P | | P | 06 24 17.3 | -0.2 |
| KHC | **Kasperske Hory** | 78.40 | 333 | *i* P | | P | 06 24 17.5 | 0.0 |
| KHC | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| CKRC | **Cesky Krumlov** | 78.44 | 332 | *e*P | | P | 06 24 17.5 | -0.2 |
| CKRC | **Cesky Krumlov** | 78.44 | 332 | *e*P | | P | 06 24 17.5 | -0.2 |
| GERES | **GERESS Array B** | 78.61 | 333 | P | | P | 06 24 17.9 | -0.9 |
| | comp=Z,1.5nm,0.5s,baz=34,slow=8.1,SNR=6.6 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| GERES | **GERESS Array B** | 78.61 | 333 | *e*P | | P | 06 24 18.4 | -0.4 |
| GERES | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| CONA | **Conrad Observa** | 78.69 | 331 | *i* P | | P | 06 24 19.7 | +0.5 |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| RONA | **Rosalia, Austr** | 78.74 | 330 | *i* P | | P | 06 24 20.0 | +0.6 |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| MOA | **Molln** | 79.30 | 332 | *i* P | | P | 06 24 22.9 | +0.5 |
| | comp=Z,2.9nm,1.0s | | | | | | | |
| TXAR | **Lajitas Array** | 79.53 | 59 | P | | P | 06 24 25.3 | +1.1 |
| | comp=Z,2.2nm,0.5s,baz=299,slow=4.2,SNR=28 | | | | | | | |
| TXAR | | | | pP | | pwP | 06 24 56.0 | +5.0 |
| | comp=Z,1.0nm,0.6s,baz=306,slow=4.3,SNR=5.5 | | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | | |
| BIOA | **Bad Ischl, Aus** | 79.64 | 332 | *i* P | | P | 06 24 25.2 | +0.9 |
| | comp=Z,5.1nm,1.3s | | | | | | | |
| BMRD | **Maredsous** | 79.90 | 339 | *d*P | | P | 06 24 25.5 | 0.0 |
| | comp=Z,5.8nm,0.9s | | | | | | | |
| SOKA | **Soboth** | 80.06 | 331 | *i* P | | P | 06 24 26.4 | -0.3 |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| LESA | **Schwarzleotal** | 80.19 | 332 | *i* P | | P | 06 24 27.3 | -0.1 |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| KBA | **Koelnbreinsper** | 80.28 | 332 | *i* P | | P | 06 24 28.1 | +0.2 |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| MYKA | **Terra Mystica** | 80.57 | 332 | *i* P | | P | 06 24 28.0 | -1.3 |
| | comp=Z,3.1nm,1.0s | | | | | | | |
| WATA | **Walderalm** | 80.62 | 333 | *i* P | | P | 06 24 29.5 | -0.2 |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| WTTA | **Wattenberg** | 80.67 | 333 | *i* P | | P | 06 24 30.1 | +0.1 |
| | comp=Z,3.7nm,0.4s | | | | | | | |
| MOTA | **Moosalm** | 80.76 | 333 | *i* P | | P | 06 24 29.5 | -0.9 |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| ABTA | **Abfaltersbach** | 80.84 | 332 | *i* P | | P | 06 24 28.3 | -2.5 |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| FETA | **Feichten** | 81.17 | 333 | *i* P | | P | 06 24 30.8 | -1.8 |
| | comp=Z,6.1nm,1.4s | | | | | | | |
| DRIO | **Del Rio** | 81.28 | 57 | IAmb | | IAmb | 06 24 35.0 | |
| | comp=Z,6.6nm,0.7s | | | | | | | |
| MMAI | **Mount Meron Ar** | 82.18 | 310 | P | | P | 06 24 38.3 | +0.2 |
| | comp=Z,0.7nm,0.3s,baz=32,slow=8.5,SNR=1.8 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| CLTN | **Cedars of Leba** | 83.77 | 43 | IAmb | | IAmb | 06 24 48.1 | |
| | comp=Z,5.4nm,1.0s | | | | | | | |
| CPCT | **Cooper Cave** | 85.15 | 42 | IAmb | | IAmb | 06 24 54.7 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| TORD | **Torodi Ar. Bea** | 115.05 | 326 | PKP | | PKiKP | 06 30 57.2 | -0.5 |
| | comp=Z,0.3nm,0.3s,baz=23,slow=2.1,SNR=10 | | | | | | | |
| H03N2 | **Juan Fernandez** | 140.50 | 90 | T | | T | 09 08 40.5 | |
| | baz=307,slow=77,SNR=11 | | | | | | | |
| H03N3 | **Juan Fernandez** | 140.51 | 90 | T | | T | 09 08 43.8 | |
| | baz=307,slow=77,SNR=11 | | | | | | | |
| H03N1 | **Juan Fernandez** | 140.51 | 90 | T | | T | 09 08 41.9 | |
| | baz=307,slow=77,SNR=9.2 | | | | | | | |
| ELIB | **Princess Elisa** | 144.09 | 205 | *d*PKPdf | | PKPab | 06 31 50.5 | +1.9 |
| ELIB | | | | *dp*PKPdf | | pPKPdf | 06 32 21.1 | +1.7 |
| BDFB | **Brasilia** | 146.21 | 34 | PKPbc | | PKPdf | 06 31 57.8 | +1.8 |
| | comp=Z,3.5nm,0.4s,baz=328,slow=3.9,SNR=9.3 | | | | | | | |
| PLCA | **Paso Flores** | 149.85 | 95 | PKPbc | | PKPbc | 06 32 07.0 | +0.9 |
| | comp=Z,2.6nm,0.7s,baz=278,slow=2.0,SNR=9.9 | | | | | | | |
| CPUP | **Villa Florida** | 150.51 | 59 | PKPbc | | PKPbc | 06 32 08.4 | +0.4 |
| | comp=Z,1.4nm,0.6s,baz=330,slow=2.4,SNR=6.1 | | | | | | | |
| SNAA | **Sanae** | 151.04 | 197 | PKPbc | | PKPbc | 06 32 08.6 | +0.6 |
| | comp=Z,1.1nm,0.7s,baz=197,slow=4.7,SNR=12 | | | | | | | |

**IDC 28 06:23:09.5±4.6, 18°.02S×178°.38W, h538km±27km, mb3.2/4, mbtmp4.1/6, Error ellipse: s-maj=120.3km s-min=39.1km az=26.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | **Nonsavu** | 3.41 | 274 | P | P | 06 24 26.6 | +0.2 |
| | 5.1nm,0.7s,baz=124,slow=18,SNR=2.6 | | | | | | |
| DZM | **Mont Dzumac** | 14.82 | 252 | P | P | 06 26 15.9 | -1.6 |
| | 9.2nm,1.2s,baz=90,slow=19,SNR=1.5 | | | | | | |
| STKA | **Stephens Creek** | 38.60 | 241 | P | P | 06 29 47.2 | +0.5 |
| | 1.7nm,0.6s,baz=80,slow=7.3,SNR=4.1 | | | | | | |
| | 1.7nm,0.6s | | | | | | |
| WRA | **Warramunga Arr** | 44.64 | 260 | P | P | 06 30 34.1 | -0.5 |
| | 1.2nm,0.5s,baz=96,slow=6.7,SNR=24 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| ASAR | **Alice Springs** | 44.79 | 254 | P | P | 06 30 35.8 | 0.0 |
| | 9.1nm,0.6s,baz=88,slow=8.3,SNR=170 | | | | | | |
| | 9.1nm,0.6s | | | | | | |
| QSPA | **South Pole Qui** | 72.04 | 180 | P | P | 06 33 38.9 | 0.0 |
| | 0.5nm,0.8s,baz=157,slow=6.0,SNR=1.2 | | | | | | |
| | 0.5nm,0.8s | | | | | | |

*IDC **28** 06:25:

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KBK | Karagaybulak SNR=9.2 | 6.92 | 26 | P | | Pn | 06 27 41.5 | +1.7 |
| BOOM | Boomskoye usch | 7.16 | 31 | Pn | | Pn | 06 27 43.6 | +0.7 |
| CHMS | Chumysh SNR=9.3 | 7.17 | 23 | P | | Pn | 06 27 43.9 | +1.1 |
| CHMS | Chumysh comp=E,16nm,0.7s | 7.17 | 23 | ⇑P | | Pn | 06 27 42.9 | +0.1 |
| CHMS | | | | ⇑S | | Sn | 06 29 01.4 | -2.4 |
| | comp=E,12nm,0.7s | | | | | | | |
| USP | Ospenovka SNR=11 | 7.33 | 21 | P | | Pn | 06 27 46.0 | +1.0 |
| TKM2 | Tokmak 2 SNR=38 | 7.39 | 28 | P | | Pn | 06 27 47.1 | +1.2 |
| TKM2 | Tokmak 2 comp=E,31nm,0.7s | 7.39 | 28 | ⇓P | | Pn | 06 27 46.7 | +0.8 |
| TKM2 | | | | ⇓S | | Sn | 06 29 07.2 | -2.2 |
| | comp=E,13nm,0.8s | | | | | | | |
| SMLA | Simla | 7.45 | 134 | eP | | Pn | 06 27 47.7 | +1.1 |
| SMLA | | | | eS | | Sn | 06 29 08.0 | -2.5 |
| SMLA | comp=N,176nm,0.4s | | | IAML | | | 06 29 12.9 | |
| SMLA | comp=E,249nm,0.7s | | | IAML | | | 06 29 14.4 | |
| TARG | Taragay, Kyrgy | 7.51 | 43 | Pn | | Pn | 06 27 48.6 | +0.9 |
| HNLY | HANLEY | 7.60 | 117 | eP | | Pn | 06 27 51.1 | +2.1 |
| HNLY | | | | eS | | Sn | 06 29 07.1 | -7.9 |
| KLP | Kalpa | 7.83 | 127 | eP | | Pn | 06 27 53.3 | +1.3 |
| KLP | | | | eS | | Sn | 06 29 16.5 | -3.8 |
| KLP | comp=E,349nm,0.5s | | | IAML | | | 06 29 22.7 | |
| KLP | comp=N,404nm,0.8s | | | IAML | | | 06 29 26.2 | |
| KUDL | Kundal | 9.54 | 149 | eP | | Pn | 06 28 14.1 | +0.1 |
| KUDL | | | | eS | | Sn | 06 29 53.7 | -6.9 |
| KUDL | comp=E,86nm,1.0s | | | IAML | | | 06 29 55.5 | |
| KUDL | comp=N,35nm,0.5s | | | IAML | | | 06 29 57.4 | |
| AJM | Ajmer | 10.45 | 161 | eP | | Pn | 06 28 26.5 | +0.6 |
| LGTI | Lohaghat | 10.51 | 129 | eP | | Pn | 06 28 26.1 | -0.4 |
| LGTI | | | | eS | | Sn | 06 30 15.8 | -7.7 |
| LGTI | comp=E,50nm,0.6s | | | IAML | | | 06 30 18.9 | |
| LGTI | comp=N,46nm,0.6s | | | IAML | | | 06 30 19.1 | |
| MAKZ | Makanchi | 13.23 | 35 | | | Pn | 06 29 01.8 | +0.6 |
| MK31 | Makanchi Array | 13.36 | 36 | Pn | | Pn | 06 29 04.6 | +1.8 |
| MKAR | Makanchi Array comp=N,3.2nm,0.8s,baz=230,slow=13,SNR=20 | 13.36 | 36 | P | | Pn | 06 29 04.3 | +1.5 |
| BHPL | Bhopal | 14.34 | 155 | eP | | P | 06 29 19.9 | +3.0 |
| BHPL | | | | eS | | Sn | 06 31 48.3 | -6.9 |
| AB31 | Akbulak array comp=N,1.6nm,0.4s,baz=147,slow=11,SNR=114 | 15.08 | 331 | ⇑P | | Pn | 06 29 23.6 | -0.4 |
| AB31 | | | | ⇑S | | S | 06 32 05.4 | -7.0 |
| | comp=N,1.9nm,0.8s,baz=156,slow=24,SNR=2.7 | | | | | | | |
| ABKAR | Akbulak array | 15.08 | 331 | | | Pn | 06 29 24.7 | +0.7 |
| KURBB | Kurchatov Arra comp=N,0.9nm,0.4s,baz=209,slow=10,SNR=5.6 | 15.18 | 19 | P | | P | 06 29 26.8 | +0.8 |
| BVAR | Borovoye Array comp=N,2.0nm,0.5s,baz=163,slow=11,SNR=8.4 | 16.56 | 359 | P | | Pn | 06 29 43.5 | +1.5 |
| BVAR | | | | S | | S | 06 32 43.0 | -1.3 |
| | comp=N,1.6nm,0.6s,baz=165,slow=23,SNR=5.5 | | | | | | | |
| BRVK | Borovoye | 16.60 | 359 | P | | P | 06 29 42.5 | +0.9 |
| BRVK | comp=Z,13nm,1.5s | | | IAmb | | IAmb | 06 29 44.9 | |
| AKTO | Aktyubinsk comp=Z,21nm,0.8s,baz=142,slow=8.3,SNR=48 | 16.77 | 330 | P | | Pn | 06 29 45.2 | +0.8 |
| AKTO | | | | S | | S | 06 32 45.9 | -2.8 |
| | comp=Z,1.4nm,0.5s,baz=335,slow=19,SNR=1.4 | | | | | | | |
| ZAA0 | Zalesovo Array comp=Z,5.8nm,0.7s | 19.98 | 25 | P | | P | 06 30 18.8 | +0.6 |
| ZAA0 | | | | IAmb | | IAmb | 06 30 20.2 | |
| ZALV | Zalesovo Beam comp=Z,7.0nm,0.6s,baz=221,slow=11,SNR=32 comp=Z,7.0nm,0.6s | 19.98 | 25 | P | | P | 06 30 19.7 | +1.4 |
| SHL | Shillong | 20.96 | 115 | P | | P | 06 30 30.1 | +0.9 |
| ARU | Arti | 21.64 | 341 | P | | P | 06 30 35.9 | +0.1 |
| ARU | comp=Z,9.9nm,0.9s | | | IAmb | | IAmb | 06 30 39.6 | |
| ARU | Arti comp=Z,2.3nm,0.3s,baz=166,slow=8.0,SNR=9.4 comp=Z,2.3nm,0.3s | 21.64 | 341 | P | | P | 06 30 36.4 | +0.6 |
| SONM | Songino Array comp=Z,0.5nm,0.5s,baz=267,slow=9.7,SNR=1.8 comp=Z,0.5nm,0.5s | 28.42 | 55 | P | | P | 06 31 39.4 | +1.9 |
| AKASG | Malin Array Be comp=Z,0.4nm,0.3s,baz=84,slow=6.8,SNR=5.4 comp=Z,0.4nm,0.3s | 32.91 | 309 | P | | P | 06 32 16.1 | -0.6 |
| FINES | FINESS Array B comp=Z,4.4nm,0.8s,baz=125,slow=10.0,SNR=12 comp=Z,4.4nm,0.8s | 37.47 | 326 | P | | P | 06 32 56.1 | +0.5 |
| ARCES | ARCESS Array B comp=Z,5.2nm,0.8s,baz=106,slow=6.8,SNR=9.9 comp=Z,5.2nm,0.8s | 41.15 | 338 | P | | P | 06 33 27.2 | +1.3 |
| HFS | Hagfors comp=Z,4.1nm,0.7s,baz=93,slow=11,SNR=7.1 comp=Z,4.1nm,0.7s | 43.05 | 322 | P | | P | 06 33 42.3 | +0.9 |
| NB2 | NORSAR Subarra comp=Z,4.4nm,0.8s,baz=95,slow=7.9 | 44.36 | 323 | P | | P | 06 33 52.4 | +0.5 |
| NOA | NORSAR Array B comp=Z,3.0nm,0.7s,baz=97,slow=7.9,SNR=13 comp=Z,3.0nm,0.7s | 44.36 | 323 | P | | P | 06 33 52.7 | +0.8 |
| NC204 | NORSAR Array S | 44.60 | 323 | P | | P | 06 33 54.9 | +1.1 |
| TIXI | Tiksi | 45.83 | 22 | P | | P | 06 34 04.7 | +1.5 |
| TIXI | comp=Z,3.8nm,0.6s | | | IAmb | | IAmb | 06 34 05.0 | |
| TORD | Torodi Ar. Bea comp=Z,1.7nm,0.5s,baz=49,slow=6.2,SNR=25 comp=Z,1.7nm,0.5s | 65.64 | 269 | P | | P | 06 36 23.6 | -1.2 |
| ILAR | Eielson Array comp=Z,0.4nm,0.8s,baz=304,slow=5.5,SNR=5.3 comp=Z,0.4nm,0.8s | 74.83 | 16 | P | | P | 06 37 20.5 | +0.7 |
| WRA | Warramunga Arr comp=Z,0.6nm,0.6s,baz=322,slow=4.9,SNR=9.5 comp=Z,0.6nm,0.6s | 82.04 | 122 | P | | P | 06 37 59.7 | -0.2 |
| ASAR | Alice Springs comp=Z,0.5nm,0.6s,baz=306,slow=4.8,SNR=8.2 comp=Z,0.5nm,0.6s | 84.30 | 125 | P | | P | 06 38 11.2 | -0.1 |
| STKA | Stephens Creek comp=Z,0.8nm,0.3s,baz=284,slow=11,SNR=1.7 comp=Z,0.8nm,0.3s | 94.83 | 126 | P | | P | 06 39 00.8 | -0.1 |
| PLCA | Paso Flores comp=Z,1.6nm,0.8s,baz=207,slow=2.3,SNR=4.4 | 149.74 | 250 | PKPbc | | PKPbc | 06 45 27.2 | -0.7 |

*NEIC **28** 06:32:57.1±1.7, 15.°9S±0.°2×176.°79W±0.°10, h299km±11km, mb4.3/16, Error ellipse: s-maj=29.7km s-min=2.9km az=154.0*

*IDC **28** 06:33:02.3±3.2, 14.°80S×178.°13W, h324km±28km, mb3.4/4, mbtmp4.1/6, Error ellipse: s-maj=43.5km s-min=27.1km az=141.0*

**ISC 28 06:32:55.6**±1.0, **16.°0S**±0.°2×**176.°8W**±0.°1, **h300**km, **n28,** σ1**52**/27, **mb4.0**/11, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MSVF | Nonsavu | 5.22 | 250 | | Pn | 06 34 17.4 | +1.6 |
| MSVF | Nonsavu 12nm,0.8s,baz=107,slow=17,SNR=5.2 | 5.22 | 250 | P | Pn | 06 34 17.3 | +1.4 |
| AFI | Afiamalu | 5.29 | 67 | Pn | Pn | 06 34 17.5 | +0.8 |
| FUNA | Funafuti | 8.43 | 332 | | Pn | 06 34 54.1 | -0.5 |
| PINNC | Pines Island, | 16.25 | 244 | P | P | 06 36 26.0 | -0.4 |
| DZM | Mont Dzumac | 16.94 | 247 | P | P | 06 36 33.0 | -1.1 |
| DZM | comp=Z,15nm,0.9s | | | IAmb | IAmb | 06 36 41.0 | |
| DZM | Mont Dzumac comp=Z,7.1nm,0.7s,baz=84,slow=17,SNR=5.9 | 16.94 | 247 | P | P | 06 36 32.8 | -1.3 |
| KOUNC | Koumac, New Ca | 18.52 | 253 | P | P | 06 36 53.1 | +2.2 |
| EIDS | Eidsvold | 31.39 | 247 | P | P | 06 38 45.6 | -3.8 |
| EIDS | comp=Z,21nm,1.5s | | | IAmb | IAmb | 06 39 02.3 | |
| CTAO | Charters Tower | 35.32 | 258 | P | P | 06 39 24.7 | +1.4 |
| CTAO | comp=Z,15nm,1.1s | | | IAmb | IAmb | 06 39 36.0 | |
| COEN | Coen | 38.69 | 268 | P | P | 06 39 50.8 | -0.7 |
| COEN | comp=Z,18nm,1.4s | | | IAmb | IAmb | 06 39 58.3 | |
| WR0 | Warramunga Arr | 46.33 | 258 | P | P | 06 40 53.6 | +1.0 |
| WB0 | Warramunga Arr | 46.48 | 258 | P | P | 06 40 54.8 | +1.0 |
| WB2 | Warramunga Arr | 46.51 | 258 | P | P | 06 40 54.7 | +0.7 |
| WRAB | Tennant Creek | 46.51 | 258 | P | P | 06 40 54.9 | +0.9 |
| WRAB | comp=Z,5.2nm,0.6s | | | IAmb | IAmb | 06 40 56.0 | |
| WRA | Warramunga Arr comp=Z,0.6nm,0.3s,baz=98,slow=8.4,SNR=7.2 comp=Z,0.6nm,0.3s | 46.52 | 258 | P | P | 06 40 50.7 | -3.4 |
| AS31 | Alice Springs | 46.81 | 252 | P | P | 06 40 54.9 | -1.4 |
| ASAR | Alice Springs comp=Z,5.6nm,0.7s,baz=90,slow=8.3,SNR=36 comp=Z,5.6nm,0.7s | 46.81 | 252 | P | P | 06 40 54.2 | -2.1 |
| MTN | Manton Dam | 50.43 | 266 | P | P | 06 41 24.5 | +0.8 |
| MTN | comp=Z,8.9nm,0.9s | | | IAmb | IAmb | 06 41 41.0 | |
| KNRA | Kununurra comp=Z,6.3nm,1.0s | 52.24 | 262 | P | P | 06 41 38.5 | +1.5 |
| KNRA | | | | IAmb | IAmb | 06 41 56.0 | |
| FITZ | Fitzroy Crossi | 54.88 | 259 | P | P | 06 41 57.0 | +0.9 |
| QSPA | South Pole Qui comp=Z,1.9nm,1.0s,baz=40,slow=16,SNR=2.4 comp=Z,1.9nm,1.0s | 74.01 | 180 | P | P | 06 44 10.6 | +12 |
| CCB | Clear Creek Bu | 83.43 | 12 | P | P | 06 44 48.4 | -0.9 |
| MDM | Murphy Dome | 83.62 | 12 | P | P | 06 44 50.5 | +0.1 |
| MDM | comp=Z,7.9nm,1.2s | | | IAmb | IAmb | 06 44 51.1 | |
| ILAR | Eielson Array comp=Z,1.0nm,0.9s,baz=204,slow=5.9,SNR=7.1 comp=Z,1.0nm,0.9s | 83.73 | 12 | P | P | 06 44 50.3 | -0.5 |
| BRTR | Keskin Array B comp=Z,1.7nm,0.9s,baz=101,slow=1.3,SNR=7.5 | 144.51 | 318 | PKP | PKPdf | 06 51 56.3 | -0.6 |
| GERES | GERESS Array B | 146.17 | 348 | PKP | PKPbc | 06 52 00.9 | 0.0 |
| | comp=Z,0.3nm,0.3s,baz=99,slow=1.3,SNR=1.6 | | | | | | |
| MMAI | Mount Meron Ar comp=Z,0.8nm,0.3s,baz=64,slow=6.6,SNR=1.6 | 146.36 | 306 | PKP | PKPdf | 06 51 59.7 | -0.4 |

*NOU **28** 06:35:21.8, 40.°29S×174.°94E, h89km, MLv4.0/14, Cook Strait, New Zealand*

*WEL **28** 06:35:23.5±0.8, 40.°5S±4.°×17.°5E±.°, h49km±10km, M3.7/95, ML4.0/7, MLv3.7/95, Error ellipse: s-maj=0.0km s-min=0.0km az=78.3, confirmed*

**ISC 28 06:35:22.9**±1.3, **40.°27S**±0.°03×**174.°91E**±0.°03, **h68**km±7km, **n148,** σ0**85**/165, **Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| FXBS | Foxton Beach S | 0.30 | 128 | P | Pn | 06 35 32.8 | -1.1 |
| FXBS | | | | S | Sn | 06 35 41.6 | -0.3 |
| OHWZ | Ohakea | 0.31 | 78 | P | Pn | 06 35 34.0 | +0.1 |
| OHWZ | | | | S | Sn | 06 35 42.7 | +0.7 |
| WCDS | Wanganui Civil | 0.35 | 17 | P | Pn | 06 35 34.2 | -0.1 |
| WCDS | | | | S | Sn | 06 35 43.0 | +0.4 |
| HOCS | Levin Horowhen | 0.45 | 141 | P | Pn | 06 35 34.1 | -1.0 |
| FAHS | Feilding Agric | 0.51 | 83 | P | Pn | 06 35 34.9 | -0.7 |
| FAHS | | | | S | Sn | 06 35 45.3 | +0.4 |
| OTKS | Otaki School | 0.51 | 160 | P | Pn | 06 35 34.7 | -1.0 |
| OTKS | | | | S | Sn | 06 35 45.4 | +0.3 |
| WAZ | Wanganui | 0.52 | 6 | P | Pn | 06 35 35.5 | -0.3 |
| WAZ | | | | S | Sn | 06 35 45.1 | -0.2 |
| PNMS | Monrad Interme | 0.53 | 100 | P | Pn | 06 35 35.1 | -0.7 |
| PNMS | | | | S | Sn | 06 35 45.7 | +0.5 |
| PNBS | Palmerston Nor | 0.54 | 98 | P | Pn | 06 35 35.1 | -0.8 |
| PNBS | | | | S | Sn | 06 35 45.7 | +0.3 |
| OGWZ | Otaki Gorge | 0.58 | 160 | P | Pn | 06 35 36.8 | +0.4 |
| OGWZ | | | | S | Sn | 06 35 48.1 | +1.9 |
| KIW | Kapiti Island | 0.59 | 180 | P | Pn | 06 35 36.7 | +0.2 |
| KIW | | | | S | Sn | 06 35 46.8 | +0.4 |
| MRZ | Mangatainoka R | 0.64 | 128 | P | Pn | 06 35 37.3 | +0.2 |
| MRZ | | | | S | Sn | 06 35 48.1 | +0.7 |
| POWZ | Post Office Ro | 0.66 | 101 | P | Pn | 06 35 37.4 | +0.1 |
| POWZ | | | | S | Sn | 06 35 49.4 | +1.5 |
| HOWZ | Holdsworth Sta | 0.77 | 144 | P | Pn | 06 35 38.6 | 0.0 |
| MNGS | Mangaweka Scho | 0.82 | 56 | P | Pn | 06 35 39.3 | +0.2 |
| MNGS | | | | S | Sn | 06 35 51.9 | +0.8 |
| CAW | Cannon Point | 0.84 | 172 | P | Pn | 06 35 39.8 | +0.4 |
| HWHS | Hawera High Sc | 0.84 | 324 | P | Pn | 06 35 38.7 | -0.7 |
| HWHS | | | | S | Sn | 06 35 52.2 | +0.6 |
| PRWZ | Pori Road | 0.85 | 110 | P | Pn | 06 35 39.9 | +0.4 |
| PRWZ | | | | S | Sn | 06 35 52.8 | +1.0 |
| TIWZ | Tintock | 0.90 | 124 | P | Pn | 06 35 40.1 | +0.1 |
| LREZ | Lake Rotokare | 0.90 | 334 | P | Pn | 06 35 40.0 | -0.1 |
| LREZ | | | | S | Sn | 06 35 53.8 | +1.0 |
| DUWZ | D'Urville Isla | 0.92 | 235 | P | Pn | 06 35 40.1 | -0.3 |
| DVHZ | Dannevirke | 0.96 | 92 | P | Pn | 06 35 40.8 | -0.1 |
| MTVZ | Mangateitei | 0.99 | 26 | P | Pn | 06 35 40.9 | -0.3 |
| MTW | Mount Morrison | 0.99 | 153 | P | Pn | 06 35 41.8 | +0.6 |
| WEL | Wellington | 1.02 | 186 | P | Pn | 06 35 42.0 | +0.5 |
| PKVZ | Pokeno | 1.04 | 19 | P | Pn | 06 35 41.1 | -0.8 |
| SNZO | South Karori | 1.05 | 189 | P | Pn | 06 35 41.9 | 0.0 |
| PNHZ | Pukenui | 1.05 | 70 | P | Pn | 06 35 42.0 | 0.0 |
| TCW | Tory Channel | 1.05 | 207 | P | Pn | 06 35 42.5 | +0.5 |
| TCW | | | | S | Sn | 06 35 57.0 | +0.7 |
| MOVZ | Moawhango | 1.08 | 37 | P | Pn | 06 35 42.0 | -0.4 |
| WNVZ | Wahianoa | 1.08 | 29 | P | Pn | 06 35 42.5 | -0.1 |
| TRVZ | Turoa | 1.09 | 27 | P | Pn | 06 35 42.5 | -0.2 |
| BFZ | Birch Farm | 1.09 | 112 | P | Pn | 06 35 42.5 | 0.0 |
| PREZ | Palmer Road | 1.10 | 328 | P | Pn | 06 35 43.0 | +0.4 |
| TMWZ | Te Maipa | 1.12 | 139 | P | Pn | 06 35 43.4 | +0.6 |
| WHVZ | Whangaehu Hut | 1.12 | 28 | P | Pn | 06 35 42.9 | -0.2 |
| MAVZ | Matarangi | 1.12 | 27 | P | Pn | 06 35 43.4 | +0.2 |
| FWVZ | Far West T-bar | 1.13 | 26 | P | Pn | 06 35 42.9 | -0.3 |
| BHW | Baring Head | 1.13 | 182 | P | Pn | 06 35 43.3 | +0.3 |
| VRZ | Vera Road | 1.15 | 354 | P | Pn | 06 35 43.0 | -0.3 |
| TUVZ | Tukino | 1.16 | 30 | P | Pn | 06 35 43.5 | 0.0 |
| CPVWZ | Castlepoint | 1.17 | 123 | P | Pn | 06 35 43.9 | +0.5 |
| MSWZ | Mikau Station | 1.17 | 168 | P | Pn | 06 35 43.8 | +0.3 |
| NMEZ | Namu Road | 1.17 | 317 | P | Pn | 06 35 43.6 | +0.1 |
| PAWZ | Paruwai Farm | 1.17 | 161 | P | Pn | 06 35 44.1 | +0.5 |
| COVZ | Chateau Observ | 1.18 | 25 | P | Pn | 06 35 43.3 | -0.4 |
| NEZ | North Egmont | 1.18 | 328 | P | Pn | 06 35 43.9 | +0.2 |
| WPHZ | Waipukurau | 1.19 | 80 | P | Pn | 06 35 44.1 | +0.4 |
| KHEZ | Kahui Hut | 1.20 | 324 | P | Pn | 06 35 43.9 | -0.1 |
| KHEZ | Kahui Hut | 1.20 | 324 | P | Pn | 06 35 44.2 | +0.3 |
| ANWZ | Angora Road | 1.21 | 99 | P | Pn | 06 35 44.2 | +0.3 |
| DREZ | Durham Road | 1.22 | 333 | P | Pn | 06 35 44.6 | +0.5 |
| NGZ | Ngauruhoe | 1.22 | 26 | P | Pn | 06 35 44.0 | -0.3 |
| SNVZ | South Ngauruho | 1.22 | 28 | P | Pn | 06 35 44.4 | 0.0 |
| OTVZ | Oturere | 1.25 | 28 | P | Pn | 06 35 44.4 | -0.3 |
| NNVZ | North Ngauruho | 1.26 | 26 | P | Pn | 06 35 44.6 | -0.3 |
| TWVZ | Taurewa | 1.27 | 19 | P | Pn | 06 35 44.1 | -0.7 |
| TRWZ | Traveller | 1.27 | 153 | P | Pn | 06 35 45.6 | +0.8 |
| WTVZ | West Tongariro | 1.27 | 24 | P | Pn | 06 35 44.6 | -0.3 |
| MHEZ | Mangahewa | 1.28 | 339 | P | Pn | 06 35 45.4 | +0.5 |
| KRHZ | Kereru | 1.28 | 61 | P | Pn | 06 35 44.9 | -0.2 |
| NBEZ | Newall Road No | 1.29 | 321 | P | Pn | 06 35 45.0 | 0.0 |
| ETVZ | East Tongariro | 1.29 | 29 | P | Pn | 06 35 45.3 | +0.1 |
| PKE | Pukeiti | 1.29 | 326 | P | Pn | 06 35 45.1 | 0.0 |
| KRVZ | Karewarewa | 1.30 | 26 | P | Pn | 06 35 44.9 | -0.5 |
| TMVZ | Te Maari | 1.31 | 28 | P | Pn | 06 35 45.4 | -0.1 |
| NTVZ | North Tongarir | 1.31 | 27 | P | Pn | 06 35 45.5 | 0.0 |
| PRHZ | Porangahau | 1.32 | 90 | P | Pn | 06 35 45.5 | +0.1 |
| PLWZ | Palliser | 1.32 | 169 | P | Pn | 06 35 45.5 | 0.0 |
| TUWZ | Tuamarina | 1.37 | 212 | P | Pn | 06 35 46.9 | +0.8 |
| KATZ | Kakaramea | 1.43 | 25 | P | Pn | 06 35 47.1 | +0.1 |
| KWHZ | Kaweka Forest | 1.44 | 54 | P | Pn | 06 35 47.2 | +0.2 |
| NNZ | Nelson | 1.50 | 231 | P | Pn | 06 35 47.8 | 0.0 |
| RATZ | Rangitukua | 1.55 | 26 | P | Pn | 06 35 48.8 | +0.2 |
| CMWZ | Cape Campbell | 1.57 | 200 | P | Pn | 06 35 49.5 | +0.8 |
| KAHZ | Kahuranaki | 1.58 | 73 | P | Pn | 06 35 48.7 | -0.2 |
| MCHZ | McNeill Hill | 1.60 | 59 | P | Pn | 06 35 49.4 | +0.2 |
| BSWZ | Blackbirch Sta | 1.64 | 208 | P | Pn | 06 35 49.9 | +0.2 |
| BKZ | Black Stump Fm | 1.65 | 48 | P | Pn | 06 35 50.0 | +0.2 |
| BKZ | Black Stump Fm | 1.65 | 48 | P | Pn | 06 35 49.9 | 0.0 |
| HATZ | Hinemaiaia | 1.65 | 34 | P | Pn | 06 35 49.7 | -0.2 |
| TKNZ | Takaka Hill | 1.67 | 242 | P | Pn | 06 35 50.3 | +0.2 |
| WATZ | Wairara | 1.69 | 22 | P | Pn | 06 35 50.7 | +0.4 |
| HIZ | Hauiti | 1.76 | 359 | P | Pn | 06 35 51.2 | -0.1 |
| HIZ | Hauiti | 1.76 | 359 | P | Pn | 06 35 51.2 | -0.1 |
| MRHZ | Matea Rd | 1.85 | 39 | P | Pn | 06 35 51.7 | -0.9 |
| NMHZ | Naumai | 1.87 | 52 | P | Pn | 06 35 52.7 | -0.2 |
| ARHZ | Aropaoanui | 1.90 | 59 | P | Pn | 06 35 52.7 | -0.4 |
| QRZ | Quartz Range | 1.90 | 252 | P | Pn | 06 35 52.6 | -0.5 |
| QRZ | Quartz Range | 1.90 | 252 | P | Pn | 06 35 52.6 | -0.5 |
| KUTZ | Kaahu Road | 1.92 | 22 | P | Pn | 06 35 53.6 | +0.2 |
| MRNZ | Matariki Terra | 1.98 | 235 | P | Pn | 06 35 54.8 | +0.5 |
| TLZ | Tolley Road | 2.00 | 14 | P | Pn | 06 35 54.0 | -0.6 |
| ALRZ | Allen Road | 2.04 | 33 | P | Pn | 06 35 54.8 | -0.2 |
| MTHZ | Maungataniwha | 2.06 | 47 | P | Pn | 06 35 54.5 | -0.8 |
| THZ | Tophouse | 2.13 | 225 | P | Pn | 06 35 56.5 | +0.2 |
| WHHZ | Waihua | 2.15 | 57 | P | Pn | 06 35 59.0 | +2.4 |
| HRRZ | Handcock Road | 2.16 | 30 | P | Pn | 06 35 57.2 | +0.5 |
| MUGZ | Murupara | 2.30 | 39 | P | Pn | 06 35 57.4 | -1.1 |
| RTZ | Ruatahuna | 2.30 | 45 | P | Pn | 06 35 57.4 | -1.3 |
| KHZ | Kahutara | 2.38 | 205 | P | Pn | 06 35 59.1 | -0.5 |
| KHZ | Kahutara | 2.38 | 205 | P | Pn | 06 35 59.3 | -0.3 |
| TARZ | Mount Tarawera | 2.38 | 32 | P | Pn | 06 36 00.2 | +0.4 |
| SNGZ | Shannon Statio | 2.40 | 52 | P | Pn | 06 35 59.1 | -0.9 |
| KNZ | Kokohu | 2.47 | 60 | P | Pn | 06 35 59.5 | -1.4 |
| MHGZ | Mahia Peninsul | 2.56 | 65 | P | Pn | 06 36 01.0 | -1.2 |
| TOZ | Tahuroa Road | 2.58 | 10 | P | Pn | 06 36 02.0 | -0.3 |
| RAGZ | Rawiri | 2.63 | 48 | P | Pn | 06 36 03.8 | +0.7 |
| URZ | Urewera | 2.64 | 41 | P | Pn | 06 36 01.3 | -1.8 |
| URZ | Urewera | 2.64 | 41 | P | Pn | 06 36 01.3 | -1.8 |
| PRGZ | Paritu Road | 2.66 | 60 | P | Pn | 06 36 02.0 | -1.6 |
| MARZ | Manawahe | 2.66 | 31 | P | Pn | 06 36 05.3 | +1.7 |
| RIGZ | Rimuhau | 2.70 | 56 | P | Pn | 06 36 02.5 | -1.6 |
| DSZ | Denniston Nort | 2.77 | 237 | P | Pn | 06 36 04.4 | -0.6 |
| MWZ | Matawai | 2.80 | 47 | P | Pn | 06 36 03.7 | -1.8 |
| WHRZ | Whale Island | 2.90 | 34 | P | Pn | 06 36 10.0 | +3.3 |
| TKGZ | Te Karaka | 2.92 | 52 | P | Pn | 06 36 05.2 | -1.8 |
| GVZ | Greta Valley S | 3.04 | 207 | P | Pn | 06 36 07.6 | -1.1 |
| RUGZ | Raukumara Rang | 3.15 | 44 | P | Pn | 06 36 07.9 | -2.3 |
| MKAZ | Moumakai | 3.17 | 4 | P | Pn | 06 36 10.2 | -0.2 |
| TWGZ | Tauwhareparae | 3.17 | 50 | P | Pn | 06 36 09.1 | -1.4 |
| LTZ | Lake Taylor | 3.20 | 218 | P | Pn | 06 36 09.7 | -1.1 |
| AWAZ | Awhitu Peninsu | 3.21 | 356 | P | Pn | 06 36 11.1 | +0.1 |
| ETAZ | East Tamaki Re | 3.31 | 0 | P | Pn | 06 36 12.7 | +0.3 |
| WTAZ | Waiatarua | 3.35 | 355 | P | Pn | 06 36 13.8 | +0.9 |
| PUZ | Puketiti | 3.40 | 51 | P | Pn | 06 36 11.5 | -2.2 |
| WIAZ | Waiheke Island | 3.48 | 3 | P | Pn | 06 36 14.9 | +0.3 |
| MBAZ | Motutapu North | 3.50 | 360 | P | Pn | 06 36 15.1 | +0.2 |
| RVAZ | Riverhead Bore | 3.51 | 356 | P | Pn | 06 36 15.1 | +0.1 |
| INZ | Inchbonnie | 3.58 | 226 | P | Pn | 06 36 14.8 | -1.1 |
| KUZ | Kuaotunu | 3.58 | 10 | P | Pn | 06 36 15.5 | -0.5 |
| KUZ | Kuaotunu | 3.58 | 10 | P | Pn | 06 36 15.5 | -0.5 |
| OKCZ | Okains Bay | 3.71 | 201 | P | Pn | 06 36 16.2 | -1.6 |
| MXZ | Matakaoa Point | 3.79 | 45 | P | Pn | 06 36 16.9 | -1.9 |
| MXZ | Matakaoa Point | 3.79 | 45 | P | Pn | 06 36 16.9 | -1.9 |
| WVZ | Waitaha Valley | 4.20 | 227 | P | Pn | 06 36 24.0 | -0.4 |
| WCZ | Waipu Caves | 4.35 | 354 | P | Pn | 06 36 26.4 | -0.2 |
| RPZ | Rata Peaks | 4.48 | 219 | P | Pn | 06 36 27.3 | -1.0 |
| GCSZ | Gaunt Creek Bo | 4.58 | 227 | P | Pn | 06 36 28.8 | -0.9 |
| ARCZ | Arundel | 4.60 | 216 | P | Pn | 06 36 29.2 | -0.8 |
| TMZ | Timaru | 5.03 | 214 | P | Pn | 06 36 33.9 | -1.9 |
| OUZ | Omahuta | 5.15 | 348 | P | Pn | 06 36 37.9 | +0.4 |
| OUZ | Omahuta | 5.15 | 348 | P | Pn | 06 36 37.7 | +0.2 |
| ODZ | Otahua Downs | 5.71 | 212 | P | Pn | 06 36 43.3 | -1.8 |
| JCZ | Jackson Bay | 5.93 | 228 | P | Pn | 06 36 46.7 | -1.5 |
| JCZ | Jackson Bay | 5.93 | 228 | P | Pn | 06 36 46.5 | -1.7 |
| CTZ | Chatham Island | 7.19 | 122 | P | Pn | 06 37 04.5 | -0.8 |
| CTZ | Chatham Island | 7.19 | 122 | P | Pn | 06 37 04.6 | -0.7 |

*IDC **28** 06:43:32.4±1.1, 14.°10N×145.°57E, h93km±10km, mb3.7/13, mbtmp4.0/13, Error ellipse: s-maj=25.0km s-min=18.2km az=100.0*

*NEIC **28** 06:43:33.9±0.8, 14.°03N±0.°08×145.°6E±0.°1, h96km±9km, mb4.4/24, Error ellipse: s-maj=20.7km s-min=6.8km az=119.0*

**ISC 28 06:43:33.2**±0.6, **14.°1N**±0.°1×**145.°5E**±0.°1, **h100**km, **n46,** σ0**79**/41, **mb4.1**/24, **Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| GUMO | Guam 2μm,0.3s,baz=69,slow=2.7,SNR=378 | 0.80 | 234 | P | Pn | 06 43 51.9 | +0.3 |
| GUMO | 2μm,0.3s,baz=285,slow=20,SNR=14 | | | S | Sn | 06 44 05.1 | -0.3 |
| PATS | Pohnpei | 14.46 | 118 | Pn | Pn | 06 46 53.0 | -0.3 |
| H11S3 | WAKE ISLAND Hy baz=258,slow=75 | 20.77 | 75 | T | T | 07 09 32.6 | |
| H11S1 | WAKE ISLAND Hy baz=258,slow=75 | 20.79 | 75 | T | T | 07 09 42.4 | |
| H11S2 | WAKE ISLAND Hy baz=258,slow=75 | 20.79 | 75 | T | T | 07 09 31.7 | |
| H11N1 | WAKE ISLAND Hy baz=260 | 21.18 | 72 | T | T | 07 10 05.2 | |
| H11N2 | WAKE ISLAND Hy baz=260 | 21.19 | 72 | T | T | 07 10 04.5 | |
| H11N3 | WAKE ISLAND Hy baz=260 | 21.20 | 72 | T | T | 07 10 08.6 | |
| WB0 | Warramunga Arr | 35.36 | 198 | P | P | 06 50 19.6 | +0.3 |
| WR0 | Warramunga Arr | 35.50 | 198 | P | P | 06 50 21.2 | +0.7 |
| WB2 | Warramunga Arr | 35.54 | 198 | P | P | 06 50 21.2 | +0.3 |
| WB2 | comp=Z,3.7nm,0.9s | | | IAmb | IAmb | 06 50 22.7 | |
| WRA | Warramunga Arr comp=Z,1.5nm,0.8s,baz=22,slow=9.6,SNR=11 comp=Z,1.5nm,0.8s | 35.54 | 198 | P | P | 06 50 20.9 | 0.0 |
| ASAR | Alice Springs comp=Z,0.4nm,0.7s,baz=28,slow=12,SNR=4.7 comp=Z,0.4nm,0.7s | 39.18 | 197 | P | P | 06 50 52.0 | +0.3 |
| SONM | Songino Array comp=Z,0.5nm,0.4s,baz=116,slow=3.4,SNR=4.2 comp=Z,0.5nm,0.4s | 46.73 | 324 | P | P | 06 51 52.5 | +0.1 |
| LVA | Lava Point | 54.98 | 32 | P | P | 06 52 54.8 | +0.8 |
| S12K | Black Hills | 57.71 | 32 | P | P | 06 53 14.1 | +0.7 |
| N15K | Kwethluk River | 60.55 | 28 | P | P | 06 53 34.2 | +1.4 |
| MKAR | Makanchi Array comp=Z,0.7nm,0.6s,baz=92,slow=8.1,SNR=5.6 comp=Z,0.7nm,0.6s | 61.60 | 316 | P | P | 06 53 40.8 | +0.4 |
| ZAA0 | Zalesovo Array | 61.62 | 324 | | P | 06 53 41.3 | +1.1 |
| ZAA0 | comp=Z,1.6nm,0.8s | | | IAmb | IAmb | 06 53 47.7 | |
| ZALV | Zalesovo Beam comp=Z,0.8nm,0.5s,baz=90,slow=4.8,SNR=2.4 comp=Z,0.8n

**IDC 28 06:44:49.5±3.6, 53°.75N×88°.08E, h0km, mbtmp2.7/2, ML2.7/2, Error ellipse: s-maj=34.3km s-min=19.9km az=42.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.94** | **277** | I | I | 06 57 30.0 | |
| | 0.1nm,0.7s,baz=94,slow=329,SNR=3.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.94** | **277** | Pg | Pb | 06 45 24.9 | -0.8 |
| | 0.5nm,0.3s,baz=96,slow=13,SNR=9.0 | | | | | | |
| ZALV | | | | Lg | Lg | 06 45 51.4 | |
| | 1.3nm,0.3s,baz=91,slow=29,SNR=10 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.65** | **246** | Pn | Pn | 06 46 29.1 | +0.6 |
| | 0.2nm,0.3s,baz=59,slow=14,SNR=7.8 | | | | | | |
| KURBB | | | | Lg | Lg | 06 48 18.7 | |
| | baz=46,slow=29 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.89** | **210** | Pn | Pn | 06 46 46.5 | +1.0 |
| | 0.1nm,0.3s,baz=34,slow=16,SNR=2.5 | | | | | | |
| | 0.2nm,0.7s | | | | | | |

*IDC 28 06:46:54.2±0.9, 22°.34S×170°.33E, h0km, mb3.9/8, mbtmp3.9/11, ML4.1/3, MS3.6/4, Error ellipse: s-maj=25.3km s-min=23.0km az=177.0*

**ISC 28 06:46:58.7±0.7, 22°.3S±0°.1×170°.36E±0°.08, h33km, n20, σ0§64/19, mb4.1/10, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.64** | **273** | Pn | Pn | **06 47 52.3** | **-0.6** |
| | 8.6nm,0.3s,baz=118,slow=13,SNR=82 | | | | | | |
| DZM | | | | Sn | Sn | **06 48 34.3** | **-0.4** |
| | 11nm,0.3s,baz=127,slow=23,SNR=8.1 | | | | | | |
| DZM | | | | LR | LR | 06 49 10.3 | |
| | comp=Z,112nm,20.0s,baz=28,slow=38 | | | | | | |
| | 26nm,0.3s | | | | | | |
| **MSVF** | **Nonsavu** | **8.55** | **59** | Pn | Pn | **06 48 59.4** | **-0.9** |
| | 0.4nm,0.3s,baz=282,slow=19,SNR=2.0 | | | | | | |
| | 6.3nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **16.26** | **320** | LR | LR | 06 56 27.5 | |
| | comp=Z,1μm,18.8s,baz=14,slow=35 | | | | | | |
| **URZ** | **Urewera** | **16.90** | **161** | Pn | P | **06 50 53.8** | **-0.6** |
| | 0.1nm,0.3s,baz=352,slow=7.1,SNR=2.1 | | | | | | |
| URZ | | | | LR | LR | 06 56 27.5 | |
| | comp=Z,224nm,18.6s,baz=90,slow=34 | | | | | | |
| | 3.0nm,0.8s | | | | | | |
| **RPZ** | **Rata Peaks** | **21.34** | **179** | LR | LR | 06 58 38.5 | |
| | comp=Z,250nm,18.8s,baz=340,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **33.53** | **261** | P | P | **06 53 35.6** | **0.0** |
| | 0.7nm,0.9s,baz=88,slow=9.4,SNR=5.0 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.64** | **267** | P | P | **06 53 35.8** | **-0.7** |
| | 0.9nm,0.8s,baz=99,slow=8.6,SNR=2.6 | | | | | | |
| | 0.9nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.96** | **332** | P | P | **06 57 41.5** | **-0.2** |
| | 0.8nm,0.3s,baz=157,slow=6.5,SNR=2.4 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.74** | **180** | P | P | **06 57 53.5** | **+0.6** |
| | 1.0nm,1.0s,baz=17,slow=2.4,SNR=2.2 | | | | | | |
| | 1.0nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **71.64** | **326** | P | P | **06 58 18.4** | **+1.5** |
| | 1.5nm,0.7s,baz=146,slow=6.0,SNR=6.9 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.54** | **184** | ⇑Pdiff | P | **06 59 33.4** | **+0.1** |
| | comp=Z,70nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **86.13** | **182** | ⇑Pdiff | P | **06 59 35.7** | **-0.4** |
| | comp=Z,32nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **86.13** | **182** | P | P | **06 59 35.9** | **-0.2** |
| | comp=Z,1.9nm,1.1s,baz=184,slow=2.8,SNR=3.6 | | | | | | |
| | comp=Z,1.9nm,1.1s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.68** | **180** | ⇑Pdiff | P | **06 59 38.6** | **-0.2** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.99** | **181** | ⇑Pdiff | P | **06 59 40.1** | **-0.1** |
| | comp=Z,2.7nm,0.7s,baz=174,slow=3.4 | | | | | | |
| **SONM** | **Songino Array** | **90.31** | **323** | P | P | **06 59 56.6** | **+0.3** |
| | comp=Z,0.4nm,0.4s,baz=152,slow=6.5,SNR=2.4 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **92.86** | **17** | P | P | **07 00 07.4** | **-0.2** |
| | comp=Z,0.4nm,0.7s,baz=212,slow=4.9,SNR=2.8 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.69** | **353** | PKPbc | **PKPbc** | **07 06 36.9** | **+0.1** |
| | comp=Z,1.4nm,0.4s,baz=358,slow=3.0,SNR=10 | | | | | | |
| **GERES** | **GERESS Array B** | **147.69** | **331** | PKPbc | **PKPbc** | **07 06 40.2** | **+0.3** |
| | comp=Z,1.5nm,0.7s,baz=15,slow=4.1,SNR=4.1 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.95** | **332** | PKPbc | **PKiKP** | **07 06 50.0** | **+1.2** |
| | comp=Z,2.4nm,0.4s,baz=270,slow=3.0,SNR=5.3 | | | | | | |

*IDC 28 06:53:29.5±1.8, 43°.68N×127°.42W, h0km, mb3.3/5, mbtmp3.5/12, ML3.4/7, MS3.4/14, Error ellipse: s-maj=29.1km s-min=13.6km az=53.0*
*NEIC 28 06:53:32.3±2.1, 43°.66N±0°.08×127°.5W±0°.1, h10km±2km, ML3.5/66, Error ellipse: s-maj=16.3km s-min=11.9km az=235.0*

**ISC 28 06:53:32.2±1.3, 43°.68N±0°.09×127°.4W±0°.1, h15km, n87, σ2§20/73, mb3.4/4, MS3.4/6, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **J01E** | **Myrtle Point** | **2.54** | **100** | Pn | Pn | **06 54 12.4** | **-0.5** |
| J01E | | | | IAML | | 06 54 48.9 | |
| | comp=N,244nm,0.7s | | | | | | |
| J01E | | | | IAML | | 06 54 51.4 | |
| | comp=E,221nm,0.9s | | | | | | |
| **K02D** | **Willamette Mer** | **2.87** | **109** | | Pn | **06 54 16.7** | **-0.7** |
| K02D | | | | IAML | | 06 54 56.9 | |
| | comp=N,153nm,1.0s | | | | | | |
| K02D | | | | IAML | | 06 55 00.3 | |
| | comp=E,209nm,0.6s | | | | | | |
| **HEBO** | **Mount Hebo** | **3.00** | **58** | | Pn | **06 54 20.5** | **+1.3** |
| HEBO | | | | IAML | | 06 55 02.7 | |
| | comp=E,175nm,0.6s | | | | | | |
| **DBO** | **Dodson Butte** | **3.04** | **99** | Pn | Pn | **06 54 20.2** | **+0.4** |
| DBO | | | | IAML | | 06 55 03.7 | |
| | comp=E,166nm,1.1s | | | | | | |
| DBO | | | | IAML | | 06 55 10.2 | |
| | comp=N,108nm,0.8s | | | | | | |
| **COR** | **Corvallis** | **3.05** | **71** | | Pn | **06 54 21.3** | **+1.4** |
| COR | | | | IAML | | 06 55 08.2 | |
| | comp=N,95nm,1.0s | | | | | | |
| **L02F** | **Cave Junction** | **3.18** | **118** | Pn | Pn | **06 54 21.9** | **+0.2** |
| **BUCK** | **Buck Mountain** | **3.19** | **79** | Pn | Pn | **06 54 23.4** | **+1.5** |
| BUCK | | | | IAML | | 06 55 06.7 | |
| | comp=N,94nm,1.5s | | | | | | |
| **G03D** | **McMinnville, O** | **3.30** | **61** | | Pn | **06 54 25.0** | **+1.6** |
| G03D | | | | IAML | | 06 55 11.2 | |
| | comp=E,131nm,0.8s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.39** | **107** | Pn | Pn | **06 54 25.4** | **+0.8** |
| HUMO | | | | IAML | | 06 55 11.9 | |
| | comp=N,116nm,0.5s | | | | | | |
| HUMO | | | | IAML | | 06 55 13.2 | |
| | comp=E,77nm,0.6s | | | | | | |
| **H04D** | **Lebanon** | **3.43** | **74** | Pn | Pn | **06 54 26.9** | **+1.8** |
| H04D | | | | IAML | | 06 55 14.8 | |
| | comp=E,93nm,0.9s | | | | | | |
| **F03A** | **Seaside** | **3.52** | **49** | | Pn | **06 54 28.0** | **+1.7** |
| **I04A** | **Tendick Farm,** | **3.58** | **86** | | Pn | **06 54 29.2** | **+2.0** |
| I04A | | | | IAML | | 06 55 18.7 | |
| | comp=E,120nm,0.9s | | | | | | |
| I04A | | | | IAML | | 06 55 22.4 | |
| | comp=N,82nm,1.3s | | | | | | |
| **RADR** | **Rader Ridge** | **3.72** | **41** | | Pn | **06 54 30.2** | **+1.1** |
| RADR | | | | IAML | | 06 55 25.7 | |
| | comp=N,79nm,3.6s | | | | | | |
| RADR | | | | IAML | | 06 56 51.3 | |
| | comp=E,71nm,2.5s | | | | | | |
| **H04A** | **Detroit Lake** | **3.85** | **73** | Pn | Pn | **06 54 32.9** | **+2.0** |
| **F04D** | **Rainier, OR** | **3.91** | **51** | | Pn | **06 54 33.3** | **+1.6** |
| **E03A** | **Lebam** | **3.93** | **42** | Pn | Pn | **06 54 33.0** | **+1.1** |
| **YBH** | **Yreka Blue Hor** | **3.93** | **118** | Pn | Pn | **06 54 33.5** | **+1.5** |
| **YBH** | **Yreka Blue Hor** | **3.93** | **118** | Pn | Pn | **06 54 33.0** | **+1.0** |
| | comp=E,0.8nm,0.3s,baz=295,slow=13,SNR=19 | | | | | | |
| YBH | | | | Sn | Sn | **06 55 13.4** | **-4.6** |
| | comp=E,0.4nm,0.3s,baz=288,slow=13,SNR=2.1 | | | | | | |
| YBH | | | | Lg | Lg | 06 55 22.5 | |
| | comp=E,1.2nm,0.3s,baz=356,slow=24,SNR=10 | | | | | | |
| | comp=E,2.8nm,0.4s | | | | | | |
| **L04D** | **Klamath Falls** | **3.98** | **110** | IAML | | 06 55 25.2 | |
| | comp=N,103nm,1.1s | | | | | | |
| **F04A** | **Amboy** | **4.17** | **56** | Pn | Pn | **06 54 37.7** | **+2.4** |
| **WISH** | **Wishkah** | **4.27** | **35** | | Pn | **06 54 37.7** | **+1.2** |
| WISH | | | | IAML | | 06 55 53.4 | |
| | comp=E,82nm,2.8s | | | | | | |
| **I05D** | **Terrebonne, OR** | **4.38** | **79** | | Pn | **06 54 40.2** | **+2.0** |
| I05D | | | | IAML | | 06 55 52.3 | |
| | comp=E,44nm,1.2s | | | | | | |
| I05D | | | | IAML | | 06 55 53.7 | |
| | comp=N,46nm,1.7s | | | | | | |
| **KMRM** | **Mail Ridge** | **4.39** | **141** | Pn | Pn | **06 54 39.6** | **+1.3** |
| KMRM | | | | IAML | | 06 56 36.0 | |
| | comp=E,42nm,3.4s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.39** | **66** | IAML | | 06 55 45.6 | |
| | comp=E,58nm,0.9s | | | | | | |
| HOOD | | | | IAML | | 06 55 47.0 | |
| | comp=N,64nm,1.1s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.45** | **32** | Pn | Pn | **06 54 40.1** | **+1.0** |
| NLWA | | | | IAML | | 06 55 35.4 | |
| | comp=N,67nm,0.3s | | | | | | |
| **J05D** | **Fort Rock, OR** | **4.47** | **93** | Pn | Pn | **06 54 41.2** | **+1.8** |
| J05D | | | | IAML | | 06 55 40.4 | |
| | comp=N,34nm,0.6s | | | | | | |
| J05D | | | | IAML | | 06 56 12.2 | |
| | comp=E,32nm,3.1s | | | | | | |
| **G05A** | **Wamic** | **4.59** | **68** | Pn | Pn | **06 54 43.8** | **+2.7** |
| G05A | | | | IAML | | 06 55 20.2 | |
| | comp=E,56nm,3.6s | | | | | | |
| G05A | | | | IAML | | 06 56 32.5 | |
| | comp=N,47nm,4.2s | | | | | | |
| **PINE** | **Pine Mountain** | **4.64** | **86** | IAML | | 06 56 19.2 | |
| | comp=N,28nm,4.7s | | | | | | |
| **LON** | **Longmire** | **4.98** | **50** | IAML | | 06 56 02.0 | |
| | comp=N,32nm,1.1s | | | | | | |
| **GNW** | **Green Mountain** | **5.02** | **38** | IAML | | 06 55 51.4 | |
| | comp=E,36nm,0.3s | | | | | | |
| **PGC** | **Sidney** | **5.66** | **27** | Pn | Pn | **06 54 56.4** | **+0.6** |
| **F07A** | **Phinny Hill Vi** | **5.73** | **65** | Pn | Pn | **06 54 59.0** | **+2.3** |
| **MXC** | **Moxie City** | **5.77** | **57** | | Pn | **06 54 59.5** | **+2.2** |
| **ORV** | **Oroville** | **6.01** | **131** | Pn | Pn | **06 55 02.9** | **+2.3** |
| **J08A** | **Circle Bar Ran** | **6.46** | **90** | | Pn | **06 55 08.2** | **+1.4** |
| **AFDM** | **Forest Hills D** | **6.73** | **132** | | Pn | **06 55 10.6** | **+0.1** |
| **PAHR** | **Pah Rah Range** | **7.16** | **121** | | Pn | **06 55 18.3** | **+1.9** |
| **PNTR** | **Pine Nut** | **7.41** | **126** | | Pn | **06 55 20.9** | **+0.9** |
| **KVN** | **Kaiserville** | **8.35** | **120** | Pn | Pn | **06 55 33.9** | **+1.1** |
| **MFID** | **Camas Ranch** | **8.37** | **88** | Pn | Pn | **06 55 35.4** | **+2.3** |
| **NEW** | **Newport** | **8.47** | **54** | Pn | Pn | **06 55 35.6** | **+1.3** |
| | comp=E,1.0nm,0.3s,baz=248,slow=12,SNR=13 | | | | | | |
| NEW | | | | LR | LR | 06 58 56.8 | |
| | comp=E,352nm,19.9s,baz=246,slow=38 | | | | | | |
| | comp=E,2.5nm,0.3s | | | | | | |
| **BBB** | **Bella Bella** | **8.53** | **357** | Pn | Pn | **06 55 35.2** | **+0.2** |
| | comp=E,0.8nm,0.3s,baz=188,slow=12,SNR=6.1 | | | | | | |
| BBB | | | | Sn | Sn | **06 57 09.6** | **-1.4** |
| | comp=E,0.3nm,0.3s,baz=227,slow=23,SNR=1.5 | | | | | | |
| BBB | | | | LR | LR | 06 58 16.1 | |
| | comp=E,176nm,18.0s,baz=166,slow=34 | | | | | | |
| | comp=E,7.5nm,0.8s | | | | | | |
| **LHV** | **Little Huntoon** | **8.61** | **126** | | Pn | **06 55 40.2** | **+4.1** |
| **NVAR** | **Mina Array Bea** | **8.61** | **124** | Pn | Pn | **06 55 37.5** | **+1.1** |
| | baz=291,slow=12,SNR=2.4 | | | | | | |
| NVAR | | | | LR | LR | 06 59 02.0 | |
| | comp=E,284nm,18.5s,baz=297,slow=38 | | | | | | |
| | comp=E,3.2nm,1.0s | | | | | | |
| **ELK** | **Elko** | **9.45** | **104** | | Pn | **06 55 52.0** | **+4.0** |
| **ELK** | **Elko** | **9.45** | **104** | Pn | Pn | **06 55 51.2** | **+3.2** |
| | baz=302,slow=11,SNR=6.4 | | | | | | |
| ELK | | | | LR | LR | 06 59 32.5 | |
| | comp=E,99nm,19.3s,baz=158,slow=38 | | | | | | |
| | comp=E,1.3nm,0.8s | | | | | | |
| **DSP** | **Deep Springs** | **9.52** | **128** | Pn | Pn | **06 55 52.2** | **+3.6** |
| **MSO** | **Missoula** | **9.97** | **67** | Pn | Pn | **06 55 54.9** | **0.0** |
| **GRAC** | **Grapevine Rang** | **10.12** | **128** | Pn | Pn | **06 55 60.0** | **+3.0** |
| **BPMT** | **Black Pine Rid** | **10.22** | **69** | Pn | Pn | **06 55 59.5** | **+1.0** |
| **ISA** | **Isabella, Lake** | **10.52** | **137** | | Pn | **06 56 03.8** | **+1.3** |
| **OVMT** | **Ovando** | **10.65** | **66** | Pn | Pn | **06 56 06.8** | **+2.5** |
| **DLMT** | **Dillon** | **10.67** | **76** | | Pn | **06 56 07.7** | **+3.1** |
| **TPNV** | **Topopah Spring** | **10.81** | **125** | | Pn | **06 56 10.7** | **+4.2** |
| **GWY** | **Greenwater Val** | **11.09** | **129** | Pn | Pn | **06 56 14.6** | **+4.2** |
| **LYMT** | **Lyon Mountain** | **11.10** | **68** | | Pn | **06 56 09.9** | **-0.7** |
| **BOZ** | **Bozeman (W)** | **11.37** | **75** | Pn | Pn | **06 56 16.8** | **+2.7** |
| **YHL** | **Hebgen Lake** | **11.65** | **79** | | Pn | **06 56 21.5** | **+3.3** |
| **HWUT** | **Hardware Ranch** | **11.81** | **95** | Pn | Pn | **06 56 23.0** | **+2.8** |
| **FXWY** | **Fox Creek** | **11.83** | **85** | | Pn | **06 56 25.2** | **+4.7** |
| **IMW** | **Indian Meadow** | **11.87** | **83** | | Pn | **06 56 22.2** | **+1.1** |
| **YHH** | **Holmes Hill** | **11.89** | **79** | | Pn | **06 56 22.9** | **+1.4** |
| **AHID** | **Auburn Hatcher** | **11.89** | **89** | | Pn | **06 56 23.2** | **+1.8** |
| **TPAW** | **Teton Pass** | **11.90** | **85** | | Pn | **06 56 23.6** | **+2.2** |
| **YPP** | **Pitchstone Pla** | **11.94** | **81** | | Pn | **06 56 21.2** | **-0.9** |
| **REDW** | **Red Top Meadow** | **11.98** | **86** | | Pn | **06 56 26.6** | **+4.0** |
| **FLWY** | **Flagg Ranch** | **12.03** | **82** | | Pn | **06 56 23.4** | **+0.3** |
| **SNOW** | **Snow King Moun** | **12.04** | **85** | | Pn | **06 56 26.2** | **+2.8** |
| **LOHW** | **Long Hollow** | **12.13** | **85** | | Pn | **06 56 27.5** | **+2.8** |
| **PDAR** | **Pinedale Array** | **13.01** | **88** | Pn | Pn | **06 56 40.1** | **+3.5** |
| | comp=E,0.1nm,0.3s,baz=279,slow=13,SNR=17 | | | | | | |
| PDAR | | | | LR | LR | 07 02 04.4 | |
| | comp=E,157nm,18.9s,baz=271,slow=39 | | | | | | |
| | comp=E,3.7nm,0.9s | | | | | | |
| **PFO** | **Pinyon Flats O** | **13.15** | **136** | LR | LR | 07 01 35.4 | |
| | comp=E,136nm,20.0s,baz=252,slow=37 | | | | | | |
| **DLBC** | **Dease Lake** | **14.88** | **355** | LR | LR | 07 01 58.8 | |
| | comp=E,138nm,19.8s,baz=160,slow=34 | | | | | | |
| **ANMO** | **Albuquerque** | **18.33** | **111** | P | Pn | **06 57 45.6** | **-0.4** |
| | comp=E,0.1nm,0.3s,baz=294,slow=9.7,SNR=1.8 | | | | | | |
| ANMO | | | | LR | LR | 07 05 22.3 | |
| | comp=E,147nm,18.5s,baz=296,slow=39 | | | | | | |
| | comp=E,0.4nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.27** | **17** | P | P | **06 58 05.9** | **-0.9** |
| | comp=E,0.8nm,0.8s,baz=206,slow=10,SNR=3.5 | | | | | | |
| YKA | | | | LR | LR | 07 04 46.2 | |
| | comp=E,45nm,20.4s,baz=78,slow=33 | | | | | | |
| | comp=E,0.8nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **21.15** | **321** | LR | LR | 07 04 13.3 | |
| | comp=E,123nm,21.0s,baz=143,slow=30 | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.35** | **62** | P | P | **06 58 29.4** | **+0.1** |
| | comp=E,2.7nm,0.8s,baz=258,slow=19,SNR=1.9 | | | | | | |
| ULM | | | | LR | LR | 07 07 30.9 | |
| | comp=E,169nm,19.6s,baz=238,slow=38 | | | | | | |
| | comp=E,2.7nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **23.71** | **119** | P | P | **06 58 43.4** | **-0.2** |
| | comp=E,0.6nm,0.9s,baz=307,slow=7.5,SNR=4.4 | | | | | | |
| | comp=E,0.6nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **23.82** | **339** | P | P | **06 58 42.2** | **-2.1** |
| | comp=E,0.4nm,0.8s,baz=147,slow=8.6,SNR=4.3 | | | | | | |
| ILAR | | | | LR | LR | 07 06 25.3 | |
| | comp=E,97nm,21.0s,baz=142,slow=33 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.16** | **88** | LR | LR | 07 15 02.1 | |
| | comp=E,143nm,19.5s,baz=298,slow=38 | | | | | | |
| **SADO** | **Sadowa,** | **34.16** | **71** | LR | LR | 07 14 32.3 | |
| | comp=E,97nm,19.0s,baz=245,slow=37 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **59.23** | **268** | T | T | 08 07 14.3 | |
| | baz=50,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **59.23** | **268** | T | T | 08 07 13.8 | |
| | baz=50,slow=75 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **59.24** | **268** | T | T | 08 07 15.3 | |
| | baz=50,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **60.15** | **268** | T | T | 08 08 37.6 | |
| | baz=50,slow=75 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **60.16** | **268** | T | T | 08 08 26.5 | |
| | baz=50,slow=75 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **60.17** | **268** | T | T | 08 08 19.8 | |
| | baz=50,slow=75 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.42** | **344** | P | P | **07 05 59.1** | **+0.4** |
| | comp=E,0.3nm,0.3s,baz=11,slow=4.8,SNR=3.5 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |

*NOU 28 06:56:21.2, 36°.67S×178°.55E, h228km, MLv4.0/10, Off E. Coast of N. Island, N.Z.*
*WEL 28 06:56:35.4±1.0, 37°.5S±7°×17°.8E±°, h102km±9km, M3.3/13, ML3.5/11, MLv3.3/13, Error ellipse: s-maj=0.0km s-min=0.0km az=46.5, confirmed*

**ISC 28 06:56:30.2±2.1, 37°.04S±0°.09×177°.83E±0°.08, h157km±9km, n126, σ2§10/133, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **0.64** | **144** | P | Pn | **06 56 54.3** | **+1.2** |
| **MXZ** | **Matakaoa Point** | **0.64** | **144** | P | Pn | **06 56 54.1** | **+1.1** |
| MXZ | | | | S | Sn | **06 57 09.6** | **-1.1** |
| **WIZ** | **White Island** | **0.70** | **226** | P | Pn | **06 56 53.4** | **0.0** |
| WIZ | | | | S | Sn | **06 57 07.7** | **-3.6** |
| **WSRZ** | **White Island S** | **0.70** | **227** | P | Pn | **06 56 54.1** | **+0.6** |
| WSRZ | | | | S | Sn | **06 57 09.3** | **-2.0** |
| **HAZ** | **Te Kaha** | **0.71** | **183** | P | Pn | **06 56 54.5** | **+1.0** |
| HAZ | | | | S | Sn | **06 57 09.6** | **-1.9** |
| **PKGZ** | **Pakihiroa** | **0.84** | **166** | P | Pn | **06 56 56.3** | **+1.8** |
| **RUGZ** | **Raukumara Rang** | **0.93** | **187** | P | Pn | **06 56 55.9** | **+0.7** |
| RUGZ | | | | S | Sn | **06 57 13.3** | **-1.1** |
| **WHRZ** | **Whale Island** | **1.05** | **220** | P | Pn | **06 56 57.4** | **+1.3** |
| **OPCS** | **Opotiki Colleg** | **1.06** | **204** | P | Pn | **06 56 56.4** | **+0.3** |
| OPCS | | | | S | Sn | **06 57 13.7** | **-2.3** |
| **PUZ** | **Puketiti** | **1.08** | **162** | P | Pn | **06 56 58.2** | **+1.9** |
| PUZ | | | | S | Sn | **06 57 15.9** | **-0.6** |
| **TWGZ** | **Tauwhareparae** | **1.14** | **174** | P | Pn | **06 56 59.6** | **+2.8** |
| TWGZ | | | | S | Sn | **06 57 18.1** | **+0.7** |
| **OPRZ** | **Ohinepanea** | **1.29** | **231** | P | Pn | **06 56 59.6** | **+1.4** |
| **MWZ** | **Matawai** | **1.31** | **190** | P | Pn | **06 57 00.1** | **+1.7** |
| **MARZ** | **Manawahe** | **1.31** | **224** | P | Pn | **06 57 00.1** | **+1.7** |
| **URZ** | **Urewera** | **1.34** | **205** | P | Pn | **06 57 00.1** | **+1.5** |
| **URZ** | **Urewera** | **1.34** | **205** | P | Pn | **06 57 00.1** | **+1.5** |
| **EDRZ** | **Edgecumbe** | **1.37** | **219** | P | Pn | **06 57 00.9** | **+1.9** |
| **TKGZ** | **Te Karaka** | **1.39** | **179** | P | Pn | **06 57 01.6** | **+2.4** |
| **TGRZ** | **Tauranga** | **1.42** | **241** | P | Pn | **06 57 00.8** | **+1.4** |
| **CNGZ** | **Carnagh Statio** | **1.47** | **168** | P | Pn | **06 57 02.8** | **+2.9** |
| **RAGZ** | **Rawiri** | **1.48** | **193** | P | Pn | **06 57 02.6** | **+2.4** |
| **MKRZ** | **Makatiti** | **1.54** | **224** | P | Pn | **06 57 03.6** | **+2.9** |
| **OMRZ** | **Omania** | **1.57** | **227** | P | Pn | **06 57 03.2** | **+2.2** |
| **TARZ** | **Mount Tarawera** | **1.58** | **221** | P | Pn | **06 57 03.8** | **+2.6** |
| **KARZ** | **Kaharoa** | **1.59** | **232** | P | Pn | **06 57 03.2** | **+2.0** |
| **MUGZ** | **Murupara** | **1.66** | **210** | P | Pn | **06 57 04.0** | **+2.1** |
| **RIGZ** | **Rimuhau** | **1.66** | **182** | P | Pn | **06 57 04.2** | **+2.2** |
| **RRRZ** | **Republican Roa** | **1.66** | **218** | P | Pn | **06 57 04.7** | **+2.7** |
| **HLRZ** | **Highlands Stat** | **1.68** | **224** | P | Pn | **06 57 04.9** | **+2.7** |
| **KMRZ** | **Kaimai** | **1.70** | **241** | P | Pn | **06 57 04.3** | **+1.9** |
| **RTZ** | **Ruatahuna** | **1.71** | **203** | P | Pn | **06 57 04.3** | **+1.8** |
| **KUZ** | **Kuaotunu** | **1.71** | **279** | P | Pn | **06 57 03.5** | **+1.0** |
| **KUZ** | **Kuaotunu** | **1.71** | **279** | P | Pn | **06 57 03.4** | **+1.0** |
| **SNGZ** | **Shannon Statio** | **1.78** | **192** | P | Pn | **06 57 05.5** | **+2.3** |
| **HSRZ** | **Hossack Road** | **1.78** | **224** | P | Pn | **06 57 06.3** | **+3.0** |
| **HRRZ** | **Handcock Road** | **1.82** | **222** | P | Pn | **06 57 06.6** | **+2.9** |
| **PRGZ** | **Paritu Road** | **1.88** | **179** | P | Pn | **06 57 07.0** | **+2.7** |
| **GRWZ** | **Galatos Road** | **1.88** | **226** | P | Pn | **06 57 07.3** | **+3.0** |
| **ALRZ** | **Allen Road** | **1.92** | **217** | P | Pn | **06 57 07.5** | **+2.7** |
| **MTHZ** | **Maungataniwha** | **1.96** | **203** | P | Pn | **06 57 07.3** | **+1.9** |
| **TOZ** | **Tahuroa Road** | **1.97** | **249** | P | Pn | **06 57 07.6** | **+2.2** |
| **KNZ** | **Kokohu** | **1.98** | **183** | P | Pn | **06 57 07.6** | **+2.2** |
| **GRZ** | **Great Barrier** | **2.06** | **292** | P | Pn | **06 57 07.8** | **+1.4** |
| **WHHZ** | **Waihua** | **2.08** | **193** | P | Pn | **06 57 09.1** | **+2.5** |
| **MRHZ** | **Matea Rd** | **2.10** | **211** | P | Pn | **06 57 09.3** | **+2.3** |
| **MHGZ** | **Mahia Peninsul** | **2.11** | **178** | P | Pn | **06 57 09.7** | **+2.7** |
| **MKAZ** | **Moumakai** | **2.13** | **268** | P | Pn | **06 57 09.2** | **+1.9** |
| **KUTZ** | **Kaahu Road** | **2.14** | **227** | P | Pn | **06 57 10.7** | **+3.3** |
| **NMHZ** | **Naumai** | **2.20** | **201** | P | Pn | **06 57 11.0** | **+2.8** |
| **TLZ** | **Tolley Road** | **2.22** | **234** | P | Pn | **06 57 11.3** | **+3.0** |
| **HATZ** | **Hinemaiaia** | **2.30** | **216** | P | Pn | **06 57 11.8** | **+2.6** |
| **ARHZ** | **Aropaoanui** | **2.31** | **196** | P | Pn | **06 57 12.0** | **+2.7** |
| **ETAZ** | **East Tamaki Re** | **2.32** | **271** | P | Pn | **06 57 11.6** | **+2.1** |
| **BKZ** | **Black Stump Fm** | **2.36** | **206** | P | Pn | **06 57 12.1** | **+2.0** |
| **BKZ** | **Black Stump Fm** | **2.36** | **206** | P | Pn | **06 57 12.0** | **+2.0** |
| **RATZ** | **Rangitukua** | **2.44** | **221** | P | Pn | **06 57 14.3** | **+3.4** |
| **AWAZ** | **Awhitu Peninsu** | **2.55** | **269** | P | Pn | **06 57 15.7** | **+3.5** |
| **MCHZ** | **McNeill Hill** | **2.56** | **200** | P | Pn | **06 57 14.9** | **+2.6** |
| **KATZ** | **Kakaramea** | **2.56** | **220** | P | Pn | **06 57 16.4** | **+4.0** |
| **KWHZ** | **Kaweka Forest** | **2.62** | **205** | P | Pn | **06 57 15.2** | **+2.0** |
| **TMVZ** | **Te Maari** | **2.66** | **218** | P | Pn | **06 57 16.6** | **+2.9** |
| **NTVZ** | **North Tongarir** | **2.66** | **219** | P | Pn | **06 57 16.7** | **+3.0** |
| **ETVZ** | **East Tongariro** | **2.67** | **218** | P | Pn | **06 57 16.6** | **+2.8** |
| **CKHZ** | **Cape Kidnapper** | **2.67** | **192** | P | Pn | **06 57 15.6** | **+1.9** |
| **KRVZ** | **Karewarewa** | **2.68** | **219** | P | Pn | **06 57 16.9** | **+3.0** |
| **OTVZ** | **Oturere** | **2.72** | **218** | P | Pn | **06 57 17.1** | **+2.7** |
| **NNVZ** | **North Ngauruho** | **2.72** | **219** | P | Pn | **06 57 17.7** | **+3.2** |
| **WTVZ** | **West Tongariro** | **2.72** | **220** | P | Pn | **06 57 17.4** | **+3.0** |
| **SNVZ** | **South Ngauruho** | **2.75** | **218** | P | Pn | **06 57 17.6** | **+2.8** |
| **NGZ** | **Ngauruhoe** | **2.76** | **219** | P | Pn | **06 57 17.9** | **+2.9** |
| **TWVZ** | **Taurewa** | **2.77** | **222** | P | Pn | **06 57 18.2** | **+3.3** |
| **HIZ** | **Hauiti** | **2.77** | **237** | P | Pn | **06 57 18.8** | **+3.9** |
| **HIZ** | **Hauiti** | **2.77** | **237** | P | Pn | **06 57 18.8** | **+3.9** |
| **TUVZ** | **Tukino** | **2.80** | **217** | P | Pn | **06 57 18.0** | **+2.5** |
| **KRHZ** | **Kereru** | **2.84** | **203** | P | Pn | **06 57 17.3** | **+1.6** |
| **FWVZ** | **Far West T-bar** | **2.84** | **218** | P | Pn | **06 57 19.1** | **+3.0** |
| **KAHZ** | **Kahuranaki** | **2.84** | **195** | P | Pn | **06 57 18.0** | **+2.1** |
| **MOVZ** | **Moawhango** | **2.87** | **214** | P | Pn | **06 57 18.1** | **+1.8** |
| **WNVZ** | **Wahianoa** | **2.88** | **217** | P | Pn | **06 57 18.9** | **+2.4** |
| **PKVZ** | **Pokaka** | **2.97** | **220** | P | Pn | **06 57 20.3** | **+2.7** |
| **MTVZ** | **Mangateitei** |

*δ35.38000°,λ113.44000°. Principal axes: T 1.2081, Plg72.0000°, Azm121.0000°; N 0.1130, Plg13.0000°, Azm258.0000°; P -1.3211, Plg12.0000°, Azm351.0000°;*
*NEIC **28** 07:08:11.3, 10.90S×124.14E, h14km*
*GCMT **28** 07:08:17.4±0.0, 10.82S×124.14E, h12km, MW6.2/161, Moment Tensor Solution. s161,c379; s160,c663; Duration: 3.0 Moment tensor: Scale 10^18 Nm; Mrr2.08±.01; Mθθ-2.41±.01; Mφφ0.32±.01; Mrθ-0.39±.03; Mrφ-0.16±.01; Mθφ-0.53±.03; Best double couple: M=2.35400×10^18 NP1:φs253.00000°,δ52.00000°, λ71.00000°. NP2:φs101.00000°,δ42.00000°,λ112.00000°. Principal axes: T 2.2500, Plg74.0000°, Azm105.0000°; N 0.2020, Plg15.0000°, Azm264.0000°; P -2.4580, Plg5.0000°, Azm356.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 28 07:08:10.6±0.4, 10.78S±0.02×124.17E±0.03, h17km±1km, n1671, s199/1617, mb5.8/207, MS5.9/414, 79C-37D, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.76** | **318** | P | **Pb** | **07 08 25.2** | **-0.2** |
| **SOEI** | **Soe** | **1.02** | **5** | P | **Pn** | **07 08 30.2** | **-0.1** |
| **SOEI** | **Soe** | **1.02** | **5** | | **Pb** | **07 08 29.9** | **-0.1** |
| SOEI | | | | Sg | **Sn** | **07 08 49.5** | **+5.1** |
| **SOEI** | **Soe** | **1.02** | **5** | P | **Pb** | **07 08 29.2** | **-0.8** |
| **SOEI** | **Soe** | **1.02** | **5** | ⇓P | **Pb** | **07 08 29.8** | **-0.1** |
| **SOEI** | **Soe** | **1.02** | **5** | P | **Pb** | **07 08 29.6** | **-0.4** |
| **MMRI** | **Maumere** | **2.86** | **318** | P | **Pn** | **07 08 57.7** | **+2.2** |
| **MMRI** | **Maumere** | **2.86** | **318** | Pn | **Pn** | **07 08 56.3** | **+0.7** |
| **MMRI** | **Maumere** | **2.86** | **318** | ⇑P | **Pn** | **07 08 56.4** | **+0.9** |
| **MMRI** | **Maumere** | **2.86** | **318** | P | **Pn** | **07 08 56.7** | **+1.2** |
| **EDFI** | **Ende, Flores** | **3.17** | **309** | P | **Pn** | **07 09 00.2** | **+0.3** |
| **BASI** | **Baing, Sumba** | **3.58** | **279** | P | **Pn** | **07 09 05.9** | **+0.5** |
| **WBSI** | **Waikabubak, Su** | **4.84** | **283** | P | **Pn** | **07 09 22.7** | **-0.1** |
| **BBSI** | **Bau Bau** | **5.49** | **343** | P | **Pn** | **07 09 34.7** | **+3.0** |
| | 3μm,0.9s,15nm | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.87** | **321** | P | **Pn** | **07 09 39.0** | **+2.0** |
| **PLAI** | **Plampang** | **6.60** | **287** | P | **Pn** | **07 09 47.6** | **+0.7** |
| **KNRA** | **Kununurra** | **6.61** | **138** | Pn | **Pn** | **07 09 44.4** | **-2.7** |
| KNRA | | | | Sn | **Sn** | **07 11 02.6** | **+0.5** |
| **KNRA** | **Kununurra** | **6.61** | **138** | P | **Pn** | **07 09 45.2** | **-1.9** |
| | comp=Z,94μmcomp=Z,3139μmcomp=Z,0.0nmcomp=Z,3μm,0.9s | | | | | | |
| **BKSI** | **Bulukumba** | **6.74** | **323** | P | **Pn** | **07 09 49.9** | **+1.0** |
| **DRS** | **Darwin Rock St** | **6.79** | **105** | P | **Pn** | **07 09 52.3** | **+2.7** |
| **MTN** | **Manton Dam** | **7.12** | **107** | P | **Pn** | **07 09 54.7** | **+0.6** |
| **MTN** | **Manton Dam** | **7.12** | **107** | Pn | **Pn** | **07 09 52.4** | **-1.7** |
| MTN | | | | Sn | **Sn** | **07 11 12.6** | **-2.0** |
| **MTN** | **Manton Dam** | **7.12** | **107** | ⇓P | **Pn** | **07 09 51.8** | **-2.3** |
| **MTN** | **Manton Dam** | **7.12** | **107** | P | **Pn** | **07 09 52.4** | **-1.7** |
| **KAPI** | **Kappang** | **7.21** | **322** | P | **Pn** | **07 09 57.6** | **+2.3** |
| **KAPI** | **Kappang** | **7.21** | **322** | Pn | **Pn** | **07 09 56.5** | **+1.2** |
| **KAPI** | **Kappang** | **7.21** | **322** | ⇑P | **Pn** | **07 09 57.9** | **+2.5** |
| **KAPI** | **Kappang** | **7.21** | **322** | Pn | **Pn** | **07 09 57.5** | **+2.2** |
| | comp=Z,22nm,0.3s,baz=145,slow=10.0,SNR=94 | | | | | | |
| KAPI | | | | LR | LR | 07 13 16.1 | |
| | comp=Z,329μm,20.8s,baz=145,slow=44 | | | | | | |
| **KAPI** | **Kappang** | **7.21** | **322** | P | **Pn** | **07 09 58.2** | **+2.8** |
| KAPI | | | | P | **Pn** | **07 09 58.2** | **+2.8** |
| KAPI | | | | S | **Sn** | **07 11 22.6** | **+5.7** |
| KAPI | | | | S | **Sn** | **07 11 22.6** | **+5.7** |
| **KAPI** | **Kappang** | **7.21** | **322** | *i* P | **Pn** | **07 09 57.7** | **+2.4** |
| KAPI | | | | MLR | MLR | | |
| | comp=Z,181μm,17.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **7.42** | **169** | Pn | **Pn** | **07 09 55.4** | **-2.8** |
| **TWSI** | **Taliwang, Sumb** | **7.47** | **285** | P | **Pn** | **07 09 58.8** | **-0.1** |
| **BNSI** | **Bone** | **7.51** | **327** | P | **Pn** | **07 10 03.2** | **+3.7** |
| | comp=Z,2μm,1.4s,comp=Z,28μmcomp=Z,8.8nm | | | | | | |
| **SAUI** | **Saumlaki** | **7.56** | **69** | P | **Pn** | **07 10 01.9** | **+1.7** |
| **SAUI** | **Saumlaki** | **7.56** | **69** | Pn | **Pn** | **07 10 00.5** | **+0.3** |
| **SAUI** | **Saumlaki** | **7.56** | **69** | ⇑P | **Pn** | **07 10 01.1** | **+0.9** |
| **SAUI** | **Saumlaki** | **7.56** | **69** | P | **Pn** | **07 10 00.9** | **+0.7** |
| **NLAI** | **Namlea** | **8.03** | **21** | P | **Pn** | **07 10 09.8** | **+3.1** |
| | comp=Z,570nm,1.0s,comp=Z,2μmcomp=Z,152μm | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.05** | **327** | P | **Pn** | **07 10 08.7** | **+1.7** |
| **KDU** | **Kakadu** | **8.35** | **104** | P | **Pn** | **07 10 13.6** | **+2.7** |
| **KDU** | **Kakadu** | **8.35** | **104** | ⇑P | **Pn** | **07 10 09.3** | **-1.7** |
| **KDU** | **Kakadu** | **8.35** | **104** | P | **Pn** | **07 10 09.5** | **-1.5** |
| **BNDI** | **Bandanaira** | **8.42** | **43** | P | **Pn** | **07 10 15.2** | **+3.3** |
| **BNDI** | **Bandanaira** | **8.42** | **43** | P | **Pn** | **07 10 16.0** | **+4.1** |
| | comp=Z,882nm,1.0s,comp=Z,21μmcomp=Z,105μm | | | | | | |
| **MSAI** | **Masohi** | **8.76** | **33** | P | **Pn** | **07 10 19.1** | **+2.4** |
| **TTSI** | **Tana Toraja** | **8.81** | **330** | P | **Pn** | **07 10 19.8** | **+2.4** |
| **SANI** | **Sanana** | **8.86** | **12** | P | **Pn** | **07 10 20.5** | **+2.5** |
| **SANI** | **Sanana** | **8.86** | **12** | P | **Pn** | **07 10 18.2** | **+0.2** |
| SANI | | | | S | **Sn** | **07 11 51.9** | **-5.6** |
| **SANI** | **Sanana** | **8.86** | **12** | ⇓P | **Pn** | **07 10 20.8** | **+2.8** |
| **SANI** | **Sanana** | **8.86** | **12** | P | **Pn** | **07 10 20.3** | **+2.3** |
| **DNP** | **Denpasar** | **9.08** | **283** | P | **Pn** | **07 10 23.0** | **+2.0** |
| **SRBI** | **Singaraja** | **9.24** | **286** | P | **Pn** | **07 10 23.3** | **+0.1** |
| | comp=Z,732nm,0.8s,comp=Z,11μmcomp=Z,102μm | | | | | | |
| **LUWI** | **Luwuk** | **9.77** | **352** | P | **Pn** | **07 10 32.2** | **+1.7** |
| **LUWI** | **Luwuk** | **9.77** | **352** | Pn | **Pn** | **07 10 32.0** | **+1.5** |
| **LUWI** | **Luwuk** | **9.77** | **352** | P | **Pn** | **07 10 30.8** | **+0.3** |
| **LUWI** | **Luwuk** | **9.77** | **352** | ⇓P | **Pn** | **07 10 33.2** | **+2.7** |
| **LUWI** | **Luwuk** | **9.77** | **352** | P | **Pn** | **07 10 32.7** | **+2.2** |
| **JAGI** | **Jajag, Banyuwa** | **10.14** | **282** | P | **Pn** | **07 10 35.4** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **10.14** | **282** | Pn | **Pn** | **07 10 33.6** | **-2.0** |
| **JAGI** | **Jajag, Banyuwa** | **10.14** | **282** | ⇓P | **Pn** | **07 10 32.9** | **-2.8** |
| **JAGI** | **Jajag, Banyuwa** | **10.14** | **282** | P | **Pn** | **07 10 34.1** | **-1.5** |
| **LBMI** | **Labuha** | **10.60** | **18** | P | Pn | 07 10 47.7 | +5.8 |
| **MBWA** | **Marble Bar** | **11.17** | **202** | P | **Pn** | **07 10 48.9** | **-0.8** |
| **MBWA** | **Marble Bar** | **11.17** | **202** | Pn | **Pn** | **07 10 48.2** | **-1.5** |
| **MBWA** | **Marble Bar** | **11.17** | **202** | P | **Pn** | **07 10 47.9** | **-1.7** |
| | comp=Z,171μmcomp=Z,0.0nmcomp=Z,745nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **11.17** | **202** | P | **Pn** | **07 10 48.7** | **-1.0** |
| MBWA | | | | S | **Sn** | **07 12 49.5** | **-4.8** |
| **FAKI** | **Fak Fak** | **11.19** | **46** | P | **Pn** | **07 10 51.3** | **+1.4** |
| **FAKI** | **Fak Fak** | **11.19** | **46** | Pn | **Pn** | **07 10 49.7** | **-0.3** |
| **FAKI** | **Fak Fak** | **11.19** | **46** | ⇑P | **Pn** | **07 10 48.1** | **-1.9** |
| **FAKI** | **Fak Fak** | **11.19** | **46** | P | **Pn** | **07 10 48.9** | **-1.0** |
| **KMSI** | **Cibinong** | **11.28** | **359** | P | **Pn** | **07 10 54.6** | **+3.4** |
| **GTOI** | **Gorontalo** | **11.40** | **354** | P | Pn | 07 10 58.4 | +5.6 |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | P | **Pn** | **07 10 52.8** | **-1.5** |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | | **Pn** | **07 10 51.8** | **-2.6** |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | Pn | **Pn** | **07 10 52.4** | **-2.0** |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | P | **Pn** | **07 10 52.5** | **-1.8** |
| | comp=Z,210μmcomp=Z,0.0nmcomp=Z,913nm,1.1s | | | | | | |
| **KMPI** | **Kaimana, Papua** | **11.80** | **54** | P | **Pn** | **07 11 00.0** | **+1.7** |
| **BKB** | **Balikpapan** | **11.90** | **322** | P | **Pn** | **07 11 01.6** | **+1.9** |
| **BKB** | **Balikpapan** | **11.90** | **322** | Pn | **Pn** | **07 11 01.0** | **+1.3** |
| **BKB** | **Balikpapan** | **11.90** | **322** | P | **Pn** | **07 11 04.4** | **+4.7** |
| **TNTI** | **Ternate** | **11.90** | **16** | P | **Pn** | **07 11 01.6** | **+1.8** |
| **TNTI** | **Ternate** | **11.90** | **16** | Pn | **Pn** | **07 11 03.2** | **+3.4** |
| **TNTI** | **Ternate** | **11.90** | **16** | P | **Pn** | **07 11 04.0** | **+4.2** |
| | comp=Z,475nm,1.5s,comp=Z,7μmcomp=Z,61μm | | | | | | |
| **SWI** | **Sorong** | **12.11** | **36** | P | **Pn** | **07 11 02.4** | **-0.1** |
| **GRJI** | **Gresik** | **12.18** | **287** | P | **Pn** | **07 11 05.7** | **+2.2** |
| **TOLI2** | **Tolitoli** | **12.28** | **344** | P | **Pn** | **07 11 09.2** | **+4.3** |
| **TOLI2** | **Tolitoli** | **12.28** | **344** | Pn | **Pn** | **07 11 07.2** | **+2.3** |
| **SMKI** | **Samarinda** | **12.38** | **326** | P | **Pn** | **07 11 08.9** | **+2.6** |
| **BWJI** | **Bawean** | **12.40** | **292** | P | **Pn** | **07 11 08.2** | **+1.7** |
| **PWJI** | **Pagerwojo** | **12.51** | **282** | P | **Pn** | **07 11 05.5** | **-2.5** |
| | comp=Z,930nm,0.9s,comp=Z,9μm | | | | | | |
| **NGJI** | **Ngawi** | **13.00** | **284** | P | **Pn** | **07 11 15.2** | **+0.4** |
| **WB0** | **Warramunga Arr** | **13.30** | **133** | Pn | Pn | 07 11 13.9 | -5.0 |
| **I07AU** | **WARRAMUNGA INF** | **13.37** | **134** | I | I | 08 33 40.0 | |
| | baz=310,slow=322,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.38** | **134** | Pn | Pn | 07 11 14.6 | -5.3 |
| | comp=Z,6.6nm,0.3s,baz=307,slow=13,SNR=152 | | | | | | |
| WRA | | | | Sn | **Sn** | **07 13 41.6** | **-6.8** |
| | comp=Z,38nm,0.3s,baz=305,slow=23,SNR=9.1 | | | | | | |
| WRA | | | | LR | LR | 07 17 03.7 | |
| | comp=Z,115μm,18.2s,baz=312,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.38** | **134** | *i* P | Pn | 07 11 14.1 | -5.8 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,108nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **13.38** | **134** | Pn | **Pn** | **07 11 15.7** | **-4.2** |
| **WRAB** | **Tennant Creek** | **13.38** | **134** | *i* P | **Pn** | **07 11 15.2** | **-4.7** |
| WRAB | | | | MLR | MLR | | |
| | comp=Z,112μm,13.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **13.38** | **134** | Pn | Pn | 07 11 15.0 | -5.0 |
| **MTKI** | **Muara Teweh, K** | **13.43** | **316** | P | **Pn** | **07 11 23.3** | **+2.6** |
| | comp=Z,289nm,1.2s,comp=Z,13μmcomp=Z,76μm | | | | | | |
| **WR0** | **Warramunga Arr** | **13.53** | **134** | Pn | **Pn** | **07 11 17.7** | **-4.3** |
| **UGM** | **Wanagama** | **13.77** | **281** | P | **Pn** | **07 11 24.6** | **-0.6** |
| **UGM** | **Wanagama** | **13.77** | **281** | Pn | **Pn** | **07 11 22.6** | **-2.7** |
| **UGM** | **Wanagama** | **13.77** | **281** | P | **Pn** | **07 11 23.7** | **-1.5** |
| **YOGI** | **Yogyakarta** | **14.01** | **281** | P | **Pn** | **07 11 27.5** | **-1.0** |
| **SMRI** | **Semarang** | **14.06** | **284** | P | **Pn** | **07 11 29.5** | **+0.2** |
| **SMRI** | **Semarang** | **14.06** | **284** | Pn | **Pn** | **07 11 28.3** | **-1.0** |
| **SMRI** | **Semarang** | **14.06** | **284** | ⇓P | **Pn** | **07 11 29.4** | **+0.2** |
| **SMRI** | **Semarang** | **14.06** | **284** | P | **Pn** | **07 11 29.5** | **+0.2** |
| **SGSI** | **Sangihe** | **14.43** | **5** | P | **Pn** | **07 11 35.8** | **+1.5** |
| **WRKA** | **Warakurna** | **14.71** | **165** | P | **Pn** | **07 11 36.7** | **-1.5** |
| **WRKA** | **Warakurna** | **14.71** | **165** | ⇓P | **Pn** | **07 11 34.4** | **-3.8** |
| **WRKA** | **Warakurna** | **14.71** | **165** | P | **Pn** | **07 11 35.5** | **-2.7** |
| | comp=Z,111μmcomp=Z,0.0nmcomp=Z,2μm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **15.15** | **218** | P | **P** | **07 11 46.7** | **-2.3** |
| **GIRL** | **Giralia** | **15.15** | **218** | ⇑P | **Pn** | **07 11 44.6** | **+0.6** |
| **GIRL** | **Giralia** | **15.15** | **218** | P | **Pn** | **07 11 44.3** | **+0.3** |
| | comp=Z,0.0nmcomp=Z,195μmcomp=Z,1μm,1.3s | | | | | | |
| **KPJI** | **Karang Pucung** | **15.44** | **282** | P | **Pn** | **07 11 45.5** | **-2.3** |
| **CMJI** | **Cimerak** | **15.80** | **280** | P | **Pn** | **07 11 50.7** | **-1.8** |
| | comp=Z,1μm,1.1s,comp=Z,11μmcomp=Z,20μm | | | | | | |
| **AS31** | **Alice Springs** | **15.82** | **145** | P | **Pn** | **07 11 48.7** | **-4.1** |
| **ASAR** | **Alice Springs** | **15.82** | **145** | Pn | **Pn** | **07 11 49.2** | **-3.6** |
| | comp=Z,13nm,0.3s,baz=321,slow=12,SNR=886 | | | | | | |
| ASAR | | | | Sn | **Sn** | **07 14 40.9** | **-7.1** |
| | comp=Z,29nm,0.3s,baz=320,slow=23,SNR=5.4 | | | | | | |
| ASAR | | | | LR | LR | 07 18 10.7 | |
| | comp=Z,114μm,20.9s,baz=320,slow=38 | | | | | | |
| **JCJI** | **Jatiwangi** | **16.29** | **284** | P | **Pn** | **07 11 59.0** | **+0.2** |
| **STKI** | **Sintang** | **16.59** | **310** | P | **P** | **07 12 05.1** | **0.0** |
| | comp=Z,350nm,1.1s,comp=Z,33μm | | | | | | |
| **MEEK** | **Meekatharra** | **16.63** | **198** | P | **Pn** | **07 12 02.8** | **-0.3** |
| **MEEK** | **Meekatharra** | **16.63** | **198** | P | **Pn** | **07 11 59.7** | **-3.4** |
| **BBJI** | **Bungbulang** | **16.64** | **280** | P | **Pn** | **07 12 02.1** | **-1.3** |
| **MYLDM** | **Lahad Datu** | **16.83** | **340** | P | **P** | **07 12 08.8** | **+1.1** |
| **MYLDM** | **Lahad Datu** | **16.83** | **340** | ⇓P | **P** | **07 12 09.3** | **+1.6** |
| **CNJI** | **Cibinong** | **17.18** | **280** | P | **Pn** | **07 12 08.4** | **-1.7** |
| | comp=Z,1μm,1.0s,comp=Z,9μm | | | | | | |
| **CBJI** | **Citeko** | **17.66** | **283** | P | **Pn** | **07 12 15.3** | **-0.8** |
| **DBJI** | **Dramaga** | **17.73** | **282** | P | **Pn** | **07 12 15.8** | **-1.1** |
| | comp=Z,2μm,1.2s,comp=Z,26μm | | | | | | |
| **SBUM** | **Sibu** | **17.73** | **317** | P | **Pn** | **07 12 17.0** | **+0.1** |
| **SBUM** | **Sibu** | **17.73** | **317** | ⇑P | **P** | **07 12 17.5** | **-0.1** |
| **QIS** | **Mount Isa** | **17.74** | **125** | P | **Pn** | **07 12 12.2** | **-4.9** |
| **TABU** | **Tabubil** | **17.74** | **73** | P | **P** | **07 12 18.2** | **+0.3** |
| **DAV** | **Davao City (W)** | **17.79** | **5** | P | **P** | **07 12 23.4** | **+5.1** |
| | comp=Z,151nm,0.4s,baz=245,slow=19,SNR=1.3 | | | | | | |
| DAV | | | | LR | LR | 07 19 44.0 | |
| | comp=Z,62μm,21.5s,baz=207,slow=40 | | | | | | |
| **DAV** | **Davao City (W)** | **17.79** | **5** | P | **P** | **07 12 19.4** | **+1.1** |
| DAV | | | | P | **P** | **07 12 19.4** | **+1.1** |
| DAV | | | | S | **S** | **07 15 41.7** | **-0.7** |
| DAV | | | | S | **S** | **07 15 41.7** | **-0.7** |
| **DAV** | **Davao City (W)** | **17.79** | **5** | P | **P** | **07 12 20.0** | **+1.7** |
| **SKJI** | **Sukabumi** | **17.80** | **281** | P | **P** | **07 12 18.9** | **+0.4** |
| **GENI** | **Genyem** | **17.83** | **64** | P | **P** | **07 12 20.8** | **+1.9** |
| **GENI** | **Genyem** | **17.83** | **64** | ⇑P | **P** | **07 12 18.9** | **0.0** |
| **GENI** | **Genyem** | **17.83** | **64** | P | **P** | **07 12 20.4** | **+1.5** |
| | comp=Z,630nm,0.6s,comp=Z,13μmcomp=Z,25μm | | | | | | |
| **TNG** | **Tangerang** | **17.93** | **283** | P | **Pn** | **07 12 21.4** | **+2.0** |
| TNG | | | | P | **P** | **07 12 20.9** | **+1.0** |
| **XMI** | **Christmas Isla** | **18.17** | **269** | P | **P** | **07 12 23.2** | **+0.6** |
| **XMI** | **Christmas Isla** | **18.17** | **269** | ⇑P | **P** | **07 12 23.9** | **+1.3** |
| **XMIS** | **Christmas Isla** | **18.21** | **269** | P | **P** | **07 12 24.9** | **+1.9** |
| **XMIS** | **Christmas Isla** | **18.21** | **269** | P | **Pn** | **07 12 20.7** | **-2.2** |
| **JAY** | **Jayapura** | **18.34** | **65** | P | **P** | **07 12 25.7** | **+1.2** |
| **KSM** | **Kuching** | **18.39** | **311** | P | **Pn** | **07 12 25.2** | **+0.1** |
| **KSM** | **Kuching** | **18.39** | **311** | P | **P** | **07 12 24.2** | **-0.8** |
| **KSM** | **Kuching** | **18.39** | **311** | ⇑P | **P** | **07 12 24.5** | **-0.5** |
| **SBJI** | **Serang** | **18.43** | **283** | P | **Pn** | **07 12 26.8** | **+1.2** |
| | comp=Z,2μm,1.0s,comp=Z,31μm | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.50** | **334** | P | **Pn** | **07 12 27.6** | **+1.2** |
| **KKM** | **Kota Kinabalu** | **18.50** | **334** | P | **P** | **07 12 26.0** | **-0.3** |
| KKM | | | | IAmb | IAmb | 07 12 38.3 | |
| | comp=Z,861nm,0.9s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.50** | **334** | ⇑P | **P** | **07 12 25.3** | **-0.9** |
| **COEN** | **Coen** | **18.83** | **102** | P | **P** | **07 12 30.1** | **+0.3** |
| **COEN** | **Coen** | **18.83** | **102** | P | **P** | **07 12 27.2** | **-2.6** |
| **COEN** | **Coen** | **18.83** | **102** | ⇑P | **P** | **07 12 27.7** | **-2.1** |
| **COEN** | **Coen** | **18.83** | **102** | P | **P** | **07 12 27.9** | **-1.9** |
| **BLSI** | **Bandar Lampung** | **19.49** | **285** | P | **P** | **07 12 37.1** | **0.0** |
| **MORW** | **Morawa** | **19.72** | **202** | P | **Pn** | **07 12 40.9** | **-0.1** |
| **MORW** | **Morawa** | **19.72** | **202** | ⇑P | **P** | **07 12 40.3** | **+0.7** |
| **MORW** | **Morawa** | **19.72** | **202** | P | **P** | **07 12 39.8** | **+0.3** |
| | comp=Z,0.0nmcomp=Z,136μmcomp=Z,553nm,0.8s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **19.85** | **294** | P | **P** | **07 12 39.7** | **-1.3** |
| | comp=Z,401nm,1.0s,comp=Z,26μmcomp=Z,20μm | | | | | | |
| **OOD** | **Oodnadatta** | **20.09** | **149** | P | **P** | **07 12 44.0** | **+0.5** |
| **KASI** | **Kota Agung** | **20.16** | **283** | P | **P** | **07 12 45.1** | **+0.7** |
| **FORT** | **Forrest** | **20.23** | **170** | P | **P** | **07 12 45.1** | **+0.1** |
| **FORT** | **Forrest** | **20.23** | **170** | P | **P** | **07 12 45.0** | **+0.1** |
| **FORT** | **Forrest** | **20.23** | **170** | ⇓P | **P** | **07 12 44.7** | **-0.3** |
| **FORT** | **Forrest** | **20.23** | **170** | P | **P** | **07 12 45.1** | **+0.1** |
| | comp=Z,0.0nmcomp=Z,2μm,0.8s | | | | | | |
| **KMBL** | **Kambalda** | **20.60** | **186** | P | **P** | **07 12 49.9** | **+0.9** |
| **KMBL** | **Kambalda** | **20.60** | **186** | P | **P** | **07 12 49.1** | **+0.1** |
| | comp=Z,0.0nmcomp=Z,518nm,0.7s | | | | | | |
| **LWLI** | **Liwa** | **20.72** | **284** | P | **P** | **07 12 49.7** | **-0.9** |
| **MTSU** | **Mount Surprise** | **20.82** | **113** | P | Pn | 07 12 53.2 | -0.8 |
| **BLDU** | **Ballidu** | **20.92** | **198** | P | **P** | **07 12 53.4** | **+0.9** |
| **BLDU** | **Ballidu** | **20.92** | **198** | P | **P** | **07 12 52.6** | **+0.1** |
| | comp=Z,0.0nmcomp=Z,878nm,1.0s | | | | | | |
| **MULG** | **Mulgathing** | **21.48** | **156** | P | **P** | **07 12 59.4** | **+0.9** |
| **KLBR** | **Kellerberrin** | **21.55** | **195** | P | **P** | **07 12 59.8** | **+0.5** |
| **KLBR** | **Kellerberrin** | **21.55** | **195** | P | **P** | **07 12 58.9** | **-0.3** |
| | comp=Z,1μm,0.8s | | | | | | |
| **AUCSH** | **Cairns State H** | **21.83** | **109** | P | **P** | **07 13 08.1** | **+5.7** |
| **MNAI** | **Manna** | **21.97** | **285** | P | **P** | **07 13 05.5** | **+1.6** |
| **MNAI** | **Manna** | **21.97** | **285** | IAMs_20 | IAMs_20 | 07 23 07.9 | |
| | comp=Z,32μm,21.0s | | | | | | |
| **MNAI** | **Manna** | **21.97** | **285** | ⇑P | **P** | **07 13 03.5** | **-0.5** |
| **MNAI** | **Manna** | **21.97** | **285** | P | **P** | **07 13 03.5** | **-0.5** |
| **MUN** | **Mundaring** | **22.35** | **198** | P | **P** | **07 13 07.7** | **-0.1** |
| **MUN** | **Mundaring** | **22.35** | **198** | P | **P** | **07 13 07.7** | **-0.1** |
| | comp=Z,0.0nmcomp=Z,481nm,1.0s | | | | | | |
| **MTKN** | **Mount Kenneth** | **22.44** | **199** | P | **P** | **07 13 10.2** | **+1.4** |
| **PMG** | **Port Moresby** | **22.67** | **89** | P | **P** | **07 13 16.8** | **+5.3** |
| **PMG** | **Port Moresby** | **22.67** | **89** | P | **P** | **07 13 16.5** | **+5.0** |
| **PMG** | **Port Moresby** | **22.67** | **89** | P | **P** | **07 13 09.4** | **-2.1** |
| PMG | | | | IAmb | IAmb | 07 13 31.7 | |
| | comp=Z,365nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **22.67** | **89** | IAMs_20 | IAMs_20 | 07 23 14.9 | |
| | comp=Z,29μm,19.0s | | | | | | |
| **PMG** | **Port Moresby** | **22.67** | **89** | ⇑P | **P** | **07 13 10.0** | **-1.5** |
| **PMG** | **Port Moresby** | **22.67** | **89** | LR | LR | 07 24 28.7 | |
| | comp=Z,46μm,18.8s,baz=248,slow=43 | | | | | | |
| **PMG** | **Port Moresby** | **22.67** | **89** | *i* P | **P** | **07 13 07.3** | **-4.2** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,418nm,1.2s | | | | | | |
| PMG | | | | MLR | MLR | | |
| | comp=Z,41μm,15.0s | | | | | | |
| **TPRI** | **Tanjung Pinang** | **22.73** | **300** | P | **P** | **07 13 13.4** | **+1.3** |
| | comp=Z,337nm,1.0s,comp=Z,7μmcomp=Z,13μm | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.95** | **195** | P | **P** | **07 13 15.1** | **+0.9** |
| **NWAO** | **Narrogin (SRO)** | **22.95** | **195** | P | **P** | **07 13 15.3** | **+1.1** |
| **NWAO** | **Narrogin (SRO)** | **22.95** | **195** | P | **P** | **07 13 13.7** | **-0.5** |
| NWAO | | | | IAmb | IAmb | 07 13 31.9 | |
| | comp=Z,386nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.95** | **195** | P | **P** | **07 13 13.6** | **-0.6** |
| | comp=Z,1μm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.95** | **195** | LR | LR | 07 22 01.5 | |
| | comp=Z,58μm,20.4s,baz=5.0,slow=36 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.95** | **195** | P | **P** | **07 13 15.2** | **+0.9** |
| NWAO | | | | S | **S** | **07 17 25.1** | **+1.3** |
| **NWAO** | **Narrogin (SRO)** | **22.95** | **195** | P | **P** | **07 13 13.7** | **-0.5** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,386nm,1.0s | | | | | | |
| **INKA** | **Innaminka** | **22.96** | **140** | P | **P** | **07 13 16.0** | **+1.6** |
| **CTA** | **Charters Tower** | **23.18** | **116** | LR | LR | 07 22 35.6 | |
| | comp=Z,2μm,19.7s,baz=290,slow=37 | | | | | | |
| **CTAO** | **Charters Tower** | **23.18** | **116** | P | **P** | **07 13 18.9** | **+2.1** |
| **CTAO** | **Charters Tower** | **23.18** | **116** | IAMs_20 | IAMs_20 | 07 22 23.9 | |
| | comp=Z,33μm,20.0s | | | | | | |
| **CTAO** | **Charters Tower** | **23.18** | **116** | ⇑P | **P** | **07 13 17.6** | **+0.8** |
| **TV1H** | **Townsville Har** | **23.40** | **114** | P | **P** | **07 13 21.4** | **+2.5** |
| **LCRK** | **Leigh Creek** | **23.53** | **148** | P | **P** | **07 13 22.3** | **+2.2** |
| **BTDF** | **Bukit Timah Da** | **23.61** | **300** | P | **P** | **07 13 21.1** | **+0.1** |
| **MYKOM** | **Kota Tinggi** | **23.76** | **301** | P | **P** | **07 13 21.6** | **-0.9** |
| MYKOM | | | | IAmb | IAmb | 07 13 35.4 | |
| | comp=Z,1μm,2.0s | | | | | | |
| **AUAYR** | **Ayr State High** | **24.05** | **114** | P | **P** | **07 13 28.6** | **+3.5** |
| **BBOO** | **Buckleboo** | **24.51** | **155** | P | **P** | **07 13 30.1** | **+0.9** |
| **BBOO** | **Buckleboo** | **24.51** | **155** | P | **P** | **07 13 28.6** | **-0.7** |
| BBOO | | | | IAmb | IAmb | 07 13 52.6 | |
| | comp=Z,473nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **24.51** | **155** | P | **P** | **07 13 28.9** | **-0.4** |
| | comp=Z,0.0nmcomp=Z,596nm,0.9s | | | | | | |
| **QLP** | **Quilpie** | **24.60** | **132** | P | **P** | **07 13 32.5** | **+2.3** |
| **QLP** | **Quilpie** | **24.60** | **132** | ⇑P | **P** | **07 13 31.7** | **+1.5** |
| **QLP** | **Quilpie** | **24.60** | **132** | P | **P** | **07 13 31.4** | **+1.2** |
| | comp=Z,0.0nmcomp=Z,1μm,1.1s | | | | | | |
| **MANU** | **Manus Island** | **24.61** | **71** | P | **P** | **07 13 30.4** | **+0.1** |
| MANU | | | | IAmb | IAmb | 07 13 51.9 | |
| | comp=Z,685nm,1.6s | | | | | | |
| **RKGY** | **Rocky Gully** | **24.62** | **194** | P | **P** | **07 13 31.4** | **+1.2** |
| **RKGY** | **Rocky Gully** | **24.62** | **194** | P | **P** | **07 13 30.8** | **+0.6** |
| | comp=Z,433nm,1.0s | | | | | | |
| **PPSI** | **Pulau Pagai** | **25.26** | **287** | P | **P** | **07 13 37.7** | **+1.4** |
| | comp=Z,723nm,1.6s,comp=Z,9μmcomp=Z,11μm | | | | | | |
| **WHYH** | **Whyalla** | **25.35** | **153** | P | **P** | **07 13 38.9** | **+2.1** |
| **BKNI** | **Bangkinang** | **25.51** | **294** | P | **P** | **07 13 38.4** | **-0.1** |
| **BKNI** | **Bangkinang** | **25.51** | **294** | P | **P** | **07 13 39.2** | **+0.7** |
| BKNI | | | | S | **S** | **07 18 01.9** | **-3.6** |
| **BKNI** | **Bangkinang** | **25.51** | **294** | P | **P** | **07 13 38.9** | **+0.4** |
| **PTPS** | **Port Pirie** | **25.65** | **152** | P | **P** | **07 13 41.8** | **+2.2** |
| **HTT** | **Hallett** | **26.30** | **151** | P | **P** | **07 13 46.7** | **+1.2** |
| **HTT** | **Hallett** | **26.30** | **151** | ⇑P | **P** | **07 13 46.5** | **+0.9** |
| **HTT** | **Hallett** | **26.30** | **151** | P | **P** | **07 13 46.8** | **+1.2** |
| **STKA** | **Stephens Creek** | **26.46** | **145** | P | **P** | **07 13 47.9** | **+0.9** |
| **STKA** | **Stephens Creek** | **26.46** | **145** | P | **P** | **07 13 47.5** | **+0.5** |
| | comp=Z,0.0nmcomp=Z,83nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **26.46** | **145** | P | **P** | **07 13 47.7** | **+0.7** |
| | comp=Z,121nm,0.8s,baz=313,slow=9.3,SNR=77 | | | | | | |
| STKA | | | | LR | LR | 07 24 10.9 | |
| | comp=Z,72

TPUB IAMs_20 IAMs_20 07 27 57.8
comp=Z,20µm,22.0s
**YULB Yu-li 34.08 355** P **P** **07 14 56.0 +1.6**
**YULB Yu-li 34.08 355** IAMs_20 IAMs_20 07 28 30.6
comp=Z,16µm,21.0s
**AUUHS Ulladulla High 34.20 140** P **P** **07 14 58.1 +2.7**
**SSLB Suanglung 34.50 355** P **P** **07 14 57.1 -1.0**
**MILA Mila 34.51 143** P **P** **07 15 00.9 +2.7**
**MILA Mila 34.51 143** P **P** **07 15 02.0 +3.9**
**NACB Ninganchiao 34.83 356** P **P** **07 15 03.3 +2.4**
**NACB Ninganchiao 34.83 356** IAMs_20 IAMs_20 07 28 30.6
comp=Z,18µm,22.0s
**YOJ Yonaguni jima 35.04 358** P **P** **07 15 02.7 0.0**
YOJ IAmb IAmb 07 15 25.2
comp=Z,186nm,1.0s
**YOJ Yonaguni jima 35.04 358** P **P** **07 15 02.7 0.0**
YOJ pmax pmax
comp=Z,186nm,1.0s
**SRDT SRDT 35.22 315** P **P** **07 15 05.0 +0.6**
**HNR Honiara 35.23 91** P **P** **07 15 07.5 +2.9**
**HNR Honiara 35.23 91** P **P** **07 15 05.6 +1.0**
**HNR Honiara 35.23 91** LR LR 07 31 14.5
comp=Z,137µm,18.5s,baz=256,slow=39
**HNR Honiara 35.23 91** P **P** **07 15 05.6 +1.0**
HNR pmax pmax
comp=Z,581nm,1.3s
HNR MLR MLR
comp=Z,9µm,19.0s
**YHNB Yeheng 35.34 356** P **P** **07 15 07.5 +2.2**
**YHNB Yeheng 35.34 356** P **P** **07 15 04.1 -1.2**
YHNB IAMs_20 IAMs_20 07 29 20.0
comp=Z,22µm,22.0s
**NONG Nongkai 35.39 324** P **P** **07 15 06.6 +0.8**
**KNMB Chin-men Tao 35.48 351** IAMs_20 IAMs_20 07 29 56.8
comp=Z,17µm,21.0s
**TATO Taipei 35.63 356** P **P** **07 15 10.0 +2.2**
**TATO Taipei 35.63 356** P **P** **07 15 09.1 +1.3**
**TATO Taipei 35.63 356** IAMs_20 IAMs_20 07 29 16.8
comp=Z,23µm,22.0s
**QZH Quanzhou 35.92 351** P **P** **07 15 11.0 +0.8**
QZH S **S** **07 20 41.5 -6.3**
QZH pmax pmax
comp=Z,1µm,8.0s
QZH LR LR
comp=Z,14µm,22.3s
QZH LR LR
comp=Z,14µm,22.3s
QZH LR LR
comp=Z,18µm,22.3s
**CORO Coronation Par 36.62 151** P **P** **07 15 19.8 +3.7**
**GLAD Gladstone 36.70 149** P **P** **07 15 21.4 +4.6**
**MOO Moorlands 37.41 152** P **P** **07 15 25.0 +2.2**
**MOO Moorlands 37.41 152** P **P** **07 15 23.9 +1.1**
comp=Z,0.0nmcomp=Z,131nm,1.4s
**PHRA Phrae 37.48 321** P **P** **07 15 22.7 -1.0**
**JOW Kunigami 37.60 6** P **P** **07 15 26.0 +1.5**
**JOW Kunigami 37.60 6** P **P** **07 15 23.1 -1.4**
JOW IAmb IAmb 07 15 32.0
comp=Z,221nm,1.0s
**JOW Kunigami 37.60 6** ⇓P **P** **07 15 22.9 -1.6**
**JOW Kunigami 37.60 6** LR LR 07 30 18.2
comp=Z,14µm,21.5s,baz=187,slow=36
**SLVN Son La 37.61 328** P **P** **07 15 24.3 -0.5**
SLVN IAMs_20 IAMs_20 07 33 27.4
comp=Z,13µm,18.0s
**TAU Tasmania Unive 37.83 152** P **P** **07 15 28.5 +2.1**
**PATS Pohnpei 38.22 64** P **P** **07 15 32.5 +2.4**
**CMAR Chiang Mai Arr 38.26 319** P **P** **07 15 29.9 -0.9**
comp=Z,60nm,0.9s,baz=143,slow=6.1,SNR=69
CMAR PcP **PcP** **07 17 45.5 +1.0**
comp=Z,17nm,0.8s,baz=180,slow=2.4,SNR=4.9
CMAR LR LR 07 35 52.7
comp=Z,7µm,18.1s,baz=140,slow=44
comp=Z,60nm,0.9s
**CMAR Chiang Mai Arr 38.26 319** *ce*P **P** **07 15 29.3 -1.0**
CMAR pmax pmax
comp=Z,64nm,0.9s
**GULI GuiLin 38.29 340** P **P** **07 15 31.0 +0.6**
GULI S **S** **07 21 23.8 -0.3**
GULI pmax pmax
comp=Z,130nm,1.2s
GULI LR LR
comp=Z,9µm,22.8s
GULI LR LR
comp=Z,11µm,21.7s
GULI LR LR
comp=Z,22µm,22.3s
**PBA Port Blair 38.37 305** P P 07 15 36.7 +5.4
**CRAI Chiangrai 38.70 323** P **P** **07 15 33.5 -0.5**
**CNSH ChangSha 40.23 345** P **P** **07 15 46.0 -0.6**
CNSH S **S** **07 21 51.5 -1.6**
CNSH pmax pmax
comp=Z,1µm,4.7s
CNSH LR LR
comp=Z,6µm,25.9s
CNSH LR LR
comp=Z,9µm,31.9s
CNSH LR LR
comp=Z,12µm,24.9s
**GYA Guiyang 40.74 336** ⇓P **P** **07 15 50.0 -1.0**
GYA PP **PP** **07 17 30.0 +4.9**
GYA S **S** **07 21 58.8 -2.2**
GYA pmax pmax
comp=Z,100nm,0.8s
GYA pmax pmax
comp=Z,1µm,4.0s
GYA LR LR
comp=Z,11µm,21.5s
GYA LR LR
comp=Z,11µm,25.0s
GYA LR LR
comp=Z,32µm,30.5s
**KMI Kunming 41.35 330** ⇓P **P** **07 15 56.5 +0.3**
KMI sP sP 07 16 02.3 -0.3
KMI PcS **PcS** **07 21 43.3 -2.8**
KMI S **S** **07 22 10.0 -0.4**
KMI SS **SS** **07 25 08.0 -6.6**
KMI pmax pmax
comp=Z,210nm,1.1s
KMI pmax pmax
comp=Z,1µm,5.2s
KMI LR LR
comp=Z,12µm,23.5s
KMI LR LR
comp=Z,10µm,25.4s
KMI LR LR
comp=Z,30µm,25.0s
**JCJ Chichijima 41.51 25** P **P** **07 15 59.6 +2.5**
**JCJ Chichijima 41.51 25** P **P** **07 15 57.2 +0.1**
JCJ IAmb IAmb 07 16 43.2
comp=Z,240nm,0.9s
**JCJ Chichijima 41.51 25** ⇑P **P** **07 15 59.1 +2.0**
**JCJ Chichijima 41.51 25** LR LR 07 32 12.0
comp=Z,5µm,20.7s,baz=208,slow=35
**SSE Sheshan 41.73 356** P **P** **07 16 00.0 +1.1**
SSE pmax pmax
comp=Z,40nm,1.0s
SSE pmax pmax
comp=Z,460nm,3.9s
SSE LR LR
comp=Z,2µm,18.6s
SSE LR LR
comp=Z,3µm,18.9s
**NOUC Port Laguerre 41.81 111** P **P** **07 16 01.5 +1.7**
**DZM Mont Dzumac 41.94 111** P **P** **07 16 02.6 +1.6**
**DZM Mont Dzumac 41.94 111** *e*P **P** **07 16 02.0 +1.0**
comp=Z,172nm,1.3s
**DZM Mont Dzumac 41.94 111** *e*PP **PP** **07 17 37.5 -0.6**
comp=Z,2µm,22.1s
DZM *e*S **S** **07 22 18.0 -1.1**
comp=Z,11µm,31.1s
DZM *e*SS **SnSn** **07 25 33.6 -4.0**
comp=Z,22µm,30.4s
DZM *e*LR LR 07 27 32.6
comp=Z,26µm,21.8s
**DZM Mont Dzumac 41.94 111** LR LR 07 33 56.8
comp=Z,23µm,18.1s,baz=286,slow=37
**WHN Wuhan 42.16 347** P **P** **07 16 02.0 -0.4**
WHN pP **pP** **07 16 04.5 -2.5**
WHN sP **sP** **07 16 07.8 -1.0**
WHN S **S** **07 22 21.3 -0.3**
WHN SS SS 07 25 19.0 -11
WHN pmax pmax
comp=Z,290nm,0.8s
WHN pmax pmax
comp=Z,3µm,6.6s
WHN LR LR
comp=Z,42µm,22.3s
WHN LR LR
comp=Z,13µm,13.0s
WHN LR LR
comp=Z,75µm,22.3s
**YATNC Mamie plateau, 42.35 111** P **P** **07 16 06.6 +2.4**
**NJ2 Nanjing 42.89 353** ⇓P **P** **07 16 08.3 0.0**
NJ2 pP **sP** **07 16 14.0 -0.7**
NJ2 pmax pmax
comp=Z,88nm,1.1s
NJ2 pmax pmax
comp=Z,720nm,3.7s
NJ2 LR LR
comp=Z,7µm,24.5s
NJ2 LR LR
comp=Z,8µm,24.6s
NJ2 LR LR
comp=Z,7µm,22.7s
**PZH PanZhiHua 42.99 330** P **P** **07 16 10.5 +1.0**
PZH PP **PP** **07 17 54.5 +5.0**
PZH S **S** **07 22 29.8 -4.6**
PZH pmax pmax
comp=Z,190nm,1.2s
PZH pmax pmax
comp=Z,1µm,6.9s
PZH LR LR
comp=Z,16µm,25.0s
PZH LR LR
comp=Z,14µm,23.5s
PZH LR LR
comp=Z,24µm,24.5s
**DVP Devils Point 43.13 104** P **P** **07 16 13.1 +2.5**
**ENH Enshi 43.19 341** P **P** **07 16 09.4 -1.5**
**ENH Enshi 43.19 341** P **P** **07 16 09.3 -1.5**
ENH IAmb IAmb 07 16 19.8
comp=Z,162nm,0.7s
ENH IAMs_20 IAMs_20 07 36 03.0
comp=Z,13µm,20.0s
**MARNC Mare, Loyalty 43.32 110** P **P** **07 16 15.2 +3.1**
**TNCH TengChong 43.50 325** P **P** **07 16 14.0 +0.3**
TNCH pP pP 07 16 16.5 -1.8
TNCH S **S** **07 22 44.0 +1.9**
TNCH ScS **ScS** **07 26 11.8 -1.6**
TNCH pmax pmax
comp=Z,220nm,1.4s
TNCH pmax pmax
comp=Z,1µm,5.5s
TNCH LR LR
comp=Z,7µm,22.3s
TNCH LR LR
comp=Z,5µm,18.6s
TNCH LR LR
comp=Z,24µm,22.3s
**JNU Nakatsue 44.12 8** P **P** **07 16 16.8 -1.5**
**JNU Nakatsue 44.12 8** P **P** **07 16 16.3 -2.0**
JNU IAmb IAmb 07 16 25.8
comp=Z,205nm,1.1s
**JNU Nakatsue 44.12 8** ⇓P **P** **07 16 16.6 -1.7**
**JNU Nakatsue 44.12 8** LR LR 07 34 30.3
comp=Z,8µm,21.4s,baz=184,slow=36
**JMN Monobe 45.21 11** P **P** **07 16 28.4 +1.4**
**JMN Monobe 45.21 11** P **P** **07 16 27.4 +0.3**
JMN IAmb IAmb 07 16 38.2
comp=Z,277nm,1.0s
**JMN Monobe 45.21 11** ⇑P **P** **07 16 27.1 0.0**
**JMN Monobe 45.21 11** P **P** **07 16 27.6 +0.6**
**JTU Tsushima 45.32 6** P **P** **07 16 29.1 +1.3**
**JTU Tsushima 45.32 6** ⇑P **P** **07 16 29.4 +1.6**
**CD2 Chengdu 45.85 335** P **P** **07 16 33.5 +1.3**
CD2 pP pP 07 16 37.3 +0.5
CD2 PP **PP** **07 18 20.5 +0.6**
CD2 S **S** **07 23 12.3 -3.4**
CD2 pmax pmax
comp=Z,360nm,1.0s
CD2 pmax pmax
comp=Z,1µm,7.6s
CD2 LR LR
comp=Z,18µm,26.0s
CD2 LR LR
comp=Z,14µm,19.0s
CD2 LR LR
comp=Z,19µm,28.8s
**IMP Imphal 46.07 321** *e*P **P** **07 16 31.7 -2.3**
IMP IAmb IAmb 07 16 34.9
comp=Z,95nm,1.0s
**JHJ Hachijo jima 2 46.12 18** LR LR 07 33 39.1
comp=Z,9µm,21.5s,baz=239,slow=33
**JHS Saijyo 46.31 10** P **P** **07 16 36.0 +0.3**
**HALK Hakmana 46.43 289** ⇑P **P** **07 16 36.5 -0.5**
**LYN LuoYang 46.43 347** P **P** **07 16 34.8 -1.7**
LYN sP sP 07 16 42.3 -0.7
LYN PcP **PcP** **07 18 13.0 +1.8**
LYN S **S** **07 23 19.8 -4.0**
LYN SS **SS** **07 26 43.3 -6.7**
LYN pmax pmax
comp=Z,140nm,1.0s
LYN pmax pmax
comp=Z,2µm,7.3s
LYN LR LR
comp=Z,21µm,22.4s
LYN LR LR
comp=Z,9µm,19.2s
LYN LR LR
comp=Z,30µm,22.7s
**JAD Aida 46.44 11** P **P** **07 16 37.3 +0.6**
**JIE Ise 46.47 14** P **P** **07 16 36.3 -0.6**
**KOHI KOHIMA 46.61 322** *e*P **P** **07 16 35.9 -2.5**
KOHI IAmb IAmb 07 16 45.5
comp=Z,388nm,0.9s
**MOKO MOKOCHONG 46.81 322** *e*P **P** **07 16 38.3 -1.6**
MOKO IAmb IAmb 07 16 51.5
comp=Z,317nm,0.6s
**PALK Pallekele 46.84 291** P **P** **07 16 39.2 -1.0**
PALK IAmb IAmb 07 16 49.0
comp=Z,73nm,0.8s
**PALK Pallekele 46.84 291** ⇓P **P** **07 16 41.7 +1.5**
**PALK Pallekele 46.84 291** LR LR 07 37 04.2
comp=Z,15µm,21.5s,baz=115,slow=37
**PALK Pallekele 46.84 291** P **P** **07 16 38.9 -1.3**
PALK P **P** **07 16 38.9 -1.3**
PALK S **S** **07 23 27.4 -3.0**
PALK S **S** **07 23 27.4 -3.0**
**PALK Pallekele 46.84 291** *i*P **P** **07 16 39.9 -0.3**
PALK pmax pmax
comp=Z,70nm,0.9s
**XAN Xi'an 46.87 343** ⇑P **P** **07 16 38.0 -2.1**
XAN S **S** **07 23 28.5 -1.7**
XAN SS **SS** **07 26 50.3 -7.0**
XAN pmax pmax
comp=Z,510nm,0.8s
XAN pmax pmax
comp=Z,2µm,8.0s
XAN LR LR
comp=Z,16µm,19.4s
XAN LR LR
comp=Z,9µm,17.8s
XAN LR LR
comp=Z,32µm,22.9s
**TJN Taejon 47.00 4** P **P** **07 16 40.7 -0.3**
**TJN Taejon 47.00 4** P **P** **07 16 40.3 -0.7**
**TJN Taejon 47.00 4** *ce*P **P** **07 16 40.4 -0.6**
**JWT Wachi 47.02 13** P **P** **07 16 41.0 -0.2**
**TIA Tai'an 47.21 352** P **P** **07 16 40.3 -2.3**
TIA pmax pmax
comp=Z,21nm,0.8s
TIA pmax pmax
comp=Z,950nm,8.8s
TIA LR LR
comp=Z,8µm,22.6s
TIA LR LR
comp=Z,8µm,21.6s
TIA LR LR
comp=Z,11µm,21.2s
**MALK Mahakanadarawa 47.41 292** P **P** **07 16 44.9 +0.3**
MALK S **S** **07 23 33.9 -4.6**
**MALK Mahakanadarawa 47.41 292** ⇑P **P** **07 16 44.0 -0.6**
**INU Inuyama 47.46 14** P **P** **07 16 44.1 -0.5**
**INU Inuyama 47.46 14** P **P** **07 16 44.3 -0.3**
INU IAmb IAmb 07 16 59.0
comp=Z,98nm,1.1s
**JGF Kuroka 47.78 15** P **P** **07 16 48.1 +0.9**
**JGF Kuroka 47.78 15** P **P** **07 16 47.0 -0.1**
JGF IAmb IAmb 07 16 57.7
comp=Z,303nm,1.7s
**JGF Kuroka 47.78 15** ⇑P **P** **07 16 46.0 -1.1**
**JGF Kuroka 47.78 15** P **P** **07 16 46.8 -0.3**
**ITAN ITANAGAR 47.90 323** *e*P **P** **07 16 46.8 -1.4**
**SHL Shillong 47.90 319** P **P** **07 16 46.2 -2.2**
**SHL Shillong 47.90 319** *e*P **P** **07 16 46.5 -1.9**
SHL IAmb IAmb 07 16 55.7
comp=Z,122nm,0.8s
**SHL Shillong 47.90 319** P **P** **07 16 46.3 -2.1**
**SHL Shillong 47.90 319** P **P** **07 16 46.2 -2.2**
SHL pmax pmax
comp=Z,325nm,1.1s
SHL MLR MLR
comp=Z,20µm,22.0s
**INCN Inchon 48.06 3** P **P** **07 16 50.1 +0.8**
**INCN Inchon 48.06 3** P **P** **07 16 48.5 -0.8**
INCN IAmb IAmb 07 16 57.0
comp=Z,117nm,1.0s
**INCN Inchon 48.06 3** IAMs_20 IAMs_20 07 35 40.8
comp=Z,12µm,22.0s
**INCN Inchon 48.06 3** P **P** **07 16 53.0 +3.8**
INCN S **S** **07 23 46.1 -0.9**
**INCN Inchon 48.06 3** P **P** **07 16 48.5 -0.8**
INCN pmax pmax
comp=Z,117nm,1.0s
**KSRS Korea Array 48.10 4** P **P** **07 16 48.3 -1.2**
comp=Z,35nm,0.9s,baz=182,slow=9.9,SNR=47
KSRS PcP **PcP** **07 18 17.9 +0.8**
comp=Z,26nm,0.8s,baz=189,slow=3.5,SNR=8.2
KSRS LR LR 07 37 17.6
comp=Z,6µm,21.9s,baz=190,slow=36
comp=Z,35nm,0.9s
**JGN Niukaw 48.36 14** P **P** **07 16 51.3 -0.4**
**JRY Ryogami san 48.57 16** P **P** **07 16 52.8 -0.5**
**HJU Haeju 48.59 2** P **P** **07 16 49.8 -3.5**
HJU S **S** **07 23 49.6 -4.7**
HJU AmB
comp=Z,710nm,2.6s
**HNS HongShan 48.74 350** ⇑P **P** **07 16 52.3 -2.1**
HNS PP **PP** **07 18 48.5 +0.7**
HNS S **S** **07 23 52.5 -4.0**
HNS pmax pmax
comp=Z,86nm,1.0s
HNS pmax pmax
comp=Z,1µm,8.2s
HNS LR LR
comp=Z,9µm,23.1s
HNS LR LR
comp=Z,9µm,22.3s
HNS LR LR
comp=Z,12µm,20.7s
**MAJO Matsushiro 48.89 15** P **P** **07 16 55.2 -0.5**
**MAJO Matsushiro 48.89 15** P **P** **07 16 54.7 -1.0**
MAJO IAmb IAmb 07 17 41.3
comp=Z,117nm,1.0s
**MAJO Matsushiro 48.89 15** ⇑P **P** **07 16 54.5 -1.2**
**MAJO Matsushiro 48.89 15** *i*P **P** **07 16 54.8 -0.9**
MAJO pmax pmax
comp=Z,105nm,1.1s
MAJO MLR MLR
comp=Z,10µm,20.0s
**MAT Matsushiro 48.89 15** P **P** **07 16 54.7 -0.9**
**MJAR Matsushiro Arr 48.89 15** P **P** **07 16 54.0 -1.7**
comp=Z,54nm,0.9s,baz=186,slow=7.8,SNR=38
MJAR LR LR 07 35 34.4
comp=Z,9µm,21.4s,baz=210,slow=34
comp=Z,54nm,0.9s
**MJAR Matsushiro Arr 48.89 15** P **P** **07 16 54.0 -1.7**
**TIY Taiyuan 49.48 348** P **P** **07 17 02.0 +1.8**
TIY S **S** **07 24 04.0 -3.0**
TIY SS **SS** **07 27 33.0 -6.4**
TIY pmax pmax
comp=Z,71nm,0.7s
TIY pmax pmax
comp=Z,730nm,6.1s
TIY LR LR
comp=Z,6µm,26.1s
TIY LR LR
comp=Z,5µm,24.7s
TIY LR LR
comp=Z,9µm,23.4s
**DL2 Dalian 49.48 357** P **P** **07 16 58.0 -2.1**
DL2 S **S** **07 24 01.5 -5.4**
DL2 pmax pmax
comp=Z,310nm,1.0s
DL2 pmax pmax
comp=Z,830nm,9.8s
DL2 LR LR
comp=Z,5µm,21.0s
DL2 LR LR
comp=Z,4µm,20.3s
DL2 LR LR
comp=Z,9µm,29.4s
**PYAG Pyongyang 49.59 2** P **P** **07 16 59.5 -1.5**
PYAG S **S** **07 24 03.9 -4.5**
PYAG AmB
comp=Z,534nm,1.9s
PYAG AMS AMS
comp=Z,7µm,20.9s
**AIS Amsterdam Isla 49.60 229** IAMs_20 IAMs_20 07 34 16.4
comp=Z,16µm,21.0s
**MDRS Chennai 49.62 297** *e*P **P** **07 17 00.4 -1.2**
MDRS IAmb IAmb 07 17 08.4
comp=Z,235nm,1.2s
**TARA Tarawa 49.96 79** IAMs_20 IAMs_20 07 37 55.6
comp=Z,9µm,22.0s
**RAGD RAYAGADA 50.00 306** *e*P **P** **07 17 03.1 -1.4**
RAGD IAmb IAmb 07 17 18.6
comp=Z,171nm,1.4s
**JSD Sado 50.32 14** P **P** **07 17 07.9 +1.4**
**JSD Sado 50.32 14** P **P** **07 17 06.7 +0.2**
JSD IAmb IAmb 07 17 17.2
comp=Z,184nm,1.4s
**JSD Sado 50.32 14** ⇓P **P** **07 17 09.2 +2.7**
**JSD Sado 50.32 14** P **P** **07 17 06.5 0.0**
**LZH Lanzhou 50.40 339** ⇑*i*P **P** **07 17 06.5 -0.9**
LZH pP pP 07 17 12.5 +0.4
LZH S **S** **07 24 14.0 -6.3**
LZH pmax pmax
comp=Z,220nm,1.0s
LZH pmax pmax
comp=Z,2µm,6.2s
LZH LR LR
comp=Z,12µm,20.6s
LZH LR LR
comp=Z,9µm,21.3s
LZH LR LR
comp=Z,23µm,21.6s
**SUJ Sinuiju 50.62 0** P **P** **07 17 06.6 -2.2**
SUJ S **S** **07 24 15.3 -7.4**
SUJ AmB
comp=Z,413nm,1.6s
SUJ AMS AMS
comp=Z,13µm,24.9s
**JCZ Jackson Bay 50.73 139** P **P** **07 17 13.4 +3.6**
**TRD Trivandrum 50.74 290** *e*P **P** **07 17 09.5 -0.6**
TRD IAmb IAmb 07 17 19.0
comp=Z,80nm,0.7s
**BOK Bokaro 50.81 313** *e*P **P** **07 17 09.9 -0.6**
**JMM Marumori 50.83 17** P **P** **07 17 12.6 +2.2**
**JMM Marumori 50.83 17** P **P** **07 17 12.1 +1.8**
JMM IAmb IAmb 07 17 23.5
comp=Z,288nm,1.1s
**JMM Marumori 50.83 17** ⇓P **P** **07 17 12.7 +2.3**
**JMM Marumori 50.83 17** P **P** **07 17 13.5 +3.1**
**VJD Vijayawada 50.88 302** *e*P **P** **07 17 10.0 -1.1**
VJD IAmb IAmb 07 17 13.0
comp=Z,149nm,0.9s
**KOD Kodaikanal 50.92 293** *e*P **P** **07 17 10.5 -1.4**
KOD IAmb IAmb 07 17 20.5
comp=Z,111nm,0.7s
**BJT Baijiatuao 51.08 352** P **P** **07 17 11.1 -1.1**
**BJI Beijing 51.10 352** P **P** **07 17 10.0 -2.3**
BJI S **S** **07 24 23.5 -5.9**
BJI pmax pmax
comp=Z,15nm,0.8s
BJI LR LR
comp=Z,2µm,19.4s
BJI LR LR
comp=Z,2µm,17.0s
BJI LR LR
comp=Z,2µm,19.0s
**JHSG JHARSUGUGA 51.16 309** *e*P **P** **07 17 13.0 -0.2**
**JYA Atsumi 51.21 16** P **P** **07 17 13.6 +0.4**
**GTK Tadong 51.23 318** *e*P **P** **07 17 12.6 -1.2**

GTK IAmb IAmb 07 17 22.8
comp=Z,255nm,0.7s
**LSA Lhasa 51.30 323 P P 07 17 14.5 -0.2**
LSA LR LR
comp=Z,10µm,25.3s
LSA LR LR
comp=Z,8µm,26.3s
LSA LR LR
comp=Z,19µm,24.2s
**LSA Lhasa 51.30 323** IAMs_20 IAMs_20 07 40 23.3
comp=Z,9µm,21.0s
**LSA Lhasa 51.30 323 P P 07 17 14.3 -0.3**
**MCQ Macquarie Isla 51.56 155 P P 07 17 13.9 -1.8**
MCQ IAmb IAmb 07 17 35.5
comp=Z,263nm,1.2s
**MCQ Macquarie Isla 51.56 155 P P 07 17 14.7 -1.0**
comp=Z,213nm,1.2s
**MCQ Macquarie Isla 51.56 155 P P 07 17 13.9 -1.8**
MCQ pmax pmax
comp=Z,263nm,1.2s
**RPZ Rata Peaks 52.05 138** LR LR 07 40 20.9
comp=Z,16µm,18.1s,baz=291,slow=37
**KAAM Kaadhehdhoo 52.09 279 P P 07 17 20.4 0.0**
KAAM IAMs_20 IAMs_20 07 41 20.4
comp=Z,11µm,18.0s
**KAAM Kaadhehdhoo 52.09 279 ⇓P P 07 17 21.8 +1.5**
**KAAM Kaadhehdhoo 52.09 279 P P 07 17 22.1 +1.8**
**JOM Ohasama 52.47 17 P P 07 17 23.2 +0.6**
**MSVF Nonsavu 52.53 104 P P 07 17 27.2 +3.6**
**MSVF Nonsavu 52.53 104** LR LR 07 40 54.3
comp=Z,10µm,18.1s,baz=264,slow=37
**MSVF Nonsavu 52.53 104** *i* P **P 07 17 20.0 -3.6**
MSVF pmax pmax
comp=Z,51nm,1.2s
**BLSP Bilaspur 52.62 309** *e*P **P 07 17 21.3 -2.8**
**HHC Hu-ho-hao-te 52.67 348** *e*P **P 07 17 22.5 -1.7**
HHC pP pP 07 17 27.0 -1.9
HHC sP sP 07 17 30.3 -0.4
HHC S **S 07 24 47.8 -3.5**
HHC sS sS 07 25 03.8 +4.8
HHC SS **SS 07 28 31.5 +1.3**
HHC pmax pmax
comp=Z,37nm,0.5s
HHC pmax pmax
comp=Z,620nm,5.0s
HHC LR LR
comp=Z,5µm,21.4s
HHC LR LR
comp=Z,3µm,22.9s
HHC LR LR
comp=Z,10µm,21.0s
**BTO Baotou 52.77 346** *e*P **P 07 17 24.5 -0.5**
BTO pP **pP 07 17 29.3 -0.4**
BTO sP **sP 07 17 31.0 -0.5**
BTO PP **PP 07 19 26.3 +1.7**
BTO S **S 07 24 51.0 -1.7**
BTO sS **pS 07 24 58.8 +0.4**
BTO pmax pmax
comp=Z,35nm,1.7s
BTO pmax pmax
comp=Z,2µm,8.3s
BTO LR LR
comp=Z,25µm,19.9s
BTO LR LR
comp=Z,11µm,20.6s
BTO LR LR
comp=Z,30µm,21.1s
**HIZ Hauiti 52.87 130 P P 07 17 25.9 +0.1**
**HYB Hyderabad 53.07 301** *e*P **P 07 17 25.6 -1.9**
HYB *e* 07 17 33.1
HYB IVmB_BB 07 17 38.8
comp=Z,2µm,2.7s
HYB *e*PP **PP 07 19 25.8 -1.8**
HYB *e*S **S 07 24 57.1 -0.2**
HYB *e*ScS **ScS 07 27 20.1 +2.9**
HYB *e*SS **SS 07 28 37.1 +0.1**
HYB IVMs_BB IVMs_BB 07 39 56.0
comp=Z,6µm,23.4s
**TCW Tory Channel 53.31 134 P P 07 17 31.6 +2.7**
**WAZ Wanganui 53.35 132 P P 07 17 31.3 +2.1**
**MSHR Mys Shultsa 53.48 6** *ce*P **P 07 17 29.3 -0.7**
MSHR pmax pmax
comp=Z,166nm,2.1s
MSHR MLR MLR
comp=Z,3µm,18.0s
**PSTR Posyet 53.51 6** *i* P **P 07 17 29.9 -0.3**
**JTM Tenmabayashi 53.63 16 P P 07 17 33.5 +2.4**
**JTM Tenmabayashi 53.63 16 P P 07 17 31.2 +0.1**
**JTM Tenmabayashi 53.63 16 ⇑P P 07 17 33.6 +2.4**
**JTM Tenmabayashi 53.63 16 P P 07 17 32.8 +1.6**
**SNZO South Karori 53.65 134 P P 07 17 34.3 +2.9**
**OTVZ Oturere 53.67 131 P P 07 17 32.8 +1.0**
**BHW Baring Head 53.80 134** IAMs_20 IAMs_20 07 40 57.1
comp=Z,12µm,19.0s
**BHW Baring Head 53.80 134** P P 07 17 39.2 +6.7
**OGWZ Otaki Gorge 53.82 133 P P 07 17 34.3 +1.6**
**CAW Cannon Point 53.84 133 P P 07 17 36.7 +3.9**
**MRZ Mangatainoka R 54.06 133 P P 07 17 34.8 +0.4**
**MSWZ Moikau Station 54.07 134 P P 07 17 35.3 +0.8**
**HOWZ Holdsworth Sta 54.09 133 P P 07 17 36.3 +1.6**
**VLA Vladivostok 54.10 7** *i* P **P 07 17 34.2 -0.3**
VLA pmax pmax
comp=Z,109nm,1.3s
**PLWZ Palliser 54.13 134 P P 07 17 36.7 +1.7**
**PAWZ Paruwai Farm 54.19 134 P P 07 17 35.9 +0.5**
**FUNA Funafuti 54.23 93 P P 07 17 39.6 +3.5**
**BKZ Black Stump Fm 54.28 131 P P 07 17 38.6 +2.4**
**BKZ Black Stump Fm 54.28 131 P P 07 17 37.5 +1.4**
**KWHZ Kaweka Forest 54.30 131 P P 07 17 38.6 +2.2**
**GOMU GeErMu 54.31 331 P P 07 17 36.5 -0.2**
GOMU pP pP 07 17 41.8 +0.5
GOMU sP pwP 07 17 44.0 -0.2
GOMU pmax pmax
comp=Z,110nm,1.0s
GOMU LR LR
comp=Z,9µm,20.6s
GOMU LR LR
comp=Z,18µm,20.6s
GOMU LR LR
comp=Z,25µm,22.0s
**CN2 Changchun 54.33 1 P P 07 17 34.5 -1.7**
CN2 S **S 07 25 11.3 -2.1**
CN2 pmax pmax
comp=Z,70nm,1.0s
CN2 pmax pmax
comp=Z,500nm,7.0s
CN2 LR LR
comp=Z,6µm,20.0s
CN2 LR LR
comp=Z,3µm,20.0s
CN2 LR LR
comp=Z,9µm,25.0s
**MTHZ Maungataniwha 54.45 130 P P 07 17 39.5 +2.1**
**URZ Urewera 54.50 129 ⇑P P 07 17 38.8 +1.2**
**URZ Urewera 54.50 129** LR LR 07 42 17.8
comp=Z,20µm,18.8s,baz=24,slow=38
**URZ Urewera 54.50 129 P P 07 17 38.8 +1.2**
**NMHZ Naumai 54.50 131 P P 07 17 41.1 +3.4**
**NGP Nagpur 54.51 306** *e*P **P 07 17 35.1 -2.9**
**BFZ Birch Farm 54.55 133 P P 07 17 40.7 +2.7**
**ALBI Allahabad 54.68 312** *e*P **P 07 17 36.9 -2.2**
**PXZ Pawanui 54.81 132 P P 07 17 39.6 -0.3**
**SNGZ Shannon Statio 54.81 130 P P 07 17 43.0 +3.0**
**MWZ Matawai 54.83 129 P P 07 17 42.3 +2.2**
**GTA Gaotai 54.83 337 P P 07 17 39.5 -0.6**
GTA pP pP 07 17 42.0 -2.8
GTA S **S 07 25 14.0 -6.7**
GTA sS pS 07 25 24.3 -2.1
GTA pmax pmax
comp=Z,38nm,1.8s
GTA pmax pmax
comp=Z,1µm,9.8s
GTA LR LR
comp=Z,4µm,24.1s
GTA LR LR
comp=Z,8µm,18.9s
GTA LR LR
comp=Z,13µm,23.6s
**XLT XiLinHaoTe 54.91 353** *e*P **P 07 17 38.8 -1.8**
XLT pP pP 07 17 43.5 -1.7
XLT sP sP 07 17 46.5 -0.5
XLT PcP **PcP 07 18 40.0 -2.5**
XLT PP **PP 07 19 41.5 -2.3**
XLT S **S 07 25 18.0 -3.5**
XLT sS sS 07 25 34.8 +5.6
XLT pmax pmax
comp=Z,79nm,1.1s
XLT pmax pmax
comp=Z,750nm,4.3s
XLT LR LR
comp=Z,5µm,22.1s
XLT LR LR
comp=Z,12µm,45.1s
**JSH Shimam 55.11 14** P P 07 17 52.6 +11
**USA0B Ussuriysk Arra 55.17 7** *i* P **P 07 17 41.9 -0.4**
**USRK Ussuriysk Ar. 55.17 7 P P 07 17 42.0 -0.3**
comp=Z,42nm,0.8s,baz=192,slow=6.5,SNR=51
USRK LR LR 07 40 07.2
comp=Z,4µm,21.8s,baz=199,slow=35
comp=Z,42nm,0.8s
**USRK Ussuriysk Ar. 55.17 7 P P 07 17 42.0 -0.3**
**MXZ Matakaoa Point 55.23 128 P P 07 17 46.2 +3.2**
**MDJ Mudanjiang 55.35 5 P P 07 17 43.7 +0.1**
**MDJ Mudanjiang 55.35 5 P P 07 17 42.8 -0.8**
MDJ pP pP 07 17 45.8 -2.5
MDJ S **S 07 25 24.8 -2.3**
MDJ sS pS 07 25 33.3 +0.4
MDJ SS **SS 07 29 09.3 -2.8**
MDJ pmax pmax
comp=Z,44nm,1.0s
MDJ pmax pmax
comp=Z,1µm,7.0s
MDJ LR LR
comp=Z,8µm,23.8s
MDJ LR LR
comp=Z,4µm,23.8s
MDJ LR LR
comp=Z,15µm,24.7s
**MDJ Mudanjiang 55.35 5 P P 07 17 43.4 -0.2**
**ERM Erimo 55.35 17 P P 07 17 46.2 +2.6**
**ERM Erimo 55.35 17 P P 07 17 42.2 -1.5**
**ERM Erimo 55.35 17** *i* P **P 07 17 42.8 -0.8**
ERM pmax pmax
comp=Z,65nm,1.1s
**JEM Erimo 55.35 17 P P 07 17 46.3 +2.7**
**AKL Akola 55.93 304** *e*P **P 07 17 46.0 -2.2**
**CASY Casey 56.21 187 P P 07 17 49.5 +0.1**
CASY IAmb IAmb 07 17 58.5
comp=Z,199nm,1.5s
**CASY Casey 56.21 187 ⇑P P 07 17 50.0 +0.6**
**BNX BinXian 56.33 3 ⇑P P 07 17 49.3 -1.3**
BNX pP **pP 07 17 52.5 -2.8**
BNX S **S 07 25 41.0 +0.9**
BNX sS **sS 07 25 47.3 -0.7**
BNX pmax pmax
comp=Z,34nm,1.2s
BNX pmax pmax
comp=Z,770nm,6.8s
BNX LR LR
comp=Z,7µm,24.4s
BNX LR LR
comp=Z,4µm,20.1s
BNX LR LR
comp=Z,10µm,20.6s
**TEY Ternei 56.68 11**⇓*e*P **P 07 17 52.1 -0.9**
TEY *e* 07 25 40.0
TEY pmax pmax
comp=Z,10.0nm,0.8s
TEY pmax pmax
comp=N,100nm,10.5s
TEY pmax pmax
comp=E,100nm,11.3s
TEY pmax pmax
comp=Z,100nm,12.0s
**KAD Karad 56.73 299** *e*P **P 07 17 52.2 -1.8**
**RAO Raoul Island 56.87 118** LR LR 07 42 38.2
comp=Z,21µm,18.4s,baz=284,slow=36
**BHPL Bhopal 56.88 307** *e*P **P 07 17 52.5 -2.6**
BHPL IAmb IAmb 07 18 04.3
comp=Z,49nm,0.7s
**ASAJ Asahikawa 57.14 16 P P 07 17 56.7 +0.3**
ASAJ pmax pmax
comp=Z,60nm,0.9s
**JKA Kamikawa-asahi 57.14 16 P P 07 17 56.7 +0.3**
**JHNI Jhansi 57.21 310** *e*P **P 07 17 53.5 -3.8**
JHNI IAmb IAmb 07 17 57.0
comp=Z,142nm,0.9s
**POO Poona 57.55 300** *e*P **P 07 17 57.6 -2.3**
POO IAmb IAmb 07 18 05.9
comp=Z,61nm,0.8s
**GUNA GUNA 57.69 308** *e*P **P 07 17 58.4 -2.3**
GUNA IAmb IAmb 07 18 10.0
comp=Z,104nm,0.8s
**YUK Yuzh-Kuril'sk 58.01 18** *e*P **P 07 18 03.2 +0.8**
YUK *e* 07 18 55.0
YUK *e* 07 20 12.0
YUK *e*PPP PPP 07 21 29.9
YUK *e*S **S 07 26 04.8 +2.6**
YUK *e* 07 27 54.6
YUK *e*SS **SS 07 29 57.4 +3.5**
YUK pmax pmax
comp=Z,245nm,1.1s
YUK pmax pmax
comp=Z,215nm,0.8s
**LGTI Lohaghat 58.24 315** *e*P **P 07 18 02.4 -2.0**
LGTI IAmb IAmb 07 18 10.6
comp=Z,90nm,0.8s
**PTH Pithoragarh 58.32 315** *e*P **P 07 18 02.9 -2.4**
PTH IAmb IAmb 07 18 11.0
comp=Z,144nm,0.9s
**ROCAM Rodrigues Isla 59.08 253** IAMs_20 IAMs_20 07 43 20.1
comp=Z,9µm,20.0s
**JOSI Joshimath 59.38 315** *e*P **P 07 18 10.9 -1.7**
**KUR Kuril'sk 59.71 19** *e*P **P 07 18 16.7 +2.4**
KUR *e*S **S 07 26 30.9 +6.5**
KUR *e*SSS SSS 07 32 50.2
KUR pmax pmax
comp=Z,314nm,1.1s
KUR pmax pmax
comp=E,164nm,1.0s
KUR pmax pmax
comp=N,90nm,0.8s
KUR pmax pmax
comp=Z,2µm,5.2s
**SONA Sohna 59.82 312** *e*P **P 07 18 12.7 -2.7**
**YSS Yuzh-Sakhalins 59.82 15 P P 07 18 17.2 +2.2**
**YSS Yuzh-Sakhalins 59.82 15 P P 07 18 15.4 +0.4**
**YSS Yuzh-Sakhalins 59.82 15** *e*P **P 07 18 15.9 +0.9**
YSS *e* 07 20 30.8
YSS *e*S **S 07 26 23.4 -2.4**
YSS *e*PS **PnS 07 26 42.1 +2.8**
YSS pmax pmax
comp=Z,700nm,9.5s
YSS pmax pmax
comp=Z,50nm,0.8s
YSS smax smax
comp=N,2µm,11.6s
YSS smax smax
comp=E,2µm,12.1s
YSS MLR MLR
comp=Z,2µm,18.0s
YSS MLR MLR
comp=N,2µm,17.0s
YSS MLR MLR
comp=E,2µm,17.0s
**HIA Hailar 59.91 357 P P 07 18 16.6 +0.9**
**HIA Hailar 59.91 357 P P 07 18 15.4 -0.3**
HIA IAmb IAmb 07 18 25.5
comp=Z,131nm,0.9s
**HIA Hailar 59.91 357** IAMs_20 IAMs_20 07 44 51.6
comp=Z,7µm,20.0s
**HIA Hailar 59.91 357 P P 07 18 15.4 -0.3**
HIA pmax pmax
comp=Z,131nm,0.9s
HIA MLR MLR
comp=Z,7µm,20.0s
**KLR Kul'dur 60.12 6** LR LR 07 44 17.5
comp=Z,5µm,21.9s,baz=206,slow=36
**KLR Kul'dur 60.12 6** *e*P **P 07 18 14.9 -2.1**
KLR pmax pmax
comp=Z,36nm,1.2s
**KUDL Kundal 60.20 311** *e*P **P 07 18 14.9 -3.1**
KUDL IAmb IAmb 07 18 25.0
comp=Z,154nm,1.0s
**ULN Ulaanbaatar 60.33 347 P P 07 18 17.5 -1.3**
ULN IAmb IAmb 07 18 26.2
comp=Z,142nm,1.2s
**ULN Ulaanbaatar 60.33 347** IAMs_20 IAMs_20 07 44 07.7
comp=Z,7µm,21.0s
**ULN Ulaanbaatar 60.33 347 ⇑P P 07 18 17.5 -1.3**
**ULN Ulaanbaatar 60.33 347 P P 07 18 17.8 -1.0**
ULN P **P 07 18 17.8 -1.0**
ULN S **S 07 26 31.7 -1.0**
ULN S **S 07 26 31.7 -1.0**
**ULN Ulaanbaatar 60.33 347** *ce*P **P 07 18 17.2 -1.5**
ULN pmax pmax
comp=Z,144nm,1.2s
**SONM Songino Array 60.45 346** P **P 07 18 18.1 -1.5**
comp=Z,31nm,0.7s,baz=163,slow=9.0,SNR=64
SONM LR LR 07 46 07.7
comp=Z,8µm,21.5s,baz=168,slow=38
SONM PKPPKP **P'P'df 07 47 42.2 +4.2**
comp=Z,0.3nm,0.3s,baz=349,slow=4.4,SNR=1.9
SONM PKP2bc 07 47 49.7
comp=Z,2.1nm,1.1s,baz=313,slow=1.7,SNR=5.1
comp=Z,31nm,0.7s
**AJM Ajmer 60.71 309** *e*P **P 07 18 19.4 -2.3**
**RTK Rohtak 60.74 312** *e*P **P 07 18 19.5 -2.2**
**HEH HeiHe 60.84 2** P **P 07 18 20.8 -1.1**
HEH pP **pP 07 18 23.5 -3.2**
HEH S **S 07 26 37.0 -1.7**
HEH pmax pmax
comp=Z,120nm,1.1s
HEH pmax pmax
comp=Z,1µm,6.3s
HEH LR LR
comp=Z,5µm,24.8s
HEH LR LR
comp=Z,2µm,23.1s
HEH LR LR
comp=Z,12µm,23.5s
**KLP Kalpa 60.86 315** *e*P **P 07 18 21.8 -1.1**
KLP IAmb IAmb 07 18 32.1
comp=Z,596nm,0.9s
**HNLY HANLEY 61.11 317** *e*P **P 07 18 22.6 -2.2**
**SMLA Simla 61.38 314** *e*P **P 07 18 24.6 -1.4**
SMLA IAmb IAmb 07 18 34.9
comp=Z,288nm,0.7s
**UGL Uglegorsk 61.65 13** *e*P **P 07 18 26.9 -0.5**
UGL *e*S **S 07 26 52.7 +3.7**
UGL pmax pmax
comp=Z,130nm,0.9s
UGL pmax pmax
comp=Z,800nm,2.5s
UGL smax smax
comp=E,3µm,11.0s
UGL smax smax
comp=N,2µm,8.0s
**BHK Bhakra 62.07 314** *e*P **P 07 18 28.3 -2.4**
**GRNR Gornyy 62.21 9**⇑*i*P **P 07 18 31.3 +0.1**
GRNR pmax pmax
comp=Z,20nm,1.0s
**AFI Afiamalu 62.49 100** IAMs_20 IAMs_20 07 44 31.5
comp=Z,8µm,21.0s
**DHRM DHARAMSHALA 62.62 315** *e*P **P 07 18 33.2 -1.5**
DHRM IAmb IAmb 07 18 45.2
comp=Z,623nm,0.8s
**THN Thein Dam 63.14 315** *e*P **P 07 18 36.5 -1.2**
THN IAmb IAmb 07 18 44.5
comp=Z,500nm,1.0s
**BHUJ Bhuj 63.15 303** *e*P **P 07 18 36.5 -1.5**
**CIT Chita 63.21 353** *e*P P 07 18 45.0 +7.1
CIT *e* 07 19 21.5
CIT pmax pmax
comp=Z,192nm,2.0s
**TYV Tymovskoe 63.46 13** *e*P **P 07 18 41.5 +2.0**
TYV *e*S **S 07 27 14.6 +2.9**
TYV pmax pmax
comp=Z,400nm,8.3s
TYV pmax pmax
comp=Z,13nm,1.1s
TYV smax smax
comp=N,1µm,10.1s
TYV smax smax
comp=E,1µm,10.1s
**ZAK Zakamensk 63.58 345** *e*P **P 07 18 38.2 -2.2**
ZAK pmax pmax
comp=Z,86nm,1.2s
ZAK pmax pmax
comp=Z,39nm,1.1s
**WMQ Urumqi 63.66 331** P **P 07 18 41.0 -0.1**
WMQ PcP **PcP 07 19 17.3 0.0**
WMQ S **S 07 27 13.5 -1.2**
WMQ pmax pmax
comp=Z,150nm,0.9s
WMQ pmax pmax
comp=Z,1µm,6.5s
WMQ LR LR
comp=Z,8µm,21.3s
WMQ LR LR
comp=Z,10µm,22.7s
WMQ LR LR
comp=Z,15µm,23.8s
**JMU Jammu 63.87 315** *e*P **P 07 18 42.3 -0.2**
**ZEA Zeya 64.31 2** *e*P **P 07 18 45.9 +0.8**
ZEA *e*S **S 07 27 28.7 +6.4**
ZEA *e*SS **SS 07 31 39.1 +6.6**
ZEA pmax pmax
comp=E,40nm,1.0s
ZEA pmax pmax
comp=N,100nm,1.3s
ZEA pmax pmax
comp=Z,110nm,1.6s
ZEA pmax pmax
comp=Z,700nm,10.3s
ZEA smax smax
comp=E,1µm,14.1s
ZEA smax smax
comp=N,2µm,11.7s
**IRK Irkutsk 65.07 347** *e*P **P 07 18 49.4 -0.6**
IRK *e* 07 19 20.4
IRK pmax pmax
comp=Z,751nm,1.4s
**NKL Nikolayevsk 65.22 11** *e*P **P 07 18 52.2 +1.2**
NKL *e* 07 21 10.3
NKL *e*S **S 07 27 29.2 -4.2**
NKL *e*SS **SS 07 31 47.0 +0.4**
NKL pmax pmax
comp=N,77nm,1.2s
NKL pmax pmax
comp=Z,236nm,1.3s
NKL pmax pmax
comp=E,85nm,1.4s
NKL smax smax
comp=E,244nm,4.5s
NKL smax smax
comp=N,174nm,2.3s
**MOY Mondy 65.34 344** *e*P **P 07 18 51.2 -0.8**
MOY pmax pmax
comp=Z,172nm,1.5s
**KNGR Kungurtug, Tuv 65.39 342** *i* P **P 07 18 52.7 +0.4**
KNGR pmax pmax
comp=Z,118nm,1.2s
KNGR MLR MLR
comp=Z,3µm,15.0s
**NIL Nilore 65.53 315** P **P 07 18 52.2 -1.3**
**NIL Nilore 65.53 315** P **P 07 18 52.2 -1.3**
NIL pmax pmax
comp=Z,190nm,0.8s
NIL MLR MLR
comp=Z,12µm,19.0s
**KSH Kashi 67.12 321** P **P 07 19 02.5 -1.2**
KSH pP pP 07 19 05.8 -2.6
KSH sP sP 07 19 10.0 -0.3
KSH S **S 07 27 55.5 -1.9**
KSH ScS **SKSac 07 28 54.5 -6.0**
KSH pmax pmax
comp=Z,62nm,0.7s
KSH pmax pmax
comp=Z,810nm,4.3s
KSH LR LR
comp=Z,10µm,21.6s
KSH LR LR
comp=Z,11µm,23.7s
KSH LR LR
comp=Z,26µm,24.0s
**SKR Severo-Kuril's 67.23 21** *e*P **P 07 19 08.5 +4.6**
SKR *e*S **S 07 27 55.8 -2.1**
SKR pmax pmax
comp=Z,500nm,6.2s
SKR MLR MLR
comp=Z,4µm,19.0s
**SHLS Shalkode 67.40 326** *e*P **P 07 19 03.3 -2.1**
comp=Z,34nm,0.7s,baz=326
SHLS *e*S **S 07 28 00.0 -0.6**

baz=326
**SHLS Shalkode 67.40 326** *e*P **P** **07 19 03.2 -2.1**
SHLS *e*S **S** **07 28 00.0 -0.6**
SHLS pmax pmax
comp=Z,34nm,0.7s
**TARG Taragay, Kyrgy 67.40 324** P **P** **07 19 04.3 -1.5**
TARG IAmb IAmb 07 19 25.1
comp=Z,107nm,1.0s
**TARG Taragay, Kyrgy 67.40 324** P **P** **07 19 04.3 -1.5**
TARG pmax pmax
comp=Z,107nm,1.0s
**PRZ Przheval'sk 67.55 325** P **P** **07 19 05.9 -0.5**
PRZ IAMs_20 IAMs_20 07 53 25.9
comp=Z,7µm,21.0s
**PRZ Przheval'sk 67.55 325** P **P** **07 19 05.9 -0.5**
PRZ pmax pmax
comp=Z,446nm,1.4s
PRZ MLR MLR
comp=Z,7µm,21.0s
**UZB Uzynbulak 67.63 326** *e*P **P** **07 19 06.5 -0.5**
comp=Z,33nm,0.8s,baz=326
UZB *e*S **S** **07 28 05.6 +2.1**
baz=326
**UZB Uzynbulak 67.63 326** *e*P **P** **07 19 06.4 -0.5**
UZB *e*S **S** **07 28 05.5 +2.1**
UZB pmax pmax
comp=Z,33nm,0.8s
**ZSN Zaisan 67.69 332** *e*P **P** **07 19 06.4 -0.7**
comp=Z,38nm,0.8s,baz=332
ZSN *e*S **S** **07 28 05.8 +2.0**
baz=332
**ZSN Zaisan 67.69 332** *e*P **P** **07 19 06.3 -0.7**
ZSN *e*S **S** **07 28 05.8 +2.0**
ZSN pmax pmax
comp=Z,38nm,0.8s
**SATY Saty 67.92 325** *e*P **P** **07 19 08.3 -0.3**
comp=Z,66nm,0.8s,baz=325
SATY *e*S **S** **07 28 09.0 +2.1**
baz=325
**SATY Saty 67.92 325** *e*P **P** **07 19 08.3 -0.3**
SATY *e*S **S** **07 28 08.9 +2.1**
SATY pmax pmax
comp=Z,66nm,0.8s
**ZHN Zhinishke 67.97 326** *e*P **P** **07 19 08.4 -0.6**
comp=Z,39nm,0.9s,baz=326
**ZHN Zhinishke 67.97 326** *e*P **P** **07 19 08.3 -0.6**
ZHN pmax pmax
comp=Z,39nm,0.9s
**KPKS Kokpek 68.03 326** *e*P **P** **07 19 08.8 -0.5**
comp=Z,39nm,0.7s,baz=326
KPKS *e*S **S** **07 28 10.2 +2.0**
baz=326
**KPKS Kokpek 68.03 326** *e*P **P** **07 19 08.8 -0.5**
KPKS *e*S **S** **07 28 10.1 +2.0**
KPKS pmax pmax
comp=Z,39nm,0.7s
**NRN Naryn 68.27 323** P **P** **07 19 10.0 -1.2**
**NRN Naryn 68.27 323** P **P** **07 19 10.0 -1.2**
NRN pmax pmax
comp=Z,50nm,0.8s
**DGZ Jazzator, Alta 68.29 335** *i* P **P** **07 19 11.3 +0.4**
DGZ pmax pmax
comp=Z,123nm,0.8s
DGZ MLR MLR
comp=Z,10µm,24.0s
**MK31 Makanchi Array 68.43 330** *i* P **P** **07 19 10.1 -1.6**
**MKAR Makanchi Array 68.43 330** P **P** **07 19 10.0 -1.7**
comp=Z,36nm,0.6s,baz=138,slow=7.6,SNR=122
MKAR PKP2bc 07 47 29.1
comp=Z,0.8nm,0.7s,baz=304,slow=2.4,SNR=6.2
comp=Z,36nm,0.6s
**MAKZ Makanchi 68.59 330** P **P** **07 19 11.8 -0.9**
MAKZ IAmb IAmb 07 19 29.8
comp=Z,163nm,1.2s
**MAKZ Makanchi 68.59 330** P **P** **07 19 11.8 -0.9**
MAKZ pmax pmax
comp=Z,163nm,1.2s
MAKZ MLR MLR
comp=Z,2µm,22.0s
**TNSS Tian-Shan 68.72 325** *e*P **P** **07 19 13.1 -1.0**
baz=325
**TNSS Tian-Shan 68.72 325** *e*P **P** **07 19 13.0 -1.0**
**MDOK Medeo 68.74 325** *e*P **P** **07 19 13.1 -0.8**
baz=325
MDOK LR LR 07 49 54.0
baz=325
**MDOK Medeo 68.74 325** *e*P **P** **07 19 13.0 -0.8**
**AAA Alma-Ata 68.85 325** *e*P **P** **07 19 13.9 -0.5**
comp=Z,50nm,0.8s,baz=325
AAA LR LR 07 49 58.3
comp=Z,10µm,27.3s,baz=325
**AAA Alma-Ata 68.85 325** *e*P **P** **07 19 14.2 -0.2**
**BOOM Boomskoye usch 68.96 324** P **P** **07 19 14.4 -0.9**
**BOOM Boomskoye usch 68.96 324** P **P** **07 19 14.4 -0.9**
**TDK Taldyqorghan 69.19 327** *e*P **P** **07 19 15.9 -0.5**
comp=Z,61nm,0.8s,baz=327
TDK LR LR 07 50 09.9
comp=Z,5µm,21.4s,baz=327
**TDK Taldyqorghan 69.19 327** *e*P **P** **07 19 15.9 -0.5**
TDK pmax pmax
comp=Z,61nm,0.8s
TDK MLR MLR
comp=Z,5µm,21.0s
**CHKK Chushkaly 69.22 325** *e*P **P** **07 19 15.8 -0.8**
baz=325
**CHKK Chushkaly 69.22 325** *e*P **P** **07 19 15.8 -0.8**
**MAW Mawson 69.36 201** P **P** **07 19 18.0 +0.9**
comp=Z,57nm,1.2s,baz=65,slow=9.4,SNR=24
MAW LR LR 07 45 18.4
comp=Z,29µm,21.7s,baz=56,slow=32
MAW PKP2bc 07 47 26.5
comp=Z,3.0nm,1.0s,baz=291,slow=10,SNR=3.6
comp=Z,57nm,1.2s
**MAW Mawson 69.36 201** P **P** **07 19 18.0 +0.9**
**TKM2 Tokmak 2 69.42 324** P **P** **07 19 17.2 -0.9**
SNR=24
**TKM2 Tokmak 2 69.42 324** P **P** **07 19 16.9 -1.3**
**DRK Karamyk 69.72 319** P **P** **07 19 19.8 -0.4**
**DRK Karamyk 69.72 319** P **P** **07 19 19.8 -0.4**
DRK pmax pmax
comp=Z,150nm,0.6s
**PEA0B Petropavlovsk- 69.78 21** *ce*P **P** **07 19 16.3 -3.6**
**PETK Petropavlovsk- 69.78 21** P **P** **07 19 19.1 -0.7**
comp=Z,11nm,0.7s,baz=209,slow=4.6,SNR=23
comp=Z,11nm,0.7s
**AAK Ala-Archa 69.89 323** P **P** **07 19 20.5 -0.5**
SNR=25
**AAK Ala-Archa 69.89 323** P **P** **07 19 20.4 -0.5**
AAK IAmb IAmb 07 19 36.6
comp=Z,91nm,0.8s
**AAK Ala-Archa 69.89 323** IAMs_20 IAMs_20 07 55 54.8
comp=Z,9µm,22.0s
**AAK Ala-Archa 69.89 323** *i* P **P** **07 19 20.1 -0.9**
SNR=26
**AAK Ala-Archa 69.89 323** P **P** **07 19 20.8 -0.2**
comp=Z,50nm,0.8s,baz=162,slow=7.2,SNR=24
AAK LR LR 07 53 50.2
comp=Z,6µm,21.3s,baz=128,slow=39
comp=Z,50nm,0.8s
**AAK Ala-Archa 69.89 323** P **P** **07 19 20.5 -0.5**
AAK S **S** **07 28 31.7 +1.3**
**AAK Ala-Archa 69.89 323** *ce*P **P** **07 19 20.6 -0.4**
AAK pmax pmax
comp=Z,54nm,0.8s
**PET Petropavlovsk 70.05 21** P **P** **07 19 24.1 +2.6**
**PET Petropavlovsk 70.05 21** *e*P **P** **07 19 21.5 0.0**
PET *e*S **S** **07 28 33.1 +1.8**
PET *e*PS **PnS** **07 29 06.2 +7.3**
PET *e*SS **SS** **07 32 57.6 -3.8**
PET pmax pmax
comp=Z,119nm,1.2s
PET pmax pmax
comp=Z,900nm,16.1s
PET pmax pmax
comp=Z,1µm,15.7s
PET MLR MLR
comp=Z,2µm,19.0s
PET MLR MLR
comp=Z,2µm,18.0s
**AML Almayashu 70.07 322** P **P** **07 19 21.8 -0.6**
SNR=43
**H04N2 CROZET ISLANDS 70.10 225** T T 08 36 15.1
baz=82,slow=75,SNR=77
**H04N3 CROZET ISLANDS 70.11 225** T T 08 36 21.7
baz=82,slow=75,SNR=71
**H04N1 CROZET ISLANDS 70.11 225** T T 08 36 14.9

baz=82,slow=75,SNR=86
**USP Ospenovka 70.27 324** P **P** **07 19 22.2 -0.9**
SNR=48
**SGDS Sogindy 70.31 324** *e*P **P** **07 19 22.5 -1.0**
baz=324
SGDS *e*S **S** **07 28 36.7 +1.7**
baz=324
**SGDS Sogindy 70.31 324** *e*P **P** **07 19 22.4 -1.0**
SGDS *e*S **S** **07 28 36.7 +1.7**
**EKS2 Erkin-Say 70.33 323** P **P** **07 19 23.2 -0.4**
SNR=38
**GAR Garm 70.42 318** P **P** **07 19 22.8 -1.5**
**BTK Batken 70.67 319** P **P** **07 19 24.5 -1.2**
BTK IAmb IAmb 07 19 39.8
comp=Z,68nm,0.8s
**BTK Batken 70.67 319** P **P** **07 19 24.5 -1.2**
BTK pmax pmax
comp=Z,68nm,0.9s
**CHGR Chuyangaron 71.00 317** P **P** **07 19 26.6 -1.2**
**CHGR Chuyangaron 71.00 317** P **P** **07 19 26.6 -1.2**
CHGR pmax pmax
comp=Z,238nm,1.1s
**NGCH Negor - Chabah 71.10 302** P **P** **07 19 29.2 +0.7**
**SIMJ Simiganj 71.11 317** P **P** **07 19 26.9 -1.6**
SIMJ IAmb IAmb 07 19 39.9
comp=Z,117nm,0.9s
**JLN Jalan Bani Buh 71.41 298** P **P** **07 19 30.7 +0.3**
SNR=8.8
JLN P **P** **07 19 30.7 +0.3**
SNR=8.8
JLN S **S** **07 28 48.8 +0.3**
JLN S **S** **07 28 48.8 +0.3**
**BTLS Baital 71.61 325** *e*P **P** **07 19 30.1 -1.1**
baz=325
**BTLS Baital 71.61 325** *e*P **P** **07 19 30.0 -1.1**
**SEM Semipalatinsk 71.94 332** *e*P **P** **07 19 32.0 -1.4**
comp=Z,36nm,0.9s,baz=332
SEM LR LR 07 51 49.5
comp=Z,3µm,20.4s,baz=332
**SEM Semipalatinsk 71.94 332** *e*P **P** **07 19 31.9 -1.4**
SEM pmax pmax
comp=Z,36nm,0.9s
SEM MLR MLR
comp=Z,3µm,20.0s
**WBK Wadi Bani Khal 71.95 298** P **P** **07 19 34.7 +0.9**
SNR=15
WBK P **P** **07 19 34.7 +0.9**
SNR=15
WBK S **S** **07 28 55.3 +0.5**
WBK S **S** **07 28 55.3 +0.5**
**MHTO MHTO 72.28 296** P **P** **07 19 35.9 -0.2**
SNR=17
MHTO P **P** **07 19 35.9 +0.2**
SNR=17
MHTO S **S** **07 28 57.0 -1.5**
MHTO S **S** **07 28 57.0 -1.5**
**DQM DQM 72.32 295** P **P** **07 19 36.8 +0.8**
SNR=12
DQM P **P** **07 19 36.8 +0.8**
SNR=12
DQM S **S** **07 28 59.3 +0.3**
DQM S **S** **07 28 59.3 +0.3**
**WSAR Wadi Sarin 72.47 299** LR LR 07 53 13.4
comp=Z,10µm,19.4s,baz=128,slow=37
**KK31 Karatay Array 72.55 322** *i* P **P** **07 19 34.6 -2.3**
**KKAR Karatay Array 72.55 322** P **P** **07 19 35.6 -1.2**
**KKAR Karatay Array 72.55 322** P **P** **07 19 35.7 -1.2**
KKAR pmax pmax
comp=Z,41nm,0.9s
**ZALV Zalesovo Beam 72.59 337** P **P** **07 19 35.3 -1.6**
comp=Z,73nm,0.8s,baz=134,slow=4.4,SNR=82
ZALV S **S** **07 28 53.4 -7.4**
comp=Z,15nm,1.0s,baz=141,slow=9.3,SNR=5.5
ZALV LR LR 07 54 35.9
comp=Z,4µm,21.7s,baz=150,slow=38
comp=Z,73nm,0.8s
**JMDO Jabal Madar 72.63 298** P **P** **07 19 38.3 +0.5**
SNR=16
JMDO P **P** **07 19 38.3 +0.5**
SNR=16
JMDO S **S** **07 29 01.2 -1.2**
JMDO S **S** **07 29 01.2 -1.2**
**YAK Yakutsk 72.71 3** P **P** **07 19 36.6 -0.7**
YAK IAmb IAmb 07 19 41.2
comp=Z,115nm,0.8s
**YAK Yakutsk 72.71 3** LR LR 07 51 13.5
comp=Z,1µm,21.9s,baz=190,slow=36
**YAK Yakutsk 72.71 3** *e*P **P** **07 19 36.5 -0.8**
YAK *e* 07 19 53.3
YAK *e*S **S** **07 29 02.3 +0.5**
YAK *e* 07 29 43.6
YAK *e*SS **SS** **07 33 41.5 -0.3**
YAK pmax pmax
comp=Z,125nm,0.9s
YAK pmax pmax
comp=N,48nm,1.3s
YAK pmax pmax
comp=E,14nm,1.2s
YAK pmax pmax
comp=Z,569nm,5.3s
YAK smax smax
comp=N,3µm,10.2s
YAK smax smax
comp=E,2µm,11.6s
YAK MLR MLR
comp=Z,3µm,19.0s
YAK MLR MLR
comp=N,1µm,16.0s
YAK MLR MLR
comp=E,2µm,23.0s
**KURBB Kurchatov Arra 72.88 332** P **P** **07 19 37.3 -1.4**
comp=E,34nm,0.8s,baz=143,slow=5.1,SNR=136
KURBB PKPPKP
comp=E,2.2nm,1.1s,baz=320,slow=2.9,SNR=5.3
KURBB LR LR 07 55 57.9
comp=E,8µm,20.8s,baz=142,slow=39
comp=E,34nm,0.8s
**KURBB Kurchatov Arra 72.88 332** P **P** **07 19 37.1 -1.5**
**KURK Kurchatov 72.90 332** P **P** **07 19 38.1 -0.7**
KURK IAmb IAmb 07 19 56.0
comp=Z,145nm,0.9s
**KURK Kurchatov 72.90 332** P **P** **07 19 39.3 +0.5**
KURK P **P** **07 19 39.3 +0.5**
KURK S **S** **07 29 01.8 -2.7**
KURK S **S** **07 29 01.8 -2.7**
**KURK Kurchatov 72.90 332** *ce*P **P** **07 19 37.5 -1.3**
**SMDO Samad 72.91 298** P **P** **07 19 40.1 +0.5**
SNR=25
SMDO P **P** **07 19 40.1 +0.5**
SNR=25
SMDO S **S** **07 29 00.4 -5.5**
SMDO S **S** **07 29 00.4 -5.5**
**BRLS Boroldoy 72.92 321** *e*P **P** **07 19 37.9 -1.3**
baz=321
**BRLS Boroldoy 72.92 321** *e*P **P** **07 19 37.8 -1.3**
**RAR Rarotonga 73.27 109** LR LR 07 50 43.2
comp=Z,3µm,21.5s,baz=262,slow=35
**MA2 Magadan 73.31 14** P **P** **07 19 44.7 +3.7**
**MA2 Magadan 73.31 14** P **P** **07 19 41.1 +0.1**
MA2 IAmb IAmb 07 19 53.8
comp=Z,110nm,1.1s
MA2 IAMs_20 IAMs_20 07 48 53.9
comp=Z,6µm,22.0s
**MA2 Magadan 73.31 14** LR LR 07 52 16.0
comp=Z,2µm,21.0s,baz=220,slow=36
**MA2 Magadan 73.31 14** *ce*P **P** **07 19 41.8 +0.8**
MA2 pmax pmax
comp=Z,43nm,1.0s
MA2 MLR MLR
comp=Z,3µm,23.0s
**MA2 Magadan 73.31 14** P **P** **07 19 40.7 -0.3**
comp=Z,95nm,1.0s,comp=Z,2µm
**SHAO Shalim 73.45 292** P **P** **07 19 43.7 +0.9**
SHAO P **P** **07 19 43.7 +0.9**
SHAO S **S** **07 29 11.5 -0.5**
SHAO S **S** **07 29 11.5 -0.5**
**BSY Bisya 73.54 298** P **P** **07 19 42.9 -0.2**
SNR=29
BSY P **P** **07 19 42.9 -0.2**
SNR=29
BSY S **S** **07 29 12.3 -0.6**
BSY S **S** **07 29 12.3 -0.6**
**HOQ Hoqain 73.72 298** P **P** **07 19 44.7 +0.4**
SNR=41
HOQ P **P** **07 19 44.7 +0.4**
SNR=41

**DMTO DMTO 73.98 292** P **P** **07 19 46.7 +0.9**
DMTO P **P** **07 19 46.7 +0.9**
DMTO S **S** **07 29 18.0 +0.1**
DMTO S **S** **07 29 18.0 +0.1**
**FOMA Nahampoana Res 74.00 247** P **P** **07 19 50.2 +4.4**
**JASK Jask - Hormozg 74.03 301** P **P** **07 19 47.5 +1.5**
SNR=13
JASK S **S** **07 29 19.8 +1.5**
**ARQ Araqi 74.32 298** P **P** **07 19 48.3 +0.5**
SNR=13
ARQ P **P** **07 19 48.3 +0.5**
SNR=13
ARQ S **S** **07 29 21.3 -0.4**
ARQ S **S** **07 29 21.3 -0.4**
**VOI Vohitsoka 74.44 250** P **P** **07 19 50.4 +1.7**
SNR=5.9
**SOHO SOHO 74.58 299** *i* P **P** **07 19 49.2 0.0**
SNR=31
**SOHO SOHO 74.58 299** P **P** **07 19 49.8 +0.6**
SOHO P **P** **07 19 49.8 +0.6**
SOHO S **S** **07 29 22.8 -1.6**
SOHO S **S** **07 29 22.8 -1.6**
**RBK Rabkut 74.60 292** P **P** **07 19 51.0 +1.5**
RBK P **P** **07 19 51.0 +1.5**
RBK S **S** **07 29 25.0 0.0**
RBK S **S** **07 29 25.0 0.0**
**WHFO Wadi Hawf 75.11 292** P **P** **07 19 53.8 +1.3**
WHFO P **P** **07 19 53.8 +1.3**
WHFO S **S** **07 29 29.0 -1.7**
WHFO S **S** **07 29 29.0 -1.7**
**UOSS Minazif 75.13 299** P **P** **07 19 52.1 -0.3**
UOSS IAmb IAmb 07 20 00.7
comp=Z,221nm,1.2s
**UOSS Minazif 75.13 299** IAMs_20 IAMs_20 07 56 58.8
comp=Z,5µm,21.0s
**UOSS Minazif 75.13 299** *i* P **P** **07 19 52.3 -0.1**
SNR=25
**UOSS Minazif 75.13 299** P **P** **07 19 52.6 +0.2**
UOSS S **S** **07 29 29.0 -1.6**
**HATD Hatta, Dubai 75.15 299** *i* P **P** **07 19 52.6 +0.1**
SNR=24
**HATD Hatta, Dubai 75.15 299** P **P** **07 19 53.2 +0.6**
SNR=29
HATD P **P** **07 19 53.2 +0.6**
SNR=29
HATD S **S** **07 29 30.1 -0.8**
HATD S **S** **07 29 30.1 -0.8**
**MDH Madha 75.17 300** P **P** **07 19 53.4 +0.8**
**MDH Madha 75.17 300** P **P** **07 19 52.4 -0.2**
SNR=5.2
MDH P **P** **07 19 52.4 -0.2**
SNR=5.2
MDH S **S** **07 29 32.2 +1.2**
MDH S **S** **07 29 32.2 +1.2**
**ASHO Ashiyiah 75.17 299** *i* P **P** **07 19 52.7 +0.1**
SNR=34
**ASHO Ashiyiah 75.17 299** P **P** **07 19 52.8 +0.2**
SNR=35
ASHO P **P** **07 19 52.8 +0.2**
SNR=35
ASHO S **S** **07 29 30.7 -0.4**
ASHO S **S** **07 29 30.7 -0.4**
**ALNE Al Ain 75.22 298** P **P** **07 19 53.8 +0.9**
**ALNE Al Ain 75.22 298** P **P** **07 19 53.7 +0.8**
SNR=31
ALNE P **P** **07 19 53.7 +0.8**
SNR=31
ALNE S **S** **07 29 31.4 -0.3**
ALNE S **S** **07 29 31.4 -0.3**
**MSFE Esma-Masafi 75.31 300** P **P** **07 19 54.5 +1.1**
**MASF Masafi 75.31 300** P **P** **07 19 54.1 +0.7**
MASF P **P** **07 19 54.1 +0.7**
MASF S **S** **07 29 34.1 +1.4**
MASF S **S** **07 29 34.1 +1.4**
**ABTO Aybut 75.38 291** P **P** **07 19 55.3 +1.2**
ABTO P **P** **07 19 55.3 +1.2**
**SHME Shamm 75.55 301** *i* P **P** **07 19 55.4 +0.6**
SNR=8.0
**SHME Shamm 75.55 301** P **P** **07 19 55.9 +1.1**
SNR=10
SHME P **P** **07 19 55.9 +1.1**
SNR=10
SHME S **S** **07 29 34.1 -1.1**
SHME S **S** **07 29 34.1 -1.1**
**FAQ Al Faqa, Dubai 75.59 299** *i* P **P** **07 19 56.0 +1.0**
SNR=12
**FAQ Al Faqa, Dubai 75.59 299** P **P** **07 19 55.7 +0.7**
SNR=20
FAQ P **P** **07 19 55.7 +0.7**
SNR=20
FAQ S **S** **07 29 34.7 -0.9**
FAQ S **S** **07 29 34.7 -0.9**
**NAZ Nazwa, Dubai 75.61 299** *i* P **P** **07 19 55.4 +0.3**
SNR=14
**NAZ Nazwa, Dubai 75.61 299** P **P** **07 19 55.5 +0.4**
SNR=16
NAZ P **P** **07 19 55.5 +0.4**
SNR=16
NAZ S **S** **07 29 33.4 -2.5**
NAZ S **S** **07 29 33.4 -2.5**
**ASUD Al Ashush, Dub 75.77 299** *i* P **P** **07 19 56.8 +0.7**
SNR=14
**ASUD Al Ashush, Dub 75.77 299** P **P** **07 19 57.2 +1.1**
SNR=9.0
ASUD P **P** **07 19 57.2 +1.1**
SNR=9.0
ASUD S **S** **07 29 37.3 -0.5**
ASUD S **S** **07 29 37.3 -0.5**
**AJN Ajban 76.05 299** P **P** **07 19 58.3 +0.7**
**AJN Ajban 76.05 299** P **P** **07 19 58.8 +1.2**
AJN P **P** **07 19 58.8 +1.2**
AJN S **S** **07 29 38.8 -2.0**
AJN S **S** **07 29 38.8 -2.0**
**SEY Seymchan 76.65 13** LR LR 07 52 13.1
comp=Z,1µm,21.8s,baz=209,slow=35
**SEY Seymchan 76.65 13** *ce*P **P** **07 19 59.9 -0.3**
SEY pmax pmax
comp=Z,154nm,1.7s
SEY MLR MLR
comp=Z,4µm,21.0s
**MZR Muzera 76.87 297** P **P** **07 20 03.4 +1.1**
SNR=16
MZR P **P** **07 20 03.4 +1.1**
SNR=16
MZR S **S** **07 29 47.8 -2.1**
MZR S **S** **07 29 47.8 -2.1**
**JRN Qarnain Island 78.01 298** P **P** **07 20 09.3 +0.6**
SNR=7.1
JRN P **P** **07 20 09.3 +0.6**
SNR=7.1
JRN S **S** **07 29 59.6 -2.5**
JRN S **S** **07 29 59.6 -2.5**
**BVAR Borovoye Array 78.31 330** P **P** **07 20 08.8 -1.0**
comp=Z,18nm,0.8s,baz=124,slow=7.4,SNR=25
comp=Z,18nm,0.8s
**BRVK Borovoye 78.38 330** P **P** **07 20 09.2 -1.0**
**BRVK Borovoye 78.38 330** P **P** **07 20 09.1 -1.0**
BRVK P **P** **07 20 09.1 -1.0**
BRVK S **S** **07 30 02.9 -2.1**
BRVK S **S** **07 30 02.9 -2.1**
**BRVK Borovoye 78.38 330** *ce*P **P** **07 20 09.2 -1.0**
BRVK pmax pmax
comp=Z,8µm,23.2s
**XMAS Kiritimati 78.98 86** IAMs_20 IAMs_20 07 57 40.4
comp=Z,4µm,19.0s
**QSPA South Pole Qui 79.22 180** P **P** **07 20 15.3 +0.5**
QSPA IAmb IAmb 07 20 26.9
comp=Z,162nm,0.9s
**QSPA South Pole Qui 79.22 180** P **P** **07 20 15.7 +0.9**
comp=Z,64nm,1.1s,baz=302,slow=1.3,SNR=76
QSPA LR LR 07 53 13.7
comp=Z,26µm,21.1s,baz=336,slow=34
comp=Z,64nm,1.1s
**TRNA Turayna 79.37 298** P **P** **07 20 17.2 +1.0**
SNR=18
TRNA S **S** **07 30 12.0 -4.7**
**SMRA Abu-Samra 79.71 298** P **P** **07 20 19.0 +0.9**
SNR=27
SMRA S **S** **07 30 18.2 -2.0**
**SHMA Al-Shehemyia 79.91 299** P **P** **07 20 20.1 +1.0**
SNR=18
SHMA S **S** **07 30 18.5 -3.8**
**SAKB Bahrain 80.32 299** P **P** **07 20 22.3 +1.0**
SAKB S **S** **07 30 25.8 -0.8**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AB31** | **Akbulak array** | **81.98** | **323** | *i* | P | | **P** | **07 20 28.3** | **-1.3** |
| **ABKAR** | **Akbulak array** | **81.98** | **323** | | P | | **P** | **07 20 28.3** | **-1.3** |
| ABKAR | | | | | IAmb | | IAmb | 07 20 39.0 | |
| | comp=Z,78nm,0.8s | | | | | | | | |
| **TIXI** | **Tiksi** | **82.30** | **1** | | P | | **P** | **07 20 30.0** | **-0.8** |
| **TIXI** | **Tiksi** | **82.30** | **1** | | IAMs_20 | | IAMs_20 | 07 58 53.1 | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **TIXI** | **Tiksi** | **82.30** | **1** | | LR | | LR | 07 57 43.2 | |
| | comp=Z,5µm,21.9s,baz=215,slow=36 | | | | | | | | |
| **TIXI** | **Tiksi** | **82.30** | **1** | *ce* | P | | **P** | **07 20 29.8** | **-1.0** |
| TIXI | | | | | pmax | | pmax | | |
| | comp=Z,83nm,1.2s | | | | | | | | |
| TIXI | | | | | MLR | | MLR | | |
| | comp=Z,13µm,25.0s | | | | | | | | |
| **TBI** | **Tubuai** | **82.50** | **112** | *e* | P | | **P** | **07 20 32.7** | **-0.3** |
| | comp=Z,4µm,26.5s | | | | | | | | |
| **TBI** | **Tubuai** | **82.50** | **112** | *e* | PP | | **PP** | **07 23 40.5** | **-1.8** |
| | comp=Z,2µm,27.2s | | | | | | | | |
| TBI | | | | *e* | S | | **S** | **07 30 42.9** | **-6.6** |
| | comp=Z,3µm,31.1s | | | | | | | | |
| TBI | | | | *e* | S | | **SKSac** | **07 30 54.2** | **+0.2** |
| | comp=Z,5µm,25.2s | | | | | | | | |
| TBI | | | | *e* | SS | | **SS** | **07 36 00.2** | **-11** |
| | comp=Z,15µm,32.5s | | | | | | | | |
| TBI | | | | *e* | LQ | | LQ | 07 42 49.5 | |
| | comp=Z,61µm,36.0s | | | | | | | | |
| TBI | | | | *e* | LR | | LR | 07 46 22.8 | |
| | comp=Z,45µm,30.0s | | | | | | | | |
| TBI | | | | *e* | LR | | LR | 07 46 24.8 | |
| | comp=Z,7µm,21.8s | | | | | | | | |
| TBI | | | | *e* | LR | | LR | 07 46 25.1 | |
| | comp=Z,10µm,30.2s | | | | | | | | |
| **ELIB** | **Princess Elisa** | **83.17** | **198** | *d* | P | | **P** | **07 20 37.2** | **+1.5** |
| | comp=Z,97nm,1.1s | | | | | | | | |
| ELIB | | | | *d* | S | | **S** | **07 30 57.2** | **+2.3** |
| **PAE** | **Paea** | **83.26** | **107** | *e* | PKIKP | | **P** | **07 20 35.4** | **-1.6** |
| | comp=Z,57nm,1.4s | | | | | | | | |
| **PAE** | **Paea** | **83.26** | **107** | *e* | S | | **S** | **07 30 56.3** | **-1.1** |
| | comp=Z,319nm,25.5s | | | | | | | | |
| PAE | | | | *e* | SS | | **SS** | **07 36 23.4** | **+1.1** |
| | comp=Z,414nm,25.1s | | | | | | | | |
| **PAE** | **Paea** | **83.26** | **107** | *e* | LR | | LR | 07 46 44.3 | |
| | comp=Z,2µm,24.2s | | | | | | | | |
| **PPT2** | **Papeete2** | **83.28** | **107** | *e* | PKIKP | | **P** | **07 20 33.7** | **-3.5** |
| | comp=Z,1µm,24.5s | | | | | | | | |
| **PPT2** | **Papeete2** | **83.28** | **107** | *e* | P | | **P** | **07 20 39.3** | **+2.1** |
| | comp=Z,2nm,1.2s | | | | | | | | |
| **PPT2** | **Papeete2** | **83.28** | **107** | *e* | PP | | **PP** | **07 23 46.4** | **-2.5** |
| | comp=Z,543nm,26.5s | | | | | | | | |
| PPT2 | | | | *e* | S | | **S** | **07 30 54.3** | **-3.4** |
| | comp=Z,4µm,23.5s | | | | | | | | |
| PPT2 | | | | *e* | SS | | SS | 07 36 03.5 | -19 |
| | comp=Z,3µm,23.5s | | | | | | | | |
| PPT2 | | | | *e* | LQ | | LQ | 07 43 14.0 | |
| | comp=Z,20µm,36.2s | | | | | | | | |
| PPT2 | | | | *e* | LR | | LR | 07 46 42.7 | |
| | comp=Z,9µm,25.0s | | | | | | | | |
| PPT2 | | | | *e* | LR | | LR | 07 46 47.0 | |
| | comp=Z,2µm,24.1s | | | | | | | | |
| PPT2 | | | | *e* | LR | | LR | 07 46 48.0 | |
| | comp=Z,7µm,25.5s | | | | | | | | |
| **PPT** | **Papeete** | **83.28** | **107** | | P | | **P** | **07 20 37.2** | **0.0** |
| | comp=Z,15nm,0.8s,baz=90,slow=20,SNR=1.7 | | | | | | | | |
| PPT | | | | | LR | | LR | 07 54 51.8 | |
| | comp=Z,2µm,21.9s,baz=258,slow=34 | | | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **PPTF** | **Pamatai, Papee** | **83.29** | **107** | | P | | **P** | **07 20 39.9** | **+2.6** |
| **TVO** | **Taravao** | **83.55** | **107** | *e* | P | | **P** | **07 20 40.6** | **+2.0** |
| | comp=Z,39nm,1.2s | | | | | | | | |
| **TVO** | **Taravao** | **83.55** | **107** | *e* | LR | | LR | 07 46 51.1 | |
| | comp=Z,2µm,25.4s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **83.62** | **324** | | P | | **P** | **07 20 37.7** | **-0.4** |
| | comp=Z,102nm,0.9s,baz=110,slow=5.0,SNR=92 | | | | | | | | |
| AKTO | | | | | PKKPbc | | **PKKPbc** | **07 38 60.0** | **+1.8** |
| | comp=Z,2.0nm,0.8s,baz=268,slow=2.6,SNR=3.3 | | | | | | | | |
| AKTO | | | | | LR | | LR | 08 02 44.9 | |
| | comp=Z,7µm,21.4s,baz=118,slow=39 | | | | | | | | |
| | comp=Z,102nm,0.9s | | | | | | | | |
| **KBD** | **Kabd** | **83.64** | **301** | | P | | **P** | **07 20 39.9** | **+1.2** |
| KBD | | | | | S | | **S** | **07 30 57.7** | **-3.1** |
| **ATD** | **Arta Tunnel** | **83.78** | **283** | | IAMs_20 | | IAMs_20 | 08 00 06.1 | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **ATD** | **Arta Tunnel** | **83.78** | **283** | | LR | | LR | 07 54 40.0 | |
| | comp=Z,198nm,21.2s,baz=94,slow=33 | | | | | | | | |
| **ATD** | **Arta Tunnel** | **83.78** | **283** | *e* | P | | **P** | **07 20 43.6** | **+3.8** |
| ATD | | | | *e* | S | | S | 07 31 15.5 | +13 |
| **RAYN** | **Ar Rayn** | **84.06** | **295** | | P | | **P** | **07 20 41.1** | **0.0** |
| **RAYN** | **Ar Rayn** | **84.06** | **295** | *i* | P | | **P** | **07 20 41.7** | **+0.7** |
| | SNR=42 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **84.06** | **295** | | P | | **P** | **07 20 41.9** | **+0.8** |
| **RAYN** | **Ar Rayn** | **84.06** | **295** | | P | | **P** | **07 20 41.1** | **0.0** |
| RAYN | | | | | pmax | | pmax | | |
| | comp=Z,143nm,0.9s | | | | | | | | |
| RAYN | | | | | MLR | | MLR | | |
| | comp=Z,11µm,22.0s | | | | | | | | |
| **BILL** | **Bilibino** | **84.14** | **15** | ⇓ | *e* | P | **P** | **07 20 41.6** | **+1.2** |
| BILL | | | | | *e* | | | 07 23 53.2 | |
| BILL | | | | | *i* | S | **S** | **07 31 08.0** | **+3.8** |
| BILL | | | | | pmax | | pmax | | |
| | comp=Z,39nm,1.7s | | | | | | | | |
| **CLES** | **Cleveland East** | **84.52** | **34** | | P | | **P** | **07 20 43.2** | **+0.5** |
| **HPAH** | **Hawaii Prepara** | **84.54** | **69** | | IAMs_20 | | IAMs_20 | 07 59 31.5 | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| **MEH** | **Mehetia** | **84.65** | **107** | *e* | PKIKP | | P | 07 20 37.3 | -6.8 |
| | comp=Z,105µm,34.3s | | | | | | | | |
| **MEH** | **Mehetia** | **84.65** | **107** | *e* | SS | | SS | 07 36 38.7 | -4.2 |
| | comp=Z,52µm,29.0s | | | | | | | | |
| **SVE** | **Sverdlovsk** | **85.09** | **330** | *ce* | P | | **P** | **07 20 45.2** | **-0.2** |
| SVE | | | | | *e* | S | **SKSac** | **07 31 10.8** | **+1.5** |
| SVE | | | | | *e* | | | 07 36 47.4 | |
| SVE | | | | | pmax | | pmax | | |
| | comp=Z,373nm,1.1s | | | | | | | | |
| SVE | | | | | MLR | | MLR | | |
| | comp=N,5µm,22.0s | | | | | | | | |
| SVE | | | | | MLR | | MLR | | |
| | comp=Z,7µm,22.0s | | | | | | | | |
| SVE | | | | | MLR | | MLR | | |
| | comp=E,6µm,23.0s | | | | | | | | |
| **NIKH** | **Nikolski High** | **85.15** | **34** | | P | | **P** | **07 20 49.7** | **+3.9** |
| **NIKH** | **Nikolski High** | **85.15** | **34** | | P | | **P** | **07 20 46.1** | **+0.3** |
| | baz=245 | | | | | | | | |
| **PMOR** | **Pomariorio Ree** | **85.29** | **104** | *e* | S | | **SKSac** | **07 31 14.8** | **+2.5** |
| | comp=E,2µm,26.0s | | | | | | | | |
| **PMOR** | **Pomariorio Ree** | **85.29** | **104** | *e* | LR | | LR | 07 47 42.1 | |
| | comp=E,8µm,25.8s | | | | | | | | |
| **VAH** | **Vaihoa** | **85.51** | **105** | *e* | P | | **P** | **07 20 51.3** | **+2.9** |
| | comp=E,106nm,1.3s | | | | | | | | |
| **VAH** | **Vaihoa** | **85.51** | **105** | *e* | S | | **S** | **07 31 22.4** | **+2.5** |
| | comp=E,2µm,25.6s | | | | | | | | |
| **VAH** | **Vaihoa** | **85.51** | **105** | *e* | LR | | LR | 07 47 45.7 | |
| | comp=E,10µm,27.2s | | | | | | | | |
| **KIBK** | **Kibwezi** | **85.77** | **268** | | IAMs_20 | | IAMs_20 | 07 57 01.7 | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **KIBK** | **Kibwezi** | **85.77** | **268** | | P | | **P** | **07 20 52.1** | **+2.2** |
| **KIBK** | **Kibwezi** | **85.77** | **268** | | P | | **P** | **07 20 51.5** | **+1.6** |
| | SNR=16 | | | | | | | | |
| **ARU** | **Arti** | **85.93** | **330** | | P | | **P** | **07 20 49.5** | **-0.2** |
| ARU | | | | | IAmb | | IAmb | 07 21 01.9 | |
| | comp=Z,134nm,1.0s | | | | | | | | |
| **ARU** | **Arti** | **85.93** | **330** | | P | | **P** | **07 20 49.6** | **0.0** |
| | comp=Z,32nm,0.7s,baz=148,slow=1.8,SNR=31 | | | | | | | | |
| ARU | | | | | LR | | LR | 08 04 32.7 | |
| | comp=Z,5µm,20.2s,baz=124,slow=39 | | | | | | | | |
| | comp=Z,32nm,0.7s | | | | | | | | |
| **ARU** | **Arti** | **85.93** | **330** | *c* | *i* | P | **P** | **07 20 48.7** | **-0.9** |
| ARU | | | | | | | | 07 24 07.6 | |
| ARU | | | | | PPP | | PPP | 07 26 02.3 | |
| ARU | | | | | S | | **SKSac** | **07 31 14.4** | **-0.2** |
| ARU | | | | | SS | | **SS** | **07 37 04.5** | **+4.1** |
| ARU | | | | | pmax | | pmax | | |
| | comp=Z,54nm,1.0s | | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **86.25** | **30** | | P | | P | 07 20 56.5 | +5.4 |
| **SPIA** | **Saint Paul Isl** | **86.25** | **30** | | P | | **P** | **07 20 51.3** | **+0.1** |
| | baz=244,SNR=8.1 | | | | | | | | |
| **P08K** | **Saint George I** | **86.34** | **30** | | P | | **P** | **07 20 51.8** | **+0.2** |
| | baz=244,SNR=12 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **86.77** | **269** | | P | | **P** | **07 20 55.7** | **+0.7** |
| **KMBO** | **Kilima Mbogo** | **86.77** | **269** | | IAMs_20 | | IAMs_20 | 07 55 42.3 | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **86.77** | **269** | *i* | P | | **P** | **07 20 56.7** | **+1.6** |
| | SNR=9.6 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **86.77** | **269** | | P | | **P** | **07 20 56.3** | **+1.3** |
| | comp=Z,22nm,1.1s,baz=61,slow=5.7,SNR=14 | | | | | | | | |
| KMBO | | | | | LR | | LR | 07 55 54.0 | |
| | comp=Z,5µm,20.4s,baz=105,slow=33 | | | | | | | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **86.77** | **269** | | P | | **P** | **07 20 56.8** | **+1.7** |
| KMBO | | | | | P | | **P** | **07 20 56.8** | **+1.7** |
| **KMBO** | **Kilima Mbogo** | **86.77** | **269** | *e* | P | | P | 07 21 02.5 | +7.4 |
| KMBO | | | | *e* | S | | **S** | **07 31 39.6** | **+6.7** |
| **KMBO** | **Kilima Mbogo** | **86.77** | **269** | *i* | P | | **P** | **07 20 54.7** | **-0.4** |
| **UNV** | **Unalaska Valle** | **86.79** | **34** | | P | | **P** | **07 20 56.6** | **+2.7** |
| **UNV** | **Unalaska Valle** | **86.79** | **34** | | P | | **P** | **07 20 54.5** | **+0.6** |
| | baz=247 | | | | | | | | |
| **AKT** | **Akhty** | **87.11** | **313** | *e* | P | | **P** | **07 20 53.0** | **-2.9** |
| AKT | | | | *e* | | | | 07 24 19.7 | |
| AKT | | | | *e* | S | | **SKSac** | **07 31 18.9** | **-3.9** |
| AKT | | | | *e* | SS | | **SS** | **07 37 23.2** | **+4.6** |
| AKT | | | | | pmax | | pmax | | |
| | comp=Z,174nm,1.0s | | | | | | | | |
| AKT | | | | | MLR | | MLR | | |
| | comp=Z,7µm,30.0s | | | | | | | | |
| **LVA** | **Lava Point** | **87.17** | **34** | | P | | **P** | **07 20 56.1** | **+0.3** |
| **FURI** | **Furi** | **87.27** | **280** | | LR | | LR | 07 57 09.7 | |
| | comp=Z,4µm,21.0s,baz=99,slow=34 | | | | | | | | |
| **FURI** | **Furi** | **87.27** | **280** | *e* | P | | **P** | **07 21 01.1** | **+3.5** |
| FURI | | | | *e* | S | | **S** | **07 31 38.3** | **+0.5** |
| FURI | | | | | IAMs_20 | | IAMs_20 | 08 01 17.6 | |
| | comp=Z,4µm,18.7s | | | | | | | | |
| **DODT** | **Dodoma, Tanzan** | **87.32** | **264** | *i* | P | | **P** | **07 20 55.6** | **-2.0** |
| **MAK** | **Makhachkala** | **87.70** | **314** | *c* | *i* | P | **P** | **07 20 58.4** | **-0.2** |
| MAK | | | | | *e* | | | 07 24 19.9 | |
| MAK | | | | | *e* | | | 07 31 24.0 | |
| MAK | | | | *e* | SS | | SS | 07 37 32.8 | +5.9 |
| MAK | | | | *e* | SSS | | SSS | 07 41 02.0 | |
| MAK | | | | | pmax | | pmax | | |
| | comp=Z,303nm,1.3s | | | | | | | | |
| MAK | | | | | MLR | | MLR | | |
| | comp=Z,11µm,26.0s | | | | | | | | |
| **GAMB** | **Gambell** | **88.62** | **24** | | P | | **P** | **07 21 02.7** | **+0.3** |
| | baz=242 | | | | | | | | |
| **FALS** | **False Pass** | **88.85** | **33** | | P | | **P** | **07 21 06.6** | **+2.9** |
| **FALS** | **False Pass** | **88.85** | **33** | | P | | **P** | **07 21 03.4** | **-0.3** |
| | baz=249 | | | | | | | | |
| **GNI** | **Garni** | **88.92** | **311** | | P | | **P** | **07 21 04.8** | **+0.1** |
| **GNI** | **Garni** | **88.92** | **311** | | P | | **P** | **07 21 05.9** | **+1.2** |
| | comp=Z,16nm,0.8s,baz=174,slow=4.9,SNR=7.5 | | | | | | | | |
| GNI | | | | | LR | | LR | 08 06 14.8 | |
| | comp=Z,2µm,20.9s,baz=119,slow=39 | | | | | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **GNI** | **Garni** | **88.92** | **311** | | P | | **P** | **07 21 08.6** | **+4.0** |
| **GNI** | **Garni** | **88.92** | **311** | *i* | P | | **P** | **07 21 04.8** | **+0.1** |
| GNI | | | | | pmax | | pmax | | |
| | comp=Z,80nm,1.0s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **89.06** | **195** | ⇑ | P | | **P** | **07 21 06.0** | **+1.3** |
| | comp=Z,780nm,0.7s | | | | | | | | |
| TROLL | | | | ⇑ | SKSac | | **SKSac** | **07 31 41.5** | **+7.8** |
| | comp=Z,0.0nm,0.1s | | | | | | | | |
| **LODK** | **Lodwar** | **89.47** | **274** | | IAMs_20 | | IAMs_20 | 08 05 14.9 | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **LODK** | **Lodwar** | **89.47** | **274** | | P | | **P** | **07 21 09.5** | **+1.8** |
| | SNR=7.7 | | | | | | | | |
| **LODK** | **Lodwar** | **89.47** | **274** | *e* | P | | P | 07 21 12.8 | +5.1 |
| LODK | | | | *e* | S | | **S** | **07 31 51.4** | **-6.9** |
| **M11K** | **Mekoryuk** | **89.50** | **28** | | P | | **P** | **07 21 06.8** | **+0.2** |
| | baz=247 | | | | | | | | |
| **S12K** | **Black Hills** | **89.87** | **33** | | P | | **P** | **07 21 08.8** | **+0.3** |
| | baz=251 | | | | | | | | |
| **BELG** | **Belogornoye** | **90.39** | **323** | | P | | **P** | **07 21 09.6** | **-1.4** |
| | comp=Z,114nm,1.0s,baz=132,slow=1.5,SNR=17 | | | | | | | | |
| BELG | | | | | LR | | LR | 08 10 09.2 | |
| | comp=Z,3µm,18.2s,baz=104,slow=41 | | | | | | | | |
| | comp=Z,114nm,1.0s | | | | | | | | |
| **BELG** | **Belogornoye** | **90.39** | **323** | *i* | P | | **P** | **07 21 10.7** | **-0.3** |
| BELG | | | | | pmax | | pmax | | |
| | comp=Z,36nm,1.0s | | | | | | | | |
| **NCK** | **Nalchik** | **90.59** | **314** | *i* | P | | **P** | **07 21 12.6** | **+0.4** |
| NCK | | | | | pmax | | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | | | |
| **SDPT** | **Sand Point** | **90.61** | **34** | | P | | **P** | **07 21 13.9** | **+2.0** |
| **SDPT** | **Sand Point** | **90.61** | **34** | | P | | **P** | **07 21 11.3** | **-0.6** |
| | baz=252 | | | | | | | | |
| **SNAA** | **Sanae** | **90.62** | **195** | | P | | **P** | **07 21 12.8** | **+0.8** |
| SNAA | | | | | IAmb | | IAmb | 07 21 24.2 | |
| | comp=Z,75nm,0.9s | | | | | | | | |
| **SNAA** | **Sanae** | **90.62** | **195** | ⇑ | P | | **P** | **07 21 13.1** | **+1.1** |
| | comp=Z,181nm,0.6s | | | | | | | | |
| SNAA | | | | ⇓ | SKSac | | SKSac | 07 31 53.9 | +11 |
| | comp=Z,0.2nm,0.2s | | | | | | | | |
| **SNAA** | **Sanae** | **90.62** | **195** | | P | | **P** | **07 21 12.7** | **+0.7** |
| | comp=Z,30nm,0.8s,baz=152,slow=4.3,SNR=97 | | | | | | | | |
| SNAA | | | | | PKKPbc | | **PKKPbc** | **07 38 41.1** | **-0.1** |
| | comp=Z,2.8nm,1.1s,baz=228,slow=2.6,SNR=3.8 | | | | | | | | |
| SNAA | | | | | PKPPKP | | **P'P'df** | **07 46 47.4** | **-2.8** |
| | comp=Z,1.5nm,0.9s,baz=206,slow=1.2,SNR=4.0 | | | | | | | | |
| SNAA | | | | | LR | | LR | 07 58 24.3 | |
| | comp=Z,20µm,22.0s,baz=100,slow=33 | | | | | | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **SNAA** | **Sanae** | **90.62** | **195** | *i* | P | | **P** | **07 21 11.5** | **-0.5** |
| SNAA | | | | | pmax | | pmax | | |
| | comp=Z,64nm,0.9s | | | | | | | | |
| **BELA** | **Belgrano 2** | **90.69** | **184** | | | | **P** | **07 21 12.8** | **+0.7** |
| BELA | | | | | IAmb | | IAmb | 07 21 20.7 | |
| | comp=Z,97nm,0.8s | | | | | | | | |
| **K13K** | **Kusilvak Mount** | **90.78** | **27** | | P | | **P** | **07 21 13.6** | **+1.0** |
| K13K | | | | | IAmb | | IAmb | 07 21 22.8 | |
| | comp=Z,68nm,1.1s | | | | | | | | |
| **K13K** | **Kusilvak Mount** | **90.78** | **27** | | P | | **P** | **07 21 12.5** | **-0.1** |
| | baz=248 | | | | | | | | |
| **M13K** | **Dall Lake** | **90.83** | **28** | | P | | **P** | **07 21 15.2** | **+2.4** |
| M13K | | | | | IAmb | | IAmb | 07 21 24.4 | |
| | comp=Z,73nm,1.1s | | | | | | | | |
| **M13K** | **Dall Lake** | **90.83** | **28** | | P | | **P** | **07 21 12.6** | **-0.2** |
| | baz=250 | | | | | | | | |
| **TNA** | **Tin City** | **90.87** | **23** | | P | | **P** | **07 21 12.6** | **-0.3** |
| | baz=246 | | | | | | | | |
| **CHNA** | **Chernabura Isl** | **90.93** | **34** | | P | | **P** | **07 21 12.7** | **-0.8** |
| | baz=253 | | | | | | | | |
| **KBZ** | **Khabaz** | **91.14** | **314** | | P | | **P** | **07 21 15.2** | **+0.6** |
| | comp=Z,17nm,0.8s,baz=128,slow=3.9,SNR=14 | | | | | | | | |
| KBZ | | | | | PKKPbc | | **PKKPbc** | **07 38 40.2** | **+0.8** |
| | comp=Z,3.8nm,0.8s,baz=260,slow=2.4,SNR=4.1 | | | | | | | | |
| KBZ | | | | | LR | | LR | 08 09 56.3 | |
| | comp=Z,3µm,21.3s,baz=103,slow=41 | | | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **91.14** | **314** | *ce* | P | | **P** | **07 21 15.3** | **+0.6** |
| KBZ | | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **91.31** | **314** | *ce* | P | | **P** | **07 21 16.3** | **+0.5** |
| **KIRV** | **Kirov** | **91.32** | **330** | | P | | **P** | **07 21 16.6** | **+1.4** |
| | comp=Z,9.7nm,0.5s,baz=92,slow=6.9,SNR=8.5 | | | | | | | | |
| KIRV | | | | | LR | | LR | 08 08 08.8 | |
| | comp=Z,4µm,19.8s,baz=125,slow=40 | | | | | | | | |
| | comp=Z,9.7nm,0.5s | | | | | | | | |
| **KIRV** | **Kirov** | **91.32** | **330** | *ce* | P | | **P** | **07 21 16.3** | **+1.2** |
| **KVAR** | **Kislovodsk Arr** | **91.34** | **314** | | LR | | LR | 08 10 14.7 | |
| | comp=Z,2µm,20.0s,slow=41 | | | | | | | | |
| **KIV** | **Kislovodsk** | **91.34** | **314** | | IAMs_20 | | IAMs_20 | 08 08 05.3 | |
| | comp=Z,6µm,21.0s | | | | | | | | |
| **KIV** | **Kislovodsk** | **91.34** | **314** | | P | | **P** | **07 21 17.6** | **+1.8** |
| **KIV** | **Kislovodsk** | **91.34** | **314** | | P | | **P** | **07 21 17.3** | **+1.5** |
| KIV | | | | | P | | **P** | **07 21 17.3** | **+1.5** |
| **KIV** | **Kislovodsk** | **91.34** | **314** | ⇑ | P | | P | 07 21 23.3 | +7.5 |
| **KIV** | **Kislovodsk** | **91.34** | **314** | *e* | P | | **P** | **07 21 16.6** | **+0.8** |
| KIV | | | | *e* | | | | 07 31 48.7 | |
| KIV | | | | *e* | SS | | SS | 07 38 25.2 | +5.2 |
| KIV | | | | | pmax | | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | | | |
| KIV | | | | | pmax | | pmax | | |
| | comp=Z,116nm,4.4s | | | | | | | | |
| KIV | | | | | MLR | | MLR | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **S14K** | **Fog Glacier** | **91.39** | **33** | | P | | **P** | **07 21 14.3** | **-1.4** |
| | baz=253 | | | | | | | | |
| **O14K** | **Tigyukauivet M** | **91.43** | **30** | | P | | **P** | **07 21 15.3** | **-0.4** |
| | baz=251 | | | | | | | | |
| **F14K** | **Arctic Creek** | **91.44** | **23** | | P | | **P** | **07 21 15.3** | **-0.3** |
| | baz=247 | | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **91.45** | **29** | | P | | **P** | **07 21 15.2** | **-0.5** |
| | baz=251 | | | | | | | | |
| **L14K** | **Kuka Creek** | **91.46** | **27** | | P | | **P** | **07 21 15.6** | **-0.1** |
| | baz=250 | | | | | | | | |
| **ANM** | **Nome** | **91.47** | **24** | | P | | **P** | **07 21 15.0** | **-0.8** |
| | baz=248 | | | | | | | | |
| **MATP** | **Matopo** | **91.53** | **249** | | LR | | LR | 07 59 37.6 | |
| | comp=Z,2µm,18.5s,baz=102,slow=34 | | | | | | | | |
| **BCA** | **Borcka** | **91.53** | **312** | ⇓ | P | | **P** | **07 21 14.1** | **-2.5** |
| **J14K** | **Nanvaranak Lak** | **91.56** | **26** | | P | | **P** | **07 21 16.1** | **-0.1** |
| | baz=249 | | | | | | | | |
| **M14K** | **Bethel** | **91.59** | **28** | | P | | **P** | **07 21 16.0** | **-0.4** |
| | baz=251 | | | | | | | | |
| **CHGN** | **Chignik** | **92.00** | **33** | | P | | **P** | **07 21 17.7** | **-0.6** |
| | baz=254 | | | | | | | | |
| **L15K** | **Ungalak Mounta** | **92.11** | **27** | | P | | **P** | **07 21 18.6** | **-0.2** |
| | baz=251 | | | | | | | | |
| **O15K** | **Ungalikthiuk R** | **92.11** | **30** | | P | | **P** | **07 21 18.4** | **-0.5** |
| | baz=252 | | | | | | | | |
| **G15K** | **Niukluk** | **92.16** | **24** | | P | | **P** | **07 21 18.6** | **-0.3** |
| | baz=249 | | | | | | | | |
| **M15K** | **Kasigluk River** | **92.16** | **28** | | P | | **P** | **07 21 18.5** | **-0.5** |
| | baz=252,SNR=8.3 | | | | | | | | |
| **F15K** | **North Star Dit** | **92.18** | **23** | | P | | **P** | **07 21 18.9** | **-0.1** |
| | baz=248,SNR=6.1 | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.23** | **194** | ⇑ | P | | **P** | **07 21 20.4** | **+1.1** |
| | comp=Z,17nm,0.6s,baz=129,slow=3.4 | | | | | | | | |
| VNA2 | | | | ⇑ | SKSac | | **SKSac** | **07 31 58.9** | **+7.2** |
| | comp=Z,134µm,0.0s,baz=100,slow=1.7 | | | | | | | | |
| **N15K** | **Kwethluk River** | **92.28** | **29** | | P | | **P** | **07 21 19.4** | **-0.3** |
| | baz=252,SNR=13 | | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **92.29** | **27** | | P | | **P** | **07 21 19.9** | **+0.3** |
| | baz=251 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.54** | **194** | ⇑ | P | | **P** | **07 21 21.6** | **+0.8** |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| VNA3 | | | | ⇑ | SKSac | | **SKSac** | **07 32 01.5** | **+8.1** |
| | comp=Z,0.0nm,0.1s | | | | | | | | |
| **BOSA** | **Boshof** | **92.60** | **240** | | P | | **P** | **07 21 22.7** | **+0.6** |
| | comp=Z,8.8nm,1.0s,baz=82,slow=4.8,SNR=5.6 | | | | | | | | |
| BOSA | | | | | LR | | LR | 07 57 07.4 | |
| | comp=Z,7µm,20.5s,baz=105,slow=32 | | | | | | | | |
| | comp=Z,8.8nm,1.0s | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **92.63** | **194** | ⇑ | P | | **P** | **07 21 22.5** | **+1.4** |
| | comp=Z,33nm,0.9s | | | | | | | | |
| **H16K** | **Elim** | **92.76** | **24** | | P | | **P** | **07 21 21.9** | **+0.2** |
| | baz=251 | | | | | | | | |
| **R16K** | **Pilot Point** | **92.79** | **32** | | P | | **P** | **07 21 21.6** | **-0.4** |
| | baz=254 | | | | | | | | |
| **LABN** | **Labinsk** | **92.87** | **315** | *e* | P | | **P** | **07 21 23.4** | **+0.7** |
| LABN | | | | *e* | | | | 07 25 05.0 | |
| LABN | | | | *e* | S | | **SKSac** | **07 31 57.2** | **+1.2** |
| LABN | | | | | pmax | | pmax | | |
| | comp=Z,39nm,0.6s | | | | | | | | |
| LABN | | | | | pmax | | pmax | | |
| | comp=N,16nm,0.6s | | | | | | | | |
| **C16K** | **Lisburne Hills** | **92.88** | **21** | | P | | **P** | **07 21 21.8** | **-0.4** |
| | baz=248 | | | | | | | | |
| **LSZ** | **Lusaka** | **92.88** | **254** | | P | | **P** | **07 21 24.8** | **+1.3** |
| LSZ | | | | | P | | **P** | **07 21 24.8** | **+1.3** |
| **G16K** | **Koyuk River** | **92.96** | **24** | | P | | **P** | **07 21 22.0** | **-0.7** |
| | baz=251 | | | | | | | | |
| **P16K** | **Nushagak River** | **92.98** | **30** | | P | | **P** | **07 21 22.3** | **-0.5** |
| | baz=254,SNR=6.8 | | | | | | | | |
| **N16K** | **Nishlik Lake** | **93.00** | **29** | | P | | **P** | **07 21 22.5** | **-0.5** |
| | baz=254 | | | | | | | | |
| **J16K** | **Anvik River** | **93.01** | **26** | | P | | **P** | **07 21 22.4** | **-0.5** |
| | baz=252,SNR=6.2 | | | | | | | | |
| **L16K** | **Owhat River** | **93.03** | **28** | | P | | **P** | **07 21 22.7** | **-0.3** |
| | baz=253 | | | | | | | | |
| **M16K** | **Timber Creek** | **93.07** | **28** | | P | | **P** | **07 21 23.2** | **0.0** |
| | baz=253,SNR=8.9 | | | | | | | | |
| **O16K** | **Kokwok River B** | **93.08** | **30** | | P | | **P** | **07 21 23.0** | **-0.3** |
| | baz=254,SNR=7.8 | | | | | | | | |
| **VSLR** | **Vesyoloye** | **93.11** | **313** | *i* | P | | **P** | **07 21 24.3** | **+0.4** |
| VSLR | | | | | pmax | | pmax | | |
| | comp=Z,82nm,1.0s | | | | | | | | |
| **LBTB** | **Lobatse** | **93.14** | **244** | | LR | | LR | 08 01 57.3 | |
| | comp=Z,8µm,18.1s,baz=100,slow=35 | | | | | | | | |
| **I17K** | **Unalakleet** | **93.15** | **25** | | P | | **P** | **07 21 23.3** | **-0.3** |
| | baz=252 | | | | | | | | |
| **ERBR** | **Yeremizino-Bor** | **93.26** | **316** | *e* | P | | **P** | **07 21 28.0** | **+3.5** |
| ERBR | | | | *e* | | | | 07 25 05.8 | |
| ERBR | | | | | pmax | | pmax | | |
| | comp=N,29nm,0.7s | | | | | | | | |
| ERBR | | | | | pmax | | pmax | | |
| | comp=E,13nm,0.5s | | | | | | | | |
| ERBR | | | | | pmax | | pmax | | |
| | comp=Z,89nm,1.4s | | | | | | | | |
| ERBR | | | | | MLR | | MLR | | |
| | comp=N,5µm,19.0s | | | | | | | | |
| ERBR | | | | | MLR | | MLR | | |
| | comp=Z,10µm,25.0s | | | | | | | | |
| **MBAR** | **Mbarara** | **93.26** | **269** | | P | | **P** | **07 21 26.9** | **+1.4** |
| MBAR | | | | | P | | **P** | **07 21 26.9** | **+1.4** |
| **MBAR** | **Mbarara** | **93.26** | **269** | *e* | P | | P | 07 21 30.6 | +5.1 |
| MBAR | | | | *e* | S | | SKSac | 07 32 11.6 | +12 |
| **MBAR** | **Mbarara** | **93.26** | **269** | *i* | P | | **P** | **07 21 25.0** | **-0.5** |
| MBAR | | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **SOC** | **Sochi** | **93.36** | **314** | *e* | P | | **P** | **07 21 28.3** | **+3.3** |
| SOC | | | | *e* | | | | 07 25 15.8 | |
| SOC | | | | *e* | S | | **SKSac** | **07 32 03.7** | **+4.9** |
| SOC | | | | *e* | SSS | | SSS | 07 42 25.1 | |
| SOC | | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **93.37** | **302** | | P | | **P** | **07 21 24.2** | **-1.3** |
| | comp=Z,7.5nm,1.0s,baz=85,slow=0.2,SNR=6.5 | | | | | | | | |
| ASF | | | | | LR | | LR | 08 08 33.1 | |
| | comp=Z,8µm,19.9s,baz=333,slow=39 | | | | | | | | |
| | comp=Z,7.5nm,1.0s | | | | | | | | |
| **CHIR** | **Chirikof Islan** | **93.38** | **34** | | IAMs_20

**N18K Kilae Creek** 94.43 29 P P 07 21 29.2 -0.4
baz=256
**L18K Granite Mounta** 94.44 27 P P 07 21 29.0 -0.5
baz=255
**P18K Big Mountain,** 94.44 30 P P 07 21 29.1 -0.5
baz=256
**C18K Utukok River** 94.45 21 P P 07 21 28.7 -0.8
baz=252,SNR=9.2
**B18K Kokolik River** 94.47 20 P P 07 21 28.7 -0.8
baz=251
**H18K Honhosa River** 94.49 24 P P 07 21 28.8 -0.9
baz=254
**O18K Koktuh Hills** 94.56 30 P P 07 21 28.8 -1.4
baz=256
**G18K Tagagawik** 94.58 24 P P 07 21 29.3 -0.8
baz=254,SNR=7.2
**EIL Elat** 94.58 299 LR LR 08 09 26.5
comp=Z,6µm,18.1s,baz=96,slow=39
**M18K Stony River** 94.66 28 P P 07 21 29.9 -0.7
baz=256
**J18K Innoko River** 94.74 26 P P 07 21 30.3 -0.6
baz=256
**MMAI Mount Meron Ar** 94.76 303 P P 07 21 32.1 +0.3
comp=Z,0.5nm,0.3s,baz=71,slow=10,SNR=5.3
MMAI LR LR 08 09 01.0
comp=Z,7µm,21.2s,baz=46,slow=39
comp=Z,0.5nm,0.3s
**OHAK Old Harbor** 94.96 33 P P 07 21 31.0 -1.0
baz=258
**A19K Wainwright** 94.97 19 P P 07 21 31.1 -0.6
baz=252
**GCSA Galena City Sc** 94.99 25 P P 07 21 31.4 -0.5
baz=255
**O19K Port Alsworth** 95.07 30 P P 07 21 32.1 -0.3
baz=257
**N19K Bonanza Creek** 95.13 29 P P 07 21 31.7 -1.2
baz=257,SNR=6.6
**Q19K Cape Douglas,** 95.14 31 IAMs_20 IAMs_20 08 02 25.2
comp=Z,3µm,22.0s
**Q19K Cape Douglas,** 95.14 31 P P 07 21 33.2 +0.3
baz=258
**C19K Lookout Ridge** 95.14 20 P P 07 21 32.8 +0.1
baz=253,SNR=42
**F19K Shaleruckik Mo** 95.17 23 P P 07 21 32.7 -0.1
baz=255,SNR=8.3
**VSR Storozhevoye** 95.20 321 eP P 07 21 32.1 -1.2
VSR e 07 21 37.1
VSR e 07 32 06.7
VSR pmax pmax
comp=Z,80nm,0.9s
VSR pmax pmax
comp=Z,90nm,1.0s
**ANN Anapa** 95.20 314 eP P 07 21 32.6 -0.8
ANN eS SKSac 07 32 08.9 +0.3
ANN pmax pmax
comp=Z,66nm,1.3s
ANN pmax pmax
comp=E,23nm,1.1s
ANN MLR MLR
comp=N,3µm,23.0s
ANN MLR MLR
comp=Z,4µm,27.0s
ANN MLR MLR
comp=E,3µm,23.0s
**VORR Voronezh** 95.26 321 eP P 07 21 31.7 -1.8
VORR e 07 32 11.4
VORR pmax pmax
comp=Z,60nm,0.4s
**G19K Purcell Mounta** 95.26 24 P P 07 21 33.1 -0.1
baz=255,SNR=35
**L19K White Mountain** 95.26 28 P P 07 21 33.4 +0.1
baz=257
**J19K Poorman** 95.34 26 P P 07 21 33.7 0.0
baz=256,SNR=8.1
**SUR Sutherland** 95.34 236 LR LR 08 01 08.6
comp=Z,6µm,18.2s,baz=113,slow=33
**SUR Sutherland** 95.34 236 P P 07 21 34.5 -0.2
**H19K Roundabout Mou** 95.36 24 P P 07 21 33.8 +0.1
baz=256,SNR=18
**M19K Big River Lodg** 95.42 28 P P 07 21 33.8 -0.3
baz=257
**KDAK Kodiak Island** 95.45 32 P P 07 21 34.1 -0.1
comp=Z,11nm,0.8s,baz=256,slow=5.5,SNR=4.6
KDAK LR LR 08 02 34.1
comp=Z,1µm,21.0s,baz=269,slow=34
comp=Z,11nm,0.8s
**KDAK Kodiak Island** 95.45 32 P P 07 21 33.8 -0.4
baz=258
**KDAK Kodiak Island** 95.45 32 i P P 07 21 33.3 -0.9
KDAK pmax pmax
comp=Z,30nm,0.8s
**D19K Kuna River** 95.48 21 P P 07 21 34.2 0.0
baz=255
**P19K Oil Pt** 95.49 30 IAMs_20 IAMs_20 08 03 27.7
comp=Z,3µm,22.0s
**P19K Oil Pt** 95.49 30 P P 07 21 34.3 -0.1
baz=258
**E19K Redstone River** 95.54 22 P P 07 21 34.7 +0.3
baz=255,SNR=42
**LPSR Galich'ya Gora** 95.60 322 eP P 07 21 33.2 -1.8
LPSR e 07 21 36.0
LPSR e 07 32 06.7
LPSR pmax pmax
comp=Z,50nm,0.8s
LPSR pmax pmax
comp=Z,90nm,1.8s
LPSR MLR MLR
comp=Z,6µm,32.0s
**RKT Rikitea** 95.61 115 eP P 07 21 38.6 +2.8
comp=Z,2µm,26.0s
**RKT Rikitea** 95.61 115 ePP PP 07 25 24.9 -2.2
comp=Z,1µm,23.0s
RKT eS S 07 32 46.7 -6.0
comp=Z,9µm,32.0s
RKT eSS SS 07 39 22.5 +1.1
comp=Z,8µm,27.2s
RKT eLQ LQ 07 48 19.9
comp=Z,39µm,38.0s
RKT eLR LR 07 52 22.0
comp=Z,5µm,22.9s
RKT eLR LR 07 52 26.2
comp=Z,830nm,33.8s
RKT eLR LR 07 52 27.7
comp=Z,28µm,29.2s
**SYI Shuyak Island** 95.71 32 IAMs_20 IAMs_20 08 03 35.4
comp=Z,3µm,22.0s
**L20K Farewell, AK** 95.77 28 P P 07 21 35.8 +0.2
baz=258
**K20K Telida** 95.87 27 P P 07 21 36.2 +0.1
baz=258
**O20K Slope Mountain** 95.88 30 P P 07 21 35.7 -0.5
baz=259
**H20K Anotleneega Mo** 95.99 24 P P 07 21 36.6 0.0
baz=257,SNR=7.5
**M20K Styx River** 95.99 28 P P 07 21 36.4 -0.4
baz=258
**I20K Naaghedeneel** 96.00 25 P P 07 21 36.4 -0.2
baz=258
**F20K Avaraart Lake** 96.01 23 P P 07 21 36.6 0.0
baz=257,SNR=30
**J20K Nowinta River** 96.01 26 P P 07 21 36.5 -0.2
baz=258
**D20K Etivluk River** 96.07 21 P P 07 21 36.9 0.0
baz=256,SNR=32
**E20K Nigu River** 96.12 22 P P 07 21 36.8 -0.3
baz=256,SNR=73
**B20K Meade River** 96.20 20 P P 07 21 37.4 +0.1
baz=256,SNR=10
**DIKM Dikmen** 96.26 311 ⇑P P 07 21 38.7 +0.4
**HOM Homer** 96.29 31 P P 07 21 37.5 -0.5
baz=260
**N20K Mount Spurr** 96.30 29 P P 07 21 37.9 -0.2
baz=259
**SPCR Spurr Chakacha** 96.30 29 P P 07 21 37.8 -0.3
baz=259
**A21K Barrow** 96.70 19 P P 07 21 39.8 +0.2
baz=256
**CAPN Captain Cook N** 96.72 29 IAMs_20 IAMs_20 08 04 46.2
comp=Z,3µm,20.0s
**CAPN Captain Cook N** 96.72 29 P P 07 21 39.5 -0.4
baz=260
**G21K Allakaket** 96.75 24 P P 07 21 40.4 +0.3
baz=259,SNR=8.0
**SKT Skwentna** 96.76 28 P P 07 21 39.5 -0.6
baz=260
**C21K Knifeblade Rid** 96.82 21 P P 07 21 40.5 +0.3
baz=258,SNR=20
**H21K Melozitna Rive** 96.87 24 P P 07 21 40.2 -0.4
baz=259,SNR=7.9
**MOS Moscow** 96.88 325 eP P 07 21 40.7 -0.1
MOS e 07 25 39.5
MOS eS SKSac 07 32 15.9 -1.0
MOS ePS PS 07 34 28.3 +2.9
MOS eSS SS 07 39 42.1 +4.0
MOS pmax pmax
comp=Z,64nm,0.6s
**F21K Alatna River** 96.90 23 P P 07 21 40.6 -0.1
baz=259
**KIRS Kirsehir-Merke** 96.90 308 ⇑P P 07 21 38.8 -2.6
**E21K Killik River** 96.96 22 P P 07 21 40.9 0.0
baz=258
**B21K Ikpikpuk River** 96.97 20 P P 07 21 41.1 +0.2
baz=258,SNR=25
**SUA Susitna One** 97.04 29 P P 07 21 41.2 -0.3
baz=260,SNR=9.0
**I21K Tanana** 97.12 25 P P 07 21 41.5 -0.1
baz=260
**A22K Sinclair Lake** 97.14 19 P Pdif 07 21 41.8 +0.1
baz=258
**BR131 Keskin Array S** 97.20 309 i P P 07 21 42.8 0.0
**BRTR Keskin Array B** 97.20 309 P P 07 21 41.6 -1.2
comp=Z,5.8nm,0.9s,baz=147,slow=5.7,SNR=19
BRTR LR LR 08 09 30.1
comp=Z,6µm,21.8s,baz=114,slow=38
comp=Z,5.8nm,0.9s
**BRTR Keskin Array B** 97.20 309 i P Pdif 07 21 44.7 +1.8
BRTR pmax pmax
comp=Z,6.0nm,0.9s
**BZK Bozkurt** 97.23 311 ⇑P Pdif 07 21 49.0 +6.2
**BPAW Bear Paw Mtn.** 97.36 26 P P 07 21 42.6 -0.2
baz=261
**O22K Cooper Landing** 97.37 30 P P 07 21 41.8 -1.1
baz=261
**M22K Willow** 97.38 29 P P 07 21 41.9 -1.0
baz=261
**OBN Obninsk** 97.38 325 P P 07 21 42.1 -0.9
comp=Z,22nm,0.3s,baz=153,slow=4.9,SNR=9.3
OBN LR LR 08 11 40.4
comp=Z,5µm,20.8s,baz=92,slow=39
comp=Z,22nm,0.3s
**OBN Obninsk** 97.38 325 ⇑eP P 07 21 42.1 -0.9
OBN e 07 25 39.9
OBN i S SKSac 07 32 24.0 +4.5
OBN eSS SS 07 39 43.3 -1.9
OBN pmax pmax
comp=Z,56nm,1.0s
**CUT Chulitna** 97.41 28 P P 07 21 42.1 -0.9
baz=261
**F22K John River** 97.45 23 P P 07 21 42.4 -0.7
baz=260
**SEW Seward** 97.45 30 P P 07 21 42.1 -1.2
baz=261
**RC01 Rabbit Creek A** 97.46 29 P P 07 21 42.3 -1.0
baz=261
**H22K Ishtalitna Cre** 97.49 24 P P 07 21 43.2 -0.2
baz=260,SNR=10.0
**D22K Ayikyak River** 97.51 21 P Pdif 07 21 43.6 +0.1
baz=260,SNR=20
**B22K Teshekpuk Lake** 97.52 20 IAMs_20 IAMs_20 08 06 33.9
comp=Z,3µm,21.0s
**B22K Teshekpuk Lake** 97.52 20 P Pdif 07 21 43.6 +0.1
baz=259,SNR=30
**SIM Simferopol'** 97.56 314 P Pdif 07 21 45.2 +1.0
SIM e 07 32 26.0
SIM eS S 07 33 02.0 -6.5
SIM pmax pmax
comp=Z,60nm,7.3s
SIM pmax pmax
comp=Z,28nm,1.0s
**G22K Bettles** 97.61 23 P Pdif 07 21 44.3 +0.4
baz=260
**MLY Manley** 97.61 25 P P 07 21 43.7 -0.3
baz=261,SNR=5.9
**E22K Anaktuvuk Pass** 97.69 22 P Pdif 07 21 44.5 +0.2
baz=260
**ADZR Andozero** 97.79 334 eP P 07 21 42.5 -2.2
ADZR e 07 25 42.1
ADZR pmax pmax
comp=Z,25nm,1.1s
**PMR Palmer** 97.82 29 P Pdif 07 21 46.9 +2.0
**PMR Palmer** 97.82 29 P P 07 21 44.4 -0.5
baz=262
**ANTO Ankara** 97.86 309 IAMs_20 IAMs_20 08 13 41.9
comp=Z,3µm,20.0s
**PWL Port Wells** 98.10 30 P P 07 21 45.6 -0.6
baz=262
**KNK Knik Glacier** 98.12 29 P P 07 21 45.7 -0.6
baz=262
**G23K Bananza Creek** 98.16 24 P P 07 21 46.4 0.0
baz=262,SNR=26
**COLD Coldfoot** 98.16 23 P P 07 21 46.1 -0.2
baz=262,SNR=14
**MCK McKinley** 98.20 27 P P 07 21 46.1 -0.5
baz=262
**I23K Minto, Yukon-K** 98.21 25 P P 07 21 46.1 -0.4
baz=262,SNR=22
**H23K Yukon River** 98.23 25 P P 07 21 46.4 -0.3
baz=262
**SML Sawmill** 98.23 29 P P 07 21 45.9 -1.0
baz=263
**D23K Nanushuk River** 98.23 21 P P 07 21 46.5 -0.2
baz=262,SNR=51
**WAT1 Susitna Watana** 98.26 28 P P 07 21 46.7 -0.2
baz=263
**NEA2 Nenana** 98.26 26 P P 07 21 46.7 -0.2
baz=262
**C23K Itkillik River** 98.39 20 P P 07 21 47.0 -0.2
baz=262,SNR=37
**E23K Chandalar** 98.50 22 P P 07 21 47.4 -0.5
baz=262,SNR=33
**M23K Glacier View** 98.51 29 P P 07 21 47.8 -0.3
baz=263
**TOLK Toolik Lake Re** 98.59 22 P P 07 21 47.9 -0.4
baz=262,SNR=17
**WAT6 Susitna Watana** 98.60 28 P P 07 21 47.8 -0.8
baz=263
**SCM Sheep Creek Mo** 98.70 29 P P 07 21 48.6 -0.3
baz=264
**GLI Glacier Island** 98.71 30 P P 07 21 48.4 -0.5
baz=264
**COLA College** 98.81 26 P P 07 21 49.1 -0.1
baz=264
**DHY Denali Highway** 98.82 27 P P 07 21 49.0 -0.5
baz=264
**H24K Noodor Dome** 98.91 25 P P 07 21 49.6 -0.2
baz=264
**E24K Your Creek** 98.92 22 P Pdif 07 21 49.8 0.0
baz=263,SNR=7.3
**D24K Happy Valley** 98.92 21 IAMs_20 IAMs_20 08 04 22.7
comp=Z,3µm,22.0s
**D24K Happy Valley** 98.92 21 P P 07 21 49.6 -0.1
baz=263
**Q23K Milleton Isla** 98.92 31 P P 07 21 49.6 -0.2
baz=264
**FID Port Fidalgo** 99.00 30 IAMs_20 IAMs_20 08 07 40.6
comp=Z,3µm,22.0s
**POKR Poker Plat Res** 99.01 25 P Pdif 07 21 49.8 -0.4
baz=264
**C24K Franklin Bluff** 99.03 21 P Pdif 07 21 49.8 -0.4
baz=264
**F24K Squaw Lake** 99.09 23 P Pdif 07 21 49.6 -0.9
baz=264,SNR=19
**HDA Harding Lake** 99.15 26 P Pdif 07 21 50.2 -0.7
baz=264
**G24K Hadweenzic Riv** 99.16 24 P Pdif 07 21 50.9 +0.1
baz=264,SNR=14
**ILAR Eielson Array** 99.21 26 P Pdif 07 21 49.7 -1.4
comp=Z,6.0nm,0.9s,baz=282,slow=4.5,SNR=7.6
ILAR PP PP 07 25 52.4 -1.5
comp=Z,1.6nm,1.0s,baz=275,slow=4.4,SNR=2.5
ILAR PKKP PKKPdf 07 38 22.9 +0.4
comp=Z,1.1nm,0.8s,baz=109,slow=1.5,SNR=6.4
comp=Z,6.0nm,0.9s
**M24K Tolsona, Glenn** 99.27 28 P Pdif 07 21 50.2 -1.3
baz=265
**EYAK Cordova Ski Ar** 99.33 30 P Pdif 07 21 50.7 -1.0
baz=265
**KLU Klutina** 99.34 29 P Pdif 07 21 51.2 -0.6
baz=265
**K24K Donnelly Dome** 99.61 27 P Pdif 07 21 52.3 -0.6
baz=265
**PAX Paxson** 99.67 28 P Pdif 07 21 52.8 -0.5
baz=265
**G25K Bearman Lake** 99.71 24 P Pdif 07 21 52.9 -0.4
baz=265
**LVZ Lovozero** 99.72 337 i P Pdif 07 21 53.6 +0.3
LVZ pmax pmax
comp=Z,17nm,0.9s
LVZ MLR MLR
comp=Z,5µm,21.0s
**HARP HAARP** 99.77 28 P Pdif 07 21 53.2 -0.4
baz=266
**H25L Birch Creek** 99.78 24 P Pdif 07 21 53.1 -0.5
baz=266,SNR=22
**D25K Kavik River** 99.81 21 P Pdif 07 21 52.5 -1.2
baz=266,SNR=5.8
**J25K Salcha River,** 99.85 26 P Pdif 07 21 52.7 -1.3
baz=266,SNR=9.7
**PRP Porcupine Dome** 99.85 25 P Pdif 07 21 53.0 -1.1
baz=266
**RAGM Ragged Mountai** 99.85 30 IAMs_20 IAMs_20 08 09 53.8
comp=Z,3µm,21.0s
**BMRM Bremner River** 99.93 30 P Pdif 07 21 53.4 -1.1
baz=266
**KAIM Kayak Island** 99.94 31 IAMs_20 IAMs_20 07 57 27.3
comp=Z,4µm,18.0s
**KAIM Kayak Island** 99.94 31 P Pdif 07 21 52.9 -1.6
baz=266
**F25K Christian Rive** 99.95 23 P Pdif 07 21 53.7 -0.7
baz=266,SNR=8.9
**N25K Chitina, Valde** 99.98 29 P Pdif 07 21 53.3 -1.4
baz=266
**RIDG Independent Ri** 100.01 27 P Pdif 07 21 52.4 -2.4
baz=266
**APA Apatity** 100.17 337 ⇓i P Pdif 07 21 58.9 +3.6
APA i 07 26 01.0
APA i 07 32 39.0
APA i PS PS 07 35 02.3 +1.7
APA i SS SS 07 40 28.0 +4.3
APA pmax pmax
comp=Z,7.0nm,1.2s
**SUCK Suckling Hills** 100.27 31 IAMs_20 IAMs_20 08 04 10.0
comp=Z,3µm,21.0s
**GLB Gilahina Butte** 100.34 29 IAMs_20 IAMs_20 07 58 20.8
comp=Z,3µm,22.0s
**C26K Camden Bay** 100.36 21 P Pdif 07 21 54.7 -1.3
baz=267
**SCRK Sand Creek** 100.41 27 P Pdif 07 21 54.9 -1.7
baz=267
**VRDI Verde Repeater** 100.50 29 IAMs_20 IAMs_20 08 06 06.0
comp=Z,3µm,22.0s
**F26K Sheenjek River** 100.53 23 P Pdif 07 21 55.9 -1.0
baz=267,SNR=7.2
**J26L Joseph Creek** 100.62 26 P Pdif 07 21 55.6 -1.9
baz=267
**CRQM Cirque** 100.63 30 IAMs_20 IAMs_20 08 10 43.0
comp=Z,3µm,22.0s
**G26K Porcupine Rive** 100.64 24 P Pdif 07 21 55.7 -1.7
baz=268,SNR=19
**L26K Log Cabin Wild** 100.64 28 IAMs_20 IAMs_20 08 06 48.7
comp=Z,3µm,22.0s
**CRQE Cirque** 100.65 30 P Pdif 07 21 55.7 -2.0
baz=267
**MCARA McCarthy VSAT** 100.72 29 IAMs_20 IAMs_20 08 07 10.7
comp=Z,3µm,22.0s
**MCARA McCarthy VSAT** 100.72 29 P Pdif 07 21 56.0 -1.9
baz=267
**SNH Sunshine Point** 100.75 31 IAMs_20 IAMs_20 08 09 05.6
comp=Z,3µm,21.0s
**C27K Jago River** 100.76 21 P Pdif 07 21 56.8 -1.1
baz=268,SNR=22
**M26K Nabesna, AK** 100.78 28 P Pdif 07 21 56.3 -1.9
baz=267
**I26K Coal Creek Min** 100.83 25 P Pdif 07 21 56.5 -1.8
baz=268
**PUL Pulkovo** 101.17 329 i P Pdif 07 21 59.9 +0.1
PUL pmax pmax
comp=Z,278nm,0.4s
**K27K Chicken** 101.25 27 P Pdif 07 21 59.6 -0.6
baz=269
**M27K Edge Creek, AK** 101.30 28 IAMs_20 IAMs_20 08 12 04.0
comp=Z,3µm,21.0s
**M27K Edge Creek, AK** 101.30 28 P Pdif 07 21 59.4 -1.2
baz=268
**L27K Beaver Creek,** 101.34 28 P Pdif 07 21 59.5 -1.2
baz=269
**AKASG Malin Array Be** 101.38 320 P Pdif 07 22 00.0 -1.0
comp=Z,7.2nm,0.8s,baz=78,slow=4.5,SNR=12
AKASG PP PP 07 26 09.9 -0.7
comp=Z,7.2nm,0.9s,baz=83,slow=6.2,SNR=5.3
**AKASG Malin Array Be** 101.38 320 i P Pdif 07 22 02.2 +1.2
AKASG pmax pmax
comp=Z,7.0nm,0.8s
**AKBB Malin Array Si** 101.38 320 P Pdif 07 22 00.4 -0.6
**KIEV Kiev** 101.39 320 IAMs_20 IAMs_20 08 16 50.2
comp=Z,5µm,21.0s
**KIEV Kiev** 101.39 320 P Pdif 07 21 59.9 -1.2
**KIEV Kiev** 101.39 320 ⇓P Pdif 07 21 59.1 -1.9
**G27K Doyon Strip** 101.47 24 P Pdif 07 22 01.1 -0.1
baz=270,SNR=11
**I27K Kandik River** 101.48 25 P Pdif 07 22 00.9 -0.3
baz=269,SNR=30
**E27K Coleen River** 101.50 22 P Pdif 07 22 01.2 0.0
baz=270,SNR=21
**CTG Chitna Glacier** 101.52 30 P Pdif 07 22 00.8 -0.8
baz=269
**H27K Steamboat Moun** 101.52 24 P Pdif 07 22 01.1 -0.3
baz=270,SNR=10
**TABL Table Mountain** 101.60 30 IAMs_20 IAMs_20 08 05 01.1
comp=Z,3µm,22.0s
**EGAK Eagle** 101.66 26 P Pdif 07 22 01.3 -0.7
baz=270
**D27M Malcolm River** 101.73 21 P Pdif 07 22 01.3 -1.0
baz=271
**SORM Soroca** 101.81 317 ⇑P Pdif 07 22 02.7 -0.3
**SORM Soroca** 101.81 317 ⇑P Pdif 07 22 02.7 -0.3
**YUK3 Moose Creek** 101.95 29 P Pdif 07 22 02.0 -1.6
baz=270
**PINM Pinnacle** 102.04 31 P Pdif 07 22 02.4 -1.5
baz=269
**O28M Mount Upton** 102.08 30 P Pdif 07 22 02.0 -2.3
baz=270
**F28M Old Crow** 102.16 23 P Pdif 07 22 03.0 -1.2
baz=271,SNR=9.4
**I28M Miner Creek** 102.18 25 P Pdif 07 22 02.7 -1.7
baz=271,SNR=13
**E28M Babbage River** 102.26 22 P Pdif 07 22 03.8 -0.8
baz=272,SNR=7.9
**YUK8 Steele Glacier** 102.29 29 P Pdif 07 22 03.2 -2.0
baz=270
**MNK Minsk** 102.34 324 i P Pdif 07 22 01.6 -3.6
MNK i S SKSac 07 32 41.4 -2.7
MNK i PS PS 07 35 23.0 -1.2
MNK i SS SS 07 40 55.9 +1.4
MNK i SSS SSS 07 44 49.7
MNK pmax pmax
comp=Z,6.0nm,0.6s
MNK pmax pmax
comp=N,19nm,0.8s
MNK pmax pmax
comp=E,14nm,0.8s
MNK MLR MLR
comp=E,10µm,26.0s
MNK MLR MLR
comp=N,7µm,25.0s
MNK MLR MLR
comp=Z,9µm,25.0s
**DAWY Dawson** 102.43 27 P Pdif 07 22 04.2 -1.3
baz=271
**PNL Peninsula** 102.47 31 P Pdif 07 22 03.4 -2.3
baz=270
**H29M Whitestone** 102.80 24 P Pdif 07 22 05.5 -1.6
baz=272
**VRI Vrincioaia** 102.82 315 ⇑P Pdif 07 22 06.3 -1.3
**VRI Vrincioaia** 102.82 315 ⇑P Pdif 07 22 06.3 -1.3
**I29M Ogilvie Camp,** 102.86 25 P Pdif 07 22 06.0 -1.3
baz=272,SNR=11
**E29M Blow River** 102.87 22 P Pdif 07 22 05.8 -1.5
baz=273
**PLOR Plostina** 102.87 315 ⇓P Pdif 07 22 09.6 +1.7
**PLOR Plostina** 102.87 315 ⇓P Pdif 07 22 09.6 +1.7
**O29M Mount Kennedy** 102.88 30 P Pdif 07 22 05.9 -1.7
baz=271
**M29M Somme Creek** 102.89 28 P Pdif 07 22 06.2 -1.4
baz=271
**TESR Tescani** 102.90 315 ⇑P Pdif 07 22 08.2 +0.3
**G29M Pine Creek** 102.91 24 P Pdif 07 22 06.8 -0.8
baz=273,SNR=13
**J29N Klondike Camp** 102.94 26 P Pdif 07 22 06.9 -0.9
baz=272
**NACGM Naroch** 102.98 324 ePdif Pdif 07 22 11.1 +3.0
comp=Z,35nm,1.1s,baz=90
**ARCES ARCESS Array B** 103.06 339 Pdiff Pdif 07 22 09.5 +1.4

comp=Z,12nm,1.1s,baz=345,slow=5.6,SNR=5.1
**COVR Voineasa-Covas 103.19 315** ⇑P **Pdif** **07 22 12.2 +2.9**
**FINES FINESS Array B 103.26 331** Pdiff **Pdif** **07 22 09.7 +0.5**
comp=Z,1.6nm,0.8s,baz=90,slow=5.7,SNR=2.8
FINES PP **PP** **07 26 22.7 -1.8**
comp=Z,4.8nm,0.8s,baz=109,slow=10,SNR=3.9
**K29M Barlow Dome 103.27 27** P **Pdif** **07 22 08.4 -1.0**
baz=273
**P29M Windy Craggy 103.31 31** P **Pdif** **07 22 07.8 -1.7**
baz=271
**TURR Turia 103.32 315** ⇑P **Pdif** **07 22 11.1 +1.2**
**MLR Muntele Rosu 103.36 314** Pdiff **Pdif** **07 22 11.4 +1.3**
comp=Z,5.3nm,0.8s,baz=224,slow=4.4,SNR=7.8
MLR PP **PP** **07 26 24.4 -1.4**
comp=Z,10nm,1.0s,baz=109,slow=5.0,SNR=3.8
**MLR Muntele Rosu 103.36 314** ⇑P **Pdif** **07 22 12.7 +2.6**
**MLR Muntele Rosu 103.36 314** ⇑P **Pdif** **07 22 12.7 +2.6**
**EPYK Eagle Plains 103.46 24** P **Pdif** **07 22 09.1 -0.9**
baz=274
**RNPP9 Sopachiv 103.50 320** P **Pdif** **07 22 09.8 -0.7**
**N30M Aishikik Lake 103.57 29** IAMs_20 IAMs_20 08 03 06.2
comp=Z,3µm,22.0s
**N30M Aishikik Lake 103.57 29** P **Pdif** **07 22 09.0 -1.7**
baz=272
**G30M tAoh Zraii Nji 103.61 24** P **Pdif** **07 22 09.3 -1.3**
baz=275
**M30M Minto, Yukon 103.66 28** P **Pdif** **07 22 09.8 -1.2**
baz=273
**I30M Mount Dempster 103.68 25** P **Pdif** **07 22 09.9 -1.2**
baz=274
**P30M Million Dollar 103.69 31** P **Pdif** **07 22 09.9 -1.3**
baz=272
**F30M Barrier River 103.72 23** P **Pdif** **07 22 10.4 -0.7**
baz=275
**J30M Hart River 103.74 26** P **Pdif** **07 22 10.7 -0.7**
baz=274
**BURAR Bucovina Array 103.91 316** ⇑P **Pdif** **07 22 13.1 +0.6**
**BURAR Bucovina Array 103.91 316** ⇑P **Pdif** **07 22 13.1 +0.6**
**VOIR 103.98 314** ⇑P **Pdif** **07 22 18.8 +5.9**
**VOIR 103.98 314** ⇑P **Pdif** **07 22 18.8 +5.9**
**PLBC Pleasant Camp 104.02 31** P **Pdif** **07 22 10.4 -2.2**
baz=273
**O30N Mendenhall 104.09 30** P **Pdif** **07 22 10.6 -2.4**
baz=273
**SPITS Spitsbergen Ar 104.11 348** Pdiff **Pdif** **07 22 13.8 +1.2**
comp=Z,4.9nm,0.8s,baz=56,slow=27,SNR=2.8
**S31K Pelican 104.15 33** P **Pdif** **07 22 11.7 -1.5**
baz=272
**N31M Braeburn, Yuko 104.20 29** IAMs_20 IAMs_20 08 07 23.7
comp=Z,4µm,22.0s
**N31M Braeburn, Yuko 104.20 29** P **Pdif** **07 22 11.2 -2.2**
baz=274
**G31M Satah River 104.38 23** P **Pdif** **07 22 12.3 -1.6**
baz=276
**R31K City Hall, Gus 104.39 32** P **Pdif** **07 22 11.7 -2.5**
baz=273
**H31M Peel River 104.47 25** P **Pdif** **07 22 12.6 -1.9**
baz=276
**INK Inuvik 104.50 22** P **Pdif** **07 22 13.2 -1.3**
baz=277
**F31M Tsiigehtchic 104.52 23** P **Pdif** **07 22 12.8 -1.9**
baz=277
**SIT Sitka 104.68 34** P **Pdif** **07 22 12.9 -2.7**
baz=273
**M31M Drury Creek, Y 104.80 28** IAMs_20 IAMs_20 08 09 47.6
comp=Z,3µm,21.0s
**R32K Eaglecrest 105.04 32** P **PKiKP** **07 26 29.6 -2.1**
baz=274
**S32K Killisnoo 105.06 33** P **PKiKP** **07 26 30.0 -1.8**
baz=274
**SUW Suwalki 105.10 323** *e*Pdif **Pdif** **07 22 28.7 +11**
SUW *e*SKSac **SKSac** **07 33 00.1 +3.2**
SUW *e*SP **SP** **07 35 51.3 +0.8**
SUW *e*L L 08 11 22.8
comp=Z,7µm,26.6s
**FARO Faro, Yukon 105.28 28** P **PKiKP** **07 26 30.8 -1.4**
baz=276
**P32M Atlin 105.36 31** IAMs_20 IAMs_20 08 08 16.5
comp=Z,3µm,22.0s
**P32M Atlin 105.36 31** P **PKiKP** **07 26 30.4 -1.9**
baz=275
**KWP Kalwaria Pacla 105.56 319** *e*Pdif **Pdif** **07 22 26.1 +6.4**
KWP *e*PKiKP **PKiKP** **07 26 26.6 -6.5**
KWP *e*PP **PP** **07 26 40.2 -1.7**
KWP *e*SKSac **SKSac** **07 33 04.0 +4.9**
KWP *e*SP SP 07 35 58.6 +3.1
KWP *e*L L 08 10 17.8
comp=Z,8µm,28.9s
**KWP Kalwaria Pacla 105.56 319** IAMs_20 IAMs_20 08 19 56.0
comp=Z,3µm,20.0s
**GZR Gura Zlata 105.58 314** ⇓P **Pdif** **07 22 20.2 +0.2**
**GZR Gura Zlata 105.58 314** ⇓P **Pdif** **07 22 20.2 +0.2**
**KOLS Kolonicke sedl 105.86 318** *e*PP PKiKP 07 26 43.1 +10
**U33K Whale Pass 105.96 35** P **PKiKP** **07 26 32.6 -0.8**
baz=274
**CRAG Craig 106.01 35** P **PKiKP** **07 26 32.0 -1.6**
baz=274
**MDVR Moldovita 106.34 314** ⇑P **Pdif** **07 22 24.4 +1.1**
**BOVS Bovan 106.37 312** ⇓P **Pdif** **07 22 28.4 +5.0**
**A36M Sachs Harbour 106.50 18** P **PKiKP** **07 26 32.8 -1.3**
baz=286
**FNA Florina 106.63 309** IAMs_20 IAMs_20 08 12 20.7
comp=Z,4µm,22.0s
**R33M Jennings River 106.77 31** P **PKiKP** **07 26 33.2 -2.0**
baz=277
**S34M Telegraph Cree 106.87 33** P **PKiKP** **07 26 33.2 -1.9**
baz=277
**V35K Ketchikan 106.88 35** P **PKiKP** **07 26 32.7 -2.5**
baz=276
**KBN Korca 107.08 309** IAMs_20 IAMs_20 08 17 59.7
comp=Z,4µm,22.0s
**NIE Niedzica 107.13 318** *e*Pdif **Pdif** **07 22 35.5 +8.7**
NIE *e*PP **PP** **07 26 59.5 +5.9**
NIE *e*SKSac **SKSac** **07 33 09.6 +3.4**
NIE *e*SP **SP** **07 36 09.8 -2.0**
NIE *e*L L 08 10 48.2
comp=Z,4µm,28.4s
**DLBC Dease Lake 107.38 32** P **PKiKP** **07 26 34.2 -2.0**
baz=278
**OJC Ojcow 107.40 319** *e*Pdif **Pdif** **07 22 36.7 +8.8**
OJC *e*SKSac **SKSac** **07 33 08.4 +1.1**
OJC *e*SP **SP** **07 36 17.0 +2.5**
OJC *e*L L 08 07 31.8
comp=Z,6µm,36.3s
**T35M Bob Quinn 107.45 34** IAMs_20 IAMs_20 08 10 31.0
comp=Z,3µm,22.0s
**T35M Bob Quinn 107.45 34** P **PKiKP** **07 26 34.2 -2.1**
baz=277
**C36M Paulatuk 107.63 20** P **PKiKP** **07 26 34.7 -1.6**
baz=287
**U35K Hyder 107.71 35** IAMs_20 IAMs_20 08 15 18.8
comp=Z,2µm,20.0s
**WTLY Watson Lake, Y 107.75 30** P **PKiKP** **07 26 35.0 -1.8**
baz=279
**TGTN Hyland Airport 107.76 29** P **PKiKP** **07 26 36.0 -0.8**
baz=280
**KEK Kerkira 107.84 308** IAMs_20 IAMs_20 08 17 59.1
comp=Z,3µm,21.0s
**PDG Podgorica 108.19 311** IAMs_20 IAMs_20 08 19 27.0
comp=Z,4µm,21.0s
**OKC Ostrava-Krasne 108.50 319** AMS AMS 08 17 40.0
comp=Z,3µm,22.0s
**MORC Moravsky Berou 108.89 319** *e*PP **PP** **07 27 06.0 -0.4**
**LIRD Liard River Hi 109.22 31** P **PKiKP** **07 26 38.3 -1.2**
baz=282
**KRLC Kraliky 109.35 319** *e*SKS **SKSac** **07 33 16.5 +0.8**
**HFS Hagfors 109.44 330** Pdiff **Pdif** **07 22 37.2 +0.5**
comp=Z,1.3nm,0.8s,baz=206,slow=30,SNR=1.0
**VRAC Vranov 109.56 319** *e*PP **PP** **07 27 08.3 -2.9**
**KSP Ksiaz 109.57 320** *e*Pdif **Pdif** **07 22 39.5 +2.0**
KSP *e*SKSac **SKSac** **07 33 20.0 +3.5**
KSP *e*SP SP 07 36 26.3 -10
KSP *e*L L 08 06 23.5
comp=Z,7µm,35.9s
**WRGLY Wrigley 109.57 26** P **PKiKP** **07 26 38.6 -1.4**
baz=285
**DPC Dobruska-Polom 109.61 320** *e*SKS **SKSac** **07 33 20.7 +3.9**
DPC AMS AMS 08 20 20.0
comp=Z,4µm,20.2s
**OSTC Ostas 109.65 320** AMS AMS 08 20 20.0
comp=Z,5µm,19.4s
**CHVC Chvalec 109.75 320** AMS AMS 08 20 20.0
comp=Z,5µm,19.6s
**TOAD Toad River Com 109.78 31** P **PKiKP** **07 26 39.6 -1.1**
baz=282
**UPC Upice 109.79 320** *e*SKS **SKSac** **07 33 19.1 +1.6**
UPC AMS AMS 08 20 30.0
comp=Z,6µm,21.0s
**RONA Rosalia, Austr 109.92 317** *e*PKiKP **PKiKP** **07 26 43.2 +1.9**
comp=Z,15nm,1.5s
**KOTAN Kotaneelee Air 110.08 30** P **PKiKP** **07 26 39.8 -1.3**
baz=284
**CONA Conrad Observa 110.19 317** *i* PKiKP **PKiKP** **07 26 43.0 +1.2**
comp=Z,12nm,2.0s
CONA *e*PKKP **PKKPab** **07 37 51.9 -1.9**
comp=Z,12nm,1.2s
**TIP Timpagrande 110.21 308** IAMs_20 IAMs_20 08 22 07.7
comp=Z,3µm,22.0s
**NB2 NORSAR Subarra1 110.42 331** PKPdf **PKiKP** **07 26 44.7 +2.9**
comp=Z,22nm,2.0s,baz=68,slow=1.9
**NB2 NORSAR Subarra1 110.42 331** PKPdf **PKiKP** **07 26 44.7 +2.9**
baz=68,slow=1.9
**NOA NORSAR Array B 110.42 331** Pdiff **Pdif** **07 22 42.1 +1.1**
comp=Z,0.9nm,0.9s,baz=92,slow=9.4,SNR=2.2
NOA PKiKP **PKiKP** **07 26 41.4 -0.4**
comp=Z,3.4nm,0.9s,baz=261,slow=3.2,SNR=5.6
NOA PP **PP** **07 27 16.5 -0.5**
comp=Z,3.1nm,0.9s,baz=73,slow=7.0,SNR=4.6
**ARSA Arzberg 110.49 316** *e*pPKiKP **PKiKP** **07 26 45.2 +2.8**
comp=Z,8.1nm,1.1s
**PRU Pruhonice 110.79 319** *e*SKS **SKSac** **07 33 25.8 +4.2**
PRU AMS AMS 08 16 00.0
comp=Z,5µm,24.1s
**PRA Prague 110.85 320** AMS AMS 08 16 00.0
comp=Z,5µm,24.3s
**SOKA Soboth 110.89 316** *i* pPKiKP **PKiKP** **07 26 45.6 +2.4**
comp=Z,11nm,1.1s
**CUC Castrocucco 110.90 309** IAMs_20 IAMs_20 08 17 33.8
comp=Z,4µm,22.0s
**BRG Berggiesshubel 111.04 320** *e*PKP PKiKP 07 26 32.7 -10
BRG Amp 07 26 52.9
comp=Z,4.2nm,0.9s
**CKRC Cesky Krumlov 111.11 318** AMS AMS 08 19 10.0
comp=Z,6µm,22.5s
**DAG Danmarks Havn 111.17 351** *i* P **PKiKP** **07 26 45.1 +2.4**
**OBKA Obir 111.24 316** *e*pPKiKP **PKiKP** **07 26 46.4 +2.6**
comp=Z,12nm,1.3s
**MOA Molln 111.27 317** *e*pPKiKP **PKiKP** **07 26 46.3 +2.5**
comp=Z,3.1nm,0.8s
MOA *e*PKKP **PKKPab** **07 37 47.9 -1.0**
comp=Z,9.9nm,1.0s
**HSKC Hora Svate Kat 111.40 320** AMS AMS 08 14 50.0
comp=Z,5µm,23.9s
**GERES GERESS Array B 111.50 318** PKiKP **PKiKP** **07 26 44.6 +0.3**
comp=Z,3.9nm,0.9s,baz=85,slow=1.1,SNR=6.4
**KHC Kasperske Hory 111.54 319** *e*PDIFF **Pdif** **07 22 50.0 +3.7**
KHC *e*PP **PP** **07 27 20.3 -5.2**
KHC *e*SKS **SKSac** **07 33 23.7 -1.1**
KHC *e*PKKP **PKKPbc** **07 37 41.0 +0.8**
KHC AMS AMS 08 16 10.0
comp=Z,7µm,24.7s
**KHC Kasperske Hory 111.54 319** *i* P **Pdif** **07 22 50.0 +3.7**
KHC *e* 07 27 20.3
KHC *e* 07 33 23.7
KHC MLR MLR
comp=Z,7µm,24.7s
**CLL Collm 111.55 321** *e*P **Pdif** **07 22 46.0 -0.3**
CLL pmax pmax
comp=Z,7.0nm,1.1s
CLL MLR MLR
comp=Z,5µm,22.1s
**BIOA Bad Ischl, Aus 111.71 317** *e*PKiKP **PKiKP** **07 26 45.1 +0.5**
comp=Z,3.4nm,0.6s
**PAOL Paolisi 111.77 310** IAMs_20 IAMs_20 08 21 45.0
comp=Z,3µm,22.0s
**MYKA Terra Mystica 111.85 316** *i* PKiKP **PKiKP** **07 26 45.6 +0.6**
comp=Z,8.2nm,1.7s
**SABO M.te Sabotino 111.96 315** IAMs_20 IAMs_20 08 24 40.1
comp=Z,3µm,20.0s
**KBA Koelnbreinsper 111.99 316** *e*PKKP 07 37 48.5
comp=Z,7.3nm,0.8s
**WDD Wied Dalam 112.13 304** IAMs_20 IAMs_20 08 14 30.7
comp=Z,3µm,22.0s
**LESA Schwarzleotal 112.39 317** *i* PKiKP **PKiKP** **07 26 46.5 +0.5**
comp=Z,3.6nm,0.6s
LESA *e*PKKP **PKKPab** **07 37 43.1 -1.0**
comp=Z,21nm,1.6s
**CAMP Campotosto 112.50 312** IAMs_20 IAMs_20 08 20 07.1
comp=Z,3µm,21.0s
**ABTA Abfaltersbach 112.60 316** *e*PKiKP **PKiKP** **07 26 46.9 +0.5**
comp=Z,12nm,1.1s
**GRA1 Grafenberg Arr 112.96 319** IAMs_20 IAMs_20 08 20 14.6
comp=Z,4µm,22.0s
**GRFO Grafenberg 112.96 319** IAMs_20 IAMs_20 08 20 02.7
comp=Z,4µm,22.0s
**WTTA Wattenberg 113.11 317** *i* PKiKP **PKiKP** **07 26 48.4 +0.9**
comp=Z,30nm,0.7s
WTTA *e*PKKP **PKKPab** **07 37 42.3 +1.3**
comp=Z,20nm,1.3s
**WATA Walderalm 113.14 317** *i* PKiKP **PKiKP** **07 26 48.1 +0.6**
comp=Z,18nm,1.0s
**NEEM North Greenlan 113.30 359** *i* P **PKiKP** **07 26 47.5 +0.3**
**SQTA Sankt Quirin 113.41 317** *i* PKiKP **PKiKP** **07 26 48.9 +0.9**
comp=Z,18nm,1.5s
SQTA *e*PKKP **PKKPab** **07 37 38.5 -1.1**
comp=Z,9.2nm,0.7s
**MOTA Moosalm 113.46 317** *i* pPKiKP **PKiKP** **07 26 50.1 +2.0**
comp=Z,23nm,1.3s
MOTA *e*PKKP **PKKPab** **07 37 39.6 +0.2**
comp=Z,18nm,1.1s
**COR Corvallis 113.51 46** IAMs_20 IAMs_20 08 14 52.9
comp=Z,2µm,20.0s
**YKA Yellowknife Ar 113.64 26** PKiKP **PKiKP** **07 26 48.1 +0.3**
comp=Z,6.1nm,0.9s,baz=305,slow=2.3,SNR=10
**RETA Reutte 113.66 317** *i* pPKP **PKiKP** **07 26 51.5 +3.1**
comp=Z,5.4nm,0.7s
RETA *e*PKKP **PKKPab** **07 37 37.8 -0.6**
comp=Z,7.6nm,0.9s
**FETA Feichten 113.76 317** *i* PKiKP **PKiKP** **07 26 49.9 +1.1**
comp=Z,12nm,1.2s
FETA *e*PKKP **PKKPbc** **07 37 35.1 +2.3**
comp=Z,12nm,1.2s
**TULEG Thule 113.89 3** IAMs_20 IAMs_20 08 13 30.6
comp=Z,3µm,22.0s
**TULEG Thule 113.89 3** *i* P **PKiKP** **07 26 44.6 -3.3**
**HUMO Hull Mountain 114.03 48** IAMs_20 IAMs_20 08 10 37.9
comp=Z,3µm,22.0s
**FUORN Ofenpass-Fuorn 114.15 316** IAMs_20 IAMs_20 08 22 04.3
comp=Z,4µm,21.0s
**DAVA Damuels 114.29 317** *e*PKiKP **PKiKP** **07 26 50.2 +0.5**
comp=Z,25nm,1.1s
DAVA *e*PKKP **PKKPab** **07 37 33.6 -2.1**
comp=Z,15nm,1.1s
**YBH Yreka Blue Hor 114.33 49** IAMs_20 IAMs_20 08 09 39.7
comp=Z,2µm,22.0s
**O02D Mt. Diablo Mer 114.46 51** IAMs_20 IAMs_20 08 13 10.3
comp=Z,3µm,22.0s
**MCCM Marconi Confer 114.60 53** IAMs_20 IAMs_20 08 17 26.2
comp=Z,3µm,20.0s
**B08A Colville Reser 115.52 41** **PKiKP** **07 26 51.4 -0.5**
**SAO San Andreas Ge 115.88 54** IAMs_20 IAMs_20 08 26 34.0
comp=Z,2µm,18.0s
**ECH Echery 115.89 319** IAMs_20 IAMs_20 08 26 44.2
comp=Z,4µm,22.0s
**AFDM Forest Hills D 116.00 52** **PKiKP** **07 26 54.0 +0.8**
**MEM Membach 116.02 321** *d*PKP **PKPdf** **07 26 56.4 +3.7**
**D08A Wollman Farm, 116.08 43** **PKiKP** **07 26 54.0 +1.1**
**WLF Walferdange 116.18 320** IAMs_20 IAMs_20 08 24 32.7
comp=Z,3µm,20.0s
**SENIN Lac Senin/Sane 116.21 316** **PKiKP** **07 26 54.3 +0.8**
**KEST Kesra 116.34 305** PKP **PKiKP** **07 26 54.2 +0.3**
comp=Z,11nm,1.0s,baz=275,slow=7.3,SNR=6.6
**G08A Pilot Rock 116.43 45** **PKiKP** **07 26 54.7 +0.8**
**CMB Columbia Colle 116.57 53** IAMs_20 IAMs_20 08 19 39.3
comp=Z,3µm,19.0s
**SCO Scoresbysund 116.69 348** IAMs_20 IAMs_20 08 27 02.0
comp=Z,3µm,21.0s
**SCO Scoresbysund 116.69 348** *i* P **PKiKP** **07 26 56.6 +3.1**
**BMRD Maredsous 116.87 321** *d*PKP **PKiKP** **07 26 54.9 +0.6**
**BNI Bardonecchia 116.91 315** IAMs_20 IAMs_20 08 25 02.8
comp=Z,3µm,22.0s
**NEW Newport 116.97 41** PKP **PKiKP** **07 26 55.2 +0.5**
comp=Z,4.6nm,0.8s,baz=261,slow=1.3,SNR=4.8
**DOU Dourbes 117.03 321** *d*PKP **PKiKP** **07 26 58.2 +3.5**
**WVOR Wild Horse Val 117.21 48** IAMs_20 IAMs_20 08 11 55.0
comp=Z,2µm,20.0s
**SUMG Summit 117.37 354** **PKPdf** **07 26 54.1 -1.2**
SUMG IAMs_20 IAMs_20 08 19 22.0
comp=Z,3µm,21.0s
**SUMG Summit 117.37 354** PKIKP **PKPdf** **07 26 54.1 -1.2**
SUMG MLR MLR
comp=Z,3µm,21.0s
**SUMG Summit 117.37 354** *i* P **PKiKP** **07 26 55.5 +0.2**
**F10A Beach Ranch, E 117.46 44** **PKiKP** **07 26 56.5 +0.6**
**BMO Blue Mountains 117.67 45** **PKPdf** **07 26 56.2 -0.1**
BMO IAMs_20 IAMs_20 08 18 06.8
comp=Z,2µm,21.0s
**BMO Blue Mountains 117.67 45** PKIKP **PKPdf** **07 26 56.2 -0.1**
BMO MLR MLR
comp=Z,2µm,21.0s
**NVAR Mina Array Bea 118.14 52** PKP **PKiKP** **07 26 58.3 +0.8**
comp=Z,4.5nm,0.9s,baz=242,slow=2.4,SNR=13
NVAR PKKPab **PKKPab** **07 37 21.1 +1.9**
comp=Z,2.4nm,1.0s,baz=108,slow=5.9,SNR=4.6
**PASC Pasadena Art C 118.81 57** IAMs_20 IAMs_20 08 13 20.8
comp=Z,3µm,21.0s
**CLF Chambon-Foret 119.10 319** IAMs_20 IAMs_20 08 25 03.6
comp=Z,3µm,22.0s
**MSO Missoula 119.44 42** PKPdf **PKiKP** **07 27 00.1 +0.4**
**EKA Eskdalemuir Ar 119.53 329** PKP **PKiKP** **07 26 59.7 +0.3**
comp=Z,5.5nm,0.9s,baz=60,slow=4.3,SNR=6.5
**BPMT Black Pine Rid 119.88 42** **PKiKP** **07 27 00.8 +0.1**
**OVMT Ovando 119.98 42** PKPdf **PKiKP** **07 27 01.9 +1.1**
**HLID Hailey 119.99 46** **PKiKP** **07 27 01.6 +0.6**
HLID IAMs_20 IAMs_20 08 19 14.5
comp=Z,2µm,21.0s
**ELK Elko 120.05 49** IAMs_20 IAMs_20 08 17 34.1
comp=Z,2µm,20.0s
**UMMG Uummannaq 120.11 359** *i* P **PKPdf** **07 26 56.7 -3.3**
**EJON La Jonquera 120.17 313** PKP **PKiKP** **07 27 01.7 +0.6**
**R11B Troy Canyon, C 120.26 52** P **PKPdf** **07 27 00.1 -1.5**
baz=281
**TPFO Pinon Flats 120.30 57** P **PKPdf** **07 27 00.9 -0.8**
baz=277
**TAM Tamanrasset 120.42 290** IAMs_20 IAMs_20 08 22 30.4
comp=Z,3µm,20.0s
**SOEG Soedalen 120.42 350** *i* P **PKiKP** **07 27 06.9 +6.1**
**LYMT Lyon Mountain 120.47 41** **PKiKP** **07 27 02.5 +0.7**
**LRM Limekiln Ridge 120.72 43** PKPdf **PKiKP** **07 27 03.4 +1.0**
**ICESG Greenland Ices 120.81 353** *i* P **PKiKP** **07 27 02.2 +0.2**
**ETOS Mallorca 120.83 310** PKP **PKiKP** **07 27 03.7 +1.2**
**SPR3 Spring Creek 3 121.09 51** PKPdf **PKiKP** **07 27 04.6 +1.1**
**CEST Esterri de Car 121.31 313** **PKiKP** **07 27 03.5 +0.1**
CEST IAMs_20 IAMs_20 08 31 14.1
comp=Z,2µm,21.0s
**EGMT Eagleton 121.74 40** **PKiKP** **07 27 04.6 +0.5**
EGMT IAMs_20 IAMs_20 08 24 13.3
comp=Z,2µm,21.0s
**FXWY Fox Creek 122.34 45** **PKiKP** **07 27 06.5 +0.9**
FXWY IAMs_20 IAMs_20 08 17 41.4
comp=Z,2µm,21.0s
**H17A Grant Village 122.42 44** P **PKPdf** **07 27 04.6 -1.0**
baz=288
**TPAW Teton Pass 122.43 45** PKPdf **PKiKP** **07 27 06.4 +0.5**
**HWUT Hardware Ranch 122.53 47** IAMs_20 IAMs_20 08 16 04.7
comp=Z,2µm,21.0s
**AHID Auburn Hatcher 122.54 46** IAMs_20 IAMs_20 08 20 54.9
comp=Z,2µm,20.0s
**REDW Red Top Meadow 122.54 45** **PKiKP** **07 27 07.2 +1.2**
**LOHW Long Hollow 122.64 45** **PKiKP** **07 27 07.8 +1.6**
**MTPU Mount Pierson 122.94 52** **PKiKP** **07 27 07.3 +0.1**
**FFC Flin Flon 123.11 30** **PKiKP** **07 27 07.2 +0.7**
**FFC Flin Flon 123.11 30** PKIKP **PKiKP** **07 27 07.2 +0.7**
**214A Organ Pipe Nat 123.57 59** P **PKPdf** **07 27 06.5 -1.4**
baz=278
**PDAR Pinedale Array 123.62 45** PKP **PKiKP** **07 27 08.3 +0.1**
comp=Z,6.3nm,0.8s,baz=260,slow=1.0,SNR=23
**ECHE Chera 123.71 311** PKP **PKiKP** **07 27 08.9 +0.7**
**SFJD Kangerlussuaq 123.74 358** *i* P **PKiKP** **07 27 07.3 0.0**
**TORD Torodi Ar. Bea 123.78 279** PKP **PKiKP** **07 27 08.9 0.0**
comp=Z,26nm,0.8s,baz=48,slow=2.3,SNR=60
**ANGG Ammassalik, Gr 123.82 351** *i* P **PKiKP** **07 27 09.0 +1.5**
**DY2G Dye2 124.00 355** *i* P **PKiKP** **07 27 08.1 -0.1**
**HMU Henry Mountain 124.08 51** **PKPdf** **07 27 08.1 -0.9**
**ISOG Isortoq, Green 124.08 352** *i* P **PKiKP** **07 27 08.2 +0.2**
**WUAZ Wupatki 124.12 54** IAMs_20 IAMs_20 08 19 23.3
comp=Z,3µm,20.0s
**CART Cartagena 124.23 308** IAMs_20 IAMs_20 08 25 24.8
comp=Z,3µm,22.0s
**CART Cartagena 124.23 308** PKP **PKiKP** **07 27 10.0 +0.8**
**LAO LASA Array 124.47 40** IAMs_20 IAMs_20 08 27 32.5
comp=Z,2µm,21.0s
**DGMT Dagmar 124.97 37** **PKPdf** **07 27 09.2 -0.9**
**DGMT Dagmar 124.97 37** IAMs_20 IAMs_20 08 17 50.4
comp=Z,2µm,22.0s
**TUC Tucson 125.21 58** IAMs_20 IAMs_20 08 18 07.3
comp=Z,2µm,20.0s
**ENIJ Nijar 125.31 308** PKP **PKiKP** **07 27 12.3 +0.9**
**O20A White River Ci 125.36 48** IAMs_20 IAMs_20 08 25 44.8
comp=Z,2µm,20.0s
**W18A Petrified Fore 125.51 54** P **PKPdf** **07 27 10.2 -1.5**
baz=283
**RWWY Rawlins 125.62 46** **PKiKP** **07 27 12.6 +0.4**
RWWY IAMs_20 IAMs_20 08 23 42.4
comp=Z,2µm,21.0s
**K22A Casper 125.77 45** PKPdf **PKiKP** **07 27 12.9 +0.6**
**EBER Berja 125.86 308** PKP **PKiKP** **07 27 14.6 +1.8**
**ESDC Sonseca Array 125.91 311** PKP **PKPdf** **07 27 12.4 +0.2**
comp=Z,9.3nm,1.1s,baz=25,slow=2.5,SNR=22
**PAB San Pablo 126.23 311** IAMs_20 IAMs_20 08 27 45.5
comp=Z,3µm,21.0s
**SMCO Snowmass 126.58 49** IAMs_20 IAMs_20 08 26 26.1
comp=Z,2µm,20.0s
**NUUK Nuuk 126.60 358** *i* P **PKiKP** **07 27 14.4 +1.3**
**N23A Red Feather La 126.78 47** P **PKPdf** **07 27 12.9 -1.2**
baz=290
**EADA Adamuz 126.81 310** PKP **PKiKP** **07 27 15.1 +0.8**
**RSSD Black Hills 126.91 42** PKPdf **PKiKP** **07 27 15.3 +0.6**
**RSSD Black Hills 126.91 42** PKIKP **PKiKP** **07 27 15.3 +0.6**
**PLCA Paso Flores 126.97 166** PKP **PKiKP** **07 27 15.2 +0.4**
comp=Z,13nm,1.1s,baz=202,slow=4.7,SNR=10.0
**PHWY Pilot Hill 126.99 46** IAMs_20 IAMs_20 08 30 36.7
comp=Z,2µm,20.0s
**EMAL Malaga-Limoner 127.09 308** PKP **PKiKP** **07 27 16.5 +1.6**
**S22A 4UR Ranch, Cre 127.11 51** P **PKPdf** **07 27 13.8 -1.1**
baz=287,SNR=28
**ECAL Calabor 127.14 315** PKP **PKiKP** **07 27 15.9 +0.9**
**PBRG Braganca 127.19 315** *e*PKP **PKiKP** **07 27 18.3 +3.2**
PBRG *e*SKP 07 30 40.5
**ECAB El Cabril 127.47 310** PKP **PKiKP** **07 27 17.0 +1.3**
**MVO Moncorvo 127.63 314** *e*PKP **PKiKP** **07 27 17.3 +1.3**
MVO *e*SKP 07 30 40.4
**MVO Moncorvo 127.63 314** *e*LQ LQ 08 03 06.5
MVO *e*LR LR 08 12 49.5
comp=Z,3µm,22.0s
**121A Cookes Peak, D 127.66 57** P **PKPdf** **07 27 14.8 -1.1**
baz=282,SNR=9.7
**LIJA Lijar 127.80 309** PKP **PKiKP** **07 27 17.7 +1.2**
**E28A Huff 127.95 38** IAMs_20 IAMs_20 08 20 56.3
comp=Z,2µm,22.0s
**MDND Maddock 127.97 36** **PKiKP** **07 27 16.9 +0.5**
MDND IAMs_20 IAMs_20 08 14 27.7
comp=Z,2µm,22.0s
**Q24A Divide 128.00 49** P **PKPdf** **07 27 15.2 -1.3**
baz=289
**Y22D IRIS PASSCAL I 128.01 55** IAMs_20 IAMs_20 08 22 44.4
comp=Z,3µm,20.0s
**Y22D IRIS PASSCAL I 128.01 55** P **PKPdf** **07 27 14.4 -2.1**
baz=284
**BRIGG Briggsdale 128.05 46** IAMs_20 IAMs_20 08 19 21.0
comp=Z,2µm,21.0s
**ECEU Ceuta 128.06 307** PKP **PKiKP** **07 27 17.7 +0.8**
**PVRL Vila Real 128.07 315** *e*PKP **PKiKP** **07 27 21.2 +4.4**
**POLO Lamas de Olo 128.09 315** *e*PKP **PKiKP** **07 27 21.1 +4.2**
POLO *e*SKP 07 30 48.6
**ESPR Espera 128.16 309** PKP **PKiKP** **07 27 18.0 +1.0**
**ANMO Albuquerque 128.17 54** IAMs_20 IAMs_20 08 21 21.4
comp=Z,2µm,21.0s
**PGAV Gavieira, Arco 128.19 316** *e*PKP **PKPdf** **07 27 16.7 +0.2**
PGAV *e*SKP 07 30 44.2
**PGAV Gavieira, Arco 128.19 316** *e*LQ LQ 08 05 53.8
PGAV *e*LR LR 08 12 44.2
comp=Z,3µm,20.0s
**MDT Midelt 128.20 303** PKP **PKiKP** **07 27 17.8 +0.4**
comp=Z,11nm,1.1s,baz=69,slow=2.4,SNR=10.0
**MTE Manteigas 128.26 313** *e*PKP **PKiKP** **07 27 18.6 +1.3**
MTE *e*SKP 07 30 43.3
**MTE Manteigas 128.26 313** *e*LR LR 08 13 07.5
comp=Z,4µm,22.0s
**PVIS Viseu 128.40 314** *e*PKP **PKiKP** **07 27 18.9 +1.4**
PVIS *e*SKP 07 30 44.5
**PCBR Castelo Branco 128.41 313** *e*PKP **PKiKP** **07 27 19.3 +1.8**
**IFR Ifrane 128.47 304** PKP **PKiKP** **07 27 19.8 +1.8**
**PMRV Marv??o 128.50 312** *e*PKP **PKiKP** **07 27 19.1 +1.4**
PMRV *e*SKP 07 30 43.8
**PMRV Marv??o 128.50 312** *e*LR LR 08 13 33.1
comp=Z,3µm,22.0s
**EMIN Mina Concepcio 128.51 310** PKP **PKiKP** **07 27 18.5 +0.7**

**PBAR Barrancos 128.65 311** *e*PKP **PKiKP 07 27 19.8 +1.8**
PBAR *e*SKP 07 30 46.5
**PBAR Barrancos 128.65 311** PKP **PKiKP 07 27 20.2 +2.2**
**ULM Lac du Bonnet 128.71 32** PKP **PKPdf 07 27 17.2 +0.1**
comp=Z,12nm,0.8s,baz=328,slow=3.5,SNR=9.2
**PESTR Estremoz 128.83 312** *e*SKP 07 30 44.9
**PESTR Estremoz 128.83 312** PKP **PKiKP 07 27 19.2 +0.9**
**COI Coimbra 128.95 314** IAMs_20 IAMs_20 08 28 47.5
comp=Z,3µm,22.0s
**COI Coimbra 128.95 314** *e*SKP 07 30 46.8
**PCAS Casmilo, Conde 129.07 313** *e*SKP 07 30 47.9
**T25A Trinidad 129.13 51** P **PKPdf 07 27 17.1 -1.6**
baz=288
**PMTG Montargil 129.23 312** *e*PKP **PKPdf 07 27 16.4 -2.0**
PMTG *e*SKP 07 30 47.4
**EVO Evora 129.26 311** *e*PKP **PKPdf 07 27 18.8 +0.3**
EVO *e*SKP 07 30 46.8
**PBEJ Beja 129.32 311** *e*PKP **PKiKP 07 27 20.5 +1.1**
**PVAQ Vaqueiros 129.41 310** IAMs_20 IAMs_20 08 29 48.8
comp=Z,4µm,22.0s
**PVAQ Vaqueiros 129.41 310** *e*SKP 07 30 48.1
**PVAQ Vaqueiros 129.41 310** *e*LQ LQ 08 03 01.2
**PVAQ Vaqueiros 129.41 310** *e*LR LR 08 14 05.2
comp=Z,4µm,22.0s
**PSBE So Bento 129.48 313** *e*PKP **PKiKP 07 27 23.8 +4.1**
PSBE *e*SKP 07 30 47.8
**DBIC Dimbokro 129.50 270** PKP **PKiKP 07 27 20.4 +0.1**
comp=Z,33nm,0.9s,baz=24,slow=1.9,SNR=7.8
**OGNE Ogallala 129.52 45** IAMs_20 IAMs_20 08 30 11.7
comp=Z,2µm,21.0s
**PCVE Castro Verde 129.58 310** *e*PKP **PKiKP 07 27 21.8 +1.9**
PCVE *e*SKP 07 30 48.6
**PBDV Barranco-do-Ve 129.62 310** *e*PKP **PKPdf 07 27 19.4 +0.1**
PBDV *e*SKP 07 30 49.6
**MESJ Messejana 129.64 311** IAMs_20 IAMs_20 08 34 58.9
comp=Z,3µm,21.0s
**MESJ Messejana 129.64 311** *e*PKP **PKiKP 07 27 22.8 +2.8**
MESJ *e*SKP 07 30 48.0
**PNCL Nicolau / Gran 129.78 311** *e*PKP **PKiKP 07 27 24.4 +4.1**
PNCL *e*SKP 07 30 46.7
**KSCO Kaye Shedlock' 129.83 48** IAMs_20 IAMs_20 08 17 41.9
comp=Z,2µm,22.0s
**AGMN Agassiz Nation 129.84 34** PKPdf **PKiKP 07 27 20.7 +0.6**
AGMN IAMs_20 IAMs_20 08 25 31.1
comp=Z,2µm,19.0s
**SUSD Miller 130.04 40** IAMs_20 IAMs_20 08 26 51.8
comp=Z,2µm,20.0s
**MORF Marmelete 130.15 310** IAMs_20 IAMs_20 08 31 11.3
comp=Z,3µm,20.0s
**MORF Marmelete 130.15 310** *e*PKP **PKiKP 07 27 25.6 +4.5**
MORF *e*SKP 07 30 47.6
**PFVI Vila Bisbo 130.33 310** IAMs_20 IAMs_20 08 31 26.3
comp=Z,3µm,20.0s
**PFVI Vila Bisbo 130.33 310** *e*PKP **PKiKP 07 27 26.6 +5.2**
PFVI *e*SKP 07 30 52.9
**F33A 5 Mile Ranch, 130.95 37** IAMs_20 IAMs_20 08 25 46.8
comp=Z,2µm,22.0s
**TRQA Tornquist 131.08 174** PKPdf **PKiKP 07 27 22.9 -0.2**
**TRQA Tornquist 131.08 174** PKiKP **PKiKP 07 27 22.9 -0.2**
TRQA MLR MLR
comp=Z,9µm,20.0s
**TXAR Lajitas Array 131.79 60** PKhKP PKPpre 07 27 14.5
comp=Z,1.0nm,0.7s,baz=225,slow=1.1,SNR=13
**AMTX Amarillo 131.94 52** IAMs_20 IAMs_20 08 30 26.3
comp=Z,3µm,20.0s
**BGNE Belgrade 131.98 43** IAMs_20 IAMs_20 08 20 49.5
comp=Z,3µm,22.0s
**CBKS Cedar Bluff 131.99 47** IAMs_20 IAMs_20 08 29 51.0
comp=Z,2µm,20.0s
**EYMN Ely 132.39 32** IAMs_20 IAMs_20 08 24 23.5
comp=Z,3µm,22.0s
**R32A Long Quarter, 132.88 47** **PKiKP 07 27 26.3 -0.3**
R32A IAMs_20 IAMs_20 08 35 49.7
comp=Z,2µm,21.0s
**L34A Svendsen Farm, 132.89 41** **PKPdf 07 27 25.5 +0.2**
L34A IAMs_20 IAMs_20 08 38 54.4
comp=Z,2µm,22.0s
**SAND Sanderson 132.96 59** **PKPdf 07 27 23.8 -2.0**
**SPMN Marine on St. 133.33 36** PKPdf **PKiKP 07 27 26.8 -0.4**
**OK038 West end E0370 133.63 49** IAMs_20 IAMs_20 08 27 57.6
comp=Z,2µm,21.0s
**I37A Lemond, Waseca 133.67 37** IAMs_20 IAMs_20 08 25 32.8
comp=Z,3µm,22.0s
**OK032 Salt Plains WL 133.90 49** IAMs_20 IAMs_20 08 24 01.6
comp=Z,2µm,22.0s
**KSU1 Kansas State U 134.08 45** IAMs_20 IAMs_20 08 31 21.3
comp=Z,2µm,20.0s
**WMOK Wichita Mounta 134.24 52** IAMs_20 IAMs_20 08 23 54.0
comp=Z,3µm,22.0s
**ABTX Abilene, Hawle 134.26 55** **PKPdf 07 27 28.5 +0.3**
ABTX IAMs_20 IAMs_20 08 30 58.4
comp=Z,2µm,19.0s
**JCT Junction City 134.76 58** IAMs_20 IAMs_20 08 28 05.0
comp=Z,3µm,22.0s
**G40A Rib Lake 134.77 34** IAMs_20 IAMs_20 08 36 35.5
comp=Z,2µm,22.0s
**COWI Conover 134.81 33** IAMs_20 IAMs_20 08 25 45.6
comp=Z,2µm,22.0s
**OK029 Liberty Lake 134.85 50** **PKPdf 07 27 28.6 -0.6**
OK029 IAMs_20 IAMs_20 08 26 25.4
comp=Z,3µm,22.0s
**SCIA State Center 134.94 40** IAMs_20 IAMs_20 08 33 26.6
comp=Z,2µm,20.0s
**OK048 Pawnee Station 134.98 49** IAMs_20 IAMs_20 08 33 16.5
comp=Z,3µm,21.0s
**OK051 E0350 and S346 135.03 48** IAMs_20 IAMs_20 08 33 28.6
comp=Z,3µm,22.0s
**SCHQ Schefferville 135.20 9** PKP **PKPdf 07 27 29.0 -0.3**
comp=Z,9.1nm,0.8s,baz=313,slow=3.3,SNR=5.4
**OK031 S. Brethren Rd 135.25 49** IAMs_20 IAMs_20 08 33 31.5
comp=Z,3µm,20.0s
**OK052 Battle Ridge R 135.26 49** IAMs_20 IAMs_20 08 33 41.8
comp=Z,3µm,20.0s
**I40A Norwalk 135.38 36** IAMs_20 IAMs_20 08 32 14.8
comp=Z,2µm,22.0s
**N38A Joes South For 135.52 41** IAMs_20 IAMs_20 08 32 31.0
comp=Z,2µm,22.0s
**F42A Maple Grove Fa 135.57 32** IAMs_20 IAMs_20 08 29 37.5
comp=Z,2µm,20.0s
**833A Chaparral WMA, 135.67 60** P **PKPdf 07 27 29.3 -1.6**
baz=284
**FW06 Azle 135.81 53** IAMs_20 IAMs_20 08 28 39.8
comp=Z,2µm,20.0s
**P38A Dawn 135.92 43** IAMs_20 IAMs_20 08 32 13.8
comp=Z,2µm,20.0s
**Z35A Perchaven, San 135.92 53** IAMs_20 IAMs_20 08 35 51.1
comp=Z,2µm,19.0s
**TUL3 Leonard 136.04 49** **PKPdf 07 27 31.6 +0.2**
TUL3 IAMs_20 IAMs_20 08 30 42.5
comp=Z,3µm,20.0s
**L40A Anamosa 136.09 38** IAMs_20 IAMs_20 08 41 21.9
comp=Z,2µm,21.0s
**JFWS Jewell Farm 136.18 37** IAMs_20 IAMs_20 08 34 45.1
comp=Z,2µm,19.0s
**I42A Draeger Farm, 136.35 35** IAMs_20 IAMs_20 08 21 53.4
comp=Z,2µm,20.0s
**435B Jarrell 136.50 56** IAMs_20 IAMs_20 08 28 16.3
comp=Z,2µm,20.0s
**435B Jarrell 136.50 56** P **PKPdf 07 27 31.9 -0.5**
baz=288
**H43A Windswept, Lux 136.61 33** IAMs_20 IAMs_20 08 29 44.1
comp=Z,2µm,21.0s
**U38A Gravette 136.84 47** IAMs_20 IAMs_20 08 28 59.5
comp=Z,2µm,20.0s
**P40A Paris 136.96 42** IAMs_20 IAMs_20 08 41 05.1
comp=Z,3µm,22.0s
**S39A Bolivar 137.02 45** IAMs_20 IAMs_20 08 28 02.2
comp=Z,2µm,22.0s
**E46A Sault Ste Mari 137.06 29** **PKPdf 07 27 33.0 0.0**
E46A IAMs_20 IAMs_20 08 34 19.8
comp=Z,2µm,21.0s
**L42A Oliver, Polo 137.07 38** IAMs_20 IAMs_20 08 40 48.6
comp=Z,2µm,21.0s
**N41A Harden Midland 137.09 40** IAMs_20 IAMs_20 08 30 07.3
comp=Z,2µm,22.0s
**HHAR Hobbs 137.23 47** **PKPdf 07 27 31.5 -2.2**
**UNM Universidad Na 137.38 73** IAMs_20 IAMs_20 08 28 37.3
comp=Z,3µm,20.0s
**K43A Burlington 137.42 36** IAMs_20 IAMs_20 08 31 31.9
comp=Z,2µm,22.0s
**237A Washetta, Mont 137.53 54** IAMs_20 IAMs_20 08 24 46.4
comp=Z,2µm,22.0s
**PLTB Pedras Altas 137.65 183** **PKPdf 07 27 33.2 -1.3**
**I45A Fountain 137.72 33** IAMs_20 IAMs_20 08 25 17.5
comp=Z,3µm,22.0s
**L44A Lake County Fo 138.00 36** IAMs_20 IAMs_20 08 37 37.1
comp=Z,3µm,22.0s
**L44A Lake County Fo 138.00 36** P **PKPdf 07 27 34.6 -0.2**
baz=309
**PMAR Madeira 138.11 308** *e*PKP **PKiKP 07 27 37.3 -0.3**
**HDIL Hopedale 138.15 39** IAMs_20 IAMs_20 08 33 21.3
comp=Z,2µm,22.0s
**CCM Cathedral Cave 138.26 43** IAMs_20 IAMs_20 08 41 07.7
comp=Z,2µm,21.0s
**HQIL Hanson Quary C 138.26 37** IAMs_20 IAMs_20 08 30 27.2
comp=Z,2µm,22.0s
**PMOZ Porto Moniz, M 138.29 308** *e*LR LR 08 17 13.1
comp=Z,3µm,20.0s
**M44A Midewin, Midew 138.41 37** IAMs_20 IAMs_20 08 35 09.1
comp=Z,2µm,20.0s
**VLDQ Val d'Or 138.59 22** **PKPdf 07 27 36.0 +0.4**
**T42A Van Buren 138.89 45** IAMs_20 IAMs_20 08 35 01.5
comp=Z,2µm,21.0s
**J47A Sumner 139.02 33** IAMs_20 IAMs_20 08 27 37.8
comp=Z,2µm,21.0s
**L46A Eue Claire 139.03 35** IAMs_20 IAMs_20 08 42 24.3
comp=Z,3µm,20.0s
**Q44A Meyer Farm, Va 139.27 41** IAMs_20 IAMs_20 08 40 33.3
comp=Z,2µm,20.0s
**MACI Morro de la Ar 139.30 301** IAMs_20 IAMs_20 08 37 05.1
comp=Z,3µm,20.0s
**I49A Point Hope 139.55 30** IAMs_20 IAMs_20 08 27 26.6
comp=Z,2µm,20.0s
**SFIN Lafayette 139.59 38** IAMs_20 IAMs_20 08 35 49.5
comp=Z,2µm,20.0s
**S44A Carbondale 139.79 43** IAMs_20 IAMs_20 08 26 03.0
comp=Z,3µm,21.0s
**P46A Rosedale 139.99 39** IAMs_20 IAMs_20 08 40 33.1
comp=Z,3µm,21.0s
**441A DeRidder 140.07 54** IAMs_20 IAMs_20 08 29 55.7
comp=Z,2µm,21.0s
**N47A Urbana 140.10 36** IAMs_20 IAMs_20 08 28 06.9
comp=Z,2µm,20.0s
**L48A N Adams 140.11 34** IAMs_20 IAMs_20 08 32 50.8
comp=Z,3µm,22.0s
**GNAR Gosnell 140.17 45** **PKPdf 07 27 37.7 -1.3**
**AAM Ann Arbor 140.28 33** IAMs_20 IAMs_20 08 36 06.3
comp=Z,2µm,22.0s
**K50A Casco 140.49 31** IAMs_20 IAMs_20 08 28 58.7
comp=Z,3µm,21.0s
**143A Socs Landing, 140.69 51** IAMs_20 IAMs_20 08 27 43.0
comp=Z,2µm,20.0s
**LDAQ Lac Daran 140.73 16** PKPdf **PKPdf 07 27 39.8 +0.1**
**N49A Columbus Grove 140.94 35** IAMs_20 IAMs_20 08 35 53.9
comp=Z,2µm,22.0s
**P48A Milroy 141.17 38** IAMs_20 IAMs_20 08 30 58.2
comp=Z,3µm,22.0s
**OXF Oxford 141.33 47** **PKPdf 07 27 39.1 -2.0**
OXF IAMs_20 IAMs_20 08 29 17.4
comp=Z,2µm,20.0s
**OXF Oxford 141.33 47** PKiKP **PKPdf 07 27 39.1 -2.0**
OXF MLR MLR
comp=Z,2µm,20.0s
**O49A Covington 141.34 36** IAMs_20 IAMs_20 08 44 52.6
comp=Z,3µm,22.0s
**WCI Wyandotte Cave 141.40 40** IAMs_20 IAMs_20 08 42 07.4
comp=Z,2µm,20.0s
**P49A Miami Univ. Ec 141.54 37** IAMs_20 IAMs_20 08 42 47.1
comp=Z,2µm,21.0s
**P49A Miami Univ. Ec 141.54 37** P **PKPdf 07 27 41.0 -0.4**
baz=310
**BART Pico Bartolome 141.55 319** *e*PKP **PKPdf 07 27 38.9 -2.6**
**Y45A Yeager Farm, C 141.55 48** PKPdf **PKPdf 07 27 39.9 -1.6**
Y45A IAMs_20 IAMs_20 08 30 58.1
comp=Z,2µm,22.0s
**VBMS Vicksburg 141.57 51** IAMs_20 IAMs_20 08 27 37.5
comp=Z,3µm,21.0s
**WVT Waverly 141.59 44** IAMs_20 IAMs_20 08 37 27.2
comp=Z,2µm,21.0s
**GO02 Mina Guanaco 141.84 160** **PKPdf 07 27 40.5 -2.3**
**PSMN Pico do Norte, 141.93 318** *e*PKP **PKPdf 07 27 40.3 -1.8**
**N51A Ashland 141.94 33** IAMs_20 IAMs_20 08 45 05.1
comp=Z,2µm,21.0s
**PSMA Santa Maria 141.98 318** *e*PKP **PKPdf 07 27 41.5 -0.7**
**M52A Chesterland 142.03 32** IAMs_20 IAMs_20 08 43 29.5
comp=Z,2µm,22.0s
**PLAL Pickwick Lake 142.04 45** **PKPdf 07 27 41.9 -0.5**
**J54A Appleton 142.04 27** IAMs_20 IAMs_20 08 29 35.2
comp=Z,3µm,22.0s
**R49A Shelbyville 142.06 39** IAMs_20 IAMs_20 08 36 53.9
comp=Z,2µm,20.0s
**ACSO Alum Creek Sta 142.08 35** IAMs_20 IAMs_20 08 45 02.0
comp=Z,2µm,21.0s
**PSBA Serra de Santa 142.27 322** *e*PKP **PKiKP 07 27 44.4 -1.3**
**ERPA Erie 142.29 30** IAMs_20 IAMs_20 08 34 08.1
comp=Z,3µm,21.0s
**J55A Hilton 142.41 27** IAMs_20 IAMs_20 08 30 31.0
comp=Z,2µm,20.0s
**M53A WI Miller and 142.45 31** IAMs_20 IAMs_20 08 29 03.5
comp=Z,2µm,22.0s
**M53A WI Miller and 142.45 31** P **PKPdf 07 27 41.9 -1.1**
baz=317,SNR=9.6
**146A Union 142.49 49** **PKPdf 07 27 41.6 -1.7**
146A IAMs_20 IAMs_20 08 28 47.1
comp=Z,2µm,21.0s
**P51A Williamsport 142.54 36** IAMs_20 IAMs_20 08 38 21.4
comp=Z,2µm,22.0s
**R50A Paris 142.58 38** IAMs_20 IAMs_20 08 36 44.6
comp=Z,3µm,21.0s
**LONY Lake Ozonia 142.61 22** IAMs_20 IAMs_20 08 33 34.7
comp=Z,3µm,22.0s
**Q51A Peebles 142.68 36** IAMs_20 IAMs_20 08 43 26.1
comp=Z,2µm,21.0s
**346A Big Creek Wild 142.74 51** **PKPdf 07 27 42.9 -0.8**
**PQI Presque Isle 142.76 14** **PKPdf 07 27 42.5 -0.8**
**O52A Adamsville 142.79 34** IAMs_20 IAMs_20 08 45 38.8
comp=Z,2µm,22.0s
**J56A Wolcott 142.82 26** IAMs_20 IAMs_20 08 43 01.9
comp=Z,2µm,21.0s
**N53A Lisbon 142.83 32** IAMs_20 IAMs_20 08 34 18.7
comp=Z,2µm,21.0s
**Z47A Carrollton 142.94 48** **PKPdf 07 27 44.0 0.0**
Z47A IAMs_20 IAMs_20 08 36 44.5
comp=Z,3µm,21.0s
**P52A Corning 142.96 35** IAMs_20 IAMs_20 08 44 25.4
comp=Z,3µm,21.0s
**P52A Corning 142.96 35** P **PKPdf 07 27 44.3 +0.4**
baz=314
**F62A Pittston Farm, 142.98 16** **PKPdf 07 27 44.0 +0.3**
F62A IAMs_20 IAMs_20 08 44 37.4
comp=Z,3µm,22.0s
**PPNO Prainha do Por 143.02 323** *e*PKP PKPbc 07 27 42.0 +1.1
**O53A New Philadelph 143.03 33** IAMs_20 IAMs_20 08 30 40.2
comp=Z,3µm,22.0s
**O53A New Philadelph 143.03 33** P **PKPdf 07 27 42.8 -1.2**
baz=316,SNR=8.3
**X48A Hartselle 143.04 45** IAMs_20 IAMs_20 08 39 58.4
comp=Z,2µm,22.0s
**T50A Nancy 143.05 40** IAMs_20 IAMs_20 08 37 03.2
comp=Z,3µm,20.0s
**J57A Williamstown 143.07 25** IAMs_20 IAMs_20 08 40 13.2
comp=Z,2µm,21.0s
**CPUP Villa Florida 143.09 178** PKP **PKPdf 07 27 43.4 -1.2**
comp=Z,7.6nm,1.0s,baz=210,slow=1.5,SNR=7.2
**PICO Pico 143.10 323** *e*PKP **PKPdf 07 27 43.3 -0.9**
**Q52A Bidwell 143.35 36** IAMs_20 IAMs_20 08 42 41.6
comp=Z,2µm,21.0s
**SWET Sewanee 143.39 44** **PKPdf 07 27 44.1 -0.7**
**F63A Nahmakanta, Br 143.39 16** **PKPdf 07 27 43.4 -1.0**
F63A IAMs_20 IAMs_20 08 31 25.3
comp=Z,2µm,22.0s
**J58A Remsen 143.40 24** **PKPdf 07 27 44.8 +0.2**
J58A IAMs_20 IAMs_20 08 33 36.1
comp=Z,2µm,21.0s
**K57A Scipio Center 143.41 26** **PKPdf 07 27 44.1 -0.5**
K57A IAMs_20 IAMs_20 08 46 26.5
comp=Z,2µm,22.0s
**L56A Greenwood 143.43 28** **PKPdf 07 27 44.6 -0.1**
L56A IAMs_20 IAMs_20 08 45 12.8
comp=Z,3µm,21.0s
**S51A Beattyville 143.44 38** IAMs_20 IAMs_20 08 39 18.3
comp=Z,2µm,20.0s
**P53A Whipple 143.48 34** **PKPdf 07 27 44.9 +0.1**
**VT1 Waterbury 143.51 21** **PKPdf 07 27 45.3 +0.6**
VT1 IAMs_20 IAMs_20 08 32 11.1
comp=Z,3µm,22.0s
**O54A Avella 143.53 32** IAMs_20 IAMs_20 08 38 44.1
comp=Z,2µm,22.0s
**J59A Piesco 143.62 23** **PKPdf 07 27 44.7 -0.2**
**PKME Peaks-Kenny Pk 143.74 16** **PKPdf 07 27 44.0 -1.1**
PKME IAMs_20 IAMs_20 08 31 46.4
comp=Z,3µm,22.0s
**Y49A Blount Mountai 143.80 46** PKPbc 07 27 44.1 +1.0
Y49A IAMs_20 IAMs_20 08 33 06.8
comp=Z,3µm,21.0s
**LRAL Lakeview Retre 143.81 47** IAMs_20 IAMs_20 08 27 46.1
comp=Z,3µm,21.0s
**H62A Milan 143.82 19** **PKPdf 07 27 45.8 +0.5**
**LBNH Lisbon 143.87 20** IAMs_20 IAMs_20 08 41 16.3
comp=Z,3µm,22.0s
**FPAL Fort Paine 143.98 44** PKPdf PKPbc 07 27 44.2 +0.5
**ACCN Adirondack Com 144.01 22** PKPbc 07 27 43.8 +0.4
**BINY Binghamton 144.07 26** PKPbc 07 27 44.4 +0.7
BINY IAMs_20 IAMs_20 08 39 04.9
comp=Z,2µm,21.0s
**Q54A Coxs Mills 144.14 34** PKPbc 07 27 44.9 +0.9
Q54A IAMs_20 IAMs_20 08 46 11.5
comp=Z,2µm,22.0s
**TZTN Tazewell 144.16 40** PKPbc 07 27 44.5 +0.4
TZTN IAMs_20 IAMs_20 08 33 56.5
comp=Z,3µm,22.0s
**MCWV Mont Chateau 144.19 32** **PKPdf 07 27 45.3 -0.8**
MCWV IAMs_20 IAMs_20 08 45 35.7
comp=Z,2µm,20.0s
**CPCT Cooper Cave 144.19 42** PKPdf PKPbc 07 27 44.6 +0.3
**LMN Caledonia Moun 144.21 11** **PKPdf 07 27 45.3 -0.6**
**HNH Hanover 144.22 21** PKPdf **PKPdf 07 27 45.5 -0.4**
HNH IAMs_20 IAMs_20 08 44 34.4
comp=Z,3µm,22.0s
**G65A Princeton 144.25 14** PKPbc 07 27 44.5 +0.4
G65A IAMs_20 IAMs_20 08 40 56.6
comp=Z,3µm,22.0s
**M57A Sunshine Farm, 144.25 28** PKPdf PKPbc 07 27 44.8 +0.5
**WVL Waterville 144.28 17** PKPbc 07 27 44.8 +0.5
WVL IAMs_20 IAMs_20 08 38 27.0
comp=Z,3µm,22.0s
**CCIG Comitan 144.31 77** *i* P **PKiKP 07 27 53.3 +2.6**
CCIG IAML 07 28 10.6
comp=Z,170nm,1.0s
**I62A Tamworth 144.39 19** PKPdf **PKPdf 07 27 46.0 -0.2**
**LVC Limon Verde 144.43 159** PKP **PKPdf 07 27 47.0 -0.4**
comp=Z,30nm,0.9s,baz=214,slow=3.0,SNR=25
**SSPA Standing Stone 144.44 29** PKPbc 07 27 45.2 +0.4
**SSPA Standing Stone 144.44 29** IAMs_20 IAMs_20 08 46 06.2
comp=Z,2µm,22.0s
**J61A Chester 144.44 21** PKPbc 07 27 45.1 +0.3
J61A IAMs_20 IAMs_20 08 43 19.6
comp=Z,2µm,22.0s
**L59A Walton 144.47 25** PKPbc 07 27 45.3 +0.3
L59A IAMs_20 IAMs_20 08 33 49.6
comp=Z,2µm,21.0s
**I63A Otisfield 144.48 18** PKPdf **PKPdf 07 27 45.8 -0.6**
I63A IAMs_20 IAMs_20 08 39 39.9
comp=Z,3µm,21.0s
**X51A Calhoun 144.48 44** PKPbc 07 27 45.5 +0.3
X51A IAMs_20 IAMs_20 08 37 57.6
comp=Z,2µm,21.0s
**TRY Troy 144.57 23** **PKPdf 07 27 46.3 -0.2**
TRY IAMs_20 IAMs_20 08 33 13.9
comp=Z,2µm,22.0s
**BRAL Brewton 144.68 50** PKPdf **PKPdf 07 27 47.4 +0.3**
BRAL IAMs_20 IAMs_20 08 31 45.7
comp=Z,2µm,21.0s
**KSPA Keystone Colle 144.69 26** PKPbc 07 27 45.7 0.0
**S54A Dingess, Beckl 144.69 36** **PKPab 07 27 45.7 0.0**
S54A IAMs_20 IAMs_20 08 39 18.2
comp=Z,2µm,20.0s
**EMMW East Machias 144.74 14** **PKPdf 07 27 46.5 -0.3**
**W52A Murphy 144.79 42** **PKPdf 07 27 46.8 -0.5**
**RTAL Retalhuleu 144.83 80** *i* P **PKPdf 07 27 48.1 +0.3**
RTAL IAML 07 28 44.1
comp=Z,410nm,1.0s
**N58A Sunbury 144.84 28** PKPdf **PKPab 07 27 46.0 -0.1**
N58A IAMs_20 IAMs_20 08 35 45.3
comp=Z,2µm,21.0s
**250A Grady 144.87 48** PKPdf **PKPdf 07 27 47.1 -0.3**
250A IAMs_20 IAMs_20 08 34 13.5
comp=Z,2µm,21.0s
**HUEH Huehuetenango 144.98 79** *i* P **PKPdf 07 27 49.3 +1.0**
HUEH IAML 07 28 00.4
comp=Z,620nm,1.0s
**Q56A Snyder Ridge, 144.99 33** PKPbc 07 27 47.0 +0.2
**R55A Marlinton 145.03 34** **PKPab 07 27 47.0 0.0**
R55A IAMs_20 IAMs_20 08 41 24.0
comp=Z,2µm,21.0s
**SOKI Kika Raxquin 145.10 80** *i* P **PKPdf 07 27 50.3 +1.5**
SOKI IAML 07 28 06.6
comp=Z,620nm,1.0s
**V53A Saluda 145.17 40** IAMs_20 IAMs_20 08 40 17.3
comp=Z,3µm,22.0s
**L61B Northampton 145.18 22** IAMs_20 IAMs_20 08 45 09.0
comp=Z,2µm,21.0s
**L61B Northampton 145.18 22** P **PKPab 07 27 47.3 +0.1**
baz=330
**U54A Nelsons Funny 145.24 38** **PKPbc 07 27 47.7 0.0**
**P57A Homestead Farm 145.26 31** **PKPbc 07 27 47.5 -0.1**
P57A IAMs_20 IAMs_20 08 46 55.0
comp=Z,2µm,21.0s
**Y52A Lilburn 145.42 44** IAMs_20 IAMs_20 08 39 50.6
comp=Z,2µm,21.0s
**KSCT Kent School, K 145.49 24** **PKPab 07 27 48.4 0.0**
**SDMD Soldier's Deli 145.90 30** **PKPab 07 27 49.9 -0.2**
**UCCT U. Connecticut 145.91 22** **PKPbc 07 27 49.6 +0.1**
**451A Vernon 145.93 50** IAMs_20 IAMs_20 08 45 51.7
comp=Z,2µm,21.0s
**PAL Palisades 145.93 25** **PKPbc 07 27 49.4 -0.2**
**PAL Palisades 145.93 25** PKP2 **PKPbc 07 27 49.4 -0.2**
**APG El Apazote 146.00 79** PKPbc **PKPbc 07 27 50.9 +0.1**
comp=Z,11nm,1.0s,baz=295,slow=5.9,SNR=43
**WSPT Westport, CT 146.03 24** PKPbc **PKPab 07 27 50.2 -0.2**
WSPT IAMs_20 IAMs_20 08 42 01.6
comp=Z,2µm,20.0s
**S57A Dark Hollow, R 146.04 34** **PKPdf 07 27 49.3 0.0**
S57A IAMs_20 IAMs_20 08 33 57.9
comp=Z,2µm,21.0s
**V55A Taylorsville 146.05 39** PKPbc **PKPdf 07 27 49.5 +0.2**
**WUPA West Chester U 146.07 28** PKPbc **PKPbc 07 27 50.0 0.0**
**CPNY Central Park 146.09 25** **PKPbc 07 27 50.3 +0.2**
**GOGA Godfrey 146.09 44** **PKPbc 07 27 50.6 +0.3**
**GOGA Godfrey 146.09 44** IAMs_20 IAMs_20 08 45 46.0
comp=Z,2µm,21.0s
**GOGA Godfrey 146.09 44** PKP2 **PKPbc 07 27 50.6 +0.3**
**352A Blakely 146.11 48** IAMs_20 IAMs_20 08 36 36.9
comp=Z,2µm,20.0s
**N62A Caumsett State 146.17 24** **PKPbc 07 27 50.5 +0.2**
N62A IAMs_20 IAMs_20 08 44 09.5
comp=Z,2µm,22.0s
**U56A King 146.22 37** **PKPbc 07 27 50.6 0.0**
**L64A Middleborough 146.28 20** IAMs_20 IAMs_20 08 39 42.2
comp=Z,3µm,22.0s
**PETF Flores 146.42 76** *i* P **PKPab 07 27 52.6 -0.1**
PETF IAML 07 28 02.6
comp=Z,260nm,1.0s
**R58B Mineral 146.47 32** **PKPdf 07 27 50.6 +0.6**
R58B IAMs_20 IAMs_20 08 44 43.2
comp=Z,2µm,22.0s
**CBN Corbin Frederi 146.56 32** IAMs_20 IAMs_20 08 47 48.2
comp=Z,3µm,22.0s
**P61A Hammonton 146.65 27** IAMs_20 IAMs_20 08 47 06.2
comp=Z,3µm,21.0s
**M65A Busby, Falmout 146.68 20** IAMs_20 IAMs_20 08 40 27.7
comp=Z,3µm,22.0s
**M65A Busby, Falmout 146.68 20** P **PKPdf 07 27 50.3 +0.1**
baz=333
**NUBE Las Nubes 146.70 81** *i* P **PKPbc 07 27 52.5 -0.4**
NUBE IAML 07 28 21.0
comp=Z,260nm,1.0s
**154A Montrose 146.79 45** IAMs_20 IAMs_20 08 40 40.8
comp=Z,2µm,21.0s
**CEVE Cerro Verde 146.86 81** *i* P **PKPdf 07 27 51.8 +0.2**
CEVE IAML 07 28 13.1
comp=Z,190nm,1.0s
**UNIC Universidad Ca 146.93 81** *i* P **PKPbc 07 27 52.6 -0.8**
UNIC IAML 07 28 33.3
comp=Z,210nm,1.0s
**JAYA Jayaque - finc 147.03 82** *i* P **PKPab 07 27 55.7 +0.4**
JAYA IAML 07 28 17.5
comp=Z,350nm,1.0s
**MTO3 Montecristo 147.09 80** *i* P **PKPbc 07 27 53.0 -1.0**
MTO3 IAML 07 28 29.7
comp=Z,110nm,1.0s
**TIGA Tifton 147.10 47** IAMs_20 IAMs_20 08 35 42.1
comp=Z,2µm,22.0s
**ESQI Esquipulas 147.10 80** *i* P **PKiKP 07 27 56.7 +0.3**
ESQI IAML 07 28 16.3
comp=Z,250nm,1.0s
**553A Crawfordville 147.13 50** IAMs_20 IAMs_20 08 45 19.4
comp=Z,3µm,22.0s

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|---|---|---|---|---|---|---|---|---|
| **LALI** | **Alcalda de L** | **147.16** | **82** | *i* P | | **PKPab** | **07 27 55.3** | **-0.3** |
| LALI | | | | IAML | | | 07 28 06.1 | |
| | comp=Z,99nm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **147.16** | **81** | *i* P | | **PKPab** | **07 27 55.0** | **-0.7** |
| PMON | | | | IAML | | | 07 28 06.5 | |
| | comp=Z,270nm,1.0s | | | | | | | |
| **ITCA** | **Escuela Especi** | **147.20** | **81** | *i* P | | **PKPbc** | **07 27 54.1** | **-0.1** |
| ITCA | | | | IAML | | | 07 28 08.2 | |
| | comp=Z,1µm,1.0s | | | | | | | |
| **SNET** | **Serv Nac Est T** | **147.24** | **81** | IAMs_20 | IAMs_20 | | 08 26 08.2 | |
| | comp=Z,3µm,21.0s | | | | | | | |
| **W57A** | **Gilead** | **147.25** | **38** | IAMs_20 | IAMs_20 | | 08 34 54.4 | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **LOMA** | **Loma Larga** | **147.30** | **82** | *i* P | | **PKiKP** | **07 27 57.0** | **+0.2** |
| LOMA | | | | IAML | | | 07 28 15.4 | |
| | comp=Z,120nm,1.0s | | | | | | | |
| **V58A** | **Windy Hill, Pi** | **147.34** | **37** | IAMs_20 | IAMs_20 | | 08 34 44.6 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **T59A** | **Double "B" Far** | **147.38** | **33** | IAMs_20 | IAMs_20 | | 08 36 28.3 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| **R61A** | **Willards** | **147.47** | **29** | IAMs_20 | IAMs_20 | | 08 47 49.3 | |
| | comp=Z,3µm,21.0s | | | | | | | |
| **COEG** | **Centro de Oper** | **147.58** | **82** | *i* P | | **PKiKP** | **07 27 56.3** | **-1.0** |
| COEG | | | | IAML | | | 07 28 12.3 | |
| | comp=Z,93nm,1.0s | | | | | | | |
| **255A** | **Hazlehurst** | **147.62** | **45** | IAMs_20 | IAMs_20 | | 08 36 51.8 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| **TECO** | **Alcaldia de Te** | **147.68** | **82** | *i* P | | **PKPbc** | **07 27 55.0** | **-0.4** |
| TECO | | | | IAML | | | 07 28 07.5 | |
| | comp=Z,110nm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **147.73** | **81** | *i* P | | **PKPbc** | **07 27 55.1** | **-0.5** |
| SCLA | | | | IAML | | | 07 28 05.9 | |
| | comp=Z,130nm,1.0s | | | | | | | |
| **Y57A** | **Sumter** | **147.75** | **40** | IAMs_20 | IAMs_20 | | 08 40 18.8 | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **S61A** | **Accomac** | **147.82** | **30** | IAMs_20 | IAMs_20 | | 08 36 56.6 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **PQSS** | **Presa 15 de Se** | **147.89** | **82** | *i* P | | **PKiKP** | **07 27 57.0** | **-0.9** |
| PQSS | | | | IAML | | | 07 28 07.9 | |
| | comp=Z,71nm,1.0s | | | | | | | |
| **X58A** | **Rowland** | **148.06** | **38** | IAMs_20 | IAMs_20 | | 08 47 00.6 | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **PACA** | **Pacayal** | **148.13** | **82** | *i* P | | **PKPab** | **07 28 02.1** | **+2.5** |
| PACA | | | | IAML | | | 07 28 28.0 | |
| | comp=Z,930nm,1.0s | | | | | | | |
| **Y58A** | **Scranton** | **148.28** | **40** | IAMs_20 | IAMs_20 | | 08 41 20.8 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| **INTHN** | **La Esperanza I** | **148.31** | **80** | *i* P | | **PKiKP** | **07 27 59.5** | **+0.4** |
| **MARCA** | **Marcala la Paz** | **148.39** | **81** | *i* P | | **PKiKP** | **07 27 58.7** | **-0.3** |
| **NHSC** | **New Hope** | **148.47** | **41** | IAMs_20 | IAMs_20 | | 08 34 15.9 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| **257A** | **Skidaway Islan** | **148.60** | **44** | IAMs_20 | IAMs_20 | | 08 33 57.6 | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **456A** | **Hilliard** | **148.62** | **47** | IAMs_20 | IAMs_20 | | 08 44 14.2 | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **V61A** | **Roper** | **148.78** | **34** | IAMs_20 | IAMs_20 | | 08 32 41.4 | |
| | comp=Z,3µm,22.0s | | | | | | | |
| **656A** | **Willston** | **148.96** | **50** | IAMs_20 | IAMs_20 | | 08 39 46.6 | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **Y60A** | **Bolivia** | **149.11** | **38** | IAMs_20 | IAMs_20 | | 08 34 21.5 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **149.13** | **81** | IAMs_20 | IAMs_20 | | 08 25 16.7 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **149.13** | **81** | *i* P | | **PKPab** | **07 28 05.5** | **+1.8** |
| TGUH | | | | IAML | | | 07 28 10.1 | |
| | comp=Z,160nm,1.0s | | | | | | | |
| **NNA** | **Nana** | **149.22** | **137** | PKPbc | | **PKPbc** | **07 27 59.3** | **-0.1** |
| | comp=Z,59nm,0.9s,baz=251,slow=5.9,SNR=14 | | | | | | | |
| **DWPF** | **Disney Wildern** | **150.44** | **51** | IAMs_20 | IAMs_20 | | 08 43 36.8 | |
| | comp=Z,3µm,21.0s | | | | | | | |
| **LPAZ** | **La Paz** | **150.48** | **155** | PKPbc | | **PKPbc** | **07 28 02.2** | **-1.0** |
| | comp=Z,22nm,0.8s,baz=122,slow=1.2,SNR=30 | | | | | | | |
| **ATAH** | **Atahualpa** | **151.34** | **127** | PKPbc | | **PKiKP** | **07 28 06.0** | **+0.5** |
| | comp=Z,24nm,0.9s,baz=238,slow=5.2,SNR=7.4 | | | | | | | |
| **JTS** | **Las Juntas de** | **151.37** | **88** | PKPbc | | **PKPbc** | **07 28 03.8** | **-0.8** |
| | comp=Z,19nm,0.9s,baz=199,slow=3.9,SNR=10 | | | | | | | |
| **061Z** | **Ochoppi** | **151.94** | **54** | IAMs_20 | IAMs_20 | | 08 42 24.3 | |
| | comp=Z,2µm,22.0s | | | | | | | |
| **BDFB** | **Brasilia** | **152.63** | **197** | PKPbc | | **PKiKP** | **07 28 08.0** | **+0.2** |
| | comp=Z,18nm,0.8s,baz=46,slow=1.7,SNR=16 | | | | | | | |
| **SLOR** | **San Lorenzo -** | **154.72** | **116** | IAMs_20 | IAMs_20 | | 08 31 49.8 | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **BBSR** | **BB Station** | **157.00** | **20** | IAMs_20 | IAMs_20 | | 08 42 56.9 | |
| | comp=Z,2µm,21.0s | | | | | | | |
| **ROSC** | **El Rosal** | **160.76** | **106** | PKP | | **PKPdf** | **07 28 11.5** | **+0.1** |
| | comp=Z,9.1nm,0.8s,baz=322,slow=5.3,SNR=4.5 | | | | | | | |
| **SDV** | **Santo Domingo** | **165.29** | **96** | PKP | | **PKPdf** | **07 28 16.1** | **+0.6** |
| | comp=Z,6.9nm,0.2s,baz=267,slow=2.5,SNR=9.9 | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **171.31** | **93** | PKP | | **PKPdf** | **07 28 20.0** | **+0.6** |
| | comp=Z,9.7nm,1.0s,baz=332,slow=7.4,SNR=2.9 | | | | | | | |
| **MDP** | **Montagnes des** | **173.54** | **209** | PKP | | **PKPdf** | **07 28 21.7** | **+1.4** |
| | comp=Z,19nm,1.1s,baz=1.0,slow=5.0,SNR=6.7 | | | | | | | |

*RSPR **28** 07:08:52.8, 19.47N×64.78W, h96km±12km, MD3.1/6*
*NEIC **28** 07:08:52.5±1.3, 19.55N±0.07×64.73W±0.06, h35km±2km, ML2.3/19, Md3.1/6(RSPR), Error ellipse: s-maj=15.4km s-min=3.2km az=322.0*
**ISC 28 07:08:52.2±2.4, 19.4N±0.2×64.67W±0.04, h27km, n33, σ0 98/31, 6C, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **HUMP** | **Col San Antoni** | **1.66** | **223** | Pn | **Pn** | | **07 09 19.7** | **+0.1** |
| HUMP | | | | IAML | | | 07 10 12.5 | |
| | comp=E,23nm,0.2s | | | | | | | |
| **GCPR** | **Guaynabo City** | **1.71** | **232** | Pn | **Pn** | | **07 09 20.4** | **+0.2** |
| GCPR | | | | IAML | | | 07 10 02.7 | |
| | comp=N,24nm,2.6s | | | | | | | |
| **PDPR** | **Patillas Dam,** | **1.86** | **224** | Pn | **Pn** | | **07 09 21.8** | **-0.6** |
| **IGPR** | **InterUniversit** | **1.96** | **224** | *eP* | **Pn** | | **07 09 24.1** | **+0.4** |
| **IGPR** | **InterUniversit** | **1.96** | **224** | *eS* | **Sn** | | **07 09 48.9** | **+1.5** |
| **IGPR** | **InterUniversit** | **1.96** | **224** | | **Pn** | | **07 09 24.1** | **+0.4** |
| IGPR | | | | | **Sn** | | **07 09 48.9** | **+1.5** |
| **IGPR** | **InterUniversit** | **1.96** | **224** | IAML | | | 07 09 55.2 | |
| | comp=E,19nm,0.3s | | | | | | | |
| IGPR | | | | IAML | | | 07 09 55.5 | |
| | comp=N,16nm,0.8s | | | | | | | |
| **SABA** | **Saba** | **2.21** | **142** | Pn | **Pb** | | **07 09 30.5** | **-0.9** |
| **AOPR** | **Arecibo Observ** | **2.23** | **243** | *eP* | **Pn** | | **07 09 27.7** | **+0.3** |
| **AOPR** | **Arecibo Observ** | **2.23** | **243** | *eS* | **Sn** | | **07 09 53.9** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **2.23** | **243** | | **Pn** | | **07 09 27.7** | **+0.3** |
| **AOPR** | **Arecibo Observ** | **2.23** | **243** | IAML | | | 07 09 45.8 | |
| | comp=N,24nm,2.3s | | | | | | | |
| AOPR | | | | IAML | | | 07 10 07.2 | |
| | comp=E,35nm,1.1s | | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.23** | **243** | | **Sn** | | **07 09 53.9** | **-0.2** |
| **CELP** | **Cerrillos** | **2.23** | **235** | *eP* | **Pn** | | **07 09 27.6** | **+0.2** |
| **CELP** | **Cerrillos** | **2.23** | **235** | *eS* | **Sn** | | **07 09 54.8** | **+0.7** |
| **CELP** | **Cerrillos** | **2.23** | **235** | | **Pn** | | **07 09 27.6** | **+0.2** |
| **CELP** | **Cerrillos** | **2.23** | **235** | IAML | | | 07 09 49.0 | |
| | comp=E,13nm,2.6s | | | | | | | |
| CELP | | | | IAML | | | 07 10 07.5 | |
| | comp=N,13nm,2.6s | | | | | | | |
| **CELP** | **Cerrillos** | **2.23** | **235** | | **Sn** | | **07 09 54.8** | **+0.7** |
| **UUPR** | **Utuado, UPR, P** | **2.25** | **240** | *eP* | **Pn** | | **07 09 26.6** | **-1.0** |
| **UUPR** | **Utuado, UPR, P** | **2.25** | **240** | *eS* | **Sn** | | **07 09 54.9** | **+0.4** |
| **UUPR** | **Utuado, UPR, P** | **2.25** | **240** | | **Pn** | | **07 09 26.6** | **-1.0** |
| UUPR | | | | | **Sn** | | **07 09 54.9** | **+0.4** |
| **UUPR** | **Utuado, UPR, P** | **2.25** | **240** | IAML | | | 07 10 10.3 | |
| | comp=N,39nm,0.4s | | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.49** | **249** | Pn | **Pn** | | **07 09 31.1** | **+0.1** |
| **LSP** | **Las Mesas** | **2.59** | **243** | *eP* | **Pn** | | **07 09 33.4** | **+1.0** |
| **LSP** | **Las Mesas** | **2.59** | **243** | | **Pn** | | **07 09 33.4** | **+1.0** |
| **MLPR** | **Magueyes Islan** | **2.65** | **239** | *eP* | **Pn** | | **07 09 33.0** | **-0.2** |
| **MLPR** | **Magueyes Islan** | **2.65** | **239** | *eS* | **Sn** | | **07 10 04.2** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **2.65** | **239** | | **Pn** | | **07 09 33.0** | **-0.2** |
| **MLPR** | **Magueyes Islan** | **2.65** | **239** | | **Sn** | | **07 10 04.2** | **-0.4** |
| **MLPR** | **Magueyes Islan** | **2.65** | **239** | IAML | | | 07 10 01.1 | |
| | comp=E,18nm,2.4s | | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.65** | **239** | IAML | | | 07 10 23.7 | |
| | comp=N,19nm,2.0s | | | | | | | |
| **ANWB** | **Willy Bob** | **3.22** | **121** | *eP* | **Pn** | | **07 09 43.7** | **+2.7** |
| ANWB | | | | *eS* | **Sn** | | **07 10 15.9** | **-2.5** |
| **ANBD** | **Bethesda, Anti** | **3.60** | **130** | *eP* | **Pn** | | **07 09 46.5** | **+0.3** |
| ANBD | | | | *eS* | **Sn** | | **07 10 28.1** | **+0.2** |

*BJI **28** 07:13:22.2±0.0, 11.29S×124.69E, h10km, mb5.3/72, mB5.9/23, Ms5.9/21, Ms7 5.8/22*
*IDC **28** 07:13:29.0±0.4, 10.51S×124.03E, h0km, mb5.2/23, mbtmp5.1/23, Error ellipse: s-maj=23.5km s-min=13.0km az=76.0*
*MOS **28** 07:13:29.6±1.2, 10.54S×124.08E, h13km, mb5.6/53, Error ellipse: s-maj=11.1km s-min=5.4km az=110.5*
*DJA **28** 07:13:31.1±0.1,11.5S±2.5×12.4E±.5, h10km, M6.1/73, mb5.7/73, mB6.4/10, MLv5.9/16, Mw5.7/773, Mw(mB)6.1/10, MwMwp6.5/7, Mwp6.5/7*
*NEIC **28** 07:13:31.8, 10.62S×124.13E, h12km*
*NEIC **28** 07:13:31.8, 10.82S×124.23E, h12km, Moment Tensor Solution. Duration: 39 Moment tensor: Scale 10^17 Nm; Mrr3.83; Mθθ-3.94; Mφφ0.11; Mrθ2.22; Mθφ-0.34; Mrφ-1.38; Fault plane solution: Mo4.69000×10^17 NP1: φs103.57000°, δ61.80000°, λ108.26000°. NP2: φs248.65000°, δ33.18000°, λ59.70000°. Principal axes: T 4.8459, Plg68.0000°, Azm49.0000°; N -0.3176, Plg16.0000°, Azm275.0000°; P -4.5283, Plg15.0000°, Azm180.0000°;*
*NEIC **28** 07:13:32.1±2.5, 10.63S±0.07×124.14E±0.07, h8km±3km, mb5.6/57, Mww5.7/12 Error ellipse: s-maj=11.4km s-min=8.1km az=48.0*
*GCMT **28** 07:13:35.2±0.2, 10.85S±0.02×124.40E±0.03, h20km, MW5.8/113, Moment Tensor Solution. s47,c57; s113,c201; Duration: 19 Moment tensor: Scale 10^17 Nm; Mrr5.50±.29; Mθθ-4.91±.18; Mφφ-0.58±.16; Mrθ1.43±.30; Mθφ-0.84±.10; Mφr1.89±.40; Best double couple: Mo5.76200×10^17 NP1:φs65.00000°, δ56.00000°, λ75.00000°. NP2:φs271.00000°, δ37.00000°, λ111.00000°. Principal axes: T 6.1600, Plg74.0000°, Azm292.0000°; N -0.7910, Plg13.0000°, Azm74.0000°; P -5.3650, Plg10.0000°, Azm166.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 28 07:13:33.0±0.2, 10.75S±0.04×124.10E±0.05, h27km, n454, σ1 57/459, mb5.5/132, MS5.7/12, 9C-8D, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **BATI** | **Baumata** | **0.69** | **321** | P | **Pb** | | **07 13 46.0** | **-0.4** |
| **SOEI** | **Soe** | **1.00** | **10** | Pn | **Pn** | | **07 13 50.9** | **-0.5** |
| **SOEI** | **Soe** | **1.00** | **10** | P | **Pn** | | **07 13 51.0** | **-0.4** |
| **MMRI** | **Maumere** | **2.79** | **319** | Pn | **Pn** | | **07 14 17.1** | **+1.2** |
| **MMRI** | **Maumere** | **2.79** | **319** | P | **Pn** | | **07 14 16.6** | **+0.7** |
| **EDFI** | **Ende, Flores** | **3.09** | **310** | P | **Pn** | | **07 14 20.1** | **-0.1** |
| **BASI** | **Baing, Sumba** | **3.50** | **278** | P | **Pn** | | **07 14 26.1** | **+0.4** |
| **WBSI** | **Waikabubak, Su** | **4.76** | **283** | P | **Pn** | | **07 14 42.7** | **-0.4** |
| **BBSI** | **Bau Bau** | **5.44** | **344** | P | **Pn** | | **07 14 54.0** | **+1.6** |
| | 1µm,0.7s,5.7nm | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.80** | **322** | P | **Pn** | | **07 14 58.5** | **+1.1** |
| | 1µm,0.7s,5.9nm | | | | | | | |
| **PLAI** | **Plampang** | **6.51** | **286** | P | **Pn** | | **07 15 07.3** | **+0.1** |
| **BKSI** | **Bulukumba** | **6.67** | **324** | P | **Pn** | | **07 15 10.2** | **+0.8** |
| **KNRA** | **Kununurra** | **6.68** | **138** | Pn | **Pn** | | **07 15 09.6** | **+0.1** |
| **KNRA** | **Kununurra** | **6.68** | **138** | P | **Pn** | | **07 15 09.6** | **+0.1** |
| | comp=Z,93µmcomp=Z,1409µmcomp=Z,1µm,0.9s | | | | | | | |
| **KAPI** | **Kappang** | **7.14** | **323** | Pn | **Pn** | | **07 15 17.9** | **+2.1** |
| **KAPI** | **Kappang** | **7.14** | **323** | Pn | **Pn** | | **07 15 16.7** | **+0.9** |
| | comp=Z,13nm,0.3s,baz=174,slow=14,SNR=5.4 | | | | | | | |
| **KAPI** | **Kappang** | **7.14** | **323** | *i* P | **Pn** | | **07 15 15.4** | **-0.3** |
| **MTN** | **Manton Dam** | **7.20** | **108** | Pn | **Pn** | | **07 15 14.2** | **-2.4** |
| **MTN** | **Manton Dam** | **7.20** | **108** | P | **Pn** | | **07 15 14.1** | **-2.5** |
| **TWSI** | **Taliwang, Sumb** | **7.39** | **285** | P | **Pn** | | **07 15 19.4** | **+0.2** |
| | comp=Z,944nm,0.7s,comp=Z,5.0nm | | | | | | | |
| **BNSI** | **Bone** | **7.44** | **328** | P | **Pn** | | **07 15 21.1** | **+1.2** |
| | comp=Z,813nm,1.1s,comp=Z,5.8nm | | | | | | | |
| **SAUI** | **Saumlaki** | **7.62** | **69** | Pn | **Pn** | | **07 15 21.0** | **-1.4** |
| **SAUI** | **Saumlaki** | **7.62** | **69** | P | **Pn** | | **07 15 24.1** | **+1.7** |
| **SPSI** | **Sidrap Palu** | **7.99** | **327** | P | **Pn** | | **07 15 28.7** | **+1.3** |
| | comp=Z,340nm,1.0s | | | | | | | |
| **NLAI** | **Namlea** | **8.03** | **22** | P | **Pn** | | **07 15 30.6** | **+2.6** |
| | comp=Z,255nm,1.2s | | | | | | | |
| **MSAI** | **Masohi** | **8.78** | **33** | P | **Pn** | | **07 15 40.1** | **+1.8** |
| | comp=Z,444nm,1.0s | | | | | | | |
| **SANI** | **Sanana** | **8.84** | **12** | P | **Pn** | | **07 15 40.6** | **+1.5** |
| | comp=Z,248nm,0.9s | | | | | | | |
| **SRBI** | **Singaraja** | **9.15** | **286** | P | **Pn** | | **07 15 42.7** | **-0.7** |
| **LUWI** | **Luwuk** | **9.73** | **352** | P | **Pn** | | **07 15 53.6** | **+2.3** |
| | comp=Z,372nm,0.9s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **10.06** | **282** | Pn | **Pn** | | **07 15 53.3** | **-2.6** |
| **JAGI** | **Jajag, Banyuwa** | **10.06** | **282** | P | **Pn** | | **07 15 53.4** | **-2.6** |
| | comp=Z,304nm,1.2s | | | | | | | |
| **LBMI** | **Labuha** | **10.60** | **19** | P | **Pn** | | **07 16 03.6** | **+0.4** |
| | comp=Z,389nm,0.9s | | | | | | | |
| **FAKI** | **Fak Fak** | **11.22** | **47** | Pn | **Pn** | | **07 16 11.1** | **-0.7** |
| **FAKI** | **Fak Fak** | **11.22** | **47** | P | **Pn** | | **07 16 13.5** | **+1.7** |
| | comp=Z,260nm,0.8s | | | | | | | |
| **KMSI** | **Cibinong** | **11.25** | **359** | P | **Pn** | | **07 16 14.7** | **+2.6** |
| | comp=Z,424nm,0.8s | | | | | | | |
| **GTOI** | **Gorontalo** | **11.36** | **354** | P | **Pn** | | **07 16 16.6** | **+2.9** |
| **BKB** | **Balikpapan** | **11.83** | **322** | P | **Pn** | | **07 16 21.1** | **+1.0** |
| | comp=Z,364nm,1.0s | | | | | | | |
| **KMPI** | **Kaimana, Papua** | **11.85** | **54** | P | **Pn** | | **07 16 21.7** | **+1.4** |
| **TNTI** | **Ternate** | **11.89** | **16** | P | **Pn** | | **07 16 23.4** | **+2.4** |
| | comp=Z,225nm,1.6s | | | | | | | |
| **GRJI** | **Gresik** | **12.09** | **287** | P | **Pn** | | **07 16 25.0** | **+1.3** |
| | comp=Z,418nm,1.1s | | | | | | | |
| **SWI** | **Sorong** | **12.13** | **36** | P | **Pn** | | **07 16 25.6** | **+1.4** |
| | comp=Z,132nm,0.9s | | | | | | | |
| **TOLI2** | **Tolitoli** | **12.23** | **344** | Pn | **Pn** | | **07 16 30.1** | **+4.5** |
| **PGJI** | **Pagerwojo** | **12.43** | **282** | P | **Pn** | | **07 16 28.1** | **-0.2** |
| | comp=Z,191nm,1.0s | | | | | | | |
| **NGJI** | **Ngawi** | **12.92** | **284** | P | **Pn** | | **07 16 34.5** | **-0.5** |
| | comp=Z,425nm,1.9s | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **13.36** | **316** | P | **Pn** | | **07 16 42.4** | **+1.4** |
| | comp=Z,155nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.45** | **134** | Pn | Pn | | 07 16 37.5 | -4.8 |
| | baz=303,slow=14 | | | | | | | |
| WRA | | | | Sn | Sn | | 07 18 59.5 | -12 |
| | comp=Z,5.2nm,0.3s,baz=321,slow=24,SNR=0.9 | | | | | | | |
| **WRAB** | **Tennant Creek** | **13.46** | **134** | *i* P | **Pn** | | **07 16 43.7** | **+1.4** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,925nm,1.0s | | | | | | | |
| **UGM** | **Wanagama** | **13.69** | **281** | Pn | **Pn** | | **07 16 45.4** | **-0.2** |
| **UGM** | **Wanagama** | **13.69** | **281** | P | **Pn** | | **07 16 45.9** | **+0.4** |
| | comp=Z,472nm,1.2s | | | | | | | |
| **YOGI** | **Yogyakarta** | **13.93** | **281** | P | **Pn** | | **07 16 49.6** | **+0.8** |
| | comp=Z,353nm,1.0s | | | | | | | |
| **SMRI** | **Semarang** | **13.98** | **284** | P | **Pn** | | **07 16 50.1** | **+0.6** |
| | comp=Z,507nm,0.9s | | | | | | | |
| **SGSI** | **Sangihe** | **14.41** | **6** | P | **Pn** | | **07 16 56.9** | **+1.5** |
| | comp=Z,358nm,0.8s | | | | | | | |
| **KPJI** | **Karang Pucung** | **15.36** | **281** | P | **Pn** | | **07 17 07.9** | **-0.2** |
| | comp=Z,290nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **15.89** | **145** | Pn | **Pn** | | **07 17 10.1** | **-4.9** |
| | baz=320,slow=13 | | | | | | | |
| ASAR | | | | Sn | **Sn** | | **07 20 01.4** | **-9.1** |
| | comp=Z,10nm,0.3s,baz=320,slow=22,SNR=5.6 | | | | | | | |
| **SBUM** | **Sibu** | **17.65** | **317** | P | **P** | | **07 17 37.7** | **-0.3** |
| **SKJI** | **Sukabumi** | **17.72** | **281** | P | **P** | | **07 17 39.3** | **+0.5** |
| **GENI** | **Genyem** | **17.89** | **64** | P | **P** | | **07 17 41.6** | **+1.0** |
| | comp=Z,302nm,1.6s | | | | | | | |
| **XMIS** | **Christmas Isla** | **18.13** | **269** | P | **P** | | **07 17 46.2** | **+2.9** |
| **KSM** | **Kuching** | **18.32** | **311** | P | **Pn** | | **07 17 46.5** | **+1.1** |
| **JAY** | **Jayapura** | **18.40** | **65** | P | **Pn** | | **07 17 47.6** | **+1.2** |
| **KKM** | **Kota Kinabalu** | **18.43** | **334** | P | **Pn** | | **07 17 47.0** | **+0.1** |
| **PPBI** | **Pangkal Pinang** | **19.76** | **294** | P | **P** | | **07 18 01.5** | **+0.3** |
| **KASI** | **Kota Agung** | **20.08** | **283** | P | **P** | | **07 18 04.4** | **-0.2** |
| **FORT** | **Forrest** | **20.27** | **170** | P | Pn | | 07 18 09.6 | +1.0 |
| **MNAI** | **Manna** | **21.89** | **285** | P | **P** | | **07 18 23.6** | **-1.0** |
| **MNAI** | **Manna** | **21.89** | **285** | P | **P** | | **07 18 23.6** | **-0.6** |
| **TPRI** | **Tanjung Pinang** | **22.65** | **300** | P | **P** | | **07 18 33.8** | **+1.4** |
| | comp=Z,267nm,1.0s | | | | | | | |
| **PMG** | **Port Moresby** | **22.75** | **89** | P | **P** | | **07 18 32.0** | **-1.3** |
| PMG | | | | IAmb | IAmb | | 07 18 57.8 | |
| | comp=Z,298nm,1.1s | | | | | | | |
| **PMG** | **Port Moresby** | **22.75** | **89** | *i* P | **P** | | **07 18 33.6** | **+0.2** |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,360nm,1.2s | | | | | | | |
| **MANU** | **Manus Island** | **24.67** | **71** | P | **P** | | **07 18 52.1** | **+0.2** |
| MANU | | | | IAmb | IAmb | | 07 19 22.5 | |
| | comp=Z,133nm,1.1s | | | | | | | |
| **PDSI** | **Padang** | **25.43** | **291** | P | **P** | | **07 18 58.0** | **-0.9** |
| | comp=Z,148nm,1.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.53** | **145** | P | **P** | | **07 19 09.8** | **+1.2** |
| | comp=Z,160nm,1.0s,baz=309,slow=8.6,SNR=4.2 | | | | | | | |
| | comp=Z,160nm,1.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.53** | **145** | *eP* | **P** | | **07 19 11.1** | **+2.5** |
| STKA | | | | pmax | pmax | | | |
| | comp=Z,113nm,0.9s | | | | | | | |
| **EIDS** | **Eidsvold** | **29.41** | **123** | P | **P** | | **07 19 36.8** | **+2.4** |
| EIDS | | | | IAmb | IAmb | | 07 20 40.8 | |
| | comp=Z,106nm,1.4s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **30.46** | **151** | P | **P** | | **07 19 44.1** | **+0.5** |
| | comp=Z,195nm,0.9s | | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **31.34** | **297** | P | **P** | | **07 19 51.2** | **-0.4** |
| | comp=Z,194nm,0.8s | | | | | | | |
| **UBPT** | **Khong Chiam** | **31.77** | **324** | P | **P** | | **07 19 55.0** | **-0.2** |
| UBPT | | | | IAmb | IAmb | | 07 20 04.2 | |
| | comp=Z,102nm,1.5s | | | | | | | |
| **YNG** | **Young** | **32.29** | **140** | P | **P** | | **07 20 00.6** | **+0.9** |
| | comp=Z,0.0nmcomp=Z,614nm,1.2s | | | | | | | |
| **QIZ** | **Qiongzhong** | **32.76** | **335** | P | **P** | | **07 20 08.5** | **+4.6** |
| QIZ | | | | pmax | pmax | | | |
| | comp=Z,65nm,1.1s | | | | | | | |
| **TOO** | **Toolangi** | **32.91** | **148** | P | **P** | | **07 20 07.0** | **+1.8** |
| **TOO** | **Toolangi** | **32.91** | **148** | P | **P** | | **07 20 05.9** | **+0.7** |
| | comp=Z,0.0nmcomp=Z,148nm,1.0s | | | | | | | |
| **TOO** | **Toolangi** | **32.91** | **148** | P | **P** | | **07 20 07.0** | **+1.8** |
| TOO | | | | pmax | pmax | | | |
| | comp=Z,123nm,1.0s | | | | | | | |
| **MGCD** | **Mangrove Creek** | **33.39** | **136** | P | **P** | | **07 20 14.0** | **+4.6** |
| **CNB** | **Canberra Magne** | **33.55** | **141** | P | **P** | | **07 20 12.2** | **+1.4** |
| | comp=Z,0.0nmcomp=Z,92nm,1.1s | | | | | | | |
| **YHNB** | **Yeheng** | **35.30** | **356** | P | **P** | | **07 20 24.6** | **-1.4** |
| YHNB | | | | IAmb | IAmb | | 07 20 37.5 | |
| | comp=Z,80nm,0.9s | | | | | | | |
| **PHRA** | **Phrae** | **37.40** | **321** | P | **P** | | **07 20 45.8** | **+1.8** |
| **SLVN** | **Son La** | **37.55** | **328** | P | **P** | | **07 20 44.4** | **-0.8** |
| SLVN | | | | IAmb | IAmb | | 07 20 49.5 | |
| | comp=Z,119nm,1.5s | | | | | | | |
| **JOW** | **Kunigami** | **37.57** | **6** | P | **P** | | **07 20 43.9** | **-1.4** |
| JOW | | | | IAmb | IAmb | | 07 20 49.7 | |
| | comp=Z,99nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.19** | **319** | P | **P** | | **07 20 49.3** | **-1.3** |
| | comp=Z,10nm,0.7s,baz=152,slow=6.5,SNR=8.0 | | | | | | | |
| CMAR | | | | PcP | **PcP** | | **07 23 05.3** | **+0.2** |
| | comp=Z,4.7nm,0.6s,baz=167,slow=3.3,SNR=1.9 | | | | | | | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.19** | **319** | *eP* | **P** | | **07 20 53.3** | **+2.7** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,61nm,0.9s | | | | | | | |
| **GULI** | **GuiLin** | **38.24** | **340** | P | **P** | | **07 20 50.5** | **-0.4** |
| **CRAI** | **Chiangrai** | **38.63** | **323** | P | **P** | | **07 20 53.2** | **-1.2** |
| CRAI | | | | IAmb | IAmb | | 07 21 03.2 | |
| | comp=Z,140nm,1.0s | | | | | | | |
| **GYA** | **Guiyang** | **40.68** | **336** | ⇓P | **P** | | **07 21 13.5** | **+2.0** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,83nm,0.8s | | | | | | | |
| **KMI** | **Kunming** | **41.29** | **330** | ⇓P | **P** | | **07 21 16.5** | **-0.1** |
| KMI | | | | pP | pP | | 07 21 20.0 | -4.2 |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,130nm,1.4s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,11µm,19.9s | | | | | | | |
| **JCJ** | **Chichijima** | **41.51** | **25** | P | **P** | | **07 21 18.4** | **+0.2** |
| JCJ | | | | IAmb | IAmb | | 07 21 37.8 | |
| | comp=Z,133nm,1.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **42.02** | **111** | P | **P** | | **07 21 24.3** | **+1.7** |
| **WHN** | **Wuhan** | **42.11** | **347** | P | **P** | | **07 21 20.5** | **-2.4** |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,220nm,1.4s | | | | | | | |
| **NJ2** | **Nanjing** | **42.85** | **353** | ⇓P | **P** | | **07 21 30.8** | **+1.8** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,84nm,0.9s | | | | | | | |
| **PZH** | **PanZhiHua** | **42.93** | **330** | P | **P** | | **07 21 28.5** | **-1.4** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,90nm,1.2s | | | | | | | |
| **ENH** | **Enshi** | **43.14** | **341** | P | **P** | | **07 21 31.8** | **+0.4** |
| **TNCH** | **TengChong** | **43.43** | **325** | P | **P** | | **07 21 36.5** | **+2.4** |
| TNCH | | | | pP | pP | | 07 21 39.5 | -2.1 |
| TNCH | | | | pmax | pmax | | | |
| | comp=Z,84nm,1.2s | | | | | | | |
| **JMN** | **Monobe** | **45.20** | **12** | P | **P** | | **07 21 46.4** | **-1.4** |
| **IMP** | **Imphal** | **45.99** | **321** | *eP* | **P** | | **07 21 55.6** | **+1.2** |
| IMP | | | | IAmb | IAmb | | 07 22 01.4 | |
| | comp=Z,44nm,0.9s | | | | | | | |
| **LYN** | **LuoYang** | **46.38** | **347** | P | **P** | | **07 21 58.

comp=Z,85nm,0.9s
**LSA Lhasa 51.23 323** P **P** **07 22 33.6 -1.5**
LSA pmax pmax
comp=Z,85nm,0.9s
**KAAM Kaadhehdhoo 52.01 279** P **P** **07 22 42.7 +2.0**
KAAM IAmb IAmb 07 22 48.3
comp=Z,98nm,0.9s
**RPZ Rata Peaks 52.13 138** P **P** **07 22 42.3 +1.2**
RPZ IAmb IAmb 07 23 03.1
comp=Z,78nm,1.0s
**MSVF Nonsavu 52.61 104** *i*P **P** **07 22 45.7 +0.5**
MSVF pmax pmax
comp=Z,28nm,1.1s
**THZ Tophouse 52.62 135** P **P** **07 22 47.4 +2.5**
THZ IAmb IAmb 07 22 49.4
comp=Z,52nm,0.9s
**HHC Hu-ho-hao-te 52.63 348** ⇓P **P** **07 22 46.0 +1.2**
HHC pP pP 07 22 50.0 -2.5
HHC pmax pmax
comp=Z,22nm,0.5s
HHC pmax pmax
comp=Z,1μm,8.0s
**BTO Baotou 52.73 347** *e*P **P** **07 22 46.3 +0.7**
BTO pP **pP** **07 22 51.0 -2.3**
BTO sP **pwP** **07 22 53.5 -2.3**
BTO S **S** **07 30 15.8 +3.8**
BTO sS **pS** **07 30 22.0 +0.5**
BTO SS **SS** **07 33 56.8 +5.7**
BTO pmax pmax
comp=Z,64nm,1.9s
BTO pmax pmax
comp=Z,3μm,8.8s
**HYB Hyderabad 52.99 301** *e*P **P** **07 22 45.5 -2.4**
**DUWZ D'Urville Isla 53.00 133** P **P** **07 22 48.3 +0.7**
**TUWZ Tuamarina 53.23 134** P **P** **07 22 50.9 +1.6**
**TCW Tory Channel 53.39 134** P **P** **07 22 49.9 -0.5**
**MSHR Mys Shultsa 53.46 6** *i*P **P** **07 22 51.1 +0.4**
MSHR pmax pmax
comp=Z,22nm,0.9s
**PSTR Posyet 53.49 6** *i*P **P** **07 22 51.3 +0.3**
**SNVZ South Ngauruho 53.73 131** P **P** **07 22 56.5 +3.2**
**OGWZ Otaki Gorge 53.90 133** P **P** **07 22 54.2 0.0**
**CAW Cannon Point 53.92 133** P **P** **07 22 55.0 +0.7**
**VLA Vladivostok 54.07 7** *i*P **P** **07 22 55.1 -0.2**
VLA pmax pmax
comp=Z,40nm,0.9s
**MRZ Mangatainoka R 54.14 133** P **P** **07 22 56.0 0.0**
**MSWZ Moikau Station 54.15 134** P **P** **07 22 55.2 -0.8**
**HOWZ Holdsworth Sta 54.17 133** P **P** **07 22 55.6 -0.6**
**PLWZ Palliser 54.20 134** P **P** **07 22 56.6 +0.1**
**PAWZ Paruwai Farm 54.26 134** P **P** **07 22 55.8 -1.1**
**CN2 Changchun 54.30 1** P **P** **07 22 58.3 +1.4**
CN2 pP pP 07 23 04.3 -0.3
CN2 pmax pmax
comp=Z,30nm,1.3s
CN2 LR LR
comp=Z,4μm,19.0s
CN2 LR LR
comp=Z,3μm,19.0s
CN2 LR LR
comp=Z,4μm,19.0s
**BKZ Black Stump Fm 54.36 131** P **P** **07 22 56.9 -0.8**
**KWHZ Kaweka Forest 54.38 131** P **P** **07 22 57.4 -0.4**
**MTHZ Maungataniwha 54.53 130** P **P** **07 22 59.9 +1.0**
**URZ Urewera 54.57 129** P **P** **07 23 00.3 +1.2**
**NMHZ Naumai 54.58 131** P **P** **07 22 59.3 0.0**
**GTA Gaotai 54.77 337** P **P** **07 22 59.0 -1.6**
GTA pP pP 07 23 03.0 -5.4
GTA pmax pmax
comp=Z,31nm,1.3s
GTA LR LR
comp=Z,5μm,19.6s
GTA LR LR
comp=Z,4μm,18.5s
**XLT XiLinHaoTe 54.87 353** *e*P **P** **07 22 58.5 -2.7**
XLT pP pP 07 23 02.5 -6.4
XLT sP pwP 07 23 06.5 -5.0
XLT pmax pmax
comp=Z,21nm,1.3s
**PXZ Pawanui 54.88 132** P **P** **07 22 59.4 -2.0**
**MWZ Matawai 54.91 129** P **P** **07 23 00.1 -1.5**
**USA0B Ussuriysk Arra 55.15 7** *i*P **P** **07 23 03.4 +0.3**
**USRK Ussuriysk Ar. 55.15 7** P **P** **07 23 01.1 -1.9**
comp=Z,11nm,0.7s,baz=193,slow=6.2,SNR=17
comp=Z,11nm,0.7s
**MDJ Mudanjiang 55.33 5** P **P** **07 23 02.8 -1.5**
MDJ pmax pmax
comp=Z,47nm,1.5s
**MDJ Mudanjiang 55.33 5** P **P** **07 23 02.9 -1.4**
MDJ IAmb IAmb 07 23 13.5
comp=Z,97nm,1.1s
**ERM Erimo 55.35 17** *i*P **P** **07 23 04.1 -0.4**
ERM pmax pmax
comp=Z,32nm,1.0s
**AKL Akola 55.85 304** *e*P **P** **07 23 06.0 -2.6**
AKL IAmb IAmb 07 23 16.6
comp=Z,66nm,0.6s
**CASY Casey 56.23 187** P **P** **07 23 12.0 +1.4**
**BNX BinXian 56.30 3** ⇓P **P** **07 23 12.0 +0.7**
BNX pmax pmax
comp=Z,30nm,1.6s
**BHPL Bhopal 56.80 307** *e*P **P** **07 23 15.4 0.0**
**JHNI Jhansi 57.13 310** *e*P **P** **07 23 13.2 -4.4**
JHNI IAmb IAmb 07 23 24.9
comp=Z,77nm,1.0s
**ASAJ Asahikawa 57.13 16** P **P** **07 23 17.8 +0.6**
ASAJ pmax pmax
comp=Z,57nm,1.2s
**JKA Kamikawa-asahi 57.13 16** P **P** **07 23 17.8 +0.5**
JKA IAmb IAmb 07 24 16.6
comp=Z,57nm,1.2s
**YUK Yuzh-Kuril'sk 58.00 18** *i*P **P** **07 23 23.5 +0.2**
**LGTI Lohaghat 58.16 315** *e*P **P** **07 23 23.4 -1.4**
**PTH Pithoragarh 58.24 315** *e*P **P** **07 23 24.2 -1.4**
**YSS Yuzh-Sakhalins 59.81 15** *e*P **P** **07 23 35.9 0.0**
YSS pmax pmax
comp=Z,30nm,0.9s
**HIA Hailar 59.88 357** P **P** **07 23 35.1 -1.2**
HIA IAmb IAmb 07 23 43.1
comp=Z,49nm,1.0s
**HIA Hailar 59.88 357** *i*P **P** **07 23 35.2 -1.2**
HIA pmax pmax
comp=Z,37nm,0.9s
**KLR Kul'dur 60.09 6** *i*P **P** **07 23 36.2 -1.6**
KLR pmax pmax
comp=Z,11nm,1.0s
**KUDL Kundal 60.12 311** *e*P **P** **07 23 35.2 -3.2**
**ULN Ulaanbaatar 60.28 347** P **P** **07 23 37.7 -1.6**
ULN IAmb IAmb 07 23 47.4
comp=Z,44nm,0.9s
**ULN Ulaanbaatar 60.28 347** *i*P **P** **07 23 37.9 -1.4**
ULN pmax pmax
comp=Z,42nm,1.0s
**SONM Songino Array 60.41 346** P **P** **07 23 38.2 -1.9**
comp=Z,12nm,0.8s,baz=159,slow=9.4,SNR=7.4
SONM PKPPKP **P'P'df** **07 53 02.3 +3.1**
comp=Z,0.2nm,0.3s,baz=343,slow=1.5,SNR=2.4
comp=Z,12nm,0.8s
**SONM Songino Array 60.41 346** *e*P **P** **07 23 42.3 +2.2**
SONM pmax pmax
comp=Z,34nm,1.0s
**AJM Ajmer 60.63 309** *e*P **P** **07 23 38.8 -3.2**
AJM IAmb IAmb 07 23 49.2
comp=Z,59nm,0.8s
**KLP Kalpa 60.78 315** *e*P **P** **07 23 41.5 -1.7**
KLP IAmb IAmb 07 23 56.1
comp=Z,273nm,0.9s
**HEH HeiHe 60.81 2** *e*P **P** **07 23 40.0 -2.6**
HEH pmax pmax
comp=Z,81nm,1.2s
HEH pmax pmax
comp=Z,820nm,4.2s
**HNLY HANLEY 61.03 317** *e*P **P** **07 23 43.8 -1.4**
**SMLA Simla 61.30 314** *e*P **P** **07 23 45.2 -1.2**
SMLA IAmb IAmb 07 23 57.0
comp=Z,233nm,1.1s
**BHK Bhakra 61.99 314** *e*P **P** **07 23 50.1 -1.0**
BHK IAmb IAmb 07 23 59.1
comp=Z,181nm,1.1s
**DHRM DHARAMSHALA 62.55 315** *e*P **P** **07 23 52.9 -2.2**
DHRM IAmb IAmb 07 24 03.9
comp=Z,464nm,1.3s
**THN Thein Dam 63.06 315** *e*P **P** **07 23 56.2 -1.9**
**TYV Tymovskoe 63.44 13** *e*P **P** **07 23 59.1 -1.2**
TYV pmax pmax
comp=Z,600nm,5.0s
TYV pmax pmax
comp=Z,13nm,1.2s
**WMQ Urumqi 63.60 331** ⇑*i*P **P** **07 24 00.0 -1.6**
WMQ PcP **PcP** **07 24 36.5 -1.3**
WMQ S **S** **07 32 37.5 +3.7**
WMQ pmax pmax
comp=Z,100nm,1.1s
WMQ pmax pmax
comp=Z,1μm,7.1s
WMQ LR LR
comp=Z,7μm,20.9s
WMQ LR LR
comp=Z,11μm,21.7s
WMQ LR LR
comp=Z,14μm,24.5s
**ZEA Zeya 64.29 2** *e*P **P** **07 24 04.9 -0.9**
ZEA pmax pmax
comp=N,30nm,1.3s
ZEA pmax pmax
comp=Z,40nm,1.2s
**IRK Irkutsk 65.02 347** *e*P **P** **07 24 10.0 -0.6**
IRK pmax pmax
comp=Z,67nm,1.7s
**MOY Mondy 65.29 344** *e*P **P** **07 24 14.6 +2.0**
MOY pmax pmax
comp=Z,103nm,1.9s
**KNGR Kungurtug, Tuv 65.34 342** *i*P **P** **07 24 11.4 -1.5**
KNGR pmax pmax
comp=Z,21nm,1.1s
**NIL Nilore 65.45 315** P **P** **07 24 12.3 -1.6**
**NIL Nilore 65.45 315** P **P** **07 24 12.3 -1.6**
NIL pmax pmax
comp=Z,131nm,1.2s
**KSH Kashi 67.04 321** P **P** **07 24 23.0 -1.1**
KSH pP pP 07 24 26.8 -5.1
KSH pmax pmax
comp=Z,36nm,0.8s
KSH LR LR
comp=Z,4μm,23.4s
KSH LR LR
comp=Z,5μm,19.9s
**SHLS Shalkode 67.33 326** *e*P **P** **07 24 22.8 -3.0**
comp=Z,29nm,0.8s,baz=326
**SHLS Shalkode 67.33 326** *e*P **P** **07 24 22.8 -3.0**
SHLS pmax pmax
comp=Z,29nm,0.8s
**TARG Taragay, Kyrgy 67.33 324** P **P** **07 24 26.8 +0.6**
TARG IAmb IAmb 07 24 34.5
comp=Z,32nm,0.8s
**TARG Taragay, Kyrgy 67.33 324** P **P** **07 24 26.8 +0.6**
TARG pmax pmax
comp=Z,33nm,0.8s
**UZB Uzunbulak 67.56 326** *e*P **P** **07 24 25.6 -1.8**
comp=Z,17nm,1.2s,baz=326
**UZB Uzunbulak 67.56 326** *e*P **P** **07 24 25.5 -1.8**
UZB pmax pmax
comp=Z,17nm,1.2s
**ZSN Zaisan 67.63 332** *e*P **P** **07 24 26.0 -1.5**
comp=Z,33nm,1.1s,baz=332
**ZSN Zaisan 67.63 332** *e*P **P** **07 24 26.0 -1.5**
ZSN pmax pmax
comp=Z,33nm,1.1s
**SATY Saty 67.85 326** *e*P **P** **07 24 27.6 -1.6**
comp=Z,27nm,1.0s,baz=326
**SATY Saty 67.85 326** *e*P **P** **07 24 27.5 -1.6**
SATY pmax pmax
comp=Z,27nm,1.0s
**ZHN Zhinishke 67.90 326** *e*P **P** **07 24 27.9 -1.6**
comp=Z,22nm,1.0s,baz=326
**ZHN Zhinishke 67.90 326** *e*P **P** **07 24 27.8 -1.6**
ZHN pmax pmax
comp=Z,22nm,1.0s
**KPKS Kokpek 67.96 326** *e*P **P** **07 24 28.1 -1.6**
comp=Z,27nm,0.8s,baz=326
**KPKS Kokpek 67.96 326** *e*P **P** **07 24 28.1 -1.6**
KPKS pmax pmax
comp=Z,27nm,0.8s
**NRN Naryn 68.20 323** P **P** **07 24 32.0 +0.4**
**NRN Naryn 68.20 323** P **P** **07 24 32.0 +0.4**
NRN pmax pmax
comp=Z,25nm,0.9s
**DGZ Jazzator, Alta 68.23 335** *i*P **P** **07 24 30.5 -0.9**
DGZ pmax pmax
comp=Z,118nm,0.9s
**MK31 Makanchi Array 68.37 330** *i*P **P** **07 24 33.0 +0.9**
**MKAR Makanchi Array 68.37 330** P **P** **07 24 30.6 -1.6**
comp=Z,12nm,0.5s,baz=137,slow=7.3,SNR=24
comp=Z,12nm,0.5s
**MAKZ Makanchi 68.53 330** P **P** **07 24 32.0 -1.1**
MAKZ IAmb IAmb 07 24 42.3
comp=Z,39nm,0.9s
**MAKZ Makanchi 68.53 330** P **P** **07 24 32.0 -1.1**
MAKZ pmax pmax
comp=Z,39nm,1.0s
**TNSS Tian-Shan 68.65 325** *e*P **P** **07 24 32.7 -1.8**
baz=325
**TNSS Tian-Shan 68.65 325** *e*P **P** **07 24 32.6 -1.8**
**MDOK Medeo 68.67 325** *e*P **P** **07 24 32.6 -1.8**
baz=325
**MDOK Medeo 68.67 325** *e*P **P** **07 24 32.5 -1.8**
**AAA Alma-Ata 68.78 325** *e*P **P** **07 24 33.5 -1.4**
baz=325
**AAA Alma-Ata 68.78 325** *e*P **P** **07 24 33.4 -1.4**
**TDK Taldyqorghan 69.12 327** *e*P **P** **07 24 35.4 -1.5**
baz=327
**TDK Taldyqorghan 69.12 327** *e*P **P** **07 24 35.3 -1.5**
**MAW Mawson 69.37 201** P **P** **07 24 38.9 +0.9**
comp=Z,14nm,0.8s,baz=105,slow=6.9,SNR=7.8
comp=Z,14nm,0.8s
**DRK Karamyk 69.65 319** P **P** **07 24 39.1 -1.5**
**DRK Karamyk 69.65 319** P **P** **07 24 39.1 -1.5**
DRK pmax pmax
comp=Z,70nm,0.8s
**PEA0B Petropavlovsk- 69.78 21** *i*P **P** **07 24 41.5 +0.8**
**PETK Petropavlovsk- 69.78 21** P **P** **07 24 39.6 -1.2**
comp=Z,15nm,0.9s,baz=212,slow=2.4,SNR=6.8
comp=Z,15nm,0.9s
**AAK Ala-Archa 69.82 323** P **P** **07 24 40.2 -1.2**
AAK IAmb IAmb 07 24 48.4
comp=Z,40nm,0.8s
**AAK Ala-Archa 69.82 323** P **P** **07 24 40.3 -1.2**
comp=Z,16nm,0.7s,baz=139,slow=6.1,SNR=6.8
comp=Z,16nm,0.7s
**AAK Ala-Archa 69.82 323** *i*P **P** **07 24 40.2 -1.2**
AAK pmax pmax
comp=Z,45nm,1.0s
**PET Petropavlovsk 70.05 21** *e*P **P** **07 24 43.6 +1.3**
PET pmax pmax
comp=Z,52nm,1.3s
**H04N2 CROZET ISLANDS 70.07 225** T T 08 41 48.2
baz=82,slow=75,SNR=16
**H04N3 CROZET ISLANDS 70.08 225** T T 08 41 47.0
baz=82,slow=75,SNR=18
**H04N1 CROZET ISLANDS 70.08 225** T T 08 41 50.0
baz=82,slow=75,SNR=15
**SGDS Sogindy 70.24 324** *e*P **P** **07 24 42.5 -1.4**
baz=324
**SGDS Sogindy 70.24 324** *e*P **P** **07 24 42.4 -1.4**
**GAR Garm 70.35 318** P **P** **07 24 44.0 -0.7**
**SBA Scott Base 70.48 171** P **P** **07 24 46.3 +1.6**
**SBA Scott Base 70.48 171** P **P** **07 24 46.3 +1.6**
SBA pmax pmax
comp=Z,36nm,1.2s
**BTLS Baital 71.53 325** *e*P **P** **07 24 50.3 -1.4**
baz=325
**BTLS Baital 71.53 325** *e*P **P** **07 24 50.2 -1.4**
**SEM Semipalatinsk 71.87 332** *e*P **P** **07 24 52.0 -1.9**
comp=Z,26nm,1.1s,baz=332
**SEM Semipalatinsk 71.87 332** *e*P **P** **07 24 51.9 -1.9**
SEM pmax pmax
comp=Z,26nm,1.1s
**ZALV Zalesovo Beam 72.53 337** P **P** **07 24 55.2 -2.1**
comp=Z,18nm,0.5s,baz=140,slow=5.1,SNR=7.7
ZALV PKPPKP **P'P'df** **07 52 41.8 +2.4**
comp=Z,0.4nm,0.3s,baz=295,slow=8.0,SNR=1.4
comp=Z,18nm,0.5s
**YAK Yakutsk 72.68 3** P **P** **07 24 57.5 -0.6**
YAK IAmb IAmb 07 25 05.8
comp=Z,56nm,0.7s
**YAK Yakutsk 72.68 3** *e*P **P** **07 25 00.6 +2.6**
YAK *e*'PP **pP** **07 25 04.4 -1.6**
YAK *e* 07 25 17.4
YAK *eS* **SKiKP** **07 34 26.6 -4.0**
YAK *e* 07 35 06.2
YAK pmax pmax
comp=Z,89nm,1.3s
YAK pmax pmax
comp=N,39nm,1.1s
YAK pmax pmax
comp=E,12nm,1.3s
YAK smax smax
comp=N,1μm,10.4s
YAK smax smax
comp=E,372nm,6.6s
YAK MLR MLR
comp=Z,2μm,18.0s
YAK MLR MLR
comp=E,2μm,18.0s
YAK MLR MLR
comp=N,2μm,18.0s
**KURBB Kurchatov Arra 72.82 332** P **P** **07 24 57.4 -1.7**
comp=N,16nm,0.7s,baz=139,slow=5.1,SNR=10
comp=N,16nm,0.7s
**KURK Kurchatov 72.84 332** P **P** **07 24 58.1 -1.2**
KURK IAmb IAmb 07 25 10.9
comp=Z,67nm,0.9s
**KURK Kurchatov 72.84 332** *i*P **P** **07 24 58.7 -0.6**
KURK pmax pmax
comp=Z,63nm,0.9s
**BRLS Borolday 72.85 321** *e*P **P** **07 24 58.0 -1.6**
baz=321
**BRLS Borolday 72.85 321** *e*P **P** **07 24 57.9 -1.6**
**MA2 Magadan 73.30 14** P **P** **07 25 01.5 -0.3**
MA2 IAmb IAmb 07 25 27.6
comp=Z,46nm,0.9s
**MA2 Magadan 73.30 14** P **P** **07 25 01.5 -0.3**
MA2 pmax pmax
comp=Z,47nm,0.9s
**UOSS Minazif 75.05 299** P **P** **07 25 12.4 -0.4**
UOSS IAmb IAmb 07 25 17.5
comp=Z,68nm,1.1s
**SEY Seymchan 76.64 13** *i*P **P** **07 25 20.8 -0.2**
SEY pmax pmax
comp=Z,30nm,0.9s
**BVAR Borovoye Array 78.25 330** P **P** **07 25 29.2 -1.0**
comp=Z,5.7nm,0.6s,baz=122,slow=5.4,SNR=8.4
comp=Z,5.7nm,0.6s
**BRVK Borovoye 78.32 330** P **P** **07 25 31.5 +0.9**
**BRVK Borovoye 78.32 330** *i*P **P** **07 25 31.8 +1.2**
BRVK pmax pmax
comp=Z,17nm,1.3s
**QSPA South Pole Qui 79.26 180** P **P** **07 25 36.5 +0.7**
comp=Z,33nm,1.0s,baz=296,slow=1.1,SNR=12
comp=Z,33nm,1.0s
**KIWB Kanaga Island 80.16 33** P **P** **07 25 41.5 +0.8**
**ABKAR Akbulak array 81.91 323** P **P** **07 25 49.3 -0.8**
**TIXI Tiksi 82.27 2** P **P** **07 25 50.3 -1.2**
**TIXI Tiksi 82.27 2** *i*P **P** **07 25 53.0 +1.5**
TIXI pmax pmax
comp=Z,22nm,0.9s
**ELIB Princess Elisa 83.17 198** *d*P **P** **07 25 57.0 +0.5**
comp=Z,17nm,1.0s
**AKTO Aktyubinsk 83.55 324** P **P** **07 25 57.5 -1.1**
comp=Z,26nm,0.8s,baz=105,slow=3.2,SNR=11
comp=Z,26nm,0.8s
**RAYN Ar Rayn 83.98 295** P **P** **07 26 02.4 +0.9**
**RAYN Ar Rayn 83.98 295** P **P** **07 26 02.4 +0.9**
RAYN pmax pmax
comp=Z,53nm,0.8s
**BILL Bilibino 84.13 15** ⇑*e*P **P** **07 26 02.0 +0.8**
BILL *e* 07 29 14.8
BILL *eS* **S** **07 36 26.7 +2.7**
BILL *eSS* **SS** **07 41 55.9 +2.5**
BILL pmax pmax
comp=Z,20nm,1.3s
BILL MLR MLR
comp=Z,2μm,20.0s
**CLES Cleveland East 84.53 34** P **P** **07 26 04.0 +0.4**
**SVE Sverdlovsk 85.03 330** *e*P **P** **07 26 06.6 +0.6**
SVE pmax pmax
comp=Z,136nm,1.1s
**ARU Arti 85.87 330** P **P** **07 26 09.3 -0.8**
comp=Z,4.3nm,0.2s,baz=114,slow=5.2,SNR=1.4
comp=Z,4.3nm,0.2s
**ARU Arti 85.87 330** *c i*P **P** **07 26 11.4 +1.2**
ARU *e* 07 29 31.9
ARU S **SKSac** **07 36 35.8 +1.9**
ARU SS **SS** **07 42 20.6 +1.1**
ARU pmax pmax
comp=Z,40nm,1.4s
**KMBO Kilima Mbogo 86.69 269** P **P** **07 26 16.0 +0.5**
comp=Z,1.3nm,0.3s,baz=76,slow=7.9,SNR=1.9
comp=Z,1.3nm,0.3s
**KMBO Kilima Mbogo 86.69 269** *i*P **P** **07 26 15.7 +0.2**
**AKT Akhty 87.03 313** *e*P **P** **07 26 16.4 0.0**
AKT *e* 07 29 39.3
AKT pmax pmax
comp=Z,134nm,1.2s
**MAK Makhachkala 87.62 314** *d i*P **P** **07 26 14.4 -4.6**
MAK *e* 07 29 38.1
MAK *e* 07 36 38.7
MAK *eSS* SS 07 42 38.6 -7.2
MAK *eSSS* SSS 07 46 10.1
MAK pmax pmax
comp=Z,180nm,1.0s
MAK MLR MLR
comp=Z,6μm,21.0s
**GNI Garni 88.84 311** *i*P **P** **07 26 25.9 +0.7**
GNI pmax pmax
comp=Z,23nm,0.9s
**TROLL Troll, Antarti 89.07 195** ⇑P **P** **07 26 26.7 +1.1**
comp=Z,456nm,0.7s
**BELG Belogornoye 90.32 323** P **P** **07 26 30.6 -0.8**
comp=Z,68nm,1.1s,baz=128,slow=2.7,SNR=1.9
comp=Z,68nm,1.1s
**BELG Belogornoye 90.32 323** *i*P **P** **07 26 31.8 +0.3**
BELG pmax pmax
comp=Z,8.0nm,0.8s
**NCK Nalchik 90.52 314** *i*P **P** **07 26 33.8 +1.1**
NCK pmax pmax
comp=Z,21nm,1.2s
**SNAA Sanae 90.64 195** ⇑P **P** **07 26 33.5 +0.6**
comp=Z,147nm,0.6s
**SNAA Sanae 90.64 195** P **P** **07 26 33.9 +1.0**
comp=Z,15nm,0.8s,baz=197,slow=8.4,SNR=18
comp=Z,15nm,0.8s
**SNAA Sanae 90.64 195** *i*P **P** **07 26 33.8 +1.0**
SNAA pmax pmax
comp=Z,20nm,1.0s
**KBZ Khabaz 91.07 314** P **P** **07 26 34.6 -0.6**
comp=Z,4.1nm,0.8s,baz=138,slow=4.8,SNR=2.4
comp=Z,4.1nm,0.8s
**KBZ Khabaz 91.07 314** *i*P **P** **07 26 36.3 +1.1**
KBZ pmax pmax
comp=Z,12nm,0.9s
**SHA1 Shidzhatmaz 91.24 314** *i*P **P** **07 26 37.1 +0.8**
**KIRV Kirov 91.25 330** *i*P **P** **07 26 36.2 +0.5**
**KIV Kislovodsk 91.27 314** *e*P **P** **07 26 37.3 +1.0**
KIV pmax pmax
comp=Z,15nm,1.0s
**VNA2 Neumayer--Watz 92.24 194** ⇑P **P** **07 26 39.8 -0.4**
comp=Z,9.4nm,0.7s,baz=111,slow=4.9
**VNA3 Neumayer Olymp 92.56 194** ⇑P **P** **07 26 39.1 -2.6**
comp=Z,4.9nm,0.7s
**VNA1 Neumayer--Stat 92.64 194** ⇑P **P** **07 26 43.0 +1.0**
comp=Z,17nm,0.8s
**VSLR Vesyoloye 93.04 314** *i*P **P** **07 26 44.6 +0.2**
VSLR pmax pmax
comp=Z,19nm,1.0s
**MBAR Mbarara 93.19 269** *i*P **P** **07 26 46.6 +0.6**
**ANN Anapa 95.13 314** *e*P **P** **07 26 53.2 -0.7**
ANN pmax pmax
comp=Z,40nm,0.9s
**KDAK Kodiak Island 95.46 32** P **P** **07 26 54.8 -0.3**
comp=Z,13nm,1.1s,baz=19,slow=2.9,SNR=2.7
comp=Z,13nm,1.1s
**MOS Moscow 96.81 325** *e*P **P** **07 27 04.5 +3.2**
MOS *e* 07 30 59.5
**BRTR Keskin Array B 97.12 309** P **P** **07 27 03.2 -0.1**
comp=Z,3.0nm,0.9s,baz=127,slow=4.9,SNR=2.5
comp=Z,3.0nm,0.9s
**OBN Obninsk 97.31 325** *e*P Pdif 07 27 04.0 +0.4
OBN *e* 07 31 02.7
OBN pmax pmax
comp=Z,29nm,1.2s
OBN MLR MLR
comp=Z,5μm,21.0s
**ADZR Andozero 97.73 334** P P 07 26 59.7 -5.5
ADZR 07 30 58.1
ADZR pmax pmax

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,11nm,0.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **99.22** | **26** | P | **Pdif** | **07 27 09.6** | **-2.3** | |
| | comp=Z,5.6nm,1.0s,baz=259,slow=6.1,SNR=5.0 | | | | | | | |
| ILAR | | | | PP | **PP** | **07 31 12.2** | **-2.6** | |
| | comp=Z,4.4nm,1.1s,baz=252,slow=6.8,SNR=5.6 | | | | | | | |
| | comp=Z,5.6nm,1.0s | | | | | | | |
| **LVZ** | **Lovozero** | **99.66** | **337** | *i* P | **Pdif** | **07 27 15.1** | **+1.2** | |
| LVZ | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **101.31** | **320** | PP | **PP** | **07 31 27.9** | **-3.1** | |
| | comp=Z,0.4nm,0.3s,baz=76,slow=7.7,SNR=2.3 | | | | | | | |
| **MNK** | **Minsk** | **102.27** | **324** | *i* P | **Pdif** | **07 27 21.9** | **-3.8** | |
| MNK | | | | *i* | | 07 31 33.9 | | |
| MNK | | | | *i* S | **SKSac** | **07 38 01.5** | **-1.9** | |
| MNK | | | | *i* PS | **PS** | **07 40 40.6** | **-4.0** | |
| MNK | | | | *i* SS | **SS** | **07 46 12.1** | **-1.4** | |
| MNK | | | | *i* SSS | SSS | 07 50 10.1 | | |
| MNK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=E,11nm,0.8s | | | | | | | |
| MNK | | | | pmax | pmax | | | |
| | comp=N,24nm,0.9s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=Z,7μm,24.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=N,5μm,23.0s | | | | | | | |
| MNK | | | | MLR | MLR | | | |
| | comp=E,3μm,22.0s | | | | | | | |
| **HFS** | **Hagfors** | **109.38** | **330** | PP | **PP** | **07 32 25.9** | **-4.5** | |
| | comp=E,3.1nm,0.9s,baz=103,slow=11,SNR=3.7 | | | | | | | |
| **NOA** | **NORSAR Array B** | **110.35** | **331** | PP | **PP** | **07 32 32.4** | **-5.1** | |
| | comp=E,1.3nm,0.8s,baz=77,slow=7.8,SNR=4.3 | | | | | | | |
| **GERES** | **GERESS Array B** | **111.43** | **318** | PKiKP | **PKiKP** | **07 32 05.7** | **+0.7** | |
| | comp=E,1.1nm,0.6s,baz=180,slow=2.7,SNR=4.4 | | | | | | | |
| GERES | | | | PP | **PP** | **07 32 43.3** | **-2.5** | |
| | comp=E,0.4nm,0.3s,baz=92,slow=4.0,SNR=3.6 | | | | | | | |
| **CLL** | **Collm** | **111.48** | **321** | *e*PP | **PP** | **07 32 46.0** | **+0.1** | |
| **YKA** | **Yellowknife Ar** | **113.65** | **26** | PKiKP | **PKiKP** | **07 32 07.8** | **-0.8** | |
| | comp=E,0.7nm,0.5s,baz=319,slow=2.2,SNR=5.7 | | | | | | | |
| **PNT** | **Penticton** | **115.14** | **40** | PKIKP | **PKPdf** | **07 32 14.7** | **+2.8** | |
| **B08A** | **Colville Reser** | **115.54** | **41** | | **PKiKP** | **07 32 12.2** | **-0.5** | |
| **G08A** | **Pilot Rock** | **116.46** | **45** | | **PKPdf** | **07 32 14.6** | **-0.1** | |
| **NEW** | **Newport** | **117.00** | **41** | PKP | **PKiKP** | **07 32 16.3** | **+0.8** | |
| | comp=E,2.4nm,0.6s,baz=276,slow=10,SNR=5.6 | | | | | | | |
| **PNTR** | **Pine Nut** | **117.08** | **52** | PKPdf | **PKPdf** | **07 32 14.7** | **-1.5** | |
| **PAHR** | **Pah Rah Range** | **117.15** | **51** | | **PKPdf** | **07 32 15.6** | **-0.7** | |
| **WVOR** | **Wild Horse Val** | **117.25** | **48** | | **PKiKP** | **07 32 18.0** | **+1.6** | |
| **WVOR** | **Wild Horse Val** | **117.25** | **48** | PKIKP | **PKiKP** | **07 32 18.0** | **+1.6** | |
| **NVAR** | **Mina Array Bea** | **118.18** | **52** | PKP | **PKiKP** | **07 32 19.3** | **+0.9** | |
| | comp=E,2.8nm,0.7s,baz=229,slow=2.1,SNR=9.3 | | | | | | | |
| NVAR | | | | PP | **PP** | **07 33 32.7** | **-1.2** | |
| | comp=E,0.5nm,0.7s,baz=245,slow=5.9,SNR=1.6 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **119.47** | **329** | PKP | **PKiKP** | **07 32 20.3** | **+0.2** | |
| | comp=E,0.7nm,0.5s,baz=320,slow=2.1,SNR=2.9 | | | | | | | |
| EKA | | | | PP | **PP** | **07 33 44.1** | **+2.3** | |
| | comp=E,1.2nm,0.6s,baz=45,slow=7.1,SNR=3.6 | | | | | | | |
| **BPMT** | **Black Pine Rid** | **119.90** | **42** | PKPdf | **PKiKP** | **07 32 21.8** | **+0.2** | |
| **HLID** | **Hailey** | **120.02** | **46** | PKPdf | **PKiKP** | **07 32 22.4** | **+0.7** | |
| **ELK** | **Elko** | **120.08** | **49** | | **PKiKP** | **07 32 22.1** | **0.0** | |
| **ELK** | **Elko** | **120.08** | **49** | PKIKP | **PKiKP** | **07 32 22.1** | **0.0** | |
| **EGMT** | **Eagleton** | **121.77** | **40** | PKPdf | **PKiKP** | **07 32 25.1** | **+0.2** | |
| **DUG** | **Dugway, Tooele** | **122.01** | **49** | | **PKiKP** | **07 32 26.1** | **+0.3** | |
| **DUG** | **Dugway, Tooele** | **122.01** | **49** | PKIKP | **PKiKP** | **07 32 26.1** | **+0.3** | |
| **IMW** | **Indian Meadow** | **122.35** | **45** | PKPdf | **PKiKP** | **07 32 27.2** | **+0.7** | |
| **FXWY** | **Fox Creek** | **122.37** | **45** | | **PKiKP** | **07 32 27.3** | **+0.8** | |
| **LCMT** | **Little Creek M** | **122.38** | **53** | | **PKiKP** | **07 32 27.3** | **+0.7** | |
| **TPAW** | **Teton Pass** | **122.47** | **45** | PKPdf | **PKiKP** | **07 32 27.1** | **+0.4** | |
| **HWUT** | **Hardware Ranch** | **122.56** | **47** | PKPdf | **PKiKP** | **07 32 27.5** | **+0.6** | |
| **REDW** | **Red Top Meadow** | **122.57** | **45** | | **PKiKP** | **07 32 27.7** | **+0.8** | |
| **SNOW** | **Snow King Moun** | **122.61** | **45** | | **PKiKP** | **07 32 28.0** | **+1.0** | |
| **MPU** | **Maple Canyon** | **122.93** | **49** | PKPdf | **PKiKP** | **07 32 28.6** | **+0.9** | |
| **FFC** | **Flin Flon** | **123.12** | **30** | PKPdf | **PKiKP** | **07 32 28.0** | **+0.7** | |
| **FFC** | **Flin Flon** | **123.12** | **30** | PKIKP | **PKiKP** | **07 32 28.0** | **+0.7** | |
| **TMUT** | **Trail Mountain** | **123.43** | **50** | | **PKiKP** | **07 32 29.6** | **+0.8** | |
| **PDAR** | **Pinedale Array** | **123.66** | **45** | PKP | **PKPdf** | **07 32 28.6** | **-0.3** | |
| | comp=E,4.8nm,0.8s,baz=257,slow=1.0,SNR=12 | | | | | | | |
| **TORD** | **Torodi Ar, Bea** | **123.70** | **279** | PKP | **PKPdf** | **07 32 29.1** | **-0.2** | |
| | comp=E,12nm,0.7s,baz=54,slow=1.8,SNR=18 | | | | | | | |
| **P17A** | **Butcher Ranch,** | **123.73** | **50** | | **PKiKP** | **07 32 29.3** | **+0.1** | |
| **SRU** | **San Rafael Swe** | **123.99** | **50** | PKPdf | **PKiKP** | **07 32 30.5** | **+0.7** | |
| **SRU** | **San Rafael Swe** | **123.99** | **50** | PKIKP | **PKiKP** | **07 32 30.5** | **+0.7** | |
| **WUAZ** | **Wupatki** | **124.16** | **54** | PKPdf | **PKiKP** | **07 32 30.5** | **+0.3** | |
| **RDMU** | **Red Mountain** | **124.30** | **48** | | **PKiKP** | **07 32 31.4** | **+1.0** | |
| **X16A** | **Lo Mia Camp, P** | **124.33** | **56** | | **PKiKP** | **07 32 31.2** | **+0.7** | |
| **LAO** | **LASA Array** | **124.49** | **40** | PKPdf | **PKiKP** | **07 32 31.5** | **+1.2** | |
| **DGMT** | **Dagmar** | **124.99** | **37** | PKPdf | **PKPdf** | **07 32 30.9** | **0.0** | |
| **O20A** | **White River Ci** | **125.40** | **48** | PKPdf | **PKiKP** | **07 32 33.0** | **+0.4** | |
| **ESDC** | **Sonseca Array** | **125.83** | **311** | PKP | **PKiKP** | **07 32 33.0** | **-0.2** | |
| | comp=E,6.3nm,1.1s,baz=45,slow=2.0,SNR=6.5 | | | | | | | |
| **MVCO** | **Mesa Verde** | **126.02** | **52** | PKPdf | **PKiKP** | **07 32 34.0** | **+0.1** | |
| **SMCO** | **Snowmass** | **126.62** | **49** | PKPdf | **PKPdf** | **07 32 34.9** | **+0.1** | |
| **RSSD** | **Black Hills** | **126.93** | **42** | PKPdf | **PKPdf** | **07 32 35.0** | **0.0** | |
| **RSSD** | **Black Hills** | **126.93** | **42** | PKIKP | **PKPdf** | **07 32 35.0** | **0.0** | |
| **PLCA** | **Paso Flores** | **127.02** | **166** | PKP | **PKiKP** | **07 32 36.8** | **+1.1** | |
| | comp=E,6.1nm,0.9s,baz=214,slow=2.8,SNR=7.5 | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **127.15** | **51** | PKPdf | **PKiKP** | **07 32 36.6** | **+0.3** | |
| **MDT** | **Midelt** | **128.12** | **303** | PKP | **PKPdf** | **07 32 37.2** | **-0.3** | |
| | comp=E,1.4nm,0.6s,baz=98,slow=4.2,SNR=2.0 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **128.16** | **50** | | **PKPdf** | **07 32 37.6** | **0.0** | |
| **ULM** | **Lac du Bonnet** | **128.72** | **32** | PKP | **PKPdf** | **07 32 37.9** | **0.0** | |
| | comp=E,10.0nm,0.8s,baz=13,slow=3.4,SNR=6.3 | | | | | | | |
| **DBIC** | **Dimbokro** | **129.42** | **270** | PKP | **PKiKP** | **07 32 41.3** | **+0.3** | |
| | comp=E,11nm,1.0s,baz=62,slow=1.8,SNR=4.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **131.84** | **60** | PKP | **PKiKP** | **07 32 46.2** | **+0.6** | |
| | comp=E,1.6nm,0.7s,baz=182,slow=1.9,SNR=4.2 | | | | | | | |
| TXAR | | | | SKP | | 07 36 21.5 | | |
| | comp=E,1.4nm,0.9s,baz=318,slow=1.2,SNR=4.1 | | | | | | | |
| **SCHQ** | **Schefferville** | **135.18** | **9** | PKP | **PKiKP** | **07 32 51.5** | **0.0** | |
| | comp=E,2.8nm,0.5s,baz=340,slow=2.5,SNR=5.0 | | | | | | | |
| **MIAR** | **Mount Ida** | **138.30** | **49** | PKPdf | **PKiKP** | **07 32 57.8** | **-0.7** | |
| **MIAR** | **Mount Ida** | **138.30** | **49** | PKIKP | **PKiKP** | **07 32 57.8** | **-0.7** | |
| **V48A** | **Smith Brothers** | **142.52** | **43** | | **PKPdf** | **07 33 03.4** | **-0.6** | |
| **X48A** | **Hartselle** | **142.07** | **45** | PKPdf | **PKPdf** | **07 33 04.4** | **-0.6** | |
| **CPUP** | **Villa Florida** | **143.12** | **178** | PKP | **PKiKP** | **07 33 07.4** | **-1.2** | |
| | comp=E,3.2nm,0.7s,baz=219,slow=0.7,SNR=3.5 | | | | | | | |
| **SWET** | **Sewanee** | **143.41** | **43** | | **PKPdf** | **07 33 05.7** | **0.0** | |
| **J59A** | **Piesco** | **143.62** | **23** | | **PKPdf** | **07 33 06.0** | **+0.2** | |
| **PKME** | **Peaks-Kenny Pk** | **143.74** | **16** | | **PKPdf** | **07 33 06.9** | **+1.1** | |
| **H62A** | **Milan** | **143.82** | **19** | | **PKPdf** | **07 33 06.3** | **+0.3** | |
| **Y49A** | **Blount Mountai** | **143.83** | **46** | PKPdf | **PKPdf** | **07 33 06.4** | **0.0** | |
| **ACCN** | **Adirondack Com** | **144.01** | **22** | PKPdf | **PKPdf** | **07 33 06.9** | **+0.5** | |
| **FPAL** | **Fort Paine** | **144.01** | **44** | PKPdf | **PKPdf** | **07 33 07.1** | **+0.4** | |
| **BINY** | **Binghamton** | **144.07** | **26** | PKPdf | **PKPdf** | **07 33 07.5** | **+0.9** | |
| **LMN** | **Caledonia Moun** | **144.20** | **11** | | PKPbc | 07 33 04.8 | 0.0 | |
| **MCWV** | **Mont Chateau** | **144.20** | **32** | | **PKPab** | **07 33 04.6** | **0.0** | |
| **CPCT** | **Cooper Cave** | **144.22** | **42** | PKPdf | PKPbc | 07 33 05.5 | +0.3 | |
| **HNH** | **Hanover** | **144.22** | **20** | PKPdf | PKPbc | 07 33 05.1 | +0.2 | |
| **G65A** | **Princeton** | **144.24** | **14** | PKPdf | PKPbc | 07 33 04.9 | +0.1 | |
| **M57A** | **Sunshine Farm,** | **144.26** | **28** | PKPdf | PKPbc | 07 33 05.1 | 0.0 | |
| **WVL** | **Waterville** | **144.28** | **17** | | PKPbc | 07 33 05.1 | +0.1 | |
| **SSPA** | **Standing Stone** | **144.45** | **29** | PKPdf | PKPbc | 07 33 05.9 | +0.2 | |
| **I63A** | **Otisfield** | **144.47** | **18** | PKPdf | PKPbc | 07 33 05.7 | +0.1 | |
| **LVC** | **Limon Verde** | **144.48** | **159** | PKPdf | PKPbc | 07 33 07.5 | +0.7 | |
| **LVC** | **Limon Verde** | **144.48** | **159** | PKP | **PKPdf** | **07 33 08.6** | **+0.2** | |
| | comp=E,27nm,0.8s,baz=247,slow=6.9,SNR=12 | | | | | | | |
| **LVC** | **Limon Verde** | **144.48** | **159** | PKIKP | PKPbc | 07 33 07.5 | +0.7 | |
| **X51A** | **Calhoun** | **144.51** | **43** | | PKPbc | 07 33 06.0 | -0.1 | |
| **KSPA** | **Keystone Colle** | **144.69** | **26** | PKPdf | **PKPab** | **07 33 06.1** | **-0.2** | |
| **S54A** | **Dingess, Beckl** | **144.71** | **36** | PKPdf | PKPbc | 07 33 06.9 | +0.2 | |
| **EMMW** | **East Machias** | **144.73** | **14** | | PKPbc | 07 33 06.4 | 0.0 | |
| **W52A** | **Murphy** | **144.82** | **42** | | **PKPab** | **07 33 07.0** | **-0.1** | |
| **N58A** | **Sunbury** | **144.85** | **28** | PKPdf | **PKPab** | **07 33 06.7** | **-0.2** | |
| **250A** | **Grady** | **144.91** | **48** | PKPdf | PKPbc | 07 33 07.5 | +0.1 | |
| **Q56A** | **Snyder Ridge,** | **145.00** | **32** | PKPdf | **PKPab** | **07 33 07.4** | **-0.2** | |
| **R55A** | **Marlinton** | **145.04** | **34** | | **PKPbc** | **07 33 06.9** | **-0.9** | |
| **HUEH** | **Huehuenango** | **145.05** | **79** | PKPbc | **PKPab** | **07 33 08.7** | **+0.1** | |
| **GBN** | **Guysborough** | **145.13** | **7** | | **PKPdf** | **07 33 08.1** | **-0.1** | |
| **K62A** | **Royalston** | **145.15** | **21** | | **PKPdf** | **07 33 08.2** | **-0.2** | |
| **L61B** | **Northampton** | **145.18** | **22** | | **PKPbc** | **07 33 07.6** | **-0.4** | |
| **U54A** | **Nelsons Funny** | **145.26** | **38** | | **PKPbc** | **07 33 07.7** | **-0.9** | |
| **P57A** | **Homestead Farm** | **145.28** | **31** | | **PKPbc** | **07 33 08.1** | **-0.3** | |
| **Y52A** | **Lilburn** | **145.45** | **44** | | **PKPab** | **07 33 09.2** | **-0.2** | |
| **KSCT** | **Kent School, K** | **145.49** | **24** | | **PKPdf** | **07 33 09.0** | **0.0** | |
| **ODNJ** | **Ogdensburg** | **145.58** | **25** | | **PKPbc** | **07 33 09.3** | **0.0** | |
| **HAL** | **Halifax** | **145.59** | **10** | | **PKPab** | **07 33 09.6** | **+0.1** | |
| **HAL** | **Halifax** | **145.59** | **10** | PKIKP | **PKPab** | **07 33 09.6** | **+0.1** | |
| **BLA** | **Blacksburg** | **145.62** | **36** | | **PKPbc** | **07 33 09.6** | **-0.1** | |
| **BLA** | **Blacksburg** | **145.62** | **36** | PKIKP | **PKPbc** | **07 33 09.6** | **-0.1** | |
| **152A** | **Waverly Hall** | **145.66** | **46** | | **PKPab** | **07 33 10.1** | **-0.1** | |
| **MVL** | **Millersville** | **145.68** | **28** | PKPdf | **PKPbc** | **07 33 09.7** | **0.0** | |
| **TRNY** | **Table Rock, Ra** | **145.69** | **25** | PKPdf | **PKPdf** | **07 33 09.4** | **0.0** | |
| **WES** | **Weston** | **145.72** | **20** | | **PKPdf** | **07 33 09.2** | **-0.1** | |
| **WES** | **Weston** | **145.72** | **20** | PKIKP | **PKPdf** | **07 33 09.2** | **-0.1** | |
| **BCX** | **Boston College** | **145.81** | **20** | | **PKPdf** | **07 33 09.6** | **+0.1** | |
| **TA01** | **Diego Aracena** | **145.86** | **156** | | **PKPab** | **07 33 11.4** | **+0.2** | |
| **S57A** | **Dark Hollow, R** | **146.06** | **34** | | **PKPbc** | **07 33 10.9** | **0.0** | |
| **APG** | **El Apazote** | **146.07** | **79** | PKPbc | **PKPbc** | **07 33 11.5** | **-0.4** | |
| | comp=E,10nm,1.1s,baz=317,slow=4.4,SNR=7.8 | | | | | | | |
| **V55A** | **Taylorsville** | **146.07** | **38** | | **PKPbc** | **07 33 10.9** | **-0.2** | |
| **GOGA** | **Godfrey** | **146.12** | **44** | | **PKPbc** | **07 33 11.2** | **-0.1** | |
| **GOGA** | **Godfrey** | **146.12** | **44** | PKP2 | **PKPbc** | **07 33 11.2** | **-0.1** | |
| **352A** | **Blakely** | **146.14** | **48** | | **PKPbc** | **07 33 11.3** | **0.0** | |
| **TA02** | **Huaiquique** | **146.15** | **156** | | **PKPdf** | **07 33 11.0** | **+0.3** | |
| **N62A** | **Caumsett State** | **146.18** | **24** | | **PKPbc** | **07 33 10.9** | **-0.3** | |
| **HMBC** | **Humberstone** | **146.24** | **156** | | **PKPdf** | **07 33 11.4** | **+0.3** | |
| **U56A** | **King** | **146.24** | **37** | | **PKPbc** | **07 33 11.2** | **-0.3** | |
| **PAULI** | **Pauline** | **146.36** | **40** | | **PKPbc** | **07 33 11.9** | **0.0** | |
| **HODGE** | **Hodges** | **146.44** | **42** | | **PKPbc** | **07 33 12.3** | **+0.1** | |
| **T57A** | **Hurt** | **146.44** | **35** | | **PKPbc** | **07 33 11.8** | **-0.3** | |
| **KMSC** | **Kings Mountain** | **146.46** | **40** | | **PKPdf** | **07 33 11.4** | **+0.5** | |
| **154A** | **Montrose** | **146.82** | **45** | | **PKPbc** | **07 33 13.7** | **+0.4** | |
| **JSC** | **Jenkinsville** | **147.05** | **41** | | **PKPbc** | **07 33 14.0** | **0.0** | |
| **JSC** | **Jenkinsville** | **147.05** | **41** | PKP2 | **PKPbc** | **07 33 14.0** | **0.0** | |
| **TIGA** | **Tifton** | **147.13** | **47** | | **PKPbc** | **07 33 13.9** | **-0.4** | |
| **T59A** | **Double "B" Far** | **147.40** | **33** | | **PKPbc** | **07 33 14.5** | **-0.3** | |
| **255A** | **Hazlehurst** | **147.65** | **45** | | **PKPbc** | **07 33 15.4** | **-0.2** | |
| **X58A** | **Rowland** | **148.08** | **38** | | **PKPbc** | **07 33 16.6** | **-0.2** | |
| **NNA** | **Nana** | **149.30** | **137** | PKPbc | **PKPbc** | **07 33 20.2** | **-0.3** | |
| | comp=E,23nm,0.8s,baz=254,slow=11,SNR=8.1 | | | | | | | |
| **LPAZ** | **La Paz** | **150.54** | **156** | PKPbc | **PKPbc** | **07 33 24.4** | **+0.2** | |
| | comp=E,29nm,0.8s,baz=72,slow=1.7,SNR=28 | | | | | | | |
| **BOAB** | **BOACO BROADBAND** | **150.80** | **84** | | **PKPbc** | **07 33 24.0** | **0.0** | |
| **ATAH** | **Atahualpa** | **151.42** | **127** | PKPbc | **PKiKP** | **07 33 26.9** | **+0.4** | |
| | comp=E,40nm,0.8s,baz=306,slow=3.3,SNR=16 | | | | | | | |
| **JTS** | **Las Juntas de** | **151.44** | **88** | PKPbc | **PKiKP** | **07 33 26.3** | **+0.2** | |
| | comp=E,15nm,1.0s,baz=255,slow=4.8,SNR=4.6 | | | | | | | |
| **BDFB** | **Brasilia** | **152.64** | **197** | PKPbc | **PKiKP** | **07 33 29.1** | **+0.5** | |
| | comp=E,18nm,0.8s,baz=162,slow=3.2,SNR=6.5 | | | | | | | |

*IDC **28** 07:35:43.3±2.6, 11°.48S×123°.42E, h0km, mb3.4/1, mbtmp3.6/3, ML3.5/2, Error ellipse: s-maj=197.7km s-min=35.1km az=51.0*
*DJA **28** 07:35:47.4±0.8, 11°.5±8°×12°.4E±°, h10km, M3.8/7, MLv3.8/7*
**ISC 28 07:35:45.1±1.0, 11°.0S±0°.1×124°.3E±0°.2, h10km, n6, σ2s44/9, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **1.02** | **323** | P | **Pg** | **07 36 04.6** | **-0.2** |
| BATI | | | | S | **Sg** | **07 36 17.4** | **-0.7** |
| **SOEI** | **Soe** | **1.26** | **359** | P | **Pn** | **07 36 09.1** | **+0.2** |
| **EDFI** | **Ende, Flores** | **3.42** | **311** | P | **Pn** | **07 36 38.5** | **-0.1** |
| **WRA** | **Warramunga Arr** | **13.12** | **134** | Pn | **Pn** | **07 38 54.6** | **+2.8** |
| | 0.2nm,0.3s,baz=308,slow=14,SNR=3.4 | | | | | | |
| WRA | | | | Sn | **Sn** | **07 41 13.8** | **-4.1** |
| | 0.1nm,0.3s,baz=306,slow=24,SNR=2.1 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **15.55** | **145** | Pn | **Pn** | **07 39 27.1** | **+2.4** |
| | 0.4nm,0.3s,baz=317,slow=12,SNR=17 | | | | | | |
| ASAR | | | | Sn | **Sn** | **07 42 15.2** | **-2.1** |
| | 0.1nm,0.3s,baz=316,slow=21,SNR=3.4 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.70** | **330** | P | **P** | **07 46 48.7** | **-0.3** |
| | 0.2nm,0.4s,baz=124,slow=8.1,SNR=2.1 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*IDC **28** 07:40:57.5±2.5, 11°.29S×123°.49E, h0km, mb3.6/1, mbtmp3.8/3, ML3.9/2, Error ellipse: s-maj=195.2km s-min=33.7km az=51.0*
*DJA **28** 07:41:03.4±0.5, 11°.5±5°×12°.4E±°, h10km, M4.3/10, mb4.4/1, MLv4.3/10*
**ISC 28 07:41:01.7±0.9, 10°.96S±0°.09×124°.3E±0°.1, h10km, n10, σ1s32/12, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.94** | **322** | P | **Pg** | **07 41 18.3** | **-1.6** |
| BATI | | | | S | **Sg** | **07 41 33.5** | **+1.2** |
| **SOEI** | **Soe** | **1.20** | **1** | P | **Pb** | **07 41 25.4** | **+0.8** |
| **EDFI** | **Ende, Flores** | **3.34** | **311** | P | **Pn** | **07 41 53.3** | **-0.9** |
| **BASI** | **Baing, Sumba** | **3.68** | **281** | P | **Pn** | **07 41 59.9** | **+1.1** |
| **WBSI** | **Waikabubak, Su** | **4.96** | **285** | P | **Pn** | **07 42 15.9** | **-0.4** |
| **PLAI** | **Plampang** | **6.72** | **288** | P | **Pn** | **07 42 40.7** | **+0.2** |
| **TWSI** | **Taliwang, Sumb** | **7.59** | **286** | P | **Pn** | **07 42 52.8** | **+0.4** |
| **WRA** | **Warramunga Arr** | **13.20** | **134** | Pn | **Pn** | **07 44 09.9** | **+0.6** |
| | 0.4nm,0.3s,baz=310,slow=14,SNR=8.0 | | | | | | |
| WRA | | | | Sn | **Sn** | **07 46 37.0** | **+0.7** |
| | 0.5nm,0.3s,baz=307,slow=24,SNR=5.0 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **15.63** | **145** | Pn | **Pn** | **07 44 42.8** | **+0.5** |
| | 0.8nm,0.3s,baz=317,slow=12,SNR=27 | | | | | | |
| ASAR | | | | Sn | **Sn** | **07 47 33.0** | **-2.7** |
| | 0.2nm,0.3s,baz=316,slow=20,SNR=6.3 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.62** | **330** | P | P | 07 52 02.0 | -3.1 |
| | 0.4nm,0.6s,baz=126,slow=7.5,SNR=4.4 | | | | | | |
| | 0.4nm,0.6s | | | | | | |

*IDC **28** 07:53:21.4±2.8, 11°.50S×123°.35E, h0km, mb3.4/1, mbtmp3.7/3, ML3.5/2, Error ellipse: s-maj=232.1km s-min=34.6km az=50.0*
*DJA **28** 07:53:25.2±1.5, 11°.5±10°×12°.4E±°, h10km, M3.4/4, MLv3.4/4*
**ISC 28 07:53:22.9±1.0, 11°.08S±0°.08×124°.1E±0°.1, h10km, n6, σ2s65/9, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.98** | **332** | P | **Pg** | **07 53 41.2** | **-0.6** |
| **SOEI** | **Soe** | **1.32** | **6** | P | **Pn** | **07 53 47.4** | **-0.1** |
| SOEI | | | | S | **Sb** | **07 54 04.9** | **-0.1** |
| **EDFI** | **Ende, Flores** | **3.34** | **314** | P | **Pn** | **07 54 15.0** | **-0.3** |
| **WRA** | **Warramunga Arr** | **13.20** | **133** | Pn | **Pn** | **07 56 32.8** | **+2.3** |
| | 0.2nm,0.3s,baz=303,slow=14,SNR=9.4 | | | | | | |
| WRA | | | | Sn | **Sn** | **07 58 55.5** | **-1.9** |
| | 0.2nm,0.3s,baz=291,slow=21,SNR=3.4 | | | | | | |
| | 2.0nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **15.60** | **145** | Pn | **Pn** | **07 57 06.2** | **+3.2** |
| | 0.3nm,0.3s,baz=320,slow=12,SNR=35 | | | | | | |
| ASAR | | | | Sn | **Sn** | **07 59 51.3** | **-4.7** |
| | 0.1nm,0.3s,baz=309,slow=21,SNR=2.9 | | | | | | |
| | 3.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.67** | **331** | P | P | **08 04 26.7** | **+0.1** |
| | 0.2nm,0.5s,baz=138,slow=7.0,SNR=2.9 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **28** 08:04:47.5±2.6, 11°.13S×123°.80E, h0km, mb3.5/1, mbtmp3.6/3, ML3.8/2, Error ellipse: s-maj=221.5km s-min=34.4km az=52.0*
*DJA **28** 08:04:51.4±1.3, 11°.5±7°×12°.4E±°, h11km±8km, M3.9/6, mb4.5/1, MLv3.6/6*
**ISC 28 08:04:49.0±1.0, 11°.0S±0°.1×124°.1E±0°.1, h10km, n7, σ1s62/10, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.95** | **330** | P | **Pg** | **08 05 07.0** | **-0.4** |
| BATI | | | | S | **Sg** | **08 05 19.6** | **-0.2** |
| **SOEI** | **Soe** | **1.28** | **6** | P | **Pn** | **08 05 13.4** | **+0.3** |
| **MMRI** | **Maumere** | **3.04** | **322** | P | **Pn** | **08 05 38.0** | **+0.8** |
| **EDFI** | **Ende, Flores** | **3.32** | **313** | P | **Pn** | **08 05 40.5** | **-0.6** |
| **WRA** | **Warramunga Arr** | **13.22** | **133** | Pn | **Pn** | **08 07 58.5** | **+1.6** |
| | 0.5nm,0.3s,baz=308,slow=15,SNR=10 | | | | | | |
| WRA | | | | Sn | **Sn** | **08 10 21.1** | **-3.0** |
| | 0.6nm,0.3s,baz=29,slow=10.0,SNR=9.0 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **15.62** | **145** | Pn | **Pn** | **08 08 31.7** | **+2.2** |
| | 0.3nm,0.3s,baz=320,slow=12,SNR=24 | | | | | | |
| ASAR | | | | Sn | **Sn** | **08 11 22.0** | **-0.8** |
| | 0.3nm,0.3s,baz=318,slow=22,SNR=8.1 | | | | | | |
| | 2.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.64** | **331** | P | P | **08 15 52.1** | **-0.3** |
| | 0.3nm,0.5s,baz=139,slow=6.4,SNR=3.0 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**IDC 28 08:10:21.0±3.6, 53°.68N×87°.65E, h0km, mbtmp2.6/2, ML2.3/2, Error ellipse: s-maj=32.5km s-min=17.7km az=55.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.70** | **280** | I | I | 08 22 20.0 | |
| | 0.1nm,0.9s,baz=98,slow=328,SNR=4.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.70** | **280** | Pg | Pn | 08 10 51.3 | -0.6 |
| | 0.5nm,0.3s,baz=99,slow=18,SNR=4.6 | | | | | | |
| ZALV | | | | Lg | Lg | 08 11 15.6 | |
| | 0.8nm,0.3s,baz=100,slow=25,SNR=6.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.39** | **245** | Pn | Pn | 08 11 56.2 | -0.2 |
| | baz=61,slow=14,SNR=3.8 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.70** | **209** | Pn | Pn | 08 12 16.4 | +2.0 |
| | 0.1nm,0.3s,baz=20,slow=9.5,SNR=2.2 | | | | | | |
| MKAR | | | | Lg | Lg | 08 14 24.6 | |
| | 0.1nm,0.3s,baz=23,slow=27,SNR=3.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

*SJA **28** 08:17:10.7±0.6, 22°.64S×66°.82W, h230km±6km, ML3.7, MW4.0*
*IDC **28** 08:17:11.4±0.8, 22°.66S×66°.70W, h203km±9km, mb3.5/7, mbtmp4.1/13, Error ellipse: s-maj=14.3km s-min=11.4km az=119.0*
*NEIC **28** 08:17:11.8±1.2, 22°.71S±0°.08×66°.9W±0°.1, h232km±9km, mb4.3/9, ML4.4(GUC), Error ellipse: s-maj=17.5km s-min=11.0km az=98.0*
*GUC **28** 08:17:11.9±0.6, 22°.72S×67°.16W, h253km±7km, ML4.4*
*VAO **28** 08:17:12.4±0.5, 22°.49S×66°.84W, h222km±6km, mb4.2*
**ISC 28 08:17:11.6±0.5, 22°.68S±0°.04×66°.93W±0°.05, h250km, n92, σ2s34/107, mb4.0/9, 6C-2D, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **1.19** | **257** | | **Pn** | **08 17 46.6** | **-1.4** |
| **AF01** | **San Pedro de A** | **1.19** | **257** | *e*P | **Pn** | **08 17 46.2** | **-1.9** |
| AF01 | | | | IAML | | 08 18 23.9 | |
| | comp=Z,224nm,0.6s | | | | | | |
| **AF01** | **San Pedro de A** | **1.19** | **257** | ⇑ *i*P | **Pn** | **08 17 46.8** | **-1.2** |
| **YJA** | **Yavi** | **1.40** | **69** | *e*P | **Pn** | **08 17 46.9** | **-2.8** |
| YJA | | | | *e*S | **S** | **08 18 13.5** | **-6.0** |
| YJA | | | | IAML | | 08 18 13.8 | |
| | comp=Z,156nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **1.83** | **272** | *e*P | **Pn**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAL2** | **Monte Alegre,** | **23.98** | **33** | P | **P** | **08 22 05.3** | **+1.6** |
| MAL2 | | | | IAmb | IAmb | 08 22 13.5 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **BOAV** | **Boa Vista** | **25.70** | **15** | P | **P** | **08 22 20.5** | **+1.3** |
| **MCPB** | **Macapa, AP** | **26.49** | **35** | P | **P** | **08 22 27.6** | **+1.4** |
| MCPB | | | | IAmb | IAmb | 08 22 34.9 | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **60.57** | **161** | P | **P** | **08 26 59.2** | **+3.8** |
| **SNAA** | **Sanae** | **60.57** | **161** | P | P | 08 26 59.6 | +4.1 |
| | comp=Z,0.8nm,0.8s,baz=276,slow=9.2,SNR=26 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **62.65** | **324** | P | P | 08 27 14.6 | +4.6 |
| | comp=Z,0.2nm,0.7s,baz=163,slow=8.8,SNR=3.4 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro** | **67.33** | **72** | P | P | 08 27 44.7 | +4.5 |
| | comp=Z,1.7nm,0.6s,baz=238,slow=5.6,SNR=1.5 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.52** | **180** | P | P | 08 27 46.1 | +5.4 |
| QSPA | | | | IAmb | IAmb | 08 28 30.2 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.52** | **180** | P | P | 08 27 46.0 | +5.2 |
| | comp=Z,0.8nm,0.5s,baz=174,slow=3.4,SNR=14 | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.03** | **69** | P | **P** | **08 28 34.6** | **+2.6** |
| | comp=Z,2.2nm,0.3s,baz=258,slow=5.4,SNR=61 | | | | | | |
| | comp=Z,2.2nm,0.3s | | | | | | |
| **BOSA** | **Boshof** | **81.27** | **117** | P | P | 08 29 04.2 | +3.8 |
| | comp=Z,4.2nm,1.1s,baz=270,slow=8.1,SNR=3.6 | | | | | | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **ESDC** | **Sonseca Array** | **85.40** | **44** | P | P | 08 29 25.4 | +4.5 |
| | comp=Z,0.5nm,0.7s,baz=233,slow=6.2,SNR=4.5 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **145.46** | **38** | PKPbc | **PKiKP** | **08 36 24.8** | **+1.0** |
| | comp=Z,0.6nm,0.4s,baz=322,slow=3.3,SNR=8.4 | | | | | | |

**IDC 28 08:18:45.1±3.6, 53°54N×90°77E, h0km, mbtmp2.8/3, ML2.1/3, Error ellipse: s-maj=28.8km s-min=24.4km az=65.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.56** | **279** | I | I | 08 42 00.0 | |
| | 0.3nm,1.0s,baz=91,slow=325,SNR=24 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.56** | **279** | Pn | Pn | 08 19 42.7 | +1.2 |
| | 0.1nm,0.3s,baz=99,slow=16,SNR=2.4 | | | | | | |
| ZALV | | | | Lg | Lg | 08 20 37.8 | |
| | 0.5nm,0.3s,baz=91,slow=22,SNR=3.6 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.08** | **254** | Pn | Pn | 08 20 43.1 | -0.5 |
| | baz=66,slow=14,SNR=4.9 | | | | | | |
| KURBB | | | | Sn | Sn | 08 22 13.5 | -2.1 |
| | 0.1nm,0.3s,baz=67,slow=27,SNR=4.5 | | | | | | |
| KURBB | | | | Lg | Lg | 08 23 03.4 | |
| | 0.1nm,0.3s,baz=70,slow=31,SNR=5.5 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.66** | **222** | Pn | Pn | 08 20 52.8 | +1.1 |
| | 0.1nm,0.3s,baz=40,slow=11,SNR=2.8 | | | | | | |
| MKAR | | | | Sn | Sn | 08 22 28.8 | -1.2 |
| | 0.1nm,0.3s,baz=38,slow=31,SNR=2.6 | | | | | | |
| MKAR | | | | Lg | Lg | 08 23 21.0 | |
| | baz=38,slow=20,SNR=3.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**IDC 28 08:24:58.9±2.2, 53°97N×85°65E, h0km, mbtmp2.6/2, ML2.3/2, Error ellipse: s-maj=14.8km s-min=7.3km az=78.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.49** | **268** | I | I | 08 27 40.0 | |
| | baz=86,slow=323,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.49** | **268** | Pg | Pg | 08 25 08.6 | +0.2 |
| | 1.2nm,0.3s,baz=88,slow=17,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 08 25 14.9 | |
| | 1.6nm,0.3s,baz=85,slow=25,SNR=37 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.50** | **235** | Pn | Pn | 08 26 22.8 | +0.8 |
| | 0.1nm,0.3s,baz=52,slow=13,SNR=1.6 | | | | | | |
| KURBB | | | | Lg | Lg | 08 27 54.0 | |
| | baz=56,slow=31,SNR=1.5 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.50** | **198** | Pn | Pn | 08 26 50.9 | +1.4 |
| | 0.1nm,0.3s,baz=18,slow=15,SNR=2.7 | | | | | | |
| MKAR | | | | Sn | Sn | 08 28 12.8 | -2.4 |
| | baz=23,slow=27 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

**IDC 28 08:25:32.6±2.5, 54°22N×86°04E, h0km, mbtmp3.1/2, ML3.0/2, Error ellipse: s-maj=18.4km s-min=10.9km az=54.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.77** | **250** | I | I | 08 31 10.0 | |
| | baz=67,slow=325,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.77** | **249** | Pg | Pg | 08 25 47.0 | -0.3 |
| | 2.2nm,0.3s,baz=67,slow=16,SNR=7.6 | | | | | | |
| ZALV | | | | Lg | Lg | 08 25 58.1 | |
| | 7.6nm,0.3s,baz=73,slow=28,SNR=16 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.84** | **235** | Pn | Pn | 08 27 01.1 | +0.8 |
| | 0.2nm,0.3s,baz=52,slow=13,SNR=2.7 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.81** | **199** | Pn | Pn | 08 27 28.2 | +0.8 |
| | 0.5nm,0.3s,baz=21,slow=12,SNR=14 | | | | | | |
| MKAR | | | | Sn | Sn | 08 28 56.5 | 0.0 |
| | 0.1nm,0.3s,baz=15,slow=29,SNR=3.2 | | | | | | |
| | 0.5nm,0.3s | | | | | | |

*NOU **28** 08:28:14.4, 37°.20S×179°.42E, h0km, MLv3.7/7, Off E. Coast of N. Island, N.Z.*
*WEL **28** 08:28:32.9, 38°S±19°×17°8E±1°.0, h30km±12km, M2.5/20, ML2.7/15, MLv2.5/20, Error ellipse: s-maj=0.0km s-min=0.0km az=179.2*

**ISC 28 08:28:22.3±3.6, 37°2S±0°.1×179°0E±0°.2, h35km, n44, σ1s01/44, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **0.64** | **236** | P | **Pn** | **08 28 32.4** | **-2.6** |
| **MXZ** | **Matakaoa Point** | **0.64** | **236** | P | **Pn** | **08 28 32.9** | **-2.1** |
| **PKGZ** | **Pakihiroa** | **0.97** | **227** | P | **Pn** | **08 28 39.2** | **-0.3** |
| **PUZ** | **Puketiti** | **1.04** | **213** | P | **Pn** | **08 28 41.0** | **+0.5** |
| **HAZ** | **Te Kaha** | **1.10** | **239** | P | **Pn** | **08 28 39.9** | **-1.3** |
| **TWGZ** | **Tauwhareparae** | **1.25** | **219** | P | **Pn** | **08 28 44.2** | **+0.8** |
| **RUGZ** | **Raukumara Rang** | **1.28** | **233** | P | **Pn** | **08 28 44.1** | **+0.3** |
| **CNGZ** | **Carnagh Statio** | **1.42** | **205** | P | **Pn** | **08 28 46.8** | **+1.2** |
| **TKGZ** | **Te Karaka** | **1.52** | **215** | P | **Pn** | **08 28 47.4** | **+0.3** |
| **MWZ** | **Matawai** | **1.61** | **225** | P | **Pn** | **08 28 49.1** | **+0.8** |
| **RIGZ** | **Rimuhau** | **1.78** | **212** | P | **Pn** | **08 28 50.9** | **+0.3** |
| **RAGZ** | **Rawiri** | **1.79** | **223** | P | **Pn** | **08 28 51.6** | **+0.9** |
| **URZ** | **Urewera** | **1.82** | **234** | P | **Pn** | **08 28 51.4** | **+0.3** |
| **URZ** | **Urewera** | **1.82** | **234** | P | **Pn** | **08 28 51.8** | **+0.8** |
| **MARZ** | **Manawahe** | **1.99** | **246** | P | **Pn** | **08 28 54.3** | **+0.8** |
| **SNGZ** | **Shannon Statio** | **2.04** | **219** | P | **Pn** | **08 28 54.8** | **+0.6** |
| **RTZ** | **Ruatahuna** | **2.12** | **228** | P | **Pn** | **08 28 56.4** | **+1.1** |
| **MUGZ** | **Murupara** | **2.16** | **233** | P | **Pn** | **08 28 56.4** | **+0.6** |
| **TARZ** | **Mount Tarawera** | **2.21** | **241** | P | **Pn** | **08 28 58.4** | **+1.8** |
| **MTHZ** | **Maungataniwha** | **2.36** | **225** | P | **Pn** | **08 28 59.4** | **+0.9** |
| **NMHZ** | **Naumai** | **2.55** | **221** | P | **Pn** | **08 29 02.4** | **+1.1** |
| **MRHZ** | **Matea Rd** | **2.59** | **230** | P | **Pn** | **08 29 02.6** | **+0.8** |
| **KUZ** | **Kuaotunu** | **2.64** | **279** | P | **Pn** | **08 29 02.3** | **-0.2** |
| **KUZ** | **Kuaotunu** | **2.64** | **279** | P | **Pn** | **08 29 01.6** | **-0.9** |
| **BKZ** | **Black Stump Fm** | **2.77** | **224** | P | **Pn** | **08 29 04.3** | **0.0** |
| **BKZ** | **Black Stump Fm** | **2.77** | **224** | P | **Pn** | **08 29 04.4** | **+0.2** |
| **TOZ** | **Tahuroa Road** | **2.81** | **258** | P | **Pn** | **08 29 04.8** | **+0.1** |
| **MCHZ** | **McNeill Hill** | **2.87** | **218** | P | **Pn** | **08 29 05.3** | **-0.2** |
| **KWHZ** | **Kaweka Forest** | **2.99** | **221** | P | **Pn** | **08 29 07.2** | **-0.1** |
| **MKAZ** | **Moumakai** | **3.05** | **271** | P | **Pn** | **08 29 07.1** | **-0.9** |
| **KAHZ** | **Kahuranaki** | **3.07** | **212** | P | **Pn** | **08 29 07.4** | **-1.0** |
| **TMVZ** | **Te Maari** | **3.21** | **232** | P | **Pn** | **08 29 10.6** | **+0.3** |
| **ETVZ** | **East Tongariro** | **3.22** | **232** | P | **Pn** | **08 29 10.9** | **+0.4** |
| **NTVZ** | **North Tongarir** | **3.22** | **233** | P | **Pn** | **08 29 11.1** | **+0.7** |
| **OTVZ** | **Oturere** | **3.26** | **232** | P | **Pn** | **08 29 11.8** | **+0.7** |
| **SNVZ** | **South Ngauruho** | **3.29** | **232** | P | **Pn** | **08 29 11.8** | **+0.3** |
| **PNHZ** | **Pukenui** | **3.47** | **218** | P | **Pn** | **08 29 13.7** | **-0.2** |
| **WPHZ** | **Waipukurau** | **3.48** | **214** | P | **Pn** | **08 29 14.7** | **+0.7** |
| **HIZ** | **Hauiti** | **3.51** | **247** | P | **Pn** | **08 29 14.8** | **+0.4** |
| **HIZ** | **Hauiti** | **3.51** | **247** | P | **Pn** | **08 29 15.7** | **+1.3** |
| **RVAZ** | **Riverhead Bore** | **3.54** | **276** | P | **Pn** | **08 29 16.3** | **+1.5** |
| **VRZ** | **Vera Road** | **3.84** | **239** | P | **Pn** | **08 29 19.7** | **+0.8** |
| **BFZ** | **Birch Farm** | **4.08** | **211** | P | **Pn** | **08 29 19.5** | **-2.6** |
| **OUZ** | **Omahuta** | **4.78** | **293** | P | **Pn** | **08 29 32.3** | **+0.5** |

*IDC **28** 08:40:52.4±0.8, 10°.58S×124°.58E, h0km, mb4.0/10, mbtmp4.1/13, ML4.0/3, MS4.2/8, Error ellipse: s-maj=43.8km s-min=16.1km az=66.0*
*DJA **28** 08:40:54.8±0.5, 11°S±5°×12°4E±°, h10km, M4.6/11, mb4.8/3, MLv4.6/11*
*NEIC **28** 08:40:55.5±2.1, 10°.67S±0°.05×124°.37E±0°.07, h10km±1km, mb4.5/11, Error ellipse: s-maj=12.0km s-min=8.3km az=109.0*

**ISC 28 08:40:55.4±0.5, 10°.74S±0°.05×124°.27E±0°.06, h10km, n64, σ1s85/50, mb4.2/13, MS4.0/4, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.79** | **312** | P | **Pg** | **08 41 11.3** | **+0.6** |
| **SOEI** | **Soe** | **0.97** | **0** | Pn | **Pg** | **08 41 14.9** | **+0.7** |
| **SOEI** | **Soe** | **0.97** | **0** | P | **Pg** | **08 41 15.5** | **+1.3** |
| **MMRI** | **Maumere** | **2.89** | **316** | P | **Pn** | **08 41 42.2** | **+0.6** |
| **MMRI** | **Maumere** | **2.89** | **316** | P | **Pn** | **08 41 41.3** | **-0.2** |
| **EDFI** | **Ende, Flores** | **3.22** | **308** | P | **Pn** | **08 41 45.7** | **-0.4** |
| **BASI** | **Baing, Sumba** | **3.66** | **278** | P | **Pn** | **08 41 52.0** | **-0.2** |
| **WBSI** | **Waikabubak, Su** | **4.92** | **282** | P | **Pn** | **08 42 08.6** | **-0.9** |
| **KNRA** | **Kununurra** | **6.58** | **139** | | **Pn** | **08 42 32.5** | **+0.2** |
| **DRS** | **Darwin Rock St** | **6.71** | **105** | P | **Pn** | **08 42 34.4** | **+0.3** |
| **BKSI** | **Bulukumba** | **6.76** | **322** | P | **Pn** | **08 42 34.8** | **0.0** |
| | 42nm,0.8s,0.2nm | | | | | | |
| **MTN** | **Manton Dam** | **7.04** | **108** | Pn | **Pn** | **08 42 38.3** | **-0.3** |
| **KAPI** | **Kappang** | **7.23** | **321** | Pn | **Pn** | **08 42 43.5** | **+2.3** |
| **KAPI** | **Kappang** | **7.23** | **321** | Pn | **Pn** | **08 42 42.0** | **+0.7** |
| | 2.8nm,0.3s,baz=131,slow=10,SNR=6.1 | | | | | | |
| KAPI | | | | LR | LR | 08 45 55.4 | |
| | comp=Z,3μm,19.3s,baz=212,slow=42 | | | | | | |
| | 12nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **7.44** | **170** | Pn | **Pn** | **08 42 43.0** | **-1.1** |
| **TWSI** | **Taliwang, Sumb** | **7.54** | **285** | P | **Pn** | **08 42 44.4** | **-1.1** |
| **KDU** | **Kakadu** | **8.27** | **104** | P | **Pn** | **08 42 55.6** | **+0.1** |
| **FAKI** | **Fak Fak** | **11.09** | **46** | Pn | Pn | 08 43 28.9 | -5.3 |
| **MBWA** | **Marble Bar** | **11.24** | **202** | Pn | **Pn** | **08 43 34.8** | **-1.4** |
| **PSA00** | **Pilbara Seismi** | **11.58** | **201** | Pn | Pn | 08 43 38.3 | -2.6 |
| **WB0** | **Warramunga Arr** | **13.26** | **134** | Pn | Pn | 08 44 00.4 | -3.5 |
| **WRA** | **Warramunga Arr** | **13.34** | **135** | Pn | Pn | 08 44 01.0 | -4.0 |
| | 0.7nm,0.3s,baz=303,slow=14,SNR=43 | | | | | | |
| WRA | | | | LR | LR | 08 49 45.9 | |
| | comp=Z,2μm,20.1s,baz=344,slow=40 | | | | | | |
| | 2.3nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **13.34** | **134** | Pn | Pn | 08 44 01.9 | -3.1 |
| **WB2** | **Warramunga Arr** | **13.35** | **134** | Pn | Pn | 08 44 02.4 | -2.8 |
| **WR0** | **Warramunga Arr** | **13.49** | **134** | Pn | Pn | 08 44 03.4 | -3.7 |
| **WRKA** | **Warakurna** | **14.73** | **165** | P | Pn | 08 44 21.4 | -2.6 |
| **AS31** | **Alice Springs** | **15.80** | **146** | Pn | **Pn** | **08 44 36.2** | **-2.1** |
| **ASAR** | **Alice Springs** | **15.80** | **146** | Pn | **Pn** | **08 44 35.4** | **-2.9** |
| | 1.0nm,0.3s,baz=320,slow=12,SNR=56 | | | | | | |
| ASAR | | | | Sn | **Sn** | **08 47 31.4** | **-2.2** |
| | 0.8nm,0.3s,baz=313,slow=21,SNR=4.0 | | | | | | |
| ASAR | | | | LR | LR | 08 50 50.2 | |
| | comp=Z,2μm,18.3s,baz=308,slow=38 | | | | | | |
| | 5.0nm,0.5s | | | | | | |
| **AS01** | **Alice Springs** | **15.83** | **146** | P | **Pn** | **08 44 35.7** | **-2.8** |
| **MEEK** | **Meekatharra** | **16.69** | **198** | P | **Pn** | **08 44 53.2** | **+3.6** |
| **QIS** | **Mount Isa** | **17.69** | **125** | P | **Pn** | **08 45 00.4** | **-1.7** |
| **DAV** | **Davao City (W)** | **17.74** | **4** | LR | LR | 08 51 59.5 | |
| | comp=Z,449nm,21.5s,baz=177,slow=38 | | | | | | |
| **COEN** | **Coen** | **18.75** | **102** | P | **P** | **08 45 16.8** | **+2.1** |
| **COEN** | **Coen** | **18.75** | **102** | P | **P** | **08 45 12.7** | **-2.0** |
| COEN | | | | IAmb | IAmb | 08 45 38.7 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **MORW** | **Morawa** | **19.80** | **202** | P | **P** | **08 45 29.5** | **+3.5** |
| MORW | | | | IAmb | IAmb | 08 46 08.1 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **OOD** | **Oodnadatta** | **20.08** | **149** | P | **P** | **08 45 29.2** | **0.0** |
| **FORT** | **Forrest** | **20.25** | **171** | P | **P** | **08 45 33.0** | **+2.0** |
| **FORT** | **Forrest** | **20.25** | **171** | P | **P** | **08 45 32.6** | **+1.5** |
| FORT | | | | IAmb | IAmb | 08 45 46.1 | |
| | comp=Z,50nm,1.1s | | | | | | |
| **BLDU** | **Ballidu** | **20.99** | **198** | P | Pn | 08 45 45.6 | +4.0 |
| **MULG** | **Mulgathing** | **21.48** | **156** | P | **P** | **08 45 45.2** | **+0.9** |
| **PMG** | **Port Moresby** | **22.58** | **89** | LR | LR | 08 56 19.2 | |
| | comp=Z,328nm,19.4s,baz=234,slow=42 | | | | | | |
| **INKA** | **Innaminka** | **22.93** | **140** | P | **P** | **08 46 00.4** | **+0.5** |
| **LCRK** | **Leigh Creek** | **23.52** | **149** | P | **P** | **08 46 07.3** | **+1.6** |
| **BBOO** | **Buckleboo** | **24.51** | **155** | P | **P** | **08 46 17.8** | **+2.7** |
| **BBOO** | **Buckleboo** | **24.51** | **155** | P | **P** | **08 46 15.2** | **+0.2** |
| **RKGY** | **Rocky Gully** | **24.68** | **195** | P | **P** | **08 46 23.6** | **+7.0** |
| **STKA** | **Stephens Creek** | **26.44** | **145** | P | **P** | **08 46 31.6** | **-1.0** |
| | comp=Z,0.7nm,0.4s,baz=323,slow=10,SNR=2.0 | | | | | | |
| STKA | | | | LR | LR | 08 56 38.1 | |
| | comp=Z,704nm,20.7s,baz=252,slow=36 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **CM31** | **Chiang Mai Ar** | **38.29** | **319** | P | **P** | **08 48 15.3** | **-1.0** |
| **CMAR** | **Chiang Mai Ar** | **38.29** | **319** | P | **P** | **08 48 15.4** | **-0.9** |
| | comp=Z,3.0nm,0.3s,baz=140,slow=6.2,SNR=2.8 | | | | | | |
| CMAR | | | | LR | LR | 09 05 33.2 | |
| | comp=Z,145nm,18.7s,baz=205,slow=39 | | | | | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **48.06** | **4** | P | P | 08 49 32.7 | -2.3 |
| | comp=Z,0.4nm,0.4s,baz=166,slow=7.1,SNR=3.0 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **MJAR** | **Mashiro Arr** | **48.82** | **15** | P | P | 08 49 38.1 | -2.9 |
| | comp=Z,0.5nm,0.4s,baz=172,slow=9.8,SNR=1.8 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **RPZ** | **Rata Peaks** | **52.02** | **138** | LR | LR | 09 11 44.0 | |
| | comp=Z,417nm,18.5s,baz=290,slow=36 | | | | | | |
| **CASY** | **Casey** | **56.26** | **187** | P | **P** | **08 50 35.6** | **-0.1** |
| CASY | | | | IAmb | IAmb | 08 51 04.0 | |
| | comp=Z,6.1nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **60.44** | **346** | P | **P** | **08 51 03.2** | **-2.1** |
| | comp=Z,0.6nm,0.6s,baz=170,slow=11,SNR=4.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **68.44** | **330** | P | **P** | **08 51 55.7** | **-1.9** |
| MK31 | | | | IAmb | IAmb | 08 52 28.6 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.44** | **330** | P | **P** | **08 51 55.9** | **-1.7** |
| | comp=Z,1.0nm,0.5s,baz=137,slow=6.7,SNR=14 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **68.98** | **324** | P | **P** | **08 52 00.9** | **-0.4** |
| BOOM | | | | IAmb | IAmb | 08 52 22.7 | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.58** | **337** | P | P | 08 52 20.4 | -2.4 |
| | comp=Z,0.9nm,0.4s,baz=134,slow=6.2,SNR=2.0 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.89** | **331** | P | **P** | **08 52 23.2** | **-1.4** |
| | comp=Z,0.5nm,0.3s,baz=137,slow=4.9,SNR=5.9 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **79.27** | **180** | P | **P** | **08 53 01.4** | **+0.4** |
| **QSPA** | **South Pole Qui** | **79.27** | **180** | P | **P** | **08 53 00.0** | **-0.9** |
| | comp=Z,1.0nm,0.9s,baz=350,slow=11,SNR=5.1 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **90.69** | **195** | P | **P** | **08 53 58.4** | **+0.2** |
| SNAA | | | | IAmb | IAmb | 08 54 09.4 | |
| | comp=Z,4.7nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **90.69** | **195** | P | **P** | **08 53 58.6** | **+0.5** |
| | comp=Z,1.4nm,1.1s,baz=189,slow=3.6,SNR=7.8 | | | | | | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.86** | **279** | PKP | **PKPdf** | **08 59 54.3** | **-0.5** |
| | comp=Z,0.5nm,0.7s,baz=108,slow=1.3,SNR=3.1 | | | | | | |

*IDC **28** 08:43:11.9±0.8, 10°.64S×124°.53E, h0km, mb4.1/9, mbtmp4.2/12, ML4.1/3, Error ellipse: s-maj=44.1km s-min=17.0km az=68.0*
*NEIC **28** 08:43:14.4±2.9, 10°.78S±0°.04×124°.30E±0°.03, h10km±1km, mb4.4/16, Error ellipse: s-maj=8.9km s-min=2.9km az=215.0*
*DJA **28** 08:43:14.6±0.4, 11°S±4°×12°4E±°, h10km, M4.7/10, mb4.8/3, MLv4.6/10*

**ISC 28 08:43:13.6±0.5, 10°.84S±0°.05×124°.31E±0°.06, h10km, n51, σ1s66/47, mb4.4/14, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.89** | **314** | P | **Pg** | **08 43 31.5** | **+0.7** |
| **SOEI** | **Soe** | **1.07** | **358** | Pn | **Pg** | **08 43 35.4** | **+1.1** |
| SOEI | | | | Sn | **Sg** | **08 43 50.7** | **+2.4** |
| **SOEI** | **Soe** | **1.07** | **358** | P | **Pg** | **08 43 35.7** | **+1.4** |
| **MMRI** | **Maumere** | **2.99** | **317** | Pn | **Pn** | **08 44 03.5** | **+2.4** |
| MMRI | | | | Sn | **Sn** | **08 44 35.4** | **-1.7** |
| **MMRI** | **Maumere** | **2.99** | **317** | P | **Pn** | **08 43 59.8** | **-1.3** |
| **EDFI** | **Ende, Flores** | **3.31** | **309** | P | **Pn** | **08 44 05.4** | **-0.2** |
| **BASI** | **Baing, Sumba** | **3.72** | **279** | P | **Pn** | **08 44 11.9** | **+0.7** |
| **WBSI** | **Waikabubak, Su** | **4.99** | **283** | P | **Pn** | **08 44 29.7** | **+1.1** |
| **KNRA** | **Kununurra** | **6.48** | **138** | Pn | **Pn** | **08 44 51.8** | **+2.7** |
| KNRA | | | | Sn | **Sn** | **08 46 03.8** | **+0.8** |
| **PLAI** | **Plampang** | **6.74** | **287** | P | **Pn** | **08 44 53.3** | **+0.6** |
| | 157nm,2.7s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **6.97** | **107** | Pn | **Pn** | **08 44 57.1** | **+1.2** |
| MTN | | | | Sn | **Sn** | **08 46 14.7** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **7.33** | **170** | Pn | **Pn** | **08 45 02.3** | **+1.4** |
| **KAPI** | **Kappang** | **7.34** | **322** | Pn | **Pn** | **08 45 01.9** | **+1.0** |
| **KAPI** | **Kappang** | **7.34** | **322** | Pn | **Pn** | **08 45 02.4** | **+1.5** |
| | 3.1nm,0.3s,baz=145,slow=19,SNR=2.5 | | | | | | |
| | 12nm,0.5s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **7.61** | **285** | P | **Pn** | **08 45 04.6** | **-0.1** |
| **FAKI** | **Fak Fak** | **11.13** | **46** | Pn | Pn | 08 45 46.0 | -6.9 |
| **MBWA** | **Marble Bar** | **11.17** | **203** | Pn | Pn | 08 45 50.5 | -2.9 |
| **PSA00** | **Pilbara Seismi** | **11.50** | **201** | Pn | Pn | 08 45 53.5 | -4.5 |
| **WB0** | **Warramunga Arr** | **13.16** | **134** | Pn | Pn | 08 46 16.6 | -4.2 |
| **WRA** | **Warramunga Arr** | **13.24** | **134** | Pn | **Pn** | **08 46 20.8** | **-1.0** |
| | 1.0nm,0.3s,baz=310,slow=15,SNR=5.1 | | | | | | |
| WRA | | | | Sn | Sn | 08 48 41.8 | -7.4 |
| | 1.7nm,0.3s,baz=254,slow=23,SNR=6.3 | | | | | | |
| | 4.3nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **13.24** | **134** | Pn | Pn | 08 46 18.2 | -3.6 |
| **WB2** | **Warramunga Arr** | **13.25** | **134** | Pn | Pn | 08 46 18.6 | -3.3 |
| **WR0** | **Warramunga Arr** | **13.39** | **134** | | Pn | 08 46 21.1 | -2.8 |
| **UGM** | **Wanagama** | **13.91** | **281** | Pn | **Pn** | **08 46 29.4** | **-1.6** |
| **GIRL** | **Giralia** | **15.19** | **218** | Pn | **Pn** | **08 46 49.0** | **+0.8** |
| **AS31** | **Alice Springs** | **15.70** | **146** | | **Pn** | **08 46 54.4** | **-0.6** |
| **ASAR** | **Alice Springs** | **15.70** | **146** | Pn | **Pn** | **08 46 54.6** | **-0.5** |
| | 0.9nm,0.3s,baz=317,slow=12,SNR=5.2 | | | | | | |
| ASAR | | | | Sn | **Sn** | **08 49 42.4** | **-6.8** |
| | 0.6nm,0.3s,baz=314,slow=21,SNR=2.3 | | | | | | |
| | 7.0nm,0.6s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.61** | **334** | P | **P** | **08 47 30.0** | **-1.4** |
| KKM | | | | IAmb | IAmb | 08 47 46.8 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **COEN** | **Coen** | **18.68** | **101** | P | **P** | **08 47 30.9** | **-1.2** |
| **MORW** | **Morawa** | **19.72** | **202** | P | **P** | **08 47 43.1** | **-0.3** |
| MORW | | | | IAmb | IAmb | 08 48 17.6 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **FORT** | **Forrest** | **20.15** | **171** | P | **P** | **08 47 49.4** | **+1.3** |
| **CTAO** | **Charters Tower** | **23.04** | **116** | P | **P** | **08 48 19.5** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 08 48 54.5 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **BBOO** | **Buckleboo** | **24.40** | **155** | P | **P** | **08 48 33.2** | **+1.0** |
| **STKA** | **Stephens Creek** | **26.34** | **145** | P | **P** | **08 48 51.5** | **+1.7** |
| **STKA** | **Stephens Creek** | **26.34** | **145** | P | **P** | **08 48 49.6** | **-0.2** |
| | comp=Z,6.1nm,0.9s,baz=303,slow=11,SNR=3.2 | | | | | | |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.39** | **319** | P | **P** | **08 50 33.8** | **-1.6** |
| | comp=Z,3.4nm,0.3s,baz=131,slow=4.9,SNR=3.5 | | | | | | |
| | comp=Z,3.4nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **48.15** | **4** | P | **P** | **08 51 52.6** | **-1.4** |
| | comp=Z,0.6nm,0.7s,baz=178,slow=8.8,SNR=1.8 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.91** | **15** | P | P | 08 51 58.1 | -1.7 |
| | comp=Z,1.3nm,0.7s,baz=190,slow=10,SNR=2.1 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **CASY** | **Casey** | **56.16** | **187** | P | **P** | **08 52 54.7** | **+1.5** |
| CASY | | | | IAmb | IAmb | 08 53 06.9 | |
| | comp=Z,7.6nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **60.54** | **346** | P | **P** | **08 53 22.9** | **-1.3** |
| | comp=Z,0.5nm,0.5s,baz=168,slow=7.4,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **68.55** | **330** | P | **P** | **08 54 15.3** | **-1.1** |
| MK31 | | | | IAmb | IAmb | 08 54 42.0 | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.55** | **330** | P | **P** | **08 54 15.8** | **-0.7** |
| | comp=Z,1.2nm,0.5s,baz=132,slow=7.3,SNR=9.3 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **BOOM** | **Boomskoye usch** | **69.08** | **324** | P | **P** | **08 54 19.1** | **-1.1** |
| BOOM | | | | IAmb | IAmb | 08 54 25.5 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **72.69** | **337** | P | P | 08 54 39.8 | -1.8 |
| ZAA0 | | | | IAmb | IAmb | 08 54 46.

MCDR ⇑eSg **Sb** **08 51 28.0 +0.2**
MCDR IAML 08 51 28.7
comp=E,52nm,1.6s
MCDR IAML 08 52 06.9
comp=N,71nm,2.6s
**PCDR Punta Cana, DR 1.77 127** *i* P **Pb** **08 51 08.1 +0.6**
PCDR *e*S **Sg** **08 51 32.0 -0.5**
PCDR IAML 08 51 40.8
comp=Z,84nm,0.8s
**GRTK Grand Turk 2.24 328** eS **Sb** **08 51 41.3 -1.7**
GRTK IAML 08 51 48.5
comp=Z,60nm,1.2s

*IDC* ***28*** *08:52:51.9±1.3,10°.19S×125°.15E,h0km,mb4.0/5, mbtmp4.0/8,ML3.8/3,MS3.9/1,Error ellipse: s-maj=102.8km s-min=26.1km az=54.0*
*DJA* ***28*** *08:52:54.9±0.4,11°.S±4°×12°.4E±°,h10km,M4.3/6,mb4.6/1, MLv4.2/6*
**ISC 28 08:52:52.7±0.8,10°.97S±0°.09×124°.3E±0°.1,h10km,n14, σ1§56/15,mb4.1/5,Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.98** | **321** | P | **Pg** | **08 53 11.1** | **-0.5** |
| **SOEI** | **Soe** | **1.21** | **359** | P | **Pb** | **08 53 15.4** | **-0.4** |
| **EDFI** | **Ende, Flores** | **3.38** | **310** | P | **Pn** | **08 53 45.5** | **-0.3** |
| **BASI** | **Baing, Sumba** | **3.73** | **281** | P | **Pn** | **08 53 51.5** | **+1.1** |
| **WBSI** | **Waikabubak, Su** | **5.00** | **285** | P | **Pn** | **08 54 07.0** | **-1.0** |
| **KAPI** | **Kappang** | **7.43** | **322** | Pn | **Pn** | **08 54 43.4** | **+2.0** |
| | 2.0nm,0.3s,baz=152,slow=10,SNR=5.6 | | | | | | |
| KAPI | | | | LR | LR | 08 57 45.2 | |
| | comp=Z,928nm,19.2s,baz=264,slow=40 8.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **13.16** | **134** | Pn | **Pn** | **08 56 01.0** | **+1.2** |
| | 0.4nm,0.3s,baz=296,slow=14,SNR=14 | | | | | | |
| WRA | | | | Sn | **Sn** | **08 58 23.9** | **-2.4** |
| | 0.5nm,0.3s,baz=310,slow=24,SNR=5.7 1.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **15.60** | **145** | Pn | **Pn** | **08 56 34.9** | **+2.1** |
| | 0.5nm,0.3s,baz=320,slow=12,SNR=36 | | | | | | |
| ASAR | | | | Sn | **Sn** | **08 59 24.6** | **-1.2** |
| | 0.2nm,0.3s,baz=319,slow=22,SNR=5.7 2.7nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.48** | **319** | P | **P** | **09 00 14.8** | **-0.6** |
| | 2.2nm,0.3s,baz=148,slow=5.3,SNR=4.4 2.2nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **60.67** | **346** | P | P | 09 03 01.5 | -2.7 |
| | 0.3nm,0.4s,baz=180,slow=5.3,SNR=1.8 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.66** | **330** | P | **P** | **09 03 55.5** | **-0.8** |
| | 0.6nm,0.5s,baz=140,slow=7.1,SNR=6.3 0.6nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.81** | **337** | P | **P** | **09 04 19.7** | **-1.7** |
| | 0.6nm,0.4s,baz=162,slow=5.9,SNR=2.2 0.6nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **83.84** | **324** | P | **P** | **09 05 23.0** | **+0.5** |
| | 1.6nm,0.7s,baz=173,slow=2.6,SNR=4.5 1.6nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.92** | **279** | PKP | **PKPdf** | **09 11 54.6** | **+2.3** |
| | 0.2nm,0.5s,baz=88,slow=1.0,SNR=1.8 | | | | | | |

*IDC* ***28*** *08:59:23.2±2.9,54°.23N×87°.24E,h0km,mbtmp2.9/2, ML2.7/2,Error ellipse: s-maj=23.7km s-min=16.7km az=62.0*
*NNC* ***28*** *08:59:26.2±1.4,54°.08N×87°.04E,h0km,mb2.9,mpv2.7, Error ellipse: s-maj=12.7km s-min=6.3km az=24.0, Suspected Mining explosion.*
**ISC 28 08:59:24.6±3.9,54°.2N±0°.2×87°.1E±0°.2,h0km,n9,σ1§21/13, 8C-4D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.35** | **260** | I | I | 09 08 10.0 | |
| | baz=77,slow=322,SNR=3.9 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.35** | **260** | ⇑P | **Pb** | **08 59 50.5** | **-0.1** |
| | 0.3nm,0.3s | | | | | | |
| ZAA0 | | | | ⇓S | **Sb** | **09 00 08.9** | **+0.5** |
| | 1.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.35** | **260** | Pg | **Pg** | **08 59 48.9** | **-1.5** |
| | 1.4nm,0.3s,baz=77,slow=16,SNR=10 | | | | | | |
| ZALV | | | | Lg | Lg | 09 00 09.6 | |
| | 1.1nm,0.3s,baz=81,slow=27,SNR=3.2 | | | | | | |
| **KURK** | **Kurchatov** | **6.23** | **239** | ⇑Pn | **Pn** | **09 00 59.8** | **+2.1** |
| | 0.3nm,0.4s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 02 39.7 | |
| | 2.6nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.33** | **239** | Pn | **Pn** | **09 00 59.9** | **+0.8** |
| | 0.1nm,0.3s,baz=56,slow=14,SNR=4.4 | | | | | | |
| KURBB | | | | Sn | **Sn** | **09 02 12.1** | **+0.1** |
| | baz=56,slow=30,SNR=1.5 | | | | | | |
| KURBB | | | | Lg | Lg | 09 02 47.5 | |
| | baz=57,slow=30,SNR=4.2 0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.33** | **239** | ⇓Pn | **Pn** | **09 00 60.0** | **+0.9** |
| | 0.5nm,0.3s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 09 02 44.1 | |
| | 2.7nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **8.01** | **204** | ⇓Pn | **Pn** | **09 01 23.3** | **+1.2** |
| | 0.2nm,0.4s,baz=26,slow=13,SNR=4.1 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **09 02 54.5** | **+1.1** |
| | 0.5nm,0.6s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 03 34.2 | |
| | 2.2nm,1.0s,baz=28,slow=28,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.01** | **204** | Pn | **Pn** | **09 01 23.2** | **+1.1** |
| | 0.2nm,0.3s,baz=21,slow=12,SNR=6.6 | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 02 53.6** | **+0.2** |
| | 0.1nm,0.3s,baz=22,slow=27,SNR=5.1 | | | | | | |
| MKAR | | | | Lg | Lg | 09 03 41.1 | |
| | 0.1nm,0.3s,baz=28,slow=31,SNR=2.0 0.2nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **8.07** | **206** | ⇓Pn | **Pn** | **09 01 21.8** | **-1.2** |
| | 0.4nm,0.4s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sn** | **09 02 53.9** | **-1.0** |
| | 0.8nm,0.7s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 09 03 41.6 | |
| | 2.5nm,1.2s | | | | | | |

**AUST 28 09:14:43.8±0.2,33°S±2°×13°9E±°,h10km,mb3.5/1, Mjma3.7/10,ML2.7/11,MLv3.1/11,Error ellipse: s-maj=5.2km s-min=3.5km az=50.4,Near coast of South Australia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUJCS** | **Jamestown Cent** | **0.08** | **270** | P | Pg | 09 14 47.7 | +1.5 |
| AUJCS | | | | S | Sg | 09 14 49.8 | +1.9 |
| **HTT** | **Hallett** | **0.29** | **142** | P | Pg | 09 14 49.9 | +0.3 |
| HTT | | | | S | Sg | 09 14 54.2 | +0.6 |
| **NAPP** | **Napperby** | **0.47** | **272** | P | Pg | 09 14 53.5 | +0.5 |
| **PTPS** | **Port Pirie** | **0.60** | **272** | P | Pg | 09 14 55.6 | +0.2 |
| **YAPP** | **Yappala Statio** | **1.37** | **346** | P | Pn | 09 15 08.4 | -0.6 |
| YAPP | | | | S | Sn | 09 15 27.5 | +0.3 |
| **SDAN** | **Sedan** | **1.40** | **158** | P | Pn | 09 15 09.4 | 0.0 |
| SDAN | | | | S | Sg | 09 15 28.6 | -0.4 |
| **BBOO** | **Buckleboo** | **2.26** | **279** | P | Pn | 09 15 20.9 | -0.3 |
| **STKA** | **Stephens Creek** | **2.77** | **62** | P | Pn | 09 15 29.9 | +1.7 |
| **LCRK** | **Leigh Creek** | **2.78** | **351** | P | Pn | 09 15 28.7 | +0.4 |
| **LCRK** | **Leigh Creek** | **2.78** | **351** | S | Sn | 09 16 01.9 | 0.0 |
| **KELC** | **Kelly Hill Cav** | **3.15** | **208** | P | Pn | 09 15 34.4 | +1.1 |
| **ARPS** | **Mount Arapiles** | **4.39** | **145** | P | Pn | 09 15 50.0 | -0.5 |
| **MULG** | **Mulgathing** | **4.92** | **305** | P | Pn | 09 15 56.8 | -1.0 |
| **MULG** | **Mulgathing** | **4.92** | **305** | S | Sn | 09 16 51.5 | -3.2 |
| **CMSA** | **Cobar Meteorol** | **6.13** | **76** | P | Pn | 09 16 14.4 | -0.1 |
| | comp=Z,7.9nm,2.0s,comp=Z,936nmcomp=Z,95µmcomp=Z,0.0nm | | | | | | |
| **FORT** | **Forrest** | **9.36** | **282** | P | Pn | 09 16 57.5 | -1.3 |

**IDC 28 09:28:07.5±2.6,11°.18S×123°.82E,h0km,mb3.5/2, mbtmp3.3/4,ML2.8/1,Error ellipse: s-maj=177.3km s-min=32.7km az=55.0,South of Timor**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.36** | **132** | Pn | Pn | 09 31 18.0 | -0.5 |
| | 0.1nm,0.3s,baz=307,slow=15,SNR=2.3 | | | | | | |
| WRA | | | | Sn | Sn | 09 33 39.7 | -8.2 |
| | 0.1nm,0.3s,baz=318,slow=26,SNR=1.5 0.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **15.70** | **144** | Pn | Pn | 09 31 50.9 | +0.6 |
| | 0.2nm,0.4s,baz=319,slow=12,SNR=4.7 | | | | | | |
| ASAR | | | | Sn | Sn | 09 34 39.0 | -6.0 |
| | baz=324,slow=22,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **60.76** | **347** | P | P | 09 38 20.9 | -0.3 |
| | 0.4nm,0.5s,baz=165,slow=6.0,SNR=2.5 0.4nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.61** | **331** | P | P | 09 39 12.7 | +0.3 |
| | 0.1nm,0.4s,baz=128,slow=5.9,SNR=1.7 0.1nm,0.4s | | | | | | |

*ISN* ***28*** *09:29:58.3±1.2,34°.63N×46°.23E,h14km±14km,ML2.9*
*TEH* ***28*** *09:29:58.3,34°.64N×46°.22E,h9km±47km,ML2.7*
**ISC 28 09:29:58.2±1.1,34°.63N±0°.04×46°.22E±0°.05,h15km±11km, n10,σ0§39/12,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.15** | **64** | Pg | **Pg** | **09 30 02.3** | **0.0** |
| **IGHG** | **Ghaleghazi** | **0.42** | **137** | Pg | **Pg** | **09 30 07.1** | **+0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **207** | Pg | **Pg** | **09 30 09.9** | **+0.2** |
| **ILIN** | **Lien** | **0.67** | **65** | Pg | **Pg** | **09 30 11.4** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **118** | Pg | **Pg** | **09 30 12.9** | **-0.2** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **181** | Pg | **Pg** | **09 30 17.7** | **0.0** |
| **SNQR** | **Sonqor, Kerman** | **1.18** | **79** | Pn | **Pg** | **09 30 21.0** | **+0.5** |
| **IBDR** | **Badra** | **1.54** | **189** | *e*Pn | **Pg** | **09 30 27.5** | **-0.3** |
| | baz=9.0 | | | | | | |
| IBDR | | | | *e*Sn | **Sg** | **09 30 47.6** | **-0.2** |
| IBDR | | | | AML | AML | 09 30 53.2 | |
| | comp=E,314nm,0.4s | | | | | | |
| IBDR | | | | AML | AML | 09 30 57.4 | |
| | comp=N,127nm,0.3s | | | | | | |
| **IKRK** | **Kirkuk** | **1.73** | **297** | *e*Pn | **Pb** | **09 30 29.5** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **09 30 53.5** | **-0.3** |
| **IKFM** | **Kafar-mosalman** | **1.74** | **129** | Pg | **Pg** | **09 30 31.0** | **-0.7** |

*UPP* ***28*** *09:33:08.3±0.8,64°.56N×24°.58E,h0km,ML2.1*
*HEL* ***28*** *09:33:09.0±0.0,64°.54N×24°.59E,h0km,ML2.1,Explosion*
*IDC* ***28*** *09:33:10.0±1.1,64°.63N×25°.24E,h0km,mbtmp2.7/2, ML2.0/2,Error ellipse: s-maj=44.9km s-min=8.5km az=87.0*
**ISC 28 09:33:07.1±0.7,64°.57N±0°.02×24°.75E±0°.03,h0km,n30, σ0§83/53,Finland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OUF** | **Merijarvi** | **0.20** | **182** | *e*P | **Pg** | **09 33 12.1** | **+1.2** |
| OUF | | | | *e*S | **Sg** | **09 33 14.6** | **+1.2** |
| **OBF0** | **Syolatti, Pyha** | **0.23** | **253** | *e*P | **Pg** | **09 33 11.6** | **+0.1** |
| OBF0 | | | | *e*S | **Sg** | **09 33 13.7** | **-0.7** |
| **OBF4** | **Vikkela, Lumij** | **0.29** | **31** | *e*P | **Pb** | **09 33 15.2** | **0.0** |
| OBF4 | | | | *e*S | **Sb** | **09 33 19.9** | **-0.6** |
| **OUL** | **Oulu** | **0.72** | **43** | *e*P | **Pb** | **09 33 23.0** | **+0.6** |
| OUL | | | | *e*S | **Sb** | **09 33 32.8** | **+0.1** |
| **KALU** | **Kalix** | **1.43** | **336** | P | **Pn** | **09 33 34.2** | **0.0** |
| KALU | | | | S | **Sn** | **09 33 53.4** | **-0.1** |
| **KALU** | **Kalix** | **1.43** | **336** | *e*PG | **Pb** | **09 33 34.6** | **+0.2** |
| KALU | | | | *e*SB | **Sb** | **09 33 53.2** | **+0.1** |
| **TOF** | **Tornio** | **1.53** | **354** | *e*PG | **Pg** | **09 33 36.6** | **+0.3** |
| TOF | | | | *e*SB | **Sg** | **09 33 56.7** | **+0.5** |
| **SJUU** | **Sjulsmark** | **1.63** | **307** | P | **Pn** | **09 33 37.5** | **+0.5** |
| SJUU | | | | S | **Sn** | **09 33 58.7** | **0.0** |
| **RANF** | **Ranua** | **1.69** | **30** | *e*P | **Pg** | **09 33 39.8** | **+0.5** |
| RANF | | | | *e*S | **Sg** | **09 34 02.1** | **+0.9** |
| **ODEU** | **Stanfors** | **1.75** | **267** | P | **Pn** | **09 33 39.2** | **+0.5** |
| ODEU | | | | S | **Sn** | **09 34 01.1** | **-0.6** |
| **VAF** | **Ylistaro** | **1.79** | **212** | *e*PN | **Pb** | **09 33 40.3** | **-0.3** |
| VAF | | | | *e*SN | **Sn** | **09 34 02.6** | **+0.1** |
| VAF | | | | MSG | | 09 34 03.5 | |
| | comp=Z,6.7nm,0.2s | | | | | | |
| **NIF** | **Nilsia** | **1.79** | **130** | *e*PN | **Pg** | **09 33 41.4** | **0.0** |
| NIF | | | | *e*SN | **Sg** | **09 34 05.4** | **+0.8** |
| **UMAU** | **Umeaa** | **1.91** | **251** | P | **Pn** | **09 33 41.0** | **+0.2** |
| UMAU | | | | S | **Sn** | **09 34 06.3** | **+0.9** |
| **UMAU** | **Umeaa** | **1.91** | **251** | *e*PG | **Pb** | **09 33 41.8** | **-0.9** |
| UMAU | | | | *e*SN | **Sn** | **09 34 06.3** | **+0.9** |
| **SUF** | **Sumiainen** | **1.96** | **161** | *e*PB | **Pb** | **09 33 43.5** | **0.0** |
| SUF | | | | *e*SG | **Sg** | **09 34 09.6** | **-0.3** |
| SUF | | | | MSG | | 09 34 11.9 | |
| | comp=Z,9.0nm,0.2s | | | | | | |
| **RNF** | **Rovaniemi** | **2.12** | **14** | *e*P | **Pb** | **09 33 46.2** | **0.0** |
| RNF | | | | *e*SG | **Sg** | **09 34 15.0** | **0.0** |
| RNF | | | | MSG | | 09 34 15.3 | |
| | comp=Z,3.5nm,0.2s | | | | | | |
| **SVAU** | **Svanoeiden** | **2.24** | **270** | P | **Pn** | **09 33 45.7** | **+0.4** |
| SVAU | | | | S | **Sn** | **09 34 14.0** | **+0.4** |
| **MSF** | **Maaselka** | **2.25** | **51** | *e*P | **Pb** | **09 33 48.2** | **-0.4** |
| MSF | | | | *e*SB | **Sg** | **09 34 18.9** | **-0.6** |
| MSF | | | | MSG | | 09 34 21.6 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| **RMF** | **Romuvaara** | **2.28** | **97** | *e*PB | **Pg** | **09 33 49.8** | **-0.9** |
| RMF | | | | *e*SB | **Sg** | **09 34 20.1** | **-0.1** |
| RMF | | | | MSG | | 09 34 22.6 | |
| | comp=Z,9.4nm,0.2s | | | | | | |
| **KEF** | **Keuruu** | **2.41** | **179** | *e*PB | **Pb** | **09 33 50.6** | **-0.6** |
| KEF | | | | *e*SB | **Sb** | **09 34 21.3** | **-0.2** |
| KEF | | | | MSN | | 09 34 23.4 | |
| | comp=Z,3.4nm,0.1s | | | | | | |
| **PAJU** | **Pajala** | **2.56** | **345** | *e*P | **Pb** | **09 33 52.4** | **-1.4** |
| PAJU | | | | *e*SB | **Sb** | **09 34 25.2** | **-0.5** |
| **KAF** | **Kangasniemi** | **2.56** | **163** | *e*PB | **Pb** | **09 33 53.2** | **-0.6** |
| KAF | | | | *e*SB | **Sb** | **09 34 26.2** | **+0.4** |
| KAF | | | | MSN | | 09 34 28.2 | |
| | comp=Z,6.6nm,0.2s | | | | | | |
| **KU6** | **Riekki** | **2.61** | **54** | *e*P | **Pb** | **09 33 53.2** | **-1.4** |
| **OLKF** | **Oulanka, Finla** | **2.62** | **46** | *e*P | **Pb** | **09 33 53.4** | **-1.4** |
| **KLF** | **Kolari** | **2.70** | **354** | *e*P | **Pb** | **09 33 54.0** | **-2.1** |
| KLF | | | | MSN | | 09 34 33.2 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| **HUSU** | **Husum** | **2.73** | **246** | P | **Pn** | **09 33 53.3** | **+1.2** |
| **BREU** | **Bredtraesk** | **2.78** | **259** | P | **Pn** | **09 33 52.9** | **+0.1** |
| **FINES** | **FINESS Array B** | **3.19** | **168** | Pn | **Pb** | **09 34 02.3** | **-2.3** |
| | comp=Z,0.5nm,0.3s,baz=358,slow=15,SNR=9.9 | | | | | | |
| FINES | | | | Sn | **Sb** | **09 34 42.6** | **-1.4** |
| | comp=Z,0.7nm,0.3s,baz=352,slow=24,SNR=10 comp=Z,0.6nm,0.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **5.00** | **3** | Pn | **Pn** | **09 34 25.1** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=180,slow=14,SNR=14 | | | | | | |
| ARCES | | | | Sn | **Sn** | **09 35 21.4** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=186,slow=24,SNR=2.2 | | | | | | |
| ARCES | | | | Lg | Lg | 09 35 40.5 | |
| | comp=Z,0.1nm,0.3s,baz=182,slow=33,SNR=2.3 comp=Z,0.5nm,0.2s | | | | | | |
| **I37NO** | **I37NO** | **5.13** | **335** | I | I | 10 10 20.0 | |
| | baz=146,slow=322,SNR=5.9 | | | | | | |

*IDC* ***28*** *09:44:30.1±1.8,10°.33S×125°.09E,h0km,mb3.8/2, mbtmp3.9/5,ML3.9/2,MS3.9/2,Error ellipse: s-maj=131.5km s-min=28.0km az=54.0*
*NEIC* ***28*** *09:44:32.3±2.2,10°.82S±0°.07×124°.54E±0°.05,h10km±2km, mb4.1/3,Error ellipse: s-maj=13.9km s-min=5.2km az=215.0*
*DJA* ***28*** *09:44:33.1±0.5,11°.S±4°×12°.4E±°,h10km,M4.5/10, mb4.9/2,MLv4.2/10*
**ISC 28 09:44:31.0±0.7,10°.91S±0°.07×124°.38E±0°.09,h10km,n35, σ1§58/28,mb4.2/4,Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.99** | **315** | P | **Pg** | **09 44 48.7** | **-1.3** |
| **SOEI** | **Soe** | **1.15** | **355** | | **Pb** | **09 44 53.5** | **+0.5** |
| **SOEI** | **Soe** | **1.15** | **355** | P | **Pb** | **09 44 54.2** | **+1.2** |
| **MMRI** | **Maumere** | **3.09** | **317** | Pn | **Pn** | **09 45 20.4** | **+0.6** |
| **MMRI** | **Maumere** | **3.09** | **317** | P | **Pn** | **09 45 19.4** | **-0.4** |
| **EDFI** | **Ende, Flores** | **3.41** | **309** | P | **Pn** | **09 45 23.4** | **-0.9** |
| **BASI** | **Baing, Sumba** | **3.80** | **280** | P | **Pn** | **09 45 28.8** | **-0.8** |
| **WBSI** | **Waikabubak, Su** | **5.07** | **284** | P | **Pn** | **09 45 46.0** | **-1.1** |
| **KNRA** | **Kununurra** | **6.38** | **138** | | **Pn** | **09 46 04.6** | **-0.5** |
| **PLAI** | **Plampang** | **6.83** | **287** | P | **Pn** | **09 46 09.7** | **-1.5** |
| | 97nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **6.89** | **107** | Pn | Pn | 09 46 07.4 | -4.7 |
| **FITZ** | **Fitzroy Crossi** | **7.25** | **170** | Pn | **Pn** | **09 46 19.3** | **+2.2** |
| **KAPI** | **Kappang** | **7.43** | **322** | Pn | **Pn** | **09 46 18.6** | **-1.0** |
| **KAPI** | **Kappang** | **7.43** | **322** | Pn | **Pn** | **09 46 21.3** | **+1.7** |
| | 5.6nm,0.3s,baz=133,slow=13,SNR=4.3 | | | | | | |
| KAPI | | | | LR | LR | 09 49 22.6 | |
| | comp=Z,838nm,21.5s,baz=156,slow=39 | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **7.70** | **286** | P | **Pn** | **09 46 21.9** | **-1.3** |
| **FAKI** | **Fak Fak** | **11.13** | **45** | Pn | Pn | 09 47 08.3 | -2.1 |
| **PSA00** | **Pilbara Seismi** | **11.46** | **202** | Pn | **Pn** | **09 47 17.2** | **+2.4** |
| **WB0** | **Warramunga Arr** | **13.07** | **134** | Pn | **Pn** | **09 47 38.2** | **+1.4** |
| **WRA** | **Warramunga Arr** | **13.14** | **134** | Pn | **Pn** | **09 47 38.3** | **+0.4** |
| | 0.5nm,0.3s,baz=298,slow=14,SNR=16 | | | | | | |
| WRA | | | | Sn | **Sn** | **09 50 01.0** | **-3.2** |
| | 0.6nm,0.3s,baz=306,slow=24,SNR=7.4 1.6nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **13.14** | **134** | Pn | **Pn** | **09 47 38.2** | **+0.3** |
| **WB2** | **Warramunga Arr** | **13.15** | **134** | Pn | **Pn** | **09 47 39.0** | **+1.1** |
| **WR0** | **Warramunga Arr** | **13.30** | **134** | Pn | **Pn** | **09 47 40.1** | **+0.1** |
| **AS31** | **Alice Springs** | **15.60** | **146** | Pn | **Pn** | **09 48 11.7** | **+0.5** |
| AS31 | | | | IAmb | IAmb | 09 48 48.5 | |
| | comp=Z,2.7nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **15.60** | **146** | Pn | **Pn** | **09 48 12.2** | **+1.0** |
| | comp=Z,0.5nm,0.3s,baz=328,slow=14,SNR=20 | | | | | | |
| ASAR | | | | Sn | **Sn** | **09 51 01.1** | **-3.2** |
| | comp=Z,0.2nm,0.3s,baz=321,slow=22,SNR=11 comp=Z,4.0nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.88** | **196** | LR | LR | 09 57 42.8 | |
| | comp=Z,344nm,21.5s,baz=169,slow=34 | | | | | | |
| **CTAO** | **Charters Tower** | **22.95** | **116** | P | **P** | **09 49 35.7** | **0.0** |
| CTAO | | | | IAmb | IAmb | 09 50 05.5 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **H08S2** | **Diego Garcia H** | **51.26** | **269** | T | T | 10 48 35.3 | |
| | baz=98,slow=75,SNR=26 | | | | | | |
| **H08S3** | **Diego Garcia H** | **51.27** | **269** | T | T | 10 48 36.2 | |
| | baz=98,slow=75,SNR=86 | | | | | | |
| **H08S1** | **Diego Garcia H** | **51.27** | **269** | T | T | 10 48 36.7 | |
| | baz=98,slow=75,SNR=5.6 | | | | | | |
| **SONM** | **Songino Array** | **60.63** | **346** | P | **P** | **09 54 40.7** | **-1.5** |
| | comp=Z,0.5nm,0.4s,baz=175,slow=6.9,SNR=2.4 comp=Z,0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.64** | **330** | P | **P** | **09 55 33.9** | **-0.6** |
| | comp=Z,0.6nm,0.5s,baz=133,slow=7.7,SNR=6.6 comp=Z,0.6nm,0.5s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **70.15** | **225** | T | T | 11 12 42.1 | |
| | baz=82,slow=75,SNR=103 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **70.16** | **225** | T | T | 11 12 40.8 | |
| | baz=82,slow=75,SNR=106 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **70.17** | **225** | T | T | 11 12 42.3 | |
| | baz=82,slow=75,SNR=121 | | | | | | |
| **BELA** | **Belgrano 2** | **90.58** | **184** | P | **P** | **09 57 36.2** | **+3.1** |
| BELA | | | | IAmb | IAmb | 09 57 37.9 | |
| | comp=Z,1.6nm,0.8s | | | | | | |

**IDC 28 09:48:01.1±3.1,53°.47N×87°.28E,h0km,mbtmp2.6/2, ML1.3/2,Error ellipse: s-maj=27.2km s-min=16.5km az=69.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.54** | **289** | I | I | 09 58 15.0 | |
| | baz=107,slow=323,SNR=19 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.54** | **289** | Pg | Pn | 09 48 28.9 | -0.9 |
| | 0.3nm,0.3s,baz=108,slow=14,SNR=4.5 | | | | | | |
| ZALV | | | | Lg | Lg | 09 48 49.5 | |
| | 0.4nm,0.3s,baz=108,slow=23,SNR=3.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.10** | **246** | Pn | Pn | 09 49 33.2 | +0.8 |
| | baz=62,slow=14,SNR=2.5 | | | | | | |
| KURBB | | | | Lg | Lg | 09 51 14.4 | |
| | baz=62,slow=33 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.41** | **208** | Pn | Pn | 09 49 51.6 | +1.2 |
| | baz=29,slow=16,SNR=3.1 | | | | | | |
| MKAR | | | | Lg | Lg | 09 51 57.0 | |
| | 0.1nm,0.3s,baz=28,slow=31,SNR=2.0 0.2nm,0.5s | | | | | | |

*IDC* ***28*** *09:49:29.8±1.0,52°.71S×27°.81E,h0km,mb4.0/8, mbtmp4.0/8,Error ellipse: s-maj=35.5km s-min=18.1km az=78.0*
*NEIC* ***28*** *09:49:32.0±0.9,52°.6S±0°.1×27°.9E±0°.2,h10km±2km, mb4.6/12,Error ellipse: s-maj=26.8km s-min=13.9km az=53.0*
**ISC 28 09:49:31.3±0.7,52°.63S±0°.10×28°.0E±0°.1,h10km,n30, σ1§39/26,mb4.2/13,5C,South of Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H04S2** | **CROZET ISLANDS** | **16.43** | **79** | T | T | 10 10 33.8 | |
| | baz=241,slow=73 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **16.43** | **79** | T | T | 10 10 35.4 | |
| | baz=241,slow=73 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **16.45** | **79** | T | T | 10 10 40.6 | |
| | baz=241,slow=73 | | | | | | |
| **GRHM** | **Grahamstown, E** | **19.38** | **356** | P | **P** | **09 53 57.0** | **-0.3** |
| GRHM | | | | IAmb | IAmb | 09 54 32.9 | |
| | comp=Z,68nm,1.3s | | | | | | |
| **SOE** | **Somerset East** | **19.99** | **354** | P | **P** | **09 54 03.7** | **-0.2** |
| **SUR** | **Sutherland** | **20.91** | **343** | P | **P** | **09 54 13.9** | **-0.1** |
| SUR | | | | IAmb | IAmb | 09 54 31.1 | |
| | comp=Z,48nm,1.4s | | | | | | |
| **SUR** | **Sutherland** | **20.91** | **343** | P | **P** | **09 54 15.3** | **+1.3** |
| | comp=Z,12nm,1.1s,baz=161,slow=13,SNR=5.1 comp=Z,12nm,1.1s | | | | | | |
| **TROLL** | **Troll, Antarti** | **22.41** | **201** | ⇑P | **P** | **09 54 30.1** | **+0.3** |
| | comp=Z,154nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **22.49** | **145** | P | **P** | **09 54 31.5** | **+1.1** |
| | comp=Z,3.7nm,0.8s,baz=310,slow=10,SNR=8.8 | | | | | | |
| MAW | | | | S | **S** | **09 58 31.8** | **-5.0** |
| | comp=Z,0.6nm,0.3s,baz=262,slow=15,SNR=1.9 comp=Z,3.7nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **23.43** | **204** | P | **P** | **09 54 41.2** | **+1.0** |
| **SNAA** | **Sanae** | **23.43** | **204** | ⇑P | **P** | **09 54 41.0** | **+0.8** |
| | comp=Z,28nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **23.43** | **204** | P | **P** | **09 54 38.9** | **-1.3** |
| | comp=Z,2.1nm,0.7s,baz=72,slow=8.0,SNR=20 comp=Z,2.1nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **24.08** | **354** | P | **P** | **09 54 46.9** | **-0.1** |
| BOSA | | | | IAmb | IAmb | 09 54 49.7 | |
| | comp=Z,17nm,1.4s | | | | | | |
| **BOSA** | **Boshof** | **24.08** | **354** | P | **P** | **09 54 47.1** | **+0.1** |
| | comp=Z,4.2nm,0.9s,baz=172,slow=10,SNR=5.1 comp=Z,4.2nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **24.22** | **208** | ⇑P | **P** | **09 54 48.2** | **+0.5** |
| | comp=Z,2.3nm,0.9s,baz=57,slow=8.4 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **24.33** | **209** | ⇑P | **P** | **09 54 50.4** | **+1.7** |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **25.02** | **208** | ⇑P | **P** | **09

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C24K | | | | IAML | | 09 51 19.3 | |
| | comp=E,89nm,0.7s | | | | | | |
| **D27M** | **Malcolm River** | **1.40 103** | | Pn | Pn | 09 50 56.0 | -0.5 |
| **D24K** | **Happy Valley** | **1.49 254** | | Pn | Pn | 09 50 57.2 | -0.5 |
| D24K | | | | IAML | | 09 51 24.5 | |
| | comp=N,97nm,0.5s | | | | | | |
| D24K | | | | IAML | | 09 51 24.5 | |
| | comp=E,66nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.83 139** | | Pn | Pn | 09 51 01.3 | -1.2 |
| **F26K** | **Sheenjek River** | **1.93 172** | | Pn | Pn | 09 51 01.7 | -2.0 |
| F26K | | | | IAML | | 09 51 35.3 | |
| | comp=E,39nm,0.6s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.96 243** | | Pn | Pn | 09 51 03.1 | -1.0 |
| TOLK | | | | Sn | Sn | 09 51 28.0 | -0.8 |
| **E24K** | **Your Creek** | **2.03 223** | | Pn | Pn | 09 51 04.0 | -1.2 |
| **F25K** | **Christian Rive** | **2.04 189** | | Pn | Pn | 09 51 04.0 | -1.2 |
| **C23K** | **Itkillik River** | **2.04 279** | | Pn | Pn | 09 51 04.4 | -0.7 |
| C23K | | | | IAML | | 09 51 41.4 | |
| | comp=N,53nm,0.7s | | | | | | |
| C23K | | | | IAML | | 09 51 48.2 | |
| | comp=E,45nm,0.6s | | | | | | |
| **E28M** | **Babbage River** | **2.14 115** | | | Pn | 09 51 06.1 | -0.5 |
| E28M | | | | IAML | | 09 52 27.7 | |
| | comp=N,54nm,0.6s | | | | | | |
| E28M | | | | IAML | | 09 52 29.0 | |
| | comp=E,46nm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.18 256** | | Pn | Pn | 09 51 06.4 | -0.8 |
| **E23K** | **Chandalar** | **2.33 231** | | Pn | Pn | 09 51 08.4 | -0.9 |
| **F24K** | **Squaw Lake** | **2.37 210** | | Pn | Pn | 09 51 08.8 | -1.1 |
| F24K | | | | IAML | | 09 52 41.8 | |
| | comp=E,26nm,0.5s | | | | | | |
| F24K | | | | IAML | | 09 52 41.8 | |
| | comp=N,24nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.69 135** | | Pn | Pn | 09 51 13.8 | -0.4 |
| **E29M** | **Blow River** | **2.77 113** | | Pn | Pn | 09 51 14.6 | -0.7 |
| E29M | | | | | LR | 09 51 58.6 | |
| **D22K** | **Ayikyak River** | **2.90 259** | | | Pn | 09 51 17.3 | +0.3 |
| D22K | | | | IAML | | 09 53 11.3 | |
| | comp=N,22nm,0.9s | | | | | | |
| D22K | | | | IAML | | 09 53 12.5 | |
| | comp=E,24nm,1.1s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.93 243** | | Pn | Pn | 09 51 16.2 | -1.3 |
| E22K | | | | IAML | | 09 53 12.8 | |
| | comp=N,19nm,0.6s | | | | | | |
| **G27K** | **Doyon Strip** | **3.04 156** | | Pn | Pn | 09 51 16.6 | -2.4 |
| **FYU** | **Fort Yukon** | **3.05 183** | | Pn | Pn | 09 51 18.7 | -0.4 |
| **B22K** | **Teshekpuk Lake** | **3.06 288** | | Pn | Pn | 09 51 18.1 | -1.1 |
| **G24K** | **Hadweenzic Riv** | **3.08 200** | | | Pn | 09 51 18.8 | -0.7 |
| G24K | | | | IAML | | 09 53 08.5 | |
| | comp=N,30nm,1.3s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.43 275** | | Pn | Pn | 09 51 25.2 | +0.8 |
| B21K | | | | IAML | | 09 53 35.8 | |
| | comp=E,17nm,1.1s | | | | | | |
| **G23K** | **Bananza Creek** | **3.49 216** | | Pn | Pn | 09 51 25.5 | +0.3 |
| **E21K** | **Killik River** | **3.50 255** | | | Pn | 09 51 24.5 | -0.7 |
| **C21K** | **Knifeblade Rid** | **3.56 268** | | | Pn | 09 51 28.4 | +2.4 |
| **G29M** | **Pine Creek** | **3.69 134** | | | Pn | 09 51 27.9 | -0.1 |
| **H24K** | **Noodor Dome** | **3.95 199** | | | Pn | 09 51 30.3 | -1.3 |
| **F21K** | **Alatna River** | **3.99 237** | | | Pn | 09 51 31.9 | -0.2 |
| F21K | | | | IAML | | 09 53 36.1 | |
| | comp=E,7.9nm,0.6s | | | | | | |
| F21K | | | | IAML | | 09 53 44.7 | |
| | comp=N,7.5nm,1.2s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.11 184** | | Pn | Pn | 09 51 31.5 | -2.3 |
| **G30M** | **tAoh Zraii Nji** | **4.13 125** | | Pn | Pn | 09 51 31.2 | -2.8 |
| **H29M** | **Whitestone** | **4.17 141** | | | Pn | 09 51 33.5 | -1.0 |
| **I27K** | **Kandik River** | **4.19 162** | | | Pn | 09 51 36.9 | +2.0 |
| **H23K** | **Yukon River** | **4.20 208** | | | Pn | 09 51 33.3 | -1.6 |
| H23K | | | | IAML | | 09 53 41.4 | |
| | comp=E,13nm,1.1s | | | | | | |
| H23K | | | | IAML | | 09 53 42.0 | |
| | comp=N,13nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **4.27 102** | | Pn | Pn | 09 51 34.4 | -1.5 |
| INK | | | | IAML | | 09 53 44.8 | |
| | comp=E,5.6nm,3.4s | | | | | | |
| **B20K** | **Meade River** | **4.30 281** | | | Pn | 09 51 36.0 | -0.2 |
| B20K | | | | IAML | | 09 52 15.4 | |
| | comp=N,14nm,2.5s | | | | | | |
| **D20K** | **Etivluk River** | **4.31 264** | | | Pn | 09 51 38.8 | +2.3 |
| **E20K** | **Nigu River** | **4.32 257** | | | Pn | 09 51 38.9 | +2.2 |
| **I26K** | **Coal Creek Min** | **4.36 171** | | Pn | Pn | 09 51 39.8 | +2.7 |
| **EPYK** | **Eagle Plains** | **4.44 133** | | | Pn | 09 51 37.0 | -1.3 |
| **G21K** | **Allakaket** | **4.50 231** | | Pn | Pn | 09 51 36.4 | -2.6 |
| **I28M** | **Miner Creek** | **4.57 154** | | Pn | Pn | 09 51 36.5 | -3.5 |
| **F31M** | **Tsiigehtchic** | **4.61 113** | | Pn | Pn | 09 51 39.2 | -1.2 |
| F31M | | | | IAML | | 09 53 41.4 | |
| | comp=N,9.5nm,2.0s | | | | | | |
| **G31M** | **Satah River** | **4.75 119** | | Pn | Pn | 09 51 40.6 | -1.7 |
| **F20K** | **Avaraart Lake** | **4.79 243** | | Pn | Pn | 09 51 42.0 | -0.9 |
| F20K | | | | IAML | | 09 54 09.0 | |
| | comp=E,6.2nm,2.3s | | | | | | |
| F20K | | | | IAML | | 09 54 11.6 | |
| | comp=N,5.0nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.80 204** | | Pn | Pn | 09 51 41.5 | -1.6 |
| I23K | | | | IAML | | 09 54 03.5 | |
| | comp=E,9.1nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **4.90 263** | | | Pn | 09 51 46.0 | +1.5 |
| D19K | | | | IAML | | 09 53 38.1 | |
| | comp=E,8.8nm,2.3s | | | | | | |
| **IL31** | | **4.91 190** | | Pn | Pn | 09 51 43.1 | -1.6 |
| **I29M** | **Ogilvie Camp,** | **4.93 146** | | Pn | Pn | 09 51 43.4 | -1.5 |
| I29M | | | | IAML | | 09 52 38.2 | |
| | comp=E,8.6nm,0.1s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.00 221** | | Pn | Pn | 09 51 44.6 | -1.2 |
| H21K | | | | IAML | | 09 53 34.4 | |
| | comp=N,6.9nm,2.9s | | | | | | |
| H21K | | | | IAML | | 09 54 11.4 | |
| | comp=E,6.3nm,1.3s | | | | | | |
| **E19K** | **Redstone River** | **5.04 251** | | Pn | Pn | 09 51 45.2 | -1.2 |
| E19K | | | | IAML | | 09 53 43.3 | |
| | comp=N,7.3nm,1.4s | | | | | | |
| **EGAK** | **Eagle** | **5.04 162** | | | Pn | 09 51 48.1 | +1.7 |
| EGAK | | | | IAML | | 09 52 47.6 | |
| | comp=N,7.4nm,3.3s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.11 195** | | Pn | Pn | 09 51 45.7 | -1.6 |
| **J26L** | **Joseph Creek** | **5.14 174** | | Pn | Pn | 09 51 48.6 | +0.7 |
| J26L | | | | IAML | | 09 53 47.2 | |
| | comp=N,6.1nm,1.6s | | | | | | |
| **I30M** | **Mount Dempster** | **5.46 140** | | | Pn | 09 51 51.2 | -1.1 |
| **H31M** | **Peel River** | **5.51 129** | | Pn | Pn | 09 51 51.6 | -1.3 |
| **F19K** | **Shaleruckit Mo** | **5.56 246** | | Pn | Pn | 09 51 52.3 | -1.3 |
| **K27K** | **Chicken** | **5.70 168** | | Pn | Pn | 09 51 53.8 | -1.6 |
| **BWN** | **Browne** | **5.75 201** | | Pn | Pn | 09 51 54.8 | -1.4 |
| **G19K** | **Purcell Mounta** | **5.79 239** | | Pn | Pn | 09 51 56.7 | 0.0 |
| **RIDG** | **Independent Ri** | **5.88 180** | | Pn | Pn | 09 51 58.6 | +0.5 |
| **C18K** | **Utukok River** | **5.93 269** | | Pn | Pn | 09 51 58.1 | -0.6 |
| **E18K** | **Tukpahlearik C** | **6.20 257** | | Pn | Pn | 09 52 03.4 | +1.1 |
| **RND** | **Reindeer** | **6.42 196** | | Pn | Pn | 09 52 02.7 | -2.8 |
| **G18K** | **Tagagawik** | **6.43 241** | | Pn | Pn | 09 52 02.4 | -3.1 |
| **K29M** | **Barlow Dome** | **6.46 150** | | Pn | Pn | 09 52 06.4 | +0.5 |
| **L26K** | **Log Cabin Wild** | **6.63 174** | | Pn | Pn | 09 52 07.5 | -0.7 |
| **L27K** | **Beaver Creek,** | **6.67 168** | | Pn | Pn | 09 52 08.3 | -0.6 |
| **A36M** | **Sachs Harbour** | **6.87 61** | | Pn | Pn | 09 52 12.0 | +0.5 |
| **J19K** | **Poorman** | **7.05 222** | | Pn | Pn | 09 52 14.6 | +0.6 |
| **C36M** | **Paulatuk** | **7.28 82** | | Pn | Pn | 09 52 17.1 | 0.0 |
| **C16K** | **Lisburne Hills** | **7.50 270** | | Pn | Pn | 09 52 21.7 | +1.5 |
| **M29M** | **Somme Creek** | **7.63 157** | | Pn | Pn | 09 52 21.4 | -0.6 |

*JMA **28** 09:50:50.1±0.2,24˚N±2˚×122˚7E±0˚.5,h92km±1km, MV2.9/18,NW OFF ISHIGAKIJIMA IS*
*TAP **28** 09:50:50.1,24˚.52N×122˚.65E,h93km±1km,ML3.7,B*
**ISC 28 09:50:50.1±1.3,24˚52N±0˚03×122˚69E±0˚02,h95km±6km, n121,n0675/212,7C-3D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.25** | **107** | P | **Pn** | **09 51 03.9** | **0.0** |
| JYNG | | | | S | **Sn** | **09 51 13.4** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **0.30** | **101** | P | **Pn** | **09 51 04.2** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **0.30** | **101** | *i* P | **Pn** | **09 51 04.2** | **+0.1** |
| | baz=98 | | | | | | |
| YOJ | | | | S | **Sn** | **09 51 14.2** | **-0.4** |
| | baz=98 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.30** | **101** | P | **Pn** | **09 51 04.1** | **0.0** |
| YOJ | | | | *e*S | **Sn** | **09 51 14.0** | **-0.6** |
| **EOS3** | **EOS3** | **0.41** | **235** | *i* P | **Pn** | **09 51 05.2** | **+0.7** |
| | baz=232 | | | | | | |
| EOS3 | | | | S | **Sn** | **09 51 16.7** | **+1.4** |
| | baz=232 | | | | | | |
| **EOS2** | **EOS2** | **0.43** | **256** | *i* P | **Pn** | **09 51 05.1** | **+0.4** |
| | baz=255 | | | | | | |
| EOS2 | | | | S | **Sn** | **09 51 16.7** | **+1.1** |
| | baz=255 | | | | | | |
| **EOS4** | **EOS4** | **0.52** | **220** | *i* P | **Pn** | **09 51 05.5** | **+0.4** |
| | baz=217 | | | | | | |
| EOS4 | | | | *e*S | **Sn** | **09 51 17.1** | **+0.8** |
| | baz=217 | | | | | | |
| **EGS** | | **0.76** | **295** | P | **Pn** | **09 51 08.1** | **+0.5** |
| | baz=296 | | | | | | |
| EGS | | | | S | **Sn** | **09 51 20.6** | **-0.1** |
| | baz=296 | | | | | | |
| **TWC** | **Suao** | **0.77** | **277** | *i* P | **Pn** | **09 51 07.5** | **-0.2** |
| | baz=277 | | | | | | |
| TWC | | | | *i* S | **Sn** | **09 51 19.9** | **-0.9** |
| | baz=277 | | | | | | |
| **ESAO** | **Su ao** | **0.77** | **274** | *e*P | **Pn** | **09 51 07.5** | **-0.2** |
| | baz=274 | | | | | | |
| ESAO | | | | S | **Sn** | **09 51 20.2** | **-0.7** |
| | baz=274 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.80** | **308** | *e*P | **Pn** | **09 51 08.1** | **+0.1** |
| | baz=309 | | | | | | |
| TWB1 | | | | *e*S | **Sn** | **09 51 19.8** | **-1.6** |
| | baz=309 | | | | | | |
| **EWUT** | **Wuta** | **0.83** | **265** | P | **Pn** | **09 51 08.2** | **-0.1** |
| | baz=264 | | | | | | |
| EWUT | | | | *e*S | **Sn** | **09 51 21.9** | **-0.1** |
| | baz=264 | | | | | | |
| **ENA** | **Nanau** | **0.87** | **264** | *i* P | **Pn** | **09 51 08.8** | **+0.1** |
| | baz=263 | | | | | | |
| ENA | | | | *i* S | **Sn** | **09 51 23.0** | **+0.4** |
| | baz=263 | | | | | | |
| **EAHA** | **Aohua** | **0.88** | **258** | *i* P | **Pn** | **09 51 08.9** | **0.0** |
| | baz=257 | | | | | | |
| EAHA | | | | *e*S | **Sn** | **09 51 23.4** | **+0.4** |
| | baz=257 | | | | | | |
| **EHP** | **Heping Village** | **0.89** | **256** | *i* P | **Pn** | **09 51 09.1** | **+0.1** |
| | baz=255 | | | | | | |
| EHP | | | | S | **Sn** | **09 51 23.2** | **+0.1** |
| | baz=255 | | | | | | |
| **ILA** | **Ilan** | **0.89** | **286** | *e*P | **Pn** | **09 51 09.0** | **+0.1** |
| | baz=286 | | | | | | |
| ILA | | | | *i* S | **Sn** | **09 51 21.8** | **-1.2** |
| | baz=286 | | | | | | |
| **NDS** | **Dongshan** | **0.89** | **277** | *e*P | **Pn** | **09 51 09.8** | **+0.9** |
| | baz=277 | | | | | | |
| NDS | | | | S | **Sn** | **09 51 22.5** | **-0.6** |
| | baz=277 | | | | | | |
| **TIPB** | **Shuangxi** | **0.90** | **300** | *i* P | **Pn** | **09 51 09.0** | **-0.1** |
| | baz=300 | | | | | | |
| TIPB | | | | *i* S | **Sn** | **09 51 22.3** | **-1.1** |
| | baz=300 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.93** | **308** | *e*P | **Pn** | **09 51 09.9** | **+0.4** |
| | baz=309 | | | | | | |
| **TWE** | **Neicheng** | **0.95** | **282** | ⇓*i* P | **Pn** | **09 51 09.8** | **+0.3** |
| | baz=282 | | | | | | |
| TWE | | | | *i* S | **Sn** | **09 51 23.6** | **-0.6** |
| | baz=282 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **0.97** | **101** | *i* P | **Pn** | **09 51 09.7** | **-0.1** |
| **NWF** | **Wu-fen Shan** | **0.99** | **304** | *i* P | **Pn** | **09 51 10.7** | **+0.6** |
| | baz=304 | | | | | | |
| NWF | | | | *i* S | **Sn** | **09 51 24.4** | **-0.7** |
| | baz=304 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.99** | **304** | P | **Pn** | **09 51 10.4** | **+0.4** |
| | baz=304 | | | | | | |
| WFSB | | | | S | **Sn** | **09 51 24.7** | **-0.2** |
| | baz=304 | | | | | | |
| **ENTT** | **Nioudou** | **1.03** | **277** | *i* P | **Pn** | **09 51 10.8** | **+0.3** |
| | baz=276 | | | | | | |
| ENTT | | | | S | **Sn** | **09 51 25.1** | **-0.7** |
| | baz=276 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.03** | **284** | *i* P | **Pn** | **09 51 10.8** | **+0.3** |
| | baz=283 | | | | | | |
| FUSB | | | | *i* S | **Sn** | **09 51 25.3** | **-0.5** |
| | baz=283 | | | | | | |
| **ETL** | **Fush Village** | **1.03** | **250** | P | **Pn** | **09 51 10.5** | **-0.1** |
| | baz=249 | | | | | | |
| ETL | | | | S | **Sn** | **09 51 25.4** | **-0.6** |
| | baz=249 | | | | | | |
| **TNOU** | **National Taiwa** | **1.04** | **307** | P | **Pn** | **09 51 10.8** | **+0.3** |
| | baz=308 | | | | | | |
| TNOU | | | | S | **Sn** | **09 51 25.0** | **-1.0** |
| | baz=308 | | | | | | |
| **NACB** | **Ninganchiao** | **1.05** | **251** | P | **Pn** | **09 51 10.5** | **-0.3** |
| **NACB** | **Ninganchiao** | **1.05** | **251** | ⇑*i* P | **Pn** | **09 51 10.5** | **-0.3** |
| | baz=250 | | | | | | |
| NACB | | | | S | **Sn** | **09 51 26.4** | **+0.1** |
| | baz=250 | | | | | | |
| **LATG** | **Datong** | **1.06** | **271** | ⇑*i* P | **Pn** | **09 51 11.2** | **+0.3** |
| | baz=270 | | | | | | |
| LATG | | | | *i* S | **Sn** | **09 51 26.5** | **0.0** |
| | baz=270 | | | | | | |
| **NDT** | **Datong Townshi** | **1.07** | **275** | *i* P | **Pn** | **09 51 11.6** | **+0.6** |
| | baz=274 | | | | | | |
| NDT | | | | S | **Sn** | **09 51 26.3** | **-0.3** |
| | baz=274 | | | | | | |
| **TWD** | **Chiawan** | **1.09** | **246** | ⇓*i* P | **Pn** | **09 51 10.9** | **-0.2** |
| | baz=245 | | | | | | |
| TWD | | | | *i* S | **Sn** | **09 51 26.3** | **-0.7** |
| | baz=245 | | | | | | |
| **NWLT** | **Wulai** | **1.11** | **284** | *i* P | **Pn** | **09 51 11.8** | **+0.4** |
| | baz=283 | | | | | | |
| NWLT | | | | *i* S | **Sn** | **09 51 26.6** | **-0.8** |
| | baz=283 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.12** | **114** | P | **Pn** | **09 51 12.1** | **+0.6** |
| HATJ | | | | *e*S | **Sn** | **09 51 27.8** | **+0.1** |
| **HWA** | **Hwalien** | **1.13** | **241** | *e*P | **Pn** | **09 51 11.7** | **+0.2** |
| | baz=240 | | | | | | |
| HWA | | | | S | **Sn** | **09 51 29.4** | **+1.7** |
| | baz=240 | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.14** | **254** | P | **Pn** | **09 51 11.5** | **-0.3** |
| | baz=253 | | | | | | |
| ETLH | | | | S | **Sn** | **09 51 27.8** | **-0.5** |
| | baz=253 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.14** | **293** | *e*P | **Pn** | **09 51 11.9** | **+0.2** |
| | baz=293 | | | | | | |
| NHDH | | | | S | **Sn** | **09 51 27.1** | **-1.0** |
| | baz=293 | | | | | | |
| **TATO** | **Taipei** | **1.18** | **293** | P | **Pn** | **09 51 12.3** | **+0.1** |
| **TEYL** | **Yanliau Villag** | **1.19** | **237** | *e*P | **Pn** | **09 51 11.6** | **-0.7** |
| | baz=237 | | | | | | |
| TEYL | | | | *e*S | **Sn** | **09 51 29.1** | **+0.1** |
| | baz=237 | | | | | | |
| **TAP** | **Taipei** | **1.19** | **296** | S | **Sn** | **09 51 28.5** | **-0.6** |
| | baz=296 | | | | | | |
| **YM01** | **YM01** | **1.19** | **302** | *i* P | **Pn** | **09 51 12.3** | **-0.1** |
| | baz=302 | | | | | | |
| YM01 | | | | S | **Sn** | **09 51 28.6** | **-0.6** |
| | baz=302 | | | | | | |
| **NNSB** | **Datong** | **1.19** | **266** | *i* P | **Pn** | **09 51 12.6** | **+0.1** |
| | baz=265 | | | | | | |
| NNSB | | | | *i* S | **Sn** | **09 51 28.9** | **-0.4** |
| | baz=265 | | | | | | |
| **YM08** | **YM08** | **1.20** | **304** | *e*P | **Pn** | **09 51 13.6** | **+1.2** |
| | baz=304 | | | | | | |
| YM08 | | | | *i* S | **Sn** | **09 51 29.1** | **-0.1** |
| | baz=304 | | | | | | |
| **NNS** | **Nan Shan** | **1.20** | **266** | *i* P | **Pn** | **09 51 12.5** | **0.0** |
| | baz=266 | | | | | | |
| NNS | | | | *i* S | **Sn** | **09 51 28.6** | **-0.9** |
| | baz=266 | | | | | | |
| **YHNB** | **Yeheng** | **1.20** | **277** | P | **Pn** | **09 51 13.1** | **+0.5** |
| **YHNB** | **Yeheng** | **1.20** | **277** | ⇑*i* P | **Pn** | **09 51 13.1** | **+0.5** |
| | baz=277 | | | | | | |
| YHNB | | | | *i* S | **Sn** | **09 51 29.5** | **0.0** |
| | baz=277 | | | | | | |
| **NSK** | **Sanguang** | **1.22** | **277** | *i* P | **Pn** | **09 51 13.2** | **+0.5** |
| | baz=277 | | | | | | |
| NSK | | | | *i* S | **Sn** | **09 51 29.5** | **-0.3** |
| | baz=277 | | | | | | |
| **ETM** | **Tongmen** | **1.22** | **243** | *e*P | **Pn** | **09 51 12.5** | **-0.2** |
| | baz=242 | | | | | | |
| ETM | | | | S | **Sn** | **09 51 29.1** | **-0.6** |
| | baz=242 | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.23** | **333** | *e*P | **Pn** | **09 51 13.7** | **+0.9** |
| | baz=334 | | | | | | |
| PCYT | | | | *e*S | **Sn** | **09 51 30.9** | **+0.9** |
| | baz=334 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.24** | **103** | P | **Pn** | **09 51 13.4** | **+0.6** |
| JKRS | | | | S | **Sn** | **09 51 30.7** | **+0.6** |
| **ANP** | **Anpu** | **1.25** | **302** | *e*P | **Pn** | **09 51 13.0** | **-0.1** |
| | baz=302 | | | | | | |
| ANP | | | | *e*S | **Sn** | **09 51 29.6** | **-0.9** |
| | baz=302 | | | | | | |
| **SHUL** | **Shoufeng** | **1.26** | **235** | *i* P | **Pn** | **09 51 13.2** | **+0.1** |
| | baz=233 | | | | | | |
| SHUL | | | | *i* S | **Sn** | **09 51 30.6** | **+0.1** |
| | baz=233 | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.26** | **247** | ⇑*i* P | **Pn** | **09 51 13.0** | **-0.4** |
| | baz=246 | | | | | | |
| LXIB | | | | S | **Sn** | **09 51 29.8** | **-1.1** |
| | baz=246 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.29** | **297** | *i* P | **Pn** | **09 51 12.6** | **-0.8** |
| | baz=297 | | | | | | |
| TWS1 | | | | *i* S | **Sn** | **09 51 29.7** | **-1.5** |
| | baz=297 | | | | | | |
| **NTST** | **Danshui** | **1.29** | **300** | *e*S | **Sn** | **09 51 31.2** | **0.0** |
| | baz=300 | | | | | | |
| **TEGC** | **Jichi Village** | **1.32** | **233** | *i* P | **Pn** | **09 51 14.0** | **+0.1** |
| | baz=231 | | | | | | |
| TEGC | | | | *i* S | **Sn** | **09 51 31.9** | **0.0** |
| | baz=231 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.34** | **96** | P | **Pn** | **09 51 14.2** | **+0.2** |
| JIJ | | | | S | **Sn** | **09 51 31.3** | **-1.0** |
| **FUSS** | **Fushou** | **1.34** | **259** | P | **Pn** | **09 51 14.8** | **+0.4** |
| | baz=258 | | | | | | |
| FUSS | | | | *i* S | **Sn** | **09 51 32.4** | **-0.3** |
| | baz=258 | | | | | | |
| **ESL** | **Shilin** | **1.34** | **239** | *i* P | **Pn** | **09 51 13.9** | **-0.3** |
| | baz=237 | | | | | | |
| ESL | | | | *e*S | **Sn** | **09 51 32.1** | **-0.2** |
| | baz=237 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.35** | **254** | ⇓*i* P | **Pn** | **09 51 14.9** | **+0.2** |
| | baz=253 | | | | | | |
| WHF | | | | *i* S | **Sn** | **09 51 32.4** | **-0.8** |
| | baz=253 | | | | | | |
| **TWT** | **Tachien** | **1.40** | **259** | *i* P | **Pn** | **09 51 16.0** | **+0.9** |
| | baz=258 | | | | | | |
| TWT | | | | *e*S | **Sn** | **09 51 34.0** | **+0.1** |
| | baz=258 | | | | | | |
| **TDCB** | **Techi** | **1.42** | **259** | ⇑*i* P | **Pn** | **09 51 16.0** | **+0.7** |
| | baz=258 | | | | | | |
| TDCB | | | | *i* S | **Sn** | **09 51 34.0** | **-0.2** |
| | baz=258 | | | | | | |
| **EGFH** | **Guangfu** | **1.43** | **234** | *i* P | **Pn** | **09 51 15.1** | **-0.2** |
| | baz=232 | | | | | | |
| EGFH | | | | *e*S | **Sn** | **09 51 33.7** | **-0.5** |
| | baz=232 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.43** | **275** | *i* P | **Pn** | **09 51 16.0** | **+0.7** |
| | baz=274 | | | | | | |
| NFF | | | | S | **Sn** | **09 51 34.0** | **-0.4** |
| | baz=274 | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.43** | **236** | P | **Pn** | **09 51 14.9** | **-0.3** |
| | baz=235 | | | | | | |
| WARBT | | | | S | **Sn** | **09 51 33.3** | **-1.0** |
| | baz=235 | | | | | | |
| **NCUH** | **Zhongli** | **1.44** | **288** | *e*P | **Pn** | **09 51 15.7** | **+0.4** |
| | baz=288 | | | | | | |
| NCUH | | | | *i* S | **Sn** | **09 51 34.7** | **+0.3** |
| | baz=288 | | | | | | |
| **CHGB** | **Renai** | **1.45** | **252** | ⇑*i* P | **Pn** | **09 51 16.2** | **+0.5** |
| | baz=251 | | | | | | |
| CHGB | | | | S | **Sn** | **09 51 35.4** | **+0.2** |
| | baz=251 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.48** | **87** | *i* P | **Pn** | **09 51 16.0** | **+0.2** |
| JISG | | | | S | **Sn** | **09 51 34.8** | **-0.6** |
| **OWD** | **Renai** | **1.49** | **248** | *e*P | **Pn** | **09 51 16.4** | **+0.3** |
| | baz=247 | | | | | | |
| OWD | | | | S | **Sn** | **09 51 36.0** | **+0.2** |
| | baz=247 | | | | | | |
| **LIOB** | **Emei** | **1.52** | **275** | P | **Pn** | **09 51 17.0** | **+0.6** |
| | baz=274 | | | | | | |
| LIOB | | | | *i* S | **Sn** | **09 51 35.7** | **-0.7** |
| | baz=274 | | | | | | |
| **WUSB** | **Renai** | **1.53** | **250** | *i* P | **Pn** | **09 51 17.1** | **+0.6** |
| | baz=249 | | | | | | |
| WUSB | | | | S | **Sn** | **09 51 37.5** | **+0.9** |
| | baz=249 | | | | | | |
| **NSTT** | **Nanjuang** | **1.54** | **274** | *e*P | **Pn** | **09 51 17.1** | **+0.5** |
| | baz=274 | | | | | | |
| NSTT | | | | *i* S | **Sn** | **09 51 36.5** | **-0.2** |
| | baz=274 | | | | | | |
| **HGSD** | **Ruisui** | **1.54** | **229** | P | **Pn** | **09 51 16.5** | **-0.2** |
| | baz=227 | | | | | | |
| HGSD | | | | *i* S | **Sn** | **09 51 36.3** | **-0.4** |
| | baz=227 | | | | | | |
| **SBCB** | **Hsinchu** | **1.57** | **280** | P | **Pn** | **09 51 17.4** | **+0.5** |
| | baz=280 | | | | | | |
| SBCB | | | | S | **Sn** | **09 51 37.1** | **-0.3** |
| | baz=280 | | | | | | |
| **HSN** | **Hsinchu** | **1.59** | **280** | *e*P | **Pn** | **09 51 17.5** | **+0.4** |
| | baz=281 | | | | | | |
| HSN | | | | *e*S | **Sn** | **09 51 36.8** | **-0.9** |
| | baz=281 | | | | | | |
| **EHYH** | **Wanrong** | **1.60** | **230** | *e*P | **Pn** | **09 51 17.2** | **-0.1** |
| | baz=229 | | | | | | |
| EHYH | | | | S | **Sn** | **09 51 38.1** | **+0.1** |
| | baz=229 | | | | | | |
| **VWDT** | **VWDT** | **1.60** | **242** | *e*P | **Pn** | **09 51 18.0** | **+0.6** |
| | baz=241 | | | | | | |
| VWDT | | | | S | **Sn** | **09 51 38.2** | **0.0** |
| | baz=241 | | | | | | |
| **WHP** | **Taichung City** | **1.60** | **262** | *e*P | **Pn** | **09 51 18.9** | **+1.5** |
| | baz=261 | | | | | | |
| WHP | | | | S | **Sn** | **09 51 38.6** | **+0.3** |
| | baz=261 | | | | | | |
| **EHY** | **Hungye** | **1.61** | **231** | *i* P | **Pn** | **09 51 17.2** | **-0.2** |
| | baz=230 | | | | | | |
| EHY | | | | S | **Sn** | **09 51 37.1** | **-1.0** |
| | baz=230 | | | | | | |
| **ECBN** | **Changbin** | **1.65** | **224** | *e*P | **Pn** | **09 51 17.7** | **-0.3** |
| | baz=222 | | | | | | |
| ECBN | | | | S | **Sn** | **09 51 38.5** | **-0.6** |
| | baz=222 | | | | | | |
| **WCS** | **Beigang Elemen** | **1.68** | **254** | *e*P | **Pn** | **09 51 19.6** | **+1.2** |
| | baz=253 | | | | | | |
| **YULB** | **Yu-li** | **1.70** | **229** | P | **Pn** | **09 51 18.2** | **-0.3** |
| **YULB** | **Yu-li** | **1.70** | **229** | ⇑P | **Pn** | **09 51 18.3** | **-0.3** |
| | baz=227 | | | | | | |
| YULB | | | | *e*S | **Sn** | **09 51 39.2** | **-1.0** |
| | baz=227 | | | | | | |
| **EYUL** | **Yuli** | **1.71** | **227** | *e*P | **Pn** | **09 51 19.9** | **+1.1** |
| | baz=226 | | | | | | |
| EYUL | | | | *e*S | **Sn** | **09 51 41.2** | **+0.6** |
| | baz=226 | | | | | | |
| **TWF1** | **Yuli** | **1.72** | **228** | *i* P | **Pn** | **09 51 18.5** | **-0.4** |
| | baz=226 | | | | | | |
| TWF1 | | | | *i* S | **Sn** | **09 51 39.9** | **-1.0** |
| | baz=226 | | | | | | |
| **NMLH** | **Miaoli** | **1.73** | **271** | *e*P | **Pn** | **09 51 19.9** | **+1.0** |
| | baz=270 | | | | | | |
| NMLH | | | | *e*S | **Sn** | **09 51 41.3** | **+0.4** |
| | baz=270 | | | | | | |
| **SSLB** | **Suanglung** | **1.74** | **246** | P | **Pn** | **09 51 19.6** | **+0.4** |
| **SSLB** | **Suanglung** | **1.74** | **246** | *e*P | **Pn** | **09 51 19.8** | **+0.6** |
| | baz=244 | | | | | | |
| **TWQ1** | **Liyutan** | **1.75** | **265** | P | **Pn** | **09 51 19.5** | **+0.3** |
| | baz=264 | | | | | | |
| TWQ1 | | | | S | **Sn** | **09 51 41.7** | **+0.2** |
| | baz=264 | | | | | | |
| **NSY** | **Sanyi** | **1.76** | **267** | P | **Pn** | **09 51 20.3** | **+0.9** |
| | baz=266 | | | | | | |
| NSY | | | | S | **Sn** | **09 51 41.5** | **-0.1** |
| | baz=266 | | | | | | |
| **CHKH** | **Chenggong** | **1.77** | **222** | *e*P | **Pn** | **09 51 19.1** | **-0.4** |
| | baz=221 | | | | | | |
| CHKH | | | | *i* S | **Sn** | **09 51 40.4** | **-1.6** |
| | baz=221 | | | | | | |
| **TYC** | **Yuchr** | **1.78** | **250** | *i* P | **Pn** | **09 51 21.0** | **+1.4** |
| | baz=249 | | | | | | |
| **FULB** | **Fuli** | **1.83** | **224** | P | **Pn** | **09 51 20.4** | **+0.1** |
| | baz=223 | | | | | | |
| FULB | | | | *i* S | **Sn** | **09 51 43.2** | **-0.2** |
| | baz=223 | | | | | | |
| **JTJ** | **Tarama** | **1.84** | **86** | P | **Pn** | **09 51 20.9** | **+0.5** |
| **CHKT** | **Chengkung** | **1.86** | **221** | P | **Pn** | **09 51 20.2** | **-0.5** |
| | baz=219 | | | | | | |
| **WHYT** | **Xinyi Township** | **1.87** | **244** | P | **Pn** | **09 51 22.1** | **+1.4** |
| | baz=243 | | | | | | |
| **WDJ** | **Dajia District** | **1.87** | **265** | *e*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=243 | | | | | | | |
| **WGK** | **Gukeng** | **2.11** | **247** | *e*P | **Pn** | **09 51 25.9** | **+2.0** |
| | baz=246 | | | | | | | |
| **WDLH** | **Douliu** | **2.13** | **248** | *e*P | **Pn** | **09 51 25.6** | **+1.5** |
| | baz=246 | | | | | | | |
| **LONT** | **Longtian** | **2.15** | **222** | *e*P | **Pn** | **09 51 24.4** | **-0.1** |
| | baz=221 | | | | | | | |
| LONT | | | | S | **Sn** | **09 51 50.4** | **-0.3** |
| | baz=221 | | | | | | | |
| **LDUT** | **Ludao** | **2.15** | **211** | *e*P | **Pn** | **09 51 24.8** | **+0.4** |
| | baz=210 | | | | | | | |
| **WCKO** | **Fanlu** | **2.19** | **241** | *i* P | **Pn** | **09 51 26.8** | **+1.8** |
| | baz=240 | | | | | | | |
| **STYH** | **Taoyuan** | **2.21** | **233** | *i* P | **Pn** | **09 51 26.8** | **+1.7** |
| | baz=232 | | | | | | | |
| **TPUB** | **Ta-pu** | **2.24** | **238** | P | **Pn** | **09 51 26.9** | **+1.3** |
| **TPUB** | **Ta-pu** | **2.24** | **238** | *e*P | **Pn** | **09 51 27.2** | **+1.5** |
| | baz=236 | | | | | | | |
| **TWGBT** | **Beinan** | **2.25** | **221** | P | **Pn** | **09 51 25.3** | **-0.4** |
| **TWGBT** | **Beinan** | **2.25** | **221** | *e*P | **Pn** | **09 51 25.5** | **-0.2** |
| | baz=220 | | | | | | | |
| TWGBT | | | | *i* S | **Sn** | **09 51 52.1** | **-0.9** |
| | baz=220 | | | | | | | |
| **TWG** | **Pinlang** | **2.25** | **221** | *e*P | **Pn** | **09 51 25.4** | **-0.4** |
| | baz=220 | | | | | | | |
| TWG | | | | *i* S | **Sn** | **09 51 52.0** | **-1.0** |
| | baz=220 | | | | | | | |
| **WTK** | **Tuku** | **2.26** | **249** | P | **Pn** | **09 51 27.0** | **+1.1** |
| | baz=248 | | | | | | | |
| WTK | | | | *i* S | **Sn** | **09 51 54.8** | **+1.6** |
| | baz=248 | | | | | | | |
| **JIRB** | **Irabujima** | **2.28** | **82** | P | **Pn** | **09 51 26.3** | **+0.2** |
| **WTP** | **Ta-pu** | **2.28** | **237** | *e*P | **Pn** | **09 51 27.9** | **+1.7** |
| | baz=235 | | | | | | | |
| **JIKM** | **Ikemajima** | **2.36** | **80** | S | **Sn** | **09 51 55.5** | **-0.2** |
| **JMJ2** | **Miyako jima3** | **2.41** | **84** | P | **Pn** | **09 51 28.6** | **+0.8** |
| JMJ2 | | | | S | **Sn** | **09 51 56.5** | **-0.4** |
| **PNG** | **Penghu** | **3.02** | **252** | *e*P | **Pn** | **09 51 35.8** | **-0.1** |
| | baz=251 | | | | | | | |
| PNG | | | | S | **Sn** | **09 52 10.6** | **-0.7** |
| | baz=251 | | | | | | | |
| **PTMZ** | **Houxiangcun** | **3.28** | **280** | *i* P | **Pn** | **09 51 39.3** | **-0.2** |
| | baz=279 | | | | | | | |
| PTMZ | | | | *e*S | **Sn** | **09 52 14.8** | **-2.8** |
| | baz=279 | | | | | | | |

*NEIC **28** 09:51:22.1±2.4,69.46N±0.03×144.24W±0.07,h10km±2km, Error ellipse: s-maj=4.6km s-min=4.2km az=43.0*

**AEIC 28 09:51:22.7±2.8,69.47N±0.05×144.24W±0.07,h7km±6km, ML2.6,ML2.8/94(NEIC),Error ellipse: s-maj=7.9km s-min=2.8km az=197.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **50** | | Pg | 09 51 27.5 | 0.0 |
| C27K | | | | Sg | Sg | 09 51 30.7 | 0.0 |
| C27K | | | | IAML | | 09 51 31.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| C27K | | | | IAML | | 09 51 31.3 | |
| | comp=N,2μm,0.4s | | | | | | |
| **C26K** | **Camden Bay** | **0.50** | **333** | | Pg | 09 51 33.0 | +0.6 |
| C26K | | | | | Sg | 09 51 40.1 | +1.1 |
| **D25K** | **Kavik River** | **0.77** | **260** | | Pg | 09 51 37.3 | -0.2 |
| D25K | | | | | Sb | 09 51 48.9 | -0.2 |
| **D27M** | **Malcolm River** | **1.19** | **100** | | Pg | 09 51 44.4 | -1.0 |
| D27M | | | | Sg | Sb | 09 52 01.0 | 0.0 |
| D27M | | | | IAML | | 09 52 06.4 | |
| | comp=E,135nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **281** | Pn | Pn | 09 51 50.4 | -0.7 |
| C24K | | | | Sn | Sn | 09 52 10.8 | -0.9 |
| C24K | | | | IAML | | 09 52 15.6 | |
| | comp=N,146nm,0.4s | | | | | | |
| C24K | | | | IAML | | 09 52 21.3 | |
| | comp=E,100nm,0.7s | | | | | | |
| **E27K** | **Coleen River** | **1.61** | **142** | Pn | Pn | 09 51 50.6 | -0.9 |
| E27K | | | | Sn | Sn | 09 52 12.8 | +0.3 |
| E27K | | | | IAML | | 09 52 18.7 | |
| | comp=E,132nm,0.3s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **261** | | Pn | 09 51 51.2 | -0.9 |
| D24K | | | | IAML | | 09 52 21.6 | |
| | comp=N,130nm,0.4s | | | | | | |
| **F26K** | **Sheenjek River** | **1.79** | **179** | Pn | Pn | 09 51 52.7 | -1.2 |
| F26K | | | | IAML | | 09 52 25.2 | |
| | comp=E,108nm,0.5s | | | | | | |
| F26K | | | | IAML | | 09 52 26.6 | |
| | comp=N,66nm,0.4s | | | | | | |
| **E28M** | **Babbage River** | **1.91** | **115** | Pn | Pn | 09 51 54.4 | -1.2 |
| **F25K** | **Christian Rive** | **1.96** | **196** | Pn | Pn | 09 51 55.6 | -0.7 |
| F25K | | | | Sg | Sg | 09 52 25.5 | 0.0 |
| F25K | | | | IAML | | 09 52 27.6 | |
| | comp=E,84nm,0.8s | | | | | | |
| F25K | | | | IAML | | 09 52 31.8 | |
| | comp=N,81nm,0.9s | | | | | | |
| **E24K** | **Your Creek** | **2.09** | **230** | Pn | Pn | 09 51 56.9 | -1.2 |
| **TOLK** | **Toolik Lake Re** | **2.09** | **249** | | Pn | 09 51 57.0 | -1.1 |
| **C23K** | **Itkillik River** | **2.26** | **282** | Pn | Pn | 09 51 58.2 | -2.1 |
| C23K | | | | IAML | | 09 52 47.0 | |
| | comp=E,55nm,0.7s | | | | | | |
| **D23K** | **Nanushuk River** | **2.35** | **261** | Pn | Pn | 09 51 59.5 | -2.1 |
| **F24K** | **Squaw Lake** | **2.38** | **216** | Pn | Pn | 09 51 59.8 | -2.3 |
| **E23K** | **Chandalar** | **2.42** | **237** | Pn | Pn | 09 52 00.9 | -1.8 |
| E23K | | | | IAML | | 09 52 44.2 | |
| | comp=E,40nm,0.5s | | | | | | |
| E23K | | | | IAML | | 09 52 45.2 | |
| | comp=N,49nm,0.8s | | | | | | |
| **F28M** | **Old Crow** | **2.46** | **137** | Pn | Pn | 09 52 01.5 | -1.7 |
| F28M | | | | IAML | | 09 52 45.7 | |
| | comp=N,37nm,0.5s | | | | | | |
| F28M | | | | IAML | | 09 52 46.0 | |
| | comp=E,39nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.54** | **112** | Pn | Pn | 09 52 01.9 | -2.3 |
| E29M | | | | IAML | | 09 52 49.2 | |
| | comp=N,52nm,0.6s | | | | | | |
| E29M | | | | IAML | | 09 52 51.0 | |
| | comp=E,50nm,0.7s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.54** | **176** | | Pb | 09 52 06.9 | -1.6 |
| **G27K** | **Doyon Strip** | **2.85** | **159** | | Pn | 09 52 08.3 | -0.1 |
| **FYU** | **Fort Yukon** | **2.94** | **188** | Pn | Pn | 09 52 08.9 | -0.9 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **205** | Pn | Pn | 09 52 08.8 | -2.2 |
| G24K | | | | IAML | | 09 53 05.4 | |
| | comp=N,31nm,1.3s | | | | | | |
| G24K | | | | IAML | | 09 53 05.9 | |
| | comp=E,32nm,1.3s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.06** | **248** | Pn | Pn | 09 52 08.4 | -3.0 |
| **D22K** | **Ayikyak River** | **3.07** | **263** | Pn | Pn | 09 52 09.5 | -2.1 |
| D22K | | | | IAML | | 09 53 13.0 | |
| | comp=E,30nm,0.9s | | | | | | |
| D22K | | | | IAML | | 09 53 17.3 | |
| | comp=N,26nm,0.8s | | | | | | |
| **B22K** | **Teshekpuk Lake** | **3.29** | **290** | Pn | Pn | 09 52 11.7 | -2.7 |
| **G29M** | **Pine Creek** | **3.46** | **135** | Pn | Pn | 09 52 14.8 | -2.1 |
| **G23K** | **Bananza Creek** | **3.52** | **221** | Pn | Pn | 09 52 14.8 | -2.9 |
| G23K | | | | IAML | | 09 53 20.4 | |
| | comp=E,23nm,0.8s | | | | | | |
| G23K | | | | IAML | | 09 53 20.5 | |
| | comp=N,18nm,1.1s | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.64** | **277** | Pn | Pn | 09 52 18.1 | -1.2 |
| B21K | | | | IAML | | 09 53 24.8 | |
| | comp=N,20nm,2.3s | | | | | | |
| B21K | | | | IAML | | 09 53 45.4 | |
| | comp=E,18nm,2.0s | | | | | | |
| **E21K** | **Killik River** | **3.66** | **258** | | Pn | 09 52 17.0 | -2.6 |
| E21K | | | | IAML | | 09 53 29.8 | |
| | comp=N,17nm,0.8s | | | | | | |
| E21K | | | | IAML | | 09 53 32.1 | |
| | comp=E,17nm,0.9s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.75** | **270** | | Pn | 09 52 23.2 | +2.3 |
| **G30M** | **tAoh Zraii Nji** | **3.90** | **126** | Pn | Pn | 09 52 21.7 | -1.2 |
| G30M | | | | IAML | | 09 53 36.0 | |
| | comp=E,11nm,1.2s | | | | | | |
| G30M | | | | IAML | | 09 53 38.7 | |
| | comp=N,12nm,1.1s | | | | | | |
| **H24K** | **Noodor Dome** | **3.91** | **203** | Pn | Pn | 09 52 21.2 | -1.8 |
| H24K | | | | IAML | | 09 53 35.5 | |
| | comp=E,12nm,1.3s | | | | | | |
| H24K | | | | IAML | | 09 53 36.4 | |
| | comp=N,11nm,1.4s | | | | | | |
| **PRP** | **Porcupine Dome** | **4.00** | **188** | Pn | Pn | 09 52 23.1 | -1.4 |
| PRP | | | | IAML | | 09 53 16.7 | |
| | comp=E,9.8nm,0.4s | | | | | | |
| PRP | | | | IAML | | 09 53 34.3 | |
| | comp=N,12nm,1.0s | | | | | | |
| **I27K** | **Kandik River** | **4.02** | **164** | | Pn | 09 52 26.5 | +2.0 |
| **INK** | **Inuvik** | **4.05** | **102** | | Pn | 09 52 22.6 | -2.3 |
| **F21K** | **Alatna River** | **4.10** | **241** | Pn | Pn | 09 52 23.7 | -2.0 |
| **I26K** | **Coal Creek Min** | **4.21** | **174** | Pn | Pn | 09 52 25.3 | -1.8 |
| I26K | | | | IAML | | 09 53 49.6 | |
| | comp=E,14nm,1.0s | | | | | | |
| **I28M** | **Miner Creek** | **4.37** | **156** | Pn | Pn | 09 52 28.5 | -0.9 |
| I28M | | | | IAML | | 09 53 28.9 | |
| | comp=N,8.0nm,0.5s | | | | | | |
| I28M | | | | IAML | | 09 53 51.5 | |
| | comp=E,8.7nm,1.9s | | | | | | |
| **G21K** | **Allakaket** | **4.58** | **234** | Pn | Pn | 09 52 30.3 | -1.9 |
| G21K | | | | IAML | | 09 53 57.0 | |
| | comp=E,10nm,1.0s | | | | | | |
| G21K | | | | IAML | | 09 54 04.0 | |
| | comp=N,9.2nm,1.1s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.72** | **148** | Pn | Pn | 09 52 34.3 | +0.1 |
| I29M | | | | IAML | | 09 53 36.7 | |
| | comp=E,8.5nm,0.2s | | | | | | |
| **IL31** | | **4.83** | **194** | Pn | Pn | 09 52 34.1 | -1.6 |
| **EGAK** | **Eagle** | **4.87** | **164** | Pn | Pn | 09 52 34.4 | -1.8 |
| EGAK | | | | IAML | | 09 54 14.9 | |
| | comp=E,8.2nm,3.7s | | | | | | |
| EGAK | | | | IAML | | 09 54 29.5 | |
| | comp=E,6.9nm,2.3s | | | | | | |
| **J25K** | **Salcha River,** | **4.90** | **186** | Pn | Pn | 09 52 35.1 | -1.7 |
| J25K | | | | IAML | | 09 54 12.2 | |
| | comp=E,6.5nm,1.1s | | | | | | |
| J25K | | | | IAML | | 09 54 42.0 | |
| | comp=N,5.9nm,3.8s | | | | | | |
| **J26L** | **Joseph Creek** | **5.00** | **177** | | Pn | 09 52 37.3 | -0.8 |
| J26L | | | | IAML | | 09 54 02.5 | |
| | comp=E,7.8nm,2.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04** | **198** | Pn | Pn | 09 52 37.8 | -0.8 |
| **D19K** | **Kuna River** | **5.09** | **265** | Pn | Pn | 09 52 38.5 | -0.7 |
| **MLY** | **Manley** | **5.12** | **213** | Pn | Pn | 09 52 38.6 | -1.1 |
| MLY | | | | IAML | | 09 54 20.2 | |
| | comp=N,5.1nm,2.1s | | | | | | |
| MLY | | | | IAML | | 09 54 32.5 | |
| | comp=E,5.2nm,3.6s | | | | | | |
| **E19K** | **Redstone River** | **5.19** | **253** | Pn | Pn | 09 52 38.6 | -2.0 |
| E19K | | | | IAML | | 09 54 15.7 | |
| | comp=E,5.7nm,1.0s | | | | | | |
| **HDA** | **Harding Lake** | **5.20** | **193** | Pn | Pn | 09 52 39.2 | -1.5 |
| **I30M** | **Mount Dempster** | **5.24** | **141** | Pn | Pn | 09 52 41.1 | -0.3 |
| **I21K** | **Tanana** | **5.25** | **218** | Pn | Pn | 09 52 39.3 | -2.0 |
| **BWN** | **Browne** | **5.71** | **204** | Pn | Pn | 09 52 44.4 | -3.3 |
| **DAWY** | **Dawson** | **5.76** | **158** | Pn | Pn | 09 52 48.3 | -0.2 |
| **J30M** | **Hart River** | **5.81** | **144** | Pn | Pn | 09 52 49.2 | 0.0 |
| **BPAW** | **Bear Paw Mtn.** | **6.02** | **209** | Pn | Pn | 09 52 49.5 | -2.5 |
| **H19K** | **Roundabout Mou** | **6.13** | **236** | Pn | Pn | 09 52 51.5 | -2.0 |
| **C18K** | **Utukok River** | **6.13** | **270** | | Pn | 09 52 54.9 | +1.3 |
| **E18K** | **Tukpahlearik C** | **6.36** | **259** | Pn | Pn | 09 52 57.3 | +0.6 |
| **L26K** | **Log Cabin Wild** | **6.49** | **176** | | Pn | 09 53 01.1 | +2.7 |
| **DHY** | **Denali Highway** | **6.55** | **193** | Pn | Pn | 09 52 57.6 | -1.8 |
| **A36M** | **Sachs Harbour** | **6.76** | **59** | Pn | Pn | 09 53 01.7 | -0.3 |
| **F17K** | **Baldwin Pennin** | **7.08** | **253** | Pn | Pn | 09 53 03.8 | -2.6 |
| **M27K** | **Edge Creek, AK** | **7.21** | **171** | Pn | Pn | 09 53 07.4 | -1.1 |
| **M29M** | **Somme Creek** | **7.44** | **159** | Pn | Pn | 09 53 11.7 | +0.2 |
| **C16K** | **Lisburne Hills** | **7.70** | **271** | Pn | Pn | 09 53 15.0 | 0.0 |

**IDC 28 09:51:45.2±2.1,6.19S×156.36E,h0km,mb3.7/4, mbtmp3.7/4,Error ellipse: s-maj=58.6km s-min=39.1km az=99.0,Bougainville-Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **25.39** | **235** | P | P | 09 57 14.4 | -0.1 |
| | 0.3nm,0.3s,baz=58,slow=10,SNR=8.3 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **27.72** | **229** | P | P | 09 57 35.9 | +0.3 |
| | 0.2nm,0.5s,baz=60,slow=9.3,SNR=4.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **69.41** | **327** | P | P | 10 02 55.9 | +0.6 |
| | 0.5nm,0.4s,baz=145,slow=5.3,SNR=1.8 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.78** | **180** | P | P | 10 04 15.7 | -0.6 |
| | 0.7nm,0.5s,baz=24,slow=5.7,SNR=6.2 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

**IDC 28 09:55:31.6±2.2,54.23N×86.12E,h0km,mbtmp3.2/3, ML2.8/3,Error ellipse: s-maj=18.0km s-min=11.9km az=56.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.81** | **250** | I | I | 10 01 10.0 | |
| | baz=66,slow=322,SNR=2.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.82** | **250** | Pg | Pg | 09 55 45.9 | -1.3 |
| | 1.8nm,0.3s,baz=72,slow=18,SNR=15 | | | | | | |
| ZALV | | | | Lg | Lg | 09 55 59.1 | |
| | 7.1nm,0.3s,baz=72,slow=28,SNR=10.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.88** | **235** | Pn | Pn | 09 57 00.2 | +0.3 |
| | 0.2nm,0.3s,baz=50,slow=13,SNR=12 | | | | | | |
| KURBB | | | | Sn | Sn | 09 58 07.8 | -0.2 |
| | baz=54,slow=31 | | | | | | |
| | 1.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.83** | **200** | Pn | Pn | 09 57 27.7 | +0.9 |
| | 0.4nm,0.3s,baz=18,slow=12,SNR=8.9 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **9.43** | **269** | Pn | Pn | 09 57 49.1 | +0.5 |
| | baz=78,slow=11,SNR=2.9 | | | | | | |
| | 0.6nm,0.4s | | | | | | |

**IDC 28 09:56:54.0±3.3,54.21N×87.71E,h0km,mbtmp2.8/2, ML2.4/2,Error ellipse: s-maj=28.3km s-min=21.2km az=44.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.72** | **262** | I | I | 10 06 10.0 | |
| | baz=80,slow=317,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.72** | **262** | Pn | Pn | 09 57 24.2 | -1.0 |
| | 0.6nm,0.3s,baz=78,slow=13,SNR=4.6 | | | | | | |
| ZALV | | | | Lg | Lg | 09 57 47.8 | |
| | 0.6nm,0.3s,baz=81,slow=27,SNR=4.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.66** | **241** | Pn | Pn | 09 58 34.9 | +1.9 |
| | 0.1nm,0.3s,baz=52,slow=13,SNR=4.0 | | | | | | |
| KURBB | | | | Lg | Lg | 10 00 26.3 | |
| | baz=53,slow=30 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.19** | **207** | Pn | Pn | 09 58 54.0 | 0.0 |
| | 0.1nm,0.3s,baz=27,slow=9.5,SNR=2.1 | | | | | | |
| MKAR | | | | Lg | Lg | 10 01 14.7 | |
| | baz=26,slow=34 | | | | | | |
| | 0.3nm,0.6s | | | | | | |

*IDC **28** 10:00:38.5±1.5,1.01N×126.22E,h0km,mb3.7/5, mbtmp3.8/5,Error ellipse: s-maj=164.6km s-min=19.5km az=65.0*

*DJA **28** 10:00:44.5±0.5,1.1N±4.4×12.6E±.1,h55km±35km,M4.2/7, mb5.5/1,MLv3.6/7*

**ISC 28 10:00:45.2±1.1,0.8N±0.1×126.25E±0.08,h44km,n8, σ1§28/8,mb3.8/5,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.12** | **94** | P | **Pn** | **10 01 05.2** | **+0.7** |
| **SANI** | **Sanana** | **2.89** | **185** | P | **Pn** | **10 01 28.2** | **-0.5** |
| **GTOI** | **Gorontalo** | **3.24** | **266** | P | **Pn** | **10 01 34.9** | **+1.3** |
| **WRA** | **Warramunga Arr** | **22.13** | **159** | P | **P** | **10 05 37.4** | **+0.2** |
| | 1.3nm,0.5s,baz=338,slow=11,SNR=15 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **25.48** | **164** | P | **P** | **10 06 09.8** | **+0.4** |
| | 0.7nm,0.4s,baz=346,slow=12,SNR=14 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **35.64** | **157** | P | **P** | **10 07 40.1** | **+1.0** |
| | 1.8nm,0.8s,baz=350,slow=11,SNR=3.5 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.66** | **326** | P | **P** | **10 10 43.6** | **-1.5** |
| | 0.3nm,0.4s,baz=126,slow=8.4,SNR=6.5 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.91** | **328** | P | **P** | **10 11 12.0** | **-1.6** |
| | 0.6nm,0.6s,baz=137,slow=6.2,SNR=5.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

*IDC **28** 10:03:56.7±1.6,1.15N×126.43E,h0km,mb3.6/5, mbtmp3.6/5,Error ellipse: s-maj=165.6km s-min=20.9km az=65.0*

*DJA **28** 10:04:03.1±0.6,1.1N±5.1×12.6E±.1,h55km±38km,M3.6/8, MLv3.6/8*

**ISC 28 10:04:03.0±1.1,1.0N±0.1×126.28E±0.07,h39km,n11, σ1§33/10,mb3.6/5,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.12** | **104** | P | **Pn** | **10 04 23.7** | **+1.6** |
| **LBMI** | **Labuha** | **2.06** | **144** | P | Pn | 10 04 37.7 | +2.5 |
| **KMSI** | **Cibinong** | **2.35** | **259** | P | **Pn** | **10 04 39.5** | **+0.4** |
| **SANI** | **Sanana** | **3.08** | **185** | P | **Pn** | **10 04 50.1** | **+0.9** |
| **GTOI** | **Gorontalo** | **3.30** | **263** | P | **Pn** | **10 04 54.0** | **+1.9** |
| **LUWI** | **Luwuk** | **4.07** | **240** | P | **Pn** | **10 05 04.2** | **+1.4** |
| **WRA** | **Warramunga Arr** | **22.30** | **160** | P | **P** | **10 08 55.8** | **-1.4** |
| | 1.1nm,0.5s,baz=338,slow=11,SNR=11 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **25.65** | **164** | P | **P** | **10 09 29.4** | **+0.1** |
| | 0.5nm,0.4s,baz=345,slow=12,SNR=12 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| **STKA** | **Stephens Creek** | **35.81** | **157** | P | **P** | **10 10 58.3** | **-0.5** |
| | 0.9nm,0.7s,baz=335,slow=3.9,SNR=1.4 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.52** | **326** | P | **P** | **10 14 01.7** | **-0.8** |
| | 0.2nm,0.4s,baz=116,slow=8.6,SNR=4.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.77** | **328** | P | **P** | **10 14 30.3** | **-0.7** |
| | 0.2nm,0.2s,baz=122,slow=6.5,SNR=1.7 | | | | | | |
| | 0.2nm,0.2s | | | | | | |

*GUC **28** 10:17:04.4±0.8,30.17S×72.66W,h24km±14km,ML3.7*

*SJA **28** 10:17:05.5±0.8,30.42S×72.54W,h15km,ML3.4,MW3.7*

**ISC 28 10:16:53.2±2.0,30.21S±0.03×73.15W±0.09,h10km,n40, σ2§00/64,10C,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CO06** | **Fray Jorge** | **1.39** | **110** | ⇑*i*P | **Pg** | **10 17 22.6** | **+2.8** |
| CO06 | | | | *i* S | **Sb** | **10 17 35.6** | **-1.4** |
| CO06 | | | | IAML | | 10 17 37.4 | |
| | comp=N,2μm,0.2s | | | | | | |
| **CO05** | **La Serena** | **1.68** | **81** | ⇑*i*P | **Pg** | **10 17 26.9** | **+1.5** |
| CO05 | | | | *i* S | **Sn** | **10 17 42.7** | **-1.5** |
| CO05 | | | | IAML | | 10 17 44.2 | |
| | comp=N,2μm,0.3s | | | | | | |
| **GO04** | **Tololo Observa** | **2.03** | **90** | *e*P | Pg | 10 17 49.5 | +17 |
| GO04 | | | | *e*S | **Sb** | **10 17 54.9** | **-0.9** |
| **GO04** | **Tololo Observa** | **2.03** | **90** | ⇑*i*P | **Pg** | **10 17 32.6** | **+0.4** |
| GO04 | | | | *i* S | **Sn** | **10 17 53.1** | **-0.2** |
| GO04 | | | | IAML | | 10 17 56.7 | |
| | comp=N,2μm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **2.10** | **119** | *e*P | Pg | 10 17 50.5 | +17 |
| CO02 | | | | *e*S | **Sb** | **10 17 56.4** | **-1.2** |
| CO02 | | | | IAML | | 10 17 57.6 | |
| | comp=Z,884nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **2.10** | **119** | ⇑*i*P | **Pg** | **10 17 33.9** | **+0.5** |
| CO02 | | | | *i* S | **Sn** | **10 17 54.6** | **-0.1** |
| CO02 | | | | IAML | | 10 17 55.8 | |
| | comp=N,3μm,0.4s | | | | | | |
| **CO03** | **El Pedregal** | **2.21** | **107** | *e*S | **Sb** | **10 18 01.5** | **+0.7** |
| CO03 | | | | IAML | | 10 18 02.4 | |
| | comp=Z,351nm,0.5s | | | | | | |
| **CO03** | **El Pedregal** | **2.21** | **107** | ⇑*i*P | **Pg** | **10 17 35.3** | **-0.3** |
| CO03 | | | | *i* S | **Sn** | **10 17 57.4** | **-0.1** |
| CO03 | | | | IAML | | 10 17 58.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **2.44** | **61** | ⇑*i*P | **Pb** | **10 17 38.9** | **+1.6** |
| LCO | | | | *i* S | **Sn** | **10 18 04.4** | **+1.0** |
| LCO | | | | IAML | | 10 18 10.2 | |
| | comp=E,2μm,0.1s | | | | | | |
| **CO04** | **Los Peladeros** | **2.61** | **135** | ⇑*i*P | **Pg** | **10 17 42.1** | **-1.2** |
| **CO01** | **Juntas del Tor** | **2.66** | **86** | *e*P | **Pb** | **10 17 42.2** | **+1.2** |
| **AC04** | **Llanos de Chal** | **2.70** | **43** | ⇑*i*P | **Pb** | **10 17 42.1** | **+0.5** |
| AC04 | | | | *i* S | **Sn** | **10 18 09.8** | **+0.5** |
| **VA06** | **Catapilco** | **2.83** | **146** | IAML | | 10 18 17.0 | |
| | comp=N,436nm,0.4s | | | | | | |
| **AC05** | **El Transito** | **2.85** | **62** | ⇑*i*P | **Pb** | **10 17 45.0** | **+0.7** |
| AC05 | | | | *i* S | **Sn** | **10 18 15.0** | **+1.6** |
| AC05 | | | | IAML | | 10 18 19.2 | |
| | comp=N,169nm,0.2s | | | | | | |
| **AROD** | **Rodeo** | **3.18** | **90** | *e*P | **Pb** | **10 17 51.3** | **+1.3** |
| AROD | | | | *e*S | **Sb** | **10 18 25.3** | **-3.7** |
| **ROC1** | **El Roble** | **3.30** | **147** | *e*P | **Pb** | **10 17 52.4** | **+0.3** |
| ROC1 | | | | *e*S | **Sn** | **10 18 26.3** | **+1.6** |
| **VA03** | **San Esteban** | **3.38** | **140** | *e*P | **Sn** | **10 17 53.5** | **+0.3** |
| VA03 | | | | *e*S | **Sn** | **10 18 29.3** | **+3.0** |
| VA03 | | | | IAML | | 10 18 33.0 | |
| | comp=Z,146nm,0.3s | | | | | | |
| **VA03** | **San Esteban** | **3.38** | **140** | *e*P | **Pb** | **10 17 53.5** | **+0.3** |
| VA03 | | | | *i* S | **Sn** | **10 18 27.8** | **+1.5** |
| **ACDV** | **Cuesta del Vie** | **3.49** | **90** | *e*P | **Pb** | **10 17 55.8** | **+0.7** |
| ACDV | | | | *e*S | **Sn** | **10 18 31.8** | **+2.6** |
| ACDV | | | | IAML | | 10 18 41.9 | |
| | comp=Z,53nm,1.2s | | | | | | |
| **ACCO** | **Cerro Coronel** | **3.55** | **97** | *e*P | **Pb** | **10 17 57.3** | **+1.1** |
| ACCO | | | | *e*S | **Sn** | **10 18 33.5** | **+2.7** |
| ACCO | | | | IAML | | 10 18 47.0 | |
| | comp=Z,88nm,0.3s | | | | | | |
| **DOCA** | **Reserva Natura** | **3.58** | **103** | *e*P | **Pb** | **10 17 57.1** | **+0.2** |
| DOCA | | | | *e*S | **Sn** | **10 18 33.0** | **+1.3** |
| DOCA | | | | IAML | | 10 18 39.4 | |
| | comp=Z,418nm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **3.60** | **145** | *e*P | **Pb** | **10 17 57.0** | **0.0** |
| PEL | | | | *e*S | **Sn** | **10 18 35.2** | **+3.5** |
| **PEL** | **Peldehue** | **3.60** | **145** | IAML | | 10 18 37.6 | |
| | comp=N,119nm,0.5s | | | | | | |
| **GO03** | **Copiap** | **3.65** | **45** | *e*P | **Pb** | **10 17 56.1** | **-1.7** |
| GO03 | | | | *e*S | **Sn** | **10 18 36.0** | **+3.1** |
| **RTLS** | **Leoncito** | **3.67** | **117** | *e*P | **Pb** | **10 17 59.1** | **+0.8** |
| RTLS | | | | *e*S | **Sn** | **10 18 35.8** | **+2.1** |
| RTLS | | | | IAML | | 10 18 41.9 | |
| | comp=Z,380nm,0.4s | | | | | | |
| **AC06** | **Mina Casimiro** | **3.75** | **41** | *e*P | **Pb** | **10 17 58.0** | **-1.5** |
| AC06 | | | | *i* S | **Sn** | **10 18 37.9** | **+2.4** |
| AC06 | | | | IAML | | 10 18 39.3 | |
| | comp=E,50nm,0.2s | | | | | | |
| **MT10** | **Hacienda Santa** | **3.78** | **145** | ⇑*i*P | **Pb** | **10 17 59.1** | **-1.0** |
| **AUSP** | **Uspallata** | **3.80** | **123** | *e*P | **Pb** | **10 18 00.6** | **+0.1** |
| AUSP | | | | *e*S | **Sn** | **10 18 39.7** | **+2.8** |
| **ZON** | **Zonda** | **4.07** | **110** | *e*P | **Pb** | **10 18 02.4** | **-2.5** |
| ZON | | | | *e*S | **Sn** | **10 18 44.5** | **+1.3** |
| ZON | | | | IAML | | 10 19 07.1 | |
| | comp=Z,45nm,0.4s | | | | | | |
| **SJA** | **San Juan** | **4.16** | **110** | *e*P | **Pb** | **10 18 07.2** | **+0.7** |
| SJA | | | | IAML | | 10 19 28.0 | |
| | comp=Z,79nm,0.3s | | | | | | |
| **RTLL** | **Cerro Villicun** | **4.17** | **107** | *e*P | **Pb** | **10 18 04.4** | **-2.4** |
| RTLL | | | | *e*S | **Sn** | **10 18 44.5** | **-1.4** |
| RTLL | | | | *e*S | **Sn** | **10 18 47.2** | **+1.3** |
| **RTCV** | **Cerro Valdivia** | **4.28** | **114** | *e*P | **Pb** | **10 18 08.8** | **+0.1** |
| **ASAL** | **Salagasta** | **4.39** | **124** | *e*P | **Pb** | **10 18 09.7** | **-0.7** |
| ASAL | | | | *e*S | **Sn** | **10 18 53.5** | **+2.4** |
| ASAL | | | | IAML | | 10 18 59.1 | |
| | comp=Z,30nm,0.4s | | | | | | |
| **ARCO** | **CERRO ARCO** | **4.45** | **127** | *e*P | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 45.50 | 259 | P | P | 10 26 45.3 | 0.0 |
| | 0.5nm,0.5s,baz=94,slow=6.9,SNR=25 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| ASAR | Alice Springs | 45.71 | 253 | P | P | 10 26 46.9 | -0.1 |
| | 0.9nm,0.4s,baz=89,slow=8.5,SNR=23 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| ILAR | Eielson Array | 84.92 | 13 | P | P | 10 30 49.8 | 0.0 |
| | 0.3nm,0.8s,baz=218,slow=5.6,SNR=3.0 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

*TEH **28** 10:26:56.9,34.˚61N×46.˚27E,h8km±16km,ML3.5*
*ISN **28** 10:26:57.8±0.9,34.˚62N×46.˚27E,h16km±6km,ML3.7*
*DSN **28** 10:27:07.2±0.6,34.˚00N×46.˚89E,h15km,Error ellipse: s-maj=22.4km s-min=3.4km az=59.0*

**ISC 28 10:26:57.1±1.1,34.˚56N±0.˚03×46.˚28E±0.˚03,h6km±10km, n37,σ1°26/44,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| IDHR | Dehrash | 0.17 | 32 | Pg | Pg | | 10 26 59.9 | -0.7 |
| IDHR | | | | Sg | Sg | | 10 27 02.5 | -0.5 |
| IGHG | Ghaleghazi | 0.33 | 133 | Pg | Pb | | 10 27 05.1 | -0.5 |
| GLG1 | Gilan-e-Gharb | 0.53 | 215 | Pg | Pb | | 10 27 08.2 | -0.9 |
| KGS1 | Ghasr-e-Shirin | 0.57 | 265 | Pg | Pg | | 10 27 07.9 | -0.2 |
| KGS1 | | | | Sg | Sb | | 10 27 16.9 | -1.1 |
| ILIN | Lien | 0.67 | 57 | Pg | Pg | | 10 27 09.5 | -0.7 |
| ILIN | | | | Sg | Sg | | 10 27 19.2 | +0.3 |
| KCHF | Cheshme Sefid, | 0.69 | 114 | Pg | Pg | | 10 27 10.8 | +0.4 |
| ILBA | Ilam Banvizeh | 0.93 | 184 | Pg | Pb | | 10 27 15.9 | +0.2 |
| ILBA | | | | Sg | Sn | | 10 27 30.4 | -0.2 |
| SNQR | Sonqor, Kerman | 1.15 | 74 | Pg | Pg | | 10 27 19.0 | -0.3 |
| IBZA | Bozab | 1.31 | 93 | Pg | Pn | | 10 27 21.7 | -0.6 |
| IBDR | Badra | 1.47 | 191 | *e*Pg | Pg | | 10 27 26.0 | +0.7 |
| IBDR | | | | *e*Sg | Sg | | 10 27 46.0 | +1.6 |
| IBDR | | | | AML | AML | | 10 27 52.5 | |
| | comp=E,2μm,0.4s | | | | | | | |
| IBDR | | | | AML | AML | | 10 27 55.0 | |
| | comp=N,518nm,0.7s | | | | | | | |
| IKFM | Kafar-mosalman | 1.66 | 128 | Pg | Pb | | 10 27 28.8 | +0.7 |
| SDS1 | Sardasht. Az. | 1.72 | 338 | Pg | Pn | | 10 27 27.4 | -0.4 |
| IDOB | Doab | 1.75 | 115 | Pg | Pb | | 10 27 30.5 | +0.6 |
| IKRK | Kirkuk | 1.80 | 298 | *e*Pn | Pb | | 10 27 29.2 | -1.4 |
| IKRK | | | | *e*Sn | Sb | | 10 27 53.0 | -0.4 |
| IKRK | | | | AML | AML | | 10 28 00.4 | |
| | comp=E,1μm,0.5s | | | | | | | |
| IKRK | | | | AML | AML | | 10 28 01.7 | |
| | comp=N,1μm,0.8s | | | | | | | |
| HSAM | Samen | 1.95 | 99 | Pn | Pb | | 10 27 33.0 | -0.3 |
| MAHB | Mahabad | 2.26 | 348 | Pn | Pn | | 10 27 36.1 | +0.9 |
| RAFI | Al-Rafai | 2.83 | 183 | *e*Pn | Pn | | 10 27 45.0 | +2.1 |
| RAFI | | | | *e*Sn | Sb | | 10 28 20.4 | -2.5 |
| IHSH | Hashtrud | 2.86 | 16 | Pn | Pn | | 10 27 45.0 | +1.3 |
| IAZR | Azarshahr | 3.13 | 356 | Pn | Pn | | 10 27 48.6 | +1.3 |
| ISRB | Sarab | 3.45 | 19 | Pn | Pn | | 10 27 52.5 | +0.8 |
| IHRS | Heris | 3.81 | 9 | Pn | Pn | | 10 27 58.1 | +1.5 |
| IQOM | Qom | 3.96 | 84 | Pn | Pn | | 10 28 00.0 | +1.3 |
| IPIR | Pirpir | 4.28 | 115 | Pn | Pn | | 10 28 04.3 | +1.2 |
| QAMS | Qamsar | 4.32 | 99 | Pn | Pn | | 10 28 05.9 | +2.2 |
| GRMI | Germi | 4.44 | 17 | Pn | Pn | | 10 28 06.3 | +1.1 |
| ISFB | Sefidab | 4.93 | 91 | Pn | Pn | | 10 28 13.0 | +1.0 |
| GNI | Garni | 5.72 | 348 | P | Pb | | 10 28 40.8 | +3.4 |
| IRAM | Ramesheh | 5.80 | 116 | Pn | Pn | | 10 28 25.4 | +1.3 |
| SHME | Shamm | 12.01 | 132 | P | Pn | | 10 29 47.5 | -1.5 |
| NAZ | Nazwa, Dubai | 12.54 | 137 | P | Pn | | 10 29 55.5 | -0.7 |
| MSFE | Esma-Masafi | 12.54 | 134 | P | Pn | | 10 29 54.9 | -1.3 |
| ASUD | Al Ashush, Dub | 12.64 | 139 | P | Pn | | 10 29 57.2 | -0.3 |
| FAQ | Al Faqa, Dubai | 12.69 | 138 | P | Pn | | 10 29 57.2 | -1.0 |
| UOSS | Minazif | 12.88 | 135 | P | Pn | | 10 29 59.4 | -1.5 |
| HATD | Hatta, Dubai | 12.93 | 136 | P | Pn | | 10 30 00.6 | -0.9 |
| ASHO | Ashiyiah | 13.00 | 137 | P | Pn | | 10 30 01.7 | -0.8 |
| ASHO | | | | S | Sn | | 10 32 18.7 | -8.8 |
| MZR | Muzera | 13.12 | 149 | P | Pn | | 10 30 02.8 | -1.3 |

*IDC **28** 10:36:11.0±3.8, 17.˚65S×178.˚48W,h535km±23km,mb3.0/4, mbtmp3.8/5,Error ellipse: s-maj=117.5km s-min=26.3km az=141.0*

**ISC 28 10:36:13.3±2.9,17.˚3S±0.˚8×178.˚9W±0.˚7,h550km,n7, σ0°79/9,mb3.5/4,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 2.96 | 261 | P | P | | 10 37 27.0 | -1.1 |
| | 3.6nm,0.5s,baz=130,slow=20,SNR=4.3 | | | | | | | |
| STKA | Stephens Creek | 38.54 | 240 | P | P | | 10 42 49.0 | -0.2 |
| | 1.0nm,0.7s,baz=85,slow=12,SNR=2.1 | | | | | | | |
| | 1.0nm,0.7s | | | | | | | |
| WRA | Warramunga Arr | 44.30 | 259 | P | P | | 10 43 35.6 | +0.6 |
| | 0.5nm,0.3s,baz=97,slow=7.3,SNR=12 | | | | | | | |
| WRA | | | | PcP | PcP | | 10 45 07.4 | +0.2 |
| | 0.1nm,0.3s,baz=94,slow=4.0,SNR=1.7 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| ASAR | Alice Springs | 44.53 | 254 | P | P | | 10 43 37.6 | +0.9 |
| | 3.9nm,0.4s,baz=89,slow=7.8,SNR=84 | | | | | | | |
| ASAR | | | | PcP | PcP | | 10 45 08.5 | +0.5 |
| | 0.4nm,0.6s,baz=100,slow=3.9,SNR=2.8 | | | | | | | |
| | 3.9nm,0.4s | | | | | | | |
| ILAR | Eielson Array | 85.39 | 13 | P | P | | 10 47 52.7 | +0.4 |
| | 0.1nm,0.4s,baz=225,slow=5.4,SNR=4.9 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| BVAR | Borovoye Array | 116.09 | 321 | PKP | PKiKP | | 10 53 54.1 | +0.2 |
| | 0.7nm,0.4s,baz=108,slow=4.7,SNR=3.4 | | | | | | | |
| GERES | GERESS Array B | 146.90 | 345 | PKPbc | PKPbc | | 10 54 53.5 | -0.8 |
| | 0.6nm,0.5s,baz=53,slow=5.0,SNR=2.3 | | | | | | | |

*NIED **28** 10:53:15.8,34.˚85N×135.˚62E,h12km,MW3.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-0.46; Mθθ5.50; Mϕϕ-5.04; Mrθ0.48; Mθϕ-2.67; Mϕr1.31; Fault plane solution: M₀6.08000×10¹⁴ NP1: φs239.00000°,δ81.00000°,λ-169.00000°. NP2: φs148.00000°,δ79.00000°,λ-9.00000°.*
*JMA **28** 10:53:15.8±0.0,34.˚85N±0.˚08×135.˚62E±0.˚09,h12km, MD4.0/20,MV4.2/20,KYOTO OSAKA BORDER REG*
*JMA Felt III J1 at KYOTO OSAKA BORDER REG .*

**ISC 28 10:53:15.8±1.0,34.˚84N±0.˚03×135.˚62E±0.˚03,h10km±10km, n41,σ0°77/29,6D,Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JHE | Heguri | 0.19 | 164 | *i* P | Pg | | 10 53 20.1 | +0.3 |
| JHE | | | | S | Sg | | 10 53 23.2 | +0.6 |
| JHE | Heguri | 0.19 | 164 | A | A | | 10 53 20.1 | |
| | comp=E,41nm,0.6s,comp=N,19nm,0.5s | | | | | | | |
| JMIK | Miki | 0.47 | 266 | A | A | | 10 53 25.1 | |
| | comp=E,27nm,0.3s,comp=N,28nm,0.5s | | | | | | | |
| JWT | Wachi | 0.48 | 338 | *i* P | Pg | | 10 53 25.1 | 0.0 |
| JWT | | | | S | Sg | | 10 53 31.1 | -0.4 |
| JWT | Wachi | 0.48 | 338 | A | A | | 10 53 25.1 | |
| | comp=E,8.0nm,1.0s,comp=N,7.0nm,0.4s | | | | | | | |
| JNTK | Naratenkawa | 0.61 | 159 | A | A | | 10 53 27.6 | |
| | comp=E,15nm,0.4s,comp=N,7.0nm,0.2s | | | | | | | |
| JWY | Kouya | 0.62 | 182 | *i* P | Pg | | 10 53 27.7 | -0.1 |
| JWY | | | | S | Sg | | 10 53 36.1 | +0.2 |
| JKS | Kasai | 0.65 | 283 | ↓*i* P | Pg | | 10 53 28.3 | -0.1 |
| JKS | | | | ↓S | Sg | | 10 53 36.9 | -0.1 |
| JKS | Kasai | 0.65 | 283 | A | A | | 10 53 28.3 | |
| | comp=E,5.0nm,0.2s,comp=N,7.0nm,0.2s | | | | | | | |
| TSUJ | Tsu 2 | 0.67 | 101 | ↓*i* P | Pg | | 10 53 28.3 | -0.5 |
| TSUJ | | | | ↓S | Sg | | 10 53 37.4 | -0.2 |
| JAWN | Awajishima-nag | 0.69 | 239 | *i* P | Pg | | 10 53 28.8 | -0.3 |
| JAWN | | | | S | Sg | | 10 53 38.3 | +0.2 |
| JEG | Eigenji | 0.70 | 65 | A | A | | 10 53 28.9 | |
| | comp=E,9.0nm,0.7s,comp=N,9.0nm,0.7s | | | | | | | |
| JFM | Mihama | 0.75 | 23 | A | A | | 10 53 29.9 | |
| | comp=E,3.0nm,0.8s,comp=N,4.0nm,0.8s | | | | | | | |
| JKN2 | Miekihoku | 0.81 | 138 | *i* P | Pg | | 10 53 30.8 | -0.5 |
| JKN2 | | | | S | Sg | | 10 53 41.3 | -0.5 |
| JKN2 | Miekihoku | 0.81 | 138 | A | A | | 10 53 30.8 | |
| | comp=E,22nm,0.3s,comp=N,9.0nm,0.5s | | | | | | | |
| JKY | Yasaka | 0.89 | 332 | *i* P | Pg | | 10 53 32.5 | -0.5 |
| JKY | | | | S | Sg | | 10 53 44.0 | -0.7 |
| JKY | Yasaka | 0.89 | 332 | A | A | | 10 53 32.5 | |
| | comp=E,8.0nm,0.5s,comp=N,8.0nm,0.4s | | | | | | | |
| JIE | Ise | 1.00 | 116 | ↓*i* P | Pg | | 10 53 33.6 | -1.4 |
| JIE | | | | ↓S | Sg | | 10 53 47.2 | -0.9 |
| JIE | Ise | 1.00 | 116 | A | A | | 10 53 33.6 | |
| | comp=E,3.0nm,0.7s,comp=N,4.0nm,1.5s | | | | | | | |
| JWM | Minabe | 1.01 | 193 | *i* P | Pb | | 10 53 34.7 | -0.7 |
| JWM | Minabe | 1.01 | 193 | A | A | | 10 53 34.7 | |
| | comp=E,4.0nm,2.9s,comp=N,3.0nm,1.1s | | | | | | | |
| JTNC | Tanabenakahech | 1.02 | 180 | *i* P | Pb | | 10 53 34.6 | -0.9 |
| JTNC | | | | S | Sg | | 10 53 48.9 | +0.3 |
| JTNC | Tanabenakahech | 1.02 | 180 | A | A | | 10 53 34.6 | |
| | comp=E,7.0nm,0.6s,comp=N,11nm,1.2s | | | | | | | |
| JMMH | Miemihama | 1.07 | 162 | A | A | | 10 53 35.9 | |
| | comp=E,8.0nm,0.8s,comp=N,3.0nm,0.4s | | | | | | | |
| JKSM | Kasumi | 1.08 | 314 | A | A | | 10 53 36.0 | |
| | comp=E,6.0nm,0.7s,comp=N,4.0nm,1.0s | | | | | | | |
| JICN | Ichinomiyachia | 1.10 | 65 | A | A | | 10 53 36.1 | |
| | comp=E,7.0nm,1.8s,comp=N,11nm,1.5s | | | | | | | |
| JYTA | Yamagatataniai | 1.18 | 50 | A | A | | 10 53 37.5 | |
| | comp=E,12nm,0.6s,comp=N,7.0nm,0.3s | | | | | | | |
| INU | Inuyama | 1.25 | 66 | P | Pb | | 10 53 39.2 | -0.3 |
| JAO | Obara | 1.41 | 72 | A | A | | 10 53 41.1 | |
| | comp=E,4.0nm,0.4s,comp=N,5.0nm,3.3s | | | | | | | |
| JAI | Aioi | 1.42 | 223 | A | A | | 10 53 41.5 | |
| | comp=E,3.0nm,2.9s,comp=N,2.0nm,2.3s | | | | | | | |
| JJS | Sakaide | 1.47 | 252 | A | A | | 10 53 42.3 | |
| | comp=E,2.0nm,1.2s,comp=N,5.0nm,0.6s | | | | | | | |
| JKG | Kaga | 1.55 | 22 | A | A | | 10 53 43.3 | |
| | comp=E,3.0nm,1.6s,comp=N,8.0nm,0.3s | | | | | | | |
| JGF | Kuroka | 1.61 | 61 | P | Pb | | 10 53 45.0 | -0.7 |
| JMN | Monobe | 1.82 | 233 | P | Pn | | 10 53 46.9 | -0.3 |
| JNY | Yasuok | 1.91 | 74 | A | A | | 10 53 48.8 | |
| | comp=E,2.0nm,1.7s,comp=N,4.0nm,0.9s | | | | | | | |
| JSG | Sagara | 2.12 | 94 | P | Pb | | 10 53 54.2 | -0.1 |
| JOI | OKI | 2.42 | 308 | A | A | | 10 53 56.0 | |
| | comp=E,4.0nm,2.4s,comp=N,5.0nm,0.3s | | | | | | | |
| MAJO | Matsushiro | 2.71 | 50 | P | Pn | | 10 54 00.4 | +1.0 |
| JHJ2 | Mitsune | 3.89 | 115 | P | Pn | | 10 54 16.8 | +1.2 |
| JNU | Nakatsue | 4.30 | 248 | P | Pn | | 10 54 22.2 | +0.9 |
| JMM | Marumori | 5.15 | 53 | P | Pn | | 10 54 35.1 | +2.1 |

*IDC **28** 10:57:19.1±2.6,11.˚06S×123.˚76E,h0km,mb3.4/1, mbtmp3.7/3,ML3.6/2, Error ellipse: s-maj=234.6km s-min=34.4km az=52.0*
*DJA **28** 10:57:23.9±0.6,11.˚5S±5.˚×12.˚4E±.˚,h10km,M3.9/7,mb4.4/1, MLv3.7/7*

**ISC 28 10:57:20.7±0.9,11.˚05S±0.˚08×124.˚1E±0.˚1,h10km,n7, σ2°65/10,South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| BATI | Baumata | 0.96 | 331 | P | Pg | | 10 57 38.9 | -0.2 |
| BATI | | | | S | Sg | | 10 57 50.4 | -1.2 |
| SOEI | Soe | 1.29 | 6 | P | Pn | | 10 57 46.3 | +1.3 |
| EDFI | Ende, Flores | 3.32 | 313 | P | Pn | | 10 58 12.9 | +0.1 |
| BASI | Baing, Sumba | 3.59 | 283 | P | Pn | | 10 58 17.7 | +1.2 |
| WRA | Warramunga Arr | 13.22 | 133 | Pn | Pn | | 11 00 31.0 | +2.4 |
| | 0.3nm,0.3s,baz=308,slow=14,SNR=11 | | | | | | | |
| WRA | | | | Sn | Sn | | 11 02 53.0 | -2.9 |
| | 0.8nm,0.3s,baz=310,slow=24,SNR=11 | | | | | | | |
| | 1.6nm,0.7s | | | | | | | |
| ASAR | Alice Springs | 15.62 | 145 | Pn | Pn | | 11 01 04.5 | +3.3 |
| | 0.3nm,0.3s,baz=319,slow=12,SNR=19 | | | | | | | |
| ASAR | | | | Sn | Sn | | 11 03 50.1 | -4.3 |
| | 0.2nm,0.3s,baz=318,slow=22,SNR=9.2 | | | | | | | |
| | 1.2nm,0.5s | | | | | | | |
| MKAR | Makanchi Array | 68.65 | 331 | P | P | | 11 08 23.1 | -1.1 |
| | 0.2nm,0.6s,baz=137,slow=5.1,SNR=2.1 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |

*NEIC **28** 10:59:16.4±0.5, 18.˚1S±0.˚1×177.˚7W±0.˚1,h626km±9km, mb4.3/29, Error ellipse: s-maj=27.0km s-min=9.7km az=136.0*
*IDC **28** 10:59:17.2±1.3, 17.˚98S×177.˚90W,h639km±14km,mb3.2/8, mbtmp4.1/10,Error ellipse: s-maj=27.4km s-min=17.6km az=143.0*

**ISC 28 10:59:14.5±0.6,18.˚2S±0.˚1×177.˚7W±0.˚1,h600km,n42, σ1°38/43,mb4.2/23,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 4.10 | 276 | P | P | | 11 00 43.8 | +3.0 |
| | 30nm,0.5s,baz=122,slow=4.5,SNR=40 | | | | | | | |
| MSVF | | | | S | S | | 11 01 56.7 | +5.6 |
| | 17nm,1.0s,baz=115,slow=22,SNR=5.8 | | | | | | | |
| AFI | Afiamalu | 7.12 | 54 | P | P | | 11 01 07.7 | +1.9 |
| PINNC | Pines Island, | 14.61 | 250 | P | P | | 11 02 19.6 | +0.5 |
| DZM | Mont Dzumac | 15.39 | 253 | P | P | | 11 02 27.3 | +0.9 |
| | 2.9nm,0.7s,baz=100,slow=18,SNR=1.4 | | | | | | | |
| KOUNC | Koumac, New Ca | 17.17 | 259 | P | P | | 11 02 41.9 | -0.7 |
| EIDS | Eidsvold | 29.81 | 251 | P | P | | 11 04 33.4 | -1.3 |
| ARMA | Armidale | 30.38 | 241 | P | P | | 11 04 39.5 | -0.1 |
| CAN | Canberra | 34.06 | 233 | P | P | | 11 05 11.4 | +0.8 |
| CTAO | Charters Tower | 34.08 | 261 | P | P | | 11 05 10.5 | -0.4 |
| CTAO | | | | IAmb | IAmb | | 11 05 20.8 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| PMG | Port Moresby | 35.20 | 280 | P | P | | 11 05 18.9 | -1.4 |
| TOO | Toolangi | 37.51 | 231 | P | P | | 11 05 38.7 | -0.1 |
| TOO | | | | IAmb | IAmb | | 11 05 41.4 | |
| | comp=Z,22nm,1.3s | | | | | | | |
| COEN | Coen | 37.81 | 271 | P | P | | 11 05 41.8 | +0.2 |
| COEN | | | | IAmb | IAmb | | 11 06 09.3 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| STKA | Stephens Creek | 39.08 | 242 | P | P | | 11 05 52.2 | +0.6 |
| STKA | Stephens Creek | 39.08 | 242 | P | P | | 11 05 52.1 | +0.4 |
| | comp=Z,3.3nm,0.7s,baz=82,slow=5.2,SNR=8.0 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| BBOO | Buckleboo | 43.86 | 241 | P | P | | 11 06 29.3 | +0.1 |
| WR0 | Warramunga Arr | 45.07 | 260 | P | P | | 11 06 38.1 | -0.5 |
| WR0 | | | | IAmb | IAmb | | 11 07 20.1 | |
| | comp=Z,16nm,1.5s | | | | | | | |
| WB0 | Warramunga Arr | 45.23 | 260 | P | P | | 11 06 39.3 | -0.6 |
| WB0 | | | | IAmb | IAmb | | 11 06 39.7 | |
| | comp=Z,19nm,1.5s | | | | | | | |
| WB2 | Warramunga Arr | 45.25 | 260 | P | P | | 11 06 39.2 | -0.8 |
| WB2 | | | | IAmb | IAmb | | 11 06 39.8 | |
| | comp=Z,4.8nm,0.6s | | | | | | | |
| WRAB | Tennant Creek | 45.25 | 260 | P | P | | 11 06 39.3 | -0.8 |
| WRA | Warramunga Arr | 45.26 | 260 | P | P | | 11 06 38.7 | -1.4 |
| | comp=Z,3.1nm,0.4s,baz=96,slow=7.6,SNR=28 | | | | | | | |
| | comp=Z,3.1nm,0.4s | | | | | | | |
| AS31 | Alice Springs | 45.37 | 255 | P | P | | 11 06 40.4 | -0.6 |
| ASAR | Alice Springs | 45.37 | 255 | P | P | | 11 06 40.2 | -0.8 |
| | comp=Z,4.9nm,0.5s,baz=90,slow=7.9,SNR=45 | | | | | | | |
| | comp=Z,4.9nm,0.5s | | | | | | | |
| FORT | Forrest | 50.50 | 245 | P | P | | 11 07 17.9 | -1.0 |
| FORT | | | | IAmb | IAmb | | 11 07 48.0 | |
| | comp=Z,21nm,1.1s | | | | | | | |
| PSA00 | Pilbara Seismi | 58.50 | 255 | P | P | | 11 08 13.4 | -1.5 |
| MBWA | Marble Bar | 58.67 | 256 | P | P | | 11 08 14.9 | -1.1 |
| MBWA | | | | IAmb | IAmb | | 11 08 20.3 | |
| | comp=Z,18nm,1.4s | | | | | | | |
| JAGI | Jajag, Banyuwa | 66.73 | 268 | P | P | | 11 09 06.6 | -1.2 |
| MAJO | Matsushiro | 68.59 | 323 | P | P | | 11 09 18.0 | -0.7 |
| MAJO | | | | IAmb | IAmb | | 11 09 58.3 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| MJB9 | Matsu-Tunnel | 68.60 | 323 | P | P | | 11 09 17.5 | -1.3 |
| MJB9 | | | | IAmb | IAmb | | 11 09 58.3 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| QSPA | South Pole Qui | 71.82 | 180 | P | P | | 11 09 38.7 | +1.3 |
| QSPA | South Pole Qui | 71.82 | 180 | P | P | | 11 09 38.5 | +1.1 |
| | comp=Z,2.8nm,0.8s,baz=59,slow=0.6,SNR=15 | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| NVAR | Mina Array Bea | 79.18 | 43 | P | P | | 11 10 18.5 | -0.1 |
| | comp=Z,0.7nm,0.8s,baz=208,slow=6.8,SNR=4.9 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| MAW | Mawson | 83.78 | 200 | P | P | | 11 10 41.0 | -0.3 |
| | comp=Z,1.6nm,0.9s,baz=107,slow=9.1,SNR=3.0 | | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| TXAR | Lajitas Array | 85.58 | 57 | P | P | | 11 10 51.0 | 0.0 |
| | comp=Z,0.4nm,0.8s,baz=220,slow=5.4,SNR=4.8 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| ILAR | Eielson Array | 86.06 | 13 | P | P | | 11 10 50.0 | -2.2 |
| | comp=Z,0.3nm,0.4s,baz=216,slow=5.1,SNR=8.2 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| J26L | Joseph Creek | 86.55 | 14 | P | P | | 11 10 53.7 | -0.9 |
| M30M | Minto, Yukon | 86.74 | 18 | P | P | | 11 10 55.0 | -0.6 |
| M30M | | | | IAmb | IAmb | | 11 11 25.1 | |
| | comp=Z,6.3nm,1.5s | | | | | | | |
| K29M | Barlow Dome | 87.53 | 17 | P | P | | 11 10 58.5 | -0.8 |
| D19K | Kuna River | 87.65 | 7 | P | P | | 11 10 58.9 | -0.8 |
| D19K | | | | IAmb | IAmb | | 11 11 11.7 | |
| | comp=Z,7.6nm,1.4s | | | | | | | |
| F24K | Squaw Lake | 88.28 | 11 | P | P | | 11 11 02.0 | -0.6 |
| F24K | | | | IAmb | IAmb | | 11 11 29.8 | |
| | comp=Z,6.2nm,1.4s | | | | | | | |
| D22K | Ayikyak River | 88.73 | 9 | P | P | | 11 11 03.8 | -0.8 |
| D22K | | | | IAmb | IAmb | | 11 11 20.0 | |
| | comp=Z,8.2nm,1.5s | | | | | | | |
| H29M | Whitestone | 89.21 | 15 | P | P | | 11 11 06.3 | -0.6 |
| H29M | | | | IAmb | IAmb | | 11 11 19.0 | |
| | comp=Z,7.2nm,1.5s | | | | | | | |
| TORD | Torodi Ar. Bea | 174.90 | 173 | PKPab | PKPab | | 11 19 56.2 | +0.1 |
| | comp=Z,0.4nm,0.8s,baz=194,slow=2.5,SNR=2.5 | | | | | | | |

**IDC 28 11:02:44.6±321.0,54.˚10N×42.˚88E,h0km,Error ellipse: s-maj=147.0km s-min=85.4km az=148.0,Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| I43RU | DUBNA INFRASON | 4.16 | 311 | I | I | | 11 27 50.0 | |
| | 0.1nm,0.6s,baz=126,slow=315,SNR=1.7 | | | | | | | |
| I37NO | I37NO | 18.72 | 333 | I | I | | 12 54 10.0 | |
| | baz=131,slow=324,SNR=1.7 | | | | | | | |
| I26DE | FREYUNG INFRAS | 18.83 | 266 | I | I | | 12 58 20.0 | |
| | baz=69,slow=302,SNR=0.2 | | | | | | | |
| I46RU | ZALESOVO INFRA | 24.38 | 73 | I | I | | 13 32 00.0 | |
| | baz=289,slow=322,SNR=1.8 | | | | | | | |

*IDC **28** 11:03:53.5±0.8, 10.˚57S×124.˚67E,h0km,mb4.0/10, mbtmp4.1/13,ML3.7/3,MS3.1/2,Error ellipse: s-maj=50.3km s-min=17.4km az=63.0*
*DJA **28** 11:03:56.5±0.5, 11.˚5S±5.˚×12.˚4E±.˚,h10km,M4.3/10, mb4.9/3,MLv4.1/10*
*NEIC **28** 11:03:56.6±2.1, 10.˚84S±0.˚06×124.˚28E±0.˚08,h10km±1km, mb4.4/12,Error ellipse: s-maj=14.6km s-min=8.7km az=69.0*

**ISC 28 11:03:55.9±0.5,10.˚88S±0.˚06×124.˚32E±0.˚08,h10km,n43, σ1°52/42,mb4.2/15,Timor region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| BATI | Baumata | 0.93 | 316 | P | Pg | | 11 04 13.7 | -0.1 |
| SOEI | Soe | 1.11 | 357 | | Pb | | 11 04 17.5 | +0.2 |
| SOEI | Soe | 1.11 | 357 | P | Pb | | 11 04 17.9 | +0.6 |
| MMRI | Maumere | 3.03 | 317 | | Pn | | 11 04 43.9 | -0.1 |
| EDFI | Ende, Flores | 3.35 | 309 | P | Pn | | 11 04 47.6 | -0.8 |
| BASI | Baing, Sumba | 3.74 | 280 | P | Pn | | 11 04 53.5 | -0.2 |
| WBSI | Waikabubak, Su | 5.01 | 284 | P | Pn | | 11 05 10.2 | -1.0 |
| KNRA | Kununurra | 6.44 | 138 | | Pn | | 11 05 32.2 | +1.4 |
| PLAI | Plampang | 6.76 | 287 | P | Pn | | 11 05 35.1 | -0.2 |
| | 271nm,0.9s | | | | | | | |
| MTN | Manton Dam | 6.95 | 107 | | Pn | | 11 05 39.0 | +1.2 |
| FITZ | Fitzroy Crossi | 7.29 | 170 | | Pn | | 11 05 43.5 | +0.9 |
| KAPI | Kappang | 7.38 | 322 | Pn | Pn | | 11 05 44.1 | +0.4 |
| | 2.0nm,0.3s,baz=139,slow=10,SNR=4.7 | | | | | | | |
| KAPI | | | | LR | LR | | 11 08 57.0 | |
| | comp=Z,129nm,20.1s,baz=184,slow=41 | | | | | | | |
| | 6.3nm,0.2s | | | | | | | |
| TWSI | Taliwang, Sumb | 7.63 | 285 | P | Pn | | 11 05 46.7 | -0.6 |
| PSA00 | Pilbara Seismi | 11.47 | 201 | Pn | Pn | | 11 06 39.8 | -0.1 |
| WB0 | Warramunga Arr | 13.13 | 134 | Pn | Pn | | 11 07 02.1 | -0.4 |
| WRA | Warramunga Arr | 13.20 | 134 | Pn | Pn | | 11 07 01.7 | -1.9 |
| | 0.2nm,0.3s,baz=313,slow=13,SNR=6.2 | | | | | | | |
| WRA | | | | Sn | Sn | | 11 09 23.1 | -7.5 |
| | 0.7nm,0.3s,baz=305,slow=25,SNR=6.0 | | | | | | | |
| WRA | | | | LR | LR | | 11 12 53.3 | |
| | comp=Z,68nm,18.1s,baz=320,slow=41 | | | | | | | |
| | 1.1nm,0.6s | | | | | | | |
| WRAB | Tennant Creek | 13.21 | 134 | Pn | Pn | | 11 07 03.6 | 0.0 |
| WB2 | Warramunga Arr | 13.21 | 134 | Pn | Pn | | 11 07 02.9 | -0.8 |
| WR0 | Warramunga Arr | 13.36 | 134 | Pn | Pn | | 11 07 05.4 | -0.3 |
| AS31 | Alice Springs | 15.66 | 146 | Pn | Pn | | 11 07 36.6 | -0.2 |
| ASAR | Alice Springs | 15.66 | 146 | Pn | Pn | | 11 07 36.2 | -0.6 |
| | 0.6nm,0.3s,baz=318,slow=12,SNR=30 | | | | | | | |
| ASAR | | | | Sn | Sn | | 11 10 24.0 | -6.5 |
| | 0.4nm,0.3s,baz=328,slow=23,SNR=9.9 | | | | | | | |
| | 4.2nm,0.6s | | | | | | | |
| SBUM | Sibu | 17.90 | 317 | | Pn | | 11 08 06.2 | +1.1 |
| KKM | Kota Kinabalu | 18.65 | 334 | P | P | | 11 08 12.9 | -1.2 |
| BBOO | Buckleboo | 24.36 | 155 | P | P | | 11 09 15.2 | +1.1 |
| BBOO | | | | IAmb | IAmb | | 11 09 50.9 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| STKA | Stephens Creek | 26.30 | 145 | P | P | | 11 09 31.8 | 0.0 |
| | comp=Z,2.8nm,0.9s,baz=300,slow=16,SNR=3.1 | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | |
| GUMO | Guam | 31.72 | 40 | P | P | | 11 10 19.8 | -0.4 |
| CMAR | Chiang Mai Arr | 38.43 | 319 | P | P | | 11 11 16.7 | -1.3 |
| | comp=Z,0.5nm,0.3s,baz=150,slow=5.2,SNR=5.3 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| DGAR | Diego Garcia | 51.28 | 269 | P | P | | 11 12 59.9 | -0.6 |
| SONM | Songino Array | 60.58 | 346 | P | P | | 11 14 03.1 | -3.7 |
| | comp=Z,0.3nm,0.4s,baz=154,slow=8.0,SNR=1.8 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| MK31 | Makanchi Array | 68.59 | 330 | P | P | | 11 14 57.4 | -1.6 |
| MK31 | | | | IAmb | IAmb | | 11 15 00.2 | |
| | comp=Z,2.0nm,1.1s | | | | | | | |
| MKAR | Makanchi Array | 68.59 | 330 | P | P | | 11 14 57.6 | -1.4 |
| | comp=Z,0.8nm,0.5s,baz=136,slow=7.2,SNR=10 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| PETK | Petropavlovsk- | 69.82 | 21 | P | P | | 11 15 04.3 | -2.1 |
| | comp=Z,1.6nm,0.7s,baz=248,slow=7.9,SNR=1.7 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| KKAR | Karatay Array | 72.71 | 322 | P | P | | 11 15 24.4 | +0.1 |
| KKAR | | | | IAmb | IAmb | | 11 15 44.4 | |
| | comp=Z,2.0nm,1.4s | | | | | | | |
| ZAA0 | Zalesovo Array | 72.73 | 337 | P | P | | 11 15 23.0 | -1.0 |
| ZAA0 | | | | IAmb | IAmb | | 11 15 33.8 | |
| | comp=Z,3.1nm,1.0s | | | |

*AEIC **28** 11:13:21.7±2.8, 69°56N±0°02×144°9W±0°1, h18km±4km, ML4.1, mb4.5/10(NEIC), ML4.2/124(NEIC), Mwr4.0/37(NEIC) Error ellipse: s-maj=6.1km s-min=3.5km az=82.0*

*NEIC **28** 11:13:22.6, 69°65N×144°88W, h12km*

*IDC **28** 11:13:23.1±0.9, 69°86N×144°16W, h0km, mb3.8/11, mbtmp3.9/14, ML4.0/3, MS3.2/6, Error ellipse: s-maj=31.8km s-min=13.3km az=45.0*

**ISC 28 11:13:21.8±1.1, 69°53N±0°04×144°86W±0°03, h11km±7km, n199, σ1°65/203, mb4.1/19, MS3.1/5, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | | ISC |
| **C26K** | **Camden Bay** | **0.39** | **357** | | | **Pg** | **11 13 29.6** | **+0.2** | |
| C26K | | | | | | **Sb** | **11 13 34.9** | **-1.6** | |
| C26K | | | | IAML | | | 11 13 35.7 | | |
| | comp=E,23µm,0.7s | | | | | | | | |
| **C27K** | **Jago River** | **0.41** | **77** | | | **Pg** | **11 13 30.1** | **+0.2** | |
| C27K | | | | Sg | | **Sg** | **11 13 36.0** | **+0.6** | |
| C27K | | | | IAML | | | 11 13 38.3 | | |
| | comp=N,17µm,0.6s | | | | | | | | |
| **D25K** | **Kavik River** | **0.58** | **249** | Pg | | **Pg** | **11 13 33.1** | **+0.1** | |
| **C24K** | **Franklin Bluff** | **1.36** | **280** | | | **Pg** | **11 13 47.3** | **-0.4** | |
| C24K | | | | Sg | | **Sg** | **11 14 06.3** | **+0.9** | |
| C24K | | | | IAML | | | 11 14 08.3 | | |
| | comp=N,5µm,0.5s | | | | | | | | |
| **D27M** | **Malcolm River** | **1.41** | **100** | | | **Pn** | **11 13 47.6** | **+0.2** | |
| D27M | | | | | | **Sg** | **11 14 08.6** | **+1.5** | |
| D27M | | | | IAML | | | 11 14 13.0 | | |
| | comp=N,4µm,0.6s | | | | | | | | |
| **D24K** | **Happy Valley** | **1.46** | **257** | | | **Pb** | **11 13 49.1** | **+0.3** | |
| D24K | | | | | | **Sb** | **11 14 07.5** | **+0.2** | |
| **E27K** | **Coleen River** | **1.80** | **137** | | | **Pn** | **11 13 52.9** | **+0.2** | |
| E27K | | | | IAML | | | 11 14 21.9 | | |
| | comp=E,2µm,0.7s | | | | | | | | |
| **F26K** | **Sheenjek River** | **1.87** | **172** | Pn | | **Pb** | **11 13 55.6** | **-0.3** | |
| F26K | | | | IAML | | | 11 14 24.2 | | |
| | comp=E,2µm,0.5s | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **1.91** | **244** | | | **Pn** | **11 13 54.6** | **+0.3** | |
| TOLK | | | | IAML | | | 11 14 30.3 | | |
| | comp=N,2µm,0.6s | | | | | | | | |
| **E24K** | **Your Creek** | **1.97** | **224** | | | **Pb** | **11 13 56.9** | **-0.7** | |
| E24K | | | | | | **Sb** | **11 14 23.7** | **+1.5** | |
| **F25K** | **Christian Rive** | **1.97** | **189** | | | **Pn** | **11 13 54.8** | **-0.3** | |
| F25K | | | | IAML | | | 11 14 29.0 | | |
| | comp=N,2µm,0.8s | | | | | | | | |
| F25K | | | | IAML | | | 11 14 30.2 | | |
| | comp=E,2µm,1.0s | | | | | | | | |
| **C23K** | **Itkillik River** | **2.03** | **281** | | | **Pn** | **11 13 55.7** | **-0.1** | |
| **E28M** | **Babbage River** | **2.13** | **114** | | | **Pn** | **11 13 56.4** | **-0.8** | |
| E28M | | | | IAML | | | 11 14 32.7 | | |
| | comp=N,2µm,0.8s | | | | | | | | |
| **D23K** | **Nanushuk River** | **2.15** | **257** | Pn | | **Pn** | **11 13 55.3** | **-2.2** | |
| D23K | | | | | | **Pb** | **11 13 56.6** | **-4.0** | |
| D23K | | | | IAML | | | 11 14 35.9 | | |
| | comp=N,1µm,0.9s | | | | | | | | |
| D23K | | | | IAML | | | 11 14 44.8 | | |
| | comp=E,2µm,1.0s | | | | | | | | |
| **D28M** | **Stokes Point** | **2.17** | **93** | Pn | | **Pn** | **11 13 58.4** | **+0.6** | |
| **E23K** | **Chandalar** | **2.28** | **232** | | | **Pn** | **11 14 00.8** | **+1.5** | |
| E23K | | | | IAML | | | 11 14 40.3 | | |
| | comp=E,1µm,0.7s | | | | | | | | |
| E23K | | | | IAML | | | 11 14 44.1 | | |
| | comp=N,1µm,0.8s | | | | | | | | |
| **F24K** | **Squaw Lake** | **2.31** | **210** | Pn | | **Pn** | **11 13 59.6** | **-0.1** | |
| F24K | | | | IAML | | | 11 14 40.0 | | |
| | comp=E,1µm,0.7s | | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.63** | **171** | | | **Pn** | **11 14 05.8** | **+1.8** | |
| **F28M** | **Old Crow** | **2.66** | **134** | Pn | | **Pn** | **11 14 05.3** | **+0.7** | |
| F28M | | | | IAML | | | 11 14 48.3 | | |
| | comp=E,816nm,1.0s | | | | | | | | |
| F28M | | | | IAML | | | 11 14 55.5 | | |
| | comp=N,1µm,0.7s | | | | | | | | |
| **E29M** | **Blow River** | **2.76** | **111** | | | **Pn** | **11 14 07.4** | **+1.5** | |
| E29M | | | | IAML | | | 11 14 55.5 | | |
| | comp=E,1µm,0.6s | | | | | | | | |
| E29M | | | | IAML | | | 11 14 57.7 | | |
| | comp=N,1µm,0.7s | | | | | | | | |
| **G25K** | **Bearman Lake** | **2.82** | **190** | | | **Pn** | **11 14 08.8** | **+2.2** | |
| **D22K** | **Ayikyak River** | **2.87** | **260** | Pn | | **Pn** | **11 14 07.8** | **+0.4** | |
| D22K | | | | IAML | | | 11 15 02.6 | | |
| | comp=E,1µm,1.0s | | | | | | | | |
| D22K | | | | IAML | | | 11 15 07.0 | | |
| | comp=N,988nm,1.0s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **2.89** | **244** | Pn | | **Pn** | **11 14 07.3** | **-0.3** | |
| **FYU** | **Fort Yukon** | **2.99** | **183** | Pn | | **Pn** | **11 14 08.0** | **-1.0** | |
| **G27K** | **Doyon Strip** | **2.99** | **155** | Pn | | **Pn** | **11 14 09.7** | **+0.6** | |
| **G24K** | **Hadweenzic Riv** | **3.01** | **200** | Pn | | **Pn** | **11 14 10.7** | **+1.3** | |
| G24K | | | | IAML | | | 11 15 04.4 | | |
| | comp=E,917nm,0.8s | | | | | | | | |
| G24K | | | | IAML | | | 11 15 07.8 | | |
| | comp=N,982nm,1.0s | | | | | | | | |
| **COLD** | **Coldfoot** | **3.05** | **223** | | | **Pn** | **11 14 09.7** | **-0.1** | |
| **B22K** | **Teshekpuk Lake** | **3.06** | **289** | Pn | | **Pn** | **11 14 10.1** | **+0.2** | |
| **H25L** | **Birch Creek** | **3.30** | **187** | | | **Pn** | **11 14 15.3** | **+2.0** | |
| **F22K** | **John River** | **3.37** | **236** | | | **Pn** | **11 14 16.2** | **+1.9** | |
| **B21K** | **Ikpikpuk River** | **3.42** | **276** | Pn | | **Pn** | **11 14 15.4** | **+0.5** | |
| B21K | | | | IAML | | | 11 15 24.4 | | |
| | comp=N,706nm,0.7s | | | | | | | | |
| B21K | | | | IAML | | | 11 15 34.9 | | |
| | comp=E,678nm,1.0s | | | | | | | | |
| **G23K** | **Bananza Creek** | **3.43** | **217** | Pn | | **Pn** | **11 14 16.0** | **+0.8** | |
| G23K | | | | IAML | | | 11 15 17.3 | | |
| | comp=E,610nm,1.0s | | | | | | | | |
| G23K | | | | IAML | | | 11 15 18.6 | | |
| | comp=N,481nm,0.8s | | | | | | | | |
| **E21K** | **Killik River** | **3.46** | **256** | | | **Pn** | **11 14 14.7** | **-0.8** | |
| E21K | | | | IAML | | | 11 15 22.4 | | |
| | comp=N,559nm,0.6s | | | | | | | | |
| E21K | | | | IAML | | | 11 15 26.0 | | |
| | comp=E,512nm,0.8s | | | | | | | | |
| **C21K** | **Kniveblade Rid** | **3.54** | **268** | | | **Pn** | **11 14 18.2** | **+1.6** | |
| **H27K** | **Steamboat Moun** | **3.55** | **158** | | | **Pn** | **11 14 19.0** | **+2.2** | |
| **G22K** | **Bettles** | **3.61** | **226** | | | **Pn** | **11 14 18.9** | **+1.4** | |
| **G29M** | **Pine Creek** | **3.67** | **133** | | | **Pn** | **11 14 19.6** | **+1.3** | |
| G29M | | | | IAML | | | 11 15 31.8 | | |
| | comp=N,580nm,0.8s | | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.73** | **298** | | | **Pn** | **11 14 19.8** | **+0.6** | |
| **F30M** | **Barrier River** | **3.85** | **116** | | | **Pn** | **11 14 23.5** | **+2.7** | |
| **H24K** | **Noodor Dome** | **3.89** | **199** | Pn | | **Pn** | **11 14 21.1** | **-0.3** | |
| H24K | | | | IAML | | | 11 15 26.5 | | |
| | comp=N,310nm,0.7s | | | | | | | | |
| H24K | | | | IAML | | | 11 15 37.4 | | |
| | comp=E,328nm,1.3s | | | | | | | | |
| **F21K** | **Alatna River** | **3.94** | **238** | Pn | | **Pn** | **11 14 22.9** | **+0.7** | |
| F21K | | | | IAML | | | 11 15 40.0 | | |
| | comp=E,298nm,0.8s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.04** | **184** | | | **Pn** | **11 14 25.1** | **+1.4** | |
| **G30M** | **tAoh Zraii Nji** | **4.11** | **124** | Pn | | **Pn** | **11 14 25.9** | **+1.4** | |
| G30M | | | | IAML | | | 11 15 36.6 | | |
| | comp=N,267nm,0.8s | | | | | | | | |
| **H23K** | **Yukon River** | **4.13** | **208** | | | **Pn** | **11 14 25.2** | **+0.5** | |
| H23K | | | | IAML | | | 11 15 36.1 | | |
| | comp=N,331nm,0.7s | | | | | | | | |
| H23K | | | | IAML | | | 11 15 43.5 | | |
| | comp=E,366nm,1.4s | | | | | | | | |
| **H29M** | **Whitestone** | **4.14** | **141** | Pn | | **Pn** | **11 14 26.5** | **+1.7** | |
| H29M | | | | IAML | | | 11 15 39.9 | | |
| | comp=N,377nm,1.0s | | | | | | | | |
| **I27K** | **Kandik River** | **4.14** | **161** | | | **Pn** | **11 14 27.4** | **+2.5** | |
| **INK** | **Inuvik** | **4.28** | **101** | Pn | | **Pn** | **11 14 26.7** | **0.0** | |
| **INK** | **Inuvik** | **4.28** | **101** | Pn | | **Pn** | **11 14 27.8** | **+1.1** | |
| | comp=N,5.0nm,0.3s,baz=314,slow=7.8,SNR=292 | | | | | | | | |
| INK | | | | Sn | | **Sn** | **11 15 14.4** | **-2.0** | |
| | comp=N,4.2nm,0.3s,baz=256,slow=14,SNR=3.9 | | | | | | | | |
| INK | | | | LR | | LR | 11 16 41.7 | | |
| | comp=N,166nm,20.9s,baz=282,slow=48 | | | | | | | | |
| | comp=N,16nm,0.4s | | | | | | | | |
| **D20K** | **Etivluk River** | **4.29** | **264** | | | **Pn** | **11 14 28.7** | **+1.9** | |
| **E20K** | **Nigu River** | **4.29** | **258** | | | **Pn** | **11 14 28.2** | **+1.3** | |
| **B20K** | **Meade River** | **4.30** | **282** | Pn | | **Pn** | **11 14 27.4** | **+0.5** | |
| **I26K** | **Coal Creek Min** | **4.30** | **170** | | | **Pn** | **11 14 25.8** | **-1.2** | |
| **A21K** | **Barrow** | **4.34** | **300** | | | **Pn** | **11 14 28.0** | **+0.5** | |
| **EPYK** | **Eagle Plains** | **4.42** | **132** | | | **Pn** | **11 14 28.0** | **-0.6** | |
| **H22K** | **Ishtalitna Cre** | **4.42** | **217** | | | **Pn** | **11 14 30.3** | **+1.7** | |
| **G21K** | **Allakaket** | **4.44** | **231** | Pn | | **Pn** | **11 14 28.5** | **-0.4** | |
| G21K | | | | IAML | | | 11 15 53.5 | | |
| | comp=N,245nm,1.2s | | | | | | | | |
| G21K | | | | IAML | | | 11 16 00.8 | | |
| | comp=E,267nm,0.9s | | | | | | | | |
| **I28M** | **Miner Creek** | **4.52** | **153** | Pn | | **Pn** | **11 14 30.6** | **+0.4** | |
| I28M | | | | IAML | | | 11 15 57.6 | | |
| | comp=E,252nm,1.0s | | | | | | | | |
| **POKR** | **Poker Plat Res** | **4.55** | **194** | | | **Pn** | **11 14 31.4** | **+1.0** | |
| POKR | | | | IAML | | | 11 15 51.0 | | |
| | comp=N,182nm,0.7s | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.60** | **112** | Pn | | **Pn** | **11 14 31.9** | **+0.8** | |
| F31M | | | | IAML | | | 11 15 50.2 | | |
| | comp=N,220nm,1.1s | | | | | | | | |
| **G31M** | **Satah River** | **4.73** | **119** | Pn | | **Pn** | **11 14 34.5** | **+1.6** | |
| **I23K** | **Minto, Yukon-K** | **4.74** | **204** | | | **Pn** | **11 14 34.2** | **+1.3** | |
| I23K | | | | IAML | | | 11 16 04.3 | | |
| | comp=E,261nm,1.2s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **4.74** | **243** | Pn | | **Pn** | **11 14 34.1** | **+1.0** | |
| **MDM** | **Murphy Dome** | **4.78** | **197** | | | **Pn** | **11 14 34.7** | **+1.1** | |
| MDM | | | | IAML | | | 11 15 55.4 | | |
| | comp=E,231nm,0.9s | | | | | | | | |
| MDM | | | | IAML | | | 11 15 56.7 | | |
| | comp=N,166nm,0.6s | | | | | | | | |
| **COLA** | **College** | **4.82** | **195** | | | **Pn** | **11 14 33.2** | **-1.0** | |
| **IL31** | | **4.85** | **190** | Pn | | **Pn** | **11 14 36.5** | **+2.0** | |
| **ILAR** | **Eielson Array** | **4.85** | **190** | Pn | | **Pn** | **11 14 36.5** | **+2.0** | |
| | comp=N,3.6nm,0.3s,baz=360,slow=11,SNR=106 | | | | | | | | |
| ILAR | | | | Sn | | **Sn** | **11 15 27.6** | **-3.0** | |
| | comp=N,9.1nm,0.3s,baz=18,slow=18,SNR=6.4 | | | | | | | | |
| **D19K** | **Kuna River** | **4.88** | **264** | | | **Pn** | **11 14 36.3** | **+1.4** | |
| D19K | | | | IAML | | | 11 16 16.1 | | |
| | comp=N,211nm,0.9s | | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.89** | **146** | | | **Pn** | **11 14 34.2** | **-1.0** | |
| I29M | | | | IAML | | | 11 15 38.5 | | |
| | comp=E,191nm,0.7s | | | | | | | | |
| I29M | | | | IAML | | | 11 16 08.2 | | |
| | comp=N,167nm,0.6s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **4.94** | **222** | Pn | | **Pn** | **11 14 37.6** | **+1.8** | |
| H21K | | | | IAML | | | 11 16 09.0 | | |
| | comp=N,155nm,1.2s | | | | | | | | |
| H21K | | | | IAML | | | 11 16 12.8 | | |
| | comp=E,175nm,1.1s | | | | | | | | |
| **J25K** | **Salcha River,** | **4.95** | **183** | | | **Pn** | **11 14 37.7** | **+1.7** | |
| J25K | | | | IAML | | | 11 16 09.5 | | |
| | comp=E,189nm,1.5s | | | | | | | | |
| **EGAK** | **Eagle** | **4.99** | **161** | | | **Pn** | **11 14 36.9** | **+0.4** | |
| EGAK | | | | IAML | | | 11 16 20.7 | | |
| | comp=E,168nm,1.4s | | | | | | | | |
| **E19K** | **Redstone River** | **5.00** | **251** | | | **Pn** | **11 14 36.0** | **-0.7** | |
| E19K | | | | IAML | | | 11 16 13.2 | | |
| | comp=E,152nm,0.6s | | | | | | | | |
| E19K | | | | IAML | | | 11 16 15.8 | | |
| | comp=N,184nm,0.7s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04** | **195** | Pn | | **Pn** | **11 14 35.6** | **-1.5** | |
| CCB | | | | IAML | | | 11 16 09.5 | | |
| | comp=E,160nm,1.1s | | | | | | | | |
| **MLY** | **Manley** | **5.06** | **210** | Pn | | **Pn** | **11 14 38.7** | **+1.2** | |
| MLY | | | | IAML | | | 11 16 14.5 | | |
| | comp=E,118nm,0.7s | | | | | | | | |
| **J26L** | **Joseph Creek** | **5.08** | **174** | Pn | | **Pn** | **11 14 39.5** | **+1.7** | |
| J26L | | | | IAML | | | 11 15 43.3 | | |
| | comp=N,139nm,0.6s | | | | | | | | |
| J26L | | | | IAML | | | 11 16 11.3 | | |
| | comp=E,172nm,1.0s | | | | | | | | |
| **I21K** | **Tanana** | **5.16** | **216** | Pn | | **Pn** | **11 14 37.0** | **-1.8** | |
| **HDA** | **Harding Lake** | **5.21** | **190** | | | **Pn** | **11 14 39.5** | **-0.1** | |
| HDA | | | | IAML | | | 11 16 22.7 | | |
| | comp=N,158nm,1.1s | | | | | | | | |
| **NEA2** | **Nenana** | **5.23** | **200** | | | **Pn** | **11 14 41.0** | **+1.2** | |
| **C19K** | **Lookout Ridge** | **5.24** | **272** | | | **Pn** | **11 14 39.0** | **-0.9** | |
| C19K | | | | IAML | | | 11 16 33.8 | | |
| | comp=N,144nm,1.8s | | | | | | | | |
| **WRH** | **Wood River Hil** | **5.24** | **195** | | | **Pn** | **11 14 42.1** | **+2.1** | |
| WRH | | | | IAML | | | 11 16 10.5 | | |
| | comp=E,158nm,0.7s | | | | | | | | |
| WRH | | | | IAML | | | 11 16 14.2 | | |
| | comp=N,125nm,0.8s | | | | | | | | |
| **I30M** | **Mount Dempster** | **5.42** | **139** | Pn | | **Pn** | **11 14 44.9** | **+2.3** | |
| **H31M** | **Peel River** | **5.48** | **128** | Pn | | **Pn** | **11 14 45.3** | **+2.0** | |
| **F19K** | **Shaleruckik Mo** | **5.52** | **247** | Pn | | **Pn** | **11 14 42.4** | **-1.3** | |
| **SCRK** | **Sand Creek** | **5.59** | **176** | Pn | | **Pn** | **11 14 43.0** | **-1.9** | |
| **A19K** | **Wainwright** | **5.63** | **284** | | | **Pn** | **11 14 46.3** | **+1.0** | |
| **K27K** | **Chicken** | **5.64** | **167** | | | **Pn** | **11 14 46.8** | **+1.4** | |
| **BWN** | **Browne** | **5.68** | **201** | Pn | | **Pn** | **11 14 44.6** | **-1.3** | |
| **G19K** | **Purcell Mounta** | **5.74** | **239** | Pn | | **Pn** | **11 14 45.6** | **-1.1** | |
| **K24K** | **Donnelly Dome** | **5.77** | **184** | | | **Pn** | **11 14 50.0** | **+2.8** | |
| **DAWY** | **Dawson** | **5.90** | **156** | | | **Pn** | **11 14 51.6** | **+2.6** | |
| **C18K** | **Utukok River** | **5.91** | **269** | Pn | | **Pn** | **11 14 49.8** | **+0.7** | |
| **DOT** | **Dot Lake** | **5.92** | **177** | | | **Pn** | **11 14 51.9** | **+2.6** | |
| **B18K** | **Kokolik River** | **5.96** | **276** | | | **Pn** | **11 14 50.3** | **+0.5** | |
| **BPAW** | **Bear Paw Mtn.** | **5.97** | **207** | Pn | | **Pn** | **11 14 49.1** | **-0.8** | |
| **H19K** | **Roundabout Mou** | **5.99** | **233** | Pn | | **Pn** | **11 14 48.1** | **-2.0** | |
| **J30M** | **Hart River** | **5.99** | **142** | Pn | | **Pn** | **11 14 51.2** | **+0.8** | |
| **I20K** | **Naaghedeneel** | **6.05** | **223** | Pn | | **Pn** | **11 14 50.2** | **-0.7** | |
| **MCK** | **McKinley** | **6.05** | **197** | | | **Pn** | **11 14 52.9** | **+1.8** | |
| **E18K** | **Tukpahlearik C** | **6.16** | **257** | | | **Pn** | **11 14 54.0** | **+1.5** | |
| **F18K** | **Selawik** | **6.27** | **249** | | | **Pn** | **11 14 55.3** | **+1.3** | |
| **RND** | **Reindeer** | **6.36** | **196** | Pn | | **Pn** | **11 14 54.7** | **-0.7** | |
| **G18K** | **Tagagawik** | **6.38** | **242** | Pn | | **Pn** | **11 14 54.7** | **-0.9** | |
| **K29M** | **Barlow Dome** | **6.41** | **150** | Pn | | **Pn** | **11 14 58.3** | **+2.2** | |
| **J20K** | **Nowinta River** | **6.50** | **219** | Pn | | **Pn** | **11 14 58.2** | **+1.1** | |
| **DHY** | **Denali Highway** | **6.57** | **190** | Pn | | **Pn** | **11 14 59.2** | **+0.9** | |
| **L26K** | **Log Cabin Wild** | **6.57** | **174** | | | **Pn** | **11 15 01.1** | **+2.9** | |
| **PAX** | **Paxson** | **6.60** | **182** | | | **Pn** | **11 14 59.2** | **+0.6** | |
| **L27K** | **Beaver Creek,** | **6.62** | **168** | Pn | | **Pn** | **11 15 01.3** | **+2.4** | |
| **C17K** | **DeLong Mountai** | **6.66** | **269** | | | **Pn** | **11 14 59.1** | **-0.3** | |
| **RDOG** | **Red Dog Mine** | **6.71** | **266** | Pn | | **Pn** | **11 14 59.9** | **-0.1** | |
| **E17K** | **Hotham Inlet** | **6.74** | **257** | | | **Pn** | **11 15 01.2** | **+0.7** | |
| **H18K** | **Honhosa River** | **6.81** | **236** | | | **Pn** | **11 15 02.8** | **+1.3** | |
| **F17K** | **Baldwin Pennin** | **6.89** | **251** | Pn | | **Pn** | **11 15 02.8** | **+0.3** | |
| **WAT1** | **Susitna Watana** | **6.90** | **194** | | | **Pn** | **11 15 05.2** | **+2.5** | |
| **D17K** | **Noatak River** | **6.90** | **263** | | | **Pn** | **11 15 02.9** | **+0.2** | |
| **A36M** | **Sachs Harbour** | **6.92** | **60** | Pn | | **Pn** | **11 15 02.3** | **-0.5** | |
| **WAT7** | **Susitna Watana** | **6.92** | **195** | | | **Pn** | **11 15 06.0** | **+2.9** | |
| **J19K** | **Poorman** | **6.99** | **223** | Pn | | **Pn** | **11 15 05.0** | **+1.0** | |
| **HARP** | **HAARP** | **7.17** | **181** | | | **Pn** | **11 15 09.6** | **+3.2** | |
| **M26K** | **Nabesna, AK** | **7.21** | **173** | Pn | | **Pn** | **11 15 08.9** | **+2.0** | |
| **K20K** | **Telida** | **7.21** | **215** | Pn | | **Pn** | **11 15 06.6** | **-0.3** | |
| **G17K** | **Kiwalik Mounta** | **7.27** | **244** | | | **Pn** | **11 15 08.9** | **+1.2** | |
| **C36M** | **Paulatuk** | **7.31** | **82** | Pn | | **Pn** | **11 15 07.3** | **-1.0** | |
| **H17K** | **Granite Mounta** | **7.43** | **239** | Pn | | **Pn** | **11 15 08.5** | **-1.4** | |
| **C16K** | **Lisburne Hills** | **7.49** | **270** | Pn | | **Pn** | **11 15 10.3** | **-0.4** | |
| **CUT** | **Chulitna** | **7.49** | **200** | Pn | | **Pn** | **11 15 11.2** | **+0.5** | |
| **M29M** | **Somme Creek** | **7.58** | **157** | Pn | | **Pn** | **11 15 14.2** | **+2.1** | |
| **J18K** | **Innoko River** | **7.70** | **223** | Pn | | **Pn** | **11 15 12.5** | **-1.2** | |
| **M30M** | **Minto, Yukon** | **7.71** | **151** | Pn | | **Pn** | **11 15 16.1** | **+2.2** | |
| **G16K** | **Koyuk River** | **7.88** | **247** | Pn | | **Pn** | **11 15 14.3** | **-1.8** | |
| **YUK2** | **White River** | **7.95** | **166** | | | **Pn** | **11 15 19.9** | **+2.6** | |
| **L20K** | **Farewell, AK** | **7.97** | **212** | | | **Pn** | **11 15 19.1** | **+1.7** | |
| **GHO** | **Glory Hole Cre** | **7.97** | **194** | Pn | | **Pn** | **11 15 16.7** | **-0.8** | |
| **SKT** | **Skwentna** | **8.06** | **203** | Pn | | **Pn** | **11 15 17.3** | **-1.3** | |
| **J17K** | **VABM Dome** | **8.36** | **229** | Pn | | **Pn** | **11 15 23.2** | **+0.5** | |
| **VRDI** | **Verde Repeater** | **8.36** | **175** | Pn | | **Pn** | **11 15 23.1** | **+0.1** | |
| **L19K** | **White Mountain** | **8.43** | **214** | Pn | | **Pn** | **11 15 25.7** | **+2.0** | |
| **F15K** | **North Star Dit** | **8.44** | **252** | Pn | | **Pn** | **11 15 24.3** | **+0.4** | |
| **SUA** | **Susitna One** | **8.46** | **200** | Pn | | **Pn** | **11 15 26.5** | **+2.3** | |
| **M31M** | **Drury Creek, Y** | **8.51** | **145** | Pn | | **Pn** | **11 15 24.7** | **0.0** | |
| **M19K** | **Big River Lodg** | **8.60** | **212** | Pn | | **Pn** | **11 15 25.5** | **-0.4** | |
| **FARO** | **Faro, Yukon** | **8.70** | **142** | Pn | | **Pn** | **11 15 25.6** | **-1.8** | |
| **CTGM** | **Chitina Glacie** | **8.73** | **169** | Pn | | **Pn** | **11 15 28.4** | **+0.5** | |
| **L18K** | **Granite Mounta** | **8.78** | **219** | Pn | | **Pn** | **11 15 30.2** | **+1.9** | |
| **J16K** | **Anvik River** | **8.87** | **233** | Pn | | **Pn** | **11 15 30.0** | **+0.4** | |
| **F14K** | **Arctic Creek** | **9.15** | **254** | | | **Pn** | **11 15 33.6** | **+0.2** | |
| **WAX** | **Waxell Ridge** | **9.16** | **174** | Pn | | **Pn** | **11 15 32.7** | **-1.1** | |
| **RAGM** | **Ragged Mountai** | **9.19** | **179** | Pn | | **Pn** | **11 15 33.7** | **-0.4** | |
| **TABL** | **Table Mountain** | **9.27** | **168** | Pn | | **Pn** | **11 15 33.9** | **-1.4** | |
| **ANM** | **Nome** | **9.40** | **248** | Pn | | **Pn** | **11 15 36.1** | **-0.8** | |
| **O29M** | **Mount Kennedy** | **9.64** | **161** | Pn | | **Pn** | **11 15 38.9** | **-1.4** | |
| **M17K** | **Holitna River** | **9.67** | **219** | Pn | | **Pn** | **11 15 38.4** | **-2.3** | |
| **BCPM** | **Bancas Point** | **9.87** | **164** | Pn | | **Pn** | **11 15 41.1** | **-2.3** | |
| **L16K** | **Owhat River** | **9.87** | **224** | Pn | | **Pn** | **11 15 40.4** | **-3.0** | |
| **K15K** | **Wolf Creek Mou** | **9.92** | **231** | Pn | | **Pn** | **11 15 42.8** | **-1.3** | |
| **N18K** | **Kilae Creek** | **10.01** | **213** | Pn | | **Pn** | **11 15 43.9** | **-1.4** | |
| **M16K** | **Timber Creek** | **10.35** | **221** | Pn | | **Pn** | **11 15 46.1** | **-3.8** | |
| **P29M** | **Windy Craggy** | **10.39** | **160** | Pn | | **Pn** | **11 15 47.0** | **-3.6** | |
| **N17K** | **Nushgak Hills** | **10.41** | **216** | Pn | | **Pn** | **11 15 48.6** | **-2.1** | |
| **P19K** | **Oil Pt** | **10.54** | **204** | Pn | | **Pn** | **11 15 51.3** | **-1.2** | |
| **WRGLY** | **Wrigley** | **10.61** | **116** | Pn | | **Pn** | **11 15 53.3** | **-0.1** | |
| **P33M** | **Teslin, Yukon** | **10.64** | **146** | Pn | | **Pn** | **11 15 54.5** | **+0.5** | |
| **O18K** | **Koktuh Hills** | **10.66** | **209** | Pn | | **Pn** | **11 15 51.0** | **-3.2** | |
| **SKAG** | **Skagway** | **10.90** | **153** | Pn | | **Pn** | **11 15 54.5** | **-2.9** | |
| **L14K** | **Kuka Creek** | **11.02** | **231** | Pn | | **Pn** | **11 15 56.5** | **-2.5** | |
| **K13K** | **Kusilvak Mount** | **11.10** | **236** | Pn | | **Pn** | **11 15 58.1** | **-2.0** | |
| **M14K** | **Bethel** | **11.32** | **227** | Pn | | **Pn** | **11 16 02.1** | **-1.1** | |
| **Q32M** | **Nakina River** | **11.90** | **147** | Pn | | **Pn** | **11 16 11.4** | **0.0** | |
| **KDAK** | **Kodiak Island** | **12.27** | **200** | Pn | | Pn | 11 16 23.2 | +7.1 | |
| | comp=N,0.2nm,0.3s,baz=360,slow=13,SNR=1.5 | | | | | | | | |
| **DLBC** | **Dease Lake** | **12.84** | **143** | Pn | | **Pn** | **11 16 22.7** | **-1.4** | |
| **DLBC** | **Dease Lake** | **12.84** | **143** | Pn | | **Pn** | **11 16 25.0** | **+0.9** | |
| | comp=N,0.4nm,0.3s,baz=344,slow=7.5,SNR=11 | | | | | | | | |
| | comp=N,2.8nm,0.6s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **14.04** | **105** | Pn | | **Pn** | **11 16 36.9** | **-3.3** | |
| | comp=N,1.1nm,0.3s,baz=314,slow=13,SNR=21 | | | | | | | | |
| YKA | | | | Sn | | Sn | 11 19 02.7 | -13 | |
| | comp=N,1.0nm,0.3s,baz=35,slow=21,SNR=5.0 | | | | | | | | |
| | comp=N,4.4nm,0.6s | | | | | | | | |
| **FFC** | **Flin Flon** | **24.22** | **106** | P | | **P** | **11 18 35.6** | **-2.4** | |
| **NLWA** | **Neilton Lookou** | **24.50** | **144** | P | | **P** | **11 18 39.2** | **-1.5** | |
| NLWA | | | | IAmb | | IAmb | 11 19 01.9 | | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **MA2** | **Magadan** | **27.96** | **282** | LR | | LR | 11 31 29.8 | | |
| | comp=Z,29nm,18.1s,baz=76,slow=39 | | | | | | | | |
| **FRB** | **Frobisher Bay** | **28.90** | **63** | LR | | LR | 11 31 43.3 | | |
| | comp=Z,52nm,20.7s,baz=342,slow=39 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.57** | **267** | LR | | LR | 11 32 10.7 | | |
| | comp=Z,44nm,21.7s,baz=12,slow=37 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.36** | **127** | P | | **P** | **11 19 53.5** | **+2.4** | |
| | comp=Z,0.5nm,0.6s,baz=11,slow=5.7,SNR=9.9 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.26** | **141** | P | | **P** | **11 20 11.4** | **+3.8** | |
| | comp=Z,0.5nm,0.6s,baz=347,slow=7.7,SNR=5.2 | | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | | |
| **BRIGG** | **Briggsdale** | **35.89** | **122** | P | | **P** | **11 20 20.3** | **-1.3** | |
| BRIGG | | | | IAmb | | IAmb | 11 20 22.2 | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **PKCU** | **Pink Cliffs** | **36.61** | **134** | P | | **P** | **11 20 26.6** | **-1.4** | |
| PKCU | | | | IAmb | | IAmb | 11 20 44.5 | | |
| | comp=Z,8.4nm,1.3s | | | | | | | | |
| **SMWD** | **Samnorwood** | **42.17** | **121** | P | | **P** | **11 21 12.8** | **-1.2** | |
| **JKA** | **Kamikawa-asahi** | **43.50** | **273** | P | | **P** | **11 21 22.6** | **-2.0** | |
| **ASAJ** | **Asahikawa** | **43.50** | **273** | LR | | LR | 11 40 46.3 | | |
| | comp=Z,37nm,18.2s,baz=44,slow=38 | | | | | | | | |
| **GGN** | **Saint George** | **44.54** | **81** | P | | **P** | **11 21 31.4** | **-1.5** | |
| GGN | | | | IAmb | | IAmb | 11 21 36.4 | | |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.58** | **128** | P | | **P** | **11 21 52.8** | **+3.4** | |
| | comp=Z,0.3nm,0.6s,baz=352,slow=6.0,SNR=6.5 | | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | | |
| **PAULI** | **Pauline** | **48.45** | **101** | P | | **P** | **11 22 03.2** | **-0.6** | |
| PAULI | | | | IAmb | | IAmb | 11 22 04.6 | | |
| | comp=Z,10nm,1.3s | | | | | | | | |
| **NAO01** | **NORSAR Array S** | **48.76** | **16** | P | | **P** | **11 22 03.4** | **-2.5** | |
| **NC602** | **NORSAR Array S** | **48.93** | **15** | P | | **P** | **11 22 06.2** | **-1.0** | |
| NC602 | | | | IAmb | | IAmb | 11 22 09.9 | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **HFS** | **Hagfors** | **49.72** | **14** | P | | **P** | **11 22 13.1** | **-0.1** | |
| | comp=Z,1.1nm,0.4s,baz=4.2,slow=5.9,SNR=11 | | | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.64** | **325** | P | | **P** | **11 22 29.8** | **+2.1** | |
| | comp=Z,0.5nm,0.4s,baz=46,slow=12,SNR=2.3 | | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | | |
| **SONM** | **Songino Array** | **52.00** | **306** | P | | **P** | **11 22 34.8** | **+4.1**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HAGA | | | | S | Sn | 11 19 27.6 | -0.2 | |
| HAGA | | | | AML | AML | | | |
| | comp=N,51μm,0.1s | | | | | | | |
| HAGA | | | | AML | AML | | | |
| | comp=E,50μm,0.1s | | | | | | | |
| **RAFF** | **Raffo Rosso** | **0.70** | **218** | P | Pb | 11 19 22.9 | +0.5 | |
| RAFF | | | | S | Sn | 11 19 33.0 | +0.8 | |

**ROM 28 11:20:03.8±0.1, 37°.760N±0°.004×14°.906E±0°.008, h26km, ML2.1/35, Error ellipse: s-maj=0.7km s-min=0.1km az=293.0, Sicily**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EPZF** | **Pizzo Felice** | **0.07** | **329** | P | Pb | 11 20 07.8 | -0.7 |
| EPZF | | | | S | Sb | 11 20 11.8 | +0.1 |
| EPZF | | | | AML | AML | | |
| | comp=E,6360μm,0.4s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,3905μm,0.7s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=N,3762μm,0.3s | | | | | | |
| EPZF | | | | AML | AML | | |
| | comp=E,6358μm,0.4s | | | | | | |
| **ESLN** | **Serra La Nave** | **0.09** | **141** | P | Pb | 11 20 08.3 | -0.4 |
| ESLN | | | | S | Sb | 11 20 12.3 | +0.3 |
| ESLN | | | | AML | AML | | |
| | comp=E,1156μm,0.2s | | | | | | |
| **EMCN** | **Etna Monte Con** | **0.11** | **73** | P | Pb | 11 20 08.6 | -0.2 |
| EMCN | | | | AML | AML | | |
| | comp=E,1370μm,0.3s | | | | | | |
| **ESML** | **S. M. di Licod** | **0.14** | **189** | P | Pb | 11 20 09.1 | +0.2 |
| ESML | | | | S | Sb | 11 20 13.4 | +1.1 |
| ESML | | | | AML | AML | | |
| | comp=E,1073μm,0.3s | | | | | | |
| ESML | | | | AML | AML | | |
| | comp=N,854μm,0.8s | | | | | | |
| ESML | | | | AML | AML | | |
| | comp=E,1072μm,0.3s | | | | | | |
| **GALF** | **Gagliano Caste** | **0.27** | **260** | P | Pb | 11 20 10.5 | -0.1 |
| GALF | | | | S | Sb | 11 20 16.1 | +0.9 |
| GALF | | | | AML | AML | | |
| | comp=E,454μm,0.8s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,327μm,1.0s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,1405μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,454μm,1.2s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,1070μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,327μm,1.0s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,1403μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=E,453μm,0.8s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,302μm,0.4s | | | | | | |
| GALF | | | | AML | AML | | |
| | comp=N,1072μm,0.4s | | | | | | |
| **EPOZ** | **Pozzillo** | **0.28** | **150** | P | Pb | 11 20 10.4 | -0.2 |
| EPOZ | | | | AML | AML | | |
| | comp=N,1075μm,0.9s | | | | | | |
| EPOZ | | | | AML | AML | | |
| | comp=E,936μm,0.8s | | | | | | |
| EPOZ | | | | AML | AML | | |
| | comp=E,888μm,0.4s | | | | | | |
| **MUCR** | **Ucria** | **0.28** | **355** | P | Pb | 11 20 10.3 | -0.4 |
| MUCR | | | | S | Sb | 11 20 15.6 | +0.2 |
| MUCR | | | | AML | AML | | |
| | comp=N,244μm,0.4s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=E,241μm,0.3s | | | | | | |
| MUCR | | | | AML | AML | | |
| | comp=N,244μm,0.4s | | | | | | |
| **NOV** | **Novara** | **0.32** | **34** | P | Pb | 11 20 11.1 | -0.2 |
| NOV | | | | S | Sb | 11 20 16.5 | +0.1 |
| NOV | | | | AML | AML | | |
| | comp=E,900μm,1.6s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,850μm,0.3s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=E,900μm,0.4s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=N,853μm,0.3s | | | | | | |
| NOV | | | | AML | AML | | |
| | comp=E,853μm,0.3s | | | | | | |
| **AIO** | **Antillo** | **0.33** | **51** | P | Pb | 11 20 11.6 | +0.2 |
| AIO | | | | S | Sb | 11 20 17.0 | +0.4 |
| AIO | | | | AML | AML | | |
| | comp=N,406μm,1.5s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=N,406μm,0.5s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=E,317μm,1.1s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=N,281μm,0.3s | | | | | | |
| AIO | | | | AML | AML | | |
| | comp=E,286μm,0.4s | | | | | | |
| **HLNI** | **Lentini** | **0.41** | **184** | P | Pb | 11 20 12.3 | -0.3 |
| HLNI | | | | S | Sb | 11 20 19.0 | +0.5 |
| HLNI | | | | AML | AML | | |
| | comp=E,386μm,0.5s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=E,386μm,1.5s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=N,292μm,0.2s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=E,323μm,0.1s | | | | | | |
| HLNI | | | | AML | AML | | |
| | comp=N,292μm,0.2s | | | | | | |
| **HAGA** | **Augusta** | **0.51** | **157** | P | Pb | 11 20 13.8 | -0.4 |
| HAGA | | | | S | Sb | 11 20 22.1 | +0.7 |
| HAGA | | | | AML | AML | | |
| | comp=N,242μm,0.3s | | | | | | |
| HAGA | | | | AML | AML | | |
| | comp=E,258μm,0.9s | | | | | | |
| HAGA | | | | AML | AML | | |
| | comp=E,190μm,0.1s | | | | | | |
| HAGA | | | | AML | AML | | |
| | comp=N,194μm,0.1s | | | | | | |
| **MPNC** | **Port Mandanici** | **0.52** | **42** | P | Pb | 11 20 14.4 | 0.0 |
| MPNC | | | | S | Sn | 11 20 23.1 | -0.6 |
| MPNC | | | | AML | AML | | |
| | comp=E,432μm,0.5s | | | | | | |
| MPNC | | | | AML | AML | | |
| | comp=N,513μm,0.3s | | | | | | |
| MPNC | | | | AML | AML | | |
| | comp=E,432μm,0.5s | | | | | | |
| MPNC | | | | AML | AML | | |
| | comp=N,513μm,0.3s | | | | | | |
| **PETRA** | **Petralia Sopra** | **0.63** | **277** | P | Pb | 11 20 15.9 | -0.4 |
| PETRA | | | | AML | AML | | |
| | comp=N,112μm,1.1s | | | | | | |
| PETRA | | | | AML | AML | | |
| | comp=N,112μm,0.9s | | | | | | |
| PETRA | | | | AML | AML | | |
| | comp=E,120μm,0.5s | | | | | | |
| PETRA | | | | AML | AML | | |
| | comp=N,106μm,0.5s | | | | | | |
| **RAFF** | **Raffo Rosso** | **0.69** | **219** | P | Pb | 11 20 17.2 | 0.0 |
| RAFF | | | | AML | AML | | |
| | comp=E,91μm,0.2s | | | | | | |
| **MSRU** | **Castanea** | **0.69** | **43** | P | Pn | 11 20 17.8 | -0.1 |
| MSRU | | | | S | Sn | 11 20 27.8 | -0.2 |
| MSRU | | | | AML | AML | | |
| | comp=N,154μm,0.4s | | | | | | |
| MSRU | | | | AML | AML | | |
| | comp=E,257μm,0.5s | | | | | | |
| **CSLB** | **Castelbuono** | **0.69** | **285** | P | Pn | 11 20 17.7 | -0.3 |
| CSLB | | | | AML | AML | | |
| | comp=N,54μm,1.0s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=N,54μm,1.0s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=E,48μm,1.1s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=N,54μm,1.0s | | | | | | |
| CSLB | | | | AML | AML | | |
| | comp=E,47μm,0.7s | | | | | | |
| **HMDC** | **Modica** | **0.81** | **187** | P | Pb | 11 20 18.9 | -0.3 |
| HMDC | | | | S | Sn | 11 20 30.8 | +0.1 |
| HMDC | | | | AML | AML | | |
| | comp=E,252μm,1.1s | | | | | | |
| HMDC | | | | AML | AML | | |
| | comp=N,178μm,0.3s | | | | | | |
| HMDC | | | | AML | AML | | |
| | comp=E,252μm,0.9s | | | | | | |
| HMDC | | | | AML | AML | | |
| | comp=E,226μm,0.2s | | | | | | |
| HMDC | | | | AML | AML | | |
| | comp=N,179μm,0.3s | | | | | | |
| **CEL** | **Celeste** | **0.93** | **57** | AML | AML | | |
| | comp=E,75μm,1.4s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,97μm,1.4s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=E,75μm,0.6s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,97μm,0.6s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,88μm,0.5s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=N,89μm,0.5s | | | | | | |
| CEL | | | | AML | AML | | |
| | comp=E,53μm,0.4s | | | | | | |
| **CLTA** | **Licata** | **0.96** | **232** | P | Pb | 11 20 22.1 | +0.3 |
| CLTA | | | | S | Sn | 11 20 35.3 | +0.8 |
| CLTA | | | | AML | AML | | |
| | comp=E,75μm,0.5s | | | | | | |
| **CROCE** | **Santa Croce Ca** | **0.97** | **198** | P | Pb | 11 20 21.9 | 0.0 |
| CROCE | | | | S | Sn | 11 20 35.5 | +0.7 |
| CROCE | | | | AML | AML | | |
| | comp=E,114μm,0.3s | | | | | | |
| CROCE | | | | AML | AML | | |
| | comp=N,103μm,0.4s | | | | | | |
| **PLAC** | **Placanica** | **1.39** | **60** | P | Pb | 11 20 29.0 | -0.2 |
| PLAC | | | | AML | AML | | |
| | comp=N,69μm,0.5s | | | | | | |
| PLAC | | | | AML | AML | | |
| | comp=E,81μm,0.5s | | | | | | |
| PLAC | | | | AML | AML | | |
| | comp=E,55μm,0.3s | | | | | | |

**IDC 28 11:25:22.2±311.0, 54°.38N×42°.11E, h0km, Error ellipse: s-maj=143.2km s-min=73.9km az=143.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **3.64** | **312** | I | I | 11 46 20.0 | |
| | 0.2nm,0.7s,baz=128,slow=313,SNR=8.3 | | | | | | |
| **I37NO** | **I37NO** | **18.27** | **333** | I | I | 13 16 30.0 | |
| | baz=130,slow=326,SNR=1.2 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **18.40** | **264** | I | I | 13 17 15.4 | |
| | baz=67,slow=316,SNR=0.6 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **24.74** | **73** | I | I | 13 57 15.0 | |
| | baz=289,slow=320 | | | | | | |

*HEL **28** 11:30:16.6±0.1, 63°.97N×28°.14E, h0km, ML1.8, Explosion*
*IDC **28** 11:30:17.0±1.7, 63°.89N×28°.02E, h0km, mbtmp2.9/2, ML2.2/2, Error ellipse: s-maj=37.6km s-min=8.3km az=98.0*
*UPP **28** 11:30:17.4±2.7, 63°.87N×27°.91E, h0km, ML1.7*

**ISC 28 11:30:15.9±0.8, 63°.91N±0°.02×28°.04E±0°.03, h0km, n41, σ1=36/66, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIF** | **Nilsia** | **0.53** | **191** | PG | **Pb** | **11 30 27.5** | **-0.6** |
| | baz=17 | | | | | | |
| NIF | | | | SG | **Sb** | **11 30 35.2** | **-1.0** |
| **RMF** | **Romuvaara** | **0.89** | **69** | PG | **Pg** | **11 30 32.0** | **-0.9** |
| RMF | | | | MSG | | 11 30 42.3 | |
| | comp=Z,11nm,0.2s | | | | | | |
| RMF | | | | SB | **Sg** | **11 30 43.1** | **-1.3** |
| **SUF** | **Sumiainen** | **1.47** | **216** | PG | **Pb** | **11 30 44.5** | **+0.5** |
| SUF | | | | MSG | | 11 31 02.7 | |
| | comp=Z,4.0nm,0.2s | | | | | | |
| SUF | | | | SN | **Sn** | **11 31 05.1** | **+1.6** |
| **OUL** | **Oulu** | **1.50** | **323** | PG | **Pn** | **11 30 43.6** | **-0.5** |
| OUL | | | | SG | **Sg** | **11 31 03.0** | **-1.1** |
| **OUF** | **Merijarvi** | **1.52** | **289** | PG | **Pn** | **11 30 44.4** | **0.0** |
| | baz=108 | | | | | | |
| OUF | | | | MSG | | 11 31 03.0 | |
| | comp=Z,10.0nm,0.2s | | | | | | |
| OUF | | | | SG | **Sg** | **11 31 04.6** | **-0.2** |
| **OBF4** | **Vikkela, Lumij** | **1.57** | **307** | PG | **Pn** | **11 30 44.9** | **-0.1** |
| OBF4 | | | | MSG | | 11 31 03.5 | |
| | comp=Z,7.0nm,0.2s | | | | | | |
| OBF4 | | | | SN | **Sg** | **11 31 07.0** | **+0.7** |
| **OBF0** | **Syolatti, Pyha** | **1.77** | **291** | PG | **Pn** | **11 30 48.7** | **+1.0** |
| OBF0 | | | | MSG | | 11 31 10.0 | |
| | comp=Z,7.0nm,0.2s | | | | | | |
| OBF0 | | | | SN | **Sb** | **11 31 12.0** | **+0.2** |
| **JOF** | **Joensuu** | **1.77** | **123** | *eP* | **Pn** | **11 30 48.4** | **+0.6** |
| **JOF** | **Joensuu** | **1.77** | **123** | PG | **Pn** | **11 30 48.4** | **+0.6** |
| | baz=305 | | | | | | |
| JOF | | | | SN | **Sn** | **11 31 11.9** | **+0.9** |
| **KAF** | **Kangasniemi** | **1.97** | **205** | PG | **Pb** | **11 30 52.7** | **+0.1** |
| | baz=25 | | | | | | |
| KAF | | | | MSG | | 11 31 17.2 | |
| | comp=Z,7.5nm,0.2s | | | | | | |
| KAF | | | | SG | **Sg** | **11 31 20.1** | **+1.1** |
| **MSF** | **Maaselka** | **2.06** | **11** | PG | **Pn** | **11 30 52.0** | **+0.3** |
| MSF | | | | SG | **Sn** | **11 31 17.8** | **-0.2** |
| **RANF** | **Ranua** | **2.18** | **346** | PG | **Pn** | **11 30 54.8** | **+1.4** |
| | baz=167 | | | | | | |
| RANF | | | | SG | **Sn** | **11 31 21.9** | **+0.8** |
| **KEF** | **Keuruu** | **2.27** | **221** | *eP* | **Pb** | **11 30 57.4** | **-0.3** |
| **KEF** | **Keuruu** | **2.27** | **221** | PG | **Pb** | **11 30 58.0** | **+0.3** |
| KEF | | | | MSG | | 11 31 25.8 | |
| | comp=Z,6.3nm,0.2s | | | | | | |
| KEF | | | | SG | **Sg** | **11 31 28.5** | **-0.2** |
| **KU6** | **Riekki** | **2.27** | **19** | PG | **Pn** | **11 30 55.9** | **+1.3** |
| | baz=201 | | | | | | |
| KU6 | | | | MSG | | 11 31 21.6 | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| KU6 | | | | SG | **Sn** | **11 31 23.6** | **+0.4** |
| **OLKF** | **Oulanka, Finla** | **2.49** | **13** | PG | **Pn** | **11 30 59.5** | **+1.8** |
| OLKF | | | | MSG | | 11 31 28.1 | |
| | comp=Z,5.7nm,0.2s | | | | | | |
| OLKF | | | | SG | **Sn** | **11 31 29.8** | **+1.1** |
| **RUF** | **Ruokolahti** | **2.53** | **170** | PG | **Pb** | **11 31 01.7** | **-0.3** |
| | baz=349 | | | | | | |
| RUF | | | | MSG | | 11 31 32.8 | |
| | comp=Z,4.9nm,0.2s | | | | | | |
| RUF | | | | SG | **Sg** | **11 31 36.3** | **-0.6** |
| **VAF** | **Ylistaro** | **2.56** | **253** | *eP* | **Pb** | **11 31 02.7** | **0.0** |
| **VAF** | **Ylistaro** | **2.56** | **253** | PB | **Pb** | **11 31 02.0** | **-0.7** |
| VAF | | | | MSG | | 11 31 34.1 | |
| | comp=Z,3.8nm,0.2s | | | | | | |
| VAF | | | | SG | **Sb** | **11 31 35.6** | **+1.0** |
| **FIA0** | **FINESS Array S** | **2.63** | **201** | PB | **Pb** | **11 31 03.2** | **-0.7** |
| | baz=20 | | | | | | |
| FIA0 | | | | MSG | | 11 31 36.4 | |
| | comp=Z,3.1nm,0.2s | | | | | | |
| FIA0 | | | | SB | **Sb** | **11 31 37.4** | **+0.7** |
| **FINES** | **FINESS Array B** | **2.63** | **201** | Pn | **Pb** | **11 31 03.5** | **-0.4** |
| | comp=Z,1.3nm,0.3s,baz=23,slow=15,SNR=39 | | | | | | |
| FINES | | | | Lg | Lg | 11 31 37.8 | |
| | comp=Z,1.1nm,0.3s,baz=23,slow=29,SNR=26 | | | | | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **TOF** | **Tornio** | **2.69** | **326** | PB | **Pn** | **11 31 01.6** | **+1.2** |
| TOF | | | | SN | **Sn** | **11 31 33.5** | **-0.2** |
| TOF | | | | MSG | | 11 31 35.1 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| **KALU** | **Kalix** | **2.80** | **317** | P | **Pn** | **11 31 02.8** | **+0.9** |
| KALU | | | | S | **Sn** | **11 31 36.9** | **+0.7** |
| **KALU** | **Kalix** | **2.80** | **317** | PN | **Pn** | **11 31 03.3** | **+1.4** |
| | baz=135 | | | | | | |
| KALU | | | | SN | **Sn** | **11 31 36.9** | **+0.7** |
| **RNF** | **Rovaniemi** | **2.84** | **343** | PN | **Pn** | **11 31 01.8** | **-0.7** |
| RNF | | | | SB | **Sn** | **11 31 40.7** | **+3.3** |
| **SJUU** | **Sjulsmark** | **3.20** | **303** | P | **Pn** | **11 31 09.0** | **+1.7** |
| **ODEU** | **Stanfors** | **3.25** | **282** | P | **Pn** | **11 31 08.3** | **+0.3** |
| **UMAU** | **Umeaa** | **3.26** | **273** | P | **Pn** | **11 31 08.8** | **+0.7** |
| **UMAU** | **Umeaa** | **3.26** | **273** | PN | **Pn** | **11 31 09.0** | **+0.8** |
| UMAU | | | | SG | **Sg** | **11 31 59.9** | **-0.5** |
| **VJF** | **Virojoki** | **3.39** | **184** | SG | **Sg** | **11 32 02.0** | **-2.6** |
| **KPF** | **Kankaanpaa** | **3.44** | **235** | PB | **Pb** | **11 31 16.3** | **-1.3** |
| **PAJU** | **Pajala** | **3.75** | **329** | P | **Pn** | **11 31 16.2** | **+1.3** |
| **PAJU** | **Pajala** | **3.75** | **329** | PN | **Pn** | **11 31 16.1** | **+1.3** |
| PAJU | | | | SN | **Sn** | **11 31 58.8** | **-0.8** |
| **KLF** | **Kolari** | **3.75** | **335** | PN | **Pn** | **11 31 16.2** | **+1.3** |
| KLF | | | | SN | **Sn** | **11 31 58.4** | **-1.2** |
| **SVAU** | **Svanoeiden** | **3.75** | **283** | P | **Pn** | **11 31 15.6** | **+0.7** |
| **HARU** | **Harads** | **3.76** | **310** | P | **Pn** | **11 31 16.2** | **+1.2** |
| **VRF** | **Varrio** | **3.91** | **9** | SB | **Sn** | **11 32 08.4** | **+4.7** |
| **HEL1** | **Helsinki** | **4.03** | **203** | PN | **Pn** | **11 31 20.3** | **+1.6** |
| **HEMU** | **Hemsoen** | **4.68** | **259** | PN | **Pn** | **11 31 29.5** | **+1.8** |
| HEMU | | | | SG | **Sg** | **11 32 42.1** | **-4.0** |
| **ARCES** | **ARCESS Array B** | **5.74** | **351** | Pn | **Pn** | **11 31 42.6** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=172,slow=14,SNR=1.8 | | | | | | |
| ARCES | | | | Sn | **Sn** | **11 32 45.5** | **-3.2** |
| | comp=Z,0.2nm,0.3s,baz=171,slow=23,SNR=5.9 | | | | | | |
| ARCES | | | | Lg | Lg | 11 33 08.4 | |
| | comp=Z,0.3nm,0.3s,baz=167,slow=30,SNR=5.6 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **I37NO** | **I37NO** | **6.41** | **328** | I | I | 12 08 00.0 | |
| | baz=138,slow=326,SNR=3.5 | | | | | | |

*IDC **28** 11:31:12.2±0.9, 49°.05S×164°.62E, h0km, mb3.9/5, mbtmp4.0/7, ML3.7/2, MS3.4/3, Error ellipse: s-maj=28.5km s-min=23.4km az=91.0*
*NEIC **28** 11:31:14.4±2.1, 49°.21S±0°.06×164°.6E±0°.1, h10km±1km, mb4.5/17, Error ellipse: s-maj=12.1km s-min=9.1km az=72.0*

**ISC 28 11:31:15.1±0.6, 49°.18S±0°.07×164°.50E±0°.07, h18km, n109, σ1=31/114, mb4.3/12, Auckland Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APZ** | **The Paps** | **3.32** | **46** | P | **Pn** | **11 32 07.1** | **+0.9** |
| APZ | | | | S | **Sn** | **11 32 44.8** | **-0.4** |
| **PYZ** | **Puysegur Point** | **3.36** | **27** | Pn | **Pn** | **11 32 06.4** | **-0.3** |
| PYZ | | | | Sn | **Sn** | **11 32 46.0** | **0.0** |
| **PYZ** | **Puysegur Point** | **3.36** | **27** | P | **Pn** | **11 32 06.7** | **0.0** |
| PYZ | | | | S | **Sn** | **11 32 44.8** | **-1.2** |
| **ORPS** | **Orepuki** | **3.64** | **39** | P | **Pn** | **11 32 11.8** | **+1.4** |
| **RRKS** | **Rarakau** | **3.64** | **35** | P | **Pn** | **11 32 12.0** | **+1.5** |
| RRKS | | | | S | **Sn** | **11 32 53.6** | **+0.6** |
| **WHZ** | **Wether Hill Ro** | **4.04** | **37** | | **Pn** | **11 32 17.1** | **+1.1** |
| WHZ | | | | Sn | **Sn** | **11 33 02.4** | **-0.3** |
| **WHZ** | **Wether Hill Ro** | **4.04** | **37** | P | **Pn** | **11 32 16.8** | **+0.8** |
| WHZ | | | | S | **Sn** | **11 33 02.9** | **+0.2** |
| **SYZ** | **Scrubby Hill** | **4.09** | **52** | P | **Pn** | **11 32 18.0** | **+1.3** |
| SYZ | | | | S | **Sn** | **11 33 02.3** | **-1.8** |
| **DCZ** | **Deep Cove** | **4.13** | **27** | | **Pn** | **11 32 18.0** | **+0.7** |
| DCZ | | | | Sn | **Sn** | **11 33 03.4** | **-1.8** |
| **MLZ** | **Mavora Lakes** | **4.54** | **34** | | **Pn** | **11 32 23.3** | **+0.3** |
| MLZ | | | | Sn | **Sn** | **11 33 16.0** | **+0.7** |
| **MLZ** | **Mavora Lakes** | **4.54** | **34** | P | **Pn** | **11 32 24.6** | **+1.7** |
| MLZ | | | | S | **Sn** | **11 33 17.6** | **+2.3** |
| **TUZ** | **Tuapeka** | **4.74** | **49** | P | **Pn** | **11 32 26.9** | **+1.2** |
| TUZ | | | | S | **Sn** | **11 33 21.1** | **+0.9** |
| **MSZ** | **Milford Sound** | **5.08** | **29** | P | **Pn** | **11 32 32.5** | **+2.2** |
| MSZ | | | | S | **Sn** | **11 33 33.2** | **+4.7** |
| **EAZ** | **Earnscleugh** | **5.13** | **41** | P | **Pn** | **11 32 31.7** | **+0.6** |
| EAZ | | | | S | **Sn** | **11 33 31.7** | **+1.9** |
| **HHSZ** | **Highcliff Hill** | **5.29** | **54** | P | **Pn** | **11 32 34.7** | **+1.5** |
| HHSZ | | | | S | **Sn** | **11 33 34.0** | **+0.4** |
| **WKZ** | **Wanaka** | **5.34** | **37** | | **Pn** | **11 32 34.9** | **+1.0** |
| WKZ | | | | Sn | **Sn** | **11 33 34.1** | **-0.8** |
| **WKZ** | **Wanaka** | **5.34** | **37** | P | **Pn** | **11 32 36.4** | **+2.4** |
| WKZ | | | | S | **Sn** | **11 33 37.0** | **+2.1** |
| **ODZ** | **Otahua Downs** | **5.89** | **48** | | **Pn** | **11 32 41.2** | **-0.1** |
| **ODZ** | **Otahua Downs** | **5.89** | **48** | P | **Pn** | **11 32 41.6** | **+0.1** |
| **JCZ** | **Jackson Bay** | **5.90** | **32** | P | **Pn** | **11 32 44.3** | **+2.6** |
| **LBZ** | **Lake Benmore** | **6.18** | **41** | Pn | **Pn** | **11 32 44.1** | **-1.4** |
| **LBZ** | **Lake Benmore** | **6.18** | **41** | P | **Pn** | **11 32 45.0** | **-0.5** |
| **MCQ** | **Macquarie Isla** | **6.33** | **211** | Pn | **Pn** | **11 32 46.5** | **-1.0** |
| **TMZ** | **Timaru** | **6.56** | **45** | P | **Pn** | **11 32 50.9** | **+0.3** |
| **FOZ** | **Fox Glacier** | **6.74** | **35** | Pn | **Pn** | **11 32 53.3** | **+0.2** |
| **FOZ** | **Fox Glacier** | **6.74** | **35** | P | **Pn** | **11 32 55.0** | **+1.9** |
| **ARCZ** | **Arundel** | **6.97** | **44** | P | **Pn** | **11 32 56.0** | **-0.3** |
| **RPZ** | **Rata Peaks** | **7.10** | **42** | Pn | **Pn** | **11 32 56.9** | **-1.1** |
| **RPZ** | **Rata Peaks** | **7.10** | **42** | Pn | **Pn** | **11 32 55.3** | **-2.7** |
| | 3.0nm,0.3s,baz=212,slow=4.2,SNR=15 | | | | | | |
| RPZ | | | | Sn | **Sn** | **11 34 13.7** | **-4.5** |
| | 3.0nm,0.3s,baz=39,slow=15,SNR=2.1 | | | | | | |
| | 6.3nm,0.3s | | | | | | |
| **RPZ** | **Rata Peaks** | **7.10** | **42** | P | **Pn** | **11 32 56.2** | **-1.8** |
| **WACZ** | **Wakanui South** | **7.28** | **47** | P | **Pn** | **11 33 00.8** | **+0.3** |
| **MHCZ** | **Mount Hutt** | **7.47** | **44** | P | **Pn** | **11 33 03.1** | **-0.1** |
| **WVZ** | **Waitaha Valley** | **7.49** | **38** | P | **Pn** | **11 33 03.9** | **+0.6** |
| **RACZ** | **Rakaia** | **7.59** | **47** | P | **Pn** | **11 33 04.9** | **+0.2** |
| **OXZ** | **Oxford** | **7.85** | **45** | | **Pn** | **11 33 08.5** | **+0.2** |
| **OXZ** | **Oxford** | **7.85** | **45** | P | **Pn** | **11 33 07.3** | **-0.9** |
| **MQZ** | **McQueen's Vall** | **7.85** | **49** | Pn | **Pn** | **11 33 08.5** | **+0.2** |
| **MQZ** | **McQueen's Vall** | **7.85** | **49** | P | **Pn** | **11 33 08.3** | **0.0** |
| **AKCZ** | **Akaroa Harbour** | **7.86** | **51** | P | **Pn** | **11 33 10.3** | **+1.8** |
| **OKCZ** | **Okains Bay** | **8.04** | **50** | P | **Pn** | **11 33 13.0** | **+2.0** |
| **INZ** | **Inchbonnie** | **8.07** | **39** | Pn | **Pn** | **11 33 11.7** | **+0.4** |
| **INZ** | **Inchbonnie** | **8.07** | **39** | P | **Pn** | **11 33 12.3** | **+1.0** |
| **AMCZ** | **Amberley** | **8.25** | **46** | Pn | **Pn** | **11 33 12.8** | **-1.0** |
| **LTZ** | **Lake Taylor** | **8.38** | **43** | Pn | **Pn** | **11 33 15.0** | **-0.6** |
| **LTZ** | **Lake Taylor** | **8.38** | **43** | P | **Pn** | **11 33 14.7** | **-0.9** |
| **GVZ** | **Greta Valley S** | **8.59** | **47** | Pn | **Pn** | **11 33 18.8** | **+0.3** |
| **DSZ** | **Denniston Nort** | **9.03** | **37** | Pn | **Pn** | **11 33 24.4** | **-0.2** |
| **DSZ** | **Denniston Nort** | **9.03** | **37** | P | **Pn** | **11 33 25.1** | **+0.5** |
| **KHZ** | **Kahutara** | **9.25** | **46** | Pn | **Pn** | **11 33 26.8** | **-0.7** |
| **KHZ** | **Kahutara** | **9.25** | **46** | P | **Pn** | **11 33 26.7** | **-0.7** |
| **THZ** | **Tophouse** | **9.48** | **42** | Pn | **Pn** | **11 33 32.4** | **+1.7** |
| **THZ** | **Tophouse** | **9.48** | **42** | P | **Pn** | **11 33 32.0** | **+1.3** |
| **MRNZ** | **Matariki Terra** | **9.71** | **40** | Pn | **Pn** | **11 33 34.9** | **+1.0** |
| **MRNZ** | **Matariki Terra** | **9.71** | **40** | P | **Pn** | **11 33 35.1** | **+1.2** |
| **BSWZ** | **Blackbirch Sta** | **9.95** | **45** | P | Pn | 11 33 43.0 | +5.9 |
| **QRZ** | **Quartz Range** | **10.10** | **37** | Pn | **Pn** | **11 33 39.7** | **+0.5** |
| **QRZ** | **Quartz Range** | **10.10** | **37** | P | **Pn** | **11 33 39.5** | **+0.4** |
| **TKNZ** | **Takaka Hill** | **10.10** | **39** | Pn | **Pn** | **11 33 39.5** | **+0.3** |
| **NNZ** | **Nelson** | **10.13** | **41** | Pn | **Pn** | **11 33 40.8** | **+1.2** |
| **TUWZ** | **Tuamarina** | **10.21** | **44** | Pn | **Pn** | **11 33 39.9** | **-0.8** |
| **MSWZ** | **Moikau Station** | **10.84** | **48** | Pn | **Pn** | **11 33 50.1** | **+0.8** |
| **MRZ** | **Mangatainoka R** | **11.58** | **47** | Pn | **Pn** | **11 33 59.2** | **-0.2** |
| **BFZ** | **Birch Farm** | **11.89** | **49** | Pn | **Pn** | **11 34 04.9** | **+1.3** |
| **BKZ** | **Black Stump Fm** | **13.19** | **45** | Pn | **Pn** | **11 34 20.1** | **-1.3** |
| **TAU** | **Tasmania Unive** | **13.46** | **291** | Pn | **Pn** | **11 34 23.1** | **-2.0** |
| **RTZ** | **Ruatahuna** | **13.86** | **45** | Pn | **Pn** | **11 34 29.1** | **-1.5** |
| **CTZ** | **Chatham Island** | **14.10** | **74** | Pn | **Pn** | **11 34 34.6** | **+0.8** |
| **CTZ** | **Chatham Island** | **14.10** | **74** | P | **Pn** | **11 34 35.2** | **+1.4** |
| **URZ** | **Urewera** | **14.20** | **44** | Pn | **Pn** | **11 34 33.7** | **-1.5** |
| | 0.1nm,0.3s,baz=243,slow=14,SNR=1.8 | | | | | | |
| URZ | | | | LR | LR | 11 40 46.2 | |
| | comp=Z,120nm,21.4s,baz=322,slow=41 | | | | | | |
| | 5.2nm,0.9s | | | | | | |
| **MXZ** | **Matakaoa Point** | **15.32** | **46** | Pn | **Pn** | **11 34 47.7** | **-2.7** |
| **TOO** | **Toolangi** | **17.98** | **303** | P | **P** | **11 35 26.7** | **+2.2** |
| TOO | | | | IAmb | IAmb | 11 35 27.7 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **RAO** | **Raoul Island** | **24.01** | **40** | P | **P** | **11 36 28.4** | **-0.4** |
| **STKA** | **Stephens Creek** | **24.38** | **307** | P | **P** | **11 36 33.8** | **+1.6** |
| **EIDS** | **Eidsvold** | **25.98** | **331** | P | **P** | **11 36 47.1** | **+0.4** |
| **DZM** | **Mont Dzumac** | **27.10** | **4** | *e*LR | LR | 11 44 00.5 | |
| | comp=Z,88nm,32.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **27.10** | **4** | LR | LR | 11 46 22.3 | |
| | comp=Z,73nm,19.6s,baz=349,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **35.00** | **306** | P | **P** | **11 38 06.7** | **+0.2** |
| | comp=Z,1.6nm,0.9s,baz=135,slow=8.0,SNR=9.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 40 38.0** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=122,slow=3.4,SNR=4.4 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **37.73** | **310** | P | **P** | **11 38 29.8** | **0.0** |
| **WB2** | **Warramunga Arr** | **37.84** | **310** | P | **P** | **11 38 31.3** | **+0.6** |
| WB2 | | | | IAmb | IAmb | 11 38 31.4 | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.85** | **310** | P | **P** | **11 38 30.2** | **-0.6** |
| | comp=Z,2.9nm,0.9s,baz=136,slow=8.0,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 40 46.9** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=140,slow=2.8,SNR=9.0 | | | | | | |
| | comp=Z,2.9nm,

comp=Z,1.5nm,1.0s
**PMG Port Moresby 42.22 334** P **P** **11 39 07.5 +0.5**
PMG IAmb IAmb 11 39 48.4
comp=Z,18nm,0.9s
**FUNA Funafuti 42.36 22** P **P** **11 39 05.4 -2.7**
**FITZ Fitzroy Crossi 44.03 301** P **P** **11 39 22.4 +0.8**
**TBI Tubuai 44.28 71** *e*LR LR 11 51 46.2
comp=Z,610nm,38.8s
**KNRA Kununurra 44.30 306** P **P** **11 39 23.7 -0.1**
KNRA IAmb IAmb 11 39 26.2
comp=Z,7.3nm,1.2s
**MTN Manton Dam 45.48 311** P **P** **11 39 34.0 +0.8**
MTN IAmb IAmb 11 39 34.1
comp=Z,8.1nm,0.8s
**PPT2 Papeete2 48.55 66** *e*LR LR 11 53 42.9
comp=Z,56nm,26.0s
**SNAA Sanae 59.12 185** P **P** **11 41 15.6 +1.7**
SNAA IAmb IAmb 11 41 38.0
comp=Z,4.7nm,1.3s
**SNAA Sanae 59.12 185** P **P** **11 41 14.9 +1.0**
comp=Z,0.6nm,0.9s,baz=118,slow=15,SNR=1.9
SNAA LR LR 12 06 13.9
comp=Z,38nm,19.0s,baz=338,slow=36
comp=Z,0.6nm,0.9s
**H04S2 CROZET ISLANDS 67.93 223** T T 12 57 08.4
baz=139,slow=76,SNR=11
**H04S1 CROZET ISLANDS 67.93 223** T T 12 57 04.0
baz=139,slow=76,SNR=13
**H04S3 CROZET ISLANDS 67.95 223** T T 12 57 03.0
baz=139,slow=76,SNR=14
**H08S2 Diego Garcia H 85.58 264** T T 13 17 49.4
baz=140,slow=76,SNR=193
**H08S1 Diego Carcia H 85.59 263** T T 13 17 49.8
baz=140,slow=76,SNR=99
**H08S3 Diego Garcia H 85.60 264** T T 13 17 50.9
baz=140,slow=76,SNR=236
**CMAR Chiang Mai Arr 88.84 300** P **P** **11 44 08.8 +0.8**
comp=Z,0.4nm,0.3s,baz=145,slow=3.3,SNR=4.1
comp=Z,0.4nm,0.3s
**TORD Torodi Ar. Bea 141.37 207** PKhKP PKPpre 11 50 38.2
comp=Z,0.6nm,0.9s,baz=224,slow=1.4,SNR=3.1
**BRTR Keskin Array B 144.23 274** PKP **PKPab** **11 50 47.2 -0.2**
comp=Z,1.1nm,0.8s,baz=119,slow=4.3,SNR=5.0
AKASG **Malin Array Be 151.50 290** PKPbc **PKPbc** **11 51 06.5 -0.5**
AKASG PKPab **sPKPbc** **11 51 14.4 -0.3**
comp=Z,0.5nm,0.2s,baz=83,slow=2.5,SNR=6.6
ARCES **ARCESS Array B 151.71 331** PKPbc **PKiKP** **11 51 07.6 +0.2**
comp=Z,4.1nm,0.6s,baz=90,slow=2.4,SNR=15
**FINES FINESS Array B 153.85 314** PKPbc **PKPbc** **11 51 11.7 -0.2**
comp=Z,1.9nm,1.0s,baz=53,slow=7.1,SNR=3.6

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*MIRAS **28** 11:38:30.8, 57.°05N×61.°46E, h0km, ML2.8/6, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
**ISC 28 11:38:30.9**±1.4, **56.°92N**±0.°06×**61.°55E**±0.°08, **h10**km**, n7,** σ0**61**/14**, 2D, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SVE** | **Sverdlovsk** | **0.51** | **260** | *i* P | | **Pg** | | **11 38 40.2** | **-0.6** |
| | 52nm,0.2s | | | | | | | | |
| SVE | | | | *i* S | | **Sg** | | **11 38 47.3** | **-0.2** |
| | 111nm,0.3s | | | | | | | | |
| SVE | | | | *i* AML | | AML | | 11 38 48.8 | |
| | 203nm,1.4s | | | | | | | | |
| **ARU** | **Arti** | **1.72** | **255** | *i* P | | **Pb** | | **11 39 02.5** | **-0.1** |
| | 24nm,0.4s | | | | | | | | |
| ARU | | | | *i* S | | **Sg** | | **11 39 25.7** | **-0.4** |
| | 24nm,0.2s | | | | | | | | |
| ARU | | | | *i* AML | | AML | | 11 39 26.8 | |
| | 151nm,1.3s | | | | | | | | |
| **PR7R** | **Sarany** | **2.22** | **319** | *i* P | | **Pn** | | **11 39 08.1** | **+0.3** |
| | 36nm,0.2s | | | | | | | | |
| PR7R | | | | *i* S | | **Sn** | | **11 39 35.8** | **+0.6** |
| | 58nm,0.5s | | | | | | | | |
| PR7R | | | | *i* AML | | AML | | 11 39 38.1 | |
| | 113nm,0.3s | | | | | | | | |
| **PR3R** | **Kungur** | **2.53** | **284** | *i* P | | **Pn** | | **11 39 12.1** | **+0.1** |
| | 9.8nm,0.3s | | | | | | | | |
| PR3R | | | | *i* S | | **Sn** | | **11 39 43.9** | **+1.1** |
| | 20nm,0.4s | | | | | | | | |
| PR3R | | | | *i* AML | | AML | | 11 39 46.1 | |
| | 34nm,0.3s | | | | | | | | |
| **SVUR** | **Severouralsk** | **3.39** | **347** | *i* P | | **Pn** | | **11 39 23.4** | **-0.5** |
| | 5.7nm,0.2s | | | | | | | | |
| SVUR | | | | *i* S | | **Sn** | | **11 40 03.8** | **-0.3** |
| | 4.7nm,0.3s | | | | | | | | |
| SVUR | | | | *i* AML | | AML | | 11 40 13.4 | |
| | 10nm,1.7s | | | | | | | | |
| **PR1R** | **Pomanovo** | **3.42** | **314** | *i* P | | **Pn** | | **11 39 23.9** | **-0.3** |
| | 7.9nm,0.3s | | | | | | | | |
| PR1R | | | | *i* S | | **Sn** | | **11 40 04.8** | **0.0** |
| | 9.8nm,0.2s | | | | | | | | |
| PR1R | | | | *i* AML | | AML | | 11 40 12.5 | |
| | 19nm,0.4s | | | | | | | | |
| **AB31** | **Akbulak array** | **7.74** | **188** | Pn | | **Pn** | | **11 40 24.5** | **+1.0** |
| | 0.1nm,0.3s,baz=13,slow=12,SNR=9.0 | | | | | | | | |
| AB31 | | | | ⇓Sn | | **Sn** | | **11 41 50.5** | **-0.6** |
| | 0.2nm,0.3s | | | | | | | | |
| AB31 | | | | ⇓Lg | | Lg | | 11 42 32.0 | |
| | 1.2nm,0.6s,baz=16,slow=24,SNR=3.0 | | | | | | | | |

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*IDC **28** 11:55:44.4±0.4, 10.°59S×124.°13E, h0km, mb4.5/21, mbtmp4.4/21, MS4.3/45, Error ellipse: s-maj=15.9km s-min=9.6km az=69.0*
*NEIC **28** 11:55:45.3±2.0, 10.°87S±0.°04×124.°22E±0.°07, h10km±1km, mb5.3/96, Mww5.0/20, Error ellipse: s-maj=11.3km s-min=7.0km az=79.0*
*NEIC **28** 11:55:45.3, 10.°87S×124.°24E, h12km*
*MOS **28** 11:55:45.2±0.9, 10.°65S×124.°17E, h19km, mb5.1/40, MS4.4/5, Error ellipse: s-maj=11.0km s-min=5.9km az=114.6*
*NEIC **28** 11:55:45.3, 10.°97S×124.°14E, h12km, Moment Tensor Solution. Duration: 1s8 Moment tensor: Scale 1016Nm; Mrr3.70; Mθθ-3.68; Mϕϕ-0.02; Mrθ-0.92; Mθϕ-0.33; Mϕr-2.92; Fault plane solution: M0 4.66000×1016 NP1: ϕs235.56000°, δ61.45000°, λ60.39000°. NP2: ϕs105.50000°, δ40.21000°, λ132.24000°. Principal axes: T 5.3548, Plg61.0000°, Azm99.0000°; N -1.3950, Plg26.0000°, Azm251.0000°; P -3.9598, Plg12.0000°, Azm346.0000°;*
*BJI **28** 11:55:45.7±0.0, 11.°13S×124.°61E, h52km, mb4.9/68, mB5.3/37, Ms4.6/50, Ms7 4.5/51*
*DJA **28** 11:55:47.5±0.7, 11.°5S±2.°2×12.°4E±.°, h16km±5km, M5.0/61, mb4.9/61, mB5.5/31, MLv5.2/16, Mw(mB)5.0/31, MwMwp4.8/11, Mwp5.2/11*
*GCMT **28** 11:55:47.3±0.2, 10.°84S±0.°01×124.°24E±0.°02, h12km, MW5.0/112, Moment Tensor Solution. s57,c71; s112,c174; Duration: 0 Moment tensor: Scale 1016Nm; Mrr3.90±.09; Mθθ-3.68±.07; Mϕϕ-0.22±.09; Mrθ-0.87±.26; Mθϕ-0.70±.07; Mϕr-1.19±.35; Best double couple: M0 4.12300×1016 NP1:ϕs246.00000°, δ54.00000°, λ75.00000°. NP2:ϕs91.00000°, δ38.00000°, λ110.00000°. Principal axes: T 4.2750, Plg75.0000°, Azm109.0000°; N -0.3040, Plg12.0000°, Azm255.0000°; P -3.9720, Plg8.0000°, Azm347.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 28 11:55:45.7**±0.2**, 10.°81S**±0.°03×**124.°13E**±0.°04**, h10**km**, n378,** σ1**8**77**/336, **mb5.1**/112, **MS4.3**/66**, 15C-6D, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.76** | **322** | P | | **Pg** | | **11 56 02.3** | **+2.0** |
| **SOEI** | **Soe** | **1.06** | **7** | P | | **Pg** | | **11 56 07.9** | **+1.8** |
| **SOEI** | **Soe** | **1.06** | **7** | | | **Pg** | | **11 56 06.9** | **+0.8** |
| SOEI | | | | | Sg | **Sg** | | **11 56 24.3** | **+4.5** |
| **SOEI** | **Soe** | **1.06** | **7** | P | | **Pg** | | **11 56 07.2** | **+1.1** |
| **MMRI** | **Maumere** | **2.86** | **319** | P | | **Pn** | | **11 56 33.9** | **+2.6** |
| **MMRI** | **Maumere** | **2.86** | **319** | Pn | | **Pn** | | **11 56 33.2** | **+1.9** |
| **MMRI** | **Maumere** | **2.86** | **319** | P | | **Pn** | | **11 56 32.5** | **+1.2** |
| **EDFI** | **Ende, Flores** | **3.16** | **310** | P | | **Pn** | | **11 56 36.2** | **+0.6** |
| **BASI** | **Baing, Sumba** | **3.55** | **279** | P | | **Pn** | | **11 56 41.9** | **+1.1** |
| **WBSI** | **Waikabubak, Su** | **4.81** | **284** | P | | **Pn** | | **11 56 58.5** | **+0.2** |
| **BBSI** | **Bau Bau** | **5.51** | **344** | P | | **Pn** | | **11 57 10.3** | **+2.4** |
| | 259nm,1.2s,8μm1.5nm | | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.87** | **322** | P | | **Pn** | | **11 57 14.7** | **+1.9** |
| | 276nm,1.2s,6μm4μm1.3nm | | | | | | | | |
| **PLAI** | **Plampang** | **6.57** | **287** | P | | **Pn** | | **11 57 24.2** | **+1.8** |
| **KNRA** | **Kununurra** | **6.61** | **138** | Pn | | **Pn** | | **11 57 21.6** | **-1.4** |
| KNRA | | | | Sn | | **Sn** | | **11 58 35.4** | **-3.0** |
| **BKSI** | **Bulukumba** | **6.75** | **324** | P | | **Pn** | | **11 57 26.2** | **+1.4** |
| | 185nm,1.0s,2μm5μm0.5nm | | | | | | | | |
| **DRS** | **Darwin Rock St** | **6.82** | **104** | P | | **Pn** | | **11 57 25.4** | **-0.5** |
| **MTN** | **Manton Dam** | **7.14** | **107** | P | | **Pn** | | **11 57 29.6** | **-0.7** |
| **MTN** | **Manton Dam** | **7.14** | **107** | Pn | | **Pn** | | **11 57 28.3** | **-2.0** |
| **KAPI** | **Kappang** | **7.21** | **323** | P | | **Pn** | | **11 57 34.6** | **+3.4** |
| **KAPI** | **Kappang** | **7.21** | **323** | Pn | | **Pn** | | **11 57 31.4** | **+0.2** |
| **KAPI** | **Kappang** | **7.21** | **323** | Pn | | **Pn** | | **11 57 33.9** | **+2.6** |
| | 1.4nm,0.3s,baz=143,slow=12,SNR=20 | | | | | | | | |
| KAPI | | | | | | LR | LR | 12 00 46.5 | |
| | comp=Z,10μm,20.0s,baz=150,slow=43 | | | | | | | | |
| **KAPI** | **Kappang** | **7.21** | **323** | *i* P | | **Pn** | | **11 57 32.3** | **+1.1** |
| **FITZ** | **Fitzroy Crossi** | **7.39** | **169** | P | | **Pn** | | **11 57 32.7** | **-1.0** |
| **FITZ** | **Fitzroy Crossi** | **7.39** | **169** | Pn | | **Pn** | | **11 57 32.6** | **-1.0** |
| **TWSI** | **Taliwang, Sumb** | **7.44** | **285** | P | | **Pn** | | **11 57 34.3** | **0.0** |
| | 193nm,1.2s,2μm1.3nm | | | | | | | | |
| **BNSI** | **Bone** | **7.52** | **328** | P | | **Pn** | | **11 57 38.8** | **+3.4** |
| | 177nm,1.2s,5μm4μm1.0nm | | | | | | | | |
| **SAUI** | **Saumlaki** | **7.61** | **69** | Pn | | **Pn** | | **11 57 35.0** | **-1.7** |
| **SAUI** | **Saumlaki** | **7.61** | **69** | P | | **Pn** | | **11 57 37.7** | **+1.0** |
| **NLAI** | **Namlea** | **8.08** | **22** | P | | **Pn** | | **11 57 45.1** | **+2.0** |
| | 93nm,1.4s,2μm3μm | | | | | | | | |
| **KDU** | **Kakadu** | **8.38** | **104** | P | | **Pn** | | **11 57 48.9** | **+1.7** |
| **SANI** | **Sanana** | **8.90** | **12** | P | | **Pn** | | **11 57 56.6** | **+2.2** |
| | 41nm,1.1s,2μm | | | | | | | | |
| **LUWI** | **Luwuk** | **9.80** | **352** | Pn | | **Pn** | | **11 58 05.7** | **-1.1** |
| **LUWI** | **Luwuk** | **9.80** | **352** | P | | **Pn** | | **11 58 08.7** | **+1.9** |
| | 136nm,2.0s,4μm | | | | | | | | |
| **MBWA** | **Marble Bar** | **11.12** | **202** | P | | **Pn** | | **11 58 25.3** | **+0.4** |
| **MBWA** | **Marble Bar** | **11.12** | **202** | Pn | | **Pn** | | **11 58 24.6** | **-0.3** |
| **FAKI** | **Fak Fak** | **11.24** | **46** | P | | **Pn** | | **11 58 28.8** | **+2.3** |
| **FAKI** | **Fak Fak** | **11.24** | **46** | Pn | | Pn | | 11 58 24.6 | -1.9 |
| **FAKI** | **Fak Fak** | **11.24** | **46** | P | | **Pn** | | **11 58 27.0** | **+0.5** |
| | 31nm,1.2s | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **11.46** | **200** | P | | **Pn** | | **11 58 32.3** | **+2.8** |
| **PSA00** | **Pilbara Seismi** | **11.46** | **200** | Pn | | **Pn** | | **11 58 28.4** | **-1.1** |
| **PSA00** | **Pilbara Seismi** | **11.46** | **200** | | | **Pn** | | **11 58 28.3** | **-1.3** |
| **SWI** | **Sorong** | **12.16** | **36** | P | | **Pn** | | **11 58 39.8** | **+0.7** |
| | 27nm,1.0s,1μm | | | | | | | | |
| **TOLI2** | **Tolitoli** | **12.30** | **344** | P | | **Pn** | | **11 58 44.7** | **+3.6** |
| **TOLI2** | **Tolitoli** | **12.30** | **344** | Pn | | Pn | | 11 58 39.5 | -1.6 |
| **PWJI** | **Pagerwojo** | **12.47** | **282** | P | | **Pn** | | **11 58 43.4** | **0.0** |
| | 40nm,1.0s | | | | | | | | |
| **NGJI** | **Ngawi** | **12.97** | **284** | P | | **Pn** | | **11 58 52.5** | **+2.3** |
| | 104nm,1.5s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **13.31** | **133** | Pn | | Pn | | 11 58 51.1 | -3.6 |
| **WRA** | **Warramunga Arr** | **13.38** | **134** | Pn | | Pn | | 11 58 50.3 | -5.5 |
| | 1.6nm,0.3s,baz=312,slow=12,SNR=66 | | | | | | | | |
| WRA | | | | | Sn | Sn | | 12 01 14.1 | -11 |
| | 2.3nm,0.3s,baz=305,slow=24,SNR=9.1 | | | | | | | | |
| WRA | | | | | | LR | LR | 12 04 34.8 | |
| | comp=Z,6μm,21.5s,baz=316,slow=39 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **13.38** | **134** | Pn | | Pn | | 11 58 51.3 | -4.5 |
| **WRAB** | **Tennant Creek** | **13.38** | **134** | *i* P | | Pn | | 11 58 51.5 | -4.3 |
| WRAB | | | | | pmax | pmax | | | |
| | comp=Z,37nm,1.1s | | | | | | | | |
| **WB2** | **Warramunga Arr** | **13.39** | **134** | Pn | | Pn | | 11 58 52.1 | -3.8 |
| **WR0** | **Warramunga Arr** | **13.54** | **133** | Pn | | Pn | | 11 58 53.5 | -4.5 |
| **UGM** | **Wanagama** | **13.73** | **281** | P | | **Pn** | | **11 59 04.3** | **+3.7** |
| **KPJI** | **Karang Pucung** | **15.40** | **282** | P | | **Pn** | | **11 59 24.3** | **+1.1** |
| | comp=Z,55nm,2.0s | | | | | | | | |
| **AS31** | **Alice Springs** | **15.81** | **145** | Pn | | **Pn** | | **11 59 25.2** | **-3.4** |
| **ASAR** | **Alice Springs** | **15.81** | **145** | Pn | | **Pn** | | **11 59 25.2** | **-3.4** |
| | comp=Z,3.8nm,0.3s,baz=319,slow=12,SNR=284 | | | | | | | | |
| ASAR | | | | | Sn | Sn | | 12 02 13.0 | -11 |
| | comp=Z,1.1nm,0.3s,baz=323,slow=23,SNR=7.2 | | | | | | | | |
| ASAR | | | | | | LR | LR | 12 05 50.2 | |
| | comp=Z,6μm,19.1s,baz=320,slow=38 | | | | | | | | |
| **STKI** | **Sintang** | **16.59** | **310** | P | | **Pn** | | **11 59 39.2** | **+0.7** |
| | comp=Z,66nm,1.7s | | | | | | | | |
| **MYLDM** | **Lahad Datu** | **16.85** | **340** | P | | **Pn** | | **11 59 42.8** | **+1.0** |
| **CNJI** | **Cibinong** | **17.15** | **280** | P | | **Pn** | | **11 59 48.1** | **+2.5** |
| **CBJI** | **Citeko** | **17.63** | **283** | P | | **Pn** | | **11 59 53.0** | **+1.4** |
| **DBJI** | **Dramaga** | **17.69** | **282** | P | | **Pn** | | **11 59 52.8** | **+0.4** |
| **SBUM** | **Sibu** | **17.72** | **317** | P | | **Pn** | | **11 59 52.4** | **-0.4** |
| **SKJI** | **Sukabumi** | **17.77** | **281** | P | | **Pn** | | **11 59 54.7** | **+1.4** |
| **TABU** | **Tabubil** | **17.79** | **73** | P | | **Pn** | | **11 59 55.8** | **+2.1** |
| **DAV** | **Davao City (W)** | **17.82** | **5** | LR | | LR | | 12 07 14.1 | |
| | comp=Z,μm,21.5s,baz=223,slow=39 | | | | | | | | |
| **GENI** | **Genyem** | **17.89** | **64** | P | | **Pn** | | **11 59 57.0** | **+2.2** |
| **GENI** | **Genyem** | **17.89** | **64** | P | | **Pn** | | **11 59 56.1** | **+1.3** |
| **KSM** | **Kuching** | **18.39** | **311** | P | | **P** | | **12 00 03.0** | **+2.1** |
| **KSM** | **Kuching** | **18.39** | **311** | P | | **P** | | **11 59 59.8** | **-1.2** |
| **KKM** | **Kota Kinabalu** | **18.51** | **334** | P | | **P** | | **12 00 05.7** | **+3.3** |
| **KKM** | **Kota Kinabalu** | **18.51** | **334** | P | | **P** | | **12 00 01.7** | **-0.6** |
| **COEN** | **Coen** | **18.86** | **101** | P | | **P** | | **12 00 08.6** | **+2.4** |
| **COEN** | **Coen** | **18.86** | **101** | P | | **P** | | **12 00 03.5** | **-2.7** |
| **MORW** | **Morawa** | **19.68** | **201** | P | | **P** | | **12 00 17.5** | **+2.5** |
| **MORW** | **Morawa** | **19.68** | **201** | P | | **P** | | **12 00 11.8** | **-3.2** |
| **PPBI** | **Pangkal Pinang** | **19.82** | **294** | P | | **P** | | **12 00 16.3** | **-0.4** |
| **OOD** | **Oodnadatta** | **20.08** | **149** | P | | **P** | | **12 00 20.2** | **+0.8** |
| **KASI** | **Kota Agung** | **20.13** | **284** | P | | **P** | | **12 00 21.3** | **+1.3** |
| | comp=Z,201nm,1.4s,comp=Z,3μm | | | | | | | | |
| **FORT** | **Forrest** | **20.20** | **170** | P | | **P** | | **12 00 22.2** | **+1.5** |
| **FORT** | **Forrest** | **20.20** | **170** | P | | **P** | | **12 00 17.1** | **-3.6** |
| **KMBL** | **Kambalda** | **20.56** | **185** | P | | **P** | | **12 00 26.7** | **+2.1** |
| **LWLI** | **Liwa** | **20.69** | **285** | P | | **P** | | **12 00 27.0** | **+0.7** |
| | comp=Z,228nm,1.3s | | | | | | | | |
| **MTSU** | **Mount Surprise** | **20.84** | **113** | P | | **P** | | **12 00 29.7** | **+1.9** |
| **BLDU** | **Ballidu** | **20.88** | **198** | P | | **P** | | **12 00 29.9** | **+1.8** |
| **MULG** | **Mulgathing** | **21.46** | **156** | P | | **P** | | **12 00 35.3** | **+1.0** |
| **KLBR** | **Kellerberrin** | **21.50** | **195** | P | | **P** | | **12 00 37.6** | **+2.8** |
| **PMG** | **Port Moresby** | **22.71** | **89** | P | | **P** | | **12 00 49.7** | **+1.8** |
| **PMG** | **Port Moresby** | **22.71** | **89** | P | | **P** | | **12 00 49.9** | **+2.0** |
| **PMG** | **Port Moresby** | **22.71** | **89** | P | | **P** | | **12 00 45.5** | **-2.3** |
| PMG | | | | | IAmb | IAmb | | 12 01 07.1 | |
| | comp=Z,107nm,1.4s | | | | | | | | |
| **PMG** | **Port Moresby** | **22.71** | **89** | P | | **P** | | **12 00 47.1** | **-0.8** |
| | comp=Z,13nm,0.9s,baz=231,slow=14,SNR=2.1 | | | | | | | | |
| PMG | | | | | | LR | LR | 12 10 59.4 | |
| | comp=Z,1μm,18.2s,baz=241,slow=40 | | | | | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **PMG** | **Port Moresby** | **22.71** | **89** | *i* P | | **P** | | **12 00 47.5** | **-0.4** |
| PMG | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.91** | **195** | P | | **P** | | **12 00 49.0** | **-0.7** |
| NWAO | | | | | IAmb | IAmb | | 12 00 56.3 | |
| | comp=Z,158nm,1.5s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.91** | **195** | P | | **P** | | **12 00 51.2** | **+1.4** |
| | comp=Z,12nm,0.6s,baz=41,slow=10,SNR=3.2 | | | | | | | | |
| NWAO | | | | | S | **S** | | **12 05 07.2** | **+7.4** |
| | comp=Z,16nm,1.0s,baz=0.0,slow=10,SNR=2.1 | | | | | | | | |
| NWAO | | | | | | LR | LR | 12 11 03.7 | |
| | comp=Z,3μm,20.2s,baz=7.5,slow=40 | | | | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **INKA** | **Innaminka** | **22.96** | **139** | P | | **P** | | **12 00 52.2** | **+1.8** |
| **CTA** | **Charters Tower** | **23.20** | **116** | P | | **P** | | **12 00 53.8** | **+0.8** |
| | comp=Z,1.6nm,1.1s,baz=294,slow=12,SNR=14 | | | | | | | | |
| CTA | | | | | S | **S** | | **12 05 09.5** | **+4.3** |
| | comp=Z,0.2nm,0.8s,baz=51,slow=23,SNR=1.4 | | | | | | | | |
| CTA | | | | | | LR | LR | 12 10 36.9 | |
| | comp=Z,127nm,21.4s,baz=291,slow=38 | | | | | | | | |
| | comp=Z,1.6nm,1.1s | | | | | | | | |
| **CTAO** | **Charters Tower** | **23.20** | **116** | P | | **P** | | **12 00 55.0** | **+2.0** |
| **CTAO** | **Charters Tower** | **23.20** | **116** | P | | **P** | | **12 00 51.4** | **-1.6** |
| CTAO | | | | | IAmb | IAmb | | 12 00 55.5 | |
| | comp=Z,168nm,1.8s | | | | | | | | |
| **CTAO** | **Charters Tower** | **23.20** | **116** | P | | **P** | | **12 00 51.4** | **-1.6** |
| CTAO | | | | | pmax | pmax | | | |
| | comp=Z,168nm,1.8s | | | | | | | | |
| **TV1H** | **Townsville Har** | **23.42** | **114** | P | | **P** | | **12 00 57.1** | **+2.0** |
| **LCRK** | **Leigh Creek** | **23.52** | **148** | P | | **P** | | **12 00 58.1** | **+2.1** |
| **MYKOM** | **Kota Tinggi** | **23.75** | **301** | P | | **P** | | **12 00 58.0** | **-0.4** |
| **BBOO** | **Buckleboo** | **24.49** | **155** | P | | **P** | | **12 01 06.0** | **+0.8** |
| **BBOO** | **Buckleboo** | **24.49** | **155** | P | | **P** | | **12 01 04.0** | **-1.2** |
| BBOO | | | | | IAmb | IAmb | | 12 01 06.9 | |
| | comp=Z,157nm,1.4s | | | | | | | | |
| **QLP** | **Quilpie** | **24.61** | **132** | P | | **P** | | **12 01 08.2** | **+1.9** |
| **MANU** | **Manus Island** | **24.65** | **71** | P | | **P** | | **12 01 04.5** | **-2.4** |
| MANU | | | | | IAmb | IAmb | | 12 01 09.2 | |
| | comp=Z,177nm,1.8s | | | | | | | | |
| **WHYH** | **Whyalla** | **25.34** | **153** | P | | **P** | | **12 01 14.2** | **+1.4** |
| **BKNI** | **Bangkinang** | **25.49** | **294** | P | | **P** | | **12 01 13.8** | **-0.6** |
| **HTT** | **Hallett** | **26.29** | **151** | P | | **P** | | **12 01 22.2** | **+0.7** |
| **STKA** | **Stephens Creek** | **26.45** | **145** | P | | **P** | | **12 01 25.0** | **+2.0** |
| **STKA** | **Stephens Creek** | **26.45** | **145** | P | | **P** | | **12 01 21.0** | **-2.0** |
| **STKA** | **Stephens Creek** | **26.45** | **145** | P | | **P** | | **12 01 24.1** | **+1.1** |
| | comp=Z,24nm,1.0s,baz=324,slow=12,SNR=15 | | | | | | | | |
| STKA | | | | | S | **S** | | **12 06 02.9** | **+6.1** |
| | comp=Z,1.5nm,0.5s,baz=7.8,slow=18,SNR=1.4 | | | | | | | | |
| STKA | | | | | | LR | LR | 12 11 39.1 | |
| | comp=Z,2μm,21.2s,baz=313,slow=36 | | | | | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| **STKA** | **Stephens Creek** | **26.45** | **145** | *i* P | | **P** | | **12 01 22.4** | **-0.6** |
| **COCO** | **West Island** | **26.78** | **264** | P | | **P** | | **12 01 26.1** | **+0.1** |
| **COCO** | **West Island** | **26.78** | **264** | P | | **P** | | **12 01 26.2** | **+0.1** |
| COCO | | | | | pmax | pmax | | | |
| | comp=Z,140nm,1.2s | | | | | | | | |
| **KAVG** | **Kavieng** | **27.70** | **75** | P | | **P** | | **12 01 36.8** | **+2.4** |
| **RPSI** | **Rantau Prapat** | **28.45** | **297** | P | | **P** | | **12 01 40.6** | **-0.5** |
| **PSI** | **Prapat** | **28.50** | **297** | P | | **P** | | **12 01 40.6** | **-1.0** |
| PSI | | | | | pmax | pmax | | | |
| | comp=Z,32nm,1.5s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.69** | **139** | P | | **P** | | **12 01 45.1** | **+2.1** |
| **AULRC** | **Lightning Ridg** | **28.95** | **133** | P | | **P** | | **12 01 47.0** | **+1.6** |
| **EIDS** | **Eidsvold** | **29.34** | **123** | P | | **P** | | 12 01 45.3 | -3.6 |
| **ARPS** | **Mount Arapiles** | **30.39** | **151** | P | | **P** | | **12 02 00.3** | **+2.3** |
| **AUDCS** | **Dubbo College** | **31.06** | **137** | P | | **P** | | **12 02 06.2** | **+2.2** |
| **AUMAG** | **Moama Anglican** | **31.34** | **147** | P | | **P** | | **12 02 09.1** | **+2.6** |
| **GUMO** | **Guam** | **31.80** | **41** | LR | | LR | | 12 15 25.6 | |
| | comp=Z,104nm,18.7s,baz=212,slow=37 | | | | | | | | |
| **UBPT** | **Khong Chiam** | **31.84** | **324** | P | | **P** | | **12 02 09.8** | **-1.1** |
| UBPT | | | | | IAmb | IAmb | | 12 02 11.2 | |
| | comp=Z,96nm,1.9s | | | | | | | | |
| **AUPHS** | **Peel High Scho** | **31.97** | **133** | P | | **P** | | **12 02 14.6** | **+2.5** |
| **ARMA** | **Armidale** | **32.14** | **131** | P | | P | | 12 02 10.9 | -2.8 |
| ARMA | | | | | IAmb | IAmb | | 12 02 16.7 | |
| | comp=Z,78nm,1.9s | | | | | | | | |
| **YNG** | **Young** | **32.21** | **140** | P | | **P** | | **12 02 16.7** | **+2.5** |
| **QIZ** | **Qiongzhong** | **32.83** | **334** | P | | **P** | | **12 02 23.3** | **+3.7** |
| QIZ | | | | | LR | LR | | | |
| | comp=Z,490nm,21.9s | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| | comp=Z,380nm,21.9s | | | | | | | | |
| QIZ | | | | | LR | LR | | | |
| | comp=Z,840nm,21.0s | | | | | | | | |
| **TOO** | **Toolangi** | **32.84** | **148** | P | | **P** | | **12 02 22.2** | **+2.6** |
| **TOO** | **Toolangi** | **32.84** | **148** | P | | **P** | | **12 02 19.4** | **-0.2** |
| TOO | | | | | IAmb | IAmb | | 12 02 23.5 | |
| | comp=Z,49nm,1.2s | | | | | | | | |
| **TOO** | **Toolangi** | **32.84** | **148** | P | | **P** | | **12 02 19.4** | **-0.2** |
| TOO | | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.2s | | | | | | | | |
| **CNB** | **Canberra Magne** | **33.48** | **141** | P | | **P** | | **12 02 27.1** | **+1.8** |
| **HNR** | **Honiara** | **35.27** | **91** | LR | | LR | | 12 17 06.2 | |
| | comp=Z,8μm,21.6s,baz=248,slow=36 | | | | | | | | |
| **PHRA** | **Phrae** | **37.48** | **321** | P | | **P** | | **12 02 59.3** | **-0.5** |
| **SLVN** | **Son La** | **37.62** | **328** | P | | **P** | | **12 03 00.2** | **-0.8** |
| **JOW** | **Kunigami** | **37.63** | **6** | LR | | LR | | 12 17 35.9 | |
| | comp=Z,463nm,21.9s,baz=143,slow=35 | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **38.26** | **319** | P | | **P** | | **12 03 06.0** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **38.26** | **319** | P | | **P** | | **12 03 05.6** | **-0.8** |
| | comp=Z,4.6nm,0.9s,baz=145,slow=6.8,SNR=31 | | | | | | | | |
| CMAR | | | | | PcP | **PcP** | | **12 05 21.8** | **+1.1** |
| | comp=Z,0.7nm,0.3s,baz=140,slow=2.9,SNR=1.4 | | | | | | | | |
| CMAR | | | | | S | **S** | | **12 09 05.4** | **+4.8** |
| | comp=Z,0.7nm,0.3s,baz=120,slow=28,SNR=1.3 | | | | | | | | |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.26** | **319** | *i* P | | **P** | | **12 03 06.0** | **-0.4** |
| CMAR | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **GYA** | **Guiyang** | **40.75** | **336** | ⇓P | | **P** | | **12 03 26.3** | **-0.9** |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.2s | | | | | | | | |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,240nm,4.9s | | | | | | | | |
| GYA | | | | | LR | LR | | | |
| | comp=Z,610nm,23.4s | | | | | | | | |
| **KMI** | **Kunming** | **41.36** | **330** | ⇑P | | **P** | | **12 03 32.3** | **-0.1** |
| KMI | | | | | S | **S** | | **12 09 47.5** | **+0.2** |
| KMI | | | | | pmax | pmax | | | |
| | comp=Z,39nm,1.5s | | | | | | | | |
| KMI | | | | | pmax | pmax | | | |
| | comp=Z,240nm,3.1s | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| | comp=Z,290nm,29.6s | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| | comp=Z,340nm,23.5s | | | | | | | | |
| KMI | | | | | LR | LR | | | |
| | comp=Z,770nm,23.9s | | | | | | | | |
| **JCJ** | **Chichijima** | **41.55** | **25** | LR | | LR | | 12 19 07.0 | |
| | comp=Z,176nm,20.8s,baz=164,slow=34 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.96** | **111** | *e*P | | P | | 12 03 46.4 | +9.1 |
| | comp=Z,41nm,23.2s | | | | | | | | |
| DZM | | | | *e*S | | **S** | | **12 09 51.7** | **-4.5** |
| | comp=Z,206nm,29.4s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **41.96** | **111** | LR | | LR | | 12 21 08.6 | |
| | comp=Z,870nm,18.6s,baz=289,slow=36 | | | | | | | | |
| **WHN** | **Wuhan** | **42.18** | **347** | P | | **P** | | **12 03 37.3** | **-1.4** |
| WHN | | | | | pmax | pmax | | | |
| | comp=Z,54nm,1.0s | | | | | | | | |

comp=Z,2.4nm,0.8s,baz=186,slow=3.8,SNR=4.4
KSRS LR LR 12 24 58.3
comp=Z,239nm,21.6s,baz=190,slow=37
comp=Z,4.0nm,1.0s
**HNS HongShan 48.77 350** ⇓P P 12 04 29.0 -1.7
HNS PcP **PcP** **12 05 58.3 +2.6**
HNS S S 12 11 25.8 -7.9
HNS pmax pmax
comp=Z,17nm,1.4s
HNS pmax pmax
comp=Z,250nm,5.1s
HNS LR LR
comp=Z,410nm,18.3s
HNS LR LR
comp=Z,120nm,11.2s
HNS LR LR
comp=Z,480nm,19.6s
**MJAR Matsushiro Arr 48.93 15** P P 12 04 29.9 -2.2
comp=Z,4.4nm,0.8s,baz=192,slow=9.1,SNR=10
MJAR LR LR 12 23 45.5
comp=Z,322nm,21.1s,baz=209,slow=34
comp=Z,4.4nm,0.8s
**MAJO Matsushiro 48.93 15** P **P** **12 04 31.2 -0.9**
MAJO IAmb IAmb 12 05 09.6
comp=Z,37nm,1.4s
**MAJO Matsushiro 48.93 15** *i* P P 12 04 30.4 -1.7
MAJO pmax pmax
comp=Z,14nm,1.5s
**MJB9 Matsu-Tunnel 48.93 15** P **P** **12 04 31.2 -0.9**
MJB9 IAmb IAmb 12 05 09.6
comp=Z,37nm,1.5s
**LZH Lanzhou 50.42 339** *e*P **P** **12 04 43.5 -0.2**
LZH pmax pmax
comp=Z,39nm,1.1s
LZH LR LR
comp=Z,540nm,18.2s
LZH LR LR
comp=Z,330nm,17.2s
LZH LR LR
comp=Z,680nm,17.9s
**BJT Baijiatuau 51.11 352** P P 12 04 47.0 -1.6
**BJT Baijiatuau 51.11 352** P P 12 04 47.0 -1.5
BJT pmax pmax
comp=Z,10.0nm,0.9s
**LSA Lhasa 51.30 323** P **P** **12 04 50.3 -0.5**
**LSA Lhasa 51.30 323** P **P** **12 04 49.7 -1.1**
LSA IAmb IAmb 12 04 51.6
comp=Z,39nm,1.3s
**LSA Lhasa 51.30 323** P **P** **12 04 49.7 -1.1**
LSA pmax pmax
comp=Z,39nm,1.3s
**RPZ Rata Peaks 52.05 138** LR LR 12 27 33.4
comp=Z,1µm,18.4s,baz=308,slow=37
**MSVF Nonsavu 52.56 104** LR LR 12 25 46.3
comp=Z,386nm,21.2s,baz=296,slow=34
**HHC Hu-ho-hao-te 52.70 348** *e*P **P** **12 04 59.5 -1.0**
HHC *e*S **S** **12 12 26.0 -2.5**
HHC pmax pmax
comp=Z,15nm,0.5s
HHC pmax pmax
comp=Z,140nm,4.7s
HHC LR LR
comp=Z,160nm,18.6s
HHC LR LR
comp=Z,130nm,15.7s
HHC LR LR
comp=Z,220nm,17.5s
**BTO Baotou 52.80 347** *e*P **P** **12 05 04.5 +3.2**
BTO sS sS 12 12 52.3 +18
BTO pmax pmax
comp=Z,25nm,2.0s
BTO pmax pmax
comp=Z,260nm,4.6s
BTO LR LR
comp=Z,840nm,19.2s
BTO LR LR
comp=Z,420nm,20.6s
BTO LR LR
comp=Z,840nm,18.5s
**HYB Hyderabad 53.05 301** *e*P **P** **12 05 02.2 -1.3**
**VLA Vladivostok 54.13 7** *i* P **P** **12 05 11.5 +0.6**
VLA pmax pmax
comp=Z,22nm,1.1s
**GOMU GeErMu 54.32 331** P **P** **12 05 11.8 -1.0**
GOMU S **S** **12 12 50.0 -1.1**
GOMU pmax pmax
comp=Z,27nm,1.7s
GOMU LR LR
comp=Z,330nm,15.3s
GOMU LR LR
comp=Z,480nm,15.3s
GOMU LR LR
comp=Z,880nm,18.7s
**CN2 Changchun 54.36 1** P P 12 05 09.8 -2.8
CN2 pmax pmax
comp=Z,10.0nm,0.5s
CN2 LR LR
comp=Z,200nm,20.0s
CN2 LR LR
comp=Z,200nm,20.0s
CN2 LR LR
comp=Z,200nm,21.0s
**URZ Urewera 54.51 129** LR LR 12 28 34.7
comp=Z,1µm,19.8s,baz=28,slow=36
**GTA Gaotai 54.85 337** P **P** **12 05 15.5 -0.9**
GTA pmax pmax
comp=Z,18nm,1.7s
GTA pmax pmax
comp=Z,140nm,5.8s
GTA LR LR
comp=Z,160nm,21.1s
GTA LR LR
comp=Z,220nm,21.8s
GTA LR LR
comp=Z,320nm,24.4s
**XLT XiLinHaoTe 54.94 353** *e*P P 12 05 14.5 -2.4
XLT pP pwP 12 05 26.0 +3.9
XLT S S 12 12 52.5 -6.2
XLT ScS ScS 12 14 53.8 -13
XLT pmax pmax
comp=Z,10.0nm,1.2s
XLT pmax pmax
comp=Z,140nm,4.6s
XLT LR LR
comp=Z,150nm,19.6s
XLT LR LR
comp=Z,290nm,23.8s
**USA0B Ussuriysk Arra 55.21 7** P P 12 05 17.1 -1.6
USA0B IAmb IAmb 12 05 22.5
comp=Z,46nm,1.7s
**USA0B Ussuriysk Arra 55.21 7** *i* P **P** **12 05 18.3 -0.4**
**USRK Ussuriysk Ar. 55.21 7** P **P** **12 05 17.4 -1.3**
comp=Z,3.8nm,0.7s,baz=182,slow=7.7,SNR=9.5
USRK LR LR 12 27 37.6
comp=Z,147nm,21.8s,baz=193,slow=35
comp=Z,3.8nm,0.7s
**MDJ Mudanjiang 55.39 5** P **P** **12 05 18.8 -1.1**
MDJ PcP **PcP** **12 06 20.5 +0.2**
MDJ S **S** **12 13 02.0 -2.4**
MDJ SS **SS** **12 16 45.0 -4.4**
MDJ pmax pmax
comp=Z,26nm,1.5s
MDJ pmax pmax
comp=Z,210nm,3.6s
MDJ LR LR
comp=Z,230nm,22.0s
MDJ LR LR
comp=Z,180nm,23.4s
MDJ LR LR
comp=Z,380nm,24.2s
**MDJ Mudanjiang 55.39 5** P **P** **12 05 18.9 -1.1**
MDJ IAmb IAmb 12 05 20.4
comp=Z,46nm,1.4s
**CASY Casey 56.17 187** P **P** **12 05 24.3 -1.0**
CASY IAmb IAmb 12 05 27.3
comp=Z,34nm,1.6s
**BNX BinXian 56.37 3** ⇓P P 12 05 25.5 -1.5
BNX pmax pmax
comp=Z,9.0nm,1.2s
**RAO Raoul Island 56.89 118** LR LR 12 30 10.2
comp=Z,1µm,18.3s,baz=356,slow=36
**ASAJ Asahikawa 57.19 16** LR LR 12 29 09.3
comp=Z,192nm,21.6s,baz=183,slow=35
**YSS Yuzh-Sakhalins 59.87 15** *e*P **P** **12 05 54.4 +3.0**
YSS *e* 12 06 37.7
YSS *e*S **S** **12 14 01.2 -1.9**
YSS *e*SS **SS** **12 18 03.0 +3.2**
YSS pmax pmax
comp=Z,10.0nm,1.3s
YSS pmax pmax
comp=Z,100nm,4.5s
YSS smax smax
comp=N,100nm,4.9s
YSS smax smax
comp=E,100nm,4.5s
**HIA Hailar 59.94 357** P **P** **12 05 51.1 -0.8**
**HIA Hailar 59.94 357** P **P** **12 05 51.2 -0.8**
HIA pmax pmax
comp=Z,16nm,1.1s
**KLR Kul'dur 60.16 6** LR LR 12 31 47.7
comp=Z,157nm,21.6s,baz=193,slow=36
**KLR Kul'dur 60.16 6***c*e**P** **P** **12 05 52.6 -0.8**
KLR pmax pmax
comp=Z,9.0nm,2.5s
**ULN Ulaanbaatar 60.36 347** P **P** **12 05 54.0 -1.0**
ULN IAmb IAmb 12 05 55.2
comp=Z,40nm,1.7s
**ULN Ulaanbaatar 60.36 347***ce*P P 12 05 53.1 -1.9
ULN pmax pmax
comp=Z,38nm,2.5s
**SONM Songino Array 60.48 346** P **P** **12 05 54.6 -1.3**
comp=Z,3.6nm,0.7s,baz=168,slow=8.1,SNR=29
SONM LR LR 12 34 08.9
comp=Z,229nm,20.0s,baz=176,slow=38
comp=Z,3.6nm,0.7s
**HEH HeiHe 60.87 2** *e*P P 12 05 56.8 -1.5
HEH S S 12 14 10.0 -6.0
HEH pmax pmax
comp=Z,21nm,1.4s
HEH pmax pmax
comp=Z,260nm,4.7s
HEH LR LR
comp=Z,210nm,19.4s
HEH LR LR
comp=Z,190nm,19.3s
HEH LR LR
comp=Z,380nm,21.3s
**GRNR Gornyy 62.25 9**⇑*i*P **P** **12 06 06.8 -0.8**
GRNR pmax pmax
comp=Z,4.0nm,1.1s
**ZAK Zakamensk 63.60 345** *e*P P 12 06 13.7 -3.0
ZAK pmax pmax
comp=Z,11nm,1.7s
**WMQ Urumqi 63.67 331** *e*P **P** **12 06 17.3 0.0**
WMQ pmax pmax
comp=Z,31nm,1.1s
WMQ pmax pmax
comp=Z,220nm,4.3s
WMQ LR LR
comp=Z,240nm,23.1s
WMQ LR LR
comp=Z,240nm,18.7s
WMQ LR LR
comp=Z,280nm,24.1s
**ZEA Zeya 64.35 2** *e*P **P** **12 06 21.2 -0.2**
ZEA pmax pmax
comp=Z,10.0nm,1.0s
**IRK Irkutsk 65.09 347** *e*P **P** **12 06 25.0 -1.3**
IRK pmax pmax
comp=Z,43nm,2.5s
**MOY Mondy 65.36 344** *e*P **P** **12 06 27.8 -0.5**
MOY pmax pmax
comp=Z,32nm,2.1s
**KNGR Kungurtug, Tuv 65.41 342** *i* P **P** **12 06 28.6 0.0**
KNGR pmax pmax
comp=Z,7.0nm,1.2s
**NIL Nilore 65.53 315** P **P** **12 06 28.1 -1.5**
**NIL Nilore 65.53 315** P P 12 06 28.1 -1.5
NIL pmax pmax
comp=Z,69nm,1.7s
**TARG Taragay, Kyrgy 67.40 324** P P 12 06 40.1 -1.8
TARG IAmb IAmb 12 06 44.3
comp=Z,40nm,1.9s
**TARG Taragay, Kyrgy 67.40 324** P P 12 06 40.2 -1.7
TARG pmax pmax
comp=Z,40nm,1.9s
**NRN Naryn 68.27 323** P P 12 06 45.6 -1.7
**NRN Naryn 68.27 323** P P 12 06 45.6 -1.7
NRN pmax pmax
comp=Z,9.0nm,1.3s
**DGZ Jazzator, Alta 68.30 335** *i* P **P** **12 06 46.6 -0.5**
DGZ pmax pmax
comp=Z,15nm,1.1s
**MK31 Makanchi Array 68.44 330** P **P** **12 06 47.5 -0.4**
MK31 IAmb IAmb 12 06 49.2
comp=Z,20nm,1.2s
**MK31 Makanchi Array 68.44 330***ce*P **P** **12 06 46.8 -1.1**
**MKAR Makanchi Array 68.44 330** P **P** **12 06 46.5 -1.4**
comp=Z,6.1nm,0.8s,baz=136,slow=7.3,SNR=37
MKAR S S 12 15 43.0 -6.6
comp=Z,0.1nm,0.5s,baz=253,slow=16,SNR=1.8
MKAR LR LR 12 41 22.0
comp=Z,128nm,19.0s,baz=142,slow=40
comp=Z,6.1nm,0.8s
**MKAR Makanchi Array 68.44 330** *i* P **P** **12 06 47.0 -0.9**
MKAR pmax pmax
comp=Z,6.0nm,0.8s
**MAKZ Makanchi 68.60 330** P **P** **12 06 48.2 -0.7**
MAKZ IAmb IAmb 12 06 49.3
comp=Z,44nm,1.8s
**MAKZ Makanchi 68.60 330** P **P** **12 06 48.2 -0.7**
MAKZ pmax pmax
comp=Z,44nm,1.8s
**KBL Kabul 68.96 314** P **P** **12 06 51.2 -0.4**
KBL IAmb IAmb 12 06 52.1
comp=Z,14nm,0.9s
**KBL Kabul 68.96 314** P **P** **12 06 51.2 -0.4**
KBL pmax pmax
comp=Z,14nm,0.9s
**MAW Mawson 69.32 201** P **P** **12 06 54.5 +1.5**
comp=Z,7.5nm,1.1s,baz=85,slow=8.4,SNR=11
MAW LR LR 12 32 49.4
comp=Z,595nm,21.6s,baz=57,slow=32
comp=Z,7.5nm,1.1s
**PETK Petropavlovsk- 69.83 21** P **P** **12 06 56.1 -0.2**
comp=Z,2.5nm,0.8s,baz=223,slow=5.9,SNR=4.4
PETK LR LR 12 36 27.8
comp=Z,50nm,21.8s,baz=214,slow=35
comp=Z,2.5nm,0.8s
**AAK Ala-Archa 69.90 323** P **P** **12 06 56.5 -0.6**
AAK IAmb IAmb 12 07 29.2
comp=Z,37nm,1.9s
**AAK Ala-Archa 69.90 323** LR LR 12 41 41.7
comp=Z,146nm,19.6s,baz=118,slow=40
**AAK Ala-Archa 69.90 323***ce*P **P** **12 06 56.4 -0.8**
AAK pmax pmax
comp=Z,19nm,2.5s
**H04N2 CROZET ISLANDS 70.05 225** T T 13 23 58.2
baz=82,slow=75,SNR=90
**H04N3 CROZET ISLANDS 70.06 225** T T 13 23 57.0
baz=82,slow=75,SNR=75
**H04N1 CROZET ISLANDS 70.06 225** T T 13 23 58.2
baz=82,slow=75,SNR=96
**PET Petropavlovsk 70.10 21** *e*P P 12 07 05.1 +7.2
PET MLR MLR
comp=Z,100nm,19.0s
**SBA Scott Base 70.41 171** P **P** **12 06 58.6 -1.0**
SBA IAmb IAmb 12 07 03.0
comp=Z,34nm,1.8s
**SBA Scott Base 70.41 171** P **P** **12 06 58.6 -1.0**
SBA pmax pmax
comp=Z,34nm,1.8s
**GAR Garm 70.42 318** P **P** **12 07 00.0 -0.4**
**BTK Batken 70.67 319** P **P** **12 07 01.5 -0.3**
**BTK Batken 70.67 319** P **P** **12 07 01.5 -0.3**
BTK pmax pmax
comp=Z,22nm,1.6s
**CHGR Chuyangaron 71.00 317** P **P** **12 07 03.0 -0.9**
CHGR IAmb IAmb 12 07 26.2
comp=Z,49nm,1.4s
**CHGR Chuyangaron 71.00 317** P **P** **12 07 03.0 -0.9**
CHGR pmax pmax
comp=Z,49nm,1.4s
**SIMJ Simiganj 71.10 317** P **P** **12 07 03.6 -1.0**
SIMJ IAmb IAmb 12 07 26.9
comp=Z,24nm,1.4s
**WSAR Wadi Sarin 72.45 299** LR LR 12 40 43.3
comp=Z,247nm,19.0s,baz=122,slow=37
**KKAR Karatay Array 72.55 322** P P 12 07 11.1 -2.0
**KKAR Karatay Array 72.55 322** P P 12 07 11.1 -1.9
KKAR pmax pmax
comp=Z,7.0nm,1.4s
**ZAA0 Zalesovo Array 72.60 337** P **P** **12 07 12.0 -1.1**
**ZALV Zalesovo Beam 72.60 337** P **P** **12 07 11.6 -1.5**
comp=Z,7.6nm,0.9s,baz=120,slow=5.2,SNR=28
ZALV LR LR 12 41 09.4
comp=Z,136nm,21.1s,baz=136,slow=38
comp=Z,7.6nm,0.9s
**ZALV Zalesovo Beam 72.60 337** *i* P **P** **12 07 11.6 -1.5**
ZALV pmax pmax
comp=Z,5.0nm,0.7s
**YAK Yakutsk 72.74 3** P **P** **12 07 13.5 -0.2**
YAK IAmb IAmb 12 07 14.8
comp=Z,18nm,1.0s
**YAK Yakutsk 72.74 3** LR LR 12 42 32.3
comp=Z,86nm,18.9s,baz=192,slow=39
**YAK Yakutsk 72.74 3***ce*P **P** **12 07 13.0 -0.7**
YAK pmax pmax
comp=Z,18nm,1.3s
**KURBB Kurchatov Arra 72.89 332** P **P** **12 07 13.7 -1.2**
comp=Z,3.5nm,0.8s,baz=145,slow=5.2,SNR=33
KURBB LR LR 12 43 16.6
comp=Z,274nm,21.0s,baz=172,slow=39
comp=Z,3.5nm,0.8s
**KURK Kurchatov 72.91 332** P **P** **12 07 14.6 -0.4**
**KURK Kurchatov 72.91 332***ce*P **P** **12 07 13.6 -1.4**
KURK pmax pmax
comp=Z,33nm,1.7s
**RAR Rarotonga 73.30 109** LR LR 12 40 21.2
comp=Z,166nm,18.1s,baz=284,slow=36
**MA2 Magadan 73.35 14** LR LR 12 37 42.9
comp=Z,109nm,21.8s,baz=220,slow=34
**MA2 Magadan 73.35 14** *i* P **P** **12 07 16.9 -0.5**
MA2 pmax pmax
comp=Z,14nm,1.2s
**MA2 Magadan 73.35 14** P **P** **12 07 16.3 -1.1**
comp=Z,29nm,1.5s
**HRA Herat 73.86 311** P **P** **12 07 21.8 +0.6**
**UOSS Minazif 75.11 299** P **P** **12 07 28.2 -0.2**
UOSS IAmb IAmb 12 07 29.5
comp=Z,77nm,1.7s
**SHEM Shemya Is, Ala 76.33 29** LR LR 12 36 56.5
comp=Z,54nm,21.3s,baz=150,slow=32
**SEY Seymchan 76.69 13***ce*P **P** **12 07 37.4 +0.8**
SEY pmax pmax
comp=Z,39nm,2.5s
**BVAR Borovoye Array 78.32 330** P **P** **12 07 45.2 -0.8**
comp=Z,2.1nm,0.9s,baz=108,slow=4.7,SNR=8.8
comp=Z,2.1nm,0.9s
**BRVK Borovoye 78.39 330** P **P** **12 07 45.9 -0.4**
BRVK IAmb IAmb 12 07 55.5
comp=Z,37nm,1.8s
**BRVK Borovoye 78.39 330***ce*P **P** **12 07 45.3 -1.0**
BRVK pmax pmax
comp=Z,26nm,2.5s
**QSPA South Pole Qui 79.19 180** P **P** **12 07 50.3 -0.4**
QSPA IAmb IAmb 12 07 53.3
comp=Z,45nm,1.6s
**QSPA South Pole Qui 79.19 180** P **P** **12 07 51.3 +0.5**
comp=Z,9.3nm,1.1s,baz=293,slow=2.0,SNR=19
QSPA LR LR 12 42 25.7
comp=Z,1µm,18.4s,baz=341,slow=35
comp=Z,9.3nm,1.1s
**ABKAR Akbulak array 81.98 323** P **P** **12 08 05.3 -0.5**
**TIXI Tiksi 82.34 2** P **P** **12 08 06.0 -1.1**
**TIXI Tiksi 82.34 2** LR LR 12 46 44.3
comp=Z,191nm,20.2s,baz=208,slow=37
**TIXI Tiksi 82.34 2***ce*P **P** **12 08 06.7 -0.5**
TIXI pmax pmax
comp=Z,19nm,2.5s
**TBI Tubuai 82.53 112** *e*LR LR 12 33 54.5
comp=Z,1µm,25.5s
**ELIB Princess Elisa 83.12 198** *d*P **P** **12 08 13.5 +1.9**
comp=Z,8.2nm,1.3s
**PPT2 Papeete2 83.30 107** *e*LR LR 12 34 16.1
comp=Z,227nm,27.0s
PPT2 *e*LR LR 12 34 21.0
comp=Z,214nm,24.2s
**PPT Papeete 83.31 107** LR LR 12 43 17.3
comp=Z,106nm,20.1s,baz=276,slow=34
**RAYN Ar Rayn 84.04 295** P **P** **12 08 15.6 -1.5**
**RAYN Ar Rayn 84.04 295** P P **P** **12 08 15.6 -1.5**
RAYN pmax pmax
comp=Z,69nm,1.9s
**BILL Bilibino 84.18 15**⇓*e*P **P** **12 08 17.1 +0.3**
BILL *e* 12 11 32.7
BILL *e*S **SKSac** **12 18 38.4 -1.6**
BILL pmax pmax
comp=Z,8.0nm,1.3s
BILL MLR MLR
comp=Z,92nm,18.0s
**ARU Arti 85.94 330** P **P** **12 08 25.9 0.0**
ARU IAmb IAmb 12 08 27.7
comp=Z,52nm,1.8s
**ARU Arti 85.94 330***c i*P **P** **12 08 24.8 -1.0**
ARU 12 11 44.4
ARU S **SKSac** **12 18 50.2 -1.4**
ARU SS **SS** **12 24 31.8 -5.6**
ARU pmax pmax
comp=Z,31nm,1.8s
**ARU Arti 85.94 330** P **P** **12 08 25.1 -0.7**
comp=Z,9.7nm,1.4s,comp=Z,443nm
**KMBO Kilima Mbogo 86.73 269** P P 12 08 29.1 -1.9
KMBO IAmb IAmb 12 08 34.2
comp=Z,39nm,2.0s
**KMBO Kilima Mbogo 86.73 269** P **P** **12 08 31.7 +0.7**
comp=Z,0.7nm,0.3s,baz=75,slow=11,SNR=5.6
KMBO LR LR 12 42 41.0
comp=Z,125nm,21.4s,baz=96,slow=32
comp=Z,0.7nm,0.3s
**KMBO Kilima Mbogo 86.73 269** *i* P **P** **12 08 31.4 +0.4**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**NVL N'lazarevskaya 87.00 198** *e*P **P** **12 08 31.4 +0.5**
NVL *e*S **SKSac** **12 18 51.2 -6.7**
NVL pmax pmax
comp=Z,3.0nm,0.8s
NVL MLR MLR
comp=Z,343nm,16.0s
**AKT Akhty 87.10 313** *e*P **P** **12 08 32.6 +0.5**
AKT *e* 12 11 55.6
AKT pmax pmax
comp=Z,42nm,1.4s
**MAK Makhachkala 87.69 314** *e*P P 12 08 30.7 -4.0
MAK *e* 12 18 55.3
MAK *e*SS SS 12 24 56.3 -7.3
MAK pmax pmax
comp=Z,179nm,1.1s
MAK MLR MLR
comp=Z,284nm,16.0s
**TROLL Troll, Antarti 89.02 195** ⇑P **P** **12 08 41.6 +0.9**
comp=Z,108nm,0.8s
**BELG Belogornoye 90.39 323** *i* P **P** **12 08 47.0 -0.1**
BELG pmax pmax
comp=Z,2.0nm,0.9s
**SNAA Sanae 90.58 195** P **P** **12 08 46.5 -1.4**
SNAA IAmb IAmb 12 08 50.7
comp=Z,19nm,1.5s
**SNAA Sanae 90.58 195** ⇑P **P** **12 08 49.5 +1.6**
comp=Z,41nm,0.5s
**SNAA Sanae 90.58 195** P **P** **12 08 49.1 +1.2**
comp=Z,2.2nm,0.6s,baz=170,slow=5.4,SNR=22
SNAA LR LR 12 46 06.3
comp=Z,320nm,21.7s,baz=96,slow=33
comp=Z,2.2nm,0.6s
**SNAA Sanae 90.58 195** *i* P **P** **12 08 48.1 +0.2**
SNAA pmax pmax
comp=Z,6.0nm,1.2s
**NCK Nalchik 90.59 314** *i* P **P** **12 08 48.0 -0.4**
NCK pmax pmax
comp=Z,9.0nm,0.6s
**BELA Belgrano 2 90.65 184** P **P** **12 08 48.7 +0.6**
BELA IAmb IAmb 12 08 50.3
comp=Z,28nm,1.4s
**KBZ Khabaz 91.14 314** P **P** **12 08 51.3 +0.4**
comp=Z,1.3nm,0.7s,baz=121,slow=8.1,SNR=1.9
comp=Z,1.3nm,0.7s
**KBZ Khabaz 91.14 314** *i* P **P** **12 08 51.2 +0.4**
KBZ pmax pmax
comp=Z,2.0nm,0.9s
**SHA1 Shidzhatmaz 91.31 314** *i* P **P** **12 08 52.0 0.0**
**KIRV Kirov 91.33 330** *i* P **P** **12 08 51.6 +0.3**
**KIV Kislovodsk 91.34 314** *e*P **P** **12 08 50.5 -1.5**
KIV pmax pmax
comp=Z,8.0nm,1.0s
**VNA2 Neumayer--Watz 92.19 194** ⇑P **P** **12 08 56.5 +1.2**
comp=Z,2.2nm,0.6s,baz=135,slow=5.7
**BOSA Boshof 92.55 240** LR LR 12 45 08.6

comp=Z,101nm,19.6s,baz=122,slow=32
**LBTB Lobatse 93.09 244** LR LR 12 49 54.6
comp=Z,108nm,18.0s,baz=105,slow=35
**MBAR Mbarara 93.22 269** *i* P **P 12 09 00.7 -0.8**
MBAR pmax pmax
comp=Z,3.0nm,1.1s
**E18K Tukpahlearik C 94.33 22** P **P 12 09 05.9 +0.9**
E18K lAmb lAmb 12 09 12.9
comp=Z,25nm,1.5s
**H18K Honhosa River 94.54 24** P **P 12 09 06.3 +0.2**
**J18K Innoko River 94.79 26** P **P 12 09 06.4 -0.9**
**C19K Lookout Ridge 95.19 20** P **P 12 09 08.4 -0.7**
**SUR Sutherland 95.29 236** LR LR 12 47 58.2
comp=Z,202nm,18.6s,baz=126,slow=33
**G19K Purcell Mounta 95.31 24** P P 12 09 07.8 -1.8
G19K lAmb lAmb 12 09 14.7
comp=Z,9.4nm,1.1s
**H19K Roundabout Mou 95.41 24** **P 12 09 09.1 -0.9**
H19K lAmb lAmb 12 09 11.6
comp=Z,15nm,1.4s
**KDAK Kodiak Island 95.50 32** LR LR 12 48 36.8
comp=Z,69nm,21.3s,baz=263,slow=33
**D19K Kuna River 95.53 21** P **P 12 09 10.0 -0.7**
D19K lAmb lAmb 12 09 11.9
comp=Z,14nm,1.1s
**E19K Redstone River 95.58 22** P **P 12 09 10.3 -0.5**
E19K lAmb lAmb 12 09 15.9
comp=Z,17nm,1.2s
**RKT Rikitea 95.63 115** *e*LR LR 12 39 50.5
comp=Z,717nm,24.0s
**F20K Avaraart Lake 96.06 23** P **P 12 09 13.2 +0.2**
F20K lAmb lAmb 12 09 14.5
comp=Z,17nm,1.4s
**SNOP Sinop 96.35 311** P **P 12 09 13.5 -1.4**
SNOP lAmb lAmb 12 09 14.1
comp=Z,11nm,0.8s
**CSS Mathiatis 96.75 304** P **P 12 09 16.1 -0.8**
**B21K Ikpikpuk River 97.02 20** P **P 12 09 17.8 +0.6**
**BRTR Keskin Array B 97.19 309** P **P 12 09 18.2 -0.7**
comp=Z,6.0nm,0.6s,baz=88,slow=7.4,SNR=1.7
comp=Z,0.6nm,0.6s
**BR105 Keskin Array S 97.21 309** pP pP 12 09 26.5 +4.8
comp=Z,2.3nm,0.9s
**OBN Obninsk 97.39 325** *e*P **P 12 09 19.4 +0.2**
OBN pmax pmax
comp=Z,8.0nm,1.2s
**B22K Teshekpuk Lake 97.57 20** P **P 12 09 19.8 0.0**
**E22K Anaktuvuk Pass 97.74 22** P **P 12 09 20.8 +0.1**
**G23K Bananza Creek 98.20 24** **P 12 09 23.6 +0.8**
G23K lAmb lAmb 12 09 28.1
comp=Z,8.0nm,1.2s
**I23K Minto, Yukon-K 98.26 25** P **P 12 09 23.4 +0.4**
**H23K Yukon River 98.27 25** P **P 12 09 24.1 +1.0**
**D23K Nanushuk River 98.28 21** P **P 12 09 24.5 +1.4**
**C23K Itkillik River 98.43 20** P **P 12 09 24.7 +1.1**
**E23K Chandalar 98.54 22** P **P 12 09 24.4 +0.1**
E23K lAmb lAmb 12 09 31.0
comp=Z,12nm,1.2s
**CCB Clear Creek Bu 98.85 26** **P 12 09 25.1 -0.5**
**DHY Denali Highway 98.87 27** P **P 12 09 25.0 -1.0**
**F24K Squaw Lake 99.13 23** P **Pdif 12 09 27.2 +0.2**
F24K lAmb lAmb 12 09 28.9
comp=Z,10nm,1.4s
**G24K Hadweenzic Riv 99.21 24** P **Pdif 12 09 27.2 0.0**
G24K lAmb lAmb 12 09 45.7
comp=Z,22nm,1.9s
**ILAR Eielson Array 99.26 26** P **Pdif 12 09 26.4 -1.0**
comp=Z,1.2nm,1.1s,baz=250,slow=4.1,SNR=5.5
ILAR PP **PP 12 13 28.8 -1.5**
comp=Z,0.5nm,1.0s,baz=242,slow=5.0,SNR=2.9
comp=Z,1.2nm,1.1s
**LVZ Lovozero 99.74 337** *i* P **Pdif 12 09 28.1 -1.5**
LVZ pmax pmax
comp=Z,14nm,1.2s
**AKASG Malin Array Be 101.38 320** P **Pdif 12 09 36.2 -1.0**
comp=Z,0.2nm,0.3s,baz=83,slow=3.2,SNR=1.8
**AKBB Malin Array Si 101.38 320** P **Pdif 12 09 36.3 -0.9**
**MNK Minsk 102.34 324** *i* P **Pdif 12 09 36.8 -4.6**
MNK *i* 12 13 49.7
MNK *i* S **SKSac 12 20 16.5 -4.6**
MNK *i* PS **PS 12 22 57.2 -3.1**
MNK *i* SS **SS 12 28 29.6 -1.7**
MNK *i* SSS SSS 12 32 23.2
MNK pmax pmax
comp=E,22nm,0.6s
MNK pmax pmax
comp=N,13nm,0.6s
MNK pmax pmax
comp=Z,12nm,0.5s
MNK MLR MLR
comp=E,125nm,25.0s
MNK MLR MLR
comp=N,146nm,22.0s
MNK MLR MLR
comp=Z,204nm,23.0s
**KMPD K-Podol'skiy 103.09 317** P **Pdif 12 09 43.7 -1.1**
**CLL Collm 111.56 321** *e*Sdif Sdif 12 22 48.0 +5.8
CLL *e*PPS PPS 12 25 42.0
CLL *ex* x 12 36 00.0
**PDAR Pinedale Array 123.68 45** PKP **PKPdf 12 14 44.0 -0.3**
comp=Z,0.8nm,0.9s,baz=282,slow=1.8,SNR=6.8
**TORD Torodi Ar. Bea 123.74 279** PKP **PKPdf 12 14 44.9 +0.1**
comp=Z,1.7nm,0.6s,baz=65,slow=2.1,SNR=10
**ESDC Sonseca Array 125.90 311** PKP **PKPdf 12 14 48.8 +0.4**
comp=Z,1.3nm,1.1s,baz=135,slow=40,SNR=4.6
**ULM Lac du Bonnet 128.76 32** PKP **PKPdf 12 14 54.4 +1.0**
comp=Z,2.5nm,0.6s,baz=322,slow=8.0,SNR=3.8
**DBIC Dimbokro 129.46 270** PKP **PKPdf 12 14 56.6 +0.8**
comp=Z,6.3nm,1.1s,baz=137,slow=7.0,SNR=4.3
**CPUP Villa Florida 143.05 178** PKP PKPbc 12 15 19.6 +2.3
comp=Z,2.0nm,0.8s,baz=203,slow=5.3,SNR=3.8
**LMN Caledonia Moun 144.25 11** **PKPab 12 15 21.8 +1.8**
**M57A Sunshine Farm, 144.30 28** **PKPab 12 15 21.7 +1.4**
**WVL Waterville 144.33 17** PKPdf **PKPab 12 15 21.6 +1.3**
**LVC Limon Verde 144.41 159** PKPdf **PKPab 12 15 23.8 +2.2**
**LVC Limon Verde 144.41 159** PKIKP **PKPab 12 15 23.8 +2.2**
**GGN Saint George 144.54 13** PKPdf **PKPab 12 15 21.5 +0.6**
**TKL Tuckaleechee C 144.61 41** PKPdf **PKPab 12 15 21.9 +0.3**
**TKL Tuckaleechee C 144.61 41** PKIKP **PKPab 12 15 21.9 +0.3**
**KSPA Keystone Colle 144.74 26** PKPdf **PKPab 12 15 22.9 +1.1**
**EMMW East Mathias 144.78 14** PKPdf **PKPab 12 15 22.5 +0.6**
**GBN Guysborough 145.19 7** PKPbc **PKPbc 12 15 24.8 +1.5**
**L61B Northampton 145.22 22** PKPbc **PKPbc 12 15 24.4 +0.9**
**BG3 Lake Jocassee 145.56 41** **PKPdf 12 15 25.6 +0.8**
**HAL Halifax 145.64 10** **PKPdf 12 15 25.8 +1.2**
**HAL Halifax 145.64 10** PKIKP **PKPdf 12 15 25.8 +1.2**
**TA01 Diego Aracena 145.79 156** **PKPdf 12 15 25.9 +0.4**
**SDMD Soldier's Deli 145.95 30** **PKPdf 12 15 26.5 +1.3**
**PAL Palisades 145.98 25** **PKPdf 12 15 27.1 +1.9**
**PAL Palisades 145.98 25** PKP2 **PKPdf 12 15 27.1 +1.9**
**APG El Apazote 146.04 79** PKPbc **PKPdf 12 15 28.4 +2.0**
comp=Z,1.0nm,0.8s,baz=316,slow=5.5,SNR=12
**WUPA West Chester U 146.12 28** PKPbc **PKPdf 12 15 27.5 +2.0**
**HMBC Humberstone 146.16 156** PKPbc **PKPdf 12 15 27.5 +1.2**
**AQDB Aquidauana 148.91 180** **PKPdf 12 15 34.9 +4.1**
**LPAZ La Paz 150.47 156** PKPbc **PKPbc 12 15 40.5 +1.1**
comp=Z,7.9nm,0.9s,baz=221,slow=1.3,SNR=16
**SOCE Pocosol 151.74 88** PKPbc **PKPdf 12 15 37.8 +2.5**
**CZSB Cruzeiro do Su 155.10 137** PKPdf **PKPdf 12 15 36.7 -3.5**
**OTAV Otavalo 155.22 114** PKPdf PKPdf 12 15 35.8 -5.2
OTAV PKPab sPKPbc 12 16 02.2 +8.7
**OTAV Otavalo 155.22 114** PKIKP PKPdf 12 15 35.8 -5.2
OTAV 12 16 02.2
**ETMB Extrema 157.07 153** PKPdf **PKPdf 12 15 38.8 -4.0**
ETMB PKPab **PKPab 12 16 11.1 -1.8**
**SAML Samuel 159.06 159** PKPdf **PKPdf 12 15 43.1 -2.1**
**SAML Samuel 159.06 159** PKIKP **PKPdf 12 15 43.1 -2.1**
**HUMP Col San Antoni 167.90 52** PKPdf **PKPdf 12 15 51.3 -2.0**
HUMP **PKPab 12 16 59.2 -1.1**

**IDC 28 12:02:21.4±2.4, 11°78S×123°02E, h0km, mb3.6/2, mbtmp3.9/4, ML3.9/2, Error ellipse: s-maj=198.0km s-min=32.7km az=50.0, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.58** | **128** | Pn | Pn | 12 05 33.4 | -2.0 |
| | 0.5nm,0.3s,baz=302,slow=14,SNR=0.9 | | | | | | |
| WRA | | | | Sn | Sn | 12 07 55.3 | -12 |
| | 0.4nm,0.3s,baz=312,slow=25,SNR=5.3 | | | | | | |
| | 3.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **15.71** | **140** | Pn | P | 12 06 06.4 | -2.1 |
| | 0.9nm,0.3s,baz=316,slow=12,SNR=7.7 | | | | | | |
| ASAR | | | | Sn | Sn | 12 08 53.9 | -5.4 |
| | 0.2nm,0.3s,baz=313,slow=23,SNR=3.0 | | | | | | |
| | 3.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.75** | **331** | P | P | 12 13 27.4 | +0.2 |
| | 0.6nm,0.6s,baz=136,slow=6.1,SNR=5.4 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.22** | **332** | P | P | 12 13 53.9 | -0.3 |
| | 0.1nm,0.3s,baz=135,slow=5.7,SNR=2.5 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

**IDC 28 12:08:54.4±2.8, 11°54S×123°42E, h0km, mb3.4/1, mbtmp3.5/3, ML3.5/2, Error ellipse: s-maj=232.8km s-min=34.8km az=50.0, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.42** | **130** | Pn | Pn | 12 12 04.7 | -1.6 |
| | 0.3nm,0.3s,baz=303,slow=14,SNR=11 | | | | | | |
| WRA | | | | Sn | Sn | 12 14 26.5 | -10 |
| | 0.4nm,0.3s,baz=358,slow=20,SNR=6.8 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **15.65** | **142** | Pn | Pn | 12 12 38.4 | +1.9 |
| | 0.2nm,0.3s,baz=320,slow=12,SNR=6.2 | | | | | | |
| ASAR | | | | Sn | Sn | 12 15 27.2 | -3.6 |
| | 0.2nm,0.3s,baz=316,slow=22,SNR=6.1 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.73** | **331** | P | P | 12 20 00.1 | 0.0 |
| | 0.2nm,0.4s,baz=147,slow=7.7,SNR=2.6 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*IDC* ***28*** *12:16:02.5±2.1, 14°22N×92°99W, h0km, mb3.9/3, mbtmp3.8/7, ML3.6/4, Error ellipse: s-maj=49.4km s-min=19.1km az=24.0*
*CATAC* ***28*** *12:16:04.0±1.7, 14°18N×92°92W, h1km±9km, ML4.3*
*MEX* ***28*** *12:16:06.4±0.9, 14°27N×93°02W, h15km, MD4.3*
*SNET* ***28*** *12:16:07.6±0.9, 14°29N×92°85W, h32km±77km, ML4.3*
*GCG* ***28*** *12:16:09.4±1.4, 14°53N×92°73W, h20km±13km, MD4.3*
**ISC 28 12:16:03.4±1.7, 14°45N±0°05×92°96W±0°04, h3km±10km, n54, σ1°64/81, mb3.9/3, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **THIG** | | **0.82** | **56** | *e*P | **Pn** | **12 16 21.6** | **-0.1** |
| THIG | | | | *e*S | **Sn** | **12 16 33.7** | **-0.7** |
| **CHUJ** | **Union Juarez** | **1.05** | **52** | *i* P | **Pn** | **12 16 24.9** | **-0.3** |
| CHUJ | | | | *i* S | **Sn** | **12 16 39.8** | **-0.6** |
| **PAVE** | **Pavencul** | **1.06** | **45** | *i* P | **Pn** | **12 16 25.5** | **+0.1** |
| PAVE | | | | *i* S | **Sn** | **12 16 40.2** | **-0.5** |
| **RTAL** | **Retalhuleu** | **1.23** | **86** | *i* P | **Pn** | **12 16 27.1** | **-0.3** |
| RTAL | | | | *i* S | **Sn** | **12 16 43.2** | **-1.3** |
| **RTAL** | **Retalhuleu** | **1.23** | **86** | *e*P | **Pn** | **12 16 29.6** | **-0.5** |
| RTAL | | | | *e*S | **Sn** | **12 16 43.3** | **-1.3** |
| **RTAL** | **Retalhuleu** | **1.23** | **86** | *i* P | **Pn** | **12 16 27.1** | **-0.3** |
| RTAL | | | | *i* S | **Sg** | **12 16 43.6** | **+0.7** |
| RTAL | | | | lAML | | 12 16 46.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **PCIG** | | **1.28** | **349** | *e*P | **Pn** | **12 16 27.9** | **-0.2** |
| PCIG | | | | *e*S | **Sb** | **12 16 42.3** | **-2.6** |
| **SULM** | **Suchitepequez,** | **1.36** | **96** | *e*P | **Pb** | **12 16 30.3** | **+0.9** |
| **STG3** | **Santiaguito 3,** | **1.37** | **79** | *e*P | **Pb** | **12 16 29.8** | **0.0** |
| **SOKI** | **Kika Raxquin** | **1.55** | **76** | *i* P | **Pn** | **12 16 32.6** | **+0.3** |
| SOKI | | | | *i* S | **Sg** | **12 16 54.1** | **+0.7** |
| SOKI | | | | lAML | | 12 16 58.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **HUEH** | **Huehuetenango** | **1.66** | **58** | *i* P | **Pg** | **12 16 35.1** | **0.0** |
| HUEH | | | | *i* S | **Sg** | **12 16 56.2** | **-0.5** |
| **HUEH** | **Huehuetenango** | **1.66** | **58** | *e*P | **Pb** | **12 16 34.9** | **+0.3** |
| HUEH | | | | *e*S | **Sg** | **12 16 57.0** | **+0.4** |
| **HUEH** | **Huehuetenango** | **1.66** | **58** | *i* P | **Pg** | **12 16 35.2** | **0.0** |
| HUEH | | | | lAML | | 12 17 03.8 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **CCIG** | **Comitan** | **1.99** | **23** | *e*P | **Pg** | **12 16 41.3** | **-0.4** |
| CCIG | | | | *e*S | **Sg** | **12 17 05.5** | **-1.9** |
| **CCIG** | **Comitan** | **1.99** | **23** | *i* P | **Pg** | **12 16 41.2** | **-0.4** |
| **QUIS** | **Sacapulas** | **1.99** | **65** | *i* P | **Pb** | **12 16 40.1** | **-0.3** |
| QUIS | | | | *i* S | **Sg** | **12 17 08.3** | **+0.8** |
| QUIS | | | | lAML | | 12 17 11.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **FUG** | **Fuego 3** | **2.05** | **90** | *e*P | **Pn** | **12 16 39.4** | **+0.5** |
| **PCG** | **Pacaya** | **2.28** | **91** | *e*P | **Pn** | **12 16 43.0** | **+0.8** |
| PCG | | | | *e*S | **Sn** | **12 17 10.5** | **-0.4** |
| **TGIG** | | **2.33** | **356** | *e*P | **Pb** | **12 16 44.9** | **-1.1** |
| TGIG | | | | *e*S | **Sb** | **12 17 13.5** | **-1.7** |
| **APG** | **El Apazote** | **2.48** | **77** | Pn | **Pn** | **12 16 46.3** | **+1.4** |
| | comp=Z,2.9nm,0.3s,baz=214,slow=19,SNR=109 | | | | | | |
| APG | | | | Sn | **Sb** | **12 17 18.7** | **-1.0** |
| | comp=Z,4.2nm,0.3s,baz=325,slow=16,SNR=18 | | | | | | |
| | comp=Z,8.2nm,0.4s | | | | | | |
| **NBG** | **Las Nubes** | **2.54** | **86** | *e*P | **Pb** | **12 16 48.2** | **-1.5** |
| **UXUV** | **UXUV** | **3.08** | **338** | *e*P | **Pn** | **12 16 55.5** | **+2.6** |
| UXUV | | | | *e*S | **Sb** | **12 17 34.6** | **-2.1** |
| **SLOZ** | **Alcaldia de Sa** | **3.11** | **97** | *e*P | **Pn** | **12 16 53.6** | **+0.2** |
| **NUBE** | **Las Nubes** | **3.13** | **100** | *e*P | **Pn** | **12 16 53.4** | **-0.4** |
| NUBE | | | | *e*S | **Sn** | **12 17 20.2** | **-3.6** |
| **NUBE** | **Las Nubes** | **3.13** | **100** | *i* P | **Pn** | **12 16 53.8** | **0.0** |
| NUBE | | | | *i* S | **Sn** | **12 17 29.8** | **-2.0** |
| NUBE | | | | lAML | | 12 17 41.2 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **CMIG** | **Matias Romero** | **3.22** | **325** | Pn | **Pn** | **12 16 56.0** | **+1.2** |
| | comp=Z,8.4nm,0.3s,baz=148,slow=13,SNR=33 | | | | | | |
| CMIG | | | | Sn | **Sb** | **12 17 37.4** | **-3.3** |
| | comp=Z,23nm,0.3s,baz=246,slow=19,SNR=3.5 | | | | | | |
| | comp=Z,24nm,0.4s | | | | | | |
| **CMIG** | **Matias Romero** | **3.22** | **325** | *e*P | **Pn** | **12 16 55.6** | **+0.8** |
| CMIG | | | | *e*S | **Sn** | **12 17 32.1** | **-1.5** |
| **MRL** | **Marmol** | **3.23** | **78** | *e*P | **Pn** | **12 16 57.2** | **+2.0** |
| **CEVE** | **Cerro Verde** | **3.29** | **100** | *e*P | **Pn** | **12 16 56.5** | **+0.4** |
| CEVE | | | | lAML | | 12 17 51.4 | |
| | comp=Z,877nm,0.5s | | | | | | |
| **CEVE** | **Cerro Verde** | **3.29** | **100** | *i* P | **Pn** | **12 16 56.5** | **+0.4** |
| CEVE | | | | lAML | | 12 17 48.1 | |
| | comp=Z,720nm,1.0s | | | | | | |
| **SNJE** | **San Jose** | **3.31** | **100** | *e*P | **Pn** | **12 16 56.0** | **-0.2** |
| **HUIG** | **Huatulco** | **3.31** | **294** | *e*P | **Pn** | **12 16 56.0** | **-0.1** |
| HUIG | | | | *e*S | **Sn** | **12 17 30.8** | **-5.2** |
| **MTO3** | **Montecristo** | **3.49** | **90** | *e*P | **Pn** | **12 16 59.3** | **+0.5** |
| **MTO3** | **Montecristo** | **3.49** | **90** | *i* P | **Pn** | **12 16 58.5** | **-0.2** |
| MTO3 | | | | lAML | | 12 18 12.1 | |
| | comp=Z,81nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **3.50** | **103** | *e*P | **Pn** | **12 16 58.4** | **-0.4** |
| **JAYA** | **Jayaque - finc** | **3.50** | **103** | *i* P | **Pn** | **12 16 58.8** | **0.0** |
| JAYA | | | | lAML | | 12 17 45.5 | |
| | comp=Z,770nm,1.0s | | | | | | |
| **PMON** | **Piamonte** | **3.61** | **101** | *e*P | **Pn** | **12 17 00.5** | **+0.2** |
| **PETF** | **Flores** | **3.86** | **50** | *i* P | **Pn** | **12 17 06.1** | **+2.4** |
| PETF | | | | *i* S | **Sn** | **12 17 50.6** | **+1.0** |
| **PETF** | **Flores** | **3.86** | **50** | *e*P | **Pn** | **12 17 05.6** | **+1.9** |
| **PETF** | **Flores** | **3.86** | **50** | *i* P | **Pn** | **12 17 05.9** | **+2.2** |
| PETF | | | | lAML | | 12 17 17.6 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **YOIG** | **Yosondua** | **5.03** | **299** | *e*P | **Pn** | **12 17 22.3** | **+2.3** |
| YOIG | | | | *e*S | **Sn** | **12 18 17.5** | **-1.2** |
| **PNIG** | **Pinotepa** | **5.34** | **292** | *e*P | **Pn** | **12 17 24.6** | **+0.5** |
| **TOIG** | **Toxpalan** | **5.36** | **313** | *e*P | **Pn** | **12 17 25.6** | **+1.2** |
| TOIG | | | | *e*S | **Sn** | **12 18 22.7** | **-4.0** |
| **HLIG** | **Huajuapan de L** | **5.74** | **307** | *e*P | **Pn** | **12 17 30.4** | **+0.6** |
| HLIG | | | | *i* S | **Sn** | **12 18 39.2** | **+2.9** |
| **FTIG** | **Fresnillo de T** | **6.04** | **305** | *e*P | **Pn** | **12 17 36.8** | **+3.0** |
| FTIG | | | | *e*S | **Sn** | **12 18 41.8** | **-1.8** |
| **CRIG** | **Cruz Grande** | **6.37** | **292** | *e*P | **Pn** | **12 17 39.1** | **+1.0** |
| **PPM** | **Popocatepetl** | **7.11** | **311** | *e*P | **Pn** | **12 17 51.5** | **+2.7** |
| **MEIG** | **Mezcala** | **7.27** | **299** | *e*P | **Pn** | **12 17 52.4** | **+1.8** |
| **PLIG** | **Platanillo** | **7.40** | **303** | *e*P | **Pn** | **12 17 56.5** | **+4.1** |
| **JTS** | **Las Juntas de** | **8.85** | **117** | Pn | **Pn** | **12 18 10.3** | **-1.9** |
| | comp=Z,0.8nm,0.3s,baz=304,slow=22,SNR=1.5 | | | | | | |
| JTS | | | | Sn | **Sn** | **12 19 52.3** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=287,slow=21,SNR=1.5 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **TXAR** | **Lajitas Array** | **17.82** | **328** | P | **P** | **12 20 15.2** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=146,slow=9.8,SNR=9.3 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **32.74** | **322** | P | **P** | **12 22 40.0** | **+2.3** |
| | comp=Z,0.9nm,0.7s,baz=126,slow=9.0,SNR=9.2 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **62.07** | **337** | P | **P** | **12 26 25.4** | **+0.4** |
| | comp=Z,0.7nm,0.9s,baz=159,slow=5.5,SNR=5.0 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **89.75** | **325** | P | **P** | **12 29 02.8** | **-0.4** |
| | comp=Z,1.2nm,0.6s,baz=72,slow=6.7,SNR=4.4 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |

**NAM 28 12:20:16.9±4.3, 19°72S×14°49E, h25km±19km, ML0.5, 7C-8D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST3N** | **ST3** | **0.02** | **154** | ⇓*i*P | Pb | 12 20 23.3 | +1.9 |
| ST3N | | | | *i* S | Sb | 12 20 24.7 | +0.3 |
| ST3N | | | | *i* S | | 12 20 24.7 | |
| ST3N | | | | lAML | | 12 20 24.8 | |
| | comp=Z,4.4nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.02** | **154** | ⇓*i*P | Pb | 12 20 23.3 | +1.9 |
| ST3N | | | | *i* S | Sb | 12 20 24.7 | +0.3 |
| ST3N | | | | lAML | | 12 20 24.8 | |
| | comp=Z,4.4nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **145** | ⇑*i*P | Pb | 12 20 22.5 | +0.9 |
| ST9N | | | | *i* S | Sb | 12 20 23.5 | -1.4 |
| ST9N | | | | lAML | | 12 20 23.7 | |
| | comp=Z,52nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.09** | **145** | ⇑*i*P | Pb | 12 20 22.4 | +0.8 |
| ST9N | | | | *i* S | Sb | 12 20 23.5 | -1.4 |
| ST9N | | | | lAML | | 12 20 23.7 | |
| | comp=Z,52nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **226** | ⇑*e*P | Pn | 12 20 24.6 | +1.3 |
| ST6N | | | | ⇑*i*P | Pb | 12 20 24.6 | +2.7 |
| ST6N | | | | *i* S | Sb | 12 20 26.9 | +1.8 |
| ST6N | | | | lAML | | 12 20 27.8 | |
| | comp=Z,2.5nm,0.0s | | | | | | |
| ST6N | | | | lAML | | 12 20 29.0 | |
| | comp=N,3.1nm,0.0s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **226** | ⇑*i*P | Pn | 12 20 24.6 | +1.3 |
| ST6N | | | | *i* S | Sb | 12 20 26.9 | +1.7 |
| ST6N | | | | lAML | | 12 20 27.8 | |
| | comp=Z,2.4nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **98** | ⇓*i*P | Pn | 12 20 22.9 | -0.4 |
| ST1N | | | | *i* S | Sb | 12 20 24.0 | -1.2 |
| ST1N | | | | *i* S | | 12 20 24.1 | |
| ST1N | | | | lAML | | 12 20 24.2 | |
| | comp=Z,26nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **98** | ⇓*i*P | Pn | 12 20 22.9 | -0.4 |
| ST1N | | | | *i* S | Sb | 12 20 24.0 | -1.2 |
| ST1N | | | | *i* S | Sb | 12 20 24.0 | -1.2 |
| ST1N | | | | lAML | | 12 20 24.2 | |
| | comp=Z,25nm,0.0s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **281** | ⇓*i*P | Pn | 12 20 26.4 | +2.5 |
| ST8N | | | | *i* S | Sb | 12 20 30.2 | +4.2 |
| ST8N | | | | lAML | | 12 20 30.3 | |
| | comp=Z,0.9nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.16** | **281** | ⇓*i*P | Pn | 12 20 26.4 | +2.5 |
| ST8N | | | | *i* S | Sb | 12 20 30.2 | +4.3 |
| ST8N | | | | lAML | | 12 20 30.3 | |
| | comp=Z,0.9nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.23** | **153** | ⇑*i*P | Pn | 12 20 24.0 | -0.9 |
| ST2N | | | | *i* S | Sb | 12 20 26.0 | -1.3 |
| ST2N | | | | *i* S | | 12 20 26.0 | |
| ST2N | | | | lAML | | 12 20 26.2 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.23** | **153** | ⇑*i*P | Pn | 12 20 24.0 | -0.8 |
| ST2N | | | | *i* S | Sb | 12 20 25.9 | -1.3 |
| ST2N | | | | *i* S | Sb | 12 20 26.0 | -1.3 |
| ST2N | | | | lAML | | 12 20 26.2 | |
| | comp=Z,14nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.26** | **105** | ⇓*i*P | Pb | 12 20 23.3 | -0.2 |
| ST5N | | | | *i* S | Sb | 12 20 27.0 | -1.1 |
| ST5N | | | | lAML | | 12 20 27.1 | |
| | comp=Z,4.0nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.26** | **105** | ⇓*i*P | Pn | 12 20 24.6 | -0.7 |
| ST5N | | | | *i* S | Sb | 12 20 27.0 | -1.0 |
| ST5N | | | | lAML | | 12 20 27.1 | |
| | comp=Z,3.9nm,0.1s | | | | | | |

**IDC 28 12:52:09.1±2.0, 5°28N×121°95E, h0km, mb3.2/3, mbtmp3.2/3, Error ellipse: s-maj=231.1km s-min=29.3km az=62.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **27.87** | **154** | P | P | 12 58 00.1 | -0.7 |
| | 0.2nm,0.6s,baz=332,slow=11,SNR=7.2 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **31.05** | **158** | P | P | 12 58 29.9 | +0.9 |
| | 0.1nm,0.4s,baz=345,slow=6.8,SNR=4.5 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.62** | **327** | P | P | 13 01 32.1 | -0.1 |
| | 0.2nm,0.4s,baz=123,slow=7.1,SNR=2.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*DRS* ***28*** *12:57:10.5, 38°51N×48°51E, h13km*
*MOS* ***28*** *12:57:11.8±1.1, 38°58N×48°78E, h16km, mb5.1/54, MS3.8/18, Error ellipse: s-maj=4.1km s-min=3.2km az=122.5*
*IDC* ***28*** *12:57:11.0±0.4, 38°77N×48°64E, h0km, mb4.6/31, mbtmp4.6/42, ML4.6/9, MS4.2/43, Error ellipse: s-maj=9.7km s-min=8.3km az=168.0*
*TEH* ***28*** *12:57:12.2, 38°78N×48°84E, h12km±22km, ML4.7*
*NEIC* ***28*** *12:57:13.9±1.4, 38°82N±0°04×48°81E±0°07, h10km±1km, mb5.0/234, Error ellipse: s-maj=10.4km s-min=5.7km az=126.0*
*GII* ***28*** *12:57:14.5±0.7, 38°83N×48°86E, h10km, confirmed*
*AZER* ***28*** *12:57:14.8, 38°72N×48°63E, h15km, ml5.0*
*GCMT* ***28*** *12:57:17.9±0.3, 38°67N±0°03×48°56E±0°03, h30km±1km, MW5.0/76, Moment Tensor Solution. s31,c38; s76,c112; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=2.19±. 17; $M_{\theta\theta}$0.12±. 12; $M_{\phi\phi}$2.08±.11; $M_{r\theta}$-0.91±. 19; $M_{\theta\phi}$-1.04±. 07; $M_{\phi r}$2.13±. 16; Best double couple: $M_0$3.30500×$10^{16}$ NP1:$\phi_s$157.00000°, $\delta$67.00000°, $\lambda$-90.00000°. NP2: $\phi_s$336.00000°, $\delta$23.00000°, $\lambda$-90.00000°. Principal axes: T 3.4750, Plg22.0000°, Azm247.0000°; N -0.3310, Plg0.0000°, Azm337.0000°; P -3.1360, Plg68.0000°, Azm67.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NNC* ***28*** *12:57:27.1±7.9, 39°45N×49°53E, h53km±54km, mb4.6 Error ellipse: s-maj=56.8km s-min=33.8km az=54.0*
**ISC 28 12:57:14.4±0.5, 38°79N±0°02×48°74E±0°02, h19km±1km, n1059, σ1°67/1112, mb5.0/214, MS4.2/63, 34C-38D, Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **0.09** | **158** | P | **Pg** | **12 57 20.0** | **+1.9** |
| LKRN | | | | S | **Sg** | **12 57 23.3** | **+2.8** |
| **ASTR** | **Astara** | **0.23** | **170** | P | **Pb** | **12 57 20.8** | **+1.2** |
| ASTR | | | | S | **Sb** | **12 57 24.9** | **+1.9** |
| **LRK** | **Lerik** | **0.34** | **245** | P | **Pb** | **12 57 22.4** | **+0.3** |
| LRK | | | | S | **Sb** | **12 57 27.5** | **+0.3** |
| **YRD** | **Yardimli** | **0.41** | **288** | P | **Pb** | **12 57 24.2** | **+1.0** |
| YRD | | | | S | **Sb** | **12 57 30.8** | **+1.6** |
| **GLBA** | **Clilabad** | **0.53** | **329** | P | **Pn** | **12 57 27.3** | **+0.4** |
| GLBA | | | | S | **Sn** | **12 57 36.8** | **+1.5** |
| **GRMI** | **Germi** | **0.66** | **272** | Pg | **Pb** | **12 57 26.9** | **-0.4** |
| GRMI | | | | Sg | **Sb**

PQL Sn **Sb** **12 58 17.1 +2.2**
**NDR** **Nardaran** **2.03 28** Pn **Pg** **12 57 53.0 -0.4**
NDR Sn **Sg** **12 58 20.4 +0.5**
**IML** **Ismayilli** **2.05 348** Pn **Pb** **12 57 50.3 -0.7**
IML Sn **Sb** **12 58 17.8 +1.7**
**ATGJ** **Altiaghaj** **2.08 4** Pn **Pb** **12 57 51.7 +0.2**
ATGJ Sn **Sb** **12 58 19.4 +2.5**
**ITBZ** **Tabriz** **2.11 256** Pn **Pn** **12 57 49.8 +1.0**
**ORD** **Ordubad** **2.15 275** Pn **Pn** **12 57 51.0 +1.7**
ORD Sn **Sb** **12 58 18.6 -0.4**
**SIZA** **Siyzn** **2.29 3** Pn **Pb** **12 57 54.1 -1.0**
SIZA Sg **Sg** **12 58 29.0 +1.0**
**MNGR** **Mingechevir, A** **2.35 328** Pn **Pb** **12 57 55.3 -0.9**
MNGR Sn **Sb** **12 58 26.6 +1.7**
**IMRD** **Marand** **2.37 269** Pn **Pn** **12 57 54.5 +2.0**
**XNQ** **Khinaliq** **2.42 349** Pn **Pn** **12 57 55.3 +2.2**
XNQ Sn **Sb** **12 58 28.2 +1.1**
**IAZR** **Azarshahr** **2.44 244** Pn **Pn** **12 57 55.4 +2.0**
**ISHB** **Shabestar** **2.50 259** Pn **Pn** **12 57 55.3 +1.1**
**SBZ** **Shahbuz** **2.55 285** Pn **Pn** **12 57 57.0 +2.1**
SBZ Sn **Sb** **12 58 29.3 -1.4**
**NAX** **Nakhchivan** **2.56 280** Pn **Pn** **12 57 57.3 +2.4**
NAX Sn **Sb** **12 58 29.2 -1.5**
**QUBA** **Quba, Azerbaij** **2.57 356** Pn **Pb** **12 57 58.0 -1.9**
QUBA Sn **Sb** **12 58 29.9 -1.2**
**GANJ** **Ganja** **2.63 316** Pn **Pn** **12 57 57.2 +1.3**
GANJ Sn **Sb** **12 58 30.9 -1.9**
**IGZV** **Ghazvin** **2.67 153** Pn **Pn** **12 57 56.2 -0.4**
**SEKA** **Sheki** **2.69 334** Pn **Pn** **12 57 59.0 +2.2**
SEKA Sn **Sb** **12 58 33.4 -1.2**
**QSAR** **Qusar** **2.75 353** Pn **Pn** **12 58 00.3 +2.9**
QSAR Sg **Sg** **12 58 44.7 +2.0**
**AKT** **Akhty** **2.80 344** *e*Pn **Pb** **12 58 02.2 -1.6**
600nm,0.3s
AKT *e*Sn **Sb** **12 58 38.9 +1.2**
440nm,2.2s
**AKT** **Akhty** **2.80 344** *d i*PN **Pn** **12 58 00.8 +2.6**
AKT *e* 12 58 08.9
AKT *e*S **Sb** **12 58 39.8 +2.1**
AKT *e* 12 58 48.9
AKT *e* 12 58 55.5
AKT pmax pmax
comp=Z,332nm,0.6s
AKT smax smax
comp=N,2µm,0.4s
AKT smax smax
comp=N,2µm,0.4s
AKT smax smax
comp=E,2µm,0.5s
AKT MLR MLR
comp=Z,2µm,2.0s
**KSMR** **Kasumkent** **2.85 351** *e*Pn **Pb** **12 58 02.2 -2.4**
comp=Z,480nm,0.9s
KSMR *e*Sn **Sb** **12 58 39.2 0.0**
comp=Z,440nm,8.5s
**KSMR** **Kasumkent** **2.85 351** *e*PN **Pb** **12 58 02.2 -2.4**
KSMR *e*S **Sb** **12 58 39.7 +0.5**
KSMR pmax pmax
comp=Z,865nm,0.5s
KSMR smax smax
comp=N,4µm,0.7s
**GDB** **GEDABAY** **3.00 311** Pn **Pn** **12 58 03.3 +2.2**
GDB Sn **Sn** **12 58 40.1 +3.5**
**MAHB** **Mahabad** **3.14 231** Pn **Pn** **12 58 03.6 +0.7**
**QABG** **Abgarm-Qazvin** **3.15 167** Pn **Pn** **12 58 02.9 -0.3**
**HYR** **Heyderabad** **3.16 288** Pn **Pn** **12 58 06.0 +2.9**
HYR Sg **Sb** **12 58 51.2 +3.1**
**MAKU** **Maku** **3.21 281** Pn **Pn** **12 58 05.6 +1.7**
**MZPU** **Pul - Mazandar** **3.25 135** Pn **Pn** **12 58 04.1 -0.4**
**DRN** **Derbent** **3.25 355** *e*Pn **Pb** **12 58 09.2 -2.3**
comp=N,640nm,0.1s
DRN *e*Sn **Sb** **12 58 51.4 +0.7**
comp=N,440nm,1.6s
**DRN** **Derbent** **3.25 355** *e*PN **Pb** **12 58 09.1 -2.3**
DRN *e*S **Sb** **12 58 51.3 +0.7**
DRN pmax pmax
comp=Z,144nm,0.6s
DRN smax smax
comp=N,2µm,0.4s
DRN smax smax
comp=E,1µm,0.3s
DRN smax smax
comp=N,1µm,0.5s
**ZKTA** **Zakatala** **3.27 331** Pn **Pn** **12 58 08.0 +3.3**
ZKTA Sn **Sn** **12 58 45.9 +2.8**
**GNI** **Garni** **3.38 295** Pn **Pn** **12 58 07.5 +1.2**
**GNI** **Garni** **3.38 295** Pn **Pb** **12 58 10.2 -3.5**
**GNI** **Garni** **3.38 295** Pn **Pb** **12 58 13.6 -0.2**
comp=N,64nm,0.3s,baz=314,slow=1.0,SNR=30
GNI Sn **Sb** **12 58 55.7 +1.2**
comp=N,62nm,0.3s,baz=29,slow=20,SNR=2.1
**GNI** **Garni** **3.38 295** P **Pb** **12 58 10.4 -3.3**
GNI S **Sn** **12 58 46.2 +0.3**
**GNI** **Garni** **3.38 295** *c i*PN **Pn** **12 58 08.2 +2.0**
**QZX** **Qazax, Azerbai** **3.44 312** Pn **Pn** **12 58 09.4 +2.5**
QZX Sn **Sn** **12 58 52.1 +4.9**
**URKR** **Urkarakh** **3.48 346** *e*Pn **Pn** **12 58 10.9 +3.3**
comp=N,360nm,0.2s
URKR *e*Sn **Sb** **12 58 54.8 -2.5**
comp=N,560nm,0.6s
**URKR** **Urkarakh** **3.48 346** *e*PN **Pn** **12 58 10.9 +3.3**
URKR *e*S **Sb** **12 58 55.3 -2.0**
URKR pmax pmax
comp=Z,196nm,0.4s
URKR smax smax
comp=E,516nm,0.4s
**KMKR** **Kumukh** **3.56 340** *e*Pn **Pn** **12 58 12.9 +4.1**
comp=E,120nm,0.0s
KMKR *e*Sn **Sb** **12 58 58.7 -1.2**
comp=E,440nm,1.2s
**KMKR** **Kumukh** **3.56 340** *e*PN **Pn** **12 58 12.9 +4.1**
KMKR *e*S **Sb** **12 58 58.7 -1.2**
KMKR pmax pmax
comp=Z,43nm,0.1s
KMKR smax smax
comp=E,1µm,0.6s
KMKR smax smax
comp=N,1µm,0.4s
KMKR smax smax
comp=N,899nm,0.4s
**TASB** **TASBURUN-IGDIR** **3.69 290** *e*P **Pb** **12 58 19.5 +0.6**
**SDS1** **Sardasht. Az.** **3.69 225** Pn **Pn** **12 58 11.3 +0.7**
**SGKR** **Sergokala** **3.76 348** *e*Pn **Pn** **12 58 15.6 +4.3**
comp=N,360nm,0.1s
SGKR *e*Sn **Sb** **12 59 03.8 -1.5**
comp=N,520nm,1.2s
**CLDR** **Caldiran** **3.77 277** *e*P **Pn** **12 58 08.7 -3.1**
**CLDR** **Caldiran** **3.77 277** *e*S **Sb** **12 59 01.9 -4.1**
**IPRN** **Peran** **3.83 131** Pn **Pn** **12 58 12.3 -0.1**
**GNBR** **Gunib** **3.84 340** *e*Pn **Pn** **12 58 16.8 +4.2**
comp=N,500nm,0.2s
GNBR *e*Sn **Sb** **12 59 05.6 -2.1**
comp=N,550nm,0.8s
**GNBR** **Gunib** **3.84 340** *e*PN **Pn** **12 58 16.7 +4.2**
GNBR *e*S **Sb** **12 59 05.6 -2.1**
GNBR pmax pmax
comp=Z,219nm,0.5s
GNBR smax smax
comp=N,691nm,0.6s
GNBR smax smax
comp=E,790nm,0.6s
GNBR smax smax
comp=E,642nm,0.6s
**HAGD** **Aghdareh** **3.97 175** Pn **Pn** **12 58 14.8 +0.3**
**SNQR** **Sonqor, Kerman** **4.02 193** Pn **Pn** **12 58 16.7 +1.4**
**ARKR** **Arakani** **4.03 341** *e*Pn **Pn** **12 58 18.3 +3.2**
comp=E,560nm,0.2s
ARKR *e*Sn **Sn** **12 59 07.8 +5.9**
comp=E,560nm,0.6s
**XNZR** **Khunzakh** **4.05 338** *e*Pn **Pn** **12 58 18.3 +2.8**
comp=E,520nm,0.3s
XNZR *e*Sn **Sn** **12 59 08.0 +5.4**
comp=E,560nm,0.2s
**HNZR** **Khunzah** **4.07 338** *e*PN **Pn** **12 58 18.3 +2.6**
HNZR *e*S **Sn** **12 59 08.2 +5.3**
HNZR pmax pmax
comp=Z,266nm,0.5s
HNZR smax smax
comp=E,302nm,0.7s
**ILIN** **Lien** **4.12 201** Pn **Pn** **12 58 17.9 +1.4**
**IDMV** **Damavand** **4.15 140** Pn **Pn** **12 58 17.7 +0.8**
**UNCR** **Uncukul** **4.19 340** *e*Pn **Pn** **12 58 20.6 +3.3**
comp=E,480nm,0.3s
UNCR *e*Sn **Sb** **12 59 12.8 -4.9**
comp=E,560nm,0.8s
**UNCR** **Uncukul** **4.19 340** *e*PN **Pn** **12 58 20.6 +3.3**
UNCR *e*S **Sb** **12 59 13.3 -4.4**
UNCR pmax pmax
comp=Z,257nm,0.5s
UNCR smax smax
comp=N,808nm,0.6s
**VANB** **Van** **4.19 269** *e*P **Pn** **12 58 21.8 +4.4**
**BUJR** **Buynaksk** **4.22 343** *e*Pn Pn 12 58 22.6 +4.9
comp=N,360nm,0.3s
BUJR *e*Sn **Sb** **12 59 15.1 -3.3**
comp=N,680nm,1.5s
**BUJR** **Buynaksk** **4.22 343** *e*PN Pn 12 58 22.5 +4.9
BUJR *e*S **Sb** **12 59 16.1 -2.4**
BUJR pmax pmax
comp=Z,304nm,0.4s
BUJR smax smax
comp=N,1µm,0.6s
BUJR smax smax
comp=E,1µm,0.7s
BUJR smax smax
comp=E,2µm,0.7s
**IALA** **Alasht** **4.22 129** Pn **Pn** **12 58 18.1 +0.1**
**MAK** **Makhachkala** **4.27 348** *i*PN **Pn** **12 58 21.5 +3.2**
MAK *e*S **Sb** **12 59 14.4 -5.6**
MAK pmax pmax
comp=Z,181nm,0.4s
MAK smax smax
comp=E,2µm,1.0s
MAK smax smax
comp=E,910nm,0.8s
MAK MLR MLR
comp=Z,952nm,7.0s
**BTLR** **Botlikh** **4.32 335** *e*Pn **Pn** **12 58 22.6 +3.6**
comp=Z,440nm,0.2s
BTLR *e*Sn **Sn** **12 59 15.5 +6.6**
comp=Z,560nm,0.3s
**BTLR** **Botlikh** **4.32 335** *e*PN **Pn** **12 58 22.6 +3.6**
BTLR *e*S **Sb** **12 59 15.9 -5.5**
BTLR pmax pmax
comp=Z,163nm,0.4s
BTLR smax smax
comp=E,226nm,0.6s
**CUKT** **Cukurca** **4.33 251** *e*P **Pn** **12 58 21.2 +1.8**
**IQOM** **Qom** **4.36 154** Pn **Pn** **12 58 20.1 +0.2**
**DBC** **Dubki** **4.47 342** *e*Pn **Pn** **12 58 24.6 +3.5**
comp=E,450nm,0.2s
DBC *e*Sn **Sn** **12 59 19.5 +6.9**
comp=E,600nm,0.5s
**DBC** **Dubki** **4.47 342** *e*PN **Pn** **12 58 24.6 +3.5**
DBC *e*S **Sb** **12 59 19.8 -5.9**
DBC pmax pmax
comp=Z,164nm,0.4s
DBC smax smax
comp=E,542nm,0.6s
**GEVA** **Gevas** **4.48 266** Pn **Pn** **12 58 24.2 +2.9**
**IVRN** **Varamin** **4.48 147** Pn **Pn** **12 58 22.2 +0.8**
**IFIR** **Firoozkooh** **4.49 133** Pn **Pn** **12 58 22.9 +1.3**
**IDHR** **Dehrash** **4.50 206** Pn **Pn** **12 58 23.6 +1.9**
**AGRB** **Hanur-Agry** **4.53 282** P **Pn** **12 58 23.9 +1.7**
**AKDM** **Akdamar-Van** **4.54 266** *e*P **Pn** **12 58 26.1 +3.9**
**DLMR** **Dylym** **4.56 340** *e*Pn **Pn** **12 58 26.0 +3.5**
comp=E,360nm,0.4s
DLMR *e*Sn **Sn** **12 59 22.1 +7.2**
comp=E,520nm,2.0s
**DLMR** **Dylym** **4.56 340** *e*PN **Pn** **12 58 25.9 +3.5**
DLMR *e*S **Sn** **12 59 22.1 +7.2**
DLMR pmax pmax
comp=Z,424nm,0.4s
DLMR smax smax
comp=N,2µm,0.5s
DLMR smax smax
comp=E,2µm,0.6s
DLMR smax smax
comp=N,2µm,0.5s
**HSAM** **Samen** **4.57 181** Pn **Pn** **12 58 24.0 +1.3**
**IGLO** **Ghaloghah** **4.64 118** Pn **Pn** **12 58 23.5 -0.1**
**KCHF** **Cheshme Sefid,** **4.71 197** Pn **Pn** **12 58 26.0 +1.4**
**KARS** **Kars** **4.74 295** *e*P **Pb** **12 58 34.8 -2.0**
**KARS** **Kars** **4.74 295** **Pn** **12 58 24.2 -0.7**
**KARS** **Kars** **4.74 295** PN **Pn** **12 58 24.2 -0.7**
**IGHG** **Ghaleghazi** **4.78 202** Pn **Pn** **12 58 26.9 +1.3**
**ILAS** **Lasjerd** **4.79 134** Pn **Pn** **12 58 26.1 +0.3**
**AKH** **Akhalkalaki** **4.80 305** P **Pb** **12 58 37.9 0.0**
**MLAZ** **Malazgirt-MUS** **4.84 276** *e*P Pb 12 58 32.6 -6.0
**KGS1** **Ghasr-e-Shirin** **4.97 212** Pn **Pn** **12 58 29.6 +1.6**
**IDOB** **Doab** **5.01 185** Pn **Pn** **12 58 29.8 +1.0**
**SIRT** **Sirnak** **5.13 257** Pn **Pn** **12 58 32.7 +2.4**
**GLG1** **Gilan-e-Gharb** **5.19 207** Pn **Pn** **12 58 32.3 +1.2**
**SENK** **Senkaya-Erzuru** **5.24 292** *e*P **Pb** **12 58 41.4 -4.0**
**ISFB** **Sefidab** **5.25 146** Pn **Pn** **12 58 32.4 +0.5**
**GURO** **Guroymak-BITLI** **5.25 269** *e*P Pn 12 58 37.0 +5.0
**GURO** **Guroymak-BITLI** **5.25 269** Pn **Pn** **12 58 34.4 +2.4**
**IANJ** **Anjilo** **5.30 127** Pn **Pn** **12 58 33.7 +0.9**
**IKFM** **Kafar-mosalman** **5.30 188** Pn **Pn** **12 58 34.1 +1.5**
**KOPR** **Koprukoy-ERZUR** **5.47 285** *e*P Pb 12 58 43.6 -5.7
**QAMS** **Qamsar** **5.48 156** Pn **Pn** **12 58 35.8 +0.6**
**IMND** **Minoodasht** **5.48 104** Pn **Pn** **12 58 34.2 -0.8**
**KRSH** **Karshahi** **5.54 149** Pn **Pn** **12 58 36.3 +0.4**
**ILBA** **Ilam Banvizeh** **5.54 202** Pn **Pn** **12 58 37.4 +1.4**
**MRVT** **Maraveh tapeh** **5.90 99** Pn **Pn** **12 58 40.7 -0.1**
**IKLH** **Kolahrood** **5.92 156** Pn **Pn** **12 58 42.1 +0.8**
**SVAN** **Silvan-Diyarba** **5.95 266** *e*P **Pn** **12 58 43.5 +2.0**
**BCA** **Borcka** **6.07 298** *e*P **Pn** **12 58 42.8 -0.2**
**BCA** **Borcka** **6.07 298** ⇑P **Pn** **12 58 47.3 +4.3**
**NCK** **Nalchik** **6.10 322** *i* P **Pn** **12 58 45.2 +1.8**
NCK pmax pmax
comp=Z,5.0nm,0.5s
**IPIR** **Pirpir** **6.34 163** Pn **Pn** **12 58 47.8 +0.7**
**MARD** **Mardin** **6.45 259** Pn **Pn** **12 58 50.6 +2.2**
**IZEF** **Zefreh** **6.56 153** Pn **Pn** **12 58 51.1 +1.0**
**KBZ** **Khabaz** **6.61 320** Pn Pn 12 58 55.8 +5.4
comp=Z,1.2nm,0.3s,baz=150,slow=8.3,SNR=13
**KBZ** **Khabaz** **6.61 320** *ce*P **Pn** **12 58 53.4 +3.0**
**MAZI** **Mazidag** **6.67 261** *e*P **Pn** **12 58 52.0 +0.6**
**JHBN** **Jahan bin** **6.73 166** Pn **Pn** **12 58 53.5 +1.1**
**SHA1** **Shidzhatmaz** **6.74 319** *i* P **Pn** **12 58 53.6 +1.1**
**KIV** **Kislovodsk** **6.88 321** Pn **Pn** **12 58 55.0 +0.8**
**KIV** **Kislovodsk** **6.88 321** Pn **Pn** **12 58 57.3 +3.0**
**KIV** **Kislovodsk** **6.88 321** P **Pn** **12 58 56.9 +2.6**
**KIV** **Kislovodsk** **6.88 321** *e*P **Pn** **12 58 55.6 +1.3**
KIV pmax pmax
comp=Z,26nm,1.0s
KIV MLR MLR
comp=Z,307nm,10.0s
**KIV** **Kislovodsk** **6.88 321** P **Pn** **12 58 55.1 +0.8**
comp=Z,37nm,0.7s,comp=Z,579nmcomp=Z,0.3nm
**ANAR** **Anarak** **6.90 143** Pn **Pn** **12 58 55.8 +1.2**
**IGAR** **Gharneh** **6.92 156** Pn **Pn** **12 58 55.9 +1.0**
**IBRJ** **Brojen** **7.17 163** Pn **Pn** **12 58 59.3 +0.8**
**PTK** **Pertek** **7.30 274** *e*P **Pn** **12 59 02.6 +2.5**
**SBZV** **Sabzevar** **7.44 106** Pn **Pn** **12 59 02.3 +0.2**
**TAPT** **Tabas- Tapeh t** **7.79 117** Pn **Pn** **12 59 07.3 +0.4**
**IEMG** **Emamgholi** **7.94 97** Pn **Pn** **12 59 08.5 -0.5**
**TNSJ** **Nastanj** **7.97 125** Pn **Pn** **12 59 09.6 +0.4**
**VSLR** **Vesyoloye** **8.06 308** *i* P **Pn** **12 59 11.0 +0.7**
VSLR pmax pmax
comp=Z,2.0nm,0.2s
VSLR MLR MLR
comp=Z,699nm,12.0s
**IAKL** **Akhelmad** **8.24 102** Pn **Pn** **12 59 13.6 +0.5**
**SOC** **Sochi** **8.32 308** *e*P **Pn** **12 59 13.4 -0.5**
SOC *e* 13 00 49.0
SOC pmax pmax
comp=Z,11nm,0.8s
SOC MLR MLR
comp=Z,1µm,15.0s
**LABN** **Labinsk** **8.37 317** *e*P **Pn** **12 59 13.4 -1.2**
LABN *e*S **Sn** **13 00 49.2 +0.6**
LABN pmax pmax
comp=Z,26nm,0.4s
LABN MLR MLR
comp=Z,1µm,13.0s
**IPAY** **Payeh** **8.47 103** Pn **Pn** **12 59 16.4 +0.2**
**TKDS** **Koohdasht(Taba** **8.52 125** Pn **Pn** **12 59 17.4 +0.6**
**TPRV** **Parvadeh(Tabas** **8.63 129** Pn **Pn** **12 59 19.2 +0.8**
**IKRD** **Kardeh** **8.77 100** Pn **Pn** **12 59 20.5 +0.2**
**IMEH** **Mehriz** **8.81 145** Pn **Pn** **12 59 21.7 +0.8**
**IMOG** **Moghan** **8.85 104** Pn **Pn** **12 59 21.8 +0.3**
**TBHD** **Torbat heydari** **9.04 109** Pn **Pn** **12 59 24.0 0.0**
**IBAF** **Bafgh** **9.10 140** Pn **Pn** **12 59 25.9 +1.1**
**ERBR** **Yeremizino-Bor** **9.23 321** *e*P **Pn** **12 59 25.6 -0.9**
ERBR *e*S **Sn** **13 01 10.6 +0.8**
ERBR pmax pmax
comp=Z,20nm,0.6s
ERBR MLR MLR
comp=Z,774nm,14.0s
**GAZ** **Gaziantep** **9.24 264** Pn **Pn** **12 59 28.1 +1.4**
**IMYA** **Miami** **9.35 102** Pn **Pn** **12 59 28.5 +0.3**
**KBD** **Kabd** **9.63 185** P **Pn** **12 59 31.4 -0.6**
KBD S **Sn** **13 01 16.4 -3.2**
**AFRZ** **Afriz** **9.88 120** Pn **Pn** **12 59 36.2 +0.6**
**TBJM** **Torbat-e-JAM** **9.91 107** Pn **Pn** **12 59 36.6 +0.6**
**BNN** **Bunyan** **10.06 274** Pn **Pn** **12 59 40.1 +2.1**
**ANN** **Anapa** **10.35 309** *e*P **Pn** **12 59 42.4 +0.6**
ANN *e*S **Sn** **13 01 40.6 +3.4**
ANN pmax pmax
comp=Z,28nm,0.8s
ANN MLR MLR
comp=Z,1µm,16.0s
**IKOO** **Kooshah** **10.49 124** Pn **Pn** **12 59 44.8 +0.8**
**DIKM** **Dikmen** **10.70 290** P **Pn** **12 59 48.0 +1.5**
comp=Z,17nm,1.2s
**SNOP** **Sinop** **10.81 292** Pn **Pn** **12 59 49.6 +1.6**
**BSRN** **Basiran** **10.87 126** Pn **Pn** **12 59 49.5 +0.4**
**ASF** **Jabal al Asfar** **11.69 239** Pn **Pn** **13 00 01.0 +0.8**
comp=Z,0.6nm,0.3s,baz=226,slow=0.0,SNR=7.0
**ASF** **Jabal al Asfar** **11.69 239** P **Pn** **13 00 04.2 +4.0**
**HRA** **Herat** **11.71 108** Pn **Pn** **12 59 59.8 -0.8**
**BR104** **Keskin Array S** **11.74 279** P **Pn** **13 00 02.5 +1.5**
comp=Z,17nm,1.1s,comp=Z,124nm
**BR131** **Keskin Array S** **11.75 279** *i* P **Pn** **13 00 02.7 +1.7**
**BRTR** **Keskin Array B** **11.75 279** Pn **Pn** **13 00 04.7 +3.6**
comp=Z,3.8nm,1.0s,baz=101,slow=13,SNR=17
**BR106** **Keskin Array S** **11.76 279** P **Pn** **13 00 02.8 +1.6**
comp=Z,17nm,0.9s,comp=Z,117nm
**BR105** **Keskin Array S** **11.76 279** P **Pn** **13 00 02.8 +1.6**
comp=Z,16nm,1.0s,comp=Z,139nm
**NATI** **Neve Ativ** **11.88 246** P **Pn** **13 00 07.2 +4.5**
**MMA0** **Mount Meron ar** **12.25 246** P P 13 00 14.0 -6.1
**MMA0B** **Mount Meron ar** **12.25 246** P **Pn** **13 00 11.8 +4.0**
**MMAI** **Mount Meron Ar** **12.25 246** Pn **Pn** **13 00 08.9 +1.0**
comp=Z,1.2nm,0.3s,baz=69,slow=14,SNR=21
MMAI LR LR 13 05 15.4
comp=Z,1µm,21.4s,baz=9.0,slow=40
**HNTI** **Hanita** **12.38 247** P Pn 13 00 14.7 +5.2
**HNTI** **Hanita** **12.38 247** P **Pn** **13 00 13.0 +3.4**
**ANTO** **Ankara** **12.40 280** Pn **Pn** **13 00 10.9 +1.1**
**ANTO** **Ankara** **12.40 280** P **Pn** **13 00 09.4 -0.4**
**ANTO** **Ankara** **12.40 280** P **Pn** **13 00 11.0 +1.1**
**SIM** **Simferopol'** **12.51 304** P **P** **13 00 26.7 +3.8**
SIM pmax pmax
comp=Z,16nm,0.8s
**BLGI** **Bet Lehem HaGe** **12.55 245** P **Pn** **13 00 15.1 +3.2**
**HMDT** **Nahal Hemdat** **12.58 243** P **Pn** **13 00 16.8 +4.5**
**OFRI** **`Ofer** **12.75 245** P **Pn** **13 00 18.1 +3.4**
**CSS** **Mathiatis** **12.91 258** Pn **Pn** **13 00 16.4 -0.4**
**CSS** **Mathiatis** **12.91 258** P **Pn** **13 00 18.7 +1.8**
comp=Z,27nm,1.4s,comp=Z,529nm
**SALP** **Salfit** **12.92 243** P Pn 13 00 21.9 +5.0
**SLTI** **Sal'it** **12.92 244** P **Pn** **13 00 20.4 +3.4**
**SHMA** **Al-Shehemyia** **13.03 171** P **Pn** **13 00 17.3 -1.2**
**DSI** **Dead Sea** **13.08 241** P **Pn** **13 00 22.7 +3.6**
**DSI** **Dead Sea** **13.08 241** P **Pn** **13 00 21.3 +2.2**
**GHAJ** **Ghor Haditha** **13.12 239** Pn **Pn** **13 00 21.5 +1.9**
**AB31** **Akbulak array** **13.19 34** ⇑P **Pn** **13 00 18.1 -2.5**
comp=Z,12nm,0.5s,baz=215,slow=13,SNR=213
AB31 ⇓S Sn 13 02 36.9 -10
comp=Z,33nm,0.7s,baz=225,slow=20,SNR=13
**AB31** **Akbulak array** **13.19 34** P **Pn** **13 00 18.1 -2.5**
**ABKAR** **Akbulak array** **13.19 34** **Pn** **13 00 18.3 -2.2**
**LISJ** **El Lisan** **13.21 239** P **Pn** **13 00 25.1 +4.2**
**MSBI** **Mazada** **13.25 240** P **Pn** **13 00 25.7 +4.3**
**MSBI** **Mazada** **13.25 240** P **Pn** **13 00 24.3 +2.9**
**VRH** **Novokhopyorsk** **13.36 341** *e*P **Pn** **13 00 21.2 -1.6**
VRH pmax pmax
comp=Z,34nm,0.6s
**AKTO** **Aktyubinsk** **13.37 26** Pn **Pn** **13 00 21.4 -1.7**
comp=Z,6.1nm,0.3s,baz=207,slow=7.8,SNR=39
AKTO Sn **Sn** **13 02 42.7 -8.4**
comp=Z,9.6nm,0.3s,baz=223,slow=21,SNR=8.0
AKTO LR LR 13 07 24.4
comp=Z,930nm,18.9s,baz=228,slow=46
comp=Z,18nm,0.4s
**YTIR** **Yattir** **13.38 241** P **Pn** **13 00 25.9 +2.5**
**MDUB** **Mudurnu** **13.63 283** Pn **Pn** **13 00 26.0 -0.7**
**BELG** **Belogornoye** **13.63 357** Pn **Pn** **13 00 24.6 -1.9**
comp=Z,4.5nm,0.3s,baz=296,slow=1.2,SNR=12
BELG Sn Sn 13 02 47.8 -9.4
comp=Z,2.8nm,0.3s,baz=358,slow=22,SNR=3.3
BELG LR LR 13 07 47.6
comp=Z,324nm,19.4s,baz=182,slow=47
comp=Z,35nm,0.6s
**BELG** **Belogornoye** **13.63 357** *i* P **Pn** **13 00 24.4 -2.1**
BELG pmax pmax
comp=Z,9.0nm,1.0s
BELG MLR MLR
comp=Z,13nm,12.0s
**ZFRI** **Zfri** **13.85 238** P **Pn** **13 00 32.5 +2.9**
**ZFRI** **Zfri** **13.85 238** P **Pn** **13 00 31.8 +2.3**
**PRNI** **Paran** **14.09 237** P **Pn** **13 00 35.6 +2.6**
**PRNI** **Paran** **14.09 237** P **Pn** **13 00 35.2 +2.3**
**SMRA** **Abu-Samra** **14.11 172** P **Pn** **13 00 31.5 -1.7**
**VSR** **Storozhevoye** **14.13 335** *e*P **Pn** **13 00 32.9 -0.5**
VSR pmax pmax
comp=Z,10.0nm,0.5s
**KZIT** **Kziot** **14.15 241** P **P** **13 00 38.5 -2.7**
**SHME** **Shamm** **14.15 152** P **Pn** **13 00 33.4 -0.3**
**TRNA** **Turayna** **14.17 171** P **Pn** **13 00 32.4 -1.6**
**BORA** **Eskisehir** **14.20 280** Pn **Pn** **13 00 33.5 -1.0**
**JRN** **Qarnain Island** **14.24 165** P **Pn** **13 00 34.1 -0.9**
**HRFI** **Mount Harif** **14.27 236** P **Pn** **13 00 37.5 +2.0**
**BANOM** **Banah** **14.32 151** P **Pn** **13 00 35.4 -0.8**
**KRMI** **Paran Flat** **14.43 237** P **Pn** **13 00 39.3 +1.7**
**AQBJ** **Aqaba** **14.47 235** P **Pn** **13 00 41.0 +2.8**
**VORR** **Voronezh** **14.51 336** *e*P **Pn** **13 00 36.2 -2.3**
VORR pmax pmax
comp=Z,49nm,0.4s
**MBRI** **Mt Berech** **14.51 236** P **Pn** **13 00 41.6 +2.8**
**MBRI** **Mt Berech** **14.51 236** P **Pn** **13 00 40.3 +1.4**
**EIL** **Elat** **14.57 236** Pn **Pn** **13 00 38.5 -1.0**
comp=Z,0.3nm,0.3s,baz=35,slow=4.8,SNR=14
EIL Lg Lg 13 04 48.6
comp=Z,0.2nm,0.3s,baz=110,slow=17,SNR=1.7
EIL LR LR 13 07 07.3
comp=Z,3µm,18.4s,baz=70,slow=41
comp=Z,20nm,1.2s
**EIL** **Elat** **14.57 236** P **Pn** **13 00 41.3 +1.7**
**MASF** **Masafi** **14.77 153** P **Pn** **13 00 41.1 -1.2**
**MSFE** **Esma-Masafi** **14.79 153** Pn **Pn** **13 00 40.3 -2.2**
**MDH** **Madha** **14.89 152** P **Pn** **13 00 43.2 -0.7**
**JASK** **Jask - Hormozg** **15.01 146** P **Pn** **13 00 44.9 -0.5**
**ELL** **Elmali** **15.03 268** **Pn** **13 00 47.9 +2.1**
ELL IAmb IAmb 13 00 54.9
comp=Z,166nm,1.8s
**ELL** **Elmali** **15.03 268** P **Pn** **13 00 47.9 +2.1**
ELL pmax pmax
comp=Z,166nm,1.8s
**AJN** **Ajban** **15.14 158** P **Pn** **13 00 48.2 +1.0**
**FAQ** **Al Faqa, Dubai** **15.16 155** P **Pn** **13 00 47.1 -0.4**
**UOSS** **Minazif** **15.18 153** Pn **Pn** **13 00 47.7 -0.1**
**UOSS** **Minazif** **15.18 153** Pn **Pn** **13 00 45.5 -2.2**
**UOSS** **Minazif** **15.18 153** P **Pn** **13 00 46.8 -1.0**
**ASUD** **Al Ashush, Dub** **15.19 156** P **Pn** **13 00 47.5 -0.3**
**HATD** **Hatta, Dubai** **15.27 154** Pn **Pn** **13 00 49.5 +0.6**
**HATD** **Hatta, Dubai** **15.27 154** P **Pn** **13 00 48.2 -0.7**
**NE56** **Odesa** **15.27 307** P **Pn** **13 00 49.8 +1.0**
**KLYT** **Kilyos** **15.29 285** P **Pn** **13 00 50.5 +1.4**
comp=Z,65nm,1.0s
**ASHO** **Ashiyiah** **15.37 154** Pn **Pn** **13 00 48.4 -1.9**
**ASHO** **Ashiyiah** **15.37 154** P **Pn** **13 00 49.0 -1.2**
**LPSR** **Galich'ya Gora** **15.40 337** *e*P **Pn** **13 00 49.0 -1.4**
LPSR pmax pmax
comp=Z,30nm,0.6s
**RAYN** **Ar Rayn** **15.47 191** Pn **Pn** **13 00 48.2 -3.3**
**RAYN** **Ar Rayn** **15.47 191** Pn **Pn** **13 00 48.4 -3.2**
**RAYN** **Ar Rayn** **15.47 191** P **Pn** **13 00 48.5 -3.1**
**RAYN** **Ar Rayn** **15.47 191** P **Pn** **13 00 48.3 -3.3**
RAYN pmax pmax
comp=Z,23nm,0.8s
**SIMJ** **Simiganj** **15.82 84** **Pn** **13 00 54.3 -1.9**
**ALNE** **Al Ain** **15.85 156** P **Pn** **13 00 55.8 -0.7**
**CHGR** **Chuyangaron** **15.94 84** **Pn** **13 00 57.0 -0.7**
CHGR IAmb IAmb 13 01 03.3
comp=Z,61nm,0.6s
**CHGR** **Chuyangaron** **15.94 84** P **Pn** **13 00 57.0 -0.7**

CHGR pmax pmax
comp=Z,61nm,0.6s
**SOHO SOHO 16.04 153** Pn **Pn 13 00 59.1 +0.3**
**SOHO SOHO 16.04 153** P **Pn 13 00 59.2 +0.3**
SOHO P **Pn 13 00 59.2 +0.3**
**TLCR 16.11 300** ⇓P **P 13 01 03.4 +0.4**
**TLCR 16.11 300** P **P 13 01 03.3 +0.4**
**CHM Chimkent 16.24 71** *e*P **Pn 13 01 01.8 +0.4**
baz=71
**CHM Chimkent 16.24 71** *e*P **Pn 13 01 01.8 +0.4**
**MZR Muzera 16.25 164** Pn **Pn 13 01 01.1 -0.6**
**MZR Muzera 16.25 164** P **Pn 13 01 02.7 +1.1**
SNR=28
MZR P **Pn 13 01 02.7 +1.1**
SNR=28
**TPGR Topolog 16.30 298** ⇓P **P 13 01 04.8 -0.2**
**TLBR Topalu 16.48 297** ⇑P **P 13 01 07.0 0.0**
**BRLS Borolday 16.49 68** *e*P **Pn 13 01 03.4 -1.3**
baz=69
**BRLS Borolday 16.49 68** *e*P **Pn 13 01 03.3 -1.3**
**HARR Harsova 16.59 297** ⇓P **P 13 01 09.0 +0.8**
**HARR Harsova 16.59 297** P **P 13 01 09.0 +0.8**
**MILM Milestii Mici 16.69 306** ⇓P **P 13 01 10.3 +1.1**
**MILM Milestii Mici 16.69 306** P **P 13 01 10.3 +1.1**
**ARQ Araqi 16.77 154** P **P 13 01 09.6 -0.8**
ARQ P **P 13 01 09.6 -0.8**
**GAR Garm 16.80 82** **Pn 13 01 07.6 -1.0**
GAR IAmb IAmb 13 01 15.1
comp=Z,95nm,0.8s
**HOQ Hoqain 16.83 152** P **P 13 01 10.9 -0.1**
**KBL Kabul 16.83 98** Pn **Pn 13 01 07.0 -2.1**
**KBL Kabul 16.83 98** P **Pn 13 01 07.0 -2.1**
KBL pmax pmax
comp=Z,37nm,1.2s
**KK31 Karatay Array 16.99 68** ⇑P **Pn 13 01 10.4 -0.5**
comp=Z,14nm,0.5s,baz=264,slow=14,SNR=136
KK31 ⇑S Sn 13 04 07.5 -12
comp=Z,26nm,0.8s,baz=266,slow=23,SNR=4.2
**KK31 Karatay Array 16.99 68** P **Pn 13 01 10.4 -0.5**
**KKAR Karatay Array 16.99 68** **Pn 13 01 10.1 -0.9**
**KKAR Karatay Array 16.99 68** P **Pn 13 01 10.1 -0.9**
KKAR pmax pmax
comp=Z,30nm,0.8s
**NGCH Negor - Chabah 17.00 138** P **P 13 01 12.4 -0.4**
**BTK Batken 17.11 79** **Pn 13 01 11.9 -0.5**
**BTK Batken 17.11 79** P **Pn 13 01 11.9 -0.5**
BTK pmax pmax
comp=Z,19nm,0.6s
**SORM Soroca 17.46 309** ⇓P **P 13 01 18.4 +0.7**
**SORM Soroca 17.46 309** P **P 13 01 18.4 +0.7**
**SORM Soroca 17.46 309** P **P 13 01 18.0 +0.3**
comp=Z,29nm,1.6s
**ODBI Odobesti 17.46 300** P **P 13 01 18.3 +0.4**
comp=Z,37nm,0.7s
**KARP Karpathos 17.49 266** Pn **Pn 13 01 17.8 +0.5**
KARP IAmb IAmb 13 01 27.4
comp=Z,82nm,0.8s
**KARP Karpathos 17.49 266** P **P 13 01 19.0 +0.6**
**KARP Karpathos 17.49 266** P **P 13 01 18.9 +0.6**
comp=Z,104nm,0.7s,comp=Z,1µm
**BSY Bisya 17.55 153** P **Pn 13 01 18.0 -0.1**
SNR=7.7
**SMDO Samad 17.58 150** P **Pn 13 01 18.4 0.0**
SMDO P **Pn 13 01 18.4 0.0**
**WSAR Wadi Sarin 17.65 149** P **Pn 13 01 17.8 -1.4**
comp=Z,0.8nm,0.3s,baz=1.1,slow=12,SNR=12
comp=Z,29nm,0.9s
**VRI Vrincioaia 17.71 301** ⇓P **P 13 01 22.6 +1.9**
**VRI Vrincioaia 17.71 301** P **P 13 01 22.5 +1.9**
**VRI Vrincioaia 17.71 301** P **P 13 01 21.1 +0.4**
comp=Z,9.8nm,0.8s,comp=Z,397nm
**PLOR5 Plostina Array 17.75 300** P **P 13 01 21.7 +0.6**
comp=Z,24nm,0.8s
**PLOR Plostina 17.76 301** ⇓P **P 13 01 23.4 +2.2**
**PLOR Plostina 17.76 301** P **P 13 01 23.4 +2.2**
**PLOR3 Plostina Array 17.77 301** P **P 13 01 21.8 +0.5**
comp=Z,27nm,0.9s
**DRK Karamyk 17.90 81** P **P 13 01 23.6 +0.5**
**DRK Karamyk 17.90 81** P **P 13 01 23.6 +0.5**
DRK pmax pmax
comp=Z,31nm,0.6s
**TESR Tescani 17.95 303** ⇓P **P 13 01 24.5 +1.2**
**TESR Tescani 17.95 303** P **P 13 01 24.1 +0.8**
comp=Z,24nm,1.0s
**COVR Voineasa-Covas 18.06 300** ⇓P **P 13 01 27.0 +2.5**
**ONER Baraj Valea Uz 18.07 302** ⇑P **P 13 01 26.6 +2.0**
**AK09 Malin Array Si 18.13 317** P **P 13 01 25.3 +0.1**
**AK07 Malin Array Si 18.14 317** P **Pn 13 01 25.2 +0.2**
**AK10 Malin Array Si 18.14 317** P **P 13 01 25.4 +0.1**
**MLR Muntele Rosu 18.15 299** **P 13 01 26.3 +0.7**
**MLR Muntele Rosu 18.15 299** P **P 13 01 26.2 +0.6**
comp=Z,5.3nm,0.7s,baz=163,slow=9.6,SNR=4.9
MLR LR LR 13 11 12.4
comp=Z,516nm,20.6s,baz=114,slow=46
**MLR Muntele Rosu 18.15 299** ⇓P **P 13 01 27.8 +2.2**
**MLR Muntele Rosu 18.15 299** P **P 13 01 26.3 +0.7**
MLR pmax pmax
comp=Z,7.0nm,0.7s
**MLR Muntele Rosu 18.15 299** P **P 13 01 26.8 +1.2**
comp=Z,15nm,1.0s,comp=Z,434nm
**AK08 Malin Array Si 18.16 317** P **Pn 13 01 25.5 +0.3**
**AK05 Malin Array Si 18.18 317** P **Pn 13 01 25.7 +0.2**
**AK02 Malin Array Si 18.19 317** P **Pn 13 01 26.0 +0.3**
**AK01 Malin Array Si 18.21 317** P **P 13 01 26.4 +0.4**
**AKASG Malin Array Be 18.21 317** P **Pn 13 01 25.0 -0.9**
comp=Z,4.0nm,0.3s,baz=125,slow=12,SNR=31
AKASG PcP **PcP 13 05 57.7 -0.4**
comp=Z,2.0nm,0.5s,baz=82,slow=2.1,SNR=6.8
AKASG LR LR 13 09 05.1
comp=Z,378nm,18.4s,baz=128,slow=39
comp=Z,5.2nm,0.5s
**AKASG Malin Array Be 18.21 317** *i* P **P 13 01 26.2 +0.2**
AKASG pmax pmax
comp=Z,5.0nm,0.5s
**AKBB Malin Array Si 18.21 317** **Pn 13 01 26.0 +0.1**
**AKBB Malin Array Si 18.21 317** *i* P **Pn 13 01 25.5 -0.4**
**AKBB Malin Array Si 18.21 317** P **P 13 01 26.8 +0.8**
**KIEV Kiev 18.21 317** **Pn 13 01 26.0 +0.1**
**KIEV Kiev 18.21 317** P **P 13 01 26.6 +0.5**
**KIEV Kiev 18.21 317** ⇓P **P 13 01 27.3 +1.2**
**KIEV Kiev 18.21 317** P **P 13 01 27.2 +1.2**
**KIEV Kiev 18.21 317** P **P 13 01 26.4 +0.3**
comp=Z,71nm,0.9s
**AK12 Malin Array Si 18.21 317** P **P 13 01 26.4 +0.3**
**JMDO Jabal Madar 18.23 151** P **Pn 13 01 26.0 -0.3**
SNR=9.6
JMDO P **Pn 13 01 26.0 -0.3**
SNR=9.6
**TURR Turia 18.24 301** ⇓P **P 13 01 27.5 +1.0**
**OBN Obninsk 18.27 337** **Pn 13 01 24.9 -1.7**
OBN IAmb IAmb 13 01 25.4
comp=Z,62nm,0.5s
**OBN Obninsk 18.27 337** P **Pn 13 01 24.8 -1.8**
comp=Z,6.7nm,0.3s,baz=156,slow=18,SNR=8.1
OBN S **Sn 13 04 46.9 -3.1**
comp=Z,16nm,0.4s,baz=243,slow=11,SNR=1.4
OBN LR LR 13 09 32.6
comp=Z,540nm,18.2s,baz=162,slow=41
comp=Z,56nm,0.5s
**OBN Obninsk 18.27 337** ⇑*e*P **Pn 13 01 24.9 -1.7**
OBN *e*S **Sn 13 04 51.3 +1.3**
OBN pmax pmax
comp=Z,36nm,0.8s
OBN MLR MLR
comp=Z,348nm,13.0s
**WBK Wadi Bani Khal 18.35 149** P **Pn 13 01 27.5 -0.4**
**MOS Moscow 18.52 340** *e*P **P 13 01 28.7 -0.7**
MOS *e*S **Sn 13 04 56.9 +1.0**
MOS pmax pmax
comp=Z,48nm,0.6s
**SANT Santorini 18.60 270** P **P 13 01 30.5 0.0**
**LUBAR Lubar, Ukraine 18.61 314** P **P 13 01 30.8 +0.3**
**MI29 MI29, Kamyanyy 18.80 315** P **Pn 13 01 33.6 +0.5**
**ARU Arti 18.82 17** P **P 13 01 31.7 -1.0**
ARU IAmb IAmb 13 01 41.7
comp=Z,42nm,0.4s
**ARU Arti 18.82 17** P **P 13 01 32.0 -0.7**
comp=Z,0.1nm,0.3s,baz=208,slow=6.0,SNR=40
ARU S Sn 13 04 48.9 -14
comp=Z,12nm,0.6s,baz=85,slow=24,SNR=2.4
comp=Z,27nm,0.4s
**ARU Arti 18.82 17***c i*P **P 13 01 31.4 -1.3**
ARU S **Sn 13 05 01.2 -1.9**
ARU pmax pmax
comp=Z,26nm,0.6s
**JLN Jalan Bani Buh 18.94 148** P **Pn 13 01 35.0 0.0**
SNR=5.2
JLN P **Pn 13 01 35.0 0.0**
SNR=5.2
**ARR Arges 19.02 298** ⇓P **Pn 13 01 37.4 +1.5**
**HORU Horodok 19.07 310** P **Pn 13 01 36.5 +0.2**
**MI28 Mi28,Pidlybu 19.16 316** P **Pn 13 01 37.7 +0.2**
**BURAR Bucovina Array 19.22 305** ⇓P **Pn 13 01 38.9 +0.5**
**BURAR Bucovina Array 19.22 305** P **Pn 13 01 38.8 +0.5**
**BUR08 Bucovina Ar. S 19.24 305** P **P 13 01 38.3 +0.7**
**IDI Anoyia 19.34 267** P **P 13 01 38.9 +0.2**
**IDI Anoyia 19.34 267** P **P 13 01 37.8 -0.9**
comp=Z,10.0nm,0.4s,baz=73,slow=10,SNR=27
IDI LR LR 13 10 55.8
comp=Z,635nm,19.6s,baz=75,slow=43
**EKS2 Erkin-Say 19.34 70** P **Pn 13 01 41.7 +1.8**
SNR=26
**MHTO MHTO 19.44 153** P **Pn 13 01 41.0 0.0**
SNR=11
**LOT Lotru 19.64 298** ⇓P **Pn 13 01 43.6 +0.3**
**SVE Sverdlovsk 19.68 20** *e*P **Pn 13 01 43.5 -0.2**
SVE *e*S S 13 05 12.8 -10
SVE pmax pmax
comp=Z,45nm,0.6s
**BTLS Baital 19.80 63** *e*P **P 13 01 44.1 +0.5**
baz=64
BTLS *e*S **Sn 13 05 27.1 +0.1**
baz=64
**BTLS Baital 19.80 63** *e*P **P 13 01 44.0 +0.5**
BTLS *e*S **Sn 13 05 27.1 +0.1**
**KIRV Kirov 19.82 1** P **P 13 01 43.0 -0.6**
comp=Z,9.6nm,0.3s,baz=148,slow=2.5,SNR=12
KIRV S S 13 05 12.0 -14
comp=Z,14nm,0.6s,baz=21,slow=24,SNR=2.2
KIRV LR LR 13 11 08.5
comp=Z,181nm,21.5s,baz=180,slow=42
comp=Z,76nm,0.6s
**KIRV Kirov 19.82 1***ce*P **P 13 01 43.7 +0.1**
**AAK Ala-Archa 19.87 71** P **Pn 13 01 47.5 +1.4**
SNR=33
**AAK Ala-Archa 19.87 71** P **Pn 13 01 45.7 -0.5**
AAK IAmb IAmb 13 01 50.2
comp=Z,52nm,0.8s
**AAK Ala-Archa 19.87 71** Pn **Pn 13 01 46.5 +0.4**
**AAK Ala-Archa 19.87 71** P **Pn 13 01 46.4 +0.3**
comp=Z,5.0nm,0.3s,baz=252,slow=3.8,SNR=56
AAK LR LR 13 11 11.2
comp=Z,1µm,18.8s,baz=280,slow=42
comp=Z,40nm,0.7s
**AAK Ala-Archa 19.87 71** P **Pn 13 01 47.7 +1.5**
AAK P **Pn 13 01 47.7 +1.5**
**AAK Ala-Archa 19.87 71** P **Pn 13 01 46.6 +0.4**
comp=Z,49nm,0.8s
**AAK Ala-Archa 19.87 71***ce*P **Pn 13 01 45.6 -0.6**
AAK pmax pmax
comp=Z,47nm,0.6s
**USP Ospenovka 19.91 69** P **P 13 01 45.5 +0.6**
SNR=21
**FRU1 Bishkek 19.98 70** P **P 13 01 46.4 +0.8**
FRU1 IAmb IAmb 13 01 51.0
comp=Z,53nm,0.9s
**FRU1 Bishkek 19.98 70** P **P 13 01 46.4 +0.8**
FRU1 pmax pmax
comp=Z,53nm,0.9s
**SGDS Sogindy 20.02 68** *e*P **P 13 01 46.6 +0.6**
baz=68
**SGDS Sogindy 20.02 68** *e*P **P 13 01 46.6 +0.6**
**CHMS Chumysh 20.08 70** P Pn 13 01 48.5 0.0
SNR=21
**CHMS Chumysh 20.08 70** ⇑P Pn 13 01 48.2 -0.3
comp=Z,50nm,0.9s
**CHMS Chumysh 20.08 70** P Pn 13 01 48.2 -0.3
**DQM 20.28 155** P **P 13 01 48.8 -0.1**
**RNPP5 Staryi Chortor 20.29 315** P **P 13 01 49.2 +0.4**
**GZR Gura Zlata 20.31 297** ⇓P Pn 13 01 50.6 -0.6
**BMR Baia Mare 20.35 304** ⇑P Pn 13 01 51.3 -0.3
**BMR Baia Mare 20.35 304** P Pn 13 01 51.2 -0.4
**RNPP9 Sopachiv 20.38 316** P **P 13 01 50.2 +0.5**
**NIL Nilore 20.41 97** **P 13 01 51.0 +0.7**
NIL IAmb IAmb 13 02 06.5
comp=Z,101nm,1.4s
**NIL Nilore 20.41 97** P Pn 13 01 52.2 -0.3
NIL P Pn 13 01 52.2 -0.3
**NIL Nilore 20.41 97** P **P 13 01 51.0 +0.7**
NIL pmax pmax
comp=Z,101nm,1.4s
**BRVK Borovoye 20.58 39** P **P 13 01 51.6 -0.4**
BRVK IAmb IAmb 13 02 05.9
comp=Z,51nm,0.7s
**BRVK Borovoye 20.58 39** P **P 13 01 53.2 +1.2**
BRVK P **P 13 01 53.2 +1.2**
**BRVK Borovoye 20.58 39** ⇑P **P 13 01 52.3 +0.4**
comp=Z,40nm,0.7s
**BRVK Borovoye 20.58 39***de*P **P 13 01 52.4 +0.4**
BRVK pmax pmax
comp=Z,108nm,1.7s
**BVAR Borovoye Array 20.61 39** P **P 13 01 53.1 +0.8**
comp=Z,41nm,0.4s,baz=236,slow=8.5,SNR=202
BVAR S **S 13 05 33.6 -8.2**
comp=Z,18nm,0.6s,baz=220,slow=25,SNR=8.5
comp=Z,41nm,0.4s
**DOK Doka 20.64 165** P **P 13 01 51.3 -1.5**
**DRGR 20.64 301** ⇓P Pn 13 01 54.4 -0.7
**DRGR 20.64 301** P Pn 13 01 54.4 -0.7
**TKM2 Tokmak 2 20.69 70** P Pn 13 01 55.3 -0.6
SNR=47
**TKM2 Tokmak 2 20.69 70** ⇑P Pn 13 01 55.4 -0.5
comp=Z,62nm,0.7s
**TKM2 Tokmak 2 20.69 70** P Pn 13 01 55.4 -0.5
**LVV L'vov 20.74 310** *e*P **P 13 01 54.9 +1.2**
LVV *e*S **S 13 05 40.9 -3.5**
LVV pmax pmax
comp=Z,330nm,1.2s
LVV MLR MLR
comp=E,100nm,15.0s
LVV MLR MLR
comp=N,100nm,14.0s
LVV MLR MLR
comp=Z,300nm,15.0s
**SURR Surduc 20.83 298** ⇓P Pn 13 01 56.4 -0.8
**BOVS Bovan 20.86 292** ⇓P **P 13 01 56.4 +1.3**
**BOOM Boomskoye usch 20.93 71** P **P 13 01 55.5 -0.6**
**BOOM Boomskoye usch 20.93 71** P **P 13 01 55.5 -0.6**
BOOM pmax pmax
comp=Z,37nm,0.7s
**MDVR Moldovita 20.97 295** ⇓P **P 13 01 57.3 +1.0**
**FNA Florina 21.09 284** P **P 13 01 58.3 +0.6**
**FNA Florina 21.09 284** P **P 13 01 58.3 +0.6**
FNA pmax pmax
comp=Z,37nm,1.2s
**MNK Minsk 21.13 325** *i* P **P 13 01 57.3 -0.7**
comp=E,26nm,1.0s
MNK *i* P **P 13 01 57.3 -0.7**
comp=N,36nm,1.0s
MNK *i* P **P 13 01 57.3 -0.7**
comp=Z,34nm,0.9s,baz=129
MNK *i* PP **PnPn 13 02 16.4 -0.8**
MNK *i* PPP PPP 13 02 24.2
MNK *i* S **S 13 05 53.1 +1.1**
MNK *i* SS **SnSn 13 06 16.0 +2.2**
MNK *i* SSS SSS 13 06 29.2
MNK *i* LQ LQ 13 08 23.2
MNK *i* LR LR 13 09 59.7
MNK *i* LRM MLR 13 11 13.0
comp=N,556nm,20.1s
MNK *i* LRM MLR 13 11 17.5
comp=E,378nm,20.6s
MNK *i* LRM MLR 13 11 17.5
comp=Z,586nm,19.3s
**MNK Minsk 21.13 325** *i* P **P 13 01 57.2 -0.7**
MNK *i* PPP PPP 13 02 24.2
MNK *i* S **S 13 05 53.1 +1.1**
MNK *i* SSS SSS 13 06 29.2
MNK pmax pmax
comp=Z,34nm,0.9s
MNK pmax pmax
comp=N,36nm,1.0s
MNK pmax pmax
comp=E,26nm,1.0s
MNK MLR MLR
comp=N,556nm,20.0s
MNK MLR MLR
comp=Z,586nm,19.0s
MNK MLR MLR
comp=E,378nm,21.0s
**BZS Buzias 21.16 298** ⇓P **P 13 02 00.1 +1.8**
**BZS Buzias 21.16 298** P **P 13 02 00.0 +1.8**
**ULHL Ulahol 21.16 72** P **P 13 02 01.1 +2.6**
SNR=12
**SIRR Siria 21.24 299** ⇓P **P 13 02 01.0 +1.9**
**WHFO Wadi Hawf 21.25 167** P **P 13 01 57.6 -1.9**
WHFO P **P 13 01 57.6 -1.9**
**KUU Kurty 21.29 67** *e*P **P 13 02 00.5 +0.7**
comp=E,20nm,0.6s,baz=67
**KUU Kurty 21.29 67** *e*P **P 13 02 00.4 +0.7**
KUU pmax pmax
comp=Z,19nm,0.6s
**UZHM Uzhgorod 21.40 306** P **P 13 02 02.1 +1.3**
**KWP Kalwaria Pacla 21.47 309** *e*P **P 13 02 02.7 +1.1**
KWP *e*S **S 13 06 00.3 +1.5**
**KWP Kalwaria Pacla 21.47 309** P **P 13 02 02.5 +0.9**
KWP IAmb IAmb 13 02 14.6
comp=Z,54nm,0.9s
**KWP Kalwaria Pacla 21.47 309** P **P 13 02 02.5 +0.9**
KWP pmax pmax
comp=Z,54nm,0.9s
**KOLS Kolonicke sedl 21.51 307** *e*P **P 13 02 03.0 +1.0**
KOLS *e* 13 02 06.6
**KOLS Kolonicke sedl 21.51 307** *e*P **P 13 02 03.0 +1.0**
KOLS *e* 13 02 06.6
**SHAO Shalim 21.55 162** P **P 13 02 01.2 -1.4**
**KBN Korca 21.55 284** P **P 13 02 04.1 +1.5**
KBN IAmb IAmb 13 02 13.5
comp=Z,71nm,1.3s
**KBN Korca 21.55 284** P **P 13 02 04.1 +1.5**
KBN pmax pmax
comp=Z,71nm,1.3s
**AAA Alma-Ata 21.67 69** *e*P **P 13 02 04.8 +0.9**
comp=Z,29nm,0.7s,baz=69
**AAA Alma-Ata 21.67 69** *e*P **P 13 02 04.8 +0.9**
AAA pmax pmax
comp=Z,29nm,0.7s
**DMTO DMTO 21.68 164** P **P 13 02 03.9 -0.2**
**TNSS Tian-Shan 21.69 70** *e*P **P 13 02 04.9 +0.5**
baz=70
**TNSS Tian-Shan 21.69 70** *e*P **P 13 02 04.9 +0.5**
**ABTO Aybut 21.73 168** P **P 13 02 03.3 -1.2**
**RBK Rabkut 21.74 166** P **P 13 02 04.3 -0.4**
**CHKK Chushkaly 21.76 67** *e*P **P 13 02 05.7 +0.9**
baz=68
**CHKK Chushkaly 21.76 67** *e*P **P 13 02 05.6 +0.9**
**MDOK Medeo 21.77 69** *e*P **P 13 02 05.7 +0.7**
baz=70
**MDOK Medeo 21.77 69** P **P 13 02 05.3 +0.3**
comp=Z,21nm,0.9s
**MDOK Medeo 21.77 69** *e*P **P 13 02 05.6 +0.6**
**NACGM Naroch 21.88 325** *e*P **P 13 02 07.7 +1.8**
comp=E,3µm,0.8s
**CRVS Cervenica-Dubn 22.01 306** *e*P **P 13 02 09.0 +1.6**
CRVS *e* 13 02 15.2
**CRVS Cervenica-Dubn 22.01 306** *e*P **P 13 02 09.0 +1.6**
CRVS *e* 13 02 15.2
**PUK Puka 22.16 288** P **P 13 02 09.9 +0.8**
PUK IAmb IAmb 13 02 20.2
comp=Z,127nm,1.8s
**ARXS Arharly 22.39 67** *e*P **P 13 02 11.0 -0.6**
**KEK Kerkira 22.39 282** P **P 13 02 12.2 +0.6**
KEK IAmb IAmb 13 02 20.6
comp=Z,50nm,1.0s
**PDG Podgorica 22.62 289** P **P 13 02 14.0 +0.1**
PDG IAmb IAmb 13 02 28.0
comp=Z,107nm,1.6s
**PRZ Przheval'sk 22.75 71** P **P 13 02 14.7 -0.9**
**PRZ Przheval'sk 22.75 71** P **P 13 02 14.7 -0.9**
PRZ pmax pmax
comp=Z,26nm,0.7s
**SATY Saty 22.76 70** *e*P **P 13 02 16.2 +0.5**
baz=70
SATY *e*S **S 13 06 25.6 +2.1**
baz=70
**SATY Saty 22.76 70** *e*P **P 13 02 16.1 +0.5**
SATY *e*S **S 13 06 25.6 +2.1**
**PSZ Piszkesteto 22.76 303** P **P 13 02 16.5 +1.0**
**PSZ Piszkesteto 22.76 303** ⇓P **P 13 02 17.1 +1.6**
**PSZ Piszkesteto 22.76 303** P **P 13 02 16.5 +1.0**
PSZ pmax pmax
comp=Z,55nm,1.5s
**ZHN Zhinishke 22.78 69** *e*P **P 13 02 16.4 +0.6**
baz=70
**ZHN Zhinishke 22.78 69** *e*P **P 13 02 16.4 +0.6**
**TDK Taldyqorghan 22.86 65** *e*P **P 13 02 17.3 +0.7**
comp=Z,17nm,0.5s,baz=65
**TDK Taldyqorghan 22.86 65** *e*P **P 13 02 17.2 +0.7**
TDK pmax pmax
comp=Z,17nm,0.5s
**NIE Niedzica 22.89 307** *e*P **P 13 02 18.1 +1.3**
NIE *e*S **S 13 06 26.4 +0.9**
**KPKS Kokpek 22.97 69** *e*P **P 13 02 18.3 +0.6**
baz=69
**KPKS Kokpek 22.97 69** *e*P **P 13 02 18.3 +0.6**
**SUW Suwalki 23.11 320** *e*P **P 13 02 18.9 0.0**
SUW *e*S **S 13 06 30.6 +1.5**
**SUW Suwalki 23.11 320** P **P 13 02 19.5 +0.6**
**SUW Suwalki 23.11 320** *e*P **P 13 02 20.5 +1.5**
**SUW Suwalki 23.11 320** P **P 13 02 19.5 +0.6**
SUW pmax pmax
comp=Z,74nm,0.9s
**UZB Uzynbulak 23.21 69** *e*P **P 13 02 21.1 +0.8**
baz=70
**UZB Uzynbulak 23.21 69** *e*P **P 13 02 21.0 +0.8**
**MORH Mrgy, Hungar 23.30 298** ⇓P **P 13 02 22.4 +1.5**
**BEL Belsk 23.42 313** *e*P **P 13 02 24.3 +2.2**
BEL *e*S **S 13 06 25.8 -8.4**
**OJC Ojcow 23.44 309** *e*P **P 13 02 21.6 -0.7**
OJC *e*S **S 13 06 33.1 -1.5**
**OJC Ojcow 23.44 309** P **P 13 02 22.4 +0.1**
OJC IAmb IAmb 13 02 31.4
comp=Z,63nm,1.3s
**OJC Ojcow 23.44 309** P **P 13 02 22.4 +0.1**
OJC pmax pmax
comp=Z,63nm,1.3s
**SHLS Shalkode 23.53 69** *e*P **P 13 02 27.4 +4.0**
comp=Z,12nm,0.8s,baz=70
**SHLS Shalkode 23.53 69** *e*P **P 13 02 27.4 +4.0**
SHLS pmax pmax
comp=Z,12nm,0.8s
**PABE Paberze 23.54 323** P **P 13 02 23.6 +0.4**
PABE IAmb IAmb 13 02 33.9
comp=Z,117nm,1.8s
**PABE Paberze 23.54 323** *e*P **P 13 02 24.5 +1.3**
**PDGK Podgornoye 23.55 69** P **P 13 02 23.9 +0.2**
comp=Z,22nm,0.8s
**PDGK Podgornoye 23.55 69** P **P 13 02 23.9 +0.2**
**VYHS Vyhne 23.58 304** *e*P **P 13 02 24.9 +1.2**
VYHS *e* 13 02 32.7
**VYHS Vyhne 23.58 304** *e*P **P 13 02 24.9 +1.2**
VYHS *e* 13 02 32.7
**KURBB Kurchatov Arra 24.08 51** P **P 13 02 29.9 +1.5**
comp=Z,24nm,0.8s,baz=259,slow=9.2,SNR=165
KURBB LR LR 13 14 16.3
comp=Z,860nm,18.2s,baz=259,slow=42
comp=Z,24nm,0.8s
**KURBB Kurchatov Arra 24.08 51** ⇑P **P 13 02 29.1 +0.6**
comp=Z,27nm,0.8s
**KURK Kurchatov 24.16 51** P **P 13 02 30.5 +1.3**
**KURK Kurchatov 24.16 51** P **P 13 02 31.4 +2.2**
KURK P **P 13 02 31.4 +2.2**
**KURK Kurchatov 24.16 51** ⇑P **P 13 02 30.6 +1.4**
comp=Z,46nm,0.8s
**KURK Kurchatov 24.16 51***ce*P **P 13 02 30.9 +1.7**
KURK pmax pmax
comp=Z,85nm,1.3s
**VSU Vasula 24.27 331***ce*P **P 13 02 31.5 +1.4**
VSU pmax pmax
comp=Z,49nm,1.7s
**OKC Ostrava-Krasne 24.35 307** AMS AMS 13 16 10.0
comp=Z,300nm,15.3s
**JAVC Velka Javorina 24.41 304** *e*P **P 13 02 34.7 +3.1**
**SMOL Smolenice 24.50 304** *e*P **P 13 02 34.0 +1.7**
SMOL *e* 13 02 42.4
**MORC Moravsky Berou 24.71 307** P **P 13 02 35.3 +1.0**
MORC IAmb IAmb 13 02 44.9
comp=Z,54nm,1.6s
**MORC Moravsky Berou 24.71 307** *e*P **P 13 02 34.9 +0.7**
**MORC Moravsky Berou 24.71 307** ⇓P **P 13 02 35.0 +0.7**
**MORC Moravsky Berou 24.71 307** P **P 13 02 35.0 +0.7**
**TIP Timpagrande 24.80 281** P **P 13 02 35.8 +0.6**
TIP IAmb IAmb 13 02 52.9

comp=Z,70nm,1.6s
**RONA Rosalia, Austr 25.10 301** *e*P **P 13 02 38.9 +1.0**
comp=Z,13nm,0.7s
**VRAC Vranov 25.20 305** *e*P **P 13 02 39.0 +0.3**
**VRAC Vranov 25.20 305** LR LR 13 15 00.7
comp=Z,154nm,18.5s,baz=91,slow=42
**VRAC Vranov 25.20 305** ⇓P **P 13 02 39.0 +0.3**
**VRAC Vranov 25.20 305** P **P 13 02 38.9 +0.3**
**ARBE Arbavere 25.23 332** *e*P **P 13 02 40.1 +1.3**
**KRLC Kraliky 25.26 307** AMS AMS 13 16 10.0
comp=Z,300nm,17.5s
**SGRT San Giovanni R 25.26 287** P **P 13 02 40.5 +1.1**
**KRUC Moravsky 25.28 305** *e*P **P 13 02 41.1 +1.7**
**CUC Castrocucco 25.40 283** P **P 13 02 43.4 +2.9**
**CONA Conrad Observa 25.43 302** *i* P **P 13 02 41.8 +1.0**
comp=Z,9.1nm,1.0s
**MAKZ Makanchi 25.52 61** P **P 13 02 42.2 +0.6**
**MAKZ Makanchi 25.52 61** ⇓P **P 13 02 43.1 +1.4**
comp=Z,35nm,0.6s
**MAKZ Makanchi 25.52 61** P **P 13 02 42.2 +0.6**
MAKZ pmax pmax
comp=Z,64nm,1.1s
**ARSA Arzberg 25.56 300** *i* P **P 13 02 43.3 +1.3**
comp=Z,19nm,0.7s
**MTSE Matsula 25.57 329** *e*P **P 13 02 43.2 +1.4**
**DPC Dobruska-Polom 25.62 307** *e*P **P 13 02 44.7 +2.2**
DPC AMS AMS 13 16 20.0
comp=Z,300nm,16.1s
**DPC Dobruska-Polom 25.62 307** *e*P **P 13 02 44.7 +2.2**
DPC MLR MLR
comp=Z,300nm,16.1s
**CEL Celeste 25.63 279** P **P 13 02 45.8 +3.1**
CEL IAmb IAmb 13 03 06.5
comp=Z,30nm,1.1s
**OSTC Ostas 25.73 308** *e*P **P 13 02 46.8 +3.3**
**OSTC Ostas 25.73 308** *e*P **P 13 02 46.8 +3.3**
**MK31 Makanchi Array 25.74 61** P **P 13 02 45.2 +1.7**
MK31 IAmb IAmb 13 02 48.0
comp=Z,36nm,0.9s
**MK31 Makanchi Array 25.74 61** ⇓P **P 13 02 44.6 +1.1**
comp=Z,38nm,0.8s,baz=254,slow=9.0,SNR=236
**MK31 Makanchi Array 25.74 61** *ce*P **P 13 02 45.0 +1.4**
**MKAR Makanchi Array 25.74 61** P **P 13 02 45.2 +1.6**
comp=Z,34nm,0.8s,baz=252,slow=11,SNR=126
MKAR LR LR 13 14 45.0
comp=Z,546nm,18.4s,baz=267,slow=41
comp=Z,34nm,0.8s
**KSP Ksiaz 25.76 308** *e*P **P 13 02 44.9 +1.2**
KSP *e*S **S 13 07 14.0 +2.2**
**SOKA Soboth 25.83 299** *e*P **P 13 02 45.8 +1.3**
comp=Z,19nm,1.2s
**CHVC Chvalec 25.84 308** AMS AMS 13 16 30.0
comp=Z,300nm,16.4s
**UPC Upice 25.85 308** *e*P **P 13 02 47.8 +3.3**
UPC AMS AMS 13 16 30.0
comp=Z,300nm,15.5s
**UPC Upice 25.85 308** *e*P **P 13 02 47.8 +3.3**
UPC MLR MLR
comp=Z,300nm,15.5s
**OBKA Obir 26.15 298** *e*P **P 13 02 48.1 +0.7**
comp=Z,18nm,1.5s
**MEF Metsahovi 26.36 332** *e*P **P 13 02 50.5 +1.5**
**JOF Joensuu 26.36 342** *e*P **P 13 02 49.6 +0.6**
**MOA Molln 26.48 301** *i* P **P 13 02 51.1 +0.8**
comp=Z,12nm,1.1s
**CKRC Cesky Krumlov 26.59 303** *e*P **P 13 02 52.1 +0.9**
CKRC AMS AMS 13 16 10.0
comp=Z,300nm,19.5s
**CKRC Cesky Krumlov 26.59 303** *e*P **P 13 02 52.1 +0.9**
CKRC MLR MLR
comp=Z,300nm,19.5s
**PRU Pruhonice 26.65 306** AMS AMS 13 14 50.0
comp=Z,300nm,21.3s
**FIA1 FINESS Array S 26.66 336** P **P 13 02 53.3 +1.6**
FIA1 IAmb IAmb 13 03 16.0
comp=Z,31nm,0.7s
**FINES FINESS Array B 26.66 336** P **P 13 02 51.7 0.0**
comp=Z,4.0nm,0.4s,baz=141,slow=12,SNR=43
FINES LR LR 13 14 43.4
comp=Z,483nm,18.6s,baz=132,slow=40
comp=Z,4.0nm,0.4s
**SABO M.te Sabotino 26.77 297** P **P 13 02 53.1 +0.2**
SABO IAmb IAmb 13 03 02.2
comp=Z,44nm,1.3s
**MYKA Terra Mystica 26.78 298** *e*P **P 13 02 54.0 +0.9**
comp=Z,12nm,1.4s
**PRED Cave del Predi 26.82 298** P **P 13 02 54.5 +1.1**
**CAMP Campotosto 26.94 289** P **P 13 02 55.0 +0.5**
**VAE Valguarnera 26.94 278** LR LR 13 16 08.0
comp=Z,214nm,19.3s,baz=91,slow=42
**GEC2 GERESS Array S 26.99 303** P **P 13 02 55.4 +0.4**
**GERES GERESS Array B 26.99 303** P **P 13 02 55.4 +0.4**
comp=Z,2.2nm,0.4s,baz=84,slow=10.0,SNR=1.1
GERES PcP **PcP 13 06 15.7 -0.4**
comp=Z,1.2nm,0.4s,baz=46,slow=4.2,SNR=4.1
GERES LR LR 13 16 56.4
comp=Z,182nm,18.8s,baz=96,slow=44
comp=Z,2.2nm,0.4s
**KBA Koelnbreinsper 27.02 299** *i* P **P 13 02 57.5 +2.2**
comp=Z,8.8nm,1.1s
**KHC Kasperske Hory 27.11 304** P **P 13 02 57.0 +1.0**
**KHC Kasperske Hory 27.11 304** *e*P **P 13 02 57.3 +1.3**
KHC AMS AMS 13 15 10.0
comp=Z,300nm,24.6s
**KHC Kasperske Hory 27.11 304** *ce*P **P 13 02 59.9 +3.9**
KHC pmax pmax
comp=Z,24nm,2.5s
**FDMO Fiordimonte 27.14 290** P **P 13 02 57.1 +0.8**
**BRG Berggiesshubel 27.21 308** *e*P **P 13 03 01.5 +4.7**
BRG Amp 13 03 02.2
comp=Z,4.3nm,0.9s
**BRG Berggiesshubel 27.21 308** *e*P **P 13 03 01.5 +4.7**
BRG pmax pmax
comp=Z,4.0nm,0.9s
BRG MLR MLR
comp=E,237nm,17.9s
BRG MLR MLR
comp=Z,254nm,18.8s
BRG MLR MLR
comp=N,309nm,20.9s
**LESA Schwarzleotal 27.50 300** *e*P **P 13 03 01.4 +1.9**
comp=N,14nm,1.3s
**ZSN Zaisan 27.55 60** *e*P **P 13 03 00.9 +1.0**
baz=60
**ZSN Zaisan 27.55 60** *e*P **P 13 03 00.9 +1.0**
**ABTA Abfaltersbach 27.56 299** *e*P **P 13 03 00.3 +0.2**
comp=N,9.4nm,1.3s
**KEF Keuruu 27.58 336** *e*P **P 13 03 01.2 +1.2**
**ATD Arta Tunnel 27.65 193** LR LR 13 14 46.7
comp=N,11nm,18.6s,baz=7.0,slow=38
**CLL Collm 27.89 308** P **P 13 03 03.6 +0.7**
CLL IAmb IAmb 13 03 11.8
comp=Z,25nm,1.1s
**CLL Collm 27.89 308** *i* P **P 13 03 03.9 +1.1**
comp=Z,11nm,0.9s
CLL *i* x x 13 03 10.8
comp=Z,25nm,1.1s
CLL *ex* x 13 03 17.0
CLL AMS AMS 13 16 00.0
comp=Z,300nm,18.7s
**CLL Collm 27.89 308** *i* P **P 13 03 03.9 +1.1**
CLL *i* 13 03 10.8
CLL pmax pmax
comp=Z,11nm,0.9s
CLL MLR MLR
comp=Z,300nm,18.7s
**WTTA Wattenberg 28.20 300** *e*P **P 13 03 06.2 +0.4**
comp=Z,10nm,0.6s
**WATA Walderalm 28.24 300** *e*P **P 13 03 06.3 +0.1**
comp=Z,4.4nm,0.6s
**SQTA Sankt Quirin 28.48 299** *e*P **P 13 03 07.9 -0.4**
comp=Z,8.1nm,0.5s
**MOTA Moosalm 28.56 300** *e*P **P 13 03 08.9 -0.2**
comp=Z,8.9nm,0.7s
**ZCCA Zocca 28.61 293** P **P 13 03 10.9 +1.4**
ZCCA IAmb IAmb 13 03 50.3
comp=Z,32nm,1.4s
**ZAA0 Zalesovo Array 28.77 46** P **P 13 03 11.2 +0.6**
**ZAA0 Zalesovo Array 28.77 46** ⇑P **P 13 03 10.5 -0.1**
comp=Z,1.7nm,0.7s
**ZALV Zalesovo Beam 28.77 46** P **P 13 03 11.4 +0.8**
comp=Z,9.6nm,0.6s,baz=264,slow=11,SNR=44
ZALV LR LR 13 16 20.0
comp=Z,398nm,18.6s,baz=246,slow=40
comp=Z,9.6nm,0.6s
**ZALV Zalesovo Beam 28.77 46** *i* P **P 13 03 11.5 +0.8**
ZALV pmax pmax
comp=Z,8.0nm,0.5s
**FETA Feichten 28.80 299** *e*P **P 13 03 11.4 +0.2**
comp=Z,13nm,0.8s
**RETA Reutte 28.80 300** *e*P **P 13 03 11.0 -0.2**
comp=Z,3.4nm,0.5s
**VAF Ylistaro 28.92 336** *e*P **P 13 03 12.3 +0.4**
**FUORN Ofenpass-Fuorn 29.11 298** P **P 13 03 14.7 +0.7**
**DAVA Damuels 29.39 300** *i* P **P 13 03 15.9 -0.5**
comp=Z,9.8nm,0.5s
**DGZ Jazzator, Alta 29.48 56** *d* iP **P 13 03 18.8 +1.6**
DGZ pmax pmax
comp=Z,12nm,1.0s
**WMQ Urumqi 29.50 68** *e*P **P 13 03 19.5 +2.1**
WMQ sP sP 13 03 28.5 +2.7
WMQ pmax pmax
comp=Z,21nm,0.7s
WMQ pmax pmax
comp=Z,130nm,3.7s
WMQ LR LR
comp=Z,790nm,15.7s
WMQ LR LR
comp=Z,700nm,16.7s
WMQ LR LR
comp=Z,450nm,15.3s
**MSSA Maissana 29.66 293** P **P 13 03 18.9 +0.2**
**APA Apatity 30.07 348** ⇓iP **P 13 03 21.7 -0.4**
APA *i* 13 04 26.0
APA *i* 13 06 28.0
APA *i* S **S 13 08 20.0 +0.7**
APA pmax pmax
comp=Z,8.0nm,0.7s
APA MLR MLR
comp=Z,300nm,12.0s
**LVZ Lovozero 30.19 349** P **P 13 03 24.4 +1.3**
**LVZ Lovozero 30.19 349** *i* P **P 13 03 22.6 -0.6**
LVZ pmax pmax
comp=Z,9.0nm,0.8s
**VSL Villasalto 30.37 284** P **P 13 03 26.3 +1.2**
VSL IAmb IAmb 13 03 33.9
comp=Z,48nm,1.7s
**HFS Hagfors 30.64 326** P **P 13 03 27.5 +0.3**
comp=Z,3.5nm,0.4s,baz=114,slow=10,SNR=34
HFS LR LR 13 17 18.5
comp=Z,542nm,20.5s,baz=116,slow=39
comp=Z,3.5nm,0.4s
**FURI Furi 31.11 200** LR LR 13 16 50.4
comp=Z,567nm,18.5s,baz=337,slow=38
**SENIN Lac Senin/Sane 31.15 298** P **P 13 03 32.1 0.0**
**KEST Kesra 31.34 277** P **P 13 03 33.6 -0.1**
**KEST Kesra 31.34 277** P **P 13 03 32.0 -1.7**
comp=Z,2.8nm,0.8s,baz=17,slow=11,SNR=2.6
KEST LR LR 13 18 31.7
comp=Z,373nm,19.3s,baz=345,slow=41
comp=Z,2.8nm,0.8s
**TATN Tataouine 31.48 271** P **P 13 03 36.1 +1.2**
**BNI Bardonecchia 31.64 295** P **P 13 03 36.5 +0.2**
**BNI Bardonecchia 31.64 295** P **P 13 03 36.5 +0.2**
BNI pmax pmax
comp=Z,18nm,1.2s
**NC602 NORSAR Array S 31.87 326** P **P 13 03 38.7 +0.7**
NC602 IAmb IAmb 13 04 14.6
comp=Z,39nm,1.7s
**NC405 NORSAR Array S 31.96 326** P **P 13 03 39.5 +0.6**
NC405 IAmb IAmb 13 04 19.6
comp=Z,50nm,1.6s
**NB2 NORSAR Subarra 32.15 326** P **P 13 03 40.1 -0.4**
comp=Z,4.4nm,0.6s,baz=118,slow=8.6
**NOA NORSAR Array B 32.15 326** P **P 13 03 39.8 -0.7**
comp=Z,0.7nm,0.4s,baz=125,slow=9.0,SNR=14
NOA LR LR 13 18 14.3
comp=Z,635nm,19.3s,baz=125,slow=39
comp=Z,0.7nm,0.4s
**KEV Kevo 33.12 346** P **P 13 03 50.2 +1.4**
**KEV Kevo 33.12 346** P **P 13 03 50.2 +1.4**
KEV pmax pmax
comp=Z,65nm,1.5s
**SSB Saint Sauveur 33.13 296** P **P 13 03 49.3 0.0**
SSB IAmb IAmb 13 04 00.4
comp=Z,27nm,1.5s
**SSB Saint Sauveur 33.13 296** P **P 13 03 49.3 0.0**
SSB pmax pmax
comp=Z,27nm,1.5s
**ARCES ARCESS Array B 33.22 345** P **P 13 03 50.0 +0.3**
comp=Z,4.8nm,0.7s,baz=145,slow=10,SNR=29
ARCES PcP **PcP 13 06 32.2 +0.4**
comp=Z,5.3nm,0.7s,baz=188,slow=1.8,SNR=5.3
ARCES LR LR 13 18 47.1
comp=Z,249nm,18.1s,baz=122,slow=39
comp=Z,4.8nm,0.7s
**HYB Hyderabad 33.59 121** *e*P **P 13 03 54.3 +0.8**
HYB *e* 13 08 32.3
**CEST Esterri de Car 35.83 292** P **P 13 04 13.1 +0.3**
CEST IAmb IAmb 13 04 20.7
comp=Z,19nm,1.0s
**KNGR Kungurtug, Tuv 36.00 55** *i* P **P 13 04 15.7 +1.6**
KNGR pmax pmax
comp=Z,20nm,1.0s
**GOMU GeErMu 36.35 79** P **P 13 04 20.0 +2.4**
GOMU pP pP 13 04 23.8 +0.3
GOMU sP sP 13 04 28.3 +2.4
GOMU pmax pmax
comp=Z,20nm,0.9s
GOMU LR LR
comp=Z,700nm,17.0s
GOMU LR LR
comp=Z,690nm,17.1s
GOMU LR LR
comp=Z,1μm,15.9s
**LODK Lodwar 37.25 202** P **P 13 04 25.9 +0.8**
**EKA Eskdalemuir Ar 38.04 313** P **P 13 04 31.6 +0.4**
comp=Z,4.8nm,0.4s,baz=101,slow=8.8,SNR=36
EKA PcP **PcP 13 06 46.8 +0.5**
comp=Z,4.4nm,0.8s,baz=94,slow=3.3,SNR=5.0
comp=Z,4.8nm,0.4s
**EKB Eskdalemuir 38.06 313** P **P 13 04 32.0 +0.6**
EKB IAmb IAmb 13 05 26.3
comp=Z,62nm,1.5s
**ESK Eskdalemuir 38.07 313** P **P 13 04 32.2 +0.8**
**ESK Eskdalemuir 38.07 313** P **P 13 04 32.2 +0.8**
ESK pmax pmax
comp=Z,102nm,1.9s
**GTA Gaotai 39.20 72** P **P 13 04 43.3 +1.9**
GTA pP sP 13 04 51.0 +1.3
GTA pmax pmax
comp=Z,13nm,1.5s
GTA LR LR
comp=Z,390nm,20.0s
GTA LR LR
comp=Z,330nm,15.6s
GTA LR LR
comp=Z,350nm,18.5s
**ZAK Zakamensk 39.69 55** *e*P **P 13 04 46.3 +1.0**
ZAK pmax pmax
comp=Z,9.0nm,1.4s
**TAM Tamanrasset 40.01 259** P **P 13 04 48.8 +0.5**
TAM IAmb IAmb 13 04 57.3
comp=Z,53nm,1.3s
**TAM Tamanrasset 40.01 259** P **P 13 04 48.8 +0.5**
TAM pmax pmax
comp=Z,53nm,1.3s
**IRK Irkutsk 40.19 52** *e*P **P 13 04 46.9 -2.3**
IRK pmax pmax
comp=Z,59nm,2.0s
**ESBB Sonseca Array 40.34 288** P **P 13 04 51.9 +1.2**
**ESDC Sonseca Array 40.34 288** P **P 13 04 49.5 -1.2**
comp=Z,3.9nm,0.8s,baz=66,slow=8.1,SNR=26
ESDC PcP **PcP 13 06 53.4 -0.5**
comp=Z,1.4nm,0.8s,baz=48,slow=3.3,SNR=6.1
ESDC LR LR 13 24 14.3
comp=Z,176nm,18.3s,baz=81,slow=40
comp=Z,3.9nm,0.8s
**PAB San Pablo 40.66 288** P **P 13 04 53.9 +0.5**
**PAB San Pablo 40.66 288** P **P 13 04 53.9 +0.5**
PAB pmax pmax
comp=Z,7.0nm,1.1s
**KMBO Kilima Mbogo 41.10 198** P **P 13 04 56.0 -1.4**
comp=Z,1.2nm,0.4s,baz=29,slow=13,SNR=3.5
KMBO LR LR 13 22 54.6
comp=Z,197nm,19.3s,baz=24,slow=38
comp=Z,1.2nm,0.4s
**SPB2 Spitsbergen Ar 41.70 350** P **P 13 05 03.0 +1.7**
SPB2 IAmb IAmb 13 05 11.2
comp=Z,23nm,0.7s
**SPITS Spitsbergen Ar 41.70 350** P **P 13 05 01.0 -0.4**
comp=Z,3.3nm,0.4s,baz=133,slow=9.7,SNR=25
comp=Z,3.3nm,0.4s
**SPITS Spitsbergen Ar 41.70 350** P **P 13 05 01.0 -0.4**
**SONM Songino Array 42.04 58** P **P 13 05 05.8 +1.1**
comp=Z,3.7nm,0.5s,baz=276,slow=9.2,SNR=21
SONM PcP **PcP 13 06 59.3 -0.1**
comp=Z,1.2nm,0.8s,baz=272,slow=4.8,SNR=5.1
SONM LR LR 13 24 32.0
comp=Z,345nm,20.2s,baz=278,slow=39
comp=Z,3.7nm,0.5s
**KIBK Kibwezi 42.10 196** P **P 13 05 05.8 +0.5**
**MVO Moncorvo 42.18 292** *e*P **P 13 05 03.5 -2.4**
comp=Z,24nm,1.8s
**ULN Ulaanbaatar 42.47 58** P **P 13 05 09.4 +1.2**
**ULN Ulaanbaatar 42.47 58** P **P 13 05 10.1 +1.9**
ULN P **P 13 05 10.1 +1.9**
**ULN Ulaanbaatar 42.47 58** *ce*P **P 13 05 09.9 +1.7**
ULN pmax pmax
comp=Z,25nm,0.8s
**PALK Pallekele 42.59 129** LR LR 13 25 52.6
comp=Z,151nm,18.7s,baz=345,slow=40
**MTE Manteigas 42.77 291** P **P 13 05 09.6 -1.1**
**MTE Manteigas 42.77 291** *e*P **P 13 05 09.6 -1.1**
comp=Z,29nm,1.6s
**KBS Kingsbay 42.85 350** P **P 13 05 09.5 -1.2**
KBS IAmb IAmb 13 06 37.1
comp=Z,35nm,1.4s
**KBS Kingsbay 42.85 350** P **P 13 05 09.5 -1.2**
KBS pmax pmax
comp=Z,35nm,1.4s
**PGAV Gavieira, Arco 42.86 293** *e*P **P 13 05 09.9 -1.5**
**PCBR Castelo Branco 42.89 290** *e*P **P 13 05 11.9 +0.4**
**PVIS Viseu 42.94 291** *e*P **P 13 05 10.9 -1.1**
**PMRV Marv??o 42.95 289** *e*P **P 13 05 13.0 +1.0**
**PBAR Barrancos 43.08 287** *e*P **P 13 05 12.3 -0.8**
**PESTR Estremoz 43.27 289** P **P 13 05 13.4 -1.3**
**PESTR Estremoz 43.27 289** *e*P **P 13 05 14.0 -0.6**
**JMIC Jan Mayen 43.28 336** LR LR 13 24 45.6
comp=Z,106nm,18.6s,baz=85,slow=38
**LZH Lanzhou 43.28 76** ⇓P **P 13 05 17.0 +2.0**
LZH sP sP 13 05 25.5 +2.1
LZH pmax pmax
comp=Z,53nm,1.2s
LZH LR LR
comp=Z,660nm,18.6s
LZH LR LR
comp=Z,470nm,16.8s
LZH LR LR
comp=Z,570nm,18.9s
**COI Coimbra 43.46 291** *e*P **P 13 05 17.5 +1.4**
**PMTG Montargil 43.67 289** *e*P **P 13 05 17.7 -0.2**
comp=Z,30nm,1.7s
**PBEJ Beja 43.74 288** *e*P **P 13 05 19.1 +0.6**
comp=Z,26nm,1.4s
**PBEJ Beja 43.74 288** *e*PP **PP 13 07 02.6 +2.4**
**PVAQ Vaqueiros 43.84 287** *e*P **P 13 05 18.2 -1.0**
comp=Z,35nm,1.7s
**PCVE Castro Verde 44.00 287** *e*P **P 13 05 23.0 +2.4**
**MESJ Messejana 44.07 287** *e*P **P 13 05 22.4 +1.3**
**KAAM Kaadhehdhoo 44.13 144** P **P 13 05 22.0 +0.4**
**PNCL Nicolau / Gran 44.21 288** *e*P **P 13 05 22.7 +0.5**
**PTEO Sao Teotonio 44.55 287** *e*P **P 13 05 26.5 +1.6**
comp=Z,52nm,1.8s
**PFVI Vila Bisbo 44.77 287** P **P 13 05 26.9 +0.2**
**CD2 Chengdu 45.25 83** P **P 13 05 29.0 -1.7**
CD2 S **S 13 12 05.3 -4.7**
CD2 pmax pmax
comp=Z,20nm,0.4s
CD2 LR LR
comp=Z,400nm,17.3s
CD2 LR LR
comp=Z,540nm,21.8s
CD2 LR LR
comp=Z,370nm,15.1s
**PZH PanZhiHua 45.71 89** P **P 13 05 33.5 -0.9**
PZH S **S 13 12 18.0 +1.2**
PZH pmax pmax
comp=Z,20nm,1.0s
PZH pmax pmax
comp=Z,140nm,5.2s
PZH LR LR
comp=Z,300nm,22.0s
PZH LR LR
comp=Z,200nm,21.0s
PZH LR LR
comp=Z,250nm,19.6s
**BTO Baotou 46.34 67** *e*P **P 13 05 40.3 +1.1**
BTO pP **pP 13 05 45.0 -0.2**
BTO sP **sP 13 05 47.3 -0.3**
BTO pmax pmax
comp=Z,46nm,1.6s
BTO pmax pmax
comp=Z,130nm,3.9s
BTO LR LR
comp=Z,740nm,18.6s
BTO LR LR
comp=Z,530nm,18.2s
BTO LR LR
comp=Z,810nm,14.6s
**KMI Kunming 47.17 90** ⇑P **P 13 05 47.3 +1.3**
KMI pP pP 13 05 51.0 -1.0
KMI pmax pmax
comp=Z,44nm,0.8s
KMI LR LR
comp=Z,260nm,14.1s
KMI LR LR
comp=Z,230nm,16.7s
KMI LR LR
comp=Z,360nm,21.5s
**BORG Borgarnes 47.32 327** LR LR 13 26 42.9
comp=Z,315nm,21.2s,baz=95,slow=38
**HHC Hu-ho-hao-te 47.37 67** ⇓*i*P **P 13 05 49.3 +2.0**
HHC sP sP 13 06 02.0 +6.3
HHC *e*S **S 13 12 44.8 +4.5**
HHC sS sS 13 12 53.0 +2.0
HHC pmax pmax
comp=Z,11nm,0.6s
HHC LR LR
comp=Z,280nm,16.5s
HHC LR LR
comp=Z,240nm,10.2s
HHC LR LR
comp=Z,300nm,17.9s
**SCO Scoresbysund 47.59 335** P **P 13 05 47.9 -0.5**
**SCO Scoresbysund 47.59 335** P **P 13 05 47.9 -0.5**
SCO pmax pmax
comp=Z,32nm,1.3s
**CM31 Chiang Mai Arr 47.85 100** P **P 13 05 51.6 +0.5**
**CMAR Chiang Mai Arr 47.85 100** P **P 13 05 51.1 0.0**
comp=Z,4.5nm,0.7s,baz=299,slow=8.7,SNR=23
CMAR PP **PP 13 07 45.4 +2.4**
comp=Z,0.7nm,0.3s,baz=300,slow=9.7,SNR=4.4
CMAR LR LR 13 32 18.8
comp=Z,96nm,19.6s,baz=110,slow=44
comp=Z,4.5nm,0.7s
**XAN Xi'an 47.91 76** ⇓P **P 13 05 52.5 +1.0**
XAN sP sP 13 06 00.3 +0.4
XAN pmax pmax
comp=Z,50nm,0.9s
XAN LR LR
comp=Z,610nm,20.6s
XAN LR LR
comp=Z,520nm,15.1s
XAN LR LR
comp=Z,730nm,15.9s
**CRAI Chiangrai 47.94 97** P **P 13 05 52.0 +0.2**
**TORD Torodi Ar. Bea 48.72 252** P **P 13 05 55.9 -2.0**
comp=Z,2.3nm,0.5s,baz=52,slow=7.2,SNR=29
TORD PcP **PcP 13 07 21.6 -1.2**
comp=Z,2.2nm,0.9s,baz=14,slow=3.8,SNR=4.1
TORD LR LR 13 29 42.9
comp=Z,167nm,20.6s,baz=86,slow=40
comp=Z,2.3nm,0.5s
**PHRA Phrae 48.81 99** P **P 13 05 58.7 +0.1**
**XLT XiLinHaoTe 49.55 61** *e*P **P 13 06 05.5 +1.5**
XLT sP sP 13 06 12.5 -0.3
XLT PcP **PcP 13 07 28.5 +2.9**
XLT PP **PP 13 08 00.5 +2.3**
XLT pmax pmax
comp=Z,9.0nm,1.2s
XLT pmax pmax
comp=Z,71nm,4.8s
**GYA Guiyang 49.57 86** P **P 13 06 05.0 +0.6**
GYA pmax pmax
comp=Z,17nm,0.7s
GYA LR LR
comp=Z,440nm,18.5s

GYA LR LR
comp=Z,390nm,23.4s
GYA LR LR
comp=Z,440nm,19.8s
**ENH Enshi 49.96 80** P **P 13 06 06.6 -0.6**
**SLVN Son La 50.07 94** P **P 13 06 08.3 +0.1**
**LYN LuoYang 50.38 74** P **P 13 06 12.3 +2.0**
LYN pmax pmax
comp=Z,36nm,0.8s
LYN LR LR
comp=Z,750nm,19.9s
LYN LR LR
comp=Z,440nm,13.0s
LYN LR LR
comp=Z,960nm,23.1s
**TIXI Tiksi 50.64 24** P **P 13 06 12.4 +0.7**
TIXI IAmb IAmb 13 06 13.9
comp=Z,19nm,1.2s
**TIXI Tiksi 50.64 24***ce*P **P 13 06 12.9 +1.2**
TIXI pmax pmax
comp=Z,16nm,1.0s
**HNS HongShan 50.89 70** ⇓P **P 13 06 15.5 +1.4**
HNS pmax pmax
comp=Z,14nm,1.0s
HNS LR LR
comp=Z,460nm,18.3s
HNS LR LR
comp=Z,340nm,19.1s
HNS LR LR
comp=Z,420nm,18.8s
**YAK Yakutsk 52.54 36** P **P 13 06 26.4 +0.4**
YAK IAmb IAmb 13 06 29.4
comp=Z,13nm,0.8s
**YAK Yakutsk 52.54 36** LR LR 13 32 30.0
comp=Z,838nm,18.5s,baz=265,slow=40
**YAK Yakutsk 52.54 36** *eP* **P 13 06 27.1 +1.1**
YAK *e**PP **pP 13 06 29.9 -2.2**
YAK *e* 13 07 36.0
YAK *e* 13 08 25.3
YAK *eS* **S 13 13 54.0 +2.4**
YAK *e* 13 16 17.4
YAK *eSS* **SS 13 17 23.3 -5.9**
YAK pmax pmax
comp=Z,12nm,0.9s
YAK pmax pmax
comp=E,6.0nm,1.2s
YAK pmax pmax
comp=Z,36nm,2.2s
YAK pmax pmax
comp=E,12nm,1.9s
YAK smax smax
comp=E,45nm,4.2s
YAK smax smax
comp=N,14nm,1.5s
YAK MLR MLR
comp=Z,1µm,22.0s
YAK MLR MLR
comp=E,541nm,18.0s
**SUMG Summit 52.67 338** P **P 13 06 28.9 +1.5**
SUMG IAmb IAmb 13 06 30.1
comp=Z,19nm,0.9s
**SUMG Summit 52.67 338** P **P 13 06 28.9 +1.5**
SUMG pmax pmax
comp=Z,19nm,0.9s
**ZEA Zeya 53.53 46** *eP* **P 13 06 34.9 +1.4**
ZEA pmax pmax
comp=Z,10.0nm,0.7s
ZEA MLR MLR
comp=E,200nm,21.0s
ZEA MLR MLR
comp=N,200nm,18.0s
ZEA MLR MLR
comp=Z,300nm,20.0s
**SRIT Nakonsritamara 54.52 110** P **P 13 06 41.2 0.0**
**HEH HeiHe 54.77 50** *eP* **P 13 06 43.5 +0.9**
HEH pmax pmax
comp=Z,32nm,1.0s
HEH pmax pmax
comp=Z,93nm,4.3s
HEH LR LR
comp=Z,240nm,15.5s
HEH LR LR
comp=Z,260nm,15.5s
HEH LR LR
comp=Z,350nm,18.7s
**NJ2 Nanjing 56.27 74** *eP* **P 13 06 53.0 -0.7**
NJ2 pmax pmax
comp=Z,11nm,0.6s
**BNX BinXian 56.43 55** ⇑P **P 13 06 55.3 +0.7**
BNX pmax pmax
comp=Z,13nm,0.8s
**KULM Kulim 57.51 112** P **P 13 07 01.3 -1.3**
**KLR Kul'dur 57.76 50** P **P 13 07 03.7 -0.2**
comp=Z,3.7nm,0.6s,baz=287,slow=8.5,SNR=12
comp=Z,3.7nm,0.6s
**KLR Kul'dur 57.76 50***ce*P **P 13 07 05.1 +1.2**
KLR pmax pmax
comp=Z,23nm,2.5s
**DBIC Dimbokro 57.81 251** P **P 13 07 02.5 -2.2**
comp=Z,2.6nm,0.5s,baz=27,slow=7.9,SNR=4.9
DBIC LR LR 13 33 45.5
comp=Z,198nm,19.7s,baz=12,slow=38
comp=Z,2.6nm,0.5s
**PSI Prapat 57.99 115** P **P 13 07 04.7 -1.4**
PSI pmax pmax
comp=Z,22nm,1.2s
**RPSI Rantau Prapat 58.06 115** P **P 13 07 04.7 -1.8**
RPSI IAmb IAmb 13 07 05.6
comp=Z,22nm,1.2s
**IPM Ipoh 58.33 112** P **P 13 07 07.3 -1.1**
IPM IAmb IAmb 13 07 07.5
comp=Z,19nm,0.9s
**SFJD Kangerlussuaq 58.42 333** LR LR 13 32 48.6
comp=Z,231nm,19.5s,baz=62,slow=37
**INCN Inchon 59.44 65** P **P 13 07 15.9 0.0**
**INCN Inchon 59.44 65** P **P 13 07 15.9 0.0**
INCN pmax pmax
comp=Z,67nm,1.6s
**IVI Ivigtut 59.97 326** P **P 13 07 20.2 +1.1**
**USA0B Ussuriysk Arra 60.03 56** P **P 13 07 19.6 -0.2**
USA0B IAmb IAmb 13 07 20.5
comp=Z,12nm,0.8s
**USA0B Ussuriysk Arra 60.03 56** P **P 13 07 19.6 -0.2**
**USRK Ussuriysk Ar. 60.03 56** P **P 13 07 19.8 0.0**
comp=Z,9.0nm,0.7s,baz=273,slow=6.4,SNR=24
USRK LR LR 13 36 23.6
comp=Z,766nm,18.5s,baz=301,slow=39
comp=Z,9.0nm,0.7s
**MSHR Mys Shultsa 60.22 58** *i* P **P 13 07 21.0 -0.1**
MSHR pmax pmax
comp=Z,29nm,1.2s
**KS19 Wonju Array Si 60.30 64** P **P 13 07 22.4 +0.6**
**KSRS Korea Array 60.36 64** P **P 13 07 22.6 +0.5**
comp=Z,7.8nm,0.5s,baz=293,slow=6.7,SNR=32
comp=Z,7.8nm,0.5s
**SEY Seymchan 61.94 30***ce*P **P 13 07 33.6 +1.2**
SEY pmax pmax
comp=Z,17nm,1.0s
**SSLB Suanglung 62.04 81** P **P 13 07 34.2 +0.4**
**MYKOM Kota Tinggi 62.22 112** P **P 13 07 33.0 -1.9**
MYKOM IAmb IAmb 13 07 35.0
comp=Z,20nm,1.2s
**MA2 Magadan 62.99 34** LR LR 13 38 56.7
comp=Z,417nm,18.1s,baz=302,slow=40
**TYV Tymovskoe 63.33 45** *eP* **P 13 07 43.5 +1.6**
TYV pmax pmax
comp=Z,8.0nm,1.1s
TYV pmax pmax
comp=Z,100nm,4.4s
**BILL Bilibino 63.76 22**⇑ *eP* **P 13 07 44.8 +0.3**
BILL *e* 13 10 05.1
BILL *eS* S 13 16 29.3 +11
BILL pmax pmax
comp=Z,11nm,0.9s
BILL MLR MLR
comp=Z,146nm,16.0s
**JNU Nakatsue 64.60 67** P **P 13 07 50.9 +0.3**
comp=Z,8.1nm,0.9s,baz=178,slow=5.1,SNR=4.1
JNU LR LR 13 39 28.8
comp=Z,104nm,19.9s,baz=357,slow=39
comp=Z,8.1nm,0.9s
**TSUM Tsumeb 64.66 213** LR LR 13 36 57.6
comp=Z,166nm,21.1s,baz=244,slow=37
**YSS Yuzh-Sakhalins 65.35 49** *eP* **P 13 07 56.0 +0.8**
YSS pmax pmax
comp=Z,10.0nm,1.1s

**ASAJ Asahikawa 66.74 51** P **P 13 08 03.6 -0.5**
comp=Z,4.1nm,0.7s,baz=304,slow=15,SNR=4.7
comp=Z,4.1nm,0.7s
**LBTB Lobatse 67.07 203** LR LR 13 41 05.7
comp=Z,176nm,18.1s,baz=23,slow=39
**LWLI Liwa 67.12 117** P **P 13 08 05.3 -1.8**
**MJAR Matsushiro Arr 67.93 60** P **P 13 08 11.4 -0.5**
comp=Z,2.8nm,0.8s,baz=301,slow=6.4,SNR=8.1
MJAR LR LR 13 41 05.0
comp=Z,248nm,18.7s,baz=304,slow=39
comp=Z,2.8nm,0.8s
**SBUM Sibu 67.97 105** P **P 13 08 12.8 +0.5**
SBUM IAmb IAmb 13 08 14.2
comp=Z,11nm,1.1s
**A19K Wainwright 69.17 10** P **P 13 08 19.6 +0.6**
baz=335
**A22K Sinclair Lake 69.19 8** P **P 13 08 20.2 +1.1**
baz=340
**A36M Sachs Harbour 69.44 358** P **P 13 08 21.7 +1.1**
A36M IAmb IAmb 13 08 30.3
comp=Z,14nm,1.1s
**A36M Sachs Harbour 69.44 358** P **P 13 08 21.1 +0.4**
baz=4.9
**B18K Kokolik River 69.83 11** P **P 13 08 24.4 +1.3**
baz=335
**B20K Meade River 69.88 9** P **P 13 08 24.9 +1.5**
B20K IAmb IAmb 13 08 25.7
comp=Z,12nm,0.9s
**B20K Meade River 69.88 9** P **P 13 08 24.3 +1.0**
baz=339,SNR=5.4
**B22K Teshekpuk Lake 69.99 8** P **P 13 08 25.9 +1.8**
**B22K Teshekpuk Lake 69.99 8** P **P 13 08 24.6 +0.5**
baz=342,SNR=6.4
**C16K Lisburne Hills 70.24 13** P **P 13 08 26.3 +0.7**
baz=332
**C17K DeLong Mountai 70.42 12** P **P 13 08 28.3 +1.5**
baz=334,SNR=7.7
**B21K Ikpikpuk River 70.55 8** P **P 13 08 29.2 +1.8**
B21K IAmb IAmb 13 08 30.4
comp=Z,17nm,0.9s
**B21K Ikpikpuk River 70.55 8** P **P 13 08 29.3 +1.8**
baz=341,SNR=9.0
**BOSA Boshof 70.55 202** P **P 13 08 26.6 -1.5**
comp=Z,3.3nm,0.8s,baz=8.8,slow=7.3,SNR=7.1
BOSA LR LR 13 41 43.7
comp=Z,168nm,19.5s,baz=3.0,slow=38
comp=Z,3.3nm,0.8s
**C18K Utukok River 70.58 11** P **P 13 08 29.0 +1.2**
**C18K Utukok River 70.58 11** P **P 13 08 29.1 +1.2**
baz=336,SNR=8.0
**C23K Itkillik River 70.76 7** P **P 13 08 30.8 +2.0**
**C23K Itkillik River 70.76 7** P **P 13 08 30.8 +2.0**
baz=344,SNR=5.5
**RDOG Red Dog Mine 70.85 12** P **P 13 08 30.1 +0.7**
**RDOG Red Dog Mine 70.85 12** P **P 13 08 30.6 +1.2**
baz=334
**C21K Kniveblade Rid 70.97 9** P **P 13 08 31.5 +1.4**
baz=341,SNR=8.2
**C24K Franklin Bluff 71.05 6** P **P 13 08 31.9 +1.4**
**C24K Franklin Bluff 71.05 6** P **P 13 08 32.3 +1.8**
baz=346
**D17K Noatak River 71.14 12** P **P 13 08 32.3 +1.1**
baz=334,SNR=8.9
**D20K Etivluk River 71.16 10** P **P 13 08 32.6 +1.3**
baz=339
**D19K Kuna River 71.16 10** P **P 13 08 32.7 +1.4**
**D19K Kuna River 71.16 10** P **P 13 08 32.2 +0.8**
baz=338
**D22K Ayikyak River 71.47 8** P **P 13 08 34.9 +1.7**
**D22K Ayikyak River 71.47 8** P **P 13 08 34.8 +1.7**
baz=342
**C27K Jago River 71.51 5** P **P 13 08 35.4 +2.0**
C27K IAmb IAmb 13 08 35.6
comp=Z,12nm,1.0s
**C27K Jago River 71.51 5** P **P 13 08 34.8 +1.4**
baz=350
**D24K Happy Valley 71.59 7** P **P 13 08 34.9 +1.1**
baz=346
**D23K Nanushuk River 71.60 7** P **P 13 08 35.5 +1.6**
D23K IAmb IAmb 13 08 36.6
comp=Z,8.7nm,0.8s
**D23K Nanushuk River 71.60 7** P **P 13 08 35.2 +1.3**
baz=344
**D25K Kavik River 71.62 6** IAmb IAmb 13 08 36.6
comp=Z,9.5nm,0.8s
**D25K Kavik River 71.62 6** P **P 13 08 35.5 +1.4**
baz=348,SNR=8.3
**E20K Nigu River 71.64 10** P **P 13 08 35.6 +1.3**
baz=340
**SCHQ Schefferville 71.72 327** P **P 13 08 35.1 +0.3**
comp=Z,7.9nm,0.9s,baz=43,slow=5.2,SNR=12
comp=Z,7.9nm,0.9s
**E21K Killik River 71.74 9** P **P 13 08 35.6 +0.8**
baz=341
**E18K Tukpahlearik C 71.79 11** P **P 13 08 36.1 +1.0**
baz=336,SNR=9.0
**E17K Hotham Inlet 71.91 12** P **P 13 08 36.9 +1.1**
baz=335
**TOLK Toolik Lake Re 72.02 7** P **P 13 08 38.0 +1.6**
TOLK IAmb IAmb 13 08 39.1
comp=Z,13nm,0.8s
**TOLK Toolik Lake Re 72.02 7** P **P 13 08 37.9 +1.4**
baz=345,SNR=7.3
**D27M Malcolm River 72.04 4** P **P 13 08 37.9 +1.2**
baz=352
**C36M Paulatuk 72.05 357** P **P 13 08 36.8 +0.2**
baz=5.8
**E19K Redstone River 72.26 10** P **P 13 08 38.7 +0.8**
**E19K Redstone River 72.26 10** P **P 13 08 38.1 +0.2**
baz=339
**E22K Anaktuvuk Pass 72.28 8** P **P 13 08 39.1 +1.0**
baz=343,SNR=6.1
**F14K Arctic Creek 72.55 15** P **P 13 08 40.5 +0.8**
baz=332
**E23K Chandalar 72.58 7** IAmb IAmb 13 08 42.4
comp=Z,22nm,1.6s
**E23K Chandalar 72.58 7** P **P 13 08 40.1 +0.2**
baz=345
**F17K Baldwin Pennin 72.59 12** P **P 13 08 40.4 +0.6**
baz=336
**F15K North Star Dit 72.66 14** P **P 13 08 41.1 +0.8**
baz=333
**E24K Your Creek 72.67 7** IAmb IAmb 13 08 43.2
comp=Z,15nm,1.2s
**E24K Your Creek 72.67 7** P **P 13 08 41.4 +0.9**
baz=346,SNR=6.4
**F18K Selawik 72.70 11** P **P 13 08 41.3 +0.8**
baz=337
**E28M Babbage River 72.75 3** IAmb IAmb 13 08 42.8
comp=Z,14nm,1.1s
**E28M Babbage River 72.75 3** P **P 13 08 42.0 +1.2**
baz=353
**F19K Shaleruckik Mo 72.76 11** P **P 13 08 41.4 +0.5**
F19K IAmb IAmb 13 08 42.5
comp=Z,17nm,1.1s
**F19K Shaleruckik Mo 72.76 11** P **P 13 08 41.5 +0.6**
baz=338,SNR=8.1
**F22K John River 72.84 8** P **P 13 08 42.7 +1.3**
baz=343,SNR=6.7
**F20K Avaraart Lake 72.85 10** P **P 13 08 41.9 +0.5**
**F20K Avaraart Lake 72.85 10** P **P 13 08 42.6 +1.2**
baz=340,SNR=6.0
**F21K Alatna River 72.97 9** P **P 13 08 43.4 +1.2**
F21K IAmb IAmb 13 08 44.7
comp=Z,14nm,0.8s
**F21K Alatna River 72.97 9** P **P 13 08 43.6 +1.4**
baz=342,SNR=16
**E29M Blow River 73.03 3** P **P 13 08 43.7 +1.2**
baz=354
**E27K Coleen River 73.06 4** IAmb IAmb 13 08 45.3
comp=Z,21nm,1.3s
**E27K Coleen River 73.06 4** P **P 13 08 43.9 +1.2**
baz=352,SNR=5.5
**INK Inuvik 73.21 1** P **P 13 08 44.6 +1.1**
baz=358
**F24K Squaw Lake 73.27 7** IAmb IAmb 13 08 47.0
comp=Z,26nm,1.9s
**F24K Squaw Lake 73.27 7** P **P 13 08 44.7 +0.7**
baz=346
**COLD Coldfoot 73.33 8** P **P 13 08 45.4 +1.1**
baz=345,SNR=6.8
**G16K Koyuk River 73.36 13** P **P 13 08 45.7 +1.3**
G16K IAmb IAmb 13 08 46.2
comp=Z,13nm,1.1s
**G16K Koyuk River 73.36 13** P **P 13 08 45.5 +1.0**
baz=335
**F25K Christian Rive 73.38 6** P **P 13 08 45.8 +1.1**
baz=348,SNR=6.1

**F26K Sheenjek River 73.39 5** P **P 13 08 45.9 +1.3**
baz=349
**G15K Niukluk 73.41 14** P **P 13 08 45.8 +1.0**
baz=334
**G22K Bettles 73.48 8** P **P 13 08 46.4 +1.3**
baz=344
**G18K Tagagawik 73.51 11** P **P 13 08 46.5 +1.1**
G18K IAmb IAmb 13 08 47.2
comp=Z,15nm,1.1s
**G18K Tagagawik 73.51 11** P **P 13 08 46.3 +1.0**
baz=338
**G19K Purcell Mounta 73.51 11** IAmb IAmb 13 08 47.5
comp=Z,22nm,1.0s
**G19K Purcell Mounta 73.51 11** P **P 13 08 46.5 +1.2**
baz=339,SNR=8.4
**G17K Kiwalik Mounta 73.55 12** P **P 13 08 46.4 +0.8**
baz=336,SNR=5.4
**G21K Allakaket 73.64 9** IAmb IAmb 13 08 48.2
comp=Z,14nm,0.9s
**G21K Allakaket 73.64 9** P **P 13 08 47.1 +1.0**
baz=342
**F28M Old Crow 73.72 3** P **P 13 08 47.5 +1.0**
baz=353
**G23K Bananza Creek 73.84 8** P **P 13 08 48.5 +1.2**
baz=345
**F30M Barrier River 73.87 2** P **P 13 08 48.2 +0.8**
baz=356
**H16K Elim 74.07 13** P **P 13 08 48.6 0.0**
baz=335
**F31M Tsiigehtchic 74.08 1** P **P 13 08 49.0 +0.5**
baz=358
**G24K Hadweenzic Riv 74.10 7** IAmb IAmb 13 08 51.7
comp=Z,12nm,0.9s
**G24K Hadweenzic Riv 74.10 7** P **P 13 08 50.5 +1.7**
baz=347,SNR=8.5
**G26K Porcupine Rive 74.15 5** P **P 13 08 50.6 +1.6**
baz=350,SNR=7.6
**G25K Bearman Lake 74.16 6** P **P 13 08 50.8 +1.7**
baz=348
**H19K Roundabout Mou 74.18 11** IAmb IAmb 13 08 51.6
comp=Z,21nm,1.4s
**H19K Roundabout Mou 74.18 11** P **P 13 08 50.2 +1.0**
baz=340
**H17K Granite Mounta 74.20 12** IAmb IAmb 13 08 51.3
comp=Z,12nm,0.8s
**H17K Granite Mounta 74.20 12** P **P 13 08 50.2 +0.8**
baz=337
**H18K Honhosa River 74.25 12** P **P 13 08 50.8 +1.1**
**H18K Honhosa River 74.25 12** P **P 13 08 50.7 +1.1**
baz=338
**G27K Doyon Strip 74.43 4** P **P 13 08 52.2 +1.5**
baz=352,SNR=5.7
**H20K Anotleneega Mo 74.43 10** P **P 13 08 51.8 +1.0**
baz=341,SNR=13
**G30M tAoh Zrail Nji 74.49 2** P **P 13 08 51.6 +0.5**
baz=356
**H22K Ishtalitna Cre 74.49 8** P **P 13 08 52.6 +1.6**
baz=344,SNR=10.0
**G29M Pine Creek 74.50 3** P **P 13 08 51.8 +0.7**
baz=354
**H21K Melozitna River 74.55 9** IAmb IAmb 13 08 54.1
comp=Z,16nm,0.9s
**H21K Melozitna River 74.55 9** P **P 13 08 52.7 +1.3**
baz=343,SNR=14
**G31M Satah River 74.59 1** IAmb IAmb 13 08 53.1
comp=Z,10nm,0.6s
**G31M Satah River 74.59 1** P **P 13 08 52.1 +0.5**
baz=358,SNR=10
**H25L Birch Creek 74.67 6** P **P 13 08 53.9 +1.8**
baz=348
**H23K Yukon River 74.75 8** P **P 13 08 54.6 +1.9**
H23K IAmb IAmb 13 08 55.8
comp=Z,12nm,0.9s
**H23K Yukon River 74.75 8** P **P 13 08 54.5 +1.9**
baz=345
**H24K Noodor Dome 74.91 7** P **P 13 08 55.0 +1.5**
baz=346
**H27K Steamboat Moun 75.01 4** P **P 13 08 55.6 +1.5**
baz=352,SNR=5.9
**EPYK Eagle Plains 75.08 2** P **P 13 08 55.4 +0.8**
EPYK IAmb IAmb 13 08 56.3
comp=Z,35nm,1.6s
**EPYK Eagle Plains 75.08 2** P **P 13 08 55.5 +1.0**
baz=356
**I20K Naaghedeneel 75.15 10** P **P 13 08 56.5 +1.6**
baz=341
**H29M Whitestone 75.18 3** IAmb IAmb 13 08 57.5
comp=Z,35nm,1.6s
**H29M Whitestone 75.18 3** P **P 13 08 55.8 +0.7**
baz=354,SNR=5.4
**GBN Guysborough 75.39 317** P **P 13 08 57.5 +0.9**
**MLY Manley 75.39 8** IAmb IAmb 13 08 58.5
comp=Z,12nm,1.0s
**MLY Manley 75.39 8** P **P 13 08 57.7 +1.3**
baz=344,SNR=7.6
**SUR Sutherland 75.42 204** LR LR 13 46 38.6
comp=Z,234nm,18.3s,baz=19,slow=39
**I23K Minto, Yukon-K 75.43 8** IAmb IAmb 13 09 08.1
comp=Z,34nm,1.8s
**I23K Minto, Yukon-K 75.43 8** P **P 13 08 58.0 +1.5**
baz=345
**PRP Porcupine Dome 75.43 6** P **P 13 08 58.1 +1.4**
baz=348
**ICQ Pointe Anglais 75.53 323** P **P 13 08 58.4 +1.0**
ICQ IAmb IAmb 13 09 06.9
comp=Z,20nm,1.2s
**J14K Nanvaranak Lak 75.54 15** P **P 13 08 58.2 +1.1**
J14K IAmb IAmb 13 08 59.1
comp=Z,11nm,0.8s
**J14K Nanvaranak Lak 75.54 15** P **P 13 08 58.5 +1.4**
baz=334
**J16K Anvik River 75.60 13** P **P 13 08 58.7 +1.1**
baz=337
**I27K Kandik River 75.63 4** P **P 13 08 59.1 +1.4**
baz=352
**POKR Poker Plat Res 75.66 7** P **P 13 08 58.5 +0.7**
**POKR Poker Plat Res 75.66 7** P **P 13 08 59.4 +1.6**
baz=347
**H31M Peel River 75.71 1** P **P 13 08 58.4 +0.2**
H31M IAmb IAmb 13 09 19.1
comp=Z,25nm,1.6s
**H31M Peel River 75.71 1** P **P 13 08 58.9 +0.7**
baz=357
**MDM Murphy Dome 75.73 7** IAmb IAmb 13 09 00.9
comp=Z,24nm,1.3s
**J19K Poorman 75.75 11** P **P 13 08 58.9 +0.6**
J19K IAmb IAmb 13 09 00.4
comp=Z,13nm,0.9s
**J19K Poorman 75.75 11** P **P 13 09 00.0 +1.7**
baz=340,SNR=9.4
**J17K VABM Dome 75.77 13** P **P 13 08 59.5 +1.1**
baz=338
**J20K Nowinta River 75.79 10** P **P 13 08 59.5 +1.0**
J20K IAmb IAmb 13 09 00.6
comp=Z,12nm,0.8s
**J20K Nowinta River 75.79 10** P **P 13 09 00.0 +1.5**
baz=342,SNR=10
**I26K Coal Creek Min 75.82 5** P **P 13 08 58.8 +0.1**
**I26K Coal Creek Min 75.82 5** P **P 13 08 59.9 +1.1**
baz=350,SNR=6.9
**COLA College 75.85 7** P **P 13 09 00.5 +1.6**
COLA IAmb IAmb 13 09 01.2
comp=Z,17nm,0.9s
**COLA College 75.85 7** P **P 13 08 60.0 +1.1**
baz=347
**COLA College 75.85 7** P **P 13 09 00.5 +1.6**
COLA pmax pmax
comp=Z,17nm,0.9s
**I28M Miner Creek 75.88 4** P **P 13 08 59.5 +0.4**
**I28M Miner Creek 75.88 4** P **P 13 08 59.8 +0.6**
baz=353,SNR=9.4
**NEA2 Nenana 76.00 8** P **P 13 09 00.8 +1.0**
**NEA2 Nenana 76.00 8** P **P 13 09 00.8 +1.0**
baz=346
**I29M Ogilvie Camp, 76.04 3** P **P 13 09 00.4 +0.4**
baz=354
**IL31 76.05 7** P **P 13 09 00.9 +1.0**
IL31 IAmb IAmb 13 09 32.0
comp=Z,20nm,1.8s
**ILAR Eielson Array 76.05 7** P **P 13 09 00.3 +0.3**
comp=Z,2.3nm,1.0s,baz=336,slow=4.5,SNR=15
comp=Z,2.3nm,1.0s
**K13K Kusilvak Mount 76.05 16** P **P 13 09 01.2 +1.2**
baz=334
**CCB Clear Creek Bu 76.08 7** P **P 13 09 00.7 +0.5**
**J18K Innoko River 76.08 11** P **P 13 09 01.2 +0.9**
**J18K Innoko River 76.08 11** P **P 13 09 01.6 +1.3**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=340,SNR=8.5 | | | | | | |
| I30M | **Mount Dempster** | 76.25 | 2 | P | P | 13 09 02.1 | +0.8 |
| | baz=356,SNR=10 | | | | | | |
| BPAW | **Bear Paw Mtn.** | 76.27 | 9 | P | P | 13 09 03.4 | +2.1 |
| | baz=344 | | | | | | |
| J25K | **Salcha River,** | 76.34 | 6 | P | P | 13 09 03.0 | +1.2 |
| J25K | | | | IAmb | IAmb | 13 09 04.1 | |
| | comp=Z,24nm,1.6s | | | | | | |
| J25K | **Salcha River,** | 76.34 | 6 | P | P | 13 09 02.6 | +0.8 |
| | baz=349,SNR=5.5 | | | | | | |
| K15K | **Wolf Creek Mou** | 76.34 | 14 | P | P | 13 09 02.7 | +0.9 |
| | baz=336 | | | | | | |
| HDA | **Harding Lake** | 76.40 | 7 | P | P | 13 09 03.2 | +1.1 |
| HDA | | | | IAmb | IAmb | 13 09 03.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| HDA | **Harding Lake** | 76.40 | 7 | P | P | 13 09 01.9 | -0.1 |
| | baz=347 | | | | | | |
| EGAK | **Eagle** | 76.48 | 4 | P | P | 13 09 03.2 | +0.8 |
| EGAK | **Eagle** | 76.48 | 4 | P | P | 13 09 03.3 | +0.8 |
| | baz=352,SNR=6.3 | | | | | | |
| BATG | **Bathurst New B** | 76.48 | 321 | P | P | 13 09 03.6 | +0.7 |
| BATG | | | | IAmb | IAmb | 13 09 04.8 | |
| | comp=Z,17nm,0.8s | | | | | | |
| K17K | **Iditarod** | 76.53 | 12 | IAmb | IAmb | 13 09 05.1 | |
| | comp=Z,15nm,1.0s | | | | | | |
| K17K | **Iditarod** | 76.53 | 12 | P | P | 13 09 03.6 | +0.8 |
| | baz=338 | | | | | | |
| K20K | **Telida** | 76.58 | 10 | IAmb | IAmb | 13 09 05.6 | |
| | comp=Z,14nm,0.9s | | | | | | |
| K20K | **Telida** | 76.58 | 10 | P | P | 13 09 04.2 | +1.1 |
| | baz=342 | | | | | | |
| J26L | **Joseph Creek** | 76.59 | 5 | P | P | 13 09 03.8 | +0.5 |
| | baz=350 | | | | | | |
| LMN | **Caledonia Moun** | 76.82 | 319 | P | P | 13 09 05.2 | +0.4 |
| LMN | | | | IAmb | IAmb | 13 09 06.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| MCK | **McKinley** | 76.86 | 8 | P | P | 13 09 05.4 | +0.7 |
| | baz=346 | | | | | | |
| J30M | **Hart River** | 76.89 | 2 | P | P | 13 09 06.1 | +1.1 |
| | baz=356,SNR=7.6 | | | | | | |
| L15K | **Ungalak Mounta** | 76.92 | 14 | P | P | 13 09 06.1 | +1.1 |
| | baz=336 | | | | | | |
| L14K | **Kuka Creek** | 76.99 | 15 | P | P | 13 09 05.6 | +0.3 |
| L14K | | | | IAmb | IAmb | 13 09 07.4 | |
| | comp=Z,11nm,0.8s | | | | | | |
| L14K | **Kuka Creek** | 76.99 | 15 | P | P | 13 09 07.0 | +1.6 |
| | baz=335,SNR=5.2 | | | | | | |
| HAL | **Halifax** | 77.00 | 317 | P | P | 13 09 06.9 | +1.1 |
| HAL | **Halifax** | 77.00 | 317 | P | P | 13 09 06.9 | +1.1 |
| HAL | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| L17K | **Donlin** | 77.08 | 13 | P | P | 13 09 06.9 | +1.0 |
| | baz=339 | | | | | | |
| SCRK | **Sand Creek** | 77.08 | 6 | P | P | 13 09 07.1 | +1.1 |
| SCRK | | | | IAmb | IAmb | 13 09 08.6 | |
| | comp=Z,22nm,1.4s | | | | | | |
| SCRK | **Sand Creek** | 77.08 | 6 | P | P | 13 09 07.1 | +1.1 |
| | baz=350,SNR=5.2 | | | | | | |
| K24K | **Donnelly Dome** | 77.10 | 7 | P | P | 13 09 06.9 | +0.9 |
| | baz=348,SNR=8.4 | | | | | | |
| K27K | **Chicken** | 77.16 | 5 | P | P | 13 09 07.0 | +0.6 |
| K27K | | | | IAmb | IAmb | 13 09 08.8 | |
| | comp=Z,22nm,1.6s | | | | | | |
| K27K | **Chicken** | 77.16 | 5 | P | P | 13 09 07.1 | +0.8 |
| | baz=351 | | | | | | |
| RND | **Reindeer** | 77.18 | 8 | P | P | 13 09 07.0 | +0.5 |
| RND | | | | IAmb | IAmb | 13 09 07.7 | |
| | comp=Z,14nm,1.0s | | | | | | |
| RND | **Reindeer** | 77.18 | 8 | P | P | 13 09 07.1 | +0.5 |
| RND | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| RIDG | **Independent Ri** | 77.24 | 6 | P | P | 13 09 07.3 | +0.5 |
| | baz=349 | | | | | | |
| L16K | **Owhat River** | 77.26 | 13 | P | P | 13 09 07.7 | +0.7 |
| | baz=338 | | | | | | |
| L18K | **Granite Mounta** | 77.26 | 12 | P | P | 13 09 08.2 | +1.3 |
| | baz=340 | | | | | | |
| SHEM | **Shemya Is, Ala** | 77.28 | 31 | LR | LR | 13 47 54.9 | |
| | comp=Z,198nm,18.2s,baz=322,slow=39 | | | | | | |
| DAWY | **Dawson** | 77.28 | 4 | P | P | 13 09 08.1 | +1.0 |
| | baz=353,SNR=9.1 | | | | | | |
| L20K | **Farewell, AK** | 77.44 | 11 | P | P | 13 09 08.7 | +0.7 |
| | baz=342 | | | | | | |
| L19K | **White Mountain** | 77.58 | 11 | IAmb | IAmb | 13 09 11.3 | |
| | comp=Z,13nm,1.2s | | | | | | |
| L19K | **White Mountain** | 77.58 | 11 | P | P | 13 09 10.2 | +1.4 |
| | baz=341,SNR=6.7 | | | | | | |
| K29M | **Barlow Dome** | 77.59 | 3 | P | P | 13 09 09.9 | +1.0 |
| K29M | **Barlow Dome** | 77.59 | 3 | P | P | 13 09 09.9 | +1.0 |
| | baz=355 | | | | | | |
| DHY | **Denali Highway** | 77.66 | 7 | P | P | 13 09 09.6 | +0.2 |
| | baz=347 | | | | | | |
| M14K | **Bethel** | 77.67 | 15 | P | P | 13 09 10.4 | +1.2 |
| M14K | **Bethel** | 77.67 | 15 | P | P | 13 09 10.7 | +1.5 |
| | baz=336,SNR=5.1 | | | | | | |
| WAT1 | **Susitna Watana** | 77.78 | 8 | P | P | 13 09 10.6 | +0.7 |
| | baz=346 | | | | | | |
| PQI | **Presque Isle** | 77.87 | 321 | P | P | 13 09 11.6 | +1.0 |
| PQI | | | | IAmb | IAmb | 13 09 12.6 | |
| | comp=Z,17nm,0.9s | | | | | | |
| M17K | **Holitna River** | 77.91 | 13 | P | P | 13 09 11.7 | +1.1 |
| | baz=339 | | | | | | |
| M19K | **Big River Lodg** | 77.92 | 11 | P | P | 13 09 12.4 | +1.7 |
| | baz=342 | | | | | | |
| PAX | **Paxson** | 77.95 | 7 | P | P | 13 09 11.5 | +0.6 |
| | baz=349 | | | | | | |
| M15K | **Kasigluk River** | 77.98 | 14 | P | P | 13 09 11.5 | +0.5 |
| | baz=337 | | | | | | |
| CUT | **Chulitna** | 77.99 | 9 | P | P | 13 09 11.5 | +0.5 |
| | baz=345 | | | | | | |
| M16K | **Timber Creek** | 78.00 | 13 | P | P | 13 09 11.8 | +0.8 |
| M16K | | | | IAmb | IAmb | 13 09 13.9 | |
| | comp=Z,21nm,1.1s | | | | | | |
| M16K | **Timber Creek** | 78.00 | 13 | P | P | 13 09 12.4 | +1.3 |
| | baz=338 | | | | | | |
| L26K | **Log Cabin Wild** | 78.07 | 6 | P | P | 13 09 12.8 | +1.4 |
| | baz=350,SNR=5.2 | | | | | | |
| D62A | **Allapoint, All** | 78.08 | 322 | P | P | 13 09 12.9 | +1.1 |
| D62A | | | | IAmb | IAmb | 13 09 14.0 | |
| | comp=Z,20nm,1.0s | | | | | | |
| M18K | **Stony River** | 78.09 | 12 | P | P | 13 09 12.7 | +1.2 |
| | baz=341 | | | | | | |
| WAT6 | **Susitna Watana** | 78.11 | 8 | P | P | 13 09 12.1 | +0.3 |
| | baz=347 | | | | | | |
| M20K | **Styx River** | 78.12 | 10 | P | P | 13 09 12.4 | +0.5 |
| | baz=343 | | | | | | |
| WRGLY | **Wrigley** | 78.13 | 356 | P | P | 13 09 12.6 | +0.9 |
| | baz=6.1 | | | | | | |
| L27K | **Beaver Creek,** | 78.14 | 5 | P | P | 13 09 13.3 | +1.4 |
| | baz=352,SNR=6.1 | | | | | | |
| YKA | **Yellowknife Ar** | 78.17 | 352 | P | P | 13 09 11.2 | -0.8 |
| | comp=Z,1.5nm,0.9s,baz=14,slow=7.2,SNR=3.9 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| YKA | **Yellowknife Ar** | 78.17 | 352 | *i* P | P | 13 09 14.6 | +2.6 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| SKT | **Skwentna** | 78.24 | 10 | P | P | 13 09 12.9 | +0.4 |
| | baz=344,SNR=6.6 | | | | | | |
| N14K | **Kuskokwak Cree** | 78.49 | 15 | P | P | 13 09 14.5 | +0.8 |
| | baz=336 | | | | | | |
| LDAQ | **Lac Daran** | 78.49 | 324 | P | P | 13 09 14.7 | +0.6 |
| LDAQ | | | | IAmb | IAmb | 13 09 16.4 | |
| | comp=Z,27nm,1.4s | | | | | | |
| KAPI | **Kappang** | 78.51 | 106 | P | P | 13 09 14.1 | -0.5 |
| KAPI | **Kappang** | 78.51 | 106 | P | P | 13 09 14.4 | -0.2 |
| | comp=Z,5.0nm,0.4s,baz=254,slow=2.9,SNR=4.5 | | | | | | |
| | comp=Z,5.0nm,0.4s | | | | | | |
| KAPI | **Kappang** | 78.51 | 106 | P | P | 13 09 14.1 | -0.5 |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,35nm,1.2s | | | | | | |
| HARP | **HAARP** | 78.54 | 7 | P | P | 13 09 14.6 | +0.5 |
| | baz=349 | | | | | | |
| N16K | **Nishlik Lake** | 78.54 | 13 | P | P | 13 09 15.0 | +0.9 |
| | baz=338 | | | | | | |
| N15K | **Kwethluk River** | 78.58 | 14 | P | P | 13 09 15.3 | +1.0 |
| | baz=337 | | | | | | |
| F64A | **Sherman** | 78.60 | 321 | P | P | 13 09 15.1 | +0.4 |
| F64A | | | | IAmb | IAmb | 13 09 16.8 | |
| | comp=Z,14nm,0.9s | | | | | | |
| M22K | **Willow** | 78.64 | 9 | P | P | 13 09 15.7 | +1.1 |
| | baz=345 | | | | | | |
| M26K | **Nabesna, AK** | 78.71 | 6 | P | P | 13 09 15.9 | +0.8 |
| M26K | | | | IAmb | IAmb | 13 09 40.4 | |
| | comp=Z,35nm,1.9s | | | | | | |
| M26K | **Nabesna, AK** | 78.71 | 6 | P | P | 13 09 15.6 | +0.5 |
| | baz=351 | | | | | | |
| M24K | **Tolsona, Glenn** | 78.73 | 7 | P | P | 13 09 15.0 | -0.2 |
| | baz=348 | | | | | | |
| M24K | **Tolsona, Glenn** | 78.73 | 7 | P | P | 13 09 16.0 | +0.8 |
| | baz=348 | | | | | | |
| N17K | **Nushagak Hills** | 78.77 | 13 | P | P | 13 09 16.3 | +0.9 |
| | baz=340 | | | | | | |
| SML | **Sawmill** | 78.80 | 8 | P | P | 13 09 16.2 | +0.6 |
| SML | **Sawmill** | 78.80 | 8 | P | P | 13 09 16.0 | +0.5 |
| | baz=346 | | | | | | |
| M27K | **Edge Creek, AK** | 78.83 | 5 | P | P | 13 09 16.5 | +0.7 |
| M27K | | | | IAmb | IAmb | 13 12 09.4 | |
| | comp=Z,26nm,1.4s | | | | | | |
| M27K | **Edge Creek, AK** | 78.83 | 5 | P | P | 13 09 16.2 | +0.3 |
| | baz=352 | | | | | | |
| SUA | **Susitna One** | 78.84 | 9 | P | P | 13 09 15.2 | -0.7 |
| SUA | **Susitna One** | 78.84 | 9 | P | P | 13 09 15.8 | -0.1 |
| | baz=344,SNR=5.2 | | | | | | |
| N18K | **Kilae Creek** | 78.85 | 12 | P | P | 13 09 15.6 | -0.2 |
| | baz=341 | | | | | | |
| M23K | **Glacier View** | 78.88 | 8 | P | P | 13 09 15.9 | -0.1 |
| | baz=347 | | | | | | |
| M30M | **Minto, Yukon** | 78.88 | 3 | P | P | 13 09 16.2 | +0.2 |
| | baz=356 | | | | | | |
| SCM | **Sheep Creek Mo** | 78.88 | 8 | P | P | 13 09 15.7 | -0.3 |
| | baz=347 | | | | | | |
| N20K | **Mount Spurr** | 78.90 | 10 | P | P | 13 09 16.5 | +0.3 |
| | baz=343 | | | | | | |
| SPCR | **Spurr Chakacha** | 78.90 | 10 | P | P | 13 09 16.3 | +0.2 |
| | baz=343 | | | | | | |
| SPIA | **Saint Paul Isl** | 78.91 | 20 | P | P | 13 09 16.9 | +0.8 |
| | baz=330 | | | | | | |
| PMR | **Palmer** | 78.92 | 9 | P | P | 13 09 15.9 | -0.2 |
| PMR | | | | IAmb | IAmb | 13 09 18.1 | |
| | comp=Z,27nm,1.2s | | | | | | |
| PMR | **Palmer** | 78.92 | 9 | P | P | 13 09 17.0 | +0.9 |
| | baz=346 | | | | | | |
| PMR | **Palmer** | 78.92 | 9 | P | P | 13 09 15.9 | -0.2 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,27nm,1.2s | | | | | | |
| N19K | **Bonanza Creek** | 78.94 | 11 | P | P | 13 09 16.4 | 0.0 |
| N19K | | | | IAmb | IAmb | 13 09 28.4 | |
| | comp=Z,39nm,1.6s | | | | | | |
| N19K | **Bonanza Creek** | 78.94 | 11 | P | P | 13 09 17.3 | +0.9 |
| | baz=342,SNR=5.6 | | | | | | |
| M29M | **Somme Creek** | 78.95 | 3 | P | P | 13 09 17.2 | +0.8 |
| | baz=354 | | | | | | |
| KNK | **Knik Glacier** | 79.17 | 8 | P | P | 13 09 18.2 | +0.6 |
| | baz=346 | | | | | | |
| O14K | **Tigyukauivet M** | 79.19 | 15 | P | P | 13 09 18.3 | +0.7 |
| | baz=356 | | | | | | |
| FARO | **Faro, Yukon** | 79.31 | 1 | P | P | 13 09 18.9 | +0.6 |
| FARO | | | | IAmb | IAmb | 13 09 20.9 | |
| | comp=Z,27nm,1.8s | | | | | | |
| FARO | **Faro, Yukon** | 79.31 | 1 | P | P | 13 09 19.2 | +0.9 |
| | baz=358 | | | | | | |
| M31M | **Drury Creek, Y** | 79.32 | 1 | P | P | 13 09 19.2 | +0.9 |
| | baz=357 | | | | | | |
| RC01 | **Rabbit Creek A** | 79.33 | 9 | P | P | 13 09 17.7 | -0.7 |
| | baz=345 | | | | | | |
| KLU | **Klutina** | 79.36 | 7 | IAmb | IAmb | 13 09 20.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| KLU | **Klutina** | 79.36 | 7 | P | P | 13 09 18.1 | -0.5 |
| | baz=348 | | | | | | |
| N25K | **Chitina, Valde** | 79.37 | 6 | P | P | 13 09 18.3 | -0.5 |
| | baz=349 | | | | | | |
| O16K | **Kokwok River B** | 79.49 | 14 | P | P | 13 09 19.3 | +0.1 |
| | baz=339 | | | | | | |
| O17K | **Koliganek Bris** | 79.50 | 13 | P | P | 13 09 19.3 | 0.0 |
| | baz=340 | | | | | | |
| YUK3 | **Moose Creek** | 79.50 | 4 | P | P | 13 09 20.8 | +1.1 |
| | baz=353 | | | | | | |
| O15K | **Ungalikthiuk R** | 79.55 | 14 | P | P | 13 09 19.8 | +0.1 |
| | baz=338 | | | | | | |
| O19K | **Port Alsworth** | 79.56 | 11 | P | P | 13 09 20.0 | +0.4 |
| | baz=342 | | | | | | |
| P08K | **Saint George I** | 79.60 | 20 | P | P | 13 09 20.6 | +0.7 |
| | baz=330 | | | | | | |
| MCARA | **McCarthy VSAT** | 79.72 | 6 | P | P | 13 09 21.1 | +0.6 |
| | baz=351 | | | | | | |
| PWL | **Port Wells** | 79.72 | 8 | P | P | 13 09 21.1 | +0.5 |
| | baz=346 | | | | | | |
| GLI | **Glacier Island** | 79.84 | 8 | P | P | 13 09 21.9 | +0.7 |
| | baz=347 | | | | | | |
| O20K | **Slope Mountain** | 79.92 | 11 | P | P | 13 09 21.9 | +0.2 |
| | baz=343 | | | | | | |
| O22K | **Cooper Landing** | 79.92 | 9 | P | P | 13 09 22.1 | +0.5 |
| | baz=345 | | | | | | |
| N30M | **Aishikik Lake** | 79.99 | 3 | P | P | 13 09 22.3 | +0.3 |
| | baz=355 | | | | | | |
| N31M | **Braeburn, Yuko** | 80.01 | 2 | P | P | 13 09 21.5 | -0.6 |
| | baz=356 | | | | | | |
| YUK4 | **Talbot Arm** | 80.03 | 4 | P | P | 13 09 22.4 | -0.1 |
| | baz=354 | | | | | | |
| CTG | **Chitna Glacier** | 80.25 | 5 | P | P | 13 09 23.0 | -0.6 |
| | baz=352 | | | | | | |
| EYAK | **Cdova Ski Ar** | 80.30 | 7 | P | P | 13 09 23.5 | -0.1 |
| | baz=348 | | | | | | |
| SEW | **Seward** | 80.33 | 9 | P | P | 13 09 23.6 | -0.2 |
| | baz=346 | | | | | | |
| YUK6 | **Outpost Mounta** | 80.45 | 4 | P | P | 13 09 23.6 | -1.2 |
| | baz=354 | | | | | | |
| GRNC | **Granite Creek** | 80.46 | 5 | P | P | 13 09 25.9 | +1.1 |
| GRNC | | | | IAmb | IAmb | 13 09 27.2 | |
| | comp=Z,32nm,1.2s | | | | | | |
| O28M | **Mount Upton** | 80.52 | 4 | P | P | 13 09 24.9 | -0.3 |
| | baz=353 | | | | | | |
| O30N | **Mendenhall** | 80.71 | 2 | P | P | 13 09 25.7 | -0.3 |
| O30N | | | | IAmb | IAmb | 13 09 47.6 | |
| | comp=Z,29nm,1.8s | | | | | | |
| O30N | **Mendenhall** | 80.71 | 2 | P | P | 13 09 26.0 | +0.1 |
| | baz=356 | | | | | | |
| WHY | **Whitehorse** | 80.86 | 2 | P | P | 13 09 26.6 | -0.2 |
| | baz=357 | | | | | | |
| MESA | **MESA** | 80.99 | 5 | P | P | 13 09 27.4 | -0.2 |
| | baz=352 | | | | | | |
| Q17K | **Contact Creek** | 81.14 | 13 | P | P | 13 09 28.0 | -0.3 |
| | baz=341 | | | | | | |
| KOTAN | **Kotaneelee Air** | 81.26 | 356 | P | P | 13 09 28.5 | -0.3 |
| | baz=5.6 | | | | | | |
| WBSI | **Waikabubak, Su** | 81.29 | 110 | P | P | 13 09 28.3 | -1.4 |
| Q23K | **Middleton Isla** | 81.34 | 8 | P | P | 13 09 29.1 | -0.1 |
| | baz=348 | | | | | | |
| P33M | **Teslin, Yukon** | 81.34 | 1 | P | P | 13 09 29.1 | -0.2 |
| | baz=359 | | | | | | |
| Q20K | **Shuyak Island** | 81.37 | 11 | P | P | 13 09 29.0 | -0.4 |
| | baz=343 | | | | | | |
| WTLY | **Watson Lake, Y** | 81.43 | 359 | P | P | 13 09 30.0 | +0.3 |
| | baz=1.9 | | | | | | |
| LBNH | **Lisbon** | 81.53 | 321 | P | P | 13 09 31.4 | +0.9 |
| LBNH | **Lisbon** | 81.53 | 321 | P | P | 13 09 31.5 | +0.9 |
| LBNH | | | | pmax | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | |
| PLBC | **Pleasant Camp** | 82.02 | 3 | P | P | 13 09 32.8 | -0.1 |
| | baz=356 | | | | | | |
| LIRD | **Liard River Hi** | 82.06 | 357 | P | P | 13 09 32.8 | -0.3 |
| | baz=4.0 | | | | | | |
| KDAK | **Kodiak Island** | 82.14 | 11 | P | P | 13 09 33.5 | +0.1 |
| | baz=343 | | | | | | |
| R33M | **Jennings River** | 82.17 | 360 | P | P | 13 09 33.3 | -0.5 |
| | baz=0.1 | | | | | | |
| S12K | **Black Hills** | 82.28 | 17 | P | P | 13 09 33.8 | -0.5 |
| | baz=336 | | | | | | |
| EDFI | **Ende, Flores** | 82.40 | 108 | P | P | 13 09 32.8 | -2.8 |
| LONY | **Lake Ozonia** | 82.52 | 323 | IAmb | IAmb | 13 09 37.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| OHAK | **Old Harbor** | 82.56 | 12 | P | P | 13 09 36.5 | +0.8 |
| | baz=343 | | | | | | |
| TOAD | **Toad River Com** | 82.59 | 357 | P | P | 13 09 36.5 | +0.6 |
| | baz=4.6 | | | | | | |
| Q32M | **Nakina River** | 82.61 | 1 | P | P | 13 09 35.9 | -0.2 |
| | baz=359 | | | | | | |
| FALS | **False Pass** | 82.73 | 18 | P | P | 13 09 36.2 | -0.4 |
| | baz=335 | | | | | | |
| NIKH | **Nikolski High** | 82.97 | 22 | P | P | 13 09 37.6 | -0.3 |
| | baz=331 | | | | | | |
| DLBC | **Dease Lake** | 83.13 | 359 | P | P | 13 09 38.5 | -0.2 |
| | baz=0.9 | | | | | | |
| L61B | **Northampton** | 83.22 | 321 | IAmb | IAmb | 13 09 41.7 | |
| | comp=Z,20nm,1.2s | | | | | | |
| L61B | **Northampton** | 83.22 | 321 | P | P | 13 09 39.5 | +0.1 |
| | baz=42 | | | | | | |
| R32K | **Eaglecrest** | 83.26 | 2 | P | P | 13 09 38.2 | -1.1 |
| | baz=357 | | | | | | |
| UCCT | **U. Connecticut** | 83.48 | 320 | P | P | 13 09 40.8 | 0.0 |
| CHNA | **Chernabura Isl** | 83.64 | 16 | P | P | 13 09 40.9 | -0.3 |
| | baz=338 | | | | | | |
| S34M | **Telegraph Cree** | 83.66 | 360 | P | P | 13 09 41.1 | -0.2 |
| | baz=0.0 | | | | | | |
| L59A | **Walton** | 84.58 | 322 | IAmb | IAmb | 13 09 48.3 | |
| | comp=Z,13nm,1.1s | | | | | | |
| T35M | **Bob Quinn** | 84.59 | 359 | P | P | 13 09 46.3 | +0.2 |
| | baz=0.7 | | | | | | |
| TRNY | **Table Rock, Ra** | 84.96 | 320 | IAmb | IAmb | 13 09 49.8 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| ULM | **Lac du Bonnet** | 86.02 | 338 | P | P | 13 09 53.4 | 0.0 |
| | comp=Z,2.9nm,0.8s,baz=34,slow=7.3,SNR=3.5 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| V35K | **Ketchikan** | 86.25 | 0 | P | P | 13 09 53.4 | -1.0 |
| | baz=360 | | | | | | |
| F33A | **5 Mile Ranch,** | 90.09 | 336 | IAmb | IAmb | 13 10 14.7 | |
| | comp=Z,26nm,1.7s | | | | | | |
| FITZ | **Fitzroy Crossi** | 91.39 | 112 | P | P | 13 10 18.4 | -0.9 |
| NEW | **Newport** | 92.42 | 351 | IAmb | IAmb | 13 10 28.2 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| KMSC | **Kings Mountain** | 93.14 | 321 | P | P | 13 10 27.6 | +0.3 |
| JSC | **Jenkinsville** | 93.79 | 321 | P | P | 13 10 30.3 | 0.0 |
| JSC | **Jenkinsville** | 93.79 | 321 | P | P | 13 10 30.3 | 0.0 |
| JSC | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| RSSD | **Black Hills** | 93.88 | 341 | P | P | 13 10 31.4 | +0.6 |
| RSSD | | | | IAmb | IAmb | 13 10 40.9 | |
| | comp=Z,16nm,1.9s | | | | | | |
| RSSD | **Black Hills** | 93.88 | 341 | P | P | 13 10 31.4 | +0.6 |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,16nm,1.9s | | | | | | |
| BG3 | **Lake Jocassee** | 94.04 | 322 | P | P | 13 10 30.9 | -0.5 |
| BG3 | | | | IAmb | IAmb | 13 10 33.0 | |
| | comp=Z,12nm,1.3s | | | | | | |
| HODGE | **Hodges** | 94.33 | 321 | P | P | 13 10 33.4 | +0.6 |
| HODGE | | | | IAmb | IAmb | 13 10 34.3 | |
| | comp=Z,10nm,1.0s | | | | | | |
| E08A | **Dider Farm, El** | 94.40 | 352 | P | P | 13 10 33.6 | +0.7 |
| E08A | | | | IAmb | IAmb | 13 13 27.3 | |
| | comp=Z,17nm,1.8s | | | | | | |
| CPCT | **Cooper Cave** | 94.42 | 323 | P | P | 13 10 33.9 | +0.7 |
| CPCT | | | | IAmb | IAmb | 13 14 13.4 | |
| | comp=Z,14nm,1.7s | | | | | | |
| MXC | **Moxie City** | 94.45 | 352 | P | P | 13 10 34.2 | +1.1 |
| MXC | | | | IAmb | IAmb | 13 10 46.2 | |
| | comp=Z,16nm,1.8s | | | | | | |
| SIUC | **Southern Illin** | 94.60 | 328 | P | P | 13 10 34.4 | +0.5 |
| SMRT | **St. Maarten** | 94.83 | 298 | P | P | 13 10 35.6 | +0.3 |
| F04D | **Rainier, OR** | 95.18 | 354 | P | P | 13 10 35.9 | -0.5 |
| N23A | **Red Feather La** | 97.39 | 341 | P | P | 13 10 46.4 | -0.5 |
| | baz=20 | | | | | | |
| WRA | **Warramunga Arr** | 98.92 | 108 | P | P | 13 10 51.7 | -2.0 |
| | comp=Z,2.1nm,0.9s,baz=314,slow=4.4,SNR=10 | | | | | | |
| | comp=Z,2.1nm,0.9s | | | | | | |
| WRA | **Warramunga Arr** | 98.92 | 108 | *i* P | P | 13 10 52.0 | -1.7 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| Q24A | **Divide** | 98.99 | 340 | P | Pdif | 13 10 53.9 | -0.3 |
| | baz=20 | | | | | | |
| ELK | **Elko** | 99.50 | 348 | LR | LR | 13 58 49.2 | |
| | comp=Z,82nm,18.5s,baz=80,slow=37 | | | | | | |
| S22A | **4UR Ranch, Cre** | 100.59 | 341 | P | Pdif | 13 11 00.9 | -0.4 |
| | baz=19 | | | | | | |
| ASAR | **Alice Springs** | 100.87 | 112 | P | Pdif | 13 11 01.4 | -0.9 |
| | comp=Z,0.7nm,0.7s,baz=309,slow=5.0,SNR=7.3 | | | | | | |
| TROLL | **Troll, Antarti** | 115.15 | 194 | ⇑PKPdf | PKPdf | 13 15 51.7 | -1.5 |
| | comp=Z,29nm,0.5s | | | | | | |
| SNAA | **Sanae** | 115.99 | 196 | ⇑PKPdf | PKPdf | 13 15 53.5 | -1.3 |
| | comp=Z,28nm,1.2s | | | | | | |
| VNA2 | **Neumayer--Watz** | 116.49 | 198 | ⇑PKPdf | PKPdf | 13 15 54.5 | -1.2 |
| | comp=Z,2.7nm,0.6s,baz=3.1,slow=3.0 | | | | | | |
| VNA3 | **Neumayer Olymp** | 117.25 | 198 | ⇑PKPdf | PKPdf | 13 15 55.0 | -2.1 |
| | comp=Z,4.2nm,0.8s | | | | | | |
| QSPA | **South Pole Qui** | 128.61 | 180 | PKP | PKPdf | 13 16 17.3 | -1.8 |
| | comp=Z,4.6nm,0.8s,baz=277,slow=1.2,SNR=18 | | | | | | |

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*NEIC* ***28*** *13:00:35.0±1.3, 17°.9S±0°.1×178°.0W±0°.1, h599km±8km, mb4.4/74, Error ellipse: s-maj=20.6km s-min=17.1km az=136.0*

*IDC* ***28*** *13:00:35.2±1.4, 18°.10S×178°.05W, h607km±16km, mb3.6/15, mbtmp4.5/16, Error ellipse: s-maj=15.3km s-min=11.9km az=122.0*

**ISC 28 13:00:34.5±0.5, 17°.99S±0°.09×178°.00W±0°.09, h600km, n129, ₙ0ᵍ80/132, mb4.3/58, 5C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | **Nonsavu** | 3.77 | 273 | P | P | 13 02 00.0 | +1.5 |
| MSVF | **Nonsavu** | 3.77 | 273 | P | P | 13 02 00.4 | +1.9 |
| | 436nm,0.7s,baz=128,slow=5.5,SNR=228 | | | | | | |
| AFI | **Afiamalu** | 7.23 | 57 | P | P | 13 02 25.3 | -1.5 |
| MXZ | **Matakaoa Point** | 19.77 | 189 | P | P | 13 04 28.5 | +2.6 |
| URZ | **Urewera** | 20.64 | 191 | P | P | 13 04 31.7 | -2.1 |
| | 10.0nm,0.7s,baz=3.2,slow=1.4,SNR=6.6 | | | | | | |
| | 10.0nm,0.7s | | | | | | |
| CMWZ | **Cape Campbell** | 24.60 | 194 | P | P | 13 05 10.1 | +1.1 |
| EIDS | **Eidsvold** | 29.61 | 250 | P | P | 13 05 52.8 | -0.1 |
| EIDS | | | | IAmb | IAmb | 13 05 53.8 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| CTAO | **Charters Tower** | 33.82 | 261 | P | P | 13 06 28.7 | 0.0 |
| CTAO | | | | IAmb | IAmb | 13 06 29.6 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| PMG | **Port Moresby** | 34.86 | 279 | P | P | 13 06 37.8 | +0.4 |
| COEN | **Coen** | 37.49 | 270 | P | P | 13 06 59.4 | +0.4 |
| STKA | **Stephens Creek** | 38.93 | 241 | P | P | 13 07 10.5 | +0.1 |
| | comp=Z,4.8nm,0.7s,baz=72,slow=11,SNR=7.8 | | | | | | |
| | comp=Z,4.8nm,0.7s | | | | | | |
| WRAB | **Tennant Creek** | 44.99 | 260 | P | P | 13 07 57.0 | -1.1 |
| WRAB | | | | IAmb | IAmb | 13 07 58.2 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| WRA | **Warramunga Arr** | 45.00 | 260 | P | P | 13 07 57.3 | -0.9 |
| | comp=Z,7.8nm,0.8s,baz=96,slow=6.7,SNR=87 | | | | | | |
| WRA | | | | PcP | PcP | 13 09 26.1 | 0.0 |
| | comp=Z,1.0nm,1.1s,baz=90,slow=3.8,SNR=4.6 | | | | | | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| ASAR | **Alice Springs** | 45.14 | 254 | P | P | 13 07 59.0 | -0.2 |
| | comp=Z,15nm,0.7s,baz=88,slow=8.5,SNR=138 | | | | | | |
| ASAR | | | | PcP | PcP | 13 09 26.5 | -0.1 |
| | comp=Z,1.3nm,0.4s,baz=101,slow=4.0,SNR=6.9 | | | | | | |
| ASAR | | | | S | S | 13 13 54.9 | -1.5 |
| | comp=Z,2.3nm,1.0s,baz=93,slow=16,SNR=13 | | | | | | |
| | comp=Z,15nm,0.7s | | | | | | |
| GUMO | **Guam** | 48.23 | 308 | P | P | 13 08 22.6 | +0.2 |
| GUMO | **Guam** | 48.23 | 308 | P | P | 13 08 22.8 | +0.4 |
| | comp=Z,24nm,0.6s,baz=157,slow=11,SNR=4.7 | | | | | | |
| | comp=Z,24nm,0.6s | | | | | | |
| KNRA | **Kununurra** | 50.87 | 264 | P | P | 13 08 41.3 | -0.4 |
| FITZ | **Fitzroy Crossi** | 53.40 | 261 | P | P | 13 08 59.5 | -0.3 |
| PSA00 | **Pilbara Seismi** | 58.27 | 255 | P | P | 13 09 32.4 | -0.9 |
| PSA00 | | | | IAmb | IAmb | 13 10 00.0 | |
| | comp=Z,26nm,1.4s | | | | | | |
| SBA | **Scott Base** | 60.36 | 184 | P | P | 13 09 47.7 | +1.5 |
| JGF | **Kuroka** | 68.04 | 322 | P | P | 13 10 34.3 | -1.1 |
| JGF | | | | IAmb | IAmb | 13 10 36.0 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| MJAR | **Matsushiro Arr** | 68.20 | 323 | P | P | 13 10 36.1 | -0.2 |
| | comp=Z,5.7nm,0.7s,baz=159,slow=6.1,SNR=14 | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| MAJO | **Matsushiro** | 68.21 | 323 | P | P | 13 10 36.6 | +0.2 |
| MAJO | | | | IAmb | IAmb | 13 10 37.1 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| UGM | **Wanagama** | 70.03 | 268 | P | P | 13 10 47.6 | -0.2 |
| YOJ | **Yonaguni jima** | 71.31 | 304 | P | P | 13 10 55.0 | 0.0 |
| ASAJ | **Asahikawa** | 71.53 | 331 | P | P | 13 10 57.3 | +1.4 |
| | comp=Z,3.3n

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **79.21** | **44** | P | | **P** | **13 11 39.9** | **+1.1** |
| | comp=Z,0.9nm,0.7s,baz=221,slow=7.7,SNR=8.8 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **N15K** | **Kwethluk River** | **79.23** | **9** | P | | **P** | **13 11 38.7** | **+0.6** |
| N15K | | | | IAmb | | IAmb | 13 12 13.0 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **P18K** | **Big Mountain,** | **79.32** | **12** | P | | **P** | **13 11 38.4** | **-0.2** |
| **M14K** | **Bethel** | **79.53** | **8** | P | | **P** | **13 11 40.3** | **+0.7** |
| **O18K** | **Koktuh Hills** | **79.75** | **11** | P | | **P** | **13 11 41.1** | **+0.2** |
| O18K | | | | IAmb | | IAmb | 13 11 42.0 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **L14K** | **Kuka Creek** | **80.00** | **7** | P | | **P** | **13 11 42.8** | **+0.7** |
| **J05D** | **Fort Rock, OR** | **80.14** | **38** | P | | **P** | **13 11 44.5** | **+1.0** |
| **M16K** | **Timber Creek** | **80.21** | **9** | P | | **P** | **13 11 44.4** | **+1.1** |
| M16K | | | | IAmb | | IAmb | 13 11 45.4 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **CN2** | **Changchun** | **80.32** | **322** | P | | **P** | **13 11 45.3** | **+1.1** |
| CN2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **BNX** | **BinXian** | **80.39** | **325** | ⇑P | | **P** | **13 11 45.0** | **+0.5** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **L16K** | **Owhat River** | **80.79** | **9** | P | | **P** | **13 11 46.8** | **+0.6** |
| L16K | | | | IAmb | | IAmb | 13 11 47.9 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **M17K** | **Holitna River** | **80.81** | **10** | P | | **P** | **13 11 47.1** | **+0.8** |
| M17K | | | | IAmb | | IAmb | 13 11 48.4 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.07** | **8** | P | | **P** | **13 11 48.5** | **+0.9** |
| K15K | | | | IAmb | | IAmb | 13 11 49.6 | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **I07A** | **Izee** | **81.63** | **38** | P | | **P** | **13 11 52.0** | **+0.9** |
| **L18K** | **Granite Mounta** | **81.71** | **10** | P | | **P** | **13 11 51.6** | **+0.7** |
| L18K | | | | IAmb | | IAmb | 13 11 52.5 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **L19K** | **White Mountain** | **81.98** | **11** | P | | **P** | **13 11 52.7** | **+0.3** |
| **J16K** | **Anvik River** | **82.14** | **8** | P | | **P** | **13 11 54.2** | **+1.1** |
| J16K | | | | IAmb | | IAmb | 13 11 54.8 | |
| | comp=Z,17nm,1.2s | | | | | | | |
| **U15A** | **North Rim** | **82.28** | **48** | P | | **P** | **13 11 55.3** | **+0.5** |
| **GLI** | **Glacier Island** | **82.43** | **15** | P | | **P** | **13 11 54.3** | **-0.3** |
| GLI | | | | IAmb | | IAmb | 13 11 54.9 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **J17K** | **VABM Dome** | **82.46** | **8** | P | | **P** | **13 11 55.0** | **+0.3** |
| J17K | | | | IAmb | | IAmb | 13 11 58.3 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **PMR** | **Palmer** | **82.59** | **13** | P | | **P** | **13 11 54.9** | **-0.4** |
| PMR | | | | IAmb | | IAmb | 13 12 31.4 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **GHO** | **Glory Hole Cre** | **82.80** | **13** | P | | **P** | **13 11 55.8** | **-0.6** |
| GHO | | | | IAmb | | IAmb | 13 11 57.0 | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **J18K** | **Innoko River** | **82.87** | **9** | P | | **P** | **13 11 57.2** | **+0.4** |
| J18K | | | | IAmb | | IAmb | 13 11 57.9 | |
| | comp=Z,8.4nm,0.8s | | | | | | | |
| **SML** | **Sawmill** | **82.96** | **14** | P | | **P** | **13 11 56.6** | **-0.7** |
| SML | | | | IAmb | | IAmb | 13 12 23.0 | |
| | comp=Z,21nm,1.4s | | | | | | | |
| **WAX** | **Waxell Ridge** | **83.16** | **17** | P | | **P** | **13 11 58.6** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **83.21** | **14** | P | | **P** | **13 11 58.5** | **-0.1** |
| SCM | | | | IAmb | | IAmb | 13 11 58.8 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **J19K** | **Poorman** | **83.54** | **10** | P | | **P** | **13 12 00.5** | **+0.5** |
| **N25K** | **Chitina, Valde** | **83.67** | **15** | P | | **P** | **13 12 00.9** | **+0.1** |
| N25K | | | | IAmb | | IAmb | 13 12 02.1 | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **83.72** | **14** | P | | **P** | **13 12 01.7** | **+0.6** |
| **GLB** | **Gilahina Butte** | **83.74** | **16** | P | | **P** | **13 12 01.4** | **+0.3** |
| GLB | | | | IAmb | | IAmb | 13 12 01.9 | |
| | comp=Z,7.7nm,0.8s | | | | | | | |
| **J20K** | **Nowinta River** | **83.96** | **10** | P | | **P** | **13 12 02.4** | **+0.3** |
| J20K | | | | IAmb | | IAmb | 13 12 03.0 | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **RND** | **Reindeer** | **84.26** | **13** | P | | **P** | **13 12 03.3** | **-0.4** |
| **M27K** | **Edge Creek, AK** | **85.01** | **16** | P | | **P** | **13 12 07.8** | **+0.3** |
| **Q32M** | **Nakina River** | **85.31** | **22** | P | | **P** | **13 12 09.8** | **+0.7** |
| Q32M | | | | IAmb | | IAmb | 13 12 40.6 | |
| | comp=Z,22nm,1.5s | | | | | | | |
| **O30N** | **Mendenhall** | **85.40** | **19** | P | | **P** | **13 12 09.6** | **+0.4** |
| O30N | | | | IAmb | | IAmb | 13 12 10.6 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **HDA** | **Harding Lake** | **85.55** | **13** | P | | **P** | **13 12 09.5** | **-0.3** |
| HDA | | | | IAmb | | IAmb | 13 12 10.0 | |
| | comp=Z,4.1nm,0.6s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.58** | **13** | P | | **P** | **13 12 09.3** | **-0.6** |
| CCB | | | | IAmb | | IAmb | 13 12 09.9 | |
| | comp=Z,8.8nm,1.2s | | | | | | | |
| **L27K** | **Beaver Creek,** | **85.61** | **16** | P | | **P** | **13 12 10.2** | **+0.1** |
| **TXAR** | **Lajitas Array** | **85.71** | **57** | P | | **P** | **13 12 13.2** | **+1.7** |
| | comp=Z,0.3nm,0.6s,baz=261,slow=4.2,SNR=2.7 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.88** | **13** | P | | **P** | **13 12 10.6** | **-0.8** |
| | comp=Z,1.4nm,0.5s,baz=220,slow=5.0,SNR=36 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **M29M** | **Somme Creek** | **86.01** | **17** | P | | **P** | **13 12 12.5** | **+0.3** |
| **J25K** | **Salcha River,** | **86.07** | **13** | P | | **P** | **13 12 12.4** | **0.0** |
| **J26L** | **Joseph Creek** | **86.39** | **14** | P | | **P** | **13 12 14.0** | **+0.2** |
| J26L | | | | IAmb | | IAmb | 13 12 14.7 | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| **M30M** | **Minto, Yukon** | **86.59** | **18** | P | | **P** | **13 12 15.0** | **+0.1** |
| M30M | | | | IAmb | | IAmb | 13 12 15.5 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **F21K** | **Alatna River** | **86.88** | **9** | P | | **P** | **13 12 16.1** | **+0.1** |
| **G23K** | **Bananza Creek** | **86.99** | **11** | P | | **P** | **13 12 16.3** | **-0.3** |
| **DAWY** | **Dawson** | **87.06** | **16** | P | | **P** | **13 12 17.2** | **+0.3** |
| **K29M** | **Barlow Dome** | **87.38** | **17** | P | | **P** | **13 12 19.1** | **+0.5** |
| K29M | | | | IAmb | | IAmb | 13 12 20.7 | |
| | comp=Z,8.5nm,1.2s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **87.45** | **12** | P | | **P** | **13 12 18.5** | **-0.2** |
| **HHC** | **Hu-ho-hao-te** | **87.61** | **314** | *e*P | | **P** | **13 12 21.0** | **+0.8** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,55nm,4.2s | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **87.98** | **10** | P | | **P** | **13 12 21.1** | **-0.1** |
| E22K | | | | IAmb | | IAmb | 13 12 22.1 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **F24K** | **Squaw Lake** | **88.09** | **11** | P | | **P** | **13 12 21.9** | **+0.2** |
| F24K | | | | IAmb | | IAmb | 13 12 22.8 | |
| | comp=Z,3.9nm,0.7s | | | | | | | |
| **I30M** | **Mount Dempster** | **88.77** | **16** | P | | **P** | **13 12 25.0** | **0.0** |
| I30M | | | | IAmb | | IAmb | 13 12 25.9 | |
| | comp=Z,4.5nm,1.0s | | | | | | | |
| **D23K** | **Nanushuk River** | **88.91** | **10** | P | | **P** | **13 12 26.0** | **+0.5** |
| **ELIB** | **Princess Elisa** | **89.12** | **187** | *d*P | | **P** | **13 12 26.0** | **-0.8** |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.28** | **290** | P | | **P** | **13 12 29.9** | **+1.5** |
| | comp=Z,0.8nm,0.3s,baz=113,slow=3.3,SNR=9.8 | | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.23** | **180** | ⇑P | | **P** | **13 12 30.8** | **-1.1** |
| | comp=Z,120nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.51** | **178** | ⇑P | | **P** | **13 12 31.3** | **-1.8** |
| | comp=Z,26nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.51** | **178** | P | | **P** | **13 12 32.2** | **-0.9** |
| | comp=Z,1.2nm,0.8s,baz=199,slow=6.8,SNR=4.4 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **G31M** | **Satah River** | **90.63** | **16** | P | | **P** | **13 12 32.9** | **-0.5** |
| **VNA3** | **Neumayer Olymp** | **90.63** | **176** | ⇑P | | **P** | **13 12 33.0** | **-0.6** |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.08** | **177** | ⇑P | | **P** | **13 12 35.3** | **-0.3** |
| | comp=Z,3.4nm,0.7s,baz=169,slow=3.8 | | | | | | | |
| **SONM** | **Songino Array** | **93.87** | **319** | P | | **P** | **13 12 49.2** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=141,slow=5.0,SNR=2.1 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **117.15** | **321** | PKP | | **PKPdf** | **13 18 10.9** | **-1.2** |
| | comp=Z,0.6nm,0.4s,baz=112,slow=1.6,SNR=3.7 | | | | | | | |
| **OJC** | **Ojcow** | **144.82** | **340** | PKPdf | | **PKPdf** | **13 19 03.6** | **-0.3** |
| **BRTR** | **Keskin Array B** | **145.12** | **315** | PKPbc | | **PKPbc** | **13 19 05.7** | **-0.4** |
| | comp=Z,3.4nm,0.7s,baz=134,slow=3.6,SNR=17 | | | | | | | |
| **CLL** | **Collm** | **145.63** | **348** | PKPdf | | **PKPbc** | **13 19 05.5** | **-1.4** |
| **CLL** | **Collm** | **145.63** | **348** | ⇓*i*PKPbc | | **PKPbc** | **13 19 07.1** | **+0.2** |
| | comp=Z,16nm,0.8s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.74** | **344** | *e*PKP | | **PKPab** | **13 19 08.0** | **-1.2** |
| **MMAI** | **Mount Meron Ar** | **146.51** | **303** | PKPbc | | **PKiKP** | **13 19 10.8** | **-1.3** |
| | comp=Z,3.6nm,0.5s,baz=48,slow=5.0,SNR=7.3 | | | | | | | |
| **VRAC** | **Vranov** | **146.60** | **343** | PKPbc | | **PKPbc** | **13 19 09.6** | **-0.1** |
| | comp=Z,2.0nm,0.3s,baz=14,slow=4.2,SNR=4.0 | | | | | | | |
| **KHC** | **Kasperske Hory** | **147.55** | **346** | | | **PKPbc** | **13 19 12.1** | **-0.1** |
| **KHC** | **Kasperske Hory** | **147.55** | **346** | *e*PKP | | **PKiKP** | **13 19 12.6** | **-1.1** |
| **CKRC** | **Cesky Krumlov** | **147.66** | **345** | *e*PKP | | **PKiKP** | **13 19 13.0** | **-0.9** |
| **GERES** | **GERESS Array B** | **147.79** | **345** | PKPbc | | **PKPbc** | **13 19 12.8** | **-0.2** |
| | comp=Z,2.7nm,0.6s,baz=20,slow=4.4,SNR=5.1 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.06** | **342** | *i* PKP | | **PKiKP** | **13 19 13.8** | **-1.1** |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **148.14** | **342** | *i* PKP | | **PKiKP** | **13 19 13.8** | **-1.1** |
| | comp=Z,7.6nm,1.1s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.36** | **346** | *i* PKP | | **PKPbc** | **13 19 16.0** | **-0.8** |
| | comp=Z,2.1nm,0.5s | | | | | | | |
| **SOKA** | **Soboth** | **149.43** | **342** | *i* PKP | | **PKiKP** | **13 19 16.8** | **-0.9** |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **149.52** | **345** | *i* PKP | | **PKPbc** | **13 19 16.7** | **-0.6** |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **WATA** | **Walderalm** | **149.69** | **347** | *i* PKP | | **PKiKP** | **13 19 17.6** | **-0.8** |
| | comp=Z,6.9nm,0.7s | | | | | | | |
| **RETA** | **Reutte** | **149.71** | **348** | *i* PKP | | **PKiKP** | **13 19 17.7** | **-0.5** |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **OBKA** | **Obir** | **149.72** | **343** | *i* PKP | | **PKPbc** | **13 19 17.1** | **-0.6** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.75** | **347** | *i* PKP | | **PKiKP** | **13 19 17.8** | **-0.7** |
| | comp=Z,7.5nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **149.78** | **348** | *i* PKP | | **PKiKP** | **13 19 17.7** | **-0.9** |
| | comp=Z,4.5nm,0.8s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.86** | **344** | *i* PKP | | **PKPbc** | **13 19 17.3** | **-0.6** |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.88** | **347** | *i* PKP | | **PKiKP** | **13 19 18.2** | **-0.5** |
| | comp=Z,6.4nm,0.8s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **150.04** | **345** | *i* PKP | | **PKPbc** | **13 19 18.1** | **-0.3** |
| | comp=Z,8.2nm,0.7s | | | | | | | |
| **DAVA** | **Damuels** | **150.07** | **349** | *i* PKiKP | | **PKiKP** | **13 19 18.7** | **-0.4** |
| | comp=Z,3.9nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **150.17** | **348** | *i* PKP | | **PKiKP** | **13 19 18.6** | **-0.8** |
| | comp=Z,7.5nm,0.9s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.64** | **348** | | | **PKPbc** | **13 19 19.4** | **-0.6** |
| **ESDC** | **Sonseca Array** | **157.78** | **12** | PKPab | | **PKPab** | **13 19 59.6** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=347,slow=5.3,SNR=4.5 | | | | | | | |

*IDC **28** 13:01:29.8±7.3, 15°.83S×175°.47W, h0km, mb4.1/3, mbtmp4.1/3, Error ellipse: s-maj=323.9km s-min=32.9km az=140.0*
*NEIC **28** 13:02:09.7±1.2, 16°.2S±0°.2×175°.8W±0°.2, h350km±11km, mb4.2/24, Error ellipse: s-maj=29.1km s-min=18.3km az=125.0*

**ISC 28 13:02:09.3±0.7, 16°.2S±0°.1×175°.9W±0°.2, h350km, n29, σ0s63/29, mb4.2/14, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **4.57** | **61** | Pn | **Pn** | **13 03 24.0** | **-0.4** |
| **BKZ** | **Black Stump Fm** | **23.87** | **195** | P | **P** | **13 06 51.5** | **-0.9** |
| BKZ | | | | IAmb | IAmb | 13 07 04.4 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **QRZ** | **Quartz Range** | **26.55** | **200** | P | **P** | **13 07 16.4** | **+0.1** |
| **GVZ** | **Greta Valley S** | **28.35** | **197** | P | **P** | **13 07 31.5** | **-0.7** |
| **WHZ** | **Wether Hill Ro** | **32.59** | **201** | P | **P** | **13 08 09.7** | **+0.6** |
| **CAN** | **Canberra** | **36.67** | **232** | P | **P** | **13 08 44.6** | **+0.6** |
| **TOO** | **Toolangi** | **40.13** | **230** | P | **P** | **13 09 13.1** | **+0.6** |
| TOO | | | | IAmb | IAmb | 13 09 49.0 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **BBOO** | **Buckleboo** | **46.35** | **240** | P | **P** | **13 10 01.9** | **+0.1** |
| BBOO | | | | IAmb | IAmb | 13 10 40.3 | |
| | comp=Z,36nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **47.14** | **258** | P | **P** | **13 10 07.8** | **-0.2** |
| **WB0** | **Warramunga Arr** | **47.29** | **258** | P | **P** | **13 10 09.1** | **-0.1** |
| **WB2** | **Warramunga Arr** | **47.32** | **258** | P | **P** | **13 10 09.2** | **-0.2** |
| **WRAB** | **Tennant Creek** | **47.32** | **258** | P | **P** | **13 10 08.8** | **-0.6** |
| **WRA** | **Warramunga Arr** | **47.33** | **258** | P | **P** | **13 10 09.3** | **-0.2** |
| | comp=Z,1.0nm,0.5s,baz=92,slow=6.9,SNR=12 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **47.59** | **253** | P | **P** | **13 10 11.4** | **0.0** |
| **ASAR** | **Alice Springs** | **47.59** | **253** | P | **P** | **13 10 11.8** | **+0.4** |
| | comp=Z,2.9nm,0.4s,baz=89,slow=7.8,SNR=22 | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **52.93** | **243** | P | **P** | **13 10 50.5** | **-0.5** |
| FORT | | | | IAmb | IAmb | 13 11 26.1 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **TPUB** | **Ta-pu** | **73.38** | **301** | P | **P** | **13 13 03.1** | **-1.2** |
| **QSPA** | **South Pole Qui** | **73.89** | **180** | P | **P** | **13 13 06.6** | **0.0** |
| QSPA | | | | IAmb | IAmb | 13 13 14.4 | |
| | comp=Z,4.6nm,1.3s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **80.96** | **13** | P | **P** | **13 13 46.4** | **+1.2** |
| **K20K** | **Telida** | **81.06** | **10** | P | **P** | **13 13 46.3** | **+0.7** |
| K20K | | | | IAmb | IAmb | 13 14 03.5 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **N25K** | **Chitina, Valde** | **81.39** | **15** | P | **P** | **13 13 48.4** | **+0.9** |
| **GLB** | **Gilahina Butte** | **81.45** | **15** | P | **P** | **13 13 47.9** | **+0.2** |
| **CCB** | **Clear Creek Bu** | **83.37** | **12** | P | **P** | **13 13 57.2** | **-0.2** |
| CCB | | | | IAmb | IAmb | 13 13 57.9 | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **IL31** | | **83.66** | **12** | P | **P** | **13 13 58.6** | **-0.2** |
| IL31 | | | | IAmb | IAmb | 13 14 32.0 | |
| | comp=Z,3.1nm,1.3s | | | | | | |
| **ILAR** | **Eielson Array** | **83.66** | **12** | P | **P** | **13 13 58.7** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=223,slow=6.0,SNR=10 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **E18K** | **Tukpahlearik C** | **84.09** | **6** | P | **P** | **13 14 01.9** | **+0.9** |
| E18K | | | | IAmb | IAmb | 13 14 02.4 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **M30M** | **Minto, Yukon** | **84.25** | **17** | P | **P** | **13 14 02.8** | **+0.8** |
| M30M | | | | IAmb | IAmb | 13 14 14.1 | |
| | comp=Z,6.6nm,1.5s | | | | | | |
| **E19K** | **Redstone River** | **84.50** | **7** | P | **P** | **13 14 04.0** | **+1.0** |
| E19K | | | | IAmb | IAmb | 13 14 45.2 | |
| | comp=Z,5.6nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.17** | **318** | PKPbc | **PKPbc** | **13 21 06.8** | **+0.4** |
| | comp=Z,0.8nm,0.7s,baz=117,slow=3.9,SNR=4.4 | | | | | | |

*IDC **28** 13:03:26.4±0.7, 22°.67N×87°.75E, h0km, mb4.1/18, mbtmp4.1/20, ML4.0/1, MS4.1/1, Error ellipse: s-maj=26.7km s-min=14.4km az=51.0*
*NDI **28** 13:03:27.2±3.2, 22°.42N×87°.67E, h10km, ML4.1, MW3.9, mb4.5(NEIC)*
*NEIC **28** 13:03:27.7±1.2, 22°.69N±0°.08×87°.79E±0°.09, h10km±1km, mb4.5/15, Error ellipse: s-maj=15.5km s-min=12.2km az=227.0*

**ISC 28 13:03:27.5±0.5, 22°.65N±0°.05×87°.77E±0°.04, h10km, n48, σ1s50/52, mb4.3/24, Southern India**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAL** | **Calcutta** | **0.53** | **102** | *e*P | **Pn** | **13 03 40.8** | **-0.3** |
| CAL | | | | *ex* | **Sn** | **13 03 53.8** | **+3.7** |
| CAL | | | | IAML | | 13 03 57.9 | |
| | comp=E,19μm,0.3s | | | | | | |
| CAL | | | | IAML | | 13 03 58.8 | |
| | comp=N,17μm,0.4s | | | | | | |
| **BOK** | **Bokaro** | **2.08** | **304** | *e*P | **Pn** | **13 04 03.5** | **+1.1** |
| BOK | | | | *e*S | **Sn** | **13 04 28.9** | **+0.4** |
| BOK | | | | IAML | | 13 04 37.7 | |
| | comp=E,3μm,0.6s | | | | | | |
| BOK | | | | IAML | | 13 04 39.5 | |
| | comp=E,4μm,0.5s | | | | | | |
| **GTK** | **Tadong** | **4.71** | **9** | *e*P | **Pn** | **13 04 41.4** | **+2.6** |
| GTK | | | | *e*S | **Sn** | **13 05 38.2** | **+4.7** |
| **SHL** | **Shillong** | **4.75** | **51** | Pn | **Pn** | **13 04 38.3** | **-1.1** |
| SHL | | | | Sn | **Sn** | **13 05 30.6** | **-3.9** |
| **SHL** | **Shillong** | **4.75** | **51** | *e*P | **Pn** | **13 04 41.1** | **+1.7** |
| SHL | | | | *e*S | **Sn** | **13 05 33.0** | **-1.6** |
| SHL | | | | IAML | | 13 05 34.1 | |
| | comp=E,232nm,0.6s | | | | | | |
| SHL | | | | IAML | | 13 05 36.3 | |
| | comp=E,311nm,0.6s | | | | | | |
| **IMP** | **Imphal** | **6.06** | **68** | *e*S | **Sn** | **13 06 07.5** | **+0.8** |
| **KOHI** | **KOHIMA** | **6.54** | **61** | *e*S | **Sn** | **13 06 17.6** | **-1.1** |
| KOHI | | | | IAML | | 13 06 22.5 | |
| | comp=N,150nm,0.6s | | | | | | |
| KOHI | | | | IAML | | 13 06 23.5 | |
| | comp=E,169nm,0.4s | | | | | | |
| **LSA** | **Lhasa** | **7.65** | **23** | Pn | **Pn** | **13 05 18.5** | **-0.9** |
| **LKP** | **Lekhapani** | **8.68** | **56** | *e*P | **Pn** | **13 05 34.8** | **+1.6** |
| **HYB** | **Hyderabad** | **10.11** | **241** | *e*P | **Pn** | **13 05 53.0** | **+0.2** |
| HYB | | | | *e* | | 13 07 39.4 | |
| HYB | | | | IAMs_20 | IAMs_20 | 13 08 39.8 | |
| | comp=Z,412nm,6.7s | | | | | | |
| HYB | | | | IVMs_BB | IVMs_BB | 13 09 26.0 | |
| | comp=Z,624nm,6.3s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **11.26** | **110** | Pn | **Pn** | **13 06 08.8** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **11.26** | **110** | Pn | **Pn** | **13 06 08.1** | **-0.5** |
| | comp=Z,2.8nm,0.8s,baz=288,slow=14,SNR=7.6 | | | | | | |
| CMAR | | | | LR | LR | 13 12 29.0 | |
| | comp=Z,51nm,18.1s,baz=290,slow=48 | | | | | | |
| **PBA** | **Port Blair** | **11.92** | **156** | Pn | **Pn** | **13 06 18.3** | **+0.7** |
| **CRAI** | **Chiangrai** | **11.98** | **99** | Pn | **Pn** | **13 06 18.4** | **0.0** |
| **PALK** | **Pallekele** | **16.74** | **205** | P | **P** | **13 07 23.9** | **-0.7** |
| PALK | | | | IAmb | IAmb | 13 07 41.6 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **PALK** | **Pallekele** | **16.74** | **205** | Pn | **Pn** | **13 07 21.2** | **-1.1** |
| | comp=Z,0.6nm,0.3s,baz=14,slow=14,SNR=2.3 | | | | | | |
| PALK | | | | Sn | Sn | 13 10 12.7 | -16 |
| | comp=Z,0.6nm,0.3s,baz=306,slow=6.4,SNR=1.3 | | | | | | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **NIL** | **Nilore** | **16.84** | **314** | Pn | **Pn** | **13 07 19.5** | **-4.0** |
| NIL | | | | IAmb | IAmb | 13 07 37.5 | |
| | comp=Z,17nm,0.6s | | | | | | |
| **UBPT** | **Khong Chiam** | **18.26** | **111** | P | **P** | **13 07 41.4** | **0.0** |
| **TARG** | **Taragay, Kyrgy** | **20.78** | **339** | Pn | **P** | **13 08 10.3** | **+1.1** |
| TARG | | | | IAmb | IAmb | 13 08 18.6 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **GAR** | **Garm** | **22.08** | **322** | P | **P** | **13 08 22.3** | **-0.6** |
| GAR | | | | IAmb | IAmb | 13 08 24.6 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **CHGR** | **Chuyangaron** | **22.54** | **319** | P | **P** | **13 08 27.0** | **-0.8** |
| CHGR | | | | IAmb | IAmb | 13 08 31.9 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **SIMJ** | **Simiganj** | **22.63** | **319** | P | **P** | **13 08 26.9** | **-1.9** |
| SIMJ | | | | IAmb | IAmb | 13 08 34.2 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **22.80** | **334** | P | **P** | **13 08 31.5** | **+0.9** |
| | comp=Z,4.8nm,0.6s,baz=157,slow=14,SNR=2.9 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **24.49** | **351** | P | **P** | **13 08 47.7** | **+0.8** |
| MK31 | | | | IAmb | IAmb | 13 08 49.8 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.49** | **351** | P | **P** | **13 08 47.9** | **+0.9** |
| | comp=Z,3.5nm,0.4s,baz=176,slow=9.1,SNR=19 | | | | | | |
| | comp=Z,3.5nm,0.4s | | | | | | |
| **MAKZ** | **Makanchi** | **24.55** | **350** | P | **P** | **13 08 47.0** | **-0.5** |
| MAKZ | | | | IAmb | IAmb | 13 08 51.0 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.84** | **348** | P | **P** | **13 09 25.1** | **-0.9** |
| | comp=Z,3.7nm,1.0s,baz=153,slow=8.3,SNR=3.6 | | | | | | |
| | comp=Z,3.7nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **29.22** | **26** | P | **P** | **13 09 30.3** | **+0.8** |
| | comp=Z,1.2nm,0.7s,baz=219,slow=8.2,SNR=4.1 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **31.33** | **357** | P | **P** | **13 09 48.7** | **+0.7** |
| | comp=Z,4.2nm,0.8s,baz=189,slow=10.0,SNR=7.8 | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **33.10** | **341** | P | **P** | **13 10 03.7** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=157,slow=9.4,SNR=2.1 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **34.46** | **327** | P | **P** | **13 10 14.6** | **-0.8** |
| **BRTR** | **Keskin Array B** | **48.61** | **304** | P | **P** | **13 12 12.4** | **+0.7** |
| | comp=Z,0.6nm,0.6s,baz=131,slow=9.3,SNR=4.5 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **OBN** | **Obninsk** | **49.77** | **324** | LR | LR | 13 34 28.1 | |
| | comp=Z,198nm,18.9s,baz=165,slow=37 | | | | | | |
| **AKASG** | **Malin Array Be** | **52.99** | **317** | P | **P** | **13 12 42.8** | **-1.5** |
| | comp=Z,0.2nm,0.3s,baz=82,slow=6.6,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **MLR** | **Muntele Rosu** | **54.62** | **310** | P | **P** | **13 12 57.7** | **+1.2** |
| | comp=Z,5.9nm,0.8s,baz=212,slow=3.5,SNR=6.2 | | | | | | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **IDI** | **Anoyia** | **55.62** | **298** | P | **P** | **13 13 03.2** | **-0.6** |
| **FIA1** | **FINESS Array S** | **56.89** | **330** | P | **P** | **13 13 11.9** | **-0.4** |
| **FINES** | **FINESS Array B** | **56.89** | **330** | P | **P** | **13 13 12.5** | **+0.1** |
| | comp=Z,1.8nm,0.6s,baz=103,slow=8.2,SNR=5.6 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **62.12** | **129** | P | **P** | **13 13 49.4** | **+0.4** |
| | comp=Z,3.0nm,0.7s,baz=323,slow=7.0,SNR=18 | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **62.72** | **327** | P | **P** | **13 13 52.5** | **0.0** |
| | comp=Z,2.2nm,0.5s,baz=102,slow=6.7,SNR=11 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **63.96** | **328** | P | **P** | **13 14 00.2** | **-0.5** |
| | comp=Z,1.1nm,0.6s,baz=91,slow=6.6,SNR=2.5 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **NC204** | **NORSAR Array S** | **64.18** | **328** | P | **P** | **13 14 02.0** | **-0.3** |
| **ASAR** | **Alice Springs** | **64.27** | **133** | P | **P** | **13 14 04.7** | **+1.4** |
| | comp=Z,2.5nm,0.6s,baz=310,slow=6.5,SNR=23 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I28M | Miner Creek | 61.88 | 28 | P | | P | 13 16 23.4 | +3.3 |
| G31M | Satah River | 64.06 | 26 | P | | P | 13 16 36.0 | +1.9 |
| G31M | | | | IAmb | | IAmb | 13 16 41.7 | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| FINES | FINESS Array B | 78.17 | 334 | P | | P | 13 17 58.5 | +1.0 |
| | comp=Z,0.5nm,0.3s,baz=78,slow=6.4,SNR=9.5 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |

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*BGR* ***28*** *13:08:08.1, 18˚.36S×176˚.70W, h33km*
*BJI* ***28*** *13:09:09.8±0.0, 17˚.60S×177˚.65W, h588km, mb5.4/75, mB5.2/41*
*MOS* ***28*** *13:09:10.7±0.9, 17˚.92S×178˚.00W, h599km, mb5.4/32, Error ellipse: s-maj=8.9km s-min=7.3km az=127.3*
*NEIC* ***28*** *13:09:11.8±2.0, 18˚.03S±0˚.09×177˚.94W±0˚.09, h601km±3km, mb5.3/489, Mwb5.7/32, Mww5.7/19, Error ellipse: s-maj=13.5km s-min=11.1km az=145.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr-2.48; Mθθ0.71; Mϕϕ 1.77; Mrθ-2.81; Mθϕ0.83; Mϕr-2.84; Fault plane solution: M₀4.64000×10¹⁷ NP1:ϕs42.15000°, δ74.99000°, λ-84.05000°. NP2:ϕs200.24000°, δ16.12000°, λ-111.12000°. Principal axes: T 4.4457, Plg30.0000°, Azm127.0000°; N 0.3645, Plg6.0000°, Azm221.0000°; P -4.8102, Plg60.0000°, Azm320.0000°;*
*NEIC* ***28*** *13:09:11.1, 18˚.04S×178˚.03W, h620km, Moment Tensor Solution. Duration: 3ᵗ5 Moment tensor: Scale 10¹⁷Nm; Mrr-0.66; Mθθ-1.42; Mϕϕ2.08; Mrθ-2.63; Mθϕ0.60; Mϕr-2.65; Fault plane solution: M₀4.20000×10¹⁷ NP1:ϕs45.17000°, δ84.35000°, λ-65.43000°. NP2:ϕs147.31000°, δ25.17000°, λ-166.63000°. Principal axes: T 4.3756, Plg35.0000°, Azm114.0000°; N -0.3553, Plg24.0000°, Azm223.0000°; P -4.0203, Plg45.0000°, Azm340.0000°;*
*NEIC* ***28*** *13:09:11, 18˚.05S×177˚.96W, h592km*
*NEIC* ***28*** *13:09:11.1, 18˚.04S×177˚.92W, h620km*
*NOU* ***28*** *13:09:12.5, 18˚.03S×177˚.95W, h604km, ML5.1/162, Fiji Islands Region*
*IDC* ***28*** *13:09:12.6±0.6, 18˚.19S×178˚.09W, h611km±6km, mb4.6/27, mbtmp5.6/31, Error ellipse: s-maj=7.6km s-min=6.9km az=134.0*
*GCMT* ***28*** *13:09:13.8±0.2, 18˚.03S±0˚.02×178˚.06W±0˚.02, h614km±1km, MW5.7/123, Moment Tensor Solution. s123,c218; Duration: 1ᵗ7 Moment tensor: Scale 10¹⁷ Nm; Mrr-1.54±.05; Mθθ-0.01±.08; Mϕϕ1.55±.07; Mrθ-2.85±.07; Mθϕ0.72±.07; Mϕr-2.55±.07; Best double couple: M₀4.18700×10¹⁷ NP1:ϕs46.00000°, δ79.00000°, λ-79.00000°. NP2:ϕs179.00000°, δ15.00000°, λ-136.00000°. Principal axes: T 4.1520, Plg33.0000°, Azm126.0000°; N 0.0700, Plg11.0000°, Azm223.0000°; P -4.2210, Plg54.0000°, Azm329.0000°; nsta1 refers to body waves, cutoff=40s. Triangular moment-rate function*
**ISC 28 13:09:11.0±0.2, 18˚.13S±0˚.03×177˚.87W±0˚.03, h602km±2km, h603km; pP-P, n1484, σ1ˢ21/1414, mb5.3/373, 98C-96D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.90** | **275** | P | | **P** | **13 10 37.7** | **+1.6** |
| **MSVF** | **Nonsavu** | **3.90** | **275** | P | | **P** | **13 10 37.3** | **+1.2** |
| **MSVF** | **Nonsavu** | **3.90** | **275** | P | | **P** | **13 10 37.7** | **+1.6** |
| | 7μm,1.0s,baz=121,slow=9.7,SNR=1242 | | | | | | | |
| MSVF | | | | S | | **S** | **13 11 47.0** | **+1.6** |
| | 764nm,1.2s,baz=298,slow=23,SNR=15 | | | | | | | |
| **MSVF** | **Nonsavu** | **3.90** | **275** | *i* P | | **P** | **13 10 36.5** | **+0.4** |
| **AFI** | **Afiamalu** | **7.21** | **55** | P | | **P** | **13 11 01.1** | **-2.1** |
| **AFI** | **Afiamalu** | **7.21** | **55** | P | | **P** | **13 11 01.1** | **-2.1** |
| **NIUE** | **Niue** | **7.59** | **98** | P | | **P** | **13 11 09.6** | **+3.0** |
| **NIUE** | **Niue** | **7.59** | **98** | P | | **P** | **13 11 06.7** | **+0.1** |
| **NIUE** | **Niue** | **7.59** | **98** | P | | **P** | **13 11 08.1** | **+1.6** |
| | comp=Z,3895μmcomp=Z,656nm,1.0s | | | | | | | |
| **FUNA** | **Funafuti** | **9.97** | **343** | P | | **P** | **13 11 29.1** | **-0.5** |
| **FUNA** | **Funafuti** | **9.97** | **343** | P | | **P** | **13 11 27.6** | **-2.0** |
| **RIZ** | **Raoul Island** | **11.06** | **180** | P | | **P** | **13 11 39.0** | **-1.2** |
| RIZ | | | | S | | **S** | **13 13 41.4** | **-1.4** |
| **RAO** | **Raoul Island** | **11.07** | **180** | P | | **P** | **13 11 38.9** | **-1.4** |
| **RAO** | **Raoul Island** | **11.07** | **180** | P | | **P** | **13 11 39.6** | **-0.7** |
| | comp=Z,322nm,0.3s,baz=352,slow=13,SNR=7.5 | | | | | | | |
| RAO | | | | S | | **S** | **13 13 42.1** | **-0.8** |
| | comp=Z,501nm,0.5s,baz=97,slow=23,SNR=6.9 | | | | | | | |
| **GLKZ** | **Green Lake** | **11.08** | **180** | P | | **P** | **13 11 39.4** | **-1.0** |
| GLKZ | | | | S | | **S** | **13 13 40.1** | **-3.1** |
| **RTV** | **Rentapao** | **13.05** | **269** | P | | **P** | **13 12 01.5** | **+1.2** |
| **DVP** | **Devils Point** | **13.28** | **270** | P | | **P** | **13 12 03.8** | **+1.1** |
| **MARNC** | **Mare, Loyalty** | **13.68** | **254** | P | | **P** | **13 12 06.5** | **-0.2** |
| **LIFNC** | **LIFOU** | **14.29** | **257** | P | | **P** | **13 12 12.2** | **-0.4** |
| **LIFNC** | **LIFOU** | **14.29** | **257** | P | | **P** | **13 12 10.6** | **-2.0** |
| **PINNC** | **Pines Island,** | **14.47** | **250** | P | | **P** | **13 12 15.1** | **+0.8** |
| **PINNC** | **Pines Island,** | **14.47** | **250** | P | | **P** | **13 12 13.8** | **-0.5** |
| **YATNC** | **Mamie plateau,** | **14.84** | **252** | P | | **P** | **13 12 18.5** | **+0.8** |
| **DZM** | **Mont Dzumac** | **15.24** | **253** | *e*P | | **P** | **13 12 20.4** | **-1.1** |
| | comp=Z,253nm,1.1s | | | | | | | |
| DZM | | | | *e*S | | **S** | **13 14 48.1** | **-8.8** |
| | comp=Z,152nm,1.2s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.24** | **253** | | | **P** | **13 12 20.8** | **-0.7** |
| **DZM** | **Mont Dzumac** | **15.24** | **253** | P | | **P** | **13 12 21.3** | **-0.3** |
| | comp=Z,74nm,0.8s,baz=78,slow=18,SNR=54 | | | | | | | |
| DZM | | | | S | | **S** | **13 14 57.3** | **+0.4** |
| | comp=Z,50nm,1.1s,baz=151,slow=22,SNR=4.4 | | | | | | | |
| **NOUC** | **Port Laguerre** | **15.38** | **253** | P | | **P** | **13 12 23.2** | **+0.6** |
| **KOUNC** | **Koumac, New Ca** | **17.01** | **259** | P | | **P** | **13 12 37.8** | **+0.2** |
| **RAR** | **Rarotonga** | **17.32** | **103** | P | | **P** | **13 12 42.6** | **+2.2** |
| **RAR** | **Rarotonga** | **17.32** | **103** | P | | **P** | **13 12 42.0** | **+1.6** |
| **RAR** | **Rarotonga** | **17.32** | **103** | P | | **P** | **13 12 42.4** | **+2.0** |
| | comp=Z,274nm,0.9s,baz=251,slow=6.4,SNR=32 | | | | | | | |
| **OUZ** | **Omahuta** | **18.63** | **202** | P | | **P** | **13 12 54.9** | **+2.8** |
| **GRZ** | **Great Barrier** | **18.99** | **197** | P | | **P** | **13 12 58.2** | **+2.8** |
| **WCZ** | **Waipu Caves** | **19.03** | **200** | P | | **P** | **13 12 58.0** | **+2.2** |
| **KUZ** | **Kuaotunu** | **19.38** | **196** | P | | **P** | **13 13 01.6** | **+2.7** |
| **MXZ** | **Matakaoa Point** | **19.64** | **189** | P | | **P** | **13 13 01.9** | **+0.6** |
| **MKAZ** | **Moumakai** | **19.87** | **197** | P | | **P** | **13 13 05.7** | **+2.4** |
| **HAZ** | **Te Kaha** | **19.92** | **190** | P | | **P** | **13 13 03.9** | **+0.1** |
| **PKGZ** | **Pakihiroa** | **19.98** | **189** | P | | **P** | **13 13 05.0** | **+0.7** |
| **RUGZ** | **Raukumara Rang** | **20.14** | **190** | P | | **P** | **13 13 06.0** | **+0.1** |
| **PUZ** | **Puketiti** | **20.15** | **189** | P | | **P** | **13 13 06.9** | **+1.0** |
| **TWGZ** | **Tauwhareparae** | **20.30** | **189** | P | | **P** | **13 13 09.4** | **+2.1** |
| **TOZ** | **Tahuroa Road** | **20.37** | **195** | P | | **P** | **13 13 08.2** | **+0.4** |
| **TOZ** | **Tahuroa Road** | **20.37** | **195** | P | | **P** | **13 13 10.2** | **+2.4** |
| **MWZ** | **Matawai** | **20.52** | **190** | P | | **P** | **13 13 09.1** | **-0.2** |
| **URZ** | **Urewera** | **20.53** | **191** | P | | **P** | **13 13 08.8** | **-0.4** |
| | comp=Z,57nm,0.5s,baz=29,slow=1.5,SNR=39 | | | | | | | |
| URZ | | | | S | | **S** | **13 16 17.0** | **-4.4** |
| | comp=Z,13nm,0.8s,baz=330,slow=20,SNR=2.7 | | | | | | | |
| | comp=Z,57nm,0.5s | | | | | | | |
| **URZ** | **Urewera** | **20.53** | **191** | P | | **P** | **13 13 08.5** | **-0.7** |
| **CNGZ** | **Carnagh Statio** | **20.56** | **189** | P | | **P** | **13 13 11.7** | **+2.1** |
| **RTZ** | **Ruatahuna** | **20.90** | **191** | P | | **P** | **13 13 10.8** | **-1.9** |
| **HIZ** | **Hauiti** | **21.27** | **196** | P | | **P** | **13 13 17.7** | **+1.8** |
| **TARA** | **Tarawa** | **21.38** | **334** | P | | **P** | **13 13 14.9** | **-2.4** |
| **BKZ** | **Black Stump Fm** | **21.52** | **192** | P | | **P** | **13 13 20.3** | **+2.1** |
| **BKZ** | **Black Stump Fm** | **21.52** | **192** | | | **P** | **13 13 16.7** | **-1.6** |
| **BKZ** | **Black Stump Fm** | **21.52** | **192** | P | | **P** | **13 13 16.2** | **-2.0** |
| **NGZ** | **Ngauruhoe** | **21.72** | **194** | P | | **P** | **13 13 22.3** | **+2.2** |
| **NEZ** | **North Egmont** | **22.19** | **197** | P | | **P** | **13 13 26.8** | **+2.6** |
| **WAZ** | **Wanganui** | **22.42** | **195** | P | | **P** | **13 13 26.1** | **-0.1** |
| **BFZ** | **Birch Farm** | **23.04** | **191** | P | | **P** | **13 13 32.5** | **+0.9** |
| **BFZ** | **Birch Farm** | **23.04** | **191** | P | | **P** | **13 13 31.2** | **-0.4** |
| **BFZ** | **Birch Farm** | **23.04** | **191** | P | | **P** | **13 13 31.4** | **-0.2** |
| **MRZ** | **Mangatainoka R** | **23.15** | **193** | | | **P** | **13 13 31.4** | **-1.3** |
| **MRZ** | **Mangatainoka R** | **23.15** | **193** | P | | **P** | **13 13 32.9** | **+0.3** |
| **HNR** | **Honiara** | **23.19** | **289** | P | | **P** | **13 13 33.7** | **+0.3** |
| **HNR** | **Honiara** | **23.19** | **289** | P | | **P** | **13 13 31.9** | **-1.5** |
| **HNR** | **Honiara** | **23.19** | **289** | P | | **P** | **13 13 31.9** | **-1.5** |
| **MSWZ** | **Moikau Station** | **23.94** | **193** | P | | **P** | **13 13 39.6** | **-0.1** |
| **SNZO** | **South Karori** | **23.96** | **194** | P | | **P** | **13 13 39.4** | **-0.4** |
| **TCW** | **Tory Channel** | **23.97** | **195** | P | | **P** | **13 13 39.8** | **0.0** |
| **QRZ** | **Quartz Range** | **24.08** | **198** | P | | **P** | **13 13 42.5** | **+1.7** |
| **QRZ** | **Quartz Range** | **24.08** | **198** | P | | **P** | **13 13 42.0** | **+1.2** |
| **NNZ** | **Nelson** | **24.20** | **196** | P | | **P** | **13 13 42.0** | **+0.1** |
| **THZ** | **Tophouse** | **24.84** | **197** | P | | **P** | **13 13 46.6** | **-1.0** |
| **DSZ** | **Denniston Nort** | **25.14** | **198** | P | | **P** | **13 13 51.1** | **+0.9** |
| **KHZ** | **Kahutara** | **25.29** | **195** | P | | **P** | **13 13 51.7** | **+0.3** |
| **KHZ** | **Kahutara** | **25.29** | **195** | P | | **P** | **13 13 50.4** | **-1.1** |
| **CTZ** | **Chatham Island** | **25.55** | **178** | P | | **P** | **13 13 57.6** | **+3.9** |
| **GVZ** | **Greta Valley S** | **25.93** | **195** | P | | **P** | **13 13 56.5** | **-0.7** |
| **LTZ** | **Lake Taylor** | **25.96** | **197** | P | | **P** | **13 13 58.0** | **+0.5** |
| **INZ** | **Inchbonnie** | **26.14** | **198** | P | | **P** | **13 13 58.0** | **-1.0** |
| **OXZ** | **Oxford** | **26.53** | **197** | P | | **P** | **13 14 01.8** | **-0.6** |
| **WVZ** | **Waitaha Valley** | **26.67** | **199** | P | | **P** | **13 14 04.8** | **+1.2** |
| **MQZ** | **McQueen's Vall** | **26.72** | **195** | P | | **P** | **13 14 03.3** | **-0.7** |
| **PAE** | **Paea** | **26.92** | **93** | *e*P | | **P** | **13 14 06.1** | **0.0** |
| | comp=Z,206nm,1.3s | | | | | | | |
| **PPT2** | **Papeete2** | **26.93** | **93** | *e*P | | P | 13 13 55.7 | -11 |
| | comp=Z,270nm,27.0s | | | | | | | |
| **PPT2** | **Papeete2** | **26.93** | **93** | *e*P | | **P** | **13 14 06.1** | **-0.2** |
| | comp=Z,459nm,1.3s | | | | | | | |
| PPT2 | | | | *e*pP | | **pP** | **13 15 32.4** | **-6.5** |
| | comp=Z,180nm,27.5s | | | | | | | |
| PPT2 | | | | *e*S | | **S** | **13 18 01.6** | **-1.1** |
| | comp=Z,403nm,24.2s | | | | | | | |
| PPT2 | | | | *es*S | | **sS** | **13 20 57.7** | **-0.2** |
| | comp=Z,1μm,25.5s | | | | | | | |
| PPT2 | | | | *es*S | | **SS** | **13 20 58.7** | **-8.4** |
| | comp=Z,1μm,29.5s | | | | | | | |
| **PPT** | **Papeete** | **26.93** | **93** | P | | **P** | **13 14 08.1** | **+1.9** |
| | comp=Z,158nm,0.7s,baz=202,slow=5.4,SNR=20 | | | | | | | |
| | comp=Z,158nm,0.7s | | | | | | | |
| **PPTF** | **Pamatai, Papee** | **26.94** | **93** | P | | **P** | **13 14 10.2** | **+3.8** |
| **PPTF** | **Pamatai, Papee** | **26.94** | **93** | P | | **P** | **13 14 07.4** | **+1.0** |
| **TBI** | **Tubuai** | **27.05** | **106** | *e*P | | **P** | **13 14 01.9** | **-5.3** |
| | comp=Z,2μm,40.5s | | | | | | | |
| **TBI** | **Tubuai** | **27.05** | **106** | *e*P | | **P** | **13 14 08.4** | **+1.2** |
| | comp=Z,393nm,0.9s | | | | | | | |
| TBI | | | | *e*pP | | **pP** | **13 15 36.4** | **-3.3** |
| | comp=Z,261nm,1.2s | | | | | | | |
| TBI | | | | *e*S | | **S** | **13 18 03.3** | **-0.9** |
| | comp=Z,2μm,42.2s | | | | | | | |
| TBI | | | | *es*S | | **sS** | **13 20 56.1** | **-3.5** |
| | comp=Z,904nm,25.5s | | | | | | | |
| TBI | | | | *es*S | | **SS** | **13 21 05.7** | **-3.1** |
| | comp=Z,4μm,24.0s | | | | | | | |
| **RPZ** | **Rata Peaks** | **27.16** | **198** | P | | **P** | **13 14 09.0** | **+1.1** |
| **RPZ** | **Rata Peaks** | **27.16** | **198** | P | | **P** | **13 14 09.5** | **+1.6** |
| | comp=Z,47nm,0.7s,baz=55,slow=0.5,SNR=20 | | | | | | | |
| RPZ | | | | S | | **S** | **13 18 02.4** | **-3.1** |
| | comp=Z,30nm,1.0s,baz=126,slow=23,SNR=4.1 | | | | | | | |
| | comp=Z,47nm,0.7s | | | | | | | |
| **RPZ** | **Rata Peaks** | **27.16** | **198** | P | | **P** | **13 14 09.4** | **+1.4** |
| **TVO** | **Taravao** | **27.22** | **94** | *e*P | | **P** | **13 14 09.1** | **+0.3** |
| | comp=Z,240nm,1.3s | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.37** | **200** | P | | **P** | **13 14 10.9** | **+1.2** |
| **LBZ** | **Lake Benmore** | **28.03** | **198** | IAmb | | IAmb | 13 14 20.2 | |
| | comp=Z,66nm,0.7s | | | | | | | |
| **JCZ** | **Jackson Bay** | **28.19** | **201** | P | | **P** | **13 14 18.8** | **+1.8** |
| **AUWSH** | **Wavell State H** | **28.31** | **246** | P | | **P** | **13 14 19.7** | **+1.6** |
| **ODZ** | **Otahua Downs** | **28.50** | **197** | P | | **P** | **13 14 20.0** | **+0.5** |
| **WKZ** | **Wanaka** | **28.79** | **200** | IAmb | | IAmb | 13 14 34.0 | |
| | comp=Z,118nm,1.1s | | | | | | | |
| **PMOR** | **Pomariorio Ree** | **28.89** | **88** | *e*P | | **P** | **13 14 23.2** | **-0.1** |
| | comp=Z,1μm,1.2s | | | | | | | |
| **EAZ** | **Earnscleugh** | **29.06** | **199** | P | | **P** | **13 14 24.6** | **+0.2** |
| **VAH** | **Vaihoa** | **29.10** | **89** | *e*P | | **P** | **13 14 24.4** | **-0.7** |
| | comp=Z,584nm,1.2s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.56** | **200** | P | | **P** | **13 14 30.2** | **+1.4** |
| **EIDS** | **Eidsvold** | **29.67** | **250** | P | | **P** | **13 14 31.2** | **+1.2** |
| **EIDS** | **Eidsvold** | **29.67** | **250** | IAmb | | IAmb | 13 14 31.8 | |
| | comp=Z,49nm,0.8s | | | | | | | |
| **EIDS** | **Eidsvold** | **29.67** | **250** | P | | **P** | **13 14 29.7** | **-0.2** |
| | comp=Z,66nm,0.8s | | | | | | | |
| **DCZ** | **Deep Cove** | **29.97** | **201** | IAmb | | IAmb | 13 14 41.2 | |
| | comp=Z,48nm,0.9s | | | | | | | |
| **DCZ** | **Deep Cove** | **29.97** | **201** | P | | **P** | **13 14 32.1** | **0.0** |
| **RK1H** | **Rockhampton Ha** | **30.00** | **255** | P | | **P** | **13 14 33.5** | **+0.7** |
| **WHZ** | **Wether Hill Ro** | **30.08** | **200** | P | | **P** | **13 14 33.7** | **+0.5** |
| **ARMA** | **Armidale** | **30.27** | **240** | P | | **P** | **13 14 37.0** | **+1.8** |
| **ARMA** | **Armidale** | **30.27** | **240** | P | | **P** | **13 14 36.2** | **+1.0** |
| | comp=Z,41nm,0.8s | | | | | | | |
| **SYZ** | **Scrubby Hill** | **30.29** | **198** | P | | **P** | **13 14 38.2** | **+3.3** |
| **AUPHS** | **Peel High Scho** | **31.08** | **240** | P | | **P** | **13 14 44.3** | **+2.4** |
| **MGCD** | **Mangrove Creek** | **31.59** | **236** | P | | **P** | **13 14 49.1** | **+2.9** |
| **MGCD** | **Mangrove Creek** | **31.59** | **236** | P | | **P** | **13 14 48.4** | **+2.2** |
| | comp=Z,64nm,0.8s | | | | | | | |
| **RABL** | **Rabaul** | **32.42** | **292** | IAmb | | IAmb | 13 14 53.0 | |
| | comp=Z,92nm,0.9s | | | | | | | |
| **AUAYR** | **Ayr State High** | **32.85** | **262** | P | | **P** | **13 14 57.7** | **+0.6** |
| **AULRC** | **Lightning Ridg** | **33.09** | **244** | P | | **P** | **13 15 00.6** | **+1.6** |
| **AUDCS** | **Dubbo College** | **33.25** | **239** | P | | **P** | **13 15 02.8** | **+2.5** |
| **BULU** | **Kimbe** | **33.49** | **288** | P | | **P** | **13 15 03.5** | **+1.0** |
| **CNB** | **Canberra Magne** | **33.70** | **233** | P | | **P** | **13 15 05.4** | **+1.4** |
| **CNB** | **Canberra Magne** | **33.70** | **233** | P | | **P** | **13 15 05.4** | **+1.4** |
| | comp=Z,211nm,0.7s | | | | | | | |
| **CTA** | **Charters Tower** | **33.91** | **261** | P | | **P** | **13 15 06.3** | **+0.3** |
| **CTA** | **Charters Tower** | **33.91** | **261** | P | | **P** | **13 15 06.0** | **-0.1** |
| | comp=Z,3.7nm,0.6s,baz=94,slow=9.8,SNR=69 | | | | | | | |
| CTA | | | | S | | **S** | **13 19 42.5** | **-7.1** |
| | comp=Z,0.3nm,0.7s,baz=355,slow=7.9,SNR=2.5 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.91** | **261** | P | | **P** | **13 15 06.4** | **+0.4** |
| **CTAO** | **Charters Tower** | **33.91** | **261** | P | | **P** | **13 15 05.8** | **-0.2** |
| CTAO | | | | IAmb | | IAmb | 13 15 07.9 | |
| | comp=Z,71nm,0.8s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.91** | **261** | P | | **P** | **13 15 05.8** | **-0.2** |
| CTAO | | | | pmax | | pmax | | |
| | comp=Z,71nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.91** | **261** | P | | **P** | **13 15 05.9** | **-0.1** |
| CTAO | | | | pP | | **pP** | **13 16 44.2** | **+0.9** |
| CTAO | | | | PcP | | **PcP** | **13 17 27.4** | **+0.8** |
| CTAO | | | | ScP | | **ScP** | **13 20 18.4** | **+3.3** |
| **CAN** | **Canberra** | **33.98** | **233** | P | | **P** | **13 15 08.2** | **+1.9** |
| **CAN** | **Canberra** | **33.98** | **233** | P | | **P** | **13 15 07.1** | **+0.8** |
| CAN | | | | IAmb | | IAmb | 13 15 09.0 | |
| | comp=Z,78nm,0.7s | | | | | | | |
| **CAN** | **Canberra** | **33.98** | **233** | P | | **P** | **13 15 07.4** | **+1.0** |
| | comp=Z,117nm,0.7s | | | | | | | |
| **CAN** | **Canberra** | **33.98** | **233** | P | | **P** | **13 15 07.1** | **+0.8** |
| CAN | | | | pmax | | pmax | | |
| | comp=Z,77nm,0.7s | | | | | | | |
| **CAN** | **Canberra** | **33.98** | **233** | P | | **P** | **13 15 07.4** | **+1.0** |
| CAN | | | | pP | | **pP** | **13 16 44.8** | **+1.5** |
| CAN | | | | PP | | **PP** | **13 16 50.6** | **+1.2** |
| CAN | | | | PcP | | **PcP** | **13 17 28.5** | **+2.0** |
| CAN | | | | ScP | | **ScP** | **13 20 18.6** | **+3.5** |
| **YNG** | **Young** | **34.08** | **235** | P | | **P** | **13 15 08.6** | **+1.4** |
| **PATS** | **Pohnpei** | **34.18** | **314** | P | | **P** | **13 15 10.0** | **+1.8** |
| **PATS** | **Pohnpei** | **34.18** | **314** | P | | **P** | **13 15 08.2** | **0.0** |
| **PATS** | **Pohnpei** | **34.18** | **314** | P | | **P** | **13 15 08.3** | **+0.1** |
| | comp=Z,335nm,1.4s | | | | | | | |
| **KAVG** | **Kavieng** | **34.37** | **293** | P | | **P** | **13 15 09.7** | **-0.2** |
| **PMG** | **Port Moresby** | **35.00** | **280** | P | | **P** | **13 15 16.6** | **+1.5** |
| **PMG** | **Port Moresby** | **35.00** | **280** | P | | **P** | **13 15 16.5** | **+1.5** |
| **PMG** | **Port Moresby** | **35.00** | **280** | P | | **P** | **13 15 15.5** | **+0.4** |
| **PMG** | **Port Moresby** | **35.00** | **280** | P | | **P** | **13 15 15.8** | **+0.8** |
| | comp=Z,239nm,0.9s,baz=81,slow=5.6,SNR=37 | | | | | | | |
| | comp=Z,239nm,0.9s | | | | | | | |
| **PMG** | **Port Moresby** | **35.00** | **280** | *ce*P | | **P** | **13 15 16.2** | **+1.1** |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,346nm,1.0s | | | | | | | |
| **PMG** | **Port Moresby** | **35.00** | **280** | P | | **P** | **13 15 15.7** | **+0.7** |
| PMG | | | | pP | | **pP** | **13 16 53.4** | **+0.1** |
| PMG | | | | PcP | | **PcP** | **13 17 31.0** | **+1.2** |
| **CMSA** | **Cobar Meteorol** | **35.49** | **241** | P | | **P** | **13 15 20.0** | **+1.1** |
| **CMSA** | **Cobar Meteorol** | **35.49** | **241** | P | | **P** | **13 15 19.8** | **+0.9** |
| | comp=Z,151nm,0.8s | | | | | | | |
| **JOHN** | **Johnston Islan** | **35.61** | **14** | P | | **P** | **13 15 20.2** | **+0.3** |
| **JOHN** | **Johnston Islan** | **35.61** | **14** | P | | **P** | **13 15 19.1** | **-0.8** |
| **MTSU** | **Mount Surprise** | **35.89** | **264** | P | | **P** | **13 15 23.4** | **+1.0** |
| **QLP** | **Quilpie** | **35.93** | **250** | P | | **P** | **13 15 23.4** | **+0.8** |
| **QLP** | **Quilpie** | **35.93** | **250** | P | | **P** | **13 15 23.0** | **+0.4** |
| | comp=Z,198nm,0.6s | | | | | | | |
| **TOO** | **Toolangi** | **37.43** | **231** | P | | **P** | **13 15 36.0** | **+1.3** |
| **TOO** | **Toolangi** | **37.43** | **231** | P | | **P** | **13 15 35.5** | **+0.8** |
| TOO | | | | IAmb | | IAmb | 13 15 37.9 | |
| | comp=Z,74nm,0.9s | | | | | | | |
| **TOO** | **Toolangi** | **37.43** | **231** | P | | **P** | **13 15 35.6** | **+0.8** |
| | comp=Z,101nm,0.8s | | | | | | | |
| **TOO** | **Toolangi** | **37.43** | **231** | P | | **P** | **13 15 35.5** | **+0.8** |
| TOO | | | | pmax | | pmax | | |
| | comp=Z,74nm,0.9s | | | | | | | |
| **AUMAG** | **Moama Anglican** | **37.49** | **234** | P | | **P** | **13 15 37.2** | **+2.0** |
| **COEN** | **Coen** | **37.62** | **271** | P | | **P** | **13 15 37.3** | **+0.8** |
| **COEN** | **Coen** | **37.62** | **271** | P | | **P** | **13 15 36.9** | **+0.4** |
| **COEN** | **Coen** | **37.62** | **271** | P | | **P** | **13 15 37.0** | **+0.5** |
| | comp=Z,244nm,1.1s | | | | | | | |
| **MANU** | **Manus Island** | **37.66** | **291** | P | | **P** | **13 15 37.1** | **+0.2** |
| **TAOE** | **Nuku Hiva Isla** | **37.75** | **81** | P | | **P** | **13 15 39.5** | **+1.8** |
| **TAOE** | **Nuku Hiva Isla** | **37.75** | **81** | *e*P | | **P** | **13 15 33.7** | **-4.0** |
| | comp=Z,527nm,0.9s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.75** | **81** | *e*PP | | PP | 13 17 10.6 | -14 |
| | comp=Z,70nm,26.3s | | | | | | | |
| TAOE | | | | *e*S | | S | 13 20 37.4 | -10 |
| | comp=Z,230nm,24.5s | | | | | | | |
| TAOE | | | | *e*SS | | SS | 13 23 51.5 | -16 |
| | comp=Z,185nm,23.5s | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **37.75** | **81** | P | | **P** | **13 15 38.9** | **+1.1** |
| **TAOE** | **Nuku Hiva Isla** | **37.75** | **81** | P | | **P** | **13 15 39.5** | **+1.8** |
| **CORO** | **Coronation Par** | **37.84** | **225** | P | | **P** | **13 15 40.0** | **+2.1** |
| **STKA** | **Stephens Creek** | **38.97** | **242** | P | | **P** | **13 15 48.1** | **+0.9** |
| **STKA** | **Stephens Creek** | **38.97** | **242** | P | | **P** | **13 15 48.2** | **+0.9** |
| | comp=Z,25nm,0.8s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.97** | **242** | P | | **P** | **13 15 48.3** | **+1.1** |
| | comp=Z,86nm,0.7s,baz=80,slow=8.4,SNR=154 | | | | | | | |
| STKA | | | | S | | **S** | **13 20 58.5** | **-5.7** |
| | comp=Z,4.0nm,0.9s,baz=84,slow=10,SNR=1.9 | | | | | | | |
| | comp=Z,86nm,0.7s | | | | | | | |
| **INKA** | **Innaminka** | **39.14** | **248** | P | | **P** | **13 15 49.5** | **+0.9** |
| **ARPS** | **Mount Arapiles** | **39.93** | **234** | P | | **P** | **13 15 55.9** | **+1.1** |
| **ARPS** | **Mount Arapiles** | **39.93** | **234** | P | | **P** | **13 15 55.5** | **+0.7** |
| | comp=Z,70nm,0.8s | | | | | | | |
| **QIS** | **Mount Isa** | **40.12** | **259** | P | | **P** | **13 15 56.4** | **-0.2** |
| **QIS** | **Mount Isa** | **40.12** | **259** | P | | **P** | **13 15 56.0** | **-0.6** |
| | comp=Z,17nm,0.6s | | | | | | | |
| **WAKE** | **Wake Island** | **40.17** | **337** | P | | **P** | **13 15 56.3** | **-0.5** |
| **WAKE** | **Wake Island** | **40.17** | **337** | P | | **P** | **13 15 56.0** | **-0.8** |
| WAKE | | | | pP | | **pP** | **13 17 37.8** | **-0.7** |
| WAKE | | | | PcP | | **PcP** | **13 17 44.5** | **-1.4** |
| WAKE | | | | sP | | **sP** | **13 18 45.0** | **-1.0** |
| **RKT** | **Rikitea** | **40.35** | **105** | *e*P | | **P** | **13 15 57.3** | **-1.0** |
| | comp=Z,426nm,1.1s | | | | | | | |
| **RKT** | **Rikitea** | **40.35** | **105** | *e*P | | **P** | **13 15 58.1** | **-0.2** |
| | comp=Z,1μm,42.8s | | | | | | | |
| RKT | | | | *e*pP | | **pP** | **13 17 38.9** | **-0.4** |
| | comp=Z,126nm,1.4s | | | | | | | |
| RKT | | | | *e*S | | **S** | **13 21 22.8** | **-1.6** |
| | comp=Z,994nm,32.2s | | | | | | | |
| RKT | | | | *es*S | | sS | 13 24 18.1 | -13 |
| | comp=Z,2μm,29.8s | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.47** | **338** | P | | **P** | **13 15 58.4** | **-0.6** |
| | baz=174,slow=11,SNR=12 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.48** | **338** | P | | **P** | **13 15 58.4** | **-0.6** |
| | baz=174,slow=11,SNR=18 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.49** | **338** | P | | **P** | **13 15 58.6** | **-0.6** |
| | baz=174,slow=11,SNR=13 | | | | | | | |
| **HTT** | **Hallett** | **41.47** | **240** | P | | **P** | **13 16 08.2** | **+1.1** |
| **HTT** | **Hallett** | **41.47** | **240** | P | | **P** | **13 16 07.9** | **+0.8** |
| | comp=Z,128nm,0.7s | | | | | | | |
| **LCRK** | **Leigh Creek** | **41.62** | **244** | P | | **P** | **13 16 09.0** | **+0.8** |
| **TABU** | **Tabubil** | **41.93** | **283** | P | | **P** | **13 16 12.0** | **+1.0** |
| **GHSS** | **Government Hou** | **42.02** | **238** | P | | **P** | **13 16 12.5** | **+1.2** |
| **WHYH** | **Whyalla** | **42.52** | **241** | P | | **P** | **13 16 16.3** | **+1.1** |
| **JAY** | **Jayapura** | **43.46** | **286** | P | | **P** | **13 16 23.1** | **+0.2** |
| | comp=Z,398nm,1.2s,comp=Z,4μm | | | | | | | |
| **JOKA** | **Jonika Flow** | **43.56** | **32** | IAmb | | IAmb | 13 16 25.2 | |
| | comp=Z,170nm,1.0s | | | | | | | |
| **POHA** | **Pohakuloa** | **43.57** | **31** | P | | **P** | **13 16 24.1** | **+0.3** |
| **OOD** | **Oodnadatta** | **43.61** | **249** | P | | **P** | **13 16 25.1** | **+1.3** |
| **KEKH** | **Kekaha** | **43.65** | **25** | P | | **P** | **13 16 24.4** | **+0.3** |
| **BBOO** | **Buckleboo** | **43.75** | **241** | P | | **P** | **13 16 25.8** | **+1.0** |
| **BBOO** | **Buckleboo** | **43.75** | **241** | P | | **P** | **13 16 25.0**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,256nm,1.3s,comp=Z,3µm | | | | | | | | | |
| PSA00 | Pilbara Seismi | 58.35 | 255 | | P | | P | | 13 18 10.2 | -0.1 |
| PSA00 | Pilbara Seismi | 58.35 | 255 | | P | | P | | 13 18 09.1 | -1.1 |
| PSA00 | Pilbara Seismi | 58.35 | 255 | | P | | P | | 13 18 09.5 | -0.8 |
| | comp=Z,111nm,1.0s | | | | | | | | | |
| MBWA | Marble Bar | 58.52 | 256 | | P | | P | | 13 18 11.5 | +0.1 |
| MBWA | Marble Bar | 58.52 | 256 | | P | | P | | 13 18 10.5 | -0.9 |
| MBWA | Marble Bar | 58.52 | 256 | | P | | P | | 13 18 10.5 | -0.9 |
| | comp=Z,81nm,0.8s | | | | | | | | | |
| MBWA | Marble Bar | 58.52 | 256 | | P | | P | | 13 18 11.0 | -0.4 |
| MBWA | | | | | S | | S | | 13 25 25.0 | -5.4 |
| MBWA | Marble Bar | 58.52 | 256 | | P | | P | | 13 18 10.8 | -0.6 |
| MBWA | | | | | PcP | | PcP | | 13 18 53.8 | +0.1 |
| MBWA | | | | | pP | | pP | | 13 20 05.5 | -0.2 |
| MMRI | Maumere | 58.81 | 271 | | P | | P | | 13 18 13.2 | -0.3 |
| MMRI | Maumere | 58.81 | 271 | | IAmb | | IAmb | | 13 18 14.1 | |
| | comp=Z,148nm,0.9s | | | | | | | | | |
| MMRI | Maumere | 58.81 | 271 | | P | | P | | 13 18 12.9 | -0.6 |
| | comp=Z,209nm,0.9s | | | | | | | | | |
| MEEK | Meekatharra | 58.83 | 249 | | P | | P | | 13 18 13.6 | +0.1 |
| MEEK | Meekatharra | 58.83 | 249 | | P | | P | | 13 18 12.8 | -0.7 |
| | comp=Z,61nm,0.8s | | | | | | | | | |
| EDFI | Ende, Flores | 59.30 | 270 | | P | | P | | 13 18 15.9 | -1.0 |
| | comp=Z,190nm,1.2s,comp=Z,2µm | | | | | | | | | |
| JCJ | Chichijima | 59.35 | 318 | | P | | P | | 13 18 16.8 | 0.0 |
| JCJ | Chichijima | 59.35 | 318 | | P | | P | | 13 18 15.9 | -0.9 |
| JCJ | | | | | IAmb | | IAmb | | 13 18 17.2 | |
| | comp=Z,183nm,0.8s | | | | | | | | | |
| NWAO | Narrogin (SRO) | 59.56 | 242 | | P | | P | | 13 18 17.6 | -0.6 |
| RKGY | Rocky Gully | 59.70 | 240 | | P | | P | | 13 18 19.7 | +0.6 |
| | comp=Z,96nm,0.9s | | | | | | | | | |
| BASI | Baing, Sumba | 59.97 | 269 | | P | | P | | 13 18 22.3 | +1.1 |
| | comp=Z,271nm,1.5s,comp=Z,3µm | | | | | | | | | |
| KMSI | Cibinong | 60.08 | 281 | | P | | P | | 13 18 21.8 | -0.1 |
| BLDU | Ballidu | 60.15 | 245 | | P | | P | | 13 18 22.4 | +0.3 |
| BLDU | Ballidu | 60.15 | 245 | | P | | P | | 13 18 22.0 | -0.1 |
| | comp=Z,49nm,0.7s | | | | | | | | | |
| SBA | Scott Base | 60.23 | 184 | | P | | P | | 13 18 24.5 | +2.8 |
| SBA | Scott Base | 60.23 | 184 | | P | | P | | 13 18 24.5 | +2.8 |
| SBA | | | | | pmax | | pmax | | | |
| | comp=Z,70nm,1.2s | | | | | | | | | |
| SBA | Scott Base | 60.23 | 184 | | P | | P | | 13 18 24.9 | +3.1 |
| SBA | | | | | pP | | pwP | | 13 20 20.2 | +0.3 |
| LUWI | Luwuk | 60.65 | 279 | | P | | P | | 13 18 27.1 | +1.5 |
| LUWI | Luwuk | 60.65 | 279 | | P | | P | | 13 18 25.5 | -0.1 |
| | comp=Z,321nm,1.2s,comp=Z,4µm | | | | | | | | | |
| MORW | Morawa | 60.86 | 246 | | P | | P | | 13 18 25.9 | -0.9 |
| MORW | Morawa | 60.86 | 246 | | P | | P | | 13 18 26.4 | -0.4 |
| | comp=Z,45nm,0.7s | | | | | | | | | |
| WBSI | Waikabubak, Su | 61.25 | 269 | | P | | P | | 13 18 29.5 | -0.1 |
| | comp=Z,45nm,0.7s | | | | | | | | | |
| BKSI | Bulukumba | 61.77 | 274 | | P | | P | | 13 18 32.1 | -0.9 |
| BNSI | Bone | 62.07 | 275 | | P | | P | | 13 18 35.0 | +0.1 |
| | comp=Z,169nm,1.2s,comp=Z,2µm | | | | | | | | | |
| KAPI | Kappang | 62.22 | 274 | | P | | P | | 13 18 36.4 | +0.5 |
| KAPI | Kappang | 62.22 | 274 | | P | | P | | 13 18 34.5 | -1.3 |
| KAPI | Kappang | 62.22 | 274 | | P | | P | | 13 18 34.4 | -1.5 |
| KAPI | Kappang | 62.22 | 274 | *i* | P | | P | | 13 18 34.6 | -1.3 |
| KAPI | | | | | pmax | | pmax | | | |
| | comp=Z,57nm,1.3s | | | | | | | | | |
| TOLI2 | Tolitoli | 63.26 | 281 | | P | | P | | 13 18 42.9 | +0.4 |
| TOLI2 | Tolitoli | 63.26 | 281 | | P | | P | | 13 18 41.8 | -0.7 |
| TOLI2 | | | | | IAmb | | IAmb | | 13 18 43.5 | |
| | comp=Z,102nm,1.0s | | | | | | | | | |
| TWSI | Taliwang, Sumb | 63.88 | 269 | | P | | P | | 13 18 46.1 | -0.4 |
| | comp=Z,269nm,1.2s,comp=Z,3µm | | | | | | | | | |
| CCD | Concordia, Ant | 64.78 | 194 | | P | | P | | 13 18 52.9 | +1.4 |
| CCD | | | | | pP | | pP | | 13 20 52.0 | +2.0 |
| JHJ2 | Mitsune | 65.04 | 321 | | P | | P | | 13 18 53.5 | +0.2 |
| SRBI | Singaraja | 65.64 | 269 | | P | | P | | 13 18 57.5 | 0.0 |
| | comp=Z,143nm,1.4s,comp=Z,2µm | | | | | | | | | |
| JMZ | Minamidaito 2 | 66.02 | 310 | | P | | P | | 13 19 00.8 | +1.2 |
| CASY | Casey | 66.15 | 205 | | P | | P | | 13 19 00.0 | +0.3 |
| CASY | Casey | 66.15 | 205 | | P | | P | | 13 19 00.8 | +1.0 |
| CASY | | | | | pP | | pwP | | 13 21 00.7 | -0.4 |
| JAGI | Jajag, Banyuwa | 66.55 | 268 | | P | | P | | 13 19 02.3 | -0.9 |
| JAGI | Jajag, Banyuwa | 66.55 | 268 | | P | | P | | 13 19 01.6 | -1.6 |
| JAGI | | | | | IAmb | | IAmb | | 13 19 03.0 | |
| | comp=Z,178nm,0.9s | | | | | | | | | |
| JAGI | Jajag, Banyuwa | 66.55 | 268 | | P | | P | | 13 19 02.2 | -0.9 |
| | comp=Z,215nm,0.9s,comp=Z,2µm | | | | | | | | | |
| JSG | Sagara | 67.10 | 322 | | P | | P | | 13 19 07.1 | +1.0 |
| JMM | Marumori | 67.91 | 326 | | P | | P | | 13 19 10.6 | -0.3 |
| JMM | Marumori | 67.91 | 326 | | IAmb | | IAmb | | 13 19 11.9 | |
| | comp=Z,135nm,1.0s | | | | | | | | | |
| MTKI | Muara Teweh, K | 68.10 | 276 | | P | | P | | 13 19 13.4 | +0.8 |
| JGF | Kuroka | 68.23 | 322 | | P | | P | | 13 19 13.3 | +0.3 |
| JGF | Kuroka | 68.23 | 322 | | IAmb | | IAmb | | 13 19 13.8 | |
| | comp=Z,71nm,0.9s | | | | | | | | | |
| INU | Inuyama | 68.26 | 321 | | P | | P | | 13 19 13.4 | +0.3 |
| INU | Inuyama | 68.26 | 321 | | P | | P | | 13 19 12.1 | -1.0 |
| INU | | | | | IAmb | | IAmb | | 13 19 14.3 | |
| | comp=Z,126nm,1.3s | | | | | | | | | |
| MJA0 | Matsu Arr-Jizo | 68.37 | 323 | *e* | P | | P | | 13 19 13.3 | -0.5 |
| MJA0 | | | | | pmax | | pmax | | | |
| | comp=Z,101nm,0.8s | | | | | | | | | |
| MJAR | Matsushiro Arr | 68.39 | 323 | | P | | P | | 13 19 13.3 | -0.6 |
| | comp=Z,95nm,0.8s,baz=157,slow=5.7,SNR=187 | | | | | | | | | |
| | comp=Z,95nm,0.8s | | | | | | | | | |
| MAJO | Matsushiro | 68.39 | 323 | | P | | P | | 13 19 13.9 | 0.0 |
| MAJO | Matsushiro | 68.39 | 323 | | P | | P | | 13 19 13.1 | -0.8 |
| MAJO | | | | | IAmb | | IAmb | | 13 19 14.7 | |
| | comp=Z,148nm,0.9s | | | | | | | | | |
| MAJO | Matsushiro | 68.39 | 323 | *i* | P | | P | | 13 19 12.9 | -1.0 |
| MAJO | | | | | pmax | | pmax | | | |
| | comp=Z,125nm,1.0s | | | | | | | | | |
| MAJO | Matsushiro | 68.39 | 323 | | P | | P | | 13 19 13.5 | -0.4 |
| MAJO | | | | | PcP | | PcP | | 13 19 34.5 | +0.3 |
| MAJO | | | | | pP | | pP | | 13 21 13.9 | +0.1 |
| JOW | Kunigami | 68.76 | 309 | | P | | P | | 13 19 16.7 | +0.4 |
| JOW | Kunigami | 68.76 | 309 | | P | | P | | 13 19 17.1 | +0.8 |
| | comp=Z,156nm,1.1s,baz=144,slow=4.9,SNR=15 | | | | | | | | | |
| | comp=Z,156nm,1.1s | | | | | | | | | |
| PWJI | Pagerwojo | 68.90 | 268 | | P | | P | | 13 19 17.1 | -0.3 |
| | comp=Z,129nm,0.9s,comp=Z,2µm | | | | | | | | | |
| JMN | Monobe | 69.10 | 318 | | P | | P | | 13 19 19.0 | +0.8 |
| KKM | Kota Kinabalu | 69.29 | 284 | | P | | P | | 13 19 20.5 | +0.6 |
| KKM | Kota Kinabalu | 69.29 | 284 | | IAmb | | IAmb | | 13 19 21.2 | |
| | comp=Z,87nm,0.9s | | | | | | | | | |
| NGJI | Ngawi | 69.41 | 269 | | P | | P | | 13 19 22.7 | +2.2 |
| | comp=Z,84nm,0.9s | | | | | | | | | |
| JSD | Sado | 69.42 | 324 | | P | | P | | 13 19 20.4 | +0.4 |
| JSD | Sado | 69.42 | 324 | | IAmb | | IAmb | | 13 19 21.3 | |
| | comp=Z,110nm,0.8s | | | | | | | | | |
| ERM | Erimo | 69.84 | 330 | | P | | P | | 13 19 23.1 | +0.7 |
| ERM | Erimo | 69.84 | 330 | | P | | P | | 13 19 22.2 | -0.1 |
| ERM | | | | | IAmb | | IAmb | | 13 19 27.9 | |
| | comp=Z,124nm,1.2s | | | | | | | | | |
| ERM | Erimo | 69.84 | 330 | *ce* | P | | P | | 13 19 23.0 | +0.7 |
| ERM | | | | | pmax | | pmax | | | |
| | comp=Z,99nm,1.2s | | | | | | | | | |
| JEM | Erimo | 69.84 | 330 | | P | | P | | 13 19 22.9 | +0.5 |
| JTM | Tenmabayashi | 69.93 | 328 | | P | | P | | 13 19 23.4 | +0.4 |
| JTM | Tenmabayashi | 69.93 | 328 | | IAmb | | IAmb | | 13 19 24.2 | |
| | comp=Z,169nm,1.0s | | | | | | | | | |
| UGM | Wanagama | 70.15 | 268 | | P | | P | | 13 19 25.4 | +0.5 |
| UGM | Wanagama | 70.15 | 268 | | P | | P | | 13 19 26.1 | +1.2 |
| | comp=Z,374nm,1.5s,comp=Z,4µm | | | | | | | | | |
| YUK | Yuzh-Kuril'sk | 70.20 | 333 | *i* | P | | P | | 13 19 23.7 | -0.8 |
| SMRI | Semarang | 70.47 | 269 | | P | | P | | 13 19 27.7 | +0.9 |
| SMRI | Semarang | 70.47 | 269 | | IAmb | | IAmb | | 13 19 28.4 | |
| | comp=Z,123nm,0.8s | | | | | | | | | |
| JNU | Nakatsue | 70.66 | 316 | | P | | P | | 13 19 27.6 | +0.1 |
| JNU | Nakatsue | 70.66 | 316 | | IAmb | | IAmb | | 13 19 28.7 | |
| | comp=Z,109nm,1.0s | | | | | | | | | |
| JNU | Nakatsue | 70.66 | 316 | | P | | P | | 13 19 27.2 | -0.2 |
| | comp=Z,53nm,0.8s,baz=103,slow=5.6,SNR=27 | | | | | | | | | |
| | comp=Z,53nm,0.8s | | | | | | | | | |
| NIKH | Nikolski High | 71.24 | 6 | | P | | P | | 13 19 30.2 | -0.1 |
| NIKH | Nikolski High | 71.24 | 6 | | P | | P | | 13 19 29.7 | -0.7 |
| | baz=189,SNR=6.5 | | | | | | | | | |
| YOJ | Yonaguni jima | 71.49 | 304 | | P | | P | | 13 19 33.3 | +0.8 |
| STKI | Sintang | 71.66 | 276 | | P | | P | | 13 19 34.7 | +1.0 |
| | comp=Z,224nm,1.0s | | | | | | | | | |
| KPJI | Karang Pucung | 71.83 | 268 | | P | | P | | 13 19 34.6 | -0.1 |
| | comp=Z,101nm,0.9s,comp=Z,1µm | | | | | | | | | |
| QSPA | South Pole Qui | 71.92 | 180 | | P | | P | | 13 19 36.3 | +1.8 |
| | comp=Z,48nm,1.0s,baz=222,slow=2.3,SNR=77 | | | | | | | | | |
| QSPA | | | | | PKP2bc | | | | 13 47 09.7 | |
| | comp=Z,6.1nm,1.1s,baz=263,slow=1.1,SNR=6.7 | | | | | | | | | |
| | comp=Z,48nm,1.0s | | | | | | | | | |
| QSPA | South Pole Qui | 71.92 | 180 | | P | | P | | 13 19 36.2 | +1.8 |
| QSPA | | | | | pP | | pwP | | 13 21 38.9 | -0.4 |
| QSPA | | | | | pwP | | PP | | 13 22 02.0 | -23 |
| TWGBT | Beinan | 72.22 | 302 | | P | | P | | 13 19 35.9 | -0.8 |
| TWG | Pinlang | 72.22 | 302 | | IAmb | | IAmb | | 13 19 36.0 | |
| | comp=Z,67nm,0.6s | | | | | | | | | |
| SKR | Severo-Kuril's | 72.24 | 343 | *ce* | P | | P | | 13 19 35.6 | -0.6 |
| YULB | Yu-li | 72.32 | 303 | | P | | P | | 13 19 37.6 | +0.3 |
| UNV | Unalaska Valle | 72.35 | 7 | | P | | P | | 13 19 36.2 | -0.5 |
| UNV | Unalaska Valle | 72.35 | 7 | | P | | P | | 13 19 35.9 | -0.8 |
| | baz=191,SNR=24 | | | | | | | | | |
| NACB | Ninganchiao | 72.47 | 303 | | P | | P | | 13 19 38.6 | +0.5 |
| LVA | Lava Point | 72.71 | 7 | | IAmb | | IAmb | | 13 19 38.5 | |
| | comp=Z,98nm,0.8s | | | | | | | | | |
| SSLB | Suanglung | 72.79 | 303 | | P | | P | | 13 19 39.9 | -0.1 |
| SSLB | Suanglung | 72.79 | 303 | | IAmb | | IAmb | | 13 19 40.5 | |
| | comp=Z,115nm,1.0s | | | | | | | | | |
| TPUB | Ta-pu | 72.81 | 302 | | P | | P | | 13 19 39.7 | -0.4 |
| YHNB | Yeheng | 72.89 | 304 | | P | | P | | 13 19 41.3 | +0.7 |
| TATO | Taipei | 72.95 | 304 | | P | | P | | 13 19 41.4 | +0.6 |
| TATO | Taipei | 72.95 | 304 | | P | | P | | 13 19 40.5 | -0.3 |
| TATO | Taipei | 72.95 | 304 | | P | | P | | 13 19 40.1 | -0.7 |
| BBJI | Bungbulang | 73.01 | 268 | | P | | P | | 13 19 41.4 | -0.2 |
| KSM | Kuching | 73.22 | 277 | | P | | P | | 13 19 43.7 | +1.0 |
| CNJI | Cibinong | 73.55 | 268 | | P | | P | | 13 19 44.9 | +0.4 |
| | comp=Z,80nm,1.2s | | | | | | | | | |
| PET | Petropavlovsk | 73.72 | 345 | | P | | P | | 13 19 44.2 | -0.4 |
| PET | Petropavlovsk | 73.72 | 345 | | P | | P | | 13 19 43.4 | -1.2 |
| PET | | | | | IAmb | | IAmb | | 13 19 45.2 | |
| | comp=Z,123nm,1.2s | | | | | | | | | |
| PET | Petropavlovsk | 73.72 | 345 | *ce* | P | | P | | 13 19 43.9 | -0.7 |
| PET | | | | | pmax | | pmax | | | |
| | comp=Z,168nm,1.7s | | | | | | | | | |
| FALS | False Pass | 73.74 | 9 | | P | | P | | 13 19 44.7 | +0.1 |
| FALS | False Pass | 73.74 | 9 | | P | | P | | 13 19 43.7 | -0.9 |
| | baz=194,SNR=6.2 | | | | | | | | | |
| YSS | Yuzh-Sakhalins | 73.85 | 333 | | P | | P | | 13 19 46.7 | +1.3 |
| YSS | Yuzh-Sakhalins | 73.85 | 333 | *e* | P | | P | | 13 19 46.2 | +0.8 |
| YSS | | | | *e* | | | | | 13 19 58.3 | |
| YSS | | | | *e* | *PP | | pP | | 13 21 48.9 | +0.9 |
| YSS | | | | *e* | | | | | 13 22 40.1 | |
| YSS | | | | *e* | *SP | | sP | | 13 22 52.0 | +2.8 |
| YSS | | | | *e* | S | | S | | 13 28 28.0 | -1.5 |
| YSS | | | | *e* | | | | | 13 28 59.5 | |
| YSS | | | | | pmax | | pmax | | | |
| | comp=Z,800nm,5.4s | | | | | | | | | |
| YSS | | | | | pmax | | pmax | | | |
| | comp=Z,190nm,1.1s | | | | | | | | | |
| YSS | | | | | smax | | smax | | | |
| | comp=N,100nm,4.3s | | | | | | | | | |
| YSS | | | | | smax | | smax | | | |
| | comp=E,100nm,5.5s | | | | | | | | | |
| PEA0B | Petropavlovsk- | 74.03 | 345 | *ce* | P | | P | | 13 19 46.1 | -0.2 |
| PETK | Petropavlovsk- | 74.03 | 345 | | P | | P | | 13 19 45.7 | -0.7 |
| | comp=E,164nm,0.9s,baz=129,slow=7.0,SNR=119 | | | | | | | | | |
| | comp=E,164nm,0.9s | | | | | | | | | |
| CBJI | Citeko | 74.07 | 268 | | P | | P | | 13 19 46.6 | -0.9 |
| | comp=E,213nm,0.9s | | | | | | | | | |
| DBJI | Dramaga | 74.12 | 268 | | P | | P | | 13 19 47.9 | +0.1 |
| | comp=E,253nm,1.1s | | | | | | | | | |
| SKJI | Sukabumi | 74.18 | 268 | | P | | P | | 13 19 49.1 | +1.0 |
| CNBA | Chernabura Isl | 74.32 | 11 | | IAmb | | IAmb | | 13 19 48.6 | |
| | comp=Z,161nm,1.3s | | | | | | | | | |
| CHNA | Chernabura Isl | 74.33 | 11 | | P | | P | | 13 19 47.0 | -1.0 |
| | baz=198,SNR=7.9 | | | | | | | | | |
| SDPT | Sand Point | 74.67 | 10 | | P | | P | | 13 19 49.2 | -0.7 |
| SDPT | Sand Point | 74.67 | 10 | | P | | P | | 13 19 49.2 | -0.7 |
| | baz=197,SNR=9.2 | | | | | | | | | |
| S12K | Black Hills | 74.76 | 9 | | P | | P | | 13 19 49.7 | -0.7 |
| | baz=196,SNR=24 | | | | | | | | | |
| P08K | Saint George I | 74.77 | 5 | | P | | P | | 13 19 50.0 | -0.4 |
| | baz=188,SNR=6.2 | | | | | | | | | |
| SBJI | Serang | 74.84 | 268 | | P | | P | | 13 19 52.6 | +0.8 |
| | comp=Z,281nm,1.1s | | | | | | | | | |
| TJN | Taejon | 74.92 | 317 | | P | | P | | 13 19 53.1 | +1.4 |
| TJN | Taejon | 74.92 | 317 | *ce* | P | | P | | 13 19 51.4 | -0.3 |
| KSRS | Korea Array | 75.21 | 318 | | P | | P | | 13 19 54.1 | +0.8 |
| | comp=Z,25nm,0.9s,baz=139,slow=6.2,SNR=48 | | | | | | | | | |
| | comp=Z,25nm,0.9s | | | | | | | | | |
| KSRS | Korea Array | 75.21 | 318 | *e* | P | | P | | 13 19 54.1 | +0.8 |
| KSRS | | | | | pmax | | pmax | | | |
| | comp=Z,46nm,1.1s | | | | | | | | | |
| QZH | Quanzhou | 75.23 | 303 | *i* | P | | P | | 13 19 54.0 | +0.3 |
| QZH | | | | | S | | S | | 13 28 48.3 | +3.0 |
| QZH | | | | | pmax | | pmax | | | |
| | comp=Z,220nm,1.0s | | | | | | | | | |
| TEY | Ternei | 75.27 | 328 | *e* | P | | P | | 13 19 52.9 | -0.5 |
| TEY | | | | *e* | | | | | 13 28 46.6 | |
| TEY | | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.5s | | | | | | | | | |
| TEY | | | | | pmax | | pmax | | | |
| | comp=Z,100nm,4.8s | | | | | | | | | |
| TEY | | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,1.6s | | | | | | | | | |
| TEY | | | | | pmax | | pmax | | | |
| | comp=E,10.0nm,1.6s | | | | | | | | | |
| SPIA | Saint Paul Isl | 75.29 | 4 | | P | | P | | 13 19 54.0 | +0.7 |
| SPIA | Saint Paul Isl | 75.29 | 4 | | P | | P | | 13 19 53.2 | -0.1 |
| | baz=188,SNR=12 | | | | | | | | | |
| S14K | Fog Glacier | 75.72 | 10 | | P | | P | | 13 19 55.7 | -0.1 |
| | baz=198,SNR=21 | | | | | | | | | |
| UGL | Uglegorsk | 75.79 | 334 | *e* | P | | P | | 13 19 56.4 | +0.2 |
| UGL | | | | | pmax | | pmax | | | |
| | comp=Z,200nm,1.0s | | | | | | | | | |
| CHGN | Chignik | 75.94 | 11 | | IAmb | | IAmb | | 13 19 57.5 | |
| | comp=Z,149nm,0.9s | | | | | | | | | |
| CHGN | Chignik | 75.94 | 11 | | P | | P | | 13 19 56.3 | -0.5 |
| | baz=199,SNR=12 | | | | | | | | | |
| PPBI | Pangkal Pinang | 76.02 | 272 | | P | | P | | 13 19 59.0 | +0.7 |
| | comp=Z,120nm,1.1s | | | | | | | | | |
| CHIR | Chirikof Islan | 76.03 | 13 | | P | | P | | 13 19 57.4 | 0.0 |
| | baz=202 | | | | | | | | | |
| INCN | Inchon | 76.05 | 318 | | P | | P | | 13 19 58.9 | +0.9 |
| INCN | Inchon | 76.05 | 318 | | P | | P | | 13 19 58.4 | +0.4 |
| INCN | | | | | IAmb | | IAmb | | 13 20 00.1 | |
| | comp=Z,198nm,1.4s | | | | | | | | | |
| INCN | Inchon | 76.05 | 318 | | P | | P | | 13 19 59.1 | +1.1 |
| INCN | Inchon | 76.05 | 318 | | P | | P | | 13 19 58.4 | +0.4 |
| INCN | | | | | pmax | | pmax | | | |
| | comp=Z,198nm,1.4s | | | | | | | | | |
| SAO | San Andreas Ge | 76.23 | 44 | | IAmb | | IAmb | | 13 20 02.0 | |
| | comp=Z,60nm,0.9s | | | | | | | | | |
| PMPB | Monarch Peak | 76.34 | 44 | | IAmb | | IAmb | | 13 20 02.9 | |
| | comp=Z,169nm,1.6s | | | | | | | | | |
| BBGB | Big Mountain B | 76.39 | 44 | | IAmb | | IAmb | | 13 20 04.3 | |
| | comp=Z,108nm,1.3s | | | | | | | | | |
| VLA | Vladivostok | 76.43 | 325 | *i* | P | | P | | 13 19 59.2 | -0.7 |
| VLA | | | | | pmax | | pmax | | | |
| | comp=Z,81nm,1.3s | | | | | | | | | |
| MSHR | Mys Shultsa | 76.48 | 324 | *ce* | P | | P | | 13 20 01.3 | +1.1 |
| MSHR | | | | | pmax | | pmax | | | |
| | comp=Z,210nm,1.3s | | | | | | | | | |
| HOPS | Hopland Field | 76.51 | 41 | | IAmb | | IAmb | | 13 20 03.4 | |
| | comp=Z,87nm,1.2s | | | | | | | | | |
| KASI | Kota Agung | 76.57 | 269 | | P | | P | | 13 20 00.7 | -0.6 |
| | comp=Z,254nm,1.2s,comp=Z,2µm | | | | | | | | | |
| KCPM | Cahto Peak | 76.61 | 40 | | IAmb | | IAmb | | 13 20 04.2 | |
| | comp=Z,113nm,1.4s | | | | | | | | | |
| PSTR | Posyet | 76.73 | 324 | *i* | P | | P | | 13 20 00.8 | -0.7 |
| KMPM | Mount Pierce | 76.73 | 39 | | IAmb | | IAmb | | 13 20 05.0 | |
| | comp=Z,85nm,1.1s | | | | | | | | | |
| KMRM | Mail Ridge | 76.86 | 40 | | IAmb | | IAmb | | 13 20 05.7 | |
| | comp=Z,198nm,0.9s | | | | | | | | | |
| TYV | Tymovskoe | 76.94 | 336 | *e* | P | | P | | 13 20 03.0 | +0.5 |
| TYV | | | | *e* | S | | S | | 13 28 58.5 | -4.0 |
| TYV | | | | | pmax | | pmax | | | |
| | comp=Z,400nm,4.4s | | | | | | | | | |
| TYV | | | | | pmax | | pmax | | | |
| | comp=Z,106nm,1.6s | | | | | | | | | |
| TYV | | | | | smax | | smax | | | |
| | comp=N,100nm,6.6s | | | | | | | | | |
| TYV | | | | | smax | | smax | | | |
| | comp=E,200nm,6.6s | | | | | | | | | |
| SII | Sitkinak Islan | 77.03 | 13 | | P | | P | | 13 20 03.6 | +0.8 |
| SII | Sitkinak Islan | 77.03 | 13 | | P | | P | | 13 20 03.0 | +0.1 |
| | baz=203,SNR=9.0 | | | | | | | | | |
| USA0B | Ussuriysk Arra | 77.09 | 325 | *i* | P | | P | | 13 20 03.4 | 0.0 |
| USRK | Ussuriysk Ar. | 77.09 | 325 | | P | | P | | 13 20 04.6 | +1.2 |
| | comp=E,25nm,0.8s,baz=146,slow=2.8,SNR=69 | | | | | | | | | |
| | comp=E,25nm,0.8s | | | | | | | | | |
| LWLI | Liwa | 77.13 | 269 | | P | | P | | 13 20 04.1 | -0.5 |
| R16K | Pilot Point | 77.29 | 11 | | P | | P | | 13 20 04.4 | +0.2 |
| | baz=200 | | | | | | | | | |
| O02D | Mt. Diablo Mer | 77.39 | 40 | | IAmb | | IAmb | | 13 20 08.8 | |
| | comp=Z,107nm,1.2s | | | | | | | | | |
| KRMB | Red Mountain | 77.54 | 38 | | IAmb | | IAmb | | 13 20 09.4 | |
| | comp=Z,98nm,1.4s | | | | | | | | | |
| R17L | Mt. Peulik Vol | 77.58 | 12 | | P | | P | | 13 20 06.0 | +0.2 |
| | baz=201,SNR=26 | | | | | | | | | |
| HKPS | Hong Kong Po S | 77.67 | 298 | | P | | P | | 13 20 07.9 | +0.8 |
| HKPS | Hong Kong Po S | 77.67 | 298 | | IAmb | | IAmb | | 13 20 09.6 | |
| | comp=Z,202nm,1.2s | | | | | | | | | |
| OHAK | Old Harbor | 77.83 | 13 | | P | | P | | 13 20 07.8 | +0.7 |
| OHAK | Old Harbor | 77.83 | 13 | | IAmb | | IAmb | | 13 20 08.5 | |
| | comp=Z,114nm,0.9s | | | | | | | | | |
| OHAK | Old Harbor | 77.83 | 13 | | P | | P | | 13 20 07.6 | +0.5 |
| | baz=204,SNR=18 | | | | | | | | | |
| R18K | Karluk | 77.90 | 13 | | P | | P | | 13 20 07.7 | +0.2 |
| | baz=203 | | | | | | | | | |
| PFO | Pinyon Flats O | 77.92 | 49 | *i* | P | | P | | 13 20 07.9 | -0.5 |
| PFO | | | | | pmax | | pmax | | | |
| | comp=Z,26nm,1.1s | | | | | | | | | |
| TPFO | Pinon Flats | 77.92 | 49 | | P | | P | | 13 20 07.4 | -1.0 |
| | baz=239 | | | | | | | | | |
| SLBS | Sierra La Lagu | 78.23 | 60 | | P | | P | | 13 20 10.7 | +0.5 |
| Q17K | Contact Creek | 78.26 | 12 | | P | | P | | 13 20 09.4 | -0.1 |
| | baz=201,SNR=36 | | | | | | | | | |
| O14K | Tigyukauivet M | 78.30 | 9 | | P | | P | | 13 20 09.3 | -0.3 |
| | baz=196 | | | | | | | | | |
| O15K | Ungalikthiuk R | 78.44 | 9 | | P | | P | | 13 20 09.9 | -0.5 |
| | baz=198,SNR=7.9 | | | | | | | | | |
| NJ2 | Nanjing | 78.48 | 309 | *i* | P | | P | | 13 20 12.0 | +0.8 |
| NJ2 | | | | | pmax | | pmax | | | |
| | comp=Z,80nm,0.9s | | | | | | | | | |
| NJ2 | | | | | pmax | | pmax | | | |
| | comp=Z,460nm,3.9s | | | | | | | | | |
| KDAK | Kodiak Island | 78.50 | 14 | | P | | P | | 13 20 10.9 | +0.2 |
| KDAK | | | | | IAmb | | IAmb | | 13 20 13.1 | |
| | comp=Z,185nm,1.0s | | | | | | | | | |
| KDAK | Kodiak Island | 78.50 | 14 | | P | | P | | 13 20 11.1 | +0.4 |
| | baz=204 | | | | | | | | | |
| KDAK | Kodiak Island | 78.50 | 14 | *i* | P | | P | | 13 20 10.6 | -0.1 |
| KDAK | | | | | pmax | | pmax | | | |
| | comp=Z,256nm,1.1s | | | | | | | | | |
| Q16K | King Salmon | 78.50 | 11 | | P | | P | | 13 20 10.8 | +0.2 |
| | baz=201 | | | | | | | | | |
| TPRI | Tanjung Pinang | 78.51 | 275 | | P | | P | | 13 20 12.7 | +0.9 |
| | comp=Z,100nm,1.0s | | | | | | | | | |
| WAKR | Walker | 78.53 | 43 | | IAmb | | IAmb | | 13 20 14.7 | |
| | comp=Z,68nm,1.0s | | | | | | | | | |
| J01E | Myrtle Point | 78.54 | 37 | | IAmb | | IAmb | | 13 20 14.0 | |
| | comp=Z,76nm,1.0s | | | | | | | | | |
| DLV | T Lat | 78.55 | 287 | | P | | P | | 13 20 12.9 | +0.7 |
| DLV | T Lat | 78.55 | 287 | | IAmb | | IAmb | | 13 20 14.4 | |
| | comp=Z,132nm,1.3s | | | | | | | | | |
| HATC | Hat Creek Radi | 78.59 | 40 | | IAmb | | IAmb | | 13 20 14.7 | |
| | comp=Z,128nm,1.1s | | | | | | | | | |
| P16K | Nushagak River | 78.60 | 10 | | P | | P | | 13 20 11.1 | -0.1 |
| | baz=199,SNR=8.7 | | | | | | | | | |
| MDJ | Mudanjiang | 78.66 | 325 | | P | | P | | 13 20 13.4 | +1.5 |
| MDJ | Mudanjiang | 78.66 | 325 | | P | | P | | 13 20 13.0 | +1.1 |
| MDJ | | | | | pP | | pwP | | 13 22 18.8 | -0.6 |
| MDJ | | | | | pmax | | pmax | | | |
| | comp=Z,280nm,1.0s | | | | | | | | | |
| MDJ | | | | | pmax | | pmax | | | |
| | comp=Z,1µm,4.7s | | | | | | | | | |
| PNTR | Pine Nut | 78.76 | 42 | | IAmb | | IAmb | | 13 20 15.8 | |
| | comp=Z,104nm,0.9s | | | | | | | | | |
| HUMO | Hull Mountain | 78.76 | 38 | | IAmb | | IAmb | | 13 20 15.7 | |
| | comp=Z,89nm,1.2s | | | | | | | | | |
| Q18K | Katmai Hardscr | 78.79 | 12 | | P | | P | | 13 20 12.3 | -0.1 |
| | baz=202,SNR=43 | | | | | | | | | |
| M11K | Mekoryuk | 78.81 | 6 | | P | | P | | 13 20 13.3 | +1.1 |
| | baz=191,SNR=10 | | | | | | | | | |
| N14K | Kuskokwak Cree | 78.89 | 8 | | P | | P | | 13 20 13.1 | +0.5 |
| | baz=196,SNR=56 | | | | | | | | | |
| YERR | Yerington | 78.93 | 43 | | IAmb | | IAmb | | 13 20 16.4 | |
| | comp=Z,63nm,0.9s | | | | | | | | | |
| LHV | Little Huntoon | 79.00 | 44 | | IAmb | | IAmb | | 13 20 17.1 | |
| | comp=Z,71nm,1.0s | | | | | | | | | |
| P17K | Kvichak River | 79.03 | 11 | | P | | P | | 13 20 13.4 | -0.1 |
| | baz=201 | | | | | | | | | |
| GRAC | Grapevine Rang | 79.08 | 45 | | IAmb | | IAmb | | 13 20 17.5 | |
| | comp=Z,142nm,1.6s | | | | | | | | | |
| O16K | Kokwok River B | 79.11 | 10 | | IAmb | | IAmb | | 13 20 14.3 | |
| | comp=Z,88nm,0.9s | | | | | | | | | |
| O16K | Kokwok River B | 79.11 | 10 | | P | | P | | 13 20 13.3 | -0.6 |
| | baz=199,SNR=30 | | | | | | | | | |
| M13K | Dall Lake | 79.15 | 7 | | P | | P | | 13 20 14.4 | +0.4 |
| M13K | | | | | IAmb | | IAmb | | 13 20 17.2 | |
| | comp=Z,87nm,0.9s | | | | | | | | | |
| M13K | Dall Lake | 79.15 | 7 | | P | | P | | 13 20 14.9 | +0.9 |
| | baz=194,SNR=11 | | | | | | | | | |
| NVAR | Mina Array Bea | 79.23 | 44 | | P | | P | | 13 20 17.1 | +1.7 |
| | comp=Z,25nm,0.8s,baz=225,slow=7.4,SNR=112 | | | | | | | | | |
| | comp=Z,25nm,0.8s | | | | | | | | | |
| Q20K | Shuyak Island | 79.30 | 13 | | P | | P | | 13 20 15.3 | +0.4 |
| | baz=205,SNR=9.5 | | | | | | | | | |
| SYI | Shuyak Island | 79.30 | 13 | | IAmb | | IAmb | | 13 20 16.4 | |
| | comp=Z,172nm,0.9s | | | | | | | | | |
| Q19K | Cape Douglas, | 79.32 | 13 | | IAmb |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L14K | **Kuka Creek** | 80.13 | 7 | P | | **P** | | 13 20 19.9 | +0.7 |
| | baz=195,SNR=38 | | | | | | | | |
| N17K | **Nushagak Hills** | 80.15 | 10 | IAmb | | IAmb | | 13 20 20.6 | |
| | comp=Z,123nm,1.4s | | | | | | | | |
| N17K | **Nushagak Hills** | 80.15 | 10 | P | | **P** | | 13 20 19.5 | +0.2 |
| | baz=200,SNR=31 | | | | | | | | |
| J05D | **Fort Rock, OR** | 80.18 | 38 | IAmb | | IAmb | | 13 20 23.1 | |
| | comp=Z,142nm,0.9s | | | | | | | | |
| G03D | **McMinnville, O** | 80.18 | 36 | IAmb | | IAmb | | 13 20 22.7 | |
| | comp=Z,227nm,1.4s | | | | | | | | |
| Q09A | **Carvers** | 80.19 | 44 | IAmb | | IAmb | | 13 20 23.0 | |
| | comp=Z,62nm,0.9s | | | | | | | | |
| M16K | **Timber Creek** | 80.33 | 9 | P | | **P** | | 13 20 21.6 | +1.3 |
| | baz=198,SNR=103 | | | | | | | | |
| O19K | **Port Alsworth** | 80.36 | 12 | P | | **P** | | 13 20 20.4 | 0.0 |
| | baz=203,SNR=56 | | | | | | | | |
| CNPM | **China Poot** | 80.38 | 13 | IAmb | | IAmb | | 13 20 22.0 | |
| | comp=Z,115nm,1.0s | | | | | | | | |
| HOM | **Homer** | 80.41 | 13 | P | | **P** | | 13 20 21.2 | +0.6 |
| | baz=205 | | | | | | | | |
| F03A | **Seaside** | 80.47 | 35 | IAmb | | IAmb | | 13 20 24.0 | |
| | comp=Z,201nm,1.5s | | | | | | | | |
| H04A | **Detroit Lake** | 80.47 | 37 | IAmb | | IAmb | | 13 20 23.5 | |
| | comp=Z,230nm,1.6s | | | | | | | | |
| K13K | **Kusilvak Mount** | 80.49 | 6 | IAmb | | IAmb | | 13 20 23.1 | |
| | comp=Z,135nm,1.3s | | | | | | | | |
| K13K | **Kusilvak Mount** | 80.49 | 6 | P | | **P** | | 13 20 22.1 | +1.1 |
| | baz=193 | | | | | | | | |
| SNY | **Shenyang** | 80.49 | 320 | ⇓P | | **P** | | 13 20 21.8 | +0.3 |
| SNY | | | | pmax | | pmax | | | |
| | comp=Z,43nm,1.0s | | | | | | | | |
| CN2 | **Changchun** | 80.51 | 322 | ⇓*i*P | | **P** | | 13 20 22.0 | +0.4 |
| CN2 | | | | pP | | pP | | 13 22 29.5 | +1.8 |
| CN2 | | | | S | | **SKSac** | | 13 29 42.5 | -0.4 |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,180nm,1.1s | | | | | | | | |
| CN2 | | | | pmax | | pmax | | | |
| | comp=Z,600nm,3.0s | | | | | | | | |
| S11A | **Rachel** | 80.51 | 45 | IAmb | | IAmb | | 13 20 24.7 | |
| | comp=Z,58nm,1.0s | | | | | | | | |
| N18K | **Kilae Creek** | 80.52 | 11 | P | | **P** | | 13 20 21.1 | -0.1 |
| | baz=201,SNR=19 | | | | | | | | |
| KLR | **Kul'dur** | 80.56 | 329 | P | | **P** | | 13 20 22.4 | +0.7 |
| | comp=Z,37nm,1.0s,baz=112,slow=4.4,SNR=63 | | | | | | | | |
| | comp=Z,37nm,1.0s | | | | | | | | |
| KLR | **Kul'dur** | 80.56 | 329 | *ce*P | | **P** | | 13 20 21.1 | -0.6 |
| KLR | | | | pmax | | pmax | | | |
| | comp=Z,53nm,1.2s | | | | | | | | |
| BNX | **BinXian** | 80.57 | 325 | ⇓P | | **P** | | 13 20 21.8 | -0.1 |
| BNX | | | | pP | | **pP** | | 13 22 27.5 | -0.2 |
| BNX | | | | sP | | **sP** | | 13 23 27.3 | -1.4 |
| BNX | | | | S | | **SKSac** | | 13 29 44.0 | +0.8 |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,210nm,0.9s | | | | | | | | |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,690nm,3.9s | | | | | | | | |
| O20K | **Slope Mountain** | 80.59 | 13 | P | | **P** | | 13 20 21.5 | -0.2 |
| | baz=204,SNR=6.7 | | | | | | | | |
| L15K | **Ungalak Mounta** | 80.61 | 8 | P | | **P** | | 13 20 22.2 | +0.6 |
| | baz=196,SNR=50 | | | | | | | | |
| PINE | **Pine Mountain** | 80.65 | 38 | IAmb | | IAmb | | 13 20 25.7 | |
| | comp=Z,159nm,1.0s | | | | | | | | |
| I05D | **Terrebonne, OR** | 80.74 | 37 | IAmb | | IAmb | | 13 20 25.6 | |
| | comp=Z,100nm,1.1s | | | | | | | | |
| SMAI | **San Martin Ant** | 80.76 | 159 | IAmb | | IAmb | | 13 20 26.2 | |
| | comp=Z,120nm,1.2s | | | | | | | | |
| E03A | **Lebam** | 80.85 | 35 | IAmb | | IAmb | | 13 20 25.9 | |
| | comp=Z,131nm,1.0s | | | | | | | | |
| N19K | **Bonanza Creek** | 80.90 | 11 | IAmb | | IAmb | | 13 20 24.0 | |
| | comp=Z,94nm,1.0s | | | | | | | | |
| N19K | **Bonanza Creek** | 80.90 | 11 | P | | **P** | | 13 20 22.8 | -0.5 |
| | baz=202,SNR=26 | | | | | | | | |
| L16K | **Owhat River** | 80.92 | 9 | P | | **P** | | 13 20 24.2 | +1.0 |
| | baz=198,SNR=105 | | | | | | | | |
| M17K | **Holitna River** | 80.93 | 10 | P | | **P** | | 13 20 24.8 | +1.5 |
| | baz=200,SNR=85 | | | | | | | | |
| SVW2 | **Sparrevohn** | 80.96 | 11 | P | | **P** | | 13 20 24.1 | +0.6 |
| HG4B | **Hotspring** | 80.99 | 27 | IAmb | | IAmb | | 13 20 26.2 | |
| | comp=Z,92nm,1.1s | | | | | | | | |
| R11B | **Troy Canyon, C** | 80.99 | 45 | P | | **P** | | 13 20 25.7 | +1.3 |
| | baz=238 | | | | | | | | |
| BMN | **Battle Mountai** | 81.03 | 42 | IAmb | | IAmb | | 13 20 27.4 | |
| | comp=Z,79nm,1.1s | | | | | | | | |
| F04A | **Amboy** | 81.09 | 36 | IAmb | | IAmb | | 13 20 26.9 | |
| | comp=Z,168nm,1.3s | | | | | | | | |
| DIB | **Dawson Inlet,** | 81.11 | 26 | IAmb | | IAmb | | 13 20 26.4 | |
| | comp=Z,75nm,1.1s | | | | | | | | |
| WHN | **Wuhan** | 81.15 | 306 | ⇓*i*P | | **P** | | 13 20 26.0 | +0.8 |
| WHN | | | | pmax | | pmax | | | |
| | comp=Z,270nm,1.1s | | | | | | | | |
| HOOD | **Mount Hood Mea** | 81.15 | 36 | IAmb | | IAmb | | 13 20 27.4 | |
| | comp=Z,119nm,1.1s | | | | | | | | |
| C03A | **Quillayute Air** | 81.20 | 33 | IAmb | | IAmb | | 13 20 29.0 | |
| | comp=Z,146nm,1.2s | | | | | | | | |
| K15K | **Wolf Creek Mou** | 81.20 | 8 | P | | **P** | | 13 20 26.0 | +1.3 |
| | baz=196,SNR=164 | | | | | | | | |
| CNSH | **ChangSha** | 81.21 | 303 | P | | **P** | | 13 20 26.5 | +1.0 |
| CNSH | | | | pmax | | pmax | | | |
| | comp=Z,92nm,1.1s | | | | | | | | |
| WVOR | **Wild Horse Val** | 81.25 | 40 | IAmb | | IAmb | | 13 20 28.4 | |
| | comp=Z,101nm,1.1s | | | | | | | | |
| M18K | **Stony River** | 81.29 | 10 | P | | **P** | | 13 20 25.6 | +0.5 |
| | baz=201,SNR=27 | | | | | | | | |
| G05A | **Wamic** | 81.30 | 37 | IAmb | | IAmb | | 13 20 28.2 | |
| | comp=Z,67nm,1.0s | | | | | | | | |
| SEW | **Seward** | 81.30 | 14 | P | | **P** | | 13 20 25.0 | -0.2 |
| | baz=207,SNR=9.0 | | | | | | | | |
| J14K | **Nanvaranak Lak** | 81.40 | 7 | P | | **P** | | 13 20 26.4 | +0.7 |
| | baz=194 | | | | | | | | |
| TUC | **Tucson** | 81.43 | 52 | P | | **P** | | 13 20 28.4 | +1.7 |
| TUC | **Tucson** | 81.43 | 52 | P | | **P** | | 13 20 28.4 | +1.7 |
| TUC | | | | pmax | | pmax | | | |
| | comp=Z,41nm,1.1s | | | | | | | | |
| Q23K | **Middleton Isla** | 81.46 | 16 | P | | **P** | | 13 20 26.5 | +0.5 |
| | baz=210 | | | | | | | | |
| L17K | **Donlin** | 81.49 | 9 | P | | **P** | | 13 20 27.6 | +1.4 |
| | baz=199,SNR=136 | | | | | | | | |
| CAPN | **Captain Cook N** | 81.52 | 13 | P | | **P** | | 13 20 27.4 | +1.1 |
| | baz=206 | | | | | | | | |
| MA2 | **Magadan** | 81.55 | 344 | P | | **P** | | 13 20 26.2 | -0.3 |
| MA2 | **Magadan** | 81.55 | 344 | P | | **P** | | 13 20 24.3 | -2.2 |
| MA2 | | | | IAmb | | IAmb | | 13 20 27.1 | |
| | comp=Z,136nm,1.0s | | | | | | | | |
| MA2 | **Magadan** | 81.55 | 344 | *ce*P | | **P** | | 13 20 25.1 | -1.4 |
| MA2 | | | | pmax | | pmax | | | |
| | comp=Z,109nm,1.0s | | | | | | | | |
| O22K | **Cooper Landing** | 81.58 | 14 | IAmb | | IAmb | | 13 20 27.6 | |
| | comp=Z,92nm,0.7s | | | | | | | | |
| O22K | **Cooper Landing** | 81.58 | 14 | P | | **P** | | 13 20 26.4 | -0.2 |
| | baz=207 | | | | | | | | |
| BKNI | **Bangkinang** | 81.63 | 273 | P | | **P** | | 13 20 30.2 | +2.2 |
| BKNI | **Bangkinang** | 81.63 | 273 | P | | **P** | | 13 20 29.5 | +1.5 |
| | comp=Z,181nm,1.4s,comp=Z,3µm | | | | | | | | |
| I07A | **Izee** | 81.66 | 38 | IAmb | | IAmb | | 13 20 30.5 | |
| | comp=Z,82nm,0.9s | | | | | | | | |
| G06A | **Carlson Farm,** | 81.68 | 37 | IAmb | | IAmb | | 13 20 30.0 | |
| | comp=Z,71nm,1.1s | | | | | | | | |
| P23K | **Montague Islan** | 81.69 | 15 | P | | **P** | | 13 20 27.0 | -0.2 |
| | baz=209 | | | | | | | | |
| N20K | **Mount Spurr** | 81.70 | 12 | P | | **P** | | 13 20 26.6 | -0.7 |
| | baz=205,SNR=15 | | | | | | | | |
| SPCR | **Spurr Chakacha** | 81.70 | 12 | P | | **P** | | 13 20 26.5 | -0.8 |
| | baz=205,SNR=9.2 | | | | | | | | |
| SPU | **Mount Spurr** | 81.71 | 12 | IAmb | | IAmb | | 13 20 27.7 | |
| | comp=Z,98nm,1.2s | | | | | | | | |
| TIA | **Tai'an** | 81.78 | 312 | P | | **P** | | 13 20 28.5 | +0.2 |
| TIA | | | | pP | | **pP** | | 13 22 37.5 | +2.5 |
| TIA | | | | S | | **SKSac** | | 13 29 51.5 | -0.1 |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,53nm,1.1s | | | | | | | | |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,470nm,7.6s | | | | | | | | |
| GAMB | **Gambell** | 81.78 | 3 | P | | **P** | | 13 20 28.4 | +0.8 |
| | baz=186,SNR=12 | | | | | | | | |
| PDSI | **Padang** | 81.80 | 272 | P | | **P** | | 13 20 28.1 | -0.8 |
| | comp=Z,59nm,1.2s | | | | | | | | |
| L18K | **Granite Mounta** | 81.83 | 10 | IAmb | | IAmb | | 13 20 30.1 | |
| | comp=Z,116nm,0.8s | | | | | | | | |
| L18K | **Granite Mounta** | 81.83 | 10 | P | | **P** | | 13 20 29.0 | +1.1 |
| | baz=200,SNR=114 | | | | | | | | |
| Q12A | **Willow Creek R** | 81.86 | 45 | IAmb | | IAmb | | 13 20 31.6 | |
| | comp=Z,103nm,1.3s | | | | | | | | |
| J08A | **Circle Bar Ran** | 81.87 | 39 | IAmb | | IAmb | | 13 20 31.4 | |
| | comp=Z,114nm,1.2s | | | | | | | | |
| GNW | **Green Mountain** | 81.87 | 34 | IAmb | | IAmb | | 13 20 31.0 | |
| | comp=Z,69nm,0.9s | | | | | | | | |
| BELA | **Belgrano 2** | 81.88 | 173 | P | | **P** | | 13 20 28.8 | +0.7 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BELA | | | | IAmb | | IAmb | | 13 20 30.4 | |
| | comp=Z,86nm,1.3s | | | | | | | | |
| M19K | **Big River Lodg** | 81.93 | 11 | IAmb | | IAmb | | 13 20 29.4 | |
| | comp=Z,55nm,0.8s | | | | | | | | |
| M19K | **Big River Lodg** | 81.93 | 11 | P | | **P** | | 13 20 28.3 | -0.1 |
| | baz=202 | | | | | | | | |
| CLRS | **Cowichan Lake** | 81.98 | 33 | IAmb | | IAmb | | 13 20 31.3 | |
| | comp=Z,54nm,1.0s | | | | | | | | |
| K17K | **Iditarod** | 82.05 | 9 | P | | **P** | | 13 20 29.9 | +0.9 |
| | baz=199 | | | | | | | | |
| GULI | **GuiLin** | 82.07 | 300 | P | | **P** | | 13 20 31.8 | +1.8 |
| L19K | **White Mountain** | 82.10 | 11 | IAmb | | IAmb | | 13 20 31.8 | |
| | comp=Z,186nm,1.2s | | | | | | | | |
| L19K | **White Mountain** | 82.10 | 11 | P | | **P** | | 13 20 29.7 | +0.4 |
| | baz=202,SNR=57 | | | | | | | | |
| RC01 | **Rabbit Creek A** | 82.12 | 13 | IAmb | | IAmb | | 13 20 30.6 | |
| | comp=Z,172nm,1.2s | | | | | | | | |
| RC01 | **Rabbit Creek A** | 82.12 | 13 | P | | **P** | | 13 20 29.3 | -0.1 |
| | baz=207,SNR=16 | | | | | | | | |
| CBB | **Campbell River** | 82.14 | 31 | IAmb | | IAmb | | 13 20 32.2 | |
| | comp=Z,93nm,1.1s | | | | | | | | |
| M20K | **Styx River** | 82.14 | 12 | P | | **P** | | 13 20 28.9 | -0.8 |
| | baz=204 | | | | | | | | |
| PGC | **Sidney** | 82.22 | 33 | IAmb | | IAmb | | 13 20 32.5 | |
| | comp=Z,75nm,1.1s | | | | | | | | |
| PWL | **Port Wells** | 82.23 | 14 | IAmb | | IAmb | | 13 20 30.9 | |
| | comp=Z,163nm,0.9s | | | | | | | | |
| PWL | **Port Wells** | 82.23 | 14 | P | | **P** | | 13 20 29.8 | -0.2 |
| | baz=208,SNR=20 | | | | | | | | |
| SUA | **Susitna One** | 82.24 | 13 | IAmb | | IAmb | | 13 20 30.9 | |
| | comp=Z,117nm,0.8s | | | | | | | | |
| SUA | **Susitna One** | 82.24 | 13 | P | | **P** | | 13 20 30.0 | -0.1 |
| | baz=206,SNR=26 | | | | | | | | |
| HIN | **Hinchinbrook I** | 82.26 | 15 | IAmb | | IAmb | | 13 20 31.3 | |
| | comp=Z,124nm,1.1s | | | | | | | | |
| J16K | **Anvik River** | 82.27 | 8 | IAmb | | IAmb | | 13 20 32.2 | |
| | comp=Z,182nm,1.1s | | | | | | | | |
| J16K | **Anvik River** | 82.27 | 8 | P | | **P** | | 13 20 31.1 | +1.0 |
| | baz=197,SNR=33 | | | | | | | | |
| BBB | **Bella Bella** | 82.27 | 28 | IAmb | | IAmb | | 13 20 32.5 | |
| | comp=Z,58nm,1.0s | | | | | | | | |
| U15A | **North Rim** | 82.29 | 48 | IAmb | | IAmb | | 13 20 34.6 | |
| | comp=Z,61nm,0.9s | | | | | | | | |
| KAIM | **Kayak Island** | 82.39 | 16 | P | | **P** | | 13 20 30.8 | 0.0 |
| | baz=212 | | | | | | | | |
| F07A | **Phinney Hill Vi** | 82.47 | 37 | IAmb | | IAmb | | 13 20 34.0 | |
| | comp=Z,46nm,0.9s | | | | | | | | |
| UBPT | **Khong Chiam** | 82.49 | 289 | P | | **P** | | 13 20 33.4 | +1.1 |
| UBPT | **Khong Chiam** | 82.49 | 289 | IAmb | | IAmb | | 13 20 34.2 | |
| | comp=Z,58nm,1.0s | | | | | | | | |
| CRAG | **Craig** | 82.51 | 24 | P | | **P** | | 13 20 31.4 | -0.1 |
| | baz=222 | | | | | | | | |
| GLI | **Glacier Island** | 82.54 | 15 | P | | **P** | | 13 20 31.4 | -0.2 |
| | baz=209,SNR=28 | | | | | | | | |
| SKT | **Skwentna** | 82.54 | 12 | IAmb | | IAmb | | 13 20 31.6 | |
| | comp=Z,63nm,1.0s | | | | | | | | |
| SKT | **Skwentna** | 82.54 | 12 | P | | **P** | | 13 20 30.2 | -1.3 |
| | baz=205,SNR=21 | | | | | | | | |
| L20K | **Farewell, AK** | 82.55 | 11 | P | | **P** | | 13 20 31.5 | -0.1 |
| | baz=203 | | | | | | | | |
| FID | **Port Fidalgo** | 82.58 | 15 | IAmb | | IAmb | | 13 20 32.6 | |
| | comp=Z,144nm,1.2s | | | | | | | | |
| J17K | **VABM Dome** | 82.58 | 8 | IAmb | | IAmb | | 13 20 33.6 | |
| | comp=Z,78nm,0.8s | | | | | | | | |
| J17K | **VABM Dome** | 82.58 | 8 | P | | **P** | | 13 20 32.4 | +0.7 |
| | baz=198,SNR=34 | | | | | | | | |
| EYAK | **Cordova Ski Ar** | 82.58 | 15 | P | | **P** | | 13 20 32.4 | +0.7 |
| EYAK | **Cordova Ski Ar** | 82.58 | 15 | P | | **P** | | 13 20 31.7 | 0.0 |
| | baz=211,SNR=9.2 | | | | | | | | |
| GRNB | **Grenville Isla** | 82.62 | 26 | IAmb | | IAmb | | 13 20 34.5 | |
| | comp=Z,71nm,1.2s | | | | | | | | |
| M22K | **Willow** | 82.63 | 13 | P | | **P** | | 13 20 31.8 | -0.1 |
| | baz=207,SNR=51 | | | | | | | | |
| MXC | **Mcle City** | 82.66 | 36 | IAmb | | IAmb | | 13 20 35.0 | |
| | comp=Z,74nm,1.2s | | | | | | | | |
| G08A | **Pilot Rock** | 82.67 | 38 | IAmb | | IAmb | | 13 20 35.4 | |
| | comp=Z,137nm,1.3s | | | | | | | | |
| KNK | **Knik Glacier** | 82.69 | 14 | IAmb | | IAmb | | 13 20 33.4 | |
| | comp=Z,100nm,0.8s | | | | | | | | |
| KNK | **Knik Glacier** | 82.69 | 14 | P | | **P** | | 13 20 32.4 | +0.1 |
| | baz=208,SNR=20 | | | | | | | | |
| PMR | **Palmer** | 82.70 | 13 | P | | **P** | | 13 20 32.3 | 0.0 |
| PMR | **Palmer** | 82.70 | 13 | IAmb | | IAmb | | 13 20 33.3 | |
| | comp=Z,170nm,1.3s | | | | | | | | |
| PMR | **Palmer** | 82.70 | 13 | P | | **P** | | 13 20 32.3 | 0.0 |
| | baz=208,SNR=31 | | | | | | | | |
| PKCU | **Pink Cliffs** | 82.77 | 47 | IAmb | | IAmb | | 13 20 37.6 | |
| | comp=Z,92nm,1.2s | | | | | | | | |
| HMT | **Hamilton** | 82.79 | 16 | IAmb | | IAmb | | 13 20 34.2 | |
| | comp=Z,99nm,0.9s | | | | | | | | |
| I17K | **Unalakleet** | 82.84 | 8 | IAmb | | IAmb | | 13 20 35.0 | |
| | comp=Z,210nm,1.6s | | | | | | | | |
| I17K | **Unalakleet** | 82.84 | 8 | P | | **P** | | 13 20 34.0 | +1.1 |
| | baz=196 | | | | | | | | |
| LTY | **Liberty** | 82.85 | 35 | IAmb | | IAmb | | 13 20 35.7 | |
| | comp=Z,62nm,1.1s | | | | | | | | |
| SIT | **Sitka** | 82.89 | 22 | P | | **P** | | 13 20 33.4 | 0.0 |
| | baz=220 | | | | | | | | |
| E07A | **Sunnyside** | 82.90 | 36 | IAmb | | IAmb | | 13 20 36.3 | |
| | comp=Z,101nm,1.1s | | | | | | | | |
| IPM | **Ipoh** | 82.96 | 277 | P | | **P** | | 13 20 35.7 | +1.0 |
| IPM | **Ipoh** | 82.96 | 277 | IAmb | | IAmb | | 13 20 36.6 | |
| | comp=Z,128nm,0.9s | | | | | | | | |
| HAWA | **Hanford** | 82.98 | 36 | IAmb | | IAmb | | 13 20 36.7 | |
| | comp=Z,108nm,1.1s | | | | | | | | |
| U33K | **Whale Pass** | 82.99 | 23 | IAmb | | IAmb | | 13 20 36.3 | |
| | comp=Z,167nm,1.4s | | | | | | | | |
| U33K | **Whale Pass** | 82.99 | 23 | P | | **P** | | 13 20 34.9 | +1.1 |
| | baz=222,SNR=8.4 | | | | | | | | |
| J18K | **Innoko River** | 83.00 | 9 | P | | **P** | | 13 20 34.3 | +0.5 |
| | baz=200,SNR=116 | | | | | | | | |
| ANM | **Nome** | 83.00 | 5 | P | | **P** | | 13 20 34.7 | +1.0 |
| | baz=192 | | | | | | | | |
| V35K | **Ketchikan** | 83.00 | 25 | IAmb | | IAmb | | 13 20 36.4 | |
| | comp=Z,100nm,1.3s | | | | | | | | |
| V35K | **Ketchikan** | 83.00 | 25 | P | | **P** | | 13 20 34.9 | +1.0 |
| | baz=224,SNR=7.6 | | | | | | | | |
| SML | **Sawmill** | 83.07 | 14 | IAmb | | IAmb | | 13 20 36.2 | |
| | comp=Z,202nm,1.6s | | | | | | | | |
| SML | **Sawmill** | 83.07 | 14 | P | | **P** | | 13 20 34.1 | -0.1 |
| | baz=208,SNR=15 | | | | | | | | |
| CUT | **Chulitna** | 83.19 | 13 | P | | **P** | | 13 20 34.6 | -0.1 |
| | baz=206,SNR=31 | | | | | | | | |
| M23K | **Glacier View** | 83.19 | 14 | P | | **P** | | 13 20 34.5 | -0.3 |
| | baz=209,SNR=20 | | | | | | | | |
| BMRM | **Bremner River** | 83.23 | 16 | P | | **P** | | 13 20 35.2 | +0.1 |
| | baz=212,SNR=26 | | | | | | | | |
| S31K | **Pelican** | 83.28 | 21 | IAmb | | IAmb | | 13 20 37.4 | |
| | comp=Z,127nm,1.1s | | | | | | | | |
| S31K | **Pelican** | 83.28 | 21 | P | | **P** | | 13 20 36.2 | +1.0 |
| | baz=220,SNR=8.3 | | | | | | | | |
| MESA | **MESA** | 83.28 | 17 | P | | **P** | | 13 20 36.3 | +0.8 |
| | baz=214,SNR=13 | | | | | | | | |
| E08A | **Dider Farm, El** | 83.31 | 37 | IAmb | | IAmb | | 13 20 38.2 | |
| | comp=Z,259nm,1.8s | | | | | | | | |
| SCM | **Sheep Creek Mo** | 83.32 | 14 | P | | **P** | | 13 20 35.6 | +0.1 |
| | baz=209,SNR=35 | | | | | | | | |
| K20K | **Telida** | 83.33 | 11 | P | | **P** | | 13 20 35.7 | +0.2 |
| | baz=203 | | | | | | | | |
| MVU | **Marysvale** | 83.35 | 46 | IAmb | | IAmb | | 13 20 39.9 | |
| | comp=Z,172nm,1.3s | | | | | | | | |
| KLU | **Klutina** | 83.36 | 15 | IAmb | | IAmb | | 13 20 37.0 | |
| | comp=Z,90nm,1.1s | | | | | | | | |
| KLU | **Klutina** | 83.36 | 15 | P | | **P** | | 13 20 35.9 | +0.2 |
| | baz=210,SNR=20 | | | | | | | | |
| HEH | **HeiHe** | 83.37 | 328 | *e*P | | **P** | | 13 20 35.8 | -0.1 |
| HEH | | | | sP | | **sP** | | 13 23 43.3 | -0.1 |
| HEH | | | | S | | **SKSac** | | 13 30 01.5 | +0.3 |
| HEH | | | | pmax | | pmax | | | |
| | comp=Z,100nm,1.2s | | | | | | | | |
| HEH | | | | pmax | | pmax | | | |
| | comp=Z,760nm,5.9s | | | | | | | | |
| H16K | **Elim** | 83.38 | 7 | P | | **P** | | 13 20 36.1 | +0.5 |
| | baz=195,SNR=18 | | | | | | | | |
| CRQE | **Cirque** | 83.45 | 16 | P | | **P** | | 13 20 36.3 | +0.1 |
| | baz=213,SNR=13 | | | | | | | | |
| S32K | **Killisnoo** | 83.47 | 22 | IAmb | | IAmb | | 13 20 38.2 | |
| | comp=Z,95nm,1.6s | | | | | | | | |
| S32K | **Killisnoo** | 83.47 | 22 | P | | **P** | | 13 20 37.1 | +1.0 |
| | baz=221 | | | | | | | | |
| W18A | **Petrified Fore** | 83.50 | 50 | P | | **P** | | 13 20 39.0 | +1.8 |
| | baz=243,SNR=10.0 | | | | | | | | |
| WRAK | **Wrangell Islan** | 83.51 | 24 | P | | **P** | | 13 20 37.5 | +1.1 |
| | baz=223 | | | | | | | | |
| MFID | **Camas Ranch** | 83.51 | 40 | IAmb | | IAmb | | 13 20 39.6 | |
| | comp=Z,66nm,1.1s | | | | | | | | |
| G15K | **Niukluk** | 83.54 | 6 | P | | **P** | | 13 20 36.7 | +0.3 |
| | baz=193,SNR=26 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KULM | **Kulim** | 83.57 | 278 | IAmb | | IAmb | | 13 20 39.9 | |
| | comp=Z,93nm,1.3s | | | | | | | | |
| PNL | **Peninsula** | 83.61 | 19 | P | | **P** | | 13 20 37.9 | +1.0 |
| PNL | **Peninsula** | 83.61 | 19 | P | | **P** | | 13 20 37.2 | +0.3 |
| | baz=217,SNR=9.7 | | | | | | | | |
| J19K | **Poorman** | 83.67 | 10 | IAmb | | IAmb | | 13 20 38.9 | |
| | comp=Z,56nm,0.9s | | | | | | | | |
| J19K | **Poorman** | 83.67 | 10 | P | | **P** | | 13 20 37.8 | +0.7 |
| | baz=201,SNR=44 | | | | | | | | |
| D08A | **Wollman Farm,** | 83.71 | 36 | IAmb | | IAmb | | 13 20 40.2 | |
| | comp=Z,65nm,1.0s | | | | | | | | |
| BCPM | **Bancas Point** | 83.77 | 18 | IAmb | | IAmb | | 13 20 39.2 | |
| | comp=Z,73nm,1.0s | | | | | | | | |
| TNA | **Tin City** | 83.78 | 4 | P | | **P** | | 13 20 38.0 | +0.5 |
| | baz=190,SNR=6.0 | | | | | | | | |
| N25K | **Chitina, Valde** | 83.78 | 15 | P | | **P** | | 13 20 38.2 | +0.4 |
| | baz=212,SNR=51 | | | | | | | | |
| GRNC | **Granite Creek** | 83.80 | 17 | IAmb | | IAmb | | 13 20 39.5 | |
| | comp=Z,130nm,1.0s | | | | | | | | |
| 121A | **Cookes Peak, D** | 83.80 | 53 | P | | **P** | | 13 20 41.0 | +2.3 |
| | baz=244 | | | | | | | | |
| F14K | **Arctic Creek** | 83.81 | 5 | P | | **P** | | 13 20 38.3 | +0.6 |
| | baz=191,SNR=16 | | | | | | | | |
| MAW | **Mawson** | 83.82 | 200 | P | | **P** | | 13 20 39.6 | +1.7 |
| | comp=Z,3.2nm,1.1s | | | | | | | | |
| MAW | **Mawson** | 83.82 | 200 | P | | **P** | | 13 20 39.2 | +1.3 |
| | comp=Z,8.4nm,0.6s,baz=139,slow=6.8,SNR=24 | | | | | | | | |
| | comp=Z,8.4nm,0.6s | | | | | | | | |
| M24K | **Tolsona, Glenn** | 83.83 | 14 | P | | **P** | | 13 20 38.6 | +0.6 |
| | baz=210,SNR=38 | | | | | | | | |
| E09A | **Wood Farm, Sta** | 83.84 | 37 | IAmb | | IAmb | | 13 20 40.6 | |
| | comp=Z,81nm,1.3s | | | | | | | | |
| WAT6 | **Susitna Watana** | 83.88 | 14 | P | | **P** | | 13 20 38.4 | 0.0 |
| | baz=209,SNR=67 | | | | | | | | |
| WAT1 | **Susitna Watana** | 83.93 | 13 | P | | **P** | | 13 20 38.3 | -0.1 |
| | baz=208 | | | | | | | | |
| H17K | **Granite Mounta** | 83.95 | 8 | P | | **P** | | 13 20 38.5 | +0.1 |
| | baz=197 | | | | | | | | |
| MCARA | **McCarthy VSAT** | 84.00 | 16 | IAmb | | IAmb | | 13 20 40.4 | |
| | comp=Z,156nm,1.1s | | | | | | | | |
| MCARA | **McCarthy VSAT** | 84.00 | 16 | P | | **P** | | 13 20 39.1 | +0.3 |
| | baz=213,SNR=18 | | | | | | | | |
| HNS | **HongShan** | 84.05 | 312 | ⇓P | | **P** | | 13 20 40.3 | +0.8 |
| HNS | | | | pP | | **pP** | | 13 22 51.0 | +3.7 |
| HNS | | | | sP | | **sP** | | 13 23 48.5 | +0.9 |
| HNS | | | | SKS | | **SKSac** | | 13 30 06.3 | +0.2 |
| HNS | | | | S | | **S** | | 13 30 19.0 | +4.0 |
| HNS | | | | pmax | | pmax | | | |
| | comp=Z,110nm,1.4s | | | | | | | | |
| F10A | **Beach Ranch, E** | 84.06 | 38 | IAmb | | IAmb | | 13 20 41.7 | |
| | comp=Z,108nm,1.1s | | | | | | | | |
| J20K | **Nowinta River** | 84.08 | 10 | IAmb | | IAmb | | 13 20 40.5 | |
| | comp=Z,86nm,0.8s | | | | | | | | |
| J20K | **Nowinta River** | 84.08 | 10 | P | | **P** | | 13 20 39.4 | +0.3 |
| | baz=203 | | | | | | | | |
| LOGN | **Logan Glacier** | 84.08 | 17 | IAmb | | IAmb | | 13 20 40.9 | |
| | comp=Z,111nm,0.9s | | | | | | | | |
| P29M | **Windy Craggy** | 84.09 | 19 | IAmb | | IAmb | | 13 20 41.5 | |
| | comp=Z,110nm,0.8s | | | | | | | | |
| P29M | **Windy Craggy** | 84.09 | 19 | P | | **P** | | 13 20 40.1 | +0.8 |
| | baz=218,SNR=26 | | | | | | | | |
| CTG | **Chitna Glacier** | 84.10 | 17 | P | | **P** | | 13 20 39.9 | +0.5 |
| | baz=215,SNR=24 | | | | | | | | |
| G16K | **Koyuk River** | 84.10 | 6 | IAmb | | IAmb | | 13 20 40.9 | |
| | comp=Z,58nm,1.1s | | | | | | | | |
| G16K | **Koyuk River** | 84.10 | 6 | P | | **P** | | 13 20 39.7 | +0.6 |
| | baz=195,SNR=12 | | | | | | | | |
| SEY | **Seymchan** | 84.11 | 347 | *ce*P | | **P** | | 13 20 39.0 | -0.2 |
| SEY | | | | pmax | | pmax | | | |
| | comp=Z,290nm,1.3s | | | | | | | | |
| JIS | **Juneau Island** | 84.15 | 21 | P | | **P** | | 13 20 40.5 | +1.0 |
| GCSA | **Galena City Sc** | 84.18 | 9 | P | | **P** | | 13 20 40.0 | +0.5 |
| | baz=200 | | | | | | | | |
| F15K | **North Star Dit** | 84.18 | 5 | IAmb | | IAmb | | 13 20 40.9 | |
| | comp=Z,51nm,1.1s | | | | | | | | |
| F15K | **North Star Dit** | 84.18 | 5 | P | | **P** | | 13 20 39.6 | +0.1 |
| | baz=193,SNR=8.3 | | | | | | | | |
| B08A | **Colville Reser** | 84.23 | 35 | IAmb | | IAmb | | 13 20 42.0 | |
| | comp=Z,56nm,0.9s | | | | | | | | |
| O28M | **Mount Upton** | 84.27 | 18 | P | | **P** | | 13 20 40.8 | +0.3 |
| | baz=216,SNR=37 | | | | | | | | |
| BJT | **Baijiatuao** | 84.30 | 315 | P | | **P** | | 13 20 42.0 | +1.3 |
| BJT | **Baijiatuao** | 84.30 | 315 | IAmb | | IAmb | | 13 20 42.8 | |
| | comp=Z,181nm,1.4s | | | | | | | | |
| BJI | **Beijing** | 84.30 | 315 | P | | **P** | | 13 20 41.5 | +0.8 |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,44nm,1.2s | | | | | | | | |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,300nm,4.2s | | | | | | | | |
| HARP | **HAARP** | 84.32 | 15 | P | | **P** | | 13 20 40.7 | +0.3 |
| | baz=211,SNR=17 | | | | | | | | |
| H18K | **Honhosa River** | 84.36 | 8 | P | | **P** | | 13 20 40.2 | -0.3 |
| | baz=199 | | | | | | | | |
| LYN | **LuoYang** | 84.37 | 309 | P | | **P** | | 13 20 42.3 | +1.1 |
| LYN | | | | pP | | pP | | 13 22 52.5 | +3.4 |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,330nm,0.9s | | | | | | | | |
| O29M | **Mount Kennedy** | 84.37 | 18 | P | | **P** | | 13 20 41.5 | +0.8 |
| | baz=217,SNR=15 | | | | | | | | |
| RPSI | **Rantau Prapat** | 84.38 | 275 | IAmb | | IAmb | | 13 20 42.8 | |
| | comp=Z,105nm,0.9s | | | | | | | | |
| PLBC | **Pleasant Camp** | 84.39 | 20 | P | | **P** | | 13 20 41.7 | +1.0 |
| | baz=219,SNR=21 | | | | | | | | |
| DHY | **Denali Highway** | 84.40 | 13 | IAmb | | IAmb | | 13 20 42.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| K24K | **Donnelly Dome** | 85.39 | 14 | P | **P** | 13 20 46.0 | +0.4 | |
| | baz=210,SNR=58 | | | | | | | |
| Q32M | **Nakina River** | 85.40 | 22 | IAmb | IAmb | 13 20 48.1 | | |
| | comp=E,54nm,0.8s | | | | | | | |
| Q32M | **Nakina River** | 85.40 | 22 | P | **P** | 13 20 46.8 | +0.9 | |
| | baz=223,SNR=21 | | | | | | | |
| MLY | **Manley** | 85.46 | 11 | IAmb | IAmb | 13 20 46.9 | | |
| | comp=Z,70nm,1.1s | | | | | | | |
| MLY | **Manley** | 85.46 | 11 | P | **P** | 13 20 45.1 | -0.7 | |
| | baz=206,SNR=30 | | | | | | | |
| G19K | **Purcell Mounta** | 85.47 | 8 | P | **P** | 13 20 45.8 | +0.1 | |
| | baz=200,SNR=9.4 | | | | | | | |
| O30N | **Mendenhall** | 85.50 | 19 | IAmb | IAmb | 13 20 48.1 | | |
| | comp=Z,83nm,0.9s | | | | | | | |
| O30N | **Mendenhall** | 85.50 | 19 | P | **P** | 13 20 47.0 | +0.9 | |
| | baz=220,SNR=35 | | | | | | | |
| RIDG | **Independent Ri** | 85.55 | 14 | IAmb | IAmb | 13 20 47.6 | | |
| | comp=Z,140nm,1.1s | | | | | | | |
| RIDG | **Independent Ri** | 85.55 | 14 | P | **P** | 13 20 46.4 | +0.1 | |
| | baz=211,SNR=32 | | | | | | | |
| F18K | **Selawik** | 85.58 | 7 | P | **P** | 13 20 45.8 | -0.4 | |
| | baz=197 | | | | | | | |
| GYA | **Guiyang** | 85.59 | 300 | ⇓P | **P** | 13 20 48.3 | +0.8 | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.1s | | | | | | | |
| SRIT | **Nakonsritamara** | 85.62 | 280 | P | **P** | 13 20 49.8 | +2.1 | |
| ZEA | **Zeya** | 85.63 | 331 | *e*P | **P** | 13 20 47.7 | +0.9 | |
| ZEA | | | | *e* | | 13 22 57.8 | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=E,20nm,1.1s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,70nm,0.9s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,130nm,0.9s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,100nm,2.4s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,200nm,3.6s | | | | | | | |
| HDA | **Harding Lake** | 85.66 | 13 | IAmb | IAmb | 13 20 47.6 | | |
| | comp=Z,82nm,0.8s | | | | | | | |
| HDA | **Harding Lake** | 85.66 | 13 | P | **P** | 13 20 46.6 | -0.1 | |
| | baz=209 | | | | | | | |
| H21K | **Melozitna Rive** | 85.67 | 10 | IAmb | IAmb | 13 20 49.3 | | |
| | comp=Z,152nm,1.6s | | | | | | | |
| H21K | **Melozitna Rive** | 85.67 | 10 | P | **P** | 13 20 47.0 | +0.2 | |
| | baz=204,SNR=37 | | | | | | | |
| TXAR | **Lajitas Array** | 85.68 | 57 | P | **P** | 13 20 50.5 | +2.7 | |
| | comp=Z,19nm,0.9s,baz=224,slow=5.2,SNR=116 | | | | | | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| L27K | **Beaver Creek,** | 85.71 | 16 | IAmb | IAmb | 13 20 48.7 | | |
| | comp=Z,38nm,0.9s | | | | | | | |
| L27K | **Beaver Creek,** | 85.71 | 16 | P | **P** | 13 20 47.5 | +0.4 | |
| | baz=214,SNR=37 | | | | | | | |
| N30M | **Aishikik Lake** | 85.73 | 18 | IAmb | IAmb | 13 20 50.2 | | |
| | comp=Z,35nm,0.9s | | | | | | | |
| N30M | **Aishikik Lake** | 85.73 | 18 | P | **P** | 13 20 47.7 | +0.5 | |
| | baz=219,SNR=14 | | | | | | | |
| SURA | **Surathani** | 85.78 | 281 | P | **P** | 13 20 50.4 | +2.0 | |
| WHY | **Whitehorse** | 85.79 | 20 | IAmb | IAmb | 13 20 49.7 | | |
| | comp=Z,83nm,1.1s | | | | | | | |
| WHY | **Whitehorse** | 85.79 | 20 | P | **P** | 13 20 48.5 | +0.9 | |
| | baz=221,SNR=31 | | | | | | | |
| E17K | **Hotham Inlet** | 85.80 | 6 | P | **P** | 13 20 47.5 | +0.2 | |
| | baz=195,SNR=9.8 | | | | | | | |
| TIY | **Taiyuan** | 85.80 | 312 | *e*P | **P** | 13 20 49.3 | +1.2 | |
| TIY | | | | pmax | pmax | | | |
| | comp=Z,450nm,3.5s | | | | | | | |
| I23K | **Minto, Yukon-K** | 85.83 | 12 | IAmb | IAmb | 13 20 48.9 | | |
| | comp=Z,77nm,1.2s | | | | | | | |
| I23K | **Minto, Yukon-K** | 85.83 | 12 | P | **P** | 13 20 46.5 | -0.9 | |
| | baz=207,SNR=39 | | | | | | | |
| ANMO | **Albuquerque** | 85.84 | 51 | P | **P** | 13 20 49.1 | +0.5 | |
| ANMO | **Albuquerque** | 85.84 | 51 | *i* P | **P** | 13 20 47.9 | -0.6 | |
| ANMO | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| DLBC | **Dease Lake** | 85.84 | 23 | IAmb | IAmb | 13 20 50.1 | | |
| | comp=Z,159nm,1.8s | | | | | | | |
| DLBC | **Dease Lake** | 85.84 | 23 | P | **P** | 13 20 48.9 | +1.1 | |
| | baz=225,SNR=23 | | | | | | | |
| COLA | **College** | 85.88 | 12 | P | **P** | 13 20 46.5 | -1.2 | |
| COLA | **College** | 85.88 | 12 | P | **P** | 13 20 47.2 | -0.5 | |
| | baz=208 | | | | | | | |
| COLA | **College** | 85.88 | 12 | P | **P** | 13 20 46.5 | -1.2 | |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,184nm,1.1s | | | | | | | |
| SCRK | **Sand Creek** | 85.95 | 14 | IAmb | IAmb | 13 20 49.8 | | |
| | comp=Z,57nm,1.1s | | | | | | | |
| SCRK | **Sand Creek** | 85.95 | 14 | P | **P** | 13 20 48.5 | +0.2 | |
| | baz=212,SNR=31 | | | | | | | |
| ILAR | **Eielson Array** | 85.99 | 13 | P | **P** | 13 20 47.6 | -0.7 | |
| | comp=Z,42nm,0.9s,baz=230,slow=5.5,SNR=282 | | | | | | | |
| ILAR | | | | PP | **PP** | 13 24 23.3 | +3.1 | |
| | comp=Z,8.1nm,1.0s,baz=222,slow=7.4,SNR=6.1 | | | | | | | |
| | comp=Z,42nm,0.9s | | | | | | | |
| ILAR | **Eielson Array** | 85.99 | 13 | *e*P | **P** | 13 20 47.6 | -0.7 | |
| ILAR | | | | pmax | pmax | | | |
| | comp=Z,45nm,0.9s | | | | | | | |
| F19K | **Shaleruckik Mo** | 86.03 | 8 | IAmb | IAmb | 13 20 49.4 | | |
| | comp=Z,33nm,0.7s | | | | | | | |
| F19K | **Shaleruckik Mo** | 86.03 | 8 | P | **P** | 13 20 48.4 | 0.0 | |
| | baz=199,SNR=30 | | | | | | | |
| SLVN | **Son La** | 86.04 | 294 | IAmb | IAmb | 13 20 52.2 | | |
| | comp=Z,48nm,1.3s | | | | | | | |
| M29M | **Somme Creek** | 86.11 | 17 | P | **P** | 13 20 49.6 | +0.6 | |
| | baz=217,SNR=45 | | | | | | | |
| H22K | **Ishtalitna Cre** | 86.13 | 11 | P | **P** | 13 20 49.0 | +0.1 | |
| | baz=205,SNR=60 | | | | | | | |
| P33M | **Teslin, Yukon** | 86.14 | 21 | IAmb | IAmb | 13 20 51.1 | | |
| | comp=Z,36nm,0.9s | | | | | | | |
| P33M | **Teslin, Yukon** | 86.14 | 21 | P | **P** | 13 20 50.0 | +0.8 | |
| | baz=222,SNR=20 | | | | | | | |
| N31M | **Braeburn, Yuko** | 86.15 | 19 | P | **P** | 13 20 50.0 | +0.8 | |
| | baz=220,SNR=24 | | | | | | | |
| R33M | **Jennings River** | 86.18 | 22 | IAmb | IAmb | 13 20 52.0 | | |
| | comp=Z,122nm,1.4s | | | | | | | |
| R33M | **Jennings River** | 86.18 | 22 | P | **P** | 13 20 50.3 | +0.9 | |
| | baz=224,SNR=29 | | | | | | | |
| J25K | **Salcha River,** | 86.18 | 13 | P | **P** | 13 20 49.3 | +0.1 | |
| | baz=211,SNR=67 | | | | | | | |
| POKR | **Poker Plat Res** | 86.18 | 12 | IAmb | IAmb | 13 20 49.6 | | |
| | comp=Z,61nm,0.8s | | | | | | | |
| POKR | **Poker Plat Res** | 86.18 | 12 | P | **P** | 13 20 48.5 | -0.7 | |
| | baz=205,SNR=27 | | | | | | | |
| XLT | **XiLinHaoTe** | 86.25 | 319 | ⇓*i*P | **P** | 13 20 50.3 | +0.2 | |
| XLT | | | | pP | pP | 13 23 01.0 | +2.2 | |
| XLT | | | | sP | sP | 13 23 58.0 | -1.1 | |
| XLT | | | | SS | SS | 13 36 36.3 | +1.7 | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,140nm,1.1s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,170nm,6.5s | | | | | | | |
| E18K | **Tukpahlearik C** | 86.26 | 7 | IAmb | IAmb | 13 20 50.7 | | |
| | comp=Z,42nm,0.8s | | | | | | | |
| E18K | **Tukpahlearik C** | 86.26 | 7 | P | **P** | 13 20 49.8 | +0.3 | |
| | baz=196,SNR=19 | | | | | | | |
| D17K | **Noatak River** | 86.27 | 6 | P | **P** | 13 20 49.5 | 0.0 | |
| | baz=194,SNR=11 | | | | | | | |
| G21K | **Allakaket** | 86.35 | 10 | P | **P** | 13 20 50.1 | +0.2 | |
| | baz=203 | | | | | | | |
| H23K | **Yukon River** | 86.40 | 11 | P | **P** | 13 20 49.5 | -0.7 | |
| | baz=207,SNR=16 | | | | | | | |
| K27K | **Chicken** | 86.45 | 15 | P | **P** | 13 20 51.2 | +0.8 | |
| | baz=214 | | | | | | | |
| J26L | **Joseph Creek** | 86.50 | 14 | P | **P** | 13 20 51.5 | +0.7 | |
| | baz=212,SNR=116 | | | | | | | |
| DLMT | **Dillon** | 86.50 | 40 | IAmb | IAmb | 13 20 54.1 | | |
| | comp=Z,58nm,1.0s | | | | | | | |
| F20K | **Avaraart Lake** | 86.51 | 9 | P | **P** | 13 20 50.9 | +0.3 | |
| | baz=201,SNR=27 | | | | | | | |
| TPAW | **Teton Pass** | 86.61 | 42 | IAmb | IAmb | 13 20 53.9 | | |
| | comp=Z,43nm,1.1s | | | | | | | |
| RDOG | **Red Dog Mine** | 86.64 | 6 | P | **P** | 13 20 51.1 | -0.2 | |
| | baz=194 | | | | | | | |
| C16K | **Lisburne Hills** | 86.65 | 5 | P | **P** | 13 20 51.1 | -0.1 | |
| | baz=192 | | | | | | | |
| E19K | **Redstone River** | 86.69 | 8 | P | **P** | 13 20 51.8 | +0.2 | |
| | baz=200 | | | | | | | |
| M30M | **Minto, Yukon** | 86.69 | 18 | P | **P** | 13 20 52.3 | +0.6 | |
| | baz=219,SNR=77 | | | | | | | |
| BILL | **Bilibino** | 86.71 | 354 | P | **P** | 13 20 51.1 | -0.5 | |
| BILL | | | | IAmb | IAmb | 13 20 53.7 | | |
| | comp=Z,39nm,0.8s | | | | | | | |
| BILL | **Bilibino** | 86.71 | 354 | *d*P | **P** | 13 20 51.4 | -0.2 | |
| BILL | | | | *e**PP | **pP** | 13 22 57.0 | -2.9 | |
| BILL | | | | *e* | | 13 24 00.5 | | |
| BILL | | | | *e*S | **SKSac** | 13 30 19.6 | -1.5 | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,110nm,1.7s | | | | | | | |
| SNOW | **Snow King Moun** | 86.72 | 42 | IAmb | IAmb | 13 20 55.5 | | |
| | comp=Z,62nm,1.1s | | | | | | | |
| H24K | **Noodor Dome** | 86.73 | 12 | P | **P** | 13 20 50.4 | -1.4 | |
| | baz=208,SNR=15 | | | | | | | |
| N32M | **Quiet Lake** | 86.75 | 20 | P | **P** | 13 20 53.0 | +1.0 | |
| | baz=222 | | | | | | | |
| SNSI | **Sinabang, Aceh** | 86.75 | 274 | P | **P** | 13 20 55.7 | +2.6 | |
| | comp=Z,153nm,1.4s | | | | | | | |
| S22A | **4UR Ranch, Cre** | 86.77 | 49 | P | **P** | 13 20 54.7 | +1.7 | |
| | baz=244,SNR=26 | | | | | | | |
| XAN | **Xi'an** | 86.80 | 307 | ⇓P | **P** | 13 20 54.0 | +1.1 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,320nm,1.3s | | | | | | | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,790nm,5.6s | | | | | | | |
| IMW | **Indian Meadow** | 86.81 | 42 | IAmb | IAmb | 13 20 55.9 | | |
| | comp=Z,62nm,1.0s | | | | | | | |
| HIA | **Hailar** | 86.85 | 324 | P | **P** | 13 20 53.3 | +0.6 | |
| HIA | **Hailar** | 86.85 | 324 | IAmb | IAmb | 13 20 54.5 | | |
| | comp=Z,93nm,1.4s | | | | | | | |
| HIA | **Hailar** | 86.85 | 324 | *i* P | **P** | 13 20 52.1 | -0.6 | |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,45nm,1.2s | | | | | | | |
| LOHW | **Long Hollow** | 86.89 | 42 | IAmb | IAmb | 13 20 56.0 | | |
| | comp=Z,56nm,1.4s | | | | | | | |
| PRP | **Porcupine Dome** | 86.93 | 13 | IAmb | IAmb | 13 20 53.8 | | |
| | comp=Z,43nm,1.0s | | | | | | | |
| PRP | **Porcupine Dome** | 86.93 | 13 | P | **P** | 13 20 52.5 | -0.3 | |
| | baz=211,SNR=25 | | | | | | | |
| F21K | **Alatna River** | 87.00 | 9 | IAmb | IAmb | 13 20 54.1 | | |
| | comp=Z,34nm,0.9s | | | | | | | |
| F21K | **Alatna River** | 87.00 | 9 | P | **P** | 13 20 53.0 | -0.1 | |
| | baz=203,SNR=34 | | | | | | | |
| C17K | **DeLong Mountai** | 87.02 | 5 | P | **P** | 13 20 53.0 | 0.0 | |
| | baz=194 | | | | | | | |
| G22K | **Bettles** | 87.04 | 10 | P | **P** | 13 20 53.7 | +0.5 | |
| | baz=205 | | | | | | | |
| FLWY | **Flagg Ranch** | 87.05 | 42 | IAmb | IAmb | 13 20 57.2 | | |
| | comp=Z,75nm,1.1s | | | | | | | |
| G23K | **Bananza Creek** | 87.11 | 11 | IAmb | IAmb | 13 20 55.1 | | |
| | comp=Z,56nm,1.1s | | | | | | | |
| G23K | **Bananza Creek** | 87.11 | 11 | P | **P** | 13 20 53.7 | +0.2 | |
| | baz=206,SNR=36 | | | | | | | |
| YHL | **Hebgen Lake** | 87.12 | 41 | IAmb | IAmb | 13 20 57.9 | | |
| | comp=Z,92nm,1.0s | | | | | | | |
| M31M | **Drury Creek, Y** | 87.12 | 19 | IAmb | IAmb | 13 20 55.0 | | |
| | comp=Z,51nm,1.1s | | | | | | | |
| M31M | **Drury Creek, Y** | 87.12 | 19 | P | **P** | 13 20 53.9 | +0.2 | |
| | baz=221,SNR=27 | | | | | | | |
| DAWY | **Dawson** | 87.16 | 16 | IAmb | IAmb | 13 20 55.6 | | |
| | comp=Z,132nm,1.3s | | | | | | | |
| DAWY | **Dawson** | 87.16 | 16 | P | **P** | 13 20 54.5 | +0.6 | |
| | baz=216,SNR=58 | | | | | | | |
| PDAR | **Pinedale Array** | 87.16 | 43 | P | **P** | 13 20 55.6 | +1.0 | |
| | comp=Z,22nm,1.0s,baz=208,slow=2.9,SNR=46 | | | | | | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| BOZ | **Bozeman (W)** | 87.21 | 40 | IAmb | IAmb | 13 20 57.5 | | |
| | comp=Z,62nm,1.2s | | | | | | | |
| MLSI | **Meulaboh, Aceh** | 87.26 | 275 | P | **P** | 13 20 56.0 | +0.6 | |
| | comp=Z,138nm,1.0s | | | | | | | |
| I26K | **Coal Creek Min** | 87.27 | 14 | IAmb | IAmb | 13 20 56.0 | | |
| | comp=Z,151nm,1.4s | | | | | | | |
| I26K | **Coal Creek Min** | 87.27 | 14 | P | **P** | 13 20 54.8 | +0.5 | |
| | baz=213,SNR=52 | | | | | | | |
| H17A | **Grant Village** | 87.28 | 41 | IAmb | IAmb | 13 20 59.1 | | |
| | comp=Z,41nm,0.8s | | | | | | | |
| H17A | **Grant Village** | 87.28 | 41 | P | **P** | 13 20 57.9 | +2.7 | |
| | baz=241,SNR=19 | | | | | | | |
| EGAK | **Eagle** | 87.30 | 15 | IAmb | IAmb | 13 20 56.0 | | |
| | comp=Z,99nm,1.1s | | | | | | | |
| EGAK | **Eagle** | 87.30 | 15 | P | **P** | 13 20 54.7 | +0.3 | |
| | baz=215,SNR=64 | | | | | | | |
| YNM | **Yellowstone No** | 87.36 | 41 | IAmb | IAmb | 13 21 00.0 | | |
| | comp=Z,58nm,0.9s | | | | | | | |
| C18K | **Utukok River** | 87.38 | 6 | P | **P** | 13 20 54.6 | -0.2 | |
| | baz=196,SNR=7.6 | | | | | | | |
| FARO | **Faro, Yukon** | 87.46 | 19 | IAmb | IAmb | 13 20 56.9 | | |
| | comp=Z,138nm,1.8s | | | | | | | |
| FARO | **Faro, Yukon** | 87.46 | 19 | P | **P** | 13 20 55.5 | +0.2 | |
| | baz=222,SNR=30 | | | | | | | |
| WTLY | **Watson Lake, Y** | 87.47 | 22 | IAmb | IAmb | 13 20 57.6 | | |
| | comp=Z,76nm,1.3s | | | | | | | |
| WTLY | **Watson Lake, Y** | 87.47 | 22 | P | **P** | 13 20 56.5 | +1.1 | |
| | baz=226,SNR=6.7 | | | | | | | |
| F22K | **John River** | 87.47 | 10 | P | **P** | 13 20 55.6 | +0.4 | |
| | baz=204,SNR=58 | | | | | | | |
| LKWY | **Lake** | 87.47 | 41 | IAmb | IAmb | 13 21 00.1 | | |
| | comp=Z,46nm,0.9s | | | | | | | |
| K29M | **Barlow Dome** | 87.48 | 17 | P | **P** | 13 20 56.2 | +0.8 | |
| | baz=218 | | | | | | | |
| H25L | **Birch Creek** | 87.52 | 12 | P | **P** | 13 20 54.6 | -0.8 | |
| | baz=210,SNR=11 | | | | | | | |
| COLD | **Coldfoot** | 87.54 | 10 | P | **P** | 13 20 56.2 | +0.7 | |
| | baz=206,SNR=96 | | | | | | | |
| D19K | **Kuna River** | 87.57 | 7 | P | **P** | 13 20 55.8 | +0.1 | |
| | baz=199 | | | | | | | |
| G24K | **Hadweenzic Riv** | 87.57 | 12 | IAmb | IAmb | 13 20 56.6 | | |
| | comp=Z,26nm,0.8s | | | | | | | |
| G24K | **Hadweenzic Riv** | 87.57 | 12 | P | **P** | 13 20 55.7 | 0.0 | |
| | baz=209,SNR=12 | | | | | | | |
| E20K | **Nigu River** | 87.58 | 8 | P | **P** | 13 20 56.1 | +0.3 | |
| | baz=201 | | | | | | | |
| J29N | **Klondike Camp** | 87.78 | 16 | P | **P** | 13 20 57.8 | +1.0 | |
| | baz=217,SNR=9.1 | | | | | | | |
| HHC | **Hu-ho-hao-te** | 87.80 | 314 | ⇓*i*P | **P** | 13 20 58.5 | +1.0 | |
| HHC | | | | pP | pP | 13 23 08.5 | +1.9 | |
| HHC | | | | SKS | **SKSac** | 13 30 30.5 | +1.5 | |
| HHC | | | | *e*S | **S** | 13 30 52.3 | +1.7 | |
| HHC | | | | sS | sS | 13 34 39.8 | +1.2 | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,79nm,0.9s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,94nm,4.2s | | | | | | | |
| I27K | **Kandik River** | 87.87 | 14 | P | **P** | 13 20 57.5 | +0.3 | |
| | baz=214,SNR=20 | | | | | | | |
| G25K | **Bearman Lake** | 87.89 | 12 | P | **P** | 13 20 56.9 | -0.2 | |
| | baz=210,SNR=24 | | | | | | | |
| FYU | **Fort Yukon** | 87.89 | 12 | IAmb | IAmb | 13 20 58.3 | | |
| | comp=Z,31nm,0.7s | | | | | | | |
| SRDT | **SRDT** | 87.94 | 286 | P | **P** | 13 20 59.8 | +1.3 | |
| TOAD | **Toad River Com** | 87.95 | 24 | P | **P** | 13 20 58.6 | +1.0 | |
| | baz=229,SNR=92 | | | | | | | |
| D20K | **Etivluk River** | 87.96 | 8 | P | **P** | 13 20 57.7 | +0.2 | |
| | baz=200 | | | | | | | |
| C19K | **Lookout Ridge** | 87.98 | 6 | P | **P** | 13 20 58.1 | +0.5 | |
| | baz=197 | | | | | | | |
| LIRD | **Liard River Hi** | 87.99 | 24 | P | **P** | 13 20 58.6 | +0.8 | |
| | baz=228,SNR=11 | | | | | | | |
| B18K | **Kokolik River** | 88.01 | 6 | P | **P** | 13 20 57.9 | +0.2 | |
| | baz=195 | | | | | | | |
| E21K | **Killik River** | 88.06 | 9 | IAmb | IAmb | 13 20 59.0 | | |
| | comp=Z,79nm,1.1s | | | | | | | |
| E21K | **Killik River** | 88.06 | 9 | P | **P** | 13 20 58.0 | 0.0 | |
| | baz=203,SNR=57 | | | | | | | |
| E22K | **Anaktuvuk Pass** | 88.10 | 9 | P | **P** | 13 20 58.5 | +0.3 | |
| | baz=205,SNR=94 | | | | | | | |
| I28M | **Miner Creek** | 88.15 | 15 | IAmb | IAmb | 13 20 59.8 | | |
| | comp=Z,50nm,0.9s | | | | | | | |
| I28M | **Miner Creek** | 88.15 | 15 | P | **P** | 13 20 58.7 | +0.2 | |
| | baz=216,SNR=42 | | | | | | | |
| DRIO | **Del Rio** | 88.17 | 58 | IAmb | IAmb | 13 21 03.0 | | |
| | comp=Z,33nm,0.9s | | | | | | | |
| F24K | **Squaw Lake** | 88.21 | 11 | IAmb | IAmb | 13 21 00.3 | | |
| | comp=Z,60nm,0.8s | | | | | | | |
| F24K | **Squaw Lake** | 88.21 | 11 | P | **P** | 13 20 59.3 | +0.6 | |
| | baz=208,SNR=67 | | | | | | | |
| MSTX | **Muleshoe** | 88.21 | 53 | IAmb | IAmb | 13 21 02.0 | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| RWWY | **Rawlins** | 88.23 | 45 | IAmb | IAmb | 13 21 02.0 | | |
| | comp=Z,54nm,1.2s | | | | | | | |
| T25A | **Trinidad** | 88.26 | 50 | P | **P** | 13 21 01.1 | +1.2 | |
| | baz=246 | | | | | | | |
| J30M | **Hart River** | 88.38 | 17 | IAmb | IAmb | 13 21 01.5 | | |
| | comp=Z,111nm,1.6s | | | | | | | |
| J30M | **Hart River** | 88.38 | 17 | P | **P** | 13 21 00.2 | +0.6 | |
| | baz=219,SNR=40 | | | | | | | |
| E23K | **Chandalar** | 88.39 | 10 | IAmb | IAmb | 13 21 01.1 | | |
| | comp=Z,79nm,0.9s | | | | | | | |
| E23K | **Chandalar** | 88.39 | 10 | P | **P** | 13 20 60.0 | +0.4 | |
| | baz=207,SNR=64 | | | | | | | |
| KMI | **Kunming** | 88.39 | 297 | ⇓P | **P** | 13 21 02.0 | +1.3 | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,67nm,1.4s | | | | | | | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,370nm,5.5s | | | | | | | |
| H27K | **Steamboat Moun** | 88.42 | 14 | P | **P** | 13 21 00.2 | +0.6 | |
| | baz=214,SNR=46 | | | | | | | |
| RLMT | **Red Lodge** | 88.44 | 41 | IAmb | IAmb | 13 21 03.5 | | |
| | comp=Z,45nm,1.1s | | | | | | | |
| I29M | **Ogilvie Camp,** | 88.48 | 15 | IAmb | IAmb | 13 21 01.2 | | |
| | comp=Z,74nm,1.1s | | | | | | | |
| I29M | **Ogilvie Camp,** | 88.48 | 15 | P | **P** | 13 21 00.0 | 0.0 | |
| | baz=217,SNR=43 | | | | | | | |
| Q24A | **Divide** | 88.48 | 48 | P | **P** | 13 21 02.2 | +1.2 | |
| | baz=245 | | | | | | | |
| G26K | **Porcupine Rive** | 88.52 | 13 | P | **P** | 13 21 00.7 | +0.7 | |
| | baz=212,SNR=95 | | | | | | | |
| E24K | **Your Creek** | 88.60 | 11 | IAmb | IAmb | 13 21 02.0 | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| E24K | **Your Creek** | 88.60 | 11 | P | **P** | 13 21 00.8 | +0.3 | |
| | baz=208,SNR=27 | | | | | | | |
| C21K | **Knifeblade Rid** | 88.61 | 8 | P | **P** | 13 21 01.1 | +0.7 | |
| | baz=202,SNR=50 | | | | | | | |
| TGTN | **Hyland Airport** | 88.63 | 21 | P | **P** | 13 21 02.0 | +1.2 | |
| | baz=226,SNR=36 | | | | | | | |
| D22K | **Ayikyak River** | 88.65 | 9 | P | **P** | 13 21 01.4 | +0.7 | |
| | baz=204,SNR=66 | | | | | | | |
| F25K | **Christian Rive** | 88.70 | 12 | P | **P** | 13 21 01.8 | +0.8 | |
| | baz=210,SNR=30 | | | | | | | |
| N23A | **Red Feather La** | 88.75 | 46 | P | **P** | 13 21 03.7 | +1.6 | |
| | baz=245 | | | | | | | |
| BTO | **Baotou** | 88.75 | 314 | *e*P | **P** | 13 21 03.3 | +1.4 | |
| BTO | | | | pP | **pP** | 13 23 12.5 | +1.1 | |
| BTO | | | | PP | **PP** | 13 24 46.8 | +4.2 | |
| BTO | | | | sS | **sS** | 13 34 48.3 | -1.5 | |
| BTO | | | | SS | **SS** | 13 37 15.8 | +5.2 | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,98nm,1.1s | | | | | | | |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,850nm,7.6s | | | | | | | |
| 833A | **Chaparral WMA,** | 88.77 | 60 | P | **P** | 13 21 03.7 | +1.5 | |
| | baz=249 | | | | | | | |
| G27K | **Doyon Strip** | 88.87 | 14 | IAmb | IAmb | 13 21 03.5 | | |
| | comp=Z,36nm,1.2s | | | | | | | |
| G27K | **Doyon Strip** | 88.87 | 14 | P | **P** | 13 21 02.1 | +0.3 | |
| | baz=214,SNR=41 | | | | | | | |
| I30M | **Mount Dempster** | 88.88 | 16 | P | **P** | 13 21 02.2 | +0.3 | |
| | baz=219,SNR=71 | | | | | | | |
| A19K | **Wainwright** | 88.89 | 6 | P | **P** | 13 21 01.9 | +0.2 | |
| | baz=196 | | | | | | | |
| LL02 | **Futaleuf** | 88.91 | 135 | P | **P** | 13 21 04.1 | +1.5 | |
| LL02 | | | | IAmb | IAmb | 13 21 06.9 | | |
| | comp=Z,77nm,1.4s | | | | | | | |
| TOLK | **Toolik Lake Re** | 88.92 | 10 | IAmb | IAmb | 13 21 03.4 | | |
| | comp=Z,60nm,1.1s | | | | | | | |
| TOLK | **Toolik Lake Re** | 88.92 | 10 | P | **P** | 13 21 02.3 | +0.4 | |
| | baz=207,SNR=28 | | | | | | | |
| ELIB | **Princess Elisa** | 89.00 | 186 | *d*P | **P** | 13 21 03.3 | +0.7 | |
| | comp=Z,22nm,0.7s | | | | | | | |
| ELIB | | | | *d*pP | **pP** | 13 23 10.7 | -1.2 | |
| D23K | **Nanushuk River** | 89.03 | 9 | P | **P** | 13 21 03.2 | +0.8 | |
| | baz=206,SNR=63 | | | | | | | |
| B21K | **Ikpikpuk River** | 89.07 | 8 | P | **P** | 13 21 02.8 | +0.2 | |
| | baz=202,SNR=34 | | | | | | | |
| F26K | **Sheenjek River** | 89.08 | 12 | P | **P** | 13 21 03.5 | +0.8 | |
| | baz=212,SNR=14 | | | | | | | |
| K22A | **Casper** | 89.11 | 44 | IAmb | IAmb | 13 21 06.0 | | |
| | comp=Z,43nm,1.2s | | | | | | | |
| B20K | **Meade River** | 89.11 | 7 | P | **P** | 13 21 03.2 | +0.5 | |
| | baz=200,SNR=26 | | | | | | | |
| H29M | **Whitestone** | 89.15 | 15 | P | **P** | 13 21 03.5 | +0.5 | |
| | baz=217,SNR=81 | | | | | | | |
| KOTAN | **Kotaneelee Air** | 89.24 | 24 | P | **P** | 13 21 04.5 | +0.9 | |
| | baz=230,SNR=27 | | | | | | | |
| HNDO | **Hondo** | 89.30 | 59 | IAmb | IAmb | 13 21 08.6 | | |
| | comp=Z,39nm,1.2s | | | | | | | |
| SN07 | **Snyder 07** | 89.33 | 55 | IAmb | IAmb | 13 23 34.3 | | |
| | comp=Z,22nm,0.5s | | | | | | | |
| AMTX | **Amarillo** | 89.40 | 53 | IAmb | IAmb | 13 21 07.3 | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| CMAR | **Chiang Mai Arr** | 89.44 | 290 | P | **P** | 13 21 06.8 | +1.3 | |
| | comp=Z,40nm,1.0s,baz=109,slow=2.9,SNR=163 | | | | | | | |
| CMAR | | | | PP | **PP** | 13 24 46.9 | -1.5 | |
| | comp=Z,0.8nm,0.5s,baz=106,slow=5.8,SNR=2.0 | | | | | | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| LL04 | **Puerto Octay** | 89.45 | 133 | P | **P** | 13 21 05.8 | +0.7 | |
| LL04 | | | | IAmb | IAmb | 13 21 07.8 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| D24K | **Happy Valley** | 89.50 | 10 | P | **P** | 13 21 05.1 | +0.5 | |
| | baz=208 | | | | | | | |
| EGMT | **Eagleton** | 89.50 | 39 | IAmb | IAmb | 13 21 07.5 | | |
| | comp=Z,36nm,1.4s | | | | | | | |
| CD2 | **Chengdu** | 89.62 | 303 | P | **P** | 13 21 07.5 | +1.4 | |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| EPYK | **Eagle Plains** | 89.68 | 15 | P | **P** | 13 21 05.8 | +0.3 | |
| | baz=219,SNR=58 | | | | | | | |
| PZH | **PanZhiHua** | 89.71 | 298 | P | **P** | 13 21 07.3 | +0.6 | |
| PZH | | | | pP | **pwP** | 13 23 18.0 | -0.3 | |
| PZH | | | | SKS | **SKSac** | 13 30 39.5 | -1.3 | |
| PZH | | | | S | **ScS** | 13 31 11.3 | +0.2 | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,60nm,1.2s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,350nm,5.9s | | | | | | | |
| G29M | **Pine Creek** | 89.79 | 15 | P | **P** | 13 21 06.0 | 0.0 | |
| | baz=218,SNR=43 | | | | | | | |
| C23K | **Itkillik River** | 89.83 | 9 | P | **P** | 13 21 06.7 | +0.6 | |
| | baz=206,SNR=46 | | | | | | | |
| H31M | **Peel River** | 89.87 | 16 | IAmb | IAmb | 13 21 07.5 | | |
| | comp=Z,49nm,0.9s | | | | | | | |
| H31M | **Peel River** | 89.87 | 16 | P | **P** | 13 21 06.2 | -0.2 | |
| | baz=221,SNR=25 | | | | | | | |
| B22K | **Teshekpuk Lake** | 89.89 | 8 | P | **P** | 13 21 06.7 | +0.3 | |
| | baz=203,SNR=31 | | | | | | | |
| F28M | **Old Crow** | 89.93 | 14 | IAmb | IAmb | 13 21 08.2 | | |
| | comp=Z,62nm,1.2s | | | | | | | |
| F28M | **Old Crow** | 89.93 | 14 | P | **P** | 13 21 06.8 | +0.2 | |
| | baz=216,SNR=34 | | | | | | | |
| YAK | **Yakutsk** | 89.97 | 338 | P | **P** | 13 21 05.6 | -1.3 | |
| YAK | **Yakutsk** | 89.97 | 338 | P | **P** | 13 21 06.1 | -0.8 | |
| | comp=Z,46nm,0.7s,baz=119,slow=1.5,SNR=32 | | | | | | | |
| | comp=Z,46nm,0.7s | | | | | | | |
| YAK | **Yakutsk** | 89.97 | 338 | *e*P | **P** | 13 21 05.6 | -1.3 | |
| YAK | | | | *e**PP | **pP** | 13 23 15.7 | -0.2 | |
| YAK | | | | *e* | | 13 24 46.0 | | |
| YAK | | | | *e*S | **SKSac** | 13 30 38.6 | -1.8 | |
| YAK | | | | *e* | | 13 31 09.3 | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,67nm,1.0s |

comp=Z,9.4nm,0.9s
**SNAA Sanae 90.36 178** *i* P **P** 13 21 08.8 **0.0**
SNAA pmax pmax
comp=Z,16nm,1.1s
**VNA3 Neumayer Olymp 90.48 176** ⇑P **P** 13 21 10.3 **+0.9**
comp=Z,6.5nm,0.3s
VNA3 ⇑SKSac **SKSac** 13 30 43.6 **+0.1**
comp=Z,0.9nm,0.9s
VNA3 ⇑PKKPbc **PKKPdf** 13 38 32.7 **+3.2**
comp=Z,2.0nm,0.8s
**G31M Satah River 90.73 16** P **P** 13 21 10.6 **+0.3**
baz=221,SNR=102
**PLCA Paso Flores 90.81 133** P **P** 13 21 13.9 **+2.3**
comp=Z,12nm,1.0s,baz=228,slow=6.6,SNR=5.3
comp=Z,12nm,1.0s
**E28M Babbage River 90.81 13** P **P** 13 21 11.2 **+0.5**
baz=216,SNR=23
**C27K Jago River 90.81 11** IAmb IAmb 13 21 13.0
comp=Z,54nm,0.9s
**C27K Jago River 90.81 11** P **P** 13 21 10.9 **+0.2**
baz=212,SNR=12
**C26K Camden Bay 90.84 11** P **P** 13 21 11.3 **+0.6**
baz=211
**F30M Barrier River 90.88 15** P **P** 13 21 11.0 **0.0**
baz=220,SNR=30
**VNA2 Neumayer--Watz 90.93 177** ⇑P **P** 13 21 12.3 **+1.0**
comp=Z,15nm,0.7s,baz=198,slow=4.5
VNA2 ⇑SKSac **SKSac** 13 30 44.6 **-1.3**
comp=Z,0.6nm,0.8s,baz=268,slow=21
VNA2 ⇑PKKPbc **PKKPdf** 13 38 31.0 **+2.3**
comp=Z,1.4nm,0.6s,baz=20,slow=4.1
**E29M Blow River 91.00 14** IAmb IAmb 13 21 13.3
comp=Z,82nm,1.4s
**E29M Blow River 91.00 14** P **P** 13 21 11.2 **-0.3**
baz=218,SNR=16
**D27M Malcolm River 91.03 12** P **P** 13 21 12.5 **+0.7**
baz=215,SNR=12
**NVL N'lazarevskaya 91.08 183** *e*P **P** 13 21 11.7 **-0.3**
NVL *e**PP **pwP** 13 23 25.2 **+1.7**
NVL *e*S **SKSac** 13 30 46.8 **+0.1**
NVL *e*SS SS 13 37 56.2 +16
NVL pmax pmax
comp=Z,13nm,0.8s
**VNA1 Neumayer--Stat 91.15 177** ⇑P **P** 13 21 13.5 **+1.1**
comp=Z,32nm,1.0s
VNA1 ⇑PKKPbc **PKKPdf** 13 38 31.2 **+2.9**
comp=Z,7.9nm,1.2s
**F31M Tsiigehtchic 91.26 16** P **P** 13 21 12.9 **+0.2**
baz=222,SNR=31
**RSSD Black Hills 91.37 44** P **P** 13 21 14.1 **0.0**
RSSD IAmb IAmb 13 21 16.1
comp=Z,31nm,1.0s
**RSSD Black Hills 91.37 44** P **P** 13 21 14.1 **0.0**
RSSD pmax pmax
comp=Z,31nm,1.0s
**LZH Lanzhou 91.43 307** ⇓P **P** 13 21 15.5 **+1.0**
LZH SS SS 13 37 47.5 -1.6
LZH pmax pmax
comp=Z,120nm,1.2s
**WRGLY Wrigley 91.44 22** P **P** 13 21 14.0 **+0.4**
baz=231
**D28M Stokes Point 91.56 13** P **P** 13 21 14.4 **+0.4**
baz=217
**CIT Chita 91.64 325** *e*P **P** 13 21 15.6 **+0.7**
**TNCH TengChong 91.96 296** P **P** 13 21 18.0 **+0.8**
TNCH sP sP 13 24 28.8 +2.6
TNCH SKS **SKSac** 13 30 54.0 **+0.4**
TNCH S **ScS** 13 31 30.5 **+0.6**
TNCH sS sS 13 35 17.3 -3.1
TNCH SS **SS** 13 37 59.3 **+2.4**
TNCH pmax pmax
comp=Z,41nm,1.6s
TNCH pmax pmax
comp=Z,160nm,4.4s
**INK Inuvik 91.97 15** P **P** 13 21 15.8 **-0.1**
baz=222,SNR=49
**BI02 San Fabin de 91.98 130** P **P** 13 21 18.1 **+1.1**
**CBKS Cedar Bluff 92.31 50** IAmb IAmb 13 21 21.2
comp=Z,49nm,1.2s
**OK032 Salt Plains WL 92.72 52** IAmb IAmb 13 21 22.6
comp=Z,26nm,0.9s
**ULN Ulaanbaatar 93.66 319** P **P** 13 21 24.1 **-0.3**
ULN IAmb IAmb 13 21 25.7
comp=Z,44nm,1.1s
**ULN Ulaanbaatar 93.66 319** P **P** 13 21 24.5 **+0.1**
**ULN Ulaanbaatar 93.66 319***ce*P **P** 13 21 24.3 **-0.1**
ULN pmax pmax
comp=Z,62nm,1.3s
**SONM Songino Array 94.06 319** P **P** 13 21 25.8 **-0.4**
comp=Z,12nm,1.0s,baz=118,slow=3.5,SNR=52
SONM PP **PP** 13 25 18.4 **-5.1**
comp=Z,8.1nm,1.2s,baz=125,slow=9.2,SNR=5.5
comp=Z,12nm,1.0s
**SONM Songino Array 94.06 319** *e*P **P** 13 21 25.8 **-0.4**
SONM pmax pmax
comp=Z,11nm,1.0s
**YKA Yellowknife Ar 94.32 25** P **P** 13 21 26.5 **-0.3**
comp=Z,14nm,0.9s,baz=248,slow=4.3,SNR=28
comp=Z,14nm,0.9s
**YKA Yellowknife Ar 94.32 25** *e*P **P** 13 21 27.0 **+0.2**
YKA pmax pmax
comp=Z,12nm,0.9s
**C36M Paulatuk 95.16 17** P **P** 13 21 29.8 **-0.7**
baz=230
**GTA Gaotai 95.57 310** P **P** 13 21 33.5 **+0.3**
GTA pP pP 13 23 45.3 +1.6
GTA PP **PP** 13 25 38.0 **+2.7**
GTA SKS **SKSac** 13 31 10.5 **-1.7**
GTA pmax pmax
comp=Z,18nm,1.1s
**ECSD EROS Data Cent 96.22 46** IAmb IAmb 13 21 37.5
comp=Z,30nm,1.7s
**TIXI Tiksi 96.50 345** P **P** 13 21 35.0 **-1.5**
TIXI IAmb IAmb 13 21 36.6
comp=Z,20nm,0.8s
**TIXI Tiksi 96.50 345***ce*P **P** 13 21 35.0 **-1.5**
TIXI pmax pmax
comp=Z,21nm,0.9s
**A36M Sachs Harbour 96.57 14** P **P** 13 21 36.8 **+0.1**
baz=230
**ZAK Zakamensk 96.89 321** *e*P **P** 13 21 35.7 **-3.1**
ZAK pmax pmax
comp=Z,11nm,1.3s
ZAK pmax pmax
comp=Z,9.0nm,1.5s
**F33A 5 Mile Ranch, 97.11 44** IAmb IAmb 13 21 42.4
comp=Z,11nm,1.1s
**KNGR Kungurtug, Tuv 100.46 320** *i* P **Pdif** 13 21 53.8 **-0.9**
KNGR pmax pmax
comp=Z,6.0nm,1.3s
**WMQ Urumqi 105.47 312** Pdif **Pdif** 13 22 18.3 **+1.2**
**ZSN Zaisan 107.99 315** *e*PKiKP **PKiKP** 13 26 30.6 **-0.7**
baz=315
**ZALV Zalesovo Beam 108.73 322** Pdiff **Pdif** 13 22 30.5 **-0.7**
comp=Z,0.3nm,0.3s,baz=83,slow=3.5,SNR=5.8
ZALV PKiKP **PKiKP** 13 26 31.7 **-0.7**
comp=Z,4.9nm,0.8s,baz=139,slow=0.7,SNR=18
ZALV PP **PP** 13 27 04.8 **-6.8**
comp=Z,4.1nm,0.9s,baz=98,slow=6.4,SNR=5.6
**MKAR Makanchi Array 109.66 314** Pdiff **Pdif** 13 22 35.8 **+0.2**
comp=Z,1.1nm,0.7s,baz=89,slow=6.3,SNR=8.2
MKAR PKiKP **PKiKP** 13 26 34.0 **-0.4**
comp=Z,2.9nm,0.5s,baz=58,slow=0.5,SNR=19
MKAR PP **PP** 13 27 13.1 **-5.3**
comp=Z,2.8nm,0.8s,baz=101,slow=7.8,SNR=5.0
MKAR PKKPbc **PKKPbc** 13 37 41.5 **+0.3**
comp=Z,0.7nm,0.6s,baz=280,slow=3.5,SNR=4.5
**SHLS Shalkode 111.31 310** *e*PKiKP **PKiKP** 13 26 36.6 **-1.2**
baz=310
**SHLS Shalkode 111.31 310** *i* PKiKP **PKiKP** 13 26 36.6 **-1.2**
**UZB Uzynbulak 111.63 310** *e*PKiKP **PKiKP** 13 26 37.9 **-0.7**
baz=310
**UZB Uzynbulak 111.63 310** *i* PKiKP **PKiKP** 13 26 37.8 **-0.7**
**KPKS Kokpek 111.90 310** *e*PKiKP **PKiKP** 13 26 38.3 **-0.6**
baz=310
KPKS *e*PP **PP** 13 27 32.2 **-2.2**
baz=310
**KPKS Kokpek 111.90 310** *i* PKiKP **PKiKP** 13 26 38.3 **-0.6**
KPKS *e* 13 27 32.2
**ZHN Zhinishke 112.06 310** *e*PKiKP **PKiKP** 13 26 38.8 **-0.5**
baz=310
**ZHN Zhinishke 112.06 310** *i* PKiKP **PKiKP** 13 26 38.8 **-0.5**
**SATY Saty 112.07 310** *e*PKiKP **PKiKP** 13 26 38.7 **-0.6**
baz=310
SATY *e*PP **PP** 13 27 33.3 **-2.4**
baz=310
**SATY Saty 112.07 310** *i* PKiKP **PKiKP** 13 26 38.7 **-0.6**
SATY *e* 13 27 33.2
**TDK Taldyqorghan 112.21 312** *e*PKiKP **PKiKP** 13 26 38.9 **-0.5**
baz=312
**TDK Taldyqorghan 112.21 312** *i* PKiKP **PKiKP** 13 26 38.8 **-0.5**
**KURK Kurchatov 112.33 318** P **PKiKP** 13 26 38.6 **-0.7**
**KURK Kurchatov 112.33 318***c i*PKiKP **PKiKP** 13 26 38.9 **-0.4**
KURK pmax pmax
comp=Z,18nm,1.0s
**KURBB Kurchatov Arra 112.39 318** Pdiff **Pdif** 13 22 48.3 **+0.7**
comp=Z,0.6nm,1.0s,baz=87,slow=4.2,SNR=2.3
KURBB PKiKP **PKiKP** 13 26 39.0 **-0.5**
comp=Z,11nm,0.8s,baz=97,slow=1.9,SNR=42
KURBB PP PP 13 27 27.4 -10
comp=Z,3.7nm,0.9s,baz=97,slow=6.3,SNR=8.2
KURBB PKKPbc **PKKPbc** 13 37 31.2 **-1.2**
comp=Z,0.6nm,0.7s,baz=275,slow=4.4,SNR=3.5
**MDOK Medeo 113.07 310** *e*PKiKP **PKiKP** 13 26 40.4 **-0.8**
baz=310
**MDOK Medeo 113.07 310** *i* PKiKP **PKiKP** 13 26 40.4 **-0.8**
**L61B Northampton 113.11 51** P **PKiKP** 13 26 40.6 **-0.5**
baz=266
**TNSS Tian-Shan 113.14 310** *e*PKiKP **PKiKP** 13 26 40.8 **-0.9**
baz=310
**TNSS Tian-Shan 113.14 310** *i* PKiKP **PKiKP** 13 26 40.8 **-0.9**
**AAA Alma-Ata 113.17 310** *e*PKiKP **PKiKP** 13 26 40.8 **-0.5**
baz=310
**AAA Alma-Ata 113.17 310** *i* PKiKP **PKiKP** 13 26 40.8 **-0.5**
**KSH Kashi 113.62 306** PKP **PKiKP** 13 26 43.0 **+0.6**
KSH PP **PP** 13 27 48.3 **+1.7**
KSH AMB AMB
comp=Z,220nm,6.9s
**KUU Kurty 113.63 311** *e*PKiKP **PKiKP** 13 26 41.6 **-0.6**
baz=311
**KUU Kurty 113.63 311** *i* PKiKP **PKiKP** 13 26 41.5 **-0.6**
**TKM2 Tokmak 2 114.12 310** P PKPdf 13 26 42.6 -0.7
SNR=10.0
**KBK Karagaybulak 114.59 309** P **PKiKP** 13 26 44.3 **+0.1**
SNR=5.2
**CHMS Chumysh 114.75 310** P PKPdf 13 26 44.1 -0.2
SNR=6.1
**SGDS Sogindy 114.85 310** *e*PKP PKPdf 13 26 43.9 -0.6
baz=310
SGDS *e*PP **PP** 13 27 52.5 **-2.5**
baz=310
**SGDS Sogindy 114.85 310** *e*PKiKP PKPdf 13 26 43.9 -0.6
SGDS *e* 13 27 52.4
**AAK Ala-Archa 114.92 309** PKPdf PKPdf 13 26 44.4 -0.4
**AAK Ala-Archa 114.92 309** P **PKiKP** 13 26 44.9 **+0.1**
**AAK Ala-Archa 114.92 309***c i*PKiKP **PKiKP** 13 26 45.2 **+0.4**
AAK pmax pmax
comp=Z,14nm,1.3s
**USP Ospenovka 114.94 310** P PKPdf 13 26 44.7 0.0
SNR=12
**NEEM North Greenlan 115.25 11** *e*P **PKPdf** 13 26 44.4 -0.3
**BTLS Baital 115.31 312** *e*PKP **PKPdf** 13 26 44.8 **-0.5**
baz=312
**BTLS Baital 115.31 312** *e*PKiKP **PKPdf** 13 26 44.7 **-0.5**
**EKS2 Erkin-Say 115.45 309** P **PKiKP** 13 26 46.1 **+0.3**
SNR=8.7
**UPNV Upernavik 116.38 16** *e*P **PKiKP** 13 26 48.1 **+1.6**
**BVAR Borovoye Array 117.34 321** PKP **PKPdf** 13 26 48.8 **-0.1**
comp=Z,11nm,0.5s,baz=86,slow=2.1,SNR=57
BVAR PP **PP** 13 28 05.3 **-6.3**
comp=Z,5.1nm,0.8s,baz=89,slow=6.5,SNR=5.3
**BRVK Borovoye 117.40 321** PKPdf **PKPdf** 13 26 48.5 **-0.5**
**BRVK Borovoye 117.40 321** P **PKPdf** 13 26 48.8 **-0.2**
**BRVK Borovoye 117.40 321***c i*PKiKP **PKPdf** 13 26 48.7 **-0.3**
BRVK pmax pmax
comp=Z,25nm,1.0s
**BATG Bathurst New B 117.85 46** PKPdf **PKPdf** 13 26 49.8 **-0.3**
**BRLS Borolday 118.35 310** *e*PKP **PKPdf** 13 26 50.9 **-0.4**
baz=309
**BRLS Borolday 118.35 310** *e*PKiKP **PKPdf** 13 26 50.8 **-0.4**
**LMN Caledonia Moun 118.79 47** PKPdf **PKPdf** 13 26 51.4 **-0.5**
**CHGR Chuyangaron 118.88 305** PKPdf **PKPdf** 13 26 52.2 **-0.3**
**CHGR Chuyangaron 118.88 305** PKiKP **PKPdf** 13 26 52.2 **-0.3**
**SIMJ Simiganj 119.00 305** PKPdf **PKPdf** 13 26 52.3 **-0.5**
**SPITS Spitsbergen Ar 119.52 357** PKP **PKPdf** 13 26 52.2 **-0.4**
comp=Z,26nm,0.9s,baz=52,slow=2.6,SNR=10
**BDFB Brasilia 120.28 121** PKKPbc PKKPbc 13 37 06.7 +1.5
comp=Z,4.1nm,0.8s,baz=90,slow=2.0,SNR=3.7
**SUMG Summit 120.83 13** PKPdf **PKiKP** 13 26 55.8 **0.0**
**SUMG Summit 120.83 13** PKiKP **PKiKP** 13 26 55.8 **0.0**
**SUMG Summit 120.83 13** *e*P **PKiKP** 13 26 56.0 **+0.2**
**VOI Vohitsoka 120.89 230** P **PKiKP** 13 26 57.8 **+0.8**
**GBN Guysborough 121.13 48** PKPdf **PKiKP** 13 26 56.7 **+0.1**
**SVE Sverdlovsk 122.11 326** *e*PKiKP **PKPdf** 13 26 58.0 **0.0**
SVE pmax pmax
comp=Z,46nm,1.0s
**DY2G Dye2 122.47 21** *e*P **PKPdf** 13 26 58.6 **-0.1**
**DBG Daneborg 122.48 7** *e*P **PKPdf** 13 26 58.3 **+0.1**
**MSEY Mahe Island 122.73 252** P **PKiKP** 13 27 01.6 **+0.8**
**ICESG Greenland Ices 122.91 17** *e*P **PKPdf** 13 26 59.4 **-0.3**
**ARU Arti 123.32 326** PKPdf **PKPdf** 13 27 00.2 **-0.1**
**ARU Arti 123.32 326** *i* PKiKP **PKPdf** 13 27 00.3 **0.0**
ARU 13 28 50.7
ARU 13 33 15.2
ARU SS SS 13 44 48.4 -3.7
**IVI Ivigtut 124.39 27** **PKPdf** 13 27 02.2 **+0.1**
**SCO Scoresbysund 125.67 10** PKPdf **PKiKP** 13 27 05.0 **+0.1**
**SCO Scoresbysund 125.67 10** PKiKP **PKiKP** 13 27 05.0 **+0.1**
**SCO Scoresbysund 125.67 10** *e*P **PKPdf** 13 27 04.1 **-0.3**
**LVZ Lovozero 126.14 345***c i*PKiKP **PKiKP** 13 27 06.0 **+0.1**
LVZ pmax pmax
comp=Z,59nm,2.5s
**JLN Jalan Bani Buh 126.33 284** P **PKiKP** 13 27 07.8 **+0.2**
**ARCES ARCESS Array B 126.63 350** PKP **PKPdf** 13 27 06.5 **+0.2**
comp=Z,33nm,0.9s,baz=5.7,slow=1.2,SNR=32
**SUR Sutherland 126.68 200** P **PKiKP** 13 27 09.9 **+1.5**
**APA Apatity 126.70 346** ⇓*i*PKiKP **PKPdf** 13 27 05.3 **-1.1**
APA *i* 13 33 14.0
APA pmax pmax
comp=Z,22nm,0.9s
**KIRV Kirov 126.97 331***c i*PKiKP **PKiKP** 13 27 07.5 **-0.2**
**MHTO MHTO 127.53 283** P **PKiKP** 13 27 09.8 **-0.2**
**JMD Jabal Madar 127.56 285** P **PKiKP** 13 27 10.1 **0.0**
**SMDO Samad 127.68 285** P **PKiKP** 13 27 10.7 **+0.3**
**DQM DQM 127.79 281** P **PKiKP** 13 27 10.4 **-0.2**
**BOSA Boshof 128.43 206** PKP **PKiKP** 13 27 12.5 **+0.6**
comp=Z,5.7nm,0.8s,baz=138,slow=5.4,SNR=6.3
**BSY Bisya 128.43 285** P **PKPdf** 13 27 11.2 **+0.1**
**SOHO SOHO 129.16 287** P **PKPdf** 13 27 12.4 **-0.1**
**UOSS Minazif 129.51 288** P **PKPdf** 13 27 13.5 **+0.4**
**HATD Hatta, Dubai 129.57 288** P **PKiKP** 13 27 14.3 **+0.2**
**MASF Masafi 129.58 288** P **PKiKP** 13 27 14.4 **+0.3**
**SHME Shamm 129.63 289** P **PKiKP** 13 27 14.0 **-0.2**
**ASHO Ashiyiah 129.63 287** P **PKPdf** 13 27 13.7 **+0.3**
**ALNE Al Ain 129.87 286** P **PKiKP** 13 27 14.9 **+0.2**
**DMTO DMTO 129.89 278** P **PKiKP** 13 27 14.5 **-0.4**
**ASUD Al Ashush, Dub 130.29 287** P **PKiKP** 13 27 15.9 **+0.4**
**RBU Rabkut 130.56 278** P **PKiKP** 13 27 16.4 **+0.1**
**AJN Ajban 130.59 287** P **PKiKP** 13 27 16.2 **+0.1**
**BELG Belogornoye 130.76 325** *i* PKiKP **PKPdf** 13 27 14.2 **-0.4**
**DOK Doka 130.80 279** P **PKPdf** 13 27 15.7 **+0.1**
**JOF Joensuu 130.92 343** *e*P **PKPdf** 13 27 10.1 **-4.5**
**WHFO Wadi Hawf 131.03 278** P **PKPdf** 13 27 16.6 **+0.4**
**ABTO Aybut 131.39 277** P **PKiKP** 13 27 17.9 **0.0**
**MZWR Madinat Zayed 131.56 286** P **PKiKP** 13 27 18.0 **-0.1**
**MZR Muzera 131.87 285** P **PKiKP** 13 27 19.6 **+0.8**
**JRN Qarnain Island 132.55 287** P **PKiKP** 13 27 20.3 **+0.2**
**VAF Ylistaro 132.94 347** *e*P **PKPdf** 13 27 14.2 **-4.1**
**KEF Keuruu 133.22 346** *e*P **PKPdf** 13 27 15.0 **-4.0**
**FINES FINESS Array B 133.54 344** PKhKP PKPpre 13 27 04.7
comp=Z,3.2nm,0.8s,baz=67,slow=1.8,SNR=5.3
FINES PKP **PKPdf** 13 27 18.2 **-1.3**
comp=Z,13nm,0.8s,baz=95,slow=2.3,SNR=14
FINES SKPbc **SKPbc** 13 29 52.3 **-0.3**
comp=Z,38nm,1.2s,baz=42,slow=5.9,SNR=19
**MOS Moscow 133.87 333** *i* PKiKP **PKiKP** 13 27 21.2 **-0.6**
MOS *e* 13 29 32.3
MOS *e* 13 29 55.1
MOS *e*SS SS 13 46 58.5 -1.3
MOS pmax pmax
comp=Z,31nm,0.7s
**SMRA Abu-Samra 134.39 287** P **PKPdf** 13 27 23.0 **+0.7**
**MAK Makhachkala 134.46 313** *e*P **Pdif** 13 24 23.1 **-2.8**
MAK *e* 13 27 21.6
MAK *e* 13 29 38.8
MAK *e* 13 29 59.6
MAK *e* 13 33 35.2
MAK *e*SS SS 13 47 08.4 +0.3
MAK *e*SSS SSS 13 52 18.3
MAK pmax pmax
comp=Z,223nm,1.1s
**VRH Novokhopyorsk 134.55 326** *e*PKiKP **PKPdf** 13 27 20.2 **-1.5**
VRH pmax pmax
comp=Z,20nm,0.9s
**SAKB Bahrain 134.67 289** P **PKiKP** 13 27 24.5 **+0.2**
**OBN Obninsk 134.73 333** ⇑*i*PKiKP **PKPdf** 13 27 22.1 **+0.2**
OBN *e* 13 30 03.5
OBN pmax pmax
comp=Z,45nm,1.3s
**MEF Metsahovi 135.02 344** *e*P **PKPdf** 13 27 18.2 **-4.1**
**LPSR Galich'ya Gora 135.20 329** *e*PKiKP **PKPdf** 13 27 20.7 **-2.2**
LPSR pmax pmax
comp=Z,30nm,1.0s
**ARBE Arbavere 135.26 343** *e*P **PKPdf** 13 27 19.7 **-3.1**
**VORR Voronezh 135.60 328** *e*PKiKP **PKPdf** 13 27 22.3 **-1.4**
VORR pmax pmax
comp=Z,40nm,1.0s
**VSR Storozhevoye 135.88 327** *e*PKiKP **PKPdf** 13 27 21.9 **-2.3**
VSR pmax pmax
comp=Z,30nm,1.2s
**MTSE Matsula 136.47 344** *e*P **PKPdf** 13 27 18.9 **-6.2**
**NB2 NORSAR Subarra 136.66 354** PKP PKPpre 13 27 11.8
comp=Z,7.8nm,1.0s,baz=16,slow=3.2
NB2 SKPa **SKPdf** 13 30 04.2 **+0.1**
comp=Z,46nm,1.4s,baz=13,slow=3.1
**NOA NORSAR Array B 136.66 354** PKhKP PKPpre 13 27 15.9
comp=Z,5.5nm,0.9s,baz=22,slow=3.9,SNR=8.2
NOA PKP **PKPdf** 13 27 25.4 **-0.1**
comp=Z,7.0nm,0.9s,baz=14,slow=4.1,SNR=8.5
NOA SKPbc **SKPbc** 13 30 03.6 **+1.3**
comp=Z,14nm,1.2s,baz=16,slow=4.5,SNR=5.5
**KBD Kabd 137.08 294** P **PKiKP** 13 27 29.3 **+0.1**
**HFS Hagfors 137.23 352** PKhKP PKPpre 13 27 15.4
comp=Z,10nm,0.8s,baz=56,slow=3.6,SNR=14
HFS PKP **PKPdf** 13 27 25.9 **-0.6**
comp=Z,13nm,0.8s,baz=54,slow=2.5,SNR=8.8
HFS SKPbc **SKPbc** 13 30 04.5 **+0.5**
comp=Z,8.0nm,0.9s,baz=42,slow=2.4,SNR=7.2
**GNI Garni 137.32 310***c i*PKiKP **PKiKP** 13 27 30.0 **+0.4**
GNI pmax pmax
comp=Z,43nm,1.3s
**KBZ Khabaz 137.32 316** PKhKP PKPpre 13 27 16.2
comp=Z,3.4nm,0.8s,baz=116,slow=4.3,SNR=7.3
KBZ PKP **PKPdf** 13 27 27.9 **+0.8**
comp=Z,9.0nm,0.9s,baz=342,slow=3.2,SNR=10
KBZ SKPbc **SKPbc** 13 30 05.7 **+0.9**
comp=Z,6.7nm,1.0s,baz=47,slow=2.6,SNR=8.8
**KBZ Khabaz 137.32 316***c i*PKiKP **PKiKP** 13 27 28.6 **-0.6**
**KIV Kislovodsk 137.37 316** *e*PKiKP **PKPdf** 13 27 26.5 **-0.9**
KIV pmax pmax
comp=Z,12nm,1.0s
**SHA1 Shidzhatmaz 137.48 316***c i*PKiKP **PKPdf** 13 27 27.1 **-0.7**
**LSZ Lusaka 138.03 219** P **PKiKP** 13 27 32.9 **+1.2**
**MNK Minsk 138.66 337** *i* PKHKP PKPpre 13 27 23.4
MNK *i* 13 33 37.3
MNK *i* SS SS 13 47 50.6 -5.3
MNK *i* SSS SSS 13 53 12.0
MNK pmax pmax
comp=Z,30nm,0.8s
MNK pmax pmax
comp=N,7.0nm,0.5s
MNK pmax pmax
comp=E,19nm,0.7s
**BCA Borcka 139.09 313** ⇑P PKPpre 13 27 22.5
**PABE Paberze 139.16 341** *e*P PKPpre 13 27 25.7
**KIBK Kibwezi 139.20 244** P **PKiKP** 13 27 35.5 **+1.4**
**RAYN Ar Rayn 139.22 285** P **PKiKP** 13 27 33.7 **-0.1**
**SOC Sochi 139.47 317** *e*PKiKP **PKPdf** 13 27 29.9 **-1.2**
SOC *e* 13 29 46.1
SOC *e* 13 30 32.7
SOC *e*SS SS 13 48 04.0 -2.5
SOC *e*SSS SSS 13 53 26.3
SOC pmax pmax
comp=Z,16nm,0.7s
**HOMB Homborsund 139.65 355** *e*P PKPpre 13 27 24.7
**BORU Boraas 139.77 351** *e*P PKPpre 13 27 23.3
**KMBO Kilima Mbogo 140.50 245** PKhKP PKPpre 13 27 29.0
comp=Z,1.7nm,0.3s,baz=44,slow=6.0,SNR=6.8
KMBO SKPbc **SKiKP** 13 30 15.9 **-0.9**
comp=Z,2.5nm,0.7s,baz=91,slow=3.1,SNR=3.7
**KMBO Kilima Mbogo 140.50 245** P **PKiKP** 13 27 38.7 **+1.7**
**SUW Suwalki 140.67 340** *e*PKP PKPpre 13 27 26.9
**SUW Suwalki 140.67 340** *e*P PKPpre 13 27 27.7
**DEL Delary 140.72 350** *e*P PKPpre 13 27 26.6
**DEL Delary 140.72 350** *i* P PKPpre 13 27 26.0
**AKASG Malin Array Be 141.00 333** PKhKP PKPpre 13 27 27.9
comp=Z,2.8nm,0.3s,baz=42,slow=4.0,SNR=39
AKASG SKPbc **SKPbc** 13 30 14.2 **-0.3**
comp=Z,0.8nm,0.4s,baz=30,slow=2.5,SNR=6.1
AKASG SKPab **SKPab** 13 30 29.5 **+0.3**
comp=Z,1.1nm,0.4s,baz=40,slow=5.1,SNR=6.2
**AKBB Malin Array Si 141.00 333***c i*PKiKP **PKiKP** 13 27 35.5 **-1.0**
**KIEV Kiev 141.01 333** PKPpre 13 27 26.9
**KIEV Kiev 141.01 333** ⇓P PKPpre 13 27 27.4
**KIEV Kiev 141.01 333** ⇓PKHKP PKPpre 13 27 27.4
**BJUU Bjuv 141.24 350** *e*P PKPpre 13 27 29.1
**MUD Monsted U'grnd 141.38 354** *i* P PKPpre 13 27 28.0
**INVG Invergeldie, C 141.49 6** *e*P PKPpre 13 27 29.8
**LAWE Loch Awe, Argy 141.51 7** *e*P PKPpre 13 27 29.9
**LUNU Lund 141.59 350** *e*P PKPpre 13 27 29.2
**BSD Bornholm Skovb 141.81 348** *e*P PKPpre 13 27 30.0
**BSD Bornholm Skovb 141.81 348** *i* P PKPpre 13 27 30.0
**SIM Simferopol' 142.24 322** *e*PKiKP **PKPdf** 13 27 33.8 **-2.2**
SIM *e* 13 30 49.0
SIM pmax pmax
comp=Z,161nm,0.9s
SIM pmax pmax
comp=Z,60nm,19.0s
**EKA Eskdalemuir Ar 142.65 5** PKhKP PKPpre 13 27 32.8
comp=Z,15nm,0.8s,baz=340,slow=3.0,SNR=22
EKA SKPab SKiKP 13 30 36.4 +17
comp=Z,3.2nm,0.8s,baz=7.4,slow=2.6,SNR=3.5
**NEWG New Galloway 142.76 6** *e*P **PKPdf** 13 27 34.0 **-2.6**
**GAL1 Galloway 142.96 7** *e*P **PKPdf** 13 27 33.9 **-3.0**
**GKP Gorka Klasztor 143.01 345** *e*PKP PKPbc 13 27 35.2 -0.2
**GKP Gorka Klasztor 143.01 345** *e*P PKPab 13 27 33.8 -1.0
**EDMD Edmundbyers 143.24 4** *e*P PKPab 13 27 35.1 -0.6
**SORM Soroca 143.24 330** ⇑P PKPab 13 27 35.6 -0.2
**SORM Soroca 143.24 330** ⇑PKiKP PKPab 13 27 35.6 -0.3
**BEL Belsk 143.29 341** *e*PKP PKPbc 13 27 36.4 +0.2
**DIKM Dikmen 143.29 317** ⇓P PKPbc 13 27 37.2 +0.6
**KESW Keswick, Cumbr 143.39 5** *e*P PKPbc 13 27 36.4 -0.1
**IOMK Kirk Michael 143.57 7** *e*P PKPab 13 27 36.5 -0.5
**ILTH Belurgan, Co L 143.58 8** *e*P PKPab 13 27 35.6 -1.4
**PURM Purcari 143.60 327** ⇓P PKPbc 13 27 37.8 +0.4
**IGLA Glengowla, Co 143.66 12** *e*P PKPbc 13 27 36.4 -0.9
**WIM Isle of Man 143.67 7** *e*P PKPbc 13 27 37.0 -0.4
**BSEG Bad Segeberg 143.71 352** *e*PKPbc PKPab 13 27 37.6 +0.1
baz=14,slow=2.8
**HLG Helgoland 143.74 354** *e*PKPbc **PKPdf** 13 27 38.0 **-0.3**
baz=14,slow=2.8
**KIS Kishinev 143.81 329** ⇓*i*PKP PKPbc 13 27 37.8 -0.2
comp=Z,600nm,1.0s
**KIS Kishinev 143.81 329** *i* PKP PKPbc 13 27 37.4 -0.6
comp=Z,400nm,1.7s
**KIS Kishinev 143.81 329** *i* PKiKP PKPbc 13 27 37.4 -0.6
KIS pmax pmax
comp=Z,400nm,1.7s
**LVV L'vov 143.82 336** *i* PKiKP PKPbc 13 27 38.0 +0.1
LVV *e* 13 33 54.2
**MILM Milestii Mici 143.87 329** ⇑P PKPbc 13 27 37.9 -0.3
**MILM Milestii Mici 143.87 329** ⇑PKiKP PKPbc 13 27 37.9 -0.3
**BZK Bozkurt 143.94 318** ⇓P **PKPdf** 13 27 39.3 **+0.3**
**HPK Haverah Park 144.13 4** *e*P PKPbc 13 27 38.8 +0.1
**IAS Iasi 144.29 330** ⇓P **PKPab** 13 27 40.2 **+0.2**
**IAS Iasi 144.29 330** ⇓PKiKP **PKPab** 13 27 40.2 **+0.2**
**LODK Lodwar 144.33 250** **PKPdf** 13 27 40.4 **-0.3**
**LODK Lodwar 144.33 250** P **PKPab** 13 27 42.0 **+0.8**
**DSB Dublin 144.34 9** **PKPdf** 13 27 38.9 **-0.4**
**WPS Cemaes, Angles 144.43 7** *e*P **PKPdf** 13 27 39.3 **-0.2**
**WME Myndd Eilian 144.45 7** *e*P **PKPdf** 13 27 38.9 **-0.6**
**KWP Kalwaria Pacla 144.48 337** *e*PKP PKPbc 13 27 40.3 +0.3
**GORT1 Trebel 144.48 350** *e*PKPbc **PKPab** 13 27 40.3 **-0.2**
baz=14,slow=2.8
**RUE Ruedersdorf 144.53 348** *e*P **PKPdf** 13 27 36.9 **-2.8**
**RUE Ruedersdorf 144.53 348** *e*PKPbc **PKPab** 13 27 40.5 **-0.1**
baz=14,slow=2.8
**WLF1 Llynfaes 144.55 7** *e*P **PKPdf** 13 27 39.6 **-0.1**
**CIDE Kastamonu/Cide 144.65 319** ⇑P **PKPab** 13 27 41.5 **0.0**
**LMK Market Rasen 144.70 3** *e*P PKPbc 13 27 40.3 -0.2
**YLL Llanberis 144.72 7** *e*P PKPbc 13 27 40.4 -0.2
**PRAR RASCA 144.79 331** ⇑P **PKPab** 13 27 41.6 **-0.3**
**STNC Stoke 144.95 5** *e*P PKPbc 13 27 41.7 +0.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VLDR | Vladesti | 144.98 | 328 | ⇓P | | PKPab | 13 27 42.6 | -0.1 |
| OJC | Ojcow | 145.00 | 340 | *e*PKP | | PKPdf | 13 27 40.8 | +0.1 |
| RETH | Rethem/Aller, | 145.01 | 352 | *e*PKPbc | | PKPbc | 13 27 41.8 | +0.4 |
| | baz=14,slow=2.8 | | | | | | | |
| TLCR | | 145.04 | 326 | ⇑P | | PKPab | 13 27 42.6 | -0.3 |
| TLCR | | 145.04 | 326 | ⇑PKIKP | | PKPab | 13 27 42.6 | -0.3 |
| BUR01 | Bucovina Ar. S | 145.05 | 332 | ⇑P | | PKPab | 13 27 42.6 | -0.5 |
| VARL | Varlezi | 145.06 | 328 | ⇑P | | PKPab | 13 27 43.1 | +0.1 |
| LLW | Llanuwchllyn | 145.06 | 6 | *e*P | | PKPdf | 13 27 40.9 | +0.2 |
| FOEL | Foel Wylfa | 145.07 | 6 | *e*P | | PKPbc | 13 27 41.6 | -0.1 |
| IWEX | Carrickbyrne, | 145.12 | 10 | *e*P | | PKPbc | 13 27 41.5 | -0.3 |
| FLTG | Flechtingen | 145.13 | 350 | *e*PKPbc | | PKPbc | 13 27 41.9 | +0.1 |
| | baz=14,slow=2.8 | | | | | | | |
| NRDL | Niedersach Rie | 145.14 | 351 | *e*PKPbc | | PKPbc | 13 27 42.3 | +0.5 |
| | baz=14,slow=2.8 | | | | | | | |
| TESR | Tescani | 145.21 | 330 | ⇑P | | PKPbc | 13 27 42.5 | +0.2 |
| KOLS | Kolonicke sedl | 145.21 | 337 | *e*PKIKP | | PKPdf | 13 27 40.3 | -0.8 |
| KOLS | Kolonicke sedl | 145.21 | 337 | *e* | | PKPab | 13 27 43.1 | -0.4 |
| KOLS | Kolonicke sedl | 145.21 | 337 | *e*PKP | | PKPdf | 13 27 40.3 | -0.8 |
| JURR | Jurilovca | 145.29 | 326 | ⇑P | | PKPab | 13 27 43.5 | -0.4 |
| NEGRR | Negrea | 145.29 | 328 | ⇓P | | PKPab | 13 27 43.4 | -0.5 |
| BRTR | Keskin Array B | 145.30 | 315 | PKPbc | | PKPdf | 13 27 41.6 | 0.0 |
| | comp=Z,88nm,1.0s,baz=137,slow=3.7,SNR=189 | | | | | | | |
| BRTR | | | | SKPbc | | SKiKP | 13 30 26.1 | +0.4 |
| | comp=Z,8.9nm,1.1s,baz=165,slow=3.4,SNR=4.0 | | | | | | | |
| BRTR | | | | PP | | PP | 13 31 09.1 | +0.1 |
| | comp=Z,7.2nm,1.1s,baz=90,slow=2.9,SNR=5.0 | | | | | | | |
| SCHL | Schela | 145.34 | 328 | ⇑P | | PKiKP | 13 27 44.9 | -0.7 |
| COSR | Cosmesti PH | 145.35 | 328 | ⇑P | | PKPab | 13 27 44.4 | +0.3 |
| TUDR | | 145.36 | 328 | ⇑P | | PKPab | 13 27 43.9 | -0.2 |
| SCHLR | Schela | 145.36 | 328 | ⇑P | | PKPab | 13 27 43.5 | -0.7 |
| CWF | Charnwood Fore | 145.36 | 4 | *e*P | | PKPbc | 13 27 42.2 | -0.3 |
| KIRS | Kirsehir-Merke | 145.40 | 314 | ⇑P | | PKPdf | 13 27 42.1 | +0.3 |
| CFR | Carcaliu | 145.40 | 327 | ⇑P | | PKPbc | 13 27 42.9 | +0.1 |
| CFR | Carcaliu | 145.40 | 327 | ⇑PKP2 | | PKPbc | 13 27 42.9 | +0.1 |
| PANC | Panciu | 145.43 | 329 | ⇑P | | PKPab | 13 27 44.4 | 0.0 |
| ONER | Baraj Valea Uz | 145.46 | 330 | ⇑P | | PKPbc | 13 27 43.5 | +0.5 |
| WACR | West Acre | 145.46 | 2 | *e*P | | PKPbc | 13 27 42.6 | -0.1 |
| HLM1 | Long Mynd | 145.46 | 5 | *e*P | | PKPdf | 13 27 41.6 | +0.3 |
| KSP | Ksiaz | 145.47 | 344 | *e*PKP | | PKPbc | 13 27 42.7 | -0.2 |
| TPGR | Topolog | 145.47 | 326 | ⇓P | | PKPbc | 13 27 43.6 | +0.5 |
| NIE | Niedzica | 145.52 | 339 | *e*PKPbc | | PKPab | 13 27 42.7 | -0.4 |
| CRVS | Cervenica-Dubn | 145.54 | 337 | *e*PKIKP | | PKPdf | 13 27 42.4 | +0.8 |
| CRVS | | | | *e* | | | 13 27 44.2 | |
| CRVS | Cervenica-Dubn | 145.54 | 337 | *e*PKP | | PKPdf | 13 27 42.4 | +0.8 |
| CRVS | | | | *e* | | | 13 27 44.2 | |
| ODBI | Odobesti | 145.55 | 329 | ⇓P | | PKPab | 13 27 44.8 | -0.1 |
| IBBN | Ibbenburen | 145.61 | 354 | *e*PKPbc | | PKPbc | 13 27 43.7 | +0.5 |
| | baz=14,slow=2.8 | | | | | | | |
| VRI | Vrincioaia | 145.64 | 329 | ⇑P | | PKPbc | 13 27 44.3 | +0.7 |
| VRI | Vrincioaia | 145.64 | 329 | ⇑PKP2 | | PKPbc | 13 27 44.3 | +0.7 |
| PLOR | Plostina | 145.69 | 329 | ⇓P | | PKPbc | 13 27 43.8 | +0.1 |
| PLOR | Plostina | 145.69 | 329 | ⇓PKP2 | | PKPbc | 13 27 43.8 | +0.1 |
| CLZ | Clausthal | 145.74 | 351 | *e*PKPbc | | PKPbc | 13 27 44.4 | +0.7 |
| | baz=14,slow=2.8 | | | | | | | |
| BMR | Baia Mare | 145.74 | 334 | ⇓P | | PKPbc | 13 27 44.5 | +0.8 |
| BMR | Baia Mare | 145.74 | 334 | ⇓PKP2 | | PKPbc | 13 27 44.5 | +0.8 |
| OSTC | Ostas | 145.75 | 344 | ⇑*e*PKP | | PKPab | 13 27 44.8 | -0.8 |
| OSTC | Ostas | 145.75 | 344 | *e*PKP2 | | PKPab | 13 27 44.8 | -0.8 |
| CHVC | Chvalec | 145.76 | 344 | ⇑*e*PKP | | PKPab | 13 27 44.8 | -0.8 |
| CHVC | Chvalec | 145.76 | 344 | *e*PKP2 | | PKPab | 13 27 44.8 | -0.8 |
| CLL | Collm | 145.79 | 348 | ⇓*e*PKIKP | | PKPdf | 13 27 42.0 | +0.1 |
| CLL | | | | *i* | | | 13 27 44.4 | |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,355nm,1.0s | | | | | | | |
| CLL | Collm | 145.79 | 348 | *e*PKPbc | | PKPbc | 13 27 44.3 | +0.6 |
| | baz=14,slow=2.8 | | | | | | | |
| ANTO | Ankara | 145.80 | 316 | PKPdf | | PKPdf | 13 27 42.5 | +0.1 |
| ANTO | Ankara | 145.80 | 316 | P | | PKPbc | 13 27 43.6 | -0.6 |
| ANTO | Ankara | 145.80 | 316 | ⇑P | | PKPdf | 13 27 42.7 | +0.3 |
| ANTO | Ankara | 145.80 | 316 | PKIKP | | PKPdf | 13 27 42.5 | +0.1 |
| RSBS | Rosebush, Pemb | 145.82 | 8 | *e*P | | PKPdf | 13 27 42.8 | +0.8 |
| ARCR | ARCALIA | 145.83 | 333 | ⇓P | | PKPab | 13 27 45.0 | -1.0 |
| HARR | Harsova | 145.84 | 326 | ⇑P | | PKPbc | 13 27 44.9 | +0.8 |
| HARR | Harsova | 145.84 | 326 | ⇑PKP2 | | PKPbc | 13 27 44.9 | +0.8 |
| TURR | Turia | 145.84 | 330 | ⇓P | | PKPbc | 13 27 44.8 | +0.7 |
| UPC | Upice | 145.85 | 344 | ⇑*e*PKP | | PKPab | 13 27 45.0 | -0.9 |
| UPC | Upice | 145.85 | 344 | *e*PKP2 | | PKPab | 13 27 45.0 | -0.9 |
| TLBR | Topalu | 145.88 | 326 | ⇑P | | PKPab | 13 27 45.3 | -1.0 |
| COVR | Voineasa-Covas | 145.91 | 329 | ⇑P | | PKPbc | 13 27 44.8 | +0.4 |
| DPC | Dobruska-Polom | 145.91 | 344 | ⇓*e*PKP | | PKPbc | 13 27 44.9 | +0.7 |
| DPC | Dobruska-Polom | 145.91 | 344 | *e*PKP2 | | PKPbc | 13 27 44.9 | +0.7 |
| OZUR | | 145.92 | 330 | ⇑P | | PKPab | 13 27 45.6 | -0.8 |
| MCH1 | Michaelchurch | 145.97 | 6 | *e*P | | PKPbc | 13 27 43.3 | -1.0 |
| BRG | Berggiesshubel | 146.00 | 347 | PKP2 | | PKPbc | 13 27 45.4 | +1.0 |
| BRG | | | | | | | 13 31 08.6 | |
| BRG | | | | pmax | | pmax | | |
| | comp=Z,153nm,1.0s | | | | | | | |
| BRG | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| BRG | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| BRG | Berggiesshubel | 146.00 | 347 | *e*PKPbc | | PKPbc | 13 27 45.0 | +0.6 |
| | baz=14,slow=2.8 | | | | | | | |
| LANS | Liptovska Anna | 146.03 | 340 | *e*PKP2 | | PKPab | 13 27 46.2 | -0.6 |
| LANS | Liptovska Anna | 146.03 | 340 | *e*PKP | | PKPab | 13 27 46.2 | -0.6 |
| KRLC | Kraliky | 146.03 | 343 | ⇑*e*PKP | | PKPbc | 13 27 44.8 | +0.2 |
| KRLC | Kraliky | 146.03 | 343 | *e*PKP2 | | PKPbc | 13 27 44.8 | +0.2 |
| MORC | Moravsky Berou | 146.08 | 342 | *e*PKP | | PKPdf | 13 27 43.3 | +0.7 |
| MORC | | | | *e* | | | 13 27 45.2 | |
| MORC | Moravsky Berou | 146.08 | 342 | ⇓P | | PKPdf | 13 27 43.0 | +0.5 |
| MORC | Moravsky Berou | 146.08 | 342 | ⇓PKIKP | | PKPdf | 13 27 43.0 | +0.5 |
| GTTG | Gottingen | 146.09 | 351 | *e*PKPbc | | PKPbc | 13 27 45.3 | +0.7 |
| | baz=14,slow=2.8 | | | | | | | |
| NEUB | Neuenburg | 146.12 | 349 | *e*PKPbc | | PKPbc | 13 27 45.3 | +0.6 |
| | baz=14,slow=2.8 | | | | | | | |
| MONM | Monmouth | 146.14 | 5 | *e*P | | PKPdf | 13 27 43.5 | +1.0 |
| NEHR | Nehoiu | 146.16 | 329 | ⇑P | | PKPbc | 13 27 46.0 | +0.9 |
| PVCC | Panska Ves | 146.19 | 346 | ⇑*e*PKP | | PKPbc | 13 27 46.0 | +1.1 |
| PVCC | Panska Ves | 146.19 | 346 | *e*PKP2 | | PKPbc | 13 27 46.0 | +1.1 |
| DOPR | Dopca | 146.21 | 330 | ⇓P | | PKiKP | 13 27 46.3 | -1.1 |
| KECS | Kecovo | 146.25 | 338 | *e*PKP2 | | PKiKP | 13 27 46.3 | -1.1 |
| KECS | Kecovo | 146.25 | 338 | *e*PKP | | PKiKP | 13 27 46.3 | -1.1 |
| ISR | Istrita | 146.26 | 328 | ⇓P | | PKPbc | 13 27 45.3 | -0.1 |
| ISR | Istrita | 146.26 | 328 | ⇓PKP2 | | PKPbc | 13 27 45.3 | -0.1 |
| MBAR | Mbarara | 146.26 | 240 | | | PKiKP | 13 27 47.6 | -1.1 |
| MBAR | Mbarara | 146.26 | 240 | P | | PKiKP | 13 27 47.8 | -0.9 |
| MBAR | Mbarara | 146.26 | 240 | *c i*PKIKP | | PKPbc | 13 27 45.7 | -0.7 |
| MBAR | | | | pmax | | pmax | | |
| | comp=Z,73nm,1.3s | | | | | | | |
| STRD | Stroud | 146.26 | 5 | *e*P | | PKPbc | 13 27 44.7 | -0.3 |
| MLR | Muntele Rosu | 146.29 | 329 | PKPdf | | PKPdf | 13 27 42.5 | -0.6 |
| MLR | Muntele Rosu | 146.29 | 329 | PKPbc | | PKPbc | 13 27 45.6 | +0.1 |
| | comp=Z,116nm,1.0s,baz=348,slow=5.0,SNR=43 | | | | | | | |
| MLR | Muntele Rosu | 146.29 | 329 | ⇑P | | PKPdf | 13 27 43.1 | 0.0 |
| MLR | Muntele Rosu | 146.29 | 329 | ⇑PKIKP | | PKPdf | 13 27 43.1 | 0.0 |
| MAUC | Maruska | 146.37 | 341 | *e*PKPDF | | PKPdf | 13 27 44.1 | +1.1 |
| MAUC | | | | ⇑*e*PKP | | PKPbc | 13 27 46.4 | +0.9 |
| HSKC | Hora Svate Kat | 146.37 | 347 | *e*PKPDF | | PKPdf | 13 27 44.0 | +1.0 |
| HSKC | | | | ⇑*e*PKP | | PKPbc | 13 27 46.3 | +0.9 |
| MESR | Meseseni | 146.38 | 334 | ⇑P | | PKPbc | 13 27 46.3 | +0.7 |
| CBBR | Cluj-Babes-Bol | 146.43 | 333 | ⇓P | | PKPbc | 13 27 46.6 | +0.9 |
| PSN | Preselentsi | 146.43 | 325 | *i* P | | PKPbc | 13 27 46.7 | +0.9 |
| CJR | Cluj-Napoca | 146.45 | 333 | ⇑P | | PKPbc | 13 27 46.6 | +0.8 |
| CJR | Cluj-Napoca | 146.45 | 333 | ⇑PKP2 | | PKPbc | 13 27 46.6 | +0.8 |
| SWN1 | Swindon | 146.55 | 4 | *e*P | | PKPbc | 13 27 46.1 | +0.3 |
| LTVH | Ltavrtes, Hu | 146.62 | 335 | ⇑P | | PKiKP | 13 27 47.8 | -0.4 |
| KASTN | Kahler Asten | 146.63 | 353 | *e*PKPbc | | PKPbc | 13 27 46.6 | +0.5 |
| | baz=14,slow=2.8 | | | | | | | |
| PRA | Prague | 146.64 | 346 | ⇑*e*PKP | | PKiKP | 13 27 47.2 | -0.9 |
| PRA | Prague | 146.64 | 346 | *e*PKP2 | | PKiKP | 13 27 47.2 | -0.9 |
| MOX | Moxa | 146.69 | 349 | *e*PKPbc | | PKPbc | 13 27 46.7 | +0.5 |
| | baz=14,slow=2.8 | | | | | | | |
| PRU | Pruhonice | 146.69 | 345 | ⇑*e*PKP | | PKPbc | 13 27 46.8 | +0.5 |
| PRU | Pruhonice | 146.69 | 345 | *e*PKP2 | | PKPbc | 13 27 46.8 | +0.5 |
| MMAI | Mount Meron Ar | 146.69 | 303 | PKPbc | | PKPbc | 13 27 47.5 | +0.6 |
| | comp=Z,74nm,0.6s,baz=104,slow=0.3,SNR=106 | | | | | | | |
| PLN | Plauen | 146.74 | 348 | *e*PKPbc | | PKPbc | 13 27 47.0 | +0.6 |
| | baz=14,slow=2.8 | | | | | | | |
| TANN | Tannenbergstha | 146.75 | 348 | *e*PKPbc | | PKPbc | 13 27 47.2 | +0.7 |
| | baz=14,slow=2.8 | | | | | | | |
| DRGR | | 146.77 | 334 | ⇓P | | PKPbc | 13 27 47.4 | +0.7 |
| DRGR | | 146.77 | 334 | ⇓PKP2 | | PKPbc | 13 27 47.4 | +0.7 |
| VRAC | Vranov | 146.78 | 343 | *e*PKP | | PKPdf | 13 27 44.5 | +0.8 |
| VRAC | | | | *e* | | | 13 27 47.2 | |
| VRAC | Vranov | 146.78 | 343 | ⇓P | | PKPbc | 13 27 47.2 | +0.6 |
| VRAC | Vranov | 146.78 | 343 | ⇓PKP2 | | PKPbc | 13 27 47.2 | +0.6 |
| WOL | Wolverton | 146.79 | 4 | *e*P | | PKPbc | 13 27 46.3 | -0.1 |
| VYHS | Vyhne | 146.81 | 340 | *e*PKIKP | | PKPdf | 13 27 44.1 | +0.3 |
| VYHS | | | | *e* | | | 13 27 47.4 | |
| VYHS | Vyhne | 146.81 | 340 | *e* | | PKPab | 13 27 51.0 | +1.1 |
| VYHS | Vyhne | 146.81 | 340 | *e*PKP | | PKPdf | 13 27 44.1 | +0.3 |
| VYHS | Vyhne | 146.81 | 340 | *e* | | PKPbc | 13 27 47.4 | +0.7 |
| JAVC | Velka Javorina | 146.86 | 341 | *e*PKP | | PKPbc | 13 27 45.8 | -1.1 |
| JAVC | | | | *e* | | | 13 27 48.5 | |
| PSZ | Piszkesteto | 146.94 | 338 | ⇓P | | PKPbc | 13 27 47.6 | +0.5 |
| PSZ | Piszkesteto | 146.94 | 338 | ⇓PKP2 | | PKPbc | 13 27 47.6 | +0.5 |
| TNR | Turnu Rosu | 146.96 | 331 | ⇓P | | PKiKP | 13 27 48.5 | -0.5 |
| TNR | Turnu Rosu | 146.96 | 331 | ⇓PKP2 | | PKiKP | 13 27 48.5 | -0.5 |
| ARR | Arges | 147.01 | 330 | ⇓P | | PKiKP | 13 27 48.9 | -0.2 |
| ELSH | Elham, Standar | 147.05 | 1 | *e*P | | PKPbc | 13 27 47.4 | +0.2 |
| KRUC | Moravsky | 147.06 | 343 | *e*PKP | | PKPdf | 13 27 44.8 | +0.7 |
| KRUC | | | | *e* | | | 13 27 47.8 | |
| MANZ | Manzenberg | 147.23 | 348 | *e*PKPbc | | PKPbc | 13 27 48.4 | +0.7 |
| | baz=14,slow=2.8 | | | | | | | |
| SMOL | Smolenice | 147.24 | 341 | *e*PKP2 | | PKiKP | 13 27 49.4 | 0.0 |
| BEBN | Eben Emael | 147.29 | 356 | *d*PKPbc | | PKPbc | 13 27 48.3 | +0.5 |
| ROTZ | Rotzenmuhle | 147.42 | 348 | *e*PKPbc | | PKiKP | 13 27 49.0 | -0.7 |
| | baz=14,slow=2.8 | | | | | | | |
| AHRW | Bad Neuenahr-A | 147.43 | 354 | *e*PKPbc | | PKPbc | 13 27 48.8 | +0.6 |
| | baz=14,slow=2.8 | | | | | | | |
| MEM | Membach | 147.45 | 355 | *d*PKPdf | | PKPdf | 13 27 45.4 | +0.6 |
| MEM | | | | *d*PKPbc | | PKPbc | 13 27 48.4 | +0.2 |
| HUMR | Humele | 147.46 | 329 | ⇓P | | PKPbc | 13 27 48.3 | -0.1 |
| BTNL | Ternell | 147.47 | 355 | *d*PKPdf | | PKPdf | 13 27 45.3 | +0.5 |
| BTNL | | | | *d*PKPbc | | PKPbc | 13 27 48.2 | -0.1 |
| BSTI | Sart Tilman | 147.51 | 356 | *d*PKPbc | | PKPbc | 13 27 49.0 | +0.7 |
| ISK | Istanbul-Kandi | 147.51 | 320 | P | | PKPdf | 13 27 45.9 | +0.8 |
| SRO | Srobarova | 147.57 | 339 | *e*PKP2 | | PKiKP | 13 27 49.5 | -0.6 |
| SRO | Srobarova | 147.57 | 339 | *e*PKP | | PKiKP | 13 27 49.5 | -0.6 |
| SRO | | | | *e* | | | 13 27 54.2 | |
| TNS | Taunus Mts | 147.59 | 352 | *e*PKPbc | | PKPbc | 13 27 49.2 | +0.5 |
| | baz=14,slow=2.8 | | | | | | | |
| SIRR | Siria | 147.62 | 334 | ⇑P | | PKPdf | 13 27 45.9 | +0.7 |
| ZST | Bratislava | 147.62 | 341 | *e*PKP2 | | PKiKP | 13 27 49.9 | -0.3 |
| ZST | Bratislava | 147.62 | 341 | *e*PKP | | PKiKP | 13 27 49.9 | -0.3 |
| ZST | | | | *e* | | | 13 27 54.4 | |
| GRF | Grafenberg Arr | 147.68 | 349 | *e*PKPbc | | PKiKP | 13 27 49.8 | -0.5 |
| | baz=14,slow=2.8 | | | | | | | |
| GRFO | Grafenberg | 147.68 | 349 | PKPdf | | PKPdf | 13 27 45.5 | +0.4 |
| GRFO | Grafenberg | 147.68 | 349 | PKiKP | | PKPdf | 13 27 45.5 | +0.4 |
| BCLA | Clavier | 147.69 | 356 | *d*PKPbc | | PKPbc | 13 27 49.0 | +0.2 |
| BCLA | | | | *d*PKP | | PKPab | 13 27 53.2 | -0.1 |
| BHOU | Houvegnez | 147.71 | 355 | *d*PKPbc | | PKiKP | 13 27 49.7 | -0.7 |
| BHOU | | | | *d*PKP | | PKPab | 13 27 53.4 | -0.1 |
| KHC | Kasperske Hory | 147.72 | 346 | *e*PKPDF | | PKPdf | 13 27 46.0 | +0.7 |
| KHC | | | | ⇑*e*PKP | | PKiKP | 13 27 49.8 | -0.7 |
| KHC | | | | *e*PKPAB | | PKPab | 13 27 54.7 | +1.1 |
| KHC | | | | *e*pPKP | | pPKPab | 13 30 10.0 | +4.1 |
| KHC | | | | *es*PKP | | | 13 31 02.2 | |
| KHC | Kasperske Hory | 147.72 | 346 | *e*PKIKP | | PKPdf | 13 27 46.0 | +0.7 |
| KHC | | | | *e* | | | 13 27 54.7 | |
| KHC | | | | *e* | | | 13 31 02.2 | |
| BGES | Gesves | 147.74 | 356 | *d*PKPbc | | PKPbc | 13 27 48.8 | -0.2 |
| BGES | | | | *d*PKP | | PKPab | 13 27 53.3 | -0.3 |
| CKRC | Cesky Krumlov | 147.83 | 345 | *e*PKPDF | | PKPdf | 13 27 46.1 | +0.6 |
| CKRC | | | | ⇑*e*PKP | | PKPbc | 13 27 49.9 | +0.6 |
| CKRC | | | | *ex* | | x | 13 31 06.0 | |
| CKRC | Cesky Krumlov | 147.83 | 345 | *e*PKIKP | | PKPdf | 13 27 46.1 | +0.6 |
| CKRC | | | | *e* | | | 13 27 49.5 | 0.0 |
| GZR | Gura Zlata | 147.84 | 332 | ⇑P | | PKPbc | 13 27 49.5 | 0.0 |
| GZR | Gura Zlata | 147.84 | 332 | ⇑PKHKP | | PKPpre | 13 27 49.5 | |
| BMRD | Maredsous | 147.84 | 357 | *d*PKPdf | | PKPdf | 13 27 46.1 | +0.8 |
| BMRD | | | | *d*PKPbc | | PKPbc | 13 27 49.5 | +0.3 |
| BMRD | | | | *d*PcP | | PKPab | 13 27 53.9 | -0.1 |
| SURR | Surduc | 147.84 | 333 | ⇓P | | PKPbc | 13 27 49.7 | +0.3 |
| SZH | Strazhitsa | 147.84 | 326 | *i* P | | PKPbc | 13 27 50.0 | +0.5 |
| WET | Wettzell | 147.87 | 347 | *e*PKPbc | | PKPbc | 13 27 49.9 | +0.5 |
| | baz=14,slow=2.8 | | | | | | | |
| RCHB | Rochefort | 147.96 | 356 | *d*PKPbc | | PKPbc | 13 27 49.8 | +0.3 |
| RCHB | | | | *d*PKiKP | | PKiKP | 13 27 51.2 | +0.4 |
| GEC2 | GERESS Array S | 147.96 | 346 | *e*PKPbc | | PKPbc | 13 27 50.4 | +0.6 |
| | baz=14,slow=2.8 | | | | | | | |
| GERES | GERESS Array B | 147.96 | 346 | PKP | | PKPdf | 13 27 46.3 | +0.6 |
| | comp=Z,54nm,0.8s,baz=64,slow=3.1,SNR=69 | | | | | | | |
| GERES | | | | PKPbc | | PKPbc | 13 27 50.3 | +0.6 |
| | comp=Z,54nm,0.8s,baz=26,slow=3.9,SNR=77 | | | | | | | |
| DOU | Dourbes | 148.05 | 357 | *d*PKPbc | | PKPbc | 13 27 50.2 | +0.5 |
| DOU | | | | *d*PKP | | PKPab | 13 27 54.8 | -0.1 |
| VLAD | Vladila | 148.13 | 329 | ⇑P | | PKiKP | 13 27 51.4 | 0.0 |
| ELND | Elena | 148.13 | 326 | ⇑P | | PKPbc | 13 27 48.3 | -1.9 |
| BZS | Buzias | 148.16 | 334 | ⇑P | | PKPdf | 13 27 46.6 | +0.6 |
| BZS | Buzias | 148.16 | 334 | ⇑PKHKP | | PKPdf | 13 27 46.6 | +0.6 |
| SRE | Strehaia | 148.20 | 331 | ⇓P | | PKiKP | 13 27 51.0 | -0.5 |
| SRE | Strehaia | 148.20 | 331 | ⇓PKP2 | | PKiKP | 13 27 51.0 | -0.5 |
| CONA | Conrad Observa | 148.23 | 342 | *i* PKP | | PKPdf | 13 27 46.7 | +0.5 |
| | comp=Z,16nm,1.7s,SNR=122 | | | | | | | |
| CONA | | | | *i* PKiKP | | PKiKP | 13 27 51.4 | -0.2 |
| | comp=Z,220nm,1.3s | | | | | | | |
| CONA | | | | *i* PKP | | PKPab | 13 27 57.1 | +1.3 |
| | comp=Z,142nm,1.0s | | | | | | | |
| CONA | | | | *e*pPKP | | pPKPdf | 13 30 03.3 | -1.4 |
| | comp=Z,13nm,1.1s | | | | | | | |
| CONA | | | | *e*PP | | PP | 13 31 23.4 | -1.5 |
| | comp=Z,10.0nm,1.8s | | | | | | | |
| RONA | Rosalia, Austr | 148.31 | 342 | *i* PKP | | PKPdf | 13 27 46.8 | +0.5 |
| | comp=Z,9.0nm,0.9s,SNR=70 | | | | | | | |
| RONA | | | | *i* PKiKP | | PKiKP | 13 27 51.4 | -0.3 |
| | comp=Z,176nm,1.2s | | | | | | | |
| RONA | | | | *i* PKP | | PKPab | 13 27 57.4 | +1.3 |
| | comp=Z,134nm,1.1s | | | | | | | |
| RONA | | | | *i* PP | | PP | 13 31 22.8 | -2.5 |
| | comp=Z,11nm,1.2s | | | | | | | |
| PVL | Pavlikeni | 148.37 | 327 | *i* P | | PKPbc | 13 27 51.3 | +0.5 |
| WLF | Walferdange | 148.38 | 355 | *d*PKiKP | | PKiKP | 13 27 51.8 | 0.0 |
| WLF | Walferdange | 148.38 | 355 | *e*PKPbc | | PKiKP | 13 27 51.7 | 0.0 |
| | baz=14,slow=2.8 | | | | | | | |
| EDRB | Edirne | 148.38 | 324 | P | | PKPbc | 13 27 50.4 | -0.5 |
| HERR | Herculane | 148.40 | 332 | ⇓P | | PKPbc | 13 27 51.1 | +0.3 |
| DJES | Djerdap | 148.51 | 332 | ⇑P | | PKPbc | 13 27 51.3 | +0.1 |
| BAND | Balkesir-Ban | 148.52 | 320 | ⇑P | | PKiKP | 13 27 51.9 | -0.5 |
| BANR | Banloc | 148.55 | 334 | ⇓P | | PKiKP | 13 27 52.5 | +0.3 |
| MOA | Molln | 148.74 | 344 | *e*PKP | | PKPdf | 13 27 47.0 | +0.1 |
| | comp=Z,12nm,1.2s | | | | | | | |
| MOA | | | | *e*PKiKP | | PKPbc | 13 27 52.1 | +0.4 |
| | comp=Z,97nm,1.2s,SNR=17 | | | | | | | |
| MOA | | | | *i* PKP | | PKPab | 13 27 58.8 | +0.9 |
| | comp=Z,155nm,1.4s | | | | | | | |
| MOA | | | | *e*pPKP | | pPKPdf | 13 30 05.2 | -0.4 |
| | comp=Z,11nm,1.0s | | | | | | | |
| MOA | | | | *i* PP | | PP | 13 31 28.6 | +1.0 |
| | comp=Z,5.9nm,1.2s | | | | | | | |
| MDVR | Moldovita | 148.78 | 333 | ⇑P | | PKPdf | 13 27 47.5 | +0.3 |
| JSA | Saint Aubin | 148.83 | 5 | *e*P | | PKPdf | 13 27 47.3 | +0.4 |
| MORH | Mrgy, Hungar | 148.84 | 338 | ⇑P | | PKPdf | 13 27 47.5 | +0.5 |
| STU | Stuttgart | 148.91 | 351 | *e*PKPbc | | PKiKP | 13 27 52.7 | -0.2 |
| | baz=14,slow=2.8 | | | | | | | |
| ARSA | Arzberg | 148.94 | 342 | *e*PKP | | PKPdf | 13 27 47.2 | -0.1 |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| ARSA | | | | *i* PKiKP | | PKPbc | 13 27 52.4 | +0.3 |
| | comp=Z,61nm,1.2s,SNR=13 | | | | | | | |
| ARSA | | | | *e*PP | | PP | 13 31 27.8 | -1.0 |
| | comp=Z,8.5nm,1.4s | | | | | | | |
| BIOA | Bad Ischl, Aus | 149.05 | 345 | *i* PKP | | PKPdf | 13 27 47.5 | +0.1 |
| | comp=Z,17nm,1.1s,SNR=34 | | | | | | | |
| BIOA | | | | *i* PKiKP | | PKiKP | 13 27 52.9 | -0.3 |
| | comp=Z,100nm,1.1s | | | | | | | |
| BIOA | | | | *i* PKP | | PKPab | 13 27 59.9 | +0.8 |
| | comp=Z,175nm,1.0s | | | | | | | |
| FUR | Furstenfeldbru | 149.13 | 348 | *e*PKPbc | | PKiKP | 13 27 53.4 | 0.0 |
| | baz=14,slow=2.8 | | | | | | | |
| RJOB | Jochberg | 149.21 | 346 | *e*PKPbc | | PKiKP | 13 27 53.3 | -0.3 |
| | baz=14,slow=2.8 | | | | | | | |
| KULA | Kula-Manisa | 149.24 | 317 | P | | PKPbc | 13 27 53.0 | -0.2 |
| PLD | Plovdiv | 149.27 | 326 | *i* P | | PKPbc | 13 27 53.0 | 0.0 |
| FRGS | Fruska Gora | 149.28 | 335 | ⇓*i*P | | PKPbc | 13 27 53.1 | +0.1 |
| ELL | Elmali | 149.32 | 313 | | | PKPbc | 13 27 53.0 | -0.5 |
| ELL | Elmali | 149.32 | 313 | PKHKP | | PKPbc | 13 27 53.0 | -0.5 |
| ALN | Alexandroupoli | 149.40 | 323 | P | | PKPbc | 13 27 52.4 | -0.9 |
| ENEZ | Enez | 149.44 | 323 | P | | PKPbc | 13 27 52.1 | -1.4 |
| BFO | Black Forest | 149.46 | 352 | PKPdf | | PKPdf | 13 27 47.8 | -0.3 |
| BFO | Black Forest | 149.46 | 352 | PKIKP | | PKPdf | 13 27 47.8 | -0.3 |
| BFO | Black Forest | 149.46 | 352 | *e*PKPbc | | PKiKP | 13 27 53.8 | -0.3 |
| | baz=14,slow=2.8 | | | | | | | |
| LESA | Schwarzleotal | 149.53 | 346 | *i* PKP | | PKPdf | 13 27 48.4 | +0.1 |
| | comp=Z,21nm,1.1s | | | | | | | |
| LESA | | | | *i* PKiKP | | PKiKP | 13 27 54.2 | -0.2 |
| | comp=Z,104nm,1.1s | | | | | | | |
| LESA | | | | *i* PKP | | PKPab | 13 28 01.9 | +0.7 |
| | comp=Z,146nm,1.4s | | | | | | | |
| LESA | | | | *e*pPKP | | pPKPdf | 13 30 08.4 | +1.5 |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| SOKA | Soboth | 149.61 | 342 | *i* PKP | | PKPdf | 13 27 48.3 | -0.1 |
| | comp=Z,16nm,1.4s,SNR=50 | | | | | | | |
| SOKA | | | | *i* PKiKP | | PKPbc | 13 27 54.1 | +0.3 |
| | comp=Z,123nm,1.1s | | | | | | | |
| SOKA | | | | *i* PKP | | PKPab | 13 28 02.0 | +0.5 |
| | comp=Z,93nm,1.1s | | | | | | | |
| SOKA | | | | *i* PP | | PP | 13 31 32.7 | 0.0 |
| | comp=Z,12nm,1.5s | | | | | | | |
| PERS | Pernice | 149.62 | 342 | *i* PKPdf | | PKPdf | 13 27 47.7 | -0.7 |
| PERS | | | | *i* PKPbc | | PKPbc | 13 27 53.5 | -0.2 |
| PERS | | | | *e*PKPab | | PKPab | 13 28 01.5 | -0.1 |
| BOVS | Bovan | 149.68 | 331 | ⇓P | | PKPbc | 13 27 53.4 | -0.5 |
| KBA | Koelnbreinsper | 149.69 | 345 | *i* PKP | | PKPdf | 13 27 48.3 | -0.3 |
| | comp=Z,15nm,1.1s,SNR=45 | | | | | | | |
| KBA | | | | *i* PKiKP | | PKPbc | 13 27 54.2 | +0.1 |
| | comp=Z,114nm,1.0s | | | | | | | |
| KBA | | | | *i* PKP | | PKPab | 13 28 02.1 | +0.2 |
| | comp=Z,132nm,0.8s | | | | | | | |
| KBA | | | | *i* PP | | PP | 13 31 30.3 | -3.0 |
| | comp=Z,17nm,1.6s | | | | | | | |
| VTS | Vitosha | 149.72 | 328 | *i* P | | PKPbc | 13 27 54.6 | +0.3 |
| UBR | Ueberruh | 149.81 | 349 | *e*PKPbc | | PKiKP | 13 27 54.7 | -0.2 |
| | baz=14,slow=2.8 | | | | | | | |
| WATA | Walderalm | 149.86 | 347 | *i* PKP | | PKPdf | 13 27 49.0 | +0.1 |
| | comp=Z,16nm,1.0s | | | | | | | |
| WATA | | | | *i* PKiKP | | PKPbc | 13 27 54.7 | +0.2 |
| | comp=Z,143nm,1.1s,SNR=17 | | | | | | | |
| WATA | | | | *i* PKP | | PKPab | 13 28 03.1 | +0.5 |
| | comp=Z,101nm,1.4s | | | | | | | |
| WATA | | | | *i* PP | | PP | 13 31 34.5 | +0.4 |
| | comp=Z,4.9nm,0.9s | | | | | | | |
| RETA | Reutte | 149.88 | 348 | *i* PKP | | PKPdf | 13 27 49.1 | +0.2 |
| | comp=Z,8.3nm,1.0s | | | | | | | |
| RETA | | | | *i* PKiKP | | PKPbc | 13 27 54.7 | +0.3 |
| | comp=Z,82nm,1.1s,SNR=22 | | | | | | | |
| RETA | | | | *i* PKP | | PKPab | 13 28 02.8 | +0.2 |
| | comp=Z,72nm,1.2s | | | | | | | |
| RETA | | | | *i* PP | | PP | 13 31 35.9 | +1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PBEJ** | **Beja** | **158.34** | **22** | *e*PKPdf | **PKPdf** | **13 28 02.2** | **+1.5** |
| **PBEJ** | **Beja** | **158.34** | **22** | *e*PKPab | **PKPab** | **13 28 39.4** | **+0.4** |
| **MESJ** | **Messejana** | **158.38** | **23** | *e*PKPdf | **PKPdf** | **13 28 01.9** | **+1.2** |
| **MESJ** | **Messejana** | **158.38** | **23** | *e*PKPdf | **PKPdf** | **13 28 01.0** | **+0.3** |
| MESJ | | | | *e*PKPab | **PKPab** | **13 28 39.5** | **+0.3** |
| **PTEO** | **Sao Teotonio** | **158.44** | **24** | *e*PKPab | **PKPab** | **13 28 40.2** | **+0.7** |
| **PBAR** | **Barrancos** | **158.48** | **20** | *e*PKPdf | **PKPdf** | **13 28 01.6** | **+0.8** |
| **PBAR** | **Barrancos** | **158.48** | **20** | *e*PKPab | **PKPab** | **13 28 39.4** | **-0.2** |
| **PCVE** | **Castro Verde** | **158.62** | **23** | *e*PKPdf | **PKPdf** | **13 28 02.5** | **+1.5** |
| **PCVE** | **Castro Verde** | **158.62** | **23** | *e*PKPab | **PKPab** | **13 28 40.6** | **+0.3** |
| **MORF** | **Marmelete** | **158.68** | **24** | *e*PKPdf | **PKPdf** | **13 28 02.1** | **+1.0** |
| **MORF** | **Marmelete** | **158.68** | **24** | *e*PKPab | **PKPab** | **13 28 41.0** | **+0.4** |
| **MORF** | **Marmelete** | **158.68** | **24** | *e*PKPdf | **PKPdf** | **13 28 01.4** | **+0.3** |
| MORF | | | | *e*PKPab | **PKPab** | **13 28 40.9** | **+0.3** |
| **PFVI** | **Vila Bisbo** | **158.76** | **25** | *e*PKPab | **PKPab** | **13 28 41.6** | **+0.7** |
| **PVAQ** | **Vaqueiros** | **158.94** | **22** | *e*PKPdf | **PKPdf** | **13 28 02.7** | **+1.3** |
| **PVAQ** | **Vaqueiros** | **158.94** | **22** | *e*PKPab | **PKPab** | **13 28 42.1** | **+0.4** |
| **PBDV** | **Barranco-do-Ve** | **159.01** | **23** | *e*PKPab | **PKPab** | **13 28 42.5** | **+0.5** |
| **KEST** | **Kesra** | **161.34** | **341** | PKP | **PKPdf** | **13 28 05.0** | **+0.8** |
| | comp=Z,5.6nm,0.8s,baz=286,slow=3.9,SNR=6.4 | | | | | | |
| KEST | | | | PKPab | **PKPab** | **13 28 52.7** | **+0.4** |
| | comp=Z,55nm,1.0s,baz=293,slow=2.0,SNR=26 | | | | | | |
| **DBIC** | **Dimbokro** | **166.72** | **148** | PKP | **PKPdf** | **13 28 09.7** | **+0.3** |
| | comp=Z,6.5nm,0.9s,baz=249,slow=2.0,SNR=5.2 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **13 29 17.6** | **+1.1** |
| | comp=Z,2.0nm,0.5s,baz=153,slow=3.5,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.03** | **175** | PKP | **PKPdf** | **13 28 12.8** | **-0.8** |
| | comp=Z,7.7nm,1.0s,baz=333,slow=2.8,SNR=20 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **13 29 55.5** | **+2.4** |
| | comp=Z,1.9nm,0.8s,baz=200,slow=2.2,SNR=6.8 | | | | | | |
| TORD | | | | PP | **PP** | **13 33 43.7** | **-0.9** |
| | comp=Z,1.3nm,1.0s,baz=136,slow=3.9,SNR=3.5 | | | | | | |

*SCB **28** 13:12:15.2±0.9, 18°.58S×63°.76W, h15km±6km, ML5.3/2, MW5.2, Error ellipse: s-maj=2.9km s-min=2.5km az=2.0*
*IDC **28** 13:12:16.1±0.6, 18°.64S×63°.92W, h0km, mb4.5/12, mbtmp4.5/17, ML4.4/5, MS4.1/21, Error ellipse: s-maj=19.9km s-min=13.8km az=59.0*
*NEIC **28** 13:12:18.6±2.1, 18°.60S±0°.04×63°.85W±0°.07, h14km±5km, mb5.1/93, Mww4.7/12, Error ellipse: s-maj=11.1km s-min=2.0km az=119.0*
*VAO **28** 13:12:19.3±0.3, 18°.48S×63°.84W, h22km±2km, mb4.9*
*NEIC **28** 13:12:19.2, 18°.50S×63°.75W, h16km, Moment Tensor Solution. Duration: 1s2 Moment tensor: Scale 10¹⁶Nm; Mrr=0.24; Mθθ 0.50; Mϕϕ -0.26; Mrθ -0.14; Mϕ 1.23; Mr 0.72; Fault plane solution: M0 1.49000×10¹⁶ NP1: ϕs191.43000°, δ78.99000°, λ-151.05000°. NP2: ϕs95.40000°, δ61.63000°, λ-12.54000°. Principal axes: T 1.4675, Plg12.0000°, Azm321.0000°; N 0.0532, Plg59.0000°, Azm210.0000°; P -1.5207, Plg28.0000°, Azm57.0000°;*
*NEIC **28** 13:12:19.2, 18°.60S×63°.86W, h16km*

**ISC 28 13:12:17.7±0.3, 18°.53S±0°.04×63°.86W±0°.04, h10km, n187, σ1s42/152, mb5.0/60, MS4.1/18, 5C-1D, Central Bolivia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOTI** | **Planta Incahua** | **1.30** | **172** | Pn | **Pg** | **13 12 42.9** | **+0.2** |
| **AOEA** | **Aiquile** | **1.35** | **285** | Pg | **Pb** | **13 12 43.3** | **0.0** |
| AOEA | | | | Sg | **Sg** | **13 13 02.5** | **+1.2** |
| AOEA | | | | IAML | | 13 13 06.6 | |
| | 34µm,0.7s | | | | | | |
| **AOVT** | **TarijaAcel** | **3.09** | **195** | Pn | **Pn** | **13 13 09.0** | **+2.2** |
| **MOCB** | **Mochara** | **3.18** | **211** | Pn | **Pn** | **13 13 10.6** | **+2.4** |
| MOCB | | | | Sn | **Sb** | **13 13 52.3** | **-1.3** |
| MOCB | | | | IAML | | 13 14 03.1 | |
| | 12µm,0.6s | | | | | | |
| **BBSD** | **Serra de San D** | **3.37** | **67** | Pn | **Pn** | **13 13 11.7** | **+1.2** |
| **BBSD** | **Serra de San D** | **3.37** | **67** | *e*P | **Pn** | **13 13 11.8** | **+1.2** |
| BBSD | | | | *e*S | **Sn** | **13 13 49.7** | **-1.0** |
| **SIV** | **San Ignacio** | **3.67** | **47** | Pn | **Pn** | **13 13 15.9** | **+1.2** |
| | 12nm,0.3s,baz=218,slow=13,SNR=428 | | | | | | |
| SIV | | | | Sn | **Sn** | **13 13 59.8** | **+1.7** |
| | 14nm,0.3s,baz=228,slow=12,SNR=7.2 | | | | | | |
| SIV | | | | LR | LR | 13 15 05.0 | |
| | comp=Z,2µm,21.4s,baz=240,slow=45 | | | | | | |
| | 391nm,0.5s | | | | | | |
| **SIV** | **San Ignacio** | **3.67** | **47** | Pn | **Pn** | **13 13 16.2** | **+1.5** |
| **SOEO** | **Opoqueri** | **3.82** | **269** | Pn | **Pn** | **13 13 20.7** | **+3.6** |
| **BBOE** | **La Paz, Chanca** | **4.29** | **293** | Pn | **Pn** | **13 13 27.0** | **+3.4** |
| **SOEJ** | **Jacaque** | **4.41** | **290** | Pn | **Pn** | **13 13 28.9** | **+3.7** |
| **LPAZ** | **La Paz** | **4.65** | **298** | Pn | **Pn** | **13 13 31.1** | **+2.5** |
| | 109nm,0.3s,baz=115,slow=8.2,SNR=1412 | | | | | | |
| LPAZ | | | | Sn | **Sn** | **13 14 24.4** | **+1.4** |
| | 38nm,0.3s,baz=36,slow=19,SNR=3.6 | | | | | | |
| LPAZ | | | | Lg | Lg | 13 14 40.9 | |
| | 50nm,0.3s,baz=238,slow=4.6,SNR=4.7 | | | | | | |
| LPAZ | | | | LR | LR | 13 15 38.7 | |
| | comp=Z,3µm,19.9s,baz=110,slow=44 | | | | | | |
| **BBOD** | **La Paz, Gloria** | **4.90** | **292** | Pn | **Pn** | **13 13 35.8** | **+3.8** |
| **GO01** | **Chusmiza** | **5.17** | **257** | | **Pn** | **13 13 36.7** | **+1.0** |
| **FDPY** | **Filadelfia** | **5.23** | **136** | *e*P | **Pn** | **13 13 35.3** | **-0.8** |
| FDPY | | | | *e*S | **Sn** | **13 14 35.9** | **-0.6** |
| **PB18** | **Visviri** | **5.43** | **279** | | **Pn** | **13 13 40.0** | **+0.8** |
| **PTLB** | **Pontes e Lacer** | **5.46** | **57** | Pn | **Pn** | **13 13 40.4** | **+1.1** |
| **PTLB** | **Pontes e Lacer** | **5.46** | **57** | Pn | **Pn** | **13 13 40.6** | **+1.3** |
| **PTLB** | **Pontes e Lacer** | **5.46** | **57** | *e*P | **Pn** | **13 13 39.8** | **+0.5** |
| PTLB | | | | *e*S | **Sn** | **13 14 41.6** | **-0.6** |
| **PB09** | **IPOC Station P** | **6.01** | **236** | | **Pn** | **13 13 48.1** | **+1.3** |
| **PB09** | **IPOC Station P** | **6.01** | **236** | Pn | **Pn** | **13 13 49.7** | **+2.8** |
| **TA02** | **Huaiquique** | **6.17** | **253** | | **Pn** | **13 13 49.0** | **+0.1** |
| **LVC** | **Limon Verde** | **6.23** | **229** | Pn | **Pn** | **13 13 51.0** | **+0.9** |
| **LVC** | **Limon Verde** | **6.23** | **229** | Pn | **Pn** | **13 13 51.3** | **+1.2** |
| | 4.1nm,0.3s,baz=56,slow=12,SNR=32 | | | | | | |
| LVC | | | | LR | LR | 13 16 55.3 | |
| | comp=Z,2µm,21.2s,baz=35,slow=46 | | | | | | |
| **LVC** | **Limon Verde** | **6.23** | **229** | *e*P | **Pn** | **13 13 51.4** | **+1.2** |
| **TA01** | **Diego Aracena** | **6.29** | **250** | | **Pn** | **13 13 49.1** | **-1.6** |
| **VILB** | **Vilhena** | **6.57** | **33** | Pn | **Pn** | **13 13 56.0** | **+1.5** |
| **VILB** | **Vilhena** | **6.57** | **33** | Pn | **Pn** | **13 13 56.6** | **+2.0** |
| **VILB** | **Vilhena** | **6.57** | **33** | *e*P | **Pn** | **13 13 53.5** | **-1.0** |
| **PANT** | **Pantanal (Braz** | **6.88** | **95** | *e*P | **Pn** | **13 13 58.3** | **-0.4** |
| **PB04** | **IPOC Station P** | **7.00** | **236** | Pn | **Pn** | **13 13 59.0** | **-1.6** |
| **PAPY** | **Pozo Azul** | **7.62** | **137** | *e*P | **Pn** | **13 14 08.2** | **-0.7** |
| **AQDB** | **Aquidauana** | **7.94** | **105** | Pn | **Pn** | **13 14 12.8** | **-0.5** |
| **AQDB** | **Aquidauana** | **7.94** | **105** | *e*P | **Pn** | **13 14 14.5** | **+1.2** |
| **SALV** | **Santo Antonio** | **8.23** | **73** | *e*P | **Pn** | **13 14 16.6** | **-0.8** |
| SALV | | | | *e*S | **Sn** | **13 15 50.6** | **+0.2** |
| **GO02** | **Mina Guanaco** | **8.47** | **218** | Pn | **Pn** | **13 14 20.3** | **-0.6** |
| **PB14** | **IPOC Station P** | **8.59** | **224** | | **Pn** | **13 14 21.8** | **-0.7** |
| **ETMB** | **Extrema** | **8.96** | **345** | Pn | **Pn** | **13 14 26.1** | **-1.2** |
| **ETMB** | **Extrema** | **8.96** | **345** | *e*P | **Pn** | **13 14 26.3** | **-1.0** |
| ETMB | | | | *e*S | **Sn** | **13 16 08.7** | **+0.3** |
| **SAML** | **Samuel** | **9.55** | **4** | Pn | **Pn** | **13 14 34.8** | **-0.6** |
| **SAML** | **Samuel** | **9.55** | **4** | *e*P | **Pn** | **13 14 35.1** | **-0.3** |
| **SJPY** | **San Joaquin** | **9.66** | **133** | *e*P | **Pn** | **13 14 35.9** | **-1.0** |
| **PDRB** | **Porto dos Gac** | **9.73** | **46** | *e*P | **Pn** | **13 14 37.3** | **-0.6** |
| **CPUP** | **Villa Florida** | **9.83** | **143** | Pn | **Pn** | **13 14 38.5** | **-0.8** |
| | 0.9nm,0.3s,baz=328,slow=11,SNR=7.7 | | | | | | |
| CPUP | | | | Sn | **Sn** | **13 16 32.6** | **+2.9** |
| | 5.8nm,0.3s,baz=45,slow=18,SNR=4.8 | | | | | | |
| CPUP | | | | Lg | Lg | 13 17 24.6 | |
| | 3.5nm,0.3s,baz=50,slow=17,SNR=3.4 | | | | | | |
| | 2.7nm,0.4s | | | | | | |
| **CLDB** | **Colider** | **10.90** | **47** | *e*P | **Pn** | **13 14 53.8** | **-0.1** |
| **ARAG** | **Araguaiana, MT** | **11.86** | **78** | *e*P | **Pn** | **13 15 05.7** | **-1.4** |
| **PCMB** | **Pacaembu** | **12.23** | **107** | *e*P | **Pn** | **13 15 12.4** | **+0.4** |
| **CRSM** | **Crissiumal (Br** | **12.69** | **136** | *e*P | **Pn** | **13 15 19.7** | **+1.3** |
| **CO01** | **Juntas del Tor** | **12.73** | **205** | | **Pn** | **13 15 17.3** | **-1.8** |
| **ITRB** | **Iturama** | **12.82** | **97** | *e*P | **Pn** | **13 15 20.2** | **0.0** |
| ITRB | | | | *e*S | **Sn** | **13 17 40.7** | **-2.3** |
| **LDASE** | **Londrina, Braz** | **12.85** | **114** | *e*P | **Pn** | **13 15 21.4** | **+0.8** |
| **ITQB** | **Itaqui** | **12.90** | **151** | *e*P | **Pn** | **13 15 20.7** | **-0.5** |
| **PSAL** | **Palomas, Salto** | **13.72** | **157** | *e*P | **Pn** | **13 15 33.2** | **+0.8** |
| **CZSB** | **Cruzeiro do Su** | **13.76** | **320** | | **Pn** | **13 15 31.9** | **-1.1** |
| **CZSB** | **Cruzeiro do Su** | **13.76** | **320** | *e*P | **Pn** | **13 15 32.6** | **-0.4** |
| **ITAB** | **Concordia** | **13.84** | **131** | *e*P | **Pn** | **13 15 34.6** | **+0.5** |
| **NPGB** | **Novo Progresso** | **14.11** | **37** | *e*P | **Pn** | **13 15 37.0** | **-0.8** |
| **NNA** | **Nana** | **14.11** | **296** | Pn | **Pn** | **13 15 37.7** | **-0.2** |
| | 2.1nm,0.3s,baz=145,slow=12,SNR=2.3 | | | | | | |
| | 8.4nm,0.4s | | | | | | |
| **RODS** | **Rosario do Sul** | **14.15** | **148** | *e*P | **Pn** | **13 15 39.0** | **+0.7** |
| **FRTB** | **Fartura** | **14.19** | **112** | *e*P | **Pn** | **13 15 39.2** | **+0.3** |
| **ALGR** | **Alto Alegre (B** | **14.23** | **138** | *e*P | **Pn** | **13 15 40.4** | **+0.9** |
| ALGR | | | | *e*S | **Sn** | **13 18 18.6** | **+1.0** |
| **IPMB** | **Ipameri, GO** | **14.88** | **90** | *e*P | **Pn** | **13 15 48.7** | **+0.4** |
| **TBOT** | **Tacuaremb** | **14.92** | **153** | *e*P | **Pn** | **13 15 49.6** | **+0.9** |
| **TEFE** | **Tefe** | **14.95** | **357** | *e*P | **Pn** | **13 15 46.7** | **-2.6** |
| TEFE | | | | *e*S | **Sn** | **13 18 33.9** | **-1.3** |
| **CPSB** | **Cacapava Do Su** | **15.14** | **143** | *e*P | **Pn** | **13 15 53.5** | **+1.7** |
| **BDFB** | **Brasilia** | **15.42** | **82** | Pn | **Pn** | **13 15 56.6** | **+0.9** |
| | 0.6nm,0.3s,baz=223,slow=9.2,SNR=1.6 | | | | | | |
| BDFB | | | | Lg | Lg | 13 20 28.0 | |
| | 1.0nm,0.3s,baz=235,slow=2.0,SNR=3.5 | | | | | | |
| BDFB | | | | LR | LR | 13 22 32.4 | |
| | comp=Z,1µm,18.6s,baz=270,slow=40 | | | | | | |
| | 1.7nm,0.4s | | | | | | |
| **TBTG** | **Tabatinga, AM** | **15.44** | **337** | *e*P | **Pn** | **13 15 53.9** | **-1.9** |
| **MACA** | **Manacapuru-AM** | **15.59** | **12** | | **Pn** | **13 15 56.0** | **-1.8** |
| MACA | | | | IAmb | IAmb | 13 16 07.5 | |
| | comp=Z,50nm,0.7s | | | | | | |
| **MACA** | **Manacapuru-AM** | **15.59** | **12** | *e*P | **Pn** | **13 15 56.7** | **-1.1** |
| **MT08** | **Bocatoma Ro** | **15.84** | **199** | | **Pn** | **13 16 00.1** | **-1.0** |
| **MT03** | **Universidad Ad** | **16.04** | **200** | P | **P** | **13 16 06.9** | **-0.2** |
| **PLTB** | **Pedras Altas** | **16.10** | **147** | P | **P** | **13 16 08.0** | **+0.3** |
| **PLTB** | **Pedras Altas** | **16.10** | **147** | *e*P | **Pn** | **13 16 05.8** | **+1.5** |
| **TER01** | **Tubaro-SC** | **16.76** | **129** | *e*P | **Pn** | **13 16 13.2** | **+0.5** |
| **GO05** | **Huala** | **17.91** | **202** | P | **Pn** | **13 16 26.3** | **-0.7** |
| **ATAH** | **Atahualpa** | **18.12** | **307** | P | **Pn** | **13 16 29.8** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=140,slow=12,SNR=8.5 | | | | | | |
| ATAH | | | | LR | LR | 13 24 47.8 | |
| | comp=Z,1µm,20.8s,baz=159,slow=41 | | | | | | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **PRPB** | **Parauapebas** | **18.40** | **50** | *e*P | **P** | **13 16 33.0** | **-0.1** |
| **SMTB** | **Santa Maria do** | **18.49** | **61** | *e*P | **P** | **13 16 33.0** | **-1.1** |
| **MAL2** | **Monte Alegre,** | **18.96** | **31** | P | **Pn** | **13 16 40.0** | **0.0** |
| **BI02** | **San Fabin de** | **19.20** | **198** | P | **P** | **13 16 40.4** | **-1.5** |
| **TRQA** | **Tornquist** | **19.52** | **176** | P | **P** | **13 16 45.3** | **0.0** |
| **BOAV** | **Boa Vista** | **21.06** | **9** | P | **P** | **13 17 03.9** | **+1.8** |
| BOAV | | | | IAmb | IAmb | 13 17 09.0 | |
| | comp=Z,58nm,1.2s | | | | | | |
| **BOAV** | **Boa Vista** | **21.06** | **9** | *e*P | **P** | **13 17 02.0** | **-0.2** |
| BOAV | | | | *e*pP | **sP** | **13 17 07.9** | **+0.7** |
| **MCPB** | **Macapa, AP** | **21.46** | **34** | *e*P | **P** | **13 17 05.8** | **-0.7** |
| **GO06** | **Curarrehue** | **21.99** | **196** | P | **P** | **13 17 09.5** | **-2.6** |
| GO06 | | | | IAmb | IAmb | 13 17 14.5 | |
| | comp=Z,86nm,1.0s | | | | | | |
| **TMAB** | **Tom-Au,PA,Br** | **22.29** | **46** | *e*P | **P** | **13 17 15.4** | **0.0** |
| **LR05** | **Currie** | **22.73** | **196** | P | **P** | **13 17 17.8** | **-2.2** |
| LR05 | | | | IAmb | IAmb | 13 17 28.9 | |
| | comp=Z,65nm,1.1s | | | | | | |
| **PLCA** | **Paso Flores** | **22.86** | **193** | P | **P** | **13 17 19.8** | **-1.6** |
| | comp=Z,14nm,0.9s,baz=5.8,slow=9.5,SNR=13 | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **LL04** | **Puerto Octay** | **23.48** | **196** | IAmb | IAmb | 13 17 29.1 | |
| | comp=Z,58nm,0.9s | | | | | | |
| **OTAV** | **Otavalo** | **23.53** | **321** | *e*P | **P** | **13 17 27.8** | **-1.0** |
| **LL01** | **San Ignacio de** | **24.86** | **195** | IAmb | IAmb | 13 17 42.8 | |
| | comp=Z,41nm,0.9s | | | | | | |
| **ROSC** | **El Rosal** | **25.41** | **335** | P | **P** | **13 17 47.1** | **+1.0** |
| | comp=Z,10nm,0.4s,baz=146,slow=18,SNR=7.6 | | | | | | |
| ROSC | | | | Lg | Lg | 13 25 43.7 | |
| | comp=Z,2.6nm,0.3s,baz=317,slow=23,SNR=1.6 | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | |
| **LL02** | **Futaleuf** | **25.49** | **194** | P | **P** | **13 17 45.2** | **-1.0** |
| LL02 | | | | IAmb | IAmb | 13 17 51.2 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **28.05** | **346** | P | **P** | **13 18 10.4** | **+0.7** |
| SDV | | | | IAmb | IAmb | 13 18 14.8 | |
| | comp=Z,18nm,1.0s | | | | | | |
| **SDV** | **Santo Domingo** | **28.05** | **346** | LR | LR | 13 30 14.0 | |
| | comp=Z,675nm,18.9s,baz=218,slow=38 | | | | | | |
| **SDV** | **Santo Domingo** | **28.05** | **346** | *e*P | **P** | **13 18 08.4** | **-1.3** |
| SDV | | | | *e*pP | **sP** | **13 18 14.2** | **-0.7** |
| **RCBR** | **Riachuelo** | **30.05** | **69** | LR | LR | 13 30 51.4 | |
| | comp=Z,184nm,19.7s,baz=238,slow=37 | | | | | | |
| **JTS** | **Las Juntas de** | **35.41** | **322** | LR | LR | 13 34 49.4 | |
| | comp=Z,218nm,18.4s,baz=146,slow=38 | | | | | | |
| **CELP** | **Cerrillos** | **36.48** | **356** | P | **P** | **13 19 23.2** | **-0.1** |
| CELP | | | | IAmb | IAmb | 13 19 27.8 | |
| | comp=Z,29nm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **41.26** | **321** | P | **P** | **13 20 03.1** | **-0.5** |
| **APG** | **El Apazote** | **42.40** | **320** | LR | LR | 13 38 55.3 | |
| | comp=Z,19nm,19.1s,baz=124,slow=38 | | | | | | |
| **RPN** | **Rapa Nui** | **42.59** | **250** | LR | LR | 13 35 04.8 | |
| | comp=Z,216nm,18.6s,baz=132,slow=32 | | | | | | |
| **PMSA** | **Palmer Station** | **46.21** | **180** | LR | LR | 13 40 32.7 | |
| | comp=Z,296nm,19.4s,baz=340,slow=37 | | | | | | |
| **CMIG** | **Matias Romero** | **46.74** | **317** | LR | LR | 13 40 32.6 | |
| | comp=Z,166nm,20.5s,baz=140,slow=36 | | | | | | |
| **GOGA** | **Godfrey** | **54.94** | **340** | IAmb | IAmb | 13 21 52.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **Y52A** | **Lilburn** | **55.55** | **340** | IAmb | IAmb | 13 21 57.1 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **V55A** | **Taylorsville** | **56.53** | **343** | P | **P** | **13 22 00.4** | **0.0** |
| V55A | | | | IAmb | IAmb | 13 22 05.1 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **T59A** | **Double "B" Far** | **56.70** | **347** | P | **P** | **13 22 02.0** | **+0.5** |
| **X48A** | **Hartselle** | **57.13** | **337** | IAmb | IAmb | 13 22 07.7 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **U54A** | **Nelsons Funny** | **57.33** | **343** | IAmb | IAmb | 13 22 11.7 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **TZTN** | **Tazewell** | **57.85** | **341** | IAmb | IAmb | 13 22 17.2 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **PLAL** | **Pickwick Lake** | **57.98** | **337** | IAmb | IAmb | 13 22 13.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **CLTN** | **Cedars of Leba** | **58.34** | **339** | IAmb | IAmb | 13 22 16.9 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **WVT** | **Waverly** | **58.91** | **337** | | **P** | **13 22 15.2** | **-1.9** |
| WVT | | | | IAmb | IAmb | 13 22 19.0 | |
| | comp=Z,25nm,1.1s | | | | | | |
| **T47A** | **Sharon Grove** | **59.42** | **338** | IAmb | IAmb | 13 22 23.0 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **R50A** | **Paris** | **59.69** | **341** | IAmb | IAmb | 13 22 26.3 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **MIAR** | **Mount Ida** | **59.88** | **332** | IAmb | IAmb | 13 22 26.3 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **WHAR** | **Wooly Hollow** | **59.94** | **333** | IAmb | IAmb | 13 22 27.1 | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **P53A** | **Whipple** | **60.00** | **344** | P | **P** | **13 22 25.1** | **+0.5** |
| **LCAR** | **Lake Charles** | **60.14** | **335** | IAmb | IAmb | 13 22 27.9 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **N58A** | **Sunbury** | **60.27** | **349** | IAmb | IAmb | 13 22 30.7 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **60.39** | **334** | IAmb | IAmb | 13 22 29.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SAND** | **Sanderson** | **60.69** | **322** | IAmb | IAmb | 13 22 33.7 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **KSPA** | **Keystone Colle** | **60.80** | **350** | IAmb | IAmb | 13 22 34.4 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **T42A** | **Van Buren** | **60.95** | **335** | IAmb | IAmb | 13 22 33.9 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **61.12** | **343** | IAmb | IAmb | 13 22 35.5 | |
| | comp=Z,30nm,1.2s | | | | | | |
| **L59A** | **Walton** | **61.30** | **351** | P | **P** | **13 22 33.8** | **+0.5** |
| L59A | | | | IAmb | IAmb | 13 22 38.6 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **61.41** | **163** | ⇑P | **P** | **13 22 37.0** | **+3.2** |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **61.50** | **333** | IAmb | IAmb | 13 22 37.6 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **FVM** | **French Village** | **61.52** | **336** | IAmb | IAmb | 13 22 37.3 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **61.54** | **162** | ⇑P | **P** | **13 22 38.0** | **+3.4** |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **L56A** | **Greenwood** | **61.68** | **348** | IAmb | IAmb | 13 22 40.2 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **RLO** | **Rose Lookout** | **61.88** | **332** | IAmb | IAmb | 13 22 40.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **61.89** | **336** | | **P** | **13 22 36.1** | **-1.3** |
| CCM | | | | IAmb | IAmb | 13 22 40.4 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **61.92** | **162** | ⇑P | **P** | **13 22 36.6** | **-0.6** |
| | comp=Z,4.9nm,0.6s,baz=297,slow=6.3 | | | | | | |
| **X34A** | **Smith Ranch, M** | **61.94** | **329** | IAmb | IAmb | 13 22 42.6 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **TUL3** | **Leonard** | **62.02** | **331** | IAmb | IAmb | 13 22 43.1 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **J59A** | **Piesco** | **62.46** | **351** | IAmb | IAmb | 13 22 46.5 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **R40A** | **Madies Statio** | **62.50** | **335** | IAmb | IAmb | 13 22 44.3 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **62.52** | **328** | | **P** | **13 22 40.7** | **-1.1** |
| WMOK | | | | IAmb | IAmb | 13 22 45.5 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **DBIC** | **Dimbokro** | **63.33** | **72** | P | **P** | **13 22 47.8** | **+0.2** |
| | comp=Z,6.3nm,1.0s,baz=270,slow=5.1,SNR=2.6 | | | | | | |
| | comp=Z,6.3nm,1.0s | | | | | | |
| **P40A** | **Paris** | **63.48** | **336** | IAmb | IAmb | 13 22 50.9 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **63.57** | **162** | P | **P** | **13 22 46.4** | **-1.9** |
| SNAA | | | | IAmb | IAmb | 13 22 57.6 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **63.57** | **162** | ⇑P | **P** | **13 22 48.3** | **0.0** |
| | comp=Z,102nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **63.57** | **162** | P | **P** | **13 22 47.6** | **-0.7** |
| | comp=Z,5.6nm,0.8s,baz=281,slow=6.8,SNR=5.6 | | | | | | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **F64A** | **Sherman** | **64.22** | **357** | IAmb | IAmb | 13 22 57.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **TROLL** | **Troll, Antarti** | **65.27** | **162** | ⇑P | **P** | **13 22 60.0** | **+0.5** |
| | comp=Z,266nm,0.7s | | | | | | |
| **D62A** | **Allapoint, Al** | **65.48** | **356** | IAmb | IAmb | 13 23 05.5 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **66.82** | **323** | LR | LR | 13 55 57.7 | |
| | comp=Z,59nm,18.1s,baz=64,slow=39 | | | | | | |
| **MVCO** | **Mesa Verde** | **69.59** | **323** | IAmb | IAmb | 13 23 32.5 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.64** | **180** | P | **P** | **13 23 39.0** | **-0.5** |
| | comp=Z,4.7nm,1.0s,baz=160,slow=2.5,SNR=3.1 | | | | | | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.88** | **69** | P | **P** | **13 23 41.5** | **-0.1** |
| | comp=Z,4.2nm,0.8s,baz=254,slow=5.4,SNR=22 | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **P18A** | **Preston Nutter** | **72.26** | **324** | IAmb | IAmb | 13 23 52.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **PDAR** | **Pinedale Array** | **74.08** | **327** | P | **P** | **13 23 53.9** | **-0.5** |
| | comp=Z,1.0nm,0.6s,baz=126,slow=7.5,SNR=6.1 | | | | | | |
| PDAR | | | | LR | LR | 14 00 57.7 | |
| | comp=Z,46nm,18.4s,baz=39,slow=39 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ULM** | **Lac du Bonnet** | **74.08** | **339** | P | **P** | **13 23 53.7** | **-0.2** |
| | comp=Z,4.5nm,0.7s,baz=137,slow=7.4,SNR=4.6 | | | | | | |
| ULM | | | | LR | LR | 13 59 09.0 | |
| | comp=Z,119nm,18.9s,baz=77,slow=38 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **IMW** | **Indian Meadow** | **75.59** | **327** | IAmb | IAmb | 13 24 08.3 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **OMMB** | **Old Mammoth Mi** | **76.19** | **318** | P | **P** | **13 24 06.9** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **76.25** | **319** | P | **P** | **13 24 07.5** | **+0.6** |
| | comp=Z,3.3nm,1.0s,baz=141,slow=6.8,SNR=5.3 | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **ESDC** | **Sonseca Array** | **80.42** | **43** | P | **P** | **13 24 31.6** | **+1.8** |
| | comp=Z,1.5nm,1.1s,baz=240,slow=5.7,SNR=5.0 | | | | | | |
| | comp=Z,1.5nm,1.1s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **80.92** | **320** | LR | LR | 14 03 49.9 | |
| | comp=Z,90nm,19.0s,baz=118,slow=38 | | | | | | |
| **MAW** | **Mawson** | **85.73** | **162** | P | **P** | **13 24 56.3** | **-0.4** |
| | comp=Z,3.4nm,0.8s,baz=259,slow=7.7,SNR=4.6 | | | | | | |
| MAW | | | | LR | LR | 14 01 55.0 | |
| | comp=Z,67nm,20.5s,baz=274,slow=35 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.06** | **339** | P | **P** | **13 25 17.0** | **-0.4** |
| | comp=Z,9.7nm,1.0s,baz=126,slow=3.7,SNR=8.4 | | | | | | |
| | comp=Z,9.7nm,1.0s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **92.69** | **41** | LR | LR | 14 02 55.0 | |
| | comp=Z,96nm,21.5s,baz=252,slow=33 | | | | | | |
| **IDI** | **Anoyia** | **99.48** | **56** | LR | LR | 14 11 50.1 | |
| | comp=Z,118nm,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MRVT** | **Maraveh tapeh** | **5.92** | **97** | Pn | | **Pn** | **13 23 27.6** | **-0.9** |

*IDC **28** 13:22:36.3±1.2,9.°90S×125.°28E,h0km,mb3.9/4, mbtmp4.0/6,ML4.0/2,MS3.5/1,Error ellipse: s-maj=145.0km s-min=22.1km az=53.0*
*NEIC **28** 13:22:38.4±1.6,10.°78S±0.°05×124.°3E±0.°1,h10km±1km, mb4.6/8,Error ellipse: s-maj=17.2km s-min=8.1km az=259.0*
*DJA **28** 13:22:40.3±1.1,11.°S±3.°×12.°4E±.°,h27km±12km,M4.6/12, mb4.8/6,mB5.0/2,MLv4.5/12,Mw(mB)4.4/2*
**ISC 28 13:22:38.4**±0.6,**10.°82S**±0.°05×**124.°29E**±0.°07,**h10**km,**n50,** σ1°**80**/43,**mb4.4/8,Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.87** | **314** | P | **Pg** | **13 22 55.2** | **0.0** |
| **SOEI** | **Soe** | **1.06** | **359** | | **Pg** | **13 22 59.1** | **+0.4** |
| SOEI | **Soe** | **1.06** | **359** | P | **Pg** | 13 22 59.4 | **+0.6** |
| SOEI | | | | S | **Sg** | 13 23 13.8 | **+1.3** |
| **MMRI** | **Maumere** | **2.97** | **317** | | **Pn** | **13 23 25.8** | **+0.2** |
| **MMRI** | **Maumere** | **2.97** | **317** | P | **Pn** | 13 23 24.5 | **-1.1** |
| **EDFI** | **Ende, Flores** | **3.29** | **308** | P | **Pn** | **13 23 29.0** | **-1.1** |
| **BASI** | **Baing, Sumba** | **3.70** | **279** | P | **Pn** | **13 23 35.0** | **-0.7** |
| **WBSI** | **Waikabubak, Su** | **4.96** | **283** | P | **Pn** | **13 23 51.4** | **-1.7** |
| **BSSI** | **Bau Bau, Buton** 65nm,0.8s,0.2nm | **5.98** | **321** | P | **Pn** | **13 24 06.3** | **-0.7** |
| **KNRA** | **Kununurra** | **6.50** | **138** | | **Pn** | **13 24 14.9** | **+0.7** |
| **DRS** | **Darwin Rock St** | **6.67** | **105** | P | **Pn** | **13 24 16.5** | **0.0** |
| **PLAI** | **Plampang** 277nm,2.2s | **6.72** | **287** | P | **Pn** | **13 24 17.9** | **+0.7** |
| **BKSI** | **Bulukumba** | **6.84** | **323** | P | Pn | 13 24 16.6 | -2.3 |
| **MTN** | **Manton Dam** | **6.99** | **107** | P | **Pn** | **13 24 20.9** | **-0.1** |
| **MTN** | **Manton Dam** | **6.99** | **107** | Pn | **Pn** | **13 24 20.8** | **-0.2** |
| **KAPI** | **Kappang** | **7.31** | **322** | Pn | **Pn** | **13 24 23.7** | **-1.7** |
| **KAPI** | **Kappang** 2.2nm,0.3s,baz=184,slow=15,SNR=1.9 | **7.31** | **322** | Pn | **Pn** | **13 24 24.8** | **-0.5** |
| KAPI | comp=Z,354nm,20.4s,baz=203,slow=40 9.4nm,0.5s | | | LR | LR | 13 27 29.4 | |
| **FITZ** | **Fitzroy Crossi** | **7.35** | **170** | P | **Pn** | **13 24 26.3** | **+0.4** |
| **FITZ** | **Fitzroy Crossi** | **7.35** | **170** | Pn | **Pn** | **13 24 25.8** | **-0.1** |
| **TWSI** | **Taliwang, Sumb** | **7.59** | **285** | P | **Pn** | **13 24 29.3** | **+0.1** |
| **MBWA** | **Marble Bar** | **11.18** | **203** | Pn | **Pn** | **13 25 18.2** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | Pn | **Pn** | **13 25 22.6** | **-0.4** |
| **WB0** | **Warramunga Arr** | **13.19** | **134** | Pn | Pn | 13 25 43.5 | -2.4 |
| **WRA** | **Warramunga Arr** 1.0nm,0.3s,baz=308,slow=11,SNR=28 | **13.27** | **134** | Pn | **Pn** | **13 25 45.2** | **-1.7** |
| WRA | 3.6nm,0.3s,baz=295,slow=24,SNR=8.5 2.9nm,0.7s | | | Sn | Sn | 13 28 05.6 | -9.1 |
| **WRAB** | **Tennant Creek** | **13.27** | **134** | | Pn | 13 25 44.4 | -2.6 |
| **WB2** | **Warramunga Arr** | **13.27** | **134** | Pn | Pn | 13 25 44.7 | -2.4 |
| **WR0** | **Warramunga Arr** | **13.42** | **134** | Pn | Pn | 13 25 46.5 | -2.6 |
| **WRKA** | **Warakurna** | **14.64** | **165** | P | **Pn** | **13 26 04.8** | **-1.0** |
| **AS31** | **Alice Springs** | **15.72** | **146** | Pn | **Pn** | **13 26 18.8** | **-1.4** |
| **ASAR** | **Alice Springs** 1.2nm,0.3s,baz=320,slow=12,SNR=57 | **15.72** | **146** | Pn | **Pn** | **13 26 18.8** | **-1.4** |
| ASAR | 1.3nm,0.3s,baz=318,slow=21,SNR=9.4 | | | Sn | **Sn** | **13 29 08.8** | **-5.8** |
| **AS01** | **Alice Springs** | **15.75** | **145** | P | **Pn** | **13 26 19.0** | **-1.5** |
| **QIS** | **Mount Isa** | **17.62** | **125** | P | **Pn** | **13 26 43.5** | **-0.8** |
| **OOD** | **Oodnadatta** | **20.00** | **149** | P | **P** | **13 27 13.2** | **+1.9** |
| **FORT** | **Forrest** | **20.17** | **171** | P | Pn | 13 27 17.3 | +2.3 |
| **FORT** | **Forrest** | **20.17** | **171** | P | **P** | **13 27 14.8** | **+1.7** |
| **MTSU** | **Mount Surprise** | **20.70** | **113** | P | Pn | 13 27 23.5 | +2.2 |
| **MULG** | **Mulgathing** | **21.39** | **156** | P | **P** | **13 27 29.1** | **+2.7** |
| **INKA** | **Innaminka** | **22.86** | **140** | P | **P** | **13 27 44.4** | **+2.4** |
| **LCRK** | **Leigh Creek** | **23.43** | **148** | P | **P** | **13 27 51.9** | **+4.0** |
| **BBOO** | **Buckleboo** | **24.42** | **155** | P | **P** | **13 27 57.6** | **+0.3** |
| BBOO | comp=Z,17nm,1.1s | | | IAmb | IAmb | 13 28 18.0 | |
| **QLP** | **Quilpie** | **24.49** | **133** | P | **P** | **13 28 02.8** | **+4.8** |
| **STKA** | **Stephens Creek** comp=Z,2.9nm,0.7s,baz=331,slow=12,SNR=6.1 comp=Z,2.9nm,0.7s | **26.36** | **145** | P | **P** | **13 28 16.6** | **+1.7** |
| **TOO** | **Toolangi** | **32.75** | **148** | P | **P** | **13 29 12.8** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** comp=Z,0.5nm,0.3s,baz=148,slow=6.9,SNR=1.5 comp=Z,0.5nm,0.3s | **38.37** | **319** | P | **P** | **13 29 58.6** | **-1.4** |
| **MAJO** | **Matsushiro** | **48.90** | **15** | P | **P** | **13 31 23.1** | **-1.5** |
| MAJO | comp=Z,7.7nm,1.0s | | | IAmb | IAmb | 13 31 57.4 | |
| **MJB9** | **Matsu-Tunnel** | **48.90** | **15** | P | **P** | **13 31 23.0** | **-1.6** |
| MJB9 | comp=Z,7.5nm,1.0s | | | IAmb | IAmb | 13 31 57.4 | |
| **ZALV** | **Zalesovo Beam** comp=Z,0.9nm,0.5s,baz=129,slow=5.7,SNR=3.4 comp=Z,0.9nm,0.5s | **72.67** | **337** | P | P | 13 34 03.2 | -3.0 |
| **KURBB** | **Kurchatov Arra** comp=Z,0.4nm,0.7s,baz=143,slow=5.5,SNR=4.2 comp=Z,0.4nm,0.7s | **72.97** | **331** | P | P | 13 34 06.0 | -2.0 |
| **QSPA** | **South Pole Qui** | **79.19** | **180** | P | **P** | **13 34 45.1** | **+1.6** |
| **SNAA** | **Sanae** | **90.61** | **195** | P | **P** | **13 35 40.5** | **-0.3** |
| SNAA | comp=Z,4.4nm,1.4s | | | IAmb | IAmb | 13 36 01.1 | |

**ROM 28 13:25:31.6**±0.1,**44.°146N**±0.°005×**11.°077E**±0.°004, **h12**km,**ML0.8/6,Error ellipse: s-maj=0.6km s-min=0.3km az=11.0,Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FNVD** | **Fontana Vidola** | **0.04** | **56** | P | Pg | 13 25 34.1 | +0.2 |
| FNVD | | | | S | Sg | 13 25 35.8 | +0.3 |
| **MTCR** | **Monte La Croce** | **0.13** | **206** | P | Pg | 13 25 35.3 | +0.4 |
| MTCR | | | | S | Sg | 13 25 37.9 | +0.6 |
| MTCR | comp=E,75μm,0.9s | | | AML | AML | | |
| MTCR | comp=N,78μm,0.3s | | | AML | AML | | |
| **MOCL** | **Monte Cuccoli** | **0.16** | **152** | P | Pg | 13 25 35.8 | +0.5 |
| MOCL | | | | S | Sg | 13 25 38.6 | +0.8 |
| **MPPT** | **Montemurlo** | **0.19** | **177** | P | Pg | 13 25 36.2 | +0.5 |
| MPPT | | | | S | Sg | 13 25 39.5 | +0.9 |
| MPPT | comp=E,26μm,0.6s | | | AML | AML | | |
| MPPT | comp=N,30μm,0.7s | | | AML | AML | | |
| MPPT | comp=N,30μm,1.3s | | | AML | AML | | |
| **POPM** | **Popiglio** | **0.25** | **247** | P | Pg | 13 25 37.2 | +0.4 |
| POPM | | | | S | Sg | 13 25 41.3 | +1.0 |
| POPM | comp=N,42μm,0.2s | | | AML | AML | | |
| POPM | comp=E,27μm,0.7s | | | AML | AML | | |

*NOU **28** 13:26:12.2,34.°86S×179.°39W,h320km,mb4.2/7,South of Kermadec Islands*
*WEL **28** 13:27:07.7,38.°S±18.°×17.°8E±1.°8,h62km±21km,M2.5/19, ML2.6/18,MLv2.5/19,Error ellipse: s-maj=0.0km s-min=0.0km az=138.4*
**ISC 28 13:26:58.8**±2.6,**37.°3S**±0.°2×**177.°87E**±0.°09,**h100**km,**n52,** σ1°**65**/49,**Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **0.43** | **127** | P | Pn | 13 27 11.9 | -2.3 |
| **HAZ** | **Te Kaha** | **0.46** | **189** | P | **Pn** | **13 27 14.9** | **+0.6** |
| **PKGZ** | **Pakihiroa** | **0.59** | **164** | P | **Pn** | **13 27 15.5** | **+0.1** |
| **RUGZ** | **Raukumara Rang** | **0.68** | **193** | P | **Pn** | **13 27 17.8** | **+1.6** |
| **PUZ** | **Puketiti** | **0.83** | **158** | P | **Pn** | **13 27 16.4** | **-1.1** |
| **TWGZ** | **Tauwhareparae** | **0.88** | **174** | P | **Pn** | **13 27 20.1** | **+2.1** |
| **MWZ** | **Matawai** | **1.07** | **195** | P | **Pn** | **13 27 21.9** | **+1.8** |
| **URZ** | **Urewera** | **1.13** | **212** | P | **Pn** | **13 27 23.8** | **+3.1** |
| **TKGZ** | **Te Karaka** | **1.14** | **181** | P | **Pn** | **13 27 21.7** | **+1.0** |
| **CNGZ** | **Carnagh Statio** | **1.21** | **167** | P | **Pn** | **13 27 22.0** | **+0.4** |
| **RAGZ** | **Rawiri** | **1.25** | **197** | P | **Pn** | **13 27 24.3** | **+2.2** |
| **RIGZ** | **Rimuhau** | **1.41** | **183** | P | **Pn** | **13 27 25.1** | **+1.2** |
| **MUGZ** | **Murupara** | **1.46** | **216** | P | **Pn** | **13 27 27.0** | **+2.4** |
| **RTZ** | **Ruatahuna** | **1.49** | **208** | P | **Pn** | **13 27 26.9** | **+1.9** |
| **SNGZ** | **Shannon Statio** | **1.54** | **196** | P | **Pn** | **13 27 27.7** | **+2.1** |
| **PRGZ** | **Paritu Road** | **1.62** | **180** | P | **Pn** | **13 27 28.4** | **+1.9** |
| **MTHZ** | **Maungataniwha** | **1.75** | **207** | P | **Pn** | **13 27 30.2** | **+2.0** |
| **WHHZ** | **Waihua** | **1.84** | **196** | P | **Pn** | **13 27 31.8** | **+2.4** |
| **MHGZ** | **Mahia Peninsul** | **1.85** | **179** | P | **Pn** | **13 27 31.1** | **+1.6** |
| **MRHZ** | **Matea Rd** | **1.91** | **216** | P | **Pn** | **13 27 31.6** | **+1.3** |
| **NMHZ** | **Naumai** | **1.98** | **205** | P | **Pn** | **13 27 33.3** | **+2.0** |
| **ARHZ** | **Aropaoanui** | **2.08** | **199** | P | **Pn** | **13 27 34.2** | **+1.8** |
| **BKZ** | **Black Stump Fm** | **2.15** | **210** | P | **Pn** | **13 27 34.7** | **+1.2** |
| **BKZ** | **Black Stump Fm** | **2.15** | **210** | P | **Pn** | **13 27 34.8** | **+1.4** |
| **MCHZ** | **McNeill Hill** | **2.33** | **203** | P | **Pn** | **13 27 37.0** | **+1.3** |
| **KWHZ** | **Kaweka Forest** | **2.41** | **208** | P | **Pn** | **13 27 37.4** | **+0.6** |
| **TMVZ** | **Te Maari** | **2.49** | **223** | P | **Pn** | **13 27 38.8** | **+0.9** |
| **NTVZ** | **North Tongarir** | **2.49** | **223** | P | **Pn** | **13 27 38.8** | **+0.8** |
| **ETVZ** | **East Tongariro** | **2.50** | **222** | P | **Pn** | **13 27 38.8** | **+0.7** |
| **OTVZ** | **Oturere** | **2.54** | **222** | P | **Pn** | **13 27 36.1** | **-2.5** |
| **SNVZ** | **South Ngauruho** | **2.57** | **222** | P | Pn | 13 27 30.8 | -8.2 |
| **KAHZ** | **Kahuranaki** | **2.61** | **197** | P | **Pn** | **13 27 40.7** | **+1.3** |
| **KRHZ** | **Kereru** | **2.62** | **206** | P | **Pn** | **13 27 39.8** | **+0.3** |
| **HIZ** | **Hauiti** | **2.67** | **242** | P | **Pn** | **13 27 41.1** | **+0.9** |
| **HIZ** | **Hauiti** | **2.67** | **242** | P | **Pn** | **13 27 40.4** | **+0.2** |
| **PNHZ** | **Pukenui** | **2.92** | **206** | P | **Pn** | **13 27 43.4** | **-0.1** |
| **PRHZ** | **Porangahau** | **3.11** | **198** | P | **Pn** | **13 27 46.1** | **0.0** |
| **DVHZ** | **Dannevirke** | **3.27** | **203** | P | **Pn** | **13 27 47.9** | **-0.4** |
| **WAZ** | **Wanganui** | **3.33** | **222** | P | **Pn** | **13 27 48.8** | **-0.2** |
| **ANWZ** | **Angora Road** | **3.34** | **199** | P | **Pn** | **13 27 49.0** | **0.0** |
| **PRWZ** | **Pori Road** | **3.57** | **204** | P | **Pn** | **13 27 52.2** | **0.0** |
| **BFZ** | **Birch Farm** | **3.60** | **200** | P | **Pn** | **13 27 52.1** | **-0.6** |
| **BFZ** | **Birch Farm** | **3.60** | **200** | P | **Pn** | **13 27 51.9** | **-0.7** |
| **TIWZ** | **Tintock** | **3.80** | **203** | P | **Pn** | **13 27 53.8** | **-1.5** |
| **MRZ** | **Mangatainoka R** | **3.80** | **207** | P | **Pn** | **13 27 53.5** | **-1.8** |
| **HOWZ** | **Holdsworth Sta** | **4.03** | **206** | P | **Pn** | **13 27 56.1** | **-2.3** |
| **OGWZ** | **Otaki Gorge** | **4.09** | **210** | P | **Pn** | **13 27 57.2** | **-2.0** |
| **TMWZ** | **Te Maipa** | **4.10** | **201** | P | **Pn** | **13 27 57.9** | **-1.5** |
| **KIW** | **Kapiti Island** | **4.24** | **212** | P | **Pn** | **13 27 58.4** | **-2.8** |
| **PAWZ** | **Paruwai Farm** | **4.49** | **204** | P | **Pn** | **13 28 02.0** | **-2.6** |
| **SNZO** | **South Karori** | **4.70** | **211** | P | **Pn** | **13 28 04.4** | **-2.9** |
| **KHZ** | **Kahutara** | **6.10** | **212** | P | Pn | 13 28 22.1 | -4.3 |

*NNC **28** 13:32:13.2±2.8,44.°46N×83.°91E,h0km,mb3.1,mpv2.8, Error ellipse: s-maj=23.0km s-min=8.8km az=117.0*
*SOME **28** 13:32:14.7,44.°40N×83.°82E,h15km*
**ISC 28 13:32:15.5**±2.9,**44.°4N**±0.°1×**84.°6E**±0.°2,**h10**km,**n17,** σ2°**32**/21,**4C-1D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MK31** | **Makanchi Array** 0.3nm,0.3s,baz=146,slow=15,SNR=57 | **2.88** | **326** | ⇑Pg | **Pn** | **13 33 00.9** | **-0.6** |
| MK31 | 5.5nm,0.5s,baz=141,slow=29,SNR=14 | | | Lg | Lg | 13 33 36.2 | |
| **MAKZ** | **Makanchi** 0.6nm,0.5s | **3.02** | **323** | ⇑Pg | **Pn** | **13 33 00.4** | **-3.0** |
| MAKZ | 2.5nm,0.5s | | | ⇓Lg | Lg | 13 33 41.3 | |
| **ZSN** | **Zaisan** 3.8nm,0.2s | **3.04** | **3** | *eP* | **Pb** | **13 33 11.5** | **+1.9** |
| ZSN | 7.9nm,0.3s | | | *eS* | **Sg** | **13 33 52.3** | **-0.7** |
| **KTMS** | **Ketmen** 2.4nm,0.4s | **3.23** | **254** | *eP* | **Pn** | **13 33 03.1** | **-3.4** |
| KTMS | 12nm,0.3s | | | *eS* | Sn | 13 33 37.8 | -7.3 |
| **KTMS** | **Ketmen** 2.4nm,0.4s | **3.23** | **254** | Pg | **Pn** | **13 33 03.1** | **-3.4** |
| KTMS | 12nm,0.3s | | | Lg | Lg | 13 33 37.8 | |
| **DJR** | **Jarkent** 1.5nm,0.2s | **3.46** | **270** | *eP* | **Pn** | **13 33 09.2** | **-0.4** |
| DJR | 6.4nm,0.5s | | | *eS* | **Sn** | **13 33 48.3** | **-2.4** |
| **DJR** | **Jarkent** 1.5nm,0.2s | **3.46** | **270** | Pg | **Pn** | **13 33 09.2** | **-0.4** |
| DJR | 6.4nm,0.5s | | | Lg | Lg | 13 33 48.3 | |
| **PDGK** | **Podgornoye** 0.4nm,0.3s | **3.87** | **255** | Pg | **Pn** | **13 33 15.2** | **+0.1** |
| PDGK | 4.6nm,0.5s | | | Lg | Lg | 13 33 58.4 | |
| **PDGK** | **Podgornoye** 0.5nm,0.4s | **3.87** | **255** | ⇑Pg | **Pn** | **13 33 16.8** | **+1.7** |
| PDGK | 11nm,0.6s | | | ⇑Lg | Lg | 13 34 01.5 | |
| **KNOS** | **Konyrlen** 0.7nm,0.4s | **3.90** | **271** | Pg | **Pn** | **13 33 16.5** | **+0.9** |
| KNOS | 5.3nm,0.5s | | | Lg | Lg | 13 34 00.7 | |
| **SHLS** | **Shalkode** 9.8nm,0.3s | **3.94** | **253** | *eP* | **Pn** | **13 33 12.5** | **-3.6** |
| SHLS | 33nm,0.5s | | | *eS* | Sn | 13 33 53.7 | -8.8 |
| **SHLS** | **Shalkode** 9.8nm,0.3s | **3.94** | **253** | Pg | **Pn** | **13 33 12.5** | **-3.6** |
| SHLS | 33nm,0.5s | | | Lg | Lg | 13 33 53.7 | |
| **UZB** | **Uzynbulak** | **4.25** | **255** | *eP* | **Pn** | **13 33 21.7** | **+1.3** |
| **UZB** | | **4.25** | **255** | *eS* | **Sn** | **13 34 09.5** | **-0.6** |
| **UZB** | **Uzynbulak** | **4.25** | **255** | Pg | **Pn** | **13 33 21.7** | **+1.3** |
| UZB | | | | Lg | Lg | 13 34 09.5 | |
| **KPKS** | **Kokpek** 3.2nm,0.3s | **4.39** | **260** | *eP* | **Pn** | **13 33 24.6** | **+2.3** |
| KPKS | 16nm,0.5s | | | *eS* | **Sn** | **13 34 14.6** | **+1.1** |
| **KPKS** | **Kokpek** 3.2nm,0.3s | **4.39** | **260** | Pg | **Pn** | **13 33 24.6** | **+2.3** |
| KPKS | 16nm,0.5s | | | Lg | Lg | 13 34 14.6 | |
| **BLB** | **Baldybastay** 3.3nm,0.6s | **4.42** | **268** | Pg | **Pn** | **13 33 25.9** | **+3.1** |
| BLB | 5.9nm,0.4s | | | Lg | Lg | 13 34 17.7 | |

*TEH **28** 13:35:27.9,38.°66N×48.°59E,h15km±29km,ML2.7*
*AZER **28** 13:35:27.3,38.°73N×48.°62E,h10km,ml2.6*
**ISC 28 13:35:28.3**±0.9,**38.°71N**±0.°03×**48.°61E**±0.°03,**h17**km±7km, **n22,**σ1°**33**/37,**Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **0.13** | **90** | P | **Pb** | **13 35 32.2** | **-0.2** |
| LKRN | | | | S | **Sg** | **13 35 35.5** | **+0.7** |
| **ASTR** | **Astara** | **0.20** | **137** | P | **Pb** | **13 35 32.8** | **-0.9** |
| ASTR | | | | S | **Sg** | **13 35 36.7** | **+0.2** |
| **LRK** | **Lerik** | **0.23** | **252** | P | **Pb** | **13 35 34.5** | **+0.4** |
| LRK | | | | S | **Sg** | **13 35 39.6** | **+2.3** |
| **YRD** | **Yardimli** | **0.36** | **305** | P | **Pb** | **13 35 36.6** | **+0.2** |
| YRD | | | | S | **Sb** | **13 35 42.9** | **+1.1** |
| **GAS1** | **Astara - Iran** | **0.37** | **151** | Pg | **Pg** | **13 35 34.8** | **-1.1** |
| **GLBA** | **Clilabad** | **0.56** | **342** | P | **Pb** | **13 35 39.9** | **+0.2** |
| GLBA | | | | S | **Sn** | **13 35 49.3** | **-1.1** |
| **GRMI** | **Germi** | **0.57** | **280** | Pg | **Pb** | **13 35 39.4** | **-0.5** |
| **ISRB** | **Sarab** | **1.16** | **220** | Pg | **Pb** | **13 35 49.0** | **-0.9** |
| **QRD** | **Qoradiz** | **1.25** | **307** | P | **Pg** | **13 35 51.8** | **-0.8** |
| QRD | | | | S | **Sg** | **13 36 09.2** | **+0.2** |
| **IHRS** | **Heris** | **1.29** | **253** | Pg | **Pn** | **13 35 51.5** | **-0.3** |
| **BLQ** | **Beylaqan** | **1.30** | **321** | P | **Pn** | **13 35 51.6** | **-0.1** |
| BLQ | | | | S | **Sg** | **13 36 10.0** | **-0.4** |
| **IHSH** | **Hashtrud** | **1.76** | **218** | Pg | **Pb** | **13 35 59.5** | **-0.9** |
| **AGDM** | **Agdam** | **1.82** | **321** | Pn | **Pn** | **13 35 59.6** | **+0.8** |
| AGDM | | | | Sn | **Sb** | **13 36 24.8** | **+1.2** |
| **BRDA** | **Brd** | **1.91** | **325** | Pn | **Pb** | **13 36 02.0** | **-0.6** |
| BRDA | | | | Sn | **Sg** | **13 36 28.2** | **-1.5** |
| **ORD** | **Ordubad** | **2.06** | **277** | Pn | **Pb** | **13 36 04.7** | **-0.6** |
| ORD | | | | Sn | **Sg** | **13 36 32.5** | **-2.1** |
| **IMRD** | **Marand** | **2.28** | **271** | Pn | **Pn** | **13 36 06.8** | **+1.5** |
| **ISHB** | **Shabestar** | **2.39** | **261** | Pn | **Pn** | **13 36 07.7** | **+0.8** |
| **SBZ** | **Shahbuz** | **2.48** | **287** | Pn | **Pb** | **13 36 11.1** | **-1.4** |
| SBZ | | | | Sn | **Sb** | **13 36 44.1** | **+1.3** |
| **XNQ** | **Khinaliq** | **2.48** | **352** | Pn | **Pb** | **13 36 10.9** | **-1.7** |
| XNQ | | | | Sn | **Sn** | **13 36 40.6** | **+2.4** |
| **GANJ** | **Ganja** | **2.62** | **318** | Pn | **Pb** | **13 36 12.3** | **-2.5** |
| GANJ | | | | Sn | **Sn** | **13 36 40.7** | **-0.6** |
| **SEKA** | **Sheki** | **2.72** | **337** | Pn | **Pn** | **13 36 12.7** | **+1.3** |
| SEKA | | | | Sn | **Sn** | **13 36 46.1** | **+2.3** |
| **GDB** | **GEDABAY** | **2.98** | **313** | Pn | **Pn** | **13 36 17.2** | **+2.2** |
| GDB | | | | Sn | **Sb** | **13 36 56.0** | **-1.3** |

**IDC 28 13:47:50.8**±3.5,**10.°04N**×**124.°50E,h0**km,**mb3.5**/4, **mbtmp3.5**/4,**Error ellipse: s-maj=382.7km s-min=26.7km az=67.0,Leyte**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** 0.2nm,0.5s,baz=339,slow=7.1,SNR=6.4 0.2nm,0.5s | **34.73** | **165** | P | P | 13 54 42.8 | -0.1 |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=128,slow=9.3,SNR=1.8 0.1nm,0.3s | **51.17** | **324** | P | P | 13 56 54.9 | -0.9 |
| **ZALV** | **Zalesovo Beam** 0.5nm,0.4s,baz=132,slow=6.4,SNR=3.6 0.5nm,0.4s | **54.01** | **332** | P | P | 13 57 15.7 | -0.9 |
| **KURBB** | **Kurchatov Arra** 0.5nm,0.5s,baz=128,slow=6.7,SNR=4.1 0.5nm,0.5s | **55.28** | **326** | P | P | 13 57 27.3 | +1.3 |

**IDC 28 13:53:22.3**±1.5,**7.°87S**×**126.°69E,h0**km,**mb3.6**/3, **mbtmp3.7**/5,**ML3.9**/2,**Error ellipse: s-maj=214.4km s-min=29.5km az=62.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** 0.6nm,0.3s,baz=322,slow=13,SNR=31 | **14.11** | **149** | Pn | Pn | 13 56 41.9 | -1.7 |
| WRA | 1.1nm,0.3s,baz=328,slow=22,SNR=11 0.7nm,0.4s | | | Sn | Sn | 13 59 02.0 | -19 |
| **ASAR** | **Alice Springs** 0.4nm,0.3s,baz=338,slow=10,SNR=51 | **17.17** | **157** | P | P | 13 57 25.2 | -0.3 |
| ASAR | 0.5nm,0.4s,baz=322,slow=16,SNR=5.3 1.9nm,0.7s | | | S | Sn | 14 00 25.9 | -10 |
| **MKAR** | **Makanchi Array** 0.2nm,0.5s,baz=120,slow=7.3,SNR=2.3 0.2nm,0.5s | **67.20** | **329** | P | P | 14 04 18.9 | +0.6 |
| **KURBB** | **Kurchatov Arra** 0.6nm,0.6s,baz=134,slow=4.9,SNR=12 0.6nm,0.6s | **71.57** | **330** | P | P | 14 04 45.4 | +0.2 |
| **BVAR** | **Borovoye Array** 0.6nm,0.8s,baz=129,slow=4.6,SNR=2.5 0.6nm,0.8s | **77.07** | **329** | P | P | 14 05 16.5 | -0.8 |

*SKHL **28** 14:02:20.5±0.1,44.°90N×146.°60E,h34km±4km,mb3.8/3*
*JMA **28** 14:02:20.2±0.2,43.°3N±0.°6×14.°6E±.°,h86km±1km, MV2.6/39,OFF NEMURO PENINSULA*
**ISC 28 14:02:19.8**±2.3,**43.°26N**±0.°08×**146.°01E**±0.°07,**h87**km±14km, **n13,**σ0°**32**/23,**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NEM2** | **Nemuro 2** | **0.22** | **298** | P | **Pn** | **14 02 32.8** | **+0.3** |
| NEM2 | | | | S | **Sn** | **14 02 41.8** | **0.0** |
| **JKHN** | **Kushirohamanak** | **0.65** | **254** | P | **Pn** | **14 02 35.8** | **+0.3** |
| JKHN | | | | *eS* | **Sn** | **14 02 47.1** | **0.0** |
| **YUK** | **Yuzh-Kuril'sk** | **0.78** | **352** | *eP* | **Pn** | **14 02 36.7** | **-0.1** |
| YUK | 90nm,0.2s | | | AMB | AMB | 14 02 36.9 | |
| YUK | | | | *eS* | **Sn** | **14 02 48.8** | **-0.7** |
| YUK | 310nm,0.2s | | | A | A | 14 02 51.0 | |
| YUK | 170nm,0.2s | | | A | A | 14 02 51.0 | |
| **SHO** | **Shikotan** | **0.85** | **44** | *eP* | **Pn** | **14 02 37.7** | **+0.2** |
| SHO | 20nm,0.3s | | | AMB | AMB | 14 02 38.1 | |
| SHO | | | | *eS* | **Sn** | **14 02 50.7** | **-0.1** |
| SHO | 140nm,0.2s | | | A | A | 14 02 51.3 | |
| SHO | 100nm,0.2s | | | A | A | 14 02 51.3 | |
| **JNSB** | **Nemuroshibetsu** | **0.89** | **305** | P | **Pn** | **14 02 38.0** | **0.0** |
| JNSB | | | | *eS* | **Sn** | **14 02 51.7** | **+0.1** |
| **JRA** | **Rausu** | **0.93** | **317** | P | **Pn** | **14 02 38.6** | **+0.2** |
| JRA | | | | S | **Sn** | **14 02 52.8** | **+0.3** |
| **JNK** | **Nakash** | **0.99** | **289** | P | **Pn** | **14 02 38.8** | **-0.4** |
| **JAK** | **Akkeshi** | **1.00** | **255** | P | **Pn** | **14 02 39.2** | **0.0** |
| JAK | | | | S | **Sn** | **14 02 53.1** | **-0.6** |
| **JOB** | **Onbets** | **1.63** | **258** | *eP* | **Pn** | **14 02 47.3** | **+0.3** |
| JOB | | | | *eS* | **Sn** | **14 03 07.5** | **-0.3** |
| **JAR** | **Ashorobuto** | **1.64** | **272** | P | **Pn** | **14 02 47.4** | **+0.3** |
| JAR | | | | *eS* | **Sn** | **14 03 07.5** | **-0.3** |
| **JTKR** | **Abashiri--Toko** | **1.68** | **296** | P | **Pn** | **14 02 48.0** | **+0.4** |
| JTKR | | | | *eS* | **Sn** | **14 03 08.8** | **0.0** |
| **JCH** | **Churui** | **2.05** | **252** | *eP* | **Pn** | **14 02 52.4** | **-0.1** |
| **JMP** | **Maruseppu** | **2.06** | **292** | P | **Pn** | **14 02 53.0** | **+0.4** |

**IDC 28 14:04:04.0**±424.0,**51.°12N**×**47.°77E,h0**km,**Error ellipse: s-maj=147.2km s-min=88.1km az=39.0,Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** 0.1nm,0.9s,baz=280,slow=321,SNR=20 | **6.55** | **92** | I | I | 14 44 50.0 | |
| **I46RU** | **ZALESOVO INFRA** baz=276,slow=320,SNR=1.4 | **22.55** | **68** | I | I | 16 19 40.0 | |
| **I37NO** | **I37NO** baz=128,slow=324,SNR=2.4 | **22.74** | **333** | I | I | 16 22 10.0 | |

**NNC 28 14:10:55.8**±5.1,**37.°29N**×**71.°31E,h0**km,**mb3.7,mpv3.3, 1C-5D,Error ellipse: s-maj=39.7km s-min=36.9km az=155.0,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KK31** | **Karatay Array** 0.8nm,0.3s,baz=182,slow=13,SNR=12 | **5.83** | **354** | ⇓P | Pn | 14 12 22.9 | -0.7 |
| KK31 | 4.3nm,0.7s,baz=186,slow=22,SNR=8.6 | | | ⇓S | Sn | 14 13 32.4 | +1.2 |
| **AAK** | **Ala-Archa** 1.6nm,0.5s | **5.87** | **24** | ⇑P | Pn | 14 12 25.2 | +1.0 |
| AAK | 2.9nm,0.8s | | | ⇓S | Sn | 14 13 34.7 | +2.5 |
| **TKM2** | **Tokmak 2** 1.1nm,0.3s | **6.51** | **29** | ⇓P | Pn | 14 12 32.7 | -0.2 |
| TKM2 | 1.7nm,0.8s | | | ⇓S | Sn | 14 13 47.3 | -0.7 |

*AZER **28** 14:10:58.2,38.°72N×48.°63E,h14km,ml2.7*
*TEH **28** 14:10:59.0,38.°66N×48.°62E,h18km±34km,ML2.6*
**ISC 28 14:10:58.7**±1.7,**38.°72N**±0.°03×**48.°64E**±0.°03,**h14**km±14km, **n20,**σ0°**91**/34,**Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **0.11** | **95** | P | **Pb** | **14 11 03.2** | **+0.6** |
| LKRN | | | | S | **Sb** | **14 11 06.5** | **+1.3** |
| **ASTR** | **Astara** | **0.20** | **143** | P | **Pb** | **14 

*NEIC **28** 14:12:10.1±1.9,5.°35N±0.°08×126.°2E±0.°1,h142km±8km, mb4.6/15, Error ellipse: s-maj=20.6km s-min=9.7km az=73.0*

**ISC 28 14:12:10.3±0.7,5.°28N±0.°05×126.°11E±0.°07,h138km±5km, n83,σ1s18/88,mb4.4/39,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **1.86** | **343** | P | | **Pn** | **14 12 46.4** | **+3.4** |
| **DAV** | **Davao City (W)** | **1.86** | **343** | Pn | | **Pn** | **14 12 42.2** | **-0.8** |
| **DAV** | **Davao City (W)** | **1.86** | **343** | P | | **Pn** | **14 12 42.4** | **-0.7** |
| | 233nm,0.3s,baz=70,slow=3.8,SNR=2.8 | | | | | | | |
| DAV | | | | S | | **Sn** | **14 13 06.7** | **-1.5** |
| | 638nm,0.3s,baz=170,slow=22,SNR=10 | | | | | | | |
| **TNTI** | **Ternate** | **4.64** | **164** | Pn | | **Pn** | **14 13 18.6** | **-0.2** |
| **TNTI** | **Ternate** | **4.64** | **164** | P | | **Pn** | **14 13 18.2** | **-0.6** |
| **KMSI** | **Cibinong** | **5.13** | **205** | P | | **Pn** | **14 13 26.6** | **+1.3** |
| **GTOI** | **Gorontalo** | **5.55** | **214** | P | | **Pn** | **14 13 30.9** | **0.0** |
| | 67nm,1.0s,0.3nm | | | | | | | |
| **TOLI2** | **Tolitoli** | **6.74** | **232** | P | | **Pn** | **14 13 47.6** | **+0.8** |
| **TOLI2** | **Tolitoli** | **6.74** | **232** | Pn | | **Pn** | **14 13 46.9** | **+0.1** |
| **LUWI** | **Luwuk** | **7.11** | **208** | Pn | | **Pn** | **14 13 51.8** | **0.0** |
| **LUWI** | **Luwuk** | **7.11** | **208** | P | | **Pn** | **14 13 53.5** | **+1.7** |
| | 75nm,0.9s | | | | | | | |
| **SANI** | **Sanana** | **7.28** | **181** | P | | **Pn** | **14 13 50.7** | **-3.3** |
| **SWI** | **Sorong** | **7.97** | **140** | P | | **Pn** | **14 14 02.1** | **-1.3** |
| | 28nm,0.8s,0.1nm | | | | | | | |
| **NLAI** | **Namlea** | **8.51** | **173** | P | | **Pn** | **14 14 08.5** | **-2.2** |
| | 52nm,0.5s,2μm | | | | | | | |
| **KKM** | **Kota Kinabalu** | **9.88** | **275** | Pn | | **Pn** | **14 14 28.5** | **-0.6** |
| **FAKI** | **Fak Fak** | **10.19** | **143** | P | | **Pn** | **14 14 33.0** | **-0.1** |
| **FAKI** | **Fak Fak** | **10.19** | **143** | Pn | | **Pn** | **14 14 32.6** | **-0.5** |
| **KAPI** | **Kappang** | **12.04** | **212** | | | **Pn** | **14 14 58.0** | **+0.6** |
| **KAPI** | **Kappang** | **12.04** | **212** | P | | **Pn** | **14 14 56.5** | **-1.0** |
| | 12nm,0.4s,baz=30,slow=12,SNR=7.1 | | | | | | | |
| KAPI | | | | LR | | LR | 14 18 55.3 | |
| | comp=Z,71nm,21.1s,baz=68,slow=34 | | | | | | | |
| **SBUM** | **Sibu** | **14.14** | **259** | | | **P** | **14 15 28.2** | **+0.3** |
| **BATI** | **Baumata** | **15.57** | **189** | P | | **Pn** | **14 15 40.9** | **-1.6** |
| | 68nm,0.5s | | | | | | | |
| **KSM** | **Kuching** | **16.22** | **257** | P | | **P** | **14 15 54.1** | **+3.1** |
| **KSM** | **Kuching** | **16.22** | **257** | P | | **P** | **14 15 51.8** | **+0.8** |
| KSM | | | | IAmb | | IAmb | 14 15 54.6 | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **18.13** | **221** | P | | **Pn** | **14 16 15.3** | **+1.8** |
| **JAGI** | **Jajag, Banyuwa** | **18.13** | **221** | P | | **P** | **14 16 12.8** | **+0.8** |
| **DRS** | **Darwin Rock St** | **18.22** | **165** | P | | **Pn** | **14 16 14.1** | **-0.4** |
| | comp=Z,23nm,0.9s | | | | | | | |
| **TABU** | **Tabubil** | **18.37** | **125** | P | | **Pn** | **14 16 17.2** | **+0.9** |
| **YULB** | **Yu-li** | **18.60** | **346** | P | | **P** | **14 16 16.2** | **-0.8** |
| YULB | | | | IAmb | | IAmb | 14 16 54.3 | |
| | comp=Z,52nm,1.5s | | | | | | | |
| **DLV** | **T Lat** | **18.64** | **292** | P | | **P** | **14 16 18.2** | **+0.5** |
| **MTN** | **Manton Dam** | **18.68** | **165** | P | | **Pn** | **14 16 19.0** | **-0.9** |
| **KNRA** | **Kununurra** | **20.98** | **173** | P | | **P** | **14 16 43.0** | **+0.3** |
| KNRA | | | | IAmb | | IAmb | 14 16 43.9 | |
| | comp=Z,14nm,0.5s | | | | | | | |
| **JOW** | **Kunigami** | **21.54** | **5** | P | | **P** | **14 16 48.6** | **0.0** |
| | comp=Z,13nm,0.6s,baz=202,slow=11,SNR=6.6 | | | | | | | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **22.49** | **262** | P | | **P** | **14 16 59.3** | **+0.8** |
| **IPM** | **Ipoh** | **25.01** | **269** | P | | **P** | **14 17 21.5** | **-0.2** |
| IPM | | | | IAmb | | IAmb | 14 17 25.4 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **26.33** | **162** | P | | **P** | **14 17 33.2** | **-0.2** |
| **WRA** | **Warramunga Arr** | **26.33** | **162** | P | | **P** | **14 17 33.0** | **-0.4** |
| | comp=Z,0.7nm,0.3s,baz=344,slow=9.9,SNR=54 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **14 20 56.2** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=334,slow=2.4,SNR=4.6 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **14 24 23.6** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=338,slow=3.0,SNR=5.5 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **27.24** | **266** | P | | **P** | **14 17 41.2** | **-0.6** |
| RPSI | | | | IAmb | | IAmb | 14 17 42.9 | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **NJ2** | **Nanjing** | **27.49** | **347** | *e*P | | **P** | **14 17 45.5** | **+1.8** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,190nm,3.9s | | | | | | | |
| **GSI** | **Gunungsitoli** | **28.76** | **263** | P | | **P** | **14 17 54.1** | **-1.1** |
| **GSI** | **Gunungsitoli** | **28.76** | **263** | P | | **P** | **14 17 55.7** | **+0.5** |
| | comp=Z,30nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.58** | **299** | P | | **P** | **14 18 02.0** | **-0.5** |
| | comp=Z,0.5nm,0.4s,baz=103,slow=7.8,SNR=1.8 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **14 21 05.1** | **+0.9** |
| | comp=Z,0.7nm,0.3s,baz=215,slow=0.8,SNR=7.1 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **29.75** | **165** | P | | **P** | **14 18 04.0** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=340,slow=6.8,SNR=29 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **14 21 05.1** | **+0.6** |
| | comp=Z,1.1nm,0.4s,baz=345,slow=2.6,SNR=11 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **14 24 34.7** | **+0.8** |
| | comp=Z,1.3nm,0.8s,baz=350,slow=3.4,SNR=7.2 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **PZH** | **PanZhiHua** | **31.42** | **315** | P | | **P** | **14 18 18.0** | **-0.7** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,5.1s | | | | | | | |
| **CTA** | **Charters Tower** | **32.05** | **142** | P | | **P** | **14 18 23.6** | **-0.6** |
| | comp=Z,0.2nm,0.7s,baz=314,slow=9.6,SNR=1.8 | | | | | | | |
| **KSRS** | **Korea Array** | **32.07** | **3** | P | | **P** | **14 18 24.5** | **+0.5** |
| | comp=Z,1.1nm,0.5s,baz=183,slow=9.7,SNR=2.3 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **XAN** | **Xi'an** | **32.77** | **333** | P | | **P** | **14 18 29.5** | **-0.8** |
| XAN | | | | sP | | sP | 14 19 15.5 | +0.1 |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **HNS** | **HongShan** | **33.63** | **343** | *e*P | | **P** | **14 18 38.0** | **+0.3** |
| **LZH** | **Lanzhou** | **36.87** | **329** | P | | **P** | **14 19 06.5** | **+0.9** |
| LZH | | | | sP | | sP | 14 19 58.0 | +6.1 |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **37.75** | **342** | *e*P | | **P** | **14 19 12.5** | **-0.4** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,97nm,4.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **39.11** | **7** | P | | **P** | **14 19 25.6** | **+1.5** |
| | comp=Z,1.3nm,0.5s,baz=184,slow=8.0,SNR=9.3 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **MDJ** | **Mudanjiang** | **39.30** | **4** | P | | **P** | **14 19 28.0** | **+2.3** |
| MDJ | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **39.78** | **159** | P | | **P** | **14 19 30.8** | **+1.0** |
| | comp=Z,1.6nm,0.5s,baz=343,slow=7.8,SNR=7.6 | | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **GTA** | **Gaotai** | **41.47** | **329** | P | | **P** | **14 19 43.8** | **0.0** |
| GTA | | | | pP | | pP | 14 20 19.3 | +4.5 |
| GTA | | | | sP | | sP | 14 20 35.3 | +4.8 |
| GTA | | | | PcP | | **PcP** | **14 21 40.5** | **+1.5** |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.70** | **68** | T | | T | 15 04 07.4 | |
| | baz=259,slow=7.5,SNR=7.2 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.72** | **68** | T | | T | 15 04 13.6 | |
| | baz=259,slow=7.5,SNR=8.9 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.72** | **68** | T | | T | 15 04 09.0 | |
| | baz=259,slow=7.5,SNR=4.6 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.18** | **66** | T | | T | 15 04 54.3 | |
| | baz=254 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.19** | **66** | T | | T | 15 05 19.0 | |
| | baz=254 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.20** | **66** | T | | T | 15 04 59.1 | |
| | baz=254 | | | | | | | |
| **SONM** | **Songino Array** | **45.65** | **341** | P | | **P** | **14 20 17.3** | **+0.2** |
| | comp=Z,0.5nm,0.3s,baz=151,slow=9.5,SNR=5.4 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **14 21 53.5** | **+0.5** |
| | comp=Z,1.9nm,0.9s,baz=186,slow=3.0,SNR=6.0 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **WMQ** | **Urumqi** | **51.12** | **325** | *e*P | | **P** | **14 20 59.8** | **+0.8** |
| WMQ | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **54.25** | **23** | P | | **P** | **14 21 22.1** | **+0.3** |
| | comp=Z,3.3nm,0.6s,baz=184,slow=3.3,SNR=20 | | | | | | | |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.95** | **325** | P | | **P** | **14 21 33.4** | **-0.7** |
| | comp=Z,3.1nm,0.4s,baz=119,slow=7.3,SNR=64 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **14 22 30.9** | **-0.2** |
| | comp=Z,2.0nm,0.6s,baz=116,slow=5.5,SNR=9.3 | | | | | | | |
| MKAR | | | | ScP | | **ScP** | **14 26 17.5** | **+0.1** |
| | comp=Z,0.7nm,0.8s,baz=106,slow=3.9,SNR=4.8 | | | | | | | |
| | comp=Z,3.1nm,0.4s | | | | | | | |
| **MAKZ** | **Makanchi** | **56.13** | **325** | P | | **P** | **14 21 34.2** | **-1.2** |
| MAKZ | | | | IAmb | | IAmb | 14 21 35.2 | |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **KSH** | **Kashi** | **56.53** | **315** | P | | **P** | **14 21 39.0** | **+0.5** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.94** | **333** | P | | **P** | **14 21 53.3** | **-1.6** |
| | comp=Z,1.8nm,0.4s,baz=129,slow=6.7,SNR=16 | | | | | | | |
| ZALV | | | | PcP | | **sP** | **14 22 41.5** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=115,slow=6.0,SNR=4.1 | | | | | | | |
| | comp=Z,1.8nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.12** | **327** | P | | **P** | **14 22 02.0** | **-1.0** |
| | comp=Z,3.4nm,0.5s,baz=124,slow=6.3,SNR=52 | | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | **60.12** | **327** | P | | **P** | **14 22 01.8** | **-1.3** |
| KURK | | | | IAmb | | IAmb | 14 22 02.6 | |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.70** | **327** | P | | **P** | **14 22 38.8** | **-1.2** |
| | comp=Z,2.9nm,0.4s,baz=120,slow=8.8,SNR=21 | | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | | |
| **BRVK** | **Borovoye** | **65.77** | **327** | P | | **P** | **14 22 39.1** | **-1.3** |
| BRVK | | | | IAmb | | IAmb | 14 22 40.4 | |
| | comp=Z,9.7nm,1.2s | | | | | | | |
| **ABKAR** | **Akbulak array** | **70.57** | **321** | P | | **P** | **14 23 09.3** | **-1.2** |
| **ARU** | **Arti** | **73.31** | **328** | P | | **P** | **14 23 24.9** | **-1.7** |
| ARU | | | | IAmb | | IAmb | 14 23 25.9 | |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.98** | **25** | P | | **P** | **14 24 25.1** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=268,slow=5.1,SNR=5.7 | | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | | |
| **MAW** | **Mawson** | **84.98** | **200** | P | | **P** | **14 24 29.5** | **-0.2** |
| | comp=Z,0.9nm,0.5s,baz=76,slow=6.3,SNR=2.6 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **BRTR** | **Keskin Array B** | **88.57** | **310** | P | | **P** | **14 24 46.7** | **-1.3** |
| | comp=Z,0.3nm,0.3s,baz=104,slow=6.1,SNR=2.5 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.80** | **340** | P | | **P** | **14 24 47.3** | **-1.0** |
| | comp=Z,2.5nm,0.7s,baz=78,slow=4.4,SNR=16 | | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **88.85** | **349** | P | | **P** | **14 24 48.5** | **+0.1** |
| | comp=Z,0.9nm,0.3s,baz=91,slow=7.5,SNR=16 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **90.19** | **332** | P | | **P** | **14 24 52.4** | **-2.4** |
| | comp=Z,1.9nm,0.7s,baz=51,slow=7.5,SNR=9.1 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **95.17** | **180** | P | | **P** | **14 25 18.4** | **+0.6** |
| | comp=Z,1.1nm,0.9s,baz=14,slow=3.1,SNR=8.4 | | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | | |
| **HFS** | **Hagfors** | **96.37** | **332** | P | | **P** | **14 25 21.8** | **-1.5** |
| | comp=Z,1.2nm,0.6s,baz=120,slow=2.3,SNR=5.2 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **97.14** | **334** | P | | **P** | **14 25 24.9** | **-1.9** |
| | comp=Z,0.6nm,0.4s,baz=66,slow=4.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **97.14** | **334** | P | | **P** | **14 25 24.7** | **-2.1** |
| | comp=Z,1.0nm,0.6s,baz=66,slow=4.5,SNR=4.8 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.85** | **289** | PKP | | **PKiKP** | **14 30 48.9** | **-0.4** |
| | comp=Z,0.7nm,0.4s,baz=45,slow=1.9,SNR=11 | | | | | | | |

*AZER **28** 14:16:40.8,38.°72N×48.°63E,h10km,ml2.6*
*TEH **28** 14:16:42.0,38.°65N×48.°62E,h18km±31km,ML2.7*

**ISC 28 14:16:42.3±1.0,38.°67N±0.°03×48.°62E±0.°03,h19km±2km, n17,σ1s12/28,Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **0.13** | **71** | P | | **Pg** | **14 16 45.9** | **-0.5** |
| LKRN | | | | S | | **Sg** | **14 16 49.3** | **+0.1** |
| **ASTR** | **Astara** | **0.17** | **129** | P | | **Pg** | **14 16 46.8** | **-0.2** |
| ASTR | | | | S | | **Sg** | **14 16 50.6** | **+0.5** |
| **LRK** | **Lerik** | **0.22** | **264** | P | | **Pg** | **14 16 48.3** | **+0.5** |
| LRK | | | | S | | **Sg** | **14 16 53.5** | **+1.9** |
| **GAS1** | **Astara - Iran** | **0.33** | **148** | Pg | | **Pb** | **14 16 49.0** | **-0.6** |
| **YRD** | **Yardimli** | **0.39** | **310** | P | | **Pg** | **14 16 50.2** | **-0.3** |
| YRD | | | | S | | **Sb** | **14 16 56.5** | **0.0** |
| **GRMI** | **Germi** | **0.58** | **284** | Pg | | **Pg** | **14 16 53.6** | **-0.5** |
| **GLBA** | **Clilabad** | **0.60** | **343** | P | | **Pb** | **14 16 53.6** | **-0.6** |
| GLBA | | | | S | | **Sb** | **14 17 02.7** | **+0.5** |
| **ISRB** | **Sarab** | **1.13** | **222** | Pg | | **Pg** | **14 17 03.3** | **-0.9** |
| ISRB | | | | Sg | | **Sg** | **14 17 19.0** | **0.0** |
| **QRD** | **Qoradiz** | **1.29** | **308** | Pn | | **Pn** | **14 17 05.1** | **-0.2** |
| QRD | | | | Sn | | **Sb** | **14 17 22.0** | **0.0** |
| **IHRS** | **Heris** | **1.29** | **255** | Pg | | **Pn** | **14 17 05.4** | **-0.1** |
| **BLQ** | **Beylaqan** | **1.34** | **322** | Pn | | **Pn** | **14 17 05.7** | **-0.3** |
| BLQ | | | | Sn | | **Sn** | **14 17 23.4** | **+0.2** |
| **IHSH** | **Hashtrud** | **1.73** | **219** | Pg | | **Pb** | **14 17 12.6** | **-1.1** |
| **AGDM** | **Agdam** | **1.85** | **321** | Pn | | **Pn** | **14 17 13.9** | **+0.7** |
| AGDM | | | | Sn | | **Sb** | **14 17 38.4** | **-0.1** |
| **BRDA** | **Brd** | **1.94** | **325** | Sn | | **Sg** | **14 17 43.7** | **-1.3** |
| **ORD** | **Ordubad** | **2.07** | **278** | Pn | | **Pb** | **14 17 17.6** | **-1.7** |
| ORD | | | | Sn | | **Sb** | **14 17 45.4** | **+0.8** |
| **SBZ** | **Shahbuz** | **2.50** | **288** | Pn | | **Pb** | **14 17 24.6** | **-2.0** |
| SBZ | | | | Sg | | **Sb** | **14 17 58.3** | **+1.3** |
| **GDB** | **GEDABAY** | **3.02** | **314** | Sn | | **Sn** | **14 18 08.3** | **+3.4** |

**IDC 28 14:30:45.4±4.3,20.°81N×122.°92E,h0km,mb3.6/3, mbtmp3.6/3,MS2.9/1,Error ellipse: s-maj=310.7km s-min=27.1km az=61.0,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **USRK** | **Ussuriysk Ar.** | **24.52** | **16** | LR | | LR | 14 46 23.0 | |
| | comp=Z,26nm,19.7s,baz=16,slow=38 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.89** | **318** | P | | P | 14 38 37.4 | -0.1 |
| | 0.3nm,0.5s,baz=113,slow=9.5,SNR=4.8 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.01** | **164** | P | | P | 14 38 38.0 | -0.7 |
| | 0.6nm,0.7s,baz=348,slow=8.5,SNR=15 | | | | | | | |
| | 0.6nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.48** | **166** | P | | P | 14 39 07.0 | +0.4 |
| | 0.4nm,0.3s,baz=341,slow=6.9,SNR=18 | | | | | | | |
| | 0.4nm,0.3s | | | | | | | |

*SSNC **28** 14:31:17.7±1.3,20.°10N×70.°14W,h81km±201km,MD3.7, ML3.4,MW3.6*
*SDD **28** 14:31:21.1±2.6,20.°06N×70.°41W,h20km±27km,MD3.8, ML3.5,MW3.8*
*OSPL **28** 14:31:22.8±3.0,20.°03N×70.°54W,h0km±12km,ML3.4*

**ISC 28 14:31:17.9±1.1,20.°04N±0.°03×70.°43W±0.°03,h9km±10km, n25,σ1s08/47,6C-1D,Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SODR** | **Sosua Marina B** | **0.32** | **206** | *e*Pg | | **Pb** | **14 31 26.7** | **+1.0** |
| SODR | | | | *e*Sg | | **Sb** | **14 31 33.4** | **+2.4** |
| SODR | | | | IAML | | | 14 31 37.0 | |
| | comp=N,8μm,0.6s | | | | | | | |
| **SC01** | **Santiago de lo** | **0.67** | **205⇑** | *e*Pg | | **Pn** | **14 31 33.0** | **-0.6** |
| SC01 | | | | *e*Sg | | **Sn** | **14 31 44.4** | **+0.2** |
| SC01 | | | | IAML | | | 14 31 54.0 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **SC01** | **Santiago de lo** | **0.67** | **205** | *i* P | | **Pn** | **14 31 33.2** | **-0.3** |
| SC01 | | | | *e*S | | **Sn** | **14 31 44.1** | **-0.1** |
| SC01 | | | | IAML | | | 14 31 47.0 | |
| | comp=Z,2μm,0.8s | | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **0.84** | **141** | *e*S | | **Sn** | **14 31 50.1** | **+1.6** |
| LONA1 | | | | IAML | | | 14 31 56.0 | |
| | comp=Z,2μm,4.4s | | | | | | | |
| **NADR** | **Nagua** | **0.87** | **141⇓** | *e*Pg | | **Pn** | **14 31 36.9** | **+0.6** |
| NADR | | | | *e*Sg | | **Sn** | **14 31 48.7** | **-0.4** |
| NADR | | | | IAML | | | 14 31 58.7 | |
| | comp=N,3μm,0.2s | | | | | | | |
| **MCDR** | **Montecristi** | **1.16** | **263⇑** | *e*Pg | | **Pn** | **14 31 41.1** | **+0.8** |
| MCDR | | | | *e*Sg | | **Sn** | **14 31 57.6** | **+1.2** |
| MCDR | | | | IAML | | | 14 32 04.0 | |
| | comp=N,323nm,0.5s | | | | | | | |
| **ABDR** | **Alto Bandera** | **1.23** | **189⇑** | *e*Pg | | **Pn** | **14 31 41.8** | **+0.1** |
| ABDR | | | | *e*Sg | | **Sn** | **14 31 59.3** | **+0.7** |
| ABDR | | | | IAML | | | 14 32 00.7 | |
| | comp=N,2μm,0.3s | | | | | | | |
| **LODA1** | **ITESIL, Dajabo** | **1.30** | **248** | *e*S | | **Sn** | **14 32 00.4** | **+0.7** |
| **SDDR** | **Presa de Saban** | **1.33** | **218** | *e*P | | **Pb** | **14 31 43.0** | **0.0** |
| SDDR | | | | *e*S | | **Sb** | **14 31 56.7** | **-3.5** |
| SDDR | | | | IAML | | | 14 32 05.0 | |
| | comp=N,294nm,0.5s | | | | | | | |
| SDDR | | | | IAML | | | 14 32 05.7 | |
| | comp=N,401nm,0.5s | | | | | | | |
| **SDDR** | **Presa de Saban** | **1.33** | **218** | *i* P | | **Pg** | **14 31 43.3** | **-0.1** |
| SDDR | | | | *e*S | | **Sn** | **14 31 01.2** | **+0.7** |
| SDDR | | | | IAML | | | 14 32 03.6 | |
| | comp=Z,390nm,0.4s | | | | | | | |
| **GRTK** | **Grand Turk** | **1.61** | **336⇑** | *e*Pg | | **Pg** | **14 31 48.9** | **+0.1** |
| GRTK | | | | *e*Sg | | **Sg** | **14 32 10.4** | **+0.8** |
| GRTK | | | | IAML | | | 14 32 14.8 | |
| | comp=N,318nm,0.7s | | | | | | | |
| **GRTK** | **Grand Turk** | **1.61** | **336** | *i* P | | **Pg** | **14 31 49.2** | **+0.4** |
| GRTK | | | | *e*S | | **Sg** | **14 32 10.9** | **+1.3** |
| GRTK | | | | IAML | | | 14 32 19.3 | |
| | comp=Z,209nm,0.7s | | | | | | | |
| **BANI** | **BANI** | **1.64** | **178** | *e*Pg | | **Pg** | **14 31 49.1** | **-0.3** |
| BANI | | | | *e*Sg | | **Sg** | **14 32 11.7** | **+1.1** |
| BANI | | | | IAML | | | 14 32 15.2 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **SDD** | **Santo Domingo** | **1.65** | **163** | *e*Pg | | **Pg** | **14 31 48.8** | **-0.7** |
| SDD | | | | *e*Sg | | **Sg** | **14 32 10.7** | **-0.2** |
| SDD | | | | IAML | | | 14 32 13.0 | |
| | comp=N,214nm,0.8s | | | | | | | |
| **SDD** | **Santo Domingo** | **1.65** | **163** | *i* P | | **Pg** | **14 31 50.0** | **+0.5** |
| SDD | | | | *e*S | | **Sg** | **14 32 11.3** | **+0.4** |
| **PODR** | **Polo** | **2.03** | **203** | *i* P | | **Pb** | **14 31 55.8** | **+0.7** |
| PODR | | | | *e*S | | **Sn** | **14 32 19.1** | **+1.0** |
| PODR | | | | IAML | | | 14 32 29.2 | |
| | comp=Z,329nm,0.5s | | | | | | | |
| **JIDR** | **Jimani** | **2.04** | **221⇑** | *e*Pg | | **Pb** | **14 31 55.4** | **+0.2** |
| JIDR | | | | *e*Sg | | **Sg** | **14 32 23.0** | **-0.5** |
| JIDR | | | | IAML | | | 14 32 24.5 | |
| | comp=N,491nm,0.6s | | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **2.05** | **198** | *e*Pg | | **Pb** | **14 31 56.1** | **+0.8** |
| LOBA2 | | | | *e*Sg | | **Sg** | **14 32 25.4** | **+1.7** |
| LOBA2 | | | | IAML | | | 14 32 26.5 | |
| | comp=N,39nm,0.4s | | | | | | | |
| **HIDR** | **Higuey Centro** | **2.17** | **131** | *e*Sg | | **Sg** | **14 32 26.0** | **-1.5** |
| HIDR | | | | IAML | | | 14 32 28.7 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **PAPH** | **Port-au-Prince** | **2.32** | **230** | *e*P | | **Pb** | **14 31 59.3** | **-0.6** |
| PAPH | | | | *e*S | | **Sn** | **14 32 25.3** | **+0.2** |
| PAPH | | | | IAML | | | 14 32 29.9 | |
| | comp=N,131nm,0.5s | | | | | | | |
| PAPH | | | | IAML | | | 14 32 35.9 | |
| | comp=E,114nm,0.6s | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.46** | **128⇑** | *e*Pg | | **Pb** | **14 32 02.2** | **-0.1** |
| PCDR | | | | *e*Sg | | **Sg** | **14 32 35.7** | **-1.3** |
| PCDR | | | | IAML | | | 14 32 43.8 | |
| | comp=N,358nm,0.5s | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.46** | **128** | *i* P | | **Pb** | **14 32 02.9** | **+0.6** |
| PCDR | | | | *e*S | | **Sg** | **14 32 35.3** | **-1.7** |
| PCDR | | | | IAML | | | 14 32 47.8 | |
| | comp=Z,240nm,0.8s | | | | | | | |
| **MASC** | **Masc** | **3.57** | **273** | *e*P | | **Pb** | **14 32 19.7** | **-1.6** |
| MASC | | | | *e*S | | **Sn** | **14 32 56.3** | **+0.4** |
| MASC | | | | IAML | | | 14 33 08.4 | |
| | comp=N,43nm,1.3s | | | | | | | |
| MASC | | | | IAML | | | 14 33 11.4 | |
| | comp=E,30nm,0.9s | | | | | | | |
| **QMBU** | **Quimbuelo** | **4.12** | **273** | *e*P | | **Pn** | **14 32 20.9** | **-0.2** |
| QMBU | | | | *e*S | | **Sn** | **14 33 07.9** | **-1.6** |
| QMBU | | | | IAML | | | 14 33 17.3 | |
| | comp=E,24nm,0.1s | | | | | | | |
| QMBU | | | | IAML | | | 14 33 34.2 | |
| | comp=N,30nm,0.7s | | | | | | | |
| **RCC** | **Rio Carpintero** | **4.95** | **270** | *e*P | | **Pn** | **14 32 31.9** | **-0.6** |
| RCC | | | | *e*S | | **Sn** | **14 33 29.3** | **-0.6** |
| RCC | | | | IAML | | | 14 33 41.6 | |
| | comp=E,14nm,1.7s | | | | | | | |
| RCC | | | | IAML | | | 14 33 55.8 | |
| | comp=N,20nm,1.7s | | | | | | | |

**STR 28 14:41:03.2±0.6,48.°N±3.°×±.°,h0km,MLv2.1/7,Error ellipse: s-maj=0.0km s-min=0.0km az=146.6, preliminary,France**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CHMF** | **Charmoille** | **0.77** | **128** | Pg | | Pg | 14 41 17.8 | -0.1 |
| CHMF | | | | Sg | | Sg | 14 41 28.2 | +0.3 |
| **BRANT** | **Les Verrieres** | **0.93** | **148** | Pg | | Pg | 14 41 20.9 | 0.0 |
| **BRANT** | **Les Verrieres** | **0.93** | **148** | Sg | | Sg | 14 41 33.5 | +0.7 |
| **MOF** | **Molkenrain** | **0.94** | **82** | Pg | | Pg | 14 41 21.3 | +0.2 |
| MOF | | | | Sg | | Sg | 14 41 33.8 | +0.6 |
| **RIVEL** | **MONT RIVEL** | **0.97** | **173** | Pg | | Pg | 14 41 21.5 | -0.2 |
| RIVEL | | | | Sg | | Sb | 14 41 35.5 | -0.8 |
| **BOURR** | **Bourrignon** | **1.05** | **108** | Pg | | Pg | 14 41 22.8 | -0.5 |
| **BOURR** | **Bourrignon** | **1.05** | **108** | Sg | | Sg | 14 41 37.2 | +0.3 |
| **ECH** | **Echery** | **1.06** | **62** | Pg | | Pg | 14 41 23.9 | +0.4 |
| ECH | | | | Sg | | Sb | 14 41 38.3 | -0.6 |
| **MANO** | **Manonville** | **1.11** | **6** | Sg | | Sn | 14 41 42.7 | +0.7 |
| **WLS** | **Welschbruch** | **1.27** | **57** | Pg | | Pg | 14 41 26.5 | -1.1 |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=259 | | | | | | | |
| LATG | | | | *e*S | | **Sn** | **14 42 32.0** | **-0.2** |
| | baz=259 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.20** | **252** | P | | **Pn** | **14 42 14.0** | **-0.4** |
| | baz=242 | | | | | | | |
| NACB | | | | *e*S | | **Sn** | **14 42 31.4** | **-0.7** |
| | baz=242 | | | | | | | |
| **NDT** | **Datong Townshi** | **1.21** | **272** | P | | **Pn** | **14 42 15.0** | **+0.5** |
| | baz=264 | | | | | | | |
| NDT | | | | *e*S | | **Sn** | **14 42 32.5** | **+0.1** |
| | baz=264 | | | | | | | |
| **TWD** | **Chiawan** | **1.23** | **247** | *e*P | | **Pn** | **14 42 14.3** | **-0.4** |
| | baz=238 | | | | | | | |
| TWD | | | | *e*S | | **Sn** | **14 42 32.1** | **-0.6** |
| | baz=238 | | | | | | | |
| **NWLT** | **Wulai** | **1.24** | **280** | *e*P | | **Pn** | **14 42 14.7** | **-0.1** |
| | baz=281 | | | | | | | |
| NWLT | | | | *e*S | | **Sn** | **14 42 32.4** | **-0.5** |
| | baz=281 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.29** | **254** | *e*P | | **Pn** | **14 42 15.2** | **-0.3** |
| | baz=250 | | | | | | | |
| ETLH | | | | *e*S | | **Sn** | **14 42 33.1** | **-0.9** |
| | baz=250 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.33** | **239** | *e*P | | **Pn** | **14 42 15.8** | **-0.1** |
| | baz=237 | | | | | | | |
| TEYL | | | | *e*S | | **Sn** | **14 42 35.2** | **+0.5** |
| | baz=237 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.34** | **89** | P | | **Pn** | **14 42 15.9** | **0.0** |
| JISG | | | | *e*S | | **Sn** | **14 42 33.9** | **-0.9** |
| **NNSB** | **Datong** | **1.34** | **265** | *e*P | | **Pn** | **14 42 16.0** | **-0.1** |
| | baz=254 | | | | | | | |
| NNSB | | | | *e*S | | **Sn** | **14 42 34.3** | **-0.7** |
| | baz=254 | | | | | | | |
| **YHNB** | **Yeheng** | **1.34** | **275** | P | | **Pn** | **14 42 16.4** | **+0.3** |
| | baz=264 | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | **14 42 34.2** | **-0.8** |
| | baz=264 | | | | | | | |
| **NNS** | **Nan Shan** | **1.34** | **265** | *e*P | | **Pn** | **14 42 16.3** | **+0.1** |
| | baz=254 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **14 42 34.5** | **-0.7** |
| | baz=254 | | | | | | | |
| **NSK** | **Sanguang** | **1.36** | **275** | P | | **Pn** | **14 42 16.5** | **+0.3** |
| | baz=264 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **14 42 34.5** | **-0.8** |
| | baz=264 | | | | | | | |
| **ETM** | **Tongmen** | **1.37** | **245** | P | | **Pn** | **14 42 16.0** | **-0.3** |
| | baz=239 | | | | | | | |
| ETM | | | | S | | **Sn** | **14 42 34.8** | **-0.6** |
| | baz=239 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.40** | **237** | P | | **Pn** | **14 42 16.8** | **+0.2** |
| | baz=233 | | | | | | | |
| SHUL | | | | *e*S | | **Sn** | **14 42 36.2** | **+0.1** |
| | baz=233 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.41** | **248** | P | | **Pn** | **14 42 16.6** | **-0.3** |
| | baz=244 | | | | | | | |
| LXIB | | | | *e*S | | **Sn** | **14 42 35.5** | **-1.1** |
| | baz=244 | | | | | | | |
| **TEGC** | **Jichi Village** | **1.46** | **235** | P | | **Pn** | **14 42 17.6** | **+0.2** |
| | baz=230 | | | | | | | |
| TEGC | | | | *e*S | | **Sn** | **14 42 37.6** | **+0.2** |
| | baz=230 | | | | | | | |
| **ESL** | **Shilin** | **1.49** | **240** | P | | **Pn** | **14 42 17.4** | **-0.3** |
| | baz=241 | | | | | | | |
| ESL | | | | *e*S | | **Sn** | **14 42 36.7** | **-1.3** |
| | baz=241 | | | | | | | |
| **FUSS** | **Fushou** | **1.49** | **258** | *e*P | | **Pn** | **14 42 17.9** | **-0.1** |
| | baz=250 | | | | | | | |
| FUSS | | | | *e*S | | **Sn** | **14 42 38.6** | **+0.1** |
| | baz=250 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.50** | **254** | *e*P | | **Pn** | **14 42 18.3** | **+0.1** |
| | baz=250 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **14 42 38.0** | **-0.9** |
| | baz=250 | | | | | | | |
| **TWT** | **Tachien** | **1.55** | **259** | *e*P | | **Pn** | **14 42 19.2** | **+0.6** |
| | baz=252 | | | | | | | |
| TWT | | | | *e*S | | **Sn** | **14 42 39.4** | **-0.2** |
| | baz=252 | | | | | | | |
| **TDCB** | **Techi** | **1.57** | **259** | *e*P | | **Pn** | **14 42 19.4** | **+0.6** |
| | baz=252 | | | | | | | |
| TDCB | | | | *e*S | | **Sn** | **14 42 39.2** | **-0.7** |
| | baz=252 | | | | | | | |
| **EGFH** | **Guangfu** | **1.57** | **236** | *e*P | | **Pn** | **14 42 18.7** | **0.0** |
| | baz=237 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.57** | **273** | *e*P | | **Pn** | **14 42 19.1** | **+0.3** |
| | baz=268 | | | | | | | |
| NFF | | | | *e*S | | **Sn** | **14 42 39.1** | **-0.8** |
| | baz=268 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.57** | **238** | P | | **Pn** | **14 42 18.6** | **-0.2** |
| | baz=241 | | | | | | | |
| WARBT | | | | S | | **Sn** | **14 42 38.8** | **-1.0** |
| | baz=241 | | | | | | | |
| **CHGB** | **Renai** | **1.60** | **252** | *e*P | | **Pn** | **14 42 19.6** | **+0.3** |
| | baz=242 | | | | | | | |
| CHGB | | | | *e*S | | **Sn** | **14 42 40.6** | **-0.2** |
| | baz=242 | | | | | | | |
| **OWD** | **Renai** | **1.64** | **249** | *e*P | | **Pn** | **14 42 19.9** | **+0.2** |
| | baz=240 | | | | | | | |
| OWD | | | | *e*S | | **Sn** | **14 42 40.4** | **-1.0** |
| | baz=240 | | | | | | | |
| **LIOB** | **Emei** | **1.67** | **273** | *e*P | | **Pn** | **14 42 20.2** | **+0.3** |
| | baz=268 | | | | | | | |
| LIOB | | | | *e*S | | **Sn** | **14 42 41.2** | **-0.6** |
| | baz=268 | | | | | | | |
| **WUSB** | **Renai** | **1.67** | **251** | P | | **Pn** | **14 42 20.7** | **+0.6** |
| | baz=242 | | | | | | | |
| WUSB | | | | *e*S | | **Sn** | **14 42 41.0** | **-1.1** |
| | baz=242 | | | | | | | |
| **HGSD** | **Ruisui** | **1.68** | **231** | *e*P | | **Pn** | **14 42 19.9** | **-0.1** |
| | baz=227 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **14 42 41.5** | **-0.6** |
| | baz=227 | | | | | | | |
| **JTJ** | **Tarama** | **1.69** | **87** | *e*P | | **Pn** | **14 42 20.4** | **+0.2** |
| JTJ | | | | *e*S | | **Sn** | **14 42 41.7** | **-0.7** |
| **EHY** | **Hungye** | **1.74** | **233** | *e*P | | **Pn** | **14 42 20.5** | **-0.3** |
| | baz=231 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **14 42 42.3** | **-1.3** |
| | baz=231 | | | | | | | |
| **VWDT** | **VWDT** | **1.75** | **243** | P | | **Pn** | **14 42 21.5** | **+0.7** |
| | baz=235 | | | | | | | |
| VWDT | | | | S | | **Sn** | **14 42 43.4** | **-0.2** |
| | baz=235 | | | | | | | |
| **WHP** | **Taichung City** | **1.75** | **261** | P | | **Pn** | **14 42 22.2** | **+1.2** |
| | baz=254 | | | | | | | |
| WHP | | | | *e*S | | **Sn** | **14 42 44.3** | **+0.4** |
| | baz=254 | | | | | | | |
| **YULB** | **Yu-li** | **1.83** | **231** | *e*P | | **Pn** | **14 42 21.8** | **-0.1** |
| | baz=235 | | | | | | | |
| YULB | | | | *e*S | | **Sn** | **14 42 45.0** | **-0.5** |
| | baz=235 | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.83** | **255** | *e*P | | **Pn** | **14 42 22.6** | **+0.7** |
| | baz=249 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **14 42 46.5** | **+1.1** |
| | baz=249 | | | | | | | |
| **EYUL** | **Yuli** | **1.84** | **229** | *e*P | | **Pn** | **14 42 22.1** | **+0.1** |
| | baz=234 | | | | | | | |
| EYUL | | | | *e*S | | **Sn** | **14 42 45.4** | **-0.4** |
| | baz=234 | | | | | | | |
| **TWF1** | **Yuli** | **1.86** | **230** | *e*P | | **Pn** | **14 42 22.2** | **0.0** |
| | baz=235 | | | | | | | |
| TWF1 | | | | *e*S | | **Sn** | **14 42 45.5** | **-0.6** |
| | baz=235 | | | | | | | |
| **SSLB** | **Suanglung** | **1.89** | **246** | *e*P | | **Pn** | **14 42 22.9** | **+0.3** |
| | baz=239 | | | | | | | |
| **CHKH** | **Chenggong** | **1.90** | **225** | *e*P | | **Pn** | **14 42 23.1** | **+0.3** |
| | baz=220 | | | | | | | |
| CHKH | | | | *e*S | | **Sn** | **14 42 45.9** | **-1.1** |
| | baz=220 | | | | | | | |
| **TYC** | **Yuchr** | **1.93** | **251** | *e*P | | **Pn** | **14 42 24.0** | **+0.9** |
| | baz=242 | | | | | | | |
| TYC | | | | *e*S | | **Sn** | **14 42 49.4** | **+1.9** |
| | baz=242 | | | | | | | |
| **FULB** | **Fuli** | **1.96** | **227** | *e*P | | **Pn** | **14 42 23.7** | **+0.1** |
| | baz=220 | | | | | | | |
| FULB | | | | *e*S | | **Sn** | **14 42 48.8** | **+0.4** |
| | baz=220 | | | | | | | |
| **WHYT** | **Xinyi Township** | **2.01** | **245** | *e*P | | **Pn** | **14 42 25.6** | **+1.4** |
| | baz=241 | | | | | | | |
| WHYT | | | | *e*S | | **Sn** | **14 42 51.5** | **+1.9** |
| | baz=241 | | | | | | | |
| **WNT** | **Mingjian** | **2.09** | **251** | *e*S | | **Sn** | **14 42 53.8** | **+2.6** |
| | baz=247 | | | | | | | |
| **EDH** | **Donghe** | **2.12** | **222** | *e*S | | **Sn** | **14 42 50.9** | **-1.0** |
| | baz=219 | | | | | | | |
| **JIRB** | **Irabujima** | **2.13** | **82** | *e*P | | **Pn** | **14 42 25.9** | **+0.2** |
| **ELDTW** | **Lidau** | **2.16** | **231** | *e*P | | **Pn** | **14 42 25.9** | **-0.3** |
| | baz=226 | | | | | | | |
| ELDTW | | | | *e*S | | **Sn** | **14 42 52.2** | **-0.8** |
| | baz=226 | | | | | | | |
| **CHN5** | **Tsauling** | **2.20** | **245** | *e*S | | **Sn** | **14 42 56.1** | **+2.1** |
| | baz=236 | | | | | | | |
| **LDUT** | **Ludao** | **2.26** | **214** | *e*P | | **Pn** | **14 42 26.4** | **-0.9** |
| | baz=212 | | | | | | | |
| LDUT | | | | *e*S | | **Sn** | **14 42 53.3** | **-1.9** |
| | baz=212 | | | | | | | |
| **JMJ2** | **Miyako jima3** | **2.27** | **85** | *e*P | | **Pn** | **14 42 27.8** | **+0.4** |
| JMJ2 | | | | *e*S | | **Sn** | **14 42 55.6** | **+0.3** |
| **WCKO** | **Fanlu** | **2.33** | **242** | *e*S | | **Sn** | **14 42 59.0** | **+2.1** |
| | baz=239 | | | | | | | |
| **TWGBT** | **Beinan** | **2.37** | **223** | *e*P | | **Pn** | **14 42 28.6** | **-0.2** |
| | baz=227 | | | | | | | |
| **TWG** | **Pinlang** | **2.37** | **224** | *e*P | | **Pn** | **14 42 28.5** | **-0.3** |
| | baz=227 | | | | | | | |

*WEL* ***28*** *14:49:58.1±1.0, 37°S±5°×17°9E±°, h12km, M3.8/49, ML4.0/13, MLv3.8/49, Error ellipse: s-maj=0.0km s-min=0.0km az=81.6, confirmed*

*NOU* ***28*** *14:49:59.7, 36.97S×178.84E, h17km, MLv4.2/12, Off E. Coast of N. Island, N.Z.*

**ISC 28 14:49:53.0±2.6, 36.77S±0.08×179.21E±0.09, h3km±12km, n99, σ1.971/108, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.07** | **222** | P | **Pb** | **14 50 14.2** | **+0.1** |
| **MXZ** | **Matakaoa Point** | **1.07** | **222** | P | **Pb** | **14 50 14.2** | **+0.1** |
| MXZ | | | | S | **Sg** | **14 50 23.8** | **-3.5** |
| **TDHS** | **Te Araroa Dist** | **1.09** | **218** | P | **Pn** | **14 50 18.4** | **+3.2** |
| **PKGZ** | **Pakihiroa** | **1.41** | **219** | P | **Pb** | **14 50 20.4** | **+0.3** |
| PKGZ | | | | S | **Sn** | **14 50 39.7** | **+0.8** |
| **PUZ** | **Puketiti** | **1.50** | **210** | P | **Pg** | **14 50 23.8** | **+2.1** |
| PUZ | | | | S | **Sn** | **14 50 41.2** | **+0.2** |
| **HAZ** | **Te Kaha** | **1.50** | **229** | P | **Pn** | **14 50 20.1** | **-0.8** |
| HAZ | | | | S | **Sn** | **14 50 42.3** | **+1.3** |
| **RUGZ** | **Raukumara Rang** | **1.70** | **225** | P | **Pn** | **14 50 24.2** | **+0.5** |
| **TWGZ** | **Tauwhareparae** | **1.71** | **215** | P | **Pg** | **14 50 26.9** | **+1.1** |
| TWGZ | | | | S | **Sg** | **14 50 46.8** | **-1.1** |
| **WIZ** | **White Island** | **1.78** | **244** | P | **Pn** | **14 50 23.7** | **-0.9** |
| **CNGZ** | **Carnagh Statio** | **1.88** | **205** | P | **Pg** | **14 50 29.5** | **+0.4** |
| CNGZ | | | | S | **Sg** | **14 50 53.3** | **-0.3** |
| **TKGZ** | **Te Karaka** | **1.98** | **213** | P | **Pb** | **14 50 30.0** | **+0.2** |
| TKGZ | | | | S | **Sn** | **14 50 53.0** | **+0.2** |
| **MWZ** | **Matawai** | **2.05** | **220** | P | **Pb** | **14 50 30.7** | **-0.3** |
| MWZ | | | | S | **Sn** | **14 50 54.5** | **-0.1** |
| **RAGZ** | **Rawiri** | **2.23** | **219** | P | **Pb** | **14 50 33.6** | **-0.4** |
| **URZ** | **Urewera** | **2.23** | **228** | P | **Pn** | **14 50 31.8** | **+0.9** |
| **URZ** | **Urewera** | **2.23** | **228** | P | **Pn** | **14 50 31.7** | **+0.9** |
| URZ | | | | S | **Sn** | **14 50 58.3** | **-0.7** |
| **RIGZ** | **Rimuhau** | **2.24** | **210** | P | **Pb** | **14 50 33.4** | **-0.8** |
| **MARZ** | **Manawahe** | **2.35** | **238** | P | **Pn** | **14 50 32.4** | **-0.2** |
| **OPRZ** | **Ohinepanea** | **2.37** | **242** | P | **Pn** | **14 50 32.8** | **0.0** |
| **EDRZ** | **Edgecumbe** | **2.37** | **235** | P | **Pb** | **14 50 35.3** | **-1.2** |
| **PRGZ** | **Paritu Road** | **2.39** | **206** | P | **Pn** | **14 50 35.5** | **+2.4** |
| **SNGZ** | **Shannon Statio** | **2.49** | **216** | P | **Pn** | **14 50 36.8** | **+2.3** |
| **TGRZ** | **Tauranga** | **2.54** | **247** | P | **Pn** | **14 50 35.1** | **0.0** |
| **RTZ** | **Ruatahuna** | **2.55** | **223** | P | **Pb** | **14 50 38.0** | **-1.5** |
| **KNZ** | **Kokohu** | **2.55** | **208** | P | **Pn** | **14 50 36.9** | **+1.6** |
| **LIRZ** | **Lichensteins R** | **2.56** | **241** | P | **Pb** | **14 50 37.9** | **-1.8** |
| **MUGZ** | **Murupara** | **2.58** | **228** | P | **Pn** | **14 50 36.5** | **+0.8** |
| **MHGZ** | **Mahia Peninsul** | **2.59** | **203** | P | **Pn** | **14 50 38.2** | **+2.3** |
| **TARZ** | **Mount Tarawera** | **2.60** | **235** | P | **Pb** | **14 50 39.2** | **-1.1** |
| **OMRZ** | **Omania** | **2.62** | **239** | P | **Pb** | **14 50 39.1** | **-1.6** |
| **RRRZ** | **Republican Roa** | **2.65** | **233** | P | **Pn** | **14 50 38.6** | **+1.9** |
| **KARZ** | **Kaharoa** | **2.67** | **241** | P | **Pn** | **14 50 38.6** | **+1.7** |
| **HLRZ** | **Highlands Stat** | **2.71** | **236** | P | **Pb** | **14 50 40.5** | **-1.6** |
| **WHHZ** | **Waihua** | **2.78** | **214** | P | **Pn** | **14 50 40.5** | **+2.1** |
| **MTHZ** | **Maungataniwha** | **2.80** | **221** | P | **Pn** | **14 50 40.7** | **+2.0** |
| **KUZ** | **Kuaotunu** | **2.80** | **270** | P | **Pn** | **14 50 38.5** | **-0.2** |
| **HSRZ** | **Hossack Road** | **2.81** | **236** | P | **Pb** | **14 50 42.3** | **-1.6** |
| **KMRZ** | **Kaimai** | **2.82** | **247** | P | **Pn** | **14 50 41.0** | **+2.1** |
| **HRRZ** | **Handcock Road** | **2.83** | **234** | P | **Pn** | **14 50 41.6** | **+2.5** |
| **ALRZ** | **Allen Road** | **2.89** | **231** | P | **Pn** | **14 50 42.1** | **+2.1** |
| **NMHZ** | **Naumai** | **3.00** | **219** | P | **Pn** | **14 50 43.7** | **+2.2** |
| **MRHZ** | **Matea Rd** | **3.02** | **226** | P | **Pn** | **14 50 43.9** | **+2.1** |
| **ARHZ** | **Aropaoanui** | **3.04** | **214** | P | **Pn** | **14 50 44.0** | **+2.0** |
| **GRZ** | **Great Barrier** | **3.07** | **279** | P | **Pn** | **14 50 43.1** | **+0.8** |
| **TOZ** | **Tahuroa Road** | **3.11** | **251** | P | **Pn** | **14 50 42.6** | **-0.4** |
| **KUTZ** | **Kaahu Road** | **3.19** | **236** | P | **Pn** | **14 50 46.9** | **+2.8** |
| **BKZ** | **Black Stump Fm** | **3.21** | **221** | P | **Pn** | **14 50 46.1** | **+1.7** |
| **BKZ** | **Black Stump Fm** | **3.21** | **221** | P | **Pn** | **14 50 45.9** | **+1.5** |
| **MKAZ** | **Moumakai** | **3.26** | **263** | P | **Pn** | **14 50 45.2** | **+0.2** |
| **WIAZ** | **Waiheke Island** | **3.27** | **268** | P | **Pn** | **14 50 45.7** | **+0.5** |
| **TLZ** | **Tolley Road** | **3.31** | **241** | P | **Pn** | **14 50 47.8** | **+2.1** |
| **MCHZ** | **McNeill Hill** | **3.32** | **216** | P | **Pn** | **14 50 47.5** | **+1.6** |
| **CKHZ** | **Cape Kidnapper** | **3.33** | **210** | P | **Pn** | **14 50 47.0** | **+1.0** |
| **RATZ** | **Rangitukua** | **3.43** | **231** | P | **Pn** | **14 50 49.9** | **+2.5** |
| **ETAZ** | **East Tamaki Re** | **3.44** | **266** | P | **Pn** | **14 50 48.2** | **+0.7** |
| **KWHZ** | **Kaweka Forest** | **3.44** | **219** | P | **Pn** | **14 50 48.8** | **+1.2** |
| **MBAZ** | **Motutapu North** | **3.46** | **269** | P | **Pn** | **14 50 48.6** | **+0.8** |
| **KAHZ** | **Kahuranaki** | **3.53** | **211** | P | **Pn** | **14 50 49.6** | **+0.9** |
| **EPAZ** | **Eden Park BICE** | **3.58** | **267** | P | **Pn** | **14 50 50.8** | **+1.3** |
| **HBAZ** | **Herne Bay Bore** | **3.59** | **267** | P | **Pn** | **14 50 51.0** | **+1.4** |
| **TMVZ** | **Te Maari** | **3.62** | **229** | P | **Pn** | **14 50 51.7** | **+1.5** |
| **NTVZ** | **North Tongarir** | **3.63** | **229** | P | **Pn** | **14 50 51.8** | **+1.5** |
| **ETVZ** | **East Tongariro** | **3.63** | **228** | P | **Pn** | **14 50 52.1** | **+1.8** |
| **KRHZ** | **Kereru** | **3.63** | **217** | P | **Pn** | **14 50 51.3** | **+1.1** |
| **AWAZ** | **Awhitu Peninsu** | **3.67** | **264** | P | **Pn** | **14 50 51.6** | **+0.9** |
| **OTVZ** | **Oturere** | **3.68** | **229** | P | **Pn** | **14 50 52.6** | **+1.7** |
| **WTVZ** | **West Tongariro** | **3.69** | **230** | P | **Pn** | **14 50 53.6** | **+2.5** |
| **SNVZ** | **South Ngauruho** | **3.71** | **228** | P | **Pn** | **14 50 53.0** | **+1.7** |
| **RVAZ** | **Riverhead Bore** | **3.72** | **269** | P | **Pn** | **14 50 52.5** | **+1.2** |
| **WTAZ** | **Waiatarua** | **3.72** | **266** | P | **Pn** | **14 50 52.6** | **+1.2** |
| **NGZ** | **Ngauruhoe** | **3.73** | **229** | P | **Pn** | **14 50 53.3** | **+1.7** |
| **TUVZ** | **Tukino** | **3.75** | **227** | P | **Pn** | **14 50 53.5** | **+1.6** |
| **COVZ** | **Chateau Observ** | **3.78** | **229** | P | **Pn** | **14 50 53.9** | **+1.6** |
| **MOVZ** | **Moawhango** | **3.79** | **225** | P | **Pn** | **14 50 53.4** | **+1.0** |
| **WNVZ** | **Wahianoa** | **3.82** | **227** | P | **Pn** | **14 50 54.3** | **+1.3** |
| **HIZ** | **Hauiti** | **3.87** | **242** | P | **Pn** | **14 50 55.0** | **+1.6** |
| **HIZ** | **Hauiti** | **3.87** | **242** | P | **Pn** | **14 50 54.9** | **+1.6** |
| **PNHZ** | **Pukenui** | **3.93** | **216** | P | **Pn** | **14 50 54.5** | **+0.3** |
| **MTVZ** | **Mangateitei** | **3.94** | **227** | P | **Pn** | **14 50 55.9** | **+1.5** |
| **WPHZ** | **Waipukurau** | **3.94** | **213** | P | **Pn** | **14 50 54.6** | **+0.2** |
| **WCZ** | **Waipu Caves** | **4.01** | **281** | P | **Pn** | **14 50 57.0** | **+1.6** |
| **VRZ** | **Vera Road** | **4.23** | **235** | P | **Pn** | **14 51 01.3** | **+3.0** |
| **DVHZ** | **Dannevirke** | **4.25** | **213** | P | **Pn** | **14 50 58.4** | **-0.3** |
| **WAZ** | **Wanganui** | **4.46** | **227** | P | **Pn** | **14 51 03.1** | **+1.5** |
| **POWZ** | **Post Office Ro** | **4.51** | **216** | P | **Pn** | **14 51 02.5** | **+0.3** |
| **BFZ** | **Birch Farm** | **4.54** | **210** | P | **Pn** | **14 51 02.0** | **-0.6** |
| **PRWZ** | **Pori Road** | **4.55** | **213** | P | **Pn** | **14 51 02.9** | **+0.1** |
| **LREZ** | **Lake Rotokare** | **4.64** | **233** | P | **Pn** | **14 51 06.9** | **+2.9** |
| **NEZ** | **North Egmont** | **4.74** | **237** | P | **Pn** | **14 51 09.4** | **+3.8** |
| **TIWZ** | **Tintock** | **4.76** | **212** | P | **Pn** | **14 51 05.6** | **-0.2** |
| **OUZ** | **Omahuta** | **4.81** | **287** | P | **Pn** | **14 51 08.9** | **+2.6** |
| **OUZ** | **Omahuta** | **4.81** | **287** | P | **Pn** | **14 51 08.8** | **+2.3** |
| **NBEZ** | **Newall Road No** | **4.90** | **238** | P | **Pn** | 14 51 12.6 | +5.1 |
| **SNZO** | **South Karori** | **5.73** | **216** | P | **Pn** | **14 51 20.0** | **+1.1** |
| **TKNZ** | **Takaka Hill** | **6.47** | **227** | P | **Pn** | **14 51 28.5** | **-0.6** |
| **QRZ** | **Quartz Range** | **6.60** | **230** | P | **Pn** | **14 51 30.0** | **-0.9** |
| **KHZ** | **Kahutara** | **7.13** | **216** | P | **Pn** | **14 51 37.4** | **-0.8** |
| **CTZ** | **Chatham Island** | **7.65** | **157** | P | **Pn** | **14 51 49.8** | **+4.5** |
| **CTZ** | **Chatham Island** | **7.65** | **157** | P | **Pn** | **14 51 49.3** | **+4.0** |
| CTZ | | | | S | **Sn** | **14 53 07.7** | **-4.8** |
| **RPZ** | **Rata Peaks** | **9.32** | **219** | P | **Pn** | **14 52 08.7** | **+0.5** |

*SOME* ***28*** *14:53:53.4, 44.58N×82.20E, h25km*

*NNC* ***28*** *14:53:54.8±1.4, 44.66N×82.02E, h0km, mb3.8, mpv3.5, Error ellipse: s-maj=17.0km s-min=4.2km az=121.0, Suspected Mining explosion.*

**ISC 28 14:53:51.1±1.5, 44.66N±0.07×82.25E±0.09, h0km, n22, σ0.62/35, 5C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DJR** | **Jarkent** | **1.79** | **260** | *e*P | **Pg** | **14 54 25.6** | **+0.2** |
| | 13nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **14 54 49.0** | **+0.4** |
| | 17nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **1.79** | **260** | P | **Pg** | **14 54 25.6** | **+0.2** |
| | 13nm,0.2s | | | | | | |
| DJR | | | | S | **Sg** | **14 54 49.0** | **+0.4** |
| | 17nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **1.83** | **229** | *e*P | **Pn** | **14 54 24.3** | **+0.3** |
| | 4.8nm,0.2s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **14 54 46.7** | **-1.1** |
| | 22nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.83** | **229** | P | **Pn** | **14 54 24.3** | **+0.3** |
| | 4.8nm,0.2s | | | | | | |
| KTMS | | | | S | **Sn** | **14 54 46.7** | **-1.1** |
| | 22nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **2.13** | **1** | ⇑Pn | **Pg** | **14 54 32.3** | **+0.3** |
| | 7.0nm,0.4s,baz=184,slow=14,SNR=279 | | | | | | |
| MK31 | | | | ⇓Sn | **Sg** | **14 54 60.0** | **+0.4** |
| | 3.6nm,0.5s,baz=187,slow=28,SNR=17 | | | | | | |
| **MAKZ** | **Makanchi** | **2.16** | **355** | ⇑Pn | **Pg** | **14 54 32.3** | **-0.1** |
| | 3.7nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Sn | **Sg** | **14 54 60.0** | **-0.4** |
| | 9.7nm,0.6s | | | | | | |
| **KNOS** | **Konyrlen** | **2.22** | **263** | Pg | **Pb** | **14 54 32.3** | **+0.1** |
| | 16nm,0.2s | | | | | | |
| KNOS | | | | Lg | Lg | 14 55 00.4 | |
| | 27nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **2.40** | **237** | Pg | **Pb** | **14 54 35.0** | **-0.2** |
| | 6.7nm,0.3s | | | | | | |
| PDGK | | | | Lg | Lg | 14 55 05.2 | |
| | 6.5nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **2.40** | **237** | ⇑Pn | **Pb** | **14 54 34.6** | **-0.5** |
| | 3.7nm,0.3s | | | | | | |
| PDGK | | | | ⇑Sn | **Sb** | **14 55 05.1** | **-0.2** |
| | 10nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **2.51** | **234** | *e*P | **Pn** | **14 54 33.6** | **+0.3** |
| | 24nm,0.2s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **14 55 02.6** | **-2.1** |
| | 31nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **2.51** | **234** | Pg | **Pn** | **14 54 34.5** | **+1.2** |
| | 24nm,0.2s | | | | | | |
| SHLS | | | | Lg | Lg | 14 55 04.7 | |
| | 31nm,0.4s | | | | | | |
| **BLB** | **Baldybastay** | **2.76** | **260** | Pg | **Pb** | **14 54 41.2** | **-0.2** |
| | 31nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 14 55 15.8 | |
| | 23nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **2.78** | **238** | *e*P | **Pb** | **14 54 41.8** | **+0.1** |
| | 9.8nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sb** | **14 55 16.6** | **+0.2** |
| | 6.8nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **2.78** | **238** | Pg | **Pb** | **14 54 41.8** | **+0.1** |
| | 9.8nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 14 55 16.6 | |
| | 6.8nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **2.83** | **246** | *e*P | **Pb** | **14 54 42.5** | **-0.1** |
| | 19nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **14 55 17.9** | **0.0** |
| | 22nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **2.83** | **246** | Pg | **Pb** | **14 54 42.5** | **-0.1** |
| | 19nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 14 55 17.9 | |
| | 22nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **3.13** | **243** | *e*P | **Pb** | **14 54 48.1** | **+0.3** |
| | 10nm,0.6s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **14 55 27.3** | **+0.8** |
| | 31nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **3.13** | **243** | Pg | **Pb** | **14 54 48.1** | **+0.3** |
| | 10nm,0.6s | | | | | | |
| ZHN | | | | Lg | Lg | 14 55 27.3 | |
| | 31nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **3.20** | **263** | *e*P | **Pb** | **14 54 48.9** | **0.0** |
| | 5.5nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **14 55 28.4** | **+0.1** |
| | 9.2nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **3.20** | **263** | Pg | **Pb** | **14 54 48.0** | **-0.8** |
| | 5.5nm,0.3s | | | | | | |
| ARXS | | | | Lg | Lg | 14 55 27.7 | |
| | 9.2nm,0.5s | | | | | | |
| **SATY** | **Saty** | **3.21** | **241** | *e*P | **Pb** | **14 54 49.2** | **+0.2** |
| | 4.5nm,0.2s | | | | | | |
| SATY | | | | *e*S | **Sb** | **14 55 29.4** | **+0.7** |
| | 23nm,0.3s | | | | | | |
| **SATY** | **Saty** | **3.21** | **241** | Pg | **Pb** | **14 54 49.2** | **+0.2** |
| | 4.5nm,0.2s | | | | | | |
| SATY | | | | Lg | Lg | 14 55 29.4 | |
| | 23nm,0.3s | | | | | | |

**IDC 28 14:56:08.2±67.0, 16.91S×178.74W, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=1219.0km s-min=174.1km az=78.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **38.84** | **240** | P | P | 15 03 35.3 | 0.0 |
| | 1.2nm,0.5s,baz=63,slow=11,SNR=5.6 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.51** | **259** | P | P | 15 04 21.6 | -0.3 |
| | 0.5nm,0.5s,baz=94,slow=7.3,SNR=2.9 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **44.76** | **253** | P | P | 15 04 23.8 | -0.1 |
| | 3.8nm,0.5s,baz=88,slow=8.7,SNR=16 | | | | | | |
| | 3.8nm,0.5s | | | | | | |

*JMA* ***28*** *14:56:29.4±0.2, 43.3N±0.8×14.7E±°, h47km±2km, MV2.9/28, OFF NEMURO PENINSULA*

*SKHL* ***28*** *14:56:29.3±0.3, 43.20N×146.80E, h34km±3km, mb4.0/4*

**ISC 28 14:56:29.7±2.2, 43.3N±0.1×146.68E±0.08, h32km±13km, n11, σ0.52/20, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.60** | **10** | *e*P | **Pb** | **14 56 41.9** | **0.0** |
| SHO | | | | AMB | AMB | 14 56 42.5 | |
| | 80nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **14 56 51.0** | **+0.3** |
| SHO | | | | A | A | 14 56 53.4 | |
| | 480nm,0.3s | | | | | | |
| SHO | | | | A | A | 14 56 53.4 | |
| | 630nm,0.3s | | | | | | |
| **N

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LCO | | | | IAML | | 14 58 00.0 | | |
| | comp=N,3μm,0.3s | | | | | | | |
| LCO | | | | IAML | | 14 58 00.3 | | |
| | comp=N,2μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **0.91** | **43** | *i* P | **Pn** | **14 57 46.7** | **-1.4** | |
| LCO | | | | *i* S | **Sn** | **14 57 58.5** | **-1.6** | |
| LCO | | | | IAML | | 14 57 59.5 | | |
| | comp=Z,3μm,0.5s | | | | | | | |
| **LCO** | **Las Campanas** | **0.91** | **43** | *e*P | **Pn** | **14 57 47.4** | **-0.7** | |
| LCO | | | | *i* S | **Sn** | **14 57 58.9** | **-1.2** | |
| LCO | | | | IAML | | 14 58 00.2 | | |
| | comp=Z,13μm,0.3s | | | | | | | |
| **CO06** | **Fray Jorge** | **1.01** | **191** | | **Pn** | **14 57 49.4** | **+0.2** | |
| **CO06** | **Fray Jorge** | **1.01** | **191** | *e*P | **Pn** | **14 57 49.6** | **+0.4** | |
| CO06 | | | | *i* S | **Sn** | **14 58 03.1** | **+0.9** | |
| CO06 | | | | IAML | | 14 58 07.1 | | |
| | comp=N,2μm,0.2s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.18** | **105** | | **Pn** | **14 57 51.3** | **-0.5** | |
| CO01 | | | | IAML | | 14 58 06.2 | | |
| | comp=E,2μm,0.4s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.18** | **105** | *i* P | **Pn** | **14 57 50.8** | **-1.1** | |
| CO01 | | | | *i* S | **Sn** | **14 58 05.6** | **-1.2** | |
| CO01 | | | | IAML | | 14 58 06.2 | | |
| | comp=Z,2μm,0.5s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.18** | **105** | *e*P | **Pn** | **14 57 51.5** | **-0.4** | |
| CO01 | | | | *i* S | **Sn** | **14 58 05.7** | **-1.2** | |
| CO01 | | | | IAML | | 14 58 07.0 | | |
| | comp=N,2μm,0.4s | | | | | | | |
| **AC05** | **El Transito** | **1.30** | **50** | | **Pn** | **14 57 53.1** | **-0.2** | |
| AC05 | | | | IAML | | 14 58 10.5 | | |
| | comp=N,2μm,0.2s | | | | | | | |
| **CO03** | **El Pedregal** | **1.32** | **152** | | **Pn** | **14 57 52.7** | **-0.9** | |
| CO03 | | | | IAML | | 14 58 09.4 | | |
| | comp=N,4μm,0.3s | | | | | | | |
| CO03 | | | | IAML | | 14 58 09.6 | | |
| | comp=E,4μm,0.3s | | | | | | | |
| **CO03** | **El Pedregal** | **1.32** | **152** | *i* P | **Pn** | **14 57 52.6** | **-0.9** | |
| CO03 | | | | *i* S | **Sn** | **14 58 08.5** | **-1.4** | |
| CO03 | | | | IAML | | 14 58 09.8 | | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **CO03** | **El Pedregal** | **1.32** | **152** | *e*P | **Pn** | **14 57 52.9** | **-0.6** | |
| CO03 | | | | *i* S | **Sn** | **14 58 08.6** | **-1.4** | |
| CO03 | | | | IAML | | 14 58 09.7 | | |
| | comp=E,4μm,0.3s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.50** | **12** | | **Pn** | **14 57 56.1** | **+0.1** | |
| **AC04** | **Llanos de Chal** | **1.50** | **12** | *i* P | **Pn** | **14 57 55.6** | **-0.3** | |
| AC04 | | | | IAML | | 14 58 18.8 | | |
| | comp=Z,472nm,0.4s | | | | | | | |
| **AC04** | **Llanos de Chal** | **1.50** | **12** | *e*P | **Pn** | **14 57 56.4** | **+0.5** | |
| AC04 | | | | *i* S | **Sn** | **14 58 15.1** | **+0.9** | |
| **CO02** | **Combarbal** | **1.56** | **167** | | **Pn** | **14 57 56.4** | **-0.5** | |
| **CO02** | **Combarbal** | **1.56** | **167** | *i* P | **Pn** | **14 57 56.5** | **-0.5** | |
| CO02 | | | | IAML | | 14 58 17.2 | | |
| | comp=Z,1μm,0.1s | | | | | | | |
| **CO02** | **Combarbal** | **1.56** | **167** | *e*P | **Pn** | **14 57 56.5** | **-0.5** | |
| CO02 | | | | *i* S | **Sn** | **14 58 15.5** | **-0.6** | |
| **AROD** | **Rodeo** | **1.75** | **107** | *i* P | **Pn** | **14 58 00.8** | **+1.0** | |
| **ACDV** | **Cuesta del Vie** | **2.05** | **104** | *i* P | **Pn** | **14 58 04.9** | **+1.2** | |
| ACDV | | | | IAML | | 14 58 32.7 | | |
| | comp=Z,412nm,0.9s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.23** | **115** | *i* P | **Pn** | **14 58 08.0** | **+1.7** | |
| ACCO | | | | IAML | | 14 58 46.2 | | |
| | comp=Z,228nm,0.4s | | | | | | | |
| **GO03** | **Copiap** | **2.32** | **27** | | **Pn** | **14 58 08.1** | **+0.8** | |
| **GO03** | **Copiap** | **2.32** | **27** | *i* P | **Pn** | **14 58 08.6** | **+1.3** | |
| **DOCA** | **Reserva Natura** | **2.38** | **123** | *i* P | **Pn** | **14 58 09.8** | **+1.4** | |
| DOCA | | | | IAML | | 14 58 42.5 | | |
| | comp=Z,444nm,0.7s | | | | | | | |
| **CO04** | **Los Peladeros** | **2.39** | **171** | *e*P | **Pn** | **14 58 08.4** | **0.0** | |
| CO04 | | | | *i* S | **Sn** | **14 58 36.6** | **0.0** | |
| CO04 | | | | IAML | | 14 58 45.0 | | |
| | comp=N,2μm,0.2s | | | | | | | |
| **AC06** | **Mina Casimiro** | **2.49** | **22** | | **Pn** | **14 58 10.6** | **+0.9** | |
| **AC06** | **Mina Casimiro** | **2.49** | **22** | *e*P | **Pn** | **14 58 09.9** | **+0.3** | |
| AC06 | | | | *i* S | **Sn** | **14 58 39.6** | **+0.8** | |
| **RTLS** | **Leoncito** | **2.79** | **140** | *i* P | **Pn** | **14 58 16.2** | **+2.2** | |
| RTLS | | | | IAML | | 14 59 01.5 | | |
| | comp=Z,597nm,0.3s | | | | | | | |
| **VA06** | **Catapilco** | **2.88** | **178** | | **Pn** | **14 58 15.1** | **+0.2** | |
| **ZON** | **Zonda** | **3.00** | **129** | | **Pn** | **14 58 17.9** | **+1.1** | |
| **RTLL** | **Cerro Villicun** | **3.02** | **124** | *i* P | **Pn** | **14 58 18.3** | **+1.3** | |
| **VA03** | **San Esteban** | **3.17** | **167** | | **Pn** | **14 58 19.8** | **+0.8** | |
| VA03 | | | | IAML | | 14 59 04.5 | | |
| | comp=N,670nm,0.3s | | | | | | | |
| **ROC1** | **El Roble** | **3.31** | **174** | *i* P | **Pn** | **14 58 21.5** | **+0.5** | |
| **VA01** | **Torpederas** | **3.34** | **183** | | **Pn** | **14 58 20.7** | **-0.6** | |
| VA01 | | | | IAML | | 14 59 17.2 | | |
| | comp=E,188nm,0.6s | | | | | | | |
| **PEL** | **Peldehue** | **3.51** | **170** | | **Pn** | **14 58 24.4** | **+0.7** | |
| PEL | | | | IAML | | 14 59 19.9 | | |
| | comp=E,278nm,0.3s | | | | | | | |
| PEL | | | | IAML | | 14 59 20.5 | | |
| | comp=N,238nm,0.6s | | | | | | | |
| **AVFE** | **Valle Fertil** | **3.56** | **107** | *i* P | **Pn** | **14 58 25.5** | **+1.1** | |
| AVFE | | | | IAML | | 14 59 26.0 | | |
| | comp=Z,90nm,0.5s | | | | | | | |
| **MT02** | **Curacav** | **3.58** | **176** | | **Pn** | **14 58 24.7** | **+0.2** | |
| MT02 | | | | IAML | | 14 59 17.8 | | |
| | comp=N,165nm,0.5s | | | | | | | |
| MT02 | | | | IAML | | 14 59 25.1 | | |
| | comp=E,173nm,0.4s | | | | | | | |
| **MT02** | **Curacav** | **3.58** | **176** | *i* P | **Pn** | **14 58 24.8** | **+0.2** | |
| MT02 | | | | IAML | | 14 59 18.1 | | |
| | comp=Z,128nm,0.3s | | | | | | | |
| **AC01** | **Pan de Azucar** | **3.59** | **12** | *i* P | **Pn** | **14 58 23.4** | **-1.4** | |
| AC01 | | | | IAML | | 14 59 29.5 | | |
| | comp=Z,70nm,0.3s | | | | | | | |
| **ASAL** | **Salagasta** | **3.65** | **143** | *i* P | **Pn** | **14 58 27.6** | **+2.0** | |
| ASAL | | | | IAML | | 14 59 23.7 | | |
| | comp=Z,133nm,0.4s | | | | | | | |
| **MT05** | **Renca** | **3.75** | **171** | *i* P | **Pn** | **14 58 24.4** | **-2.6** | |
| MT05 | | | | IAML | | 14 59 27.1 | | |
| | comp=Z,232nm,0.3s | | | | | | | |
| **MT04** | **Ro Olivares** | **3.87** | **164** | *i* P | **Pn** | **14 58 30.2** | **+1.4** | |
| MT04 | | | | IAML | | 14 59 27.7 | | |
| | comp=Z,139nm,0.8s | | | | | | | |
| **MT03** | **Universidad Ad** | **3.88** | **169** | IAML | | 14 59 29.9 | | |
| | comp=N,347nm,0.2s | | | | | | | |
| **MT03** | **Universidad Ad** | **3.88** | **169** | *i* P | **Pn** | **14 58 29.9** | **+1.0** | |
| MT03 | | | | IAML | | 14 59 28.6 | | |
| | comp=Z,206nm,0.3s | | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **3.89** | **87** | *i* P | **Pn** | **14 58 29.7** | **+0.7** | |
| ACLC | | | | IAML | | 14 59 25.3 | | |
| | comp=Z,97nm,0.9s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **3.94** | **163** | IAML | | 14 59 32.2 | | |
| | comp=N,211nm,0.5s | | | | | | | |
| MT08 | | | | IAML | | 14 59 33.0 | | |
| | comp=E,174nm,0.4s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **3.94** | **163** | *i* P | **Pn** | **14 58 32.4** | **+2.6** | |
| MT08 | | | | IAML | | 14 59 33.8 | | |
| | comp=Z,117nm,0.8s | | | | | | | |
| **VA05** | **Santo Domingo** | **3.97** | **182** | | **Pn** | **14 58 29.3** | **-0.6** | |
| **AAGR** | **Agrelo** | **4.05** | **148** | *i* P | **Pn** | **14 58 35.0** | **+3.8** | |
| AAGR | | | | IAML | | 14 59 33.5 | | |
| | comp=Z,90nm,0.8s | | | | | | | |
| **MT09** | **Talagante** | **4.10** | **175** | | **Pn** | **14 58 32.4** | **+0.5** | |
| **MT09** | **Talagante** | **4.10** | **175** | *e*P | **Pn** | **14 58 32.4** | **+0.5** | |
| MT09 | | | | *i* S | **Sn** | **14 59 18.5** | **-0.3** | |
| **MT13** | **San Alfonso** | **4.17** | **167** | IAML | | 14 59 39.5 | | |
| | comp=E,290nm,0.4s | | | | | | | |
| MT13 | | | | IAML | | 14 59 41.4 | | |
| | comp=N,278nm,0.5s | | | | | | | |
| **MT13** | **San Alfonso** | **4.17** | **167** | *i* P | **Pn** | **14 58 34.2** | **+1.4** | |
| MT13 | | | | IAML | | 14 59 40.5 | | |
| | comp=Z,147nm,0.5s | | | | | | | |
| **MT01** | **Popeta** | **4.18** | **178** | | **Pn** | **14 58 32.4** | **-0.4** | |
| MT01 | | | | IAML | | 14 59 37.5 | | |
| | comp=N,226nm,0.4s | | | | | | | |
| MT01 | | | | IAML | | 14 59 38.6 | | |
| | comp=E,214nm,0.4s | | | | | | | |
| **MT01** | **Popeta** | **4.18** | **178** | *i* P | **Pn** | **14 58 33.0** | **+0.2** | |
| MT01 | | | | IAML | | 14 59 38.4 | | |
| | comp=Z,134nm,0.8s | | | | | | | |
| **LMEL** | **Las Melosas** | **4.28** | **166** | IAML | | 14 59 42.2 | | |
| | comp=E,202nm,0.6s | | | | | | | |
| LMEL | | | | IAML | | 14 59 43.6 | | |
| | comp=N,255nm,0.3s | | | | | | | |
| **LMEL** | **Las Melosas** | **4.28** | **166** | *i* P | **Pn** | **14 58 35.7** | **+1.3** | |
| **LMEL** | **Las Melosas** | **4.28** | **166** | *e*P | **Pn** | **14 58 36.6** | **+2.2** | |
| LMEL | | | | *i* S | **Sn** | **14 59 26.2** | **+3.0** | |
| **BO04** | **La Punta** | **4.35** | **171** | | **Pn** | **14 58 35.3** | **0.0** | |
| BO04 | | | | IAML | | 14 59 41.5 | | |
| | comp=N,182nm,0.6s | | | | | | | |
| BO04 | | | | IAML | | 14 59 44.1 | | |
| | comp=E,171nm,0.5s | | | | | | | |
| **ACHE** | **Chepes** | **4.36** | **111** | *i* P | **Pn** | **14 58 36.3** | **+0.9** | |
| **BO01** | **Tunca** | **4.71** | **177** | | **Pn** | **14 58 40.8** | **+0.7** | |
| BO01 | | | | IAML | | 14 59 54.9 | | |
| | comp=N,111nm,0.6s | | | | | | | |
| BO01 | | | | IAML | | 14 59 58.1 | | |
| | comp=E,80nm,0.4s | | | | | | | |
| **BO01** | **Tunca** | **4.71** | **177** | *i* P | **Pn** | **14 58 40.8** | **+0.7** | |
| BO01 | | | | IAML | | 14 59 53.4 | | |
| | comp=Z,51nm,0.5s | | | | | | | |
| **CYA** | **Choya** | **5.06** | **77** | *i* P | **Pn** | **14 58 45.5** | **+0.5** | |
| CYA | | | | IAML | | 14 59 52.9 | | |
| | comp=Z,45nm,0.8s | | | | | | | |
| **BO02** | **Sierra Bellavi** | **5.13** | **174** | | **Pn** | **14 58 45.7** | **-0.2** | |
| **BO02** | **Sierra Bellavi** | **5.13** | **174** | *i* P | **Pn** | **14 58 46.2** | **+0.3** | |
| BO02 | | | | IAML | | 15 00 05.5 | | |
| | comp=Z,89nm,0.3s | | | | | | | |
| **GO05** | **Huala** | **5.34** | **185** | | **Pn** | **14 58 47.1** | **-1.7** | |
| GO05 | | | | IAML | | 15 00 17.5 | | |
| | comp=N,99nm,0.8s | | | | | | | |
| GO05 | | | | IAML | | 15 00 17.5 | | |
| | comp=E,106nm,0.9s | | | | | | | |
| **GO05** | **Huala** | **5.34** | **185** | *i* P | **Pn** | **14 58 47.0** | **-1.7** | |
| **TRQA** | **Tornquist** | **11.45** | **139** | | **Pn** | **15 00 11.5** | **-1.1** | |

*IDC* ***28*** *15:10:39.1±2.3,1˚.88N×127˚.67E,h0km,mb3.4/3, mbtmp3.5/3,Error ellipse: s-maj=152.5km s-min=28.0km az=67.0*

*DJA* ***28*** *15:10:56.3±0.7,2˚.N±5˚×12˚.7E±˚,h118km±12km,M3.6/10, mb3.8/2,mB4.7/1,MLv3.5/10,Mw(mB)4.0/1*

**ISC 28 15:10:54.9±1.5,1˚.5N±0˚.1×127˚.3E±0˚.1,h128km,n8, σ1§46/8,mb3.4/3,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.75** | **178** | P | **Pn** | **15 11 17.0** | **+1.5** |
| **SANI** | **Sanana** | **3.81** | **201** | P | **Pn** | **15 11 51.9** | **-0.1** |
| **GTOI** | **Gorontalo** | **4.42** | **258** | P | **Pn** | **15 12 02.0** | **+1.8** |
| **NLAI** | **Namlea** | **4.74** | **183** | P | **Pn** | **15 12 05.7** | **+1.2** |
| **LUWI** | **Luwuk** | **5.24** | **241** | P | **Pn** | **15 12 11.0** | **-0.1** |
| **WRA** | **Warramunga Arr** | **22.41** | **163** | P | **P** | **15 15 41.5** | **-1.6** |
| | 1.1nm,0.5s,baz=343,slow=10,SNR=19 1.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **25.84** | **166** | P | **P** | **15 16 15.1** | **+0.5** |
| | 0.3nm,0.6s,baz=342,slow=10,SNR=7.0 0.3nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.70** | **326** | P | **P** | **15 20 45.0** | **-0.9** |
| | 0.4nm,0.9s,baz=107,slow=7.7,SNR=2.6 0.4nm,0.9s | | | | | | |

*NEIC* ***28*** *15:18:43.6,65˚.20N×150˚.54W,h12km,Moment Tensor Solution. Duration: 0 Moment tensor: Scale 10^15Nm; Mrr-0.55; Mθθ-0.34; Mϕϕ0.89; Mrθ0.36; Mrϕ-3.51; Mθr1.16; Fault plane solution: M0 3.79000×10^15 NP1: ϕs183.56000°,δ83.08000°,λ-19.54000°. NP2: ϕs276.01000°,δ70.60000°,λ-172.66000°. Principal axes: T 3.9408, Plg9.0000°, Azm231.0000°; N -0.3071, Plg69.0000°, Azm345.0000°; P -3.6336, Plg19.0000°, Azm138.0000°;*

*IDC* ***28*** *15:18:43.1±0.6,65˚.42N×150˚.26W,h0km,mb3.9/16, mbtmp3.9/19,ML4.0/3,MS3.3/37 Error ellipse: s-maj=13.9km s-min=8.6km az=38.0*

*NEIC* ***28*** *15:18:43.4±1.5,65˚.20N±0˚.03×150˚.55W±0˚.06,h15km±3km, Error ellipse: s-maj=3.8km s-min=3.3km az=206.0, Moment Tensor Solution. Moment tensor: Scale 10^15Nm; Mrr0.21; Mθθ-1.11; Mϕϕ0.90; Mrθ-0.23; Mrϕ-3.44; Mθr0.41; Fault plane solution: M0 3.61000×10^15 NP1: ϕs277.88000°,δ83.78000°,λ174.95000°. NP2:ϕs8.43000°, δ84.98000°,λ6.24000°. Principal axes: T 3.5366, Plg8.0000°, Azm233.0000°; N 0.1504, Plg82.0000°, Azm47.0000°; P -3.6870, Plg1.0000°, Azm143.0000°;*

*MOS* ***28*** *15:18:43.4±1.0,65˚.21N×150˚.53W,h24km,mb4.5/18 Error ellipse: s-maj=17.1km s-min=7.0km az=99.6*

*AEIC* ***28*** *15:18:43.5±1.6,65˚.18N±0˚.03×150˚.57W±0˚.02,h17km±4km, ML4.7,mb4.5/2(NEIC),ML4.9/220(NEIC),Mwr4.3/94(NEIC), Mww4.3/25(NEIC),Error ellipse: s-maj=4.0km s-min=1.2km az=184.0*

*ANF* ***28*** *15:18:43.4±0.2,65˚.18N×150˚.50W,h12km±2km,ML5.2/132, Error ellipse: s-maj=1.1km s-min=1.1km az=36.0*

*NEIC* ***28*** *15:18:43.6,65˚.20N×150˚.54W,h12km*

*NEIC* ***28*** *15:18:44.2,65˚.18N×150˚.50W,h16km*

**ISC 28 15:18:43.3±0.9,65˚.21N±0˚.01×150˚.51W±0˚.01,h9km±6km, n513,σ1§27/521,mb4.2/37,MS3.3/36,3C,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MLY** | **Manley** | **0.20** | **208** | | **Pg** | **15 18 48.2** | **+0.8** |
| MLY | | | | IAML | | 15 18 51.3 | |
| | comp=E,256μm,0.5s | | | | | | |
| **MLY** | **Manley** | **0.20** | **208** | P | **Pg** | **15 18 47.8** | **+0.3** |
| | baz=27,SNR=1000 | | | | | | |
| MLY | | | | S | **Sg** | **15 18 51.0** | **+0.7** |
| | baz=27 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **0.49** | **97** | | **Pg** | **15 18 53.4** | **+0.6** |
| **I23K** | **Minto, Yukon-K** | **0.49** | **97** | | **Sg** | **15 19 00.1** | **+0.9** |
| **I23K** | **Minto, Yukon-K** | **0.49** | **97** | P | **Pg** | **15 18 53.2** | **+0.4** |
| | baz=277,SNR=1000 | | | | | | |
| I23K | | | | S | **Sg** | **15 18 59.5** | **+0.3** |
| | baz=277 | | | | | | |
| I23K | | | | S | **Sg** | **15 18 59.5** | **+0.3** |
| | baz=277 | | | | | | |
| **H23K** | **Yukon River** | **0.74** | **33** | | **Sb** | **15 19 08.6** | **0.0** |
| **H23K** | **Yukon River** | **0.74** | **33** | | **Pg** | **15 18 57.8** | **+0.3** |
| H23K | | | | IAML | | 15 19 09.2 | |
| | comp=E,30μm,0.7s | | | | | | |
| H23K | | | | IAML | | 15 19 12.7 | |
| | comp=N,30μm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **0.74** | **33** | P | **Pg** | **15 18 57.9** | **+0.4** |
| | baz=214 | | | | | | |
| H23K | | | | S | **Sb** | **15 19 08.2** | **-0.4** |
| | baz=214 | | | | | | |
| H23K | | | | S | **Sb** | **15 19 08.2** | **-0.4** |
| | baz=214 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **0.78** | **333** | | **Pb** | **15 18 58.9** | **-0.1** |
| **H22K** | **Ishtalitna Cre** | **0.78** | **333** | P | **Pb** | **15 18 58.9** | **-0.1** |
| | baz=153,SNR=1000 | | | | | | |
| H22K | | | | S | **Sg** | **15 19 08.8** | **+0.5** |
| | baz=153 | | | | | | |
| H22K | | | | S | **Sg** | **15 19 08.8** | **+0.5** |
| | baz=153 | | | | | | |
| **NEA2** | **Nenana** | **0.87** | **135** | | **Pg** | **15 19 00.6** | **+0.5** |
| **NEA2** | **Nenana** | **0.87** | **135** | | **Sn** | **15 19 12.9** | **-1.8** |
| **NEA2** | **Nenana** | **0.87** | **135** | P | **Pg** | **15 19 00.5** | **+0.5** |
| | baz=315,SNR=1000 | | | | | | |
| NEA2 | | | | S | **Sb** | **15 19 11.3** | **-1.1** |
| | baz=315 | | | | | | |
| **MDM** | **Murphy Dome** | **1.00** | **104** | | **Pb** | **15 19 02.2** | **-0.6** |
| MDM | | | | IAML | | 15 19 16.7 | |
| | comp=N,22μm,0.4s | | | | | | |
| **MDM** | **Murphy Dome** | **1.00** | **104** | | **Sb** | **15 19 15.2** | **-0.8** |
| **H21K** | **Melozitna Rive** | **1.06** | **296** | Pn | **Pn** | **15 19 03.6** | **-0.7** |
| H21K | | | | IAML | | 15 19 19.4 | |
| | comp=N,20μm,0.5s | | | | | | |
| **H21K** | **Melozitna Rive** | **1.06** | **296** | | **Sb** | **15 19 17.2** | **-0.6** |
| **H21K** | **Melozitna Rive** | **1.06** | **296** | P | **Pn** | **15 19 03.6** | **-0.7** |
| | baz=115,SNR=1000 | | | | | | |
| H21K | | | | S | **Sb** | **15 19 17.1** | **-0.6** |
| | baz=115 | | | | | | |
| H21K | | | | S | **Sb** | **15 19 17.1** | **-0.6** |
| | baz=115 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.13** | **191** | | **Pn** | **15 19 04.6** | **-0.8** |
| BPAW | | | | IAML | | 15 19 20.9 | |
| | comp=N,34μm,0.3s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **1.13** | **191** | | **Sn** | **15 19 19.8** | **-1.3** |
| **BPAW** | **Bear Paw Mtn.** | **1.13** | **191** | P | **Pb** | **15 19 04.4** | **-0.7** |
| | baz=9.7,SNR=1000 | | | | | | |
| BPAW | | | | S | **Sb** | **15 19 19.0** | **-0.9** |
| | baz=9.7 | | | | | | |
| **BWN** | **Browne** | **1.14** | **156** | | **Pn** | **15 19 04.7** | **-0.7** |
| BWN | | | | IAML | | 15 19 22.3 | |
| | comp=E,31μm,0.6s | | | | | | |
| BWN | | | | IAML | | 15 19 29.5 | |
| | comp=N,23μm,0.8s | | | | | | |
| **BWN** | **Browne** | **1.14** | **156** | | **Sn** | **15 19 21.5** | **+0.4** |
| **I53US** | **FAIRBANKS INFR** | **1.17** | **105** | Pg | **Pg** | **15 19 06.0** | **+0.2** |
| | baz=286,slow=24 | | | | | | |
| I53US | | | | Lg | Lg | 15 19 21.3 | |
| | baz=253,slow=21 | | | | | | |
| **COLA** | **College** | **1.18** | **105** | | **Pn** | **15 19 04.7** | **-1.2** |
| **COLA** | **College** | **1.18** | **105** | | **Sn** | **15 19 20.8** | **-1.3** |
| **COLA** | **College** | **1.18** | **105** | P | **Pn** | **15 19 04.7** | **-1.2** |
| | baz=287 | | | | | | |
| COLA | | | | S | **Sn** | **15 19 21.1** | **-1.0** |
| | baz=287 | | | | | | |
| **COLA** | **College** | **1.18** | **105** | *i* P | **Pn** | **15 19 04.4** | **-1.5** |
| **H24K** | **Noodor Dome** | **1.27** | **59** | | **Pn** | **15 19 06.2** | **-1.0** |
| **H24K** | **Noodor Dome** | **1.27** | **59** | P | **Pn** | **15 19 06.5** | **-0.7** |
| | baz=241,SNR=1000 | | | | | | |
| H24K | | | | S | **Sn** | **15 19 23.7** | **-0.7** |
| | baz=241 | | | | | | |
| H24K | | | | S | **Sn** | **15 19 23.7** | **-0.7** |
| | baz=241 | | | | | | |
| **WRH** | **Wood River Hil** | **1.27** | **125** | | **Pn** | **15 19 06.0** | **-1.2** |
| WRH | | | | IAML | | 15 19 24.6 | |
| | comp=N,22μm,0.6s | | | | | | |
| WRH | | | | IAML | | 15 19 25.1 | |
| | comp=E,24μm,0.6s | | | | | | |
| **CCB** | **Clear Creek Bu** | **1.28** | **115** | | **Pn** | **15 19 06.1** | **-1.3** |
| CCB | | | | IAML | | 15 19 25.1 | |
| | comp=N,16μm,1.0s | | | | | | |
| CCB | | | | IAML | | 15 19 25.4 | |
| | comp=E,23μm,0.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **1.30** | **93** | | **Pn** | **15 19 06.4** | **-1.3** |
| POKR | | | | IAML | | 15 19 26.6 | |
| | comp=N,27μm,0.6s | | | | | | |
| POKR | | | | IAML | | 15 19 26.7 | |
| | comp=E,20μm,0.7s | | | | | | |
| **POKR** | **Poker Plat Res** | **1.30** | **93** | P | **Pn** | **15 19 06.7** | **-1.0** |
| | baz=275,SNR=1000 | | | | | | |
| POKR | | | | S | **Sb** | **15 19 24.2** | **-0.6** |
| | baz=275 | | | | | | |
| **G23K** | **Bananza Creek** | **1.52** | **7** | | **Pn** | **15 19 10.6** | **-0.1** |
| G23K | | | | IAML | | 15 19 33.8 | |
| | comp=N,16μm,0.6s | | | | | | |
| **G23K** | **Bananza Creek** | **1.52** | **7** | P | **Pn** | **15 19 10.8** | **0.0** |
| | baz=188,SNR=940 | | | | | | |
| G23K | | | | S | **Sb** | **15 19 30.8** | **-0.3** |
| | baz=188 | | | | | | |
| **ILAR** | **Eielson Array** | **1.60** | **104** | Pg | **Pn** | **15 19 10.7** | **-1.2** |
| | comp=N,401nm,0.3s,baz=286,slow=17,SNR=50 | | | | | | |
| ILAR | | | | Lg | Lg | 15 19 33.0 | |
| | comp=N,2μm,0.3s,baz=294,slow=30,SNR=14 | | | | | | |
| **MCK** | **McKinley** | **1.63** | **155** | | **Pn** | **15 19 11.6** | **-0.7** |
| **MCK** | **McKinley** | **1.63** | **155** | P | **Pn** | **15 19 11.5** | **-0.8** |
| | baz=336,SNR=1000 | | | | | | |
| MCK | | | | S | **Sb** | **15 19 33.3** | **-1.0** |
| | baz=336 | | | | | | |
| **MCK** | **McKinley** | **1.63** | **155** | P | **Pn** | **15 19 11.6** | **-0.7** |
| **HDA** | **Harding Lake** | **1.72** | **116** | | **Pn** | **15 19 12.2** | **-1.3** |
| HDA | | | | IAML | | 15 19 38.5 | |
| | comp=E,17μm,0.4s | | | | | | |
| **HDA** | **Harding Lake** | **1.72** | **116** | P | **Pn** | **15 19 12.1** | **-1.3** |
| | baz=299,SNR=1000 | | | | | | |
| HDA | | | | Sb | **Sb** | **15 19 37.1** | **+0.2** |
| | baz=299 | | | | | | |
| **I20K** | **Naaghedeneel** | **1.73** | **258** | | **Pn** | **15 19 12.4** | **-1.2** |
| **I20K** | **Naaghedeneel** | **1.73** | **258** | P | **Pn** | **15 19 12.7** | **-0.9** |
| | baz=74,SNR=1000 | | | | | | |
| I20K | | | | Sg | **Sg** | **15 19 40.7** | **+1.7** |
| | baz=74 | | | | | | |
| **G22K** | **Bettles** | **1.77** | **347** | | **Pn** | **15 19 14.2** | **+0.2** |
| **G22K** | **Bettles** | **1.77** | **347** | P | **Pn** | **15 19 14.2** | **+0.2** |
| | baz=167,SNR=1000 | | | | | | |
| G22K | | | | Sb | **Sg** | **15 19 39.4** | **-0.5** |
| | baz=167 | | | | | | |
| **G21K** | **Allakaket** | **1.80** | **318** | | **Pn** | **15 19 14.2** | **-0.3** |
| **G21K** | **Allakaket** | **1.80** | **318** | P | **Pn** | **15 19 14.4** | **-0.1** |
| | baz=136,SNR=1000 | | | | | | |
| G21K | | | | S | **Sb** | **15 19 37.9** | **-1.1** |
| | baz=136 | | | | | | |
| **H20K** | **Anotleneega Mo** | **1.85** | **281** | | **Pn** | **15 19 14.1** | **-1.1** |
| **H20K** | **Anotleneega Mo** | **1.85** | **281** | P | **Pn** | **15 19 14.2** | **-1.1** |
| | baz=97,SNR=1000 | | | | | | |
| H20K | | | | Sb | **Sg** | **15 19 41.8** | **-1.0** |
| | baz=97 | | | | | | |
| **J20K** | **Nowinta River** | **1.88** | **238** | Pn | **Pn** | **15 19 14.4** | **-1.1** |
| **J20K** | **Nowinta River** | **1.88** | **238** | P | **Pn** | **15 19 14.6** | **-1.0** |
| | baz=55,SNR=1000 | | | | | | |
| J20K | | | | Sb | **Sg** | **15 19 42.4** | **-1.1** |
| | baz=55 | | | | | | |
| J20K | | | | Sb | **Sg** | **15 19 42.4** | **-1.1** |
| | baz=55 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **1.95** | **38** | | **Pn** | **15 19 15.9** | **-0.6** |
| G24K | | | | IAML | | 15 19 51.6 | |
| | comp=N,5μm,0.9s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **1.95** | **38** | P | **Pn** | **15 19 16.1** | **-0.5** |
| | baz=221,SNR=770 | | | | | | |
| G24K | | | | Sb | **Sg** | **15 19 44.7** | **-1.1** |
| | baz=221 | | | | | | |
| **RND** | **Reindeer** | **1.95** | **157** | Pn | **Pn** | **15 19 15.9** | **-0.8** |
| **RND** | **Reindeer** | **1.95** | **157** | P | **Pn** | **15 19 15.9** | **-0.8** |
| **COLD** | **Coldfoot** | **2.03** | **3** | | **Pn** | **15 19 18.1** | **+0.4** |
| **COLD** | **Coldfoot** | **2.03** | **3** | P | **Pn** | **15 19 17.9** | **+0.2** |
| | baz=184,SNR=208 | | | | | | |
| COLD | | | | Sb | **Sg** | **15 19 47.7** | **-0.7** |
| | baz=184 | | | | | | |
| **PRP** | **Porcupine Dome** | **2.11** | **79** | | **Pn** | **15 19 17.9** | **-1.0** |
| **PRP** | **Porcupine Dome** | **2.11** | **79** | IAML | | 15 19 57.0 | |
| | comp=N,7μm,0.7s | | | | | | |
| PRP | | | | IAML | | 15 19 58.2 | |
| | comp=E,6μm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **2.11** | **79** | P | **Pn** | **15 19 17.9** | **-1.0** |
| | baz=264,SNR=457 | | | | | | |
| PRP | | | | Sb | **Sb** | **15 19 49.0** | **+0.8** |
| | baz=264 | | | | | | |
| **H25L** | **Birch Creek** | **2.21** | **59** | P | **Pn** | **15 19 19.4** | **-0.7** |
| | baz=243,SNR=770 | | | | | | |
| H25L | | | | Sg | **Sg** | **15 19 55.9** | **+1.6** |
| | baz=243 | | | | | | |
| **J25K** | **Salcha River,** | **2.27** | **103** | | **Pn** | **15 19 19.8** | **-1.2** |
| **J25K** | **Salcha River,** | **2.27** | **103** | IAML | | 15 19 56.6 | |
| | comp=N,7μm,0.4s | | | | | | |
| **J25K** | **Salcha River,** | **2.27** | **103** | P | **Pn** | **15 19 19.9** | **-1.2** |
| | baz=287,SNR=144 | | | | | | |
| J25K | | | | Sb | **Sb** | **15 19 53.6** | **+0.9** |
| | baz=287 | | | | | | |
| J25K | | | | Sb | **Sb** | **15 19 53.6** | **+0.9** |
| | baz=287 | | | | | | |
| **F21K** | **Alatna River** | **2.35** | **331** | | **Pn** | **15 19 22.5** | **+0.4** |
| **F21K** | **Alatna River** | **2.35** | **331** | P | **Pn** | **15 19 22.6** | **+0.5** |
| | baz=148,SNR=848 | | | | | | |
| F21K | | | | S | **Sn** | **15 19 51.5** | **+0.4** |
| | baz=148 | | | | | | |
| **G25K** | **Bearman Lake** | **2.39** | **47** | P | **Pn** | **15 19 22.0** | **-0.5** |
| | baz=231,SNR=53 | | | | | | |
| **F22K** | **John River** | **2.40** | **345** | | **Pn** | **15 19 23.3** | **+0.5** |
| **F22K** | **John River** | **2.40** | **345** | P | **Pn** | **15 19 23.3** | **+0.5** |
| | baz=163,SNR=83 | | | | | | |
| F22K | | | | Sb | **Sg** | **15

baz=341
WAT1 S **Sn** **15 19 55.0 -0.8**
baz=341
**DHY** **Denali Highway** **2.55 146** Pn **Pn** **15 19 24.9 0.0**
**DHY** **Denali Highway** **2.55 146** P **Pn** **15 19 25.0 0.0**
baz=328,SNR=492
DHY Sb **Sb** **15 20 01.5 +0.9**
baz=328
**F24K** **Squaw Lake** **2.55 23** **Pn** **15 19 24.6 -0.2**
F24K IAML 15 20 05.8
comp=N,4µm,0.6s
F24K IAML 15 20 06.1
comp=E,6µm,0.8s
**F24K** **Squaw Lake** **2.55 23** P **Pn** **15 19 24.8 0.0**
baz=206,SNR=48
F24K Sb **Sb** **15 20 02.7 +2.1**
baz=206
**FYU** **Fort Yukon** **2.56 55** Pn **Pn** **15 19 23.6 -1.4**
FYU IAML 15 20 09.4
comp=N,4µm,0.7s
FYU IAML 15 20 14.7
comp=E,4µm,1.1s
**GCSA** **Galena City Sc** **2.75 263** P **Pn** **15 19 26.2 -1.2**
baz=78,SNR=25
GCSA Sb **Sg** **15 20 08.6 -2.8**
baz=78
**F20K** **Avaraart Lake** **2.81 313** P **Pn** **15 19 28.7 +0.3**
baz=129,SNR=398
F20K Sb **Sg** **15 20 10.7 -2.7**
baz=129
**CUT** **Chulitna** **2.82 178** **Pn** **15 19 28.6 +0.2**
**CUT** **Chulitna** **2.82 178** P **Pn** **15 19 27.8 -0.7**
baz=358,SNR=27
CUT Sb **Sb** **15 20 10.2 +1.9**
baz=358
**RIDG** **Independent Ri** **2.86 118** Pn **Pn** **15 19 27.4 -1.7**
RIDG IAML 15 20 18.9
comp=N,4µm,0.6s
RIDG IAML 15 20 21.1
comp=E,4µm,0.9s
**RIDG** **Independent Ri** **2.86 118** P **Pn** **15 19 27.3 -1.8**
baz=303,SNR=21
RIDG Sb **Sb** **15 20 11.3 +1.6**
baz=303
**G19K** **Purcell Mounta** **2.88 292** Pn **Pn** **15 19 28.1 -1.2**
G19K IAML 15 20 18.2
comp=E,4µm,0.9s
G19K IAML 15 20 21.8
comp=N,5µm,0.6s
**G19K** **Purcell Mounta** **2.88 292** P **Pn** **15 19 28.1 -1.2**
baz=106,SNR=71
G19K Sb **Sg** **15 20 12.6 -3.0**
baz=106
**E23K** **Chandalar** **2.88 7** **Pn** **15 19 30.1 +0.7**
E23K IAML 15 20 18.2
comp=N,5µm,0.7s
**E23K** **Chandalar** **2.88 7** P **Pn** **15 19 30.2 +0.7**
baz=188,SNR=81
E23K Sb **Sb** **15 20 12.8 +2.5**
baz=188
**WAT6** **Susitna Watana** **2.91 154** P **Pn** **15 19 29.8 -0.1**
baz=336,SNR=234
WAT6 Sb **Sb** **15 20 11.9 +0.8**
baz=336
**E22K** **Anaktuvuk Pass** **2.98 351** **Pn** **15 19 31.8 +1.0**
**E22K** **Anaktuvuk Pass** **2.98 351** IAML 15 20 22.2
comp=E,2µm,0.9s
**E22K** **Anaktuvuk Pass** **2.98 351** P **Pn** **15 19 31.8 +1.0**
baz=170,SNR=89
E22K Sb **Sb** **15 20 15.8 +2.7**
baz=170
**E24K** **Your Creek** **2.99 15** IAML 15 20 23.6
comp=N,4µm,0.7s
**E24K** **Your Creek** **2.99 15** P **Pn** **15 19 31.1 +0.2**
baz=197,SNR=59
E24K Sb **Sb** **15 20 15.9 +2.6**
baz=197
**J26L** **Joseph Creek** **3.05 100** **Pn** **15 19 30.8 -1.0**
**J26L** **Joseph Creek** **3.05 100** IAML 15 20 20.4
comp=N,5µm,0.8s
J26L IAML 15 20 23.7
comp=E,3µm,0.7s
**J26L** **Joseph Creek** **3.05 100** P **Pn** **15 19 30.8 -1.0**
baz=286,SNR=141
J26L Sb **Sb** **15 20 17.3 +2.1**
baz=286
J26L Sb **Sb** **15 20 17.3 +2.1**
baz=286
**SCRK** **Sand Creek** **3.07 111** Pn **Pn** **15 19 30.3 -1.8**
SCRK IAML 15 20 20.5
comp=N,3µm,0.8s
SCRK IAML 15 20 21.2
comp=E,3µm,0.8s
**SCRK** **Sand Creek** **3.07 111** P **Pn** **15 19 30.4 -1.8**
baz=296,SNR=24
SCRK Sb **Sb** **15 20 18.0 +2.2**
baz=296
**F25K** **Christian Rive** **3.09 37** **Pn** **15 19 31.8 -0.5**
**F25K** **Christian Rive** **3.09 37** P **Pn** **15 19 32.0 -0.3**
baz=222,SNR=133
F25K Sb **Sb** **15 20 19.1 +2.9**
baz=222
**I26K** **Coal Creek Min** **3.10 85** **Pn** **15 19 30.8 -1.5**
**I26K** **Coal Creek Min** **3.10 85** P **Pn** **15 19 30.7 -1.6**
baz=271
**L20K** **Farewell, AK** **3.12 210** **Pn** **15 19 31.4 -1.2**
**L20K** **Farewell, AK** **3.12 210** P **Pn** **15 19 31.5 -1.2**
baz=27
L20K Sb **Sb** **15 20 19.3 +2.2**
baz=27
L20K Sb **Sb** **15 20 19.3 +2.2**
baz=27
**PAX** **Paxson** **3.15 133** P **Pn** **15 19 33.3 +0.1**
baz=318,SNR=194
PAX S **Sn** **15 20 10.5 -0.5**
baz=318
**J18K** **Innoko River** **3.22 240** IAML 15 20 33.9
comp=E,3µm,0.5s
**J18K** **Innoko River** **3.22 240** P **Pn** **15 19 32.7 -1.3**
baz=54
**G26K** **Porcupine Rive** **3.25 54** **Pn** **15 19 33.0 -1.4**
**G26K** **Porcupine Rive** **3.25 54** P **Pn** **15 19 33.1 -1.3**
baz=241,SNR=46
G26K Sb **Sg** **15 20 25.0 -2.5**
baz=241
**SKT** **Skwentna** **3.27 188** Pn **Pn** **15 19 34.9 +0.1**
SKT IAML 15 20 26.4
comp=N,4µm,0.6s
**SKT** **Skwentna** **3.27 188** P **Pn** **15 19 35.1 +0.3**
baz=7.3,SNR=55
SKT Sb **Sb** **15 20 23.8 +2.3**
baz=7.3
**H18K** **Honhosa River** **3.31 273** P **Pn** **15 19 33.9 -1.3**
baz=86
H18K Sb **Sb** **15 20 24.9 +2.4**
baz=86
**F19K** **Shaleruckik Mo** **3.38 302** Pn **Pn** **15 19 35.8 -0.4**
F19K IAML 15 20 36.3
comp=E,2µm,1.0s
**F19K** **Shaleruckik Mo** **3.38 302** P **Pn** **15 19 35.9 -0.3**
baz=116,SNR=197
F19K Sb **Sb** **15 20 27.7 +3.2**
baz=116
**G18K** **Tagagawik** **3.46 285** IAML 15 20 40.1
comp=N,2µm,1.5s
**G18K** **Tagagawik** **3.46 285** P **Pn** **15 19 36.3 -0.9**
baz=98,SNR=97
G18K Sb **Sg** **15 20 30.9 -3.2**
baz=98
**TOLK** **Toolik Lake Re** **3.47 6** **Pn** **15 19 39.1 +1.7**
**TOLK** **Toolik Lake Re** **3.47 6** IAML 15 20 39.7
comp=N,3µm,0.8s
**TOLK** **Toolik Lake Re** **3.47 6** P **Pn** **15 19 39.1 +1.7**
baz=187,SNR=231
TOLK S **Sn** **15 20 19.6 +1.0**
baz=187
**M22K** **Willow** **3.48 177** **Pn** **15 19 37.0 -0.5**
**M22K** **Willow** **3.48 177** P **Pn** **15 19 36.7 -0.7**
baz=357,SNR=39
M22K Sb **Sb** **15 20 30.0 +2.8**
baz=357
**E21K** **Killik River** **3.52 339** IAML 15 20 39.3
comp=E,2µm,0.9s
**E21K** **Killik River** **3.52 339** P **Pn** **15 19 39.2 +1.0**
baz=156,SNR=55
**GHO** **Glory Hole Cre** **3.52 168** IAML 15 20 36.2
comp=E,2µm,0.9s
GHO IAML 15 20 36.4
comp=N,3µm,0.8s
**E19K** **Redstone River** **3.53 313** IAML 15 20 41.5
comp=E,2µm,0.8s
E19K IAML 15 20 42.0
comp=N,2µm,0.8s
**E19K** **Redstone River** **3.53 313** P **Pn** **15 19 38.5 +0.3**
baz=127
E19K Sb **Sg** **15 20 33.0 -3.4**
baz=127
**M20K** **Styx River** **3.54 201** **Pn** **15 19 37.9 -0.6**
**M20K** **Styx River** **3.54 201** IAML 15 20 35.2
comp=N,3µm,0.6s
M20K IAML 15 20 35.7
comp=E,2µm,0.7s
**M20K** **Styx River** **3.54 201** P **Pn** **15 19 37.8 -0.7**
baz=18
M20K Sb **Sb** **15 20 31.7 +2.5**
baz=18
M20K Sb **Sb** **15 20 31.7 +2.5**
baz=18
**SML** **Sawmill** **3.55 163** Pn **Pn** **15 19 38.3 -0.4**
SML IAML 15 20 35.7
comp=N,2µm,0.9s
**SML** **Sawmill** **3.55 163** P **Pn** **15 19 38.4 -0.2**
baz=345,SNR=109
SML Sb **Sb** **15 20 32.4 +2.9**
baz=345
**F26K** **Sheenjek River** **3.57 43** **Pn** **15 19 38.1 -0.7**
**F26K** **Sheenjek River** **3.57 43** P **Pn** **15 19 38.2 -0.7**
baz=229,SNR=60
F26K Sb **Sg** **15 20 34.2 -3.6**
baz=229
**L19K** **White Mountain** **3.60 214** Pn **Pn** **15 19 37.8 -1.5**
L19K IAML 15 20 45.1
comp=E,2µm,0.7s
**L19K** **White Mountain** **3.60 214** P **Pn** **15 19 38.0 -1.3**
baz=30,SNR=122
L19K Sb **Sb** **15 20 33.7 +2.8**
baz=30
L19K Sb **Sb** **15 20 33.7 +2.8**
baz=30
**M23K** **Glacier View** **3.65 159** **Pn** **15 19 39.5 -0.4**
**M23K** **Glacier View** **3.65 159** P **Pn** **15 19 39.5 -0.4**
baz=341,SNR=104
**M24K** **Tolsona, Glenn** **3.67 146** Pn **Pn** **15 19 41.0 +0.8**
M24K IAML 15 20 50.5
comp=E,2µm,0.8s
M24K IAML 15 20 51.2
comp=N,2µm,0.9s
**M24K** **Tolsona, Glenn** **3.67 146** P **Pn** **15 19 40.9 +0.8**
baz=330,SNR=116
**SCM** **Sheep Creek Mo** **3.68 156** IAML 15 20 41.5
comp=E,2µm,1.1s
SCM IAML 15 20 53.0
comp=N,3µm,0.9s
**SCM** **Sheep Creek Mo** **3.68 156** P **Pn** **15 19 40.3 -0.1**
baz=338,SNR=106
**PMR** **Palmer** **3.69 170** **Pn** **15 19 40.3 -0.1**
**PMR** **Palmer** **3.69 170** IAML 15 20 41.2
comp=E,1µm,1.0s
**PMR** **Palmer** **3.69 170** P **Pn** **15 19 40.3 -0.1**
baz=351,SNR=40
PMR Sb **Sb** **15 20 36.3 +3.1**
baz=351
**PMR** **Palmer** **3.69 170** P **Pn** **15 19 40.3 -0.1**
**HARP** **HAARP** **3.69 137** **Pn** **15 19 40.8 +0.3**
**HARP** **HAARP** **3.69 137** P **Pn** **15 19 40.0 -0.5**
baz=322
**I27K** **Kandik River** **3.74 80** **Pn** **15 19 40.0 -1.2**
**I27K** **Kandik River** **3.74 80** P **Pn** **15 19 39.9 -1.4**
baz=268,SNR=52
**M19K** **Big River Lodg** **3.75 209** IAML 15 20 39.6
comp=E,2µm,0.5s
M19K IAML 15 20 46.8
comp=N,2µm,0.6s
**M19K** **Big River Lodg** **3.75 209** P **Pn** **15 19 40.1 -1.1**
baz=26,SNR=121
**SUA** **Susitna One** **3.76 182** **Pn** **15 19 41.6 0.0**
**SUA** **Susitna One** **3.76 182** IAML 15 20 41.4
comp=E,2µm,0.7s
**SUA** **Susitna One** **3.76 182** P **Pn** **15 19 41.5 -0.1**
baz=1.3,SNR=29
**D23K** **Nanushuk River** **3.77 359** **Pn** **15 19 42.9 +1.3**
D23K IAML 15 20 49.5
comp=N,2µm,0.8s
D23K IAML 15 20 52.6
comp=E,3µm,0.9s
**D23K** **Nanushuk River** **3.77 359** P **Pn** **15 19 43.4 +1.7**
baz=179,SNR=60
**D22K** **Ayikyak River** **3.78 348** IAML 15 20 48.1
comp=N,2µm,0.7s
**D22K** **Ayikyak River** **3.78 348** P **Pn** **15 19 42.9 +1.2**
baz=166,SNR=30
**E20K** **Nigu River** **3.80 326** P **Pn** **15 19 43.5 +1.4**
baz=141,SNR=114
**K27K** **Chicken** **3.82 104** **Pn** **15 19 41.3 -0.9**
**K27K** **Chicken** **3.82 104** IAML 15 20 45.0
comp=E,2µm,1.1s
**K27K** **Chicken** **3.82 104** P **Pn** **15 19 41.2 -1.1**
baz=292
**L26K** **Log Cabin Wild** **3.83 122** P **Pn** **15 19 40.6 -1.8**
baz=308,SNR=23
**H27K** **Steamboat Moun** **3.85 71** **Pn** **15 19 41.3 -1.4**
**H27K** **Steamboat Moun** **3.85 71** P **Pn** **15 19 41.5 -1.2**
baz=259,SNR=52
**KNK** **Knik Glacier** **3.92 165** IAML 15 20 45.3
comp=N,2µm,0.6s
**KNK** **Knik Glacier** **3.92 165** P **Pn** **15 19 44.3 +0.6**
baz=347,SNR=106
**G27K** **Doyon Strip** **3.96 62** Pn **Pn** **15 19 42.7 -1.4**
**G27K** **Doyon Strip** **3.96 62** P **Pn** **15 19 42.7 -1.4**
baz=250,SNR=30
**H17K** **Granite Mounta** **3.99 270** **Pn** **15 19 43.4 -1.1**
**H17K** **Granite Mounta** **3.99 270** IAML 15 20 31.9
comp=N,1µm,0.7s
H17K IAML 15 20 57.0
comp=E,1µm,1.2s
**H17K** **Granite Mounta** **3.99 270** P **Pn** **15 19 43.4 -1.1**
baz=82
**SPCG** **Spurr Capps Gl** **3.99 191** **Pn** **15 19 44.8 0.0**
**EGAK** **Eagle** **4.00 92** Pn **Pn** **15 19 43.8 -0.9**
**EGAK** **Eagle** **4.00 92** P **Pn** **15 19 43.6 -1.1**
baz=280,SNR=50
**F18K** **Selawik** **4.00 295** **Pn** **15 19 43.8 -0.8**
**F18K** **Selawik** **4.00 295** P **Pn** **15 19 44.0 -0.7**
baz=106,SNR=30
**D24K** **Happy Valley** **4.02 9** P **Pn** **15 19 46.4 +1.5**
baz=190
**SPCP** **Crater Peak Br** **4.03 191** **Pn** **15 19 45.6 +0.4**
**SPBG** **Spurr Blockage** **4.05 193** **Pn** **15 19 46.1 +0.6**
**L18K** **Granite Mounta** **4.07 225** Pn **Pn** **15 19 44.4 -1.3**
L18K IAML 15 21 04.9
comp=E,2µm,1.3s
L18K IAML 15 21 06.1
comp=N,2µm,1.0s
**L18K** **Granite Mounta** **4.07 225** P **Pn** **15 19 44.5 -1.1**
baz=40,SNR=152
**N20K** **Mount Spurr** **4.10 192** P **Pn** **15 19 46.3 +0.2**
baz=9.9,SNR=29
**SPCR** **Spurr Chakacha** **4.10 192** P **Pn** **15 19 46.3 +0.2**
baz=9.9,SNR=18
**SPU** **Mount Spurr** **4.10 190** **Pn** **15 19 46.1 -0.1**
**J17K** **VABM Dome** **4.15 248** Pn **Pn** **15 19 45.1 -1.6**
**J17K** **VABM Dome** **4.15 248** P **Pn** **15 19 45.2 -1.6**
baz=60,SNR=126
**RC01** **Rabbit Creek A** **4.15 175** Pn **Pn** **15 19 47.5 +0.7**
**RC01** **Rabbit Creek A** **4.15 175** P **Pn** **15 19 47.3 +0.4**
baz=355,SNR=22
**K17K** **Iditarod** **4.25 237** **Pn** **15 19 46.6 -1.5**
**K17K** **Iditarod** **4.25 237** P **Pn** **15 19 46.6 -1.5**
baz=50
**WACK** **Wrangell Chich** **4.25 137** **Pn** **15 19 49.3 +0.9**
**D20K** **Etivluk River** **4.26 328** P **Pn** **15 19 49.5 +1.2**
baz=143,SNR=128
**G17K** **Kiwalik Mounta** **4.26 279** **Pn** **15 19 47.3 -0.9**
**G17K** **Kiwalik Mounta** **4.26 279** P **Pn** **15 19 47.2 -1.0**
baz=90,SNR=22
**KLU** **Klutina** **4.26 149** **Pn** **15 19 49.6 +1.1**
**KLU** **Klutina** **4.26 149** P **Pn** **15 19 49.3 +0.8**
baz=333
**C21K** **Knifeblade Rid** **4.30 339** P **Pn** **15 19 50.1 +1.3**
baz=155,SNR=41
**M26K** **Nabesna, AK** **4.36 127** P **Pn** **15 19 48.2 -1.6**
baz=313,SNR=10
**L27K** **Beaver Creek,** **4.37 116** Pn **Pn** **15 19 47.5 -2.4**
L27K IAML 15 21 01.3
comp=E,1µm,0.7s
L27K IAML 15 21 01.8
comp=N,1µm,1.0s
**L27K** **Beaver Creek,** **4.37 116** P **Pn** **15 19 47.7 -2.1**
baz=303,SNR=121
**D25K** **Kavik River** **4.43 19** **Pn** **15 19 51.5 +0.8**
**D25K** **Kavik River** **4.43 19** IAML 15 21 09.4
comp=E,861nm,1.2s
D25K IAML 15 21 16.3
comp=N,753nm,0.6s
**D25K** **Kavik River** **4.43 19** P **Pn** **15 19 51.5 +0.8**
baz=203,SNR=102
**M18K** **Stony River** **4.43 215** **Pn** **15 19 49.1 -1.5**
**M18K** **Stony River** **4.43 215** P **Pn** **15 19 49.2 -1.5**
baz=30,SNR=98
**I28M** **Miner Creek** **4.44 82** **Pn** **15 19 49.5 -1.3**
**I28M** **Miner Creek** **4.44 82** IAML 15 21 10.4
comp=N,1µm,1.1s
I28M IAML 15 21 16.8
comp=E,1µm,0.7s
**I28M** **Miner Creek** **4.44 82** P **Pn** **15 19 49.6 -1.3**
baz=272,SNR=63
**D19K** **Kuna River** **4.46 321** **Pn** **15 19 51.7 +0.7**
**D19K** **Kuna River** **4.46 321** IAML 15 21 14.3
comp=N,789nm,1.4s
D19K IAML 15 21 14.4
comp=E,891nm,1.4s
**D19K** **Kuna River** **4.46 321** P **Pn** **15 19 51.8 +0.8**
baz=134
**CAPN** **Captain Cook N** **4.47 184** P **Pn** **15 19 51.2 +0.1**
baz=3.3
**PWL** **Port Wells** **4.48 166** **Pn** **15 19 52.2 +0.9**
**PWL** **Port Wells** **4.48 166** IAML 15 21 04.1
comp=E,726nm,1.4s
PWL IAML 15 21 05.5
comp=N,1µm,0.7s
**PWL** **Port Wells** **4.48 166** P **Pn** **15 19 52.0 +0.7**
baz=348
**N25K** **Chitina, Valde** **4.49 141** **Pn** **15 19 51.9 +0.4**
**N25K** **Chitina, Valde** **4.49 141** P **Pn** **15 19 51.9 +0.4**
baz=326
**C24K** **Franklin Bluff** **4.58 8** IAML 15 21 10.4
comp=N,1µm,0.7s
**C24K** **Franklin Bluff** **4.58 8** P **Pn** **15 19 54.0 +1.3**
baz=190
**F17K** **Baldwin Pennin** **4.58 290** Pn **Pn** **15 19 52.3 -0.4**
F17K IAML 15 21 11.9
comp=N,1µm,1.2s
F17K IAML 15 21 16.1
comp=E,1µm,1.3s
**F17K** **Baldwin Pennin** **4.58 290** P **Pn** **15 19 52.4 -0.3**
baz=101
**I17K** **Unalakleet** **4.59 258** IAML 15 21 11.6
comp=N,1µm,0.7s
I17K IAML 15 21 13.6
comp=E,1µm,0.8s
**I17K** **Unalakleet** **4.59 258** P **Pn** **15 19 51.5 -1.3**
baz=69,SNR=19
**GLI** **Glacier Island** **4.62 159** **Pn** **15 19 53.6 +0.4**
GLI IAML 15 21 15.5
comp=N,715nm,0.9s
GLI IAML 15 21 15.7
comp=E,978nm,0.8s
**GLI** **Glacier Island** **4.62 159** P **Pn** **15 19 53.9 +0.7**
baz=342,SNR=34
**DIV** **Divide** **4.62 150** **Pn** **15 19 53.8 +0.4**
**E27K** **Coleen River** **4.63 46** **Pn** **15 19 52.2 -1.2**
**E27K** **Coleen River** **4.63 46** IAML 15 21 16.2
comp=E,654nm,0.9s
**E27K** **Coleen River** **4.63 46** P **Pn** **15 19 52.3 -1.1**
baz=234,SNR=35
**E18K** **Tukpahlearik C** **4.63 303** P **Pn** **15 19 54.4 +0.9**
baz=114,SNR=77
**L17K** **Donlin** **4.64 232** **Pn** **15 19 52.4 -1.1**
**L17K** **Donlin** **4.64 232** P **Pn** **15 19 52.4 -1.1**
baz=45,SNR=163
**C23K** **Itkillik River** **4.65 360** P **Pn** **15 19 54.3 +0.7**
baz=180,SNR=62
**B21K** **Ikpikpuk River** **4.70 342** IAML 15 21 21.6
comp=N,726nm,0.8s
B21K IAML 15 21 36.5
comp=E,1µm,0.8s
**B21K** **Ikpikpuk River** **4.70 342** P **Pn** **15 19 55.0 +0.6**
baz=159,SNR=36
**SLKM** **Skilak Lake** **4.72 178** **Pn** **15 19 55.8 +1.2**
**SVW2** **Sparrevohn** **4.72 211** **Pn** **15 19 53.4 -1.2**
SVW2 IAML 15 21 22.2
comp=E,1µm,0.6s
**N19K** **Bonanza Creek** **4.77 204** **Pn** **15 19 54.1 -1.3**
**N19K** **Bonanza Creek** **4.77 204** IAML 15 21 13.8
comp=E,1µm,1.4s
**N19K** **Bonanza Creek** **4.77 204** P **Pn** **15 19 54.3 -1.0**
baz=20,SNR=12
**M27K** **Edge Creek, AK** **4.78 123** **Pn** **15 19 54.8 -0.7**
**M27K** **Edge Creek, AK** **4.78 123** IAML 15 21 18.1
comp=N,886nm,0.8s
M27K IAML 15 21 19.0
comp=E,886nm,0.9s
**M27K** **Edge Creek, AK** **4.78 123** P **Pn** **15 19 54.9 -0.7**
baz=310,SNR=21
**J16K** **Anvik River** **4.81 251** Pn **Pn** **15 19 54.4 -1.4**
**J16K** **Anvik River** **4.81 251** P **Pn** **15 19 54.3 -1.4**
baz=62,SNR=62
**FID** **Port Fidalgo** **4.84 156** **Pn** **15 19 57.1 +0.9**
**GLB** **Gilahina Butte** **4.84 138** **Pn** **15 19 57.2 +0.9**
**RDWB** **Redoubt West** **4.86 194** **Pn** **15 19 56.9 +0.2**
**F28M** **Old Crow** **4.91 56** **Pn** **15 19 56.0 -1.2**
**F28M** **Old Crow** **4.91 56** IAML 15 21 32.6
comp=N,549nm,1.2s
**F28M** **Old Crow** **4.91 56** P **Pn** **15 19 56.0 -1.2**
baz=246,SNR=83
**DAWY** **Dawson** **4.92 98** P **Pn** **15 19 56.5 -0.9**
baz=288,SNR=35
**M17K** **Holitna River** **4.94 222** P **Pn** **15 19 56.2 -1.4**
baz=36,SNR=59
**E17K** **Hotham Inlet** **4.96 297** **Pn** **15 19 57.6 -0.2**
**E17K** **Hotham Inlet** **4.96 297** P **Pn** **15 19 57.1 -0.7**
baz=107,SNR=28
**G16K** **Koyuk River** **4.97 277** **Pn** **15 19 56.6 -1.4**
**G16K** **Koyuk River** **4.97 277** IAML 15 21 26.9
comp=E,863nm,0.9s
G16K IAML 15 21 27.1
comp=N,700nm,1.2s
**G16K** **Koyuk River** **4.97 277** P **Pn** **15 19 56.9 -1.2**
baz=87,SNR=9.9
**H16K** **Elim** **5.02 269** **Pn** **15 19 57.5 -1.2**
**H16K** **Elim** **5.02 269** P **Pn** **15 19 57.2 -1.5**
baz=78,SNR=9.7
**BMRM** **Bremner River** **5.03 145** **Pn** **15 19 59.3 +0.4**
**BMRM** **Bremner River** **5.03 145** P **Pn** **15 19 57.5 -1.4**
baz=330,SNR=28
**MCARA** **McCarthy VSAT** **5.11 135** P **Pn** **15 19 58.9 -1.1**
baz=322,SNR=20
**H29M** **Whitestone** **5.12 73** P **Pn** **15 19 58.7 -1.3**
baz=264,SNR=19
**I29M** **Ogilvie Camp,** **5.13 83** IAML 15 21 45.6
comp=N,931nm,0.8s
I29M IAML 15 21 50.1
comp=E,579nm,0.9s
**I29M** **Ogilvie Camp,** **5.13 83** P **Pn** **15 19 59.0 -1.2**
baz=274,SNR=20
**SEW** **Seward** **5.15 174** **Pn** **15 20 01.7 +1.2**
**SEW** **Seward** **5.15 174** P **Pn** **15 20 01.6 +1.2**
baz=355
**C27K** **Jago River** **5.15 28** **Pn** **15 20 01.6 +1.0**
**C27K** **Jago River** **5.15 28** IAML 15 21 50.0
comp=N,508nm,1.2s
**C27K** **Jago River** **5.15 28** P **Pn** **15 20 01.5 +1.0**
baz=214,SNR=49
**EYAK** **Cordova Ski Ar** **5.16 153** **Pn** **15 20 01.5 +0.9**
**EYAK** **Cordova Ski Ar** **5.16 153** P **Pn** **15 20 00.8 +0.2**
baz=337
**N18K** **Kilae Creek** **5.17 211** **Pn** **15 19 59.3 -1.5**
**N18K** **Kilae Creek** **5.17 211** IAML 15 21 26.8
comp=N,962nm,0.9s
N18K IAML 15 21 26.9
comp=E,901nm,0.7s
**N18K** **Kilae Creek** **5.17 211** P **Pn** **15 19 59.2 -1.5**
baz=26,SNR=22
**HIN** **Hinchinbrook I** **5.17 157** IAML 15 21 32.6
comp=N,506nm,0.9s
**C26K** **Camden Bay** **5.19 22** **Pn** **15 20 01.9 +0.9**
**C26K** **Camden Bay** **5.19 22** IAML 15 21 37.5
comp=N,798nm,1.4s
**C26K** **Camden Bay** **5.19 22** P **Pn** **15 20 02.0 +1.0**
baz=207
**O20K** **Slope Mountain** **5.24 192** P **Pn** **15 20 02.5 +0.7**

baz=9.7
C19K **Lookout Ridge** 5.27 322 Pn Pn 15 20 02.3 +0.2
C19K **Lookout Ridge** 5.27 322 IAML 15 21 48.3
comp=N,404nm,1.4s
C19K **Lookout Ridge** 5.27 322 P Pn 15 20 02.1 -0.1
baz=134
B22K **Teshekpuk Lake** 5.27 349 Pn Pn 15 20 02.4 +0.3
B22K IAML 15 21 38.6
comp=E,628nm,1.1s
B22K IAML 15 21 45.4
comp=N,706nm,1.5s
B22K **Teshekpuk Lake** 5.27 349 P Pn 15 20 02.2 +0.1
baz=167,SNR=22
J29N **Klondike Camp** 5.30 93 P Pn 15 20 02.7 0.0
baz=284,SNR=7.1
O19K **Port Alsworth** 5.33 201 P Pn 15 20 02.5 -0.4
baz=17
L16K **Owhat River** 5.33 233 Pn 15 20 01.6 -1.5
L16K **Owhat River** 5.33 233 IAML 15 21 43.5
comp=E,850nm,0.9s
L16K IAML 15 21 48.6
comp=N,666nm,0.7s
L16K **Owhat River** 5.33 233 P Pn 15 20 01.8 -1.2
baz=45,SNR=244
G29M **Pine Creek** 5.37 66 Pn 15 20 02.6 -0.9
G29M **Pine Creek** 5.37 66 P Pn 15 20 02.7 -0.7
baz=257,SNR=40
C18K **Utukok River** 5.43 314 P Pn 15 20 04.9 +0.5
baz=124,SNR=34
B20K **Meade River** 5.45 335 Pn 15 20 04.9 +0.4
B20K **Meade River** 5.45 335 P Pn 15 20 04.6 +0.1
baz=149,SNR=52
D27M **Malcolm River** 5.49 38 Pn 15 20 05.1 -0.1
D27M **Malcolm River** 5.49 38 P Pn 15 20 04.8 -0.4
baz=227,SNR=29
E28M **Babbage River** 5.50 47 Pn 15 20 03.6 -1.6
E28M **Babbage River** 5.50 47 P Pn 15 20 03.7 -1.6
baz=237,SNR=15
YUK2 **White River** 5.53 124 Pn 15 20 05.2 -0.6
N17K **Nushagak Hills** 5.60 216 Pn 15 20 05.7 -1.0
N17K **Nushagak Hills** 5.60 216 P Pn 15 20 05.7 -1.0
baz=30,SNR=35
CRQE **Cirque** 5.61 140 P Pn 15 20 06.5 -0.3
baz=326,SNR=12
D17K **Noatak River** 5.62 302 Pn 15 20 07.0 +0.1
D17K **Noatak River** 5.62 302 P Pn 15 20 07.0 +0.1
baz=111,SNR=14
YUK3 **Moose Creek** 5.67 123 P Pn 15 20 07.5 -0.3
baz=312
M16K **Timber Creek** 5.69 226 P Pn 15 20 06.2 -1.6
baz=39,SNR=102
K15K **Wolf Creek Mou** 5.70 244 Pn 15 20 06.0 -2.0
K15K **Wolf Creek Mou** 5.70 244 P Pn 15 20 06.4 -1.6
baz=54,SNR=20
RDOG **Red Dog Mine** 5.70 306 P Pn 15 20 08.0 0.0
baz=114,SNR=6.8
CNPM **China Poot** 5.72 184 Pn 15 20 09.6 +1.3
G15K **Niukluk** 5.72 274 Pn 15 20 07.1 -1.2
G15K **Niukluk** 5.72 274 P Pn 15 20 06.6 -1.7
baz=82
P19K **Oil Pt** 5.72 194 P Pn 15 20 08.4 +0.1
baz=12
K29M **Barlow Dome** 5.77 98 Pn 15 20 09.1 0.0
K29M **Barlow Dome** 5.77 98 P Pn 15 20 08.3 -0.9
baz=289,SNR=17
EPYK **Eagle Plains** 5.79 72 P Pn 15 20 07.6 -1.8
baz=265,SNR=12
O18K **Koktuh Hills** 5.80 204 P Pn 15 20 08.0 -1.4
baz=20
F15K **North Star Dit** 5.91 281 Pn 15 20 10.5 -0.5
F15K **North Star Dit** 5.91 281 P Pn 15 20 10.2 -0.7
baz=88,SNR=5.6
E29M **Blow River** 5.92 52 Pn Pn 15 20 09.7 -1.2
E29M **Blow River** 5.92 52 P Pn 15 20 09.8 -1.1
baz=243,SNR=30
I30M **Mount Dempster** 5.95 83 Pn 15 20 10.2 -1.3
I30M **Mount Dempster** 5.95 83 P Pn 15 20 10.2 -1.3
baz=276,SNR=35
CTG **Chitna Glacier** 5.95 131 P Pn 15 20 11.4 -0.2
baz=320,SNR=10
C17K **DeLong Mountai** 5.97 309 Pn 15 20 12.1 +0.3
C17K **DeLong Mountai** 5.97 309 P Pn 15 20 11.7 0.0
baz=118
KAIM **Kayak Island** 6.00 149 P Pn 15 20 12.4 +0.2
baz=335
M29M **Somme Creek** 6.01 112 Pn 15 20 11.4 -1.0
M29M **Somme Creek** 6.01 112 P Pn 15 20 11.6 -0.9
baz=303,SNR=70
B18K **Kokolik River** 6.04 319 Pn 15 20 12.8 +0.1
B18K **Kokolik River** 6.04 319 P Pn 15 20 12.7 +0.1
baz=128,SNR=18
A22K **Sinclair Lake** 6.05 346 P Pn 15 20 12.6 -0.3
baz=162
L15K **Ungalak Mounta** 6.06 239 Pn 15 20 11.0 -2.0
L15K **Ungalak Mounta** 6.06 239 P Pn 15 20 11.2 -1.8
baz=49,SNR=113
N16K **Nishlik Lake** 6.07 222 Pn 15 20 11.7 -1.4
N16K **Nishlik Lake** 6.07 222 P Pn 15 20 11.9 -1.3
baz=35,SNR=65
J30M **Hart River** 6.07 90 P Pn 15 20 12.6 -0.6
baz=282,SNR=32
G30M **tAoh Zraii Nji** 6.07 67 Pn 15 20 11.4 -1.8
G30M **tAoh Zraii Nji** 6.07 67 P Pn 15 20 11.5 -1.7
baz=260,SNR=23
D28M **Stokes Point** 6.15 43 Pn 15 20 15.6 +1.4
D28M **Stokes Point** 6.15 43 P Pn 15 20 14.8 +0.6
baz=233
P18K **Big Mountain,** 6.24 203 Pn 15 20 15.1 -0.4
P18K **Big Mountain,** 6.24 203 P Pn 15 20 14.7 -0.7
baz=18
J14K **Nanvaranak Lak** 6.25 253 P Pn 15 20 14.5 -1.0
baz=61
O17K **Koliganek Bris** 6.25 212 P Pn 15 20 13.9 -1.6
baz=26,SNR=11
ANM **Nome** 6.36 271 Pn 15 20 15.9 -1.2
ANM **Nome** 6.36 271 P Pn 15 20 15.9 -1.2
baz=78
ANM **Nome** 6.36 271 P Pn 15 20 15.9 -1.2
F30M **Barrier River** 6.38 61 P Pn 15 20 16.6 -0.7
baz=255,SNR=17
MESA **MESA** 6.40 138 P Pn 15 20 16.3 -1.5
baz=326
A19K **Wainwright** 6.42 326 P Pn 15 20 18.3 +0.5
baz=136
O28M **Mount Upton** 6.47 129 P Pn 15 20 19.4 +0.5
baz=318,SNR=11
Q19K **Cape Douglas,** 6.47 195 P Pn 15 20 19.0 +0.3
baz=12
M15K **Kasigluk River** 6.48 230 P Pn 15 20 17.3 -1.5
baz=41,SNR=34
A21K **Barrow** 6.54 342 P Pn 15 20 19.2 -0.3
baz=157
M30M **Minto, Yukon** 6.60 107 Pn 15 20 19.6 -0.9
M30M **Minto, Yukon** 6.60 107 P Pn 15 20 19.5 -0.9
baz=300,SNR=10
C16K **Lisburne Hills** 6.62 304 Pn 15 20 20.7 0.0
C16K **Lisburne Hills** 6.62 304 P Pn 15 20 20.7 0.0
baz=111
F14K **Arctic Creek** 6.62 279 P Pn 15 20 19.9 -0.7
baz=85
P17K **Kvichak River** 6.64 207 P Pn 15 20 20.1 -0.8
baz=22
O16K **Kokwok River B** 6.64 215 Pn 15 20 19.2 -1.8
O16K **Kokwok River B** 6.64 215 P Pn 15 20 18.7 -2.3
baz=29
Q20K **Shuyak Island** 6.68 188 P Pn 15 20 20.4 -1.1
baz=6.7
N15K **Kwethluk River** 6.70 225 Pn 15 20 20.3 -1.5
N15K **Kwethluk River** 6.70 225 P Pn 15 20 20.2 -1.7
baz=37,SNR=22
L14K **Kuka Creek** 6.72 240 P Pn 15 20 20.5 -1.5
baz=49,SNR=53
H31M **Peel River** 6.75 78 Pn 15 20 20.3 -2.2
H31M **Peel River** 6.75 78 P Pn 15 20 21.0 -1.5
baz=272,SNR=17
G31M **Satah River** 6.82 68 Pn 15 20 21.3 -2.1
G31M **Satah River** 6.82 68 P Pn 15 20 21.3 -2.1
baz=263
M14K **Bethel** 6.87 235 P Pn 15 20 23.0 -1.0
baz=44,SNR=55
Q18K **Katmai Hardscr** 6.92 200 P Pn 15 20 23.9 -0.9
baz=16,SNR=14
F31M **Tsiigehtchic** 7.11 64 P Pn 15 20 25.3 -2.0
baz=260
K13K **Kusilvak Mount** 7.11 249 P Pn 15 20 25.5 -1.9
baz=56
N30M **Aishikik Lake** 7.11 116 P Pn 15 20 27.1 -0.3
baz=308,SNR=20
P16K **Nushagak River** 7.12 213 P Pn 15 20 26.0 -1.5
baz=26
TNA **Tin City** 7.28 281 P Pn 15 20 29.4 -0.2
baz=85
N14K **Kuskokwak Cree** 7.39 229 P Pn 15 20 29.5 -1.7
baz=39
INK **Inuvik** 7.39 58 Pn Pn 15 20 30.1 -1.1
comp=N,4.3nm,0.3s,baz=260,slow=14,SNR=16
INK Sn Sn 15 21 52.2 -2.8
comp=N,2.4nm,0.3s,baz=261,slow=15,SNR=2.0
comp=N,10nm,0.4s
INK **Inuvik** 7.39 58 P Pn 15 20 30.6 -0.6
baz=253,SNR=13
Q17K **Contact Creek** 7.42 203 P Pn 15 20 31.5 -0.3
baz=18
O15K **Ungalikthiuk R** 7.45 220 P Pn 15 20 30.8 -1.2
baz=32,SNR=12
KDAK **Kodiak Island** 7.52 189 Pn Pn 15 20 33.1 +0.1
comp=N,2.0nm,0.3s,baz=63,slow=11,SNR=34
KDAK Sn Sn 15 21 55.6 -2.6
comp=N,1.3nm,0.3s,baz=286,slow=11,SNR=1.5
KDAK LR LR 15 23 14.3
comp=N,405nm,18.0s,baz=35,slow=35
comp=N,7.6nm,0.4s
KDAK **Kodiak Island** 7.52 189 P Pn 15 20 32.8 -0.2
baz=6.6
KDAK **Kodiak Island** 7.52 189 *i* P Pn 15 20 32.9 -0.1
M13K **Dall Lake** 7.59 237 Pn 15 20 33.5 -0.4
M13K **Dall Lake** 7.59 237 P Pn 15 20 32.8 -1.1
baz=45,SNR=9.3
N31M **Braeburn, Yuko** 7.60 113 P Pn 15 20 33.7 -0.4
baz=306,SNR=9.0
M31M **Drury Creek, Y** 7.76 105 P Pn 15 20 35.8 -0.5
baz=300
O14K **Tigvukauivet M** 7.80 225 P Pn 15 20 35.3 -1.5
baz=35
O30N **Mendenhall** 7.92 118 P Pn 15 20 37.4 -1.2
baz=310,SNR=10
P30M **Million Dollar** 8.05 123 P Pn 15 20 41.8 +1.5
baz=315
R17L **Mt. Peulik Vol** 8.10 203 P Pn 15 20 40.9 -0.1
baz=18
OHAK **Old Harbor** 8.13 191 P Pn 15 20 41.1 -0.2
baz=8.2
P29M **Windy Craggy** 8.14 127 P Pn 15 20 41.2 -0.3
baz=319
FARO **Faro, Yukon** 8.17 104 P Pn 15 20 42.5 +0.4
baz=299,SNR=13
WHY **Whitehorse** 8.45 115 P Pn 15 20 45.1 -0.8
baz=309
M11K **Mekoryuk** 8.65 243 P Pn 15 20 47.3 -1.1
baz=49
PLBC **Pleasant Camp** 8.74 125 P Pn 15 20 49.1 -0.6
baz=317
N32M **Quiet Lake** 8.86 109 P Pn 15 20 50.3 -1.1
baz=305
GAMB **Gambell** 9.24 271 P Pn 15 20 55.5 -1.0
baz=72
P33M **Teslin, Yukon** 9.53 114 P Pn 15 21 00.8 +0.2
baz=309
P32M **Atlin** 9.60 118 P Pn 15 21 02.0 +0.5
baz=313
S14K **Fog Glacier** 9.97 210 P Pn 15 21 06.6 -0.1
baz=22
R32K **Eaglecrest** 10.26 125 P Pn 15 21 06.9 -3.6
baz=319
Q32M **Nakina River** 10.57 118 Pn 15 21 14.7 -0.3
Q32M **Nakina River** 10.57 118 P Pn 15 21 14.7 -0.3
baz=314
TGTN **Hyland Airport** 10.62 100 P Pn 15 21 14.9 -0.5
baz=300
R33M **Jennings River** 10.77 114 P Pn 15 21 17.0 -0.6
baz=311
C36M **Paulatuk** 10.97 56 Pn 15 21 17.3 -2.9
C36M **Paulatuk** 10.97 56 P Pn 15 21 18.1 -2.1
baz=260,SNR=7.6
S12K **Black Hills** 11.09 216 P Pn 15 21 23.3 +1.4
baz=26
A36M **Sachs Harbour** 11.36 42 Pn Pn 15 21 24.3 -1.2
A36M **Sachs Harbour** 11.36 42 P Pn 15 21 25.4 -0.1
baz=246,SNR=31
S34M **Telegraph Cree** 11.74 119 P Pn 15 21 30.1 -0.7
baz=316
DLBC **Dease Lake** 11.78 116 Pn 15 21 30.6 -0.8
DLBC **Dease Lake** 11.78 116 Pn Pn 15 21 31.3 -0.1
comp=N,0.6nm,0.3s,baz=302,slow=11,SNR=8.3
DLBC LR LR 15 26 31.1
comp=N,90nm,20.1s,baz=338,slow=40
DLBC **Dease Lake** 11.78 116 P Pn 15 21 30.7 -0.6
baz=314
WRGLY **Wrigley** 11.90 87 P Pn 15 21 32.3 -0.7
baz=292
SPIA **Saint Paul Isl** 12.41 239 P Pn 15 21 39.7 -0.2
baz=41
LIRD **Liard River Hi** 12.69 106 P Pn 15 21 43.8 0.0
baz=308
T35M **Bob Quinn** 12.75 121 P Pn 15 21 45.6 +1.0
baz=319
KOTAN **Kotaneelee Air** 13.11 100 P Pn 15 21 50.1 +0.7
baz=304
TOAD **Toad River Com** 13.39 107 P Pn 15 21 53.0 -0.3
baz=309
YKA **Yellowknife Ar** 15.92 83 Pn Pn 15 22 21.6 -5.6
comp=N,0.3nm,0.3s,baz=296,slow=13,SNR=4.4
YKA LR LR 15 29 01.1
comp=N,117nm,21.9s,baz=222,slow=39
comp=N,1.3nm,0.9s
YKA **Yellowknife Ar** 15.92 83 *i* P Pn 15 22 27.7 +0.6
YKA pmax pmax
comp=Z,3.0nm,0.6s
BILL **Bilibino** 17.11 299 *e*P Pn 15 22 41.3 -1.0
BILL *e*S Sn 15 25 50.3 -2.0
BILL pmax pmax
comp=Z,14nm,1.1s
BILL MLR MLR
comp=Z,146nm,14.0s
BBB **Bella Bella** 17.34 128 LR LR 15 29 43.4
comp=Z,63nm,19.6s,baz=328,slow=38
RES **Resolute Bay** 20.37 39 P P 15 23 19.5 -0.2
comp=Z,3.7nm,0.8s,baz=270,slow=5.1,SNR=1.5
RES LR LR 15 33 37.5
comp=Z,62nm,19.5s,baz=5.5,slow=44
comp=Z,3.7nm,0.8s
SEY **Seymchan** 24.34 291 *e*P P 15 24 00.5 -0.5
SEY pmax pmax
comp=Z,9.0nm,1.5s
NEW **Newport** 24.52 118 LR LR 15 33 21.0
comp=Z,106nm,18.2s,baz=323,slow=36
E07A **Sunnyside** 24.96 124 P P 15 24 06.1 -0.7
E07A IAmb IAmb 15 24 09.3
comp=Z,9.8nm,0.6s
MA2 **Magadan** 26.88 286 LR LR 15 36 45.3
comp=Z,49nm,18.6s,baz=60,slow=40
MA2 **Magadan** 26.88 286 *i* P P 15 24 21.7 -2.3
MA2 pmax pmax
comp=Z,19nm,1.4s
OVMT **Ovando** 27.07 114 P P 15 24 25.4 -0.7
TIXI **Tiksi** 28.13 318 LR LR 15 38 36.5
comp=Z,55nm,19.5s,baz=65,slow=42
TIXI **Tiksi** 28.13 318 *i* P P 15 24 34.4 -0.7
TIXI pmax pmax
comp=Z,4.0nm,1.1s
PETK **Petropavlovsk-** 28.27 270 LR LR 15 35 46.2
comp=Z,92nm,20.0s,baz=38,slow=36
YBH **Yreka Blue Hor** 28.30 133 LR LR 15 34 35.4
comp=Z,70nm,18.8s,baz=352,slow=34
ULM **Lac du Bonnet** 31.58 91 P P 15 25 06.4 +0.6
comp=Z,3.6nm,0.9s,baz=329,slow=5.9,SNR=4.2
ULM LR LR 15 39 11.2
comp=Z,40nm,19.9s,baz=4.0,slow=39
comp=Z,3.6nm,0.9s
ULM **Lac du Bonnet** 31.58 91 *i* P P 15 25 05.6 -0.2
ELK **Elko** 31.67 123 LR LR 15 38 07.9
comp=Z,71nm,19.0s,baz=338,slow=37
PDAR **Pinedale Array** 32.01 114 P P 15 25 11.5 +1.6
comp=Z,5.5nm,0.9s,baz=335,slow=6.6,SNR=25
PDAR LR LR 15 38 54.9
comp=Z,36nm,18.4s,baz=340,slow=38
comp=Z,5.5nm,0.9s
NVAR **Mina Array Bea** 32.70 129 P P 15 25 18.0 +2.0
comp=Z,2.5nm,0.8s,baz=312,slow=7.5,SNR=16
comp=Z,2.5nm,0.8s
YAK **Yakutsk** 33.40 303 *i* P P 15 25 22.0 +0.4
YAK pmax pmax
comp=Z,7.0nm,0.8s
R11B **Troy Canyon, C** 33.69 126 P P 15 25 24.8 +0.2
baz=334,SNR=12
N23A **Red Feather La** 35.01 112 P P 15 25 36.2 +0.1
baz=329
PFO **Pinyon Flats O** 37.71 130 LR LR 15 40 18.2
comp=Z,49nm,19.6s,baz=210,slow=34
YSS **Yuzh-Sakhalins** 39.22 276 *e*P P 15 26 13.3 +1.9
YSS pmax pmax
comp=Z,10.0nm,1.2s
YSS MLR MLR
comp=Z,100nm,16.0s
SCHQ **Schefferville** 39.96 64 LR LR 15 42 20.1
comp=Z,38nm,21.1s,baz=302,slow=36
ANMO **Albuquerque** 40.01 117 LR LR 15 43 05.8
comp=Z,46nm,18.2s,baz=350,slow=37
ANMO **Albuquerque** 40.01 117 *i* P P 15 26 17.7 -0.7
ANMO pmax pmax
comp=Z,2.0nm,1.3s
ZEA **Zeya** 40.25 294 *e*P P 15 26 25.2 +5.3
ASAJ **Asahikawa** 41.56 273 LR LR 15 43 48.0
comp=Z,43nm,20.0s,baz=44,slow=36
KLR **Kul'dur** 41.97 287 LR LR 15 43 17.7
comp=Z,53nm,18.9s,baz=45,slow=35
KLR **Kul'dur** 41.97 287 *ce*P P 15 26 34.7 +0.6
KLR pmax pmax
comp=Z,8.0nm,1.8s
SADO **Sadowa** 42.91 82 LR LR 15 45 00.9
comp=Z,82nm,18.1s,baz=144,slow=37
BORG **Borgarnes** 45.18 28 LR LR 15 48 23.2
comp=Z,14nm,20.1s,baz=329,slow=40
MIAR **Mount Ida** 45.44 104 P P 15 27 01.9 -0.2
MIAR IAmb IAmb 15 27 12.4
comp=Z,4.9nm,0.8s
MIAR **Mount Ida** 45.44 104 P P 15 27 01.9 -0.2
MIAR pmax pmax
comp=Z,5.0nm,0.9s
ARCES **ARCESS Array B** 45.50 2 LR LR 15 48 11.2
comp=Z,14nm,20.2s,baz=327,slow=39
TXAR **Lajitas Array** 46.07 118 P P 15 27 09.4 +2.0
comp=Z,2.0nm,0.8s,baz=336,slow=5.9,SNR=10
comp=Z,2.0nm,0.8s
HIA **Hailar** 46.66 296 *i* P P 15 27 11.9 +0.2
HIA pmax pmax
comp=Z,4.0nm,0.5s
LVZ **Lovozero** 47.12 357 *i* P P 15 27 14.1 -1.0
LVZ pmax pmax
comp=Z,12nm,1.3s
LPIG **La Paz** 48.51 128 LR LR 15 46 13.5
comp=Z,63nm,19.8s,baz=10.0,slow=34
TKL **Tuckaleechee C** 48.56 94 LR LR 15 48 56.4
comp=Z,66nm,18.8s,baz=324,slow=37
SONM **Songino Array** 52.72 304 P P 15 27 57.8 -0.2
comp=Z,0.3nm,0.6s,baz=42,slow=6.3,SNR=2.7
SONM LR LR 15 52 59.5
comp=Z,61nm,19.6s,baz=70,slow=39
comp=Z,0.3nm,0.6s
KSRS **Korea Array** 53.25 281 LR LR 15 50 04.9
comp=Z,16nm,21.3s,baz=65,slow=35
FINES **FINESS Army B** 53.63 2 P P 15 28 04.3 0.0
comp=Z,1.1nm,0.8s,baz=14,slow=6.3,SNR=2.1
comp=Z,1.1nm,0.8s
ZALV **Zalesovo Beam** 53.87 323 P P 15 28 06.0 -0.1
comp=Z,1.2nm,0.6s,baz=14,slow=7.2,SNR=3.3
ZALV LR LR 15 54 09.4
comp=Z,29nm,18.9s,baz=56,slow=40
comp=Z,1.2nm,0.6s
HFS **Hagfors** 54.41 10 P P 15 28 11.0 +1.0
comp=Z,2.7nm,1.0s,baz=73,slow=4.8,SNR=2.0
comp=Z,2.7nm,1.0s
HFS **Hagfors** 54.41 10 P P 15 28 11.0 +1.0
JNU **Nakatsue** 55.73 275 LR LR 15 52 23.4
comp=Z,20nm,18.6s,baz=46,slow=36
ARU **Arti** 56.68 341 *c* P P 15 28 26.8 +0.4
ARU 15 30 31.8
ARU S S 15 36 19.8 +1.4
ARU SS SS 15 40 02.6 -2.5
ARU pmax pmax
comp=Z,6.0nm,1.9s
HHC **Hu-ho-hao-te** 56.86 296 *e*P P 15 28 24.5 -3.5
HHC pP pP 15 28 29.0 -1.9
HHC sP sP 15 28 32.0 0.0
HHC pmax pmax
comp=Z,20nm,0.5s
HHC pmax pmax
comp=Z,84nm,4.5s
HHC LR LR
comp=N,170nm,17.8s
HHC LR LR
comp=E,220nm,18.2s
HHC LR LR
comp=Z,100nm,13.5s
DGZ **Jazzator, Alta** 57.02 319 *i* P P 15 28 29.2 +0.1
DGZ pmax pmax
comp=Z,4.0nm,1.6s
EKA **Eskdalemuir Ar** 57.23 22 P P 15 28 30.9 +0.6
comp=Z,0.5nm,0.5s,baz=345,slow=6.2,SNR=1.5
comp=Z,0.5nm,0.5s
BRVK **Borovoye** 57.97 332 *i* P P 15 28 35.9 +0.4
BRVK pmax pmax
comp=Z,2.0nm,0.8s
BVAR **Borovoye Array** 57.98 332 P P 15 28 35.7 +0.1
comp=Z,0.9nm,0.6s,baz=24,slow=11,SNR=6.5
comp=Z,0.9nm,0.6s
KURK **Kurchatov** 58.36 326 *i* P P 15 28 37.9 -0.4
KURK pmax pmax
comp=Z,6.0nm,2.1s
KURBB **Kurchatov Arra** 58.47 326 P P 15 28 38.9 -0.1
comp=Z,0.2nm,0.2s,baz=29,slow=7.7,SNR=1.6
comp=Z,0.2nm,0.2s
HNS **HongShan** 58.64 292 ⇑P P 15 28 46.5 +6.1
HNS pmax pmax
comp=Z,8.0nm,0.9s
OBN **Obninsk** 59.88 355 *e*P P 15 28 49.0 +0.3
OBN pmax pmax
comp=Z,5.0nm,0.7s
MKAR **Makanchi Array** 61.07 321 P P 15 28 56.6 -0.5
comp=Z,0.5nm,0.7s,baz=52,slow=7.9,SNR=3.9
MKAR LR LR 15 58 33.2
comp=Z,37nm,18.8s,baz=2.0,slow=39
comp=Z,0.5nm,0.7s
WMQ **Urumqi** 62.30 316 *e*P P 15 29 08.8 +3.4
WMQ pmax pmax
comp=Z,14nm,0.7s
GTA **Gaotai** 62.39 305 P P 15 29 11.8 +5.6
GTA sP sP 15 29 27.0 +17
GTA pmax pmax
comp=Z,2.0nm,0.9s
GTA LR LR
comp=N,69nm,16.4s
GTA LR LR
comp=E,98nm,15.6s
GTA LR LR
comp=Z,96nm,16.0s
CLL **Collm** 63.12 12 *e*P P 15 29 10.0 -0.7
LZH **Lanzhou** 63.92 300 *e*P P 15 29 22.0 +5.6
LZH sP sP 15 29 29.5 +9.1
LZH pmax pmax
comp=Z,6.0nm,1.2s
AKASG **Malin Array Be** 64.42 0 P P 15 29 20.6 +1.4
comp=Z,1.0nm,0.5s,baz=360,slow=6.6,SNR=1.6
comp=Z,1.0nm,0.5s
AKBB **Malin Array Si** 64.42 0 *i* P P 15 29 19.6 +0.3
AKBB pmax pmax
comp=Z,4.0nm,1.1s
AAK **Ala-Archa** 66.92 325 LR LR 16 04 58.0
comp=Z,16nm,20.8s,baz=52,slow=42
GUMO **Guam** 67.20 252 LR LR 15 58 54.9
comp=Z,12nm,19.1s,baz=24,slow=36
JTS **Las Juntas de** 70.57 108 LR LR 16 04 23.6
comp=Z,30nm,18.1s,baz=360,slow=39
ESDC **Sonseca Array** 72.24 27 P P 15 30 11.1 +2.6
comp=Z,1.1nm,1.0s,baz=353,slow=5.2,SNR=4.7
ESDC LR LR 16 03 49.7
comp=Z,17nm,20.5s,baz=348,slow=38
AKT **Akhty** 72.69 346 *e*P P 15 30 12.4 +1.2
AKT pmax pmax
comp=Z,4.0nm,0.5s
BRTR **Keskin Array B** 75.35 357 P P 15 30 26.5 -0.3
comp=Z,0.1nm,0.3s,baz=330,slow=5.5,SNR=2.5
comp=Z,0.1nm,0.3s
PCRV **Puerto La Cruz** 79.11 89 LR LR 16 07 18.7
comp=Z,12nm,18.7s,slow=37
DAV **Davao City (W)** 81.07 267 LR LR 16 09 20.4
comp=Z,7.8nm,19.3s,baz=356,slow=37
CMAR **Chiang Mai Arr** 81.67 296 P P 15 31 01.4 -0.4
comp=Z,0.5nm,0.4s,baz=8.9,slow=6.7,SNR=5.2
CMAR LR LR 16 10 17.0
comp=Z,49nm,18.4s,baz=260,slow=38
comp=Z,0.5nm,0.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **81.67** | **296** | *i* P | | **P** | **15 31 03.7** | **+1.9** |
| **MDP** | **Montagnes des** | **88.71** | **81** | LR | | LR | 16 11 00.3 | |
| | comp=Z,15nm,20.6s,baz=345,slow=35 | | | | | | | |
| **ATAH** | **Atahualpa** | **89.05** | **109** | LR | | LR | 16 13 47.9 | |
| | comp=Z,19nm,19.4s,baz=49,slow=37 | | | | | | | |

*SDD* ***28*** *15:20:50.2±1.6, 19°.36N×69°.37W, h19km±27km, MD3.3, ML3.2, MWW3.5*
*OSPL* ***28*** *15:20:51.2±2.8, 19°.28N×69°.23W, h0km±13km, ML3.1*
**ISC 28 15:20:49.3**±1.2, **19°.34N**±0°.06×**69°.36W**±0°.03, **h17**km±10km, **n15**, σ1§**29**/23, **2C-1D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NADR** | **Nagua** | **0.47** | **272** | ⇑*e*Pg | **Pg** | **15 20 58.7** | **-0.1** |
| NADR | | | | *e*Sg | **Sg** | **15 21 05.3** | **+0.1** |
| NADR | | | | IAML | | 15 21 10.6 | |
| | comp=N,3μm,0.2s | | | | | | |
| **LONA1** | **Toro Cenizo, N** | **0.48** | **275** | *i* P | **Pn** | **15 21 01.0** | **-0.3** |
| LONA1 | | | | *e*S | **Sn** | **15 21 10.2** | **+0.8** |
| LONA1 | | | | IAML | | 15 21 14.3 | |
| | comp=Z,2μm,1.2s | | | | | | |
| **HIDR** | **Higuey Centro** | **0.96** | **141** | IAML | | 15 21 18.8 | |
| | comp=N,2μm,0.3s | | | | | | |
| **SDD** | **Santo Domingo** | **1.02** | **211** | *i* P | **Pb** | **15 21 07.1** | **-1.4** |
| **PCDR** | **Punta Cana, DR** | **1.24** | **132** | *i* P | **Pn** | **15 21 10.7** | **-1.1** |
| PCDR | | | | *e*S | **Sb** | **15 21 26.1** | **-1.8** |
| PCDR | | | | IAML | | 15 21 32.3 | |
| | comp=Z,262nm,1.1s | | | | | | |
| **SC01** | **Santiago de lo** | **1.30** | **274** | *i* P | **Pg** | **15 21 15.9** | **+1.6** |
| SC01 | | | | IAML | | 15 21 46.7 | |
| | comp=Z,206nm,0.6s | | | | | | |
| **ABDR** | **Alto Bandera** | **1.31** | **247** | ⇓*e*Pg | **Pn** | **15 21 13.5** | **+0.3** |
| ABDR | | | | *e*Sg | **Sn** | **15 21 30.4** | **0.0** |
| ABDR | | | | IAML | | 15 21 39.9 | |
| | comp=N,317nm,0.6s | | | | | | |
| **BANI** | **BANI** | **1.34** | **225** | *e*Pg | **Pn** | **15 21 13.1** | **-0.2** |
| BANI | | | | *e*Sg | **Sn** | **15 21 29.7** | **-1.1** |
| BANI | | | | IAML | | 15 21 32.4 | |
| | comp=N,321nm,0.3s | | | | | | |
| **SDDR** | **Presa de Saban** | **1.86** | **259** | *i* P | **Pg** | **15 21 24.7** | **-0.4** |
| SDDR | | | | IAML | | 15 21 56.5 | |
| | comp=Z,119nm,0.6s | | | | | | |
| **LOBA2** | **Hotel Casa Bon** | **2.07** | **233** | *e*Pg | **Pn** | **15 21 25.3** | **+2.1** |
| LOBA2 | | | | *e*Sg | **Sb** | **15 21 52.4** | **+0.6** |
| LOBA2 | | | | IAML | | 15 22 01.4 | |
| | comp=N,36nm,0.7s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.51** | **122** | *e*Pg | **Pb** | **15 21 34.1** | **+0.2** |
| CRPR | | | | *e*Sg | **Sb** | **15 22 07.0** | **+2.4** |
| CRPR | | | | IAML | | 15 22 14.5 | |
| | comp=N,54nm,0.3s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.66** | **111** | *e*Pg | **Pb** | **15 21 36.7** | **+0.2** |
| AOPR | | | | *e*Sg | **Sb** | **15 22 10.0** | **+1.2** |
| AOPR | | | | IAML | | 15 22 16.6 | |
| | comp=N,372nm,0.4s | | | | | | |
| **GRTK** | **Grand Turk** | **2.73** | **323** | *e*Pg | **Pb** | **15 21 36.2** | **-1.4** |
| GRTK | | | | IAML | | 15 22 34.7 | |
| | comp=N,67nm,1.2s | | | | | | |
| **GRTK** | **Grand Turk** | **2.73** | **323** | *i* P | **Pb** | **15 21 36.2** | **-1.4** |
| GRTK | | | | IAML | | 15 22 05.8 | |
| | comp=Z,65nm,1.4s | | | | | | |
| **CELP** | **Cerrillos** | **2.92** | **115** | ⇑*e*Pg | **Pb** | **15 21 39.0** | **-1.9** |
| CELP | | | | *e*Sg | **Sb** | **15 22 17.5** | **+1.2** |
| CELP | | | | IAML | | 15 22 21.5 | |
| | comp=N,142nm,0.7s | | | | | | |

*IDC* ***28*** *15:30:08.4±1.2, 27°.93N×101°.40E, h0km, mb3.5/5, mbtmp3.5/6, ML3.7/1, MS3.4/1, Error ellipse: s-maj=36.8km s-min=20.1km az=84.0*
**ISC 28 15:30:08.4**±1.0, **27°.78N**±0°.07×**101°.11E**±0°.08, **h10**km, **n9**, σ1§**43**/11, **mb3.5/4, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PZH** | **PanZhiHua** | **1.39** | **156** | Pg | **Pn** | **15 30 33.5** | **-0.5** |
| PZH | | | | Sg | **Sb** | **15 30 52.3** | **-0.1** |
| PZH | | | | smax | smax | | |
| | comp=N,1μm,0.8s | | | | | | |
| PZH | | | | smax | smax | | |
| | comp=E,1μm,0.7s | | | | | | |
| **TNCH** | **TengChong** | **3.59** | **221** | Pn | **Pn** | **15 31 03.5** | **-0.9** |
| TNCH | | | | Pg | **Pg** | **15 31 16.5** | **-0.8** |
| TNCH | | | | Sn | **Sn** | **15 31 47.5** | **+0.5** |
| TNCH | | | | Sg | **Sg** | **15 32 04.3** | **+0.4** |
| TNCH | | | | smax | smax | | |
| | comp=N,110nm,1.7s | | | | | | |
| TNCH | | | | smax | smax | | |
| | comp=E,110nm,1.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=N,190nm,2.5s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,310nm,2.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **9.49** | **193** | Pn | Pn | 15 32 31.0 | +5.7 |
| | comp=E,0.2nm,0.3s,baz=6.1,slow=12,SNR=2.1 | | | | | | |
| CMAR | | | | Lg | Lg | 15 35 13.0 | |
| | baz=359,slow=27 | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **20.44** | **10** | P | **P** | **15 34 45.0** | **-1.0** |
| | comp=E,0.4nm,0.4s,baz=199,slow=12,SNR=3.0 | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.07** | **327** | P | **P** | **15 35 25.5** | **+1.6** |
| | comp=E,1.1nm,0.8s,baz=141,slow=8.6,SNR=9.8 | | | | | | |
| | comp=E,1.1nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **24.48** | **60** | P | **P** | **15 35 26.4** | **-1.4** |
| | comp=E,1.2nm,0.9s,baz=246,slow=11,SNR=2.8 | | | | | | |
| | comp=E,1.2nm,0.9s | | | | | | |
| **BELG** | **Belogornoye** | **46.41** | **317** | LR | LR | 15 59 40.1 | |
| | comp=E,41nm,18.8s,baz=40,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.31** | **142** | P | **P** | **15 39 56.4** | **-0.3** |
| | comp=E,1.5nm,0.9s,baz=331,slow=7.9,SNR=7.2 | | | | | | |
| | comp=E,1.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **60.14** | **145** | P | **P** | **15 40 19.3** | **+2.9** |
| | comp=E,0.2nm,0.5s,baz=328,slow=6.8,SNR=8.2 | | | | | | |
| | comp=E,0.2nm,0.5s | | | | | | |

*IDC* ***28*** *15:30:53.1±1.1, 42°.64N×48°.33E, h0km, mb3.5/6, mbtmp3.7/12, ML3.3/6, MS3.2/1, Error ellipse: s-maj=19.2km s-min=10.1km az=155.0*
*DRS* ***28*** *15:30:55.9, 42°.62N×48°.40E, h15km*
*NORS* ***28*** *15:30:56.4, 42°.70N×48°.40E, h6km, MPVA4.3*
*MOS* ***28*** *15:30:56.1, 42°.60N×48°.35E, h19km, MPVA4.3*
**ISC 28 15:30:54.9**±1.3, **42°.63N**±0°.02×**48°.48E**±0°.03, **h13**km±8km, **n114**, σ1§**65**/180, **mb3.6**/10, **4C-5D, Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DRN** | **Derbent** | **0.60** | **190** | *e*Pg | **Pn** | **15 31 09.4** | **+0.4** |
| DRN | | | | *e*Sg | **Sn** | **15 31 19.3** | **+0.6** |
| **DRN** | **Derbent** | **0.60** | **190** | *e*PG | **Pn** | **15 31 09.7** | **+0.7** |
| DRN | | | | *e*S | **Sn** | **15 31 19.2** | **+0.6** |
| DRN | | | | pmax | pmax | | |
| | comp=Z,593nm,0.7s | | | | | | |
| DRN | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | |
| **SGKR** | **Sergokala** | **0.63** | **255** | *e*Pg | **Pb** | **15 31 08.4** | **+0.7** |
| SGKR | | | | *e*Sg | **Sb** | **15 31 17.3** | **+1.0** |
| **SGKR** | **Sergokala** | **0.63** | **255** | *e*PG | **Pb** | **15 31 08.4** | **+0.7** |
| SGKR | | | | *e*S | **Sb** | **15 31 17.3** | **+1.0** |
| **URKR** | **Urkarakh** | **0.78** | **234** | *e*Pg | **Pb** | **15 31 10.6** | **+0.3** |
| URKR | | | | *e*Sg | **Sb** | **15 31 21.8** | **+1.1** |
| **URKR** | **Urkarakh** | **0.78** | **234** | *e*PG | **Pb** | **15 31 10.6** | **+0.3** |
| URKR | | | | *e*S | **Sb** | **15 31 21.8** | **+1.1** |
| **MAK** | **Makhachkala** | **0.79** | **295** | *e*Pg | **Pg** | **15 31 09.5** | **-0.7** |
| MAK | | | | *e*Sg | **Sb** | **15 31 20.9** | **-0.1** |
| **MAK** | **Makhachkala** | **0.79** | **295** | ⇑*i*PG | **Pn** | **15 31 12.3** | **+0.7** |
| MAK | | | | *e* | | 15 31 21.6 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,268nm,0.2s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,3μm,0.5s | | | | | | |
| **KANR** | **Karaman** | **0.92** | **309** | *e*Pg | **Pb** | **15 31 13.6** | **+0.9** |
| KANR | | | | *e*Sg | **Sb** | **15 31 26.7** | **+1.9** |
| **KANR** | **Karaman** | **0.92** | **309** | *e*PG | **Pb** | **15 31 13.6** | **+0.9** |
| KANR | | | | *e*S | **Sb** | **15 31 26.7** | **+1.9** |
| **BUJR** | **Buynaksk** | **1.03** | **282** | *e*Pg | **Pb** | **15 31 15.2** | **+0.7** |
| BUJR | | | | *e*Sg | **Sn** | **15 31 29.2** | **0.0** |
| **BUJR** | **Buynaksk** | **1.03** | **282** | *e*PG | **Pb** | **15 31 15.2** | **+0.7** |
| BUJR | | | | *e*S | **Sn** | **15 31 29.2** | **0.0** |
| **KSMR** | **Kasumkent** | **1.05** | **194** | *e*Pg | **Pn** | **15 31 16.2** | **+0.8** |
| KSMR | | | | *e*Sg | **Sn** | **15 31 31.1** | **+1.2** |
| **ARKR** | **Arakani** | **1.09** | **269** | *e*Pg | **Pb** | **15 31 16.2** | **+0.5** |
| ARKR | | | | *e*Sg | **Sb** | **15 31 30.4** | **+0.6** |
| **ARKR** | **Arakani** | **1.09** | **269** | *e*PG | **Pb** | **15 31 16.2** | **+0.5** |
| ARKR | | | | *e*S | **Sb** | **15 31 30.4** | **+0.6** |
| **KMKR** | **Kumukh** | **1.13** | **245** | *e*Pg | **Pn** | **15 31 17.1** | **+0.5** |
| KMKR | | | | *e*Sg | **Sn** | **15 31 32.5** | **+0.4** |
| **KMKR** | **Kumukh** | **1.13** | **245** | *e*PG | **Pn** | **15 31 17.1** | **+0.5** |
| KMKR | | | | *e*S | **Sn** | **15 31 32.5** | **+0.4** |
| **GNBR** | **Gunib** | **1.14** | **259** | *e*Pg | **Pn** | **15 31 17.2** | **+0.6** |
| GNBR | | | | *e*Sg | **Sn** | **15 31 32.7** | **+0.6** |
| **GNBR** | **Gunib** | **1.14** | **259** | *e*PG | **Pn** | **15 31 17.2** | **+0.6** |
| GNBR | | | | *e*S | **Sn** | **15 31 32.7** | **+0.6** |
| **KRNR** | **Karanay** | **1.18** | **280** | *e*Pg | **Pb** | **15 31 17.4** | **+0.4** |
| KRNR | | | | *e*Sg | **Sb** | **15 32.1** | **-0.1** |
| **KRNR** | **Karanay** | **1.18** | **280** | *e*PG | **Pb** | **15 31 17.5** | **+0.4** |
| KRNR | | | | *e*S | **Sb** | **15 32.1** | **-0.1** |
| **UNCR** | **Uncukul** | **1.25** | **275** | *e*Pg | **Pb** | **15 31 18.4** | **+0.3** |
| UNCR | | | | *e*Sg | **Sn** | **15 31 35.5** | **+0.9** |
| **UNCR** | **Uncukul** | **1.25** | **275** | *e*PG | **Pb** | **15 31 18.5** | **+0.3** |
| UNCR | | | | *e*S | **Sn** | **15 31 35.5** | **+0.9** |
| **AKT** | **Akhty** | **1.27** | **206** | *e*Pg | **Pn** | **15 31 19.3** | **+0.9** |
| AKT | | | | *e*Sg | **Sn** | **15 31 35.9** | **+0.6** |
| **AKT** | **Akhty** | **1.27** | **206** | *d*iPG | **Pn** | **15 31 19.2** | **+0.9** |
| AKT | | | | *e*S | **Sn** | **15 31 36.1** | **+0.8** |
| AKT | | | | pmax | pmax | | |
| | comp=Z,218nm,0.3s | | | | | | |
| AKT | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| AKT | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| AKT | | | | smax | smax | | |
| | comp=E,2μm,0.2s | | | | | | |
| **DBC** | **Dubki** | **1.27** | **289** | *e*Pg | **Pb** | **15 31 18.9** | **+0.2** |
| DBC | | | | *e*Sg | **Sn** | **15 31 36.0** | **+0.6** |
| **DBC** | **Dubki** | **1.27** | **289** | *e*PG | **Pb** | **15 31 18.9** | **+0.2** |
| DBC | | | | *e*S | **Sn** | **15 31 36.0** | **+0.6** |
| **HNZR** | **Khunzah** | **1.30** | **268** | *e*PG | **Pg** | **15 31 19.7** | **-0.2** |
| HNZR | | | | *e*S | **Sn** | **15 31 37.1** | **+0.9** |
| **XNZR** | **Khunzakh** | **1.31** | **267** | *e*Pg | **Pg** | **15 31 19.7** | **-0.4** |
| XNZR | | | | *e*Sg | **Sn** | **15 31 37.1** | **+0.7** |
| **DLMR** | **Dylym** | **1.43** | **289** | *e*Pg | **Pb** | **15 31 21.9** | **+0.5** |
| DLMR | | | | *e*Sg | **Sg** | **15 31 40.7** | **-0.2** |
| **DLMR** | **Dylym** | **1.43** | **289** | *e*PG | **Pb** | **15 31 21.9** | **+0.5** |
| DLMR | | | | *e*S | **Sg** | **15 31 40.7** | **-0.2** |
| **BTLR** | **Botlikh** | **1.67** | **272** | *e*Pg | **Pb** | **15 31 25.6** | **+0.2** |
| BTLR | | | | *e*Sg | **Sg** | **15 31 47.6** | **-0.8** |
| **BTLR** | **Botlikh** | **1.67** | **272** | *e*PN | **Pb** | **15 31 25.6** | **+0.2** |
| **SEKA** | **Sheki** | **1.71** | **214** | PN | **Pg** | **15 31 27.6** | **0.0** |
| **DVE** | **Vedeno** | **1.76** | **282** | *e*Pg | **Pb** | **15 31 27.0** | **0.0** |
| DVE | | | | *e*Sg | **Sn** | **15 31 47.8** | **+0.4** |
| **DVE** | **Vedeno** | **1.76** | **282** | *e*PN | **Pb** | **15 31 27.0** | **0.0** |
| **LGD** | **Lagodekhi** | **1.84** | **245** | P | **Pb** | **15 31 28.4** | **+0.1** |
| LGD | | | | S | **Sg** | **15 31 51.8** | **-2.2** |
| **LGD** | **Lagodekhi** | **1.84** | **245** | *e*Pg | **Pb** | **15 31 28.4** | **+0.1** |
| LGD | | | | *e*Sg | **Sg** | **15 31 51.8** | **-2.2** |
| **LGD** | **Lagodekhi** | **1.84** | **245** | *e*PN | **Pb** | **15 31 28.4** | **+0.1** |
| **SHTL** | **Shatili** | **2.45** | **272** | P | **Pb** | **15 31 37.3** | **-1.6** |
| **SHTL** | **Shatili** | **2.45** | **272** | PN | **Pb** | **15 31 37.3** | **-1.6** |
| **GANJ** | **Ganja** | **2.55** | **220** | PN | **Pb** | **15 31 38.1** | **+2.2** |
| **DGRG** | **David-gareji** | **2.59** | **244** | P | **Pb** | **15 31 40.1** | **-1.1** |
| DGRG | | | | S | **Sb** | **15 32 13.9** | **+1.0** |
| **DGRG** | **David-gareji** | **2.59** | **244** | PN | **Pb** | **15 31 40.0** | **-1.1** |
| DGRG | | | | S | **Sb** | **15 32 13.9** | **+1.0** |
| **CHRG** | **Chargali** | **2.64** | **265** | P | **Pb** | **15 31 41.0** | **-1.1** |
| **KMGR** | **Komgaron** | **2.69** | **280** | *e*Pn | **Pb** | **15 31 41.9** | **-1.0** |
| KMGR | | | | *e*Sn | **Sn** | **15 32 11.4** | **+1.1** |
| **KMGR** | **Komgaron** | **2.69** | **280** | *e*PN | **Pb** | **15 31 41.9** | **-1.0** |
| KMGR | | | | *e*S | **Sn** | **15 32 11.4** | **+1.1** |
| **VLKR** | **Vladikavkaz** | **2.83** | **280** | *e*Pn | **Pb** | **15 31 43.9** | **-1.3** |
| VLKR | | | | *e*Sn | **Sn** | **15 32 12.4** | **-1.2** |
| **VLKR** | **Vladikavkaz** | **2.83** | **280** | *e*PN | **Pb** | **15 31 43.9** | **-1.3** |
| **GUDG** | **Gudauri** | **2.96** | **268** | *e*Pn | **Pb** | **15 31 45.2** | **-2.3** |
| **GUDG** | **Gudauri** | **2.96** | **268** | *e*PN | **Pb** | **15 31 45.2** | **-2.3** |
| GUDG | | | | *e*S | **Sb** | **15 32 24.0** | **+0.3** |
| **BTKR** | **Batakoyurt** | **2.98** | **286** | *e*Pn | **Pn** | **15 31 43.1** | **+1.3** |
| **BTKR** | **Batakoyurt** | **2.98** | **286** | *e*PN | **Pn** | **15 31 43.1** | **+1.3** |
| BTKR | | | | *e*S | **Sb** | **15 32 25.6** | **+1.5** |
| **LACR** | **Lac** | **3.09** | **275** | *e*Pn | **Pn** | **15 31 44.6** | **+1.3** |
| LACR | | | | *e*Sn | **Sn** | **15 32 16.5** | **-3.6** |
| **LACR** | **Lac** | **3.09** | **275** | *e*PN | **Pn** | **15 31 44.7** | **+1.3** |
| **ARNR** | **Ardon** | **3.13** | **282** | *e*Pn | **Pn** | **15 31 46.8** | **+3.0** |
| **ARNR** | **Ardon** | **3.13** | **282** | *e*PN | **Pn** | **15 31 46.8** | **+3.0** |
| ARNR | | | | *e*S | **Sn** | **15 32 23.5** | **+2.4** |
| **KORR** | **Kora** | **3.27** | **280** | *e*PN | **Pb** | **15 31 50.7** | **-2.1** |
| KORR | | | | *e*S | **Sb** | **15 32 29.0** | **-3.6** |
| **STDR** | **Stavd-Durt** | **3.32** | **284** | *e*Sn | **Sn** | **15 32 27.1** | **+1.3** |
| **STDR** | **Stavd-Durt** | **3.32** | **284** | *e*PN | **Pn** | **15 31 50.3** | **+3.8** |
| STDR | | | | *e*S | **Sn** | **15 32 27.1** | **+1.3** |
| **TRLG** | **Trialeti** | **3.43** | **253** | P | **Pn** | **15 31 50.3** | **+2.1** |
| TRLG | | | | S | **Sn** | **15 32 30.4** | **+1.7** |
| **TRLG** | **Trialeti** | **3.43** | **253** | *e*Pn | **Pn** | **15 31 50.3** | **+2.1** |
| TRLG | | | | *e*Sn | **Sn** | **15 32 30.4** | **+1.7** |
| **TRLG** | **Trialeti** | **3.43** | **253** | *e*PN | **Pn** | **15 31 50.3** | **+2.1** |
| TRLG | | | | *e*S | **Sn** | **15 32 30.4** | **+1.7** |
| **LSNR** | **Lesken** | **3.48** | **282** | *e*Pn | **Pn** | **15 31 51.7** | **+3.1** |
| LSNR | | | | *e*Sn | **Sn** | **15 32 29.5** | **-0.1** |
| **LSNR** | **Lesken** | **3.48** | **282** | *e*PN | **Pn** | **15 31 51.7** | **+3.1** |
| LSNR | | | | *e*S | **Sn** | **15 32 29.5** | **-0.1** |
| **DIGR** | **Digorskoe uzhe** | **3.62** | **276** | *e*Pn | **Pn** | **15 31 52.3** | **+1.6** |
| DIGR | | | | *e*Sn | **Sn** | **15 32 33.4** | **+0.1** |
| **DIGR** | **Digorskoe uzhe** | **3.62** | **276** | *e*PN | **Pn** | **15 31 52.3** | **+1.6** |
| DIGR | | | | *e*S | **Sn** | **15 32 33.4** | **+0.1** |
| **NCK** | **Nalchik** | **3.68** | **285** | *i* PN | **Pn** | **15 31 53.3** | **+1.9** |
| NCK | | | | pmax | pmax | | |
| | comp=Z,70nm,0.2s | | | | | | |
| **GNI** | **Garni** | **3.74** | **230** | *e*Pn | **Pn** | **15 31 56.0** | **+3.6** |
| GNI | | | | *e*Sn | **Sn** | **15 32 37.7** | **+1.3** |
| **GNI** | **Garni** | **3.74** | **230** | Pn | **Pn** | **15 31 55.1** | **+2.7** |
| | comp=Z,1.6nm,0.3s,baz=18,slow=13,SNR=3.6 | | | | | | |
| GNI | | | | Sn | **Sn** | **15 32 32.0** | **-4.4** |
| | comp=Z,1.5nm,0.3s,baz=165,slow=9.8,SNR=3.4 | | | | | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **GNI** | **Garni** | **3.74** | **230** | *e*PN | **Pn** | **15 31 56.0** | **+3.6** |
| **PYA1** | **Pyatigorsk** | **4.18** | **292** | *e*Pn | **Pn** | **15 31 59.6** | **+1.3** |
| PYA1 | | | | *e*Sn | **Sn** | **15 32 44.8** | **-2.2** |
| **PYA1** | **Pyatigorsk** | **4.18** | **292** | *e*PN | **Pn** | **15 31 59.6** | **+1.3** |
| **KBZ** | **Khabaz** | **4.23** | **287** | *e*Pn | **Pn** | **15 31 59.9** | **+1.1** |
| KBZ | | | | *e*Sn | **Sn** | **15 32 44.9** | **-3.1** |
| **KBZ** | **Khabaz** | **4.23** | **287** | Pn | **Pn** | **15 32 00.1** | **+1.2** |
| | comp=Z,0.9nm,0.3s,baz=114,slow=18,SNR=12 | | | | | | |
| KBZ | | | | Sn | **Sn** | **15 32 46.2** | **-1.8** |
| | comp=Z,2.3nm,0.3s,baz=60,slow=5.2,SNR=6.7 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **KBZ** | **Khabaz** | **4.23** | **287** | *d*iPN | **Pn** | **15 32 00.4** | **+1.5** |
| **BEYR** | **Belyy Ugol+** | **4.36** | **290** | *e*Pn | **Pn** | **15 32 02.0** | **+1.3** |
| BEYR | | | | *e*Sn | **Sn** | **15 32 48.8** | **-2.6** |
| **BEYR** | **Belyy Ugol+** | **4.36** | **290** | *e*PN | **Pn** | **15 32 02.0** | **+1.3** |
| **SHA1** | **Shidzhatmaz** | **4.40** | **287** | *e*Pn | **Pn** | **15 32 02.5** | **+1.0** |
| SHA1 | | | | *e*Sn | **Sn** | **15 32 51.2** | **-1.4** |
| **SHA1** | **Shidzhatmaz** | **4.40** | **287** | *d*iPN | **Pn** | **15 32 03.0** | **+1.5** |
| **KIV0** | **Kislovodsk Arr** | **4.43** | **289** | *e*Pn | **Pn** | **15 32 03.2** | **+1.5** |
| KIV0 | | | | *e*Sn | **Sn** | **15 32 50.0** | **-3.1** |
| **KIV** | **Kislovodsk** | **4.43** | **289** | *e*Pn | **Pn** | **15 32 03.4** | **+1.6** |
| KIV | | | | *e*Sn | **Sn** | **15 32 51.3** | **-2.9** |
| **KIV** | **Kislovodsk** | **4.43** | **289** | *e*PN | **Pn** | **15 32 02.5** | **+1.4** |
| KIV | | | | *e*S | **Sn** | **15 32 55.7** | **+2.4** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,6.0nm,8.0s | | | | | | |
| **ALER** | **Alexandrovskoy** | **4.57** | **300** | *e*Pn | **Pn** | **15 32 05.9** | **+2.4** |
| ALER | | | | *e*Sn | **Sn** | **15 32 51.9** | **-4.5** |
| **ALER** | **Alexandrovskoy** | **4.57** | **300** | *e*PN | **Pn** | **15 32 05.9** | **+2.4** |
| **GOF** | **Gofitskoye** | **4.62** | **304** | *ce*PN | **Pb** | **15 32 16.7** | **+1.0** |
| GOF | | | | *e*S | **Sb** | **15 33 16.9** | **+5.6** |
| **VSLR** | **Vesyoloye** | **6.25** | **281** | *i* P | **Pn** | **15 32 28.6** | **+2.0** |
| **BELG** | **Belogornoye** | **9.79** | **357** | Pn | **Pn** | **15 33 15.0** | **-0.2** |
| | comp=Z,1.8nm,0.3s,baz=190,slow=6.1,SNR=5.1 | | | | | | |
| BELG | | | | Sn | Sn | 15 34 56.2 | -8.6 |
| | comp=Z,1.3nm,0.3s,baz=92,slow=19,SNR=1.9 | | | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **BELG** | **Belogornoye** | **9.79** | **357** | *i* P | **Pn** | **15 33 16.0** | **+0.8** |
| **AKTO** | **Aktyubinsk** | **10.20** | **37** | Pn | **Pn** | **15 33 20.6** | **-0.2** |
| | comp=Z,0.7nm,0.3s,baz=201,slow=7.7,SNR=10 | | | | | | |
| AKTO | | | | Sn | Sn | 15 35 07.7 | -7.3 |
| | comp=Z,0.9nm,0.3s,baz=182,slow=22,SNR=7.5 | | | | | | |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **10.37** | **46** | ⇓Pn | **Pn** | **15 33 23.5** | **+0.3** |
| | comp=Z,0.4nm,0.4s,baz=235,slow=13,SNR=30 | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **15 35 15.3** | **-3.9** |
| | comp=Z,4.1nm,0.8s,baz=238,slow=22,SNR=7.4 | | | | | | |
| **AB31** | **Akbulak array** | **10.37** | **46** | P | **Pn** | **15 33 23.5** | **+0.3** |
| AB31 | | | | S | **Sn** | **15 35 15.3** | **-3.9** |
| **OBN** | **Obninsk** | **14.72** | **332** | *e*P | **Pn** | **15 34 23.9** | **+1.4** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,20nm,13.0s | | | | | | |
| **ARU** | **Arti** | **15.26** | **22** | Pn | **Pn** | **15 34 26.5** | **-3.3** |
| | baz=190,slow=11,SNR=3.8 | | | | | | |
| ARU | | | | Sn | Sn | 15 37 07.7 | -11 |
| | baz=182,slow=24,SNR=3.1 | | | | | | |
| | comp=Z,1.9nm,0.3s | | | | | | |
| **ARU** | **Arti** | **15.26** | **22** | P | **Pn** | **15 34 28.3** | **-1.5** |
| ARU | | | | S | **Sn** | **15 37 19.8** | **+1.2** |
| **AKASG** | **Malin Array Be** | **15.46** | **308** | *i* P | **Pn** | **15 34 35.5** | **+3.1** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **16.16** | **81** | ⇓Pn | **Pn** | **15 34 43.2** | **+1.6** |
| | comp=Z,0.3nm,0.3s,baz=289,slow=14,SNR=4.4 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 15 37 28.8 | -12 |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **16.16** | **81** | P | **Pn** | **15 34 43.2** | **+1.6** |
| **BRVK** | **Borovoye** | **17.90** | **47** | *i* P | **Pn** | **15 35 04.2** | **+0.9** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **17.95** | **47** | P | **Pn** | **15 35 02.8** | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=254,slow=10,SNR=4.0 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **VSU** | **Vasula** | **20.88** | **327** | *i* P | **P** | **15 35 37.8** | **+1.5** |
| VSU | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **WSAR** | **Wadi Sarin** | **21.10** | **153** | LR | LR | 15 45 09.9 | |
| | comp=Z,69nm,19.1s,baz=162,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **22.02** | **58** | P | **P** | **15 35 49.1** | **+0.4** |
| | comp=Z,0.2nm,0.2s,baz=265,slow=11,SNR=5.1 | | | | | | |
| | comp=Z,0.2nm,0.2s | | | | | | |
| **KURK** | **Kurchatov** | **22.09** | **58** | *i* P | **P** | **15 35 49.5** | **+0.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **FINES** | **FINESS Array B** | **23.13** | **332** | P | **P** | **15 35 59.9** | **-0.4** |
| | comp=Z,0.9nm,0.6s,baz=146,slow=13,SNR=4.8 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.27** | **68** | P | **P** | **15 36 11.9** | **+0.3** |
| | comp=Z,0.2nm,0.6s,baz=274,slow=7.4,SNR=1.7 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **27.43** | **322** | P | **P** | **15 36 39.0** | **-1.0** |
| | comp=Z,0.6nm,0.4s,baz=96,slow=9.1,SNR=6.1 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **27.43** | **322** | P | **P** | **15 36 39.0** | **-1.0** |
| **DGZ** | **Jazzator, Alta** | **27.65** | **62** | *i* P | **P** | **15 36 42.6** | **+0.4** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **35.37** | **309** | P | **P** | **15 37 48.1** | **-1.6** |
| | comp=Z,0.4nm,0.4s,baz=93,slow=7.4,SNR=3.9 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **PALK** | **Pallekele** | **45.23** | **132** | *i* P | **P** | **15 39 11.7** | **-0.2** |
| **YAK** | **Yakutsk** | **49.59** | **38** | *i* P | **P** | **15 39 44.1** | **-1.1** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **49.85** | **248** | P | **P** | **15 39 46.0** | **-1.7** |
| | comp=Z,0.5nm,0.5s,baz=36,slow=6.1,SNR=5.2 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **BILL** | **Bilibino** | **60.28** | **23** | *e*P | **P** | **15 41 03.8** | **+1.4** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.5s | | | | | | |

*IDC* ***28*** *15:39:53.3±1.0, 35°.25N×139°.05E, h0km, mb3.7/7, mbtmp3.7/8, ML3.5/1, Error ellipse: s-maj=40.9km s-min=11.8km az=68.0*
*NIED* ***28*** *15:39:57.5, 35°.35N×139°.11E, h19km, MW3.5, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$1.80; $M_{\theta\theta}$-0.63; $M_{\phi\phi}$-1.17; $M_{r\theta}$1.12; $M_{\theta\phi}$-0.80; $M_{r\phi}$0.24; Fault plane solution: $M_0$2.10000×$10^{14}$ NP1:ϑ≅

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **IBDR** | **Badra** | **1.52** | **188** | *e*Pn | **Pb** | **15 53 46.0** | **0.0** |
| IBDR | | | | *e*Sn | **Sg** | **15 54 06.6** | **-0.1** |
| IBDR | | | | AML | AML | 15 54 18.2 | |
| | comp=N,143nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 15 54 18.4 | |
| | comp=E,126nm,0.7s | | | | | | |
| **IKRK** | **Kirkuk** | **1.71** | **298** | *e*Pn | **Pb** | **15 53 49.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **15 54 13.0** | **+0.5** |
| IKRK | | | | AML | AML | 15 54 15.2 | |
| | comp=N,139nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 15 54 18.8 | |
| | comp=E,142nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.76** | **128** | Pg | **Pb** | **15 53 50.2** | **+0.3** |
| **IDOB** | **Doab** | **1.84** | **116** | Pn | **Pb** | **15 53 51.5** | **-0.1** |
| **HAGD** | **Aghdareh** | **2.44** | **84** | Pn | **Pb** | **15 54 00.7** | **-1.0** |
| **RAFI** | **Al-Rafai** | **2.89** | **181** | *e*Pn | **Pn** | **15 54 04.0** | **+0.3** |
| RAFI | | | | *e*Sn | **Sn** | **15 54 40.0** | **+1.4** |

*IDC **28** 15:56:58.4±1.8, 13°.93N×51°.70E, h0km, mb3.5/5, mbtmp3.5/6, ML3.0/1, MS3.2/16, Error ellipse: s-maj=46.9km s-min=25.4km az=172.0*
*OMAN **28** 15:57:03.8±0.2, 14°.46N×51°.45E, h10km, mb4.3/1, ml3.8/2, Error ellipse: s-maj=4.7km s-min=2.0km az=338.0*

**ISC 28 15:57:01.6±1.1, 14°.27N±0°.10×51°.51E±0°.08, h10km, n31, σ1s07/25, mb3.4/5, MS3.1/14, Eastern Gulf of Aden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABTO** | **Aybut** | **3.52** | **29** | P | **Pn** | **15 57 56.5** | **+0.1** |
| | SNR=14 | | | | | | |
| ABTO | | | | S | **Sn** | **15 58 38.5** | **+0.4** |
| **RBK** | **Rabkut** | **4.13** | **38** | P | **Pn** | **15 58 05.3** | **+0.5** |
| | SNR=7.1 | | | | | | |
| RBK | | | | S | **Sn** | **15 58 54.1** | **+0.8** |
| **WHFO** | **Wadi Hawf** | **4.23** | **31** | P | **Pn** | **15 58 06.2** | **0.0** |
| | SNR=12 | | | | | | |
| WHFO | | | | S | **Sn** | **15 58 55.6** | **-0.1** |
| **DMTO** | **DMTO** | **4.76** | **43** | P | **Pn** | **15 58 14.0** | **+0.5** |
| | SNR=5.6 | | | | | | |
| DMTO | | | | S | **Sn** | **15 59 09.8** | **+1.0** |
| **DOK** | **Doka** | **5.00** | **30** | P | **Pn** | **15 58 17.5** | **+0.7** |
| DOK | | | | S | **Sn** | **15 59 14.8** | **+0.1** |
| **ATD** | **Arta Tunnel** | **8.87** | **253** | Pn | **Pn** | **15 59 11.1** | **+1.0** |
| | 0.2nm,0.3s,baz=75,slow=19,SNR=7.1 | | | | | | |
| ATD | | | | LR | LR | 16 01 43.6 | |
| | comp=Z,8.6nm,20.0s,baz=43,slow=32 0.5nm,0.3s | | | | | | |
| **MZR** | **Muzera** | **8.88** | **12** | P | **Pn** | **15 59 10.2** | **0.0** |
| MZR | | | | S | **Sn** | **16 00 50.2** | **-0.2** |
| **MHTO** | **MHTO** | **9.08** | **42** | P | **Pn** | **15 59 12.7** | **-0.2** |
| **ARQ** | **Araqi** | **10.19** | **27** | P | **Pn** | **15 59 28.6** | **+0.5** |
| ARQ | | | | S | **Sn** | **16 01 22.3** | **-0.2** |
| **RAYN** | **Ar Rayn** | **10.82** | **329** | P | **Pn** | **15 59 37.1** | **+0.4** |
| RAYN | | | | S | **Sn** | **16 01 35.2** | **-2.7** |
| **ASUD** | **Al Ashush, Dub** | **10.91** | **19** | P | **Pn** | **15 59 39.1** | **+1.2** |
| **WSAR** | **Wadi Sarin** | **11.18** | **36** | LR | LR | 16 03 42.9 | |
| | comp=Z,112nm,18.3s,baz=254,slow=36 | | | | | | |
| **FURI** | **Furi** | **13.65** | **248** | LR | LR | 16 04 34.1 | |
| | comp=Z,81nm,18.6s,baz=88,slow=33 | | | | | | |
| **KBD** | **Kabd** | **15.25** | **347** | P | **Pn** | **16 00 37.5** | **+0.4** |
| **EIL** | **Elat** | **21.65** | **318** | LR | LR | 16 09 31.2 | |
| | comp=Z,73nm,18.4s,baz=296,slow=34 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **23.73** | **325** | LR | LR | 16 12 09.3 | |
| | comp=Z,47nm,18.7s,baz=109,slow=38 | | | | | | |
| **GNI** | **Garni** | **26.46** | **348** | LR | LR | 16 14 28.6 | |
| | comp=Z,59nm,18.7s,baz=164,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **29.82** | **332** | LR | LR | 16 16 48.6 | |
| | comp=Z,27nm,18.3s,baz=161,slow=39 | | | | | | |
| **KBZ** | **Khabaz** | **30.27** | **348** | LR | LR | 16 18 18.7 | |
| | comp=Z,60nm,19.0s,baz=138,slow=42 | | | | | | |
| **AKTO** | **Aktyubinsk** | **36.46** | **7** | LR | LR | 16 20 56.0 | |
| | comp=Z,24nm,20.7s,baz=92,slow=39 | | | | | | |
| **MLR** | **Muntele Rosu** | **37.88** | **330** | LR | LR | 16 20 20.7 | |
| | comp=Z,35nm,20.8s,baz=165,slow=37 | | | | | | |
| **BELG** | **Belogornoye** | **38.16** | **356** | LR | LR | 16 23 11.8 | |
| | comp=Z,24nm,18.3s,baz=236,slow=41 | | | | | | |
| **AKASG** | **Malin Array Be** | **40.58** | **338** | P | **P** | **16 04 42.6** | **+1.3** |
| | 0.1nm,0.3s,baz=151,slow=7.2,SNR=6.0 0.1nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **41.39** | **32** | P | **P** | **16 04 49.1** | **+1.1** |
| | 0.2nm,0.5s,baz=224,slow=8.1,SNR=3.2 0.2nm,0.5s | | | | | | |
| **ARU** | **Arti** | **42.42** | **6** | LR | LR | 16 26 01.3 | |
| | comp=Z,18nm,19.1s,baz=194,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.60** | **78** | P | **P** | **16 05 19.6** | **-2.9** |
| | 1.6nm,0.8s,baz=275,slow=9.0,SNR=9.6 | | | | | | |
| CMAR | | | | LR | LR | 16 24 16.3 | |
| | comp=Z,6.9nm,18.1s,baz=265,slow=36 1.6nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.34** | **275** | P | **P** | **16 05 43.1** | **-0.8** |
| | 0.2nm,0.6s,baz=79,slow=7.5,SNR=1.4 0.2nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **50.54** | **344** | P | **P** | **16 06 00.4** | **+0.5** |
| | 2.0nm,0.9s,baz=152,slow=6.3,SNR=4.2 | | | | | | |
| FINES | | | | LR | LR | 16 29 24.8 | |
| | comp=Z,21nm,18.0s,baz=203,slow=38 2.0nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **53.46** | **338** | LR | LR | 16 32 23.8 | |
| | comp=Z,20nm,18.5s,baz=162,slow=40 | | | | | | |
| **MDT** | **Midelt** | **54.04** | **300** | LR | LR | 16 30 32.3 | |
| | comp=Z,52nm,18.3s,baz=154,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **54.98** | **337** | LR | LR | 16 31 41.6 | |
| | comp=Z,17nm,21.8s,baz=150,slow=38 | | | | | | |

*IDC **28** 16:23:40.1±10.0, 35°.53N×68°.75E, h0km, mb3.9/2, mbtmp3.9/5, ML3.2/2, MS2.7/7, Error ellipse: s-maj=143.6km s-min=70.8km az=54.0*
*NEIC **28** 16:23:46.3±1.1, 35°.64N±0°.04×68°.4E±0°.1, h78km±16km, mb4.1/5, Error ellipse: s-maj=13.8km s-min=5.2km az=106.0*
*NNC **28** 16:23:46.3±3.9, 35°.76N×68°.30E, h99km±117km, mb3.6, mpv4.0, Error ellipse: s-maj=35.4km s-min=27.5km az=134.0*
*BJI **28** 16:23:48.9±0.0, 36°.11N×68°.32E, h113km, mb4.5/9, mB4.6/4*

**ISC 28 16:23:46.7±0.8, 35°.68N±0°.07×68°.36E±0°.07, h100km, n48, σ1s93/52, mb4.4/7, 5C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBL** | **Kabul** | **1.27** | **154** | Pn | **Pn** | **16 24 07.7** | **-2.7** |
| KBL | | | | Sn | **Sn** | **16 24 23.3** | **-5.0** |
| **SIMJ** | **Simiganj** | **3.02** | **10** | Pn | **Pn** | **16 24 32.8** | **0.0** |
| **CHGR** | **Chuyangaron** | **3.04** | **12** | Pn | **Pn** | **16 24 32.7** | **-0.3** |
| **GAR** | **Garm** | **3.66** | **25** | Pn | **Pn** | **16 24 41.4** | **-0.1** |
| **NIL** | **Nilore** | **4.51** | **115** | | **Pn** | **16 24 54.0** | **+1.2** |
| **DRK** | **Karamyk** | **4.67** | **35** | | **Pn** | **16 24 54.8** | **-0.5** |
| **BTK** | **Batken** | **4.78** | **23** | Pn | **Pn** | **16 24 56.2** | **-0.4** |
| **JMU** | **Jammu** | **6.17** | **117** | *e*P | **Pn** | **16 25 16.7** | **+1.4** |
| JMU | | | | *e*S | **Sn** | **16 26 23.6** | **-0.9** |
| JMU | | | | IAML | | 16 26 26.4 | |
| | comp=N,96nm,0.5s | | | | | | |
| JMU | | | | IAML | | 16 26 26.8 | |
| | comp=E,89nm,0.4s | | | | | | |
| **THN** | **Thein Dam** | **6.91** | **116** | *e*P | **Pn** | **16 25 25.5** | **+0.1** |
| THN | | | | *e*S | **Sn** | **16 26 42.2** | **-0.3** |
| THN | | | | IAML | | 16 26 48.3 | |
| | comp=E,61nm,0.4s | | | | | | |
| THN | | | | IAML | | 16 26 48.4 | |
| | comp=N,56nm,0.3s | | | | | | |
| **KSH** | **Kashi** | **7.15** | **55** | P | Pn | 16 25 23.5 | -5.3 |
| KSH | | | | S | Sn | 16 26 37.0 | -12 |
| KSH | | | | smax | smax | | |
| | comp=N,55nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=N,32nm,0.4s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **7.43** | **115** | *e*P | **Pn** | **16 25 33.6** | **+0.9** |
| DHRM | | | | *e*S | **Sn** | **16 26 53.4** | **-2.1** |
| DHRM | | | | IAML | | 16 26 56.5 | |
| | comp=E,144nm,0.4s | | | | | | |
| DHRM | | | | IAML | | 16 26 58.5 | |
| | comp=N,122nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **7.60** | **12** | ⇑P | **Pn** | **16 25 34.8** | **+0.1** |
| | comp=N,2.8nm,0.4s,baz=202,slow=16,SNR=39 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **16 26 58.3** | **-0.8** |
| | comp=N,4.2nm,0.5s,baz=196,slow=27,SNR=5.5 | | | | | | |
| **KKAR** | **Karatay Array** | **7.60** | **12** | | **Pn** | **16 25 34.5** | **-0.1** |
| **AML** | **Almayashu** | **7.67** | **31** | P | **Pn** | **16 25 35.1** | **-0.9** |
| | SNR=10 | | | | | | |
| **EKS2** | **Erkin-Say** | **8.14** | **29** | P | **Pn** | **16 25 42.0** | **-0.1** |
| | SNR=10 | | | | | | |
| **AAK** | **Ala-Archa** | **8.42** | **33** | P | **Pn** | **16 25 45.2** | **-0.8** |
| | SNR=7.0 | | | | | | |
| **AAK** | **Ala-Archa** | **8.42** | **33** | Pn | **Pn** | **16 25 45.0** | **-1.0** |
| **AAK** | **Ala-Archa** | **8.42** | **33** | LR | LR | 16 28 45.4 | |
| | comp=N,10nm,20.9s,baz=232,slow=36 | | | | | | |
| **AAK** | **Ala-Archa** | **8.42** | **33** | ⇓P | **Pn** | **16 25 45.3** | **-0.7** |
| | comp=N,3.5nm,0.4s | | | | | | |
| AAK | | | | S | **Sn** | **16 27 19.5** | **+0.1** |
| | comp=N,14nm,0.8s | | | | | | |
| **KBK** | **Karagaybulak** | **8.64** | **34** | P | **Pn** | **16 25 49.2** | **+0.2** |
| | SNR=5.6 | | | | | | |
| **SMLA** | **Simla** | **8.65** | **119** | *e*P | **Pn** | **16 25 48.1** | **-0.9** |
| SMLA | | | | *e*S | **Sn** | **16 27 20.9** | **-3.8** |
| SMLA | | | | IAML | | 16 27 27.6 | |
| | comp=E,52nm,0.8s | | | | | | |
| **CHMS** | **Chumysh** | **8.82** | **32** | P | **Pn** | **16 25 50.8** | **-0.5** |
| | SNR=8.2 | | | | | | |
| **CHMS** | **Chumysh** | **8.82** | **32** | ⇑P | **Pn** | **16 25 49.6** | **-1.8** |
| | comp=E,3.5nm,0.4s | | | | | | |
| CHMS | | | | ⇓S | **Sn** | **16 27 28.8** | **-0.2** |
| | comp=E,11nm,0.6s | | | | | | |
| **ULHL** | **Ulahol** | **8.98** | **41** | P | **Pn** | **16 25 52.2** | **-1.4** |
| | SNR=12 | | | | | | |
| **BOOM** | **Boomskoye usch** | **8.99** | **39** | Pn | **Pn** | **16 25 52.4** | **-1.4** |
| **TKM2** | **Tokmak 2** | **9.15** | **36** | P | **Pn** | **16 25 54.6** | **-1.3** |
| | SNR=7.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **9.15** | **36** | ⇓P | **Pn** | **16 25 53.9** | **-2.1** |
| | comp=E,2.2nm,0.3s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **16 27 35.4** | **-1.7** |
| | comp=E,2.4nm,0.6s | | | | | | |
| **HNLY** | **HANLEY** | **9.25** | **105** | *e*P | **Pn** | **16 25 58.8** | **+1.1** |
| **KUDL** | **Kundal** | **10.20** | **135** | *e*S | **Sn** | **16 27 59.0** | **-3.6** |
| **AB31** | **Akbulak array** | **14.90** | **338** | ⇓P | **Pn** | **16 27 12.3** | **+0.2** |
| | comp=E,0.9nm,0.4s,baz=294,slow=39,SNR=30 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **16 29 51.2** | **-5.1** |
| | comp=E,1.2nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **14.90** | **338** | Pn | **P** | **16 27 12.8** | **-2.4** |
| **MK31** | **Makanchi Array** | **15.24** | **39** | Pn | **Pn** | **16 27 15.9** | **-0.4** |
| **MKAR** | **Makanchi Array** | **15.24** | **39** | Pn | **Pn** | **16 27 13.2** | **-3.2** |
| | comp=E,0.1nm,0.3s,baz=233,slow=12,SNR=6.9 | | | | | | |
| MKAR | | | | LR | LR | 16 33 48.7 | |
| | comp=E,27nm,19.6s,baz=264,slow=40 comp=E,1.3nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **16.65** | **23** | Pn | **Pn** | **16 27 32.1** | **-1.7** |
| | comp=E,1.1nm,0.2s,baz=216,slow=9.3,SNR=1.1 | | | | | | |
| KURBB | | | | LR | LR | 16 34 47.5 | |
| | comp=E,62nm,18.0s,baz=164,slow=40 | | | | | | |
| **WMQ** | **Urumqi** | **16.92** | **55** | *e*P | **P** | **16 27 38.3** | **+0.6** |
| WMQ | | | | pmax | pmax | | |
| | comp=E,19nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **17.40** | **4** | P | **Pn** | **16 27 44.5** | **+1.5** |
| | comp=E,0.1nm,0.3s,baz=183,slow=13,SNR=11 comp=E,0.9nm,0.4s | | | | | | |
| **BRVK** | **Borovoye** | **17.43** | **4** | | **Pn** | **16 27 44.0** | **+0.8** |
| BRVK | | | | IAmb | IAmb | 16 27 59.5 | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **21.31** | **301** | LR | LR | 16 39 54.7 | |
| | comp=Z,90nm,21.5s,slow=45 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.58** | **27** | P | **P** | **16 28 31.7** | **+3.6** |
| | comp=Z,9.6nm,0.5s,baz=221,slow=9.9,SNR=52 | | | | | | |
| ZALV | | | | LR | LR | 16 38 10.2 | |
| | comp=Z,12nm,18.7s,baz=114,slow=40 comp=Z,9.6nm,0.5s | | | | | | |
| **ARU** | **Arti** | **21.80** | **345** | LR | LR | 16 36 44.0 | |
| | comp=Z,19nm,19.1s,baz=195,slow=36 | | | | | | |
| **SNOP** | **Sinop** | **26.47** | **294** | P | **P** | **16 29 16.1** | **+1.7** |
| SNOP | | | | IAmb | IAmb | 16 29 16.9 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **28.66** | **79** | *e*P | P | 16 29 41.0 | +6.8 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| **PZH** | **PanZhiHua** | **29.90** | **98** | P | **P** | **16 29 48.8** | **+3.6** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,110nm,4.7s | | | | | | |
| **SONM** | **Songino Array** | **30.56** | **55** | P | **P** | **16 29 53.7** | **+2.9** |
| | comp=Z,0.2nm,0.4s,baz=264,slow=10.0,SNR=2.2 comp=Z,0.2nm,0.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **34.05** | **68** | *e*P | **P** | **16 30 20.3** | **-1.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,22nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,68nm,5.5s | | | | | | |
| **VRAC** | **Vranov** | **39.75** | **306** | LR | LR | 16 51 47.1 | |
| | comp=Z,14nm,18.4s,baz=253,slow=42 | | | | | | |
| **GRA1** | **Grafenberg Arr** | **43.24** | **307** | P | **P** | **16 31 39.2** | **+1.3** |
| GRA1 | | | | IAmb | IAmb | 16 31 40.2 | |
| | comp=Z,5.9nm,1.0s | | | | | | |
| **GRFO** | **Grafenberg** | **43.24** | **307** | P | **P** | **16 31 39.2** | **+1.2** |

**IDC 28 16:31:38.3±2.4, 10°.88S×124°.17E, h0km, mb3.6/1, mbtmp3.7/3, ML3.7/2, Error ellipse: s-maj=222.3km s-min=33.4km az=53.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.31** | **134** | Pn | Pn | 16 34 48.3 | -0.3 |
| | 0.3nm,0.3s,baz=312,slow=15,SNR=21 | | | | | | |
| WRA | | | | Sn | Sn | 16 37 07.7 | -10 |
| | 0.3nm,0.3s,baz=301,slow=22,SNR=3.2 0.3nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **15.74** | **145** | Pn | Pn | 16 35 21.9 | +0.4 |
| | 0.5nm,0.3s,baz=320,slow=12,SNR=73 | | | | | | |
| ASAR | | | | Sn | Sn | 16 38 09.0 | -7.7 |
| | 0.2nm,0.3s,baz=318,slow=22,SNR=11 2.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.52** | **330** | P | P | 16 42 42.6 | 0.0 |
| | 0.4nm,0.6s,baz=138,slow=7.6,SNR=4.1 0.4nm,0.6s | | | | | | |

*NEIC **28** 16:33:18.5±1.4, 18°.2S±0°.1×178°.0W±0°.1, h584km±10km, mb4.3/26, Error ellipse: s-maj=22.9km s-min=17.5km az=146.0*
*IDC **28** 16:33:19.4±3.6, 18°.04S×178°.13W, h592km±22km, mb3.1/6, mbtmp4.0/7, Error ellipse: s-maj=90.8km s-min=23.1km az=132.0*

**ISC 28 16:33:18.5±0.7, 18°.2S±0°.1×178°.0W±0°.1, h590km, n40, σ0s77/41, mb4.1/19, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.77** | **276** | | **P** | **16 34 42.0** | **+0.2** |
| **MSVF** | **Nonsavu** | **3.77** | **276** | P | **P** | **16 34 42.6** | **+0.8** |
| | 127nm,0.6s,baz=132,slow=12,SNR=112 | | | | | | |
| **AFI** | **Afiamalu** | **7.35** | **56** | P | **P** | **16 35 10.3** | **-1.2** |
| **PINNC** | **Pines Island,** | **14.32** | **250** | P | **P** | **16 36 19.7** | **-1.0** |
| **DZM** | **Mont Dzumac** | **15.10** | **253** | P | **P** | **16 36 27.0** | **-1.0** |
| DZM | | | | IAmb | IAmb | 16 37 04.6 | |
| | comp=Z,41nm,1.5s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.86** | **259** | P | **P** | **16 36 43.0** | **-1.3** |
| **TOZ** | **Tahuroa Road** | **20.29** | **195** | P | **P** | **16 37 15.7** | **+0.6** |
| **THZ** | **Tophouse** | **24.75** | **196** | P | **P** | **16 37 54.0** | **-1.0** |
| **MLZ** | **Mavora Lakes** | **29.47** | **200** | P | **P** | **16 38 36.5** | **+0.4** |
| **EIDS** | **Eidsvold** | **29.52** | **251** | P | **P** | **16 38 36.2** | **-0.5** |
| EIDS | | | | IAmb | IAmb | 16 38 44.0 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **ARMA** | **Armidale** | **30.13** | **240** | P | **P** | **16 38 41.9** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 16 38 43.2 | |
| | comp=Z,8.5nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **33.77** | **261** | P | **P** | **16 39 12.4** | **-0.5** |
| CTAO | | | | IAmb | IAmb | 16 39 16.7 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **CAN** | **Canberra** | **33.84** | **233** | P | **P** | **16 39 13.5** | **+0.2** |
| **TOO** | **Toolangi** | **37.29** | **231** | P | **P** | **16 39 42.0** | **+0.2** |
| TOO | | | | IAmb | IAmb | 16 39 43.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **COEN** | **Coen** | **37.48** | **271** | P | **P** | **16 39 43.7** | **+0.1** |
| COEN | | | | IAmb | IAmb | 16 40 10.5 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **38.83** | **242** | P | **P** | **16 39 54.6** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.83** | **242** | P | **P** | **16 39 54.4** | **+0.2** |
| | comp=Z,2.5nm,0.5s,baz=90,slow=6.1,SNR=6.0 comp=Z,2.5nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.60** | **241** | P | **P** | **16 40 31.6** | **-0.3** |
| **WRA** | **Warramunga Arr** | **44.95** | **260** | P | **P** | **16 40 41.9** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=95,slow=6.6,SNR=2.8 comp=Z,0.3nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **45.07** | **254** | P | **P** | **16 40 43.0** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | **P** | **16 40 43.1** | **-0.3** |
| | comp=Z,0.8nm,0.4s,baz=92,slow=7.8,SNR=9.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 42 11.4** | **+0.1** |
| | comp=Z,0.7nm,0.6s,baz=102,slow=3.8,SNR=6.0 comp=Z,0.8nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.88** | **180** | P | **P** | **16 43 42.7** | **+0.1** |
| **PETK** | **Petropavlovsk-** | **74.03** | **345** | P | **P** | **16 43 54.0** | **-0.8** |
| | comp=Z,3.9nm,0.8s,baz=149,slow=6.7,SNR=4.5 comp=Z,3.9nm,0.8s | | | | | | |
| **M16K** | **Timber Creek** | **80.40** | **9** | P | **P** | **16 44 30.3** | **+1.2** |
| M16K | | | | IAmb | IAmb | 16 44 51.9 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **L16K** | **Owhat River** | **80.98** | **9** | P | **P** | **16 44 33.4** | **+1.3** |
| L16K | | | | IAmb | IAmb | 16 44 43.3 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.26** | **8** | P | **P** | **16 44 34.9** | **+1.4** |
| K15K | | | | IAmb | IAmb | 16 44 35.7 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **L18K** | **Granite Mounta** | **81.89** | **10** | P | **P** | **16 44 37.9** | **+1.2** |
| L18K | | | | IAmb | IAmb | 16 45 15.3 | |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **J16K** | **Anvik River** | **82.33** | **8** | P | **P** | **16 44 39.9** | **+1.0** |
| J16K | | | | IAmb | IAmb | 16 45 20.0 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **K20K** | **Telida** | **83.40** | **11** | P | **P** | **16 44 44.7** | **+0.4** |
| **J19K** | **Poorman** | **83.73** | **10** | P | **P** | **16 44 46.6** | **+0.7** |
| **J20K** | **Nowinta River** | **84.14** | **10** | P | **P** | **16 44 48.8** | **+0.9** |
| J20K | | | | IAmb | IAmb | 16 45 32.5 | |
| | comp=Z,7.4nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.76** | **13** | P | **P** | **16 44 55.5** | **-0.1** |
| CCB | | | | IAmb | IAmb | 16 45 34.5 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **86.07** | **13** | P | **P** | **16 44 56.2** | **-1.0** |
| | comp=Z,0.3nm,0.5s,baz=224,slow=5.0,SNR=4.6 comp=Z,0.3nm,0.5s | | | | | | |
| **J25K** | **Salcha River,** | **86.26** | **13** | P | **P** | **16 44 58.5** | **+0.4** |
| **E19K** | **Redstone River** | **86.75** | **8** | P | **P** | **16 45 00.7** | **+0.4** |
| E19K | | | | IAmb | IAmb | 16 45 33.6 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.32** | **290** | P | **P** | **16 45 14.9** | **+1.4** |
| | comp=Z,0.8nm,0.9s,baz=114,slow=2.3,SNR=4.8 comp=Z,0.8nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **145.23** | **315** | PKPbc | **PKPbc** | **16 51 51.5** | **+0.1** |
| | comp=Z,1.0nm,0.7s,baz=132,slow=5.1,SNR=6.4 | | | | | | |
| **CLL** | **Cclln** | **145.81** | **348** | | **PKPbc** | **16 51 52.8** | **+0.4** |
| **GERES** | **GERESS Array B** | **147.97** | **345** | PKPbc | **PKPbc** | **16 51 58.5** | **+0.1** |
| | comp=Z,1.0nm,0.6s,baz=61,slow=2.5,SNR=5.2 | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.82** | **348** | | **PKPbc** | **16 52 05.9** | **+0.4** |

*IDC **28** 16:51:40.9±1.1, 31°.28N×70°.52E, h0km, mb3.6/10, mbtmp3.6/12, ML3.6/2, MS2.7/3, Error ellipse: s-maj=26.2km s-min=21.1km az=64.0*
*NNC **28** 16:51:43.5±4.0, 31°.50N×70°.83E, h0km, mb4.1, Error ellipse: s-maj=65.1km s-min=32.1km az=100.0*

**ISC 28 16:51:46.1±1.1, 31°.36N±0°.10×70°.6E±0°.1, h35km, n16, σ1s03/18, mb3.6/9, 4C-1D, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **11.68** | **14** | Pn | **Pn** | **16 54 30.9** | **+0.6** |
| | 0.8nm,0.3s,baz=190,slow=3.1,SNR=4.6 | | | | | | |
| AAK | | | | LR | LR | 16 59 58.3 | |
| | comp=Z,16nm,18.1s,baz=231,slow=42 3.7nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **11.68** | **14** | P | **Pn** | **16 54 29.7** | **-0.6** |
| | 2.2nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **16 56 38.1** | **-1.4** |
| | 3.5nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **11.72** | **360** | ⇑P | **Pn** | **16 54 29.2** | **-1.6** |
| | 1.6nm,0.4s,baz=190,slow=14,SNR=24 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **16 56 42.8** | **+2.4** |
| | 1.5nm,0.6s,baz=182,slow=25,SNR=3.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **12.21** | **18** | ⇑P | **Pn** | **16 54 36.4** | **-1.1** |
| | 1.1nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **16 56 52.6** | **+0.1** |
| | 1.8nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **17.86** | **27** | P | **Pn** | **16 55 51.5** | **-0.1** |
| | 0.1nm,0.3s,baz=210,slow=13,SNR=5.3 0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.13** | **15** | P | **P** | **16 56 17.0** | **+0.1** |
| | 1.0nm,0.5s,baz=201,slow=11,SNR=9.8 1.0nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **21.24** | **337** | P | **P** | **16 56 29.3** | **+0.4** |
| | 2.5nm,0.8s,baz=127,slow=9.2,SNR=6.1 2.5nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **21.65** | **360** | P | **P** | **16 56 33.5** | **+0.2** |
| | 1.0nm,0.7s,baz=154,slow=11,SNR=5.4 1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **24.79** | **20** | P | **P** | **16 57 05.8** | **+1.3** |
| | 0.6nm,0.3s,baz=221,slow=9.1,SNR=3.4 0.6nm,0.3s | | | | | | |
| **BRTR** | **Keskin Array B** | **31.03** | **296** | P | **P** | **16 58 00.8** | **+0.2** |
| | 0.8nm,0.8s,baz=129,slow=8.3,SNR=4.9 0.8nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **41.65** | **330** | P | **P** | **16 59 31.0** | **+0.4** |
| | 1.7nm,0.8s,baz=105,slow=6.5,SNR=6.2 1.7nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **46.99** | **325** | LR | LR | 17 21 44.6 | |
| | comp=Z,21nm,20.4s,baz=221,slow=38 | | | | | | |
| **NOA** | **NORSAR Array B** | **48.36** | **326** | P | **P** | **17 00 24.0** | **-0.1** |
| | 0.3nm,0.5s,baz=104,slow=7.8,SNR=2.4 | | | | | | |
| NOA | | | | LR | LR | 17 23 12.1 | |
| | comp=Z,8.3nm,19.1s,baz=280,slow=39 0.3nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.35** | **271** | P | **P** | **17 02 24.4** | **-0.8** |
| | 0.3nm,0.6s,baz=60,slow=5.2,SNR=2.8 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.61** | **121** | P | **P** | **17 03 49.8** | **-0.1** |
| | 0.7nm,1.0s,baz=316,slow=5.7,SNR=3.4 0.7nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **81.63** | **124** | P | **P** | **17 04 01.7** | **+0.9** |
| | 0.3nm,0.5s,baz=303,slow=5.4,SNR=8.6 0.3nm,0.5s | | | | | | |

*DNK **28** 16:59:20.2±1.7, 54°.64N×10°.31E, h0km, Suspected explosion*
*BGR **28** 16:59:22.9±0.5, 54°.38N×9°.48E, h0km, Error ellipse: s-maj=16.7km s-min=7.8km az=62.0, Mining explosion.*

**UPP 28 16:59:21.5±2.6, 54°.73N×10°.36E, h0km, ML2.3, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKMB** | **Sankelm

*mbtmp3.9/14, Error ellipse: s-maj=36.6km s-min=15.8km az=47.0*
*MEX **28** 17:01:27.3±0.9, 17°.08N×94°.69W, h131km±8km, MD4.4*
**ISC 28 17:01:24.4±0.6, 17°.15N±0°.04×94°.64W±0°.03, h143km±5km, n128, σ1s85/173, mb4.1/21, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMIG** | **Matias Romero** | **0.24** | **256** | | **Pn** | **17 01 45.0** | **+1.0** |
| **CMIG** | **Matias Romero** | **0.24** | **256** | P | **Pn** | **17 01 44.6** | **+0.6** |
| | 2μm,0.3s,baz=122,slow=2.1,SNR=6786 | | | | | | |
| CMIG | | | | S | **Sn** | **17 01 58.8** | **0.0** |
| | baz=342,slow=20 | | | | | | |
| **CMIG** | **Matias Romero** | **0.24** | **256** | *i* P | **Pn** | **17 01 45.0** | **+1.0** |
| CMIG | | | | *i* S | **Sn** | **17 01 58.7** | **0.0** |
| **TUIG** | **Tuzandepetl** | **0.90** | **13** | *i* P | **Pn** | **17 01 48.4** | **+0.6** |
| **NEUV** | **Arroyo Zacate** | **1.24** | **297** | *i* P | **Pn** | **17 01 51.1** | **+0.3** |
| NEUV | | | | *i* S | **Sn** | **17 02 10.0** | **-0.9** |
| **PMUV** | **Sontecomapan** | **1.46** | **342** | *i* P | **Pn** | **17 01 53.0** | **-0.2** |
| PMUV | | | | eS | **Sn** | **17 02 11.4** | **-3.8** |
| **TGIG** | | **1.50** | **104** | | **Pn** | **17 01 54.8** | **+1.3** |
| TGIG | | | | | **Sn** | **17 02 15.8** | **+0.1** |
| **TGIG** | | **1.50** | **104** | *i* P | **Pn** | **17 01 54.8** | **+1.3** |
| TGIG | | | | *i* S | **Sn** | **17 02 15.8** | **+0.1** |
| **HUIG** | **Huatulco** | **1.97** | **226** | | **Pn** | **17 01 58.2** | **-0.5** |
| HUIG | | | | | **Sn** | **17 02 22.9** | **-2.2** |
| **HUIG** | **Huatulco** | **1.97** | **226** | *i* P | **Pn** | **17 01 58.2** | **-0.5** |
| HUIG | | | | eS | **Sn** | **17 02 22.9** | **-2.2** |
| **PCIG** | | **1.98** | **136** | | **Pn** | **17 02 00.8** | **+1.8** |
| PCIG | | | | | **Sn** | **17 02 26.0** | **+0.6** |
| **PCIG** | | **1.98** | **136** | *i* P | **Pn** | **17 02 00.8** | **+1.8** |
| PCIG | | | | eS | **Sn** | **17 02 26.0** | **+0.6** |
| **OXIG** | **Oaxaca** | **2.00** | **268** | | **Pn** | **17 02 01.0** | **+1.6** |
| OXIG | | | | | **Sn** | **17 02 27.1** | **+0.9** |
| **VHO** | **Vista Hermosa** | **2.00** | **268** | *i* P | **Pn** | **17 02 01.0** | **+1.6** |
| VHO | | | | eS | **Sn** | **17 02 27.1** | **+0.9** |
| **TOIG** | **Toxpalan** | **2.50** | **292** | | **Pn** | **17 02 06.6** | **+1.4** |
| TOIG | | | | | **Sn** | **17 02 35.7** | **-1.0** |
| **TOIG** | **Toxpalan** | **2.50** | **292** | *i* P | **Pn** | **17 02 06.6** | **+1.4** |
| TOIG | | | | eS | **Sn** | **17 02 35.7** | **-1.0** |
| **CCIG** | **Comitan** | **2.55** | **109** | | **Pn** | **17 02 05.6** | **-0.4** |
| CCIG | | | | Sn | **Sn** | **17 02 36.8** | **-1.2** |
| **CCIG** | **Comitan** | **2.55** | **109** | *i* P | **Pn** | **17 02 07.3** | **+1.3** |
| CCIG | | | | eS | **Sn** | **17 02 35.7** | **-2.3** |
| **PEIG** | **Puerto Escondi** | **2.66** | **245** | | **Pn** | **17 02 06.4** | **-0.9** |
| PEIG | | | | | **Sn** | **17 02 38.3** | **-2.0** |
| **PEIG** | **Puerto Escondi** | **2.66** | **245** | *i* P | **Pn** | **17 02 06.4** | **-0.9** |
| PEIG | | | | eS | **Sn** | **17 02 38.3** | **-2.0** |
| **YOIG** | **Yosondua** | **2.79** | **264** | | **Pn** | **17 02 09.9** | **+0.7** |
| YOIG | | | | | **Sn** | **17 02 42.4** | **-1.2** |
| **YOIG** | **Yosondua** | **2.79** | **264** | *i* P | **Pn** | **17 02 09.9** | **+0.7** |
| YOIG | | | | eS | **Sn** | **17 02 42.4** | **-1.2** |
| **JAUV** | **Jalcomulco** | **3.01** | **317** | eP | **Pn** | **17 02 11.7** | **0.0** |
| JAUV | | | | eS | **Sn** | **17 02 45.2** | **-3.1** |
| **PAVE** | **Pavencul** | **3.06** | **129** | eP | **Pn** | **17 02 14.2** | **+1.7** |
| PAVE | | | | eS | **Sn** | **17 02 48.9** | **-0.9** |
| **LVIG** | **Laguna Verde** | **3.06** | **327** | eP | **Pn** | **17 02 14.3** | **+2.0** |
| LVIG | | | | eS | **Sn** | **17 02 45.6** | **-3.8** |
| **HLIG** | **Huajuapan de L** | **3.09** | **283** | | **Pn** | **17 02 14.3** | **+1.4** |
| HLIG | | | | | **Sn** | **17 02 48.9** | **-1.4** |
| **HLIG** | **Huajuapan de L** | **3.09** | **283** | *i* P | **Pn** | **17 02 14.3** | **+1.4** |
| HLIG | | | | eS | **Sn** | **17 02 48.9** | **-1.4** |
| **CHUJ** | **Union Juarez** | **3.18** | **130** | eP | **Pn** | **17 02 15.9** | **+1.8** |
| CHUJ | | | | eS | **Sn** | **17 02 50.2** | **-2.2** |
| **FTIG** | **Fresnillo de T** | **3.42** | **283** | | **Pn** | **17 02 18.8** | **+1.8** |
| **FTIG** | **Fresnillo de T** | **3.42** | **283** | *i* P | **Pn** | **17 02 18.8** | **+1.8** |
| **PNIG** | **Pinotepa** | **3.42** | **258** | | **Pn** | **17 02 16.4** | **-0.6** |
| **PNIG** | **Pinotepa** | **3.42** | **258** | *i* P | **Pn** | **17 02 16.4** | **-0.6** |
| **HUEH** | **Huehuetenango** | **3.52** | **121** | | **Pn** | **17 02 18.2** | **-0.2** |
| HUEH | | | | Sn | **Sn** | **17 02 54.6** | **-5.7** |
| **HUEH** | **Huehuetenango** | **3.52** | **121** | eP | **Pn** | **17 02 18.9** | **+0.4** |
| HUEH | | | | eS | **Sn** | **17 02 59.3** | **-1.0** |
| **TLIG** | **Tlapa** | **3.77** | **277** | | **Pn** | **17 02 21.3** | **-0.3** |
| TLIG | | | | Sn | **Sn** | **17 03 02.7** | **-3.3** |
| **TLIG** | **Tlapa** | **3.77** | **277** | *i* P | **Pn** | **17 02 23.2** | **+1.5** |
| TLIG | | | | eS | **Sn** | **17 03 04.0** | **-1.9** |
| **RTAL** | **Retalhuleu** | **3.85** | **132** | | Pn | 17 02 17.4 | -5.2 |
| RTAL | | | | Sn | Sn | 17 02 58.0 | -10 |
| **RTAL** | **Retalhuleu** | **3.85** | **132** | eS | Sn | 17 02 57.6 | -10 |
| **CXUV** | **Coxquihui** | **4.11** | **318** | eP | **Pn** | **17 02 27.0** | **+1.0** |
| CXUV | | | | eS | **Sn** | **17 03 06.1** | **-7.6** |
| **PBCV** | **Popocatepetl** | **4.15** | **297** | *i* P | **Pn** | **17 02 29.8** | **+3.0** |
| PBCV | | | | *i* S | **Sn** | **17 03 15.3** | **+0.2** |
| **PBPN** | **Popocatepetl** | **4.23** | **297** | *i* P | **Pn** | **17 02 30.8** | **+2.8** |
| PBPN | | | | *i* S | **Sn** | **17 03 19.7** | **+2.3** |
| **PPM** | **Popocatepetl** | **4.24** | **297** | *i* P | **Pn** | **17 02 31.3** | **+3.1** |
| PPM | | | | eS | **Sn** | **17 03 17.1** | **-0.5** |
| **PPIG** | **Popocatepetl** | **4.25** | **297** | | **Pn** | **17 02 31.3** | **+3.1** |
| PPIG | | | | | **Sn** | **17 03 17.1** | **-0.6** |
| **CRIG** | **Cruz Grande** | **4.32** | **265** | | **Pn** | **17 02 28.1** | **-0.5** |
| CRIG | | | | | **Sn** | **17 03 17.0** | **-1.7** |
| **CRIG** | **Cruz Grande** | **4.32** | **265** | *i* P | **Pn** | **17 02 28.1** | **-0.5** |
| CRIG | | | | eS | **Sn** | **17 03 17.0** | **-1.7** |
| **YAIG** | **Yautepec** | **4.54** | **293** | | **Pn** | **17 02 34.2** | **+2.4** |
| **YAIG** | **Yautepec** | **4.54** | **293** | eP | **Pn** | **17 02 34.2** | **+2.4** |
| **APG** | **El Apazote** | **4.55** | **117** | P | **Pn** | **17 02 31.9** | **0.0** |
| | 0.7nm,0.3s,baz=191,slow=13,SNR=28 | | | | | | |
| APG | | | | S | **Sn** | **17 03 17.5** | **-6.9** |
| | 12nm,0.5s,baz=172,slow=20,SNR=17 | | | | | | |
| **PETF** | **Flores** | **4.57** | **92** | | **Pn** | **17 02 30.5** | **-1.5** |
| PETF | | | | Sn | **Sn** | **17 03 22.3** | **-2.3** |
| **PETF** | **Flores** | **4.57** | **92** | eP | **Pn** | **17 02 32.2** | **+0.2** |
| PETF | | | | eS | **Sn** | **17 03 22.1** | **-2.5** |
| **DAIG** | **Los Arroyos** | **4.79** | **269** | | **Pn** | **17 02 35.3** | **+0.3** |
| DAIG | | | | | **Sn** | **17 03 25.4** | **-4.5** |
| **DAIG** | **Los Arroyos** | **4.79** | **269** | eP | **Pn** | **17 02 35.3** | **+0.3** |
| DAIG | | | | eS | **Sn** | **17 03 25.4** | **-4.5** |
| **PLIG** | **Platanillo** | **4.79** | **286** | | **Pn** | **17 02 37.3** | **+2.2** |
| PLIG | | | | | **Sn** | **17 03 29.4** | **-0.7** |
| **PLIG** | **Platanillo** | **4.79** | **286** | *i* P | **Pn** | **17 02 37.3** | **+2.2** |
| PLIG | | | | eS | **Sn** | **17 03 29.4** | **-0.7** |
| **MEIG** | **Mezcala** | **4.81** | **280** | | **Pn** | **17 02 36.8** | **+1.5** |
| MEIG | | | | | **Sn** | **17 03 28.4** | **-2.1** |
| **MEIG** | **Mezcala** | **4.81** | **280** | *i* P | **Pn** | **17 02 36.8** | **+1.5** |
| MEIG | | | | eS | **Sn** | **17 03 28.4** | **-2.1** |
| **AOVM** | **Tlapan** | **4.92** | **296** | | **Pn** | **17 02 39.9** | **+2.7** |
| **AOVM** | **Tlapan** | **4.92** | **296** | eP | **Pn** | **17 02 39.9** | **+2.7** |
| **MAVM** | **Malinalco, Edo** | **4.96** | **292** | eP | Pn | 17 02 25.2 | -12 |
| **CAIG** | **El Cayaco** | **5.38** | **270** | | **Pn** | **17 02 42.6** | **-0.2** |
| CAIG | | | | | **Sn** | **17 03 40.2** | **-3.8** |
| **CAIG** | **El Cayaco** | **5.38** | **270** | eP | **Pn** | **17 02 42.6** | **-0.2** |
| CAIG | | | | eS | **Sn** | **17 03 40.2** | **-3.8** |
| **ESQI** | **Esquipulas** | **5.71** | **116** | Pn | **Pn** | **17 02 40.4** | **-1.9** |
| **MTO3** | **Montecristo** | **5.77** | **118** | | **Pn** | **17 02 48.0** | **-0.2** |
| **JTS** | **Las Juntas de** | **11.62** | **125** | P | **Pn** | **17 04 07.3** | **+1.3** |
| | 3.6nm,0.3s,baz=279,slow=23,SNR=2.3 | | | | | | |
| **833A** | **Chaparral WMA,** | **11.95** | **339** | Pn | **Pn** | **17 04 10.7** | **+0.4** |
| **SOR** | **Soroa** | **12.29** | **61** | Pn | **Pn** | **17 04 12.0** | **-2.7** |
| **HNDO** | **Hondo** | **13.04** | **342** | Pn | **Pn** | **17 04 24.5** | **+0.2** |
| **HNVL** | **Huntsville, TX** | **13.57** | **357** | Pn | **Pn** | **17 04 29.5** | **-1.6** |
| **BRDY** | **Brady** | **14.62** | **345** | P | **Pn** | **17 04 46.4** | **+1.9** |
| **TXAR** | **Lajitas Array** | **14.68** | **327** | P | **Pn** | **17 04 46.6** | **+1.3** |
| | 0.3nm,0.5s,baz=280,slow=38,SNR=2.3 | | | | | | |
| **237A** | **Washetta, Mont** | **14.82** | **356** | | **P** | **17 04 48.9** | **-0.2** |
| **OZNA** | **Ozona** | **14.93** | **338** | P | **Pn** | **17 04 49.1** | **+0.8** |
| **WHTX** | **Lake Whitney,** | **15.00** | **351** | P | **P** | **17 04 52.2** | **+1.2** |
| **PLPT** | **Palo Pinto** | **15.95** | **349** | P | **Pn** | **17 05 01.4** | **+0.6** |
| PLPT | | | | IAmb | IAmb | 17 05 22.2 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **WTFS** | **Witchita Falls** | **16.90** | **349** | | **P** | **17 05 11.9** | **-0.1** |
| WTFS | | | | IAmb | IAmb | 17 05 25.5 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **POST** | **Post** | **17.01** | **340** | P | **P** | **17 05 13.6** | **+0.2** |
| POST | | | | IAmb | IAmb | 17 05 30.1 | |
| | comp=Z,7.0nm,0.4s | | | | | | |
| **MIAR** | **Mount Ida** | **17.35** | **3** | | **P** | **17 05 17.1** | **+0.2** |
| MIAR | | | | IAmb | IAmb | 17 05 19.4 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **17.38** | **358** | P | **P** | **17 05 16.9** | **-0.4** |
| **WMOK** | **Wichita Mounta** | **17.90** | **349** | P | **P** | **17 05 22.8** | **-0.3** |
| **OXF** | **Oxford** | **17.91** | **14** | P | **P** | **17 05 22.0** | **-1.1** |
| OXF | | | | IAmb | IAmb | 17 05 56.6 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **WHAR** | **Wooly Hollow** | **18.19** | **6** | P | **P** | **17 05 26.3** | **+0.2** |
| **MSTX** | **Muleshoe** | **18.27** | **338** | P | **P** | **17 05 27.1** | **-0.1** |
| **SMWD** | **Samnorwood** | **18.57** | **345** | P | **P** | **17 05 30.9** | **+0.6** |
| SMWD | | | | IAmb | IAmb | 17 05 33.1 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **AMTX** | **Amarillo** | **18.75** | **342** | P | **P** | **17 05 32.3** | **-0.1** |
| AMTX | | | | IAmb | IAmb | 17 05 37.6 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **18.80** | **6** | P | **P** | **17 05 32.6** | **-0.2** |
| FCAR | | | | IAmb | IAmb | 17 05 34.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **OK048** | **Pawnee Station** | **19.30** | **354** | P | **P** | **17 05 36.5** | **-1.7** |
| OK048 | | | | IAmb | IAmb | 17 05 56.5 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **SWET** | **Sewanee** | **19.60** | **22** | P | **P** | **17 05 40.3** | **-1.2** |
| SWET | | | | IAmb | IAmb | 17 05 41.4 | |
| | comp=Z,7.9nm,0.7s | | | | | | |
| **OK032** | **Salt Plains WL** | **19.83** | **352** | P | **P** | **17 05 41.7** | **-2.3** |
| **WVT** | **Waverly** | **19.85** | **16** | P | **P** | **17 05 42.4** | **-1.8** |
| WVT | | | | IAmb | IAmb | 17 05 48.8 | |
| | comp=Z,9.2nm,0.4s | | | | | | |
| **T42A** | **Van Buren** | **20.05** | **8** | P | **P** | **17 05 44.8** | **-1.5** |
| T42A | | | | IAmb | IAmb | 17 05 49.7 | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| **S39A** | **Bolivar** | **20.50** | **3** | P | **P** | **17 05 49.5** | **-1.6** |
| **RTBA** | **Rita Blanca** | **20.51** | **341** | P | **P** | **17 05 49.5** | **-1.9** |
| RTBA | | | | IAmb | IAmb | 17 05 53.9 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **TKL** | **Tuckaleechee C** | **20.82** | **26** | P | **P** | **17 05 54.3** | **-0.2** |
| | comp=Z,1.9nm,0.5s,baz=191,slow=14,SNR=4.5 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **CCM** | **Cathedral Cave** | **21.04** | **7** | P | **P** | **17 05 55.4** | **-1.5** |
| **FVM** | **French Village** | **21.08** | **9** | P | **P** | **17 05 56.3** | **-1.1** |
| **R40A** | **Maddies Statio** | **21.16** | **5** | P | **P** | **17 05 57.6** | **-0.6** |
| **V53A** | **Saluda** | **21.24** | **27** | P | **P** | **17 05 57.5** | **-1.6** |
| **TZTN** | **Tazewell** | **21.67** | **25** | P | **P** | **17 06 02.3** | **-1.4** |
| **CBKS** | **Cedar Bluff** | **22.04** | **349** | P | **P** | **17 06 06.2** | **-1.4** |
| **V55A** | **Taylorsville** | **22.12** | **30** | P | **P** | **17 06 07.1** | **-1.2** |
| **U54A** | **Nelsons Funny** | **22.39** | **28** | P | **P** | **17 06 08.9** | **-2.1** |
| U54A | | | | IAmb | IAmb | 17 06 10.7 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **P40A** | **Paris** | **22.41** | **5** | P | **P** | **17 06 09.3** | **-1.9** |
| P40A | | | | IAmb | IAmb | 17 06 11.1 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **P38A** | **Dawn** | **22.41** | **2** | P | **P** | **17 06 09.4** | **-1.7** |
| P38A | | | | IAmb | IAmb | 17 06 11.0 | |
| | comp=Z,8.4nm,0.6s | | | | | | |
| **S51A** | **Beattyville** | **22.61** | **23** | P | **P** | **17 06 12.0** | **-1.1** |
| S51A | | | | IAmb | IAmb | 17 06 49.9 | |
| | comp=Z,10nm,0.5s | | | | | | |
| **U56A** | **King** | **22.92** | **31** | P | **P** | **17 06 14.7** | **-1.3** |
| U56A | | | | IAmb | IAmb | 17 06 15.8 | |
| | comp=Z,17nm,1.3s | | | | | | |
| **SCIA** | **State Center** | **24.70** | **3** | P | **P** | **17 06 31.7** | **-0.5** |
| **PDAR** | **Pinedale Array** | **28.52** | **337** | P | **P** | **17 07 06.6** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=92,slow=37,SNR=1.5 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **DSP** | **Deep Springs** | **28.77** | **319** | P | **P** | **17 07 08.7** | **+0.1** |
| **NVAR** | **Mina Array Bea** | **29.64** | **320** | P | **P** | **17 07 18.1** | **+1.5** |
| | comp=Z,0.4nm,0.6s,baz=120,slow=10,SNR=3.7 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **DELO** | **Deloro Mine** | **30.82** | **24** | P | **P** | **17 07 24.4** | **-2.2** |
| **EYMN** | **Ely** | **30.82** | **4** | P | **P** | **17 07 25.3** | **-1.3** |
| **ULM** | **Lac du Bonnet** | **33.03** | **359** | P | **P** | **17 07 45.4** | **-0.6** |
| | comp=Z,3.2nm,0.7s,baz=159,slow=10,SNR=4.0 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **FFC** | **Flin Flon** | **37.93** | **353** | P | **P** | **17 08 27.8** | **+0.1** |
| FFC | | | | IAmb | IAmb | 17 08 30.1 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **FCC** | **Fort Churchill** | **41.55** | **0** | P | **P** | **17 08 58.4** | **+0.8** |
| **LPAZ** | **La Paz** | **42.27** | **140** | P | **P** | **17 09 06.0** | **+1.4** |
| | comp=Z,1.1nm,0.5s,baz=333,slow=15,SNR=4.6 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **47.41** | **348** | P | **P** | **17 09 43.9** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=119,slow=7.8,SNR=4.6 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **M29M** | **Somme Creek** | **54.53** | **337** | P | **P** | **17 10 39.9** | **+2.5** |
| M29M | | | | IAmb | IAmb | 17 10 41.2 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **J30M** | **Hart River** | **55.07** | **340** | P | **P** | **17 10 43.5** | **+2.3** |
| J30M | | | | IAmb | IAmb | 17 11 11.0 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| **M20K** | **Styx River** | **60.34** | **332** | P | **P** | **17 11 19.6** | **+1.5** |
| M20K | | | | IAmb | IAmb | 17 11 53.7 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| **K20K** | **Telida** | **61.26** | **334** | P | **P** | **17 11 25.4** | **+1.2** |
| K20K | | | | IAmb | IAmb | 17 11 30.4 | |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **C23K** | **Itkillik River** | **62.59** | **341** | | **P** | **17 11 34.9** | **+2.0** |
| **EKA** | **Eskdalemuir Ar** | **76.92** | **36** | P | **P** | **17 13 00.8** | **0.0** |
| | comp=Z,1.7nm,0.7s,baz=282,slow=4.0,SNR=5.1 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **79.77** | **52** | P | **P** | **17 13 17.3** | **+0.4** |
| | comp=Z,1.4nm,0.8s,baz=297,slow=5.1,SNR=8.0 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **82.59** | **28** | P | **P** | **17 13 32.4** | **+1.0** |
| | comp=Z,0.9nm,0.7s,baz=292,slow=5.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **82.59** | **28** | P | **P** | **17 13 32.1** | **+0.8** |
| | comp=Z,1.4nm,0.7s,baz=293,slow=5.2,SNR=7.0 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.94** | **18** | P | **P** | **17 13 38.7** | **+0.6** |
| | comp=Z,0.9nm,0.5s,baz=284,slow=4.9,SNR=6.4 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **84.08** | **29** | P | **P** | **17 13 39.2** | **+0.3** |
| | comp=Z,1.9nm,1.0s,baz=298,slow=3.1,SNR=2.6 | | | | | | |
| | comp=Z,1.9nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **88.72** | **24** | P | **P** | **17 14 02.0** | **+0.5** |
| | comp=Z,0.9nm,0.8s,baz=272,slow=6.3,SNR=1.6 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |

*IDC **28** 17:08:07.0±35.0, 19°.27S×179°.45W, h559km±125km, mb3.3/3, mbtmp4.2/4, Error ellipse: s-maj=749.9km s-min=120.5km az=84.0*
*NEIC **28** 17:08:08.8±1.3, 18°.52S±0°.07×179°.7W±0°.2, h570km±12km, mb4.3/14, Error ellipse: s-maj=23.2km s-min=9.5km az=86.0*
**ISC 28 17:08:06.2±1.6, 18°.9S±0°.3×179°.4W±0°.3, h550km, n19, σ1s33/19, mb4.2/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.67** | **295** | P | **P** | **17 09 21.5** | **+2.1** |
| **MSVF** | **Nonsavu** | **2.67** | **295** | P | **P** | **17 09 21.8** | **+2.4** |
| | 28nm,0.6s,baz=138,slow=14,SNR=21 | | | | | | |
| **CAN** | **Canberra** | **32.34** | **233** | P | **P** | **17 13 51.8** | **+1.1** |
| **CTAO** | **Charters Tower** | **32.35** | **262** | P | **P** | **17 13 50.8** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 17 13 56.6 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **TOO** | **Toolangi** | **35.80** | **231** | P | **P** | **17 14 21.4** | **+1.8** |
| TOO | | | | IAmb | IAmb | 17 14 30.8 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **COEN** | **Coen** | **36.17** | **272** | P | **P** | **17 14 22.6** | **-0.3** |
| **STKA** | **Stephens Creek** | **37.32** | **242** | P | **P** | **17 14 33.1** | **+1.0** |
| **STKA** | **Stephens Creek** | **37.32** | **242** | P | **P** | **17 14 30.5** | **-1.7** |
| | comp=Z,2.7nm,0.7s,baz=100,slow=11,SNR=3.3 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **42.09** | **242** | P | **P** | **17 15 10.1** | **-0.3** |
| BBOO | | | | IAmb | IAmb | 17 15 50.2 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.33** | **261** | P | **P** | **17 15 19.2** | **-1.1** |
| WR0 | | | | IAmb | IAmb | 17 15 56.0 | |
| | comp=Z,8.3nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **43.51** | **261** | P | **P** | **17 15 20.1** | **-1.6** |
| **WRA** | **Warramunga Arr** | **43.52** | **261** | P | **P** | **17 15 20.9** | **-0.9** |
| | comp=Z,1.0nm,0.3s,baz=95,slow=7.4,SNR=78 | | | | | | |
| | comp=Z,3.7nm,0.4s,baz=101,slow=6.5,SNR=135 | | | | | | |
| | comp=Z,3.7nm,0.4s | | | | | | |
| **AS31** | **Alice Springs** | **43.60** | **255** | P | **P** | **17 15 22.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **43.60** | **255** | P | **P** | **17 15 21.8** | **-0.7** |
| **FORT** | **Forrest** | **48.72** | **245** | P | **P** | **17 16 00.2** | **-0.8** |
| **KNRA** | **Kununurra** | **49.44** | **265** | P | **P** | **17 16 05.7** | **-0.9** |
| KNRA | | | | IAmb | IAmb | 17 16 12.2 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.92** | **261** | P | **P** | **17 16 23.2** | **-1.5** |
| **KDAK** | **Kodiak Island** | **79.59** | **14** | P | **P** | **17 19 15.0** | **-1.0** |
| **HATC** | **Hat Creek Radi** | **80.12** | **41** | P | **P** | **17 19 19.6** | **+0.1** |
| HATC | | | | IAmb | IAmb | 17 19 22.6 | |
| | comp=Z,17nm,0.8s | | | | | | |

*IDC **28** 17:20:59.4±1.2, 2°.06N×128°.60E, h0km, mb3.5/6, mbtmp3.5/6, MS2.8/2, Error ellipse: s-maj=82.1km s-min=19.2km az=73.0*
*DJA **28** 17:21:01.5±0.6, 2°.N±6°×12°.9E±°, h10km, M3.8/10, mb3.9/6, MLv3.7/10*
**ISC 28 17:21:04.3±0.9, 2°.1N±0°.1×129°.03E±0°.09, h40km, n14, σ0s84/12, mb3.7/6, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.12** | **232** | P | **Pn** | **17 21 36.0** | **-1.2** |
| **SWI** | **Sorong** | **3.68** | **143** | P | **Pn** | **17 21 58.2** | **-0.5** |
| **SANI** | **Sanana** | **5.12** | **217** | P | **Pn** | **17 22 17.8** | **-0.6** |
| **NLAI** | **Namlea** | **5.63** | **200** | P | **Pn** | **17 22 25.4** | **-0.2** |
| | 9.4nm,0.9s,0.0nm | | | | | | |
| **FAKI** | **Fak Fak** | **5.92** | **147** | P | **Pn** | **17 22 29.1** | **-0.5** |
| **GTOI** | **Gorontalo** | **6.19** | **257** | P | **Pn** | **17 22 34.6** | **+1.4** |
| | 5.3nm,0.8s,0.0nm | | | | | | |
| **WRA** | **Warramunga Arr** | **22.50** | **167** | P | **P** | **17 26 01.4** | **+0.7** |
| | 0.4nm,0.5s,baz=345,slow=11,SNR=7.6 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **26.04** | **170** | P | **P** | **17 26 35.0** | **+1.0** |
| | 0.1nm,0.5s,baz=354,slow=6.9,SNR=7.2 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **JCJ** | **Chichijima** | **27.88** | **26** | LR | LR | 17 35 32.0 | |
| | comp=Z,18nm,21.7s,baz=110,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **35.21** | **358** | P | **P** | **17 27 55.2** | **+0.4** |
| | 0.5nm,0.6s,baz=171,slow=9.4,SNR=1.3 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **43.55** | **14** | LR | LR | 17 46 26.3 | |
| | comp=Z,11nm,19.0s,baz=116,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **49.60** | **340** | P | **P** | **17 29 51.5** | **-0.2** |
| | 0.5nm,0.5s,baz=151,slow=6.3,SNR=2.9 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.21** | **325** | P | **P** | **17 31 08.1** | **-0.3** |
| | 0.8nm,0.7s,baz=116,slow=8.0,SNR=10 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.36** | **327** | P | **P** | **17 31 35.5** | **-0.5** |
| | 0.6nm,0.6s,baz=128,slow=6.0,SNR=11 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

*AEIC **28** 17:28:36.4±2.7, 51°.9N±0°.1×170°.89W±0°.09, h25km±9km, Error ellipse: s-maj=20.3km s-min=5.1km az=160.0*
**NEIC 28 17:28:35.5±2.2, 51°.98N±0°.04×170°.93W±0°.07, h5km±8km, mb3.6/1, ML3.3(AEIC), Error ellipse: s-maj=8.7km s-min=2.4km az=131.0, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLES** | **Cleveland East** | **1.06** | **36** | | Pg | 17 28 55.4 | -0.4 |
| CLES | | | | | Sg | 17 29 09.3 | -0.2 |
| **CLCO** | **Concord Point,** | **1.10** | **42** | | Pg | 17 28 56.0 | -0.5 |
| CLCO | | | | | Sg | 17 29 10.7 | -0.1 |
| **NIKH** | **Nikolski High** | **1.61** | **51** | | Pn | 17 29 02.6 | -1.9 |
| NIKH | | | | | Sn | 17 29 22.9 | -2.9 |
| **KOSE** | **Korovin Southe** | **1.96** | **282** | | Pn | 17 29 09.6 | +0.3 |
| KOSE | | | | | Sn | 17 29 33.4 | -0.8 |
| **KOKL** | **Mount Kliuchef** | **2.04** | **281** | | Pn | 17 29 10.1 | -0.4 |
| **KOWE** | **Korovin West** | **2.08** | **282** | | Pn | 17 29 10.0 | -1.0 |
| **OKWE** | **Okmok W'ng Wal** | **2.22** | **47** | | Pn | 17 29 12.8 | -0.1 |
| **OKCE** | **Okmok Cone E** | **2.22** | **48** | | Pn | 17 29 13.4 | +0.4 |
| OKCE | | | | | Sn | 17 29 40.9 | 0.0 |
| **OKNC** | **Okmok New Cone** | **2.26** | **48** | | Pn | 17 29 14.1 | +0.6 |
| **MAPS** | **Pakushin South** | **3.04** | **51** | | Pn | 17 29 24.0 | -0.1 |
| MAPS | | | | | Sn | 17 30 00.4 | -0.4 |
| **GSMY** | **Great Sitkin M** | **3.17** | **273** | | Pn | 17 29 25.4 | -0.6 |
| **GSTR** | **Great Sitkin T** | **3.17** | **274** | Pn | Pn | 17 29 24.7 | -1.2 |
| **MSW** | **Makushin Switc** | **3.17** | **51** | | Pn | 17 29 26.0 | 0.0 |
| **UNV** | **Unalaska Valle** | **3.27** | **53** | | Pn | 17 29 26.8 | -0.5 |
| UNV | | | | | Sn | 17 30 06.0 | -0.5 |
| **AKMO** | **Akutan Morgan** | **3.65** | **53** | | Pn | 17 29 33.0 | +0.5 |
| **LVA** | **Lava Point** | **3.68** | **52** | | Pn | 17 29 33.7 | +0.8 |
| **AKGG** | **Akutan Green G** | **3.72** | **51** | | Pn | 17 29 33.6 | +0.1 |
| **KIWB** | **Kanaga Island** | **3.85** | **271** | Pn | Pn | 17 29 35.5 | +0.2 |
| **AMKA** | **Amchitka** | **6.11** | **268** | Pn | Pn | 17 30 06.0 | -0.3 |
| **S12K** | **Black Hills** | **6.44** | **51** | Pn | Pn | 17 30 10.7 | -0.2 |
| **CNBA** | **Chernabura Isl** | **7.36** | **63** | Pn | Pn | 17 30 22.4 | -1.0 |
| **O14K** | **Tigyukauivet M** | **9.11** | **33** | Pn | Pn | 17 30 48.0 | +0.7 |
| **M14K** | **Bethel** | **10.09** | **26** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TMWZ | **Te Maipa** | **9.71** | **199** | P | **Pn** | **17 35 47.5** | **+0.6** |
| TMWZ | | | | S | **S** | **17 37 32.3** | **-4.3** |
| **MTW** | **Mount Morrison** | **9.87** | **201** | P | **Pn** | **17 35 48.8** | **0.0** |
| MTW | | | | S | **S** | **17 37 33.9** | **-6.2** |
| **TRWZ** | **Traveller** | **10.04** | **199** | P | **Pn** | **17 35 51.5** | **+0.6** |
| TRWZ | | | | S | **S** | **17 37 40.0** | **-3.9** |
| **PAWZ** | **Paruwai Farm** | **10.10** | **201** | P | **Pn** | **17 35 51.2** | **-0.4** |
| PAWZ | | | | S | **S** | **17 37 39.5** | **-5.8** |
| **MSWZ** | **Moikau Station** | **10.18** | **201** | P | **Pn** | **17 35 52.6** | **-0.1** |
| MSWZ | | | | S | **S** | **17 37 40.8** | **-6.4** |
| **BHW** | **Baring Head** | **10.30** | **203** | P | **Pn** | **17 35 53.4** | **-0.6** |
| BHW | | | | S | **S** | **17 37 45.1** | **-4.6** |
| **PLWZ** | **Palliser** | **10.32** | **201** | P | **Pn** | **17 35 55.0** | **+0.6** |
| PLWZ | | | | S | **S** | **17 37 45.1** | **-5.3** |
| **TCW** | **Tory Channel** | **10.33** | **205** | P | **Pn** | **17 35 53.4** | **-1.0** |
| TCW | | | | S | **S** | **17 37 44.3** | **-6.1** |
| **TUWZ** | **Tuamarina** | **10.64** | **206** | P | **Pn** | **17 35 57.6** | **-0.6** |
| TUWZ | | | | S | **S** | **17 37 52.8** | **-4.7** |
| **RPZ** | **Rata Peaks** | **13.71** | **209** | P | **Pn** | **17 36 36.7** | **+1.3** |
| | 8.5nm,0.8s,baz=100,slow=8.4,SNR=6.1 | | | | | | |
| RPZ | | | | S | **S** | **17 38 58.8** | **-7.6** |
| | 6.4nm,0.5s,baz=118,slow=21,SNR=10.0 | | | | | | |
| **MSVF** | **Nonsavu** | **14.32** | **352** | P | **P** | **17 36 41.5** | **-0.7** |
| | 18nm,0.8s,baz=186,slow=5.1,SNR=9.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.67** | **306** | P | **P** | **17 36 56.3** | **-0.8** |
| | 4.0nm,0.9s,baz=135,slow=18,SNR=2.3 | | | | | | |
| **RAR** | **Rarotonga** | **20.91** | **64** | P | **P** | **17 37 53.7** | **+1.3** |
| | 55nm,1.2s,baz=242,slow=17,SNR=2.3 | | | | | | |
| | 55nm,1.2s | | | | | | |
| **CTA** | **Charters Tower** | **32.52** | **283** | P | **P** | **17 39 34.9** | **-1.1** |
| | 0.1nm,0.5s,baz=162,slow=11,SNR=1.4 | | | | | | |
| **STKA** | **Stephens Creek** | **32.58** | **260** | P | **P** | **17 39 36.8** | **+0.4** |
| | 1.3nm,0.5s,baz=55,slow=6.3,SNR=3.8 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **41.45** | **270** | P | **P** | **17 40 50.4** | **-0.3** |
| | 0.8nm,0.3s,baz=108,slow=7.5,SNR=53 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.59** | **275** | P | **P** | **17 40 59.4** | **-0.4** |
| | 2.3nm,0.3s,baz=112,slow=8.0,SNR=34 | | | | | | |
| | 2.3nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **58.12** | **180** | P | **P** | **17 42 57.9** | **+3.0** |
| | 1.2nm,0.7s,baz=0.0,slow=18,SNR=13 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **76.60** | **179** | ⇑P | **P** | **17 44 50.8** | **+1.0** |
| | comp=Z,20nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **76.60** | **179** | P | **P** | **17 44 51.7** | **+1.9** |
| | comp=Z,1.1nm,0.9s,baz=212,slow=7.3,SNR=3.5 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **76.82** | **177** | ⇑P | **P** | **17 44 52.9** | **+1.9** |
| | comp=Z,0.4nm,0.2s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **77.23** | **177** | ⇑P | **P** | **17 44 54.8** | **+1.6** |
| | comp=Z,1.9nm,0.5s,baz=186,slow=5.4 | | | | | | |
| **H03S2** | **Juan Fernandez** | **80.92** | **124** | T | T | 19 13 40.8 | |
| | baz=238,slow=73 | | | | | | |
| **H03S1** | **Juan Fernandez** | **80.93** | **124** | T | T | 19 13 48.9 | |
| | baz=238,slow=73 | | | | | | |
| **H03S3** | **Juan Fernandez** | **80.94** | **124** | T | T | 19 13 46.8 | |
| | baz=238,slow=73 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **87.61** | **328** | P | **P** | **17 45 46.9** | **+0.2** |
| | comp=Z,1.4nm,0.7s,baz=88,slow=9.4,SNR=2.6 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.50** | **44** | P | **P** | **17 46 01.3** | **+0.6** |
| | comp=Z,0.3nm,0.5s,baz=250,slow=2.7,SNR=2.6 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **121.01** | **313** | PKP | **PKPdf** | **17 51 48.3** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=108,slow=1.8,SNR=6.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **126.40** | **315** | PKP | **PKPdf** | **17 51 59.2** | **+0.1** |
| | comp=Z,0.7nm,0.4s,baz=108,slow=1.4,SNR=9.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **139.78** | **346** | PKhKP | PKPpre | 17 52 14.3 | |
| | comp=Z,4.3nm,1.1s,baz=46,slow=3.5,SNR=4.1 | | | | | | |
| ARCES | | | | PKP | **PKPdf** | **17 52 23.9** | **+0.1** |
| | comp=Z,1.6nm,0.7s,baz=52,slow=2.0,SNR=5.4 | | | | | | |
| **FINES** | **FINESS Array B** | **146.05** | **338** | PKPbc | **PKPbc** | **17 52 36.1** | **-0.3** |
| | comp=Z,11nm,0.7s,baz=50,slow=4.1,SNR=74 | | | | | | |
| **NB2** | **NORSAR Subarra** | **150.04** | **349** | PKP | **PKPbc** | **17 52 46.8** | **-0.1** |
| | comp=Z,1.3nm,0.5s,baz=15,slow=2.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **150.04** | **349** | PKPbc | **PKPbc** | **17 52 46.9** | **-0.1** |
| | comp=Z,1.9nm,0.6s,baz=16,slow=4.2,SNR=12 | | | | | | |
| NOA | | | | PKPab | **PKPab** | **17 52 53.5** | **-0.4** |
| | comp=Z,1.5nm,0.8s,baz=27,slow=4.0,SNR=6.8 | | | | | | |
| **HFS** | **Hagfors** | **150.44** | **346** | PKPbc | **PKPbc** | **17 52 47.3** | **-0.5** |
| | comp=Z,1.9nm,0.4s,baz=52,slow=2.4,SNR=20 | | | | | | |
| HFS | | | | PKPab | **PKPab** | **17 52 54.9** | **-0.7** |
| | comp=Z,2.2nm,0.4s,baz=66,slow=3.7,SNR=12 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.52** | **320** | PKPbc | **PKPbc** | **17 52 50.5** | **-0.1** |
| | comp=Z,0.6nm,0.3s,baz=48,slow=3.0,SNR=9.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.88** | **295** | PKPbc | **PKPbc** | **17 52 51.7** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=136,slow=4.4,SNR=2.2 | | | | | | |

**NOU 28 17:50:52.7, 15°.46S×166°.39E, *h*8km, MLv4.6/13, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **2.84** | **143** | P | Pn | 17 51 38.2 | -0.1 |
| **RTV** | **Rentapao** | **3.03** | **140** | P | Pn | 17 51 41.4 | +0.4 |
| **LIFNC** | **LIFOU** | **5.35** | **171** | P | Pn | 17 52 12.7 | -0.2 |
| KOUNC | **Koumac, New Ca** | **5.44** | **201** | P | Pn | 17 52 15.1 | +0.9 |
| MARNC | **Mare, Loyalty** | **6.19** | **166** | P | Pn | 17 52 24.6 | +0.2 |
| | 2.0nm,1.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **6.58** | **180** | P | Pn | 17 52 29.5 | -0.3 |
| YATNC | **Mamie plateau,** | **6.58** | **176** | P | Pn | 17 52 29.4 | -0.4 |
| **NOUC** | **Port Laguerre** | **6.61** | **181** | P | Pn | 17 52 30.5 | +0.3 |
| PINNC | **Pines Island,** | **7.18** | **172** | P | Pn | 17 52 38.6 | +0.5 |

*IDC **28** 18:18:40.9±9.4,21°.27S×68°.32W,h64km±40km,mb3.1/1, mbtmp3.5/3,ML3.7/2, Error ellipse: s-maj=161.4km s-min=25.6km az=70.0*

*GUC **28** 18:18:44.2±0.7,20°.80S×69°.19W,h80km±4km,ML3.1*

**ISC 28 18:18:46.9±1.4, 20°.82S±0°.04×69°.26W±0°.08, h66km±12km, n12,σ1°35/19, 3C, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **0.31** | **223** | ⇑*i*P | **Pn** | **18 18 57.3** | **-0.5** |
| PB01 | | | | *i* S | **Sn** | **18 19 07.0** | **+1.2** |
| PB01 | | | | IAML | | 18 19 08.5 | |
| | comp=N,3μm,0.2s | | | | | | |
| **PX03** | **IPOC Station P** | **0.54** | **320** | *e*P | **Pn** | **18 18 58.8** | **-1.0** |
| PX03 | | | | *e*S | **Sn** | **18 19 10.5** | **+1.2** |
| PX03 | | | | IAML | | 18 19 11.7 | |
| | comp=N,1μm,0.2s | | | | | | |
| **HMBC** | **Humberstone** | **0.79** | **312** | ⇑*i*P | **Pn** | **18 19 01.6** | **-1.2** |
| HMBC | | | | *i* S | **Sn** | **18 19 15.5** | **+1.1** |
| HMBC | | | | IAML | | 18 19 15.9 | |
| | comp=N,2μm,0.2s | | | | | | |
| **TA01** | **Diego Aracena** | **0.89** | **286** | *e*P | **Pn** | **18 19 02.6** | **-1.3** |
| TA01 | | | | *i* S | **Sn** | **18 19 17.4** | **+1.0** |
| TA01 | | | | IAML | | 18 19 21.8 | |
| | comp=E,507nm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **0.98** | **179** | ⇑*i*P | **Pn** | **18 19 03.8** | **-1.3** |
| PB09 | | | | *e*S | **Sn** | **18 19 18.8** | **+0.3** |
| PB09 | | | | IAML | | 18 19 19.9 | |
| | comp=N,535nm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **0.98** | **304** | *e*P | **Pn** | **18 19 03.5** | **-1.4** |
| TA02 | | | | *e*S | **Sn** | **18 19 18.5** | **+0.2** |
| **PB04** | **IPOC Station P** | **1.72** | **208** | *e*P | **Pn** | **18 19 13.7** | **-1.1** |
| PB04 | | | | *e*S | **Sn** | **18 19 37.0** | **+1.0** |
| **LVC** | **Limon Verde** | **1.81** | **170** | *e*P | **Pn** | **18 19 15.0** | **-1.3** |
| LVC | | | | *i* S | **Sn** | **18 19 38.6** | **+0.1** |
| **PB14** | **IPOC Station P** | **3.94** | **195** | *e*P | **Pn** | **18 19 46.3** | **+1.2** |
| **LPAZ** | **La Paz** | **4.63** | **14** | P | **Pn** | **18 19 53.5** | **-1.4** |
| | comp=N,0.9nm,0.3s,baz=189,slow=9.0,SNR=14 | | | | | | |
| LPAZ | | | | S | **Sn** | **18 20 50.3** | **+2.6** |
| | comp=N,0.9nm,0.4s,baz=151,slow=8.6,SNR=1.4 | | | | | | |
| | comp=N,2.5nm,0.4s | | | | | | |
| **CPUP** | **Villa Florida** | **12.24** | **119** | P | Pn | 18 21 18.8 | -20 |
| | comp=N,0.2nm,0.3s,baz=286,slow=20,SNR=2.6 | | | | | | |
| | comp=N,0.7nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.44** | **71** | P | P | 18 30 26.1 | -9.5 |
| | comp=N,0.1nm,0.3s,baz=252,slow=5.2,SNR=4.7 | | | | | | |
| | comp=N,0.1nm,0.3s | | | | | | |

*SOME **28** 18:31:07.9, 41°.48N×77°.92E, h10km*

*KRNET **28** 18:31:07.3±0.1, 41°.61N×78°.15E, h21km, mb2.1*

*NNC **28** 18:31:08.8±1.1, 41°.47N×77°.94E, h0km, mb3.1, mpv2.8, Error ellipse: s-maj=7.2km s-min=4.6km az=176.0*

**ISC 28 18:31:10.9±1.6, 41°.60N±0°.06×77°.86E±0°.03, h7km±16km, n42,σ1°50/68, 10C-2D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDJ** | **Kajisay** | **0.73** | **317** | ⇑*i*P | **Pg** | **18 31 24.2** | **-0.9** |
| | baz=6.0 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sg** | **18 31 36.0** | **+1.4** |
| | baz=6.0 | | | | | | |
| **PRZ** | **Przheval'sk** | **0.97** | **24** | ⇓*e*P | Pg | 18 31 24.0 | -5.7 |
| | baz=12 | | | | | | |
| PRZ | | | | ⇓*e*S | **Sg** | **18 31 36.8** | **-5.5** |
| | baz=12 | | | | | | |
| **ULHL** | **Ulahol** | **1.37** | **299** | ⇑*i*P | **Pb** | **18 31 35.9** | **-1.1** |
| | baz=95 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sg** | **18 31 56.4** | **+1.5** |
| | baz=95 | | | | | | |
| **NRN** | **Naryn** | **1.40** | **264** | ⇑*e*P | **Pg** | **18 31 37.4** | **-0.5** |
| | baz=64 | | | | | | |
| NRN | | | | ⇑*i*S | **Sg** | **18 31 59.2** | **+3.1** |
| | baz=64 | | | | | | |
| **SATY** | **Saty** | **1.52** | **15** | *e*P | **Pb** | **18 31 38.6** | **-0.9** |
| | 2.3nm,0.3s | | | | | | |
| SATY | | | | *e*S | **Sg** | **18 32 01.0** | **+1.3** |
| | 12nm,0.1s | | | | | | |
| **SATY** | **Saty** | **1.52** | **15** | P | **Pb** | **18 31 38.6** | **-0.9** |
| | 2.3nm,0.3s | | | | | | |
| SATY | | | | S | **Sg** | **18 32 01.0** | **+1.3** |
| | 12nm,0.1s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.59** | **335** | *e*P | **Pb** | **18 31 40.2** | **-0.7** |
| | 0.9nm,0.1s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **18 32 03.5** | **+1.4** |
| | 2.2nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **1.59** | **335** | P | **Pb** | **18 31 40.5** | **-0.4** |
| | 0.8nm,0.2s | | | | | | |
| TNSS | | | | S | **Sg** | **18 32 03.8** | **+1.8** |
| | 2.2nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **1.63** | **15** | *e*P | **Pb** | **18 31 40.5** | **-0.9** |
| | 2.7nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **18 32 04.1** | **+0.8** |
| | 22nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **1.63** | **15** | P | **Pb** | **18 31 40.8** | **-0.6** |
| | 2.7nm,0.2s | | | | | | |
| ZHN | | | | S | **Sg** | **18 32 04.1** | **+0.8** |
| | 35nm,0.7s | | | | | | |
| **MDOK** | **Medeo** | **1.68** | **339** | *e*P | **Pb** | **18 31 41.7** | **-0.5** |
| | 1.0nm,0.2s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **18 32 06.1** | **+1.3** |
| | 2.4nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **1.68** | **339** | Pg | **Pb** | **18 31 41.7** | **-0.5** |
| | 1.0nm,0.2s | | | | | | |
| MDOK | | | | Lg | Lg | 18 32 06.8 | |
| | 2.4nm,0.4s | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.68** | **303** | ⇑*i*P | **Pb** | **18 31 40.9** | **-1.5** |
| | baz=99 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sg** | **18 32 05.4** | **+0.4** |
| | baz=99 | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.73** | **342** | *e*P | **Pb** | **18 31 42.8** | **-0.3** |
| | 3.1nm,0.2s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **18 32 08.0** | **+1.6** |
| | 8.3nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **1.73** | **342** | Pg | **Pb** | **18 31 42.8** | **-0.3** |
| | 3.1nm,0.2s | | | | | | |
| KOTS | | | | Lg | Lg | 18 32 08.9 | |
| | 8.3nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.77** | **29** | *e*P | **Pb** | **18 31 42.9** | **-1.0** |
| | 1.3nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sg** | **18 32 08.1** | **+0.2** |
| | 3.1nm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **1.77** | **29** | Pg | **Pb** | **18 31 42.9** | **-1.0** |
| | 1.3nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 18 32 08.1 | |
| | 3.1nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **1.86** | **326** | *e*P | **Pg** | **18 31 45.9** | **-0.8** |
| | 3.0nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sg** | **18 32 13.1** | **+2.3** |
| | 8.1nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **1.86** | **326** | Pg | **Pg** | **18 31 45.9** | **-0.8** |
| | 3.0nm,0.2s | | | | | | |
| MTBS | | | | Lg | Lg | 18 32 13.1 | |
| | 8.1nm,0.2s | | | | | | |
| **KURS** | **Kuram** | **1.90** | **7** | *e*P | **Pb** | **18 31 46.2** | **+0.2** |
| | 3.4nm,0.4s | | | | | | |
| KURS | | | | *e*S | **Sg** | **18 32 14.0** | **+1.9** |
| | 3.9nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **1.90** | **7** | Pg | **Pg** | **18 31 47.0** | **-0.5** |
| | 3.9nm,1.0s | | | | | | |
| KURS | | | | Lg | Lg | 18 32 14.7 | |
| | 3.9nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **1.96** | **37** | *e*P | **Pg** | **18 31 49.5** | **+1.0** |
| | 2.6nm,0.4s | | | | | | |
| SHLS | | | | *e*S | **Sg** | **18 32 19.5** | **+5.5** |
| | 4.1nm,0.5s | | | | | | |
| **SHLS** | **Shalkode** | **1.96** | **37** | Pg | **Pg** | **18 31 49.6** | **+1.1** |
| | 2.6nm,0.4s | | | | | | |
| SHLS | | | | Lg | Lg | 18 32 19.5 | |
| | 4.1nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **1.97** | **18** | *e*P | **Pb** | **18 31 46.9** | **-0.3** |
| | 1.8nm,0.1s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **18 32 14.8** | **+0.7** |
| | 4.7nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **1.97** | **18** | Pg | **Pb** | **18 31 46.8** | **-0.3** |
| | 1.8nm,0.1s | | | | | | |
| KPKS | | | | Lg | Lg | 18 32 14.8 | |
| | 4.7nm,0.2s | | | | | | |
| **KST** | **Kastek** | **2.02** | **316** | *e*P | **Pb** | **18 31 47.7** | **-0.3** |
| | 2.5nm,0.7s | | | | | | |
| KST | | | | *e*S | **Sg** | **18 32 16.3** | **+0.6** |
| | 2.9nm,0.3s | | | | | | |
| **KST** | **Kastek** | **2.02** | **316** | Pg | **Pb** | **18 31 47.7** | **-0.3** |
| | 2.5nm,0.7s | | | | | | |
| KST | | | | Lg | Lg | 18 32 16.3 | |
| | 2.9nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **2.11** | **34** | Pg | **Pg** | **18 31 49.8** | **-1.6** |
| | 0.6nm,0.2s | | | | | | |
| PDGK | | | | Lg | Lg | 18 32 20.1 | |
| | 2.7nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.14** | **309** | ⇑*e*P | **Pb** | **18 31 47.5** | **-2.6** |
| | baz=6.0 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **18 32 16.4** | **-0.5** |
| | baz=6.0 | | | | | | |
| **DGS** | **Degeres** | **2.25** | **318** | *e*P | **Pb** | **18 31 52.1** | **0.0** |
| | 1.6nm,0.3s | | | | | | |
| DGS | | | | *e*S | **Sg** | **18 32 24.0** | **+0.6** |
| | 2.5nm,0.3s | | | | | | |
| **DGS** | **Degeres** | **2.25** | **318** | Pg | **Pb** | **18 31 52.1** | **0.0** |
| | 1.6nm,0.3s | | | | | | |
| DGS | | | | Lg | Lg | 18 32 24.0 | |
| | 2.5nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **2.28** | **338** | *e*P | **Pb** | **18 31 52.2** | **-0.3** |
| | 0.8nm,0.2s | | | | | | |
| KTBS | | | | *e*S | **Sg** | **18 32 24.0** | **-0.3** |
| | 11nm,0.3s | | | | | | |
| **CHKK** | **Chushkaly** | **2.34** | **344** | *e*P | **Pb** | **18 31 53.2** | **-0.4** |
| | 2.5nm,0.4s | | | | | | |
| CHKK | | | | *e*S | **Sg** | **18 32 25.6** | **-0.6** |
| | 9.6nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **2.54** | **10** | Pg | **Pb** | **18 31 56.3** | **-0.7** |
| | 6.8nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 18 32 31.1 | |
| | 14nm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **2.61** | **44** | *e*P | **Pb** | **18 31 56.1** | **-2.0** |
| | 0.6nm,0.3s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **18 32 30.7** | **+0.2** |
| | 4.9nm,0.2s | | | | | | |
| **KTMS** | **Ketmen** | **2.61** | **44** | Pg | **Pb** | **18 31 56.1** | **-2.0** |
| | 0.6nm,0.3s | | | | | | |
| KTMS | | | | Lg | Lg | 18 32 30.7 | |
| | 4.9nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **2.62** | **360** | *e*P | **Pb** | **18 31 57.8** | **-0.4** |
| | 1.9nm,0.3s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **18 32 33.8** | **-1.1** |
| | 4.5nm,0.2s | | | | | | |
| **ARXS** | **Arharly** | **2.62** | **360** | Pg | **Pb** | **18 31 57.8** | **-0.4** |
| | 1.9nm,0.3s | | | | | | |
| ARXS | | | | Lg | Lg | 18 32 33.8 | |
| | 4.5nm,0.2s | | | | | | |
| **KRBS** | **Karabastau** | **2.64** | **323** | *e*P | **Pb** | **18 31 58.3** | **-0.4** |
| | 1.2nm,0.3s | | | | | | |
| KRBS | | | | *e*S | **Sg** | **18 32 34.5** | **-1.3** |
| | 2.5nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **2.93** | **19** | Pg | **Pb** | **18 32 03.2** | **-0.3** |
| | 0.5nm,0.2s | | | | | | |
| KNOS | | | | Lg | Lg | 18 32 43.0 | |
| | 1.5nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **3.08** | **27** | *e*P | **Pb** | **18 32 05.4** | **-0.7** |
| | 0.7nm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sb** | **18 32 46.7** | **+2.7** |
| | 5.1nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **3.08** | **27** | Pg | **Pb** | **18 32 05.4** | **-0.7** |
| | 0.7nm,0.1s | | | | | | |
| DJR | | | | Lg | Lg | 18 32 46.7 | |
| | 5.1nm,0.4s | | | | | | |

*NEIC **28** 18:36:32.7,9°.01S×110°.16E,h50km, Moment Tensor Solution. Duration: 1s7 Moment tensor: Scale 10^16^Nm; Mrr3.64; Mθθ-3.77; Mφφ0.13; Mrθ4.01; Mrφ4.88; Mθφ-1.58; Fault plane solution: M0 7.01000×10^16^ NP1: φs105.15000°, δ67.48000°, λ66.44000°. NP2: φs333.86000°, δ32.14000°, λ133.96000°. Principal axes: T 5.4786, Plg60.0000°, Azm340.0000°; N 3.0626, Plg22.0000°, Azm115.0000°; P -8.5411, Plg19.0000°, Azm213.0000°;*

*NEIC **28** 18:36:32.9±2.8,9°.02S±0°.05×110°.15E±0°.05,h40km±1km, mb5.5/146,Mwb5.2/31,Mww5.2/19 Error ellipse: s-maj=9.3km s-min=8.6km az=126.0,Moment Tensor Solution. Moment tensor: Scale 10^16^Nm; Mrr3.93; Mθθ-4.24; Mφφ0.30; Mrθ5.98; Mθφ1.47; Mrφ0.27; Fault plane solution: M0 7.40000×10^16^ NP1:φs304.73000°, δ20.48000°, λ122.38000°. NP2:φs90.63000°, δ72.81000°, λ78.69000°. Principal axes: T 7.2150, Plg61.0000°, Azm344.0000°; N 0.3541, Plg11.0000°, Azm94.0000°; P -7.5691, Plg27.0000°, Azm190.0000°;*

*MOS **28** 18:36:32.6±0.9,8°.57S×110°.38E,h41km,mb5.8/55, MS4.3/7 Error ellipse: s-maj=8.5km s-min=4.6km az=111.9*

*NEIC **28** 18:36:32.7,9°.01S×110°.16E,h50km*

*NEIC **28** 18:36:32.7,9°.01S×110°.16E,h36km*

*BJI **28** 18:36:33.0±0.0,8°.80S×110°.30E,h55km,mb5.2/77, mB5.1/34,Ms4.7/61,Ms7 4.5/62*

*IDC **28** 18:36:36.0±1.3,8°.54S×110°.34E,h48km±10km,mb5.0/25, mbtmp5.2/25,MS4.2/59,Error ellipse: s-maj=15.4km s-min=10.3km az=72.0*

*DJA **28** 18:36:36.5±0.2,9°S±2°×11°0E±°,h54km±2km,M5.1/84, mb5.3/84,mB5.6/50,MLv5.9/24,Mw5.2/83,Mw(mB)5.1/50, MwMwp4.9/21,Mwp5.2/21*

*GCMT **28** 18:36:37.9±0.1,8°.99S±0°.01×110°.27E±0°.01,h48km, MW5.2/113,Moment Tensor Solution. s109,c168; s113,c210; Duration: 1s0 Moment tensor: Scale 10^17^ Nm; Mrr0.56±.02; Mθθ-0.61±.01; Mφφ0.05±.01; Mrθ0.64±.01; Mθφ0.41±.01; Mrφ-0.15±.01; Best double couple: M0 0.95700×10^17^ NP1:φs104.00000°,δ67.00000°, λ79.00000°. NP2:φs312.00000°,δ25.00000°,λ115.00000°. Principal axes: T 0.8460, Plg66.0000°, Azm355.0000°; N 0.2210, Plg10.0000°, Azm109.0000°; P -1.0670, Plg22.0000°, Azm203.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 28 18:36:34.9±0.3, 8°.86S±0°.03×110°.20E±0°.03, h53km±2km, h54km; pP-P, n984,σ1s70/976, mb5.5/191, MS4.3/91, 55C-27D, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **0.99** | **19** | P | **Pn** | **18 36 54.0** | **+1.4** |
| **UGM** | **Wanagama** | **0.99** | **19** | Pn | **Pn** | **18 36 53.7** | **+1.0** |
| **UGM** | **Wanagama** | **0.99** | **19** | P | **Pn** | **18 36 54.7** | **+2.1** |
| UGM | | | | S | **Sn** | **18 37 07.7** | **+2.0** |
| **YOGI** | **Yogyakarta** | **1.04** | **5** | P | **Pn** | **18 36 55.3** | **+2.1** |
| YOGI | | | | S | **Sn** | **18 37 08.8** | **+2.1** |
| **PWJI** | **Pagerwojo** | **1.79** | **63** | P | **Pn** | **18 37 04.5** | **+1.1** |
| PWJI | | | | S | **Sn** | **18 37 25.2** | **+0.2** |
| **SMRI** | **Semarang** | **1.81** | **8** | P | **Pn** | **18 37 07.9** | **+4.2** |
| **SMRI** | **Semarang** | **1.81** | **8** | | **Pn** | **18 37 07.3** | **+3.6** |
| SMRI | | | | Sn | **Sn** | **18 37 30.9** | **+5.3** |
| **SMRI** | **Semarang** | **1.81** | **8** | P | **Pn** | **18 37 07.7** | **+4.0** |
| **NGJI** | **Ngawi** | **1.94** | **40** | P | Pn | 18 37 10.0 | +4.6 |
| **KPJI** | **Karang Pucung** | **1.96** | **320** | P | **Pn** | **18 37 09.4** | **+3.6** |
| **CMJI** | **Cimerak** | **2.03** | **301** | P | **Pn** | **18 37 09.3** | **+2.6** |
| **BBJI** | **Bungbulang** | **2.88** | **299** | P | **Pn** | **18 37 21.1** | **+2.7** |
| **GRJI** | **Gresik** | **2.97** | **50** | P | **Pn** | **18 37 22.2** | **+2.6** |
| **CNJI** | **Cibinong** | **3.41** | **297** | P | **Pn** | **18 37 27.9** | **+2.4** |
| **BWJI** | **Bawean** | **3.85** | **39** | P | **Pn** | **18 37 34.5** | **+2.8** |
| **JAGI** | **Jajag, Banyuwa** | **3.93** | **85** | P | **Pn** | **18 37 34.7** | **+2.0** |
| **JAGI** | **Jajag, Banyuwa** | **3.93** | **85** | Pn | **Pn** | **18 37 33.0** | **+0.3** |
| JAGI | | | | Sn | **Sn** | **18 38 15.8** | **-1.8** |
| **JAGI** | **Jajag, Banyuwa** | **3.93** | **85** | P | **Pn** | **18 37 33.5** | **+0.8** |
| **SKJI** | **Sukabumi** | **4.05** | **297** | P | **Pn** | **18 37 37.8** | **+3.4** |
| **DBJI** | **Dramaga** | **4.11** | **304** | P | Pn | 18 37 39.5 | +4.2 |
| **XMI** | **Christmas Isla** | **4.72** | **250** | P | **Pn** | **18 37 44.5** | **+0.9** |
| **XMIS** | **Christmas Isla** | **4.76** | **250** | P | **Pn** | **18 37 44.7** | **+0.5** |
| **XMIS** | **Christmas Isla** | **4.76** | **250** | | **Pn** | **18 37 44.7** | **+0.5** |
| XMIS | | | | Sn | **Sn** | **18 38 31.4** | **-6.8** |
| **SBJI** | **Serang** | **4.86** | **304** | P | **Pn** | **18 37 49.4** | **+3.8** |
| **DNP** | **Denpasar** | **4.96** | **88** | P | **Pn** | **18 37 49.7** | **+2.9** |
| **SRBI** | **Singaraja** | **5.02** | **82** | P | **Pn** | **18 37 48.2** | **+0.5** |
| **BLSI** | **Bandar Lampung** | **6.01** | **305** | P | **Pn** | **18 38 04.7** | **+3.3** |
| | 504nm,0.8s | | | | | | |
| **KASI** | **Kota Agung** | **6.55** | **300** | P | **Pn** | **18 38 12.3** | **+3.5** |
| | 698nm,1.0s,8μm2.7nm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **6.61** | **90** | P | **Pn** | **18 38 11.2** | **+1.7** |
| **LWLI** | **Liwa** | **7.19** | **302** | P | **Pn** | **18 38 21.0** | **+3.4** |
| **PLAI** | **Plampang** | **7.49** | **90** | P | **Pn** | **18 38 23.2** | **+1.6** |
| **PPBI** | **Pangkal Pinang** | **7.78** | **328** | P | **Pn** | **18 38 29.7** | **+4.1** |
| **PMBI** | **Palembang** | **7.99** | **317** | Pn | **Pn** | **18 38 32.2** | **+3.7** |
| **PMBI** | **Palembang** | **7.99** | **317** | P | **Pn** | **18 38 32.1** | **+3.7** |
| | 494nm,0.8s,6μm | | | | | | |
| **STKI** | **Sintang** | **8.95** | **8** | P | **Pn** | **18 38 45.3** | **+3.7** |
| | 261nm,0.8s,5μm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **9.15** | **31** | P | **Pn** | **18 38 46.6** | **+2.3** |
| | 160nm,0.9s,3μm5μm | | | | | | |
| **BKB** | **Balikpapan** | **10.07** | **42** | Pn | Pn | 18 39 02.6 | +5.7 |
| **BKB** | **Balikpapan** | **10.07** | **42** | P | Pn | 18 39 02.1 | +5.2 |
| | 266nm,0.9s,4μm5μm | | | | | | |
| **KAPI** | **

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GTOI | Gorontalo | 15.87 | 54 | P | | P | | 18 40 16.5 | -1.3 |
| KKM | Kota Kinabalu | 15.97 | 22 | P | | P | | 18 40 19.2 | +0.2 |
| KKM | Kota Kinabalu | 15.97 | 22 | | | Pn | | 18 40 16.0 | -0.3 |
| RPSI | Rantau Prapat | 16.06 | 315 | | | Pn | | 18 40 16.5 | -0.8 |
| IPM | Ipoh | 16.10 | 325 | P | | P | | 18 40 19.6 | -0.8 |
| IPM | Ipoh | 16.10 | 325 | | | Pn | | 18 40 18.3 | +0.4 |
| GSI | Gunungsitoli | 16.13 | 308 | | | Pn | | 18 40 12.1 | -6.2 |
| PSI | Prapat | 16.14 | 315 | P | | Pn | | 18 40 16.5 | -2.0 |
| PSI | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| MYLDM | Lahad Datu | 16.21 | 31 | P | | P | | 18 40 22.4 | +0.8 |
| KULM | Kulim | 16.97 | 326 | | | Pn | | 18 40 28.0 | -0.8 |
| SANI | Sanana | 17.10 | 68 | P | | P | | 18 40 32.0 | +0.5 |
| SANI | Sanana | 17.10 | 68 | P | | P | | 18 40 31.5 | 0.0 |
| | comp=Z,158nm,0.9s,comp=Z,2μmcomp=Z,2μm | | | | | | | | |
| FITZ | Fitzroy Crossi | 17.59 | 123 | P | | Pn | | 18 40 33.2 | -3.2 |
| FITZ | | | | IAmb | | IAmb | | 18 40 43.6 | |
| | comp=Z,339nm,0.7s | | | | | | | | |
| NLAI | Namlea | 17.70 | 73 | P | | P | | 18 40 40.0 | +1.9 |
| | comp=Z,167nm,1.0s,comp=Z,2μmcomp=Z,3μm | | | | | | | | |
| LHMI | Lhok Sumawe | 19.24 | 316 | P | | Pn | | 18 40 56.2 | -0.2 |
| KNRA | Kununurra | 19.36 | 112 | P | | P | | 18 40 54.6 | -1.6 |
| MEEK | Meekatharra | 19.40 | 157 | P | | Pn | | 18 40 59.7 | +1.4 |
| MSAI | Masohi | 19.40 | 75 | P | | P | | 18 40 57.0 | +0.2 |
| | comp=Z,239nm,0.7s,comp=Z,2μm | | | | | | | | |
| TNTI | Ternate | 19.60 | 62 | P | | Pn | | 18 41 01.8 | +1.1 |
| TNTI | Ternate | 19.60 | 62 | P | | P | | 18 40 58.8 | -0.1 |
| TNTI | | | | IAmb | | IAmb | | 18 41 06.8 | |
| | comp=Z,381nm,1.3s | | | | | | | | |
| TNTI | Ternate | 19.60 | 62 | P | | Pn | | 18 41 00.4 | -0.3 |
| | comp=Z,256nm,1.1s,comp=Z,3μmcomp=Z,1μm | | | | | | | | |
| BNDI | Bandanaira | 20.04 | 79 | P | | P | | 18 41 04.6 | +0.9 |
| SRIT | Nakonsritamara | 20.30 | 328 | P | | P | | 18 41 06.5 | 0.0 |
| DRS | Darwin Rock St | 20.65 | 102 | P | | Pn | | 18 41 13.1 | 0.0 |
| | comp=Z,164nm,0.7s | | | | | | | | |
| DLV | T Lat | 20.73 | 355 | P | | P | | 18 41 11.1 | -0.3 |
| DLV | | | | IAmb | | IAmb | | 18 41 21.8 | |
| | comp=Z,197nm,1.1s | | | | | | | | |
| MORW | Morawa | 20.84 | 165 | P | | Pn | | 18 41 14.6 | -0.7 |
| MORW | Morawa | 20.84 | 165 | P | | P | | 18 41 08.9 | -3.5 |
| SAUI | Saumlaki | 20.89 | 89 | P | | P | | 18 41 13.7 | +0.7 |
| SAUI | Saumlaki | 20.89 | 89 | P | | P | | 18 41 10.9 | -2.1 |
| SAUI | | | | IAmb | | IAmb | | 18 41 14.8 | |
| | comp=Z,358nm,1.0s | | | | | | | | |
| SAUI | Saumlaki | 20.89 | 89 | P | | P | | 18 41 14.2 | +1.2 |
| MTN | Manton Dam | 20.93 | 103 | P | | Pn | | 18 41 15.0 | -1.5 |
| MTN | Manton Dam | 20.93 | 103 | P | | P | | 18 41 13.3 | -0.2 |
| MTN | | | | IAmb | | IAmb | | 18 41 23.5 | |
| | comp=Z,158nm,0.8s | | | | | | | | |
| DAV | Davao City (W) | 22.03 | 45 | P | | P | | 18 41 27.2 | +2.1 |
| | comp=Z,146nm,0.4s,baz=44,slow=8.5,SNR=1.7 | | | | | | | | |
| DAV | | | | LR | | LR | | 18 51 00.2 | |
| | comp=Z,556nm,20.4s,baz=225,slow=40 | | | | | | | | |
| KDU | Kakadu | 22.21 | 102 | P | | P | | 18 41 28.9 | +1.8 |
| SWI | Sorong | 22.42 | 70 | P | | P | | 18 41 29.4 | 0.0 |
| | comp=Z,165nm,0.9s,comp=Z,1μm | | | | | | | | |
| BLDU | Ballidu | 22.49 | 165 | P | | P | | 18 41 32.8 | +2.8 |
| FAKI | Fak Fak | 22.70 | 76 | P | | P | | 18 41 35.7 | +3.3 |
| FAKI | Fak Fak | 22.70 | 76 | P | | P | | 18 41 29.3 | -3.1 |
| WRKA | Warakurna | 23.59 | 135 | P | | P | | 18 41 43.3 | +2.2 |
| MUN | Mundaring | 23.68 | 167 | P | | P | | 18 41 45.2 | +3.4 |
| UBPT | Khong Chiam | 24.43 | 349 | P | | P | | 18 41 53.6 | +4.8 |
| UBPT | Khong Chiam | 24.43 | 349 | P | | P | | 18 41 47.9 | -0.9 |
| NWAO | Narrogin (SRO) | 24.82 | 166 | P | | P | | 18 41 54.4 | +2.2 |
| | comp=Z,81nm,2.0s | | | | | | | | |
| NWAO | Narrogin (SRO) | 24.82 | 166 | P | | P | | 18 41 47.8 | -4.4 |
| NWAO | | | | IAmb | | IAmb | | 18 41 56.9 | |
| | comp=Z,110nm,1.2s | | | | | | | | |
| NWAO | Narrogin (SRO) | 24.82 | 166 | LR | | LR | | 18 52 07.1 | |
| | comp=Z,925nm,20.1s,baz=346,slow=37 | | | | | | | | |
| NWAO | Narrogin (SRO) | 24.82 | 166 | P | | P | | 18 41 52.2 | 0.0 |
| NWAO | Narrogin (SRO) | 24.82 | 166 | P | | P | | 18 41 47.8 | -4.4 |
| NWAO | | | | pmax | | pmax | | | |
| | comp=Z,110nm,1.3s | | | | | | | | |
| SRDT | SRDT | 25.54 | 334 | P | | P | | 18 42 03.7 | +4.9 |
| WRA | Warramunga Arr | 25.81 | 118 | P | | P | | 18 42 02.8 | +1.4 |
| | comp=Z,7.2nm,0.7s,baz=288,slow=12,SNR=78 | | | | | | | | |
| WRA | | | | PcP | | PcP | | 18 45 31.8 | +1.8 |
| | comp=Z,5.2nm,0.7s,baz=303,slow=2.0,SNR=4.0 | | | | | | | | |
| WRA | | | | LR | | LR | | 18 52 31.3 | |
| | comp=Z,532nm,21.8s,baz=331,slow=37 | | | | | | | | |
| | comp=Z,7.2nm,0.7s | | | | | | | | |
| WRAB | Tennant Creek | 25.82 | 118 | P | | P | | 18 42 00.3 | -1.1 |
| WRAB | Tennant Creek | 25.82 | 118 | *i* P | | P | | 18 41 59.8 | -1.6 |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| PBA | Port Blair | 26.77 | 319 | P | | P | | 18 42 10.2 | +0.2 |
| ASAR | Alice Springs | 27.04 | 126 | P | | P | | 18 42 14.3 | +1.9 |
| | comp=Z,3.5nm,0.5s,baz=308,slow=8.9,SNR=93 | | | | | | | | |
| ASAR | | | | PcP | | PcP | | 18 45 35.2 | +2.4 |
| | comp=Z,7.1nm,0.7s,baz=305,slow=2.0,SNR=7.3 | | | | | | | | |
| ASAR | | | | ScP | | ScP | | 18 49 09.3 | +0.4 |
| | comp=Z,2.8nm,0.7s,baz=291,slow=1.6,SNR=2.4 | | | | | | | | |
| ASAR | | | | LR | | LR | | 18 53 15.8 | |
| | comp=Z,534nm,21.2s,baz=300,slow=37 | | | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | | | |
| AS01 | Alice Springs | 27.08 | 126 | P | | P | | 18 42 15.7 | +2.9 |
| | comp=Z,57nm,0.8s | | | | | | | | |
| FORT | Forrest | 27.45 | 145 | P | | P | | 18 42 16.3 | +0.3 |
| FORT | Forrest | 27.45 | 145 | P | | P | | 18 42 14.5 | -1.5 |
| FORT | | | | IAmb | | IAmb | | 18 42 44.1 | |
| | comp=Z,67nm,0.6s | | | | | | | | |
| QIZ | Qiongzhong | 27.71 | 359 | P | | P | | 18 42 21.3 | +2.9 |
| QIZ | | | | sP | | sP | | 18 42 40.3 | +2.8 |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,730nm,24.4s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,390nm,21.9s | | | | | | | | |
| QIZ | | | | LR | | LR | | | |
| | comp=Z,1μm,26.9s | | | | | | | | |
| PHRA | Phrae | 28.91 | 340 | P | | P | | 18 42 28.5 | -0.5 |
| CMAR | Chiang Mai Arr | 29.32 | 338 | P | | P | | 18 42 32.4 | -0.4 |
| | comp=Z,12nm,0.7s,baz=174,slow=8.0,SNR=49 | | | | | | | | |
| CMAR | | | | PcP | | PcP | | 18 45 40.5 | +2.1 |
| | comp=Z,9.0nm,0.8s,baz=190,slow=3.2,SNR=11 | | | | | | | | |
| CMAR | | | | ScP | | ScP | | 18 49 16.8 | +0.9 |
| | comp=Z,2.8nm,1.1s,baz=198,slow=2.3,SNR=6.3 | | | | | | | | |
| CMAR | | | | LR | | LR | | 18 55 25.7 | |
| | comp=Z,764nm,18.7s,baz=155,slow=39 | | | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| GENI | Genyem | 30.45 | 80 | P | | P | | 18 42 42.2 | -0.6 |
| | comp=Z,37nm,1.2s | | | | | | | | |
| OOD | Oodnadatta | 30.55 | 131 | P | | P | | 18 42 46.6 | +3.1 |
| SLVN | Son La | 30.63 | 348 | P | | P | | 18 42 44.1 | -0.2 |
| QIS | Mount Isa | 30.67 | 116 | P | | P | | 18 42 47.0 | +2.3 |
| MULG | Mulgathing | 30.85 | 137 | P | | P | | 18 42 50.0 | +3.8 |
| TABU | Tabubil | 30.99 | 86 | P | | P | | 18 42 48.2 | +0.6 |
| HKPS | Hong Kong Po S | 31.18 | 7 | P | | P | | 18 42 49.3 | +0.2 |
| COEN | Coen | 32.70 | 102 | P | | P | | 18 43 04.4 | +1.8 |
| COEN | Coen | 32.70 | 102 | P | | P | | 18 43 01.2 | -1.5 |
| COEN | | | | IAmb | | IAmb | | 18 43 05.1 | |
| | comp=Z,64nm,0.9s | | | | | | | | |
| PALK | Pallekele | 33.48 | 298 | P | | P | | 18 43 07.9 | -1.6 |
| PALK | | | | IAmb | | IAmb | | 18 43 14.0 | |
| | comp=Z,100nm,1.1s | | | | | | | | |
| PALK | Pallekele | 33.48 | 298 | LR | | LR | | 18 55 31.0 | |
| | comp=Z,414nm,21.9s,baz=119,slow=34 | | | | | | | | |
| PALK | Pallekele | 33.48 | 298 | P | | P | | 18 43 12.2 | +2.7 |
| PALK | Pallekele | 33.48 | 298 | *i* P | | P | | 18 43 08.9 | -0.6 |
| PALK | | | | pmax | | pmax | | | |
| | comp=Z,93nm,1.0s | | | | | | | | |
| PALK | Pallekele | 33.48 | 298 | P | | P | | 18 43 12.2 | +2.7 |
| TPUB | Ta-pu | 33.55 | 18 | P | | P | | 18 43 09.3 | -0.6 |
| BBOO | Buckleboo | 33.76 | 139 | P | | P | | 18 43 14.5 | +2.8 |
| BBOO | Buckleboo | 33.76 | 139 | P | | P | | 18 43 09.1 | -2.5 |
| YULB | Yu-li | 33.84 | 19 | P | | P | | 18 43 11.0 | -1.3 |
| YULB | | | | IAmb | | IAmb | | 18 43 30.6 | |
| | comp=Z,94nm,1.8s | | | | | | | | |
| LCRK | Leigh Creek | 33.85 | 133 | P | | P | | 18 43 15.4 | +2.9 |
| SSLB | Suanglung | 34.10 | 18 | P | | P | | 18 43 15.3 | +0.6 |
| SSLB | Suanglung | 34.10 | 18 | P | | P | | 18 43 13.9 | -0.8 |
| SSLB | | | | IAmb | | IAmb | | 18 43 54.7 | |
| | comp=Z,45nm,1.0s | | | | | | | | |
| MTSU | Mount Surprise | 34.38 | 109 | P | | P | | 18 43 20.6 | +3.4 |
| INKA | Innaminka | 34.40 | 127 | P | | P | | 18 43 20.5 | +3.3 |
| KMI | Kunming | 34.55 | 348 | ⇑P | | P | | 18 43 19.8 | +1.1 |
| KMI | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,970nm,17.6s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,640nm,16.8s | | | | | | | | |
| KMI | | | | LR | | LR | | | |
| | comp=Z,1μm,16.7s | | | | | | | | |
| NACB | Ninganchiao | 34.66 | 18 | P | | P | | 18 43 23.2 | +3.7 |
| NACB | | | | IAmb | | IAmb | | 18 43 39.6 | |
| | comp=Z,43nm,1.2s | | | | | | | | |
| YHNB | Yeheng | 35.06 | 18 | P | | P | | 18 43 24.0 | +1.0 |
| YHNB | Yeheng | 35.06 | 18 | P | | P | | 18 43 21.8 | -1.2 |
| GYA | Guiyang | 35.27 | 355 | ⇓P | | P | | 18 43 25.5 | +0.7 |
| GYA | | | | pmax | | pmax | | | |
| | comp=Z,23nm,0.6s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,780nm,19.5s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,750nm,18.8s | | | | | | | | |
| GYA | | | | LR | | LR | | | |
| | comp=Z,1μm,22.1s | | | | | | | | |
| YOJ | Yonaguni jima | 35.40 | 20 | P | | P | | 18 43 31.7 | +5.9 |
| YOJ | Yonaguni jima | 35.40 | 20 | P | | P | | 18 43 25.0 | -0.8 |
| YOJ | Yonaguni jima | 35.40 | 20 | P | | P | | 18 43 25.0 | -0.8 |
| YOJ | | | | pmax | | pmax | | | |
| | comp=Z,408nm,1.6s | | | | | | | | |
| TNCH | TengChong | 35.55 | 342 | P | | P | | 18 43 27.0 | -0.3 |
| TNCH | | | | pP | | pwP | | 18 43 42.3 | +1.7 |
| TNCH | | | | PcP | | PcP | | 18 45 57.3 | +1.6 |
| TNCH | | | | S | | S | | 18 48 58.5 | -1.1 |
| TNCH | | | | pmax | | pmax | | | |
| | comp=Z,29nm,0.9s | | | | | | | | |
| TNCH | | | | pmax | | pmax | | | |
| | comp=Z,130nm,4.9s | | | | | | | | |
| TNCH | | | | LR | | LR | | | |
| | comp=Z,370nm,15.2s | | | | | | | | |
| TNCH | | | | LR | | LR | | | |
| | comp=Z,300nm,9.2s | | | | | | | | |
| TNCH | | | | LR | | LR | | | |
| | comp=Z,680nm,23.4s | | | | | | | | |
| HTT | Hallett | 36.04 | 137 | P | | P | | 18 43 35.8 | +4.4 |
| PZH | PanZhiHua | 36.09 | 347 | P | | P | | 18 43 33.8 | +1.9 |
| PZH | | | | PP | | PP | | 18 44 59.0 | +4.1 |
| PZH | | | | S | | S | | 18 49 08.0 | +0.2 |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| PZH | | | | pmax | | pmax | | | |
| | comp=Z,140nm,5.3s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,620nm,17.0s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,760nm,19.0s | | | | | | | | |
| PZH | | | | LR | | LR | | | |
| | comp=Z,840nm,17.1s | | | | | | | | |
| PMG | Port Moresby | 36.48 | 94 | P | | P | | 18 43 38.4 | +3.1 |
| PMG | Port Moresby | 36.48 | 94 | P | | P | | 18 43 38.1 | +2.8 |
| PMG | Port Moresby | 36.48 | 94 | P | | P | | 18 43 34.4 | -0.9 |
| PMG | | | | IAmb | | IAmb | | 18 43 53.5 | |
| | comp=Z,84nm,1.4s | | | | | | | | |
| PMG | Port Moresby | 36.48 | 94 | LR | | LR | | 19 00 56.0 | |
| | comp=Z,351nm,20.9s,baz=260,slow=40 | | | | | | | | |
| PMG | Port Moresby | 36.48 | 94 | *ce*P | | P | | 18 43 33.8 | -1.5 |
| PMG | | | | pmax | | pmax | | | |
| | comp=Z,38nm,1.3s | | | | | | | | |
| CTA | Charters Tower | 36.57 | 112 | LR | | LR | | 19 00 17.0 | |
| | comp=Z,14nm,19.1s,baz=282,slow=39 | | | | | | | | |
| CTAO | Charters Tower | 36.57 | 112 | P | | P | | 18 43 34.7 | -1.3 |
| CTAO | Charters Tower | 36.57 | 112 | P | | P | | 18 43 34.7 | -1.3 |
| CTAO | | | | pmax | | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| CTAO | Charters Tower | 36.57 | 112 | P | | P | | 18 43 38.4 | +2.4 |
| CTAO | | | | pP | | pP | | 18 43 49.0 | -0.2 |
| CTAO | | | | PcP | | PcP | | 18 46 00.4 | +1.8 |
| QLP | Quilpie | 36.73 | 123 | P | | P | | 18 43 40.2 | +2.9 |
| STKA | Stephens Creek | 37.06 | 133 | P | | P | | 18 43 42.7 | +2.7 |
| STKA | Stephens Creek | 37.06 | 133 | P | | P | | 18 43 42.1 | +2.1 |
| | comp=Z,10nm,0.4s,baz=320,slow=7.3,SNR=32 | | | | | | | | |
| STKA | | | | PcP | | PcP | | 18 46 02.0 | +2.1 |
| | comp=Z,19nm,0.6s,baz=346,slow=7.1,SNR=3.3 | | | | | | | | |
| STKA | | | | LR | | LR | | 19 01 54.7 | |
| | comp=Z,528nm,18.3s,baz=301,slow=41 | | | | | | | | |
| | comp=Z,10nm,0.4s | | | | | | | | |
| STKA | Stephens Creek | 37.06 | 133 | *i* P | | P | | 18 43 38.2 | -1.8 |
| H08S2 | Diego Garcia H | 37.33 | 269 | T | | T | | 19 23 41.1 | |
| | baz=94,slow=75 | | | | | | | | |
| H08S3 | Diego Garcia H | 37.34 | 269 | T | | T | | 19 23 39.4 | |
| | baz=94,slow=75 | | | | | | | | |
| H08S1 | Diego Carcia H | 37.34 | 269 | T | | T | | 19 23 39.6 | |
| | baz=94,slow=75 | | | | | | | | |
| DGAR | Diego Garcia | 37.38 | 269 | P | | P | | 18 43 40.9 | -2.1 |
| DGAR | Diego Garcia | 37.38 | 269 | P | | P | | 18 43 40.9 | -2.1 |
| DGAR | | | | pmax | | pmax | | | |
| | comp=Z,1μm,2.0s | | | | | | | | |
| MANU | Manus Island | 37.59 | 82 | P | | P | | 18 43 43.0 | -1.7 |
| KAAM | Kaadhehdhoo | 38.21 | 282 | P | | P | | 18 43 53.3 | +3.4 |
| SHL | Shillong | 38.58 | 333 | P | | P | | 18 43 51.5 | -1.6 |
| SHL | | | | IAmb | | IAmb | | 18 44 04.9 | |
| | comp=Z,55nm,0.9s | | | | | | | | |
| SHL | | | | | | ScP | | 18 49 49.8 | +1.1 |
| SHL | Shillong | 38.58 | 333 | P | | P | | 18 43 51.5 | -1.6 |
| SHL | | | | | | | | 18 49 49.8 | |
| SHL | | | | pmax | | pmax | | | |
| | comp=Z,55nm,0.9s | | | | | | | | |
| ENH | Enshi | 38.91 | 359 | P | | P | | 18 43 55.4 | -0.2 |
| ENH | Enshi | 38.91 | 359 | P | | P | | 18 43 55.1 | -0.5 |
| ENH | | | | PcP | | PcP | | 18 46 07.2 | +1.6 |
| JOW | Kunigami | 39.57 | 26 | P | | P | | 18 44 03.8 | +2.7 |
| JOW | Kunigami | 39.57 | 26 | P | | P | | 18 44 00.5 | -0.7 |
| JOW | | | | IAmb | | IAmb | | 18 44 17.3 | |
| | comp=Z,157nm,1.6s | | | | | | | | |
| JOW | Kunigami | 39.57 | 26 | LR | | LR | | 19 00 07.9 | |
| | comp=Z,418nm,21.8s,baz=256,slow=36 | | | | | | | | |
| ARPS | Mount Arapiles | 39.94 | 139 | P | | P | | 18 44 07.5 | +3.4 |
| CMSA | Cobar Meteorol | 39.95 | 129 | P | | P | | 18 44 06.6 | +2.3 |
| CD2 | Chengdu | 40.02 | 351 | P | | P | | 18 44 05.5 | +0.7 |
| CD2 | | | | pP | | pwP | | 18 44 20.8 | +2.5 |
| CD2 | | | | S | | S | | 18 50 09.5 | +2.6 |
| CD2 | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.6s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,510nm,12.7s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,490nm,19.4s | | | | | | | | |
| CD2 | | | | LR | | LR | | | |
| | comp=Z,610nm,15.3s | | | | | | | | |
| HMDM | Hanimaadhoo | 40.03 | 292 | P | | P | | 18 44 04.0 | -1.1 |
| HMDM | | | | IAmb | | IAmb | | 18 44 10.3 | |
| | comp=Z,208nm,1.3s | | | | | | | | |
| JMZ | Minamidaito 2 | 40.08 | 30 | P | | P | | 18 44 08.9 | +3.6 |
| JMZ | Minamidaito 2 | 40.08 | 30 | P | | P | | 18 44 05.1 | -0.2 |
| HYB | Hyderabad | 40.74 | 310 | *e*P | | P | | 18 44 10.8 | -0.2 |
| HYB | | | | IVmB_BB | | | | 18 44 11.3 | |
| | comp=Z,397nm,1.6s | | | | | | | | |
| GUMO | Guam | 41.01 | 57 | P | | P | | 18 44 17.8 | +4.6 |
| GUMO | Guam | 41.01 | 57 | P | | P | | 18 44 11.1 | -2.1 |
| GUMO | | | | IAmb | | IAmb | | 18 44 15.2 | |
| | comp=Z,137nm,1.1s | | | | | | | | |
| GUMO | Guam | 41.01 | 57 | LR | | LR | | 19 02 03.5 | |
| | comp=Z,89nm,19.9s,baz=230,slow=38 | | | | | | | | |
| GUMO | Guam | 41.01 | 57 | P | | P | | 18 44 11.1 | -2.1 |
| GUMO | | | | pmax | | pmax | | | |
| | comp=Z,137nm,1.1s | | | | | | | | |
| AIS | Amsterdam Isla | 41.18 | 220 | P | | P | | 18 44 12.1 | -2.2 |
| AIS | | | | IAmb | | IAmb | | 18 44 55.0 | |
| | comp=Z,70nm,0.8s | | | | | | | | |
| NJ2 | Nanjing | 41.51 | 11 | *e*P | | P | | 18 44 19.3 | +2.3 |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,21nm,0.6s | | | | | | | | |
| NJ2 | | | | pmax | | pmax | | | |
| | comp=Z,110nm,4.5s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,340nm,21.8s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,250nm,20.8s | | | | | | | | |
| NJ2 | | | | LR | | LR | | | |
| | comp=Z,630nm,22.7s | | | | | | | | |
| RABL | Rabaul | 41.93 | 86 | P | | P | | 18 44 20.4 | -0.4 |
| EIDS | Eidsvold | 42.17 | 118 | P | | P | | 18 44 20.8 | -1.9 |
| LSA | Lhasa | 42.49 | 335 | P | | P | | 18 44 25.5 | -0.2 |
| LSA | | | | pmax | | pmax | | | |
| | comp=Z,55nm,0.8s | | | | | | | | |
| LSA | Lhasa | 42.49 | 335 | *i* P | | P | | 18 44 25.7 | 0.0 |
| | SNR=21 | | | | | | | | |
| LSA | Lhasa | 42.49 | 335 | P | | P | | 18 44 26.6 | +0.9 |
| LSA | Lhasa | 42.49 | 335 | P | | P | | 18 44 25.9 | +0.2 |
| LSA | | | | pP | | pP | | 18 44 36.5 | -2.4 |
| LSA | | | | sP | | pwP | | 18 44 41.2 | -0.9 |
| XAN | Xi'an | 42.67 | 358 | ⇑P | | P | | 18 44 26.3 | -0.3 |
| XAN | | | | pP | | pwP | | 18 44 41.0 | +0.9 |
| XAN | | | | S | | S | | 18 50 43.8 | -2.4 |
| XAN | | | | pmax | | pmax | | | |
| | comp=Z,68nm,0.7s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,620nm,22.8s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,580nm,17.7s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,1μm,20.6s | | | | | | | | |
| YNG | Young | 43.22 | 132 | P | | P | | 18 44 33.5 | +2.4 |
| LYN | LuoYang | 43.22 | 3 | P | | P | | 18 44 31.0 | +0.1 |
| LYN | | | | pP | | pwP | | 18 44 46.0 | +1.5 |
| LYN | | | | SS | | SS | | 18 53 58.5 | -11 |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,74nm,0.5s | | | | | | | | |
| LYN | | | | pmax | | pmax | | | |
| | comp=Z,240nm,4.3s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,450nm,14.9s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,530nm,17.6s | | | | | | | | |
| LYN | | | | LR | | LR | | | |
| | comp=Z,590nm,16.8s | | | | | | | | |
| LZH | Lanzhou | 45.10 | 353 | *e*P | | P | | 18 44 47.0 | +0.9 |
| LZH | | | | sP | | sP | | 18 45 08.0 | +2.7 |
| LZH | | | | PcP | | PcP | | 18 46 28.3 | +2.2 |
| LZH | | | | pmax | | pmax | | | |
| | comp=Z,47nm,1.3s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,420nm,16.8s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,440nm,19.2s | | | | | | | | |
| LZH | | | | LR | | LR | | | |
| | comp=Z,700nm,19.9s | | | | | | | | |
| TIA | Tai'an | 45.30 | 8 | P | | P | | 18 44 46.5 | -1.0 |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,28nm,0.9s | | | | | | | | |
| TIA | | | | pmax | | pmax | | | |
| | comp=Z,160nm,3.8s | | | | | | | | |
| TIA | | | | LR | | LR | | | |
| | comp=Z,77nm,13.7s | | | | | | | | |
| TIA | | | | LR | | LR | | | |
| | comp=Z,350nm,17.6s | | | | | | | | |
| TIA | | | | LR | | LR | | | |
| | comp=Z,390nm,19.8s | | | | | | | | |
| JNU | Nakatsue | 46.15 | 24 | P | | P | | 18 44 54.9 | +0.5 |
| JNU | Nakatsue | 46.15 | 24 | P | | P | | 18 44 52.8 | -1.6 |
| JNU | | | | IAmb | | IAmb | | 18 44 55.0 | |
| | comp=Z,109nm,1.5s | | | | | | | | |
| JNU | Nakatsue | 46.15 | 24 | LR | | LR | | 19 07 05.3 | |
| | comp=Z,234nm,18.9s,baz=184,slow=40 | | | | | | | | |
| HNS | HongShan | 46.20 | 5 | ⇑P | | P | | 18 44 54.0 | -0.6 |
| HNS | | | | PcP | | PcP | | 18 46 31.5 | +1.8 |
| HNS | | | | PP | | PP | | 18 46 47.5 | +3.6 |
| HNS | | | | ScS | | ScS | | 18 54 44.5 | -0.9 |
| HNS | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,370nm,15.9s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,170nm,12.7s | | | | | | | | |
| HNS | | | | LR | | LR | | | |
| | comp=Z,470nm,16.5s | | | | | | | | |
| JTU | Tsushima | 46.82 | 22 | P | | P | | 18 44 59.8 | +0.3 |
| JCJ | Chichijima | 47.31 | 40 | P | | P | | 18 45 06.1 | +2.6 |
| JCJ | Chichijima | 47.31 | 40 | P | | P | | 18 45 02.6 | -0.9 |
| JCJ | Chichijima | 47.31 | 40 | LR | | LR | | 19 06 31.7 | |
| | comp=Z,120nm,21.2s,baz=274,slow=38 | | | | | | | | |
| TJN | Taejon | 47.80 | 19 | P | | P | | 18 45 08.9 | +1.8 |
| TJN | Taejon | 47.80 | 19 | P | | P | | 18 45 06.0 | -1.0 |
| TJN | Taejon | 47.80 | 19 | *i* P | | P | | 18 45 05.8 | -1.3 |
| JMN | Monobe | 47.95 | 27 | P | | P | | 18 45 08.4 | 0.0 |
| JMN | Monobe | 47.95 | 27 | P | | P | | 18 45 07.0 | -1.4 |
| JMN | | | | IAmb | | IAmb | | 18 45 09.5 | |
| | comp=Z,94nm,1.3s | | | | | | | | |
| DL2 | Dalian | 48.69 | 12 | P | | P | | 18 45 11.5 | -2.4 |
| DL2 | | | | S | | S | | 18 52 12.0 | -0.6 |
| DL2 | | | | pmax | | pmax | | | |
| | comp=Z,49nm,1.0s | | | | | | | | |
| DL2 | | | | pmax | | pmax | | | |
| | comp=Z,270nm,4.3s | | | | | | | | |
| DL2 | | | | LR | | LR | | | |
| | comp=Z,500nm,20.6s | | | | | | | | |
| DL2 | | | | LR | | LR | | | |
| | comp=Z,330nm,21.6s | | | | | | | | |
| DL2 | | | | LR | | LR | | | |
| | comp=Z,680nm,17.8s | | | | | | | | |
| BJT | Baijiatuau | 48.94 | 6 | P | | P | | 18 45 15.3 | -0.5 |
| BJT | | | | IAmb | | IAmb | | 18 45 16.6 | |
| | comp=Z,90nm,1.5s | | | | | | | | |
| BJT | | | | PcP | | PcP | | 18 46 40.3 | +0.9 |
| BJT | Baijiatuau | 48.94 | 6 | P | | P | | 18 45 15.4 | -0.4 |
| BJT | | | | PcP | | PcP | | 18 46 41.1 | +1.7 |
| BJI | Beijing | 48.96 | 6 | P | | P | | 18 45 15.5 | -0.4 |
| BJI | | | | PcP | | PcP | | 18 46 41.3 | +1.9 |
| BJI | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.1s | | | | | | | | |
| KSRS | Korea Array | 48.97 | 19 | P | | P | | 18 45 15.9 | -0.1 |
| | comp=Z,16nm,0.7s,baz=195,slow=9.0,SNR=45 | | | | | | | | |
| KSRS | | | | LR | | LR | | 19 10 02.3 | |
| | comp=Z,103nm,18.1s,baz=205,slow=41 | | | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| GTA | Gaotai | 48.98 | 349 | P | | P | | 18 45 16.5 | +0.2 |
| GTA | | | | pP | | pP | | 18 45 27.5 | -2.3 |
| GTA | | | | sP | | pwP | | 18 45 32.5 | -0.3 |
| GTA | | | | PcP | | PcP | | 18 46 41.5 | +1.8 |
| GTA | | | | ScP | | ScP | | 18 50 31.5 | +1.0 |
| GTA | | | | S | | S | | 18 52 15.0 | -1.9 |
| GTA | | | | sS | | sS | | 18 52 41.0 | +1.7 |
| GTA | | | | ScS | | ScS | | 18 55 01.8 | -2.2 |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| GTA | | | | pmax | | pmax | | | |
| | comp=Z,110nm,9.2s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,280nm,21.1s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,360nm,20.7s | | | | | | | | |
| GTA | | | | LR | | LR | | | |
| | comp=Z,410nm,21.1s | | | | | | | | |
| HNR | Honiara | 49.09 | 95 | P | | P | | 18 45 16.3 | -1.1 |
| HNR | Honiara | 49.09 | 95 | LR | | LR | | 19 09 37.7 | |
| | comp=Z,1μm,18.1s,baz=100,slow=40 | | | | | | | | |
| HNR | Honiara | 49.09 | 95 | P | | P | | 18 45 16.3 | -1.1 |
| HNR | | | | pmax | | pmax | | | |
| | comp=Z,243nm,1.0s | | | | | | | | |
| BTO | Baotou | 49.21 | 360 | ⇑*i* P | | P | | 18 45 19.0 | +1.0 |
| BTO | | | | pP | | pwP | | 18 45 34.0 | -0.1 |
| BTO | | | | sP | | sP | | 18 45 41.8 | +4.2 |
| BTO | | | | PP | | PP | | 18 47 14.5 | +2.1 |
| BTO | | | | S | | S | | 18 52 22.0 | +1.9 |
| BTO | | | | SS | | SS | | 18 55 48.0 | -4.3 |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,76nm,0.9s | | | | | | | | |
| BTO | | | | pmax | | pmax | | | |
| | comp=Z,350nm,5.9s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,760nm,24.3s | | | | | | | | |
| BTO | | | | LR | | LR | | | |
| | comp=Z,650nm,19.4s | | | | | | | | |
| BTO | | |

MAJO pmax pmax
comp=Z,48nm,1.0s
**MAJO Matsushiro 52.27 29** P **P** **18 45 39.5 -1.6**
**MJAR Matsushiro Arr 52.27 29** P **P** **18 45 39.5 -1.5**
comp=Z,62nm,0.7s,baz=203,slow=7.7,SNR=139
MJAR PcP **PcP** **18 46 53.6 +1.8**
comp=Z,11nm,0.8s,baz=192,slow=4.3,SNR=4.1
MJAR LR LR 19 06 59.3
comp=Z,201nm,21.8s,baz=222,slow=35
comp=Z,62nm,0.7s
**XLT XiLinHaoTe 52.77 5** *e*P **P** **18 45 44.0 -0.7**
XLT pP pwP 18 45 59.0 -1.9
XLT PcP **PcP** **18 46 55.0 +1.4**
XLT S **S** **18 53 02.8 -6.4**
XLT sS sS 18 53 34.3 +0.3
XLT pmax pmax
comp=Z,39nm,1.1s
XLT pmax pmax
comp=Z,66nm,3.8s
XLT LR LR
comp=Z,240nm,22.1s
XLT LR LR
comp=Z,230nm,20.0s
KOUNC **Koumac, New Ca 53.38 109** P **P** **18 45 52.4 +2.9**
**JSD Sado 53.50 28** P **P** **18 45 49.4 -0.7**
**JSD Sado 53.50 28** P **P** **18 45 48.6 -1.5**
JSD IAmb IAmb 18 45 50.1
comp=Z,70nm,0.7s
**CN2 Changchun 54.21 14** P **P** **18 45 53.8 -1.3**
CN2 PcP **PcP** **18 47 00.0 +1.0**
CN2 pmax pmax
comp=Z,20nm,0.6s
CN2 pmax pmax
comp=Z,200nm,3.0s
CN2 LR LR
comp=Z,200nm,17.0s
CN2 LR LR
comp=Z,300nm,17.0s
CN2 LR LR
comp=Z,300nm,18.0s
**MSEY Mahe Island 54.46 271** P **P** **18 46 00.8 +3.2**
**JMM Marumori 54.56 30** P **P** **18 45 58.0 +0.2**
**JMM Marumori 54.56 30** P **P** **18 45 56.6 -1.2**
**MSHR Mys Shultsa 54.65 19** *i* P **P** **18 45 57.6 -0.7**
MSHR pmax pmax
comp=Z,28nm,1.2s
**NIL Nilore 54.94 322** P **P** **18 45 58.6 -2.0**
NIL IAmb IAmb 18 46 00.6
comp=Z,60nm,0.9s
**NIL Nilore 54.94 322** P **P** **18 46 00.2 -0.5**
**NIL Nilore 54.94 322** P **P** **18 45 58.7 -2.0**
NIL pmax pmax
comp=Z,60nm,0.9s
**VLA Vladivostok 55.37 19** *i* P **P** **18 46 02.8 -0.7**
VLA pmax pmax
comp=Z,46nm,0.9s
**DZM Mont Dzumac 55.49 111** *e*P **P** **18 46 06.9 +1.9**
comp=Z,87nm,1.5s
DZM *e*S **S** **18 53 38.6 -8.2**
comp=Z,72nm,35.0s
DZM *e*SS **SS** **18 57 31.3 -1.0**
comp=Z,100nm,26.9s
DZM *e*LR LR 19 02 16.2
comp=Z,543nm,28.4s
**DZM Mont Dzumac 55.49 111** LR LR 19 10 46.8
comp=Z,178nm,20.1s,baz=282,slow=37
**MDJ Mudanjiang 56.03 17** P **P** **18 46 08.7 +0.4**
**MDJ Mudanjiang 56.03 17** P **P** **18 46 07.5 -0.8**
MDJ pmax pmax
comp=Z,32nm,1.4s
**MDJ Mudanjiang 56.03 17** IAmb IAmb 18 46 09.0
comp=Z,90nm,1.6s
**MDJ Mudanjiang 56.03 17** P **P** **18 46 07.7 -0.5**
**WMQ Urumqi 56.27 341** *e*P **P** **18 46 12.5 +2.5**
WMQ pP sP 18 46 28.0 -1.7
WMQ pmax pmax
comp=Z,33nm,1.3s
WMQ pmax pmax
comp=Z,160nm,3.7s
WMQ LR LR
comp=Z,31nm,19.9s
WMQ LR LR
comp=Z,290nm,17.5s
WMQ LR LR
comp=Z,300nm,23.1s
USA0B **Ussuriysk Arra 56.37 19** *i* P **P** **18 46 09.8 -0.9**
**USRK Ussuriysk Ar. 56.37 19** P **P** **18 46 10.1 -0.6**
comp=Z,51nm,0.8s,baz=207,slow=5.0,SNR=72
USRK LR LR 19 12 56.7
comp=Z,95nm,18.0s,baz=219,slow=39
comp=Z,51nm,0.8s
**BNX BinXian 56.50 14** ⇑P **P** **18 46 10.5 -1.0**
BNX pmax pmax
comp=Z,66nm,0.9s
**ULN Ulaanbaatar 56.54 357** P **P** **18 46 10.6 -1.4**
ULN IAmb IAmb 18 46 12.9
comp=Z,58nm,1.6s
**ULN Ulaanbaatar 56.54 357** P **P** **18 46 11.9 -0.1**
**ULN Ulaanbaatar 56.54 357** *ce*P **P** **18 46 11.1 -0.9**
ULN pmax pmax
comp=Z,39nm,1.7s
**SONM Songino Array 56.54 357** P **P** **18 46 11.6 -0.3**
comp=Z,12nm,0.7s,baz=177,slow=8.4,SNR=60
SONM PcP **PcP** **18 47 08.6 +0.5**
comp=Z,16nm,0.9s,baz=170,slow=4.9,SNR=8.8
SONM ScP **ScP** **18 51 03.5 +0.3**
comp=Z,2.3nm,1.1s,baz=176,slow=3.9,SNR=4.2
SONM LR LR 19 12 14.3
comp=Z,307nm,19.8s,baz=180,slow=38
comp=Z,12nm,0.7s
**JTM Tenmabayashi 57.01 28** P **P** **18 46 15.0 -0.2**
**JTM Tenmabayashi 57.01 28** P **P** **18 46 14.3 -1.0**
**CASY Casey 57.34 180** P **P** **18 46 16.0 -1.2**
CASY IAmb IAmb 18 47 37.0
comp=Z,17nm,0.5s
**WUS Wushi 57.38 333** P **P** **18 46 18.5 +0.4**
**KSH Kashi 57.65 329** P **P** **18 46 19.0 -1.0**
KSH pP sP 18 46 39.3 -0.3
KSH pmax pmax
comp=Z,22nm,0.8s
**TARG Taragay, Kyrgy 58.45 332** IAmb IAmb 18 46 35.2
comp=Z,19nm,0.8s
**JLN Jalan Bani Buh 58.54 303** P **P** **18 46 27.9 +1.5**
**TEY Ternei 58.68 22**⇑ *e*P **P** **18 46 26.2 -0.7**
TEY pmax pmax
comp=E,10.0nm,0.6s
TEY pmax pmax
comp=N,20nm,0.7s
TEY pmax pmax
comp=Z,70nm,0.7s
**PRZ Przheval'sk 58.77 333** P **P** **18 46 28.2 +0.3**
PRZ IAmb IAmb 18 47 20.6
comp=Z,33nm,0.8s
**PRZ Przheval'sk 58.77 333** P **P** **18 46 28.2 +0.3**
PRZ pmax pmax
comp=Z,33nm,0.8s
**SHLS Shalkode 58.84 334** *e*P **P** **18 46 26.5 -1.8**
comp=Z,20nm,0.9s,baz=334
**SHLS Shalkode 58.84 334** *e*P **P** **18 46 26.4 -1.8**
SHLS pmax pmax
comp=Z,20nm,0.9s
**ERM Erimo 58.94 28** P **P** **18 46 28.9 +0.2**
**ERM Erimo 58.94 28** P **P** **18 46 27.8 -0.9**
**ERM Erimo 58.94 28** *ce*P **P** **18 46 27.9 -0.8**
ERM pmax pmax
comp=Z,96nm,0.7s
**JEM Erimo 58.94 28** P **P** **18 46 28.7 0.0**
**UZB Uzynbulak 59.03 334** *e*P **P** **18 46 28.9 -0.7**
comp=Z,11nm,0.6s,baz=334
**UZB Uzynbulak 59.03 334** *e*P **P** **18 46 28.8 -0.8**
UZB pmax pmax
comp=Z,11nm,0.6s
**NRN Naryn 59.08 330** PcP **PcP** **18 47 20.0 +1.5**
NRN IAmb IAmb 18 47 21.3
comp=Z,27nm,0.9s
**WBK Wadi Bani Khal 59.11 303** P **P** **18 46 31.7 +1.4**
**SATY Saty 59.23 333** *e*P **P** **18 46 30.3 -0.7**
baz=333
SATY *e*S **S** **18 54 34.1 -1.1**
baz=333
**SATY Saty 59.23 333** *e*P **P** **18 46 30.2 -0.7**
SATY *e*S **S** **18 54 34.0 -1.1**
**MHTO MHTO 59.26 301** P **P** **18 46 32.1 +0.7**
**ZAK Zakamensk 59.30 355** *e*P **P** **18 46 29.6 -1.6**
ZAK pmax pmax
comp=Z,9.0nm,1.4s

**ZHN Zhinishke 59.30 333** *e*P **P** **18 46 30.9 -0.5**
baz=333
**ZHN Zhinishke 59.30 333** *e*P **P** **18 46 30.9 -0.5**
**KPKS Kokpek 59.43 334** *e*P **P** **18 46 31.8 -0.5**
baz=334
KPKS *e*S **S** **18 54 36.8 -0.8**
baz=334
**KPKS Kokpek 59.43 334** *e*P **P** **18 46 31.7 -0.5**
KPKS *e*S **S** **18 54 36.8 -0.8**
**WSAR Wadi Sarin 59.67 303** LR LR 19 10 36.7
comp=Z,238nm,21.6s,baz=122,slow=34
**JMDO Jabal Madar 59.73 302** P **P** **18 46 36.0 +1.3**
**TNSS Tian-Shan 59.87 332** *e*P **P** **18 46 34.7 -1.0**
baz=332
**TNSS Tian-Shan 59.87 332** *e*P **P** **18 46 34.7 -1.0**
**BOOM Boomskoye usch 59.92 331** IAmb IAmb 18 46 37.1
comp=Z,72nm,1.6s
**MDOK Medeo 59.92 332** *e*P **P** **18 46 35.1 -0.7**
baz=332
**MDOK Medeo 59.92 332** *e*P **P** **18 46 35.0 -0.7**
**AAA Alma-Ata 60.02 332** *e*P **P** **18 46 35.9 -0.5**
comp=Z,13nm,0.6s,baz=332
**AAA Alma-Ata 60.02 332** *e*P **P** **18 46 35.8 -0.5**
AAA pmax pmax
comp=Z,13nm,0.6s
**SMDO Samad 60.07 303** P **P** **18 46 38.3 +1.3**
SNR=5.4
**KNGR Kungurtug, Tuv 60.23 351** *i* P **P** **18 46 36.1 -1.5**
KNGR pmax pmax
comp=Z,3.0nm,0.8s
**GAR Garm 60.33 325** IAmb IAmb 18 46 39.2
comp=Z,56nm,1.2s
**ASAJ Asahikawa 60.34 26** LR LR 19 12 01.8
comp=Z,154nm,21.9s,baz=222,slow=35
**ASAJ Asahikawa 60.34 26** P **P** **18 46 37.4 -0.9**
ASAJ pmax pmax
comp=Z,52nm,0.6s
**JKA Kamikawa-asahi 60.34 26** P **P** **18 46 37.4 -1.0**
**ZSN Zaisan 60.40 340** *e*P **P** **18 46 38.3 -0.4**
comp=Z,18nm,0.9s,baz=340
**ZSN Zaisan 60.40 340** *e*P **P** **18 46 38.3 -0.4**
ZSN pmax pmax
comp=Z,17nm,0.9s
**TKM2 Tokmak 2 60.41 331** P **P** **18 46 38.9 -0.3**
SNR=42
**CHKK Chushkaly 60.49 333** *e*P **P** **18 46 38.9 -0.6**
baz=333
**CHKK Chushkaly 60.49 333** *e*P **P** **18 46 38.8 -0.6**
**KBK Karagaybulak 60.52 331** P **P** **18 46 40.4 +0.5**
SNR=11
**DMTO DMTO 60.62 296** P **P** **18 46 42.1 +1.3**
**BSY Bisya 60.64 302** P **P** **18 46 42.0 +1.1**
**CIT Chita 60.70 2** *e*P **P** **18 46 41.2 +0.5**
CIT *e* 18 46 56.4
CIT *e* 18 47 24.8
CIT pmax pmax
comp=Z,69nm,2.0s
**AAK Ala-Archa 60.73 330** P **P** **18 46 41.4 +0.1**
SNR=7.6
**AAK Ala-Archa 60.73 330** P **P** **18 46 40.0 -1.2**
**AAK Ala-Archa 60.73 330** *i* P **P** **18 46 41.1 -0.2**
SNR=7.7
**AAK Ala-Archa 60.73 330** LR LR 19 18 39.2
comp=Z,180nm,18.1s,baz=152,slow=42
**AAK Ala-Archa 60.73 330** P **P** **18 46 42.1 +0.9**
**AAK Ala-Archa 60.73 330** *ce*P **P** **18 46 38.6 -2.7**
AAK pmax pmax
comp=Z,23nm,1.3s
**MK31 Makanchi Array 60.73 338** *ce*P **P** **18 46 40.5 -0.5**
**MKAR Makanchi Array 60.73 338** P **P** **18 46 40.9 -0.2**
comp=Z,31nm,0.7s,baz=146,slow=7.4,SNR=288
MKAR LR LR 19 16 12.4
comp=Z,184nm,21.0s,baz=153,slow=39
comp=Z,31nm,0.7s
**MKAR Makanchi Array 60.73 338** *ce*P **P** **18 46 40.5 -0.5**
MKAR pmax pmax
comp=Z,31nm,0.7s
**HEH HeiHe 60.74 13** *e*P **P** **18 46 40.3 -0.7**
HEH pP **pwP** **18 46 56.5 -0.9**
HEH pmax pmax
comp=Z,120nm,0.7s
HEH pmax pmax
comp=Z,210nm,4.4s
HEH LR LR
comp=Z,160nm,18.2s
HEH LR LR
comp=Z,190nm,18.8s
HEH LR LR
comp=Z,360nm,18.4s
**AML Almayashu 60.75 330** P **P** **18 46 42.1 +0.4**
SNR=13
**CHGR Chuyangaron 60.76 324** PcP **PcP** **18 47 26.3 +1.3**
**BTK Batken 60.77 326** P **P** **18 46 40.8 -0.8**
**BTK Batken 60.77 326** P **P** **18 46 40.8 -0.8**
BTK pmax pmax
comp=Z,20nm,1.0s
**TDK Taldyqorghan 60.78 335** *e*P **P** **18 46 40.9 -0.6**
comp=Z,22nm,0.6s,baz=334
**TDK Taldyqorghan 60.78 335** *e*P **P** **18 46 40.8 -0.6**
TDK pmax pmax
comp=Z,22nm,0.6s
**FRU1 Bishkek 60.79 331** P **P** **18 46 40.6 -1.0**
FRU1 IAmb IAmb 18 46 42.6
comp=Z,30nm,0.8s
**FRU1 Bishkek 60.79 331** P **P** **18 46 40.6 -1.0**
FRU1 pmax pmax
comp=Z,30nm,0.8s
**MOY Mondy 60.80 353** *e*P **P** **18 46 41.4 -0.1**
MOY pmax pmax
comp=Z,33nm,1.8s
**KUU Kurty 60.81 333** *e*P **P** **18 46 41.2 -0.5**
comp=Z,13nm,0.7s,baz=332
**KUU Kurty 60.81 333** *e*P **P** **18 46 41.1 -0.5**
KUU pmax pmax
comp=Z,13nm,0.7s
**SIMJ Simiganj 60.85 324** P **P** **18 46 40.4 -1.7**
SIMJ PcP **PcP** **18 47 26.0 +0.6**
SIMJ IAmb IAmb 18 47 27.9
comp=Z,34nm,0.9s
**SIMJ Simiganj 60.85 324** P **P** **18 46 40.2 -2.0**
SIMJ PcP **PcP** **18 47 26.1 +0.6**
SIMJ ScP **ScP** **18 51 22.6 0.0**
**KLR Kul'dur 60.85 16** LR LR 19 15 13.9
comp=Z,169nm,18.1s,baz=211,slow=38
**KLR Kul'dur 60.85 16** *ce*P **P** **18 46 40.6 -1.1**
KLR pmax pmax
comp=Z,127nm,1.2s
**MAKZ Makanchi 60.86 338** P **P** **18 46 40.4 -1.5**
**MAKZ Makanchi 60.86 338** P **P** **18 46 41.4 -0.5**
**HOQ Hoqain 60.91 303** P **P** **18 46 44.0 +1.3**
SNR=6.8
**IRK Irkutsk 61.07 356** *e*P **P** **18 46 40.2 -3.0**
IRK *e* 18 54 50.2
IRK pmax pmax
comp=Z,43nm,1.5s
**EKS2 Erkin-Say 61.10 330** P **P** **18 46 44.0 +0.3**
SNR=17
**USP Ospenovka 61.20 331** P **P** **18 46 44.0 -0.3**
SNR=18
**RBK Rabkut 61.20 295** P **P** **18 46 46.0 +1.2**
**SGDS Sogindy 61.27 331** *e*P **P** **18 46 44.2 -0.7**
baz=331
**SGDS Sogindy 61.27 331** *e*P **P** **18 46 44.1 -0.7**
**ARQ Araqi 61.46 303** P **P** **18 46 47.5 +1.1**
**JCZ Jackson Bay 61.49 136** P **P** **18 46 49.4 +3.0**
**DGZ Jazzator, Alta 61.62 343** *i* P **P** **18 46 47.0 -0.1**
DGZ pmax pmax
comp=Z,24nm,0.9s
**DOK Doka 61.67 297** P **P** **18 46 48.9 +1.1**
**WHFO Wadi Hawf 61.74 296** P **P** **18 46 49.5 +1.1**
**SOHO SOHO 61.79 303** *i* P **P** **18 46 49.1 +0.6**
SNR=6.0
**SOHO SOHO 61.79 303** P **P** **18 46 49.8 +1.2**
**ABTO Aybut 61.96 295** P **P** **18 46 51.2 +1.2**
**H04N2 CROZET ISLANDS 61.97 222** T T 19 54 30.1
baz=70,slow=75,SNR=295
**H04N1 CROZET ISLANDS 61.99 222** T T 19 54 31.2
baz=70,slow=75,SNR=309
**H04N3 CROZET ISLANDS 61.99 222** T T 19 54 30.7
baz=70,slow=75,SNR=1202
**H04S1 CROZET ISLANDS 62.11 221** T T 19 54 37.4
baz=75,slow=74,SNR=4.3
**H04S3 CROZET ISLANDS 62.12 221** T T 19 54 42.6
baz=75,slow=74,SNR=4.8
**H04S2 CROZET ISLANDS 62.12 221** T T 19 54 44.9
baz=75

**VOI Vohitsoka 62.12 250** P **P** **18 46 50.9 -0.2**
VOI IAmb IAmb 18 47 19.6
comp=Z,53nm,1.4s
**VOI Vohitsoka 62.12 250** P **P** **18 46 52.5 +1.4**
**UMZA Um Al Zommool 62.34 301** P **P** **18 46 53.2 +0.9**
**ALNE Al Ain 62.40 303** *i* P **P** **18 46 53.5 +0.7**
SNR=8.1
**ALNE Al Ain 62.40 303** P **P** **18 46 53.9 +1.1**
SNR=5.5
**UOSS Minazif 62.40 304** P **P** **18 46 51.1 -1.6**
UOSS IAmb IAmb 18 47 10.0
comp=Z,72nm,1.6s
**UOSS Minazif 62.40 304** P **P** **18 46 52.9 +0.2**
**UOSS Minazif 62.40 304** P **P** **18 46 53.7 +1.0**
**ASHO Ashiyiah 62.41 304** *i* P **P** **18 46 53.1 +0.3**
SNR=8.2
**ASHO Ashiyiah 62.41 304** P **P** **18 46 53.9 +1.1**
**HATD Hatta, Dubai 62.41 304** P **P** **18 46 54.2 +1.4**
**HATD Hatta, Dubai 62.41 304** P **P** **18 46 54.0 +1.2**
**MDH Madha 62.48 304** P **P** **18 46 53.3 +0.1**
**MASF Masafi 62.62 304** P **P** **18 46 55.3 +1.1**
**YSS Yuzh-Sakhalins 62.66 25** P **P** **18 46 54.2 +0.2**
**YSS Yuzh-Sakhalins 62.66 25** P **P** **18 46 52.3 -1.7**
**YSS Yuzh-Sakhalins 62.66 25** *ce*P **P** **18 46 53.6 -0.4**
YSS *e**SP **sP** **18 47 14.2 +0.2**
YSS *e* 18 49 10.9
YSS *e*S **S** **18 55 15.7 -2.7**
YSS *e*PS **PnS** **18 55 39.3 -1.4**
YSS *e*SS **SS** **18 59 16.1 -7.9**
YSS pmax pmax
comp=Z,180nm,1.2s
YSS pmax pmax
comp=Z,100nm,5.6s
YSS MLR MLR
comp=Z,100nm,15.0s
**YSS Yuzh-Sakhalins 62.66 25** P **P** **18 46 53.5 -0.4**
YSS pP **pP** **18 47 04.0 -4.2**
**BTLS Baital 62.75 332** *e*P **P** **18 46 53.9 -0.8**
baz=332
**BTLS Baital 62.75 332** *e*P **P** **18 46 53.8 -0.8**
**FAQ Al Faqa, Dubai 62.82 304** *i* P **P** **18 46 56.4 +0.9**
SNR=23
**FAQ Al Faqa, Dubai 62.82 304** P **P** **18 46 56.7 +1.2**
SNR=8.5
**NAZ Nazwa, Dubai 62.87 304** P **P** **18 46 56.9 +1.1**
**SHME Shamm 62.93 305** P **P** **18 46 57.4 +1.2**
**RPZ Rata Peaks 62.98 135** P **P** **18 46 59.3 +3.0**
**RPZ Rata Peaks 62.98 135** LR LR 19 16 25.7
comp=Z,368nm,18.3s,baz=298,slow=38
**ASUD Al Ashush, Dub 62.99 303** *i* P **P** **18 46 58.1 +1.5**
SNR=7.0
**ASUD Al Ashush, Dub 62.99 303** P **P** **18 46 57.7 +1.1**
**KKAR Karatay Array 63.07 328** P **P** **18 46 55.6 -1.2**
**KKAR Karatay Array 63.07 328** P **P** **18 46 55.6 -1.2**
KKAR pmax pmax
comp=Z,12nm,1.2s
**AJN Ajban 63.24 303** P **P** **18 46 59.0 +0.7**
**BRLS Boroldday 63.37 328** *e*P **P** **18 46 57.3 -1.5**
baz=328
**BRLS Boroldday 63.37 328** *e*P **P** **18 46 57.3 -1.5**
**OXZ Oxford 63.58 134** P **P** **18 46 58.3 -1.9**
**GRNR Gornyy 63.59 18**⇑ *i*P **P** **18 47 00.0 -0.1**
GRNR pmax pmax
comp=Z,40nm,1.0s
GRNR MLR MLR
comp=E,100nm,14.0s
**MRNZ Matariki Terra 63.68 132** P **P** **18 46 58.9 -2.1**
**MZR Muzera 63.88 301** *i* P **P** **18 47 04.0 +1.4**
SNR=25
**MZR Muzera 63.88 301** P **P** **18 47 03.6 +1.1**
SNR=6.2
**ZEA Zeya 64.01 11** *e*P **P** **18 47 02.9 +0.2**
ZEA pmax pmax
comp=E,20nm,6.0s
ZEA pmax pmax
comp=N,40nm,1.3s
ZEA pmax pmax
comp=Z,70nm,1.5s
ZEA MLR MLR
comp=Z,200nm,16.0s
**UGL Uglegorsk 64.11 23** *e*P **P** **18 47 03.8 +0.3**
UGL pmax pmax
comp=Z,150nm,1.1s
**SEM Semipalatinsk 64.51 339** *e*P **P** **18 47 05.5 -0.9**
comp=Z,26nm,1.0s,baz=339
**SEM Semipalatinsk 64.51 339** *e*P **P** **18 47 05.4 -0.9**
SEM pmax pmax
comp=Z,26nm,1.0s
**GHWR Ruwais 64.77 302** P **P** **18 47 09.4 +1.1**
**TCW Tory Channel 64.77 131** P **P** **18 47 05.3 -2.8**
**JRN Garnain Island 65.17 303** P **P** **18 47 11.9 +1.0**
**BHW Baring Head 65.24 132** P **P** **18 47 09.4 -1.8**
BHW IAmb IAmb 18 47 50.0
comp=Z,40nm,1.2s
KURBB **Kurchatov Arra 65.30 338** P **P** **18 47 10.8 -0.4**
comp=Z,13nm,0.7s,baz=152,slow=6.2,SNR=107
KURBB LR LR 19 18 55.0
comp=Z,204nm,19.1s,baz=167,slow=39
comp=Z,13nm,0.7s
**KURK Kurchatov 65.34 339** P **P** **18 47 10.9 -0.6**
KURK IAmb IAmb 18 47 12.4
comp=Z,28nm,0.8s
**KURK Kurchatov 65.34 339** P **P** **18 47 11.3 -0.2**
**KURK Kurchatov 65.34 339** *ce*P **P** **18 47 10.9 -0.6**
KURK pmax pmax
comp=Z,75nm,1.7s
**KURK Kurchatov 65.34 339** P **P** **18 47 10.9 -0.6**
KURK pP **pP** **18 47 21.9 -3.8**
KURK sP **pwP** **18 47 26.3 -1.8**
KURK PcP **PcP** **18 47 44.5 +1.2**
**TYV Tymovskoe 65.79 22** *e*P **P** **18 47 13.9 -0.4**
TYV pmax pmax
comp=Z,100nm,4.6s
TYV pmax pmax
comp=Z,15nm,1.3s
**SLWR Sila 65.80 301** P **P** **18 47 16.2 +1.2**
**ZALV Zalesovo Beam 66.14 344** P **P** **18 47 15.6 -1.0**
comp=Z,4.6nm,0.3s,baz=154,slow=4.6,SNR=55
ZALV PKP2bc 19 15 54.9
comp=Z,0.6nm,0.7s,baz=307,slow=0.7,SNR=4.2
ZALV LR LR 19 18 18.3
comp=Z,246nm,18.8s,baz=154,slow=38
comp=Z,4.6nm,0.3s
**BFZ Birch Farm 66.15 131** P **P** **18 47 19.9 +2.9**
**BFZ Birch Farm 66.15 131** P **P** **18 47 16.4 -0.6**
BFZ IAmb IAmb 18 47 22.7
comp=Z,74nm,1.3s
**MSVF Nonsavu 66.33 105** LR LR 19 16 04.3
comp=Z,96nm,19.9s,baz=39,slow=36
**TRNA Turayna 66.46 302** P **P** **18 47 20.2 +1.0**
**URZ Urewera 66.46 128** P **P** **18 47 21.7 +2.7**
**URZ Urewera 66.46 128** LR LR 19 15 38.7
comp=Z,470nm,21.8s,baz=17,slow=35
**MAW Mawson 66.55 198** P **P** **18 47 21.8 +2.8**
comp=Z,31nm,0.9s,baz=52,slow=6.9,SNR=43
MAW LR LR 19 10 19.8
comp=Z,468nm,22.0s,baz=50,slow=30
MAW PKP2bc 19 15 52.5
comp=Z,3.3nm,0.9s,baz=250,slow=6.6,SNR=5.5
comp=Z,31nm,0.9s
**SMRA Abu-Samra 66.79 302** P **P** **18 47 22.2 +0.9**
SNR=6.2
**NKL Nikolayevsk 66.99 19** *e*P **P** **18 47 17.7 -4.3**
NKL *e*S S 18 55 59.6 -12
NKL pmax pmax
comp=N,143nm,1.0s
NKL pmax pmax
comp=E,115nm,1.0s
NKL pmax pmax
comp=Z,456nm,1.0s
NKL smax smax
comp=N,87nm,6.0s
NKL smax smax
comp=E,237nm,6.0s
**SHMA Al-Shehemyia 67.10 303** P **P** **18 47 24.2 +0.9**
**SAKB Bahrain 67.50 303** P **P** **18 47 26.7 +0.9**
**RAO Raoul Island 69.95 118** LR LR 19 18 47.3
comp=E,342nm,19.8s,baz=60,slow=36
**BVAR Borovoye Array 70.33 336** P **P** **18 47 42.4 -0.4**
comp=E,36nm,0.7s,baz=142,slow=8.7,SNR=197
comp=E,36nm,0.7s
**BRVK Borovoye 70.39 336** P **P** **18 47 43.1 -0.1**
BRVK IAmb IAmb 18 47 44.0
comp=Z,36nm,0.9s
**BRVK Borovoye 70.39 336** P **P** **18 47 43.2 0.0**

**BRVK Borovoye 70.39 336** *ce* P **P 18 47 43.1 -0.1**
BRVK pmax pmax
comp=Z,56nm,1.3s
**BRVK Borovoye 70.39 336** P **P 18 47 42.7 -0.5**
BRVK pP **pP 18 47 54.0 -3.3**
BRVK PcP **PcP 18 48 05.2 +0.8**
**RAYN Ar Rayn 70.91 299** P **P 18 47 47.5 +0.5**
RAYN lAmb lAmb 18 47 50.6
comp=Z,55nm,1.4s
**RAYN Ar Rayn 70.91 299** *i* P **P 18 47 47.8 +0.7**
SNR=18
**RAYN Ar Rayn 70.91 299** P **P 18 47 47.8 +0.7**
**RAYN Ar Rayn 70.91 299** P **P 18 47 47.7 +0.6**
**KBD Kabd 71.05 305** P **P 18 47 48.6 +0.9**
**KIBK Kibwezi 72.01 270** P **P 18 47 56.9 +2.9**
**YAK Yakutsk 72.28 10** P **P 18 47 53.9 -0.5**
**YAK Yakutsk 72.28 10** LR LR 19 20 42.8
comp=Z,189nm,20.6s,baz=202,slow=37
**YAK Yakutsk 72.28 10** *c i* P **P 18 47 53.7 -0.7**
YAK *e* 18 48 08.5
YAK *e* *PP **sP 18 48 15.0 +0.5**
YAK *e* 18 50 32.1
YAK *e* S **S 18 57 09.5 -3.7**
YAK *e* *SS sS 18 57 44.9 +7.0
YAK *e* 18 57 56.1
YAK *e* SS **SS 19 01 56.9 +4.6**
YAK pmax pmax
comp=Z,230nm,0.9s
YAK pmax pmax
comp=N,76nm,0.9s
YAK pmax pmax
comp=E,43nm,1.0s
YAK pmax pmax
comp=Z,27nm,2.7s
YAK pmax pmax
comp=N,10.0nm,1.0s
YAK pmax pmax
comp=E,15nm,2.2s
YAK smax smax
comp=E,44nm,1.7s
YAK smax smax
comp=N,31nm,1.5s
**KMBO Kilima Mbogo 72.98 272** *i* P **P 18 48 03.2 +3.3**
SNR=11
**KMBO Kilima Mbogo 72.98 272** P **P 18 48 03.0 +3.1**
comp=N,10nm,0.8s,baz=73,slow=8.7,SNR=27
KMBO LR LR 19 14 56.9
comp=N,214nm,20.8s,baz=96,slow=32
comp=N,10nm,0.8s
**KMBO Kilima Mbogo 72.98 272** P **P 18 48 02.4 +2.5**
**KMBO Kilima Mbogo 72.98 272** P **P 18 48 03.0 +3.1**
**FURI Furi 73.38 282** LR LR 19 15 18.6
comp=N,214nm,21.7s,baz=108,slow=32
**PEA0B Petropavlovsk- 73.71 28** *ce* P **P 18 48 03.7 +0.6**
**PETK Petropavlovsk- 73.71 28** P **P 18 48 02.6 -0.4**
comp=N,62nm,0.9s,baz=213,slow=3.3,SNR=77
comp=N,62nm,0.9s
**PET Petropavlovsk 74.09 28** P **P 18 48 06.3 +1.0**
**PET Petropavlovsk 74.09 28** P **P 18 48 05.3 0.0**
PET lAmb lAmb 18 48 06.5
comp=Z,58nm,0.9s
**PET Petropavlovsk 74.09 28**⇑ *i* P **P 18 48 05.1 -0.2**
PET *e* 18 48 19.7
PET *e* S **S 18 57 36.2 +2.1**
PET pmax pmax
comp=Z,77nm,0.9s
PET MLR MLR
comp=Z,100nm,15.0s
PET MLR MLR
comp=Z,200nm,17.0s
**PET Petropavlovsk 74.09 28** P **P 18 48 05.1 -0.2**
comp=Z,77nm,1.5s
**AKTO Aktyubinsk 74.34 328** LR LR 19 25 53.7
comp=Z,127nm,19.0s,baz=96,slow=40
**MA2 Magadan 75.50 20** P **P 18 48 14.5 +1.2**
**MA2 Magadan 75.50 20** P **P 18 48 13.6 +0.3**
**MA2 Magadan 75.50 20** LR LR 19 23 53.7
comp=Z,88nm,19.3s,baz=213,slow=38
**MA2 Magadan 75.50 20** *ce* P **P 18 48 14.0 +0.7**
MA2 pmax pmax
comp=Z,247nm,1.7s
**MA2 Magadan 75.50 20** P **P 18 48 13.1 -0.2**
comp=Z,169nm,0.9s,comp=Z,1μm
**LODK Lodwar 75.58 276** P **P 18 48 17.4 +2.5**
**AKT Akhty 75.98 317** *eP* **P 18 48 17.3 +0.7**
AKT *e* 18 48 29.2
AKT *e* S **S 18 57 55.7 -0.1**
AKT *e* 18 58 31.5
AKT pmax pmax
comp=Z,138nm,1.2s
**SVE Sverdlovsk 77.02 335** *de* P **P 18 48 22.3 +0.3**
SVE pmax pmax
comp=Z,91nm,1.0s
**CUKT Cukurca 77.22 311** *eP* **P 18 48 23.9 +0.1**
**GNI Garni 77.50 314** P **P 18 48 26.1 +0.9**
GNI lAmb lAmb 18 48 33.5
comp=Z,42nm,0.8s
**GNI Garni 77.50 314** P **P 18 48 26.8 +1.5**
**GNI Garni 77.50 314** LR LR 19 25 36.7
comp=Z,58nm,21.9s,baz=102,slow=38
**GNI Garni 77.50 314** P **P 18 48 25.4 +0.1**
**GNI Garni 77.50 314** *ce* P **P 18 48 25.6 +0.3**
GNI pmax pmax
comp=Z,65nm,1.3s
**ARU Arti 77.67 334** P **P 18 48 25.2 -0.3**
ARU lAmb lAmb 18 48 26.7
comp=Z,88nm,1.1s
**ARU Arti 77.67 334** LR LR 19 26 07.0
comp=Z,276nm,21.7s,baz=118,slow=38
**ARU Arti 77.67 334** *c i* P **P 18 48 25.4 -0.2**
ARU *PP **pwP 18 48 40.4 -2.7**
ARU 18 51 15.4
ARU PPP PPP 18 53 09.9
ARU S **S 18 58 13.1 -0.3**
ARU SS **SS 19 03 08.8 -5.5**
ARU pmax pmax
comp=Z,102nm,1.2s
ARU MLR MLR
comp=Z,358nm,21.0s
**ARU Arti 77.67 334** P **P 18 48 25.3 -0.3**
comp=Z,73nm,1.4s,comp=Z,728nm
**CLDR Caldiran 77.70 313** *eP* P 18 48 21.5 -5.0
**TASB TASBURUN-IGDIR 77.79 314** *eP* **P 18 48 28.2 +1.4**
**AKDM Akdamar-Van 78.08 312** *eP* **P 18 48 29.8 +1.2**
**SEY Seymchan 78.52 18** *ce* P **P 18 48 30.6 +0.4**
SEY pmax pmax
comp=Z,166nm,1.7s
**GURO Guroymak-BITLI 78.86 312** lAmb lAmb 18 48 35.3
comp=Z,44nm,1.1s
**KARS Kars 78.86 314** *eP* **P 18 48 34.4 +1.6**
**AKH Akhalkalaki 78.86 315** *eP* **P 18 48 34.2 +1.4**
**SVAN Silvan-Diyarba 79.33 311** *eP* **P 18 48 36.4 +1.1**
**SENK Senkaya-Erzuru 79.35 314** *eP* **P 18 48 37.3 +1.8**
**MBAR Mbarara 79.49 271** *i* P **P 18 48 35.2 -1.6**
MBAR pmax pmax
comp=Z,26nm,0.9s
**KOPR Koprukoy-ERZUR 79.50 313** *eP* **P 18 48 36.9 +0.6**
**NCK Nalchik 79.59 317** *i* P **P 18 48 36.1 -0.4**
NCK pmax pmax
comp=Z,42nm,0.9s
**BNGB Bingl 80.00 312** *eP* **P 18 48 40.2 +1.2**
**LSZ Lusaka 80.06 256** P **P 18 48 41.2 +1.4**
**KBZ Khabaz 80.15 317** P **P 18 48 40.5 +1.0**
comp=Z,52nm,1.0s,baz=113,slow=4.0,SNR=72
comp=Z,52nm,1.0s
**KBZ Khabaz 80.15 317** *ce* P **P 18 48 40.4 +1.0**
KBZ pmax pmax
comp=Z,64nm,1.0s
**BCA Borcka 80.18 315** *eP* **P 18 48 40.6 +0.8**
**BCA Borcka 80.18 315** ⇓P **P 18 48 40.3 +0.5**
**BATM Batumi 80.19 315** *eP* **P 18 48 40.8 +1.0**
**SHA1 Shidzhatmaz 80.31 317** *ce* P **P 18 48 41.7 +1.0**
**KIV Kislovodsk 80.37 317** P **P 18 48 41.5 +0.6**
KIV lAmb lAmb 18 48 43.7
comp=Z,48nm,0.7s
**KIV Kislovodsk 80.37 317** *i* P **P 18 48 41.9 +1.1**
SNR=19
**KIV Kislovodsk 80.37 317** P **P 18 48 41.3 +0.5**
**KIV Kislovodsk 80.37 317** *eP* **P 18 48 41.6 +0.8**
KIV *eS* **S 18 58 40.6 -2.3**
KIV pmax pmax
comp=Z,57nm,1.1s
KIV pmax pmax
comp=Z,51nm,4.2s
**GOF Gofitskoye 80.56 319** *ce* P **P 18 48 42.6 +0.9**

**SVRC Sivrice-ELAZID 80.81 311** *eP* **P 18 48 44.8 +1.4**
**BELG Belogornoye 80.90 327** LR LR 19 31 36.1
comp=Z,99nm,18.9s,baz=101,slow=41
**BELG Belogornoye 80.90 327** *i* P **P 18 48 43.0 -0.3**
BELG pmax pmax
comp=Z,46nm,1.0s
**PTK Pertek 80.91 312** *eP* **P 18 48 45.4 +1.4**
**QSPA South Pole Qui 81.14 180** P **P 18 48 47.1 +2.5**
comp=Z,39nm,1.1s,baz=338,slow=3.5,SNR=110
QSPA LR LR 19 20 23.2
comp=Z,269nm,21.9s,baz=322,slow=32
comp=Z,39nm,1.1s
**TIXI Tiksi 81.29 6** P **P 18 48 43.9 -1.0**
**TIXI Tiksi 81.29 6** LR LR 19 29 23.8
comp=Z,228nm,18.7s,baz=212,slow=39
**TIXI Tiksi 81.29 6** *ce* P **P 18 48 44.1 -0.8**
TIXI pmax pmax
comp=Z,153nm,0.7s
**BOSA Boshof 81.41 242** P **P 18 48 50.2 +3.4**
comp=Z,4.1nm,0.5s,baz=116,slow=4.4,SNR=30
BOSA LR LR 19 19 34.1
comp=Z,462nm,19.2s,baz=118,slow=32
comp=Z,4.1nm,0.5s
**LBTB Lobatse 81.45 246** LR LR 19 20 52.8
comp=Z,128nm,18.3s,baz=94,slow=32
**GHAJ Ghor Haditha 81.66 303** lAmb lAmb 18 48 51.0
comp=Z,50nm,0.9s
**ILIC Ilic-Erzincan 81.70 312** *eP* P 18 48 53.0 +4.9
**EIL Elat 81.74 302** *eP* **P 18 48 50.2 +1.9**
**EIL Elat 81.74 302** LR LR 19 25 27.5
comp=Z,83nm,19.6s,baz=70,slow=36
**ARPR Arapgir-MALATY 81.76 312** *eP* **P 18 48 50.4 +2.0**
**ARPR Arapgir-MALATY 81.76 312** P **P 18 48 49.2 +0.8**
ARPR lAmb lAmb 18 48 51.4
comp=Z,54nm,1.0s
**HRFI Mount Harif 81.76 302** *eP* **P 18 48 50.7 +2.2**
**SHEM Shemya Is, Ala 81.78 33** LR LR 19 20 55.9
comp=Z,116nm,20.7s,baz=359,slow=33
**LABN Labinsk 81.94 318** *eP* **P 18 48 50.3 +1.3**
LABN *e* *PP **pwP 18 49 05.8 -0.6**
LABN *eS* **S 18 58 57.1 -1.8**
LABN *e* 18 59 06.7
LABN pmax pmax
comp=Z,135nm,1.0s
**VSLR Vesyoloye 81.99 316** *i* P **P 18 48 48.9 -0.4**
VSLR pmax pmax
comp=Z,116nm,1.0s
**GAZ Gaziantep 82.01 310** *eP* **P 18 48 51.6 +1.9**
**GAZ Gaziantep 82.01 310** lAmb lAmb 18 48 52.5
comp=Z,58nm,1.1s
**ESPY Espiye-Giresun 82.06 313** *eP* **P 18 48 50.9 +1.2**
**DARE Darende-Malaty 82.23 311** *eP* **P 18 48 52.4 +1.6**
**SOC Sochi 82.25 316** *eP* **P 18 48 48.7 -1.9**
SOC *e* *PP **pwP 18 49 06.0 -2.0**
SOC *e* 18 51 57.3
SOC *e* PPP PPP 18 53 47.8
SOC *eS* **S 18 59 00.0 -2.1**
SOC *eSS* **SS 19 04 18.6 -4.9**
SOC *eSSS* SSS 19 07 45.9
SOC pmax pmax
comp=Z,93nm,0.9s
SOC MLR MLR
comp=Z,62nm,19.0s
**MMAI Mount Meron Ar 82.25 305** P **P 18 48 53.6 +2.6**
comp=Z,15nm,0.6s,baz=99,slow=6.4,SNR=24
MMAI LR LR 19 25 35.3
comp=Z,105nm,21.8s,baz=48,slow=36
comp=Z,15nm,0.6s
**KMRS Kahramanmaras 82.35 310** *eP* **P 18 48 52.8 +1.4**
**ERBR Yeremizino-Bor 82.48 318** *i* P **P 18 48 52.6 +0.8**
ERBR *eS* **S 18 59 01.8 -2.6**
ERBR *e* 18 59 09.3
ERBR pmax pmax
comp=Z,147nm,1.3s
**TAHT Tahtakopru-Hat 82.57 309** *eP* **P 18 48 54.7 +2.2**
**RSDY Resadiye-TOKAT 82.90 313** *eP* **P 18 48 56.3 +2.1**
**KIRV Kirov 82.97 333** LR LR 19 30 17.4
comp=Z,204nm,21.7s,baz=112,slow=39
**KIRV Kirov 82.97 333** *ce* P **P 18 48 54.3 +0.3**
**SVSK Karacayir 83.00 312** *eP* **P 18 48 56.9 +2.3**
**KOZT Kozan 83.16 310** *eP* **P 18 48 56.8 +1.2**
**TOKT Tokat 83.45 312** *eP* **P 18 48 58.9 +1.9**
**BNN Bunyan 83.54 311** *eP* **P 18 48 59.2 +1.6**
**KARA Karaisali 83.69 309** *eP* **P 18 48 59.6 +1.3**
**VRH Novokhopyorsk 83.73 324** *c i* P **P 18 48 58.5 +0.4**
VRH pmax pmax
comp=Z,206nm,0.7s
**CMRD Camardi-Nigde 83.85 309** *eP* **P 18 49 01.2 +2.0**
**KVT Kavak 84.04 313** *eP* **P 18 49 01.9 +1.9**
**KIZK Mersin 84.18 308** *eP* **P 18 49 01.5 +0.7**
**ANN Anapa 84.20 317** *eP* **P 18 49 00.9 +0.2**
ANN *i* *PP **pwP 18 49 16.7 -1.3**
ANN *eS* **SKSac 18 59 16.8 -2.9**
ANN *e* 18 59 23.4
ANN pmax pmax
comp=Z,89nm,1.3s
**KOZK Kozakli-Nevseh 84.37 311** *eP* **P 18 49 03.9 +2.1**
**CSS Mathiatis 84.42 307** *eP* **P 18 49 03.6 +1.5**
**KEBE Keben-Mersin 84.50 308** *eP* **P 18 49 04.4 +1.9**
**DIKM Dikmen 84.77 313** ⇓P **P 18 49 05.6 +2.0**
**DIKM Dikmen 84.77 313** P **P 18 49 05.0 +1.4**
comp=Z,29nm,0.8s,comp=Z,492nm
**SUR Sutherland 84.81 238** LR LR 19 22 05.2
comp=Z,230nm,18.4s,baz=106,slow=32
**CORM Corum 84.81 312** *eP* **P 18 49 06.1 +2.0**
**YESY Yesilyurt 84.83 309** *eP* **P 18 49 05.9 +1.7**
**TEKE Tekeli-Mersin 84.89 308** *eP* **P 18 49 05.8 +1.4**
**KIRS Kirsehir-Merke 85.06 311**⇑ P **P 18 49 06.8 +1.5**
**SULT Sultanhani-AKS 85.11 310** *eP* **P 18 49 07.2 +1.6**
**VSR Storozhevoye 85.23 323** *eP* **P 18 49 05.5 -0.2**
VSR pmax pmax
comp=Z,150nm,0.6s
**VORR Voronezh 85.36 324** *eP* **P 18 49 06.8 +0.4**
VORR pmax pmax
comp=Z,128nm,1.0s
**BR104 Keskin Array S 85.42 311** P **P 18 49 08.0 +0.9**
comp=Z,59nm,1.1s,comp=Z,405nm
**BR131 Keskin Array S 85.42 311** *eP* **P 18 49 08.1 +0.9**
**BR131 Keskin Array S 85.42 311** *i* P **P 18 49 06.4 -0.8**
**BRTR Keskin Array B 85.42 311** P **P 18 49 08.5 +1.3**
comp=Z,39nm,0.8s,baz=130,slow=6.3,SNR=156
BRTR LR LR 19 28 38.1
comp=Z,68nm,21.7s,baz=118,slow=37
comp=Z,39nm,0.8s
**BRTR Keskin Array B 85.42 311** *ce* P **P 18 49 08.1 +0.9**
BRTR pmax pmax
comp=Z,39nm,0.8s
**BR105 Keskin Array S 85.44 311** P **P 18 49 08.1 +0.9**
comp=Z,63nm,1.0s,comp=Z,426nm
**BR106 Keskin Array S 85.44 311** P **P 18 49 08.1 +0.9**
comp=Z,60nm,1.0s,comp=Z,397nm
**GAZI Gazipasa 85.54 308** *eP* **P 18 49 08.8 +1.1**
**CANT Cankiri 85.67 312** *eP* **P 18 49 09.7 +1.4**
**BZK Bozkurt 85.76 313** *eP* **P 18 49 10.5 +2.0**
**BZK Bozkurt 85.76 313** ⇓P **P 18 49 10.7 +2.2**
**BZK Bozkurt 85.76 313** pP pP 18 49 26.1 +3.0
comp=Z,89nm,0.9s
**LPSR Galich'ya Gora 85.85 325** *eP* **P 18 49 08.6 -0.1**
LPSR pmax pmax
comp=Z,170nm,0.9s
**LADK Ladik-KONYA 85.99 309** *eP* **P 18 49 11.0 +1.0**
**ANTO Ankara 86.09 311** P **P 18 49 11.6 +1.3**
**ANTO Ankara 86.09 311** P **P 18 49 11.4 +1.0**
**ANTO Ankara 86.09 311**⇑ P **P 18 49 12.6 +2.2**
**ANTO Ankara 86.09 311** P **P 18 49 12.5 +2.2**
**ANTO Ankara 86.09 311** P **P 18 49 11.8 +1.4**
comp=Z,27nm,1.3s,comp=Z,326nm
**BILL Bilibino 86.23 18**⇑ *eP* **P 18 49 09.7 -0.6**
BILL pmax pmax
comp=Z,27nm,1.7s
**SIM Simferopol' 86.50 316** *ce* P **P 18 49 13.5 +1.4**
SIM *e* *PP **pwP 18 49 29.0 -0.6**
SIM pmax pmax
comp=Z,125nm,1.0s
SIM pmax pmax
comp=Z,110μm,0.9s
**KHAM Kharkiv 86.59 322** P **P 18 49 12.0 -0.5**
KHAM pP **sP 18 49 30.6 -2.1**
**RAR Rarotonga 86.87 111** LR LR 19 26 38.1
comp=Z,45nm,19.6s,baz=268,slow=35
**SVRH Sivrihisar-ESK 86.93 311** *eP* **P 18 49 16.1 +1.6**
**TROLL Troll, Antarti 87.01 197** ⇓Pdiff **P 18 49 17.0 +2.6**
comp=Z,392nm,1.2s
**CIFT Cifteler, Eski 87.26 310** *eP* **P 18 49 17.6 +1.5**

**KORT Korkueli 87.26 308** *eP* **P 18 49 17.3 +1.1**
**MDUB Mudurnu 87.42 311** *eP* **P 18 49 18.3 +1.4**
**PLTM Poltava 87.53 321** P **P 18 49 16.3 -0.7**
**MOS Moscow 87.64 327** *eP* **P 18 49 17.5 +0.1**
MOS *eS* **SKSac 18 59 39.2 -1.6**
MOS pmax pmax
comp=Z,156nm,0.8s
MOS pmax pmax
comp=E,58nm,0.9s
MOS pmax pmax
comp=N,70nm,0.9s
**GULT Gulveren 87.92 311** *eP* **P 18 49 19.4 +0.2**
**OBN Obninsk 88.00 327** P **P 18 49 19.6 +0.5**
**OBN Obninsk 88.00 327** *c i* P **P 18 49 19.9 +0.8**
OBN *e* 18 52 47.6
OBN *eS* **S 18 59 53.8 -4.7**
OBN *eSS* **SS 19 05 49.0 +1.5**
OBN pmax pmax
comp=Z,135nm,1.0s
OBN MLR MLR
comp=Z,202nm,22.0s
**FETY Fethiye 88.17 307** *eP* **P 18 49 21.5 +1.0**
**SNAA Sanae 88.70 197** ⇓Pdiff **P 18 49 25.4 +3.1**
comp=Z,27nm,0.4s
**SNAA Sanae 88.70 197** P **P 18 49 25.4 +3.1**
comp=Z,15nm,0.7s,baz=103,slow=4.1,SNR=125
SNAA PKKPbc **PKKPbc 19 07 02.5 -2.9**
comp=Z,1.9nm,1.1s,baz=270,slow=3.0,SNR=6.0
SNAA LR LR 19 24 56.9
comp=Z,444nm,19.1s,baz=110,slow=33
comp=Z,15nm,0.7s
**SNAA Sanae 88.70 197** *i* P **P 18 49 23.1 +0.8**
SNAA pmax pmax
comp=Z,22nm,1.0s
**YLV Yalova 88.80 311** *eP* **P 18 49 24.6 +1.2**
**YLV Yalova 88.80 311** P **P 18 49 23.2 -0.2**
comp=Z,70nm,1.0s,comp=Z,748nm
**TURN Turunc 88.86 307** *eP* **P 18 49 25.9 +2.3**
**KULA Kula-Manisa 88.90 309** *eP* **P 18 49 25.8 +1.9**
**NAZL Nazilli-Aydin 89.07 308** *eP* **P 18 49 27.1 +2.4**
**ODEM Odemis-Izmir 89.30 309** *eP* **P 18 49 28.3 +2.5**
**AYDB Zeytinkoy-Aydi 89.37 308** *eP* **P 18 49 28.2 +2.0**
**KARP Karpathos 89.47 306** *eP* **P 18 49 28.7 +2.1**
**TSUM Tsumeb 89.58 251** LR LR 19 27 22.5
comp=Z,124nm,18.1s,baz=142,slow=34
**BODT Bodrum 89.65 307** *eP* **P 18 49 28.7 +1.3**
**JURR Jurilovca 90.06 315** ⇓P **P 18 49 30.3 +1.2**
**ADZR Andozero 90.09 335**⇓ *i* P **P 18 49 29.5 +0.7**
ADZR pmax pmax
comp=Z,18nm,0.6s
**VNA2 Neumayer--Watz 90.35 197** ⇓Pdiff **P 18 49 33.1 +3.2**
comp=Z,14nm,1.2s,baz=109,slow=2.7
**TPGR Topolog 90.40 315**⇑ P **P 18 49 31.8 +1.1**
**MILM Milestii Mici 90.57 317**⇑ P **P 18 49 31.8 +0.4**
**MILM Milestii Mici 90.57 317** P **P 18 49 31.8 +0.4**
**TLBR Topalu 90.60 315**⇑ P **P 18 49 33.2 +1.6**
**CFR Carcaliu 90.66 316**⇑ P **P 18 49 32.8 +1.0**
**CFR Carcaliu 90.66 316** P **P 18 49 32.8 +1.0**
**HARR Harsova 90.71 315**⇑ P **P 18 49 34.0 +1.9**
**HARR Harsova 90.71 315** P **P 18 49 34.0 +1.9**
**VNA1 Neumayer--Stat 90.73 197** ⇓Pdiff **P 18 49 34.8 +3.1**
comp=Z,14nm,1.0s
**VNA3 Neumayer Olymp 90.83 196** ⇓Pdiff **P 18 49 35.1 +2.9**
comp=Z,7.8nm,1.0s
**AK09 Malin Array Si 91.06 321** P **P 18 49 33.4 -0.2**
AK09 pP **sP 18 49 51.7 -2.1**
**AKASG Malin Array Be 91.11 321** P **P 18 49 33.6 -0.2**
comp=Z,11nm,0.8s,baz=87,slow=4.7,SNR=40
AKASG LR LR 19 35 57.4
comp=Z,49nm,20.2s,baz=90,slow=39
comp=Z,11nm,0.8s
**AKASG Malin Array Be 91.11 321** *ce* P **P 18 49 33.5 -0.3**
AKASG pmax pmax
comp=Z,12nm,0.8s
**AKBB Malin Array Si 91.11 321** *ce* P **P 18 49 33.6 -0.2**
AKBB pmax pmax
comp=Z,17nm,0.9s
**AKBB Malin Array Si 91.11 321** P **P 18 49 33.1 -0.7**
**AK03 Malin Array Si 91.12 321** P **P 18 49 32.3 -0.7**
**KIEV Kiev 91.12 321** P **P 18 49 33.5 -0.4**
KIEV lAmb lAmb 18 49 34.7
comp=Z,15nm,0.8s
**KIEV Kiev 91.12 321** *i* P **P 18 49 33.8 0.0**
SNR=9.2
**KIEV Kiev 91.12 321**⇑ P **P 18 49 33.9 0.0**
**KIEV Kiev 91.12 321** P **P 18 49 33.8 0.0**
**SORM Soroca 91.13 318** ⇓P **P 18 49 34.4 +0.4**
**SORM Soroca 91.13 318** P **P 18 49 34.3 +0.4**
**AK13 Malin Array Si 91.20 321** P **P 18 49 33.5 -0.7**
**AK18 Malin Array Si 91.22 321** P **P 18 49 33.6 -0.7**
**BELA Belgrano 2 91.22 187** P **P 18 49 35.1 +1.1**
BELA lAmb lAmb 18 49 38.2
comp=Z,18nm,0.8s
**GHRR 91.34 316** ⇓P **P 18 49 37.1 +2.1**
**NIKH Nikolski High 91.59 37** P **P 18 49 35.1 -0.9**
baz=257
**SPIA Saint Paul Isl 91.76 32** P **P 18 49 36.2 -0.5**
baz=256
**VRI Vrincioaia 91.77 316** *eP* **P 18 49 38.5 +1.5**
**VRI Vrincioaia 91.77 316** ⇓P **P 18 49 38.8 +1.7**
**VRI Vrincioaia 91.77 316** P **P 18 49 38.7 +1.7**
**PLOR Plostina 91.82 316** ⇓P **P 18 49 38.6 +1.2**
**PLOR Plostina 91.82 316** P **P 18 49 38.5 +1.2**
**ELND Elena 91.83 313**⇑ P **P 18 49 38.4 +1.0**
**TESR Tescani 91.94 317**⇑ P **P 18 49 38.6 +0.8**
**NEHR Nehoiu 91.99 316** ⇓P **P 18 49 39.8 +1.7**
**P08K Saint George I 92.00 33** P **P 18 49 37.5 -0.3**
baz=257
**ONER Baraj Valea Uz 92.08 316** ⇓P **P 18 49 39.9 +1.5**
**COVR Voineasa-Covas 92.12 316**⇑ P **P 18 49 39.3 +0.5**
**MLR Muntele Rosu 92.24 316** lAmb lAmb 18 49 41.5
comp=Z,58nm,1.6s
**MLR Muntele Rosu 92.24 316**⇑ P **P 18 49 40.4 +1.0**
**MLR Muntele Rosu 92.24 316** P **P 18 49 40.4 +1.0**
**KMPD K-Podol'skiy 92.45 319** P **P 18 49 39.5 -0.6**
**PUL Pulkovo 92.52 330** *i* P **P 18 49 40.5 +0.4**
PUL pmax pmax
comp=Z,51nm,1.0s
**VALR Valaam 92.62 332** *i* P **P 18 49 40.4 -0.1**
VALR pmax pmax
comp=Z,43nm,1.0s
**GAMB Gambell 92.66 26** P **P 18 49 40.5 -0.1**
baz=255
**MNK Minsk 92.70 325** *i* P **P 18 49 40.1 -1.0**
MNK *i* *PP **pwP 18 49 57.1 -1.7**
MNK *i* 18 53 22.4
MNK *i* PPP PPP 18 55 22.2
MNK *i* S **SKSac 19 00 08.0 -2.2**
MNK *i* *SS **S 19 00 38.4 -3.4**
MNK *i* PS **PS 19 02 00.3 +0.1**
MNK *i* SS **SS 19 06 55.4 -0.1**
MNK *i* SSS SSS 19 10 35.4
MNK pmax pmax
comp=N,18nm,0.9s
MNK pmax pmax
comp=Z,34nm,0.9s
MNK pmax pmax
comp=E,14nm,0.9s
MNK MLR MLR
comp=Z,147nm,23.0s
MNK MLR MLR
comp=N,64nm,21.0s
MNK MLR MLR
comp=E,103nm,21.0s
**DOPR Dopca 92.71 316** ⇓P **P 18 49 42.5 +1.1**
**LVZ Lovozero 92.76 338** P **P 18 49 40.5 -0.7**
**LVZ Lovozero 92.76 338** *ce* P **P 18 49 40.9 -0.3**
LVZ pmax pmax
comp=Z,25nm,1.0s
**JOF Joensuu 92.80 333** *eP* **P 18 49 42.4 +1.0**
**BUR01 Bucovina Ar. S 93.10 318** ⇓P **P 18 49 44.8 +1.6**
**APA Apatity 93.13 338**⇓ *i* P **P 18 49 38.8 -4.0**
APA pmax pmax
comp=Z,4.0nm,0.9s
APA MLR MLR
comp=Z,500nm,18.0s
**UNV Unalaska Valle 93.14 36** P **P 18 49 42.9 -0.2**
baz=259
**ARCR ARCALIA 93.60 317**⇑ P **P 18 49 46.9 +1.4**
**VSU Vasula 94.07 328** *ce* P **P 18 49 47.2 -0.1**
VSU pmax pmax
comp=Z,30nm,0.9s
**GZR Gura Zlata 94.43 315**⇑ P **P 18 49 51.4 +2.0**
**GZR Gura Zlata 94.43 315** P **P 18 49 51.4 +2.0**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| M11K | Mekoryuk | 94.47 | 30 | P | | P | | 18 49 49.0 | 0.0 | |
| | baz=260 | | | | | | | | | |
| HERR | Herculane | 94.61 | 315 | ⇓P | | P | | 18 49 50.9 | +0.8 | |
| ARBE | Arbavere | 94.62 | 329 | *e*P | | P | | 18 49 51.0 | +1.2 | |
| TNA | Tin City | 94.64 | 24 | P | | P | | 18 49 49.4 | -0.4 | |
| | baz=259 | | | | | | | | | |
| FINES | FINESS Array B | 94.90 | 331 | P | | P | | 18 49 51.9 | +0.8 | |
| | comp=Z,15nm,0.8s,baz=102,slow=6.6,SNR=51 | | | | | | | | | |
| FINES | | | | PKKPbc | | PKKPdf | | 19 06 49.4 | +0.1 | |
| | comp=Z,0.5nm,0.6s,baz=219,slow=3.6,SNR=5.0 | | | | | | | | | |
| FINES | | | | LR | | LR | | 19 37 52.7 | | |
| | comp=Z,160nm,21.0s,baz=101,slow=39 | | | | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| SURR | Surduc | 94.93 | 315 | ⇑P | | P | | 18 49 52.8 | +1.2 | |
| BOVS | Bovan | 94.95 | 313 | ⇓P | | P | | 18 49 51.9 | +0.2 | |
| KWP | Kalwaria Pacla | 95.05 | 319 | *e*P | | P | | 18 49 52.7 | +0.6 | |
| KWP | Kalwaria Pacla | 95.05 | 319 | IAmb | | IAmb | | 18 50 33.8 | | |
| | comp=Z,11nm,0.6s | | | | | | | | | |
| MDVR | Moldovita | 95.09 | 314 | ⇓P | | P | | 18 49 53.5 | +1.0 | |
| PABE | Paberze | 95.09 | 325 | P | | P | | 18 49 51.9 | -0.2 | |
| PABE | | | | IAmb | | IAmb | | 18 49 53.5 | | |
| | comp=Z,31nm,0.9s | | | | | | | | | |
| PABE | Paberze | 95.09 | 325 | *e*P | | P | | 18 49 52.2 | +0.2 | |
| VADS | Vadso | 95.16 | 340 | *e*P | | P | | 18 49 52.1 | +0.1 | |
| VADS | | | | IAmb | | IAmb | | 18 49 54.3 | | |
| | comp=Z,281nm,2.2s | | | | | | | | | |
| KOLS | Kolonicke sedl | 95.24 | 319 | *i* P | | P | | 18 49 54.5 | +1.5 | |
| KOLS | Kolonicke sedl | 95.24 | 319 | *e*PDIFF | | P | | 18 49 54.5 | +1.5 | |
| KOLS | | | | *e* | | | | 19 15 15.7 | | |
| BZS | Buzias | 95.27 | 315 | ⇓P | | P | | 18 49 53.6 | +0.5 | |
| BZS | Buzias | 95.27 | 315 | P | | P | | 18 49 53.6 | +0.5 | |
| F14K | Arctic Creek | 95.28 | 25 | P | | P | | 18 49 52.4 | -0.3 | |
| | baz=260 | | | | | | | | | |
| SIRR | Siria | 95.32 | 316 | ⇓P | | P | | 18 49 54.3 | +0.9 | |
| SUW | Suwalki | 95.34 | 324 | *e*P | | P | | 18 49 53.5 | +0.2 | |
| SUW | | | | *e*pP | | pwP | | 18 50 09.6 | -1.3 | |
| SUW | Suwalki | 95.34 | 324 | *e*P | | P | | 18 49 53.7 | +0.5 | |
| K13K | Kusilvak Mount | 95.46 | 28 | P | | P | | 18 49 53.3 | -0.3 | |
| | baz=262 | | | | | | | | | |
| MEF | Metsahovi | 95.53 | 330 | *e*P | | P | | 18 49 54.8 | +0.9 | |
| KEF | Keuruu | 95.58 | 332 | *e*P | | P | | 18 49 54.8 | +0.7 | |
| MTSE | Matsula | 95.62 | 328 | *e*P | | P | | 18 49 54.9 | +0.5 | |
| M13K | Dall Lake | 95.88 | 30 | P | | P | | 18 49 55.1 | -0.3 | |
| | baz=262 | | | | | | | | | |
| TBI | Tubuai | 95.90 | 115 | *e*LR | | LR | | 19 20 59.0 | | |
| | comp=Z,1μm,31.5s | | | | | | | | | |
| S12K | Black Hills | 95.97 | 35 | P | | P | | 18 49 55.7 | -0.3 | |
| | baz=263 | | | | | | | | | |
| F15K | North Star Dit | 96.01 | 24 | P | | P | | 18 49 55.6 | -0.4 | |
| | baz=262 | | | | | | | | | |
| J14K | Nanvaranak Lak | 96.08 | 28 | P | | P | | 18 49 55.7 | -0.7 | |
| | baz=262 | | | | | | | | | |
| C16K | Lisburne Hills | 96.11 | 22 | IAmb | | IAmb | | 18 49 58.6 | | |
| | comp=Z,32nm,1.0s | | | | | | | | | |
| C16K | Lisburne Hills | 96.11 | 22 | P | | P | | 18 49 56.2 | -0.2 | |
| | baz=262 | | | | | | | | | |
| PBUR | Paburge | 96.30 | 326 | *e*P | | P | | 18 49 57.8 | +0.2 | |
| L14K | Kuka Creek | 96.32 | 29 | P | | P | | 18 49 56.7 | -0.8 | |
| | baz=263 | | | | | | | | | |
| ARA0 | ARCESS Array S | 96.37 | 339 | *e*P | | P | | 18 49 57.5 | -0.1 | |
| ARCES | ARCESS Array B | 96.37 | 339 | P | | P | | 18 49 57.3 | -0.4 | |
| | comp=Z,2.6nm,0.5s,baz=95,slow=5.9,SNR=25 | | | | | | | | | |
| ARCES | | | | LR | | LR | | 19 40 08.9 | | |
| | comp=Z,113nm,18.9s,baz=99,slow=40 | | | | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | | | | |
| NIE | Niedzica | 96.58 | 319 | *e*P | | P | | 18 49 59.9 | +0.8 | |
| NIE | | | | *e*PP | | PP | | 18 53 52.6 | -1.4 | |
| M14K | Bethel | 96.60 | 30 | IAmb | | IAmb | | 18 50 00.7 | | |
| | comp=Z,15nm,0.9s | | | | | | | | | |
| M14K | Bethel | 96.60 | 30 | P | | P | | 18 49 58.2 | -0.6 | |
| | baz=264 | | | | | | | | | |
| VAF | Ylistaro | 96.70 | 333 | *e*P | | P | | 18 50 00.2 | +1.0 | |
| O14K | Tigyukauivet M | 96.79 | 31 | P | | P | | 18 49 58.9 | -0.8 | |
| | baz=264 | | | | | | | | | |
| SDPT | Sand Point | 96.83 | 35 | P | | P | | 18 49 59.9 | -0.1 | |
| | baz=264 | | | | | | | | | |
| D17K | Noatak River | 96.88 | 23 | P | | P | | 18 50 00.2 | +0.3 | |
| | baz=264 | | | | | | | | | |
| H16K | Elim | 96.89 | 26 | P | | P | | 18 50 00.4 | +0.3 | |
| | baz=264 | | | | | | | | | |
| RAF | Rauma | 96.92 | 331 | *e*P | | P | | 18 50 00.7 | +0.5 | |
| G16K | Koyuk River | 96.92 | 25 | IAmb | | IAmb | | 18 50 17.8 | | |
| | comp=Z,17nm,0.9s | | | | | | | | | |
| G16K | Koyuk River | 96.92 | 25 | P | | P | | 18 50 00.5 | +0.4 | |
| | baz=264 | | | | | | | | | |
| L15K | Ungalak Mounta | 96.92 | 29 | P | | P | | 18 50 01.3 | +1.1 | |
| | baz=264 | | | | | | | | | |
| C17K | DeLong Mountai | 96.93 | 22 | P | | P | | 18 50 00.1 | 0.0 | |
| | baz=264 | | | | | | | | | |
| K15K | Wolf Creek Mou | 96.96 | 28 | P | | P | | 18 50 00.4 | -0.1 | |
| | baz=264 | | | | | | | | | |
| PPT2 | Papeete2 | 96.97 | 109 | *e*LR | | LR | | 19 21 23.4 | | |
| | comp=Z,227nm,27.0s | | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | | 19 21 27.9 | | |
| | comp=Z,303nm,25.8s | | | | | | | | | |
| PPT | Papeete | 96.98 | 109 | LR | | LR | | 19 27 50.5 | | |
| | comp=Z,150nm,21.5s,baz=218,slow=32 | | | | | | | | | |
| RDOG | Red Dog Mine | 96.98 | 22 | P | | P | | 18 50 00.4 | -0.1 | |
| | baz=264 | | | | | | | | | |
| OJC | Ojcow | 96.99 | 320 | *e*P | | P | | 18 50 01.5 | +0.7 | |
| KTK1 | Kautokeino | 97.11 | 339 | *e*P | | P | | 18 50 00.4 | -0.6 | |
| KTK1 | | | | IAmb | | IAmb | | 18 50 01.0 | | |
| | comp=Z,9.7nm,0.9s | | | | | | | | | |
| HAMF | Hammerfest | 97.13 | 340 | *e*P | | P | | 18 50 00.6 | -0.4 | |
| M15K | Kasigluk River | 97.22 | 30 | P | | Pdif | | 18 50 02.5 | +0.8 | |
| | baz=265 | | | | | | | | | |
| CHNA | Chernabura Isl | 97.29 | 36 | P | | Pdif | | 18 50 02.5 | +0.4 | |
| | baz=265 | | | | | | | | | |
| E17K | Hotham Inlet | 97.30 | 23 | P | | Pdif | | 18 50 02.2 | +0.3 | |
| | baz=265 | | | | | | | | | |
| MORH | Mrgy, Hungar | 97.39 | 316 | ⇑P | | Pdif | | 18 50 03.1 | +0.3 | |
| S14K | Fog Glacier | 97.43 | 34 | P | | P | | 18 50 01.7 | -1.1 | |
| | baz=265 | | | | | | | | | |
| VYHS | Vyhne | 97.46 | 318 | *i* P | | P | | 18 50 03.1 | +0.1 | |
| VYHS | Vyhne | 97.46 | 318 | *e*PDIFF | | P | | 18 50 03.1 | +0.1 | |
| VYHS | | | | *e* | | | | 19 15 20.3 | | |
| N15K | Kwethluk River | 97.47 | 30 | P | | Pdif | | 18 50 02.9 | +0.1 | |
| N15K | | | | IAmb | | IAmb | | 18 50 04.6 | | |
| | comp=Z,19nm,1.1s | | | | | | | | | |
| N15K | Kwethluk River | 97.47 | 30 | P | | P | | 18 50 01.5 | -1.2 | |
| | baz=265 | | | | | | | | | |
| F17K | Baldwin Pennin | 97.47 | 24 | P | | P | | 18 50 02.1 | -0.5 | |
| | baz=265 | | | | | | | | | |
| J16K | Anvik River | 97.48 | 27 | P | | Pdif | | 18 50 03.5 | +0.7 | |
| | baz=265 | | | | | | | | | |
| I17K | Unalakleet | 97.49 | 27 | P | | Pdif | | 18 50 03.1 | +0.3 | |
| | baz=265 | | | | | | | | | |
| B18K | Kokolik River | 97.51 | 21 | P | | Pdif | | 18 50 03.1 | +0.2 | |
| | baz=265 | | | | | | | | | |
| O15K | Ungalikthiuk R | 97.52 | 31 | P | | P | | 18 50 03.0 | 0.0 | |
| | baz=265 | | | | | | | | | |
| G17K | Kiwalik Mounta | 97.64 | 25 | P | | Pdif | | 18 50 03.7 | +0.2 | |
| | baz=266,SNR=6.0 | | | | | | | | | |
| C18K | Utukok River | 97.67 | 22 | P | | P | | 18 50 03.1 | -0.5 | |
| | baz=265 | | | | | | | | | |
| AAL | Aland | 97.71 | 330 | *e*P | | P | | 18 50 03.6 | -0.2 | |
| E18K | Tukpahlearik C | 97.80 | 23 | IAmb | | IAmb | | 18 50 06.7 | | |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| E18K | Tukpahlearik C | 97.80 | 23 | P | | Pdif | | 18 50 04.4 | +0.3 | |
| | baz=266 | | | | | | | | | |
| A19K | Wainwright | 97.83 | 20 | P | | P | | 18 50 04.0 | -0.1 | |
| | baz=266 | | | | | | | | | |
| L16K | Owhat River | 97.88 | 29 | IAmb | | IAmb | | 18 50 06.5 | | |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| L16K | Owhat River | 97.88 | 29 | P | | P | | 18 50 04.7 | +0.1 | |
| | baz=266,SNR=6.4 | | | | | | | | | |
| H17K | Granite Mounta | 97.91 | 25 | IAmb | | IAmb | | 18 50 07.0 | | |
| | comp=Z,12nm,0.8s | | | | | | | | | |
| H17K | Granite Mounta | 97.91 | 25 | P | | P | | 18 50 04.4 | -0.2 | |
| | baz=266,SNR=6.0 | | | | | | | | | |
| M16K | Timber Creek | 98.08 | 29 | P | | Pdif | | 18 50 05.8 | +0.2 | |
| | baz=266 | | | | | | | | | |
| F18K | Selawik | 98.12 | 24 | P | | P | | 18 50 04.9 | -0.6 | |
| | baz=266 | | | | | | | | | |
| N16K | Nishlik Lake | 98.14 | 30 | P | | Pdif | | 18 50 06.1 | +0.3 | |
| | baz=266,SNR=5.1 | | | | | | | | | |
| J17K | VABM Dome | 98.17 | 27 | P | | Pdif | | 18 50 06.2 | +0.3 | |
| | baz=267 | | | | | | | | | |
| C19K | Lookout Ridge | 98.28 | 21 | IAmb | | IAmb | | 18 50 09.2 | | |
| | comp=Z,29nm,1.4s | | | | | | | | | |
| C19K | Lookout Ridge | 98.28 | 21 | P | | P | | 18 50 06.4 | +0.1 | |
| | baz=267 | | | | | | | | | |
| MORC | Moravsky Berou | 98.40 | 319 | P | | Pdif | | 18 50 07.8 | +0.5 | |
| MORC | Moravsky Berou | 98.40 | 319 | *e*PDIFF | | Pdif | | 18 50 07.8 | +0.5 | |
| MORC | Moravsky Berou | 98.40 | 319 | ⇓P | | Pdif | | 18 50 08.3 | +1.0 | |
| MORC | Moravsky Berou | 98.40 | 319 | P | | Pdif | | 18 50 08.3 | +1.0 | |
| O16K | Kokwok River B | 98.43 | 31 | P | | Pdif | | 18 50 07.5 | +0.4 | |
| | baz=267 | | | | | | | | | |
| P16K | Nushagak River | 98.45 | 32 | P | | Pdif | | 18 50 07.5 | +0.3 | |
| | baz=267 | | | | | | | | | |
| L17K | Donlin | 98.46 | 28 | P | | P | | 18 50 07.2 | 0.0 | |
| | baz=267 | | | | | | | | | |
| G18K | Tagagawik | 98.48 | 25 | P | | P | | 18 50 07.1 | -0.1 | |
| | baz=267 | | | | | | | | | |
| K17K | Iditarod | 98.49 | 28 | IAmb | | IAmb | | 18 50 09.6 | | |
| | comp=Z,17nm,1.0s | | | | | | | | | |
| K17K | Iditarod | 98.49 | 28 | P | | P | | 18 50 07.0 | -0.3 | |
| | baz=267 | | | | | | | | | |
| H18K | Honhosa River | 98.57 | 25 | P | | P | | 18 50 07.4 | -0.3 | |
| | baz=268 | | | | | | | | | |
| TRO | Tromso | 98.68 | 339 | *e*P | | P | | 18 50 07.6 | -0.4 | |
| D19K | Kuna River | 98.79 | 22 | IAmb | | IAmb | | 18 50 10.8 | | |
| | comp=Z,10nm,0.8s | | | | | | | | | |
| D19K | Kuna River | 98.79 | 22 | P | | P | | 18 50 07.9 | -0.7 | |
| | baz=268 | | | | | | | | | |
| M17K | Holitna River | 98.84 | 29 | P | | P | | 18 50 08.9 | 0.0 | |
| | baz=268 | | | | | | | | | |
| F19K | Shaleruckik Mo | 98.88 | 24 | P | | P | | 18 50 08.5 | -0.4 | |
| | baz=268 | | | | | | | | | |
| UPP | Uppsala | 98.88 | 329 | *e*P | | P | | 18 50 07.7 | -1.4 | |
| N17K | Nushagak Hills | 98.93 | 30 | P | | Pdif | | 18 50 09.5 | +0.2 | |
| | baz=268 | | | | | | | | | |
| O17K | Koliganek Bris | 98.95 | 31 | P | | Pdif | | 18 50 09.8 | +0.4 | |
| | baz=268 | | | | | | | | | |
| VRAC | Vranov | 98.99 | 319 | *e*PDIFF | | Pdif | | 18 50 11.4 | +1.5 | |
| VRAC | Vranov | 98.99 | 319 | LR | | LR | | 19 44 22.9 | | |
| | comp=Z,60nm,18.2s,baz=80,slow=41 | | | | | | | | | |
| E19K | Redstone River | 99.10 | 23 | | | Pdif | | 18 50 10.3 | +0.3 | |
| E19K | | | | IAmb | | IAmb | | 18 50 12.4 | | |
| | comp=Z,37nm,1.6s | | | | | | | | | |
| E19K | Redstone River | 99.10 | 23 | P | | Pdif | | 18 50 10.1 | +0.1 | |
| | baz=269,SNR=7.0 | | | | | | | | | |
| RONA | Rosalia, Austr | 99.10 | 317 | *e*Pdiff | | Pdif | | 18 50 11.0 | +0.6 | |
| | comp=Z,3.2nm,1.0s | | | | | | | | | |
| G19K | Purcell Mounta | 99.13 | 24 | P | | Pdif | | 18 50 10.0 | -0.1 | |
| | baz=269 | | | | | | | | | |
| B20K | Meade River | 99.16 | 20 | P | | Pdif | | 18 50 10.0 | -0.1 | |
| | baz=269 | | | | | | | | | |
| DPC | Dobruska-Polom | 99.22 | 320 | AMS | | AMS | | 19 38 30.0 | | |
| | comp=Z,200nm,18.3s | | | | | | | | | |
| L18K | Granite Mounta | 99.22 | 28 | | | Pdif | | 18 50 11.2 | +0.6 | |
| L18K | | | | IAmb | | IAmb | | 18 50 28.1 | | |
| | comp=Z,10nm,1.0s | | | | | | | | | |
| L18K | Granite Mounta | 99.22 | 28 | P | | Pdif | | 18 50 10.9 | +0.3 | |
| | baz=268 | | | | | | | | | |
| J18K | Innoko River | 99.24 | 27 | IAmb | | IAmb | | 18 50 12.5 | | |
| | comp=Z,9.5nm,1.1s | | | | | | | | | |
| J18K | Innoko River | 99.24 | 27 | P | | Pdif | | 18 50 11.0 | +0.3 | |
| | baz=269 | | | | | | | | | |
| R17L | Mt. Peulik Vol | 99.25 | 33 | P | | Pdif | | 18 50 09.9 | -1.0 | |
| | baz=268 | | | | | | | | | |
| D20K | Etivluk River | 99.35 | 22 | P | | Pdif | | 18 50 11.2 | +0.1 | |
| | baz=270,SNR=8.2 | | | | | | | | | |
| A21K | Barrow | 99.35 | 19 | P | | Pdif | | 18 50 10.8 | -0.1 | |
| | baz=270 | | | | | | | | | |
| H19K | Roundabout Mou | 99.39 | 25 | P | | Pdif | | 18 50 11.3 | +0.1 | |
| | baz=269 | | | | | | | | | |
| SPA0 | Spitsbergen Ar | 99.39 | 348 | *e*P | | Pdif | | 18 50 11.0 | -0.1 | |
| SPITS | Spitsbergen Ar | 99.39 | 348 | P | | Pdif | | 18 50 10.9 | -0.1 | |
| | comp=Z,9.6nm,0.5s,baz=101,slow=7.5,SNR=44 | | | | | | | | | |
| SPITS | | | | LR | | LR | | 19 41 56.1 | | |
| | comp=Z,201nm,19.7s,baz=60,slow=40 | | | | | | | | | |
| | comp=Z,9.6nm,0.5s | | | | | | | | | |
| CONA | Conrad Observa | 99.41 | 317 | *e*Pdiff | | Pdif | | 18 50 14.3 | +2.4 | |
| | comp=Z,4.5nm,1.6s | | | | | | | | | |
| CONA | | | | *i* PKiKP | | PKiKP | | 18 54 35.5 | -5.7 | |
| | comp=Z,2.8nm,1.1s | | | | | | | | | |
| E20K | Nigu River | 99.50 | 22 | P | | Pdif | | 18 50 11.8 | 0.0 | |
| | baz=270 | | | | | | | | | |
| Q17K | Contact Creek | 99.53 | 32 | P | | Pdif | | 18 50 11.9 | -0.3 | |
| | baz=270 | | | | | | | | | |
| N18K | Kilae Creek | 99.57 | 30 | P | | Pdif | | 18 50 12.0 | -0.2 | |
| | baz=269 | | | | | | | | | |
| M18K | Stony River | 99.62 | 29 | P | | Pdif | | 18 50 12.3 | 0.0 | |
| | baz=269 | | | | | | | | | |
| F20K | Avaraart Lake | 99.68 | 23 | IAmb | | IAmb | | 18 50 15.2 | | |
| | comp=Z,14nm,1.4s | | | | | | | | | |
| F20K | Avaraart Lake | 99.68 | 23 | P | | Pdif | | 18 50 12.8 | +0.2 | |
| | baz=270 | | | | | | | | | |
| J19K | Porman | 99.73 | 26 | P | | Pdif | | 18 50 13.2 | +0.4 | |
| | baz=270 | | | | | | | | | |
| P18K | Big Mountain, | 99.89 | 31 | P | | Pdif | | 18 50 13.9 | +0.3 | |
| | baz=269 | | | | | | | | | |
| O18K | Koktuh Hills | 99.90 | 31 | P | | Pdif | | 18 50 13.3 | -0.4 | |
| | baz=269 | | | | | | | | | |
| SOKA | Soboth | 99.91 | 316 | *e*PKiKP | | PKiKP | | 18 54 36.6 | -5.5 | |
| Q18K | Katmai Hardscr | 99.99 | 32 | P | | Pdif | | 18 50 13.8 | -0.4 | |
| | baz=269 | | | | | | | | | |
| C21K | Knifeblade Rid | 100.00 | 21 | P | | Pdif | | 18 50 13.9 | 0.0 | |
| | baz=272 | | | | | | | | | |
| FAUS | Fauske | 100.00 | 337 | *e*P | | Pdif | | 18 50 13.7 | -0.3 | |
| FAUS | | | | IAmb | | IAmb | | 18 50 14.4 | | |
| | comp=Z,14nm,0.8s | | | | | | | | | |
| STEI | Steigen | 100.01 | 338 | IAmb | | IAmb | | 18 50 13.8 | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| STEI | | | | *e*P | | Pdif | | 18 50 14.0 | +0.1 | |
| H20K | Anotleneega Mo | 100.04 | 25 | P | | Pdif | | 18 50 14.2 | 0.0 | |
| | baz=271 | | | | | | | | | |
| B21K | Ikpikpuk River | 100.05 | 21 | Pdif | | Pdif | | 18 50 15.1 | +1.0 | |
| B21K | Ikpikpuk River | 100.05 | 21 | P | | Pdif | | 18 50 14.2 | +0.1 | |
| | baz=272 | | | | | | | | | |
| L19K | White Mountain | 100.08 | 28 | P | | Pdif | | 18 50 14.3 | -0.2 | |
| | baz=270 | | | | | | | | | |
| GOPC | GO Pecny, Ondr | 100.19 | 319 | AMS | | AMS | | 19 38 50.0 | | |
| | comp=Z,100nm,17.8s | | | | | | | | | |
| KBS | Kingsbay | 100.22 | 349 | *e*P | | Pdif | | 18 50 14.2 | -0.6 | |
| OBKA | Obir | 100.24 | 316 | *e*PP | | PP | | 18 54 30.0 | +7.8 | |
| N19K | Bonanza Creek | 100.26 | 30 | P | | Pdif | | 18 50 15.1 | -0.3 | |
| | baz=270 | | | | | | | | | |
| R18K | Karluk | 100.28 | 33 | P | | Pdif | | 18 50 14.5 | -0.8 | |
| | baz=270 | | | | | | | | | |
| M19K | Big River Lodg | 100.30 | 29 | P | | Pdif | | 18 50 15.6 | +0.1 | |
| | baz=270 | | | | | | | | | |
| E21K | Killik River | 100.32 | 22 | | | Pdif | | 18 50 15.7 | +0.3 | |
| E21K | Killik River | 100.32 | 22 | P | | Pdif | | 18 50 15.2 | -0.2 | |
| | baz=272 | | | | | | | | | |
| PRU | Pruhonice | 100.35 | 319 | AMS | | AMS | | 19 39 00.0 | | |
| | comp=Z,200nm,24.3s | | | | | | | | | |
| MOR8 | Moi Rana | 100.37 | 336 | *e*P | | Pdif | | 18 50 15.0 | -0.6 | |
| MOR8 | | | | IAmb | | IAmb | | 18 50 15.3 | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| J20K | Nowinta River | 100.38 | 26 | P | | Pdif | | 18 50 16.1 | +0.5 | |
| | baz=271 | | | | | | | | | |
| K20K | Telida | 100.43 | 27 | P | | Pdif | | 18 50 15.9 | -0.1 | |
| | baz=271 | | | | | | | | | |
| B22K | Teshekpuk Lake | 100.43 | 20 | P | | Pdif | | 18 50 16.0 | +0.2 | |
| | baz=273 | | | | | | | | | |
| L20K | Farewell, AK | 100.53 | 28 | P | | Pdif | | 18 50 16.5 | 0.0 | |
| | baz=271 | | | | | | | | | |
| F21K | Alatna River | 100.56 | 23 | P | | Pdif | | 18 50 16.9 | +0.5 | |
| | baz=272 | | | | | | | | | |
| G21K | Allakaket | 100.58 | 24 | P | | Pdif | | 18 50 17.4 | +0.9 | |
| | baz=272 | | | | | | | | | |
| D22K | Ayikyak River | 100.77 | 21 | P | | Pdif | | 18 50 17.5 | +0.1 | |
| | baz=273 | | | | | | | | | |
| HFS | Hagfors | 100.86 | 330 | P | | Pdif | | 18 50 18.7 | +0.8 | |
| | comp=Z,11nm,1.0s,baz=97,slow=4.9,SNR=12 | | | | | | | | | |
| MYKA | Terra Mystica | 100.87 | 316 | *e*PP | | PP | | 18 54 32.0 | +5.2 | |
| GERES | GERESS Array B | 100.88 | 318 | P | | Pdif | | 18 50 19.2 | +0.8 | |
| | comp=Z,0.8nm,0.6s,baz=100,slow=3.4,SNR=5.7 | | | | | | | | | |
| KONS | Konsvik | 100.89 | 336 | *e*P | | Pdif | | 18 50 18.0 | +0.1 | |
| M20K | Styx River | 100.90 | 29 | P | | Pdif | | 18 50 18.3 | +0.1 | |
| | baz=272 | | | | | | | | | |
| H21K | Melozitna River | 100.90 | 25 | P | | Pdif | | 18 50 17.2 | -0.8 | |
| | baz=273 | | | | | | | | | |
| P19K | Oil Pt | 100.90 | 31 | P | | Pdif | | 18 50 17.8 | -0.4 | |
| | baz=271 | | | | | | | | | |
| OHAK | Old Harbor | 100.91 | 33 | P | | Pdif | | 18 50 17.8 | -0.4 | |
| | baz=273 | | | | | | | | | |
| STOK | Stokkvaagen | 100.94 | 336 | *e*P | | Pdif | | 18 50 17.6 | -0.5 | |
| F22K | John River | 101.05 | 23 | P | | Pdif | | 18 50 18.5 | -0.1 | |
| | baz=274 | | | | | | | | | |
| KBA | Koelnbreinsper | 101.08 | 316 | *e*PP | | PP | | 18 54 28.9 | +0.4 | |
| E22K | Anaktuvuk Pass | 101.14 | 22 | P | | Pdif | | 18 50 19.2 | +0.1 | |
| | baz=274 | | | | | | | | | |
| O20K | Slope Mountain | 101.20 | 30 | P | | Pdif | | 18 50 19.2 | -0.3 | |
| | baz=272 | | | | | | | | | |
| G22K | Bettles | 101.35 | 23 | P | | Pdif | | 18 50 20.2 | +0.3 | |
| | baz=274 | | | | | | | | | |
| CLL | Collm | 101.35 | 321 | *e*SS | | SS | | 19 08 48.0 | -10 | |
| CLL | | | | *e*SSS | | SSS | | 19 12 54.0 | | |
| CLL | | | | AMS | | AMS | | 19 43 00.0 | | |
| | comp=Z,100nm,20.8s | | | | | | | | | |
| Q20K | Shuyak Island | 101.36 | 32 | P | | Pdif | | 18 50 19.7 | -0.5 | |
| | baz=272 | | | | | | | | | |
| H22K | Ishtalitna Cre | 101.47 | 24 | P | | Pdif | | 18 50 20.6 | +0.1 | |
| | baz=274 | | | | | | | | | |
| D23K | Nanushuk River | 101.49 | 21 | P | | Pdif | | 18 50 20.7 | +0.2 | |
| | baz=275 | | | | | | | | | |
| LESA | Schwarzleotal | 101.54 | 317 | *e*PP | | PP | | 18 54 31.0 | -0.9 | |
| ABTA | Abfaltersbach | 101.65 | 316 | *e*Pdiff | | Pdif | | 18 50 22.9 | +1.0 | |
| | comp=Z,5.0nm,1.4s | | | | | | | | | |
| ABTA | | | | *e*PP | | PP | | 18 54 38.2 | +5.4 | |
| SKT | Skwentna | 101.65 | 28 | P | | Pdif | | 18 50 21.5 | +0.1 | |
| | baz=273 | | | | | | | | | |
| BPAW | Bear Paw Mtn. | 101.76 | 26 | P | | Pdif | | 18 50 22.0 | +0.1 | |
| | baz=274 | | | | | | | | | |
| MLY | Manley | 101.80 | 25 | P | | Pdif | | 18 50 22.3 | +0.2 | |
| | baz=274 | | | | | | | | | |
| COLD | Coldfoot | 101.83 | 23 | P | | Pdif | | 18 50 22.5 | +0.4 | |
| | baz=275 | | | | | | | | | |
| CAPN | Captain Cook N | 101.90 | 30 | P | | Pdif | | 18 50 22.6 | +0.1 | |
| | baz=273 | | | | | | | | | |
| NC602 | NORSAR Array S | 101.90 | 330 | *e*P | | Pdif | | 18 50 22.8 | +0.3 | |
| TOLK | Toolik Lake Re | 101.92 | 22 | P | | Pdif | | 18 50 22.6 | +0.1 | |
| | baz=276 | | | | | | | | | |
| G23K | Bananza Creek | 101.95 | 24 | P | | Pdif | | 18 50 23.1 | +0.4 | |
| | baz=275 | | | | | | | | | |
| E23K | Chandalar | 101.97 | 22 | P | | Pdif | | 18 50 22.3 | -0.5 | |
| | baz=276 | | | | | | | | | |
| NB2 | NORSAR Subarra | 102.05 | 331 | P | | Pdif | | 18 50 23.2 | 0.0 | |
| | comp=Z,8.0nm,1.0s,baz=86,slow=4.6 | | | | | | | | | |
| NB2 | NORSAR Subarra | 102.05 | 331 | P | | Pdif | | 18 50 23.2 | 0.0 | |
| | baz=86,slow=4.6 | | | | | | | | | |
| NOA | NORSAR Array B | 102.05 | 331 | P | | Pdif | | 18 50 23.2 | 0.0 | |
| | comp=Z,3.2nm,0.9s,baz=88,slow=4.6,SNR=7.8 | | | | | | | | | |
| SUA | Susitna One | 102.05 | 29 | P | | Pdif | | 18 50 23.2 | -0.2 | |
| | baz=274 | | | | | | | | | |
| H23K | Yukon River | 102.23 | 24 | P | | Pdif | | 18 50 24.2 | +0.3 | |
| | baz=276 | | | | | | | | | |
| WTTA | Wattenberg | 102.25 | 316 | *e*pPdiff | | pPdif | | 18 50 40.3 | +1.2 | |
| | comp=Z,5.8nm,1.1s | | | | | | | | | |
| WATA | Walderalm | 102.29 | 317 | *e*PP | | PP | | 18 54 35.8 | -1.9 | |
| I23K | Minto, Yukon-K | 102.37 | 25 | P | | Pdif | | 18 50 24.0 | -0.5 | |
| | baz=276 | | | | | | | | | |
| SQTA | Sankt Quirin | 102.54 | 316 | *e*PP | | PP | | 18 54 38.2 | -1.3 | |
| RC01 | Rabbit Creek A | 102.57 | 29 | P | | Pdif | | 18 50 25.0 | -0.5 | |
| | baz=274 | | | | | | | | | |
| MOTA | Moosalm | 102.61 | 317 | *e*pPdiff | | pPdif | | 18 50 42.3 | +1.6 | |
| | comp=Z,6.3nm,1.2s | | | | | | | | | |
| MOTA | | | | *e*PP | | PP | | 18 54 37.0 | -3.0 | |
| F24K | Squaw Lake | 102.69 | 23 | P | | Pdif | | 18 50 25.6 | -0.4 | |
| | baz=278 | | | | | | | | | |
| MCK | McKinley | 102.70 | 27 | P | | Pdif | | 18 50 25.9 | -0.1 | |
| | baz=276 | | | | | | | | | |
| RETA | Reutte | 102.84 | 317 | *e*PP | | PP | | 18 54 40.3 | -1.4 | |
| FETA | Feichten | 102.87 | 316 | *e*pPdiff | | pPdif | | 18 50 39.9 | -1.9 | |
| | comp=Z,1.7nm,0.8s | | | | | | | | | |
| FETA | | | | *e*PP | | PP | | 18 54 39.9 | -2.1 | |
| H24K | Noodor Dome | 102.91 | 24 | P | | Pdif | | 18 50 26.6 | -0.3 | |
| | baz=277 | | | | | | | | | |
| G24K | Hadweenzic Riv | 102.96 | 24 | P | | Pdif | | 18 50 27.2 | +0.1 | |
| | baz=278 | | | | | | | | | |
| WAT1 | Susitna Watana | 102.97 | 28 | P | | Pdif | | 18 50 27.7 | +0.4 | |
| | baz=276 | | | | | | | | | |
| D25K | Kavik River | 102.97 | 21 | P | | Pdif | | 18 50 28.4 | +1.2 | |
| | baz=279 | | | | | | | | | |
| DOMB | Dombas | 102.99 | 332 | *e*P | | Pdif | | 18 50 26.6 | -0.8 | |
| KNK | Knik Glacier | 103.15 | 29 | P | | Pdif | | 18 50 28.5 | +0.4 | |
| | baz=276 | | | | | | | | | |
| SML | Sawmill | 103.17 | 29 | P | | Pdif | | 18 50 28.9 | +0.7 | |
| | baz=276 | | | | | | | | | |
| POKR | Poker Plat Res | 103.19 | 25 | P | | Pdif | | 18 50 28.1 | -0.1 | |
| | baz=277 | | | | | | | | | |
| PWL | Port Wells | 103.27 | 30 | P | | Pdif | | 18 50 28.6 | -0.1 | |
| | baz=276 | | | | | | | | | |
| WAT6 | Susitna Watana | 103.36 | 28 | P | | Pdif | | 18 50 29.0 | -0.2 | |
| | baz=277 | | | | | | | | | |
| DAVA | Damuels | 103.45 | 316 | *e*Pdiff | | Pdif | | 18 50 30.8 | +0.8 | |
| | comp=Z,5.2nm,1.1s | | | | | | | | | |
| M23K | Glacier View | 103.46 | 29 | P | | Pdif | | 18 50 29.5 | 0.0 | |
| | baz=276 | | | | | | | | | |
| ILAR | Eielson Array | 103.46 | 25 | Pdiff | | Pdif | | 18 50 28.9 | -0.5 | |
| | comp=Z,0.4nm,0.7s,baz=260,slow=5.0,SNR=4.2 | | | | | | | | | |
| ILAR | | | | PKiKP | | PP | | 18 54 46.7 | +1.0 | |
| | comp=Z,1.6nm,0.9s,baz=267,slow=5.4,SNR=5.7 | | | | | | | | | |
| DHY | Denali Highway | 103.47 | 27 | P | | Pdif | | 18 50 29.5 | -0.2 | |
| | baz=277 | | | | | | | | | |
| G25K | Bearman Lake | 103.49 | 23 | P | | Pdif | | 18 50 29.7 | +0.2 | |
| | baz=279 | | | | | | | | | |
| HDA | Harding Lake | 103.49 | 26 | P | | Pdif | | 18 50 29.9 | +0.3 | |
| | baz=278 | | | | | | | | | |
| F25K | Christian River | 103.53 | 22 | P | | Pdif | | 18 50 29.8 | +0.1 | |
| | baz=280 | | | | | | | | | |
| SCM | Sheep Creek Mo | 103.64 | 28 | P | | Pdif | | 18 50 31.4 | +1.0 | |
| | baz=277 | | | | | | | | | |
| J25K | Salcha River, | 104.13 | 26 | P | | Pdif | | 18 50 32.3 | -0.2 | |
| | baz

comp=Z,3.2nm,0.8s,baz=247,slow=2.2,SNR=17
**PLCA Paso Flores 130.66 179** PKP **PKiKP 18 55 43.6 +2.2**
comp=Z,2.2nm,0.9s,baz=198,slow=3.2,SNR=3.8
PLCA SKPbc **SKPab 18 59 03.0 +3.0**
comp=Z,13nm,1.0s,baz=172,slow=4.0,SNR=10
**PDAR Pinedale Array 131.52 39** PKP **PKiKP 18 55 43.0 -0.2**
comp=Z,0.9nm,0.5s,baz=318,slow=1.2,SNR=7.7
PDAR SKPbc **SKPbc 18 59 03.5 +0.2**
comp=Z,3.4nm,1.0s,baz=318,slow=2.0,SNR=8.2
**HMU Henry Mountain 133.15 45** PKPpre 18 55 27.7
**ULM Lac du Bonnet 133.40 23** PKP **PKiKP 18 55 46.0 -0.4**
comp=Z,5.2nm,0.9s,baz=321,slow=6.5,SNR=5.5
ULM SKPbc **SKPbc 18 59 08.4 -0.8**
comp=Z,12nm,0.9s,baz=315,slow=4.9,SNR=11
**SCHQ Schefferville 134.09 358** PKP **PKiKP 18 55 48.5 +0.8**
comp=Z,6.0nm,0.9s,baz=12,slow=9.4,SNR=4.7
SCHQ SKPbc **SKPbc 18 59 11.2 -0.1**
comp=Z,5.9nm,0.9s,baz=42,slow=6.2,SNR=3.5
**ECSD EROS Data Cent 138.13 29 PKPdf 18 55 49.5 -4.8**
**L40A Anamosa 141.92 26** PKPpre 18 55 55.7
**TXAR Lajitas Array 142.28 53** PKhKP PKPpre 18 55 58.8
comp=Z,4.2nm,0.9s,baz=197,slow=1.9,SNR=25
TXAR SKPbc **SKPbc 18 59 36.3 +0.5**
comp=Z,2.7nm,1.0s,baz=215,slow=3.0,SNR=5.1
**PQI Presque Isle 142.29 358 PKPdf 18 55 57.7 -3.9**
**APMT Aspermont 142.93 45 PKPdf 18 56 00.4 -2.9**
**CPUP Villa Florida 142.99 199** PKhKP PKPpre 18 56 01.9
comp=Z,2.6nm,0.6s,baz=142,slow=4.0,SNR=6.0
**F62A Pittston Farm, 143.09 0** PKPbc 18 56 00.4 +0.3
**N41A Harden Midland 143.17 27** PKPdf PKPab 18 55 59.8 +0.7
**P40A Paris 143.55 30** PKPdf PKPbc 18 56 01.3 -0.2
**ABTX Abilene, Hawle 143.65 45** PKPdf PKPbc 18 56 02.9 +0.8
**G65A Princeton 143.74 357** PKPdf PKPbc 18 56 01.9 0.0
**HAL Halifax 143.95 352** PKPdf PKPbc 18 56 02.8 +0.3
**HAL Halifax 143.95 352** PKIKP PKPbc 18 56 02.8 +0.3
**LONY Lake Ozonia 144.13 6** PKPdf PKPbc 18 56 03.4 +0.3
**R40A Maddies Statio 144.39 31** PKPdf PKPbc 18 56 04.2 +0.1
**U38A Gravette 144.60 35** PKPdf PKPbc 18 56 04.9 +0.1
**WCI Wyandotte Cave 147.19 24** PKPdf **PKPdf 18 56 08.2 -2.1**
WCI **PKPbc 18 56 13.3 +0.7**
**WCI Wyandotte Cave 147.19 24** PKIKP **PKPdf 18 56 08.3 -2.1**
WCI 18 56 13.4
**BDFB Brasilia 147.47 222** PKPbc **PKiKP 18 56 16.8 +0.4**
comp=Z,11nm,0.6s,baz=143,slow=4.1,SNR=12
**SSPA Standing Stone 147.54 12 PKPbc 18 56 14.1 +0.5**
**TRNY Table Rock, Ra 147.60 6 PKPdf 18 56 08.0 -3.0**
TRNY **PKPbc 18 56 13.6 -0.1**
**WSPT Westport, CT 147.66 5 PKPbc 18 56 14.3 +0.4**
**CPNY Central Park 147.98 6 PKPbc 18 56 15.4 +0.7**
**WVT Waverly 148.27 28** PKPab **PKPbc 18 56 16.3 +0.7**
**WVT Waverly 148.27 28** PKP2 **PKPbc 18 56 16.3 +0.7**
**P57A Homestead Farm 148.63 12 PKPbc 18 56 16.7 +0.2**
**LVC Limon Verde 148.72 182 PKPbc 18 56 16.5 -1.2**
**LVC Limon Verde 148.72 182** PKIKP **PKPbc 18 56 16.5 -1.2**
**U49A Red Boiling Sp 148.87 25 PKPbc 18 56 17.7 +0.5**
**V48A Smith Brothers 149.06 28 PKPbc 18 56 18.1 +0.4**
**CPCT Cooper Cave 150.30 25** PKPdf **PKPdf 18 56 11.9 -3.6**
CPCT PKPbc **PKiKP 18 56 21.4 -0.1**
**TA01 Diego Aracena 150.76 179 PKiKP 18 56 24.6 +1.7**
**LRAL Lakeview Retre 151.16 31 PKPdf 18 56 13.7 -3.2**
LRAL PKPbc **PKPbc 18 56 23.1 +0.2**
**152A Waverly Hall 152.57 28 PKPdf 18 56 16.0 -3.1**
152A **PKiKP 18 56 27.0 +0.7**
**JSC Jenkinsville 152.59 21 PKPdf 18 56 15.4 -3.6**
JSC **PKiKP 18 56 27.1 +0.8**
**JSC Jenkinsville 152.59 21** PKIKP **PKPdf 18 56 15.4 -3.6**
**LPAZ La Paz 154.97 184** PKP **PKPdf 18 56 26.6 +2.9**
comp=Z,3.1nm,1.1s,baz=352,slow=2.0,SNR=6.4
LPAZ PKPab **sPKPbc 18 56 51.1 -1.7**
comp=Z,9.8nm,0.5s,baz=174,slow=2.5,SNR=23

*TIR* ***28*** *18:51:26.9,41.48N×19.46E,h38km,Md2.9,Ml2.9*
*SKO* ***28*** *18:51:26.3,41.26N×19.38E,h25km*
*BEO* ***28*** *18:51:27.7±0.4,41.39N×19.55E,h13km±1km,ML2.6/3*
*PDG* ***28*** *18:51:27.5±0.1,41.42N×19.57E,h12km,ML2.9/11,Error ellipse: s-maj=0.3km s-min=0.6km az=0.0*
*THE* ***28*** *18:51:29.1,41.44N×19.62E,h10km±1km,ML2.7/5,Error ellipse: s-maj=3.1km s-min=1.5km az=149.0*

**ISC 28 18:51:27.7±0.9, 41.43N±0.02×19.55E±0.02, h11km±7km, n67,σ0892/107, 4C-3D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.25** | **109** | P | **Pg** | **18 51 32.3** | **-0.6** |
| | baz=113 | | | | | | |
| TIR | | | | S | **Sg** | **18 51 37.2** | **+0.8** |
| | baz=113 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=N,13nm,0.2s,baz=113 | | | | | | |
| **TIR** | **Tirane** | **0.25** | **109** | P | **Pg** | **18 51 32.5** | **-0.4** |
| TIR | | | | S | **Sg** | **18 51 36.8** | **+0.5** |
| | comp=N,4μm,0.2s | | | | | | |
| **TIR** | **Tirane** | **0.25** | **109** | *e*Pg | **Pg** | **18 51 32.5** | **-0.4** |
| TIR | | | | *e*Sg | **Sg** | **18 51 36.8** | **+0.5** |
| **PUK** | **Puka** | **0.67** | **23** | P | **Pg** | **18 51 40.4** | **-0.3** |
| | baz=29 | | | | | | |
| PUK | | | | S | **Sg** | **18 51 49.8** | **+0.4** |
| | baz=29 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,2.5nm,0.2s,baz=29 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.81** | **340** | ↑*i* Pg | **Pg** | **18 51 42.7** | **-0.6** |
| DRME | | | | *e*Sg | **Sn** | **18 51 56.1** | **-0.9** |
| **VLO** | **Vlora** | **0.96** | **183** | P | **Pn** | **18 51 47.6** | **+0.5** |
| | baz=178 | | | | | | |
| VLO | | | | S | **Sn** | **18 52 00.5** | **-0.2** |
| | baz=178 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=N,2.2nm,0.2s,baz=178 | | | | | | |
| **VLO** | **Vlora** | **0.96** | **183** | P | **Pn** | **18 51 48.0** | **+0.9** |
| VLO | | | | S | **Sn** | **18 52 02.2** | **+1.5** |
| | comp=N,745nm,0.4s | | | | | | |
| **OHR** | **Ohrid** | **0.99** | **108** | *e*Pg | **Pg** | **18 51 45.7** | **-1.1** |
| OHR | | | | *e*Sg | **Sn** | **18 52 00.9** | **-0.8** |
| **OHR** | **Ohrid** | **0.99** | **108** | *i* Pg | **Pg** | **18 51 45.8** | **-1.0** |
| OHR | | | | *i* Sg | **Sn** | **18 52 01.5** | **-0.2** |
| **BUM** | **Brajici-Budva** | **1.00** | **331** | *e*Pg | **Pg** | **18 51 47.1** | **+0.1** |
| BUM | | | | *i* Sg | **Sn** | **18 52 02.5** | **+0.6** |
| **BCI** | **Bajram Curri** | **1.01** | **22** | P | **Pb** | **18 51 45.8** | **-1.5** |
| | baz=26 | | | | | | |
| BCI | | | | S | **Sn** | **18 52 02.1** | **-0.1** |
| | baz=26 | | | | | | |
| **PDG** | **Podgorica** | **1.02** | **348** | *e*Pg | **Pb** | **18 51 47.4** | **-0.1** |
| PDG | | | | *e*Sg | **Sn** | **18 52 02.8** | **+0.4** |
| **PDG** | **Podgorica** | **1.02** | **348** | *e*Pn | **Pb** | **18 51 46.9** | **-0.6** |
| **PDG** | **Podgorica** | **1.02** | **348** | *i* Pg | **Pg** | **18 51 47.7** | **+0.2** |
| **PDG** | **Podgorica** | **1.02** | **348** | *e*Pg | **Pb** | **18 51 46.8** | **-0.7** |
| PDG | | | | *i* Sg | **Sn** | **18 52 03.4** | **+1.0** |
| **PVY** | **Plav** | **1.20** | **14** | ↑*i* Pg | **Pn** | **18 51 49.3** | **-1.4** |
| PVY | | | | *i* Sg | **Sn** | **18 52 09.0** | **+1.9** |
| **CEME** | **Cevo** | **1.21** | **337** | ↑*i* Pg | **Pn** | **18 51 50.3** | **-0.4** |
| CEME | | | | *e*Sg | **Sn** | **18 52 09.0** | **+1.8** |
| **KBN** | **Korca** | **1.23** | **130** | P | **Pg** | **18 51 53.1** | **+1.7** |
| | baz=130 | | | | | | |
| KBN | | | | S | **Sn** | **18 52 10.3** | **+2.7** |
| | baz=130 | | | | | | |
| **KBN** | **Korca** | **1.23** | **130** | P | **Pg** | **18 51 52.0** | **+0.6** |
| KBN | | | | S | **Sn** | **18 52 08.0** | **+0.3** |
| | comp=N,190nm,0.6s | | | | | | |
| **NKME** | **Niksic** | **1.41** | **342** | ↑*i* Pg | **Pn** | **18 51 53.8** | **+0.4** |
| NKME | | | | *i* Sg | **Sg** | **18 52 15.6** | **+2.5** |
| **KOME** | **Kolasin** | **1.42** | **359** | ↓*i* Pg | **Pn** | **18 51 54.0** | **+0.4** |
| KOME | | | | *i* Sg | **Sg** | **18 52 15.5** | **+2.0** |
| **IVA** | **Berane** | **1.47** | **10** | ↓*i* Pg | **Pn** | **18 51 54.6** | **+0.4** |
| IVA | | | | *i* Sg | **Sg** | **18 52 16.9** | **+2.0** |
| **NEST** | **Nestorio** | **1.52** | **131** | P | **Pb** | **18 51 55.8** | **-0.2** |
| NEST | | | | S | **Sb** | **18 52 15.8** | **+0.5** |
| **FNA** | **Florina** | **1.52** | **114** | P | **Pb** | **18 51 55.9** | **-0.2** |
| | baz=115 | | | | | | |
| FNA | | | | S | **Sg** | **18 52 16.6** | **-0.1** |
| | baz=115 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.4nm,0.5s,baz=115 | | | | | | |
| **FNA** | **Florina** | **1.52** | **114** | P | **Pn** | **18 51 55.2** | **+0.3** |
| FNA | | | | S | **Sb** | **18 52 15.5** | **+0.2** |
| | comp=E,292nm,0.6s | | | | | | |
| **FNA** | **Florina** | **1.52** | **114** | *e*Pg | **Pb** | **18 51 55.4** | **-0.6** |
| FNA | | | | *e*Sg | **Sg** | **18 52 16.2** | **-0.4** |
| **FNA** | **Florina** | **1.52** | **114** | *i* Pg | **Pb** | **18 51 55.8** | **-0.2** |
| FNA | | | | *i* Sg | **Sg** | **18 52 16.3** | **-0.4** |
| **TREB** | **Trebinje** | **1.57** | **326** | *e*Pg | **Pn** | **18 51 55.8** | **+0.3** |
| TREB | | | | *e*Sg | **Sg** | **18 52 18.3** | **+0.1** |
| **TREB** | **Trebinje** | **1.57** | **326** | *e*Pn | **Pn** | **18 51 56.0** | **+0.5** |
| **SRN** | **Sarande** | **1.58** | **167** | P | **Pb** | **18 51 56.4** | **-0.6** |
| | baz=165 | | | | | | |
| SRN | | | | S | **Sg** | **18 52 18.2** | **-0.5** |
| | baz=165 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,0.3nm,0.5s,baz=165 | | | | | | |
| **SRN** | **Sarande** | **1.58** | **167** | P | **Pn** | **18 51 55.9** | **+0.2** |
| SRN | | | | S | **Sb** | **18 52 17.0** | **0.0** |
| | comp=E,90nm,0.6s | | | | | | |
| **SCTE** | **Santa Cesarea** | **1.58** | **212** | P | **Pb** | **18 51 56.6** | **-0.4** |
| | baz=209 | | | | | | |
| SCTE | | | | S | **Sb** | **18 52 16.8** | **-0.2** |
| | baz=209 | | | | | | |
| **BRY** | **Bratogost** | **1.65** | **333** | *e*Pn | **Pb** | **18 51 58.0** | **-0.3** |
| **BRY** | **Bratogost** | **1.65** | **333** | ↓*i* Pn | **Pn** | **18 51 57.6** | **+0.8** |
| BRY | | | | *i* Sn | **Sg** | **18 52 21.5** | **+0.6** |
| **KEK** | **Kerkira** | **1.72** | **174** | P | **Pn** | **18 51 57.7** | **0.0** |
| **UPM** | **Unac-Piva** | **1.84** | **345** | *e*Pn | **Pb** | **18 52 00.7** | **-0.8** |
| **UPM** | **Unac-Piva** | **1.84** | **345** | *e*Pn | **Pb** | **18 52 00.6** | **-0.9** |
| UPM | | | | *e*Sn | **Sb** | **18 52 25.5** | **+1.0** |
| **SJES** | **Sjenica** | **1.86** | **10** | *e*Pn | **Pb** | **18 52 01.3** | **-0.5** |
| SJES | | | | *e*Sn | **Sb** | **18 52 25.6** | **+0.5** |
| **SJES** | **Sjenica** | **1.86** | **10** | *e*Pn | **Pb** | **18 52 01.1** | **-0.7** |
| **PLE** | **Pljevlja** | **1.90** | **356** | *e*Pn | **Pn** | **18 52 01.3** | **+1.0** |
| PLE | | | | *i* Sn | **Sb** | **18 52 27.3** | **+0.9** |
| **IGT** | **Igoumenitsa** | **1.98** | **162** | P | **Pn** | **18 52 02.0** | **+0.7** |
| **STON** | **Ston** | **1.99** | **317** | *e*Pn | **Pn** | **18 52 01.5** | **+0.2** |
| STON | | | | *e*Sn | **Sn** | **18 52 26.6** | **+0.3** |
| **STON** | **Ston** | **1.99** | **317** | *e*Pn | **Pn** | **18 52 01.2** | **-0.1** |
| **STIP** | **Stip** | **2.00** | **81** | *i* Pn | **Pb** | **18 52 03.8** | **-0.3** |
| **SELS** | **Selova** | **2.13** | **32** | *e*Pn | **Pn** | **18 52 03.6** | **+0.3** |
| SELS | | | | *e*Sn | **Sn** | **18 52 31.0** | **+1.1** |
| **BARS** | **Barje** | **2.18** | **50** | *e*Pn | **Pn** | **18 52 04.4** | **+0.4** |
| BARS | | | | *e*Sn | **Sn** | **18 52 32.0** | **+1.0** |
| **RUDO** | **Rudo** | **2.19** | **357** | *e*Pn | **Pn** | **18 52 05.1** | **+1.0** |
| **BBLS** | **Lazi&#263i** | **2.44** | **358** | *e*Pn | **Pn** | **18 52 08.7** | **+1.1** |
| **BBLS** | **Lazi&#263i** | **2.44** | **358** | *e*Pn | **Pb** | **18 52 11.5** | **-0.1** |
| **GRUS** | **Gruza** | **2.60** | **19** | *e*Pn | **Pn** | **18 52 10.2** | **+0.4** |
| **DIVS** | **Divibare** | **2.69** | **7** | *e*Pn | **Pn** | **18 52 11.9** | **+0.9** |
| **HAPS** | **Han Pijesak,Bl** | **2.69** | **351** | *e*Pn | **Pn** | **18 52 12.0** | **+0.9** |
| **HAPS** | **Han Pijesak,Bl** | **2.69** | **351** | *e*Pn | **Pn** | **18 52 11.5** | **+0.4** |
| **BOVS** | **Bovan** | **2.72** | **35** | *e*Pn | **Pn** | **18 52 11.5** | **+0.1** |
| BOVS | | | | *e*Sn | **Sn** | **18 52 43.3** | **-0.9** |
| **TRUS** | **Trudelj** | **2.86** | **12** | *e*Pn | **Pn** | **18 52 13.9** | **+0.6** |
| **SGRT** | **San Giovanni R** | **2.87** | **278** | P | **Pn** | **18 52 13.2** | **-0.4** |
| | baz=277 | | | | | | |
| SGRT | | | | S | **Sn** | **18 52 45.8** | **-2.4** |
| | baz=277 | | | | | | |
| **ZAPS** | **Zavoj** | **2.94** | **50** | *e*Pn | **Pn** | **18 52 13.8** | **-0.6** |
| **VTS** | **Vitosha** | **2.99** | **65** | *e*Pn | **Pn** | **18 52 15.2** | **0.0** |
| **ZAGS** | **Zajecar** | **3.10** | **39** | *e*Pn | **Pn** | **18 52 15.8** | **-0.7** |
| **TEKS** | **Tekeris** | **3.12** | **360** | *e*Pn | **Pn** | **18 52 16.6** | **-0.3** |
| **TEKS** | **Tekeris** | **3.12** | **360** | *e*Pn | **Pn** | **18 52 16.1** | **-0.8** |
| **KUBS** | **Kucevo** | **3.37** | **27** | *e*Pn | **Pn** | **18 52 19.1** | **-1.1** |
| **MDVR** | **Moldovita** | **3.71** | **25** | *e*Pn | **Pn** | **18 52 24.8** | **-0.2** |
| MDVR | | | | *e*Sn | **Sn** | **18 53 07.2** | **-1.4** |
| **BLY** | **Banja Luka** | **3.74** | **333** | *e*Pn | **Pg** | **18 52 37.0** | **-2.4** |
| **A050A** | **Klekovaca** | **3.77** | **325** | *e*Pn | **Pn** | **18 52 26.9** | **+1.0** |
| **A051A** | **Mrakovica** | **4.07** | **333** | *e*Pn | **Pn** | **18 52 29.8** | **-0.2** |
| **BZS** | **Buzias** | **4.45** | **19** | *e*Pn | **Pn** | **18 52 35.0** | **-0.1** |
| BZS | | | | *e*Sn | **Sn** | **18 53 24.7** | **-2.1** |

**NOU 28 18:51:42.7,15.43S×167.42E,h11km,MLv4.4/9,**
**Vanuatu Islands,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVP** | **Devils Point** | **2.40** | **162** | P | Pn | 18 52 20.4 | -0.4 |
| **YATNC** | **Mamie plateau,** | **6.61** | **184** | P | Pn | 18 53 16.6 | -0.8 |
| **DZM** | **Mont Dzumac** | **6.67** | **188** | P | Pn | 18 53 18.3 | +0.1 |
| **NOUC** | **Port Laguerre** | **6.72** | **189** | P | Pn | 18 53 19.8 | +1.0 |
| **PINNC** | **Pines Island,** | **7.14** | **180** | P | Pn | 18 53 25.6 | +1.0 |

*BGR* ***28*** *18:55:36.7,19.23S×175.88W,h33km*
*NEIC* ***28*** *18:56:44.3±1.5,18.15S±0.1×177.9W±0.1,h600km±8km, mb4.5/56, Error ellipse: s-maj=21.1km s-min=16.5km az=121.0*
*IDC* ***28*** *18:56:46.1±1.4,18.06S×178.06W,h621km±12km, mb3.7/14,mbtmp4.7/16,Error ellipse: s-maj=21.8km s-min=13.8km az=102.0*

**ISC 28 18:56:43.1±0.5, 18.14S±0.09×177.91W±0.09, h590km, n152,σ1908/157, mb4.4/41, 7C-13D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.86** | **275** | P | **P** | **18 58 10.5** | **+3.5** |
| **MSVF** | **Nonsavu** | **3.86** | **275** | P | **P** | **18 58 11.2** | **+4.2** |
| | 327nm,0.7s,baz=126,slow=11,SNR=180 | | | | | | |
| MSVF | | | | S | **S** | **18 59 21.8** | **+6.4** |
| | 36nm,1.1s,baz=132,slow=23,SNR=9.0 | | | | | | |
| **AFI** | **Afiamalu** | **7.24** | **55** | P | **P** | **18 58 36.4** | **+1.2** |
| **DZM** | **Mont Dzumac** | **15.20** | **252** | P | **P** | **18 59 54.5** | **+0.9** |
| **DZM** | **Mont Dzumac** | **15.20** | **252** | P | **P** | **18 59 54.6** | **+0.9** |
| | 4.5nm,0.6s,baz=94,slow=9.1,SNR=6.0 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **16.97** | **259** | P | **P** | **19 00 11.3** | **+1.5** |
| KOUNC | | | | IAmb | IAmb | 19 00 30.0 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **THZ** | **Tophouse** | **24.82** | **197** | P | **P** | **19 01 19.6** | **-0.5** |
| **FOZ** | **Fox Glacier** | **27.36** | **200** | P | **P** | **19 01 42.4** | **+0.1** |
| **MLZ** | **Mavora Lakes** | **29.54** | **200** | P | **P** | **19 02 02.5** | **+1.2** |
| **EIDS** | **Eidsvold** | **29.63** | **250** | P | **P** | **19 02 02.6** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 19 02 02.8 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **30.23** | **240** | P | **P** | **19 02 08.8** | **+1.2** |
| ARMA | | | | IAmb | IAmb | 19 02 24.7 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **33.87** | **261** | P | **P** | **19 02 38.3** | **-0.1** |
| CTAO | | | | IAmb | IAmb | 19 02 39.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **33.94** | **233** | P | **P** | **19 02 39.3** | **+0.5** |
| **PMG** | **Port Moresby** | **34.96** | **280** | P | **P** | **19 02 46.7** | **-0.8** |
| | comp=Z,18nm,0.8s,baz=102,slow=9.3,SNR=4.0 | | | | | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **TOO** | **Toolangi** | **37.39** | **231** | P | **P** | **19 03 08.0** | **+0.8** |
| TOO | | | | IAmb | IAmb | 19 03 09.0 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **COEN** | **Coen** | **37.58** | **271** | P | **P** | **19 03 09.4** | **+0.4** |
| **STKA** | **Stephens Creek** | **38.93** | **242** | P | **P** | **19 03 20.6** | **+0.8** |
| **STKA** | **Stephens Creek** | **38.93** | **242** | P | **P** | **19 03 20.0** | **+0.3** |
| | comp=Z,8.8nm,0.5s,baz=94,slow=11,SNR=26 | | | | | | |
| | comp=Z,8.8nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.71** | **241** | P | **P** | **19 03 57.5** | **+0.2** |
| **WR0** | **Warramunga Arr** | **44.86** | **260** | PcP | **PcP** | **19 05 34.8** | **-0.4** |
| **WB0** | **Warramunga Arr** | **45.02** | **260** | PcP | **PcP** | **19 05 35.3** | **-0.5** |
| **WB2** | **Warramunga Arr** | **45.04** | **260** | P | **P** | **19 04 06.8** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 19 04 08.0 | |
| | comp=Z,15nm,1.1s | | | | | | |
| WB2 | | | | PcP | **PcP** | **19 05 34.9** | **-1.0** |
| **WRAB** | **Tennant Creek** | **45.04** | **260** | P | **P** | **19 04 06.7** | **-1.1** |
| WRAB | | | | IAmb | IAmb | 19 04 08.0 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.05** | **260** | P | **P** | **19 04 07.3** | **-0.5** |
| | comp=Z,8.4nm,0.6s,baz=95,slow=6.4,SNR=230 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 05 35.6** | **-0.2** |
| | comp=Z,1.1nm,0.4s,baz=91,slow=3.6,SNR=8.0 | | | | | | |
| | comp=Z,8.4nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **45.18** | **254** | P | **P** | **19 04 08.2** | **-0.6** |
| AS31 | | | | PcP | **PcP** | **19 05 36.0** | **-0.4** |
| **ASAR** | **Alice Springs** | **45.18** | **254** | P | **P** | **19 04 08.8** | **-0.1** |
| | comp=Z,12nm,0.4s,baz=91,slow=8.1,SNR=236 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 05 35.9** | **-0.4** |
| | comp=Z,2.3nm,0.4s,baz=105,slow=3.9,SNR=11 | | | | | | |
| ASAR | | | | S | **S** | **19 10 00.2** | **-6.5** |
| | comp=Z,0.6nm,1.0s,baz=86,slow=8.1,SNR=4.5 | | | | | | |
| | comp=Z,12nm,0.4s | | | | | | |
| **GUMO** | **Guam** | **48.38** | **308** | P | **P** | **19 04 33.1** | **+0.3** |
| **GUMO** | **Guam** | **48.38** | **308** | P | **P** | **19 04 31.8** | **-1.1** |
| | comp=Z,39nm,0.9s,baz=184,slow=15,SNR=3.9 | | | | | | |
| | comp=Z,39nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **49.26** | **268** | P | **P** | **19 04 38.1** | **-1.3** |
| MTN | | | | IAmb | IAmb | 19 04 39.2 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **FORT** | **Forrest** | **50.34** | **245** | P | **P** | **19 04 46.1** | **-1.0** |
| FORT | | | | IAmb | IAmb | 19 04 47.1 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **50.93** | **264** | P | **P** | **19 04 50.8** | **-0.8** |
| **FAKI** | **Fak Fak** | **51.08** | **281** | P | **P** | **19 04 52.2** | **-0.5** |
| FAKI | | | | IAmb | IAmb | 19 04 54.3 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.45** | **261** | P | **P** | **19 05 09.4** | **-0.1** |
| **SOEI** | **Soe** | **56.54** | **270** | P | **P** | **19 05 31.3** | **+0.1** |
| SOEI | | | | IAmb | IAmb | 19 05 33.3 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **58.31** | **255** | P | **P** | **19 05 42.3** | **-0.6** |
| PSA00 | | | | IAmb | IAmb | 19 05 42.7 | |
| | comp=Z,36nm,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **58.48** | **256** | P | **P** | **19 05 43.1** | **-1.0** |
| MBWA | | | | IAmb | IAmb | 19 06 15.7 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.52** | **242** | P | **P** | **19 05 50.5** | **-0.4** |
| NWAO | | | | IAmb | IAmb | 19 06 29.5 | |
| | comp=Z,72nm,1.4s | | | | | | |
| **TOLI2** | **Tolitoli** | **63.22** | **281** | P | **P** | **19 06 16.3** | **+1.0** |
| **CASY** | **Casey** | **66.13** | **205** | P | **P** | **19 06 33.1** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **66.50** | **268** | P | **P** | **19 06 34.0** | **-1.9** |
| **MJAR** | **Matsushiro Arr** | **68.37** | **323** | P | **P** | **19 06 46.1** | **-0.7** |
| | comp=Z,4.0nm,0.5s,baz=153,slow=6.0,SNR=17 | | | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **68.37** | **323** | P | **P** | **19 06 46.1** | **-0.7** |
| MAJO | | | | IAmb | IAmb | 19 06 47.1 | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.38** | **323** | P | **P** | **19 06 46.0** | **-0.9** |
| MJB9 | | | | IAmb | IAmb | 19 06 47.1 | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **KKM** | **Kota Kinabalu** | **69.25** | **284** | P | **P** | **19 06 52.2** | **-0.4** |
| KKM | | | | IAmb | IAmb | 19 06 55.4 | |
| | comp=Z,17nm,1.0s | | | | | | |
| **JSD** | **Sado** | **69.40** | **324** | P | **P** | **19 06 53.5** | **+0.6** |
| JSD | | | | IAmb | IAmb | 19 07 17.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **UGM** | **Wanagama** | **70.11** | **268** | P | **P** | **19 06 56.9** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **71.46** | **304** | P | **P** | **19 07 05.1** | **-0.2** |
| **JKA** | **Kamikawa-asahi** | **71.70** | **331** | P | **P** | **19 07 05.7** | **+1.2** |
| **ASAJ** | **Asahikawa** | **71.70** | **331** | P | **P** | **19 07 06.9** | **+0.6** |
| | comp=Z,5.2nm,0.9s,baz=187,slow=16,SNR=4.3 | | | | | | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **71.92** | **180** | P | **P** | **19 07 08.6** | **+1.2** |
| **QSPA** | **South Pole Qui** | **71.92** | **180** | P | **P** | **19 07 08.7** | **+1.2** |
| | comp=Z,1.5nm,0.7s,baz=33,slow=0.5,SNR=12 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **74.02** | **345** | P | **P** | **19 07 19.0** | **-0.4** |
| **PETK** | **Petropavlovsk-** | **74.02** | **345** | P | **P** | **19 07 18.9** | **-0.4** |
| | comp=Z,5.9nm,0.7s,baz=116,slow=7.9,SNR=19 | | | | | | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **S12K** | **Black Hills** | **74.77** | **9** | P | **P** | **19 07 22.5** | **-1.0** |
| **OHAK** | **Old Harbor** | **77.84** | **13** | P | **P** | **19 07 40.4** | **+0.2** |
| **O14K** | **Tigyukauivet M** | **78.31** | **9** | P | **P** | **19 07 42.3** | **-0.4** |
| O14K | | | | IAmb | IAmb | 19 08 15.7 | |
| | comp=Z,23nm,1.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **78.64** | **325** | P | **P** | **19 07 45.5** | **+0.6** |
| **O16K** | **Kokwok River B** | **79.12** | **10** | P | **P** | **19 07 46.1** | **-0.9** |
| **N15K** | **Kwethluk River** | **79.36** | **9** | P | **P** | **19 07 48.7** | **+0.4** |
| **M14K** | **Bethel** | **79.66** | **8** | P | **P** | **19 07 50.3** | **+0.5** |
| M14K | | | | IAmb | IAmb | 19 07 51.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **M16K** | **Timber Creek** | **80.34** | **9** | P | **P** | **19 07 54.2** | **+0.8** |
| M16K | | | | IAmb | IAmb | 19 07 56.5 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **L16K** | **Owhat River** | **80.92** | **9** | P | **P** | **19 07 56.9** | **+0.6** |
| **M17K** | **Holitna River** | **80.94** | **10** | P | **P** | **19 07 57.3** | **+0.8** |
| M17K | | | | IAmb | IAmb | 19 07 58.5 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **81.20** | **8** | P | **P** | **19 07 58.6** | **+0.8** |
| K15K | | | | IAmb | IAmb | 19 07 59.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **J18K** | **Innoko River** | **83.00** | **9** | P | **P** | **19 08 07.2** | **+0.3** |
| **MAW** | **Mawson** | **83.81** | **200** | P | **P** | **19 08 10.8** | **-0.2** |
| | comp=Z,2.0nm,1.0s,baz=108,slow=3.2,SNR=3.2 | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **84.10** | **347** | P | **P** | **19 08 11.8** | **-0.5** |
| | comp=Z,6.5nm,0.7s,baz=150,slow=8.9,SNR=28 | | | | | | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **R32K** | **Eaglecrest** | **84.12** | **21** | P | **P** | **19 08 12.7** | **+0.2** |
| **RND** | **Reindeer** | **84.39** | **13** | P | **P** | **19 08 13.6** | **-0.2** |
| RND | | | | IAmb | IAmb | 19 08 14.2 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **ENH** | **Enshi** | **84.79** | **304** | P | **P** | **19 08 16.2** | **-0.3** |
| ENH | | | | IAmb | IAmb | 19 08 18.0 | |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.70** | **13** | P | **P** | **19 08 18.8** | **-1.2** |
| CCB | | | | IAmb | IAmb | 19 08 19.5 | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **86.00** | **13** | P | **P** | **19 08 20.5** | **-1.0** |
| | comp=Z,1.2nm,0.4s,baz=219,slow=4.7,SNR=18 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **D23K** | **Nanushuk River** | **89.04** | **10**

| | | | | | | |
|---|---|---|---|---|---|---|
| ZVC | | | *ex* | x | 19 15 25.3 | |
| **ROTZ** | **Rotzenmuhle** | **147.41 348** | *e*PKPbc | **PKPbc** | **19 15 21.3** | **-0.1** |
| | baz=13,slow=2.7 | | | | | |
| **SIRR** | **Siria** | **147.61 334** | ⇓P | **PKPbc** | **19 15 22.1** | **+0.1** |
| **KHC** | **Kasperske Hory** | **147.71 346** | | **PKPbc** | **19 15 22.0** | **-0.3** |
| **KHC** | **Kasperske Hory** | **147.71 346** | *e*PKP | **PKPbc** | **19 15 22.3** | **+0.1** |
| **SURR** | **Surduc** | **147.82 333** | ⇓P | **PKPbc** | **19 15 22.0** | **-0.6** |
| **CKRC** | **Cesky Krumlov** | **147.83 345** | *e*PKP | **PKPbc** | **19 15 22.6** | **+0.1** |
| **GEC2** | **GERESS Array S** | **147.95 345** | *e*PKPbc | **PKPbc** | **19 15 22.9** | **-0.1** |
| | baz=13,slow=2.7 | | | | | |
| **GERES** | **GERESS Array B** | **147.95 345** | PKPbc | **PKPbc** | **19 15 22.8** | **-0.1** |
| | comp=Z,2.9nm,0.6s,baz=14,slow=2.8,SNR=18 | | | | | |
| **BZS** | **Buzias** | **148.15 334** | ⇑P | **PKPbc** | **19 15 23.1** | **-0.3** |
| **CONA** | **Conrad Observa** | **148.22 342** | *i* PP | **PKPbc** | **19 15 23.8** | **+0.2** |
| | comp=Z,4.0nm,0.8s | | | | | |
| **RONA** | **Rosalia, Austr** | **148.30 342** | *i* PP | **PKPbc** | **19 15 23.7** | **-0.1** |
| | comp=Z,4.1nm,0.8s,SNR=4.3 | | | | | |
| **ARSA** | **Arzberg** | **148.93 342** | *e*PP | **PKPbc** | **19 15 25.5** | **+0.2** |
| | comp=Z,1.4nm,0.6s | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **149.04 345** | *e*PP | **PKPbc** | **19 15 25.3** | **-0.3** |
| | comp=Z,2.0nm,0.7s | | | | | |
| **RJOB** | **Jochberg** | **149.20 346** | *e*PKPbc | **PKPbc** | **19 15 25.5** | **-0.5** |
| | baz=13,slow=2.7 | | | | | |
| **LESA** | **Schwarzleotal** | **149.52 346** | *i* PP | **PKPbc** | **19 15 26.5** | **-0.3** |
| | comp=Z,4.8nm,1.0s | | | | | |
| **SOKA** | **Soboth** | **149.60 342** | *i* PP | **PKPbc** | **19 15 26.3** | **-0.7** |
| | comp=Z,4.4nm,1.0s | | | | | |
| **BOVS** | **Bovan** | **149.67 331** | ⇑P | **PKPbc** | **19 15 26.5** | **-0.6** |
| **KBA** | **Koelnbreinsper** | **149.68 345** | *i* PP | **PKPbc** | **19 15 27.0** | **-0.3** |
| | comp=Z,3.6nm,0.6s | | | | | |
| **UBR** | **Ueberruh** | **149.81 349** | *e*PKPbc | **PKPbc** | **19 15 27.3** | **-0.2** |
| | baz=13,slow=2.7 | | | | | |
| **WATA** | **Walderalm** | **149.85 347** | *i* PP | **PKPbc** | **19 15 27.2** | **-0.5** |
| | comp=Z,3.5nm,0.6s | | | | | |
| **WTTA** | **Wattenberg** | **149.91 347** | *i* PP | **PKPbc** | **19 15 27.7** | **-0.1** |
| | comp=Z,10nm,0.6s,SNR=10 | | | | | |
| **MOTA** | **Moosalm** | **149.94 348** | *i* PP | **PKPbc** | **19 15 27.3** | **-0.6** |
| | comp=Z,4.2nm,0.8s | | | | | |
| **MYKA** | **Terra Mystica** | **150.02 344** | *i* PP | **PKPbc** | **19 15 27.1** | **-0.8** |
| | comp=Z,3.2nm,0.5s,SNR=4.1 | | | | | |
| **SQTA** | **Sankt Quirin** | **150.04 348** | *i* PP | **PKPbc** | **19 15 27.7** | **-0.4** |
| | comp=Z,5.2nm,0.6s | | | | | |
| **ABTA** | **Abfaltersbach** | **150.20 345** | *i* PP | **PKPbc** | **19 15 27.7** | **-0.7** |
| | comp=Z,7.7nm,0.7s,SNR=7.8 | | | | | |
| **DAVA** | **Damuels** | **150.23 349** | *e*PP | **PKPbc** | **19 15 28.7** | **+0.1** |
| | comp=Z,4.8nm,0.8s | | | | | |
| **FETA** | **Feichten** | **150.33 348** | *i* PP | **PKPbc** | **19 15 28.6** | **-0.2** |
| | comp=Z,3.0nm,0.7s | | | | | |
| **STAL** | **STALIGIAL** | **150.61 345** | | **PKPbc** | **19 15 27.9** | **-1.4** |
| **FUORN** | **Ofenpass-Fuorn** | **150.80 348** | PKPdf | **PKPdf** | **19 15 22.1** | **-1.7** |
| FUORN | | | | **PKPbc** | **19 15 30.0** | **0.0** |

*NEIC **28** 19:00:11.2±2.3,51°.40N±0°.06×174°.04W±0°.09, h50km±7km, mb3.9/51, ML3.6(AEIC), Error ellipse: s-maj=10.2km s-min=6.9km az=141.0*
*AEIC **28** 19:00:11.7±1.8,51°.53N±0°.06×174°.06W±0°.09, h50km±8km, Error ellipse: s-maj=10.3km s-min=6.9km az=146.0*
*IDC **28** 19:00:16.0±0.9,53°.09N×175°.35W, h0km, mb4.0/15, mbtmp3.9/17, ML3.3/2, MS3.0/1, Error ellipse: s-maj=27.0km s-min=17.8km az=176.0*

**ISC 28 19:00:10.5±0.9, 51°.42N±0°.10×173°.99W±0°.06, h35km, n127, σ1s26/125, mb4.0/21, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOFP** | **Korovin Flat P** | **0.86** | **356** | | **Pn** | **19 00 26.4** | **+0.3** |
| **KOKL** | **Mount Kliuchef** | **0.91** | **352** | | **Pn** | **19 00 27.1** | **+0.3** |
| KOKL | | | | | **Sn** | **19 00 41.3** | **+2.5** |
| **KOSE** | **Korovin Southe** | **0.92** | **358** | | **Pn** | **19 00 27.6** | **+0.6** |
| **KOWE** | **Korovin West** | **0.96** | **350** | | **Pn** | **19 00 27.9** | **+0.4** |
| **GSMY** | **Great Sitkin M** | **1.43** | **297** | | **Pn** | **19 00 33.8** | **-0.1** |
| **GSTR** | **Great Sitkin T** | **1.45** | **298** | | **Pn** | **19 00 33.9** | **-0.4** |
| **GSTR** | **Great Sitkin T** | **1.45** | **298** | | **Sn** | **19 00 51.3** | **-0.7** |
| **GSCK** | **Great Sitkin C** | **1.48** | **294** | | **Pn** | **19 00 34.8** | **+0.3** |
| **GSTD** | **Great Sitkin T** | **1.48** | **296** | | **Pn** | **19 00 35.1** | **+0.4** |
| GSTD | | | | | **Sn** | **19 00 54.9** | **+2.0** |
| **GSSP** | **Great Sitkin S** | **1.52** | **297** | | **Pn** | **19 00 35.5** | **+0.4** |
| **ADAG** | **Mount Adagdak** | **1.72** | **290** | | **Pn** | **19 00 38.8** | **+1.0** |
| **KIRH** | **Kanaga Island** | **1.99** | **285** | | **Pn** | **19 00 42.6** | **+1.0** |
| **KIWB** | **Kanaga Island** | **2.02** | **284** | | **Pn** | **19 00 41.6** | **-0.3** |
| **KICM** | **Kanaga Island** | **2.06** | **285** | | **Pn** | **19 00 43.8** | **+1.3** |
| **TAFP** | **Tanaga Falls P** | **2.53** | **282** | | **Pn** | **19 00 50.5** | **+1.4** |
| TAFP | | | | | **Sn** | **19 01 19.9** | **+1.3** |
| **TASE** | **Tanaga Southea** | **2.56** | **281** | | **Pn** | **19 00 51.0** | **+1.5** |
| **TANO** | **Tanaga North** | **2.62** | **282** | | **Pn** | **19 00 51.7** | **+1.5** |
| **CLES** | **Cleveland East** | **2.89** | **59** | Pn | **Pn** | **19 00 55.9** | **+2.0** |
| **GANO** | **Gareloi North** | **3.03** | **279** | | **Pn** | **19 00 57.5** | **+1.6** |
| **NIKH** | **Nikolski High** | **3.52** | **62** | | **Pn** | **19 01 04.7** | **+2.2** |
| **AMKA** | **Amchitka** | **4.20** | **272** | Pn | **Pn** | **19 01 12.9** | **+1.0** |
| **MAPS** | **Pakushin South** | **4.91** | **58** | | **Pn** | **19 01 23.2** | **+1.5** |
| **MSW** | **Makushin Swtc** | **5.04** | **58** | | **Pn** | **19 01 25.7** | **+2.2** |
| **UNV** | **Unalaska Valle** | **5.16** | **59** | | **Pn** | **19 01 27.2** | **+2.1** |
| **LVA** | **Lava Point** | **5.55** | **57** | Pn | **Pn** | **19 01 32.2** | **+1.7** |
| **S12K** | **Black Hills** | **8.29** | **54** | Pn | **Pn** | **19 02 09.5** | **+1.4** |
| **SDPT** | **Sand Point** | **8.98** | **59** | Pn | **Pn** | **19 02 18.1** | **+0.6** |
| **CNBA** | **Chernabura Isl** | **9.30** | **63** | Pn | **Pn** | **19 02 21.9** | **0.0** |
| **CHGN** | **Chignik** | **10.41** | **56** | Pn | **Pn** | **19 02 38.1** | **+1.1** |
| **O14K** | **Tigyukauivet M** | **10.66** | **38** | Pn | **Pn** | **19 02 43.1** | **+2.6** |
| **M13K** | **Dall Lake** | **10.79** | **29** | Pn | **Pn** | **19 02 45.8** | **+3.6** |
| **M14K** | **Bethel** | **11.49** | **31** | Pn | **Pn** | **19 02 54.1** | **+2.3** |
| **K13K** | **Kusilvak Mount** | **11.70** | **22** | | **Pn** | **19 02 55.4** | **+0.7** |
| **N15K** | **Kwethluk River** | **11.72** | **36** | Pn | **Pn** | **19 02 55.6** | **+0.6** |
| **L14K** | **Kuka Creek** | **11.73** | **28** | Pn | **Pn** | **19 02 56.1** | **+1.1** |
| **CHIR** | **Chirikof Islan** | **11.75** | **61** | Pn | **Pn** | **19 02 57.9** | **+2.5** |
| **PLK4** | **Peulik 4** | **11.96** | **52** | Pn | **Pn** | **19 02 58.6** | **+0.3** |
| **O16K** | **Kokwok River B** | **12.14** | **41** | Pn | **Pn** | **19 03 02.3** | **+1.5** |
| **J14K** | **Nanvaranak Lak** | **12.67** | **22** | | **Pn** | **19 03 08.2** | **+0.4** |
| **ACHA** | **Angle Creek He** | **12.70** | **50** | Pn | **Pn** | **19 03 09.4** | **+1.0** |
| **M16K** | **Timber Creek** | **12.71** | **35** | | **Pn** | **19 03 09.2** | **+0.7** |
| **K15K** | **Wolf Creek Mou** | **12.82** | **27** | Pn | **Pn** | **19 03 09.7** | **-0.3** |
| **L16K** | **Owhat River** | **13.01** | **32** | Pn | **Pn** | **19 03 14.2** | **+1.7** |
| **N17K** | **Nushagak Hills** | **13.06** | **39** | Pn | **Pn** | **19 03 13.2** | **-0.1** |
| **OHAK** | **Old Harbor** | **13.38** | **56** | Pn | **Pn** | **19 03 14.3** | **-3.3** |
| **M17K** | **Holitna River** | **13.51** | **36** | Pn | **Pn** | **19 03 18.2** | **-1.2** |
| **O18K** | **Koktuh Hills** | **13.51** | **44** | Pn | **Pn** | **19 03 18.5** | **-1.0** |
| **N18K** | **Kilae Creek** | **13.67** | **40** | Pn | **Pn** | **19 03 23.9** | **+2.3** |
| **Q19K** | **Cape Douglas,** | **13.80** | **49** | Pn | **Pn** | **19 03 25.0** | **+1.7** |
| **J16K** | **Anvik River** | **13.87** | **26** | Pn | **Pn** | **19 03 24.3** | **+0.1** |
| **KDAK** | **Kodiak Island** | **13.91** | **54** | Pn | **Pn** | **19 03 24.6** | **-0.2** |
| **K17K** | **Iditarod** | **14.12** | **31** | Pn | **Pn** | **19 03 28.6** | **+0.9** |
| **P19K** | **Oil Pt** | **14.30** | **47** | Pn | **Pn** | **19 03 31.3** | **+1.2** |
| **L18K** | **Granite Mounta** | **14.32** | **34** | Pn | **Pn** | **19 03 31.3** | **+0.9** |
| **N19K** | **Bonanza Creek** | **14.32** | **41** | Pn | **Pn** | **19 03 32.5** | **+2.0** |
| **J17K** | **VABM Dome** | **14.39** | **28** | Pn | **Pn** | **19 03 31.8** | **+0.5** |
| **RSO** | **Redoubt South** | **14.88** | **44** | Pn | **Pn** | **19 03 39.0** | **+0.7** |
| **L19K** | **White Mountain** | **14.96** | **37** | Pn | **Pn** | **19 03 40.6** | **+1.5** |
| **M19K** | **Big River Lodg** | **14.97** | **38** | Pn | **Pn** | **19 03 41.2** | **+2.0** |
| M19K | | | | IAmb | IAmb | 19 03 53.1 | |
| | comp=Z,8.5nm,1.2s | | | | | | |
| **F15K** | **North Star Dit** | **15.10** | **15** | Pn | **Pn** | **19 03 42.5** | **+1.6** |
| F15K | | | | IAmb | IAmb | 19 04 10.0 | |
| | comp=Z,8.3nm,1.0s | | | | | | |
| **J18K** | **Innoko River** | **15.16** | **31** | Pn | **Pn** | **19 03 43.0** | **+1.3** |
| **CNPM** | **China Poot** | **15.17** | **49** | Pn | **Pn** | **19 03 42.1** | **+0.2** |
| **J19K** | **Poorman** | **15.88** | **31** | Pn | **Pn** | **19 03 50.6** | **-0.5** |
| J19K | | | | IAmb | IAmb | 19 03 59.0 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **H18K** | **Honhosa River** | **15.95** | **24** | Pn | **Pn** | **19 03 52.4** | **+0.5** |
| **K20K** | **Telida** | **15.97** | **34** | Pn | **Pn** | **19 03 51.6** | **-0.6** |
| **SKT** | **Skwentna** | **16.14** | **40** | Pn | **Pn** | **19 03 55.2** | **+0.8** |
| SKT | | | | IAmb | IAmb | 19 04 16.6 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **SUA** | **Susitna One** | **16.22** | **43** | Pn | **Pn** | **19 03 55.6** | **+0.1** |
| SUA | | | | IAmb | IAmb | 19 04 33.2 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **J20K** | **Nowinta River** | **16.48** | **32** | Pn | **Pn** | **19 03 59.2** | **+0.5** |
| **GHO** | **Glory Hole Cre** | **17.14** | **43** | | **P** | **19 04 07.4** | **-0.9** |
| **PETK** | **Petropavlovsk-** | **17.37** | **287** | Pn | **Pn** | **19 04 05.8** | **-4.1** |
| | comp=Z,0.1nm,0.3s,baz=86,slow=16,SNR=1.5 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **17.40** | **43** | Pn | **Pn** | **19 04 09.2** | **-1.1** |
| SML | | | | IAmb | IAmb | 19 04 51.8 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **F19K** | **Shaleruckik Mo** | **17.45** | **22** | | **P** | **19 04 11.2** | **-0.5** |
| **GLI** | **Glacier Island** | **17.59** | **47** | Pn | **Pn** | **19 04 10.9** | **-1.6** |
| GLI | | | | IAmb | IAmb | 19 04 51.5 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **FID** | **Port Fidalgo** | **17.83** | **48** | | **Pn** | **19 04 14.2** | **-1.3** |
| FID | | | | IAmb | IAmb | 19 04 37.4 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **E19K** | **Redstone River** | **18.08** | **21** | P | **P** | **19 04 18.5** | **-0.2** |
| **F20K** | **Avaraart Lake** | **18.11** | **23** | P | **P** | **19 04 19.5** | **+0.6** |
| **KLU** | **Klutina** | **18.34** | **46** | P | **P** | **19 04 20.6** | **-1.0** |
| **C18K** | **Utukok River** | **18.35** | **15** | P | **Pn** | **19 04 22.2** | **+0.4** |
| C18K | | | | IAmb | IAmb | 19 04 29.4 | |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **M24K** | **Tolsona, Glenn** | **18.46** | **44** | P | **P** | **19 04 22.5** | **-0.4** |
| **I23K** | **Minto, Yukon-K** | **18.70** | **33** | P | **Pn** | **19 04 25.3** | **-0.7** |
| I23K | | | | IAmb | IAmb | 19 04 45.2 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **D19K** | **Kuna River** | **18.76** | **18** | P | **Pn** | **19 04 26.9** | **+0.1** |
| D19K | | | | IAmb | IAmb | 19 04 36.8 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **N25K** | **Chitina, Valde** | **18.98** | **46** | P | **P** | **19 04 28.2** | **-0.4** |
| N25K | | | | IAmb | IAmb | 19 05 08.5 | |
| | comp=Z,16nm,1.4s | | | | | | |
| **MDM** | **Murphy Dome** | **18.99** | **35** | P | **Pn** | **19 04 29.4** | **-0.1** |
| **C19K** | **Lookout Ridge** | **19.02** | **16** | P | **Pn** | **19 04 30.9** | **+1.0** |
| **HDA** | **Harding Lake** | **19.17** | **37** | P | **Pn** | **19 04 31.0** | **-0.7** |
| **ILAR** | **Eielson Array** | **19.38** | **36** | P | **P** | **19 04 32.4** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=232,slow=8.8,SNR=23 | | | | | | |
| ILAR | | | | LR | LR | 19 12 33.5 | |
| | comp=Z,46nm,20.4s,baz=123,slow=40 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **G23K** | **Bananza Creek** | **19.45** | **29** | P | **Pn** | **19 04 35.2** | **+0.1** |
| **H24K** | **Noodor Dome** | **19.60** | **33** | | **Pn** | **19 04 36.0** | **-1.0** |
| H24K | | | | IAmb | IAmb | 19 04 43.4 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **E21K** | **Killik River** | **19.62** | **22** | P | **Pn** | **19 04 36.3** | **-0.7** |
| E21K | | | | IAmb | IAmb | 19 04 46.1 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **RIDG** | **Independent Ri** | **19.68** | **40** | P | **P** | **19 04 36.0** | **-0.2** |
| RIDG | | | | IAmb | IAmb | 19 04 43.2 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **J25K** | **Salcha River,** | **19.87** | **37** | P | **P** | **19 04 36.8** | **-1.5** |
| **E22K** | **Anaktuvuk Pass** | **19.92** | **25** | P | **P** | **19 04 38.9** | **+0.1** |
| E22K | | | | IAmb | IAmb | 19 04 48.5 | |
| | comp=Z,5.2nm,1.1s | | | | | | |
| **G24K** | **Hadweenzic Riv** | **20.24** | **31** | P | **P** | **19 04 42.0** | **-0.2** |
| **D22K** | **Ayikyak River** | **20.26** | **22** | | **P** | **19 04 42.6** | **+0.1** |
| D22K | | | | IAmb | IAmb | 19 05 08.3 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **B21K** | **Ikpikpuk River** | **20.41** | **19** | P | **P** | **19 04 43.7** | **-0.3** |
| **J26L** | **Joseph Creek** | **20.51** | **39** | | **P** | **19 04 44.1** | **-1.2** |
| **E24K** | **Your Creek** | **20.79** | **27** | P | Pn | 19 04 49.1 | -1.7 |
| E24K | | | | IAmb | IAmb | 19 05 02.7 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **D23K** | **Nanushuk River** | **20.81** | **24** | P | **P** | **19 04 48.6** | **+0.2** |
| D23K | | | | IAmb | IAmb | 19 05 30.3 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **TOLK** | **Toolik Lake Re** | **20.87** | **25** | P | **P** | **19 04 48.4** | **-0.7** |
| TOLK | | | | IAmb | IAmb | 19 05 00.0 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| **K27K** | **Chicken** | **20.92** | **41** | P | **P** | **19 04 49.4** | **-0.2** |
| K27K | | | | IAmb | IAmb | 19 05 09.4 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **I26K** | **Coal Creek Min** | **21.02** | **37** | P | **P** | **19 04 48.9** | **-1.8** |
| **D24K** | **Happy Valley** | **21.42** | **25** | P | **P** | **19 04 54.1** | **-0.8** |
| D24K | | | | IAmb | IAmb | 19 05 04.8 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **C23K** | **Itkillik River** | **21.46** | **22** | P | **P** | **19 04 54.7** | **-0.7** |
| **O29M** | **Mount Kennedy** | **21.52** | **52** | P | **P** | **19 04 55.4** | **-0.9** |
| O29M | | | | IAmb | IAmb | 19 05 16.1 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **21.57** | **39** | P | **P** | **19 04 55.5** | **-1.1** |
| **I28M** | **Miner Creek** | **22.31** | **38** | P | **P** | **19 05 04.0** | **-0.7** |
| I28M | | | | IAmb | IAmb | 19 05 12.0 | |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **22.91** | **39** | P | **P** | **19 05 10.0** | **-0.9** |
| I29M | | | | IAmb | IAmb | 19 05 25.0 | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| **H29M** | **Whitestone** | **23.20** | **37** | P | **P** | **19 05 12.5** | **-1.3** |
| H29M | | | | IAmb | IAmb | 19 05 36.9 | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **J30M** | **Hart River** | **23.46** | **41** | P | **P** | **19 05 16.5** | **-0.1** |
| **I30M** | **Mount Dempster** | **23.63** | **40** | P | **P** | **19 05 16.2** | **-2.0** |
| I30M | | | | IAmb | IAmb | 19 05 49.3 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **E29M** | **Blow River** | **24.26** | **32** | P | **P** | **19 05 23.8** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **36.27** | **280** | P | **P** | **19 07 10.1** | **0.0** |
| | comp=Z,2.8nm,0.6s,baz=56,slow=9.6,SNR=9.3 | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **43.40** | **75** | P | P | 19 08 24.6 | +15 |
| | comp=Z,1.8nm,0.6s,baz=316,slow=3.8,SNR=12 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **49.29** | **299** | P | **P** | **19 08 56.4** | **+0.7** |
| | comp=Z,0.9nm,0.6s,baz=45,slow=9.2,SNR=4.7 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **55.66** | **85** | P | P | 19 09 58.2 | +15 |
| | comp=Z,0.6nm,0.6s,baz=325,slow=7.8,SNR=4.4 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.51** | **352** | P | **P** | **19 10 01.8** | **-0.7** |
| | comp=Z,1.3nm,0.7s,baz=29,slow=7.6,SNR=1.3 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.23** | **316** | P | **P** | **19 10 20.8** | **-0.6** |
| | comp=Z,0.7nm,0.4s,baz=43,slow=6.7,SNR=8.2 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.32** | **311** | P | **P** | **19 10 28.1** | **-0.9** |
| | comp=Z,0.4nm,0.4s,baz=46,slow=6.2,SNR=12 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.75** | **322** | P | **P** | **19 10 31.3** | **-0.4** |
| | comp=Z,1.2nm,0.4s,baz=49,slow=6.4,SNR=12 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **66.34** | **350** | P | **P** | **19 10 53.9** | **-1.0** |
| | comp=Z,2.8nm,0.6s,baz=28,slow=6.3,SNR=5.6 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **68.62** | **356** | P | **P** | **19 11 08.6** | **-0.8** |
| | comp=Z,0.7nm,0.4s,baz=10,slow=1.6,SNR=9.3 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **69.33** | **327** | P | **P** | **19 11 13.9** | **0.0** |
| | comp=Z,1.7nm,0.6s,baz=45,slow=10,SNR=7.8 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.99** | **280** | P | **P** | **19 11 45.1** | **+2.7** |
| | comp=Z,1.0nm,0.7s,baz=24,slow=7.2,SNR=6.6 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **76.36** | **345** | P | **P** | **19 11 54.8** | **-0.8** |
| | comp=Z,0.7nm,0.3s,baz=14,slow=5.7,SNR=4.4 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **GERES** | **GERESS Array B** | **79.89** | **355** | P | **P** | **19 12 15.7** | **+0.3** |
| | comp=Z,0.4nm,0.5s,baz=26,slow=6.9,SNR=4.4 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **84.21** | **228** | P | P | 19 12 51.1 | +13 |
| | comp=Z,0.2nm,0.6s,baz=31,slow=5.9,SNR=4.7 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **MAW** | **Mawson** | **148.36** | **218** | PKPbc | PKPab | 19 20 05.7 | +11 |
| | comp=Z,2.7nm,0.9s,baz=58,slow=1.3,SNR=4.5 | | | | | | |

*IDC **28** 19:00:22.9±1.6,26°.03N×141°.79E, h123km±34km, mb3.4/4, mbtmp3.8/4, Error ellipse: s-maj=112.2km s-min=22.0km az=80.0*
*JMA **28** 19:00:25.5±0.1,26°.0N±0°.8×14°.2E±°, h127km±1km, MV3.9/15, IOTO ISLANDS REGION*

**ISC 28 19:00:24.3±1.4, 26°.09N±0°.10×142°.2E±0°.5, h150km, n10, σ1s78/14, mb3.4/4, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHH2** | **Haha-jima-NKT2** | **0.54** | **355** | P | **Pn** | **19 00 46.7** | **+0.8** |
| JHH2 | | | | *e*S | **Sn** | **19 01 02.5** | **+0.2** |
| **CBIJ** | **Chichi jima** | **1.00** | **358** | P | **Pn** | **19 00 50.6** | **+1.5** |
| CBIJ | | | | *e*S | **Sn** | **19 01 09.7** | **+1.6** |
| **JCJ** | **Chichijima** | **1.00** | **358** | P | **Pn** | **19 00 45.8** | **-3.3** |
| | 352nm,0.4s,baz=271,slow=24,SNR=335 | | | S | | | |
| JCJ | | | | | **Sn** | **19 01 04.4** | **-3.7** |
| | 226nm,0.4s,baz=303,slow=22,SNR=20 | | | | | | |
| **BSO1** | **Boso 1** | **8.60** | **353** | *e*P | **Pn** | **19 02 26.3** | **+1.2** |
| BSO1 | | | | *e*S | **Sn** | **19 04 00.4** | **-0.1** |
| **JOD2** | **Odawara 2** | **9.53** | **344** | *e*P | **Pn** | **19 02 39.6** | **+1.5** |
| **JRY** | **Ryogami san** | **10.30** | **345** | *e*P | **Pn** | **19 02 48.0** | **-0.2** |
| **WRA** | **Warramunga Arr** | **46.40** | **190** | P | **P** | **19 08 36.2** | **+0.3** |
| | 4.8nm,0.7s,baz=9.9,slow=8.6,SNR=43 | | | | | | |
| | 4.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **50.12** | **190** | P | **P** | **19 09 04.4** | **+0.1** |
| | 0.3nm,0.4s,baz=13,slow=8.2,SNR=7.2 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.15** | **310** | P | **P** | **19 09 11.4** | **-0.5** |
| | 0.2nm,0.6s,baz=91,slow=8.6,SNR=2.5 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **78.86** | **334** | P | **P** | **19 12 11.2** | **+0.7** |
| | 0.3nm,0.3s,baz=60,slow=4.6,SNR=4.1 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*DJA **28** 19:18:53.4±0.3,8°.S±4°×11°.6E±°, h10km, M4.1/13, mb4.3/4, MLv4.0/13*
*IDC **28** 19:19:34.1±2.2,7°.06S×118°.65E, h397km±21km, mb3.0/5, mbtmp3.7/7, Error ellipse: s-maj=67.8km s-min=14.2km az=61.0*

**ISC 28 19:18:53.6±0.7, 8°.03S±0°.07×116°.29E±0°.04, h10km, n22, σ2s37/23, mb3.7/6, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.91** | **140** | P | **Pg** | **19 19 09.7** | **-1.5** |
| **SRBI** | **Singaraja** | **1.07** | **267** | P | **Pg** | **19 19 13.1** | **-1.1** |
| SRBI | | | | S | **Sn** | **19 19 28.6** | **-1.0** |
| **DNP** | **Denpasar** | **1.25** | **239** | P | **Pn** | **19 19 16.1** | **-1.0** |
| **PLAI** | **Plampang** | **1.67** | **118** | P | **Pn** | **19 19 23.2** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.16** | **258** | P | **Pn** | **19 19 28.4** | **-1.3** |
| **WBSI** | **Waikabubak, Su** | **3.46** | **118** | P | **Pn** | **19 19 46.3** | **-1.3** |
| **GRJI** | **Gresik** | **3.94** | **286** | P | **Pn** | **19 19 54.3** | **+0.1** |
| **PWJI** | **Pagerwojo** | **4.44** | **270** | P | **Pg** | **19 20 21.9** | **+3.1** |
| **KAPI** | **Kappang** | **4.56** | **49** | P | Pg | 19 20 31.8 | +11 |
| | 18nm,0.6s,baz=217,slow=7.0,SNR=4.6 | | | | | | |
| KAPI | | | | S | **Sg** | **19 21 19.2** | **-1.0** |
| | 22nm,0.8s,baz=233,slow=20,SNR=2.1 | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **4.57** | **66** | P | **Pn** | **19 20 03.0** | **+0.1** |
| **BKSI** | **Bulukumba** | **4.66** | **55** | P | **Pn** | **19 20 04.1** | **0.0** |
| **BNSI** | **Bone** | **5.23** | **47** | P | **Pn** | **19 20 12.8** | **+0.8** |
| | 12nm,0.6s,0.2nm | | | | | | |
| **EDFI** | **Ende, Flores** | **5.39** | **98** | P | **Pn** | **19 20 14.2** | **0.0** |
| | 21nm,1.1s,0.1nm | | | | | | |
| **UGM** | **Wanagama** | **5.71** | **271** | P | **Pn** | **19 20 18.3** | **-0.3** |
| **MMRI** | **Maumere** | **5.92** | **96** | P | **Pb** | **19 20 40.8** | **+3.9** |
| **WRA** | **Warramunga Arr** | **21.11** | **126** | P | **P** | **19 23 37.4** | **-1.2** |
| | 1.9nm,1.0s,baz=300,slow=11,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **22.95** | **135** | P | **P** | **19 23 57.2** | **-1.1** |
| | 1.6nm,0.8s,baz=310,slow=8.7,SNR=11 | | | | | | |
| | 1.6nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **56.31** | **352** | P | **P** | **19 28 32.6** | **-2.0** |
| | 0.7nm,0.9s,baz=157,slow=7.7,SNR=2.7 | | | | | | |
| | 0.7nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.40** | **334** | P | **P** | **19 29 16.1** | **-0.6** |
| | 0.4nm,0.6s,baz=142,slow=6.1,SNR=4.7 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.21** | **340** | P | **P** | **19 29 46.1** | **-1.8** |
| | 0.4nm,0.4s,baz=151,slow=3.3,SNR=2.8 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.96** | **180** | P | **P** | **19 31 17.4** | **+3.9** |
| | 1.4nm,0.9s,baz=357,slow=4.4,SNR=5.6 | | | | | | |
| | 1.4nm,0.9s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **99.85** | **348** | P | **Pdif** | **19 32 30.7** | **-7.2** |
| | 3.0nm,0.8s,baz=98,slow=10,SNR=1.7 | | | | | | |

*ISN **28** 19:24:09.0±1.2,34°.61N×46°.27E, h10km±31km, ML2.6*
*TEH **28** 19:24:09.9,34°.62N×46°.28E, h10km±54km, ML2.7*

**ISC 28 19:24:10.3±1.1, 34°.63N±0°.04×46°.29E±0°.04, h10km±11km, n12, σ1s102/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.11** | **46** | Pg | **Pg** | **19 24 12.9** | **-0.3** |
| **IGHG** | **

comp=Z,0.5nm,0.3s,baz=218,slow=9.8,SNR=2.8
comp=Z,0.6nm,0.4s
**RIDG** **Independent Ri** **19.80 40** P **P** **19 42 00.8 +0.4**
RIDG IAmb IAmb 19 42 02.4
comp=Z,12nm,1.1s
**E21K** **Killik River** **19.81 22** P **P** **19 42 01.0 +0.6**
**J25K** **Salcha River,** **20.00 37** P **P** **19 42 02.1 -0.5**
J25K IAmb IAmb 19 42 03.5
comp=Z,16nm,1.1s
**SCRK** **Sand Creek** **20.25 39** P **P** **19 42 04.6 -0.7**
SCRK IAmb IAmb 19 42 29.9
comp=Z,6.8nm,0.8s
**D22K** **Ayikyak River** **20.45 22** P **P** **19 42 05.2 -2.1**
D22K IAmb IAmb 19 42 21.8
comp=Z,7.0nm,0.8s
**J26L** **Joseph Creek** **20.64 38** P **P** **19 42 08.8 -0.7**
J26L IAmb IAmb 19 42 10.1
comp=Z,16nm,0.9s
**I26K** **Coal Creek Min** **21.16 36** P **P** **19 42 14.6 -0.4**
**MA2** **Magadan** **21.57 307** LR LR 19 49 56.7
comp=Z,60nm,19.5s,baz=94,slow=37
**EGAK** **Eagle** **21.70 39** **P** **19 42 20.4 -0.4**
EGAK IAmb IAmb 19 42 22.9
comp=Z,13nm,0.8s
**S31K** **Pelican** **22.59 58** P **P** **19 42 27.6 -2.8**
**BBB** **Bella Bella** **28.01 70** LR LR 19 54 24.7
comp=Z,36nm,18.5s,baz=332,slow=36
**YSS** **Yuzh-Sakhalins** **28.44 279** P **P** **19 43 22.1 -2.3**
**YAK** **Yakutsk** **31.89 312** LR LR 19 57 03.8
comp=Z,74nm,18.9s,baz=88,slow=39
**TIXI** **Tiksi** **32.36 330** LR LR 19 58 33.3
comp=Z,37nm,18.4s,baz=174,slow=41
**YKA** **Yellowknife Ar** **33.10 47** LR LR 19 59 10.7
comp=Z,87nm,19.2s,baz=320,slow=40
**KLR** **Kul'dur** **34.22 289** LR LR 19 58 26.5
comp=Z,29nm,19.2s,baz=78,slow=38
**H11N2** **WAKE ISLAND Hy** **34.86 213** T T 20 22 19.2
baz=20,slow=76,SNR=6.5
**H11N3** **WAKE ISLAND Hy** **34.87 213** T T 20 22 22.9
baz=20,slow=76,SNR=6.1
**H11N1** **WAKE ISLAND Hy** **34.88 213** T T 20 22 17.1
baz=20,slow=76,SNR=6.7
**H11S1** **WAKE ISLAND Hy** **36.07 213** T T 20 23 38.2
baz=20,slow=75,SNR=12
**H11S2** **WAKE ISLAND Hy** **36.08 212** T T 20 23 53.4
baz=20,slow=75,SNR=12
**H11S3** **WAKE ISLAND Hy** **36.08 213** T T 20 23 38.9
baz=20,slow=75,SNR=5.3
**USRK** **Ussuriysk Ar.** **36.41 281** P **P** **19 44 34.6 +0.5**
comp=Z,4.2nm,0.6s,baz=56,slow=9.8,SNR=12
comp=Z,4.2nm,0.6s
**FLWY** **Flagg Ranch** **41.95 74** P **P** **19 45 18.2 -2.5**
FLWY IAmb IAmb 19 45 19.7
comp=Z,2.6nm,0.6s
**KSRS** **Korea Array** **42.77 275** P **P** **19 45 31.1 +4.1**
comp=Z,1.8nm,0.8s,baz=63,slow=6.8,SNR=4.8
KSRS LR LR 20 02 41.1
comp=Z,11nm,19.5s,baz=245,slow=36
comp=Z,1.8nm,0.8s
**PDAR** **Pinedale Array** **43.37 75** P P 19 45 46.0 +14
comp=Z,1.5nm,0.6s,baz=308,slow=4.4,SNR=8.8
comp=Z,1.5nm,0.6s
**AGMN** **Agassiz Nation** **48.24 61** P **P** **19 46 09.0 -1.2**
**SONM** **Songino Array** **49.50 299** P **P** **19 46 20.2 +0.1**
comp=Z,1.7nm,0.8s,baz=53,slow=7.3,SNR=8.7
SONM LR LR 20 08 08.1
comp=Z,43nm,18.7s,baz=102,slow=38
comp=Z,1.7nm,0.8s
**TXAR** **Lajitas Array** **55.58 85** P P 19 47 21.7 +16
comp=Z,0.7nm,0.6s,baz=316,slow=8.8,SNR=4.2
comp=Z,0.7nm,0.6s
**ZALV** **Zalesovo Beam** **56.39 316** LR LR 20 12 52.0
comp=Z,27nm,19.3s,baz=34,slow=39
**KURK** **Kurchatov** **61.37 316** P **P** **19 47 43.8 -1.4**
KURK IAmb IAmb 19 47 46.2
comp=Z,2.2nm,0.8s
**KURBB** **Kurchatov Arra** **61.48 316** P **P** **19 47 45.7 -0.2**
comp=Z,1.5nm,0.5s,baz=43,slow=7.0,SNR=12
comp=Z,1.5nm,0.5s
**MKAR** **Makanchi Array** **62.56 311** P **P** **19 47 53.0 -0.3**
comp=Z,0.5nm,0.3s,baz=43,slow=6.7,SNR=19
comp=Z,0.5nm,0.3s
**BVAR** **Borovoye Array** **63.01 322** P **P** **19 47 56.3 +0.1**
comp=Z,1.5nm,0.4s,baz=43,slow=6.7,SNR=13
BVAR PcP **PcP** **19 48 34.9 +1.1**
comp=Z,1.8nm,0.7s,baz=67,slow=5.0,SNR=7.9
comp=Z,1.5nm,0.4s
**FINES** **FINESS Array B** **66.61 350** P **P** **19 48 18.6 -0.8**
comp=Z,1.6nm,0.7s,baz=12,slow=8.1,SNR=7.7
FINES PcP **PcP** **19 48 49.5 +1.0**
comp=Z,0.6nm,0.6s,baz=64,slow=4.4,SNR=5.2
FINES LR LR 20 18 26.9
comp=Z,16nm,21.1s,baz=346,slow=38
comp=Z,1.6nm,0.7s
**NOA** **NORSAR Array B** **68.06 357** LR LR 20 18 56.7
comp=Z,9.8nm,18.6s,baz=190,slow=37
**HFS** **Hagfors** **68.88 356** P **P** **19 48 33.2 -0.6**
comp=Z,1.2nm,0.5s,baz=357,slow=3.0,SNR=11
comp=Z,1.2nm,0.5s
**ABKAR** **Akbulak array** **69.93 326** P **P** **19 48 39.9 -0.5**
**CMAR** **Chiang Mai Arr** **74.13 280** P **P** **19 49 09.2 +3.1**
comp=Z,0.7nm,0.4s,baz=34,slow=6.7,SNR=4.5
comp=Z,0.7nm,0.4s
**AKASG** **Malin Array Be** **76.62 345** P **P** **19 49 19.6 -0.3**
comp=Z,1.4nm,0.4s,baz=18,slow=5.9,SNR=6.9
AKASG LR LR 20 25 32.8
comp=Z,18nm,20.7s,baz=12,slow=38
comp=Z,1.4nm,0.4s
**CLL** **Collm** **77.73 356** *i* P **P** **19 49 26.4 +0.4**
**KHC** **Kasperske Hory** **79.87 355** P **P** **19 49 37.7 -0.2**
KHC IAmb IAmb 19 49 39.6
comp=Z,1.7nm,0.8s
**GERES** **GERESS Array B** **80.15 355** P **P** **19 49 40.2 +0.7**
comp=Z,0.4nm,0.4s,baz=18,slow=4.8,SNR=5.1
comp=Z,0.4nm,0.4s
**BRTR** **Keskin Array B** **86.34 339** P **P** **19 50 12.4 +0.8**
comp=Z,0.7nm,0.9s,baz=349,slow=2.9,SNR=5.1
comp=Z,0.7nm,0.9s
**MAW** **Mawson** **148.23 217** PKPbc PKPab 19 57 28.4 +11
comp=Z,1.9nm,1.0s,baz=89,slow=12,SNR=3.1

*NEIC **28** 19:37:48.5,69°.53N×144°.07W,h6km*
*NEIC **28** 19:37:49.2±1.3,69°.55N±0°.04×144°.14W±0°.06,h10km±2km, Error ellipse: s-maj=6.7km s-min=3.3km az=16.0,Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.00; $M_{\theta\theta}$-1.88; $M_{\phi\phi}$ 1.88; $M_{r\theta}$-0.27; $M_{r\phi}$-0.77; $M_{\theta\phi}$-0.36; Fault plane solution: $M_o$2.08000×$10^{14}$ NP1:$\phi_s$33.76000°, δ89.34000°, λ-12.44000°. NP2:$\phi_s$123.91000°, δ77.56000°, λ-179.32000°. Principal axes: T 2.0715, Plg8.0000°, Azm80.0000°; N 0.0146, Plg78.0000°, Azm211.0000°; P -2.0861, Plg9.0000°, Azm348.0000°;*
**AEIC 28 19:37:47.6±1.2,69°.47N±0°.02×144°.23W±0°.03,h10**km±6km, **ML3.4,ML3.5**/124(NEIC),**Mwr3.5**/10(NEIC) **Error ellipse: s-maj=3.7km s-min=0.5km az=199.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.24** | **49** | | Pg | 19 37 52.1 | -0.4 |
| C27K | | | | Sg | Sg | 19 37 55.2 | -0.6 |
| C27K | | | | IAML | | 19 37 55.6 | |
| | comp=E,9μm,0.4s | | | | | | |
| C27K | | | | IAML | | 19 37 55.7 | |
| | comp=N,8μm,0.5s | | | | | | |
| **C26K** | **Camden Bay** | **0.51** | **332** | | Pb | 19 37 58.5 | -0.1 |
| C26K | | | | | Sb | 19 38 06.3 | +0.3 |
| **D25K** | **Kavik River** | **0.78** | **260** | | Pg | 19 38 02.3 | -0.2 |
| D25K | | | | Sg | Sg | 19 38 12.5 | -0.2 |
| **D27M** | **Malcolm River** | **1.18** | **100** | | Pb | 19 38 08.8 | -1.3 |
| D27M | | | | IAML | | 19 38 31.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **D27M** | **Malcolm River** | **1.18** | **100** | | Sg | 19 38 25.7 | +0.2 |
| **C24K** | **Franklin Bluff** | **1.59** | **281** | | Pg | 19 38 18.2 | +0.1 |
| C24K | | | | | Sg | 19 38 40.0 | +1.4 |
| **C24K** | **Franklin Bluff** | **1.59** | **281** | IAML | | 19 38 44.8 | |
| | comp=E,603nm,0.5s | | | | | | |
| **E27K** | **Coleen River** | **1.61** | **142** | Pn | Pb | 19 38 17.5 | +0.2 |
| E27K | | | | Sn | Sg | 19 38 39.4 | +0.2 |
| E27K | | | | IAML | | 19 38 42.6 | |
| | comp=E,510nm,0.6s | | | | | | |
| **D24K** | **Happy Valley** | **1.66** | **261** | | Pb | 19 38 18.6 | +0.3 |
| D24K | | | | | Sg | 19 38 43.1 | +2.1 |
| **F26K** | **Sheenjek River** | **1.79** | **179** | | Pb | 19 38 21.0 | +0.6 |
| F26K | | | | Sn | Sg | 19 38 44.3 | -0.6 |
| F26K | | | | IAML | | 19 38 49.8 | |
| | comp=N,429nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.90** | **115** | | Pb | 19 38 22.4 | 0.0 |
| E28M | | | | Sn | Sb | 19 38 46.8 | +0.7 |
| **D28M** | **Stokes Point** | **1.95** | **92** | | Pb | 19 38 23.2 | +0.1 |
| D28M | | | | | Sg | 19 38 49.3 | -0.8 |
| **F25K** | **Christian Rive** | **1.96** | **196** | | Pb | 19 38 23.7 | +0.4 |
| F25K | | | | Sn | Sb | 19 38 48.5 | +0.7 |
| **E24K** | **Your Creek** | **2.09** | **230** | | Pb | 19 38 25.4 | -0.2 |
| E24K | | | | Sn | Sg | 19 38 53.5 | -1.2 |
| **TOLK** | **Toolik Lake Re** | **2.10** | **249** | | Pb | 19 38 24.6 | -1.0 |
| TOLK | | | | IAML | | 19 38 59.9 | |
| | comp=E,338nm,0.5s | | | | | | |
| TOLK | | | | IAML | | 19 39 02.3 | |
| | comp=N,237nm,0.5s | | | | | | |
| **C23K** | **Itkillik River** | **2.26** | **282** | Pn | Pb | 19 38 26.9 | -1.6 |
| **D23K** | **Nanushuk River** | **2.36** | **261** | Pn | Pb | 19 38 28.5 | -1.6 |
| **F24K** | **Squaw Lake** | **2.38** | **216** | Pn | Pb | 19 38 29.3 | -1.2 |
| **E23K** | **Chandalar** | **2.42** | **237** | Pn | Pb | 19 38 29.9 | -1.4 |
| **F28M** | **Old Crow** | **2.46** | **137** | Pn | Pn | 19 38 29.6 | +1.9 |
| F28M | | | | IAML | | 19 39 08.2 | |
| | comp=E,198nm,0.5s | | | | | | |
| F28M | | | | IAML | | 19 39 11.5 | |
| | comp=N,213nm,0.4s | | | | | | |
| **E29M** | **Blow River** | **2.53** | **112** | | Pn | 19 38 30.6 | +1.9 |
| E29M | | | | IAML | | 19 39 09.2 | |
| | comp=N,230nm,0.8s | | | | | | |
| E29M | | | | IAML | | 19 39 13.4 | |
| | comp=E,223nm,0.8s | | | | | | |
| **G26K** | **Porcupine Rive** | **2.54** | **176** | | Pb | 19 38 31.0 | -2.2 |
| **G25K** | **Bearman Lake** | **2.81** | **195** | | Pb | 19 38 35.3 | -2.5 |
| **G27K** | **Doyon Strip** | **2.84** | **159** | Pn | Pn | 19 38 35.1 | +2.1 |
| **FYU** | **Fort Yukon** | **2.94** | **188** | Pn | Pn | 19 38 37.1 | +2.8 |
| **G24K** | **Hadweenzic Riv** | **3.04** | **205** | Pn | Pn | 19 38 38.0 | +2.3 |
| G24K | | | | IAML | | 19 39 32.5 | |
| | comp=N,147nm,1.4s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.07** | **248** | | Pn | 19 38 37.8 | +1.7 |
| **D22K** | **Ayikyak River** | **3.08** | **263** | Pn | Pn | 19 38 38.4 | +2.1 |
| D22K | | | | IAML | | 19 39 34.6 | |
| | comp=N,132nm,0.9s | | | | | | |
| D22K | | | | IAML | | 19 39 38.7 | |
| | comp=E,107nm,1.0s | | | | | | |
| **COLD** | **Coldfoot** | **3.16** | **227** | | Pn | 19 38 39.9 | +2.6 |
| **B22K** | **Teshekpuk Lake** | **3.29** | **290** | Pn | Pn | 19 38 40.8 | +1.7 |
| **H27K** | **Steamboat Moun** | **3.41** | **161** | | Pn | 19 38 43.6 | +2.8 |
| **G29M** | **Pine Creek** | **3.46** | **135** | Pn | Pn | 19 38 43.5 | +2.1 |
| **G23K** | **Bananza Creek** | **3.52** | **221** | Pn | Pn | 19 38 44.1 | +1.8 |
| G23K | | | | IAML | | 19 39 45.7 | |
| | comp=N,69nm,0.8s | | | | | | |
| G23K | | | | IAML | | 19 39 53.3 | |
| | comp=E,95nm,1.1s | | | | | | |
| **F22K** | **John River** | **3.53** | **240** | | Pn | 19 38 45.0 | +2.6 |
| **B21K** | **Ikpikpuk River** | **3.65** | **277** | | Pn | 19 38 46.1 | +2.1 |
| B21K | | | | IAML | | 19 39 31.8 | |
| | comp=E,92nm,0.7s | | | | | | |
| B21K | | | | IAML | | 19 40 03.4 | |
| | comp=N,90nm,1.1s | | | | | | |
| **E21K** | **Killik River** | **3.67** | **258** | | Pn | 19 38 45.4 | +1.1 |
| **E21K** | **Killik River** | **3.67** | **258** | IAML | | 19 39 57.2 | |
| | comp=N,73nm,0.9s | | | | | | |
| E21K | | | | IAML | | 19 40 00.3 | |
| | comp=E,64nm,0.9s | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.76** | **270** | | Pn | 19 38 47.9 | +2.4 |
| **G30M** | **tAoh Zraii Nji** | **3.89** | **126** | Pn | Pn | 19 38 49.6 | +2.2 |
| G30M | | | | IAML | | 19 39 59.8 | |
| | comp=N,63nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | **3.91** | **203** | Pn | Pn | 19 38 50.1 | +2.4 |
| H24K | | | | IAML | | 19 39 59.5 | |
| | comp=N,49nm,0.6s | | | | | | |
| H24K | | | | IAML | | 19 40 00.8 | |
| | comp=E,65nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **3.95** | **143** | Pn | Pn | 19 38 50.5 | +2.3 |
| H29M | | | | IAML | | 19 39 41.4 | |
| | comp=E,83nm,0.6s | | | | | | |
| H29M | | | | IAML | | 19 40 00.3 | |
| | comp=N,73nm,0.9s | | | | | | |
| **A22K** | **Sinclair Lake** | **3.96** | **298** | | Pn | 19 38 50.1 | +1.9 |
| **PRP** | **Porcupine Dome** | **4.00** | **188** | Pn | Pn | 19 38 51.9 | +2.8 |
| PRP | | | | IAML | | 19 39 42.1 | |
| | comp=N,56nm,0.4s | | | | | | |
| PRP | | | | IAML | | 19 40 01.3 | |
| | comp=E,59nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **4.04** | **102** | | Pn | 19 38 51.2 | +1.8 |
| **F21K** | **Alatna River** | **4.11** | **241** | Pn | Pn | 19 38 52.8 | +2.5 |
| F21K | | | | IAML | | 19 40 08.5 | |
| | comp=N,55nm,1.3s | | | | | | |
| F21K | | | | IAML | | 19 40 08.5 | |
| | comp=E,44nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **4.19** | **212** | | Pn | 19 38 53.8 | +2.3 |
| **H23K** | **Yukon River** | **4.19** | **212** | IAML | | 19 40 05.4 | |
| | comp=N,51nm,0.9s | | | | | | |
| H23K | | | | IAML | | 19 40 06.2 | |
| | comp=E,61nm,1.0s | | | | | | |
| **I26K** | **Coal Creek Min** | **4.21** | **174** | | Pn | 19 38 54.3 | +2.6 |
| **EPYK** | **Eagle Plains** | **4.21** | **134** | | Pn | 19 38 53.9 | +2.1 |
| **I28M** | **Miner Creek** | **4.37** | **156** | Pn | Pn | 19 38 56.8 | +2.8 |
| I28M | | | | IAML | | 19 39 50.3 | |
| | comp=N,40nm,0.5s | | | | | | |
| I28M | | | | IAML | | 19 40 13.1 | |
| | comp=E,37nm,1.4s | | | | | | |
| **F31M** | **Tsiigehtchic** | **4.37** | **113** | Pn | Pn | 19 38 56.9 | +3.0 |
| F31M | | | | IAML | | 19 40 12.3 | |
| | comp=E,42nm,1.1s | | | | | | |
| F31M | | | | IAML | | 19 40 12.9 | |
| | comp=N,39nm,1.1s | | | | | | |
| **E20K** | **Nigu River** | **4.50** | **260** | | Pn | 19 38 58.3 | +2.5 |
| **G31M** | **Satah River** | **4.51** | **120** | Pn | Pn | 19 38 57.6 | +1.8 |
| **B20K** | **Meade River** | **4.53** | **283** | Pn | Pn | 19 38 57.6 | +1.5 |
| **POKR** | **Poker Plat Res** | **4.55** | **197** | | Pn | 19 38 58.9 | +2.5 |
| POKR | | | | IAML | | 19 40 27.0 | |
| | comp=E,47nm,1.6s | | | | | | |
| POKR | | | | IAML | | 19 40 27.1 | |
| | comp=N,40nm,1.0s | | | | | | |
| **A21K** | **Barrow** | **4.57** | **300** | | Pn | 19 38 59.0 | +2.4 |
| **G21K** | **Allakaket** | **4.58** | **234** | Pn | Pn | 19 38 58.6 | +1.8 |
| G21K | | | | IAML | | 19 40 32.9 | |
| | comp=E,39nm,0.7s | | | | | | |
| G21K | | | | IAML | | 19 40 35.0 | |
| | comp=N,34nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **4.72** | **148** | | Pn | 19 39 00.9 | +2.2 |
| I29M | | | | IAML | | 19 40 21.0 | |
| | comp=N,46nm,0.6s | | | | | | |
| I29M | | | | IAML | | 19 40 21.6 | |
| | comp=E,39nm,0.6s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **4.78** | **207** | | Pn | 19 39 01.8 | +2.3 |
| I23K | | | | IAML | | 19 40 28.6 | |
| | comp=E,42nm,1.3s | | | | | | |
| I23K | | | | IAML | | 19 40 33.5 | |
| | comp=N,42nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **4.79** | **201** | | Pn | 19 39 02.0 | +2.3 |
| MDM | | | | IAML | | 19 40 24.8 | |
| | comp=N,31nm,0.6s | | | | | | |
| MDM | | | | IAML | | 19 40 25.6 | |
| | comp=E,40nm,0.9s | | | | | | |
| **COLA** | **College** | **4.83** | **199** | Pn | Pn | 19 39 03.3 | +3.1 |
| **EGAK** | **Eagle** | **4.87** | **164** | Pn | Pn | 19 39 03.5 | +2.7 |
| EGAK | | | | IAML | | 19 40 02.0 | |
| | comp=E,37nm,0.5s | | | | | | |
| EGAK | | | | IAML | | 19 40 02.0 | |
| | comp=E,36nm,0.6s | | | | | | |
| **J25K** | **Salcha River,** | **4.90** | **186** | | Pn | 19 39 04.1 | +2.8 |
| J25K | | | | IAML | | 19 40 34.0 | |
| | comp=N,25nm,0.7s | | | | | | |
| **F20K** | **Avaraart Lake** | **4.92** | **246** | Pn | Pn | 19 39 03.5 | +2.1 |
| **J26L** | **Joseph Creek** | **5.00** | **177** | Pn | Pn | 19 39 05.4 | +2.7 |
| J26L | | | | IAML | | 19 40 08.8 | |
| | comp=N,24nm,0.5s | | | | | | |
| J26L | | | | IAML | | 19 40 32.9 | |
| | comp=E,30nm,0.7s | | | | | | |
| **H21K** | **Melozitna Rive** | **5.04** | **225** | Pn | Pn | 19 39 05.5 | +2.3 |
| H21K | | | | IAML | | 19 40 41.1 | |
| | comp=N,26nm,0.8s | | | | | | |
| H21K | | | | IAML | | 19 40 41.6 | |
| | comp=E,24nm,0.8s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.04** | **198** | Pn | Pn | 19 39 05.9 | +2.7 |
| CCB | | | | IAML | | 19 40 36.1 | |
| | comp=E,22nm,1.3s | | | | | | |
| **D19K** | **Kuna River** | **5.09** | **265** | Pn | Pn | 19 39 05.8 | +1.9 |
| D19K | | | | IAML | | 19 40 07.4 | |
| | comp=N,32nm,0.5s | | | | | | |
| **MLY** | **Manley** | **5.12** | **213** | | Pn | 19 39 07.0 | +2.6 |
| **HDA** | **Harding Lake** | **5.20** | **193** | | Pn | 19 39 08.0 | +2.7 |
| **E19K** | **Redstone River** | **5.20** | **253** | Pn | Pn | 19 39 06.7 | +1.4 |
| E19K | | | | IAML | | 19 40 41.2 | |
| | comp=E,25nm,0.7s | | | | | | |
| E19K | | | | IAML | | 19 40 45.5 | |
| | comp=N,28nm,0.8s | | | | | | |
| **I30M** | **Mount Dempster** | **5.23** | **141** | Pn | Pn | 19 39 07.9 | +2.0 |
| I30M | | | | IAML | | 19 40 10.6 | |
| | comp=N,31nm,0.4s | | | | | | |
| **WRH** | **Wood River Hil** | **5.25** | **199** | | Pn | 19 39 08.5 | +2.5 |
| WRH | | | | IAML | | 19 40 10.9 | |
| | comp=N,26nm,0.8s | | | | | | |
| WRH | | | | IAML | | 19 40 11.3 | |
| | comp=E,22nm,0.7s | | | | | | |
| **NEA2** | **Nenana** | **5.25** | **203** | | Pn | 19 39 08.8 | +2.7 |
| **H31M** | **Peel River** | **5.27** | **130** | Pn | Pn | 19 39 07.5 | +1.2 |
| H31M | | | | IAML | | 19 40 40.5 | |
| | comp=E,28nm,1.0s | | | | | | |
| H31M | | | | IAML | | 19 40 49.9 | |
| | comp=N,25nm,1.2s | | | | | | |
| **C19K** | **Lookout Ridge** | **5.46** | **273** | Pn | Pn | 19 39 10.8 | +1.8 |
| **SCRK** | **Sand Creek** | **5.52** | **179** | Pn | Pn | 19 39 13.0 | +3.1 |
| **K27K** | **Chicken** | **5.53** | **170** | | Pn | 19 39 12.9 | +3.0 |
| **F19K** | **Shaleruckik Mo** | **5.71** | **249** | Pn | Pn | 19 39 14.3 | +2.1 |
| **DAWY** | **Dawson** | **5.76** | **158** | | Pn | 19 39 16.1 | +3.1 |
| **RIDG** | **Independent Ri** | **5.76** | **183** | Pn | Pn | 19 39 15.8 | +2.7 |
| **J30M** | **Hart River** | **5.80** | **144** | Pn | Pn | 19 39 16.0 | +2.2 |
| **A19K** | **Wainwright** | **5.87** | **285** | | Pn | 19 39 16.4 | +2.0 |
| **G19K** | **Purcell Mounta** | **5.90** | **242** | Pn | Pn | 19 39 16.5 | +1.5 |
| **BPAW** | **Bear Paw Mtn.** | **6.02** | **210** | | Pn | 19 39 18.2 | +1.6 |
| **H19K** | **Roundabout Mou** | **6.13** | **236** | | Pn | 19 39 19.7 | +1.6 |
| **C18K** | **Utukok River** | **6.14** | **270** | Pn | Pn | 19 39 18.8 | +0.6 |
| **I20K** | **Naaghedeneel** | **6.16** | **225** | Pn | Pn | 19 39 21.2 | +2.7 |
| **B18K** | **Kokolik River** | **6.20** | **277** | | Pn | 19 39 20.5 | +1.5 |
| **K29M** | **Barlow Dome** | **6.25** | **152** | Pn | Pn | 19 39 21.8 | +2.0 |
| **RND** | **Reindeer** | **6.37** | **199** | Pn | Pn | 19 39 24.8 | +3.4 |
| **E18K** | **Tukpahlearik C** | **6.37** | **259** | Pn | Pn | 19 39 23.0 | +1.7 |
| **L26K** | **Log Cabin Wild** | **6.49** | **176** | Pn | Pn | 19 39 26.6 | +3.6 |
| **L27K** | **Beaver Creek,** | **6.51** | **170** | Pn | Pn | 19 39 26.3 | +3.0 |
| **DHY** | **Denali Highway** | **6.55** | **193** | Pn | Pn | 19 39 27.0 | +3.0 |
| **G18K** | **Tagagawik** | **6.55** | **244** | Pn | Pn | 19 39 25.7 | +1.7 |
| **J20K** | **Nowinta River** | **6.59** | **221** | Pn | Pn | 19 39 26.4 | +2.0 |
| **A36M** | **Sachs Harbour** | **6.75** | **59** | Pn | Pn | 19 39 26.4 | -0.2 |
| **C17K** | **DeLong Mountai** | **6.88** | **271** | | Pn | 19 39 29.4 | +1.0 |
| **WAT7** | **Susitna Watana** | **6.92** | **198** | | Pn | 19 39 33.0 | +3.9 |
| **RDOG** | **Red Dog Mine** | **6.92** | **267** | | Pn | 19 39 30.0 | +1.1 |
| **E17K** | **Hotham Inlet** | **6.95** | **258** | | Pn | 19 39 30.6 | +1.3 |
| **F17K** | **Baldwin Pennin** | **7.08** | **253** | Pn | Pn | 19 39 32.1 | +1.0 |
| **C36M** | **Paulatuk** | **7.10** | **82** | Pn | Pn | 19 39 30.8 | -0.6 |
| **J19K** | **Poorman** | **7.10** | **225** | Pn | Pn | 19 39 33.3 | +1.9 |
| **D17K** | **Noatak River** | **7.12** | **264** | | Pn | 19 39 32.2 | +0.5 |
| **M26K** | **Nabesna, AK** | **7.12** | **175** | Pn | Pn | 19 39 35.3 | +3.5 |
| **M27K** | **Edge Creek, AK** | **7.21** | **171** | | Pn | 19 39 35.5 | +2.5 |
| **M29M** | **Somme Creek** | **7.44** | **159** | Pn | Pn | 19 39 38.7 | +2.6 |
| **M24K** | **Tolsona, Glenn** | **7.44** | **187** | Pn | Pn | 19 39 39.1 | +3.0 |
| **G17K** | **Kiwalik Mounta** | **7.44** | **246** | | Pn | 19 39 38.2 | +2.2 |
| **CUT** | **Chulitna** | **7.51** | **202** | Pn | Pn | 19 39 39.2 | +2.2 |
| **M30M** | **Minto, Yukon** | **7.55** | **153** | | Pn | 19 39 39.6 | +2.0 |
| **C16K** | **Lisburne Hills** | **7.71** | **271** | Pn | Pn | 19 39 39.9 | +0.1 |
| **SCM** | **Sheep Creek Mo** | **7.78** | **191** | Pn | Pn | 19 39 42.4 | +1.6 |
| **J18K** | **Innoko River** | **7.82** | **226** | Pn | Pn | 19 39 42.4 | +1.2 |
| **SML** | **Sawmill** | **7.88** | **194** | Pn | Pn | 19 39 45.8 | +3.7 |
| **N25K** | **Chitina, Valde** | **7.90** | **181** | Pn | Pn | 19 39 45.0 | +2.6 |
| **GHO** | **Glory Hole Cre** | **7.97** | **196** | Pn | Pn | 19 39 46.2 | +1.8 |
| **KLU** | **Klutina** | **8.04** | **186** | Pn | Pn | 19 39 46.6 | +2.2 |
| **G16K** | **Koyuk River** | **8.06** | **248** | Pn | Pn | 19 39 45.9 | +1.4 |
| **GLB** | **Gilahina Butte** | **8.07** | **179** | Pn | Pn | 19 39 46.8 | +2.1 |
| **SKT** | **Skwentna** | **8.10** | **205** | Pn | Pn | 19 39 46.5 | +1.4 |
| **M22K** | **Willow** | **8.12** | **200** | Pn | Pn | 19 39 46.6 | +1.2 |
| **M20K** | **Styx River** | **8.45** | **210** | Pn | Pn | 19 39 51.2 | +1.2 |
| **SUA** | **Susitna One** | **8.48** | **202** | Pn | Pn | 19 39 51.8 | +1.4 |
| **J17K** | **VABM Dome** | **8.50** | **231** | Pn | Pn | 19 39 51.5 | +1.0 |
| **L19K** | **White Mountain** | **8.50** | **216** | Pn | Pn | 19 39 51.6 | +0.9 |
| **N30M** | **Aishikik Lake** | **8.57** | **156** | Pn | Pn | 19 39 52.8 | +1.2 |
| **I17K** | **Unalakleet** | **8.58** | **237** | Pn | Pn | 19 39 53.0 | +1.3 |
| **CTGM** | **Chitina Glacie** | **8.63** | **171** | Pn | Pn | 19 39 53.8 | +1.3 |
| **F15K** | **North Star Dit** | **8.64** | **254** | Pn | Pn | 19 39 53.0 | +0.5 |
| **M19K** | **Big River Lodg** | **8.66** | **214** | Pn | Pn | 19 39 54.4 | +1.6 |
| **LOGN** | **Logan Glacier** | **8.79** | **170** | Pn | Pn | 19 39 56.3 | +1.6 |
| **PWL** | **Port Wells** | **8.82** | **193** | Pn | Pn | 19 39 56.4 | +1.5 |
| **GRNC** | **Granite Creek** | **8.84** | **172** | Pn | Pn | 19 39 56.7 | +1.3 |
| **L18K** | **Granite Mounta** | **8.87** | **221** | Pn | Pn | 19 39 57.6 | +1.9 |
| **SPU** | **Mount Spurr** | **8.94** | **205** | Pn | Pn | 19 39 59.2 | +2.6 |
| **ISLE** | **Juniper Island** | **8.94** | **174** | Pn | Pn | 19 39 59.1 | +2.4 |
| **J16K** | **Anvik River** | **9.01** | **234** | Pn | Pn | 19 39 59.1 | +1.5 |
| **TABL** | **Table Mountain** | **9.16** | **170** | Pn | Pn | 19 40 03.8 | +4.0 |
| **O30N** | **Mendenhall** | **9.37** | **155** | Pn | Pn | 19 40 04.6 | +2.0 |
| **MESA** | **MESA** | **9.38** | **173** | Pn | Pn | 19 40 04.3 | +1.4 |
| **O29M** | **Mount Kennedy** | **9.51** | **163** | Pn | Pn | 19 40 07.0 | +2.5 |
| **WHY** | **Whitehorse** | **9.67** | **152** | Pn | Pn | 19 40 09.4 | +2.7 |
| **N19K** | **Bonanza Creek** | **9.69** | **211** | Pn | Pn | 19 40 09.6 | +2.7 |
| **M17K** | **Holitna River** | **9.76** | **220** | Pn | Pn | 19 40 08.8 | +0.9 |
| **L16K** | **Owhat River** | **9.99** | **226** | Pn | Pn | 19 40 12.8 | +1.8 |
| **K15K** | **Wolf Creek Mou** | **10.06** | **233** | Pn | Pn | 19 40 13.5 | +1.6 |
| **CNPM** | **China Poot** | **10.42** | **200** | Pn | Pn | 19 40 18.0 | +1.1 |
| **M16K** | **Timber Creek** | **10.45** | **223** | Pn | Pn | 19 40 18.9 | +1.6 |
| **P33M** | **Teslin, Yukon** | **10.46** | **147** | Pn | Pn | 19 40 18.8 | +1.3 |
| **N17K** | **Nushagak Hills** | **10.49** | **218** | Pn | Pn | 19 40 19.7 | +1.9 |

*UPA **28** 19:42:07.2±1.3,8°.96N×77°.50W,h34km±7km,MD4.0, MW4.4*
*RSNC **28** 19:42:09.3±0.0,9°N±1°×7°7W±°,h32km±3km,M3.9,mb4.2, mB4.8,ML3.7,Mw(mB)4.1*
**ISC 28 19:42:06.6**±1.0,**9°.05N**±0°.04×**77°.50W**±0°.02,**h32**km±10km, **n55,σ1°37/91,9C-5D,Near north coast of Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAPC** | **Capurgana** | **0.44** | **161** | P | **Pb** | **19 42 16.2** | **0.0** |
| CAPC | | | | S | **Sb** | **19 42 23.1** | **+0.4** |
| **UPD2** | **Meteti** | **0.72** | **226** | ↑*i*P | **Pb** | **19 42 20.1** | **-0.6** |
| UPD2 | | | | *i*S | **Sb** | **19 42 28.6** | **-1.7** |
| **TOTI** | **Torti** | **0.81** | **261** | ↑*i*P | **Pb** | **19 42 21.6** | **-0.7** |
| TOTI | | | | *i*S | **Sb** | **19 42 32.6** | **-0.3** |
| **LCBC** | **Los crdobas,** | **1.13** | **100** | P | **Pn** | **19 42 27.6** | **+1.4** |
| LCBC | | | | S | **Sn** | **19 42 44.1** | **+3.4** |
| **LCBC** | **Los crdobas,** | **1.13** | **100** | ↑*i*P | **Pn** | **19 42 27.7** | **+1.4** |
| LCBC | | | | *i*S | **Sn** | **19 42 40.5** | **-0.3** |
| **CNTA3** | **Canitas, Panam** | **1.39** | **277** | ↑*i*P | **Pn** | **19 42 29.7** | **-0.1** |
| CNTA3 | | | | *i*S | **Sn** | **19 42 46.5** | **-0.4** |
| **APAC** | **Apartado, Choc** | **1.46** | **142** | P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CACAO | **El Cacao, Vera** | **3.74** | **243** | *e*P | | **Pn** | **19 43 02.6** | **+0.5** |
| **SMRC** | **Santa Marta, M** | **3.84** | **57** | P | | **Pn** | **19 43 04.5** | **+0.9** |
| SMRC | | | | S | | **Sn** | **19 43 45.8** | **-1.9** |
| **GMAL** | **Guarumal, Vera** | **3.91** | **251** | P | | **Pn** | **19 43 05.8** | **+1.3** |
| **PTBC** | **PUERTO BERRIO,** | **3.91** | **129** | P | | Pn | 19 43 03.1 | -1.4 |
| PTBC | | | | S | | **Sn** | **19 43 47.1** | **-2.3** |
| **OCAC** | **Ocana** | **4.21** | **101** | P | | **Pn** | **19 43 07.9** | **-0.8** |
| OCAC | | | | S | | **Sn** | **19 43 55.0** | **-1.9** |
| **BRJC** | **Barrancabermej** | **4.25** | **119** | P | | **Pn** | **19 43 10.3** | **+1.1** |
| BRJC | | | | S | | **Sn** | **19 43 56.4** | **-1.4** |
| **PLMC** | **San Jos del P** | **4.29** | **164** | P | | **Pn** | **19 43 08.9** | **-0.9** |
| PLMC | | | | S | | **Sn** | **19 44 00.7** | **+1.8** |
| **NORC** | **Norcasia** | **4.34** | **143** | P | | **Pn** | **19 43 11.4** | **+1.0** |
| NORC | | | | S | | **Sn** | **19 43 59.1** | **-0.9** |
| **BARC** | **Barichara** | **4.92** | **119** | P | | **Pn** | **19 43 18.1** | **-0.6** |
| BARC | | | | S | | **Sn** | **19 44 13.9** | **-0.8** |
| **CRJC** | **Cerrejon, Guaj** | **4.95** | **66** | P | | **Pn** | **19 43 18.8** | **0.0** |
| CRJC | | | | S | | **Sn** | **19 44 11.6** | **-3.5** |
| **PAMC** | **Pamplona, Colo** | **5.04** | **109** | P | | **Pn** | **19 43 20.3** | **-0.2** |
| PAMC | | | | S | | **Sn** | **19 44 16.9** | **-1.1** |
| **YOTC** | **Yotoco, Valle** | **5.17** | **167** | P | | **Pn** | **19 43 22.4** | **+0.5** |
| | 12nm,1.0s | | | | | | | |
| **RUSC** | **La Rusia** | **5.39** | **125** | P | | **Pn** | **19 43 26.6** | **+1.4** |
| RUSC | | | | S | | **Sn** | **19 44 24.5** | **-1.9** |
| **CHIC** | **Chingaza** | **5.77** | **139** | P | | **Pn** | **19 43 32.1** | **+1.7** |
| CHIC | | | | S | | **Sn** | **19 44 35.8** | **0.0** |
| **JAMC** | **Jamundi, Valle** | **5.86** | **172** | P | | **Pn** | **19 43 32.1** | **+0.6** |
| | 9.0nm,1.2s | | | | | | | |
| **PRAC** | **Prado** | **5.90** | **154** | P | | **Pn** | **19 43 34.7** | **+2.7** |
| **URIC** | **Uribia, Colomb** | **6.02** | **64** | P | | **Pn** | **19 43 34.4** | **+0.9** |
| | 31nm,0.5s,1µm | | | | | | | |
| URIC | | | | S | | **Sn** | **19 44 39.4** | **-2.0** |
| | 31nm,0.5s,1µm | | | | | | | |
| **TAMC** | **Tame, Arauca** | **6.22** | **114** | P | | **Pn** | **19 43 37.5** | **+1.2** |
| TAMC | | | | S | | **Sn** | **19 44 47.6** | **+1.1** |
| **POPC** | **Popayan, Colom** | **6.52** | **173** | P | | **Pn** | **19 43 42.1** | **+1.5** |
| **MTDJ** | **Mount Denham** | **9.12** | **360** | P | | **Pn** | **19 44 17.7** | **+1.6** |
| MTDJ | | | | S | | **Sn** | **19 45 55.4** | **-2.4** |
| **GTBY** | **Guantanamo Bay** | **11.05** | **12** | P | | **Pn** | **19 44 45.3** | **+2.7** |

*IDC **28** 19:46:57.6±1.3, 10°.30S×125°.09E, h0km, mb3.8/3, mbtmp3.9/6, ML3.5/3, MS3.2/9, Error ellipse: s-maj=149.6km s-min=21.4km az=53.0*
*DJA **28** 19:47:01.7±1.0, 11°S±4°×12°4E±°, h13km±8km, M4.4/13, mb4.8/6, MLv4.2/13*
**ISC 28 19:46:59.4±0.8, 11°.02S±0°.08×124°.29E±0°.08, h10km, n27, σ1§49/18, mb3.8/3, MS3.1/5, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **1.01** | **323** | P | | **P** | **Pg** | **19 47 18.4** | **-0.5** |
| **SOEI** | **Soe** | **1.26** | **359** | P | | **P** | **Pn** | **19 47 23.1** | **0.0** |
| **MMRI** | **Maumere** | **3.11** | **319** | P | | **P** | **Pn** | **19 47 49.0** | **+0.4** |
| **EDFI** | **Ende, Flores** | **3.41** | **311** | P | | **P** | **Pn** | **19 47 52.5** | **-0.3** |
| **BASI** | **Baing, Sumba** | **3.73** | **282** | P | | **P** | **Pn** | **19 47 58.0** | **+0.9** |
| **WBSI** | **Waikabubak, Su** | **5.01** | **285** | P | | **P** | **Pn** | **19 48 14.8** | **+0.1** |
| **PLAI** | **Plampang** | **6.77** | **288** | P | | **P** | **Pn** | **19 48 39.6** | **+0.7** |
| **BKSI** | **Bulukumba** | **7.00** | **324** | P | | **P** | **Pn** | **19 48 40.5** | **-1.6** |
| | 20nm,0.8s,0.1nm | | | | | | | | |
| **KAPI** | **Kappang** | **7.47** | **323** | Pn | | **P** | **Pn** | **19 48 48.8** | **+0.3** |
| | 0.4nm,0.3s,baz=139,slow=9.3,SNR=6.1 | | | | | | | | |
| KAPI | | | | LR | | LR | LR | 19 52 11.0 | |
| | comp=Z,228nm,18.1s,baz=168,slow=42 14nm,0.7s | | | | | | | | |
| **SAUI** | **Saumlaki** | **7.55** | **67** | P | | **P** | **Pn** | **19 48 52.1** | **+2.6** |
| **TWSI** | **Taliwang, Sumb** | **7.64** | **287** | P | | **P** | **Pn** | **19 48 49.8** | **-1.0** |
| | 35nm,0.7s,0.1nm | | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.13** | **134** | Pn | | **P** | **Pn** | **19 50 06.6** | **+0.5** |
| | 0.3nm,0.3s,baz=309,slow=15,SNR=29 | | | | | | | | |
| WRA | | | | Sn | | **Sn** | **Sn** | **19 52 29.0** | **-3.3** |
| | 0.3nm,0.3s,baz=311,slow=24,SNR=5.8 | | | | | | | | |
| WRA | | | | LR | | LR | LR | 19 56 06.5 | |
| | comp=Z,165nm,20.4s,baz=87,slow=42 1.4nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **15.56** | **145** | Pn | | **P** | **Pn** | **19 50 41.1** | **+2.1** |
| | 0.4nm,0.3s,baz=320,slow=12,SNR=6.3 | | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **Sn** | **19 53 29.7** | **-1.9** |
| | 0.2nm,0.3s,baz=316,slow=23,SNR=8.7 | | | | | | | | |
| ASAR | | | | LR | | LR | LR | 19 57 26.9 | |
| | comp=Z,78nm,18.6s,baz=327,slow=40 3.3nm,0.7s | | | | | | | | |
| **DAV** | **Davao City (W)** | **18.02** | **4** | LR | | LR | LR | 19 58 18.2 | |
| | comp=Z,57nm,21.6s,baz=204,slow=39 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.75** | **195** | LR | | LR | LR | 20 02 36.1 | |
| | comp=Z,104nm,20.9s,baz=44,slow=40 | | | | | | | | |
| **STKA** | **Stephens Creek** | **26.20** | **145** | P | | **P** | **P** | **19 52 34.8** | **+0.4** |
| | 1.9nm,0.9s,baz=291,slow=14,SNR=1.5 | | | | | | | | |
| STKA | | | | LR | | LR | LR | 20 03 31.2 | |
| | comp=Z,60nm,20.7s,baz=224,slow=38 1.9nm,0.9s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.51** | **319** | P | | **P** | **P** | **19 54 21.4** | **-0.8** |
| | 1.0nm,0.9s,baz=139,slow=7.0,SNR=5.0 | | | | | | | | |
| CMAR | | | | LR | | LR | LR | 20 12 13.8 | |
| | comp=Z,17nm,18.6s,baz=130,slow=39 1.0nm,0.9s | | | | | | | | |
| **KSRS** | **Korea Array** | **48.34** | **4** | LR | | LR | LR | 20 15 52.2 | |
| | comp=Z,7.6nm,20.4s,baz=275,slow=36 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **51.17** | **269** | T | | T | T | 20 51 12.8 | |
| | baz=99 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **51.18** | **269** | T | | T | T | 20 51 14.0 | |
| | baz=99,SNR=4.5 | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **51.19** | **269** | T | | T | T | 20 51 15.1 | |
| | baz=99 | | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **70.01** | **225** | T | | T | T | 21 15 12.4 | |
| | baz=82,slow=75,SNR=5.4 | | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **70.02** | **225** | T | | T | T | 21 15 12.3 | |
| | baz=82,slow=75,SNR=6.6 | | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **70.02** | **225** | T | | T | T | 21 15 12.6 | |
| | baz=82,slow=75,SNR=6.4 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.85** | **337** | P | | P | 19 58 26.1 | -2.2 | |
| | 0.9nm,0.6s,baz=154,slow=4.2,SNR=3.8 0.9nm,0.6s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **94.99** | **303** | LR | | LR | LR | 20 49 54.3 | |
| | comp=Z,12nm,18.7s,baz=135,slow=40 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.92** | **278** | PKP | | **PKPdf** | **20 06 00.0** | **+1.2** | |
| | 0.3nm,0.7s,baz=88,slow=1.6,SNR=2.0 | | | | | | | | |

*SOME **28** 19:53:47.9, 41°.78N×84°.50E, h5km*
*NNC **28** 19:53:58.3±2.8, 42°.16N×84°.21E, h0km, mb3.7, mpv3.4, Error ellipse: s-maj=24.7km s-min=14.6km az=159.0*
**ISC 28 19:53:51.4±2.4, 41°.5N±0°.1×84°.09E±0°.09, h10km, n35, σ2§37/45, 7C-10D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KTMS** | **Ketmen** | **3.35** | **306** | *e*P | | **P** | **Pb** | **19 54 51.2** | **+0.2** |
| | 4.1nm,0.1s | | | | | | | | |
| KTMS | | | | *e*S | | **Sg** | **Sg** | **19 55 37.0** | **-2.1** |
| **SHLS** | **Shalkode** | **3.79** | **297** | *e*P | | **P** | **Pb** | **19 54 57.2** | **-1.2** |
| | 12nm,0.3s | | | | | | | | |
| SHLS | | | | *e*S | | **Sb** | **Sb** | **19 55 47.2** | **+2.8** |
| | 108nm,0.7s | | | | | | | | |
| **SHLS** | **Shalkode** | **3.79** | **297** | Pg | | **Pb** | **Pb** | **19 54 57.2** | **-1.2** |
| | 12nm,0.3s | | | | | | | | |
| SHLS | | | | Lg | | Lg | Lg | 19 55 46.6 | |
| | 108nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.84** | **299** | Pg | | **Pg** | **Pg** | **19 55 01.6** | **-3.3** |
| | 1.7nm,0.2s | | | | | | | | |
| PDGK | | | | Lg | | Lg | Lg | 19 55 55.3 | |
| | 25nm,0.7s | | | | | | | | |
| **PDGK** | **Podgornoye** | **3.84** | **299** | ⇑Pn | | **Pb** | **Pb** | **19 54 56.1** | **-3.2** |
| | 1.0nm,0.3s | | | | | | | | |
| PDGK | | | | ⇓Pg | | Pg | Pg | 19 55 09.8 | +4.9 |
| | 12nm,0.6s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | Lg | 19 55 55.1 | |
| | 38nm,0.6s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.08** | **295** | *e*P | | **P** | **Pg** | **19 55 06.8** | **-2.8** |
| | 3.7nm,0.2s | | | | | | | | |
| UZB | | | | *e*S | | **Sg** | **Sg** | **19 56 04.5** | **+2.1** |
| | 31nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **4.08** | **295** | Pg | | **Pg** | **Pg** | **19 55 06.8** | **-2.8** |
| | 3.7nm,0.2s | | | | | | | | |
| UZB | | | | Lg | | Lg | Lg | 19 56 04.5 | |
| | 31nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **4.21** | **313** | *e*P | | **Pb** | **Pb** | **19 55 07.3** | **+1.8** |
| | 1.2nm,0.2s | | | | | | | | |
| DJR | | | | *e*S | | **Sg** | **Sg** | **19 56 04.8** | **-1.7** |
| | 23nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **4.21** | **313** | Pg | | **Pb** | **Pb** | **19 55 07.6** | **+2.0** |
| | 1.2nm,0.2s | | | | | | | | |
| DJR | | | | Lg | | Lg | Lg | 19 56 05.0 | |
| | 23nm,0.4s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.43** | **298** | *e*P | | **P** | **Pg** | **19 55 12.6** | **-3.7** |
| | 3.9nm,0.3s | | | | | | | | |
| KPKS | | | | *e*S | | **Sg** | **Sg** | **19 56 14.1** | **+0.5** |
| | 33nm,0.4s | | | | | | | | |
| **KPKS** | **Kokpek** | **4.43** | **298** | Pg | | **Pg** | **Pg** | **19 55 12.6** | **-3.7** |
| | 3.9nm,0.3s | | | | | | | | |
| KPKS | | | | Lg | | Lg | Lg | 19 56 14.1 | |
| | 33nm,0.4s | | | | | | | | |
| **SATY** | **Saty** | **4.48** | **292** | *e*P | | **Pg** | **Pg** | **19 55 14.3** | **-2.8** |
| | 5.7nm,0.2s | | | | | | | | |
| SATY | | | | *e*S | | **Sg** | **Sg** | **19 56 17.2** | **+2.1** |
| | 24nm,0.3s | | | | | | | | |
| **SATY** | **Saty** | **4.48** | **292** | Pg | | **Pg** | **Pg** | **19 55 14.3** | **-2.8** |
| | 5.7nm,0.2s | | | | | | | | |
| SATY | | | | Lg | | Lg | Lg | 19 56 17.2 | |
| | 24nm,0.3s | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.49** | **293** | *e*P | | **Pg** | **Pg** | **19 55 14.0** | **-3.4** |
| | 3.0nm,0.2s | | | | | | | | |
| ZHN | | | | *e*S | | **Sg** | **Sg** | **19 56 16.8** | **+1.2** |
| | 48nm,0.2s | | | | | | | | |
| **ZHN** | **Zhinishke** | **4.49** | **293** | Pg | | **Pg** | **Pg** | **19 55 14.0** | **-3.4** |
| | 3.0nm,0.2s | | | | | | | | |
| ZHN | | | | Lg | | Lg | Lg | 19 56 16.8 | |
| | 48nm,0.2s | | | | | | | | |
| **KNOS** | **Konyrlen** | **4.57** | **310** | Pg | | **Pg** | **Pg** | **19 55 15.4** | **-3.5** |
| | 2.1nm,0.2s | | | | | | | | |
| KNOS | | | | Lg | | Lg | Lg | 19 56 18.7 | |
| | 22nm,0.4s | | | | | | | | |
| **KURS** | **Kuram** | **4.79** | **296** | *e*P | | **Pg** | **Pg** | **19 55 21.3** | **-1.7** |
| | 4.2nm,0.6s | | | | | | | | |
| KURS | | | | *e*S | | **Sg** | **Sg** | **19 56 29.1** | **+4.1** |
| | 20nm,0.9s | | | | | | | | |
| **KURS** | **Kuram** | **4.79** | **296** | Pg | | **Pg** | **Pg** | **19 55 21.3** | **-1.7** |
| | 4.2nm,0.6s | | | | | | | | |
| KURS | | | | Lg | | Lg | Lg | 19 56 29.1 | |
| | 20nm,0.9s | | | | | | | | |
| **BLB** | **Baldybastay** | **4.85** | **304** | Pg | | **Pg** | **Pg** | **19 55 21.5** | **-2.8** |
| | 15nm,0.3s | | | | | | | | |
| BLB | | | | Lg | | Lg | Lg | 19 56 27.7 | |
| | 43nm,0.5s | | | | | | | | |
| **ARXS** | **Arharly** | **5.32** | **302** | *e*P | | **Pg** | **Pg** | **19 55 29.6** | **-3.6** |
| | 3.1nm,0.4s | | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **Sg** | **19 56 42.8** | **+0.8** |
| | 36nm,0.6s | | | | | | | | |
| **ARXS** | **Arharly** | **5.32** | **302** | Pg | | **Pg** | **Pg** | **19 55 29.6** | **-3.6** |
| | 3.1nm,0.4s | | | | | | | | |
| ARXS | | | | Lg | | Lg | Lg | 19 56 42.1 | |
| | 36nm,0.6s | | | | | | | | |
| **MK31** | **Makanchi Array** | **5.41** | **347** | ⇓Pn | | **Pn** | **Pn** | **19 55 13.4** | **+1.4** |
| | 0.2nm,0.3s,baz=40,slow=16,SNR=26 | | | | | | | | |
| MK31 | | | | Pg | | **Pb** | **Pb** | **19 55 25.9** | **0.0** |
| | 1.9nm,0.3s,baz=158,slow=16,SNR=40 | | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | Lg | 19 56 31.0 | |
| | 17nm,0.5s,baz=163,slow=29,SNR=8.6 | | | | | | | | |
| **KOTS** | **Kotyrbulak** | **5.43** | **290** | Pg | | **Pn** | **Pn** | **19 55 14.5** | **+1.9** |
| | 1.7nm,0.8s | | | | | | | | |
| KOTS | | | | Lg | | Lg | Lg | 19 56 51.1 | |
| | 31nm,0.5s | | | | | | | | |
| **MDOK** | **Medeo** | **5.46** | **290** | Pg | | **Pn** | **Pn** | **19 55 13.6** | **+0.7** |
| | 2.3nm,0.7s | | | | | | | | |
| MDOK | | | | Pn | | **Pb** | **Pb** | **19 55 27.2** | **+0.3** |
| | 3.1nm,0.5s | | | | | | | | |
| MDOK | | | | Lg | | Lg | Lg | 19 56 48.5 | |
| | 32nm,0.9s | | | | | | | | |
| MDOK | | | | Lg | | Lg | Lg | 19 56 49.7 | |
| | 14nm,0.4s | | | | | | | | |
| **MAKZ** | **Makanchi** | **5.48** | **345** | ⇓Pn | | **Pn** | **Pn** | **19 55 14.0** | **+1.0** |
| | 0.2nm,0.3s | | | | | | | | |
| MAKZ | | | | ⇑Pg | | **Pb** | **Pb** | **19 55 28.2** | **+1.1** |
| | 3.5nm,0.4s | | | | | | | | |
| MAKZ | | | | ⇓Lg | | Lg | Lg | 19 56 32.4 | |
| | 11nm,0.7s | | | | | | | | |
| **TNSS** | **Tian-Shan** | **5.50** | **288** | Pg | | **Pn** | **Pn** | **19 55 14.6** | **+0.9** |
| | 1.4nm,0.4s | | | | | | | | |
| TNSS | | | | Lg | | Lg | Lg | 19 56 51.2 | |
| | 7.9nm,0.7s | | | | | | | | |
| **IZV** | **Izvestkoviy** | **5.74** | **288** | Pg | | **Pn** | **Pn** | **19 55 16.6** | **-0.2** |
| | 0.1nm,0.1s | | | | | | | | |
| IZV | | | | Lg | | Lg | Lg | 19 56 55.3 | |
| | 13nm,0.5s | | | | | | | | |
| **MTBS** | **Maitube** | **5.89** | **288** | Pg | | **Pn** | **Pn** | **19 55 21.4** | **+2.6** |
| | 1.4nm,0.1s | | | | | | | | |
| MTBS | | | | Lg | | Lg | Lg | 19 57 02.9 | |
| | 8.1nm,0.4s | | | | | | | | |
| **KST** | **Kastek** | **6.21** | **287** | Pg | | **Pn** | **Pn** | **19 55 20.5** | **-2.7** |
| | 2.7nm,0.8s | | | | | | | | |
| KST | | | | Lg | | Lg | Lg | 19 57 02.9 | |
| | 4.5nm,0.5s | | | | | | | | |
| **DGS** | **Degeres** | **6.39** | **288** | Pg | | **Pn** | **Pn** | **19 55 26.9** | **+1.3** |
| | 1.3nm,0.7s | | | | | | | | |
| DGS | | | | Lg | | Lg | Lg | 19 57 13.9 | |
| | 9.6nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.45** | **285** | ⇑Pn | | Pb | Pb | 19 55 35.3 | -8.5 |
| | 2.9nm,0.6s | | | | | | | | |
| TKM2 | | | | ⇓Sn | | Sn | Sn | 19 56 50.0 | +10 |
| | 4.9nm,0.6s | | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | Lg | 19 57 24.7 | |
| | 9.6nm,0.8s | | | | | | | | |
| **CHMS** | **Chumysh** | **7.08** | **285** | ⇑Pg | | Pg | Pg | 19 56 11.9 | +5.1 |
| | 2.1nm,0.6s | | | | | | | | |
| CHMS | | | | ⇑Lg | | Lg | Lg | 19 57 44.4 | |
| | 5.0nm,0.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **7.22** | **282** | Pg | | **Pg** | **Pg** | **19 56 10.1** | **+0.6** |
| | 0.9nm,0.4s | | | | | | | | |
| AAK | | | | Lg | | Lg | Lg | 19 57 50.1 | |
| | 8.6nm,1.0s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **9.87** | **339** | ⇓Pn | | **Pn** | **Pn** | **19 56 14.8** | **+1.7** |
| | 0.6nm,0.5s | | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | Lg | 19 58 54.6 | |
| | 15nm,0.9s | | | | | | | | |
| **KURK** | **Kurchatov** | **9.93** | **339** | ⇓Pn | | **Pn** | **Pn** | **19 56 14.5** | **+0.6** |
| | 0.2nm,0.4s | | | | | | | | |
| KURK | | | | ⇓Lg | | Lg | Lg | 19 58 56.3 | |
| | 11nm,1.1s | | | | | | | | |

*IDC **28** 20:06:37.8±2.6, 11°.17S×123°.63E, h0km, mb3.4/2, mbtmp3.7/4, ML4.0/2, Error ellipse: s-maj=173.7km s-min=31.7km az=54.0*
*DJA **28** 20:06:41.7±0.7, 11°S±7°×12°4E±°, h10km, M3.5/5, mb3.9/1, MLv3.3/5*
**ISC 28 20:06:40.0±0.9, 10°.99S±0°.09×124°.2E±0°.1, h10km, n9, σ1§70/11, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.94** | **326** | P | | **P** | **Pg** | **20 06 57.9** | **-0.2** |
| **SOEI** | **Soe** | **1.23** | **4** | P | | **P** | **Pn** | **20 07 04.2** | **+0.8** |
| **MMRI** | **Maumere** | **3.03** | **320** | P | | **P** | **Pn** | **20 07 29.0** | **+0.9** |
| **EDFI** | **Ende, Flores** | **3.32** | **312** | P | | **P** | **Pn** | **20 07 31.9** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **4.91** | **285** | P | | **P** | **Pn** | **20 07 54.8** | **+0.8** |
| **WRA** | **Warramunga Arr** | **13.22** | **134** | Pn | | **P** | **Pn** | **20 09 49.6** | **+1.6** |
| | 0.7nm,0.3s,baz=307,slow=15,SNR=66 | | | | | | | | |
| WRA | | | | Sn | | **Sn** | **Sn** | **20 12 13.3** | **-1.8** |
| | 0.6nm,0.3s,baz=314,slow=26,SNR=6.9 1.2nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **15.64** | **145** | Pn | | **P** | **Pn** | **20 10 23.4** | **+2.7** |
| | 0.6nm,0.3s,baz=320,slow=12,SNR=88 | | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **Sn** | **20 13 11.8** | **-2.3** |
| | 0.1nm,0.3s,baz=313,slow=22,SNR=2.2 3.5nm,0.6s | | | | | | | | |
| **SONM** | **Songino Array** | **60.67** | **346** | P | | **P** | **P** | **20 16 51.3** | **-0.1** |
| | 0.2nm,0.5s,baz=145,slow=5.3,SNR=1.8 0.2nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.62** | **330** | P | | **P** | **P** | **20 17 41.9** | **-1.4** |
| | 0.2nm,0.5s,baz=130,slow=7.9,SNR=2.9 0.2nm,0.5s | | | | | | | | |

*IDC **28** 20:14:14.9±0.7, 22°.16S×170°.31E, h0km, mb4.3/13, mbtmp4.3/14, ML4.5/1, MS3.6/5, Error ellipse: s-maj=21.6km s-min=18.8km az=104.0*
*NEIC **28** 20:14:18.1±2.2, 22°.35S±0°.07×169°.96E±0°.07, h10km±1km, mb4.8/28, Error ellipse: s-maj=13.2km s-min=9.8km az=146.0*
*NOU **28** 20:14:19.6, 22°.09S×169°.87E, h0km, ML4.8/9, Southeast of Loyalty Islands*
**ISC 28 20:14:18.8±0.4, 22°.26S±0°.06×170°.01E±0°.06, h21km, n104, σ1§10/110, mb4.6/29, MS3.9/4, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **1.99** | **292** | P | | **P** | **Pn** | **20 14 51.7** | **+0.4** |
| **PINNC** | **Pines Island,** | **2.40** | **261** | | | **Pn** | **Pn** | **20 14 56.0** | **-0.9** |
| PINNC | | | | Sn | | **Sn** | **Sn** | **20 15 22.5** | **-3.1** |
| **YATNC** | **Mamie plateau,** | **2.90** | **273** | P | | **P** | **Pn** | **20 15 04.1** | **+0.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LIFNC** | **LIFOU** | **2.97** | **299** | P | | **Pn** | **20 15 04.5** | **-0.2** |
| **LIFNC** | **LIFOU** | **2.97** | **299** | | | **Pn** | **20 15 04.8** | **+0.1** |
| LIFNC | | | | Sn | | **Sn** | **20 15 36.7** | **-3.0** |
| **DZM** | **Mont Dzumac** | **3.31** | **273** | P | | **Pn** | **20 15 11.0** | **+1.5** |
| **DZM** | **Mont Dzumac** | **3.31** | **273** | | | **Pn** | **20 15 10.7** | **+1.2** |
| DZM | | | | Sn | | **Sn** | **20 15 47.5** | **-0.8** |
| **DZM** | **Mont Dzumac** | **3.31** | **273** | Pn | | **Pn** | **20 15 11.1** | **+1.6** |
| | 36nm,0.3s,baz=124,slow=11,SNR=814 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **20 15 48.8** | **+0.6** |
| | 63nm,0.3s,baz=90,slow=22,SNR=14 84nm,0.3s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.44** | **272** | P | | **Pn** | **20 15 12.7** | **+1.5** |
| **RTV** | **Rentapao** | **4.68** | **341** | P | | **Pn** | **20 15 29.2** | **+0.9** |
| **DVP** | **Devils Point** | **4.82** | **339** | P | | **Pn** | **20 15 30.3** | **+0.1** |
| KOUNC | **Koumac, New Ca** | **5.60** | **287** | P | | **Pn** | **20 15 43.0** | **+2.2** |
| KOUNC | **Koumac, New Ca** | **5.60** | **287** | | | **Pn** | **20 15 42.4** | **+1.5** |
| KOUNC | | | | Sn | | **Sn** | **20 16 42.0** | **-2.6** |
| **MSVF** | **Nonsavu** | **8.79** | **61** | | | **Pn** | **20 16 26.8** | **+1.9** |
| **MSVF** | **Nonsavu** | **8.79** | **61** | Pn | | **Pn** | **20 16 26.6** | **+1.7** |
| | 0.2nm,0.3s,baz=162,slow=19,SNR=5.2 | | | | | | | |
| **URZ** | **Urewera** | **17.08** | **161** | LR | | LR | 20 23 31.1 | |
| | comp=Z,193nm,18.5s,baz=65,slow=33 | | | | | | | |
| **MRZ** | **Mangatainoka R** | **18.95** | **167** | P | | **P** | **20 18 37.2** | **-1.2** |
| MRZ | | | | IAmb | | IAmb | 20 18 48.4 | |
| | comp=Z,106nm,1.8s | | | | | | | |
| **TCW** | **Tory Channel** | **19.24** | **170** | P | | **P** | **20 18 40.5** | **-1.2** |
| **CTA** | **Charters Tower** | **22.25** | **271** | P | | **P** | **20 19 16.2** | **+1.7** |
| | comp=Z,0.6nm,0.8s,baz=94,slow=12,SNR=3.5 | | | | | | | |
| CTA | | | | LR | | LR | 20 28 01.1 | |
| | comp=Z,16nm,18.0s,baz=94,slow=37 | | | | | | | |
| **TOO** | **Toolangi** | **26.06** | **229** | P | | **P** | **20 19 49.7** | **-1.1** |
| TOO | | | | IAmb | | IAmb | 20 19 58.7 | |
| | comp=Z,50nm,1.9s | | | | | | | |
| **COEN** | **Coen** | **26.77** | **283** | P | | **P** | **20 19 57.2** | **-0.2** |
| COEN | | | | IAmb | | IAmb | 20 19 59.2 | |
| | comp=Z,39nm,1.6s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.99** | **243** | P | | **P** | **20 19 58.2** | **-1.0** |
| **STKA** | **Stephens Creek** | **26.99** | **243** | P | | **P** | **20 20 01.4** | **+2.1** |
| | comp=Z,6.0nm,0.7s,baz=93,slow=14,SNR=4.9 comp=Z,6.0nm,0.7s | | | | | | | |
| **BBOO** | **Buckleboo** | **31.77** | **243** | P | | **P** | **20 20 41.2** | **-0.5** |
| **WR0** | **Warramunga Arr** | **33.12** | **267** | P | | **P** | **20 20 53.7** | **0.0** |
| **AS31** | **Alice Springs** | **33.22** | **260** | P | | **P** | **20 20 55.1** | **+0.6** |
| **ASAR** | **Alice Springs** | **33.22** | **260** | P | | **P** | **20 20 55.8** | **+1.2** |
| | comp=Z,3.3nm,0.8s,baz=83,slow=9.1,SNR=23 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **20 23 36.7** | **-0.3** |
| | comp=Z,0.9nm,0.9s,baz=79,slow=4.8,SNR=1.9 comp=Z,3.3nm,0.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.30** | **268** | P | | **P** | **20 20 55.6** | **+0.4** |
| WB0 | | | | IAmb | | IAmb | 20 21 03.3 | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.30** | **267** | P | | **P** | **20 20 53.6** | **-1.7** |
| **WRA** | **Warramunga Arr** | **33.31** | **267** | P | | **P** | **20 20 55.8** | **+0.4** |
| | comp=Z,3.2nm,0.6s,baz=98,slow=8.2,SNR=56 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **20 23 37.9** | **+0.6** |
| | comp=Z,0.6nm,0.9s,baz=92,slow=4.2,SNR=2.6 | | | | | | | |
| WRA | | | | LR | | LR | 20 34 58.4 | |
| | comp=Z,235nm,18.3s,baz=67,slow=37 comp=Z,3.2nm,0.6s | | | | | | | |
| **MTN** | **Manton Dam** | **38.14** | **278** | P | | **P** | **20 21 37.7** | **+0.9** |
| **FORT** | **Forrest** | **38.31** | **248** | P | | **P** | **20 21 39.3** | **+1.2** |
| FORT | | | | IAmb | | IAmb | 20 21 56.1 | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **39.46** | **272** | P | | **P** | **20 21 47.4** | **-0.5** |
| KNRA | | | | IAmb | | IAmb | 20 23 06.8 | |
| | comp=Z,30nm,1.6s | | | | | | | |
| **FAKI** | **Fak Fak** | **41.37** | **292** | P | | **P** | **20 22 03.7** | **0.0** |
| **FITZ** | **Fitzroy Crossi** | **41.74** | **267** | P | | **P** | **20 22 07.0** | **+0.2** |
| **MBWA** | **Marble Bar** | **46.55** | **261** | P | | **P** | **20 22 45.2** | **-0.1** |
| **NWAO** | **Narrogin (SRO)** | **47.54** | **245** | P | | **P** | **20 22 53.5** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **47.54** | **245** | LR | | LR | 20 42 48.1 | |
| | comp=Z,179nm,18.0s,baz=76,slow=36 | | | | | | | |
| **TOLI2** | **Tolitoli** | **53.30** | **289** | P | | **P** | **20 23 37.5** | **+0.8** |
| **SBA** | **Scott Base** | **55.67** | **181** | P | | **P** | **20 23 52.8** | **-0.1** |
| SBA | | | | IAmb | | IAmb | 20 24 00.3 | |
| | comp=Z,20nm,1.8s | | | | | | | |
| **CASY** | **Casey** | **57.67** | **204** | P | | **P** | **20 24 06.9** | **-0.4** |
| CASY | | | | IAmb | | IAmb | 20 25 23.2 | |
| | comp=Z,22nm,1.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.74** | **332** | P | | **P** | **20 25 00.7** | **-1.4** |
| | comp=Z,4.4nm,1.0s,baz=167,slow=6.3,SNR=8.8 comp=Z,4.4nm,1.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **65.75** | **332** | P | | **P** | **20 25 01.6** | **-0.5** |
| MAJO | | | | IAmb | | IAmb | 20 25 02.3 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **65.75** | **332** | P | | **P** | **20 25 01.2** | **-0.9** |
| MJB9 | | | | IAm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARSA** | **Arzberg** | **147.70** | **327** | *i* PKiKP | **PKPab** | **20 34 04.6** | **+0.5** |
| | comp=Z,3.5nm,1.4s | | | | | | | |
| **GRA1** | **Grafenberg Arr** | **147.91** | **334** | | **PKPbc** | **20 34 01.1** | **-1.2** |
| **GRFO** | **Grafenberg** | **147.91** | **334** | | **PKPbc** | **20 34 01.1** | **-1.1** |
| **BIOA** | **Bad Ischl, Aus** | **148.32** | **329** | *i* PKiKP | **PKiKP** | **20 34 05.8** | **+0.7** |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **SOKA** | **Soboth** | **148.33** | **326** | *e*PKiKP | **PKiKP** | **20 34 05.3** | **+0.1** |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **OBKA** | **Obir** | **148.69** | **326** | *i* PKP | **PKPdf** | **20 34 02.3** | **+1.5** |
| | comp=Z,8.4nm,1.3s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.90** | **328** | *i* PKiKP | **PKiKP** | **20 34 06.8** | **+0.3** |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| **LESA** | **Schwarzleotal** | **148.97** | **329** | *e*PKP | **PKPbc** | **20 34 04.9** | **-0.3** |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **MYKA** | **Terra Mystica** | **149.06** | **327** | *e*PKP | **PKPab** | **20 34 09.5** | **-0.1** |
| | comp=Z,2.4nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.53** | **329** | *i* PKiKP | **PKiKP** | **20 34 09.7** | **+2.0** |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **WATA** | **Walderalm** | **149.54** | **330** | *e*PKiKP | **PKiKP** | **20 34 07.8** | **0.0** |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.57** | **330** | *e*PKiKP | **PKiKP** | **20 34 08.7** | **+0.8** |
| | comp=Z,4.4nm,1.1s | | | | | | | |
| **MOTA** | **Moosalm** | **149.75** | **331** | *i* PKP | **PKPbc** | **20 34 06.8** | **-0.4** |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **RETA** | **Reutte** | **149.80** | **331** | *i* PKP | **PKiKP** | **20 34 07.8** | **-0.4** |
| | comp=Z,7.3nm,1.4s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.80** | **331** | *i* PKP | **PKPbc** | **20 34 07.4** | **+0.1** |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **FETA** | **Feichten** | **150.16** | **331** | *e*PKP | **PKPbc** | **20 34 08.1** | **-0.1** |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| **DAVA** | **Damuels** | **150.34** | **332** | *i* PKP | **PKPab** | **20 34 13.3** | **-1.7** |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **ESDC** | **Sonseca Array** | **161.89** | **345** | PKPab | **PKPab** | **20 35 03.7** | **-0.7** |
| | comp=Z,0.6nm,0.8s,baz=2.6,slow=3.3,SNR=4.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.66** | **233** | PKP | **PKPdf** | **20 34 21.9** | **-0.9** |
| | comp=Z,0.7nm,0.8s,baz=168,slow=0.9,SNR=4.5 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **20 35 23.5** | **+1.9** |
| | comp=Z,0.4nm,0.9s,baz=101,slow=4.7,SNR=1.6 | | | | | | | |

*ISK **28** 20:21:13.8,38°.83N×25°.86E,h5km,ML2.6/25*
*ATH **28** 20:21:14.1,38°.84N×25°.84E,h11km±2km,ML2.4/7, Error ellipse: s-maj=2.8km s-min=0.9km az=92.0*
*AFAD **28** 20:21:15.1±0.0,38°.90N×26°.00E,h7km±3km,ML2.6*
**ISC 28 20:21:12.5**±1.2,**38°.83N**±0°.02×**25°.81E**±0°.02,**h8**km±10km,
**n51,σ0°67/76,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EAG2** | **Marmaro, Chios** | **0.37** | **140** | P | **Pg** | **20 21 20.7** | **+1.0** |
| EAG2 | | | | S | **Sb** | **20 21 26.4** | **-0.9** |
| EAG2 | | | | AML | AML | 20 21 27.5 | |
| | comp=N,23138μm,0.3s | | | | | | |
| EAG2 | | | | AML | AML | 20 21 28.1 | |
| | comp=E,22249μm,0.3s | | | | | | |
| **SIGR** | **SIGRI** | **0.38** | **6** | Pg | **Pb** | **20 21 21.7** | **+0.1** |
| SIGR | | | | Sg | **Sb** | **20 21 27.5** | **-0.2** |
| **SIGR** | **SIGRI** | **0.38** | **6** | P | **Pb** | **20 21 22.0** | **+0.4** |
| SIGR | | | | S | **Sb** | **20 21 26.7** | **-1.0** |
| SIGR | | | | AML | AML | 20 21 27.9 | |
| | comp=N,3538μm,0.4s | | | | | | |
| SIGR | | | | AML | AML | 20 21 30.9 | |
| | comp=E,1749μm,0.4s | | | | | | |
| **KARB** | **zmir-Karabur** | **0.50** | **109** | P | **Pg** | **20 21 23.2** | **+1.0** |
| **PRK** | **Paraskevi** | **0.55** | **41** | P | **Pb** | **20 21 24.1** | **-0.3** |
| PRK | | | | S | **Sg** | **20 21 31.1** | **+0.7** |
| PRK | | | | AML | AML | 20 21 35.9 | |
| | comp=E,737μm,0.3s | | | | | | |
| PRK | | | | AML | AML | 20 21 36.4 | |
| | comp=N,1051μm,0.3s | | | | | | |
| **CESE** | **eme** | **0.63** | **142** | Pg | **Pb** | **20 21 26.1** | **+0.3** |
| CESE | | | | Sg | **Sb** | **20 21 34.5** | **-0.3** |
| **GPNR** | **Gulpinar-Canak** | **0.68** | **22** | Pg | **Pb** | **20 21 26.6** | **0.0** |
| GPNR | | | | Sg | **Sb** | **20 21 36.6** | **+0.5** |
| **KOCA** | **Canakkale, Ayv** | **0.72** | **21** | P | **Pb** | **20 21 27.4** | **0.0** |
| KOCA | | | | S | **Sb** | **20 21 38.6** | **+1.2** |
| KOCA | | | | *i* AML | AML | 20 21 40.0 | |
| | comp=N,625nm,0.4s | | | | | | |
| KOCA | | | | *i* AML | AML | 20 21 40.0 | |
| | comp=N,667nm,0.5s | | | | | | |
| **FOCM** | **Foa** | **0.73** | **99** | Pg | **Pb** | **20 21 27.5** | **0.0** |
| **AYVA** | **Ayvalik** | **0.84** | **55** | P | **Pg** | **20 21 28.2** | **-0.4** |
| AYVA | | | | S | **Sg** | **20 21 37.9** | **-1.6** |
| AYVA | | | | *i* AML | AML | 20 21 42.0 | |
| | comp=N,311nm,0.3s | | | | | | |
| **IZMD** | **zmir-Dikili-** | **0.89** | **80** | P | **Pb** | **20 21 30.6** | **+0.3** |
| IZMD | | | | P | **Pn** | **20 21 31.0** | **-0.5** |
| IZMD | | | | S | **Sg** | **20 21 39.6** | **-1.5** |
| **DKL** | **Dikili** | **0.89** | **74** | Pg | **Pb** | **20 21 30.5** | **+0.3** |
| DKL | | | | Sg | **Sb** | **20 21 42.7** | **+0.4** |
| **EZNE** | **Ezine-Canakkal** | **1.02** | **25** | Pg | **Pn** | **20 21 33.6** | **+0.4** |
| EZNE | | | | Sg | **Sn** | **20 21 47.5** | **-0.2** |
| **BOZC** | **Bozcaada** | **1.03** | **11** | P | **Pb** | **20 21 32.6** | **0.0** |
| BOZC | | | | P | **Pn** | **20 21 32.8** | **-0.5** |
| BOZC | | | | S | **Sb** | **20 21 46.7** | **+0.4** |
| BOZC | | | | *i* AML | AML | 20 21 49.0 | |
| | comp=N,134nm,0.4s | | | | | | |
| **EZN** | **Ezine** | **1.07** | **22** | Pg | **Pn** | **20 21 33.8** | **-0.1** |
| EZN | | | | Sg | **Sn** | **20 21 49.1** | **+0.1** |
| **BAYC** | **CANAKKALE_Bayr** | **1.08** | **32** | P | **Pb** | **20 21 33.7** | **+0.3** |
| BAYC | | | | S | **Sn** | **20 21 48.8** | **-0.3** |
| **GMLD** | **Gumuldur** | **1.15** | **130** | Pn | **Pn** | **20 21 36.1** | **+0.2** |
| **LIA** | **Limnos Island** | **1.17** | **336** | P | **Pn** | **20 21 35.8** | **+0.6** |
| LIA | | | | S | **Sn** | **20 21 51.2** | **-0.3** |
| LIA | | | | AML | AML | 20 21 54.2 | |
| | comp=E,654μm,0.7s | | | | | | |
| LIA | | | | AML | AML | 20 21 55.4 | |
| | comp=N,580μm,0.3s | | | | | | |
| **BUHA** | **Balikesir, Bur** | **1.19** | **55** | P | **Pb** | **20 21 34.8** | **-0.6** |
| **ECEA** | **Canakkale, Ece** | **1.25** | **13** | P | **Pg** | **20 21 37.0** | **+0.6** |
| ECEA | | | | S | **Sn** | **20 21 54.0** | **+0.7** |
| ECEA | | | | *i* AML | AML | 20 21 57.0 | |
| | comp=N,271nm,0.6s | | | | | | |
| **CNKL** | **anakkale-Mer** | **1.31** | **20** | P | **Pn** | **20 21 36.5** | **-0.7** |
| CNKL | | | | P | **Pg** | **20 21 38.1** | **+0.4** |
| CNKL | | | | S | **Sb** | **20 21 54.0** | **-0.6** |
| CNKL | | | | *i* AML | AML | 20 21 57.0 | |
| | comp=N,102nm,0.5s | | | | | | |
| CNKL | | | | *i* AML | AML | 20 21 57.0 | |
| | comp=N,100nm,0.4s | | | | | | |
| **GOAD** | **anakkale-G¶** | **1.33** | **3** | P | **Pg** | **20 21 38.7** | **+0.6** |
| GOAD | | | | S | **Sn** | **20 21 55.9** | **+0.4** |
| GOAD | | | | *i* AML | AML | 20 21 58.0 | |
| | comp=N,173nm,0.8s | | | | | | |
| **KYMI** | **Kymi, Euboea I** | **1.35** | **262** | P | **Pg** | **20 21 37.9** | **-0.4** |
| KYMI | | | | S | **Sn** | **20 21 56.0** | **+0.2** |
| KYMI | | | | AML | AML | 20 22 08.3 | |
| | comp=E,82μm,0.7s | | | | | | |
| KYMI | | | | AML | AML | 20 22 08.9 | |
| | comp=N,95μm,0.8s | | | | | | |
| **GADA** | **Gvkgeada** | **1.36** | **3** | Pn | **Pg** | **20 21 39.5** | **+0.9** |
| **COMU** | **Canakkale** | **1.37** | **22** | Pn | **Pg** | **20 21 39.4** | **+0.6** |
| **TNSA** | **Tinos** | **1.38** | **202** | P | **Pg** | **20 21 39.0** | **0.0** |
| **SOMA** | **Soma-Manisa** | **1.39** | **76** | Pn | **Pg** | **20 21 39.6** | **+0.5** |
| **YENI** | **Yenice-Canakka** | **1.57** | **45** | Pn | **Pg** | **20 21 42.7** | **+0.1** |
| **GCAM** | **G?zelcaml?** | **1.59** | **135** | Pn | **Pg** | **20 21 43.1** | **+0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.65** | **18** | Pn | **Pg** | **20 21 43.9** | **-0.2** |
| **DION** | **Dionisos Attik** | **1.65** | **244** | P | **Pb** | **20 21 42.6** | **-0.6** |
| **SMTH** | **Samothraki Isl** | **1.65** | **353** | P | **Pb** | **20 21 42.6** | **-0.6** |
| SMTH | | | | S | **Sn** | **20 22 03.6** | **+0.2** |
| **LPK** | **Lapseki** | **1.71** | **25** | Pn | **Pb** | **20 21 44.7** | **+0.5** |
| **APE** | **Apeiranthos** | **1.77** | **187** | Pn | **Pb** | **20 21 45.2** | **-0.1** |
| **APE** | **Apeiranthos** | **1.77** | **187** | P | **Pn** | **20 21 44.3** | **+0.8** |
| **GORD** | **Gordes-Manisa** | **1.85** | **87** | Pn | **Pb** | **20 21 46.5** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.86** | **118** | Pn | **Pb** | **20 21 46.6** | **-0.2** |
| **ODEM** | **Odemis-Izmir** | **1.86** | **107** | Pn | **Pb** | **20 21 46.6** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **1.90** | **50** | Pn | **Pb** | **20 21 47.1** | **-0.3** |
| **ERIK** | **Erikli-Kesan** | **1.92** | **16** | Pn | **Pb** | **20 21 46.9** | **-0.8** |
| **ENEZ** | **Enez** | **1.92** | **8** | Pn | **Pb** | **20 21 47.7** | **-0.1** |
| **THAS** | **Thassos island** | **1.96** | **335** | P | **Pn** | **20 21 47.1** | **+1.0** |
| THAS | | | | S | **Sn** | **20 22 10.1** | **-0.9** |
| THAS | | | | AML | AML | 20 22 19.9 | |
| | comp=N,47μm,0.4s | | | | | | |
| THAS | | | | AML | AML | 20 22 21.9 | |
| | comp=E,44μm,0.3s | | | | | | |
| **OUR** | **Ouranopolis** | **2.06** | **317** | Pn | **Pb** | **20 21 49.9** | **-0.3** |
| **ALN** | **Alexandroupoli** | **2.07** | **5** | Pn | **Pb** | **20 21 49.8** | **-0.6** |
| **ALN** | **Alexandroupoli** | **2.07** | **5** | P | **Pn** | **20 21 48.4** | **+0.8** |
| ALN | | | | S | **Sn** | **20 22 13.1** | **-0.6** |
| ALN | | | | AML | AML | 20 22 22.3 | |
| | comp=E,52μm,0.5s | | | | | | |
| ALN | | | | AML | AML | 20 22 27.6 | |
| | comp=N,58μm,0.5s | | | | | | |
| **VIL2** | **Platees** | **2.08** | **254** | P | **Pn** | **20 21 48.8** | **+0.9** |
| **SUSR** | **Susurluk-Balik** | **2.10** | **57** | Pn | **Pb** | **20 21 49.9** | **-0.9** |
| **RKY** | **Sarkoy-Tekirda** | **2.14** | **29** | Pn | **Pb** | **20 21 50.5** | **-1.0** |
| **MRMT** | **Marmara Adasi** | **2.25** | **37** | Pn | **Pb** | **20 21 52.4** | **-1.0** |
| **UKOP** | **Uzunkopru-Edir** | **2.38** | **15** | Pn | **Pn** | **20 21 53.6** | **+1.7** |
| **KCTX** | **Karacabey (Bur** | **2.44** | **53** | Pn | **Pn** | **20 21 54.1** | **+1.4** |

*IDC **28** 20:25:22.4±0.7,22°.15S×170°.26E,h0km,mb4.4/14, mbtmp4.4/15,ML4.4/1,MS3.8/12, Error ellipse: s-maj=21.0km s-min=17.7km az=112.0*
*NEIC **28** 20:25:24.9±2.0,22°.18S±0°.08×170°.07E±0°.07,h10km±1km, mb4.8/34, Error ellipse: s-maj=14.4km s-min=10.6km az=165.0*
*NOU **28** 20:25:26.2,22°.12S×169°.90E,h0km,MLv4.7/9, Southeast of Loyalty Islands*
**ISC 28 20:25:26.7**±0.4,**22°.22S**±0°.06×**170°.02E**±0°.06,**h25**km,**n120,**
**σ1§19/120,mb4.6/31,MS3.8/11,5C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.99** | **291** | P | **Pn** | **20 25 58.8** | **0.0** |
| **PINNC** | **Pines Island,** | **2.41** | **260** | P | **Pn** | **20 26 05.2** | **+0.6** |
| **PINNC** | **Pines Island,** | **2.41** | **260** | | **Pn** | **20 26 04.7** | **+0.2** |
| PINNC | | | | Sn | **Sn** | **20 26 26.2** | **-7.1** |
| **YATNC** | **Mamie plateau,** | **2.91** | **273** | P | **Pn** | **20 26 11.5** | **+0.1** |
| **LIFNC** | **LIFOU** | **2.96** | **298** | P | **Pn** | **20 26 11.6** | **-0.5** |
| **LIFNC** | **LIFOU** | **2.96** | **298** | | **Pn** | **20 26 11.4** | **-0.7** |
| LIFNC | | | | Sn | **Sn** | **20 26 44.3** | **-2.5** |
| **DZM** | **Mont Dzumac** | **3.32** | **272** | P | **Pn** | **20 26 18.1** | **+0.9** |
| **DZM** | **Mont Dzumac** | **3.32** | **272** | *e*Pn | **Pn** | **20 26 16.3** | **-0.8** |
| | 253nm,1.0s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **20 26 56.4** | **+0.5** |
| | 898nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **3.32** | **272** | | **Pn** | **20 26 17.3** | **+0.1** |
| DZM | | | | Sn | **Sn** | **20 26 57.0** | **+1.2** |
| **DZM** | **Mont Dzumac** | **3.32** | **272** | Pn | **Pn** | **20 26 18.2** | **+1.1** |
| | 31nm,0.3s,baz=135,slow=14,SNR=622 | | | | | | |
| DZM | | | | Sn | **Sn** | **20 26 55.9** | **+0.1** |
| | 67nm,0.3s,baz=108,slow=20,SNR=12 | | | | | | |
| | 75nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.45** | **271** | P | **Pn** | **20 26 19.8** | **+1.0** |
| **RTV** | **Rentapao** | **4.65** | **341** | P | **Pn** | **20 26 36.6** | **+1.2** |
| **DVP** | **Devils Point** | **4.79** | **339** | P | **Pn** | **20 26 37.3** | **0.0** |
| **KOUNC** | **Koumac, New Ca** | **5.59** | **286** | P | **Pn** | **20 26 49.9** | **+1.5** |
| **KOUNC** | **Koumac, New Ca** | **5.59** | **286** | | **Pn** | **20 26 48.7** | **+0.4** |
| KOUNC | | | | Sn | **Sn** | **20 27 54.2** | **+2.3** |
| **MSVF** | **Nonsavu** | **8.77** | **61** | Pn | **Pn** | **20 27 30.7** | **-1.4** |
| **MSVF** | **Nonsavu** | **8.77** | **61** | Pn | **Pn** | **20 27 34.7** | **+2.7** |
| | 0.8nm,0.3s,baz=188,slow=11,SNR=7.7 | | | | | | |
| MSVF | | | | LR | LR | 20 30 07.3 | |
| | comp=Z,834nm,18.2s,baz=171,slow=33 | | | | | | |
| **URZ** | **Urewera** | **17.11** | **161** | LR | LR | 20 34 38.1 | |
| | comp=Z,240nm,19.9s,baz=56,slow=32 | | | | | | |
| **BKZ** | **Black Stump Fm** | **17.78** | **163** | P | **P** | **20 29 33.8** | **+0.7** |
| **ARMA** | **Armidale** | **18.38** | **240** | P | **P** | **20 29 38.6** | **-1.3** |
| **MRZ** | **Mangatainoka R** | **18.98** | **167** | P | **P** | **20 29 46.6** | **+0.4** |
| MRZ | | | | IAmb | IAmb | 20 29 54.1 | |
| | comp=Z,110nm,1.6s | | | | | | |
| **BFZ** | **Birch Farm** | **19.15** | **165** | P | **P** | **20 29 48.0** | **-0.2** |
| BFZ | | | | IAmb | IAmb | 20 29 56.4 | |
| | comp=Z,100nm,1.7s | | | | | | |
| **CTA** | **Charters Tower** | **22.26** | **271** | P | **P** | **20 30 24.6** | **+2.5** |
| | comp=Z,0.6nm,0.8s,baz=91,slow=9.6,SNR=7.0 | | | | | | |
| CTA | | | | LR | LR | 20 38 23.6 | |
| | comp=Z,9.6nm,18.0s,baz=92,slow=35 | | | | | | |
| **CTAO** | **Charters Tower** | **22.26** | **271** | P | **P** | **20 30 23.4** | **+1.4** |
| **CAN** | **Canberra** | **22.52** | **230** | P | **P** | **20 30 27.1** | **+2.3** |
| CAN | | | | IAmb | IAmb | 20 30 39.8 | |
| | comp=Z,58nm,1.4s | | | | | | |
| **TOO** | **Toolangi** | **26.09** | **229** | P | **P** | **20 30 57.4** | **-1.1** |
| TOO | | | | IAmb | IAmb | 20 31 25.8 | |
| | comp=Z,52nm,1.6s | | | | | | |
| **COEN** | **Coen** | **26.77** | **283** | P | **P** | **20 31 04.2** | **-0.7** |
| COEN | | | | IAmb | IAmb | 20 31 38.1 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **27.01** | **243** | P | **P** | **20 31 06.4** | **-0.4** |
| **STKA** | **Stephens Creek** | **27.01** | **243** | P | **P** | **20 31 09.2** | **+2.3** |
| | comp=Z,5.6nm,0.7s,baz=90,slow=11,SNR=10 | | | | | | |
| STKA | | | | LR | LR | 20 41 26.4 | |
| | comp=Z,210nm,19.1s,baz=43,slow=35 | | | | | | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **31.79** | **243** | P | **P** | **20 31 49.8** | **+0.5** |
| **ASAR** | **Alice Springs** | **33.24** | **260** | P | **P** | **20 32 02.8** | **+0.7** |
| | comp=Z,4.2nm,0.8s,baz=83,slow=8.6,SNR=23 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 34 44.4** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=86,slow=5.1,SNR=1.7 | | | | | | |
| ASAR | | | | LR | LR | 20 44 39.2 | |
| | comp=Z,158nm,21.1s,baz=102,slow=35 | | | | | | |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.31** | **268** | P | **P** | **20 32 02.3** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 20 32 07.7 | |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.31** | **267** | P | **P** | **20 32 02.9** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 20 32 13.6 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.32** | **267** | P | **P** | **20 32 02.9** | **0.0** |
| | comp=Z,4.2nm,0.6s,baz=100,slow=8.1,SNR=36 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 34 45.0** | **+0.4** |
| | comp=Z,0.7nm,0.9s,baz=93,slow=4.1,SNR=2.6 | | | | | | |
| WRA | | | | LR | LR | 20 46 05.9 | |
| | comp=Z,211nm,18.6s,baz=48,slow=37 | | | | | | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **TBI** | **Tubuai** | **37.29** | **100** | *e*LR | LR | 20 42 32.6 | |
| | comp=Z,443nm,40.0s | | | | | | |
| **MTN** | **Manton Dam** | **38.14** | **278** | P | **P** | **20 32 44.2** | **0.0** |
| **PPT2** | **Papeete2** | **38.19** | **90** | *e*LR | LR | 20 42 59.2 | |
| | comp=Z,66nm,24.2s | | | | | | |
| **FORT** | **Forrest** | **38.33** | **248** | P | **P** | **20 32 45.8** | **+0.2** |
| FORT | | | | IAmb | IAmb | 20 33 11.1 | |
| | comp=Z,30nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **39.47** | **272** | P | **P** | **20 32 55.9** | **+0.5** |
| **FAKI** | **Fak Fak** | **41.36** | **292** | P | **P** | **20 33 11.1** | **0.0** |
| FAKI | | | | IAmb | IAmb | 20 34 12.8 | |
| | comp=Z,45nm,1.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.75** | **267** | P | **P** | **20 33 14.0** | **-0.2** |
| **GUMO** | **Guam** | **43.30** | **323** | LR | LR | 20 53 03.2 | |
| | comp=Z,41nm,18.0s,baz=136,slow=38 | | | | | | |
| **PSAO** | **Pilbara Seismi** | **46.38** | **261** | P | **P** | **20 33 51.9** | **+0.5** |
| **MBWA** | **Marble Bar** | **46.56** | **261** | P | **P** | **20 33 52.8** | **0.0** |
| **NWAO** | **Narrogin (SRO)** | **47.57** | **245** | P | **P** | **20 33 59.8** | **-0.7** |
| **NWAO** | **Narrogin (SRO)** | **47.57** | **245** | LR | LR | 20 53 54.7 | |
| | comp=Z,168nm,18.7s,baz=320,slow=36 | | | | | | |
| **RKT** | **Rikitea** | **50.51** | **102** | *e*LR | LR | 20 48 47.8 | |
| | comp=Z,3μm,37.8s | | | | | | |
| **GIRL** | **Giralia** | **51.30** | **258** | P | **P** | **20 34 29.9** | **+0.8** |
| **TOLI2** | **Tolitoli** | **53.30** | **289** | P | **P** | **20 34 44.3** | **+0.3** |
| TOLI2 | | | | IAmb | IAmb | 20 34 56.8 | |
| | comp=Z,5.3nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.72** | **332** | P | **P** | **20 36 08.4** | **-0.8** |
| | comp=Z,4.4nm,0.9s,baz=169,slow=6.7,SNR=10 | | | | | | |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **MAJO** | **Matsushiro** | **65.72** | **332** | P | **P** | **20 36 07.6** | **-1.6** |
| MAJO | | | | IAmb | IAmb | 20 36 09.2 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **JNU** | **Nakatsue** | **66.51** | **325** | P | **P** | **20 36 13.3** | **-1.2** |
| **QSPA** | **South Pole Qui** | **67.85** | **180** | P | **P** | **20 36 23.2** | **+0.5** |
| QSPA | | | | IAmb | IAmb | 20 36 43.5 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.85** | **180** | P | **P** | **20 36 23.2** | **+0.5** |
| | comp=Z,2.5nm,0.8s,baz=57,slow=1.2,SNR=15 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **70.63** | **339** | P | **P** | **20 36 40.3** | **+0.4** |
| JKA | | | | IAmb | IAmb | 20 37 03.7 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **71.37** | **326** | P | **P** | **20 36 44.2** | **-0.2** |
| | comp=Z,3.4nm,0.8s,baz=145,slow=6.3,SNR=7.0 | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.71** | **333** | P | **P** | **20 37 05.0** | **+0.8** |
| | comp=Z,2.1nm,0.7s,baz=130,slow=3.0,SNR=5.5 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.77** | **352** | P | **P** | **20 37 10.3** | **+0.2** |
| | comp=Z,3.8nm,0.9s,baz=218,slow=11,SNR=2.2 | | | | | | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **75.96** | **202** | P | **P** | **20 37 11.8** | **+0.7** |
| | comp=Z,1.9nm,0.8s,baz=91,slow=12,SNR=4.9 | | | | | | |
| MAW | | | | LR | LR | 21 08 07.8 | |
| | comp=Z,41nm,18.2s,baz=192,slow=34 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **78.87** | **336** | LR | LR | 21 07 25.6 | |
| | comp=Z,35nm,21.9s,baz=78,slow=32 | | | | | | |
| **BELA** | **Belgrano 2** | **79.08** | **175** | P | **P** | **20 37 27.9** | **-0.6** |
| **PHRA** | **Phrae** | **79.33** | **295** | P | **P** | **20 37 32.3** | **+1.6** |
| **CRAI** | **Chiangrai** | **80.01** | **297** | P | **P** | **20 37 35.0** | **+0.5** |
| CRAI | | | | IAmb | IAmb | 20 37 37.8 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.39** | **294** | P | **P** | **20 37 38.8** | **+2.3** |
| | comp=Z,2.2nm,0.6s,baz=141,slow=3.9,SNR=13 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **CHGN** | **Chignik** | **82.65** | **17** | P | **P** | **20 37 46.1** | **-1.4** |
| **MA2** | **Magadan** | **83.02** | **350** | LR | LR | 21 09 51.1 | |
| | comp=Z,42nm,21.3s,baz=106,slow=32 | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.63** | **184** | ⇑P | **P** | **20 38 02.8** | **-0.1** |
| | comp=Z,240nm,0.6s | | | | | | |
| **N15K** | **Kwethluk River** | **85.64** | **14** | P | **P** | **20 38 02.0** | **-0.8** |
| **SNAA** | **Sanae** | **86.23** | **182** | P | **P** | **20 38 05.5** | **-0.4** |
| SNAA | | | | IAmb | IAmb | 20 38 30.5 | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **86.23** | **182** | ⇑P | **P** | **20 38 05.3** | **-0.5** |
| | comp=Z,33nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **86.23** | **182** | P | **P** | **20 38 05.2** | **-0.5** |
| | comp=Z,2.4nm,0.9s,baz=198,slow=7.7,SNR=16 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.79** | **180** | ⇑P | **P** | **20 38 07.9** | **-0.6** |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.09** | **181** | ⇑P | **P** | **20 38 09.9** | **0.0** |
| | comp=Z,5.9nm,0.6s,baz=176,slow=5.2 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.38** | **181** | ⇑P | **P** | **20 38 09.6** | **-1.7** |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **L19K** | **White Mountain** | **88.65** | **16** | P | **P** | **20 38 18.4** | **+1.1** |
| L19K | | | | IAmb | IAmb | 20 38 36.3 | |
| | comp=Z,15nm,1.6s | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.30** | **53** | LR | LR | 21 10 29.1 | |
| | comp=Z,38nm,19.4s,baz=168,slow=30 | | | | | | |
| **ULN** | **Ulaanbaatar** | **89.68** | **323** | P | **P** | **20 38 21.3** | **-1.4** |
| ULN | | | | IAmb | IAmb | 20 38 24.5 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **90.03** | **323** | P | **P** | **20 38 24.7** | **+0.5** |
| | comp=Z,4.0nm,0.9s,baz=138,slow=4.9,SNR=19 | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **LPIG** | **La Paz** | **90.05** | **64** | LR | LR | 21 12 22.0 | |
| | comp=Z,38nm,18.3s,baz=246,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.23** | **48** | P | **P** | **20 38 25.3** | **-0.2** |
| | comp=Z,0.5nm,0.6s,baz=232,slow=9.0,SNR=5.1 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **92.85** | **17** | P | **P** | **20 38 34.0** | **-2.8** |
| | comp=Z,0.7nm,0.6s,baz=238,slow=4.9,SNR=8.3 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **104.36** | **315** | Pdiff | **Pdif** | **20 39 29.9** | **+0.9** |
| | comp=Z,0.3nm,0.8s,baz=95,slow=4.9,SNR=2.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.12** | **345** | PKP | **PKPdf** | **20 44 29.6** | **-0.4** |
| | comp=Z,5.0nm,1.1s,baz=28,slow=4.3,SNR=1.7 | | | | | | |
| **FINES** | **FINESS Array B** | **133.60** | **337** | PKP | **PKPdf** | **20 44 38.2** | **-2.4** |
| | comp=Z,0.8nm,0.8s,baz=45,slow=0.6,SNR=1.7 | | | | | | |
| **PSZ** | **Piszkesteto** | **144.95** | **324** | | **PKPab** | **20 45 00.9** | **-0.1** |
| **MORC** | **Moravsky Berou** | **144.99** | **329** | | **PKPab** | **20 45 00.4** | **-0.6** |
| **OSTC** | **Ostas** | **145.08** | **331** | *e*PKP | **PKPdf** | **20 45 01.8** | **0.0** |
| **CHVC** | **Chvalec** | **145.13** | **331** | *e*PKP | **PKPdf** | **20 45 01.9** | **0.0** |
| **KRLC** | **Kraliky** | **145.15** | **329** | *e*PKP | **PKPdf** | **20 45 02.0** | **0.0** |
| **DPC** | **Dobruska-Polom** | **145.17** | **330** | *e*PKP | **PKPdf** | **20 45 02.5** | **+0.5** |
| DPC | | | | *e*pPKP | pPKPab | 20 45 07.6 | -0.2 |
| **UPC** | **Upice** | **145.20** | **331** | *e*PKP | **PKPdf** | **20 45 02.3** | **+0.3** |
| **PVCC** | **Panska Ves** | **145.83** | **332** | *e*PKP | **PKPab** | **20 45 05.0** | **+1.0** |
| **CLL** | **Collm** | **145.91** | **334** | | **PKPdf** | **20 45 02.1** | **-1.0** |
| **EKA** | **Eskdalemuir Ar** | **146.54** | **353** | PKPbc | **PKPbc** | **20 45 04.8** | **-0.7** |
| | comp=Z,4.0nm,0.6s,baz=355,slow=2.6,SNR=20 | | | | | | |
| **ZVC** | **Zvikov** | **146.79** | **331** | *e*PKP | **PKPbc** | **20 45 07.0** | **+0.5** |
| ZVC | | | | *ep*PKP | **pPKPdf** | **20 45 12.0** | **+0.6** |
| **RONA** | **Rosalia, Austr** | **146.98** | **327** | *i* PKP | **PKPab** | **20 45 07

**σ1§01/14, mb3.7/12, MS3.2/6, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **9.90** | **197** | Pn | **Pn** | **20 49 07.7** | **0.0** |
| | 0.1nm,0.3s,baz=3.5,slow=12,SNR=8.2 | | | | | | |
| CMAR | | | | Pg | | 20 49 45.5 | |
| | 0.3nm,0.3s,baz=1.1,slow=16,SNR=4.5 | | | | | | |
| CMAR | | | | Lg | Lg | 20 51 55.0 | |
| | 0.1nm,0.3s,baz=358,slow=29,SNR=5.0 | | | | | | |
| CMAR | | | | LR | LR | 20 53 16.5 | |
| | comp=Z,88nm,18.3s,baz=355,slow=40 0.8nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **20.09** | **9** | P | **P** | **20 51 19.4** | **+0.5** |
| | 1.2nm,0.9s,baz=194,slow=12,SNR=5.2 1.2nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **23.76** | **60** | P | **P** | **20 51 59.3** | **+1.6** |
| | 1.2nm,0.6s,baz=259,slow=10,SNR=3.8 | | | | | | |
| KSRS | | | | LR | LR | 21 00 58.0 | |
| | comp=Z,59nm,19.2s,baz=145,slow=36 1.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.25** | **326** | P | **P** | **20 52 01.4** | **-0.9** |
| | 2.8nm,0.6s,baz=134,slow=10,SNR=29 | | | | | | |
| MKAR | | | | LR | LR | 21 02 38.5 | |
| | comp=Z,59nm,18.7s,baz=196,slow=39 2.8nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **26.55** | **311** | LR | LR | 21 04 22.7 | |
| | comp=Z,73nm,19.8s,baz=193,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.69** | **328** | P | **P** | **20 52 41.1** | **-1.1** |
| | 0.9nm,0.8s,baz=141,slow=8.9,SNR=8.7 0.9nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **28.78** | **339** | P | **P** | **20 52 42.8** | **-0.1** |
| | 0.5nm,0.6s,baz=163,slow=7.7,SNR=3.7 0.5nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **28.97** | **48** | P | **P** | **20 52 44.4** | **-0.3** |
| | 0.7nm,0.6s,baz=238,slow=8.3,SNR=1.5 0.7nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **39.93** | **316** | LR | LR | 21 11 19.7 | |
| | comp=Z,40nm,20.8s,baz=220,slow=37 | | | | | | |
| **ARU** | **Arti** | **41.77** | **325** | LR | LR | 21 13 12.3 | |
| | comp=Z,59nm,20.9s,baz=104,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **56.63** | **301** | P | **P** | **20 56 29.4** | **+0.7** |
| | 0.2nm,0.5s,baz=120,slow=10,SNR=1.6 0.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.08** | **143** | P | **P** | **20 56 31.4** | **-0.4** |
| | 3.1nm,0.8s,baz=331,slow=7.8,SNR=5.8 3.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **59.95** | **146** | P | **P** | **20 56 51.9** | **+0.1** |
| | 0.5nm,0.4s,baz=327,slow=6.7,SNR=1.3 0.5nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **65.26** | **327** | P | **P** | **20 57 28.7** | **+1.9** |
| | 1.3nm,0.8s,baz=93,slow=15,SNR=2.4 1.3nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **66.22** | **328** | P | **P** | **20 57 33.5** | **+0.4** |
| | 0.7nm,0.8s,baz=76,slow=6.5,SNR=3.7 0.7nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **68.33** | **315** | P | **P** | **20 57 46.1** | **-0.6** |
| | 0.2nm,0.3s,baz=101,slow=5.1,SNR=1.7 0.2nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **73.43** | **25** | P | **P** | **20 58 16.1** | **-1.3** |
| | 0.3nm,0.6s,baz=266,slow=3.6,SNR=1.9 0.3nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.18** | **16** | LR | LR | 21 44 00.6 | |
| | comp=Z,26nm,18.1s,baz=314,slow=40 | | | | | | |

*NEIC* ***28*** *20:51:58.7±2.0, 7.°07S±0.°08×129.°07E±0.°07, h145km±6km, mb4.5/8, Error ellipse: s-maj=12.4km s-min=8.9km az=148.0*

*DJA* ***28*** *20:51:58.6±0.7, 7.°5S×12.°9E±.°, h211km±18km, M4.3/8, mb4.3/6, mB4.9/1, MLv4.3/8, Mw(mB)4.2/1*

*IDC* ***28*** *20:52:07.5±6.3, 7.°94S×128.°90E, h187km±62km, mb3.8/3, mbtmp4.2/5, Error ellipse: s-maj=100.5km s-min=26.0km az=71.0*

**ISC 28 20:51:59.0±0.7, 7.°14S±0.°06×129.°08E±0.°06, h156km, n40, σ2§23/42, mb4.5/6, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **2.35** | **111** | P | **Pn** | **20 52 40.5** | **+1.8** |
| **SAUI** | **Saumlaki** | **2.35** | **111** | Pn | **Pn** | **20 52 40.9** | **+2.2** |
| SAUI | | | | Sn | **Sn** | **20 53 08.5** | **-0.7** |
| **SAUI** | **Saumlaki** | **2.35** | **111** | P | **Pn** | **20 52 40.3** | **+1.6** |
| **MSAI** | **Masohi** | **3.77** | **358** | P | **Pn** | **20 52 57.5** | **+0.9** |
| **FAKI** | **Fak Fak** | **5.25** | **37** | P | **Pn** | **20 53 16.8** | **+0.9** |
| **FAKI** | **Fak Fak** | **5.25** | **37** | Pn | **Pn** | **20 53 15.1** | **-0.8** |
| FAKI | | | | Sn | **Sn** | **20 54 13.3** | **-2.6** |
| **FAKI** | **Fak Fak** | **5.25** | **37** | P | **Pn** | **20 53 16.6** | **+0.7** |
| | 37nm,1.3s,0.2nm | | | | | | |
| **SOEI** | **Soe** | **5.43** | **241** | Pn | **Pn** | **20 53 20.3** | **+2.0** |
| SOEI | | | | Sn | **Sn** | **20 54 19.9** | **-0.4** |
| **SOEI** | **Soe** | **5.43** | **241** | P | **Pn** | **20 53 20.7** | **+2.4** |
| | 65nm,0.6s,0.4nm | | | | | | |
| **DRS** | **Darwin Rock St** | **5.55** | **161** | P | **Pn** | **20 53 20.2** | **+0.3** |
| **MTN** | **Manton Dam** | **6.02** | **161** | P | **Pn** | **20 53 26.1** | **+0.1** |
| **MTN** | **Manton Dam** | **6.02** | **161** | | **Pn** | **20 53 25.9** | **-0.1** |
| MTN | | | | Sn | **Sn** | **20 54 28.8** | **-5.4** |
| **BATI** | **Baumata** | **6.16** | **240** | P | **Pn** | **20 53 29.6** | **+1.6** |
| | 56nm,0.5s,0.4nm | | | | | | |
| **MMRI** | **Maumere** | **6.94** | **257** | Pn | **Pn** | **20 53 36.7** | **-1.7** |
| **KNRA** | **Kununurra** | **8.49** | **182** | Pn | **Pn** | **20 53 58.2** | **-0.8** |
| **WBSI** | **Waikabubak, Su** | **9.90** | **255** | P | **Pn** | **20 54 17.0** | **-0.8** |
| **TOLI2** | **Tolitoli** | **11.65** | **314** | P | Pn | 20 54 25.0 | -16 |
| **WB0** | **Warramunga Arr** | **13.57** | **158** | Pn | **Pn** | **20 55 01.9** | **-3.5** |
| **WRA** | **Warramunga Arr** | **13.71** | **159** | P | **Pn** | **20 55 05.5** | **-1.7** |
| | 0.7nm,0.3s,baz=336,slow=13,SNR=22 | | | | | | |
| WRA | | | | S | Sn | 20 57 28.0 | -11 |
| | 5.4nm,0.8s,baz=332,slow=23,SNR=7.0 | | | | | | |
| **WB2** | **Warramunga Arr** | **13.71** | **159** | Pn | **Pn** | **20 55 05.0** | **-2.2** |
| **COEN** | **Coen** | **15.41** | **117** | P | **Pn** | **20 55 28.2** | **-0.3** |
| COEN | | | | IAmb | IAmb | 20 55 58.4 | |
| | comp=Z,26nm,1.5s | | | | | | |
| **QIS** | **Mount Isa** | **16.79** | **144** | P | **Pn** | **20 55 51.1** | **+6.0** |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **17.07** | **165** | P | **P** | **20 55 48.3** | **+0.4** |
| | comp=Z,2.4nm,0.4s,baz=344,slow=10,SNR=28 | | | | | | |
| ASAR | | | | S | S | 20 58 45.6 | -12 |
| | comp=Z,0.6nm,0.8s,baz=350,slow=27,SNR=2.3 | | | | | | |
| **AS01** | **Alice Springs** | **17.08** | **165** | P | **Pn** | **20 55 49.2** | **+0.5** |
| | comp=Z,5.5nm,0.5s | | | | | | |
| **MULG** | **Mulgathing** | **23.49** | **169** | P | **P** | **20 56 56.0** | **+1.2** |
| **FORT** | **Forrest** | **23.54** | **182** | P | **P** | **20 56 55.5** | **+0.3** |
| **FORT** | **Forrest** | **23.54** | **182** | P | **P** | **20 56 56.5** | **+1.3** |
| FORT | | | | IAmb | IAmb | 20 57 37.2 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **LCRK** | **Leigh Creek** | **24.72** | **161** | P | **P** | **20 57 09.2** | **+3.3** |
| **BBOO** | **Buckleboo** | **26.35** | **167** | P | **P** | **20 57 21.8** | **+1.1** |
| **BBOO** | **Buckleboo** | **26.35** | **167** | P | **P** | **20 57 21.5** | **+0.9** |
| **STKA** | **Stephens Creek** | **27.24** | **156** | P | **P** | **20 57 33.9** | **+5.3** |
| | comp=Z,1.8nm,2.6s | | | | | | |
| **STKA** | **Stephens Creek** | **27.24** | **156** | P | **P** | **20 57 28.6** | **+0.1** |
| **STKA** | **Stephens Creek** | **27.24** | **156** | P | **P** | **20 57 28.9** | **+0.2** |
| | comp=Z,1.5nm,0.6s,baz=323,slow=11,SNR=2.5 comp=Z,1.5nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **44.29** | **11** | P | **P** | **20 59 51.9** | **-1.4** |
| MAJO | | | | IAmb | IAmb | 21 00 18.2 | |
| | comp=Z,21nm,1.4s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **44.29** | **11** | P | **P** | **20 59 51.7** | **-1.6** |
| MJB9 | | | | IAmb | IAmb | 21 00 18.2 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **52.46** | **12** | P | **P** | **21 01 00.2** | **+4.5** |
| **TCW** | **Tory Channel** | **52.51** | **138** | P | **P** | **21 00 57.2** | **+1.1** |
| **BVAR** | **Borovoye Array** | **77.70** | **328** | P | P | 21 03 46.7 | +8.3 |
| | comp=Z,6.0nm,0.6s,baz=126,slow=8.5,SNR=17 comp=Z,6.0nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **82.84** | **180** | P | **P** | **21 04 06.6** | **+0.7** |
| **QSPA** | **South Pole Qui** | **82.84** | **180** | P | **P** | **21 04 06.2** | **+0.4** |
| | comp=Z,1.0nm,0.8s,baz=333,slow=1.8,SNR=9.8 comp=Z,1.0nm,0.8s | | | | | | |

*NIED* ***28*** *20:58:41.5, 39.°79N×142.°17E, h23km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale 10^14Nm; Mrr0.30; Mθθ3.00; Mφφ-3.30; Mrθ-1.25; Mθφ-1.57; Mφr-0.49; Fault plane solution: M03.78000×10^14 NP1: φs237.00000°, δ85.00000°, λ159.00000°. NP2: φs329.00000°, δ69.00000°, λ5.00000°.*

*JMA* ***28*** *20:58:41.5±0.1, 39.°8N±0.°2×142.°2E±0.°7, h23km, MD3.7/40, MV4.0/40, E OFF IWATE PREF*

*JMA Felt II J1 at E OFF IWATE PREF .*

*IDC* ***28*** *20:58:44.2±1.9, 39.°75N×142.°30E, h47km±16km, mb3.5/11, mbtmp3.7/16, ML3.2/5, Error ellipse: s-maj=25.7km s-min=13.2km az=98.0*

**ISC 28 20:58:42.1±1.2, 39.°77N±0.°03×142.°11E±0.°08, h25km±7km, n38, σ1§23/34, mb3.9/11, 4D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTH** | **Tanohata** | **0.25** | **311** | *i* P | **Pb** | **20 58 48.2** | **-0.3** |
| JTH | | | | S | **Sb** | **20 58 52.4** | **-0.5** |
| **JTH** | **Tanohata** | **0.25** | **311** | A | A | 20 58 48.2 | |
| | comp=E,22nm,0.3s,comp=N,9.0nm,0.2s | | | | | | |
| **MIYJ** | **Miyakonagasawa** | **0.30** | **229** | ⇓*i* P | **Pb** | **20 58 49.0** | **-0.1** |
| MIYJ | | | | ⇓S | **Sb** | **20 58 54.1** | **+0.2** |
| **JKEN** | **Kujiedanarisaw** | **0.53** | **325** | P | **Pb** | **20 58 52.0** | **-0.8** |
| JKEN | | | | S | **Sb** | **20 58 59.8** | **-0.3** |
| **JKEN** | **Kujiedanarisaw** | **0.53** | **325** | A | A | 20 58 52.0 | |
| | comp=E,7.0nm,1.1s,comp=N,9.0nm,0.3s | | | | | | |
| **JKZ** | **Kuzumaki** | **0.64** | **290** | ⇓*i* P | **Pn** | **20 58 54.6** | **-0.9** |
| JKZ | | | | ⇓S | **Sb** | **20 59 03.2** | **0.0** |
| **JOM** | **Ohasama** | **0.70** | **245** | *i* P | **Pn** | **20 58 55.8** | **-0.6** |
| JOM | | | | S | **Sn** | **20 59 05.6** | **-0.7** |
| **JOM** | **Ohasama** | **0.70** | **245** | A | A | 20 58 55.8 | |
| | comp=E,7.0nm,0.3s,comp=N,6.0nm,0.5s | | | | | | |
| **JANG** | **Nango** | **0.76** | **323** | *i* P | **Pb** | **20 58 55.4** | **-1.2** |
| JANG | | | | S | **Sb** | **20 59 05.3** | **-1.2** |
| **JANG** | **Nango** | **0.76** | **323** | A | A | 20 58 55.4 | |
| | comp=E,3.0nm,0.3s,comp=N,3.0nm,4.7s | | | | | | |
| **OFUJ** | **Ofunato** | **0.77** | **207** | *i* P | **Pb** | **20 58 56.1** | **-0.8** |
| **JMK** | **Ichinoseki** | **1.07** | **220** | *i* P | **Pb** | **20 59 01.5** | **-0.4** |
| JMK | | | | S | **Sn** | **20 59 15.7** | **+0.2** |
| **JMK** | **Ichinoseki** | **1.07** | **220** | A | A | 20 59 01.5 | |
| | comp=E,5.0nm,1.4s,comp=N,2.0nm,0.6s | | | | | | |
| **JKMT** | **Kesennumamotoy** | **1.08** | **207** | *i* P | **Pn** | **20 59 01.3** | **-0.3** |
| JKMT | | | | S | **Sb** | **20 59 15.3** | **-0.4** |
| **JRG** | **Rokugo** | **1.20** | **252** | A | A | 20 59 03.7 | |
| | comp=E,4.0nm,0.5s,comp=N,4.0nm,0.3s | | | | | | |
| **JOU** | **Okura** | **1.80** | **219** | A | A | 20 59 12.5 | |
| | comp=E,2.0nm,3.4s,comp=N,3.0nm,4.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **4.36** | **5** | P | **Pn** | **20 59 47.2** | **+0.6** |
| | comp=N,1.7nm,0.3s,baz=218,slow=15,SNR=10 | | | | | | |
| ASAJ | | | | S | **Sn** | **21 00 38.5** | **+1.9** |
| | comp=N,4.2nm,0.6s,baz=112,slow=16,SNR=1.3 comp=N,3.3nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.46** | **225** | P | **Pn** | **20 59 50.6** | **+2.6** |
| | comp=N,0.2nm,0.3s,baz=39,slow=12,SNR=9.4 comp=N,3.0nm,0.6s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **6.90** | **196** | P | **Pn** | **21 00 21.9** | **+0.3** |
| | comp=N,4.1nm,0.3s,baz=66,slow=20,SNR=1.3 | | | | | | |
| JHJ | | | | S | **Sn** | **21 01 36.0** | **-3.3** |
| | comp=N,61nm,0.9s,baz=68,slow=18,SNR=1.3 comp=N,52nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.74** | **304** | P | Pn | 21 00 51.1 | +4.3 |
| | comp=N,0.1nm,0.3s,baz=118,slow=18,SNR=2.3 comp=N,1.0nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **11.34** | **263** | P | **Pn** | **21 01 26.0** | **+3.6** |
| | comp=N,0.2nm,0.3s,baz=72,slow=14,SNR=2.1 comp=N,0.5nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **26.82** | **299** | P | **P** | **21 04 21.0** | **+0.7** |
| | comp=N,0.3nm,0.5s,baz=134,slow=4.2,SNR=1.2 comp=N,0.3nm,0.5s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.19** | **126** | T | T | 21 35 12.9 | |
| | baz=319,slow=75,SNR=986 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.20** | **126** | T | T | 21 35 09.9 | |
| | baz=319,slow=75,SNR=1099 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.21** | **126** | T | T | 21 35 16.0 | |
| | baz=319,slow=75,SNR=607 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.00** | **128** | T | T | 21 36 09.2 | |
| | baz=321,slow=76,SNR=329 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.00** | **128** | T | T | 21 36 09.7 | |
| | baz=321,slow=76,SNR=161 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.01** | **128** | T | T | 21 36 10.5 | |
| | baz=321,slow=76,SNR=206 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.52** | **310** | P | **P** | **21 06 19.3** | **+0.5** |
| | comp=N,2.2nm,0.5s,baz=92,slow=8.4,SNR=11 comp=N,2.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.18** | **300** | P | **P** | **21 06 41.1** | **+0.4** |
| | comp=N,1.6nm,0.6s,baz=84,slow=10,SNR=9.3 comp=N,1.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.80** | **306** | P | **P** | **21 06 53.5** | **-0.1** |
| | comp=N,1.8nm,0.7s,baz=83,slow=8.7,SNR=5.4 comp=N,1.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **46.90** | **34** | P | **P** | **21 07 08.6** | **-1.4** |
| | comp=N,0.2nm,0.7s,baz=283,slow=8.2,SNR=1.3 comp=N,0.2nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **49.17** | **311** | P | **P** | **21 07 27.7** | **+0.1** |
| | comp=N,0.4nm,0.4s,baz=78,slow=9.7,SNR=2.6 comp=N,0.4nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **59.84** | **188** | P | **P** | **21 08 44.6** | **-0.8** |
| | comp=N,0.4nm,0.8s,baz=5.3,slow=6.8,SNR=5.8 comp=N,0.4nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **63.57** | **188** | P | **P** | **21 09 10.9** | **+0.4** |
| | comp=N,0.3nm,0.8s,baz=1.0,slow=5.6,SNR=1.8 comp=N,0.3nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **66.65** | **332** | P | **P** | **21 09 30.4** | **+0.2** |
| | comp=N,1.1nm,0.6s,baz=37,slow=9.8,SNR=6.7 comp=N,1.1nm,0.6s | | | | | | |
| **HFS** | **Hagfors** | **71.82** | **336** | P | **P** | **21 10 02.1** | **0.0** |
| | comp=N,2.9nm,0.9s,baz=65,slow=8.4,SNR=6.3 comp=N,2.9nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.47** | **322** | P | **P** | **21 10 06.4** | **+0.2** |
| | comp=N,0.7nm,0.5s,baz=45,slow=6.6,SNR=6.5 comp=N,0.7nm,0.5s | | | | | | |

*IDC* ***28*** *20:59:16.6±0.7, 8.°20N×38.°02W, h0km, mb4.1/19, mbtmp4.1/20, ML3.8/1, MS3.5/38, Error ellipse: s-maj=21.7km s-min=15.3km az=140.0*

*NEIC* ***28*** *20:59:18.2±0.7, 8.°2N±0.°2×38.°2W±0.°2, h10km±1km, mb4.6/25, Error ellipse: s-maj=31.3km s-min=18.4km az=134.0*

**ISC 28 20:59:18.5±0.4, 8.°09N±0.°07×37.°98W±0.°08, h16km, n105, σ1§20/73, mb4.5/47, MS3.5/36, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RCBR** | **Riachuelo** | **13.97** | **171** | Pn | **Pn** | **21 02 37.4** | **+1.3** |
| | 0.4nm,0.3s,baz=62,slow=15,SNR=4.5 | | | | | | |
| RCBR | | | | Sn | **Sn** | **21 05 06.4** | **-4.7** |
| | 0.1nm,0.3s,baz=63,slow=24,SNR=1.9 | | | | | | |
| RCBR | | | | LR | LR | 21 07 03.9 | |
| | comp=Z,95nm,18.4s,baz=148,slow=33 2.3nm,0.5s | | | | | | |
| **MDP** | **Montagnes des** | **14.86** | **259** | LR | LR | 21 08 10.9 | |
| | comp=Z,83nm,19.1s,baz=55,slow=36 | | | | | | |
| **SACV** | **Santiago Islan** | **15.65** | **63** | Pn | **Pn** | **21 02 54.5** | **-4.1** |
| SACV | | | | IAmb | IAmb | 21 03 05.9 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **MCPB** | **Macapa, AP** | **16.35** | **240** | *e*P | **Pn** | **21 03 07.2** | **-0.4** |
| **SMTB** | **Santa Maria do** | **19.37** | **210** | *e*P | **Pn** | **21 03 44.8** | **-0.1** |
| **SDBA** | **SAO DESIDERIO** | **21.49** | **199** | *e*P | **P** | **21 04 09.8** | **+3.0** |
| **BBTS** | **Babate** | **22.00** | **71** | LR | LR | 21 10 41.2 | |
| | comp=Z,98nm,20.4s,baz=144,slow=31 | | | | | | |
| **NPGB** | **Novo Progresso** | **22.94** | **230** | *e*P | **P** | **21 04 22.5** | **+0.2** |
| **BOAV** | **Boa Vista** | **23.14** | **257** | P | **P** | **21 04 22.1** | **-2.3** |
| BOAV | | | | IAmb | IAmb | 21 04 30.9 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **BOAV** | **Boa Vista** | **23.14** | **257** | *e*P | **P** | **21 04 23.1** | **-1.3** |
| **SNDB** | **Serra Nova Dou** | **23.93** | **214** | *e*P | **P** | **21 04 34.4** | **+2.3** |
| **BDFB** | **Brasilia** | **25.58** | **203** | P | **P** | **21 04 48.9** | **+1.7** |
| | comp=Z,3.8nm,0.7s,baz=335,slow=17,SNR=2.8 | | | | | | |
| BDFB | | | | LR | LR | 21 14 18.0 | |
| | comp=Z,147nm,20.3s,baz=330,slow=35 comp=Z,3.8nm,0.7s | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **28.25** | **123** | T | T | 21 34 51.3 | |
| | baz=303,slow=75,SNR=63 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **28.25** | **123** | T | T | 21 34 51.7 | |
| | baz=303,slow=75,SNR=80 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **28.27** | **123** | T | T | 21 34 52.9 | |
| | baz=303,slow=75,SNR=81 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **28.74** | **126** | T | T | 21 35 35.6 | |
| | baz=302,slow=74,SNR=44 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **28.76** | **126** | T | T | 21 35 35.9 | |
| | baz=278,slow=74,SNR=43 | | | | | | |
| **SAML** | **Samuel** | **30.28** | **237** | P | **P** | **21 05 26.8** | **-2.4** |
| **SAML** | **Samuel** | **30.28** | **237** | *e*P | **P** | **21 05 29.7** | **+0.5** |
| **DBIC** | **Dimbokro** | **32.87** | **90** | P | **P** | **21 05 53.2** | **+1.1** |
| | comp=Z,2.3nm,0.7s,baz=264,slow=12,SNR=3.6 | | | | | | |
| DBIC | | | | LR | LR | 21 15 45.5 | |
| | comp=Z,52nm,19.1s,baz=11,slow=30 comp=Z,2.3nm,0.7s | | | | | | |
| **SIV** | **San Ignacio** | **33.09** | **224** | LR | LR | 21 18 36.8 | |
| | comp=Z,173nm,19.5s,baz=112,slow=35 | | | | | | |
| **ETMB** | **Extrema** | **33.27** | **238** | *e*P | **P** | **21 05 55.9** | **+0.3** |
| **BBSD** | **Serra de San D** | **33.63** | **222** | *e*P | **P** | **21 05 59.5** | **+0.9** |
| **ROSC** | **El Rosal** | **36.24** | **267** | P | **P** | **21 06 22.7** | **+1.0** |
| | comp=Z,9.1nm,0.4s,baz=51,slow=18,SNR=2.4 comp=Z,9.1nm,0.4s | | | | | | |
| **LPAZ** | **La Paz** | **38.43** | **231** | P | **P** | **21 06 41.8** | **+1.3** |
| | comp=Z,2.1nm,0.8s,baz=46,slow=5.1,SNR=5.0 | | | | | | |
| LPAZ | | | | LR | LR | 21 21 29.3 | |
| | comp=Z,73nm,20.7s,baz=44,slow=35 comp=Z,2.1nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **39.03** | **208** | LR | LR | 21 23 11.9 | |
| | comp=Z,154nm,18.3s,baz=42,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **39.28** | **79** | P | **P** | **21 06 47.5** | **+0.5** |
| | comp=Z,6.3nm,0.8s,baz=282,slow=9.2,SNR=38 comp=Z,6.3nm,0.8s | | | | | | |
| **MDT** | **Midelt** | **39.49** | **47** | LR | LR | 21 22 16.0 | |
| | comp=Z,43nm,18.7s,baz=208,slow=35 | | | | | | |
| **LVC** | **Limon Verde** | **42.99** | **224** | LR | LR | 21 25 18.4 | |
| | comp=Z,74nm,19.5s,baz=32,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **43.04** | **251** | LR | LR | 21 25 06.8 | |
| | comp=Z,48nm,18.8s,baz=84,slow=36 | | | | | | |
| **PAB** | **San Pablo** | **43.44** | **39** | P | **P** | **21 07 20.7** | **-0.2** |
| **NNA** | **Nana** | **43.48** | **243** | LR | LR | 21 25 22.9 | |
| | comp=Z,65nm,20.7s,baz=49,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **43.76** | **39** | P | **P** | **21 07 23.6** | **+0.2** |
| | comp=Z,1.2nm,1.0s,baz=236,slow=8.2,SNR=6.9 | | | | | | |
| ESDC | | | | LR | LR | 21 22 20.4 | |
| | comp=Z,77nm,20.5s,baz=212,slow=32 comp=Z,1.2nm,1.0s | | | | | | |
| **CEST** | **Esterri de Car** | **48.66** | **38** | P | **P** | **21 08 03.8** | **+1.7** |
| CEST | | | | IAmb | IAmb | 21 08 38.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **TKL** | **Tuckaleechee C** | **49.96** | **310** | LR | LR | 21 24 45.0 | |
| | comp=Z,52nm,21.6s,baz=118,slow=31 | | | | | | |
| **KEST** | **Kesra** | **51.15** | **50** | P | **P** | **21 08 21.6** | **+0.5** |
| KEST | | | | IAmb | IAmb | 21 08 23.8 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **KEST** | **Kesra** | **51.15** | **50** | P | **P** | **21 08 22.8** | **+1.7** |
| | comp=Z,3.9nm,0.7s,baz=219,slow=5.4,SNR=6.5 comp=Z,3.9nm,0.7s | | | | | | |
| **SCHQ** | **Schefferville** | **51.99** | **339** | P | **P** | **21 08 27.3** | **+0.3** |
| | comp=Z,2.4nm,0.9s,baz=240,slow=9.8,SNR=1.7 comp=Z,2.4nm,0.9s | | | | | | |
| **BNI** | **Bardonecchia** | **53.29** | **38** | P | **P** | **21 08 37.5** | **+0.6** |
| BNI | | | | IAmb | IAmb | 21 08 39.3 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **54.61** | **24** | P | **P** | **21 08 45.8** | **-0.4** |
| | comp=Z,2.1nm,0.8s,baz=232,slow=6.3,SNR=4.3 comp=Z,2.1nm,0.8s | | | | | | |
| **ECH** | **Echery** | **55.18** | **35** | P | **P** | **21 08 51.0** | **+0.5** |
| **VAE** | **Valguarnera** | **55.57** | **50** | LR | LR | 21 31 16.8 | |
| | comp=Z,87nm,20.1s,baz=300,slow=35 | | | | | | |
| **ZCCA** | **Zocca** | **55.68** | **41** | P | **P** | **21 08 56.0** | **+1.8** |
| **BFO** | **Black Forest** | **55.91** | **36** | P | **P** | **21 08 56.3** | **+0.5** |
| BFO | | | | IAmb | IAmb | 21 08 57.6 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **56.08** | **38** | LR | LR | 21 29 42.1 | |
| | comp=Z,88nm,21.2s,baz=258,slow=33 | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **56.24** | **38** | P | **P** | **21 08 59.9** | **+1.4** |
| **DAVA** | **Damuels** | **56.31** | **37** | *i* P | **P** | **21 08 59.7** | **+0.9** |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **FDMO** | **Fiordimonte** | **56.55** | **43** | P | **P** | **21 09 01.6** | **+1.2** |
| FDMO | | | | IAmb | IAmb | 21 09 36.6 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **FETA** | **Feichten** | **56.70** | **38** | *i* P | **P** | **21 09 01.9** | **+0.3** |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **CTI** | **Castel Tesino** | **56.84** | **39** | P | **P** | **21 09 02.8** | **+0.3** |
| CTI | | | | IAmb | IAmb | 21 09 04.2 | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **CEL** | **Celeste** | **56.92** | **49** | P | **P** | **21 09 03.8** | **+0.6** |
| **RETA** | **Reutte** | **56.94** | **37** | *i* P | **P** | **21 09 03.6** | **+0.5** |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **MOTA** | **Moosalm** | **57.08** | **38** | *i* P | **P** | **21 09 04.4** | **+0.2** |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **57.09** | **38** | *i* P | **P** | **21 09 04.6** | **+0.3** |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **PLCA** | **Paso Flores** | **57.09** | **209** | LR | LR | 21 34 08.8 | |
| | comp=Z,102nm,18.2s,baz=95,slow=37 | | | | | | |
| **WATA** | **Walderalm** | **57.36** | **38** | *i* P | **P** | **21 09 06.3** | **0.0** |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **57.37** | **38** | *i* P | **P** | **21 09 06.6** | **+0.3** |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **ABTA** | **Abfaltersbach** | **57.68** | **39** | *i* P | **P** | **21 09 09.0** | **+0.6** |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **BORG** | **Borgarnes** | **57.78** | **8** | LR | LR | 21 28 17.5 | |
| | comp=Z,17nm,22.0s,baz=221,slow=30 | | | | | | |
| **SABO** | **M.te Sabotino** | **58.05** | **40** | P | **P** | **21 09 11.6** | **+0.6** |
| SABO | | | | IAmb | IAmb | 21 09 37.0 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **LESA** | **Schwarzleotal** | **58.07** | **38** | *i* P | **P** | **21 09 11.4** | **+0.2** |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **GRFO** | **Grafenberg** | **58.23** | **35** | P | **P** | **21 09 12.5** | **+0.3** |
| **GRA1** | **Grafenberg Arr** | **58.23** | **35** | P | **P** | **21 09 12.2** | **+0.1** |
| **MYKA** | **Terra Mystica** | **58.34** | **39** | *i* P | **P** | **21 09 13.9** | **+0.9** |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **KBA** | **Koelnbreinsper** | **58.34** | **39** | *i* P | **P** | **21 09 13.6** | **+0.4** |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **BIOA** | **

comp=Z,19nm,20.1s,baz=90,slow=34
**BELG Belogornoye 80.97 38** LR LR 21 46 56.7
comp=Z,20nm,19.1s,baz=306,slow=35
**KIRV Kirov 81.80 32** LR LR 21 48 08.4
comp=Z,27nm,18.4s,baz=264,slow=36
**SNAA Sanae 82.90 169** P **P** **21 11 42.6 +0.4**
SNAA LR LR 21 45 02.5
comp=Z,31nm,18.3s,baz=3.5,slow=33
comp=Z,0.8nm,0.9s
**INK Inuvik 84.60 338** LR LR 21 47 33.3
comp=Z,47nm,18.1s,baz=319,slow=34
**ARU Arti 86.93 34** LR LR 21 47 54.8
comp=Z,43nm,21.7s,baz=280,slow=34
**ILAR Eielson Array 90.65 336** P **P** **21 12 19.2 -1.0**
comp=Z,0.1nm,0.4s,baz=55,slow=4.7,SNR=2.8
comp=Z,0.1nm,0.4s
**KDAK Kodiak Island 95.90 331** LR LR 21 55 33.9
comp=Z,33nm,18.2s,baz=152,slow=35
**TIXI Tiksi 99.95 4** LR LR 21 50 47.6
comp=Z,8.8nm,18.9s,baz=17,slow=31

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*IDC **28** 21:00:02.8±1.0, 43.˚41N×88.˚61E, h0km, mb3.6/6, mbtmp3.6/10, Error ellipse: s-maj=77.0km s-min=14.7km az=51.0*
*NNC **28** 21:00:05.4±2.2, 43.˚24N×88.˚02E, h0km, mb4.2, mpv3.8, Error ellipse: s-maj=25.6km s-min=14.1km az=59.0*
**ISC 28 21:00:07.9±1.1, 43.˚3N±0.˚1×88.˚3E±0.˚1, h35km, n12, σ1s22/15, mb3.5/6, 3C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MK31** | **Makanchi Array** | **5.53** | **312** | ⇑Pn | | **Pn** | **21 01 27.4** | **-0.3** |
| | 2.4nm,0.4s,baz=127,slow=14,SNR=99 | | | | | | |
| MK31 | | | | Sn | | **Sn** | **21 02 31.4** | **+1.4** |
| | 7.4nm,0.6s,baz=126,slow=25,SNR=5.7 | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 21 02 57.6 | |
| | 9.4nm,0.7s,baz=127,slow=22,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **5.53** | **312** | Pn | | **Pn** | **21 01 27.6** | **-0.1** |
| | 1.7nm,0.3s,baz=128,slow=14,SNR=100 | | | | | | |
| MKAR | | | | Sn | | **Sn** | **21 02 31.0** | **+0.9** |
| | 1.3nm,0.3s,baz=127,slow=25,SNR=7.7 | | | | | | |
| MKAR | | | | Lg | | Lg | 21 02 52.6 | |
| | 1.2nm,0.3s,baz=127,slow=24,SNR=3.8 | | | | | | |
| | 7.2nm,0.6s | | | | | | |
| **MAKZ** | **Makanchi** | **5.71** | **311** | ⇓Pn | | **Pn** | **21 01 30.2** | **0.0** |
| | 8.4nm,0.4s | | | | | | |
| MAKZ | | | | ⇓Sn | | **Sn** | **21 02 35.3** | **+0.8** |
| | 4.1nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 21 03 00.2 | |
| | 3.4nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **6.43** | **274** | Pn | | **Pn** | **21 01 37.8** | **-2.2** |
| | 4.0nm,0.5s | | | | | | |
| PDGK | | | | Lg | | Lg | 21 03 26.6 | |
| | 8.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **9.94** | **321** | Pn | | **Pn** | **21 02 26.2** | **-1.8** |
| | 0.1nm,0.3s,baz=131,slow=13,SNR=22 | | | | | | |
| KURBB | | | | Lg | | Lg | 21 05 19.6 | |
| | baz=200,slow=21,SNR=1.5 | | | | | | |
| | 2.0nm,0.5s | | | | | | |

**ZALV Zalesovo Beam 10.94 349** Pn **Pn** **21 02 40.5 -1.3**
0.1nm,0.3s,baz=165,slow=12,SNR=3.9
0.3nm,0.3s
**CMAR Chiang Mai Arr 26.31 157** P **P** **21 05 41.5 +1.2**
0.6nm,0.5s,baz=341,slow=8.0,SNR=5.4
0.6nm,0.5s
**FINES FINESS Array B 40.32 319** P **P** **21 07 42.2 +0.8**
0.8nm,0.7s,baz=101,slow=7.2,SNR=3.7
0.8nm,0.7s
**HFS Hagfors 46.51 318** P **P** **21 08 30.8 -0.5**
2.0nm,1.0s,baz=104,slow=10,SNR=5.1
2.0nm,1.0s
**NOA NORSAR Array B 47.47 320** P **P** **21 08 39.2 +0.3**
0.3nm,0.6s,baz=81,slow=9.1,SNR=2.5
0.3nm,0.6s
**WRA Warramunga Arr 75.79 136** P **P** **21 11 50.9 +0.7**
0.3nm,0.7s,baz=340,slow=6.2,SNR=2.8
0.3nm,0.7s
**ASAR Alice Springs 78.70 138** P **P** **21 12 05.3 -1.2**
0.2nm,0.6s,baz=345,slow=6.7,SNR=2.2
0.2nm,0.6s

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*NEIC **28** 21:04:01.9±0.5, 36.˚760N±0.˚008×98.˚05W±0.˚01, h8km±2km, mb_Lg2.2/19, ML2.5/42, ML2.6, Error ellipse: s-maj=1.8km s-min=0.8km az=119.0*
**NEIC 28 21:04:01.5±0.5, 36.˚751N±0.˚008×98.˚050W±0.˚004, h5km±1km, Error ellipse: s-maj=2.4km s-min=1.4km az=209.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK032** | **Salt Plains WL** | **0.14** | **292** | Pg | Pg | 21 04 05.2 | +0.8 |
| OK032 | | | | Sg | Sg | 21 04 07.5 | +1.2 |
| OK032 | | | | IAML | | 21 04 08.8 | |
| | 2µm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **0.18** | **57** | | Pg | 21 04 06.0 | +0.9 |
| GC02 | | | | Sg | Sg | 21 04 08.9 | +1.3 |
| **KAN14** | **Manchester OK** | **0.22** | **19** | Pg | Pg | 21 04 06.6 | +0.8 |
| KAN14 | | | | Sg | Sg | 21 04 09.9 | +1.2 |
| KAN14 | | | | IAML | | 21 04 10.0 | |
| | comp=N,1µm,0.1s | | | | | | |
| **CROK** | **Carrier** | **0.25** | **168** | Pg | Pg | 21 04 07.3 | +0.8 |
| CROK | | | | Sg | Sg | 21 04 11.1 | +1.3 |
| CROK | | | | IAML | | 21 04 11.2 | |
| | comp=E,1µm,0.3s | | | | | | |
| CROK | | | | IAML | | 21 04 13.3 | |
| | comp=N,630nm,0.2s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.39** | **22** | Pg | Pg | 21 04 09.6 | +0.7 |
| KAN05 | | | | Sg | Sg | 21 04 15.0 | +0.9 |
| KAN05 | | | | IAML | | 21 04 15.7 | |
| | comp=E,357nm,0.2s | | | | | | |
| KAN05 | | | | IAML | | 21 04 16.8 | |
| | comp=N,442nm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **0.47** | **30** | Pg | Pg | 21 04 11.1 | +0.6 |
| **KAN08** | **Anthony NE Sta** | **0.48** | **8** | Pg | Pg | 21 04 11.4 | +0.7 |
| KAN08 | | | | Sg | Sg | 21 04 17.8 | +0.8 |
| KAN08 | | | | IAML | | 21 04 20.0 | |
| | comp=E,247nm,0.3s | | | | | | |
| **KAN09** | **Caldwell North** | **0.52** | **42** | Pg | Pg | 21 04 12.0 | +0.5 |
| KAN09 | | | | Sg | Sg | 21 04 19.1 | +0.8 |
| KAN09 | | | | IAML | | 21 04 19.3 | |
| | comp=N,399nm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 21 04 20.4 | |
| | comp=E,513nm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **0.53** | **60** | Pg | Pg | 21 04 12.1 | +0.4 |
| **KAN12** | **Harper NE Stat** | **0.55** | **4** | Pg | Pg | 21 04 12.7 | +0.6 |
| KAN12 | | | | Sg | Sg | 21 04 20.1 | +0.9 |
| KAN12 | | | | IAML | | 21 04 23.8 | |
| | comp=N,502nm,0.4s | | | | | | |
| **OK038** | **West end E0370** | **0.62** | **244** | Pg | Pg | 21 04 13.9 | +0.4 |
| OK038 | | | | IAML | | 21 04 22.8 | |
| | comp=N,266nm,0.3s | | | | | | |
| OK038 | | | | IAML | | 21 04 29.7 | |
| | comp=N,274nm,0.3s | | | | | | |
| **BLOK** | **Blackwell** | **0.67** | **89** | Pg | Pg | 21 04 14.8 | +0.4 |
| BLOK | | | | IAML | | 21 04 31.8 | |
| | comp=E,286nm,0.2s | | | | | | |
| **NOKA** | **Waynoka** | **0.72** | **261** | Pg | Pg | 21 04 15.3 | 0.0 |
| NOKA | | | | IAML | | 21 04 25.8 | |
| | comp=N,203nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 21 04 27.7 | |
| | comp=E,142nm,0.2s | | | | | | |
| **OK048** | **Pawnee Station** | **0.95** | **110** | Pg | Pg | 21 04 19.9 | +0.1 |
| **OK051** | **E0350 and S346** | **1.01** | **104** | Pg | Pg | 21 04 20.9 | 0.0 |
| **OK029** | **Liberty Lake** | **1.07** | **153** | Pg | Pg | 21 04 21.7 | -0.3 |
| **QUOK** | **Quay** | **1.23** | **118** | | Pg | 21 04 24.6 | -0.5 |
| **T35A** | **Sooner Cattle** | **1.25** | **82** | | Pg | 21 04 25.1 | -0.3 |
| T35A | | | | IAML | | 21 04 45.5 | |
| | comp=N,80nm,0.2s | | | | | | |
| T35A | | | | IAML | | 21 04 46.2 | |
| | comp=E,83nm,0.2s | | | | | | |
| **OK052** | **Battle Ridge R** | **1.26** | **127** | | Pg | 21 04 25.0 | -0.7 |
| OK052 | | | | IAML | | 21 04 46.8 | |
| | comp=E,103nm,0.2s | | | | | | |
| **OK031** | **S. Brethren Rd** | **1.26** | **129** | | Pg | 21 04 25.1 | -0.6 |
| OK031 | | | | IAML | | 21 04 43.1 | |
| | comp=E,100nm,0.3s | | | | | | |
| OK031 | | | | IAML | | 21 04 43.6 | |
| | comp=E,88nm,0.2s | | | | | | |
| **DEOK** | **Depew** | **1.55** | **125** | | Pn | 21 04 29.6 | -0.1 |
| **R32A** | **Long Quarter,** | **1.75** | **343** | | Pb | 21 04 33.6 | -0.6 |
| **TUL3** | **Leonard** | **2.01** | **114** | IAmb_Lg | | 21 05 05.4 | |
| | comp=Z,8.5nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **2.10** | **197** | Pn | Pn | 21 04 37.9 | +0.6 |
| **X34A** | **Smith Ranch, M** | **2.15** | **175** | IAmb_Lg | | 21 05 14.4 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **SMWD** | **Samnorwood** | **2.42** | **228** | Pn | Pn | 21 04 42.2 | +0.4 |
| **KSU1** | **Kansas State U** | **2.61** | **25** | IAmb_Lg | | 21 05 28.0 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **U38A** | **Gravette** | **2.96** | **95** | Pn | Pn | 21 04 50.0 | +0.8 |
| **X37A** | **Clayton** | **3.07** | **134** | Pn | Pn | 21 04 50.5 | -0.1 |
| **RTBA** | **Rita Blanca** | **3.79** | **267** | Pn | Pn | 21 05 01.1 | +0.5 |
| **S39A** | **Bolivar** | **3.89** | **75** | Pn | Pn | 21 05 01.9 | -0.1 |
| **MIAR** | **Mount Ida** | **4.26** | **120** | IAmb_Lg | | 21 06 19.5 | |
| | comp=Z,3.8nm,0.9s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.27** | **303** | IAmb_Lg | | 21 06 20.9 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.57** | **50** | IAmb_Lg | | 21 06 27.7 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.65** | **83** | IAmb_Lg | | 21 06 36.7 | |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.81** | **116** | IAmb_Lg | | 21 06 37.6 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **T25A** | **Trinidad** | **5.11** | **276** | IAmb_Lg | | 21 06 46.8 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **6.04** | **294** | IAmb_Lg | | 21 07 23.4 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.12** | **87** | IAmb_Lg | | 21 07 32.7 | |
| | comp=Z,4.4nm,0.8s | | | | | | |

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*ASIES **28** 21:21:27.4, 23.˚54N×121.˚55E, h29km, ML4.0, Mw3.5, Moment Tensor Solution. Moment tensor: Scale $10^{21}$Nm; $M_{rr}$2.09; $M_{\theta\theta}$-0.59; $M_{\phi\phi}$-1.50; $M_{r\theta}$-0.86; $M_{\theta\phi}$-0.80; $M_{\phi r}$-0.09; Fault plane solution: $M_0$2.20622×$10^{21}$ NP1: $\phi_s$226.27000°, $\delta$54.31000°, $\lambda$108.87000°. NP2: $\phi_s$15.91000°, $\delta$39.78000°, $\lambda$65.76000°. Principal axes: T Plg72.9330°, Azm187.4710°; N Plg15.2300°, Azm34.9970°; P Plg7.5200°, Azm302.9370°;*
*JMA **28** 21:21:27.0±0.2, 24.˚N±1.˚×12.˚1E±.˚, h32km±2km, MV3.2/15, TAIWAN REGION*
*TAP **28** 21:21:27.4, 23.˚54N×121.˚55E, h29km, ML4.0, B*
**ISC 28 21:21:26.9±0.9, 23.˚54N±0.˚01×121.˚63E±0.˚02, h29km±5km, n172, σ0s86/286, 11C-42D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEGC** | **Jichi Village** | **0.19** | **334** | ⇑*i*P | | **Pn** | **21 21 33.5** | **-0.3** |
| | baz=1.0 | | | | | | |
| TEGC | | | | *e*S | | **Sb** | **21 21 38.3** | **+1.3** |
| | baz=1.0 | | | | | | |
| **HGSD** | **Ruisui** | **0.20** | **257** | ⇑*i*P | | **Pb** | **21 21 33.2** | **+0.3** |
| | baz=244 | | | | | | |
| HGSD | | | | *e*S | | **Sb** | **21 21 38.2** | **+1.1** |
| | baz=244 | | | | | | |
| **EGFH** | **Guangfu** | **0.23** | **306** | ⇑*i*P | | **Pb** | **21 21 33.4** | **+0.1** |
| | baz=307 | | | | | | |
| EGFH | | | | *e*S | | **Sb** | **21 21 37.7** | **0.0** |
| | baz=307 | | | | | | |
| **SHUL** | **Shoufeng** | **0.26** | **346** | ⇑*i*P | | **Pn** | **21 21 34.5** | **-0.3** |
| | baz=360 | | | | | | |
| SHUL | | | | *e*S | | **Sn** | **21 21 39.9** | **+0.1** |
| | baz=360 | | | | | | |

**EHYH Wanrong 0.27 261** ⇓*i*P **Pb** **21 21 33.6 -0.1**
baz=268
EHYH *i*S **Sb** **21 21 37.8 -0.6**
baz=268
**ECBN Changbin 0.27 217** ⇓*i*P **Pn** **21 21 34.6 -0.4**
baz=200
ECBN *e*S **Sn** **21 21 39.5 -0.6**
baz=200
**EHY Hungye 0.28 264** ⇓*i*P **Pb** **21 21 33.6 -0.5**
baz=269
EHY S **Sb** **21 21 37.6 -1.4**
baz=269
**WARBT Fenglin Townsh 0.29 309** ⇓*i*P **Pb** **21 21 33.7 -0.4**
baz=310
WARBT *e*S **Sb** **21 21 37.9 -1.2**
baz=310
**ESL Shilin 0.33 327** ⇓*i*P **Pb** **21 21 34.5 -0.2**
baz=332
ESL *e*S **Sb** **21 21 39.5 -0.6**
baz=332
**TEYL Yanliau Villag 0.33 355** ⇑*i*P **Pn** **21 21 36.3 +0.6**
baz=22
TEYL *e*S **Sn** **21 21 42.5 +0.9**
baz=22
**YULB Yu-li 0.34 245** P **Pb** **21 21 34.2 -0.6**
**YULB Yu-li 0.34 245** ⇓*i*P **Pb** **21 21 34.5 -0.3**
baz=247
YULB *e*S **Sb** **21 21 37.5 -2.6**
baz=247
**TWF1 Yuli 0.36 239** ⇓*i*P **Pb** **21 21 34.8 -0.2**
baz=242
TWF1 S **Sb** **21 21 39.8 -0.8**
baz=242
**CHKH Chenggong 0.40 212** ⇓*i*P **Pb** **21 21 36.1 +0.3**
baz=192
CHKH S **Sb** **21 21 42.4 +0.6**
baz=192
**HWA Hwalien 0.44 357** *e*P **Pn** **21 21 37.1 -0.1**
baz=19
HWA *e*S **Sn** **21 21 44.8 +0.5**
baz=19
**ETM Tongmen 0.45 344** ⇓*i*P **Pb** **21 21 36.4 -0.1**
baz=344
ETM *e*S **Sb** **21 21 42.5 -0.5**
baz=344
**FULB Fuli 0.46 223** ⇓P **Pb** **21 21 37.0 +0.4**
baz=225
FULB *e*S **Sb** **21 21 43.9 +0.7**
baz=225
**CHKT Chengkung 0.50 209** ⇓*i*P **Pb** **21 21 37.5 +0.3**
baz=187
CHKT *i*S **Sb** **21 21 45.0 +0.7**
baz=187
**VWDT VWDT 0.50 296** ⇓*i*P **Pb** **21 21 36.9 -0.4**
baz=299
VWDT S **Sb** **21 21 43.2 -1.1**
baz=299
**LXIB Xiulin Townshi 0.52 338** ⇓*i*P **Pb** **21 21 37.3 -0.5**
baz=339
LXIB S **Sb** **21 21 43.9 -1.3**
baz=339
**TWD Chiawan 0.54 357** ⇓*i*P **Pn** **21 21 38.2 -0.4**
baz=353
TWD *e*S **Sn** **21 21 46.0 -0.8**
baz=353
**EHD Haiduan 0.55 226** *e*P **Pb** **21 21 37.2 -0.9**
baz=229
EHD *e*S **Sb** **21 21 44.0 -1.7**
baz=229
**ECS Chishang 0.58 221** *e*P **Pb** **21 21 38.5 -0.1**
baz=213
**OWD Renai 0.59 315** ⇓*i*P **Pb** **21 21 38.2 -0.6**
baz=320
OWD *e*S **Sb** **21 21 45.3 -1.7**
baz=320
**ETL Fush Village 0.62 359** P **Pb** **21 21 39.2 -0.1**
baz=357
**EDH Donghe 0.64 208** ⇑*e*P **Pb** **21 21 39.6 +0.1**
baz=189
EDH S **Sb** **21 21 48.5 +0.4**
baz=189
**NACB Ninganchiao 0.64 357** P **Pb** **21 21 39.1 -0.4**
**NACB Ninganchiao 0.64 357** ⇓*i*P **Pb** **21 21 39.2 -0.3**
baz=354
NACB *e*S **Sb** **21 21 47.9 -0.3**
baz=354
**WUSB Renai 0.66 314** ⇓*i*P **Pb** **21 21 39.4 -0.6**
baz=324
**ELDTW Lidau 0.66 239** *e*P **Pb** **21 21 38.8 -1.2**
baz=237
ELDTW *e*S **Sb** **21 21 46.3 -2.6**
baz=237
**CHGB Renai 0.67 321** ⇓*i*P **Pb** **21 21 39.8 -0.4**
baz=326
CHGB *i*S **Sb** **21 21 48.5 -0.8**
baz=326
**SSLB Suanglung 0.67 292** P **Pb** **21 21 38.7 -1.4**
**SSLB Suanglung 0.67 292** ⇓*i*P **Pb** **21 21 39.0 -1.1**
baz=287
SSLB *e*S **Sb** **21 21 46.7 -2.4**
baz=287
**ETLH Xiulin Townshi 0.68 348** ⇓*i*P **Pb** **21 21 39.8 -0.6**
baz=356
ETLH *e*S **Sb** **21 21 48.7 -0.8**
baz=356
**WHF Hehuan Shan 0.69 331** ⇓*i*P **Pb** **21 21 40.0 -0.8**
baz=338
WHF *e*S **Sb** **21 21 48.9 -1.3**
baz=338
**WHYT Xinyi Township 0.73 283** ⇓*i*P **Pb** **21 21 40.6 -0.5**
baz=281
WHYT *e*S **Sb** **21 21 49.3 -1.5**
baz=281
**LONT Longtian 0.78 216** ⇑*e*P **Pb** **21 21 40.6 -1.3**
baz=208
**EHP Heping Village 0.78 7** *e*P **Pn** **21 21 42.0 +0.1**
EHP *e*S **Sn** **21 21 52.9 +0.3**
**WPL Puli Township 0.78 308** *e*P **Pn** **21 21 44.0 +2.0**
baz=318
**FUSS Fushou 0.79 334** ⇓*i*P **Pb** **21 21 41.9 -0.4**
baz=338
FUSS *e*S **Sb** **21 21 51.9 -0.9**
baz=338
**EAHA Aohua 0.80 7** ⇓*e*P **Pn** **21 21 42.3 +0.1**
baz=14
**TYC Yuchr 0.80 298** ⇓*i*P **Pb** **21 21 41.4 -0.9**
baz=304
TYC *e*S **Sb** **21 21 51.7 -1.0**
baz=304
**DPDB Guoxing 0.81 308** ⇓*i*P **Pb** **21 21 41.9 -0.6**
baz=315
**TWT Tachien 0.83 330** ⇓*i*P **Pb** **21 21 42.6 -0.2**
baz=333
TWT *i*S **Sb** **21 21 52.3 -1.4**
baz=333
**TDCB Techi 0.84 329** ⇓*i*P **Pb** **21 21 42.6 -0.3**
baz=333
TDCB *e*S **Sb** **21 21 52.3 -1.7**
baz=333
**WCS Beigang Elemen 0.84 308** ⇓*i*P **Pb** **21 21 42.4 -0.6**
baz=313
WCS *e*S **Sb** **21 21 53.0 -0.8**
baz=313
**EOS4 EOS4 0.86 47** *e*P **Pn** **21 21 43.5 +0.8**
baz=63
**STYH Taoyuan 0.87 245** *e*P **Pb** **21 21 42.9 -0.5**
baz=240
STYH S **Sb** **21 21 53.2 -1.4**
baz=240
**LDUT Ludao 0.87 190** ⇓*i*P **Pb** **21 21 42.4 -1.1**
baz=173
LDUT *i*S **Sb** **21 21 54.0 -0.7**
baz=173
**TWGBT Beinan 0.88 216** P **Pn** **21 21 41.5 -1.8**
**TWGBT Beinan 0.88 216** ⇑*i*P **Pn** **21 21 41.7 -1.6**
baz=196
**WJS Zhushan 0.88 289** ⇑*i*P **Pn** **21 21 43.6 +0.4**
baz=290
WJS *e*S **Sb** **21 21 54.9 0.0**
baz=290
**CHN5 Tsauling 0.88 274** ⇓*i*P **Pb** **21 21 43.3 -0.3**
baz=274
CHN5 *e*S **Sb** **21 21 54.1 -1.0**
baz=274
**TWG Pinlang 0.88 216** ⇑*i*P **Pn** **21 21 41.7 -1.6**
baz=208
TWG *e*S **Sb** **21 21 53.2 -1.8**
baz=208

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ENA** | **Nanau** | **0.90** | **6** | ⇓*i* | P | **Pn** | **21 21 43.5 -0.1** |
| | baz=358 | | | | | | |
| ENA | | | | *e* | S | **Sb** | **21 21 55.1 -0.3** |
| | baz=358 | | | | | | |
| **TTN** | **Taitung** | **0.90** | **210** | *e* | P | **Pn** | **21 21 43.4 -0.1** |
| | baz=202 | | | | | | |
| TTN | | | | *e* | S | **Sn** | **21 21 56.6 +1.1** |
| | baz=202 | | | | | | |
| **EWUT** | **Wuta** | **0.92** | **8** | *e* | P | **Pb** | **21 21 44.0 -0.2** |
| EWUT | | | | *e* | S | **Sn** | **21 21 55.9 -0.1** |
| **NNSB** | **Datong** | **0.92** | **346** | ⇓ | P | **Pn** | **21 21 43.6 -0.3** |
| | baz=3.0 | | | | | | |
| NNSB | | | | *e* | S | **Sb** | **21 21 55.0 -1.2** |
| | baz=3.0 | | | | | | |
| **NNSH** | **Datong** | **0.92** | **346** | *e* | P | **Pn** | **21 21 43.6 -0.3** |
| NNSH | | | | *e* | S | **Sb** | **21 21 54.8 -1.4** |
| **NNS** | **Nan Shan** | **0.93** | **345** | *e* | P | **Pn** | **21 21 44.0 -0.2** |
| | baz=3.0 | | | | | | |
| NNS | | | | *e* | S | **Sb** | **21 21 55.7 -0.9** |
| | baz=3.0 | | | | | | |
| **WNT** | **Mingjian** | **0.93** | **292** | ⇓*i* | P | **Pb** | **21 21 44.4 0.0** |
| | baz=292 | | | | | | |
| WNT | | | | S | | **Sn** | **21 21 56.7 +0.2** |
| | baz=292 | | | | | | |
| **WCKO** | **Fanlu** | **0.95** | **264** | P | | **Pb** | **21 21 44.8 0.0** |
| | baz=263 | | | | | | |
| WCKO | | | | *i* | S | **Sb** | **21 21 57.0 +0.1** |
| | baz=263 | | | | | | |
| **WNT1** | **Nantou City** | **0.95** | **293** | *e* | P | **Pb** | **21 21 44.9 +0.2** |
| | baz=294 | | | | | | |
| WNT1 | | | | *e* | S | **Sn** | **21 21 57.2 +0.4** |
| | baz=294 | | | | | | |
| **TPUB** | **Ta-pu** | **0.95** | **256** | P | | **Pn** | **21 21 44.4 +0.1** |
| **TPUB** | **Ta-pu** | **0.95** | **256** | P | | **Pn** | **21 21 44.4 +0.1** |
| | baz=254 | | | | | | |
| TPUB | | | | *e* | S | **Sb** | **21 21 56.4 -0.7** |
| | baz=254 | | | | | | |
| **WHP** | **Taichung City** | **0.97** | **320** | ⇓ | P | **Pn** | **21 21 44.7 0.0** |
| | baz=326 | | | | | | |
| WHP | | | | *e* | S | **Sb** | **21 21 56.7 -0.9** |
| | baz=326 | | | | | | |
| **WTP** | **Ta-pu** | **0.98** | **253** | P | | **Pn** | **21 21 45.0 +0.3** |
| | baz=250 | | | | | | |
| WTP | | | | S | | **Sb** | **21 21 57.5 -0.3** |
| | baz=250 | | | | | | |
| **WGK** | **Gukeng** | **0.99** | **279** | ⇓ | P | **Pn** | **21 21 45.2 +0.4** |
| | baz=279 | | | | | | |
| WGK | | | | S | | **Sb** | **21 21 57.9 -0.3** |
| | baz=279 | | | | | | |
| **WWF** | **Wufeng** | **0.99** | **301** | ⇓ | P | **Pb** | **21 21 45.8 +0.3** |
| | baz=302 | | | | | | |
| WWF | | | | *e* | S | **Sn** | **21 21 59.1 +1.2** |
| | baz=302 | | | | | | |
| **LATG** | **Datong** | **1.00** | **355** | *e* | P | **Pn** | **21 21 44.8 -0.3** |
| LATG | | | | *e* | S | **Sb** | **21 21 56.9 -1.7** |
| **WDLH** | **Douliu** | **1.01** | **279** | ⇓ | P | **Pb** | **21 21 45.6 -0.2** |
| | baz=279 | | | | | | |
| WDLH | | | | S | | **Sn** | **21 21 59.1 +0.7** |
| | baz=279 | | | | | | |
| **WYL** | **Yuanlin Townsh** | **1.05** | **294** | *i* | P | **Pb** | **21 21 46.4 -0.1** |
| | baz=295 | | | | | | |
| WYL | | | | *e* | S | **Sb** | **21 22 00.4 +0.5** |
| | baz=295 | | | | | | |
| **ESAO** | **Su ao** | **1.05** | **11** | *e* | P | **Pb** | **21 21 46.8 +0.3** |
| | baz=2.0 | | | | | | |
| ESAO | | | | *e* | S | **Sb** | **21 22 00.2 +0.3** |
| | baz=2.0 | | | | | | |
| **SLGT** | **Liugui** | **1.05** | **239** | *e* | P | **Pn** | **21 21 46.0 +0.3** |
| | baz=237 | | | | | | |
| SLGT | | | | *e* | S | **Sn** | **21 21 59.5 0.0** |
| | baz=237 | | | | | | |
| **CHN2** | **Minshiung** | **1.06** | **270** | *e* | P | **Pb** | **21 21 46.8 +0.1** |
| | baz=270 | | | | | | |
| **SGST** | **Jiashian** | **1.06** | **245** | *e* | P | **Pn** | **21 21 45.4 -0.4** |
| | baz=241 | | | | | | |
| SGST | | | | *e* | S | **Sn** | **21 21 58.8 -0.9** |
| | baz=241 | | | | | | |
| **TCU** | **Taichung** | **1.07** | **305** | *e* | P | **Pb** | **21 21 47.0 +0.3** |
| | baz=306 | | | | | | |
| TCU | | | | *e* | S | **Sb** | **21 22 01.0 +0.7** |
| | baz=306 | | | | | | |
| **NDT** | **Datong Townshi** | **1.07** | **354** | *e* | P | **Pb** | **21 21 46.3 -0.5** |
| | baz=12 | | | | | | |
| **CHN1** | **Nanshi** | **1.07** | **251** | *e* | P | **Pb** | **21 21 46.9 +0.1** |
| | baz=249 | | | | | | |
| CHN1 | | | | *e* | S | **Sn** | **21 22 00.1 +0.2** |
| | baz=249 | | | | | | |
| **TWK** | **Hsinying** | **1.08** | **256** | *e* | P | **Pb** | **21 21 46.8 -0.3** |
| | baz=255 | | | | | | |
| TWK | | | | *i* | S | **Sn** | **21 22 00.5 +0.2** |
| | baz=255 | | | | | | |
| **SNST** | **Tainan City** | **1.09** | **253** | *e* | P | **Pb** | **21 21 47.1 0.0** |
| | baz=252 | | | | | | |
| SNST | | | | *i* | S | **Sn** | **21 22 00.8 +0.5** |
| | baz=252 | | | | | | |
| **TWC** | **Suao** | **1.09** | **10** | *e* | P | **Pb** | **21 21 47.1 0.0** |
| | baz=6.0 | | | | | | |
| **NDS** | **Dongshan** | **1.10** | **4** | *e* | P | **Pb** | **21 21 47.5 +0.2** |
| | baz=357 | | | | | | |
| NDS | | | | *e* | S | **Sb** | **21 22 00.8 -0.4** |
| | baz=357 | | | | | | |
| **ENTT** | **Nioudou** | **1.10** | **357** | *e* | P | **Pn** | **21 21 46.5 +0.1** |
| | baz=3.0 | | | | | | |
| ENTT | | | | *e* | S | **Sn** | **21 22 00.6 -0.1** |
| | baz=3.0 | | | | | | |
| **CHY** | **Chiayi** | **1.11** | **268** | *e* | P | **Pb** | **21 21 47.4 0.0** |
| | baz=268 | | | | | | |
| CHY | | | | *e* | S | **Sb** | **21 22 01.4 -0.1** |
| | baz=268 | | | | | | |
| **WCHH** | **Zhanghua** | **1.12** | **299** | *e* | P | **Pb** | **21 21 47.6 -0.1** |
| | baz=299 | | | | | | |
| WCHH | | | | *i* | S | **Sb** | **21 22 02.0 +0.1** |
| | baz=299 | | | | | | |
| **ECL** | **Taimali** | **1.12** | **214** | *e* | P | **Pn** | **21 21 46.2 -0.5** |
| | baz=195 | | | | | | |
| **TWQ1** | **Liyutan** | **1.13** | **316** | ⇓*i* | P | **Pb** | **21 21 48.0 +0.2** |
| | baz=325 | | | | | | |
| TWQ1 | | | | *i* | S | **Sb** | **21 22 02.8 +0.7** |
| | baz=325 | | | | | | |
| **WTK** | **Tuku** | **1.15** | **278** | *e* | P | **Pb** | **21 21 48.0 -0.2** |
| | baz=278 | | | | | | |
| WTK | | | | *i* | S | **Sb** | **21 22 03.1 +0.4** |
| | baz=278 | | | | | | |
| **YHNB** | **Yeheng** | **1.15** | **348** | P | | **Pn** | **21 21 47.5 +0.4** |
| **YHNB** | **Yeheng** | **1.15** | **348** | *i* | P | **Pn** | **21 21 47.5 +0.4** |
| | baz=352 | | | | | | |
| YHNB | | | | *e* | S | **Sn** | **21 22 00.8 -1.3** |
| | baz=352 | | | | | | |
| **NSK** | **Sanguang** | **1.16** | **348** | ⇓*i* | P | **Pn** | **21 21 47.6 +0.4** |
| | baz=351 | | | | | | |
| NSK | | | | S | | **Sn** | **21 22 01.7 -0.5** |
| | baz=351 | | | | | | |
| **TWE** | **Neicheng** | **1.18** | **2** | *e* | P | **Pb** | **21 21 48.2 -0.4** |
| | baz=11 | | | | | | |
| **NSY** | **Sanyi** | **1.18** | **318** | ⇓*i* | P | **Pb** | **21 21 49.2 +0.5** |
| | baz=319 | | | | | | |
| NSY | | | | *i* | S | **Sb** | **21 22 04.8 +1.1** |
| | baz=319 | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.19** | **337** | *e* | P | **Pb** | **21 21 48.6 -0.2** |
| | baz=339 | | | | | | |
| NFF | | | | *e* | S | **Sn** | **21 22 02.6 -0.2** |
| | baz=339 | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.21** | **288** | *e* | P | **Pb** | **21 21 49.7 +0.6** |
| | baz=288 | | | | | | |
| WRL | | | | *e* | S | **Sn** | **21 22 03.6 +0.5** |
| | baz=288 | | | | | | |
| **SSD** | **Sandimen** | **1.21** | **230** | *e* | P | **Pn** | **21 21 48.1 +0.2** |
| | baz=223 | | | | | | |
| SSD | | | | *e* | S | **Sn** | **21 22 03.1 -0.2** |
| | baz=223 | | | | | | |
| **WDJ** | **Dajia District** | **1.22** | **312** | *e* | P | **Pb** | **21 21 49.5 +0.3** |
| | baz=313 | | | | | | |
| WDJ | | | | *e* | S | **Sb** | **21 22 05.6 +1.0** |
| | baz=313 | | | | | | |
| **RLNB** | **Erlin** | **1.22** | **287** | *e* | P | **Pb** | **21 21 48.8 -0.5** |
| | baz=288 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **1.22** | **358** | P | | **Pn** | **21 21 48.4 +0.4** |
| | baz=6.0 | | | | | | |
| **TSMG** | **Majia** | **1.23** | **228** | *e* | P | **Pn** | **21 21 48.6 +0.5** |
| | baz=219 | | | | | | |
| **SCST** | **Cishan** | **1.23** | **239** | *i* | P | **Pb** | **21 21 50.0 +0.6** |
| | baz=235 | | | | | | |
| SCST | | | | *i* | S | **Sb** | **21 22 07.4 +2.5** |
| | baz=235 | | | | | | |
| **NSTT** | **Nanjuang** | **1.23** | **332** | ⇓*i* | P | **Pb** | **21 21 49.5 -0.1** |
| | baz=333 | | | | | | |
| NSTT | | | | *e* | S | **Sn** | **21 22 03.7 -0.2** |
| | baz=333 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LIOB** | **Emei** | **1.24** | **333** | ⇑*i* | P | **Pb** | **21 21 49.9 +0.2** |
| | baz=334 | | | | | | |
| LIOB | | | | *e* | S | **Sb** | **21 22 05.1 -0.2** |
| | baz=334 | | | | | | |
| **NWLT** | **Wulai** | **1.24** | **355** | *e* | P | **Pb** | **21 21 49.0 -0.8** |
| | baz=359 | | | | | | |
| NWLT | | | | *i* | S | **Sb** | **21 22 04.7 -0.7** |
| | baz=359 | | | | | | |
| **ICHU** | **Yijhu** | **1.25** | **262** | *e* | P | **Pn** | **21 21 49.2 +0.8** |
| | baz=262 | | | | | | |
| ICHU | | | | *e* | S | **Sb** | **21 22 05.7 +0.1** |
| | baz=262 | | | | | | |
| **NMLH** | **Miaoli** | **1.26** | **323** | *i* | P | **Pb** | **21 21 49.9 -0.1** |
| | baz=323 | | | | | | |
| NMLH | | | | S | | **Sb** | **21 22 06.0 +0.2** |
| | baz=323 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.28** | **285** | *e* | P | **Pb** | **21 21 49.7 -0.7** |
| | baz=285 | | | | | | |
| WTCT | | | | *e* | S | **Sb** | **21 22 06.2 -0.2** |
| | baz=285 | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.29** | **270** | *e* | P | **Pn** | **21 21 49.5 +0.6** |
| | baz=269 | | | | | | |
| WSL | | | | *e* | S | **Sn** | **21 22 05.9 +0.7** |
| | baz=269 | | | | | | |
| **NJD** | **Zhudong** | **1.29** | **338** | *e* | P | **Pb** | **21 21 51.3 +0.7** |
| | baz=348 | | | | | | |
| **SSHA** | **Shanhua** | **1.30** | **252** | *e* | P | **Pb** | **21 21 51.0 +0.4** |
| | baz=251 | | | | | | |
| **WSF** | **Szhu** | **1.30** | **275** | *e* | P | **Pn** | **21 21 49.8 +0.7** |
| | baz=274 | | | | | | |
| WSF | | | | *i* | S | **Sn** | **21 22 05.8 +0.4** |
| | baz=274 | | | | | | |
| **MASBT** | **Mashibuluo** | **1.30** | **225** | *e* | P | **Pn** | **21 21 48.9 -0.2** |
| | baz=220 | | | | | | |
| MASBT | | | | *e* | S | **Sn** | **21 22 06.4 +0.9** |
| | baz=220 | | | | | | |
| **CHN8** | **Yiju** | **1.32** | **262** | *e* | P | **Pn** | **21 21 50.1 +0.8** |
| | baz=261 | | | | | | |
| CHN8 | | | | *i* | S | **Sn** | **21 22 06.8 +0.9** |
| | baz=261 | | | | | | |
| **TWM1** | **Shoushan** | **1.32** | **238** | *e* | P | **Pb** | **21 21 51.9 +0.9** |
| | baz=234 | | | | | | |
| TWM1 | | | | *e* | S | **Sb** | **21 22 10.2 +2.6** |
| | baz=234 | | | | | | |
| **SGLT** | **Jiouru** | **1.32** | **233** | *e* | P | **Pb** | **21 21 51.8 +0.7** |
| | baz=229 | | | | | | |
| SGLT | | | | *e* | S | **Sb** | **21 22 09.5 +1.8** |
| | baz=229 | | | | | | |
| **TSPT** | **Pingtung City** | **1.35** | **231** | *e* | P | **Pb** | **21 21 51.5 0.0** |
| | baz=227 | | | | | | |
| **TAW** | **Tawu** | **1.35** | **210** | *e* | P | **Pn** | **21 21 49.7 -0.1** |
| | baz=192 | | | | | | |
| **EAST** | **Anshuo** | **1.35** | **212** | *e* | P | **Pn** | **21 21 48.7 -1.2** |
| | baz=195 | | | | | | |
| **HSN1** | **Hsinchu** | **1.36** | **336** | *e* | P | **Pb** | **21 21 52.1 +0.4** |
| | baz=324 | | | | | | |
| HSN1 | | | | *e* | S | **Sb** | **21 22 09.8 +1.2** |
| | baz=324 | | | | | | |
| **SCLT** | **Jiali** | **1.37** | **255** | *e* | P | **Pb** | **21 21 51.4 -0.4** |
| | baz=254 | | | | | | |
| SCLT | | | | *e* | S | **Sn** | **21 22 08.3 +1.1** |
| | baz=254 | | | | | | |
| **TAWH** | **Dawu Township** | **1.37** | **210** | *e* | P | **Pn** | **21 21 50.3 +0.3** |
| | baz=193 | | | | | | |
| **SBCB** | **Hsinchu** | **1.38** | **335** | *e* | P | **Pb** | **21 21 52.4 +0.3** |
| | baz=336 | | | | | | |
| SBCB | | | | *e* | S | **Sb** | **21 22 10.0 +0.6** |
| | baz=336 | | | | | | |
| **SNJT** | **Kaohsiung City** | **1.42** | **237** | P | | **Pb** | **21 21 53.2 +0.4** |
| | baz=235 | | | | | | |
| SNJT | | | | S | | **Sb** | **21 22 12.8 +2.2** |
| | baz=235 | | | | | | |
| **NHDH** | **Xindian Distri** | **1.43** | **356** | *e* | P | **Pb** | **21 21 52.4 -0.4** |
| NHDH | | | | *e* | S | **Sn** | **21 22 09.1 +0.5** |
| **TATO** | **Taipei** | **1.44** | **355** | P | | **Pb** | **21 21 52.7 -0.4** |
| **TATO** | **Taipei** | **1.44** | **355** | *e* | P | **Pn** | **21 21 51.7 +0.7** |
| | baz=11 | | | | | | |
| TATO | | | | *e* | S | **Sb** | **21 22 10.0 -1.0** |
| | baz=11 | | | | | | |
| **TWA** | **Mucha** | **1.44** | **358** | *e* | P | **Pn** | **21 21 51.7 +0.7** |
| | baz=3.0 | | | | | | |
| TWA | | | | *e* | S | **Sn** | **21 22 08.4 -0.6** |
| | baz=3.0 | | | | | | |
| **TIPB** | **Shuangxi** | **1.44** | **7** | *e* | P | **Pb** | **21 21 52.1 -1.0** |
| | baz=3.0 | | | | | | |
| **BACT** | **New Taipei Cit** | **1.47** | **353** | *e* | P | **Pb** | **21 21 54.1 +0.6** |
| | baz=19 | | | | | | |
| **TSCK** | **Chigu Township** | **1.47** | **255** | *e* | P | **Pb** | **21 21 52.8 -0.7** |
| | baz=254 | | | | | | |
| **NCUH** | **Zhongli** | **1.48** | **344** | *e* | P | **Pb** | **21 21 53.8 0.0** |
| | baz=345 | | | | | | |
| NCUH | | | | *e* | S | **Sb** | **21 22 12.6 +0.3** |
| | baz=345 | | | | | | |
| **SCZT** | **Fangliau** | **1.49** | **219** | *e* | P | **Pb** | **21 21 53.5 -0.3** |
| | baz=209 | | | | | | |
| SCZT | | | | *e* | S | **Sb** | **21 22 11.9 -0.4** |
| | baz=209 | | | | | | |
| **NTY** | **Taoyuan** | **1.49** | **348** | *e* | P | **Pb** | **21 21 53.2 -0.7** |
| | baz=3.0 | | | | | | |
| NTY | | | | *e* | S | **Sb** | **21 22 13.4 +1.0** |
| | baz=3.0 | | | | | | |
| **LAY** | **Lan-yu** | **1.49** | **183** | *e* | P | **Pn** | **21 21 51.0 -0.7** |
| | baz=167 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.50** | **12** | *e* | P | **Pb** | **21 21 53.5 -0.6** |
| | baz=6.0 | | | | | | |
| **JYNG** | **Yonaguni jima** | **1.51** | **53** | P | | **Pb** | **21 21 54.5 +0.3** |
| JYNG | | | | S | | **Sb** | **21 22 12.8 -0.2** |
| **SLIU** | **Shizi** | **1.52** | **210** | *e* | P | **Pn** | **21 21 52.6 +0.5** |
| | baz=193 | | | | | | |
| **LYUB** | **Lan-yu** | **1.53** | **182** | *e* | P | **Pn** | **21 21 50.9 -1.3** |
| | baz=167 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.54** | **5** | *e* | P | **Pn** | **21 21 53.2 +0.8** |
| | baz=13 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **1.54** | **5** | *e* | P | **Pn** | **21 21 52.7 +0.3** |
| | baz=10.0 | | | | | | |
| WFSB | | | | *e* | S | **Sb** | **21 22 14.6 +0.8** |
| | baz=10.0 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.56** | **54** | P | | **Pb** | **21 21 55.4 +0.3** |
| **YOJ** | **Yonaguni jima** | **1.56** | **54** | *e* | P | **Pb** | **21 21 54.5 -0.6** |
| | baz=59 | | | | | | |
| YOJ | | | | *e* | S | **Sb** | **21 22 14.3 -0.3** |
| | baz=59 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.56** | **54** | P | | **Pb** | **21 21 54.5 -0.6** |
| YOJ | | | | S | | **Sb** | **21 22 14.5 0.0** |
| **SXI1** | **Grass Mountain** | **1.57** | **8** | *e* | P | **Pb** | **21 21 54.3 -1.0** |
| **TWS1** | **Kuangyinshan** | **1.57** | **353** | *e* | P | **Pn** | **21 21 53.1 +0.3** |
| | baz=8.0 | | | | | | |
| TWS1 | | | | *e* | S | **Sb** | **21 22 14.4 -0.4** |
| | baz=8.0 | | | | | | |
| **YM01** | **YM01** | **1.60** | **358** | *e* | P | **Pn** | **21 21 54.1 +0.8** |
| | baz=1.0 | | | | | | |
| YM01 | | | | *e* | S | **Sn** | **21 22 13.9 +0.8** |
| | baz=1.0 | | | | | | |
| **TNOU** | **National Taiwa** | **1.61** | **5** | *e* | P | **Pn** | **21 21 54.2 +0.8** |
| | baz=13 | | | | | | |
| **NTST** | **Danshui** | **1.63** | **354** | *e* | P | **Pn** | **21 21 54.7 +1.1** |
| | baz=19 | | | | | | |
| **YM08** | **YM08** | **1.65** | **359** | *e* | P | **Pn** | **21 21 54.1 +0.2** |
| | baz=1.0 | | | | | | |
| YM08 | | | | *e* | S | **Sn** | **21 22 13.6 -0.5** |
| | baz=1.0 | | | | | | |
| **ANP** | **Anpu** | **1.65** | **356** | *e* | P | **Pn** | **21 21 54.6 +0.7** |
| | baz=2.0 | | | | | | |
| **HEN** | **Hengchun** | **1.73** | **209** | *e* | P | **Pn** | **21 21 56.5 +1.5** |
| | baz=193 | | | | | | |
| **TWY** | **Chenhua** | **1.73** | **359** | *e* | P | **Pn** | **21 21 56.2 +1.1** |
| | baz=2.0 | | | | | | |
| TWY | | | | *e* | S | **Sn** | **21 22 16.9 +0.7** |
| | baz=2.0 | | | | | | |
| **WDGT** | **Dungji** | **1.83** | **262** | *e* | P | **Pn** | **21 21 56.6 +0.2** |
| | baz=261 | | | | | | |
| WDGT | | | | *e* | S | **Sn** | **21 22 16.9 -1.7** |
| | baz=261 | | | | | | |
| **PHUB** | **P'eng-hu** | **1.89** | **270** | *e* | P | **Pn** | **21 21 56.8 -0.4** |
| | baz=271 | | | | | | |
| **PNG** | **Penghu** | **1.91** | **271** | *e* | P | **Pn** | **21 21 57.8 +0.4** |
| | baz=272 | | | | | | |
| **VCHM** | **Qimei** | **2.05** | **261** | *e* | P | **Pn** | **21 21 59.4 0.0** |
| | baz=263 | | | | | | |
| VCHM | | | | *e* | S | **Sn** | **21 22 22.1 -1.9** |
| | baz=263 | | | | | | |
| **HATJ** | **Hateruma jima** | **2.06** | **75** | S | | **Sb** | **21 22 26.5 -2.2** |
| **IRIF** | **Iriomote-Funau** | **2.08** | **67** | P | | **Pb** | **21 22 01.9 -2.0** |
| IRIF | | | | S | | **Sb** | **21 22 27.5 -1.8** |
| **JKRS** | **Kuro-shima** | **2.29** | **72** | S | | **Sb** | **21 22 32.9 -2.4** |
| **JIJ** | **Ishigaki jima** | **2.44** | **70** | P | | **Pn** | **21 22 06.7 +1.9** |
| JIJ | | | | S | | **Sn** | **21 22 35.1 +1.5** |
| **JISG** | **Ishigakijimahi** | **2.66** | **66** | P | | **Pn** | **21 22 09.4 +1.5** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JISG | | | | S | | **Sn** | **21 22 40.2 +1.1** |
| **PTMZ** | **Houxiangcun** | **2.74** | **304** | *e* | P | **Pn** | **21 22 08.7 -0.1** |
| | baz=303 | | | | | | |
| **JTJ** | **Tarama** | **3.02** | **68** | S | | **Sn** | **21 22 49.9 +2.1** |
| **MATB** | **Ma-tsu** | **3.02** | **330** | *e* | P | **Pn** | **21 22 12.9 +0.2** |
| | baz=327 | | | | | | |
| **KNM** | **Kinmen** | **3.05** | **287** | *e* | P | **Pn** | **21 22 14.4 +1.2** |
| | baz=287 | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.11** | **288** | *e* | P | **Pn** | **21 22 13.7 -0.3** |
| | baz=288 | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **3.45** | **331** | *e* | P | **Pn** | **21 22 18.4 -0.2** |
| | baz=328 | | | | | | |
| **MHZQ** | **Yeshan** | **3.48** | **318** | *e* | P | **Pn** | **21 22 19.2 +0.2** |
| | baz=316 | | | | | | |
| **ZPLA** | **Ao Xicun** | **3.58** | **277** | *e* | P | **Pn** | **21 22 20.0 -0.4** |
| | baz=278 | | | | | | |
| **JMJ** | **Miyako jima 2** | **3.58** | **68** | *e* | P | **Pn** | **21 22 22.0 +1.6** |
| | baz=82 | | | | | | |
| **SXFK** | **Yanhouchang** | **4.61** | **309** | *e* | P | **Pn** | **21 22 34.5 -0.1** |
| | baz=309 | | | | | | |

*IDC **28** 21:27:59.1±1.7, 17.˙64S×178.˚52W, h518km±18km, mb3.2/11, mbtmp4.1/13, Error ellipse: s-maj=22.3km s-min=16.4km az=132.0*

**ISC 28 21:28:01.4**±0.7, **17.˚6S**-0.˚2×**178.˚7W**-0.˚1, **h547**km, **n19,** σ2ᵖ**49**/23, **mb3.6**/12, **4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.10** | **267** | P | | P | **P** | **21 29 14.6** | **-2.4** |
| | 116nm,0.8s,baz=106,slow=5.4,SNR=57 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.67** | **250** | P | | P | **P** | **21 31 06.3** | **-1.4** |
| | 5.3nm,0.7s,baz=75,slow=20,SNR=2.3 | | | | | | | | |
| **URZ** | **Urewera** | **20.91** | **189** | P | | P | **P** | **21 32 03.3** | **-2.3** |
| | 14nm,0.8s,baz=63,slow=2.3,SNR=2.5 | | | | | | | | |
| | 14nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.54** | **241** | P | | P | **P** | **21 34 37.5** | **0.0** |
| | 1.0nm,0.5s,baz=91,slow=10,SNR=5.7 | | | | | | | | |
| | 1.0nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.42** | **259** | P | | P | **P** | **21 35 24.0** | **-0.2** |
| | 0.6nm,0.6s,baz=93,slow=8.0,SNR=6.3 | | | | | | | | |
| WRA | | | | | PcP | | **PcP** | **21 36 57.3** | **+1.2** |
| | 0.4nm,0.5s,baz=103,slow=2.9,SNR=1.5 | | | | | | | | |
| WRA | | | | | ScP | | **ScP** | **21 40 02.9** | **+6.7** |
| | 0.4nm,0.7s,baz=91,slow=2.8,SNR=2.1 | | | | | | | | |
| | 0.6nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.61** | **254** | P | | P | **P** | **21 35 26.4** | **+0.7** |
| | 4.2nm,0.6s,baz=89,slow=8.2,SNR=50 | | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **21 36 58.1** | **+1.4** |
| | 0.6nm,0.6s,baz=98,slow=4.4,SNR=1.9 | | | | | | | | |
| ASAR | | | | | ScP | | **ScP** | **21 40 04.6** | **+7.5** |
| | 0.1nm,0.4s,baz=97,slow=3.7,SNR=2.8 | | | | | | | | |
| | 4.2nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **72.45** | **180** | P | | P | **P** | **21 38 33.0** | **+0.6** |
| | 3.4nm,0.7s,baz=14,slow=0.3,SNR=30 | | | | | | | | |
| | 3.4nm,0.7s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.39** | **44** | P | | P | **P** | **21 39 10.9** | **-0.5** |
| | 1.4nm,0.8s,baz=227,slow=8.2,SNR=7.9 | | | | | | | | |
| | 1.4nm,0.8s | | | | | | | | |
| **MAW** | **Mawson** | **84.05** | **200** | P | | P | **P** | **21 39 34.7** | **+0.5** |
| | 0.7nm,0.5s,baz=97,slow=16,SNR=1.9 | | | | | | | | |
| | 0.7nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.65** | **13** | P | | P | **P** | **21 39 40.7** | **-1.3** |
| | 0.5nm,0.6s,baz=222,slow=5.0,SNR=5.5 | | | | | | | | |
| | 0.5nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.06** | **58** | P | | P | **P** | **21 39 45.1** | **+0.2** |
| | 0.5nm,0.7s,baz=249,slow=3.5,SNR=4.5 | | | | | | | | |
| | 0.5nm,0.7s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.32** | **44** | P | | P | **P** | **21 39 49.8** | **-0.9** |
| | 0.1nm,0.3s,baz=163,slow=3.5,SNR=2.1 | | | | | | | | |
| | 0.1nm,0.3s | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.61** | **180** | ⇑P | | P | **P** | **21 40 05.3** | **0.0** |
| | comp=Z,60nm,0.5s | | | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **179** | ⇑P | | P | **P** | **21 40 06.3** | **-0.3** |
| | comp=Z,14nm,0.6s | | | | | | | | |
| **SNAA** | **Sanae** | **90.91** | **179** | P | | P | **P** | **21 40 06.3** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=208,slow=10,SNR=12 | | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.06** | **176** | ⇑P | | P | **P** | **21 40 07.4** | **+0.1** |
| | comp=Z,3.2nm,0.6s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.50** | **177** | ⇑P | | P | **P** | **21 40 09.6** | **+0.4** |
| | comp=Z,1.3nm,0.5s,baz=184,slow=5.3 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.37** | **315** | PKP | | **PKPab** | **21 46 37.1** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=29,slow=2.8,SNR=3.8 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **145.75** | **303** | PKPbc | | **PKiKP** | **21 46 41.9** | **-0.9** |
| | comp=Z,0.7nm,0.5s,baz=64,slow=5.7,SNR=4.6 | | | | | | | | |

*IDC **28** 21:32:42.3±1.1, 8.˚46S×116.˚95E, h0km, mb3.6/6, mbtmp3.7/7, ML3.8/1, Error ellipse: s-maj=26.3km s-min=20.0km az=78.0*

*DJA **28** 21:32:43.7±0.3, 8.˚5±4.˚×11.˚7E±.˚, h10km, M3.8/8, MLv3.8/8*

**ISC 28 21:32:43.6**±0.7, **8.˚43S**±0.˚06×**116.˚93E**±0.˚05, **h10**km, **n16,** σ1ᵖ**79**/18, **mb3.7**/5, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.31** | **189** | P | | P | **Pg** | **21 32 49.7** | **0.0** |
| **PLAI** | **Plampang** | **0.92** | **115** | P | | P | **Pg** | **21 33 01.3** | **-0.1** |
| **SRBI** | **Singaraja** | **1.73** | **281** | P | | P | **Pn** | **21 33 13.8** | **0.0** |
| **WBSI** | **Waikabubak, Su** | **2.71** | **116** | P | | P | **Pn** | **21 33 29.1** | **+1.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.75** | **269** | P | | P | **Pn** | **21 33 27.5** | **-0.2** |
| **BSSI** | **Bau Bau, Buton** | **4.20** | **57** | P | | P | **Pn** | **21 33 48.1** | **+0.4** |
| **KAPI** | **Kappang** | **4.40** | **40** | Pn | | P | **Pn** | **21 33 50.8** | **+0.3** |
| | 4.9nm,0.3s,baz=225,slow=1.4,SNR=14 | | | | | | | | |
| KAPI | | | | | Sn | | **Sn** | **21 34 40.2** | **-1.7** |
| | 4.5nm,0.3s,baz=226,slow=20,SNR=7.3 | | | | | | | | |
| KAPI | | | | | Lg | | Lg | 21 35 02.1 | |
| | 2.2nm,0.3s,baz=252,slow=20,SNR=1.4 | | | | | | | | |
| | 14nm,0.2s | | | | | | | | |
| **BKSI** | **Bulukumba** | **4.43** | **46** | P | | P | **Pn** | **21 33 51.1** | **+0.3** |
| **EDFI** | **Ende, Flores** | **4.72** | **94** | P | | P | **Pn** | **21 33 56.1** | **+1.2** |
| **WRA** | **Warramunga Arr** | **20.37** | **126** | P | | P | **P** | **21 37 20.6** | **0.0** |
| | 1.7nm,0.5s,baz=301,slow=12,SNR=22 | | | | | | | | |
| WRA | | | | | S | | **S** | **21 41 03.1** | **-5.8** |
| | 0.2nm,0.5s,baz=302,slow=17,SNR=1.3 | | | | | | | | |
| | 1.7nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.22** | **135** | P | | P | **P** | **21 37 41.0** | **+0.5** |
| | 1.4nm,0.5s,baz=316,slow=10,SNR=16 | | | | | | | | |
| | 1.4nm,0.5s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.08** | **327** | P | | P | **P** | **21 39 13.4** | **+2.4** |
| | 0.3nm,0.5s,baz=157,slow=4.9,SNR=2.4 | | | | | | | | |
| | 0.3nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **56.79** | **352** | P | | P | **P** | **21 42 27.8** | **-0.3** |
| | 0.3nm,0.3s,baz=159,slow=6.0,SNR=1.8 | | | | | | | | |
| | 0.3nm,0.3s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.04**

**MKAR Makanchi Array 40.23 297** P **P** **21 53 09.8 -0.6**
0.3nm,0.5s,baz=90,slow=9.4,SNR=4.4
0.3nm,0.5s
**KURBB Kurchatov Arra 41.76 303** P **P** **21 53 22.9 +0.1**
1.4nm,0.2s,baz=77,slow=9.0,SNR=0.9
1.4nm,0.2s

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*ISN **28** 22:13:27.0±1.0,34.°60N×46.°20E,h8km±27km,ML2.6*
*TEH **28** 22:13:28.1,34.°61N×46.°20E,h8km±24km,ML2.7*
**ISC 28 22:13:28.5±1.1,34.°60N±0.°04×46.°21E±0.°04,h12km±12km, n12,σ1°±21/15,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.17** | **55** | Pg | **Pg** | **22 13 32.3** | **-0.3** |
| **IGHG** | **Ghaleghazi** | **0.40** | **132** | Pg | **Pb** | **22 13 36.8** | **-0.8** |
| **KGS1** | **Ghasr-e-Shirin** | **0.52** | **260** | Pg | **Pb** | **22 13 38.4** | **-1.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.55** | **208** | Pg | **Pb** | **22 13 39.0** | **-1.0** |
| **ILIN** | **Lien** | **0.69** | **62** | Pg | **Pb** | **22 13 41.9** | **-0.7** |
| **KCHF** | **Cheshme Sefid,** | **0.76** | **115** | Pg | **Pb** | **22 13 43.2** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **0.97** | **180** | Pg | **Pb** | **22 13 46.9** | **-0.4** |
| **IBZA** | **Bozab** | **1.37** | **95** | Pg | **Pg** | **22 13 54.6** | **-0.1** |
| **IBDR** | **Badra** | **1.50** | **189** | *e*Pn | **Pg** | **22 13 57.0** | **-0.3** |
| IBDR | | | | *e*Sn | **Sg** | **22 14 18.5** | **+1.6** |
| IBDR | | | | AML | AML | 22 14 27.0 | |
| | comp=E,144nm,0.8s | | | | | | |
| IBDR | | | | AML | AML | 22 14 34.6 | |
| | comp=N,81nm,0.7s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.73** | **128** | Pg | **Pg** | **22 14 00.7** | **-0.9** |
| **IKRK** | **Kirkuk** | **1.73** | **298** | *e*Pn | **Pb** | **22 14 00.0** | **-0.2** |
| IKRK | | | | *e*Sn | **Sg** | **22 14 24.6** | **+0.3** |
| IKRK | | | | AML | AML | 22 14 31.0 | |
| | comp=N,81nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 22 14 31.1 | |
| | comp=E,70nm,0.3s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.87** | **182** | *e*Pn | **Pn** | **22 14 16.0** | **+2.0** |
| RAFI | | | | *e*Sn | **Sb** | **22 14 52.5** | **-2.1** |

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**IDC 28 22:16:57.8±2.6,18.°03S×178.°40W,h0km,mb3.7/3, mbtmp3.7/3,Error ellipse: s-maj=273.4km s-min=35.3km az=159.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.62** | **260** | P | P | 22 25 11.4 | -1.0 |
| | 0.2nm,0.3s,baz=97,slow=7.7,SNR=11 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **44.77** | **254** | P | P | 22 25 14.3 | +0.7 |
| | 2.9nm,0.6s,baz=87,slow=8.1,SNR=43 | | | | | | |
| | 2.9nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.05** | **58** | P | P | 22 29 40.9 | 0.0 |
| | 0.1nm,0.4s,baz=197,slow=2.7,SNR=2.3 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

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*ISN **28** 22:17:58.0±1.2,34.°60N×46.°16E,h16km±16km,ML2.7*
*TEH **28** 22:17:58.7,34.°61N×46.°16E,h9km±54km,ML2.9*
**ISC 28 22:17:59.3±1.1,34.°59N±0.°04×46.°17E±0.°04,h10km,n10, σ0°±55/12,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.21** | **59** | Pg | **Pg** | **22 18 03.7** | **0.0** |
| **IGHG** | **Ghaleghazi** | **0.42** | **129** | Pg | **Pg** | **22 18 07.9** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.49** | **260** | Pg | **Pg** | **22 18 08.4** | **-0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.53** | **204** | Pg | **Pg** | **22 18 09.4** | **-0.2** |
| **ILIN** | **Lien** | **0.73** | **63** | Pg | **Pg** | **22 18 12.5** | **-0.9** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **114** | Pg | **Pg** | **22 18 14.1** | **-0.4** |
| **ILBA** | **Ilam Banvizeh** | **0.97** | **178** | Pg | **Pg** | **22 18 17.4** | **-0.5** |
| **IBZA** | **Bozab** | **1.40** | **95** | Pg | **Pn** | **22 18 25.5** | **+0.3** |
| **IBDR** | **Badra** | **1.49** | **188** | *e*Pn | **Pn** | **22 18 26.0** | **-0.2** |
| | baz=7.0 | | | | | | |
| IBDR | | | | *e*Sn | **Sn** | **22 18 46.0** | **+0.3** |
| **IKRK** | **Kirkuk** | **1.70** | **299** | *e*Pn | **Pn** | **22 18 29.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sn** | **22 18 52.0** | **+1.0** |
| IKRK | | | | AML | AML | 22 18 56.1 | |
| | comp=N,117nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 22 18 59.6 | |
| | comp=E,88nm,0.2s | | | | | | |

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*VIE **28** 22:18:05.8±0.6,49.°78N×18.°61E,h0km,mb2.1/2,ml1.8/3, Error ellipse: s-maj=7.2km s-min=3.3km az=155.0, Suspected Mining induced.*
*IPEC **28** 22:18:06.0±0.2,50.°06N×18.°47E,h1km,ML1.8/4,Error ellipse: s-maj=1.9km s-min=1.0km az=163.0*
**PRU 28 22:18:08.2,50.°05N×18.°34E,h0km,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAC** | **Raciborz** | **0.10** | **290** | *e*PG | Pg | 22 18 10.3 | +0.2 |
| RAC | | | | *e*SG | Sg | 22 18 13.7 | +2.3 |
| **OKC** | **Ostrava-Krasne** | **0.25** | **210** | *e*PG | Pg | 22 18 12.1 | -0.8 |
| OKC | | | | *e*SG | Sg | 22 18 17.2 | +1.1 |
| | comp=Z,64nm,0.8s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.58** | **242** | *e*Pg | Pg | 22 18 18.5 | -0.9 |
| | baz=65 | | | | | | |
| MORC | | | | *e*Sg | Sg | 22 18 26.7 | -0.2 |
| | 22nm,0.4s,baz=65 | | | | | | |
| **KRLC** | **Kraliky** | **1.00** | **272** | *e*PG | Pg | 22 18 25.8 | -1.6 |
| KRLC | | | | *e*SG | Sg | 22 18 39.2 | -1.2 |
| | comp=Z,19nm,0.3s | | | | | | |
| **LANS** | **Liptovska Anna** | **1.16** | **140** | *e*PG | Pg | 22 18 27.9 | -2.5 |
| LANS | | | | *e*SG | Sg | 22 18 45.2 | -0.3 |
| LANS | | | | *e*LG | Lg | 22 18 48.1 | |
| **JAVC** | **Velka Javorina** | **1.27** | **200** | *e*Pg | Pg | 22 18 30.9 | -1.6 |
| | baz=23 | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.33** | **284** | *e*PG | Pg | 22 18 32.1 | -1.6 |
| DPC | | | | *e*SG | Sg | 22 18 50.8 | -0.1 |
| | comp=Z,21nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **1.36** | **237** | *e*Pg | Pg | 22 18 32.3 | -1.9 |
| | baz=58 | | | | | | |
| VRAC | | | | *e*Sg | Sg | 22 18 50.9 | -0.8 |
| | 6.2nm,0.2s,baz=58 | | | | | | |
| **NIE** | **Niedzica** | **1.42** | **116** | *e*Pg | Pn | 22 18 32.1 | -3.2 |
| NIE | | | | *e*Sg | Sg | 22 18 51.2 | -2.6 |
| **OSTC** | **Ostas** | **1.45** | **291** | *e*PG | Pn | 22 18 34.3 | -1.5 |
| OSTC | | | | *e*SG | Sg | 22 18 54.9 | 0.0 |
| **KSP** | **Ksiaz** | **1.53** | **302** | *e*Pg | Pn | 22 18 36.0 | -0.8 |
| KSP | | | | *e*Sg | Sg | 22 18 56.4 | -1.0 |
| **CHVC** | **Chvalec** | **1.56** | **291** | *e*PG | Pn | 22 18 35.6 | -1.6 |
| **VYHS** | **Vyhne** | **1.59** | **168** | *e*PG | Pn | 22 18 34.7 | -2.9 |
| VYHS | | | | *e*SG | Sn | 22 18 57.1 | -1.8 |
| **KRUC** | **Moravsky** | **1.61** | **233** | *e*Pn | Pn | 22 18 36.3 | -1.5 |
| | baz=53 | | | | | | |
| KRUC | | | | *e*Sg | Sn | 22 18 58.6 | -0.7 |
| | 4.7nm,0.2s,baz=53 | | | | | | |
| **TREC** | **Trest** | **2.00** | **249** | *e*SG | Sb | 22 19 10.6 | -0.3 |
| **CONA** | **Conrad Observa** | **2.68** | **218** | *i* Pn | Pn | 22 18 49.7 | -2.9 |
| | 0.2nm,0.2s | | | | | | |
| CONA | | | | *e*Sg | Sg | 22 19 32.6 | -1.6 |
| | 1.6nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **2.93** | **288** | Pg | Pb | 22 19 01.1 | -0.2 |
| BRG | | | | Sg | Sg | 22 19 41.0 | -1.2 |
| BRG | | | | Amp | | 22 19 43.6 | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.23** | **255** | *e*PG | Pb | 22 19 07.0 | +0.6 |
| KHC | | | | *e*SG | Sg | 22 19 49.5 | -2.5 |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **ARSA** | **Arzberg** | **3.37** | **215** | *e*Sg | Sg | 22 19 54.7 | -1.6 |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **MOA** | **Molln** | **3.47** | **232** | *e*Pg | Pb | 22 19 11.4 | +0.8 |
| | comp=Z,0.7nm,0.5s | | | | | | |
| MOA | | | | *e*Sg | Sg | 22 19 57.7 | -2.0 |
| | comp=Z,1.0nm,0.4s | | | | | | |

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*ISN **28** 22:20:39.3±1.2,34.°66N×46.°26E,h8km±14km,ML2.7*
*TEH **28** 22:20:39.5,34.°66N×46.°30E,h7km±103km,ML2.7*
**ISC 28 22:20:39.2±1.1,34.°67N±0.°04×46.°27E±0.°03,h13km±10km, n12,σ0°±51/14,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.10** | **73** | Pg | **Pg** | **22 20 42.0** | **-0.4** |
| **IGHG** | **Ghaleghazi** | **0.42** | **144** | Pg | **Pg** | **22 20 47.9** | **+0.2** |
| **KGS1** | **Ghasr-e-Shirin** | **0.58** | **254** | Pg | **Pb** | **22 20 51.6** | **+0.3** |
| **ILIN** | **Lien** | **0.62** | **66** | Sg | **Sb** | **22 21 00.9** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.63** | **208** | Pg | **Pb** | **22 20 52.1** | **0.0** |
| **KCHF** | **Cheshme Sefid,** | **0.75** | **122** | Pg | **Pg** | **22 20 53.5** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **1.04** | **183** | Pg | **Pn** | **22 20 59.4** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.13** | **80** | Pg | **Pg** | **22 21 00.8** | **-0.2** |
| **IBZA** | **Bozab** | **1.33** | **98** | Pg | **Pb** | **22 21 04.3** | **+0.2** |
| **IBDR** | **Badra** | **1.58** | **190** | *e*Pn | **Pg** | **22 21 09.0** | **-0.6** |
| | baz=10.0 | | | | | | |
| IBDR | | | | *e*Sn | **Sg** | **22 21 30.5** | **+0.4** |
| IBDR | | | | AML | AML | 22 21 37.1 | |
| | comp=E,104nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 22 21 42.2 | |
| | comp=N,61nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.74** | **295** | *e*Pn | **Pg** | **22 21 12.0** | **-0.6** |
| IKRK | | | | *e*Sn | **Sg** | **22 21 36.0** | **+0.8** |
| IKRK | | | | AML | AML | 22 21 40.8 | |
| | comp=N,205nm,0.3s | | | | | | |
| IKRK | | | | AML | AML | 22 21 44.0 | |
| | comp=E,132nm,0.5s | | | | | | |
| **IDOB** | **Doab** | **1.81** | **119** | Pg | **Pg** | **22 21 13.1** | **-0.8** |

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*IPEC **28** 22:21:38.6±0.2,49.°98N×18.°71E,h1km,ML1.5/4,Error ellipse: s-maj=2.1km s-min=1.1km az=165.0*
**PRU 28 22:21:40.8,49.°95N×18.°58E,h0km,Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKC** | **Ostrava-Krasne** | **0.30** | **248** | *e*PG | Pg | 22 21 46.6 | 0.0 |
| OKC | | | | *e*SG | Sg | 22 21 51.6 | +1.1 |
| | comp=Z,7.6nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.69** | **256** | *e*Pg | Pg | 22 21 53.7 | -0.4 |
| | baz=74 | | | | | | |
| MORC | | | | *e*Sg | Sg | 22 22 03.3 | +0.3 |
| | 9.2nm,0.2s,baz=74 | | | | | | |
| **LANS** | **Liptovska Anna** | **0.99** | **144** | *e*PG | Pg | 22 21 57.4 | -2.3 |
| LANS | | | | *e*SG | Sg | 22 22 10.2 | -2.3 |
| LANS | | | | *e*LG | Lg | 22 22 13.0 | |
| **KRLC** | **Kraliky** | **1.17** | **277** | *e*PG | Pg | 22 22 01.1 | -2.0 |
| KRLC | | | | *e*SG | Sg | 22 22 18.3 | 0.0 |
| | comp=Z,13nm,0.3s | | | | | | |
| **NIE** | **Niedzica** | **1.24** | **115** | *e*Pg | Pg | 22 22 01.5 | -3.0 |
| NIE | | | | *e*Sg | Sg | 22 22 18.5 | -2.0 |
| **JAVC** | **Velka Javorina** | **1.24** | **209** | *e*Pg | Pg | 22 22 03.5 | -1.1 |
| | baz=31 | | | | | | |
| **JAVC** | **Velka Javorina** | **1.24** | **209** | *e*PG | Pg | 22 22 03.6 | -1.0 |
| **VRAC** | **Vranov** | **1.44** | **244** | *e*Pg | Pn | 22 22 06.6 | -1.6 |
| | baz=63 | | | | | | |
| VRAC | | | | *e*Sg | Sg | 22 22 26.8 | -0.3 |
| | 5.0nm,0.4s,baz=63 | | | | | | |
| **VRAC** | **Vranov** | **1.44** | **244** | *e*PG | Pn | 22 22 06.7 | -1.5 |
| VRAC | | | | *e*SG | Sg | 22 22 26.9 | -0.2 |
| **VYHS** | **Vyhne** | **1.47** | **173** | *e*PN | Pn | 22 22 05.7 | -2.8 |
| VYHS | | | | *e*SN | Sg | 22 22 25.9 | -2.0 |
| **DPC** | **Dobruska-Polom** | **1.51** | **286** | *e*PG | Pn | 22 22 07.5 | -1.6 |
| DPC | | | | *e*SG | Sg | 22 22 28.6 | -0.6 |
| | comp=Z,4.8nm,0.3s | | | | | | |
| **OSTC** | **Ostas** | **1.64** | **293** | *e*PG | Pn | 22 22 10.9 | +0.1 |
| OSTC | | | | *e*SG | Sn | 22 22 31.9 | -0.7 |
| **KRUC** | **Moravsky** | **1.68** | **239** | *e*Pn | Pn | 22 22 10.7 | -0.7 |
| | baz=58 | | | | | | |
| KRUC | | | | *e*Sg | Sn | 22 22 33.7 | +0.1 |
| | 2.9nm,0.3s,baz=58 | | | | | | |
| **KRUC** | **Moravsky** | **1.68** | **239** | *e*PN | Pn | 22 22 10.8 | -0.6 |
| KRUC | | | | *e*SG | Sn | 22 22 33.8 | +0.2 |
| **CKRC** | **Cesky Krumlov** | **3.01** | **250** | *e*SG | Sg | 22 23 15.2 | -2.3 |
| **KHC** | **Kasperske Hory** | **3.36** | **258** | *e*SG | Sg | 22 23 27.3 | -1.4 |

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*IDC **28** 22:22:15.9±0.7,29.°45N×141.°86E,h0km,mb3.8/14, mbtmp3.8/17,ML3.4/3,MS3.0/7,Error ellipse: s-maj=27.7km s-min=14.4km az=74.0*
*NEIC **28** 22:22:19.0±1.5,29.°46N±0.°06×141.°7E±0.°1,h16km±5km, mb4.4/10,Error ellipse: s-maj=18.8km s-min=6.7km az=73.0*
*NIED **28** 22:22:20.1,29.°61N×141.°86E,h77km,MW3.8,Moment Tensor Solution. s2 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=2.51; $M_{\theta\theta}$4.67; $M_{\phi\phi}$-2.16; $M_{r\theta}$4.44; $M_{\theta\phi}$-1.40; $M_{\phi r}$1.96; Fault plane solution: $M_0$6.44000×$10^{14}$ NP1: $\phi_s$250.00000°,δ76.00000°,λ-120.00000°. NP2: $\phi_s$137.00000°,δ33.00000°,λ-26.00000°.*
**ISC 28 22:22:17.6±0.6,29.°44N±0.°06×141.°7E±0.°1,h10km,n36, σ1°±22/40,mb4.1/20,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **2.38** | **170** | | **Pn** | **22 22 57.9** | **+1.3** |
| JCJ | | | | Sn | **Sn** | **22 23 25.6** | **-0.2** |
| **JCJ** | **Chichijima** | **2.38** | **170** | Pn | Pn | 22 22 54.4 | -2.3 |
| | 16nm,0.3s,baz=91,slow=15,SNR=15 | | | | | | |
| JCJ | | | | Sn | **Sn** | **22 23 22.4** | **-3.4** |
| | 36nm,0.3s,baz=264,slow=23,SNR=6.6 | | | | | | |
| JCJ | | | | LR | LR | 22 23 53.7 | |
| | comp=Z,231nm,18.5s,baz=61,slow=41 37nm,0.4s | | | | | | |
| **JHJ2** | **Mitsune** | **4.00** | **336** | Pn | **Pn** | **22 23 19.5** | **+0.5** |
| **JHJ** | **Hachijo jima 2** | **4.02** | **336** | Pn | **Pn** | **22 23 19.8** | **+0.5** |
| | 6.8nm,0.3s,baz=228,slow=19,SNR=2.5 | | | | | | |
| JHJ | | | | Sn | **Sn** | **22 24 05.0** | **-1.5** |
| | 9.0nm,0.3s,baz=66,slow=18,SNR=1.1 | | | | | | |
| JHJ | | | | LR | LR | 22 24 51.3 | |
| | comp=Z,199nm,19.6s,baz=121,slow=38 139nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.67** | **338** | Pn | **Pn** | **22 24 09.4** | **0.0** |
| | 0.3nm,0.3s,baz=152,slow=10,SNR=18 | | | | | | |
| MJAR | | | | Sn | **Sn** | **22 25 35.2** | **-1.1** |
| | 0.2nm,0.3s,baz=172,slow=17,SNR=5.5 | | | | | | |
| MJAR | | | | LR | LR | 22 27 06.4 | |
| | comp=Z,92nm,19.4s,baz=186,slow=38 3.0nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **7.67** | **338** | | **Pn** | **22 24 08.2** | **-1.2** |
| **JMN** | **Monobe** | **7.94** | **305** | Pn | **Pn** | **22 24 11.4** | **-1.7** |
| **JMM** | **Marumori** | **8.44** | **355** | | **Pn** | **22 24 18.4** | **-1.5** |
| **JNU** | **Nakatsue** | **9.97** | **294** | LR | LR | 22 28 25.8 | |
| | comp=Z,136nm,18.2s,baz=131,slow=37 | | | | | | |
| **JOW** | **Kunigami** | **12.15** | **261** | LR | LR | 22 29 28.2 | |
| | comp=Z,73nm,20.8s,baz=121,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **14.01** | **308** | LR | LR | 22 31 00.9 | |
| | comp=Z,58nm,18.4s,baz=125,slow=37 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **16.64** | **335** | | **Pn** | **22 26 13.2** | **+2.2** |
| **USRK** | **Ussuriysk Ar.** | **16.64** | **335** | Pn | **Pn** | **22 26 14.8** | **+3.9** |
| | 0.1nm,0.3s,baz=150,slow=9.7,SNR=5.8 | | | | | | |
| USRK | | | | LR | LR | 22 32 37.5 | |
| | comp=Z,55nm,18.6s,baz=188,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **21.18** | **342** | P | **P** | **22 27 02.7** | **-0.3** |
| | 0.7nm,0.5s,baz=159,slow=13,SNR=2.5 0.7nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **32.77** | **314** | P | **P** | **22 28 51.0** | **+0.1** |
| | 0.3nm,0.4s,baz=82,slow=3.1,SNR=1.6 0.3nm,0.4s | | | | | | |
| **COEN** | **Coen** | **43.17** | **178** | P | **P** | **22 30 19.2** | **+0.5** |
| COEN | | | | IAmb | IAmb | 22 30 26.2 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **47.47** | **318** | P | **P** | **22 30 52.5** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=69,slow=7.9,SNR=4.5 | | | | | | |
| ZALV | | | | PcP | **PcP** | **22 32 22.2** | **-0.5** |
| | comp=Z,0.7nm,0.7s,baz=118,slow=8.3,SNR=2.4 comp=Z,0.7nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.69** | **308** | P | **P** | **22 31 02.5** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=91,slow=8.2,SNR=1.2 | | | | | | |
| MKAR | | | | PcP | **PcP** | **22 32 25.2** | **-2.0** |
| | comp=Z,0.4nm,0.6s,baz=40,slow=2.5,SNR=4.2 comp=Z,0.2nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **49.43** | **189** | P | **P** | **22 31 07.5** | **-0.4** |
| **WRA** | **Warramunga Arr** | **49.61** | **189** | P | **P** | **22 31 09.2** | **-0.1** |
| | comp=Z,1.1nm,0.6s,baz=9.5,slow=8.2,SNR=19 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 32 31.4** | **+0.6** |
| | comp=Z,0.7nm,0.7s,baz=356,slow=3.6,SNR=4.7 comp=Z,1.1nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.13** | **313** | P | **P** | **22 31 20.8** | **+0.3** |
| | comp=Z,0.9nm,0.4s,baz=91,slow=8.3,SNR=5.7 comp=Z,0.9nm,0.4s | | | | | | |
| **J20K** | **Nowinta River** | **52.67** | **30** | P | **P** | **22 31 31.7** | **-0.1** |
| J20K | | | | IAmb | IAmb | 22 31 49.9 | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **53.34** | **189** | P | **P** | **22 31 37.7** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=3.5,slow=5.6,SNR=7.4 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 32 44.9** | **+0.3** |
| | comp=Z,1.0nm,0.9s,baz=20,slow=4.9,SNR=5.5 comp=Z,0.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **55.86** | **29** | P | **P** | **22 31 53.9** | **-1.2** |
| | comp=Z,0.5nm,0.8s,baz=268,slow=5.4,SNR=3.5 comp=Z,0.5nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **56.05** | **316** | P | **P** | **22 31 57.6** | **+1.0** |
| | comp=Z,1.4nm,0.5s,baz=94,slow=7.6,SNR=12 comp=Z,1.4nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **56.12** | **316** | P | **P** | **22 31 57.1** | **0.0** |
| BRVK | | | | IAmb | IAmb | 22 32 10.9 | |
| | comp=Z,2.7nm,0.7s | | | | | | |

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**I28M Miner Creek 58.80 29** P **P** **22 32 15.9 0.0**
**CHGR Chuyangaron 59.41 300** P **P** **22 32 19.6 -1.0**
CHGR IAmb IAmb 22 32 35.0
comp=Z,4.8nm,0.9s
**I30M Mount Dempster 60.31 29** P **P** **22 32 26.2 -0.1**
I30M IAmb IAmb 22 32 52.2
comp=Z,2.8nm,1.1s
**FORT Forrest 61.29 193** P **P** **22 32 33.2 +0.1**
**ABKAR Akbulak array 63.18 313** P **P** **22 32 46.0 +0.3**
ABKAR IAmb IAmb 22 32 52.4
comp=Z,2.0nm,0.7s
**FINES FINESS Array B 75.67 333** P **P** **22 34 02.5 -0.3**
comp=Z,2.1nm,1.0s,baz=38,slow=7.0,SNR=7.2
comp=Z,2.1nm,1.0s
**KBZ Khabaz 76.12 312** P **P** **22 34 06.4 +0.7**
comp=Z,1.2nm,0.6s,baz=121,slow=5.9,SNR=2.2
comp=Z,1.2nm,0.6s
**NVAR Mina Array Bea 79.39 52** P **P** **22 34 23.9 -0.5**
comp=Z,0.7nm,0.7s,baz=312,slow=5.7,SNR=6.0
comp=Z,0.7nm,0.7s
**BRTR Keskin Array B 84.12 313** P **P** **22 34 50.0 +0.8**
comp=Z,0.7nm,0.8s,baz=78,slow=4.8,SNR=5.8
comp=Z,0.7nm,0.8s
**TXAR Lajitas Array 94.52 53** P **P** **22 35 38.9 +0.1**
comp=Z,0.7nm,0.8s,baz=318,slow=2.6,SNR=5.9
comp=Z,0.7nm,0.8s

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*NNC **28** 22:24:31.6±2.7,43.°77N×84.°11E,h0km,mb3.2,mpv3.1, Error ellipse: s-maj=21.1km s-min=10.2km az=127.0*
*SOME **28** 22:24:31.0,43.°75N×84.°18E,h10km*
**ISC 28 22:24:34.7±2.3,43.°7N±0.°1×84.°3E±0.°1,h10km,n23, σ2°±05/32,5C-1D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **2.84** | **266** | *e*P | **Pn** | **22 25 21.0** | **+0.7** |
| | 1.1nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **22 25 56.5** | **+1.9** |
| | 10nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **2.84** | **266** | Pg | **Pn** | **22 25 19.5** | **-0.8** |
| | 2.7nm,0.2s | | | | | | |
| KTMS | | | | Lg | Lg | 22 25 55.0 | |
| | 6.7nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **3.28** | **283** | *e*P | **Pb** | **22 25 31.2** | **-1.8** |
| | 1.2nm,0.1s | | | | | | |
| DJR | | | | *e*S | **Sb** | **22 26 14.2** | **+1.2** |
| | 9.0nm,0.5s | | | | | | |
| **DJR** | **Jarkent** | **3.28** | **283** | Pg | **Pb** | **22 25 31.2** | **-1.8** |
| | 1.2nm,0.1s | | | | | | |
| DJR | | | | Lg | Lg | 22 26 14.2 | |
| | 9.0nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **3.39** | **337** | ⇑Pg | **Pb** | **22 25 31.8** | **-3.1** |
| | 0.3nm,0.3s,baz=148,slow=15,SNR=24 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 22 26 16.1 | |
| | 3.8nm,0.6s,baz=159,slow=27,SNR=3.4 | | | | | | |
| **PDGK** | **Podgornoye** | **3.48** | **266** | Pg | **Pb** | **22 25 34.3** | **-2.2** |
| | 0.5nm,0.3s | | | | | | |
| PDGK | | | | Lg | Lg | 22 26 19.4 | |
| | 3.6nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **3.48** | **266** | ⇑Pg | **Pn** | **22 25 29.7** | **+0.7** |
| | 0.9nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 22 26 15.8 | |
| | 6.7nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **3.50** | **334** | ⇓Pg | **Pn** | **22 25 31.8** | **+2.6** |
| | 1.6nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 22 26 19.7 | |
| | 2.3nm,0.6s | | | | | | |
| **SHLS** | **Shalkode** | **3.53** | **263** | *e*P | **Pn** | **22 25 29.2** | **-0.5** |
| | 3.1nm,0.5s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **22 26 11.5** | **-0.1** |
| | 14nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **3.53** | **263** | Pg | **Pn** | **22 25 29.2** | **-0.5** |
| | 3.1nm,0.5s | | | | | | |
| SHLS | | | | Lg | Lg | 22 26 11.5 | |
| | 14nm,0.4s | | | | | | |
| **KNOS** | **Konyrlen** | **3.72** | **282** | Pg | **Pb** | **22 25 38.5** | **-2.0** |
| | 1.2nm,0.1s | | | | | | |
| KNOS | | | | Lg | Lg | 22 26 26.8 | |
| | 5.6nm,0.5s | | | | | | |
| **ZSN** | **Zaisan** | **3.78** | **6** | *e*P | **Pb** | **22 25 40.1** | **-1.4** |
| | 0.5nm,0.2s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **22 26 29.2** | **+1.9** |
| | 9.5nm,0.7s | | | | | | |
| **UZB** | **Uzunbulak** | **3.85** | **264** | *e*P | **Pb** | **22 25 41.4** | **-1.4** |
| | 2.7nm,0.2s | | | | | | |
| UZB | | | | *e*S | **Sb** | **22 26 31.5** | **+2.0** |
| | 1.7nm,0.3s | | | | | | |
| **UZB** | **Uzunbulak** | **3.85** | **264** | Pg | **Pb** | **22 25 41.4** | **-1.4** |
| | 2.7nm,0.2s | | | | | | |
| UZB | | | | Lg | Lg | 22 26 31.5 | |
| | 1.7nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **4.05** | **269** | *e*P | **Pb** | **22 25 45.6** | **-0.6** |
| | 1.4nm,0.3s | | | | | | |
| KPKS | | | | *e*S | **Sb** | **22 26 38.7** | **+3.5** |
| | 8.7nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **4.05** | **269** | Pg | **Pb** | **22 25 45.6** | **-0.6** |
| | 1.4nm,0.3s | | | | | | |
| KPKS | | | | Lg | Lg | 22 26 38.7 | |
| | 8.7nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **4.19** | **277** | Pg | **Pb** | **22 25 47.4** | **-1.2** |
| | 3.4nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 22 26 42.1 | |
| | 7.2nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **4.27** | **265** | *e*P | **Pb** | **22 25 50.3** | **+0.4** |
| | 0.5nm,0.1s | | | | | | |
| ZHN | | | | *e*S | **Sg** | **22 26 46.7** | **-5.0** |
| | 6.9nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **4.27** | **265** | Pg | **Pb** | **22 25 50.3** | **+0.4** |
| | 0.5nm,0.1s | | | | | | |
| ZHN | | | | Lg | Lg | 22 26 46.7 | |
| | 6.9nm,0.2s | | | | | | |
| **SATY** | **Saty** | **4.31** | **263** | *e*P | **Pb** | **22 25 49.8** | **-0.8** |
| | 1.0nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sb** | **22 26 46.1** | **+3.4** |
| | 3.2nm,0.1s | | | | | | |
| **SATY** | **Saty** | **4.31** | **263** | Pg | **Pb** | **22 25 49.8** | **-0.8** |
| | 1.0nm,0.1s | | | | | | |
| SATY | | | | Lg | Lg | 22 26 46.1 | |
| | 3.2nm,0.1s | | | | | | |
| **ARXS** | **Arharly** | **4.67** | **279** | *e*P | **Pb** | **22 25 55.6** | **-1.0** |
| | 0.8nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sb** | **22 26 56.5** | **+3.6** |
| | 3.7nm,0.5s | | | | | | |
| **ARXS** | **Arharly** | **4.67** | **279** | Pg | **Pb** | **22 25 55.7** | **-1.0** |
| | 0.8nm,0.2s | | |

*IDC* ***28*** *22:35:14.1±1.0,16˚.78N×146˚.68E,h72km±7km,mb5.6/31, mbtmp5.9/32,MS5.7/63,Error ellipse: s-maj=11.0km s-min=6.6km az=70.0*

*GCMT* ***28*** *22:35:17.4±0.0,16˚.64N×147˚.05E,h56km,MW6.5/170, Moment Tensor Solution. s170,c422; s165,c709; Duration: 4s1 Moment tensor: Scale 10¹⁸Nm; Mrr-0.02±.02; Mθθ2.28±.02; Mφφ-2.26±.02; Mrθ-3.45±.03; Mθφ-1.31±.02; Mφr4.30±.03; Best double couple: M₀6.07900×10¹⁸ NP1:φs145.00000°,δ89.00000°, λ-65.00000°. NP2:φs237.00000°,δ25.00000°, λ-178.00000°. Principal axes: T 6.4020, Plg39.0000°, Azm212.0000°; N -0.6440, Plg25.0000°, Azm324.0000°; P -5.7550, Plg41.0000°, Azm78.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*

**ISC 28 22:35:13.5±0.2,16˚.72N±0˚.02×146˚.78E±0˚.03,h70km±1km, h70km:pP-P,n1842,σ1s83/2487,mb6.3/289,164C-108D, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **3.62** | **211** | P | | **Pn** | **22 36 09.6** | **+2.5** |
| **GUMO** | **Guam** | **3.62** | **211** | Pn | | **Pn** | **22 36 09.0** | **+1.8** |
| **GUMO** | **Guam** | **3.62** | **211** | ⇑P | | **Pn** | **22 36 08.9** | **+1.8** |
| **GUMO** | **Guam** | **3.62** | **211** | P | | **Pn** | **22 36 08.8** | **+1.6** |
| | 22μm,0.5s,baz=231,slow=0.3,SNR=1820 | | | | | | | |
| **GUMO** | **Guam** | **3.62** | **211** | P | | **Pn** | **22 36 09.0** | **+1.8** |
| **JCJ** | **Chichijima** | **11.17** | **338** | P | | **Pn** | **22 37 50.1** | **-0.3** |
| **JCJ** | **Chichijima** | **11.17** | **338** | Pn | | **Pn** | **22 37 49.6** | **-0.8** |
| **JCJ** | **Chichijima** | **11.17** | **338** | ⇑P | | **Pn** | **22 37 49.4** | **-1.0** |
| **JCJ** | **Chichijima** | **11.17** | **338** | P | | Pn | 22 37 44.9 | -5.5 |
| | 722nm,0.4s,baz=106,slow=11,SNR=64 | | | | | | | |
| JCJ | | | | S | | Sn | 22 39 44.4 | -9.2 |
| | 1μm,0.7s,baz=247,slow=22,SNR=2.3 | | | | | | | |
| **PATS** | **Pohnpei** | **14.96** | **130** | Pn | | Pn | 22 38 34.7 | -6.4 |
| **I39PW** | **PALAU INFRASON** | **15.03** | **234** | P | | **P** | **22 38 45.0** | **-0.9** |
| | baz=78,slow=21,SNR=3.1 | | | | | | | |
| **JMZ** | **Minamidaito 2** | **17.08** | **305** | P | | **P** | **22 39 09.6** | **+1.1** |
| **JMZ** | **Minamidaito 2** | **17.08** | **305** | P | | **P** | **22 39 10.7** | **+2.2** |
| **JHJ2** | **Mitsune** | **17.49** | **340** | P | | **P** | **22 39 15.4** | **+2.4** |
| **JHJ2** | **Mitsune** | **17.49** | **340** | P | | **Pn** | **22 39 12.4** | **-0.3** |
| JHJ2 | | | | IAmb | | IAmb | 22 39 17.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **JHJ2** | **Mitsune** | **17.49** | **340** | ⇓P | | **P** | **22 39 13.8** | **+0.9** |
| **JHJ2** | **Mitsune** | **17.49** | **340** | P | | **P** | **22 39 14.7** | **+1.7** |
| **JHJ** | **Hachijo jima 2** | **17.51** | **340** | P | | **Pn** | **22 39 12.2** | **-0.7** |
| | comp=Z,828nm,0.5s,baz=184,slow=12,SNR=22 | | | | | | | |
| JHJ | | | | S | | **Sn** | **22 42 25.8** | **-1.6** |
| | comp=Z,758nm,0.9s,baz=237,slow=21,SNR=2.0 | | | | | | | |
| JHJ | | | | ScS | | **ScS** | **22 50 55.3** | **-3.8** |
| | comp=Z,175nm,1.1s,baz=51,slow=17,SNR=4.0 | | | | | | | |
| **MANU** | **Manus Island** | **18.65** | **178** | | | **Pn** | **22 39 27.3** | **+0.3** |
| MANU | | | | IAmb | | IAmb | 22 39 31.1 | |
| | comp=Z,3μm,1.1s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **19.06** | **82** | T | | T | 23 00 50.6 | |
| | baz=270,slow=75 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.07** | **82** | T | | T | 23 00 43.2 | |
| | baz=270,slow=75 | | | | | | | |
| **WAKE** | **Wake Island** | **19.08** | **79** | P | | **P** | **22 39 29.8** | **-0.7** |
| WAKE | | | | IAmb | | IAmb | 22 39 38.4 | |
| | comp=Z,3μm,1.2s | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.08** | **82** | T | | T | 23 00 46.0 | |
| | baz=270,slow=75 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.34** | **78** | T | | T | 23 00 50.7 | |
| | baz=264,slow=74,SNR=24 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.34** | **78** | T | | T | 23 00 53.3 | |
| | baz=264,slow=74,SNR=22 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.36** | **78** | T | | T | 23 00 51.9 | |
| | baz=264,slow=74,SNR=24 | | | | | | | |
| **JSG** | **Sagara** | **19.47** | **338** | P | | **Pn** | **22 39 38.2** | **+1.7** |
| **JSG** | **Sagara** | **19.47** | **338** | P | | **Pn** | **22 39 36.4** | **-0.1** |
| **JSG** | **Sagara** | **19.47** | **338** | ⇓P | | **P** | **22 39 35.4** | **+0.7** |
| **JSG** | **Sagara** | **19.47** | **338** | P | | **Pn** | **22 39 37.2** | **+0.8** |
| **KAVG** | **Kavieng** | **19.59** | **168** | P | | **Pn** | **22 39 38.3** | **+0.3** |
| **JOD2** | **Odawara 2** | **19.70** | **341** | *i* P | | **Pn** | **22 39 38.4** | **-0.9** |
| JOD2 | | | | S | | **S** | **22 43 14.5** | **-1.3** |
| **JOW** | **Kunigami** | **19.89** | **304** | P | | **Pn** | **22 39 42.5** | **+1.0** |
| **JOW** | **Kunigami** | **19.89** | **304** | P | | **Pn** | **22 39 41.0** | **-0.5** |
| **JOW** | **Kunigami** | **19.89** | **304** | ⇑P | | **Pn** | **22 39 41.4** | **-0.1** |
| **JOW** | **Kunigami** | **19.89** | **304** | P | | **Pn** | **22 39 41.8** | **+0.3** |
| | comp=Z,120nm,0.4s,baz=140,slow=12,SNR=30 | | | | | | | |
| JOW | | | | S | | **Sn** | **22 43 22.3** | **-2.5** |
| | comp=Z,87nm,0.9s,baz=59,slow=29,SNR=1.5 | | | | | | | |
| **JOW** | **Kunigami** | **19.89** | **304** | P | | **Pn** | **22 39 42.1** | **+0.5** |
| JOW | | | | S | | **Sn** | **22 43 22.3** | **-2.5** |
| **GENI** | **Genyem** | **20.27** | **199** | P | | Pn | 22 39 45.8 | -0.2 |
| **GENI** | **Genyem** | **20.27** | **199** | ⇑P | | Pn | 22 39 46.0 | -0.1 |
| **JYT** | **Yasato** | **20.29** | **344** | *i* P | | Pn | 22 39 45.1 | -1.0 |
| JYT | | | | S | | **S** | **22 43 27.6** | **+0.4** |
| **JRY** | **Ryogami san** | **20.46** | **341** | *i* P | | **P** | **22 39 46.4** | **+1.0** |
| JRY | | | | S | | **S** | **22 43 29.7** | **-0.9** |
| **INU** | **Inuyama** | **20.50** | **337** | P | | Pn | 22 39 48.0 | -0.6 |
| **INU** | **Inuyama** | **20.50** | **337** | P | | **P** | **22 39 45.4** | **-0.4** |
| **INU** | **Inuyama** | **20.50** | **337** | ⇓P | | **P** | **22 39 45.5** | **-0.3** |
| **JMN** | **Monobe** | **20.53** | **328** | ⇓P | | **P** | **22 39 46.4** | **+0.1** |
| **JGF** | **Kuroka** | **20.60** | **338** | P | | Pn | 22 39 48.4 | -1.4 |
| **JGF** | **Kuroka** | **20.60** | **338** | P | | **P** | **22 39 47.0** | **+0.1** |
| **JGF** | **Kuroka** | **20.60** | **338** | ⇓P | | **P** | **22 39 45.9** | **-1.0** |
| **JGF** | **Kuroka** | **20.60** | **338** | P | | **P** | **22 39 47.3** | **+0.4** |
| **MJAR** | **Matsushiro Arr** | **21.16** | **341** | P | | **P** | **22 39 51.7** | **-1.2** |
| | comp=Z,286nm,0.7s,baz=170,slow=10,SNR=67 | | | | | | | |
| MJAR | | | | S | | **S** | **22 43 44.7** | **+0.3** |
| | comp=Z,132nm,1.1s,baz=311,slow=25,SNR=4.6 | | | | | | | |
| MJAR | | | | ScP | | **ScP** | **22 47 25.6** | **-1.6** |
| | comp=Z,14nm,0.9s,baz=159,slow=4.8,SNR=3.6 | | | | | | | |
| | comp=Z,286nm,0.7s | | | | | | | |
| **MAJO** | **Matsushiro** | **21.16** | **341** | P | | **P** | **22 39 54.0** | **+1.1** |
| **MAJO** | **Matsushiro** | **21.16** | **341** | P | | **P** | **22 39 52.8** | **-0.1** |
| MAJO | | | | IAmb | | IAmb | 22 40 12.1 | |
| | comp=Z,4μm,1.8s | | | | | | | |
| **MAJO** | **Matsushiro** | **21.16** | **341** | ⇓P | | **P** | **22 39 52.5** | **-0.5** |
| **MAJO** | **Matsushiro** | **21.16** | **341** | *d* P | | **P** | **22 39 52.5** | **-0.5** |
| MAJO | | | | MLR | | MLR | | |
| | comp=Z,18μm,13.0s | | | | | | | |
| **MAT** | **Matsushiro** | **21.16** | **341** | *i* P | | **P** | **22 39 52.8** | **-0.1** |
| MAT | | | | S | | **S** | **22 43 41.9** | **-2.6** |
| **JGN** | **Niukaw** | **21.17** | **338** | P | | **P** | **22 39 52.5** | **-0.6** |
| JGN | | | | S | | **S** | **22 43 45.1** | **+0.3** |
| **JAD** | **Aida** | **21.37** | **331** | *i* P | | **P** | **22 39 54.5** | **-0.7** |
| JAD | | | | S | | **S** | **22 43 45.9** | **-2.7** |
| **RABL** | **Rabaul** | **21.45** | **165** | P | | **P** | **22 39 57.3** | **+1.1** |
| **JMJ** | **Miyako jima 2** | **21.62** | **295** | P | | **P** | **22 40 00.3** | **+2.3** |
| **JMM** | **Marumori** | **21.72** | **347** | P | | **P** | **22 40 01.2** | **+2.4** |
| **JMM** | **Marumori** | **21.72** | **347** | P | | **P** | **22 39 60.0** | **+1.2** |
| JMM | | | | IAmb | | IAmb | 22 40 03.4 | |
| | comp=Z,1μm,0.8s | | | | | | | |
| **JMM** | **Marumori** | **21.72** | **347** | *i* P | | **P** | **22 40 00.4** | **+1.5** |
| JMM | | | | S | | **S** | **22 43 57.8** | **+2.5** |
| **JNU** | **Nakatsue** | **21.74** | **322** | P | | **P** | **22 40 00.6** | **+1.4** |
| **JNU** | **Nakatsue** | **21.74** | **322** | P | | **P** | **22 39 59.4** | **+0.2** |
| **JNU** | **Nakatsue** | **21.74** | **322** | ⇓P | | **P** | **22 39 59.2** | **+0.1** |
| **JNU** | **Nakatsue** | **21.74** | **322** | P | | **P** | **22 39 59.3** | **+0.1** |
| | comp=Z,102nm,0.8s,baz=158,slow=4.3,SNR=35 | | | | | | | |
| JNU | | | | S | | **S** | **22 43 55.9** | **-0.1** |
| | comp=Z,35nm,0.9s,baz=0.9,slow=14,SNR=0.9 | | | | | | | |
| JNU | | | | ScP | | **ScP** | **22 47 26.2** | **-2.5** |
| | comp=Z,20nm,1.0s,baz=319,slow=0.7,SNR=2.6 | | | | | | | |
| JNU | | | | ScS | | **ScS** | **22 51 11.6** | **-1.7** |
| | comp=Z,10nm,1.1s,baz=315,slow=7.1,SNR=3.7 | | | | | | | |
| | comp=Z,102nm,0.8s | | | | | | | |
| **JNU** | **Nakatsue** | **21.74** | **322** | P | | **P** | **22 39 59.2** | **+0.1** |
| **JHS** | **Saijyo** | **21.92** | **329** | P | | **P** | **22 39 60.0** | **-1.2** |
| **BULU** | **Kimbe** | **22.39** | **171** | P | | **P** | **22 40 07.8** | **+1.6** |
| **JSD** | **Sado** | **22.52** | **342** | P | | **P** | **22 40 08.3** | **+0.8** |
| **JSD** | **Sado** | **22.52** | **342** | P | | **P** | **22 40 07.5** | **0.0** |
| **JSD** | **Sado** | **22.52** | **342** | ⇓P | | **P** | **22 40 07.8** | **+0.2** |
| **JSD** | **Sado** | **22.52** | **342** | P | | **P** | **22 40 07.2** | **-0.3** |
| JSD | | | | S | | **S** | **22 44 10.2** | **+0.5** |
| **TABU** | **Tabubil** | **22.53** | **195** | P | | **P** | **22 40 08.1** | **+0.3** |
| **JYA** | **Atsumi** | **22.66** | **346** | *i* P | | **P** | **22 40 10.4** | **+1.4** |
| JYA | | | | S | | **S** | **22 44 17.7** | **+5.8** |
| **DAV** | **Davao City (W)** | **22.83** | **248** | P | | **P** | **22 40 10.4** | **+2.4** |
| **DAV** | **Davao City (W)** | **22.83** | **248** | P | | **P** | **22 40 12.4** | **+1.5** |
| **DAV** | **Davao City (W)** | **22.83** | **248** | ⇑P | | **P** | **22 40 12.5** | **+1.5** |
| **DAV** | **Davao City (W)** | **22.83** | **248** | LR | | LR | 22 47 39.1 | |
| | comp=Z,31μm,21.4s,baz=82,slow=33 | | | | | | | |
| **DAV** | **Davao City (W)** | **22.83** | **248** | P | | **P** | **22 40 12.5** | **+1.5** |
| DAV | | | | P | | **P** | **22 40 12.5** | **+1.5** |
| **DAV** | **Davao City (W)** | **22.83** | **248** | P | | **P** | **22 40 09.0** | **-2.0** |
| **JOM** | **Ohasama** | **23.17** | **349** | P | | **P** | **22 40 14.7** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **23.52** | **293** | P | | **P** | **22 40 19.2** | **+1.7** |
| **YOJ** | **Yonaguni jima** | **23.52** | **293** | P | | **P** | **22 40 18.0** | **+0.5** |
| YOJ | | | | IAmb | | IAmb | 22 40 39.4 | |
| | comp=Z,2μm,1.2s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **23.52** | **293** | ⇑P | | **P** | **22 40 18.1** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **23.52** | **293** | P | | **P** | **22 40 18.0** | **+0.5** |
| YOJ | | | | pmax | | pmax | | |
| | comp=Z,2μm,1.2s | | | | | | | |
| **JTU** | **Tsushima** | **23.60** | **322** | P | | **P** | **22 40 19.2** | **+1.1** |
| **JTU** | **Tsushima** | **23.60** | **322** | ⇑P | | **P** | **22 40 18.2** | **+0.1** |
| **FAKI** | **Fak Fak** | **24.22** | **218** | P | | **P** | **22 40 23.6** | **-0.3** |
| **FAKI** | **Fak Fak** | **24.22** | **218** | P | | **P** | **22 40 23.7** | **-0.3** |
| FAKI | | | | IAmb | | IAmb | 22 40 45.4 | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **FAKI** | **Fak Fak** | **24.22** | **218** | ⇑P | | **P** | **22 40 23.5** | **-0.3** |
| **JTM** | **Tenmabayashi** | **24.49** | **350** | P | | **P** | **22 40 28.0** | **+1.9** |
| **JTM** | **Tenmabayashi** | **24.49** | **350** | P | | **P** | **22 40 26.9** | **+0.9** |
| **JTM** | **Tenmabayashi** | **24.49** | **350** | ⇓P | | **P** | **22 40 27.2** | **+1.2** |
| **JTM** | **Tenmabayashi** | **24.49** | **350** | *i* P | | **P** | **22 40 27.2** | **+1.2** |
| **NACB** | **Ninganchiao** | **24.71** | **292** | P | | **P** | **22 40 28.9** | **+0.6** |
| **NACB** | **Ninganchiao** | **24.71** | **292** | P | | **P** | **22 40 28.2** | **0.0** |
| **YULB** | **Yu-li** | **24.82** | **290** | P | | **P** | **22 40 30.6** | **+1.3** |
| **YULB** | **Yu-li** | **24.82** | **290** | P | | **P** | **22 40 29.2** | **-0.1** |
| **TNTI** | **Ternate** | **24.83** | **232** | P | | **P** | **22 40 28.8** | **-0.7** |
| **TNTI** | **Ternate** | **24.83** | **232** | P | | **P** | **22 40 28.5** | **-1.0** |
| **TNTI** | **Ternate** | **24.83** | **232** | ⇑P | | **P** | **22 40 28.2** | **-1.3** |
| **TWGBT** | **Beinan** | **24.91** | **288** | P | | **P** | **22 40 32.0** | **+1.8** |
| **TWG** | **Pinlang** | **24.92** | **288** | P | | **P** | **22 40 30.4** | **+0.2** |
| TWG | | | | IAmb | | IAmb | 22 40 58.0 | |
| | comp=Z,1μm,1.2s | | | | | | | |
| **TATO** | **Taipei** | **24.99** | **293** | P | | **P** | **22 40 32.7** | **+1.8** |
| **TATO** | **Taipei** | **24.99** | **293** | P | | **P** | **22 40 31.7** | **+0.8** |
| **TATO** | **Taipei** | **24.99** | **293** | P | | **P** | **22 40 32.6** | **+1.8** |
| TATO | | | | P | | **P** | **22 40 32.6** | **+1.8** |
| **YHNB** | **Yeheng** | **25.02** | **293** | P | | **P** | **22 40 32.6** | **+1.4** |
| **YHNB** | **Yeheng** | **25.02** | **293** | P | | **P** | **22 40 32.3** | **+1.1** |
| YHNB | | | | IAmb | | IAmb | 22 41 01.9 | |
| | comp=Z,2μm,1.2s | | | | | | | |
| **JOT** | **Ohata** | **25.07** | **350** | *i* P | | **P** | **22 40 32.5** | **+1.2** |
| **SZP** | **Santa** | **25.16** | **276** | P | | **P** | **22 40 34.0** | **+1.6** |
| **SSLB** | **Suanglung** | **25.20** | **290** | P | | **P** | **22 40 34.3** | **+1.5** |
| **ERM** | **Erimo** | **25.40** | **354** | P | | **P** | **22 40 36.6** | **+2.2** |
| **ERM** | **Erimo** | **25.40** | **354** | P | | **P** | **22 40 35.0** | **+0.7** |
| ERM | | | | IAmb | | IAmb | 22 41 03.6 | |
| | comp=Z,1μm,1.1s | | | | | | | |
| **ERM** | **Erimo** | **25.40** | **354** | ⇓P | | **P** | **22 40 36.1** | **+1.7** |
| **ERM** | **Erimo** | **25.40** | **354** | *de* P | | **P** | **22 40 34.6** | **+0.2** |
| ERM | | | | pmax | | pmax | | |
| | comp=Z,182nm,1.0s | | | | | | | |
| **TPUB** | **Ta-pu** | **25.40** | **289** | P | | **P** | **22 40 36.4** | **+1.8** |
| **JEM** | **Erimo** | **25.40** | **354** | P | | **P** | **22 40 36.7** | **+2.3** |
| **JEM** | **Erimo** | **25.40** | **354** | P | | **P** | **22 40 35.8** | **+1.4** |
| **PMG** | **Port Moresby** | **25.96** | **179** | P | | **P** | **22 40 40.1** | **+0.4** |
| **PMG** | **Port Moresby** | **25.96** | **179** | P | | **P** | **22 40 40.0** | **+0.4** |
| **PMG** | **Port Moresby** | **25.96** | **179** | P | | **P** | **22 40 39.9** | **+0.3** |
| **PMG** | **Port Moresby** | **25.96** | **179** | ⇑P | | **P** | **22 40 39.9** | **+0.3** |
| **PMG** | **Port Moresby** | **25.96** | **179** | ScP | | **ScP** | **22 47 40.3** | **-0.1** |
| | comp=Z,56nm,0.9s,baz=23,slow=7.0,SNR=4.4 | | | | | | | |
| PMG | | | | LR | | LR | 22 50 09.0 | |
| | comp=Z,9μm,20.8s,baz=18,slow=34 | | | | | | | |
| **PMG** | **Port Moresby** | **25.96** | **179** | *c* P | | **P** | **22 40 39.9** | **+0.3** |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **TJN** | **Taejon** | **26.08** | **322** | P | | **P** | **22 40 41.5** | **+0.9** |
| **TJN** | **Taejon** | **26.08** | **322** | P | | **P** | **22 40 40.3** | **-0.3** |
| **TJN** | **Taejon** | **26.08** | **322** | *ce* P | | **P** | **22 40 41.0** | **+0.5** |
| **JEW** | **Eniwo** | **26.43** | **351** | *i* P | | **P** | **22 40 44.9** | **+1.3** |
| **JSH** | **Shimam** | **26.47** | **349** | P | | **P** | **22 40 45.4** | **+1.4** |
| **KSRS** | **Korea Array** | **26.52** | **325** | P | | **P** | **22 40 42.6** | **-1.9** |
| | comp=Z,66nm,0.6s,baz=141,slow=9.1,SNR=123 | | | | | | | |
| KSRS | | | | ScP | | **ScP** | **22 47 39.1** | **-2.5** |
| | comp=Z,14nm,0.8s,baz=144,slow=3.0,SNR=5.5 | | | | | | | |
| KSRS | | | | P3KPbc | | | 23 13 28.6 | |
| | comp=Z,5.2nm,0.9s,baz=322,slow=4.5,SNR=8.7 | | | | | | | |
| | comp=Z,66nm,0.6s | | | | | | | |
| **KS19** | **Wonju Array Si** | **26.58** | **325** | P | | **P** | **22 40 45.3** | **+0.2** |
| **BNDI** | **Bandanaira** | **26.90** | **220** | P | | **P** | **22 40 48.8** | **+0.7** |
| **BNDI** | **Bandanaira** | **26.90** | **220** | ⇑P | | **P** | **22 40 47.3** | **-0.8** |
| **YUK** | **Yuzh-Kuril'sk** | **27.24** | **359** | *eP* | | **P** | **22 40 52.7** | **+1.8** |
| YUK | | | | *e* | | | 22 41 39.2 | |
| YUK | | | | *eS* | | **S** | **22 45 28.8** | **+3.9** |
| YUK | | | | *e*SS | | **SnSn** | **22 46 43.6** | **+3.8** |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,2μm,1.3s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=N,618nm,1.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=E,663nm,1.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,4μm,2.3s | | | | | | | |
| YUK | | | | MLR | | MLR | | |
| | comp=Z,6μm,14.0s | | | | | | | |
| YUK | | | | MLR | | MLR | | |
| | comp=N,4μm,12.0s | | | | | | | |
| YUK | | | | MLR | | MLR | | |
| | comp=E,6μm,12.0s | | | | | | | |
| **INCN** | **Inchon** | **27.26** | **323** | P | | **P** | **22 40 52.7** | **+1.4** |
| **INCN** | **Inchon** | **27.26** | **323** | P | | **P** | **22 40 52.3** | **+1.0** |
| **INCN** | **Inchon** | **27.26** | **323** | P | | **P** | **22 40 52.3** | **+1.0** |
| INCN | | | | pmax | | pmax | | |
| | comp=Z,232nm,1.0s | | | | | | | |
| **SSE** | **Sheshan** | **27.34** | **306** | P | | **P** | **22 40 51.8** | **-0.1** |
| SSE | | | | S | | **S** | **22 45 26.8** | **0.0** |
| SSE | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | | |
| SSE | | | | pmax | | pmax | | |
| | comp=Z,2μm,11.4s | | | | | | | |
| SSE | | | | LR | | LR | | |
| | comp=Z,8μm,21.1s | | | | | | | |
| SSE | | | | LR | | LR | | |
| | comp=Z,9μm,20.4s | | | | | | | |
| **JMP** | **Maruseppu** | **27.36** | **355** | *i* P | | **P** | **22 40 53.7** | **+1.7** |
| **JKA** | **Kamikawa-asahi** | **27.54** | **353** | P | | **P** | **22 40 54.7** | **+1.1** |
| JKA | | | | IAmb | | IAmb | 22 41 28.6 | |
| | comp=Z,3μm,1.6s | | | | | | | |
| **ASAJ** | **Asahikawa** | **27.54** | **353** | P | | **P** | **22 40 55.0** | **+1.4** |
| | comp=Z,292nm,0.7s,baz=223,slow=14,SNR=68 | | | | | | | |
| | comp=Z,292nm,0.7s | | | | | | | |
| **ASAJ** | **Asahikawa** | **27.54** | **353** | *i* P | | **P** | **22 40 55.6** | **+2.0** |
| **QZH** | **Quanzhou** | **27.54** | **292** | P | | **P** | **22 40 53.3** | **-0.6** |
| QZH | | | | pP | | **pP** | **22 41 08.0** | **-1.6** |
| QZH | | | | S | | **S** | **22 45 28.5** | **-1.7** |
| QZH | | | | pmax | | pmax | | |
| | comp=Z,180nm,1.0s | | | | | | | |
| QZH | | | | pmax | | pmax | | |
| | comp=Z,3μm,8.1s | | | | | | | |
| QZH | | | | LR | | LR | | |
| | comp=Z,9μm,13.4s | | | | | | | |
| QZH | | | | LR | | LR | | |
| | comp=Z,25μm,23.7s | | | | | | | |
| QZH | | | | LR | | LR | | |
| | comp=Z,55μm,25.1s | | | | | | | |
| **SANI** | **Sanana** | **27.73** | **230** | P | | **P** | **22 40 54.0** | **-1.6** |
| **SANI** | **Sanana** | **27.73** | **230** | P | | **P** | **22 40 52.8** | **-2.8** |
| **SANI** | **Sanana** | **27.73** | **230** | ⇑P | | **P** | **22 40 53.7** | **-1.9** |
| **KUR** | **Kuril'sk** | **28.44** | **2** | *d* P | | **P** | **22 41 03.3** | **+1.7** |
| KUR | | | | *i* | | | 22 41 53.9 | |
| KUR | | | | *i* S | | **S** | **22 45 45.2** | **+1.4** |
| KUR | | | | *e*SS | | **SnSn** | **22 47 06.7** | **-2.3** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,2μm,1.4s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=N,850nm,1.5s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=E,354nm,1.6s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,11μm,3.3s | | | | | | | |
| KUR | | | | MLR | | MLR | | |
| | comp=Z,5μm,12.0s | | | | | | | |
| **JWK2** | **Keihoku** | **28.80** | **353** | *i* P | | **P** | **22 41 06.7** | **+1.8** |
| **PYAG** | **Pyongyang** | **28.85** | **325** | P | | **P** | **22 41 07.3** | **+2.0** |
| PYAG | | | | S | | **S** | **22 45 58.4** | **+8.0** |
| PYAG | | | | AmB | | | | |
| | comp=Z,3μm,3.0s | | | | | | | |
| PYAG | | | | AMS | | AMS | | |
| | comp=Z,40μm,21.4s | | | | | | | |
| **SAUI** | **Saumlaki** | **28.93** | **213** | P | | **P** | **22 41 07.4** | **+1.2** |
| **SAUI** | **Saumlaki** | **28.93** | **213** | P | | **P** | **22 41 06.3** | **0.0** |
| **SAUI** | **Saumlaki** | **28.93** | **213** | ⇑P | | **P** | **22 41 07.0** | **+0.8** |
| **MSHR** | **Mys Shultsa** | **29.03** | **336** | *de* P | | **P** | **22 41 07.7** | **+0.8** |
| MSHR | | | | pmax | | pmax | | |
| | comp=Z,117nm,0.8s | | | | | | | |
| **HNR** | **Honiara** | **29.07** | **152** | P | | **P** | **22 41 09.0** | **+1.6** |
| **HNR** | **Honiara** | **29.07** | **152** | P | | **P** | **22 41 07.6** | **+0.2** |
| HNR | | | | IAmb | | IAmb | 22 42 06.6 | |
| | comp=Z,1μm,1.1s | | | | | | | |
| **HNR** | **Honiara** | **29.07** | **152** | LR | | LR | 22 52 43.6 | |
| | comp=Z,198μm,19.9s,baz=328,slow=36 | | | | | | | |
| **HNR** | **Honiara** | **29.07** | **152** | P | | **P** | **22 41 07.6** | **+0.2** |
| HNR | | | | pmax | | pmax | | |
| | comp=Z,1μm,1.1s | | | | | | | |
| **VLA** | **Vladivostok** | **29.21** | **337** | *i* P | | **P** | **22 41 09.9** | **+1.4** |
| VLA | | | | pmax | | pmax | | |
| | comp=Z,256nm,1.1s | | | | | | | |
| **PSTR** | **Posyet** | **29.23** | **335** | *i* P | | **P** | **22 41 10.0** | **+1.4** |
| **LUWI** | **Luwuk** | **29.53** | **236** | P | | **P** | **22 41 10.7** | **-0.9** |
| **LUWI** | **Luwuk** | **29.53** | **236** | P | | **P** | **22 41 10.8** | **-0.8** |
| **LUWI** | **Luwuk** | **29.53** | **236** | P | | **P** | **22 41 09.7** | **-1.9** |
| **LUWI** | **Luwuk** | **29.53** | **236** | ⇑P | | **P** | **22 41 10.7** | **-0.9** |
| **NJ2** | **Nanjing** | **29.54** | **306** | *i* P | | **P** | **22 41 10.5** | **-1.1** |
| NJ2 | | | | PP | | **PnPn** | **22 42 05.3** | **-3.8** |
| NJ2 | | | | SS | | SS | 22 47 41.0 | -28 |
| NJ2 | | | | ScP | | **ScP** | **22 47 49.5** | **-1.6** |
| NJ2 | | | | ScS | | **ScS** | **22 51 45.3** | **-0.7** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,180nm,0.9s | | | | | | | |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,3μm,11.8s | | | | | | | |
| NJ2 | | | | LR | | LR | | |
| | comp=Z,32μm,22.7s | | | | | | | |
| NJ2 | | | | LR | | LR | | |
| | comp=Z,25μm,18.9s | | | | | | | |
| NJ2 | | | | LR | | LR | | |
| | comp=Z,18μm,20.8s | | | | | | | |
| **TARA** | **Tarawa** | **29.92** | **118** | P | | **P** | **22 41 13.8** | **-1.4** |
| TARA | | | | IAmb | | IAmb | 22 41 15.4 | |
| | comp=Z,1μm,1.4s | | | | | | | |
| **TOLI2** | **Tolitoli** | **29.93** | **241** | P | | **P** | **22 41 15.5** | **+0.3** |
| **TOLI2** | **Tolitoli** | **29.93** | **241** | P | | **P** | **22 41 15.5** | **+0.3** |
| TOLI2 | | | | IAmb | | IAmb | 22 41 17.2 | |
| | comp=Z,2μm,1.5s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **29.99** | **251** | P | | **P** | **22 41 18.0** | **+2.3** |
| MYLDM | | | | IAmb | | IAmb | 22 42 20.2 | |
| | comp=Z,2μm,1.4s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **29.99** | **251** | ⇑P | | **P** | **22 41 18.3** | **+2.7** |
| **USA0B** | **Ussuriysk Arra** | **30.11** | **339** | P | | **P** | **22 41 16.7** | **+0.2** |
| **USA0B** | **Ussuriysk Arra** | **30.11** | **339** | *i* P | | **P** | **22 41 17.8** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **30.11** | **339** | P | | **P** | **22 41 17.1** | **+0.6** |
| | comp=Z,40nm,0.8s,baz=164,slow=9.6,SNR=41 | | | | | | | |
| USRK | | | | ScP | | **ScP** | **22 47 49.8** | **-3.0** |
| | comp=Z,9.8nm,0.7s,baz=162,slow=3.8,SNR=3.4 | | | | | | | |
| USRK | | | | P3KPbc | | | 23 13 12.6 | |
| | comp=Z,10nm,0.7s,baz=311,slow=4.2,SNR=21 | | | | | | | |
| | comp=Z,40nm,0.8s | | | | | | | |
| **SUJ** | **Sinuiju** | **30.28** | **325** | P | | **P** | **22 41 19.7** | **+1.7** |
| SUJ | | | | S | | **S** | **22 46 19.3** | **+6.5** |
| SUJ | | | | AmB | | | | |
| | comp=Z,40nm,0.6s | | | | | | | |
| SUJ | | | | AMS | | AMS | | |
| | comp=Z,51μm,20.7s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **30.33** | **355** | P | | **P** | **22 41 19.9** | **+1.6** |
| **YSS** | **Yuzh-Sakhalins** | **30.33** | **355** | P | | **P** | **22 41 19.2** | **+0.8** |
| **YSS** | **Yuzh-Sakhalins** | **30.33** | **355** | ⇓P | | **P** | **22 41 19.5** | **+1.2** |
| **YSS** | **Yuzh-Sakhalins** | **30.33** | **355** | *e* P | | **P** | **22 41 19.3** | **+0.9** |
| YSS | | | | *e**PP | | **pwP** | **22 41 37.4** | **-1.4** |
| YSS | | | | *e* | | | 22 42 28.1 | |
| YSS | | | | *e*S | | **S** | **22 46 13.2** | **-0.3** |
| YSS | | | | *e*SS | | **SS** | **22 48 24.4** | **-0.9** |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,530nm,0.8s | | | | | | | |
| YSS | | | | pmax | | pmax | | |
| | comp=Z,2μm,4.3s | | | | | | | |
| YSS | | | | smax | | smax | | |
| | comp=E,8μm,13.5s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=Z,17μm,18.0s | | | | | | | |
| YSS | | | | MLR | | MLR | | |
| | comp=E,12μm,15.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **30.33** | **355** | P | | **P** | **22 41 19.3** | **+0.9** |
| YSS | | | | sP | | **sP** | **22 41 41.4** | **-0.3** |
| **COEN** | **Coen** | **30.69** | **187** | P | | **P** | **22 41 22.4** | **+0.6** |
| **COEN** | **Coen** | **30.69** | **187** | P | | **P** | **22 41 22.7** | **+0.9** |
| COEN | | | | IAmb | | IAmb | 22 41 24.5 | |
| | comp=Z,479nm,0.7s | | | | | | | |
| **COEN** | **Coen** | **30.69** | **187** | ⇑P | | **P**

comp=Z,28µm,18.5s
TIA LR LR
comp=Z,16µm,15.7s
TIA LR LR
comp=Z,16µm,24.5s
**DRS Darwin Rock St 32.94 209** P **P** **22 41 41.1 -0.5**
**BNX BinXian 33.16 335** ⇓P **P** **22 41 42.8 -0.4**
BNX S **S** **22 46 56.5 -1.1**
BNX pmax pmax
comp=Z,250nm,0.8s
BNX pmax pmax
comp=Z,1µm,3.5s
BNX LR LR
comp=Z,14µm,26.0s
BNX LR LR
comp=Z,13µm,29.3s
BNX LR LR
comp=Z,35µm,27.1s
**CNSH ChangSha 33.19 296** P **P** **22 41 45.0 +1.3**
CNSH S **S** **22 47 00.5 +2.0**
CNSH pmax pmax
comp=Z,83nm,1.3s
CNSH LR LR
comp=Z,20µm,14.4s
CNSH LR LR
comp=Z,10µm,15.1s
CNSH LR LR
comp=Z,25µm,26.7s
**MTN Manton Dam 33.19 209** P **P** **22 41 43.1 -0.7**
**MTN Manton Dam 33.19 209** P **P** **22 41 43.1 -0.7**
**MTN Manton Dam 33.19 209** ⇑P **P** **22 41 43.1 -0.7**
**AUCSH Cairns State H 33.44 182** P **P** **22 41 47.2 +1.4**
**TYV Tymovskoe 34.22 355** *e*P **P** **22 41 54.0 +1.7**
TYV *e*S **S** **22 47 15.8 +1.9**
TYV pmax pmax
comp=Z,2µm,1.5s
TYV pmax pmax
comp=Z,22µm,2.8s
TYV smax smax
comp=N,852nm,1.8s
TYV smax smax
comp=E,746nm,1.8s
TYV smax smax
comp=N,28µm,5.2s
TYV smax smax
comp=E,64µm,5.2s
**KAPI Kappang 34.35 233** P **P** **22 41 54.1 +0.2**
**KAPI Kappang 34.35 233** P **P** **22 41 54.1 +0.2**
KAPI IAmb IAmb 22 41 56.5
comp=Z,1µm,1.1s
**KAPI Kappang 34.35 233** ⇑P **P** **22 41 54.2 +0.2**
**KAPI Kappang 34.35 233** LR LR 22 55 29.9
comp=Z,6µm,18.4s,baz=36,slow=35
**KAPI Kappang 34.35 233** P **P** **22 41 54.5 +0.6**
**KAPI Kappang 34.35 233** P **P** **22 41 54.1 +0.2**
KAPI pmax pmax
comp=Z,1µm,1.1s
**SOEI Soe 34.46 222** P **P** **22 41 53.3 -1.7**
**SOEI Soe 34.46 222** P **P** **22 41 53.1 -1.8**
**SOEI Soe 34.46 222** P **P** **22 41 52.7 -2.2**
**SOEI Soe 34.46 222** ⇑P **P** **22 41 53.2 -1.8**
**BKB Balikpapan 34.47 242** P **P** **22 41 56.6 +1.7**
**BKB Balikpapan 34.47 242** P **P** **22 41 56.0 +1.1**
**BKB Balikpapan 34.47 242** ⇑P **P** **22 41 56.4 +1.5**
**KLR Kul'dur 34.66 343** P **P** **22 41 56.0 -0.1**
comp=Z,173nm,0.8s,baz=147,slow=8.8,SNR=306
KLR S **S** **22 47 15.9 -4.7**
comp=Z,14nm,1.1s,baz=287,slow=17,SNR=1.2
KLR P3KPbc 23 12 52.7
comp=Z,3.0nm,0.8s,baz=310,slow=7.4,SNR=7.4
comp=Z,173nm,0.8s
**KLR Kul'dur 34.66 343** *ce*P **P** **22 41 56.3 +0.2**
KLR pmax pmax
comp=Z,229nm,0.9s
**SKR Severo-Kuril's 34.70 10** *e*P **P** **22 41 57.9 +1.4**
SKR *e*S **S** **22 47 22.2 +0.9**
SKR pmax pmax
comp=Z,386nm,1.3s
SKR pmax pmax
comp=Z,5µm,8.5s
SKR MLR MLR
comp=Z,9µm,15.0s
**MTSU Mount Surprise 34.72 184** P **P** **22 41 58.1 +1.1**
**MIDW Midway 34.93 65** P **P** **22 41 59.7 +1.0**
**MIDW Midway 34.93 65** P **P** **22 41 58.6 -0.1**
**MIDW Midway 34.93 65** ⇓P **P** **22 41 59.4 +0.7**
**MIDW Midway 34.93 65** P **P** **22 41 59.5 +0.8**
MIDW pP **pP** **22 42 15.2 +1.0**
MIDW sP **sP** **22 42 22.4 +0.6**
**GULI GuiLin 34.96 290** P **P** **22 42 01.8 +2.7**
GULI S **S** **22 47 29.3 +3.4**
GULI pmax pmax
comp=Z,190nm,1.5s
GULI LR LR
comp=Z,13µm,17.4s
GULI LR LR
comp=Z,15µm,18.4s
GULI LR LR
comp=Z,23µm,21.7s
**HNS HongShan 34.96 312** ⇑P **P** **22 41 58.8 -0.1**
HNS sP **pwP** **22 42 17.8 -1.2**
HNS PP **PnPn** **22 43 18.0 +0.2**
HNS S **S** **22 47 24.0 -1.6**
HNS ScP **ScP** **22 48 10.5 +1.0**
HNS ScS **ScS** **22 52 12.3 -0.9**
HNS pmax pmax
comp=Z,130nm,1.1s
HNS pmax pmax
comp=Z,660nm,6.0s
HNS LR LR
comp=Z,17µm,17.5s
HNS LR LR
comp=Z,8µm,18.3s
HNS LR LR
comp=Z,21µm,18.4s
**GRNR Gornyy 34.97 349** ⇓*i*P **P** **22 42 00.4 +1.6**
GRNR *e*S **S** **22 47 31.8 +6.3**
GRNR *e*SS **SnSn** **22 49 46.8 -0.4**
GRNR pmax pmax
comp=E,60nm,0.8s
GRNR pmax pmax
comp=N,130nm,0.9s
GRNR pmax pmax
comp=Z,260nm,0.7s
GRNR smax smax
comp=N,10.0nm,0.9s
**MMRI Maumere 34.98 226** P **P** **22 41 58.5 -0.8**
**MMRI Maumere 34.98 226** P **P** **22 41 58.3 -1.0**
**MMRI Maumere 34.98 226** ⇑P **P** **22 41 58.0 -1.4**
**QIZ Qiongzhong 35.19 279** P **P** **22 42 02.5 +1.4**
QIZ pP **pP** **22 42 17.0 -0.2**
QIZ PP **PP** **22 43 22.5 +0.4**
QIZ S **S** **22 47 32.0 +2.4**
QIZ pmax pmax
comp=N,240nm,1.5s
QIZ pmax pmax
comp=N,3µm,6.3s
QIZ LR LR
comp=N,7µm,11.8s
QIZ LR LR
comp=N,14µm,13.5s
QIZ LR LR
comp=N,30µm,28.6s
**QIZ Qiongzhong 35.19 279** P **P** **22 42 03.4 +2.3**
QIZ IAmb IAmb 22 42 26.7
comp=Z,755nm,1.3s
**BJT Baijiatuau 35.27 317** P **P** **22 42 01.9 +0.4**
BJT IAmb IAmb 22 42 28.3
comp=Z,758nm,1.7s
**BJT Baijiatuau 35.27 317** P **P** **22 42 01.9 +0.4**
BJT pmax pmax
comp=Z,758nm,1.7s
**BJI Beijing 35.27 317** P **P** **22 42 01.3 -0.3**
BJI S **S** **22 47 26.5 -3.9**
BJI pmax pmax
comp=Z,57nm,1.5s
BJI LR LR
comp=Z,3µm,16.9s
**LYN LuoYang 35.44 307** P **P** **22 42 03.0 -0.1**
LYN pP pP 22 42 18.5 -0.6
LYN PP **PP** **22 43 27.0 +2.3**
LYN PcP **PcP** **22 44 34.3 +2.8**
LYN SS SS 22 49 52.3 -18
LYN ScS **ScS** **22 52 14.8 -1.2**
LYN pmax pmax
comp=Z,63nm,1.2s
LYN pmax pmax
comp=Z,1µm,4.1s
LYN LR LR
comp=Z,10µm,16.3s
LYN LR LR
comp=Z,14µm,16.7s
LYN LR LR
comp=Z,24µm,16.9s
**TV1H Townsville Har 35.75 180** P **P** **22 42 06.7 +0.9**
**AUAYR Ayr State High 36.08 179** P **P** **22 42 09.5 +0.9**
**CTA Charters Tower 36.58 181** LR LR 22 55 58.4
comp=Z,498nm,20.7s,baz=0.0,slow=34
**CTAO Charters Tower 36.58 181** P **P** **22 42 13.6 +0.7**
**CTAO Charters Tower 36.58 181** P **P** **22 42 13.3 +0.4**
CTAO IAmb IAmb 22 42 17.1
comp=Z,511nm,1.1s
**CTAO Charters Tower 36.58 181** ⇑P **P** **22 42 13.6 +0.7**
**CTAO Charters Tower 36.58 181** P **P** **22 42 13.3 +0.4**
CTAO pmax pmax
comp=Z,511nm,1.1s
**ENH Enshi 36.59 298** P **P** **22 42 13.3 +0.3**
ENH IAmb IAmb 22 42 38.4
comp=Z,406nm,1.1s
**NKL Nikolayevsk 36.67 354** *e*P **P** **22 42 14.1 +0.9**
NKL *e*S **S** **22 47 52.1 +0.8**
NKL pmax pmax
comp=N,519nm,0.8s
NKL pmax pmax
comp=Z,2µm,1.1s
NKL pmax pmax
comp=E,787nm,1.3s
NKL smax smax
comp=N,5µm,4.3s
NKL smax smax
comp=E,3µm,4.3s
NKL MLR MLR
comp=N,16µm,18.0s
NKL MLR MLR
comp=E,33µm,18.0s
NKL MLR MLR
comp=Z,49µm,22.0s
**TIY Taiyuan 36.71 312** *e*P **P** **22 42 13.8 -0.2**
TIY S **S** **22 47 51.0 -1.7**
TIY pmax pmax
comp=Z,750nm,5.1s
TIY LR LR
comp=Z,23µm,19.9s
TIY LR LR
comp=Z,13µm,19.9s
TIY LR LR
comp=Z,8µm,27.5s
**KNRA Kununurra 36.77 210** P **P** **22 42 14.5 0.0**
**SBUM Sibu 36.81 251** P **P** **22 42 16.4 +1.4**
SBUM IAmb IAmb 22 42 18.8
comp=Z,687nm,1.2s
**SBUM Sibu 36.81 251** ⇑P **P** **22 42 16.4 +1.4**
**HEH HeiHe 36.91 339** *e*P **P** **22 42 14.8 -0.6**
HEH S **S** **22 47 53.8 -1.4**
HEH sS **ScP** **22 48 16.5 +0.1**
HEH SS **SnSn** **22 50 24.0 -10**
HEH pmax pmax
comp=Z,400nm,1.3s
HEH pmax pmax
comp=Z,2µm,3.5s
**PEA0B Petropavlovsk- 37.31 11** P **P** **22 42 20.4 +1.7**
**PEA0B Petropavlovsk- 37.31 11** *ce*P **P** **22 42 20.8 +2.0**
**PETK Petropavlovsk- 37.31 11** P **P** **22 42 19.7 +0.9**
comp=Z,57nm,0.8s,baz=178,slow=4.5,SNR=55
PETK ScP **ScP** **22 48 16.4 -1.5**
comp=Z,12nm,0.7s,baz=136,slow=2.8,SNR=3.5
PETK LR LR 22 56 41.0
comp=Z,16µm,20.0s,baz=202,slow=34
PETK P3KP 23 14 04.8
comp=Z,3.4nm,1.0s,baz=134,slow=4.2,SNR=3.7
PETK PKP2bc 23 15 42.0
comp=Z,9.8nm,1.1s,baz=344,slow=2.2,SNR=3.6
comp=Z,57nm,0.8s
**DLV T Lat 37.36 268** P **P** **22 42 22.3 +2.4**
**DLV T Lat 37.36 268** P **P** **22 42 20.8 +0.9**
DLV IAmb IAmb 22 42 45.8
comp=Z,1µm,1.4s
**DLV T Lat 37.36 268** ⇑P **P** **22 42 22.1 +2.2**
**PET Petropavlovsk 37.41 12** P **P** **22 42 21.6 +2.0**
**PET Petropavlovsk 37.41 12** P **P** **22 42 20.4 +0.8**
PET IAmb IAmb 22 42 58.4
comp=Z,1µm,1.5s
**PET Petropavlovsk 37.41 12** ⇓P **P** **22 42 21.3 +1.8**
**PET Petropavlovsk 37.41 12** *e*P **P** **22 42 21.1 +1.5**
PET *e**PP **pP** **22 42 33.5 -1.9**
PET *e**SP **sP** **22 42 43.7 +0.7**
PET *e*S **S** **22 48 06.0 +3.4**
PET pmax pmax
comp=Z,343nm,1.4s
PET pmax pmax
comp=Z,5µm,10.1s
PET pmax pmax
comp=Z,5µm,11.3s
PET MLR MLR
comp=Z,6µm,15.0s
PET MLR MLR
comp=Z,6µm,14.0s
**PET Petropavlovsk 37.41 12** P **P** **22 42 20.6 +1.0**
comp=Z,400nm,2.2s,comp=Z,10µm
**PET Petropavlovsk 37.41 12** P **P** **22 42 20.9 +1.4**
PET sP **sP** **22 42 43.3 +0.2**
**XLT XiLinHaoTe 37.52 323** *e*P **P** **22 42 20.0 -0.7**
XLT S **S** **22 48 01.0 -3.7**
XLT pmax pmax
comp=Z,160nm,1.6s
XLT pmax pmax
comp=Z,1µm,3.0s
XLT LR LR
comp=Z,19µm,20.0s
XLT LR LR
comp=Z,31µm,23.0s
**QIS Mount Isa 37.71 191** P **P** **22 42 22.9 +0.4**
**XAN Xi'an 38.04 304** ⇑P **P** **22 42 25.5 +0.2**
XAN PP **PnPn** **22 43 59.5 +4.0**
XAN S **S** **22 48 13.5 +0.6**
XAN ScP **ScP** **22 48 19.0 -2.1**
XAN PcS **PcS** **22 48 28.0 -0.5**
XAN ScS **ScS** **22 52 29.5 -1.2**
XAN pmax pmax
comp=Z,240nm,1.3s
XAN pmax pmax
comp=Z,4µm,9.8s
XAN LR LR
comp=Z,45µm,20.9s
XAN LR LR
comp=Z,20µm,19.7s
XAN LR LR
comp=Z,21µm,18.0s
**GYA Guiyang 38.40 292** ⇑P **P** **22 42 30.3 +1.8**
GYA pP pP 22 42 44.0 -0.8
GYA PcP **PcP** **22 44 43.5 +2.7**
GYA S **S** **22 48 19.3 +0.6**
GYA ScS **ScS** **22 52 31.5 -1.7**
GYA pmax pmax
comp=Z,200nm,1.1s
GYA pmax pmax
comp=Z,3µm,4.8s
GYA LR LR
comp=Z,12µm,16.2s
GYA LR LR
comp=Z,9µm,22.2s
GYA LR LR
comp=Z,17µm,21.1s
**WRAB Tennant Creek 38.41 199** P **P** **22 42 28.7 +0.3**
**WRAB Tennant Creek 38.41 199** *c*i P **P** **22 42 28.4 0.0**
WRAB pmax pmax
comp=Z,2µm,0.9s
**WRA Warramunga Arr 38.43 199** P **P** **22 42 28.3 -0.2**
comp=Z,2µm,0.7s,baz=28,slow=8.8,SNR=333
WRA PcP **PcP** **22 44 41.0 +0.3**
comp=Z,40nm,0.5s,baz=16,slow=3.4,SNR=1.7
WRA S **S** **22 48 16.6 -2.1**
comp=Z,45nm,1.0s,baz=14,slow=16,SNR=7.2
WRA LR LR 22 58 59.0
comp=Z,19µm,21.6s,baz=20,slow=37
WRA P3KPbc 23 12 35.8
comp=Z,1.0nm,0.9s,baz=202,slow=3.8,SNR=4.2
**HHC Hu-ho-hao-te 38.72 316** *e*P **P** **22 42 31.0 0.0**
HHC S **S** **22 48 19.5 -3.6**
HHC sS sS 22 48 48.5 -2.0
HHC SS **SS** **22 51 10.0 -6.2**
HHC pmax pmax
comp=Z,56nm,0.8s
HHC pmax pmax
comp=Z,420nm,5.5s
HHC LR LR
comp=Z,5µm,15.2s
HHC LR LR
comp=Z,13µm,18.6s
HHC LR LR
comp=Z,23µm,19.8s
**KSM Kuching 38.95 251** P **P** **22 42 33.4 +0.3**
**KSM Kuching 38.95 251** P **P** **22 42 33.6 +0.6**
**KSM Kuching 38.95 251** ⇑P **P** **22 42 33.7 +0.6**
**HIA Hailar 39.18 332** P **P** **22 42 35.1 +0.5**
**HIA Hailar 39.18 332** P **P** **22 42 35.1 +0.5**
HIA pmax pmax
comp=Z,161nm,0.8s
**HIA Hailar 39.18 332** P **P** **22 42 35.5 +1.0**
HIA pP **pP** **22 42 50.9 +0.1**
HIA sP **sP** **22 42 57.6 -0.8**
HIA PcP **PcP** **22 44 45.3 +2.6**
**BTO Baotou 39.66 314** *e*P **P** **22 42 42.0 +3.2**
BTO pP **pP** **22 42 54.5 -0.5**
BTO PP **PnPn** **22 44 18.5 +3.8**
BTO S **S** **22 48 41.5 +4.4**
BTO pmax pmax
comp=Z,170nm,1.8s
BTO pmax pmax
comp=Z,2µm,4.4s
BTO LR LR
comp=Z,20µm,15.3s
BTO LR LR
comp=Z,21µm,15.7s
BTO LR LR
comp=Z,28µm,22.9s
**UBPT Khong Chiam 39.68 274** P **P** **22 42 41.3 +2.1**
**UBPT Khong Chiam 39.68 274** P **P** **22 42 41.0 +1.9**
UBPT IAmb IAmb 22 42 43.4
comp=Z,878nm,1.5s
**UBPT Khong Chiam 39.68 274** ⇑P **P** **22 42 41.5 +2.3**
**ZEA Zeya 39.96 342** *e*P **P** **22 42 41.0 +0.1**
ZEA *e* 22 43 05.4
ZEA *e*S **S** **22 48 37.2 -3.8**
ZEA pmax pmax
comp=N,70nm,1.3s
ZEA pmax pmax
comp=E,30nm,1.5s
ZEA pmax pmax
comp=Z,130nm,1.5s
ZEA pmax pmax
comp=E,100nm,3.3s
ZEA pmax pmax
comp=N,300nm,2.0s
ZEA pmax pmax
comp=Z,500nm,2.2s
ZEA smax smax
comp=E,3µm,12.8s
**RK1H Rockhampton Ha 40.02 175** P **P** **22 42 42.0 +0.2**
**DVP Devils Point 40.20 147** P **P** **22 42 43.9 +0.6**
**FITZ Fitzroy Crossi 40.37 212** P **P** **22 42 44.9 +0.2**
**GD1S Gladstone Soft 40.54 174** P **P** **22 42 47.1 +1.1**
**SLVN Son La 40.70 283** P **P** **22 42 49.1 +1.5**
**FUNA Funafuti 40.71 126** P **P** **22 42 48.4 +0.8**
**FUNA Funafuti 40.71 126** P **P** **22 42 47.6 0.0**
FUNA IAmb IAmb 22 43 28.0
comp=Z,2µm,1.6s
**FUNA Funafuti 40.71 126** ⇓P **P** **22 42 47.9 +0.3**
**KOUNC Koumac, New Ca 40.83 154** P **P** **22 42 49.6 +1.1**
**KOUNC Koumac, New Ca 40.83 154** P **P** **22 42 49.4 +0.9**
KOUNC IAmb IAmb 22 43 14.6
comp=Z,1µm,1.2s
**KOUNC Koumac, New Ca 40.83 154** ⇑P **P** **22 42 49.2 +0.8**
**JAGI Jajag, Banyuwa 40.84 235** P **P** **22 42 47.3 -1.4**
**JAGI Jajag, Banyuwa 40.84 235** P **P** **22 42 47.1 -1.6**
JAGI IAmb IAmb 22 43 12.4
comp=Z,2µm,1.3s
**JAGI Jajag, Banyuwa 40.84 235** ⇑P **P** **22 42 47.0 -1.7**
**CD2 Chengdu 41.56 298** P **P** **22 42 55.0 +0.5**
CD2 pP pP 22 43 09.0 -2.0
CD2 PP **PP** **22 44 31.5 -0.2**
CD2 S **S** **22 49 03.5 -2.1**
CD2 SS **SS** **22 52 10.8 -1.9**
CD2 pmax pmax
comp=Z,230nm,1.0s
CD2 pmax pmax
comp=Z,4µm,12.7s
CD2 LR LR
comp=Z,32µm,18.2s
CD2 LR LR
comp=Z,24µm,17.2s
CD2 LR LR
comp=Z,21µm,22.7s
**JOHN Johnston Islan 41.78 83** P **P** **22 42 57.0 +0.6**
**JOHN Johnston Islan 41.78 83** P **P** **22 42 55.8 -0.6**
**JOHN Johnston Islan 41.78 83** ⇑P **P** **22 42 55.9 -0.6**
**KMI Kunming 41.83 289** ⇑P **P** **22 42 58.8 +1.8**
KMI PP **PP** **22 44 37.3 +2.4**
KMI ScP **ScP** **22 48 36.5 +0.2**
KMI S **S** **22 49 09.5 -0.5**
KMI pmax pmax
comp=Z,130nm,1.7s
KMI pmax pmax
comp=Z,3µm,6.1s
KMI LR LR
comp=Z,10µm,20.9s
KMI LR LR
comp=Z,11µm,20.5s
KMI LR LR
comp=Z,22µm,33.0s
**SHEM Shemya Is, Ala 41.87 25** LR LR 22 57 45.2
comp=Z,16µm,21.9s,baz=219,slow=32
**EIDS Eidsvold 42.04 174** P **P** **22 42 58.4 +0.1**
**EIDS Eidsvold 42.04 174** P **P** **22 42 58.1 -0.2**
**EIDS Eidsvold 42.04 174** ⇑P **P** **22 42 57.7 -0.6**
**AS01 Alice Springs 42.05 198** P **P** **22 42 58.8 +0.4**
**AS31 Alice Springs 42.06 198** P **P** **22 42 58.8 +0.3**
**ASAR Alice Springs 42.06 198** P **P** **22 42 58.9 +0.3**
comp=Z,409nm,0.7s,baz=20,slow=7.8,SNR=964
ASAR PcP **PcP** **22 44 53.2 +0.8**
comp=Z,103nm,0.8s,baz=22,slow=4.0,SNR=3.2
ASAR ScP **ScP** **22 48 34.9 -1.9**
comp=Z,22nm,0.8s,baz=12,slow=5.0,SNR=4.5
ASAR S **S** **22 49 12.3 -0.6**
comp=Z,52nm,0.9s,baz=20,slow=19,SNR=8.3
ASAR LR LR 23 01 47.4
comp=Z,18µm,20.6s,baz=25,slow=38
ASAR P3KPbc 23 12 21.0
comp=Z,0.3nm,0.4s,baz=188,slow=4.8,SNR=5.6
ASAR PKPPKP **P'P'df** **23 14 58.1 -1.8**
comp=Z,3.3nm,1.0s,baz=155,slow=1.3,SNR=4.7
ASAR P4KPbc 23 20 59.4
comp=Z,1.4nm,0.9s,baz=15,slow=3.8,SNR=6.3
comp=Z,409nm,0.7s
**LIFNC LIFOU 42.33 151** P **P** **22 43 01.9 +1.2**
**LIFNC LIFOU 42.33 151** P **P** **22 43 00.7 0.0**
LIFNC IAmb IAmb 22 43 25.0
comp=Z,692nm,1.0s
**LZH Lanzhou 42.61 305** ⇑*i*P **P** **22 43 04.5 +1.3**
LZH pP pP 22 43 19.0 -0.6
LZH ScP **ScP** **22 48 38.5 -0.6**
LZH S **S** **22 49 19.0 -2.2**
LZH sS sS 22 49 41.8 -7.1
LZH SS **SS** **22 52 29.0 -4.6**
LZH ScS **ScS** **22 52 56.3 -1.9**
LZH pmax pmax
comp=Z,210nm,1.0s
LZH pmax pmax
comp=Z,2µm,5.1s
LZH LR LR
comp=Z,31µm,21.0s
LZH LR LR
comp=Z,14µm,18.9s
LZH LR LR
comp=Z,29µm,19.2s
**PZH PanZhiHua 42.80 291** P **P** **22 43 06.0 +1.2**
PZH pP **pP** **22 43 20.5 -0.8**
PZH PP **PP** **22 44 47.0 +1.7**
PZH ScP **ScP** **22 48 40.0 0.0**
PZH S **S** **22 49 24.0 -0.1**
PZH ScS **ScS** **22 52 59.5 -0.1**
PZH pmax pmax
comp=Z,280nm,0.8s
PZH pmax pmax
comp=Z,3µm,7.5s
PZH LR LR

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,11µm,19.6s | | | | | | | | | |
| PZH | | | | | LR | LR | | | | |
| | comp=Z,10µm,22.0s | | | | | | | | | |
| PZH | | | | | LR | LR | | | | |
| | comp=Z,24µm,26.0s | | | | | | | | | |
| **MA2** | **Magadan** | **42.90** | **3** | P | **P** | **22 43 06.6** | **+1.7** | | | |
| **MA2** | **Magadan** | **42.90** | **3** | P | **P** | **22 43 06.1** | **+1.3** | | | |
| **MA2** | **Magadan** | **42.90** | **3** | ⇓P | **P** | **22 43 06.6** | **+1.7** | | | |
| **MA2** | **Magadan** | **42.90** | **3** | LR | LR | 23 02 03.8 | | | | |
| | comp=Z,5µm,18.9s,baz=187,slow=38 | | | | | | | | | |
| **MA2** | **Magadan** | **42.90** | **3** | *ce*P | **P** | **22 43 06.7** | **+1.8** | | | |
| MA2 | | | | pmax | pmax | | | | | |
| | comp=Z,2µm,1.3s | | | | | | | | | |
| **MA2** | **Magadan** | **42.90** | **3** | P | **P** | **22 43 06.0** | **+1.1** | | | |
| | comp=Z,2µm,1.6s,comp=Z,21µm | | | | | | | | | |
| **MA2** | **Magadan** | **42.90** | **3** | P | **P** | **22 43 06.7** | **+1.8** | | | |
| MA2 | | | | pP | **pP** | **22 43 21.9** | **+0.9** | | | |
| MA2 | | | | sP | **sP** | **22 43 29.6** | **+0.9** | | | |
| **RMQ** | **Roma** | **42.99** | **177** | P | **P** | **22 43 07.5** | **+1.5** | | | |
| **SMRI** | **Semarang** | **43.00** | **240** | P | **P** | **22 43 07.4** | **+1.0** | | | |
| **SMRI** | **Semarang** | **43.00** | **240** | P | **P** | **22 43 07.0** | **+0.6** | | | |
| **SMRI** | **Semarang** | **43.00** | **240** | ⇑P | **P** | **22 43 07.1** | **+0.8** | | | |
| **NOUC** | **Port Laguerre** | **43.06** | **153** | P | **P** | **22 43 07.5** | **+0.9** | | | |
| **DZM** | **Mont Dzumac** | **43.09** | **153** | P | **P** | **22 43 08.3** | **+1.3** | | | |
| **DZM** | **Mont Dzumac** | **43.09** | **153** | *e*P | **P** | **22 43 07.6** | **+0.6** | | | |
| | comp=Z,1µm,1.1s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **43.09** | **153** | *e*PP | **PP** | **22 44 49.2** | **+0.7** | | | |
| | comp=Z,2µm,30.6s | | | | | | | | | |
| DZM | | | | *e*S | **S** | **22 49 20.1** | **-8.1** | | | |
| | comp=Z,2µm,27.9s | | | | | | | | | |
| DZM | | | | *e*SS | **SS** | **22 52 43.2** | **-0.1** | | | |
| | comp=Z,28µm,27.2s | | | | | | | | | |
| DZM | | | | *e*LR | LR | 22 55 03.4 | | | | |
| | comp=Z,33µm,25.4s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **43.09** | **153** | P | **P** | **22 43 07.8** | **+0.8** | | | |
| **DZM** | **Mont Dzumac** | **43.09** | **153** | ⇑P | **P** | **22 43 07.8** | **+0.8** | | | |
| **DZM** | **Mont Dzumac** | **43.09** | **153** | LR | LR | 22 58 51.4 | | | | |
| | comp=Z,16µm,21.1s,baz=345,slow=33 | | | | | | | | | |
| **QLP** | **Quilpie** | **43.11** | **183** | P | **P** | **22 43 06.3** | **-0.7** | | | |
| **QLP** | **Quilpie** | **43.11** | **183** | ⇑P | **P** | **22 43 06.4** | **-0.6** | | | |
| **AMKA** | **Amchitka** | **43.19** | **29** | P | **P** | **22 43 07.6** | **+0.3** | | | |
| **YATNC** | **Mamie plateau,** | **43.28** | **152** | P | **P** | **22 43 10.8** | **+2.4** | | | |
| **MARNC** | **Mare, Loyalty** | **43.30** | **151** | P | **P** | **22 43 10.0** | **+1.4** | | | |
| **UGM** | **Wanagama** | **43.41** | **238** | P | **P** | **22 43 09.8** | **+0.1** | | | |
| **UGM** | **Wanagama** | **43.41** | **238** | P | **P** | **22 43 09.6** | **-0.2** | | | |
| **CIT** | **Chita** | **43.94** | **331** | *e*P | **P** | **22 43 14.6** | **+1.2** | | | |
| CIT | | | | *e* | | 22 43 25.6 | | | | |
| CIT | | | | *e* | | 22 44 59.4 | | | | |
| CIT | | | | *e* | | 22 49 43.8 | | | | |
| CIT | | | | *e* | | 22 53 43.6 | | | | |
| CIT | | | | pmax | pmax | | | | | |
| | comp=Z,635nm,1.6s | | | | | | | | | |
| **PINNC** | **Pines Island,** | **44.01** | **152** | P | **P** | **22 43 15.7** | **+1.4** | | | |
| **PINNC** | **Pines Island,** | **44.01** | **152** | P | **P** | **22 43 14.6** | **+0.3** | | | |
| **CRAI** | **Chiangrai** | **44.05** | **282** | P | **P** | **22 43 16.3** | **+1.5** | | | |
| CRAI | | | | IAmb | IAmb | 22 43 18.4 | | | | |
| | comp=Z,1µm,1.9s | | | | | | | | | |
| **PHRA** | **Phrae** | **44.31** | **280** | P | **P** | **22 43 18.4** | **+1.5** | | | |
| **INKA** | **Innaminka** | **44.58** | **188** | P | **P** | **22 43 18.3** | **-0.4** | | | |
| **MYKOM** | **Kota Tinggi** | **44.75** | **255** | P | **P** | **22 43 21.9** | **+1.5** | | | |
| MYKOM | | | | IAmb | IAmb | 22 43 24.7 | | | | |
| | comp=Z,1µm,1.1s | | | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **44.75** | **255** | ⇑P | **P** | **22 43 22.1** | **+1.7** | | | |
| **ULN** | **Ulaanbaatar** | **44.96** | **322** | P | **P** | **22 43 22.1** | **+0.3** | | | |
| **ULN** | **Ulaanbaatar** | **44.96** | **322** | ⇑P | **P** | **22 43 21.3** | **-0.5** | | | |
| **ULN** | **Ulaanbaatar** | **44.96** | **322** | P | **P** | **22 43 22.6** | **+0.8** | | | |
| ULN | | | | P | **P** | **22 43 22.6** | **+0.8** | | | |
| ULN | | | | P | **P** | **22 43 22.6** | **+0.8** | | | |
| **ULN** | **Ulaanbaatar** | **44.96** | **322** | *ce*P | **P** | **22 43 22.1** | **+0.3** | | | |
| ULN | | | | pmax | pmax | | | | | |
| | comp=Z,337nm,1.7s | | | | | | | | | |
| **BTDF** | **Bukit Timah Da** | **44.98** | **255** | P | **P** | **22 43 23.6** | **+1.4** | | | |
| **GC1S** | **Gold Coast 1 S** | **45.09** | **172** | P | **P** | **22 43 24.4** | **+1.7** | | | |
| **KIWB** | **Kanaga Island** | **45.20** | **31** | P | **P** | **22 43 24.4** | **+0.9** | | | |
| **WRKA** | **Warakurna** | **45.24** | **204** | P | **P** | **22 43 24.7** | **+0.6** | | | |
| **WRKA** | **Warakurna** | **45.24** | **204** | ⇑P | **P** | **22 43 24.5** | **+0.4** | | | |
| **SONM** | **Songino Array** | **45.33** | **322** | P | **P** | **22 43 24.3** | **-0.4** | | | |
| | comp=Z,89nm,0.7s,baz=135,slow=8.1,SNR=140 | | | | | | | | | |
| SONM | | | | ScP | **ScP** | **22 48 48.5** | **-1.4** | | | |
| | comp=Z,16nm,0.8s,baz=139,slow=4.2,SNR=3.2 | | | | | | | | | |
| SONM | | | | ScS | **ScS** | **22 53 13.5** | **-1.3** | | | |
| | comp=Z,7.7nm,1.1s,baz=188,slow=7.0,SNR=3.7 | | | | | | | | | |
| SONM | | | | P3KPbc | | 23 12 07.8 | | | | |
| | comp=Z,3.0nm,1.1s,baz=186,slow=4.2,SNR=8.7 | | | | | | | | | |
| SONM | | | | PKPPKP | **P'P'df** | **23 14 59.9** | **-1.2** | | | |
| | comp=Z,3.9nm,1.0s,baz=360,slow=1.7,SNR=5.9 | | | | | | | | | |
| | comp=Z,89nm,0.7s | | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **45.53** | **280** | P | **P** | **22 43 28.3** | **+1.7** | | | |
| CM31 | | | | IAmb | IAmb | 22 43 33.4 | | | | |
| | comp=Z,820nm,1.0s | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.53** | **280** | P | **P** | **22 43 27.9** | **+1.3** | | | |
| | comp=Z,351nm,0.8s,baz=71,slow=6.3,SNR=704 | | | | | | | | | |
| CMAR | | | | ScP | **ScP** | **22 48 50.6** | **-0.6** | | | |
| | comp=Z,7.0nm,0.7s,baz=71,slow=3.9,SNR=2.5 | | | | | | | | | |
| CMAR | | | | S | **S** | **22 50 05.3** | **+1.6** | | | |
| | comp=Z,2.4nm,0.4s,baz=63,slow=16,SNR=5.5 | | | | | | | | | |
| CMAR | | | | P3KP | | 23 13 50.9 | | | | |
| | comp=Z,1.6nm,0.4s,baz=264,slow=4.2,SNR=4.7 | | | | | | | | | |
| CMAR | | | | PKPPKP | **P'P'df** | **23 14 56.5** | **-4.9** | | | |
| | comp=Z,4.6nm,1.0s,baz=285,slow=4.5,SNR=7.9 | | | | | | | | | |
| CMAR | | | | PKP2bc | | 23 15 25.1 | | | | |
| | comp=Z,2.1nm,0.5s,baz=258,slow=3.5,SNR=4.9 | | | | | | | | | |
| | comp=Z,351nm,0.8s | | | | | | | | | |
| **OOD** | **Oodnadatta** | **45.53** | **194** | P | **P** | **22 43 26.6** | **+0.3** | | | |
| **BBJI** | **Bungbulang** | **45.55** | **241** | P | **P** | **22 43 25.0** | **-1.8** | | | |
| **TNCH** | **TengChong** | **45.65** | **289** | ⇑P | **P** | **22 43 29.0** | **+1.4** | | | |
| TNCH | | | | ScP | **ScP** | **22 48 52.0** | **+0.2** | | | |
| TNCH | | | | S | **S** | **22 50 07.3** | **+1.6** | | | |
| TNCH | | | | ScS | **ScS** | **22 53 17.8** | **0.0** | | | |
| TNCH | | | | pmax | pmax | | | | | |
| | comp=Z,310nm,0.8s | | | | | | | | | |
| TNCH | | | | pmax | pmax | | | | | |
| | comp=Z,3µm,4.1s | | | | | | | | | |
| TNCH | | | | LR | LR | | | | | |
| | comp=Z,5µm,16.0s | | | | | | | | | |
| TNCH | | | | LR | LR | | | | | |
| | comp=Z,7µm,20.4s | | | | | | | | | |
| TNCH | | | | LR | LR | | | | | |
| | comp=Z,16µm,20.7s | | | | | | | | | |
| **PMBI** | **Palembang** | **45.84** | **249** | P | **P** | **22 43 30.1** | **+1.1** | | | |
| **PMBI** | **Palembang** | **45.84** | **249** | P | **P** | **22 43 29.5** | **+0.5** | | | |
| PMBI | | | | IAmb | IAmb | 22 43 54.1 | | | | |
| | comp=Z,1µm,1.3s | | | | | | | | | |
| **SRDT** | **SRDT** | **45.89** | **274** | P | **P** | **22 43 31.4** | **+2.0** | | | |
| **MSVF** | **Nonsavu** | **46.05** | **137** | P | **P** | **22 43 31.6** | **+0.9** | | | |
| **MSVF** | **Nonsavu** | **46.05** | **137** | P | **P** | **22 43 31.2** | **+0.7** | | | |
| MSVF | | | | IAmb | IAmb | 22 43 33.6 | | | | |
| | comp=Z,445nm,1.1s | | | | | | | | | |
| **MSVF** | **Nonsavu** | **46.05** | **137** | ⇓P | **P** | **22 43 31.4** | **+0.7** | | | |
| **MSVF** | **Nonsavu** | **46.05** | **137** | P | **P** | **22 43 31.3** | **+0.7** | | | |
| MSVF | | | | pmax | pmax | | | | | |
| | comp=Z,445nm,1.1s | | | | | | | | | |
| **MSVF** | **Nonsavu** | **46.05** | **137** | P | **P** | **22 43 31.5** | **+0.9** | | | |
| MSVF | | | | sP | **sP** | **22 43 53.3** | **-1.2** | | | |
| **MBWA** | **Marble Bar** | **46.05** | **216** | P | **P** | **22 43 30.1** | **-0.4** | | | |
| **MBWA** | **Marble Bar** | **46.05** | **216** | P | **P** | **22 43 30.4** | **-0.1** | | | |
| MBWA | | | | IAmb | IAmb | 22 43 31.9 | | | | |
| | comp=Z,1µm,1.4s | | | | | | | | | |
| **MBWA** | **Marble Bar** | **46.05** | **216** | ⇑P | **P** | **22 43 30.4** | **-0.1** | | | |
| **MBWA** | **Marble Bar** | **46.05** | **216** | P | **P** | **22 43 30.7** | **+0.2** | | | |
| **PSA00** | **Pilbara Seismi** | **46.31** | **216** | P | **P** | **22 43 32.6** | **0.0** | | | |
| **PSA00** | **Pilbara Seismi** | **46.31** | **216** | P | **P** | **22 43 32.2** | **-0.4** | | | |
| PSA00 | | | | IAmb | IAmb | 22 43 34.1 | | | | |
| | comp=Z,694nm,1.4s | | | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **46.31** | **216** | P | **P** | **22 43 32.6** | **0.0** | | | |
| PSA00 | | | | IAmb | IAmb | 22 43 34.2 | | | | |
| | comp=Z,1µm,1.4s | | | | | | | | | |
| **SEY** | **Seymchan** | **46.33** | **4** | LR | LR | 23 01 38.6 | | | | |
| | comp=Z,8µm,19.6s,baz=189,slow=34 | | | | | | | | | |
| **SEY** | **Seymchan** | **46.33** | **4** | *ce*P | **P** | **22 43 34.1** | **+1.9** | | | |
| SEY | | | | pmax | pmax | | | | | |
| | comp=Z,2µm,2.5s | | | | | | | | | |
| **IPM** | **Ipoh** | **46.46** | **260** | P | **P** | **22 43 35.5** | **+1.5** | | | |
| **IPM** | **Ipoh** | **46.46** | **260** | P | **P** | **22 43 35.5** | **+1.5** | | | |
| **IPM** | **Ipoh** | **46.46** | **260** | ⇑P | **P** | **22 43 35.9** | **+2.0** | | | |
| **SURA** | **Surathani** | **46.47** | **267** | P | **P** | **22 43 35.8** | **+1.9** | | | |
| **KULM** | **Kulim** | **46.56** | **261** | P | **P** | **22 43 36.7** | **+2.0** | | | |
| **KULM** | **Kulim** | **46.56** | **261** | ⇑P | **P** | **22 43 37.1** | **+2.4** | | | |
| **GTA** | **Gaotai** | **46.57** | **309** | P | **P** | **22 43 34.8** | **+0.2** | | | |
| GTA | | | | pP | pP | 22 43 49.5 | -1.8 | | | |
| GTA | | | | PcP | **PcP** | **22 45 10.3** | **+2.5** | | | |
| GTA | | | | PP | **PP** | **22 45 22.0** | **-3.0** | | | |
| GTA | | | | ScP | **ScP** | **22 48 55.0** | **-0.3** | | | |
| GTA | | | | PcS | **PcS** | **22 49 04.0** | **+1.3** | | | |
| GTA | | | | S | **S** | **22 50 15.0** | **-3.5** | | | |
| GTA | | | | sS | sS | 22 50 40.0 | -6.5 | | | |
| GTA | | | | ScS | **ScS** | **22 53 21.8** | **-1.4** | | | |
| GTA | | | | pmax | pmax | | | | | |
| | comp=Z,1µm,8.8s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=Z,22µm,23.1s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=Z,9µm,24.7s | | | | | | | | | |
| GTA | | | | LR | LR | | | | | |
| | comp=Z,15µm,24.7s | | | | | | | | | |
| **SRIT** | **Nakonsritamara** | **46.64** | **266** | P | **P** | **22 43 37.7** | **+2.4** | | | |
| **SRIT** | **Nakonsritamara** | **46.64** | **266** | P | **P** | **22 43 37.5** | **+2.2** | | | |
| **YAK** | **Yakutsk** | **46.85** | **349** | P | **P** | **22 43 36.5** | **+0.3** | | | |
| **YAK** | **Yakutsk** | **46.85** | **349** | ⇓P | **P** | **22 43 36.4** | **+0.2** | | | |
| **YAK** | **Yakutsk** | **46.85** | **349** | LR | LR | 23 05 19.6 | | | | |
| | comp=Z,5µm,20.8s,baz=148,slow=39 | | | | | | | | | |
| **YAK** | **Yakutsk** | **46.85** | **349** | *d* P | **P** | **22 43 36.3** | **+0.1** | | | |
| YAK | | | | *e**PP | **sP** | **22 43 59.5** | **-0.7** | | | |
| YAK | | | | *e* | | 22 45 06.7 | | | | |
| YAK | | | | *e* | | 22 45 27.7 | | | | |
| YAK | | | | *e*S | **S** | **22 50 19.6** | **-1.8** | | | |
| YAK | | | | *e* | | 22 53 20.4 | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,1µm,0.9s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=E,88nm,1.1s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=N,251nm,1.2s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,708nm,1.9s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=E,450nm,1.9s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=N,502nm,1.8s | | | | | | | | | |
| YAK | | | | smax | smax | | | | | |
| | comp=E,2µm,2.4s | | | | | | | | | |
| YAK | | | | smax | smax | | | | | |
| | comp=N,467nm,1.1s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=N,4µm,19.0s | | | | | | | | | |
| YAK | | | | MLR | MLR | | | | | |
| | comp=E,4µm,16.0s | | | | | | | | | |
| **ARMA** | **Armidale** | **47.09** | **174** | P | **P** | **22 43 39.3** | **+0.7** | | | |
| **ARMA** | **Armidale** | **47.09** | **174** | P | **P** | **22 43 39.2** | **+0.5** | | | |
| **ARMA** | **Armidale** | **47.09** | **174** | ⇑P | **P** | **22 43 39.4** | **+0.7** | | | |
| **LCRK** | **Leigh Creek** | **47.61** | **190** | P | **P** | **22 43 42.8** | **+0.3** | | | |
| **AUPHS** | **Peel High Scho** | **47.71** | **175** | P | **P** | **22 43 44.1** | **+0.8** | | | |
| **BOD** | **Bodaibo** | **47.72** | **337** | *e*P | **P** | **22 43 42.5** | **-0.6** | | | |
| BOD | | | | pmax | pmax | | | | | |
| | comp=Z,388nm,2.0s | | | | | | | | | |
| **BKNI** | **Bangkinang** | **47.90** | **255** | P | **P** | **22 43 46.2** | **+1.1** | | | |
| **BKNI** | **Bangkinang** | **47.90** | **255** | P | **P** | **22 43 45.5** | **+0.4** | | | |
| BKNI | | | | IAmb | IAmb | 22 43 48.2 | | | | |
| | comp=Z,746nm,1.0s | | | | | | | | | |
| **BKNI** | **Bangkinang** | **47.90** | **255** | P | **P** | **22 43 44.9** | **-0.2** | | | |
| **CMSA** | **Cobar Meteorol** | **47.99** | **181** | P | **P** | **22 43 45.6** | **+0.2** | | | |
| **MULG** | **Mulgathing** | **48.31** | **195** | P | **P** | **22 43 48.5** | **+0.6** | | | |
| **ZAK** | **Zakamensk** | **48.34** | **324** | *e*P | **P** | **22 43 48.2** | **0.0** | | | |
| ZAK | | | | *e* | | 22 53 31.4 | | | | |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,177nm,1.3s | | | | | | | | | |
| **STKA** | **Stephens Creek** | **48.57** | **186** | P | **P** | **22 43 50.0** | **+0.1** | | | |
| **STKA** | **Stephens Creek** | **48.57** | **186** | P | **P** | **22 43 50.1** | **+0.1** | | | |
| **STKA** | **Stephens Creek** | **48.57** | **186** | P | **P** | **22 43 49.6** | **-0.3** | | | |
| | comp=Z,413nm,1.0s,baz=354,slow=8.4,SNR=145 | | | | | | | | | |
| STKA | | | | S | **S** | **22 50 50.7** | **+4.2** | | | |
| | comp=Z,12nm,0.8s,baz=157,slow=24,SNR=1.3 | | | | | | | | | |
| STKA | | | | LR | LR | 23 05 15.8 | | | | |
| | comp=Z,9µm,22.0s,baz=358,slow=37 | | | | | | | | | |
| | comp=Z,413nm,1.0s | | | | | | | | | |
| **AUDCS** | **Dubbo College** | **48.70** | **178** | P | **P** | **22 43 51.3** | **+0.4** | | | |
| **IRK** | **Irkutsk** | **48.71** | **326** | *e*P | **P** | **22 43 50.0** | **-0.8** | | | |
| IRK | | | | *e*S | **S** | **22 50 47.1** | **-1.1** | | | |
| IRK | | | | *e* | | 22 51 12.8 | | | | |
| IRK | | | | pmax | pmax | | | | | |
| | comp=Z,500nm,1.7s | | | | | | | | | |
| **XMI** | **Christmas Isla** | **48.78** | **239** | P | **P** | **22 43 51.1** | **-0.8** | | | |
| **XMI** | **Christmas Isla** | **48.78** | **239** | ⇑P | **P** | **22 43 51.1** | **-0.8** | | | |
| **XMIS** | **Christmas Isla** | **48.83** | **239** | P | **P** | **22 43 51.0** | **-1.2** | | | |
| **XMIS** | **Christmas Isla** | **48.83** | **239** | P | **P** | **22 43 51.4** | **-0.8** | | | |
| **PSI** | **Prapat** | **48.99** | **259** | P | **P** | **22 43 55.3** | **+1.6** | | | |
| **PSI** | **Prapat** | **48.99** | **259** | P | **P** | **22 43 55.3** | **+1.6** | | | |
| PSI | | | | pmax | pmax | | | | | |
| | comp=Z,2µm,1.1s | | | | | | | | | |
| **RPSI** | **Rantau Prapat** | **49.03** | **259** | P | **P** | **22 43 55.3** | **+1.5** | | | |
| **LHI** | **Lord Howe Isla** | **49.39** | **166** | P | **P** | **22 43 56.3** | **+0.2** | | | |
| LHI | | | | IAmb | IAmb | 22 44 13.4 | | | | |
| | comp=Z,522nm,1.3s | | | | | | | | | |
| **NTLH** | **Newcastle Hard** | **49.56** | **175** | P | **P** | **22 43 58.9** | **+1.5** | | | |
| **KOHI** | **KOHIMA** | **49.64** | **290** | *e*P | **P** | **22 43 57.4** | **-1.1** | | | |
| KOHI | | | | IAmb | IAmb | 22 44 02.2 | | | | |
| | comp=Z,288nm,1.2s | | | | | | | | | |
| KOHI | | | | IAMs_20 | IAMs_20 | 23 04 02.1 | | | | |
| | comp=Z,10µm,17.6s | | | | | | | | | |
| **GOMU** | **GeErMu** | **49.78** | **303** | P | **P** | **22 44 01.0** | **+1.3** | | | |
| GOMU | | | | pP | pP | 22 44 09.5 | -7.0 | | | |
| GOMU | | | | sP | pwP | 22 44 17.8 | -2.7 | | | |
| GOMU | | | | S | **S** | **22 51 00.0** | **-4.4** | | | |
| GOMU | | | | pmax | pmax | | | | | |
| | comp=Z,74nm,0.7s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,16µm,20.0s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,14µm,21.8s | | | | | | | | | |
| GOMU | | | | LR | LR | | | | | |
| | comp=Z,21µm,21.1s | | | | | | | | | |
| **IMP** | **Imphal** | **49.80** | **289** | *e*P | **P** | **22 43 59.0** | **-0.7** | | | |
| IMP | | | | IAmb | IAmb | 22 44 05.5 | | | | |
| | comp=Z,128nm,0.4s | | | | | | | | | |
| **MGCD** | **Mangrove Creek** | **49.82** | **175** | P | **P** | **22 44 00.5** | **+1.1** | | | |
| **ZIRO** | **ZIRO** | **49.88** | **292** | *e*P | **P** | **22 44 01.7** | **+1.4** | | | |
| ZIRO | | | | IAmb | IAmb | 22 44 06.0 | | | | |
| | comp=Z,507nm,1.0s | | | | | | | | | |
| ZIRO | | | | IAMs_20 | IAMs_20 | 23 04 03.7 | | | | |
| | comp=Z,7µm,19.8s | | | | | | | | | |
| **NFK** | **Norfolk Island** | **49.88** | **156** | P | **P** | **22 44 01.5** | **+1.6** | | | |
| **NIKH** | **Nikolski High** | **50.06** | **33** | P | **P** | **22 44 02.1** | **+1.0** | | | |
| **NIKH** | **Nikolski High** | **50.06** | **33** | P | **P** | **22 44 01.4** | **+0.3** | | | |
| | baz=241,SNR=7.2 | | | | | | | | | |
| NIKH | | | | S | **S** | **22 51 06.6** | **-0.3** | | | |
| | baz=241 | | | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **50.10** | **263** | P | **P** | **22 44 04.1** | **+2.2** | | | |
| **LHMI** | **Lhok Sumawe** | **50.10** | **263** | P | **P** | **22 44 04.4** | **+2.5** | | | |
| **LHMI** | **Lhok Sumawe** | **50.10** | **263** | ⇑P | **P** | **22 44 04.8** | **+2.8** | | | |
| **MOY** | **Mondy** | **50.22** | **324** | *e*P | **P** | **22 44 02.3** | **-0.1** | | | |
| MOY | | | | pmax | pmax | | | | | |
| | comp=Z,361nm,2.2s | | | | | | | | | |
| **WHYH** | **Whyalla** | **50.25** | **190** | P | **P** | **22 44 03.5** | **+0.9** | | | |
| **BBOO** | **Buckleboo** | **50.30** | **192** | P | **P** | **22 44 03.5** | **+0.4** | | | |
| **BBOO** | **Buckleboo** | **50.30** | **192** | P | **P** | **22 44 03.8** | **+0.7** | | | |
| **PTPS** | **Port Pirie** | **50.31** | **190** | P | **P** | **22 44 04.5** | **+1.4** | | | |
| **SYDH** | **Sydney Hard Ro** | **50.34** | **176** | P | **P** | **22 44 04.1** | **+0.8** | | | |
| **HTT** | **Hallett** | **50.43** | **189** | P | **P** | **22 44 04.9** | **+0.8** | | | |
| **HTT** | **Hallett** | **50.43** | **189** | ⇑P | **P** | **22 44 04.9** | **+0.8** | | | |
| **RIV** | **Riverview** | **50.44** | **175** | P | **P** | **22 44 05.6** | **+1.6** | | | |
| **RIV** | **Riverview** | **50.44** | **175** | ⇑P | **P** | **22 44 05.3** | **+1.2** | | | |
| **GIRL** | **Giralia** | **50.44** | **220** | P | **P** | **22 44 06.2** | **+1.9** | | | |
| **GIRL** | **Giralia** | **50.44** | **220** | P | **P** | **22 44 04.9** | **+0.6** | | | |
| **GIRL** | **Giralia** | **50.44** | **220** | ⇑P | **P** | **22 44 05.1** | **+0.8** | | | |
| **FORT** | **Forrest** | **50.54** | **201** | P | **P** | **22 44 05.8** | **+0.9** | | | |
| **FORT** | **Forrest** | **50.54** | **201** | P | **P** | **22 44 05.8** | **+0.9** | | | |
| **FORT** | **Forrest** | **50.54** | **201** | ⇑P | **P** | **22 44 05.6** | **+0.7** | | | |
| **KEKH** | **Kekaha** | **50.56** | **75** | P | **P** | **22 44 05.0** | **-0.3** | | | |
| KEKH | | | | IAmb | IAmb | 22 44 38.8 | | | | |
| | comp=Z,407nm,0.9s | | | | | | | | | |
| **YNG** | **Young** | **50.75** | **178** | P | **P** | **22 44 07.5** | **+1.0** | | | |
| **GSI** | **Gununguitoli** | **50.77** | **258** | P | **P** | **22 44 08.0** | **+1.0** | | | |
| **GSI** | **Gununguitoli** | **50.77** | **258** | P | **P** | **22 44 07.7** | **+0.7** | | | |
| **GSI** | **Gununguitoli** | **50.77** | **258** | ⇑P | **P** | **22 44 08.0** | **+1.0** | | | |
| **WOLH** | **Wollongong Har** | **50.99** | **176** | P | **P** | **22 44 10.1** | **+1.9** | | | |
| **AFI** | **Afiamalu** | **51.01** | **124** | P | **P** | **22 44 08.8** | **0.0** | | | |
| AFI | | | | IAmb | IAmb | 22 44 35.9 | | | | |
| | comp=Z,570nm,1.3s | | | | | | | | | |
| **AFI** | **Afiamalu** | **51.01** | **124** | P | **P** | **22 44 08.8** | **0.0** | | | |
| AFI | | | | pmax | pmax | | | | | |
| | comp=Z,570nm,1.3s | | | | | | | | | |
| **MEEK** | **Meekatharra** | **51.05** | **213** | P | **P** | **22 44 08.2** | **-0.7** | | | |
| **SPIA** | **Saint Paul Isl** | **51.57** | **28** | P | **P** | **22 44 13.1** | **+0.8** | | | |
| **SPIA** | **Saint Paul Isl** | **51.57** | **28** | P | **P** | **22 44 13.7** | **+1.4** | | | |
| | baz=236,SNR=5.3 | | | | | | | | | |
| SPIA | | | | S | **S** | **22 51 29.9** | **+2.3** | | | |
| | baz=236 | | | | | | | | | |
| **P08K** | **Saint George I** | **51.58** | **29** | P | **P** | **22 44 13.4** | **+1.1** | | | |
| | baz=238,SNR=5.8 | | | | | | | | | |
| **TAWA** | **Tawang** | **51.64** | **292** | IAMs_20 | IAMs_20 | 23 03 08.2 | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **SHL** | **Shillong** | **51.65** | **290** | P | **P** | **22 44 14.0** | **+0.3** | | | |
| SHL | | | | IAmb | IAmb | 22 44 18.8 | | | | |
| | comp=Z,376nm,0.8s | | | | | | | | | |
| **SHL** | **Shillong** | **51.65** | **290** | *e*P | **P** | **22 44 14.2** | **+0.5** | | | |
| SHL | | | | IAmb | IAmb | 22 44 18.5 | | | | |
| | comp=Z,387nm,1.0s | | | | | | | | | |
| SHL | | | | IAMs_20 | IAMs_20 | 23 04 04.4 | | | | |
| | comp=Z,4µm,18.1s | | | | | | | | | |
| **SHL** | **Shillong** | **51.65** | **290** | P | **P** | **22 44 14.6** | **+0.9** | | | |
| | SNR=84 | | | | | | | | | |
| **SHL** | **Shillong** | **51.65** | **290** | P | **P** | **22 44 14.0** | **+0.3** | | | |
| SHL | | | | pmax | pmax | | | | | |
| | comp=Z,376nm,0.8s | | | | | | | | | |
| **UNV** | **Unalaska Valle** | **51.72** | **33** | P | **P** | **22 44 14.0** | **+0.6** | | | |
| **UNV** | **Unalaska Valle** | **51.72** | **33** | P | **P** | **22 44 13.7** | **+0.2** | | | |
| | baz=243,SNR=10 | | | | | | | | | |
| UNV | | | | S | **S** | **22 51 30.2** | **+0.5** | | | |
| | baz=243 | | | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **51.77** | **322** | *i* P | **P** | **22 44 14.8** | **+0.7** | | | |
| KNGR | | | | pmax | pmax | | | | | |
| | comp=Z,53nm,1.5s | | | | | | | | | |
| **CAN** | **Canberra** | **51.79** | **178** | P | **P** | **22 44 15.7** | **+1.4** | | | |
| **CAN** | **Canberra** | **51.79** | **178** | P | **P** | **22 44 15.2** | **+1.0** | | | |
| CAN | | | | IAmb | IAmb | 22 44 17.4 | | | | |
| | comp=Z,415nm,0.8s | | | | | | | | | |
| **CAN** | **Canberra** | **51.79** | **178** | ⇑P | **P** | **22 44 15.6** | **+1.3** | | | |
| **CAN** | **Canberra** | **51.79** | **178** | P | **P** | **22 44 15.3** | **+1.0** | | | |
| CAN | | | | pmax | pmax | | | | | |
| | comp=Z,415nm,0.8s | | | | | | | | | |
| **CNB** | **Canberra Magne** | **51.80** | **177** | P | **P** | **22 44 15.5** | **+1.1** | | | |
| **AUUHS** | **Ulladulla High** | **51.91** | **176** | P | **P** | **22 44 15.7** | **+0.7** | | | |
| **GHSS** | **Government Hou** | **51.94** | **189** | P | **P** | **22 44 16.6** | **+1.4** | | | |
| **LVA** | **Lava Point** | **52.11** | **33** | P | **P** | **22 44 17.0** | **+0.6** | | | |
| **KIP** | **Kipapa** | **52.17** | **76** | P | **P** | **22 44 18.1** | **+0.7** | | | |
| **KIP** | **Kipapa** | **52.17** | **76** | | **P** | **22 44 17.6** | **+0.2** | | | |
| KIP | | | | IAmb | IAmb | 22 44 44.0 | | | | |
| | comp=Z,451nm,1.0s | | | | | | | | | |
| **KIP** | **Kipapa** | **52.17** | **76** | *ce*P | **P** | **22 44 18.0** | **+0.7** | | | |
| KIP | | | | pmax | pmax | | | | | |
| | comp=Z,77nm,0.6s | | | | | | | | | |
| **HON** | **Honolulu** | **52.20** | **76** | | **P** | **22 44 17.6** | **+0.1** | | | |
| HON | | | | IAmb | IAmb | 22 44 44.3 | | | | |
| | comp=Z,637nm,1.0s | | | | | | | | | |
| **HON** | **Honolulu** | **52.20** | **76** | P | **P** | **22 44 17.6** | **+0.1** | | | |
| HON | | | | pmax | pmax | | | | | |
| | comp=Z,637nm,1.0s | | | | | | | | | |
| **LSA** | **Lhasa** | **52.29** | **295** | P | **P** | **22 44 21.5** | **+2.8** | | | |
| LSA | | | | S | **S** | **22 51 41.5** | **+2.1** | | | |
| LSA | | | | LR | LR | | | | | |
| | comp=Z,9µm,26.8s | | | | | | | | | |
| LSA | | | | LR | LR | | | | | |
| | comp=Z,4µm,18.5s | | | | | | | | | |
| LSA | | | | LR | LR | | | | | |
| | comp=Z,6µm,27.4s | | | | | | | | | |
| **LSA** | **Lhasa** | **52.29** | **295** | P | **P** | **22 44 20.9** | **+2.2** | | | |
| LSA | | | | IAmb | IAmb | 22 44 58.5 | | | | |
| | comp=Z,332nm,0.9s | | | | | | | | | |
| **LSA** | **Lhasa** | **52.29** | **295** | P | **P** | **22 44 20.8** | **+2.0** | | | |
| **LSA** | **Lhasa** | **52.29** | **295** | P | **P** | **22 44 21.1** | **+2.3** | | | |
| LSA | | | | P | **P** | **22 44 21.1** | **+2.3** | | | |
| **LSA** | **Lhasa** | **52.29** | **295** | P | **P** | **22 44 20.9** | **+2.2** | | | |
| LSA | | | | pmax | pmax | | | | | |
| | comp=Z,332nm,0.9s | | | | | | | | | |

SDPT S **S** **22 52 20.8 -0.5**
baz=248
**CNBA** **Chernabura Isl** **55.81 34** P **P** **22 44 43.6 +0.2**
CNBA IAmb IAmb 22 45 13.2
comp=Z,465nm,1.1s
**CHNA** **Chernabura Isl** **55.81 34** P **P** **22 44 44.0 +0.6**
baz=249,SNR=20
CHNA S **S** **22 52 25.7 +0.7**
baz=249
**TIXI** **Tiksi** **55.95 353** P **P** **22 44 44.0 0.0**
**TIXI** **Tiksi** **55.95 353** ⇓P **P** **22 44 44.0 0.0**
**TIXI** **Tiksi** **55.95 353** LR LR 23 10 37.5
comp=Z,2μm,19.9s,baz=168,slow=38
**TIXI** **Tiksi** **55.95 353** *ce*P **P** **22 44 44.0 0.0**
TIXI pmax pmax
comp=Z,169nm,0.8s
**M13K** **Dall Lake** **56.31 27** P **P** **22 44 48.8 +2.0**
**M13K** **Dall Lake** **56.31 27** P **P** **22 44 49.0 +2.2**
baz=242
M13K S **S** **22 52 34.9 +3.3**
baz=242
**S14K** **Fog Glacier** **56.37 33** P **P** **22 44 48.1 +0.7**
baz=248,SNR=40
S14K S **S** **22 52 32.9 +0.3**
baz=248
**WMQ** **Urumqi** **56.38 312** P **P** **22 44 49.0 +1.2**
WMQ pP pP 22 45 05.0 +0.3
WMQ S **S** **22 52 32.5 -0.8**
WMQ ScS **ScS** **22 54 30.3 -0.5**
WMQ pmax pmax
comp=Z,290nm,1.7s
WMQ pmax pmax
comp=Z,2μm,3.7s
WMQ LR LR
comp=Z,2μm,24.1s
WMQ LR LR
comp=Z,8μm,23.1s
WMQ LR LR
comp=Z,10μm,24.3s
**K13K** **Kusilvak Mount** **56.51 25** P **P** **22 44 50.2 +2.0**
baz=239
K13K S **S** **22 52 37.9 +3.8**
baz=239
**MUN** **Mundaring** **56.60 211** P **P** **22 44 49.4 +0.2**
**XMAS** **Kiritimati** **56.72 99** P **P** **22 44 51.1 +0.6**
**XMAS** **Kiritimati** **56.72 99** P **P** **22 44 50.8 +0.3**
XMAS IAmb IAmb 22 45 26.1
comp=Z,707nm,1.3s
**XMAS** **Kiritimati** **56.72 99** ⇓P **P** **22 44 51.1 +0.6**
**O14K** **Tigyukauivet M** **56.73 29** P **P** **22 44 51.0 +1.2**
baz=244
O14K S **S** **22 52 38.7 +1.7**
baz=244
**N14K** **Kuskokwak Cree** **56.83 28** P **P** **22 44 51.9 +1.5**
baz=244,SNR=40
N14K S **S** **22 52 40.1 +1.8**
baz=244
**NWAO** **Narrogin (SRO)** **56.87 210** P **P** **22 44 51.3 +0.1**
**NWAO** **Narrogin (SRO)** **56.87 210** P **P** **22 44 51.4 +0.2**
NWAO IAmb IAmb 22 45 14.4
comp=Z,1μm,1.6s
**NWAO** **Narrogin (SRO)** **56.87 210** LR LR 23 10 41.9
comp=Z,11μm,20.9s,baz=36,slow=37
**NWAO** **Narrogin (SRO)** **56.87 210** P **P** **22 44 51.6 +0.4**
NWAO P **P** **22 44 51.6 +0.4**
NWAO P **P** **22 44 51.6 +0.4**
**NWAO** **Narrogin (SRO)** **56.87 210** P **P** **22 44 51.4 +0.2**
NWAO pmax pmax
comp=Z,1μm,1.6s
**NWAO** **Narrogin (SRO)** **56.87 210** P **P** **22 44 51.2 0.0**
NWAO pP **pP** **22 45 07.2 -0.9**
NWAO sP **sP** **22 45 14.3 -1.2**
NWAO PcP **PcP** **22 45 47.8 +1.8**
**CHGN** **Chignik** **56.96 33** P **P** **22 44 51.8 +0.3**
baz=249,SNR=32
CHGN S **S** **22 52 39.7 -0.6**
baz=249
**RAO** **Raoul Island** **57.02 143** LR LR 23 08 12.1
comp=Z,5μm,18.9s,baz=312,slow=35
**L14K** **Kuka Creek** **57.04 26** P **P** **22 44 53.8 +1.8**
baz=242,SNR=186
L14K S **S** **22 52 43.9 +2.8**
baz=242
**M14K** **Bethel** **57.08 27** P **P** **22 44 53.7 +1.5**
**M14K** **Bethel** **57.08 27** P **P** **22 44 53.9 +1.7**
baz=243,SNR=165
M14K S **S** **22 52 44.1 +2.5**
baz=243
**COCO** **West Island** **57.11 243** P **P** **22 44 54.3 +1.1**
**COCO** **West Island** **57.11 243** P **P** **22 44 54.2 +1.1**
**COCO** **West Island** **57.11 243** P **P** **22 44 54.4 +1.3**
**COCO** **West Island** **57.11 243** P **P** **22 44 54.2 +1.1**
COCO pmax pmax
comp=Z,2μm,1.5s
**BOK** **Bokaro** **57.20 288** *e*P **P** **22 44 55.3 +1.5**
BOK IAmb IAmb 22 44 57.7
comp=Z,468nm,1.0s
BOK IAMs_20 IAMs_20 23 01 45.1
comp=Z,4μm,20.0s
**TNA** **Tin City** **57.29 21** ⇓P **P** **22 44 54.9 +1.2**
**TNA** **Tin City** **57.29 21** P **P** **22 44 55.2 +1.5**
baz=234,SNR=24
TNA S **S** **22 52 47.0 +2.7**
baz=234
**J14K** **Nanvaranak Lak** **57.37 25** P **P** **22 44 56.2 +1.9**
baz=240
J14K S **S** **22 52 49.7 +4.4**
baz=240
**O15K** **Ungalikthiuk R** **57.37 29** P **P** **22 44 55.8 +1.5**
baz=246,SNR=86
O15K S **S** **22 52 46.8 +1.2**
baz=246
**GLAD** **Gladstone** **57.42 179** P **P** **22 44 55.6 +0.8**
**OUZ** **Omahuta** **57.58 154** ⇑P **P** **22 44 59.2 +3.1**
**M15K** **Kasigluk River** **57.61 28** P **P** **22 44 57.4 +1.4**
baz=244,SNR=87
M15K S **S** **22 52 49.8 +1.1**
baz=244
**ANM** **Nome** **57.62 22** P **P** **22 44 57.2 +1.2**
ANM IAmb IAmb 22 45 25.6
comp=Z,538nm,1.0s
**ANM** **Nome** **57.62 22** P **P** **22 44 57.9 +1.9**
baz=237,SNR=25
ANM S **S** **22 52 52.5 +3.8**
baz=237
**ANM** **Nome** **57.62 22** P **P** **22 44 57.2 +1.2**
ANM pmax pmax
comp=Z,538nm,1.0s
**N15K** **Kwethluk River** **57.65 28** P **P** **22 44 58.0 +1.7**
baz=245,SNR=91
N15K S **S** **22 52 51.4 +2.1**
baz=245
**DGZ** **Jazzator, Alta** **57.68 319** *c i*P **P** **22 44 56.9 0.0**
DGZ pmax pmax
comp=Z,96nm,1.2s
**L15K** **Ungalak Mounta** **57.70 26** P **P** **22 44 57.8 +1.2**
baz=243,SNR=87
L15K S **S** **22 52 53.0 +3.2**
baz=243
**F14K** **Arctic Creek** **57.78 21** P **P** **22 44 59.1 +2.0**
baz=236,SNR=57
F14K S **S** **22 52 54.3 +3.5**
baz=236
**R16K** **Pilot Point** **57.85 32** P **P** **22 44 58.2 +0.5**
baz=249
R16K S **S** **22 52 50.1 -1.7**
baz=249
R16K S **S** **22 52 50.1 -1.7**
baz=249
**CORO** **Coronation Par** **57.87 180** P **P** **22 44 59.4 +1.4**
**K15K** **Wolf Creek Mou** **57.97 26** P **P** **22 45 00.3 +1.8**
baz=242,SNR=74
K15K S **S** **22 52 56.5 +3.1**
baz=242
**P16K** **Nushagak River** **58.18 30** P **P** **22 45 01.6 +1.7**
baz=248,SNR=30
P16K S **S** **22 52 57.6 +1.5**
baz=248
P16K S **S** **22 52 57.6 +1.5**
baz=248
**AUALB** **St Joseph's Co** **58.29 208** P **P** **22 45 01.9 +0.9**
**G15K** **Niukluk** **58.33 22** P **P** **22 45 02.5 +1.5**
baz=238,SNR=34
G15K S **S** **22 53 01.6 +3.7**
baz=238
**O16K** **Kokwok River B** **58.34 29** P **P** **22 45 02.6 +1.4**
baz=247,SNR=75
O16K S **S** **22 53 01.3 +3.0**
baz=247
**N16K** **Nishlik Lake** **58.38 28** P **P** **22 45 03.2 +1.8**
baz=246,SNR=140
N16K S **S** **22 53 00.6 +1.8**
baz=246
**RKGY** **Rocky Gully** **58.38 209** P **P** **22 45 02.7 +1.0**
**R17L** **Mt. Peulik Vol** **58.48 32** P **P** **22 45 02.6 +0.4**
baz=250,SNR=20
R17L S **S** **22 52 58.7 -1.5**
baz=250
**F15K** **North Star Dit** **58.49 21** P **P** **22 45 03.9 +1.7**
baz=237,SNR=78
F15K S **S** **22 53 03.7 +3.6**
baz=237
**WCZ** **Waipu Caves** **58.51 154** P **P** **22 45 05.1 +2.5**
**M16K** **Timber Creek** **58.52 28** P **P** **22 45 03.9 +1.5**
baz=246,SNR=78
M16K S **S** **22 53 02.8 +2.3**
baz=246
**L16K** **Owhat River** **58.58 27** P **P** **22 45 04.0 +1.3**
baz=245,SNR=88
L16K S **S** **22 53 04.3 +3.0**
baz=245
**Q16K** **King Salmon** **58.70 31** P **P** **22 45 03.4 -0.2**
baz=249
Q16K S **S** **22 53 01.8 -1.0**
baz=249
**J16K** **Anvik River** **58.80 25** P **P** **22 45 06.5 +2.1**
baz=243,SNR=83
J16K S **S** **22 53 08.4 +4.2**
baz=243
**H16K** **Elim** **58.81 23** P **P** **22 45 05.7 +1.3**
baz=240,SNR=28
H16K S **S** **22 53 07.2 +3.0**
baz=240
**MOO** **Moorlands** **58.86 180** P **P** **22 45 06.0 +1.1**
**O17K** **Koliganek Bris** **58.88 29** P **P** **22 45 06.1 +1.2**
baz=248,SNR=64
O17K S **S** **22 53 07.6 +2.4**
baz=248
**ZSN** **Zaisan** **58.92 316** *e*P **P** **22 45 05.3 -0.2**
comp=Z,111nm,0.9s,baz=316
**ZSN** **Zaisan** **58.92 316** *e*P **P** **22 45 05.3 -0.2**
ZSN pmax pmax
comp=Z,111nm,0.9s
**Q17K** **Contact Creek** **58.93 31** P **P** **22 45 05.1 -0.3**
baz=250,SNR=25
Q17K S **S** **22 53 04.4 -1.8**
baz=250
**P17K** **Kvichak River** **58.98 30** P **P** **22 45 06.0 +0.4**
baz=249,SNR=21
P17K S **S** **22 53 06.0 -0.5**
baz=249
P17K S **S** **22 53 06.0 -0.5**
baz=249
**I17K** **Unalakleet** **59.05 24** P **P** **22 45 08.1 +2.2**
baz=242,SNR=37
I17K S **S** **22 53 11.0 +3.8**
baz=242
**N17K** **Nushagak Hills** **59.12 29** P **P** **22 45 08.6 +2.0**
baz=248,SNR=112
N17K S **S** **22 53 12.1 +3.8**
baz=248
**G16K** **Koyuk River** **59.15 22** P **P** **22 45 07.8 +1.2**
baz=240,SNR=23
G16K S **S** **22 53 11.8 +3.3**
baz=240
**L17K** **Donlin** **59.26 27** P **P** **22 45 09.4 +1.9**
baz=246,SNR=103
L17K S **S** **22 53 13.2 +3.0**
baz=246
**SII** **Sitkinak Islan** **59.27 34** P **P** **22 45 08.9 +1.3**
**SII** **Sitkinak Islan** **59.27 34** P **P** **22 45 09.0 +1.4**
baz=253
SII S **S** **22 53 12.8 +2.3**
baz=253
**TAU** **Tasmania Unive** **59.33 180** P **P** **22 45 08.6 +0.5**
TAU IAmb IAmb 22 45 36.0
comp=Z,395nm,1.1s
**TAU** **Tasmania Unive** **59.33 180** P **P** **22 45 08.6 +0.5**
TAU pmax pmax
comp=Z,395nm,1.1s
**TAU** **Tasmania Unive** **59.33 180** P **P** **22 45 08.5 +0.4**
TAU sP **pwP** **22 45 30.5 -0.3**
**M17K** **Holitna River** **59.34 28** P **P** **22 45 10.1 +2.0**
baz=247,SNR=95
M17K S **S** **22 53 14.7 +3.4**
baz=247
**AUTAR** **Taroona High S** **59.36 180** P **P** **22 45 09.3 +1.0**
**R18K** **Karluk** **59.43 32** P **P** **22 45 09.3 +0.6**
baz=252
R18K S **S** **22 53 11.7 -0.7**
baz=252
R18K S **S** **22 53 11.7 -0.7**
baz=252
**J17K** **VABM Dome** **59.47 25** P **P** **22 45 10.8 +1.9**
baz=244,SNR=189
J17K S **S** **22 53 16.5 +3.7**
baz=244
J17K S **S** **22 53 16.5 +3.7**
baz=244
**Q18K** **Katmai Hardscr** **59.50 31** P **P** **22 45 09.2 -0.1**
baz=251,SNR=50
Q18K S **S** **22 53 11.2 -2.3**
baz=251
**K17K** **Iditarod** **59.50 26** P **P** **22 45 11.1 +1.9**
baz=245
K17K S **S** **22 53 17.0 +3.8**
baz=245
**P18K** **Big Mountain,** **59.63 30** P **P** **22 45 10.4 +0.2**
baz=250,SNR=9.7
P18K S **S** **22 53 13.4 -1.7**
baz=250
**C16K** **Lisburne Hills** **59.69 19** P **P** **22 45 11.7 +1.3**
baz=235,SNR=90
C16K S **S** **22 53 18.8 +3.3**
baz=235
**N18K** **Kilae Creek** **59.77 29** P **P** **22 45 12.9 +1.8**
baz=249,SNR=76
N18K S **S** **22 53 20.5 +3.7**
baz=249
N18K S **S** **22 53 20.5 +3.7**
baz=249
**O18K** **Koktuh Hills** **59.80 30** P **P** **22 45 12.5 +1.2**
baz=250,SNR=37
O18K S **S** **22 53 19.1 +1.8**
baz=250
O18K S **S** **22 53 19.1 +1.8**
baz=250
**G17K** **Kiwalik Mounta** **59.82 23** P **P** **22 45 13.1 +1.8**
baz=242,SNR=133
G17K S **S** **22 53 20.2 +3.0**
baz=242
**H17K** **Granite Mounta** **59.83 23** P **P** **22 45 13.2 +1.8**
baz=243
H17K S **S** **22 53 21.3 +3.9**
baz=243
**OHAK** **Old Harbor** **59.93 33** P **P** **22 45 13.1 +0.9**
**OHAK** **Old Harbor** **59.93 33** P **P** **22 45 13.3 +1.2**
baz=253,SNR=39
OHAK S **S** **22 53 20.9 +2.0**
baz=253
**H01W1** **Cape Leeuwin H** **59.96 211** P **P** **22 45 13.6 +1.2**
baz=64,slow=4.2,SNR=8.5
**H01W3** **Cape Leeuwin H** **59.96 211** P **P** **22 45 13.6 +1.2**
baz=64,slow=4.2,SNR=11
**H01W2** **Cape Leeuwin H** **59.97 211** P **P** **22 45 13.8 +1.4**
baz=64,slow=4.2,SNR=11
**L18K** **Granite Mounta** **59.99 27** P **P** **22 45 14.5 +2.0**
baz=247,SNR=130
L18K S **S** **22 53 23.3 +3.8**
baz=247
L18K S **S** **22 53 23.3 +3.8**
baz=247
**F17K** **Baldwin Pennin** **60.06 21** P **P** **22 45 14.8 +1.9**
baz=240,SNR=30
F17K S **S** **22 53 23.2 +3.0**
baz=240
**SVW2** **Sparrevohn** **60.06 28** P **P** **22 45 14.6 +1.6**
**D17K** **Noatak River** **60.09 20** P **P** **22 45 14.7 +1.6**
baz=238,SNR=76
D17K S **S** **22 53 23.1 +2.5**
baz=238
**M18K** **Stony River** **60.10 28** P **P** **22 45 15.2 +1.9**
baz=248,SNR=121
M18K S **S** **22 53 24.3 +3.4**
baz=248
**E17K** **Hotham Inlet** **60.19 21** P **P** **22 45 15.6 +1.9**
baz=240,SNR=50
E17K S **S** **22 53 25.0 +3.2**
baz=240
**ZAA0** **Zalesovo Array** **60.21 323** P **P** **22 45 13.5 -0.6**
**ZALV** **Zalesovo Beam** **60.21 323** P **P** **22 45 13.3 -0.8**
comp=Z,57nm,0.6s,baz=111,slow=6.8,SNR=127
ZALV S **S** **22 53 21.1 -1.4**
comp=Z,14nm,1.0s,baz=123,slow=5.3,SNR=4.4
ZALV LR LR 23 11 54.5
comp=Z,14μm,21.6s,baz=100,slow=37
ZALV PKPPKP **P'P'df** **23 14 34.7 -5.0**
comp=Z,4.9nm,0.8s,baz=267,slow=2.8,SNR=8.4
comp=Z,57nm,0.6s
**Q19K** **Cape Douglas,** **60.26 31** P **P** **22 45 14.1 -0.3**
baz=252,SNR=9.8
Q19K S **S** **22 53 19.6 -3.5**
baz=252
Q19K S **S** **22 53 19.6 -3.5**
baz=252
**RDOG** **Red Dog Mine** **60.33 19** P **P** **22 45 15.8 +1.0**
RDOG IAmb IAmb 22 45 18.1
comp=Z,825nm,1.4s
**RDOG** **Red Dog Mine** **60.33 19** P **P** **22 45 16.5 +1.8**
baz=238,SNR=52
RDOG S **S** **22 53 25.4 +1.6**
baz=238
**O19K** **Port Alsworth** **60.34 29** P **P** **22 45 15.7 +0.9**
baz=251
O19K S **S** **22 53 25.6 +1.7**
baz=251
O19K S **S** **22 53 25.6 +1.7**
baz=251
**KDAK** **Kodiak Island** **60.46 32** ⇓P **P** **22 45 16.6 +0.9**
**KDAK** **Kodiak Island** **60.46 32** P **P** **22 45 16.6 +0.9**
baz=254
KDAK S **S** **22 53 26.4 +0.8**
baz=254
**J18K** **Innoko River** **60.47 26** P **P** **22 45 17.0 +1.2**
baz=247,SNR=83
J18K S **S** **22 53 26.9 +1.2**
baz=247
**N19K** **Bonanza Creek** **60.47 29** P **P** **22 45 17.8 +1.8**
baz=250,SNR=70
N19K S **S** **22 53 29.4 +3.5**
baz=250
N19K S **S** **22 53 29.4 +3.5**
baz=250
**C17K** **DeLong Mountai** **60.48 19** P **P** **22 45 17.4 +1.6**
baz=238,SNR=143
C17K S **S** **22 53 28.0 +2.4**
baz=238
**H18K** **Honhosa River** **60.52 23** P **P** **22 45 17.4 +1.3**
baz=244
H18K S **S** **22 53 28.2 +2.0**
baz=244
**TOZ** **Tahuroa Road** **60.52 154** P **P** **22 45 17.6 +1.2**
TOZ IAmb IAmb 22 45 37.5
comp=Z,296nm,1.3s
**TOZ** **Tahuroa Road** **60.52 154** P **P** **22 45 18.4 +2.0**
**MK31** **Makanchi Array** **60.57 315** P **P** **22 45 17.8 +0.9**
**MK31** **Makanchi Array** **60.57 315** *ce*P **P** **22 45 15.6 -1.2**
**MKAR** **Makanchi Array** **60.57 315** P **P** **22 45 16.6 -0.2**
comp=Z,56nm,0.6s,baz=90,slow=7.0,SNR=208
MKAR S **S** **22 53 27.0 -0.6**
comp=Z,14nm,1.0s,baz=94,slow=15,SNR=3.6
MKAR LR LR 23 12 09.3
comp=Z,13μm,21.8s,baz=102,slow=37
MKAR PKP2bc 23 14 46.5
comp=Z,8.7nm,0.9s,baz=268,slow=3.6,SNR=8.4
comp=Z,56nm,0.6s
**P19K** **Oil Pt** **60.68 30** P **P** **22 45 17.9 +0.6**
baz=252,SNR=24
P19K S **S** **22 53 27.0 -1.5**
baz=252
**F18K** **Selawik** **60.70 22** P **P** **22 45 18.4 +1.1**
baz=242,SNR=38
F18K S **S** **22 53 31.1 +2.7**
baz=242
**G18K** **Tagagawik** **60.74 23** P **P** **22 45 19.0 +1.4**
baz=243
G18K S **S** **22 53 31.6 +2.6**
baz=243
**E18K** **Tukpahlearik C** **60.77 21** P **P** **22 45 19.6 +1.9**
baz=241,SNR=75
E18K S **S** **22 53 32.8 +3.5**
baz=241
**L19K** **White Mountain** **60.77 27** P **P** **22 45 19.5 +1.6**
baz=249,SNR=153
L19K S **S** **22 53 33.1 +3.5**
baz=249
L19K S **S** **22 53 33.1 +3.5**
baz=249
**Q20K** **Shuyak Island** **60.79 32** P **P** **22 45 18.9 +0.9**
baz=253,SNR=12
Q20K S **S** **22 53 29.3 -0.5**
baz=253
**MAKZ** **Makanchi** **60.79 315** P **P** **22 45 19.1 +0.8**
**MAKZ** **Makanchi** **60.79 315** ⇑P **P** **22 45 18.4 +0.1**
**MAKZ** **Makanchi** **60.79 315** P **P** **22 45 19.1 +0.8**
MAKZ pmax pmax
comp=Z,251nm,1.2s
**M19K** **Big River Lodg** **60.88 28** P **P** **22 45 20.2 +1.6**
baz=250,SNR=78
M19K S **S** **22 53 35.1 +4.1**
baz=250
M19K S **S** **22 53 35.1 +4.1**
baz=250
**GCSA** **Galena City Sc** **60.92 24** P **P** **22 45 19.9 +1.2**
baz=246,SNR=14
GCSA S **S** **22 53 33.5 +2.3**
baz=246
**HIZ** **Hauiti** **60.92 155** P **P** **22 45 20.8 +1.7**
**O20K** **Slope Mountain** **61.11 30** P **P** **22 45 20.6 +0.4**
baz=252,SNR=19
O20K S **S** **22 53 32.7 -1.2**
baz=252
O20K S **S** **22 53 32.7 -1.2**
baz=252
**J19K** **Poorman** **61.12 25** P **P** **22 45 21.8 +1.6**
baz=247,SNR=222
J19K S **S** **22 53 36.1 +2.2**
baz=247
J19K S **S** **22 53 36.1 +2.2**
baz=247
**RSO** **Redoubt South** **61.16 29** P **P** **22 45 21.0 +0.2**
**C18K** **Utukok River** **61.19 19** P **P** **22 45 21.9 +1.3**
baz=239,SNR=80
C18K S **S** **22 53 36.0 +1.2**
baz=239
**OMRZ** **Omania** **61.21 154** P **P** **22 45 23.4 +2.3**
**L20K** **Farewell, AK** **61.30 27** P **P** **22 45 23.2 +1.7**
baz=250
L20K S **S** **22 53 39.2 +2.9**
baz=250
L20K S **S** **22 53 39.2 +2.9**
baz=250
**B18K** **Kokolik River** **61.37 18** P **P** **22 45 23.8 +2.1**
baz=238,SNR=104
B18K S **S** **22 53 39.5 +2.6**
baz=238
**H19K** **Roundabout Mou** **61.40 23** P **P** **22 45 23.8 +1.8**
baz=246,SNR=239
H19K S **S** **22 53 40.9 +3.5**
baz=246
**G19K** **Purcell Mounta** **61.42 23** P **P** **22 45 23.7 +1.5**
baz=245,SNR=198
G19K S **S** **22 53 41.1 +3.4**
baz=245
**M20K** **Styx River** **61.44 28** P **P** **22 45 24.3 +1.8**
baz=251,SNR=125
M20K S **S** **22 53 41.4 +3.2**
baz=251
M20K S **S** **22 53 41.4 +3.2**
baz=251
**HOM** **Homer** **61.45 31** P **P** **22 45 22.9 +0.4**
**HOM** **Homer** **61.45 31** P **P** **22 45 22.7 +0.2**
baz=254
HOM S **S** **22 53 36.7 -1.6**
baz=254
**F19K** **Shaleruckik Mo** **61.47 22** P **P** **22 45 23.5 +1.1**
baz=244,SNR=56
F19K S **S** **22 53 39.8 +1.6**
baz=244
**K20K** **Telida** **61.53 26** P **P** **22 45 24.9 +2.0**
baz=249,SNR=241
K20K S **S** **22 53 43.3 +4.2**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=249 | | | | | | | | |
| K20K | | | | | S | | **S** | **22 53 43.3** | **+4.2** |
| | baz=249 | | | | | | | | |
| **HAZ** | **Te Kaha** | **61.53** | **152** | | P | | **P** | **22 45 23.7** | **+0.5** |
| **CNPM** | **China Poot** | **61.62** | **31** | | P | | **P** | **22 45 23.9** | **+0.2** |
| **N20K** | **Mount Spurr** | **61.64** | **29** | | P | | **P** | **22 45 24.6** | **+0.7** |
| | baz=252,SNR=16 | | | | | | | | |
| N20K | | | | | S | | **S** | **22 53 40.8** | **+0.1** |
| | baz=252 | | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **61.64** | **29** | | P | | **P** | **22 45 24.4** | **+0.6** |
| | baz=252,SNR=14 | | | | | | | | |
| SPCR | | | | | S | | **S** | **22 53 40.2** | **-0.5** |
| | baz=252 | | | | | | | | |
| **URZ** | **Urewera** | **61.65** | **153** | ⇓ | P | | **P** | **22 45 24.1** | **+0.1** |
| **URZ** | **Urewera** | **61.65** | **153** | | LR | | LR | 23 10 47.3 | |
| | comp=Z,4µm,19.9s,baz=47,slow=34 | | | | | | | | |
| **URZ** | **Urewera** | **61.65** | **153** | | P | | **P** | **22 45 24.6** | **+0.6** |
| **RUGZ** | **Raukumara Rang** | **61.66** | **153** | | P | | **P** | **22 45 24.7** | **+0.5** |
| **WTVZ** | **West Tongariro** | **61.73** | **155** | | P | | **P** | **22 45 23.8** | **-1.0** |
| **NTVZ** | **North Tongarir** | **61.76** | **155** | | P | | **P** | **22 45 27.2** | **+2.3** |
| **TMVZ** | **Te Maari** | **61.78** | **155** | | P | | **P** | **22 45 27.1** | **+2.0** |
| **COVZ** | **Chateau Observ** | **61.79** | **155** | | P | | **P** | **22 45 26.9** | **+1.9** |
| **J20K** | **Nowinta River** | **61.79** | **25** | | P | | **P** | **22 45 26.8** | **+2.1** |
| | baz=249,SNR=471 | | | | | | | | |
| J20K | | | | | S | | **S** | **22 53 46.4** | **+4.0** |
| | baz=249 | | | | | | | | |
| J20K | | | | | S | | **S** | **22 53 46.4** | **+4.0** |
| | baz=249 | | | | | | | | |
| **OTVZ** | **Oturere** | **61.81** | **155** | | P | | **P** | **22 45 27.5** | **+2.2** |
| **I20K** | **Naaghedeneel** | **61.88** | **25** | | P | | **P** | **22 45 27.5** | **+2.2** |
| | baz=248,SNR=79 | | | | | | | | |
| I20K | | | | | S | | **S** | **22 53 47.7** | **+4.2** |
| | baz=248 | | | | | | | | |
| **RTZ** | **Ruatahuna** | **61.90** | **153** | | P | | **P** | **22 45 25.8** | **0.0** |
| RTZ | | | | | IAmb | | IAmb | 22 45 55.0 | |
| | comp=Z,545nm,1.0s | | | | | | | | |
| **MWZ** | **Matawai** | **61.90** | **153** | | P | | **P** | **22 45 26.5** | **+0.8** |
| **C19K** | **Lookout Ridge** | **61.92** | **19** | | P | | **P** | **22 45 27.4** | **+1.9** |
| | baz=241,SNR=297 | | | | | | | | |
| C19K | | | | | S | | **S** | **22 53 45.4** | **+1.4** |
| | baz=241 | | | | | | | | |
| **E19K** | **Redstone River** | **61.94** | **21** | | P | | **P** | **22 45 27.5** | **+1.9** |
| | baz=244,SNR=111 | | | | | | | | |
| E19K | | | | | S | | **S** | **22 53 45.2** | **+1.0** |
| | baz=244 | | | | | | | | |
| **TWGZ** | **Tauwhareparae** | **61.97** | **152** | | P | | **P** | **22 45 27.3** | **+1.1** |
| **H20K** | **Anotleneega Mo** | **61.99** | **24** | | P | | **P** | **22 45 27.9** | **+1.8** |
| | baz=247,SNR=313 | | | | | | | | |
| H20K | | | | | S | | **S** | **22 53 48.4** | **+3.5** |
| | baz=247 | | | | | | | | |
| **CAPN** | **Captain Cook N** | **62.01** | **29** | | P | | **P** | **22 45 27.6** | **+1.4** |
| | baz=253 | | | | | | | | |
| CAPN | | | | | S | | **S** | **22 53 46.2** | **+1.1** |
| | baz=253 | | | | | | | | |
| **A19K** | **Wainwright** | **62.02** | **18** | | P | | **P** | **22 45 28.4** | **+2.3** |
| | baz=239,SNR=28 | | | | | | | | |
| A19K | | | | | S | | **S** | **22 53 48.4** | **+3.3** |
| | baz=239 | | | | | | | | |
| **MTHZ** | **Maungataniwha** | **62.03** | **154** | | P | | **P** | **22 45 27.7** | **+1.0** |
| **QRZ** | **Quartz Range** | **62.04** | **158** | | P | | **P** | **22 45 27.5** | **+0.8** |
| QRZ | | | | | IAmb | | IAmb | 22 46 06.4 | |
| | comp=Z,692nm,1.2s | | | | | | | | |
| **QRZ** | **Quartz Range** | **62.04** | **158** | | P | | **P** | **22 45 27.0** | **+0.4** |
| **MOVZ** | **Moawhango** | **62.05** | **155** | | P | | **P** | **22 45 27.8** | **+1.0** |
| **D19K** | **Kuna River** | **62.10** | **20** | | P | | **P** | **22 45 28.3** | **+1.5** |
| | baz=243,SNR=168 | | | | | | | | |
| D19K | | | | | S | | **S** | **22 53 47.6** | **+1.3** |
| | baz=243 | | | | | | | | |
| **TKGZ** | **Te Karaka** | **62.12** | **153** | | P | | **P** | **22 45 28.0** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **62.15** | **154** | | P | | **P** | **22 45 27.3** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **62.15** | **154** | | P | | **P** | **22 45 27.5** | **0.0** |
| **SKT** | **Skwentna** | **62.19** | **28** | | P | | **P** | **22 45 27.7** | **+0.3** |
| | baz=252,SNR=62 | | | | | | | | |
| SKT | | | | | S | | **S** | **22 53 47.4** | **-0.1** |
| | baz=252 | | | | | | | | |
| **NMHZ** | **Naumai** | **62.22** | **154** | | P | | **P** | **22 45 29.6** | **+1.6** |
| **SHLS** | **Shalkode** | **62.27** | **310** | *e* | P | | **P** | **22 45 26.1** | **-2.4** |
| | comp=Z,142nm,1.1s,baz=310 | | | | | | | | |
| SHLS | | | | | *e*S | | **S** | **22 53 45.9** | **-3.5** |
| | baz=310 | | | | | | | | |
| **SHLS** | **Shalkode** | **62.27** | **310** | *e* | P | | **P** | **22 45 26.0** | **-2.4** |
| SHLS | | | | *e* | S | | **S** | **22 53 45.9** | **-3.5** |
| SHLS | | | | | pmax | | pmax | | |
| | comp=Z,143nm,1.1s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **62.30** | **22** | | P | | **P** | **22 45 29.8** | **+1.8** |
| | baz=246,SNR=166 | | | | | | | | |
| F20K | | | | | S | | **S** | **22 53 51.4** | **+2.8** |
| | baz=246 | | | | | | | | |
| **RIGZ** | **Rimuhau** | **62.31** | **153** | | P | | **P** | **22 45 29.5** | **+1.0** |
| **CNGZ** | **Carnagh Statio** | **62.32** | **152** | | P | | **P** | **22 45 29.5** | **+1.0** |
| **KWHZ** | **Kaweka Forest** | **62.34** | **154** | | P | | **P** | **22 45 30.2** | **+1.5** |
| **SEM** | **Semipalatinsk** | **62.36** | **319** | *e* | P | | **P** | **22 45 28.3** | **-0.7** |
| | baz=318 | | | | | | | | |
| SEM | | | | | LR | | LR | 23 12 56.7 | |
| | comp=Z,5µm,16.4s,baz=318 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **62.36** | **319** | *e* | P | | **P** | **22 45 28.3** | **-0.7** |
| SEM | | | | | MLR | | MLR | | |
| | comp=Z,5µm,16.0s | | | | | | | | |
| **WUS** | **Wushi** | **62.38** | **308** | | P | | **P** | **22 45 30.5** | **+1.3** |
| WUS | | | | | pP | | **pP** | **22 45 47.2** | **+0.7** |
| **SUA** | **Susitna One** | **62.39** | **29** | | P | | **P** | **22 45 28.9** | **0.0** |
| | baz=253,SNR=44 | | | | | | | | |
| SUA | | | | | S | | **S** | **22 53 48.8** | **-1.5** |
| | baz=253 | | | | | | | | |
| **ARHZ** | **Aropaoanui** | **62.44** | **154** | | P | | **P** | **22 45 30.1** | **+0.8** |
| **KRHZ** | **Kereru** | **62.50** | **155** | | P | | **P** | **22 45 30.5** | **+0.8** |
| **KNZ** | **Kokohu** | **62.53** | **153** | | P | | **P** | **22 45 29.7** | **-0.1** |
| **UZB** | **Uzynbulak** | **62.59** | **310** | *e* | P | | **P** | **22 45 30.5** | **-0.1** |
| | baz=310 | | | | | | | | |
| UZB | | | | | *e*S | | **S** | **22 53 53.9** | **+0.3** |
| | baz=310 | | | | | | | | |
| **UZB** | **Uzynbulak** | **62.59** | **310** | *e* | P | | **P** | **22 45 30.5** | **-0.1** |
| UZB | | | | *e* | S | | **S** | **22 53 53.8** | **+0.3** |
| **O22K** | **Cooper Landing** | **62.60** | **30** | | P | | **P** | **22 45 31.0** | **+0.8** |
| | baz=255,SNR=21 | | | | | | | | |
| O22K | | | | | S | | **S** | **22 53 52.1** | **-0.6** |
| | baz=255 | | | | | | | | |
| **SEW** | **Seward** | **62.64** | **30** | | P | | **P** | **22 45 31.1** | **+0.7** |
| | baz=255,SNR=39 | | | | | | | | |
| SEW | | | | | S | | **S** | **22 53 53.6** | **+0.5** |
| | baz=255 | | | | | | | | |
| **E20K** | **Nigu River** | **62.64** | **21** | | P | | **P** | **22 45 32.1** | **+1.7** |
| | baz=245,SNR=223 | | | | | | | | |
| E20K | | | | | S | | **S** | **22 53 54.0** | **+1.0** |
| | baz=245 | | | | | | | | |
| **NNZ** | **Nelson** | **62.70** | **158** | | P | | **P** | **22 45 31.7** | **+0.8** |
| NNZ | | | | | IAmb | | IAmb | 22 45 51.7 | |
| | comp=Z,895nm,1.6s | | | | | | | | |
| **NNZ** | **Nelson** | **62.70** | **158** | | P | | **P** | **22 45 31.8** | **+0.8** |
| **D20K** | **Etivluk River** | **62.70** | **20** | | P | | **P** | **22 45 32.2** | **+1.5** |
| | baz=244 | | | | | | | | |
| D20K | | | | | S | | **S** | **22 53 55.0** | **+1.4** |
| | baz=244 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **62.76** | **29** | | P | | **P** | **22 45 31.6** | **+0.4** |
| | baz=255,SNR=73 | | | | | | | | |
| RC01 | | | | | S | | **S** | **22 53 53.7** | **-0.9** |
| | baz=255 | | | | | | | | |
| **M22K** | **Willow** | **62.76** | **29** | | P | | **P** | **22 45 31.5** | **+0.3** |
| | baz=254,SNR=35 | | | | | | | | |
| M22K | | | | | S | | **S** | **22 53 54.1** | **-0.5** |
| | baz=254 | | | | | | | | |
| **KPKS** | **Kokpek** | **62.85** | **311** | *e* | P | | **P** | **22 45 32.1** | **-0.2** |
| | comp=Z,171nm,1.1s,baz=311 | | | | | | | | |
| KPKS | | | | *e* | S | | **S** | **22 53 57.5** | **+0.9** |
| | baz=311 | | | | | | | | |
| **KPKS** | **Kokpek** | **62.85** | **311** | *e* | P | | **P** | **22 45 32.1** | **-0.2** |
| KPKS | | | | *e* | S | | **S** | **22 53 57.5** | **+0.9** |
| KPKS | | | | | pmax | | pmax | | |
| | comp=Z,171nm,1.1s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **62.85** | **24** | | P | | **P** | **22 45 33.6** | **+1.8** |
| | baz=249,SNR=290 | | | | | | | | |
| H21K | | | | | S | | **S** | **22 53 59.3** | **+3.5** |
| | baz=249 | | | | | | | | |
| H21K | | | | | S | | **S** | **22 53 59.3** | **+3.5** |
| | baz=249 | | | | | | | | |
| **CUT** | **Chulitna** | **62.88** | **28** | | P | | **P** | **22 45 32.0** | **+0.1** |
| | baz=253,SNR=17 | | | | | | | | |
| CUT | | | | | S | | **S** | **22 53 55.5** | **-0.5** |
| | baz=253 | | | | | | | | |
| **G21K** | **Allakaket** | **62.90** | **23** | | P | | **P** | **22 45 33.6** | **+1.5** |
| | baz=248,SNR=165 | | | | | | | | |
| G21K | | | | | S | | **S** | **22 53 59.2** | **+3.0** |
| | baz=248 | | | | | | | | |
| **DVHZ** | **Dannevirke** | **62.97** | **155** | | P | | **P** | **22 45 33.2** | **+0.3** |
| **THZ** | **Tophouse** | **63.00** | **158** | | P | | **P** | **22 45 33.8** | **+0.7** |
| **ZHN** | **Zhinishke** | **63.02** | **310** | *e* | P | | **P** | **22 45 33.1** | **-0.3** |
| | baz=310 | | | | | | | | |
| ZHN | | | | *e* | S | | **S** | **22 53 59.4** | **+0.6** |
| | baz=310 | | | | | | | | |
| **ZHN** | **Zhinishke** | **63.02** | **310** | *e* | P | | **P** | **22 45 33.1** | **-0.3** |
| ZHN | | | | *e* | S | | **S** | **22 53 59.3** | **+0.5** |
| **PRZ** | **Przheval'sk** | **63.03** | **310** | | P | | **P** | **22 45 35.0** | **+1.4** |
| PRZ | | | | | IAmb | | IAmb | 22 45 40.2 | |
| | comp=Z,681nm,1.0s | | | | | | | | |
| **PRZ** | **Przheval'sk** | **63.03** | **310** | | P | | **P** | **22 45 35.0** | **+1.4** |
| PRZ | | | | | pmax | | pmax | | |
| | comp=Z,681nm,1.0s | | | | | | | | |
| **PXZ** | **Pawanui** | **63.03** | **154** | | P | | **P** | **22 45 33.7** | **+0.5** |
| **SATY** | **Saty** | **63.04** | **310** | *e* | P | | **P** | **22 45 33.3** | **-0.3** |
| | comp=Z,194nm,1.2s,baz=310 | | | | | | | | |
| SATY | | | | *e* | S | | **S** | **22 53 59.5** | **+0.5** |
| | baz=310 | | | | | | | | |
| **SATY** | **Saty** | **63.04** | **310** | *e* | P | | **P** | **22 45 33.3** | **-0.3** |
| SATY | | | | *e* | S | | **S** | **22 53 59.5** | **+0.5** |
| SATY | | | | | pmax | | pmax | | |
| | comp=Z,194nm,1.2s | | | | | | | | |
| **MRZ** | **Mangatainoka R** | **63.05** | **156** | | P | | **P** | **22 45 33.0** | **-0.3** |
| **BPAW** | **Bear Paw Mtn.** | **63.07** | **26** | | P | | **P** | **22 45 34.4** | **+1.1** |
| **BPAW** | **Bear Paw Mtn.** | **63.07** | **26** | | P | | **P** | **22 45 34.6** | **+1.3** |
| | baz=252,SNR=230 | | | | | | | | |
| BPAW | | | | | S | | **S** | **22 54 00.0** | **+1.5** |
| | baz=252 | | | | | | | | |
| **B20K** | **Meade River** | **63.10** | **19** | | P | | **P** | **22 45 34.9** | **+1.6** |
| | baz=243 | | | | | | | | |
| B20K | | | | | S | | **S** | **22 54 00.3** | **+1.7** |
| | baz=243 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **63.12** | **312** | *e* | P | | **P** | **22 45 33.8** | **-0.2** |
| | comp=Z,301nm,0.9s,baz=312 | | | | | | | | |
| TDK | | | | | LR | | LR | 23 13 25.5 | |
| | comp=Z,4µm,17.2s,baz=312 | | | | | | | | |
| **TDK** | **Taldyqorghan** | **63.12** | **312** | *e* | P | | **P** | **22 45 33.8** | **-0.2** |
| TDK | | | | | pmax | | pmax | | |
| | comp=Z,301nm,0.9s | | | | | | | | |
| TDK | | | | | MLR | | MLR | | |
| | comp=Z,4µm,17.0s | | | | | | | | |
| **F21K** | **Alatna River** | **63.17** | **22** | | P | | **P** | **22 45 35.2** | **+1.4** |
| | baz=248,SNR=119 | | | | | | | | |
| F21K | | | | | S | | **S** | **22 54 02.6** | **+3.0** |
| | baz=248 | | | | | | | | |
| **PMR** | **Palmer** | **63.17** | **29** | | P | | **P** | **22 45 33.8** | **-0.1** |
| **PMR** | **Palmer** | **63.17** | **29** | | P | | **P** | **22 45 34.4** | **+0.5** |
| | baz=255,SNR=45 | | | | | | | | |
| PMR | | | | | S | | **S** | **22 53 58.7** | **-1.0** |
| | baz=255 | | | | | | | | |
| **SNZO** | **South Karori** | **63.27** | **157** | | P | | **P** | **22 45 34.2** | **-0.5** |
| **SNZO** | **South Karori** | **63.27** | **157** | | P | | **P** | **22 45 34.4** | **-0.3** |
| SNZO | | | | | IAmb | | IAmb | 22 45 36.2 | |
| | comp=Z,378nm,0.9s | | | | | | | | |
| **SNZO** | **South Karori** | **63.27** | **157** | | P | | **P** | **22 45 34.3** | **-0.3** |
| **BFZ** | **Birch Farm** | **63.33** | **155** | | P | | **P** | **22 45 34.7** | **-0.5** |
| **BFZ** | **Birch Farm** | **63.33** | **155** | | P | | **P** | **22 45 35.8** | **+0.6** |
| **PWL** | **Port Wells** | **63.36** | **30** | | P | | **P** | **22 45 35.8** | **+0.5** |
| **PWL** | **Port Wells** | **63.36** | **30** | | P | | **P** | **22 45 36.0** | **+0.8** |
| | baz=256,SNR=69 | | | | | | | | |
| PWL | | | | | S | | **S** | **22 54 03.8** | **+1.6** |
| | baz=256 | | | | | | | | |
| **KURK** | **Kurchatov** | **63.43** | **319** | | P | | **P** | **22 45 35.8** | **0.0** |
| **KURK** | **Kurchatov** | **63.43** | **319** | ⇑ | P | | **P** | **22 45 35.2** | **-0.6** |
| **KURK** | **Kurchatov** | **63.43** | **319** | | P | | **P** | **22 45 36.5** | **+0.7** |
| KURK | | | | | P | | **P** | **22 45 36.5** | **+0.7** |
| KURK | | | | | P | | **P** | **22 45 36.5** | **+0.7** |
| **KURK** | **Kurchatov** | **63.43** | **319** | *ce* | P | | **P** | **22 45 35.7** | **-0.1** |
| KURK | | | | | pmax | | pmax | | |
| | comp=Z,909nm,1.7s | | | | | | | | |
| **KNK** | **Knik Glacier** | **63.44** | **29** | | P | | **P** | **22 45 36.3** | **+0.5** |
| KNK | | | | | IAmb | | IAmb | 22 46 05.8 | |
| | comp=Z,628nm,0.9s | | | | | | | | |
| **KNK** | **Knik Glacier** | **63.44** | **29** | | P | | **P** | **22 45 36.7** | **+0.9** |
| | baz=256,SNR=58 | | | | | | | | |
| KNK | | | | | S | | **S** | **22 54 03.4** | **+0.2** |
| | baz=256 | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **63.45** | **309** | | P | | **P** | **22 45 37.1** | **+0.4** |
| **TARG** | **Taragay, Kyrgy** | **63.45** | **309** | | P | | **P** | **22 45 37.1** | **+0.4** |
| TARG | | | | | pmax | | pmax | | |
| | comp=Z,209nm,1.0s | | | | | | | | |
| **MLY** | **Manley** | **63.46** | **25** | | P | | **P** | **22 45 37.5** | **+1.6** |
| | baz=252,SNR=199 | | | | | | | | |
| MLY | | | | | S | | **S** | **22 54 06.1** | **+2.7** |
| | baz=252 | | | | | | | | |
| **E21K** | **Killik River** | **63.47** | **21** | | P | | **P** | **22 45 37.2** | **+1.4** |
| | baz=247 | | | | | | | | |
| E21K | | | | | S | | **S** | **22 54 04.6** | **+1.3** |
| | baz=247 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.47** | **319** | | P | | **P** | **22 45 35.3** | **-0.8** |
| | comp=Z,243nm,0.7s,baz=96,slow=7.3,SNR=682 | | | | | | | | |
| KURBB | | | | | S | | **S** | **22 54 01.2** | **-2.7** |
| | comp=Z,9.6nm,1.0s,baz=285,slow=33,SNR=5.7 | | | | | | | | |
| KURBB | | | | | LR | | LR | 23 14 10.0 | |
| | comp=Z,23µm,21.9s,baz=94,slow=37 | | | | | | | | |
| | comp=Z,243nm,0.7s | | | | | | | | |
| **C21K** | **Knifeblade Rid** | **63.48** | **20** | | P | | **P** | **22 45 37.8** | **+1.9** |
| | baz=246,SNR=85 | | | | | | | | |
| C21K | | | | | S | | **S** | **22 54 05.4** | **+1.9** |
| | baz=246 | | | | | | | | |
| **H22K** | **Ishtalitna Cre** | **63.49** | **24** | | P | | **P** | **22 45 37.8** | **+1.8** |
| | baz=251,SNR=91 | | | | | | | | |
| H22K | | | | | S | | **S** | **22 54 06.7** | **+3.0** |
| | baz=251 | | | | | | | | |
| H22K | | | | | S | | **S** | **22 54 06.7** | **+3.0** |
| | baz=251 | | | | | | | | |
| **ARXS** | **Arharly** | **63.50** | **311** | *i* | P | | **P** | **22 45 36.4** | **-0.2** |
| **SML** | **Sawmill** | **63.60** | **29** | | P | | **P** | **22 45 37.8** | **+1.0** |
| | baz=256,SNR=168 | | | | | | | | |
| SML | | | | | S | | **S** | **22 54 05.4** | **+0.2** |
| | baz=256 | | | | | | | | |
| **P23K** | **Montague Islan** | **63.61** | **31** | | P | | **P** | **22 45 38.3** | **+1.4** |
| | baz=257,SNR=24 | | | | | | | | |
| P23K | | | | | S | | **S** | **22 54 07.7** | **+2.4** |
| | baz=257 | | | | | | | | |
| P23K | | | | | S | | **S** | **22 54 07.7** | **+2.4** |
| | baz=257 | | | | | | | | |
| **DDI** | **Dehra Dun** | **63.62** | **296** | *e* | P | | **P** | **22 45 38.2** | **+0.7** |
| DDI | | | | *e* | IAmb | | IAmb | 22 45 43.8 | |
| | comp=Z,412nm,1.1s | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **63.73** | **19** | | P | | **P** | **22 45 39.1** | **+1.7** |
| | baz=246,SNR=64 | | | | | | | | |
| B21K | | | | | S | | **S** | **22 54 07.6** | **+1.2** |
| | baz=246 | | | | | | | | |
| **BWN** | **Browne** | **63.73** | **26** | | P | | **P** | **22 45 38.6** | **+1.1** |
| **F22K** | **John River** | **63.74** | **22** | | P | | **P** | **22 45 39.5** | **+1.9** |
| | baz=249 | | | | | | | | |
| F22K | | | | | S | | **S** | **22 54 09.6** | **+2.9** |
| | baz=249 | | | | | | | | |
| **JCZ** | **Jackson Bay** | **63.76** | **162** | | P | | **P** | **22 45 39.1** | **+1.1** |
| **WAT1** | **Susitna Watana** | **63.76** | **28** | | P | | **P** | **22 45 38.3** | **+0.4** |
| | baz=255 | | | | | | | | |
| WAT1 | | | | | S | | **S** | **22 54 06.8** | **-0.3** |
| | baz=255 | | | | | | | | |
| **G22K** | **Bettles** | **63.78** | **23** | | P | | **P** | **22 45 39.1** | **+1.2** |
| | baz=250 | | | | | | | | |
| G22K | | | | | S | | **S** | **22 54 10.2** | **+3.0** |
| | baz=250 | | | | | | | | |
| **KHZ** | **Kahutara** | **63.80** | **158** | ⇑ | P | | **P** | **22 45 37.1** | **-1.1** |
| **KHZ** | **Kahutara** | **63.80** | **158** | | P | | **P** | **22 45 37.4** | **-0.8** |
| **MCK** | **McKinley** | **63.83** | **27** | | P | | **P** | **22 45 38.6** | **+0.4** |
| | baz=254,SNR=75 | | | | | | | | |
| MCK | | | | | S | | **S** | **22 54 07.9** | **-0.1** |
| | baz=254 | | | | | | | | |
| **A21K** | **Barrow** | **63.86** | **17** | | P | | **P** | **22 45 39.5** | **+1.3** |
| | baz=243,SNR=7.1 | | | | | | | | |
| A21K | | | | | S | | **S** | **22 54 09.5** | **+1.5** |
| | baz=243 | | | | | | | | |
| **M23K** | **Glacier View** | **63.87** | **29** | | P | | **P** | **22 45 39.5** | **+0.9** |
| | baz=256,SNR=49 | | | | | | | | |
| M23K | | | | | S | | **S** | **22 54 10.1** | **+1.5** |
| | baz=256 | | | | | | | | |
| **GLI** | **Glacier Island** | **63.96** | **30** | | P | | **P** | **22 45 40.2** | **+1.1** |
| | baz=257,SNR=36 | | | | | | | | |
| GLI | | | | | S | | **S** | **22 54 10.9** | **+1.4** |
| | baz=257 | | | | | | | | |
| **NEA2** | **Nenana** | **64.02** | **26** | | P | | **P** | **22 45 40.0** | **+0.5** |
| | baz=254,SNR=95 | | | | | | | | |
| NEA2 | | | | | S | | **S** | **22 54 10.7** | **+0.5** |
| | baz=254 | | | | | | | | |
| **Q23K** | **Middleton Isla** | **64.02** | **32** | | P | | **P** | **22 45 41.0** | **+1.5** |
| | baz=259 | | | | | | | | |
| Q23K | | | | | S | | **S** | **22 54 15.2** | **+4.9** |
| | baz=259 | | | | | | | | |
| Q23K | | | | | S | | **S** | **22 54 15.2** | **+4.9** |
| | baz=259 | | | | | | | | |
| **MID** | **Middleton Isla** | **64.02** | **32** | | P | | **P** | **22 45 42.0** | **+2.5** |
| **MDOK** | **Medeo** | **64.04** | **310** | *e* | P | | **P** | **22 45 39.9** | **-0.4** |
| | baz=310 | | | | | | | | |
| MDOK | | | | *e* | S | | **S** | **22 54 12.1** | **+0.5** |
| | baz=310 | | | | | | | | |
| MDOK | | | | | LR | | LR | 23 13 58.8 | |
| | comp=Z,2µm,15.9s,baz=310 | | | | | | | | |
| **MDOK** | **Medeo** | **64.04** | **310** | *e* | P | | **P** | **22 45 39.8** | **-0.4** |
| MDOK | | | | *e* | S | | **S** | **22 54 12.0** | **+0.5** |
| MDOK | | | | | MLR | | MLR | | |
| | comp=Z,2µm,16.0s | | | | | | | | |
| **I23K** | **Minto, Yukon-K** | **64.06** | **25** | | P | | **P** | **22 45 41.2** | **+1.5** |
| | baz=253,SNR=364 | | | | | | | | |
| I23K | | | | | S | | **S** | **22 54 12.3** | **+1.7** |
| | baz=253 | | | | | | | | |
| I23K | | | | | S | | **S** | **22 54 12.3** | **+1.7** |
| | baz=253 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **64.06** | **28** | | P | | **P** | **22 45 40.8** | **+0.9** |
| | baz=256,SNR=176 | | | | | | | | |
| WAT6 | | | | | S | | **S** | **22 54 11.6** | **+0.5** |
| | baz=256 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **64.06** | **29** | | P | | **P** | **22 45 41.1** | **+1.2** |
| **SCM** | **Sheep Creek Mo** | **64.06** | **29** | | P | | **P** | **22 45 41.2** | **+1.3** |
| | baz=256,SNR=173 | | | | | | | | |
| SCM | | | | | S | | **S** | **22 54 12.3** | **+1.3** |
| | baz=256 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **64.06** | **29** | | P | | **P** | **22 45 41.1** | **+1.2** |
| SCM | | | | | pmax | | pmax | | |
| | comp=Z,1µm,1.0s | | | | | | | | |
| **D22K** | **Ayikyak River** | **64.07** | **21** | | P | | **P** | **22 45 41.7** | **+1.9** |
| | baz=248 | | | | | | | | |
| D22K | | | | | S | | **S** | **22 54 12.4** | **+1.7** |
| | baz=248 | | | | | | | | |
| **CHKK** | **Chushkaly** | **64.09** | **311** | *e* | P | | **P** | **22 45 40.2** | **-0.2** |
| | baz=311 | | | | | | | | |
| **CHKK** | **Chushkaly** | **64.09** | **311** | *e* | P | | **P** | **22 45 40.2** | **-0.2** |
| **E22K** | **Anaktuvuk Pass** | **64.10** | **21** | | P | | **P** | **22 45 41.8** | **+1.8** |
| | baz=249 | | | | | | | | |
| E22K | | | | | S | | **S** | **22 54 12.6** | **+1.4** |
| | baz=249 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **64.12** | **161** | | LR | | LR | 23 11 57.4 | |
| | comp=Z,5µm,19.8s,baz=328,slow=34 | | | | | | | | |
| **AAA** | **Alma-Ata** | **64.14** | **310** | *e* | P | | **P** | **22 45 40.5** | **-0.2** |
| | comp=Z,328nm,0.8s,baz=310 | | | | | | | | |
| AAA | | | | | LR | | LR | 23 14 06.4 | |
| | baz=310 | | | | | | | | |
| **AAA** | **Alma-Ata** | **64.14** | **310** | *i* | P | | **P** | **22 45 41.6** | **+0.9** |
| **MDRS** | **Chennai** | **64.14** | **277** | *e* | P | | **P** | **22 45 42.7** | **+1.6** |
| MDRS | | | | | IAmb | | IAmb | 22 45 45.1 | |
| | comp=Z,389nm,1.1s | | | | | | | | |
| MDRS | | | | | IAMs_20 | | IAMs_20 | 23 02 15.2 | |
| | comp=Z,2µm,18.7s | | | | | | | | |
| **H23K** | **Yukon River** | **64.18** | **24** | | P | | **P** | **22 45 42.4** | **+1.8** |
| | baz=252 | | | | | | | | |
| H23K | | | | | S | | **S** | **22 54 15.1** | **+2.8** |
| | baz=252 | | | | | | | | |
| H23K | | | | | S | | **S** | **22 54 15.1** | **+2.8** |
| | baz=252 | | | | | | | | |
| **A22K** | **Sinclair Lake** | **64.20** | **18** | | P | | **P** | **22 45 42.1** | **+1.6** |
| | baz=245,SNR=9.6 | | | | | | | | |
| A22K | | | | | S | | **S** | **22 54 14.3** | **+2.1** |
| | baz=245 | | | | | | | | |
| **G23K** | **Bananza Creek** | **64.27** | **23** | | P | | **P** | **22 45 42.8** | **+1.6** |
| | baz=252,SNR=190 | | | | | | | | |
| G23K | | | | | S | | **S** | **22 54 16.3** | **+2.9** |
| | baz=252 | | | | | | | | |
| **SMLA** | **Simla** | **64.32** | **297** | *e* | P | | **P** | **22 45 42.5** | **+0.5** |
| SMLA | | | | | IAmb | | IAmb | 22 45 47.1 | |
| | comp=Z,231nm,0.5s | | | | | | | | |
| **DHY** | **Denali Highway** | **64.34** | **27** | | P | | **P** | **22 45 42.5** | **+0.8** |
| | baz=256,SNR=114 | | | | | | | | |
| DHY | | | | | S | | **S** | **22 54 14.8** | **+0.2** |
| | baz=256 | | | | | | | | |
| **COLD** | **Coldfoot** | **64.37** | **23** | | P | | **P** | **22 45 43.6** | **+1.8** |
| | baz=251,SNR=120 | | | | | | | | |
| COLD | | | | | S | | **S** | **22 54 17.2** | **+2.8** |
| | baz=251 | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **64.40** | **19** | | P | | **P** | **22 45 43.4** | **+1.6** |
| | baz=247,SNR=17 | | | | | | | | |
| B22K | | | | | S | | **S** | **22 54 16.5** | **+1.9** |
| | baz=247 | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **64.53** | **30** | | P | | **P** | **22 45 44.3** | **+1.4** |
| **EYAK** | **Cordova Ski Ar** | **64.53** | **30** | | P | | **P** | **22 45 44.5** | **+1.6** |
| | baz=259,SNR=33 | | | | | | | | |
| EYAK | | | | | S | | **S** | **22 54 19.5** | **+2.9** |
| | baz=259 | | | | | | | | |
| **RAR** | **Rarotonga** | **64.56** | **124** | | P | | **P** | **22 45 44.7** | **+1.1** |
| **RAR** | **Rarotonga** | **64.56** | **124** | | P | | **P** | **22 45 44.2** | **+0.6** |
| **RAR** | **Rarotonga** | **64.56** | **124** | | LR | | LR | 23 08 52.7 | |
| | comp=Z,3µm,21.4s,baz=302,slow=31 | | | | | | | | |
| **RAR** | **Rarotonga** | **64.56** | **124** | | P | | **P** | **22 45 44.2** | **+0.6** |
| RAR | | | | | pmax | | pmax | | |
| | comp=Z,338nm,1.4s | | | | | | | | |
| **KUU** | **Kurty** | **64.56** | **311** | *e* | P | | **P** | **22 45 43.2** | **-0.2** |
| | comp=Z,306nm,1.0s,baz=311 | | | | | | | | |
| KUU | | | | *e* | S | | **S** | **22 54 18.5** | **+0.8** |
| | baz=311 | | | | | | | | |
| KUU | | | | | LR | | LR | 23 14 23.1 | |
| | comp=Z,3µm,14.0s,baz=311 | | | | | | | | |
| **KUU** | **Kurty** | **64.56** | **311** | *e* | P | | **P** | **22 45 43.2** | **-0.2** |
| KUU | | | | *e* | S | | **S** | **22 54 18.5** | **+0.8** |
| KUU | | | | | pmax | | pmax | | |
| | comp=Z,306nm,1.0s | | | | | | | | |
| **COLA** | **College** | **64.59** | **25** | | P | | **P** | **22 45 43.4** | **+0.3** |
| COLA | | | | | IAmb | | IAmb | 22 46 15.9 | |
| | comp=Z,530nm,1.1s | | | | | | | | |
| **COLA** | **College** | **64.59** | **25** | | P | | **P** | **22 45 43.5** | **+0.3** |
| | baz=255 | | | | | | | | |
| COLA | | | | | S | | **S** | **22 54 17.4** | **+0.1** |
| | baz=255 | | | | | | | | |
| **COLA** | **College** | **64.59** | **25** | | P | | **P** | **22 45 43.4** | **+0.3** |
| COLA | | | | | pmax | | pmax | | |
| | comp=Z,530nm,1.1s | | | | | | | | |
| **ULHL** | **Ulahol** | **64.62** | **309** | | P | | **P** | **22 45 45.9** | **+1.8** |
| | SNR=18 | | | | | | | | |
| **KLU** | **Klutina** | **64.64** | **29** | | P | | **P** | **22 45 45.1** | **+1.4** |
| | baz=258,SNR=73 | | | | | | | | |
| KLU | | | | | S | | **S** | **22 54 20.9** | **+2.7** |
| | baz=258 | | | | | | | | |
| **M24K** | **Tolsona, Glenn** | **64.66** | **29** | | P | | **P** | **22 45 45.3** | **+1.6** |
| | baz=257,SNR=57 | | | | | | | | |
| M24K | | | | | S | | **S** | **22 54 21.9** | **+3.6** |
| | baz=257 | | | | | | | | |
| **D23K** | **Nanushuk River** | **64.78** | **21** | | P

HYB *es*P **pwP** **22 46 08.7 +1.3**
HYB *e*PP **PP** **22 48 09.8 +0.4**
HYB *e* 22 54 21.2
HYB *e*S **S** **22 54 24.5 +2.1**
HYB *e*SKSac **SKSac** **22 55 35.0 -0.1**
HYB *e*SS **SS** **22 58 36.6 +1.4**
HYB IVMs_BB IVMs_BB 23 07 44.8
comp=Z,3µm,32.7s
**MALK Mahakanadarawa 64.94 272** P **P** **22 45 46.0 -0.3**
**MALK Mahakanadarawa 64.94 272** ⇑P **P** **22 45 47.2 +0.9**
**DHRM DHARAMSHALA 64.97 298** *e*P **P** **22 45 46.2 -0.3**
DHRM IAmb IAmb 22 46 00.9
comp=Z,230nm,0.9s
DHRM IAMs_20 IAMs_20 23 02 07.4
comp=Z,3µm,20.5s
**ILAR Eielson Array 64.97 26** P **P** **22 45 45.1 -0.6**
comp=Z,237nm,1.1s,baz=258,slow=4.8,SNR=388
ILAR LR LR 23 11 39.5
comp=Z,13µm,21.9s,baz=247,slow=34
ILAR PKP2bc 23 14 31.5
comp=Z,7.0nm,1.1s,baz=69,slow=1.1,SNR=10
comp=Z,237nm,1.1s
**BHPL Bhopal 64.98 288** *e*P **P** **22 45 46.4 -0.1**
BHPL IAmb IAmb 22 45 51.9
comp=Z,148nm,0.8s
**TOLK Toolik Lake Re 65.05 21** P **P** **22 45 48.1 +2.0**
baz=251,SNR=117
TOLK S **S** **22 54 25.2 +2.3**
baz=251
**KAIM Kayak Island 65.07 31** P **P** **22 45 48.5 +2.1**
baz=260,SNR=14
KAIM S **S** **22 54 28.5 +5.1**
baz=260
**PALK Pallekele 65.07 270** P **P** **22 45 48.0 +0.7**
PALK IAmb IAmb 22 45 49.8
comp=Z,735nm,1.5s
**PALK Pallekele 65.07 270** ⇑P **P** **22 45 48.1 +0.9**
**PALK Pallekele 65.07 270** LR LR 23 09 58.5
comp=Z,6µm,21.6s,baz=74,slow=32
**PALK Pallekele 65.07 270** P **P** **22 45 48.3 +1.0**
PALK P **P** **22 45 48.3 +1.0**
**PALK Pallekele 65.07 270** P **P** **22 45 48.7 +1.4**
**PALK Pallekele 65.07 270** P **P** **22 45 47.9 +0.7**
**TKM2 Tokmak 2 65.10 310** P **P** **22 45 47.6 +0.4**
SNR=105
**C23K Itkillik River 65.10 20** P **P** **22 45 48.3 +1.8**
baz=250
C23K S **S** **22 54 24.9 +1.6**
baz=250
**PYZ Puysegur Point 65.12 165** P **P** **22 45 47.8 +1.0**
**PAX Paxson 65.16 28** P **P** **22 45 48.1 +1.0**
baz=258,SNR=135
PAX S **S** **22 54 25.5 +1.0**
baz=258
**BMRM Bremner River 65.17 30** P **P** **22 45 48.4 +1.3**
baz=259,SNR=79
BMRM S **S** **22 54 27.5 +2.9**
baz=259
**HARP HAARP 65.18 28** P **P** **22 45 48.8 +1.6**
baz=258,SNR=26
HARP S **S** **22 54 27.3 +2.6**
baz=258
**ODZ Otahua Downs 65.19 162** ⇑P **P** **22 45 47.1 -0.1**
**K24K Donnelly Dome 65.21 27** P **P** **22 45 48.1 +0.8**
baz=257,SNR=60
K24K S **S** **22 54 25.2 +0.2**
baz=257
K24K S **S** **22 54 25.2 +0.2**
baz=257
**G24K Hadweenzic Riv 65.24 24** P **P** **22 45 49.2 +1.8**
baz=254,SNR=188
G24K S **S** **22 54 28.6 +3.5**
baz=254
**E24K Your Creek 65.26 22** P **P** **22 45 49.6 +2.0**
baz=252
E24K S **S** **22 54 28.5 +3.0**
baz=252
**N25K Chitina, Valde 65.29 29** P **P** **22 45 49.5 +1.7**
baz=259,SNR=60
N25K S **S** **22 54 28.3 +2.2**
baz=259
**F24K Squaw Lake 65.31 23** P **P** **22 45 49.9 +2.0**
baz=253,SNR=205
F24K S **S** **22 54 28.8 +2.7**
baz=253
**HALK Hakmana 65.40 269** ⇑P **P** **22 45 50.2 +0.9**
**D24K Happy Valley 65.47 21** P **P** **22 45 51.1 +2.3**
baz=252
D24K S **S** **22 54 31.1 +3.2**
baz=252
**J25K Salcha River, 65.56 26** P **P** **22 45 49.6 0.0**
baz=257,SNR=158
J25K S **S** **22 54 28.5 -0.9**
baz=257
J25K S **S** **22 54 28.5 -0.9**
baz=257
**KBK Karagaybulak 65.58 310** P **P** **22 45 50.6 +0.4**
SNR=76
**RIDG Independent Ri 65.60 27** P **P** **22 45 50.8 +1.0**
baz=258,SNR=151
RIDG S **S** **22 54 30.9 +1.2**
baz=258
**GLB Gilahina Butte 65.63 30** P **P** **22 45 51.2 +1.2**
GLB IAmb IAmb 22 46 21.8
comp=Z,573nm,1.0s
**BGLC Bering Glacier 65.67 31** P **P** **22 45 52.1 +1.9**
baz=261
BGLC S **S** **22 54 34.5 +4.0**
baz=261
**C24K Franklin Bluff 65.69 20** P **P** **22 45 51.9 +1.7**
baz=252
C24K S **S** **22 54 33.2 +2.7**
baz=252
**PRP Porcupine Dome 65.71 25** P **P** **22 45 49.7 -0.9**
baz=256,SNR=39
PRP S **S** **22 54 30.0 -1.2**
baz=256
**CHMS Chumysh 65.72 310** P **P** **22 45 51.2 +0.2**
SNR=69
**H25L Birch Creek 65.77 24** P **P** **22 45 51.9 +1.2**
baz=256,SNR=74
H25L S **S** **22 54 35.6 +4.0**
baz=256
**G25K Bearman Lake 65.78 24** P **P** **22 45 52.7 +1.9**
baz=255,SNR=107
G25K S **S** **22 54 35.7 +3.9**
baz=255
**SGDS Sogindy 65.80 311** *e*P **P** **22 45 51.4 -0.2**
baz=310
**SGDS Sogindy 65.80 311** *e*P **P** **22 45 51.3 -0.2**
**FRU1 Bishkek 65.81 310** P **P** **22 45 52.2 +0.6**
**FRU1 Bishkek 65.81 310** P **P** **22 45 52.2 +0.6**
**CRQE Cirque 65.86 30** P **P** **22 45 53.1 +1.4**
baz=261,SNR=53
CRQE S **S** **22 54 35.1 +2.0**
baz=261
**USP Ospenovka 65.90 310** P **P** **22 45 52.1 -0.1**
SNR=81
**UCH Uchtor 65.91 309** P **P** **22 45 54.2 +1.5**
SNR=29
**AAK Ala-Archa 65.91 310** P **P** **22 45 52.6 +0.2**
SNR=37
**AAK Ala-Archa 65.91 310** P **P** **22 45 52.5 +0.2**
**AAK Ala-Archa 65.91 310** *i*P **P** **22 45 52.8 +0.4**
SNR=32
**AAK Ala-Archa 65.91 310** ⇑P **P** **22 45 52.6 +0.2**
**AAK Ala-Archa 65.91 310** PKP2bc 23 14 30.2
comp=Z,1.1nm,0.3s,baz=222,slow=6.0,SNR=8.1
AAK LR LR 23 14 50.5
comp=Z,7µm,20.0s,baz=89,slow=36
**AAK Ala-Archa 65.91 310** P **P** **22 45 53.4 +1.0**
AAK P **P** **22 45 53.4 +1.0**
**AAK Ala-Archa 65.91 310** *ce*P **P** **22 45 53.0 +0.6**
AAK pmax pmax
comp=Z,205nm,1.7s
**MCARA McCarthy VSAT 65.99 30** P **P** **22 45 53.7 +1.4**
baz=261,SNR=53
MCARA S **S** **22 54 36.6 +2.1**
baz=261
**SCRK Sand Creek 66.02 27** P **P** **22 45 53.3 +0.7**
SCRK IAmb IAmb 22 45 55.1
comp=Z,874nm,1.4s
**SCRK Sand Creek 66.02 27** P **P** **22 45 53.4 +0.8**
baz=259,SNR=226
SCRK S **S** **22 54 35.9 +0.8**
baz=259
**SYZ Scrubby Hill 66.11 163** P **P** **22 45 53.6 +0.5**

**L26K Log Cabin Wild 66.12 28** P **P** **22 45 54.6 +1.5**
baz=260,SNR=102
L26K S **S** **22 54 38.8 +2.7**
baz=260
L26K S **S** **22 54 38.8 +2.7**
baz=260
**F25K Christian Rive 66.16 23** P **P** **22 45 55.5 +2.2**
baz=256,SNR=266
F25K S **S** **22 54 39.7 +3.2**
baz=256
**M26K Nabesna, AK 66.17 29** P **P** **22 45 54.7 +1.1**
baz=260,SNR=63
M26K S **S** **22 54 38.4 +1.6**
baz=260
M26K S **S** **22 54 38.4 +1.6**
baz=260
**BTLS Baital 66.22 312** *e*P **P** **22 45 53.1 -1.0**
baz=312
**BTLS Baital 66.22 312** *e*P **P** **22 45 53.9 -0.2**
**J26L Joseph Creek 66.30 26** P **P** **22 45 55.5 +1.1**
baz=259,SNR=185
J26L S **S** **22 54 38.0 -0.4**
baz=259
J26L S **S** **22 54 38.0 -0.4**
baz=259
**MESA MESA 66.33 31** P **P** **22 45 56.3 +1.5**
baz=262,SNR=40
MESA S **S** **22 54 41.7 +2.6**
baz=262
**D25K Kavik River 66.36 21** P **P** **22 45 56.4 +1.8**
baz=254,SNR=173
D25K S **S** **22 54 40.3 +1.5**
baz=254
**EKS2 Erkin-Say 66.44 310** P **P** **22 45 56.1 +0.4**
SNR=58
**AML Almayashu 66.52 309** P **P** **22 45 57.5 +0.9**
SNR=92
**I26K Coal Creek Min 66.63 25** P **P** **22 45 56.4 +0.1**
baz=259
I26K S **S** **22 54 42.0 -0.1**
baz=259
I26K S **S** **22 54 42.0 -0.1**
baz=259
**M27K Edge Creek, AK 66.68 29** P **P** **22 45 58.3 +1.4**
baz=261,SNR=92
M27K S **S** **22 54 44.2 +1.1**
baz=261
M27K S **S** **22 54 44.2 +1.1**
baz=261
**G26K Porcupine Rive 66.71 24** P **P** **22 45 58.9 +2.1**
baz=258,SNR=298
G26K S **S** **22 54 46.1 +3.1**
baz=258
**CTG Chitna Glacier 66.74 30** P **P** **22 45 58.9 +1.6**
baz=262,SNR=86
CTG S **S** **22 54 46.2 +2.3**
baz=262
**CTGM Chitina Glacie 66.74 30** P **P** **22 45 58.3 +1.0**
**F26K Sheenjek River 66.74 23** P **P** **22 45 59.2 +2.2**
baz=257,SNR=255
F26K S **S** **22 54 46.9 +3.4**
baz=257
**L27K Beaver Creek, 66.81 28** P **P** **22 45 58.9 +1.3**
baz=261,SNR=175
L27K S **S** **22 54 46.7 +2.2**
baz=261
**K27K Chicken 66.86 27** P **P** **22 45 59.6 +1.8**
baz=260
K27K S **S** **22 54 47.3 +2.4**
baz=260
K27K S **S** **22 54 47.3 +2.4**
baz=260
**C26K Camden Bay 67.01 20** P **P** **22 46 01.3 +2.7**
baz=255,SNR=77
C26K S **S** **22 54 49.9 +3.4**
baz=255
**YUK3 Moose Creek 67.26 29** P **P** **22 46 02.0 +1.3**
baz=263,SNR=161
YUK3 S **S** **22 54 52.1 +1.8**
baz=263
**O28M Mount Upton 67.27 31** P **P** **22 46 02.5 +1.6**
baz=264,SNR=81
O28M S **S** **22 54 53.4 +2.8**
baz=264
**I27K Kandik River 67.32 25** P **P** **22 46 01.6 +0.9**
baz=260,SNR=134
I27K S **S** **22 54 51.2 +0.7**
baz=260
I27K S **S** **22 54 51.2 +0.7**
baz=260
**C27K Jago River 67.34 21** P **P** **22 46 02.7 +1.9**
baz=256,SNR=88
C27K S **S** **22 54 52.3 +1.8**
baz=256
**EGAK Eagle 67.37 26** P **P** **22 46 02.0 +1.0**
EGAK IAmb IAmb 22 46 38.8
comp=Z,531nm,1.1s
**EGAK Eagle 67.37 26** ⇓P **P** **22 46 02.0 +1.0**
**EGAK Eagle 67.37 26** P **P** **22 46 02.1 +1.1**
baz=261,SNR=201
EGAK S **S** **22 54 53.1 +2.1**
baz=261
**NIL Nilore 67.40 300** P **P** **22 46 02.6 +0.8**
**NIL Nilore 67.40 300** P **P** **22 46 02.6 +0.8**
NIL pmax pmax
comp=Z,857nm,0.9s
**NIL Nilore 67.40 300** P **P** **22 46 02.9 +1.0**
NIL sP **sP** **22 46 27.3 +0.6**
**H27K Steamboat Moun 67.46 25** P **P** **22 46 03.2 +1.5**
baz=260,SNR=378
H27K S **S** **22 54 54.0 +1.8**
baz=260
**BCPM Bancas Point 67.46 32** P **P** **22 46 02.3 +0.6**
BCPM IAmb IAmb 22 46 50.5
comp=Z,424nm,1.0s
**G27K Doyon Strip 67.51 24** P **P** **22 46 03.6 +1.6**
baz=260,SNR=151
G27K S **S** **22 54 56.0 +3.2**
baz=260
**YUK8 Steele Glacier 67.54 30** P **P** **22 46 04.5 +2.0**
baz=264
YUK8 S **S** **22 54 56.1 +2.4**
baz=264
**PNL Peninsula 67.56 32** P **P** **22 46 03.9 +1.6**
**PNL Peninsula 67.56 32** P **P** **22 46 03.8 +1.4**
baz=265,SNR=22
PNL S **S** **22 54 56.1 +2.7**
baz=265
**E27K Coleen River 67.79 23** P **P** **22 46 05.5 +1.8**
baz=259,SNR=62
E27K S **S** **22 54 58.3 +2.3**
baz=259
**I28M Miner Creek 67.98 26** P **P** **22 46 06.3 +1.3**
baz=262,SNR=143
I28M S **S** **22 54 59.9 +1.3**
baz=262
**O29M Mount Kennedy 68.02 31** P **P** **22 46 07.6 +2.2**
baz=265,SNR=148
O29M S **S** **22 55 03.6 +4.3**
baz=265
**DAWY Dawson 68.03 27** P **P** **22 46 06.6 +1.4**
DAWY IAmb IAmb 22 46 36.5
comp=Z,427nm,1.1s
**DAWY Dawson 68.03 27** P **P** **22 46 06.9 +1.6**
baz=263,SNR=138
DAWY S **S** **22 55 01.7 +2.7**
baz=263
**YUK4 Talbot Arm 68.08 30** P **P** **22 46 08.4 +2.6**
baz=265,SNR=46
YUK4 S **S** **22 55 03.7 +3.6**
baz=265
**DRK Karamyk 68.08 306** P **P** **22 46 06.8 +0.4**
**DRK Karamyk 68.08 306** P **P** **22 46 06.8 +0.4**
DRK pmax pmax
comp=Z,195nm,0.9s
**YUK6 Outpost Mounta 68.18 31** P **P** **22 46 08.7 +2.2**
baz=265,SNR=46
YUK6 S **S** **22 55 04.6 +3.2**
baz=265
**D27M Malcolm River 68.21 21** P **P** **22 46 08.4 +2.1**
baz=259,SNR=81
D27M S **S** **22 55 02.9 +1.8**
baz=259
**M29M Somme Creek 68.27 29** P **P** **22 46 08.9 +2.0**
baz=264,SNR=126
M29M S **S** **22 55 07.1 +5.0**
baz=264
**F28M Old Crow 68.33 23** P **P** **22 46 08.8 +1.8**
baz=261,SNR=132
F28M S **S** **22 55 04.6 +2.1**
baz=261
**TRD Trivandrum 68.34 273** *e*P **P** **22 46 08.7 +0.7**
TRD IAmb IAmb 22 46 13.1
comp=Z,385nm,0.9s
**P29M Windy Craggy 68.39 32** P **P** **22 46 09.8 +2.2**
baz=266,SNR=70
P29M S **S** **22 55 07.8 +4.3**
baz=266
**L29M L29M 68.49 28** P **P** **22 46 10.3 +2.2**
baz=264,SNR=305
L29M S **S** **22 55 09.4 +4.9**
baz=264
**J29N Klondike Camp 68.59 27** P **P** **22 46 10.9 +2.1**
baz=264,SNR=22
J29N S **S** **22 55 08.7 +3.0**
baz=264
**E28M Babbage River 68.61 22** P **P** **22 46 10.7 +1.9**
baz=261,SNR=117
E28M S **S** **22 55 08.0 +2.2**
baz=261
**I29M Ogilvie Camp, 68.65 26** P **P** **22 46 10.3 +1.3**
baz=263,SNR=263
I29M S **S** **22 55 08.8 +2.5**
baz=263
**BVAR Borovoye Array 68.65 321** P **P** **22 46 09.2 0.0**
comp=Z,294nm,0.8s,baz=95,slow=7.9,SNR=296
BVAR S **S** **22 55 08.7 +2.0**
comp=Z,36nm,1.1s,baz=110,slow=12,SNR=8.3
BVAR PKP2bc 23 14 24.5
comp=Z,14nm,1.0s,baz=298,slow=3.1,SNR=18
comp=Z,294nm,0.8s
**BRVK Borovoye 68.71 321** P **P** **22 46 09.6 -0.1**
BRVK IAmb IAmb 22 46 47.6
comp=Z,1µm,1.8s
**BRVK Borovoye 68.71 321** ⇑P **P** **22 46 09.4 -0.3**
**BRVK Borovoye 68.71 321** P **P** **22 46 10.2 +0.5**
BRVK P **P** **22 46 10.2 +0.5**
BRVK P **P** **22 46 10.2 +0.5**
**BRVK Borovoye 68.71 321** *ce*P **P** **22 46 09.6 -0.1**
BRVK pmax pmax
comp=Z,600nm,1.7s
**H29M Whitestone 68.72 25** P **P** **22 46 11.1 +1.6**
baz=263,SNR=108
H29M S **S** **22 55 09.9 +2.8**
baz=263
**BTK Batken 68.80 307** P **P** **22 46 10.7 +0.1**
**BTK Batken 68.80 307** P **P** **22 46 10.7 +0.1**
BTK pmax pmax
comp=Z,186nm,1.1s
**P30M Million Dollar 68.81 31** P **P** **22 46 12.7 +2.4**
baz=267
P30M S **S** **22 55 11.4 +2.9**
baz=267
**KKAR Karatay Array 68.82 310** P **P** **22 46 10.8 +0.2**
**KKAR Karatay Array 68.82 310** P **P** **22 46 10.8 +0.2**
KKAR pmax pmax
comp=Z,311nm,0.9s
**K29M Barlow Dome 68.83 27** P **P** **22 46 12.3 +1.9**
baz=265,SNR=324
K29M S **S** **22 55 12.2 +3.5**
baz=265
**N30M Aishikik Lake 68.84 30** P **P** **22 46 12.5 +2.2**
baz=266,SNR=118
N30M S **S** **22 55 11.9 +3.1**
baz=266
**CTZ Chatham Island 68.86 152** P **P** **22 46 13.1 +2.6**
**G29M Pine Creek 68.95 24** P **P** **22 46 12.8 +1.9**
baz=263,SNR=159
G29M S **S** **22 55 12.6 +2.8**
baz=263
**D28M Stokes Point 69.01 21** P **P** **22 46 13.0 +1.9**
baz=261
D28M S **S** **22 55 12.4 +2.1**
baz=261
**M30M Minto, Yukon 69.05 29** P **P** **22 46 13.6 +1.9**
baz=266,SNR=165
M30M S **S** **22 55 15.2 +3.9**
baz=266
**POO Poona 69.07 284** *e*P **P** **22 46 12.7 +0.2**
POO IAmb IAmb 22 46 16.6
comp=Z,403nm,0.8s
**PLBC Pleasant Camp 69.08 32** P **P** **22 46 13.7 +1.9**
baz=267,SNR=71
PLBC S **S** **22 55 16.3 +4.7**
baz=267
**S31K Pelican 69.09 34** P **P** **22 46 13.2 +1.4**
baz=268,SNR=15
S31K S **S** **22 55 15.0 +3.4**
baz=268
S31K S **S** **22 55 15.0 +3.4**
baz=268
**E29M Blow River 69.18 23** P **P** **22 46 13.4 +1.2**
E29M IAmb IAmb 22 46 46.6
comp=Z,732nm,1.5s
**E29M Blow River 69.18 23** P **P** **22 46 13.8 +1.5**
baz=263,SNR=88
E29M S **S** **22 55 14.7 +2.3**
baz=263
**GAR Garm 69.27 306** P **P** **22 46 14.0 +0.4**
GAR IAmb IAmb 22 46 18.3
comp=Z,1µm,1.7s
**O30N Mendenhall 69.28 31** P **P** **22 46 14.8 +1.6**
baz=267,SNR=58
O30N S **S** **22 55 16.8 +2.9**
baz=267
**BRLS Borolday 69.32 310** *e*P **P** **22 46 14.2 +0.5**
baz=310
**BRLS Borolday 69.32 310** *e*P **P** **22 46 14.1 +0.5**
**R31K City Hall, Gus 69.37 33** P **P** **22 46 14.9 +1.4**
baz=268
R31K S **S** **22 55 17.4 +2.5**
baz=268
**EPYK Eagle Plains 69.40 25** P **P** **22 46 15.2 +1.4**
baz=264,SNR=162
EPYK S **S** **22 55 17.0 +1.8**
baz=264
**J30M Hart River 69.41 27** P **P** **22 46 15.7 +1.7**
baz=266,SNR=288
J30M S **S** **22 55 18.3 +2.8**
baz=266
**I30M Mount Dempster 69.44 26** P **P** **22 46 15.3 +1.2**
baz=265,SNR=141
I30M S **S** **22 55 17.9 +2.0**
baz=265
**N31M Braeburn, Yuko 69.46 30** P **P** **22 46 16.2 +2.0**
baz=267,SNR=96
N31M S **S** **22 55 20.6 +4.5**
baz=267
**CHM Chimkent 69.54 309** *e*P **P** **22 46 14.8 -0.2**
comp=Z,101nm,0.7s,baz=310
CHM LR LR 23 17 26.4
baz=310
**CHM Chimkent 69.54 309** *e*P **P** **22 46 14.8 -0.2**
CHM pmax pmax
comp=Z,101nm,0.7s
**SIT Sitka 69.56 35** P **P** **22 46 16.3 +1.5**
**SIT Sitka 69.56 35** P **P** **22 46 16.5 +1.7**
baz=269,SNR=6.3
SIT S **S** **22 55 21.1 +3.9**
baz=269
**SKAG Skagway 69.61 32** P **P** **22 46 16.6 +1.6**
**SKAG Skagway 69.61 32** ⇑P **P** **22 46 16.9 +1.9**
**SKAG Skagway 69.61 32** P **P** **22 46 17.1 +2.0**
baz=268,SNR=44
SKAG S **S** **22 55 21.8 +4.0**
baz=268
**G30M tAoh Zraii Nji 69.66 24** P **P** **22 46 16.4 +1.1**
baz=265,SNR=296
G30M S **S** **22 55 19.6 +1.3**
baz=265
**GOA Goa 69.71 281** *e*P **P** **22 46 16.7 +0.2**
**WHY Whitehorse 69.87 31** P **P** **22 46 18.2 +1.4**
WHY IAmb IAmb 22 46 20.3
comp=Z,551nm,1.3s
**WHY Whitehorse 69.87 31** P **P** **22 46 18.6 +1.8**
baz=268,SNR=84
WHY S **S** **22 55 24.0 +3.0**
baz=268
**F30M Barrier River 69.88 23** P **P** **22 46 18.3 +1.7**
baz=265,SNR=227
F30M S **S** **22 55 22.5 +1.8**
baz=265
**S32K Killisnoo 69.97 34** P **P** **22 46 18.5 +1.2**
baz=270,SNR=20
S32K S **S** **22 55 26.9 +4.8**

S32K S 22 55 26.9 +4.8
baz=270
R32K Eaglecrest 70.01 33 P P 22 46 19.3 +1.7
baz=269,SNR=31
R32K S S 22 55 27.1 +4.6
baz=269
R32K S S 22 55 27.1 +4.6
baz=269
JIS Juneau Island 70.08 33 P P 22 46 19.4 +1.5
M31M Drury Creek, Y 70.15 29 P P 22 46 20.0 +1.6
baz=268,SNR=74
M31M S S 22 55 26.7 +2.6
baz=268
CHGR Chuyangaron 70.20 306 P P 22 46 19.5 +0.2
CHGR IAmb IAmb 22 46 24.6
comp=Z,1µm,1.0s
CHGR Chuyangaron 70.20 306 P P 22 46 19.5 +0.2
CHGR pmax pmax
comp=Z,1µm,1.0s
SIMJ Simiganj 70.32 306 P P 22 46 20.2 +0.2
SIMJ IAmb IAmb 22 46 25.3
comp=Z,485nm,1.1s
SIMJ Simiganj 70.32 306 P P 22 46 20.3 +0.3
SIMJ pP pP 22 46 36.8 -0.9
SIMJ PcP pwP 22 46 41.6 -0.4
SIMJ sP sP 22 46 44.1 -0.9
H31M Peel River 70.33 25 P P 22 46 20.8 +1.3
baz=267,SNR=288
H31M S S 22 55 26.2 +0.1
baz=267
G31M Satah River 70.42 24 P P 22 46 21.1 +1.2
baz=266,SNR=268
G31M S S 22 55 26.5 -0.5
baz=266
P32M Atlin 70.43 32 P P 22 46 21.9 +1.7
baz=270,SNR=59
P32M S S 22 55 29.7 +2.2
baz=270
FARO Faro, Yukon 70.64 29 P P 22 46 22.6 +1.2
baz=269
FARO S S 22 55 31.3 +1.4
baz=269
F31M Tsiigehtchic 70.66 24 P P 22 46 22.2 +0.9
baz=267,SNR=37
F31M S S 22 55 29.2 -0.5
baz=267
N32M Quiet Lake 70.76 30 P P 22 46 23.7 +1.5
baz=270
N32M S S 22 55 33.6 +2.3
baz=270
KBL Kabul 70.77 301 P P 22 46 23.1 +0.2
KBL IAmb IAmb 22 46 28.2
comp=Z,460nm,1.1s
KBL Kabul 70.77 301 P P 22 46 23.2 +0.2
KBL pmax pmax
comp=Z,461nm,1.1s
INK Inuvik 70.78 23 P P 22 46 22.7 +0.7
INK IAmb IAmb 22 46 56.5
comp=Z,534nm,1.2s
INK Inuvik 70.78 23 ⇓P P 22 46 22.8 +0.7
INK Inuvik 70.78 23 LR LR 23 12 48.1
comp=Z,3µm,21.4s,baz=249,slow=32
INK Inuvik 70.78 23 P P 22 46 22.9 +0.8
baz=267,SNR=114
INK S S 22 55 29.6 -1.5
baz=267
INK Inuvik 70.78 23 P P 22 46 22.7 +0.7
INK pmax pmax
comp=Z,534nm,1.2s
U33K Whale Pass 70.79 36 P P 22 46 24.2 +2.0
baz=271,SNR=20
U33K S S 22 55 35.3 +3.8
baz=271
U33K S S 22 55 35.3 +3.8
baz=271
CRAG Craig 70.80 36 P P 22 46 23.9 +1.5
CRAG Craig 70.80 36 ⇓P P 22 46 24.0 +1.6
CRAG Craig 70.80 36 P P 22 46 24.3 +1.9
baz=272,SNR=6.5
CRAG S S 22 55 35.4 +3.7
baz=272
T33K Petersburg 70.86 35 P P 22 46 24.6 +1.9
baz=271
P33M Teslin, Yukon 70.89 31 P P 22 46 24.6 +1.6
baz=270,SNR=63
P33M S S 22 55 35.3 +2.5
baz=270
Q32M Nakina River 71.18 33 P P 22 46 27.0 +2.0
baz=271,SNR=43
Q32M S S 22 55 39.7 +3.1
baz=271
WRAK Wrangell Islan 71.21 35 P P 22 46 26.3 +1.5
WRAK IAmb IAmb 22 46 56.0
comp=Z,453nm,1.1s
DIB Dawson Inlet, 71.27 39 P P 22 46 25.6 +0.3
PPT Papeete 71.34 116 P P 22 46 28.1 +1.8
comp=Z,75nm,0.8s,baz=153,slow=1.4,SNR=7.7
PPT LR LR 23 11 11.7
comp=Z,7µm,21.2s,baz=278,slow=30
comp=Z,75nm,0.8s
PPT2 Papeete2 71.34 116 ePKP2 P 22 46 22.5 -3.9
comp=Z,2µm,30.2s
PPT2 Papeete2 71.34 116 eP P 22 46 26.4 0.0
comp=Z,253nm,1.2s
PPT2 eS S 22 55 34.8 -4.6
comp=Z,5µm,25.2s
PPT2 eS S 22 55 37.1 -2.3
comp=Z,1µm,23.5s
PPT2 eSS SS 23 00 06.6 -8.7
comp=Z,11µm,38.0s
PPT2 eLQ LQ 23 04 12.6
comp=Z,13µm,34.0s
PPT2 eLR LR 23 07 50.4
comp=Z,50µm,30.5s
PPT2 eLR LR 23 07 53.2
comp=Z,32µm,32.5s
PPT2 eLR LR 23 08 04.4
comp=Z,9µm,26.9s
PPTF Pamatai, Papee 71.36 116 P P 22 46 28.3 +1.8
PPTF Pamatai, Papee 71.36 116 P P 22 46 27.1 +0.6
PAE Paea 71.37 116 eP P 22 46 24.4 -2.1
comp=Z,84nm,1.1s
PAE eS S 22 55 38.9 -0.6
comp=Z,638nm,22.5s
PAE Paea 71.37 116 eLR LR 23 08 04.8
comp=Z,6µm,28.8s
V35K Ketchikan 71.67 37 P P 22 46 29.1 +1.5
baz=273,SNR=16
V35K S S 22 55 44.5 +2.7
baz=273
V35K S S 22 55 44.5 +2.7
baz=273
MCQ Macquarie Isla 71.69 173 P P 22 46 28.8 +1.2
TVO Taravao 71.71 116 eP P 22 46 28.5 -0.1
comp=Z,310nm,1.4s
TVO eS S 22 55 39.2 -4.3
comp=Z,616nm,22.1s
TVO Taravao 71.71 116 eLR LR 23 08 14.3
comp=Z,7µm,29.3s
PMOR Pomariorio Ree 71.76 112 eP P 22 46 27.1 -1.7
comp=Z,1µm,1.4s
PMOR eS S 22 55 43.6 -0.4
comp=Z,2µm,22.4s
PMOR eSS SS 23 00 19.4 -2.1
comp=Z,1µm,21.7s
PMOR eLR LR 23 08 17.6
comp=Z,24µm,24.6s
S34M Telegraph Cree 71.81 34 P P 22 46 30.6 +2.1
baz=272,SNR=56
S34M S S 22 55 47.0 +3.6
baz=272
R33M Jennings River 71.84 32 P P 22 46 30.9 +2.1
baz=272,SNR=83
R33M S S 22 55 47.1 +3.2
baz=272
BHUJ Bhuj 72.02 290 eP P 22 46 31.8 +1.4
BHUJ IAmb IAmb 22 46 36.3
comp=Z,483nm,1.1s
VAH Vaihoa 72.09 113 eP P 22 46 29.4 -1.4
comp=Z,507nm,1.4s
VAH eS S 22 55 42.1 -5.7
comp=Z,4µm,24.1s
VAH Vaihoa 72.09 113 eLR LR 23 08 27.0
comp=Z,35µm,26.8s
T35M Bob Quinn 72.34 35 P P 22 46 33.7 +2.0
baz=274,SNR=44

T35M S S 22 55 52.2 +2.7
baz=274
DLBC Dease Lake 72.37 33 P P 22 46 33.3 +1.3
DLBC IAmb IAmb 22 47 02.9
comp=Z,496nm,1.1s
DLBC Dease Lake 72.37 33 LR LR 23 16 29.9
comp=Z,5µm,20.5s,baz=290,slow=34
DLBC Dease Lake 72.37 33 P P 22 46 33.8 +1.8
DLBC S S 22 55 51.4 +1.4
baz=273
HMDM Hanimaadhoo 72.41 272 P P 22 46 33.9 +1.1
HMDM IAmb IAmb 22 46 36.1
comp=Z,810nm,1.3s
HMDM Hanimaadhoo 72.41 272 P P 22 46 34.7 +1.9
SNR=8.3
U35K Hyder 72.53 36 P P 22 46 34.2 +1.4
baz=274
U35K S S 22 55 54.4 +2.8
baz=274
WTLY Watson Lake, Y 72.90 31 P P 22 46 36.7 +1.7
baz=274
WTLY S SKiKP 22 55 59.8 -1.9
baz=274
TGTN Hyland Airport 73.06 30 P P 22 46 37.9 +2.0
baz=274
TGTN S S 22 55 59.7 +2.0
baz=274
A36M Sachs Harbour 73.61 19 P P 22 46 39.6 +0.8
A36M IAmb IAmb 22 47 06.0
comp=Z,556nm,0.8s
A36M Sachs Harbour 73.61 19 P P 22 46 40.0 +1.1
baz=273,SNR=150
A36M S S 22 56 03.0 -0.4
baz=273
TBI Tubuai 73.94 121 eP P 22 46 34.9 -6.7
comp=Z,5µm,29.5s
TBI Tubuai 73.94 121 eP P 22 46 40.0 -1.6
comp=Z,493nm,1.4s
TBI eS S 22 56 06.7 -1.8
comp=Z,18µm,28.2s
TBI eS SKiKP 22 56 10.1 +6.0
comp=Z,3µm,25.2s
TBI eSS SS 23 00 32.7 -22
comp=Z,2µm,25.1s
TBI eSS SS 23 00 49.0 -5.6
comp=Z,35µm,38.8s
TBI eLQ LQ 23 05 44.6
comp=Z,30µm,36.2s
TBI eLR LR 23 08 59.0
comp=Z,50µm,28.2s
TBI eLR LR 23 09 02.8
comp=Z,11µm,29.0s
TBI eLR LR 23 09 25.8
comp=Z,8µm,23.3s
BBB Bella Bella 74.00 40 ⇓P P 22 46 42.8 +1.2
BBB Bella Bella 74.00 40 LR LR 23 12 24.2
comp=Z,10µm,21.6s,baz=269,slow=30
SVE Sverdlovsk 74.08 325 deP P 22 46 42.2 +0.3
SVE eS SKiKP 22 56 05.0 +1.5
SVE e 23 01 02.4
SVE pmax pmax
comp=Z,520nm,1.6s
SVE MLR MLR
comp=Z,7µm,19.0s
C36M Paulatuk 74.20 22 P P 22 46 43.1 +0.8
baz=275,SNR=89
C36M S S 22 56 06.9 -3.1
baz=275
LIRD Liard River Hi 74.32 32 P P 22 46 44.9 +1.6
baz=276
LIRD S S 22 56 13.4 +1.5
baz=276
KAAM Kaadhehdhoo 74.33 266 P P 22 46 45.0 +0.8
KAAM IAmb IAmb 22 46 47.5
comp=Z,831nm,1.5s
KAAM Kaadhehdhoo 74.33 266 ⇑P P 22 46 45.7 +1.6
KAAM Kaadhehdhoo 74.33 266 P P 22 46 45.2 +1.1
SNR=6.7
TOAD Toad River Com 74.83 33 P P 22 46 47.5 +1.2
baz=277,SNR=140
TOAD S S 22 56 17.3 -0.3
baz=277
WRGLY Wrigley 75.13 28 P P 22 46 49.7 +1.9
baz=277
WRGLY S S 22 56 21.7 +1.1
baz=277
KOTAN Kotaneelee Air 75.26 31 P P 22 46 50.5 +1.8
baz=278
KOTAN S S 22 56 24.0 +1.8
baz=278
ARU Arti 75.27 325 P P 22 46 48.6 -0.2
ARU IAmb IAmb 22 46 53.4
comp=Z,582nm,1.2s
ARU Arti 75.27 325 ⇑P P 22 46 48.5 -0.3
ARU Arti 75.27 325 LR LR 23 21 30.5
comp=Z,5µm,19.9s,baz=86,slow=37
ARU Arti 75.27 325 c iP P 22 46 48.6 -0.2
ARU *PP pP 22 47 07.8 +1.3
ARU 22 49 34.1
ARU PPP PPP 22 51 22.5
ARU S S 22 56 23.4 +1.0
ARU *SS pS 22 56 42.7 -1.7
ARU SSS SSS 23 04 35.3
ARU pmax pmax
comp=Z,466nm,1.0s
ARU MLR MLR
comp=Z,8µm,21.0s
ARU Arti 75.27 325 P P 22 46 48.3 -0.5
comp=Z,434nm,1.6s,comp=Z,6µm
ABKAR Akbulak array 75.48 317 P P 22 46 50.0 -0.1
ABKAR Akbulak array 75.48 317 ⇑P P 22 46 49.8 -0.4
HRA Herat 76.34 302 P P 22 46 56.3 +0.7
AKTO Aktyubinsk 76.52 319 LR LR 23 22 54.6
comp=Z,10µm,20.4s,baz=76,slow=37
TAOE Nuku Hiva Isla 76.59 104 ePKP2 P 22 46 54.2 -3.0
comp=Z,415nm,1.3s
TAOE eS S 22 56 37.2 -1.3
comp=Z,3µm,37.9s
TAOE eSS SS 23 01 34.6 -0.7
comp=Z,1µm,23.7s
TAOE eLQ LQ 23 07 07.4
comp=Z,8µm,33.0s
TAOE eLR LR 23 10 01.8
comp=Z,44µm,30.8s
TAOE Nuku Hiva Isla 76.59 104 P P 22 46 56.3 -0.8
TAOE IAmb IAmb 22 47 12.2
comp=Z,624nm,1.7s
NLWA Neilton Lookou 77.46 44 P P 22 47 02.3 +0.9
NLWA IAmb IAmb 22 47 05.2
comp=Z,751nm,1.4s
NLWA Neilton Lookou 77.46 44 ⇓P P 22 47 03.5 +2.0
WISH Wishkah 77.58 44 P P 22 47 02.7 +0.7
WISH IAmb IAmb 22 47 47.3
comp=Z,676nm,1.1s
KBO Bosley Butte 78.24 49 P P 22 47 07.2 +1.3
KBO IAmb IAmb 22 47 09.6
comp=Z,1µm,1.5s
J01E Myrtle Point 78.26 48 P P 22 47 06.8 +0.9
COR Corvallis 78.41 47 P P 22 47 08.0 +1.3
COR IAmb IAmb 22 47 10.5
comp=Z,2µm,1.6s
COR Corvallis 78.41 47 ⇓P P 22 47 08.5 +1.8
COR Corvallis 78.41 47 P P 22 47 08.0 +1.3
COR pmax pmax
comp=Z,2µm,1.7s
JCC Jacoby Creek, 78.67 51 P P 22 47 09.4 +1.2
JCC IAmb IAmb 22 47 13.9
comp=Z,1µm,1.6s
HUMO Hull Mountain 79.07 49 ⇓P P 22 47 12.1 +1.6
HILA High Level 79.09 32 P P 22 47 10.3 +0.1
NGCH Negor - Chabah 79.18 293 P P 22 47 13.4 +2.0
SNR=10
YKA Yellowknife Ar 79.25 28 P P 22 47 11.2 +0.3
comp=Z,83nm,0.9s,baz=293,slow=5.7,SNR=199
YKA PKKPbc PKKPbc 23 05 59.5 -3.4
comp=Z,1.1nm,0.7s,baz=98,slow=4.9,SNR=5.8
YKA PKPPKP P'P'df 23 13 54.6 -12
comp=Z,4.0nm,1.1s,baz=112,slow=2.0,SNR=4.8
YKA LR LR 23 22 11.3
comp=Z,9µm,19.9s,baz=286,slow=36
comp=Z,83nm,0.9s
YBH Yreka Blue Hor 79.45 50 LR LR 23 14 09.6
comp=Z,6µm,21.4s,baz=280,slow=29
EUNU Eureka 79.53 8 P P 22 47 13.3 +1.0
KIRV Kirov 79.67 328 LR LR 23 24 50.4
comp=Z,8µm,21.8s,baz=73,slow=37

KIRV Kirov 79.67 328 ceP P 22 47 13.8 +0.5
MCCM Marconi Confer 80.14 53 ⇓P P 22 47 17.2 +1.0
HAWA Hanford 80.58 44 P P 22 47 19.5 +1.0
HAWA Hanford 80.58 44 ⇓P P 22 47 19.9 +1.4
LRDM Redding Peak 80.66 51 P P 22 47 20.5 +1.4
HOPEN Hopen 80.82 348 eP P 22 47 20.3 +1.1
HOPEN lVmB_BB 22 47 22.9
comp=Z,6µm,2.2s
HOPEN eS S 22 57 19.8 -1.7
HOPEN lVMs_BB lVMs_BB 23 20 00.2
comp=Z,3µm,19.5s
ORV Oroville 80.85 52 P P 22 47 20.9 +0.8
ORV lAmb lAmb 22 47 22.7
comp=Z,1µm,1.6s
ORV Oroville 80.85 52 P P 22 47 20.9 +0.8
ORV pmax pmax
comp=Z,1µm,1.6s
SPA1 Spitsbergen Ar 81.28 351 P P 22 47 22.7 +1.1
SPA1 lAmb lAmb 22 47 54.1
comp=Z,1µm,1.6s
SPA0 Spitsbergen Ar 81.28 351 eP P 22 47 22.6 +1.0
SPA0 lVmBBB 22 47 24.9
comp=Z,5µm,2.5s
SPA0 eS S 22 57 23.4 -2.8
SPA0 lVMs_BB lVMs_BB 23 18 04.5
comp=Z,3µm,28.7s
SPITS Spitsbergen Ar 81.28 351 P P 22 47 22.1 +0.5
comp=Z,31nm,0.5s,baz=83,slow=6.8,SNR=63
SPITS PKKPbc PKKPbc 23 05 56.3 -2.6
comp=Z,7.2nm,0.5s,baz=132,slow=6.0,SNR=20
SPITS LR LR 23 24 37.8
comp=Z,7µm,21.9s,baz=12,slow=36
comp=Z,31nm,0.5s
KBS Kingsbay 81.38 352 P P 22 47 23.3 +1.2
KBS Kingsbay 81.38 352 eP P 22 47 23.5 +1.3
KBS lVmBBB 22 47 26.5
comp=Z,3µm,3.1s
KBS eS S 22 57 25.3 -1.9
KBS lVMs_BB lVMs_BB 23 16 09.4
comp=Z,3µm,39.7s
KBS Kingsbay 81.38 352 ⇑P P 22 47 23.1 +1.0
KBS Kingsbay 81.38 352 ceP P 22 47 23.8 +1.7
KBS pmax pmax
comp=Z,717nm,2.5s
KBS Kingsbay 81.38 352 i P P 22 47 23.1 +1.0
JLN Jalan Bani Buh 81.49 291 P P 22 47 24.4 +0.6
SNR=64
NOR Nord 81.51 358 ⇓P P 22 47 23.3 +0.5
NOR Nord 81.51 358 i P P 22 47 22.9 +0.1
NOR lAmb lAmb 22 47 25.4
comp=Z,23nm,1.0s
SAO San Andreas Ge 81.57 54 ⇑P P 22 47 23.6 -0.4
NEW Newport 81.68 42 ⇓P P 22 47 25.5 +1.1
NEW Newport 81.68 42 LR LR 23 19 58.7
comp=Z,4µm,19.4s,baz=290,slow=33
WBK Wadi Bani Khal 81.77 291 P P 22 47 26.1 +0.8
SNR=67
WSAR Wadi Sarin 81.91 292 LR LR 23 26 00.8
comp=Z,2µm,21.7s,baz=104,slow=37
JASK Jask - Hormozg 81.92 295 P P 22 47 28.2 +2.2
SNR=35
HSPB Hornsund (broa 82.21 350 eP P 22 47 27.4 +0.8
HSPB epP pP 22 47 42.3 -2.1
HSPB eS S 22 57 31.5 -4.3
HSPB eL L 23 18 24.8
comp=Z,17µm,30.2s
HSPB Hornsund (broa 82.21 350 eP P 22 47 26.6 +0.1
WVOR Wild Horse Val 82.21 48 P P 22 47 28.5 +1.1
WVOR lAmb lAmb 22 47 32.2
comp=Z,536nm,1.1s
WVOR Wild Horse Val 82.21 48 ⇓P P 22 47 28.5 +1.1
WVOR Wild Horse Val 82.21 48 P P 22 47 28.5 +1.1
WVOR pmax pmax
comp=Z,536nm,1.2s
F10A Beach Ranch, E 82.24 44 ⇓P P 22 47 26.9 -0.5
BELG Belogornoye 82.39 322 PKKPbc PKKPbc 23 05 55.0 -0.5
comp=Z,12nm,0.8s,baz=178,slow=3.3,SNR=3.8
BELG LR LR 23 25 50.8
comp=Z,7µm,19.3s,baz=71,slow=37
BELG Belogornoye 82.39 322 c iP P 22 47 27.9 +0.1
BELG pmax pmax
comp=Z,180nm,1.0s
SMDO Samad 82.48 292 P P 22 47 29.6 +0.6
SNR=41
BMO Blue Mountains 82.49 46 P P 22 47 29.7 +1.0
BMO lAmb lAmb 22 47 31.5
comp=Z,580nm,1.3s
BMO Blue Mountains 82.49 46 ⇓P P 22 47 29.8 +1.0
BMO Blue Mountains 82.49 46 P P 22 47 29.7 +1.0
BMO pmax pmax
comp=Z,580nm,1.3s
JMDO Jabal Madar 82.61 291 P P 22 47 30.3 +0.6
SNR=45
JMDO P P 22 47 30.3 +0.6
SNR=45
LVZ Lovozero 82.64 339 P P 22 47 29.1 +0.1
LVZ Lovozero 82.64 339 ceP P 22 47 29.7 +0.7
LVZ pmax pmax
comp=Z,174nm,1.3s
LVZ Lovozero 82.64 339 P P 22 47 28.8 -0.2
comp=Z,177nm,1.2s,comp=Z,3µm
ADZR Andozero 82.98 335 ⇑iP P 22 47 30.3 -0.4
ADZR e*PP pP 22 47 47.1 -1.5
ADZR i S S 22 57 37.9 -6.1
ADZR pmax pmax
comp=Z,191nm,0.8s
HOQ Hoqain 83.00 292 P P 22 47 32.3 +0.7
SNR=134
MHTO MHTO 83.08 290 P P 22 47 32.8 +0.7
SNR=74
APA Apatity 83.22 339 ⇓iP P 22 47 31.0 -0.9
APA i 22 50 44.0
APA i S S 22 57 41.0 -5.3
APA i SS SS 23 03 13.0 +1.7
APA pmax pmax
comp=Z,130nm,0.9s
VADS Vadso 83.24 342 eP P 22 47 32.4 +0.4
VADS lVmB_BB 22 47 35.3
comp=Z,4µm,2.4s
VADS eSKSac S 22 57 41.4 -5.1
VADS lVMs_BB lVMs_BB 23 22 53.5
comp=Z,6µm,27.7s
BJO1 Bjornoya 83.25 348 eP P 22 47 32.1 +0.2
BJO1 lVmBBB 22 47 35.1
comp=Z,2µm,2.6s
BJO1 eSKSac S 22 57 42.5 -3.9
BJO1 lVMs_BB lVMs_BB 23 20 16.4
comp=Z,2µm,10.3s
BANOM Banah 83.27 295 i P P 22 47 34.0 +0.9
SNR=6.9
BANOM Banah 83.27 295 P P 22 47 34.2 +1.1
BSY Bisya 83.31 292 P P 22 47 34.0 +0.6
SNR=25
SHME Shamm 83.38 295 i P P 22 47 34.3 +0.7
SNR=75
SHME Shamm 83.38 295 P P 22 47 34.4 +0.9
SNR=46
MDH Madha 83.44 294 i P P 22 47 33.7 -0.1
SNR=21
MDH Madha 83.44 294 P P 22 47 34.6 +0.7
SNR=17
SOHO SOHO 83.54 293 i P P 22 47 34.3 -0.1
SNR=95
SOHO SOHO 83.54 293 P P 22 47 35.1 +0.6
MASF Masafi 83.54 294 P P 22 47 35.8 +1.3
SNR=74
MSFE Esma-Masafi 83.55 294 i P P 22 47 35.0 +0.5
SNR=91
NVAR Mina Array Bea 83.55 52 P P 22 47 35.1 +0.6
comp=Z,172nm,0.9s,baz=265,slow=6.4,SNR=488
NVAR PKKPbc PKKPbc 23 05 54.2 +1.5
comp=Z,2.9nm,0.8s,baz=145,slow=2.3,SNR=6.4
NVAR LR LR 23 19 50.4
comp=Z,3µm,20.6s,baz=284,slow=32
comp=Z,172nm,0.9s
UOSS Minazif 83.61 294 P P 22 47 34.9 +0.1
UOSS lAmb lAmb 22 47 39.3
comp=Z,956nm,1.5s
UOSS Minazif 83.61 294 i P P 22 47 34.8 +0.1
SNR=52
UOSS Minazif 83.61 294 P P 22 47 35.5 +0.7
UOSS P P 22 47 35.5 +0.7
HATD Hatta, Dubai 83.71 294 i P P 22 47 35.9 +0.5
SNR=93
HATD Hatta, Dubai 83.71 294 P P 22 47 36.4 +1.1
SNR=63

HATD P P 22 47 36.4 +1.1
SNR=63
**DQM DQM 83.75 289** P P 22 47 36.3 +0.7
SNR=31
**ARQ Araqi 83.76 292** P P 22 47 36.7 +1.1
SNR=124
**BMN Battle Mountai 83.79 50** P P 22 47 36.6 +1.0
**BMN Battle Mountai 83.79 50** P P 22 47 36.6 +1.0
BMN pmax pmax
comp=Z,323nm,1.2s
**ASHO Ashiyiah 83.81 294** *i* P P 22 47 36.6 +0.7
SNR=81
**ASHO Ashiyiah 83.81 294** P P 22 47 36.7 +0.8
SNR=69
**MFID Camas Ranch 83.92 47** P P 22 47 37.0 +0.9
MFID IAmb IAmb 22 48 18.2
comp=Z,705nm,1.2s
**UMQ Umm Al-Quwin 83.93 295** *i* P P 22 47 37.8 +1.4
SNR=23
**UMQ Umm Al-Quwin 83.93 295** P P 22 47 38.3 +1.9
SNR=24
**NAZ Nazwa, Dubai 84.08 294** *i* P P 22 47 37.5 +0.3
SNR=39
**NAZ Nazwa, Dubai 84.08 294** P P 22 47 37.8 +0.7
SNR=60
NAZ P P 22 47 37.8 +0.7
SNR=60
**KEV Kevo 84.12 342** P P 22 47 36.6 +0.1
KEV IAmb IAmb 22 47 40.4
comp=Z,285nm,0.9s
**KEV Kevo 84.12 342** ⇑P P 22 47 36.6 +0.1
**KEV Kevo 84.12 342** P P 22 47 36.6 +0.1
KEV pmax pmax
comp=Z,285nm,0.9s
**MSO Missoula 84.16 43** P P 22 47 37.4 0.0
**MSO Missoula 84.16 43** ⇓P P 22 47 37.3 0.0
**FAQ Al Faqa, Dubai 84.20 294** *i* P P 22 47 38.1 +0.3
SNR=14
**FAQ Al Faqa, Dubai 84.20 294** P P 22 47 38.5 +0.7
SNR=41
**ALNE Al Ain 84.25 293** *i* P P 22 47 38.8 +0.7
SNR=88
**ALNE Al Ain 84.25 293** P P 22 47 39.1 +1.0
SNR=207
ALNE P P 22 47 39.1 +1.0
SNR=207
**TPH Tonopah 84.46 52** P P 22 47 39.7 +0.6
**TPH Tonopah 84.46 52** P P 22 47 39.7 +0.6
TPH pmax pmax
comp=Z,795nm,0.9s
**ASUD Al Ashush, Dub 84.47 294** *i* P P 22 47 40.0 +0.9
SNR=85
**ASUD Al Ashush, Dub 84.47 294** P P 22 47 40.0 +0.9
SNR=82
ASUD P P 22 47 40.0 +0.9
SNR=82
**TULEG Thule 84.53 8** P P 22 47 39.6 +1.2
**TULEG Thule 84.53 8** ⇓P P 22 47 39.6 +1.2
**TULEG Thule 84.53 8** *i* P P 22 47 38.9 +0.5
TULEG IAmb IAmb 22 47 41.5
comp=Z,244nm,1.2s
**HAMF Hammerfest 84.55 344** *e*P P 22 47 38.1 -0.4
HAMF IVmB_BB 22 48 08.6
comp=Z,3μm,1.4s
HAMF *e*SKSac **SKSac** 22 57 50.6 -5.5
HAMF IVMs_BB IVMs_BB 23 21 30.5
comp=Z,3μm,33.9s
**AIS Amsterdam Isla 84.55 228** P P 22 47 39.9 +0.8
AIS IAmb IAmb 22 48 11.7
comp=Z,737nm,1.5s
**BPMT Black Pine Rid 84.61 43** P P 22 47 40.1 +0.3
**ARA0 ARCESS Array S 84.68 342** *e*P P 22 47 39.5 +0.2
ARA0 IVmBBB 22 47 42.7
comp=Z,4μm,1.4s
ARA0 *e*SKSac **SKSac** 22 57 51.2 -5.9
ARA0 IVMs_BB IVMs_BB 23 22 22.4
comp=Z,4μm,25.4s
**ARCES ARCESS Array B 84.68 342** P P 22 47 39.3 0.0
comp=Z,247nm,0.9s,baz=68,slow=6.7,SNR=245
ARCES PKKPbc **PKKPbc** 23 05 48.2 -2.7
comp=Z,13nm,0.9s,baz=242,slow=1.9,SNR=14
ARCES PKPPKP **P'P'df** 23 13 49.9 -6.5
comp=Z,2.1nm,0.9s,baz=308,slow=4.4,SNR=4.6
ARCES LR LR 23 29 23.3
comp=Z,9μm,21.2s,baz=57,slow=38
comp=Z,247nm,0.9s
**AJN Ajban 84.78 294** *i* P P 22 47 41.0 +0.3
SNR=74
**AJN Ajban 84.78 294** P P 22 47 41.2 +0.5
SNR=88
AJN P P 22 47 41.2 +0.5
SNR=88
**HLID Hailey 84.86 46** P P 22 47 42.1 +1.1
**HLID Hailey 84.86 46** ⇓P P 22 47 42.1 +1.1
**ELK Elko 85.14 49** ⇓P P 22 47 43.8 +1.3
**ELK Elko 85.14 49** LR LR 23 17 32.2
comp=Z,6μm,21.3s,baz=280,slow=30
**MAK Makhachkala 85.37 313***c* *i*P P 22 47 41.9 -1.4
MAK *e**PP **pP** 22 47 58.1 -3.2
MAK *e**SP **pwP** 22 48 05.1 -1.0
MAK *e* 22 50 59.3
MAK *e*PPP PPP 22 52 53.9
MAK *e* 22 58 00.8
MAK *e*SS SS 23 03 45.7 +1.4
MAK pmax pmax
comp=Z,498nm,1.2s
MAK MLR MLR
comp=Z,15μm,18.0s
**TPNV Topopah Spring 85.53 53** P P 22 47 45.5 +1.0
TPNV IAmb IAmb 22 48 11.0
comp=Z,376nm,1.2s
**TPNV Topopah Spring 85.53 53** ⇓P P 22 47 45.5 +1.0
**TPNV Topopah Spring 85.53 53** P P 22 47 45.5 +1.0
TPNV pmax pmax
comp=Z,376nm,1.3s
**R11B Troy Canyon, C 85.61 51** P P 22 47 46.2 +1.4
baz=288
R11B S S 22 58 12.6 +0.9
baz=288
**KTK1 Kautokeino 85.64 342** *e*P P 22 47 43.9 -0.2
KTK1 IVmB_BB 22 47 47.1
comp=Z,3μm,2.1s
KTK1 *e*SKSac **SKSac** 22 57 55.2 -7.9
KTK1 IVMs_BB IVMs_BB 23 24 18.4
comp=Z,4μm,24.3s
**MZWR Madinat Zayed 85.98 293** P P 22 47 46.8 +0.2
**SHAO Shalim 86.01 288** *i* P P 22 47 47.4 +0.4
SNR=16
**SHAO Shalim 86.01 288** P P 22 47 47.7 +0.8
SNR=5.2
**BOZ Bozeman (W) 86.08 44** P P 22 47 48.1 +1.1
BOZ IAmb IAmb 22 48 19.9
comp=Z,252nm,0.9s
**BOZ Bozeman (W) 86.08 44** ⇑P P 22 47 48.6 +1.6
**BOZ Bozeman (W) 86.08 44** P P 22 47 48.1 +1.1
BOZ pmax pmax
comp=Z,252nm,1.0s
**RKT Rikitea 86.10 115** *e*P P 22 47 42.4 -4.8
comp=Z,5μm,31.2s
**RKT Rikitea 86.10 115** *e*P P 22 47 47.9 +0.7
comp=Z,262nm,1.2s
**RKT Rikitea 86.10 115** *e*S S 22 58 16.7 +0.3
comp=Z,17μm,25.8s
RKT *e*S **SKKSac** 22 58 20.2 +5.1
comp=Z,3μm,23.8s
RKT *e*SS **SS** 23 03 55.2 -1.4
comp=Z,26μm,37.5s
RKT *e*LQ LQ 23 11 00.6
comp=Z,74μm,42.2s
RKT *e*LR LR 23 14 36.3
comp=Z,150μm,34.0s
RKT *e*LR LR 23 14 52.1
comp=Z,8μm,23.0s
**VRH Novokhopyorsk 86.24 322** *e*P P 22 47 45.2 -2.2
VRH *e**SP **pwP** 22 48 08.7 -1.5
VRH *e*S **SKSac** 22 57 59.0 -8.5
VRH pmax pmax
comp=Z,90nm,0.8s
VRH pmax pmax
comp=Z,160nm,0.9s
VRH smax smax
comp=E,2μm,12.5s
VRH MLR MLR
comp=Z,9μm,18.0s
**JOF Joensuu 86.24 336** *e*P P 22 47 46.5 -0.6
**DAG Danmarks Havn 86.30 357** P P 22 47 47.0 -0.2
**DAG Danmarks Havn 86.30 357** ⇓P P 22 47 47.6 +0.4
**DAG Danmarks Havn 86.30 357** *i* P P 22 47 47.0 -0.2
DAG IAmb IAmb 22 47 50.1
comp=Z,180nm,0.9s
**PFO Pinyon Flats O 86.37 56** P P 22 47 48.7 +0.1
PFO IAmb IAmb 22 47 51.0
comp=Z,424nm,1.4s
**PFO Pinyon Flats O 86.37 56** LR LR 23 24 19.1
comp=Z,3μm,18.0s,baz=282,slow=34
**PFO Pinyon Flats O 86.37 56** P P 22 47 48.7 +0.1
PFO pmax pmax
comp=Z,424nm,1.4s
**TPFO Pinon Flats 86.37 56** P P 22 47 49.6 +1.0
baz=288
TPFO S S 22 58 19.6 +0.4
baz=288
**EGMT Eagleton 86.44 41** ⇓P P 22 47 49.4 +0.8
**TRO Tromso 86.45 344** *e*P P 22 47 48.2 +0.2
TRO IVmB_BB 22 47 50.9
comp=Z,3μm,0.9s
TRO IVmBBB 22 48 17.4
comp=Z,4μm,2.6s
TRO *e*SKSac **SKSac** 22 58 01.1 -6.9
TRO IVMs_BB IVMs_BB 23 30 16.2
comp=Z,3μm,21.1s
**JRN Qarnain Island 86.54 295** P P 22 47 49.8 +0.4
SNR=12
JRN P P 22 47 49.8 +0.4
SNR=12
**MZR Muzera 86.54 293** *i* P P 22 47 49.6 +0.1
SNR=282
**MZR Muzera 86.54 293** P P 22 47 49.9 +0.4
SNR=126
MZR P P 22 47 49.9 +0.4
SNR=126
**HVU Hansel Valley 86.57 47** P P 22 47 50.7 +1.2
**HVU Hansel Valley 86.57 47** P P 22 47 50.7 +1.2
HVU pmax pmax
comp=Z,1μm,1.6s
**CBX Cerro Bola 86.59 57** P P 22 47 50.3 +0.6
**YHL Hebgen Lake 86.63 44** P P 22 47 51.4 +1.5
**MOS Moscow 86.68 328** *e*P P 22 47 48.1 -1.3
MOS *e* 22 48 06.3
MOS *e* 22 51 08.2
MOS *e* 22 58 05.5
MOS *e*S **SKSac** 22 58 12.3 +2.3
MOS pmax pmax
comp=Z,271nm,1.1s
MOS pmax pmax
comp=Z,900nm,1.8s
**DMTO DMTO 86.72 287** P P 22 47 50.9 +0.5
SNR=10
**GHWR Ruwais 86.80 294** P P 22 47 51.0 +0.3
GHWR P P 22 47 51.0 +0.3
**CASY Casey 87.06 194** P P 22 47 51.5 +0.7
**DUG Dugway, Tooele 87.07 49** P P 22 47 53.0 +1.1
DUG IAmb IAmb 22 48 23.0
comp=Z,377nm,0.9s
**DUG Dugway, Tooele 87.07 49** ⇓P P 22 47 53.1 +1.2
**DUG Dugway, Tooele 87.07 49** P P 22 47 53.0 +1.1
DUG pmax pmax
comp=Z,377nm,1.0s
**H17A Grant Village 87.20 44** P P 22 47 55.7 +3.1
baz=291
**VALR Valaam 87.20 334***c* *i*P P 22 47 50.7 -1.1
VALR pmax pmax
comp=Z,71nm,1.0s
**DOK Doka 87.21 288** P P 22 47 53.0 +0.2
SNR=19
**LKWY Lake 87.25 44** ⇓P P 22 47 56.0 +3.2
**LPSR Galich'ya Gora 87.28 324** *e*P P 22 47 50.8 -1.7
LPSR *e**SP **pwP** 22 48 14.7 -0.6
LPSR *e*S **SKSac** 22 58 05.7 -8.1
LPSR pmax pmax
comp=Z,220nm,1.0s
LPSR pmax pmax
comp=Z,190nm,0.8s
LPSR smax smax
comp=E,1μm,9.9s
LPSR MLR MLR
comp=Z,6μm,21.0s
**AHID Auburn Hatcher 87.41 46** P P 22 47 54.6 +1.0
AHID IAmb IAmb 22 48 25.6
comp=Z,380nm,0.9s
**AHID Auburn Hatcher 87.41 46** ⇑P P 22 47 53.3 -0.3
**RBK Rabkut 87.45 287** P P 22 47 54.4 +0.4
SNR=10
**HWUT Hardware Ranch 87.48 47** ⇓P P 22 47 54.9 +0.9
**OBN Obninsk 87.49 327** P P 22 47 52.3 -1.1
OBN IAmb IAmb 22 48 22.2
comp=Z,820nm,1.7s
**OBN Obninsk 87.49 327** LR LR 23 30 09.4
comp=Z,10μm,19.9s,baz=56,slow=38
**OBN Obninsk 87.49 327** ⇑P P 22 47 53.2 -0.1
**OBN Obninsk 87.49 327***c* *i*P P 22 47 52.2 -1.2
OBN *i* 22 48 11.6
OBN *e* 22 51 15.1
OBN *i* S **SKSac** 22 58 08.1 -6.9
OBN *e*SS **SS** 23 04 19.1 +4.5
OBN pmax pmax
comp=Z,177nm,1.2s
OBN MLR MLR
comp=Z,17μm,24.0s
**OBN Obninsk 87.49 327** P P 22 47 52.2 -1.2
comp=Z,242nm,1.8s,comp=Z,4μm
**VORR Voronezh 87.50 324** *e*P P 22 47 52.4 -1.1
VORR *e**SP **pwP** 22 48 16.5 +0.1
VORR *e*S **SKSac** 22 58 05.7 -10
VORR pmax pmax
comp=Z,350nm,1.3s
VORR pmax pmax
comp=Z,230nm,0.8s
VORR smax smax
comp=E,90nm,3.1s
VORR MLR MLR
comp=Z,8μm,20.0s
**KULLO Kullorsuaq 87.64 6** ⇓P P 22 47 54.8 +1.1
**KULLO Kullorsuaq 87.64 6** *i* P P 22 47 54.9 +1.2
KULLO IAmb IAmb 22 47 57.8
comp=Z,66nm,0.6s
**GOF Gofitskoye 87.68 316***c* *i*P P 22 47 53.8 -0.8
GOF *e*S **SKSac** 22 58 13.9 -2.7
**VSR Storozhevoye 87.71 323** *e*P P 22 47 52.1 -2.5
VSR *e**SP **pwP** 22 48 16.4 -1.0
VSR *e*S **SKSac** 22 58 07.6 -8.9
VSR pmax pmax
comp=Z,310nm,1.3s
VSR pmax pmax
comp=Z,540nm,1.4s
VSR smax smax
comp=E,2μm,9.9s
VSR MLR MLR
comp=Z,11μm,20.0s
**WHFO Wadi Hawf 87.73 288** P P 22 47 55.2 -0.1
SNR=6.0
**SLWR Sila 87.81 294** P P 22 47 56.0 +0.5
SLWR P P 22 47 56.0 +0.5
**RLMT Red Lodge 87.81 43** P P 22 47 57.1 +1.6
RLMT IAmb IAmb 22 48 30.0
comp=Z,736nm,1.4s
**RLMT Red Lodge 87.81 43** ⇓P P 22 47 57.0 +1.6
**NCK Nalchik 87.88 315***c* *i*P P 22 47 54.8 -0.8
NCK pmax pmax
comp=Z,263nm,1.0s
**SHMA Al-Shehemyia 87.91 296** P P 22 47 55.8 -0.2
SNR=59
**W13A Hualapai Mount 87.93 54** P P 22 47 57.3 +1.0
**TRNA Turayna 88.03 295** P P 22 47 57.0 +0.5
SNR=44
**FFC Flin Flon 88.20 33** P P 22 47 57.4 +0.6
FFC IAmb IAmb 22 48 25.2
comp=Z,546nm,1.4s
**FFC Flin Flon 88.20 33** P P 22 47 57.4 +0.6
FFC pmax pmax
comp=Z,546nm,1.4s
**SAKB Bahrain 88.24 296** P P 22 47 58.4 +0.8
**GNI Garni 88.25 311** P P 22 47 57.7 +0.1
GNI IAmb IAmb 22 48 01.5
comp=Z,507nm,1.4s
**GNI Garni 88.25 311** P P 22 47 57.1 -0.5
**GNI Garni 88.25 311** ⇑P P 22 47 57.5 -0.1
**GNI Garni 88.25 311** LR LR 23 31 16.4
comp=Z,3μm,21.5s,baz=76,slow=38
**GNI Garni 88.25 311** P P 22 47 58.0 +0.3
**GNI Garni 88.25 311***ce*P P 22 47 57.2 -0.5
GNI pmax pmax
comp=Z,536nm,1.7s
**GNI Garni 88.25 311** P P 22 47 58.2 +0.6
comp=Z,216nm,1.2s,comp=Z,4μm
**KBZ Khabaz 88.27 315** P P 22 47 56.3 -1.0
comp=Z,123nm,0.9s,baz=99,slow=2.0,SNR=77
KBZ PKPPKP **P'P'df** 23 13 46.8 -3.8
comp=Z,2.0nm,0.9s,baz=333,slow=2.3,SNR=4.4
KBZ LR LR 23 30 41.8
comp=Z,12μm,21.7s,baz=68,slow=38
comp=Z,123nm,0.9s
**KBZ Khabaz 88.27 315***ce*P P 22 47 56.7 -0.6
KBZ pmax pmax
comp=Z,257nm,1.1s
**KVAR Kislovodsk Arr 88.32 316** LR LR 23 30 35.2
comp=Z,7μm,21.9s,baz=286,slow=38
**KIV Kislovodsk 88.32 316** P P 22 47 56.8 -1.0
KIV IAmb IAmb 22 48 32.6
comp=Z,277nm,1.0s
**KIV Kislovodsk 88.32 316** *i* P P 22 47 56.5 -1.2
SNR=52
**KIV Kislovodsk 88.32 316** P P 22 47 57.3 -0.5
KIV P P 22 47 57.3 -0.5
**KIV Kislovodsk 88.32 316** ⇑P P 22 47 57.3 -0.5
**KIV Kislovodsk 88.32 316** *e*P P 22 47 56.8 -1.0
KIV *e* 22 51 25.7
KIV *e* 22 58 19.1
KIV *e*SS SS 23 04 29.1 +1.4
KIV pmax pmax
comp=Z,182nm,1.1s
KIV pmax pmax
comp=Z,171nm,3.1s
KIV MLR MLR
comp=Z,9μm,20.0s
**KIV Kislovodsk 88.32 316** P P 22 47 56.8 -1.0
comp=Z,208nm,0.9s,comp=Z,2μm
**ABTO Aybut 88.33 288** P P 22 47 58.3 +0.1
SNR=13
**SMRA Abu-Samra 88.36 295** P P 22 47 57.6 -0.6
SNR=53
**SHA1 Shidzhatmaz 88.42 315***ce*P P 22 47 57.3 -1.1
**SFX San Felipe 88.46 58** P P 22 47 59.0 +0.5
**BW06 Boulder Array 88.47 46** ⇑P P 22 47 57.7 -0.9
**PDAR Pinedale Array 88.47 46** P P 22 47 58.5 -0.1
comp=Z,12nm,0.7s,baz=268,slow=2.7,SNR=44
PDAR PKKPbc **PKKPbc** 23 05 40.2 -1.1
comp=Z,2.9nm,0.7s,baz=120,slow=5.3,SNR=4.1
PDAR LR LR 23 19 48.0
comp=Z,2μm,20.5s,baz=295,slow=30
comp=Z,12nm,0.7s
**STEI Steigen 88.59 344** *e*P P 22 47 58.0 -0.3
STEI IVmB_BB 22 48 28.1
comp=Z,5μm,2.1s
STEI *e*SKSac **SKSac** 22 58 15.6 -5.5
STEI IVMs_BB IVMs_BB 23 28 59.9
comp=Z,3μm,23.2s
**LOF Lofoten 88.90 344** *e*P P 22 48 00.8 +0.9
LOF IVmB_BB 22 48 02.5
comp=Z,2μm,2.0s
LOF *e*SKSac **SKSac** 22 58 18.8 -4.2
LOF IVMs_BB IVMs_BB 23 27 54.0
comp=Z,4μm,19.5s
**FAUS Fauske 88.96 343** *e*P P 22 47 59.7 -0.4
FAUS IVmB_BB 22 48 03.0
comp=Z,2μm,1.9s
FAUS *e*SKSac **SKSac** 22 58 18.1 -5.3
FAUS IVMs_BB IVMs_BB 23 31 41.0
comp=Z,3μm,17.2s
**FIA1 FINESS Array S 89.10 336** P P 22 47 59.7 -1.2
FIA1 IAmb IAmb 22 48 28.5
comp=Z,350nm,0.9s
**FINES FINESS Array B 89.10 336** P P 22 47 59.2 -1.6
comp=Z,57nm,0.6s,baz=72,slow=6.2,SNR=210
FINES S **SKSac** 22 58 17.6 -6.8
comp=Z,8.8nm,1.0s,baz=27,slow=9.4,SNR=3.5
FINES PKKPbc **PKKPbc** 23 05 38.3 -1.7
comp=Z,8.0nm,0.8s,baz=163,slow=1.5,SNR=11
FINES PKPPKP **P'P'df** 23 13 44.1 -4.3
comp=Z,1.6nm,0.9s,baz=184,slow=5.3,SNR=3.9
FINES LR LR 23 32 16.5
comp=Z,3μm,19.4s,baz=57,slow=38
comp=Z,57nm,0.6s
**ERBR Yeremizino-Bor 89.11 318***c* *i*P P 22 48 00.6 -0.7
ERBR *e* 22 51 29.2
ERBR *e*S **SKSac** 22 58 22.2 -2.9
ERBR pmax pmax
comp=Z,1μm,1.1s
ERBR pmax pmax
comp=E,203nm,1.0s
ERBR pmax pmax
comp=N,42nm,0.5s
ERBR smax smax
comp=Z,507nm,3.0s
ERBR smax smax
comp=E,9μm,9.4s
ERBR smax smax
comp=N,6μm,4.5s
ERBR MLR MLR
comp=E,14μm,20.0s
ERBR MLR MLR
comp=Z,17μm,23.0s
ERBR MLR MLR
comp=N,6μm,16.0s
**KEF Keuruu 89.16 337** *e*P P 22 48 00.2 -1.0
**LAO LASA Array 89.17 41** P P 22 48 02.6 +0.9
**LAO LASA Array 89.17 41** ⇓P P 22 48 02.8 +1.1
**KARS Kars 89.27 312** P P 22 48 02.3 -0.1
**KARS Kars 89.27 312** P P 22 48 02.3 -0.1
KARS pmax pmax
comp=Z,2μm,1.3s
**LABN Labinsk 89.37 317** *i* P P 22 48 01.3 -1.2
LABN *e**PP **pP** 22 48 17.5 -3.2
LABN *e*S **SKSac** 22 58 25.4 -1.3
LABN *e*SSS SSS 23 08 15.4
LABN pmax pmax
comp=Z,256nm,1.4s
LABN pmax pmax
comp=E,9.0nm,0.6s
LABN pmax pmax
comp=N,19nm,0.7s
LABN smax smax
comp=Z,822nm,3.1s
LABN smax smax
comp=E,3μm,4.5s
LABN smax smax
comp=N,12μm,8.6s
LABN MLR MLR
comp=Z,18μm,23.0s
LABN MLR MLR
comp=N,16μm,23.0s
LABN MLR MLR
comp=E,17μm,20.0s
**UPNV Upernavik 89.42 7** *i* P P 22 48 02.5 +0.3
UPNV IAmb IAmb 22 48 05.7
comp=Z,66nm,0.6s
**VAF Ylistaro 89.45 338** *e*P P 22 48 01.7 -0.7
**ROCAM Rodrigues Isla 89.57 249** P P 22 48 04.3 +0.5
**KBD Kabd 89.64 300** P P 22 48 03.7 -0.4
**DGMT Dagmar 89.69 39** ⇓P P 22 48 04.3 +0.3
**WUAZ Wupatki 89.72 53** ⇓P P 22 48 06.2 +1.6
**214A Organ Pipe Nat 89.81 57** P P 22 48 06.5 +1.6
baz=290
214A S S 22 58 53.9 +2.2
baz=290
**BCA Borcka 89.99 313** ⇑P P 22 48 04.9 -0.6
**MOR8 Moi Rana 90.06 343** *e*P P 22 48 04.1 -1.2
MOR8 IVmBBB 22 48 06.8
comp=Z,2μm,3.0s
MOR8 *e*SKSac **SKSac** 22 58 23.0 -6.9
MOR8 IVMs_BB IVMs_BB 23 25 21.1
comp=Z,3μm,28.7s
**KONS Konsvik 90.19 343** *e*P P 22 48 06.5 +0.6
KONS *e*SKSac **SKSac** 22 58 29.1 -1.5
**ARBE Arbavere 90.28 334** *e*P P 22 48 06.1 -0.4
**STOK Stokkvaagen 90.34 343** *e*P P 22 48 06.1 -0.5
STOK IVmBBB 22 48 09.2
comp=Z,2μm,2.1s
STOK *e*SKSac **SKSac** 22 58 27.1 -4.3
STOK IVMs_BB IVMs_BB 23 27 03.3
comp=Z,4μm,23.8s
**SOC Sochi 90.45 316** *e*P P 22 48 04.9 -2.7
SOC *e**PP **pP** 22 48 23.4 -2.4
SOC *e**SP **pwP** 22 48 29.5 -1.1
SOC *e*S **SKSac** 22 58 30.2 -2.8
SOC *e**SS **ScS** 22 59 00.9 +0.3
SOC *e*SS **SS** 23 04 57.7 -0.6

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SOC | | | | | *e*SSS | SSS | 23 08 32.6 | | | |
| SOC | | | | | pmax | pmax | | | | |
| | comp=Z,57nm,0.6s | | | | | | | | | |
| SOC | | | | | MLR | MLR | | | | |
| | comp=Z,11µm,21.0s | | | | | | | | | |
| **MEF** | **Metsahovi** | **90.49** | **335** | *e*P | **P** | | **22 48 06.7** | **-0.7** | | |
| **VSU** | **Vasula** | **90.51** | **333** | ⇑P | **P** | | **22 48 06.5** | **-1.1** | | |
| **VSU** | **Vasula** | **90.51** | **333** | *ce*P | **P** | | **22 48 06.3** | **-1.2** | | |
| VSU | | | | pmax | pmax | | | | | |
| | comp=Z,252nm,1.3s | | | | | | | | | |
| **K22A** | **Casper** | **90.58** | **45** | P | **P** | | **22 48 09.3** | **+0.8** | | |
| **GURO** | **Guroymak-BITLI** | **90.79** | **311** | P | **P** | | **22 48 09.2** | **-0.3** | | |
| GURO | | | | IAmb | IAmb | | 22 48 13.7 | | | |
| | comp=Z,147nm,1.0s | | | | | | | | | |
| **JNE** | **Jan Mayen East** | **90.84** | **352** | *e*P | **P** | | **22 48 07.1** | **-1.7** | | |
| JNE | | | | *e*SKSac | **SKSac** | | **22 58 36.3** | **+2.2** | | |
| JNE | | | | IVMs_BB | IVMs_BB | | 23 25 26.6 | | | |
| | comp=Z,2µm,3.4s | | | | | | | | | |
| **SUMG** | **Summit** | **90.85** | **2** | P | **P** | | **22 48 10.1** | **+0.7** | | |
| SUMG | | | | IAmb | IAmb | | 22 48 44.0 | | | |
| | comp=Z,236nm,1.1s | | | | | | | | | |
| **SUMG** | **Summit** | **90.85** | **2** | P | **P** | | **22 48 09.8** | **+0.4** | | |
| **SUMG** | **Summit** | **90.85** | **2** | ⇓P | **P** | | **22 48 10.3** | **+1.0** | | |
| **SUMG** | **Summit** | **90.85** | **2** | P | **P** | | **22 48 10.1** | **+0.7** | | |
| SUMG | | | | pmax | pmax | | | | | |
| | comp=Z,235nm,1.1s | | | | | | | | | |
| **SUMG** | **Summit** | **90.85** | **2** | *i* P | **P** | | **22 48 10.0** | **+0.7** | | |
| SUMG | | | | IAmb | IAmb | | 22 48 19.2 | | | |
| | comp=Z,36nm,0.8s | | | | | | | | | |
| **JMIC** | **Jan Mayen** | **90.87** | **352** | *e*P | **P** | | **22 48 11.2** | **+2.2** | | |
| JMIC | | | | IVmBBB | | | 22 48 13.6 | | | |
| | comp=Z,3µm,1.5s | | | | | | | | | |
| JMIC | | | | *e*SKSac | **SKSac** | | **22 58 36.3** | **+1.9** | | |
| JMIC | | | | IVMs_BB | IVMs_BB | | 23 22 34.2 | | | |
| | comp=Z,2µm,34.0s | | | | | | | | | |
| **JMIC** | **Jan Mayen** | **90.87** | **352** | LR | LR | | 23 33 31.2 | | | |
| | comp=Z,426nm,18.4s,baz=36,slow=38 | | | | | | | | | |
| **NUUG** | **Nuugaatsiaq** | **90.91** | **6** | *i* P | **P** | | **22 48 09.7** | **+0.6** | | |
| NUUG | | | | IAmb | IAmb | | 22 48 14.9 | | | |
| | comp=Z,47nm,1.0s | | | | | | | | | |
| **JMI** | **Jan Mayen** | **90.95** | **352** | *e*P | **P** | | **22 48 11.2** | **+1.8** | | |
| JMI | | | | *e*SKSac | **SKSac** | | **22 58 36.3** | **+1.5** | | |
| JMI | | | | IVMs_BB | IVMs_BB | | 23 23 05.2 | | | |
| | comp=Z,3µm,2.8s | | | | | | | | | |
| **RAF** | **Rauma** | **91.03** | **336** | *e*P | **P** | | **22 48 09.2** | **-0.7** | | |
| **W18A** | **Petrified Fore** | **91.12** | **53** | P | **P** | | **22 48 12.6** | **+1.4** | | |
| | baz=291 | | | | | | | | | |
| W18A | | | | S | **S** | | **22 59 03.0** | **-0.9** | | |
| | baz=291 | | | | | | | | | |
| **MVCO** | **Mesa Verde** | **91.28** | **51** | ⇑P | **P** | | **22 48 12.6** | **+0.7** | | |
| **TUC** | **Tucson** | **91.30** | **56** | P | **P** | | **22 48 13.2** | **+1.3** | | |
| TUC | | | | IAmb | IAmb | | 22 48 42.5 | | | |
| | comp=Z,512nm,1.5s | | | | | | | | | |
| **TUC** | **Tucson** | **91.30** | **56** | ⇓P | **P** | | **22 48 13.5** | **+1.6** | | |
| **TUC** | **Tucson** | **91.30** | **56** | P | **P** | | **22 48 13.2** | **+1.3** | | |
| TUC | | | | pmax | pmax | | | | | |
| | comp=Z,512nm,1.5s | | | | | | | | | |
| **ANN** | **Anapa** | **91.44** | **318** | *c* iP | **P** | | **22 48 10.4** | **-1.8** | | |
| ANN | | | | *i* *PP | **pP** | | **22 48 29.2** | **-1.1** | | |
| ANN | | | | *e* | | | 22 51 54.4 | | | |
| ANN | | | | *e*S | **SKSac** | | **22 58 35.7** | **-2.9** | | |
| ANN | | | | *i* | | | 22 58 56.9 | | | |
| ANN | | | | *e*SSS | SSS | | 23 08 49.8 | | | |
| ANN | | | | pmax | pmax | | | | | |
| | comp=N,74nm,1.2s | | | | | | | | | |
| ANN | | | | pmax | pmax | | | | | |
| | comp=Z,255nm,1.2s | | | | | | | | | |
| ANN | | | | pmax | pmax | | | | | |
| | comp=E,25nm,1.0s | | | | | | | | | |
| ANN | | | | smax | smax | | | | | |
| | comp=E,1µm,3.8s | | | | | | | | | |
| ANN | | | | smax | smax | | | | | |
| | comp=N,1µm,4.2s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=N,7µm,21.0s | | | | | | | | | |
| ANN | | | | MLR | MLR | | | | | |
| | comp=Z,8µm,22.0s | | | | | | | | | |
| **MTSE** | **Matsula** | **91.62** | **334** | *e*P | **P** | | **22 48 12.3** | **-0.3** | | |
| **RSSD** | **Black Hills** | **91.63** | **43** | P | **P** | | **22 48 13.9** | **+0.5** | | |
| RSSD | | | | IAmb | IAmb | | 22 48 46.8 | | | |
| | comp=Z,485nm,1.4s | | | | | | | | | |
| **RSSD** | **Black Hills** | **91.63** | **43** | ⇓P | **P** | | **22 48 13.8** | **+0.4** | | |
| **RSSD** | **Black Hills** | **91.63** | **43** | P | **P** | | **22 48 13.9** | **+0.5** | | |
| RSSD | | | | pmax | pmax | | | | | |
| | comp=Z,485nm,1.4s | | | | | | | | | |
| **N23A** | **Red Feather La** | **91.68** | **46** | P | **P** | | **22 48 15.5** | **+1.8** | | |
| | baz=294 | | | | | | | | | |
| N23A | | | | S | **S** | | **22 59 09.8** | **+0.8** | | |
| | baz=294 | | | | | | | | | |
| **UMMG** | **Uummannaq** | **91.85** | **6** | *i* P | **P** | | **22 48 14.1** | **+0.6** | | |
| **NSS** | **Namsos** | **91.96** | **342** | *e*P | **P** | | **22 48 13.6** | **-0.6** | | |
| NSS | | | | IVmBBB | | | 22 48 16.4 | | | |
| | comp=Z,1µm,3.1s | | | | | | | | | |
| NSS | | | | *e*SKSac | **SKSac** | | **22 58 34.3** | **-6.5** | | |
| NSS | | | | IVMs_BB | IVMs_BB | | 23 25 39.5 | | | |
| | comp=Z,2µm,26.7s | | | | | | | | | |
| **MNK** | **Minsk** | **92.17** | **329** | *i* P | **P** | | **22 48 13.4** | **-1.9** | | |
| MNK | | | | *i* *PP | **pP** | | **22 48 30.4** | **-3.0** | | |
| MNK | | | | *i* | | | 22 51 54.2 | | | |
| MNK | | | | *i* PPP | PPP | | 22 53 53.4 | | | |
| MNK | | | | *i* S | **SKSac** | | **22 58 40.8** | **-1.5** | | |
| MNK | | | | *i* *SS | **S** | | **22 59 11.3** | **-0.9** | | |
| MNK | | | | *i* PS | **PS** | | **23 00 30.4** | **-0.8** | | |
| MNK | | | | *i* SS | **SS** | | **23 05 23.9** | **+1.7** | | |
| MNK | | | | *i* SSS | SSS | | 23 09 03.1 | | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=Z,230nm,1.0s | | | | | | | | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=E,85nm,1.0s | | | | | | | | | |
| MNK | | | | pmax | pmax | | | | | |
| | comp=N,122nm,1.2s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=N,9µm,21.0s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=Z,16µm,22.0s | | | | | | | | | |
| MNK | | | | MLR | MLR | | | | | |
| | comp=E,9µm,19.0s | | | | | | | | | |
| **AAL** | **Aland** | **92.25** | **336** | *e*P | **P** | | **22 48 14.8** | **-0.8** | | |
| **S22A** | **4UR Ranch, Cre** | **92.30** | **50** | P | **P** | | **22 48 18.1** | **+1.4** | | |
| | baz=293 | | | | | | | | | |
| S22A | | | | S | **S** | | **22 59 14.8** | **0.0** | | |
| | baz=293 | | | | | | | | | |
| **SCO** | **Scoresbysund** | **92.67** | **356** | P | **P** | | **22 48 18.2** | **+0.9** | | |
| **SCO** | **Scoresbysund** | **92.67** | **356** | P | **P** | | **22 48 18.2** | **+0.9** | | |
| SCO | | | | pmax | pmax | | | | | |
| | comp=Z,86nm,1.2s | | | | | | | | | |
| **SCO** | **Scoresbysund** | **92.67** | **356** | *i* P | **P** | | **22 48 18.0** | **+0.7** | | |
| SCO | | | | IAmb | IAmb | | 22 48 25.7 | | | |
| | comp=Z,31nm,1.2s | | | | | | | | | |
| **SLIT** | **Slitere, Latvi** | **92.92** | **334** | *e*P | **P** | | **22 48 18.8** | **+0.1** | | |
| **Q24A** | **Divide** | **93.02** | **48** | P | **P** | | **22 48 21.2** | **+1.1** | | |
| | baz=294 | | | | | | | | | |
| Q24A | | | | S | **S** | | **22 59 20.7** | **-0.4** | | |
| | baz=294 | | | | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **93.23** | **312** | P | **P** | | **22 48 20.5** | **-0.3** | | |
| ARPR | | | | IAmb | IAmb | | 22 48 56.7 | | | |
| | comp=Z,277nm,1.3s | | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **93.27** | **49** | P | **P** | | **22 48 21.9** | **+0.7** | | |
| SDCO | | | | IAmb | IAmb | | 22 48 51.7 | | | |
| | comp=Z,199nm,1.5s | | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **93.27** | **49** | ⇓P | **P** | | **22 48 21.9** | **+0.8** | | |
| **RAYN** | **Ar Rayn** | **93.35** | **296** | P | **P** | | **22 48 20.5** | **-1.0** | | |
| RAYN | | | | IAmb | IAmb | | 22 48 25.1 | | | |
| | comp=Z,196nm,1.1s | | | | | | | | | |
| **RAYN** | **Ar Rayn** | **93.35** | **296** | *i* P | **P** | | **22 48 20.3** | **-1.2** | | |
| | SNR=142 | | | | | | | | | |
| **RAYN** | **Ar Rayn** | **93.35** | **296** | P | **P** | | **22 48 21.0** | **-0.6** | | |
| **RAYN** | **Ar Rayn** | **93.35** | **296** | P | **P** | | **22 48 20.9** | **-0.6** | | |
| **UPP** | **Uppsala** | **93.36** | **337** | *e*P | **P** | | **22 48 20.0** | **-0.6** | | |
| **TBLU** | **Trondheim** | **93.42** | **342** | *e*P | **P** | | **22 48 20.5** | **-0.4** | | |
| TBLU | | | | *e*SKSac | **SKSac** | | **22 58 38.4** | **-11** | | |
| TBLU | | | | IVMs_BB | IVMs_BB | | 23 29 23.4 | | | |
| | comp=Z,3µm,22.7s | | | | | | | | | |
| **PABE** | **Paberze** | **93.46** | **331** | P | **P** | | **22 48 20.2** | **-1.0** | | |
| **PABE** | **Paberze** | **93.46** | **331** | *e*P | **P** | | **22 48 21.0** | **-0.2** | | |
| **AK03** | **Malin Array Si** | **93.50** | **326** | P | **P** | | **22 48 19.7** | **-1.8** | | |
| **AKASG** | **Malin Array Be** | **93.51** | **326** | P | **P** | | **22 48 19.6** | **-2.0** | | |
| | comp=Z,6.5nm,0.7s,baz=50,slow=4.5,SNR=23 | | | | | | | | | |
| AKASG | | | | PKKPbc | **PKKPbc** | | **23 05 27.6** | **-0.9** | | |
| | comp=Z,0.8nm,0.3s,baz=260,slow=3.0,SNR=14 | | | | | | | | | |
| AKASG | | | | PKPPKP | **P'P'df** | | **23 13 37.4** | **-3.0** | | |
| | comp=Z,1.1nm,0.8s,baz=254,slow=2.1,SNR=5.6 | | | | | | | | | |
| AKASG | | | | LR | LR | | 23 33 43.8 | | | |
| | comp=Z,7µm,21.7s,baz=46,slow=38 | | | | | | | | | |
| | comp=Z,6.5nm,0.7s | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AKBB** | **Malin Array Si** | **93.51** | **326** | *c* iP | **P** | | **22 48 20.0** | **-1.6** | | |
| **AK01** | **Malin Array Si** | **93.52** | **326** | P | **P** | | **22 48 20.0** | **-1.6** | | |
| **KIEV** | **Kiev** | **93.52** | **326** | P | **P** | | **22 48 19.8** | **-1.9** | | |
| **KIEV** | **Kiev** | **93.52** | **326** | *i* P | **P** | | **22 48 19.9** | **-1.8** | | |
| | SNR=18 | | | | | | | | | |
| **KIEV** | **Kiev** | **93.52** | **326** | ⇑P | **P** | | **22 48 19.6** | **-2.0** | | |
| **KIEV** | **Kiev** | **93.52** | **326** | ⇑P | **P** | | **22 48 20.3** | **-1.3** | | |
| **KIEV** | **Kiev** | **93.52** | **326** | P | **P** | | **22 48 20.3** | **-1.3** | | |
| **AK04** | **Malin Array Si** | **93.53** | **326** | P | **P** | | **22 48 20.0** | **-1.7** | | |
| **121A** | **Cookes Peak, D** | **93.58** | **55** | P | **P** | | **22 48 24.6** | **+2.0** | | |
| | baz=292 | | | | | | | | | |
| 121A | | | | S | **S** | | **22 59 27.6** | **+1.6** | | |
| | baz=292 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **93.64** | **35** | P | **P** | | **22 48 20.7** | **-1.5** | | |
| | comp=Z,52nm,1.0s,baz=306,slow=5.6,SNR=62 | | | | | | | | | |
| ULM | | | | LR | LR | | 23 24 52.9 | | | |
| | comp=Z,3µm,21.4s,baz=312,slow=32 | | | | | | | | | |
| | comp=Z,52nm,1.0s | | | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **93.66** | **53** | P | **P** | | **22 48 24.5** | **+1.6** | | |
| | baz=293 | | | | | | | | | |
| Y22D | | | | S | **S** | | **22 59 24.2** | **-2.4** | | |
| | baz=293 | | | | | | | | | |
| **ANMO** | **Albuquerque** | **93.67** | **52** | P | **P** | | **22 48 23.6** | **+0.7** | | |
| ANMO | | | | IAmb | IAmb | | 22 48 25.9 | | | |
| | comp=Z,183nm,1.4s | | | | | | | | | |
| **ANMO** | **Albuquerque** | **93.67** | **52** | LR | LR | | 23 31 38.8 | | | |
| | comp=Z,3µm,18.0s,baz=311,slow=36 | | | | | | | | | |
| **ANMO** | **Albuquerque** | **93.67** | **52** | P | **P** | | **22 48 23.6** | **+0.7** | | |
| ANMO | | | | pmax | pmax | | | | | |
| | comp=Z,183nm,1.4s | | | | | | | | | |
| **PBUR** | **Paburge** | **94.06** | **332** | *e*P | **P** | | **22 48 22.8** | **-1.2** | | |
| **ICESG** | **Greenland Ices** | **94.30** | **2** | *i* P | **P** | | **22 48 25.0** | **-0.3** | | |
| ICESG | | | | IAmb | IAmb | | 22 48 29.6 | | | |
| | comp=Z,30nm,0.7s | | | | | | | | | |
| **T25A** | **Trinidad** | **94.31** | **49** | P | **P** | | **22 48 26.8** | **+1.0** | | |
| | baz=295 | | | | | | | | | |
| T25A | | | | S | **S** | | **22 59 29.8** | **-2.5** | | |
| | baz=295 | | | | | | | | | |
| **OGNE** | **Ogallala** | **94.34** | **45** | P | **P** | | **22 48 25.9** | **+0.1** | | |
| OGNE | | | | IAmb | IAmb | | 22 48 59.2 | | | |
| | comp=Z,432nm,1.6s | | | | | | | | | |
| **LPIG** | **La Paz** | **94.57** | **63** | LR | LR | | 23 21 56.8 | | | |
| | comp=Z,5µm,20.8s,baz=295,slow=30 | | | | | | | | | |
| **HFS** | **Hagfors** | **94.59** | **338** | P | **P** | | **22 48 25.1** | **-1.3** | | |
| | comp=Z,14nm,0.4s,baz=72,slow=4.7,SNR=80 | | | | | | | | | |
| HFS | | | | PP | **PP** | | **22 52 12.4** | **-1.9** | | |
| | comp=Z,12nm,0.7s,baz=69,slow=9.4,SNR=3.2 | | | | | | | | | |
| HFS | | | | PKKPbc | **PKKPdf** | | **23 05 24.2** | **-0.2** | | |
| | comp=Z,5.5nm,0.7s,baz=151,slow=3.3,SNR=11 | | | | | | | | | |
| HFS | | | | LR | LR | | 23 34 16.5 | | | |
| | comp=Z,7µm,20.8s,baz=40,slow=38 | | | | | | | | | |
| | comp=Z,14nm,0.4s | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **94.66** | **37** | P | **P** | | **22 48 26.7** | **-0.2** | | |
| **AGMN** | **Agassiz Nation** | **94.66** | **37** | ⇓P | **P** | | **22 48 26.9** | **0.0** | | |
| **DOMB** | **Dombas** | **94.70** | **341** | *e*P | **P** | | **22 48 26.8** | **-0.1** | | |
| DOMB | | | | IVmB_BB | | | 22 48 29.5 | | | |
| | comp=Z,928nm,2.9s | | | | | | | | | |
| DOMB | | | | *e*SKSac | **SKSac** | | **22 58 50.6** | **-5.4** | | |
| DOMB | | | | IVMs_BB | IVMs_BB | | 23 33 42.5 | | | |
| | comp=Z,3µm,20.2s | | | | | | | | | |
| **SUW** | **Suwalki** | **94.71** | **330** | *e*P | **P** | | **22 48 26.4** | **-0.6** | | |
| SUW | | | | *e*pP | **pP** | | **22 48 41.3** | **-3.8** | | |
| SUW | | | | *e*SKSac | **SKSac** | | **22 58 49.4** | **-6.9** | | |
| SUW | | | | *e*S | **SKKSac** | | **22 59 25.1** | **+6.7** | | |
| SUW | | | | *e*L | L | | 23 27 28.9 | | | |
| | comp=Z,16µm,31.7s | | | | | | | | | |
| **SUW** | **Suwalki** | **94.71** | **330** | P | **P** | | **22 48 25.5** | **-1.5** | | |
| **SUW** | **Suwalki** | **94.71** | **330** | *e*P | **P** | | **22 48 25.9** | **-1.1** | | |
| **SUW** | **Suwalki** | **94.71** | **330** | P | **P** | | **22 48 25.5** | **-1.5** | | |
| **LUBAR** | **Lubar, Ukraine** | **94.72** | **325** | P | **P** | | **22 48 25.4** | **-1.8** | | |
| **MOL** | **Molde** | **94.74** | **342** | *e*P | **P** | | **22 48 27.1** | **+0.1** | | |
| MOL | | | | IVmBBB | | | 22 48 29.9 | | | |
| | comp=Z,1µm,1.9s | | | | | | | | | |
| MOL | | | | *e*SKSac | **SKSac** | | **22 58 54.7** | **-1.4** | | |
| MOL | | | | IVMs_BB | IVMs_BB | | 23 28 55.2 | | | |
| | comp=Z,4µm,30.2s | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **94.78** | **340** | P | **P** | | **22 48 26.0** | **-1.2** | | |
| | comp=Z,32nm,1.0s,baz=46,slow=5.1 | | | | | | | | | |
| NB2 | | | | PP | **PP** | | **22 52 16.0** | **+0.2** | | |
| | comp=Z,142nm,2.0s,baz=41,slow=7.9 | | | | | | | | | |
| NB2 | | | | PKP | **PKKPdf** | | **23 05 23.8** | **-0.4** | | |
| | comp=Z,25nm,1.1s,baz=222,slow=2.7 | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **94.78** | **340** | P | **P** | | **22 48 26.0** | **-1.2** | | |
| | baz=46,slow=5.1 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **94.78** | **340** | P | **P** | | **22 48 25.2** | **-2.1** | | |
| | comp=Z,10nm,0.6s,baz=51,slow=4.2,SNR=57 | | | | | | | | | |
| NOA | | | | PP | **PP** | | **22 52 12.3** | **-3.5** | | |
| | comp=Z,12nm,0.8s,baz=39,slow=7.5,SNR=7.6 | | | | | | | | | |
| NOA | | | | PKKPbc | **PKKPdf** | | **23 05 23.4** | **-0.7** | | |
| | comp=Z,8.2nm,0.9s,baz=89,slow=3.1,SNR=9.9 | | | | | | | | | |
| NOA | | | | LR | LR | | 23 35 11.3 | | | |
| | comp=Z,3µm,20.7s,baz=30,slow=38 | | | | | | | | | |
| | comp=Z,10nm,0.6s | | | | | | | | | |
| **GAZ** | **Gaziantep** | **94.84** | **311** | P | **P** | | **22 48 26.5** | **-1.6** | | |
| **NC602** | **NORSAR Array S** | **94.89** | **340** | *e*P | **P** | | **22 48 25.7** | **-2.1** | | |
| NC602 | | | | IVmB_BB | | | 22 48 29.4 | | | |
| | comp=Z,772nm,3.0s | | | | | | | | | |
| NC602 | | | | *e*SKSac | **SKSac** | | **22 58 52.6** | **-4.4** | | |
| NC602 | | | | IVMs_BB | IVMs_BB | | 23 31 08.2 | | | |
| | comp=Z,5µm,25.6s | | | | | | | | | |
| **RNPP8** | **Varash** | **94.95** | **327** | P | **P** | | **22 48 26.5** | **-1.7** | | |
| **SLBS** | **Sierra La Lagu** | **95.02** | **64** | P | **P** | | **22 48 29.4** | **+0.1** | | |
| SLBS | | | | IAmb | IAmb | | 22 48 32.8 | | | |
| | comp=Z,378nm,1.8s | | | | | | | | | |
| **SBA** | **Scott Base** | **95.08** | **176** | P | **P** | | **22 48 29.3** | **+1.2** | | |
| SBA | | | | IAmb | IAmb | | 22 48 32.7 | | | |
| | comp=Z,202nm,1.5s | | | | | | | | | |
| **SBA** | **Scott Base** | **95.08** | **176** | P | **P** | | **22 48 29.3** | **+1.2** | | |
| SBA | | | | pmax | pmax | | | | | |
| | comp=Z,202nm,1.5s | | | | | | | | | |
| **FRB** | **Frobisher Bay** | **95.26** | **15** | LR | LR | | 23 32 32.5 | | | |
| | comp=Z,2µm,20.2s,baz=326,slow=36 | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **95.54** | **7** | P | **P** | | **22 48 30.6** | **+0.1** | | |
| SFJD | | | | IAmb | IAmb | | 22 48 54.2 | | | |
| | comp=Z,184nm,1.2s | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **95.54** | **7** | LR | LR | | 23 34 22.4 | | | |
| | comp=Z,1µm,20.1s,baz=334,slow=37 | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **95.54** | **7** | P | **P** | | **22 48 30.6** | **+0.1** | | |
| SFJD | | | | pmax | pmax | | | | | |
| | comp=Z,184nm,1.2s | | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **95.54** | **7** | *i* P | **P** | | **22 48 30.6** | **+0.1** | | |
| SFJD | | | | IAmb | IAmb | | 22 48 35.2 | | | |
| | comp=Z,36nm,0.9s | | | | | | | | | |
| **KIS** | **Kishinev** | **95.69** | **323** | *e*P | **P** | | **22 48 29.0** | **-2.6** | | |
| | comp=Z,190nm,3.4s | | | | | | | | | |
| KIS | | | | *i* SKS | **SKSac** | | **22 58 57.0** | **-4.8** | | |
| KIS | | | | *i* SKKS | **SKKSac** | | **22 59 30.0** | **+4.2** | | |
| KIS | | | | *e*L | L | | 23 28 51.0 | | | |
| KIS | | | | LRM | MLR | | 23 35 48.0 | | | |
| | comp=Z,2µm,17.5s | | | | | | | | | |
| **KIS** | **Kishinev** | **95.69** | **323** | *e*P | **P** | | **22 48 29.0** | **-2.6** | | |
| KIS | | | | *i* | | | 22 58 57.0 | | | |
| KIS | | | | pmax | pmax | | | | | |
| | comp=Z,190nm,3.4s | | | | | | | | | |
| **MILM** | **Milestii Mici** | **95.73** | **323** | *c* iP | **P** | | **22 48 29.0** | **-2.8** | | |
| MILM | | | | *i* | | | 22 58 57.0 | | | |
| MILM | | | | pmax | pmax | | | | | |
| | comp=Z,310nm,3.5s | | | | | | | | | |
| MILM | | | | MLR | MLR | | | | | |
| | comp=Z,8µm,19.0s | | | | | | | | | |
| **OSL** | **Oslo** | **95.76** | **339** | *e*P | **P** | | **22 48 31.7** | **0.0** | | |
| OSL | | | | IVmB_BB | | | 22 48 33.7 | | | |
| | comp=Z,649nm,3.0s | | | | | | | | | |
| OSL | | | | *e*SKSac | **SKSac** | | **22 58 59.5** | **-2.0** | | |
| OSL | | | | IVMs_BB | IVMs_BB | | 23 31 21.0 | | | |
| | comp=Z,4µm,25.9s | | | | | | | | | |
| **HORU** | **Horodok** | **95.84** | **325** | P | **P** | | **22 48 30.4** | **-1.9** | | |
| **SKAR** | **Skarslia** | **95.98** | **341** | *e*P | **P** | | **22 48 34.6** | **+1.8** | | |
| SKAR | | | | *e*SKSac | **SKSac** | | **22 58 59.8** | **-3.2** | | |
| SKAR | | | | IVMs_BB | IVMs_BB | | 23 31 54.3 | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **96.22** | **314** | P | **P** | | **22 48 33.0** | **-1.4** | | |
| | comp=Z,50nm,0.9s,baz=91,slow=3.0,SNR=76 | | | | | | | | | |
| BRTR | | | | PKiKP | **PKiKP** | | **22 53 14.0** | **+1.6** | | |
| | comp=Z,6.6nm,0.9s,baz=64,slow=3.4,SNR=3.6 | | | | | | | | | |
| BRTR | | | | PKKPbc | **PKKPbc** | | **23 05 19.1** | **-2.2** | | |
| | comp=Z,3.1nm,0.8s,baz=192,slow=2.9,SNR=8.7 | | | | | | | | | |
| BRTR | | | | LR | LR | | 23 36 10.7 | | | |
| | comp=Z,4µm,21.8s,baz=55,slow=38 | | | | | | | | | |
| | comp=Z,50nm,0.9s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **96.22** | **314** | *ce*P | **P** | | **22 48 33.0** | **-1.4** | | |
| BRTR | | | | pmax | pmax | | | | | |
| | comp=Z,52nm,0.9s | | | | | | | | | |
| **FOO** | **Floro** | **96.24** | **343** | *e*P | **P** | | **22 48 34.4** | **+0.7** | | |
| FOO | | | | IVmBBB | | | 22 48 38.8 | | | |
| | comp=Z,1µm,2.6s | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FOO | | | | *e*SKSac | **SKSac** | | **22 58 59.3** | **-4.7** | | |
| FOO | | | | IVMs_BB | IVMs_BB | | 23 29 10.2 | | | |
| | comp=Z,4µm,27.9s | | | | | | | | | |
| **HYA** | **Hoyanger** | **96.25** | **342** | *e*P | **P** | | **22 48 33.5** | **-0.3** | | |
| HYA | | | | IVmB_BB | | | 22 48 51.3 | | | |
| | comp=Z,2µm,1.9s | | | | | | | | | |
| HYA | | | | *e*SKSac | **SKSac** | | **22 58 59.1** | **-5.0** | | |
| HYA | | | | IVMs_BB | IVMs_BB | | 23 30 32.6 | | | |
| | comp=Z,3µm,27.4s | | | | | | | | | |
| **KIRS** | **Kirsehir-Merke** | **96.31** | **314** | ⇑P | **P** | | **22 48 33.4** | **-1.3** | | |
| **KONO** | **Kongsberg** | **96.35** | **340** | *e*P | **P** | | **22 48 35.5** | **+1.1** | | |
| KONO | | | | IVmB_BB | | | 22 48 36.0 | | | |
| | comp=Z,971nm,3.4s | | | | | | | | | |
| KONO | | | | *e*SKSac | **SKSac** | | **22 58 58.2** | **-6.5** | | |
| KONO | | | | IVMs_BB | IVMs_BB | | 23 30 02.0 | | | |
| | comp=Z,3µm,27.0s | | | | | | | | | |
| **VHRN** | **Van Horn** | **96.46** | **55** | P | **P** | | **22 48 35.7** | **0.0** | | |
| VHRN | | | | IAmb | IAmb | | 22 49 05.8 | | | |
| | comp=Z,255nm,1.7s | | | | | | | | | |
| **DY2G** | **Dye2** | **96.48** | **5** | *i* P | **P** | | **22 48 36.0** | **+0.8** | | |
| **ECSD** | **EROS Data Cent** | **96.56** | **41** | P | **P** | | **22 48 35.1** | **-0.6** | | |
| ECSD | | | | IAmb | IAmb | | 22 49 08.3 | | | |
| | comp=Z,124nm,1.2s | | | | | | | | | |
| **VLDR** | **Vladesti** | **96.73** | **322** | ⇓P | **P** | | **22 48 35.6** | **-0.7** | | |
| **ANTO** | **Ankara** | **96.73** | **315** | P | **P** | | **22 48 35.6** | **-1.1** | | |
| ANTO | | | | IAmb | IAmb | | 22 48 39.4 | | | |
| | comp=Z,109nm,1.2s | | | | | | | | | |
| **ANTO** | **Ankara** | **96.73** | **315** | ⇑P | **P** | | **22 48 37.2** | **+0.5** | | |
| **ANTO** | **Ankara** | **96.73** | **315** | P | **P** | | **22 48 37.1** | **+0.5** | | |
| **SUE** | **Sulen** | **96.75** | **342** | *e*P | **P** | | **22 48 38.5** | **+2.4** | | |
| SUE | | | | IVmB_BB | | | 22 48 53.6 | | | |
| | comp=Z,2µm,2.5s | | | | | | | | | |
| SUE | | | | *e*SKSac | **SKSac** | | **22 59 04.0** | **-2.7** | | |
| SUE | | | | *e*SS | **SS** | | **23 06 28.8** | **+2.0** | | |
| SUE | | | | IVMs_BB | IVMs_BB | | 23 29 08.0 | | | |
| | comp=Z,4µm,32.0s | | | | | | | | | |
| **LVV** | **L'vov** | **96.77** | **327** | *e*P | **P** | | **22 48 36.4** | **-0.1** | | |
| LVV | | | | *e*PPP | PPP | | 22 54 45.8 | | | |
| LVV | | | | *e* | | | 22 59 01.9 | | | |
| LVV | | | | *e*S | **S** | | **22 59 51.4** | **-1.2** | | |
| LVV | | | | *e*PS | **PS** | | **23 01 30.6** | **+8.7** | | |
| LVV | | | | pmax | pmax | | | | | |
| | comp=Z,120nm,1.8s | | | | | | | | | |
| LVV | | | | MLR | MLR | | | | | |
| | comp=N,3µm,22.0s | | | | | | | | | |
| LVV | | | | MLR | MLR | | | | | |
| | comp=E,4µm,22.0s | | | | | | | | | |
| LVV | | | | MLR | MLR | | | | | |
| | comp=Z,9µm,23.0s | | | | | | | | | |
| **MSTX** | **Muleshoe** | **96.85** | **52** | P | **P** | | **22 48 37.4** | **0.0** | | |
| **TPGR** | **Topolog** | **97.05** | **321** | ⇑P | **P** | | **22 48 36.9** | **-1.0** | | |
| **CFR** | **Carcaliu** | **97.05** | **321** | ⇓P | **P** | | **22 48 37.0** | **-0.9** | | |
| **CFR** | **Carcaliu** | **97.05** | **321** | P | **P** | | **22 48 36.9** | **-0.9** | | |
| **ASK** | **Askoy** | **97.09** | **342** | *e*P | Pdif | | 22 48 39.8 | +2.0 | | |
| **ODD1** | **Odda** | **97.11** | **341** | *e*P | Pdif | | 22 48 39.4 | +1.4 | | |
| ODD1 | | | | IVmB_BB | | | 22 49 10.7 | | | |
| | comp=Z,1µm,2.6s | | | | | | | | | |
| ODD1 | | | | *e*PP | **PP** | | **22 52 34.9** | **+1.1** | | |
| ODD1 | | | | *e*SKSac | **SKSac** | | **22 59 10.1** | **+1.3** | | |
| ODD1 | | | | IVMs_BB | IVMs_BB | | 23 31 16.2 | | | |
| | comp=Z,3µm,24.9s | | | | | | | | | |
| **BER** | **Bergen** | **97.13** | **342** | *e*P | Pdif | | 22 48 38.9 | +1.0 | | |
| BER | | | | IVmB_BB | | | 22 48 51.9 | | | |
| | comp=Z,830nm,3.8s | | | | | | | | | |
| BER | | | | *e*PP | **PP** | | **22 52 36.4** | **+2.6** | | |
| BER | | | | *e*SKSac | **SKSac** | | **22 59 05.8** | **-2.9** | | |
| BER | | | | *e*SS | **SS** | | **23 06 31.0** | **-1.1** | | |
| BER | | | | IVMs_BB | IVMs_BB | | 23 30 58.5 | | | |
| | comp=Z,3µm,28.9s | | | | | | | | | |
| **DEL** | **Delary** | **97.14** | **336** | *e*P | **P** | | **22 48 37.4** | **-0.6** | | |
| **DEL** | **Delary** | **97.14** | **336** | *i* P | **P** | | **22 48 36.0** | **-2.0** | | |
| **ASF** | **Jabal al Asfar** | **97.17** | **307** | LR | LR | | 23 39 36.2 | | | |
| | comp=Z,981nm,18.6s,baz=333,slow=40 | | | | | | | | | |
| **BEL** | **Belsk** | **97.19** | **330** | *e*P | **P** | | **22 48 36.8** | **-1.5** | | |
| BEL | | | | *e*pP | **pP** | | **22 48 55.0** | **-1.6** | | |
| BEL | | | | *e*SKSac | **SKSac** | | **22 59 07.0** | **-2.4** | | |
| BEL | | | | *e*L | L | | 23 27 51.8 | | | |
| | comp=Z,14µm

**MLR Muntele Rosu 98.18 322** LR LR 23 35 50.7
comp=Z,8µm,20.8s,baz=61,slow=37
**MLR Muntele Rosu 98.18 322** ⇑P **P** **22 48 42.9 -0.2**
**MLR Muntele Rosu 98.18 322** P **P** **22 48 42.9 -0.2**
**ARCR ARCALIA 98.19 324** ⇓P **P** **22 48 42.8 -0.1**
**KOLS Kolonicke sedl 98.22 327** *i* P **P** **22 48 41.8 -1.3**
**KOLS Kolonicke sedl 98.22 327** *e*PDIFF **P** **22 48 41.8 -1.3**
**DOPR Dopca 98.23 323** ⇓P **P** **22 48 43.1 -0.1**
**COP Copenhagen 98.26 336** *i* P **P** **22 48 42.3 -0.8**
**BORG Borgarnes 98.28 355** LR LR 23 33 10.2
comp=Z,829nm,20.6s,baz=13,slow=35
**BMR Baia Mare 98.32 325** ⇓P **P** **22 48 43.2 -0.3**
**BMR Baia Mare 98.32 325** P **P** **22 48 43.2 -0.3**
**GOET G??ttrup 98.46 338** *i* P **P** **22 48 42.5 -1.4**
GOET IAmb IAmb 22 48 47.5
comp=Z,21nm,0.7s
GOET *i* 22 52 39.4
**GHAJ Ghor Haditha 98.57 306** P **P** **22 48 43.4 -1.5**
**CSS Mathiatis 98.63 310** P **P** **22 48 42.8 -2.4**
**OK038 West end E0370 98.67 48** P Pdif 22 48 45.6 +0.2
**OJC Ojcow 98.69 329** *e*P **P** **22 48 43.7 -1.5**
OJC *e*SKSac **SKSac** **22 59 13.2 -3.9**
OJC *e*L L 23 28 19.9
comp=Z,10µm,32.8s
**OJC Ojcow 98.69 329** P **P** **22 48 43.9 -1.3**
**OJC Ojcow 98.69 329** P **P** **22 48 43.9 -1.3**
OJC pmax pmax
comp=Z,54nm,1.4s
**CBBR Cluj-Babes-Bol 98.82 324** ⇑P **P** **22 48 44.8 -1.0**
**CJR Cluj-Napoca 98.82 324** ⇑P **P** **22 48 44.9 -1.0**
**CJR Cluj-Napoca 98.82 324** P **P** **22 48 44.8 -1.0**
**MUD Monsted U'grnd 98.92 338** *i* P **P** **22 48 43.0 -3.0**
MUD *i* 22 52 46.0
**NIE Niedzica 98.95 328** *e*P Pdif 22 48 47.7 +1.3
NIE *e*SKSac **SKSac** **22 59 14.2 -4.4**
NIE *e*L L 23 35 39.9
comp=Z,8µm,22.6s
**ARR Arges 99.01 323** ⇑P 22 48 45.8
**HUMR Humele 99.28 322** ⇓P **Pdif** **22 48 46.6 -1.3**
**SZH Strazhitsa 99.39 321** *i* P **Pdif** **22 48 46.9 -1.5**
**LOT Lotru 99.46 323** ⇑P **Pdif** **22 48 49.2 +0.3**
**JMB Yambol 99.47 320** ⇑*i*P **Pdif** **22 48 48.2 -0.6**
**LANS Liptovska Anna 99.54 328** *i* P **Pdif** **22 48 49.0 0.0**
**LANS Liptovska Anna 99.54 328** *e*PDIFF **Pdif** **22 48 49.0 0.0**
**LANS Liptovska Anna 99.54 328** *e* 23 05 14.0
**ELND Elena 99.64 320** ⇓P **Pdif** **22 48 48.5 -1.1**
**EIL Elat 99.75 305** LR LR 23 39 05.7
comp=Z,2µm,20.1s,baz=72,slow=38
**ATD Arta Tunnel 99.75 285** LR LR 23 35 29.0
comp=Z,30nm,20.0s,baz=66,slow=36
**OKC Ostrava-Krasne 99.76 329** *e*SKS **SKSac** **22 59 20.1 -2.3**
OKC AMS AMS 23 38 40.0
comp=Z,9µm,17.6s
**KSP Ksiaz 99.98 331** *e*P **Pdif** **22 48 48.6 -2.3**
KSP *ep*P **pP** **22 49 06.1 -3.0**
KSP *e*SKSac **SKSac** **22 59 20.7 -2.8**
KSP *e*L L 23 31 01.1
comp=Z,13µm,29.6s
**RUE Ruedersdorf 99.99 333** *e*P **Pdif** **22 48 50.5 -0.4**
**GZR Gura Zlata 100.06 324** ⇑P **Pdif** **22 48 50.5 -1.0**
**GZR Gura Zlata 100.06 324** P **Pdif** **22 48 50.4 -1.0**
**MORC Moravsky Berou 100.09 329** ⇑P **Pdif** **22 48 50.5 -1.0**
**MORC Moravsky Berou 100.09 329** P **Pdif** **22 48 50.5 -1.0**
**SIRR Siria 100.17 325** ⇑P **Pdif** **22 48 51.5 -0.3**
**OSTC Ostas 100.21 331** *e*PDIFF **Pdif** **22 48 51.7 -0.2**
OSTC *e*SKS **SKSac** **22 59 22.9 -1.8**
OSTC AMS AMS 23 35 10.0
comp=Z,9µm,22.2s
**OSTC Ostas 100.21 331** *i* P **Pdif** **22 48 51.7 -0.2**
OSTC *e* 22 59 22.9
OSTC MLR MLR
comp=Z,9µm,22.2s
**SURR Surduc 100.22 324** ⇓P **Pdif** **22 48 51.4 -0.7**
**KRLC Kraliky 100.27 330** *e*sP sP 22 49 15.2 -2.4
KRLC *e*PKKP **PKKPbc** **23 05 10.7 +0.4**
**CHVC Chvalec 100.27 331** AMS AMS 23 36 10.0
comp=Z,9µm,20.0s
**VYHS Vyhne 100.28 328** *i* P **Pdif** **22 48 51.6 -0.7**
**VYHS Vyhne 100.28 328** *e*PDIFF **Pdif** **22 48 51.6 -0.7**
**VYHS Vyhne 100.28 328** *e* 23 05 10.4
**DPC Dobruska-Polom 100.30 330** *e*PDIFF **Pdif** **22 48 51.7 -0.7**
DPC *e*SKS **SKSac** **22 59 21.6 -3.6**
DPC AMS AMS 23 35 10.0
comp=Z,10µm,24.2s
**DPC Dobruska-Polom 100.30 330** *i* P **Pdif** **22 48 51.7 -0.7**
DPC *e* 22 59 21.6
DPC MLR MLR
comp=Z,10µm,24.2s
**UPC Upice 100.34 331** AMS AMS 23 34 10.0
comp=Z,10µm,23.8s
**BSEG Bad Segeberg 100.38 336** *e*Pdiff **Pdif** **22 48 52.2 -0.3**
baz=44,slow=4.4
**HERR Herculane 100.57 323** ⇑P **Pdif** **22 48 53.2 -0.4**
**JAVC Velka Javorina 100.63 329** *e*PDIFF **Pdif** **22 48 55.4 +1.5**
**VALD Valchedram 100.68 322** *i* P **Pdif** **22 48 55.2 +1.1**
**KDZ Kurdzhali 100.69 319** ⇑*i*P **Pdif** **22 48 52.4 -1.8**
**MPEP Malo Peshtene 100.69 322** *i* P **Pdif** **22 48 53.7 -0.5**
**PVCC Panska Ves 101.00 331** *e*SKS **SKSac** **22 59 23.5 -5.0**
**RZN Rozhen 101.03 320** ⇑*i*P **Pdif** **22 48 55.4 -0.6**
**MDVR Moldovita 101.03 324** ⇓P **Pdif** **22 48 55.2 -0.5**
**BRG Berggiesshubel 101.05 332** SP SP 23 02 11.0 +12
BRG PKKP 23 05 08.4
BRG Amp 23 05 10.5
comp=Z,8.5nm,0.9s
**BRG Berggiesshubel 101.05 332** SS SS 23 07 19.0 -8.4
**BRG Berggiesshubel 101.05 332** *e*Pdiff **Pdif** **22 48 55.2 -0.4**
baz=44,slow=4.4
BRG *e*PKKPbc **PKKPbc** **23 05 08.3 +0.3**
baz=220,slow=3.0
**BRG Berggiesshubel 101.05 332** ⇓*e*Pif **Pdif** **22 48 55.2 -0.4**
**BRG Berggiesshubel 101.05 332** Amp 22 48 58.8
comp=Z,10nm,1.0s
**BRG Berggiesshubel 101.05 332** ⇓pPif 22 49 13.4
**BRG Berggiesshubel 101.05 332** Amp 22 49 15.6
comp=Z,38nm,1.6s
**BRG Berggiesshubel 101.05 332** ⇓sPif 22 49 21.9
**BRG Berggiesshubel 101.05 332** Amp 22 49 24.7
comp=Z,84nm,1.6s
**CLL Collm 101.16 332** *e*P **Pdif** **22 48 55.0 -1.1**
CLL *e* 22 59 25.0
CLL *e*S **Sdif** **23 00 24.0 -5.5**
CLL pmax pmax
comp=Z,39nm,1.5s
**CLL Collm 101.16 332** *e*Pdiff **Pdif** **22 48 55.5 -0.6**
baz=44,slow=4.4
CLL *e*PKKPbc **PKKPbc** **23 05 07.8 +0.1**
baz=220,slow=3.0
**FLTG Flechtingen 101.19 334** *e*Pdiff **Pdif** **22 48 55.4 -0.7**
baz=44,slow=4.4
**RICC Richard 101.20 331** AMS AMS 23 33 30.0
comp=Z,8µm,24.1s
**GOPC GO Pecny, Ondr 101.32 331** *e*PDIFF **Pdif** **22 48 55.8 -1.1**
GOPC AMS AMS 23 39 50.0
comp=Z,7µm,17.4s
**GOPC GO Pecny, Ondr 101.32 331** *i* P **Pdif** **22 48 55.8 -1.1**
GOPC MLR MLR
comp=Z,7µm,17.4s
**PRA Prague 101.38 331** *e*PDIFF **Pdif** **22 48 56.7 -0.4**
PRA *e*SKS **SKSac** **22 59 27.1 -3.2**
PRA AMS AMS 23 40 00.0
comp=Z,6µm,18.1s
**PRA Prague 101.38 331** *i* P **Pdif** **22 48 56.7 -0.4**
PRA *e* 22 59 27.1
PRA MLR MLR
comp=Z,6µm,18.1s
**PLNA Plana 101.39 321** *i* P **Pdif** **22 48 58.0 +0.5**
**PRU Pruhonice 101.39 331** *e*PDIFF **Pdif** **22 48 56.2 -0.9**
PRU *e*SKS **SKSac** **22 59 27.0 -3.4**
PRU *e*PKKP **PKKPbc** **23 05 07.8 +0.7**
PRU AMS AMS 23 39 40.0
comp=Z,6µm,17.3s
**PRU Pruhonice 101.39 331** *i* P **Pdif** **22 48 56.2 -0.9**
PRU *e* 22 59 27.0
PRU MLR MLR
comp=Z,6µm,17.3s
**TREC Trest 101.41 330** *e*SKS **SKSac** **22 59 27.0 -3.6**
TREC AMS AMS 23 36 20.0
comp=Z,12µm,22.7s
**VTS Vitosha 101.42 321** ⇑*i*P **Pdif** **22 48 57.6 -0.1**
**HSKC Hora Svate Kat 101.47 332** *e*PDIFF **Pdif** **22 48 56.3 -1.2**
HSKC AMS AMS 23 37 20.0
comp=Z,8µm,20.1s
**NRDL Niedersach Rie 101.53 335** *e*PP **PP** **22 53 05.6 -1.9**
baz=46,slow=8.3
NRDL *e*PKKPbc **PKKPbc** **23 05 07.5 +0.9**
baz=220,slow=3.0
**RETH Rethem/Aller, 101.66 335** *e*PKKPbc PKKPbc 23 05 07.3 +1.0
baz=220,slow=3.0
**MMB Musomishta 101.72 320** ⇑*i*P **Pdif** **22 48 58.4 -0.5**
**NEUB Neuenburg 101.77 333** *e*Pdiff **Pdif** **22 48 58.6 -0.2**
baz=44,slow=4.4
NEUB *e*PKKPbc **PKKPbc** **23 05 06.4 +0.5**
baz=220,slow=3.0
**MORH Mrgy, Hungar 101.84 326** ⇑P **Pdif** **22 48 58.7 -0.5**
**833A Chaparral WMA, 101.91 56** Pdiff **Pdif** **22 49 00.9 +1.0**
baz=296
**ZVC Zvikov 101.93 331** *e*PDIFF **Pdif** **22 48 59.0 -0.6**
ZVC *e*SKS **SKSac** **22 59 29.9 -3.1**
ZVC AMS AMS 23 40 10.0
comp=Z,7µm,17.3s
**KKB Krupnik 101.93 321** ⇑*i*P **Pdif** **22 48 59.7 -0.1**
**TANN Tannenbergstha 102.04 332** *e*PKKPbc PKKPbc 23 05 05.7 +0.4
baz=220,slow=3.0
**RONA Rosalia, Austr 102.09 328** *i* Pdiff **Pdif** **22 49 00.3 -0.1**
SNR=7.3
RONA *i* PP **PP** **22 53 14.5 +2.5**
comp=Z,24nm,1.3s
RONA *e*PKKP **PKKPbc** **23 05 04.7 -0.3**
comp=Z,5.1nm,1.2s,SNR=5.2
RONA *i* P'P' 23 13 22.7
comp=Z,6.6nm,1.9s
**PLN Plauen 102.12 332** *e*Pdiff **Pdif** **22 49 00.4 -0.1**
baz=44,slow=4.4
PLN *e*PP **PP** **22 53 10.6 -1.5**
baz=46,slow=8.3
PLN *e*PKKPbc **PKKPbc** **23 05 05.1 +0.2**
baz=220,slow=3.0
**CONA Conrad Observa 102.15 329** *i* Pdiff **Pdif** **22 49 00.3 -0.4**
comp=Z,25nm,1.4s,SNR=15
CONA *i* PP **PP** **22 53 12.6 +0.1**
comp=Z,40nm,1.4s
CONA *i* PKKP **PKKPbc** **23 05 03.3 -1.6**
comp=Z,14nm,1.6s
CONA *i* P'P' 23 13 23.7
comp=Z,7.9nm,1.7s
**435B Jarrell 102.19 53** Pdiff **Pdif** **22 49 01.2 +0.1**
baz=298
**MOX Moxa 102.25 333** *e*PP **PP** **22 53 11.3 -1.7**
baz=46,slow=8.3
MOX *e*PKKPbc **PKKPbc** **23 05 05.0 +0.4**
baz=220,slow=3.0
MOX *e*L L 23 39 11.5
comp=Z,8µm,21.9s
**CKRC Cesky Krumlov 102.30 330** *e*PDIFF **Pdif** **22 49 00.2 -1.1**
CKRC *e*SKS **SKSac** **22 59 31.5 -3.3**
CKRC *e*PKKP **PKKPbc** **23 05 04.2 -0.2**
CKRC AMS AMS 23 37 10.0
comp=Z,10µm,23.4s
**CKRC Cesky Krumlov 102.30 330** *i* P **Pdif** **22 49 00.2 -1.1**
CKRC *e* 22 59 31.5
CKRC MLR MLR
comp=Z,10µm,23.4s
**KHC Kasperske Hory 102.43 331** *e*PDIFF **Pdif** **22 49 01.5 -0.4**
KHC *ep*P **pPdif** **22 49 19.7 -0.4**
KHC *e*PP **PP** **22 53 16.0 +1.5**
KHC *e*SKS **SKSac** **22 59 32.7 -2.8**
KHC *e*PKKP **PKKPbc** **23 05 02.8 -1.3**
KHC AMS AMS 23 36 50.0
comp=Z,6µm,22.3s
**KHC Kasperske Hory 102.43 331** *i* P **Pdif** **22 49 01.5 -0.4**
KHC *e* 22 53 16.0
KHC *e* 22 59 32.7
KHC MLR MLR
comp=Z,6µm,22.3s
**MANZ Manzenberg 102.50 332** *e*PP **PP** **22 53 13.3 -1.7**
baz=46,slow=8.3
MANZ *e*PKKPbc **PKKPbc** **23 05 03.9 +0.1**
baz=220,slow=3.0
**GEC2 GERESS Array S 102.57 330** *e*Pdiff **Pdif** **22 49 01.4 -1.2**
baz=44,slow=4.4
**GERES GERESS Array B 102.57 330** P **Pdif** **22 49 01.7 -0.9**
comp=Z,3.3nm,0.8s,baz=41,slow=5.2,SNR=12
GERES PP **PP** **22 53 16.2 +0.5**
comp=Z,6.0nm,0.8s,baz=31,slow=10,SNR=6.7
GERES PKKPbc **PKKPbc** **23 05 02.4 -1.3**
comp=Z,8.7nm,0.9s,baz=197,slow=2.8,SNR=17
**VAY Valandovo 102.58 320** *i* P **Pdif** **22 49 03.1 +0.5**
**STIP Stip 102.59 321** *i* P **Pdif** **22 49 00.7 -2.0**
**ROTZ Rotzenmuhle 102.62 332** *e*PP **PP** **22 53 13.6 -2.2**
baz=46,slow=8.3
**L44A Lake County Fo 102.74 38** Pdiff **Pdif** **22 49 03.0 -0.3**
baz=307
**WET Wettzell 102.75 331** *e*PKKPbc PKKPbc 23 05 03.0 -0.1
baz=220,slow=3.0
**ARSA Arzberg 102.78 328** *i* Pdiff **Pdif** **22 49 03.0 -0.4**
comp=Z,18nm,1.3s,SNR=6.7
ARSA *i* PP **PP** **22 53 17.0 -0.1**
comp=Z,30nm,1.6s
ARSA *i* PKKP **PKKPbc** **23 05 03.1 +0.1**
comp=Z,13nm,1.3s
ARSA *e*P'P' 23 13 21.6
comp=Z,3.3nm,1.0s
**UBBA Unterbreizbach 102.82 334** *e*PP **PP** **22 53 17.6 +0.5**
baz=46,slow=8.3
**MOA Molln 102.99 329** *i* Pdiff **Pdif** **22 49 04.3 -0.1**
comp=Z,20nm,1.7s,SNR=7.2
MOA *i* PP **PP** **22 53 20.3 +1.6**
comp=Z,22nm,1.3s
MOA *i* PKKP **PKKPbc** **23 05 01.4 -0.9**
comp=Z,15nm,0.8s,SNR=6.7
**MAW Mawson 103.01 203** Pdiff **Pdif** **22 49 03.8 0.0**
comp=Z,27nm,1.1s,baz=77,slow=6.3,SNR=33
MAW PKKPbc **PKKPbc** **23 05 01.3 -1.8**
comp=Z,6.4nm,1.0s,baz=235,slow=5.1,SNR=5.9
**GRF Grafenberg Arr 103.11 332** *e*Pdiff **Pdif** **22 49 03.6 -1.3**
baz=44,slow=4.4
GRF *e*PP **PP** **22 53 18.4 -1.2**
baz=46,slow=8.3
GRF *e*L L 23 39 39.3
comp=Z,6µm,21.0s
**KASTN Kahler Asten 103.20 335** *e*Pdiff **Pdif** **22 49 04.3 -0.9**
baz=44,slow=4.4
**SCHQ Schefferville 103.21 19** PP **PP** **22 53 20.6 +0.6**
comp=Z,16nm,1.0s,baz=327,slow=8.0,SNR=6.3
SCHQ PKKPbc **PKKPbc** **23 04 59.8 -2.2**
comp=Z,4.8nm,0.6s,baz=174,slow=4.2,SNR=6.8
**BIOA Bad Ischl, Aus 103.41 330** *i* Pdiff **Pdif** **22 49 07.0 +0.8**
SNR=5.5
BIOA *e*PP **PP** **22 53 19.0 -2.8**
comp=Z,21nm,1.6s
BIOA *i* PKKP **PKKPbc** **23 05 00.4 -0.7**
comp=Z,4.2nm,0.9s
BIOA *i* P'P' 23 13 18.2
comp=Z,6.0nm,1.2s
**SOKA Soboth 103.41 328** *i* Pdiff **Pdif** **22 49 06.0 -0.4**
comp=Z,18nm,1.3s,SNR=12
SOKA *i* PP **PP** **22 53 22.4 +0.4**
comp=Z,19nm,1.4s
SOKA *i* PKKP **PKKPbc** **23 05 01.4 +0.3**
comp=Z,7.9nm,1.0s
SOKA *i* P'P' 23 13 21.1
comp=Z,4.3nm,1.3s
**OBKA Obir 103.77 328** *i* Pdiff **Pdif** **22 49 07.4 -0.6**
comp=Z,3.8nm,0.9s
OBKA *e*PKiKP **PP** **22 53 24.4 -0.2**
comp=Z,75nm,1.7s
OBKA *i* PKKP **PKKPbc** **23 05 00.6 +0.6**
comp=Z,13nm,1.1s
OBKA *e*P'P' 23 13 20.4
comp=Z,10nm,1.4s
**OHR Ohrid 103.78 321** *i* P **Pdif** **22 49 08.8 +0.7**
**RJOB Jochberg 103.78 330** *e*Pdiff **Pdif** **22 49 07.6 -0.3**
baz=44,slow=4.4
RJOB *e*PKKPbc **PKKPbc** **23 05 00.1 0.0**
baz=220,slow=3.0
**EKA Eskdalemuir Ar 103.84 343** Pdiff **Pdif** **22 49 07.2 -0.7**
comp=Z,1.6nm,0.6s,baz=23,slow=4.0,SNR=5.8
EKA PKiKP **PP** **22 53 22.9 -1.7**
comp=Z,13nm,0.8s,baz=32,slow=6.1,SNR=10
EKA PKKPbc **PKKPbc** **23 04 58.3 -1.7**
comp=Z,8.2nm,0.9s,baz=218,slow=4.2,SNR=7.7
**TNS Taunus Mts 103.93 334** *e*PKKPbc PKKPbc 23 05 00.3 +0.5
baz=220,slow=3.0
**KBA Koelnbreinsper 103.98 329** *i* Pdiff **Pdif** **22 49 08.3 -0.7**
comp=Z,4.9nm,1.2s
KBA *i* PKiKP **PKiKP** **22 53 25.3 -0.8**
comp=Z,60nm,1.2s
KBA *e*PKKP **PKKPbc** **23 04 59.3 -0.3**
comp=Z,7.2nm,0.6s
KBA *e*P'P' 23 13 19.0
comp=Z,8.8nm,1.4s
**LESA Schwarzleotal 104.06 330** *i* Pdiff **Pdif** **22 49 08.0 -1.2**
comp=Z,11nm,1.2s
LESA *e*PKiKP **PP** **22 53 27.5 +0.8**
comp=Z,64nm,1.4s
LESA *i* PKKP **PKKPbc** **23 04 58.4 -0.9**
comp=Z,10nm,0.8s
LESA *e*P'P' 23 13 15.6
comp=Z,5.1nm,1.6s
**MYKA Terra Mystica 104.14 329** *i* Pdiff **Pdif** **22 49 10.3 +0.7**
comp=Z,5.5nm,1.0s
MYKA *i* PP **PKiKP** **22 53 25.2 -1.1**
comp=Z,14nm,1.2s
MYKA *i* PKKP **PKKPbc** **23 04 59.2 +0.2**
comp=Z,11nm,0.8s,SNR=7.9
MYKA *i* P'P' 23 13 14.1
comp=Z,4.6nm,1.1s
**FUR Furstenfeldbru 104.19 331** *e*Pdiff **Pdif** **22 49 09.7 0.0**
baz=44,slow=4.4
FUR *e*PP **PP** **22 53 26.9 -0.7**
baz=46,slow=8.3
**AHRW Bad Neuenahr-A 104.25 335** *e*PP **PP** **22 53 28.5 +0.6**
baz=46,slow=8.3
**BTNL Ternell 104.60 335** *d*Pdif **Pdif** **22 49 13.3 +1.8**
BTNL *d*PP **PP** **22 53 30.6 +0.1**
**BEBN Eben Emael 104.62 336** *d*PP **PP** **22 53 31.0 +0.4**
**ABTA Abfaltersbach 104.62 329** *i* Pdiff **Pdif** **22 49 11.4 -0.3**
comp=Z,5.6nm,1.2s
ABTA *e*PKiKP **PKiKP** **22 53 28.0 +0.8**
comp=Z,9.7nm,1.1s
ABTA *i* PKKP **PKKPbc** **23 04 57.7 +0.1**
comp=Z,12nm,0.9s,SNR=6.8
ABTA *i* P'P' 23 13 16.6
comp=Z,8.9nm,1.7s
**MEM Membach 104.63 335** *d*Pdif **Pdif** **22 49 13.9 +2.3**
MEM *d*PP **PP** **22 53 33.3 +2.6**
**WATA Walderalm 104.65 330** *i* Pdiff **Pdif** **22 49 10.9 -1.0**
comp=Z,2.6nm,0.9s
WATA *i* PP **PP** **22 53 30.0 -1.1**
comp=Z,23nm,1.6s
WATA *i* PKKP **PKKPbc** **23 04 57.7 +0.1**
WATA *e*P'P' 23 13 16.6
comp=Z,10.0nm,1.5s
**WTTA Wattenberg 104.67 330** *i* Pdiff **Pdif** **22 49 12.7 +0.6**
comp=Z,5.6nm,1.4s
WTTA *i* PP **PKiKP** **22 53 28.8 +1.3**
comp=Z,19nm,1.2s
WTTA *i* PKKP **PKKPbc** **23 04 56.9 -0.7**
comp=Z,12nm,1.1s,SNR=4.9
WTTA *e*P'P' 23 13 16.1
comp=Z,14nm,1.8s
**BSTI Sart Tilman 104.83 336** *d*Pdif **Pdif** **22 49 11.6 -0.8**
BSTI *d*PP **PP** **22 53 32.3 +0.2**
**BHOU Houvegnez 104.83 335** *d*Pdif **Pdif** **22 49 15.0 +2.5**
BHOU *d*PP **PP** **22 53 35.0 +2.8**
**MOTA Moosalm 104.87 331** *i* Pdiff **Pdif** **22 49 12.3 -0.6**
comp=Z,10.0nm,1.3s
MOTA *i* PP **PP** **22 53 30.3 -2.5**
comp=Z,14nm,1.2s
MOTA *i* PKKP **PKKPbc** **23 04 56.9 0.0**
comp=Z,20nm,1.3s
MOTA *i* P'P' 23 13 16.2
comp=Z,7.5nm,1.4s
**SQTA Sankt Quirin 104.91 330** *i* Pdiff **Pdif** **22 49 12.3 -0.8**
comp=Z,6.6nm,1.3s
SQTA *i* PP **PP** **22 53 31.9 -1.2**
comp=Z,15nm,1.5s
SQTA *i* PKKP **PKKPbc** **23 04 56.9 +0.1**
comp=Z,17nm,1.0s,SNR=5.8
SQTA *e*P'P' 23 13 16.3
comp=Z,7.6nm,1.4s
**RETA Reutte 104.92 331** *i* Pdiff **Pdif** **22 49 13.1 +0.1**
comp=Z,5.6nm,1.2s
RETA *i* PKiKP **PKiKP** **22 53 26.4 -1.3**
comp=Z,13nm,1.3s
RETA *i* PKKP **PKKPbc** **23 04 56.8 +0.1**
comp=Z,23nm,1.3s,SNR=4.8
RETA *i* P'P' 23 13 16.5
comp=Z,7.6nm,1.6s
**BCLA Clavier 105.06 336** *d*Pdif **Pdif** **22 49 12.9 -0.5**
BCLA *d*PP **PP** **22 53 34.6 +0.8**
**UBR Ueberruh 105.09 331** *e*PKKPbc PKKPbc 23 04 56.5 +0.3
baz=220,slow=3.0
**BGES Gesves 105.17 336** *d*Pdif **Pdif** **22 49 18.3 +4.3**
BGES *d*PKiKP **PKiKP** **22 53 28.1 +0.1**
**FETA Feichten 105.28 331** *i* Pdiff **Pdif** **22 49 16.6 +1.8**
comp=Z,6.2nm,1.0s
FETA *e*PKiKP **PKiKP** **22 53 26.4 -2.1**
comp=Z,9.1nm,1.4s
FETA *i* PKKP **PKKPbc** **23 04 55.8 +0.1**
comp=Z,18nm,1.1s,SNR=4.5
**RCHB Rochefort 105.30 336** *d*Pdif **Pdif** **22 49 14.1 -0.4**
RCHB *d*PP **PP** **22 53 37.0 +1.3**
**WLF Walferdange 105.31 335** P **Pdif** **22 49 14.5 -0.1**
**WLF Walferdange 105.31 335** *d*Pdif **Pdif** **22 49 14.5 -0.1**
**WLF Walferdange 105.31 335** *e*PKKPbc PKKPbc 23 04 56.0 +0.5
baz=220,slow=3.0
**BMRD Maredsous 105.36 336** *d*Pdif **Pdif** **22 49 15.6 +0.8**
**DAVA Damuels 105.48 331** *e*Pdiff **Pdif** **22 49 16.4 +0.7**
DAVA *i* PKiKP **PKiKP** **22 53 24.8 -4.0**
comp=Z,11nm,1.2s
DAVA *i* PKKP **PKKPbc** **23 04 55.5 +0.4**
comp=Z,19nm,0.9s,SNR=7.4
**DOU Dourbes 105.59 336** *d*PP **PP** **22 53 37.9 +0.1**
**P49A Miami Univ. Ec 106.27 39** Pdiff **Pdif** **22 49 16.1 -3.0**
baz=309
**QSPA South Pole Qui 106.54 180** Pdiff **Pdif** **22 49 19.9 +0.2**
comp=Z,2.5nm,0.7s,baz=353,slow=2.9,SNR=8.1
QSPA PKiKP **PKiKP** **22 53 29.5 -0.5**
comp=Z,15nm,0.9s,baz=235,slow=1.6,SNR=8.0
QSPA PKKPbc **PKKPbc** **23 04 52.2 -1.0**
comp=Z,3.3nm,0.7s,baz=186,slow=2.0,SNR=11
QSPA PKKP **PKKPab** **23 05 02.6 -2.2**
comp=Z,4.9nm,0.6s,baz=220,slow=1.3,SNR=10.0
**M53A WI Miller and 107.38 35** Pdiff **Pdif** **22 49 21.6 -2.4**
baz=312
**P52A Corning 107.74 38** Pdiff **Pdif** **22 49 24.3 -1.3**
baz=311
**O53A New Philadelph 107.87 37** Pdiff **Pdif** **22 49 25.9 -0.3**
baz=312
**KMBO Kilima Mbogo 109.01 275** Pdiff **Pdif** **22 49 31.3 -0.8**
comp=Z,2.5nm,0.9s,baz=66,slow=6.3,SNR=4.6
KMBO PKiKP **PKiKP** **22 53 38.0 +1.5**
comp=Z,8.0nm,1.0s,baz=47,slow=7.0,SNR=6.4
**L61B Northampton 110.81 30** Pdiff **Pdif** **22 49 36.6 -2.7**
baz=319
**M65A Busby, Falmout 112.47 30** Pdiff **Pdif** **22 49 45.5 -1.0**
baz=321
**KEST Kesra 114.08 323** PKiKP PKPdf 22 53 45.7 +0.4
comp=Z,7.2nm,0.9s,baz=220,slow=2.1,SNR=6.2
KEST PKKPbc **PKKPbc** **23 04 28.4 +1.3**
comp=Z,6.2nm,0.9s,baz=278,slow=5.4,SNR=5.0
**ELIB Princess Elisa 115.86 197** *d*PP **PP** **22 54 47.4 -4.7**
**SET Setif 115.94 326** P **PKPdf** **22 53 55.0 +6.1**
**PBRG Braganca 116.83 338** *e*PKPdf **PKiKP** **22 53 50.7 +0.3**
**PGAV Gavieira, Arco 117.22 339** *e*PKPdf **PKiKP** **22 53 51.8 +0.6**
**PGAV Gavieira, Arco 117.22 339** *e*SS SS 23 11 03.8 -1.0
**PGAV Gavieira, Arco 117.22 339** *e*LQ LQ 23 22 35.8
PGAV *e*LR LR 23 30 24.6
comp=Z,3µm,20.0s
**PCAB Cabril 117.37 339** *e*PKPdf **PKiKP** **22 53 52.3 +0.9**
**MVO Moncorvo 117.50 338** *e*PKPdf **PKiKP** **22 53 52.8 +1.1**
**MVO Moncorvo 117.50 338** *e*SS SS 23 11 33.7 +25
**MVO Moncorvo 117.50 338** *e*LQ LQ 23 24 49.5
MVO *e*LR LR 23 30 59.4
comp=Z,3µm,24.0s
**POLO Lamas de Olo 117.59 339** *e*PKPdf **PKiKP** **22 53 52.8 +0.9**
**ESDC Sonseca Array 117.61 335** PKP **PKPdf** **22 53 51.9 0.0**
comp=Z,3.7nm,0.8s,baz=6.7,slow=2.4,SNR=12
ESDC PP **PP** **22 55 00.2 -3.8**
comp=Z,8.9nm,0.8s,baz=22,slow=6.4,SNR=6.8
ESDC PKKPbc **PKKPbc** **23 04 15.2 +0.2**
comp=Z,14nm,1.1s,baz=214,slow=3.2,SNR=20
ESDC SKKP 23 08 11.4
comp=Z,2.8nm,1.1s,baz=210,slow=4.0,SNR=4.4
**PVRL Vila Real 117.65 339** *e*PKPdf **PKiKP** **22 53 52.9 +0.9**
**PAB San Pablo 117.87 335** **PKiKP** **22 53 53.0 +0.5**
**PAB San Pablo 117.87 335** PKiKP **PKiKP** **22 53 53.0 +0.5**
**PVIS Viseu 118.20 338** *e*PKPdf **PKiKP** **22 53 54.9 +1.8**
**MTE Manteigas 118.36 338** **PKiKP** **22 53 53.9 +0.5**
**MTE Manteigas 118.36 338** *e*PKPdf **PKiKP** **22 53 54.5 +1.1**
**MTE Manteigas 118.36 338** *e*SS SS 23 11 54.6 +35
**MTE Manteigas 118.36 338** *e*LQ LQ 23 23 04.6
MTE *e*LR LR 23 31 50.7
comp=Z,4µm,24.0s
**PCBR Castelo Branco 118.83 338** *e*PKPdf **PKiKP** **22 53 55.0 +0.8**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PCAS | Casmilo, Conde | 119.00 | 338 | *e*PKPdf | PKiKP | 22 53 55.1 | +0.5 | | |
| PMRV | Marv??o | 119.16 | 337 | *e*PKPdf | PKiKP | 22 53 55.7 | +0.8 | | |
| PMRV | Marv??o | 119.16 | 337 | *e*LQ | LQ | 23 23 02.4 | | | |
| PMRV | | | | *e*LR | LR | 23 32 14.6 | | | |
| | comp=Z,5μm,22.0s | | | | | | | | |
| POGA | Pongola | 119.46 | 248 | | PKiKP | 22 53 56.1 | +0.4 | | |
| PSBE | So Bento | 119.59 | 338 | *e*PKPdf | PKiKP | 22 53 56.7 | +0.9 | | |
| NVL | N'lazarevskaya | 119.61 | 196 | *e*PKIKP | PKPdf | 22 53 54.6 | 0.0 | | |
| NVL | | | | *e*PS | PS | 23 05 08.5 | +0.8 | | |
| NVL | | | | *e*SS | SS | 23 11 59.7 | +24 | | |
| NVL | | | | pmax | pmax | | | | |
| | comp=Z,44nm,1.1s | | | | | | | | |
| NVL | | | | MLR | MLR | | | | |
| | comp=Z,3μm,18.0s | | | | | | | | |
| PESTR | Estremoz | 119.72 | 337 | *e*PKPdf | PKiKP | 22 53 56.6 | +0.6 | | |
| PMTG | Montargil | 119.78 | 338 | *e*PKPdf | PKiKP | 22 53 56.4 | +0.3 | | |
| PBAR | Barrancos | 120.12 | 336 | *e*PKPdf | PKiKP | 22 53 57.7 | +0.9 | | |
| PBAR | Barrancos | 120.12 | 336 | PKP | PKiKP | 22 53 57.4 | +0.6 | | |
| EVO | Evora | 120.17 | 337 | *e*PKPdf | PKiKP | 22 53 57.6 | +0.7 | | |
| EVO | Evora | 120.17 | 337 | PKP | PKiKP | 22 53 57.3 | +0.4 | | |
| PMAFR | Mafra | 120.26 | 339 | PKP | PKiKP | 22 53 57.1 | +0.1 | | |
| EMAL | Malaga-Limoner | 120.27 | 333 | PKP | PKiKP | 22 53 57.1 | 0.0 | | |
| EMIN | Mina Concepcio | 120.33 | 336 | PKP | PKiKP | 22 53 57.9 | +0.7 | | |
| EALB | Alboran | 120.34 | 332 | PKP | PKiKP | 22 53 57.5 | +0.2 | | |
| LIS | Lisbon | 120.42 | 338 | *e*PP | PP | 22 55 25.2 | +2.0 | | |
| LIS | | | | IAMs_20 | IAMs_20 | 23 33 44.4 | | | |
| | comp=E,19μm,42.7s | | | | | | | | |
| LIJA | Lijar | 120.56 | 334 | PKP | PKiKP | 22 53 58.5 | +0.6 | | |
| PBEJ | Beja | 120.56 | 337 | *e*PKPdf | PKiKP | 22 53 58.3 | +0.6 | | |
| PNCL | Nicolau / Gran | 120.73 | 337 | *e*PKPdf | PKiKP | 22 53 58.9 | +0.9 | | |
| ESPR | Espera | 120.78 | 335 | PKP | PKiKP | 22 53 59.4 | +1.3 | | |
| MESJ | Messejana | 120.86 | 337 | *e*PKPdf | PKiKP | 22 53 59.4 | +1.1 | | |
| MESJ | Messejana | 120.86 | 337 | *e*PKPdf | PKiKP | 22 53 58.9 | +0.6 | | |
| MESJ | | | | *e*PP | PP | 22 55 28.0 | +1.8 | | |
| MESJ | | | | IAMs_20 | IAMs_20 | 23 41 49.1 | | | |
| | comp=Z,13μm,33.3s | | | | | | | | |
| MESJ | Messejana | 120.86 | 337 | *e*PKIKP | PKiKP | 22 53 58.9 | +0.6 | | |
| MESJ | | | | *e* | | 22 55 28.0 | | | |
| TROLL | Troll, Antarti | 120.89 | 192 | ⇑PKKPbc | PKKPab | 23 04 00.3 | -1.0 | | |
| | comp=Z,343nm,0.8s | | | | | | | | |
| TROLL | | | | ⇑PKPdf | PKiKP | 22 53 57.7 | +0.3 | | |
| | comp=Z,426nm,0.3s | | | | | | | | |
| TROLL | | | | ⇑PP | PP | 22 55 23.8 | -2.9 | | |
| | comp=Z,68μm,3.0s | | | | | | | | |
| TROLL | | | | ⇓SKSac | SKSac | 23 00 49.4 | +0.2 | | |
| | comp=Z,0.0nm,0.1s | | | | | | | | |
| PCVE | Castro Verde | 120.97 | 337 | *e*PKPdf | PKiKP | 22 53 59.6 | +1.1 | | |
| PCVE | Castro Verde | 120.97 | 337 | PKP | PKiKP | 22 53 59.1 | +0.6 | | |
| PVAQ | Vaqueiros | 121.05 | 336 | *e*LQ | LQ | 23 25 37.4 | | | |
| PVAQ | | | | *e*LR | LR | 23 33 42.1 | | | |
| | comp=Z,6μm,22.0s | | | | | | | | |
| LSZ | Lusaka | 121.16 | 262 | | PKiKP | 22 54 00.1 | +0.6 | | |
| LSZ | Lusaka | 121.16 | 262 | PKIKP | PKiKP | 22 54 00.1 | +0.6 | | |
| PBDV | Barranco-do-Ve | 121.27 | 336 | *e*PKPdf | PKiKP | 22 53 59.9 | +0.7 | | |
| PTEO | Sao Teotonio | 121.31 | 337 | *e*PKPdf | PKiKP | 22 54 00.2 | +1.1 | | |
| MORF | Marmelete | 121.49 | 337 | | PKiKP | 22 54 00.0 | +0.4 | | |
| MORF | Marmelete | 121.49 | 337 | *e*PKPdf | PKiKP | 22 54 00.2 | +0.6 | | |
| MORF | Marmelete | 121.49 | 337 | *e*PKPdf | PKiKP | 22 54 00.1 | +0.6 | | |
| MORF | | | | *e*PP | PP | 22 55 32.7 | +2.0 | | |
| MORF | | | | IAMs_20 | IAMs_20 | 23 41 50.6 | | | |
| | comp=Z,11μm,25.4s | | | | | | | | |
| MORF | Marmelete | 121.49 | 337 | *e*PKIKP | PKiKP | 22 54 00.2 | +0.6 | | |
| MORF | | | | *e* | | 22 55 32.7 | | | |
| PFVI | Vila Bisbo | 121.71 | 337 | *e*PKPdf | PKiKP | 22 54 01.6 | +1.6 | | |
| SNAA | Sanae | 122.19 | 191 | | PKPdf | 22 53 59.8 | +0.1 | | |
| SNAA | Sanae | 122.19 | 191 | ⇑PKKPbc | PKKPab | 23 03 55.7 | +0.1 | | |
| | comp=Z,57nm,0.6s | | | | | | | | |
| SNAA | | | | ⇑PKPdf | PKiKP | 22 54 00.1 | +0.2 | | |
| | comp=Z,1μm,0.8s | | | | | | | | |
| SNAA | | | | ⇓PP | PP | 22 55 33.2 | -2.3 | | |
| | comp=Z,22μm,2.3s | | | | | | | | |
| SNAA | | | | ⇑SKSac | SKSac | 23 00 51.3 | -2.2 | | |
| | comp=Z,5μm,3.8s | | | | | | | | |
| SNAA | Sanae | 122.19 | 191 | PKP | PKPdf | 22 53 59.7 | 0.0 | | |
| | comp=Z,56nm,1.0s,baz=204,slow=5.3,SNR=60 | | | | | | | | |
| SNAA | | | | PKKPbc | PKKPab | 23 03 56.7 | +1.1 | | |
| | comp=Z,5.9nm,0.9s,baz=309,slow=3.4,SNR=11 | | | | | | | | |
| SNAA | | | | SKKPbc | SKKPbc | 23 07 38.2 | -5.2 | | |
| | comp=Z,4.1nm,0.9s,baz=319,slow=5.4,SNR=3.6 | | | | | | | | |
| SNAA | Sanae | 122.19 | 191 | *c i*PKIKP | PKPdf | 22 53 59.7 | 0.0 | | |
| SNAA | | | | pmax | pmax | | | | |
| | comp=Z,105nm,1.3s | | | | | | | | |
| IFR | Ifrane | 123.31 | 332 | PKP | PKiKP | 22 54 04.5 | +1.0 | | |
| VNA2 | Neumayer--Watz | 123.61 | 190 | ⇑PKPdf | PKiKP | 22 54 03.2 | +0.6 | | |
| | comp=Z,108nm,0.6s,baz=158,slow=1.6 | | | | | | | | |
| VNA2 | | | | ⇓PP | PP | 22 55 42.3 | -2.7 | | |
| | comp=Z,953nm,3.8s,baz=145,slow=9.1 | | | | | | | | |
| VNA2 | | | | ⇓SKSac | SKSac | 23 00 57.3 | -0.7 | | |
| | comp=Z,67μm,0.0s,baz=329,slow=35 | | | | | | | | |
| VNA3 | Neumayer Olymp | 123.69 | 189 | ⇑PKKPbc | PKKPab | 23 03 49.9 | +0.7 | | |
| | comp=Z,9.7nm,1.1s | | | | | | | | |
| VNA3 | | | | ⇑PKPdf | PKiKP | 22 54 03.0 | +0.1 | | |
| | comp=Z,79nm,0.7s | | | | | | | | |
| VNA3 | | | | ⇓PP | PP | 22 55 42.2 | -3.3 | | |
| | comp=Z,498nm,2.7s | | | | | | | | |
| VNA3 | | | | ⇑SKSac | SKSac | 23 00 57.8 | -0.5 | | |
| | comp=Z,67μm,0.0s | | | | | | | | |
| VNA1 | Neumayer--Stat | 123.99 | 190 | ⇑PKPdf | PKiKP | 22 54 03.9 | +0.6 | | |
| | comp=Z,136nm,1.3s | | | | | | | | |
| GRHM | Grahamstown, E | 124.22 | 241 | | PKiKP | 22 54 05.6 | +0.6 | | |
| SMAI | San Martin Ant | 124.27 | 165 | | PKiKP | 22 54 04.6 | +0.7 | | |
| AVE | Averroes | 124.49 | 334 | PKP | PKiKP | 22 54 06.4 | +0.8 | | |
| PAGU | Agualva, Azore | 124.52 | 354 | *e*PKP | PKiKP | 22 54 09.3 | +3.8 | | |
| PSBA | Serra de Santa | 124.53 | 354 | *e*PKP | PKiKP | 22 54 06.7 | +1.2 | | |
| PSCM | Serra do Cume | 124.58 | 354 | *e*PKP | PKiKP | 22 54 07.9 | +2.3 | | |
| PMAN | Manadas | 124.73 | 355 | *e*PKP | PKiKP | 22 54 09.1 | +3.2 | | |
| CALA | Caldeira | 124.83 | 356 | *e*PKP | PKiKP | 22 54 08.5 | +2.3 | | |
| PICO | Pico | 124.89 | 355 | *e*PKP | PKiKP | 22 54 09.6 | +3.3 | | |
| SOE | Somerset East | 124.92 | 242 | | PKiKP | 22 54 06.8 | +0.4 | | |
| PID | Ribeirinha | 124.92 | 355 | *e*PKP | PKiKP | 22 54 08.5 | +2.2 | | |
| BOSA | Boshof | 125.22 | 247 | PKP | PKPdf | 22 54 07.0 | +0.2 | | |
| | comp=Z,36nm,0.8s,baz=83,slow=1.7,SNR=32 | | | | | | | | |
| PCALD | Caldeiras da R | 125.29 | 352 | *e*PKP | PKiKP | 22 54 09.8 | +2.8 | | |
| PSET | Sete Cidades | 125.29 | 353 | *e*PKP | PKiKP | 22 54 08.9 | +1.8 | | |
| TAM | Tamanrasset | 125.42 | 315 | | PKiKP | 22 54 07.9 | 0.0 | | |
| TAM | Tamanrasset | 125.42 | 315 | PKIKP | PKiKP | 22 54 07.9 | 0.0 | | |
| PSMN | Pico do Norte, | 126.02 | 352 | *e*PKP | PKiKP | 22 54 09.8 | +1.3 | | |
| PSMA | Santa Maria | 126.03 | 352 | *e*PKP | PKiKP | 22 54 09.3 | +0.8 | | |
| TIO | Tiouine | 126.45 | 332 | PKP | PKiKP | 22 54 10.0 | +0.3 | | |
| PMOZ | Porto Moniz, M | 128.41 | 343 | *e*SS | SS | 23 13 30.1 | +3.5 | | |
| PMOZ | | | | A | A | 23 49 03.4 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | |
| PMAR | Madeira | 128.42 | 342 | *e*PKPdf | PKiKP | 22 54 15.0 | +1.3 | | |
| SDDR | Presa de Saban | 128.43 | 48 | | PKPdf | 22 54 13.3 | +0.1 | | |
| SUR | Sutherland | 128.94 | 242 | | PKiKP | 22 54 15.1 | +0.4 | | |
| TSUM | Tsumeb | 131.74 | 259 | | PKPdf | 22 54 19.2 | -0.3 | | |
| AOPR | Arecibo Observ | 132.01 | 45 | *e*P | PKiKP | 22 54 28.8 | +7.8 | | |
| CELP | Cerrillos | 132.32 | 45 | | PKPdf | 22 54 20.7 | +0.2 | | |
| OTAV | Otavalo | 132.35 | 74 | | PKPdf | 22 54 21.8 | +0.5 | | |
| OTAV | Otavalo | 132.35 | 74 | PKIKP | PKPdf | 22 54 21.8 | +0.5 | | |
| OTAV | Otavalo | 132.35 | 74 | *e*P | PKiKP | 22 54 22.1 | -0.3 | | |
| ANTS | Antisana-Sarah | 132.90 | 75 | PKPdf | PKiKP | 22 54 23.7 | 0.0 | | |
| ROSC | El Rosal | 134.08 | 66 | PKP | PKiKP | 22 54 25.5 | -0.3 | | |
| | comp=Z,7.3nm,0.3s,baz=49,slow=2.5,SNR=14 | | | | | | | | |
| TORD | Torodi Ar. Bea | 134.49 | 309 | PKP | PKiKP | 22 54 25.7 | -0.4 | | |
| | comp=Z,11nm,0.5s,baz=16,slow=3.3,SNR=17 | | | | | | | | |
| TORD | | | | PP | PP | 22 56 55.3 | -1.9 | | |
| | comp=Z,18nm,1.0s,baz=16,slow=5.7,SNR=4.5 | | | | | | | | |
| TORD | | | | SKPbc | SKPbc | 22 57 47.7 | -0.9 | | |
| | comp=Z,29nm,0.9s,baz=22,slow=4.4,SNR=6.4 | | | | | | | | |
| ATAH | Atahualpa | 134.88 | 83 | PKhKP | PKPpre | 22 54 20.1 | | | |
| | comp=Z,6.3nm,0.8s,baz=342,slow=3.2,SNR=3.0 | | | | | | | | |
| SDV | Santo Domingo | 135.09 | 58 | PKhKP | PKPpre | 22 54 18.3 | | | |
| | comp=Z,9.1nm,0.4s,baz=306,slow=4.7,SNR=7.0 | | | | | | | | |
| SDV | | | | PKP | PKPdf | 22 54 26.4 | +0.3 | | |
| | comp=Z,39nm,0.8s,baz=292,slow=2.6,SNR=4.7 | | | | | | | | |
| SDV | | | | SKPbc | SKPbc | 22 57 52.7 | +1.9 | | |
| | comp=Z,12nm,0.5s,baz=278,slow=4.7,SNR=5.0 | | | | | | | | |
| SDV | Santo Domingo | 135.09 | 58 | *e*P | PKPdf | 22 54 26.9 | +0.8 | | |
| H03S2 | Juan Fernandez | 135.68 | 121 | T | T | 01 26 08.7 | | | |
| | baz=258,slow=75,SNR=6.7 | | | | | | | | |
| H03S1 | Juan Fernandez | 135.70 | 122 | T | T | 01 25 59.7 | | | |
| | baz=258,slow=75,SNR=5.8 | | | | | | | | |
| H03S3 | Juan Fernandez | 135.70 | 121 | T | T | 01 26 03.5 | | | |
| | baz=258,slow=75,SNR=6.3 | | | | | | | | |
| ANWB | Willy Bob | 135.74 | 41 | *e*P | PKPdf | 22 54 27.4 | +0.5 | | |
| H03N2 | Juan Fernandez | 135.75 | 121 | T | T | 01 26 09.2 | | | |
| | baz=267,slow=73,SNR=17 | | | | | | | | |
| H03N3 | Juan Fernandez | 135.76 | 121 | T | T | 01 26 05.1 | | | |
| | baz=267,slow=73,SNR=21 | | | | | | | | |
| H03N1 | Juan Fernandez | 135.77 | 121 | T | T | 01 26 12.2 | | | |
| | baz=267,slow=73,SNR=22 | | | | | | | | |
| MBWH | | 136.17 | 42 | *e*P | PKPdf | 22 54 28.6 | +0.8 | | |
| ANBD | Bethesda, Anti | 136.22 | 41 | *e*P | PKiKP | 22 54 29.0 | -0.5 | | |
| BAUV | El Baul | 137.15 | 56 | PKPdf | PKPdf | 22 54 29.5 | -0.2 | | |
| BAUV | El Baul | 137.15 | 56 | *e*P | PKiKP | 22 54 31.2 | -0.3 | | |
| TBG | Guadaloupe-3 | 137.18 | 42 | *e*P | PKiKP | 22 54 30.7 | -0.8 | | |
| GDSD | La Dsirade Is | 137.21 | 41 | PKPdf | PKPdf | 22 54 29.8 | +0.1 | | |
| NNA | Nana | 137.54 | 90 | PKP | PKPdf | 22 54 31.3 | +1.0 | | |
| | comp=Z,52nm,1.0s,baz=296,slow=2.1,SNR=12 | | | | | | | | |
| NNA | Nana | 137.54 | 90 | *c i*PKIKP | PKPdf | 22 54 31.4 | +1.0 | | |
| NNA | | | | pmax | pmax | | | | |
| | comp=Z,163nm,1.3s | | | | | | | | |
| SVN | Savane Anatole | 138.23 | 43 | *e*P | PKPdf | 22 54 26.5 | -5.2 | | |
| ILAM | Ilet Lapin Mar | 138.47 | 43 | *e*P | PKiKP | 22 54 34.5 | +0.3 | | |
| BIM | Bigot | 138.54 | 43 | *e*P | PKPdf | 22 54 27.4 | -4.8 | | |
| MPOM | Morne Pois Mar | 138.73 | 43 | *e*P | PKPdf | 22 54 30.6 | -1.9 | | |
| SLBI | Saint Lucia, B | 138.96 | 43 | *e*P | PKPdf | 22 54 33.8 | +0.8 | | |
| PCRV | Puerto La Cruz | 139.02 | 51 | PKP | PKiKP | 22 54 34.6 | -0.8 | | |
| | comp=Z,11nm,0.6s,baz=37,slow=5.1,SNR=3.4 | | | | | | | | |
| PCRV | Puerto La Cruz | 139.02 | 51 | *e*P | PKPdf | 22 54 32.4 | -0.7 | | |
| SLB | Belfond | 139.06 | 44 | *e*P | PKPdf | 22 54 30.6 | -2.7 | | |
| LR03 | Panguipulli | 139.09 | 132 | | PKiKP | 22 54 34.4 | -0.4 | | |
| SLAC | Saint Lucia, A | 139.10 | 44 | *e*P | PKPdf | 22 54 21.7 | -12 | | |
| SVB | Belmont | 139.32 | 45 | *e*P | PKPdf | 22 54 33.0 | -0.7 | | |
| GCMP | Grenada, Carri | 139.76 | 46 | *e*P | PKPdf | 22 54 28.2 | -6.2 | | |
| GRGR | Grenville | 139.85 | 46 | *e*P | PKPdf | 22 54 23.6 | -11 | | |
| PLCA | Paso Flores | 139.90 | 134 | PKhKP | PKPpre | 22 54 24.6 | | | |
| | comp=Z,13nm,0.8s,baz=233,slow=3.0,SNR=18 | | | | | | | | |
| PLCA | | | | PKP | PKPdf | 22 54 32.6 | -1.4 | | |
| | comp=Z,12nm,0.8s,baz=242,slow=3.4,SNR=8.5 | | | | | | | | |
| PLCA | | | | SKPbc | SKPbc | 22 58 03.5 | -0.4 | | |
| | comp=Z,9.8nm,0.9s,baz=263,slow=4.3,SNR=2.0 | | | | | | | | |
| BBGH | Gun Hill | 140.53 | 43 | *e*P | PKPdf | 22 54 36.9 | +1.1 | | |
| BI02 | San Fabin de | 140.96 | 128 | | PKiKP | 22 54 38.1 | -0.7 | | |
| TRN | Trinidad (W) | 141.06 | 48 | *e*P | PKPdf | 22 54 37.7 | +0.9 | | |
| BO02 | Sierra Bellavi | 141.96 | 125 | | PKiKP | 22 54 39.7 | -1.2 | | |
| VA06 | Catapilco | 142.20 | 122 | | PKiKP | 22 54 39.9 | -1.4 | | |
| CO06 | Fray Jorge | 142.38 | 119 | | PKPdf | 22 54 39.9 | +1.2 | | |
| PEL | Peldehue | 142.53 | 123 | | PKPdf | 22 54 40.5 | +1.5 | | |
| PEL | Peldehue | 142.53 | 123 | PKIKP | PKPdf | 22 54 40.5 | +1.5 | | |
| VA03 | San Esteban | 142.75 | 122 | *i* P | PKPdf | 22 54 36.6 | -2.8 | | |
| CO05 | La Serena | 142.87 | 118 | | PKiKP | 22 54 41.5 | -1.3 | | |
| DBIC | Dimbokro | 143.57 | 307 | PKP | PKPbc | 22 54 38.7 | 0.0 | | |
| | comp=Z,57nm,0.4s,baz=42,slow=3.3,SNR=130 | | | | | | | | |
| RFA | San Rafael | 143.76 | 127 | *i* P | PKPbc | 22 54 39.7 | +0.8 | | |
| CO01 | Juntas del Tor | 143.83 | 118 | *i* P | PKPab | 22 54 38.2 | -0.5 | | |
| ARCO | CERRO ARCO | 144.03 | 123 | *i* P | PKPdf | 22 54 41.0 | -0.8 | | |
| RTLS | Leoncito | 144.04 | 121 | *i* P | PKPdf | 22 54 41.6 | -0.4 | | |
| AAGR | Agrelo | 144.04 | 124 | *i* P | PKPdf | 22 54 41.4 | -0.3 | | |
| AC01 | Pan de Azucar | 144.07 | 112 | | PKPdf | 22 54 41.0 | -0.8 | | |
| AC06 | Mina Casimiro | 144.11 | 114 | | PKPbc | 22 54 41.0 | +0.9 | | |
| AVIZ | Vizcacheras | 144.16 | 124 | *i* P | PKPdf | 22 54 41.9 | 0.0 | | |
| ASAL | Salagasta | 144.19 | 123 | *i* P | PKPdf | 22 54 41.5 | -0.4 | | |
| AROD | Rodeo | 144.31 | 119 | *i* P | PKPdf | 22 54 42.8 | +0.2 | | |
| PB14 | IPOC Station P | 144.42 | 109 | | PKPdf | 22 54 42.3 | -0.6 | | |
| ACCO | Cerro Coronel | 144.55 | 119 | *i* P | PKPdf | 22 54 43.1 | +0.1 | | |
| ACJV | Cuesta del Vie | 144.61 | 119 | *i* P | PKPdf | 22 54 43.4 | +0.6 | | |
| ZON | Zonda | 144.62 | 121 | | PKPdf | 22 54 42.6 | 0.0 | | |
| ZON | Zonda | 144.62 | 121 | *i* P | PKPdf | 22 54 42.7 | 0.0 | | |
| ZON | Zonda | 144.62 | 121 | PKIKP | PKPdf | 22 54 42.7 | 0.0 | | |
| BBTS | Babate | 144.73 | 331 | PKP | PKPdf | 22 54 43.4 | +0.1 | | |
| | comp=Z,280nm,0.8s,baz=329,slow=0.3,SNR=47 | | | | | | | | |
| PB04 | IPOC Station P | 144.81 | 105 | | PKPdf | 22 54 44.0 | +0.6 | | |
| TA01 | Diego Aracena | 144.82 | 102 | | PKPdf | 22 54 43.5 | +0.3 | | |
| RTLL | Cerro Villicun | 144.84 | 121 | *i* P | PKPdf | 22 54 43.3 | +0.2 | | |
| AVFE | Valle Fertil | 145.87 | 120 | *i* P | PKPab | 22 54 46.1 | 0.0 | | |
| LVC | Limon Verde | 145.94 | 106 | PKPbc | PKPab | 22 54 47.9 | +0.9 | | |
| | comp=Z,88nm,0.7s,baz=284,slow=2.9,SNR=73 | | | | | | | | |
| LVC | Limon Verde | 145.94 | 106 | *e*P | PKPdf | 22 54 45.5 | -0.1 | | |
| ACHE | Chepes | 146.38 | 121 | *e*P | PKPab | 22 54 47.9 | -0.3 | | |
| TEFE | Tefe | 146.48 | 70 | *e*P | PKPdf | 22 54 46.9 | +0.6 | | |
| LPAZ | La Paz | 146.55 | 94 | PKPbc | PKPbc | 22 54 48.1 | -0.5 | | |
| | comp=Z,52nm,0.6s,baz=323,slow=1.9,SNR=141 | | | | | | | | |
| ACLC | CERRO LA CRUZ | 146.62 | 118 | *i* P | PKPbc | 22 54 48.1 | +0.1 | | |
| TRQA | Tornquist | 147.00 | 136 | | PKPbc | 22 54 48.2 | -0.4 | | |
| TRQA | Tornquist | 147.00 | 136 | PKP2 | PKPbc | 22 54 48.2 | -0.4 | | |
| BOAV | Boa Vista | 147.03 | 57 | | PKPdf | 22 54 48.3 | +1.0 | | |
| BOAV | Boa Vista | 147.03 | 57 | *e*P | PKPdf | 22 54 48.2 | +1.0 | | |
| SACV | Santiago Islan | 147.11 | 343 | | PKPbc | 22 54 49.1 | -0.4 | | |
| ETMB | Extrema | 147.20 | 82 | | PKPdf | 22 54 47.0 | -0.4 | | |
| ETMB | Extrema | 147.20 | 82 | *e*P | PKPdf | 22 54 47.6 | +0.1 | | |
| TCA | Tanti | 148.00 | 123 | *i* P | PKPbc | 22 54 50.3 | -1.3 | | |
| TCA | | | | *i* P | PKiKP | 22 54 51.8 | -1.6 | | |
| SAML | Samuel | 149.82 | 79 | *e*P | PKPdf | 22 54 52.5 | +0.7 | | |
| MACA | Manacapuru-AM | 149.85 | 66 | | PKPdf | 22 54 52.1 | +0.2 | | |
| MACA | | | | PKPbc | PKiKP | 22 54 57.6 | -0.1 | | |
| MDP | Montagnes des | 151.04 | 43 | PKP | PKPdf | 22 54 54.7 | +1.0 | | |
| | comp=Z,118nm,0.7s,baz=266,slow=1.8,SNR=24 | | | | | | | | |
| MDP | | | | PKPbc | PKiKP | 22 55 00.2 | +0.1 | | |
| | comp=Z,186nm,1.0s,baz=270,slow=1.9,SNR=25 | | | | | | | | |
| TRIS | Tristan da Cun | 152.57 | 218 | | PKiKP | 22 55 03.6 | +1.1 | | |
| SIV | San Ignacio | 153.28 | 92 | PKP | PKPdf | 22 54 58.2 | +1.3 | | |
| | comp=Z,8.0nm,0.9s,baz=253,slow=1.6,SNR=48 | | | | | | | | |
| SIV | | | | PKPbc | PKiKP | 22 55 05.0 | +0.4 | | |
| | comp=Z,31nm,0.7s,baz=286,slow=2.2,SNR=22 | | | | | | | | |
| PSAL | Palomas, Salto | 153.59 | 127 | *e*P | PKPdf | 22 54 59.3 | +2.3 | | |
| VILB | Vilhena | 153.66 | 85 | *e*P | PKPdf | 22 54 59.1 | +1.5 | | |
| ITTB | Itatituba | 154.73 | 63 | *e*P | PKPdf | 22 54 60.0 | +0.9 | | |
| ITQB | Itaqui | 154.98 | 125 | *e*P | PKPdf | 22 55 01.1 | +2.2 | | |
| PTLB | Pontes e Lacer | 155.07 | 91 | *e*P | PKPdf | 22 55 00.4 | +1.0 | | |
| MCPB | Macapa, AP | 155.33 | 51 | *e*P | PKPdf | 22 55 00.8 | +0.9 | | |
| PAPY | Pozo Azul | 155.47 | 111 | *e*P | PKPdf | 22 55 01.9 | +2.2 | | |
| CPUP | Villa Florida | 155.66 | 117 | PKP | PKPdf | 22 55 01.6 | +1.7 | | |
| | comp=Z,18nm,1.1s,baz=310,slow=1.3,SNR=17 | | | | | | | | |
| CPUP | | | | PKPab | pPKPbc | 22 55 27.5 | -0.5 | | |
| | comp=Z,45nm,0.7s,baz=302,slow=2.9,SNR=12 | | | | | | | | |
| RODS | Rosario do Sul | 155.77 | 128 | *e*P | PKPdf | 22 55 01.5 | +1.4 | | |
| PLTB | Pedras Altas | 156.19 | 133 | *e*P | PKPdf | 22 55 02.4 | +1.9 | | |
| PDRB | Porto dos Gac | 156.66 | 81 | *e*P | PKPdf | 22 55 03.1 | +1.5 | | |
| CPSB | Cacapava Do Su | 157.05 | 130 | *e*P | PKPdf | 22 55 03.9 | +2.3 | | |
| CLDB | Colider | 157.33 | 78 | *e*P | PKPdf | 22 55 03.6 | +1.1 | | |
| CRSM | Crissiumal (Br | 157.96 | 123 | *e*P | PKPdf | 22 55 04.4 | +1.4 | | |
| ALGR | Alto Alegre (B | 158.17 | 127 | *e*P | PKPdf | 22 55 05.3 | +2.1 | | |
| AQDB | Aquidauana | 158.38 | 103 | PKPdf | PKPdf | 22 55 04.0 | +0.5 | | |
| SALV | Santo Antonio | 158.42 | 91 | *e*P | PKPdf | 22 55 05.1 | +1.4 | | |
| CNLB | Canela | 159.53 | 131 | *e*P | PKPdf | 22 55 06.5 | +1.7 | | |
| PRPB | Parauapebas | 160.67 | 59 | *e*P | PKPdf | 22 55 07.9 | +1.4 | | |
| SNDB | Serra Nova Dou | 161.87 | 77 | *e*P | PKPdf | 22 55 09.2 | +1.6 | | |
| ARAG | Araguaiana, MT | 162.12 | 89 | *e*P | PKPdf | 22 55 09.4 | +1.6 | | |
| PCMB | Pacaembu | 162.28 | 109 | *e*P | PKPdf | 22 55 10.4 | +2.5 | | |
| BDFB | Brasilia | 165.75 | 88 | PKP | PKPdf | 22 55 13.1 | +1.8 | | |
| | comp=Z,20nm,0.9s,baz=232,slow=2.2,SNR=16 | | | | | | | | |
| BDFB | | | | PKPab | PKPab | 22 56 12.1 | +1.2 | | |
| | comp=Z,96nm,1.1s,baz=13,slow=2.4,SNR=3.7 | | | | | | | | |
| SDBA | SAO DESIDERIO | 167.91 | 71 | *e*P | PKPdf | 22 55 14.9 | +2.0 | | |
| RCBR | Riachuelo | 168.86 | 14 | *e*P | PKPdf | 22 55 15.5 | +1.9 | | |
| VAS01 | Vassouras-RJ | 168.89 | 121 | *e*P | PKPdf | 22 55 15.2 | +1.9 | | |
| JANB | Januaria | 169.21 | 83 | *e*P | PKPdf | 22 55 15.4 | +1.7 | | |
| DUB01 | Friburgo-RJ | 169.85 | 123 | *e*P | PKPdf | 22 55 16.6 | +2.7 | | |
| DIAM | Diamantina, MG | 169.91 | 100 | *e*P | PKPdf | 22 55 16.2 | +2.0 | | |
| NBCA | Caruaru-PE | 171.13 | 18 | *e*P | PKPdf | 22 55 16.5 | +1.6 | | |
| NBLA | Lagarto - SE | 172.79 | 38 | *e*P | PKPdf | 22 55 16.9 | +1.4 | | |
| GDU01 | Guandu, BA | 173.18 | 65 | *e*P | PKPdf | 22 55 17.2 | +1.6 | | |
| NAN01 | Guarapari, ES | 173.31 | 101 | *e*P | PKPdf | 22 55 17.4 | +1.8 | | |
| GUA01 | Guaratinga, BA | 173.69 | 90 | *e*P | PKPdf | 22 55 17.4 | +1.6 | | |
| CMC01 | Camacan, BA | 173.80 | 78 | *e*P | PKPdf | 22 55 17.8 | +2.0 | | |

*IDC* ***28*** *22:35:59.4±2.4, 36°.55N×140°.84E, h58km±22km, mb3.8/10, mbtmp4.1/13, ML3.8/3, Error ellipse: s-maj=21.5km s-min=12.3km az=60.0*

*NIED* ***28*** *22:35:59.6, 36°.55N×140°.79E, h53km, MW3.9, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-2.60; Mθθ0.23; Mφφ2.37; Mrθ2.65; Mθφ3.95; Mφr6.51; Fault plane solution: M₀8.21000×10¹⁴ NP1: φs199.00000°, δ77.00000°, λ-106.00000°. NP2: φs71.00000°, δ21.00000°, λ-40.00000°.*

*JMA* ***28*** *22:35:59.6±0.1, 36°.6N±0°.3×140°.8E±0°.6, h53km, MD3.9/40, MV4.2/40, E OFF IBARAKI PREF .*

*JMA Felt II J1 at E OFF IBARAKI PREF .*

*NEIC* ***28*** *22:36:00.2±1.3, 36°.62N±0°.06×140°.8E±0°.1, h60km±9km, mb4.3/4, Error ellipse: s-maj=12.9km s-min=7.6km az=118.0*

**ISC 28 22:35:59.0±0.9, 36°.55N±0°.04×140°.87E±0°.06, h54km±6km, n65, σ1ᵗ¹⁄₂14/56, mb4.1/12, 1C-12D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JHO | Hitachi | 0.24 | 284 | ⇓*i*P | | Pn | 22 36 08.3 | +0.3 |
| JHO | | | | ⇓S | | Sn | 22 36 14.1 | -0.5 |
| JHO | Hitachi | 0.24 | 284 | A | | A | 22 36 08.3 | |
| | comp=E,10.0nm,4.0s,comp=N,7.0nm,0.2s | | | | | | | |
| JHYU | Hitachinakayam | 0.31 | 227 | ⇓*i*P | | Pn | 22 36 08.9 | +0.4 |
| JHYU | | | | ⇓S | | Sn | 22 36 15.2 | -0.1 |
| JHYU | Hitachinakayam | 0.31 | 227 | A | | A | 22 36 08.9 | |
| | comp=E,41nm,0.4s,comp=N,32nm,0.2s | | | | | | | |
| ONAJ | Iwakimizuishiy | 0.55 | 355 | ⇓*i*P | | Pn | 22 36 11.2 | 0.0 |
| ONAJ | | | | ⇓S | | Sn | 22 36 19.2 | -0.8 |
| ONAJ | Iwakimizuishiy | 0.55 | 355 | A | | A | 22 36 11.2 | |
| | comp=E,8.0nm,0.3s,comp=N,5.0nm,0.3s | | | | | | | |
| JFFD | Fukushimafurud | 0.59 | 336 | A | | A | 22 36 11.8 | |
| | comp=E,6.0nm,0.5s,comp=N,9.0nm,0.5s | | | | | | | |
| JYT | Yasato | 0.63 | 239 | ⇓*i*P | | Pn | 22 36 11.9 | -0.1 |
| JYT | | | | ⇓S | | Sn | 22 36 20.5 | -0.9 |
| JYT | Yasato | 0.63 | 239 | A | | A | 22 36 11.9 | |
| | comp=E,9.0nm,0.3s,comp=N,18nm,0.3s | | | | | | | |
| JFK | Kawauchi | 0.81 | 1 | ⇓*i*P | | Pn | 22 36 14.3 | -0.1 |
| JSB | Shiboa | 0.87 | 299 | *i* P | | Pn | 22 36 15.2 | +0.1 |
| JSB | | | | S | | Sn | 22 36 26.4 | -0.5 |
| JSB | Shiboa | 0.87 | 299 | A | | A | 22 36 15.2 | |
| | comp=E,8.0nm,1.0s,comp=N,9.0nm,0.9s | | | | | | | |
| JOTO | OTAMA OYAMA | 1.09 | 337 | P | | Pn | 22 36 18.8 | +0.8 |
| JOTO | | | | S | | Sn | 22 36 32.3 | 0.0 |
| JOTO | OTAMA OYAMA | 1.09 | 337 | A | | A | 22 36 18.8 | |
| | comp=E,15nm,0.6s,comp=N,17nm,0.4s | | | | | | | |
| JAG | Ashikaga | 1.14 | 264 | ⇓*i*P | | Pn | 22 36 18.8 | +0.1 |
| JAG | Ashikaga | 1.14 | 264 | A | | A | 22 36 18.8 | |
| | comp=E,4.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NRCA | | | | S | Sb | 22 46 37.4 | -1.0 |
| NRCA | | | | AML | AML | | |
| | comp=E,41μm,0.9s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=N,33μm,0.1s | | | | | | |
| NRCA | | | | AML | AML | | |
| | comp=E,41μm,1.1s | | | | | | |

**UCR 28 22:54:01.0±1.0, 9.56N×84.90W, h24km±4km, MW3.5, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBL1** | **Cabuya** | **0.19** | **280** | *eP* | Pb | 22 54 05.7 | -0.8 |
| CBL1 | | | | *eS* | Sb | 22 54 10.3 | +0.2 |
| **NYURE** | **Nandayure** | **0.56** | **321** | *eP* | Pb | 22 54 12.4 | +0.2 |
| **JUNT** | **Juntas** | **0.72** | **355** | *eP* | Pb | 22 54 14.6 | -0.4 |
| **JTS** | **Las Juntas de** | **0.73** | **356** | *eP* | Pb | 22 54 14.6 | -0.6 |
| **ACOS** | **Acosta** | **0.76** | **72** | *eP* | Pb | 22 54 15.2 | -0.5 |
| **TCS1** | **Tacares** | **0.76** | **51** | *eP* | Pn | 22 54 16.4 | 0.0 |
| **NICO** | **Nicoya** | **0.79** | **317** | *eP* | Pn | 22 54 16.9 | +0.2 |
| **LLNJ** | **Naranjito** | **0.79** | **96** | *eP* | Pb | 22 54 15.0 | -1.2 |
| **SANTA** | **Santa Ana** | **0.80** | **62** | *eP* | Pb | 22 54 15.9 | -0.4 |
| **BELE** | **Belen** | **0.82** | **59** | *eP* | Pb | 22 54 15.6 | -1.0 |
| **ABE2** | **San Pablo** | **0.85** | **80** | *eP* | Pb | 22 54 16.3 | -0.9 |
| **SOCE** | **Pocosol** | **0.87** | **19** | *eP* | Pb | 22 54 17.1 | -0.4 |
| **LCR2** | **La Lucha 2** | **0.90** | **78** | *eP* | Pb | 22 54 16.9 | -1.2 |
| LCR2 | | | | *eS* | Sb | 22 54 30.1 | +0.3 |
| **ARE1** | **Arenal 1** | **0.92** | **11** | *eP* | Pb | 22 54 18.3 | 0.0 |
| **VACR** | **Volcan Arenal** | **0.94** | **13** | *eP* | Pn | 22 54 19.2 | +0.5 |
| **CEDE** | **Laguna Cedeo** | **0.94** | **12** | *eP* | Pn | 22 54 18.9 | 0.0 |
| **TRIO** | **Tres Rios** | **0.96** | **69** | *eP* | Pb | 22 54 18.1 | -0.9 |
| TRIO | | | | *eS* | Sn | 22 54 32.3 | +0.2 |
| **BAGA** | **Bagaces** | **1.03** | **340** | *eP* | Pb | 22 54 20.2 | 0.0 |
| **REPA** | **Paraso** | **1.05** | **75** | *eP* | Pn | 22 54 19.8 | -0.6 |
| **VICA** | **Volcano Irazu** | **1.12** | **68** | *eP* | Pn | 22 54 21.2 | -0.4 |
| **CUI** | **Cuipilapa** | **1.12** | **347** | *eP* | Pn | 22 54 21.5 | +0.1 |
| **BUS1** | **Rivas** | **1.14** | **90** | *eP* | Pn | 22 54 20.7 | -1.1 |
| **RAFA** | **San Farael, Vo** | **1.14** | **69** | *eP* | Pn | 22 54 21.2 | -0.7 |
| **ALIBA** | **Liberia Airpor** | **1.21** | **328** | *eP* | Pb | 22 54 23.3 | +0.1 |
| **CVTV** | **Tajo** | **1.22** | **68** | *eP* | Pb | 22 54 23.3 | -0.3 |
| **ELI1** | **Hacienda Flor** | **1.26** | **329** | *eP* | Pb | 22 54 24.1 | 0.0 |
| **GPS2** | **Hotel Rincn d** | **1.27** | **339** | *eP* | Pb | 22 54 23.9 | -0.4 |
| **VRLE** | **La Escondida,** | **1.31** | **339** | *eP* | Pb | 22 54 24.9 | -0.1 |
| **GB1A** | **Borinquen Arri** | **1.35** | **339** | *eP* | Pb | 22 54 25.2 | -0.5 |
| **DRK0** | **Durika** | **1.66** | **100** | *eP* | Pn | 22 54 27.8 | -1.0 |

*HEL **28** 23:20:46.7±0.2, 67.82N×20.24E, h0km, ML1.3, Explosion*
*UPP **28** 23:20:46.1±0.1, 67.82N×20.20E, h0km, ML2.5, Unknown*
**ISC 28 23:20:45.2±1.1, 67.78N±0.03×20.19E±0.05, h0km, n24, σ1§16/37, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOVU** | **Salmi** | **0.45** | **359** | P | **Pg** | **23 20 54.0** | **+0.2** |
| KOVU | | | | S | **Sg** | **23 20 59.4** | **-0.2** |
| **DUNU** | **Dundret** | **0.67** | **167** | P | **Pb** | **23 20 59.6** | **-0.2** |
| **LANU** | **Lannavaara** | **0.74** | **67** | P | **Pg** | **23 20 59.6** | **+0.3** |
| **LANU** | **Lannavaara** | **0.74** | **67** | PG | **Pg** | **23 20 59.6** | **+0.3** |
| **MASU** | **Masugnsbyn** | **0.76** | **114** | P | **Pb** | **23 21 00.8** | **-0.5** |
| **PAJU** | **Pajala** | **1.36** | **122** | P | **Pb** | **23 21 11.4** | **-0.1** |
| **PAJU** | **Pajala** | **1.36** | **122** | PG | **Pb** | **23 21 11.4** | **-0.1** |
| PAJU | | | | SB | **Sn** | **23 21 30.1** | **0.0** |
| **HEF** | **Hetta** | **1.45** | **62** | *eP* | **Pn** | **23 21 11.7** | **-0.9** |
| **HEF** | **Hetta** | **1.45** | **62** | PG | **Pn** | **23 21 12.4** | **-0.3** |
| HEF | | | | MSG | | 23 21 29.2 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| HEF | | | | SN | **Sn** | **23 21 32.8** | **+0.5** |
| **KLF** | **Kolari** | **1.55** | **109** | PG | **Pb** | **23 21 14.5** | **-0.2** |
| KLF | | | | MSG | | 23 21 33.1 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| KLF | | | | SN | **Sg** | **23 21 35.8** | **+0.9** |
| **KTK1** | **Kautokeino** | **1.68** | **41** | *eP* | **Pn** | **23 21 15.1** | **-0.7** |
| **KTK1** | **Kautokeino** | **1.68** | **41** | PG | **Pn** | **23 21 16.1** | **+0.3** |
| KTK1 | | | | SN | **Sg** | **23 21 40.4** | **+1.3** |
| **TRO** | **Tromso** | **1.92** | **347** | PG | **Pb** | **23 21 20.6** | **-0.5** |
| TRO | | | | SG | **Sb** | **23 21 45.2** | **-0.3** |
| **KALU** | **Kalix** | **2.30** | **145** | PB | **Pb** | **23 21 26.6** | **-0.8** |
| | baz=329 | | | | | | |
| KALU | | | | SG | **Sg** | **23 21 58.3** | **-0.6** |
| **TOF** | **Tornio** | **2.36** | **134** | PG | **Pb** | **23 21 27.8** | **-0.6** |
| | baz=317 | | | | | | |
| TOF | | | | MSG | | 23 21 56.9 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| TOF | | | | SG | **Sg** | **23 22 00.1** | **-0.6** |
| **SGF** | **Sodankyl** | **2.45** | **95** | PN | **Pn** | **23 21 27.2** | **+0.9** |
| | baz=280 | | | | | | |
| SGF | | | | SG | **Sb** | **23 22 00.5** | **-0.2** |
| **RNF** | **Rovaniemi** | **2.55** | **115** | PB | **Pb** | **23 21 30.5** | **-1.3** |
| | baz=306 | | | | | | |
| RNF | | | | SG | **Sb** | **23 22 04.5** | **+0.8** |
| **ARA0** | **ARCESS Array S** | **2.63** | **45** | PB | **Pn** | **23 21 30.5** | **+1.7** |
| ARA0 | | | | SG | **Sb** | **23 22 05.7** | **-0.2** |
| **RAJF** | **Raja-Jooseppi** | **3.12** | **73** | PB | **Pb** | **23 21 38.8** | **-2.7** |
| RAJF | | | | SB | **Sb** | **23 22 17.9** | **-2.1** |
| **KEV** | **Kevo** | **3.18** | **48** | SN | **Sn** | **23 22 15.8** | **+0.9** |
| KEV | | | | MSG | | 23 22 18.9 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| **VRF** | **Varrio** | **3.58** | **86** | SG | **Sb** | **23 22 33.8** | **+0.6** |
| **OUF** | **Merijarvi** | **3.89** | **149** | SN | **Sn** | **23 22 32.4** | **0.0** |
| **OLKF** | **Oulanka, Finla** | **3.89** | **108** | PG | **Pb** | **23 21 56.7** | **+2.1** |
| **KU6** | **Riekki** | **4.21** | **110** | PG | **Pb** | **23 22 02.1** | **+2.2** |
| KU6 | | | | SG | **Sg** | **23 22 56.9** | **-3.2** |

*IDC **28** 23:46:30.5±0.6, 57.72S×25.75W, h0km, mb4.3/9, mbtmp4.3/9, Error ellipse: s-maj=26.8km s-min=17.5km az=59.0*
*NEIC **28** 23:46:35.9±1.4, 57.6S±0.2×25.4W±0.3, h35km±2km, mb4.5/12, Error ellipse: s-maj=33.0km s-min=17.7km az=42.0*
**ISC 28 23:46:36.8±0.5, 57.68S±0.09×25.7W±0.1, h43km, n71, σ0§79/65, mb4.4/15, 7C-1D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **6.94** | **295** | Pn | Pn | 23 48 21.7 | +6.0 |
| **VNA1** | **Neumayer--Stat** | **14.98** | **157** | ⇑P | **Pn** | **23 50 05.0** | **-0.2** |
| | comp=Z,2.4nm,0.2s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **15.18** | **160** | ⇑P | **Pn** | **23 50 07.8** | **-0.1** |
| | comp=Z,2.7nm,0.2s | | | | | | |
| VNA3 | | | | ⇑S | Sn | 23 52 41.9 | -13 |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **15.38** | **157** | ⇑P | **Pn** | **23 50 10.6** | **+0.3** |
| | comp=Z,2.2nm,0.2s,baz=318,slow=13 | | | | | | |
| VNA2 | | | | ⇓S | Sn | 23 52 46.4 | -13 |
| | comp=Z,0.0nm,0.1s,baz=312,slow=18 | | | | | | |
| **SNAA** | **Sanae** | **16.92** | **155** | | **Pn** | **23 50 30.8** | **+0.8** |
| **SNAA** | **Sanae** | **16.92** | **155** | ⇑P | **P** | **23 50 31.5** | **0.0** |
| | comp=Z,49nm,0.4s | | | | | | |
| SNAA | | | | ⇑S | Sn | 23 53 24.6 | -12 |
| | comp=Z,23nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **16.92** | **155** | Pn | **P** | **23 50 31.0** | **-0.6** |
| | comp=Z,0.6nm,0.3s,baz=316,slow=15,SNR=20 | | | | | | |
| SNAA | | | | Sn | Sn | 23 53 26.0 | -11 |
| | comp=Z,0.1nm,0.3s,baz=49,slow=20,SNR=2.3 | | | | | | |
| **TROLL** | **Troll, Antarti** | **18.42** | **152** | ⇑P | **Pn** | **23 50 49.9** | **+1.3** |
| | comp=Z,50nm,0.5s | | | | | | |
| **BELA** | **Belgrano 2** | **20.52** | **185** | P | **P** | **23 51 10.3** | **-0.5** |
| **SMAI** | **San Martin Ant** | **21.10** | **223** | P | **P** | **23 51 17.8** | **+0.7** |
| SMAI | | | | IAmb | IAmb | 23 51 19.1 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **PLTB** | **Pedras Altas** | **32.19** | **312** | P | **P** | **23 53 00.2** | **-0.1** |
| PLTB | | | | IAmb | IAmb | 23 53 12.3 | |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **32.57** | **180** | P | **P** | **23 53 04.1** | **+0.5** |
| **QSPA** | **South Pole Qui** | **32.57** | **180** | P | **P** | **23 53 03.9** | **+0.3** |
| | comp=Z,3.7nm,0.7s,baz=239,slow=1.5,SNR=32 | | | | | | |
| QSPA | | | | ScP | **ScP** | **23 59 32.0** | **+3.1** |
| | comp=Z,0.7nm,0.7s,baz=254,slow=2.4,SNR=1.6 | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **PLCA** | **Paso Flores** | **33.10** | **281** | P | **P** | **23 53 08.9** | **+0.5** |
| | comp=Z,2.0nm,0.8s,baz=209,slow=9.1,SNR=3.6 | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **38.36** | **142** | P | **P** | **23 53 52.7** | **-0.2** |
| | comp=Z,1.7nm,0.7s,baz=231,slow=6.9,SNR=10.0 | | | | | | |
| MAW | | | | PcP | **PcP** | **23 56 06.2** | **+0.6** |
| | comp=Z,0.7nm,0.7s,baz=294,slow=10.0,SNR=1.7 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **CPUP** | **Villa Florida** | **38.49** | **311** | P | **P** | **23 53 54.0** | **-0.5** |
| **CPUP** | **Villa Florida** | **38.49** | **311** | P | **P** | **23 53 54.3** | **-0.3** |
| | comp=Z,1.2nm,0.6s,baz=160,slow=6.8,SNR=4.2 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **VA03** | **San Esteban** | **39.17** | **290** | P | **P** | **23 54 01.8** | **+1.5** |
| **AC05** | **El Transito** | **42.22** | **294** | P | **P** | **23 54 24.6** | **-1.0** |
| AC05 | | | | IAmb | IAmb | 23 54 57.3 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **BDFB** | **Brasilia** | **45.18** | **329** | P | **P** | **23 54 50.4** | **+1.1** |
| | comp=Z,2.3nm,0.5s,baz=158,slow=1.6,SNR=4.1 | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **46.16** | **112** | T | T | 00 45 29.9 | |
| | baz=225,slow=75,SNR=11 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **46.17** | **112** | T | T | 00 45 28.9 | |
| | baz=225,slow=75,SNR=12 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **46.18** | **112** | T | T | 00 45 30.1 | |
| | baz=225,slow=75,SNR=15 | | | | | | |
| **PTLB** | **Pontes e Lacer** | **49.03** | **315** | P | **P** | **23 55 17.7** | **-1.5** |
| PTLB | | | | IAmb | IAmb | 23 55 22.9 | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **50.47** | **14** | T | T | 00 50 30.2 | |
| | baz=188,slow=76,SNR=5.6 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **50.47** | **14** | T | T | 00 50 25.8 | |
| | baz=188,slow=76,SNR=8.5 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **50.48** | **14** | T | T | 00 50 30.4 | |
| | baz=188,slow=76,SNR=8.7 | | | | | | |
| **LPAZ** | **La Paz** | **51.98** | **305** | P | **P** | **23 55 41.3** | **-0.9** |
| | comp=Z,2.5nm,0.5s,baz=198,slow=6.7,SNR=11 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **SAML** | **Samuel** | **56.52** | **314** | P | **P** | **23 56 13.8** | **-0.8** |
| SAML | | | | IAmb | IAmb | 23 56 16.1 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **MAL2** | **Monte Alegre,** | **59.90** | **327** | P | **P** | **23 56 39.8** | **+1.7** |
| **BOAV** | **Boa Vista** | **66.06** | **321** | P | **P** | **23 57 18.5** | **-0.6** |
| BOAV | | | | IAmb | IAmb | 23 57 19.6 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro** | **66.33** | **23** | P | **P** | **23 57 21.3** | **+0.6** |
| | comp=Z,2.9nm,0.6s,baz=160,slow=7.2,SNR=6.3 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.10** | **28** | P | **P** | **23 58 09.2** | **+1.0** |
| | comp=Z,4.0nm,0.5s,baz=202,slow=6.2,SNR=70 | | | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **97.19** | **161** | P | **P** | **00 00 03.7** | **-1.0** |
| | comp=Z,0.8nm,0.6s,baz=185,slow=3.9,SNR=12 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **122.76** | **291** | PKP | **PKiKP** | **00 05 28.1** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=116,slow=4.1,SNR=2.4 | | | | | | |
| **FXWY** | **Fox Creek** | **123.24** | **300** | PKPdf | **PKiKP** | **00 05 28.1** | **-0.2** |
| **FINES** | **FINESS Array B** | **125.45** | **28** | PKP | **PKPdf** | **00 05 30.8** | **-0.6** |
| | comp=Z,1.1nm,0.5s,baz=188,slow=2.8,SNR=19 | | | | | | |
| **FIA1** | **FINESS Array S** | **125.45** | **28** | PKPdf | **PKPdf** | **00 05 30.8** | **-0.6** |
| **OVMT** | **Ovando** | **126.74** | **302** | PKPdf | **PKiKP** | **00 05 35.1** | **0.0** |
| **ARCES** | **ARCESS Array B** | **132.16** | **22** | PKP | **PKPdf** | **00 05 43.5** | **-0.5** |
| | comp=Z,3.1nm,1.0s,baz=230,slow=0.7,SNR=6.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **134.96** | **58** | PKP | **PKiKP** | **00 05 50.3** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=229,slow=3.6,SNR=3.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **137.25** | **65** | PKP | **PKiKP** | **00 05 55.5** | **-0.4** |
| | comp=Z,0.2nm,0.4s,baz=253,slow=2.8,SNR=1.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **137.92** | **316** | PKP | **PKPdf** | **00 05 54.6** | **-0.3** |
| | comp=Z,0.4nm,0.3s,baz=122,slow=2.2,SNR=6.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.34** | **65** | PKhKP | PKPpre | 00 05 58.6 | |
| | comp=Z,0.3nm,0.3s,baz=219,slow=4.4,SNR=2.6 | | | | | | |
| **C36M** | **Paulatuk** | **144.71** | **323** | PKPdf | **PKPab** | **00 06 05.4** | **-0.5** |
| **A36M** | **Sachs Harbour** | **146.02** | **327** | PKPdf | **PKPab** | **00 06 10.3** | **-0.4** |
| **H31M** | **Peel River** | **147.06** | **314** | PKPdf | **PKPbc** | **00 06 12.9** | **-0.4** |
| **G31M** | **Satah River** | **147.41** | **316** | PKPbc | **PKPbc** | **00 06 13.6** | **-0.5** |
| **INK** | **Inuvik** | **147.57** | **319** | PKPbc | **PKPbc** | **00 06 13.2** | **-1.3** |
| | comp=Z,5.0nm,0.5s,baz=42,slow=1.1,SNR=6.6 | | | | | | |
| **K29M** | **Barlow Dome** | **147.62** | **310** | PKPbc | **PKPbc** | **00 06 15.2** | **+0.3** |
| **I30M** | **Mount Dempster** | **147.65** | **313** | PKPbc | **PKPbc** | **00 06 14.5** | **-0.5** |
| **G30M** | **tAoh Zrail Nji** | **148.16** | **316** | PKPbc | **PKPbc** | **00 06 16.3** | **+0.1** |
| **EPYK** | **Eagle Plains** | **148.16** | **315** | PKPbc | **PKPbc** | **00 06 15.8** | **-0.5** |
| **DAWY** | **Dawson** | **148.47** | **310** | PKPbc | **PKPbc** | **00 06 17.1** | **0.0** |
| **H29M** | **Whitestone** | **148.75** | **314** | PKPbc | **PKPbc** | **00 06 17.4** | **-0.3** |
| **G29M** | **Pine Creek** | **148.81** | **315** | PKPbc | **PKPbc** | **00 06 17.8** | **-0.1** |
| **M27K** | **Edge Creek, AK** | **148.93** | **306** | PKPbc | **PKPbc** | **00 06 18.6** | **+0.1** |
| **I28M** | **Miner Creek** | **149.13** | **312** | PKPbc | **PKPbc** | **00 06 18.2** | **-0.6** |
| **GLB** | **Gilahina Butte** | **149.46** | **303** | PKPbc | **PKiKP** | **00 06 19.8** | **-0.9** |
| **N25K** | **Chitina, Valde** | **149.87** | **304** | PKPbc | **PKiKP** | **00 06 20.9** | **-0.8** |
| **SONM** | **Songino Array** | **149.99** | **88** | PKPbc | **PKPbc** | **00 06 20.9** | **-0.6** |
| | comp=Z,2.0nm,0.4s,baz=222,slow=2.3,SNR=7.3 | | | | | | |
| **SCM** | **Sheep Creek Mo** | **151.17** | **303** | PKPbc | **PKiKP** | **00 06 23.9** | **-0.4** |
| **SML** | **Sawmill** | **151.62** | **303** | PKPbc | **PKiKP** | **00 06 24.8** | **-0.4** |
| **ILAR** | **Eielson Array** | **151.79** | **309** | PKPbc | **PKiKP** | **00 06 25.0** | **-0.4** |
| | comp=Z,6.7nm,0.9s,baz=142,slow=3.0,SNR=40 | | | | | | |
| **CCB** | **Clear Creek Bu** | **152.15** | **309** | PKPbc | **PKPbc** | **00 06 25.1** | **-0.8** |
| **KDAK** | **Kodiak Island** | **152.24** | **293** | PKPbc | **PKiKP** | **00 06 26.2** | **-0.3** |
| **KDAK** | **Kodiak Island** | **152.24** | **293** | PKPbc | **PKiKP** | **00 06 26.0** | **-0.5** |
| | comp=Z,4.9nm,0.6s,baz=160,slow=5.0,SNR=8.9 | | | | | | |
| **SUA** | **Susitna One** | **152.61** | **301** | PKPbc | **PKiKP** | **00 06 27.6** | **+0.2** |
| **SKT** | **Skwentna** | **153.12** | **302** | PKPbc | **PKiKP** | **00 06 28.3** | **0.0** |
| **M20K** | **Styx River** | **153.82** | **301** | PKPbc | **PKiKP** | **00 06 29.4** | **-0.4** |
| **N19K** | **Bonanza Creek** | **154.17** | **299** | PKPbc | **PKPbc** | **00 06 29.8** | **-0.7** |

**NAM 28 23:57:07.8±4.4, 19.70S×14.45E, h15km±19km, ML0.1, 14C-1D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.07** | **135** | ⇑*i*P | Pg | 23 57 12.5 | +1.6 |
| ST3N | | | | *i* S | Sg | 23 57 13.7 | +0.7 |
| ST3N | | | | IAML | | 23 57 13.8 | |
| | comp=Z,1.8nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.07** | **135** | ⇑*i*P | Pg | 23 57 12.5 | +1.6 |
| ST3N | | | | *i* S | Sg | 23 57 13.8 | +0.7 |
| ST3N | | | | IAML | | 23 57 13.8 | |
| | comp=Z,1.8nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **204** | ⇑*i*P | Pb | 23 57 13.9 | +2.0 |
| ST6N | | | | *i* S | Sb | 23 57 16.2 | +1.7 |
| ST6N | | | | IAML | | 23 57 16.3 | |
| | comp=Z,1.8nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.12** | **204** | ⇑*i*P | Pb | 23 57 13.9 | +2.1 |
| ST6N | | | | *i* S | Sb | 23 57 16.2 | +1.7 |
| ST6N | | | | IAML | | 23 57 16.3 | |
| | comp=Z,1.8nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.12** | **272** | ⇑*i*P | Pb | 23 57 16.3 | +4.4 |
| ST8N | | | | *i* S | Sb | 23 57 19.4 | +4.7 |
| ST8N | | | | IAML | | 23 57 20.4 | |
| | comp=Z,0.3nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.14** | **139** | ⇓*i*P | Pg | 23 57 11.7 | -0.1 |
| ST9N | | | | *i* S | Sg | 23 57 12.2 | -2.1 |
| ST9N | | | | IAML | | 23 57 12.3 | |
| | comp=Z,78nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.14** | **139** | ⇑*i*P | Pg | 23 57 11.6 | -0.1 |
| ST9N | | | | *i* S | Sg | 23 57 12.2 | -2.1 |
| ST9N | | | | IAML | | 23 57 12.3 | |
| | comp=Z,78nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.16** | **105** | ⇑*i*P | Pb | 23 57 12.4 | -0.1 |
| ST1N | | | | *i* S | Sg | 23 57 13.6 | -1.2 |
| ST1N | | | | IAML | | 23 57 13.7 | |
| | comp=Z,12nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.16** | **105** | ⇑*i*P | Pb | 23 57 12.4 | -0.1 |
| ST1N | | | | *i* S | Sg | 23 57 13.5 | -1.3 |
| ST1N | | | | IAML | | 23 57 13.7 | |
| | comp=Z,12nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.27** | **149** | ⇑*i*P | Pg | 23 57 13.6 | -0.2 |
| ST2N | | | | *i* S | Sg | 23 57 15.3 | -2.4 |
| ST2N | | | | IAML | | 23 57 15.5 | |
| | comp=Z,2.2nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.27** | **149** | ⇑*i*P | Pg | 23 57 13.6 | -0.2 |
| ST2N | | | | *i* S | Sg | 23 57 15.3 | -2.5 |
| ST2N | | | | IAML | | 23 57 15.5 | |
| | comp=Z,2.2nm,0.0s | | | | | | |
| **ST10N** | **ST10** | **0.31** | **191** | ⇑*i*P | Pb | 23 57 15.8 | +0.8 |
| ST10N | | | | *i* S | Sb | 23 57 19.7 | -0.2 |
| ST10N | | | | IAML | | 23 57 19.8 | |
| | comp=Z,1.2nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.31** | **191** | ⇑*i*P | Pb | 23 57 15.8 | +0.8 |
| ST10N | | | | IAML | | 23 57 19.8 | |
| | comp=Z,1.3nm,0.1s | | | | | | |
| ST10N | | | | *i* S | Sb | 23 57 19.9 | 0.0 |
| **ST5N** | **ST5** | **0.31** | **108** | ⇑*i*P | Pg | 23 57 14.4 | +0.1 |
| ST5N | | | | IAML | | 23 57 17.1 | |
| | comp=Z,1.1nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.31** | **108** | ⇑*i*P | Pg | 23 57 14.4 | +0.1 |
| ST5N | | | | IAML | | 23 57 17.1 | |
| | comp=Z,1.0nm,0.1s | | | | | | |
| ST5N | | | | *i* S | Sg | 23 57 17.1 | -1.6 |
| **ST11N** | **ST11** | **0.38** | **84** | *i* S | Sb | 23 57 22.2 | +0.3 |

*IDC **29** 00:03:58.0±0.6, 15.60N×147.05E, h0km, mb4.4/27, mbtmp4.4/29, ML4.1/2, MS4.1/2, Error ellipse: s-maj=18.2km s-min=13.4km az=104.0*

*NEIC **29** 00:04:00.4±1.4, 15.51N±0.09×147.16E±0.07, h10km±1km, mb4.9/114, Error ellipse: s-maj=15.8km s-min=10.9km az=162.0*
*BJI **29** 00:04:01.9±0.0, 15.49N×147.29E, h42km, mb4.9/43, mB5.3/11, Ms4.7/5, Ms7 4.4/4*
**ISC 29 00:04:03.0±0.5, 15.47N±0.07×147.16E±0.09, h33km, n157, σ1§08/145, mb4.8/94, MS4.2/3, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **2.90** | **230** | Pn | **Pn** | **00 04 47.8** | **+0.9** |
| GUMO | | | | Sn | **Sn** | **00 05 21.9** | **+1.4** |
| **GUMO** | **Guam** | **2.90** | **230** | Pn | **Pn** | **00 04 43.8** | **-3.0** |
| | 14nm,0.3s,baz=339,slow=23,SNR=2.5 | | | | | | |
| GUMO | | | | Sn | **Sn** | **00 05 21.5** | **+0.9** |
| | 52nm,0.3s,baz=210,slow=22,SNR=4.5 | | | | | | |
| | 40nm,0.3s | | | | | | |
| **JCJ** | **Chichijima** | **12.46** | **339** | Pn | Pn | 00 06 52.9 | -5.2 |
| | 1.9nm,0.3s,baz=313,slow=20,SNR=1.6 | | | | | | |
| | 21nm,0.7s | | | | | | |
| **PATS** | **Pohnpei** | **13.90** | **127** | Pn | Pn | 00 07 12.4 | -5.4 |
| **H11S3** | **WAKE ISLAND Hy** | **18.92** | **78** | T | T | 00 27 49.6 | |
| | baz=263,slow=74,SNR=19 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **18.93** | **78** | T | T | 00 27 47.1 | |
| | baz=263,slow=74,SNR=12 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **18.94** | **78** | T | T | 00 27 45.5 | |
| | baz=263,slow=74,SNR=10 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.28** | **74** | T | T | 00 28 14.2 | |
| | baz=260,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.29** | **74** | T | T | 00 28 12.2 | |
| | baz=260 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.30** | **74** | T | T | 00 28 11.0 | |
| | baz=260,slow=75 | | | | | | |
| **JOW** | **Kunigami** | **20.90** | **306** | P | **P** | **00 08 41.1** | **-1.6** |
| | 15nm,0.7s,baz=35,slow=25,SNR=2.6 | | | | | | |
| | 15nm,0.7s | | | | | | |
| **JGF** | **Kuroka** | **21.89** | **338** | P | **P** | **00 08 53.1** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **22.45** | **341** | P | **P** | **00 08 56.4** | **-3.0** |
| | 2.4nm,0.6s,baz=170,slow=11,SNR=6.4 | | | | | | |
| | 2.4nm,0.6s | | | | | | |
| **JMM** | **Marumori** | **23.01** | **347** | P | **P** | **00 09 04.3** | **-0.8** |
| JMM | | | | IAmb | IAmb | 00 09 15.0 | |
| | comp=Z,44nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **23.48** | **220** | P | **P** | **00 09 09.5** | **-0.5** |
| FAKI | | | | IAmb | IAmb | 00 09 12.5 | |
| | comp=Z,68nm,1.1s | | | | | | |
| **JTM** | **Tenmabayashi** | **25.78** | **349** | P | **P** | **00 09 30.9** | **0.0** |
| **KSRS** | **Korea Array** | **27.75** | **326** | P | **P** | **00 09 47.2** | **-1.4** |
| | comp=Z,1.8nm,0.8s,baz=136,slow=32,SNR=3.8 | | | | | | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **28.82** | **353** | P | **P** | **00 09 59.0** | **+0.9** |
| JKA | | | | IAmb | IAmb | 00 10 12.2 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **NJ2** | **Nanjing** | **30.59** | **308** | *eP* | **P** | **00 10 14.5** | **+0.6** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **32.29** | **210** | P | **P** | **00 10 29.2** | **+0.2** |
| **MDJ** | **Mudanjiang** | **32.65** | **336** | P | **P** | **00 10 36.3** | **+4.4** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,600nm,13.7s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,630nm,15.1s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,950nm,16.1s | | | | | | |
| **KAPI** | **Kappang** | **33.92** | **235** | LR | LR | 00 25 20.2 | |
| | comp=Z,194nm,18.9s,baz=69,slow=38 | | | | | | |
| **KNRA** | **Kununura** | **35.88** | **211** | P | **P** | **00 10 59.5** | **-0.6** |
| **LYN** | **LuoYang** | **36.48** | **308** | *eP* | **P** | **00 11 04.5** | **-0.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,19nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **37.19** | **200** | P | **P** | **00 11 10.9** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 00 12 00.2 | |
| | comp=Z,34nm,1.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **37.33** | **200** | P | **P** | **00 11 11.2** | **-1.3** |
| **WB2** | **Warramunga Arr** | **37.37** | **200** | P | **P** | **00 11 13.5** | **+0.7** |
| WB2 | | | | IAmb | IAmb | 00 11 21.0 | |
| | comp=Z,40nm,2.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.38** | **200** | P | **P** | **00 11 13.3** | **+0.4** |
| | comp=Z,2.2nm,0.8s,baz=20,slow=9.3,SNR=11 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 13 32.5** | **+0.9** |
| | comp=Z,1.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L14K | | | | | IAmb | IAmb | 00 14 01.5 | |
| | comp=Z,31nm,1.7s | | | | | | | |
| **N15K** | **Kwethluk River** | **58.58** | **28** | P | **P** | | **00 13 57.2** | **+0.8** |
| N15K | | | | | IAmb | IAmb | 00 14 07.8 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **58.94** | **25** | P | **P** | | **00 13 59.1** | **+0.3** |
| K15K | | | | | IAmb | IAmb | 00 15 08.8 | |
| | comp=Z,31nm,1.8s | | | | | | | |
| **O16K** | **Kokwok River B** | **59.25** | **29** | P | **P** | | **00 14 01.2** | **+0.2** |
| **M16K** | **Timber Creek** | **59.45** | **27** | P | **P** | | **00 14 03.0** | **+0.6** |
| **F15K** | **North Star Dit** | **59.52** | **21** | P | **P** | | **00 14 03.5** | **+0.7** |
| F15K | | | | | IAmb | IAmb | 00 14 14.3 | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **L16K** | **Owhat River** | **59.53** | **26** | P | **P** | | **00 14 02.8** | **-0.1** |
| L16K | | | | | IAmb | IAmb | 00 15 47.4 | |
| | comp=Z,24nm,2.0s | | | | | | | |
| **J16K** | **Anvik River** | **59.78** | **24** | P | **P** | | **00 14 04.9** | **+0.2** |
| **N17K** | **Nushagak Hills** | **60.04** | **28** | P | **P** | | **00 14 07.0** | **+0.5** |
| N17K | | | | | IAmb | IAmb | 00 14 16.7 | |
| | comp=Z,7.9nm,0.9s | | | | | | | |
| **M17K** | **Holitna River** | **60.28** | **27** | P | **P** | | **00 14 08.5** | **+0.4** |
| **J17K** | **VABM Dome** | **60.45** | **25** | P | **P** | | **00 14 09.6** | **+0.4** |
| J17K | | | | | IAmb | IAmb | 00 14 40.3 | |
| | comp=Z,26nm,1.8s | | | | | | | |
| **K17K** | **Iditarod** | **60.47** | **26** | P | **P** | | **00 14 08.9** | **-0.4** |
| K17K | | | | | IAmb | IAmb | 00 14 20.8 | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| **N18K** | **Kilae Creek** | **60.69** | **28** | P | **P** | | **00 14 11.3** | **+0.4** |
| **C16K** | **Lisburne Hills** | **60.76** | **18** | P | **P** | | **00 14 11.1** | **-0.2** |
| **H17K** | **Granite Mounta** | **60.84** | **23** | P | **P** | | **00 14 11.6** | **-0.3** |
| H17K | | | | | IAmb | IAmb | 00 14 16.7 | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **KDAK** | **Kodiak Island** | **61.31** | **32** | P | **P** | | **00 14 15.9** | **+0.8** |
| | comp=Z,9.4nm,1.2s,baz=193,slow=18,SNR=1.7 | | | | | | | |
| | comp=Z,9.4nm,1.2s | | | | | | | |
| **N19K** | **Bonanza Creek** | **61.38** | **28** | P | **P** | | **00 14 16.5** | **+0.8** |
| N19K | | | | | IAmb | IAmb | 00 14 27.9 | |
| | comp=Z,7.2nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.42** | **323** | P | **P** | | **00 14 14.7** | **-1.3** |
| | comp=Z,1.5nm,0.5s,baz=100,slow=6.2,SNR=12 | | | | | | | |
| ZALV | | | | PcP | **PcP** | | **00 14 57.1** | **-0.7** |
| | comp=Z,2.2nm,0.7s,baz=106,slow=6.0,SNR=4.0 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **J18K** | **Innoko River** | **61.44** | **25** | P | **P** | | **00 14 16.2** | **+0.3** |
| J18K | | | | | IAmb | IAmb | 00 14 26.4 | |
| | comp=Z,15nm,1.7s | | | | | | | |
| **H18K** | **Honhosa River** | **61.52** | **23** | P | **P** | | **00 14 16.7** | **+0.2** |
| H18K | | | | | IAmb | IAmb | 00 14 27.6 | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **61.71** | **315** | P | **P** | | **00 14 17.3** | **-0.8** |
| MK31 | | | | | IAmb | IAmb | 00 14 18.7 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.71** | **315** | P | **P** | | **00 14 17.8** | **-0.4** |
| | comp=Z,4.9nm,0.6s,baz=92,slow=8.9,SNR=32 | | | | | | | |
| | comp=Z,4.9nm,0.6s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **61.81** | **20** | P | **P** | | **00 14 19.4** | **+1.0** |
| E18K | | | | | IAmb | IAmb | 00 14 23.2 | |
| | comp=Z,5.6nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **61.93** | **315** | P | **P** | | **00 14 18.9** | **-0.7** |
| MAKZ | | | | | IAmb | IAmb | 00 14 30.6 | |
| | comp=Z,9.5nm,0.7s | | | | | | | |
| **J19K** | **Poorman** | **62.10** | **25** | P | **P** | | **00 14 21.1** | **+0.8** |
| **C18K** | **Utukok River** | **62.24** | **19** | P | **P** | | **00 14 21.3** | **0.0** |
| **H19K** | **Roundabout Mou** | **62.40** | **23** | P | **P** | | **00 14 22.4** | **0.0** |
| H19K | | | | | IAmb | IAmb | 00 14 26.9 | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| **K20K** | **Telida** | **62.49** | **26** | P | **P** | | **00 14 22.6** | **-0.4** |
| **CNPM** | **China Poot** | **62.50** | **30** | P | **P** | | **00 14 22.0** | **-1.2** |
| **J20K** | **Nowinta River** | **62.76** | **25** | P | **P** | | **00 14 24.9** | **+0.1** |
| **E19K** | **Redstone River** | **62.97** | **21** | P | **P** | | **00 14 26.8** | **+0.7** |
| E19K | | | | | IAmb | IAmb | 00 14 38.0 | |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **C19K** | **Lookout Ridge** | **62.98** | **19** | P | **P** | | **00 14 26.7** | **+0.4** |
| C19K | | | | | IAmb | IAmb | 00 14 38.1 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **D19K** | **Kuna River** | **63.15** | **20** | P | **P** | | **00 14 27.5** | **+0.1** |
| D19K | | | | | IAmb | IAmb | 00 15 30.7 | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **H21K** | **Melozitna Rive** | **63.85** | **24** | P | **P** | | **00 14 31.9** | **-0.1** |
| H21K | | | | | IAmb | IAmb | 00 14 36.5 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **64.03** | **26** | P | **P** | | **00 14 33.5** | **+0.3** |
| **F21K** | **Alatna River** | **64.19** | **22** | P | **P** | | **00 14 35.0** | **+0.8** |
| F21K | | | | | IAmb | IAmb | 00 14 39.8 | |
| | comp=Z,16nm,1.9s | | | | | | | |
| **MLY** | **Manley** | **64.44** | **25** | P | **P** | | **00 14 36.4** | **+0.4** |
| MLY | | | | | IAmb | IAmb | 00 14 39.8 | |
| | comp=Z,5.9nm,0.8s | | | | | | | |
| **SML** | **Sawmill** | **64.52** | **28** | P | **P** | | **00 14 37.1** | **+0.6** |
| **KURK** | **Kurchatov** | **64.61** | **319** | P | **P** | | **00 14 36.2** | **-1.0** |
| **KURBB** | **Kurchatov Arra** | **64.65** | **319** | P | **P** | | **00 14 36.6** | **-0.9** |
| | comp=Z,20nm,0.8s,baz=98,slow=6.9,SNR=184 | | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **64.98** | **28** | P | **P** | | **00 14 42.5** | **+2.9** |
| **D22K** | **Ayikyak River** | **65.11** | **20** | P | **P** | | **00 14 40.9** | **+0.7** |
| D22K | | | | | IAmb | IAmb | 00 14 44.9 | |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| **G23K** | **Bananza Creek** | **65.27** | **23** | P | **P** | | **00 14 41.8** | **+0.5** |
| **MDM** | **Murphy Dome** | **65.43** | **25** | P | **P** | | **00 14 42.5** | **+0.2** |
| MDM | | | | | IAmb | IAmb | 00 14 53.8 | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **KSH** | **Kashi** | **65.89** | **307** | P | **P** | | **00 14 48.8** | **+2.9** |
| KSH | | | | PcP | **PcP** | | **00 15 18.5** | **+1.8** |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **65.92** | **310** | P | **P** | | **00 14 45.9** | **-0.2** |
| **ILAR** | **Eielson Array** | **65.93** | **25** | P | **P** | | **00 14 44.4** | **-1.1** |
| | comp=Z,3.0nm,0.8s,baz=255,slow=4.6,SNR=15 | | | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **N25K** | **Chitina, Valde** | **66.20** | **29** | P | **P** | | **00 14 46.6** | **-0.8** |
| **F25K** | **Christian Rive** | **67.17** | **23** | P | **P** | | **00 14 54.4** | **+0.9** |
| F25K | | | | | IAmb | IAmb | 00 15 05.6 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **J26L** | **Joseph Creek** | **67.26** | **26** | IAmb | IAmb | | 00 14 59.3 | |
| | comp=Z,6.7nm,0.7s | | | | | | | |
| **F26K** | **Sheenjek River** | **67.75** | **23** | P | **P** | | **00 14 57.8** | **+0.6** |
| F26K | | | | | IAmb | IAmb | 00 15 09.2 | |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| **K27K** | **Chicken** | **67.80** | **27** | IAmb | IAmb | | 00 15 11.2 | |
| | comp=Z,26nm,1.9s | | | | | | | |
| **NIL** | **Nilore** | **68.34** | **300** | P | **P** | | **00 15 00.7** | **-0.8** |
| **E27K** | **Coleen River** | **68.80** | **22** | P | **P** | | **00 15 04.7** | **+1.1** |
| **F28M** | **Old Crow** | **69.33** | **23** | IAmb | IAmb | | 00 15 18.7 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **H29M** | **Whitestone** | **69.70** | **25** | P | **P** | | **00 15 09.6** | **+0.3** |
| **K29M** | **Barlow Dome** | **69.77** | **27** | P | **P** | | **00 15 10.3** | **+0.4** |
| K29M | | | | | IAmb | IAmb | 00 15 21.4 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **69.85** | **321** | P | **P** | | **00 15 09.9** | **-0.5** |
| | comp=Z,9.5nm,0.8s,baz=95,slow=7.4,SNR=38 | | | | | | | |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **69.91** | **311** | IAmb | IAmb | | 00 15 11.6 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **69.91** | **321** | P | **P** | | **00 15 10.0** | **-0.8** |
| BRVK | | | | | IAmb | IAmb | 00 15 11.2 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **GAR** | **Garm** | **70.30** | **306** | IAmb | IAmb | | 00 15 13.8 | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **J30M** | **Hart River** | **70.36** | **26** | P | **P** | | **00 15 14.0** | **+0.6** |
| J30M | | | | | IAmb | IAmb | 00 15 26.1 | |
| | comp=Z,19nm,1.8s | | | | | | | |
| **I30M** | **Mount Dempster** | **70.40** | **26** | P | **P** | | **00 15 11.4** | **-2.3** |
| I30M | | | | | IAmb | IAmb | 00 15 36.9 | |
| | comp=Z,17nm,1.9s | | | | | | | |
| **CHGR** | **Chuyangaron** | **71.23** | **306** | P | **P** | | **00 15 17.8** | **-1.4** |
| **H31M** | **Peel River** | **71.30** | **25** | P | **P** | | **00 15 18.9** | **-0.1** |
| H31M | | | | | IAmb | IAmb | 00 15 59.3 | |
| | comp=Z,22nm,1.6s | | | | | | | |
| **SIMJ** | **Simiganj** | **71.34** | **306** | P | **P** | | **00 15 19.7** | **-0.2** |
| **G31M** | **Satah River** | **71.41** | **24** | P | **P** | | **00 15 20.0** | **+0.4** |
| G31M | | | | | IAmb | IAmb | 00 15 30.8 | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **DLBC** | **Dease Lake** | **73.21** | **33** | P | **P** | | **00 15 30.7** | **+0.1** |
| | comp=Z,1.6nm,0.4s,baz=275,slow=1.6,SNR=3.6 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **A36M** | **Sachs Harbour** | **74.67** | **19** | P | **P** | | **00 15 39.0** | **+0.3** |
| A36M | | | | | IAmb | IAmb | 00 15 50.2 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **76.50** | **325** | P | **P** | | **00 15 48.7** | **-0.9** |
| ARU | | | | | IAmb | IAmb | 00 15 49.8 | |
| | comp=Z,9.4nm,0.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **76.65** | **318** | P | **P** | | **00 15 49.5** | **-1.1** |
| **YKA** | **Yellowknife Ar** | **80.18** | **28** | P | **P** | | **00 16 10.2** | **+0.4** |
| | comp=Z,2.7nm,0.8s,baz=291,slow=5.8,SNR=9.3 | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **J05D** | **Fort Rock, OR** | **80.72** | **48** | P | **P** | | **00 16 14.3** | **+1.0** |
| **PINE** | **Pine Mountain** | **80.82** | **47** | P | **P** | | **00 16 15.1** | **+1.2** |
| PINE | | | | | IAmb | IAmb | 00 16 25.7 | |
| | comp=Z,9.4nm,0.8s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **82.56** | **351** | P | **P** | | **00 16 21.5** | **-0.7** |
| | comp=Z,4.1nm,0.7s,baz=50,slow=16,SNR=2.2 | | | | | | | |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **BMO** | **Blue Mountains** | **83.10** | **45** | P | **P** | | **00 16 25.6** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **84.03** | **52** | P | **P** | | **00 16 31.8** | **+1.0** |
| | comp=Z,1.0nm,0.7s,baz=274,slow=5.2,SNR=7.6 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **ELK** | **Elko** | **85.68** | **49** | P | **P** | | **00 16 39.8** | **+0.7** |
| **ARCES** | **ARCESS Array B** | **85.98** | **343** | P | **P** | | **00 16 39.3** | **-0.4** |
| | comp=Z,1.8nm,0.6s,baz=59,slow=3.1,SNR=12 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **HVU** | **Hansel Valley** | **87.14** | **48** | P | **P** | | **00 16 46.8** | **+0.7** |
| **YHL** | **Hebgen Lake** | **87.27** | **44** | IAmb | IAmb | | 00 16 59.0 | |
| | comp=Z,9.1nm,0.7s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **87.61** | **49** | P | **P** | | **00 16 48.6** | **+0.2** |
| DUG | | | | | IAmb | IAmb | 00 16 59.9 | |
| | comp=Z,4.6nm,0.7s | | | | | | | |
| **YNR** | **Norris Junctio** | **87.65** | **44** | IAmb | IAmb | | 00 16 54.5 | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **IMW** | **Indian Meadow** | **87.75** | **45** | IAmb | IAmb | | 00 16 54.0 | |
| | comp=Z,5.3nm,0.8s | | | | | | | |
| **FXWY** | **Fox Creek** | **87.77** | **45** | P | **P** | | **00 16 49.2** | **-0.1** |
| **AHID** | **Auburn Hatcher** | **88.01** | **46** | IAmb | IAmb | | 00 17 01.9 | |
| | comp=Z,5.6nm,0.8s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **88.06** | **47** | IAmb | IAmb | | 00 17 01.9 | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **PDAR** | **Pinedale Array** | **89.08** | **46** | P | **P** | | **00 16 55.7** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=270,slow=1.8,SNR=2.8 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **U15A** | **North Rim** | **89.18** | **52** | P | **P** | | **00 16 54.7** | **-1.4** |
| **KBZ** | **Khabaz** | **89.41** | **315** | P | **P** | | **00 16 55.6** | **-1.0** |
| | comp=Z,4.6nm,0.9s,baz=158,slow=3.1,SNR=8.4 | | | | | | | |
| | comp=Z,4.6nm,0.8s | | | | | | | |
| **SRU** | **San Rafael Swe** | **89.63** | **49** | P | **P** | | **00 16 57.9** | **-0.1** |
| **RDMU** | **Red Mountain** | **89.83** | **48** | P | **P** | | **00 16 59.3** | **+0.3** |
| RDMU | | | | | IAmb | IAmb | 00 19 04.4 | |
| | comp=Z,6.1nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **90.39** | **336** | P | **P** | | **00 16 59.2** | **-1.6** |
| | comp=Z,1.0nm,0.4s,baz=76,slow=3.9,SNR=13 | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **91.88** | **311** | P | **P** | | **00 17 07.2** | **-1.3** |
| **HFS** | **Hagfors** | **95.89** | **339** | P | **P** | | **00 17 24.1** | **-2.1** |
| | comp=Z,0.4nm,0.4s,baz=100,slow=5.1,SNR=4.6 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **NOA** | **NORSAR Array B** | **96.07** | **340** | P | **P** | | **00 17 25.4** | **-1.7** |
| | comp=Z,0.3nm,0.6s,baz=46,slow=4.6,SNR=1.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **97.36** | **315** | P | **P** | | **00 17 31.3** | **-2.2** |
| | comp=Z,0.5nm,0.6s,baz=106,slow=9.1,SNR=5.1 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **TORD** | **Tordi Ar. Bea** | **135.55** | **308** | PKP | **PKPdf** | | **00 23 19.2** | **-1.7** |
| | comp=Z,0.3nm,0.7s,baz=79,slow=2.2,SNR=2.9 | | | | | | | |
| **DBIC** | **Dimbokro** | **144.61** | **306** | PKP | **PKPab** | | **00 23 35.8** | **0.0** |
| | comp=Z,13nm,0.8s,baz=49,slow=2.4,SNR=12 | | | | | | | |
| **LPAZ** | **La Paz** | **146.07** | **96** | PKPbc | **PKPbc** | | **00 23 41.8** | **+0.4** |
| | comp=Z,2.1nm,0.7s,baz=19,slow=4.6,SNR=4.2 | | | | | | | |

*NEIC **29** 00:06:59.3±1.2,35.459N±0.008×97.77W±0.01,h6km±4km, mb_Lg2.2/24, ML2.4, ML2.5/42, Error ellipse: s-maj=1.6km s-min=0.7km az=45.0*

**NEIC 29 00:06:59.2±1.3, 35.455N±0.009×97.77W±0.01, h7km±4km, Error ellipse: s-maj=1.5km s-min=1.2km az=78.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKCSW** | **OKLAHOMA CITY** | **0.28** | **100** | Pg | Pg | 00 07 05.0 | +0.3 |
| OKCSW | | | | Sg | Sg | 00 07 09.2 | +0.7 |
| **FNO** | **Franklin** | **0.36** | **123** | Pg | Pg | 00 07 07.2 | +0.8 |
| FNO | | | | Sg | Sg | 00 07 12.4 | +1.3 |
| FNO | | | | IAML | | 00 07 17.9 | |
| | comp=N,534nm,0.8s | | | | | | |
| **ADOK** | **Arcadia Dam** | **0.38** | **59** | Pg | Pg | 00 07 06.8 | +0.1 |
| ADOK | | | | Sg | Sg | 00 07 12.8 | +1.1 |
| **OK029** | **Liberty Lake** | **0.43** | **37** | Pg | Pg | 00 07 07.7 | +0.1 |
| OK029 | | | | Sg | Sg | 00 07 14.0 | +0.8 |
| OK029 | | | | IAML | | 00 07 16.8 | |
| | comp=N,656nm,0.3s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.77** | **285** | Pg | Pg | 00 07 14.2 | +0.2 |
| CSTR | | | | Sg | Sg | 00 07 24.8 | +0.7 |
| **X34A** | **Smith Ranch, M** | **0.85** | **183** | Pg | Pg | 00 07 15.9 | +0.2 |
| **OK031** | **S. Brethren Rd** | **0.91** | **57** | Pg | Pg | 00 07 16.2 | -0.5 |
| OK031 | | | | Sg | Sg | 00 07 28.8 | +0.3 |
| OK031 | | | | IAML | | 00 07 31.6 | |
| | comp=N,181nm,0.4s | | | | | | |
| OK031 | | | | IAML | | 00 07 34.4 | |
| | comp=N,188nm,0.4s | | | | | | |
| **OK052** | **Battle Ridge R** | **0.95** | **55** | Pg | Pg | 00 07 16.5 | -1.1 |
| OK052 | | | | Sg | Sg | 00 07 30.4 | +0.3 |
| OK052 | | | | IAML | | 00 07 35.8 | |
| | comp=N,209nm,0.4s | | | | | | |
| OK052 | | | | IAML | | 00 07 35.8 | |
| | comp=N,174nm,0.4s | | | | | | |
| **CROK** | **Carrier** | **1.06** | **351** | Pg | Pg | 00 07 18.6 | -1.0 |
| CROK | | | | Sg | Sg | 00 07 32.9 | -0.5 |
| **WMOK** | **Wichita Mounta** | **1.09** | **229** | Sg | Sg | 00 07 33.8 | -0.6 |
| **DEOK** | **Depew** | **1.11** | **69** | Pg | Pg | 00 07 20.1 | -0.5 |
| DEOK | | | | Sg | Sg | 00 07 34.5 | -0.4 |
| DEOK | | | | IAML | | 00 07 36.8 | |
| | comp=E,172nm,0.2s | | | | | | |
| DEOK | | | | IAML | | 00 07 40.7 | |
| | comp=N,133nm,0.2s | | | | | | |
| **QUOK** | **Quay** | **1.12** | **50** | Pg | Pg | 00 07 19.8 | -1.0 |
| QUOK | | | | Sg | Sg | 00 07 35.1 | -0.2 |
| **OK048** | **Pawnee Station** | **1.17** | **35** | Pg | Pg | 00 07 21.0 | -0.8 |
| OK048 | | | | Sg | Sg | 00 07 36.3 | -0.7 |
| OK048 | | | | IAML | | 00 07 41.4 | |
| | comp=N,112nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.29** | **323** | | Pn | 00 07 23.6 | -0.1 |
| **OK051** | **E0350 and S346** | **1.29** | **36** | | Pn | 00 07 23.1 | -0.7 |
| **OK032** | **Salt Plains WL** | **1.39** | **345** | | Pn | 00 07 24.6 | -0.6 |
| **GC02** | **Grant County #** | **1.40** | **357** | | Pn | 00 07 24.4 | -0.8 |
| **NOKA** | **Waynoka** | **1.51** | **322** | | Pn | 00 07 26.5 | -0.2 |
| **KAN14** | **Manchester OK** | **1.51** | **354** | | Pn | 00 07 25.6 | -1.1 |
| **LOOK** | **Love County** | **1.54** | **161** | | Pn | 00 07 26.9 | -0.2 |
| **KAN17** | **Caldwell West** | **1.59** | **0** | | Pn | 00 07 28.0 | +0.2 |
| **KAN05** | **Bluff City Nor** | **1.65** | **357** | | Pn | 00 07 28.6 | -0.1 |
| **TUL3** | **Leonard** | **1.68** | **74** | | Pn | 00 07 28.9 | -0.1 |
| TUL3 | | | | IAmb_Lg | | 00 07 55.9 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **KAN09** | **Caldwell North** | **1.68** | **4** | | Pn | 00 07 29.3 | +0.2 |
| **WTFS** | **Witchita Falls** | **1.78** | **199** | Pn | Pn | 00 07 30.5 | +0.1 |
| **X37A** | **Clayton** | **2.15** | **113** | Pn | Pn | 00 07 34.7 | -0.8 |
| **FW03** | **Perrin-Whitt E** | **2.42** | **186** | IAmb_Lg | | 00 08 17.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **PLPT** | **Palo Pinto** | **2.67** | **190** | Pn | Pn | 00 07 42.5 | -0.2 |
| **FW07** | **Weatherford** | **2.75** | **180** | IAmb_Lg | | 00 08 33.0 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **3.15** | **236** | IAmb_Lg | | 00 08 44.5 | |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **HHAR** | **Hobbs** | **3.22** | **74** | Pn | Pn | 00 07 51.0 | +0.7 |
| **SN07** | **Snyder 07** | **3.50** | **228** | IAmb_Lg | | 00 08 50.2 | |
| | comp=Z,5.5nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **3.56** | **104** | Pn | Pn | 00 07 55.8 | +0.8 |
| **POST** | **Post** | **3.90** | **233** | IAmb_Lg | | 00 09 05.8 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.14** | **285** | IAmb_Lg | | 00 09 14.0 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.17** | **102** | IAmb_Lg | | 00 09 19.6 | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **MSTX** | **Muleshoe** | **4.38** | **252** | IAmb_Lg | | 00 09 25.2 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.49** | **91** | Pn | Pn | 00 08 07.3 | -0.3 |
| **R40A** | **Maddies Statio** | **5.24** | **56** | Pn | Pn | 00 08 18.2 | +0.2 |
| **T42A** | **Van Buren** | **5.62** | **72** | IAmb_Lg | | 00 09 59.4 | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **HNDO** | **Hondo** | **6.04** | **193** | IAmb_Lg | | 00 10 16.2 | |
| | comp=Z,2.8nm,0.7s | | | | | | |
| **SAND** | **Sanderson** | **6.60** | **215** | IAmb_Lg | | 00 10 46.3 | |
| | comp=Z,3.6nm,0.8s | | | | | | |

*MOS **29** 00:18:39.5±1.1,56.52N×113.26E,h10km,mb4.2/7, MS3.6/4, Error ellipse: s-maj=10.0km s-min=5.7km az=85.8*

*BYKL **29** 00:18:40.7±0.2,56.54N×113.23E,h3km±3km*
*IDC **29** 00:18:40.5±0.8,56.55N×113.28E,h0km,mb3.8/15, mbtmp3.8/18,ML3.5/3,Error ellipse: s-maj=19.9km s-min=17.7km az=27.0*

**ISC 29 00:18:39.9±1.0, 56.51N±0.02×113.24E±0.02, h2km±7km, n92, σ2.877/144, mb3.9/20, 3C-3D, East of Lake Baikal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVKR** | **Severomuysk** | **0.43** | **155** | *e*Pg | **Pg** | **00 18 48.1** | **0.0** |
| SVKR | | | | Pmax | | 00 18 50.3 | |
| | 3μm,0.3s | | | | | | |
| SVKR | | | | *e*Sg | **Sg** | **00 18 53.6** | **-0.1** |
| SVKR | | | | Smax | | 00 19 03.4 | |
| | 19μm,1.6s | | | | | | |
| **SVKR** | **Severomuysk** | **0.43** | **155** | *e*PG | **Pg** | **00 18 48.7** | **+0.6** |
| SVKR | | | | *e* | | 00 18 54.3 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,11μm,0.9s | | | | | | |
| **YOAB** | **Uoyan, Buryati** | **0.92** | **247** | *e*Pg | **Pg** | **00 18 57.9** | **+0.4** |
| YOAB | | | | Pmax | | 00 19 03.8 | |
| | comp=N,333nm,0.2s | | | | | | |
| YOAB | | | | *e*Sg | **Sg** | **00 19 10.0** | **+0.6** |
| YOAB | | | | Smax | | 00 19 33.0 | |
| | comp=N,10μm,1.4s | | | | | | |
| **UKT** | **Uakit** | **1.04** | **168** | ⇑*i*Pg | **Pg** | **00 18 59.7** | **-0.2** |
| UKT | | | | *e* | | 00 19 04.2 | |
| UKT | | | | max | | 00 19 04.8 | |
| | comp=N,522nm,0.5s | | | | | | |
| UKT | | | | *e*Sg | **Sg** | **00 19 15.1** | **+1.7** |
| UKT | | | | *e* | | 00 19 20.4 | |
| UKT | | | | max | | 00 19 22.4 | |
| | comp=N,2μm,0.9s | | | | | | |
| **UKT** | **Uakit** | **1.04** | **168** | *e*PG | **Pg** | **00 19 00.7** | **+0.8** |
| UKT | | | | *e* | | 00 19 15.7 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,45nm,0.1s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| **KMO** | **Kumora** | **1.30** | **242** | *e*Pg | **Pg** | **00 19 04.7** | **0.0** |
| KMO | | | | *e* | | 00 19 08.0 | |
| KMO | | | | max | | 00 19 09.6 | |
| | comp=N,336nm,0.4s | | | | | | |
| KMO | | | | *e*Sg | **Sg** | **00 19 22.3** | **+0.8** |
| KMO | | | | Smax | | 00 19 27.2 | |
| | comp=N,3μm,0.6s | | | | | | |
| **KMO** | **Kumora** | **1.30** | **242** | *e*PG | **Pg** | **00 19 05.5** | **+0.8** |
| KMO | | | | *e* | | 00 19 22.2 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,122nm,0.3s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=E,3μm,0.7s | | | | | | |
| **NLYR** | **Nelyaty** | **1.37** | **90** | *e*Pg | **Pn** | **00 19 05.9** | **-0.1** |
| NLYR | | | | *e* | | 00 19 08.8 | |
| NLYR | | | | max | | 00 19 09.9 | |
| | comp=E,1μm,0.3s | | | | | | |
| NLYR | | | | *e*Sg | **Sg** | **00 19 24.0** | **+0.3** |
| NLYR | | | | *e* | | 00 19 27.9 | |
| NLYR | | | | max | | 00 19 30.1 | |
| | comp=E,11μm,0.9s | | | | | | |
| **NLYR** | **Nelyaty** | **1.37** | **90** | ⇓*i*PG | **Pn** | **00 19 06.0** | **-0.1** |
| NLYR | | | | *e* | | 00 19 24.4 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,1μm,0.3s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,930nm,0.8s | | | | | | |
| **BOD** | **Bodaibo** | **1.38** | **17** | ⇑*i*Pn | **Pn** | **00 19 04.8** | **-1.5** |
| BOD | | | | *e* | | 00 19 08.2 | |
| BOD | | | | max | | 00 19 08.6 | |
| | comp=N,764nm,0.5s | | | | | | |
| BOD | | | | *e*Sg | **Sg** | **00 19 23.2** | **-1.0** |
| BOD | | | | Smax | | 00 19 30.1 | |
| | comp=N,3μm,0.8s | | | | | | |
| BOD | | | | *e* | | 00 19 32.6 | |
| **BOD** | **Bodaibo** | **1.38** | **17** | ⇑*i*PG | **Pn** | **00 19 04.7** | **-1.5** |
| BOD | | | | *e* | | 00 19 23.9 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,722nm,0.3s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=E,3μm,0.3s | | | | | | |
| **YLYR** | **Ulyunkhan** | **2.01** | **217** | ⇓*i*Pn | **Pn** | **00 19 16.4** | **+1.5** |
| YLYR | | | | *e*Pg | **Pb** | **00 19 17.6** | **+0.4** |
| YLYR | | | | Pmax | | 00 19 19.0 | |
| | comp=E,791nm,0.4s | | | | | | |
| YLYR | | | | *e*Sg | **Sb** | **00 19 44.6** | **+1.9** |
| YLYR | | | | Smax | | 00 19 46.5 | |
| | comp=E,2μm,0.5s | | | | | | |
| **YLYR** | **Ulyunkhan** | **2.01** | **217** | ⇓*i*PN | **Pn** | **00 19 16.4** | **+1.5** |
| YLYR | | | | *e* | | 00 19 17.7 | |
| YLYR | | | | *e* | | 00 19 44.6 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,491nm,0.6s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=E,2μm,0.3s | | | | | | |
| **NIZB** | **Nizh Angarsk** | **2.19** | **252** | *e*Pn | **Pn** | **00 19 19.1** | **+1.7** |
| NIZB | | | | *e*Pg | **Pb** | **00 19 21.0** | **+0.7** |
| NIZB | | | | Pmax | | 00 19 23.5 | |
| | comp=E,782nm,1.1s | | | | | | |
| NIZB | | | | *e*Sn | **Sn** | **00 19 46.0** | **+0.8** |
| NIZB | | | | *e*Sg | **Sb** | **00 19 49.9** | **+1.9** |
| NIZB | | | | Smax | | 00 19 52.5 | |
| | comp=E,2μm,1.1s | | | | | | |
| **CRS** | **Chara** | **2.80** | **80** | *e*PN | **Pg** | **00 19 32.9** | **-0.6** |
| CRS | | | | *e* | | 00 

UZR eSg Sb 00 21 00.5 +6.3
UZR Smax 00 21 10.9
comp=N,356nm,1.7s
**CIT Chita 4.50 178** eSg Sg **00 21 01.6 -2.7**
CIT Smax 00 21 05.7
comp=N,729nm,0.6s
CIT e 00 21 11.5
**CIT Chita 4.50 178** ePN Pn **00 19 50.6 +1.5**
CIT e 00 20 03.1
CIT eS Sn **00 20 42.7 +0.7**
CIT e 00 21 00.6
CIT pmax pmax
comp=Z,244nm,1.2s
CIT smax smax
comp=E,742nm,1.1s
**GORB Goryachinsk 4.55 221** ePn Pn **00 19 50.4 +0.7**
GORB ePg Pb **00 20 02.6 +2.2**
GORB eSg Sb **00 21 01.4 +5.8**
**YKLR Yuktali 4.66 85** ePg Pb **00 20 04.5 +2.2**
YKLR eSn Sn **00 20 43.2 -2.7**
YKLR eSg Sg **00 21 04.5 -4.9**
**KELR Kotokel 4.80 221** ePg Pb **00 20 07.0 +2.3**
KELR eSn Sn **00 20 48.7 -0.7**
KELR eSg Sb **00 21 09.4 +6.4**
**ZRHB Zarechye 5.31 224** eSg Sg **00 21 26.7 -3.7**
ZRHB Smax 00 22 03.0
comp=E,1µm,1.3s
**TRG Tyrgan 5.49 230** ePn Pn **00 20 04.4 +1.8**
TRG ePg Pb **00 20 19.1 +2.7**
TRG Pmax 00 20 49.3
comp=E,45nm,1.9s
TRG eSn Sn **00 21 03.8 -2.5**
TRG eSg Sb **00 21 29.5 +6.9**
TRG Smax 00 21 35.1
comp=E,166nm,1.4s
**UUDB Ulan-Yde 5.68 217** ePg Pb **00 20 23.4 +3.6**
UUDB Pmax 00 20 55.1
comp=E,33nm,1.7s
UUDB e 00 20 57.1
UUDB eSg Sg **00 21 37.0 -5.3**
UUDB Smax 00 21 52.7
comp=E,332nm,1.9s
UUDB e 00 21 52.9
**HRMR Khuramsha 6.13 220** ePn Pn **00 20 13.5 +2.0**
HRMR ePg Pb **00 20 31.2 +3.9**
HRMR Pmax 00 20 38.7
comp=E,31nm,0.4s
HRMR eSn Sn **00 21 21.8 -0.3**
HRMR eSg Sg **00 21 50.5 -6.0**
HRMR Smax 00 22 07.6
comp=E,672nm,1.6s
HRMR e 00 22 15.6
**BGT Bolshoye Golou 6.40 229** e Pb **00 20 32.0 0.0**
BGT max 00 21 02.3
comp=E,21nm,1.4s
BGT eSn Sn **00 21 25.9 -2.9**
BGT eSg Sg **00 21 58.8 -6.5**
BGT Smax 00 22 26.7
comp=E,200nm,1.4s
**CLNS Chul'man 6.43 82** ePn Pn **00 20 16.7 +1.1**
CLNS ePg Pb **00 20 36.3 +3.8**
CLNS e 00 21 42.1
CLNS eSg Sg **00 21 58.4 -7.9**
CLNS e 00 22 04.3
**IRK Irkutsk 6.76 235** eSg Sg **00 22 09.7 -7.0**
IRK Smax 00 22 17.0
comp=E,504nm,1.2s
**IRK Irkutsk 6.76 235** ePG Pb 00 20 43.8 +5.8
IRK e 00 22 09.7
IRK pmax pmax
comp=Z,133nm,0.2s
IRK smax smax
comp=N,506nm,1.2s
**LSTR Listvyanka 6.78 230** ePn Pn **00 20 22.6 +2.3**
LSTR ePg Pb 00 20 43.3 +5.0
LSTR e 00 21 07.1
LSTR max 00 21 12.2
comp=N,18nm,1.4s
LSTR eSn Sn **00 21 35.4 -2.6**
LSTR eSg Sg **00 22 10.6 -6.7**
LSTR Smax 00 22 23.5
comp=N,227nm,1.6s
**KPC Khapcheranga 6.83 185** ePn Pn **00 20 22.0 +0.8**
KPC e 00 20 31.0
KPC ePg Pb 00 20 45.4 +6.0
KPC Pmax 00 21 13.5
comp=N,20nm,1.5s
KPC eSn Sn **00 21 36.9 -2.7**
KPC eSg Sg **00 22 13.7 -5.5**
KPC Smax 00 22 33.5
comp=N,349nm,1.7s
KPC e 00 22 38.5
**KPC Khapcheranga 6.83 185** ePN Pn **00 20 22.0 +0.8**
KPC e 00 20 44.8
KPC e 00 22 14.3
KPC pmax pmax
comp=Z,12nm,1.1s
KPC smax smax
comp=E,347nm,1.9s
**IVK Ivanovka 7.00 231** ePn Pn **00 20 26.2 +2.8**
IVK ePg Pb 00 20 47.5 +5.3
IVK Pmax 00 20 55.9
comp=E,33nm,1.2s
IVK eSn Sn **00 21 42.4 -1.2**
IVK eSg Sg **00 22 17.4 -7.2**
IVK Smax 00 22 41.2
comp=E,319nm,1.5s
**TLY Talaya 7.43 233** e Pg **00 20 58.5 -3.5**
TLY max 00 21 25.1
comp=E,21nm,1.5s
TLY eSg Sg **00 22 31.0 -7.2**
TLY Smax 00 22 38.5
comp=E,122nm,1.4s
**ARS Arshan 7.83 239** ePg Pb 00 21 01.3 +5.1
ARS e 00 21 10.0
ARS max 00 21 11.1
comp=E,21nm,0.6s
ARS eSn Sn **00 22 02.1 -1.8**
ARS eSg Sg 00 22 42.5 -8.5
ARS Smax 00 23 00.5
comp=E,442nm,1.6s
**HIA Hailar 8.25 149** *i* PN Pn **00 20 40.1 -0.4**
HIA pmax pmax
comp=Z,3.0nm,0.2s
**ZAK Zakamensk 8.54 228** eSg Sg 00 23 03.8 -10
ZAK e 00 23 08.0
ZAK max 00 23 40.7
comp=Z,82nm,1.2s
**ZAK Zakamensk 8.54 228** ePG Pg 00 21 18.1 -5.2
ZAK e 00 23 07.5
ZAK pmax pmax
comp=Z,10.0nm,0.9s
ZAK smax smax
comp=N,81nm,1.2s
**MOY Mondy 8.67 241** ePn Pn **00 20 47.7 +1.3**
MOY max 00 21 06.6
comp=N,29nm,1.3s
MOY e 00 21 24.5
MOY eSn Sn **00 22 23.0 -1.8**
MOY eSg Sg 00 23 09.1 -9.0
MOY Smax 00 23 36.4
comp=N,207nm,2.0s
**MOY Mondy 8.67 241** ePN Pn **00 20 48.9 +2.5**
**ORL Orlik 8.76 249** ePn Pn **00 20 49.5 +1.9**
ORL ePg Pg 00 21 18.2 -9.3
ORL Pmax 00 21 28.6
comp=N,21nm,1.5s
ORL eSn Sn **00 22 22.3 -4.7**
ORL eSg Sg 00 23 12.2 -8.7
ORL Smax 00 23 20.3
comp=N,185nm,1.6s
**ORL Orlik 8.76 249** ePN Pn **00 20 49.6 +1.9**
ORL e 00 21 18.3
ORL e 00 23 13.0
ORL pmax pmax
comp=Z,10.0nm,0.6s
ORL smax smax
comp=N,184nm,1.5s
**SONM Songino Array 9.64 209** Pn Pn **00 21 00.8 +1.1**
comp=N,0.6nm,0.3s,baz=23,slow=13,SNR=7.8
SONM Lg Lg 00 23 42.9
comp=N,1.3nm,0.3s,baz=29,slow=25,SNR=7.0
comp=N,0.8nm,0.3s
**YAK Yakutsk 10.06 50** Sn Sn **00 22 50.0 -8.5**
comp=N,5.8nm,0.3s,baz=1.2,slow=1.1,SNR=1.8
YAK Lg Lg 00 23 47.7
comp=N,2.4nm,0.3s,baz=156,slow=22,SNR=13
**YAK Yakutsk 10.06 50** *i* P Pn **00 21 07.4 +2.2**
YAK pmax pmax
comp=Z,18nm,0.6s
YAK MLR MLR
comp=Z,365nm,12.0s
**HEH HeiHe 10.52 121** eP Pn **00 21 11.0 -0.6**
HEH S Sn 00 23 00.5 -9.4
HEH smax smax
comp=N,210nm,0.9s
HEH smax smax
comp=E,130nm,0.8s
**KNGR Kungurtug, Tuv 11.05 244** eP Pn **00 21 17.2 -1.8**
KNGR pmax pmax
comp=Z,1.0nm,1.2s
**KLR Kul'dur 13.32 115** Pn Pn **00 21 51.8 +1.9**
comp=Z,0.4nm,0.3s,baz=303,slow=12,SNR=14
KLR Lg Lg 00 25 36.9
comp=Z,0.1nm,0.3s,baz=282,slow=10,SNR=3.7
comp=Z,2.8nm,0.6s
**KLR Kul'dur 13.32 115** *i* P Pn **00 21 51.0 +1.2**
KLR pmax pmax
comp=Z,2.0nm,0.8s
KLR MLR MLR
comp=Z,351nm,12.0s
**ZALV Zalesovo Beam 16.36 273** Pn Pn **00 22 31.7 +1.2**
comp=Z,0.3nm,0.3s,baz=62,slow=13,SNR=6.6
ZALV Lg Lg 00 27 12.6
comp=Z,0.1nm,0.3s,baz=153,slow=0.7,SNR=1.7
comp=Z,1.1nm,0.7s
**TIXI Tiksi 16.56 17** Pn Pn **00 22 30.0 -3.0**
comp=Z,0.9nm,0.3s,baz=245,slow=7.5,SNR=3.6
TIXI Sn Sn 00 25 21.6 -15
comp=Z,0.7nm,0.3s,baz=105,slow=15,SNR=6.3
TIXI Lg Lg 00 27 21.2
comp=Z,0.5nm,0.3s,baz=325,slow=13,SNR=2.3
**TIXI Tiksi 16.56 17** *i* P Pn **00 22 32.9 0.0**
TIXI pmax pmax
comp=Z,15nm,1.1s
TIXI MLR MLR
comp=Z,207nm,11.0s
**DGZ Jazzator, Alta 16.86 257** *i* P Pn **00 22 36.3 -0.7**
DGZ pmax pmax
comp=Z,4.0nm,1.3s
**USRK Ussuriysk Ar. 17.10 128** Lg Lg 00 27 41.1
comp=Z,0.1nm,0.3s,baz=317,slow=30,SNR=2.4
**PSTR Posyet 17.87 133** *i* P Pn **00 22 48.7 -0.7**
**MSHR Mys Shultsa 18.07 133** *i* P Pn **00 22 52.1 +0.2**
MSHR pmax pmax
comp=Z,21nm,1.0s
**SEY Seymchan 20.49 56** P Pn 00 23 22.3 +1.4
comp=Z,0.8nm,0.4s,baz=221,slow=23,SNR=1.6
SEY Lg Lg 00 29 23.0
comp=Z,0.2nm,0.3s,baz=359,slow=23,SNR=3.0
**SEY Seymchan 20.49 56** *i* P P **00 23 18.7 0.0**
SEY pmax pmax
comp=Z,9.0nm,1.6s
**KURK Kurchatov 21.18 269** *i* P P **00 23 25.7 -0.6**
KURK pmax pmax
comp=Z,5.0nm,1.0s
**KURBB Kurchatov Arra 21.27 269** P P **00 23 29.2 +1.9**
comp=Z,1.3nm,0.4s,baz=69,slow=11,SNR=14
KURBB Lg Lg 00 29 44.7
baz=15,slow=20
comp=Z,1.3nm,0.4s
**MK31 Makanchi Array 21.35 256** *i* P P **00 23 28.8 +0.6**
**MKAR Makanchi Array 21.35 256** P P **00 23 29.2 +1.0**
comp=Z,2.0nm,0.5s,baz=50,slow=8.6,SNR=19
comp=Z,2.0nm,0.5s
**MKAR Makanchi Array 21.35 256** eP P **00 23 30.0 +1.8**
MKAR pmax pmax
comp=Z,2.0nm,0.5s
**BVAR Borovoye Array 24.66 280** P P **00 24 03.7 +1.9**
comp=Z,1.1nm,0.5s,baz=63,slow=10,SNR=8.5
comp=Z,1.1nm,0.5s
**BRVK Borovoye 24.71 280** *i* P P **00 24 01.6 -0.5**
BRVK pmax pmax
comp=Z,3.0nm,1.0s
**BILL Bilibino 26.30 43** eP P **00 24 16.5 +0.1**
BILL pmax pmax
comp=Z,15nm,2.0s
**ARU Arti 29.53 293** *i* P P **00 24 43.8 -1.6**
ARU pmax pmax
comp=Z,2.0nm,1.1s
**SPITS Spitsbergen Ar 36.80 340** P P **00 25 49.3 +0.7**
comp=Z,5.3nm,0.9s,baz=27,slow=9.7,SNR=6.8
comp=Z,5.3nm,0.9s
**ARCES ARCESS Array B 38.11 325** P P **00 26 00.4 +0.6**
comp=Z,2.3nm,0.9s,baz=65,slow=11,SNR=2.2
comp=Z,2.3nm,0.9s
**OBN Obninsk 41.01 302** eP P **00 26 23.6 -0.3**
OBN *e* 00 27 59.2
OBN ePPP PPP 00 28 22.7
OBN pmax pmax
comp=Z,3.0nm,0.9s
OBN MLR MLR
comp=Z,268nm,19.0s
**FINES FINESS Array B 42.01 314** P P **00 26 31.6 -0.4**
comp=Z,2.1nm,0.6s,baz=57,slow=9.5,SNR=17
comp=Z,2.1nm,0.6s
**ILAR Eielson Array 44.67 37** P P **00 26 54.0 +0.5**
comp=Z,1.0nm,0.9s,baz=304,slow=7.2,SNR=8.4
comp=Z,1.0nm,0.9s
**ILAR Eielson Array 44.67 37** eP P **00 26 55.8 +2.2**
ILAR pmax pmax
comp=Z,1.0nm,1.0s
**HFS Hagfors 47.59 318** P P **00 27 16.6 +0.1**
comp=Z,0.9nm,0.6s,baz=61,slow=12,SNR=6.3
comp=Z,0.9nm,0.6s
**NOA NORSAR Array B 47.87 320** P P **00 27 19.0 +0.2**
comp=Z,0.9nm,0.9s,baz=51,slow=7.8,SNR=3.5
comp=Z,0.9nm,0.9s
**BRTR Keskin Array B 52.63 287** P P **00 27 56.3 +1.0**
comp=Z,0.4nm,0.7s,baz=38,slow=7.3,SNR=4.8
comp=Z,0.4nm,0.7s
**PALK Pallekele 55.36 220** *i* P P **00 28 15.2 -0.1**
**ESDC Sonseca Array 70.51 313** P P **00 29 56.7 +0.8**
comp=Z,1.2nm,1.1s,baz=23,slow=6.0,SNR=3.2
comp=Z,1.2nm,1.1s
**NVAR Mina Array Bea 75.86 39** P P **00 30 28.9 +1.1**
comp=Z,0.3nm,0.6s,baz=325,slow=4.6,SNR=2.3
comp=Z,0.3nm,0.6s
**WRA Warramunga Arr 78.20 160** P P **00 30 41.6 +0.9**
comp=Z,0.7nm,1.0s,baz=351,slow=5.9,SNR=3.6
comp=Z,0.7nm,1.0s
**ASAR Alice Springs 81.75 161** P P **00 31 00.7 +0.8**
comp=Z,0.3nm,0.6s,baz=0.0,slow=4.6,SNR=2.0
comp=Z,0.3nm,0.6s
**TORD Torodi Ar. Bea 90.58 295** P P **00 31 44.6 +0.8**
comp=Z,1.4nm,1.2s,baz=35,slow=5.3,SNR=4.9
comp=Z,1.4nm,1.2s
**QSPA South Pole Qui 146.27 180** PKPbc **PKPdf 00 38 19.7 +0.4**
comp=Z,1.9nm,1.0s,baz=319,slow=2.6,SNR=1.8

*IDC* ***29*** *00:40:21.9±0.6, 22.°59S×68.°27W, h98km±5km, mb3.9/11, mbtmp4.2/14, Error ellipse: s-maj=16.6km s-min=14.7km az=57.0*
*SJA* ***29*** *00:40:21.4±0.7, 22.°75S×68.°56W, h136km±3km, ML4.2, MW4.1*
*NEIC* ***29*** *00:40:23.2±2.6, 22.°77S±0.°05×68.°43W±0.°07, h111km±3km, mb4.3/28, ML4.1(GUC), Error ellipse: s-maj=9.6km s-min=6.7km az=98.0*
*GUC* ***29*** *00:40:24.5±0.7, 22.°85S×68.°55W, h107km±5km, ML4.1*
*VAO* ***29*** *00:40:24.3±0.5, 22.°43S×68.°13W, h70km±9km, mb4.7*
**ISC 29 00:40:22.3**±0.5,**22.°70S**±0.°03×**68.°47W**±0.°04,**h110**km±5km, **n127,σ1s93**/153,**mb4.3**/19,**5C-1D**,**Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AF01** | **San Pedro de A** | **0.37** | **133** | Pn | **Pn** | **00 40 39.6** | **+0.9** |
| AF01 | | | | | **Sn** | **00 40 52.2** | **+1.2** |
| **AF01** | **San Pedro de A** | **0.37** | **133** | *e*P | **Pn** | **00 40 39.8** | **+1.0** |
| AF01 | | | | *e*S | **Sn** | **00 40 56.4** | **+5.4** |
| AF01 | | | | IAML | | 00 41 08.9 | |
| | comp=Z,7µm,0.4s | | | | | | |
| **AF01** | **San Pedro de A** | **0.37** | **133** | *i*P | **Pn** | **00 40 39.7** | **+1.0** |
| AF01 | | | | *i* S | **Sn** | **00 40 52.0** | **+0.9** |
| AF01 | | | | IAML | | 00 41 07.0 | |
| | comp=E,13µm,0.7s | | | | | | |
| **LVC** | **Limon Verde** | **0.42** | **282** | eP | **Pn** | **00 40 34.8** | **-4.2** |
| LVC | | | | IAML | | 00 40 54.0 | |
| | comp=Z,6µm,0.6s | | | | | | |
| **LVC** | **Limon Verde** | **0.42** | **282** | P | **Pn** | **00 40 40.4** | **+1.3** |
| | comp=Z,2µm,0.3s,baz=102,slow=4.9 | | | | | | |
| LVC | | | | S | **Sn** | **00 40 52.5** | **+0.9** |
| | comp=Z,9µm,0.4s,baz=214,slow=23,SNR=63 | | | | | | |
| **LVC** | **Limon Verde** | **0.42** | **282** | eP | **Pn** | **00 40 39.9** | **+0.8** |
| LVC | | | | *i* S | **Sn** | **00 40 52.1** | **+0.5** |
| **LVC** | **Limon Verde** | **0.42** | **282** | eP | **Pn** | **00 40 40.2** | **+1.2** |
| **PB09** | **IPOC Station P** | **1.15** | **321** | Pn | **Pn** | **00 40 47.0** | **+1.7** |
| PB09 | | | | Sn | **Sn** | **00 41 04.8** | **+2.2** |
| **PB09** | **IPOC Station P** | **1.15** | **321** | eP | **Pn** | **00 40 47.4** | **+2.1** |
| PB09 | | | | eS | **Sn** | **00 41 05.8** | **+3.2** |
| PB09 | | | | IAML | | 00 41 06.2 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **PB09** | **IPOC Station P** | **1.15** | **321** | ⇑*i*P | **Pn** | **00 40 47.2** | **+1.9** |
| PB09 | | | | *i* S | **Sn** | **00 41 05.0** | **+2.4** |
| PB09 | | | | IAML | | 00 41 06.0 | |
| | comp=N,3µm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **1.60** | **283** | Pn | **Pn** | **00 40 51.7** | **+1.2** |
| PB04 | | | | Sn | **Sn** | **00 41 13.6** | **+1.7** |
| **PB04** | **IPOC Station P** | **1.60** | **283** | eP | **Pn** | **00 40 51.9** | **+1.5** |
| PB04 | | | | eS | **Sn** | **00 41 12.9** | **+1.1** |
| PB04 | | | | IAML | | 00 41 23.2 | |
| | comp=Z,3µm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **1.60** | **283** | ⇑*i*P | **Pn** | **00 40 51.9** | **+1.5** |
| PB04 | | | | *i* S | **Sn** | **00 41 13.3** | **+1.5** |
| PB04 | | | | IAML | | 00 41 20.3 | |
| | comp=N,4µm,0.2s | | | | | | |
| **PATCX** | **Punta Patache** | **2.44** | **320** | Pn | **Pn** | **00 41 01.7** | **+0.7** |
| **PB14** | **IPOC Station P** | **2.61** | **222** | Pn | **Pn** | **00 41 04.0** | **+0.5** |
| PB14 | | | | Sn | **Sn** | **00 41 32.4** | **-2.8** |
| **PB14** | **IPOC Station P** | **2.61** | **222** | eP | **Pn** | **00 41 04.6** | **+1.1** |
| PB14 | | | | eS | **Sn** | **00 41 35.0** | **-0.1** |
| PB14 | | | | IAML | | 00 41 44.1 | |
| | comp=Z,726nm,0.6s | | | | | | |
| **PB14** | **IPOC Station P** | **2.61** | **222** | eP | **Pn** | **00 41 04.5** | **+0.9** |
| PB14 | | | | *i* S | **Sn** | **00 41 34.2** | **-0.9** |
| PB14 | | | | IAML | | 00 41 49.5 | |
| | comp=E,351nm,0.3s | | | | | | |
| **TA01** | **Diego Aracena** | **2.66** | **323** | Pn | **Pn** | **00 41 03.8** | **0.0** |
| **TA01** | **Diego Aracena** | **2.66** | **323** | eP | **Pn** | **00 41 04.2** | **+0.4** |
| TA01 | | | | eS | **Sn** | **00 41 36.7** | **+1.1** |
| TA01 | | | | IAML | | 00 41 46.7 | |
| | comp=Z,534nm,0.7s | | | | | | |
| **TA01** | **Diego Aracena** | **2.66** | **323** | eP | **Pn** | **00 41 04.0** | **+0.2** |
| TA01 | | | | *i* S | **Sn** | **00 41 29.9** | **-5.8** |
| TA01 | | | | IAML | | 00 41 43.5 | |
| | comp=E,1µm,0.6s | | | | | | |
| **GO02** | **Mina Guanaco** | **2.66** | **202** | Pn | **Pn** | **00 41 04.7** | **+0.5** |
| **GO02** | **Mina Guanaco** | **2.66** | **202** | eS | **Sn** | **00 41 35.5** | **-0.7** |
| **GO02** | **Mina Guanaco** | **2.66** | **202** | eP | **Pn** | **00 41 05.1** | **+1.0** |
| GO02 | | | | *i* S | **Sn** | **00 41 35.2** | **-0.9** |
| **HMBC** | **Humberstone** | **2.75** | **331** | Pn | **Pn** | **00 41 04.9** | **-0.3** |
| **HMBC** | **Humberstone** | **2.75** | **331** | eP | **Pn** | **00 41 05.2** | **+0.1** |
| HMBC | | | | eS | **Sn** | **00 41 39.2** | **+1.1** |
| HMBC | | | | IAML | | 00 42 05.0 | |
| | comp=Z,1µm,0.6s | | | | | | |
| **HMBC** | **Humberstone** | **2.75** | **331** | *i* P | **Pn** | **00 41 05.3** | **+0.1** |
| **YJA** | **Yavi** | **2.78** | **80** | eP | **Pn** | **00 41 08.4** | **+2.5** |
| YJA | | | | eS | **Sn** | **00 41 43.9** | **+4.6** |
| **TA02** | **Huaiquique** | **2.87** | **327** | Pn | **Pn** | **00 41 07.3** | **+0.7** |
| **TA02** | **Huaiquique** | **2.87** | **327** | eP | **Pn** | **00 41 08.3** | **+1.7** |
| TA02 | | | | eS | **Sn** | **00 41 41.4** | **+0.6** |
| TA02 | | | | IAML | | 00 41 50.9 | |
| | comp=Z,426nm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **2.87** | **327** | eP | **Pn** | **00 41 07.3** | **+0.7** |
| TA02 | | | | *i* S | **Sn** | **00 41 41.6** | **+0.9** |
| TA02 | | | | IAML | | 00 41 50.9 | |
| | comp=N,380nm,0.2s | | | | | | |
| **GO01** | **Chusmiza** | **3.09** | **347** | Pn | **Pn** | **00 41 11.4** | **+1.3** |
| **GO01** | **Chusmiza** | **3.09** | **347** | eP | **Pn** | **00 41 11.7** | **+1.6** |
| GO01 | | | | eS | **Sn** | **00 41 39.8** | **-7.0** |
| **GO01** | **Chusmiza** | **3.09** | **347** | eP | **Pn** | **00 41 11.6** | **+1.6** |
| **SLA** | **San Lorenzo** | **3.38** | **127** | eP | **Pn** | **00 41 11.4** | **-2.1** |
| **SLA** | **San Lorenzo** | **3.38** | **127** | eP | **Pn** | **00 41 16.6** | **+3.1** |
| **AZAP** | **Zapla** | **3.47** | **117** | eP | **Pn** | **00 41 16.2** | **+1.4** |
| AZAP | | | | eS | **Sn** | **00 41 57.7** | **+2.3** |
| **AC01** | **Pan de Azucar** | **3.94** | **209** | Pn | **Pn** | **00 41 20.6** | **-0.3** |
| **AC01** | **Pan de Azucar** | **3.94** | **209** | eP | **Pn** | **00 41 20.6** | **-0.3** |
| AC01 | | | | eS | **Sn** | **00 42 06.0** | **-0.4** |
| AC01 | | | | IAML | | 00 42 19.6 | |
| | comp=Z,304nm,1.6s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.94** | **209** | eP | **Pn** | **00 41 20.7** | **-0.2** |
| **FSA** | **Cafayete** | **4.08** | **147** | eP | **Pn** | **00 41 23.9** | **+1.0** |
| **AHML** | **Horco Molle** | **4.96** | **146** | eP | **Pn** | **00 41 33.9** | **-0.8** |
| **GO03** | **Copiap** | **5.13** | **198** | Pn | **Pn** | **00 41 34.7** | **-2.2** |
| **GO03** | **Copiap** | **5.13** | **198** | eP | **Pn** | **00 41 36.1** | **-0.8** |
| GO03 | | | | eS | **Sn** | **00 42 35.2** | **+0.2** |
| **GO03** | **Copiap** | **5.13** | **198** | ⇑eP | **Pn** | **00 41 35.2** | **-1.8** |
| **PB18** | **Visviri** | **5.17** | **349** | Pn | **Pn** | **00 41 38.9** | **+0.8** |
| **AC04** | **Llanos de Chal** | **5.96** | **203** | Pn | **Pn** | **00 41 45.1** | **-3.1** |
| **AC05** | **El Transito** | **6.32** | **195** | Pn | **Pn** | **00 41 51.2** | **-1.9** |
| **LPAZ** | **La Paz** | **6.39** | **3** | P | **Pn** | **00 41 56.9** | **+2.3** |
| | comp=Z,7.4nm,0.5s,baz=94,slow=2.4,SNR=21 | | | | | | |
| **LCO** | **Las Campanas** | **6.60** | **197** | Pn | **Pn** | **00 41 53.5** | **-3.5** |
| **CO01** | **Juntas del Tor** | **7.39** | **191** | Pn | **Pn** | **00 42 06.5** | **-1.2** |
| **FDPY** | **Filadelfia** | **7.89** | **89** | eP | **Pn** | **00 42 12.4** | **-2.0** |
| **CO03** | **El Pedregal** | **8.35** | **193** | Pn | **Pn** | **00 42 16.9** | **-3.7** |
| **CO02** | **Combarbal** | **8.77** | **194** | Pn | **Pn** | **00 42 21.8** | **-4.5** |
| **BBSD** | **Serra de San D** | **9.20** | **55** | eP | **Pn** | **00 42 28.6** | **-3.6** |
| **PAPY** | **Pozo Azul** | **9.51** | **100** | eP | **Pn** | **00 42 35.9** | **-0.4** |
| **SIV** | **San Ignacio** | **9.66** | **48** | P | **Pn** | **00 42 35.3** | **-3.1** |
| | comp=Z,64nm,0.5s,baz=243,slow=11,SNR=285 | | | | | | |
| SIV | | | | S | Sn | 00 44 09.2 | -16 |
| | comp=Z,3.7nm,0.6s,baz=11,slow=17,SNR=1.1 | | | | | | |
| **CPUP** | **Villa Florida** | **10.77** | **112** | Pn | **Pn** | **00 42 51.1** | **-2.2** |
| **CPUP** | **Villa Florida** | **10.77** | **112** | P | **Pn** | **00 42 50.6** | **-2.7** |
| | comp=Z,1.5nm,0.5s,baz=286,slow=9.6,SNR=5.2 | | | | | | |
| **MT09** | **Talagante** | **11.26** | **191** | Pn | **Pn** | **00 43 00.5** | **+0.5** |
| **MT01** | **Popeta** | **11.39** | **192** | Pn | **Pn** | **00 42 59.6** | **-2.0** |
| **PTLB** | **Pontes e Lacer** | **11.39** | **52** | Pn | **Pn** | **00 42 58.4** | **-3.4** |
| **PTLB** | **Pontes e Lacer** | **11.39** | **52** | eP | **Pn** | **00 42 58.4** | **-3.4** |
| **AQDB** | **Aquidauana** | **12.08** | **82** | Pn | **Pn** | **00 43 11.1** | **+0.1** |
| **VILB** | **Vilhena** | **12.48** | **40** | Pn | **Pn** | **00 43 13.4** | **-2.8** |
| **VILB** | **Vilhena** | **12.48** | **40** | eP | **Pn** | **00 43 13.4** | **-2.8** |
| **SALV** | **Santo Antonio** | **13.82** | **63** | eP | **Pn** | **00 43 30.2** | **-3.5** |
| **CRSM** | **Crissiumal (Br** | **13.91** | **113** | eP | **Pn** | **00 43 36.3** | **+1.6** |
| **RODS** | **Rosario do Sul** | **14.10** | **125** | eP | **P** | **00 43 39.6** | **-1.8** |
| **BI02** | **San Fabin de** | **14.13** | **189** | Pn | **Pn** | **00 43 37.5** | **0.0** |
| **SAML** | **Samuel** | **14.59** | **21** | Pn | **Pn** | **00 43 42.8** | **-0.7** |
| **SAML** | **Samuel** | **14.59** | **21** | eP | **Pn** | **00 43 42.9** | **-0.6** |
| **ALGR** | **Alto Alegre (B** | **15.17** | **117** | eP | **P** | **00 43 53.0** | **-0.4** |
| **CZSB** | **Cruzeiro do Su** | **15.43** | **344** | eP | **P** | **00 43 56.3** | **0.0** |
| **CPSB** | **Cacapava Do Su** | **15.47** | **123** | eP | **P** | **00 43 55.1** | **-0.7** |
| **ITAB** | **Concordia** | **15.49** | **110** | | **P** | **00 43 56.7** | **-0.1** |
| ITAB | | | | IAmb | IAmb | 00 44 14.0 | |
| | comp=Z,18nm,1.2s | | | | | | |
| **PDRB** | **Porto dos Gac** | **15.72** | **47** | eP | **Pn** | **00 43 56.0** | **-1.7** |
| **PCMB** | **Pacaembu** | **15.98** | **89** | eP | **Pn** | **00 44 01.1** | **+0.1** |
| **LDASE** | **Londrina, Braz** | **15.99** | **96** | eP | **P** | **00 44 02.1** | **-0.3** |
| **PLTB** | **Pedras Altas** | **15.99** | **128** | P | **Pn** | **00 43 59.0** | **-2.1** |
| **TRQA** | **Tornquist** | **16.29** | **161** | | **Pn** | **00 44 03.2** | **-1.5** |
| **CLDB** | **Colider** | **16.88** | **48** | eP | **Pn** | **00 44 11.1** | **-1.0** |
| **ARAG** | **Araguaiana, MT** | **17.19** | **69** | eP | **P** | **00 44 14.6** | **-1.2** |
| **FRTB** | **Fartura** | **17.42** | **96** | eP | **P** | **00 44 18.0** | **-0.2** |
| **PLCA** | **Paso Flores** | **18.06** | **185** | P | **Pn** | **00 44 27.4** | **+1.1** |
| | comp=Z,2.0nm,0.9s,baz=345,slow=9.0,SNR=3.3 | | | | | | |
| **VAO** | **Valinhos** | **19.82** | **95** | P | **P** | **00 44 42.8** | **-1.8** |
| **BDFB** | **Brasilia** | **20.54** | **74** | P | **P** | **00 44 50.2** | **-2.2** |
| BDFB | | | | IAmb | IAmb | 00 44 52.2 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **BDFB** | **Brasilia** | **20.54** | **74** | P | **P** | **00 44 50.3** | **-2.1** |
| | comp=Z,6.5nm,0.6s,baz=250,slow=12,SNR=11 | | | | | | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **MACA** | **Manacapuru-AM** | **20.84** | **22** | P | **P** | **00 44 52.8** | **-2.7** |
| **MAL2** | **Monte Alegre,** | **24.80** | **36** | P | **P** | **00 45 32.5** | **-1.9** |
| **GO08** | **Villa O'Higgin** | **25.91** | **186** | P | **P** | **00 45 46.9** | **+2.8** |
| GO08 | | | | IAmb | IAmb | 00 46 19.6 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **BOAV** | **Boa Vista** | **26.12** | **18** | P | **P** | **00 45 46.6** | **+0.4** |
| **MCPB** | **Macapa, AP** | **27.35** | **38** | P | **P** | **00 45 55.5** | **-1.8** |
| MCPB | | | | IAmb | IAmb | 00 46 12.1 | |
| | comp=Z,6.3nm,1.1s | | | | | | |
| **FDF** | **Fort de France** | **37.89** | **12** | P | **P** | **00 47 29.4** | **+0.5** |
| **SNAA** | **Sanae** | **61.02** | **161** | P | **P** | **00 50 24.8** | **+0.9** |
| SNAA | | | | IAmb | IAmb | 00 50 55.3 | |
| | comp=Z,5.1nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **61.02** | **161** | ⇑P | **P** | **00 50 24.7** | **+0.7** |
| | comp=Z,29nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **61.02** | **161** | P | **P** | **00 50 24.9** | **+0.9** |
| | comp=Z,1.1nm,0.6s,baz=284,slow=8.4,SNR=12 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **BRDY** | **Brady** | **61.14** | **330** | P | **P** | **00 50 25.6** | **+0.4** |
| BRDY | | | | IAmb | IAmb | 00 50 26.2 | |

comp=Z,1.9nm,0.7s
**TXAR Lajitas Array 61.84 325** P **P** **00 50 31.1 +0.9**
comp=Z,0.3nm,0.6s,baz=148,slow=8.9,SNR=5.7
comp=Z,0.3nm,0.6s
**TROLL Troll, Antarti 62.73 161** ⇑P **P** **00 50 36.7 +1.1**
comp=Z,135nm,0.8s
**VHRN Van Horn 63.69 325** P **P** **00 50 42.8 +0.4**
VHRN IAmb IAmb 00 50 44.0
comp=Z,3.0nm,0.6s
**QSPA South Pole Qui 67.50 180** P **P** **00 51 08.2 +1.8**
QSPA IAmb IAmb 00 51 08.7
comp=Z,4.0nm,0.7s
**QSPA South Pole Qui 67.50 180** P **P** **00 51 08.2 +1.8**
comp=Z,3.4nm,0.5s,baz=322,slow=0.7,SNR=61
comp=Z,3.4nm,0.5s
**G62A West of Eustis 67.62 358** P **P** **00 51 08.8 +1.7**
**ANMO Albuquerque 67.72 327** P **P** **00 51 09.9 +1.6**
ANMO IAmb IAmb 00 51 11.1
comp=Z,2.3nm,0.8s
**F64A Sherman 68.23 0** P **P** **00 51 11.9 +0.9**
**DBIC Dimbokro 68.69 73** P **P** **00 51 14.2 -0.3**
comp=Z,2.6nm,0.3s,baz=224,slow=5.6,SNR=5.8
comp=Z,2.6nm,0.3s
**D62A Allapoint, All 69.46 360** P **P** **00 51 19.2 +0.7**
D62A IAmb IAmb 00 51 35.3
comp=Z,8.7nm,1.2s
**SRU San Rafael Swe 73.00 327** P **P** **00 51 41.9 +1.5**
**P18A Preston Nutter 73.26 327** P **P** **00 51 44.1 +2.1**
**BSUT Blindstream Ca 74.20 328** P **P** **00 51 49.5 +1.9**
BSUT IAmb IAmb 00 51 50.5
comp=Z,3.4nm,0.9s
**R11B Troy Canyon, C 75.11 323** P **P** **00 51 54.8 +2.2**
**PDAR Pinedale Array 75.35 330** P **P** **00 51 55.1 +1.1**
comp=Z,0.4nm,0.5s,baz=115,slow=7.0,SNR=4.0
comp=Z,0.4nm,0.5s
**SPUT South Promonto 75.62 327** P **P** **00 51 57.2 +1.8**
**ULM Lac du Bonnet 76.58 342** P **P** **00 52 00.4 0.0**
ULM IAmb IAmb 00 52 35.9
comp=Z,5.1nm,1.2s
**ULM Lac du Bonnet 76.58 342** P **P** **00 52 00.7 +0.3**
comp=Z,2.5nm,0.5s,baz=158,slow=5.7,SNR=8.1
comp=Z,2.5nm,0.5s
**NVAR Mina Array Bea 76.69 322** P **P** **00 52 02.9 +1.3**
comp=Z,0.6nm,0.6s,baz=141,slow=5.4,SNR=5.5
comp=Z,0.6nm,0.6s
**IMW Indian Meadow 76.86 330** P **P** **00 52 03.9 +1.3**
**RLMT Red Lodge 77.06 332** P **P** **00 52 05.0 +1.5**
RLMT IAmb IAmb 00 52 05.9
comp=Z,7.7nm,1.4s
**TORD Torodi Ar. Bea 77.38 70** P **P** **00 52 05.4 -0.3**
comp=Z,3.8nm,0.5s,baz=255,slow=5.1,SNR=58
TORD pP **pP** **00 52 31.4 -3.6**
comp=Z,2.3nm,0.9s,baz=264,slow=4.8,SNR=4.3
comp=Z,3.8nm,0.5s
**PAHR Pah Rah Range 78.17 322** P **P** **00 52 11.9 +2.1**
PAHR IAmb IAmb 00 52 13.1
comp=Z,4.4nm,0.8s
**MAW Mawson 83.07 163** P **P** **00 52 36.5 +1.2**
comp=Z,2.3nm,0.6s,baz=198,slow=5.5,SNR=7.6
comp=Z,2.3nm,0.6s
**YKA Yellowknife Ar 92.45 340** P **P** **00 53 21.5 +1.2**
comp=Z,1.3nm,0.7s,baz=126,slow=4.2,SNR=6.6
comp=Z,1.3nm,0.7s
**ASAR Alice Springs 129.04 207** PKP **PKiKP** **00 59 18.6 -0.3**
comp=Z,0.5nm,0.9s,baz=170,slow=1.8,SNR=7.8
**WRA Warramunga Arr 132.12 209** PKP **PKiKP** **00 59 24.9 -0.2**
comp=Z,0.6nm,0.5s,baz=160,slow=1.8,SNR=16
**ZALV Zalesovo Beam 142.85 26** PKP **PKPdf** **00 59 40.9 -1.7**
comp=Z,0.5nm,0.5s,baz=298,slow=3.1,SNR=2.5
**MKAR Makanchi Array 146.35 37** PKPbc **PKPbc** **00 59 50.1 -0.3**
comp=Z,1.1nm,0.8s,baz=133,slow=25,SNR=6.7
**KLR Kul'dur 149.07 334** PKPbc **PKPbc** **00 59 57.9 +0.3**
comp=Z,0.5nm,0.3s,baz=135,slow=2.3,SNR=4.1

*MOS* ***29*** *00:58:40.6±0.8,56.°51N×113.°28E,h10km,mb3.7/1, Error ellipse: s-maj=13.6km s-min=7.8km az=81.9*
*IDC* ***29*** *00:58:41.0±0.9,56.°58N×113.°22E,h0km,mb3.7/9, mbtmp3.7/11,ML3.0/2, Error ellipse: s-maj=29.3km s-min=20.5km az=24.0*
*BYKL* ***29*** *00:58:41.6±0.2,56.°53N×113.°21E,h5km±3km*
**ISC 29 00:58:41.6±0.5,56.°39N±0.°03×113.°09E±0.°02,h10km,n58,**
**σ2s47/106,mb3.6/9,8C-4D,East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SVKR** | **Severomuysk** | **0.38** | **137** | *e* | **Pg** | **Pg** | | **00 58 49.1** | **-0.1** |
| SVKR | | | | *e* | **Sg** | **Sg** | | **00 58 55.0** | **+0.8** |
| SVKR | | | | Pmax | | | | | |
| | 941nm,0.5s | | | | | | | | |
| SVKR | | | | Smax | | | | | |
| | 8μm,0.5s | | | | | | | | |
| **SVKR** | **Severomuysk** | **0.38** | **137** | *e* | PG | **Pg** | | **00 58 49.1** | **-0.1** |
| SVKR | | | | *e* | | | | 00 58 54.6 | |
| SVKR | | | | pmax | pmax | | | | |
| | comp=Z,1μm,1.1s | | | | | | | | |
| SVKR | | | | smax | smax | | | | |
| | comp=N,8μm,0.6s | | | | | | | | |
| **YOAB** | **Uoyan, Buryati** | **0.81** | **252** | *e* | Sg | **Sb** | | **00 59 09.9** | **+1.3** |
| YOAB | | | | Smax | | | | | |
| | comp=N,4μm,1.4s | | | | | | | | |
| **UKT** | **Uakit** | **0.96** | **161** | ⇑*i* | *i*Pg | **Pn** | | **00 59 00.9** | **-0.3** |
| UKT | | | | *e* | | | | 00 59 04.1 | |
| UKT | | | | *e* | Sg | **Sn** | | **00 59 15.3** | **+0.4** |
| UKT | | | | *e* | | | | 00 59 20.6 | |
| UKT | | | | max | | | | | |
| | comp=N,348nm,0.6s | | | | | | | | |
| UKT | | | | max | | | | | |
| | comp=N,800nm,0.3s | | | | | | | | |
| **UKT** | **Uakit** | **0.96** | **161** | ⇑*i* | PG | **Pn** | | **00 59 00.9** | **-0.3** |
| UKT | | | | *e* | | | | 00 59 15.7 | |
| UKT | | | | pmax | pmax | | | | |
| | comp=Z,35nm,0.2s | | | | | | | | |
| UKT | | | | smax | smax | | | | |
| | comp=E,796nm,0.3s | | | | | | | | |
| **KMO** | **Kumora** | **1.17** | **245** | *e* | Pg | **Pg** | | **00 59 05.3** | **+1.1** |
| KMO | | | | *e* | Pb | **Pb** | | **00 59 07.1** | **+3.1** |
| KMO | | | | *e* | Sg | **Sn** | | **00 59 22.2** | **+2.0** |
| KMO | | | | max | | | | | |
| | comp=E,138nm,0.3s | | | | | | | | |
| KMO | | | | Smax | | | | | |
| | comp=E,2μm,0.6s | | | | | | | | |
| **KMO** | **Kumora** | **1.17** | **245** | *e* | PG | **Pg** | | **00 59 05.8** | **+1.6** |
| KMO | | | | *e* | | | | 00 59 20.8 | |
| KMO | | | | pmax | pmax | | | | |
| | comp=Z,130nm,0.3s | | | | | | | | |
| KMO | | | | smax | smax | | | | |
| | comp=E,2μm,0.9s | | | | | | | | |
| **NLYR** | **Nelyaty** | **1.45** | **85** | ⇓*i* | Pg | **Pn** | | **00 59 06.7** | **-1.3** |
| NLYR | | | | *e* | | | | 00 59 08.7 | |
| NLYR | | | | *e* | Sg | **Sn** | | **00 59 24.9** | **-2.2** |
| NLYR | | | | *e* | | | | 00 59 28.9 | |
| NLYR | | | | max | | | | | |
| | comp=E,351nm,0.5s | | | | | | | | |
| NLYR | | | | max | | | | | |
| | comp=E,4μm,1.0s | | | | | | | | |
| **NLYR** | **Nelyaty** | **1.45** | **85** | ⇓*i* | PG | **Pn** | | **00 59 06.6** | **-1.4** |
| NLYR | | | | *e* | | | | 00 59 24.9 | |
| NLYR | | | | pmax | pmax | | | | |
| | comp=Z,388nm,0.7s | | | | | | | | |
| NLYR | | | | smax | smax | | | | |
| | comp=N,4μm,1.0s | | | | | | | | |
| **BOD** | **Bodaibo** | **1.51** | **19** | ⇑*i* | Pg | **Pn** | | **00 59 06.0** | **-2.8** |
| | comp=N,196nm,0.6s | | | | | | | | |
| BOD | | | | ⇑*i* | Pg | **Pn** | | **00 59 06.0** | **-2.8** |
| | comp=N,46nm,0.6s | | | | | | | | |
| BOD | | | | ⇑*i* | Pg | **Pn** | | **00 59 06.0** | **-2.8** |
| | comp=N,132nm,0.6s | | | | | | | | |
| BOD | | | | *e* | Sg | **Sn** | | **00 59 23.8** | **-4.7** |
| BOD | | | | *e* | | | | 00 59 27.0 | |
| BOD | | | | *e* | | | | 00 59 32.3 | |
| BOD | | | | Pmax | | | | | |
| | comp=N,309nm,0.3s | | | | | | | | |
| BOD | | | | max | | | | | |
| | comp=N,2μm,0.3s | | | | | | | | |
| **BOD** | **Bodaibo** | **1.51** | **19** | ⇑*i* | PG | **Pn** | | **00 59 05.9** | **-2.8** |
| BOD | | | | *e* | | | | 00 59 24.2 | |
| BOD | | | | pmax | pmax | | | | |
| | comp=Z,308nm,0.2s | | | | | | | | |
| BOD | | | | smax | smax | | | | |
| | comp=E,2μm,0.2s | | | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.87** | **217** | ⇓*i* | Pg | **Pg** | | **00 59 17.5** | **0.0** |
| YLYR | | | | *e* | Sg | **Sg** | | **00 59 45.0** | **+3.2** |
| YLYR | | | | Pmax | | | | | |
| | comp=E,434nm,0.8s | | | | | | | | |
| YLYR | | | | Smax | | | | | |
| | comp=E,2μm,0.6s | | | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.87** | **217** | ⇓*i* | PN | **Pg** | | **00 59 17.5** | **0.0** |
| YLYR | | | | *e* | | | | 00 59 19.1 | |
| YLYR | | | | *e* | S | **Sg** | | **00 59 42.7** | **+0.9** |
| YLYR | | | | *e* | | | | 00 59 44.6 | |
| YLYR | | | | pmax | pmax | | | | |
| | comp=Z,437nm,0.8s | | | | | | | | |
| YLYR | | | | smax | smax | | | | |
| | comp=E,2μm,0.6s | | | | | | | | |
| **NIZB** | **Nizh Angarsk** | **2.08** | **254** | *e* | PN | **Pg** | | **00 59 20.2** | **-1.3** |
| NIZB | | | | *e* | Pg | **Pb** | | **00 59 21.5** | **+2.0** |
| NIZB | | | | *e* | Sn | **Sb** | | **00 59 46.9** | **+1.5** |
| NIZB | | | | *e* | Sg | **Sg** | | **00 59 50.5** | **+2.0** |
| NIZB | | | | Pmax | | | | | |
| | comp=E,324nm,0.8s | | | | | | | | |
| NIZB | | | | Smax | | | | | |
| | comp=E,914nm,0.5s | | | | | | | | |
| **CRS** | **Chara** | **2.90** | **78** | *e* | PN | **Pb** | | **00 59 32.7** | **-0.8** |
| CRS | | | | *e* | | | | 01 00 09.1 | |
| CRS | | | | pmax | pmax | | | | |
| | comp=Z,238nm,0.8s | | | | | | | | |
| CRS | | | | smax | smax | | | | |
| | comp=E,679nm,0.9s | | | | | | | | |
| **VTMR** | **Vitim** | **3.07** | **355** | *e* | PN | **Pn** | | **00 59 28.6** | **-1.5** |
| VTMR | | | | *e* | Pg | **Pb** | | **00 59 34.4** | **-1.9** |
| VTMR | | | | *e* | Sg | **Sb** | | **01 00 12.3** | **-1.4** |
| VTMR | | | | *e* | SgSg | **Sg** | | **01 00 20.0** | **-0.1** |
| **SYVR** | **Suvo** | **3.27** | **214** | *e* | Pn | **Pn** | | **00 59 35.9** | **+3.0** |
| SYVR | | | | *e* | Pg | **Pg** | | **00 59 43.5** | **-0.7** |
| SYVR | | | | *e* | Sg | **Sg** | | **01 00 27.4** | **+0.9** |
| SYVR | | | | Pmax | | | | | |
| | comp=E,58nm,0.8s | | | | | | | | |
| SYVR | | | | Smax | | | | | |
| | comp=E,543nm,1.0s | | | | | | | | |
| **SYVR** | **Suvo** | **3.27** | **214** | *e* | PN | **Pn** | | **00 59 35.9** | **+3.0** |
| SYVR | | | | *e* | | | | 00 59 43.6 | |
| SYVR | | | | *e* | | | | 01 00 26.9 | |
| SYVR | | | | pmax | pmax | | | | |
| | comp=Z,59nm,1.0s | | | | | | | | |
| SYVR | | | | smax | smax | | | | |
| | comp=N,549nm,1.0s | | | | | | | | |
| **KHNR** | **Khani** | **3.84** | **79** | *e* | Pn | **Pn** | | **00 59 41.3** | **+0.5** |
| KHNR | | | | *e* | Pg | **Pb** | | **00 59 49.0** | **-0.4** |
| KHNR | | | | *e* | Sg | **Sb** | | **01 00 36.9** | **+1.0** |
| **MXMB** | **Maximikha** | **4.02** | **220** | *e* | Sg | **Sg** | | **01 00 50.8** | **+0.2** |
| **OGRR** | **Ongureny** | **4.20** | **231** | ⇑*i* | Pn | **Pn** | | **00 59 49.0** | **+3.3** |
| OGRR | | | | *e* | Pg | **Pg** | | **00 59 59.3** | **-2.6** |
| OGRR | | | | *e* | Sn | **Sn** | | **01 00 37.5** | **+2.8** |
| OGRR | | | | *e* | Sg | **Sg** | | **01 00 55.6** | **-0.6** |
| OGRR | | | | Pmax | | | | | |
| | comp=N,29nm,0.9s | | | | | | | | |
| OGRR | | | | Smax | | | | | |
| | comp=N,151nm,1.2s | | | | | | | | |
| **OGRR** | **Ongureny** | **4.20** | **231** | *e* | PN | **Pn** | | **00 59 48.9** | **+3.3** |
| OGRR | | | | *e* | | | | 00 59 59.6 | |
| OGRR | | | | *e* | | | | 01 00 53.5 | |
| OGRR | | | | pmax | pmax | | | | |
| | comp=Z,48nm,3.1s | | | | | | | | |
| OGRR | | | | smax | smax | | | | |
| | comp=E,151nm,1.4s | | | | | | | | |
| **UZR** | **Uzur** | **4.36** | **227** | *e* | Pg | **Pg** | | **01 00 02.5** | **-2.6** |
| UZR | | | | *e* | Sn | **Sn** | | **01 00 42.6** | **+3.8** |
| UZR | | | | *e* | Sg | **Sg** | | **01 01 00.9** | **-0.7** |
| UZR | | | | Pmax | | | | | |
| | comp=E,40nm,1.0s | | | | | | | | |
| UZR | | | | Smax | | | | | |
| | comp=E,148nm,1.1s | | | | | | | | |
| **TUP** | **Tupik** | **4.38** | **114** | ⇑*i* | Pn | **Pn** | | **00 59 49.0** | **+0.8** |
| TUP | | | | *e* | Pg | **Pb** | | **00 59 59.9** | **+1.2** |
| TUP | | | | *e* | Sn | **Sn** | | **01 00 38.3** | **-1.0** |
| TUP | | | | *e* | Sg | **Sg** | | **01 00 56.6** | **-5.6** |
| TUP | | | | *e* | | | | 01 01 02.1 | |
| TUP | | | | Pmax | | | | | |
| | comp=E,55nm,1.0s | | | | | | | | |
| TUP | | | | max | | | | | |
| | comp=E,308nm,1.1s | | | | | | | | |
| **TUP** | **Tupik** | **4.38** | **114** | *e* | PN | **Pn** | | **00 59 48.6** | **+0.4** |
| TUP | | | | *e* | | | | 00 59 59.7 | |
| TUP | | | | *e* | S | **Sn** | | **01 00 38.6** | **-0.7** |
| TUP | | | | *e* | | | | 01 00 56.7 | |
| TUP | | | | pmax | pmax | | | | |
| | comp=Z,55nm,1.0s | | | | | | | | |
| TUP | | | | smax | smax | | | | |
| | comp=N,309nm,1.2s | | | | | | | | |
| **CIT** | **Chita** | **4.39** | **176** | *e* | Sg | **Sg** | | **01 01 03.1** | **+0.6** |
| CIT | | | | Smax | | | | | |
| | comp=N,296nm,0.6s | | | | | | | | |
| **CIT** | **Chita** | **4.39** | **176** | *e* | PN | **Pn** | | **00 59 49.7** | **+1.3** |
| **GORB** | **Goryachinsk** | **4.41** | **221** | *e* | Pg | **Pg** | | **01 00 03.5** | **-2.5** |
| GORB | | | | *e* | | | | 01 00 08.3 | |
| GORB | | | | *e* | Sg | **Sg** | | **01 01 01.7** | **-1.4** |
| **YKLR** | **Yuktali** | **4.75** | **84** | *e* | Pg | **Pb** | | **01 00 05.2** | **+0.3** |
| YKLR | | | | *e* | Sg | **Sb** | | **01 01 05.1** | **+3.0** |
| **TRG** | **Tyrgan** | **5.35** | **230** | *e* | Pn | **Pn** | | **01 00 05.4** | **+3.9** |
| TRG | | | | *e* | Pg | **Pg** | | **01 00 20.2** | **-3.8** |
| TRG | | | | *e* | Sn | **Sn** | | **01 01 05.3** | **+2.1** |
| TRG | | | | *e* | Sg | **Sg** | | **01 01 30.7** | **-2.6** |
| TRG | | | | Pmax | | | | | |
| | comp=N,20nm,1.5s | | | | | | | | |
| TRG | | | | Smax | | | | | |
| | comp=N,93nm,1.2s | | | | | | | | |
| **TRG** | **Tyrgan** | **5.35** | **230** | *e* | PN | **Pn** | | **01 00 05.1** | **+3.6** |
| TRG | | | | *e* | | | | 01 00 20.5 | |
| TRG | | | | *e* | S | **Sn** | | **01 01 05.1** | **+1.9** |
| **UUDB** | **Ulan-Yde** | **5.54** | **217** | *e* | Pn | **Pn** | | **01 00 07.8** | **+3.6** |
| UUDB | | | | *e* | Pg | Pg | | 01 00 23.6 | -4.1 |
| UUDB | | | | *e* | Sn | **Sn** | | **01 01 11.1** | **+3.2** |
| UUDB | | | | *e* | Sg | **Sg** | | **01 01 37.6** | **-1.9** |
| UUDB | | | | Pmax | | | | | |
| | comp=N,20nm,1.1s | | | | | | | | |
| UUDB | | | | Smax | | | | | |
| | comp=N,135nm,2.1s | | | | | | | | |
| **HRMR** | **Khuramsha** | **5.99** | **220** | *e* | Pg | Pg | | 01 00 31.9 | -4.3 |
| HRMR | | | | *e* | | | | 01 01 31.3 | |
| HRMR | | | | *e* | Sg | **Sg** | | **01 01 51.3** | **-2.4** |
| HRMR | | | | Pmax | | | | | |
| | comp=N,26nm,0.5s | | | | | | | | |
| HRMR | | | | Smax | | | | | |
| | comp=N,262nm,1.2s | | | | | | | | |
| **BGT** | **Bolshoye Golou** | **6.27** | **229** | *e* | Pn | **Pn** | | **01 00 16.2** | **+2.1** |
| BGT | | | | *e* | Pg | Pb | | 01 00 36.0 | +5.3 |
| BGT | | | | *e* | Sn | **Sn** | | **01 01 26.7** | **+1.0** |
| BGT | | | | *e* | Sg | **Sg** | | **01 01 58.9** | **-3.7** |
| BGT | | | | Pmax | | | | | |
| | comp=N,8.0nm,0.2s | | | | | | | | |
| BGT | | | | Smax | | | | | |
| | comp=N,73nm,1.4s | | | | | | | | |
| **CLNS** | **Chul'man** | **6.53** | **81** | *e* | Pg | **Pb** | | **01 00 37.2** | **+1.9** |
| CLNS | | | | *e* | | | | 01 00 41.7 | |
| CLNS | | | | *e* | Sg | Sg | | 01 02 01.3 | -10 |
| **LSTR** | **Listvyanka** | **6.64** | **230** | *e* | Pg | Pg | | 01 00 43.5 | -5.2 |
| LSTR | | | | *e* | Sn | **Sn** | | **01 01 37.6** | **+2.7** |
| LSTR | | | | *e* | Sg | **Sg** | | **01 02 10.9** | **-3.7** |
| LSTR | | | | Pmax | | | | | |
| | comp=N,11nm,1.3s | | | | | | | | |
| LSTR | | | | Smax | | | | | |
| | comp=N,71nm,1.3s | | | | | | | | |
| **KPC** | **Khapcheranga** | **6.72** | **184** | *e* | PN | **Pn** | | **01 00 22.3** | **+2.0** |
| KPC | | | | *e* | | | | 01 00 31.0 | |
| KPC | | | | *e* | Pg | Pg | | 01 00 45.9 | -4.2 |
| KPC | | | | *e* | | | | 01 01 53.3 | |
| KPC | | | | *e* | Sg | **Sg** | | **01 02 14.8** | **-2.3** |
| KPC | | | | *e* | | | | 01 02 18.6 | |
| KPC | | | | Pmax | | | | | |
| | comp=N,11nm,1.6s | | | | | | | | |
| KPC | | | | max | | | | | |
| | comp=N,134nm,0.8s | | | | | | | | |
| **IVK** | **Ivanovka** | **6.87** | **232** | *e* | Pg | Pg | | 01 00 47.5 | -5.5 |
| IVK | | | | *e* | | | | 01 00 52.5 | |
| IVK | | | | *e* | | | | 01 01 56.5 | |
| IVK | | | | *e* | Sg | **Sg** | | **01 02 18.7** | **-3.2** |
| IVK | | | | max | | | | | |
| | comp=N,21nm,1.0s | | | | | | | | |
| IVK | | | | Smax | | | | | |
| | comp=N,114nm,1.4s | | | | | | | | |
| **TLY** | **Talaya** | **7.29** | **234** | *e* | Pg | Pg | | 01 00 55.5 | -5.7 |
| TLY | | | | *e* | Sn | **Sn** | | **01 01 51.4** | **+0.4** |
| TLY | | | | *e* | Sg | **Sg** | | **01 02 30.1** | **-5.4** |
| TLY | | | | Pmax | | | | | |
| | comp=N,9.0nm,0.7s | | | | | | | | |
| TLY | | | | Smax | | | | | |
| | comp=N,46nm,1.2s | | | | | | | | |
| **ARS** | **Arshan** | **7.70** | **239** | *e* | Pg | **Pg** | | **01 01 06.0** | **-2.9** |
| ARS | | | | *e* | Sn | **Sn** | | **01 02 02.1** | **+1.1** |
| ARS | | | | *e* | Sg | **Sg** | | **01 02 43.6** | **-4.9** |
| ARS | | | | Smax | | | | | |
| | comp=N,190nm,1.3s | | | | | | | | |
| **ZAK** | **Zakamensk** | **8.40** | **228** | *e* | | **Pb** | | **01 01 08.8** | **+1.7** |
| ZAK | | | | *e* | Sg | **Sg** | | **01 03 05.7** | **-5.3** |
| ZAK | | | | Smax | | | | | |
| | comp=N,53nm,1.0s | | | | | | | | |
| **MOY** | **Mondy** | **8.55** | **241** | *e* | Pn | **Pn** | | **01 00 48.4** | **+3.0** |
| MOY | | | | *e* | Pg | Pg | | 01 01 18.4 | -6.7 |
| MOY | | | | *e* | Sn | **Sn** | | **01 02 22.2** | **+0.3** |
| MOY | | | | *e* | | | | 01 02 44.3 | |
| MOY | | | | *e* | Sg | **Sg** | | **01 03 09.7** | **-6.0** |
| MOY | | | | *e* | | | | 01 03 38.2 | |
| MOY | | | | Pmax | | | | | |
| | comp=N,14nm,1.1s | | | | | | | | |
| MOY | | | | Smax | | | | | |
| | comp=N,82nm,2.2s | | | | | | | | |
| **MOY** | **Mondy** | **8.55** | **241** | *e* | PN | **Pn** | | **01 00 48.9** | **+3.5** |
| MOY | | | | *e* | | | | 01 01 19.4 | |
| MOY | | | | *e* | | | | 01 03 11.1 | |
| MOY | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| MOY | | | | smax | smax | | | | |
| | comp=N,82nm,2.2s | | | | | | | | |
| **ORL** | **Orlik** | **8.64** | **249** | *e* | Pn | **Pn** | | **01 00 50.0** | **+3.2** |
| ORL | | | | *e* | | | | 01 01 00.9 | |
| ORL | | | | *e* | Pg | Pg | | 01 01 19.9 | -7.1 |
| ORL | | | | *e* | Sn | **Sn** | | **01 02 23.9** | **-0.4** |
| ORL | | | | *e* | Sg | **Sg** | | **01 03 12.4** | **-6.4** |
| ORL | | | | Pmax | | | | | |
| | comp=N,18nm,1.6s | | | | | | | | |
| ORL | | | | Smax | | | | | |
| | comp=N,66nm,1.6s | | | | | | | | |
| **SONM** | **Songino Array** | **9.51** | **208** | | | Lg | Lg | 01 03 44.4 | |
| | comp=N,0.8nm,0.3s,baz=19,slow=25,SNR=11 | | | | | | | | |
| **KLR** | **Kul'dur** | **13.34** | **115** | | | Pn | **Pn** | **01 01 50.5** | **-0.3** |
| | comp=N,0.3nm,0.3s,baz=307,slow=12,SNR=4.2 | | | | | | | | |
| KLR | | | | | | Lg | Lg | 01 05 37.6 | |
| | comp=N,0.1nm,0.3s,baz=246,slow=16,SNR=2.3 | | | | | | | | |
| | comp=N,1.5nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.29** | **273** | | | Pn | **P** | **01 02 31.9** | **-1.3** |
| | comp=N,0.1nm,0.3s,baz=67,slow=11,SNR=5.3 | | | | | | | | |
| ZALV | | | | | | Lg | Lg | 01 07 13.0 | |
| | comp=N,0.1nm,0.3s,baz=68,slow=27,SNR=1.7 | | | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | | | |
| **KURK** | **Kurchatov** | **21.09** | **269** | | | P | **P** | **01 03 28.4** | **+2.5** |
| **KURBB** | **Kurchatov Arra** | **21.19** | **269** | | | P | **P** | **01 03 28.4** | **+1.4** |
| | comp=N,1.2nm,0.5s,baz=65,slow=11,SNR=8.4 | | | | | | | | |
| | comp=N,1.2nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **21.24** | **256** | | | P | **P** | **01 03 30.1** | **+2.6** |
| | comp=N,2.3nm,0.8s,baz=45,slow=8.8,SNR=9.7 | | | | | | | | |
| | comp=N,2.3nm,0.8s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **24.60** | **280** | | | P | **P** | **01 04 03.6** | **+1.9** |
| | comp=N,0.9nm,0.5s,baz=70,slow=9.8,SNR=5.1 | | | | | | | | |
| | comp=N,0.9nm,0.5s | | | | | | | | |
| **FINES** | **FINESS Array B** | **42.03** | **314** | | | P | **P** | **01 06 32.9** | **+0.2** |
| | comp=N,1.2nm,0.5s,baz=60,slow=9.0,SNR=16 | | | | | | | | |
| | comp=N,1.2nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **44.81** | **37** | | | P | **P** | **01 06 55.5** | **+0.4** |
| | comp=N,0.3nm,0.6s,baz=309,slow=10,SNR=2.5 | | | | | | | | |
| | comp=N,0.3nm,0.6s | | | | | | | | |
| **HFS** | **Hagfors** | **47.61** | **318** | | | P | **P** | **01 07 16.3** | **-0.9** |
| | comp=N,1.1nm,0.8s,baz=54,slow=7.3,SNR=5.4 | | | | | | | | |
| | comp=N,1.1nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **78.13** | **160** | | | P | **P** | **01 10 41.9** | **+1.3** |
| | comp=N,0.3nm,0.8s,baz=345,slow=6.0,SNR=2.9 | | | | | | | | |
| | comp=N,0.3nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **81.67** | **161** | | | P | **P** | **01 11 01.4** | **+1.6** |
| | comp=N,0.2nm,0.3s,baz=353,slow=5.8,SNR=3.2 | | | | | | | | |
| | comp=N,0.2nm,0.3s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **90.56** | **295** | | | P | **P** | **01 11 43.6** | **-0.3** |
| | comp=N,0.5nm,0.9s,baz=20,slow=4.7,SNR=3.7 | | | | | | | | |
| | comp=N,0.5nm,0.9s | | | | | | | | |
| **SNAA** | **Sanae** | **149.93** | **215** | PKPbc | | **PKiKP** | **P** | **01 18 32.6** | **+1.2** |
| | comp=N,1.4nm,1.0s,baz=163,slow=21,SNR=9.8 | | | | | | | | |

*NEIC* ***29*** *01:07:53.4±1.9,17.°8S±0.°1×178.°0W±0.°1,h519km±9km, mb4.5/27, Error ellipse: s-maj=24.3km s-min=10.8km az=131.0*
*IDC* ***29*** *01:07:55.4±1.4,17.°87S×178.°17W,h537km±13km,mb3.3/9, mbtmp4.2/10, Error ellipse: s-maj=21.2km s-min=19.1km az=124.0*
**ISC 29 01:07:52.8±0.7,17.°9S±0.°1×177.°95W±0.°09,h500km,n44,**
**σ1s90/45,mb4.3/23,2C,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.82** | **272** | P | | **P** | **P** | **01 09 12.7** | **+2.9** |
| **MSVF** | **Nonsavu** | **3.82** | **272** | P | | **P** | **P** | **01 09 13.2** | **+3.3** |
| | 183nm,0.8s,baz=125,slow=13,SNR=64 | | | | | | | | |
| MSVF | | | | S | | | **S** | **01 10 18.7** | **+6.1** |
| | 10nm,0.9s,baz=139,slow=18,SNR=0.9 | | | | | | | | |
| **NIUE** | **Niue** | **7.70** | **100** | P | | **P** | **P** | **01 09 47.1** | **+1.1** |
| **URZ** | **Urewera** | **20.71** | **191** | P | | **P** | **P** | **01 11 56.5** | **-1.2** |
| | 9.7nm,0.3s,baz=340,slow=2.1,SNR=15 | | | | | | | | |
| | 9.7nm,0.3s | | | | | | | | |
| **RTZ** | **Ruatahuna** | **21.08** | **191** | P | | **P** | **P** | **01 12 00.3** | **-0.9** |
| **BKZ** | **Black Stump Fm** | **21.71** | **192** | P | | **P** | **P** | **01 12 04.4** | **-2.4** |
| BKZ | | | | | | IAmb | IAmb | 01 12 30.1 | |
| | comp=Z,36nm,1.4s | | | | | | | | |
| **BFZ** | **Birch Farm** | **23.22** | **191** | P | | **P** | **P** | **01 12 20.2** | **-0.1** |
| **MRZ** | **Mangatainoka R** | **23.33** | **193** | P | | **P** | **P** | **01 12 19.8** | **-1.5** |
| MRZ | | | | | | IAmb | IAmb | 01 12 22.1 | |
| | comp=Z,34nm,1.3s | | | | | | | | |
| **BHW** | **Baring Head** | **24.20** | **193** | P | | **P** | **P** | **01 12 27.8** | **-1.1** |
| **PLWZ** | **Palliser** | **24.27** | **192** | P | | **P** | **P** | **01 12 29.9** | **+0.3** |
| **INZ** | **Inchbonnie** | **26.31** | **198** | P | | **P** | **P** | **01 12 48.6** | **+0.9** |
| INZ | | | | | | IAmb | IAmb | 01 12 56.6 | |
| | comp=Z,51nm,1.3s | | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.54** | **199** | P | | **P** | **P** | **01 12 57.9** | **-0.5** |
| **LBZ** | **Lake Benmore** | **28.20** | **198** | P | | **P** | **P** | **01 13 03.6** | **-0.7** |
| LBZ | | | | | | IAmb | IAmb | 01 13 45.6 | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **WKZ** | **Wanaka** | **28.96** | **199** | P | | **P** | **P** | **01 13 10.0** | **-0.9** |
| **MLZ** | **Mavora Lakes** | **29.73** | **200** | P | | **P** | **P** | **01 13 18.3** | **+0.7** |
| MLZ | | | | | | IAmb | IAmb | 01 13 35.8 | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| **ARMA** | **Armidale** | **30.31** | **240** | P | | **P** | **P** | **01 13 22.7** | **-0.3** |
| ARMA | | | | | | IAmb | IAmb | 01 13 47.2 | |
| | comp=Z,10nm,1.1s | | | | | | | | |
| **CAN** | **Canberra** | **34.04** | **233** | P | | **P** | **P** | **01 13 54.5** | **-0.2** |
| **TOO** | **Toolangi** | **37.50** | **231** | P | | **P** | **P** | **01 14 23.7** | **+0.3** |
| TOO | | | | | | IAmb | IAmb | 01 14 24.6 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **STKA** | **Stephens Creek** | **39.01** | **241** | P | | **P** | **P** | **01 14 34.5** | **-1.2** |
| **STKA** | **Stephens Creek** | **39.01** | **241** | P | | **P** | **P** | **01 14 34.7** | **-1.0** |
| | comp=Z,2.3nm,0.5s,baz=94,slow=9.5,SNR=5.1 | | | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | | | |
| **BBOO** | **Buckleboo** | **43.78** | **241** | P | | **P** | **P** | **01 15 12.9** | **-0.7** |
| BBOO | | | | | | IAmb | IAmb | 01 15 39.9 | |
| | comp=Z,36nm,1.4s | | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.87** | **259** | P | | **P** | **P** | **01 15 19.7** | **-2.6** |
| WR0 | | | | | | IAmb | IAmb | 01 15 32.6 | |
| | comp=Z,8.0nm,1.4s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.03** | **260** | P | | **P** | **P** | **01 15 20.6** | **-2.8** |
| **WB2** | **Warramunga Arr** | **45.05** | **259** | P | | **P** | **P** | **01 15 20.5** | **-3.1** |
| **WRA** | **Warramun

comp=Z,2.8nm,0.6s
**NVAR Mina Array Bea 79.14 44** P **P** **01 19 04.4 -1.1**
comp=Z,0.3nm,0.6s,baz=223,slow=6.0,SNR=3.8
comp=Z,0.3nm,0.6s
**J05D Fort Rock, OR 80.06 38** P **P** **01 19 09.4 -0.8**
**MAW Mawson 83.99 200** P **P** **01 19 29.6 +0.1**
comp=Z,1.5nm,0.8s,baz=153,slow=2.9,SNR=9.2
comp=Z,1.5nm,0.8s
**TXAR Lajitas Array 85.64 57** P **P** **01 19 38.8 +0.3**
comp=Z,0.4nm,0.8s,baz=232,slow=6.2,SNR=4.9
comp=Z,0.4nm,0.8s
**TROLL Troll, Antarti 90.29 180** ⇑P **P** **01 19 59.5 -0.1**
comp=Z,43nm,0.5s
**SNAA Sanae 90.56 178** P **P** **01 19 59.5 -1.3**
comp=Z,1.4nm,1.1s,baz=23,slow=12,SNR=2.5
comp=Z,1.4nm,1.1s
**VNA3 Neumayer Olymp 90.69 176** ⇑P **P** **01 20 01.4 +0.1**
comp=Z,1.8nm,0.6s
**BRTR Keskin Array B 145.11 315** PKP **PKPdf** **01 26 31.6 -1.8**
comp=Z,0.5nm,0.6s,baz=99,slow=7.6,SNR=4.1
**GERES GERESS Array B 147.74 346** PKPbc **PKPdf** **01 26 38.7 +1.4**
comp=Z,0.4nm,0.6s,baz=99,slow=2.5,SNR=2.6

**DJA 29 01:12:06.1±0.5, 9°S±11°×11°6E±°, h53km±38km, M3.7/7, mb3.7/2, MLv3.7/7, South of Bali**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DNP** | **Denpasar** | **1.09** | **316** | P | Pn | 01 12 24.7 | -0.4 |
| DNP | | | | S | Sn | 01 12 42.0 | +2.9 |
| **TWSI** | **Taliwang, Sumb** | **1.14** | **51** | P | Pn | 01 12 26.2 | +0.4 |
| TWSI | | | | S | Sn | 01 12 40.5 | 0.0 |
| **SRBI** | **Singaraja** | **1.56** | **331** | P | Pn | 01 12 30.9 | -0.6 |
| SRBI | | | | S | Sn | 01 12 52.1 | +1.4 |
| **PLAI** | **Plampang** | **1.88** | **71** | P | Pn | 01 12 35.8 | -0.1 |
| PLAI | | | | S | Sn | 01 12 59.1 | +0.6 |
| **JAGI** | **Jajag, Banyuwa** | **2.06** | **298** | P | Pn | 01 12 38.4 | +0.1 |
| JAGI | | | | S | Sn | 01 13 03.2 | +0.4 |
| **WBSI** | **Waikabubak, Su** | **3.37** | **93** | P | Pn | 01 12 56.3 | 0.0 |
| **BASI** | **Baing, Sumba** | **4.59** | **100** | P | Pn | 01 13 12.7 | -0.4 |
| **BSSI** | **Bau Bau, Buton** | **5.55** | **54** | P | Pn | 01 13 26.1 | -0.1 |
| | 44nm,1.2s,0.2nm | | | | | | |
| **EDFI** | **Ende, Flores** | **5.68** | **83** | P | Pn | 01 13 28.3 | +0.2 |

*IDC **29** 01:24:53.5±0.4, 16°.39S×177°.89E, h0km, mb4.7/23, mbtmp4.7/23, MS5.1/53, Error ellipse: s-maj=12.6km s-min=10.0km az=74.0*
*NEIC **29** 01:24:55.4, 15°.89S×178°.22E, h22km, Moment Tensor Solution. Duration: 3s6 Moment tensor: Scale 10¹⁷Nm; Mrr-0.84; Mθθ 0.74; Mϕϕ 0.10; Mrθ 0.22; Mθϕ 5.30; Mϕr 1.54; Fault plane solution: M₀5.53000×10¹⁷ NP1: ϕs182.30000°, δ87.94000°, λ-163.28000°. NP2: ϕs91.68000°, δ73.29000°, λ-2.15000°. Principal axes: T 5.9479, Plg10.0000°, Azm316.0000°; N -0.8333, Plg73.0000°, Azm189.0000°; P -5.1146, Plg13.0000°, Azm48.0000°;*
*BJI **29** 01:24:55.4±0.0, 15°.86S×178°.11E, h10km, mb5.1/56, mB5.6/37, Ms5.4/60, Ms7 5.3/59*
*NEIC **29** 01:24:55.4, 16°.39S×178°.02E, h10km*
*NEIC **29** 01:24:55.4, 16°.39S×178°.02E, h22km*
*NEIC **29** 01:24:57.5±1.7, 16°.43S±0°.07×178°.04E±0°.08, h23km±1km, mb5.7/362, Ms_20 5.4/499, Mwb5.8/10, Mww5.8/18, Error ellipse: s-maj=13.4km s-min=11.6km az=134.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr1.74; Mθθ-1.08; Mϕϕ-0.66; Mrθ 1.19; Mθϕ 6.10; Mϕr 0.29; Fault plane solution: M₀6.40000×10¹⁷ NP1: ϕs358.26000°, δ76.01000°, λ171.98000°. NP2: ϕs90.21000°, δ82.22000°, λ14.12000°. Principal axes: T 5.5198, Plg15.0000°, Azm315.0000°; N 1.4989, Plg74.0000°, Azm119.0000°; P -7.0187, Plg4.0000°, Azm224.0000°;*
*MOS **29** 01:24:59.6±3.3, 16°.37S×178°.08E, h33km, mb5.6/47, MS5.3/17 Error ellipse: s-maj=8.2km s-min=7.6km az=102.8*
*GCMT **29** 01:25:00.5±0.1, 16°.18S±0°.01×178°.04E±0°.01, h20km, MW5.8/157, Moment Tensor Solution. s126,c230; s157,c437; Duration: 1s8 Moment tensor: Scale 10¹⁷ Nm; Mrr-0.34±.06; Mθθ-0.07±.05; Mϕϕ 0.41±.05; Mrθ 0.88±.11; Mθϕ 5.14±.05; Mϕr-0.30±.11; Best double couple: M₀5.23400×10¹⁷ NP1:ϕs268.00000°, δ86.00000°, λ-10.00000°. NP2:ϕs359.00000°, δ80.00000°, λ-176.00000°. Principal axes: T 5.3450, Plg4.0000°, Azm314.0000°; N -0.2220, Plg79.0000°, Azm65.0000°; P -5.1230, Plg10.0000°, Azm223.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s. Triangular moment-rate function*
*NOU **29** 01:25:02.3, 16°.43S×177°.96E, h0km, mb5.4/103, Fiji Islands*

**ISC 29 01:24:56.3±0.4, 16°.42S±0°.04×178°.16E±0°.04, h16km±1km, h17km: pP-P, n1291, σ1s81/876, mb5.6/264, MS5.4/342, 24C-44D, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **1.31** | **185** | | **Pn** | **01 25 19.1** | **-1.0** |
| **MSVF** | **Nonsavu** | **1.31** | **185** | Pn | **Pn** | **01 25 18.8** | **-1.2** |
| | 378nm,0.3s,baz=325,slow=1.1,SNR=412 | | | | | | |
| MSVF | | | | Sn | **Sg** | **01 25 39.2** | **+0.3** |
| | 3µm,0.3s,baz=191,slow=21,SNR=7.5 | | | | | | |
| **RTV** | **Rentapao** | **9.41** | **260** | P | Pn | 01 27 16.9 | +5.7 |
| **DVP** | **Devils Point** | **9.62** | **261** | P | **Pn** | **01 27 18.9** | **+4.7** |
| **AFI** | **Afiamalu** | **10.03** | **77** | Pn | **Pn** | **01 27 21.4** | **+1.5** |
| **AFI** | **Afiamalu** | **10.03** | **77** | P | **Pn** | **01 27 21.4** | **+1.5** |
| **NIUE** | **Niue** | **11.66** | **105** | Pn | **Pn** | **01 27 43.0** | **+1.0** |
| **DZM** | **Mont Dzumac** | **12.41** | **241** | P | Pn | 01 27 57.8 | +5.4 |
| **DZM** | **Mont Dzumac** | **12.41** | **241** | Pn | **Pn** | **01 27 51.8** | **-0.6** |
| **DZM** | **Mont Dzumac** | **12.41** | **241** | *e*Pn | Pn | 01 27 42.2 | -10 |
| | 221nm,1.6s | | | | | | |
| DZM | | | | *e*LR | LR | 01 30 40.8 | |
| | 30µm,27.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **12.41** | **241** | Pn | **Pn** | **01 27 51.9** | **-0.5** |
| | 0.1nm,0.3s,baz=87,slow=17,SNR=2.1 | | | | | | |
| DZM | | | | LR | LR | 01 30 51.5 | |
| | comp=Z,2µm,20.0s,baz=65,slow=29 | | | | | | |
| **NOUC** | **Port Laguerre** | **12.54** | **241** | P | P | 01 28 00.1 | -5.6 |
| **RAO** | **Raoul Island** | **13.28** | **165** | LR | LR | 01 32 19.1 | |
| | comp=Z,17µm,20.1s,baz=344,slow=33 | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **13.79** | **251** | P | **P** | **01 28 16.0** | **-3.6** |
| **KOUNC** | **Koumac, New Ca** | **13.79** | **251** | Pn | **Pn** | **01 28 10.4** | **-0.7** |
| **NFK** | **Norfolk Island** | **15.70** | **215** | P | **P** | **01 28 44.0** | **+3.2** |
| **TARA** | **Tarawa** | **18.40** | **343** | P | **Pn** | **01 29 11.2** | **+0.4** |
| **HNR** | **Honiara** | **19.05** | **289** | LR | LR | 01 35 33.8 | |
| | comp=Z,59µm,18.1s,baz=124,slow=34 | | | | | | |
| **KUZ** | **Kuaotunu** | **20.36** | **186** | P | Pn | 01 29 39.8 | +5.6 |
| **MXZ** | **Matakaoa Point** | **21.07** | **180** | IAMs_20 | IAMs_20 | 01 36 10.8 | |
| | comp=Z,12µm,19.0s | | | | | | |
| **TOZ** | **Tahuroa Road** | **21.36** | **186** | P | **P** | **01 29 44.0** | **+1.2** |
| TOZ | | | | IAmb | IAmb | 01 29 51.4 | |
| | comp=Z,524nm,1.4s | | | | | | |
| **RAR** | **Rarotonga** | **21.42** | **106** | P | P | 01 29 52.6 | +8.9 |
| **RAR** | **Rarotonga** | **21.42** | **106** | P | **P** | **01 29 43.7** | **0.0** |
| **RAR** | **Rarotonga** | **21.42** | **106** | P | **P** | **01 29 45.9** | **+2.2** |
| | comp=Z,51nm,0.9s,baz=200,slow=8.4,SNR=5.2 | | | | | | |
| RAR | | | | S | Sn | 01 33 48.3 | -0.7 |
| | comp=Z,14nm,0.8s,baz=331,slow=14,SNR=2.1 | | | | | | |
| RAR | | | | LR | LR | 01 36 44.6 | |
| | comp=Z,1µm,19.5s,baz=278,slow=33 | | | | | | |
| | comp=Z,51nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **21.78** | **182** | P | **P** | **01 29 46.8** | **-0.5** |
| | comp=Z,20nm,0.9s,baz=73,slow=6.5,SNR=4.3 | | | | | | |
| URZ | | | | S | **S** | **01 33 51.2** | **+3.5** |
| | comp=Z,11nm,0.9s,baz=284,slow=20,SNR=1.3 | | | | | | |
| URZ | | | | LR | LR | 01 37 06.6 | |
| | comp=Z,11µm,19.3s,baz=86,slow=34 | | | | | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **HRRZ** | **Handcock Road** | **21.95** | **184** | P | P | 01 30 09.8 | +21 |
| **RTZ** | **Ruatahuna** | **22.14** | **182** | P | **P** | **01 29 53.2** | **+1.9** |
| RTZ | | | | IAmb | IAmb | 01 30 09.9 | |
| | comp=Z,314nm,1.5s | | | | | | |
| RTZ | | | | IAMs_20 | IAMs_20 | 01 37 06.0 | |
| | comp=Z,11µm,18.0s | | | | | | |
| **HIZ** | **Hauiti** | **22.20** | **187** | P | **P** | **01 29 54.8** | **+2.9** |
| HIZ | | | | IAmb | IAmb | 01 30 05.4 | |
| | comp=Z,623nm,1.6s | | | | | | |
| **BKZ** | **Black Stump Fm** | **22.71** | **183** | P | P | 01 30 05.7 | +8.3 |
| **BKZ** | **Black Stump Fm** | **22.71** | **183** | P | P | 01 30 06.3 | +8.9 |
| **FWVZ** | **Far West T-bar** | **22.87** | **185** | P | **P** | **01 30 04.0** | **+4.7** |
| **MAVZ** | **Matarangi** | **22.88** | **185** | P | **P** | **01 30 03.3** | **+3.9** |
| **WHVZ** | **Whangaehu Hut** | **22.89** | **185** | P | **P** | **01 30 02.3** | **+2.8** |
| **TRVZ** | **Turoa** | **22.91** | **185** | P | **P** | **01 30 04.0** | **+4.3** |
| **MCHZ** | **McNeill Hill** | **22.98** | **183** | P | **P** | **01 30 01.7** | **+1.6** |
| **KRHZ** | **Kereru** | **23.20** | **184** | P | **P** | **01 30 01.3** | **-1.1** |
| **KAHZ** | **Kahuranaki** | **23.32** | **182** | P | P | 01 29 56.3 | -7.3 |
| **WAZ** | **Wanganui** | **23.42** | **186** | P | P | 01 30 14.6 | +10 |
| **PNHZ** | **Pukenui** | **23.48** | **184** | P | **P** | **01 30 02.6** | **-2.5** |
| **PXZ** | **Pawanui** | **23.56** | **182** | P | P | 01 29 57.3 | -8.6 |
| **PRHZ** | **Porangahau** | **23.80** | **183** | P | **P** | **01 30 01.4** | **-6.9** |
| **BFZ** | **Birch Farm** | **24.24** | **184** | P | P | 01 30 20.8 | +8.4 |
| **BFZ** | **Birch Farm** | **24.24** | **184** | P | **P** | **01 30 13.8** | **+1.4** |
| **MRZ** | **Mangatainoka R** | **24.26** | **185** | P | **P** | **01 30 12.3** | **-0.4** |
| MRZ | | | | IAmb | IAmb | 01 30 37.4 | |
| | comp=Z,319nm,1.8s | | | | | | |
| **QRZ** | **Quartz Range** | **24.81** | **190** | IAMs_20 | IAMs_20 | 01 38 22.0 | |
| | comp=Z,9µm,18.0s | | | | | | |
| **TCW** | **Tory Channel** | **24.93** | **187** | P | **P** | **01 30 19.8** | **+1.1** |
| **SNZO** | **South Karori** | **24.99** | **186** | P | P | 01 30 27.4 | +8.3 |
| **NNZ** | **Nelson** | **25.06** | **189** | IAMs_20 | IAMs_20 | 01 40 07.7 | |
| | comp=Z,10µm,18.0s | | | | | | |
| **PLWZ** | **Palliser** | **25.19** | **185** | P | **P** | **01 30 23.7** | **+2.6** |
| **TUWZ** | **Tuamarina** | **25.19** | **187** | P | **P** | **01 30 22.9** | **+1.9** |
| **GC1S** | **Gold Coast 1 S** | **25.57** | **239** | P | **P** | **01 30 31.1** | **+6.5** |
| **THZ** | **Tophouse** | **25.66** | **189** | P | **P** | **01 30 27.9** | **+2.5** |
| THZ | | | | IAmb | IAmb | 01 30 43.4 | |
| | comp=Z,271nm,1.5s | | | | | | |
| **KHZ** | **Kahutara** | **26.21** | **188** | P | **P** | **01 30 29.6** | **-0.7** |
| KHZ | | | | IAMs_20 | IAMs_20 | 01 41 26.3 | |
| | comp=Z,8µm,18.0s | | | | | | |
| **LTZ** | **Lake Taylor** | **26.76** | **190** | P | **P** | **01 30 34.4** | **-0.8** |
| **EIDS** | **Eidsvold** | **26.78** | **246** | P | **P** | **01 30 42.3** | **+6.7** |
| **GVZ** | **Greta Valley S** | **26.82** | **188** | IAMs_20 | IAMs_20 | 01 37 31.4 | |
| | comp=Z,8µm,20.0s | | | | | | |
| **INZ** | **Inchbonnie** | **26.84** | **191** | IAMs_20 | IAMs_20 | 01 39 52.7 | |
| | comp=Z,9µm,18.0s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **26.89** | **251** | P | **P** | **01 30 41.5** | **+4.9** |
| **OXZ** | **Oxford** | **27.32** | **190** | IAMs_20 | IAMs_20 | 01 39 39.9 | |
| | comp=Z,7µm,19.0s | | | | | | |
| **ARMA** | **Armidale** | **27.96** | **235** | P | **P** | **01 30 53.2** | **+6.9** |
| **ARMA** | **Armidale** | **27.96** | **235** | P | **P** | **01 30 46.0** | **-0.3** |
| **JCZ** | **Jackson Bay** | **28.69** | **194** | P | P | 01 31 01.0 | +8.4 |
| **WKZ** | **Wanaka** | **29.35** | **193** | P | **P** | **01 31 01.0** | **+2.6** |
| **TV1H** | **Townsville Har** | **29.97** | **260** | P | P | 01 31 11.3 | +7.2 |
| **MLZ** | **Mavora Lakes** | **30.07** | **194** | P | **P** | **01 31 07.7** | **+3.0** |
| **SYDH** | **Sydney Hard Ro** | **30.11** | **230** | P | P | 01 31 14.1 | +8.9 |
| **PATS** | **Pohnpei** | **30.32** | **318** | IAMs_20 | IAMs_20 | 01 40 14.4 | |
| | comp=Z,8µm,20.0s | | | | | | |
| **DCZ** | **Deep Cove** | **30.40** | **195** | IAMs_20 | IAMs_20 | 01 41 57.9 | |
| | comp=Z,6µm,19.0s | | | | | | |
| **CTA** | **Charters Tower** | **30.49** | **258** | P | P | 01 31 16.0 | +7.2 |
| **CTA** | **Charters Tower** | **30.49** | **258** | LR | LR | 01 40 58.8 | |
| | comp=Z,286nm,20.8s,baz=80,slow=32 | | | | | | |
| **CTAO** | **Charters Tower** | **30.49** | **258** | P | P | 01 31 16.6 | +7.8 |
| **CTAO** | **Charters Tower** | **30.49** | **258** | P | **P** | **01 31 07.7** | **-1.1** |
| **CTAO** | **Charters Tower** | **30.49** | **258** | P | **P** | **01 31 07.7** | **-1.1** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,35nm,1.2s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.61** | **194** | P | **P** | **01 31 09.9** | **+0.4** |
| **PAE** | **Paea** | **30.85** | **97** | *e*P | **P** | **01 31 12.8** | **+0.9** |
| | comp=Z,22nm,0.9s | | | | | | |
| PAE | | | | *e*S | **S** | **01 36 15.1** | **-0.2** |
| | comp=Z,271nm,24.1s | | | | | | |
| PAE | | | | *e*LR | LR | 01 39 12.8 | |
| | comp=Z,2µm,26.1s | | | | | | |
| **PPT2** | **Papeete2** | **30.86** | **97** | *e*P | **P** | **01 31 15.3** | **+3.2** |
| | comp=Z,87nm,1.1s | | | | | | |
| **PPT2** | **Papeete2** | **30.86** | **97** | *e*P | P | 01 31 17.1 | +5.0 |
| | comp=Z,298nm,25.8s | | | | | | |
| PPT2 | | | | *e*S | **S** | **01 36 15.3** | **-0.3** |
| | comp=Z,967nm,23.5s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 01 37 57.1 | |
| | comp=Z,22µm,26.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 01 39 11.8 | |
| | comp=Z,3µm,26.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 01 39 16.2 | |
| | comp=Z,7µm,29.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 01 39 16.3 | |
| | comp=Z,13µm,29.0s | | | | | | |
| **PPT** | **Papeete** | **30.86** | **97** | P | **P** | **01 31 13.7** | **+1.6** |
| | comp=Z,18nm,0.5s,baz=62,slow=23,SNR=1.8 | | | | | | |
| PPT | | | | LR | LR | 01 40 29.9 | |
| | comp=Z,1µm,20.3s,baz=264,slow=30 | | | | | | |
| | comp=Z,18nm,0.5s | | | | | | |
| **PPTF** | **Pamatai, Papee** | **30.87** | **97** | P | P | 01 31 21.6 | +9.4 |
| **PPTF** | **Pamatai, Papee** | **30.87** | **97** | P | **P** | **01 31 14.1** | **+1.9** |
| PPTF | | | | IAmb | IAmb | 01 31 22.6 | |
| | comp=Z,159nm,1.2s | | | | | | |
| **SYZ** | **Scrubby Hill** | **30.96** | **192** | P | P | 01 31 22.6 | +10 |
| **PMG** | **Port Moresby** | **30.98** | **279** | P | P | 01 31 20.7 | +7.6 |
| **PMG** | **Port Moresby** | **30.98** | **279** | P | **P** | **01 31 11.4** | **-1.7** |
| **PMG** | **Port Moresby** | **30.98** | **279** | LR | LR | 01 41 13.5 | |
| | comp=Z,3µm,21.2s,baz=62,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **30.98** | **279** | *ce*P | **P** | **01 31 16.6** | **+3.5** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | |
| **AUDCS** | **Dubbo College** | **31.04** | **234** | P | P | 01 31 22.4 | +8.9 |
| **TVO** | **Taravao** | **31.16** | **97** | *e*LR | LR | 01 39 27.3 | |
| | comp=Z,2µm,27.1s | | | | | | |
| **PYZ** | **Puysegur Point** | **31.17** | **195** | IAMs_20 | IAMs_20 | 01 42 38.4 | |
| | comp=Z,7µm,18.0s | | | | | | |
| **TBI** | **Tubuai** | **31.17** | **108** | *e*P | P | 01 31 03.2 | -12 |
| | comp=Z,2µm,37.8s | | | | | | |
| TBI | | | | *e*S | **S** | **01 36 20.7** | **+0.4** |
| | comp=Z,7µm,26.2s | | | | | | |
| TBI | | | | *e*LQ | LQ | 01 38 07.3 | |
| | comp=Z,87µm,26.2s | | | | | | |
| TBI | | | | *e*LR | LR | 01 39 20.0 | |
| | comp=Z,72µm,31.0s | | | | | | |
| TBI | | | | *e*LR | LR | 01 39 23.8 | |
| | comp=Z,13µm,30.5s | | | | | | |
| TBI | | | | *e*LR | LR | 01 39 27.9 | |
| | comp=Z,9µm,26.2s | | | | | | |
| **CNB** | **Canberra Magne** | **31.85** | **228** | P | P | 01 31 27.6 | +7.0 |
| **YNG** | **Young** | **32.08** | **231** | P | P | 01 31 27.8 | +5.1 |
| **MTSU** | **Mount Surprise** | **32.34** | **262** | P | P | 01 31 32.8 | +7.7 |
| **PMOR** | **Pomariorio Ree** | **32.69** | **92** | *e*P | **P** | **01 31 29.1** | **+1.0** |
| | comp=Z,100nm,1.0s | | | | | | |
| PMOR | | | | *e*LR | LR | 01 40 00.8 | |
| | comp=Z,6µm,26.4s | | | | | | |
| **VAH** | **Vaihoa** | **32.92** | **93** | *e*P | **P** | **01 31 33.3** | **+3.2** |
| | comp=Z,86nm,1.1s | | | | | | |
| VAH | | | | *e*LR | LR | 01 40 15.1 | |
| | comp=Z,7µm,24.6s | | | | | | |
| **QLP** | **Quilpie** | **33.05** | **246** | P | P | 01 31 38.0 | +6.8 |
| **CMSA** | **Cobar Meteorol** | **33.11** | **237** | P | P | 01 31 37.2 | +5.5 |
| **COEN** | **Coen** | **33.83** | **269** | P | P | 01 31 44.9 | +6.8 |
| **COEN** | **Coen** | **33.83** | **269** | P | **P** | **01 31 36.2** | **-1.9** |
| **TOO** | **Toolangi** | **35.66** | **227** | P | P | 01 32 00.0 | +6.3 |
| **TOO** | **Toolangi** | **35.66** | **227** | P | **P** | **01 31 53.1** | **-0.6** |
| TOO | | | | IAmb | IAmb | 01 32 20.0 | |
| | comp=Z,196nm,1.9s | | | | | | |
| TOO | | | | IAMs_20 | IAMs_20 | 01 43 42.6 | |
| | comp=Z,8µm,21.0s | | | | | | |
| **TOO** | **Toolangi** | **35.66** | **227** | P | **P** | **01 31 53.1** | **-0.6** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,196nm,1.9s | | | | | | |
| **INKA** | **Innaminka** | **36.32** | **245** | P | P | 01 32 06.3 | +6.8 |
| **H11S2** | **WAKE ISLAND Hy** | **36.47** | **342** | T | T | 02 10 38.6 | |
| | baz=162,slow=76,SNR=31 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.48** | **341** | T | T | 02 10 33.1 | |
| | baz=162,slow=76,SNR=43 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.49** | **342** | T | T | 02 10 40.7 | |
| | baz=162,slow=76,SNR=22 | | | | | | |
| **STKA** | **Stephens Creek** | **36.54** | **238** | P | P | 01 32 06.2 | +4.9 |
| **STKA** | **Stephens Creek** | **36.54** | **238** | P | **P** | **01 32 00.6** | **-0.8** |
| | comp=Z,17nm,0.8s,baz=71,slow=6.8,SNR=20 | | | | | | |
| STKA | | | | LR | LR | 01 44 55.9 | |
| | comp=Z,4µm,22.0s,baz=69,slow=33 | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **36.54** | **238** | *i* P | **P** | **01 32 03.8** | **+2.5** |
| **QIS** | **Mount Isa** | **36.74** | **258** | P | P | 01 32 10.1 | +6.9 |
| **BRAT** | **Ballarat** | **36.76** | **228** | P | P | 01 32 09.7 | +6.6 |
| **WAKE** | **Wake Island** | **37.24** | **342** | IAMs_20 | IAMs_20 | 01 43 36.0 | |
| | comp=Z,5µm,20.0s | | | | | | |
| **TABU** | **Tabubil** | **37.85** | **283** | P | P | 01 32 19.2 | +6.5 |
| **ARPS** | **Mount Arapiles** | **37.97** | **231** | P | P | 01 32 19.8 | +6.4 |
| **LCRK** | **Leigh Creek** | **39.01** | **242** | P | P | 01 32 29.2 | +7.0 |
| **HTT** | **Hallett** | **39.14** | **237** | P | P | 01 32 30.6 | +7.3 |
| **JAY** | **Jayapura** | **39.34** | **287** | P | **P** | **01 32 23.1** | **-2.1** |
| | comp=Z,34nm,1.0s | | | | | | |
| **WHYH** | **Whyalla** | **40.12** | **238** | P | P | 01 32 38.0 | +6.6 |
| **OOD** | **Oodnadatta** | **40.76** | **246** | P | P | 01 32 44.3 | +7.5 |
| **TAOE** | **Nuku Hiva Isla** | **41.31** | **85** | *e*S | **S** | **01 38 55.5** | **-0.1** |
| | comp=Z,410nm,23.7s | | | | | | |
| TAOE | | | | *e*SS | **SnSn** | **01 42 04.0** | **-4.3** |
| | comp=Z,6µm,27.8s | | | | | | |
| TAOE | | | | *e*LR | LR | 01 44 05.1 | |
| | comp=Z,8µm,27.2s | | | | | | |
| TAOE | | | | *e*LR | LR | 01 44 11.1 | |
| | comp=Z,6µm,27.0s | | | | | | |
| **BBOO** | **Buckleboo** | **41.31** | **239** | P | P | 01 32 47.9 | +6.6 |
| **BBOO** | **Buckleboo** | **41.31** | **239** | P | **P** | **01 32 38.6** | **-2.7** |
| **WRAB** | **Tennant Creek** | **41.69** | **258** | P | **P** | **01 32 43.7** | **-0.8** |
| **WRAB** | **Tennant Creek** | **41.69** | **258** | *i* P | **P** | **01 32 45.8** | **+1.3** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,34nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.70** | **258** | P | **P** | **01 32 42.2** | **-2.4** |
| | comp=Z,5.8nm,0.9s,baz=92,slow=8.7,SNR=33 | | | | | | |
| WRA | | | | LR | LR | 01 49 27.8 | |
| | comp=Z,2µm,19.0s,baz=88,slow=36 | | | | | | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **42.06** | **253** | P | **P** | **01 32 45.5** | **-2.1** |
| | comp=Z,7.2nm,0.7s,baz=84,slow=8.8,SNR=57 | | | | | | |
| ASAR | | | | LR | LR | 01 48 22.7 | |
| | comp=Z,5µm,21.6s,baz=90,slow=34 | | | | | | |
| | comp=Z,7.2nm,0.7s | | | | | | |
| **MULG** | **Mulgathing** | **42.51** | **243** | P | P | 01 32 58.8 | +7.6 |
| **KIP** | **Kipapa** | **44.27** | **33** | IAMs_20 | IAMs_20 | 01 46 49.7 | |
| | comp=Z,4µm,21.0s | | | | | | |
| **POHA** | **Pohakuloa** | **44.28** | **37** | IAMs_20 | IAMs_20 | 01 46 27.2 | |
| | comp=Z,5µm,22.0s | | | | | | |
| **KDU** | **Kakadu** | **44.31** | **269** | P | P | 01 33 11.7 | +5.9 |
| **GUMO** | **Guam** | **44.40** | **310** | P | **P** | **01 33 04.0** | **-2.4** |
| GUMO | | | | IAmb | IAmb | 01 33 13.7 | |
| | comp=Z,95nm,0.8s | | | | | | |
| **GUMO** | **Guam** | **44.40** | **310** | LR | LR | 01 49 05.0 | |
| | comp=Z,1µm,21.3s,baz=148,slow=33 | | | | | | |
| **GUMO** | **Guam** | **44.40** | **310** | P | **P** | **01 33 04.0** | **-2.4** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,95nm,0.9s | | | | | | |
| **RKT** | **Rikitea** | **44.46** | **106** | *e*P | P | 01 33 12.9 | +6.0 |
| | comp=Z,907nm,26.2s | | | | | | |
| RKT | | | | *e*S | **S** | **01 39 43.0** | **+1.4** |
| | comp=Z,2µm,25.3s | | | | | | |
| RKT | | | | *e*S | S | 01 39 46.4 | +4.8 |
| | comp=Z,4µm,26.2s | | | | | | |
| RKT | | | | *e*SS | **SS** | **01 42 53.8** | **-7.3** |
| | comp=Z,53µm,30.5s | | | | | | |
| RKT | | | | *e*SS | **ScS** | **01 42 56.3** | **-8.7** |
| | comp=Z,2µm,23.8s | | | | | | |
| RKT | | | | *e*LR | LR | 01 45 28.0 | |
| | comp=Z,44µm,29.5s | | | | | | |
| RKT | | | | *e*LR | LR | 01 45 36.8 | |
| | comp=Z,6µm,25.2s | | | | | | |
| **KMPI** | **Kaimana, Papua** | **45.45** | **281** | P | **P** | **01 33 15.1** | **+0.2** |
| **MTN** | **Manton Dam** | **45.56** | **268** | P | P | 01 33 22.5 | +6.7 |
| **MTN** | **Manton Dam** | **45.56** | **268** | P | **P** | **01 33 13.6** | **-2.2** |
| MTN | | | | IAmb | IAmb | 01 33 23.8 | |
| | comp=Z,98nm,1.3s | | | | | | |
| **DRS** | **Darwin Rock St** | **45.86** | **268** | P | P | 01 33 26.0 | +7.8 |
| **FAKI** | **Fak Fak** | **47.07** | **282** | P | P | 01 33 35.7 | +8.0 |
| **FAKI** | **Fak Fak** | **47.07** | **282** | P | **P** | **01 33 24.8** | **-2.9** |
| FAKI | | | | IAmb | IAmb | 01 33 35.5 | |
| | comp=Z,78nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **47.07** | **282** | P | **P** | **01 33 27.6** | **-0.1** |
| | comp=Z,76nm,1.7s,comp=Z,989nm | | | | | | |
| **KNRA** | **Kununurra** | **47.38** | **264** | P | **P** | **01 33 28.3** | **-1.8** |
| KNRA | | | | IAmb | IAmb | 01 33 38.1 | |
| | comp=Z,83nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **47.71** | **243** | P | P | 01 33 40.2 | +7.7 |
| **FORT** | **Forrest** | **47.71** | **243** | P | **P** | **01 33 30.3** | **-2.2** |
| FORT | | | | IAmb | IAmb | 01 33 46.5 | |
| | comp=Z,67nm,0.8s | | | | | | |
| **SWI** | **Sorong** | **48.71** | **284** | P | **P** | **01 33 39.7** | **-0.6** |
| | comp=Z,129nm,1.1s | | | | | | |
| **BNDI** | **Bandanaira** | **48.77** | **279** | P | **P** | **01 33 41.5** | **+0.6** |
| **FITZ** | **Fitzroy Crossi** | **50.04** | **260** | P | **P** | **01 33 49.9** | **-0.7** |
| **NLAI** | **Namlea** | **51.83** | **279** | P | **P** | **01 34 04.1** | **+0.1** |
| | comp=Z,55nm,1.4s,comp=Z,951nm | | | | | | |
| **SOEI** | **Soe** | **52.78** | **270** | P | **P** | **01 34 15.6** | **+4.3** |
| **SOEI** | **Soe** | **52.78** | **270** | IAmb | IAmb | 01 34 27.4 | |
| | comp=Z,107nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **52.78** | **270** | P | **P** | **01 34 11.6** | **+0.3** |
| | comp=Z,141nm,1.3s,comp=Z,2µm | | | | | | |
| **TNTI** | **Ternate** | **52.92** | **284** | P | **P** | **01 34 12.5** | **+0.3** |
| | comp=Z,57nm,1.3s | | | | | | |
| **KMBL** | **Kambalda** | **53.04** | **243** | P | P | 01 34 18.9 | +6.1 |
| **SANI** | **Sanana** | **53.26** | **280** | P | P | 01 34 21.2 | +6.6 |
| **SANI** | **Sanana** | **53.26** | **280** | P | **P** | **01 34 14.4** | **-0.2** |
| | comp=Z,73nm,1.3s,comp=Z,1µm | | | | | | |
| **BATI** | **Baumata** | **53.26** | **269** | P | **P** | **01 34 15.5** | **+0.8** |
| **MMRI** | **Maumere** | **54.99** | **271** | P | P | 01 34 34.4 | +7.1 |
| **MMRI** | **Maumere** | **54.99** | **271** | P | **P** | **01 34 24.8** | **-2.5** |
| **MMRI** | **Maumere** | **54.99** | **271** | P | **P** | **01 34 27.9** | **+0.6** |
| | comp=Z,160nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **55.12** | **255** | P | P | 01 34 33.3 | +5.2 |
| **PSA00** | **Pilbara Seismi** | **55.12** | **255** | P | **P** | **01 34 26.3** | **-1.8** |
| PSA00 | | | | IAmb | IAmb | 01 34 36.1 | |
| | comp=Z,177nm,1.8s | | | | | | |
| **MBWA** | **Marble Bar** | **55.26** | **255** | P | P | 01 34 36.1 | +6.9 |
| **MBWA** | **Marble Bar** | **55.26** | **255** | P | **P** | **01 34 28.1** | **-1.0** |
| MBWA | | | | IAmb | IAmb | 01 34 43.9 | |
| | comp=Z,49nm,1.1s | | | | | | |
| **BBSI** | **Bau Bau** | **55.48

**JOW** **Kunigami** **64.76 311** P **P** **01 35 36.1 +1.9**
comp=Z,15nm,0.8s,baz=338,slow=20,SNR=1.4
JOW LR LR 02 00 45.5
comp=Z,1μm,20.0s,baz=111,slow=33
**MJAR** **Matsushiro Arr** **64.78 325** P **P** **01 35 32.1 -2.1**
comp=Z,9.0nm,1.0s,baz=154,slow=6.0,SNR=12
MJAR LR LR 01 58 24.4
comp=Z,2μm,21.8s,baz=129,slow=31
comp=Z,9.0nm,1.0s
**MAJO** **Matsushiro** **64.79 325** P **P** **01 35 32.5 -1.7**
MAJO IAmb IAmb 01 35 41.9
comp=Z,68nm,1.0s
**MAJO** **Matsushiro** **64.79 325** IAMs_20 IAMs_20 01 57 50.9
comp=Z,2μm,22.0s
**MAJO** **Matsushiro** **64.79 325** P **P** **01 35 32.5 -1.7**
MAJO pmax pmax
comp=Z,68nm,1.0s
**PWJI** **Pagerwojo** **65.16 269** P **P** **01 35 39.9 +2.8**
comp=Z,29nm,1.7s
**KKM** **Kota Kinabalu** **65.19 285** P P 01 35 44.5 +7.1
**KKM** **Kota Kinabalu** **65.19 285** P **P** **01 35 35.8 -1.6**
KKM IAmb IAmb 01 35 47.6
comp=Z,87nm,1.4s
**JMN** **Monobe** **65.33 320** P P 01 35 46.1 +8.3
**CASY** **Casey** **66.13 204** P **P** **01 35 42.4 -0.1**
**JNU** **Nakatsue** **66.82 318** P P 01 35 53.6 +6.2
**JNU** **Nakatsue** **66.82 318** P **P** **01 35 46.0 -1.4**
**JNU** **Nakatsue** **66.82 318** P **P** **01 35 45.6 -1.8**
comp=Z,7.4nm,0.7s,baz=5.5,slow=22,SNR=5.6
JNU LR LR 01 59 28.1
comp=Z,1μm,21.3s,baz=120,slow=31
comp=Z,7.4nm,0.7s
**KUR** **Kuril'sk** **67.24 337** *e*P **P** **01 35 48.9 -0.8**
KUR *e* 01 36 14.5
KUR S **S** **01 44 45.7 +1.8**
KUR MLR MLR
comp=N,900nm,15.0s
KUR MLR MLR
comp=Z,1μm,15.0s
KUR MLR MLR
comp=E,800nm,19.0s
**RPN** **Rapa Nui** **67.39 113** LR LR 01 57 36.8
comp=E,2μm,21.1s,baz=254,slow=29
**SBUM** **Sibu** **67.73 280** P **P** **01 35 50.0 -3.5**
**TWG** **Pinlang** **68.11 303** IAMs_20 IAMs_20 02 00 36.9
comp=Z,2μm,22.0s
**YULB** **Yu-li** **68.21 304** IAMs_20 IAMs_20 02 01 22.9
comp=Z,2μm,20.0s
**NACB** **Ninganchiao** **68.37 305** P P 01 36 05.8 +8.5
**JKA** **Kamikawa-asahi** **68.44 333** P **P** **01 35 56.6 -0.8**
JKA IAmb IAmb 01 36 06.4
comp=Z,52nm,1.0s
**ASAJ** **Asahikawa** **68.44 333** P **P** **01 35 56.0 -1.3**
comp=Z,2.6nm,0.4s,baz=198,slow=6.3,SNR=4.9
ASAJ LR LR 02 00 08.7
comp=Z,3μm,21.4s,baz=168,slow=31
comp=Z,2.6nm,0.4s
**ASAJ** **Asahikawa** **68.44 333** P **P** **01 35 56.6 -0.7**
ASAJ pmax pmax
comp=Z,52nm,1.0s
**SSLB** **Suanglung** **68.68 304** IAMs_20 IAMs_20 02 01 11.3
comp=Z,2μm,21.0s
**TPUB** **Ta-pu** **68.70 304** P P 01 36 07.2 +7.7
**YHNB** **Yeheng** **68.79 305** IAMs_20 IAMs_20 02 01 20.3
comp=Z,2μm,21.0s
**TATO** **Taipei** **68.86 306** IAMs_20 IAMs_20 02 02 42.9
comp=Z,2μm,19.0s
**SHEM** **Shemya Is, Ala** **68.94 357** LR LR 01 59 44.6
comp=Z,2μm,21.4s,baz=168,slow=30
**KSM** **Kuching** **69.23 278** P P 01 36 10.9 +7.9
**KSM** **Kuching** **69.23 278** P **P** **01 36 01.8 -1.2**
KSM IAmb IAmb 01 36 11.6
comp=Z,95nm,1.2s
**BBJI** **Bungbulang** **69.28 268** P P 01 36 11.7 +8.3
**NIKH** **Nikolski High** **70.01 8** P **P** **01 36 05.9 -1.0**
baz=193
**YSS** **Yuzh-Sakhalins** **70.65 335** P P 01 36 19.4 +8.5
**YSS** **Yuzh-Sakhalins** **70.65 335** P **P** **01 36 10.6 -0.4**
YSS IAmb IAmb 01 36 19.6
comp=Z,40nm,1.0s
YSS IAMs_20 IAMs_20 02 03 00.5
comp=Z,2μm,20.0s
**YSS** **Yuzh-Sakhalins** **70.65 335** *e*P **P** **01 36 13.2 +2.3**
YSS *e* 01 38 58.6
YSS *e*S **S** **01 45 19.5 -4.8**
YSS pmax pmax
comp=Z,30nm,1.2s
YSS pmax pmax
comp=Z,300nm,5.6s
**PET** **Petropavlovsk** **71.18 348** *e*P **P** **01 36 16.3 +2.3**
PET *e*S **S** **01 45 34.8 +4.7**
PET pmax pmax
comp=Z,400nm,15.3s
PET pmax pmax
comp=Z,400nm,13.2s
PET MLR MLR
comp=Z,800nm,16.0s
PET MLR MLR
comp=Z,700nm,16.0s
**UNV** **Unalaska Valle** **71.20 10** P P 01 36 21.7 +7.6
**UNV** **Unalaska Valle** **71.20 10** P **P** **01 36 13.3 -0.8**
baz=196
**KSRS** **Korea Array** **71.43 320** P **P** **01 36 15.0 -0.9**
comp=Z,2.6nm,0.9s,baz=121,slow=6.6,SNR=5.3
KSRS LR LR 02 02 14.4
comp=Z,2μm,21.5s,baz=130,slow=31
comp=Z,2.6nm,0.9s
**KSRS** **Korea Array** **71.43 320** P **P** **01 36 15.0 -0.9**
**PEA0B** **Petropavlovsk-** **71.46 347** *ce*P **P** **01 36 19.8 +4.1**
**PETK** **Petropavlovsk-** **71.46 347** P **P** **01 36 15.3 -0.4**
comp=Z,6.1nm,1.0s,baz=111,slow=8.1,SNR=5.1
PETK LR LR 02 04 24.1
comp=Z,998nm,19.2s,baz=168,slow=33
comp=Z,6.1nm,1.0s
**INCN** **Inchon** **72.25 319** IAMs_20 IAMs_20 02 02 08.3
comp=Z,2μm,22.0s
**SSE** **Sheshan** **72.28 311** P **P** **01 36 20.0 -1.1**
SSE S **S** **01 45 45.0 +1.3**
SSE sS **pS** **01 45 50.3 +0.3**
SSE pmax pmax
comp=Z,10.0nm,0.5s
SSE pmax pmax
comp=Z,170nm,3.9s
SSE LR LR
comp=Z,300nm,18.1s
**PSTR** **Posyet** **73.14 325** *i* P P 01 36 31.2 +5.2
**CNBA** **Chernabura Isl** **73.44 13** P **P** **01 36 27.7 +0.2**
CNBA IAmb IAmb 01 36 34.7
comp=Z,65nm,1.2s
**CHNA** **Chernabura Isl** **73.45 13** P **P** **01 36 26.5 -1.0**
baz=202
**P08K** **Saint George I** **73.46 7** P **P** **01 36 26.1 -1.4**
baz=192
**HKPS** **Hong Kong Po S** **73.53 300** IAMs_20 IAMs_20 02 03 28.6
comp=Z,2μm,22.0s
**USA0B** **Ussuriysk Arra** **73.56 327** *i* P P 01 36 33.7 +5.2
**USRK** **Ussuriysk Ar.** **73.56 327** P **P** **01 36 28.1 -0.3**
comp=Z,2.9nm,0.7s,baz=151,slow=4.4,SNR=9.0
USRK LR LR 02 02 49.9
comp=Z,2μm,21.7s,baz=141,slow=31
comp=Z,2.9nm,0.7s
**QSPA** **South Pole Qui** **73.63 180** P **P** **01 36 28.3 -0.5**
QSPA IAmb IAmb 01 36 47.2
comp=Z,108nm,1.4s
**QSPA** **South Pole Qui** **73.63 180** IAMs_20 IAMs_20 02 03 03.6
comp=Z,2μm,21.0s
**QSPA** **South Pole Qui** **73.63 180** P **P** **01 36 28.8 +0.1**
comp=Z,11nm,0.7s,baz=12,slow=1.0,SNR=58
QSPA LR LR 02 03 26.5
comp=Z,2μm,21.2s,baz=42,slow=31
comp=Z,11nm,0.7s
**SDPT** **Sand Point** **73.74 13** P **P** **01 36 29.5 +0.3**
**SDPT** **Sand Point** **73.74 13** P **P** **01 36 27.7 -1.5**
baz=201
**S12K** **Black Hills** **73.76 12** P **P** **01 36 27.9 -1.5**
baz=200
**TYV** **Tymovskoe** **73.87 337** *e*P P 01 36 38.0 +7.9
TYV pmax pmax
comp=Z,38nm,1.3s
TYV pmax pmax
comp=Z,200nm,2.3s
**SPIA** **Saint Paul Isl** **73.95 7** P **P** **01 36 29.0 -1.4**
baz=192
**DLV** **T Lat** **74.42 288** P P 01 36 42.3 +7.9
**NJ2** **Nanjing** **74.47 311** *e*P **P** **01 36 33.8 -0.2**
NJ2 sP **sP** **01 36 41.5 +0.6**
NJ2 S **S** **01 46 12.8 +4.2**
NJ2 pmax pmax
comp=Z,11nm,0.5s
NJ2 pmax pmax
comp=Z,270nm,3.5s
NJ2 LR LR
comp=Z,280nm,17.1s
NJ2 LR LR
comp=Z,380nm,19.6s
NJ2 LR LR
comp=Z,1μm,20.8s
**S14K** **Fog Glacier** **74.81 13** P **P** **01 36 33.8 -1.7**
baz=202
**CHGN** **Chignik** **75.07 13** P **P** **01 36 36.8 -0.1**
CHGN IAmb IAmb 01 36 54.5
comp=Z,71nm,1.1s
**CHGN** **Chignik** **75.07 13** P **P** **01 36 35.9 -1.0**
baz=203
**MDJ** **Mudanjiang** **75.11 326** P P 01 36 45.4 +7.9
**MDJ** **Mudanjiang** **75.11 326** P **P** **01 36 39.0 +1.5**
MDJ sP pP 01 36 43.5 +1.0
MDJ PcP **PcP** **01 36 52.0 +1.0**
MDJ S **S** **01 46 19.8 +4.6**
MDJ sS sS 01 46 27.0 +3.2
MDJ pmax pmax
comp=Z,24nm,1.7s
MDJ pmax pmax
comp=Z,350nm,3.8s
MDJ LR LR
comp=Z,1μm,20.3s
MDJ LR LR
comp=Z,1μm,18.9s
MDJ LR LR
comp=Z,2μm,21.6s
**MDJ** **Mudanjiang** **75.11 326** IAMs_20 IAMs_20 02 05 21.0
comp=Z,1μm,20.0s
**BTDF** **Bukit Timah Da** **75.43 276** P P 01 36 48.6 +8.6
**QIZ** **Qiongzhong** **75.85 295** P **P** **01 36 43.0 +0.7**
QIZ S **S** **01 46 26.3 +1.9**
QIZ SS **SS** **01 51 14.5 -2.6**
QIZ pmax pmax
comp=Z,570nm,16.2s
QIZ LR LR
comp=Z,440nm,14.7s
QIZ LR LR
comp=Z,580nm,14.7s
QIZ LR LR
comp=Z,820nm,17.7s
**GRNR** **Gornyy** **76.24 334** ⇓*i*P **P** **01 36 44.0 +0.2**
GRNR pmax pmax
comp=Z,5.0nm,1.1s
**DL2** **Dalian** **76.27 318** P P 01 36 52.0 +7.8
DL2 S **S** **01 46 36.5 +8.2**
**SII** **Sitkinak Islan** **76.30 15** P **P** **01 36 43.1 -1.0**
baz=207
**R16K** **Pilot Point** **76.42 13** P **P** **01 36 43.5 -1.1**
baz=204
**R17L** **Mt. Peulik Vol** **76.74 14** P **P** **01 36 45.4 -1.1**
baz=205
**CN2** **Changchun** **76.86 324** P **P** **01 36 46.8 -0.7**
CN2 sP sP 01 36 55.3 +1.0
CN2 S **S** **01 46 33.0 -1.6**
CN2 SS **SS** **01 51 31.8 +0.2**
CN2 pmax pmax
comp=Z,80nm,1.1s
CN2 LR LR
comp=Z,500nm,16.0s
CN2 LR LR
comp=Z,800nm,16.0s
CN2 LR LR
comp=Z,1μm,18.0s
**BNX** **BinXian** **77.01 326** ⇓P **P** **01 36 47.5 -0.8**
BNX pP **pP** **01 36 50.8 -2.5**
BNX sP **sP** **01 36 52.3 -2.8**
BNX S **S** **01 46 36.5 +0.4**
BNX sS **sS** **01 46 44.5 -0.2**
BNX pmax pmax
comp=Z,57nm,0.9s
BNX pmax pmax
comp=Z,430nm,6.5s
BNX LR LR
comp=Z,750nm,20.6s
BNX LR LR
comp=Z,920nm,21.8s
BNX LR LR
comp=Z,2μm,22.8s
**WHN** **Wuhan** **77.09 307** P **P** **01 36 50.3 +1.3**
WHN sP **sP** **01 36 57.0 +1.1**
WHN S **S** **01 46 40.3 +2.7**
WHN LR LR
comp=Z,8μm,26.7s
WHN LR LR
comp=Z,5μm,20.1s
WHN LR LR
comp=Z,4μm,19.5s
**OHAK** **Old Harbor** **77.12 15** P P 01 36 55.7 +7.1
**OHAK** **Old Harbor** **77.12 15** IAmb IAmb 01 36 55.7
comp=Z,134nm,1.5s
**OHAK** **Old Harbor** **77.12 15** P **P** **01 36 47.5 -1.0**
baz=208
**R18K** **Karluk** **77.14 15** P **P** **01 36 48.2 -0.5**
baz=207
**KLR** **Kul'dur** **77.19 331** P **P** **01 36 49.0 -0.2**
comp=Z,2.6nm,0.8s,baz=22,slow=4.0,SNR=13
KLR LR LR 02 05 22.6
comp=Z,1μm,21.8s,baz=140,slow=32
comp=Z,2.6nm,0.8s
**KLR** **Kul'dur** **77.19 331** *e*P **P** **01 36 47.8 -1.4**
KLR pmax pmax
comp=Z,27nm,1.2s
**O14K** **Tigyukauivet M** **77.25 11** P **P** **01 36 48.1 -1.1**
baz=200
**Q17K** **Contact Creek** **77.43 14** P **P** **01 36 49.6 -0.9**
baz=206,SNR=34
**MCCM** **Marconi Confer** **77.44 44** IAMs_20 IAMs_20 02 04 04.9
comp=Z,2μm,20.0s
**O15K** **Ungalikthiuk R** **77.44 11** P **P** **01 36 49.3 -1.1**
baz=202,SNR=6.3
**M11K** **Mekoryuk** **77.57 8** P **P** **01 36 50.0 -1.0**
baz=196,SNR=9.7
**Q16K** **King Salmon** **77.63 13** P **P** **01 36 50.4 -1.0**
baz=205,SNR=7.8
**P16K** **Nushagak River** **77.67 12** P **P** **01 36 50.6 -1.0**
baz=204,SNR=11
**SAO** **San Andreas Ge** **77.68 46** IAmb IAmb 01 37 01.3
comp=Z,46nm,0.9s
SAO IAMs_20 IAMs_20 02 03 00.3
comp=Z,3μm,21.0s
**HOPS** **Hopland Field** **77.77 43** P **P** **01 36 52.8 +0.1**
HOPS IAmb IAmb 01 37 01.9
comp=Z,83nm,1.1s
**KDAK** **Kodiak Island** **77.80 16** P **P** **01 36 53.0 +0.6**
KDAK IAmb IAmb 01 37 00.2
comp=Z,109nm,1.1s
**KDAK** **Kodiak Island** **77.80 16** LR LR 02 03 47.7
comp=Z,913nm,20.9s,baz=223,slow=30
**KDAK** **Kodiak Island** **77.80 16** P **P** **01 36 51.4 -1.0**
baz=209
**KDAK** **Kodiak Island** **77.80 16** P **P** **01 36 53.0 +0.6**
KDAK pmax pmax
comp=Z,109nm,1.1s
**N14K** **Kuskokwak Cree** **77.81 10** P **P** **01 36 51.6 -0.8**
baz=200,SNR=30
**TIA** **Tai'an** **77.84 314** P P 01 37 00.8 +7.6
TIA S **SKSac** **01 46 56.5 -10**
**BBGB** **Big Mountain B** **77.86 46** P **P** **01 36 52.7 -0.7**
BBGB IAmb IAmb 01 37 03.9
comp=Z,106nm,1.2s
**Q18K** **Katmai Hardscr** **77.97 14** P **P** **01 36 52.2 -1.4**
baz=206,SNR=29
**M13K** **Dall Lake** **78.00 9** P **P** **01 36 52.6 -0.8**
baz=198
**KMRM** **Mail Ridge** **78.03 42** P **P** **01 36 53.1 -1.1**
**P17K** **Kvichak River** **78.15 13** P **P** **01 36 52.9 -1.4**
baz=205,SNR=15
**JCC** **Jacoby Creek,** **78.16 41** IAMs_20 IAMs_20 02 05 03.7
comp=Z,2μm,19.0s
**O16K** **Kokwok River B** **78.17 12** IAmb IAmb 01 37 01.3
comp=Z,58nm,1.0s
**O16K** **Kokwok River B** **78.17 12** P **P** **01 36 52.5 -1.9**
baz=203,SNR=14
**BCW** **Bitter Crk WRg** **78.18 48** P **P** **01 36 54.6 -0.6**
**N15K** **Kwethluk River** **78.32 11** IAmb IAmb 01 37 03.8
comp=Z,109nm,1.1s
**N15K** **Kwethluk River** **78.32 11** P **P** **01 36 54.6 -0.7**
baz=201,SNR=22
**UBPT** **Khong Chiam** **78.34 290** P P 01 37 04.1 +7.8
**O17K** **Koliganek Bris** **78.54 12** P **P** **01 36 55.6 -0.8**
baz=204
**M14K** **Bethel** **78.55 10** P **P** **01 36 55.6 -0.8**
**M14K** **Bethel** **78.55 10** P **P** **01 36 55.6 -0.8**
baz=200,SNR=15
**Q19K** **Cape Douglas,** **78.55 14** P **P** **01 36 55.8 -0.8**
baz=208
**Q20K** **Shuyak Island** **78.57 15** P **P** **01 36 55.7 -1.0**
baz=209
**P18K** **Big Mountain,** **78.59 14** IAmb IAmb 01 37 04.4
comp=Z,102nm,1.0s
**P18K** **Big Mountain,** **78.59 14** P **P** **01 36 55.7 -1.2**
baz=206,SNR=8.5
**O02D** **Mt. Diablo Mer** **78.60 42** P **P** **01 36 56.3 -1.1**
O02D IAmb IAmb 01 37 06.6
comp=Z,53nm,1.1s
**PASC** **Pasadena Art C** **78.69 49** IAMs_20 IAMs_20 02 04 56.4
comp=Z,1μm,19.0s
**M15K** **Kasigluk River** **78.71 10** P **P** **01 36 56.8 -0.5**
baz=201
**N16K** **Nishlik Lake** **78.85 11** P **P** **01 36 57.6 -0.6**
baz=203,SNR=13
**MA2** **Magadan** **78.94 346** LR LR 02 08 39.9
comp=Z,787nm,19.5s,baz=168,slow=33
**IPM** **Ipoh** **78.97 278** P P 01 37 07.3 +7.4
**L14K** **Kuka Creek** **78.99 9** P **P** **01 36 57.8 -1.1**
L14K IAmb IAmb 01 37 07.5
comp=Z,84nm,1.1s
**L14K** **Kuka Creek** **78.99 9** P **P** **01 36 58.2 -0.7**
baz=199,SNR=33
**ELS** **Elsinore Mount** **79.00 50** P **P** **01 37 00.1 +0.3**
**O18K** **Koktuh Hills** **79.02 13** P **P** **01 36 58.3 -0.8**
baz=206,SNR=13
**ORV** **Oroville** **79.10 43** IAMs_20 IAMs_20 02 05 45.8
comp=Z,2μm,20.0s
**ISA** **Isabella, Lake** **79.20 48** P **P** **01 37 01.7 +0.9**
**ISA** **Isabella, Lake** **79.20 48** P **P** **01 37 01.7 +0.9**
ISA pmax pmax
comp=Z,42nm,1.2s
**N17K** **Nushagak Hills** **79.21 12** P **P** **01 36 59.4 -0.8**
baz=204,SNR=8.9
**K13K** **Kusilvak Mount** **79.27 8** P **P** **01 37 00.9 +0.5**
K13K IAmb IAmb 01 37 09.8
comp=Z,94nm,1.2s
**K13K** **Kusilvak Mount** **79.27 8** P **P** **01 36 59.5 -0.9**
baz=197,SNR=27
**P19K** **Oil Pt** **79.29 14** P **P** **01 37 00.8 +0.2**
**P19K** **Oil Pt** **79.29 14** P **P** **01 36 59.7 -1.0**
baz=208,SNR=7.0
**M16K** **Timber Creek** **79.32 11** P **P** **01 37 00.7 -0.1**
baz=202,SNR=28
**ESJX** **Sierra Juarez** **79.34 52** P **P** **01 37 02.0 +0.2**
**YBH** **Yreka Blue Hor** **79.50 41** IAmb IAmb 01 37 11.6
comp=Z,46nm,1.0s
YBH IAMs_20 IAMs_20 02 03 45.0
comp=Z,2μm,22.0s
**YBH** **Yreka Blue Hor** **79.50 41** LR LR 02 03 57.4
comp=Z,1μm,21.7s,baz=236,slow=29
**L15K** **Ungalak Mounta** **79.50 10** P **P** **01 37 00.9 -0.8**
baz=200,SNR=14
**O19K** **Port Alsworth** **79.52 14** P **P** **01 37 01.5 -0.3**
baz=207
**ILSW** **Iliamna Southw** **79.60 14** P **P** **01 37 01.7 -0.8**
**LRDM** **Redding Peak** **79.61 42** P **P** **01 37 03.7 +0.8**
LRDM IAmb IAmb 01 37 17.9
comp=Z,64nm,1.3s
**N18K** **Kilae Creek** **79.61 13** P **P** **01 37 01.7 -0.7**
baz=205,SNR=8.5
**HOM** **Homer** **79.68 15** P **P** **01 37 01.8 -0.9**
baz=210
**PFO** **Pinyon Flats O** **79.69 50** P **P** **01 37 04.3 +0.7**
**PFO** **Pinyon Flats O** **79.69 50** LR LR 02 04 08.0
comp=Z,2μm,21.9s,baz=276,slow=30
**PFO** **Pinyon Flats O** **79.69 50** *i* P P 01 37 09.3 +5.7
PFO pmax pmax
comp=Z,16nm,1.0s
**TPFO** **Pinon Flats** **79.70 50** P **P** **01 37 02.3 -1.3**
baz=242
**EMB** **Emerald Bay** **79.73 44** P **P** **01 37 03.0 -0.9**
**OMMB** **Old Mammoth Mi** **79.79 46** P **P** **01 37 05.5 +1.2**
**HATC** **Hat Creek Radi** **79.80 42** IAMs_20 IAMs_20 02 03 47.0
comp=Z,2μm,22.0s
**O20K** **Slope Mountain** **79.81 14** P **P** **01 37 02.6 -0.9**
baz=208,SNR=9.3
**HUMO** **Hull Mountain** **79.82 40** IAmb IAmb 01 37 13.3
comp=Z,51nm,1.1s
HUMO IAMs_20 IAMs_20 02 04 05.5
comp=Z,2μm,22.0s
**L16K** **Owhat River** **79.87 11** P **P** **01 37 03.3 -0.4**
baz=202,SNR=12
**WAKR** **Walker** **79.94 45** P **P** **01 37 04.0 -1.0**
WAKR IAmb IAmb 01 37 15.1
comp=Z,80nm,1.5s
**HEH** **HeiHe** **79.95 330** *e*P **P** **01 37 03.3 -1.1**
HEH pP **pP** **01 37 06.5 -3.0**
HEH S **S** **01 47 07.3 -0.1**
HEH SS **SS** **01 52 18.0 +0.2**
HEH pmax pmax
comp=Z,42nm,1.3s
HEH pmax pmax
comp=Z,220nm,6.3s
HEH LR LR
comp=Z,570nm,23.9s
HEH LR LR
comp=Z,820nm,24.4s
HEH LR LR
comp=Z,2μm,24.7s
**M17K** **Holitna River** **79.96 12** IAmb IAmb 01 37 12.4
comp=Z,65nm,1.4s
**M17K** **Holitna River** **79.96 12** P **P** **01 37 03.0 -1.3**
baz=204,SNR=8.1
**N19K** **Bonanza Creek** **80.04 13** P **P** **01 37 04.1 -0.7**
baz=207,SNR=7.3
**SVW2** **Sparrevohn** **80.06 13** P P 01 37 13.8 +9.0
**K15K** **Wolf Creek Mou** **80.07 9** P **P** **01 37 04.6 -0.2**
baz=200,SNR=23
**HNS** **HongShan** **80.11 314** ⇓P **P** **01 37 05.8 +0.3**
HNS PcP **sP** **01 37 13.8 +1.4**
HNS *e*S **S** **01 47 10.8 +1.2**
HNS SKS **SKSac** **01 47 19.8 -2.7**
HNS pmax pmax
comp=Z,21nm,1.5s
HNS LR LR
comp=Z,260nm,16.7s
HNS LR LR
comp=Z,1μm,22.3s
HNS LR LR
comp=Z,1μm,24.5s
**PNTR** **Pine Nut** **80.13 44** P **P** **01 37 05.8 -0.2**
PNTR IAmb IAmb 01 37 15.9
comp=Z,64nm,1.2s
**J14K** **Nanvaranak Lak** **80.20 8** P **P** **01 37 05.4 -0.1**
baz=198
**GSC** **Goldstone, Bar** **80.23 49** P **P** **01 37 06.2 -0.2**
**GSC** **Goldstone, Bar** **80.23 49** P **P** **01 37 06.2 -0.2**
GSC pmax pmax
comp=Z,28nm,1.2s
**GAMB** **Gambell** **80.32 5** P **P** **01 37 06.2 +0.1**
baz=190,SNR=9.1
**LYN** **LuoYang** **80.35 310** P **P** **01 37 08.5 +1.5**
LYN pP PcP 01 37 13.5 -0.5
LYN sP sP 01 37 15.3 +1.5
LYN S **SKSac** **01 47 18.5 -5.9**
LYN sS SKKSac 01 47 25.0 -1.4
LYN pmax pmax
comp=Z,27nm,0.9s
LYN pmax pmax
comp=Z,560nm,4.8s
LYN LR LR
comp=Z,1μm,19.9s
LYN LR LR
comp=Z,580nm,20.3s
LYN LR LR
comp=Z,2μm,21.3s
**M18K** **Stony River** **80.36 12** P **P** **01 37 06.5 +0.1**
baz=205,SNR=10.0
**BJT** **Baijiatuau** **80.43 317** P P 01 37 16.2 +9.0
**BJI** **Beijing** **80.44 317** P **P** **01 37 07.0 -0.3**
BJI SS SS 01 52 26.8 +1.4
BJI pmax pmax
comp=Z,7.0nm,1.7s
BJI LR LR
comp=Z,400nm,25.4s
BJI LR LR
comp=Z,250nm,28.6s

BJI LR LR
comp=Z,770nm,27.5s
**RPSI Rantau Prapat 80.45 276** P **P** **01 37 06.3 -1.6**
RPSI IAmb IAmb 01 37 15.7
comp=Z,58nm,1.2s
**LHV Little Huntoon 80.45 46** P **P** **01 37 08.2 +0.9**
LHV IAmb IAmb 01 37 16.2
comp=Z,48nm,1.0s
**L17K Donlin 80.47 11** P **P** **01 37 07.2 +0.2**
baz=203
**PSI Prapat 80.48 276** P P 01 37 15.1 +6.8
**PSI Prapat 80.48 276** P **P** **01 37 06.4 -1.9**
PSI pmax pmax
comp=Z,58nm,1.2s
**LPIG La Paz 80.58 61** LR LR 02 06 35.8
comp=Z,2µm,18.3s,baz=256,slow=31
**SEW Seward 80.62 16** P **P** **01 37 08.3 +0.6**
baz=212,SNR=5.4
**GLA Glamis 80.66 52** P **P** **01 37 09.6 +0.9**
**GLA Glamis 80.66 52** P **P** **01 37 09.6 +0.9**
GLA pmax pmax
comp=Z,34nm,1.3s
**NVAR Mina Array Bea 80.67 45** P **P** **01 37 10.3 +1.5**
comp=Z,14nm,1.1s,baz=227,slow=7.5,SNR=44
NVAR PP **PP** **01 40 14.0 +0.9**
comp=Z,1.1nm,1.0s,baz=240,slow=7.2,SNR=2.1
NVAR LR LR 02 04 50.1
comp=Z,3µm,21.8s,baz=254,slow=30
comp=Z,14nm,1.1s
**COR Corvallis 80.71 38** IAMs_20 IAMs_20 02 03 08.8
comp=Z,2µm,22.0s
**SLBS Sierra La Lagu 80.72 62** P **P** **01 37 10.6 +1.3**
**SLBS Sierra La Lagu 80.72 62** IAMs_20 IAMs_20 02 06 02.0
comp=Z,2µm,19.0s
**ENH Enshi 80.73 305** P P 01 37 18.5 +9.4
**CAPN Captain Cook N 80.77 15** P **P** **01 37 09.3 +0.8**
baz=210,SNR=9.1
**L18K Granite Mounta 80.86 12** P **P** **01 37 09.2 +0.2**
baz=204,SNR=19
**O22K Cooper Landing 80.88 15** P **P** **01 37 08.5 -0.6**
baz=211
**N20K Mount Spurr 80.90 14** P **P** **01 37 09.2 -0.1**
baz=209,SNR=9.0
**SPCR Spurr Chakacha 80.90 14** P **P** **01 37 09.0 -0.4**
baz=209,SNR=8.5
**Q23K Middleton Isla 80.91 17** P **P** **01 37 09.4 +0.1**
baz=214
**SPU Mount Spurr 80.92 14** P **P** **01 37 08.8 -0.7**
SPU IAmb IAmb 01 37 17.1
comp=Z,56nm,1.2s
**MZP Montezuma Peak 80.96 46** P **P** **01 37 10.4 -0.1**
**K17K Iditarod 81.01 11** P **P** **01 37 09.5 -0.4**
baz=203
**M19K Big River Lodg 81.04 13** P **P** **01 37 09.9 -0.1**
baz=207,SNR=11
**G03D McMinnville, O 81.08 38** P **P** **01 37 11.0 +0.4**
**P23K Montague Islan 81.08 17** P **P** **01 37 09.5 -0.7**
baz=213
**J16K Anvik River 81.15 10** P **P** **01 37 10.9 +0.3**
baz=201,SNR=22
**L19K White Mountain 81.19 12** P **P** **01 37 10.3 -0.5**
baz=206,SNR=118
**BLYC Blythe 81.20 51** P **P** **01 37 11.4 -0.1**
**TPH Tonopah 81.25 46** P **P** **01 37 11.7 -0.3**
**TPH Tonopah 81.25 46** P **P** **01 37 11.7 -0.3**
TPH pmax pmax
comp=Z,115nm,0.9s
**M20K Styx River 81.29 13** P **P** **01 37 10.9 -0.5**
baz=208
**GSI Gunungsitoli 81.33 274** P P 01 37 19.5 +6.8
**GSI Gunungsitoli 81.33 274** P **P** **01 37 14.6 +1.9**
comp=Z,64nm,1.6s
**TPNV Topopah Spring 81.39 48** P **P** **01 37 13.3 +0.7**
**TPNV Topopah Spring 81.39 48** P **P** **01 37 13.4 +0.7**
TPNV pmax pmax
comp=Z,39nm,1.2s
**RC01 Rabbit Creek A 81.40 15** IAmb IAmb 01 37 20.5
comp=Z,101nm,1.3s
**RC01 Rabbit Creek A 81.40 15** P **P** **01 37 10.9 -1.0**
baz=211,SNR=9.5
**H04A Detroit Lake 81.43 39** IAmb IAmb 01 37 21.0
comp=Z,75nm,1.2s
**GYA Guiyang 81.45 301** P **P** **01 37 12.3 -0.9**
GYA sP sP 01 37 20.8 +0.8
GYA S **S** **01 47 21.8 -2.6**
GYA pmax pmax
comp=Z,16nm,0.6s
GYA LR LR
comp=Z,1µm,21.0s
GYA LR LR
comp=Z,950nm,23.2s
GYA LR LR
comp=Z,2µm,24.0s
**SUA Susitna One 81.47 15** IAmb IAmb 01 37 20.5
comp=Z,62nm,0.8s
**SUA Susitna One 81.47 15** P **P** **01 37 12.0 -0.4**
baz=210,SNR=31
**J17K VABM Dome 81.51 10** IAmb IAmb 01 37 21.4
comp=Z,65nm,0.9s
**J17K VABM Dome 81.51 10** P **P** **01 37 12.0 -0.5**
baz=202,SNR=32
**PWL Port Wells 81.56 16** IAmb IAmb 01 37 20.5
comp=Z,90nm,1.0s
**PWL Port Wells 81.56 16** P **P** **01 37 11.9 -0.9**
baz=212,SNR=9.6
**SRIT Nakonsritamara 81.57 282** P P 01 37 22.8 +8.9
**SEY Seymchan 81.63 348** LR LR 02 09 28.4
comp=Z,2µm,20.3s,baz=150,slow=33
**SEY Seymchan 81.63 348** *eP* **P** **01 37 11.3 -1.8**
SEY pmax pmax
comp=Z,88nm,1.7s
**E03A Lebam 81.66 36** P **P** **01 37 13.3 -0.3**
**L20K Farewell, AK 81.66 13** P **P** **01 37 12.5 -0.8**
baz=207
**PINE Pine Mountain 81.70 40** P **P** **01 37 14.6 +0.4**
**I17K Unalakleet 81.70 9** IAmb IAmb 01 37 22.5
comp=Z,57nm,1.0s
**I17K Unalakleet 81.70 9** P **P** **01 37 13.9 +0.4**
baz=201,SNR=7.3
**ANM Nome 81.71 7** P **P** **01 37 13.8 +0.3**
baz=196
**214A Organ Pipe Nat 81.72 53** P **P** **01 37 13.9 -0.5**
baz=245
**SURA Surathani 81.72 282** P P 01 37 22.7 +8.0
**SKT Skwentna 81.74 14** IAmb IAmb 01 37 32.1
comp=Z,102nm,1.9s
**SKT Skwentna 81.74 14** P **P** **01 37 13.1 -0.7**
baz=209
**I05D Terrebonne, OR 81.75 39** IAmb IAmb 01 37 23.2
comp=Z,82nm,1.1s
**M22K Willow 81.87 15** IAMs_20 IAMs_20 02 05 51.6
comp=Z,1µm,21.0s
**M22K Willow 81.87 15** P **P** **01 37 14.1 -0.2**
baz=211,SNR=9.8
**KAIM Kayak Island 81.88 18** P **P** **01 37 14.4 -0.1**
baz=216
**GLI Glacier Island 81.91 16** IAmb IAmb 01 37 22.1
comp=Z,91nm,0.9s
**GLI Glacier Island 81.91 16** P **P** **01 37 14.4 -0.2**
baz=214,SNR=12
**SHPR Sheep Range 81.97 48** P **P** **01 37 16.0 +0.2**
**F04A Amboy 81.98 37** IAmb IAmb 01 37 24.1
comp=Z,94nm,1.1s
**PMR Palmer 81.98 15** P **P** **01 37 14.0 -0.9**
**PMR Palmer 81.98 15** P **P** **01 37 15.1 +0.2**
baz=212,SNR=8.4
**PMR Palmer 81.98 15** P **P** **01 37 14.0 -0.9**
PMR pmax pmax
comp=Z,39nm,0.9s
**J18K Innoko River 81.99 11** P **P** **01 37 14.7 -0.3**
baz=204
**KNK Knik Glacier 82.00 16** P **P** **01 37 15.0 -0.1**
baz=212,SNR=6.6
**EYAK Cordova Ski Ar 82.00 17** P P 01 37 24.9 +10
**EYAK Cordova Ski Ar 82.00 17** P **P** **01 37 14.8 -0.3**
baz=215
**HOOD Mount Hood Mea 82.09 38** IAmb IAmb 01 37 24.8
comp=Z,95nm,1.1s
**RAGM Ragged Mountai 82.18 18** IAMs_20 IAMs_20 02 07 58.8
comp=Z,1µm,21.0s
**GHO Glory Hole Cre 82.19 15** IAmb IAmb 01 37 24.0
comp=Z,72nm,0.8s
**H16K Elim 82.19 8** P **P** **01 37 16.2 +0.2**
baz=199,SNR=12
**G05A Wamic 82.25 38** P **P** **01 37 17.3 +0.4**
G05A IAmb IAmb 01 37 31.3
comp=Z,64nm,1.1s

**HMT Hamilton 82.26 18** IAMs_20 IAMs_20 02 16 06.0
comp=Z,1µm,19.0s
**W13A Hualapai Mount 82.27 50** P **P** **01 37 17.2 -0.1**
**G15K Niukluk 82.29 8** P **P** **01 37 16.5 -0.1**
baz=197,SNR=8.1
**ZEA Zeya 82.32 332** *eP* **P** **01 37 17.6 +0.7**
ZEA pmax pmax
comp=Z,200nm,4.2s
ZEA pmax pmax
comp=N,30nm,1.3s
ZEA pmax pmax
comp=Z,40nm,1.2s
**SML Sawmill 82.36 15** P **P** **01 37 17.0 -0.1**
baz=212,SNR=5.7
**BMN Battle Mountai 82.38 44** IAmb IAmb 01 37 26.7
comp=Z,62nm,1.1s
**CUT Chulitna 82.40 14** P **P** **01 37 16.9 -0.3**
baz=211,SNR=6.8
**TNA Tin City 82.41 6** P **P** **01 37 17.2 +0.1**
baz=194
**K20K Telida 82.41 12** IAmb IAmb 01 37 25.8
comp=Z,98nm,1.1s
**K20K Telida 82.41 12** P **P** **01 37 16.8 -0.5**
baz=207,SNR=32
**Y14A Wickenburg 82.42 51** P **P** **01 37 18.6 +0.5**
**WVOR Wild Horse Val 82.44 42** IAMs_20 IAMs_20 02 05 56.1
comp=Z,2µm,21.0s
**PRN Pahroc Range 82.46 48** IAmb IAmb 01 37 27.5
comp=Z,71nm,1.2s
**F14K Arctic Creek 82.48 6** P **P** **01 37 17.0 -0.5**
baz=195,SNR=9.1
**XLT XiLinHaoTe 82.48 320** *eP* **P** **01 37 18.0 -0.2**
XLT sP sP 01 37 25.0 0.0
XLT sS sS 01 47 43.0 +0.1
XLT pmax pmax
comp=Z,10.0nm,1.1s
XLT pmax pmax
comp=Z,96nm,3.6s
XLT LR LR
comp=Z,640nm,19.2s
XLT LR LR
comp=Z,910nm,21.0s
**M23K Glacier View 82.51 16** P **P** **01 37 17.2 -0.6**
baz=213,SNR=5.8
**R11B Troy Canyon, C 82.51 47** IAMs_20 IAMs_20 02 05 54.3
comp=Z,2µm,22.0s
**R11B Troy Canyon, C 82.51 47** P **P** **01 37 17.4 -1.2**
baz=242
**CRAG Craig 82.55 26** P **P** **01 37 17.0 -1.1**
baz=227
**BBB Bella Bella 82.63 30** LR LR 02 07 17.3
comp=Z,2µm,19.9s,baz=242,slow=31
**CLRS Cowichan Lake 82.64 34** P **P** **01 37 19.1 +0.4**
CLRS IAmb IAmb 01 37 27.5
comp=Z,44nm,1.1s
**SCM Sheep Creek Mo 82.64 16** IAmb IAmb 01 37 26.3
comp=Z,63nm,0.8s
**SCM Sheep Creek Mo 82.64 16** P **P** **01 37 17.9 -0.7**
baz=213,SNR=9.1
**GNW Green Mountain 82.65 36** IAmb IAmb 01 37 27.6
comp=Z,57nm,1.1s
**G06A Carlson Farm, 82.65 39** P **P** **01 37 19.2 +0.2**
**BMRM Bremner River 82.67 17** P **P** **01 37 18.2 -0.5**
baz=216,SNR=7.2
**J19K Poorman 82.68 11** P **P** **01 37 18.7 +0.1**
**J19K Poorman 82.68 11** P **P** **01 37 18.5 -0.1**
baz=205,SNR=17
**CBB Campbell River 82.69 33** IAmb IAmb 01 37 27.9
comp=Z,47nm,1.2s
**KLU Klutina 82.73 16** P **P** **01 37 18.6 -0.5**
**KLU Klutina 82.73 16** P **P** **01 37 18.8 -0.2**
baz=215,SNR=5.5
**I07A Izee 82.74 40** IAmb IAmb 01 37 28.5
comp=Z,51nm,1.0s
**XAN Xi'an 82.76 308** ⇓P **P** **01 37 20.0 +0.2**
XAN S **SKSac** **01 47 37.8 -3.1**
XAN SS **SS** **01 53 02.3 +1.8**
XAN pmax pmax
comp=Z,96nm,1.3s
XAN LR LR
comp=Z,870nm,21.6s
XAN LR LR
comp=Z,1µm,19.6s
XAN LR LR
comp=Z,2µm,19.2s
**WAX Waxell Ridge 82.77 18** IAmb IAmb 01 37 27.5
comp=Z,71nm,1.0s
**SIT Sitka 82.78 24** P **P** **01 37 18.6 -0.6**
baz=225
**H17K Granite Mounta 82.81 9** IAmb IAmb 01 37 27.9
comp=Z,90nm,1.2s
**H17K Granite Mounta 82.81 9** P **P** **01 37 19.1 -0.2**
baz=201,SNR=15
**MESA MESA 82.83 19** P **P** **01 37 18.5 -1.2**
baz=218,SNR=6.7
**G16K Koyuk River 82.89 8** IAmb IAmb 01 37 28.5
comp=Z,67nm,1.1s
**G16K Koyuk River 82.89 8** P **P** **01 37 18.7 -1.0**
baz=199,SNR=14
**F15K North Star Dit 82.90 7** P **P** **01 37 20.4 +0.6**
F15K IAmb IAmb 01 37 28.2
comp=Z,56nm,1.2s
**F15K North Star Dit 82.90 7** P **P** **01 37 18.9 -0.8**
baz=197,SNR=8.1
**D05A Enumclaw 82.91 36** P **P** **01 37 20.2 0.0**
**PGC Sidney 82.91 35** IAmb IAmb 01 37 28.8
comp=Z,56nm,1.1s
**CRQE Cirque 82.94 18** P **P** **01 37 19.1 -1.1**
baz=217,SNR=18
**U33K Whale Pass 82.99 25** P **P** **01 37 19.1 -1.2**
baz=227
**J08A Circle Bar Ran 83.01 41** P **P** **01 37 21.1 +0.1**
J08A IAmb IAmb 01 37 29.8
comp=Z,63nm,1.1s
**TGL Tana Glacier 83.02 18** IAmb IAmb 01 40 26.9
comp=Z,51nm,0.8s
**V35K Ketchikan 83.08 26** IAMs_20 IAMs_20 02 08 26.6
comp=Z,2µm,21.0s
**V35K Ketchikan 83.08 26** P **P** **01 37 19.8 -1.0**
baz=228
**S31K Pelican 83.09 23** IAMs_20 IAMs_20 02 09 53.5
comp=Z,1µm,18.0s
**S31K Pelican 83.09 23** P **P** **01 37 19.9 -0.9**
baz=224
**J20K Nowinta River 83.12 12** IAmb IAmb 01 37 29.3
comp=Z,99nm,0.9s
**J20K Nowinta River 83.12 12** P **P** **01 37 20.1 -0.8**
baz=207,SNR=57
**GCSA Galena City Sc 83.13 11** P **P** **01 37 19.5 -1.4**
baz=204
**WAT6 Susitna Watana 83.17 15** P **P** **01 37 20.2 -1.1**
baz=213,SNR=9.1
**M24K Tolsona, Glenn 83.18 16** P **P** **01 37 20.5 -0.8**
baz=214,SNR=11
**WAT1 Susitna Watana 83.18 15** P **P** **01 37 19.8 -1.4**
baz=212
**N25K Chitina, Valde 83.19 17** P **P** **01 37 21.4 0.0**
N25K IAmb IAmb 01 37 29.3
comp=Z,56nm,0.8s
**N25K Chitina, Valde 83.19 17** P **P** **01 37 20.4 -1.0**
baz=216,SNR=12
**VRDI Verde Repeater 83.22 18** IAmb IAmb 01 37 29.0
comp=Z,41nm,0.8s
**G17K Kiwalik Mounta 83.23 9** P **P** **01 37 21.0 -0.4**
baz=201,SNR=21
**PNL Peninsula 83.25 20** P **P** **01 37 20.7 -1.0**
baz=221
**H18K Honhosa River 83.26 10** IAmb IAmb 01 37 30.5
comp=Z,110nm,1.6s
**H18K Honhosa River 83.26 10** P **P** **01 37 20.2 -1.4**
baz=203,SNR=8.7
**HIA Hailar 83.28 326** P P 01 37 29.4 +7.3
**HIA Hailar 83.28 326** IAMs_20 IAMs_20 02 10 59.2
comp=Z,1µm,20.0s
**GLB Gilahina Butte 83.28 17** IAmb IAmb 01 37 29.1
comp=Z,46nm,0.9s
**PINM Pinnacle 83.30 20** P **P** **01 37 20.8 -1.2**
baz=220,SNR=5.8
**GRNC Granite Creek 83.33 19** IAmb IAmb 01 37 29.8
comp=Z,46nm,1.0s
**Q12A Willow Creek R 83.36 46** P **P** **01 37 23.5 +0.6**
Q12A IAmb IAmb 01 37 31.8
comp=Z,46nm,1.0s
**S32K Killisnoo 83.36 24** P **P** **01 37 20.9 -1.3**
baz=225
**F07A Phinny Hill Vi 83.42 38** P **P** **01 37 23.4 +0.6**
F07A IAmb IAmb 01 37 31.6

comp=Z,59nm,1.2s
**TUC Tucson 83.43 54** P **P** **01 37 24.6 +1.2**
TUC IAmb IAmb 01 37 32.8
comp=Z,44nm,1.4s
**TUC Tucson 83.43 54** IAMs_20 IAMs_20 02 07 20.1
comp=Z,1µm,20.0s
**TUC Tucson 83.43 54** P **P** **01 37 24.6 +1.2**
TUC pmax pmax
comp=Z,44nm,1.4s
**MCARA McCarthy VSAT 83.46 18** P **P** **01 37 21.9 -0.8**
baz=217
**WRAK Wrangell Islan 83.52 25** IAMs_20 IAMs_20 02 05 57.9
comp=Z,2µm,20.0s
**WRAK Wrangell Islan 83.52 25** P **P** **01 37 21.3 -1.8**
baz=227
**T33K Petersburg 83.54 25** P **P** **01 37 22.4 -0.8**
baz=227
**MXC Moxie City 83.57 38** P **P** **01 37 24.3 +0.7**
MXC IAmb IAmb 01 37 32.3
comp=Z,47nm,1.1s
**RND Reindeer 83.60 14** IAMs_20 IAMs_20 02 07 07.0
comp=Z,1µm,22.0s
**R31K City Hall, Gus 83.60 22** P **P** **01 37 22.7 -0.7**
baz=224
**I20K Naaghedeneel 83.62 11** P **P** **01 37 23.2 -0.2**
baz=206,SNR=8.5
**LOGN Logan Glacier 83.63 19** IAmb IAmb 01 37 31.8
comp=Z,68nm,1.2s
**CTG Chitna Glacier 83.64 19** P **P** **01 37 23.3 -0.5**
baz=219,SNR=11
**CTGM Chitina Glacie 83.64 19** IAmb IAmb 01 37 31.3
comp=Z,46nm,0.9s
**DHY Denali Highway 83.68 15** IAmb IAmb 01 37 32.5
comp=Z,93nm,1.4s
**DHY Denali Highway 83.68 15** P **P** **01 37 23.5 -0.5**
baz=213,SNR=27
**HARP HAARP 83.69 16** P **P** **01 37 23.2 -0.6**
baz=215,SNR=6.7
**SMAI San Martin Ant 83.69 160** P **P** **01 37 25.5 +1.6**
SMAI IAmb IAmb 01 37 34.0
comp=Z,69nm,1.3s
**G08A Pilot Rock 83.69 39** P **P** **01 37 24.1 -0.4**
G08A IAmb IAmb 01 37 33.2
comp=Z,74nm,1.1s
**LTY Liberty 83.71 37** IAmb IAmb 01 37 32.7
comp=Z,40nm,1.0s
**BPAW Bear Paw Mtn. 83.71 13** P **P** **01 37 22.2 -1.8**
baz=210,SNR=8.5
**CCUT Cedar City 83.72 48** IAmb IAmb 01 37 34.2
comp=Z,47nm,1.2s
**P29M Windy Craggy 83.78 21** IAMs_20 IAMs_20 02 07 24.6
comp=Z,1µm,19.0s
**P29M Windy Craggy 83.78 21** P **P** **01 37 23.2 -1.3**
baz=222,SNR=8.9
**X16A Lo Mia Camp, P 83.79 52** IAmb IAmb 01 37 34.6
comp=Z,31nm,1.0s
**PSUT Pine Spring 83.81 47** IAmb IAmb 01 37 34.0
comp=Z,35nm,0.8s
**SRDT SRDT 83.82 287** P P 01 37 34.5 +9.0
**O28M Mount Upton 83.84 19** P **P** **01 37 23.2 -1.8**
baz=220,SNR=9.4
**MCK McKinley 83.86 14** P **P** **01 37 23.4 -1.3**
baz=212,SNR=50
**ELK Elko 83.86 45** IAmb IAmb 01 37 34.3
comp=Z,37nm,1.0s
**G18K Tagagawik 83.90 9** IAmb IAmb 01 37 33.0
comp=Z,57nm,1.0s
**G18K Tagagawik 83.90 9** P **P** **01 37 23.4 -1.5**
baz=202,SNR=38
**HHC Hu-ho-hao-te 83.90 316** *eP* **P** **01 37 25.5 -0.1**
HHC sP sP 01 37 32.8 +0.4
HHC S **S** **01 47 48.0 -0.9**
HHC sS pS 01 47 56.8 +1.3
HHC SS **SS** **01 53 14.0 -3.3**
HHC pmax pmax
comp=Z,12nm,0.6s
HHC pmax pmax
comp=Z,260nm,4.1s
HHC LR LR
comp=Z,540nm,19.1s
HHC LR LR
comp=Z,970nm,20.4s
HHC LR LR
comp=Z,2µm,20.6s
**HAWA Hanford 83.92 38** IAMs_20 IAMs_20 02 06 32.7
comp=Z,1µm,20.0s
**H19K Roundabout Mou 83.92 10** P **P** **01 37 24.8 -0.2**
**H19K Roundabout Mou 83.92 10** P **P** **01 37 24.3 -0.7**
baz=205,SNR=21
**SZCU Shurtz Canyon 83.94 48** IAmb IAmb 01 37 35.2
comp=Z,51nm,1.2s
**R32K Eaglecrest 83.95 23** P **P** **01 37 24.4 -0.9**
baz=225
**JIS Juneau Island 84.01 23** P P 01 37 34.6 +9.1
**O29M Mount Kennedy 84.01 20** P **P** **01 37 24.9 -0.8**
baz=222,SNR=5.3
**U15A North Rim 84.01 49** IAmb IAmb 01 37 35.8
comp=Z,56nm,0.9s
**BELA Belgrano 2 84.03 173** IAmb IAmb 01 37 32.7
comp=Z,35nm,0.9s
**F17K Baldwin Pennin 84.03 8** P **P** **01 37 24.7 -0.7**
**F17K Baldwin Pennin 84.03 8** P **P** **01 37 24.6 -0.9**
baz=200,SNR=13
**PAX Paxson 84.07 16** P **P** **01 37 24.9 -1.1**
baz=215,SNR=8.9
**BWN Browne 84.11 14** P **P** **01 37 26.2 +0.3**
**MAW Mawson 84.13 200** P **P** **01 37 25.7 -0.5**
comp=Z,8.0nm,0.8s,baz=120,slow=9.3,SNR=17
MAW LR LR 02 10 34.5
comp=Z,867nm,21.2s,baz=103,slow=33
comp=Z,8.0nm,0.8s
**PLBC Pleasant Camp 84.13 21** P **P** **01 37 25.2 -1.0**
baz=224,SNR=5.3
**U35K Hyder 84.15 26** IAMs_20 IAMs_20 02 11 55.8
comp=Z,2µm,20.0s
**U35K Hyder 84.15 26** P **P** **01 37 25.0 -1.3**
baz=229
**PHRA Phrae 84.15 291** P **P** **01 37 25.5 -1.7**
**H20K Anotleneega Mo 84.17 11** P **P** **01 37 25.8 -0.5**
baz=206,SNR=25
**319A Douglas 84.23 55** IAmb IAmb 01 37 37.0
comp=Z,50nm,1.2s
**KMI Kunming 84.23 298** ⇓P **P** **01 37 28.3 +0.5**
KMI sP sP 01 37 35.8 +1.2
KMI S **S** **01 47 58.5 +5.4**
KMI pmax pmax
comp=Z,12nm,1.9s
KMI pmax pmax
comp=Z,200nm,4.3s
KMI LR LR
comp=Z,620nm,22.6s
KMI LR LR
comp=Z,1µm,21.0s
KMI LR LR
comp=Z,2µm,21.5s
**E08A Dider Farm, El 84.25 38** P **P** **01 37 27.2 +0.1**
**M26K Nabesna, AK 84.28 17** P **P** **01 37 26.0 -0.9**
baz=217,SNR=22
**WUAZ Wupatki 84.30 51** IAMs_20 IAMs_20 02 06 30.9
comp=Z,1µm,21.0s
**YUK8 Steele Glacier 84.37 19** P **P** **01 37 26.4 -1.3**
baz=220,SNR=29
**G19K Purcell Mounta 84.38 10** P **P** **01 37 26.9 -0.4**
baz=204,SNR=31
**F18K Selawik 84.41 9** P **P** **01 37 26.9 -0.4**
baz=202,SNR=8.0
**P30M Million Dollar 84.41 21** P **P** **01 37 27.6 -0.1**
baz=223
**BMO Blue Mountains 84.49 40** IAMs_20 IAMs_20 02 06 58.0
comp=Z,2µm,22.0s
**SKAG Skagway 84.50 22** P P 01 37 37.8 +10
**SKAG Skagway 84.50 22** P **P** **01 37 27.9 -0.1**
baz=224
**YUK3 Moose Creek 84.53 18** P **P** **01 37 27.9 -0.6**
baz=220,SNR=18
**YUK6 Outpost Mounta 84.56 20** P **P** **01 37 27.7 -0.9**
baz=222
**E17K Hotham Inlet 84.56 8** P **P** **01 37 27.5 -0.7**
baz=199,SNR=12
**NEA2 Nenana 84.56 14** P **P** **01 37 26.1 -2.1**
NEA2 IAmb IAmb 01 37 35.1
comp=Z,33nm,0.8s
**NEA2 Nenana 84.56 14** P **P** **01 37 27.9 -0.4**
baz=212,SNR=6.0
**M27K Edge Creek, AK 84.57 18** P **P** **01 37 27.8 -0.7**
baz=218,SNR=34
**MLY Manley 84.58 13** P **P** **01 37 27.9 -0.5**

baz=210,SNR=27
**CRAI Chiangrai 84.60 293 P P 01 37 28.2 -1.3**
CRAI IAmb IAmb 01 37 38.7
comp=Z,64nm,1.4s
**D08A Wollman Farm, 84.62 38 IAmb IAmb 01 37 37.7**
comp=Z,55nm,1.1s
**BILL Bilibino 84.66 356 eP P 01 37 34.3 +5.6**
BILL e 01 40 43.8
BILL eS S **01 47 56.1 +1.0**
BILL eSS SS **01 53 35.1 +8.0**
BILL pmax pmax
comp=Z,11nm,1.0s
BILL MLR MLR
comp=Z,568nm,19.0s
**K24K Donnelly Dome 84.68 15 P P 01 37 27.8 -1.1**
baz=215,SNR=36
**WRH Wood River Hil 84.68 14 IAMs_20 IAMs_20 02 07 52.7**
comp=Z,1µm,22.0s
**L26K Log Cabin Wild 84.69 17 IAmb IAmb 01 37 37.1**
comp=Z,52nm,0.8s
**L26K Log Cabin Wild 84.69 17 P P 01 37 28.2 -0.8**
baz=217,SNR=9.9
**H21K Melozitna Rive 84.71 12 IAmb IAmb 01 37 37.8**
comp=Z,33nm,0.9s
**H21K Melozitna Rive 84.71 12 P P 01 37 28.4 -0.6**
baz=208,SNR=31
**MFID Camas Ranch 84.72 42 P P 01 37 30.6 +0.8**
MFID IAMs_20 IAMs_20 02 08 51.4
comp=Z,2µm,20.0s
**T35M Bob Quinn 84.75 26 IAMs_20 IAMs_20 02 06 47.7**
comp=Z,2µm,22.0s
**T35M Bob Quinn 84.75 26 P P 01 37 28.4 -1.0**
baz=229,SNR=5.1
**YUK4 Talbot Arm 84.77 19 P P 01 37 29.5 -0.1**
baz=221,SNR=5.8
**MTPU Mount Pierson 84.77 48 IAmb IAmb 01 37 39.6**
comp=Z,43nm,0.9s
**E09A Wood Farm, Sta 84.80 38 P P 01 37 29.4 -0.5**
E09A IAmb IAmb 01 37 38.3
comp=Z,48nm,1.1s
**BTO Baotou 84.83 315 eP P 01 37 32.0 +1.7**
BTO pP **sP 01 37 37.5 +0.3**
BTO sP **pP 01 37 39.3 +3.9**
BTO S **S 01 48 02.0 +3.8**
BTO sS **ScS 01 48 09.8 +0.7**
BTO SS **SS 01 53 32.3 +1.3**
BTO pmax pmax
comp=Z,28nm,0.9s
BTO pmax pmax
comp=Z,750nm,6.9s
BTO LR LR
comp=Z,2µm,21.8s
BTO LR LR
comp=Z,2µm,24.1s
BTO LR LR
comp=Z,3µm,24.3s
**RIDG Independent Ri 84.87 16 P P 01 37 29.6 -0.3**
**RIDG Independent Ri 84.87 16 P P 01 37 29.4 -0.5**
baz=216,SNR=34
**HDA Harding Lake 84.90 14 P P 01 37 29.3 -0.6**
baz=214,SNR=29
**F19K Shaleruckik Mo 84.91 9 IAmb IAmb 01 37 38.1**
comp=Z,45nm,1.1s
**F19K Shaleruckik Mo 84.91 9 P P 01 37 29.6 -0.4**
baz=203,SNR=26
**MVU Marysvale 84.95 48 P P 01 37 32.3 +1.1**
**I23K Minto, Yukon-K 84.97 13 IAmb IAmb 01 37 38.4**
comp=Z,64nm,1.2s
**I23K Minto, Yukon-K 84.97 13 P P 01 37 30.4 +0.1**
baz=211,SNR=9.1
**D17K Noatak River 85.00 7 P P 01 37 29.5 -0.8**
baz=198,SNR=12
**S34M Telegraph Cree 85.02 24 IAmb IAmb 01 37 39.6**
comp=Z,54nm,0.8s
S34M IAMs_20 IAMs_20 02 05 57.5
comp=Z,2µm,22.0s
**S34M Telegraph Cree 85.02 24 P P 01 37 30.0 -0.6**
baz=228,SNR=24
**E18K Tukpahlearik C 85.05 8 P P 01 37 30.3 -0.3**
baz=200,SNR=32
**B08A Colville Reser 85.05 36 IAmb IAmb 01 37 39.1**
comp=Z,41nm,1.1s
**COLA College 85.08 14 P P 01 37 29.7 -1.1**
**COLA College 85.08 14 P P 01 37 30.7 -0.1**
baz=213
**COLA College 85.08 14 P P 01 37 29.7 -1.1**
COLA pmax pmax
comp=Z,170nm,1.0s
**L27K Beaver Creek, 85.14 17 IAmb IAmb 01 37 39.3**
comp=Z,58nm,1.0s
**L27K Beaver Creek, 85.14 17 P P 01 37 31.3 +0.1**
baz=218,SNR=58
**P32M Atlin 85.18 22 IAmb IAmb 01 37 40.1**
comp=Z,45nm,1.1s
**P32M Atlin 85.18 22 P P 01 37 31.0 -0.6**
baz=226,SNR=8.0
**O30N Mendenhall 85.18 21 IAmb IAmb 01 37 39.7**
comp=Z,34nm,0.9s
**O30N Mendenhall 85.18 21 P P 01 37 31.1 -0.4**
baz=224,SNR=8.8
**H22K Ishtalitna Cre 85.20 12 P P 01 37 31.4 -0.1**
baz=209,SNR=44
**ILAR Eielson Array 85.22 14 P P 01 37 30.3 -1.2**
comp=Z,12nm,0.9s,baz=233,slow=5.5,SNR=54
ILAR LR LR 02 08 53.1
comp=Z,688nm,21.6s,baz=212,slow=31
comp=Z,12nm,0.9s
**DUG Dugway, Tooele 85.26 46 IAMs_20 IAMs_20 02 07 11.1**
comp=Z,2µm,22.0s
**Q32M Nakina River 85.28 23 IAmb IAmb 01 37 40.9**
comp=Z,28nm,0.8s
**Q32M Nakina River 85.28 23 P P 01 37 31.8 -0.4**
baz=227,SNR=7.7
**SCRK Sand Creek 85.28 16 IAmb IAmb 01 37 39.6**
comp=Z,40nm,0.9s
**SCRK Sand Creek 85.28 16 P P 01 37 31.2 -0.8**
baz=216,SNR=8.9
**CMAR Chiang Mai Arr 85.29 291 P P 01 37 30.5 -2.4**
comp=Z,1.3nm,0.4s,baz=120,slow=3.5,SNR=2.9
CMAR LR LR 02 14 21.9
comp=Z,436nm,19.3s,baz=70,slow=35
comp=Z,1.3nm,0.4s
**C16K Lisburne Hills 85.30 6 P P 01 37 30.3 -1.5**
baz=196,SNR=7.4
**G21K Allakaket 85.34 11 IAmb IAmb 01 37 40.4**
comp=Z,31nm,0.9s
**G21K Allakaket 85.34 11 P P 01 37 30.5 -1.7**
baz=207,SNR=11
**N30M Aishikik Lake 85.36 20 P P 01 37 32.6 +0.2**
baz=223
**RDOG Red Dog Mine 85.36 7 P P 01 37 31.5 -0.6**
baz=198,SNR=5.8
**W18A Petrified Fore 85.36 52 P P 01 37 31.3 -1.9**
baz=246
**POKR Poker Plat Res 85.38 14 P P 01 37 31.2 -1.2**
**POKR Poker Plat Res 85.38 14 P P 01 37 31.9 -0.4**
baz=213,SNR=10
**F20K Avaraart Lake 85.43 10 P P 01 37 31.8 -0.7**
baz=205
**J25K Salcha River, 85.45 15 P P 01 37 32.1 -0.7**
baz=215,SNR=83
**CD2 Chengdu 85.51 304 P P 01 37 33.3 -0.6**
CD2 S **S 01 48 05.0 -0.2**
CD2 pmax pmax
comp=Z,30nm,1.0s
CD2 pmax pmax
comp=Z,300nm,5.5s
CD2 LR LR
comp=Z,1µm,20.6s
CD2 LR LR
comp=Z,1µm,21.6s
CD2 LR LR
comp=Z,1µm,23.0s
**WHY Whitehorse 85.52 21 IAmb IAmb 01 37 41.5**
comp=Z,35nm,1.0s
**WHY Whitehorse 85.52 21 P P 01 37 32.5 -0.8**
baz=225,SNR=8.5
**H23K Yukon River 85.52 13 P P 01 37 32.1 -0.9**
baz=211
**PZH PanZhiHua 85.56 299 P P 01 37 33.8 -0.5**
PZH S **S 01 48 05.5 -0.5**
PZH pmax pmax
comp=Z,20nm,1.1s
PZH pmax pmax
comp=Z,280nm,6.1s
PZH LR LR
comp=Z,490nm,20.8s
PZH LR LR
comp=Z,790nm,23.4s
PZH LR LR
comp=Z,1µm,20.6s
**E19K Redstone River 85.57 9 IAmb IAmb 01 37 41.6**
comp=Z,34nm,1.0s
**E19K Redstone River 85.57 9 P P 01 37 33.3 0.0**
baz=204,SNR=11
**M29M Somme Creek 85.65 19 IAmb IAmb 01 37 42.1**
comp=Z,29nm,0.9s
**M29M Somme Creek 85.65 19 P P 01 37 33.8 -0.2**
baz=222,SNR=23
**HLID Hailey 85.70 42 IAmb IAmb 01 37 43.8**
comp=Z,30nm,0.8s
HLID IAMs_20 IAMs_20 02 07 38.4
comp=Z,2µm,22.0s
**C17K DeLong Mountai 85.73 7 P P 01 37 33.2 -0.8**
baz=198,SNR=5.7
**HMU Henry Mountain 85.77 49 P P 01 37 35.4 +0.2**
**DLBC Dease Lake 85.80 24 IAmb IAmb 01 37 43.3**
comp=Z,35nm,1.0s
**DLBC Dease Lake 85.80 24 LR LR 02 07 52.2**
comp=Z,825nm,21.4s,baz=241,slow=30
**DLBC Dease Lake 85.80 24 P P 01 37 35.1 +0.4**
baz=229,SNR=9.1
**N31M Braeburn, Yuko 85.81 20 IAmb IAmb 01 37 42.7**
comp=Z,54nm,1.1s
**N31M Braeburn, Yuko 85.81 20 P P 01 37 34.6 0.0**
baz=224,SNR=8.6
**J26L Joseph Creek 85.82 16 P P 01 37 34.5 -0.1**
baz=217,SNR=106
**K27K Chicken 85.83 16 P P 01 37 35.4 +0.8**
baz=218
**121A Cookes Peak, D 85.85 55 P P 01 37 34.6 -1.1**
baz=248,SNR=12
**H24K Noodor Dome 85.89 13 P P 01 37 35.2 +0.3**
baz=213
**P33M Teslin, Yukon 85.93 22 P P 01 37 35.5 +0.2**
baz=227,SNR=7.2
**F21K Alatna River 85.98 11 P P 01 37 35.2 -0.1**
baz=207,SNR=8.2
**HVU Hansel Valley 85.98 44 IAmb IAmb 01 37 45.1**
comp=Z,80nm,1.2s
**SPUT South Promonto 86.00 45 P P 01 37 35.9 -0.4**
SPUT IAmb IAmb 01 37 45.1
comp=Z,54nm,1.1s
**TMUT Trail Mountain 86.00 47 IAmb IAmb 01 37 45.8**
comp=Z,51nm,1.2s
**MPU Maple Canyon 86.00 46 P P 01 37 37.1 +0.8**
**R33M Jennings River 86.07 23 IAmb IAmb 01 37 44.8**
comp=Z,40nm,1.0s
**R33M Jennings River 86.07 23 P P 01 37 36.5 +0.4**
baz=228,SNR=15
**G22K Bettles 86.08 12 P P 01 37 35.8 +0.1**
baz=209
**C18K Utukok River 86.13 7 P P 01 37 36.1 +0.1**
baz=200
**PRP Porcupine Dome 86.16 14 IAmb IAmb 01 37 44.7**
comp=Z,52nm,1.1s
**PRP Porcupine Dome 86.16 14 P P 01 37 36.1 -0.3**
baz=215,SNR=9.3
**G23K Bananza Creek 86.18 12 P P 01 37 36.4 +0.1**
baz=211,SNR=8.1
**L29M L29M 86.26 18 P P 01 37 36.5 -0.3**
baz=222,SNR=26
**M30M Minto, Yukon 86.27 19 IAmb IAmb 01 37 44.9**
comp=Z,66nm,1.0s
**M30M Minto, Yukon 86.27 19 P P 01 37 37.1 +0.2**
baz=223,SNR=20
**NEW Newport 86.28 37 P P 01 37 36.3 -1.0**
**NEW Newport 86.28 37 IAMs_20 IAMs_20 02 11 33.1**
comp=Z,1µm,19.0s
**NEW Newport 86.28 37 LR LR 02 11 34.8**
comp=Z,1µm,18.6s,baz=220,slow=32
**NEW Newport 86.28 37 P P 01 37 36.3 -1.0**
NEW pmax pmax
comp=Z,26nm,1.1s
**JLU Jordanelle 86.38 46 IAmb IAmb 01 37 47.0**
comp=Z,40nm,1.1s
**D19K Kuna River 86.39 9 P P 01 37 37.1 -0.3**
baz=203,SNR=6.4
**SRU San Rafael Swe 86.40 48 IAmb IAmb 01 37 47.1**
comp=Z,92nm,1.7s
**PMSA Palmer Station 86.45 158 LR LR 02 08 08.7**
comp=Z,2µm,21.5s,baz=242,slow=30
**E20K Nigu River 86.46 9 P P 01 37 37.5 -0.2**
baz=205,SNR=10
**F22K John River 86.47 11 P P 01 37 37.2 -0.5**
baz=208
**N32M Quiet Lake 86.49 21 P P 01 37 37.5 -0.5**
baz=226
**I26K Coal Creek Min 86.57 15 P P 01 37 37.9 -0.3**
baz=217
**COLD Coldfoot 86.60 12 P P 01 37 38.3 0.0**
baz=210,SNR=9.6
**DAWY Dawson 86.61 17 IAmb IAmb 01 37 46.5**
comp=Z,53nm,1.0s
**DAWY Dawson 86.61 17 P P 01 37 38.1 -0.4**
baz=221,SNR=32
**EGAK Eagle 86.67 16 IAmb IAmb 01 37 47.2**
comp=Z,63nm,1.0s
**EGAK Eagle 86.67 16 P P 01 37 37.6 -1.1**
baz=219,SNR=29
**G24K Hadweenzic Riv 86.71 13 P P 01 37 38.3 -0.6**
baz=213
**H25L Birch Creek 86.71 14 P P 01 37 38.7 -0.2**
baz=214
**HWUT Hardware Ranch 86.73 45 IAmb IAmb 01 37 48.3**
comp=Z,65nm,1.6s
**B18K Kokolik River 86.73 7 P P 01 37 38.6 -0.3**
baz=199
**ZAIG Zacatecas 86.75 65 IAMs_20 IAMs_20 02 07 31.3**
comp=Z,2µm,20.0s
**C19K Lookout Ridge 86.76 8 P P 01 37 38.8 -0.4**
baz=202,SNR=5.8
**M31M Drury Creek, Y 86.78 20 IAMs_20 IAMs_20 02 09 04.7**
comp=Z,1µm,22.0s
**M31M Drury Creek, Y 86.78 20 P P 01 37 39.4 0.0**
baz=225
**P18A Preston Nutter 86.81 47 P P 01 37 40.6 +0.1**
**D20K Ettiviuk River 86.81 9 P P 01 37 39.0 -0.4**
baz=204,SNR=10
**BSUT Blindstream Ca 86.83 46 IAmb IAmb 01 37 49.5**
comp=Z,66nm,1.3s
**MOIG Morelia 86.97 69 IAMs_20 IAMs_20 02 07 36.2**
comp=Z,2µm,20.0s
**E21K Killik River 86.98 10 P P 01 37 40.1 -0.2**
baz=207
**K29M Barlow Dome 86.99 18 IAmb IAmb 01 37 48.6**
comp=Z,33nm,1.1s
**K29M Barlow Dome 86.99 18 P P 01 37 40.1 -0.3**
baz=222,SNR=30
**YAK Yakutsk 87.00 339 LR LR 02 10 32.0**
comp=Z,649nm,21.5s,baz=138,slow=32
**YAK Yakutsk 87.00 339 i P P 01 37 46.3 +5.9**
YAK pmax pmax
comp=Z,52nm,1.5s
**G25K Bearman Lake 87.06 13 P P 01 37 40.4 -0.2**
baz=214
**E22K Anaktuvuk Pass 87.08 11 P P 01 37 40.6 -0.2**
baz=209
**Y22D IRIS PASSCAL I 87.10 53 IAMs_20 IAMs_20 02 10 36.3**
comp=Z,1µm,20.0s
**MVCO Mesa Verde 87.11 50 IAMs_20 IAMs_20 02 07 59.2**
comp=Z,2µm,21.0s
**FARO Faro, Yukon 87.15 21 P P 01 37 40.7 -0.5**
baz=226,SNR=6.6
**I27K Kandik River 87.20 16 P P 01 37 41.1 -0.2**
baz=218,SNR=6.4
**F24K Squaw Lake 87.31 12 P P 01 37 41.8 -0.1**
**F24K Squaw Lake 87.31 12 P P 01 37 42.3 +0.5**
baz=213,SNR=11
**LZH Lanzhou 87.39 309 eP P 01 37 44.5 +1.4**
LZH sP sP 01 37 51.8 +1.8
LZH sS sS 01 48 35.8 +3.7
LZH SS **SS 01 54 05.0 -3.9**
LZH pmax pmax
comp=Z,29nm,1.3s
LZH LR LR
comp=Z,700nm,18.9s
LZH LR LR
comp=Z,1µm,19.2s
LZH LR LR
comp=Z,2µm,18.2s
**E23K Chandalar 87.43 12 P P 01 37 42.9 +0.4**
baz=211,SNR=6.9
**MSO Missoula 87.49 40 IAmb IAmb 01 37 51.3**
comp=Z,51nm,1.4s
MSO IAMs_20 IAMs_20 02 13 24.5
comp=Z,976nm,19.0s
**C21K Knifeblade Rid 87.50 9 P P 01 37 41.7 -0.9**
baz=206,SNR=9.0
**I28M Miner Creek 87.52 16 P P 01 37 42.0 -1.0**
baz=220,SNR=9.2
**AHID Auburn Hatcher 87.53 44 IAmb IAmb 01 37 54.7**
comp=Z,54nm,1.3s
**D22K Ayikyak River 87.59 10 P P 01 37 42.8 -0.4**
baz=208,SNR=7.2
**E24K Your Creek 87.66 12 P P 01 37 43.2 -0.4**
baz=212
**RDMU Red Mountain 87.67 47 IAmb IAmb 01 37 53.2**
comp=Z,48nm,1.5s
**DLMT Dillon 87.67 41 P P 01 37 44.4 +0.1**
**H27K Steamboat Moun 87.72 15 P P 01 37 43.1 -0.7**
baz=218,SNR=10
**G26K Porcupine Rive 87.74 14 P P 01 37 43.6 -0.3**
baz=216,SNR=14
**ANMO Albuquerque 87.78 53 P P 01 37 44.6 -0.4**
**ANMO Albuquerque 87.78 53 IAMs_20 IAMs_20 02 11 00.2**
comp=Z,1µm,20.0s
**ANMO Albuquerque 87.78 53 LR LR 02 09 24.7**
comp=Z,1µm,21.3s,baz=256,slow=30
**ANMO Albuquerque 87.78 53 i P P 01 37 50.6 +5.5**
ANMO pmax pmax
comp=Z,6.0nm,1.0s
**TNCH TengChong 87.80 297 eP P 01 37 45.3 -0.1**
TNCH S **S 01 48 25.8 -2.1**
TNCH SS **SS 01 54 16.0 +0.7**
TNCH pmax pmax
comp=Z,390nm,4.0s
TNCH LR LR
comp=Z,480nm,22.3s
TNCH LR LR
comp=Z,490nm,23.7s
TNCH LR LR
comp=Z,1µm,22.3s
**F25K Christian Rive 87.85 13 P P 01 37 43.9 -0.6**
baz=215,SNR=14
**J30M Hart River 87.88 18 P P 01 37 44.3 -0.5**
baz=223,SNR=5.8
**I29M Ogilvie Camp, 87.90 17 P P 01 37 44.7 0.0**
baz=222,SNR=7.7
**B20K Meade River 87.93 8 P P 01 37 44.5 -0.1**
baz=204
**TPAW Teton Pass 87.93 43 IAmb IAmb 01 37 53.8**
comp=Z,61nm,1.2s
TPAW IAMs_20 IAMs_20 02 08 34.4
comp=Z,2µm,22.0s
**TOLK Toolik Lake Re 87.94 11 P P 01 37 45.2 +0.3**
baz=211
**B21K Ikpikpuk River 87.94 9 P P 01 37 44.2 -0.6**
baz=206
**FXWY Fox Creek 87.95 43 IAmb IAmb 01 37 55.8**
comp=Z,46nm,1.1s
FXWY IAMs_20 IAMs_20 02 08 59.8
comp=Z,2µm,22.0s
**LIRD Liard River Hi 88.00 25 P P 01 37 44.3 -1.0**
baz=233
**TXAR Lajitas Array 88.00 59 P P 01 37 48.0 +1.8**
comp=Z,2.4nm,0.9s,baz=235,slow=4.4,SNR=18
TXAR PKKPbc **PKKPbc 01 55 32.4 +0.1**
baz=56,slow=2.3,SNR=1.2
TXAR LR LR 02 11 31.3
comp=Z,1µm,18.3s,baz=262,slow=32
comp=Z,2.4nm,0.9s
**TXAR Lajitas Array 88.00 59 P P 01 37 48.0 +1.8**
**TOAD Toad River Com 88.02 26 P P 01 37 45.5 +0.1**
baz=233
**D23K Nanushuk River 88.02 11 P P 01 37 44.9 -0.3**
baz=210,SNR=9.0
**SNOW Snow King Moun 88.05 44 IAMs_20 IAMs_20 02 08 39.6**
comp=Z,1µm,22.0s
**CIT Chita 88.08 326 eP P 01 37 52.2 +6.3**
CIT e 01 38 05.0
CIT e 01 41 09.6
CIT pmax pmax
comp=Z,132nm,1.5s
**IMW Indian Meadow 88.11 43 IAMs_20 IAMs_20 02 08 43.1**
comp=Z,2µm,22.0s
**G27K Doyon Strip 88.14 15 P P 01 37 45.0 -0.8**
baz=218,SNR=9.6
**LOHW Long Hollow 88.21 43 IAMs_20 IAMs_20 02 08 44.9**
comp=Z,2µm,22.0s
**F26K Sheenjek River 88.26 14 P P 01 37 46.3 -0.1**
baz=216,SNR=7.8
**I30M Mount Dempster 88.34 17 IAmb IAmb 01 37 54.2**
comp=Z,25nm,0.8s
**I30M Mount Dempster 88.34 17 P P 01 37 46.3 -0.6**
baz=223,SNR=13
**FLWY Flagg Ranch 88.35 43 IAmb IAmb 01 37 56.4**
comp=Z,41nm,1.1s
FLWY IAMs_20 IAMs_20 02 09 13.4
comp=Z,2µm,22.0s
**YHL Hebgen Lake 88.36 42 P P 01 37 47.9 +0.2**
**BOZ Bozeman (W) 88.39 41 P P 01 37 48.1 +0.4**
BOZ IAMs_20 IAMs_20 02 09 49.3
comp=Z,2µm,21.0s
**BOZ Bozeman (W) 88.39 41 P P 01 37 48.1 +0.4**
BOZ pmax pmax
comp=Z,69nm,1.3s
**O20A White River Ci 88.43 47 IAmb IAmb 01 37 58.0**
comp=Z,55nm,1.3s
O20A IAMs_20 IAMs_20 02 10 07.0
comp=Z,1µm,20.0s
**D24K Happy Valley 88.52 11 P P 01 37 47.5 -0.1**
baz=212
**H29M Whitestone 88.53 16 IAmb IAmb 01 37 55.7**
comp=Z,44nm,0.9s
**H29M Whitestone 88.53 16 P P 01 37 48.0 +0.3**
baz=221,SNR=11
**S22A 4UR Ranch, Cre 88.54 50 IAmb IAmb 01 37 57.9**
comp=Z,46nm,1.8s
**S22A 4UR Ranch, Cre 88.54 50 P P 01 37 47.4 -1.3**
baz=248,SNR=14
**H17A Grant Village 88.56 43 P P 01 37 47.1 -1.5**
baz=245
**PDAR Pinedale Array 88.56 45 P P 01 37 49.4 +0.7**
comp=Z,7.3nm,1.1s,baz=218,slow=3.6,SNR=29
PDAR PP **PP 01 41 18.5 +1.2**
comp=Z,1.5nm,0.8s,baz=224,slow=5.8,SNR=5.9
PDAR PKKPbc **PKKPbc 01 55 31.5 -0.2**
comp=Z,0.1nm,0.4s,baz=23,slow=4.9,SNR=1.6
PDAR LR LR 02 12 00.7
comp=Z,817nm,19.4s,baz=234,slow=32
comp=Z,7.3nm,1.1s
**LYMT Lyon Mountain 88.57 40 P P 01 37 48.1 -0.5**
**TLIG Tlapa 88.68 71 IAMs_20 IAMs_20 02 08 58.9**
comp=Z,1µm,19.0s
**B22K Teshekpuk Lake 88.78 9 P P 01 37 48.2 -0.5**
baz=207
**C23K Itkillik River 88.79 10 P P 01 37 48.6 -0.2**
baz=210,SNR=8.6
**SMCO Snowmass 88.97 49 IAmb IAmb 01 37 59.7**
comp=Z,57nm,1.6s
**C24K Franklin Bluff 89.03 11 P P 01 37 49.9 +0.1**
baz=212
**EPYK Eagle Plains 89.09 17 P P 01 37 50.1 -0.2**
baz=223,SNR=28
**D25K Kavik River 89.14 12 P P 01 37 50.1 -0.4**
baz=214
**G29M Pine Creek 89.14 16 IAmb IAmb 01 37 58.4**
comp=Z,38nm,0.9s
**G29M Pine Creek 89.14 16 P P 01 37 50.3 -0.3**
baz=222,SNR=11
**A22K Sinclair Lake 89.14 9 P P 01 37 49.8 -0.6**
baz=206
**F28M Old Crow 89.20 15 IAmb IAmb 01 37 58.4**
comp=Z,29nm,1.1s
**F28M Old Crow 89.20 15 P P 01 37 49.9 -0.9**
baz=220,SNR=11
**E27K Coleen River 89.24 14 IAmb IAmb 01 37 59.0**
comp=Z,33nm,1.2s
**E27K Coleen River 89.24 14 P P 01 37 50.0 -0.9**
baz=218,SNR=7.8
**KOTAN Kotaneelee Air 89.26 25 P P 01 37 50.5 -0.7**
baz=234
**H31M Peel River 89.35 18 P P 01 37 51.1 -0.4**
baz=225,SNR=9.7
**MNHN Monahans 89.42 57 P P 01 37 52.8 0.0**
**USHA Ushuaia 89.51 148 LR LR 02 11 07.1**
comp=Z,1µm,20.4s,baz=258,slow=31
**G30M tAoh Zrail Nji 89.67 16 P P 01 37 52.6 -0.4**
baz=223,SNR=30
**RLMT Red Lodge 89.71 42 IAmb IAmb 01 38 03.1**
comp=Z,58nm,1.4s
**RWWY Rawlins 89.75 46 IAmb IAmb 01 38 02.8**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,80nm,1.2s | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **89.91** | **320** | *i* | P | P | 01 37 59.8 | +5.1 | | |
| ULN | | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | | |
| **C26K** | **Camden Bay** | **89.92** | **12** | | P | **P** | **01 37 53.2** | **-0.9** | | |
| | baz=215 | | | | | | | | | |
| **C27K** | **Jago River** | **89.92** | **12** | | P | **P** | **01 37 53.4** | **-0.7** | | |
| | baz=216,SNR=7.0 | | | | | | | | | |
| **E28M** | **Babbage River** | **90.05** | **14** | | IAmb | IAmb | 01 38 02.4 | | | |
| | comp=Z,40nm,0.9s | | | | | | | | | |
| **E28M** | **Babbage River** | **90.05** | **14** | | P | **P** | **01 37 53.9** | **-0.8** | | |
| | baz=220,SNR=28 | | | | | | | | | |
| **T25A** | **Trinidad** | **90.11** | **51** | | P | **P** | **01 37 54.7** | **-1.4** | | |
| | baz=250 | | | | | | | | | |
| **G31M** | **Satah River** | **90.16** | **17** | | IAmb | IAmb | 01 38 02.5 | | | |
| | comp=Z,49nm,1.0s | | | | | | | | | |
| **G31M** | **Satah River** | **90.16** | **17** | | P | **P** | **01 37 54.2** | **-1.0** | | |
| | baz=225,SNR=12 | | | | | | | | | |
| **Q24A** | **Divide** | **90.21** | **49** | | IAmb | IAmb | 01 38 06.3 | | | |
| | comp=Z,74nm,1.6s | | | | | | | | | |
| **Q24A** | **Divide** | **90.21** | **49** | | P | **P** | **01 37 54.7** | **-1.9** | | |
| | baz=249,SNR=10 | | | | | | | | | |
| **D27M** | **Malcolm River** | **90.21** | **13** | | P | **P** | **01 37 55.0** | **-0.6** | | |
| | baz=219 | | | | | | | | | |
| **ELIB** | **Princess Elisa** | **90.22** | **188** | *d* | P | **P** | **01 37 55.1** | **-0.7** | | |
| | comp=Z,15nm,1.5s | | | | | | | | | |
| **F30M** | **Barrier River** | **90.25** | **16** | | P | **P** | **01 37 54.9** | **-0.7** | | |
| | baz=224,SNR=12 | | | | | | | | | |
| **E29M** | **Blow River** | **90.28** | **15** | | P | **P** | **01 37 54.8** | **-1.0** | | |
| | baz=222,SNR=6.4 | | | | | | | | | |
| **MSTX** | **Muleshoe** | **90.28** | **55** | | IAmb | IAmb | 01 38 06.1 | | | |
| | comp=Z,110nm,1.9s | | | | | | | | | |
| MSTX | | | | | IAMs_20 | IAMs_20 | 02 10 20.7 | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **SONM** | **Songino Array** | **90.30** | **320** | | P | **P** | **01 37 55.9** | **-0.6** | | |
| | comp=Z,1.9nm,0.9s,baz=132,slow=5.2,SNR=7.3 | | | | | | | | | |
| SONM | | | | | LR | LR | 02 13 41.2 | | | |
| | comp=Z,721nm,21.8s,baz=113,slow=32 | | | | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | | | | |
| **N23A** | **Red Feather La** | **90.34** | **47** | | IAmb | IAmb | 01 38 06.2 | | | |
| | comp=Z,59nm,1.2s | | | | | | | | | |
| **N23A** | **Red Feather La** | **90.34** | **47** | | P | **P** | **01 37 55.4** | **-1.7** | | |
| | baz=249,SNR=25 | | | | | | | | | |
| **DRIO** | **Del Rio** | **90.55** | **60** | | IAmb | IAmb | 01 38 07.8 | | | |
| | comp=Z,70nm,1.5s | | | | | | | | | |
| **EGMT** | **Eagleton** | **90.57** | **40** | | IAmb | IAmb | 01 38 06.5 | | | |
| | comp=Z,49nm,1.2s | | | | | | | | | |
| **K22A** | **Casper** | **90.58** | **46** | | IAmb | IAmb | 01 38 06.7 | | | |
| | comp=Z,54nm,1.3s | | | | | | | | | |
| K22A | | | | | IAMs_20 | IAMs_20 | 02 11 45.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **OZNA** | **Ozona** | **90.60** | **58** | | IAmb | IAmb | 01 38 06.8 | | | |
| | comp=Z,50nm,1.5s | | | | | | | | | |
| **F31M** | **Tsiigehtchic** | **90.68** | **17** | | P | **P** | **01 37 57.2** | **-0.4** | | |
| | baz=226,SNR=5.8 | | | | | | | | | |
| **D28M** | **Stokes Point** | **90.79** | **14** | | P | **P** | **01 37 58.1** | **0.0** | | |
| | baz=221 | | | | | | | | | |
| **PHWY** | **Pilot Hill** | **90.83** | **47** | | P | **P** | **01 37 57.9** | **-1.5** | | |
| **833A** | **Chaparral WMA,** | **91.22** | **61** | | P | **P** | **01 37 59.9** | **-1.2** | | |
| | baz=252 | | | | | | | | | |
| **INK** | **Inuvik** | **91.34** | **16** | | P | **P** | **01 37 59.1** | **-1.5** | | |
| **INK** | **Inuvik** | **91.34** | **16** | | LR | LR | 02 11 21.1 | | | |
| | comp=Z,539nm,22.0s,baz=238,slow=30 | | | | | | | | | |
| **INK** | **Inuvik** | **91.34** | **16** | | P | **P** | **01 38 00.2** | **-0.5** | | |
| | baz=226,SNR=7.0 | | | | | | | | | |
| **INK** | **Inuvik** | **91.34** | **16** | | P | **P** | **01 37 59.2** | **-1.5** | | |
| INK | | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.3s | | | | | | | | | |
| **AMTX** | **Amarillo** | **91.44** | **54** | | IAMs_20 | IAMs_20 | 02 11 00.2 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **JCT** | **Junction City** | **91.55** | **59** | | IAMs_20 | IAMs_20 | 02 10 10.5 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **GTA** | **Gaotai** | **91.57** | **311** | | P | **P** | **01 38 03.0** | **+0.4** | | |
| GTA | | | | | pP | sP | 01 38 10.5 | +1.0 | | |
| GTA | | | | | SKS | **SKSac** | **01 48 37.0** | **+2.1** | | |
| GTA | | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,2.0s | | | | | | | | | |
| GTA | | | | | pmax | pmax | | | | |
| | comp=Z,91nm,4.4s | | | | | | | | | |
| GTA | | | | | LR | LR | | | | |
| | comp=Z,270nm,20.3s | | | | | | | | | |
| GTA | | | | | LR | LR | | | | |
| | comp=Z,610nm,22.7s | | | | | | | | | |
| GTA | | | | | LR | LR | | | | |
| | comp=Z,820nm,23.9s | | | | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.74** | **181** | ⇑ | P | **P** | **01 38 02.2** | **-0.7** | | |
| | comp=Z,601nm,0.6s | | | | | | | | | |
| **CMIG** | **Matias Romero** | **91.91** | **73** | | LR | LR | 02 11 41.7 | | | |
| | comp=Z,1μm,18.1s,baz=255,slow=30 | | | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **92.07** | **50** | | IAMs_20 | IAMs_20 | 02 11 24.6 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **SNAA** | **Sanae** | **92.13** | **180** | | P | **P** | **01 38 04.6** | **0.0** | | |
| SNAA | | | | | IAmb | IAmb | 01 38 21.1 | | | |
| | comp=Z,44nm,1.2s | | | | | | | | | |
| SNAA | | | | | IAMs_20 | IAMs_20 | 02 16 13.4 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **SNAA** | **Sanae** | **92.13** | **180** | ⇑ | P | **P** | **01 38 04.0** | **-0.6** | | |
| | comp=Z,167nm,0.6s | | | | | | | | | |
| **SNAA** | **Sanae** | **92.13** | **180** | | P | **P** | **01 38 04.3** | **-0.4** | | |
| | comp=Z,5.3nm,0.9s,baz=209,slow=8.8,SNR=20 | | | | | | | | | |
| SNAA | | | | | LR | LR | 02 16 33.2 | | | |
| | comp=Z,1μm,19.5s,baz=190,slow=34 | | | | | | | | | |
| | comp=Z,5.3nm,0.9s | | | | | | | | | |
| **SNAA** | **Sanae** | **92.13** | **180** | *ce* | P | P | 01 38 10.0 | +5.4 | | |
| SNAA | | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.1s | | | | | | | | | |
| **KVTX** | **Kingsville** | **92.26** | **62** | | IAMs_20 | IAMs_20 | 02 14 58.5 | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **92.34** | **57** | | IAMs_20 | IAMs_20 | 02 11 49.2 | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.40** | **177** | ⇑ | P | **P** | **01 38 05.2** | **-0.6** | | |
| | comp=Z,4.7nm,0.6s | | | | | | | | | |
| **BRDY** | **Brady** | **92.45** | **58** | | IAmb | IAmb | 01 38 15.0 | | | |
| | comp=Z,40nm,1.6s | | | | | | | | | |
| **NVL** | **N'lazarevskaya** | **92.53** | **184** | *e* | P | P | 01 38 11.6 | +5.2 | | |
| NVL | | | | | pmax | pmax | | | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| NVL | | | | | MLR | MLR | | | | |
| | comp=Z,655nm,16.0s | | | | | | | | | |
| **SMWD** | **Samnorwood** | **92.63** | **54** | | P | **P** | **01 38 07.1** | **-0.5** | | |
| SMWD | | | | | IAmb | IAmb | 01 38 16.7 | | | |
| | comp=Z,57nm,1.5s | | | | | | | | | |
| **LL01** | **San Ignacio de** | **92.75** | **136** | | IAMs_20 | IAMs_20 | 02 09 11.4 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.80** | **178** | ⇑ | P | **P** | **01 38 07.5** | **-0.2** | | |
| | comp=Z,6.2nm,0.6s,baz=177,slow=4.4 | | | | | | | | | |
| **RSSD** | **Black Hills** | **92.80** | **45** | | P | **P** | **01 38 07.8** | **-0.5** | | |
| **RSSD** | **Black Hills** | **92.80** | **45** | | IAMs_20 | IAMs_20 | 02 14 07.4 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **RSSD** | **Black Hills** | **92.80** | **45** | | P | **P** | **01 38 07.8** | **-0.5** | | |
| RSSD | | | | | pmax | pmax | | | | |
| | comp=Z,64nm,1.2s | | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **93.04** | **178** | ⇑ | P | **P** | **01 38 09.1** | **+0.4** | | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| **ZAK** | **Zakamensk** | **93.18** | **322** | *e* | P | **P** | **01 38 08.3** | **-1.5** | | |
| ZAK | | | | *e* | | | 01 42 00.5 | | | |
| ZAK | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.4s | | | | | | | | | |
| ZAK | | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.9s | | | | | | | | | |
| **435B** | **Jarrell** | **93.46** | **59** | | IAMs_20 | IAMs_20 | 02 14 33.2 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **93.66** | **55** | | P | **P** | **01 38 11.3** | **-1.0** | | |
| **WMOK** | **Wichita Mounta** | **93.66** | **55** | | IAMs_20 | IAMs_20 | 02 12 49.1 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **93.66** | **55** | | P | **P** | **01 38 11.3** | **-1.0** | | |
| WMOK | | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.4s | | | | | | | | | |
| **TIXI** | **Tiksi** | **93.91** | **346** | | P | **P** | **01 38 10.7** | **-1.8** | | |
| TIXI | | | | | IAmb | IAmb | 01 38 19.4 | | | |
| | comp=Z,25nm,1.2s | | | | | | | | | |
| **TIXI** | **Tiksi** | **93.91** | **346** | | LR | LR | 02 16 46.1 | | | |
| | comp=Z,638nm,20.6s,baz=148,slow=33 | | | | | | | | | |
| **TIXI** | **Tiksi** | **93.91** | **346** | *i* | P | P | 01 38 18.5 | +6.0 | | |
| TIXI | | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.1s | | | | | | | | | |
| **DGMT** | **Dagmar** | **94.19** | **41** | | IAMs_20 | IAMs_20 | 02 15 02.6 | | | |
| | comp=Z,982nm,20.0s | | | | | | | | | |
| **OK038** | **West end E0370** | **94.20** | **53** | | IAMs_20 | IAMs_20 | 02 14 23.4 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **CCIG** | **Comitan** | **94.22** | **74** | | IAMs_20 | IAMs_20 | 02 10 24.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **GOMU** | **GeErMu** | **94.31** | **306** | | P | **P** | **01 38 16.3** | **+0.6** | | |
| GOMU | | | | | sP | sP | 01 38 23.5 | +1.0 | | |
| GOMU | | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,790nm,20.7s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,810nm,21.6s | | | | | | | | | |
| GOMU | | | | | LR | LR | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **X34A** | **Smith Ranch, M** | **94.37** | **55** | | IAmb | IAmb | 01 38 25.4 | | | |
| | comp=Z,48nm,1.3s | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.38** | **25** | | P | **P** | **01 38 15.3** | **+0.5** | | |
| | comp=Z,3.0nm,1.0s,baz=253,slow=4.6,SNR=7.4 | | | | | | | | | |
| YKA | | | | | LR | LR | 02 13 11.5 | | | |
| | comp=Z,1μm,21.8s,baz=242,slow=31 | | | | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | |
| **HUEH** | **Huehuetenango** | **94.54** | **75** | | IAMs_20 | IAMs_20 | 02 10 25.4 | | | |
| | comp=Z,976nm,21.0s | | | | | | | | | |
| **GO06** | **Curarrehue** | **94.58** | **133** | | IAMs_20 | IAMs_20 | 02 10 01.2 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **C36M** | **Paulatuk** | **94.65** | **18** | | IAmb | IAmb | 01 38 23.0 | | | |
| | comp=Z,39nm,1.2s | | | | | | | | | |
| **C36M** | **Paulatuk** | **94.65** | **18** | | P | **P** | **01 38 15.2** | **-0.7** | | |
| | baz=235 | | | | | | | | | |
| **HKT** | **Hockley** | **94.68** | **60** | | IAMs_20 | IAMs_20 | 02 14 08.5 | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **HKT** | **Hockley** | **94.68** | **60** | *i* | P | P | 01 38 22.6 | +5.7 | | |
| HKT | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.3s | | | | | | | | | |
| **OK032** | **Salt Plains WL** | **94.71** | **53** | | IAMs_20 | IAMs_20 | 02 15 19.7 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **PLCA** | **Paso Flores** | **94.72** | **135** | | LR | LR | 02 11 06.7 | | | |
| | comp=Z,744nm,21.8s,baz=235,slow=29 | | | | | | | | | |
| **R32A** | **Long Quarter,** | **94.80** | **51** | | IAMs_20 | IAMs_20 | 02 15 15.0 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **FNO** | **Franklin** | **94.89** | **55** | | P | **P** | **01 38 17.4** | **-0.6** | | |
| FNO | | | | | IAmb | IAmb | 01 38 27.2 | | | |
| | comp=Z,51nm,1.5s | | | | | | | | | |
| **OK029** | **Liberty Lake** | **95.00** | **54** | | IAMs_20 | IAMs_20 | 02 12 46.7 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **237A** | **Washetta, Mont** | **95.26** | **58** | | IAMs_20 | IAMs_20 | 02 12 34.8 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **APG** | **El Apazote** | **95.42** | **76** | | LR | LR | 02 11 25.9 | | | |
| | comp=Z,53nm,21.3s,baz=254,slow=29 | | | | | | | | | |
| **BLOK** | **Blackwell** | **95.46** | **53** | | P | **P** | **01 38 20.8** | **+0.3** | | |
| **OK031** | **S. Brethren Rd** | **95.53** | **54** | | IAMs_20 | IAMs_20 | 02 13 28.5 | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **OK052** | **Battle Ridge R** | **95.57** | **54** | | IAMs_20 | IAMs_20 | 02 13 42.6 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **E28A** | **Huff** | **95.82** | **43** | | IAMs_20 | IAMs_20 | 02 14 04.2 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **A36M** | **Sachs Harbour** | **95.89** | **15** | | P | **P** | **01 38 20.8** | **-0.8** | | |
| | baz=234 | | | | | | | | | |
| **BI02** | **San Fabin de** | **95.98** | **131** | | IAMs_20 | IAMs_20 | 02 15 42.4 | | | |
| | comp=Z,966nm,20.0s | | | | | | | | | |
| **BGNE** | **Belgrade** | **96.07** | **49** | | IAMs_20 | IAMs_20 | 02 14 47.3 | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **GO05** | **Huala** | **96.19** | **129** | | IAMs_20 | IAMs_20 | 02 13 18.4 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **SNET** | **Serv Nac Est T** | **96.23** | **78** | | IAMs_20 | IAMs_20 | 02 15 57.2 | | | |
| | comp=Z,915nm,18.0s | | | | | | | | | |
| **TUL3** | **Leonard** | **96.33** | **55** | | IAMs_20 | IAMs_20 | 02 14 14.9 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **SUSD** | **Miller** | **96.36** | **46** | | IAMs_20 | IAMs_20 | 02 16 21.8 | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **PETF** | **Flores** | **96.48** | **74** | | IAMs_20 | IAMs_20 | 02 14 29.7 | | | |
| | comp=Z,970nm,19.0s | | | | | | | | | |
| **KSU1** | **Kansas State U** | **96.57** | **51** | | IAMs_20 | IAMs_20 | 02 16 20.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **96.72** | **321** | *i* | P | P | 01 38 31.0 | +5.0 | | |
| KNGR | | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | | |
| **441A** | **DeRidder** | **97.09** | **60** | | IAMs_20 | IAMs_20 | 02 16 14.4 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **L34A** | **Svendsen Farm,** | **97.50** | **49** | | IAMs_20 | IAMs_20 | 02 16 01.2 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **MT02** | **Curacav** | **97.53** | **128** | | IAMs_20 | IAMs_20 | 02 12 15.8 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **U38A** | **Gravette** | **97.57** | **54** | | P | **P** | **01 38 29.5** | **-0.5** | | |
| U38A | | | | | IAmb | IAmb | 01 38 38.5 | | | |
| | comp=Z,25nm,1.1s | | | | | | | | | |
| **BO04** | **La Punta** | **97.61** | **129** | | IAMs_20 | IAMs_20 | 02 13 32.1 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **MIAR** | **Mount Ida** | **97.73** | **56** | | IAMs_20 | IAMs_20 | 02 15 21.1 | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **N35A** | **Tabor** | **97.75** | **50** | | IAMs_20 | IAMs_20 | 02 17 32.8 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **MT03** | **Universidad Ad** | **97.90** | **128** | | IAMs_20 | IAMs_20 | 02 12 50.7 | | | |
| | comp=Z,833nm,19.0s | | | | | | | | | |
| **LMEL** | **Las Melosas** | **97.98** | **129** | | IAMs_20 | IAMs_20 | 02 12 53.6 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **CO02** | **Combarbal** | **98.50** | **126** | | IAMs_20 | IAMs_20 | 02 12 09.8 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **98.56** | **45** | | IAmb | IAmb | 01 38 41.7 | | | |
| | comp=Z,21nm,1.4s | | | | | | | | | |
| F33A | | | | | IAMs_20 | IAMs_20 | 02 23 37.7 | | | |
| | comp=Z,868nm,18.0s | | | | | | | | | |
| **S39A** | **Bolivar** | **98.70** | **53** | | IAMs_20 | IAMs_20 | 02 15 29.5 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **P38A** | **Dawn** | **99.01** | **51** | | IAMs_20 | IAMs_20 | 02 18 14.3 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **143A** | **Socs Landing,** | **99.05** | **59** | | IAMs_20 | IAMs_20 | 02 15 05.0 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **PALK** | **Pallekele** | **99.14** | **275** | | LR | LR | 02 24 09.4 | | | |
| | comp=Z,746nm,20.2s,baz=111,slow=36 | | | | | | | | | |
| **BOAB** | **BOACO BROADBA** | **99.27** | **80** | | IAMs_20 | IAMs_20 | 02 12 43.7 | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **JTS** | **Las Juntas de** | **99.39** | **82** | | LR | LR | 02 14 13.8 | | | |
| | comp=Z,604nm,20.0s,baz=264,slow=30 | | | | | | | | | |
| **N38A** | **Joes South For** | **99.50** | **50** | | IAMs_20 | IAMs_20 | 02 18 29.3 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **R40A** | **Maddies Statio** | **99.65** | **53** | | IAMs_20 | IAMs_20 | 02 16 28.6 | | | |
| | comp=Z,955nm,21.0s | | | | | | | | | |
| **VBMS** | **Vicksburg** | **99.66** | **59** | | IAMs_20 | IAMs_20 | 02 17 16.4 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **SCIA** | **State Center** | **99.77** | **49** | | IAMs_20 | IAMs_20 | 02 16 41.3 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **AC05** | **El Transito** | **100.07** | **124** | | IAMs_20 | IAMs_20 | 02 13 07.5 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **P40A** | **Paris** | **100.10** | **52** | | IAMs_20 | IAMs_20 | 02 17 59.3 | | | |
| | comp=Z,908nm,20.0s | | | | | | | | | |
| **CCM** | **Cathedral Cave** | **100.39** | **53** | | IAMs_20 | IAMs_20 | 02 19 06.1 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **SPMN** | **Mantne-on St.** | **100.80** | **46** | | IAMs_20 | IAMs_20 | 02 18 47.1 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **146A** | **Union** | **100.96** | **59** | | IAMs_20 | IAMs_20 | 02 20 05.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **OXF** | **Oxford** | **101.07** | **57** | | IAMs_20 | IAMs_20 | 02 16 39.6 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **N41A** | **Harden Midland** | **101.25** | **51** | | IAMs_20 | IAMs_20 | 02 17 40.5 | | | |
| | comp=Z,894nm,22.0s | | | | | | | | | |
| **WMQ** | **Urumqi** | **101.50** | **312** | *e* | P | **Pdif** | **01 38 49.0** | **+1.5** | | |
| WMQ | | | | | LR | LR | | | | |
| | comp=Z,630nm,21.3s | | | | | | | | | |
| WMQ | | | | | LR | LR | | | | |
| | comp=Z,920nm,22.1s | | | | | | | | | |
| WMQ | | | | | LR | LR | | | | |
| | comp=Z,1μm,24.5s | | | | | | | | | |
| **TRQA** | **Tornquist** | **101.82** | **136** | | IAMs_20 | IAMs_20 | 02 16 02.5 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **S44A** | **Carbondale** | **101.85** | **54** | | IAMs_20 | IAMs_20 | 02 19 11.9 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **Z47A** | **Carrollton** | **101.89** | **59** | | IAMs_20 | IAMs_20 | 02 17 07.3 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **E38A** | **The Farm, Brul** | **101.93** | **45** | | IAMs_20 | IAMs_20 | 02 22 52.0 | | | |
| | comp=Z,796nm,19.0s | | | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **102.03** | **52** | | IAMs_20 | IAMs_20 | 02 19 28.5 | | | |
| | comp=Z,904nm,20.0s | | | | | | | | | |
| **JFWS** | **Jewell Farm** | **102.13** | **49** | | IAMs_20 | IAMs_20 | 02 20 09.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **EYMN** | **Ely** | **102.23** | **43** | | IAMs_20 | IAMs_20 | 02 19 02.7 | | | |
| | comp=Z,817nm,20.0s | | | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **102.27** | **53** | | IAMs_20 | IAMs_20 | 02 18 08.9 | | | |
| | comp=Z,922nm,21.0s | | | | | | | | | |
| **BRAL** | **Brewton** | **102.32** | **61** | | IAMs_20 | IAMs_20 | 02 20 54.9 | | | |
| | comp=Z,923nm,20.0s | | | | | | | | | |
| **HDIL** | **Hopedale** | **102.38** | **51** | | IAMs_20 | IAMs_20 | 02 17 40.6 | | | |
| | comp=Z,871nm,22.0s | | | | | | | | | |
| **G40A** | **Rib Lake** | **102.61** | **46** | | IAMs_20 | IAMs_20 | 02 23 32.1 | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **WVT** | **Waverly** | **102.66** | **56** | | IAMs_20 | IAMs_20 | 02 17 50.6 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **LRAL** | **Lakeview Retre** | **102.74** | **59** | | IAMs_20 | IAMs_20 | 02 17 33.8 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **250A** | **Grady** | **103.14** | **60** | | IAMs_20 | IAMs_20 | 02 22 18.5 | | | |
| | comp=Z,866nm,20.0s | | | | | | | | | |
| **T47A** | **Sharon Grove** | **103.40** | **55** | | IAMs_20 | IAMs_20 | 02 22 04.9 | | | |
| | comp=Z,922nm,20.0s | | | | | | | | | |
| **COWI** | **Conover** | **103.49** | **46** | | IAMs_20 | IAMs_20 | 02 20 30.3 | | | |
| | comp=Z,931nm,20.0s | | | | | | | | | |
| **HQIL** | **Hanson Quary C** | **103.67** | **50** | | IAMs_20 | IAMs_20 | 02 16 20.8 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **L44A** | **Lake County Fo** | **103.70** | **50** | | IAMs_20 | IAMs_20 | 02 19 11.3 | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **L44A** | **Lake County Fo** | **103.70** | **50** | | P | **Pdif** | **01 38 55.8** | **-1.4** | | |
| | baz=260 | | | | | | | | | |
| **LVC** | **Limon Verde** | **103.78** | **119** | | IAMs_20 | IAMs_20 | 02 15 15.4 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **P46A** | **Rosedale** | **103.78** | **52** | | IAMs_20 | IAMs_20 | 02 24 38.9 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **SFIN** | **Lafayette** | **104.00** | **52** | | IAMs_20 | IAMs_20 | 02 21 16.5 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **F42A** | **Maple Grove Fa** | **104.12** | **46** | | IAMs_20 | IAMs_20 | 02 20 52.1 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **104.25** | **54** | | IAMs_20 | IAMs_20 | 02 20 36.4 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **553A** | **Crawfordville** | **104.34** | **62** | | IAMs_20 | IAMs_20 | 02 23 31.6 | | | |
| | comp=Z,929nm,20.0s | | | | | | | | | |
| **U49A** | **Red Boiling Sp** | **104.36** | **56** | | IAMs_20 | IAMs_20 | 02 19 02.5 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **152A** | **Waverly Hall** | **104.55** | **60** | | IAMs_20 | IAMs_20 | 02 22 46.9 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **GO01** | **Chusmiza** | **104.73** | **116** | | IAMs_20 | IAMs_20 | 02 22 21.0 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **X51A** | **Calhoun** | **104.77** | **58** | | IAMs_20 | IAMs_20 | 02 18 10.5 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **L46A** | **Eue Claire** | **104.86** | **50** | | IAMs_20 | IAMs_20 | 02 18 51.0 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **105.05** | **322** | | Pdiff | **Pdif** | **01 39 01.7** | **-1.2** | | |
| | comp=Z,0.5nm,0.3s,baz=146,slow=2.8,SNR=1.8 | | | | | | | | | |
| **N47A** | **Urbana** | **105.13** | **51** | | IAMs_20 | IAMs_20 | 02 19 58.4 | | | |
| | comp=Z,988nm,22.0s | | | | | | | | | |
| **R49A** | **Shelbyville** | **105.13** | **54** | | IAMs_20 | IAMs_20 | 02 19 36.7 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **T50A** | **Nancy** | **105.19** | **55** | | IAMs_20 | IAMs_20 | 02 18 54.4 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **TIGA** | **Tifton** | **105.28** | **61** | | IAMs_20 | IAMs_20 | 02 24 00.3 | | | |
| | comp=Z,761nm,20.0s | | | | | | | | | |
| **CAMR** | **Camarioca** | **105.67** | **70** | | IAMs_20 | IAMs_20 | 02 18 18.8 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **105.67** | **53** | | P | **PKiKP** | **01 43 17.0** | **-2.1** | | |
| | baz=262 | | | | | | | | | |
| **GOGA** | **Godfrey** | **105.72** | **59** | | IAMs_20 | IAMs_20 | 02 20 28.7 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **105.75** | **315** | | Pdiff | **Pdif** | **01 39 06.2** | **0.0** | | |
| | comp=Z,0.3nm,0.7s,baz=140,slow=4.7,SNR=1.8 | | | | | | | | | |
| MKAR | | | | | PKiKP | **PKiKP** | **01 43 20.2** | **+1.1** | | |
| | comp=Z,0.6nm,0.8s,baz=172,slow=0.7,SNR=1.9 | | | | | | | | | |
| **R50A** | **Paris** | **105.79** | **54** | | IAMs_20 | IAMs_20 | 02 19 58.1 | | | |
| | comp=Z,947nm,22.0s | | | | | | | | | |
| **656A** | **Willston** | **105.81** | **64** | | IAMs_20 | IAMs_20 | 02 24 58.2 | | | |
| | comp=Z,754nm,20.0s | | | | | | | | | |
| **154A** | **Montrose** | **105.88** | **60** | | IAMs_20 | IAMs_20 | 02 23 37.2 | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **MAKZ** | **Makanchi** | **105.97** | **315** | | IAMs_20 | IAMs_20 | 02 23 08.4 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **TZTN** | **Tazewell** | **106.14** | **56** | | IAMs_20 | IAMs_20 | 02 20 18.6 | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **S51A** | **Beattyville** | **106.27** | **55** | | IAMs_20 | IAMs_20 | 02 22 01.8 | | | |
| | comp=Z,971nm,21.0s | | | | | | | | | |
| **N49A** | **Columbus Grove** | **106.27** | **51** | | IAMs_20 | IAMs_20 | 02 23 37.6 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **255A** | **Hazlehurst** | **106.30** | **61** | | IAMs_20 | IAMs_20 | 02 22 44.2 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **V53A** | **Saluda** | **106.60** | **57** | | IAMs_20 | IAMs_20 | 02 20 01.9 | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **AAM** | **Ann Arbor** | **106.84** | **50** | | IAMs_20 | IAMs_20 | 02 20 23.5 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **M50A** | **Fremont** | **107.19** | **51** | | IAMs_20 | IAMs_20 | 02

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ABKAR | **Akbulak array** | **120.63** | **318** | PKPdf | **PKPdf** | **01 43 46.3** | **-1.0** | | |
| VAO | **Valinhos** | **120.99** | **130** | IAMs_20 | IAMs_20 | 02 33 47.8 | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| SABA | **Saba** | **121.51** | **79** | IAMs_20 | IAMs_20 | 02 39 25.1 | | | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| KIRV | **Kirov** | **123.63** | **331** | *c* iPKIKP | **PKiKP** | **01 43 56.3** | **+3.3** | | |
| KEV | **Kevo** | **123.77** | **348** | IAMs_20 | IAMs_20 | 02 37 39.8 | | | |
| | comp=Z,680nm,20.0s | | | | | | | | |
| ARCES | **ARCESS Array B** | **124.25** | **349** | PKP | **PKPdf** | **01 43 52.6** | **-1.1** | | |
| | comp=Z,4.1nm,1.0s,baz=10,slow=5.5,SNR=2.5 | | | | | | | | |
| BDFB | **Brasília** | **124.41** | **123** | PKP | **PKiKP** | **01 43 56.4** | **+0.4** | | |
| | comp=Z,0.8nm,0.3s,baz=32,slow=27,SNR=2.0 | | | | | | | | |
| MAL2 | **Monte Alegre,** | **125.19** | **105** | IAMs_20 | IAMs_20 | 02 29 45.1 | | | |
| | comp=Z,772nm,21.0s | | | | | | | | |
| BELG | **Belogornoye** | **127.17** | **324** | *i* PKIKP | **PKiKP** | **01 44 04.1** | **+3.9** | | |
| VALR | **Valaam** | **129.43** | **340** | *i* PKIKP | **PKiKP** | **01 44 09.2** | **+4.8** | | |
| MAK | **Makhachkala** | **130.52** | **313** | *eP* | **Pdif** | **01 40 53.1** | **-3.3** | | |
| MAK | | | | *e* | | 01 44 04.1 | | | |
| MAK | | | | *e* | | 01 51 10.2 | | | |
| MAK | | | | *e*SSS | SSS | 02 08 34.2 | | | |
| MAK | | | | pmax | pmax | | | | |
| | comp=Z,223nm,1.1s | | | | | | | | |
| MOS | **Moscow** | **130.59** | **332** | *i* PKIKP | **PKiKP** | **01 44 11.7** | **+4.7** | | |
| MOS | | | | *e* | | 01 46 33.2 | | | |
| MOS | | | | pmax | pmax | | | | |
| | comp=Z,55nm,1.6s | | | | | | | | |
| AKT | **Akhty** | **130.77** | **311** | *i* PKIKP | **PKiKP** | **01 44 12.5** | **+4.5** | | |
| AKT | | | | *i* | | 01 46 28.3 | | | |
| AKT | | | | pmax | pmax | | | | |
| | comp=Z,36nm,1.2s | | | | | | | | |
| FINES | **FINESS Array B** | **130.83** | **343** | PKP | **PKPdf** | **01 44 03.8** | **-2.6** | | |
| | comp=Z,1.5nm,0.9s,baz=46,slow=5.5,SNR=5.6 | | | | | | | | |
| VRH | **Novokhopyorsk** | **130.98** | **325** | *e*PKIKP | **PKiKP** | **01 44 10.0** | **+2.1** | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| OBN | **Obninsk** | **131.45** | **332** | *i* PKIKP | **PKiKP** | **01 44 13.6** | **+4.9** | | |
| OBN | | | | *e* | | 01 46 31.8 | | | |
| OBN | | | | *e*PPP | PPP | 01 49 19.9 | | | |
| OBN | | | | *e*SS | SS | 02 04 06.4 | +7.7 | | |
| OBN | | | | *e*SSS | SSS | 02 08 57.9 | | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,58nm,1.7s | | | | | | | | |
| LPSR | **Galich'ya Gora** | **131.75** | **328** | *e*PKIKP | **PKiKP** | **01 44 13.2** | **+3.8** | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.4s | | | | | | | | |
| VORR | **Voronezh** | **132.10** | **327** | *e*PKIKP | **PKiKP** | **01 44 14.8** | **+4.7** | | |
| VORR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| VSR | **Storozhevoye** | **132.37** | **326** | *e*PKIKP | **PKiKP** | **01 44 15.7** | **+5.0** | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| GNI | **Garni** | **133.31** | **310** | *c* iPKIKP | **PKiKP** | **01 44 19.1** | **+5.9** | | |
| GNI | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.7s | | | | | | | | |
| KBZ | **Khabaz** | **133.45** | **315** | PKP | **PKPdf** | **01 44 11.4** | **-0.5** | | |
| | comp=Z,0.9nm,0.8s,baz=49,slow=3.7,SNR=1.8 | | | | | | | | |
| KBZ | **Khabaz** | **133.45** | **315** | *c* iPKIKP | **PKiKP** | **01 44 18.7** | **+5.6** | | |
| KIV | **Kislovodsk** | **133.50** | **316** | *i* PKIKP | **PKiKP** | **01 44 17.8** | **+4.4** | | |
| KIV | | | | *e* | | 01 46 44.1 | | | |
| KIV | | | | *e*SS | SS | 02 04 30.4 | +5.4 | | |
| KIV | | | | *e*SSS | SSS | 02 09 25.7 | | | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| SHA1 | **Shidzhatmaz** | **133.60** | **315** | *c* iPKIKP | **PKiKP** | **01 44 18.8** | **+5.0** | | |
| ERBR | **Yeremizino-Bor** | **134.23** | **319** | *i* PKIKP | **PKiKP** | **01 44 20.4** | **+5.7** | | |
| ERBR | | | | pmax | pmax | | | | |
| | comp=Z,38nm,1.3s | | | | | | | | |
| ERBR | | | | MLR | MLR | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| NOA | **NORSAR Array B** | **134.46** | **351** | PKP | **PKPdf** | **01 44 11.6** | **-1.8** | | |
| | comp=Z,1.3nm,1.1s,baz=12,slow=2.9,SNR=3.0 | | | | | | | | |
| LABN | **Labinsk** | **134.53** | **317** | *i* PKIKP | **PKiKP** | **01 44 22.3** | **+7.0** | | |
| LABN | | | | pmax | pmax | | | | |
| | comp=Z,52nm,0.5s | | | | | | | | |
| HFS | **Hagfors** | **134.91** | **349** | PKP | **PKPdf** | **01 44 13.1** | **-1.0** | | |
| | comp=Z,3.3nm,1.0s,baz=319,slow=4.2,SNR=3.9 | | | | | | | | |
| RAYN | **Ar Rayn** | **135.10** | **287** | | **PKPdf** | **01 44 13.5** | **-2.2** | | |
| RAYN | **Ar Rayn** | **135.10** | **287** | PKIKP | **PKPdf** | **01 44 13.5** | **-2.2** | | |
| BCA | **Borcka** | **135.15** | **313** | ⇑P | **PKPdf** | **01 44 11.3** | **-3.9** | | |
| MNK | **Minsk** | **135.58** | **336** | *i* PKIKP | **PKiKP** | **01 44 21.0** | **+3.9** | | |
| MNK | | | | *i* | | 01 47 01.5 | | | |
| MNK | | | | *i* PPP | PPP | 01 49 52.8 | | | |
| MNK | | | | *i* PS | **PS** | **01 57 07.7** | **-8.5** | | |
| MNK | | | | *i* SS | SS | 02 04 54.9 | +6.4 | | |
| MNK | | | | *i* SSS | SSS | 02 09 56.5 | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=N,5.0nm,0.8s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=E,6.0nm,1.0s | | | | | | | | |
| MNK | | | | pmax | pmax | | | | |
| | comp=E,6.0nm,0.9s | | | | | | | | |
| SOC | **Sochi** | **135.63** | **316** | *e*PKIKP | **PKiKP** | **01 44 17.8** | **+0.2** | | |
| SOC | | | | *e* | | 01 46 51.4 | | | |
| SOC | | | | *e*PPP | PPP | 01 49 54.9 | | | |
| SOC | | | | *e*PS | **PS** | **01 57 14.8** | **-2.4** | | |
| SOC | | | | pmax | pmax | | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| SOC | | | | MLR | MLR | | | | |
| | comp=Z,393nm,20.0s | | | | | | | | |
| GURO | **Guroymak-BITLI** | **135.79** | **309** | PKPdf | **PKPdf** | **01 44 15.5** | **-1.2** | | |
| PABE | **Paberze** | **136.26** | **339** | IAMs_20 | IAMs_20 | 02 45 27.0 | | | |
| | comp=Z,790nm,21.0s | | | | | | | | |
| KIBK | **Kibwezi** | **136.42** | **248** | IAMs_20 | IAMs_20 | 02 41 19.6 | | | |
| | comp=Z,790nm,20.0s | | | | | | | | |
| ATD | **Arta Tunnel** | **136.43** | **270** | IAMs_20 | IAMs_20 | 02 39 27.0 | | | |
| | comp=Z,710nm,20.0s | | | | | | | | |
| ANN | **Anapa** | **136.57** | **319** | *i* PKIKP | **PKiKP** | **01 44 24.0** | **+4.6** | | |
| ANN | | | | *e* | | 01 47 04.4 | | | |
| ANN | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.1s | | | | | | | | |
| ANN | | | | MLR | MLR | | | | |
| | comp=N,680nm,18.0s | | | | | | | | |
| ANN | | | | MLR | MLR | | | | |
| | comp=Z,467nm,17.0s | | | | | | | | |
| ANN | | | | MLR | MLR | | | | |
| | comp=E,666nm,21.0s | | | | | | | | |
| KMBO | **Kilima Mbogo** | **137.67** | **249** | IAMs_20 | IAMs_20 | 02 41 41.9 | | | |
| | comp=Z,640nm,19.0s | | | | | | | | |
| KMBO | **Kilima Mbogo** | **137.67** | **249** | PKP | **PKPdf** | **01 44 19.3** | **-1.7** | | |
| | comp=Z,0.6nm,0.3s,baz=43,slow=8.6,SNR=4.3 | | | | | | | | |
| AK03 | **Malin Array Si** | **137.68** | **331** | PKP | **PKPdf** | **01 44 18.6** | **-1.0** | | |
| AKASG | **Malin Array Be** | **137.69** | **331** | PKP | **PKPdf** | **01 44 18.6** | **-0.9** | | |
| | comp=Z,1.4nm,0.8s,baz=47,slow=2.7,SNR=2.7 | | | | | | | | |
| AKBB | **Malin Array Si** | **137.69** | **331** | PKP | **PKPdf** | **01 44 18.6** | **-1.0** | | |
| AK23 | **Malin Array Si** | **137.70** | **331** | PKP | **PKPdf** | **01 44 18.6** | **-1.0** | | |
| AK01 | **Malin Array Si** | **137.70** | **331** | PKP | **PKPdf** | **01 44 18.6** | **-1.0** | | |
| KIEV | **Kiev** | **137.70** | **331** | PKPdf | **PKPdf** | **01 44 17.0** | **-2.6** | | |
| KIEV | **Kiev** | **137.70** | **331** | IAMs_20 | IAMs_20 | 02 46 05.0 | | | |
| | comp=Z,747nm,20.0s | | | | | | | | |
| KIEV | **Kiev** | **137.70** | **331** | ⇓P | **PKPdf** | **01 44 19.4** | **-0.2** | | |
| KIEV | **Kiev** | **137.70** | **331** | PKIKP | **PKPdf** | **01 44 17.0** | **-2.6** | | |
| KIEV | | | | MLR | MLR | | | | |
| | comp=Z,700nm,20.0s | | | | | | | | |
| KIEV | **Kiev** | **137.70** | **331** | PKP | **PKPdf** | **01 44 18.6** | **-1.0** | | |
| SUW | **Suwalki** | **137.73** | **338** | *e*PKP | **PKPdf** | **01 44 17.9** | **-1.6** | | |
| SUW | **Suwalki** | **137.73** | **338** | IAMs_20 | IAMs_20 | 02 45 23.8 | | | |
| | comp=Z,723nm,22.0s | | | | | | | | |
| ARPR | **Arapgir-MALATY** | **138.33** | **311** | PKPdf | **PKPdf** | **01 44 19.4** | **-1.9** | | |
| ARPR | | | | IAMs_20 | IAMs_20 | 02 47 25.1 | | | |
| | comp=Z,576nm,21.0s | | | | | | | | |
| SIM | **Simferopol'** | **138.54** | **321** | *e*PKIKP | **PKiKP** | **01 44 28.7** | **+5.2** | | |
| SIM | | | | pmax | pmax | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| RNPP8 | **Varash** | **138.75** | **334** | PKP | **PKPdf** | **01 44 20.5** | **-1.0** | | |
| RCBR | **Riachuelo** | **139.71** | **121** | IAMs_20 | IAMs_20 | 02 54 22.2 | | | |
| | comp=Z,610nm,18.0s | | | | | | | | |
| FURI | **Furi** | **139.82** | **264** | IAMs_20 | IAMs_20 | 02 37 39.8 | | | |
| | comp=Z,503nm,21.0s | | | | | | | | |
| LVV | **L'vov** | **140.65** | **334** | *e*PKHKP | PKPpre | 01 44 20.9 | | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=N,800nm,21.0s | | | | | | | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=E,200nm,21.0s | | | | | | | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=Z,900nm,21.0s | | | | | | | | |
| EKA | **Eskdalemuir Ar** | **141.15** | **1** | PKP | **PKPdf** | **01 44 25.1** | **-0.7** | | |
| | comp=Z,1.3nm,0.8s,baz=325,slow=6.9,SNR=1.8 | | | | | | | | |
| LODK | **Lodwar** | **141.24** | **255** | IAMs_20 | IAMs_20 | 02 41 04.8 | | | |
| | comp=Z,698nm,20.0s | | | | | | | | |
| KWP | **Kalwaria Pacla** | **141.35** | **334** | *e*PKP | **PKPdf** | **01 44 22.4** | **-4.0** | | |
| BRTR | **Keskin Array B** | **141.40** | **314** | PKP | **PKPdf** | **01 44 25.4** | **-1.5** | | |
| | comp=Z,0.6nm,0.9s,baz=358,slow=2.7,SNR=3.4 | | | | | | | | |
| BRTR | | | | PP | **PP** | **01 47 29.4** | **-0.2** | | |
| | comp=Z,0.7nm,0.9s,baz=72,slow=4.7,SNR=2.5 | | | | | | | | |
| BUR01 | **Bucovina Ar. S** | **141.73** | **330** | ⇓P | **PKPdf** | **01 44 28.5** | **+1.3** | | |
| ANTO | **Ankara** | **141.91** | **315** | PKPdf | **PKPdf** | **01 44 26.8** | **-0.9** | | |
| ANTO | **Ankara** | **141.91** | **315** | IAMs_20 | IAMs_20 | 02 51 16.6 | | | |
| | comp=Z,508nm,21.0s | | | | | | | | |
| ANTO | **Ankara** | **141.91** | **315** | ⇓P | **PKiKP** | **01 44 33.8** | **+3.1** | | |
| ANTO | **Ankara** | **141.91** | **315** | PKIKP | **PKPdf** | **01 44 26.8** | **-0.9** | | |
| OJC | **Ojcow** | **142.03** | **337** | *e*PKP | **PKiKP** | **01 44 32.0** | **+1.6** | | |
| KOLS | **Kolonicke sedl** | **142.07** | **334** | *e*PKIKP | **PKiKP** | **01 44 34.3** | **+3.7** | | |
| KOLS | **Kolonicke sedl** | **142.07** | **334** | *e*PKP | **PKiKP** | **01 44 34.3** | **+3.7** | | |
| TURR | **Turia** | **142.42** | **328** | ⇑P | **PKiKP** | **01 44 31.1** | **-0.3** | | |
| NIE | **Niedzica** | **142.49** | **336** | *e*PKP | **PKiKP** | **01 44 32.2** | **+0.7** | | |
| OZUR | | **142.51** | **328** | ⇑P | **PKiKP** | **01 44 32.3** | **+0.7** | | |
| ARCR | **ARCALIA** | **142.52** | **330** | ⇓P | **PKiKP** | **01 44 33.8** | **+2.2** | | |
| MMAI | **Mount Meron Ar** | **142.58** | **303** | PKP | **PKPdf** | **01 44 27.8** | **-1.4** | | |
| | comp=Z,3.6nm,0.7s,baz=76,slow=6.1,SNR=2.3 | | | | | | | | |
| KSP | **Ksiaz** | **142.70** | **341** | *e*PKP | **PKPdf** | **01 44 28.1** | **-0.6** | | |
| DOPR | **Dopca** | **142.79** | **328** | ⇑P | **PKiKP** | **01 44 34.2** | **+2.0** | | |
| MLR | **Muntele Rosu** | **142.83** | **327** | ⇓P | **PKiKP** | **01 44 34.6** | **+2.2** | | |
| GHAJ | **Ghor Haditha** | **142.92** | **300** | IAMs_20 | IAMs_20 | 02 56 38.1 | | | |
| | comp=Z,498nm,20.0s | | | | | | | | |
| OKC | **Ostrava-Krasne** | **142.94** | **338** | AMS | AMS | 02 50 40.0 | | | |
| | comp=Z,600nm,21.6s | | | | | | | | |
| OSTC | **Ostas** | **142.97** | **341** | *e*PKP | **PKiKP** | **01 44 32.8** | **+0.4** | | |
| OSTC | | | | AMS | AMS | 02 54 00.0 | | | |
| | comp=Z,500nm,20.6s | | | | | | | | |
| OSTC | **Ostas** | **142.97** | **341** | *e*PKIKP | **PKiKP** | **01 44 32.8** | **+0.4** | | |
| OSTC | | | | MLR | MLR | | | | |
| | comp=Z,500nm,20.6s | | | | | | | | |
| CHVC | **Chvalec** | **143.00** | **341** | AMS | AMS | 02 57 50.0 | | | |
| | comp=Z,500nm,17.5s | | | | | | | | |
| UPC | **Upice** | **143.08** | **341** | AMS | AMS | 02 48 10.0 | | | |
| | comp=Z,600nm,21.0s | | | | | | | | |
| DPC | **Dobruska-Polom** | **143.12** | **341** | AMS | AMS | 02 55 00.0 | | | |
| | comp=Z,700nm,18.4s | | | | | | | | |
| CJR | **Cluj-Napoca** | **143.15** | **330** | ⇑P | **PKiKP** | **01 44 35.4** | **+2.5** | | |
| MORC | **Moravsky Berou** | **143.20** | **339** | *e*PKP | **PKiKP** | **01 44 33.3** | **+0.4** | | |
| CLL | **Collm** | **143.22** | **344** | PKPdf | **PKPdf** | **01 44 30.1** | **+0.5** | | |
| CLL | | | | IAMs_20 | IAMs_20 | 02 50 49.0 | | | |
| | comp=Z,737nm,21.0s | | | | | | | | |
| CLL | **Collm** | **143.22** | **344** | PKIKP | **PKPdf** | **01 44 30.1** | **+0.5** | | |
| CLL | | | | MLR | MLR | | | | |
| | comp=Z,700nm,21.0s | | | | | | | | |
| BRG | **Berggiesshubel** | **143.36** | **343** | *e*PKP | **PKiKP** | **01 44 35.1** | **+1.9** | | |
| BRG | | | | Amp | | 01 44 38.8 | | | |
| | comp=Z,27nm,1.3s | | | | | | | | |
| BRG | **Berggiesshubel** | **143.36** | **343** | *e*PKIKP | **PKiKP** | **01 44 35.0** | **+1.9** | | |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,27nm,1.3s | | | | | | | | |
| BRG | **Berggiesshubel** | **143.36** | **343** | *e*PKPbc | **PKPdf** | **01 44 29.3** | **-0.5** | | |
| | baz=22,slow=2.4 | | | | | | | | |
| PVCC | **Panska Ves** | **143.50** | **342** | AMS | AMS | 02 48 00.0 | | | |
| | comp=Z,500nm,18.9s | | | | | | | | |
| DRGR | | **143.50** | **331** | ⇓P | **PKiKP** | **01 44 32.9** | **-0.7** | | |
| CSS | **Mathiatis** | **143.57** | **307** | IAMs_20 | IAMs_20 | 02 52 31.9 | | | |
| | comp=Z,672nm,22.0s | | | | | | | | |
| ARR | **Arges** | **143.59** | **328** | ⇓P | **PKPdf** | **01 44 30.8** | **+0.3** | | |
| HSKC | **Hora Svate Kat** | **143.75** | **344** | AMS | AMS | 02 55 20.0 | | | |
| | comp=Z,600nm,19.2s | | | | | | | | |
| VYHS | **Vyhne** | **143.80** | **337** | *e*PKIKP | **PKiKP** | **01 44 35.4** | **+1.2** | | |
| VYHS | **Vyhne** | **143.80** | **337** | *e*PKP | **PKiKP** | **01 44 35.4** | **+1.2** | | |
| PSZ | **Piszkesteto** | **143.85** | **335** | PKPdf | **PKPdf** | **01 44 32.1** | **+1.2** | | |
| PSZ | **Piszkesteto** | **143.85** | **335** | ⇓P | **PKiKP** | **01 44 34.7** | **+0.3** | | |
| PSZ | **Piszkesteto** | **143.85** | **335** | PKIKP | **PKPdf** | **01 44 32.1** | **+1.2** | | |
| PSZ | | | | MLR | MLR | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| VRAC | **Vranov** | **143.93** | **339** | *e*PKP | **PKiKP** | **01 44 35.5** | **+1.1** | | |
| VRAC | **Vranov** | **143.93** | **339** | ⇑P | **PKiKP** | **01 44 35.2** | **+0.8** | | |
| JAVC | **Velka Javorina** | **143.93** | **338** | *e*PKP | **PKiKP** | **01 44 35.8** | **+1.3** | | |
| PRA | **Prague** | **143.94** | **342** | AMS | AMS | 02 47 30.0 | | | |
| | comp=Z,800nm,20.5s | | | | | | | | |
| LOT | **Lotru** | **143.97** | **329** | ⇑P | **PKiKP** | **01 44 33.4** | **-1.4** | | |
| GOPC | **GO Pecny, Ondr** | **143.98** | **342** | AMS | AMS | 02 47 50.0 | | | |
| | comp=Z,800nm,23.2s | | | | | | | | |
| PRU | **Pruhonice** | **143.98** | **342** | AMS | AMS | 02 47 20.0 | | | |
| | comp=Z,900nm,21.4s | | | | | | | | |
| DEV | **Deva** | **144.08** | **330** | ⇓P | **PKiKP** | **01 44 36.2** | **+1.4** | | |
| TANN | **Tannenbergstha** | **144.18** | **344** | *e*PKPbc | PKPbc | 01 44 30.1 | +0.7 | | |
| | baz=22,slow=2.4 | | | | | | | | |
| MOX | **Moxa** | **144.18** | **345** | *e*L | L | 02 49 00.3 | | | |
| | comp=Z,786nm,21.7s | | | | | | | | |
| KRUC | **Moravsky** | **144.21** | **339** | *e*PKP | **PKiKP** | **01 44 35.3** | **+0.3** | | |
| SZH | **Strazhitsa** | **144.28** | **324** | P | **PKPdf** | **01 44 30.9** | **-0.8** | | |
| SMOL | **Smolenice** | **144.31** | **338** | *e*PKIKP | **PKiKP** | **01 44 38.5** | **+3.3** | | |
| SIRR | **Siria** | **144.38** | **332** | ⇓P | **PKPdf** | **01 44 31.2** | **-0.6** | | |
| GZR | **Gura Zlata** | **144.50** | **330** | ⇓P | PKPbc | 01 44 30.8 | +0.1 | | |
| SURR | **Surduc** | **144.54** | **331** | ⇓P | PKPbc | 01 44 31.1 | +0.4 | | |
| ELND | **Elena** | **144.55** | **324** | ⇑P | **PKPdf** | **01 44 32.5** | **+0.3** | | |
| SRO | **Srobarova** | **144.56** | **336** | *e*PKIKP | **PKiKP** | **01 44 38.4** | **+2.7** | | |
| SRO | **Srobarova** | **144.56** | **336** | *e*PKP | **PKiKP** | **01 44 38.4** | **+2.7** | | |
| ZVC | **Zvikov** | **144.58** | **342** | *e*PKP | **PKiKP** | **01 44 36.9** | **+1.2** | | |
| ZST | **Bratislava** | **144.69** | **338** | *e*PKIKP | **PKiKP** | **01 44 39.3** | **+3.3** | | |
| ZST | **Bratislava** | **144.69** | **338** | *e*PKP | **PKiKP** | **01 44 39.3** | **+3.3** | | |
| BAND | **Balkesir-Ban** | **144.75** | **319** | ⇓P | **PKiKP** | **01 44 39.2** | **+2.9** | | |
| ROTZ | **Rotzenmuhle** | **144.84** | **344** | *e*PKPbc | **PKPab** | **01 44 31.2** | **-0.2** | | |
| | baz=22,slow=2.4 | | | | | | | | |
| BZS | **Buzias** | **144.88** | **331** | ⇑P | **PKiKP** | **01 44 36.0** | **-0.4** | | |
| KHC | **Kasperske Hory** | **145.03** | **342** | *e*PKP | **PKPdf** | **01 44 32.9** | **0.0** | | |
| KHC | | | | *ep*PKP | **pPKPdf** | **01 44 38.5** | **+0.5** | | |
| KHC | | | | AMS | AMS | 02 50 50.0 | | | |
| | comp=Z,900nm,22.2s | | | | | | | | |
| KHC | **Kasperske Hory** | **145.03** | **342** | *e*PKIKP | **PKPdf** | **01 44 32.9** | **0.0** | | |
| KHC | | | | *e* | | 01 44 38.5 | | | |
| KHC | | | | MLR | MLR | | | | |
| | comp=Z,900nm,22.2s | | | | | | | | |
| HERR | **Herculane** | **145.04** | **329** | ⇓P | **PKPab** | **01 44 32.6** | **+0.2** | | |
| CKRC | **Cesky Krumlov** | **145.09** | **341** | *e*PKP | **PKPbc** | **01 44 31.8** | **-0.6** | | |
| CKRC | | | | *ex* | x | 01 44 38.3 | | | |
| CKRC | | | | *ex* | x | 02 06 31.4 | | | |
| CKRC | | | | AMS | AMS | 02 52 20.0 | | | |
| | comp=Z,600nm,20.1s | | | | | | | | |
| CKRC | **Cesky Krumlov** | **145.09** | **341** | *e*PKP2 | **PKPbc** | **01 44 31.8** | **-0.6** | | |
| CKRC | | | | *e* | | 01 44 38.3 | | | |
| CKRC | | | | MLR | MLR | | | | |
| | comp=Z,600nm,20.1s | | | | | | | | |
| DJES | **Djerdap** | **145.15** | **329** | ⇓P | **PKiKP** | **01 44 38.3** | **+1.3** | | |
| GRA1 | **Grafenberg Arr** | **145.16** | **345** | IAMs_20 | IAMs_20 | 02 50 51.2 | | | |
| | comp=Z,557nm,20.0s | | | | | | | | |
| GRF | **Grafenberg Arr** | **145.16** | **345** | *e*PKPbc | **PKPbc** | **01 44 32.4** | **-0.1** | | |
| | baz=22,slow=2.4 | | | | | | | | |
| GRF | | | | *e*L | L | 02 50 51.0 | | | |
| | comp=Z,558nm,21.4s | | | | | | | | |
| GRFO | **Grafenberg** | **145.16** | **345** | IAMs_20 | IAMs_20 | 02 50 52.2 | | | |
| | comp=Z,564nm,20.0s | | | | | | | | |
| BEBN | **Eben Emael** | **145.18** | **352** | *d*PKP | **PKiKP** | **01 44 36.2** | **-0.7** | | |
| BEBN | | | | *d*PKiKP | sPKPab | 01 44 39.6 | +0.3 | | |
| WET | **Wettzell** | **145.22** | **343** | *e*PKPbc | **PKPbc** | **01 44 32.5** | **-0.3** | | |
| | baz=22,slow=2.4 | | | | | | | | |
| GEC2 | **GERESS Array S** | **145.25** | **342** | *e*PKPbc | **PKPbc** | **01 44 32.3** | **-0.7** | | |
| | baz=22,slow=2.4 | | | | | | | | |
| GERES | **GERESS Array B** | **145.25** | **342** | PKPbc | **PKPbc** | **01 44 32.2** | **-0.7** | | |
| | comp=Z,2.2nm,0.8s,baz=29,slow=3.0,SNR=14 | | | | | | | | |
| MEM | **Membach** | **145.31** | **351** | *d*PKiKP | **PKiKP** | **01 44 38.1** | **+0.9** | | |
| BTNL | **Ternell** | **145.31** | **351** | *d*PKP | **PKPbc** | **01 44 32.8** | **-0.3** | | |
| BTNL | | | | *d*PKiKP | **PKiKP** | **01 44 37.5** | **+0.3** | | |
| CONA | **Conrad Observa** | **145.36** | **339** | *e*PKP | **PKPdf** | **01 44 33.7** | **+0.1** | | |
| ELL | **Elmali** | **145.37** | **312** | | **PKPbc** | **01 44 32.6** | **-1.2** | | |
| ELL | **Elmali** | **145.37** | **312** | PKP2 | **PKPbc** | **01 44 32.6** | **-1.2** | | |
| KULA | **Kula-Manisa** | **145.38** | **316** | P | **PKPbc** | **01 44 32.6** | **-1.1** | | |
| BSTI | **Sart Tilman** | **145.40** | **352** | *d*PKP | **PKPdf** | **01 44 33.4** | **0.0** | | |
| RONA | **Rosalia, Austr** | **145.41** | **338** | *e*PKP | **PKPbc** | **01 44 33.3** | **-0.1** | | |
| | comp=Z,114nm,1.3s | | | | | | | | |
| MPEP | **Malo Peshtene** | **145.44** | **326** | P | **PKPab** | **01 44 34.3** | **+0.4** | | |
| MDVR | **Moldovita** | **145.46** | **330** | ⇓P | **PKiKP** | **01 44 36.7** | **-1.1** | | |
| BHOU | **Houvegnez** | **145.56** | **351** | *d*PKP | **PKPab** | **01 44 34.0** | **-0.1** | | |
| BHOU | | | | *d*PKiKP | pPKPab | 01 44 39.7 | +0.6 | | |
| BCLA | **Clavier** | **145.59** | **352** | *d*PKP | **PKPdf** | **01 44 33.6** | **-0.2** | | |
| BCLA | | | | *d*PKiKP | **pPKPdf** | **01 44 39.2** | **+0.4** | | |
| BGES | **Gesves** | **145.66** | **352** | *d*PKP | **PKPdf** | **01 44 33.9** | **0.0** | | |
| BGES | | | | *d*PKiKP | **pPKPdf** | **01 44 38.8** | **-0.1** | | |
| ALN | **Alexandroupoli** | **145.71** | **321** | P | **PKiKP** | **01 44 40.0** | **+1.7** | | |
| MORH | **Mrgy, Hungar** | **145.73** | **334** | ⇓P | **PKPab** | **01 44 34.7** | **-0.1** | | |
| BMRD | **Maredsous** | **145.78** | **352** | *d*PKP | **PKPdf** | **01 44 33.7** | **-0.3** | | |
| BMRD | | | | *d*PKiKP | **pPKPdf** | **01 44 39.5** | **+0.3** | | |
| RCHB | **Rochefort** | **145.86** | **352** | *d*PcP | **PKPbc** | **01 44 34.7** | **0.0** | | |
| RCHB | | | | *d*PKiKP | **sPKPdf** | **01 44 41.3** | **+0.2** | | |
| MOA | **Molln** | **145.96** | **340** | *i* PKP | **PKPbc** | **01 44 35.0** | **-0.1** | | |
| | comp=Z,70nm,1.2s,SNR=10 | | | | | | | | |
| RZN | **Rozhen** | **145.99** | **323** | P | **PKPdf** | **01 44 35.2** | **+0.3** | | |
| DOU | **Dourbes** | **146.00** | **353** | *d*PKP | **PKiKP** | **01 44 37.6** | **-1.0** | | |
| DOU | | | | *d*PKiKP | pPKPbc | 01 44 40.8 | +0.5 | | |
| FRGS | **Fruska Gora** | **146.06** | **332** | *e*P | **PKiKP** | **01 44 41.6** | **+2.7** | | |
| ARSA | **Arzberg** | **146.06** | **339** | *e*PKP | **PKPbc** | **01 44 35.7** | **+0.2** | | |
| | comp=Z,44nm,1.3s | | | | | | | | |
| EZN | **Ezine** | **146.18** | **319** | P | **PKiKP** | **01 44 41.5** | **+2.2** | | |
| WLF | **Walferdange** | **146.21** | **351** | PKPdf | **PKPdf** | **01 44 35.0** | **+0.2** | | |
| WLF | **Walferdange** | **146.21** | **351** | *d*PKP | **PKPbc** | **01 44 35.8** | **0.0** | | |
| WLF | | | | *d*PKiKP | **sPKPdf** | **01 44 42.2** | **+0.6** | | |
| WLF | **Walferdange** | **146.21** | **351** | PKIKP | **PKPdf** | **01 44 35.0** | **+0.2** | | |
| WLF | | | | MLR | MLR | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| WLF | **Walferdange** | **146.21** | **351** | *e*PKPbc | **PKPbc** | **01 44 36.0** | **+0.1** | | |
| | baz=22,slow=2.4 | | | | | | | | |
| VTS | **Vitosha** | **146.22** | **326** | P | **PKPab** | **01 44 37.3** | **+0.3** | | |
| BOVS | **Bovan** | **146.30** | **328** | ⇓P | **PKPbc** | **01 44 36.5** | **+0.2** | | |
| BIOA | **Bad Ischl, Aus** | **146.30** | **341** | *e*PKP | **PKPbc** | **01 44 36.3** | **0.0** | | |
| | comp=Z,42nm,1.1s,SNR=9.9 | | | | | | | | |
| YER | **Yerkesik** | **146.33** | **314** | P | **PKPdf** | **01 44 35.5** | **0.0** | | |
| STU | **Stuttgart** | **146.49** | **347** | IAMs_20 | IAMs_20 | 02 54 53.5 | | | |
| | comp=Z,620nm,20.0s | | | | | | | | |
| RJOB | **Jochberg** | **146.51** | **342** | *e*PKPbc | **PKPbc** | **01 44 36.6** | **-0.3** | | |
| | baz=22,slow=2.4 | | | | | | | | |
| PRK | **Paraskevi** | **146.54** | **318** | P | **PKiKP** | **01 44 40.1** | **0.0** | | |
| MMB | **Musomishta** | **146.65** | **324** | P | **PKPbc** | **01 44 37.3** | **-0.2** | | |
| TEKS | **Tekeris** | **146.66** | **332** | *eP* | **PKPbc** | **01 44 37.5** | **+0.1** | | |
| NVR | **Nevrokopi** | **146.71** | **323** | P | **PKPbc** | **01 44 37.2** | **-0.5** | | |
| SOKA | **Soboth** | **146.72** | **339** | *e*PKP | **PKPdf** | **01 44 35.7** | **-0.2** | | |
| | comp=Z,73nm,1.3s,SNR=20 | | | | | | | | |
| PERS | **Pernice** | **146.73** | **339** | *e*PKPbc | **PKPbc** | **01 44 37.2** | **-0.4** | | |
| KKB | **Krupnik** | **146.80** | **325** | P | **PKPab** | **01 44 39.0** | **-0.1** | | |
| SIGR | **SIGRI** | **146.83** | **319** | P | **PKiKP** | **01 44 43.5** | **+2.9** | | |
| LESA | **Schwarzleotal** | **146.83** | **342** | *e*PKP | **PKPbc** | **01 44 37.7** | **-0.2** | | |
| | comp=Z,65nm,1.2s | | | | | | | | |
| KBA | **Koelnbreinsper** | **146.94** | **341** | *e*PKP | **PKPbc** | **01 44 37.7** | **-0.6** | | |
| | comp=Z,44nm,1.1s,SNR=9.5 | | | | | | | | |
| KOKK | **Kokkinochori,** | **146.98** | **323** | P | **PKPbc** | **01 44 38.2** | **-0.2** | | |
| SRS | **Serrai** | **147.02** | **323** | P | **PKPab** | **01 44 40.0** | **0.0** | | |
| DAT | **Datca** | **147.02** | **314** | P | **PKPdf** | **01 44 37.1** | **+0.4** | | |
| BODT | **Bodrum** | **147.04** | **314** | P | **PKPbc** | **01 44 38.1** | **-0.6** | | |
| OBKA | **Obir** | **147.04** | **339** | *e*PKP | **PKPbc** | **01 44 38.3** | **-0.2** | | |
| | comp=Z,36nm,1.2s,SNR=10 | | | | | | | | |
| OBKA | **Obir** | **147.04** | **339** | *eP* | **PKi

*IDC **29** 01:38:18.0±1.2,52.18N×171.27W,h0km,mb3.7/10, mbtmp3.7/10,Error ellipse: s-maj=35.0km s-min=29.1km az=140.0*

*AEIC **29** 01:38:22.6±2.5,51.98N±0.10×170.19W±0.1,h27km±8km, Error ellipse: s-maj=16.4km s-min=5.3km az=149.0*

*NEIC **29** 01:38:24.2±2.4,51.9N±0.1×170.9W±0.1,h35km±16km, mb3.6/8,ML3.2(AEIC),Error ellipse: s-maj=19.1km s-min=6.3km az=155.0*

**ISC 29 01:38:23.8±0.9,52.0N±0.1×170.93W±0.06,h42km,n49, σ1s39/53,mb3.6/12,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CLES** | **Cleveland East** | **1.06** | **36** | Pn | **Pn** | **01 38 41.4** | **-0.8** |
| CLES | | | | Sn | **Sn** | **01 38 55.2** | **-0.6** |
| **CLCO** | **Concord Point,** | **1.10** | **42** | | **Pn** | **01 38 41.6** | **-1.1** |
| CLCO | | | | | **Sn** | **01 38 56.6** | **-0.1** |
| **NIKH** | **Nikolski High** | **1.61** | **51** | | **Pn** | **01 38 48.1** | **-1.7** |
| **KOFP** | **Korovin Flat P** | **1.98** | **280** | | **Pn** | **01 38 54.7** | **-0.2** |
| **OKSP** | **Okmok Steeple** | **2.06** | **50** | | **Pn** | **01 38 54.9** | **-1.0** |
| OKSP | | | | | **Sn** | **01 39 20.0** | **-0.3** |
| **OKWE** | **Okmok W'ng Wal** | **2.22** | **46** | | **Pn** | **01 38 58.1** | **-0.1** |
| **OKFG** | **Magazine Ridge** | **2.33** | **51** | | **Pn** | **01 38 59.7** | **+0.1** |
| **MAPS** | **Pakushin South** | **3.04** | **51** | | **Pn** | **01 39 10.2** | **+0.9** |
| MAPS | | | | | **Sn** | **01 39 46.8** | **+2.5** |
| **GSMY** | **Great Sitkin M** | **3.17** | **273** | | **Pn** | **01 39 11.3** | **+0.1** |
| **GSTD** | **Great Sitkin T** | **3.23** | **274** | | **Sn** | **01 39 49.8** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **3.24** | **273** | | **Pn** | **01 39 13.0** | **+0.9** |
| **UNV** | **Unalaska Valle** | **3.27** | **53** | | **Sn** | **01 39 51.4** | **+1.3** |
| **UNV** | **Unalaska Valle** | **3.27** | **53** | Pn | **Pn** | **01 39 12.6** | **+0.1** |
| **AKMO** | **Akutan Morgan** | **3.65** | **52** | | **Pn** | **01 39 18.5** | **+0.8** |
| **LVA** | **Lava Point** | **3.68** | **51** | Pn | **Pn** | **01 39 19.9** | **+1.8** |
| **KIWB** | **Kanaga Island** | **3.86** | **271** | Pn | **Pn** | **01 39 20.6** | **0.0** |
| **CNBA** | **Chernabura Isl** | **7.35** | **63** | Pn | **Pn** | **01 40 06.8** | **-1.7** |
| **CHGN** | **Chignik** | **8.53** | **55** | Pn | **Pn** | **01 40 24.1** | **-0.5** |
| **O14K** | **Tigyukauivet M** | **9.11** | **33** | Pn | **Pn** | **01 40 34.8** | **+2.2** |
| **N15K** | **Kwethluk River** | **10.19** | **32** | Pn | **Pn** | **01 40 50.0** | **+2.6** |
| **O16K** | **Kokwok River B** | **10.50** | **38** | Pn | **Pn** | **01 40 54.1** | **+2.6** |
| **K13K** | **Kusilvak Mount** | **10.55** | **16** | Pn | **Pn** | **01 40 53.9** | **+1.7** |
| **M16K** | **Timber Creek** | **11.21** | **31** | Pn | **Pn** | **01 41 03.0** | **+1.8** |
| **N17K** | **Nushagak Hills** | **11.46** | **36** | Pn | **Pn** | **01 41 06.5** | **+1.8** |
| **K15K** | **Wolf Creek Mou** | **11.52** | **22** | Pn | **Pn** | **01 41 06.3** | **+0.8** |
| **L16K** | **Owhat River** | **11.58** | **28** | Pn | **Pn** | **01 41 06.5** | **+0.2** |
| **KDAK** | **Kodiak Island** | **12.04** | **54** | Pn | **Pn** | **01 41 15.2** | **+2.6** |
| **K17K** | **Iditarod** | **12.71** | **27** | Pn | **Pn** | **01 41 22.9** | **+1.1** |
| **L18K** | **Granite Mounta** | **12.82** | **31** | Pn | **Pn** | **01 41 24.8** | **+1.5** |
| **M19K** | **Big River Lodg** | **13.39** | **36** | Pn | **Pn** | **01 41 32.7** | **+1.7** |
| **L19K** | **White Mountain** | **13.41** | **34** | Pn | **Pn** | **01 41 34.4** | **+3.1** |
| **SCM** | **Sheep Creek Mo** | **16.14** | **43** | Pn | **Pn** | **01 42 08.8** | **+1.4** |
| **J25K** | **Salcha River,** | **18.28** | **36** | P | **Pn** | **01 42 34.2** | **+0.2** |
| **J26L** | **Joseph Creek** | **18.90** | **38** | P | **Pn** | **01 42 42.1** | **+0.6** |
| **F24K** | **Squaw Lake** | **19.23** | **27** | P | **P** | **01 42 44.3** | **+0.2** |
| F24K | | | | IAmb | IAmb | 01 43 00.4 | |
| | comp=Z,4.3nm,1.4s | | | | | | |
| **EGAK** | **Eagle** | **19.95** | **39** | P | **P** | **01 42 52.3** | **+0.4** |
| **I28M** | **Miner Creek** | **20.71** | **37** | P | **P** | **01 43 00.3** | **0.0** |
| I28M | | | | IAmb | IAmb | 01 43 16.7 | |
| | comp=Z,4.3nm,1.3s | | | | | | |
| **K29M** | **Barlow Dome** | **21.06** | **43** | P | **P** | **01 43 05.7** | **+1.5** |
| K29M | | | | IAmb | IAmb | 01 43 20.9 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| **H29M** | **Whitestone** | **21.62** | **36** | P | **P** | **01 43 09.5** | **-0.5** |
| H29M | | | | IAmb | IAmb | 01 43 29.1 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **41.42** | **78** | P | **P** | **01 46 07.7** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=338,slow=12,SNR=1.8 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.13** | **318** | P | **P** | **01 48 37.6** | **-2.5** |
| | comp=Z,0.3nm,0.2s,baz=44,slow=8.6,SNR=4.3 | | | | | | |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.38** | **313** | P | **P** | **01 48 46.8** | **-1.7** |
| | comp=Z,0.2nm,0.4s,baz=34,slow=7.0,SNR=1.9 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **63.46** | **324** | P | **P** | **01 48 47.4** | **-1.5** |
| | comp=Z,1.0nm,0.6s,baz=44,slow=8.6,SNR=5.0 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **67.33** | **359** | P | **P** | **01 49 13.2** | **-0.7** |
| | comp=Z,0.1nm,0.4s,baz=350,slow=5.4,SNR=1.6 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **68.19** | **358** | P | **P** | **01 49 18.0** | **-1.3** |
| | comp=Z,0.4nm,0.4s,baz=38,slow=2.6,SNR=9.1 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **72.58** | **7** | P | **P** | **01 49 45.6** | **-0.5** |
| | comp=Z,0.1nm,0.3s,baz=357,slow=6.2,SNR=1.4 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.77** | **282** | P | **P** | **01 50 05.9** | **+0.6** |
| | comp=Z,1.1nm,0.4s,baz=33,slow=6.9,SNR=1.5 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **86.01** | **230** | P | **P** | **01 50 58.8** | **-0.9** |
| | comp=Z,0.1nm,0.5s,baz=36,slow=5.9,SNR=1.7 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **89.41** | **229** | P | **P** | **01 51 16.6** | **+0.7** |
| | comp=Z,0.6nm,0.5s,baz=25,slow=5.0,SNR=6.1 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |

**NEIC 29 01:42:16.0±0.8,37.36N±0.01×97.99W±0.01,h5km±1km, mb_Lg2.7/91,ML3.0/40,Error ellipse: s-maj=2.4km s-min=2.2km az=179.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.06** | **183** | | Pg | 01 42 18.2 | +0.7 |
| KAN12 | | | | Sg | Sg | 01 42 19.4 | +0.8 |
| **KAN08** | **Anthony NE Sta** | **0.13** | **172** | Pg | Pg | 01 42 19.4 | +0.7 |
| KAN08 | | | | Sg | Sg | 01 42 21.4 | +0.8 |
| KAN08 | | | | IAML | | 01 42 21.9 | |
| | comp=E,4μm,0.1s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.27** | **159** | Pg | Pg | 01 42 21.9 | +0.7 |
| KAN05 | | | | IAML | | 01 42 29.5 | |
| | comp=E,2μm,0.1s | | | | | | |
| **KS21** | **Milan North St** | **0.27** | **105** | Pg | Pg | 01 42 21.9 | +0.5 |
| KS21 | | | | Sg | Sg | 01 42 25.7 | +0.7 |
| **KS21** | **Milan North St** | **0.27** | **105** | IAML | | 01 42 26.5 | |
| | comp=E,3μm,0.1s | | | | | | |
| KS21 | | | | IAML | | 01 42 26.6 | |
| | comp=E,2μm,0.1s | | | | | | |
| **KAN01** | **Argonia South** | **0.28** | **138** | | Pg | 01 42 21.9 | +0.4 |
| KAN01 | | | | Sg | Sg | 01 42 25.9 | +0.8 |
| KAN01 | | | | IAML | | 01 42 26.2 | |
| | comp=E,2μm,0.2s | | | | | | |
| **KAN17** | **Caldwell West** | **0.36** | **150** | Pg | Pg | 01 42 23.6 | +0.6 |
| KAN17 | | | | Sg | Sg | 01 42 28.5 | +0.6 |
| **KAN09** | **Caldwell North** | **0.37** | **127** | Pg | Pg | 01 42 23.8 | +0.5 |
| KAN09 | | | | Sg | Sg | 01 42 29.0 | +0.8 |
| KAN09 | | | | IAML | | 01 42 29.2 | |
| | comp=E,2μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 01 42 29.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| **KAN14** | **Manchester OK** | **0.40** | **176** | | Pg | 01 42 24.1 | +0.3 |
| KAN14 | | | | Sg | Sg | 01 42 30.0 | +0.9 |
| **GC02** | **Grant County #** | **0.52** | **168** | Pg | Pg | 01 42 26.4 | +0.4 |
| **KAN13** | **South Haven SW** | **0.54** | **130** | Pg | Pg | 01 42 26.5 | +0.1 |
| KAN13 | | | | Sg | Sg | 01 42 34.0 | +0.6 |
| KAN13 | | | | IAML | | 01 42 34.3 | |
| | comp=E,1μm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 01 42 34.3 | |
| | comp=N,1μm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.58** | **197** | | Pg | 01 42 27.4 | +0.2 |
| OK032 | | | | Sg | Sg | 01 42 35.7 | +0.9 |
| **CROK** | **Carrier** | **0.85** | **179** | Pg | Pg | 01 42 32.4 | 0.0 |
| CROK | | | | Sg | Sb | 01 42 44.5 | -0.6 |
| CROK | | | | IAML | | 01 42 48.2 | |
| | comp=E,606nm,0.6s | | | | | | |
| **BLOK** | **Blackwell** | **0.86** | **134** | Pg | Pg | 01 42 32.6 | 0.0 |
| BLOK | | | | Sg | Sg | 01 42 44.3 | +0.5 |
| **OK035** | **E0210 Rd and N** | **0.87** | **222** | Pg | Pg | 01 42 32.8 | +0.1 |
| OK035 | | | | Sg | Sg | 01 42 44.6 | +0.8 |
| OK035 | | | | IAML | | 01 42 48.7 | |
| | comp=E,470nm,0.4s | | | | | | |
| OK035 | | | | IAML | | 01 42 52.7 | |
| | comp=E,461nm,0.4s | | | | | | |
| **NOKA** | **Waynoka** | **1.04** | **226** | Pg | Pg | 01 42 35.6 | -0.5 |
| NOKA | | | | Sg | Sb | 01 42 50.2 | -0.4 |
| NOKA | | | | IAML | | 01 42 58.1 | |
| | comp=E,519nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 01 43 04.6 | |
| | comp=N,370nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.06** | **214** | Pg | Pg | 01 42 36.4 | -0.1 |
| OK038 | | | | Sg | Sg | 01 42 50.5 | +0.3 |
| **R32A** | **Long Quarter,** | **1.20** | **332** | | Pg | 01 42 38.7 | -0.4 |
| R32A | | | | Sg | Sg | 01 42 54.3 | -0.4 |
| R32A | | | | IAML | | 01 43 00.5 | |
| | comp=N,322nm,0.3s | | | | | | |
| **OK051** | **E0350 and S346** | **1.26** | **132** | | Pg | 01 42 39.8 | -0.4 |
| OK051 | | | | | Sg | 01 42 56.5 | 0.0 |
| **OK048** | **Pawnee Station** | **1.26** | **138** | | Pg | 01 42 39.8 | -0.4 |
| OK048 | | | | | Sg | 01 42 56.2 | -0.5 |
| OK048 | | | | | IAML | 01 43 00.5 | |
| | comp=N,256nm,0.4s | | | | | | |
| OK048 | | | | | IAML | 01 43 00.5 | |
| | comp=N,288nm,0.4s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.27** | **110** | Pg | Pg | 01 42 39.6 | -0.7 |
| T35A | | | | Sg | Sg | 01 42 56.4 | -0.3 |
| T35A | | | | IAML | | 01 42 58.9 | |
| | comp=E,374nm,0.4s | | | | | | |
| **QUOK** | **Quay** | **1.57** | **139** | | Pn | 01 42 44.8 | +0.2 |
| **OK029** | **Liberty Lake** | **1.62** | **164** | | Pn | 01 42 45.8 | +0.6 |
| **OK052** | **Battle Ridge R** | **1.67** | **145** | | Pn | 01 42 46.3 | +0.4 |
| **OK031** | **S. Brethren Rd** | **1.68** | **146** | | Pn | 01 42 46.5 | +0.4 |
| **DEOK** | **Depew** | **1.94** | **141** | Pn | Pn | 01 42 49.0 | -0.6 |
| **CBKS** | **Cedar Bluff** | **2.00** | **317** | Pn | Pn | 01 42 51.2 | +0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **2.00** | **167** | IAmb_Lg | | 01 43 18.6 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **KSU1** | **Kansas State U** | **2.05** | **32** | Pn | Pn | 01 42 51.5 | +0.3 |
| KSU1 | | | | IAmb_Lg | | 01 43 22.7 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **TUL3** | **Leonard** | **2.29** | **129** | Pn | Pn | 01 42 55.0 | +0.6 |
| TUL3 | | | | IAmb_Lg | | 01 43 32.4 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **SMWD** | **Samnorwood** | **2.89** | **220** | Pn | Pn | 01 43 03.9 | +1.1 |
| **U38A** | **Gravette** | **3.04** | **107** | Pn | Pn | 01 43 05.5 | +0.8 |
| U38A | | | | IAmb_Lg | | 01 43 57.7 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.43** | **107** | Pn | Pn | 01 43 11.4 | +1.3 |
| HHAR | | | | IAmb_Lg | | 01 44 12.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.49** | **142** | Pn | Pn | 01 43 11.8 | +0.8 |
| **S39A** | **Bolivar** | **3.73** | **84** | Pn | Pn | 01 43 14.7 | +0.4 |
| **AMTX** | **Amarillo** | **3.87** | **231** | Pn | Pn | 01 43 17.9 | +1.5 |
| **RTBA** | **Rita Blanca** | **3.91** | **258** | Pn | Pn | 01 43 17.5 | +0.7 |
| **KSCO** | **Kaye Shedlock'** | **4.00** | **296** | IAmb_Lg | | 01 44 33.4 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **Z35A** | **Perchaven, San** | **4.07** | **171** | IAmb_Lg | | 01 44 27.8 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **P38A** | **Dawn** | **4.17** | **56** | IAmb_Lg | | 01 44 28.7 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **APMT** | **Aspermont** | **4.38** | **204** | Pn | Pn | 01 43 23.0 | -0.3 |
| **DKNS** | **Dickens** | **4.39** | **214** | IAmb_Lg | | 01 44 41.8 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.55** | **127** | Pn | Pn | 01 43 26.3 | +0.7 |
| MIAR | | | | IAmb_Lg | | 01 44 48.5 | |
| | comp=Z,21nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.57** | **91** | Pn | Pn | 01 43 26.1 | +0.2 |
| **R40A** | **Maddies Statio** | **4.63** | **77** | Pn | Pn | 01 43 25.9 | -0.8 |
| R40A | | | | IAmb_Lg | | 01 44 45.2 | |
| | comp=E,11nm,0.8s | | | | | | |
| **OGNE** | **Ogallala** | **4.76** | **320** | Pn | Pn | 01 43 30.2 | +1.7 |
| OGNE | | | | IAmb_Lg | | 01 44 56.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.77** | **148** | IAmb_Lg | | 01 44 58.0 | |
| | comp=Z,3nm,0.9s | | | | | | |
| **SN07** | **Snyder 07** | **4.88** | **210** | IAmb_Lg | | 01 44 51.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.94** | **106** | IAmb_Lg | | 01 45 00.3 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **SN05** | **Snyder 5** | **5.06** | **209** | IAmb_Lg | | 01 45 06.0 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.07** | **123** | IAmb_Lg | | 01 45 03.5 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.15** | **63** | Pn | Pn | 01 43 34.1 | +0.4 |
| P40A | | | | IAmb_Lg | | 01 45 05.2 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **MSTX** | **Muleshoe** | **5.16** | **230** | IAmb_Lg | | 01 45 12.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **UALR** | **University of** | **5.25** | **118** | IAmb_Lg | | 01 45 08.4 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.52** | **91** | Pn | Pn | 01 43 39.1 | +0.2 |
| T42A | | | | IAmb_Lg | | 01 45 15.9 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **Q24A** | **Divide** | **5.86** | **288** | IAmb_Lg | | 01 45 24.8 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **5.88** | **305** | IAmb_Lg | | 01 45 32.9 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **SGCY** | **Sterling City** | **6.01** | **206** | IAmb_Lg | | 01 45 41.1 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **FVM** | **French Village** | **6.04** | **82** | IAmb_Lg | | 01 45 25.8 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **BRDY** | **Brady** | **6.12** | **188** | IAmb_Lg | | 01 45 34.3 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **CCAR** | **Cane Creek** | **6.12** | **122** | IAmb_Lg | | 01 45 38.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.45** | **9** | IAmb_Lg | | 01 45 39.4 | |
| | comp=Z,8.1nm,0.9s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.64** | **88** | IAmb_Lg | | 01 45 47.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **OZNA** | **Ozona** | **6.93** | **203** | IAmb_Lg | | 01 46 06.7 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| **S44A** | **Carbondale** | **6.95** | **85** | IAmb_Lg | | 01 45 54.5 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **SIUC** | **Southern Illin** | **6.98** | **84** | IAmb_Lg | | 01 45 59.1 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.00** | **307** | IAmb_Lg | | 01 46 15.7 | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **7.03** | **193** | IAmb_Lg | | 01 46 10.4 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.24** | **75** | IAmb_Lg | | 01 46 11.9 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **PECS** | **Pecos** | **7.70** | **221** | IAmb_Lg | | 01 46 40.5 | |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **SAND** | **Sanderson** | **8.15** | **206** | IAmb_Lg | | 01 46 54.6 | |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **DRIO** | **Del Rio** | **8.21** | **196** | IAmb_Lg | | 01 46 51.9 | |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.36** | **104** | IAmb_Lg | | 01 46 42.3 | |
| | comp=Z,7.7nm,0.7s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **8.57** | **8** | IAmb_Lg | | 01 46 50.4 | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| **VHRN** | **Van Horn** | **8.75** | **224** | IAmb_Lg | | 01 47 05.3 | |
| | comp=Z,5.7nm,0.8s | | | | | | |

*NEIC **29** 01:46:59.0±1.1,5.3S±0.2×150.6E±0.1,h130km±11km, mb4.2/12,Error ellipse: s-maj=29.3km s-min=13.1km az=149.0*

*IDC **29** 01:47:00.4±1.9,5.36S×150.42E,h147km±13km,mb3.4/7, mbtmp3.9/9,Error ellipse: s-maj=34.1km s-min=12.7km az=117.0*

**ISC 29 01:46:59.9±0.7,5.29S±0.09×150.57E±0.10,h150km,n33, σ1s33/39,mb3.8/12,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BULU** | **Kimbe** | **0.35** | **225** | P | **Pn** | **01 47 17.5** | **-3.1** |
| **RABL** | **Rabaul** | **1.93** | **56** | Pn | **Pn** | **01 47 32.0** | **-2.2** |
| **PMG** | **Port Moresby** | **5.31** | **219** | P | **Pn** | **01 48 18.0** | **+0.6** |
| **PMG** | **Port Moresby** | **5.31** | **219** | Pn | **Pn** | **01 48 16.0** | **-1.4** |
| **PMG** | **Port Moresby** | **5.31** | **219** | P | **Pn** | **01 48 16.4** | **-1.0** |
| | 75nm,0.4s,baz=48,slow=7.4,SNR=18 | | | | | | |
| PMG | | | | | S | **Sn** | **01 49 14.8** | **-3.1** |
| | 85nm,0.4s,baz=33,slow=20,SNR=11 | | | | | | |
| **TV1H** | **Townsville Har** | **14.37** | **194** | P | **P** | **01 50 21.5** | **+2.4** |
| | 18nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **15.30** | **196** | P | **P** | **01 50 32.1** | **+2.6** |
| | 1.2nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **15.30** | **196** | P | **P** | **01 50 28.4** | **-1.1** |
| | 0.8nm,0.9s,baz=14,slow=12,SNR=10 | | | | | | |
| **CTAO** | **Charters Tower** | **15.30** | **196** | P | **P** | **01 50 32.1** | **+2.6** |
| | 13nm,1.4s | | | | | | |
| **RK1H** | **Rockhampton Ha** | **18.00** | **180** | P | **Pn** | **01 51 01.6** | **+0.9** |
| | 13nm,0.8s | | | | | | |
| **QIS** | **Mount Isa** | **18.54** | **214** | P | **Pn** | **01 51 06.1** | **-1.1** |
| **EIDS** | **Eidsvold** | **19.98** | **179** | P | **P** | **01 51 20.8** | **+0.2** |
| EIDS | | | | IAmb | IAmb | 01 51 22.0 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **20.59** | **247** | P | **P** | **01 51 27.6** | **+0.3** |
| MTN | | | | IAmb | IAmb | 01 51 40.4 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **21.33** | **226** | P | **P** | **01 51 34.7** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 01 51 54.9 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.35** | **226** | P | **P** | **01 51 34.2** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 01 52 01.9 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.47** | **226** | P | **P** | **01 51 36.0** | **-0.8** |
| **WRA** | **Warramunga Arr** | **21.48** | **226** | P | **P** | **01 51 35.9** | **-1.0** |
| | comp=Z,1.2nm,0.4s,baz=50,slow=10,SNR=30 | | | | | | |
| WRA | | | | | S | **S** | **01 55 25.4** | **-0.6** |
| | comp=Z,3.1nm,0.9s,baz=57,slow=19,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **01 55 34.0** | **+0.1** |
| | comp=Z,0.8nm,0.6s,baz=41,slow=2.0,SNR=7.5 | | | | | | |
| WRA | | | | ScP | **ScP** | **01 58 57.8** | **+0.7** |
| | comp=Z,0.2nm,0.7s,baz=56,slow=2.8,SNR=5.0 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **QLP** | **Quilpie** | **22.02** | **195** | P | **P** | **01 51 43.5** | **+1.1** |
| **DZM** | **Mont Dzumac** | **22.68** | **139** | P | **P** | **01 51 48.2** | **-0.7** |
| DZM | | | | IAmb | IAmb | 01 51 49.8 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **23.77** | **243** | P | **P** | **01 51 59.3** | **+0.4** |
| KNRA | | | | IAmb | IAmb | 01 52 01.0 | |
| | comp=Z,9.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **24.32** | **220** | P | **P** | **01 52 04.3** | **+0.5** |
| | comp=Z,1.6nm,0.5s,baz=56,slow=8.5,SNR=27 | | | | | | |
| ASAR | | | | S | **S** | **01 56 11.1** | **-1.2** |
| | comp=Z,0.6nm,0.8s,baz=42,slow=13,SNR=4.1 | | | | | | |
| ASAR | | | | ScP | **ScP** | **01 59 04.7** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=60,slow=2.2,SNR=2.9 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.48** | **240** | P | **P** | **01 52 32.3** | **0.0** |
| **STKA** | **Stephens Creek** | **27.76** | **197** | P | **P** | **01 52 34.4** | **-0.2** |
| **STKA** | **Stephens Creek** | **27.76** | **197** | P | **P** | **01 52 33.4** | **-1.2** |
| | comp=Z,2.8nm,0.5s,baz=23,slow=13,SNR=6.4 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **MBWA** | **Marble Bar** | **33.80** | **239** | P | **P** | **01 53 27.6** | **-0.3** |
| MBWA | | | | IAmb | IAmb | 01 53 30.9 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **33.87** | **239** | P | **P** | **01 53 29.1** | **+0.6** |
| **RTZ** | **Ruatahuna** | **40.93** | **148** | P | **P** | **01 54 29.0** | **+1.3** |
| **TCW** | **Tory Channel** | **41.59** | **153** | P | **P** | **01 54 33.0** | **0.0** |
| **SONM** | **Songino Array** | **65.57** | **329** | P | **P** | **01 57 28.6** | **+1.0** |
| | comp=Z,6.0nm,0.5s,baz=152,slow=6.5,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **79.24** | **319** | P | **P** | **01 58 48.8** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=98,slow=10,SNR=0.8 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.81** | **322** | P | **P** | **01 59 07.8** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=107,slow=7.1,SNR=4.6 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **84.68** | **180** | P | **P** | **01 59 17.8** | **+1.1** |
| | comp=Z,0.3nm,0.6s,baz=101,slow=11,SNR=1.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.33** | **286** | PKPbc | **PKPbc** | **02 06 29.3** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=79,slow=2.8,SNR=6.5 | | | | | | |

*NEIC **29** 01:59:39.7±1.6,69.59N±0.05×144.19W±0.06,h10km±2km, Error ellipse: s-maj=8.8km s-min=3.7km az=1.0*

**AEIC 29 01:59:38.0±2.1,69.50N±0.08×144.16W±0.06,h4km±7km, ML2.4,ML2.5/64(NEIC),Error ellipse: s-maj=11.9km s-min=2.7km az=188.0,Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **C27K** | **Jago River** | **0.20** | **50** | Pg | Pg | 01 59 42.8 | +0.9 |
| **C26K** | **Camden Bay** | **0.50** | **328** | | Pg | 01 59 47.7 | +0.2 |
| C26K | | | | | Sg | 01 59 54.6 | +0.6 |
| **D25K** | **Kavik River** | **0.80** | **258** | Pg | Pg | 01 59 52.4 | -0.9 |
| D25K | | | | Sg | Sg | 02 00 02.5 | -1.2 |
| **D27M** | **Malcolm River** | **1.16** | **101** | Pg | Pg | 01 59 59.8 | -0.4 |
| D27M | | | | Sg | Sg | 02 00 15.2 | +0.1 |
| **C24K** | **Franklin Bluff** | **1.61** | **280** | Pn | Pg | 02 00 08.6 | -0.1 |
| C24K | | | | IAML | | 02 00 33.4 | |
| | comp=E,46nm,0.8s | | | | | | |
| C24K | | | | IAML | | 02 00 33.4 | |
| | comp=N,42nm,0.8s | | | | | | |
| **E27K** | **Coleen River** | **1.61** | **144** | Pn | Pg | 02 00 09.0 | +0.2 |
| **D24K** | **Happy Valley** | **1.69** | **260** | Pn | Pg | 02 00 10.1 | -0.2 |
| D24K | | | | IAML | | 02 00 37.3 | |
| | comp=N,56nm,0.8s | | | | | | |
| D24K | | | | IAML | | 02 00 37.6 | |
| | comp=E,44nm,0.8s | | | | | | |
| **F26K** | **Sheenjek River** | **1.81** | **180** | Pn | Pg | 02 00 12.8 | +0.2 |
| F26K | | | | IAML | | 02 00 39.4 | |
| | comp=E,47nm,0.5s | | | | | | |
| F26K | | | | IAML | | 02 00 40.1 | |
| | comp=N,27nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **1.89** | **116** | Pn | Pb | 02 00 13.3 | +0.3 |
| **F25K** | **Christian Rive** | **1.99** | **197** | Pn | Pb | 02 00 15.3 | +0.6 |
| F25K | | | | IAML | | 02 00 43.7 | |
| | comp=E,26nm,0.8s | | | | | | |
| F25K | | | | IAML | | 02 00 45.8 | |
| | comp=N,36nm,0.6s | | | | | | |
| **C23K** | **Itkillik River** | **2.28** | **282** | Pn | Pb | 02 00 19.1 | -0.5 |
| **F24K** | **Squaw Lake** | **2.42** | **216** | Pn | Pb | 02 00 20.1 | -1.8 |
| F24K | | | | IAML | | 02 01 49.1 | |
| | comp=N,16nm,0.7s | | | | | | |
| F24K | | | | IAML | | 02 01 50.1 | |
| | comp=E,14nm,0.5s | | | | | | |
| **F28M** | **Old Crow** | **2.46** | **138** | Pn | Pb | 02 00 20.9 | -1.8 |
| F28M | | | | IAML | | 02 01 02.9 | |
| | comp=N,15nm,0.5s | | | | | | |
| **E29M** | **Blow River** | **2.52** | **113** | Pn | Pb | 02 00 22.0 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.32** | **81** | | Pg | 02 00 36.2 | -0.1 |
| C27K | | | | | Sg | 02 00 40.8 | +0.3 |
| C27K | | | | IAML | | 02 00 41.4 | |
| | comp=N,691nm,0.3s | | | | | | |
| C27K | | | | IAML | | 02 00 43.7 | |
| | comp=E,576nm,0.6s | | | | | | |
| **C26K** | **Camden Bay** | **0.36** | **343** | Pg | Pg | 02 00 36.7 | -0.3 |
| C26K | | | | Sg | Sg | 02 00 41.8 | +0.1 |
| **D25K** | **Kavik River** | **0.67** | **249** | Pg | Pg | 02 00 41.9 | -1.0 |
| D25K | | | | Sg | Sg | 02 00 51.0 | -0.6 |
| **D27M** | **Malcolm River** | **1.33** | **103** | Pn | Pn | 02 00 54.0 | -1.0 |
| D27M | | | | IAML | | 02 01 20.1 | |
| | comp=N,82nm,0.5s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.44** | **278** | Pn | Pn | 02 00 55.6 | -0.8 |
| C24K | | | | IAML | | 02 01 18.7 | |
| | comp=E,109nm,1.1s | | | | | | |
| **E27K** | **Coleen River** | **1.77** | **141** | Pn | Pn | 02 01 00.8 | -0.3 |
| E27K | | | | IAML | | 02 01 29.4 | |
| | comp=E,36nm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.90** | **175** | Pn | Pn | 02 01 03.0 | +0.3 |
| F26K | | | | IAML | | 02 01 31.4 | |
| | comp=E,64nm,0.7s | | | | | | |
| F26K | | | | IAML | | 02 01 32.7 | |
| | comp=N,42nm,0.5s | | | | | | |
| **E28M** | **Babbage River** | **2.07** | **116** | Pn | Pn | 02 01 05.5 | +0.4 |
| **D22K** | **Ayikyak River** | **2.96** | **260** | Pn | Pn | 02 01 15.4 | -1.9 |
| **G23K** | **Bananza Creek** | **3.52** | **218** | Pn | Pn | 02 01 22.5 | -2.5 |
| G23K | | | | IAML | | 02 02 26.2 | |
| | comp=E,9.5nm,0.7s | | | | | | |
| G23K | | | | IAML | | 02 02 26.3 | |
| | comp=N,9.0nm,0.8s | | | | | | |
| **F21K** | **Alatna River** | **4.04** | **238** | Pn | Pn | 02 01 30.6 | -1.6 |
| F21K | | | | IAML | | 02 02 50.3 | |
| | comp=N,5.8nm,1.0s | | | | | | |
| F21K | | | | IAML | | 02 02 51.0 | |
| | comp=E,7.0nm,0.9s | | | | | | |
| **G31M** | **Satah River** | **4.68** | **120** | Pn | Pn | 02 01 42.2 | +1.4 |
| G31M | | | | IAML | | 02 02 47.1 | |
| | comp=N,3.4nm,0.8s | | | | | | |
| G31M | | | | IAML | | 02 03 15.4 | |
| | comp=E,4.0nm,1.2s | | | | | | |
| **D19K** | **Kuna River** | **4.97** | **264** | Pn | Pn | 02 01 46.1 | +1.2 |
| **E19K** | **Redstone River** | **5.10** | **251** | Pn | Pn | 02 01 48.4 | +1.8 |
| E19K | | | | IAML | | 02 03 31.7 | |
| | comp=E,4.1nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **5.11** | **196** | Pn | Pn | 02 01 47.5 | +0.8 |
| CCB | | | | IAML | | 02 03 25.6 | |
| | comp=E,2.5nm,0.9s | | | | | | |
| **J26L** | **Joseph Creek** | **5.12** | **175** | Pn | Pn | 02 01 46.7 | -0.3 |
| J26L | | | | IAML | | 02 02 55.2 | |
| | comp=N,3.3nm,0.7s | | | | | | |
| J26L | | | | IAML | | 02 03 08.8 | |
| | comp=E,3.6nm,0.8s | | | | | | |
| **WRH** | **Wood River Hil** | **5.30** | **197** | Pn | Pn | 02 01 49.4 | 0.0 |
| **I30M** | **Mount Dempster** | **5.40** | **140** | Pn | Pn | 02 01 52.1 | +1.2 |
| **H31M** | **Peel River** | **5.44** | **129** | Pn | Pn | 02 01 53.4 | +2.0 |
| **F19K** | **Shaleruckik Mo** | **5.62** | **247** | Pn | Pn | 02 01 52.9 | -0.8 |
| **J30M** | **Hart River** | **5.97** | **143** | Pn | Pn | 02 01 58.6 | -0.2 |
| **C18K** | **Utukok River** | **6.00** | **269** | Pn | Pn | 02 02 00.1 | +1.0 |
| **E18K** | **Tukpahlearik C** | **6.26** | **257** | Pn | Pn | 02 02 02.8 | +0.3 |

**NAM 29 02:05:27.9±4.3, 19°.76S×14°.49E, h22km±13km, ML0.9, 9C-11D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.02** | **31** ⇑ | *i*P | Pb | 02 05 33.6 | +1.6 |
| ST3N | | | | *i* S | Sb | 02 05 35.2 | +0.5 |
| ST3N | | | | *i* S | | 02 05 35.2 | |
| ST3N | | | | IAML | | 02 05 35.2 | |
| | comp=Z,12nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.02** | **31** ⇓ | *i*P | Pb | 02 05 33.6 | +1.7 |
| ST3N | | | | *i* S | Sb | 02 05 35.2 | +0.5 |
| ST3N | | | | IAML | | 02 05 35.2 | |
| | comp=Z,12nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **125** ⇓ | *i*P | Pb | 02 05 32.4 | +0.3 |
| ST9N | | | | *i* S | Sb | 02 05 33.1 | -1.9 |
| ST9N | | | | *i* S | | 02 05 33.1 | |
| ST9N | | | | IAML | | 02 05 33.4 | |
| | comp=Z,409nm,0.1s | | | | | | |
| **ST9N** | **ST9** | **0.07** | **125** ⇑ | *i*P | Pb | 02 05 32.5 | +0.3 |
| ST9N | | | | *i* S | Sb | 02 05 33.2 | -1.8 |
| ST9N | | | | IAML | | 02 05 33.5 | |
| | comp=Z,179nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.09** | **244** ⇓ | *i*P | Pb | 02 05 34.6 | +2.3 |
| ST6N | | | | *i* S | Sb | 02 05 37.0 | +1.7 |
| ST6N | | | | *i* S | | 02 05 37.1 | |
| **ST6N** | **ST6** | **0.09** | **244** ⇑ | *i*P | Pb | 02 05 34.6 | +2.3 |
| ST6N | | | | *i* S | Sb | 02 05 37.1 | +1.8 |
| ST6N | | | | IAML | | 02 05 37.2 | |
| | comp=Z,22nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **79** ⇑ | *i*P | Pb | 02 05 33.2 | +0.5 |
| ST1N | | | | *i* S | Sb | 02 05 34.6 | -1.3 |
| ST1N | | | | *i* S | | 02 05 34.7 | |
| ST1N | | | | IAML | | 02 05 35.1 | |
| | comp=Z,28nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.12** | **79** ⇓ | *i*P | Pb | 02 05 33.3 | +0.6 |
| ST1N | | | | *i* S | Sb | 02 05 34.6 | -1.3 |
| ST1N | | | | IAML | | 02 05 35.1 | |
| | comp=Z,28nm,0.0s | | | | | | |
| **ST8N** | **ST8** | **0.17** | **294** ⇓ | *i*P | Pb | 02 05 36.8 | +3.6 |
| ST8N | | | | *i* S | Sb | 02 05 40.5 | +3.7 |
| ST8N | | | | *i* S | | 02 05 41.0 | |
| ST8N | | | | IAML | | 02 05 42.4 | |
| | comp=Z,2.1nm,0.0s | | | | | | |
| **ST8N** | **ST8** | **0.17** | **294** ⇑ | *i*P | Pb | 02 05 36.8 | +3.6 |
| ST8N | | | | *i* S | Sb | 02 05 41.0 | +4.3 |
| ST8N | | | | IAML | | 02 05 42.4 | |
| | comp=Z,2.2nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.20** | **148** ⇓ | *i*P | Pb | 02 05 33.4 | -0.1 |
| ST2N | | | | *i* S | Sb | 02 05 34.9 | -2.3 |
| ST2N | | | | *i* S | | 02 05 35.1 | |
| ST2N | | | | IAML | | 02 05 36.1 | |
| | comp=Z,41nm,0.0s | | | | | | |
| **ST2N** | **ST2** | **0.20** | **148** ⇓ | *i*P | Pb | 02 05 33.4 | -0.1 |
| ST2N | | | | *i* S | Sb | 02 05 35.7 | -1.5 |
| ST2N | | | | IAML | | 02 05 36.1 | |
| | comp=Z,41nm,0.0s | | | | | | |
| **ST10N** | **ST10** | **0.25** | **202** ⇑ | *i*P | Pn | 02 05 36.0 | -0.4 |
| ST10N | | | | *i* S | Sb | 02 05 39.5 | +1.1 |
| ST10N | | | | *i* S | Sn | 02 05 39.6 | -2.1 |
| ST10N | | | | IAML | | 02 05 39.9 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.25** | **202** ⇓ | *i*P | Pn | 02 05 36.0 | -0.4 |
| ST10N | | | | *i* S | Sb | 02 05 39.5 | +1.1 |
| ST10N | | | | IAML | | 02 05 39.9 | |
| | comp=Z,18nm,0.1s | | | | | | |
| **ST5N** | **ST5** | **0.26** | **97** ⇓ | *i*P | Pb | 02 05 34.7 | +0.5 |
| ST5N | | | | *i* S | Sb | 02 05 37.4 | -1.1 |
| ST5N | | | | IAML | | 02 05 37.6 | |
| | comp=Z,11nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.26** | **97** ⇓ | *i*P | Pb | 02 05 34.7 | +0.5 |
| ST5N | | | | *i* S | Sb | 02 05 37.4 | -1.1 |
| ST5N | | | | IAML | | 02 05 37.6 | |
| | comp=Z,11nm,0.0s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **73** ⇑ | *i*P | Pn | 02 05 36.9 | -0.9 |
| ST11N | | | | *i* S | Sb | 02 05 42.3 | +1.4 |
| ST11N | | | | IAML | | 02 05 45.4 | |
| | comp=Z,3.5nm,0.0s | | | | | | |
| **ST11N** | **ST11** | **0.35** | **73** ⇑ | *i*P | Pn | 02 05 37.4 | -0.4 |
| ST11N | | | | *i* S | Sb | 02 05 42.4 | +1.4 |
| ST11N | | | | IAML | | 02 05 45.4 | |
| | comp=Z,3.5nm,0.0s | | | | | | |
| **ST4N** | **ST4** | **0.48** | **106** ⇓ | *i*P | Pb | 02 05 38.5 | +0.8 |
| ST4N | | | | *i* S | Sb | 02 05 43.3 | -1.1 |
| ST4N | | | | *i* S | Sn | 02 05 43.6 | -3.7 |
| ST4N | | | | IAML | | 02 05 46.7 | |
| | comp=Z,4.3nm,0.0s | | | | | | |
| **ST4N** | **ST4** | **0.48** | **106** ⇑ | *i*P | Pb | 02 05 38.6 | +0.8 |
| ST4N | | | | *i* S | Sb | 02 05 43.3 | -1.1 |
| ST4N | | | | IAML | | 02 05 46.7 | |
| | comp=Z,4.2nm,0.1s | | | | | | |

**IDC 29 02:17:55.6±26.0, 6°.49S×70°.32E, h0km, mb3.7/3, mbtmp3.7/3, MS4.4/1, Error ellipse: s-maj=780.5km s-min=48.7km az=69.0, Chagos Archipelago region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H04N2** | **CROZET ISLANDS** | **42.65** | **199** | T | T | 03 09 09.6 | |
| | baz=25,slow=75,SNR=9.9 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **42.65** | **199** | T | T | 03 09 13.2 | |
| | baz=25,slow=75,SNR=15 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **42.66** | **199** | T | T | 03 09 10.6 | |
| | baz=25,slow=75,SNR=13 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **49.21** | **131** | T | T | 03 20 29.5 | |
| | baz=292,slow=75,SNR=4.5 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **49.22** | **131** | T | T | 03 20 29.5 | |
| | baz=292,slow=75,SNR=4.5 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **49.23** | **131** | T | T | 03 20 31.0 | |
| | baz=292,slow=75,SNR=5.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **57.10** | **327** | LR | LR | 02 50 17.1 | |
| | comp=Z,355nm,20.0s,baz=68,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **62.73** | **27** | P | P | 02 28 22.7 | 0.0 |
| | 0.2nm,0.3s,baz=224,slow=6.0,SNR=2.2 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **63.25** | **113** | P | P | 02 28 26.0 | -0.6 |
| | 0.6nm,0.8s,baz=282,slow=6.3,SNR=4.7 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **63.42** | **109** | P | P | 02 28 28.3 | +0.5 |
| | 1.3nm,0.8s,baz=283,slow=6.4,SNR=5.6 | | | | | | |
| | 1.3nm,0.8s | | | | | | |

*IDC* ***29*** *02:33:26.9±1.6, 33°.92N×117°.82W, h0km, mb4.1/4, mbtmp4.0/11, ML3.9/7, MS3.9/12, Error ellipse: s-maj=23.6km s-min=7.4km az=43.0*

*NEIC* ***29*** *02:33:27.8±1.3, 34°.144N±0°.007×117°.766W±0°.009, h5km±1km, Error ellipse: s-maj=1.9km s-min=1.2km az=150.0, Moment Tensor Solution. Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-0.20; $M_{\theta\theta}$-5.00; $M_{\phi\phi}$5.21; $M_{r\theta}$0.52; $M_{\theta\phi}$-0.31; $M_{\phi r}$1.89; Fault plane solution: $M_0$5.48000×$10^{15}$ NP1:ϕs311.92000°, δ72.46000°, λ172.63000°. NP2: ϕs44.15000°, δ82.98000°, λ17.68000°. Principal axes: T 5.8048, Plg17.0000°, Azm269.0000°; N -0.7196, Plg71.0000°, Azm65.0000°; P -5.0851, Plg7.0000°, Azm177.0000°;*

*PAS* ***29*** *02:33:28.3±1.3, 34°.136N±0°.007×117°.775W±0°.009, h6km±1km, Mwr4.4, mb4.4/44(NEIC), ML4.7/80(NEIC), Mwr4.4/84(NEIC) Error ellipse: s-maj=1.0km s-min=1.0km az=142.0*

*NEIC* ***29*** *02:33:28.3, 34°.14N×117°.78W, h6km*

*ANF* ***29*** *02:33:29.3±0.3, 34°.14N×117°.60W, h0km, ML4.5/31, Error ellipse: s-maj=7.7km s-min=2.0km az=30.0*

**ISC 29 02:33:28.8±0.7, 34°.12N±0°.01×117°.77W±0°.01, h10km±5km, n364, σ1§33/423, mb4.4/13, MS4.2/7, Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSRC** | **Puddingstone R** | **0.04** | **227** | | Pg | 02 33 30.6 | 0.0 |
| **SSK** | **Sunset Peak** | **0.11** | **35** | | Pg | 02 33 30.8 | -0.9 |
| **CHNC** | **Chino** | **0.14** | **148** | | Pg | 02 33 31.8 | -0.2 |
| CHNC | | | | | Sg | 02 33 34.6 | +0.5 |
| **BFSC** | **Mount Baldy Ra** | **0.15** | **38** | | Pg | 02 33 31.3 | -1.0 |
| BFSC | | | | | Sg | 02 33 33.4 | -1.3 |
| **MLSC** | **Mira Loma** | **0.21** | **123** | | Pg | 02 33 32.6 | -0.5 |
| MLSC | | | | | Sg | 02 33 35.9 | -0.1 |
| **RHC** | **Rose Hills Cem** | **0.23** | **240** | | Pg | 02 33 33.4 | -0.2 |
| RHC | | | | | Sg | 02 33 37.4 | +0.6 |
| **SS2** | **San Sevaine** | **0.24** | **69** | | Pg | 02 33 33.2 | -0.5 |
| **MWC** | **Mount Wilson** | **0.26** | **294** | | Pg | 02 33 33.2 | -1.0 |
| MWC | | | | | Sg | 02 33 37.1 | -0.7 |
| **FON** | **Fontana** | **0.28** | **94** | | Pg | 02 33 33.9 | -0.5 |
| FON | | | | | Sg | 02 33 38.1 | -0.1 |
| **FULC** | **Fullerton** | **0.28** | **207** | | Pg | 02 33 34.8 | +0.4 |
| FULC | | | | | Sb | 02 33 40.0 | -0.7 |
| **CACC** | **Caltech Cellar** | **0.29** | **273** | | Pg | 02 33 33.9 | -0.8 |
| CACC | | | | | Sg | 02 33 38.3 | -0.3 |
| **CBCC** | **Caltech Broad** | **0.30** | **274** | | Pg | 02 33 34.0 | -0.8 |
| **CBCC** | **Caltech Broad** | **0.30** | **274** | | Sg | 02 33 39.1 | +0.3 |
| **CRPC** | **Caltech Rob'n** | **0.30** | **273** | | Pg | 02 33 34.0 | -0.8 |
| CRPC | | | | | Sg | 02 33 38.1 | -0.6 |
| **CRPC** | **Caltech Rob'n** | **0.30** | **273** | | Pg | 02 33 33.9 | -0.8 |
| CRPC | | | | | Sg | 02 33 38.5 | -0.3 |
| **GSA** | **Caltech--GSA** | **0.30** | **273** | | Pg | 02 33 34.0 | -0.8 |
| GSA | | | | | Sg | 02 33 38.5 | -0.2 |
| **GVRC** | **Garvey Reservo** | **0.30** | **257** | | Pg | 02 33 34.3 | -0.5 |
| **CRNC** | **Corona** | **0.30** | **144** | | Pg | 02 33 34.3 | -0.5 |
| CRNC | | | | | Sg | 02 33 38.7 | -0.1 |
| **CHFC** | **Chilao Flat St** | **0.30** | **315** | | Pg | 02 33 33.8 | -1.1 |
| CHFC | | | | | Sg | 02 33 37.9 | -1.1 |
| **HOLC** | **Holcomb Ridge** | **0.34** | **350** | | Pg | 02 33 34.6 | -1.1 |
| HOLC | | | | | Sg | 02 33 39.2 | -1.0 |
| **PASC** | **Pasadena Art C** | **0.35** | **279** | | Pg | 02 33 34.6 | -1.1 |
| PASC | | | | Sg | Sg | 02 33 39.4 | -0.9 |
| **RVR** | **Riverside** | **0.35** | **111** | | Pg | 02 33 35.0 | -0.8 |
| RVR | | | | | Sg | 02 33 39.9 | -0.6 |
| **BREC** | **Barre Substati** | **0.36** | **209** | | Pg | 02 33 36.4 | +0.6 |
| BREC | | | | | Sb | 02 33 43.0 | 0.0 |
| **JNH** | **Juniper Hills** | **0.36** | **335** | | Pg | 02 33 34.8 | -1.2 |
| JNH | | | | | Sg | 02 33 39.8 | -1.0 |
| **CLTC** | **Calectric** | **0.38** | **94** | | Pg | 02 33 35.9 | -0.4 |
| CLTC | | | | | Sg | 02 33 41.7 | +0.4 |
| **DLAC** | **Del Amo** | **0.38** | **225** | | Pg | 02 33 37.0 | +0.7 |
| DLAC | | | | | Sb | 02 33 44.0 | +0.2 |
| **CSP** | **Cedar Springs** | **0.39** | **62** | | Pg | 02 33 35.7 | -0.7 |
| **RSBC** | **Riverside Bore** | **0.40** | **111** | | Pg | 02 33 35.8 | -0.8 |
| RSBC | | | | | Sg | 02 33 41.5 | -0.4 |
| **CFSC** | **Central Fire S** | **0.41** | **92** | | Pg | 02 33 36.4 | -0.4 |
| CFSC | | | | | Sg | 02 33 42.6 | +0.4 |
| **SANC** | **Santa Ana** | **0.42** | **193** | | Pg | 02 33 37.5 | +0.3 |
| SANC | | | | | Sb | 02 33 44.4 | -0.5 |
| **WTT2** | **Watts, South G** | **0.44** | **247** | | Pg | 02 33 37.7 | +0.3 |
| WTT2 | | | | | Sb | 02 33 45.0 | -0.3 |
| **GR2C** | **Griffith Obs.** | **0.44** | **270** | | Pg | 02 33 36.3 | -1.1 |
| GR2C | | | | | Sg | 02 33 42.4 | -0.8 |
| **USC** | **University of** | **0.44** | **257** | | Pg | 02 33 37.1 | -0.3 |
| USC | | | | | Sg | 02 33 43.7 | +0.5 |
| **HLNC** | **Highland** | **0.46** | **90** | | Pg | 02 33 37.3 | -0.4 |
| HLNC | | | | | Sg | 02 33 44.0 | +0.2 |
| **LRRC** | **Littlerock Res** | **0.46** | **332** | | Pg | 02 33 36.7 | -1.1 |
| LRRC | | | | | Sg | 02 33 43.0 | -0.8 |
| **DECC** | **Green Verdugo** | **0.48** | **286** | | Pg | 02 33 37.4 | -0.9 |
| DECC | | | | | Sg | 02 33 44.4 | -0.3 |
| **BHPC** | **Baldwin Hills** | **0.51** | **255** | | Pg | 02 33 38.6 | 0.0 |
| BHPC | | | | | Sb | 02 33 46.9 | -0.4 |
| **ADO** | **Adelanto Recei** | **0.51** | **33** | | Pg | 02 33 38.2 | -0.6 |
| ADO | | | | | Sg | 02 33 45.8 | +0.2 |
| **CJV** | **Casa Juvan** | **0.51** | **323** | | Pg | 02 33 37.6 | -1.2 |
| CJV | | | | | Sg | 02 33 44.6 | -1.0 |
| **LCGC** | **La Cienega, Cu** | **0.52** | **257** | | Pg | 02 33 38.8 | -0.1 |
| LCGC | | | | | Sg | 02 33 46.0 | +0.4 |
| **BVH** | **Beverly Hills** | **0.52** | **265** | | Pg | 02 33 38.1 | -0.9 |
| **ELS** | **Elsinore Mount** | **0.55** | **149** | Pg | Pg | 02 33 38.6 | -0.9 |
| ELS | | | | Sg | Sg | 02 33 46.1 | -0.7 |
| **CFT** | **Crafton Hills** | **0.55** | **99** | | Pg | 02 33 39.0 | -0.5 |
| CFT | | | | | Sg | 02 33 47.1 | +0.2 |
| **PEC** | **Perris** | **0.56** | **114** | | Pg | 02 33 38.6 | -1.0 |
| PEC | | | | | Sg | 02 33 46.2 | -0.7 |
| **SVD** | **Seven Oaks Dam** | **0.56** | **91** | | Pg | 02 33 39.0 | -0.7 |
| SVD | | | | | Sg | 02 33 47.1 | +0.1 |
| **DJJ** | **Donna J Jenkin** | **0.57** | **269** | | Pg | 02 33 38.5 | -1.4 |
| DJJ | | | | | Sg | 02 33 46.7 | -0.6 |
| **DJJ** | **Donna J Jenkin** | **0.57** | **269** | | Pg | 02 33 38.5 | -1.4 |
| **SBB** | **Saddle Back Bu** | **0.57** | **356** | | Pg | 02 33 38.7 | -1.2 |
| SBB | | | | | Sg | 02 33 46.1 | -1.3 |
| **VTV** | **Victorville** | **0.57** | **40** | | Pg | 02 33 39.0 | -0.9 |
| VTV | | | | | Sg | 02 33 46.8 | -0.7 |
| **FMP** | **Fort Macarthur** | **0.59** | **227** | | Pg | 02 33 39.6 | -0.7 |
| FMP | | | | | Sg | 02 33 47.9 | -0.3 |
| **RPV** | **Rancho Palos V** | **0.65** | **235** | | Pg | 02 33 40.5 | -0.8 |
| RPV | | | | | Sg | 02 33 49.9 | +0.1 |
| **LEOC** | **Leona Valley** | **0.67** | **319** | | Pg | 02 33 40.5 | -1.4 |
| LEOC | | | | | Sg | 02 33 49.3 | -1.4 |
| **BBSC** | **Beaumont Base** | **0.69** | **107** | | Pg | 02 33 41.3 | -0.8 |
| BBSC | | | | | Sg | 02 33 51.4 | +0.3 |
| **MURC** | **Murrieta** | **0.71** | **137** | | Pg | 02 33 41.3 | -1.2 |
| MURC | | | | | Sg | 02 33 51.0 | -0.7 |
| **ALPC** | **Antelope** | **0.71** | **322** | | Pg | 02 33 41.3 | -1.4 |
| ALPC | | | | | Sg | 02 33 50.6 | -1.4 |
| **BBRC** | **Big Bear Solar** | **0.72** | **78** | | Pg | 02 33 42.0 | -0.8 |
| BBRC | | | | | Sg | 02 33 52.1 | 0.0 |
| **OAT** | **Oat Mountain** | **0.73** | **288** | | Pg | 02 33 42.5 | -0.5 |
| OAT | | | | | Sb | 02 33 54.0 | 0.0 |
| **PDE** | **Pardee, Santa** | **0.74** | **296** | | Pg | 02 33 42.1 | -1.1 |
| PDE | | | | | Sg | 02 33 52.4 | -0.5 |
| **BLCC** | **Black Canyon** | **0.76** | **280** | | Pg | 02 33 42.4 | -1.1 |
| BLCC | | | | | Sg | 02 33 53.2 | -0.1 |
| **HMTC** | **Hemet** | **0.76** | **122** | | Pg | 02 33 42.1 | -1.3 |
| HMTC | | | | | Sg | 02 33 52.6 | -0.8 |
| **HYS** | **Haystack Butte** | **0.76** | **13** | | Pg | 02 33 42.5 | -1.1 |
| HYS | | | | | Sg | 02 33 52.5 | -1.0 |
| **EDW2** | **Edwards Air Fo** | **0.78** | **346** | | Pg | 02 33 42.5 | -1.4 |
| EDW2 | | | | | Sg | 02 33 52.7 | -1.5 |
| **DGR** | **Domenigoni Val** | **0.79** | **126** | | Pg | 02 33 42.7 | -1.3 |
| DGR | | | | | Sg | 02 33 53.2 | -1.1 |
| **BACC** | **Bachelor Mtn.** | **0.79** | **130** | | Pg | 02 33 42.7 | -1.4 |
| BACC | | | | | Sg | 02 33 53.5 | -0.9 |
| **AGOC** | **Agoura** | **0.83** | **272** | | Pg | 02 33 43.1 | -1.6 |
| AGOC | | | | | Sg | 02 33 54.9 | -0.6 |
| **POB** | **Polly Butte** | **0.83** | **121** | | Pg | 02 33 43.4 | -1.4 |
| POB | | | | | Sg | 02 33 54.5 | -1.1 |
| **TPO** | **Tropico Hills** | **0.85** | **334** | | Pg | 02 33 43.7 | -1.5 |
| **BTPC** | **Burnt Peak** | **0.87** | **310** | | Pg | 02 33 43.9 | -1.8 |
| BTPC | | | | | Sg | 02 33 54.8 | -2.1 |
| **CIAC** | **Catalina I. Ai** | **0.89** | **217** | | Pg | 02 33 44.7 | -1.3 |
| CIAC | | | | | Sg | 02 33 57.1 | -0.6 |
| **OSI** | **Osito Audit: C** | **0.93** | **302** | | Pg | 02 33 45.0 | -1.7 |
| OSI | | | | | Pn | 02 33 57.0 | +8.9 |
| OSI | | | | | Sb | 02 33 59.4 | -0.2 |
| **RRX** | **Edison Barstow** | **0.99** | **40** | | Pg | 02 33 46.8 | -1.1 |
| RRX | | | | | Sg | 02 34 00.3 | -0.4 |
| **PFO** | **Pinyon Flats O** | **1.20** | **115** | Pg | Pb | 02 33 49.8 | -2.1 |
| PFO | | | | Sg | Sb | 02 34 06.2 | -1.3 |
| PFO | | | | IAML | | 02 34 10.5 | |
| | 14μm,0.7s | | | | | | |
| **PFO** | **Pinyon Flats O** | **1.20** | **115** | Pg | **Pb** | **02 33 49.8** | **-2.1** |
| | 379nm,0.3s,baz=298,slow=16,SNR=1314 | | | | | | |
| PFO | | | | Lg | Lg | 02 34 05.7 | |
| | 4μm,0.3s,baz=261,slow=17,SNR=31 | | | | | | |
| **TPFO** | **Pinon Flats** | **1.21** | **115** | P | **Pb** | **02 33 49.9** | **-2.0** |
| | baz=296 | | | | | | |
| TPFO | | | | S | **Sb** | **02 34 05.8** | **-1.9** |
| | baz=296 | | | | | | |
| **I57US** | **PINON FLAT INF** | **1.21** | **115** | Pg | **Pn** | **02 33 50.2** | **-1.8** |
| | baz=227,slow=441 | | | | | | |
| I57US | | | | Lg | Lg | 02 34 06.0 | |
| | baz=295,slow=27 | | | | | | |
| **GSC** | **Goldstone, Bar** | **1.42** | **34** | | **Pn** | **02 33 54.4** | **-0.5** |
| **BCW** | **Bitter Crk WRg** | **1.58** | **302** | | **Pn** | **02 33 56.3** | **-0.8** |
| **ISA** | **Isabella, Lake** | **1.64** | **340** | | **Pn** | **02 33 56.9** | **-1.0** |
| ISA | | | | IAML | | 02 34 19.8 | |
| | comp=N,5μm,0.6s | | | | | | |
| ISA | | | | IAML | | 02 34 23.0 | |
| | comp=E,7μm,0.9s | | | | | | |
| **SNCC** | **San Nicolas Is** | **1.70** | **240** | | **Pn** | **02 33 56.4** | **-2.3** |
| SNCC | | | | IAML | | 02 34 29.8 | |
| | comp=E,4μm,0.7s | | | | | | |
| **TJX** | **Tijuana** | **1.71** | **159** | Pn | **Pn** | **02 33 57.6** | **-1.2** |
| **RMX** | **La Rumorosa** | **2.07** | **136** | Pn | **Pn** | **02 34 04.6** | **+0.7** |
| RMX | | | | IAML | | 02 34 35.7 | |
| | comp=E,5μm,0.5s | | | | | | |
| RMX | | | | IAML | | 02 34 37.2 | |
| | comp=N,3μm,0.8s | | | | | | |
| **YUH** | **Yuha Desert** | **2.13** | **133** | Pn | **Pn** | **02 34 04.6** | **+0.1** |
| YUH | | | | IAML | | 02 34 35.5 | |
| | comp=N,4μm,0.8s | | | | | | |
| YUH | | | | IAML | | 02 34 35.8 | |
| | comp=E,3μm,0.8s | | | | | | |
| **GWY** | **Greenwater Val** | **2.25** | **23** | Pn | **Pn** | **02 34 05.9** | **-0.4** |
| GWY | | | | IAML | | 02 34 47.7 | |
| | comp=N,8μm,0.6s | | | | | | |
| **GLA** | **Glamis** | **2.68** | **113** | Pn | **Pn** | **02 34 10.7** | **-1.4** |
| GLA | | | | IAML | | 02 34 57.9 | |
| | comp=E,4μm,0.8s | | | | | | |
| GLA | | | | IAML | | 02 35 03.2 | |
| | comp=N,2μm,1.1s | | | | | | |
| **BLYC** | **Blythe** | **2.73** | **97** | Pn | **Pn** | **02 34 11.1** | **-1.6** |
| BLYC | | | | IAML | | 02 34 56.3 | |
| | comp=N,5μm,0.5s | | | | | | |
| BLYC | | | | IAML | | 02 34 59.4 | |
| | comp=E,3μm,0.8s | | | | | | |
| **WCT** | **Wildcat Mounta** | **2.83** | **19** | Pn | **Pn** | **02 34 14.1** | **-0.1** |
| WCT | | | | IAML | | 02 35 01.8 | |
| | comp=E,2μm,0.6s | | | | | | |
| WCT | | | | IAML | | 02 35 04.2 | |
| | comp=N,2μm,0.8s | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.89** | **6** | Pn | **Pn** | **02 34 14.8** | **-0.2** |
| GRAC | | | | IAML | | 02 35 06.8 | |
| | comp=N,3μm,1.0s | | | | | | |
| GRAC | | | | IAML | | 02 35 09.8 | |
| | comp=E,3μm,0.6s | | | | | | |
| **TPNV** | **Topopah Spring** | **3.08** | **23** | Pn | **Pn** | **02 34 18.0** | **+0.2** |
| **VTX** | **Valle De La Tr** | **3.19** | **148** | Pn | **Pn** | **02 34 19.3** | **+0.1** |
| VTX | | | | IAML | | 02 35 08.8 | |
| | comp=N,2μm,0.8s | | | | | | |
| VTX | | | | IAML | | 02 35 09.5 | |
| | comp=E,3μm,0.6s | | | | | | |
| **SHPR** | **Sheep Range** | **3.20** | **41** | Pn | **Pn** | **02 34 19.5** | **+0.1** |
| SHPR | | | | IAML | | 02 35 10.5 | |
| | comp=N,1μm,0.8s | | | | | | |
| SHPR | | | | IAML | | 02 35 11.7 | |
| | comp=E,1μm,0.7s | | | | | | |
| **GMN** | **Gold Mountain** | **3.20** | **7** | Pn | **Pn** | **02 34 19.8** | **+0.3** |
| **DSP** | **Deep Springs** | **3.25** | **357** | Pn | **Pn** | **02 34 20.3** | **+0.4** |
| **W13A** | **Hualapai Mount** | **3.35** | **72** | Pn | **Pn** | **02 34 20.6** | **-0.9** |
| W13A | | | | IAML | | 02 35 19.8 | |
| | comp=E,972nm,0.5s | | | | | | |
| **MZP** | **Montezuma Peak** | **3.59** | **5** | Pn | **Pn** | **02 34 25.0** | **+0.2** |
| **113A** | **Mohawk Valley,** | **3.61** | **111** | Pn | **Pn** | **02 34 23.2** | **-1.6** |
| **OMMB** | **Old Mammoth Mi** | **3.63** | **344** | Pn | **Pn** | **02 34 26.4** | **+1.0** |
| OMMB | | | | IAML | | 02 35 28.3 | |
| | comp=N,2μm,0.6s | | | | | | |
| OMMB | | | | IAML | | 02 35 31.4 | |
| | comp=E,2μm,1.2s | | | | | | |
| **BBGB** | **Big Mountain B** | **3.63** | **313** | Pn | **Pn** | **02 34 24.6** | **-0.6** |
| **MDPB** | **Devils Postpil** | **3.66** | **344** | Pn | **Pn** | **02 34 27.3** | **+1.4** |
| MDPB | | | | IAML | | 02 35 29.0 | |
| | comp=E,2μm,1.2s | | | | | | |
| MDPB | | | | IAML | | 02 35 31.5 | |
| | comp=N,1μm,0.8s | | | | | | |
| **S11A** | **Rachel** | **3.88** | **24** | Pn | **Pn** | **02 34 30.8** | **+2.0** |
| **PRN** | **Pahroc Range** | **3.96** | **33** | Pn | **Pn** | **02 34 30.4** | **+0.6** |
| PRN | | | | IAML | | 02 35 35.0 | |
| | comp=E,2μm,0.6s | | | | | | |
| PRN | | | | IAML | | 02 35 46.7 | |
| | comp=N,2μm,0.6s | | | | | | |
| **TPH** | **Tonopah** | **3.97** | **6** | Pn | **Pn** | **02 34 30.6** | **+0.5** |
| TPH | | | | IAML | | 02 35 42.0 | |
| | comp=E,2μm,0.8s | | | | | | |
| **LHV** | **Little Huntoon** | **4.17** | **352** | Pn | **Pn** | **02 34 34.1** | **+1.6** |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PSUT** | **Pine Spring** | **5.42** | **35** | Pn | **Pn** | **02 34 51.2** | **+1.3** |
| **WUAZ** | **Wupatki** | **5.44** | **73** | Pn | **Pn** | **02 34 49.9** | **-0.3** |
| **PKCU** | **Pink Cliffs** | **5.54** | **52** | Pn | **Pn** | **02 34 53.2** | **+1.5** |
| **SPR3** | **Spring Creek 3** | **5.60** | **29** | Pn | **Pn** | **02 34 52.9** | **+0.3** |
| **MCCM** | **Marconi Confer** | **5.76** | **316** | Pn | **Pn** | **02 34 54.8** | **+0.4** |
| **MTPU** | **Mount Pierson** | **5.98** | **48** | Pn | **Pn** | **02 34 58.6** | **+0.8** |
| **TUC** | **Tucson** | **6.13** | **105** | Pn | **Pn** | **02 34 57.9** | **-1.6** |
| **GDXM** | **Geysers** | **6.19** | **321** | Pn | **Pn** | **02 34 59.2** | **-1.1** |
| **ORV** | **Oroville** | **6.19** | **332** | Pn | **Pn** | **02 35 01.4** | **+1.0** |
| **MSU** | **Marysvale** | **6.29** | **44** | Pn | **Pn** | **02 35 03.6** | **+1.7** |
| **BMN** | **Battle Mountai** | **6.32** | **4** | Pn | **Pn** | **02 35 03.7** | **+1.5** |
| **HOPS** | **Hopland Field** | **6.47** | **320** | Pn | **Pn** | **02 35 04.5** | **+0.3** |
| **X18A** | **Snowflake** | **6.48** | **84** | Pn | **Pn** | **02 35 04.8** | **+0.2** |
| **W18A** | **Petrified Fore** | **6.70** | **79** | Pn | **Pn** | **02 35 07.7** | **+0.2** |
| **W18A** | **Petrified Fore** | **6.70** | **79** | P | **Pn** | **02 35 07.3** | **-0.2** |
| | baz=264,SNR=9.8 | | | | | | |
| **HMU** | **Henry Mountain** | **6.85** | **54** | Pn | **Pn** | **02 35 10.5** | **+0.9** |
| **ELK** | **Elko** | **6.91** | **16** | Pn | **Pn** | **02 35 11.7** | **+1.2** |
| **ELK** | **Elko** | **6.91** | **16** | Pn | **Pn** | **02 35 12.3** | **+1.9** |
| | comp=N,1.5nm,0.3s,baz=191,slow=14,SNR=28 | | | | | | |
| ELK | | | | Pg | Pb | 02 35 34.5 | +5.4 |
| | comp=N,5.3nm,0.3s,baz=212,slow=16,SNR=26 | | | | | | |
| ELK | | | | Lg | Lg | 02 37 03.6 | |
| | comp=N,4.9nm,0.3s,baz=262,slow=20,SNR=7.3 | | | | | | |
| | comp=N,12nm,0.8s | | | | | | |
| **TMUT** | **Trail Mountain** | **7.38** | **44** | Pn | **Pn** | **02 35 19.1** | **+2.2** |
| **DUN6** | **Lazy B Ranch** | **7.43** | **100** | Pn | **Pn** | **02 35 16.5** | **-1.0** |
| **319A** | **Douglas** | **7.66** | **109** | Pn | **Pn** | **02 35 19.5** | **-1.1** |
| **SRU** | **San Rafael Swe** | **7.66** | **47** | Pn | **Pn** | **02 35 23.5** | **+2.7** |
| **P17A** | **Butcher Ranch,** | **7.77** | **45** | Pn | **Pn** | **02 35 23.6** | **+1.5** |
| **MVCO** | **Mesa Verde** | **8.15** | **65** | Pn | **Pn** | **02 35 28.9** | **+1.4** |
| **PV19** | **Morning Glory** | **8.24** | **57** | Pn | **Pn** | **02 35 29.3** | **+0.6** |
| **PV18** | **Skein Mesa, Pa** | **8.26** | **58** | Pn | **Pn** | **02 35 29.8** | **+0.8** |
| **PV04** | **Paradox Valley** | **8.33** | **57** | Pn | **Pn** | **02 35 31.2** | **+1.2** |
| **121A** | **Cookes Peak, D** | **8.51** | **98** | Pn | **Pn** | **02 35 31.9** | **-0.4** |
| **121A** | **Cookes Peak, D** | **8.51** | **98** | P | **Pn** | **02 35 32.2** | **-0.1** |
| | baz=284,SNR=39 | | | | | | |
| **PV07** | **Paradox Valley** | **8.53** | **57** | Pn | **Pn** | **02 35 34.2** | **+1.5** |
| **YBH** | **Yreka Blue Hor** | **8.54** | **334** | Pn | **Pn** | **02 35 35.8** | **+3.1** |
| | comp=N,0.4nm,0.3s,baz=146,slow=9.1,SNR=18 | | | | | | |
| YBH | | | | Lg | Lg | 02 37 43.4 | |
| | comp=N,0.1nm,0.3s,baz=175,slow=14,SNR=2.6 | | | | | | |
| | comp=N,5.0nm,0.6s | | | | | | |
| **SBM** | **South Baldy** | **8.79** | **88** | Pn | **Pn** | **02 35 36.6** | **+0.2** |
| **LENM** | **Lemitar** | **8.95** | **87** | Pn | **Pn** | **02 35 39.1** | **+0.7** |
| **RDMU** | **Red Mountain** | **9.17** | **43** | Pn | **Pn** | **02 35 41.7** | **+0.3** |
| **ANMO** | **Albuquerque** | **9.37** | **82** | Pn | **Pn** | **02 35 45.0** | **+0.8** |
| **ANMO** | **Albuquerque** | **9.37** | **82** | Pn | **Pn** | **02 35 45.8** | **+1.6** |
| | comp=N,0.4nm,0.3s,baz=266,slow=11,SNR=19 | | | | | | |
| ANMO | | | | Pg | | 02 36 21.7 | |
| | comp=N,1.0nm,0.3s,baz=277,slow=14,SNR=12 | | | | | | |
| ANMO | | | | Lg | Lg | 02 38 19.6 | |
| | comp=N,0.3nm,0.3s,baz=137,slow=19,SNR=1.9 | | | | | | |
| ANMO | | | | LR | LR | 02 39 23.2 | |
| | comp=N,477nm,18.7s,baz=283,slow=38 | | | | | | |
| | comp=N,3.5nm,0.6s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **9.58** | **65** | P | **Pn** | **02 35 48.4** | **+1.3** |
| | baz=251,SNR=6.4 | | | | | | |
| **O20A** | **White River Ci** | **9.69** | **49** | Pn | **Pn** | **02 35 51.4** | **+2.8** |
| **SMCO** | **Snowmass** | **10.03** | **57** | Pn | **Pn** | **02 35 55.0** | **+1.6** |
| **PDAR** | **Pinedale Array** | **10.77** | **34** | Pn | **Pn** | **02 36 07.5** | **+4.3** |
| | comp=N,0.2nm,0.3s,baz=202,slow=11,SNR=14 | | | | | | |
| PDAR | | | | Lg | Lg | 02 39 06.4 | |
| | comp=N,0.6nm,0.3s,baz=189,slow=5.3,SNR=4.6 | | | | | | |
| | comp=N,5.2nm,1.0s | | | | | | |
| **RWWY** | **Rawlins** | **11.25** | **45** | Pn | **Pn** | **02 36 11.6** | **+1.7** |
| **T25A** | **Trinidad** | **11.28** | **71** | P | **Pn** | **02 36 09.7** | **-0.7** |
| | baz=258,SNR=5.4 | | | | | | |
| **N23A** | **Red Feather La** | **11.57** | **51** | P | **Pn** | **02 36 13.5** | **-0.8** |
| | baz=238 | | | | | | |
| **H17A** | **Grant Village** | **11.67** | **26** | P | **Pn** | **02 36 15.3** | **-0.4** |
| | baz=211 | | | | | | |
| **K22A** | **Casper** | **12.25** | **43** | Pn | **Pn** | **02 36 25.8** | **+2.2** |
| **MSTX** | **Muleshoe** | **12.44** | **86** | Pn | **Pn** | **02 36 28.8** | **+2.6** |
| **ALPN** | **Alpine** | **12.53** | **103** | Pn | **Pn** | **02 36 27.9** | **+0.5** |
| **BPMT** | **Black Pine Rid** | **12.74** | **14** | Pn | **Pn** | **02 36 33.1** | **+2.9** |
| **TXAR** | **Lajitas Array** | **12.92** | **108** | Pn | **Pn** | **02 36 35.4** | **+2.8** |
| | comp=N,0.4nm,0.3s,baz=294,slow=13,SNR=14 | | | | | | |
| TXAR | | | | Lg | Lg | 02 40 07.8 | |
| | baz=278,slow=23,SNR=2.8 | | | | | | |
| TXAR | | | | LR | LR | 02 41 53.7 | |
| | comp=N,297nm,19.4s,baz=284,slow=39 | | | | | | |
| | comp=N,0.9nm,0.4s | | | | | | |
| **LYMT** | **Lyon Mountain** | **13.49** | **16** | Pn | **Pn** | **02 36 42.3** | **+1.8** |
| **SAND** | **Sanderson** | **13.91** | **103** | Pn | **Pn** | **02 36 48.7** | **+2.6** |
| **NEW** | **Newport** | **14.14** | **2** | Pn | **Pn** | **02 36 49.0** | **-0.2** |
| **NEW** | **Newport** | **14.14** | **2** | Pn | **P** | **02 36 54.6** | **-2.3** |
| | comp=N,0.3nm,0.3s,baz=184,slow=13,SNR=11 | | | | | | |
| NEW | | | | LR | LR | 02 42 54.2 | |
| | comp=N,223nm,20.1s,baz=208,slow=40 | | | | | | |
| | comp=N,5.1nm,0.7s | | | | | | |
| **B08A** | **Colville Reser** | **14.27** | **356** | Pn | **Pn** | **02 36 51.6** | **+0.6** |
| **OZNA** | **Ozona** | **14.40** | **98** | Pn | **Pn** | **02 36 53.4** | **+0.5** |
| **RSSD** | **Black Hills** | **14.59** | **43** | Pn | **Pn** | **02 36 54.5** | **-1.0** |
| **EGMT** | **Eagleton** | **15.14** | **21** | | **P** | **02 37 09.1** | **+1.1** |
| **ABTX** | **Abilene, Hawle** | **15.22** | **91** | P | **P** | **02 37 07.4** | **-1.6** |
| ABTX | | | | IAmb | IAmb | 02 37 13.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **CBKS** | **Cedar Bluff** | **15.24** | **67** | P | **P** | **02 37 07.7** | **-1.5** |
| **LAO** | **LASA Array** | **15.31** | **31** | Pn | **Pn** | **02 37 05.5** | **+0.5** |
| LAO | | | | IAmb | IAmb | 02 37 17.7 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **DRIO** | **Del Rio** | **15.32** | **103** | Pn | **Pn** | **02 37 04.6** | **-0.6** |
| DRIO | | | | IAmb | IAmb | 02 37 15.6 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **JCT** | **Junction City** | **15.62** | **98** | P | **Pn** | **02 37 11.1** | **+1.9** |
| JCT | | | | IAmb | IAmb | 02 37 14.3 | |
| | comp=Z,27nm,1.3s | | | | | | |
| **WMOK** | **Wichita Mounta** | **15.69** | **82** | Pn | **Pn** | **02 37 10.1** | **+0.1** |
| **OK035** | **E0210 Rd and N** | **15.76** | **75** | Pn | **Pn** | **02 37 11.0** | **+0.1** |
| **BRDY** | **Brady** | **16.05** | **95** | | **Pn** | **02 37 15.7** | **+0.9** |
| **OK032** | **Salt Plains WL** | **16.16** | **75** | Pn | **Pn** | **02 37 16.9** | **+0.8** |
| **KAN14** | **Manchester OK** | **16.37** | **74** | P | **Pn** | **02 37 19.9** | **+1.1** |
| **833A** | **Chaparral WMA,** | **16.74** | **105** | P | **P** | **02 37 25.7** | **0.0** |
| | baz=295 | | | | | | |
| **FW07** | **Weatherford** | **16.75** | **89** | P | **Pn** | **02 37 24.7** | **+1.1** |
| FW07 | | | | IAmb | IAmb | 02 37 31.1 | |
| | comp=Z,47nm,1.1s | | | | | | |
| **Z35A** | **Perchaven, San** | **17.09** | **87** | Pn | **Pn** | **02 37 26.7** | **-1.2** |
| Z35A | | | | IAmb | IAmb | 02 37 34.6 | |
| | comp=Z,38nm,1.1s | | | | | | |
| **OK052** | **Battle Ridge R** | **17.27** | **78** | | **Pn** | **02 37 31.0** | **+0.9** |
| OK052 | | | | IAmb | IAmb | 02 37 36.2 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **435B** | **Jarrell** | **17.36** | **95** | P | **P** | **02 37 34.5** | **+1.9** |
| | baz=286 | | | | | | |
| **DEOK** | **Depew** | **17.52** | **78** | P | **P** | **02 37 34.7** | **+0.3** |
| **E28A** | **Huff** | **17.96** | **41** | P | **P** | **02 37 39.4** | **+0.2** |
| **TUL3** | **Leonard** | **18.09** | **78** | P | **P** | **02 37 41.2** | **+0.5** |
| TUL3 | | | | IAmb | IAmb | 02 37 45.4 | |
| | comp=Z,50nm,1.4s | | | | | | |
| **ECSD** | **EROS Data Cent** | **19.01** | **53** | P | **P** | **02 37 51.2** | **+0.4** |
| **BBB** | **Bella Bella** | **19.53** | **341** | LR | LR | 02 46 33.2 | |
| | comp=Z,219nm,20.0s,baz=186,slow=40 | | | | | | |
| **BRLDA** | **Berland Lookou** | **19.97** | **1** | P | **P** | **02 38 01.7** | **+0.5** |
| **MIAR** | **Mount Ida** | **19.98** | **82** | P | **P** | **02 38 01.8** | **+0.3** |
| **F33A** | **5 Mile Ranch,** | **20.13** | **48** | P | **P** | **02 38 02.3** | **-0.7** |
| **X40A** | **Basin Creek Fa** | **20.59** | **82** | P | **P** | **02 38 07.8** | **-0.3** |
| **MGMO** | **Mountain Grove** | **20.93** | **74** | P | **P** | **02 38 12.9** | **+1.1** |
| MGMO | | | | IAmb | IAmb | 02 38 15.8 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **WHAR** | **Wooly Hollow** | **20.97** | **80** | P | **P** | **02 38 12.4** | **+0.2** |
| **R40A** | **Maddies Statio** | **20.97** | **71** | P | **P** | **02 38 13.2** | **+1.0** |
| R40A | | | | IAmb | IAmb | 02 38 16.2 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **AGMN** | **Agassiz Nation** | **21.63** | **43** | P | **P** | **02 38 20.0** | **+0.9** |
| **T42A** | **Van Buren** | **21.87** | **75** | P | **P** | **02 38 22.4** | **+0.6** |
| T42A | | | | IAmb | IAmb | 02 38 26.0 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **PBMO** | **Poplar Bluff** | **22.40** | **75** | P | **P** | **02 38 27.3** | **-0.2** |
| PBMO | | | | IAmb | IAmb | 02 38 31.5 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.74** | **38** | P | **P** | **02 38 30.9** | **-0.1** |
| | comp=Z,6.5nm,0.7s,baz=236,slow=9.0,SNR=12 | | | | | | |
| | comp=Z,6.5nm,0.7s | | | | | | |
| **COWI** | **Conover** | **24.82** | **53** | P | **P** | **02 38 50.9** | **-0.2** |
| **T47A** | **Sharon Grove** | **25.06** | **75** | P | **P** | **02 38 53.0** | **-0.5** |
| T47A | | | | IAmb | IAmb | 02 38 59.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **TOAD** | **Toad River Com** | **25.23** | **351** | P | **P** | **02 38 55.5** | **+0.7** |
| | baz=165 | | | | | | |
| **DLBC** | **Dease Lake** | **25.67** | **345** | LR | LR | 02 50 18.8 | |
| | comp=Z,424nm,18.2s,baz=154,slow=39 | | | | | | |
| **Q32M** | **Nakina River** | **26.65** | **343** | P | **P** | **02 39 08.2** | **+0.3** |
| | baz=152 | | | | | | |
| **R33M** | **Jennings River** | **26.75** | **345** | P | **P** | **02 39 09.8** | **+1.2** |
| | baz=155 | | | | | | |
| **YKA** | **Yellowknife Ar** | **28.46** | **3** | P | **P** | **02 39 25.3** | **+1.5** |
| | comp=Z,0.6nm,0.8s,baz=181,slow=7.0,SNR=5.0 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **O29M** | **Mount Kennedy** | **29.50** | **339** | P | **P** | **02 39 34.3** | **+1.1** |
| | baz=143 | | | | | | |
| **O53A** | **New Philadelph** | **29.61** | **67** | P | **P** | **02 39 35.0** | **+0.7** |
| | baz=270 | | | | | | |
| **FARO** | **Faro, Yukon** | **29.82** | **345** | P | **P** | **02 39 36.0** | **+0.2** |
| | baz=153 | | | | | | |
| **PINM** | **Pinnacle** | **29.85** | **337** | P | **P** | **02 39 35.4** | **-0.8** |
| | baz=140 | | | | | | |
| **KMSC** | **Kings Mountain** | **29.90** | **78** | P | **P** | **02 39 35.9** | **-0.9** |
| KMSC | | | | IAmb | IAmb | 02 39 39.6 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **N30M** | **Aishikik Lake** | **30.03** | **341** | P | **P** | **02 39 38.5** | **+0.7** |
| | baz=147 | | | | | | |
| **M29M** | **Somme Creek** | **31.22** | **342** | P | **P** | **02 39 49.7** | **+1.4** |
| | baz=146 | | | | | | |
| **Q23K** | **Middleton Isla** | **31.54** | **332** | P | **P** | **02 39 50.9** | **-0.1** |
| | baz=131 | | | | | | |
| **L29M** | **L29M** | **31.68** | **342** | P | **P** | **02 39 52.9** | **+0.6** |
| | baz=147 | | | | | | |
| **MCARA** | **McCarthy VSAT** | **31.72** | **337** | P | **P** | **02 39 55.2** | **+2.6** |
| | baz=138 | | | | | | |
| **M27K** | **Edge Creek, AK** | **32.10** | **339** | P | **P** | **02 39 58.0** | **+1.9** |
| | baz=140 | | | | | | |
| **K29M** | **Barlow Dome** | **32.16** | **344** | P | **P** | **02 39 58.8** | **+2.2** |
| | baz=148 | | | | | | |
| **N25K** | **Chitina, Valde** | **32.40** | **336** | P | **P** | **02 40 00.6** | **+1.9** |
| | baz=136 | | | | | | |
| **M26K** | **Nabesna, AK** | **32.48** | **338** | P | **P** | **02 40 01.5** | **+2.2** |
| | baz=139 | | | | | | |
| **J30M** | **Hart River** | **32.53** | **345** | P | **P** | **02 40 02.3** | **+2.5** |
| | baz=151 | | | | | | |
| **L27K** | **Beaver Creek,** | **32.64** | **340** | P | **P** | **02 40 03.0** | **+2.3** |
| | baz=141 | | | | | | |
| **DAWY** | **Dawson** | **32.80** | **343** | P | **P** | **02 40 04.4** | **+2.3** |
| | baz=146 | | | | | | |
| **I30M** | **Mount Dempster** | **33.10** | **346** | P | **P** | **02 40 07.0** | **+2.2** |
| | baz=151 | | | | | | |
| **SEW** | **Seward** | **33.19** | **331** | P | **P** | **02 40 06.3** | **+0.8** |
| | baz=127 | | | | | | |
| **H31M** | **Peel River** | **33.23** | **348** | P | **P** | **02 40 05.6** | **-0.2** |
| | baz=154 | | | | | | |
| **K27K** | **Chicken** | **33.47** | **341** | P | **P** | **02 40 09.3** | **+1.4** |
| | baz=142 | | | | | | |
| **PAX** | **Paxson** | **33.67** | **337** | P | **P** | **02 40 11.0** | **+1.3** |
| | baz=136 | | | | | | |
| **EGAK** | **Eagle** | **33.82** | **342** | P | **P** | **02 40 12.0** | **+1.0** |
| | baz=144 | | | | | | |
| **SML** | **Sawmill** | **33.84** | **334** | P | **P** | **02 40 12.9** | **+1.7** |
| | baz=131 | | | | | | |
| **RC01** | **Rabbit Creek A** | **33.90** | **333** | P | **P** | **02 40 13.9** | **+2.2** |
| | baz=128 | | | | | | |
| **SCRK** | **Sand Creek** | **33.96** | **340** | P | **P** | **02 40 13.3** | **+0.9** |
| **SCRK** | **Sand Creek** | **33.96** | **340** | P | **P** | **02 40 14.5** | **+2.1** |
| | baz=139 | | | | | | |
| **RIDG** | **Independent Ri** | **34.04** | **339** | P | **P** | **02 40 14.3** | **+1.3** |
| | baz=138 | | | | | | |
| **I28M** | **Miner Creek** | **34.08** | **344** | P | **P** | **02 40 13.8** | **+0.5** |
| **I28M** | **Miner Creek** | **34.08** | **344** | P | **P** | **02 40 14.6** | **+1.3** |
| | baz=146,SNR=8.2 | | | | | | |
| **EPYK** | **Eagle Plains** | **34.18** | **347** | P | **P** | **02 40 15.2** | **+1.1** |
| | baz=151 | | | | | | |
| **G31M** | **Satah River** | **34.24** | **349** | P | **P** | **02 40 16.3** | **+1.8** |
| | baz=155 | | | | | | |
| **J26L** | **Joseph Creek** | **34.24** | **340** | P | **P** | **02 40 16.3** | **+1.6** |
| | baz=140 | | | | | | |
| **CAPN** | **Captain Cook N** | **34.26** | **331** | P | **P** | **02 40 14.7** | **-0.1** |
| | baz=126 | | | | | | |
| **K24K** | **Donnelly Dome** | **34.37** | **338** | P | **P** | **02 40 18.8** | **+3.0** |
| | baz=136 | | | | | | |
| **H29M** | **Whitestone** | **34.38** | **345** | P | **P** | **02 40 18.1** | **+2.3** |
| | baz=149 | | | | | | |
| **SUA** | **Susitna One** | **34.52** | **333** | P | **P** | **02 40 20.0** | **+2.9** |
| | baz=127 | | | | | | |
| **I27K** | **Kandik River** | **34.61** | **343** | P | **P** | **02 40 21.1** | **+3.3** |
| | baz=144 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **34.63** | **347** | P | **P** | **02 40 19.4** | **+1.4** |
| | baz=152 | | | | | | |
| **I26K** | **Coal Creek Min** | **34.76** | **342** | P | **P** | **02 40 21.0** | **+2.0** |
| | baz=141 | | | | | | |
| **Q18K** | **Katmai Hardscr** | **34.79** | **326** | P | **P** | **02 40 21.5** | **+1.9** |
| | baz=118 | | | | | | |
| **J25K** | **Salcha River,** | **34.84** | **340** | P | **P** | **02 40 22.0** | **+2.1** |
| | baz=138 | | | | | | |
| **G29M** | **Pine Creek** | **34.91** | **346** | P | **P** | **02 40 22.1** | **+1.7** |
| | baz=150 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **34.97** | **324** | P | **P** | **02 40 21.8** | **+0.9** |
| | baz=116 | | | | | | |
| **Q17K** | **Contact Creek** | **35.02** | **325** | P | **P** | **02 40 23.2** | **+1.6** |
| | baz=117 | | | | | | |
| **H27K** | **Steamboat Moun** | **35.10** | **344** | P | **P** | **02 40 23.6** | **+1.6** |
| | baz=144 | | | | | | |
| **F30M** | **Barrier River** | **35.12** | **348** | P | **P** | **02 40 23.8** | **+1.7** |
| | baz=154 | | | | | | |
| **HDA** | **Harding Lake** | **35.16** | **338** | P | **P** | **02 40 23.6** | **+1.1** |
| | baz=135 | | | | | | |
| **P18K** | **Big Mountain,** | **35.25** | **327** | P | **P** | **02 40 24.0** | **+0.6** |
| | baz=119 | | | | | | |
| **MCK** | **McKinley** | **35.32** | **337** | P | **P** | **02 40 25.9** | **+1.9** |
| | baz=132 | | | | | | |
| **INK** | **Inuvik** | **35.40** | **350** | P | **P** | **02 40 25.1** | **+0.6** |
| | baz=157 | | | | | | |
| **ILAR** | **Eielson Array** | **35.40** | **339** | P | **P** | **02 40 25.7** | **+1.1** |
| | comp=Z,3.9nm,0.7s,baz=153,slow=7.8,SNR=45 | | | | | | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| **PRP** | **Porcupine Dome** | **35.56** | **341** | P | **P** | **02 40 27.9** | **+1.8** |
| | baz=138 | | | | | | |
| **G27K** | **Doyon Strip** | **35.60** | **344** | P | **P** | **02 40 28.5** | **+2.2** |
| | baz=145 | | | | | | |
| **N19K** | **Bonanza Creek** | **35.65** | **330** | P | **P** | **02 40 28.8** | **+2.0** |
| | baz=122 | | | | | | |
| **M20K** | **Styx River** | **35.69** | **332** | P | **P** | **02 40 28.9** | **+1.7** |
| | baz=125 | | | | | | |
| **POKR** | **Poker Plat Res** | **35.81** | **339** | P | **P** | **02 40 27.5** | **-0.7** |
| | baz=136 | | | | | | |
| **F28M** | **Old Crow** | **35.89** | **346** | P | **P** | **02 40 30.7** | **+1.9** |
| | baz=148 | | | | | | |
| **NEA2** | **Nenana** | **35.95** | **338** | P | **P** | **02 40 31.5** | **+2.2** |
| | baz=133 | | | | | | |
| **N18K** | **Kilae Creek** | **36.17** | **329** | P | **P** | **02 40 30.7** | **-0.6** |
| | baz=120 | | | | | | |
| **M19K** | **Big River Lodg** | **36.19** | **331** | P | **P** | **02 40 32.1** | **+0.7** |
| | baz=123 | | | | | | |
| **H25L** | **Birch Creek** | **36.20** | **341** | P | **P** | **02 40 32.8** | **+1.4** |
| | baz=139 | | | | | | |
| **G26K** | **Porcupine Rive** | **36.22** | **343** | P | **P** | **02 40 32.9** | **+1.4** |
| | baz=142,SNR=5.5 | | | | | | |
| **SDPT** | **Sand Point** | **36.24** | **319** | P | **P** | **02 40 30.8** | **-1.1** |
| | baz=108 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **36.25** | **336** | P | **P** | **02 40 32.3** | **+0.4** |
| | baz=130 | | | | | | |
| **O17K** | **Koliganek Bris** | **36.26** | **327** | P | **P** | **02 40 32.7** | **+0.7** |
| | baz=117 | | | | | | |
| **L20K** | **Farewell, AK** | **36.31** | **332** | P | **P** | **02 40 34.3** | **+1.8** |
| | baz=124 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **36.42** | **338** | P | **P** | **02 40 34.9** | **+1.6** |
| | baz=133 | | | | | | |
| **H24K** | **Noodor Dome** | **36.46** | **340** | P | **P** | **02 40 34.7** | **+1.0** |
| | baz=136 | | | | | | |
| **L19K** | **White Mountain** | **36.53** | **332** | P | **P** | **02 40 35.5** | **+1.2** |
| | baz=123 | | | | | | |
| **M18K** | **Stony River** | **36.55** | **330** | P | **P** | **02 40 36.0** | **+1.5** |
| | baz=121 | | | | | | |
| **O16K** | **Kokwok River B** | **36.64** | **327** | P | **P** | **02 40 35.8** | **+0.6** |
| | baz=116 | | | | | | |
| **N17K** | **Nushagak Hills** | **36.66** | **328** | P | **P** | **02 40 37.4** | **+2.0** |
| | baz=118 | | | | | | |
| **G25K** | **Bearman Lake** | **36.66** | **342** | P | **P** | **02 40 36.3** | **+1.1** |
| | baz=139,SNR=5.2 | | | | | | |
| **E28M** | **Babbage River** | **36.67** | **347** | P | **P** | **02 40 34.6** | **-0.8** |
| | baz=149 | | | | | | |
| **E27K** | **Coleen River** | **36.72** | **345** | P | **P** | **02 40 34.2** | **-1.8** |
| | baz=146 | | | | | | |
| **MLY** | **Manley** | **36.78** | **337** | P | **P** | **02 40 37.4** | **+0.9** |
| MLY | | | | IAmb | IAmb | 02 40 39.6 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **MLY** | **Manley** | **36.78** | **337** | P | **P** | **02 40 37.7** | **+1.3** |
| | baz=131,SNR=7.2 | | | | | | |
| **K20K** | **Telida** | **36.89** | **334** | P | **P** | **02 40 38.0** | **+0.6** |
| | baz=125 | | | | | | |
| **F26K** | **Sheenjek River** | **36.89** | **344** | P | **P** | **02 40 39.0** | **+1.6** |
| | baz=142,SNR=8.7 | | | | | | |
| **H23K** | **Yukon River** | **36.94** | **339** | P | **P** | **02 40 38.5** | **+0.7** |
| H23K | | | | IAmb | IAmb | 02 40 40.6 | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **H23K** | **Yukon River** | **36.94** | **339** | P | **P** | **02 40 39.6** | **+1.8** |
| | baz=133 | | | | | | |
| **G24K** | **Hadweenzic Riv** | **36.97** | **341** | P | **P** | **02 40 39.1** | **+1.0** |
| | baz=137 | | | | | | |
| **F25K** | **Christian Rive** | **37.17** | **343** | P | **P** | **02 40 42.2** | **+2.4** |
| | baz=140 | | | | | | |
| **M17K** | **Holitna River** | **37.18** | **329** | P | **P** | **02 40 41.3** | **+1.5** |
| | baz=119 | | | | | | |
| **S12K** | **Black Hills** | **37.21** | **319** | P | **P** | **02 40 40.9** | **+0.8** |
| | baz=107 | | | | | | |
| **L18K** | **Granite Mounta** | **37.28** | **331** | P | **P** | **02 40 42.2** | **+1.5** |
| | baz=121 | | | | | | |
| **N16K** | **Nishlik Lake** | **37.33** | **328** | P | **P** | **02 40 42.5** | **+1.4** |
| | baz=116 | | | | | | |
| **J20K** | **Nowinta River** | **37.39** | **335** | P | **P** | **02 40 43.4** | **+1.8** |
| | baz=126 | | | | | | |
| **H22K** | **Ishtalitna Cre** | **37.55** | **338** | P | **P** | **02 40 44.4** | **+1.5** |
| | baz=131,SNR=10 | | | | | | |
| **M16K** | **Timber Creek** | **37.66** | **328** | P | **P** | **02 40 46.4** | **+2.6** |
| | baz=117 | | | | | | |
| **F24K** | **Squaw Lake** | **37.69** | **342** | P | **P** | **02 40 46.5** | **+2.4** |
| | baz=137 | | | | | | |
| **G23K** | **Bananza Creek** | **37.70** | **340** | P | **P** | **02 40 46.0** | **+1.8** |
| | baz=134 | | | | | | |
| **N15K** | **Kwethluk River** | **37.79** | **327** | P | **P** | **02 40 46.5** | **+1.4** |
| | baz=114 | | | | | | |
| **J19K** | **Poorman** | **37.82** | **334** | P | **P** | **02 40 47.0** | **+1.8** |
| | baz=124 | | | | | | |
| **H21K** | **Melozitna Rive** | **37.84** | **337** | P | **P** | **02 40 45.8** | **+0.4** |
| H21K | | | | IAmb | IAmb | 02 40 48.2 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **H21K** | **Melozitna Rive** | **37.84** | **337** | P | **P** | **02 40 46.8** | **+1.4** |
| | baz=129,SNR=6.8 | | | | | | |
| **I20K** | **Naaghedeneel** | **37.88** | **335** | P | **P** | **02 40 47.8** | **+2.1** |
| | baz=126 | | | | | | |
| **L17K** | **Donlin** | **37.89** | **330** | P | **P** | **02 40 47.6** | **+1.7** |
| | baz=119 | | | | | | |
| **J18K** | **Innoko River** | **37.94** | **333** | P | **P** | **02 40 47.7** | **+1.5** |
| | baz=122 | | | | | | |
| **K17K** | **Iditarod** | **38.18** | **331** | P | **P** | **02 40 49.4** | **+1.2** |
| | baz=119 | | | | | | |
| **L16K** | **Owhat River** | **38.19** | **329** | P | **P** | **02 40 50.9** | **+2.6** |
| | baz=117 | | | | | | |
| **E24K** | **Your Creek** | **38.25** | **342** | P | **P** | **02 40 51.2** | **+2.3** |
| | baz=137 | | | | | | |
| **G22K** | **Bettles** | **38.27** | **339** | P | **P** | **02 40 50.2** | **+1.3** |
| | baz=132 | | | | | | |
| **M15K** | **Kasigluk River** | **38.28** | **327** | P | **P** | **02 40 50.8** | **+1.7** |
| | baz=114 | | | | | | |
| **C27K** | **Jago River** | **38.35** | **346** | P | **P** | **02 40 51.8** | **+2.2** |
| | baz=144 | | | | | | |
| **H20K** | **Anotleneega Mo** | **38.43** | **336** | P | **P** | **02 40 50.8** | **+0.4** |
| | baz=126,SNR=7.6 | | | | | | |
| **E23K** | **Chandalar** | **38.53** | **341** | P | **P** | **02 40 53.0** | **+1.7** |
| | baz=135 | | | | | | |
| **G21K** | **Allakaket** | **38.61** | **338** | P | **P** | **02 40 53.9** | **+2.1** |
| | baz=129 | | | | | | |
| **D25K** | **Kavik River** | **38.68** | **344** | P | **P** | **02 40 54.3** | **+1.8** |
| | baz=141 | | | | | | |
| **C26K** | **Camden Bay** | **38.83** | **345** | P | **P** | **02 40 54.4** | **+0.8** |
| | baz=143 | | | | | | |
| **F22K** | **John River** | **38.86** | **340** | P | **P** | **02 40 56.0** | **+2.1** |
| | baz=132 | | | | | | |
| **M14K** | **Bethel** | **38.88** | **327** | P | **P** | **02 40 55.0** | **+0.9** |
| | baz=113 | | | | | | |
| **TOLK** | **Toolik Lake Re** | **38.94** | **342** | P | **P** | **02 40 56.4** | **+1.8** |
| | baz=136 | | | | | | |
| **H19K** | **Roundabout Mou** | **38.98** | **336** | P | **P** | **02 40 55.4** | **+0.5** |
| **H19K** | **Roundabout Mou** | **38.98** | **336** | P | **P** | **02 40 55.6** | **+0.7** |
| | baz=124 | | | | | | |
| **L15K** | **Ungalak Mounta** | **39.04** | **328** | P | **P** | **02 40 56.6** | **+1.1** |
| | baz=114 | | | | | | |
| **F21K** | **Alatna River** | **39.05** | **339** | P | **P** | **02 40 57.4** | **+1.8** |
| | baz=130 | | | | | | |
| **K15K** | **Wolf Creek Mou** | **39.32** | **329** | P | **P** | **02 40 59.8** | **+2.0** |
| | baz=115 | | | | | | |
| **D23K** | **Nanushuk River** | **39.45** | **342** | P | **P** | **02 41 00.7** | **+1.8** |
| | baz=135 | | | | | | |
| **C24K** | **Franklin Bluff** | **39.52** | **344** | P | **P** | **02 41 00.7** | **+1.3** |
| | baz=138 | | | | | | |
| **G19K** | **Purcell Mounta** | **39.55** | **336** | P | **P** | **02 41 01.7** | **+2.0** |
| | baz=124 | | | | | | |
| **F20K** | **Avaraart Lake** | **39.63** | **338** | P | **P** | **02 41 00.5** | **+0.1** |
| | baz=127 | | | | | | |
| **I17K** | **Unalakleet** | **39.69** | **332** | P | **P** | **02 41 00.6** | **-0.2** |
| | baz=118 | | | | | | |
| **D22K** | **Ayikyak River** | **39.92** | **341** | P | **P** | **02 41 03.7** | **+0.9** |
| | baz=132 | | | | | | |
| **G18K** | **Tagagawik** | **39.94** | **335** | P | **P** | **02 41 04.2** | **+1.1** |
| | baz=122 | | | | | | |
| **E21K** | **Killik River** | **39.98** | **340** | P | **P** | **02 41 04.8** | **+1.4** |
| | baz=130 | | | | | | |
| **C23K** | **Itkillik River** | **40.06** | **343** | P | **P** | **02 41 04.9** | **+1.0** |
| | baz=136 | | | | | | |
| **F19K** | **Shaleruckik Mo** | **40.16** | **337** | P | **P** | **02 41 06.0** | **+1.2** |
| | baz

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FON | **Fontana** | **0.28** | **97** | | Pg | 02 34 23.0 | +0.2 |
| FON | | | | | Sg | 02 34 26.9 | +0.5 |
| **CHFC** | **Chilao Flat St** | **0.29** | **313** | | Pg | 02 34 22.8 | -0.3 |
| **CACC** | **Caltech Cellar** | **0.29** | **270** | | Pg | 02 34 22.9 | -0.1 |
| CACC | | | | | Sg | 02 34 27.4 | +0.5 |
| **FULC** | **Fullerton** | **0.29** | **206** | | Pg | 02 34 23.9 | +0.9 |
| **CRPC** | **Caltech Rob'n** | **0.29** | **270** | | Sg | 02 34 27.3 | +0.4 |
| **GVRC** | **Garvey Reservo** | **0.30** | **254** | | Sg | 02 34 28.5 | +1.3 |
| **CRNC** | **Corona** | **0.31** | **146** | | Pg | 02 34 23.2 | -0.2 |
| CRNC | | | | | Sg | 02 34 27.6 | +0.1 |
| **HOLC** | **Holcomb Ridge** | **0.33** | **349** | | Sg | 02 34 28.3 | +0.2 |
| **PASC** | **Pasadena Art C** | **0.34** | **276** | Pg | Pg | 02 34 23.8 | -0.2 |
| PASC | | | | Sg | Sg | 02 34 28.5 | -0.1 |
| **JNH** | **Juniper Hills** | **0.35** | **334** | | Pg | 02 34 23.8 | -0.3 |
| JNH | | | | | Sg | 02 34 28.8 | +0.1 |
| **RVR** | **Riverside** | **0.36** | **113** | | Pg | 02 34 23.9 | -0.3 |
| RVR | | | | | Sg | 02 34 29.0 | +0.1 |
| **BREC** | **Barre Substati** | **0.37** | **208** | | Pb | 02 34 25.5 | -1.0 |
| BREC | | | | | Sb | 02 34 32.1 | -0.4 |
| **CSP** | **Cedar Springs** | **0.38** | **64** | | Pg | 02 34 24.9 | +0.1 |
| **RSBC** | **Riverside Bore** | **0.40** | **114** | | Pg | 02 34 25.0 | -0.1 |
| RSBC | | | | | Sg | 02 34 30.5 | +0.1 |
| **RSBC** | **Riverside Bore** | **0.40** | **114** | | Pg | 02 34 25.5 | +0.4 |
| RSBC | | | | | Sg | 02 34 30.7 | +0.3 |
| **SANC** | **Santa Ana** | **0.44** | **193** | | Pg | 02 34 26.6 | +0.8 |
| **DECC** | **Green Verdugo** | **0.48** | **284** | | Sg | 02 34 33.5 | +0.6 |
| **CJV** | **Casa Juvan** | **0.50** | **322** | | Sg | 02 34 34.1 | +0.6 |
| **SBB** | **Saddle Back Bu** | **0.55** | **355** | | Sg | 02 34 35.5 | +0.3 |
| **CFT** | **Crafton Hills** | **0.56** | **100** | | Sg | 02 34 36.1 | +0.8 |
| **PEC** | **Perris** | **0.56** | **115** | | Pg | 02 34 27.7 | -0.5 |
| PEC | | | | | Sg | 02 34 35.3 | -0.1 |
| **ELS** | **Elsinore Mount** | **0.56** | **149** | Pg | Pg | 02 34 27.4 | -0.8 |
| ELS | | | | IAML | | 02 34 30.0 | |
| | comp=E,1μm,1.0s | | | | | | |
| ELS | | | | IAML | | 02 34 32.2 | |
| | comp=N,1μm,0.8s | | | | | | |
| ELS | | | | Sg | Sg | 02 34 35.1 | -0.4 |
| **HYS** | **Haystack Butte** | **0.75** | **13** | | Pg | 02 34 31.6 | -0.1 |
| HYS | | | | | Sg | 02 34 41.6 | +0.2 |
| **HMTC** | **Hemet** | **0.77** | **123** | | Sg | 02 34 41.4 | -0.6 |
| **DGR** | **Domenigoni Val** | **0.80** | **127** | | Pg | 02 34 32.0 | -0.7 |
| DGR | | | | | Sg | 02 34 42.2 | -0.8 |
| **BACC** | **Bachelor Mtn.** | **0.80** | **130** | | Pg | 02 34 31.9 | -0.8 |
| BACC | | | | | Sg | 02 34 42.3 | -0.8 |
| **POB** | **Polly Butte** | **0.83** | **122** | | Pg | 02 34 33.1 | -0.3 |
| POB | | | | | Sg | 02 34 43.5 | -0.7 |
| **CIAC** | **Catalina I. Ai** | **0.91** | **216** | | Pg | 02 34 33.6 | -1.1 |
| CIAC | | | | | Sg | 02 34 46.4 | 0.0 |
| **GORC** | **Green Oak Ranc** | **1.08** | **155** | | Sg | 02 34 37.0 | -1.0 |
| GORC | | | | | Sg | 02 34 51.9 | -0.1 |
| **BZNA** | **Buzz No.'s Pla** | **1.12** | **125** | | Sg | 02 34 52.5 | -0.9 |
| **EW2** | **E Wide Canyon** | **1.15** | **99** | | Sg | 02 34 54.1 | -0.2 |
| **FRD** | **Ford Ranch, An** | **1.16** | **123** | | Sg | 02 34 53.8 | -1.0 |
| **PFO** | **Pinyon Flats O** | **1.21** | **115** | | Sg | 02 34 55.3 | -1.0 |
| **PFO** | **Pinyon Flats O** | **1.21** | **115** | Pg | Pb | 02 34 40.8 | 0.0 |
| PFO | | | | IAML | | 02 34 46.7 | |
| | comp=N,756nm,1.1s | | | | | | |
| PFO | | | | Sg | Sg | 02 34 55.4 | -0.9 |
| PFO | | | | IAML | | 02 35 00.0 | |
| | comp=N,900nm,1.1s | | | | | | |
| **PMD** | **Palm Desert** | **1.26** | **112** | | Sg | 02 34 56.7 | -1.0 |
| **MATG** | **Mataguay Scout** | **1.32** | **135** | | Sg | 02 34 58.5 | -1.3 |
| **DPP** | **Dos Picos Cty** | **1.33** | **148** | | Sg | 02 34 58.2 | -1.8 |
| **BORC** | **Borrego Spring** | **1.42** | **127** | | Sb | 02 35 01.4 | -1.4 |
| **BAR** | **Barrett** | **1.72** | **147** | | Sn | 02 35 09.3 | -1.1 |
| **TKX** | **Tecate** | **1.84** | **148** | | Sn | 02 35 12.2 | -1.2 |
| **TPNV** | **Topopah Spring** | **3.07** | **23** | Pn | Pn | 02 35 06.7 | -0.1 |
| TPNV | | | | IAML | | 02 35 28.4 | |
| | comp=N,909nm,0.8s | | | | | | |
| TPNV | | | | IAML | | 02 35 36.7 | |
| | comp=N,1μm,1.2s | | | | | | |

*VAO* ***29*** *02:38:26.9±0.4,24°.12S×67°.18W,h196km±3km, mb4.4*
*SJA* ***29*** *02:38:26.8±0.7,24°.20S×67°.13W,h198km±6km, ML3.8, MW3.6*
*NEIC* ***29*** *02:38:27.9±1.4,24°.22S±0°.08×67°.1W±0°.1, h179km±2km, mb4.4/21, ML4.2(GUC), Error ellipse: s-maj=17.4km s-min=10.6km az=101.0*
*IDC* ***29*** *02:38:27.6±1.0,24°.11S×66°.99W, h174km±9km, mb3.7/11, mbtmp4.2/17, Error ellipse: s-maj=14.8km s-min=11.1km az=57.0*
*GUC* ***29*** *02:38:28.7±0.6,24°.16S×67°.43W, h210km±7km, ML4.2*
**ISC 29 02:38:27.1**±0.6,**24°.22S**±0°.03×**67°.16W**±0°.04,**h181**km±6km, **n133,σ1°53/159,mb4.2/21,11C-2D,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AF01** | **San Pedro de A** | **1.57** | **323** | | **Pn** | **02 39 01.6** | **+1.4** |
| **AF01** | **San Pedro de A** | **1.57** | **323** | *eP* | **Pn** | **02 39 01.9** | **+1.7** |
| AF01 | | | | *i* S | **Sn** | **02 39 27.6** | **+1.9** |
| AF01 | | | | IAML | | 02 39 30.7 | |
| | comp=E,1μm,0.7s | | | | | | |
| **SLA** | **San Lorenzo** | **1.59** | **109** | *eP* | **Pn** | **02 39 01.9** | **+1.8** |
| SLA | | | | IAML | | 02 39 31.4 | |
| | comp=Z,296nm,0.9s | | | | | | |
| **SLA** | **San Lorenzo** | **1.59** | **109** | ⇓*iP* | **Pn** | **02 39 01.9** | **+1.8** |
| SLA | | | | *i* S | **Sn** | **02 39 25.8** | **+0.1** |
| **AZAP** | **Zapla** | **1.91** | **91** | *eP* | **Pn** | **02 39 04.6** | **+1.1** |
| AZAP | | | | *eS* | **Sn** | **02 39 33.3** | **+1.6** |
| AZAP | | | | IAML | | 02 39 34.4 | |
| | comp=Z,557nm,0.7s | | | | | | |
| **FSA** | **Cafayete** | **2.17** | **151** | *eP* | **Pn** | **02 39 07.6** | **+1.4** |
| FSA | | | | *eS* | **Sn** | **02 39 37.4** | **+0.6** |
| **LVC** | **Limon Verde** | **2.27** | **314** | Pn | **Pn** | **02 39 08.7** | **+1.1** |
| **LVC** | **Limon Verde** | **2.27** | **314** | *eP* | **Pn** | **02 39 09.3** | **+1.7** |
| LVC | | | | *eS* | **Sn** | **02 39 40.0** | **+0.9** |
| LVC | | | | IAML | | 02 39 42.8 | |
| | comp=Z,270nm,0.7s | | | | | | |
| **LVC** | **Limon Verde** | **2.27** | **314** | P | **Pn** | **02 39 09.1** | **+1.5** |
| | comp=Z,171nm,0.6s,baz=136,slow=7.3,SNR=50 | | | | | | |
| LVC | | | | S | **Sn** | **02 39 39.3** | **+0.3** |
| | comp=Z,329nm,0.4s,baz=8.2,slow=20,SNR=8.5 | | | | | | |
| **LVC** | **Limon Verde** | **2.27** | **314** | ⇑*iP* | **Pn** | **02 39 09.0** | **+1.3** |
| LVC | | | | *i* S | **Sn** | **02 39 39.1** | **+0.1** |
| LVC | | | | IAML | | 02 39 42.8 | |
| | comp=Z,3μm,0.6s | | | | | | |
| **LVC** | **Limon Verde** | **2.27** | **314** | *eP* | **Pn** | **02 39 07.3** | **-0.3** |
| LVC | | | | *eS* | **Sn** | **02 39 39.1** | **+0.1** |
| **GO02** | **Mina Guanaco** | **2.40** | **246** | | **Pn** | **02 39 10.4** | **+1.4** |
| **GO02** | **Mina Guanaco** | **2.40** | **246** | *eP* | **Pn** | **02 39 10.4** | **+1.4** |
| GO02 | | | | *eS* | **Sn** | **02 39 43.4** | **+1.8** |
| **GO02** | **Mina Guanaco** | **2.40** | **246** | ⇑*iP* | **Pn** | **02 39 10.5** | **+1.4** |
| GO02 | | | | *i* S | **Sn** | **02 39 42.8** | **+1.2** |
| GO02 | | | | IAML | | 02 39 43.9 | |
| | comp=E,1μm,0.3s | | | | | | |
| **YJA** | **Yavi** | **2.53** | **37** | *eP* | **Pn** | **02 39 11.8** | **+1.1** |
| YJA | | | | *eS* | **Sn** | **02 39 46.1** | **+1.5** |
| **YJA** | **Yavi** | **2.53** | **37** | *eP* | **Pn** | **02 39 11.8** | **+1.1** |
| YJA | | | | *i* S | **Sn** | **02 39 45.2** | **+0.6** |
| **ALOL** | **LOMAS DE OLMED** | **2.93** | **83** | *eP* | **Pn** | **02 39 16.0** | **+1.0** |
| **PB14** | **IPOC Station P** | **2.99** | **262** | Pn | **Pn** | **02 39 16.4** | **+0.5** |
| **PB14** | **IPOC Station P** | **2.99** | **262** | ⇑*iP* | **Pn** | **02 39 16.5** | **+0.5** |
| PB14 | | | | *i* S | **Sn** | **02 39 52.6** | **-1.3** |
| PB14 | | | | IAML | | 02 40 02.7 | |
| | comp=E,142nm,0.6s | | | | | | |
| **AHML** | **Horco Molle** | **3.04** | **148** | *eP* | **Pn** | **02 39 17.8** | **+1.5** |
| AHML | | | | *eS* | **Sn** | **02 39 56.0** | **+1.2** |
| **AHML** | **Horco Molle** | **3.04** | **148** | ⇓*iP* | **Pn** | **02 39 17.6** | **+1.3** |
| AHML | | | | *i* S | **Sn** | **02 39 54.7** | **0.0** |
| **PB04** | **IPOC Station P** | **3.33** | **304** | Pn | **Pn** | **02 39 20.2** | **+0.1** |
| **PB04** | **IPOC Station P** | **3.33** | **304** | *eP* | **Pn** | **02 39 20.6** | **+0.5** |
| PB04 | | | | *i* S | **Sn** | **02 39 59.1** | **-2.2** |
| **AC01** | **Pan de Azucar** | **3.66** | **238** | Pn | **Pn** | **02 39 23.8** | **-0.2** |
| **AC01** | **Pan de Azucar** | **3.66** | **238** | ⇑*iP* | **Pn** | **02 39 23.8** | **-0.2** |
| AC01 | | | | *i* S | **Sn** | **02 40 06.7** | **-1.7** |
| **AC06** | **Mina Casimiro** | **4.25** | **222** | Pn | **Pn** | **02 39 30.9** | **-0.6** |
| **AC06** | **Mina Casimiro** | **4.25** | **222** | ⇑*iP* | **Pn** | **02 39 31.1** | **-0.4** |
| **GO03** | **Copiap** | **4.36** | **219** | Pn | **Pn** | **02 39 32.3** | **-0.5** |
| **GO03** | **Copiap** | **4.36** | **219** | *eP* | **Pn** | **02 39 32.7** | **-0.1** |
| GO03 | | | | *eS* | **Sn** | **02 40 23.8** | **-0.6** |
| **GO03** | **Copiap** | **4.36** | **219** | ⇑*iP* | **Pn** | **02 39 32.4** | **-0.5** |
| GO03 | | | | *i* S | **Sn** | **02 40 22.9** | **-1.5** |
| **CYA** | **Choya** | **4.38** | **164** | *eP* | **Pn** | **02 39 35.5** | **+2.4** |
| CYA | | | | *eS* | **Sn** | **02 40 23.0** | **-1.9** |
| **TA01** | **Diego Aracena** | **4.59** | **322** | Pn | **Pn** | **02 39 35.4** | **-0.4** |
| **VCA** | **Vinchina** | **4.60** | **192** | *eP* | **Pn** | **02 39 38.2** | **+2.2** |
| VCA | | | | *eS* | **Sn** | **02 40 28.5** | **-1.6** |
| **HMBC** | **Humberstone** | **4.67** | **327** | Pn | **Pn** | **02 39 35.7** | **-1.3** |
| **GO01** | **Chusmiza** | **4.91** | **337** | Pn | **Pn** | **02 39 38.3** | **-2.1** |
| **ACLC** | **CERRO LA CRUZ** | **5.19** | **178** | *eP* | **Pn** | **02 39 45.0** | **+1.3** |
| ACLC | | | | *eS* | **Sn** | **02 40 38.5** | **-5.4** |
| **AC04** | **Llanos de Chal** | **5.30** | **221** | Pn | **Pn** | **02 39 43.4** | **-1.7** |
| **AC05** | **El Transito** | **5.38** | **211** | Pn | **Pn** | **02 39 45.8** | **-0.4** |
| **LCO** | **Las Campanas** | **5.73** | **213** | Pn | **Pn** | **02 39 49.5** | **-1.3** |
| **APLL** | **PUNTA DE LOS L** | **6.18** | **175** | *eP* | Pn | 02 39 46.0 | -10 |
| **AROD** | **Rodeo** | **6.27** | **199** | *eP* | **Pn** | **02 39 59.4** | **+1.5** |
| AROD | | | | *eS* | **Sn** | **02 41 06.0** | **-3.6** |
| **CO01** | **Juntas del Tor** | **6.30** | **204** | Pn | **Pn** | **02 39 58.5** | **+0.2** |
| **AVFE** | **Valle Fertil** | **6.42** | **182** | *eP* | **Pn** | **02 40 00.6** | **+0.9** |
| AVFE | | | | *eS* | **Sn** | **02 41 13.1** | **+0.4** |
| AVFE | | | | IAML | | 02 41 21.3 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **ACCO** | **Cerro Coronel** | **6.57** | **195** | *eP* | **Pn** | **02 40 02.5** | **+0.6** |
| ACCO | | | | *eS* | **Sn** | **02 41 11.5** | **-5.1** |
| ACCO | | | | IAML | | 02 41 20.2 | |
| | comp=Z,39nm,1.6s | | | | | | |
| **CO05** | **La Serena** | **6.74** | **212** | Pn | **Pn** | **02 40 02.1** | **-1.7** |
| **GO04** | **Tololo Observa** | **6.76** | **208** | Pn | **Pn** | **02 40 03.5** | **-0.8** |
| **FDPY** | **Filadelfia** | **6.91** | **75** | *eP* | **Pn** | **02 40 06.1** | **0.0** |
| FDPY | | | | *eS* | **Sn** | **02 41 25.5** | **+1.3** |
| **ACHE** | **Chepes** | **6.93** | **176** | *eS* | **Sn** | **02 41 23.0** | **-1.9** |
| **CO03** | **El Pedregal** | **7.30** | **205** | Pn | **Pn** | **02 40 09.3** | **-2.0** |
| **CO06** | **Fray Jorge** | **7.56** | **211** | Pn | **Pn** | **02 40 12.2** | **-2.4** |
| **CO02** | **Combarbal** | **7.75** | **205** | Pn | **Pn** | **02 40 13.6** | **-3.5** |
| **LPAZ** | **La Paz** | **7.94** | **353** | P | **Pn** | **02 40 20.9** | **+0.6** |
| | comp=Z,3.8nm,0.4s,baz=156,slow=5.1,SNR=28 | | | | | | |
| LPAZ | | | | S | **Sn** | **02 41 47.5** | **-2.3** |
| | comp=Z,4.8nm,0.8s,baz=344,slow=23,SNR=8.1 | | | | | | |
| **PAPY** | **Pozo Azul** | **8.15** | **91** | *eP* | **Pn** | **02 40 22.7** | **+0.2** |
| **CPUP** | **Villa Florida** | **9.14** | **105** | P | **Pn** | **02 40 33.7** | **-1.7** |
| | comp=Z,2.8nm,0.7s,baz=296,slow=11,SNR=8.7 | | | | | | |
| **BBSD** | **Serra de San D** | **9.30** | **42** | *eP* | **Pn** | **02 40 35.3** | **-2.3** |
| **SIV** | **San Ignacio** | **9.98** | **36** | P | **Pn** | **02 40 44.5** | **-2.1** |
| | comp=Z,12nm,0.6s,baz=212,slow=11,SNR=79 | | | | | | |
| SIV | | | | S | Sn | 02 42 23.1 | -15 |
| | comp=Z,3.3nm,0.8s,baz=218,slow=15,SNR=3.4 | | | | | | |
| **PSAL** | **Palomas, Salto** | **10.88** | **131** | *eP* | **Pn** | **02 40 57.4** | **-0.7** |
| **AQDB** | **Aquidauana** | **11.24** | **73** | *eP* | **Pn** | **02 41 03.6** | **+0.8** |
| **PTLB** | **Pontes e Lacer** | **11.53** | **42** | Pn | **Pn** | **02 41 04.3** | **-2.3** |
| **PTLB** | **Pontes e Lacer** | **11.53** | **42** | *eP* | **Pn** | **02 41 04.7** | **-1.9** |
| **CRSM** | **Crissiumal (Br** | **12.25** | **108** | *eP* | **Pn** | **02 41 18.1** | **+2.4** |
| **RODS** | **Rosario do Sul** | **12.26** | **122** | *eP* | **Pn** | **02 41 15.8** | **0.0** |
| **VILB** | **Vilhena** | **13.00** | **32** | Pn | **Pn** | **02 41 24.8** | **-0.6** |
| **ALGR** | **Alto Alegre (B** | **13.45** | **113** | *eP* | **Pn** | **02 41 31.4** | **+0.4** |
| **CPSB** | **Cacapava Do Su** | **13.66** | **120** | *eP* | **Pn** | **02 41 33.1** | **-0.4** |
| **ITAB** | **Concordia** | **13.87** | **106** | | **P** | **02 41 37.5** | **-1.3** |
| **PLTB** | **Pedras Altas** | **14.13** | **125** | Pn | **Pn** | **02 41 38.4** | **-1.0** |
| **ETMB** | **Extrema** | **14.35** | **4** | Pn | **Pn** | **02 41 39.6** | **-2.7** |
| **C2SB** | **Chapadao do Su** | **14.38** | **71** | *eP* | **Pn** | **02 41 41.8** | **-0.9** |
| **TRQA** | **Tornquist** | **14.48** | **163** | Pn | **Pn** | **02 41 43.0** | **-0.8** |
| **LDASE** | **Londrina, Braz** | **14.71** | **90** | *eP* | **Pn** | **02 41 45.8** | **-0.9** |
| **PCMB** | **Pacaembu** | **14.88** | **83** | *eP* | **Pn** | **02 41 47.4** | **-1.3** |
| **SAML** | **Samuel** | **15.65** | **15** | P | **Pn** | **02 41 57.0** | **-1.3** |
| **GO06** | **Currarehue** | **15.75** | **192** | P | **P** | **02 42 00.1** | **+0.6** |
| GO06 | | | | IAmb | IAmb | 02 42 02.2 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **PDRB** | **Porto dos Gac** | **15.98** | **40** | *eP* | **P** | **02 42 00.6** | **-1.6** |
| **FRTB** | **Fartura** | **16.13** | **90** | *eP* | **P** | **02 42 01.4** | **-2.5** |
| **ITRB** | **Iturama** | **16.21** | **77** | *eP* | **P** | **02 42 03.5** | **-1.3** |
| **PLCA** | **Paso Flores** | **16.71** | **189** | P | **Pn** | **02 42 11.9** | **+1.0** |
| | comp=Z,2.1nm,0.7s,baz=32,slow=12,SNR=4.0 | | | | | | |
| **ARAG** | **Araguaiana, MT** | **16.71** | **62** | *eP* | **P** | **02 42 08.9** | **-1.4** |
| **CLDB** | **Colider** | **17.11** | **41** | *eP* | **P** | **02 42 13.3** | **-1.4** |
| **CZSB** | **Cruzeiro do Su** | **17.24** | **341** | *eP* | **P** | **02 42 13.9** | **-2.1** |
| **SPB** | **Sao Paulo** | **18.05** | **92** | P | **P** | **02 42 23.8** | **-1.0** |
| SPB | | | | IAmb | IAmb | 02 42 31.4 | |
| | comp=Z,19nm,1.0s | | | | | | |
| **VAO** | **Valinhos** | **18.55** | **90** | P | **P** | **02 42 29.8** | **-0.5** |
| **VAO** | **Valinhos** | **18.55** | **90** | *eP* | **P** | **02 42 29.6** | **-0.8** |
| **IPMB** | **Ipameri, GO** | **18.73** | **74** | *eP* | **P** | **02 42 30.9** | **-1.4** |
| **LL02** | **Futaleuf** | **19.32** | **190** | P | **Pn** | **02 42 41.6** | **+0.1** |
| **SNDB** | **Serra Nova Dou** | **19.36** | **54** | *eP* | **P** | **02 42 37.4** | **-1.7** |
| **BDFB** | **Brasilia** | **19.90** | **68** | P | **P** | **02 42 44.9** | **-0.1** |
| | comp=Z,50nm,0.8s,baz=244,slow=10,SNR=58 | | | | | | |
| **NPGB** | **Novo Progresso** | **20.48** | **35** | *eP* | **P** | **02 42 48.6** | **-2.6** |
| **TEFE** | **Tefe** | **20.73** | **7** | *eP* | **P** | **02 42 51.7** | **-2.0** |
| **BSCB** | **Bom Sucesso** | **20.91** | **86** | *eP* | **P** | **02 42 54.9** | **-0.8** |
| **COYC** | **Coyhaique** | **21.68** | **189** | P | **P** | **02 43 03.9** | **+0.5** |
| **MACA** | **Manacapuru-AM** | **21.85** | **18** | P | **P** | **02 43 04.0** | **-1.5** |
| **MACA** | **Manacapuru-AM** | **21.85** | **18** | *eP* | **P** | **02 43 03.5** | **-2.0** |
| **ITTB** | **Itaituba** | **22.60** | **31** | *eP* | **P** | **02 43 09.8** | **-2.8** |
| **JANB** | **Januaria** | **23.34** | **71** | *eP* | **P** | **02 43 17.8** | **-1.7** |
| **SDBA** | **SAO DESIDERIO** | **24.13** | **65** | *eP* | **P** | **02 43 25.0** | **-1.7** |
| **SMTB** | **Santa Maria do** | **24.14** | **54** | *eP* | **P** | **02 43 24.8** | **-1.9** |
| **PRPB** | **Parauapebas** | **24.48** | **46** | *eP* | **P** | **02 43 27.9** | **-1.8** |
| **GO08** | **Villa O'Higgin** | **24.57** | **189** | P | **P** | **02 43 31.0** | **+0.8** |
| GO08 | | | | IAmb | IAmb | 02 43 35.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **MAL2** | **Monte Alegre,** | **25.39** | **32** | P | **P** | **02 43 36.4** | **-1.6** |
| **BOAV** | **Boa Vista** | **27.23** | **15** | P | **P** | **02 43 54.0** | **-0.5** |
| **RCBR** | **Riachuelo** | **35.15** | **64** | P | **P** | **02 45 03.4** | **-0.5** |
| RCBR | | | | IAmb | IAmb | 02 45 04.5 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **CMIG** | **Matias Romero** | **49.17** | **324** | P | **P** | **02 46 58.9** | **+1.9** |
| | comp=Z,1.8nm,0.7s,baz=73,slow=14,SNR=2.8 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **56.99** | **161** | ⇑P | **P** | **02 47 54.7** | **+1.3** |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **57.19** | **160** | ⇑P | **P** | **02 47 56.7** | **+1.9** |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **57.56** | **160** | ⇑P | **P** | **02 47 58.6** | **+1.2** |
| | comp=Z,3.2nm,0.5s,baz=285,slow=6.9 | | | | | | |
| **SNAA** | **Sanae** | **59.19** | **161** | P | **P** | **02 48 09.8** | **+1.1** |
| **SNAA** | **Sanae** | **59.19** | **161** | ⇑P | **P** | **02 48 08.5** | **-0.2** |
| | comp=Z,36nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **59.19** | **161** | P | **P** | **02 48 10.6** | **+1.8** |
| | comp=Z,1.6nm,0.6s,baz=286,slow=8.3,SNR=24 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **TROLL** | **Troll, Antarti** | **60.91** | **161** | ⇑P | **P** | **02 48 21.7** | **+1.2** |
| | comp=Z,77nm,0.4s | | | | | | |
| **MIAR** | **Mount Ida** | **63.60** | **336** | P | **P** | **02 48 38.5** | **-0.2** |
| MIAR | | | | IAmb | IAmb | 02 48 40.8 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **63.77** | **325** | P | **P** | **02 48 41.4** | **+1.4** |
| | comp=Z,0.5nm,0.7s,baz=142,slow=7.0,SNR=5.9 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **64.33** | **334** | | **P** | **02 48 42.5** | **-0.9** |
| X37A | | | | IAmb | IAmb | 02 48 45.8 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **VHRN** | **Van Horn** | **65.62** | **325** | P | **P** | **02 48 53.5** | **+1.5** |
| **QSPA** | **South Pole Qui** | **65.99** | **180** | P | **P** | **02 48 55.9** | **+2.0** |
| QSPA | | | | IAmb | IAmb | 02 48 56.9 | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **65.99** | **180** | P | **P** | **02 48 56.0** | **+2.2** |
| | comp=Z,3.4nm,0.5s,baz=304,slow=0.9,SNR=53 | | | | | | |
| | comp=Z,3.4nm,0.5s | | | | | | |
| **S39A** | **Bolivar** | **66.31** | **338** | P | **P** | **02 48 56.5** | **+0.3** |
| S39A | | | | IAmb | IAmb | 02 48 57.9 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **E46A** | **Sault Ste Mari** | **71.95** | **348** | P | **P** | **02 49 31.1** | **+0.6** |
| E46A | | | | IAmb | IAmb | 02 49 53.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **SRU** | **San Rafael Swe** | **74.92** | **326** | P | **P** | **02 49 49.8** | **+1.4** |
| **CCUT** | **Cedar City** | **75.25** | **324** | P | **P** | **02 49 52.9** | **+2.6** |
| CCUT | | | | IAmb | IAmb | 02 49 54.5 | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.78** | **69** | P | **P** | **02 49 59.2** | **0.0** |
| | comp=Z,1.2nm,0.5s,baz=256,slow=5.0,SNR=43 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **77.26** | **329** | P | **P** | **02 50 03.3** | **+1.7** |
| | comp=Z,0.5nm,0.4s,baz=136,slow=8.1,SNR=5.2 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **ULM** | **Lac du Bonnet** | **78.39** | **342** | P | **P** | **02 50 08.2** | **+1.0** |
| | comp=Z,2.1nm,0.5s,baz=126,slow=9.2,SNR=4.6 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.62** | **321** | P | **P** | **02 50 09.9** | **+0.8** |
| | comp=Z,0.5nm,0.6s,baz=149,slow=6.0,SNR=4.7 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **80.76** | **117** | P | **P** | **02 50 21.4** | **+0.5** |
| | comp=Z,1.2nm,0.5s,baz=294,slow=2.6,SNR=5.3 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **81.27** | **163** | P | **P** | **02 50 24.3** | **+1.7** |
| | comp=Z,1.9nm,0.5s,baz=220,slow=6.2,SNR=14 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.28** | **340** | P | **P** | **02 51 26.2** | **+1.0** |
| | comp=Z,0.8nm,0.7s,baz=132,slow=5.0,SNR=7.0 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **128.20** | **205** | PKP | **PKiKP** | **02 57 13.8** | **+0.5** |
| | comp=Z,1.2nm,0.5s,baz=137,slow=1.7,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.37** | **207** | PKP | **PKiKP** | **02 57 20.2** | **+0.6** |
| | comp=Z,1.1nm,0.5s,baz=161,slow=1.7,SNR=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.65** | **28** | PKP | **PKPdf** | **02 57 39.1** | **-0.9** |
| | comp=Z,1.1nm,0.3s,baz=298,slow=3.2,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.78** | **40** | PKPbc | **PKPbc** | **02 57 47.5** | **-0.3** |
| | comp=Z,2.6nm,0.8s,baz=297,slow=3.3,SNR=9.5 | | | | | | |
| **KLR** | **Kul'dur** | **150.96** | **334** | PKPbc | **PKiKP** | **02 57 59.0** | **+0.2** |
| | comp=Z,2.9nm,0.7s,baz=52,slow=2.1,SNR=9.3 | | | | | | |

*IDC* ***29*** *02:40:40.8±5.2,38°.15N×73°.89E,h113km±41km, mb3.4/6, mbtmp3.8/11, MS3.6/1, Error ellipse: s-maj=45.2km s-min=27.2km az=178.0*
*NNC* ***29*** *02:40:45.8±10.0,38°.79N×73°.68E, h0km, mb4.2, mpv3.8, Error ellipse: s-maj=81.8km s-min=56.8km az=158.0*
**ISC 29 02:40:42.9**±1.4,**38°.3N**±0°.1×**73°.8E**±0°.1,**h124**km,**n23, σ1°07/26,mb3.6/6,4D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **3.79** | **359** | P | **Pn** | **02 41 40.8** | **+0.7** |
| | SNR=10 | | | | | | |
| **UCH** | **Uchtor** | **3.92** | **8** | P | **Sn** | **02 42 28.4** | **+0.8** |
| | SNR=7.2 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.32** | **0** | P | **Pn** | **02 41 47.7** | **+0.8** |
| | SNR=19 | | | | | | |
| **AAK** | **Ala-Archa** | **4.33** | **7** | P | **Pn** | **02 41 47.7** | **+0.7** |
| | SNR=5.7 | | | | | | |
| **AAK** | **Ala-Archa** | **4.33** | **7** | P | **Pn** | **02 41 46.9** | **-0.1** |
| | 6.6nm,0.3s,baz=168,slow=8.8,SNR=11 | | | | | | |
| AAK | | | | S | **Sn** | **02 42 37.3** | **+0.5** |
| | 27nm,0.7s,baz=1.9,slow=22,SNR=4.3 | | | | | | |
| **AAK** | **Ala-Archa** | **4.33** | **7** | Pn | **Pn** | **02 41 47.1** | **+0.1** |
| | 11nm,0.8s | | | | | | |
| AAK | | | | Sn | **Sn** | **02 42 36.7** | **-0.1** |
| | 32nm,0.7s | | | | | | |
| **ULHL** | **Ulahol** | **4.34** | **25** | P | **Pn** | **02 41 47.1** | **-0.1** |
| | SNR=7.7 | | | | | | |
| **CHMS** | **Chumysh** | **4.71** | **9** | P | **Pn** | **02 41 52.5** | **+0.5** |
| | SNR=5.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.78** | **16** | P | **Pn** | **02 41 53.5** | **+0.3** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.78** | **16** | ⇓Pn | **Pn** | **02 41 52.8** | **-0.4** |
| | 7.2nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sn** | **02 42 46.2** | **-1.6** |
| | 20nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **5.36** | **334** | ⇓Pn | **Pn** | **02 42 00.8** | **+0.1** |
| | 17nm,0.6s,baz=140,slow=12,SNR=165 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **02 42 58.0** | **-3.4** |
| | 11nm,0.3s,baz=142,slow=22,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.53** | **34** | P | **Pn** | **02 43 09.3** | **-1.0** |
| | 1.0nm,0.7s,baz=206,slow=14,SNR=5.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.74** | **14** | P | **Pn** | **02 43 41.5** | **+2.0** |
| | 0.9nm,0.2s,baz=205,slow=9.7,SNR=6.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **14.87** | **352** | P | **Pn** | **02 44 07.9** | **+1.2** |
| | 1.8nm,0.5s,baz=171,slow=10,SNR=

comp=Z,112nm,21.3s,baz=336,slow=38
3.1nm,0.5s
**MBWA Marble Bar 27.44 195** P **P** 03 07 18.5 -0.3
MBWA IAmb IAmb 03 07 21.0
comp=Z,48nm,1.4s
**NJ2 Nanjing 27.50 345** *e*P **P** **03 07 21.3 +2.1**
NJ2 pmax pmax
comp=Z,10.0nm,0.5s
**JNU Nakatsue 27.72 7** LR LR 03 17 40.9
comp=Z,44nm,21.3s,baz=154,slow=35
**PSA00 Pilbara Seismi 27.81 194** P **P** **03 07 23.4 +1.4**
PSA00 IAmb IAmb 03 07 43.9
comp=Z,45nm,1.4s
**RPSI Rantau Prapat 28.16 265** P **P** **03 07 25.3 -0.1**
**ASAR Alice Springs 29.75 167** P **P** **03 07 39.9 +0.6**
comp=Z,0.5nm,0.5s,baz=354,slow=8.1,SNR=11
ASAR PcP **PcP** **03 10 42.2 +0.7**
comp=Z,0.7nm,0.5s,baz=351,slow=2.1,SNR=4.0
ASAR ScP **ScP** **03 14 19.5 +3.4**
comp=Z,0.9nm,0.8s,baz=351,slow=2.9,SNR=5.7
comp=Z,0.5nm,0.5s
**CMAR Chiang Mai Arr 30.28 298** P **P** **03 07 44.5 +0.5**
comp=Z,1.2nm,0.3s,baz=105,slow=7.4,SNR=4.7
CMAR PcP **PcP** **03 10 44.6 +1.7**
comp=Z,1.1nm,0.3s,baz=146,slow=1.8,SNR=4.9
CMAR LR LR 03 20 56.4
comp=Z,56nm,19.5s,baz=110,slow=38
comp=Z,1.2nm,0.3s
**KSRS Korea Array 31.82 1** LR LR 03 26 18.9
comp=Z,32nm,18.0s,baz=205,slow=47
**LYN LuoYang 31.90 337** *e*P P 03 08 02.5 +4.4
LYN pmax pmax
comp=Z,13nm,0.7s
**PZH PanZhiHua 31.92 314** P **P** **03 08 00.5 +1.9**
PZH pmax pmax
comp=Z,8.0nm,1.0s
PZH pmax pmax
comp=Z,100nm,5.4s
**XAN Xi'an 33.00 332** P **P** **03 08 08.8 +1.0**
XAN pP pwP 03 08 27.5 -3.6
XAN pmax pmax
comp=Z,22nm,0.8s
XAN LR LR
comp=Z,230nm,22.0s
XAN LR LR
comp=Z,230nm,18.5s
XAN LR LR
comp=Z,230nm,19.9s
**XAN Xi'an 33.00 332** P **P** **03 08 08.5 +0.7**
**HNS HongShan 33.69 342** ||P P 03 08 16.8 +3.1
HNS sP sP 03 08 45.5 +4.0
HNS pmax pmax
comp=Z,27nm,0.9s
HNS LR LR
comp=Z,130nm,15.1s
HNS LR LR
comp=Z,170nm,14.3s
**JMM Marumori 34.58 19** P **P** **03 08 20.6 -0.8**
**BJT Baijiatuau 35.74 346** P **P** **03 08 30.5 -0.8**
BJT IAmb IAmb 03 08 36.2
comp=Z,14nm,0.7s
**BJT Baijiatuau 35.74 346** P P 03 08 35.4 +4.1
**BJI Beijing 35.76 346** P P 03 08 35.0 +3.6
BJI pmax pmax
comp=Z,10.0nm,0.8s
**FORT Forrest 36.08 178** P **P** **03 08 34.2 -0.1**
**LZH Lanzhou 37.16 328** *e*P **P** **03 08 43.5 -0.2**
LZH pP pwP 03 09 04.3 -2.7
LZH pmax pmax
comp=Z,22nm,1.2s
LZH LR LR
comp=Z,250nm,14.4s
LZH LR LR
comp=Z,270nm,15.8s
LZH LR LR
comp=Z,310nm,15.8s
**HHC Hu-ho-hao-te 37.83 341** *e*P **P** **03 08 52.3 +3.1**
HHC pmax pmax
comp=Z,22nm,0.6s
HHC pmax pmax
comp=Z,80nm,4.6s
**USRK Ussuriysk Ar. 38.80 6** P **P** **03 08 56.0 -1.1**
comp=Z,2.4nm,0.6s,baz=184,slow=7.1,SNR=7.8
comp=Z,2.4nm,0.6s
**MDJ Mudanjiang 39.03 3** P **P** **03 09 00.3 +1.2**
MDJ pmax pmax
comp=Z,12nm,1.2s
**BBOO Buckleboo 39.05 168** P **P** **03 09 00.7 +1.3**
**SHL Shillong 39.10 304** P **P** **03 08 59.3 -0.9**
SHL IAmb IAmb 03 09 03.1
comp=Z,7.5nm,0.6s
**XLT XiLinHaoTe 39.45 348** *e*P P 03 09 06.3 +3.6
XLT sP sP 03 09 33.8 +3.2
XLT pmax pmax
comp=Z,14nm,0.7s
**STKA Stephens Creek 39.67 160** P **P** **03 09 05.4 +0.8**
comp=Z,5.6nm,0.7s,baz=333,slow=7.8,SNR=9.0
comp=Z,5.6nm,0.7s
**ASAJ Asahikawa 40.83 17** LR LR 03 26 42.9
comp=Z,53nm,21.1s,baz=193,slow=37
**GTA Gaotai 41.76 328** P **P** **03 09 22.5 +0.7**
GTA pmax pmax
comp=Z,5.0nm,1.0s
GTA LR LR
comp=Z,88nm,17.5s
GTA LR LR
comp=Z,130nm,20.3s
GTA LR LR
comp=Z,200nm,21.1s
**SONM Songino Array 45.74 341** P **P** **03 09 54.7 +1.1**
comp=Z,3.5nm,0.8s,baz=167,slow=8.4,SNR=15
comp=Z,3.5nm,0.8s
**WMQ Urumqi 51.47 324** *e*P **P** **03 10 39.5 +1.9**
WMQ LR LR
comp=Z,200nm,20.9s
**PETK Petropavlovsk- 53.70 22** P **P** **03 10 55.0 +1.2**
comp=Z,6.4nm,0.8s,baz=186,slow=4.5,SNR=6.1
comp=Z,6.4nm,0.8s
**MKAR Makanchi Array 56.29 324** P **P** **03 11 12.7 0.0**
comp=Z,6.7nm,0.7s,baz=114,slow=7.4,SNR=5.2
comp=Z,6.7nm,0.7s
**MAKZ Makanchi 56.48 324** P **P** **03 11 14.9 +0.9**
MAKZ IAmb IAmb 03 11 15.4
comp=Z,8.7nm,0.8s
**MAKZ Makanchi 56.48 324** P **P** **03 11 14.8 +0.8**
MAKZ pP **pP** **03 11 29.4 -4.5**
MAKZ sP **pwP** **03 11 36.8 -2.0**
**KSH Kashi 57.02 314** P **P** **03 11 20.0 +1.9**
KSH pmax pmax
comp=Z,6.0nm,0.4s
**NIL Nilore 57.10 307** P **P** **03 11 18.7 +0.1**
**ZALV Zalesovo Beam 59.16 332** P **P** **03 11 32.3 -0.3**
comp=Z,2.8nm,0.6s,baz=102,slow=5.3,SNR=11
comp=Z,2.8nm,0.6s
**KURK Kurchatov 60.43 327** P **P** **03 11 41.1 -0.2**
**KURK Kurchatov 60.43 327** P **P** **03 11 41.6 +0.3**
KURK pP **pP** **03 11 56.6 -4.8**
**KURBB Kurchatov Arra 60.43 327** P **P** **03 11 41.8 +0.5**
comp=Z,9.6nm,0.6s,baz=125,slow=6.4,SNR=104
comp=Z,9.6nm,0.6s
**BTK Batken 60.93 313** P **P** **03 11 45.2 +0.1**
BTK IAmb IAmb 03 12 00.3
comp=Z,5.3nm,0.5s
**GAR Garm 60.96 312** P **P** **03 11 45.3 -0.1**
GAR IAmb IAmb 03 11 46.6
comp=Z,13nm,0.9s
**SIMJ Simiganj 61.84 311** P **P** **03 11 50.8 -0.5**
SIMJ IAmb IAmb 03 11 54.5
comp=Z,10nm,1.6s
**KKAR Karatay Array 62.16 316** P **P** **03 11 52.6 -0.6**
KKAR IAmb IAmb 03 11 54.4
comp=Z,5.1nm,0.8s
**BVAR Borovoye Array 66.02 326** P **P** **03 12 18.9 +0.7**
comp=Z,7.9nm,0.6s,baz=130,slow=8.5,SNR=36
comp=Z,7.9nm,0.6s
**TIXI Tiksi 66.09 1** P **P** **03 12 17.8 -0.5**
**TIXI Tiksi 66.09 1** P **P** **03 12 18.7 +0.4**
**BRVK Borovoye 66.09 326** P **P** **03 12 19.1 +0.4**
BRVK IAmb IAmb 03 12 20.7
comp=Z,12nm,0.9s
**BRVK Borovoye 66.09 326** P **P** **03 12 19.1 +0.4**
**ABKAR Akbulak array 70.98 320** P **P** **03 12 49.2 -0.1**
ABKAR IAmb IAmb 03 12 50.6
comp=Z,9.1nm,0.8s
**ARU Arti 73.61 327** P **P** **03 13 04.1 -0.7**
ARU IAmb IAmb 03 13 06.4
comp=Z,6.6nm,0.6s

**L16K Owhat River 77.39 28** P **P** **03 13 26.8 +0.5**
L16K IAmb IAmb 03 13 55.4
comp=Z,30nm,1.9s
**O16K Kokwok River B 77.64 30** P **P** **03 13 28.2 +0.5**
O16K IAmb IAmb 03 15 23.1
comp=Z,38nm,1.9s
**J17K VABM Dome 77.92 26** P **P** **03 13 29.6 +0.4**
J17K IAmb IAmb 03 16 15.6
comp=Z,26nm,1.9s
**L18K Granite Mounta 78.78 28** P **P** **03 13 34.9 +0.9**
L18K IAmb IAmb 03 13 35.0
comp=Z,16nm,1.7s
**H19K Roundabout Mou 79.45 24** P **P** **03 13 37.2 -0.3**
H19K IAmb IAmb 03 13 43.7
comp=Z,23nm,1.9s
**J20K Nowinta River 80.21 26** P **P** **03 13 43.2 +1.5**
**KDAK Kodiak Island 80.25 32** P **P** **03 13 42.9 +0.9**
**D22K Ayikyak River 81.40 21** P **P** **03 13 49.6 +1.6**
D22K IAmb IAmb 03 14 49.4
comp=Z,36nm,1.8s
**BPAW Bear Paw Mtn. 81.58 26** P **P** **03 13 48.2 -0.8**
BPAW IAmb IAmb 03 14 12.5
comp=Z,20nm,1.8s
**MLY Manley 81.77 25** P **P** **03 13 49.9 -0.2**
**KBZ Khabaz 81.99 313** P **P** **03 13 51.5 0.0**
comp=Z,4.7nm,1.0s,baz=139,slow=6.5,SNR=6.4
comp=Z,4.7nm,1.0s
**G23K Bananza Creek 82.19 23** P **P** **03 13 54.0 +1.8**
**CCB Clear Creek Bu 83.00 26** P **P** **03 13 55.7 -0.6**
**H24K Noodor Dome 83.01 24** P **P** **03 13 57.5 +1.0**
**ILAR Eielson Array 83.39 25** P **P** **03 13 57.8 -0.7**
comp=Z,0.7nm,0.6s,baz=248,slow=5.8,SNR=12
comp=Z,0.7nm,0.6s
**I28M Miner Creek 86.31 25** P **P** **03 14 13.6 +0.4**
I28M IAmb IAmb 03 15 29.0
comp=Z,17nm,1.9s
**MMAI Mount Meron Ar 88.40 303** P **P** **03 14 24.2 +0.3**
comp=Z,1.0nm,0.4s,baz=82,slow=12,SNR=6.8
comp=Z,1.0nm,0.4s
**ARCES ARCESS Array B 88.90 340** P **P** **03 14 24.2 -1.2**
comp=Z,2.0nm,0.6s,baz=79,slow=5.0,SNR=9.0
comp=Z,2.0nm,0.6s
**BRTR Keskin Array B 89.13 310** P **P** **03 14 27.2 -0.1**
comp=Z,1.7nm,0.8s,baz=91,slow=5.1,SNR=13
comp=Z,1.7nm,0.8s
**FINES FINESS Array B 90.43 332** P **P** **03 14 32.1 -0.5**
comp=Z,1.9nm,0.6s,baz=98,slow=5.8,SNR=12
comp=Z,1.9nm,0.6s
**AKASG Malin Array Be 90.72 321** P **P** **03 14 33.4 -0.8**
comp=Z,0.6nm,0.5s,baz=76,slow=3.8,SNR=4.5
comp=Z,0.6nm,0.5s
**HFS Hagfors 96.60 332** P **P** **03 14 59.6 -1.4**
comp=Z,1.3nm,0.8s,baz=66,slow=8.3,SNR=6.1
comp=Z,1.3nm,0.8s
**NOA NORSAR Array B 97.35 334** P Pdif 03 15 04.0 -0.5
comp=Z,0.7nm,0.9s,baz=269,slow=2.7,SNR=3.0
comp=Z,0.7nm,0.9s
**TORD Torodi Ar. Bea 122.64 289** PKP **PKiKP** **03 20 28.5 +0.7**
comp=Z,2.0nm,0.7s,baz=48,slow=2.1,SNR=18
**PLCA Paso Flores 141.53 158** PKP **PKiKP** **03 21 04.5 -0.9**
comp=Z,1.5nm,0.7s,baz=267,slow=2.1,SNR=4.1

*NEIC **29** 03:04:06.6±0.6, 36.46N±0.01×98.80W±0.02, h5km±3km, mb_Lg3.4/123, ML3.5/40, ML3.4, Mwr3.2/15(SLM), Error ellipse: s-maj=2.6km s-min=1.7km az=115.0*
*NEIC **29** 03:04:06, 36.45N×98.81W, h5km, Moment Tensor Solution. Moment tensor: Scale $10^{13}$Nm; $M_{rr}$=0.79; $M_{\theta\theta}$=3.98; $M_{\phi\phi}$=-3.19; $M_{r\theta}$=4.19; $M_{\theta\phi}$=5.42; $M_{\phi r}$=-1.71; Fault plane solution: $M_o$7.94000×$10^{13}$ NP1:$\phi_s$18.00000°, δ55.00000°, λ-174.00000°. NP2:$\phi_s$285.00000°, δ85.00000°, λ-35.00000°. Principal axes: T 7.9481, Plg20.0000°, Azm337.0000°; N 0.0007, Plg55.0000°, Azm98.0000°; P -7.9488, Plg28.0000°, Azm236.0000°;*
**NEIC 29 03:04:06.2±0.6, 36.45N±0.01×98.81W±0.02, h5km±1km**
**Error ellipse: s-maj=3.1km s-min=2.5km az=300.0,**
**Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK038** | **West end E0370** | **0.06** | **61** | Pg | Pg | 03 04 08.6 | +0.9 |
| **NOKA** | **Waynoka** | **0.21** | **332** | Pg | Pg | 03 04 11.1 | +0.7 |
| NOKA | | | | Sg | Sg | 03 04 14.3 | +1.2 |
| NOKA | | | | IAML | | 03 04 14.6 | |
| | comp=E,8μm,0.4s | | | | | | |
| **OK035** | **E0210 Rd and N** | **0.27** | **17** | Pg | Pg | 03 04 12.2 | +0.6 |
| OK035 | | | | Sg | Sg | 03 04 16.1 | +1.0 |
| OK035 | | | | IAML | | 03 04 16.7 | |
| | comp=E,9μm,0.4s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.60** | **53** | Pg | Pg | 03 04 18.1 | +0.4 |
| OK032 | | | | Sg | Sg | 03 04 26.4 | +0.9 |
| OK032 | | | | IAML | | 03 04 26.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| **ELIS** | **Ellis County** | **0.62** | **232** | Pg | Pg | 03 04 18.7 | +0.5 |
| ELIS | | | | Sg | Sb | 03 04 27.6 | -1.1 |
| ELIS | | | | IAML | | 03 04 33.7 | |
| | comp=N,2μm,0.3s | | | | | | |
| **CROK** | **Carrier** | **0.67** | **85** | Pg | Pg | 03 04 19.4 | +0.4 |
| CROK | | | | Sg | Sg | 03 04 28.4 | +0.7 |
| CROK | | | | IAML | | 03 04 31.7 | |
| | comp=N,3μm,0.5s | | | | | | |
| CROK | | | | IAML | | 03 04 39.9 | |
| | comp=E,2μm,0.3s | | | | | | |
| **CSTR** | **Hydro, Custer** | **0.81** | **173** | Pg | Pg | 03 04 22.2 | +0.5 |
| **KAN14** | **Manchester OK** | **0.85** | **53** | Pg | Pg | 03 04 22.7 | +0.2 |
| KAN14 | | | | Sg | Sg | 03 04 34.3 | +0.8 |
| KAN14 | | | | IAML | | 03 04 46.6 | |
| | comp=E,1μm,0.1s | | | | | | |
| **GC02** | **Grant County #** | **0.86** | **62** | Pg | Pg | 03 04 22.9 | +0.1 |
| GC02 | | | | Sg | Sb | 03 04 34.8 | -0.8 |
| **KAN05** | **Bluff City Nor** | **1.00** | **48** | Pg | Pg | 03 04 25.2 | -0.2 |
| KAN05 | | | | IAML | | 03 04 45.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| KAN05 | | | | IAML | | 03 04 48.7 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **1.03** | **41** | Pg | Pg | 03 04 24.5 | -1.5 |
| KAN08 | | | | IAML | | 03 04 42.6 | |
| | comp=E,931nm,0.4s | | | | | | |
| **KAN17** | **Caldwell West** | **1.03** | **54** | Pg | Pg | 03 04 25.8 | -0.2 |
| KAN17 | | | | Sg | Sg | 03 04 39.5 | +0.2 |
| KAN17 | | | | IAML | | 03 04 41.3 | |
| | comp=E,1μm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 03 04 43.4 | |
| | comp=N,2μm,0.3s | | | | | | |
| **KAN12** | **Harper NE Stat** | **1.07** | **37** | Pg | Pg | 03 04 26.5 | -0.2 |
| **KAN01** | **Argonia South** | **1.10** | **50** | Pg | Pg | 03 04 27.0 | -0.3 |
| KAN01 | | | | Sg | Sg | 03 04 41.9 | +0.4 |
| KAN01 | | | | IAML | | 03 04 44.9 | |
| | comp=N,893nm,0.4s | | | | | | |
| KAN01 | | | | IAML | | 03 04 47.7 | |
| | comp=E,966nm,0.5s | | | | | | |
| **KAN09** | **Caldwell North** | **1.18** | **54** | Pg | Pg | 03 04 28.4 | -0.4 |
| **KAN13** | **South Haven SW** | **1.21** | **62** | | Pg | 03 04 28.8 | -0.6 |
| **KS21** | **Milan North St** | **1.24** | **47** | | Pg | 03 04 29.7 | -0.3 |
| **KS21** | **Milan North St** | **1.24** | **47** | IAML | | 03 04 49.1 | |
| | comp=E,1μm,0.5s | | | | | | |
| KS21 | | | | IAML | | 03 04 50.3 | |
| | comp=E,1μm,0.6s | | | | | | |
| **OK029** | **Liberty Lake** | **1.27** | **120** | Pg | Pg | 03 04 29.7 | -1.0 |
| OK029 | | | | IAML | | 03 04 50.7 | |
| | comp=E,2μm,0.5s | | | | | | |
| OK029 | | | | IAML | | 03 04 50.8 | |
| | comp=E,1μm,0.6s | | | | | | |
| **BLOK** | **Blackwell** | **1.32** | **76** | | Pn | 03 04 31.0 | -0.3 |
| **ADOK** | **Arcadia Dam** | **1.41** | **124** | | Pn | 03 04 32.1 | -0.5 |
| **OK048** | **Pawnee Station** | **1.50** | **91** | | Pn | 03 04 34.2 | +0.4 |
| **OKCSW** | **OKLAHOMA CITY** | **1.52** | **133** | | Pn | 03 04 33.6 | -0.5 |
| **OK051** | **E0350 and S346** | **1.59** | **87** | | Pn | 03 04 35.4 | +0.4 |
| **FNO** | **Franklin** | **1.65** | **136** | | Pb | 03 04 36.5 | -0.6 |
| **OK031** | **S. Brethren Rd** | **1.67** | **107** | | Pn | 03 04 36.6 | +0.5 |
| **OK052** | **Battle Ridge R** | **1.68** | **105** | | Pn | 03 04 36.8 | +0.5 |
| **WMOK** | **Wichita Mounta** | **1.71** | **179** | | Pn | 03 04 37.1 | +0.5 |
| **QUOK** | **Quay** | **1.72** | **99** | | Pn | 03 04 37.3 | +0.5 |
| **SMWD** | **Samnorwood** | **1.78** | **221** | Pn | Pn | 03 04 38.2 | +0.5 |
| SMWD | | | | IAmb_Lg | | 03 05 04.7 | |
| | comp=Z,301nm,0.8s | | | | | | |
| **DEOK** | **Depew** | **1.96** | **107** | Pn | Pn | 03 04 41.2 | +1.1 |
| **R32A** | **Long Quarter,** | **1.97** | **2** | Pn | Pn | 03 04 41.5 | +1.1 |
| **X34A** | **Smith Ranch, M** | **2.01** | **156** | IAmb_Lg | | 03 05 14.9 | |
| | comp=Z,235nm,0.7s | | | | | | |
| **W35A** | **Tecumseh** | **2.04** | **129** | | Pn | 03 04 41.5 | +0.4 |
| **CBKS** | **Cedar Bluff** | **2.47** | **343** | Pn | Pn | 03 04 47.5 | +0.3 |
| CBKS | | | | IAmb_Lg | | 03 05 28.9 | |
| | comp=Z,110nm,0.8s | | | | | | |

**TUL3 Leonard 2.50 102** Pn Pn 03 04 47.9 +0.3
**WTFS Witchita Falls 2.69 174** Pn Pn 03 04 51.4 +1.3
**LOOK Love County 2.79 151** Pn Pn 03 04 52.6 +1.1
LOOK IAmb_Lg 03 05 41.5
comp=Z,152nm,1.1s
**AMTX Amarillo 2.81 237** IAmb_Lg 03 05 42.8
comp=Z,178nm,0.8s
**RTBA Rita Blanca 3.17 271** Pn Pn 03 04 58.3 +1.4
**KSU1 Kansas State U 3.17 33** Pn Pn 03 04 56.9 +0.2
**DKNS Dickens 3.27 213** Pn Pn 03 04 59.8 +1.6
DKNS IAmb_Lg 03 05 48.8
comp=Z,84nm,0.8s
**APMT Aspermont 3.30 199** Pn Pn 03 05 00.1 +1.5
APMT IAmb_Lg 03 05 58.8
comp=Z,104nm,0.9s
**X37A Clayton 3.36 122** Pn Pn 03 04 59.9 +0.5
**Z35A Perchaven, San 3.36 157** Pn Pn 03 05 00.7 +1.3
**FW03 Perrin-Whitt E 3.46 170** Pn Pn 03 05 02.4 +1.7
**U38A Gravette 3.56 89** Pn Pn 03 05 04.0 +1.7
U38A IAmb_Lg 03 06 06.0
comp=Z,106nm,0.8s
**FW06 Azle 3.62 163** Pn Pn 03 05 04.5 +1.6
FW06 IAmb_Lg 03 06 09.2
comp=Z,74nm,0.8s
**PLPT Palo Pinto 3.65 173** Pn Pn 03 05 04.2 +0.9
**SN07 Snyder 07 3.76 208** Pn Pn 03 05 06.3 +1.3
SN07 IAmb_Lg 03 06 11.0
comp=Z,113nm,0.9s
**FW07 Weatherford 3.83 167** Pn Pn 03 05 06.7 +0.8
FW07 IAmb_Lg 03 06 15.0
comp=Z,63nm,0.8s
**ABTX Abilene, Hawle 3.88 190** Pn Pn 03 05 07.4 +0.9
ABTX IAmb_Lg 03 06 14.3
comp=Z,88nm,0.8s
**HHAR Hobbs 3.93 91** Pn Pn 03 05 08.4 +1.1
**SN05 Snyder 5 3.95 206** Pn Pn 03 05 08.5 +0.9
SN05 IAmb_Lg 03 06 21.7
comp=Z,127nm,0.9s
**KSCO Kaye Shedlock' 3.96 311** IAmb_Lg 03 06 21.3
comp=Z,71nm,0.7s
**POST Post 4.04 214** Pn Pn 03 05 10.4 +1.6
POST IAmb_Lg 03 06 17.2
comp=Z,97nm,1.0s
**MSTX Muleshoe 4.08 234** Pn Pn 03 05 10.7 +1.3
MSTX IAmb_Lg 03 06 21.3
comp=Z,108nm,1.1s
**FW16 Waxahatchie 4.26 158** Pn Pn 03 05 13.2 +1.4
FW16 IAmb_Lg 03 06 28.0
comp=Z,137nm,1.1s
**TREL Terrell 4.33 148** Pn Pn 03 05 13.4 +0.7
TREL IAmb_Lg 03 06 26.9
comp=Z,129nm,1.0s
**Z38A Mt. Pleasant 4.47 134** Pn Pn 03 05 15.6 +0.9
Z38A IAmb_Lg 03 06 40.6
comp=Z,78nm,0.9s
**T25A Trinidad 4.55 280** Pn Pn 03 05 16.7 +0.8
**S39A Bolivar 4.56 73** Pn Pn 03 05 16.5 +0.6
S39A IAmb_Lg 03 06 29.1
comp=Z,88nm,0.8s
**WHTX Lake Whitney, 4.58 165** Pn Pn 03 05 16.6 +0.4
**MIAR Mount Ida 4.67 112** Pn Pn 03 05 18.8 +1.4
MIAR IAmb_Lg 03 06 43.5
comp=Z,64nm,0.8s
**SGCY Sterling City 4.91 204** Pn Pn 03 05 18.8 -2.0
**BGNE Belgrade 4.98 6** Pn Pn 03 05 21.6 0.0
**237A Washetta, Mont 5.08 150** Pn Pn 03 05 22.4 -0.6
237A IAmb_Lg 03 07 00.6
comp=Z,76nm,0.8s
**OGNE Ogallala 5.15 332** Pn Pn 03 05 25.3 +1.2
OGNE IAmb_Lg 03 06 57.7
comp=Z,80nm,0.8s
**P38A Dawn 5.23 51** Pn Pn 03 05 25.5 +0.4
P38A IAmb_Lg 03 07 03.7
comp=Z,53nm,0.8s
**X40A Basin Creek Fa 5.25 110** Pn Pn 03 05 26.3 +0.9
X40A IAmb_Lg 03 07 01.7
comp=Z,80nm,0.7s
**MGMO Mountain Grove 5.29 80** Pn Pn 03 05 26.4 +0.4
MGMO IAmb_Lg 03 06 59.7
comp=Z,70nm,0.8s
**ODSA Odessa 5.31 217** Pn Pn 03 05 28.1 +1.8
**WHAR Wooly Hollow 5.42 100** Pn Pn 03 05 27.4 -0.3
WHAR IAmb_Lg 03 07 07.4
comp=Z,94nm,0.9s
**WLAR White Oak Lake 5.42 119** IAmb_Lg 03 07 07.7
comp=Z,81nm,0.7s
**FCAR Ozark Folk Cen 5.44 94** IAmb_Lg 03 07 02.5
comp=Z,62nm,0.7s
**R40A Maddies Statio 5.52 69** Pn Pn 03 05 30.0 +0.9
R40A IAmb_Lg 03 07 07.5
comp=Z,51nm,0.8s
**UALR University of 5.53 106** IAmb_Lg 03 07 11.9
comp=Z,68nm,0.7s
**Q24A Divide 5.62 298** IAmb_Lg 03 07 05.4
comp=Z,67nm,0.8s
**435B Jarrell 5.74 169** IAmb_Lg 03 07 09.1
comp=Z,77nm,0.8s
**OZNA Ozona 5.84 200** Pn Pn 03 05 32.9 -0.7
**Z41A Richland Creek 5.87 121** IAmb_Lg 03 07 28.4
comp=Z,66nm,0.9s
**BRIGG Briggsdale 5.97 315** IAmb_Lg 03 07 17.8
comp=Z,52nm,0.9s
**MNHN Monahans 6.06 214** Pn Pn 03 05 36.3 -0.3
**P40A Paris 6.16 58** Pn Pn 03 05 38.8 +1.0
**T42A Van Buren 6.22 82** IAmb_Lg 03 07 23.3
comp=Z,41nm,0.7s
**CCM Cathedral Cave 6.24 73** IAmb_Lg 03 07 24.1
comp=Z,67nm,0.8s
**K30B Basset 6.25 355** Pn Pn 03 05 39.3 +0.2
**ANMO Albuquerque 6.40 259** Pn Pn 03 05 42.7 +1.3
**S22A 4UR Ranch, Cre 6.54 284** Pn Pn 03 05 43.4 0.0
S22A IAmb_Lg 03 07 48.9
comp=Z,39nm,1.1s
**PECS Pecos 6.58 221** Pn Pn 03 05 44.1 +0.4
**FVM French Village 6.86 75** IAmb_Lg 03 07 50.6
comp=Z,58nm,0.8s
**HNDO Hondo 6.91 183** Pn Pn 03 05 48.9 +0.7
**SCIA State Center 6.97 37** IAmb_Lg 03 07 54.3
comp=Z,67nm,0.8s
**SAND Sanderson 7.05 204** Pn Pn 03 05 49.3 -0.8
**Y22D IRIS PASSCAL I 7.05 253** IAmb_Lg 03 08 06.6
comp=Z,55nm,0.8s
**PHWY Pilot Hill 7.10 315** Pn Pn 03 05 49.2 -1.8
PHWY IAmb_Lg 03 07 55.1
comp=Z,46nm,0.9s
**N23A Red Feather La 7.13 311** Pn Pn 03 05 52.1 +0.7
**SLM Saint Louis 7.15 70** IAmb_Lg 03 07 52.6
comp=Z,68nm,0.9s
**143A Socs Landing, 7.16 119** IAmb_Lg 03 08 03.8
comp=Z,34nm,0.9s
**DRIO Del Rio 7.17 193** Pn Pn 03 05 50.9 -0.8
**ALPN Alpine 7.28 215** Pn Pn 03 05 53.1 -0.2
**CGM3 Cape Girardeau 7.38 81** IAmb_Lg 03 08 07.4
comp=Z,45nm,0.9s
**N41A Harden Midland 7.54 53** Pn Pn 03 05 55.9 -0.9
**735A Kenedy 7.62 173** IAmb_Lg 03 08 29.1
comp=Z,48nm,0.9s
**VHRN Van Horn 7.64 224** Pn Pn 03 05 59.1 +0.8
**S44A Carbondale 7.74 78** Pn Pn 03 05 59.7 +0.2
S44A IAmb_Lg 03 08 16.2
comp=Z,59nm,0.7s
**SIUC Southern Illin 7.77 78** Pn Pn 03 05 59.3 -0.6
SIUC IAmb_Lg 03 08 15.9
comp=Z,65nm,0.9s
**MVCO Mesa Verde 7.81 278** IAmb_Lg 03 08 22.4
comp=Z,28nm,0.9s
**OXF Oxford 7.91 101** Pn Pn 03 05 58.9 -2.9
OXF IAmb_Lg 03 08 36.5
comp=Z,47nm,0.9s
**SUSD Miller 7.99 359** IAmb_Lg 03 08 23.0
comp=Z,36nm,0.8s
**P43A Skaggs, Pawnee 7.99 64** Pn Pn 03 06 01.5 -1.5
**Y45A Yeager Farm, C 8.01 106** IAmb_Lg 03 08 38.0
comp=Z,43nm,0.8s
**833A Chaparral WMA, 8.12 184** IAmb_Lg 03 08 32.4
comp=Z,49nm,1.0s
**L40A Anamosa 8.12 44** Pn Pn 03 06 02.7 -2.1
**HDIL Hopedale 8.51 58** Pn Pn 03 06 11.2 +1.1
**K22A Casper 8.59 318** IAmb_Lg 03 09 00.7
comp=Z,31nm,1.0s
**I37A Lemond, Waseca 8.61 27** IAmb_Lg 03 08 52.7
comp=Z,47nm,0.9s
**RSSD Black Hills 8.64 334** Pn Pn 03 06 12.4 +0.3
**L42A Oliver, Polo 9.00 49** IAmb_Lg 03 09 08.1
comp=Z,43nm,0.8s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **JFWS** | **Jewell Farm** | **9.23** | **43** | IAmb_Lg | | | 03 09 04.0 | | |
| | comp=Z,35nm,0.7s | | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **9.57** | **11** | Pn | Pn | | 03 06 22.5 | -2.1 | |
| F33A | | | | IAmb_Lg | | | 03 09 15.1 | | |
| | comp=Z,32nm,1.0s | | | | | | | | |
| **I40A** | **Norwalk** | **9.72** | **38** | Pn | Pn | | 03 06 27.2 | +0.5 | |
| I40A | | | | IAmb_Lg | | | 03 09 26.3 | | |
| | comp=Z,33nm,1.1s | | | | | | | | |
| **I42A** | **Draeger Farm,** | **10.60** | **42** | Pn | Pn | | 03 06 38.2 | -0.6 | |
| **G40A** | **Rib Lake** | **10.95** | **34** | Pn | Pn | | 03 06 41.9 | -1.7 | |
| **H43A** | **Windswept, Lux** | **11.60** | **43** | Pn | Pn | | 03 06 50.3 | -2.2 | |

*JMA **29** 03:25:51.0±0.2,40.9N±0.3×14.2E±, h51km±2km, MV3.5/36,E OFF AOMORI PREF*
*JMA Felt I J1 at E OFF AOMORI PREF .*
*IDC **29** 03:25:52.3±3.2, 40.95N×142.36E, h74km±27km, mb3.5/6, mbtmp3.7/8, Error ellipse: s-maj=37.3km s-min=23.7km az=95.0*

**ISC 29 03:25:50.7±1.3, 40.89N±0.04×142.15E±0.08, h51km±11km, n28, σ0.91/30, mb3.7/6, 10D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JARK** | **Aomorirokkasho** | **0.61** | **281** | ⇓P | | **Pn** | **03 26 03.5** | **+0.2** |
| JARK | | | | ⇓eS | | **Sn** | **03 26 12.1** | **-0.3** |
| **JANG** | **Nango** | **0.71** | **223** | ⇓P | | **Pn** | **03 26 05.0** | **+0.3** |
| JANG | | | | ⇓eS | | **Sn** | **03 26 14.8** | **0.0** |
| **JAHD** | **Aomorihigashid** | **0.72** | **301** | ⇓P | | **Pn** | **03 26 04.8** | **+0.1** |
| **JKEN** | **Kujiedanarisaw** | **0.77** | **206** | P | | **Pn** | **03 26 05.7** | **+0.3** |
| JKEN | | | | eS | | **Sn** | **03 26 16.3** | **+0.3** |
| **JTM** | **Tenmabayashi** | **0.83** | **263** | ⇓P | | **Pn** | **03 26 06.3** | **+0.1** |
| JTM | | | | ⇓eS | | **Sn** | **03 26 17.2** | **-0.3** |
| **JOT** | **Ohata** | **0.97** | **301** | P | | **Pn** | **03 26 07.8** | **-0.2** |
| **JKB** | **Kayabe** | **1.30** | **320** | ⇓P | | **Pn** | **03 26 12.6** | **+0.1** |
| **JAH** | **Hinai** | **1.35** | **239** | ⇓eP | | **Pn** | **03 26 13.8** | **+0.5** |
| JAH | | | | ⇓eS | | **Sn** | **03 26 30.5** | **+0.4** |
| **JSR** | **Shiriuchi** | **1.46** | **296** | eP | | **Pn** | **03 26 15.0** | **+0.3** |
| **JOM** | **Ohasama** | **1.56** | **205** | eP | | **Pn** | **03 26 17.0** | **+0.9** |
| JOM | | | | eS | | **Sn** | **03 26 35.4** | **+0.1** |
| **JIW** | **Iwasaki** | **1.66** | **260** | eP | | **Pn** | **03 26 17.5** | **+0.1** |
| **JOMM** | **Oshimamatsumae** | **1.74** | **292** | eP | | **Pn** | **03 26 18.5** | **0.0** |
| **JNB** | **Noboribetsu** | **1.78** | **332** | eP | | **Pn** | **03 26 18.9** | **-0.2** |
| JNB | | | | eS | | **Sn** | **03 26 40.2** | **-0.4** |
| **JYM2** | **Yakumo 2** | **1.81** | **313** | eP | | **Pn** | **03 26 20.0** | **+0.5** |
| **ASAJ** | **Asahikawa** | **3.24** | **6** | P | | **Pn** | **03 26 40.4** | **+1.4** |
| | 5.8nm,0.3s,baz=211,slow=12,SNR=8.4 | | | | | | | |
| ASAJ | | | | S | | **Sn** | **03 27 16.4** | **+0.2** |
| | 7.4nm,0.4s,baz=183,slow=18,SNR=1.5 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.20** | **297** | P | | **Pn** | **03 27 51.0** | **+4.0** |
| | 2.4nm,0.7s,baz=97,slow=13,SNR=4.8 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.84** | **128** | T | | T | 04 03 30.0 | |
| | baz=321,slow=75,SNR=15 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.85** | **128** | T | | T | 04 03 35.4 | |
| | baz=321,slow=75,SNR=19 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.86** | **128** | T | | T | 04 03 34.3 | |
| | baz=321,slow=75,SNR=11 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.67** | **129** | T | | T | 04 04 32.4 | |
| | baz=322,slow=76,SNR=3.4 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.67** | **129** | T | | T | 04 04 32.5 | |
| | baz=322,slow=76,SNR=3.7 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.69** | **129** | T | | T | 04 04 33.6 | |
| | baz=322,slow=76,SNR=3.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.66** | **299** | P | | **P** | **03 33 41.9** | **-0.2** |
| | 0.3nm,0.4s,baz=80,slow=11,SNR=5.8 | | | | | | | |
| | 0.3nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.17** | **305** | P | | **P** | **03 33 53.6** | **-0.6** |
| | 0.3nm,0.3s,baz=79,slow=9.5,SNR=3.9 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **48.47** | **310** | P | | **P** | **03 34 28.0** | **+0.1** |
| | 1.1nm,0.3s,baz=83,slow=9.7,SNR=5.5 | | | | | | | |
| | 1.1nm,0.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.96** | **188** | P | | **P** | **03 35 57.8** | **-0.8** |
| | 0.2nm,0.4s,baz=4.8,slow=6.8,SNR=5.0 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.68** | **332** | P | | **P** | **03 36 29.0** | **-0.3** |
| | 1.1nm,0.5s,baz=43,slow=7.7,SNR=9.2 | | | | | | | |
| | 1.1nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **70.82** | **335** | P | | **P** | **03 37 00.7** | **-0.8** |
| | 0.4nm,0.4s,baz=37,slow=7.4,SNR=4.2 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |

*JMA **29** 03:39:56.2±0.1, 35.7N±0.3×139.5E±0.5, h98km, MV2.8/37, TOKYO PREF*
*IDC **29** 03:39:57.4±1.6, 35.51N×139.01E, h110km±7km, mb3.3/3, mbtmp3.8/4, Error ellipse: s-maj=68.6km s-min=7.0km az=66.0*

**ISC 29 03:39:55.5±1.0, 35.67N±0.05×139.46E±0.08, h103km±7km, n21, σ0.69/25, mb3.7/3, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JSGW** | **Sagamiharawaka** | **0.21** | **251** | P | | **Pn** | **03 40 10.2** | **+0.1** |
| JSGW | | | | eS | | **Sn** | **03 40 20.8** | **-0.2** |
| **JHU** | **Hanno** | **0.23** | **322** | P | | **Pn** | **03 40 10.8** | **+0.6** |
| JHU | | | | eS | | **Sn** | **03 40 21.3** | **+0.2** |
| **JOD2** | **Odawara 2** | **0.51** | **216** | P | | **Pn** | **03 40 11.6** | **0.0** |
| JOD2 | | | | eS | | **Sn** | **03 40 23.3** | **-0.4** |
| **JRY** | **Ryogami san** | **0.57** | **308** | P | | **Pn** | **03 40 12.9** | **+0.8** |
| **JAG** | **Ashikaga** | **0.75** | **360** | P | | **Pn** | **03 40 14.2** | **+0.5** |
| JAG | | | | eS | | **Sn** | **03 40 27.2** | **-0.1** |
| **JYN** | **Shimob** | **0.76** | **257** | eP | | **Pn** | **03 40 14.1** | **+0.3** |
| JYN | | | | eS | | **Sn** | **03 40 28.1** | **+0.5** |
| **JIM2** | **Oshima 3** | **0.95** | **181** | eP | | **Pn** | **03 40 15.6** | **-0.1** |
| JIM2 | | | | eS | | **Sn** | **03 40 30.5** | **-0.4** |
| **JIZS** | **Izushimoda** | **1.06** | **207** | eP | | **Pn** | **03 40 17.2** | **+0.3** |
| JIZS | | | | eS | | **Sn** | **03 40 33.2** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | **1.33** | **311** | P | | **Pn** | **03 40 20.4** | **+0.5** |
| | 25nm,0.3s,baz=148,slow=9.9,SNR=69 | | | | | | | |
| MJAR | | | | S | | **Sn** | **03 40 38.2** | **-0.2** |
| | 45nm,0.5s,baz=35,slow=18,SNR=19 | | | | | | | |
| **MAT** | **Matsushiro** | **1.33** | **311** | eP | | **Pn** | **03 40 20.6** | **+0.7** |
| MAT | | | | eS | | **Sn** | **03 40 38.7** | **+0.3** |
| **BSO1** | **Boso 1** | **1.61** | **129** | eP | | **Pn** | **03 40 23.2** | **+0.5** |
| **JHJ** | **Hachijo jima 2** | **2.56** | **174** | P | | **Pn** | **03 40 36.7** | **+1.2** |
| | 434nm,0.3s,baz=155,slow=0.3,SNR=48 | | | | | | | |
| JHJ | | | | S | | **Sn** | **03 41 07.7** | **+1.5** |
| | 190nm,0.3s,baz=252,slow=23,SNR=7.4 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.89** | **116** | T | | T | 04 15 38.3 | |
| | baz=309,slow=75,SNR=6.8 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.90** | **116** | T | | T | 04 15 46.6 | |
| | baz=309,slow=75,SNR=7.4 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.91** | **116** | T | | T | 04 15 44.6 | |
| | baz=309,slow=75,SNR=6.0 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.53** | **118** | T | | T | 04 16 16.1 | |
| | baz=312 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.53** | **118** | T | | T | 04 16 17.9 | |
| | baz=312 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.55** | **118** | T | | T | 04 16 11.5 | |
| | baz=312 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.52** | **303** | P | | **P** | **03 47 49.3** | **+0.5** |
| | 0.3nm,0.5s,baz=90,slow=10,SNR=2.9 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.61** | **309** | P | | **P** | **03 48 05.3** | **+0.1** |
| | 1.0nm,0.6s,baz=84,slow=7.5,SNR=10.0 | | | | | | | |
| | 1.0nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.52** | **186** | P | | **P** | **03 49 18.4** | **-1.6** |
| | 0.6nm,0.7s,baz=0.0,slow=7.5,SNR=8.6 | | | | | | | |
| | 0.6nm,0.7s | | | | | | | |

**IDC 29 03:41:30.7±8.9, 18.63S×177.20W, h411km±93km, mb3.2/3, mbtmp4.0/4, Error ellipse: s-maj=227.9km s-min=38.3km az=160.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.71** | **255** | P | | P | 03 44 51.0 | +0.3 |
| | 7.7nm,0.8s,baz=72,slow=16,SNR=3.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.63** | **260** | P | | P | 03 49 12.6 | -0.2 |
| | 0.8nm,0.3s,baz=96,slow=7.6,SNR=36 | | | | | | | |
| | 0.8nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.70** | **255** | P | | P | 03 49 13.2 | -0.1 |
| | 1.7nm,0.5s,baz=92,slow=8.5,SNR=41 | | | | | | | |
| | 1.7nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.42** | **57** | P | | P | 03 53 23.8 | 0.0 |
| | 0.3nm,0.8s,baz=209,slow=7.2,SNR=3.8 | | | | | | | |
| | 0.3nm,0.8s | | | | | | | |

*IDC **29** 03:51:52.1±0.3, 22.00S×170.21E, h0km, mb5.7/25, mbtmp5.7/27, ML5.0/2, MS6.5/51, Error ellipse: s-maj=13.5km s-min=11.6km az=62.0*
*MOS **29** 03:51:54.0±1.1, 21.93S×170.11E, h19km, mb6.0/43, MS6.6/41, Error ellipse: s-maj=8.2km s-min=7.0km az=112.9*
*BJI **29** 03:51:55.1±0.0, 21.95S×170.10E, h20km, mb6.0/86, mB6.5/74, Ms6.7/98, Ms7 6.5/96*
*NOU **29** 03:51:56.6, 21.94S×169.97E, h10km, ML6.7/117, Southeast of Loyalty Islands*
*NEIC **29** 03:51:56.1±2.0, 22.03S±0.05×170.13E±0.06, h21km±2km, mb6.1/504, Ms_20 6.8/1145, Mww7.1/40, Error ellipse: s-maj=8.3km s-min=6.9km az=92.0*
*IPGP **29** 03:51:56.0, 22.07S×170.05E, h24km, Mw7.1, Fault plane solution: NP1:φs133.00000°, δ66.00000°, λ.87.00000°. NP2:φs320.00000°, δ24.00000°, λ.96.00000°.*
*NEIC **29** 03:51:56.7, 22.04S×170.12E, h26km*
*NEIC **29** 03:51:56.7, 22.14S×169.80E, h26km, Moment Tensor Solution. Duration: 17s6 Moment tensor: Scale 10^19Nm; Mrr3.72; Mθθ-1.80; Mφφ-1.91; Mrθ2.30; Mrφ1.64; Mθφ-2.35; Fault plane solution: M0 4.88000×10^19 NP1: φs135.73000°, δ66.16000°, λ.89.82000°. NP2: φs316.18000°, δ23.85000°, λ.90.41000°. Principal axes: T 4.9871, Plg69.0000°, Azm45.0000°; N -0.2155, Plg0.0000°, Azm136.0000°; P -4.7716, Plg21.0000°, Azm226.0000°;*
*GCMT **29** 03:52:22.7±0.0, 22.29S×169.82E, h18km, MW6.9/168, Moment Tensor Solution. s165,c421; s168,c865; Duration: 6s9 Moment tensor: Scale 10^19Nm; Mrr2.35±.01; Mθθ-1.10±.01; Mφφ-1.25±.01; Mrθ1.24±.02; Mrφ1.07±.01; Mθφ-1.11±.02; Best double couple: M0 2.83800×10^19 NP1:φs134.00000°, δ63.00000°, λ.87.00000°. NP2:φs320.00000°, δ27.00000°, λ.95.00000°. Principal axes: T 2.8920, Plg72.0000°, Azm38.0000°; N -0.1080, Plg2.0000°, Azm135.0000°; P -2.7840, Plg18.0000°, Azm226.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to surface/mantle waves, cutoff=125s. Triangular moment-rate function*

**ISC 29 03:51:56.1±0.3, 22.10S±0.03×170.21E±0.03, h24km±2km, h24km:pP-P, n2220, σ1.53/1776, mb6.1/367, MS6.8/662, 147C-89D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.12** | **286** | P | | **Pn** | **03 52 28.5** | **-1.5** |
| **MARNC** | **Mare, Loyalty** | **2.12** | **286** | ⇑P | | **Pn** | **03 52 26.9** | **-3.1** |
| **PINNC** | **Pines Island,** | **2.61** | **258** | P | | **Pn** | **03 52 35.0** | **-1.8** |
| **PINNC** | **Pines Island,** | **2.61** | **258** | Pn | | **Pn** | **03 52 33.6** | **-3.1** |
| **LIFNC** | **LIFOU** | **3.07** | **295** | P | | **Pn** | **03 52 42.4** | **-0.6** |
| **LIFNC** | **LIFOU** | **3.07** | **295** | Pn | | **Pn** | **03 52 41.1** | **-1.9** |
| **YATNC** | **Mamie plateau,** | **3.08** | **270** | P | | **Pn** | **03 52 41.3** | **-1.9** |
| **I22FR** | **PORTLAGUERRE I** | **3.12** | **268** | Pn | | **Pn** | **03 52 42.6** | **-1.2** |
| | baz=90,slow=8.8 | | | | | | | |
| I22FR | | | | Sn | | **Sn** | **03 53 18.6** | **-1.8** |
| | baz=94,slow=26 | | | | | | | |
| **DZM** | **Mont Dzumac** | **3.50** | **270** | P | | **Pn** | **03 52 47.4** | **-1.6** |
| **DZM** | **Mont Dzumac** | **3.50** | **270** | Pn | | **Pn** | **03 52 47.1** | **-1.9** |
| **DZM** | **Mont Dzumac** | **3.50** | **270** | ePn | | **Pn** | **03 52 47.0** | **-2.0** |
| | 29μm,1.5s | | | | | | | |
| **DZM** | **Mont Dzumac** | **3.50** | **270** | ⇑P | | **Pn** | **03 52 46.4** | **-2.6** |
| **DZM** | **Mont Dzumac** | **3.50** | **270** | Pn | | **Pn** | **03 52 46.6** | **-2.4** |
| | 212nm,0.3s,baz=116,slow=11,SNR=644 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **03 53 26.8** | **-2.9** |
| | 530nm,0.3s,baz=111,slow=18,SNR=8.4 | | | | | | | |
| | 1μm,0.3s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.63** | **269** | P | | **Pn** | **03 52 49.2** | **-1.5** |
| **RTV** | **Rentapao** | **4.60** | **338** | P | | **Pn** | **03 53 05.2** | **+1.0** |
| **DVP** | **Devils Point** | **4.75** | **336** | P | | **Pn** | **03 53 06.7** | **+0.5** |
| **KOUNC** | **Koumac, New Ca** | **5.74** | **284** | P | | **Pn** | **03 53 19.3** | **-0.4** |
| **KOUNC** | **Koumac, New Ca** | **5.74** | **284** | Pn | | **Pn** | **03 53 18.3** | **-1.5** |
| **KOUNC** | **Koumac, New Ca** | **5.74** | **284** | ⇓P | | **Pn** | **03 53 18.8** | **-1.0** |
| **NFK** | **Norfolk Island** | **7.21** | **196** | ⇑P | | **Pn** | **03 53 38.0** | **-2.1** |
| **MSVF** | **Nonsavu** | **8.55** | **61** | P | | Pn | 03 54 04.0 | +5.4 |
| **MSVF** | **Nonsavu** | **8.55** | **61** | Pn | | **Pn** | **03 54 00.8** | **+2.2** |
| **MSVF** | **Nonsavu** | **8.55** | **61** | ⇓P | | **Pn** | **03 54 03.3** | **+4.7** |
| **MSVF** | **Nonsavu** | **8.55** | **61** | LR | | LR | 03 56 47.1 | |
| | comp=Z,885μm,18.9s,baz=192,slow=35 | | | | | | | |
| **MSVF** | **Nonsavu** | **8.55** | **61** | *i* P | | **Pn** | **03 54 02.9** | **+4.3** |
| MSVF | | | | MLR | | MLR | | |
| | comp=Z,1276μm,13.0s | | | | | | | |
| **RAO** | **Raoul Island** | **12.85** | **126** | P | | **P** | **03 55 04.5** | **-3.4** |
| **RAO** | **Raoul Island** | **12.85** | **126** | Pn | | **Pn** | **03 55 00.6** | **+3.3** |
| | comp=Z,31nm,0.3s,baz=252,slow=20,SNR=2.1 | | | | | | | |
| RAO | | | | Sn | | Sn | 03 57 30.1 | +11 |
| | comp=Z,49nm,0.3s,baz=0.0,slow=20,SNR=1.5 | | | | | | | |
| RAO | | | | LR | | LR | 03 58 53.6 | |
| | comp=Z,360μm,20.0s,baz=350,slow=33 | | | | | | | |
| **OUZ** | **Omahuta** | **13.40** | **168** | ⇓P | | **Pn** | **03 55 06.6** | **+1.9** |
| **KUZ** | **Kuzumuru** | **15.36** | **163** | P | | **P** | **03 55 37.3** | **+1.6** |
| **HNR** | **Honiara** | **15.99** | **320** | P | | **Pn** | **03 55 39.5** | **-0.1** |
| **HNR** | **Honiara** | **15.99** | **320** | P | | **Pn** | **03 55 41.1** | **+1.5** |
| HNR | | | | IAmb | | IAmb | 03 55 46.6 | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **HNR** | **Honiara** | **15.99** | **320** | ⇑P | | **Pn** | **03 55 38.7** | **-0.9** |
| **HNR** | **Honiara** | **15.99** | **320** | P | | **Pn** | **03 55 41.1** | **+1.5** |
| HNR | | | | pmax | | pmax | | |
| | comp=Z,2μm,1.1s | | | | | | | |
| **FUNA** | **Funafuti** | **16.03** | **34** | P | | **P** | **03 55 42.5** | **-0.8** |
| **FUNA** | **Funafuti** | **16.03** | **34** | | | **P** | **03 55 41.8** | **-1.4** |
| **FUNA** | **Funafuti** | **16.03** | **34** | ⇑P | | **P** | **03 55 42.1** | **-1.1** |
| **TOZ** | **Tahuroa Road** | **16.23** | **165** | | | **P** | **03 55 45.2** | **-0.2** |
| **GC1S** | **Gold Coast 1 S** | **16.28** | **245** | P | | **P** | **03 55 44.6** | **-1.4** |
| **HIZ** | **Hauiti** | **16.84** | **167** | | | **P** | **03 55 52.3** | **+0.2** |
| **URZ** | **Urewera** | **17.16** | **161** | ⇓P | | **P** | **03 55 57.4** | **+1.6** |
| **URZ** | **Urewera** | **17.16** | **161** | P | | **P** | **03 55 56.1** | **+0.4** |
| | comp=Z,3.2nm,0.3s,baz=94,slow=6.4,SNR=20 | | | | | | | |
| URZ | | | | S | | **S** | **03 59 18.8** | **+5.5** |
| | comp=Z,57nm,1.1s,baz=86,slow=19,SNR=1.4 | | | | | | | |
| URZ | | | | LR | | LR | 04 01 21.9 | |
| | comp=Z,269μm,18.7s,baz=84,slow=33 | | | | | | | |
| | comp=Z,123nm,0.9s | | | | | | | |
| **RTZ** | **Ruatahuna** | **17.46** | **162** | | | **P** | **03 55 59.3** | **+0.2** |
| **TMVZ** | **Te Maari** | **17.60** | **166** | P | | **P** | **03 56 03.6** | **+2.9** |
| **OTVZ** | **Oturere** | **17.64** | **166** | P | | **P** | **03 56 04.1** | **+2.9** |
| **EIDS** | **Eidsvold** | **17.82** | **256** | P | | **P** | **03 56 03.3** | **+0.2** |
| **EIDS** | **Eidsvold** | **17.82** | **256** | P | | **Pn** | **03 56 02.5** | **0.0** |
| **EIDS** | **Eidsvold** | **17.82** | **256** | ⇓P | | **P** | **03 56 03.4** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **17.84** | **164** | P | | **P** | **03 56 08.3** | **+5.0** |
| **BKZ** | **Black Stump Fm** | **17.84** | **164** | | | **P** | **03 56 03.5** | **+0.2** |
| **MOVZ** | **Moawhango** | **17.89** | **166** | P | | **P** | **03 56 07.1** | **+3.3** |
| **KWHZ** | **Kaweka Forest** | **18.07** | **164** | P | | **P** | **03 56 06.8** | **+1.1** |
| **RK1H** | **Rockhampton Ha** | **18.23** | **262** | P | | **P** | **03 56 08.2** | **+0.5** |
| **KRHZ** | **Kereru** | **18.26** | **165** | P | | **P** | **03 56 11.8** | **+3.9** |
| **ARMA** | **Armidale** | **18.60** | **240** | P | | **Pn** | **03 56 13.9** | **+1.8** |
| **ARMA** | **Armidale** | **18.60** | **240** | | | **P** | **03 56 11.1** | **-0.6** |
| **ARMA** | **Armidale** | **18.60** | **240** | ⇓P | | **Pn** | **03 56 12.7** | **+0.6** |
| **PXZ** | **Pawanui** | **18.75** | **164** | P | | **Pn** | **03 56 13.7** | **0.0** |
| **QRZ** | **Quartz Range** | **18.77** | **175** | P | | **Pn** | **03 56 16.7** | **+2.6** |
| **NIUE** | **Niue** | **18.83** | **84** | P | | **Pn** | **03 56 17.5** | **+2.6** |
| **NIUE** | **Niue** | **18.83** | **84** | P | | **Pn** | **03 56 14.7** | **-0.2** |
| NIUE | | | | IAmb | | IAmb | 03 56 21.7 | |
| | comp=Z,1μm,0.9s | | | | | | | |
| **NIUE** | **Niue** | **18.83** | **84** | ⇑P | | **P** | **03 56 14.3** | **0.0** |
| **DVHZ** | **Dannevirke** | **18.84** | **166** | P | | **P** | **03 56 14.2** | **0.0** |
| **AFI** | **Afiamalu** | **18.95** | **68** | P | | **P** | **03 56 15.2** | **-0.5** |
| **AFI** | **Afiamalu** | **18.95** | **68** | P | | **P** | **03 56 15.2** | **-0.5** |
| AFI | | | | pmax | | pmax | | |
| | comp=Z,3μm,1.1s | | | | | | | |
| **TKNZ** | **Takaka Hill** | **19.02** | **174** | P | | **Pn** | **03 56 18.8** | **+1.8** |
| **MRZ** | **Mangatainoka R** | **19.06** | **167** | P | | **Pn** | **03 56 18.0** | **+0.5** |
| MRZ | | | | IAmb | | IAmb | 03 56 27.0 | |
| | comp=Z,1μm,1.2s | | | | | | | |
| **MRZ** | **Mangatainoka R** | **19.06** | **167** | P | | **Pn** | **03 56 18.6** | **+1.1** |
| **KIW** | **Kapiti Island** | **19.12** | **169** | P | | **P** | **03 56 16.6** | **-0.7** |
| **OGWZ** | **Otaki Gorge** | **19.13** | **168** | P | | **Pn** | **03 56 20.1** | **+1.8** |
| **BFZ** | **Birch Farm** | **19.22** | **166** | P | | **Pn** | **03 56 23.5** | **+4.1** |
| **BFZ** | **Birch Farm** | **19.22** | **166** | IAmb | | IAmb | 03 56 27.3 | |
| | comp=Z,2μm,1.9s | | | | | | | |
| **BFZ** | **Birch Farm** | **19.22** | **166** | P | | **Pn** | **03 56 20.6** | **+1.2** |
| **HOWZ** | **Holdsworth Sta** | **19.27** | **168** | P | | **Pn** | **03 56 20.8** | **+0.7** |
| **TCW** | **Tory Channel** | **19.36** | **171** | P | | **Pn** | **03 56 21.0** | **-0.1** |
| **TCW** | **Tory Channel** | **19.36** | **171** | P | | **Pn** | **03 56 23.6** | **+2.5** |
| **MRNZ** | **Matariki Terra** | **19.36** | **174** | P | | **P** | **03 56 20.0** | **+0.1** |
| **SNZO** | **South Karori** | **19.53** | **170** | P | | **Pn** | **03 56 27.7** | **+4.7** |
| **SNZO** | **South Karori** | **19.53** | **170** | P | | **P** | **03 56 20.7** | **-1.0** |
| SNZO | | | | IAmb | | IAmb | 03 56 32.6 | |
| | comp=Z,2μm,1.5s | | | | | | | |
| **NTLH** | **Newcastle Hard** | **19.60** | **233** | P | | **Pn** | **03 56 25.9** | **+1.9** |
| **BHW** | **Baring Head** | **19.65** | **170** | P | | **Pn** | **03 56 25.5** | **+1.0** |
| **PAWZ** | **Paruwai Farm** | **19.72** | **168** | P | | **Pn** | **03 56 25.0** | **-0.5** |
| **MSWZ** | **Moikau Station** | **19.72** | **169** | P | | **Pn** | **03 56 25.5** | **+0.1** |
| **BSWZ** | **Blackbirch Sta** | **19.80** | **172** | P | | **Pn** | **03 56 25.8** | **-0.5** |
| **RMQ** | **Roma** | **20.03** | **253** | P | | Pn | 03 56 28.8 | -0.4 |
| **MGCD** | **Mangrove Creek** | **20.19** | **233** | P | | Pn | 03 56 31.5 | +0.5 |
| **KHZ** | **Kahutara** | **20.45** | **173** | IAmb | | IAmb | 03 56 45.2 | |
| | comp=Z,2μm,1.5s | | | | | | | |
| **KHZ** | **Kahutara** | **20.45** | **173** | ⇓P | | Pn | 03 56 33.8 | -0.1 |
| **RIV** | **Riverview** | **20.45** | **231** | P | | Pn | 03 56 33.6 | -0.5 |
| **RIV** | **Riverview** | **20.45** | **231** | ⇑P | | Pn | 03 56 34.6 | +0.5 |
| **INZ** | **Inchbonnie** | **20.59** | **177** | P | | Pn | 03 56 35.5 | -0.1 |
| INZ | | | | IAmb | | IAmb | 03 56 45.0 | |
| | comp=Z,2μm,1.8s | | | | | | | |
| INZ | | | | IAMs_20 | | IAMs_20 | 04 04 01.6 | |
| | comp=Z,446μm,18.0s | | | | | | | |
| **LTZ** | **Lake Taylor** | **20.70** | **176** | P | | **P** | **03 56 35.4** | **+0.9** |
| LTZ | | | | IAmb | | IAmb | 03 56 51.7 | |
| | comp=Z,2μm,2.0s | | | | | | | |
| **SYDH** | **Sydney Hard Ro** | **20.72** | **232** | P | | Pn | 03 56 37.1 | -0.1 |
| **GVZ** | **Greta Valley S** | **20.94** | **174** | IAmb | | IAmb | 03 56 45.7 | |
| | comp=Z,2μm,1.7s | | | | | | | |
| **WOLH** | **Wollongong Har** | **20.95** | **230** | P | | Pn | 03 56 38.8 | -1.0 |
| **OXZ** | **Oxford** | **21.22** | **176** | IAmb | | IAmb | 03 56 53.1 | |
| | comp=Z,699nm,0.9s | | | | | | | |
| OXZ | | | | IAMs_20 | | IAMs_20 | 04 04 34.3 | |
| | comp=Z,291μm,18.0s | | | | | | | |
| **FOZ** | **Fox Glacier** | **21.38** | **181** | IAmb | | IAmb | 03 56 58.1 | |
| | comp=Z,514nm,1.0s | | | | | | | |
| FOZ | | | | IAMs_20 | | IAMs_20 | 04 04 14.3 | |
| | comp=Z,299μm,18.0s | | | | | | | |
| **RPZ** | **Rata Peaks** | **21.57** | **178** | P | | **P** | **03 56 43.9** | **0.0** |
| RPZ | | | | IAmb | | IAmb | 03 56 58.6 | |
| | comp=Z,1μm,1.6s | | | | | | | |
| RPZ | | | | IAMs_20 | | IAMs_20 | 04 04 34.4 | |
| | comp=Z,348μm,19.0s | | | | | | | |
| **RPZ** | **Rata Peaks** | **21.57** | **178** | P | | **P** | **03 56 45.2** | **+1.4** |
| | comp=Z,72nm,0.9s,baz=25,slow=4.9,SNR=13 | | | | | | | |
| RPZ | | | | S | | Sn | 04 00 50.7 | +0.1 |
| | comp=Z,18nm,0.9s,baz=78,slow=18,SNR=1.4 | | | | | | | |
| RPZ | | | | LR | | LR | 04 04 25.7 | |
| | comp=Z,235μm,19.2s,baz=348,slow=35 | | | | | | | |
| | comp=Z,72nm,0.9s | | | | | | | |
| **JCZ** | **Jackson Bay** | **21.95** | **183** | P | | **P** | **03 56 53.2** | **+5.2** |
| **TV1H** | **Townsville Har** | **22.09** | **273** | P | | **P** | **03 56 49.4** | **-0.2** |
| **LBZ** | **Lake Benmore** | **22.23** | **180** | IAmb | | IAmb | 03 57 10.9 | |
| | comp=Z,902nm,1.6s | | | | | | | |
| **CTA** | **Charters Tower** | **22.44** | **271** | P | | **P** | **03 56 55.1** | **+1.7** |
| **CTA** | **Charters Tower** | **22.44** | **271** | P | | **P** | **03 56 52.8** | **-0.6** |
| | comp=Z,3.9nm,0.8s,baz=92,slow=11,SNR=66 | | | | | | | |
| CTA | | | | LR | | LR | 04 05 10.1 | |
| | comp=Z,12μm,18.8s,baz=95,slow=36 | | | | | | | |
| **CTAO** | **Charters Tower** | **22.44** | **271** | P | | **P** | **03 56 54.5** | **+1.1** |
| **CTAO** | **Charters Tower** | **22.44** | **271** | P | | **P** | **03 56 53.6** | **+0.2** |
| CTAO | | | | IAmb | | IAmb | 03 57 07.2 | |
| | comp=Z,502nm,1.1s | | | | | | | |
| **CTAO** | **Charters Tower** | **22.44** | **271** | IAMs_20 | | IAMs_20 | 04 06 22.1 | |
| | comp=Z,432μm,18.0s | | | | | | | |
| **CTAO** | **Charters Tower** | **22.44** | **271** | ⇑P | | **P** | **03 56 54.0** | **+0.6** |
| **CTAO** | **Charters Tower** | **22.44** | **271** | P | | **P** | **03 56 53.6** | **+0.2** |
| CTAO | | | | pmax | | pmax | | |
| | comp=Z,502nm,1.1s | | | | | | | |
| CTAO | | | | MLR | | MLR | | |
| | comp=Z,432μm,18.0s | | | | | | | |
| **CNB** | **Canberra Magne** | **22.48** | **230** | P | | **P** | **03 56 56.6** | **+2.9** |
| **WKZ** | **Wanaka** | **22.69** | **182** | IAmb | | IAmb | 03 57 21.6 | |
| | comp=Z,930nm,1.3s | | | | | | | |
| WKZ | | | | IAMs_20 | | IAMs_20 | 04 05 13.0 | |
| | comp=Z,355μm,18.0s | | | | | | | |
| **YNG** | **Young** | **22.69** | **233** | P | | **P** | **03 56 58.7** | **+2.7** |
| **CAN** | **Canberra** | **22.74** | **230** | P | | **P** | **03 56 59.1** | **+2.6** |
| **CAN** | **Canberra** | **22.74** | **230** | P | | **P** | **03 56 57.0** | **+0.5** |
| CAN | | | | IAmb | | IAmb | 03 57 17.3 | |
| | comp=Z,1μm,1.6s | | | | | | | |
| CAN | | | | IAMs_20 | | IAMs_20 | 04 05 23.3 | |
| | comp=Z,311μm,18.0s | | | | | | | |
| **CAN** | **

**ARPS Mount Arapiles 28.58 233** P **P** 03 57 51.6 +1.3
**HTT Hallett 29.79 241** P **P** 03 58 02.0 +0.9
**HTT Hallett 29.79 241** ⇓P **P** 03 58 01.4 +0.2
**LCRK Leigh Creek 29.79 247** P **P** 03 58 02.1 +1.0
**PTPS Port Pirie 30.49 242** P **P** 03 58 07.8 +0.6
**WHYH Whyalla 30.80 242** P **P** 03 58 11.4 +1.4
**PATS Pohnpei 31.03 337** P **P** 03 58 13.0 +0.9
**PATS Pohnpei 31.03 337** P **P** 03 58 12.3 +0.2
PATS IAmb IAmb 03 58 49.0
comp=Z,246nm,1.0s
PATS IAMs_20 IAMs_20 04 10 17.1
comp=Z,153µm,18.0s
**OOD Oodnadatta 31.74 253** P **P** 03 58 18.8 +0.4
**BBOO Buckleboo 32.00 243** P **P** 03 58 20.8 +0.2
**BBOO Buckleboo 32.00 243** P **P** 03 58 19.5 -1.1
**TABU Tabubil 32.65 297** P **P** 03 58 27.4 +0.9
**MULG Mulgathing 33.34 248** P **P** 03 58 31.8 -0.5
**AS01 Alice Springs 33.39 260** P **P** 03 58 32.3 -0.6
**ASAR Alice Springs 33.43 260** P **P** 03 58 32.3 -1.0
comp=Z,43nm,0.9s,baz=86,slow=8.9,SNR=129
ASAR PcP **PcP** 04 01 16.4 +2.0
comp=Z,30nm,0.9s,baz=87,slow=5.3,SNR=2.4
ASAR LR LR 04 12 37.4
comp=Z,169µm,18.3s,baz=92,slow=37
ASAR P3KPbc 04 29 45.5
comp=Z,1.9nm,0.7s,baz=278,slow=4.1,SNR=13
comp=Z,43nm,0.9s
**MCQ Macquarie Isla 33.45 192** IAMs_20 IAMs_20 04 10 06.5
comp=Z,173µm,18.0s
**WRAB Tennant Creek 33.50 267** P **P** 03 58 32.2 -1.7
**WRAB Tennant Creek 33.50 267** *i* P **P** 03 58 31.9 -2.0
WRAB pmax pmax
comp=Z,237nm,1.0s
WRAB MLR MLR
comp=Z,529µm,15.0s
**WRA Warramunga Arr 33.51 267** P **P** 03 58 31.9 -2.1
comp=Z,17nm,0.4s,baz=99,slow=8.1,SNR=175
WRA LR LR 04 11 57.2
comp=Z,115µm,20.7s,baz=101,slow=36
comp=Z,17nm,0.4s
**JAY Jayapura 34.65 300** P **P** 03 58 44.0 +0.1
comp=Z,508nm,1.1s,comp=Z,8µm
**GENI Genyem 35.04 299** P **P** 03 58 48.2 +1.0
**GENI Genyem 35.04 299** P **P** 03 58 47.4 +0.2
comp=Z,699nm,1.2s,comp=Z,14µmcomp=Z,39µm
**KDU Kakadu 37.12 278** P **P** 03 59 05.0 0.0
**KDU Kakadu 37.12 278** ⇑P **P** 03 59 04.2 -0.8
**TBI Tubuai 37.13 100** *e*P **P** 03 59 03.7 -1.4
comp=Z,29µm,23.2s
**TBI Tubuai 37.13 100** *e*P P 03 59 16.1 +11
comp=Z,338nm,1.1s
TBI *e*S **S** **04 04 48.5 -1.8**
comp=Z,104µm,23.5s
TBI *e*S **S** **04 04 53.1 +2.8**
comp=Z,26µm,21.4s
TBI *e*SS **SS** **04 07 33.3 0.0**
comp=Z,391µm,27.0s
TBI *e*LR LR 04 09 03.5
comp=Z,47µm,21.3s
TBI *e*LR LR 04 09 03.8
comp=Z,55µm,29.0s
TBI *e*LR LR 04 09 07.3
comp=Z,219µm,25.8s
**PAE Paea 37.99 91** *e*PKP1 P 03 59 24.0 +12
comp=Z,36nm,1.1s
PAE *e*S **S** **04 05 04.2 +0.8**
comp=Z,4µm,22.7s
PAE *e*SS **SS** **04 07 50.5 -0.2**
comp=Z,4µm,21.7s
PAE *e*LR LR 04 09 25.4
comp=Z,8µm,25.3s
**PPT2 Papeete2 38.01 91** *e*PKP1 **P** **03 59 11.7 -0.9**
comp=Z,7µm,22.0s
**PPT2 Papeete2 38.01 91** *e*P P 03 59 18.1 +5.5
comp=Z,166nm,1.3s
PPT2 *e*S **S** **04 05 01.6 -2.2**
comp=Z,30µm,24.0s
PPT2 *e*S **S** **04 05 05.3 +1.5**
comp=Z,8µm,22.5s
PPT2 *e*SS **SS** **04 07 51.8 +0.5**
comp=Z,7µm,22.8s
PPT2 *e*SS **SnSn** **04 07 52.6 +5.6**
comp=Z,143µm,26.0s
PPT2 *e*LR LR 04 09 27.7
comp=Z,13µm,25.2s
PPT2 *e*LR LR 04 09 29.4
comp=Z,57µm,27.0s
PPT2 *e*LR LR 04 09 34.7
comp=Z,41µm,29.5s
**PPT Papeete 38.02 91** LR LR 04 13 12.4
comp=Z,19µm,18.7s,baz=264,slow=34
**TVO Taravao 38.27 91** *e*PKP1 **P** **03 59 16.7 +1.9**
comp=Z,68nm,1.3s
TVO *e*S **S** **04 05 09.2 +1.5**
comp=Z,4µm,21.5s
TVO *e*SS **SS** **04 07 57.7 +1.3**
comp=Z,5µm,21.8s
TVO *e*LR LR 04 09 41.7
comp=Z,8µm,26.1s
**MTN Manton Dam 38.30 277** P **P** **03 59 14.7 -0.3**
**MTN Manton Dam 38.30 277** ⇑P **P** **03 59 13.0 -2.0**
**WRKA Warakurna 38.42 257** P **P** **03 59 15.9 -0.1**
**FORT Forrest 38.54 248** P **P** **03 59 17.1 +0.2**
**FORT Forrest 38.54 248** IAMs_20 IAMs_20 04 15 23.2
comp=Z,146µm,20.0s
**FORT Forrest 38.54 248** ⇓P **P** **03 59 16.7 -0.2**
**DRS Darwin Rock St 38.65 278** P **P** **03 59 17.9 -0.1**
**KNRA Kununurra 39.64 272** P **P** **03 59 25.6 -0.7**
KNRA IAmb IAmb 03 59 47.1
comp=Z,567nm,1.3s
KNRA IAMs_20 IAMs_20 04 16 48.7
comp=Z,199µm,19.0s
**XMAS Kiritimati 39.66 57** P **P** **03 59 28.4 +2.0**
**XMAS Kiritimati 39.66 57** P **P** **03 59 27.5 +1.1**
XMAS IAmb IAmb 03 59 33.3
comp=Z,340nm,1.1s
**XMAS Kiritimati 39.66 57** IAMs_20 IAMs_20 04 12 28.9
comp=Z,120µm,20.0s
**XMAS Kiritimati 39.66 57** ⇑P **P** **03 59 26.9 +0.5**
**KMPI Kaimana, Papua 39.86 292** P **P** **03 59 28.2 +0.2**
**SAUI Saumlaki 39.98 284** IAMs_20 IAMs_20 04 17 35.2
comp=Z,129µm,18.0s
**PMOR Pomariorio Ree 40.24 87** *e*P **P** **03 59 32.8 +1.6**
comp=Z,199nm,1.0s
PMOR *e*S **S** **04 05 38.8 +1.6**
comp=Z,28µm,23.1s
PMOR *e*SS **SnSn** **04 08 42.4 +1.7**
comp=Z,30µm,23.4s
PMOR *e*LR LR 04 10 30.7
comp=Z,53µm,22.7s
**VAH Vaihoa 40.42 88** *e*P **P** **03 59 33.6 +0.9**
comp=Z,233nm,1.2s
VAH *e*S **S** **04 05 36.9 -3.1**
comp=Z,29µm,22.8s
VAH *e*SS **SnSn** **04 08 46.2 +1.1**
comp=Z,38µm,22.7s
VAH *e*LR LR 04 10 39.7
comp=Z,51µm,22.9s
**WAKE Wake Island 41.28 355** IAMs_20 IAMs_20 04 15 50.7
comp=Z,111µm,18.0s
**FAKI Fak Fak 41.48 292** P **P** **03 59 41.8 +0.3**
**FAKI Fak Fak 41.48 292** P **P** **03 59 39.5 -1.9**
FAKI IAmb IAmb 04 00 23.1
comp=Z,545nm,1.1s
**FAKI Fak Fak 41.48 292** ⇑P **P** **03 59 40.1 -1.4**
**FAKI Fak Fak 41.48 292** P **P** **03 59 41.3 -0.2**
comp=Z,518nm,1.5s,comp=Z,14µm
**FITZ Fitzroy Crossi 41.94 267** P **P** **03 59 44.1 -1.0**
**BNDI Bandanaira 42.75 288** P **P** **03 59 52.3 +0.5**
**BNDI Bandanaira 42.75 288** P **P** **03 59 52.0 +0.2**
comp=Z,856nm,1.2s,comp=Z,39µm
**GUMO Guam 43.31 323** P **P** **03 59 57.5 +1.3**
**GUMO Guam 43.31 323** P **P** **03 59 56.1 -0.2**
**GUMO Guam 43.31 323** P **P** **03 59 55.3 -0.9**
comp=Z,103nm,0.4s,baz=153,slow=2.4,SNR=20
GUMO LR LR 04 17 52.9
comp=Z,34µm,18.1s,baz=140,slow=36
comp=Z,103nm,0.4s
**GUMO Guam 43.31 323** P **P** **03 59 56.1 -0.2**
GUMO pmax pmax
comp=Z,3µm,2.0s
GUMO MLR MLR
comp=Z,46µm,18.0s
**SWI Sorong 43.39 294** P **P** **03 59 56.6 -0.4**
comp=Z,373nm,0.8s,comp=Z,14µmcomp=Z,35µm
**JOHN Johnston Islan 43.40 29** P **P** **03 59 59.3 +2.4**
**JOHN Johnston Islan 43.40 29** P **P** 03 59 56.4 -0.4
JOHN IAmb IAmb 04 00 46.0
comp=Z,285nm,1.0s
**JOHN Johnston Islan 43.40 29** ⇓P **P** **03 59 58.8 +1.9**
**KMBL Kambalda 43.85 247** P **P** **04 00 00.6 0.0**
**SOEI Soe 45.68 278** P **P** **04 00 16.4 +0.9**
**SOEI Soe 45.68 278** IAMs_20 IAMs_20 04 19 42.6
comp=Z,161µm,18.0s
**SOEI Soe 45.68 278** S **S** **04 06 59.5 +2.0**
SOEI P **P** **04 00 15.1 -0.4**
**SOEI Soe 45.68 278** P **P** **04 00 16.1 +0.6**
comp=Z,261nm,1.0s,comp=Z,16µmcomp=Z,35µm
**NLAI Namlea 45.82 288** P **P** **04 00 17.5 +1.1**
comp=Z,166nm,1.0s
**BATI Baumata 46.08 277** P **P** **04 00 20.3 +1.8**
comp=Z,164nm,0.7s,comp=Z,21µmcomp=Z,32µm
**PSA00 Pilbara Seismi 46.58 261** P **P** **04 00 23.1 +0.8**
**PSA00 Pilbara Seismi 46.58 261** P **P** **04 00 21.5 -0.8**
PSA00 IAmb IAmb 04 00 46.6
comp=Z,473nm,1.8s
**LBMI Labuha 46.72 291** P **P** **04 00 25.1 +1.6**
comp=Z,287nm,1.7s,comp=Z,11µm
**MBWA Marble Bar 46.76 261** P **P** **04 00 24.1 +0.3**
**MBWA Marble Bar 46.76 261** P **P** **04 00 23.6 -0.1**
**MBWA Marble Bar 46.76 261** ⇑P **P** **04 00 23.0 -0.7**
**MBWA Marble Bar 46.76 261** P **P** **04 00 24.2 +0.5**
MBWA P **P** **04 00 24.2 +0.5**
MBWA P **P** **04 00 24.2 +0.5**
MBWA S **S** **04 07 13.3 +0.7**
MBWA S **S** **04 07 13.3 +0.7**
MBWA S **S** **04 07 13.3 +0.7**
**MEEK Meekatharra 46.97 254** P **P** **04 00 25.3 -0.1**
**SANI Sanana 47.35 289** P **P** **04 00 28.6 +0.1**
**SANI Sanana 47.35 289** S **S** **04 07 21.8 +0.6**
SANI P **P** **04 00 28.1 -0.4**
**SANI Sanana 47.35 289** ⇑P **P** **04 00 27.5 -1.0**
**SANI Sanana 47.35 289** P **P** **04 00 29.6 +1.1**
comp=Z,545nm,1.3s,comp=Z,14µmcomp=Z,55µm
**KLBR Kellerberrin 47.37 247** P **P** **04 00 28.4 0.0**
**TNTI Ternate 47.55 293** P **P** **04 00 31.5 +1.5**
**TNTI Ternate 47.55 293** P **P** **04 00 30.4 +0.4**
TNTI IAmb IAmb 04 00 48.5
comp=Z,242nm,1.2s
**TNTI Ternate 47.55 293** P **P** **04 00 32.1 +2.1**
comp=Z,173nm,1.2s,comp=Z,8µmcomp=Z,28µm
**NWAO Narrogin (SRO) 47.78 245** P **P** **04 00 32.2 +0.6**
**NWAO Narrogin (SRO) 47.78 245** P **P** **04 00 31.3 -0.3**
**NWAO Narrogin (SRO) 47.78 245** P **P** **04 00 30.4 -1.1**
**NWAO Narrogin (SRO) 47.78 245** P **P** **04 00 31.8 +0.3**
comp=Z,64nm,0.6s,baz=99,slow=8.1,SNR=25
NWAO LR LR 04 21 07.2
comp=Z,170µm,18.7s,baz=79,slow=37
comp=Z,64nm,0.6s
**NWAO Narrogin (SRO) 47.78 245** P **P** **04 00 31.8 +0.3**
NWAO P **P** **04 00 31.8 +0.3**
NWAO P **P** **04 00 31.8 +0.3**
NWAO S **S** **04 07 27.4 +0.5**
NWAO S **S** **04 07 27.4 +0.5**
NWAO S **S** **04 07 27.4 +0.5**
**MMRI Maumere 47.96 278** P **P** **04 00 33.4 +0.3**
**MMRI Maumere 47.96 278** P **P** **04 00 34.2 +1.1**
comp=Z,412nm,1.2s,comp=Z,20µmcomp=Z,41µm
**RKGY Rocky Gully 47.98 243** P **P** **04 00 33.1 0.0**
**BLDU Ballidu 48.31 248** P **P** **04 00 35.8 +0.1**
**EDFI Ende, Flores 48.42 278** P **P** **04 00 37.4 +0.6**
comp=Z,215nm,1.7s,comp=Z,11µmcomp=Z,42µm
**MUN Mundaring 48.67 246** P **P** **04 00 38.7 +0.2**
**BBSI Bau Bau 48.89 282** P **P** **04 00 41.3 +1.0**
comp=Z,200nm,1.2s,comp=Z,17µmcomp=Z,41µm
**BASI Baing, Sumba 48.92 276** P **P** **04 00 42.1 +1.6**
**MORW Morawa 49.00 250** P **P** **04 00 42.5 +1.4**
**MORW Morawa 49.00 250** ⇓P **P** **04 00 41.4 +0.3**
**TAOE Nuku Hiva Isla 49.40 83** P **P** **04 00 46.7 +2.3**
**TAOE Nuku Hiva Isla 49.40 83** P **P** **04 00 45.6 +1.2**
**TAOE Nuku Hiva Isla 49.40 83** *e*PKP1 **P** **04 00 42.8 -1.6**
comp=Z,501nm,1.2s
TAOE *e*S **S** **04 07 50.4 0.0**
comp=Z,52µm,23.6s
TAOE *e*SS **SS** **04 11 24.0 +1.6**
comp=Z,12µm,26.4s
TAOE *e*LQ LQ 04 12 46.2
comp=Z,84µm,22.7s
TAOE *e*LR LR 04 14 45.4
comp=Z,48µm,22.9s
**WBSI Waikabubak, Su 50.21 276** P **P** **04 00 50.4 -0.1**
comp=Z,464nm,1.2s,comp=Z,8µm
**RKT Rikitea 50.35 102** *e*P **P** **04 00 49.9 -1.5**
comp=Z,27µm,23.0s
**RKT Rikitea 50.35 102** *e*P **P** **04 00 53.5 +2.1**
comp=Z,130nm,1.2s
**RKT Rikitea 50.35 102** *e*PP **PP** **04 02 45.8 -1.2**
comp=Z,9µm,21.8s
RKT *e*S **S** **04 08 03.8 +0.5**
comp=Z,20µm,21.8s
RKT *e*S S 04 08 03.9 +0.6
comp=Z,106µm,23.8s
RKT *e*SS **SS** **04 11 32.6 -4.6**
comp=Z,31µm,27.0s
RKT *e*LQ LQ 04 12 59.3
comp=Z,205µm,23.5s
RKT *e*LR LR 04 15 07.9
comp=Z,113µm,21.8s
RKT *e*LR LR 04 15 12.3
comp=Z,26µm,20.9s
RKT *e*LR LR 04 15 16.6
comp=Z,1µm,27.0s
**KMSI Cibinong 50.37 290** P **P** **04 00 52.8 +1.2**
**BSSI Bau Bau, Buton 50.51 281** P **P** **04 00 53.8 +1.1**
**LUWI Luwuk 50.66 288** P **P** **04 00 55.1 +1.3**
**LUWI Luwuk 50.66 288** P **P** **04 00 53.2 -0.7**
**LUWI Luwuk 50.66 288** S **S** **04 08 08.0 +0.3**
LUWI P **P** **04 00 54.0 +0.2**
**LUWI Luwuk 50.66 288** ⇑P **P** **04 00 53.5 -0.3**
**LUWI Luwuk 50.66 288** P **P** **04 00 54.9 +1.1**
comp=Z,573nm,1.5s,comp=Z,12µmcomp=Z,42µm
**BKSI Bulukumba 51.17 281** P **P** **04 00 57.4 -0.3**
comp=Z,192nm,1.1s,comp=Z,10µmcomp=Z,37µm
**BNSI Bone 51.57 282** P **P** **04 01 01.6 +1.0**
comp=Z,271nm,2.1s,comp=Z,11µmcomp=Z,34µm
**KAPI Kappang 51.64 282** P **P** **04 01 02.1 +0.9**
**KAPI Kappang 51.64 282** P **P** **04 01 01.6 +0.4**
**KAPI Kappang 51.64 282** P **P** **04 01 00.8 -0.4**
comp=Z,86nm,0.9s,baz=114,slow=4.0,SNR=32
KAPI LR LR 04 23 34.8
comp=Z,18µm,20.4s,baz=127,slow=37
comp=Z,86nm,0.9s
**KAPI Kappang 51.64 282** P **P** **04 01 02.6 +1.4**
KAPI P **P** **04 01 02.6 +1.4**
KAPI S **S** **04 08 22.6 +1.3**
KAPI S **S** **04 08 22.6 +1.3**
**KAPI Kappang 51.64 282** *i* P **P** **04 00 59.1 -2.1**
KAPI pmax pmax
comp=Z,892nm,1.4s
KAPI MLR MLR
comp=Z,45µm,15.0s
**PLAI Plampang 51.99 276** P **P** **04 01 05.5 +1.7**
comp=Z,516nm,1.2s
**MRSI Marisa 52.11 289** P **P** **04 01 05.7 +1.0**
comp=Z,107nm,1.1s,comp=Z,8µmcomp=Z,23µm
**DAV Davao City (W) 52.46 298** P **P** **04 01 06.3 -1.0**
comp=Z,237nm,0.3s,baz=75,slow=3.7,SNR=8.1
comp=Z,237nm,0.3s
**DAV Davao City (W) 52.46 298** P **P** **04 01 07.5 +0.2**
DAV P **P** **04 01 07.5 +0.2**
DAV P **P** **04 01 07.5 +0.2**
**DAV Davao City (W) 52.46 298** P **P** **04 01 07.0 -0.3**
**KEKH Kekaha 52.72 36** P **P** **04 01 08.9 -0.1**
KEKH IAmb IAmb 04 01 18.5
comp=Z,336nm,1.2s
**KHU Kahuku 52.96 42** P **P** **04 01 11.0 -0.1**
KHU IAmb IAmb 04 02 04.2
comp=Z,237nm,1.2s
**KHU Kahuku 52.96 42** P **P** **04 01 11.0 -0.1**
KHU pmax pmax
comp=Z,237nm,1.2s
**MWH Moku'aweowe 53.15 41** P **P** **04 01 12.0 -0.8**
MWH IAmb IAmb 04 01 47.5
comp=Z,331nm,1.4s
**DHH Diamond Head 53.21 38** P **P** **04 01 12.8 +0.2**
**DHH Diamond Head 53.21 38** P **P** **04 01 12.8 +0.2**
**UWE Uwekahuna 53.29 42** IAmb IAmb 04 01 55.6
comp=Z,361nm,1.3s
**PUH Pauahi 53.30 42** IAmb IAmb 04 01 54.4
comp=Z,440nm,1.5s
**HATHI Halema'uma'u T 53.31 42** P **P** **04 01 14.5 +0.9**
HATHI IAmb IAmb 04 01 27.1
comp=Z,375nm,1.5s
**POHA Pohakuloa 53.40 41** P **P** **04 01 15.0 +0.7**
**POHA Pohakuloa 53.40 41** P **P** **04 01 14.4 +0.1**
POHA IAmb IAmb 04 01 18.6
comp=Z,139nm,0.8s
**POHA Pohakuloa 53.40 41** ⇓P **P** **04 01 15.2 +0.9**
**TOLI2 Tolitoli 53.43 289** P **P** **04 01 13.5 -0.9**
**TOLI2 Tolitoli 53.43 289** IAmb IAmb 04 01 28.3
comp=Z,211nm,0.8s
**JOKA Jonika Flow 53.48 42** IAmb IAmb 04 01 19.4
comp=Z,272nm,1.0s
**KHLH Kahului Airpor 53.73 40** IAmb IAmb 04 01 21.7
comp=Z,242nm,1.1s
**SRBI Singaraja 54.62 276** P **P** **04 01 25.5 +2.4**
comp=Z,365nm,1.2s,comp=Z,16µmcomp=Z,42µm
**JAGI Jajag, Banyuwa 55.46 275** P **P** **04 01 28.5 -0.8**
**JAGI Jajag, Banyuwa 55.46 275** IAMs_20 IAMs_20 04 26 06.8
comp=Z,59µm,18.0s
**JAGI Jajag, Banyuwa 55.46 275** ⇑P **P** **04 01 28.1 -1.1**
**JAGI Jajag, Banyuwa 55.46 275** P **P** **04 01 30.0 +0.7**
comp=Z,359nm,1.0s,comp=Z,11µmcomp=Z,35µm
**SBA Scott Base 55.83 181** P **P** **04 01 31.8 +0.9**
**SBA Scott Base 55.83 181** IAMs_20 IAMs_20 04 22 49.0
comp=Z,78µm,18.0s
**SBA Scott Base 55.83 181** P **P** **04 01 31.8 +0.9**
SBA pmax pmax
comp=Z,967nm,1.9s
**JCJ Chichijima 55.92 330** P **P** **04 01 32.1 -0.1**
**JCJ Chichijima 55.92 330** P **P** **04 01 30.6 -1.7**
**JCJ Chichijima 55.92 330** ⇑P **P** **04 01 30.9 -1.4**
**JCJ Chichijima 55.92 330** P **P** 04 01 25.9 -6.3
comp=Z,214nm,0.8s,baz=170,slow=3.7,SNR=25
JCJ LR LR 04 22 40.5
comp=Z,18µm,20.4s,baz=133,slow=33
**MYLDM Lahad Datu 57.40 292** ⇑P **P** **04 01 44.0 +1.0**
**PWJI Pagerwojo 57.79 274** P **P** **04 01 47.0 +1.2**
comp=Z,175nm,0.9s,comp=Z,7µm
**CASY Casey 57.89 204** P **P** **04 01 46.1 +0.4**
CASY IAmb IAmb 04 02 03.1
comp=Z,400nm,1.7s
**CASY Casey 57.89 204** IAMs_20 IAMs_20 04 24 31.9
comp=Z,98µm,18.0s
**CASY Casey 57.89 204** ⇓P **P** **04 01 45.8 +0.1**
**UGM Wanagama 59.02 274** P **P** **04 01 54.6 +0.2**
**UGM Wanagama 59.02 274** IAMs_20 IAMs_20 04 27 16.0
comp=Z,62µm,18.0s
**UGM Wanagama 59.02 274** P **P** **04 01 55.7 +1.3**
comp=Z,282nm,0.9s,comp=Z,13µmcomp=Z,34µm
**SMRI Semarang 59.40 275** P **P** **04 01 58.2 +1.1**
**KKM Kota Kinabalu 59.80 291** P **P** **04 02 00.5 +0.6**
**KKM Kota Kinabalu 59.80 291** ⇑P **P** **04 01 59.3 -0.6**
**KPJI Karang Pucung 60.70 274** P **P** **04 02 07.2 +1.3**
comp=Z,23nm,1.2s,comp=Z,10µmcomp=Z,36µm
**JMZ Minamidaito 2 60.81 319** P **P** **04 02 08.0 +1.6**
**JMZ Minamidaito 2 60.81 319** P **P** **04 02 05.5 -0.9**
**CMJI Cimerak 60.98 273** P **P** **04 02 09.1 +1.2**
comp=Z,201nm,0.8s,comp=Z,7µmcomp=Z,26µm
**SBUM Sibu 61.63 286** P **P** **04 02 12.9 +0.7**
SBUM IAmb IAmb 04 03 04.8
comp=Z,229nm,1.6s
**SBUM Sibu 61.63 286** ⇑P **P** **04 02 12.1 -0.1**
**BBJI Bungbulang 61.84 273** P **P** **04 02 13.1 -0.6**
**JHJ Hachijo jima 2 62.12 331** LR LR 04 28 58.3
comp=Z,15µm,19.4s,baz=150,slow=36
**CNJI Cibinong 62.37 273** P **P** **04 02 18.0 +0.8**
comp=Z,200nm,1.0s
**XMI Christmas Isla 62.63 269** P **P** **04 02 21.4 +2.4**
**XMI Christmas Isla 62.63 269** ⇑P **P** **04 02 21.0 +2.0**
**XMIS Christmas Isla 62.65 269** P **P** **04 02 19.6 +0.5**
**XMIS Christmas Isla 62.65 269** P **P** **04 02 18.3 -0.8**
**KSM Kuching 62.91 284** P **P** **04 02 20.6 -0.3**
KSM IAMs_20 IAMs_20 04 30 44.1
comp=Z,52µm,20.0s
**DBJI Dramaga 62.99 274** P **P** **04 02 23.3 +1.9**
**SKJI Sukabumi 63.01 273** P **P** **04 02 23.0 +1.5**
comp=Z,609nm,1.4s,comp=Z,16µmcomp=Z,33µm
**JOW Kunigami 63.35 318** P **P** **04 02 24.7 +1.2**
**JOW Kunigami 63.35 318** ⇑P **P** **04 02 23.9 +0.5**
**JOW Kunigami 63.35 318** P **P** **04 02 23.6 +0.1**
comp=Z,163nm,1.1s,baz=139,slow=6.5,SNR=19
JOW LR LR 04 30 56.5
comp=Z,16µm,18.1s,baz=130,slow=37
comp=Z,163nm,1.1s
**JAM Amami Oshima 63.69 320** P **P** **04 02 27.4 +1.8**
**SBJI Serang 63.73 274** P **P** **04 02 28.8 +2.6**
comp=Z,676nm,1.4s,comp=Z,16µm
**JSG Sagara 64.14 331** P **P** **04 02 29.1 +0.7**
**JOD2 Odawara 2 64.23 332** P **P** **04 02 28.8 -0.3**
**JRY Ryogami san 64.95 332** P **P** **04 02 32.8 -1.0**
**YOJ Yonaguni jima 65.15 313** ⇑P **P** **04 02 35.2 -0.1**
**PPBI Pangkal Pinang 65.22 278** P **P** **04 02 37.5 +1.5**
comp=Z,134nm,1.2s,comp=Z,31µm
**INU Inuyama 65.23 330** P **P** **04 02 35.5 -0.1**
**INU Inuyama 65.23 330** P **P** **04 02 34.6 -0.9**
**INU Inuyama 65.23 330** ⇑P **P** **04 02 34.7 -0.9**
**JGF Kuroka 65.28 331** ⇑P **P** **04 02 35.0 -1.0**
**JGF Kuroka 65.28 331** P **P** **04 02 35.0 -1.0**
**JMN Monobe 65.42 327** ⇑P **P** **04 02 36.5 -0.4**
**KASI Kota Agung 65.45 274** P **P** **04 02 38.0 +0.5**
comp=Z,532nm,1.1s,comp=Z,7µmcomp=Z,23µm
**JSU Suzuyama 65.52 323** P **P** **04 02 38.8 +1.3**
**YULB Yu-li 65.65 311** P **P** **04 02 38.8 +0.2**
**YULB Yu-li 65.65 311** P **P** **04 02 37.4 -1.2**
**MJAR Matsushiro Arr 65.69 332** P **P** **04 02 37.4 -1.2**
comp=Z,161nm,1.0s,baz=164,slow=6.7,SNR=126
MJAR PKPPKP **P'P'df** **04 31 18.9 +6.2**
comp=Z,5.1nm,1.0s,baz=338,slow=4.3,SNR=7.4
MJAR LR LR 04 31 40.8
comp=Z,15µm,19.5s,baz=134,slow=36
comp=Z,161nm,1.0s
**MAJO Matsushiro 65.69 332** P **P** **04 02 37.3 -1.3**
**MAJO Matsushiro 65.69 332** ⇑P **P** **04 02 37.3 -1.3**
**MAJO Matsushiro 65.69 332** *i* P **P** **04 02 37.5 -1.1**
MAJO pmax pmax
comp=Z,185nm,1.0s
MAJO MLR MLR
comp=Z,15µm,14.0s
**MAT Matsushiro 65.69 332** P **P** **04 02 37.3 -1.3**
**JMM Marumori 65.75 335** ⇑P **P** **04 02 38.6 -0.2**
**JMM Marumori 65.75 335** *i* P **P** **04 02 40.1 +1.2**
**JGN Niukaw 65.82 331** P **P** **04 02 38.6 -0.9**
**JWT Wachi 65.93 329** *i* P **P** **04 02 39.5 -0.6**
**LWLI Liwa 66.05 274** P **P** **04 02 43.1 +1.6**
**SSLB Suanglung 66.14 311** IAmb IAmb 04 02 43.0
comp=Z,191nm,0.9s
**PMBI Palembang 66.17 277** IAMs_20 IAMs_20 04 35 34.8
comp=Z,64µm,18.0s
**JAD Aida 66.25 328** P **P** **04 02 42.1 -0.1**
**JNU Nakatsue 66.51 325** P **P** **04 02 44.3 +0.3**
**JNU Nakatsue 66.51 325** ⇑P **P** **04 02 43.0 -1.0**
**JNU Nakatsue 66.51 325** P **P** **04 02 43.2 -0.8**
comp=Z,220nm,1.0s,baz=100,slow=4.2,SNR=58
JNU LR LR 04 32 39.2
comp=Z,11µm,18.2s,baz=125,slow=37
comp=Z,220nm,1.0s
**TATO Taipei 66.53 312** P **P** **04 02 45.0 +0.8**
**TATO Taipei 66.53 312** P **P** **04 02 44.0 -0.2**
**TATO Taipei 66.53 312** P **P** **04 02 45.1 +0.9**
TATO S **S** **04 11 37.6 +3.8**
**JYA Atsumi 66.81 334** *i* P **P** **04 02 45.5 -0.2**
**JSD Sado 66.93 333** ⇓P **P** **04 02 46.0 -0.4**
**JSD Sado 66.93 333** *i* P **P** **04 02 45.8 -0.7**
**JOM Ohasama 66.95 336** P **P** **04 02 46.8 +0.2**
**MNAI Manna 67.31 275** IAMs_20 IAMs_20 04 30 34.8
comp=Z,58µm,19.0s
**MNAI Manna 67.31 275** P **P** 04 02 54.5 +5.0
**TPRI Tanjung Pinang 67.92 280** P **P** **04 02 54.4 +1.1**
comp=Z,238nm,1.4s,comp=Z,9µmcomp=Z,28µm
**QSPA South Pole Qui 67.97 180** P **P** **04 02 53.0 +0.1**
**QSPA South Pole Qui 67.97 180** IAMs_20 IAMs_20 04 28 36.4
comp=Z,41µm,19.0s
**QSPA South Pole Qui 67.97 180** P **P** **04 02 52.2 -0.7**
comp=Z,169nm,1.0s,baz=17,slow=2.9,SNR=108
QSPA S **S** **04 11 49.9 -0.5**
comp=Z,3.4nm,1.2s,baz=66,slow=9.2,SNR=1.1
QSPA LR LR 04 28 57.6
comp=Z,40µm,18.8s,baz=32,slow=33
QSPA PKPPKP **P'P'df** **04 31 11.2 -6.4**
comp=Z,31nm,1.0s,baz=252,slow=2.0,SNR=24
comp=Z,169nm,1.0s
**JTM Tenmabayashi 68.18 337** P **P** **04 02 53.8 -0.5**
**JTM Tenmabayashi 68.18 337** ⇑P **P** **04 02 53.4 -0.9**
**JTM Tenmabayashi 68.18 337** P **P** **04 02 54.9 +0.6**
**JTU Tsushima 68.38 325** *i* P **P** **04 02 56.3 +0.7**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ERM** | **Erimo** | **68.53 339** | | IAMs_20 | IAMs_20 | 04 28 23.0 | | |
| | comp=Z,57µm,20.0s | | | | | | | |
| **JEM** | **Erimo** | **68.53 339** | | IAMs_20 | IAMs_20 | 04 28 24.6 | | |
| | comp=Z,57µm,20.0s | | | | | | | |
| **QZH** | **Quanzhou** | **68.54 310** | ⇑ | *i*P | **P** | **04 02 56.5** | **-0.4** | |
| QZH | | | | S | **S** | **04 12 01.3** | **+3.4** | |
| QZH | | | | pmax | pmax | | | |
| | comp=Z,140nm,1.4s | | | | | | | |
| QZH | | | | pmax | pmax | | | |
| | comp=Z,6µm,8.2s | | | | | | | |
| QZH | | | | LR | LR | | | |
| | comp=Z,16µm,15.1s | | | | | | | |
| QZH | | | | LR | LR | | | |
| | comp=Z,14µm,14.1s | | | | | | | |
| QZH | | | | LR | LR | | | |
| | comp=Z,23µm,17.2s | | | | | | | |
| **JOT** | **Ohata** | **68.71 337** | | P | **P** | **04 02 57.5** | **-0.1** | |
| MYKOM | **Kota Tinggi** | **68.90 281** | | IAMs_20 | IAMs_20 | 04 37 51.9 | | |
| | comp=Z,69µm,18.0s | | | | | | | |
| **DLV** | **T Lat** | **69.33 293** | | IAmb | IAmb | 04 03 31.9 | | |
| | comp=Z,134nm,1.1s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **69.50 341** | | *e*P | **P** | **04 03 05.2** | **+2.8** | |
| YUK | | | | *e* | | 04 03 28.2 | | |
| YUK | | | | *e* | | 04 05 37.8 | | |
| YUK | | | | *e*PPP | PPP | 04 07 19.0 | | |
| YUK | | | | *e*S | **S** | **04 12 13.2** | **+4.8** | |
| YUK | | | | *e*SS | **SS** | **04 16 41.3** | **+4.5** | |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,321nm,1.5s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=N,201nm,1.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=E,250nm,1.3s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,482nm,1.7s | | | | | | | |
| **KUR** | **Kuril'sk** | **70.04 343** | *c* | *i*P | **P** | **04 03 05.8** | **+0.1** | |
| KUR | | | | *e* | | 04 03 27.3 | | |
| KUR | | | | *e* | | 04 05 38.4 | | |
| KUR | | | | S | **S** | **04 12 14.5** | **-0.2** | |
| KUR | | | | *e*SS | **SS** | **04 16 46.6** | **+1.5** | |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,978nm,1.2s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=N,402nm,2.9s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=E,225nm,1.1s | | | | | | | |
| KUR | | | | MLR | MLR | | | |
| | comp=N,73µm,17.0s | | | | | | | |
| KUR | | | | MLR | MLR | | | |
| | comp=Z,47µm,17.0s | | | | | | | |
| KUR | | | | MLR | MLR | | | |
| | comp=E,6µm,11.0s | | | | | | | |
| **HKC** | **Hong Kong Obse** | **70.20 305** | ⇑ | P | **P** | **04 03 09.0** | **+1.8** | |
| **HKPS** | **Hong Kong Po S** | **70.22 305** | | IAmb | IAmb | 04 03 10.7 | | |
| | comp=Z,279nm,1.2s | | | | | | | |
| **COCO** | **West Island** | **70.25 265** | | IAMs_20 | IAMs_20 | 04 34 43.0 | | |
| | comp=Z,67µm,18.0s | | | | | | | |
| **COCO** | **West Island** | **70.25 265** | | P | **P** | **04 03 06.1** | **-1.6** | |
| COCO | | | | S | **S** | **04 12 12.8** | **-5.8** | |
| **JKA** | **Kamikawa-asahi** | **70.58 339** | | IAMs_20 | IAMs_20 | 04 33 45.6 | | |
| | comp=Z,58µm,20.0s | | | | | | | |
| **ASAJ** | **Asahikawa** | **70.58 339** | | P | **P** | **04 03 09.8** | **+0.7** | |
| **PPSI** | **Pulau Pagai** | **70.63 275** | | P | **P** | **04 03 12.3** | **+2.2** | |
| | comp=Z,271nm,1.2s,comp=Z,12µmcomp=Z,35µm | | | | | | | |
| **SSE** | **Sheshan** | **70.77 317** | | P | **P** | **04 03 11.5** | **+1.0** | |
| SSE | | | | pP | **sP** | **04 03 17.8** | **-1.1** | |
| SSE | | | | S | **S** | **04 12 26.8** | **+2.9** | |
| SSE | | | | pmax | pmax | | | |
| | comp=Z,65nm,1.4s | | | | | | | |
| SSE | | | | pmax | pmax | | | |
| | comp=Z,3µm,10.2s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=Z,8µm,18.2s | | | | | | | |
| **TJN** | **Taejon** | **70.86 324** | | IAMs_20 | IAMs_20 | 04 32 22.9 | | |
| | comp=Z,81µm,19.0s | | | | | | | |
| **TJN** | **Taejon** | **70.86 324** | *ce* | P | **P** | **04 03 10.7** | **-0.2** | |
| **BKNI** | **Bangkinang** | **70.88 278** | | IAMs_20 | IAMs_20 | 04 38 53.3 | | |
| | comp=Z,49µm,18.0s | | | | | | | |
| **BKNI** | **Bangkinang** | **70.88 278** | | S | **S** | **04 12 25.0** | **-1.0** | |
| BKNI | | | | P | **P** | **04 03 11.0** | **-0.5** | |
| **PDSI** | **Padang** | **70.92 277** | | P | **P** | **04 03 13.9** | **+2.0** | |
| **KSRS** | **Korea Array** | **71.37 326** | | P | **P** | **04 03 13.5** | **-0.5** | |
| | comp=Z,84nm,0.9s,baz=145,slow=5.6,SNR=109 | | | | | | | |
| KSRS | | | | LR | LR | 04 32 21.0 | | |
| | comp=Z,16µm,19.6s,baz=140,slow=34 comp=Z,84nm,0.9s | | | | | | | |
| **QIZ** | **Qiongzhong** | **71.79 300** | | P | **P** | **04 03 18.3** | **+1.4** | |
| QIZ | | | | pP | **sP** | **04 03 24.0** | **-1.4** | |
| QIZ | | | | S | **S** | **04 12 35.3** | **-0.9** | |
| QIZ | | | | pmax | pmax | | | |
| | comp=Z,110nm,2.0s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,10µm,15.1s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,11µm,15.2s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,17µm,16.0s | | | | | | | |
| **SISI** | **Saibi** | **72.03 276** | | P | **P** | **04 03 21.9** | **+3.4** | |
| | comp=Z,253nm,1.3s,comp=Z,13µmcomp=Z,44µm | | | | | | | |
| **INCN** | **Inchon** | **72.07 325** | | P | **P** | **04 03 17.9** | **-0.4** | |
| **INCN** | **Inchon** | **72.07 325** | ⇑ | P | **P** | **04 03 17.7** | **-0.6** | |
| **INCN** | **Inchon** | **72.07 325** | | P | **P** | **04 03 18.7** | **+0.5** | |
| INCN | | | | S | **S** | **04 12 42.4** | **+3.5** | |
| **INCN** | **Inchon** | **72.07 325** | | P | **P** | **04 03 17.9** | **-0.4** | |
| INCN | | | | pmax | pmax | | | |
| | comp=Z,498nm,1.2s | | | | | | | |
| **RPN** | **Rapa Nui** | **72.14 113** | | P | **P** | **04 03 20.9** | **+1.9** | |
| **RPN** | **Rapa Nui** | **72.14 113** | | LR | LR | 04 28 42.9 | | |
| | comp=Z,24µm,20.0s,baz=252,slow=31 | | | | | | | |
| **RPN** | **Rapa Nui** | **72.14 113** | | P | **P** | **04 03 20.9** | **+1.9** | |
| RPN | | | | pmax | pmax | | | |
| | comp=Z,1µm,1.9s | | | | | | | |
| **IPM** | **Ipoh** | **72.57 282** | | IAmb | IAmb | 04 03 37.8 | | |
| | comp=Z,154nm,1.0s | | | | | | | |
| IPM | | | | IAMs_20 | IAMs_20 | 04 41 10.2 | | |
| | comp=Z,46µm,18.0s | | | | | | | |
| **NJ2** | **Nanjing** | **72.89 316** | ⇓ | P | **P** | **04 03 24.8** | **+1.6** | |
| NJ2 | | | | PcP | **PcP** | **04 03 41.5** | **+1.3** | |
| NJ2 | | | | S | **SKiKP** | **04 12 54.5** | **-0.8** | |
| NJ2 | | | | SKS | **SKSac** | **04 13 24.8** | **-2.5** | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,120nm,1.2s | | | | | | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,2µm,6.5s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,14µm,16.3s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,14µm,19.4s | | | | | | | |
| NJ2 | | | | LR | LR | | | |
| | comp=Z,22µm,16.7s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **73.07 341** | | P | **P** | **04 03 24.6** | **+0.6** | |
| YSS | | | | IAmb | IAmb | 04 04 00.5 | | |
| | comp=Z,212nm,0.9s | | | | | | | |
| YSS | | | | IAMs_20 | IAMs_20 | 04 30 38.2 | | |
| | comp=Z,47µm,20.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **73.07 341** | *c* | *i*P | **P** | **04 03 25.1** | **+1.2** | |
| YSS | | | | *e* | | 04 06 15.4 | | |
| YSS | | | | *e*S | **S** | **04 12 50.0** | **+0.3** | |
| YSS | | | | *e*PS | **PnS** | **04 13 15.6** | **-7.9** | |
| YSS | | | | *e*SS | **SS** | **04 17 29.2** | **-2.3** | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,180nm,1.3s | | | | | | | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,4µm,8.4s | | | | | | | |
| YSS | | | | pmax | pmax | | | |
| | comp=N,2µm,9.6s | | | | | | | |
| YSS | | | | smax | smax | | | |
| | comp=N,4µm,12.3s | | | | | | | |
| YSS | | | | MLR | MLR | | | |
| | comp=Z,24µm,20.0s | | | | | | | |
| YSS | | | | MLR | MLR | | | |
| | comp=N,36µm,19.0s | | | | | | | |
| **KULM** | **Kulim** | **73.25 283** | | IAmb | IAmb | 04 04 21.3 | | |
| | comp=Z,413nm,1.6s | | | | | | | |
| KULM | | | | IAMs_20 | IAMs_20 | 04 35 34.1 | | |
| | comp=Z,44µm,20.0s | | | | | | | |
| **PBSI** | **Pulau Batu** | **73.26 277** | | P | **P** | **04 03 27.9** | **+2.0** | |
| | comp=Z,283nm,1.3s,comp=Z,11µmcomp=Z,38µm | | | | | | | |
| **TEY** | **Ternei** | **73.51 336** | ⇓ | *e*P | **P** | **04 03 26.0** | **-0.6** | |
| TEY | | | | pmax | pmax | | | |
| | comp=N,20nm,1.1s | | | | | | | |
| TEY | | | | pmax | pmax | | | |
| | comp=E,10.0nm,1.1s | | | | | | | |
| TEY | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.1s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **73.52 351** | | *i* P | **P** | **04 03 26.1** | **-0.4** | |
| **PYAG** | **Pyongyang** | **73.69 325** | | P | **P** | **04 03 28.1** | **+0.3** | |
| PYAG | | | | S | **SKiKP** | **04 12 55.3** | **-1.0** | |
| PYAG | | | | AmB | | | | |
| | comp=Z,11µm,5.8s | | | | | | | |
| PYAG | | | | AMS | AMS | | | |
| | comp=Z,20µm,17.5s | | | | | | | |
| **MSHR** | **Mys Shultsa** | **73.75 331** | *ce* | P | **P** | **04 03 28.1** | **0.0** | |
| MSHR | | | | pmax | pmax | | | |
| | comp=Z,116nm,0.8s | | | | | | | |
| MSHR | | | | MLR | MLR | | | |
| | comp=Z,8µm,15.0s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **73.76 280** | | P | **P** | **04 03 27.6** | **-1.2** | |
| RPSI | | | | IAmb | IAmb | 04 03 44.8 | | |
| | comp=Z,188nm,1.1s | | | | | | | |
| RPSI | | | | IAMs_20 | IAMs_20 | 04 39 30.6 | | |
| | comp=Z,55µm,18.0s | | | | | | | |
| **PSI** | **Prapat** | **73.80 280** | | P | **P** | **04 03 27.6** | **-1.6** | |
| PSI | | | | pmax | pmax | | | |
| | comp=Z,188nm,1.1s | | | | | | | |
| PSI | | | | MLR | MLR | | | |
| | comp=Z,55µm,18.0s | | | | | | | |
| **VLA** | **Vladivostok** | **73.86 332** | *i* | P | **P** | **04 03 27.9** | **-0.8** | |
| VLA | | | | pmax | pmax | | | |
| | comp=Z,98nm,1.0s | | | | | | | |
| VLA | | | | MLR | MLR | | | |
| | comp=Z,18µm,17.2s | | | | | | | |
| **PSTR** | **Posyet** | **73.97 331** | *e* | P | **P** | **04 03 29.2** | **-0.1** | |
| **GSI** | **Gunungsitoli** | **74.44 278** | | P | **P** | **04 03 33.1** | **+0.3** | |
| **GSI** | **Gunungsitoli** | **74.44 278** | | P | **P** | **04 03 34.7** | **+1.9** | |
| | comp=Z,354nm,1.2s,comp=Z,9µmcomp=Z,40µm | | | | | | | |
| **KIWB** | **Kanaga Island** | **74.46 8** | | P | **P** | **04 03 32.5** | **+0.5** | |
| **CNSH** | **ChangSha** | **74.53 310** | | P | **P** | **04 03 33.0** | **+0.1** | |
| CNSH | | | | S | **S** | **04 13 08.0** | **+1.0** | |
| CNSH | | | | pmax | pmax | | | |
| | comp=Z,2µm,3.6s | | | | | | | |
| CNSH | | | | LR | LR | | | |
| | comp=Z,14µm,17.8s | | | | | | | |
| CNSH | | | | LR | LR | | | |
| | comp=Z,12µm,15.4s | | | | | | | |
| CNSH | | | | LR | LR | | | |
| | comp=Z,19µm,16.7s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **74.59 2** | | LR | LR | 04 32 09.4 | | |
| | comp=Z,32µm,20.0s,baz=192,slow=32 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **74.68 333** | *c* | *i*P | **P** | **04 03 33.0** | **-0.5** | |
| **USRK** | **Ussuriysk Ar.** | **74.68 333** | | P | **P** | **04 03 33.2** | **-0.2** | |
| | comp=Z,89nm,1.0s,baz=143,slow=6.8,SNR=97 | | | | | | | |
| USRK | | | | LR | LR | 04 36 01.2 | | |
| | comp=Z,24µm,19.4s,baz=147,slow=36 comp=Z,89nm,1.0s | | | | | | | |
| **WHN** | **Wuhan** | **74.94 312** | ⇑ | *i*P | **P** | **04 03 35.5** | **+0.2** | |
| WHN | | | | PcP | **PcP** | **04 03 49.0** | **0.0** | |
| WHN | | | | S | **S** | **04 13 13.0** | **+1.6** | |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,580nm,1.3s | | | | | | | |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,8µm,3.9s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=Z,36µm,15.2s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=Z,51µm,13.2s | | | | | | | |
| WHN | | | | LR | LR | | | |
| | comp=Z,70µm,16.7s | | | | | | | |
| **SUJ** | **Sinuiju** | **75.13 325** | | P | **P** | **04 03 35.7** | **-0.4** | |
| SUJ | | | | S | **S** | **04 13 13.7** | **+0.6** | |
| SUJ | | | | AmB | | | | |
| | comp=Z,6µm,3.6s | | | | | | | |
| SUJ | | | | AMS | AMS | | | |
| | comp=Z,25µm,24.9s | | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **75.14 280** | | P | **P** | **04 03 38.3** | **+1.4** | |
| | comp=Z,132nm,1.0s,comp=Z,5µm | | | | | | | |
| **UGL** | **Uglegorsk** | **75.17 341** | | *e*P | **P** | **04 03 35.4** | **-0.8** | |
| UGL | | | | *e*S | **S** | **04 13 11.9** | **-1.3** | |
| UGL | | | | pmax | pmax | | | |
| | comp=Z,8µm,11.0s | | | | | | | |
| UGL | | | | smax | smax | | | |
| | comp=E,11µm,20.0s | | | | | | | |
| UGL | | | | smax | smax | | | |
| | comp=N,8µm,9.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=E,11µm,18.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=N,17µm,17.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=Z,17µm,18.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **75.48 353** | | P | **P** | **04 03 37.3** | **-0.5** | |
| PET | | | | IAMs_20 | IAMs_20 | 04 34 22.1 | | |
| | comp=Z,43µm,19.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **75.48 353** | | *e*P | **P** | **04 03 37.2** | **-0.6** | |
| PET | | | | *e*S | **S** | **04 13 17.2** | **+0.8** | |
| PET | | | | pmax | pmax | | | |
| | comp=Z,96nm,1.3s | | | | | | | |
| PET | | | | pmax | pmax | | | |
| | comp=Z,5µm,14.9s | | | | | | | |
| PET | | | | pmax | pmax | | | |
| | comp=Z,7µm,17.3s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=N,5µm,15.5s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=N,5µm,14.0s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=E,9µm,14.5s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=E,7µm,16.1s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,16µm,17.0s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,19µm,17.0s | | | | | | | |
| **SRIT** | **Nakonsritamara** | **75.58 286** | | IAmb | IAmb | 04 03 57.1 | | |
| | comp=Z,262nm,1.3s | | | | | | | |
| SRIT | | | | IAMs_20 | IAMs_20 | 04 39 37.0 | | |
| | comp=Z,53µm,18.0s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **75.67 352** | *ce* | P | **P** | **04 03 38.1** | **-0.9** | |
| **PETK** | **Petropavlovsk-** | **75.67 352** | | P | **P** | **04 03 38.9** | **-0.1** | |
| | comp=Z,80nm,0.9s,baz=145,slow=4.5,SNR=49 | | | | | | | |
| PETK | | | | LR | LR | 04 33 53.8 | | |
| | comp=Z,49µm,19.4s,baz=157,slow=33 comp=Z,80nm,0.9s | | | | | | | |
| **DL2** | **Dalian** | **75.83 323** | | P | **P** | **04 03 40.0** | **-0.2** | |
| DL2 | | | | S | **S** | **04 13 20.5** | **-0.5** | |
| DL2 | | | | SS | **SS** | **04 18 17.3** | **+3.3** | |
| DL2 | | | | pmax | pmax | | | |
| | comp=Z,600nm,1.0s | | | | | | | |
| DL2 | | | | pmax | pmax | | | |
| | comp=Z,9µm,6.6s | | | | | | | |
| DL2 | | | | LR | LR | | | |
| | comp=Z,24µm,16.7s | | | | | | | |
| DL2 | | | | LR | LR | | | |
| | comp=Z,11µm,19.1s | | | | | | | |
| DL2 | | | | LR | LR | | | |
| | comp=Z,24µm,17.7s | | | | | | | |
| **SNSI** | **Sinabang, Aceh** | **76.02 278** | | P | **P** | **04 03 43.8** | **+1.9** | |
| **MDJ** | **Mudanjiang** | **76.06 331** | | P | **P** | **04 03 41.5** | **+0.1** | |
| MDJ | | | | PP | **PP** | **04 06 34.5** | **+1.9** | |
| MDJ | | | | S | **S** | **04 13 27.5** | **+4.2** | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,210nm,1.9s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,6µm,11.6s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,14µm,18.5s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,9µm,18.6s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,23µm,17.9s | | | | | | | |
| **MDJ** | **Mudanjiang** | **76.06 331** | | IAmb | IAmb | 04 03 43.9 | | |
| | comp=Z,226nm,1.1s | | | | | | | |
| **MAW** | **Mawson** | **76.14 202** | | P | **P** | **04 03 42.1** | **+0.5** | |
| | comp=Z,38nm,0.9s,baz=111,slow=8.2,SNR=38 | | | | | | | |
| MAW | | | | LR | LR | 04 34 15.4 | | |
| | comp=Z,32µm,18.1s,baz=96,slow=33 comp=Z,38nm,0.9s | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **76.58 281** | | IAMs_20 | IAMs_20 | 04 37 09.4 | | |
| | comp=Z,44µm,20.0s | | | | | | | |
| **CLES** | **Cleveland East** | **76.59 12** | | IAMs_20 | IAMs_20 | 04 31 40.2 | | |
| | comp=Z,45µm,20.0s | | | | | | | |
| **TYV** | **Tymovskoe** | **76.60 342** | | *e*P | **P** | **04 03 45.3** | **+1.0** | |
| TYV | | | | *e*S | **S** | **04 13 32.7** | **+3.7** | |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,79nm,1.3s | | | | | | | |
| TYV | | | | pmax | pmax | | | |
| | comp=Z,2µm,5.1s | | | | | | | |
| TYV | | | | smax | smax | | | |
| | comp=N,500nm,6.8s | | | | | | | |
| TYV | | | | smax | smax | | | |
| | comp=E,2µm,6.8s | | | | | | | |
| **TIA** | **Tai'an** | **76.68 318** | | P | **P** | **04 03 44.5** | **-0.6** | |
| TIA | | | | pmax | pmax | | | |
| | comp=E,92nm,0.6s | | | | | | | |
| TIA | | | | pmax | pmax | | | |
| | comp=E,6µm,12.0s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=E,16µm,16.0s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=E,22µm,18.4s | | | | | | | |
| TIA | | | | LR | LR | | | |
| | comp=E,30µm,18.7s | | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **76.69 280** | | P | **P** | **04 03 47.6** | **+1.9** | |
| | comp=E,202nm,1.1s | | | | | | | |
| **SNY** | **Shenyang** | **76.86 326** | ⇑ | P | **P** | **04 03 45.5** | **-0.4** | |
| SNY | | | | S | **S** | **04 13 36.0** | **+3.9** | |
| SNY | | | | pmax | pmax | | | |
| | comp=E,4µm,13.3s | | | | | | | |
| SNY | | | | LR | LR | | | |
| | comp=E,14µm,18.0s | | | | | | | |
| SNY | | | | LR | LR | | | |
| | comp=E,6µm,14.9s | | | | | | | |
| SNY | | | | LR | LR | | | |
| | comp=E,22µm,18.8s | | | | | | | |
| **NIKH** | **Nikolski High** | **76.94 13** | | P | **P** | **04 03 45.1** | **-1.0** | |
| | baz=200 | | | | | | | |
| **CN2** | **Changchun** | **77.36 328** | | P | **P** | **04 03 48.0** | **-0.8** | |
| CN2 | | | | S | **S** | **04 13 36.0** | **-1.6** | |
| CN2 | | | | pmax | pmax | | | |
| | comp=E,290nm,1.0s | | | | | | | |
| CN2 | | | | pmax | pmax | | | |
| | comp=E,4µm,7.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=E,16µm,18.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=E,11µm,18.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=E,14µm,16.0s | | | | | | | |
| **SLVN** | **Son La** | **77.75 299** | | P | **P** | **04 03 52.4** | **+0.9** | |
| SLVN | | | | IAmb | IAmb | 04 03 55.4 | | |
| | comp=Z,218nm,1.5s | | | | | | | |
| **BNX** | **BinXian** | **77.91 331** | ⇓ | P | **P** | **04 03 50.8** | **-1.0** | |
| BNX | | | | sP | **sP** | **04 04 00.3** | **-0.1** | |
| BNX | | | | S | **S** | **04 13 41.8** | **-1.6** | |
| BNX | | | | sS | **pS** | **04 13 52.5** | **+1.0** | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,120nm,0.9s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,1µm,4.1s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=Z,9µm,13.6s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=Z,14µm,18.4s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=Z,15µm,19.5s | | | | | | | |
| **GYA** | **Guiyang** | **78.20 305** | ⇑ | P | **P** | **04 03 55.0** | **+1.0** | |
| GYA | | | | sP | pwP | 04 04 07.8 | +1.1 | |
| GYA | | | | PP | **PP** | **04 06 53.0** | **+1.9** | |
| GYA | | | | S | **S** | **04 13 46.0** | **-1.6** | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,180nm,1.4s | | | | | | | |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,5µm,13.4s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,11µm,13.9s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,7µm,15.1s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,17µm,16.9s | | | | | | | |
| **UNV** | **Unalaska Valle** | **78.26 14** | | P | **P** | **04 03 52.6** | **-0.9** | |
| | baz=202,SNR=10 | | | | | | | |
| **GRNR** | **Gornyy** | **78.44 339** | ⇑ | *i*P | **P** | **04 03 55.7** | **+1.1** | |
| GRNR | | | | pmax | pmax | | | |
| | comp=Z,130nm,1.2s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=E,9µm,16.0s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=N,12µm,18.0s | | | | | | | |
| GRNR | | | | MLR | MLR | | | |
| | comp=Z,18µm,17.0s | | | | | | | |
| **LYN** | **LuoYang** | **78.62 315** | ⇑ | *i*P | **P** | **04 03 56.5** | **+0.5** | |
| LYN | | | | pP | sP | 04 04 03.8 | -0.9 | |
| LYN | | | | PP | **PP** | **04 06 56.5** | **+2.2** | |
| LYN | | | | S | **S** | **04 13 54.8** | **+3.3** | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,460nm,1.1s | | | | | | | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,8µm,11.1s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,26µm,21.0s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,20µm,19.2s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,46µm,19.6s | | | | | | | |
| **LVA** | **Lava Point** | **78.66 14** | | IAMs_20 | IAMs_20 | 04 31 03.0 | | |
| | comp=Z,44µm,22.0s | | | | | | | |
| **AIS** | **Amsterdam Isla** | **78.79 234** | | IAMs_20 | IAMs_20 | 04 34 53.1 | | |
| | comp=Z,44µm,18.0s | | | | | | | |
| **KLR** | **Kul'dur** | **78.84 335** | | P | **P** | **04 03 56.6** | **-0.2** | |
| | comp=Z,54nm,1.0s,baz=142,slow=4.6,SNR=122 | | | | | | | |
| KLR | | | | LR | LR | 04 34 35.6 | | |
| | comp=Z,27µm,21.4s,baz=142,slow=32 comp=Z,54nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **78.84 335** | *ce* | P | **P** | **04 03 56.4** | **-0.4** | |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,466nm,2.5s | | | | | | | |
| KLR | | | | MLR | MLR | | | |
| | comp=Z,15µm,17.0s | | | | | | | |
| **HNS** | **HongShan** | **78.93 318** | ⇑ | P | **P** | **04 03 57.8** | **+0.2** | |
| HNS | | | | S | **S** | **04 13 55.0** | **+0.3** | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,240nm,1.5s | | | | | | | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,9µm,9.6s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,15µm,15.9s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,29µm,16.7s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,31µm,16.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **79.18 175** | | IAmb | IAmb | 04 04 56.2 | | |
| | comp=Z,508nm,1.7s | | | | | | | |
| **NKL** | **Nikolayevsk** | **79.20 342** | | *e*P | **P** | **04 03 56.3** | **-2.3** | |
| NKL | | | | *e*S | **S** | **04 13 54.3** | **-2.5** | |
| NKL | | | | pmax | pmax | | | |
| | comp=N,79nm,0.6s | | | | | | | |
| NKL | | | | pmax | pmax | | | |
| | comp=E,184nm,1.1s | | | | | | | |
| NKL | | | | pmax | pmax | | | |
| | comp=Z,613nm,1.1s | | | | | | | |
| NKL | | | | smax | smax | | | |
| | comp=E,3µm,7.2s | | | | | | | |
| NKL | | | | smax | smax | | | |
| | comp=N,3µm,9.9s | | | | | | | |
| **BJT** | **Baijiatuau** | **79.71 321** | | IAmb | IAmb | 04 04 04.4 | | |
| | comp=Z,269nm,1.3s | | | | | | | |
| **BJI** | **Beijing** | **79.72 321** | | P | **P** | **04 04 01.3** | **-0.5** | |
| BJI | | | | S | **S** | **04 14 06.5** | **+3.5** | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,73nm,1.1s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,2µm,17.2s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,3µm,17.7s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,5µm,16.2s | | | | | | | |
| **PAF** | **Port-aux-Franc** | **79.77 221** | | IAMs_20 | IAMs_20 | 04 34 39.9 | | |
| | comp=Z,36µm,18.0s | | | | | | | |
| **FALS** | **False Pass** | **79.91 15** | | P | **P** | **04 04 01.7** | **-0.8** | |
| | baz=205 | | | | | | | |
| **CMBY** | **CAMPBELL BAY** | **80.04 282** | | *e*P | **P** | **04 04 04.6** | **+0.4** | |
| **CRAI** | **Chiangrai** | **80.12 297** | | IAmb | IAmb | 04 04 08.3 | | |
| | comp=Z,275nm,1.2s | | | | | | | |
| **P08K** | **Saint George I** | **80.23 11** | | P | **P** | **04 04 03.2** | **-1.0** | |
| | baz=199 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.50 294** | | P | **P** | **04 04 07.5** | **+0.9** | |
| | comp=Z,117nm,1.1s,baz=133,slow=4.3,SNR=156 | | | | | | | |
| CMAR | | | | PKKPbc | **PKKPbc** | **04 22 48.0** | **+0.3** | |
| | comp=Z,1.9nm,0.4s,baz=287,slow=4.4,SNR=8.2 | | | | | | | |
| CMAR | | | | PKPPKP | **P'P'df** | **04 30 44.9** | **-6.3** | |
| | comp=Z,1.6nm,0.5s,baz=316,slow=3.8,SNR=1.8 | | | | | | | |
| CMAR | | | | LR | LR | 04 44 28.6 | | |
| | comp=Z,9µm,18.2s,baz=115,slow=39 comp=Z,117nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.50 294** | *ce* | P | **P** | **04 04 07.5** | **+0.9** | |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,122nm,1.0s | | | | | | | |
| **TIY** | **Taiyuan** | **80.54 317** | | *e*P | **P** | **04 04 07.0** | **+0.5** | |
| TIY | | | | S | **S** | **04 14 09.0** | **-3.0** | |
| TIY | | | | pmax | pmax | | | |

TIY comp=Z,120nm,1.4s pmax pmax
TIY comp=Z,7µm,12.0s LR LR
TIY comp=Z,12µm,17.9s LR LR
TIY comp=Z,7µm,22.0s LR LR
**KMI Kunming 80.55 302** ⇑P **P 04 04 07.8 +0.8**
KMI S **S 04 14 18.3 +5.4**
KMI comp=Z,250nm,1.5s pmax pmax
KMI comp=Z,3µm,4.4s LR LR
KMI comp=Z,5µm,20.2s LR LR
KMI comp=Z,26µm,17.9s LR LR
KMI comp=Z,14µm,27.4s LR LR
**SPIA Saint Paul Isl 80.66 11** P **P 04 04 05.3 -1.1**
baz=198
**XAN Xi'an 80.70 312** ⇑P **P 04 04 07.5 +0.1**
XAN pP PcP 04 04 14.8 +0.7
XAN S **S 04 14 14.5 +0.7**
XAN comp=Z,460nm,1.3s pmax pmax
XAN comp=Z,13µm,7.4s LR LR
XAN comp=Z,27µm,16.1s LR LR
XAN comp=Z,15µm,16.5s LR LR
XAN comp=Z,36µm,17.8s LR LR
**SMAI San Martin Ant 80.84 161** P **P 04 04 07.3 -0.2**
SMAI IAmb IAmb 04 05 05.1
comp=Z,277nm,1.2s
**CNBA Chernabura Isl 80.86 17** P **P 04 04 07.0 -0.6**
CNBA IAmb IAmb 04 04 58.9
comp=Z,281nm,1.6s
CNBA IAMs_20 IAMs_20 04 33 36.7
comp=Z,43µm,20.0s
**CHNA Chernabura Isl 80.87 17** P **P 04 04 06.8 -0.8**
baz=208
**S12K Black Hills 81.00 15** IAmb IAmb 04 04 10.1
comp=Z,126nm,0.7s
**S12K Black Hills 81.00 15** P **P 04 04 07.3 -1.1**
baz=206
**SDPT Sand Point 81.09 16** P **P 04 04 07.2 -1.6**
SDPT IAmb IAmb 04 04 55.9
comp=Z,199nm,1.2s
**SDPT Sand Point 81.09 16** P **P 04 04 07.7 -1.1**
baz=208
**HEH HeiHe 81.37 334** P **P 04 04 09.5 -1.0**
HEH pP **PcP 04 04 16.0 -0.5**
HEH S **S 04 14 17.0 -2.9**
HEH SS **SS 04 19 32.0 -4.9**
HEH comp=Z,110nm,1.2s pmax pmax
HEH comp=Z,8µm,7.2s pmax pmax
HEH comp=Z,18µm,18.0s LR LR
HEH comp=Z,22µm,17.8s LR LR
HEH comp=Z,30µm,20.7s LR LR
**PZH PanZhiHua 82.01 303** P **P 04 04 15.3 +0.7**
PZH S **S 04 14 26.0 -1.8**
PZH SKS **SKSac 04 14 30.0 -3.8**
PZH comp=Z,120nm,1.4s pmax pmax
PZH comp=Z,6µm,7.1s pmax pmax
PZH comp=Z,14µm,18.2s LR LR
PZH comp=Z,13µm,18.6s LR LR
PZH comp=Z,21µm,17.1s LR LR
**S14K Fog Glacier 82.16 16** P **P 04 04 14.5 -0.2**
baz=208,SNR=7.1
**XLT XiLinHaoTe 82.28 324** *e*P **P 04 04 14.8 -0.7**
XLT S **S 04 14 26.8 -2.9**
XLT comp=Z,150nm,2.0s pmax pmax
XLT comp=Z,4µm,7.4s LR LR
XLT comp=Z,13µm,17.3s LR LR
XLT comp=Z,13µm,18.3s LR LR
**CHGN Chignik 82.48 17** IAmb IAmb 04 05 14.4
comp=Z,145nm,1.2s
CHGN IAMs_20 IAMs_20 04 34 28.4
comp=Z,36µm,21.0s
**CHGN Chignik 82.48 17** P **P 04 04 15.3 -0.8**
baz=209,SNR=11
**CD2 Chengdu 82.69 307** P **P 04 04 18.0 0.0**
CD2 pP pwP 04 04 29.5 -1.3
CD2 S **SKSac 04 14 37.8 -0.2**
CD2 comp=Z,130nm,1.0s pmax pmax
CD2 comp=Z,9µm,10.6s pmax pmax
CD2 comp=Z,24µm,16.8s LR LR
CD2 comp=Z,28µm,18.4s LR LR
CD2 comp=Z,16µm,18.4s LR LR
**CHIR Chirikof Islan 82.86 19** IAMs_20 IAMs_20 04 34 42.7
comp=Z,52µm,20.0s
**CHIR Chirikof Islan 82.86 19** P **P 04 04 17.9 -0.2**
baz=212
**MA2 Magadan 82.93 350** P **P 04 04 17.4 -1.0**
MA2 IAmb IAmb 04 05 04.3
comp=Z,341nm,2.0s
MA2 IAMs_20 IAMs_20 04 37 03.1
comp=Z,54µm,20.0s
**MA2 Magadan 82.93 350** LR LR 04 37 14.3
comp=Z,45µm,20.7s,baz=166,slow=33
**MA2 Magadan 82.93 350** *ce*P **P 04 04 16.6 -1.8**
MA2 comp=Z,74nm,1.7s pmax pmax
MA2 comp=Z,17µm,18.0s MLR MLR
**HHC Hu-ho-hao-te 82.97 319** ⇑*i*P **P 04 04 20.0 +0.7**
HHC pP sP 04 04 27.5 -0.5
HHC S **SKSac 04 14 39.5 -0.1**
HHC sS sS 04 14 48.0 0.0
HHC comp=Z,180nm,1.2s pmax pmax
HHC comp=Z,12µm,17.6s LR LR
HHC comp=Z,15µm,17.5s LR LR
HHC comp=Z,26µm,17.3s LR LR
**PBA Port Blair 82.99 286** IAMs_20 IAMs_20 04 46 02.2
comp=Z,55µm,20.0s
**PBA Port Blair 82.99 286** *e*P **P 04 04 20.0 +0.2**
PBA IAMs_20 IAMs_20 04 20 25.1
comp=Z,8µm,17.6s
**PBA Port Blair 82.99 286** P **P 04 04 19.8 +0.1**
**ELIB Princess Elisa 83.50 190** *d*P **P 04 04 20.1 -1.5**
comp=Z,82nm,1.1s
**BTO Baotou 83.77 318** *e*P **P 04 04 24.8 +1.4**
BTO pP **sP 04 04 32.8 +0.6**
BTO sP **pwP 04 04 35.5 -0.2**
BTO PP **PP 04 07 42.0 +5.0**
BTO S **SKSac 04 14 46.3 +1.5**
BTO sS **ScS 04 14 58.5 +0.6**
BTO comp=Z,170nm,1.2s pmax pmax
BTO comp=Z,14µm,12.8s pmax pmax
BTO comp=Z,26µm,15.7s LR LR
BTO comp=Z,34µm,19.3s LR LR
BTO comp=Z,40µm,18.2s LR LR
**R16K Pilot Point 83.81 17** P **P 04 04 22.7 -0.3**
baz=210

**TNCH TengChong 83.86 300** P **P 04 04 25.5 +1.2**
TNCH pP sP 04 04 32.0 -0.9
TNCH S **S 04 14 46.8 0.0**
TNCH SS **SS 04 20 18.0 +2.8**
TNCH comp=Z,200nm,2.3s pmax pmax
TNCH comp=Z,4µm,6.1s pmax pmax
TNCH comp=Z,10µm,16.6s LR LR
TNCH comp=Z,10µm,18.3s LR LR
TNCH comp=Z,26µm,15.7s LR LR
**SII Sitkinak Islan 83.92 19** IAMs_20 IAMs_20 04 34 33.6
comp=Z,46µm,22.0s
**SII Sitkinak Islan 83.92 19** P **P 04 04 23.8 +0.2**
baz=213
**PMSA Palmer Station 83.92 160** P **P 04 04 25.2 +1.5**
PMSA IAmb IAmb 04 05 10.2
comp=Z,177nm,1.1s
**PMSA Palmer Station 83.92 160** IAMs_20 IAMs_20 04 34 52.9
comp=Z,30µm,20.0s
**PMSA Palmer Station 83.92 160** LR LR 04 35 25.8
comp=Z,28µm,20.5s,baz=230,slow=31
**PMSA Palmer Station 83.92 160** *e*P **P 04 04 23.4 -0.3**
**ZEA Zeya 84.13 336** *e*P **P 04 04 24.9 +0.2**
ZEA *e*S **S 04 14 49.9 +2.1**
ZEA comp=E,20nm,0.8s pmax pmax
ZEA comp=N,60nm,1.0s pmax pmax
ZEA comp=Z,120nm,1.4s pmax pmax
ZEA comp=E,1µm,8.3s pmax pmax
ZEA comp=N,1µm,7.2s pmax pmax
ZEA comp=Z,4µm,11.0s smax smax
ZEA comp=N,4µm,12.2s smax smax
ZEA comp=E,6µm,10.6s
**R17L Mt. Peulik Vol 84.20 17** P **P 04 04 24.8 -0.3**
baz=211,SNR=19
**PLK4 Peulik 4 84.20 17** P **P 04 04 24.1 -1.0**
PLK4 IAMs_20 IAMs_20 04 35 20.8
comp=Z,41µm,20.0s
**O14K Tigyukauivet M 84.39 14** IAMs_20 IAMs_20 04 38 07.6
comp=Z,30µm,20.0s
**O14K Tigyukauivet M 84.39 14** P **P 04 04 25.6 -0.3**
baz=206,SNR=12
**M11K Mekoryuk 84.40 12** P **P 04 04 26.2 +0.3**
baz=202
**O15K Ungalikthiuk R 84.66 15** P **P 04 04 26.9 -0.4**
baz=208,SNR=13
**R18K Karluk 84.69 18** P **P 04 04 26.7 -0.7**
baz=213
**OHAK Old Harbor 84.74 19** IAMs_20 IAMs_20 04 35 52.2
comp=Z,32µm,20.0s
**OHAK Old Harbor 84.74 19** P **P 04 04 27.5 -0.2**
baz=214,SNR=16
**Q17K Contact Creek 84.87 17** P **P 04 04 27.3 -1.2**
baz=211,SNR=36
**N14K Kuskokwak Cree 84.90 14** P **P 04 04 28.4 -0.1**
baz=206,SNR=21
**P16K Nushagak River 84.98 16** P **P 04 04 28.0 -0.9**
baz=210,SNR=11
**ACHA Angle Creek He 84.98 17** IAmb IAmb 04 05 03.4
comp=Z,261nm,1.6s
ACHA IAMs_20 IAMs_20 04 44 52.5
comp=Z,28µm,18.0s
**M13K Dall Lake 84.99 13** IAMs_20 IAMs_20 04 37 01.4
comp=Z,46µm,20.0s
**M13K Dall Lake 84.99 13** P **P 04 04 29.4 +0.6**
baz=205,SNR=5.3
**Q16K King Salmon 85.02 17** P **P 04 04 28.4 -0.6**
baz=211
**LZH Lanzhou 85.31 312** *e*P **P 04 04 31.8 +0.5**
LZH sP pwP 04 04 44.0 +0.4
LZH S **S 04 14 58.0 -2.7**
LZH SS **SS 04 20 34.8 -1.4**
LZH comp=Z,370nm,1.3s pmax pmax
LZH comp=Z,3µm,5.5s pmax pmax
LZH comp=Z,14µm,18.9s LR LR
LZH comp=Z,15µm,18.9s LR LR
LZH comp=Z,24µm,18.9s LR LR
**KDAK Kodiak Island 85.42 19** P **P 04 04 31.4 +0.3**
**KDAK Kodiak Island 85.42 19** IAMs_20 IAMs_20 04 36 43.1
comp=Z,42µm,20.0s
**KDAK Kodiak Island 85.42 19** LR LR 04 36 22.9
comp=Z,41µm,20.5s,baz=230,slow=31
**KDAK Kodiak Island 85.42 19** P **P 04 04 30.6 -0.5**
baz=214
**KDAK Kodiak Island 85.42 19***c* *i*P **P 04 04 29.2 -1.9**
KDAK comp=Z,51nm,1.3s pmax pmax
**Q18K Katmai Hardscr 85.44 17** P **P 04 04 30.5 -0.9**
baz=212
**O16K Kokwok River B 85.45 16** IAmb IAmb 04 05 30.4
comp=Z,174nm,1.6s
O16K IAMs_20 IAMs_20 04 38 19.7
comp=Z,34µm,20.0s
**O16K Kokwok River B 85.45 16** P **P 04 04 29.8 -1.4**
baz=209,SNR=15
**N15K Kwethluk River 85.48 14** P **P 04 04 31.4 0.0**
baz=208,SNR=58
**P17K Kvichak River 85.53 16** P **P 04 04 30.2 -1.4**
baz=211,SNR=14
**M14K Bethel 85.59 13** IAMs_20 IAMs_20 04 37 48.2
comp=Z,32µm,20.0s
**M14K Bethel 85.59 13** P **P 04 04 31.9 +0.1**
baz=206,SNR=29
**TROLL Troll, Antarti 85.76 184** ⇑P **P 04 04 32.4 -0.6**
comp=Z,8µm,0.7s
**M15K Kasigluk River 85.81 14** P **P 04 04 32.7 -0.3**
baz=207,SNR=42
**O17K Koliganek Bris 85.86 16** P **P 04 04 32.5 -0.7**
baz=210,SNR=10
**SEY Seymchan 85.91 352** LR LR 04 38 21.0
comp=Z,37µm,21.1s,baz=156,slow=32
**SEY Seymchan 85.91 352***ce*P **P 04 04 32.5 -0.9**
SEY comp=Z,227nm,1.7s pmax pmax
SEY comp=Z,30µm,19.0s MLR MLR
**L14K Kuka Creek 85.97 13** IAMs_20 IAMs_20 04 37 42.3
comp=Z,45µm,20.0s
**L14K Kuka Creek 85.97 13** P **P 04 04 33.5 -0.2**
baz=205,SNR=25
**P18K Big Mountain, 86.02 17** IAmb IAmb 04 05 07.0
comp=Z,140nm,1.1s
**P18K Big Mountain, 86.02 17** P **P 04 04 33.2 -0.9**
baz=212,SNR=19
**N16K Nishlik Lake 86.06 15** P **P 04 04 34.5 +0.2**
baz=209,SNR=57
**Q19K Cape Douglas, 86.06 18** P **P 04 04 33.4 -0.9**
baz=213,SNR=6.6
**K13K Kusilvak Mount 86.13 12** IAmb IAmb 04 05 33.9
comp=Z,320nm,1.6s
K13K IAMs_20 IAMs_20 04 39 53.4
comp=Z,45µm,19.0s
**K13K Kusilvak Mount 86.13 12** P **P 04 04 35.0 +0.5**
baz=203
**NVL N'lazarevskaya 86.15 187** ⇑*i*P **P 04 04 34.5 -0.3**
NVL *i* S **SKSac 04 14 53.6 -5.4**
NVL *e*SSS SSS 04 24 28.5
NVL comp=Z,90nm,0.9s pmax pmax
NVL comp=Z,42µm,17.0s MLR MLR
**Q20K Shuyak Island 86.16 19** P **P 04 04 34.6 -0.1**
baz=214
**SYI Shuyak Island 86.16 19** IAmb IAmb 04 05 08.3
comp=Z,180nm,1.2s
**SNAA Sanae 86.36 182** IAMs_20 IAMs_20 04 42 49.4
comp=Z,44µm,18.0s
**SNAA Sanae 86.36 182** ⇑P **P 04 04 36.1 +0.2**
comp=Z,1µm,0.8s
**SNAA Sanae 86.36 182** P **P 04 04 35.4 -0.5**
comp=Z,105nm,1.0s,baz=189,slow=4.5,SNR=68

SNAA PKKP **PKKPdf 04 22 27.9 +1.2**
comp=Z,4.5nm,1.1s,baz=338,slow=3.2,SNR=2.7
SNAA PKPPKP **P'P'df 04 30 41.6 -2.6**
comp=Z,1.9nm,0.9s,baz=298,slow=3.4,SNR=4.5
SNAA LR LR 04 42 17.7
comp=Z,37µm,18.3s,baz=176,slow=35
comp=Z,105nm,1.0s
**SNAA Sanae 86.36 182***ce*P **P 04 04 35.0 -0.9**
SNAA pmax pmax
comp=Z,121nm,1.0s
**O18K Koktuh Hills 86.42 17** IAmb IAmb 04 05 27.6
comp=Z,282nm,1.9s
**O18K Koktuh Hills 86.42 17** P **P 04 04 35.0 -1.1**
baz=212
**N17K Nushagak Hills 86.49 15** IAmb IAmb 04 05 10.2
comp=Z,284nm,1.8s
**N17K Nushagak Hills 86.49 15** P **P 04 04 35.8 -0.6**
baz=210,SNR=9.5
**M16K Timber Creek 86.50 14** P **P 04 04 36.4 0.0**
baz=209,SNR=37
**L15K Ungalak Mounta 86.52 13** P **P 04 04 36.1 -0.4**
baz=206,SNR=21
**SNCC San Nicolas Is 86.66 52** IAMs_20 IAMs_20 04 36 14.6
comp=Z,45µm,20.0s
**MCCM Marconi Confer 86.75 47** IAmb IAmb 04 05 31.0
comp=Z,276nm,1.7s
**GAMB Gambell 86.76 8** P **P 04 04 37.7 +0.2**
baz=197
**P19K Oil Pt 86.79 18** IAmb IAmb 04 05 11.1
comp=Z,105nm,1.1s
**P19K Oil Pt 86.79 18** P **P 04 04 37.2 -0.7**
baz=214
**VNA3 Neumayer Olymp 86.91 180** ⇑P **P 04 04 37.4 -1.1**
comp=Z,38nm,0.7s
**O19K Port Alsworth 86.94 17** IAmb IAmb 04 05 14.1
comp=Z,254nm,1.6s
**O19K Port Alsworth 86.94 17** P **P 04 04 37.3 -1.3**
baz=213
**N18K Kilae Creek 86.95 16** P **P 04 04 38.3 -0.4**
baz=211
**L16K Owhat River 86.99 14** IAmb IAmb 04 05 38.9
comp=Z,253nm,1.8s
L16K IAMs_20 IAMs_20 04 40 47.3
comp=Z,30µm,20.0s
**L16K Owhat River 86.99 14** P **P 04 04 38.5 -0.3**
baz=208,SNR=22
**LKP Lekhapani 87.05 301** *e*P **P 04 04 40.6 +0.7**
**HOPS Hopland Field 87.06 46** IAMs_20 IAMs_20 04 34 22.8
comp=Z,34µm,21.0s
**K15K Wolf Creek Mou 87.07 13** IAMs_20 IAMs_20 04 38 15.4
comp=Z,44µm,20.0s
**K15K Wolf Creek Mou 87.07 13** P **P 04 04 39.6 +0.4**
baz=206
**J14K Nanvaranak Lak 87.08 12** IAmb IAmb 04 05 25.3
comp=Z,97nm,1.3s
J14K IAMs_20 IAMs_20 04 40 32.7
comp=Z,47µm,20.0s
**J14K Nanvaranak Lak 87.08 12** P **P 04 04 39.3 +0.2**
baz=204,SNR=8.2
**KCPM Cahto Peak 87.09 45** IAmb IAmb 04 05 40.0
comp=Z,119nm,1.1s
KCPM IAMs_20 IAMs_20 04 48 06.4
comp=Z,35µm,18.0s
**ILSW Iliamna Southw 87.09 17** IAmb IAmb 04 05 16.6
comp=Z,72nm,1.0s
ILSW IAMs_20 IAMs_20 04 37 44.2
comp=Z,40µm,20.0s
**KMPM Mount Pierce 87.12 44** P **P 04 04 41.1 +1.0**
KMPM IAmb IAmb 04 05 49.4
comp=Z,188nm,1.4s
KMPM IAMs_20 IAMs_20 04 37 29.3
comp=Z,31µm,20.0s
**GDXM Geysers 87.15 46** IAMs_20 IAMs_20 04 34 47.1
comp=Z,44µm,22.0s
**M17K Holitna River 87.19 15** IAmb IAmb 04 05 25.7
comp=Z,115nm,1.2s
M17K IAMs_20 IAMs_20 04 39 53.6
comp=Z,32µm,19.0s
**M17K Holitna River 87.19 15** P **P 04 04 39.9 +0.1**
baz=210,SNR=14
**PMPB Monarch Peak 87.20 49** IAMs_20 IAMs_20 04 41 18.7
comp=Z,49µm,18.0s
**BBGB Big Mountain B 87.21 49** IAmb IAmb 04 05 31.9
comp=Z,150nm,1.3s
**VNA2 Neumayer--Watz 87.21 181** ⇑P **P 04 04 39.2 -0.8**
comp=Z,93nm,0.6s,baz=179,slow=3.6
**HOM Homer 87.25 18** IAmb IAmb 04 05 39.3
comp=Z,167nm,0.9s
HOM IAMs_20 IAMs_20 04 36 44.3
comp=Z,38µm,22.0s
**HOM Homer 87.25 18** P **P 04 04 39.4 -0.6**
baz=215
**CNPM China Poot 87.26 19** IAmb IAmb 04 05 14.5
comp=Z,115nm,1.2s
CNPM IAMs_20 IAMs_20 04 48 34.7
comp=Z,31µm,18.0s
**KMRM Mail Ridge 87.29 44** P **P 04 04 41.1 +0.3**
KMRM IAMs_20 IAMs_20 04 37 35.4
comp=Z,33µm,20.0s
**O20K Slope Mountain 87.31 18** P **P 04 04 39.3 -1.2**
baz=214
**JCC Jacoby Creek, 87.39 44** IAMs_20 IAMs_20 04 35 11.4
comp=Z,27µm,19.0s
**N19K Bonanza Creek 87.42 16** IAMs_20 IAMs_20 04 37 45.0
comp=Z,30µm,20.0s
**N19K Bonanza Creek 87.42 16** P **P 04 04 39.7 -1.4**
baz=213
**IMP Imphal 87.49 298** *e*P **P 04 04 42.9 +0.7**
IMP IAmb IAmb 04 04 44.3
comp=Z,435nm,1.2s
**VNA1 Neumayer--Stat 87.50 181** ⇑P **P 04 04 40.7 -0.6**
comp=Z,165nm,0.9s
**BCW Bitter Crk WRg 87.56 51** IAmb IAmb 04 06 03.1
comp=Z,198nm,1.4s
BCW IAMs_20 IAMs_20 04 35 55.3
comp=Z,48µm,20.0s
**KRPM Rodgers 87.58 44** IAMs_20 IAMs_20 04 43 06.3
comp=Z,30µm,18.0s
**KHMM Horse Mountain 87.62 44** IAMs_20 IAMs_20 04 42 09.3
comp=Z,36µm,18.0s
**L17K Donlin 87.63 14** P **P 04 04 42.4 +0.5**
baz=209,SNR=13
**M18K Stony River 87.66 16** P **P 04 04 42.0 0.0**
baz=211,SNR=27
**MOKO MOKOCHONG 87.67 299** *e*P **P 04 04 43.4 +0.3**
MOKO IAmb IAmb 04 04 47.9
comp=Z,2µm,2.0s
**KOHI KOHIMA 87.74 299** *e*P **P 04 04 44.8 +1.3**
**KRMB Red Mountain 87.85 43** IAMs_20 IAMs_20 04 43 32.4
comp=Z,31µm,18.0s
**O02D Mt. Diablo Mer 87.86 45** P **P 04 04 44.1 +0.4**
O02D IAMs_20 IAMs_20 04 49 09.9
comp=Z,33µm,18.0s
**KBO Bosley Butte 88.01 43** IAMs_20 IAMs_20 04 35 31.7
comp=Z,36µm,20.0s
**KSXB Camp Six Broad 88.03 43** IAMs_20 IAMs_20 04 36 04.2
comp=Z,41µm,21.0s
**L18K Granite Mounta 88.08 15** IAmb IAmb 04 05 38.4
comp=Z,74nm,1.2s
L18K IAMs_20 IAMs_20 04 40 01.1
comp=Z,31µm,20.0s
**L18K Granite Mounta 88.08 15** P **P 04 04 43.3 -0.7**
baz=211,SNR=11
**PASC Pasadena Art C 88.08 52** IAMs_20 IAMs_20 04 36 57.2
comp=Z,43µm,20.0s
**TJX Tijuana 88.14 54** IAMs_20 IAMs_20 04 41 31.9
comp=Z,48µm,18.0s
**K17K Iditarod 88.14 14** IAmb IAmb 04 05 21.2
comp=Z,152nm,1.6s
K17K IAMs_20 IAMs_20 04 41 04.7
comp=Z,25µm,18.0s
**K17K Iditarod 88.14 14** P **P 04 04 43.9 -0.4**
baz=209,SNR=8.9
**J16K Anvik River 88.15 13** IAMs_20 IAMs_20 04 38 48.9
comp=Z,37µm,20.0s
**J16K Anvik River 88.15 13** P **P 04 04 44.1 -0.2**
baz=207,SNR=14
**MG04 Isla Riesco 88.19 148** IAMs_20 IAMs_20 04 37 21.6
comp=Z,37µm,19.0s
**SEW Seward 88.26 19** P **P 04 04 43.2 -1.7**
baz=217
**GO10 Punta Arenas 88.28 148** IAMs_20 IAMs_20 04 36 36.7
comp=Z,32µm,20.0s
**CAPN Captain Cook N 88.30 18** P **P 04 04 44.0 -1.1**
baz=216
**CBX Cerro Bola 88.34 54** IAMs_20 IAMs_20 04 41 37.3
comp=Z,54µm,18.0s
**N20K Mount Spurr 88.36 17** P **P 04 04 43.5 -2.0**

baz=215
**SPCR Spurr Chakacha** 88.36 17 P P 04 04 43.4 -2.1
baz=215
**M19K Big River Lodg** 88.37 16 P P 04 04 44.7 -0.7
baz=213
**L02F Cave Junction** 88.38 43 IAmb IAmb 04 05 20.7
comp=Z,162nm,1.7s
L02F IAMs_20 IAMs_20 04 35 54.4
comp=Z,45µm,21.0s
**CMB Columbia Colle** 88.39 48 IAmb IAmb 04 05 25.2
comp=Z,89nm,1.4s
**ELS Elsinore Mount** 88.39 53 IAmb IAmb 04 05 25.6
comp=Z,174nm,1.9s
ELS IAMs_20 IAMs_20 04 37 07.5
comp=Z,41µm,20.0s
**ORV Oroville** 88.39 46 P P 04 04 45.8 -0.3
ORV IAmb IAmb 04 05 21.5
comp=Z,254nm,1.9s
**ORV Oroville** 88.39 46 P P 04 04 45.8 -0.3
ORV pmax pmax
comp=Z,254nm,1.9s
**ANM Nome** 88.43 10 IAMs_20 IAMs_20 04 37 55.3
comp=Z,53µm,21.0s
**ANM Nome** 88.43 10 P P 04 04 46.0 +0.4
baz=203
**AFDM Forest Hills D** 88.44 47 P P 04 04 46.0 -0.3
AFDM IAmb IAmb 04 05 21.7
comp=Z,215nm,1.9s
AFDM IAMs_20 IAMs_20 04 36 00.5
comp=Z,31µm,22.0s
**O22K Cooper Landing** 88.48 19 P P 04 04 44.2 -1.7
baz=217
**L19K White Mountain** 88.49 16 IAMs_20 IAMs_20 04 51 29.1
comp=Z,35µm,18.0s
**L19K White Mountain** 88.49 16 P P 04 04 45.0 -1.0
baz=212,SNR=41
**USHA Ushuaia** 88.52 150 LR LR 04 35 57.7
comp=Z,23µm,20.7s,baz=219,slow=30
**J17K VABM Dome** 88.57 13 IAMs_20 IAMs_20 04 40 50.0
comp=Z,32µm,20.0s
**J17K VABM Dome** 88.57 13 P P 04 04 45.8 -0.5
baz=208,SNR=11
**ISA Isabella, Lake** 88.58 50 IAmb IAmb 04 05 26.6
comp=Z,179nm,1.6s
ISA IAMs_20 IAMs_20 04 36 58.3
comp=Z,43µm,20.0s
**VTX Valle De La Tr** 88.58 55 IAMs_20 IAMs_20 04 41 02.0
comp=Z,33µm,18.0s
**I17K Unalakleet** 88.67 12 IAMs_20 IAMs_20 04 40 15.7
comp=Z,49µm,20.0s
**I17K Unalakleet** 88.67 12 P P 04 04 47.1 +0.4
baz=207
**M20K Styx River** 88.68 16 P P 04 04 45.9 -1.1
baz=214
**Q23K Middleton Isla** 88.70 21 IAMs_20 IAMs_20 04 50 41.0
comp=Z,36µm,18.0s
**Q23K Middleton Isla** 88.70 21 P P 04 04 45.4 -1.5
baz=220
**MID Middleton Isla** 88.70 21 IAMs_20 IAMs_20 04 50 33.0
comp=Z,32µm,18.0s
**J01E Myrtle Point** 88.70 42 IAMs_20 IAMs_20 04 37 24.9
comp=Z,45µm,20.0s
**GO09 Cerro Castillo** 88.71 146 P P 04 04 47.8 +0.3
GO09 IAMs_20 IAMs_20 04 36 50.4
comp=Z,26µm,19.0s
**YBH Yreka Blue Hor** 88.72 44 IAmb IAmb 04 05 47.7
comp=Z,109nm,1.4s
YBH IAMs_20 IAMs_20 04 36 07.5
comp=Z,32µm,22.0s
**YBH Yreka Blue Hor** 88.72 44 LR LR 04 36 17.9
comp=Z,28µm,21.2s,baz=256,slow=30
**ESJX Sierra Juarez** 88.74 55 IAMs_20 IAMs_20 04 41 06.9
comp=Z,39µm,18.0s
**CIT Chita** 88.80 329 *e*P P 04 04 46.7 -1.1
CIT *e*S SKSac 04 15 16.6 +1.1
CIT pmax pmax
comp=Z,635nm,2.8s
**P23K Montague Islan** 88.80 20 P P 04 04 46.1 -1.3
baz=219
**MG01 Puerto William** 88.82 151 IAMs_20 IAMs_20 04 35 54.9
comp=Z,28µm,20.0s
**FIS Fire Island** 88.87 18 IAMs_20 IAMs_20 04 49 23.4
comp=Z,46µm,18.0s
**LRDM Redding Peak** 88.88 45 IAmb IAmb 04 05 33.3
comp=Z,80nm,1.0s
**RC01 Rabbit Creek A** 88.97 18 IAmb IAmb 04 05 29.4
comp=Z,117nm,1.6s
RC01 IAMs_20 IAMs_20 04 38 01.8
comp=Z,32µm,21.0s
**RC01 Rabbit Creek A** 88.97 18 P P 04 04 47.1 -1.1
baz=217
**TNA Tin City** 88.97 9 P P 04 04 48.2 +0.1
baz=200
**SUA Susitna One** 88.98 18 IAmb IAmb 04 05 21.8
comp=Z,150nm,1.7s
SUA IAMs_20 IAMs_20 04 38 25.2
comp=Z,37µm,20.0s
**SUA Susitna One** 88.98 18 P P 04 04 46.9 -1.6
baz=216
**L20K Farewell, AK** 88.99 16 P P 04 04 47.9 -0.4
baz=213,SNR=29
**HUMO Hull Mountain** 89.02 43 IAmb IAmb 04 05 24.9
comp=Z,263nm,1.8s
HUMO IAMs_20 IAMs_20 04 36 15.4
comp=Z,44µm,22.0s
**EMB Emerald Bay** 89.04 47 IAmb IAmb 04 05 32.2
comp=Z,182nm,1.8s
EMB IAMs_20 IAMs_20 04 35 34.4
comp=Z,30µm,20.0s
**YUH Yuha Desert** 89.05 54 IAMs_20 IAMs_20 04 41 50.1
comp=Z,46µm,18.0s
**H16K Elim** 89.05 11 P P 04 04 48.3 -0.2
baz=206
**G15K Niukluk** 89.06 11 P P 04 04 48.5 -0.1
baz=204
**HATC Hat Creek Radi** 89.06 45 P P 04 04 48.8 -0.5
HATC IAMs_20 IAMs_20 04 50 15.6
comp=Z,30µm,18.0s
**PFO Pinyon Flats O** 89.09 53 P P 04 04 48.1 -1.6
**PFO Pinyon Flats O** 89.09 53 IAMs_20 IAMs_20 04 37 08.1
comp=Z,43µm,21.0s
**PFO Pinyon Flats O** 89.09 53 LR LR 04 37 10.7
comp=Z,43µm,20.1s,baz=264,slow=30
**PFO Pinyon Flats O** 89.09 53*c i*P P 04 04 49.1 -0.5
PFO pmax pmax
comp=Z,16nm,1.2s
**TPFO Pinon Flats** 89.09 53 P P 04 04 48.9 -0.7
baz=243,SNR=6.9
**MDPB Devils Postpil** 89.09 49 P P 04 04 48.7 -1.0
MDPB IAmb IAmb 04 05 32.8
comp=Z,122nm,1.6s
**DBO Dodson Butte** 89.11 42 IAmb IAmb 04 05 49.3
comp=Z,208nm,1.9s
DBO IAMs_20 IAMs_20 04 35 57.6
comp=Z,43µm,21.0s
**F14K Arctic Creek** 89.13 10 P P 04 04 49.1 +0.2
baz=202
**OMMB Old Mammoth Mi** 89.14 49 IAmb IAmb 04 05 29.4
comp=Z,169nm,1.7s
OMMB IAMs_20 IAMs_20 04 42 22.0
comp=Z,35µm,18.0s
**J18K Innoko River** 89.15 14 IAmb IAmb 04 05 23.5
comp=Z,169nm,1.8s
J18K IAMs_20 IAMs_20 04 42 13.4
comp=Z,27µm,19.0s
**J18K Innoko River** 89.15 14 P P 04 04 48.6 -0.4
baz=210,SNR=24
**SKT Skwentna** 89.19 17 IAMs_20 IAMs_20 04 50 15.6
comp=Z,34µm,18.0s
**SKT Skwentna** 89.19 17 P P 04 04 47.3 -1.9
baz=215
**PWL Port Wells** 89.19 19 IAmb IAmb 04 05 20.8
comp=Z,88nm,1.1s
**PWL Port Wells** 89.19 19 P P 04 04 47.9 -1.5
baz=218
**MPK Martis Peak** 89.25 47 IAmb IAmb 04 05 42.6
comp=Z,148nm,1.3s
MPK IAMs_20 IAMs_20 04 45 56.7
comp=Z,29µm,18.0s
**WAKR Walker** 89.27 48 IAmb IAmb 04 05 37.2
comp=Z,87nm,1.2s
WAKR IAMs_20 IAMs_20 04 43 17.3
comp=Z,47µm,18.0s
**M22K Willow** 89.39 18 IAmb IAmb 04 05 38.5
comp=Z,129nm,1.1s
M22K IAMs_20 IAMs_20 04 38 38.1
comp=Z,49µm,20.0s
**M22K Willow** 89.39 18 P P 04 04 48.3 -1.8
baz=216
**HIN Hinchinbrook I** 89.40 20 IAMs_20 IAMs_20 04 39 41.4
comp=Z,28µm,20.0s
**UABX UABC, Campus M** 89.40 54 IAMs_20 IAMs_20 04 42 53.5
comp=Z,42µm,18.0s
**CPBX Cerro Prieto** 89.41 55 IAMs_20 IAMs_20 04 43 01.8
comp=Z,41µm,18.0s
**PNTR Pine Nut** 89.44 47 IAmb IAmb 04 05 38.3
comp=Z,101nm,1.2s
PNTR IAMs_20 IAMs_20 04 44 13.9
comp=Z,32µm,18.0s
**SHL Shillong** 89.49 298 *e*P P 04 04 54.1 +2.3
**SHL Shillong** 89.49 298 P P 04 04 51.7 -0.1
SNR=68
**PMR Palmer** 89.54 18 IAmb IAmb 04 05 25.6
comp=Z,136nm,1.6s
PMR IAMs_20 IAMs_20 04 38 41.1
comp=Z,32µm,20.0s
**PMR Palmer** 89.54 18 P P 04 04 49.5 -1.4
baz=217
**GLI Glacier Island** 89.59 19 IAmb IAmb 04 05 23.3
comp=Z,211nm,1.7s
**GLI Glacier Island** 89.59 19 P P 04 04 49.6 -1.6
baz=219
**SRIG Santa Rosalia** 89.59 60 IAMs_20 IAMs_20 04 36 38.9
comp=Z,61µm,21.0s
**KNK Knik Glacier** 89.60 19 IAmb IAmb 04 05 25.1
comp=Z,187nm,1.8s
**KNK Knik Glacier** 89.60 19 P P 04 04 50.5 -0.8
baz=218
**GSC Goldstone, Bar** 89.61 51 IAmb IAmb 04 05 27.3
comp=Z,177nm,2.0s
GSC IAMs_20 IAMs_20 04 41 57.7
comp=Z,47µm,18.0s
**F15K North Star Dit** 89.61 10 IAmb IAmb 04 05 51.3
comp=Z,210nm,2.0s
F15K IAMs_20 IAMs_20 04 38 30.4
comp=Z,48µm,21.0s
**F15K North Star Dit** 89.61 10 P P 04 04 51.2 0.0
baz=203
**YERR Yerington** 89.64 47 IAmb IAmb 04 05 51.9
comp=Z,124nm,1.5s
YERR IAMs_20 IAMs_20 04 43 47.1
comp=Z,36µm,18.0s
**FID Port Fidalgo** 89.68 20 IAmb IAmb 04 05 23.7
comp=Z,266nm,1.8s
**K20K Telida** 89.68 15 IAmb IAmb 04 05 33.4
comp=Z,150nm,1.8s
**K20K Telida** 89.68 15 P P 04 04 50.7 -0.9
baz=213
**ULN Ulaanbaatar** 89.69 323 P P 04 04 51.2 -0.9
**ULN Ulaanbaatar** 89.69 323 P P 04 04 53.1 +0.9
**ULN Ulaanbaatar** 89.69 323*ce*P P 04 04 50.1 -2.1
ULN pmax pmax
comp=Z,277nm,1.3s
**KAIM Kayak Island** 89.71 21 IAMs_20 IAMs_20 04 39 51.8
comp=Z,36µm,19.0s
**KAIM Kayak Island** 89.71 21 P P 04 04 50.0 -1.8
baz=221
**G16K Koyuk River** 89.72 11 IAmb IAmb 04 05 26.8
comp=Z,197nm,1.6s
G16K IAMs_20 IAMs_20 04 38 58.2
comp=Z,39µm,21.0s
**G16K Koyuk River** 89.72 11 P P 04 04 51.7 +0.1
baz=205,SNR=11
**GTA Gaotai** 89.74 313 P P 04 04 52.8 +0.2
GTA pP sP 04 05 00.5 -0.9
GTA SKS SKSac 04 15 23.8 +2.0
GTA S S 04 15 42.8 -0.2
GTA pmax pmax
comp=Z,93nm,2.2s
GTA pmax pmax
comp=Z,3µm,12.0s
GTA LR LR
comp=Z,9µm,16.7s
GTA LR LR
comp=Z,23µm,15.5s
GTA LR LR
comp=Z,26µm,17.1s
**DSP Deep Springs** 89.74 49 IAMs_20 IAMs_20 04 42 42.0
comp=Z,50µm,18.0s
**GHO Glory Hole Cre** 89.75 18 IAMs_20 IAMs_20 04 38 26.5
comp=Z,38µm,21.0s
**EYAK Cordova Ski Ar** 89.75 20 P P 04 04 50.8 -1.1
baz=220
**H17K Granite Mounta** 89.76 12 IAmb IAmb 04 05 26.6
comp=Z,167nm,1.9s
H17K IAMs_20 IAMs_20 04 41 18.6
comp=Z,57µm,20.0s
**H17K Granite Mounta** 89.76 12 P P 04 04 51.5 -0.4
baz=208,SNR=13
**LHV Little Huntoon** 89.79 48 IAmb IAmb 04 06 11.4
comp=Z,147nm,1.5s
LHV IAMs_20 IAMs_20 04 44 01.2
comp=Z,39µm,18.0s
**K04D Chiloquin, OR** 89.79 43 IAMs_20 IAMs_20 04 37 01.8
comp=Z,30µm,20.0s
**BUCK Buck Mountain** 89.83 41 IAmb IAmb 04 05 27.2
comp=Z,223nm,1.3s
BUCK IAMs_20 IAMs_20 04 37 29.7
comp=Z,53µm,20.0s
**LPIG La Paz** 89.84 64 LR LR 04 36 06.2
comp=Z,49µm,21.8s,baz=244,slow=30
**COR Corvallis** 89.84 41 IAMs_20 IAMs_20 04 37 07.9
comp=Z,47µm,21.0s
**J19K Poorman** 89.85 14 IAMs_20 IAMs_20 04 42 35.1
comp=Z,29µm,19.0s
**J19K Poorman** 89.85 14 P P 04 04 51.9 -0.4
baz=212,SNR=12
**DIB Dawson Inlet,** 89.86 30 IAmb IAmb 04 05 28.0
comp=Z,124nm,1.2s
DIB IAMs_20 IAMs_20 04 45 57.4
comp=Z,37µm,18.0s
**YAK Yakutsk** 89.86 342 P P 04 04 50.9 -1.5
**YAK Yakutsk** 89.86 342 IAMs_20 IAMs_20 04 45 59.3
comp=Z,37µm,19.0s
**YAK Yakutsk** 89.86 342 LR LR 04 44 05.4
comp=Z,17µm,19.0s,baz=135,slow=35
**YAK Yakutsk** 89.86 342*c i*P P 04 04 50.9 -1.5
YAK *e**PP pP 04 04 56.7 -2.1
YAK *e*S SKSac 04 15 19.7 -1.4
YAK pmax pmax
comp=Z,114nm,1.0s
YAK pmax pmax
comp=E,15nm,1.1s
YAK pmax pmax
comp=N,22nm,1.3s
YAK smax smax
comp=N,4µm,14.4s
YAK smax smax
comp=E,6µm,14.4s
YAK MLR MLR
comp=Z,39µm,20.0s
YAK MLR MLR
comp=N,14µm,19.0s
YAK MLR MLR
comp=E,12µm,19.0s
**CUT Chulitna** 89.88 17 IAmb IAmb 04 05 38.2
comp=Z,88nm,1.1s
CUT IAMs_20 IAMs_20 04 39 16.0
comp=Z,31µm,20.0s
**CUT Chulitna** 89.88 17 P P 04 04 50.3 -2.1
baz=216
**PAHR Pah Rah Range** 89.89 47 IAMs_20 IAMs_20 04 46 26.7
comp=Z,28µm,18.0s
**HEBO Mount Hebo** 89.90 40 IAMs_20 IAMs_20 04 44 55.5
comp=Z,51µm,18.0s
**HG4B Hotspring** 89.90 32 IAmb IAmb 04 05 26.3
comp=Z,152nm,1.3s
HG4B IAMs_20 IAMs_20 04 46 35.7
comp=Z,26µm,18.0s
**BILL Bilibino** 89.92 359 P P 04 04 51.1 -1.5
**BILL Bilibino** 89.92 359 *eP* P 04 04 52.6 +0.1
BILL *e**PP sP 04 05 02.5 +1.3
BILL *e* 04 08 28.0
BILL *e*PPP PPP 04 10 20.6
BILL *e*S SKSac 04 15 20.2 -1.0
BILL *e*SS SS 04 21 42.1 +0.3
BILL pmax pmax
comp=Z,119nm,1.1s
BILL MLR MLR
comp=Z,6µm,17.0s
**SML Sawmill** 89.95 18 P P 04 04 51.2 -1.7
baz=218
**RYN Ryan** 89.95 48 IAMs_20 IAMs_20 04 44 31.6
comp=Z,46µm,18.0s
**SLBS Sierra La Lagu** 89.97 64 P P 04 04 53.7 -0.3
comp=Z,47µm,21.0s
**SLBS Sierra La Lagu** 89.97 64 IAMs_20 IAMs_20 04 36 19.4
comp=Z,153nm,1.5s
**I04A Tendick Farm,** 89.98 42 IAmb IAmb 04 05 42.1
I04A IAMs_20 IAMs_20 04 36 23.6
comp=Z,53µm,21.0s
**RAGM Ragged Mountai** 89.98 21 P P 04 04 53.4 +0.4
RAGM IAmb IAmb 04 05 25.8
comp=Z,279nm,1.7s
RAGM IAMs_20 IAMs_20 04 45 20.7
comp=Z,27µm,18.0s
**GRAC Grapevine Rang** 89.99 50 IAmb IAmb 04 05 49.8
comp=Z,209nm,1.6s
**NVAR Mina Array Bea** 90.01 48 P P 04 04 53.3 -0.7
comp=Z,17nm,0.9s,baz=226,slow=7.3,SNR=73
NVAR PKKPbc PKKPbc 04 22 28.1 +1.9
comp=Z,1.2nm,0.7s,baz=93,slow=3.5,SNR=6.2
NVAR PKPPKP P'P'df 04 30 32.4 +0.2
comp=Z,1.2nm,0.9s,baz=82,slow=1.4,SNR=3.2
NVAR LR LR 04 37 19.8
comp=Z,25µm,21.9s,baz=273,slow=30
comp=Z,17nm,0.9s
**SUCK Suckling Hills** 90.04 21 IAMs_20 IAMs_20 04 46 46.4
comp=Z,38µm,18.0s
**SONM Songino Array** 90.04 323 P P 04 04 52.5 -1.3
comp=Z,128nm,1.0s,baz=98,slow=4.5,SNR=159
SONM LR LR 04 47 10.7
comp=Z,11µm,18.3s,baz=122,slow=37
comp=Z,128nm,1.0s
**GLA Glamis** 90.05 54 IAMs_20 IAMs_20 04 37 19.7
comp=Z,35µm,20.0s
**HMT Hamilton** 90.07 21 IAmb IAmb 04 05 28.4
comp=Z,363nm,1.9s
**M23K Glacier View** 90.11 19 P P 04 04 52.0 -1.6
baz=218
**GWY Greenwater Val** 90.11 51 IAMs_20 IAMs_20 04 38 06.0
comp=Z,44µm,20.0s
**G17K Kiwalik Mounta** 90.12 12 P P 04 04 53.2 -0.4
baz=207,SNR=12
**H04D Lebanon** 90.16 41 IAmb IAmb 04 05 28.5
comp=Z,118nm,1.2s
**G03D McMinnville, O** 90.19 40 IAmb IAmb 04 05 24.8
comp=Z,87nm,1.1s
G03D IAMs_20 IAMs_20 04 44 56.3
comp=Z,43µm,18.0s
**GMN Gold Mountain** 90.21 50 IAMs_20 IAMs_20 04 43 50.4
comp=Z,28µm,18.0s
**GCSA Galena City Sc** 90.22 13 P P 04 04 53.6 -0.4
baz=210
**BGLC Bering Glacier** 90.24 21 P P 04 04 52.2 -1.9
baz=222
**SCM Sheep Creek Mo** 90.26 19 P P 04 04 53.2 -1.2
SCM IAmb IAmb 04 05 45.3
comp=Z,259nm,1.8s
**SCM Sheep Creek Mo** 90.26 19 P P 04 04 53.5 -0.8
baz=219
**SCM Sheep Creek Mo** 90.26 19 P P 04 04 53.2 -1.2
SCM pmax pmax
comp=Z,259nm,1.8s
**H18K Honhosa River** 90.27 13 IAMs_20 IAMs_20 04 40 44.8
comp=Z,57µm,20.0s
**H18K Honhosa River** 90.27 13 P P 04 04 53.7 -0.6
baz=209
**BERG Berg Lake** 90.30 21 IAMs_20 IAMs_20 04 46 20.4
comp=Z,34µm,19.0s
**MZP Montezuma Peak** 90.31 49 P P 04 04 54.0 -1.5
**J20K Nowinta River** 90.35 15 IAmb IAmb 04 05 31.1
comp=Z,159nm,1.9s
J20K IAMs_20 IAMs_20 04 42 01.3
comp=Z,32µm,20.0s
**J20K Nowinta River** 90.35 15 P P 04 04 54.0 -0.7
baz=213,SNR=9.5
**PASG PASIGHAT** 90.37 300 *e*P P 04 04 45.5 -10
PASG IAmb IAmb 04 04 48.5
comp=Z,70nm,0.8s
**F03A Seaside** 90.40 40 IAmb IAmb 04 05 54.9
comp=Z,167nm,1.2s
F03A IAMs_20 IAMs_20 04 46 43.6
comp=Z,48µm,18.0s
**KLU Klutina** 90.42 19 IAmb IAmb 04 05 36.5
comp=Z,152nm,1.6s
KLU IAMs_20 IAMs_20 04 50 54.5
comp=Z,24µm,18.0s
**KLU Klutina** 90.42 19 P P 04 04 53.3 -1.9
baz=220,SNR=8.7
**WCT Wildcat Mounta** 90.42 50 IAmb IAmb 04 05 58.1
comp=Z,116nm,1.7s
WCT IAMs_20 IAMs_20 04 37 59.2
comp=Z,46µm,20.0s
**SNH Sunshine Point** 90.43 21 IAmb IAmb 04 05 28.5
comp=Z,171nm,1.2s
**BMRM Bremner River** 90.44 20 P P 04 04 53.6 -1.6
baz=221
**PIX Pinacate** 90.44 56 P P 04 04 55.1 -0.7
PIX IAMs_20 IAMs_20 04 42 33.2
comp=Z,46µm,18.0s
**KVN Kaiserville** 90.45 48 IAMs_20 IAMs_20 04 45 30.5
comp=Z,52µm,18.0s
**J05D Fort Rock, OR** 90.45 43 IAmb IAmb 04 06 04.6
comp=Z,88nm,1.1s
J05D IAMs_20 IAMs_20 04 37 02.3
comp=Z,35µm,22.0s
**HOLB Holberg** 90.46 34 IAmb IAmb 04 05 20.7
comp=Z,197nm,1.5s
**RADR Rader Ridge** 90.52 39 IAMs_20 IAMs_20 04 46 05.7
comp=Z,46µm,18.0s
**H04A Detroit Lake** 90.58 41 IAmb IAmb 04 05 20.9
comp=Z,169nm,1.5s
**BLYC Blythe** 90.59 54 IAmb IAmb 04 05 35.9
comp=Z,87nm,1.4s
BLYC IAMs_20 IAMs_20 04 43 56.9
comp=Z,51µm,18.0s
**WAX Waxell Ridge** 90.63 21 IAMs_20 IAMs_20 04 40 01.0
comp=Z,36µm,20.0s
**WAT1 Susitna Watana** 90.69 18 P P 04 04 54.5 -1.8
baz=218
**E03A Lebam** 90.72 39 IAmb IAmb 04 05 30.2
comp=Z,149nm,1.1s
E03A IAMs_20 IAMs_20 04 38 11.1
comp=Z,39µm,20.0s
**113A Mohawk Valley,** 90.73 55 IAMs_20 IAMs_20 04 42 34.7
comp=Z,34µm,18.0s
**WAT6 Susitna Watana** 90.73 18 P P 04 04 55.3 -1.4
baz=218,SNR=5.5
**MESA MESA** 90.73 22 IAmb IAmb 04 05 29.9
comp=Z,217nm,1.4s
MESA IAMs_20 IAMs_20 04 39 33.9
comp=Z,36µm,20.0s
**MESA MESA** 90.73 22 P P 04 04 54.9 -1.9
baz=224,SNR=10
**CRQM Cirque** 90.76 21 IAmb IAmb 04 05 29.5
comp=Z,152nm,1.3s
CRQM IAMs_20 IAMs_20 04 51 57.8
comp=Z,33µm,18.0s
**TPNV Topopah Spring** 90.76 50 IAmb IAmb 04 06 18.0
comp=Z,98nm,1.4s
**CRQE Cirque** 90.77 21 P P 04 04 55.6 -1.2
baz=223,SNR=14
**I20K Naaghedeneel** 90.80 14 IAmb IAmb 04 05 38.9
comp=Z,282nm,1.8s
I20K IAMs_20 IAMs_20 04 42 45.1
comp=Z,33µm,19.0s
**I20K Naaghedeneel** 90.80 14 P P 04 04 55.9 -0.8
baz=212
**F04D Rainier, OR** 90.80 40 IAMs_20 IAMs_20 04 38 14.3
comp=Z,36µm,20.0s
**M24K Tolsona, Glenn** 90.82 19 P P 04 04 56.4 -0.6
M24K IAmb IAmb 04 05 33.6
comp=Z,163nm,1.3s
**M24K Tolsona, Glenn** 90.82 19 P P 04 04 56.4 -0.6
baz=220
**G18K Tagagawik** 90.86 12 IAmb IAmb 04 05 48.5
comp=Z,123nm,1.4s
G18K IAMs_20 IAMs_20 04 42 22.5
comp=Z,45µm,20.0s
**G18K Tagagawik** 90.86 12 P P 04 04 56.5 -0.5
baz=209,SNR=20
**TGL Tana Glacier** 90.86 21 IAmb IAmb 04 05 30.1
comp=Z,229nm,1.4s
**F17K Baldwin Pennin** 90.86 11 IAMs_20 IAMs_20 04 39 32.5
comp=Z,41µm,21.0s
**F17K Baldwin Pennin** 90.86 11 P P 04 04 56.7 -0.2
baz=206,SNR=6.5
**PINE Pine Mountain** 90.89 42 IAmb IAmb 04 05 31.4
comp=Z,88nm,1.1s
PINE IAMs_20 IAMs_20 04 37 16.9
comp=Z,47µm,22.0s
**WISH Wishkah** 90.90 39 IAMs_20 IAMs_20 04 39 06.8

comp=Z,35µm,20.0s
**ISLE Juniper Island 90.91 21** IAmb IAmb 04 05 26.4
comp=Z,121nm,1.1s
ISLE IAMs_20 IAMs_20 04 40 09.5
comp=Z,34µm,20.0s
**I05D Terrebonne, OR 90.92 42** IAmb IAmb 04 05 31.9
comp=Z,209nm,1.7s
I05D IAMs_20 IAMs_20 04 38 26.6
comp=Z,43µm,20.0s
**N25K Chitina, Valde 90.92 20** P **P 04 04 55.6 -1.9**
baz=221,SNR=15
**OZB Mount Ozzard 90.93 36** IAmb IAmb 04 05 27.8
comp=Z,82nm,1.2s
**Q09A Carvers 90.98 48** P **P 04 04 58.8 +0.3**
Q09A IAmb IAmb 04 06 08.7
comp=Z,117nm,1.1s
Q09A IAMs_20 IAMs_20 04 44 24.7
comp=Z,41µm,18.0s
**CRAG Craig 90.99 28** IAMs_20 IAMs_20 04 46 36.2
comp=Z,28µm,18.0s
**CRAG Craig 90.99 28** P **P 04 04 57.2 -0.5**
baz=231
**H19K Roundabout Mou 90.99 13** P **P 04 04 56.6 -0.9**
H19K IAmb IAmb 04 05 31.0
comp=Z,268nm,1.8s
**H19K Roundabout Mou 90.99 13** P **P 04 04 57.2 -0.4**
baz=211,SNR=20
**NLWA Neilton Lookou 90.99 38** IAmb IAmb 04 05 32.4
comp=Z,135nm,1.4s
NLWA IAMs_20 IAMs_20 04 44 05.2
comp=Z,31µm,19.0s
**VRDI Verde Repeater 91.01 20** IAmb IAmb 04 05 30.7
comp=Z,148nm,1.4s
**GLB Gilahina Butte 91.05 20** IAmb IAmb 04 05 30.5
comp=Z,95nm,1.2s
**YKU2 Yakutat 91.06 23** IAMs_20 IAMs_20 04 38 42.6
comp=Z,39µm,20.0s
**BPAW Bear Paw Mtn. 91.07 16** IAMs_20 IAMs_20 04 50 47.2
comp=Z,32µm,18.0s
**BPAW Bear Paw Mtn. 91.07 16** P **P 04 04 55.9 -2.1**
baz=216
**RND Reindeer 91.07 17** IAMs_20 IAMs_20 04 50 11.4
comp=Z,51µm,18.0s
**SIT Sitka 91.07 26** IAMs_20 IAMs_20 04 38 23.2
comp=Z,38µm,20.0s
**SIT Sitka 91.07 26** P **P 04 04 57.6 -0.5**
baz=229
**F04A Amboy 91.08 40** IAmb IAmb 04 06 06.0
comp=Z,81nm,1.1s
F04A IAMs_20 IAMs_20 04 45 07.6
comp=Z,44µm,18.0s
**214A Organ Pipe Nat 91.11 56** P **P 04 04 59.1 +0.1**
baz=245
**TABL Table Mountain 91.20 22** IAmb IAmb 04 05 36.8
comp=Z,118nm,1.1s
TABL IAMs_20 IAMs_20 04 39 59.2
comp=Z,30µm,20.0s
**GRNC Granite Creek 91.20 21** IAMs_20 IAMs_20 04 40 20.3
comp=Z,30µm,20.0s
**DHY Denali Highway 91.22 18** IAmb IAmb 04 05 32.4
comp=Z,114nm,1.7s
DHY IAMs_20 IAMs_20 04 39 22.5
comp=Z,37µm,21.0s
**DHY Denali Highway 91.22 18** P **P 04 04 57.8 -1.1**
baz=219,SNR=5.2
**HOOD Mount Hood Mea 91.23 41** IAmb IAmb 04 05 07.4
comp=Z,50nm,0.9s
**MCARA McCarthy VSAT 91.26 21** IAmb IAmb 04 05 45.1
comp=Z,108nm,1.2s
**MCARA McCarthy VSAT 91.26 21** P **P 04 04 57.7 -1.2**
baz=223,SNR=6.9
**PINM Pinnacle 91.27 22** P **P 04 04 57.2 -1.9**
baz=225,SNR=7.0
**PNL Peninsula 91.27 23** P **P 04 04 56.8 -2.3**
baz=226
**F18K Selawik 91.29 12** P **P 04 04 57.8 -1.1**
baz=208,SNR=12
**H20K Anotleneega Mo 91.30 14** P **P 04 04 58.2 -0.9**
baz=212,SNR=18
**S31K Pelican 91.31 25** IAMs_20 IAMs_20 04 38 09.3
comp=Z,44µm,20.0s
**S31K Pelican 91.31 25** P **P 04 04 59.0 -0.2**
baz=228
**MCK McKinley 91.31 17** P **P 04 04 57.2 -2.0**
baz=218,SNR=6.4
**E17K Hotham Inlet 91.34 11** P **P 04 04 59.0 -0.1**
baz=206,SNR=11
**HARP HAARP 91.35 19** P **P 04 04 58.7 -0.7**
baz=221
**BBB Bella Bella 91.36 33** IAMs_20 IAMs_20 04 39 53.5
comp=Z,29µm,20.0s
**BBB Bella Bella 91.36 33** LR LR 04 39 56.1
comp=Z,26µm,19.2s,baz=248,slow=32
**BCPM Bancas Point 91.39 23** IAmb IAmb 04 05 34.2
comp=Z,70nm,1.2s
BCPM IAMs_20 IAMs_20 04 49 15.2
comp=Z,43µm,18.0s
**G05A Wamic 91.39 41** P **P 04 05 00.8 +0.9**
G05A IAmb IAmb 04 05 53.6
comp=Z,115nm,1.3s
**G19K Purcell Mounta 91.39 13** IAMs_20 IAMs_20 04 42 10.6
comp=Z,56µm,20.0s
**G19K Purcell Mounta 91.39 13** P **P 04 04 59.4 0.0**
baz=210,SNR=20
**U33K Whale Pass 91.40 28** P **P 04 04 60.0 +0.3**
baz=231
**S11A Rachel 91.44 50** IAmb IAmb 04 05 35.7
comp=Z,155nm,1.4s
**GRNB Grenville Isla 91.44 31** IAmb IAmb 04 05 33.5
comp=Z,72nm,1.3s
GRNB IAMs_20 IAMs_20 04 46 37.3
comp=Z,29µm,18.0s
**CTG Chitna Glacier 91.51 21** P **P 04 04 59.6 -0.7**
baz=224,SNR=18
**CTGM Chitina Glacier 91.52 21** IAmb IAmb 04 05 33.0
comp=Z,136nm,1.1s
CTGM IAMs_20 IAMs_20 04 40 19.4
comp=Z,30µm,20.0s
**LOGN Logan Glacier 91.53 22** IAmb IAmb 04 05 39.4
comp=Z,181nm,1.6s
LOGN IAMs_20 IAMs_20 04 40 08.8
comp=Z,26µm,20.0s
**V35K Ketchikan 91.57 29** IAMs_20 IAMs_20 04 48 24.7
comp=Z,28µm,18.0s
**V35K Ketchikan 91.57 29** P **P 04 05 00.8 +0.3**
baz=232
**CBB Campbell River 91.58 36** IAmb IAmb 04 05 35.0
comp=Z,177nm,1.4s
**CLRS Cowichan Lake 91.61 37** IAmb IAmb 04 05 34.0
comp=Z,84nm,1.3s
CLRS IAMs_20 IAMs_20 04 38 08.3
comp=Z,37µm,20.0s
**S32K Killisnoo 91.65 26** IAMs_20 IAMs_20 04 37 58.5
comp=Z,44µm,20.0s
**S32K Killisnoo 91.65 26** P **P 04 04 60.0 -0.8**
baz=230
**W13A Hualapai Mount 91.65 53** IAmb IAmb 04 05 41.1
comp=Z,124nm,1.8s
W13A IAMs_20 IAMs_20 04 38 49.0
comp=Z,40µm,20.0s
**BMN Battle Mountai 91.69 47** IAmb IAmb 04 05 40.9
comp=Z,167nm,1.8s
BMN IAMs_20 IAMs_20 04 48 09.5
comp=Z,30µm,18.0s
**D17K Noatak River 91.69 10** P **P 04 05 01.1 +0.3**
baz=205,SNR=9.7
**PAX Paxson 91.69 19** P **P 04 04 59.6 -1.5**
baz=220
**WVOR Wild Horse Val 91.70 44** P **P 04 04 59.8 -1.8**
WVOR IAmb IAmb 04 05 35.8
comp=Z,173nm,1.9s
WVOR IAMs_20 IAMs_20 04 48 49.4
comp=Z,28µm,18.0s
**WVOR Wild Horse Val 91.70 44** P **P 04 04 59.8 -1.8**
WVOR pmax pmax
comp=Z,173nm,1.9s
WVOR MLR MLR
comp=Z,28µm,18.0s
**GOMU GeErMu 91.77 308** P **P 04 05 03.5 +1.1**
GOMU PP **PP 04 08 43.5 +1.8**
GOMU pmax pmax
comp=Z,84nm,1.3s
GOMU LR LR
comp=Z,15µm,19.5s
GOMU LR LR
comp=Z,17µm,19.1s
GOMU LR LR
comp=Z,20µm,19.8s

**O28M Mount Upton 91.77 22** P **P 04 05 00.6 -1.1**
baz=225,SNR=26
**LSA Lhasa 91.79 301** P **P 04 05 04.8 +2.0**
LSA LR LR
comp=Z,6µm,17.9s
LSA LR LR
comp=Z,10µm,17.9s
LSA LR LR
comp=Z,11µm,17.9s
**LSA Lhasa 91.79 301** IAmb IAmb 04 05 05.7
comp=Z,143nm,1.3s
**LSA Lhasa 91.79 301** P **P 04 05 02.8 0.0**
**R31K City Hall, Gus 91.80 25** P **P 04 05 01.8 +0.4**
baz=229
**G06A Carlson Farm, 91.80 41** IAmb IAmb 04 06 29.1
comp=Z,91nm,1.6s
**Y14A Wickenburg 91.81 54** P **P 04 05 02.1 -0.1**
**PRN Pahroc Range 91.82 50** IAmb IAmb 04 06 12.9
comp=Z,84nm,1.3s
**E18K Tukpahlearik C 91.86 11** IAMs_20 IAMs_20 04 40 24.7
comp=Z,49µm,21.0s
**E18K Tukpahlearik C 91.86 11** P **P 04 05 01.5 0.0**
baz=207,SNR=17
**P29M Windy Craggy 91.86 24** IAMs_20 IAMs_20 04 38 57.6
comp=Z,47µm,20.0s
**P29M Windy Craggy 91.86 24** P **P 04 05 01.2 -0.6**
baz=227,SNR=13
**F19K Shaleruckik Mo 91.86 12** IAmb IAmb 04 05 38.5
comp=Z,180nm,1.5s
F19K IAMs_20 IAMs_20 04 38 58.9
comp=Z,49µm,22.0s
**F19K Shaleruckik Mo 91.86 12** P **P 04 05 01.1 -0.5**
baz=210,SNR=27
**LON Longmire 91.86 40** IAMs_20 IAMs_20 04 46 25.2
comp=Z,44µm,18.0s
**R11B Troy Canyon, C 91.87 49** IAMs_20 IAMs_20 04 44 28.3
comp=Z,44µm,18.0s
**R11B Troy Canyon, C 91.87 49** P **P 04 05 02.1 -0.5**
baz=243
**C16K Lisburne Hills 91.88 9** P **P 04 05 01.5 -0.1**
baz=203,SNR=5.2
**MLY Manley 91.89 16** IAmb IAmb 04 05 59.2
comp=Z,106nm,1.9s
MLY IAMs_20 IAMs_20 04 53 10.9
comp=Z,30µm,18.0s
**MLY Manley 91.89 16** P **P 04 05 00.3 -1.5**
baz=216,SNR=12
**PGC Sidney 91.90 37** IAmb IAmb 04 05 36.0
comp=Z,109nm,1.4s
PGC IAMs_20 IAMs_20 04 38 08.0
comp=Z,33µm,21.0s
**H21K Melozitna Rive 91.91 14** IAmb IAmb 04 05 37.4
comp=Z,132nm,1.6s
H21K IAMs_20 IAMs_20 04 43 00.4
comp=Z,36µm,20.0s
**H21K Melozitna Rive 91.91 14** P **P 04 05 01.4 -0.5**
baz=214,SNR=14
**T33K Petersburg 91.91 27** P **P 04 05 01.5 -0.5**
baz=231
**WRAK Wrangell Islan 91.93 28** P **P 04 05 01.0 -1.1**
baz=232
**I07A Izee 91.94 43** P **P 04 05 02.3 -0.4**
I07A IAMs_20 IAMs_20 04 37 50.6
comp=Z,48µm,22.0s
**NEA2 Nenana 91.96 16** IAmb IAmb 04 05 33.9
comp=Z,117nm,1.6s
**NEA2 Nenana 91.96 16** P **P 04 05 00.5 -1.6**
baz=217
**CRZF Crozet Islands 91.98 218** IAMs_20 IAMs_20 04 42 00.9
comp=Z,27µm,18.0s
**D05A Enumclaw 91.98 39** IAMs_20 IAMs_20 04 47 10.3
comp=Z,30µm,18.0s
**O29M Mount Kennedy 92.01 23** IAmb IAmb 04 05 35.7
comp=Z,138nm,1.7s
O29M IAMs_20 IAMs_20 04 39 15.7
comp=Z,45µm,20.0s
**O29M Mount Kennedy 92.01 23** P **P 04 05 01.6 -1.0**
baz=226
**M26K Nabesna, AK 92.02 20** IAmb IAmb 04 05 35.2
comp=Z,126nm,1.4s
**M26K Nabesna, AK 92.02 20** P **P 04 05 01.4 -1.2**
baz=223,SNR=29
**RDOG Red Dog Mine 92.04 10** IAmb IAmb 04 05 55.7
comp=Z,169nm,1.6s
RDOG IAMs_20 IAMs_20 04 39 45.7
comp=Z,40µm,22.0s
**RDOG Red Dog Mine 92.04 10** P **P 04 05 01.8 -0.6**
baz=205,SNR=6.0
**COYC Coyhaique 92.10 142** P **P 04 05 03.2 -0.2**
COYC IAmb IAmb 04 05 08.6
comp=Z,90nm,1.0s
**WRH Wood River Hil 92.12 17** IAmb IAmb 04 05 34.9
comp=Z,138nm,1.4s
WRH IAMs_20 IAMs_20 04 41 16.2
comp=Z,39µm,20.0s
**R32K Eaglecrest 92.20 26** IAMs_20 IAMs_20 04 38 13.9
comp=Z,49µm,21.0s
**R32K Eaglecrest 92.20 26** P **P 04 05 03.2 -0.1**
baz=230
**K24K Donnelly Dome 92.24 18** P **P 04 05 02.1 -1.4**
baz=220,SNR=8.5
**J08A Circle Bar Ran 92.24 44** IAMs_20 IAMs_20 04 51 51.8
comp=Z,32µm,18.0s
**PALK Pallekele 92.25 277** IAMs_20 IAMs_20 04 46 56.7
comp=Z,32µm,19.0s
**PALK Pallekele 92.25 277** LR LR 04 48 58.2
comp=Z,12µm,18.0s,baz=122,slow=37
**PALK Pallekele 92.25 277** P **P 04 05 06.0 +1.3**
PALK S **SKSac 04 15 39.5 +2.5**
**PALK Pallekele 92.25 277** *c i* P **P 04 05 04.2 -0.5**
PALK pmax pmax
comp=Z,54nm,1.1s
**PLBC Pleasant Camp 92.25 24** P **P 04 05 02.9 -0.7**
baz=228,SNR=6.4
**YUK8 Steele Glacier 92.28 22** P **P 04 05 02.8 -1.2**
baz=225,SNR=32
**I23K Minto, Yukon-K 92.33 16** IAmb IAmb 04 05 35.9
comp=Z,106nm,1.6s
I23K IAMs_20 IAMs_20 04 52 17.6
comp=Z,45µm,18.0s
**I23K Minto, Yukon-K 92.33 16** P **P 04 05 01.6 -2.2**
baz=217,SNR=7.5
**CCB Clear Creek Bu 92.34 17** IAmb IAmb 04 05 35.7
comp=Z,125nm,1.5s
CCB IAMs_20 IAMs_20 04 52 09.8
comp=Z,42µm,18.0s
**M27K Edge Creek, AK 92.35 20** P **P 04 05 03.4 -0.7**
M27K IAmb IAmb 04 05 37.1
comp=Z,172nm,1.5s
**M27K Edge Creek, AK 92.35 20** P **P 04 05 03.1 -1.0**
baz=224,SNR=22
**L26K Log Cabin Wild 92.38 19** IAmb IAmb 04 05 36.9
comp=Z,142nm,1.6s
L26K IAMs_20 IAMs_20 04 53 07.1
comp=Z,27µm,18.0s
**L26K Log Cabin Wild 92.38 19** P **P 04 05 02.7 -1.4**
baz=222,SNR=22
**HDA Harding Lake 92.38 17** IAMs_20 IAMs_20 04 41 03.1
comp=Z,48µm,20.0s
**HDA Harding Lake 92.38 17** P **P 04 05 03.2 -0.9**
baz=219,SNR=32
**C17K DeLong Mountai 92.39 10** P **P 04 05 03.1 -0.9**
baz=205,SNR=7.6
**YUK3 Moose Creek 92.39 21** P **P 04 05 03.4 -1.1**
baz=225,SNR=40
**H22K Ishtalitna Cre 92.44 15** P **P 04 05 03.4 -0.9**
baz=215,SNR=19
**F20K Avaraart Lake 92.45 13** IAmb IAmb 04 05 39.9
comp=Z,152nm,1.4s
F20K IAMs_20 IAMs_20 04 43 11.8
comp=Z,55µm,20.0s
**F20K Avaraart Lake 92.45 13** P **P 04 05 03.7 -0.6**
baz=211
**RIDG Independent Ri 92.46 18** IAmb IAmb 04 05 39.2
comp=Z,168nm,1.4s
RIDG IAMs_20 IAMs_20 04 49 37.3
comp=Z,29µm,18.0s
**RIDG Independent Ri 92.46 18** P **P 04 05 02.9 -1.6**
baz=221,SNR=12
**G21K Allakaket 92.47 14** P **P 04 05 04.0 -0.5**
baz=213,SNR=30
**P30M Million Dollar 92.48 24** P **P 04 05 03.3 -1.4**
baz=228
**COLA College 92.50 17** P **P 04 05 03.1 -1.5**
COLA IAmb IAmb 04 05 38.5
comp=Z,132nm,1.2s
COLA IAMs_20 IAMs_20 04 53 06.2
comp=Z,48µm,18.0s

**COLA College 92.50 17** P **P 04 05 02.7 -1.9**
baz=218
**COLA College 92.50 17** P **P 04 05 03.1 -1.5**
COLA pmax pmax
comp=Z,132nm,1.3s
**E19K Redstone River 92.51 12** IAMs_20 IAMs_20 04 39 19.0
comp=Z,54µm,22.0s
**E19K Redstone River 92.51 12** P **P 04 05 04.3 -0.3**
baz=210,SNR=44
**YUK6 Outpost Mounta 92.53 22** P **P 04 05 03.7 -1.4**
baz=227
**GO07 Milladeo Hill, 92.54 139** IAMs_20 IAMs_20 04 40 37.2
comp=Z,23µm,18.0s
**U35K Hyder 92.65 29** IAMs_20 IAMs_20 04 49 07.1
comp=Z,32µm,18.0s
**U35K Hyder 92.65 29** P **P 04 05 05.0 -0.4**
baz=233
**SKAG Skagway 92.65 25** IAmb IAmb 04 05 39.1
comp=Z,99nm,1.4s
SKAG IAMs_20 IAMs_20 04 39 00.8
comp=Z,37µm,21.0s
**SKAG Skagway 92.65 25** P **P 04 05 04.4 -1.0**
baz=229
**ILAR Eielson Array 92.68 17** P **P 04 05 03.4 -2.1**
comp=Z,8.3nm,0.6s,baz=235,slow=5.1,SNR=59
ILAR PKiKP **PKiKP 04 09 54.5 +0.8**
comp=Z,1.8nm,0.9s,baz=245,slow=3.1,SNR=4.6
ILAR PKKP **PKKPdf 04 22 17.8 -0.9**
comp=Z,3.3nm,0.9s,baz=358,slow=2.4,SNR=12
ILAR PKPPKP **P'P'df 04 30 26.6 +2.4**
comp=Z,0.6nm,0.9s,baz=260,slow=1.7,SNR=4.1
ILAR LR LR 04 41 13.7
comp=Z,45µm,20.6s,baz=217,slow=32
comp=Z,8.3nm,0.6s
**Q12A Willow Creek R 92.70 49** IAmb IAmb 04 05 46.6
comp=Z,175nm,1.7s
Q12A IAMs_20 IAMs_20 04 45 14.4
comp=Z,41µm,18.0s
**YUK4 Talbot Arm 92.71 22** P **P 04 05 05.4 -0.5**
baz=226
**LTY Liberty 92.79 40** IAmb IAmb 04 06 14.6
comp=Z,91nm,1.6s
LTY IAMs_20 IAMs_20 04 40 07.8
comp=Z,39µm,20.0s
**POKR Poker Plat Res 92.81 17** IAmb IAmb 04 05 38.9
comp=Z,206nm,2.0s
POKR IAMs_20 IAMs_20 04 53 41.2
comp=Z,44µm,18.0s
**POKR Poker Plat Res 92.81 17** P **P 04 05 03.9 -2.1**
baz=219
**MALK Mahakanadarawa 92.81 278** P **P 04 05 07.1 -0.2**
**TUC Tucson 92.82 56** P **P 04 05 06.8 -0.2**
**TUC Tucson 92.82 56** P **P 04 05 06.8 -0.2**
TUC pmax pmax
comp=Z,17nm,1.0s
**H23K Yukon River 92.83 15** IAmb IAmb 04 05 47.3
comp=Z,118nm,1.5s
H23K IAMs_20 IAMs_20 04 52 12.7
comp=Z,35µm,18.0s
**H23K Yukon River 92.83 15** P **P 04 05 05.0 -1.1**
baz=217
**C18K Utukok River 92.86 10** IAMs_20 IAMs_20 04 40 23.2
comp=Z,42µm,21.0s
**C18K Utukok River 92.86 10** P **P 04 05 05.6 -0.7**
baz=206,SNR=8.7
**G08A Pilot Rock 92.86 42** IAmb IAmb 04 05 43.6
comp=Z,69nm,1.4s
G08A IAMs_20 IAMs_20 04 38 48.0
comp=Z,47µm,21.0s
**L27K Beaver Creek, 92.87 20** P **P 04 05 04.6 -1.8**
L27K IAMs_20 IAMs_20 04 52 13.3
comp=Z,26µm,18.0s
**L27K Beaver Creek, 92.87 20** P **P 04 05 05.1 -1.3**
baz=224,SNR=20
**GTK Tadong 92.89 298** *e* P **P 04 05 08.9 +1.4**
GTK IAmb IAmb 04 05 10.1
comp=Z,224nm,1.2s
**SCRK Sand Creek 92.89 18** IAmb IAmb 04 05 38.6
comp=Z,109nm,1.3s
SCRK IAMs_20 IAMs_20 04 51 58.7
comp=Z,25µm,18.0s
**SCRK Sand Creek 92.89 18** P **P 04 05 05.5 -1.1**
baz=222,SNR=27
**E07A Sunnyside 92.93 40** IAMs_20 IAMs_20 04 39 05.6
comp=Z,34µm,20.0s
**LCMT Little Creek M 92.95 51** IAMs_20 IAMs_20 04 39 14.1
comp=Z,34µm,20.0s
**J25K Salcha River, 92.98 18** IAmb IAmb 04 05 38.4
comp=Z,131nm,1.5s
J25K IAMs_20 IAMs_20 04 41 10.9
comp=Z,35µm,20.0s
**J25K Salcha River, 92.98 18** P **P 04 05 05.5 -1.4**
baz=225,SNR=26
**SPR3 Spring Creek 3 93.03 49** IAmb IAmb 04 05 41.8
comp=Z,96nm,1.9s
SPR3 IAMs_20 IAMs_20 04 45 04.2
comp=Z,40µm,18.0s
**F21K Alatna River 93.07 13** IAmb IAmb 04 05 40.3
comp=Z,165nm,1.4s
F21K IAMs_20 IAMs_20 04 43 33.9
comp=Z,34µm,20.0s
**F21K Alatna River 93.07 13** P **P 04 05 06.8 -0.4**
baz=214,SNR=24
**CCUT Cedar City 93.09 51** IAMs_20 IAMs_20 04 39 21.9
comp=Z,39µm,20.0s
**ZAK Zakamensk 93.14 324** *e* P **P 04 05 07.5 -0.5**
ZAK pmax pmax
comp=Z,133nm,1.4s
**PSUT Pine Spring 93.17 50** IAMs_20 IAMs_20 04 45 45.8
comp=Z,45µm,18.0s
**ELK Elko 93.18 47** IAMs_20 IAMs_20 04 45 34.8
comp=Z,33µm,18.0s
**ELK Elko 93.18 47** LR LR 04 39 02.2
comp=Z,25µm,21.9s,baz=252,slow=30
**T35M Bob Quinn 93.19 28** IAMs_20 IAMs_20 04 39 32.2
comp=Z,31µm,21.0s
**T35M Bob Quinn 93.19 28** P **P 04 05 08.0 0.0**
baz=233
**X16A Lo Mia Camp, P 93.19 54** IAMs_20 IAMs_20 04 45 01.7
comp=Z,44µm,18.0s
**O30N Mendenhall 93.23 23** IAMs_20 IAMs_20 04 39 53.1
comp=Z,44µm,21.0s
**O30N Mendenhall 93.23 23** P **P 04 05 07.2 -0.9**
baz=229,SNR=9.6
**D19K Kuna River 93.25 11** IAMs_20 IAMs_20 04 41 42.6
comp=Z,39µm,20.0s
**D19K Kuna River 93.25 11** P **P 04 05 07.6 -0.4**
baz=209,SNR=15
**G22K Bettles 93.25 14** P **P 04 05 08.0 0.0**
baz=215
**H24K Noodor Dome 93.25 16** P **P 04 05 06.1 -2.0**
baz=218
**KNB Kanab 93.26 51** IAmb IAmb 04 05 48.5
comp=Z,158nm,1.9s
KNB IAMs_20 IAMs_20 04 39 23.3
comp=Z,34µm,21.0s
**SZCU Shurtz Canyon 93.31 51** IAmb IAmb 04 05 49.8
comp=Z,135nm,2.0s
SZCU IAMs_20 IAMs_20 04 39 29.7
comp=Z,34µm,21.0s
**N30M Aishikik Lake 93.33 22** IAmb IAmb 04 05 41.5
comp=Z,126nm,1.9s
**N30M Aishikik Lake 93.33 22** P **P 04 05 08.0 -0.7**
baz=228,SNR=6.1
**P32M Atlin 93.36 25** IAMs_20 IAMs_20 04 39 43.7
comp=Z,36µm,20.0s
**P32M Atlin 93.36 25** P **P 04 05 09.1 +0.3**
baz=230
**S34M Telegraph Cree 93.37 27** IAmb IAmb 04 06 09.0
comp=Z,118nm,1.6s
S34M IAMs_20 IAMs_20 04 39 45.0
comp=Z,38µm,20.0s
**S34M Telegraph Cree 93.37 27** P **P 04 05 09.5 +0.7**
baz=233
**E08A Dider Farm, El 93.38 41** IAMs_20 IAMs_20 04 46 42.5
comp=Z,47µm,18.0s
**U15A North Rim 93.39 52** IAMs_20 IAMs_20 04 39 27.0
comp=Z,29µm,20.0s
**E20K Nigu River 93.40 12** P **P 04 05 08.6 -0.1**
baz=211
**B18K Kokolik River 93.41 10** P **P 04 05 08.8 +0.1**
baz=206
**J26L Joseph Creek 93.41 18** IAmb IAmb 04 05 42.0
comp=Z,157nm,1.4s
J26L IAMs_20 IAMs_20 04 49 59.3
comp=Z,28µm,18.0s
**J26L Joseph Creek 93.41 18** P **P 04 05 07.8 -1.1**
baz=222,SNR=36

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **G23K** | **Bananza Creek** | **93.42** | **15** | P | **P** | **04 05 08.6** | **-0.3** | |
| | baz=217,SNR=12 | | | | | | | |
| **K27K** | **Chicken** | **93.50** | **19** | IAMs_20 | IAMs_20 | 04 40 39.5 | | |
| | comp=Z,27µm,21.0s | | | | | | | |
| **K27K** | **Chicken** | **93.50** | **19** | P | **P** | **04 05 08.7** | **-0.5** | |
| | baz=224 | | | | | | | |
| **C19K** | **Lookout Ridge** | **93.53** | **10** | IAMs_20 | IAMs_20 | 04 41 08.0 | | |
| | comp=Z,49µm,21.0s | | | | | | | |
| **C19K** | **Lookout Ridge** | **93.53** | **10** | P | **P** | **04 05 09.2** | **-0.1** | |
| | baz=208,SNR=12 | | | | | | | |
| **M29M** | **Somme Creek** | **93.53** | **21** | IAMs_20 | IAMs_20 | 04 43 01.8 | | |
| | comp=Z,27µm,20.0s | | | | | | | |
| **M29M** | **Somme Creek** | **93.53** | **21** | P | **P** | **04 05 09.1** | **-0.5** | |
| | baz=227,SNR=27 | | | | | | | |
| **Q32M** | **Nakina River** | **93.55** | **26** | IAmb | IAmb | 04 05 44.8 | | |
| | comp=Z,98nm,1.6s | | | | | | | |
| Q32M | | | | IAMs_20 | IAMs_20 | 04 39 08.5 | | |
| | comp=Z,54µm,21.0s | | | | | | | |
| **Q32M** | **Nakina River** | **93.55** | **26** | P | **P** | **04 05 09.1** | **-0.7** | |
| | baz=232 | | | | | | | |
| **IRK** | **Irkutsk** | **93.58** | **326** | *e*P | **P** | **04 05 08.7** | **-1.2** | |
| IRK | | | | *e*S | **SKSac** | **04 15 43.5** | **+0.8** | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,157nm,3.0s | | | | | | | |
| **F22K** | **John River** | **93.59** | **14** | P | **P** | **04 05 09.6** | **0.0** | |
| | baz=215 | | | | | | | |
| **LL02** | **Futaleuf** | **93.59** | **140** | P | **P** | **04 05 10.0** | **-0.4** | |
| LL02 | | | | IAmb | IAmb | 04 05 19.5 | | |
| | comp=Z,66nm,0.9s | | | | | | | |
| **319A** | **Douglas** | **93.61** | **58** | IAMs_20 | IAMs_20 | 04 38 40.2 | | |
| | comp=Z,47µm,22.0s | | | | | | | |
| **WHY** | **Whitehorse** | **93.61** | **24** | IAMs_20 | IAMs_20 | 04 40 03.0 | | |
| | comp=Z,46µm,20.0s | | | | | | | |
| **WHY** | **Whitehorse** | **93.61** | **24** | P | **P** | **04 05 09.1** | **-0.9** | |
| | baz=230 | | | | | | | |
| **PRP** | **Porcupine Dome** | **93.63** | **17** | IAMs_20 | IAMs_20 | 04 41 52.0 | | |
| | comp=Z,43µm,20.0s | | | | | | | |
| **PRP** | **Porcupine Dome** | **93.63** | **17** | P | **P** | **04 05 08.4** | **-1.6** | |
| | baz=221,SNR=9.3 | | | | | | | |
| **BMO** | **Blue Mountains** | **93.69** | **43** | IAMs_20 | IAMs_20 | 04 39 37.9 | | |
| | comp=Z,42µm,20.0s | | | | | | | |
| **WUAZ** | **Wupatki** | **93.69** | **53** | IAMs_20 | IAMs_20 | 04 45 31.0 | | |
| | comp=Z,42µm,18.0s | | | | | | | |
| **D20K** | **Etivluk River** | **93.71** | **12** | P | **P** | **04 05 10.0** | **-0.1** | |
| | baz=211,SNR=29 | | | | | | | |
| **D08A** | **Wollman Farm,** | **93.73** | **40** | IAMs_20 | IAMs_20 | 04 39 59.9 | | |
| | comp=Z,31µm,20.0s | | | | | | | |
| **BOK** | **Bokaro** | **93.79** | **294** | *e*P | **P** | **04 05 12.2** | **+0.7** | |
| BOK | | | | IAMs_20 | IAMs_20 | 04 18 07.0 | | |
| | comp=Z,7µm,20.2s | | | | | | | |
| **COLD** | **Coldfoot** | **93.80** | **14** | P | **P** | **04 05 10.5** | **-0.1** | |
| | baz=216,SNR=11 | | | | | | | |
| **PKCU** | **Pink Cliffs** | **93.81** | **51** | IAmb | IAmb | 04 05 48.1 | | |
| | comp=Z,239nm,1.9s | | | | | | | |
| PKCU | | | | IAMs_20 | IAMs_20 | 04 39 42.8 | | |
| | comp=Z,31µm,21.0s | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **93.82** | **23** | IAmb | IAmb | 04 05 43.7 | | |
| | comp=Z,91nm,1.4s | | | | | | | |
| N31M | | | | IAMs_20 | IAMs_20 | 04 40 43.6 | | |
| | comp=Z,37µm,20.0s | | | | | | | |
| **N31M** | **Braeburn, Yuko** | **93.82** | **23** | P | **P** | **04 05 10.2** | **-0.6** | |
| | baz=229 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **93.88** | **129** | T | T | 05 49 24.3 | | |
| | baz=238,slow=74,SNR=39 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **93.89** | **129** | T | T | 05 49 24.7 | | |
| | baz=238,slow=74,SNR=19 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **93.89** | **129** | T | T | 05 49 27.6 | | |
| | baz=238,slow=74,SNR=16 | | | | | | | |
| **MFID** | **Camas Ranch** | **93.98** | **45** | IAMs_20 | IAMs_20 | 04 39 29.8 | | |
| | comp=Z,33µm,21.0s | | | | | | | |
| **E21K** | **Killik River** | **93.99** | **13** | IAMs_20 | IAMs_20 | 04 44 11.9 | | |
| | comp=Z,42µm,20.0s | | | | | | | |
| **E21K** | **Killik River** | **93.99** | **13** | P | **P** | **04 05 10.6** | **-0.9** | |
| | baz=213 | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **94.03** | **16** | IAmb | IAmb | 04 05 44.3 | | |
| | comp=Z,158nm,1.6s | | | | | | | |
| G24K | | | | IAMs_20 | IAMs_20 | 04 53 29.7 | | |
| | comp=Z,25µm,18.0s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **94.03** | **16** | P | **P** | **04 05 10.5** | **-1.1** | |
| | baz=219,SNR=16 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **94.06** | **128** | T | T | 05 49 35.3 | | |
| | baz=241,slow=73,SNR=3.1 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **94.07** | **128** | T | T | 05 49 34.1 | | |
| | baz=241,slow=73,SNR=2.9 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **94.08** | **128** | T | T | 05 49 39.3 | | |
| | baz=241,slow=73,SNR=5.5 | | | | | | | |
| **L29M** | **L29M** | **94.10** | **21** | IAMs_20 | IAMs_20 | 04 56 21.9 | | |
| | comp=Z,28µm,18.0s | | | | | | | |
| **L29M** | **L29M** | **94.10** | **21** | P | **P** | **04 05 11.8** | **-0.3** | |
| | baz=227,SNR=30 | | | | | | | |
| **P33M** | **Teslin, Yukon** | **94.11** | **25** | IAMs_20 | IAMs_20 | 04 39 46.4 | | |
| | comp=Z,37µm,21.0s | | | | | | | |
| **P33M** | **Teslin, Yukon** | **94.11** | **25** | P | **P** | **04 05 11.2** | **-1.0** | |
| | baz=231 | | | | | | | |
| **B08A** | **Colville Reser** | **94.11** | **39** | IAMs_20 | IAMs_20 | 04 40 48.8 | | |
| | comp=Z,29µm,20.0s | | | | | | | |
| **H25L** | **Birch Creek** | **94.12** | **16** | P | **P** | **04 05 10.8** | **-1.2** | |
| | baz=220 | | | | | | | |
| **I26K** | **Coal Creek Min** | **94.12** | **18** | IAMs_20 | IAMs_20 | 04 54 36.4 | | |
| | comp=Z,35µm,18.0s | | | | | | | |
| **I26K** | **Coal Creek Min** | **94.12** | **18** | P | **P** | **04 05 11.2** | **-0.8** | |
| | baz=223 | | | | | | | |
| **MTPU** | **Mount Pierson** | **94.15** | **51** | IAmb | IAmb | 04 06 24.3 | | |
| | comp=Z,98nm,2.0s | | | | | | | |
| MTPU | | | | IAMs_20 | IAMs_20 | 04 39 57.8 | | |
| | comp=Z,48µm,20.0s | | | | | | | |
| **DLBC** | **Dease Lake** | **94.16** | **27** | IAMs_20 | IAMs_20 | 04 39 28.7 | | |
| | comp=Z,41µm,22.0s | | | | | | | |
| **DLBC** | **Dease Lake** | **94.16** | **27** | LR | LR | 04 39 39.7 | | |
| | comp=Z,37µm,21.0s,baz=255,slow=30 | | | | | | | |
| **DLBC** | **Dease Lake** | **94.16** | **27** | P | **P** | **04 05 11.3** | **-1.2** | |
| | baz=234 | | | | | | | |
| **RAGD** | **RAYAGADA** | **94.19** | **289** | *e*P | **P** | **04 05 14.7** | **+1.3** | |
| RAGD | | | | IAmb | IAmb | 04 05 15.6 | | |
| | comp=Z,273nm,1.8s | | | | | | | |
| **M30M** | **Minto, Yukon** | **94.19** | **22** | IAMs_20 | IAMs_20 | 04 42 15.2 | | |
| | comp=Z,37µm,20.0s | | | | | | | |
| **M30M** | **Minto, Yukon** | **94.19** | **22** | P | **P** | **04 05 11.3** | **-1.2** | |
| | baz=228,SNR=26 | | | | | | | |
| **DUN6** | **Lazy B Ranch** | **94.23** | **57** | IAmb | IAmb | 04 05 59.1 | | |
| | comp=Z,118nm,1.4s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **94.26** | **42** | IAMs_20 | IAMs_20 | 04 47 21.8 | | |
| | comp=Z,41µm,18.0s | | | | | | | |
| **A19K** | **Wainwright** | **94.28** | **9** | P | **P** | **04 05 12.9** | **+0.2** | |
| | baz=207 | | | | | | | |
| **EGAK** | **Eagle** | **94.32** | **19** | IAMs_20 | IAMs_20 | 04 41 14.4 | | |
| | comp=Z,28µm,21.0s | | | | | | | |
| **EGAK** | **Eagle** | **94.32** | **19** | P | **P** | **04 05 11.6** | **-1.4** | |
| | baz=224,SNR=57 | | | | | | | |
| **R33M** | **Jennings River** | **94.34** | **26** | IAmb | IAmb | 04 05 47.2 | | |
| | comp=Z,146nm,1.9s | | | | | | | |
| R33M | | | | IAMs_20 | IAMs_20 | 04 39 33.6 | | |
| | comp=Z,45µm,21.0s | | | | | | | |
| **R33M** | **Jennings River** | **94.34** | **26** | P | **P** | **04 05 12.7** | **-0.7** | |
| | baz=233 | | | | | | | |
| **X18A** | **Snowflake** | **94.36** | **55** | IAMs_20 | IAMs_20 | 04 43 57.7 | | |
| | comp=Z,27µm,18.0s | | | | | | | |
| **DAWY** | **Dawson** | **94.36** | **20** | IAmb | IAmb | 04 06 12.3 | | |
| | comp=Z,205nm,1.7s | | | | | | | |
| **DAWY** | **Dawson** | **94.36** | **20** | P | **P** | **04 05 12.3** | **-0.9** | |
| | baz=226 | | | | | | | |
| **G25K** | **Bearman Lake** | **94.43** | **16** | P | **P** | **04 05 12.6** | **-0.8** | |
| | baz=220,SNR=5.6 | | | | | | | |
| **C21K** | **Knifeblade Rid** | **94.44** | **12** | P | **P** | **04 05 13.8** | **+0.3** | |
| | baz=212,SNR=18 | | | | | | | |
| **C09A** | **Chrisman Ranch** | **94.47** | **40** | IAMs_20 | IAMs_20 | 04 47 30.4 | | |
| | comp=Z,31µm,18.0s | | | | | | | |
| **FYU** | **Fort Yukon** | **94.50** | **16** | IAmb | IAmb | 04 06 36.2 | | |
| | comp=Z,76nm,1.5s | | | | | | | |
| FYU | | | | IAMs_20 | IAMs_20 | 04 54 10.1 | | |
| | comp=Z,34µm,18.0s | | | | | | | |
| **F24K** | **Squaw Lake** | **94.58** | **15** | IAmb | IAmb | 04 05 47.7 | | |
| | comp=Z,76nm,1.2s | | | | | | | |
| F24K | | | | IAMs_20 | IAMs_20 | 04 44 04.0 | | |
| | comp=Z,34µm,19.0s | | | | | | | |
| **F24K** | **Squaw Lake** | **94.58** | **15** | P | **P** | **04 05 13.9** | **-0.3** | |
| | baz=218,SNR=20 | | | | | | | |
| **N32M** | **Quiet Lake** | **94.60** | **24** | IAMs_20 | IAMs_20 | 04 40 34.3 | | |
| | comp=Z,49µm,21.0s | | | | | | | |
| **N32M** | **Quiet Lake** | **94.60** | **24** | P | **P** | **04 05 13.9** | **-0.6** | |
| | baz=231 | | | | | | | |
| **E23K** | **Chandalar** | **94.61** | **14** | IAmb | IAmb | 04 06 14.9 | | |
| | comp=Z,139nm,1.4s | | | | | | | |
| E23K | | | | IAMs_20 | IAMs_20 | 04 55 59.6 | | |
| | comp=Z,30µm,18.0s | | | | | | | |
| **E23K** | **Chandalar** | **94.61** | **14** | P | **P** | **04 05 13.5** | **-0.8** | |
| | baz=217,SNR=15 | | | | | | | |
| **D22K** | **Ayikyak River** | **94.62** | **13** | IAMs_20 | IAMs_20 | 04 44 22.9 | | |
| | comp=Z,53µm,20.0s | | | | | | | |
| **D22K** | **Ayikyak River** | **94.62** | **13** | P | **P** | **04 05 14.3** | **0.0** | |
| | baz=214,SNR=24 | | | | | | | |
| **B20K** | **Meade River** | **94.74** | **11** | IAmb | IAmb | 04 05 47.5 | | |
| | comp=Z,65nm,1.1s | | | | | | | |
| B20K | | | | IAMs_20 | IAMs_20 | 04 41 59.2 | | |
| | comp=Z,45µm,21.0s | | | | | | | |
| **B20K** | **Meade River** | **94.74** | **11** | P | **P** | **04 05 14.5** | **-0.2** | |
| | baz=210 | | | | | | | |
| **W18A** | **Petrified Fore** | **94.75** | **54** | P | **P** | **04 05 16.0** | **+0.1** | |
| | baz=246 | | | | | | | |
| **BGU** | **Big Grassy Mou** | **94.77** | **48** | IAMs_20 | IAMs_20 | 04 47 11.9 | | |
| | comp=Z,33µm,18.0s | | | | | | | |
| **I27K** | **Kandik River** | **94.78** | **18** | P | **P** | **04 05 13.8** | **-1.4** | |
| | baz=224,SNR=23 | | | | | | | |
| **M31M** | **Drury Creek, Y** | **94.79** | **23** | IAMs_20 | IAMs_20 | 04 41 03.1 | | |
| | comp=Z,46µm,20.0s | | | | | | | |
| **M31M** | **Drury Creek, Y** | **94.79** | **23** | P | **P** | **04 05 14.0** | **-1.2** | |
| | baz=230 | | | | | | | |
| **MDRS** | **Chennai** | **94.79** | **282** | *e*P | **P** | **04 05 19.4** | **+3.1** | |
| MDRS | | | | IAMs_20 | IAMs_20 | 04 18 55.7 | | |
| | comp=Z,5µm,20.5s | | | | | | | |
| **K29M** | **Barlow Dome** | **94.80** | **21** | IAmb | IAmb | 04 05 48.4 | | |
| | comp=Z,137nm,1.6s | | | | | | | |
| K29M | | | | IAMs_20 | IAMs_20 | 04 50 51.4 | | |
| | comp=Z,24µm,18.0s | | | | | | | |
| **K29M** | **Barlow Dome** | **94.80** | **21** | P | **P** | **04 05 14.8** | **-0.6** | |
| | baz=228,SNR=21 | | | | | | | |
| **JHSG** | **JHARSUGUGA** | **94.84** | **291** | *e*P | **P** | **04 05 18.1** | **+1.7** | |
| **B21K** | **Ikpikpuk River** | **94.86** | **12** | IAMs_20 | IAMs_20 | 04 41 20.6 | | |
| | comp=Z,52µm,21.0s | | | | | | | |
| **B21K** | **Ikpikpuk River** | **94.86** | **12** | P | **P** | **04 05 15.0** | **-0.4** | |
| | baz=213 | | | | | | | |
| **E24K** | **Your Creek** | **94.88** | **14** | IAmb | IAmb | 04 05 57.9 | | |
| | comp=Z,126nm,1.8s | | | | | | | |
| E24K | | | | IAMs_20 | IAMs_20 | 04 44 45.0 | | |
| | comp=Z,33µm,20.0s | | | | | | | |
| **E24K** | **Your Creek** | **94.88** | **14** | P | **P** | **04 05 15.2** | **-0.4** | |
| | baz=218 | | | | | | | |
| **HLID** | **Hailey** | **94.97** | **45** | IAMs_20 | IAMs_20 | 04 39 40.0 | | |
| | comp=Z,35µm,22.0s | | | | | | | |
| **J29N** | **Klondike Camp** | **95.00** | **20** | P | **P** | **04 05 14.8** | **-1.4** | |
| | baz=227 | | | | | | | |
| **NLU** | **North Lily Min** | **95.02** | **49** | IAMs_20 | IAMs_20 | 04 48 29.8 | | |
| | comp=Z,44µm,18.0s | | | | | | | |
| **MOY** | **Mondy** | **95.03** | **324** | *e*P | **P** | **04 05 16.7** | **0.0** | |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,177nm,2.4s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **95.08** | **14** | IAmb | IAmb | 04 06 16.9 | | |
| | comp=Z,142nm,1.6s | | | | | | | |
| TOLK | | | | IAMs_20 | IAMs_20 | 04 51 55.2 | | |
| | comp=Z,32µm,18.0s | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **95.08** | **14** | P | **P** | **04 05 15.4** | **-1.1** | |
| | baz=217,SNR=7.7 | | | | | | | |
| **D23K** | **Nanushuk River** | **95.11** | **13** | IAmb | IAmb | 04 06 12.5 | | |
| | comp=Z,154nm,1.3s | | | | | | | |
| **D23K** | **Nanushuk River** | **95.11** | **13** | P | **P** | **04 05 15.8** | **-0.7** | |
| | baz=216,SNR=14 | | | | | | | |
| **HMU** | **Henry Mountain** | **95.14** | **51** | IAMs_20 | IAMs_20 | 04 47 40.2 | | |
| | comp=Z,31µm,18.0s | | | | | | | |
| **I28M** | **Miner Creek** | **95.16** | **19** | IAMs_20 | IAMs_20 | 04 44 38.7 | | |
| | comp=Z,32µm,20.0s | | | | | | | |
| **I28M** | **Miner Creek** | **95.16** | **19** | P | **P** | **04 05 16.1** | **-0.9** | |
| | baz=226 | | | | | | | |
| **G26K** | **Porcupine Rive** | **95.17** | **17** | P | **P** | **04 05 16.4** | **-0.4** | |
| | baz=222,SNR=33 | | | | | | | |
| **F25K** | **Christian Rive** | **95.18** | **16** | IAmb | IAmb | 04 06 16.8 | | |
| | comp=Z,97nm,1.6s | | | | | | | |
| **F25K** | **Christian Rive** | **95.18** | **16** | P | **P** | **04 05 17.0** | **0.0** | |
| | baz=221,SNR=14 | | | | | | | |
| **FARO** | **Faro, Yukon** | **95.18** | **23** | IAMs_20 | IAMs_20 | 04 41 15.6 | | |
| | comp=Z,42µm,20.0s | | | | | | | |
| **FARO** | **Faro, Yukon** | **95.18** | **23** | P | **P** | **04 05 15.9** | **-1.1** | |
| | baz=231 | | | | | | | |
| **121A** | **Cookes Peak, D** | **95.23** | **57** | IAMs_20 | IAMs_20 | 04 39 30.1 | | |
| | comp=Z,46µm,22.0s | | | | | | | |
| **121A** | **Cookes Peak, D** | **95.23** | **57** | P | **P** | **04 05 17.6** | **-0.6** | |
| | baz=247 | | | | | | | |
| **H27K** | **Steamboat Moun** | **95.26** | **18** | P | **P** | **04 05 16.4** | **-1.0** | |
| | baz=224,SNR=20 | | | | | | | |
| **MPU** | **Maple Canyon** | **95.36** | **49** | IAMs_20 | IAMs_20 | 04 47 16.6 | | |
| | comp=Z,45µm,18.0s | | | | | | | |
| **NEW** | **Newport** | **95.37** | **40** | IAMs_20 | IAMs_20 | 04 48 07.2 | | |
| | comp=Z,29µm,18.0s | | | | | | | |
| **NEW** | **Newport** | **95.37** | **40** | LR | LR | 04 45 58.1 | | |
| | comp=Z,17µm,18.1s,baz=275,slow=34 | | | | | | | |
| **CTU** | **Camp Tracy** | **95.55** | **48** | IAMs_20 | IAMs_20 | 04 46 46.8 | | |
| | comp=Z,46µm,18.0s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **95.59** | **19** | IAmb | IAmb | 04 05 51.2 | | |
| | comp=Z,168nm,1.6s | | | | | | | |
| I29M | | | | IAMs_20 | IAMs_20 | 04 41 42.1 | | |
| | comp=Z,27µm,21.0s | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **95.59** | **19** | P | **P** | **04 05 17.7** | **-1.1** | |
| | baz=227,SNR=33 | | | | | | | |
| **F26K** | **Sheenjek River** | **95.64** | **16** | IAmb | IAmb | 04 05 54.1 | | |
| | comp=Z,84nm,1.7s | | | | | | | |
| **F26K** | **Sheenjek River** | **95.64** | **16** | P | **P** | **04 05 19.1** | **0.0** | |
| | baz=222,SNR=14 | | | | | | | |
| **G27K** | **Doyon Strip** | **95.64** | **17** | IAMs_20 | IAMs_20 | 04 43 05.3 | | |
| | comp=Z,39µm,20.0s | | | | | | | |
| **G27K** | **Doyon Strip** | **95.64** | **17** | P | **P** | **04 05 18.6** | **-0.4** | |
| | baz=224,SNR=18 | | | | | | | |
| **WTLY** | **Watson Lake, Y** | **95.65** | **26** | IAMs_20 | IAMs_20 | 04 40 25.3 | | |
| | comp=Z,49µm,21.0s | | | | | | | |
| **WTLY** | **Watson Lake, Y** | **95.65** | **26** | P | **P** | **04 05 18.9** | **-0.3** | |
| | baz=235 | | | | | | | |
| **D24K** | **Happy Valley** | **95.66** | **14** | IAMs_20 | IAMs_20 | 04 55 54.6 | | |
| | comp=Z,31µm,18.0s | | | | | | | |
| **D24K** | **Happy Valley** | **95.66** | **14** | P | **P** | **04 05 19.2** | **+0.1** | |
| | baz=218 | | | | | | | |
| **J30M** | **Hart River** | **95.68** | **20** | IAmb | IAmb | 04 06 19.6 | | |
| | comp=Z,104nm,1.8s | | | | | | | |
| J30M | | | | IAMs_20 | IAMs_20 | 04 53 00.6 | | |
| | comp=Z,27µm,18.0s | | | | | | | |
| **J30M** | **Hart River** | **95.68** | **20** | P | **P** | **04 05 18.2** | **-1.2** | |
| | baz=229,SNR=7.0 | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **95.69** | **12** | IAMs_20 | IAMs_20 | 04 43 33.3 | | |
| | comp=Z,44µm,20.0s | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **95.69** | **12** | P | **P** | **04 05 18.9** | **-0.3** | |
| | baz=214 | | | | | | | |
| **JLU** | **Jordanelle** | **95.72** | **49** | IAMs_20 | IAMs_20 | 04 47 18.3 | | |
| | comp=Z,40µm,18.0s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **95.77** | **50** | IAMs_20 | IAMs_20 | 04 46 03.5 | | |
| | comp=Z,44µm,18.0s | | | | | | | |
| **PLCA** | **Paso Flores** | **95.80** | **138** | P | **P** | **04 05 21.3** | **+0.6** | |
| | comp=Z,16nm,0.9s,baz=218,slow=4.6,SNR=18 | | | | | | | |
| PLCA | | | | PKKP | **PKKPbc** | **04 22 11.0** | **+0.6** | |
| | comp=Z,2.8nm,1.0s,baz=115,slow=2.6,SNR=3.3 | | | | | | | |
| PLCA | | | | LR | LR | 04 42 22.7 | | |
| | comp=Z,10µm,18.3s,baz=248,slow=32 | | | | | | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **C23K** | **Itkillik River** | **95.83** | **13** | IAMs_20 | IAMs_20 | 04 45 53.9 | | |
| | comp=Z,41µm,20.0s | | | | | | | |
| **C23K** | **Itkillik River** | **95.83** | **13** | P | **P** | **04 05 20.1** | **+0.3** | |
| | baz=216,SNR=17 | | | | | | | |
| **ZAIG** | **Zacatecas** | **95.88** | **68** | IAMs_20 | IAMs_20 | 04 38 48.1 | | |
| | comp=Z,38µm,22.0s | | | | | | | |
| **GO06** | **Curarrehue** | **95.89** | **137** | IAmb | IAmb | 04 05 26.7 | | |
| | comp=Z,70nm,1.2s | | | | | | | |
| **MOIG** | **Morelia** | **95.96** | **71** | IAMs_20 | IAMs_20 | 04 45 29.3 | | |
| | comp=Z,26µm,18.0s | | | | | | | |
| **A21K** | **Barrow** | **95.97** | **10** | P | **P** | **04 05 19.5** | **-0.8** | |
| | baz=211 | | | | | | | |
| **A22K** | **Sinclair Lake** | **95.97** | **11** | P | **P** | **04 05 20.6** | **+0.2** | |
| | baz=212 | | | | | | | |
| **I30M** | **Mount Dempster** | **96.10** | **20** | IAmb | IAmb | 04 05 53.8 | | |
| | comp=Z,166nm,1.9s | | | | | | | |
| I30M | | | | IAMs_20 | IAMs_20 | 04 56 09.5 | | |
| | comp=Z,25µm,18.0s | | | | | | | |
| **I30M** | **Mount Dempster** | **96.10** | **20** | P | **P** | **04 05 20.2** | **-1.1** | |
| | baz=229,SNR=27 | | | | | | | |
| **C24K** | **Franklin Bluff** | **96.13** | **13** | IAMs_20 | IAMs_20 | 04 45 32.6 | | |
| | comp=Z,41µm,20.0s | | | | | | | |
| **C24K** | **Franklin Bluff** | **96.13** | **13** | P | **P** | **04 05 20.6** | **-0.5** | |
| | baz=218,SNR=12 | | | | | | | |
| **SALM** | **Salem** | **96.14** | **280** | *e*P | **P** | **04 05 24.2** | **+1.7** | |
| **TRD** | **Trivandrum** | **96.14** | **277** | *e*P | **P** | **04 05 23.2** | **+0.7** | |
| **H29M** | **Whitestone** | **96.16** | **19** | IAmb | IAmb | 04 05 54.2 | | |
| | comp=Z,118nm,1.5s | | | | | | | |
| H29M | | | | IAMs_20 | IAMs_20 | 04 55 54.2 | | |
| | comp=Z,32µm,18.0s | | | | | | | |
| **H29M** | **Whitestone** | **96.16** | **19** | P | **P** | **04 05 20.3** | **-1.1** | |
| | baz=227,SNR=18 | | | | | | | |
| **BSUT** | **Blindstream Ca** | **96.18** | **49** | IAMs_20 | IAMs_20 | 04 47 35.4 | | |
| | comp=Z,41µm,18.0s | | | | | | | |
| **D25K** | **Kavik River** | **96.34** | **14** | IAmb | IAmb | 04 05 55.0 | | |
| | comp=Z,86nm,1.5s | | | | | | | |
| D25K | | | | IAMs_20 | IAMs_20 | 04 45 32.4 | | |
| | comp=Z,28µm,20.0s | | | | | | | |
| **D25K** | **Kavik River** | **96.34** | **14** | P | **P** | **04 05 21.9** | **-0.3** | |
| | baz=220 | | | | | | | |
| **BI05** | **Punta Hualpn** | **96.35** | **134** | IAMs_20 | IAMs_20 | 04 42 51.6 | | |
| | comp=Z,29µm,18.0s | | | | | | | |
| **LIRD** | **Liard River Hi** | **96.38** | **27** | P | **P** | **04 05 22.8** | **+0.2** | |
| | baz=237 | | | | | | | |
| **TOAD** | **Toad River Com** | **96.45** | **28** | P | **P** | **04 05 23.0** | **0.0** | |
| | baz=238 | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **96.46** | **322** | *e*P | **P** | **04 05 23.9** | **+0.6** | |
| KNGR | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.1s | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **96.49** | **56** | P | **P** | **04 05 24.4** | **+0.6** | |
| | baz=248 | | | | | | | |
| **E27K** | **Coleen River** | **96.65** | **16** | IAmb | IAmb | 04 05 58.3 | | |
| | comp=Z,96nm,1.4s | | | | | | | |
| E27K | | | | IAMs_20 | IAMs_20 | 04 57 23.9 | | |
| | comp=Z,23µm,18.0s | | | | | | | |
| **E27K** | **Coleen River** | **96.65** | **16** | P | **P** | **04 05 23.5** | **-0.1** | |
| | baz=224,SNR=20 | | | | | | | |
| **TGTN** | **Hyland Airport** | **96.68** | **25** | P | **P** | **04 05 23.4** | **-0.5** | |
| | baz=235 | | | | | | | |
| **F28M** | **Old Crow** | **96.71** | **17** | IAmb | IAmb | 04 05 56.8 | | |
| | comp=Z,58nm,1.4s | | | | | | | |
| F28M | | | | IAMs_20 | IAMs_20 | 04 43 06.4 | | |
| | comp=Z,38µm,20.0s | | | | | | | |
| **F28M** | **Old Crow** | **96.71** | **17** | P | **P** | **04 05 23.6** | **-0.3** | |
| | baz=226,SNR=15 | | | | | | | |
| **G29M** | **Pine Creek** | **96.74** | **18** | IAmb | IAmb | 04 05 56.7 | | |
| | comp=Z,105nm,1.4s | | | | | | | |
| G29M | | | | IAMs_20 | IAMs_20 | 04 43 10.3 | | |
| | comp=Z,33µm,20.0s | | | | | | | |
| **G29M** | **Pine Creek** | **96.74** | **18** | P | **P** | **04 05 23.1** | **-0.9** | |
| | baz=227,SNR=18 | | | | | | | |
| **EPYK** | **Eagle Plains** | **96.76** | **19** | IAMs_20 | IAMs_20 | 04 56 03.9 | | |
| | comp=Z,34µm,18.0s | | | | | | | |
| **EPYK** | **Eagle Plains** | **96.76** | **19** | P | **P** | **04 05 23.6** | **-0.5** | |
| | baz=228,SNR=9.4 | | | | | | | |
| **DLMT** | **Dillon** | **96.91** | **44** | IAMs_20 | IAMs_20 | 04 41 04.3 | | |
| | comp=Z,43µm,21.0s | | | | | | | |
| **H31M** | **Peel River** | **97.12** | **20** | IAmb | IAmb | 04 05 59.3 | | |
| | comp=Z,69nm,1.4s | | | | | | | |
| **H31M** | **Peel River** | **97.12** | **20** | P | **P** | **04 05 24.2** | **-1.6** | |
| | baz=230 | | | | | | | |
| **C26K** | **Camden Bay** | **97.12** | **14** | P | Pdif | 04 05 26.2 | +0.5 | |
| | baz=221,SNR=21 | | | | | | | |
| **ANMO** | **Albuquerque** | **97.17** | **55** | LR | LR | 04 41 58.7 | | |
| | comp=Z,35µm,20.5s,baz=252,slow=31 | | | | | | | |
| **ANMO** | **Albuquerque** | **97.17** | **55** | *i* P | **P** | **04 05 26.2** | **-0.8** | |
| **C27K** | **Jago River** | **97.18** | **15** | IAmb | IAmb | 04 06 01.6 | | |
| | comp=Z,87nm,1.4s | | | | | | | |
| C27K | | | | IAMs_20 | IAMs_20 | 04 45 48.8 | | |
| | comp=Z,28µm,19.0s | | | | | | | |
| **C27K** | **Jago River** | **97.18** | **15** | P | **P** | **04 05 25.9** | **0.0** | |
| | baz=222,SNR=13 | | | | | | | |
| **TPAW** | **Teton Pass** | **97.23** | **46** | IAMs_20 | IAMs_20 | 04 48 32.8 | | |
| | comp=Z,26µm,18.0s | | | | | | | |
| **FXWY** | **Fox Creek** | **97.24** | **46** | IAMs_20 | IAMs_20 | 04 49 08.1 | | |
| | comp=Z,26µm,18.0s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **97.31** | **19** | IAMs_20 | IAMs_20 | 04 57 04.5 | | |
| | comp=Z,37µm,18.0s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **97.31** | **19** | P | **P** | **04 05 25.8** | **-0.8** | |
| | baz=229,SNR=37 | | | | | | | |
| **TXAR** | **Lajitas Array** | **97.33** | **61** | P | **P** | **04 05 27.5** | **-0.2** | |
| | comp=Z,0.9nm,0.6s,baz=232,slow=6.2,SNR=11 | | | | | | | |
| TXAR | | | | PKKP | **PKKPbc** | **04 22 07.2** | **+0.8** | |
| | comp=Z,1.7nm,0.7s,baz=99,slow=3.6,SNR=9.3 | | | | | | | |
| TXAR | | | | PKPPKP | **P'P'df** | **04 30 22.4** | **+2.6** | |
| | comp=Z,0.9nm,1.1s,baz=139,slow=4.5,SNR=2.8 | | | | | | | |
| TXAR | | | | LR | LR | 04 41 04.5 | | |
| | comp=Z,41µm,20.7s,baz=250,slow=30 | | | | | | | |
| **E28M** | **Babbage River** | **97.49** | **17** | IAMs_20 | IAMs_20 | 04 44 52.1 | | |
| | comp=Z,29µm,20.0s | | | | | | | |
| **E28M** | **Babbage River** | **97.49** | **17** | P | **P** | **04 05 26.5** | **-0.8** | |
| | baz=226,SNR=25 | | | | | | | |
| **LOHW** | **Long Hollow** | **97.51** | **46** | IAMs_20 | IAMs_20 | 04 51 58.3 | | |
| | comp=Z,23µm,18.0s | | | | | | | |
| **D27M** | **Malcolm River** | **97.57** | **16** | IAMs_20 | IAMs_20 | 04 53 02.4 | | |
| | comp=Z,22µm,19.0s | | | | | | | |
| **D27M** | **Malcolm River** | **97.57** | **16** | P | Pdif | 04 05 27.9 | 0.0 | |
| | baz=225 | | | | | | | |
| **UNM** | **Universidad Na** | **97.61** | **72** | IAMs_20 | IAMs_20 | 04 47 18.2 | | |
| | comp=Z,30µm,18.0s | | | | | | | |
| **YHL** | **Hebgen Lake** | **97.62** | **45** | IAMs_20 | IAMs_20 | 04 50 30.1 | | |
| | comp=Z,27µm,18.0s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **97.63** | **44** | IAMs_20 | IAMs_20 | 04 41 48.2 | | |
| | comp=Z,43µm,20.0s | | | | | | | |
| **YPP** | **Pitchstone Pla** | **97.64** | **45** | IAMs_20 | IAMs_20 | 04 49 58.6 | | |
| | comp=Z,33µm,18.0s | | | | | | | |
| **KOTAN** | **Kotaneelee Air** | **97.64** | **27** | P | **P** | **04 05 28.0** | **-0.2** | |
| | baz=239 | | | | | | | |
| **BI02** | **San Fabin de** | **97.68** | **135** | IAmb | IAmb | 04 05 35.5 

comp=Z,36µm,18.0s
**SMCO Snowmass 98.35 51** IAMs_20 IAMs_20 04 49 26.0
comp=Z,40µm,18.0s
**F31M Tsiigehtchic 98.35 19** IAMs_20 IAMs_20 04 57 37.0
comp=Z,31µm,18.0s
**F31M Tsiigehtchic 98.35 19** Pdiff **P** **04 05 30.0 -1.2**
baz=231
**NGP Nagpur 98.73 289** *e*P Pdif 04 05 34.2 +0.1
**BRCI Bahraich 98.77 296** *e*P **P** **04 05 33.8 -0.3**
**SDCO Great Sand Dun 98.91 53** IAMs_20 IAMs_20 04 48 50.0
comp=Z,44µm,18.0s
**INK Inuvik 98.96 18** IAMs_20 IAMs_20 04 44 50.0
comp=Z,37µm,20.0s
**INK Inuvik 98.96 18** LR LR 04 45 01.3
comp=Z,36µm,20.6s,baz=228,slow=32
**INK Inuvik 98.96 18** Pdiff **P** **04 05 32.9 -1.0**
baz=232
**RLMT Red Lodge 98.98 45** IAMs_20 IAMs_20 04 42 03.0
comp=Z,25µm,21.0s
**BO01 Tunca 99.09 133** IAmb IAmb 04 06 47.4
comp=Z,114nm,1.9s
BO01 IAMs_20 IAMs_20 04 45 34.2
comp=Z,34µm,18.0s
**VA05 Santo Domingo 99.14 132** IAMs_20 IAMs_20 04 45 09.6
comp=Z,26µm,18.0s
**MT01 Popeta 99.28 132** IAmb IAmb 04 05 41.4
comp=Z,64nm,1.2s
MT01 IAMs_20 IAMs_20 04 45 06.1
comp=Z,26µm,18.0s
**VA01 Torpederas 99.47 131** IAMs_20 IAMs_20 04 45 35.6
comp=Z,34µm,18.0s
**WRGLY Wrigley 99.49 25** IAMs_20 IAMs_20 04 43 08.6
comp=Z,30µm,20.0s
**WRGLY Wrigley 99.49 25** Pdiff **Pdif** **04 05 34.8 -1.6**
baz=240
**T25A Trinidad 99.50 54** IAMs_20 IAMs_20 04 49 13.9
comp=Z,23µm,18.0s
**T25A Trinidad 99.50 54** Pdiff **Pdif** **04 05 36.2 -1.2**
baz=250
**MT09 Talagante 99.50 132** IAMs_20 IAMs_20 04 45 22.2
comp=Z,26µm,18.0s
**Q24A Divide 99.59 52** IAMs_20 IAMs_20 04 49 18.1
comp=Z,44µm,18.0s
**Q24A Divide 99.59 52** Pdiff **Pdif** **04 05 38.2 +0.3**
baz=250
**BO04 La Punta 99.64 133** IAMs_20 IAMs_20 04 44 50.9
comp=Z,31µm,18.0s
**MT02 Curacav 99.69 132** IAMs_20 IAMs_20 04 45 17.2
comp=Z,29µm,18.0s
**N23A Red Feather La 99.70 50** IAMs_20 IAMs_20 04 43 11.8
comp=Z,49µm,21.0s
**N23A Red Feather La 99.70 50** Pdiff **Pdif** **04 05 38.1 -0.1**
baz=249
**EGMT Eagleton 99.76 42** IAMs_20 IAMs_20 04 49 19.4
comp=Z,27µm,18.0s
**WMQ Urumqi 99.83 313** P **Pdif** **04 05 38.8 +0.3**
WMQ sP pwP 04 05 50.5 -0.3
WMQ PP **PP** **04 09 44.0 +0.4**
WMQ SKS **SKSac** **04 16 16.0 +0.3**
WMQ S **ScS** **04 17 10.3 -0.7**
WMQ pmax pmax
comp=Z,41nm,1.5s
WMQ pmax pmax
comp=Z,870nm,4.9s
WMQ LR LR
comp=Z,11µm,18.1s
WMQ LR LR
comp=Z,9µm,19.1s
WMQ LR LR
comp=Z,8µm,19.1s
**K22A Casper 99.92 48** IAMs_20 IAMs_20 04 51 21.3
comp=Z,38µm,18.0s
**VA06 Catapilco 99.97 131** IAMs_20 IAMs_20 04 46 32.7
comp=Z,34µm,18.0s
**MT03 Universidad Ad 99.99 132** IAMs_20 IAMs_20 04 45 28.1
comp=Z,31µm,18.0s
**LMEL Las Melosas 100.00 133** IAMs_20 IAMs_20 04 45 38.2
comp=Z,34µm,18.0s
**MT13 San Alfonso 100.00 133** IAMs_20 IAMs_20 04 44 44.4
comp=Z,31µm,18.0s
**MT16 CCHEN 100.02 132** IAMs_20 IAMs_20 04 45 20.9
comp=Z,30µm,18.0s
**PEL Peldehue 100.07 132** IAMs_20 IAMs_20 04 45 21.4
comp=Z,25µm,18.0s
**MT08 Bocatoma Ro 100.36 132** IAMs_20 IAMs_20 04 45 49.8
comp=Z,31µm,18.0s
**VA03 San Esteban 100.38 132** IAMs_20 IAMs_20 04 46 04.4
comp=Z,28µm,18.0s
**833A Chaparral WMA, 100.50 64** IAMs_20 IAMs_20 04 42 30.2
comp=Z,43µm,22.0s
**833A Chaparral WMA, 100.50 64** Pdiff **Pdif** **04 05 41.0 -0.7**
baz=251
**LGTI Lohaghat 100.52 297** *e*P **Pdif** **04 05 43.2 +1.4**
LGTI IAmb IAmb 04 05 48.4
comp=Z,31nm,1.0s
**PTH Pithoragarh 100.57 298** *e*P **Pdif** **04 05 42.8 +0.5**
PTH IAmb IAmb 04 05 44.1
comp=Z,67nm,1.2s
**JHNI Jhansi 100.63 293** *e*P **Pdif** **04 05 42.4 0.0**
**CMIG Matias Romero 100.67 76** PP **PP** **04 09 45.0 -5.4**
comp=Z,0.7nm,0.5s,baz=290,slow=15,SNR=1.0
**AMTX Amarillo 100.82 57** IAMs_20 IAMs_20 04 49 37.1
comp=Z,38µm,18.0s
**BHPL Bhopal 100.85 291** *e*P **Pdif** **04 05 41.9 -1.6**
**CO02 Combarbal 100.94 130** IAMs_20 IAMs_20 04 46 34.5
comp=Z,25µm,18.0s
**KSCO Kaye Shedlock' 101.46 53** IAMs_20 IAMs_20 04 44 29.6
comp=Z,39µm,20.0s
**GOA Goa 101.47 282** *e*P **Pdif** **04 05 46.8 +0.6**
GOA IAMs_20 IAMs_20 04 20 09.8
comp=Z,3µm,20.2s
**CO05 La Serena 101.49 129** IAMs_20 IAMs_20 04 47 26.2
comp=Z,31µm,18.0s
**LAO LASA Array 101.52 44** IAMs_20 IAMs_20 04 44 02.3
comp=Z,44µm,21.0s
**735A Kenedy 101.99 64** IAMs_20 IAMs_20 04 44 07.6
comp=Z,38µm,20.0s
**DGZ Jazzator, Alta 102.05 319** *i* P **Pdif** **04 05 47.0 -1.4**
DGZ pmax pmax
comp=Z,13nm,1.2s
DGZ MLR MLR
comp=Z,19µm,18.0s
**RSSD Black Hills 102.12 47** IAMs_20 IAMs_20 04 52 17.6
comp=Z,36µm,18.0s
**CO01 Juntas del Tor 102.28 130** IAMs_20 IAMs_20 04 48 09.0
comp=Z,27µm,18.0s
**ZON Zonda 102.38 132** IAMs_20 IAMs_20 04 48 21.4
comp=Z,30µm,18.0s
**C36M Paulatuk 102.38 19** Pdiff **Pdif** **04 05 48.4 -0.7**
baz=240
**LCO Las Campanas 102.38 128** IAMs_20 IAMs_20 04 48 19.9
comp=Z,27µm,18.0s
**POO Poona 102.45 285** *e*P **Pdif** **04 05 51.2 +0.5**
POO IAMs_20 IAMs_20 04 19 20.8
comp=Z,3µm,17.2s
**OGNE Ogallala 102.51 51** IAMs_20 IAMs_20 04 56 35.3
comp=Z,23µm,18.0s
**DDI Dehra Dun 102.60 298** *e*P **Pdif** **04 05 49.6 -1.5**
**HNLY HANLEY 102.62 300** *e*P **Pdif** **04 05 52.2 +0.5**
**435B Jarrell 102.78 62** Pdiff **Pdif** **04 05 51.3 -0.6**
baz=252
**YKA Yellowknife Ar 102.78 27** Pdiff **Pdif** **04 05 51.3 +0.3**
comp=Z,2.1nm,0.8s,baz=260,slow=4.7,SNR=10
YKA PKiKP **PKiKP** **04 10 11.6 +0.1**
comp=Z,2.5nm,0.8s,baz=256,slow=1.7,SNR=7.2
YKA PKKP PKKPdf 04 22 10.2 +10
comp=Z,0.9nm,0.9s,baz=58,slow=4.7,SNR=4.4
**AC05 El Transito 102.79 128** IAMs_20 IAMs_20 04 48 42.7
comp=Z,30µm,18.0s
**KLP Kalpa 102.81 299** *e*P **Pdif** **04 05 53.6 +1.2**
KLP IAmb IAmb 04 06 05.6
comp=Z,37nm,1.0s
**CCIG Comitan 102.87 78** IAMs_20 IAMs_20 04 42 31.1
comp=Z,22µm,20.0s
**ZSN Zaisan 102.92 316** *e*P **Pdif** **04 05 51.7 -0.5**
baz=316
ZSN *e*PP **PP** **04 10 05.5 -1.3**
baz=316
**ZSN Zaisan 102.92 316** *e*P **Pdif** **04 05 51.6 -0.5**
ZSN *e* 04 10 05.5
**RER Riviere de l'E 102.96 241** IAMs_20 IAMs_20 04 48 38.4
comp=Z,40µm,18.0s
**KUDL Kundal 103.22 295** *e*P **Pdif** **04 05 54.0 +0.2**
**A36M Sachs Harbour 103.38 17** Pdiff **Pdif** **04 05 53.1 -0.4**
baz=240
**DGMT Dagmar 103.40 43** IAMs_20 IAMs_20 04 46 02.9
comp=Z,28µm,20.0s
**NOKA Waynoka 103.50 56** IAMs_20 IAMs_20 04 50 48.8
comp=Z,31µm,18.0s
**SMLA Simla 103.57 298** *e*P **Pdif** **04 05 54.8 -0.5**
**OK035 E0210 Rd and N 103.69 56** IAMs_20 IAMs_20 04 51 37.9
comp=Z,31µm,18.0s
**AJM Ajmer 104.27 293** *e*P **Pdif** **04 05 57.2 -1.4**
**FNO Franklin 104.27 58** IAMs_20 IAMs_20 04 50 47.6
comp=Z,24µm,18.0s
**MKAR Makanchi Array 104.40 315** Pdiff **Pdif** **04 05 58.2 -0.5**
comp=Z,5.9nm,0.8s,baz=98,slow=6.2,SNR=32
MKAR PP **PKiKP** **04 10 15.0 0.0**
comp=Z,7.7nm,0.9s,baz=103,slow=9.0,SNR=5.5
MKAR PKKPbc **PKKPbc** **04 21 45.3 -1.2**
comp=Z,8.8nm,0.8s,baz=269,slow=2.5,SNR=24
MKAR PKPPKP **P'P'df** **04 30 07.1 +2.5**
comp=Z,1.1nm,0.9s,baz=298,slow=3.6,SNR=4.0
**DHRM DHARAMSHALA 104.61 299** *e*P **Pdif** **04 06 00.6 +0.3**
**SNET Serv Nac Est T 104.66 81** IAMs_20 IAMs_20 04 49 01.6
comp=Z,22µm,18.0s
**K30B Basset 104.75 50** IAMs_20 IAMs_20 04 46 02.5
comp=Z,38µm,21.0s
**ZALV Zalesovo Beam 104.93 322** Pdiff **Pdif** **04 06 00.8 0.0**
comp=Z,2.9nm,0.6s,baz=116,slow=4.7,SNR=10
ZALV PKiKP **PKiKP** **04 10 15.2 -0.5**
comp=Z,8.0nm,1.1s,baz=134,slow=4.3,SNR=3.7
ZALV PKKPbc **PKKPbc** **04 21 38.1 -6.9**
comp=Z,2.2nm,0.7s,baz=264,slow=1.5,SNR=4.3
**PB14 IPOC Station P 105.02 125** PKP **PKiKP** **04 10 17.3 0.0**
**OK051 E0350 and S346 105.07 56** IAMs_20 IAMs_20 04 46 17.6
comp=Z,39µm,21.0s
**THN Thein Dam 105.14 299** *e*P **Pdif** **04 06 02.1 -0.1**
**SHLS Shalkode 105.30 311** *e*Pdif **Pdif** **04 06 00.7 -2.3**
baz=311
**SHLS Shalkode 105.30 311** *e*P **Pdif** **04 06 00.6 -2.3**
**BGNE Belgrade 105.45 51** IAMs_20 IAMs_20 04 52 29.1
comp=Z,34µm,18.0s
**UZB Uzynbulak 105.60 311** *e*Pdif **Pdif** **04 06 03.6 -0.7**
baz=311
**UZB Uzynbulak 105.60 311** *e*P **Pdif** **04 06 03.6 -0.7**
**SUSD Miller 105.70 48** IAMs_20 IAMs_20 04 48 45.4
comp=Z,28µm,20.0s
**KPKS Kokpek 105.93 311** *e*Pdif **Pdif** **04 06 04.8 -1.0**
baz=311
**KPKS Kokpek 105.93 311** *e*P **Pdif** **04 06 04.7 -1.0**
**SATY Saty 106.02 310** *e*Pdif **Pdif** **04 06 05.1 -1.0**
baz=310
**SATY Saty 106.02 310** *e*P **Pdif** **04 06 05.1 -1.0**
**441A DeRidder 106.38 63** IAMs_20 IAMs_20 04 48 08.0
comp=Z,30µm,20.0s
**RLO Rose Lookout 106.39 57** IAMs_20 IAMs_20 04 52 30.4
comp=Z,59µm,18.0s
**FFC Flin Flon 106.51 37** IAMs_20 IAMs_20 04 49 14.4
comp=Z,26µm,20.0s
**TDK Taldyqorghan 106.52 312** *e*Pdif **Pdif** **04 06 07.4 -0.8**
baz=312
TDK *e*PP **PP** **04 10 32.3 -1.3**
baz=312
TDK LR LR 04 54 46.1
comp=Z,6µm,16.7s,baz=312
**TDK Taldyqorghan 106.52 312** *e*P **Pdif** **04 06 07.4 -0.8**
TDK *e* 04 10 32.2
TDK MLR MLR
comp=Z,6µm,17.0s
**SEM Semipalatinsk 106.68 318** *e*Pdif **Pdif** **04 06 08.0 -1.0**
baz=318
SEM LR LR 04 54 52.4
comp=Z,4µm,16.2s,baz=318
**SEM Semipalatinsk 106.68 318** *e*P **Pdif** **04 06 08.0 -1.0**
**KSH Kashi 106.86 306** Pdif **Pdif** **04 06 11.8 +1.8**
KSH PP **PP** **04 10 37.3 +0.9**
KSH LR LR
comp=Z,6µm,17.2s
KSH LR LR
comp=Z,12µm,18.5s
KSH LR LR
comp=Z,12µm,22.0s
**MDOK Medeo 107.00 310** *e*Pdif **Pdif** **04 06 09.5 -1.0**
baz=310
MDOK *e*PP **PP** **04 10 35.5 -1.9**
baz=310
MDOK LR LR 04 55 05.1
comp=Z,5µm,15.8s,baz=310
**MDOK Medeo 107.00 310** *e*P **Pdif** **04 06 09.5 -1.0**
MDOK *e* 04 10 35.4
MDOK MLR MLR
comp=Z,5µm,16.0s
**AAA Alma-Ata 107.11 310** *e*Pdif **Pdif** **04 06 10.1 -0.8**
baz=310
AAA LR LR 04 55 08.2
baz=310
**AAA Alma-Ata 107.11 310** *e*P **Pdif** **04 06 10.1 -0.8**
**N35A Tabor 107.13 52** IAMs_20 IAMs_20 04 53 06.8
comp=Z,30µm,18.0s
**LVC Limon Verde 107.27 124** PKKPab PKKPab 04 21 51.5 -2.2
comp=Z,8.5nm,0.9s,baz=47,slow=8.5,SNR=4.2
**BHUJ Bhuj 107.65 288** *e*P **Pdif** **04 06 15.1 +1.5**
BHUJ IAMs_20 IAMs_20 04 20 51.3
comp=Z,6µm,22.2s
**X40A Basin Creek Fa 107.67 59** IAMs_20 IAMs_20 04 47 41.8
comp=Z,29µm,21.0s
**KURK Kurchatov 107.77 318** IAMs_20 IAMs_20 05 03 07.6
comp=Z,25µm,18.0s
**KURBB Kurchatov Arra 107.80 318** Pdiff **Pdif** **04 06 12.6 -1.1**
comp=Z,2.8nm,0.9s,baz=108,slow=3.4,SNR=16
KURBB PKiKP **PKiKP** **04 10 19.9 -1.2**
comp=Z,3.4nm,0.9s,baz=96,slow=2.1,SNR=4.2
KURBB PP **PP** **04 10 49.0 +6.3**
comp=Z,3.1nm,0.9s,baz=187,slow=21,SNR=4.3
KURBB PKKPbc **PKKPbc** **04 21 33.5 -2.4**
comp=Z,9.4nm,0.9s,baz=285,slow=3.7,SNR=18
KURBB PKPPKP **P'P'df** **04 30 00.2 +2.4**
comp=Z,0.4nm,0.7s,baz=282,slow=2.2,SNR=5.0
**F33A 5 Mile Ranch, 107.88 47** IAMs_20 IAMs_20 04 48 27.8
comp=Z,30µm,20.0s
**S39A Bolivar 108.09 56** IAMs_20 IAMs_20 04 52 25.6
comp=Z,39µm,18.0s
**UALR University of 108.14 59** IAMs_20 IAMs_20 04 49 06.1
comp=Z,39µm,20.0s
**FCAR Ozark Folk Cen 108.59 58** IAMs_20 IAMs_20 04 54 27.9
comp=Z,28µm,18.0s
**SGDS Sogindy 108.79 310** *e*Pdif **Pdif** **04 06 17.4 -1.0**
baz=310
**SGDS Sogindy 108.79 310** *e*P **Pdif** **04 06 17.3 -1.0**
**N38A Joes South For 108.89 53** IAMs_20 IAMs_20 04 53 51.4
comp=Z,28µm,18.0s
**VBMS Vicksburg 108.97 62** IAMs_20 IAMs_20 04 48 21.5
comp=Z,44µm,21.0s
**R40A Maddies Statio 109.05 56** IAMs_20 IAMs_20 04 48 40.7
comp=Z,26µm,20.0s
**ULM Lac du Bonnet 109.11 43** PKiKP **PKiKP** **04 10 21.6 -2.0**
comp=Z,6.1nm,0.6s,baz=292,slow=2.4,SNR=9.4
**SCIA State Center 109.16 52** IAMs_20 IAMs_20 04 55 36.2
comp=Z,28µm,18.0s
**BTLS Baital 109.54 312** *e*Pdif **Pdif** **04 06 20.7 -0.9**
baz=312
**BTLS Baital 109.54 312** *e*P **Pdif** **04 06 20.7 -0.9**
**346A Big Creek Wild 109.63 63** IAMs_20 IAMs_20 04 48 14.1
comp=Z,23µm,21.0s
**PBMO Poplar Bluff 110.12 58** IAMs_20 IAMs_20 04 49 01.5
comp=Z,28µm,20.0s
**SPMN Marine on St. 110.14 48** IAMs_20 IAMs_20 04 51 37.9
comp=Z,23µm,19.0s
**146A Union 110.27 62** IAMs_20 IAMs_20 04 48 28.9
comp=Z,39µm,21.0s
**PEBM Pemiscott Bayo 110.42 58** IAMs_20 IAMs_20 04 54 22.5
comp=Z,25µm,18.0s
**PVMO Portageville 110.62 58** IAMs_20 IAMs_20 04 50 21.6
comp=Z,20µm,20.0s
**PARMO Parma 110.63 58** IAMs_20 IAMs_20 04 57 45.9
comp=Z,26µm,18.0s
**N41A Harden Midland 110.64 53** IAMs_20 IAMs_20 04 55 14.7
comp=Z,34µm,18.0s
**L40A Anamosa 110.64 52** IAMs_20 IAMs_20 04 50 38.6
comp=Z,30µm,20.0s
**GLAT Glass 110.91 58** IAMs_20 IAMs_20 04 53 46.4
comp=Z,28µm,18.0s
**HICK Hickman 111.01 58** IAMs_20 IAMs_20 04 54 34.1
comp=Z,22µm,18.0s
**GAR Garm 111.02 305** IAMs_20 IAMs_20 05 04 17.6
comp=Z,29µm,20.0s
**E38A The Farm, Brul 111.25 47** IAMs_20 IAMs_20 04 52 07.2
comp=Z,22µm,20.0s
**UTMT University of 111.26 58** IAMs_20 IAMs_20 04 53 56.7
comp=Z,30µm,18.0s
**LPAZ La Paz 111.30 119** PKiKP **PKiKP** **04 10 29.1 -0.4**
comp=Z,2.6nm,1.0s,baz=247,slow=8.1,SNR=4.0
LPAZ PKKPbc **PKKPbc** **04 21 25.1 +0.5**
comp=Z,3.3nm,0.9s,baz=35,slow=2.3,SNR=6.6
**I40A Norwalk 111.42 50** IAMs_20 IAMs_20 04 49 46.0
comp=Z,42µm,21.0s
**P43A Skaggs, Pawnee 111.43 55** IAMs_20 IAMs_20 04 55 45.7
comp=Z,26µm,18.0s
**FCC Fort Churchill 111.55 34** IAMs_20 IAMs_20 04 59 45.3
comp=Z,28µm,18.0s
**T45A Paducah 111.57 58** IAMs_20 IAMs_20 04 48 41.8
comp=Z,22µm,22.0s
**SBV Sambava 111.63 245** P **PKiKP** **04 10 28.7 -0.7**
SNR=107
**Q44A Meyer Farm, Va 111.66 56** IAMs_20 IAMs_20 04 55 02.1
comp=Z,34µm,18.0s
**CHGR Chuyangaron 111.83 304** IAMs_20 IAMs_20 05 04 44.3
comp=Z,22µm,19.0s
**G40A Rib Lake 111.96 49** IAMs_20 IAMs_20 04 56 50.0
comp=Z,32µm,18.0s
**WVT Waverly 112.03 59** IAMs_20 IAMs_20 04 56 46.2
comp=Z,27µm,18.0s
**LRAL Lakeview Retre 112.05 62** IAMs_20 IAMs_20 04 51 12.7
comp=Z,37µm,20.0s
**BRLS Boroldav 112.14 309** *e*Pdif **Pdif** **04 06 32.6 -0.6**
baz=309
**BRLS Boroldav 112.14 309** *e*P **Pdif** **04 06 32.6 -0.6**
**250A Grady 112.42 63** IAMs_20 IAMs_20 04 49 48.9
comp=Z,26µm,22.0s
**T47A Sharon Grove 112.77 58** IAMs_20 IAMs_20 04 51 55.7
comp=Z,27µm,20.0s
**COWI Conover 112.82 48** IAMs_20 IAMs_20 04 58 57.8
comp=Z,24µm,18.0s
**HQIL Hanson Quary C 113.06 53** IAMs_20 IAMs_20 04 50 07.8
comp=Z,37µm,20.0s
**L44A Lake County Fo 113.08 52** PKiKP **PKiKP** **04 10 30.5 -0.9**
baz=261
**P46A Rosedale 113.18 55** IAMs_20 IAMs_20 04 57 07.1
comp=Z,31µm,18.0s
**BVAR Borovoye Array 113.18 320** Pdiff **Pdif** **04 06 37.9 +0.3**
comp=Z,1.9nm,0.8s,baz=160,slow=2.3,SNR=2.3
BVAR PKiKP **PKiKP** **04 10 30.9 -0.4**
comp=Z,7.2nm,0.8s,baz=90,slow=3.0,SNR=8.9
BVAR PKKPbc **PKKPbc** **04 21 16.4 -2.1**
comp=Z,5.9nm,0.5s,baz=279,slow=2.9,SNR=14
**CLTN Cedars of Leba 113.21 59** IAMs_20 IAMs_20 04 55 32.5
comp=Z,36µm,18.0s
**BRVK Borovoye 113.25 320** P **PKiKP** **04 10 32.4 +1.1**
**BRVK Borovoye 113.25 320** *i* PKiKP **PKiKP** **04 10 30.7 -0.6**
BRVK MLR MLR
comp=Z,13µm,18.0s
**CPUP Villa Florida 113.38 134** PKiKP **PKiKP** **04 10 32.2 -0.3**
comp=Z,2.5nm,0.7s,baz=254,slow=1.6,SNR=6.3
CPUP PKKPbc **PKKPbc** **04 21 17.3 +0.2**
comp=Z,1.3nm,0.5s,baz=13,slow=4.9,SNR=3.0
**SFIN Lafayette 113.39 54** IAMs_20 IAMs_20 04 57 23.6
comp=Z,29µm,18.0s
**352A Blakely 113.43 64** IAMs_20 IAMs_20 04 51 50.7
comp=Z,21µm,21.0s
**F42A Maple Grove Fa 113.47 48** IAMs_20 IAMs_20 04 58 02.9
comp=Z,23µm,18.0s
**H43A Windswept, Lux 113.54 50** IAMs_20 IAMs_20 04 51 44.0
comp=Z,40µm,21.0s
**WCI Wyandotte Cave 113.64 57** IAMs_20 IAMs_20 04 51 31.4
comp=Z,37µm,20.0s
**U49A Red Boiling Sp 113.73 59** IAMs_20 IAMs_20 04 51 58.1
comp=Z,32µm,20.0s
**R49A Shelbyville 114.52 57** IAMs_20 IAMs_20 04 51 59.7
comp=Z,34µm,21.0s
**N47A Urbana 114.53 54** IAMs_20 IAMs_20 04 58 48.6
comp=Z,33µm,18.0s
**CAMR Camarioca 114.55 74** IAMs_20 IAMs_20 04 57 58.4
comp=Z,23µm,18.0s
**T50A Nancy 114.56 58** IAMs_20 IAMs_20 04 55 59.1
comp=Z,26µm,18.0s
**I45A Fountain 114.57 50** IAMs_20 IAMs_20 04 58 33.4
comp=Z,31µm,19.0s
**P49A Miami Univ. Ec 115.06 56** PKiKP **PKPdf** **04 10 34.4 -0.8**
baz=261
**R50A Paris 115.17 57** IAMs_20 IAMs_20 04 52 52.0
comp=Z,31µm,21.0s
**ROSC El Rosal 115.39 95** PKP **PKPdf** **04 10 36.0 -1.2**
comp=Z,16nm,0.8s,baz=28,slow=24,SNR=7.3
**ROSC El Rosal 115.39 95** PKiKP **PKPdf** **04 10 36.0 -1.2**
**255A Hazlehurst 115.56 64** IAMs_20 IAMs_20 04 58 16.2
comp=Z,33µm,18.0s
**L48A N Adams 115.61 53** IAMs_20 IAMs_20 04 53 09.2
comp=Z,36µm,20.0s
**S51A Beattyville 115.64 58** IAMs_20 IAMs_20 04 58 42.7
comp=Z,31µm,18.0s
**DWPF Disney Wildern 115.68 68** **PKPdf** **04 10 36.6 -0.2**
**Q51A Peebles 116.04 56** PKPdf **PKPdf** **04 10 35.1 -2.1**
**SSFO Shawnee State 116.11 57** PKPdf **PKPdf** **04 10 36.2 -1.2**
SSFO IAMs_20 IAMs_20 04 52 58.9
comp=Z,30µm,20.0s
**AAM Ann Arbor 116.23 53** IAMs_20 IAMs_20 04 53 47.5
comp=Z,34µm,20.0s
**060A Indiantown 116.37 70** IAMs_20 IAMs_20 04 52 59.3
comp=Z,19µm,21.0s
**JLN Jalan Bani Buh 116.46 285** P **PKiKP** **04 10 39.5 +1.0**
**POGA Pongola 116.55 221** PKPdf **PKPdf** **04 10 37.7 -0.9**
**257A Skidaway Islan 116.78 64** IAMs_20 IAMs_20 04 59 27.6
comp=Z,32µm,18.0s
**Q52A Bidwell 116.87 56** IAMs_20 IAMs_20 04 57 52.9
comp=Z,28µm,18.0s
**U54A Nelsons Funny 116.88 59** PKPdf **PKPdf** **04 10 37.4 -1.6**
**WBK Wadi Bani Khal 116.97 285** P **PKiKP** **04 10 40.9 +1.4**
**I49A Point Hope 117.01 51** IAMs_20 IAMs_20 04 53 05.9
comp=Z,27µm,22.0s
**N51A Ashland 117.02 54** IAMs_20 IAMs_20 04 52 18.8
comp=Z,19µm,21.0s
**P52A Corning 117.06 56** PKiKP **PKPdf** **04 10 37.8 -1.3**
baz=263
**SIV San Ignacio 117.10 123** PKKPbc PKKPbc 04 21 05.4 +1.2
comp=Z,5.2nm,1.0s,baz=50,slow=5.7,SNR=3.6
**MHTO MHTO 117.47 283** P **PKPdf** **04 10 39.5 -0.9**
SNR=5.1
**Y57A Sumter 117.65 62** PKPdf **PKPdf** **04 10 40.1 -0.3**
**NHSC New Hope 117.68 63** IAMs_20 IAMs_20 04 54 18.3
comp=Z,32µm,21.0s
**JMDO Jabal Madar 117.69 284** P **PKPdf** **04 10 39.0 -1.8**
**O53A New Philadelph 117.83 55** PKiKP **PKPdf** **04 10 39.5 -1.0**
baz=264
**SMDO Samad 117.90 285** P **PKiKP** **04 10 41.5 +0.2**
**Q54A Coxs Mills 117.98 57** IAMs_20 IAMs_20 04 54 58.3
comp=Z,30µm,20.0s
**Y58A Scranton 118.23 62** IAMs_20 IAMs_20 04 53 59.7
comp=Z,39µm,21.0s
**CHIV Chivirico 118.23 79** IAMs_20 IAMs_20 04 59 29.2
comp=Z,9µm,20.0s
**AQDB Aquidauana 118.35 130** PKPdf **PKPdf** **04 10 41.8 -0.5**
AQDB IAMs_20 IAMs_20 04 58 18.8
comp=Z,21µm,18.0s
**M53A WI Miller and 118.35 54** IAMs_20 IAMs_20 04 55 18.9
comp=Z,29µm,20.0s
**M53A WI Miller and 118.35 54** PKiKP **PKPdf** **04 10 40.8 -0.7**
baz=265
**TULEG Thule 118.39 13** IAMs_20 IAMs_20 04 58 41.9
comp=Z,21µm,20.0s
**TULEG Thule 118.39 13** *i* P **PKPdf** **04 10 39.6 -0.9**
**SUR Sutherland 118.43 209** **PKiKP** **04 10 43.9 +1.5**
**SUR Sutherland 118.43 209** P **PKiKP** **04 10 44.0 +1.6**
**R55A Marlinton 118.45 57** IAMs_20 IAMs_20 05 00 38.9
comp=Z,25µm,18.0s
**BSY Bisya 118.59 285** P **PKiKP** **04 10 42.7 +0.1**
**ALLY Alegheny Colle 118.77 54** IAMs_20 IAMs_20 04 55 40.9
comp=Z,26µm,20.0s
**SVE Sverdlovsk 118.90 324** *i* PKiKP **PKiKP** **04 10 43.0 +0.9**
SVE MLR MLR
comp=Z,16µm,20.0s
**ERPA Erie 118.92 53** IAMs_20 IAMs_20 04 59 33.9
comp=Z,27µm,18.0s
**V58A Windy Hill, Pi 118.94 60** PKPdf **PKPdf** **04 10 41.1 -1.8**
**SAML Samuel 119.25 115** **PKPdf** **04 10 42.7 -1.4**
SAML IAMs_20 IAMs_20 04 52 15.2
comp=Z,32µm,21.0s
**SAML Samuel 119.25 115** PKiKP **PKPdf** **04 10 42.7 -1.4**
**Q56A Snyder Ridge, 119.26 57** IAMs_20 IAMs_20 05 00 29.2
comp=Z,29µm,18.0s
**BOSA Boshof 119.30 215** PKP **PKiKP** **04 10 44.3 +0.2**
comp=Z,19nm,1.1s,baz=109,slow=2.6,SNR=10
**DMTO DMTO 119.37 278** P **PKiKP** **04 10 44.7 +0.5**
**SOHO SOHO 119.50 286** *i* P **PKPdf** **04 10 43.8 -0.4**
SNR=17
**SOHO SOHO 119.50 286** P **PKPdf** **04 10 44.0 -0.2**
**VILB Vilhena 119.53 120** PKPdf **PKPdf** **04 10 43.3 -1.3**
**MDH Madha 119.95 287** P **PKiKP** **04 10 45.3 +0.1**
**UOSS Minazif 119.96 287** PKPdf **PKPdf** **04 10 44.1 -1.0**
**UOSS Minazif 119.96 287** P **PKPdf** **04 10 44.8 -0.3**
**UOSS Minazif 119.96 287** P **PKPdf** **04 10 45.1 0.0**

WVNY **West Valley, N** 119.97 53 IAMs_20 IAMs_20 04 59 58.5
comp=Z,25µm,18.0s
RBK **Rabkut** 119.99 278 P **PKiKP** **04 10 46.6 +1.1**
HATD **Hatta, Dubai** 120.00 287 *i* P **PKPdf** **04 10 45.1 -0.1**
SNR=9.9
HATD **Hatta, Dubai** 120.00 287 P **PKiKP** **04 10 45.5 +0.2**
ASHO **Ashiyiah** 120.04 287 *i* P **PKPdf** **04 10 45.2 -0.2**
SNR=10.0
ASHO **Ashiyiah** 120.04 287 P **PKiKP** **04 10 45.4 0.0**
SNR=5.9
ARU **Arti** 120.07 323 IAMs_20 IAMs_20 05 10 04.7
comp=Z,19µm,18.0s
ARU **Arti** 120.07 323 PKP **PKPdf** **04 10 43.7 -0.7**
comp=Z,11nm,0.2s,baz=230,slow=0.7,SNR=19
ARU PKKPbc **PKKPbc** **04 20 54.4 +0.2**
comp=Z,8.9nm,0.5s,baz=273,slow=4.0,SNR=11
ARU **Arti** 120.07 323 *i* PKIKP **PKiKP** **04 10 44.4 0.0**
ARU 04 12 11.3
ARU PPP PPP 04 14 50.3
ARU 04 17 53.4
ARU SS SS 04 28 30.5 -4.1
MSFE **Esma-Masafi** 120.09 287 *i* P **PKiKP** **04 10 45.5 0.0**
SNR=6.8
MASF **Masafi** 120.09 287 P **PKiKP** **04 10 46.0 +0.5**
MEDO **Medina** 120.12 52 IAMs_20 IAMs_20 05 01 12.4
comp=Z,19µm,18.0s
ALNE **Al Ain** 120.18 286 P **PKiKP** **04 10 46.4 +0.7**
P57A **Homestead Farm** 120.21 56 IAMs_20 IAMs_20 04 55 29.3
comp=Z,36µm,21.0s
SDV **Santo Domingo** 120.25 93 **PKPdf** **04 10 44.2 -2.0**
SDV IAMs_20 IAMs_20 04 58 34.2
comp=Z,16µm,18.0s
NOR **Nord** 120.36 1 *i* P **PKPdf** **04 10 41.8 -2.5**
DOK **Doka** 120.36 279 P **PKiKP** **04 10 46.4 +0.3**
SSPA **Standing Stone** 120.39 55 PKPdf **PKPdf** **04 10 43.8 -1.6**
NAZ **Nazwa, Dubai** 120.45 287 *i* P **PKiKP** **04 10 46.3 +0.1**
SNR=6.1
NAZ **Nazwa, Dubai** 120.45 287 P **PKiKP** **04 10 46.7 +0.5**
WHFO **Wadi Hawf** 120.50 278 P **PKPdf** **04 10 45.9 -0.5**
ASUD **Al Ashush, Dub** 120.67 286 P **PKiKP** **04 10 47.9 +1.3**
ASUD **Al Ashush, Dub** 120.67 286 P **PKiKP** **04 10 46.8 +0.2**
L56A **Greenwood** 120.73 53 IAMs_20 IAMs_20 05 04 06.7
comp=Z,26µm,18.0s
AKTO **Aktyubinsk** 120.77 316 PKP **PKPdf** **04 10 45.9 -0.1**
comp=Z,13nm,0.8s,baz=284,slow=0.6,SNR=17
AKTO PKKPbc **PKKPbc** **04 20 51.0 -0.3**
comp=Z,9.5nm,0.8s,baz=287,slow=2.8,SNR=15
ABTO **Aybut** 120.79 278 P **PKiKP** **04 10 47.8 +0.7**
M57A **Sunshine Farm,** 121.01 54 IAMs_20 IAMs_20 04 55 47.2
comp=Z,36µm,21.0s
TRIS **Tristan da Cun** 121.10 178 IAMs_20 IAMs_20 05 01 29.3
comp=Z,27µm,18.0s
NEEM **North Greenlan** 121.16 10 *i* P **PKPdf** **04 10 45.0 -1.3**
N58A **Sunbury** 121.29 55 PKPdf **PKPdf** **04 10 45.4 -1.8**
K57A **Scipio Center** 121.52 53 IAMs_20 IAMs_20 04 56 49.6
comp=Z,36µm,21.0s
KULLO **Kullorsuaq** 121.89 13 *i* P **PKPdf** **04 10 45.2 -2.2**
S61A **Accomac** 121.89 59 IAMs_20 IAMs_20 04 56 53.1
comp=Z,30µm,20.0s
MZR **Muzera** 121.99 284 *i* P **PKiKP** **04 10 50.3 +1.1**
SNR=6.8
MZR **Muzera** 121.99 284 P **PKiKP** **04 10 50.3 +1.1**
SNR=6.1
WUPA **West Chester U** 122.09 56 IAMs_20 IAMs_20 04 56 46.0
comp=Z,24µm,21.0s
KBS **Kingsbay** 122.25 355 *e*Pdif **Pdif** **04 07 19.0 +1.7**
KBS IVmB_BB 04 07 48.1
comp=Z,965nm,2.6s
KBS *e*PKPdf **PKiKP** **04 10 48.6 +0.5**
KBS *e*PP **PP** **04 12 25.2 +1.6**
KBS *e*SP SP 04 22 16.6 +2.8
KBS *e*SS **SS** **04 29 03.4 +2.2**
KBS IVMs_BB IVMs_BB 04 50 41.9
comp=Z,4µm,34.0s
J58A **Remsen** 122.44 52 PKPdf **PKPdf** **04 10 47.4 -2.0**
SPA0 **Spitsbergen Ar** 122.52 354 *e*Pdif **Pdif** **04 07 21.0 +2.4**
SPA0 IVmBBB 04 07 27.5
comp=Z,524nm,1.8s
SPA0 *e*PKPdf **PKPdf** **04 10 48.7 +0.1**
SPA0 *e*PP **PP** **04 12 26.0 +0.5**
SPA0 *e*SKSac **SKSac** **04 17 47.1 -0.1**
SPA0 *e*SP **SP** **04 22 19.1 +2.7**
SPA0 *e*SS **SS** **04 29 06.0 +1.3**
SPITS **Spitsbergen Ar** 122.52 354 PKP **PKPdf** **04 10 48.6 +0.1**
comp=Z,14nm,0.7s,baz=100,slow=3.5,SNR=11
BAUV **El Baul** 122.67 93 *e*P **PKPdf** **04 10 49.7 -0.9**
P61A **Hammonton** 122.70 56 IAMs_20 IAMs_20 04 56 02.3
comp=Z,24µm,20.0s
HOPEN **Hopen** 122.84 351 *e*Pdif **Pdif** **04 07 20.6 +0.5**
HOPEN IVmB_BB 04 07 27.7
comp=Z,1µm,2.0s
HOPEN *e*PKPdf **PKiKP** **04 10 49.6 +0.2**
HOPEN *e*PP **PP** **04 12 28.6 +0.9**
HOPEN *e*SKSdf **SKSdf** **04 17 58.0 -1.1**
HOPEN *e*SP **SP** **04 22 19.3 +0.1**
HOPEN *e*SS **SS** **04 29 10.0 +1.2**
HOPEN IVMs_BB IVMs_BB 04 59 42.4
comp=Z,4µm,19.4s
ODNJ **Ogdensburg** 122.90 55 PKPdf **PKPdf** **04 10 48.9 -1.3**
TRNY **Table Rock, Ra** 123.19 54 PKPdf **PKPdf** **04 10 49.9 -0.9**
TRNY IAMs_20 IAMs_20 04 57 02.9
comp=Z,34µm,21.0s
UPNV **Upernavik** 123.21 15 *i* P **PKPdf** **04 10 48.5 -1.4**
HSPB **Hornsund (broa** 123.65 353 *e*PKPdf **PKiKP** **04 10 55.9 +5.0**
HSPB *e*PP **PP** **04 12 26.7 -6.4**
HSPB *e*SKKPdf SKKPdf 04 24 37.5 -17
HSPB *e*SS SS 04 29 42.3 +23
HSPB *e*L L 05 01 48.0
comp=Z,16µm,19.9s
L61B **Northampton** 124.35 53 PKiKP **PKPdf** **04 10 52.4 -0.7**
baz=271
TRNA **Turayna** 124.37 286 P **PKiKP** **04 10 54.9 +1.1**
KIRV **Kirov** 124.56 327*c* *i* PKIKP **PKPdf** **04 10 52.4 -0.5**
NUUG **Nuugaatsiaq** 124.69 15 *i* P **PKPdf** **04 10 51.3 -1.5**
SMRA **Abu-Samra** 124.72 285 P **PKiKP** **04 10 54.4 -0.1**
SNR=5.6
SHMA **Al-Shehemyia** 124.79 287 P **PKiKP** **04 10 55.5 +0.8**
SNR=5.3
LDAQ **Lac Daran** 125.08 46 PKPdf **PKPdf** **04 10 52.8 -1.6**
LDAQ IAMs_20 IAMs_20 05 04 00.2
comp=Z,28µm,19.0s
DAG **Danmarks Havn** 125.10 2 PKP **PKPdf** **04 10 50.9 -2.5**
DAG **Danmarks Havn** 125.10 2 *i* P **PKPdf** **04 10 51.3 -2.1**
HRV **Adam Dziewonsk** 125.18 53 ⇑PKIKP **PKPdf** **04 10 54.0 -0.6**
SAKB **Bahrain** 125.19 287 P **PKiKP** **04 10 56.1 +0.7**
PCDR **Punta Cana, DR** 125.21 82 IAMs_20 IAMs_20 05 02 54.5
comp=Z,15µm,18.0s
BJO1 **Bjornoya** 125.37 351 *e*Pdif **Pdif** **04 07 30.6 -0.6**
BJO1 IVmB_BB 04 07 36.1
comp=Z,1µm,2.4s
BJO1 *e*PKPdf **PKPdf** **04 10 54.1 +0.1**
BJO1 *e*PP **PP** **04 12 44.4 -0.2**
BJO1 *e*SS SS 04 29 40.7 +0.1
BJO1 IVMs_BB IVMs_BB 05 03 12.0
comp=Z,3µm,18.9s
H62A **Milan** 125.40 50 IAMs_20 IAMs_20 05 03 17.0
comp=Z,27µm,18.0s
UMMG **Uummannaq** 125.52 16 *i* P **PKPdf** **04 10 53.4 -1.0**
I63A **Otisfield** 125.84 51 PKPdf **PKPdf** **04 10 54.8 -1.0**
M65A **Busby, Falmout** 125.88 54 PKiKP **PKPdf** **04 10 55.7 -0.3**
baz=271
PCRV **Puerto La Cruz** 126.25 93 PKP **PKPdf** **04 10 57.3 -0.3**
comp=Z,11nm,0.8s,baz=247,slow=1.1,SNR=5.6
PCRV **Puerto La Cruz** 126.25 93 *e*P **PKPdf** **04 10 54.8 -2.8**
AGPR **Aguadilla, PR** 126.37 83 IAMs_20 IAMs_20 05 03 43.2
comp=Z,15µm,18.0s
LVZ **Lovozero** 126.64 341 IAMs_20 IAMs_20 05 06 06.6
comp=Z,26µm,21.0s
SCHQ **Schefferville** 126.65 37 PKP **PKPdf** **04 10 56.5 -0.5**
comp=Z,42nm,0.9s,baz=332,slow=1.2,SNR=28
UUPR **Utuado, UPR, P** 126.68 83 PKPdf **PKPdf** **04 10 56.0 -2.2**
VADS **Vadso** 126.69 344 *e*Pdif **Pdif** **04 07 39.2 +2.0**
VADS IVmBBB 04 07 44.7
comp=Z,579nm,2.4s
VADS *e*PKPdf **PKPdf** **04 10 56.6 0.0**
VADS *e*PP **PP** **04 12 52.2 -1.3**
VADS *e*SS SS 04 29 50.4 -7.0
VADS IVMs_BB IVMs_BB 04 55 11.8
comp=Z,4µm,33.3s
BELG **Belogornoye** 126.99 320*c* *i* PKIKP **PKPdf** **04 10 55.3 -2.4**
BDFB **Brasilia** 126.99 132 PKP **PKPdf** **04 10 59.1 0.0**
comp=Z,26nm,0.6s,baz=198,slow=4.0,SNR=25
SUMG **Summit** 127.00 10 *i* P **PKPdf** **04 10 57.0 -0.7**
APA **Apatity** 127.22 341 ⇓ *i* PKIKP **PKPdf** **04 10 57.0 -0.7**
APA *i* 04 12 58.0
APA *i* 04 18 04.0
APA pmax pmax
comp=Z,14nm,1.0s
APA MLR MLR
comp=Z,20µm,21.0s
F64A **Sherman** 127.27 49 PKPdf **PKPdf** **04 10 56.7 -1.8**
DODT **Dodoma, Tanzan** 127.29 243 *i* P **PKPdf** **04 10 54.6 -5.1**
KIBK **Kibwezi** 127.36 249 PKPdf **PKiKP** **04 11 00.3 0.0**
KIBK **Kibwezi** 127.36 249 PKP **PKPdf** **04 11 00.0 +0.2**
KIBK **Kibwezi** 127.36 249 P **PKiKP** **04 11 00.4 0.0**
SNR=8.3
LSZ **Lusaka** 127.42 228 PKPdf **PKPdf** **04 10 59.9 0.0**
LSZ **Lusaka** 127.42 228 P **PKiKP** **04 11 01.1 +0.7**
LSZ **Lusaka** 127.42 228 PKIKP **PKPdf** **04 10 59.9 0.0**
LSZ MLR MLR
comp=Z,85µm,18.0s
DBG **Daneborg** 127.46 4 *i* P **PKPdf** **04 10 57.0 -1.0**
KEV **Kevo** 127.53 345 IAMs_20 IAMs_20 05 08 04.9
comp=Z,22µm,21.0s
ADZR **Andozero** 127.54 336 *e*PKIKP **PKPdf** **04 10 56.6 -1.8**
ADZR pmax pmax
comp=Z,17nm,1.0s
HAMF **Hammerfest** 127.63 347 *e*Pdif **Pdif** **04 07 40.5 -0.9**
HAMF IVmBBB 04 07 42.1
comp=Z,458nm,2.0s
HAMF *e*PKPdf **PKPdf** **04 10 58.6 +0.2**
HAMF *e*PP **PP** **04 12 59.4 -0.3**
HAMF *e*SKSac **SKSac** **04 17 52.8 -11**
HAMF *e*SS **SS** **04 30 11.0 +2.1**
HAMF IVMs_BB IVMs_BB 04 58 52.6
comp=Z,3µm,28.5s
PDHT **Panda Hill** 127.71 238 *i* P **PKPdf** **04 10 57.7 -2.8**
ARA0 **ARCESS Array S** 128.05 345 *e*Pdif **Pdif** **04 07 45.5 +2.1**
ARA0 *e*PKPdf **PKPdf** **04 10 59.0 -0.4**
ARA0 *e*PP **PP** **04 13 01.3 -1.1**
ARA0 *e*SS SS 04 30 18.4 +4.1
ARCES **ARCESS Array B** 128.05 345 PKP **PKPdf** **04 10 58.2 -1.1**
comp=Z,13nm,0.6s,baz=49,slow=2.0,SNR=26
SFJD **Kangerlussuaq** 128.30 19 PKPdf **PKPdf** **04 10 59.4 -0.4**
SFJD **Kangerlussuaq** 128.30 19 PKIKP **PKPdf** **04 10 59.4 -0.4**
SFJD **Kangerlussuaq** 128.30 19 *i* P **PKPdf** **04 10 58.9 -0.9**
AKT **Akhty** 128.39 306 *i* PKIKP **PKiKP** **04 11 01.5 -0.1**
AKT *e* 04 13 08.5
AKT pmax pmax
comp=Z,52nm,1.7s
MAK **Makhachkala** 128.45 308 *e*P **Pdif** **04 07 44.2 -1.5**
MAK *e* 04 10 59.4
MAK *e* 04 13 03.7
MAK *e* 04 18 07.3
MAK *e*PS **PS** **04 23 08.0 -6.1**
MAK *e*SS SS 04 30 19.3 -1.9
MAK *e*SSS SSS 04 35 04.3
MAK pmax pmax
comp=Z,173nm,1.1s
KSMZ **Kasama** 128.56 236 *i* P **PKPdf** **04 11 00.8 -1.4**
KSMZ *i* 04 11 03.8
baz=118,slow=5.6
KSMZ *i* S SP 04 22 55.4 -17
KMBO **Kilima Mbogo** 128.65 250 *i* P **PKiKP** **04 11 04.3 +1.2**
SNR=12
KMBO **Kilima Mbogo** 128.65 250 PKP **PKPdf** **04 11 02.7 +0.2**
comp=Z,25nm,1.0s,baz=109,slow=2.8,SNR=27
KMBO **Kilima Mbogo** 128.65 250 P **PKiKP** **04 11 03.1 0.0**
ATD **Arta Tunnel** 128.75 267 PKhKP PKPpre 04 10 53.0
comp=Z,0.2nm,0.3s,baz=356,slow=19,SNR=1.3
ATD PKP **PKPdf** **04 11 02.3 0.0**
comp=Z,0.8nm,0.8s,baz=252,slow=20,SNR=2.3
KTK1 **Kautokeino** 128.98 345 *e*Pdif **Pdif** **04 07 48.7 +1.2**
KTK1 *e*PKPdf **PKPdf** **04 11 00.9 -0.2**
KTK1 *e*SKPdf **SKiKP** **04 14 36.5 +0.2**
KTK1 IVMs_BB IVMs_BB 05 03 50.3
comp=Z,3µm,20.1s
TCE **Chacachacare** 129.09 94 *e*P **PKiKP** **04 11 04.0 +0.4**
RAYN **Ar Rayn** 129.28 283 PKPdf **PKPdf** **04 11 03.3 +0.2**
RAYN **Ar Rayn** 129.28 283 *i* P **PKiKP** **04 11 04.4 +0.6**
SNR=28
RAYN **Ar Rayn** 129.28 283 P **PKPdf** **04 11 03.2 +0.1**
RAYN **Ar Rayn** 129.28 283 ⇓PKIKP **PKiKP** **04 11 04.2 +0.4**
TRN **Trinidad (W)** 129.40 94 *e*P **PKPdf** **04 11 03.5 +0.1**
TRN **Trinidad (W)** 129.40 94 *e*P **PKiKP** **04 11 05.2 +1.0**
TRO **Tromso** 129.43 347 *e*Pdif **Pdif** **04 07 50.3 +0.9**
TRO IVmB_BB 04 07 52.1
comp=Z,570nm,2.3s
TRO *e*PKPdf **PKPdf** **04 10 56.3 -5.6**
TRO *e*PP **PP** **04 13 10.8 -0.6**
TRO *e*SKPdf **SKPdf** **04 14 32.6 -3.1**
TRO *e*SS SS **04 30 33.0 +1.8**
TRO IVMs_BB IVMs_BB 04 58 27.8
comp=Z,4µm,31.6s
ICESG **Greenland Ices** 129.63 13 *i* P **PKPdf** **04 11 01.3 -1.5**
GRGR **Grenville** 129.65 92 *e*P **PKPdf** **04 11 02.6 -1.3**
TBH **Brigand Hill** 129.66 95 *e*P **PKiKP** **04 11 07.0 +2.3**
GRW **Mount Saint Ca** 129.66 92 *e*P **PKPdf** **04 11 02.6 -1.4**
NUUK **Nuuk** 129.67 22 *i* P **PKPdf** **04 11 01.9 -0.6**
GRHS **Sauteurs** 129.69 92 *e*P **PKPdf** **04 11 02.3 -1.7**
DY2G **Dye2** 129.94 18 *i* P **PKPdf** **04 11 02.2 -1.0**
SEUS **St. Eustatius** 129.94 85 IAMs_20 IAMs_20 05 07 59.9
comp=Z,15µm,18.0s
GCMP **Grenada, Carri** 129.98 92 *e*P **PKPdf** **04 11 04.4 -0.1**
SVT **Saint Vincent** 130.36 91 *e*P **PKPdf** **04 11 00.9 -4.3**
SVB **Belmont** 130.38 91 *e*P **PKiKP** **04 11 06.2 +0.1**
MBFL **Flemmings, Mon** 130.46 86 *e*P **PKiKP** **04 11 06.1 -0.2**
MBWH 130.48 86 *e*P **PKPdf** **04 11 05.2 -0.3**
BBSR **BB Station** 130.58 66 PKPdf **PKPdf** **04 11 04.5 -0.7**
BBSR **BB Station** 130.58 66 IAMs_20 IAMs_20 05 12 52.1
comp=Z,16µm,18.0s
JOF **Joensuu** 130.72 337 *e*P **PKPdf** **04 11 04.0 -0.5**
SLB **Belfond** 130.74 91 *e*P PKPdf 04 10 52.2 -14
GNI **Garni** 130.75 305 PKPdf **PKPdf** **04 11 05.9 +0.4**
GNI **Garni** 130.75 305*c* *i* PKIKP **PKPdf** **04 11 05.1 -0.4**
TBG **Guadaloupe-3** 130.75 88 *e*P **PKPdf** **04 11 02.6 -3.3**
VRH **Novokhopyorsk** 130.84 319 *e*PKIKP **PKPdf** **04 11 03.2 -1.9**
VRH pmax pmax
comp=Z,82nm,2.6s
SLBI **Saint Lucia, B** 130.86 90 *e*P **PKPdf** **04 11 05.9 -0.3**
SLAC **Saint Lucia, A** 130.90 91 *e*P **PKPdf** **04 11 06.2 -0.1**
BIM **Bigot** 130.92 90 *e*P **PKPdf** **04 11 06.6 +0.2**
SVN **Savane Anatole** 130.92 89 *e*P **PKiKP** **04 11 09.2 +2.0**
ANBD **Bethesda, Anti** 130.95 86 *e*P **PKPdf** **04 11 04.6 -1.7**
TSUM **Tsumeb** 131.00 215 PKPdf **PKiKP** **04 11 07.3 -0.2**
ANWB **Willy Bob** 131.09 85 *e*P **PKPdf** **04 11 04.4 -2.1**
JMIC **Jan Mayen** 131.09 359 *e*Pdif **Pdif** **04 07 56.5 -0.3**
JMIC *e*PKPdf **PKiKP** **04 11 06.2 +0.2**
JMIC *e*PP **PP** **04 13 22.9 +0.8**
JMIC *e*SKPdf **SKPdf** **04 14 37.0 -1.8**
JMIC *e*SS **SS** **04 30 55.7 +4.3**
JMIC IVMs_BB IVMs_BB 04 55 04.1
comp=Z,4µm,30.3s
JMI **Jan Mayen** 131.15 360 *e*Pdif **Pdif** **04 07 55.8 -1.2**
JMI *e*PKPdf **PKPdf** **04 11 04.5 -0.6**
JMI *e*PP **PP** **04 13 22.6 +0.1**
GOF **Gofitskoye** 131.38 311*c* *e*PKIKP **PKPdf** **04 11 06.1 -0.2**
MOS **Moscow** 131.56 326 *i* PKIKP **PKPdf** **04 11 04.3 -2.0**
MOS *e* 04 13 25.5
MOS *e*SS SS 04 30 52.4 -5.9
MOS pmax pmax
comp=Z,35nm,0.9s
STEI **Steigen** 131.60 348 *e*Pdif **Pdif** **04 07 59.4 +0.3**
STEI *e*PKPdf **PKPdf** **04 11 03.7 -2.3**
STEI *e*PP **PP** **04 13 27.3 +1.9**
STEI *e*SKPdf **SKPdf** **04 14 37.1 -2.6**
STEI *e*SP **SP** **04 23 38.5 +2.9**
STEI *e*SS **SS** **04 31 02.1 +4.5**
STEI IVMs_BB IVMs_BB 05 00 15.1
comp=Z,3µm,32.1s
KBZ **Khabaz** 131.70 309 PKP **PKPdf** **04 11 07.0 +0.1**
comp=Z,2.9nm,1.0s,baz=159,slow=8.6,SNR=14
KBZ **Khabaz** 131.70 309*c* *i* PKIKP **PKPdf** **04 11 06.0 -0.9**
LOF **Lofoten** 131.75 349 *e*Pdif **Pdif** **04 08 00.8 +1.1**
LOF *e*PKPdf **PKiKP** **04 11 07.3 0.0**
LOF *e*PP **PP** **04 13 26.0 -0.4**
LOF *e*SKPdf **SKPdf** **04 14 36.3 -3.8**
LOF IVMs_BB IVMs_BB 04 59 19.0
comp=Z,3µm,33.8s
VALR **Valaam** 131.81 335*c* *i* PKIKP **PKPdf** **04 11 05.1 -1.5**
KIV **Kislovodsk** 131.81 310 *i* P **PKPdf** **04 11 04.7 -2.7**
SNR=14
KIV **Kislovodsk** 131.81 310 *i* P **Pdif** **04 07 56.8 -4.0**
KIV *i* 04 11 05.0
KIV *e* 04 13 24.8
KIV *e*PS **PS** **04 23 39.5 -4.0**
KIV *e*SS SS 04 30 58.6 -4.0
KIV pmax pmax
comp=Z,6.0nm,1.0s
SHA1 **Shidzhatmaz** 131.87 310*c* *i* PKIKP **PKPdf** **04 11 07.4 -0.2**
LPSR **Galich'ya Gora** 132.04 322 *e*PKIKP **PKPdf** **04 11 06.1 -1.2**
LPSR *e* 04 13 28.6
LPSR pmax pmax
comp=Z,120nm,2.4s
FAUS **Fauske** 132.05 347 *e*Pdif **Pdif** **04 08 00.8 -0.3**
FAUS IVmB_BB 04 08 16.2
comp=Z,343nm,4.0s
FAUS *e*PKPdf **PKPdf** **04 11 06.0 -0.9**
FAUS *e*PP **PP** **04 13 27.5 -0.9**
FAUS *e*SKPdf **SKPdf** **04 14 37.8 -2.8**
FAUS *e*SP **SP** **04 23 39.2 -0.3**
FAUS *e*SS **SS** **04 31 06.2 +2.9**
FAUS IVMs_BB IVMs_BB 05 00 30.8
comp=Z,3µm,33.0s
GBN **Guysborough** 132.08 48 PKPdf **PKPdf** **04 11 07.2 -0.4**
VORR **Voronezh** 132.19 321 *e*PKIKP **PKPdf** **04 11 06.3 -1.3**
VORR *e* 04 13 39.0
VORR pmax pmax
comp=Z,30nm,0.9s
VSR **Storozhevoye** 132.36 320 *e*PKIKP **PKPdf** **04 11 06.3 -1.7**
VSR *e* 04 13 30.5
VSR pmax pmax
comp=Z,80nm,2.3s
OBN **Obninsk** 132.37 326 IAMs_20 IAMs_20 05 14 09.0
comp=Z,16µm,19.0s
OBN **Obninsk** 132.37 326 *i* PKIKP **PKPdf** **04 11 08.0 +0.2**
OBN *e* 04 11 13.7
OBN *e* 04 11 19.3
OBN *e* 04 13 30.1
OBN *e*PPP PPP 04 16 20.0
OBN *e* 04 18 15.8
OBN *e*SS SS 04 31 07.3 -0.8
OBN *e*SSS SSS 04 36 00.3
OBN pmax pmax
comp=Z,127nm,2.5s
LODK **Lodwar** 132.46 254 P **PKiKP** **04 11 10.2 -0.3**
ISOG **Isortoq, Green** 132.62 16 *i* P **PKPdf** **04 11 06.5 -1.5**
IVI **Ivigtut** 132.78 24 IAMs_20 IAMs_20 05 02 47.8
comp=Z,18µm,22.0s
IVI **Ivigtut** 132.78 24 *i* P **PKPdf** **04 11 07.1 -1.3**
ANGG **Ammassalik, Gr** 132.90 15 IAMs_20 IAMs_20 05 11 42.8
comp=Z,18µm,19.0s
ANGG **Ammassalik, Gr** 132.90 15 *i* P **PKPdf** **04 11 06.5 -2.1**
BCA **Borcka** 132.96 307 ⇓P **PKiKP** **04 11 10.6 0.0**
ERBR **Yeremizino-Bor** 133.02 313 *i* PKIKP **PKiKP** **04 11 10.2 -0.4**
ERBR *e* 04 18 16.6
ERBR pmax pmax
comp=Z,73nm,1.4s
LABN **Labinsk** 133.07 311 *i* PKIKP **PKPdf** **04 11 08.9 -0.7**
LABN *e* 04 13 37.3
LABN *e* 04 18 15.3
LABN pmax pmax
comp=Z,167nm,2.8s
KONS **Konsvik** 133.25 348 *e*PKPdf **PKPdf** **04 11 09.0 -0.2**
MOR8 **Moi Rana** 133.26 347 *e*Pdif **Pdif** **04 08 05.7 -0.9**
MOR8 *e*PKPdf **PKPdf** **04 11 08.7 -0.6**
MOR8 *e*PP **PP** **04 13 33.3 -2.9**
MOR8 IVMs_BB IVMs_BB 05 01 16.5
comp=Z,3µm,26.4s
STOK **Stokkvaagen** 133.42 348 *e*Pdif **Pdif** **04 08 09.3 +2.1**
STOK *e*PKPdf **PKPdf** **04 11 05.2 -4.3**
STOK *e*PP **PP** **04 13 36.1 -1.0**
STOK *e*SKPdf **SKPdf** **04 14 41.5 -1.7**
STOK IVMs_BB IVMs_BB 05 00 25.1
comp=Z,3µm,26.7s
KEF **Keuruu** 133.50 338 *e*P **PKPdf** **04 11 06.0 -3.8**
FINES **FINESS Array B** 133.56 337 PKhKP PKPpre 04 10 54.7
comp=Z,2.7nm,0.9s,baz=349,slow=1.9,SNR=5.1
FINES PKP **PKPdf** **04 11 08.6 -1.4**
comp=Z,4.1nm,0.5s,baz=94,slow=4.2,SNR=6.7
FINES SKPbc **SKPab** **04 14 38.4 -0.8**
comp=Z,14nm,0.8s,baz=57,slow=7.0,SNR=5.6
VAF **Ylistaro** 133.60 340 *e*P **PKPdf** **04 11 03.7 -6.2**
SOC **Sochi** 134.00 310 *i* PKIKP **PKPdf** **04 11 10.1 -1.2**
SOC *e* 04 13 39.1
SOC *e*PPP PPP 04 16 32.8
SOC pmax pmax
comp=Z,16nm,0.7s
ARBE **Arbavere** 134.91 335 *e*P **PKPdf** **04 11 10.3 -2.2**
MEF **Metsahovi** 135.00 337 *e*P **PKPdf** **04 11 09.4 -3.3**
NSS **Namsos** 135.21 347 *e*PKPdf **PKPdf** **04 11 09.8 -3.1**
NSS *e*SKPdf **SKPab** **04 14 46.2 -0.1**
NSS IVMs_BB IVMs_BB 05 02 45.7
comp=Z,3µm,22.3s
VSU **Vasula** 135.23 334*c* *i* PKIKP **PKPdf** **04 11 12.7 -0.4**
VSU pmax pmax
comp=Z,44nm,1.3s
ANN **Anapa** 135.32 312 *i* PKIKP **PKPdf** **04 11 07.5 -6.2**
ANN *e* 04 13 48.8
ANN *e*SS SS 04 31 40.4 -4.3
ANN pmax pmax
comp=E,20nm,1.0s
ANN pmax pmax
comp=N,13nm,0.8s
ANN pmax pmax
comp=Z,38nm,1.4s
RAF **Rauma** 135.36 339 *e*P **PKPdf** **04 11 06.9 -6.3**
MTSE **Matsula** 136.23 335 *e*P **PKPdf** **04 11 11.8 -3.2**
AAL **Aland** 136.58 339 *e*P **PKPdf** **04 11 09.3 -6.3**
TBLU **Trondheim** 136.70 347 *e*Pdif **Pdif** **04 08 22.6 +0.7**
TBLU *e*PKPdf **PKPdf** **04 11 13.5 -2.3**
TBLU *e*PP **PP** **04 13 57.1 -0.8**
TBLU *e*SKPdf **SKPdf** **04 14 49.0 -0.3**
TBLU *e*SS **SS** **04 31 57.3 -1.9**
TBLU IVMs_BB IVMs_BB 04 58 37.8
comp=Z,3µm,29.0s
GAZ **Gaziantep** 136.91 301 IAMs_20 IAMs_20 05 25 46.7
comp=Z,19µm,18.0s
MNK **Minsk** 137.05 328 *i* PKIKP **PKPdf** **04 11 14.1 -2.6**
MNK *i* 04 13 56.0
MNK *i* 04 18 28.1
MNK *i* SP SP 04 24 29.6 +6.7
MNK *i* SS **SS** **04 32 04.0 -0.3**
MNK *i* SSS SSS 04 37 09.2
MNK pmax pmax
comp=Z,38nm,0.9s
MNK pmax pmax
comp=E,11nm,0.8s
MNK pmax pmax
comp=N,16nm,0.9s
MNK MLR MLR
comp=E,13µm,20.0s
MNK MLR MLR
comp=N,11µm,20.0s
SIM **Simferopol'** 137.55 313 *e*PKHKP PKPpre 04 11 09.1
SIM pmax pmax
comp=Z,600nm,8.4s
MOL **Molde** 137.86 348 *e*Pdif **Pdif** **04 08 28.1 +1.0**
MOL *e*PKPdf **PKPdf** **04 11 15.6 -2.3**
MOL *e*PP **PP** **04 14 05.4 +0.4**
MOL *e*SKPdf **SKPbc** **04 14 50.4 +0.1**
MOL IVMs_BB IVMs_BB 04 59 45.9
comp=Z,2µm,19.4s
DOMB **Dombas** 138.03 347 *e*P **PP** **04 14 06.0 -0.2**
DOMB IVMs_BB IVMs_BB 05 02 55.2
comp=Z,3µm,28.5s
PABE **Paberze** 138.27 332 IAMs_20 IAMs_20 05 11 20.5
comp=Z,15µm,21.0s
PABE **Paberze** 138.27 332 *e*P **PKPdf** **04 11 16.6 -2.2**
AKASG **Malin Array Be** 138.32 323 PKhKP PKPpre 04 11 08.2
comp=Z,1.6nm,0.4s,baz=44,slow=3.9,SNR=14
AKASG PKP **PKPdf** **04 11 17.6 -1.6**
comp=Z,15nm,0.9s,baz=57,slow=2.6,SNR=13
KIEV **Kiev** 138.34 323 PKPpre 04 11 09.0
KIEV **Kiev** 138.34 323 IAMs_20 IAMs_20 05 12 41.8
comp=Z,21µm,22.0s
KIEV **Kiev** 138.34 323 *i* P **PKPdf** **04 11 16.3 -2.9**
SNR=6.3
KIEV **Kiev** 138.34 323 ⇑P **PKPdf** **04 11 17.0 -2.1**
KIEV **Kiev** 138.34 323 ⇑PKIKP **PKPdf** **04 11 17.0 -2.1**
NB2 **NORSAR Subarra** 138.43 345 PKPdf PKPpre 04 11 09.2
comp=Z,3.7nm,0.8s,baz=31,slow=1.9
NOA **NORSAR Array B** 138.43 345 PKhKP PKPpre 04 11 08.8
comp=Z,4.4nm,0.9s,baz=25,slow=3.9,SNR=14
NOA SKPbc **SKPbc** **04 14 52.3 +0.2**
comp=Z,5.3nm,1.0s,baz=16,slow=4.3,SNR=3.5
HFS **Hagfors** 138.55 342 PKhKP PKPpre 04 11 06.8
comp=Z,6.8nm,0.7s,baz=73,slow=5.0,SNR=16
NC602 **NORSAR Array S** 138.61 344 *e*Pdif **Pdif** **04 08 29.6 -0.9**
NC602 *e*PKPdf PKPpre 04 11 10.7

NC602 ePP PP 04 14 10.1 +0.2
**GHAJ Ghor Haditha 138.70 293** IAMs_20 IAMs_20 05 14 25.9
comp=Z,23µm,20.0s
**MMAI Mount Meron Ar 138.76 295** PKhKP PKPpre 04 11 13.8
comp=Z,4.5nm,0.7s,baz=29,slow=1.9,SNR=5.7
**PBUR Paburge 138.80 333** eP **PKPdf 04 11 16.5 -3.4**
**KIRS Kirsehir-Merke 139.16 305** ⇓P PKPpre 04 11 12.4
**FOO Floro 139.22 349** ePKPdf PKPpre 04 11 11.5
FOO ePP **PP 04 14 13.8 +0.4**
FOO eSS SS 04 32 31.0 +2.1
**BRTR Keskin Array B 139.25 306** PKhKP PKPpre 04 11 13.8
comp=Z,3.8nm,0.9s,baz=153,slow=3.2,SNR=11
BRTR PP **PP 04 14 16.4 +1.2**
comp=Z,6.6nm,1.1s,baz=64,slow=3.4,SNR=4.6
**HYA Hoyanger 139.41 348** ePKPdf PKPpre 04 11 14.2
HYA ePP **PP 04 14 12.2 -2.5**
**SKAR Skarslia 139.42 346** ePKPdf PKPpre 04 11 12.6
SKAR ePP **PP 04 14 12.7 -2.1**
SKAR eSS SS 04 32 34.2 +2.6
**OSL Oslo 139.51 344** ePKPdf PKPpre 04 11 17.2
OSL ePP **PP 04 14 17.6 +2.3**
OSL eSS SS 04 32 35.0 +2.5
**SUW Suwalki 139.57 330** ePKPdf PKPpre 04 11 11.9
SUW ePP **PP 04 14 21.3 +5.2**
SUW eSS SS 04 32 48.8 +15
SUW eL L 05 14 20.9
comp=Z,14µm,21.6s
**SUE Sulen 139.77 349** ePKPdf **PKPdf 04 11 20.5 -0.9**
SUE eSKPdf **SKPdf 04 14 54.5 -0.3**
**ANTO Ankara 139.85 306** IAMs_20 IAMs_20 05 27 29.0
comp=Z,12µm,18.0s
**SORM Soroca 140.03 320** ⇑P **PKPdf 04 11 15.7 -6.6**
**SORM Soroca 140.03 320** ⇑PKHKP PKPpre 04 11 15.7
**KONO Kongsberg 140.04 345** PKPpre PKPpre 04 11 14.1
**KONO Kongsberg 140.04 345** ePKPdf PKPpre 04 11 14.5
KONO ePP **PP 04 14 19.9 +1.3**
KONO eSS SS 04 32 38.9 +0.2
KONO IVMs_BB IVMs_BB 05 04 24.7
comp=Z,2µm,32.0s
**KONO Kongsberg 140.04 345** ⇓PKHKP PKPpre 04 11 12.4
**ASK Askoy 140.23 348** ePKPdf **PKPdf 04 11 20.9 -1.3**
ASK eSKPdf **SKPbc 04 14 56.6 -0.3**
ASK eSS **SS 04 32 43.4 +2.6**
**KIS Kishinev 140.24 318** ePKP PKPpre 04 11 11.0
comp=Z,1µm,5.3s
**KIS Kishinev 140.24 318** ePKHKP PKPpre 04 11 12.0
**KIS Kishinev 140.24 318** *i* PKiKP **PKPdf 04 11 21.0 -1.8**
**KIS Kishinev 140.24 318** ePKHKP PKPpre 04 11 12.0
KIS *i* 04 11 21.0
KIS pmax pmax
comp=Z,1µm,9.2s
**MILM Milestii Mici 140.28 318** ePKHKP PKPpre 04 11 11.0
MILM *i* 04 11 21.0
MILM pmax pmax
comp=Z,1µm,5.3s
**BER Bergen 140.29 348** ePKPdf **PKPdf 04 11 18.7 -3.7**
BER ePP **PP 04 14 22.3 +2.3**
BER eSS SS 04 32 44.3 +2.8
**ODD1 Odda 140.47 347** ePKPdf PKPpre 04 11 16.5
ODD1 ePP **PP 04 14 24.0 +2.7**
ODD1 ePKSdf **PKSdf 04 14 59.1 +0.6**
ODD1 eSS SS 04 32 47.5 +3.7
**BLS5 Blasjo 140.96 347** ePKPdf PKPpre 04 11 18.4
BLS5 ePP **PP 04 14 23.7 -0.5**
BLS5 ePKSdf **PKSdf 04 15 02.3 +2.9**
BLS5 eSS SS 04 32 56.8 +6.6
**KMY Karmoy 141.40 348** ePKPdf PKPpre 04 11 18.6
KMY ePP **PP 04 14 26.7 -0.1**
KMY ePKSdf **PKSdf 04 15 01.6 +1.6**
KMY eSS SS 04 32 58.7 +4.3
**DEL Delary 141.50 339** eP PKPpre 04 11 15.5
**HOMB Homborsund 141.53 345** ePKPdf PKPpre 04 11 16.8
HOMB ePP **PP 04 14 28.2 +0.6**
HOMB eSS SS 04 32 57.4 +1.3
HOMB IVMs_BB IVMs_BB 05 03 54.5
comp=Z,3µm,11.8s
**LVV L'vov 141.63 324** ePKIKP PKPpre 04 11 20.5
LVV *e* 04 14 25.4
LVV *e* 04 18 26.0
**SNART Snartemo 141.77 346** ePKPdf PKPpre 04 11 19.6
SNART ePP **PP 04 14 31.3 +2.2**
**TESR Tescani 141.79 318** ⇑P PKPpre 04 11 20.7
**OVD Ostervraa, Den 141.91 342** *i* P PKPpre 04 11 19.8
**ONER Baraj Valea Uz 142.03 318** ⇑P PKPpre 04 11 21.8
**VRI Vrincioaia 142.04 317** ⇓P PKPpre 04 11 21.5
**VRI Vrincioaia 142.04 317** ⇓PKIKP PKPpre 04 11 21.5
**BEL Belsk 142.07 329** ePKPdf PKPpre 04 11 20.9
BEL eL L 05 12 48.9
comp=Z,15µm,24.2s
**PLOR Plostina 142.09 317** ⇓P **PKPdf 04 11 23.6 -2.6**
**PLOR Plostina 142.09 317** ⇓PKIKP **PKPdf 04 11 23.6 -2.6**
**BURAR Bucovina Array 142.13 321** ⇓P PKPpre 04 11 22.1
**BURAR Bucovina Array 142.13 321** ⇓PKIKP PKPpre 04 11 22.1
**BSD Bornholm Skovb 142.21 337** eP PKPpre 04 11 18.2
**BSD Bornholm Skovb 142.21 337** *i* P PKPpre 04 11 23.1
**RCBR Riachuelo 142.26 134** PKPpre 04 11 22.2
**RCBR Riachuelo 142.26 134** IAMs_20 IAMs_20 05 18 30.0
comp=Z,20µm,18.0s
**RCBR Riachuelo 142.26 134** PKHKP PKPpre 04 11 22.2
**ISK Istanbul-Kandi 142.27 309** P PKPpre 04 11 17.6
**TURR Turia 142.39 318** ⇓P **PKPdf 04 11 25.0 -1.8**
**GOET G??ttrup 142.43 343** *i* P PKPpre 04 11 23.2
**KWP Kalwaria Pacla 142.45 325** ePKPdf PKPpre 04 11 21.2
KWP ePP PP 04 14 47.2 +13
KWP eSS SS 04 33 05.3 -2.6
KWP eL L 05 13 43.6
comp=Z,18µm,23.3s
**KWP Kalwaria Pacla 142.45 325** IAMs_20 IAMs_20 05 16 27.0
comp=Z,17µm,19.0s
**NEHR Nehoiu 142.50 317** ⇑P **PKPdf 04 11 25.2 -1.7**
**OZUR 142.52 318** ⇑P **PKPdf 04 11 24.7 -2.3**
**BOSR Bodos 142.60 318** ⇑P **PKPdf 04 11 24.5 -2.6**
**COP Copenhagen 142.61 339** *i* P PKPpre 04 11 23.7
**GKP Gorka Klasztor 142.68 333** ePKPdf PKPpre 04 11 23.4
**GKP Gorka Klasztor 142.68 333** eP PKPpre 04 11 22.0
**MLR Muntele Rosu 142.69 317** IAMs_20 IAMs_20 05 19 16.0
comp=Z,19µm,20.0s
**MLR Muntele Rosu 142.69 317** ⇓P **PKPdf 04 11 25.7 -1.7**
**MLR Muntele Rosu 142.69 317** ⇓PKIKP **PKPdf 04 11 25.7 -1.7**
**DOPR Dopca 142.82 318** ⇓P **PKPdf 04 11 24.9 -2.5**
**ARCR ARCALIA 142.90 321** ⇓P **PKPdf 04 11 25.0 -2.6**
**MUD Monsted U'grnd 142.94 343** *i* P PKPpre 04 11 22.9
**KOLS Kolonicke sedl 143.08 324** ePKIKP PKPbc 04 11 25.6 +0.9
**KOLS Kolonicke sedl 143.08 324** ePKP PKPbc 04 11 25.6 +0.9
**BMR Baia Mare 143.10 322** ⇓P PKPpre 04 11 24.7
**BMR Baia Mare 143.10 322** ⇓PKIKP PKPpre 04 11 24.7
**RGN Rugen 143.22 338** IAMs_20 IAMs_20 05 23 00.1
comp=Z,23µm,18.0s
**KULA Kula-Manisa 143.30 305** P PKPab 04 11 23.2 -1.3
**MDB Medias 143.36 319** ⇓P PKPbc 04 11 25.8 +0.3
**MDB Medias 143.36 319** ⇓PKIKP PKPbc 04 11 25.8 +0.3
**BIGH Upper Bighouse 143.40 355** eP PKPab 04 11 23.8 -0.3
**CBBR Cluj-Babes-Bol 143.54 321** ⇓P **PKPdf 04 11 27.5 -1.2**
**CJR Cluj-Napoca 143.54 320** ⇑P **PKPdf 04 11 27.5 -1.3**
**CJR Cluj-Napoca 143.54 320** ⇑PKIKP **PKPdf 04 11 27.5 -1.3**
**ARR Arges 143.57 318** ⇓P PKPbc 04 11 27.3 +1.0
**OJC Ojcow 143.59 328** ePKPdf PKPab 04 11 23.9 -1.2
OJC ePP PP 04 15 06.7 +26
OJC eSS SS 04 33 30.4 +10
OJC eL L 05 14 05.1
comp=Z,13µm,24.1s
**EDRB Edirne 143.65 311** P PKPab 04 11 25.0 -0.7
**SSRD Sdr. Stenderup 143.65 341** *i* P PKPbc 04 11 27.0 +1.0
**TNR Turnu Rosu 143.66 318** ⇓P PKPbc 04 11 27.0 +0.5
**TNR Turnu Rosu 143.66 318** ⇓PKIKP PKPbc 04 11 27.0 +0.6
**MESR Meseseni 143.69 321** ⇑P **PKPdf 04 11 27.8 -1.2**
**HUMR Humele 143.74 316** ⇓P PKPab 04 11 25.2 -0.7
**ELND Elena 143.83 313** ⇓P PKPbc 04 11 27.8 +0.8
**NIE Niedzica 143.83 326** ePKPdf PKPbc 04 11 27.0 +0.2
NIE eSS SS 04 33 24.4 +0.5
NIE eL L 05 16 16.8
comp=Z,11µm,21.9s
**LINV Loch Inver, As 143.84 356** eP PKPab 04 11 24.5 -1.3
**LEWI Lewis, Hebride 143.93 357** eP PKPab 04 11 25.6 -0.7
**YER Yerkesik 143.93 303** P PKPab 04 11 26.6 -0.4
**DRGR 144.02 321** ⇓P PKPbc 04 11 27.4 -0.1
**DRGR 144.02 321** ⇓PKIKP PKPbc 04 11 27.4 -0.1
**LOT Lotru 144.07 318** ⇓P **PKPab 04 11 27.2 -0.1**
**LTVH Ltavrtes, Hu 144.16 322** ⇓P PKPbc 04 11 27.8 0.0
**PVL Pavlikeni 144.22 314** ⇑*i*P PKPbc 04 11 28.3 +0.1
**MCD Coleburn Disti 144.24 354** eP **PKPab 04 11 25.2 -2.2**

**KECS Kecovo 144.31 325** ePKIKP **PKPdf 04 11 29.2 -0.8**
**KECS Kecovo 144.31 325** ePKP **PKPdf 04 11 29.2 -0.8**
**VLAD Vladila 144.34 316** ⇓P PKPbc 04 11 28.6 0.0
**DEV Deva 144.38 320** ⇑P PKPbc 04 11 28.8 +0.2
**DEV Deva 144.38 320** ⇑PKIKP PKPbc 04 11 28.8 +0.2
**DIM Dimitrovgrad 144.38 312** ⇑*i*P PKPbc 04 11 29.2 +0.5
**BORR Bors 144.39 322** ⇑P **PKPdf 04 11 29.8 -0.3**
**LANS Liptovska Anna 144.43 327** ePKIKP **PKPdf 04 11 30.3 +0.1**
**LANS Liptovska Anna 144.43 327** ePKP **PKPdf 04 11 30.3 +0.1**
**ENEZ Enez 144.46 310** P **PKPab 04 11 27.1 -1.6**
**CAVK Edirne/Enez-Ca 144.47 310** ⇓P PKPbc 04 11 29.3 +0.3
**ALN Alexandroupoli 144.48 310** P **PKPab 04 11 27.4 -1.4**
**DAT Datca 144.58 303** P **PKPab 04 11 28.1 -1.4**
**OKC Ostrava-Krasne 144.64 328** ePKP PKPbc 04 11 29.6 +0.3
OKC AMS AMS 05 41 30.0
comp=Z,14µm,16.4s
**OKC Ostrava-Krasne 144.64 328** ePKIKP PKPbc 04 11 29.6 +0.3
OKC MLR MLR
comp=Z,14µm,16.4s
**EZN Ezine 144.65 308** P **PKPab 04 11 27.9 -1.6**
**RUE Ruedersdorf 144.67 335** eP **PKPab 04 11 24.7 -4.4**
**KPL Plockton 144.67 356** eP PKPbc 04 11 29.1 0.0
**GZR Gura Zlata 144.70 319** ⇓P **PKPab 04 11 29.5 -0.1**
**GZR Gura Zlata 144.70 319** ⇓PKIKP **PKPab 04 11 29.5 -0.1**
**BODT Bodrum 144.70 303** P **PKPab 04 11 28.7 -1.1**
**BSEG Bad Segeberg 144.75 339** ePKPdf **PKPab 04 11 28.6 -0.7**
baz=39,slow=1.6
**SRE Strehaia 144.80 318** ⇓P **PKPdf 04 11 30.6 -0.4**
**SRE Strehaia 144.80 318** ⇓PKIKP **PKPdf 04 11 30.6 -0.4**
**DRUM Mains of Drumt 144.82 353** eP **PKPab 04 11 29.0 -0.5**
**KSP Ksiaz 144.82 331** ePKPdf **PKPab 04 11 29.5 -0.2**
KSP ePP **PP 04 14 49.6 +1.7**
KSP eL L 05 08 26.8
comp=Z,20µm,34.0s
**PRK Paraskevi 144.87 307** P **PKPab 04 11 28.7 -1.6**
**PLD Plovdiv 144.91 313** ⇑*i*P **PKPab 04 11 30.1 -0.3**
**SURR Surduc 144.91 320** ⇓P **PKPab 04 11 30.2 -0.1**
**SIRR Siria 144.91 321** ⇑P **PKPab 04 11 30.3 0.0**
**NISR Nisiros 144.96 303** P **PKPab 04 11 29.5 -1.2**
**PSZ Piszkesteto 144.96 325** IAMs_20 IAMs_20 05 16 30.2
comp=Z,22µm,20.0s
**PSZ Piszkesteto 144.96 325** ⇑P **PKPab 04 11 30.1 -0.4**
**PSZ Piszkesteto 144.96 325** ⇑PKIKP **PKPab 04 11 30.1 -0.4**
**MORC Moravsky Berou 144.98 329** IAMs_20 IAMs_20 05 24 36.2
comp=Z,13µm,19.0s
**MORC Moravsky Berou 144.98 329** ePKP **PKPab 04 11 29.7 -0.7**
**MORC Moravsky Berou 144.98 329** ⇓P **PKPab 04 11 29.8 -0.7**
**MORC Moravsky Berou 144.98 329** ⇓PKIKP **PKPab 04 11 29.8 -0.7**
**SMTH Samothraki Isl 145.00 310** P PKPbc 04 11 29.4 -1.4
**BAIL Bailesti 145.01 317** ⇓P **PKPdf 04 11 32.2 +0.9**
**OSTC Ostas 145.06 331** ePKP **PKPbc 04 11 30.5 -0.2**
OSTC AMS AMS 05 20 00.0
comp=Z,16µm,20.7s
**OSTC Ostas 145.06 331** ePKIKP **PKPbc 04 11 30.5 -0.2**
OSTC MLR MLR
comp=Z,16µm,20.7s
**MPEP Malo Peshtene 145.06 315** *i* P **PKPdf 04 11 31.3 -0.1**
**RZN Rozhen 145.09 312** ⇑*i*P **PKPbc 04 11 30.5 -0.8**
**VALD Valchedram 145.11 316** *i* P **PKPdf 04 11 32.2 +0.7**
**CHVC Chvalec 145.11 331** ePKP **PKPbc 04 11 30.5 -0.3**
CHVC AMS AMS 05 20 00.0
comp=Z,18µm,20.4s
**CHVC Chvalec 145.11 331** ePKIKP **PKPbc 04 11 30.5 -0.3**
CHVC MLR MLR
comp=Z,18µm,20.4s
**MAUC Maruska 145.11 328** ePKP **PKPbc 04 11 30.2 -0.7**
**KRLC Kraliky 145.13 330** ePKP **PKPbc 04 11 30.5 -0.4**
KRLC AMS AMS 05 32 50.0
comp=Z,12µm,17.8s
**KRLC Kraliky 145.13 330** ePKIKP **PKPbc 04 11 30.5 -0.4**
KRLC MLR MLR
comp=Z,12µm,17.8s
**PGB Panagyurishte 145.14 314** ⇑*i*P **PKPbc 04 11 30.5 -0.7**
**PUNG Punghina 145.15 317** ⇑P **PKiKP 04 11 33.6 -1.8**
**DPC Dobruska-Polom 145.16 330** ePKP **PKPab 04 11 31.1 0.0**
DPC AMS AMS 05 13 00.0
comp=Z,14µm,22.6s
**DPC Dobruska-Polom 145.16 330** ePKIKP **PKPab 04 11 31.1 0.0**
DPC MLR MLR
comp=Z,14µm,22.6s
**VYHS Vyhne 145.16 326** ePKIKP **PKPbc 04 11 31.0 -0.1**
**VYHS Vyhne 145.16 326** ePKP **PKPbc 04 11 31.0 -0.1**
**KARP Karpathos 145.18 301** IAMs_20 IAMs_20 05 28 43.5
comp=Z,16µm,19.0s
**KARP Karpathos 145.18 301** P **PKPbc 04 11 30.3 -1.2**
**HERR Herculane 145.18 318** ⇓P **PKPbc 04 11 30.9 -0.3**
**UPC Upice 145.19 331** ePKP **PKPbc 04 11 30.9 -0.1**
UPC AMS AMS 05 20 00.0
comp=Z,19µm,19.9s
**UPC Upice 145.19 331** ePKIKP **PKPbc 04 11 30.9 -0.1**
UPC MLR MLR
comp=Z,19µm,19.9s
**SIGR SIGRI 145.19 308** P **PKPbc 04 11 26.9 -4.5**
**DJES Djerdap 145.22 318** ⇑P **PKPdf 04 11 32.4 +0.7**
**BZS Buzias 145.28 320** ⇑P **PKPdf 04 11 31.9 +0.1**
**BZS Buzias 145.28 320** ⇑PKIKP **PKPdf 04 11 31.9 +0.1**
**CHOS Chios island 145.30 306** P **PKPbc 04 11 31.3 -0.6**
**LIA Limnos Island 145.45 309** P **PKPdf 04 11 30.7 -1.5**
**INVG Invergeldie, C 145.45 354** eP **PKPab 04 11 31.8 -0.1**
**KAVA Kavala 145.52 311** P **PKPdf 04 11 30.7 -1.6**
**JAVC Velka Javorina 145.52 327** ePKP **PKPab 04 11 32.9 +0.4**
**THAS Thassos island 145.52 310** P **PKPdf 04 11 30.7 -1.6**
**PLNA Plana 145.66 314** P **PKPdf 04 11 32.6 -0.1**
**MDVR Moldovita 145.66 319** ⇑P **PKPab 04 11 33.1 0.0**
**BANR Banloc 145.70 320** ⇓P **PKiKP 04 11 35.4 -1.1**
**VTS Vitosha 145.72 314** ⇑*i*P **PKPbc 04 11 33.0 -0.2**
**LAWE Loch Awe, Argy 145.73 356** eP **PKPdf 04 11 31.6 -0.6**
**FLTG Flechtingen 145.75 337** ePKPdf **PKPdf 04 11 31.5 -0.8**
baz=39,slow=1.6
**VRAC Vranov 145.75 329** ePKP **PKPdf 04 11 32.2 -0.2**
VRAC *e* 04 20 48.7
**VRAC Vranov 145.75 329** ⇓P **PKPab 04 11 33.1 -0.2**
**VRAC Vranov 145.75 329** ⇓PKIKP **PKPab 04 11 33.1 -0.2**
**ESY Stoneypath 145.81 353** eP **PKPdf 04 11 32.5 +0.2**
**PVCC Panska Ves 145.81 332** ePKP **PKPab 04 11 33.3 -0.1**
PVCC AMS AMS 05 35 10.0
comp=Z,16µm,17.0s
**PVCC Panska Ves 145.81 332** ePKIKP **PKPab 04 11 33.3 -0.1**
PVCC MLR MLR
comp=Z,16µm,17.0s
**BRG Berggiesshubel 145.82 333** ePKP **PKPbc 04 11 32.8 -0.2**
BRG Amp 04 11 36.0
comp=Z,1µm,1.2s
**BRG Berggiesshubel 145.82 333** ePKIKP **PKPbc 04 11 32.8 -0.2**
BRG pmax pmax
comp=Z,1µm,1.2s
**BRG Berggiesshubel 145.82 333** ePKPdf **PKPdf 04 11 31.8 -0.6**
baz=39,slow=1.6
**MMB Musomishta 145.83 312** ⇑*i*P **PKPdf 04 11 31.8 -1.1**
**NVR Nevrokopi 145.83 312** P **PKPdf 04 11 32.1 -0.8**
**SRO Srobarova 145.87 326** ePKP2 **PKPab 04 11 34.3 +0.6**
**SRO Srobarova 145.87 326** ePKP **PKPab 04 11 34.3 +0.6**
**EDI Edinburgh 145.87 353** eP **PKPbc 04 11 32.9 -0.1**
**SMOL Smolenice 145.87 327** ePKP2 **PKPab 04 11 34.6 +0.9**
**CLL Collm 145.88 334** IAMs_20 IAMs_20 05 26 49.6
comp=Z,18µm,18.0s
**CLL Collm 145.88 334** ePKP2 **PKPdf 04 11 32.0 -0.6**
CLL pmax pmax
comp=Z,1µm,1.2s
CLL MLR MLR
comp=Z,17µm,18.0s
**CLL Collm 145.88 334** ePKPdf **PKPdf 04 11 31.4 -1.2**
baz=39,slow=1.6
**KOKK Kokkinochori, 145.95 311** P **PKPdf 04 11 30.5 -2.5**
**RICC Richard 146.00 332** ePKP **PKPbc 04 11 33.4 -0.2**
RICC AMS AMS 05 18 50.0
comp=Z,20µm,20.6s
**KRUC Moravsky 146.01 329** ePKP **PKPdf 04 11 33.2 +0.3**
KRUC *e* 04 20 49.2
**ZKR Zakros 146.02 300** P **PKPdf 04 11 33.6 +0.2**
**PGBU Glenifferbraes 146.10 355** eP **PKPbc 04 11 33.4 -0.4**
**SRS Serrai 146.11 312** P **PKPdf 04 11 30.7 -2.6**
**KKB Krupnik 146.13 313** ⇑*i*P **PKPdf 04 11 33.0 -0.3**
**OUR Ouranopolis 146.15 310** P **PKPdf 04 11 32.4 -1.0**
**GOPC GO Pecny, Ondr 146.16 331** ePKP **PKPbc 04 11 33.7 -0.4**
GOPC AMS AMS 05 21 40.0
comp=Z,16µm,19.6s
**GOPC GO Pecny, Ondr 146.16 331** ePKP2 **PKPbc 04 11 33.7 -0.4**
GOPC MLR MLR
comp=Z,16µm,19.6s
**PRA Prague 146.21 332** ePKP **PKPbc 04 11 34.1 -0.1**
PRA AMS AMS 05 18 40.0
comp=Z,16µm,19.6s
**PRA Prague 146.21 332** ePKP2 **PKPbc 04 11 34.1 -0.1**
PRA MLR MLR
comp=Z,16µm,19.6s
**PRU Pruhonice 146.22 331** ePKP **PKPdf 04 11 33.7 +0.5**
PRU AMS AMS 05 21 00.0
comp=Z,13µm,19.4s
**PRU Pruhonice 146.22 331** ePKP2 **PKPdf 04 11 33.7 +0.5**
PRU MLR MLR
comp=Z,13µm,19.4s
**HSKC Hora Svate Kat 146.24 333** ePKP **PKPbc 04 11 34.3 -0.1**
HSKC AMS AMS 05 25 50.0
comp=Z,16µm,18.8s
**BOVS Bovan 146.24 317** ⇑P **PKPdf 04 11 33.9 +0.5**
**ZST Bratislava 146.24 327** ePKP2 **PKPab 04 11 35.8 +0.7**
**ZST Bratislava 146.24 327** ePKP **PKPab 04 11 35.8 +0.7**
**SKY Skiros Island 146.26 308** P **PKPdf 04 11 33.1 -0.5**
**TREC Trest 146.28 330** ePKP **PKPbc 04 11 34.3 -0.2**
TREC AMS AMS 05 23 40.0
comp=Z,16µm,18.9s
**TREC Trest 146.28 330** ePKP2 **PKPbc 04 11 34.3 -0.2**
TREC MLR MLR
comp=Z,16µm,18.9s
**SNT1 Gialos, Santor 146.33 303** P **PKPdf 04 11 32.4 -1.4**
**CMBO Columbo, Santo 146.33 303** P **PKPdf 04 11 34.0 +0.2**
**THR3 Thira Island, 146.35 303** P **PKPbc 04 11 35.0 -0.1**
**SAP3 Santorini-Thir 146.39 303** P **PKPdf 04 11 33.2 -0.7**
**THR5 Thira Island, 146.39 303** P **PKPbc 04 11 35.6 +0.4**
**SOH Sokhos 146.40 311** P **PKPdf 04 11 32.3 -1.6**
**EKA Eskdalemuir Ar 146.44 353** PKPbc **PKPdf 04 11 33.2 -0.2**
comp=Z,101nm,0.5s,baz=358,slow=2.6,SNR=197
EKA SKP 04 15 02.3
comp=Z,4.1nm,0.5s,baz=3.8,slow=4.3,SNR=3.3
**ESK Eskdalemuir 146.46 353** PKPdf **PKPdf 04 11 33.1 -0.3**
**ESK Eskdalemuir 146.46 353** eP **PKPdf 04 11 32.8 -0.6**
**ESK Eskdalemuir 146.46 353** PKP2 **PKPdf 04 11 33.1 -0.3**
**PAIG Paliouri 146.52 310** P **PKPdf 04 11 34.5 +0.5**
**KNT Kendrikon 146.57 312** P **PKPdf 04 11 32.1 -2.0**
**FRGS Fruska Gora 146.60 321** ⇑*i*P **PKPbc 04 11 35.4 -0.2**
**HORT Hortiatis 146.66 311** P **PKPdf 04 11 32.6 -1.8**
**MORH Mrgy, Hungar 146.66 323** ⇓P **PKPbc 04 11 35.4 -0.2**
**KYMI Kymi, Euboea I 146.67 307** P **PKPdf 04 11 32.3 -2.0**
**THE Thessaloniki 146.75 311** P **PKPdf 04 11 32.4 -2.0**
**NEWG New Galloway 146.77 354** eP **PKPdf 04 11 34.0 0.0**
**ZVC Zvikov 146.77 331** AMS AMS 05 39 10.0
comp=Z,19µm,17.1s
**TANN Tannenbergstha 146.79 334** ePKPdf **PKPdf 04 11 33.5 -0.8**
baz=39,slow=1.6
**EDMD Edmundbyers 146.79 352** eP **PKPbc 04 11 35.3 -0.5**
**STIP Stip 146.83 314** *i* P **PKPbc 04 11 35.8 -0.5**
**PLN Plauen 146.85 334** ePKPdf **PKPdf 04 11 33.4 -0.8**
baz=39,slow=1.6
**KSTL Kastelli Herak 146.89 301** P **PKPdf 04 11 34.9 +0.1**
**CLGH Cloghs, Cushen 146.95 356** eP **PKPdf 04 11 35.1 +0.9**
**MOX Moxa 146.95 335** eL L 05 27 48.4
comp=Z,19µm,18.1s
**RONA Rosalia, Austr 146.98 327** ePKP **PKPbc 04 11 35.8 -0.8**
comp=Z,162nm,1.2s,SNR=82
**DION Dionisos Attik 146.98 306** P **PKPbc 04 11 37.0 +0.1**
**GDLE Glaisdale, N Y 147.02 350** eP **PKPbc 04 11 35.5 -0.9**
**IDGL Inch Island, C 147.03 358** PKPdif **PKPbc 04 11 35.7 -0.7**
**IDGL Inch Island, C 147.03 358** eP **PKPbc 04 11 36.2 -0.2**
**IDI Anoyia 147.04 301** P **PKPdf 04 11 34.9 -0.2**
**IDI Anoyia 147.04 301** PKP **PKPdf 04 11 35.2 0.0**
**CONA Conrad Observa 147.04 328** ePKP **PKPbc 04 11 35.8 -1.0**
comp=Z,293nm,1.7s,SNR=153
**MHLO Agia Marina, M 147.05 304** P **PKPbc 04 11 36.1 -1.0**
**GAL1 Galloway 147.06 355** eP **PKPbc 04 11 35.8 -0.7**
**TEKS Tekeris 147.11 320** ⇑*i*P **PKPbc 04 11 36.7 -0.4**
**ATHU Athens Univers 147.13 306** P **PKPdf 04 11 33.4 -1.7**
**CKRC Cesky Krumlov 147.16 330** ePKP **PKPbc 04 11 37.0 -0.1**
CKRC AMS AMS 05 37 00.0
comp=Z,14µm,17.6s
**CKRC Cesky Krumlov 147.16 330** ePKP2 **PKPbc 04 11 37.0 -0.1**
CKRC MLR MLR
comp=Z,14µm,17.6s
**KESW Keswick, Cumbr 147.17 353** eP **PKPdf 04 11 35.4 +0.7**
**ATH Athens Observa 147.18 306** P **PKPdf 04 11 33.9 -1.3**
**TMBK Timbaki Herakl 147.19 301** P **PKPbc 04 11 38.0 +0.5**
**MANZ Manzenberg 147.26 334** ePKPdf **PKPdf 04 11 33.8 -1.3**
baz=39,slow=1.6
**KHC Kasperske Hory 147.27 331** IAMs_20 IAMs_20 05 19 38.7
comp=Z,16µm,21.0s
**KHC Kasperske Hory 147.27 331** ePKP **PKPbc 04 11 37.1 -0.3**
KHC AMS AMS 05 19 20.0
comp=Z,16µm,19.6s
**KHC Kasperske Hory 147.27 331** ePKP2 **PKPbc 04 11 37.1 -0.3**
KHC MLR MLR
comp=Z,16µm,19.6s
**ROTZ Rotzenmuhle 147.39 333** ePKPdf **PKPdf 04 11 34.3 -0.9**
baz=39,slow=1.6
**VILL Villia 147.41 307** P **PKPbc 04 11 37.0 -1.2**
**GEC2 GERESS Array S 147.43 331** ePKPdf **PKPdf 04 11 34.8 -0.6**
baz=39,slow=1.6
**GERES GERESS Array B 147.43 331** PKP **PKPdf 04 11 35.8 +0.4**
comp=Z,94nm,1.0s,baz=36,slow=2.5,SNR=99
GERES PKPbc **PKPbc 04 11 38.1 +0.2**
comp=Z,70nm,0.8s,baz=28,slow=4.4,SNR=136
**UBBA Unterbreizbach 147.43 336** ePKPdf **PKPdf 04 11 34.0 -1.1**
baz=39,slow=1.6
**KTI Kastanea 147.43 311** P **PKPdf 04 11 36.1 +0.4**
**SJES Sjenica 147.52 318** ⇑*i*P **PKPdf 04 11 34.9 -0.9**
**BBLS Lazi&#263i 147.55 319** eP **PKPdf 04 11 34.6 -1.1**
**WET Wettzell 147.57 332** ePKPdf **PKPdf 04 11 34.7 -0.8**
baz=39,slow=1.6
**HPK Haverah Park 147.59 351** eP **PKPdf 04 11 34.8 -0.5**
**TYRN Tyrnavos 147.63 310** P **PKPdf 04 11 34.2 -1.7**
**IOMK Kirk Michael 147.65 354** eP **PKPdf 04 11 35.7 +0.2**
**ARSA Arzberg 147.67 327** *i* PKP **PKPbc 04 11 37.4 -1.1**
comp=Z,64nm,1.1s,SNR=15
**AXAR Agios Charalam 147.68 308** P **PKPdf 04 11 35.0 -1.0**
**RUDO Rudo 147.71 319** eP **PKPbc 04 11 38.9 +0.2**
**HAPS Han Pijesak,Bl 147.71 320** ⇑*i*P **PKPdf 04 11 35.2 -0.8**
**IMMV Iera Moni Meta 147.71 302** P **PKPdf 04 11 35.5 -0.7**
**LOUT Loutraki 147.72 307** P **PKPdf 04 11 34.0 -2.1**
**EPID Epidavros 147.74 306** P **PKPdf 04 11 34.2 -2.0**
**FNA Florina 147.78 313** IAMs_20 IAMs_20 05 29 08.0
comp=Z,16µm,19.0s
**FNA Florina 147.78 313** P **PKPdf 04 11 34.7 -1.5**
**GVD Gavdhos 147.79 301** P **PKPdf 04 11 35.2 -1.1**
**KRND KRANIDI 147.79 306** P **PKPdf 04 11 35.0 -1.2**
**KOGS Kog 147.82 325** *i* PKPdf **PKPdf 04 11 35.1 -0.9**
KOGS *i* PKPbc **PKPbc 04 11 38.2 -0.7**
**DOB Doboj 147.84 321** eP **PKPbc 04 11 39.9 +0.9**
**GRA1 Grafenberg Arr 147.85 334** IAMs_20 IAMs_20 05 25 27.8
comp=Z,15µm,19.0s
**GRF Grafenberg Arr 147.85 334** eL L 05 25 28.5
comp=Z,14µm,19.2s
**GRFO Grafenberg 147.85 334** IAMs_20 IAMs_20 05 25 27.9
comp=Z,15µm,18.0s
**LMK Market Rasen 147.87 349** eP **PKPdf 04 11 35.8 0.0**
**MOA Molln 147.88 329** *i* PKP **PKPbc 04 11 39.2 +0.1**
comp=Z,73nm,0.6s,SNR=69
**BCI Bajram Curri 147.91 316** *i* P **PKPdf 04 11 31.3 -5.0**
**MAKR Makrakomi, Fth 147.97 309** P **PKPdf 04 11 35.2 -1.3**
**ILTH Belurgan, Co L 148.01 356** PKPdif **PKPbc 04 11 38.1 -1.0**
**ILTH Belurgan, Co L 148.01 356** eP **PKPdf 04 11 37.4 +1.4**
**OHR Ohrid 148.02 313** *i* P **PKPbc 04 11 40.1 +0.4**
**ANKY Antikythira Is 148.14 303** P **PKPdf 04 11 34.2 -2.6**
**LBWR Ladybower, Pea 148.15 351** eP **PKPdf 04 11 37.5 +1.2**
**NEST Nestorio 148.16 312** P **PKPdf 04 11 35.0 -1.9**
**VLI Veliai 148.16 305** P **PKPbc 04 11 39.0 -1.2**
**PUK Puka 148.18 316** IAMs_20 IAMs_20 05 20 57.4
comp=Z,15µm,20.0s
**PUK Puka 148.18 316** *i* P **PKPab 04 11 42.5 -0.6**
**PENT Pentalofos 148.19 312** P **PKPdf 04 11 36.1 -0.9**
**KTHA Kythira Island 148.21 304** P **PKPdf 04 11 35.2 -1.8**
**GUR Goura 148.21 307** P **PKPdf 04 11 35.5 -1.6**
**UPM Unac-Piva 148.21 318** eP **PKPbc 04 11 39.5 -0.8**
**EVR Evrytania 148.24 309** P **PKPdf 04 11 36.3 -0.8**
**KBN Korca 148.25 313** IAMs_20 IAMs_20 05 23 53.6
comp=Z,19µm,21.0s
**KBN Korca 148.25 313** *i* P **PKiKP 04 11 41.8 -0.3**
**KBN Korca 148.25 313** P **PKPdf 04 11 35.4 -1.6**
**ANX Ano Chora 148.28 308** P **PKPdf 04 11 36.5 -0.6**
**BIOA Bad Ischl, Aus 148.29 329** *i* PKP **PKPdf 04 11 37.1 +0.3**
comp=Z,61nm,1.1s,SNR=38
**SOKA Soboth 148.30 327** *i* PKP **PKPdf 04 11 37.0 +0.1**
comp=Z,134nm,1.2s,SNR=53
**KLV Kalavryta, Ach 148.31 307** P **PKPdf 04 11 35.8 -1.4**
**EFP Efpalio 148.35 308** P **PKPdf 04 11 36.1 -1.0**
**A051A Mrakovica 148.36 323** ⇑*i*P **PKPdf 04 11 35.7 -1.3**
**BLY Banja Luka 148.36 322** ⇑*i*P **PKPdf 04 11 36.5 -0.4**
**WACR West

**PDG Podgorica 148.40 317** ⇑*iP* **PKPdf 04 11 36.4 -0.7**
**PDG Podgorica 148.40 317** ⇓P **PKPbc 04 11 40.0 -0.6**
**WME Myndd Eilian 148.47 354** *eP* **PKPdf 04 11 37.0 +0.2**
**TNS Taunus Mts 148.48 337** *e*PKPdf **PKPdf 04 11 36.1 -0.9**
baz=39,slow=1.6
**WPS Cemaes, Angles 148.49 354** *eP* **PKPdf 04 11 37.6 +0.8**
**PRIJ Prijedor 148.49 323** *eP* **PKiKP 04 11 42.6 +0.3**
**STNC Stoke 148.52 351** *eP* **PKPdf 04 11 37.8 +0.8**
**TIR Tirane 148.54 314** IAMs_20 IAMs_20 05 20 14.0
comp=Z,16µm,20.0s
**TIR Tirane 148.54 314** *i* P **PKPdf 04 11 35.3 -2.0**
**TIR Tirane 148.54 314** *i* P **PKPdf 04 11 36.8 -0.5**
**TIR Tirane 148.54 314** ⇑P **PKPbc 04 11 41.6 +0.6**
**TIR Tirane 148.54 314** ⇑PKP2 **PKPbc 04 11 41.6 +0.6**
**PVO Paravola 148.56 309** P **PKPdf 04 11 36.5 -1.0**
**DRME Dracevica, Mon 148.57 316** *eP* **PKPdf 04 11 37.2 -0.2**
**WLF1 Llynfaes 148.59 354** *eP* **PKPdf 04 11 37.4 +0.4**
**BRY Bratogost 148.60 318** *eP* **PKPbc 04 11 40.7 -0.6**
**RJOB Jochberg 148.65 330** *e*PKPdf **PKPdf 04 11 35.9 -1.5**
baz=39,slow=1.6
**OBKA Obir 148.66 327** *i* PKP **PKPbc 04 11 40.7 -0.6**
comp=Z,54nm,1.0s,SNR=16
**OBKA Obir 148.66 327** ⇑*iP* **PKPdf 04 11 36.1 -1.4**
**DRO Drossia 148.67 307** P **PKPdf 04 11 37.5 -0.2**
**YLL Llanberis 148.71 353** *eP* **PKPbc 04 11 40.5 -0.5**
**KLMT Kalamata 148.72 306** P **PKPab 04 11 52.0 +6.7**
**CWF Charnwood Fore 148.72 350** *eP* **PKPdf 04 11 38.1 +0.8**
**IGLA Glengowla, Co 148.73 360** PKPdif **PKPbc 04 11 40.0 -1.0**
**IGLA Glengowla, Co 148.73 360** *eP* **PKPdf 04 11 36.6 -0.6**
**DSB Dublin 148.79 356** PKPdif **PKPbc 04 11 40.3 -0.9**
**DSB Dublin 148.79 356** PKP **PKPdf 04 11 37.3 -0.1**
**TREB Trebinje 148.82 318** *eP* **PKPbc 04 11 41.8 +0.1**
**FOEL Foel Wylfa 148.85 352** *eP* **PKPdf 04 11 38.6 +1.1**
**KBA Koelnbreinsper 148.86 329** *e*PKP **PKPbc 04 11 41.2 -0.7**
comp=Z,115nm,1.2s,SNR=65
**A050A Klekovaca 148.90 322** ⇑*iP* **PKPdf 04 11 37.0 -0.9**
**BEBN Eben Emael 148.91 341** *d*PKPbc **PKPbc 04 11 41.8 +0.2**
**ELMS Elmsett, Ipswi 148.92 347** *eP* **PKPdf 04 11 38.9 +1.3**
**LESA Schwarzleotal 148.93 330** *i* PKP **PKPdf 04 11 38.0 +0.1**
comp=Z,228nm,1.4s
**LLW Llanuwychllyn 148.94 353** *eP* **PKPdf 04 11 38.1 +0.5**
**BTNL Ternell 148.95 340** *d*PKPdf **PKPdf 04 11 37.1 -0.7**
BTNL *d*PKPbc **PKPbc 04 11 41.7 -0.1**
**BOJS Bojanci 148.96 325** ⇑*iP* **PKPdf 04 11 37.1 -0.8**
**MEM Membach 148.97 340** *d*PKPdf **PKPdf 04 11 38.1 +0.4**
MEM *d*PKPbc **PKPbc 04 11 41.6 -0.2**
**LJU Ljubljana 148.99 326** *i* PKPdf **PKPdf 04 11 36.9 -1.0**
LJU *i* PKPbc **PKPbc 04 11 41.5 -0.5**
**PYL PYLOS 149.02 305** P **PKPdf 04 11 36.3 -2.0**
**MYKA Terra Mystica 149.03 328** *i* PKP **PKPbc 04 11 41.6 -0.6**
comp=Z,25nm,0.7s,SNR=36
**IGT Igoumenitsa 149.04 311** P **PKPdf 04 11 37.0 -1.2**
**TSLK Tsoukalades, L 149.10 310** P **PKPbc 04 11 42.6 +0.1**
**LKD2 Lefkada island 149.12 310** P **PKPdf 04 11 37.5 -1.3**
**NYDR Nydri-Lefkada 149.12 309** P **PKPbc 04 11 42.0 -0.5**
**SRN Sarande 149.12 312** P **PKPdf 04 11 37.0 -1.3**
**BSTI Sart Tilman 149.13 341** *d*PKP **PKPbc 04 11 42.2 +0.1**
**STON Ston 149.14 319** *eP* **PKPdf 04 11 36.7 -1.5**
**HLM1 Long Mynd 149.17 352** *eP* **PKPdf 04 11 38.5 +0.5**
**EVGI Lefkada island 149.18 309** P **PKPdf 04 11 37.6 -0.9**
**BHOU Houvegnez 149.19 340** *d*PKPdf **PKPdf 04 11 38.2 +0.1**
BHOU *d*PKPbc **PKPbc 04 11 42.5 +0.1**
**VLO Vlora 149.20 313** **PKPbc 04 11 42.1 -0.6**
VLO IAMs_20 IAMs_20 05 28 55.6
comp=Z,15µm,19.0s
**VLO Vlora 149.20 313** P **PKPbc 04 11 42.6 0.0**
**VLO Vlora 149.20 313** PKP2 **PKPbc 04 11 42.1 -0.6**
**CADS Cadrg 149.26 327** *i* PKPdf **PKPdf 04 11 36.8 -1.6**
**FSK Fiskardo 149.32 309** P **PKPdf 04 11 37.1 -1.6**
**KEK Kerkira 149.33 312** IAMs_20 IAMs_20 05 29 20.3
comp=Z,19µm,20.0s
**KEK Kerkira 149.33 312** P **PKPdf 04 11 37.0 -1.7**
**BCLA Clavier 149.35 341** *d*PKPdf **PKPdf 04 11 38.5 +0.2**
BCLA *d*PKPbc **PKPbc 04 11 43.0 +0.3**
**STU Stuttgart 149.39 335** IAMs_20 IAMs_20 05 26 49.5
comp=Z,13µm,18.0s
**LTHK Lithakia 149.40 307** P **PKPdf 04 11 37.6 -1.2**
**PSDA Pessada-Kefalo 149.44 308** P **PKPdf 04 11 37.3 -1.6**
**BGES Gesves 149.45 341** *d*PKPdf **PKPdf 04 11 38.6 +0.1**
BGES *d*PKP **PKPbc 04 11 42.8 -0.1**
**ABTA Abfaltersbach 149.50 329** *i* PKP **PKPdf 04 11 39.2 +0.3**
comp=Z,236nm,1.6s,SNR=58
**WATA Walderalm 149.50 331** *i* PKP **PKPbc 04 11 43.4 0.0**
comp=Z,129nm,1.0s,SNR=54
**SABO M.te Sabotino 149.50 327** IAMs_20 IAMs_20 05 22 04.6
comp=Z,16µm,20.0s
**WTTA Wattenberg 149.53 331** *e*PKP **PKPdf 04 11 39.8 +0.8**
comp=Z,346nm,1.7s,SNR=73
**RCHB Rochefort 149.61 341** *d*PKPdf **PKPdf 04 11 39.1 +0.3**
RCHB *d*PKPbc **PKPbc 04 11 43.2 -0.2**
**BMRD Maredsous 149.62 341** *d*PKPdf **PKPdf 04 11 39.2 +0.4**
BMRD *d*PKPbc **PKPbc 04 11 43.3 -0.1**
**IWEX Carrickbyrne, 149.69 356** PKPdif **PKPbc 04 11 42.6 -0.9**
**IWEX Carrickbyrne, 149.69 356** *eP* **PKPdf 04 11 39.4 +0.6**
**MCH1 Michaelchurch 149.69 352** *eP* **PKPdf 04 11 40.9 +2.1**
**MOTA Mooslm 149.71 331** *i* PKP **PKPbc 04 11 43.7 -0.2**
comp=Z,223nm,1.3s
**WLF Walferdange 149.74 339** IAMs_20 IAMs_20 05 19 18.5
comp=Z,19µm,20.0s
**WLF Walferdange 149.74 339** PKP **PKPdf 04 11 39.0 0.0**
**WLF Walferdange 149.74 339** *d*PKPdf **PKPdf 04 11 40.0 +0.9**
WLF *d*PKPbc **PKPbc 04 11 44.2 +0.4**
**RETA Reutte 149.75 332** *e*PKP **PKPbc 04 11 43.9 -0.1**
comp=Z,72nm,1.0s,SNR=25
**STAL STALIGIAL 149.75 328** IAMs_20 IAMs_20 05 29 37.6
comp=Z,14µm,19.0s
**SQTA Sankt Quirin 149.75 331** *i* PKP **PKPdf 04 11 40.1 +0.8**
comp=Z,115nm,0.7s,SNR=67
**ELSH Elham, Standar 149.78 346** *eP* **PKPdf 04 11 40.5 +1.5**
**ASCN Ascension 149.82 171** **PKPbc 04 11 44.2 -0.8**
**MONM Monmouth 149.82 351** *eP* **PKPdf 04 11 38.4 -0.6**
**DOU Dourbes 149.85 341** *d*PKPdf **PKPdf 04 11 39.1 0.0**
DOU *d*PKP **PKPbc 04 11 43.6 -0.3**
**UBR Ueberruh 149.88 333** *e*PKPdf **PKPdf 04 11 37.8 -1.6**
baz=39,slow=1.6
**RSBS Rosebush, Pemb 149.94 354** *eP* **PKPdf 04 11 39.4 +0.2**
**OLDB Oldbury-Upon-S 149.96 351** *eP* **PKPdf 04 11 38.7 -0.5**
**SWN1 Swindon 149.99 350** *eP* **PKPdf 04 11 39.7 +0.4**
**SCTE Santa Cesarea 150.08 313** IAMs_20 IAMs_20 05 26 37.9
comp=Z,15µm,20.0s
**SCTE Santa Cesarea 150.08 313** *i* P **PKPdf 04 11 34.4 -5.5**
**BFO Black Forest 150.09 335** **PKPdf 04 11 37.8 -1.9**
BFO IAMs_20 IAMs_20 05 30 07.8
comp=Z,16µm,18.0s
**BFO Black Forest 150.09 335** PKIKP **PKPdf 04 11 37.8 -1.9**
**BFO Black Forest 150.09 335** *e*PKPdf **PKPdf 04 11 38.3 -1.3**
baz=39,slow=1.6
**WOL Wolverton 150.09 349** *eP* **PKPdf 04 11 40.5 +1.1**
**FETA Feichten 150.12 331** *e*PKP **PKPdf 04 11 40.9 +1.0**
comp=Z,176nm,1.2s,SNR=76
**VAL Valentia 150.21 1** PKPdif **PKPbc 04 11 44.1 -0.6**
**HMNX Herstmonceux 150.21 347** *eP* **PKPdf 04 11 39.5 -0.2**
**DAVA Damuels 150.29 332** *i* PKP **PKPbc 04 11 45.4 0.0**
comp=Z,123nm,1.3s,SNR=25
**ECH Echery 150.62 337** PKPbc **PKPbc 04 11 45.9 0.0**
ECH IAMs_20 IAMs_20 05 28 13.9
comp=Z,14µm,20.0s
**ECH Echery 150.62 337** PKIKP **PKPbc 04 11 45.9 0.0**
**NOCI Noci 150.65 316** *i* P **PKPdf 04 11 39.0 -1.7**
**HTL Hartland 150.86 353** *eP* **PKPdf 04 11 40.6 -0.1**
**MATE Matera 150.96 316** ⇓P **PKiKP 04 11 47.2 -0.3**
**SGRT San Giovanni R 150.96 318** *i* P **PKPdf 04 11 39.6 -1.6**
**SBD Saint Breward 151.31 353** *eP* **PKPdf 04 11 42.5 +1.1**
**DYA Yadsworthy 151.35 352** *eP* **PKPdf 04 11 41.6 +0.1**
**TIP Timpagrande 151.66 313** **PKPdf 04 11 40.0 -2.4**
TIP PKPbc **pPKPdf 04 11 48.5 -0.4**
TIP IAMs_20 IAMs_20 05 22 09.9
comp=Z,13µm,20.0s
**TIP Timpagrande 151.66 313** ⇑P **PKiKP 04 11 50.0 +0.9**
**CCA1 Carnmenellis 151.74 354** *eP* **PKPdf 04 11 42.3 +0.3**
**FDMO Fiordimonte 151.75 323** IAMs_20 IAMs_20 05 25 27.9
comp=Z,16µm,20.0s
**NRCA Norcia 151.86 323** IAMs_20 IAMs_20 05 25 45.0
comp=Z,17µm,20.0s
**CUC Castrocucco 151.88 315** IAMs_20 IAMs_20 05 27 37.3
comp=Z,16µm,20.0s
**CAMP Campotosto 151.88 322** IAMs_20 IAMs_20 05 25 27.7
comp=Z,22µm,20.0s
**INTR Introdacqua 151.92 320** IAMs_20 IAMs_20 05 27 29.8
comp=Z,13µm,20.0s
**ZCCA Zocca 151.97 327** PKPdf **PKPdf 04 11 42.2 -0.5**
ZCCA PKPbc **PKPbc 04 11 49.1 -0.1**
**PRMA PARMA 152.00 329** IAMs_20 IAMs_20 05 33 36.0
comp=Z,14µm,19.0s
**PAOL Paolisi 152.10 318** IAMs_20 IAMs_20 05 32 44.9
comp=Z,13µm,20.0s
**JSA Saint Aubin 152.30 349** *eP* **PKPdf 04 11 42.4 -0.5**
**CLF Chambon-Foret 152.38 342** PKPdf **PKPdf 04 11 41.6 -1.5**
CLF PKPbc **sPKPdf 04 11 51.4 -0.3**
CLF IAMs_20 IAMs_20 05 28 55.2
comp=Z,23µm,19.0s
**VLC Villacollemand 152.40 328** PKP **PKPdf 04 11 41.4 -1.9**
**CEL Celeste 152.70 312** IAMs_20 IAMs_20 05 24 05.4
comp=Z,12µm,21.0s
**CASP Castiglione de 153.12 325** IAMs_20 IAMs_20 05 29 49.1
comp=Z,14µm,20.0s
**BNI Bardonecchia 153.41 333** IAMs_20 IAMs_20 05 24 11.0
comp=Z,19µm,20.0s
**SSB Saint Sauveur 154.07 336** IAMs_20 IAMs_20 05 36 49.1
comp=Z,13µm,18.0s
**RAFF Raffo Rosso 154.26 311** IAMs_20 IAMs_20 05 35 07.9
comp=Z,14µm,19.0s
**EKNA AfricaArray - 154.34 229** ⇑*eP* **PKPdf 04 11 48.2 +1.2**
**WDD Wied Dalam 154.79 308** IAMs_20 IAMs_20 05 31 52.0
comp=Z,14µm,19.0s
**PCED Cedros 156.88 40** *e*PKP **PKPdf 04 11 51.4 +1.8**
**CALA Caldeira 156.91 40** *e*PKP **PKPdf 04 11 50.7 +0.9**
**ROSA Rosais 157.10 40** *e*PKP **PKPdf 04 11 50.4 +0.5**
**EJON La Jonquera 157.10 335** PKP **PKPdf 04 11 49.4 -0.4**
**PICO Pico 157.13 40** *e*PKP **PKPdf 04 11 49.8 -0.3**
**PMAN Manadas 157.25 39** *e*PKP **PKPdf 04 11 50.6 +0.5**
**PPNO Prainha do Nor 157.25 40** *e*PKP **PKPdf 04 11 51.7 +1.5**
**PID Ribeirinha 157.35 40** *e*PKP **PKPdf 04 11 51.7 +1.4**
**CEST Esterri de Car 157.57 338** IAMs_20 IAMs_20 05 31 53.7
comp=Z,18µm,19.0s
**PSBA Serra de Santa 157.60 38** *e*PKP **PKPdf 04 11 51.3 +0.7**
**PSCM Serra do Cume 157.76 38** *e*PKP **PKPdf 04 11 51.0 +0.2**
**KEST Kesra 158.49 313** PKP **PKPdf 04 11 51.8 -0.1**
comp=Z,3.3nm,1.0s,baz=262,slow=3.8,SNR=5.5
KEST PKPab **PKPab 04 12 28.1 +1.4**
comp=Z,43nm,1.1s,baz=235,slow=1.1,SNR=15
**PSET Sete Cidades 159.16 38** *e*PKP **PKPdf 04 11 53.1 +0.6**
**PCALD Caldeiras da R 159.31 37** *e*PKP **PKPdf 04 11 54.0 +1.3**
**CMLA Cha da Macela 159.32 37** IAMs_20 IAMs_20 05 19 02.5
comp=Z,20nm,20.0s
**CMLA Cha da Macela 159.32 37** *e*PKP **PKPdf 04 11 53.3 +0.6**
**ETOS Mallorca 159.37 331** PKP **PKPdf 04 11 52.2 -0.5**
**PGRON Lagoa das Cont 159.40 37** *e*PKP **PKPdf 04 11 53.4 +0.6**
**BART Pico Bartolome 159.51 37** *e*PKP **PKPdf 04 11 52.5 -0.5**
**ECAL Calabor 160.05 353** PKP **PKPdf 04 11 52.5 -1.0**
**PSMN Pico do Norte, 160.11 38** *e*PKP **PKPdf 04 11 52.5 -1.1**
**PGAV Gavieira, Arco 160.15 357** ⇑*e*PKPdf **PKPdf 04 11 52.2 -1.4**
**PGAV Gavieira, Arco 160.15 357** *e*PKPab **PKPab 04 12 33.4 -0.2**
**PGAV Gavieira, Arco 160.15 357** *e*LR LR 05 07 35.4
comp=Z,19µm,16.0s
**PBRG Braganca 160.19 353** ⇑*e*PKPdf **PKPdf 04 11 52.0 -1.6**
**PBRG Braganca 160.19 353** *e*PKPab **PKPab 04 12 33.4 -0.3**
**PCAB Cabril 160.39 356** ⇑*e*PKPdf **PKPdf 04 11 53.0 -0.8**
**PCAB Cabril 160.39 356** *e*PKPab **PKPab 04 12 34.4 -0.1**
**EIBI Ibiza 160.62 333** PKP **PKPdf 04 11 53.9 -0.2**
**POLO Lamas de Olo 160.71 355** ⇑*e*PKPdf **PKPdf 04 11 53.4 -0.8**
**POLO Lamas de Olo 160.71 355** *e*PKPab **PKPab 04 12 36.0 0.0**
**SET Setif 160.71 320** P **PKPdf 04 11 57.0 +2.6**
**PVRL Vila Real 160.80 355** *e*PKPab **PKPab 04 12 36.0 -0.3**
**MVO Moncorvo 160.85 354** ⇑*e*PKPdf **PKPdf 04 11 53.2 -1.2**
**MVO Moncorvo 160.85 354** *e*PKPab **PKPab 04 12 36.2 -0.4**
**MVO Moncorvo 160.85 354** *e*LR LR 05 07 41.5
comp=Z,16µm,20.0s
**ECHE Chera 161.01 339** PKP **PKPdf 04 11 54.6 0.0**
**PVIS Viseu 161.37 355** ⇑*e*PKPdf **PKPdf 04 11 52.5 -2.4**
**PVIS Viseu 161.37 355** *e*PKPab **PKPab 04 12 38.7 -0.2**
**MTE Manteigas 161.66 355** ⇑*e*PKPdf **PKPdf 04 11 54.5 -0.7**
**MTE Manteigas 161.66 355** *e*PKPab **PKPab 04 12 39.8 -0.3**
**MTE Manteigas 161.66 355** *e*LR LR 05 09 05.5
comp=Z,18µm,18.0s
**ESDC Sonseca Array 161.79 345** PKP **PKPdf 04 11 54.9 -0.5**
comp=Z,0.8nm,0.9s,baz=354,slow=3.6,SNR=5.1
ESDC PKPab **PKPab 04 12 38.3 -2.4**
comp=Z,13nm,0.9s,baz=6.5,slow=3.2,SNR=17
**COI Coimbra 161.91 357** ⇑*e*PKPdf **PKPdf 04 11 54.8 -0.6**
**COI Coimbra 161.91 357** *e*PKPab **PKPab 04 12 41.9 +0.8**
**ETOB Tobarra 162.06 339** PKP **PKPdf 04 11 55.5 -0.2**
**PCAS Casmilo, Conde 162.07 357** ⇑*e*PKPdf **PKPdf 04 11 54.5 -1.1**
**PCAS Casmilo, Conde 162.07 357** *e*PKPab **PKPab 04 12 42.0 +0.1**
**PCBR Castelo Branco 162.21 354** *e*PKPdf **PKPdf 04 11 53.9 -1.8**
**PCBR Castelo Branco 162.21 354** *e*PKPab **PKPab 04 12 42.0 -0.4**
**PMRV Marv??o 162.60 354** ⇑*e*PKPdf **PKPdf 04 11 54.5 -1.7**
**PMRV Marv??o 162.60 354** *e*PKPab **PKPab 04 12 45.0 +0.8**
**PMRV Marv??o 162.60 354** *e*LR LR 05 09 06.6
comp=Z,24µm,18.0s
**PSBE So Bento 162.62 357** ⇑*e*PKPdf **PKPdf 04 11 55.1 -1.1**
**PSBE So Bento 162.62 357** *e*PKPab **PKPab 04 12 44.5 +0.2**
**EMUR La Murta 162.66 337** PKP **PKPdf 04 11 54.8 -1.5**
**CART Cartagena 162.80 336** PKP **PKPdf 04 11 54.5 -1.8**
**PMTG Montargil 163.03 356** ⇑*e*PKPdf **PKPdf 04 11 54.9 -1.6**
**PMTG Montargil 163.03 356** *e*PKPab **PKPab 04 12 45.8 -0.3**
**PESTR Estremoz 163.18 354** ⇑*e*PKPdf **PKPdf 04 11 55.7 -1.0**
**PESTR Estremoz 163.18 354** *e*PKPab **PKPab 04 12 47.3 +0.5**
**PESTR Estremoz 163.18 354** PKP **PKPdf 04 11 55.7 -1.0**
**PMAFR Mafra 163.19 359** PKP **PKPdf 04 11 55.7 -1.0**
**EBAD Badajoz 163.23 352** PKP **PKPdf 04 11 55.0 -1.7**
**EADA Adamuz 163.37 346** PKP **PKPdf 04 11 55.9 -1.1**
**LIS Lisbon 163.43 358** *e*PKPdf **PKPdf 04 11 55.9 -1.0**
**LIS Lisbon 163.43 358** *e*PKPdf **PKPdf 04 11 56.4 -0.6**
LIS IAMs_20 IAMs_20 05 36 01.4
comp=Z,37µm,19.0s
**LIS Lisbon 163.43 358** *e*PKIKP **PKPdf 04 11 56.3 -0.6**
**EVO Evora 163.55 355** ⇑*e*PKPdf **PKPdf 04 11 55.9 -1.2**
**EVO Evora 163.55 355** *e*PKPab **PKPab 04 12 49.5 +1.1**
**EVO Evora 163.55 355** PKP **PKPdf 04 11 56.3 -0.8**
**ECAB El Cabril 163.64 348** PKP **PKPdf 04 11 56.7 -0.6**
**ENIJ Nijar 163.79 338** PKP **PKPdf 04 11 56.5 -0.9**
**PBAR Barrancos 163.80 352** ⇑*e*PKPdf **PKPdf 04 11 55.4 -1.9**
**PBAR Barrancos 163.80 352** *e*PKPab **PKPab 04 12 49.7 +0.2**
**PBAR Barrancos 163.80 352** PKP **PKPdf 04 11 57.0 -0.3**
**DBIC Dimbokro 163.94 198** PKP **PKPdf 04 11 58.2 0.0**
comp=Z,37nm,1.0s,baz=140,slow=1.9,SNR=16
DBIC PKPab **PKPab 04 12 51.7 +1.1**
comp=Z,45nm,0.9s,baz=149,slow=4.3,SNR=10
**EQTA Presa de Quent 163.97 341** PKP **PKPdf 04 11 55.7 -2.0**
**PNCL Nicolau / Gran 164.00 356** ⇑*e*PKPdf **PKPdf 04 11 56.9 -0.6**
**PNCL Nicolau / Gran 164.00 356** PKP **PKPdf 04 11 56.7 -0.7**
**PBEJ Beja 164.04 354** ⇑*e*PKPdf **PKPdf 04 11 56.5 -1.0**
**PBEJ Beja 164.04 354** *e*PKPab **PKPab 04 12 51.0 +0.5**
**EBER Berja 164.09 339** PKP **PKPdf 04 11 55.4 -2.4**
**EMIN Mina Concepcio 164.15 351** PKP **PKPdf 04 11 56.7 -1.0**
**EGOR Sierra Gorda, 164.25 343** PKP **PKPdf 04 11 56.1 -1.9**
**MESJ Messejana 164.25 355** ⇑*e*PKPdf **PKPdf 04 11 56.4 -1.3**
**MESJ Messejana 164.25 355** *e*PKPab **PKPab 04 12 53.0 +1.5**
**MESJ Messejana 164.25 355** *e*PKPdf **PKPdf 04 11 57.1 -0.6**
MESJ *e*PP **PP 04 16 37.5 +1.2**
MESJ IAMs_20 IAMs_20 05 31 38.4
comp=Z,32µm,18.4s
**MESJ Messejana 164.25 355** *e*PKIKP **PKPdf 04 11 57.1 -0.6**
MESJ *e* 04 16 37.5
**ELGU Los Guajares, 164.34 341** PKP **PKPdf 04 11 56.5 -1.4**
**PCVE Castro Verde 164.45 355** ⇑*e*PKPdf **PKPdf 04 11 56.2 -1.7**
**PCVE Castro Verde 164.45 355** *e*PKPab **PKPab 04 12 53.4 +1.1**
**PCVE Castro Verde 164.45 355** PKP **PKPdf 04 11 57.0 -0.9**
**EGRO El Granado 164.49 353** PKP **PKPdf 04 11 57.3 -0.6**
**PTEO Sao Teotonio 164.58 357** *e*PKPdf **PKPdf 04 11 58.2 +0.2**
**PTEO Sao Teotonio 164.58 357** *e*PKPab **PKPab 04 12 53.9 +1.0**
**PVAQ Vaqueiros 164.64 354** ⇑*e*PKPdf **PKPdf 04 11 57.8 -0.3**
**PVAQ Vaqueiros 164.64 354** *e*PKPab **PKPab 04 12 53.6 +0.4**
**PVAQ Vaqueiros 164.64 354** *e*LR LR 05 10 47.2
comp=Z,28µm,18.0s
**PVAQ Vaqueiros 164.64 354** PKP **PKPdf 04 11 57.8 -0.3**
**EMAL Malaga-Limoner 164.67 344** PKP **PKPdf 04 11 56.7 -1.4**
**MORF Marmelete 164.81 357** ⇑*e*PKPdf **PKPdf 04 11 57.6 -0.7**
**MORF Marmelete 164.81 357** *e*PKPab **PKPab 04 12 55.7 +1.7**
**MORF Marmelete 164.81 357** *e*PKPdf **PKPdf 04 11 57.7 -0.6**
MORF IAMs_20 IAMs_20 05 46 04.3
comp=N,25µm,15.4s
**MORF Marmelete 164.81 357** *e*PKIKP **PKPdf 04 11 57.7 -0.6**
**PBDV Barranco-do-Ve 164.82 354** ⇑*e*PKPdf **PKPdf 04 11 57.7 -0.6**
**PBDV Barranco-do-Ve 164.82 354** PKP **PKPdf 04 11 58.1 -0.1**
**ESPR Espera 164.89 348** PKP **PKPdf 04 11 57.6 -0.7**
**PFVI Vila Bisbo 164.99 357** ⇑*e*PKPdf **PKPdf 04 11 58.0 -0.4**
**PFVI Vila Bisbo 164.99 357** PKP **PKPdf 04 11 58.2 -0.2**
**EALB Alboran 165.00 338** PKP **PKPdf 04 11 57.2 -1.2**
**CHAS Isla Isabel II 165.46 335** PKP **PKPdf 04 11 58.5 -0.3**
**EMLI Melilla 165.55 337** PKP **PKPdf 04 11 58.8 -0.1**
**CEU Ceuta 165.72 345** PKP **PKPdf 04 11 58.2 -0.8**
**ECEU Ceuta 165.72 345** PKP **PKPdf 04 11 57.1 -1.9**
**TORD Torodi Ar. Bea 165.90 233** PKP **PKPdf 04 11 59.7 -0.1**
comp=N,26nm,0.9s,baz=3.2,slow=1.4,SNR=82
TORD PKPab **PKPab 04 13 01.6 +2.2**
comp=N,21nm,1.0s,baz=56,slow=3.1,SNR=4.6
**PVLZ Peæn de 166.12 341** PKP **PKPdf 04 11 58.5 -0.9**
**PMOZ Porto Moniz, M 167.46 30** *e*PKPdf **PKPdf 04 12 01.6 +1.0**
**PMOZ Porto Moniz, M 167.46 30** *e*LR LR 05 10 59.7
comp=N,17µm,18.0s
**PMOZ Porto Moniz, M 167.46 30** PKP **PKPdf 04 12 01.7 +1.1**
**PMPST Porto Santo, M 167.62 27** *e*PKPdf **PKPdf 04 12 00.7 +0.1**
**IFR Ifrane 167.90 341** PKP **PKPdf 04 12 00.9 -0.1**
**AVE Averroes 168.65 350** PKP **PKPdf 04 12 00.6 -0.7**
**BBTS Babate 170.22 138** PKP **PKPdf 04 12 02.9 +0.3**
comp=N,56nm,0.9s,baz=116,slow=0.7,SNR=14
BBTS PKPab **PKPab 04 13 18.1 -0.4**
comp=N,31nm,0.8s,baz=238,slow=3.1,SNR=2.0
**TIO Tiouine 170.92 346** PKP **PKPdf 04 12 03.0 +0.1**
**EOSO Osorio 172.08 40** PKP **PKPdf 04 12 03.6 +0.2**

*IDC **29** 04:01:07.7±1.0,22.°14S×170.°20E,h0km,mb4.3/10, mbtmp4.3/11,ML4.5/1,Error ellipse: s-maj=31.4km s-min=26.3km az=140.0*
*NEIC **29** 04:01:12.8±1.5,22.°03S±0.°09×170.°03E±0.°07,h27km±5km, mb5.1/18,Error ellipse: s-maj=13.3km s-min=9.4km az=160.0*
*NOU **29** 04:01:16.5,22.°05S×169.°47E,h0km,MLv5.8/8,Southeast of Loyalty Islands*

**ISC 29 04:01:12.5±0.5,22.°15S±0.°07×169.°96E±0.°06,h25km,n67, σ1s04/69,mb4.8/21,5C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | Mare, Loyalty | 1.91 | 290 | P | Pn | 04 01 42.8 | -0.6 |
| PINNC | Pines Island, | 2.37 | 258 | P | Pn | 04 01 50.4 | +0.6 |
| PINNC | Pines Island, | 2.37 | 258 | Pn | Pn | 04 01 50.0 | +0.3 |
| PINNC | | | | Sn | Sn | 04 02 18.7 | +0.6 |
| DZM | Mont Dzumac | 3.26 | 271 | P | Pn | 04 02 02.8 | +0.7 |
| DZM | Mont Dzumac | 3.26 | 271 | Pn | Pn | 04 02 02.8 | +0.7 |
| DZM | | | | Sn | Sn | 04 02 38.6 | -1.5 |
| DZM | Mont Dzumac | 3.26 | 271 | Pn | Pn | 04 02 02.4 | +0.3 |
| | 49nm,0.3s,baz=113,slow=14,SNR=12 | | | | | | |
| DZM | | | | Sn | Sn | 04 02 39.3 | -0.8 |
| | 101nm,0.3s,baz=144,slow=22,SNR=13 | | | | | | |
| | 90nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 3.39 | 270 | P | Pn | 04 02 04.6 | +0.8 |
| RTV | Rentapao | 4.56 | 341 | P | Pn | 04 02 23.2 | +3.2 |
| DVP | Devils Point | 4.70 | 339 | P | Pn | 04 02 25.9 | +4.0 |
| KOUNC | Koumac, New Ca | 5.52 | 286 | P | Pn | 04 02 33.9 | +0.8 |
| KOUNC | Koumac, New Ca | 5.52 | 286 | Pn | Pn | 04 02 33.4 | +0.2 |
| MSVF | Nonsavu | 8.79 | 61 | | Pn | 04 03 15.0 | -3.0 |
| MSVF | Nonsavu | 8.79 | 61 | Pn | Pn | 04 03 20.9 | +2.8 |
| | 3.0nm,0.3s,baz=245,slow=12,SNR=5.6 | | | | | | |
| EIDS | Eidsvold | 17.57 | 256 | | Pn | 04 05 15.9 | +0.1 |
| ARMA | Armidale | 18.37 | 240 | | Pn | 04 05 26.3 | +0.7 |
| MRZ | Mangatainoka R | 19.06 | 167 | Pn | Pn | 04 05 34.5 | +0.7 |
| MSWZ | Moikau Station | 19.72 | 168 | P | Pn | 04 05 41.3 | -0.5 |
| KHZ | Kahutara | 20.43 | 172 | P | P | 04 05 48.8 | -0.9 |
| LTZ | Lake Taylor | 20.67 | 175 | P | Pn | 04 05 52.3 | -0.6 |
| GVZ | Greta Valley S | 20.92 | 174 | P | P | 04 05 53.8 | +0.5 |
| CTAO | Charters Tower | 22.20 | 271 | P | P | 04 06 07.6 | +0.4 |
| COEN | Coen | 26.70 | 283 | P | P | 04 06 48.5 | -1.5 |
| STKA | Stephens Creek | 26.99 | 243 | P | P | 04 06 52.3 | -0.1 |
| BBOO | Buckleboo | 31.77 | 243 | P | P | 04 07 34.9 | 0.0 |
| WR0 | Warramunga Arr | 33.08 | 267 | P | P | 04 07 45.9 | -0.6 |
| ASAR | Alice Springs | 33.19 | 260 | P | P | 04 07 48.0 | +0.5 |
| | 2.2nm,0.9s,baz=84,slow=9.4,SNR=2.4 | | | | | | |
| | 2.2nm,0.9s | | | | | | |
| WB0 | Warramunga Arr | 33.25 | 267 | P | P | 04 07 48.2 | +0.2 |
| WB0 | | | | IAmb | IAmb | 04 07 50.7 | |
| | comp=Z,42nm,1.4s | | | | | | |
| WB2 | Warramunga Arr | 33.26 | 267 | P | P | 04 07 47.8 | -0.3 |
| WRA | Warramunga Arr | 33.27 | 267 | P | P | 04 07 48.0 | -0.1 |
| | comp=Z,3.2nm,0.9s,baz=97,slow=8.4,SNR=6.1 | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| FORT | Forrest | 38.30 | 248 | P | P | 04 08 32.5 | +1.3 |
| FORT | | | | IAmb | IAmb | 04 08 35.8 | |
| | comp=Z,38nm,1.1s | | | | | | |
| KNRA | Kununurra | 39.41 | 272 | P | P | 04 08 40.6 | 0.0 |
| KNRA | | | | IAmb | IAmb | 04 08 45.1 | |
| | comp=Z,27nm,1.3s | | | | | | |
| MBWA | Marble Bar | 46.52 | 261 | P | P | 04 09 38.9 | +0.7 |
| MBWA | | | | IAmb | IAmb | 04 09 45.5 | |
| | comp=Z,40nm,1.4s | | | | | | |
| NWAO | Narrogin (SRO) | 47.54 | 245 | P | P | 04 09 46.7 | +0.7 |
| CASY | Casey | 57.75 | 204 | P | P | 04 11 03.1 | +2.0 |
| QSPA | South Pole Qui | 67.92 | 180 | P | P | 04 12 09.0 | 0.0 |
| KSRS | Korea Array | 71.27 | 326 | P | P | 04 12 29.9 | +0.2 |
| | comp=Z,1.7nm,0.7s,baz=143,slow=6.8,SNR=4.1 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| KS19 | Wonju Array Si | 71.34 | 326 | P | P | 04 12 30.3 | +0.1 |
| KS19 | | | | IAmb | IAmb | 04 12 39.2 | |
| | comp=Z,41nm,1.6s | | | | | | |
| USA0B | Ussuriysk Arra | 74.61 | 333 | P | P | 04 12 48.8 | -0.6 |
| USA0B | | | | IAmb | IAmb | 04 12 55.2 | |
| | comp=Z,41nm,1.7s | | | | | | |
| USRK | Ussuriysk Ar. | 74.61 | 333 | P | P | 04 12 49.6 | +0.2 |
| | comp=Z,1.3nm,0.4s,baz=140,slow=6.1,SNR=4.7 | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | |
| PETK | Petropavlovsk- | 75.69 | 352 | P | P | 04 12 55.0 | -0.4 |
| | comp=Z,1.7nm,0.6s,baz=233,slow=7.0,SNR=2.2 | | | | | | |

*MOS **29** 04:03:12.3±0.7,22.°08S×170.°05E,h10km,mb5.3/22,Error ellipse: s-maj=11.6km s-min=9.9km az=125.5*
*NEIC **29** 04:03:14.6±1.5,22.°11S±0.°09×170.°1E±0.°1,h10km±1km, mb5.3/43,Error ellipse: s-maj=16.2km s-min=15.7km az=72.0*
*BGR **29** 04:03:16.5,21.°29S×172.°45E,h33km*

**ISC 29 04:03:16.1±0.4,22.°06S±0.°06×170.°08E±0.°07,h25km,n273, σ0s97/270,mb5.2/74,13C-24D,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **2.50** | **257** | Pn | | **Pn** | **04 03 54.6** | **-0.7** |
| **LIFNC** | **LIFOU** | **2.94** | **295** | | | **Pn** | **04 04 00.9** | **-0.4** |
| **DZM** | **Mont Dzumac** | **3.38** | **269** | Pn | | **Pn** | **04 04 06.1** | **-1.2** |
| **DZM** | **Mont Dzumac** | **3.38** | **269** | Pn | | **Pn** | **04 04 05.9** | **-1.5** |
| | 129nm,0.3s,baz=115,slow=9.1,SNR=15 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **04 04 43.5** | **-3.2** |
| | 112nm,0.3s,baz=81,slow=23,SNR=4.0 | | | | | | | |
| | 287nm,0.2s | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **5.61** | **284** | Pn | | **Pn** | **04 04 38.1** | **+0.1** |
| **NFK** | **Norfolk Island** | **7.22** | **195** | P | | **Pn** | **04 04 00.5** | **+0.5** |
| **MSVF** | **Nonsavu** | **8.64** | **62** | Pn | | Pn | 04 05 26.3 | +6.5 |
| | 2.7nm,0.3s,baz=219,slow=13,SNR=12 | | | | | | | |
| **EIDS** | **Eidsvold** | **17.71** | **256** | P | | **Pn** | **04 07 21.3** | **+0.2** |
| **EIDS** | **Eidsvold** | **17.71** | **256** | P | | **P** | **04 07 23.1** | **+1.2** |
| **ARMA** | **Armidale** | **18.51** | **239** | P | | **P** | **04 07 30.9** | **+0.2** |
| **ARMA** | **Armidale** | **18.51** | **239** | P | | **Pn** | **04 07 33.9** | **+2.9** |
| **MRZ** | **Mangatainoka R** | **19.12** | **167** | | | **P** | **04 07 36.1** | **-1.1** |
| **BFZ** | **Birch Farm** | **19.28** | **166** | P | | **P** | **04 07 38.6** | **-0.4** |
| **MGCD** | **Mangrove Creek** | **20.11** | **232** | P | | Pn | 04 07 51.1 | +1.0 |
| | comp=Z,44nm,1.3s | | | | | | | |
| **INZ** | **Inchbonnie** | **20.64** | **177** | P | | **P** | **04 07 53.5** | **-0.2** |
| **OXZ** | **Oxford** | **21.27** | **176** | P | | **P** | **04 08 00.4** | **-0.1** |
| **RPZ** | **Rata Peaks** | **21.61** | **178** | P | | **P** | **04 08 04.4** | **+0.1** |
| | comp=Z,13nm,0.8s,baz=21,slow=14,SNR=3.0 | | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **CTA** | **Charters Tower** | **22.32** | **271** | P | | **P** | **04 08 12.8** | **+0.7** |
| | comp=Z,2.4nm,1.1s,baz=115,slow=9.1,SNR=4.0 | | | | | | | |
| **CTAO** | **Charters Tower** | **22.32** | **271** | P | | **P** | **04 08 12.8** | **+0.7** |
| **CTAO** | **Charters Tower** | **22.32** | **271** | P | | **P** | **04 08 12.8** | **+0.7** |
| **CNB** | **Canberra Magne** | **22.41** | **229** | P | | **P** | **04 08 16.0** | **+3.0** |
| **YNG** | **Young** | **22.62** | **233** | P | | **P** | **04 08 17.5** | **+2.3** |
| **CAN** | **Canberra** | **22.67** | **230** | P | | **P** | **04 08 16.3** | **+0.6** |
| **MILA** | **Mila** | **23.48** | **226** | P | | **P** | **04 08 26.1** | **+2.1** |
| **CMSA** | **Cobar Meteorol** | **23.69** | **241** | P | | **P** | **04 08 27.8** | **+1.8** |
| **QLP** | **Quilpie** | **23.96** | **254** | P | | **P** | **04 08 30.1** | **+1.5** |
| | comp=Z,232nm,2.2s | | | | | | | |
| **PMG** | **Port Moresby** | **25.35** | **296** | *i* P | | **P** | **04 08 40.9** | **-0.5** |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **TOO** | **Toolangi** | **26.24** | **228** | P | | **P** | **04 08 49.3** | **0.0** |
| **TOO** | **Toolangi** | **26.24** | **228** | P | | **P** | **04 08 51.0** | **+1.7** |
| **TOO** | **Toolangi** | **26.24** | **228** | P | | **P** | **04 08 49.3** | **0.0** |
| **COEN** | **Coen** | **26.80** | **283** | P | | **P** | **04 08 55.1** | **+0.7** |
| **STKA** | **Stephens Creek** | **27.14** | **243** | P | | **P** | **04 08 58.8** | **+1.4** |
| **STKA** | **Stephens Creek** | **27.14** | **243** | P | | **P** | **04 08 57.9** | **+0.5** |
| | comp=Z,9.5nm,0.5s,baz=87,slow=12,SNR=16 | | | | | | | |
| | comp=Z,9.5nm,0.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.14** | **243** | *e*P | | **P** | **04 08 57.6** | **+0.2** |
| STKA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **28.51** | **233** | P | | **P** | **04 09 11.2** | **+1.6** |
| | comp=Z,29nm,1.2s | | | | | | | |
| **BBOO** | **Buckleboo** | **31.91** | **243** | P | | **P** | **04 09 40.4** | **+0.6** |
| BBOO | | | | IAmb | IAmb | | 04 09 41.5 | |
| | comp=Z,71nm,1.3s | | | | | | | |
| **BBOO** | **Buckleboo** | **31.91** | **243** | P | | **P** | **04 09 40.7** | **+0.9** |
| | comp=Z,44nm,1.5s | | | | | | | |
| **AS31** | **Alice Springs** | **33.32** | **260** | P | | **P** | **04 09 53.4** | **+1.2** |
| | comp=Z,3.2nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.32** | **260** | P | | **P** | **04 09 51.9** | **-0.4** |
| | comp=Z,6.6nm,1.1s,baz=87,slow=8.3,SNR=6.3 | | | | | | | |
| | comp=Z,6.6nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.38** | **267** | *i* P | | **P** | **04 09 53.3** | **+0.5** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.39** | **267** | P | | **P** | **04 09 50.8** | **-2.1** |
| | comp=Z,1.6nm,0.4s,baz=102,slow=8.2,SNR=18 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.39** | **267** | *e*P | | **P** | **04 09 51.1** | **-1.8** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **MTN** | **Manton Dam** | **38.18** | **277** | P | | **P** | **04 10 33.8** | **-0.1** |
| **WRKA** | **Warakurna** | **38.32** | **257** | P | | **P** | **04 10 36.8** | **+1.8** |
| | comp=Z,0.0nmcomp=Z,35nm,1.9s | | | | | | | |
| **KNRA** | **Kununurra** | **39.52** | **272** | P | | **P** | **04 10 45.0** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **41.82** | **267** | P | | **P** | **04 11 03.9** | **-0.3** |
| **MBWA** | **Marble Bar** | **46.65** | **261** | P | | **P** | **04 11 43.1** | **+0.3** |
| MBWA | | | | IAmb | IAmb | | 04 11 58.8 | |
| | comp=Z,56nm,1.3s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.69** | **245** | P | | **P** | **04 11 49.7** | **-1.1** |
| **NWAO** | **Narrogin (SRO)** | **47.69** | **245** | P | | **P** | **04 11 49.7** | **-1.1** |
| NWAO | | | | pmax | pmax | | | |
| | comp=Z,113nm,1.7s | | | | | | | |
| **TOLI2** | **Tolitoli** | **53.30** | **289** | P | | **P** | **04 12 33.6** | **+0.2** |
| TOLI2 | | | | IAmb | IAmb | | 04 12 45.3 | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **55.34** | **275** | P | | **P** | **04 12 48.3** | **0.0** |
| JAGI | | | | IAmb | IAmb | | 04 12 56.4 | |
| | comp=Z,32nm,1.2s | | | | | | | |
| **SBA** | **Scott Base** | **55.87** | **181** | P | | **P** | **04 12 51.9** | **+0.8** |
| SBA | | | | IAmb | IAmb | | 04 13 04.4 | |
| | comp=Z,43nm,1.6s | | | | | | | |
| **SBA** | **Scott Base** | **55.87** | **181** | P | | **P** | **04 12 51.9** | **+0.8** |
| SBA | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.6s | | | | | | | |
| **CASY** | **Casey** | **57.88** | **204** | P | | **P** | **04 13 05.7** | **+0.2** |
| CASY | | | | IAmb | IAmb | | 04 13 21.0 | |
| | comp=Z,39nm,1.6s | | | | | | | |
| **INU** | **Inuyama** | **65.14** | **331** | P | | **P** | **04 13 54.8** | **-0.1** |
| INU | | | | IAmb | IAmb | | 04 13 56.4 | |
| | comp=Z,35nm,1.2s | | | | | | | |
| **JMN** | **Monobe** | **65.33** | **327** | P | | **P** | **04 13 56.6** | **+0.3** |
| JMN | | | | IAmb | IAmb | | 04 13 58.4 | |
| | comp=Z,42nm,1.2s | | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **65.59** | **332** | *e*P | | **P** | **04 13 57.8** | **-0.1** |
| MJA0 | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.61** | **332** | P | | **P** | **04 13 57.1** | **-0.8** |
| | comp=Z,18nm,1.0s,baz=162,slow=6.4,SNR=20 | | | | | | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **65.61** | **332** | P | | **P** | **04 13 57.3** | **-0.7** |
| MAJO | | | | IAmb | IAmb | | 04 13 59.0 | |
| | comp=Z,32nm,1.1s | | | | | | | |
| **MAJO** | **Matsushiro** | **65.61** | **332** | P | | **P** | **04 13 57.3** | **-0.7** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,32nm,1.1s | | | | | | | |
| **JNU** | **Nakatsue** | **66.41** | **325** | P | | **P** | **04 14 03.7** | **+0.5** |
| **JSD** | **Sado** | **66.84** | **333** | P | | **P** | **04 14 05.5** | **-0.3** |
| JSD | | | | IAmb | IAmb | | 04 14 06.7 | |
| | comp=Z,38nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.01** | **180** | P | | **P** | **04 14 13.4** | **+0.3** |
| QSPA | | | | IAmb | IAmb | | 04 14 32.3 | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.01** | **180** | P | | **P** | **04 14 12.2** | **-0.9** |
| | comp=Z,8.4nm,1.0s,baz=28,slow=3.7,SNR=5.5 | | | | | | | |
| | comp=Z,8.4nm,1.0s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **70.51** | **339** | P | | **P** | **04 14 29.5** | **+0.9** |
| **ASAJ** | **Asahikawa** | **70.51** | **339** | P | | **P** | **04 14 29.5** | **+0.9** |
| ASAJ | | | | pmax | pmax | | | |
| | comp=Z,114nm,1.5s | | | | | | | |
| **KSRS** | **Korea Array** | **71.27** | **326** | P | | **P** | **04 14 34.4** | **+1.1** |
| | comp=Z,10nm,1.0s,baz=146,slow=6.3,SNR=15 | | | | | | | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **71.27** | **326** | *e*P | | **P** | **04 14 34.1** | **+0.8** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **NJ2** | **Nanjing** | **72.78** | **316** | *e*P | | **P** | **04 14 44.8** | **+2.3** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **72.99** | **341** | P | | **P** | **04 14 44.2** | **+0.8** |
| YSS | | | | IAmb | IAmb | | 04 14 45.8 | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **72.99** | **341** | *e*P | | **P** | **04 14 44.3** | **+0.9** |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **RPSI** | **Rantau Prapat** | **73.63** | **280** | P | | **P** | **04 14 47.2** | **-0.8** |
| RPSI | | | | IAmb | IAmb | | 04 15 02.2 | |
| | comp=Z,31nm,1.5s | | | | | | | |
| **PSI** | **Prapat** | **73.67** | **280** | P | | **P** | **04 14 47.2** | **-1.2** |
| PSI | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.5s | | | | | | | |
| **VLA** | **Vladivostok** | **73.77** | **332** | *i* P | | **P** | **04 14 48.8** | **+0.7** |
| VLA | | | | pmax | pmax | | | |
| | comp=Z,36nm,0.9s | | | | | | | |
| **PSTR** | **Posyet** | **73.88** | **331** | *i* P | | **P** | **04 14 49.6** | **+0.9** |
| **USA0B** | **Ussuriysk Arra** | **74.59** | **333** | *i* P | | **P** | **04 14 53.6** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **74.59** | **333** | P | | **P** | **04 14 53.8** | **+0.9** |
| | comp=Z,11nm,0.9s,baz=153,slow=5.2,SNR=13 | | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **PET** | **Petropavlovsk** | **75.43** | **353** | *i* P | | **P** | **04 14 57.8** | **+0.4** |
| PET | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **75.62** | **352** | *i* P | | **P** | **04 14 59.4** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **75.62** | **352** | P | | **P** | **04 14 59.1** | **+0.5** |
| | comp=Z,12nm,0.9s,baz=124,slow=7.4,SNR=8.8 | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **DL2** | **Dalian** | **75.73** | **323** | P | | **P** | **04 15 00.0** | **+0.4** |
| DL2 | | | | pmax | pmax | | | |
| | comp=Z,76nm,1.2s | | | | | | | |
| **MDJ** | **Mudanjiang** | **75.97** | **331** | P | | **P** | **04 15 01.0** | **+0.2** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.2s | | | | | | | |
| **MAW** | **Mawson** | **76.13** | **202** | P | | **P** | **04 15 00.4** | **-1.0** |
| | comp=Z,1.8nm,0.9s,baz=52,slow=5.0,SNR=2.8 | | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | | |
| **CN2** | **Changchun** | **77.27** | **329** | P | | **P** | **04 15 08.5** | **+0.3** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.2s | | | | | | | |
| **BNX** | **BinXian** | **77.82** | **331** | ⇑P | | **P** | **04 15 10.5** | **-0.7** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.9s | | | | | | | |
| **ENH** | **Enshi** | **78.07** | **310** | P | | **P** | **04 15 13.0** | **0.0** |
| ENH | | | | IAmb | IAmb | | 04 15 14.8 | |
| | comp=Z,54nm,1.2s | | | | | | | |
| **LYN** | **LuoYang** | **78.51** | **315** | P | | **P** | **04 15 16.8** | **+1.5** |
| LYN | | | | sP | pP | | 04 15 23.5 | +1.7 |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,57nm,1.1s | | | | | | | |
| **KLR** | **Kul'dur** | **78.75** | **336** | P | | **P** | **04 15 17.4** | **+1.1** |
| | comp=Z,7.9nm,0.8s,baz=103,slow=4.2,SNR=10 | | | | | | | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| **KLR** | **Kul'dur** | **78.75** | **336** | *i* P | | **P** | **04 15 17.1** | **+0.8** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.3s | | | | | | | |
| **HNS** | **HongShan** | **78.82** | **318** | ⇑P | | **P** | **04 15 18.0** | **+1.1** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,32nm,1.5s | | | | | | | |
| **PHRA** | **Phrae** | **79.31** | **295** | P | | **P** | **04 15 21.0** | **+0.9** |
| **CRAI** | **Chiangrai** | **80.00** | **297** | P | | **P** | **04 15 24.7** | **+1.0** |
| **CMAR** | **Chiang Mai Arr** | **80.38** | **294** | P | | **P** | **04 15 27.6** | **+1.8** |
| | comp=Z,4.8nm,0.7s,baz=137,slow=4.1,SNR=18 | | | | | | | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.38** | **294** | *e*P | | **P** | **04 15 28.4** | **+2.5** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **KMI** | **Kunming** | **80.43** | **302** | ⇑P | | **P** | **04 15 28.3** | **+2.0** |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.5s | | | | | | | |
| **XAN** | **Xi'an** | **80.59** | **312** | P | | **P** | **04 15 27.8** | **+1.1** |
| XAN | | | | sP | pP | | 04 15 34.5 | +1.2 |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,42nm,1.1s | | | | | | | |
| **PZH** | **PanZhiHua** | **81.89** | **303** | P | | **P** | **04 15 36.3** | **+2.4** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,110nm,1.0s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **82.18** | **324** | *e*P | | **P** | **04 15 35.0** | **0.0** |
| XLT | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **CHGN** | **Chignik** | **82.48** | **17** | P | | **P** | **04 15 35.3** | **-0.7** |
| CHGN | | | | IAmb | IAmb | | 04 15 51.2 | |
| | comp=Z,26nm,1.3s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **82.87** | **319** | *e*P | | **P** | **04 15 39.3** | **+0.7** |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **ELIB** | **Princess Elisa** | **83.51** | **190** | *d*P | | **P** | **04 15 43.4** | **+1.7** |
| **BTO** | **Baotou** | **83.66** | **318** | *e*P | | **P** | **04 15 46.8** | **+4.0** |
| BTO | | | | pP | | **sP** | **04 15 51.5** | **-0.2** |
| BTO | | | | sP | | **pwP** | **04 15 53.8** | **-1.7** |
| BTO | | | | pmax | pmax | | | |
| | comp=Z,38nm,1.4s | | | | | | | |
| **HIA** | **Hailar** | **83.94** | **330** | *i* P | | **P** | **04 15 44.0** | **+0.2** |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **ZEA** | **Zeya** | **84.05** | **336** | *e*P | | **P** | **04 15 44.6** | **+0.4** |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **LZH** | **Lanzhou** | **85.20** | **312** | *e*P | | **P** | **04 15 52.3** | **+1.6** |
| LZH | | | | sP | sP | | 04 15 59.5 | -0.2 |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,36nm,1.3s | | | | | | | |
| **KDAK** | **Kodiak Island** | **85.42** | **19** | P | | **P** | **04 15 51.0** | **0.0** |
| **KDAK** | **Kodiak Island** | **85.42** | **19** | P | | **P** | **04 15 51.0** | **0.0** |
| KDAK | | | | pmax | pmax | | | |
| | comp=Z,60nm,1.6s | | | | | | | |
| **N15K** | **Kwethluk River** | **85.47** | **14** | P | | **P** | **04 15 52.0** | **+0.7** |
| N15K | | | | IAmb | IAmb | | 04 15 53.1 | |
| | comp=Z,37nm,1.2s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.79** | **184** | ⇑P | | **P** | **04 15 51.5** | **-1.6** |
| | comp=Z,650nm,0.8s | | | | | | | |
| **SEY** | **Seymchan** | **85.86** | **352** | *i* P | | **P** | **04 15 53.3** | **+0.2** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **86.39** | **182** | P | | **P** | **04 15 55.0** | **-1.0** |
| SNAA | | | | IAmb | IAmb | | 04 16 03.3 | |
| | comp=Z,60nm,1.7s | | | | | | | |
| **SNAA** | **Sanae** | **86.39** | **182** | ⇑P | | **P** | **04 15 55.0** | **-1.0** |
| | comp=Z,114nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **86.39** | **182** | P | | **P** | **04 15 54.9** | **-1.0** |
| | comp=Z,8.0nm,1.0s,baz=209,slow=11,SNR=8.4 | | | | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **SNAA** | **Sanae** | **86.39** | **182** | *i* P | | **P** | **04 15 55.9** | **-0.1** |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| **M16K** | **Timber Creek** | **86.49** | **15** | P | | **P** | **04 15 56.1** | **-0.2** |
| M16K | | | | IAmb | IAmb | | 04 15 58.3 | |
| | comp=Z,44nm,1.4s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.95** | **180** | ⇑P | | **P** | **04 15 56.0** | **-2.6** |
| | comp=Z,4.2nm,0.6s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.25** | **181** | ⇑P | | **P** | **04 15 58.0** | **-2.2** |
| | comp=Z,3.6nm,0.7s,baz=177,slow=5.0 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.53** | **181** | ⇑P | | **P** | **04 15 59.9** | **-1.6** |
| | comp=Z,16nm,1.1s | | | | | | | |
| **CMB** | **Columbia Colle** | **88.45** | **48** | P | | **P** | **04 16 06.6** | **+0.2** |
| **CMB** | **Columbia Colle** | **88.45** | **48** | P | | **P** | **04 16 06.6** | **+0.2** |
| CMB | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| **WAKR** | **Walker** | **89.33** | **48** | P | | **P** | **04 16 09.8** | **-0.9** |
| WAKR | | | | IAmb | IAmb | | 04 16 13.8 | |
| | comp=Z,17nm,1.5s | | | | | | | |
| **SHL** | **Shillong** | **89.37** | **298** | P | | **P** | **04 16 11.0** | **-0.2** |
| **SHL** | **Shillong** | **89.37** | **298** | P | | **P** | **04 16 11.0** | **-0.2** |
| SHL | | | | pmax | pmax | | | |
| | comp=Z,44nm,1.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **89.59** | **323** | P | | **P** | **04 16 11.9** | **+0.4** |
| **ULN** | **Ulaanbaatar** | **89.59** | **323** | *i* P | | **P** | **04 16 12.0** | **+0.4** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.2s | | | | | | | |
| **GTA** | **Gaotai** | **89.63** | **313** | P | | **P** | **04 16 13.3** | **+1.3** |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | |
| **YAK** | **Yakutsk** | **89.79** | **342** | *i* P | | **P** | **04 16 11.6** | **-0.3** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **BILL** | **Bilibino** | **89.88** | **359** | *e*P | | **P** | **04 16 12.4** | **+0.1** |
| BILL | | | | *e**PP | | **pP** | **04 16 16.8** | **-2.2** |
| BILL | | | | *e**SP | | **sP** | **04 16 19.1** | **-2.3** |
| BILL | | | | *e* | | | 04 19 46.0 | |
| BILL | | | | *e*PPP | | PPP | 04 21 43.7 | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.3s | | | | | | | |
| **SONM** | **Songino Array** | **89.94** | **323** | P | | **P** | **04 16 13.7** | **+0.5** |
| | comp=Z,15nm,1.0s,baz=142,slow=5.1,SNR=23 | | | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.08** | **48** | P | | **P** | **04 16 14.6** | **+0.4** |
| | comp=Z,1.9nm,0.8s,baz=226,slow=6.9,SNR=6.4 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **KVN** | **Kaiserville** | **90.51** | **48** | P | | **P** | **04 16 15.8** | **-0.4** |
| **KVN** | **Kaiserville** | **90.51** | **48** | P | | **P** | **04 16 15.8** | **-0.4** |
| KVN | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| **TPH** | **Tonopah** | **90.66** | **49** | P | | **P** | **04 16 17.9** | **+1.0** |
| **TPH** | **Tonopah** | **90.66** | **49** | P | | **P** | **04 16 17.9** | **+1.0** |
| TPH | | | | pmax | pmax | | | |
| | comp=Z,48nm,1.3s | | | | | | | |
| **HDA** | **Harding Lake** | **92.38** | **17** | P | | **P** | **04 16 25.2** | **+1.2** |
| HDA | | | | IAmb | IAmb | | 04 16 25.5 | |
| | comp=Z,20nm,1.6s | | | | | | | |
| **E19K** | **Redstone River** | **92.49** | **12** | P | | **P** | **04 16 25.4** | **+1.0** |
| E19K | | | | IAmb | IAmb | | 04 16 43.2 | |
| | comp=Z,31nm,1.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.68** | **17** | P | | **P** | **04 16 22.1** | **-3.3** |
| | comp=Z,1.3nm,0.8s,baz=245,slow=4.8,SNR=9.3 | | | | | | | |
| **ZAK** | **Zakamensk** | **93.03** | **324** | *e*P | | **P** | **04 16 26.5** | **-1.0** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.4s | | | | | | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **F24K** | **Squaw Lake** | **94.57** | **15** | P | | **P** | **04 16 33.8** | **-0.3** |
| **TIXI** | **Tiksi** | **97.65** | **348** | *i* P | | **P** | **04 16 47.8** | **-0.1** |
| TIXI | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.9s | | | | | | | |
| **WMQ** | **Urumqi** | **99.71** | **313** | *e*P | | **Pdif** | **04 17 00.0** | **+2.1** |
| **DGZ** | **Jazzator, Alta** | **101.94** | **319** | *i* P | | **Pdif** | **04 17 07.9** | **+0.1** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.4s | | | | | | | |
| **BRVK** | **Borovoye** | **113.14** | **320** | *i* PKIKP | | **PKiKP** | **04 21 51.5** | **+0.4** |
| **ARU** | **Arti** | **119.97** | **323** | *i* PKIKP | | **PKPdf** | **04 22 04.2** | **+0.1** |
| **D62A** | **Allapoint, All** | **126.72** | **47** | | | **PKPdf** | **04 22 16.6** | **-0.8** |
| **F63A** | **Nahmakanta, Br** | **126.83** | **49** | | | **PKPdf** | **04 22 17.5** | **-0.1** |
| **BELG** | **Belogornoye** | **126.89** | **320** | *i* PKIKP | | **PKPdf** | **04 22 17.8** | **+0.4** |
| **PQI** | **Presque Isle** | **127.47** | **47** | | | **PKPdf** | **04 22 18.0** | **-0.8** |
| **HUMP** | **Col San Antoni** | **127.57** | **84** | | | **PKPdf** | **04 22 19.9** | **+0.1** |
| **ARCES** | **ARCESS Array B** | **127.98** | **345** | PKP | | **PKPdf** | **04 22 19.1** | **0.0** |
| | comp=Z,0.6nm,0.4s,baz=77,slow=1.7,SNR=14 | | | | | | | |
| **BATG** | **Bathurst New B** | **128.71** | **46** | PKPdf | | **PKPdf** | **04 22 20.6** | **-0.5** |
| **LMN** | **Caledonia Moun** | **129.79** | **48** | PKPdf | | **PKPdf** | **04 22 23.2** | **-0.1** |
| **KIV** | **Kislovodsk** | **131.70** | **310** | *e*PKIKP | | **PKPdf** | **04 22 26.1** | **-1.0** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **131.75** | **310** | *i* PKIKP | | **PKPdf** | **04 22 28.1** | **+0.8** |
| **OBN** | **Obninsk** | **132.27** | **326** | *e*PKIKP | | **PKPdf** | **04 22 27.9** | **+0.3** |
| OBN | | | | *e* | | | 04 22 30.6 | |
| OBN | | | | *e* | | | 04 24 50.6 | |
| OBN | | | | *e*PPP | | PPP | 04 27 42.5 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **133.48** | **337** | PKhKP | | PKPpre | 04 22 25.2 | |
| | comp=Z,1.7nm,0.9s,baz=38,slow=7.0,SNR=1.7 | | | | | | | |
| FINES | | | | PKP | | **PKPdf** | **04 22 28.2** | **-1.5** |
| | comp=Z,0.6nm,0.6s,baz=315,slow=0.2,SNR=4.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **139.13** | **306** | PKP | | **PKPdf** | **04 22 39.9** | **-1.2** |
| | comp=Z,1.4nm,1.0s,baz=204,slow=3.2,SNR=2.6 | | | | | | | |
| **ARR** | **Arges** | **143.46** | **318** | ⇓P | | PKPab | 04 22 44.8 | 0.0 |
| **DRGR** | | **143.91** | **321** | ⇓P | | PKPbc | 04 22 47.3 | +0.1 |
| **DRGR** | | **143.91** | **321** | ⇓PKIKP | | PKPbc | 04 22 47.3 | +0.1 |
| **GZR** | **Gura Zlata** | **144.60** | **319** | ⇓P | | **PKPab** | **04 22 49.3** | **+0.1** |
| **GZR** | **Gura Zlata** | **144.60** | **319** | ⇓PKIKP | | **PKPab** | **04 22 49.3** | **+0.1** |
| **BSEG** | **Bad Segeberg** | **144.67** | **339** | *e*PKPbc | | **PKPab** | **04 22 49.1** | **+0.1** |
| | baz=34,slow=2.8 | | | | | | | |
| **SURR** | **Surduc** | **144.81** | **320** | ⇓P | | PKPbc | 04 22 50.3 | +0.4 |
| **PSZ** | **Piszkesteto** | **144.86** | **324** | PKPdf | | **PKPdf** | **04 22 51.1** | **+0.1** |
| **PSZ** | **Piszkesteto** | **144.86** | **324** | ⇓P | | PKPbc | 04 22 50.7 | +0.6 |
| **PSZ** | **Piszkesteto** | **144.86** | **324** | ⇓PKIKP | | PKPbc | 04 22 50.7 | +0.6 |
| **MORC** | **Moravsky Berou** | **144.88** | **329** | PKPdf | | PKPbc | 04 22 50.8 | +0.7 |
| **MORC** | **Moravsky Berou** | **144.88** | **329** | *e*PKP | | **PKPab** | **04 22 49.9** | **-0.1** |
| **MORC** | **Moravsky Berou** | **144.88** | **329** | ⇓P | | **PKPab** | **04 22 47.1** | **-2.9** |
| **MORC** | **Moravsky Berou** | **144.88** | **329** | ⇓PKIKP | | **PKPab** | **04 22 47.1** | **-2.9** |
| **CHVC** | **Chvalec** | **145.02** | **331** | *e*PKP | | **PKPab** | **04 22 51.0** | **+0.5** |
| **CHVC** | **Chvalec** | **145.02** | **331** | *e*PKIKP | | **PKPab** | **04 22 51.0** | **+0.5** |
| **KRLC** | **Kraliky** | **145.04** | **330** | *e*PKP | | **PKPbc** | **04 22 50.5** | **-0.1** |
| **KRLC** | **Kraliky** | **145.04** | **330** | *e*PKIKP | | **PKPbc** | **04 22 50.5** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **145.06** | **330** | *e*PKP | | **PKPab** | **04 22 51.1** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **145.06** | **330** | *e*PKIKP | | **PKPab** | **04 22 51.1** | **+0.4** |
| **VYHS** | **Vyhne** | **145.07** | **326** | *e*PKIKP | | **PKPdf** | **04 22 51.3** | **+0.1** |
| **VYHS** | **Vyhne** | **145.07** | **326** | *e*PKP | | **PKPdf** | **04 22 51.3** | **+0.1** |
| **HERR** | **Herculane** | **145.07** | **318** | ⇓P | | **PKPdf** | **04 22 51.7** | **+0.4** |
| **GORT1** | **Trebel** | **145.11** | **338** | *e*PKPbc | | **PKPbc** | **04 22 50.7** | **+0.2** |
| | baz=34,slow=2.8 | | | | | | | |
| **BZS** | **Buzias** | **145.18** | **320** | ⇑P |

comp=Z,7.5nm,1.1s
**SOKA Soboth 148.21 327** *e*PKP **PKPbc 04 22 59.9 0.0**
comp=Z,13nm,1.1s
**TNS Taunus Mts 148.40 337** *e*PKPbc **PKPbc 04 23 00.2 -0.1**
baz=34,slow=2.8
**OBKA Obir 148.57 327** *e*PKP **PKPbc 04 23 00.6 -0.3**
comp=Z,11nm,1.1s
**KBA Koelnbreinsper 148.77 329** *e*PKP **PKPbc 04 23 00.8 -0.8**
comp=Z,15nm,1.1s
**LESA Schwarzleotal 148.84 330** *i* PKP **PKPbc 04 23 01.0 -0.6**
comp=Z,17nm,0.7s
**BTNL Ternell 148.87 340** *d*PKP **PKPbc 04 23 01.2 -0.3**
**MEM Membach 148.89 340** *d*PKP **PKPbc 04 23 01.4 0.0**
**MYKA Terra Mystica 148.94 328** *e*PKP **PKPbc 04 23 01.5 -0.4**
comp=Z,17nm,0.8s
**BSTI Sart Tilman 149.05 341** *d*PKP **PKPbc 04 23 01.9 0.0**
**BHOU Houvegnez 149.12 340** *d*PKP **PKPbc 04 23 02.7 +0.6**
**BCLA Clavier 149.28 341** *d*PKP **PKPbc 04 23 02.2 -0.3**
**BGES Gesves 149.37 341** *d*PKP **PKPbc 04 23 02.7 0.0**
**ABTA Abfaltersbach 149.41 329** *e*PKP **PKPbc 04 23 02.5 -0.5**
comp=Z,25nm,1.4s
**WATA Walderalm 149.41 331** *i* PKiKP **PKPbc 04 23 03.4 +0.3**
comp=Z,40nm,1.5s
**WTTA Wattenberg 149.44 331** *e*PKP **PKPbc 04 23 01.9 -1.3**
comp=Z,44nm,1.3s
**RCHB Rochefort 149.53 341** *d*PKP **PKPbc 04 23 03.2 +0.1**
**BMRD Maredsous 149.54 341** *d*PKP **PKPbc 04 23 03.2 +0.1**
**MOTA Moosalm 149.62 331** *e*PKP **PKPbc 04 23 03.5 -0.1**
comp=Z,20nm,1.1s
**STAL STALIGIAL 149.66 328 PKiKP 04 23 05.0 +0.4**
**RETA Reutte 149.66 332** *e*PKP **PKPbc 04 23 03.5 -0.1**
comp=Z,18nn,1.5s
**SQTA Sankt Quirin 149.66 331** *i* PKP **PKPbc 04 23 03.8 +0.1**
comp=Z,23nn,1.1s
**WLF Walferdange 149.66 339** *d*PKP **PKiKP 04 23 04.4 -0.1**
**WLF Walferdange 149.66 339** *e*PKPbc **PKPbc 04 23 03.5 0.0**
baz=34,slow=2.8
**DOU Dourbes 149.78 341** *d*PKP **PKPbc 04 23 03.5 -0.3**
**BFO Black Forest 150.00 335** *e*PKPbc **PKPbc 04 23 03.7 -0.7**
baz=34,slow=2.8
**FETA Feichten 150.03 331** *e*PKiKP **PKPbc 04 23 04.7 +0.1**
comp=Z,32nn,1.3s
**DAVA Damuels 150.20 332** *e*PKiKP **PKPbc 04 23 05.3 +0.3**
comp=Z,20nn,1.2s
**ECH Echery 150.54 336** PKPbc **PKiKP 04 23 06.4 0.0**
**ECH Echery 150.54 336** PKIKP **PKiKP 04 23 06.4 0.0**
**FUORN Ofenpass-Fuorn 150.54 331 PKPbc 04 23 06.0 0.0**
**ESDC Sonseca Array 161.72 345** PKPab **PKPab 04 23 59.2 -1.2**
comp=Z,1.2nn,1.1s,baz=14,slow=4.8,SNR=5.1
**DBIC Dimbokro 163.94 198** PKPab **PKPab 04 24 09.9 -0.7**
comp=Z,4.2nn,0.9s,baz=272,slow=3.4,SNR=3.2

*IDC **29** 04:04:34.3±0.9, 22°.03S×170°.19E, h0km, mb4.6/13, mbtmp4.6/14, MS6.0/1, Error ellipse: s-maj=30.6km s-min=20.7km az=148.0*
*NEIC **29** 04:04:36.7±1.9, 21°.95S±0°.1×170°.00E±0°.09, h10km±1km, mb5.1/56, Error ellipse: s-maj=19.1km s-min=12.8km az=162.0*
**ISC 29 04:04:38.9±0.4, 21°.98S±0°.09×170°.01E±0°.07, h25km, n122, σ1°29/122, mb5.0/42, 6C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.46** | **255** | Pn | **Pn** | **04 05 17.1** | **-0.3** |
| PINNC | | | | Sn | **Sn** | **04 05 46.5** | **-0.1** |
| **DZM** | **Mont Dzumac** | **3.31** | **268** | Pn | **Pn** | **04 05 27.6** | **-1.6** |
| **DZM** | **Mont Dzumac** | **3.31** | **268** | Pn | **Pn** | **04 05 30.1** | **+0.9** |
| | 284nm,0.5s,baz=120,slow=20,SNR=0.9 | | | | | | |
| DZM | | | | Sn | **Sn** | **04 06 05.9** | **-2.0** |
| | 50nm,0.3s,baz=195,slow=20,SNR=1.3 | | | | | | |
| **MSVF** | **Nonsavu** | **8.66** | **62** | Pn | Pn | 04 06 48.8 | +6.0 |
| | 2.7nm,0.3s,baz=234,slow=12,SNR=9.5 | | | | | | |
| **EIDS** | **Eidsvold** | **17.67** | **255** | | **Pn** | **04 08 43.3** | **0.0** |
| **MRZ** | **Mangatainoka R** | **19.21** | **167** | | **P** | **04 09 01.9** | **+0.9** |
| MRZ | | | | IAmb | IAmb | 04 09 15.8 | |
| | comp=Z,124nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **22.25** | **270** | P | **P** | **04 09 36.5** | **+2.4** |
| | comp=Z,1.5nm,0.8s,baz=99,slow=11,SNR=2.6 | | | | | | |
| **CTAO** | **Charters Tower** | **22.25** | **270** | P | **P** | **04 09 33.0** | **-1.1** |
| **COEN** | **Coen** | **26.71** | **283** | P | **P** | **04 10 16.0** | **-0.5** |
| COEN | | | | IAmb | IAmb | 04 10 34.6 | |
| | comp=Z,39nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **27.12** | **243** | P | **P** | **04 10 21.4** | **+1.4** |
| **STKA** | **Stephens Creek** | **27.12** | **243** | P | **P** | **04 10 21.7** | **+1.7** |
| | comp=Z,25nn,1.1s,baz=82,slow=12,SNR=5.8 | | | | | | |
| | comp=Z,25nn,1.1s | | | | | | |
| **BBOO** | **Buckleboo** | **31.89** | **243** | P | **P** | **04 11 01.8** | **-0.5** |
| **WR0** | **Warramunga Arr** | **33.14** | **267** | P | **P** | **04 11 13.2** | **-0.2** |
| **ASAR** | **Alice Springs** | **33.27** | **260** | P | **P** | **04 11 14.9** | **+0.3** |
| | comp=Z,3.5nm,0.7s,baz=80,slow=8.8,SNR=1.4 | | | | | | |
| ASAR | | | | LR | LR | 04 24 08.8 | |
| | comp=Z,21μm,18.3s,baz=63,slow=35 | | | | | | |
| | comp=Z,3.5nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.31** | **267** | P | **P** | **04 11 14.8** | **-0.1** |
| **WB2** | **Warramunga Arr** | **33.32** | **267** | P | **P** | **04 11 14.6** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 04 11 29.2 | |
| | comp=Z,25nn,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.33** | **267** | P | **P** | **04 11 14.9** | **-0.1** |
| | comp=Z,3.7nm,0.5s,baz=98,slow=8.3,SNR=9.5 | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **38.10** | **277** | P | **P** | **04 11 54.1** | **-2.0** |
| **FORT** | **Forrest** | **38.41** | **248** | P | **P** | **04 11 58.4** | **-0.1** |
| **KNRA** | **Kununurra** | **39.45** | **272** | P | **P** | **04 12 07.7** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 04 12 25.4 | |
| | comp=Z,34nm,1.1s | | | | | | |
| **XMAS** | **Kiritimati** | **39.76** | **57** | P | **P** | **04 12 08.2** | **-1.7** |
| XMAS | | | | IAmb | IAmb | 04 12 29.4 | |
| | comp=Z,66nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.76** | **267** | P | **P** | **04 12 25.4** | **-1.0** |
| **PSA00** | **Pilbara Seismi** | **46.41** | **261** | P | **P** | **04 13 02.8** | **-1.0** |
| PSA00 | | | | IAmb | IAmb | 04 13 26.2 | |
| | comp=Z,17nn,1.2s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **46.41** | **261** | P | **P** | **04 13 03.5** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 04 13 18.2 | |
| | comp=Z,58nn,1.4s | | | | | | |
| **MBWA** | **Marble Bar** | **46.59** | **261** | P | **P** | **04 13 03.9** | **-1.3** |
| **NWAO** | **Narrogin (SRO)** | **47.66** | **245** | P | **P** | **04 13 12.9** | **-0.4** |
| **MORW** | **Morawa** | **48.87** | **250** | P | **P** | **04 13 21.8** | **-1.0** |
| **TOLI2** | **Tolitoli** | **53.21** | **289** | P | **P** | **04 13 55.4** | **-0.1** |
| TOLI2 | | | | IAmb | IAmb | 04 14 09.1 | |
| | comp=Z,16nn,0.9s | | | | | | |
| **SBA** | **Scott Base** | **55.95** | **181** | P | **P** | **04 14 16.1** | **+1.7** |
| SBA | | | | IAmb | IAmb | 04 14 28.3 | |
| | comp=Z,29nn,1.2s | | | | | | |
| **CASY** | **Casey** | **57.93** | **204** | P | **P** | **04 14 29.2** | **+0.6** |
| **UGM** | **Wanagama** | **58.82** | **274** | P | **P** | **04 14 35.6** | **-0.2** |
| **JOW** | **Kunigami** | **63.14** | **318** | P | **P** | **04 15 03.7** | **-1.1** |
| **JGF** | **Kuroka** | **65.09** | **331** | P | **P** | **04 15 16.9** | **-0.5** |
| JGF | | | | IAmb | IAmb | 04 15 19.4 | |
| | comp=Z,20nn,1.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.50** | **332** | P | **P** | **04 15 19.3** | **-0.8** |
| | comp=Z,2.5nn,0.4s,baz=164,slow=7.1,SNR=5.5 | | | | | | |
| | comp=Z,2.5nn,0.4s | | | | | | |
| **MAJO** | **Matsushiro** | **65.50** | **332** | P | **P** | **04 15 18.2** | **-1.9** |
| MAJO | | | | IAmb | IAmb | 04 15 21.2 | |
| | comp=Z,27nn,1.3s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **65.51** | **332** | P | **P** | **04 15 18.4** | **-1.7** |
| MJB9 | | | | IAmb | IAmb | 04 15 21.2 | |
| | comp=Z,26nn,1.3s | | | | | | |
| **JMM** | **Marumori** | **65.56** | **335** | P | **P** | **04 15 19.0** | **-1.4** |
| **JSD** | **Sado** | **66.74** | **333** | P | **P** | **04 15 28.4** | **+0.5** |
| **QSPA** | **South Pole Qui** | **68.09** | **180** | P | **P** | **04 15 35.0** | **-1.4** |
| **JKA** | **Kamikawa-asahi** | **70.41** | **339** | P | **P** | **04 15 51.6** | **+0.9** |
| **KSRS** | **Korea Array** | **71.17** | **326** | P | **P** | **04 15 56.8** | **+1.4** |
| | comp=Z,4.0nn,0.8s,baz=148,slow=5.8,SNR=4.9 | | | | | | |
| | comp=Z,4.0nn,0.8s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **74.49** | **333** | P | **P** | **04 16 15.7** | **+0.6** |
| USA0B | | | | IAmb | IAmb | 04 16 29.6 | |
| | comp=Z,12nn,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.49** | **333** | P | **P** | **04 16 16.5** | **+1.4** |
| | comp=Z,2.4nn,0.4s,baz=159,slow=5.2,SNR=10 | | | | | | |
| | comp=Z,2.4nn,0.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.53** | **352** | P | **P** | **04 16 21.3** | **+0.4** |
| | comp=Z,11nn,1.0s,baz=132,slow=8.2,SNR=4.1 | | | | | | |
| | comp=Z,11nn,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **78.65** | **336** | P | **P** | **04 16 40.0** | **+1.6** |
| | comp=Z,3.3nn,0.6s,baz=348,slow=1.7,SNR=4.8 | | | | | | |
| | comp=Z,3.3nn,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.29** | **294** | P | **P** | **04 16 49.3** | **+1.2** |
| | comp=Z,2.8nn,0.7s,baz=133,slow=4.1,SNR=4.6 | | | | | | |
| | comp=Z,2.8nn,0.7s | | | | | | |
| **S12K** | **Black Hills** | **80.94** | **16** | P | **P** | **04 16 49.3** | **-1.4** |
| **O16K** | **Kokwok River B** | **85.38** | **16** | P | **P** | **04 17 13.5** | **-0.1** |
| **N15K** | **Kwethluk River** | **85.41** | **14** | P | **P** | **04 17 12.9** | **-0.9** |
| **M14K** | **Bethel** | **85.51** | **13** | P | **P** | **04 17 14.1** | **-0.1** |
| M14K | | | | IAmb | IAmb | 04 17 15.1 | |
| | comp=Z,24nm,1.3s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.86** | **184** | ⇑P | **P** | **04 17 15.6** | **-0.7** |
| | comp=Z,393nm,1.1s | | | | | | |
| **L14K** | **Kuka Creek** | **85.90** | **13** | P | **P** | **04 17 16.6** | **+0.5** |
| L14K | | | | IAmb | IAmb | 04 17 17.8 | |
| | comp=Z,25nn,1.4s | | | | | | |
| **M16K** | **Timber Creek** | **86.43** | **15** | P | **P** | **04 17 18.8** | **+0.1** |
| M16K | | | | IAmb | IAmb | 04 17 21.6 | |
| | comp=Z,20nn,1.3s | | | | | | |
| **SNAA** | **Sanae** | **86.47** | **182** | P | **P** | **04 17 18.2** | **-0.9** |
| SNAA | | | | IAmb | IAmb | 04 17 44.8 | |
| | comp=Z,24nn,1.4s | | | | | | |
| **SNAA** | **Sanae** | **86.47** | **182** | ⇑P | **P** | **04 17 18.4** | **-0.7** |
| | comp=Z,103nn,0.9s | | | | | | |
| **SNAA** | **Sanae** | **86.47** | **182** | P | **P** | **04 17 18.4** | **-0.7** |
| | comp=Z,5.3nn,0.9s,baz=191,slow=6.9,SNR=3.0 | | | | | | |
| | comp=Z,5.3nn,0.9s | | | | | | |
| **P19K** | **Oil Pt** | **86.73** | **18** | P | **P** | **04 17 21.2** | **+0.9** |
| **VNA3** | **Neumayer Olymp** | **87.03** | **180** | ⇑P | **P** | **04 17 20.6** | **-1.2** |
| | comp=Z,11nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.33** | **181** | ⇑P | **P** | **04 17 22.1** | **-1.1** |
| | comp=Z,7.5nm,0.6s,baz=178,slow=4.0 | | | | | | |
| **KMRM** | **Mail Ridge** | **87.33** | **45** | P | **P** | **04 17 23.3** | **-0.4** |
| **VNA1** | **Neumayer--Stat** | **87.62** | **181** | ⇑P | **P** | **04 17 23.8** | **-0.8** |
| | comp=Z,10nn,0.9s | | | | | | |
| **L18K** | **Granite Mounta** | **88.01** | **15** | P | **P** | **04 17 27.7** | **+1.3** |
| **SONM** | **Songino Array** | **89.83** | **323** | P | **P** | **04 17 36.0** | **+0.5** |
| | comp=Z,7.9nm,1.0s,baz=121,slow=2.5,SNR=5.9 | | | | | | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.07** | **48** | P | **P** | **04 17 37.0** | **+0.1** |
| | comp=Z,1.5nm,0.8s,baz=221,slow=7.5,SNR=4.1 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **KVN** | **Kaiserville** | **90.50** | **48** | P | **P** | **04 17 38.5** | **-0.4** |
| **LOGN** | **Logan Glacier** | **91.48** | **22** | P | **P** | **04 17 42.3** | **-0.6** |
| LOGN | | | | IAmb | IAmb | 04 18 08.3 | |
| | comp=Z,12nn,1.2s | | | | | | |
| **GNW** | **Green Mountain** | **91.71** | **39** | P | **P** | **04 17 44.4** | **+0.4** |
| **H21K** | **Melozitna Rive** | **91.84** | **15** | P | **P** | **04 17 43.4** | **-0.9** |
| H21K | | | | IAmb | IAmb | 04 18 12.4 | |
| | comp=Z,9.3nn,1.5s | | | | | | |
| **M27K** | **Edge Creek, AK** | **92.30** | **20** | P | **P** | **04 17 46.1** | **-0.5** |
| M27K | | | | IAmb | IAmb | 04 18 10.9 | |
| | comp=Z,6.0nn,1.1s | | | | | | |
| **G21K** | **Allakaket** | **92.40** | **14** | P | **P** | **04 17 47.4** | **+0.5** |
| G21K | | | | IAmb | IAmb | 04 17 50.6 | |
| | comp=Z,12nn,1.4s | | | | | | |
| **E19K** | **Redstone River** | **92.43** | **12** | P | **P** | **04 17 45.1** | **-1.8** |
| E19K | | | | IAmb | IAmb | 04 18 09.0 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **92.62** | **17** | P | **P** | **04 17 46.4** | **-1.5** |
| | comp=Z,0.6nm,0.5s,baz=237,slow=5.3,SNR=4.4 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **LL06** | **Loncomilla** | **93.27** | **138** | P | **P** | **04 17 49.7** | **-1.9** |
| **N31M** | **Braeburn, Yuko** | **93.78** | **23** | P | **P** | **04 17 53.1** | **-0.2** |
| N31M | | | | IAmb | IAmb | 04 18 05.1 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **M30M** | **Minto, Yukon** | **94.15** | **22** | P | **P** | **04 17 54.8** | **-0.2** |
| M30M | | | | IAmb | IAmb | 04 18 04.7 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **EGAK** | **Eagle** | **94.27** | **19** | P | **P** | **04 17 54.8** | **-0.6** |
| EGAK | | | | IAmb | IAmb | 04 18 14.7 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **X18A** | **Snowflake** | **94.44** | **55** | P | **P** | **04 17 56.4** | **-0.8** |
| **D22K** | **Ayikyak River** | **94.54** | **13** | P | **P** | **04 17 57.0** | **+0.3** |
| D22K | | | | IAmb | IAmb | 04 18 22.2 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **K29M** | **Barlow Dome** | **94.76** | **21** | P | **P** | **04 17 57.0** | **-0.9** |
| **D23K** | **Nanushuk River** | **95.03** | **13** | P | **P** | **04 17 58.2** | **-0.6** |
| D23K | | | | IAmb | IAmb | 04 18 00.6 | |
| | comp=Z,12nn,1.1s | | | | | | |
| **I28M** | **Miner Creek** | **95.11** | **19** | P | **P** | **04 17 58.5** | **-1.0** |
| I28M | | | | IAmb | IAmb | 04 18 19.0 | |
| | comp=Z,8.9nm,1.3s | | | | | | |
| **BDFB** | **Brasilia** | **127.21** | **132** | PKP | **PKPdf** | **04 23 41.8** | **-0.3** |
| | comp=Z,4.3nm,0.9s,baz=165,slow=3.9,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.89** | **345** | PKP | **PKPdf** | **04 23 41.9** | **+0.2** |
| | comp=Z,2.7nm,0.9s,baz=65,slow=1.6,SNR=6.8 | | | | | | |
| **MORC** | **Moravsky Berou** | **144.78** | **329** | *e*PKP | PKPbc | 04 24 12.9 | +0.4 |
| **OSTC** | **Ostas** | **144.87** | **331** | *e*PKP | **PKPdf** | **04 24 13.9** | **+0.3** |
| **MAUC** | **Maruska** | **144.91** | **328** | *e*PKP | **PKPdf** | **04 24 14.4** | **+0.7** |
| **CHVC** | **Chvalec** | **144.92** | **331** | *e*PKP | **PKPdf** | **04 24 13.7** | **0.0** |
| **KRLC** | **Kraliky** | **144.94** | **330** | *e*PKP | **PKPdf** | **04 24 13.9** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **144.96** | **330** | *e*PKP | **PKPdf** | **04 24 14.3** | **+0.5** |
| **UPC** | **Upice** | **144.99** | **331** | *e*PKP | **PKPdf** | **04 24 14.3** | **+0.5** |
| **JAVC** | **Velka Javorina** | **145.32** | **327** | *e*PKP | **PKPdf** | **04 24 16.2** | **+1.7** |
| **VRAC** | **Vranov** | **145.55** | **329** | *e*PKP | **PKPab** | **04 24 15.8** | **+0.6** |
| **PVCC** | **Panska Ves** | **145.62** | **332** | *e*PKP | **PKPab** | **04 24 16.2** | **+0.8** |
| **BRG** | **Berggiesshubel** | **145.63** | **333** | *i* PKP | **PKPab** | **04 24 16.0** | **+0.6** |
| BRG | | | | Amp | | 04 24 17.9 | |
| | comp=Z,68nn,1.1s | | | | | | |
| **BRG** | **Berggiesshubel** | **145.63** | **333** | P | **PKiKP** | **04 24 20.9** | **+2.0** |
| BRG | | | | Amp | | 04 24 22.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **CLL** | **Collm** | **145.69** | **334** | ⇑*i* PKPbc | **PKPdf** | **04 24 15.4** | **+0.5** |
| | comp=Z,60nn,1.1s | | | | | | |
| CLL | | | | *i* x | x | 04 24 24.1 | |
| **KRUC** | **Moravsky** | **145.81** | **329** | *e*PKP | **PKPab** | **04 24 16.5** | **+0.3** |
| **GOPC** | **GO Pecny, Ondr** | **145.97** | **331** | *e*PKP | **PKPab** | **04 24 17.0** | **+0.2** |
| **PRU** | **Pruhonice** | **146.02** | **331** | *e*PKP | **PKPab** | **04 24 17.3** | **+0.4** |
| **HSKC** | **Hora Svate Kat** | **146.05** | **333** | *e*PKP | **PKPab** | **04 24 17.3** | **+0.3** |
| **EKA** | **Eskdalemuir Ar** | **146.30** | **353** | PKPbc | **PKPbc** | **04 24 16.9** | **-0.2** |
| | comp=Z,6.3nm,0.5s,baz=4.2,slow=2.8,SNR=13 | | | | | | |
| **ZVC** | **Zvikov** | **146.58** | **331** | *e*PKP | **PKPab** | **04 24 19.2** | **+0.1** |
| **RONA** | **Rosalia, Austr** | **146.78** | **327** | *i* PKP | **PKiKP** | **04 24 24.0** | **+2.5** |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **CONA** | **Conrad Observa** | **146.84** | **328** | *i* PKP | **PKiKP** | **04 24 24.7** | **+3.1** |
| | comp=Z,16nm,1.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **147.08** | **331** | *e*PKP | **PKPbc** | **04 24 20.5** | **+1.0** |
| **GERES** | **GERESS Array B** | **147.23** | **331** | PKPbc | **PKPbc** | **04 24 20.5** | **+0.4** |
| | comp=Z,7.3nm,0.7s,baz=25,slow=6.3,SNR=5.2 | | | | | | |
| **ARSA** | **Arzberg** | **147.47** | **327** | *i* PKP | **PKiKP** | **04 24 25.7** | **+2.9** |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **MOA** | **Molln** | **147.68** | **329** | *i* PKP | **PKPab** | **04 24 28.7** | **+5.2** |
| | comp=Z,18nm,1.1s | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.09** | **329** | *e*PKiKP | **PKPab** | **04 24 31.9** | **+6.7** |
| | comp=Z,4.1nm,0.5s | | | | | | |
| **SOKA** | **Soth** | **148.10** | **327** | *i* PKP | **PKPab** | **04 24 27.4** | **+2.2** |
| | comp=Z,16nn,1.3s | | | | | | |
| **OBKA** | **Obir** | **148.46** | **327** | *i* PKP | **PKPab** | **04 24 26.9** | **+0.2** |
| | comp=Z,12nn,1.6s | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.66** | **329** | *e*PKP | **PKPab** | **04 24 27.6** | **-0.1** |
| | comp=Z,12nn,1.2s | | | | | | |
| **LESA** | **Schwarzleotal** | **148.73** | **330** | *e*PKP | **PKPab** | **04 24 28.0** | **+0.2** |
| | comp=Z,5.4nn,0.8s | | | | | | |
| **MYKA** | **Terra Mystica** | **148.83** | **328** | *e*PKP | **PKPab** | **04 24 28.3** | **+0.1** |
| | comp=Z,22nn,1.6s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.30** | **329** | *e*PKP | **PKPbc** | **04 24 24.7** | **-0.8** |
| | comp=Z,12nn,1.0s | | | | | | |
| **WATA** | **Walderalm** | **149.31** | **331** | *i* PKP | **PKPbc** | **04 24 26.2** | **+0.6** |
| | comp=Z,15nn,1.1s | | | | | | |
| **WTTA** | **Wattenberg** | **149.33** | **331** | *e*PKP | **PKPbc** | **04 24 26.2** | **+0.5** |
| | comp=Z,21nn,1.2s | | | | | | |
| **MOTA** | **Moosalm** | **149.51** | **331** | *i* PKP | **PKPbc** | **04 24 26.1** | **0.0** |
| | comp=Z,17nn,1.0s | | | | | | |
| **RETA** | **Reutte** | **149.56** | **332** | *e*PKP | **PKPbc** | **04 24 26.9** | **+0.8** |
| | comp=Z,14nn,1.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.56** | **331** | *e*PKP | **PKPbc** | **04 24 26.3** | **+0.1** |
| | comp=Z,14nn,0.9s | | | | | | |
| **FETA** | **Feichten** | **149.93** | **331** | *e*PKP | **PKPbc** | **04 24 27.3** | **+0.2** |
| | comp=Z,15nn,1.0s | | | | | | |
| **DAVA** | **Damuels** | **150.10** | **332** | *e*PKP | **PKPbc** | **04 24 28.1** | **+0.5** |
| | comp=Z,24nn,1.2s | | | | | | |

*IDC **29** 04:14:43.3±0.8, 16°.38S×178°.11E, h0km, mb4.3/8, mbtmp4.3/8, Error ellipse: s-maj=32.4km s-min=17.6km az=106.0*
**ISC 29 04:14:47.5±0.7, 16°.38S±0°.09×178°.0E±0°.2, h21km, n32, σ1°53/33, mb4.6/11, 5C, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **1.35** | **179** | Pn | **Pn** | **04 15 08.7** | **-2.5** |
| | 64nm,0.3s,baz=265,slow=14,SNR=100 | | | | | | |
| MSVF | | | | Sn | **Sn** | **04 15 30.3** | **+1.7** |
| | 280nm,0.3s,baz=252,slow=20,SNR=6.1 | | | | | | |
| **STKA** | **Stephens Creek** | **36.45** | **238** | P | **P** | **04 21 50.7** | **-0.4** |
| | 3.5nm,0.9s,baz=38,slow=6.0,SNR=2.9 | | | | | | |
| | 3.5nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **41.95** | **253** | P | **P** | **04 22 36.4** | **-0.8** |
| | 3.3nm,0.9s,baz=81,slow=8.9,SNR=18 | | | | | | |
| | 3.3nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.67** | **180** | P | **P** | **04 26 20.3** | **+0.7** |
| | 6.9nm,1.0s,baz=10,slow=1.2,SNR=7.3 | | | | | | |
| | 6.9nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.74** | **46** | P | **P** | **04 26 58.6** | **-1.1** |
| | 1.0nm,0.8s,baz=230,slow=9.4,SNR=4.9 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **84.12** | **200** | P | **P** | **04 27 15.5** | **-1.1** |
| | 1.5nm,0.8s,baz=90,slow=3.0,SNR=2.8 | | | | | | |
| | 1.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.21** | **14** | P | **P** | **04 27 20.4** | **-1.6** |
| | 5.4nm,0.8s,baz=233,slow=5.2,SNR=10 | | | | | | |
| | 5.4nm,0.8s | | | | | | |
| **PDAR** | **Pinedale Array** | **88.63** | **45** | P | **P** | **04 27 37.9** | **-1.6** |
| | 0.7nm,0.8s,baz=205,slow=4.0,SNR=3.6 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **91.78** | **181** | ⇑P | **P** | **04 27 56.8** | **+3.2** |
| | comp=Z,393nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **92.17** | **180** | ⇑P | **P** | **04 27 57.8** | **+2.4** |
| | comp=Z,51nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **92.17** | **180** | P | **P** | **04 27 53.8** | **-1.5** |
| | comp=Z,3.0nm,1.0s,baz=218,slow=5.3,SNR=6.3 | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.44** | **178** | ⇑P | **P** | **04 27 58.8** | **+2.3** |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.84** | **178** | ⇑P | **P** | **04 28 00.8** | **+2.4** |
| | comp=Z,2.5nm,0.8s,baz=172,slow=3.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **93.09** | **178** | ⇑P | **P** | **04 28 01.1** | **+1.6** |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **145.17** | **342** | PKPbc | **PKPbc** | **04 34 23.7** | **+0.4** |
| | comp=Z,2.1nm,0.9s,baz=338,slow=2.9,SNR=7.1 | | | | | | |
| **CONA** | **Conrad Observa** | **145.28** | **339** | *i* PKiKP | **PKiKP** | **04 34 27.9** | **+0.1** |
| | comp=Z,5.2nn,0.9s | | | | | | |
| **RONA** | **Rosalia, Austr** | **145.32** | **338** | *e*PKP | **PKPdf** | **04 34 24.3** | **+0.4** |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **MOA** | **Molln** | **145.88** | **340** | *i* PKiKP | **PKiKP** | **04 34 29.4** | **+0.4** |
| | comp=Z,8.1nm,1.3s | | | | | | |
| **ARSA** | **Arzberg** | **145.98** | **339** | *e*PKiKP | **PKiKP** | **04 34 29.5** | **+0.3** |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **SOKA** | **Soboth** | **146.64** | **339** | *i* PKP | **PKPbc** | **04 34 28.1** | **+0.2** |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **LESA** | **Schwarzleotal** | **146.75** | **342** | *i* PKiKP | **PKPbc** | **04 34 28.8** | **+0.6** |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **KBA** | **Koelnbreinsper** | **146.85** | **341** | *i* PKP | **PKPbc** | **04 34 28.3** | **-0.2** |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **OBKA** | **Obir** | **146.95** | **339** | *i* PKiKP | **PKPbc** | **04 34 29.5** | **+0.8** |
| | comp=Z,5.4nm,1.2s | | | | | | |
| **WATA** | **Walderalm** | **147.15** | **343** | *e*PKiKP | **PKiKP** | **04 34 32.3** | **+0.5** |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **MYKA** | **Terra Mystica** | **147.16** | **340** | *e*PKiKP | **PKPab** | **04 34 31.4** | **+0.5** |
| | comp=Z,4.4nm,1.0s | | | | | | |
| **WTTA** | **Wattenberg** | **147.20** | **343** | *e*PKiKP | **PKPbc** | **04 34 30.1** | **+0.5** |
| | comp=Z,8.6nm,1.1s | | | | | | |
| **RETA** | **Reutte** | **147.24** | **344** | *i* PKiKP | **PKiKP** | **04 34 33.6** | **+1.8** |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **147.28** | **343** | *e*PKiKP | **PKiKP** | **04 34 33.5** | **+1.5** |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **SQTA** | **Sankt Quirin** | **147.36** | **343** | *i* PKiKP | **PKiKP** | **04 34 34.1** | **+1.9** |
| | comp=Z,7.8nm,1.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **147.41** | **341** | *i* PKP | **PKPbc** | **04 34 30.1** | **+0.1** |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **DAVA** | **Damuels** | **147.65** | **345** | *e*PKiKP | **PKPab** | **04 34 35.6** | **+2.7** |
| | comp=Z,6.8nm,1.3s | | | | | | |
| **FETA** | **Feichten** | **147.68** | **344** | *i* PKiKP | **PKPab** | **04 34 34.2** | **+1.2** |
| | comp=Z,6.2nm,1.1s | | | | | | |

**IDC 29 04:16:12.8±2.3, 17°.21S×177°.79W, h0km, mb3.7/4, mbtmp3.7/4, Error ellipse: s-maj=128.6km s-min=29.1km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.34** | **259** | P | P | 04 24 33.8 | +0.6 |
| | 0.2nm,0.4s,baz=96,slow=7.6,SNR=6.3 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MTN | | | | IAmb | IAmb | 04 34 39.6 | | |
| | comp=Z,31nm,1.6s | | | | | | | |
| **FORT** | **Forest** | **38.27** | **248** | P | **P** | **04 34 33.6** | **+0.3** | |
| FORT | | | | IAmb | IAmb | 04 34 39.7 | | |
| | comp=Z,52nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **39.37** | **272** | P | **P** | **04 34 42.2** | **-0.5** | |
| **SWI** | **Sorong** | **43.16** | **294** | P | **P** | **04 35 16.0** | **+2.2** | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **BATI** | **Baumata** | **45.81** | **277** | P | **P** | **04 35 37.6** | **+2.5** | |
| | comp=Z,50nm,0.8s | | | | | | | |
| **SANI** | **Sanana** | **47.11** | **289** | P | **P** | **04 35 47.8** | **+2.6** | |
| | comp=Z,32nm,1.1s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.52** | **245** | P | **P** | **04 35 47.3** | **-0.8** | |
| **GTOI** | **Gorontalo** | **51.01** | **290** | P | **P** | **04 36 19.2** | **+4.1** | |
| **TOLI2** | **Tolitoli** | **53.19** | **289** | P | **P** | **04 36 31.0** | **-0.3** | |
| TOLI2 | | | | IAmb | IAmb | 04 36 48.7 | | |
| | comp=Z,25nm,1.4s | | | | | | | |
| **SBA** | **Scott Base** | **55.78** | **181** | P | **P** | **04 36 50.3** | **+1.1** | |
| SBA | | | | IAmb | IAmb | 04 37 05.5 | | |
| | comp=Z,21nm,1.3s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **59.56** | **292** | P | **P** | **04 37 15.6** | **-1.3** | |
| KKM | | | | IAmb | IAmb | 04 37 19.7 | | |
| | comp=Z,24nm,1.4s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **64.98** | **313** | P | **P** | **04 37 51.7** | **-1.2** | |
| **MJAR** | **Matsushiro Arr** | **65.61** | **332** | P | **P** | **04 37 55.1** | **-1.6** | |
| | comp=Z,4.1nm,0.8s,baz=168,slow=6.4,SNR=9.9 | | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **MAJO** | **Matsushiro** | **65.61** | **332** | P | **P** | **04 37 55.6** | **-1.1** | |
| MAJO | | | | IAmb | IAmb | 04 37 56.4 | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **65.61** | **332** | P | **P** | **04 37 55.5** | **-1.3** | |
| MJB9 | | | | IAmb | IAmb | 04 37 56.4 | | |
| | comp=Z,7.7nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.93** | **180** | P | **P** | **04 38 11.6** | **+0.3** | |
| QSPA | | | | IAmb | IAmb | 04 38 26.7 | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.93** | **180** | P | **P** | **04 38 10.7** | **-0.6** | |
| | comp=Z,7.8nm,1.0s,baz=19,slow=3.8,SNR=7.8 | | | | | | | |
| | comp=Z,7.8nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **71.25** | **326** | P | **P** | **04 38 29.6** | **-2.3** | |
| | comp=Z,3.4nm,0.9s,baz=152,slow=5.8,SNR=6.5 | | | | | | | |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **RPN** | **Rapa Nui** | **72.37** | **113** | P | **P** | **04 38 38.9** | **-0.2** | |
| **NJ2** | **Nanjing** | **72.73** | **316** | *e*P | **P** | **04 38 44.5** | **+3.6** | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **75.68** | **352** | P | **P** | **04 38 57.5** | **-0.2** | |
| PEA0B | | | | IAmb | IAmb | 04 39 16.8 | | |
| | comp=Z,44nm,1.2s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.68** | **352** | P | **P** | **04 38 55.8** | **-1.9** | |
| | comp=Z,1.1nm,1.0s,baz=152,slow=6.5,SNR=4.6 | | | | | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **MAW** | **Mawson** | **76.00** | **202** | P | **P** | **04 38 59.4** | **-0.1** | |
| | comp=Z,2.5nm,0.8s,baz=126,slow=4.6,SNR=5.6 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **CN2** | **Changchun** | **77.26** | **329** | P | **P** | **04 39 05.5** | **-1.3** | |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **BNX** | **BinXian** | **77.81** | **331** | ⇓P | **P** | **04 39 08.8** | **-1.1** | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **HNS** | **HongShan** | **78.78** | **318** | ⇓P | **P** | **04 39 16.0** | **+0.6** | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **BELA** | **Belgrano 2** | **79.16** | **175** | P | **P** | **04 39 15.7** | **-1.3** | |
| **PHRA** | **Phrae** | **79.21** | **295** | P | **P** | **04 39 18.1** | **-0.2** | |
| **CRAI** | **Chiangrai** | **79.90** | **297** | P | **P** | **04 39 21.8** | **-0.2** | |
| CRAI | | | | IAmb | IAmb | 04 39 24.4 | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.28** | **294** | P | **P** | **04 39 25.6** | **+1.6** | |
| | comp=Z,2.0nm,0.5s,baz=131,slow=3.4,SNR=14 | | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **KMI** | **Kunming** | **80.34** | **302** | ⇓P | **P** | **04 39 26.3** | **+1.8** | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.3s | | | | | | | |
| **XAN** | **Xi'an** | **80.53** | **313** | P | **P** | **04 39 25.8** | **+0.7** | |
| XAN | | | | sP | sP | 04 39 33.5 | -0.4 | |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **HEH** | **HeiHe** | **81.29** | **334** | *e*P | **P** | **04 39 27.8** | **-0.9** | |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **81.81** | **303** | P | **P** | **04 39 35.5** | **+3.3** | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,80nm,1.1s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **82.83** | **319** | *e*P | **P** | **04 39 39.5** | **+2.3** | |
| HHC | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **CHIR** | **Chirikof Islan** | **82.99** | **19** | P | **P** | **04 39 38.8** | **+1.3** | |
| **ELIB** | **Princess Elisa** | **83.41** | **190** | *d*P | **P** | **04 39 35.9** | **-3.9** | |
| **O14K** | **Tigyukauivet M** | **84.50** | **14** | P | **P** | **04 39 45.4** | **+0.3** | |
| **LZH** | **Lanzhou** | **85.14** | **312** | *e*P | **P** | **04 39 50.3** | **+1.2** | |
| LZH | | | | pP | pP | 04 39 55.5 | -0.1 | |
| LZH | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **O16K** | **Kokwok River B** | **85.56** | **16** | P | **P** | **04 39 47.5** | **-3.0** | |
| O16K | | | | IAmb | IAmb | 04 39 48.7 | | |
| | comp=Z,30nm,1.9s | | | | | | | |
| **N15K** | **Kwethluk River** | **85.59** | **15** | P | **P** | **04 39 52.9** | **+2.3** | |
| **TROLL** | **Troll, Antarti** | **85.70** | **184** | ⇑P | **P** | **04 39 50.2** | **-1.2** | |
| | comp=Z,337nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **86.30** | **182** | P | **P** | **04 39 53.1** | **-1.2** | |
| SNAA | | | | IAmb | IAmb | 04 40 09.2 | | |
| | comp=Z,16nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **86.30** | **182** | ⇑P | **P** | **04 39 52.5** | **-1.8** | |
| | comp=Z,81nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **86.30** | **182** | P | **P** | **04 39 52.5** | **-1.8** | |
| | comp=Z,4.2nm,0.9s,baz=195,slow=6.0,SNR=15 | | | | | | | |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.87** | **180** | ⇑P | **P** | **04 39 55.2** | **-1.8** | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.17** | **181** | ⇑P | **P** | **04 39 56.8** | **-1.7** | |
| | comp=Z,11nm,0.6s,baz=176,slow=4.2 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.45** | **181** | ⇑P | **P** | **04 39 58.3** | **-1.5** | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **SHL** | **Shillong** | **89.27** | **298** | P | **P** | **04 40 08.6** | **-0.8** | |
| SHL | | | | IAmb | IAmb | 04 40 22.2 | | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **89.91** | **323** | P | **P** | **04 40 11.2** | **-0.7** | |
| | comp=Z,5.6nm,1.0s,baz=140,slow=5.2,SNR=18 | | | | | | | |
| | comp=Z,5.6nm,1.0s | | | | | | | |
| **DSP** | **Deep Springs** | **89.98** | **49** | P | **P** | **04 40 10.7** | **-1.5** | |
| **NVAR** | **Mina Array Bea** | **90.24** | **48** | P | **P** | **04 40 11.8** | **-1.9** | |
| | comp=Z,1.2nm,0.8s,baz=234,slow=7.9,SNR=9.1 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.80** | **17** | P | **P** | **04 40 22.9** | **-1.7** | |
| | comp=Z,0.7nm,0.8s,baz=246,slow=5.5,SNR=6.5 | | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | | |
| **WMQ** | **Urumqi** | **99.66** | **313** | *e*P | **Pdif** | **04 40 58.3** | **+1.9** | |
| **ARCES** | **ARCESS Array B** | **128.02** | **345** | PKP | **PKPdf** | **04 46 17.1** | **-0.9** | |
| | comp=Z,1.1nm,0.6s,baz=354,slow=2.4,SNR=8.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **138.19** | **323** | PKP | **PKiKP** | **04 46 41.0** | **+1.4** | |
| | comp=Z,0.3nm,0.4s,baz=62,slow=2.9,SNR=4.1 | | | | | | | |
| **LANS** | **Liptovska Anna** | **144.31** | **326** | *e*PKP | **PKPdf** | **04 46 48.5** | **-0.2** | |
| **BSEG** | **Bad Segeberg** | **144.69** | **339** | *e*PKPbc | **PKPab** | **04 46 46.6** | **-1.1** | |
| | baz=37,slow=3.1 | | | | | | | |
| **PSZ** | **Piszkesteto** | **144.84** | **324** | | PKPbc | 04 46 48.9 | +0.1 | |
| **MORC** | **Moravsky Berou** | **144.87** | **329** | *e*PKP | **PKPab** | **04 46 47.8** | **-0.9** | |
| **KARP** | **Karpathos** | **144.96** | **301** | | **PKPab** | **04 46 49.4** | **-0.1** | |
| **KRLC** | **Kraliky** | **145.03** | **329** | *e*PKP | **PKPbc** | **04 46 48.1** | **-1.2** | |
| **VYHS** | **Vyhne** | **145.05** | **326** | *e*PKP | **PKPbc** | **04 46 48.4** | **-0.9** | |
| **DPC** | **Dobruska-Polom** | **145.06** | **330** | *e*PKP | **PKPbc** | **04 46 48.7** | **-0.6** | |
| **UPC** | **Upice** | **145.09** | **331** | *e*PKP | **PKPbc** | **04 46 48.6** | **-0.8** | |
| **JAVC** | **Velka Javorina** | **145.41** | **327** | *e*PKP | **PKPab** | **04 46 51.3** | **+0.6** | |
| **VRAC** | **Vranov** | **145.65** | **329** | *e*PKP | **PKPdf** | **04 46 50.7** | **-0.2** | |
| **FLTG** | **Flechtingen** | **145.68** | **337** | *e*PKPbc | **PKPdf** | **04 46 49.3** | **-1.5** | |
| | baz=37,slow=3.1 | | | | | | | |
| **PVCC** | **Panska Ves** | **145.72** | **332** | *e*PKP | **PKPdf** | **04 46 50.6** | **-0.4** | |
| **BRG** | **Berggiesshubel** | **145.74** | **333** | *i* PKP | **PKPdf** | **04 46 50.5** | **-0.5** | |
| BRG | | | | Amp | | 04 46 51.4 | | |
| | comp=Z,23nm,0.7s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.74** | **333** | P | **PKiKP** | **04 46 55.0** | **-0.1** | |
| BRG | | | | Amp | | 04 46 55.7 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.74** | **333** | *e*PKPbc | **PKPdf** | **04 46 50.3** | **-0.7** | |
| | baz=37,slow=3.1 | | | | | | | |
| **CLL** | **Collm** | **145.80** | **334** | | **PKPdf** | **04 46 50.0** | **-1.0** | |
| **CLL** | **Collm** | **145.80** | **334** | *i* PKPbc | **PKPdf** | **04 46 50.1** | **-1.0** | |
| | comp=Z,46nm,1.1s | | | | | | | |
| CLL | | | | *i* PKiKP | **PKiKP** | **04 46 54.7** | **-0.5** | |
| | comp=Z,20nm,0.8s | | | | | | | |
| CLL | | | | *i* x | x | 04 46 58.4 | | |
| **CLL** | **Collm** | **145.80** | **334** | *e*PKPbc | **PKPdf** | **04 46 50.2** | **-0.9** | |
| | baz=37,slow=3.1 | | | | | | | |
| **KRUC** | **Moravsky** | **145.91** | **328** | *e*PKP | **PKPdf** | **04 46 50.9** | **-0.5** | |
| **NRDL** | **Niedersach Rie** | **145.95** | **338** | *e*PKPbc | **PKPdf** | **04 46 50.8** | **-0.4** | |
| | baz=37,slow=3.1 | | | | | | | |
| **RETH** | **Rethem/Aller,** | **146.01** | **339** | *e*PKPbc | **PKPdf** | **04 46 50.7** | **-0.6** | |
| | baz=37,slow=3.1 | | | | | | | |
| **PRU** | **Pruhonice** | **146.12** | **331** | *e*PKP | **PKPdf** | **04 46 51.6** | **-0.1** | |
| **EKA** | **Eskdalemuir Ar** | **146.45** | **353** | PKPbc | **PKPdf** | **04 46 51.1** | **-0.9** | |
| | comp=Z,6.7nm,0.5s,baz=356,slow=2.6,SNR=47 | | | | | | | |
| **ZVC** | **Zvikov** | **146.68** | **331** | *e*PKP | **PKPbc** | **04 46 53.6** | **-0.7** | |
| **TANN** | **Tannenbergstha** | **146.70** | **333** | *e*PKPbc | **PKPdf** | **04 46 53.0** | **+0.3** | |
| | baz=37,slow=3.1 | | | | | | | |
| **RONA** | **Rosalia, Austr** | **146.87** | **327** | *i* PKP | **PKPbc** | **04 46 54.2** | **-0.8** | |
| | comp=Z,5.9nm,0.6s | | | | | | | |
| **MOX** | **Moxa** | **146.87** | **334** | *e*PKPbc | **PKPdf** | **04 46 53.5** | **+0.6** | |
| | baz=37,slow=3.1 | | | | | | | |
| **CONA** | **Conrad Observa** | **146.93** | **327** | *i* PKP | **PKPbc** | **04 46 54.9** | **-0.3** | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **147.07** | **330** | *e*PKP | **PKPbc** | **04 46 54.6** | **-0.9** | |
| CKRC | | | | *ex* | x | 04 46 59.1 | | |
| **KHC** | **Kasperske Hory** | **147.18** | **331** | | **PKPdf** | **04 46 54.4** | **+0.8** | |
| **KHC** | **Kasperske Hory** | **147.18** | **331** | *e*PKP | **PKPdf** | **04 46 54.3** | **+0.8** | |
| **MANZ** | **Manzenberg** | **147.18** | **333** | *e*PKPbc | **PKPbc** | **04 46 54.7** | **-1.1** | |
| | baz=37,slow=3.1 | | | | | | | |
| **GEC2** | **GERESS Array S** | **147.33** | **330** | *e*PKPbc | **PKPdf** | **04 46 54.9** | **+1.0** | |
| | baz=37,slow=3.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.33** | **330** | PKPbc | **PKPbc** | **04 46 55.4** | **-0.9** | |
| | comp=Z,8.0nm,0.7s,baz=35,slow=3.3,SNR=19 | | | | | | | |
| **ARSA** | **Arzberg** | **147.56** | **327** | *e*pPKP | pPKPdf | 04 47 01.2 | +0.3 | |
| | comp=Z,7.6nm,1.5s | | | | | | | |
| **FNA** | **Florina** | **147.61** | **312** | | **PKPbc** | **04 46 57.7** | **+0.4** | |
| **MOA** | **Molln** | **147.77** | **329** | *i* pPKP | **PKiKP** | **04 46 59.2** | **-0.2** | |
| | comp=Z,7.3nm,1.0s | | | | | | | |
| **BIOA** | **Bad Ischl, Aus** | **148.18** | **329** | *e*pPKP | pPKPdf | 04 47 05.3 | +3.4 | |
| | comp=Z,2.2nm,0.4s | | | | | | | |
| **SOKA** | **Soboth** | **148.19** | **326** | *i* PKP | **PKPbc** | **04 46 57.4** | **-1.2** | |
| | comp=Z,6.1nm,1.2s | | | | | | | |
| **OBKA** | **Obir** | **148.55** | **327** | *e*PKiKP | **PKiKP** | **04 47 01.6** | **+0.4** | |
| | comp=Z,5.6nm,1.2s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.76** | **328** | *i* pPKP | **PKPbc** | **04 46 59.1** | **-1.2** | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **LESA** | **Schwarzeotal** | **148.83** | **330** | *i* pPKP | **PKPbc** | **04 46 59.0** | **-1.3** | |
| | comp=Z,3.8nm,0.6s | | | | | | | |
| **BTNL** | **Ternell** | **148.90** | **340** | *d*PKPdf | **PKPbc** | **04 46 59.2** | **-1.0** | |
| **MEM** | **Membach** | **148.92** | **340** | *d*PKPdf | **PKPbc** | **04 46 59.1** | **-1.2** | |
| **MYKA** | **Terra Mystica** | **148.93** | **328** | *i* pPKP | **PKPbc** | **04 46 58.8** | **-1.7** | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.40** | **329** | *i* pPKP | **PKPbc** | **04 46 60.0** | **-1.8** | |
| | comp=Z,4.7nm,1.0s | | | | | | | |
| **WATA** | **Walderalm** | **149.41** | **330** | *i* pPKP | **PKPbc** | **04 47 01.4** | **-0.4** | |
| | comp=Z,3.9nm,0.4s | | | | | | | |
| **WTTA** | **Wattenberg** | **149.43** | **330** | *i* pPKP | **PKPbc** | **04 47 01.6** | **-0.3** | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **RCHB** | **Rochefort** | **149.56** | **340** | *d*PKPdf | **PKPbc** | **04 47 01.4** | **-0.4** | |
| **BMRD** | **Maredsous** | **149.57** | **341** | *d*PKPdf | **PKPbc** | **04 47 01.1** | **-0.8** | |
| **MOTA** | **Moosalm** | **149.61** | **331** | *e*pPKP | **PKPbc** | **04 47 00.6** | **-1.8** | |
| | comp=Z,9.8nm,1.0s | | | | | | | |
| **STAL** | **STALIGIAL** | **149.64** | **328** | | **PKPbc** | **04 47 01.1** | **-1.3** | |
| **RETA** | **Reutte** | **149.66** | **331** | *i* pPKP | **PKPbc** | **04 47 01.9** | **-0.4** | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.66** | **331** | *i* pPKP | **PKPbc** | **04 47 01.4** | **-1.1** | |
| | comp=Z,1.1nm,1.1s | | | | | | | |
| **WLF** | **Walferdange** | **149.69** | **339** | *d*PKP | **PKPbc** | **04 47 02.4** | **+0.2** | |
| **DOU** | **Dourbes** | **149.80** | **341** | *d*PKPdf | **PKPbc** | **04 47 01.8** | **-0.7** | |
| **BFO** | **Black Forest** | **150.01** | **335** | | **PKPbc** | **04 47 02.3** | **-0.8** | |
| **FETA** | **Feichten** | **150.03** | **331** | *i* pPKP | **PKPbc** | **04 47 02.5** | **-0.9** | |
| | comp=Z,6.8nm,0.9s | | | | | | | |
| **DAVA** | **Damuels** | **150.20** | **332** | *i* pPKP | pPKPdf | 04 47 07.0 | +1.6 | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **161.76** | **345** | PKPab | **PKPab** | **04 47 57.4** | **-1.9** | |
| | comp=Z,1.0nm,0.9s,baz=14,slow=4.9,SNR=5.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.66** | **233** | PKP | **PKPdf** | **04 47 17.4** | **-0.8** | |
| | comp=Z,1.2nm,0.9s,baz=324,slow=1.2,SNR=5.7 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **04 48 16.7** | **-0.4** | |
| | comp=Z,0.4nm,0.7s,baz=128,slow=6.1,SNR=2.2 | | | | | | | |

*IDC **29** 04:33:01.8±1.0, 22°.17S×170°.26E, h0km, mb4.1/8, mbtmp4.1/9, ML4.1/1, Error ellipse: s-maj=29.6km s-min=25.0km az=171.0*
*NOU **29** 04:33:02.4, 22°.05S×170°.15E, h0km, ML5.2/7, Southeast of Loyalty Islands*
*NEIC **29** 04:33:04.6±2.1, 22°.05S±0°.07×170°.08E±0°.10, h10km±1km, mb4.6/12, Error ellipse: s-maj=19.2km s-min=4.4km az=53.0*

**ISC 29 04:33:06.4**±0.6, **22°.11S**±0°.08×**170°.04E**±0°.08, **h25**km, **n41**, σ0**9**6/41, **mb4.4**/15, **3C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.97** | **288** | P | | **Pn** | **04 33 36.9** | **-1.2** |
| **PINNC** | **Pines Island,** | **2.45** | **258** | P | | **Pn** | **04 33 45.3** | **+0.5** |
| **PINNC** | **Pines Island,** | **2.45** | **258** | | | **Pn** | **04 33 43.9** | **-0.9** |
| **LIFNC** | **LIFOU** | **2.92** | **296** | P | | **Pn** | **04 33 51.6** | **+0.3** |
| **DZM** | **Mont Dzumac** | **3.34** | **270** | | | **Pn** | **04 33 56.8** | **-0.3** |
| **DZM** | **Mont Dzumac** | **3.34** | **270** | Pn | | **Pn** | **04 33 57.1** | **+0.1** |
| | 16nm,0.3s,baz=117,slow=13,SNR=17 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **04 34 34.4** | **-1.6** |
| | 52nm,0.3s,baz=88,slow=15,SNR=15 | | | | | | | |
| | 37nm,0.4s | | | | | | | |
| **DVP** | **Devils Point** | **4.69** | **338** | P | | **Pn** | **04 34 15.6** | **0.0** |
| **KOUNC** | **Koumac, New Ca** | **5.58** | **285** | Pn | | **Pn** | **04 34 26.2** | **-1.7** |
| **MSVF** | **Nonsavu** | **8.70** | **61** | Pn | | Pn | 04 35 14.8 | +4.1 |
| | 0.4nm,0.3s,baz=204,slow=12,SNR=5.3 | | | | | | | |
| **MRZ** | **Mangatainoka R** | **19.09** | **167** | | | **Pn** | **04 37 27.9** | **-0.1** |
| MRZ | | | | IAmb | | IAmb | 04 37 44.2 | |
| | comp=Z,38nm,1.4s | | | | | | | |
| **CTA** | **Charters Tower** | **22.28** | **271** | P | | **P** | **04 38 03.8** | **+1.8** |
| | comp=Z,0.1nm,0.3s,baz=95,slow=7.3,SNR=2.1 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.08** | **243** | P | | **P** | **04 38 48.7** | **+1.5** |
| **STKA** | **Stephens Creek** | **27.08** | **243** | P | | **P** | **04 38 49.0** | **+1.8** |
| | comp=Z,2.8nm,0.6s,baz=97,slow=13,SNR=6.9 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **BBOO** | **Buckleboo** | **31.86** | **243** | P | | **P** | **04 39 30.4** | **+0.9** |
| **WR0** | **Warramunga Arr** | **33.16** | **267** | P | | **P** | **04 39 41.0** | **-0.1** |
| **ASAR** | **Alice Springs** | **33.27** | **260** | P | | **P** | **04 39 42.2** | **+0.2** |
| | comp=Z,0.8nm,0.7s,baz=75,slow=8.9,SNR=5.7 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.33** | **267** | P | | **P** | **04 39 42.5** | **-0.1** |
| WB0 | | | | IAmb | | IAmb | 04 39 49.5 | |
| | comp=Z,6.1nm,1.4s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.34** | **267** | P | | **P** | **04 39 42.3** | **-0.3** |
| **WRA** | **Warramunga Arr** | **33.35** | **267** | P | | **P** | **04 39 42.5** | **-0.3** |
| | comp=Z,1.0nm,0.4s,baz=100,slow=8.3,SNR=15 | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **KNRA** | **Kununurra** | **39.48** | **272** | P | | **P** | **04 40 34.1** | **-1.0** |
| KNRA | | | | IAmb | | IAmb | 04 40 48.3 | |
| | comp=Z,20nm,1.3s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.78** | **267** | P | | **P** | **04 40 55.2** | **+1.2** |
| **MBWA** | **Marble Bar** | **46.60** | **261** | P | | **P** | **04 41 33.5** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **47.63** | **245** | P | | **P** | **04 41 40.6** | **0.0** |
| **SBA** | **Scott Base** | **55.82** | **181** | P | | **P** | **04 42 42.2** | **+1.1** |
| SBA | | | | IAmb | | IAmb | 04 42 54.4 | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.96** | **180** | P | | **P** | **04 44 03.1** | **0.0** |
| **QSPA** | **South Pole Qui** | **67.96** | **180** | P | | **P** | **04 44 01.9** | **-1.2** |
| | comp=Z,2.8nm,0.9s,baz=337,slow=4.6,SNR=4.9 | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | |
| **BELA** | **Belgrano 2** | **79.19** | **175** | P | | **P** | **04 45 07.8** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **80.36** | **294** | P | | **P** | **04 45 18.1** | **+2.0** |
| | comp=Z,1.1nm,0.3s,baz=136,slow=4.8,SNR=4.2 | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| **N15K** | **Kwethluk River** | **85.52** | **14** | P | | **P** | **04 45 42.1** | **+0.3** |
| N15K | | | | IAmb | | IAmb | 04 45 54.1 | |
| | comp=Z,7.8nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **86.34** | **182** | P | | **P** | **04 45 45.2** | **-0.8** |
| SNAA | | | | IAmb | | IAmb | 04 45 57.1 | |
| | comp=Z,6.1nm,1.2s | | | | | | | |
| **SNAA** | **Sanae** | **86.34** | **182** | ⇑P | | **P** | **04 45 45.0** | **-1.0** |
| | comp=Z,30nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **86.34** | **182** | P | | **P** | **04 45 45.2** | **-0.8** |
| | comp=Z,1.3nm,0.7s,baz=200,slow=3.1,SNR=8.8 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.90** | **180** | ⇑P | | **P** | **04 45 47.8** | **-1.0** |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.20** | **181** | ⇑P | | **P** | **04 45 49.4** | **-0.7** |
| | comp=Z,5.9nm,0.7s,baz=174,slow=4.1 | | | | | | | |
| **SONM** | **Songino Array** | **89.95** | **323** | P | | **P** | **04 46 03.7** | **+0.2** |
| | comp=Z,1.1nm,0.8s,baz=137,slow=5.0,SNR=6.7 | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.73** | **17** | P | | **P** | **04 46 14.7** | **-1.2** |
| | comp=Z,0.3nm,0.6s,baz=230,slow=4.8,SNR=4.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **CHVC** | **Chvalec** | **145.04** | **331** | *e*PKP | | **PKPdf** | **04 52 41.7** | **+0.3** |
| **EKA** | **Eskdalemuir Ar** | **146.43** | **353** | PKPbc | | **PKPbc** | **04 52 44.0** | **-0.9** |
| | comp=Z,2.1nm,0.5s,baz=352,slow=2.6,SNR=11 | | | | | | | |
| **ZVC** | **Zvikov** | **146.70** | **331** | *e*PKP | | **PKPab** | **04 52 46.8** | **-0.3** |
| **KHC** | **Kasperske Hory** | **147.20** | **331** | *e*PKP | | **PKPab** | **04 52 48.8** | **-0.3** |
| KHC | | | | *ex* | | x | 04 52 58.4 | |
| **GERES** | **GERESS Array B** | **147.35** | **331** | PKPbc | | **PKPbc** | **04 52 47.5** | **-0.4** |
| | comp=Z,1.6nm,0.6s,baz=46,slow=5.6,SNR=3.8 | | | | | | | |

*IDC **29** 04:41:31.4±2.6, 22°.23S×170°.24E, h0km, mb3.9/5, mbtmp3.9/5, Error ellipse: s-maj=81.6km s-min=30.6km az=142.0*

**ISC 29 04:41:34.5**±0.9, **22°.3S**±0°.2×**170°.0E**±0°.1, **h10**km, **n12**, σ1**9**00/12, **mb4.0**/8, **3C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MSVF** | **Nonsavu** | **8.85** | **61** | Pn | | **Pn** | **04 43 43.7** | **+1.1** |
| | 0.2nm,0.3s,baz=288,slow=3.2,SNR=2.5 | | | | | | | |
| **CTA** | **Charters Tower** | **22.21** | **271** | P | | **P** | **04 46 31.8** | **+0.5** |
| | 0.2nm,0.8s,baz=39,slow=6.5,SNR=3.7 | | | | | | | |
| **STKA** | **Stephens Creek** | **26.94** | **243** | P | | **P** | **04 47 17.9** | **+1.7** |
| | 1.6nm,0.5s,baz=53,slow=7.2,SNR=4.3 | | | | | | | |
| | 1.6nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.17** | **261** | P | | **P** | **04 48 12.2** | **+0.7** |
| | 0.5nm,0.7s,baz=90,slow=9.6,SNR=4.6 | | | | | | | |
| | 0.5nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.27** | **267** | P | | **P** | **04 48 12.2** | **-0.2** |
| | 0.7nm,0.6s,baz=98,slow=8.2,SNR=5.6 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.75** | **332** | P | | **P** | **04 52 19.1** | **-0.5** |
| | 0.9nm,0.3s,baz=153,slow=6.3,SNR=4.3 | | | | | | | |
| | 0.9nm,0.3s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.56** | **184** | ⇑P | | **P** | **04 54 12.3** | **-0.5** |
| | comp=Z,104nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.72** | **180** | ⇑P | | **P** | **04 54 17.3** | **-1.1** |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.02** | **181** | ⇑P | | **P** | **04 54 19.3** | **-0.5** |
| | comp=Z,2.2nm,0.7s,baz=181,slow=4.4 | | | | | | | |
| **SONM** | **Songino Array** | **90.05** | **323** | P | | **P** | **04 54 34.1** | **-0.4** |
| | comp=Z,0.4nm,0.3s,baz=123,slow=5.3,SNR=4.1 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.60** | **353** | PKPbc | | **PKPdf** | **05 01 13.1** | **-1.4** |
| | comp=Z,0.5nm,0.3s,baz=344,slow=2.3,SNR=6.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.47** | **330** | PKPbc | | **PKPdf** | **05 01 16.3** | **0.0** |
| | comp=Z,0.6nm,0.5s,baz=72,slow=4.3,SNR=3.9 | | | | | | | |

**IDC 29 04:47:43.1**±5.9, **5°.05S**×**133°.61E**, **h0**km, **mb3.8**/1, **mbtmp3.5**/3, **ML3.2/2, Error ellipse: s-maj=340.7km s-min=31.9km az=77.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase |

SBA pmax pmax
comp=Z,23nm,1.1s
**KKM Kota Kinabalu 59.81 292** P **P** **04 58 41.7 +0.5**
KKM IAmb IAmb 04 58 47.8
comp=Z,22nm,1.1s
**JGF Kuroka 65.39 331** P **P** **04 59 18.7 +0.7**
JGF IAmb IAmb 04 59 19.4
comp=Z,10nm,0.7s
**JMN Monobe 65.52 327** P **P** **04 59 19.8 +1.0**
**MJAR Matsushiro Arr 65.80 332** P **P** **04 59 20.6 +0.1**
comp=Z,4.8nm,0.6s,baz=168,slow=7.3,SNR=13
comp=Z,4.8nm,0.6s
**MAJO Matsushiro 65.80 332** P **P** **04 59 21.2 +0.6**
MAJO IAmb IAmb 04 59 34.2
comp=Z,15nm,1.1s
**MAJO Matsushiro 65.80 332** *c iP* **P** **04 59 20.9 +0.3**
MAJO pmax pmax
comp=Z,27nm,1.5s
**SSLB Suanglung 66.20 311** P **P** **04 59 23.6 +0.1**
**JNU Nakatsue 66.61 325** P **P** **04 59 26.8 +0.9**
JNU IAmb IAmb 04 59 40.1
comp=Z,18nm,1.0s
**JSD Sado 67.04 333** P **P** **04 59 29.7 +1.2**
JSD IAmb IAmb 04 59 30.6
comp=Z,17nm,0.6s
**QSPA South Pole Qui 67.82 180** P **P** **04 59 33.8 +0.5**
**QSPA South Pole Qui 67.82 180** P **P** **04 59 33.5 +0.2**
comp=Z,9.6nm,1.0s,baz=23,slow=1.9,SNR=15
comp=Z,9.6nm,1.0s
**TJN Taejon 70.95 325** *eP* **P** **04 59 53.6 +0.8**
**KSRS Korea Array 71.47 326** P **P** **04 59 55.6 -0.2**
comp=Z,2.5nm,0.6s,baz=133,slow=5.2,SNR=7.5
comp=Z,2.5nm,0.6s
**NJ2 Nanjing 72.96 316** *eP* **P** **05 00 07.0 +2.1**
NJ2 pmax pmax
comp=Z,10.0nm,0.5s
**YSS Yuzh-Sakhalins 73.19 341** *eP* **P** **05 00 05.9 0.0**
YSS pmax pmax
comp=Z,30nm,1.1s
**RPSI Rantau Prapat 73.73 280** P **P** **05 00 07.8 -2.1**
RPSI IAmb IAmb 05 00 15.2
comp=Z,14nm,1.1s
**PSI Prapat 73.78 280** P **P** **05 00 07.9 -2.5**
PSI pmax pmax
comp=Z,14nm,1.1s
**MSHR Mys Shultsa 73.86 331** *i* P P 05 00 19.3 +9.3
MSHR pmax pmax
comp=Z,36nm,1.1s
**USA0B Ussuriysk Arra 74.79 333** *eP* **P** **05 00 16.6 +1.2**
**USRK Ussuriysk Ar. 74.79 333** P **P** **05 00 16.3 +0.9**
comp=Z,1.0nm,0.5s,baz=167,slow=9.6,SNR=5.4
comp=Z,1.0nm,0.5s
**PET Petropavlovsk 75.62 353** *eP* **P** **05 00 20.1 +0.2**
PET pmax pmax
comp=Z,14nm,1.1s
**PEA0B Petropavlovsk- 75.82 352** *eP* **P** **05 00 22.5 +1.4**
**PETK Petropavlovsk- 75.82 352** P **P** **05 00 21.9 +0.8**
comp=Z,3.6nm,0.9s,baz=149,slow=5.9,SNR=3.7
comp=Z,3.6nm,0.9s
**MAW Mawson 75.98 202** P **P** **05 00 23.0 +1.0**
comp=Z,5.1nm,0.8s,baz=119,slow=4.9,SNR=13
comp=Z,5.1nm,0.8s
**MAW Mawson 75.98 202** P **P** **05 00 23.0 +1.0**
**MDJ Mudanjiang 76.17 331** P **P** **05 00 26.0 +2.7**
MDJ pmax pmax
comp=Z,8.0nm,0.6s
**BNX BinXian 78.01 331** ⇓P **P** **05 00 34.0 +0.4**
BNX pmax pmax
comp=Z,7.0nm,0.6s
**GYA Guiyang 78.24 305** P **P** **05 00 37.5 +2.0**
GYA pmax pmax
comp=Z,15nm,1.7s
**LYN LuoYang 78.69 315** P **P** **05 00 39.5 +1.9**
LYN pmax pmax
comp=Z,31nm,1.4s
**KLR Kul'dur 78.95 335** ⇑ *iP* **P** **05 00 39.7 +1.0**
KLR pmax pmax
comp=Z,19nm,1.8s
**HNS HongShan 79.00 318** ⇓P **P** **05 00 41.5 +2.2**
HNS pmax pmax
comp=Z,16nm,1.5s
**BELA Belgrano 2 79.04 175** P **P** **05 00 38.9 -0.1**
**PHRA Phrae 79.46 295** P **P** **05 00 42.5 +0.3**
**CRAI Chiangrai 80.14 297** P **P** **05 00 46.5 +0.6**
CRAI IAmb IAmb 05 00 53.4
comp=Z,27nm,1.4s
**CMAR Chiang Mai Arr 80.52 294** P **P** **05 00 51.0 +3.0**
comp=Z,6.5nm,0.9s,baz=135,slow=4.2,SNR=7.8
comp=Z,6.5nm,0.9s
**KMI Kunming 80.59 302** ⇑P **P** **05 00 51.0 +2.5**
KMI pmax pmax
comp=Z,29nm,1.4s
**SMAI San Martin Ant 80.72 161** P **P** **05 00 48.5 +0.4**
SMAI IAmb IAmb 05 01 07.8
comp=Z,18nm,1.1s
**XAN Xi'an 80.77 312** P **P** **05 00 51.0 +2.0**
XAN pP pP 05 00 54.5 -0.9
XAN pmax pmax
comp=Z,19nm,1.2s
**HEH HeiHe 81.48 334** *eP* **P** **05 00 53.3 +1.0**
HEH pmax pmax
comp=Z,6.0nm,0.8s
**PZH PanZhiHua 82.05 303** P **P** **05 00 58.5 +2.4**
PZH pmax pmax
comp=Z,10.0nm,0.7s
**CHGN Chignik 82.64 17** P **P** **05 00 58.4 +0.1**
CHGN IAmb IAmb 05 01 42.4
comp=Z,44nm,1.6s
**HHC Hu-ho-hao-te 83.06 319** *eP* **P** **05 01 02.8 +1.8**
HHC pmax pmax
comp=Z,18nm,1.0s
**MA2 Magadan 83.07 350** *i P* **P** **05 01 03.4 +3.0**
MA2 pmax pmax
comp=Z,15nm,1.4s
**ELIB Princess Elisa 83.34 190** *dP* **P** **05 01 02.1 0.0**
comp=Z,7.1nm,1.3s
**PLK4 Peulik 4 84.36 17** P **P** **05 01 08.2 +1.0**
**OHAK Old Harbor 84.90 19** P **P** **05 01 10.7 +0.9**
**LZH Lanzhou 85.37 312** ⇓P **P** **05 01 15.5 +2.6**
LZH sP pwP 05 01 23.0 -3.1
LZH pmax pmax
comp=Z,19nm,1.3s
**O16K Kokwok River B 85.61 16** P **P** **05 01 13.2 -0.1**
**TROLL Troll, Antarti 85.61 184** ⇑P **P** **05 01 13.2 -0.3**
comp=Z,463nm,0.6s
TROLL ⇑PP **PP** **05 04 29.4 -2.4**
comp=Z,168nm,0.7s
**N15K Kwethluk River 85.63 14** P **P** **05 01 14.3 +0.9**
**NVL N'lazarevskaya 85.99 187** *eP* P 05 01 08.7 -6.6
NVL pmax pmax
comp=Z,7.0nm,1.0s
**SEY Seymchan 86.05 352** ⇑ *iP* **P** **05 01 15.2 -0.2**
SEY pmax pmax
comp=Z,13nm,1.3s
**SNAA Sanae 86.20 182** P **P** **05 01 16.1 -0.4**
SNAA IAmb IAmb 05 01 29.5
comp=Z,22nm,1.2s
**SNAA Sanae 86.20 182** ⇑P **P** **05 01 16.0 -0.4**
comp=Z,127nm,1.0s
SNAA ⇑PP **PP** **05 04 35.8 -0.6**
comp=Z,46nm,0.6s
**SNAA Sanae 86.20 182** P **P** **05 01 16.8 +0.4**
comp=Z,6.0nm,0.9s,baz=174,slow=4.2,SNR=15
comp=Z,6.0nm,0.9s
**SNAA Sanae 86.20 182** ⇑ *iP* **P** **05 01 15.9 -0.5**
SNAA pmax pmax
comp=Z,8.0nm,1.0s
**M16K Timber Creek 86.65 14** P **P** **05 01 20.2 +1.8**
M16K IAmb IAmb 05 01 20.7
comp=Z,28nm,1.6s
**VNA3 Neumayer Olymp 86.76 180** ⇑P **P** **05 01 18.5 -0.6**
comp=Z,11nm,0.7s
**VNA2 Neumayer--Watz 87.06 181** ⇑P **P** **05 01 20.2 -0.4**
comp=Z,10nm,0.7s,baz=173,slow=4.3
VNA2 ⇑PP **PP** **05 04 42.1 -1.2**
comp=Z,2.6nm,0.6s,baz=119,slow=2.8
**VNA1 Neumayer--Stat 87.35 181** ⇑P **P** **05 01 21.5 -0.4**
comp=Z,11nm,1.1s
**SHL Shillong 89.52 298** P **P** **05 01 33.5 +0.3**
SHL IAmb IAmb 05 01 39.3
comp=Z,20nm,1.0s
**SHL Shillong 89.52 298** P **P** **05 01 33.5 +0.3**
SHL pmax pmax
comp=Z,20nm,1.0s
**ULN Ulaanbaatar 89.78 323** ⇑ *iP* **P** **05 01 34.9 +1.0**
ULN pmax pmax
comp=Z,18nm,1.4s
**GTA Gaotai 89.81 313** P **P** **05 01 36.3 +2.1**
GTA pP pP 05 01 39.5 -1.1
GTA pmax pmax
comp=Z,5.0nm,0.8s
**BILL Bilibino 90.06 359** *eP* **P** **05 01 34.3 -0.2**
BILL *e* 05 05 05.3
BILL *e*PPP PPP 05 07 08.8
BILL pmax pmax
comp=Z,24nm,1.6s
**SONM Songino Array 90.13 323** P **P** **05 01 36.1 +0.7**
comp=Z,1.9nm,0.8s,baz=150,slow=6.1,SNR=8.9
comp=Z,1.9nm,0.8s
**NVAR Mina Array Bea 90.15 48** P **P** **05 01 35.3 -0.6**
comp=Z,0.4nm,0.6s,baz=223,slow=7.4,SNR=4.1
comp=Z,0.4nm,0.6s
**ILAR Eielson Array 92.84 17** P **P** **05 01 47.1 -0.4**
comp=Z,0.8nm,0.7s,baz=232,slow=5.4,SNR=6.9
comp=Z,0.8nm,0.7s
**ZAK Zakamensk 93.23 324** *eP* **P** **05 01 49.7 0.0**
ZAK pmax pmax
comp=Z,7.0nm,1.5s
**I26K Coal Creek Min 94.28 18** P **P** **05 01 54.3 +0.2**
**EGAK Eagle 94.48 19** P **P** **05 01 54.3 -0.7**
EGAK IAmb IAmb 05 01 59.4
comp=Z,16nm,1.8s
**TIXI Tiksi 97.85 348** P **P** **05 02 08.2 -1.9**
TIXI IAmb IAmb 05 02 32.6
comp=Z,15nm,1.8s
**TIXI Tiksi 97.85 348** *eP* Pdif 05 02 09.8 -0.4
TIXI pmax pmax
comp=Z,1.0nm,0.7s
**E29M Blow River 97.94 17** P **P** **05 02 09.4 -1.2**
E29M IAmb IAmb 05 02 34.0
comp=Z,7.9nm,1.4s
**SAND Sanderson 98.92 61** P Pdif 05 02 15.3 -0.7
**VA01 Torpederas 99.41 131** P **Pdif** **05 02 14.8 -3.4**
**WMQ Urumqi 99.89 313** *eP* **Pdif** **05 02 22.3 +2.2**
**LDAQ Lac Daran 125.22 46** **PKPdf** **05 07 34.7 -1.2**
**ARCES ARCESS Array B 128.18 345** PKP **PKiKP** **05 07 40.3 -1.2**
comp=Z,0.7nm,0.5s,baz=288,slow=1.2,SNR=5.5
**OBN Obninsk 132.46 326** *e*PKIKP **PKiKP** **05 07 49.3 -1.1**
OBN *e* 05 10 14.2
OBN *e*PPP PPP 05 13 07.6
OBN pmax pmax
comp=Z,2.0nm,0.9s
**FINES FINESS Array B 133.68 337** PKhKP PKPpre 05 07 48.4
comp=Z,1.0nm,0.9s,baz=92,slow=4.3,SNR=3.8
**HFS Hagfors 138.68 342** PKhKP PKPpre 05 07 50.1
comp=Z,0.5nm,0.4s,baz=73,slow=9.8,SNR=2.1
**BSEG Bad Segeberg 144.87 339** *e*PKPbc **PKPdf** **05 08 11.6 -0.4**
baz=34,slow=2.6
**PSZ Piszkesteto 145.05 324** **PKPab** **05 08 11.1 -1.0**
**PSZ Piszkesteto 145.05 324** PKIKP **PKPab** **05 08 11.1 -1.0**
**MORC Moravsky Berou 145.08 329** *e*PKP **PKPdf** **05 08 12.5 -0.1**
**OSTC Ostas 145.16 331** *e*PKP **PKiKP** **05 08 14.1 -2.5**
OSTC *e*PKP **PKPdf** **05 08 14.7 +2.0**
**OSTC Ostas 145.16 331** *e*PKIKP **PKiKP** **05 08 14.1 -2.5**
OSTC *e* 05 08 14.7
**DPC Dobruska-Polom 145.26 330** *e*PKP **PKiKP** **05 08 13.8 -3.0**
**DPC Dobruska-Polom 145.26 330** *e*PKIKP **PKiKP** **05 08 13.8 -3.0**
**VYHS Vyhne 145.26 326** *e*PKIKP **PKPdf** **05 08 13.8 +0.9**
**VYHS Vyhne 145.26 326** *e*PKP **PKPdf** **05 08 13.8 +0.9**
VYHS *e* 05 14 04.2
**UPC Upice 145.29 331** *e*PKP **PKiKP** **05 08 13.8 -3.0**
**UPC Upice 145.29 331** *e*PKIKP **PKiKP** **05 08 13.8 -3.0**
**GORT1 Trebel 145.31 337** *e*PKPbc **PKPdf** **05 08 13.1 +0.4**
baz=34,slow=2.6
**JAVC Velka Javorina 145.62 327** *e*PKP **PKiKP** **05 08 15.6 -2.0**
**VRAC Vranov 145.85 329** *e*PKP **PKPab** **05 08 15.3 +0.4**
**FLTG Flechtingen 145.87 337** *e*PKPbc **PKPab** **05 08 14.4 -0.4**
baz=34,slow=2.6
**PVCC Panska Ves 145.92 332** *e*PKP **PKiKP** **05 08 16.4 -1.7**
**PVCC Panska Ves 145.92 332** *e*PKP2 **PKiKP** **05 08 16.4 -1.7**
**BRG Berggiesshubel 145.93 333** *e*PKP **PKPab** **05 08 15.2 +0.1**
BRG Amp 05 08 17.6
comp=Z,15nm,0.9s
**BRG Berggiesshubel 145.93 333** P **PKiKP** **05 08 20.9 +2.8**
BRG Amp 05 08 21.7
comp=Z,20nm,1.0s
**BRG Berggiesshubel 145.93 333** P PKiKP 05 08 27.3 +9.2
BRG Amp 05 08 28.9
comp=Z,11nm,0.9s
**BRG Berggiesshubel 145.93 333** *e*PKP2 **PKPab** **05 08 15.2 +0.1**
BRG pmax pmax
comp=Z,15nm,0.9s
**BRG Berggiesshubel 145.93 333** *e*PKPbc **PKPab** **05 08 15.3 +0.1**
baz=34,slow=2.6
**CLL Collm 145.99 334** **PKPab** **05 08 14.7 -0.6**
**CLL Collm 145.99 334** *i* PKPbc **PKPab** **05 08 15.3 0.0**
comp=Z,74nm,1.6s
**CLL Collm 145.99 334** PKP2 **PKPab** **05 08 14.7 -0.6**
**CLL Collm 145.99 334** *e*PKPbc **PKPab** **05 08 15.0 -0.3**
baz=34,slow=2.6
**KRUC Moravsky 146.11 329** *e*PKP **PKPab** **05 08 15.7 -0.2**
**NRDL Niedersach Rie 146.13 338** *e*PKPbc **PKPab** **05 08 15.7 0.0**
baz=34,slow=2.6
**RETH Rethem/Aller, 146.19 339** *e*PKPbc **PKPab** **05 08 15.9 -0.1**
baz=34,slow=2.6
**PRU Pruhonice 146.32 331** *e*PKP **PKiKP** **05 08 16.9 -2.0**
**PRU Pruhonice 146.32 331** *e*PKP2 **PKiKP** **05 08 16.9 -2.0**
**CLZ Clausthal 146.58 337** *e*PKPbc **PKPab** **05 08 17.2 -0.4**
baz=34,slow=2.6
**EKA Eskdalemuir Ar 146.59 353** PKPbc **PKPab** **05 08 16.4 -1.0**
comp=Z,3.4nm,0.5s,baz=0.6,slow=2.5,SNR=10
**ZVC Zvikov 146.88 331** *e*PKP **PKiKP** **05 08 18.9 -1.2**
**TANN Tannenbergstha 146.90 334** *e*PKPbc **PKPab** **05 08 17.8 -1.2**
baz=34,slow=2.6
**GTTG Gottingen 146.97 337** *e*PKPbc **PKPab** **05 08 17.3 -1.8**
baz=34,slow=2.6
**MOX Moxa 147.06 335** *e*PKPbc **PKPab** **05 08 18.1 -1.4**
baz=34,slow=2.6
**RONA Rosalia, Austr 147.08 327** *i* PKP **PKiKP** **05 08 20.0 -0.6**
comp=Z,6.2nm,0.9s
**CONA Conrad Observa 147.14 327** *e*PKP **PKiKP** **05 08 20.4 -0.4**
comp=Z,9.7nm,1.5s
**CKRC Cesky Krumlov 147.27 330** *e*PKP **PKiKP** **05 08 19.9 -1.1**
**CKRC Cesky Krumlov 147.27 330** *e*PKP2 **PKiKP** **05 08 19.9 -1.1**
**MANZ Manzenberg 147.37 333** *e*PKPbc **PKPab** **05 08 19.4 -1.5**
baz=34,slow=2.6
**KHC Kasperske Hory 147.38 331** **PKPbc** **05 08 16.9 -2.1**
**KHC Kasperske Hory 147.38 331** *e*PKP **PKiKP** **05 08 20.7 -0.5**
KHC *ex* x 05 08 25.3
**KHC Kasperske Hory 147.38 331** PKIKP **PKPbc** **05 08 16.9 -2.1**
**ROTZ Rotzenmuhle 147.50 333** *e*PKPbc **PKPab** **05 08 19.6 -1.7**
baz=34,slow=2.6
**GEC2 GERESS Array S 147.53 331** *e*PKPbc **PKPab** **05 08 19.7 -1.9**
baz=34,slow=2.6
**GERES GERESS Array B 147.53 331** PKPbc **PKPab** **05 08 20.4 -1.2**
comp=Z,2.1nm,0.6s,baz=44,slow=4.1,SNR=10.0
**MOA Molln 147.98 329** *e*pPKP **PKPab** **05 08 22.1 -1.2**
comp=Z,8.1nm,1.1s
**BIOA Bad Ischl, Aus 148.39 329** *e*PKP **PKiKP** **05 08 23.0 -0.3**
comp=Z,2.1nm,0.6s
**SOKA Soboth 148.40 326** *e*pPKP **PKPbc** **05 08 21.6 -0.3**
comp=Z,4.4nm,1.3s
**OBKA Obir 148.76 327** *e*PKiKP **PKPab** **05 08 25.4 -1.2**
**KBA Koelnbreinsper 148.96 329** *e*PKiKP **PKiKP** **05 08 24.9 +0.2**
**LESA Schwarzleotal 149.03 330** *e*pPKP **PKPbc** **05 08 23.0 -0.4**
comp=Z,3.2nm,1.0s
**ABTA Abfaltersbach 149.60 329** *e*PKiKP **PKiKP** **05 08 26.4 +0.5**
comp=Z,1.6nm,0.5s
**WATA Walderalm 149.61 331** *i* PKP **PKiKP** **05 08 26.0 0.0**
comp=Z,2.8nm,0.5s
**WTTA Wattenberg 149.63 330** *i* PKiKP **PKiKP** **05 08 26.3 +0.2**
comp=Z,6.0nm,0.6s
**BMRD Maredsous 149.74 341** *d*PKP **PKPab** **05 08 30.0 -0.3**
**MOTA Moosalm 149.81 331** *e*pPKiKP **PKPab** **05 08 30.7 -0.1**
comp=Z,12nm,0.9s
**RETA Reutte 149.86 332** *i* pPKiKP **PKPab** **05 08 30.5 -0.5**
comp=Z,2.9nm,0.5s
**SQTA Sankt Quirin 149.86 331** *e*PKiKP **PKiKP** **05 08 26.9 +0.4**
comp=Z,4.1nm,0.6s
**WLF Walferdange 149.86 339** *d*PKP **PKPab** **05 08 28.5 -2.3**
**DOU Dourbes 149.97 341** *d*PKP **PKiKP** **05 08 27.3 +0.9**
**BFO Black Forest 150.20 335** PKPdf **PKPdf** **05 08 20.6 -0.5**
**BFO Black Forest 150.20 335** PKIKP **PKPdf** **05 08 20.6 -0.5**
**BFO Black Forest 150.20 335** *e*PKPbc **PKiKP** **05 08 25.9 -1.1**
baz=34,slow=2.6
**FETA Feichten 150.23 331** *e*PKP **PKiKP** **05 08 26.6 -0.7**
comp=Z,5.9nm,1.2s
**DAVA Damuels 150.40 332** *i* pPKiKP **PKPab** **05 08 32.7 -0.6**
comp=Z,10nm,0.9s
**FUORN Ofenpass-Fuorn 150.74 331** PKPdf **PKPdf** **05 08 21.0 -1.3**
**TORD Torodi Ar. Bea 165.77 232** PKP **PKPdf** **05 08 41.1 +0.2**
comp=Z,1.9nm,1.0s,baz=353,slow=2.7,SNR=6.8

*IDC **29** 04:51:12.9±0.7,7.75S×118.98E,h0km,mb4.4/9, mbtmp4.4/11,ML4.4/2,Error ellipse: s-maj=28.5km s-min=11.7km az=65.0*
*BJI **29** 04:51:14.3±0.0,8.15S×118.49E,h22km,mb4.7/15*
*DJA **29** 04:51:15.3±0.7,8.3S×11.9E±1,h12km±5km,M5.1/30, mB6.5/2,mb5.0/30,ML5.1/27,Mw(mB)6.3/2*
*NEIC **29** 04:51:15.1±2.0,7.80S±0.05×118.75E±0.07,h10km±1km, mb4.9/29,Error ellipse: s-maj=11.5km s-min=7.8km az=260.0*
**ISC 29 04:51:18.1**±0.4,**7.79S**±0.04×**118.82E**±0.05,**h34km**,**n135**, σ1s**39**/138,**mb4.8**/35,**Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PLAI** | **Plampang** | **1.46** | **225** | P | | **Pn** | **04 51 40.7** | **-1.4** |
| PLAI | | | | S | | **Sn** | **04 51 58.6** | **-1.4** |
| **WBSI** | **Waikabubak, Su** | **1.93** | **163** | P | | **Pn** | **04 51 48.3** | **-0.2** |
| WBSI | | | | S | | **Sn** | **04 52 13.0** | **+1.4** |
| **TWSI** | **Taliwang, Sumb** | **2.14** | **244** | P | | **Pn** | **04 51 49.9** | **-1.5** |
| **BSSI** | **Bau Bau, Buton** | **2.33** | **45** | P | | **Pn** | **04 51 53.0** | **-1.0** |
| **BKSI** | **Bulukumba** | **2.77** | **28** | P | | **Pn** | **04 51 58.8** | **-1.3** |
| **KAPI** | **Kappang** | **2.91** | **19** | P | | **Pn** | **04 52 00.9** | **-1.1** |
| **KAPI** | **Kappang** | **2.91** | **19** | Pn | | **Pn** | **04 52 00.4** | **-1.6** |
| **KAPI** | **Kappang** | **2.91** | **19** | Pn | | **Pn** | **04 52 00.7** | **-1.3** |
| | 35nm,0.3s,baz=191,slow=7.9,SNR=86 | | | | | | | |
| KAPI | | | | | Sn | **Sn** | **04 52 34.0** | **-1.8** |
| | 192nm,0.3s,baz=314,slow=19,SNR=13 | | | | | | | |
| | 281nm,0.4s | | | | | | | |
| **BASI** | **Baing, Sumba** | **2.97** | **144** | P | | **Pn** | **04 52 03.1** | **+0.2** |
| **EDFI** | **Ende, Flores** | **3.00** | **109** | P | | **Pn** | **04 52 03.1** | **-0.2** |
| **MMRI** | **Maumere** | **3.49** | **104** | P | | **Pn** | **04 52 10.1** | **+0.1** |
| **MMRI** | **Maumere** | **3.49** | **104** | Pn | | **Pn** | **04 52 09.4** | **-0.5** |
| **MMRI** | **Maumere** | **3.49** | **104** | P | | **Pn** | **04 52 09.5** | **-0.5** |
| **SRBI** | **Singaraja** | **3.59** | **265** | P | | **Pn** | **04 52 09.1** | **-2.2** |
| **BNSI** | **Bone** | **3.60** | **21** | P | | **Pn** | **04 52 11.1** | **-0.4** |
| **DNP** | **Denpasar** | **3.68** | **256** | P | | **Pn** | **04 52 12.3** | **-0.3** |
| **IGBI** | **Denpasar** | **3.78** | **254** | P | | **Pn** | **04 52 13.3** | **-0.7** |
| **SPSI** | **Sidrap Palu** | **3.92** | **14** | P | | **Pn** | **04 52 16.3** | **+0.5** |
| **BBSI** | **Bau Bau** | **4.37** | **59** | P | | **Pn** | **04 52 21.9** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **4.67** | **261** | P | | **Pn** | **04 52 25.0** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **4.67** | **261** | Pn | | **Pn** | **04 52 23.4** | **-2.9** |
| **JAGI** | **Jajag, Banyuwa** | **4.67** | **261** | P | | **Pn** | **04 52 24.2** | **-2.1** |
| **TTSI** | **Tana Toraja** | **4.82** | **12** | P | | **Pn** | **04 52 28.0** | **-0.3** |
| **BATI** | **Baumata** | **5.35** | **117** | P | | **Pn** | **04 52 37.1** | **+1.4** |
| | 156nm,0.7s,1.0nm | | | | | | | |
| **SOEI** | **Soe** | **5.73** | **110** | P | | **Pn** | **04 52 40.1** | **-0.8** |
| **SOEI** | **Soe** | **5.73** | **110** | Pn | | **Pn** | **04 52 41.9** | **+1.0** |
| **SOEI** | **Soe** | **5.73** | **110** | P | | **Pn** | **04 52 41.8** | **+0.9** |
| **GRJI** | **Gresik** | **6.35** | **277** | P | | **Pn** | **04 52 47.9** | **-1.4** |
| **PWJI** | **Pagerwojo** | **6.95** | **268** | P | | **Pn** | **04 52 56.6** | **-1.0** |
| | 84nm,0.7s,0.8nm | | | | | | | |
| **NGJI** | **Ngawi** | **7.31** | **273** | P | | **Pn** | **04 53 01.9** | **-0.6** |
| **SMKI** | **Samarinda** | **7.47** | **348** | P | | **Pn** | **04 53 03.6** | **-1.1** |
| **LUWI** | **Luwuk** | **7.77** | **31** | P | | **Pn** | **04 53 08.5** | **-0.4** |
| | 61nm,1.0s,0.6nm | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **7.85** | **330** | P | | **Pn** | **04 53 09.2** | **-0.7** |
| **UGM** | **Wanagama** | **8.22** | **269** | P | | **Pn** | **04 53 15.9** | **+0.8** |
| **UGM** | **Wanagama** | **8.22** | **269** | P | | **Pn** | **04 53 13.7** | **-1.4** |
| | 120nm,1.2s | | | | | | | |
| **SMRI** | **Semarang** | **8.34** | **275** | P | | **Pn** | **04 53 15.0** | **-1.7** |
| | 149nm,0.8s | | | | | | | |
| **TOLI2** | **Tolitoli** | **9.05** | **13** | P | | **Pn** | **04 53 26.4** | **-0.1** |
| **TOLI2** | **Tolitoli** | **9.05** | **13** | Pn | | **Pn** | **04 53 26.4** | **-0.1** |
| **SANI** | **Sanana** | **9.14** | **52** | P | | **Pn** | **04 53 27.3** | **-0.3** |
| | 35nm,0.6s | | | | | | | |
| **GTOI** | **Gorontalo** | **9.35** | **27** | P | | **Pn** | **04 53 30.9** | **+0.3** |
| **KPJI** | **Karang Pucung** | **9.81** | **272** | P | | **Pn** | **04 53 36.0** | **-0.9** |
| **CMJI** | **Cimerak** | **10.28** | **269** | P | | **Pn** | **04 53 42.1** | **-1.1** |
| | 68nm,1.4s | | | | | | | |
| **BBJI** | **Bungbulang** | **11.08** | **271** | P | | **Pn** | **04 53 54.5** | **+0.2** |
| **CNJI** | **Cibinong** | **11.60** | **272** | P | | **Pn** | **04 54 01.0** | **-0.4** |
| | 31nm,1.1s | | | | | | | |
| **KNRA** | **Kununurra** | **12.49** | **130** | Pn | | **Pn** | **04 54 12.1** | **-1.5** |
| **KNRA** | **Kununurra** | **12.49** | **130** | P | | **Pn** | **04 54 12.0** | **-1.5** |
| | comp=Z,17μmcomp=Z,102nm,0.8s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **12.89** | **359** | Pn | | **Pn** | **04 54 19.0** | **+0.1** |
| **MTN** | **Manton Dam** | **13.11** | **114** | P | | **Pn** | **04 54 22.0** | **0.0** |
| **MTN** | **Manton Dam** | **13.11** | **114** | Pn | | **Pn** | **04 54 21.1** | **-0.9** |
| **MTN** | **Manton Dam** | **13.11** | **114** | P | | **Pn** | **04 54 20.5** | **-1.5** |
| | comp=Z,12μmcomp=Z,73nm,1.8s | | | | | | | |
| **MBWA** | **Marble Bar** | **13.32** | **176** | P | | **Pn** | **04 54 24.5** | **-0.4** |
| **MBWA** | **Marble Bar** | **13.32** | **176** | Pn | | **Pn** | **04 54 24.1** | **-0.8** |
| **PSA00** | **Pilbara Seismi** | **13.74** | **176** | P | | **Pn** | **04 54 30.0** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **13.74** | **176** | Pn | | **Pn** | **04 54 30.0** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **13.74** | **176** | Pn | | **Pn** | **04 54 30.1** | **-0.4** |
| **KASI** | **Kota Agung** | **14.40** | **278** | P | | **Pn** | **04 54 39.3** | **-0.4** |
| | comp=Z,97nm,1.0s | | | | | | | |
| **GIRL** | **Giralia** | **15.41** | **196** | P | | **Pn** | **04 54 52.9** | **-0.2** |
| **GIRL** | **Giralia** | **15.41** | **196** | Pn | | **Pn** | **04 54 50.7** | **-2.4** |
| **MNAI** | **Manna** | **16.14** | **281** | Pn | | **Pn** | **04 55 00.3** | **-2.2** |
| **MEEK** | **Meekatharra** | **18.75** | **181** | P | | **Pn** | **04 55 34.8** | **-0.1** |
| **MEEK** | **Meekatharra** | **18.75** | **181** | P | | **P** | **04 55 34.2** | **-0.1** |
| | comp=Z,19μmcomp=Z,64nm,1.2s | | | | | | | |
| **WB0** | **Warramunga Arr** | **19.23** | **130** | P | | **P** | **04 55 39.2** | **-0.3** |
| **WRA** | **Warramunga Arr** | **19.29** | **130** | P | | **P** | **04 55 40.0** | **-0.2** |
| | comp=Z,1.8nm,0.3s,baz=304,slow=13,SNR=31 | | | | | | | |
| WRA | | | | | S | **S** | **04 59 07.6** | **-9.3** |
| | comp=Z,1.5nm,0.5s,baz=259,slow=21,SNR=4.7 | | | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **19.29** | **130** | | | **P** | **04 55 40.7** | **+0.5** |
| **WB2** | **Warramunga Arr** | **19.30** | **130** | P | | **P** | **04 55 39.7** | **-0.6** |
| **WRKA** | **Warakurna** | **19.39** | **153** | P | | **Pn** | **04 55 42.1** | **-0.6** |
| **WRKA** | **Warakurna** | **19.39** | **153** | P | | **P** | **04 55 41.6** | **+0.3** |
| | comp=Z,14μmcomp=Z,51nm,2.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **19.45** | **130** | P | | **P** | **04 55 42.0** | **0.0** |
| WR0 | | | | | IAmb | IAmb | 04 55 44.3 | |
| | comp=Z,24nm,0.6s | | | | | | | |
| **BKNI** | **Bangkinang** | **19.48** | **294** | P | | **Pn** | **04 55 42.6** | **-1.1** |
| **MORW** | **Morawa** | **21.33** | **187** | P | | **P** | **04 56 02.5** | **+0.2** |
| **MORW** | **Morawa** | **21.33** | **187** | P | | **P** | **04 55 60.0** | **-2.3** |
| MORW | | | | | IAmb | IAmb | 04 56 10.4 | |
| | comp=Z,71nm,1.4s | | | | | | | |
| **AS31** | **Alice Springs** | **21.41** | **139** | P | | **P** | **04 56 02.9** | **-0.4** |
| **AS31** | **Alice Springs** | **21.41** | **139** | P | | **P** | **04 56 03.9** | **+0.6** |
| | comp=Z,19nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **21.41** | **139** | P | | **P** | **04 56 03.3** | **0.0** |
| | comp=Z,25nm,0.6s,baz=316,slow=9.0,SNR=47 | | | | | | | |
| ASAR | | | | | S | **S** | **04 59 58.8** | **-0.5** |
| | comp=Z,3.9nm,0.9s,baz=320,slow=21,SNR=5.3 | | | | | | | |
| | comp=Z,25nm,0.6s | | | | | | | |
| **AS01** | **Alice Springs** | **21.44** | **139** | P | | **P** | **04 56 03.9** | **+0.3** |
| **RPSI** | **Rantau Prapat** | **22.41** | **297** | P | | **P** | **04 56 13.6** | **-0.5** |
| **BLDU** | **Ballidu** | **22.80** | **185** | P | | **P** | **04 56 17.4** | **-0.5** |
| **KMBL** | **Kambalda** | **23.63** | **173** | P | | **P** | **04 56 28.3** | **+2.0** |
| **KLBR** | **Kellerberrin** | **23.70** | **182** | P | | **P** | **04 56 26.9** | **-0.1** |
| **KLBR** | **Kellerberrin** | **23.70** | **182** | P | | **P** | **04 56 25.1** | **-1.9** |
| | comp=Z,57nm,0.9s | | | | | | | |
| **QIS** | **Mount Isa** | **23.78** | **124** | P | | **P** | **04 56 28.3** | **+0.5** |
| **QIS** | **Mount Isa** | **23.78** | **124** | P | | **P** | **04 56 27.9** | **0.0** |
| | comp=Z,49nm,0.7s | | | | | | | |
| **MTKN** | **Mount Kenneth** | **24.19** | **186** | P | | **P** | **04 56 33.1** | **+1.6** |
| **FORT** | **Forrest** | **24.45** | **160** | P | | **P** | **04 56 32.7** | **-1.2** |
| **FORT** | **Forrest** | **24.45** | **160** | P | | **P** | **04 56 32.7** | **-1.2** |
| | comp=Z,101nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **24.68** | **106** | P | | **P** | **04 56 36.9** | **+0.8** |
| **COEN** | **Coen** | **24.68** | **106** | P | | **P** | **04 56 36.0** | **-0.2** |
| COEN | | | | | IAmb | IAmb | 04 56 47.4 | |
| | comp=Z,51nm,0.9s | | | | | | | |
| **COEN** | **Coen** | **24.68** | **106** | P | | **P** | **04 56 38.2** | **+2.1** |
| | comp=Z,64nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **25.06** | **183** | P | | **P** | **04 56 40.1** | **+0.7** |
| **NWAO** | **Narrogin (SRO)** | **25.06** | **183** | P | | **P** | **04 56 40.2** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **

comp=Z,14nm,0.8s
**CMSA Cobar Meteorol 34.43 137 P P 04 58 02.6 0.0**
**ARPS Mount Arapiles 35.65 147 P P 04 58 13.6 +0.6**
**ARMA Armidale 38.07 131 P P 04 58 35.2 +1.4**
ARMA IAmb IAmb 04 58 48.6
comp=Z,14nm,1.0s
**TOO Toolangi 38.25 145 P P 04 58 36.0 +0.8**
TOO IAmb IAmb 04 58 46.6
comp=Z,40nm,1.9s
**NJ2 Nanjing 39.62 0 eP P 04 58 47.8 +1.3**
NJ2 pmax pmax
comp=Z,6.0nm,0.5s
**CD2 Chengdu 41.10 340 P P 04 59 00.8 +1.9**
CD2 pmax pmax
comp=Z,20nm,0.5s
**HNS HongShan 45.12 355** *eP* P 04 59 38.0 +6.8
**HHC Hu-ho-hao-te 48.86 353** *eP* P **05 00 03.0 +2.5**
HHC pmax pmax
comp=Z,12nm,0.6s
**GTA Gaotai 50.16 341** P P 05 00 19.3 +8.8
GTA sP sP 05 00 29.5 +6.0
GTA pmax pmax
comp=Z,7.0nm,1.6s
**CN2 Changchun 51.70 6 P P 05 00 22.8 +1.0**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**MDJ Mudanjiang 53.06 10 P P 05 00 29.0 -2.9**
MDJ pmax pmax
comp=Z,10.0nm,0.9s
**SONM Songino Array 56.46 350** P P **05 00 57.3 +0.6**
comp=Z,1.0nm,0.8s,baz=166,slow=11,SNR=4.3
comp=Z,1.0nm,0.8s
**THZ Tophouse 58.39 135 P P 05 01 10.8 +0.4**
**WMQ Urumqi 58.59 334** *eP* P **05 01 11.0 -0.7**
WMQ pmax pmax
comp=Z,22nm,0.9s
**CASY Casey 58.68 184 P P 05 01 11.8 0.0**
CASY IAmb IAmb 05 01 18.1
comp=Z,7.3nm,1.1s
**TCW Tory Channel 59.18 134 P P 05 01 16.6 +0.8**
**KSH Kashi 61.53 323 P P 05 01 31.0 -1.1**
KSH sP pP 05 01 40.0 -1.6
KSH pmax pmax
comp=Z,5.0nm,0.7s
**MKAR Makanchi Array 63.30 333 P P 05 01 43.5 -0.2**
comp=Z,1.4nm,0.7s,baz=154,slow=6.6,SNR=5.3
comp=Z,1.4nm,0.7s
**GAR Garm 64.71 320 P P 05 01 51.4 -1.8**
GAR IAmb IAmb 05 02 01.9
comp=Z,13nm,1.1s
**CHGR Chuyangaron 65.27 319 P P 05 01 54.7 -2.1**
CHGR IAmb IAmb 05 02 12.4
comp=Z,11nm,0.9s
**SIMJ Simiganj 65.36 319 P P 05 01 55.7 -1.7**
SIMJ IAmb IAmb 05 02 13.0
comp=Z,6.7nm,1.1s
**KURBB Kurchatov Arra 67.81 334 P P 05 02 12.1 -0.5**
comp=Z,0.6nm,0.6s,baz=147,slow=5.3,SNR=8.3
comp=Z,0.6nm,0.6s
**ZAA0 Zalesovo Array 67.85 339 P P 05 02 13.9 +1.1**
ZAA0 IAmb IAmb 05 02 20.6
comp=Z,5.0nm,0.8s
**ZALV Zalesovo Beam 67.85 339 P P 05 02 12.2 -0.6**
comp=Z,1.1nm,0.5s,baz=123,slow=5.5,SNR=4.5
comp=Z,1.1nm,0.5s
**MAW Mawson 70.31 200 P P 05 02 29.1 +1.3**
comp=Z,6.4nm,1.0s,baz=90,slow=6.2,SNR=3.5
comp=Z,6.4nm,1.0s
**SBA Scott Base 74.20 171 P P 05 02 52.7 +1.7**
**ABKAR Akbulak array 76.47 325 P P 05 03 04.2 -0.3**
ABKAR IAmb IAmb 05 03 13.0
comp=Z,7.8nm,0.9s
**QSPA South Pole Qui 82.20 180 P P 05 03 35.2 -0.4**
QSPA IAmb IAmb 05 03 49.2
comp=Z,22nm,1.6s
**QSPA South Pole Qui 82.20 180 P P 05 03 35.8 +0.2**
comp=Z,3.8nm,1.0s,baz=172,slow=0.8,SNR=7.5
comp=Z,3.8nm,1.0s
**LODK Lodwar 83.99 274 P P 05 03 45.6 -0.3**
LODK IAmb IAmb 05 03 52.2
comp=Z,9.3nm,1.4s
**BOSA Boshof 89.43 241 P P 05 04 15.9 +3.7**
comp=Z,2.4nm,1.0s,baz=63,slow=9.0,SNR=1.7
**CPUP Villa Florida 145.88 186 PKPbc PKPab 05 10 55.0 -0.1**
comp=Z,1.0nm,0.4s,baz=277,slow=1.3,SNR=3.8

*NOU **29** 04:54:15.8,22°.06S×170°.85E, h0km, MLv4.9/4, Southeast of Loyalty Islands*
*IDC **29** 04:54:24.2±0.9,22°.05S×170°.26E, h0km, mb4.2/8, mbtmp4.2/9, ML4.2/1, Error ellipse: s-maj=30.1km s-min=26.7km az=127.0*
*NEIC **29** 04:54:29.1±1.9,22°.4S±0°.1×169°.88E±0°.07, h10km±1km, mb4.5/11, Error ellipse: s-maj=21.2km s-min=10.7km az=349.0*

**ISC 29 04:54:28.1±0.6, 22°.4S±0°.1×169°.90E±0°.07, h10km, n50, σ1s48/49, mb4.3/14, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **2.28** | **264** | | | **Pn** | **04 55 06.8** | **+1.1** |
| PINNC | | | | Sn | | **Sn** | **04 55 33.2** | **-0.7** |
| **YATNC** | **Mamie plateau,** | **2.81** | **276** | P | | **Pn** | **04 55 13.7** | **+0.7** |
| **DZM** | **Mont Dzumac** | **3.21** | **275** | P | | **Pn** | **04 55 19.4** | **+0.7** |
| **DZM** | **Mont Dzumac** | **3.21** | **275** | Pn | | **Pn** | **04 55 19.5** | **+0.7** |
| | 21nm,0.3s,baz=116,slow=12,SNR=35 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **04 55 56.7** | **-0.5** |
| | 77nm,0.3s,baz=146,slow=16,SNR=12 | | | | | | | |
| | 69nm,0.4s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.34** | **274** | P | | **Pn** | **04 55 21.4** | **+1.0** |
| **KOUNC** | **Koumac, New Ca** | **5.54** | **288** | | | **Pn** | **04 55 50.9** | **+0.4** |
| **MSVF** | **Nonsavu** | **8.95** | **60** | Pn | | **Pn** | **04 56 38.6** | **+1.0** |
| **MSVF** | **Nonsavu** | **8.95** | **60** | Pn | | **Pn** | **04 56 37.8** | **+0.3** |
| | 0.6nm,0.3s,baz=198,slow=9.9,SNR=6.0 | | | | | | | |
| **EIDS** | **Eidsvold** | **17.46** | **256** | | | **Pn** | **04 58 32.6** | **+0.8** |
| **ARMA** | **Armidale** | **18.20** | **240** | Pn | | **Pn** | **04 58 36.7** | **-4.3** |
| **MRZ** | **Mangatainoka R** | **18.84** | **167** | | | **Pn** | **04 58 50.5** | **+1.9** |
| MRZ | | | | IAmb | IAmb | | 04 59 20.9 | |
| | comp=Z,63nm,1.3s | | | | | | | |
| **MSWZ** | **Moikau Station** | **19.50** | **168** | P | | **P** | **04 58 54.4** | **-1.0** |
| **MQZ** | **McQueen's Vall** | **21.39** | **175** | P | | **P** | **04 59 16.6** | **+0.8** |
| MQZ | | | | IAmb | IAmb | | 04 59 21.8 | |
| | comp=Z,47nm,1.3s | | | | | | | |
| **CTAO** | **Charters Tower** | **22.15** | **272** | P | | **P** | **04 59 24.7** | **+0.4** |
| CTAO | | | | IAmb | IAmb | | 04 59 46.4 | |
| | comp=Z,9.8nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.84** | **243** | P | | **P** | **05 00 09.1** | **+0.3** |
| **STKA** | **Stephens Creek** | **26.84** | **243** | P | | **P** | **05 00 11.1** | **+2.3** |
| | comp=Z,2.2nm,0.6s,baz=98,slow=12,SNR=2.9 | | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.10** | **261** | P | | **P** | **05 01 06.8** | **+2.4** |
| | comp=Z,1.8nm,0.9s,baz=84,slow=8.5,SNR=2.6 | | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.20** | **268** | P | | **P** | **05 01 05.3** | **0.0** |
| WRAB | | | | IAmb | IAmb | | 05 01 08.5 | |
| | comp=Z,8.3nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.20** | **267** | P | | **P** | **05 01 04.7** | **-0.6** |
| | comp=Z,1.4nm,0.7s,baz=101,slow=8.0,SNR=1.8 | | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | | |
| **MBWA** | **Marble Bar** | **46.43** | **262** | P | | **P** | **05 02 55.5** | **+0.2** |
| **NWAO** | **Narrogin (SRO)** | **47.39** | **245** | P | | **P** | **05 03 03.5** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **65.81** | **332** | P | | P | 05 05 09.9 | -3.7 |
| | comp=Z,0.8nm,0.4s,baz=167,slow=5.2,SNR=1.5 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.68** | **180** | P | | **P** | **05 05 25.3** | **0.0** |
| QSPA | | | | IAmb | IAmb | | 05 05 27.1 | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.68** | **180** | P | | **P** | **05 05 24.7** | **-0.6** |
| | comp=Z,4.8nm,1.0s,baz=306,slow=1.8,SNR=4.5 | | | | | | | |
| | comp=Z,4.8nm,1.0s | | | | | | | |
| **BELA** | **Belgrano 2** | **78.92** | **175** | P | | **P** | **05 06 30.2** | **-1.2** |
| BELA | | | | IAmb | IAmb | | 05 06 43.8 | |
| | comp=Z,3.8nm,1.1s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.45** | **184** | ⇑P | | **P** | **05 07 05.4** | **-0.4** |
| | comp=Z,291nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **86.06** | **182** | ⇑P | | **P** | **05 07 07.9** | **-0.8** |
| | comp=Z,36nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **86.06** | **182** | P | | **P** | **05 07 08.0** | **-0.7** |
| | comp=Z,2.9nm,0.8s,baz=159,slow=5.6,SNR=6.2 | | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.62** | **180** | ⇑P | | **P** | **05 07 10.4** | **-1.0** |
| | comp=Z,6.6nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.92** | **181** | ⇑P | | **P** | **05 07 12.4** | **-0.5** |
| | comp=Z,7.4nm,0.6s,baz=176,slow=5.3 | | | | | | | |
| **SONM** | **Songino Array** | **90.09** | **323** | P | | **P** | **05 07 25.2** | **-3.1** |
| | comp=Z,1.4nm,0.9s,baz=132,slow=4.9,SNR=5.0 | | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **93.04** | **17** | P | | P | 05 07 36.0 | -5.3 |
| | comp=Z,0.3nm,0.8s,baz=247,slow=4.9,SNR=2.0 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.25** | **345** | PKP | | **PKPdf** | **05 13 31.6** | **-2.5** |
| | comp=Z,2.7nm,0.9s,baz=64,slow=2.1,SNR=4.6 | | | | | | | |
| **VRAC** | **Vranov** | **145.84** | **328** | *e*PKP | | **PKPdf** | **05 14 05.9** | **-1.1** |
| **EKA** | **Eskdalemuir Ar** | **146.69** | **353** | PKPbc | | **PKPdf** | **05 14 06.3** | **-1.8** |
| | comp=Z,2.2nm,0.5s,baz=358,slow=2.5,SNR=16 | | | | | | | |
| **ZVC** | **Zvikov** | **146.88** | **331** | *e*PKP | | **PKPdf** | **05 14 08.7** | **0.0** |
| **RONA** | **Rosalia, Austr** | **147.06** | **326** | *e*PKiKP | | **PKPdf** | **05 14 06.7** | **-2.4** |
| | comp=Z,3.9nm,0.9s | | | | | | | |
| **CONA** | **Conrad Observa** | **147.13** | **327** | *e*PKP | | **PKPdf** | **05 14 10.4** | **+1.2** |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **147.27** | **330** | *e*PKP | | **PKPdf** | **05 14 10.1** | **+0.7** |
| CKRC | | | | *ex* | | x | 05 14 14.7 | |
| **KHC** | **Kasperske Hory** | **147.38** | **331** | *e*PKP | | **PKPdf** | **05 14 10.2** | **+0.6** |
| **GERES** | **GERESS Array B** | **147.53** | **330** | PKPbc | | **PKPdf** | **05 14 10.9** | **+0.9** |
| | comp=Z,1.8nm,0.7s,baz=49,slow=4.1,SNR=6.3 | | | | | | | |
| **MOA** | **Molln** | **147.97** | **328** | *e*PKP | | **PKPbc** | **05 14 14.1** | **+0.5** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **SOKA** | **Soboth** | **148.38** | **326** | *e*PKP | | PKPdf | 05 14 03.2 | -8.2 |
| | comp=Z,8.4nm,1.6s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.95** | **328** | *i* PKP | | **PKiKP** | **05 14 18.4** | **+0.6** |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **LESA** | **Schwarzleotal** | **149.03** | **329** | *e*PKP | | **PKPbc** | **05 14 17.9** | **+1.4** |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.59** | **329** | *i* PKP | | **PKPab** | **05 14 23.7** | **+0.8** |
| | comp=Z,4.8nm,1.0s | | | | | | | |
| **MOTA** | **Moosalm** | **149.82** | **331** | *e*PKP | | **PKPbc** | **05 14 19.8** | **+1.3** |
| | comp=Z,4.7nm,1.0s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.86** | **330** | *e*PKP | | **PKPdf** | **05 14 16.8** | **+3.0** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **RETA** | **Reutte** | **149.86** | **331** | *e*PKP | | **PKiKP** | **05 14 22.7** | **+3.2** |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **FETA** | **Feichten** | **150.23** | **331** | *i* PKP | | **PKiKP** | **05 14 21.2** | **+0.8** |
| | comp=Z,4.8nm,1.1s | | | | | | | |

*IDC **29** 04:57:03.8±8.4,21°.42S×170°.39E, h0km, mb4.0/3, mbtmp4.0/4, ML4.0/1, Error ellipse: s-maj=138.4km s-min=121.2km az=25.0*
*NEIC **29** 04:57:05.2±1.7,21°.5S±0°.2×170°.37E±0°.05, h10km±1km, mb4.8/12, Error ellipse: s-maj=26.2km s-min=6.4km az=350.0*

**ISC 29 04:57:04.6±0.9, 21°.5S±0°.2×170°.29E±0°.09, h10km, n24, σ1s55/24, mb4.6/11, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **2.86** | **247** | Pn | | **Pn** | **04 57 49.7** | **-0.6** |
| **DZM** | **Mont Dzumac** | **3.62** | **260** | Pn | | **Pn** | **04 58 02.0** | **+1.2** |
| **DZM** | **Mont Dzumac** | **3.62** | **260** | Pn | | **Pn** | **04 58 02.3** | **+1.4** |
| | 12nm,0.3s,baz=120,slow=12,SNR=24 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **04 58 39.5** | **-4.2** |
| | 17nm,0.3s,baz=100,slow=20,SNR=3.0 | | | | | | | |
| | 26nm,0.3s | | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **5.69** | **279** | Pn | | **Pn** | **04 58 30.5** | **+1.3** |
| **NIUE** | **Niue** | **18.71** | **86** | | | **P** | **05 01 21.9** | **-1.6** |
| **MRZ** | **Mangatainoka R** | **19.61** | **168** | P | | **P** | **05 01 33.0** | **-0.2** |
| MRZ | | | | IAmb | IAmb | | 05 01 33.7 | |
| | comp=Z,47nm,1.5s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.56** | **242** | P | | **P** | **05 02 52.9** | **+1.0** |
| **STKA** | **Stephens Creek** | **27.56** | **242** | P | | **P** | **05 02 53.7** | **+1.8** |
| | comp=Z,4.3nm,0.8s,baz=86,slow=12,SNR=4.0 | | | | | | | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **32.34** | **242** | P | | **P** | **05 03 35.5** | **+1.3** |
| BBOO | | | | IAmb | IAmb | | 05 03 39.7 | |
| | comp=Z,41nm,1.6s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.59** | **266** | P | | **P** | **05 03 47.3** | **+2.0** |
| WB0 | | | | IAmb | IAmb | | 05 03 55.2 | |
| | comp=Z,31nm,1.9s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.60** | **266** | P | | **P** | **05 03 45.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **33.61** | **259** | P | | **P** | **05 03 47.0** | **+1.6** |
| | comp=Z,1.5nm,1.1s,baz=87,slow=7.0,SNR=2.7 | | | | | | | |
| | comp=Z,1.5nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.62** | **266** | P | | **P** | **05 03 47.3** | **+1.8** |
| | comp=Z,0.9nm,0.8s,baz=98,slow=8.3,SNR=3.4 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **FORT** | **Forrest** | **38.83** | **247** | P | | **P** | **05 04 30.3** | **+0.3** |
| FORT | | | | IAmb | IAmb | | 05 04 38.2 | |
| | comp=Z,101nm,2.0s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **46.75** | **260** | P | | **P** | **05 05 32.2** | **-2.2** |
| PSA00 | | | | IAmb | IAmb | | 05 05 35.1 | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **MBWA** | **Marble Bar** | **46.92** | **261** | P | | **P** | **05 05 36.2** | **+0.5** |
| **QSPA** | **South Pole Qui** | **68.56** | **180** | P | | P | 05 08 13.1 | +5.6 |
| QSPA | | | | IAmb | IAmb | | 05 08 19.8 | |
| | comp=Z,13nm,1.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **79.76** | **175** | P | | **P** | **05 09 13.2** | **+0.7** |
| BELA | | | | IAmb | IAmb | | 05 09 17.1 | |
| | comp=Z,12nm,1.9s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **86.35** | **184** | ⇑P | | **P** | **05 09 47.4** | **+0.6** |
| | comp=Z,140nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **86.94** | **182** | P | | **P** | **05 09 50.3** | **+0.6** |
| **SNAA** | **Sanae** | **86.94** | **182** | ⇑P | | **P** | **05 09 49.7** | **0.0** |
| | comp=Z,26nm,1.0s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **87.50** | **180** | ⇑P | | **P** | **05 09 52.7** | **+0.4** |
| | comp=Z,3.1nm,0.8s | | | | | | | |
| **J16K** | **Anvik River** | **87.56** | **13** | P | | **P** | **05 09 50.9** | **-1.5** |
| **VNA2** | **Neumayer--Watz** | **87.80** | **181** | ⇑P | | **P** | **05 09 53.4** | **-0.3** |
| | comp=Z,1.7nm,0.8s,baz=196,slow=2.7 | | | | | | | |

*SNET **29** 05:01:12.9±0.6, 14°.32N×89°.89W, h173km±6km, ML3.6*
*CATAC **29** 05:01:15.0±0.3, 14°.16N×89°.95W, h156km±2km, ML3.3*
*GCG **29** 05:01:18.9±0.4, 14°.28N×90°.16W, h142km±44km, MD3.7*

**ISC 29 05:01:14.5±1.7, 14°.16N±0°.06×89°.93W±0°.05, h167km±9km, n69, σ0s58/84, 4C-3D, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SLOZ** | **Alcaldia de Sa** | **0.20** | **134** | *e*P | | **Pn** | **05 01 36.7** | **-0.3** |
| SLOZ | | | | *e*S | | **Sn** | **05 01 55.0** | **+1.0** |
| **LOAL** | **Lomas de Alarc** | **0.22** | **138** | *e*P | | **Pn** | **05 01 36.9** | **-0.1** |
| **LOAL** | **Lomas de Alarc** | **0.22** | **138** | *i* P | | **Pn** | **05 01 36.8** | **-0.2** |
| LOAL | | | | | IAML | | 05 01 37.1 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| LOAL | | | | *i* S | | **Sn** | **05 01 52.9** | **-1.3** |
| **JUAM** | **Asuncion Mita** | **0.28** | **52** | *i* P | | **Pn** | **05 01 36.9** | **-0.2** |
| JUAM | | | | | IAML | | 05 01 37.2 | |
| | comp=Z,650nm,1.0s | | | | | | | |
| JUAM | | | | *i* S | | **Sn** | **05 01 54.4** | **0.0** |
| **NUBE** | **Las Nubes** | **0.30** | **150** | ⇑*e*P | | **Pn** | **05 01 36.9** | **-0.5** |
| **NUBE** | **Las Nubes** | **0.30** | **150** | *i* P | | **Pn** | **05 01 36.5** | **-0.8** |
| NUBE | | | | | IAML | | 05 01 37.5 | |
| | comp=Z,520nm,1.0s | | | | | | | |
| NUBE | | | | *i* S | | **Sn** | **05 01 53.6** | **-1.2** |
| **FAME** | **Alcaldia de Sa** | **0.33** | **194** | *i* S | | **Sn** | **05 01 54.5** | **-0.2** |
| **JAMO** | **Monjas** | **0.33** | **9** | *i* P | | **Pn** | **05 01 37.3** | **-0.1** |
| JAMO | | | | *i* S | | **Sn** | **05 01 54.1** | **-0.9** |
| JAMO | | | | | IAML | | 05 02 06.0 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **RTR** | **El Retiro** | **0.38** | **134** | ⇑*i*P | | **Pn** | **05 01 37.7** | **+0.1** |
| **UNIC** | **Universidad Ca** | **0.41** | **116** | *i* P | | **Pn** | **05 01 37.3** | **-0.3** |
| UNIC | | | | | IAML | | 05 01 37.4 | |
| | comp=Z,570nm,1.0s | | | | | | | |
| UNIC | | | | *i* S | | **Sn** | **05 01 55.1** | **-0.1** |
| **SNJE** | **San Jose** | **0.43** | **133** | ⇑*e*P | | **Pn** | **05 01 37.7** | **-0.1** |
| **SBLS** | **San Blas** | **0.44** | **137** | ⇓*i*P | | **Pn** | **05 01 38.0** | **+0.1** |
| **CEVE** | **Cerro Verde** | **0.45** | **138** | *e*P | | **Pn** | **05 01 37.9** | **-0.1** |
| CEVE | | | | | IAML | | 05 02 11.3 | |
| | comp=Z,841nm,0.5s | | | | | | | |
| CEVE | | | | *i* S | | **Sn** | **05 01 53.6** | **-1.2** |
| **CEVE** | **Cerro Verde** | **0.45** | **138** | *i* P | | **Pn** | **05 01 37.7** | **-0.3** |
| CEVE | | | | | IAML | | 05 01 38.2 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **NBG** | **Las Nubes** | **0.58** | **316** | *e*P | | **Pn** | **05 01 39.8** | **+1.2** |
| **MTO3** | **Montecristo** | **0.60** | **67** | *i* P | | **Pn** | **05 01 38.5** | **-0.1** |
| MTO3 | | | | | IAML | | 05 01 38.6 | |
| | comp=Z,490nm,1.0s | | | | | | | |
| MTO3 | | | | *i* S | | **Sn** | **05 01 57.2** | **+0.2** |
| **CEDA** | **San Andres** | **0.63** | **124** | *i* P | | **Pn** | **05 01 38.0** | **-0.6** |
| CEDA | | | | *i* S | | **Sn** | **05 01 57.6** | **+0.6** |
| CEDA | | | | | IAML | | 05 02 17.3 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **JAYA** | **Jayaque - finc** | **0.69** | **137** | *i* P | | **Pn** | **05 01 38.4** | **-0.6** |
| JAYA | | | | *i* S | | **Sn** | **05 01 58.9** | **+1.1** |
| JAYA | | | | | IAML | | 05 02 01.2 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **PCG** | **Pacaya** | **0.69** | **289** | *e*P | | **Pn** | **05 01 40.0** | **+0.9** |
| **ESQI** | **Esquipulas** | **0.69** | **55** | *i* P | | **Pn** | **05 01 39.1** | **+0.1** |
| ESQI | | | | | IAML | | 05 01 39.5 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| ESQI | | | | *i* S | | **Sn** | **05 01 59.2** | **+1.4** |
| **GCG4** | **OSOP** | **0.72** | **306** | *i* P | | **Pn** | **05 01 39.4** | **+0.2** |
| GCG4 | | | | | IAML | | 05 01 39.6 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **0.72** | **117** | *i* P | | **Pn** | **05 01 38.7** | **-0.3** |
| QUEZ | | | | | IAML | | 05 02 06.5 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **PMON** | **Piamonte** | **0.75** | **127** | ⇑*e*P | | **Pn** | **05 01 39.3** | **0.0** |
| **PMON** | **Piamonte** | **0.75** | **127** | *i* P | | **Pn** | **05 01 39.0** | **-0.3** |
| PMON | | | | | IAML | | 05 02 09.2 | |
| | comp=Z,910nm,1.0s | | | | | | | |
| **GUMI** | **Mixco** | **0.81** | **305** | *i* P | | **Pn** | **05 01 39.9** | **+0.1** |
| GUMI | | | | | IAML | | 05 01 40.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **UEES** | **Universidad Ev** | **0.81** | **123** | *i* P | | **Pn** | **05 01 39.7** | **0.0** |
| UEES | | | | | IAML | | 05 02 13.7 | |
| | comp=Z,430nm,1.0s | | | | | | | |
| **SNET** | **Serv Nac Est T** | **0.83** | **125** | *i* P | | **Pn** | **05 01 39.8** | **0.0** |
| SNET | | | | *i* S | | **Sn** | **05 02 00.0** | **+0.8** |
| SNET | | | | | IAML | | 05 02 10.7 | |
| | comp=Z,860nm,1.0s | | | | | | | |
| **UTEC** | **Universidad Te** | **0.85** | **123** | *i* P | | **Pn** | **05 01 39.6** | **-0.3** |
| UTEC | | | | | IAML | | 05 02 09.6 | |
| | comp=Z,530nm,1.0s | | | | | | | |
| **IGN** | **Direccin Gen** | **0.86** | **121** | *i* P | | **Pn** | **05 01 39.7** | **-0.3** |
| IGN | | | | | IAML | | 05 02 19.9 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **LALI** | **Alcalda de L** | **0.90** | **138** | *i* P | | **Pn** | **05 01 39.9** | **-0.3** |
| LALI | | | | | IAML | | 05 01 40.3 | |
| | comp=Z,260nm,1.0s | | | | | | | |
| LALI | | | | *i* S | | **Sn** | **05 02 00.2** | **+0.3** |
| **LOMA** | **Loma Larga** | **0.90** | **125** | *e*P | | **Pn** | **05 01 41.0** | **+0.6** |
| **LOMA** | **Loma Larga** | **0.90** | **125** | *i* P | | **Pn** | **05 01 40.6** | **+0.2** |
| LOMA | | | | | IAML | | 05 02 11.2 | |
| | comp=Z,780nm,1.0s | | | | | | | |
| **PANCS** | **Alcalda de** | **0.91** | **127** | *i* P | | **Pn** | **05 01 40.0** | **-0.4** |
| PANCS | | | | | IAML | | 05 02 00.8 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **FUG** | **Fuego 3** | **0.93** | **288** | *e*P | | **Pn** | **05 01 41.3** | **+0.7** |
| **MRL** | **Marmol** | **0.94** | **15** | *e*P | | **Pn** | **05 01 41.8** | **+1.1** |
| **LLGN** | **La Laguna** | **0.96** | **90** | *i* P | | **Pn** | **05 01 40.3** | **-0.4** |
| LLGN | | | | | IAML | | 05 02 01.6 | |
| | comp=Z,760nm,1.0s | | | | | | | |
| **LFRS** | **El Faro** | **1.00** | **122** | *e*P | | **Pn** | **05 01 41.2** | **+0.1** |
| **PAVA** | **Las Pavas** | **1.06** | **115** | ⇓*i*P | | **Pn** | **05 01 41.6** | **0.0** |
| **COEG** | **Centro de Oper** | **1.16** | **118** | *e*P | | **Pn** | **05 01 42.1** | **-0.2** |
| **COEG** | **Centro de Oper** | **1.16** | **118** | *i* P | | **Pn** | **05 01 42.0** | **-0.3** |
| COEG | | | | | IAML | | 05 02 18.4 | |
| | comp=Z,360nm,1.0s | | | | | | | |
| **CHTG** | **Tecpan** | **1.18** | **300** | *i* P | | **Pn** | **05 01 42.7** | **-0.1** |
| CHTG | | | | | IAML | | 05 01 43.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **UESV** | **Universidad de** | **1.23** | **115** | *i* P | | **Pn** | **05 01 42.6** | **-0.3** |
| UESV | | | | | IAML | | 05 02 16.3 | |
| | comp=Z,250nm,1.0s | | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **1.26** | **111** | ⇓*i*P | | **Pn** | **05 01 43.3** | **+0.1** |
| **SCLA** | **Alcaldia de Sa** | **1.26** | **111** | *i* P | | **Pn** | **05 01 43.3** | **+0.1** |
| SCLA | | | | | IAML | | 05 01 43.6 | |
| | comp=Z,150nm,1.0s | | | | | | | |
| SCLA | | | | *i* S | | **Sn** | **05 02 04.5** | **-0.7** |
| **TECO** | **Alcaldia de Te** | **1.28** | **119** | *i* P | | **Pn** | **05 01 43.0** | **-0.4** |
| TECO | | | | | IAML | | 05 02 15.0 | |
| | comp=Z,250nm,1.0s | | | | | | | |
| **SARH** | **Santa Rosa de** | **1.29** | **62** | *i* P | | **Pn** | **05 01 43.9** | **+0.4** |
| SARH | | | | *i* S | | **Sn** | **05 02 05.1** | **-0.7** |
| **PQSS** | **Presa 15 de Se** | **1.44** | **112** | *e*P | | **Pn** | **05 01 44.1** | **-0.7** |
| **PQSS** | **Presa 15 de Se** | **1.44** | **112** | *i* P | | **Pn** | **05 01 44.5** | **-0.3** |
| PQSS | | | | | IAML | | 05 02 20.8 | |
| | comp=Z,210nm,1.0s | | | | | | | |
| **COEB** | **Comit de Eme** | **1.51** | **116** | *e*P | | **Pn** | **05 01 45.7** | **0.0** |
| COEB | | | | | IAML | | 05 02 17.5 | |
| | comp=Z,325nm,0.5s | | | | | | | |
| **COEB** | **Comit de Eme** | **1.51** | **116** | *i* P | | **Pn** | **05 01 45.6** | **-0.1** |
| COEB | | | | | IAML | | 05 02 17.3 | |
| | comp=Z,250nm,1.0s | | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.57** | **295** | *i* P | | **Pn** | **05 01 46.7** | **+0.2** |
| SOKI | | | | | IAML | | 05 01 53.9 | |
| | comp=Z,760nm,1.0s | | | | | | | |
| **SULM** | **Suchitepequez,** | **1.59** | **275** | *e*P | | **Pn** | **05 01 46.7** | **+0.4** |
| **STG3** | **Santiaguito 3,** | **1.68** | **289** | *e*P | | **Pn** | **05 01 48.1** | **+0.6** |
| **RTAL** | **Retalhuleu** | **1.75** | **282** | *e*P | | **Pn** | **05 01 47.4** | **-0.6** |
| **RTAL** | **Retalhuleu** | **1.75** | **282** | *i* P | | **Pn** | **05 01 47.3** | **-0.6** |
| RTAL | | | | | IAML | | 05 01 48.0 | |
| | comp=Z,400nm,1.0s | | | | | | | |
| RTAL | | | | *i* S | | **Sn** | **05 02 12.8** | **-0.9** |
| **INTHN** | **La Esperanza I** | **1.78** | **85** | *i* P | | **Pn** | **05 01 48.3** | **-0.3** |
| **CHIHN** | **Chmisales** | **1.82** | **57** | *i* P | | **Pn** | **05 01 49.0** | **0.0** |
| **MARCA** | **Marcala la Paz** | **1.84** | **90** | *i* P | | **Pn** | **05 01 48.9** | **-0.2** |
| **CNCH** | **Conchagua** | **2.22** | **113** | *i* P | | **Pn** | **05 01 52.9** | **-0.5** |
| CNCH | | | | | IAML | | 05 02 42.3 | |
| | comp=Z,510nm,1.0s | | | | | | | |
| **COMHN** | **El Horno** | **2.32** | **83** | *i* P | | **Pn** | **05 01 53.5** | **-1.1** |
| **TGUH** | **Tegucigalpa,Un** | **2.58** | **92** | *i* P | | **Pn** | **05 01 57.3** | **-0.3** |
| TGUH | | | | | IAML | | 05 01 57.9 | |
| | comp=Z,190nm,1.0s | | | | | | | |
| **PETF** | **Flores** | **2.74** | **1** | *i* P | | **Pn** | **05 01 59.1** | **-0.3** |
| PETF | | | | | IAML | | 05 01 59.9 | |
| | comp=Z,130nm,1.0s | | | | | | | |
| **CCIG** | **Comitan** |

*IDC **29** 05:08:16.3±1.3, 11°.23N×144°.73E, h0km, mb3.8/7, mbtmp3.8/8, ML3.7/1, Error ellipse: s-maj=50.1km s-min=20.1km az=94.0*

**ISC 29 05:08:21.3±1.3, 11°.3N±0°.1×144°.7E±0°.4, h35km, n14, σ0s53/9, mb3.8/7, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **2.32** | **3** | Pn | **Pn** | **05 08 56.9** | **-0.2** |
| | 20nm,0.3s,baz=171,slow=13,SNR=4.0 | | | | | | |
| GUMO | | | | Sn | **Sn** | **05 09 24.3** | **-0.1** |
| | 74nm,0.3s,baz=14,slow=21,SNR=25 | | | | | | |
| | 53nm,0.3s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.40** | **69** | T | T | 05 36 46.5 | |
| | baz=254,slow=75,SNR=18 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.41** | **69** | T | T | 05 36 50.0 | |
| | baz=254,slow=75,SNR=14 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.41** | **69** | T | T | 05 36 48.3 | |
| | baz=254,slow=75,SNR=8.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.93** | **66** | T | T | 05 37 24.5 | |
| | baz=248 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.94** | **66** | T | T | 05 37 25.7 | |
| | baz=248 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.95** | **66** | T | T | 05 37 27.9 | |
| | baz=248 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.65** | **198** | P | **P** | **05 14 50.4** | **+0.2** |
| | 0.6nm,0.7s,baz=21,slow=9.8,SNR=7.3 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **36.29** | **197** | P | **P** | **05 15 21.3** | **-0.4** |
| | 0.5nm,0.7s,baz=18,slow=9.7,SNR=4.9 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **48.56** | **326** | P | **P** | **05 17 01.7** | **+0.3** |
| | 0.6nm,0.6s,baz=134,slow=8.3,SNR=3.1 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **63.08** | **317** | P | **P** | **05 18 45.2** | **-0.1** |
| | 0.4nm,0.5s,baz=90,slow=7.4,SNR=2.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **66.31** | **320** | P | **P** | **05 19 07.4** | **+1.1** |
| | 1.7nm,0.7s,baz=106,slow=6.2,SNR=11 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **70.73** | **25** | P | **P** | **05 19 33.9** | **+0.3** |
| | 0.6nm,0.7s,baz=251,slow=5.3,SNR=5.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **71.67** | **322** | P | **P** | **05 19 39.4** | **-0.2** |
| | 1.2nm,0.5s,baz=110,slow=8.3,SNR=4.4 | | | | | | |
| | 1.2nm,0.5s | | | | | | |

*IDC **29** 05:12:16.7±1.2, 22°.25S×170°.21E, h0km, mb4.1/7, mbtmp4.1/8, ML4.2/1, Error ellipse: s-maj=33.0km s-min=29.3km az=54.0*

**ISC 29 05:12:18.6±0.9, 22°.3S±0°.2×170°.1E±0°.1, h10km, n14, σ1s30/15, mb4.2/9, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **3.42** | **274** | Pn | **Pn** | **05 13 12.6** | **+0.6** |
| | 22nm,0.3s,baz=123,slow=11,SNR=41 | | | | | | |
| DZM | | | | Sn | **Sn** | **05 13 51.7** | **-0.9** |
| | 25nm,0.3s,baz=126,slow=21,SNR=4.0 | | | | | | |
| | 46nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **33.31** | **261** | P | **P** | **05 18 57.4** | **+0.6** |
| | 2.0nm,1.0s,baz=85,slow=8.5,SNR=11 | | | | | | |
| | 2.0nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.41** | **267** | P | **P** | **05 18 56.9** | **-0.8** |
| | 0.8nm,0.5s,baz=102,slow=8.3,SNR=6.6 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.86** | **332** | P | **P** | **05 23 02.5** | **-1.9** |
| | 3.3nm,0.8s,baz=161,slow=5.9,SNR=5.2 | | | | | | |
| | 3.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.73** | **180** | P | **P** | **05 23 16.7** | **+0.5** |
| | 1.7nm,0.9s,baz=7.0,slow=3.9,SNR=4.2 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.52** | **294** | P | **P** | **05 24 33.2** | **+1.8** |
| | 0.9nm,0.3s,baz=134,slow=3.9,SNR=5.8 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.51** | **184** | ⇑P | **P** | **05 24 55.8** | **-0.8** |
| | comp=Z,69nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **86.11** | **182** | ⇑P | **P** | **05 24 58.8** | **-0.7** |
| | comp=Z,26nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **86.11** | **182** | P | **P** | **05 24 59.2** | **-0.3** |
| | comp=Z,0.9nm,0.8s,baz=56,slow=3.6,SNR=3.1 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.67** | **180** | ⇑P | **P** | **05 24 59.6** | **-2.6** |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.97** | **181** | ⇑P | **P** | **05 25 02.6** | **-1.1** |
| | comp=Z,1.9nm,0.7s,baz=161,slow=4.0 | | | | | | |
| **SONM** | **Songino Array** | **90.18** | **323** | P | **P** | **05 25 19.4** | **+0.2** |
| | comp=Z,1.5nm,1.0s,baz=132,slow=4.2,SNR=5.3 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.67** | **353** | PKPbc | **PKPdf** | **05 31 59.1** | **+0.5** |
| | comp=Z,0.5nm,0.5s,baz=332,slow=2.8,SNR=3.4 | | | | | | |
| **GERES** | **GERESS Array B** | **147.59** | **330** | PKPbc | **PKPdf** | **05 32 02.0** | **+1.4** |
| | comp=Z,0.4nm,0.3s,baz=90,slow=2.7,SNR=3.7 | | | | | | |

*NOU **29** 05:17:17.0, 37°.96S×179°.51E, h0km, MLv4.7/10, Off E. Coast of N. Island, N.Z.*

*IDC **29** 05:17:24.5±3.9, 37°.65S×178°.64E, h0km, mb3.9/3, mbtmp3.9/3, Error ellipse: s-maj=97.4km s-min=32.1km az=140.0*

*WEL **29** 05:17:29.1±0.8, 38°.S±3°.×17°.8E±°, h12km, M4.3/11, ML4.6/11, MLv4.3/11, Error ellipse: s-maj=0.0km s-min=0.0km az=94.1, confirmed*

**ISC 29 05:17:24.8±2.0, 37°.87S±0°.04×178°.78E±0°.07, h7km±10km, n112, σ0s99/124, mb3.9/3, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TDHS** | **Te Araroa Dist** | **0.40** | **306** | P | **Pg** | **05 17 33.1** | **+0.5** |
| TDHS | | | | S | **Sb** | **05 17 39.6** | **-1.0** |
| **PUZ** | **Puketiti** | **0.46** | **244** | P | **Pg** | **05 17 35.1** | **+1.4** |
| PUZ | | | | S | **Sg** | **05 17 40.2** | **+0.5** |
| **MXZ** | **Matakaoa Point** | **0.48** | **309** | P | **Pb** | **05 17 36.1** | **+0.5** |
| **MXZ** | **Matakaoa Point** | **0.48** | **309** | P | **Pb** | **05 17 36.2** | **+0.5** |
| MXZ | | | | S | **Sb** | **05 17 42.1** | **-0.7** |
| **PKGZ** | **Pakihiroa** | **0.55** | **270** | P | **Pg** | **05 17 35.7** | **+0.2** |
| PKGZ | | | | S | **Sg** | **05 17 41.2** | **-1.4** |
| **TBAS** | **Tolaga Bay Are** | **0.63** | **216** | P | **Pn** | **05 17 41.7** | **+1.6** |
| **TWGZ** | **Tauwhareparae** | **0.70** | **244** | P | **Pb** | **05 17 40.0** | **+0.6** |
| TWGZ | | | | S | **Sb** | **05 17 49.0** | **-0.3** |
| **CNGZ** | **Carnagh Statio** | **0.76** | **216** | P | **Pn** | **05 17 43.5** | **+1.6** |
| **HAZ** | **Te Kaha** | **0.79** | **278** | P | **Pg** | **05 17 40.0** | **-0.1** |
| HAZ | | | | S | **Sg** | **05 17 48.6** | **-1.8** |
| **RUGZ** | **Raukumara Rang** | **0.87** | **263** | P | **Pg** | **05 17 41.8** | **+0.1** |
| RUGZ | | | | S | **Sg** | **05 17 51.6** | **-1.4** |
| **TKGZ** | **Te Karaka** | **0.93** | **232** | P | **Pn** | **05 17 44.7** | **+0.5** |
| TKGZ | | | | S | **Sn** | **05 17 58.6** | **+0.8** |
| **MWZ** | **Matawai** | **1.09** | **244** | P | **Pb** | **05 17 46.4** | **+0.4** |
| MWZ | | | | S | **Sb** | **05 17 59.4** | **-1.0** |
| **RIGZ** | **Rimuhau** | **1.16** | **223** | P | **Pb** | **05 17 48.0** | **+0.9** |
| **OPCS** | **Opotiki Colleg** | **1.18** | **262** | P | **Pb** | **05 17 46.6** | **-1.0** |
| **RAGZ** | **Rawiri** | **1.24** | **239** | P | **Pn** | **05 17 48.8** | **+0.2** |
| **PRGZ** | **Paritu Road** | **1.27** | **213** | P | **Pn** | **05 17 49.7** | **+0.8** |
| **WIZ** | **White Island** | **1.30** | **285** | P | **Pn** | **05 17 49.3** | **-0.1** |
| **WSRZ** | **White Island S** | **1.31** | **285** | P | **Pn** | **05 17 50.0** | **+0.4** |
| **URZ** | **Urewera** | **1.37** | **253** | P | **Pn** | **05 17 50.7** | **+0.4** |
| **URZ** | **Urewera** | **1.37** | **253** | Pn | **Pn** | **05 17 50.8** | **+0.4** |
| | 335nm,0.3s,baz=218,slow=1.0,SNR=852 | | | | | | |
| URZ | | | | Sn | **Sg** | **05 18 08.8** | **-0.1** |
| | 420nm,0.3s,baz=77,slow=18,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **1.37** | **253** | P | **Pn** | **05 17 50.8** | **+0.4** |
| URZ | | | | S | **Sg** | **05 18 09.4** | **+0.5** |
| **WHRZ** | **Whale Island** | **1.43** | **270** | P | **Pb** | **05 17 52.1** | **+0.4** |
| **KNZ** | **Kokohu** | **1.44** | **217** | P | **Pn** | **05 17 51.3** | **0.0** |
| **SNGZ** | **Shannon Statio** | **1.45** | **231** | P | **Pn** | **05 17 51.7** | **+0.2** |
| **MHGZ** | **Mahia Peninsul** | **1.45** | **208** | P | **Pn** | **05 17 52.3** | **+0.8** |
| **RTZ** | **Ruatahuna** | **1.60** | **242** | P | **Pn** | **05 17 54.8** | **+1.2** |
| **EDRZ** | **Edgecumbe** | **1.63** | **281** | P | **Pn** | **05 17 54.6** | **+0.6** |
| **MARZ** | **Manawahe** | **1.67** | **265** | P | **Pn** | **05 17 54.8** | **+0.3** |
| **MUGZ** | **Murupara** | **1.69** | **248** | P | **Pn** | **05 17 55.2** | **+0.4** |
| MUGZ | | | | S | **Sb** | **05 18 17.1** | **-0.6** |
| **WHHZ** | **Waihua** | **1.71** | **225** | P | **Pn** | **05 17 54.7** | **-0.3** |
| **OPRZ** | **Ohinepanea** | **1.76** | **270** | P | **Pn** | **05 17 55.7** | **0.0** |
| **MTHZ** | **Maungataniwha** | **1.81** | **237** | P | **Pn** | **05 17 57.2** | **+0.7** |
| **TARZ** | **Mount Tarawera** | **1.83** | **258** | P | **Pn** | **05 17 57.7** | **+0.9** |
| **MKRZ** | **Makatiti** | **1.84** | **261** | P | **Pg** | **05 18 00.5** | **+0.4** |
| **RRRZ** | **Republican Roa** | **1.84** | **255** | P | **Pb** | **05 17 58.5** | **-0.4** |
| **LIRZ** | **Lichensteins R** | **1.90** | **265** | P | **Pb** | **05 17 59.4** | **-0.3** |
| **OMRZ** | **Omania** | **1.91** | **262** | P | **Pn** | **05 17 59.1** | **+1.2** |
| **HLRZ** | **Highlands Stat** | **1.95** | **258** | P | **Pn** | **05 17 59.7** | **+1.3** |
| **ARHZ** | **Aropaoanui** | **1.97** | **225** | P | **Pn** | **05 17 59.4** | **+0.8** |
| **NMHZ** | **Naumai** | **1.97** | **231** | P | **Pn** | **05 17 59.1** | **+0.4** |
| **TGRZ** | **Tauranga** | **2.00** | **273** | P | **Pn** | **05 17 58.7** | **-0.2** |
| **KARZ** | **Kaharoa** | **2.01** | **265** | P | **Pn** | **05 17 59.6** | **+0.4** |
| **HRRZ** | **Handcock Road** | **2.03** | **254** | P | **Pn** | **05 18 00.4** | **+0.9** |
| **ALRZ** | **Allen Road** | **2.04** | **249** | P | **Pn** | **05 18 00.5** | **+0.9** |
| **HSRZ** | **Hossack Road** | **2.04** | **257** | P | **Pn** | **05 18 00.8** | **+1.2** |
| **MRHZ** | **Matea Rd** | **2.09** | **242** | P | **Pn** | **05 18 01.0** | **+0.7** |
| **BKZ** | **Black Stump Fm** | **2.21** | **233** | P | **Pn** | **05 18 02.1** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **2.21** | **233** | P | **Pn** | **05 18 02.2** | **+0.2** |
| **CKHZ** | **Cape Kidnapper** | **2.23** | **216** | P | **Pn** | **05 18 01.7** | **-0.4** |
| **KMRZ** | **Kaimai** | **2.24** | **270** | P | **Pn** | **05 18 02.3** | **-0.1** |
| **MCHZ** | **McNeill Hill** | **2.26** | **225** | P | **Pn** | **05 18 02.9** | **+0.3** |
| **KUTZ** | **Kaahu Road** | **2.41** | **254** | P | **Pn** | **05 18 05.8** | **+1.1** |
| **KWHZ** | **Kaweka Forest** | **2.41** | **229** | P | **Pn** | **05 18 04.4** | **-0.3** |
| **KAHZ** | **Kahuranaki** | **2.43** | **217** | P | **Pn** | **05 18 04.4** | **-0.6** |
| **RATZ** | **Rangitukua** | **2.56** | **246** | P | **Pb** | **05 18 12.5** | **+1.4** |
| **KRHZ** | **Kereru** | **2.58** | **226** | P | **Pn** | **05 18 06.8** | **-0.2** |
| **TLZ** | **Tolley Road** | **2.59** | **259** | P | **Pn** | **05 18 07.6** | **+0.4** |
| **TOZ** | **Tahuroa Road** | **2.60** | **272** | P | **Pn** | **05 18 07.0** | **-0.2** |
| **PXZ** | **Pawanui** | **2.62** | **214** | P | **Pn** | **05 18 06.8** | **-0.8** |
| **KATZ** | **Kakaramea** | **2.66** | **245** | P | **Pb** | **05 18 12.1** | **-0.7** |
| **KUZ** | **Kuaotunu** | **2.68** | **294** | P | **Pn** | **05 18 08.1** | **-0.3** |
| **KUZ** | **Kuaotunu** | **2.68** | **294** | P | **Pn** | **05 18 08.0** | **-0.3** |
| **TMVZ** | **Te Maari** | **2.71** | **242** | P | **Pn** | **05 18 08.9** | **-0.1** |
| **ETVZ** | **East Tongariro** | **2.72** | **241** | P | **Pn** | **05 18 08.7** | **-0.3** |
| **NTVZ** | **North Tongarir** | **2.73** | **242** | P | **Pn** | **05 18 09.2** | **+0.1** |
| **OTVZ** | **Oturere** | **2.76** | **241** | P | **Pn** | **05 18 09.7** | **+0.1** |
| **NNVZ** | **North Ngauruho** | **2.78** | **242** | P | **Pn** | **05 18 11.1** | **+1.2** |
| **WTVZ** | **West Tongariro** | **2.79** | **243** | P | **Pn** | **05 18 11.1** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **2.81** | **241** | P | **Pn** | **05 18 10.5** | **+0.2** |
| **TUVZ** | **Tukino** | **2.82** | **239** | P | **Pn** | **05 18 10.8** | **+0.4** |
| **MOVZ** | **Moawhango** | **2.82** | **236** | P | **Pn** | **05 18 10.3** | **-0.1** |
| **WPHZ** | **Waipukurau** | **2.85** | **219** | P | **Pn** | **05 18 09.8** | **-0.9** |
| **PNHZ** | **Pukenui** | **2.87** | **224** | P | **Pn** | **05 18 09.9** | **-1.0** |
| **FWVZ** | **Far West T-bar** | **2.88** | **240** | P | **Pn** | **05 18 11.6** | **+0.3** |
| **WNVZ** | **Wahianoa** | **2.88** | **239** | P | **Pn** | **05 18 11.4** | **+0.1** |
| **MKAZ** | **Moumakai** | **2.97** | **284** | P | **Pn** | **05 18 12.4** | **0.0** |
| **WIAZ** | **Waiheke Island** | **3.10** | **289** | P | **Pn** | **05 18 14.5** | **+0.4** |
| **GRZ** | **Great Barrier** | **3.11** | **300** | P | **Pn** | **05 18 14.8** | **+0.6** |
| **HIZ** | **Hauiti** | **3.15** | **257** | P | **Pn** | **05 18 15.9** | **+1.0** |
| **HIZ** | **Hauiti** | **3.15** | **257** | P | **Pn** | **05 18 15.7** | **+0.8** |
| **DVHZ** | **Dannevirke** | **3.16** | **219** | P | **Pn** | **05 18 13.4** | **-1.6** |
| **ETAZ** | **East Tamaki Re** | **3.20** | **285** | P | **Pn** | **05 18 16.0** | **+0.5** |
| **MBAZ** | **Motutapu North** | **3.28** | **288** | P | **Pn** | **05 18 17.2** | **+0.6** |
| **EPAZ** | **Eden Park BICE** | **3.36** | **286** | P | **Pn** | **05 18 18.8** | **+1.1** |
| **HBAZ** | **Herne Bay Bore** | **3.38** | **286** | P | **Pn** | **05 18 19.1** | **+1.1** |
| **AWAZ** | **Awhitu Peninsu** | **3.38** | **282** | P | **Pn** | **05 18 18.8** | **+0.7** |
| **ABAZ** | **Army Bay** | **3.39** | **291** | P | **Pn** | **05 18 18.9** | **+0.8** |
| **VRZ** | **Vera Road** | **3.39** | **247** | P | **Pn** | **05 18 19.0** | **+0.9** |
| **POWZ** | **Post Office Ro** | **3.44** | **222** | P | **Pn** | **05 18 17.5** | **-1.3** |
| **PRWZ** | **Pori Road** | **3.46** | **218** | P | **Pn** | **05 18 18.0** | **-1.0** |
| **WTAZ** | **Waiatarua** | **3.47** | **284** | P | **Pn** | **05 18 20.3** | **+1.0** |
| **WAZ** | **Wanganui** | **3.51** | **236** | P | **Pn** | **05 18 20.4** | **+0.6** |
| **RVAZ** | **Riverhead Bore** | **3.52** | **287** | P | **Pn** | **05 18 20.8** | **+0.9** |
| **TIWZ** | **Tintock** | **3.67** | **217** | P | **Pn** | **05 18 20.5** | **-1.5** |
| **LREZ** | **Lake Rotokare** | **3.77** | **244** | P | **Pn** | **05 18 24.2** | **+0.8** |
| **PREZ** | **Palmer Road** | **3.90** | **246** | P | **Pn** | **05 18 27.3** | **+2.0** |
| **NEZ** | **North Egmont** | **3.93** | **248** | P | **Pn** | **05 18 27.1** | **+1.5** |
| **PKE** | **Pukeiti** | **3.98** | **249** | P | **Pn** | **05 18 27.6** | **+1.3** |
| **KHEZ** | **Kahui Hut** | **3.99** | **248** | P | **Pn** | **05 18 27.6** | **+1.1** |
| **KHEZ** | **Kahui Hut** | **3.99** | **248** | P | **Pn** | **05 18 28.0** | **+1.5** |
| **WCZ** | **Waipu Caves** | **4.04** | **297** | P | **Pn** | **05 18 28.1** | **+1.1** |
| **SNZO** | **South Karori** | **4.66** | **221** | P | **Pn** | **05 18 32.3** | **-3.2** |
| **OUZ** | **Omahuta** | **4.94** | **301** | P | **Pn** | **05 18 40.9** | **+1.5** |
| **OUZ** | **Omahuta** | **4.94** | **301** | P | **Pn** | **05 18 41.2** | **+1.8** |
| **QRZ** | **Quartz Range** | **5.67** | **237** | P | **Pn** | **05 18 46.4** | **-3.1** |
| **KHZ** | **Kahutara** | **6.06** | **220** | P | **Pn** | **05 18 52.5** | **-2.3** |
| **KHZ** | **Kahutara** | **6.06** | **220** | P | **Pn** | **05 18 54.2** | **-0.6** |
| **CTZ** | **Chatham Island** | **6.82** | **151** | P | **Pn** | **05 19 08.2** | **+2.9** |
| **STKA** | **Stephens Creek** | **30.94** | **270** | P | **P** | **05 23 43.2** | **+0.8** |
| | 1.5nm,0.7s,baz=85,slow=11,SNR=2.0 | | | | | | |
| | 1.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **40.69** | **277** | P | **P** | **05 25 05.8** | **-0.3** |
| | 1.1nm,0.7s,baz=126,slow=8.0,SNR=9.9 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.36** | **282** | P | **P** | **05 25 18.6** | **-1.2** |
| | 1.9nm,0.8s,baz=123,slow=7.1,SNR=14 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **145.17** | **344** | PKP | **PKPbc** | **05 37 01.9** | **+0.4** |
| | 1.1nm,0.7s,baz=17,slow=6.6,SNR=1.2 | | | | | | |

*IDC **29** 05:22:05.8±1.0, 22°.15S×170°.27E, h0km, mb4.2/9, mbtmp4.3/10, ML4.7/1, MS4.4/1, Error ellipse: s-maj=28.4km s-min=23.6km az=8.0*

*NEIC **29** 05:22:07.4±2.1, 22°.13S±0°.10×170°.27E±0°.08, h10km±1km, mb4.7/23, Error ellipse: s-maj=16.8km s-min=11.8km az=159.0*

*NOU **29** 05:22:10.5, 22°.05S×169°.87E, h0km, MLv4.9/9, Southeast of Loyalty Islands*

**ISC 29 05:22:07.4±0.5, 22°.20S±0°.07×170°.20E±0°.07, h10km, n69, σ1s34/66, mb4.7/31, 6C-1D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.14** | **289** | P | **Pn** | **05 22 42.0** | **-1.2** |
| **PINNC** | **Pines Island,** | **2.58** | **260** | Pn | **Pn** | **05 22 49.0** | **-0.3** |
| **YATNC** | **Mamie plateau,** | **3.07** | **272** | P | **Pn** | **05 22 55.0** | **-1.0** |
| **LIFNC** | **LIFOU** | **3.10** | **297** | P | **Pn** | **05 22 55.5** | **-0.9** |
| **LIFNC** | **LIFOU** | **3.10** | **297** | Pn | **Pn** | **05 22 55.2** | **-1.2** |
| **DZM** | **Mont Dzumac** | **3.48** | **271** | P | **Pn** | **05 23 02.0** | **+0.2** |
| **DZM** | **Mont Dzumac** | **3.48** | **271** | Pn | **Pn** | **05 23 01.3** | **-0.5** |
| **DZM** | **Mont Dzumac** | **3.48** | **271** | Pn | **Pn** | **05 23 02.3** | **+0.5** |
| | 60nm,0.3s,baz=93,slow=16,SNR=150 | | | | | | |
| DZM | | | | Sn | **Sn** | **05 23 40.1** | **-3.0** |
| | 32nm,0.3s,baz=91,slow=23,SNR=3.1 | | | | | | |
| | 209nm,0.4s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.61** | **271** | P | **Pn** | **05 23 03.3** | **-0.2** |
| **RTV** | **Rentapao** | **4.69** | **339** | P | **Pn** | **05 23 19.7** | **+1.4** |
| **DVP** | **Devils Point** | **4.83** | **337** | P | **Pn** | **05 23 20.4** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **5.75** | **285** | P | **Pn** | **05 23 34.1** | **+1.2** |
| **KOUNC** | **Koumac, New Ca** | **5.75** | **285** | Pn | **Pn** | **05 23 33.4** | **+0.6** |
| **MSVF** | **Nonsavu** | **8.62** | **60** | Pn | **Pn** | **05 24 09.5** | **-2.8** |
| **MSVF** | **Nonsavu** | **8.62** | **60** | Pn | Pn | 05 24 16.4 | +4.1 |
| | 0.2nm,0.3s,baz=218,slow=11,SNR=11 | | | | | | |
| **HNR** | **Honiara** | **16.06** | **321** | Pn | **Pn** | **05 25 53.5** | **0.0** |
| **EIDS** | **Eidsvold** | **17.78** | **256** | | **Pn** | **05 26 14.7** | **-0.4** |
| **ARMA** | **Armidale** | **18.53** | **240** | P | **P** | **05 26 24.6** | **+0.3** |
| **CTA** | **Charters Tower** | **22.43** | **271** | P | **P** | **05 27 08.3** | **+1.7** |
| | 0.4nm,0.7s,baz=94,slow=14,SNR=3.3 | | | | | | |
| **CTAO** | **Charters Tower** | **22.43** | **271** | P | **P** | **05 27 07.6** | **+1.1** |
| **COEN** | **Coen** | **26.93** | **283** | P | **P** | **05 27 50.0** | **+0.8** |
| COEN | | | | IAmb | IAmb | 05 27 50.8 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **27.17** | **243** | P | **P** | **05 27 52.2** | **+1.0** |
| **STKA** | **Stephens Creek** | **27.17** | **243** | P | **P** | **05 27 52.2** | **+1.0** |
| | comp=Z,5.8nm,0.8s,baz=70,slow=12,SNR=4.3 | | | | | | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **31.95** | **243** | P | **P** | **05 28 34.0** | **+0.4** |
| **WR0** | **Warramunga Arr** | **33.30** | **267** | P | **P** | **05 28 44.8** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 05 28 59.2 | |
| | comp=Z,13nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **33.40** | **260** | P | **P** | **05 28 45.6** | **-0.9** |
| **ASAR** | **Alice Springs** | **33.40** | **260** | P | **P** | **05 28 46.4** | **-0.1** |
| | comp=Z,5.5nm,0.8s,baz=87,slow=9.0,SNR=14 | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.47** | **267** | P | **P** | **05 28 44.6** | **-2.5** |
| WB0 | | | | IAmb | IAmb | 05 28 47.1 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.48** | **267** | P | **P** | **05 28 46.5** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 05 28 46.6 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.49** | **267** | P | **P** | **05 28 46.1** | **-1.1** |
| | comp=Z,2.7nm,0.6s,baz=101,slow=8.2,SNR=27 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **38.30** | **277** | P | **P** | **05 29 27.6** | **-0.9** |
| MTN | | | | IAmb | IAmb | 05 29 54.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **39.63** | **272** | P | **P** | **05 29 38.9** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 05 30 06.1 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.92** | **267** | P | **P** | **05 29 58.5** | **0.0** |
| **GUMO** | **Guam** | **43.38** | **323** | LR | LR | 05 47 34.9 | |
| | comp=Z,451nm,18.9s,baz=60,slow=35 | | | | | | |
| **MBWA** | **Marble Bar** | **46.73** | **261** | P | **P** | **05 30 36.6** | **-0.5** |
| **NWAO** | **Narrogin (SRO)** | **47.73** | **245** | P | **P** | **05 30 44.4** | **-0.3** |
| **SBA** | **Scott Base** | **55.73** | **181** | P | **P** | **05 31 44.9** | **+1.2** |
| **JCJ** | **Chichijima** | **56.00** | **330** | P | **P** | **05 31 46.1** | **-0.2** |
| **MYLDM** | **Lahad Datu** | **57.42** | **292** | P | **P** | **05 31 56.1** | **-0.6** |
| MYLDM | | | | IAmb | IAmb | 05 32 02.0 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **CASY** | **Casey** | **57.80** | **204** | P | **P** | **05 31 58.3** | **-0.3** |
| CASY | | | | IAmb | IAmb | 05 32 24.2 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.87** | **180** | P | **P** | **05 33 05.5** | **-0.4** |
| QSPA | | | | IAmb | IAmb | 05 33 26.6 | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.87** | **180** | P | **P** | **05 33 06.0** | **+0.1** |
| | comp=Z,2.7nm,0.9s,baz=41,slow=2.1,SNR=7.3 | | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | | |
| **NJ2** | **Nanjing** | **72.95** | **316** | *e*P | **P** | **05 33 39.0** | **+1.8** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **76.04** | **202** | P | **P** | **05 33 55.4** | **+0.7** |
| | comp=Z,2.0nm,0.9s,baz=110,slow=8.5,SNR=3.8 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **HNS** | **HongShan** | **78.99** | **318** | *e*P | **P** | **05 34 12.5** | **+0.9** |
| **BELA** | **Belgrano 2** | **79.09** | **175** | P | **P** | **05 34 10.2** | **-1.4** |
| BELA | | | | IAmb | IAmb | 05 34 22.0 | |
| | comp=Z,7.7nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.53** | **294** | P | **P** | **05 34 21.5** | **+1.1** |
| | comp=Z,1.6nm,0.6s,baz=134,slow=3.6,SNR=11 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **KMI** | **Kunming** | **80.59** | **302** | ⇑P | **P** | **05 34 22.0** | **+1.2** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **XAN** | **Xi'an** | **80.76** | **312** | *e*P | **P** | **05 34 21.8** | **+0.5** |
| XAN | | | | pP | pwP | 05 34 39.8 | +10 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **PZH** | **PanZhiHua** | **82.05** | **303** | P | **P** | **05 34 31.0** | **+2.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | |
| **XLT** | **XiLinHaoTe** | **82.35** | **324** | *e*P | **P** | **05 34 32.3** | **+2.7** |
| XLT | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **83.04** | **319** | *e*P | **P** | **05 34 34.5** | **+1.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,650nm,5.1s | | | | | | |
| **ELIB** | **Princess Elisa** | **83.40** | **190** | *d*P | **P** | **05 34 37.8** | **+3.0** |
| | comp=Z,2.2nm,1.3s | | | | | | |
| **LZH** | **Lanzhou** | **85.37** | **312** | *e*P | P | 05 34 50.5 | +5.2 |
| LZH | | | | sP | pwP | 05 34 57.0 | +3.5 |
| LZH | | | | pmax | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.66** | **184** | ⇑P | **P** | **05 34 45.1** | **-1.1** |
| | comp=Z,177nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **86.26** | **182** | P | **P** | **05 34 52.4** | **+3.3** |
| SNAA | | | | IAmb | IAmb | 05 35 00.3 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **SNAA** | **Sanae** | **86.26** | **182** | ⇑P | **P** | **05 34 48.6** | **-0.4** |
| | comp=Z,43nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **86.26** | **182** | P | **P** | **05 34 49.7** | **+0.7** |
| | comp=Z,2.5nm,1.1s,baz=201,slow=1.6,SNR=5.8 | | | | | | |
| | comp=Z,2.5nm,1.1s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.81** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| JYN | **Shimob** | **1.34 251** | ⇓ | *i* P | | **Pn** | **05 30 42.4** | **+0.3** |
| JYN | | | ⇓ | S | | **Sn** | **05 30 59.1** | **-0.1** |
| **JIM2** | **Oshima 3** | **1.35 204** | | A | | A | 05 30 42.9 | |
| | comp=E,11nm,0.5s,comp=N,10.0nm,0.5s | | | | | | | |
| **JFK** | **Kawauchi** | **1.54 24** | | A | | A | 05 30 45.0 | |
| | comp=E,4.0nm,2.6s,comp=N,3.0nm,1.2s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **1.63 292** | | P | | **Pn** | **05 30 46.2** | **+0.3** |
| | comp=N,418nm,0.6s,baz=90,slow=12,SNR=912 | | | | | | | |
| **MAJO** | **Matsushiro** | **1.64 292** | | P | | **Pn** | **05 30 46.4** | **+0.6** |
| **MAJO** | **Matsushiro** | **1.64 292** | | Pn | | **Pn** | **05 30 46.4** | **+0.6** |
| MAJO | | | | Sn | | **Sn** | **05 31 06.2** | **+0.1** |
| **MJB9** | **Matsu-Tunnel** | **1.64 292** | | Pn | | **Pn** | **05 30 46.5** | **+0.6** |
| **JMST** | **Minamisoumatoc** | **1.88 20** | | A | | A | 05 30 49.7 | |
| | comp=E,4.0nm,0.7s,comp=N,3.0nm,0.3s | | | | | | | |
| **JMM** | **Marumori** | **1.99 16** | | P | | **Pn** | **05 30 51.1** | **+0.6** |
| **JMM** | **Marumori** | **1.99 16** | | Pn | | **Pn** | **05 30 50.7** | **+0.2** |
| JMM | | | | Sn | | **Sn** | **05 31 15.0** | **+0.5** |
| **JSG** | **Sagara** | **2.02 231** | | P | | **Pn** | **05 30 52.3** | **+1.3** |
| **JSG** | **Sagara** | **2.02 231** | | | | **Pn** | **05 30 51.7** | **+0.7** |
| JSG | | | | Sn | | **Sn** | **05 31 17.3** | **+2.1** |
| JSG | | | | IAML | | | 05 31 22.4 | |
| | comp=E,1µm,0.7s | | | | | | | |
| JSG | | | | IAML | | | 05 31 26.6 | |
| | comp=N,2µm,0.6s | | | | | | | |
| **JGF** | **Kuroka** | **2.25 262** | | P | | **Pn** | **05 30 55.8** | **+1.6** |
| **JGF** | **Kuroka** | **2.25 262** | | Pn | | **Pn** | **05 30 55.3** | **+1.1** |
| JGF | | | | IAML | | | 05 31 25.0 | |
| | comp=E,394nm,0.6s | | | | | | | |
| **JSD** | **Sado** | **2.54 325** | | P | | **Pn** | **05 30 58.4** | **+0.3** |
| **JSD** | **Sado** | **2.54 325** | | Pn | | **Pn** | **05 30 58.2** | **+0.1** |
| JSD | | | | IAML | | | 05 31 44.2 | |
| | comp=N,390nm,0.8s | | | | | | | |
| **INU** | **Inuyama** | **2.58 257** | | P | | **Pn** | **05 30 59.3** | **+0.7** |
| **INU** | **Inuyama** | **2.58 257** | | Pn | | **Pn** | **05 30 58.9** | **+0.3** |
| INU | | | | IAML | | | 05 31 21.5 | |
| | comp=E,222nm,0.8s | | | | | | | |
| INU | | | | Sn | | **Sn** | **05 31 27.3** | **-1.5** |
| INU | | | | IAML | | | 05 31 41.7 | |
| | comp=N,225nm,0.7s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **2.84 185** | | P | | **Pn** | **05 31 03.3** | **+1.2** |
| | comp=N,218nm,0.3s,baz=319,slow=22,SNR=21 | | | | | | | |
| JHJ | | | | S | | **Sn** | **05 31 32.8** | **-2.4** |
| | comp=N,239nm,0.3s,baz=66,slow=23,SNR=12 | | | | | | | |
| **JHJ2** | **Mitsune** | **2.85 185** | | P | | **Pn** | **05 31 03.1** | **+0.9** |
| **JHJ2** | **Mitsune** | **2.85 185** | | Pn | | **Pn** | **05 31 02.7** | **+0.5** |
| **JTM** | **Tenmabayashi** | **4.88 9** | | P | | **Pn** | **05 31 31.7** | **+1.7** |
| **JTM** | **Tenmabayashi** | **4.88 9** | | Pn | | **Pn** | **05 31 30.6** | **+0.6** |
| JTM | | | | IAML | | | 05 32 43.3 | |
| | comp=E,44nm,2.0s | | | | | | | |
| JTM | | | | IAML | | | 05 32 50.6 | |
| | comp=N,113nm,1.2s | | | | | | | |
| **JMN** | **Monobe** | **5.57 248** | | P | | **Pn** | **05 31 40.9** | **+1.4** |
| **JMN** | **Monobe** | **5.57 248** | | | | **Pn** | **05 31 39.8** | **+0.3** |
| **ERM** | **Erimo** | **6.50 21** | | P | | **Pn** | **05 31 50.8** | **-1.3** |
| **ERM** | **Erimo** | **6.50 21** | | Pn | | **Pn** | **05 31 50.6** | **-1.5** |
| **JEM** | **Erimo** | **6.50 21** | | P | | **Pn** | **05 31 51.1** | **-1.0** |
| **JNU** | **Nakatsue** | **8.11 252** | | Pn | | **Pn** | **05 32 15.3** | **+1.1** |
| **JNU** | **Nakatsue** | **8.11 252** | | P | | **Pn** | **05 32 14.9** | **+0.7** |
| | comp=N,7.1nm,0.9s,baz=141,slow=12,SNR=6.6 | | | | | | | |
| **ASAJ** | **Asahikawa** | **8.37 12** | | P | | **Pn** | **05 32 16.1** | **-1.5** |
| | comp=N,6.7nm,0.3s,baz=214,slow=12,SNR=6.5 | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **8.37 12** | | Pn | | **Pn** | **05 32 16.4** | **-1.2** |
| **JCJ** | **Chichijima** | **9.01 168** | | Pn | | **Pn** | **05 32 24.1** | **-2.4** |
| **KSRS** | **Korea Array** | **9.89 282** | | P | | **Pn** | **05 32 39.5** | **+1.1** |
| | comp=N,2.6nm,0.5s,baz=95,slow=14,SNR=6.3 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.31 325** | | P | | **Pn** | **05 32 47.0** | **+2.9** |
| | comp=N,6.5nm,0.7s,baz=141,slow=12,SNR=12 | | | | | | | |
| **KLR** | **Kul'dur** | **14.61 338** | | P | | **Pn** | **05 33 40.2** | **-1.7** |
| | comp=N,0.9nm,0.3s,baz=177,slow=8.4,SNR=5.5 | | | | | | | |
| **SONM** | **Songimo Array** | **27.53 306** | | P | | **P** | **05 35 58.3** | **-1.0** |
| | comp=N,1.2nm,0.6s,baz=111,slow=7.9,SNR=2.6 | | | | | | | |
| | comp=N,1.2nm,0.6s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.55 117** | | T | | T | 06 06 14.1 | |
| | baz=309,slow=75,SNR=22 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.56 117** | | T | | T | 06 06 02.1 | |
| | baz=309,slow=75,SNR=21 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.57 117** | | T | | T | 06 06 15.5 | |
| | baz=309,slow=75,SNR=29 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.21 119** | | T | | T | 06 07 18.6 | |
| | baz=314,slow=75,SNR=21 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.21 119** | | T | | T | 06 07 15.2 | |
| | baz=314,slow=75,SNR=16 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.23 119** | | T | | T | 06 07 21.3 | |
| | baz=314,slow=75,SNR=14 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.87 313** | | P | | **P** | **05 38 02.3** | **+0.1** |
| | comp=N,3.6nm,0.6s,baz=91,slow=6.4,SNR=12 | | | | | | | |
| | comp=N,3.6nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.80 303** | | P | | **P** | **05 38 18.2** | **+0.3** |
| | comp=N,4.1nm,0.9s,baz=90,slow=9.5,SNR=21 | | | | | | | |
| | comp=N,4.1nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.84 309** | | P | | **P** | **05 38 33.5** | **-0.5** |
| | comp=N,2.8nm,0.4s,baz=84,slow=8.0,SNR=22 | | | | | | | |
| | comp=N,2.8nm,0.4s | | | | | | | |
| **BVAR** | **Borovoye Array** | **50.52 313** | | P | | **P** | **05 39 10.0** | **-0.1** |
| | comp=N,1.5nm,0.5s,baz=93,slow=6.9,SNR=5.6 | | | | | | | |
| | comp=N,1.5nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **50.97 32** | | P | | **P** | **05 39 13.9** | **+0.6** |
| | comp=N,1.1nm,0.8s,baz=270,slow=6.3,SNR=14 | | | | | | | |
| | comp=N,1.1nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.86 187** | | P | | **P** | **05 39 48.8** | **-0.8** |
| | comp=N,1.5nm,0.5s,baz=1.1,slow=7.5,SNR=29 | | | | | | | |
| | comp=N,1.5nm,0.5s | | | | | | | |
| **ASAR** | **Alice Springs** | **59.59 187** | | P | | **P** | **05 40 15.3** | **-0.4** |
| | comp=N,0.6nm,0.8s,baz=17,slow=12,SNR=6.1 | | | | | | | |
| | comp=N,0.6nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.63 339** | | P | | **P** | **05 40 48.0** | **-0.9** |
| | comp=N,3.2nm,0.8s,baz=60,slow=7.3,SNR=5.4 | | | | | | | |
| | comp=N,3.2nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.50 322** | | P | | **P** | **05 41 48.6** | **-1.3** |
| | comp=N,1.6nm,0.6s,baz=47,slow=7.1,SNR=4.1 | | | | | | | |
| | comp=N,1.6nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.48 52** | | P | | **P** | **05 42 03.4** | **+1.6** |
| | comp=N,0.3nm,0.7s,baz=276,slow=4.3,SNR=3.1 | | | | | | | |
| | comp=N,0.3nm,0.7s | | | | | | | |
| **PDAR** | **Pinedale Array** | **79.18 45** | | P | | **P** | **05 42 17.3** | **+0.6** |
| | comp=N,0.3nm,0.5s,baz=323,slow=1.4,SNR=2.7 | | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.62 52** | | P | | **P** | **05 43 20.0** | **+1.1** |
| | comp=N,0.3nm,0.5s,baz=287,slow=3.3,SNR=6.0 | | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | | |
| **LPAZ** | **La Paz** | **148.15 59** | | PKPbc | | **PKPdf** | **05 49 56.0** | **+1.1** |
| | comp=N,1.1nm,0.8s,baz=353,slow=8.4,SNR=5.1 | | | | | | | |
| **LPAZ** | **La Paz** | **148.15 59** | | P | | **PKPdf** | **05 49 56.1** | **+1.1** |

*ISN **29** 05:34:34.4±1.3, 34.6°N×46.2°E, h3km±35km, ML4.6*
*IDC **29** 05:34:35.2±0.6, 34.6°N×46.1°E, h0km, mb4.5/24, mbtmp4.5/33, ML3.7/9, Error ellipse: s-maj=13.7km s-min=10.7km az=152.0*
*TEH **29** 05:34:35.5, 34.6°N×46.2°E, h8km±15km, ML4.6*
*MOS **29** 05:34:35.6±1.3, 34.6°N×46.2°E, h10km, mb4.8/29, Error ellipse: s-maj=6.3km s-min=3.6km az=115.8*
*AFAD **29** 05:34:36.1±0.0, 34.7°N×46.1°E, h3km±6km, MW4.8*
*NEIC **29** 05:34:38.0±2.2, 34.7°N±0.0°×46.1°E±0.0°, h10km±1km, mb4.8/42, Error ellipse: s-maj=13.2km s-min=11.4km az=63.0*
*NAO **29** 05:34:40.2, 34.7°N×45.3°E, 36km, mb4.5*
*DSN **29** 05:34:42.0±2.9, 34.1°N×46.3°E, h19km±25km, mb5.5/1, Error ellipse: s-maj=9.1km s-min=3.4km az=63.0*

**ISC 29 05:34:36.2±0.3, 34.6°1N±0.0°2×46.2°7E±0.0°2, h10km, n701, σ1.9°78/696, mb4.7/127, 44C-20D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **IDHR** | **Dehrash** | **0.13** | **47** | Pg | **Pg** | **05** | **34** | **38.5** | **-0.9** |
| **IGHG** | **Ghaleghazi** | **0.37** | **139** | Pg | **Pg** | **05** | **34** | **43.3** | **-0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.57** | **260** | Pg | **Pg** | **05** | **34** | **47.0** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **211** | Pg | **Pg** | **05** | **34** | **47.1** | **-0.4** |
| **ILIN** | **Lien** | **0.65** | **62** | Pg | **Pg** | **05** | **34** | **48.1** | **-0.7** |
| ILIN | | | | Sg | **Sb** | **05** | **34** | **57.3** | **-1.6** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **118** | Pg | **Pg** | **05** | **34** | **49.3** | **-0.8** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **183** | Pg | **Pg** | **05** | **34** | **54.6** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.14** | **77** | Pg | **Pg** | **05** | **34** | **57.1** | **-1.1** |
| **IBZA** | **Bozab** | **1.32** | **96** | Pg | **Pg** | **05** | **35** | **00.7** | **-0.9** |
| **IBDR** | **Badra** | **1.52** | **191** | *e*Pn | **Pg** | **05** | **35** | **05.0** | **-0.5** |
| IBDR | | | | *e*Sn | **Sg** | **05** | **35** | **26.5** | **+1.2** |
| IBDR | | | | AML | AML | 05 | 35 | 39.5 | |
| | comp=N,8µm,0.8s | | | | | | | | |
| IBDR | | | | AML | AML | 05 | 35 | 39.5 | |
| | comp=E,9µm,0.7s | | | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.66** | **338** | Pg | **Pb** | **05** | **35** | **06.5** | **-0.6** |
| **IKFM** | **Kafar-mosalman** | **1.70** | **129** | Pg | **Pg** | **05** | **35** | **08.6** | **-0.2** |
| **IKRK** | **Kirkuk** | **1.77** | **297** | *e*Pn | **Pn** | **05** | **35** | **07.0** | **+0.1** |
| IKRK | | | | *e*Sn | **Sg** | **05** | **35** | **32.8** | **-0.3** |
| IKRK | | | | AML | AML | 05 | 35 | 39.1 | |
| | comp=E,24µm,0.7s | | | | | | | | |
| IKRK | | | | AML | AML | 05 | 35 | 41.2 | |
| | comp=N,19µm,0.6s | | | | | | | | |
| **IDOB** | **Doab** | **1.78** | **117** | Pg | **Pb** | **05** | **35** | **08.5** | **-0.6** |
| **HSAM** | **Samen** | **1.97** | **101** | Pn | **Pb** | **05** | **35** | **11.9** | **-0.4** |
| **MAHB** | **Mahabad** | **2.20** | **348** | Pn | **Pb** | **05** | **35** | **14.8** | **-1.4** |
| **BDRS** | **Dareh Seyedi** | **2.26** | **106** | Pn | **Pb** | **05** | **35** | **16.0** | **-1.3** |
| **IHSH** | **Hashtrud** | **2.81** | **16** | Pn | **Pb** | **05** | **35** | **23.9** | **-2.7** |
| **RAFI** | **Al-Rafai** | **2.88** | **183** | *e*Pn | **Pn** | **05** | **35** | **24.0** | **+1.8** |
| RAFI | | | | *e*Sn | **Sn** | **05** | **35** | **59.0** | **+2.1** |
| RAFI | | | | AML | AML | 05 | 36 | 20.3 | |
| | comp=N,936nm,0.4s | | | | | | | | |
| RAFI | | | | AML | AML | 05 | 36 | 20.4 | |
| | comp=E,1µm,0.5s | | | | | | | | |
| **IAZR** | **Azarshahr** | **3.07** | **356** | Pn | **Pn** | **05** | **35** | **26.9** | **+1.9** |
| **YOVA** | **Hakkari_Yksek** | **3.38** | **332** | P | **Pn** | **05** | **35** | **30.9** | **+1.7** |
| YOVA | | | | S | **Sn** | **05** | **36** | **11.1** | **+1.7** |
| YOVA | | | | *i* AML | AML | 05 | 36 | 35.0 | |
| | comp=E,883nm,1.4s | | | | | | | | |
| YOVA | | | | *i* AML | AML | 05 | 36 | 40.0 | |
| | comp=E,2µm,1.2s | | | | | | | | |
| **ISRB** | **Sarab** | **3.40** | **19** | Pn | **Pn** | **05** | **35** | **31.6** | **+2.0** |
| **CUKT** | **Cukurca** | **3.40** | **321** | P | **Pn** | **05** | **35** | **30.7** | **+1.2** |
| **CUKT** | **Cukurca** | **3.40** | **321** | P | **Pn** | **05** | **35** | **32.5** | **+3.0** |
| CUKT | | | | S | **Sn** | **05** | **36** | **07.3** | **-2.8** |
| CUKT | | | | *i* AML | AML | 05 | 36 | 34.0 | |
| | comp=E,7µm,0.9s | | | | | | | | |
| **JIR1** | **Jirandeh** | **3.56** | **53** | Pn | **Pn** | **05** | **35** | **32.5** | **+0.8** |
| **HAKT** | **HAKKARI** | **3.60** | **326** | P | **Pn** | **05** | **35** | **33.6** | **+1.3** |
| HAKT | | | | S | **Sg** | **05** | **36** | **29.3** | **-2.6** |
| HAKT | | | | *i* AML | AML | 05 | 36 | 39.0 | |
| | comp=E,2µm,0.8s | | | | | | | | |
| **ITBZ** | **Tabriz** | **3.62** | **358** | Pn | **Pn** | **05** | **35** | **34.1** | **+1.7** |
| **ISHB** | **Shabestar** | **3.70** | **352** | Pn | **Pn** | **05** | **35** | **34.7** | **+1.0** |
| **AHWZ** | **Ahwaz** | **3.83** | **148** | Pn | **Pn** | **05** | **35** | **36.9** | **+1.7** |
| **IQOM** | **Qom** | **3.96** | **85** | Pn | **Pn** | **05** | **35** | **39.1** | **+1.8** |
| **IMRD** | **Marand** | **4.12** | **354** | Pn | **Pn** | **05** | **35** | **41.5** | **+2.1** |
| **SIRT** | **Sirnak** | **4.24** | **314** | Pn | **Pn** | **05** | **35** | **42.1** | **+1.1** |
| **SIRN** | **Sirnak** | **4.25** | **314** | P | **Pn** | **05** | **35** | **41.5** | **+0.4** |
| SIRN | | | | S | **Sn** | **05** | **36** | **32.1** | **+1.3** |
| SIRN | | | | *i* AML | AML | 05 | 37 | 00.0 | |
| | comp=E,2µm,0.7s | | | | | | | | |
| **QAMS** | **Qamsar** | **4.34** | **100** | Pn | **Pn** | **05** | **35** | **44.3** | **+1.9** |
| **JHBN** | **Jahan bin** | **4.38** | **122** | Pn | **Pn** | **05** | **35** | **44.9** | **+1.9** |
| **GRMI** | **Germi** | **4.39** | **17** | Pn | **Pn** | **05** | **35** | **45.6** | **+2.6** |
| **PERV** | **Siirt/Pervari-** | **4.49** | **319** | P | **Pn** | **05** | **35** | **45.6** | **+1.1** |
| **IVRN** | **Varamin** | **4.51** | **84** | Pn | **Pn** | **05** | **35** | **46.2** | **+1.6** |
| **GEVA** | **Gevas** | **4.51** | **326** | P | **Pn** | **05** | **35** | **46.6** | **+1.8** |
| GEVA | | | | S | **Sn** | **05** | **36** | **37.0** | **-0.3** |
| GEVA | | | | *i* AML | AML | 05 | 37 | 17.0 | |
| | comp=E,339nm,1.0s | | | | | | | | |
| **TVAN** | **Van** | **4.54** | **330** | P | **Pn** | **05** | **35** | **47.4** | **+2.2** |
| **AKDM** | **Akdamar-Van** | **4.56** | **325** | *e*P | **Pn** | **05** | **35** | **48.0** | **+2.6** |
| **ZNGN** | **Zangian** | **4.57** | **122** | Pn | **Pn** | **05** | **35** | **47.5** | **+1.8** |
| **IKLH** | **Kolahrood** | **4.59** | **105** | Pn | **Pn** | **05** | **35** | **47.9** | **+1.8** |
| **VANB** | **Van** | **4.60** | **331** | *e*P | **Pn** | **05** | **35** | **47.3** | **+1.3** |
| **MZPU** | **Pul - Mazandar** | **4.69** | **66** | Pn | **Pn** | **05** | **35** | **49.2** | **+2.0** |
| **IDMV** | **Damavand** | **4.82** | **77** | Pn | **Pn** | **05** | **35** | **51.1** | **+2.0** |
| **MIDY** | **Mardin/Midyat-** | **4.83** | **307** | P | **Pn** | **05** | **35** | **50.2** | **+1.0** |
| MIDY | | | | S | **Sn** | **05** | **36** | **40.9** | **-4.3** |
| MIDY | | | | *i* AML | AML | 05 | 36 | 50.0 | |
| | comp=E,1µm,0.9s | | | | | | | | |
| MIDY | | | | *i* AML | AML | 05 | 37 | 15.0 | |
| | comp=E,1µm,0.7s | | | | | | | | |
| **SRTM** | **Siirt_Merkez** | **4.87** | **315** | P | **Pn** | **05** | **35** | **50.7** | **+1.1** |
| **KRSH** | **Karshahi** | **4.90** | **96** | Pn | **Pn** | **05** | **35** | **51.9** | **+1.8** |
| **CLDR** | **Caldiran** | **4.90** | **338** | *e*P | **Pn** | **05** | **35** | **46.9** | **-3.3** |
| **CLDR** | **Caldiran** | **4.90** | **338** | P | **Pn** | **05** | **35** | **47.1** | **-3.1** |
| **ISFB** | **Sefidab** | **4.94** | **91** | Pn | **Pn** | **05** | **35** | **52.3** | **+1.7** |
| **IBRJ** | **Brojen** | **4.97** | **121** | Pn | **Pn** | **05** | **35** | **52.7** | **+1.5** |
| **BLIS** | **Bitlis-Merkez** | **5.06** | **320** | P | **Pn** | **05** | **35** | **53.6** | **+1.3** |
| **ADCV** | **BITLIS_Adilcev** | **5.07** | **327** | P | **Pn** | **05** | **35** | **52.4** | **0.0** |
| **BTMN** | **Batman** | **5.20** | **310** | P | **Pn** | **05** | **35** | **55.0** | **+0.9** |
| **GURO** | **Guroymak-BITLI** | **5.20** | **320** | *e*P | **Pn** | **05** | **35** | **55.4** | **+1.1** |
| **GURO** | **Guroymak-BITLI** | **5.20** | **320** | Pn | **Pn** | **05** | **35** | **55.3** | **+1.1** |
| **MARD** | **Mardin** | **5.21** | **303** | P | **Pn** | **05** | **35** | **54.5** | **+0.2** |
| **IGAR** | **Gharneh** | **5.30** | **113** | Pn | **Pn** | **05** | **35** | **58.0** | **+2.3** |
| **IZEF** | **Zefreh** | **5.33** | **107** | Pn | **Pn** | **05** | **35** | **57.6** | **+1.5** |
| **SVAN** | **Silvan-Diyarba** | **5.41** | **312** | *e*P | **Pn** | **05** | **35** | **57.2** | **+0.2** |
| **SVAN** | **Silvan-Diyarba** | **5.41** | **312** | P | **Pn** | **05** | **35** | **57.1** | **+0.2** |
| **IFIR** | **Firoozkooh** | **5.41** | **77** | Pn | **Pn** | **05** | **35** | **58.7** | **+1.5** |
| **MLAZ** | **Malazgirt-MUS** | **5.42** | **328** | *e*P | **Pn** | **05** | **35** | **58.8** | **+1.6** |
| **MAZI** | **Mazidag** | **5.51** | **303** | *e*P | **Pn** | **05** | **35** | **58.2** | **-0.2** |
| **ILAS** | **Lasjerd** | **5.54** | **80** | Pn | **Pn** | **05** | **36** | **01.1** | **+2.0** |
| **KBD** | **Kabd** | **5.55** | **167** | P | **Pn** | **05** | **36** | **00.2** | **+1.3** |
| KBD | | | | S | **Sn** | **05** | **37** | **02.8** | **0.0** |
| **AGRB** | **Hanur-Agry** | **5.61** | **333** | *e*P | **Pn** | **05** | **36** | **02.1** | **+2.3** |
| **MUSM** | **Mu-Merkez** | **5.61** | **318** | P | **Pn** | **05** | **36** | **00.6** | **+0.8** |
| **GNI** | **Garni** | **5.66** | **348** | Pn | **Pn** | **05** | **36** | **02.6** | **+2.1** |
| **GNI** | **Garni** | **5.66** | **348** | P | **Pb** | **05** | **36** | **12.6** | **-2.6** |
| **GNI** | **Garni** | **5.66** | **348** | Pn | Pn | 05 | 36 | 04.7 | +4.1 |
| | comp=E,2.9nm,0.3s,baz=202,slow=18,SNR=3.4 | | | | | | | | |
| GNI | | | | Pg | **Pb** | **05** | **36** | **18.6** | **+3.4** |
| | comp=E,1.8nm,0.3s,baz=142,slow=19,SNR=13 | | | | | | | | |
| GNI | | | | Lg | Lg | 05 | 37 | 35.1 | |
| | comp=E,2.2nm,0.3s,baz=18,slow=19,SNR=1.5 | | | | | | | | |
| | comp=E,9.9nm,0.5s | | | | | | | | |
| **GNI** | **Garni** | **5.66** | **348** | *i* P | **Pn** | **05** | **35** | **58.7** | **-1.8** |
| **KOTA** | **Agri, Merkez-K** | **5.73** | **336** | P | **Pn** | **05** | **36** | **04.5** | **+3.0** |
| **KLNJ** | **Kolanjah** | **5.74** | **127** | Pn | **Pn** | **05** | **36** | **03.9** | **+2.0** |
| **IRAM** | **Ramesheh** | **5.83** | **117** | Pn | **Pn** | **05** | **36** | **04.3** | **+1.3** |
| **VRTB** | **Varto-Mus** | **5.96** | **321** | *e*P | **Pn** | **05** | **36** | **05.9** | **+1.3** |
| **DIYA** | **Diyarbakir** | **5.97** | **305** | P | **Pn** | **05** | **36** | **02.3** | **-2.4** |
| **DYBB** | **Diyarbakir** | **5.97** | **306** | *e*P | **Pn** | **05** | **36** | **05.1** | **+0.4** |
| **EATA** | **Eleskirt** | **6.05** | **331** | P | **Pn** | **05** | **36** | **08.9** | **+2.9** |
| **HANI** | **Diyarbakir_Han** | **6.06** | **310** | P | **Pn** | **05** | **36** | **05.5** | **-0.4** |
| **BNGB** | **Bingl** | **6.26** | **316** | *e*P | **Pn** | **05** | **36** | **08.9** | **+0.1** |
| **ANAR** | **Anarak** | **6.36** | **101** | Pn | **Pn** | **05** | **36** | **12.0** | **+1.8** |
| **KARS** | **Kars** | **6.52** | **338** | Pn | **Pn** | **05** | **36** | **14.0** | **+1.7** |
| **KARS** | **Kars** | **6.52** | **338** | P | **Pn** | **05** | **36** | **14.0** | **+1.7** |
| **URFA** | **Urfa** | **6.66** | **297** | *e*P | **Pn** | **05** | **36** | **13.4** | **-0.9** |
| **SVRC** | **Sivrice-ELAZID** | **6.75** | **306** | *e*P | **Pn** | **05** | **36** | **14.7** | **-0.9** |
| **KAZ2** | **Kazeron-Fars-I** | **6.76** | **136** | Pn | **Pn** | **05** | **36** | **17.6** | **+2.0** |
| **ISAD** | **Sadrabad** | **6.77** | **111** | Pn | **Pn** | **05** | **36** | **17.7** | **+1.8** |
| **AKT** | **Akhty** | **6.95** | **9** | *e*P | **Pn** | **05** | **36** | **20.6** | **+2.4** |
| AKT | | | | *e*S | **Sn** | **05** | **37** | **41.1** | **+3.7** |
| AKT | | | | pmax | pmax | | | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| AKT | | | | smax | smax | | | | |
| | comp=N,21nm,0.7s | | | | | | | | |
| AKT | | | | smax | smax | | | | |
| | comp=E,19nm,0.7s | | | | | | | | |
| AKT | | | | smax | smax | | | | |
| | comp=N,33nm,1.6s | | | | | | | | |
| **PTK** | **Pertek** | **6.98** | **310** | *e*P | **Pn** | **05** | **36** | **18.7** | **0.0** |
| **AHBU** | **AHRAM** | **7.15** | **142** | Pn | **Pn** | **05** | **36** | **22.1** | **+1.2** |
| **ERZN** | **Erzincan** | **7.21** | **315** | *e*P | **Pn** | **05** | **36** | **21.2** | **-0.6** |
| **DSBU** | **Dashti - Bushe** | **7.55** | **144** | Pn | **Pn** | **05** | **36** | **27.8** | **+1.4** |
| **BCA** | **Borcka** | **7.74** | **333** | *e*P | **Pn** | **05** | **36** | **30.6** | **+1.6** |
| **ARPR** | **Arapgir-MALATY** | **7.78** | **307** | *e*P | **Pn** | **05** | **36** | **28.9** | **-0.7** |
| **ARPR** | **Arapgir-MALATY** | **7.78** | **307** | | **Pn** | **05** | **36** | **30.2** | **+0.6** |
| **GAZ** | **Gaziantep** | **7.78** | **292** | Pn | **Pn** | **05** | **36** | **28.9** | **-0.7** |
| **DARE** | **Darende-Malaty** | **8.10** | **302** | *e*P | **Pn** | **05** | **36** | **31.1** | **-2.8** |
| **KMRS** | **Kahramanmaras** | **8.12** | **294** | *e*P | **Pn** | **05** | **36** | **33.9** | **-0.3** |
| **ASF** | **Jabal al Asfar** | **8.21** | **255** | Pn | **Pn** | **05** | **36** | **36.3** | **+0.8** |
| | comp=N,1.6nm,0.3s,baz=65,slow=0.2,SNR=10 | | | | | | | | |
| | comp=N,8.7nm,0.4s | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **8.21** | **255** | P | **Pn** | **05** | **36** | **36.0** | **+0.5** |
| **MAK** | **Makhachkala** | **8.39** | **6***c* | *i* P | Pn | 05 | 36 | 32.6 | -5.2 |
| MAK | | | | *e*S | **Sn** | **05** | **38** | **04.8** | **-7.8** |
| MAK | | | | pmax | pmax | | | | |
| | comp=Z,296nm,1.3s | | | | | | | | |
| MAK | | | | MLR | MLR | | | | |
| | comp=Z,11µm,16.0s | | | | | | | | |
| **TAHT** | **Tahtakopru-Hat** | **8.41** | **285** | *e*P | **Pn** | **05** | **36** | **39.4** | **+1.2** |
| **ESPY** | **Espiye-Giresun** | **8.67** | **319** | *e*P | **Pn** | **05** | **36** | **38.2** | **-3.6** |
| **SARI** | **SarD1z-Kayseri** | **8.79** | **298** | *e*P | **Pn** | **05** | **36** | **41.7** | **-1.8** |
| **GEM** | **Giv'at Ha'Em** | **8.93** | **264** | P | **Pn** | **05** | **36** | **48.3** | **+3.0** |
| **SHMJ** | **Saham** | **8.96** | **261** | P | **Pn** | **05** | **36** | **48.0** | **+2.3** |
| **SVSK** | **Karacayir** | **9.09** | **308** | *e*P | **Pn** | **05** | **36** | **45.7** | **-1.7** |
| **MMA0** | **Mount Meron ar** | **9.18** | **263** | P | **Pn** | **05** | **36** | **50.9** | **+2.1** |
| **MMAI** | **Mount Meron Ar** | **9.18** | **263** | Pn | **Pn** | **05** | **36** | **49.5** | **+0.7** |
| | comp=Z,3.3nm,0.3s,baz=82,slow=18,SNR=9.1 | | | | | | | | |
| MMAI | | | | Lg | Lg | 05 | 39 | 12.8 | |
| | comp=Z,3.3nm,0.3s,baz=94,slow=13,SNR=3.5 | | | | | | | | |
| | comp=Z,4.0nm,0.4s | | | | | | | | |
| **QRNJ** | **Al-Qirein** | **9.22** | **259** | P | **Pn** | **05** | **36** | **51.9** | **+2.7** |
| **HMDT** | **Nahal Hemdat** | **9.28** | **258** | P | **Pn** | **05** | **36** | **51.7** | **+1.6** |
| **SAKB** | **Bahrain** | **9.36** | **156** | P | **Pn** | **05** | **36** | **52.1** | **+0.9** |
| SAKB | | | | S | **Sn** | **05** | **38** | **32.7** | **-3.8** |
| **BNN** | **Bunyan** | **9.38** | **300** | *e*P | **Pn** | **05** | **36** | **49.1** | **-2.4** |
| **BNN** | **Bunyan** | **9.38** | **300** | Pn | **Pn** | **05** | **36** | **49.6** | **-1.9** |
| **KBZ** | **Khabaz** | **9.47** | **345** | Pn | Pn | 05 | 36 | 57.5 | +4.8 |
| | comp=Z,0.2nm,0.3s,baz=149,slow=8.2,SNR=8.1 | | | | | | | | |
| | comp=Z,4.9nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **9.47** | **345** | *i* P | **Pn** | **05** | **36** | **51.2** | **-1.4** |
| **SHA1** | **Shidzhatmaz** | **9.53** | **344** | *i* P | **Pn** | **05** | **36** | **53.9** | **+0.1** |
| **CMRD** | **Camardi-Nigde** | **9.62** | **292** | *e*P | **Pn** | **05** | **36** | **51.6** | **-3.2** |
| **SHMA** | **Al-Shehemyia** | **9.62** | **154** | P | **Pn** | **05** | **36** | **55.6** | **+0.9** |
| | SNR=5.4 | | | | | | | | |
| SHMA | | | | S | **Sn** | **05** | **38** | **39.5** | **-3.4** |
| **SLTI** | **Sal'it** | **9.68** | **259** | P | **Pn** | **05** | **36** | **58.7** | **+3.1** |
| **KIV** | **Kislovodsk** | **9.73** | **345** | Pn | **Pn** | **05** | **36** | **55.0** | **-1.4** |
| **KIV** | **Kislovodsk** | **9.73** | **345** | *e*P | **Pn** | **05** | **36** | **55.1** | **-1.3** |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **KIV** | **Kislovodsk** | **9.73** | **345** | Pn | Pn | 05 | 37 | 03.0 | +6.6 |
| | comp=Z,25nm,1.2s | | | | | | | | |
| **YOZ** | **Yozgat** | **10.08** | **303** | *e*P | **Pn** | **05** | **36** | **58.6** | **-2.5** |
| **PRNI** | **Paran** | **10.42** | **249** | P | **Pn** | **05** | **37** | **09.1** | **+3.4** |
| **SMRA** | **Abu-Samra** | **10.60** | **157** | P | **Pn** | **05** | **37** | **07.7** | **-0.4** |
| | SNR=10.0 | | | | | | | | |
| SMRA | | | | S | **Sn** | **05** | **39** | **04.6** | **-2.3** |
| **AQBJ** | **Aqaba** | **10.68** | **246** | P | **Pn** | **05** | **37** | **12.4** | **+3

comp=Z,43nm,0.8s
**PURM Purcari 17.19 319** ⇓P **P** **05 38 38.2 +0.3**
**VSR Storozhevoye 17.38 345** *e*P **Pn** **05 38 38.1 -0.6**
VSR pmax pmax
comp=Z,20nm,1.0s
**DOK Doka 17.40 154** P **Pn** **05 38 36.1 -3.0**
SNR=23
DOK S **Sn** **05 41 44.6 -8.3**
**CFR Carcaliu 17.43 313** ⇑P **P** **05 38 41.0 +0.5**
**CFR Carcaliu 17.43 313** P **P** **05 38 41.0 +0.5**
**IDI Anoyia 17.54 278** P **P** **05 38 41.0 -1.1**
IDI IAmb IAmb 05 38 47.1
comp=Z,70nm,1.3s
**IDI Anoyia 17.54 278** P **P** **05 38 41.2 -0.8**
comp=Z,1.8nm,0.3s,baz=101,slow=9.4,SNR=4.6
comp=Z,45nm,1.1s
**DQM DQM 17.70 143** P **Pn** **05 38 41.1 -1.8**
SNR=6.9
**ABKAR Akbulak array 17.78 30** P **P** **05 38 43.9 -0.5**
**VORR Voronezh 17.80 345** *e*P **Pn** **05 38 42.4 -1.5**
VORR pmax pmax
comp=Z,40nm,1.0s
**BELG Belogornoye 17.80 3** P **P** **05 38 43.8 -0.9**
comp=Z,1.6nm,0.3s,baz=76,slow=2.7,SNR=13
comp=Z,82nm,0.9s
**BELG Belogornoye 17.80 3***c i*P **Pn** **05 38 43.0 -0.9**
BELG pmax pmax
comp=Z,16nm,0.9s
**ELND Elena 17.91 304** ⇓P **P** **05 38 47.8 +1.8**
**WHFO Wadi Hawf 17.92 156** P **Pn** **05 38 42.4 -3.3**
SNR=8.9
**AKTO Aktyubinsk 17.99 25** P **P** **05 38 47.1 +0.3**
comp=Z,0.4nm,0.3s,baz=207,slow=12,SNR=18
comp=Z,10nm,0.8s
**ABTO Aybut 18.30 158** P **Pn** **05 38 46.8 -3.5**
SNR=15
**RBK Rabkut 18.45 155** P **P** **05 38 49.2 -2.9**
SNR=8.0
**SHAO Shalim 18.51 151** P **Pn** **05 38 53.1 -0.8**
**SHAO Shalim 18.51 151** P **Pn** **05 38 53.1 +0.2**
SNR=6.9
**DMTO DMTO 18.52 153** P **Pn** **05 38 52.4 -0.6**
SNR=21
**SPBR Spulber 18.56 313** ⇑P **Pn** **05 38 54.7 +1.4**
**VRI Vrincioaia 18.63 313** ⇑P **Pn** **05 38 56.0 +1.8**
**VRI Vrincioaia 18.63 313** P **Pn** **05 38 55.9 +1.8**
**PLOR Plostina 18.67 313** ⇓P **Pn** **05 38 55.9 +1.2**
**PLOR Plostina 18.67 313** P **Pn** **05 38 55.9 +1.2**
**NEHR Nehoiu 18.68 311** ⇑P **Pn** **05 38 56.2 +1.4**
**LPSR Galich'ya Gora 18.73 346** *e*P **P** **05 38 53.0 -1.9**
LPSR pmax pmax
comp=Z,90nm,0.9s
**KBL Kabul 18.75 84** P **Pn** **05 38 57.1 +1.2**
**KBL Kabul 18.75 84** P **Pn** **05 38 57.1 +1.2**
KBL pmax pmax
comp=Z,7.0nm,0.5s
**MLR Muntele Rosu 18.93 311** **P** **05 38 56.6 -0.7**
**MLR Muntele Rosu 18.93 311** P **Pn** **05 38 59.2 +1.3**
comp=Z,11nm,0.7s,baz=181,slow=8.6,SNR=13
**MLR Muntele Rosu 18.93 311** ⇓P **Pn** **05 38 58.7 +0.7**
**MLR Muntele Rosu 18.93 311** P **Pn** **05 38 58.6 +0.7**
**MLR Muntele Rosu 18.93 311** P **Pn** **05 39 01.1 +3.2**
comp=Z,20nm,0.7s
**COVR Voineasa-Covas 18.94 312** ⇑P **Pn** **05 38 59.9 +2.0**
**SORM Soroca 19.00 321** ⇑P **Pn** **05 38 59.5 +0.9**
**SORM Soroca 19.00 321** P **Pn** **05 38 59.4 +0.9**
**SORM Soroca 19.00 321** P **P** **05 38 57.4 -0.5**
**TESR Tescani 19.01 315** ⇑P **Pn** **05 38 58.9 +0.2**
**TESR Tescani 19.01 315** P **Pn** **05 38 58.4 -0.3**
comp=Z,52nm,1.1s
**ONER Baraj Valea Uz 19.07 314** ⇑P **Pn** **05 39 00.4 +0.9**
**TURR Turia 19.15 313** ⇑P **Pn** **05 39 01.8 +1.3**
**OZUR 19.31 313** ⇑P **Pn** **05 39 03.2 +0.7**
**MTUR Matau 19.36 310** ⇑P **Pn** **05 39 03.9 +0.8**
**MTUR Matau 19.36 310** P **Pn** **05 39 03.9 +0.8**
**BOSR Bodos 19.38 312** ⇑P **Pn** **05 39 04.1 +0.9**
**DOPR Dopca 19.49 312** ⇑P **Pn** **05 39 04.7 +0.1**
**ARR Arges 19.70 310** ⇑P **Pn** **05 39 08.0 +1.0**
**TNR Turnu Rosu 20.05 310** ⇑P Pn 05 39 10.8 -0.3
**TNR Turnu Rosu 20.05 310** P Pn 05 39 10.8 -0.4
**BTK Batken 20.23 67** P Pn 05 39 13.3 -0.2
**BTK Batken 20.23 67** P Pn 05 39 13.3 -0.2
BTK pmax pmax
comp=Z,6.0nm,0.8s
**LOT Lotru 20.28 309** ⇓P Pn 05 39 13.6 -0.4
**AKASG Malin Array Be 20.31 328** P **P** **05 39 11.6 -0.6**
comp=Z,16nm,0.8s,baz=138,slow=10,SNR=54
comp=Z,16nm,0.8s
**AKASG Malin Array Be 20.31 328***ce*P **P** **05 39 11.6 -0.6**
AKASG pmax pmax
comp=Z,18nm,0.8s
**AKBB Malin Array Si 20.31 328**⇑*i*P **P** **05 39 11.4 -0.8**
AKBB pmax pmax
comp=Z,40nm,1.1s
**KIEV Kiev 20.31 327** P **P** **05 39 10.9 -1.3**
KIEV IAmb IAmb 05 39 13.5
comp=Z,37nm,1.1s
**KIEV Kiev 20.31 327** ⇑P **P** **05 39 12.0 -0.2**
**KIEV Kiev 20.31 327** P **P** **05 39 12.0 -0.2**
**KIEV Kiev 20.31 327** P **P** **05 39 11.5 -0.7**
**SRE Strehaia 20.34 306** ⇑P Pn 05 39 14.5 -0.1
**SRE Strehaia 20.34 306** P Pn 05 39 14.5 -0.1
**BURAR Bucovina Array 20.42 316** ⇑P Pn 05 39 14.8 -0.9
**BURAR Bucovina Array 20.42 316** P Pn 05 39 14.7 -1.0
**FNA Florina 20.61 295** P **P** **05 39 15.2 -0.4**
FNA IAmb IAmb 05 39 17.5
comp=Z,57nm,1.0s
**FNA Florina 20.61 295** P **P** **05 39 15.2 -0.4**
FNA pmax pmax
comp=Z,57nm,1.0s
**KKAR Karatay Array 20.64 59** P Pn 05 39 18.7 +0.5
**KKAR Karatay Array 20.64 59** P Pn 05 39 18.7 +0.5
KKAR pmax pmax
comp=Z,10.0nm,1.1s
**ARCR ARCALIA 20.66 314** ⇑P Pn 05 39 18.1 -0.2
**TRKS Terek-Say 20.72 63** P Pn 05 39 19.3 0.0
**DJES Djerdap 20.80 306** ⇑P Pn 05 39 19.6 -0.4
**GZR Gura Zlata 20.90 308** ⇑P Pn 05 39 19.5 -1.7
**CJR Cluj-Napoca 20.94 312** ⇑P Pn 05 39 21.0 -0.7
**CJR Cluj-Napoca 20.94 312** P Pn 05 39 20.9 -0.8
**HERR Herculane 20.95 306** ⇑P Pn 05 39 20.9 -0.8
**BOVS Bovan 21.02 303** ⇑P **P** **05 39 21.0 +1.1**
**ARK Arkit 21.38 63** P **P** **05 39 25.2 +1.2**
**MDVR Moldovita 21.38 306** ⇑P **P** **05 39 25.2 +1.4**
**SURR Surduc 21.46 308** ⇑P **P** **05 39 25.5 +0.9**
**DRGR 21.52 312** ⇑P **P** **05 39 26.9 +1.5**
**DRGR 21.52 312** P **P** **05 39 26.8 +1.5**
**MESR Meseseni 21.53 313** ⇓P **P** **05 39 26.1 +0.7**
**OBN Obninsk 21.58 345** P **P** **05 39 25.9 +0.1**
comp=Z,24nm,0.3s,baz=165,slow=23,SNR=6.8
comp=Z,24nm,0.3s
**OBN Obninsk 21.58 345** *e*P **P** **05 39 26.3 +0.5**
OBN *e*PPP PPP 05 39 53.0
OBN pmax pmax
comp=Z,40nm,1.0s
OBN MLR MLR
comp=Z,4μm,16.0s
**KEK Kerkira 21.67 291** P **P** **05 39 25.8 -1.1**
**BZS Buzias 21.74 308** ⇑P **P** **05 39 29.3 +1.7**
**BZS Buzias 21.74 308** P **P** **05 39 29.3 +1.7**
**PUK Puka 21.93 298** P **P** **05 39 29.1 -0.7**
PUK IAmb IAmb 05 39 34.2
comp=Z,24nm,0.8s
**MOS Moscow 21.95 347** *e*P **P** **05 39 28.5 -1.3**
MOS *e* 05 39 48.5
MOS *e*S **S** **05 43 27.1 -4.9**
MOS pmax pmax
comp=Z,30nm,0.6s
**SIRR Siria 21.96 309** ⇑P **P** **05 39 31.5 +1.4**
**SJES Sjenica 22.14 301** *e*P **P** **05 39 31.6 -0.5**
**LVV L'vov 22.29 320** *e*P **P** **05 39 33.0 -0.5**
LVV pmax pmax
comp=Z,130nm,1.7s
**DRME Dracevica, Mon 22.47 298** *e*P **P** **05 39 35.0 -0.6**
**RUDO Rudo 22.65 301** *e*P **P** **05 39 35.3 -2.2**
**BBLS Lazi&#263i 22.69 302** *e*P **P** **05 39 38.2 +0.3**
**TEKS Tekeris 22.79 304** *e*P **P** **05 39 38.0 -0.9**
**KOLS Kolonicke sedl 22.79 316** *e*P **P** **05 39 40.4 +1.5**
KOLS pmax pmax
comp=Z,80nm,0.8s
**KOLS Kolonicke sedl 22.79 316** *e*P **P** **05 39 40.4 +1.5**
**UPM Unac-Piva 22.88 300** *e*P **P** **05 39 40.5 +0.4**
**KWP Kalwaria Pacla 22.90 318** *e*P **P** **05 39 40.9 +0.8**
KWP *e*S **S** **05 43 51.6 +1.7**

**KWP Kalwaria Pacla 22.90 318** P **P** **05 39 40.0 -0.1**
comp=Z,41nm,1.0s
**HAPS Han Pijesak,Bl 23.06 302** *e*P **P** **05 39 41.3 -0.6**
**BRY Bratogost 23.08 299** *e*P **P** **05 39 42.2 +0.1**
**TREB Trebinje 23.18 299** *e*P **P** **05 39 42.8 -0.2**
**AAK Ala-Archa 23.38 62** *e*P **P** **05 39 45.9 +0.7**
AAK pmax pmax
comp=Z,1.0nm,0.7s
**ARU Arti 23.39 17** P **P** **05 39 45.7 +0.9**
ARU IAmb IAmb 05 39 54.9
comp=Z,25nm,1.0s
**ARU Arti 23.39 17** ⇓*i*P **P** **05 39 46.0 +1.1**
ARU pmax pmax
comp=Z,15nm,0.9s
**ARU Arti 23.39 17** P **P** **05 39 45.4 +0.5**
**KECS Kecovo 23.62 314** *e*P **P** **05 39 49.0 +1.7**
**KECS Kecovo 23.62 314** *e*P **P** **05 39 49.0 +1.7**
**STON Ston 23.68 299** *e*P **P** **05 39 46.8 -1.1**
**PSZ Piszkesteto 23.73 312** P **P** **05 39 48.6 +0.2**
PSZ IAmb IAmb 05 39 50.5
comp=Z,20nm,0.8s
**PSZ Piszkesteto 23.73 312** ⇑P **P** **05 39 49.3 +0.8**
**PSZ Piszkesteto 23.73 312** P **P** **05 39 48.7 +0.2**
PSZ pmax pmax
comp=Z,20nm,0.8s
**MORH Mrgy, Hungar 23.89 307** ⇑P **P** **05 39 50.0 +0.1**
**MORH Mrgy, Hungar 23.89 307** P **P** **05 39 50.0 +0.1**
comp=Z,24nm,1.4s
**KIRV Kirov 24.07 4** ⇓*i*P **P** **05 39 52.3 +0.8**
**NIE Niedzica 24.16 316** *e*P **P** **05 39 53.6 +1.2**
**NIE Niedzica 24.16 316** P **P** **05 39 53.0 +0.6**
comp=Z,11nm,1.1s
**SVE Sverdlovsk 24.28 19** *e*P **P** **05 39 55.8 +2.4**
SVE pmax pmax
comp=Z,31nm,1.0s
**NACGM Naroch 24.40 332** *e*P **P** **05 39 54.5 -0.1**
comp=Z,24nm,0.9s,baz=138
**BLY Banja Luka 24.45 303** *e*P **P** **05 39 55.4 +0.2**
**LANS Liptovska Anna 24.52 314** *e*P **P** **05 39 57.3 +1.5**
LANS pmax pmax
comp=Z,12nm,0.9s
**LANS Liptovska Anna 24.52 314** *e*P **P** **05 39 57.3 +1.5**
**VYHS Vyhne 24.61 313** *e*P **P** **05 39 57.6 +1.0**
VYHS pmax pmax
comp=Z,19nm,0.9s
**VYHS Vyhne 24.61 313** *e*P **P** **05 39 57.6 +1.0**
VYHS *e* 05 59 01.8
**CEL Celeste 24.65 287** P **P** **05 39 57.4 +0.3**
comp=Z,51nm,0.9s
**A051A Mrakovica 24.71 304** *e*P **P** **05 39 57.0 -0.6**
**CUC Castrocucco 24.75 292** P **P** **05 39 56.9 -1.0**
CUC IAmb IAmb 05 40 02.0
comp=Z,35nm,1.3s
**OJC Ojcow 24.82 317** *e*P **P** **05 39 58.9 +0.4**
**OJC Ojcow 24.82 317** P **P** **05 39 58.9 +0.4**
comp=Z,120nm,0.9s
**A050A Klekovaca 24.84 302** *e*P **P** **05 39 58.8 0.0**
**MPLH Magyarany 24.93 309** P **P** **05 39 59.9 +0.5**
comp=Z,148nm,1.1s
**BRVK Borovoye 25.10 35** P **P** **05 40 03.0 +2.1**
BRVK IAmb IAmb 05 40 04.9
comp=Z,21nm,1.1s
**BRVK Borovoye 25.10 35** ⇓*i*P **P** **05 40 02.7 +1.8**
BRVK pmax pmax
comp=Z,22nm,1.1s
**BEL Belsk 25.12 321** *e*P **P** **05 40 02.5 +1.4**
**BVAR Borovoye Array 25.13 36** P **P** **05 40 03.4 +2.2**
comp=Z,7.3nm,0.7s,baz=232,slow=7.3,SNR=25
comp=Z,7.3nm,0.7s
**SUW Suwalki 25.28 327** *e*P **P** **05 40 04.2 +1.7**
**SUW Suwalki 25.28 327** P **P** **05 40 01.9 -0.6**
**SUW Suwalki 25.28 327** *e*P **P** **05 40 04.2 +1.7**
**SUW Suwalki 25.28 327** P **P** **05 40 01.9 -0.6**
SUW pmax pmax
comp=Z,104nm,1.1s
**JAVC Velka Javorina 25.47 313** *e*P **P** **05 40 05.4 +1.0**
**SMOL Smolenice 25.48 312** *e*P **P** **05 40 07.3 +2.9**
SMOL pmax pmax
comp=Z,15nm,1.3s
**KOGS Kog 25.54 307** *e*P **P** **05 40 05.5 +0.5**
**ZST Bratislava 25.57 311** *e*P **P** **05 40 06.5 +1.3**
ZST pmax pmax
comp=Z,67nm,0.7s
**ZST Bratislava 25.57 311** *e*P **P** **05 40 06.5 +1.3**
**MAUC Maruska 25.58 314** *e*P **P** **05 40 06.1 +0.7**
**OKC Ostrava-Krasne 25.59 315** *e*P **P** **05 40 05.7 +0.3**
**OKC Ostrava-Krasne 25.59 315** *e*P **P** **05 40 05.7 +0.3**
**RONA Rosalia, Austr 25.90 309** *i* P **P** **05 40 08.6 +0.3**
comp=Z,14nm,0.8s,SNR=12
**MORC Moravsky Berou 25.92 315** IAmb IAmb 05 40 11.0
comp=Z,24nm,1.0s
**MORC Moravsky Berou 25.92 315** *e*P **P** **05 40 08.3 -0.2**
**MORC Moravsky Berou 25.92 315** ⇓P **P** **05 40 09.3 +0.8**
**MORC Moravsky Berou 25.92 315** P **P** **05 40 09.2 +0.8**
**PABE Paberze 25.95 330** P **P** **05 40 07.9 -0.7**
**PABE Paberze 25.95 330** *e*P **P** **05 40 08.7 +0.1**
**BOJS Bojanci 25.96 304** *e*P **P** **05 40 08.6 -0.2**
**CONA Conrad Observa 26.25 310** *e*P **P** **05 40 12.3 +0.7**
comp=Z,6.1nm,1.0s,SNR=17
CONA *i* pP **pP** **05 40 15.1 0.0**
SNR=6.1
**ARSA Arzberg 26.26 308** *i* P **P** **05 40 12.6 +1.1**
comp=Z,15nm,1.2s
**VRAC Vranov 26.30 313** *e*P **P** **05 40 12.8 +1.0**
**VRAC Vranov 26.30 313** ⇓P **P** **05 40 12.9 +1.1**
**VRAC Vranov 26.30 313** P **P** **05 40 12.9 +1.1**
**KRUC Moravsky 26.32 312** *e*P **P** **05 40 12.2 +0.1**
**SOKA Soboth 26.41 307** *i* P **P** **05 40 13.9 +0.9**
comp=Z,6.4nm,0.8s
**VNDS Vrh nad Dolski 26.48 305** *i* P **P** **05 40 15.3 +1.8**
**KRLC Kraliky 26.49 315** *e*P **P** **05 40 13.7 +0.1**
**KRLC Kraliky 26.49 315** *e*P **P** **05 40 13.7 +0.1**
**OBKA Obir 26.69 306** *e*P **P** **05 40 18.6 +3.1**
comp=Z,9.5nm,1.1s
**OBKA Obir 26.69 306** *e*P **P** **05 40 16.5 +1.0**
**CAMP Campotosto 26.76 297** IAmb IAmb 05 40 19.2
comp=Z,27nm,1.0s
**CRNS Crni Vrh 26.77 305** *i* P **P** **05 40 16.8 +0.6**
**DPC Dobruska-Polom 26.88 315** *e*P **P** **05 40 17.2 +0.1**
**DPC Dobruska-Polom 26.88 315** *e*P **P** **05 40 17.2 +0.1**
**DPC Dobruska-Polom 26.88 315** P **P** **05 40 17.3 +0.1**
comp=Z,13nm,1.1s
**NRCA Norcia 27.01 298** P **P** **05 40 17.8 -0.6**
NRCA IAmb IAmb 05 40 22.4
comp=Z,29nm,1.0s
**FDMO Fiordimonte 27.05 298** IAmb IAmb 05 40 22.0
comp=Z,19nm,0.9s
**KSP Ksiaz 27.10 316** *e*P **P** **05 40 19.1 +0.1**
**KSP Ksiaz 27.10 316** P **P** **05 40 19.0 0.0**
comp=Z,16nm,1.3s
**CHVC Chvalec 27.13 315** *e*P **P** **05 40 19.7 +0.3**
**CHVC Chvalec 27.13 315** *e*P **P** **05 40 19.7 +0.3**
**VSU Vasula 27.18 337***ce*P **P** **05 40 18.6 -1.0**
VSU pmax pmax
comp=Z,18nm,0.9s
**MOA Molln 27.25 309** *i* P **P** **05 40 20.6 +0.1**
comp=Z,8.5nm,1.0s,SNR=4.5
**MYKA Terra Mystica 27.32 306** *e*P **P** **05 40 24.7 +3.5**
comp=Z,7.2nm,1.5s
**CKRC Cesky Krumlov 27.52 311** *e*P **P** **05 40 24.5 +1.6**
**CKRC Cesky Krumlov 27.52 311** *e*P **P** **05 40 24.5 +1.6**
**BIOA Bad Ischl, Aus 27.61 308** *i* P **P** **05 40 23.8 +0.1**
comp=Z,11nm,1.0s
**KBA Koelnbreinsper 27.64 307** *e*P **P** **05 40 24.4 +0.2**
comp=Z,9.3nm,0.7s,SNR=15
**KHC Kasperske Hory 28.08 311** P **P** **05 40 28.7 +0.7**
KHC IAmb IAmb 05 40 31.9
comp=Z,29nm,1.9s
**KHC Kasperske Hory 28.08 311** *e*P **P** **05 40 28.9 +1.0**
KHC *ex* x 05 41 52.0
**KHC Kasperske Hory 28.08 311**⇑*i*P **P** **05 40 26.4 -1.5**
KHC pmax pmax
comp=Z,27nm,1.8s
**KHC Kasperske Hory 28.08 311** P **P** **05 40 28.9 +1.0**
**ABTA Abfaltersbach 28.11 306** *i* P **P** **05 40 28.2 0.0**
comp=Z,16nm,1.5s
**LESA Schwarzleotal 28.16 307** *e*P **P** **05 40 28.9 +0.1**
comp=Z,4.2nm,0.5s
**KURBB Kurchatov Arra 28.34 46** P **P** **05 40 32.6 +2.5**
comp=Z,2.5nm,0.7s,baz=252,slow=9.2,SNR=9.9
comp=Z,2.5nm,0.7s
**KURK Kurchatov 28.43 46** *e*P **P** **05 40 31.9 +1.0**
KURK pmax pmax
comp=Z,5.0nm,1.3s

**BRG Berggiesshubel 28.47 315** *e*P **P** **05 40 32.5 +1.2**
BRG Amp 05 40 34.2
comp=Z,4.8nm,1.0s
**BRG Berggiesshubel 28.47 315** *e*P **P** **05 40 32.5 +1.2**
BRG pmax pmax
comp=Z,5.0nm,1.0s
**CTI Castel Tesino 28.54 304** P **P** **05 40 31.5 -0.6**
CTI IAmb IAmb 05 40 40.6
comp=Z,8.1nm,0.7s
**CTI Castel Tesino 28.54 304** P **P** **05 40 31.5 -0.6**
CTI pmax pmax
comp=Z,8.0nm,0.7s
**ZCCA Zocca 28.73 300** P **P** **05 40 34.5 +0.8**
**WTTA Wattenberg 28.81 307** *i* P **P** **05 40 34.2 -0.4**
comp=Z,12nm,0.9s,SNR=5.8
**WATA Walderalm 28.87 307** *i* P **P** **05 40 34.8 -0.2**
comp=Z,6.9nm,0.6s
**SQTA Sankt Quirin 29.09 306** *i* P **P** **05 40 36.5 -0.5**
comp=Z,5.9nm,0.7s,SNR=6.2
**MOTA Moosalm 29.18 307** *i* P **P** **05 40 37.0 -0.9**
comp=Z,13nm,0.9s
**CLL Collm 29.19 315** IAmb IAmb 05 40 39.7
comp=Z,12nm,1.0s
**CLL Collm 29.19 315** *i* P **P** **05 40 37.3 -0.3**
comp=Z,12nm,0.9s
CLL *e*PPP PPP 05 41 41.0
**CLL Collm 29.19 315** *i* P **P** **05 40 37.3 -0.3**
CLL pmax pmax
comp=Z,12nm,0.9s
**CLL Collm 29.19 315** P **P** **05 40 37.3 -0.3**
comp=Z,13nm,1.1s
**FETA Feichten 29.36 306** *i* P **P** **05 40 39.2 -0.3**
comp=Z,12nm,0.9s,SNR=8.2
**RETA Reutte 29.44 307** *i* P **P** **05 40 39.4 -0.6**
comp=Z,3.6nm,0.4s
**FUORN Ofenpass-Fuorn 29.59 305** P **P** **05 40 42.3 +0.6**
**MK31 Makanchi Array 29.64 55**⇑*i*P **P** **05 40 43.9 +2.2**
**MKAR Makanchi Array 29.64 55** P **P** **05 40 44.5 +2.7**
comp=Z,2.6nm,0.6s,baz=252,slow=7.3,SNR=9.6
comp=Z,2.6nm,0.6s
**VSL Villasalto 29.70 290** IAmb IAmb 05 40 56.1
comp=Z,14nm,1.1s
**FINES FINESS Array B 29.79 340** P **P** **05 40 42.5 -0.4**
comp=Z,5.1nm,0.8s,baz=143,slow=9.2,SNR=14
comp=Z,5.1nm,0.8s
**FINES FINESS Array B 29.79 340***ce*P **P** **05 40 43.2 +0.3**
FINES pmax pmax
comp=Z,5.0nm,0.8s
**BSD Bornholm Skovb 29.84 323** *e*P **P** **05 40 42.0 -1.4**
**BSD Bornholm Skovb 29.84 323** *i* P **P** **05 40 41.4 -1.9**
BSD IAmb IAmb 05 40 43.6
comp=Z,26nm,0.9s
**JOF Joensuu 29.84 346** *e*P **P** **05 40 43.7 +0.5**
**DAVA Damuels 29.98 306** *i* P **P** **05 40 44.6 -0.4**
comp=Z,20nm,0.8s,SNR=9.8
**KEST Kesra 30.09 283** P **P** **05 40 45.4 -0.6**
comp=Z,12nm,1.1s,baz=9.9,slow=2.7,SNR=9.0
comp=Z,12nm,1.1s
**KEF Keuruu 30.72 340** *e*P **P** **05 40 51.2 +0.1**
**LUNU Lund 30.82 323** *i* P **P** **05 40 51.2 -0.8**
**BJUU Bjuv 31.25 324** *i* P **P** **05 40 55.4 -0.4**
**SENIN Lac Senin/Sane 31.57 304** P **P** **05 40 58.1 -1.0**
**FABU Falkenberg 31.86 325** *i* P **P** **05 41 01.2 0.0**
**VAF Ylistaro 32.03 340** *e*P **P** **05 41 01.4 -1.2**
**BORU Boraas 32.16 326** *i* P **P** **05 41 02.9 -0.9**
**ONAU Onsala 32.43 325** *i* P **P** **05 41 04.4 -1.7**
**SSRD Sdr. Stenderup 32.69 321** *i* P **P** **05 41 07.1 -1.4**
SSRD IAmb IAmb 05 41 11.2
comp=Z,42nm,0.8s
**TJOU Tjoern 32.88 326** *i* P **P** **05 41 09.1 -1.0**
**WLF Walferdange 32.90 310** *dP* **P** **05 41 10.8 +0.4**
**BTNL Ternell 33.11 311** *dP* **P** **05 41 15.9 +3.6**
**HFS Hagfors 33.14 330** P **P** **05 41 11.9 -0.5**
comp=Z,2nm,0.7s,baz=134,slow=8.5,SNR=25
comp=Z,12nm,0.7s
**ZALV Zalesovo Beam 33.14 42** P **P** **05 41 13.3 +0.9**
comp=Z,2.2nm,0.8s,baz=253,slow=7.6,SNR=9.4
comp=Z,2.2nm,0.8s
**MUD Monsted U'grnd 33.33 322** *i* P **P** **05 41 12.0 -2.0**
MUD IAmb IAmb 05 41 16.5
comp=Z,25nm,0.8s
**SSB Saint Sauveur 33.38 301** IAmb IAmb 05 41 14.7
comp=Z,10nm,0.9s
**DGZ Jazzator, Alta 33.57 51** ⇓*i*P **P** **05 41 19.2 +2.7**
DGZ pmax pmax
comp=Z,5.0nm,1.0s
**APA Apatity 33.83 351** ⇓*i*P **P** **05 41 18.2 -0.1**
APA pmax pmax
comp=Z,11nm,0.8s
**BMRD Maredsous 33.90 310** *dP* **P** **05 41 19.2 0.0**
**DOU Dourbes 33.97 310** *dP* **P** **05 41 18.2 -1.6**
**LVZ Lovozero 33.99 352** P **P** **05 41 19.0 -0.8**
**KONO Kongsberg 34.61 328** P **P** **05 41 24.7 -0.4**
**NB2 NORSAR Subarra 34.66 331** P **P** **05 41 24.5 -1.1**
comp=Z,10nm,1.4s,baz=125,slow=9.3
**NOA NORSAR Array B 34.66 331** P **P** **05 41 24.5 -1.1**
comp=Z,2.6nm,0.8s,baz=125,slow=8.7,SNR=8.7
comp=Z,2.6nm,0.8s
**CEST Esterri de Car 35.73 297** IAmb IAmb 05 41 35.8
comp=Z,9.9nm,0.9s
**ARCES ARCESS Array B 36.82 348** P **P** **05 41 43.7 -0.3**
comp=Z,6.9nm,1.0s,baz=122,slow=4.4,SNR=7.4
comp=Z,6.9nm,1.0s
**TAM Tamanrasset 37.40 263** P **P** **05 41 50.4 +0.7**
**TAM Tamanrasset 37.40 263** P **P** **05 41 50.4 +0.7**
TAM pmax pmax
comp=Z,14nm,1.5s
**EKA Eskdalemuir Ar 39.60 317** P **P** **05 42 07.2 -0.4**
comp=Z,11nm,0.6s,baz=106,slow=8.5,SNR=23
comp=Z,11nm,0.6s
**ESDC Sonseca Array 39.94 292** P **P** **05 42 10.9 +0.2**
comp=Z,12nm,0.8s,baz=64,slow=8.3,SNR=71
ESDC PcP **PcP** **05 44 17.1 +1.1**
comp=Z,1.1nm,0.7s,baz=45,slow=3.9,SNR=5.4
comp=Z,12nm,0.8s
**PAB San Pablo 40.25 292** P **P** **05 42 13.0 -0.3**
PAB IAmb IAmb 05 42 15.8
comp=Z,30nm,1.5s
**PAB San Pablo 40.25 292** P **P** **05 42 13.0 -0.3**
PAB pmax pmax
comp=Z,31nm,1.5s
**DSB Dublin 41.18 313** P **P** **05 42 19.9 -0.8**
**ILTH Belurgan, Co L 41.23 315** P **P** **05 42 20.9 -0.2**
**PBRG Braganca 41.71 296** *e*P **P** **05 42 25.4 +0.1**
**MVO Moncorvo 42.02 295** *e*P **P** **05 42 28.0 +0.2**
**GTA Gaotai 42.51 67** P **P** **05 42 35.3 +3.4**
GTA pmax pmax
comp=Z,7.0nm,0.7s
**PVRL Vila Real 42.51 296** *e*P **P** **05 42 32.1 +0.3**
**MTE Manteigas 42.53 294** P **P** **05 42 31.7 -0.3**
**MTE Manteigas 42.53 294** *e*P **P** **05 42 32.4 +0.4**
comp=Z,39nm,1.5s
**POLO Lamas de Olo 42.56 296** *e*P **P** **05 42 32.5 +0.2**
comp=Z,14nm,1.5s
**PBAR Barrancos 42.57 291** *e*P **P** **05 42 32.3 0.0**
comp=Z,26nm,1.1s
**PCBR Castelo Branco 42.58 293** *e*P **P** **05 42 32.6 +0.3**
comp=Z,54nm,1.8s
**PMRV Marv??o 42.59 293** *e*P **P** **05 42 32.7 +0.2**
**PCAB Cabril 42.68 296** *e*P **P** **05 42 32.8 -0.3**
**PVIS Viseu 42.74 295** *e*P **P** **05 42 33.7 0.0**
**PGAV Gavieira, Arco 42.82 297** *e*P **P** **05 42 35.0 +0.6**
**PESTR Estremoz 42.85 292** *e*P **P** **05 42 34.7 +0.1**
comp=Z,25nm,1.0s
**IGLA Glengowla, Co 42.98 314** P **P** **05 42 35.6 +0.2**
**COI Coimbra 43.22 294** P **P** **05 42 38.2 +0.7**
COI IAmb IAmb 05 42 39.4
comp=Z,24nm,0.9s
**COI Coimbra 43.22 294** *e*P **P** **05 42 38.5 +1.0**
**COI Coimbra 43.22 294** P **P** **05 42 38.2 +0.7**
COI pmax pmax
comp=Z,24nm,0.9s
**PBEJ Beja 43.24 291** *e*P **P** **05 42 38.2 +0.5**
comp=Z,31nm,1.5s
**PVAQ Vaqueiros 43.27 290** *e*P **P** **05 42 37.7 -0.2**
**PMTG Montargil 43.30 292** *e*P **P** **05 42 38.3 +0.1**
comp=Z,31nm,1.8s
**PCAS Casmilo, Conde 43.31 294** *e*P **P** **05 42 39.0 +0.7**
comp=Z,58nm,1.6s
**PCVE Castro Verde 43.46 290** *e*P **P** **05 42 39.8 +0.3**
**MESJ Messejana 43.56 291** *e*P **P** **05 42 37.8 -2.5**
comp=Z,40nm,1.8s
**PSBE So Bento 43.64 293** *e*P **P** **05 42 43.4 +2.4**
**PNCL Nicolau / Gran 43.73 291** *e*P **P** **05 42 42.1 +0.4**
comp=Z,39nm,1.8s
**ZAK Zakamensk 43.79 51** *e*P **P** **05 42 44.2 +2.1**

ZAK pmax pmax
comp=Z,3.0nm,1.2s
**HSPB Hornsund (broa 44.67 351** *e*P P 05 42 53.9 +5.3
HSPB *e*S **S** **05 49 18.2 -6.3**
**SPITS Spitsbergen Ar 45.52 352** P **P** **05 42 56.0 +0.6**
comp=Z,23nm,1.1s,baz=143,slow=12,SNR=7.3
comp=Z,23nm,1.1s
**SPITS Spitsbergen Ar 45.52 352** P **P** **05 42 56.0 +0.6**
**TORD Torodi Ar. Bea 45.56 253** P **P** **05 42 56.8 +0.3**
comp=Z,4.0nm,0.8s,baz=48,slow=8.5,SNR=16
comp=Z,4.0nm,0.8s
**ULN Ulaanbaatar 46.44 54** P **P** **05 43 04.5 +1.3**
ULN IAmb IAmb 05 43 07.4
comp=Z,7.6nm,1.2s
**ULN Ulaanbaatar 46.44 54***ce*P **P** **05 43 05.7 +2.4**
ULN pmax pmax
comp=Z,7.0nm,1.2s
**PZH PanZhiHua 47.94 84** P **P** **05 43 18.3 +3.1**
PZH pmax pmax
comp=Z,9.0nm,1.2s
PZH pmax pmax
comp=Z,110nm,5.1s
**CMAR Chiang Mai Arr 49.26 95** P **P** **05 43 25.5 +0.2**
comp=Z,3.4nm,0.3s,baz=296,slow=8.5,SNR=11
comp=Z,3.4nm,0.3s
**HHC Hu-ho-hao-te 50.95 63** *e*P **P** **05 43 39.5 +1.5**
HHC pmax pmax
comp=Z,15nm,0.7s
**XAN Xi'an 50.97 72** P **P** **05 43 39.5 +1.3**
XAN pP sP 05 43 43.0 -0.2
XAN pmax pmax
comp=Z,13nm,0.9s
**DBIC Dimbokro 54.59 252** P **P** **05 44 05.0 0.0**
comp=Z,2.5nm,0.5s,baz=30,slow=7.3,SNR=7.4
comp=Z,2.5nm,0.5s
**TIXI Tiksi 55.25 22**⇑ *i*P **P** **05 44 11.0 +1.9**
TIXI pmax pmax
comp=Z,7.0nm,0.9s
**SUMG Summit 55.81 339** *i*P **P** **05 44 13.0 -0.5**
SUMG IAmb IAmb 05 44 15.9
comp=Z,18nm,1.0s
**ICESG Greenland Ices 56.72 335** *i*P **P** **05 44 19.2 -0.9**
ICESG IAmb IAmb 05 44 21.9
comp=Z,15nm,0.8s
**NEEM North Greenlan 58.08 345** *i*P **P** **05 44 30.1 +0.6**
**NJ2 Nanjing 59.45 70** *e*P **P** **05 44 39.3 0.0**
NJ2 pmax pmax
comp=Z,11nm,0.5s
**DY2G Dye2 59.79 332** *i*P **P** **05 44 40.4 -1.0**
DY2G IAmb IAmb 05 44 42.8
comp=Z,24nm,0.9s
**KLR Kul'dur 61.99 48** P **P** **05 44 56.8 +0.4**
comp=Z,0.8nm,0.4s,baz=299,slow=13,SNR=2.6
comp=Z,0.8nm,0.4s
**KLR Kul'dur 61.99 48**⇑ *i*P **P** **05 44 57.6 +1.2**
KLR pmax pmax
comp=Z,3.0nm,1.1s
**KSRS Korea Array 64.04 61** P **P** **05 45 10.3 +0.2**
comp=Z,1.8nm,0.8s,baz=284,slow=6.2,SNR=6.4
comp=Z,1.8nm,0.8s
**BOSA Boshof 65.95 200** P **P** **05 45 23.5 +0.8**
comp=Z,2.2nm,0.7s,baz=16,slow=7.7,SNR=5.7
comp=Z,2.2nm,0.7s
**SEY Seymchan 66.54 29** P **P** **05 45 26.7 +0.8**
comp=Z,5.5nm,0.7s,baz=289,slow=6.9,SNR=9.1
comp=Z,5.5nm,0.7s
**SEY Seymchan 66.54 29**⇓ *i*P **P** **05 45 28.0 +2.0**
SEY pmax pmax
comp=Z,12nm,1.3s
**BILL Bilibino 68.36 21** *e*P **P** **05 45 38.4 +1.0**
BILL *e* 05 46 07.4
BILL *e* 05 48 06.4
BILL *e*PPP PPP 05 49 47.7
BILL pmax pmax
comp=Z,10.0nm,1.3s
BILL MLR MLR
comp=Z,1μm,16.0s
**A36M Sachs Harbour 73.53 357** P **P** **05 46 09.5 +0.8**
baz=7.4
**SCHQ Schefferville 74.10 326** P **P** **05 46 12.2 -0.2**
comp=Z,9.8nm,0.9s,baz=52,slow=4.6,SNR=7.1
comp=Z,9.8nm,0.9s
**C19K Lookout Ridge 74.84 9** P **P** **05 46 19.1 +2.6**
baz=338
**C17K DeLong Mountai 74.90 11** P **P** **05 46 18.5 +1.7**
baz=335
**B21K Ikpikpuk River 74.95 7** P **P** **05 46 18.0 +0.9**
baz=342
**C18K Utukok River 75.04 10** P **P** **05 46 19.0 +1.3**
baz=337
**C23K Itkillik River 75.13 6** P **P** **05 46 20.0 +1.9**
baz=346
**RDOG Red Dog Mine 75.33 11** P **P** **05 46 19.5 +0.2**
baz=336
**C21K Knifeblade Rid 75.38 8** P **P** **05 46 20.6 +1.1**
baz=342
**C24K Franklin Bluff 75.40 5** P **P** **05 46 20.3 +0.7**
baz=347
**D20K Etivluk River 75.59 8** P **P** **05 46 22.3 +1.5**
baz=341
**D19K Kuna River 75.61 9** IAmb IAmb 05 46 23.8
comp=Z,14nm,1.1s
**D19K Kuna River 75.61 9** P **P** **05 46 22.0 +1.1**
baz=340
**D17K Noatak River 75.63 11** P **P** **05 46 21.8 +0.9**
baz=336
**D22K Ayikyak River 75.86 7** P **P** **05 46 22.7 +0.4**
baz=344
**D23K Nanushuk River 75.97 6** P **P** **05 46 23.7 +0.8**
baz=346
**E20K Nigu River 76.07 8** P **P** **05 46 24.6 +1.0**
baz=341
**C36M Paulatuk 76.10 356** P **P** **05 46 23.0 -0.6**
C36M IAmb IAmb 05 46 25.6
comp=Z,11nm,0.9s
**C36M Paulatuk 76.10 356** P **P** **05 46 24.1 +0.5**
baz=8.3
**E21K Killik River 76.15 8** P **P** **05 46 24.0 0.0**
baz=343
**E18K Tukpahlearik C 76.26 10** P **P** **05 46 25.2 +0.6**
baz=338
**TOLK Toolik Lake Re 76.38 6** IAmb IAmb 05 46 28.2
comp=Z,9.1nm,1.0s
**TOLK Toolik Lake Re 76.38 6** P **P** **05 46 25.6 +0.2**
baz=347
**E17K Hotham Inlet 76.39 11** P **P** **05 46 25.7 +0.4**
baz=337
**E19K Redstone River 76.70 9** P **P** **05 46 27.5 +0.4**
baz=340
**E28M Babbage River 77.00 2** P **P** **05 46 29.9 +1.1**
baz=355
**E24K Your Creek 77.03 6** P **P** **05 46 30.1 +1.1**
baz=348
**F14K Arctic Creek 77.07 13** P **P** **05 46 29.9 +0.7**
baz=333
**F18K Selawik 77.17 10** P **P** **05 46 30.6 +1.0**
baz=338
**F15K North Star Dit 77.17 13** P **P** **05 46 30.7 +0.9**
baz=334
**F19K Shaleruckik Mo 77.22 10** P **P** **05 46 30.9 +0.9**
baz=340
**F22K John River 77.24 7** P **P** **05 46 31.3 +1.2**
baz=345
**E29M Blow River 77.26 2** IAmb IAmb 05 46 32.5
comp=Z,11nm,1.0s
**E29M Blow River 77.26 2** P **P** **05 46 31.8 +1.5**
baz=357
**F20K Avaraart Lake 77.28 9** P **P** **05 46 31.3 +1.0**
baz=342
**E27K Coleen River 77.34 3** IAmb IAmb 05 46 33.7
comp=Z,5.9nm,0.7s
**E27K Coleen River 77.34 3** P **P** **05 46 32.3 +1.5**
baz=354
**F21K Alatna River 77.38 8** IAmb IAmb 05 46 33.9
comp=Z,6.6nm,0.9s
**F21K Alatna River 77.38 8** P **P** **05 46 32.2 +1.3**
baz=344,SNR=6.7
**INK Inuvik 77.39 360** P **P** **05 46 32.0 +1.0**
baz=0.3
**COLD Coldfoot 77.71 6** P **P** **05 46 34.1 +1.3**
baz=346
**F25K Christian Rive 77.71 5** P **P** **05 46 33.9 +1.1**
baz=350
**G16K Koyuk River 77.86 12** P **P** **05 46 34.6 +1.1**
baz=336
**G22K Bettles 77.88 7** P **P** **05 46 34.9 +1.2**
baz=345
**G19K Purcell Mounta 77.96 9** IAmb IAmb 05 46 36.7
comp=Z,9.9nm,1.1s
**G19K Purcell Mounta 77.96 9** P **P** **05 46 35.1 +0.9**
baz=341
**G18K Tagagawik 77.97 10** P **P** **05 46 35.1 +0.9**
baz=339
**F28M Old Crow 77.98 2** P **P** **05 46 34.7 +0.4**
F28M IAmb IAmb 05 47 06.1
comp=Z,7.6nm,1.2s
**F28M Old Crow 77.98 2** P **P** **05 46 35.8 +1.5**
baz=355
**G17K Kiwalik Mounta 78.04 11** P **P** **05 46 35.5 +0.9**
baz=338
**G21K Allakaket 78.05 8** IAmb IAmb 05 46 36.7
comp=Z,5.0nm,0.9s
**G21K Allakaket 78.05 8** P **P** **05 46 35.8 +1.1**
baz=344
**ANM Nome 78.07 13** P **P** **05 46 35.7 +0.9**
baz=334
**F30M Barrier River 78.08 1** P **P** **05 46 35.8 +1.0**
baz=358,SNR=8.8
**G23K Bananza Creek 78.23 7** P **P** **05 46 36.4 +0.7**
baz=346
**F31M Tsiigehtchic 78.26 0** P **P** **05 46 36.9 +1.1**
**F31M Tsiigehtchic 78.26 0** P **P** **05 46 36.5 +0.7**
baz=0.1
**G24K Hadweenzic Riv 78.46 6** P **P** **05 46 38.0 +1.0**
baz=349
**G26K Porcupine Rive 78.47 4** P **P** **05 46 38.1 +1.2**
baz=352,SNR=5.8
**G25K Bearman Lake 78.50 5** P **P** **05 46 38.2 +1.1**
baz=350
**H19K Roundabout Mou 78.63 9** P **P** **05 46 39.0 +1.1**
baz=341
**H17K Granite Mounta 78.68 11** P **P** **05 46 39.4 +1.2**
baz=338
**G30M tAoh Zraii Nji 78.71 1** P **P** **05 46 39.2 +0.8**
baz=358,SNR=7.7
**H18K Honhosa River 78.72 10** P **P** **05 46 39.7 +1.3**
baz=340
**G27K Doyon Strip 78.72 3** P **P** **05 46 39.8 +1.4**
baz=354,SNR=8.2
**G29M Pine Creek 78.74 2** IAmb IAmb 05 46 40.4
comp=Z,13nm,1.1s
**G29M Pine Creek 78.74 2** P **P** **05 46 39.6 +1.1**
baz=357,SNR=6.1
**G31M Satah River 78.78 0** P **P** **05 46 38.3 -0.3**
**G31M Satah River 78.78 0** P **P** **05 46 38.9 +0.2**
baz=360,SNR=15
**H20K Anotleneega Mo 78.87 9** P **P** **05 46 40.1 +0.9**
baz=342,SNR=9.3
**H22K Ishtalitna Cre 78.89 7** P **P** **05 46 40.6 +1.3**
baz=345
**H21K Melozitna Rive 78.96 8** IAmb IAmb 05 46 42.8
comp=Z,10nm,1.1s
**H21K Melozitna Rive 78.96 8** P **P** **05 46 40.9 +1.2**
baz=344,SNR=9.9
**H25L Birch Creek 79.01 5** P **P** **05 46 41.1 +1.2**
baz=350
**H23K Yukon River 79.14 7** P **P** **05 46 41.7 +1.0**
baz=347
**H24K Noodor Dome 79.28 6** P **P** **05 46 42.7 +1.2**
baz=348
**H27K Steamboat Moun 79.30 3** P **P** **05 46 42.9 +1.3**
baz=354,SNR=6.7
**EPYK Eagle Plains 79.31 1** IAmb IAmb 05 46 43.2
comp=Z,8.1nm,0.9s
**EPYK Eagle Plains 79.31 1** P **P** **05 46 41.9 +0.2**
baz=358
**H29M Whitestone 79.43 2** P **P** **05 46 43.2 +1.0**
baz=356
**I20K Naaghedeneel 79.59 9** P **P** **05 46 44.1 +1.0**
baz=343
**PRP Porcupine Dome 79.77 5** P **P** **05 46 45.3 +0.9**
baz=350
**MLY Manley 79.79 7** P **P** **05 46 45.6 +1.2**
baz=346
**I23K Minto, Yukon-K 79.82 7** P **P** **05 46 45.4 +1.1**
baz=347
**H31M Peel River 79.91 0** P **P** **05 46 45.0 +0.1**
baz=360
**I27K Kandik River 79.92 3** P **P** **05 46 45.8 +0.8**
baz=354
**POKR Poker Plat Res 80.02 6** P **P** **05 46 45.8 +0.3**
baz=349
**J14K Nanvaranak Lak 80.06 13** P **P** **05 46 46.8 +1.1**
baz=336
**J16K Anvik River 80.11 12** P **P** **05 46 47.1 +1.1**
baz=338
**I26K Coal Creek Min 80.14 4** IAmb IAmb 05 46 48.7
comp=Z,7.2nm,0.9s
**I26K Coal Creek Min 80.14 4** P **P** **05 46 47.1 +1.0**
baz=352
**I28M Miner Creek 80.15 3** P **P** **05 46 47.5 +1.2**
baz=355,SNR=6.9
**J19K Poorman 80.20 10** P **P** **05 46 47.8 +1.3**
baz=342
**COLA College 80.22 6** P **P** **05 46 47.9 +1.3**
baz=348
**J20K Nowinta River 80.23 9** P **P** **05 46 48.5 +1.9**
baz=343
**J17K VABM Dome 80.25 11** P **P** **05 46 47.8 +1.0**
baz=339
**I29M Ogilvie Camp, 80.29 2** P **P** **05 46 47.3 +0.4**
baz=356
**ILAR Eielson Array 80.41 6** P **P** **05 46 47.8 +0.2**
comp=Z,1.9nm,1.0s,baz=333,slow=4.3,SNR=11
comp=Z,1.9nm,1.0s
**I30M Mount Dempster 80.47 1** IAmb IAmb 05 46 50.3
comp=Z,8.5nm,0.9s
**I30M Mount Dempster 80.47 1** P **P** **05 46 48.5 +0.4**
baz=358,SNR=11
**J18K Innoko River 80.55 10** P **P** **05 46 49.1 +0.7**
baz=341
**K13K Kusilvak Mount 80.59 14** P **P** **05 46 49.4 +0.9**
baz=335
**BPAW Bear Paw Mtn. 80.67 8** P **P** **05 46 49.1 0.0**
**BPAW Bear Paw Mtn. 80.67 8** P **P** **05 46 50.1 +1.0**
baz=346
**J25K Salcha River, 80.68 5** P **P** **05 46 49.6 +0.5**
baz=350
**HDA Harding Lake 80.76 6** P **P** **05 46 49.5 0.0**
baz=349
**EGAK Eagle 80.77 3** P **P** **05 46 49.8 +0.3**
EGAK IAmb IAmb 05 46 52.0
comp=Z,7.7nm,1.1s
**EGAK Eagle 80.77 3** P **P** **05 46 50.1 +0.6**
baz=354,SNR=8.4
**K15K Wolf Creek Mou 80.86 13** P **P** **05 46 50.6 +0.5**
baz=337
**J26L Joseph Creek 80.91 4** P **P** **05 46 51.0 +0.6**
baz=352,SNR=5.8
**K17K Iditarod 81.02 11** P **P** **05 46 51.8 +1.0**
baz=340
**K20K Telida 81.02 9** P **P** **05 46 51.9 +1.0**
baz=343
**J30M Hart River 81.12 1** IAmb IAmb 05 46 54.3
comp=Z,7.8nm,0.9s
**J30M Hart River 81.12 1** P **P** **05 46 52.3 +0.8**
baz=358,SNR=7.7
**MCK McKinley 81.25 7** P **P** **05 46 52.0 -0.2**
baz=348
**SCRK Sand Creek 81.41 5** P **P** **05 46 54.0 +0.9**
baz=352
**L15K Ungalak Mounta 81.44 13** P **P** **05 46 54.2 +1.1**
baz=337
**K24K Donnelly Dome 81.45 5** P **P** **05 46 54.4 +1.2**
baz=350
**K27K Chicken 81.47 4** P **P** **05 46 54.1 +0.9**
baz=353
**L14K Kuka Creek 81.52 14** P **P** **05 46 54.7 +1.1**
baz=336
**DAWY Dawson 81.55 3** P **P** **05 46 54.7 +1.0**
DAWY IAmb IAmb 05 46 55.7
comp=Z,7.9nm,1.1s
**DAWY Dawson 81.55 3** P **P** **05 46 55.0 +1.3**
baz=355,SNR=6.5
**L17K Donlin 81.57 11** P **P** **05 46 55.1 +1.3**
baz=340
**L18K Granite Mounta 81.74 11** P **P** **05 46 55.5 +0.8**
baz=341
**L16K Owhat River 81.77 12** P **P** **05 46 55.4 +0.5**
baz=339
**K29M Barlow Dome 81.83 2** P **P** **05 46 56.3 +1.0**
baz=357,SNR=5.3
**L20K Farewell, AK 81.89 9** P **P** **05 46 56.4 +0.9**
baz=344
**YKA Yellowknife Ar 82.01 351** P **P** **05 46 55.7 -0.4**
comp=Z,3.0nm,1.0s,baz=13,slow=5.7,SNR=14
comp=Z,3.0nm,1.0s
**DHY Denali Highway 82.04 6** P **P** **05 46 57.3 +0.8**
baz=349
**L19K White Mountain 82.04 10** P **P** **05 46 57.6 +1.2**
baz=343
**WRGLY Wrigley 82.15 355** P **P** **05 46 58.0 +1.1**
baz=8.7
**M14K Bethel 82.20 14** P **P** **05 46 57.8 +0.7**
baz=337
**M13K Dall Lake 82.24 14** P **P** **05 46 58.7 +1.4**
baz=336
**PAX Paxson 82.30 5** P **P** **05 46 58.3 +0.6**
baz=350
**M19K Big River Lodg 82.38 10** P **P** **05 46 59.1 +1.0**
baz=343
**L26K Log Cabin Wild 82.39 4** P **P** **05 46 58.9 +0.7**
baz=352
**M17K Holitna River 82.40 11** P **P** **05 46 59.2 +1.1**
baz=341
**L27K Beaver Creek, 82.44 4** P **P** **05 46 59.9 +1.4**
baz=353
**WAT6 Susitna Watana 82.49 6** P **P** **05 46 59.4 +0.5**
baz=349
**M15K Kasigluk River 82.50 13** P **P** **05 46 59.5 +0.8**
baz=338
**M16K Timber Creek 82.50 12** P **P** **05 46 59.7 +0.9**
baz=339
**L29M L29M 82.55 2** P **P** **05 47 00.1 +1.1**
baz=356
**M18K Stony River 82.56 10** P **P** **05 46 59.3 +0.3**
baz=342
**M20K Styx River 82.56 9** P **P** **05 46 59.7 +0.6**
baz=344
**SKT Skwentna 82.67 8** P **P** **05 47 00.1 +0.4**
baz=345
**HARP HAARP 82.89 5** P **P** **05 47 02.4 +1.6**
baz=351
**M26K Nabesna, AK 83.04 4** P **P** **05 47 02.2 +0.6**
baz=352
**N16K Nishlik Lake 83.05 12** P **P** **05 47 02.8 +1.1**
baz=340
**M24K Tolsona, Glenn 83.09 6** P **P** **05 47 03.8 +1.9**
baz=350
**N15K Kwethluk River 83.10 13** P **P** **05 47 02.9 +1.0**
baz=338
**M27K Edge Creek, AK 83.14 4** IAmb IAmb 05 47 05.5
comp=Z,9.1nm,1.1s
**M27K Edge Creek, AK 83.14 4** P **P** **05 47 04.0 +1.8**
baz=353
**SML Sawmill 83.19 7** P **P** **05 47 03.0 +0.6**
baz=348
**M29M Somme Creek 83.21 2** P **P** **05 47 02.4 -0.1**
baz=356
**SCM Sheep Creek Mo 83.26 6** P **P** **05 47 03.5 +0.8**
baz=349
**SUA Susitna One 83.27 8** P **P** **05 47 03.0 +0.1**
**SUA Susitna One 83.27 8** P **P** **05 47 04.0 +1.1**
baz=346
**PMR Palmer 83.32 7** P **P** **05 47 04.3 +1.4**
baz=347
**N18K Kilae Creek 83.33 11** P **P** **05 47 04.5 +1.5**
baz=342
**N19K Bonanza Creek 83.41 10** IAmb IAmb 05 47 06.6
comp=Z,9.4nm,1.0s
**N19K Bonanza Creek 83.41 10** P **P** **05 47 05.0 +1.5**
baz=343
**FARO Faro, Yukon 83.50 360** P **P** **05 47 05.3 +1.3**
baz=0.5
**M31M Drury Creek, Y 83.52 0** P **P** **05 47 04.4 +0.4**
baz=360
**KNK Knik Glacier 83.57 7** P **P** **05 47 05.9 +1.6**
baz=348
**KLU Klutina 83.72 6** P **P** **05 47 06.0 +0.8**
**KLU Klutina 83.72 6** P **P** **05 47 06.2 +1.1**
baz=350
**RC01 Rabbit Creek A 83.75 8** P **P** **05 47 05.9 +0.7**
**RC01 Rabbit Creek A 83.75 8** P **P** **05 47 06.2 +1.0**
baz=347
**YUK3 Moose Creek 83.80 3** P **P** **05 47 06.5 +0.8**
baz=355
**O16K Kokwok River B 83.99 12** P **P** **05 47 07.7 +1.3**
baz=340
**O17K Koliganek Bris 83.99 12** P **P** **05 47 08.0 +1.5**
baz=341
**O15K Ungalikthiuk R 84.07 13** P **P** **05 47 08.2 +1.3**
baz=339
**TGTN Hyland Airport 84.10 357** P **P** **05 47 08.3 +1.2**
baz=4.7
**PWL Port Wells 84.12 7** P **P** **05 47 08.5 +1.4**
baz=348
**GLI Glacier Island 84.22 7** P **P** **05 47 08.0 +0.4**
baz=349
**YUK4 Talbot Arm 84.30 2** P **P** **05 47 08.3 +0.1**
baz=356
**P16K Nushagak River 84.54 12** P **P** **05 47 10.0 +0.7**
baz=340
**P17K Kvichak River 84.65 12** P **P** **05 47 10.5 +0.7**
baz=342
**EYAK Cordova Ski Ar 84.67 6** P **P** **05 47 10.7 +0.9**
baz=350
**P19K Oil Pt 84.70 10** P **P** **05 47 08.9 -1.2**
baz=344
**O30N Mendenhall 84.94 1** P **P** **05 47 11.6 +0.2**
baz=358
**L61B Northampton 85.14 319** P **P** **05 47 13.1 +0.5**
baz=46
**Q18K Katmai Hardscr 85.40 11** P **P** **05 47 14.5 +0.7**
baz=343
**P33M Teslin, Yukon 85.52 360** P **P** **05 47 15.0 +0.7**
baz=0.9
**Q17K Contact Creek 85.63 12** P **P** **05 47 15.7 +0.9**
baz=342
**LIRD Liard River Hi 86.11 356** P **P** **05 47 18.7 +1.6**
baz=6.4
**P32M Atlin 86.15 360** P **P** **05 47 17.6 +0.2**
baz=0.2
**PLBC Pleasant Camp 86.25 1** P **P** **05 47 18.8 +1.0**
baz=358
**R33M Jennings River 86.31 359** P **P** **05 47 18.4 +0.1**
baz=2.4
**KDAK Kodiak Island 86.60 10** P **P** **05 47 19.5 0.0**
baz=345
**TOAD Toad River Com 86.62 356** P **P** **05 47 19.3 -0.4**
baz=7.1
**OHAK Old Harbor 87.04 11** P **P** **05 47 21.9 +0.2**
baz=344
**DLBC Dease Lake 87.25 358** P **P** **05 47 21.3 -1.4**
baz=3.2
**P52A Corning 92.09 323** P **P** **05 47 44.1 -1.7**
baz=40
**R11B Troy Canyon, C 105.48 345** P **PKiKP** **05 52 59.7 -0.1**
baz=16

*IDC **29** 05:39:20.7±0.7,22.37S×170.18E,h0km,mb4.3/13, mbtmp4.2/14,ML4.2/1,Error ellipse: s-maj=22.3km s-min=20.1km az=98.0*
**ISC 29 05:39:24.6**±0.6,**22.43S**±0.1×**170.00E**±0.0,**h21**km,**n22**, σ1§**22**/24,**mb4.3**/16,**3C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.31** | **276** | Pn | **Pn** | **05 40 15.4** | **+0.1** |
| | 21nm,0.3s,baz=133,slow=13,SNR=108 | | | | | | |
| DZM | | | | Sn | **Sn** | **05 40 53.8** | **-0.4** |
| | 7.1nm,0.3s,baz=50,slow=12,SNR=7.8 | | | | | | |
| | 55nm,0.4s | | | | | | |
| **MSVF** | **Nonsavu** | **8.89** | **60** | Pn | **Pn** | **05 41 34.3** | **+2.2** |
| | 0.5nm,0.3s,baz=253,slow=14,SNR=5.9 | | | | | | |
| **CTA** | **Charters Tower** | **22.25** | **272** | P | **P** | **05 44 22.4** | **+2.2** |
| | 0.2nm,0.6s,baz=80,slow=8.5,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **33.18** | **261** | P | **P** | **05 46 00.3** | **+0.2** |
| | 4.7nm,0.8s,baz=88,slow=9.0,SNR=29 | | | | | | |
| | 4.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.30** | **268** | P | **P** | **05 46 00.3** | **-0.7** |
| | 2.9nm,0.9s,baz=98,slow=8.1,SNR=12 | | | | | | |
| | 2.9nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.90** | **332** | P | **P** | **05 50 07.3** | **-1.6** |
| | 1.1nm,0.3s,baz=173,slow=7.3,SNR=4.9 | | | | | | |
| | 1.1nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.63** | **180** | P | **P** | **05 50 20.3** | **+0.5** |
| | 2.5nm,0.9s,baz=29,slow=0.4,SNR=9.6 | | | | | | |
| | 2.5nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **71.53** | **326** | P | **P** | **05 50 43.9** | **-0.1** |
| | 3.1nm,1.0s,baz=150,slow=8.4,SNR=5.3 | | | | | | |
| | 3.1nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.89** | **333** | P | **P** | **05 51 04.4** | **+0.7** |
| | 2.8nm,0.9s,baz=147,slow=4.5,SNR=4.7 | | | | | | |

2.8nm,0.9s
**MAW Mawson 75.75 202** P **P** **05 51 08.8 +0.4**
2.3nm,1.0s,baz=108,slow=9.7,SNR=4.4
2.3nm,1.0s
**PETK Petropavlovsk- 75.98 352** P **P** **05 51 09.1 -0.7**
3.1nm,0.8s,baz=123,slow=11,SNR=3.7
3.1nm,0.8s
**CMAR Chiang Mai Arr 80.46 294** P **P** **05 51 37.5 +2.1**
1.3nm,0.3s,baz=131,slow=4.9,SNR=1.4
1.3nm,0.3s
**SNAA Sanae 86.01 182** ⇑P **P** **05 52 01.6 -1.6**
comp=Z,18nm,0.5s
**SNAA Sanae 86.01 182** P **P** **05 52 02.6 -0.6**
comp=Z,0.9nm,0.6s,baz=181,slow=14,SNR=9.0
comp=Z,0.9nm,0.6s
**VNA3 Neumayer Olymp 86.57 180** ⇑P **P** **05 52 05.1 -0.8**
comp=Z,1.8nm,0.5s
**VNA2 Neumayer--Watz 86.88 181** ⇑P **P** **05 52 06.8 -0.6**
comp=Z,2.9nm,0.5s,baz=180,slow=5.6
**SONM Songino Array 90.19 323** P **P** **05 52 23.4 -0.1**
comp=Z,1.1nm,0.5s,baz=147,slow=3.9,SNR=7.8
comp=Z,1.1nm,0.5s
**NVAR Mina Array Bea 90.38 48** P **P** **05 52 22.8 -2.0**
comp=Z,0.7nm,0.8s,baz=221,slow=7.9,SNR=6.3
comp=Z,0.7nm,0.8s
**ILAR Eielson Array 93.06 17** P **P** **05 52 34.2 -2.0**
comp=Z,0.6nm,0.8s,baz=242,slow=7.1,SNR=5.2
comp=Z,0.6nm,0.8s
**EKA Eskdalemuir Ar 146.75 353** PKPbc **PKPdf** **05 59 03.2 +0.3**
comp=Z,1.2nm,0.4s,baz=21,slow=2.4,SNR=1.4
**GERES GERESS Array B 147.62 330** PKPbc **PKPbc** **05 59 08.2 +0.7**
comp=Z,5.5nm,0.4s,baz=40,slow=3.2,SNR=2.1
**TORD Torodi Ar. Bea 165.54 232** PKP **PKPdf** **05 59 28.5 -0.1**
comp=Z,0.5nm,1.0s,baz=132,slow=2.1,SNR=2.6
TORD PKPab **PKPab** **06 00 26.6 -0.3**
comp=Z,0.5nm,0.9s,baz=96,slow=4.2,SNR=2.1

*NOU **29** 06:09:58.7,20.˚90S×178.˚44W,h546km,mb4.8/42, Fiji Islands Region*
*IDC **29** 06:10:01.1±1.4,21.˚04S×178.˚75W,h562km±14km, mb3.6/15,mbtmp4.6/18, Error ellipse: s-maj=15.4km s-min=12.3km az=119.0*
*NEIC **29** 06:10:01.6±1.4,20.˚9S±0.˚1×178.˚7W±0.˚1,h566km±10km, mb4.7/41, Error ellipse: s-maj=20.0km s-min=15.0km az=148.0*
**ISC 29 06:10:00.3±0.4,21.˚10S±0.˚07×178.˚74W±0.˚07,h550km, n176,σ1°48/178,mb4.6/48,5C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.52** | **317** | P | | **P** | **06 11 28.9** | **+2.4** |
| **MSVF** | **Nonsavu** | **4.52** | **317** | P | | **P** | **06 11 29.3** | **+2.8** |
| | 111nm,0.5s,baz=132,slow=6.0,SNR=219 | | | | | | | |
| **NIUE** | **Niue** | **8.52** | **78** | P | | **P** | **06 12 04.1** | **+0.8** |
| **AFI** | **Afiamalu** | **9.76** | **44** | P | | **P** | **06 12 15.0** | **-1.1** |
| **MARNC** | **Mare, Loyalty** | **12.34** | **266** | P | | **P** | **06 12 44.1** | **+1.7** |
| **DVP** | **Devils Point** | **12.78** | **283** | P | | **P** | **06 12 48.5** | **+1.4** |
| **PINNC** | **Pines Island,** | **12.92** | **261** | P | | **P** | **06 12 49.4** | **+1.1** |
| **LIFNC** | **LIFOU** | **13.11** | **269** | P | | **P** | **06 12 50.7** | **+0.4** |
| **LIFNC** | **LIFOU** | **13.11** | **269** | P | | **P** | **06 12 50.2** | **-0.1** |
| **DZM** | **Mont Dzumac** | **13.82** | **263** | P | | **P** | **06 12 58.8** | **+1.0** |
| **DZM** | **Mont Dzumac** | **13.82** | **263** | P | | **P** | **06 12 58.2** | **+0.4** |
| | 19nm,0.6s,baz=83,slow=19,SNR=11 | | | | | | | |
| **NOUC** | **Port Laguerre** | **13.95** | **263** | P | | **P** | **06 13 00.0** | **+0.9** |
| **OUZ** | **Omahuta** | **15.59** | **204** | P | | **P** | **06 13 18.6** | **+2.9** |
| **KOUNC** | **Koumac, New Ca** | **15.88** | **269** | P | | **P** | **06 13 22.2** | **+3.4** |
| **KOUNC** | **Koumac, New Ca** | **15.88** | **269** | P | | **P** | **06 13 19.4** | **+0.6** |
| **KUZ** | **Kuaotunu** | **16.32** | **196** | P | | **P** | **06 13 24.6** | **+1.9** |
| **HAZ** | **Te Kaha** | **16.87** | **190** | P | | **P** | **06 13 28.7** | **+1.0** |
| **TGRZ** | **Tauranga** | **17.12** | **194** | P | | **P** | **06 13 32.7** | **+2.7** |
| **TWGZ** | **Tauwhareparae** | **17.25** | **189** | P | | **P** | **06 13 30.2** | **-1.0** |
| **TOZ** | **Tahuroa Road** | **17.30** | **196** | P | | **P** | **06 13 33.5** | **+1.9** |
| TOZ | | | | IAmb | | IAmb | 06 13 35.2 | |
| | comp=Z,25nm,0.6s | | | | | | | |
| **TOZ** | **Tahuroa Road** | **17.30** | **196** | P | | **P** | **06 13 34.1** | **+2.5** |
| **KMRZ** | **Kaimai** | **17.31** | **194** | P | | **P** | **06 13 34.3** | **+2.5** |
| **URZ** | **Urewera** | **17.47** | **191** | P | | **P** | **06 13 32.3** | **-0.9** |
| **URZ** | **Urewera** | **17.47** | **191** | P | | **P** | **06 13 32.3** | **-0.9** |
| | comp=Z,35nm,0.8s,baz=10,slow=2.9,SNR=13 | | | | | | | |
| URZ | | | | S | | **S** | **06 16 19.6** | **-7.0** |
| | comp=Z,10nm,0.6s,baz=294,slow=19,SNR=1.6 | | | | | | | |
| **URZ** | **Urewera** | **17.47** | **191** | P | | **P** | **06 13 32.2** | **-0.9** |
| **MWZ** | **Matawai** | **17.47** | **190** | P | | **P** | **06 13 32.9** | **-0.3** |
| **HRRZ** | **Handcock Road** | **17.75** | **193** | P | | **P** | **06 13 36.9** | **+1.1** |
| **RTZ** | **Ruatahuna** | **17.84** | **191** | P | | **P** | **06 13 36.1** | **-0.5** |
| **TLZ** | **Tolley Road** | **17.86** | **195** | P | | **P** | **06 13 39.5** | **+2.6** |
| **SNGZ** | **Shannon Statio** | **17.94** | **190** | P | | **P** | **06 13 38.3** | **+0.8** |
| **MRHZ** | **Matea Rd** | **18.16** | **192** | P | | **P** | **06 13 39.4** | **-0.1** |
| **HIZ** | **Hauiti** | **18.21** | **196** | P | | **P** | **06 13 43.6** | **+3.6** |
| **HIZ** | **Hauiti** | **18.21** | **196** | P | | **P** | **06 13 44.2** | **+4.3** |
| **NMHZ** | **Naumai** | **18.34** | **191** | P | | **P** | **06 13 41.1** | **-0.1** |
| **BKZ** | **Black Stump Fm** | **18.46** | **192** | P | | **P** | **06 13 41.0** | **-1.3** |
| **NTVZ** | **North Tongarir** | **18.57** | **194** | P | | **P** | **06 13 44.7** | **+1.4** |
| **TMVZ** | **Te Maari** | **18.58** | **194** | P | | **P** | **06 13 44.1** | **+0.7** |
| **ETVZ** | **East Tongariro** | **18.59** | **194** | P | | **P** | **06 13 41.4** | **-2.2** |
| **NNVZ** | **North Ngauruho** | **18.61** | **194** | P | | **P** | **06 13 45.3** | **+1.5** |
| **OTVZ** | **Oturere** | **18.63** | **194** | P | | **P** | **06 13 43.7** | **-0.3** |
| **SNVZ** | **South Ngauruho** | **18.66** | **194** | P | | **P** | **06 13 44.8** | **+0.6** |
| **MCHZ** | **McNeill Hill** | **18.69** | **191** | P | | **P** | **06 13 45.0** | **+0.6** |
| **KWHZ** | **Kaweka Forest** | **18.73** | **192** | P | | **P** | **06 13 44.0** | **-0.7** |
| **WNVZ** | **Wahianoa** | **18.80** | **194** | P | | **P** | **06 13 46.4** | **+0.9** |
| **MOVZ** | **Moawhango** | **18.84** | **193** | P | | **P** | **06 13 46.2** | **+0.4** |
| **KRHZ** | **Kereru** | **18.95** | **192** | P | | **P** | **06 13 46.6** | **-0.1** |
| **PNHZ** | **Pukenui** | **19.24** | **192** | P | | **P** | **06 13 49.3** | **-0.1** |
| **SNZO** | **South Karori** | **20.90** | **194** | P | | **P** | **06 14 03.8** | **-0.5** |
| **QRZ** | **Quartz Range** | **21.01** | **199** | P | | **P** | **06 14 06.5** | **+1.1** |
| **KHZ** | **Kahutara** | **22.22** | **195** | P | | **P** | **06 14 15.6** | **-0.6** |
| **RPZ** | **Rata Peaks** | **24.10** | **198** | P | | **P** | **06 14 33.9** | **+1.0** |
| **JCZ** | **Jackson Bay** | **25.14** | **201** | P | | **P** | **06 14 42.9** | **+0.6** |
| **EIDS** | **Eidsvold** | **28.02** | **255** | P | | **P** | **06 15 08.2** | **+0.7** |
| **EIDS** | **Eidsvold** | **28.02** | **255** | P | | **P** | **06 15 08.2** | **+0.4** |
| EIDS | | | | IAmb | | IAmb | 06 15 09.2 | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **28.18** | **245** | P | | **P** | **06 15 10.9** | **+1.7** |
| **ARMA** | **Armidale** | **28.18** | **245** | P | | **P** | **06 15 09.7** | **+0.4** |
| **CNB** | **Canberra Magne** | **31.32** | **236** | P | | **P** | **06 15 37.7** | **+1.5** |
| **CAN** | **Canberra** | **31.60** | **236** | P | | **P** | **06 15 39.0** | **+0.5** |
| CAN | | | | IAmb | | IAmb | 06 15 40.7 | |
| | comp=Z,42nm,1.1s | | | | | | | |
| **TV1H** | **Townsville Har** | **32.37** | **267** | P | | **P** | **06 15 45.7** | **+0.5** |
| **CTA** | **Charters Tower** | **32.75** | **265** | P | | **P** | **06 15 48.6** | **+0.1** |
| | comp=Z,3.2nm,0.5s,baz=94,slow=9.9,SNR=98 | | | | | | | |
| | comp=Z,3.2nm,0.5s | | | | | | | |
| **CTAO** | **Charters Tower** | **32.75** | **265** | P | | **P** | **06 15 49.2** | **+0.8** |
| **CTAO** | **Charters Tower** | **32.75** | **265** | P | | **P** | **06 15 48.1** | **-0.3** |
| **CMSA** | **Cobar Meteorol** | **33.40** | **244** | P | | **P** | **06 15 54.8** | **+1.0** |
| **QLP** | **Quilpie** | **34.22** | **254** | P | | **P** | **06 16 01.3** | **+0.5** |
| **PMG** | **Port Moresby** | **34.81** | **284** | P | | **P** | **06 16 06.6** | **+0.8** |
| **PMG** | **Port Moresby** | **34.81** | **284** | P | | **P** | **06 16 06.4** | **+0.6** |
| **PMG** | **Port Moresby** | **34.81** | **284** | P | | **P** | **06 16 05.8** | **0.0** |
| **MTSU** | **Mount Surprise** | **34.88** | **268** | P | | **P** | **06 16 06.9** | **+0.5** |
| **TOO** | **Toolangi** | **34.98** | **234** | P | | **P** | **06 16 08.2** | **+1.2** |
| **TOO** | **Toolangi** | **34.98** | **234** | P | | **P** | **06 16 08.2** | **+1.2** |
| TOO | | | | IAmb | | IAmb | 06 16 08.9 | |
| | comp=Z,26nm,0.7s | | | | | | | |
| **BRAT** | **Ballarat** | **36.16** | **235** | P | | **P** | **06 16 18.4** | **+1.7** |
| **STKA** | **Stephens Creek** | **36.91** | **245** | P | | **P** | **06 16 23.9** | **+1.0** |
| **STKA** | **Stephens Creek** | **36.91** | **245** | P | | **P** | **06 16 24.0** | **+1.0** |
| **STKA** | **Stephens Creek** | **36.91** | **245** | P | | **P** | **06 16 23.2** | **+0.3** |
| | comp=Z,16nm,0.5s,baz=93,slow=10,SNR=37 | | | | | | | |
| | comp=Z,16nm,0.5s | | | | | | | |
| **COEN** | **Coen** | **36.94** | **275** | P | | **P** | **06 16 24.1** | **+0.7** |
| **COEN** | **Coen** | **36.94** | **275** | P | | **P** | **06 16 23.4** | **0.0** |
| COEN | | | | IAmb | | IAmb | 06 16 25.0 | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **INKA** | **Innaminka** | **37.35** | **252** | P | | **P** | **06 16 28.1** | **+1.5** |
| **ARPS** | **Mount Arapiles** | **37.58** | **237** | P | | **P** | **06 16 29.5** | **+1.2** |
| **HTT** | **Hallett** | **39.33** | **243** | P | | **P** | **06 16 43.4** | **+0.7** |
| **LCRK** | **Leigh Creek** | **39.66** | **247** | P | | **P** | **06 16 46.0** | **+0.7** |
| **WHYH** | **Whyalla** | **40.41** | **244** | P | | **P** | **06 16 52.0** | **+0.8** |
| **BBOO** | **Buckleboo** | **41.66** | **244** | P | | **P** | **06 17 01.5** | **+0.3** |
| **BBOO** | **Buckleboo** | **41.66** | **244** | P | | **P** | **06 17 01.5** | **+0.3** |
| BBOO | | | | IAmb | | IAmb | 06 17 02.2 | |
| | comp=Z,38nm,0.8s | | | | | | | |
| **OOD** | **Oodnadatta** | **41.83** | **252** | P | | **P** | **06 17 03.7** | **+1.1** |
| **TABU** | **Tabubil** | **41.88** | **286** | P | | **P** | **06 17 03.8** | **+0.6** |
| **MULG** | **Mulgathing** | **43.25** | **248** | P | | **P** | **06 17 13.8** | **+0.1** |
| **JAY** | **Jayapura** | **43.59** | **290** | P | | **P** | **06 17 16.3** | **-0.2** |
| **WR0** | **Warramunga Arr** | **43.65** | **263** | P | | **P** | **06 17 16.5** | **-0.4** |
| **AS31** | **Alice Springs** | **43.71** | **257** | P | | **P** | **06 17 17.5** | **+0.1** |
| AS31 | | | | IAmb | | IAmb | 06 17 18.1 | |
| | comp=Z,9.3nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **43.71** | **257** | P | | **P** | **06 17 17.4** | **0.0** |
| | comp=Z,32nm,0.7s,baz=96,slow=7.8,SNR=384 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **06 18 51.9** | **-0.3** |
| | comp=Z,2.9nm,0.7s,baz=96,slow=4.3,SNR=7.3 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **06 21 52.3** | **+0.7** |
| | comp=Z,0.7nm,0.6s,baz=112,slow=4.2,SNR=4.2 | | | | | | | |
| ASAR | | | | S | | **S** | **06 23 05.5** | **-2.6** |
| | comp=Z,1.2nm,0.9s,baz=98,slow=15,SNR=6.4 | | | | | | | |
| | comp=Z,32nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **43.82** | **263** | P | | **P** | **06 17 17.9** | **-0.3** |
| WB0 | | | | IAmb | | IAmb | 06 17 18.5 | |
| | comp=Z,36nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **43.82** | **263** | P | | **P** | **06 17 17.8** | **-0.5** |
| WB2 | | | | IAmb | | IAmb | 06 17 18.7 | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.83** | **263** | P | | **P** | **06 17 16.9** | **-1.5** |
| WRAB | | | | IAmb | | IAmb | 06 17 18.6 | |
| | comp=Z,28nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.84** | **263** | P | | **P** | **06 17 17.6** | **-0.7** |
| | comp=Z,6.4nm,0.3s,baz=96,slow=7.3,SNR=358 | | | | | | | |
| WRA | | | | S | | **S** | **06 23 06.0** | **-3.8** |
| | comp=Z,0.4nm,0.7s,baz=92,slow=18,SNR=3.1 | | | | | | | |
| | comp=Z,6.4nm,0.3s | | | | | | | |
| **GENI** | **Genyem** | **44.02** | **289** | P | | **P** | **06 17 20.1** | **+0.2** |
| **GENI** | **Genyem** | **44.02** | **289** | P | | **P** | **06 17 19.9** | **0.0** |
| **DHH** | **Diamond Head** | **46.81** | **27** | P | | **P** | **06 17 40.7** | **-0.2** |
| **FORT** | **Forrest** | **48.42** | **247** | P | | **P** | **06 17 52.2** | **-0.7** |
| **MTN** | **Manton Dam** | **48.48** | **271** | P | | **P** | **06 17 53.0** | **-0.7** |
| MTN | | | | IAmb | | IAmb | 06 17 53.6 | |
| | comp=Z,23nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **49.93** | **267** | P | | **P** | **06 18 04.0** | **-0.3** |
| KNRA | | | | IAmb | | IAmb | 06 18 04.9 | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **SWI** | **Sorong** | **52.74** | **286** | P | | **P** | **06 18 24.3** | **-0.3** |
| **NLAI** | **Namlea** | **55.53** | **281** | P | | **P** | **06 18 43.6** | **-0.7** |
| | comp=Z,24nm,1.1s | | | | | | | |
| **SOEI** | **Soe** | **55.83** | **272** | P | | **P** | **06 18 46.2** | **-0.4** |
| **SOEI** | **Soe** | **55.83** | **272** | P | | **P** | **06 18 46.1** | **-0.4** |
| | comp=Z,82nm,0.9s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **56.86** | **257** | P | | **P** | **06 18 52.4** | **-1.0** |
| PSA00 | | | | IAmb | | IAmb | 06 18 53.7 | |
| | comp=Z,31nm,0.8s | | | | | | | |
| **SANI** | **Sanana** | **57.02** | **282** | P | | **P** | **06 18 53.4** | **-1.2** |
| | comp=Z,25nm,1.0s | | | | | | | |
| **MBWA** | **Marble Bar** | **57.05** | **258** | P | | **P** | **06 18 53.5** | **-1.2** |
| MBWA | | | | IAmb | | IAmb | 06 18 54.9 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **SBA** | **Scott Base** | **57.23** | **184** | P | | **P** | **06 18 58.2** | **+3.3** |
| **NWAO** | **Narrogin (SRO)** | **57.48** | **244** | P | | **P** | **06 18 57.2** | **-0.2** |
| NWAO | | | | IAmb | | IAmb | 06 19 14.3 | |
| | comp=Z,83nm,1.5s | | | | | | | |
| **MMRI** | **Maumere** | **58.09** | **273** | P | | **P** | **06 19 01.5** | **-0.3** |
| | comp=Z,43nm,0.5s | | | | | | | |
| **EDFI** | **Ende, Flores** | **58.56** | **273** | P | | **P** | **06 19 04.3** | **-0.9** |
| | comp=Z,27nm,0.9s | | | | | | | |
| **MORW** | **Morawa** | **58.96** | **248** | P | | **P** | **06 19 07.3** | **-0.2** |
| MORW | | | | IAmb | | IAmb | 06 19 49.6 | |
| | comp=Z,48nm,1.4s | | | | | | | |
| **GIRL** | **Giralia** | **61.73** | **255** | P | | **P** | **06 19 26.5** | **+0.6** |
| **PLAI** | **Plampang** | **62.19** | **271** | P | | **P** | **06 19 28.3** | **-0.7** |
| **TOLI2** | **Tolitoli** | **63.06** | **283** | P | | **P** | **06 19 33.1** | **-1.5** |
| **QSPA** | **South Pole Qui** | **68.97** | **180** | P | | **P** | **06 20 12.2** | **+1.6** |
| | comp=Z,8.5nm,0.6s,baz=319,slow=0.4,SNR=88 | | | | | | | |
| | comp=Z,8.5nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.29** | **324** | P | | **P** | **06 20 17.3** | **-1.4** |
| | comp=Z,1.7nm,0.5s,baz=159,slow=5.7,SNR=5.7 | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **79.08** | **326** | P | | **P** | **06 21 07.8** | **0.0** |
| | comp=Z,2.6nm,0.8s,baz=134,slow=5.5,SNR=4.4 | | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **NJ2** | **Nanjing** | **79.73** | **310** | *e*P | | **P** | **06 21 12.8** | **+1.2** |
| NJ2 | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **MAW** | **Mawson** | **80.76** | **200** | P | | **P** | **06 21 16.3** | **0.0** |
| | comp=Z,3.2nm,0.8s,baz=130,slow=7.6,SNR=13 | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **DSP** | **Deep Springs** | **81.55** | **45** | P | | **P** | **06 21 20.4** | **-0.4** |
| **NVAR** | **Mina Array Bea** | **81.94** | **44** | P | | **P** | **06 21 23.4** | **+0.3** |
| | comp=Z,1.3nm,0.6s,baz=227,slow=8.3,SNR=13 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **KVN** | **Kaiserville** | **82.42** | **43** | P | | **P** | **06 21 25.9** | **+0.4** |
| **U15A** | **North Rim** | **84.88** | **48** | P | | **P** | **06 21 38.6** | **+0.8** |
| **HNS** | **HongShan** | **85.45** | **313** | *e*P | | **P** | **06 21 40.8** | **+0.6** |
| **ELIB** | **Princess Elisa** | **85.97** | **187** | *d*P | | **P** | **06 21 42.6** | **+0.3** |
| | comp=Z,10nm,0.8s | | | | | | | |
| **SEY** | **Seymchan** | **86.81** | **347** | P | | **P** | **06 21 44.4** | **-1.7** |
| | comp=Z,1.7nm,0.5s,baz=132,slow=6.4,SNR=4.4 | | | | | | | |
| | comp=Z,1.7nm,0.5s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **87.13** | **180** | ⇑P | | **P** | **06 21 47.5** | **-0.3** |
| | comp=Z,119nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **87.43** | **179** | ⇑P | | **P** | **06 21 48.4** | **-0.7** |
| | comp=Z,16nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **87.43** | **179** | P | | **P** | **06 21 47.8** | **-1.3** |
| | comp=Z,0.8nm,0.5s,baz=211,slow=8.8,SNR=11 | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **RND** | **Reindeer** | **87.44** | **13** | P | | **P** | **06 21 47.8** | **-1.3** |
| RND | | | | IAmb | | IAmb | 06 21 49.3 | |
| | comp=Z,8.3nm,0.7s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **87.58** | **176** | ⇑P | | **P** | **06 21 49.7** | **-0.1** |
| | comp=Z,5.8nm,0.4s | | | | | | | |
| **XAN** | **Xi'an** | **87.95** | **308** | P | | **P** | **06 21 52.8** | **+0.6** |
| XAN | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.96** | **58** | P | | **P** | **06 21 52.4** | **0.0** |
| | comp=Z,0.7nm,0.9s,baz=226,slow=4.9,SNR=7.0 | | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **88.02** | **177** | ⇑P | | **P** | **06 21 51.8** | **0.0** |
| | comp=Z,4.4nm,0.7s,baz=178,slow=3.7 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **88.25** | **177** | ⇑P | | **P** | **06 21 52.8** | **0.0** |
| | comp=Z,6.4nm,0.9s | | | | | | | |
| **HDA** | **Harding Lake** | **88.72** | **13** | IAmb | | IAmb | 06 21 54.7 | |
| | comp=Z,4.8nm,0.6s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **88.75** | **13** | P | | **P** | **06 21 53.8** | **-1.3** |
| CCB | | | | IAmb | | IAmb | 06 21 54.3 | |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **MDM** | **Murphy Dome** | **88.94** | **12** | IAmb | | IAmb | 06 21 55.6 | |
| | comp=Z,4.1nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **89.06** | **13** | P | | **P** | **06 21 55.1** | **-1.4** |
| | comp=Z,1.3nm,0.7s,baz=221,slow=5.4,SNR=18 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **89.28** | **315** | *e*P | | **P** | **06 22 01.0** | **+2.7** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,2μm,5.8s | | | | | | | |
| **J26L** | **Joseph Creek** | **89.56** | **14** | IAmb | | IAmb | 06 22 00.1 | |
| | comp=Z,4.3nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.67** | **290** | P | | **P** | **06 22 00.6** | **+0.1** |
| | comp=Z,1.7nm,0.6s,baz=133,slow=2.7,SNR=15 | | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **89.87** | **43** | P | | **P** | **06 22 01.4** | **+0.2** |
| | comp=Z,0.8nm,0.6s,baz=207,slow=4.2,SNR=12 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **DAWY** | **Dawson** | **90.23** | **16** | P | | **P** | **06 22 01.7** | **-0.3** |
| **EGAK** | **Eagle** | **90.36** | **15** | P | | **P** | **06 22 02.4** | **-0.1** |
| **PZH** | **PanZhiHua** | **90.38** | **298** | P | | **P** | **06 22 04.0** | **+0.3** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,4.3s | | | | | | | |
| **C19K** | **Lookout Ridge** | **91.01** | **7** | P | | **P** | **06 22 04.8** | **-0.7** |
| **I28M** | **Miner Creek** | **91.21** | **15** | P | | **P** | **06 22 05.3** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **110.53** | **321** | PKiKP | | **PKiKP** | **06 27 27.9** | **-2.3** |
| | comp=Z,1.6nm,0.3s,baz=73,slow=4.8,SNR=4.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **111.11** | **313** | PKiKP | | **PKiKP** | **06 27 29.5** | **-2.1** |
| | comp=Z,0.5nm,0.6s,baz=46,slow=3.5,SNR=3.9 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **114.02** | **317** | PKiKP | | **PKiKP** | **06 27 34.9** | **-2.1** |
| | comp=Z,0.7nm,0.7s,baz=92,slow=1.9,SNR=6.1 | | | | | | | |
| **BVAR** | **Borovoye Array** | **119.09** | **320** | PKP | | **PKPdf** | **06 27 45.2** | **-1.5** |
| | comp=Z,1.6nm,0.3s,baz=99,slow=3.0,SNR=8.4 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **122.42** | **356** | PKP | | **PKPdf** | **06 27 51.3** | **-1.2** |
| | comp=Z,22nm,1.1s,baz=46,slow=2.8,SNR=2.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.38** | **349** | PKP | | **PKPdf** | **06 28 04.8** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=27,slow=3.0,SNR=7.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **136.15** | **343** | PKP | | **PKPdf** | **06 28 18.8** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=55,slow=5.6,SNR=3.2 | | | | | | | |
| FINES | | | | SKPbc | | **SKPbc** | **06 30 58.4** | **-1.0** |
| | comp=Z,2.6nm,0.8s,baz=33,slow=4.5,SNR=5.5 | | | | | | | |
| **HFS** | **Hagfors** | **140.02** | **350** | PKhKP | | PKPpre | 06 28 18.0 | |
| | comp=Z,1.0nm,0.3s,baz=48,slow=2.2,SNR=14 | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.20** | **330** | PKP | | PKPab | 06 28 28.3 | -1.5 |
| | comp=Z,8.3nm,0.5s,baz=44,slow=4.2,SNR=58 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **145.66** | **4** | PKPbc | | **PKPdf** | **06 28 35.6** | **-0.3** |
| | comp=Z,3.3nm,0.7s,baz=350,slow=2.5,SNR=8.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.72** | **311** | PKPbc | | **PKPdf** | **06 28 40.0** | **+1.5** |
| | comp=Z,2.9nm,0.8s,baz=145,slow=4.7,SNR=12 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.50** | **299** | PKPbc | | **PKPdf** | **06 28 43.0** | **+3.1** |
| | comp=Z,3.7nm,0.5s,baz=60,slow=5.2,SNR=11 | | | | | | | |
| **LANS** | **Liptovska Anna** | **148.47** | **337** | *e*PKP | | **PKPbc** | **06 28 45.8** | **+0.6** |
| **CLL** | **Collm** | **148.48** | **346** | ⫽*i*PKPbc | | **PKPdf** | **06 28 44.4** | **+3.6** |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.66** | **344** | *e*P | | **PKPdf** | **06 28 45.3** | **+4.2** |
| BRG | | | | Amp | | | 06 28 45.6 | |
| | comp=Z,3.9nm,0.8s | | | | | | | |
| **VYHS** | **Vyhne** | **149.25** | **337** | *e*PKP | | **PKPbc** | **06 28 46.8** | **-0.3** |
| **GERES** | **GERESS Array B** | **150.58** | **343** | PKPbc | | **PKPdf** | **06 28 48.9** | **+4.5** |
| | comp=Z,3.0nm,0.8s,baz=29,slow=3.0,SNR=6.3 | | | | | | | |
| **CONA** | **Conrad Observa** | **150.76** | **340** | *e*PKiKP | | **PKPbc** | **06 28 50.3** | **-0.5** |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **150.82** | **339** | *e*PKiKP | | **PKPbc** | **06 28 50.4** | **-0.4** |
| | comp=Z,6.7nm,0.6s | | | | | | | |
| **MOA** | **Molln** | **151.33** | **342** | *e*PKP | | **PKPbc** | **06 28 51.3** | **-0.7** |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **SOKA** | **Soboth** | **152.13** | **339** | *e*PKP | | **PKPbc** | **06 28 52.7** | **-1.2** |
| | comp=Z,3.3nm,0.9s | | | | | | | |
| **LESA** | **Schwarzleotal** | **152.16** | **343** | *e*PKP | | **PKPbc** | **06 28 52.7** | **-1.3** |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **152.29** | **342** | *e*PKP | | **PKPbc** | **06 28 53.3** | **-1.1** |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **MYKA** | **Terra Mystica** | **152.61** | **341** | *e*PKP | | **PKPbc** | **06 28 53.3** | **-1.6** |
| | comp=Z,3.4nm,0.9s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **152.83** | **343** | *e*PKP | | **PKPbc** | **06 28 53.9** | **-1.5** |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| **FETA** | **Feichten** | **153.03** | **346** | *e*PKiKP | | **PKPbc** | **06 28 55.3** | **-0.6** |
| | comp=Z,2.2nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **172.08** | **183** | PKP | | **PKPdf** | **06 29 04.8** | **-2.2** |
| | comp=Z,1.1nm,0.9s,baz=233,slow=0.7,SNR=5.6 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **06 30 32.5** | **-1.4** |
| | comp=Z,1.1nm,0.8s,baz=181,slow=2.5,SNR=5.8 | | | | | | | |

*IDC **29** 06:29:51.4±12.0,24.˚39S×179.˚85W,h398km±128km, mb3.2/6,mbtmp3.9/6, Error ellipse: s-maj=48.3km s-min=28.7km az=63.0*
**ISC 29 06:29:51.2±1.2,24.˚5S±0.˚3×179.˚8W±0.˚2,h400km,n7, σ1°19/7,mb3.4/6,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **31.66** | **271** | P | | **P** | **06 35 40.7** | **+1.1** |
| | 0.5nm,0.4s,baz=97,slow=10,SNR=12 | | | | | | | |
| | 0.5nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **42.13** | **261** | P | | **P** | **06 37 06.2** | **-0.4** |
| | 0.8nm,0.5s,baz=90,slow=6.7,SNR=14 | | | | | | | |
| | 0.8nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.55** | **267** | P | | **P** | **06 37 09.0** | **-1.0** |
| | 2.4nm,0.3s,baz=98,slow=8.3,SNR=33 | | | | | | | |
| | 2.4nm,0.3s | | | | | | | |
| **QSPA** | **South Pole Qui**

1.8nm,0.8s
TXAR **Lajitas Array** 34.70 321 P P 06 50 24.8 +1.9
0.1nm,0.6s,baz=151,slow=11,SNR=2.0
0.1nm,0.6s
PDAR **Pinedale Array** 47.62 330 P P 06 52 09.1 0.0
0.1nm,0.3s,baz=139,slow=8.1,SNR=2.8
0.1nm,0.3s
NVAR **Mina Array Bea** 49.84 320 P P 06 52 27.1 +0.9
0.3nm,0.5s,baz=127,slow=8.0,SNR=3.7
0.3nm,0.5s
YKA **Yellowknife Ar** 64.56 343 P P 06 54 08.2 -1.5
0.5nm,0.8s,baz=125,slow=7.2,SNR=5.3
0.5nm,0.8s

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**IDC 29 07:05:56.9±4.5, 18°59S×175°19W, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=316.6km s-min=33.8km az=152.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | 47.52 | 260 | P | P | 07 14 33.6 | -0.7 |
| | 0.4nm,0.9s,baz=98,slow=7.5,SNR=7.5 | | | | | | |
| | 0.4nm,0.9s | | | | | | |
| ASAR | **Alice Springs** | 47.56 | 255 | P | P | 07 14 35.0 | +0.4 |
| | 0.8nm,0.4s,baz=90,slow=7.9,SNR=18 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| NVAR | **Mina Array Bea** | 77.83 | 42 | P | P | 07 17 56.6 | 0.0 |
| | 0.2nm,0.5s,baz=216,slow=5.7,SNR=2.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

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*NEIC **29** 07:12:01.3±1.3, 3°.3S±0°.2×153°.9E±0°.2, h398km±11km, mb4.4/15, Error ellipse: s-maj=30.4km s-min=19.0km az=148.0*
*IDC **29** 07:12:03.9±3.0, 3°.78S×153°.84E, h396km±30km, mb3.4/10, mbtmp4.1/11, Error ellipse: s-maj=22.9km s-min=19.6km az=100.0*
**ISC 29 07:12:03.7±0.7, 3°.6S±0°.1×153°.8E±0°.1, h400km, n34, σ1♀57/39, mb4.0/16, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | **Rabaul** | 1.69 | 250 | | Pn | 07 12 56.6 | -1.3 |
| RABL | | | | Sn | S | 07 13 38.6 | -2.9 |
| PMG | **Port Moresby** | 8.71 | 228 | P | Pn | 07 14 07.2 | +0.3 |
| PMG | | | | Sn | S | 07 15 53.0 | +5.0 |
| PMG | **Port Moresby** | 8.71 | 228 | P | P | 07 14 08.5 | +1.4 |
| | 23nm,0.5s,baz=22,slow=4.5,SNR=7.2 | | | | | | |
| COEN | **Coen** | 14.64 | 225 | | P | 07 15 13.2 | +0.7 |
| CTA | **Charters Tower** | 17.93 | 203 | P | P | 07 15 47.5 | 0.0 |
| | 0.5nm,0.7s,baz=30,slow=11,SNR=10 | | | | | | |
| CTAO | **Charters Tower** | 17.93 | 203 | P | P | 07 15 47.5 | 0.0 |
| CTAO | | | | IAmb | IAmb | 07 15 50.7 | |
| | comp=Z,6.9nm,0.7s | | | | | | |
| KOUNC | **Koumac, New Ca** | 19.71 | 149 | P | P | 07 16 08.1 | +2.6 |
| EIDS | **Eidsvold** | 21.77 | 187 | P | P | 07 16 23.9 | -0.4 |
| DZM | **Mont Dzumac** | 22.09 | 147 | P | P | 07 16 26.1 | -1.2 |
| DZM | | | | IAmb | IAmb | 07 16 27.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| DZM | **Mont Dzumac** | 22.09 | 147 | P | P | 07 16 26.2 | -1.2 |
| | comp=Z,16nm,0.7s,baz=334,slow=13,SNR=4.7 | | | | | | |
| | comp=Z,16nm,0.7s | | | | | | |
| WB0 | **Warramunga Arr** | 24.79 | 228 | P | P | 07 16 51.0 | -0.6 |
| WR0 | **Warramunga Arr** | 24.80 | 228 | P | P | 07 16 51.3 | -0.4 |
| WR0 | | | | IAmb | IAmb | 07 16 52.4 | |
| | comp=Z,18nm,1.5s | | | | | | |
| WRAB | **Tennant Creek** | 24.92 | 228 | P | P | 07 16 52.7 | -0.1 |
| WB2 | **Warramunga Arr** | 24.93 | 228 | P | P | 07 16 52.6 | -0.2 |
| WB2 | | | | IAmb | IAmb | 07 16 55.0 | |
| | comp=Z,13nm,1.5s | | | | | | |
| WRA | **Warramunga Arr** | 24.93 | 228 | P | P | 07 16 52.0 | -0.9 |
| | comp=Z,0.8nm,0.4s,baz=51,slow=9.4,SNR=22 | | | | | | |
| WRA | | | | PcP | PcP | 07 20 17.3 | +1.2 |
| | comp=Z,1.0nm,0.8s,baz=52,slow=2.7,SNR=5.2 | | | | | | |
| WRA | | | | S | S | 07 20 43.9 | -2.8 |
| | comp=Z,1.2nm,0.9s,baz=57,slow=14,SNR=5.3 | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | |
| ARMA | **Armidale** | 26.73 | 184 | P | P | 07 17 07.5 | -1.3 |
| ARMA | | | | IAmb | IAmb | 07 17 39.9 | |
| | comp=Z,15nm,1.4s | | | | | | |
| ASAR | **Alice Springs** | 27.66 | 222 | P | P | 07 17 16.6 | -0.4 |
| | comp=Z,0.6nm,0.5s,baz=52,slow=8.9,SNR=14 | | | | | | |
| ASAR | | | | PcP | PcP | 07 20 23.7 | +1.2 |
| | comp=Z,0.5nm,0.5s,baz=50,slow=2.6,SNR=5.6 | | | | | | |
| ASAR | | | | S | S | 07 21 26.3 | -3.2 |
| | comp=Z,0.9nm,0.7s,baz=49,slow=14,SNR=7.0 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| LHI | **Lord Howe Isla** | 28.20 | 170 | P | P | 07 17 23.4 | +1.7 |
| FITZ | **Fitzroy Crossi** | 31.06 | 240 | P | P | 07 17 45.3 | -1.5 |
| BBOO | **Buckleboo** | 33.43 | 208 | P | P | 07 18 05.0 | -2.1 |
| BBOO | | | | IAmb | IAmb | 07 18 24.7 | |
| | comp=Z,42nm,1.5s | | | | | | |
| MRNZ | **Matariki Terra** | 41.30 | 158 | P | P | 07 19 11.4 | -0.8 |
| THZ | **Tophouse** | 41.67 | 158 | P | P | 07 19 13.8 | -1.3 |
| THZ | | | | IAmb | IAmb | 07 19 56.6 | |
| | comp=Z,47nm,1.5s | | | | | | |
| TCW | **Tory Channel** | 41.72 | 157 | P | P | 07 19 14.6 | -0.9 |
| LTZ | **Lake Taylor** | 42.34 | 160 | P | P | 07 19 19.8 | -0.6 |
| LTZ | | | | IAmb | IAmb | 07 19 43.0 | |
| | comp=Z,43nm,1.4s | | | | | | |
| MKAR | **Makanchi Array** | 80.07 | 319 | P | P | 07 23 32.9 | +2.5 |
| | comp=Z,0.4nm,0.7s,baz=77,slow=5.4,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| ILAR | **Eielson Array** | 80.72 | 22 | P | P | 07 23 33.7 | +0.4 |
| | comp=Z,1.3nm,0.8s,baz=252,slow=5.4,SNR=12 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| KURBB | **Kurchatov Arra** | 83.47 | 322 | P | P | 07 23 49.2 | +1.5 |
| | comp=Z,0.3nm,0.4s,baz=111,slow=2.9,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| QSPA | **South Pole Qui** | 86.33 | 180 | P | P | 07 24 02.1 | +0.4 |
| QSPA | | | | IAmb | IAmb | 07 24 02.8 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| QSPA | **South Pole Qui** | 86.33 | 180 | P | P | 07 24 01.6 | -0.1 |
| | comp=Z,4.7nm,0.8s,baz=5.2,slow=1.4,SNR=40 | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| MAW | **Mawson** | 87.02 | 203 | P | P | 07 24 04.5 | -0.2 |
| | comp=Z,1.1nm,0.6s,baz=111,slow=5.1,SNR=12 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| BVAR | **Borovoye Array** | 88.88 | 323 | P | P | 07 24 14.4 | +0.7 |
| | comp=Z,1.0nm,0.7s,baz=88,slow=4.7,SNR=2.9 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| NVAR | **Mina Array Bea** | 90.61 | 52 | P | P | 07 24 23.4 | +1.0 |
| | comp=Z,0.3nm,0.6s,baz=255,slow=5.6,SNR=3.8 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| TORD | **Torodi Ar. Bea** | 150.82 | 291 | PKPbc | PKiKP | 07 31 11.7 | +0.5 |
| | comp=Z,1.6nm,0.7s,baz=61,slow=1.6,SNR=13 | | | | | | |
| BDFB | **Brasilia** | 151.18 | 132 | PKPbc | PKiKP | 07 31 11.9 | -0.2 |
| | comp=Z,3.1nm,0.7s,baz=306,slow=4.1,SNR=4.7 | | | | | | |

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*IDC **29** 07:16:30.3±1.3, 38°.67N×142°.51E, h0km, mb3.5/6, mbtmp3.5/9, ML2.9/3, Error ellipse: s-maj=30.9km s-min=23.9km az=75.0*
*JMA **29** 07:16:40.5±0.1, 38°.5N±0°.2×141°.7E±0°.5, h53km, MV3.5/40, KINKAZAN REGION*
*JMA Felt I J1 at KINKAZAN REGION .*
**ISC 29 07:16:38.5±1.3, 38°.50N±0°.05×141°.9E±0°.1, h55km±9km, n22, σ1♀33/31, mb3.5/6, 13D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JIKH | **Ishinomakikobu** | 0.42 | 243 | *i* P | Pn | 07 16 49.8 | +0.5 |
| JIKH | | | | S | Sn | 07 16 56.3 | -0.7 |
| JIO | **Ouri** | 0.47 | 264 | ⇓P | Pn | 07 16 49.8 | +0.1 |
| JIO | | | | ⇓S | Sn | 07 16 56.2 | -1.6 |
| JKMT | **Kesennumamotoy** | 0.48 | 310 | *i* P | Pn | 07 16 50.2 | +0.4 |
| JKMT | | | | ⇓S | Sn | 07 16 56.9 | -1.1 |
| OFUJ | **Ofunato** | 0.61 | 340 | *i* P | Pn | 07 16 52.3 | +0.8 |
| OFUJ | | | | S | Sn | 07 17 00.6 | -0.2 |
| JMK | **Ichinoseki** | 0.72 | 309 | ⇓*i* P | Pn | 07 16 52.9 | +0.1 |
| JMK | | | | ⇓S | Sn | 07 17 01.6 | -1.6 |
| JOU | **Okura** | 1.01 | 263 | ⇓*i* P | Pn | 07 16 56.0 | -0.5 |
| JOU | | | | ⇓S | Sn | 07 17 07.9 | -2.0 |
| JOM | **Ohasama** | 1.09 | 333 | ⇓*i* P | Pn | 07 16 58.1 | +0.5 |
| JOM | | | | ⇓S | Sn | 07 17 11.3 | -0.4 |
| JMM | **Marumori** | 1.10 | 235 | ⇓*i* P | Pn | 07 16 57.5 | -0.3 |
| JMM | | | | ⇓S | Sn | 07 17 10.3 | -1.7 |
| JYK | **Kaneyama** | 1.30 | 289 | ⇓*i* P | Pn | 07 17 00.1 | -0.4 |
| JRG | **Rokugo** | 1.35 | 312 | *i* P | Pn | 07 17 01.1 | -0.1 |
| JFK | **Kawauchi** | 1.41 | 217 | P | Pn | 07 17 02.5 | +0.6 |
| JFK | | | | S | Sn | 07 17 18.8 | -0.8 |
| JYS | **Shirataka** | 1.50 | 260 | P | Pn | 07 17 02.9 | -0.2 |
| JOTO | **OTAMA OYAMA** | 1.58 | 234 | P | Pn | 07 17 04.9 | +0.7 |
| MJAR | **Matsushiro Arr** | 3.55 | 238 | Pn | Pn | 07 17 32.8 | +1.6 |
| | 0.3nm,0.3s,baz=35,slow=12,SNR=9.0 | | | | | | |
| | 1.5nm,0.3s | | | | | | |
| USRK | **Ussuriysk Ar.** | 9.40 | 310 | Pn | Pn | 07 18 52.2 | +1.0 |
| | 0.1nm,0.3s,baz=113,slow=14,SNR=1.7 | | | | | | |
| | 0.7nm,0.4s | | | | | | |
| KSRS | **Korea Array** | 11.11 | 269 | Pn | Pn | 07 19 17.8 | +3.1 |
| | 0.3nm,0.3s,baz=78,slow=15,SNR=2.4 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| MKAR | **Makanchi Array** | 43.71 | 301 | P | P | 07 24 38.7 | +0.7 |
| | 0.4nm,0.6s,baz=82,slow=9.1,SNR=3.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| KURBB | **Kurchatov Arra** | 45.44 | 307 | P | P | 07 24 52.2 | +0.5 |
| | 1.4nm,0.5s,baz=80,slow=8.1,SNR=11 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| ILAR | **Eielson Array** | 48.03 | 33 | P | P | 07 25 08.1 | -3.8 |
| | 0.3nm,0.7s,baz=255,slow=6.5,SNR=2.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| BVAR | **Borovoye Array** | 49.90 | 311 | P | P | 07 25 27.0 | +0.7 |
| | 0.4nm,0.5s,baz=98,slow=10,SNR=1.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| WRA | **Warramunga Arr** | 58.57 | 188 | P | P | 07 26 30.3 | +0.7 |
| | 0.3nm,0.6s,baz=4.8,slow=7.3,SNR=4.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | 62.30 | 188 | P | P | 07 26 56.1 | +1.1 |
| | 0.2nm,0.6s,baz=352,slow=6.1,SNR=1.8 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

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*DJA **29** 07:22:10.5±0.6, 4°.N±4°.×12°.6E±°, h12km±4km, M4.6/12, mb4.7/6, mB5.0/3, MLv4.7/12, Mw(mB)4.3/3*
*IDC **29** 07:22:14.9±0.8, 3°.26N×126°.29E, h0km, mb4.1/9, mbtmp4.1/9, MS3.3/1, Error ellipse: s-maj=43.4km s-min=16.7km az=67.0*
*NEIC **29** 07:22:19.9±1.5, 3°.8N±0°.1×126°.2E±0°.1, h72km±8km, mb4.5/20, Error ellipse: s-maj=17.9km s-min=13.2km az=59.0*
**ISC 29 07:22:18.5±0.6, 3°.63N±0°.07×126°.09E±0°.09, h35km, n59, σ2♀51/50, mb4.5/18, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGSI | **Sangihe** | 0.56 | 276 | P | Pn | 07 22 29.9 | -0.2 |
| TNTI | **Ternate** | 3.11 | 156 | | Pn | 07 23 06.5 | +1.4 |
| TNTI | **Ternate** | 3.11 | 156 | P | Pn | 07 23 08.2 | +3.1 |
| DAV | **Davao City (W)** | 3.46 | 352 | LR | LR | 07 24 36.2 | |
| | comp=Z,401nm,20.9s,baz=133,slow=37 | | | | | | |
| KMSI | **Cibinong** | 3.69 | 215 | P | Pn | 07 23 17.7 | +4.6 |
| GTOI | **Gorontalo** | 4.28 | 226 | P | Pn | 07 23 24.1 | +2.9 |
| SANI | **Sanana** | 5.64 | 181 | P | Pn | 07 23 41.5 | +1.6 |
| SANI | **Sanana** | 5.64 | 181 | P | Pn | 07 23 41.5 | +1.6 |
| LUWI | **Luwuk** | 5.70 | 216 | | Pn | 07 23 48.2 | +7.5 |
| LUWI | **Luwuk** | 5.70 | 216 | P | Pn | 07 23 45.2 | +4.4 |
| TOLI2 | **Tolitoli** | 5.86 | 245 | P | Pn | 07 23 43.8 | +0.8 |
| TOLI2 | **Tolitoli** | 5.86 | 245 | Pn | Pn | 07 23 43.3 | +0.3 |
| SWI | **Sorong** | 6.83 | 131 | P | Pn | 07 23 56.2 | 0.0 |
| | 32nm,0.8s,0.2nm | | | | | | |
| NLAI | **Namlea** | 6.89 | 172 | P | Pn | 07 24 00.5 | +3.3 |
| | 36nm,0.4s | | | | | | |
| MYLDM | **Lahad Datu** | 7.72 | 282 | Pn | Pn | 07 24 08.3 | -0.2 |
| FAKI | **Fak Fak** | 8.95 | 136 | Pn | Pn | 07 24 27.2 | +1.8 |
| SBUM | **Sibu** | 13.90 | 266 | Pn | Pn | 07 25 35.3 | +2.1 |
| DRS | **Darwin Rock St** | 16.65 | 163 | P | Pn | 07 26 09.1 | -0.3 |
| KDU | **Kakadu** | 17.40 | 159 | P | Pn | 07 26 19.8 | +1.1 |
| KNRA | **Kununurra** | 19.36 | 172 | | P | 07 26 40.6 | -0.7 |
| KNRA | | | | IAmb | IAmb | 07 26 42.0 | |
| | comp=Z,17nm,0.6s | | | | | | |
| TWG | **Pinlang** | 19.69 | 346 | P | P | 07 26 43.0 | -1.9 |
| TWG | | | | IAmb | IAmb | 07 26 43.8 | |
| | comp=Z,44nm,1.3s | | | | | | |
| FITZ | **Fitzroy Crossi** | 21.59 | 181 | P | P | 07 27 04.9 | -0.5 |
| WB0 | **Warramunga Arr** | 24.64 | 161 | P | P | 07 27 34.1 | -1.9 |
| WRA | **Warramunga Arr** | 24.78 | 161 | P | P | 07 27 34.6 | -2.7 |
| | comp=Z,3.6nm,0.7s,baz=334,slow=11,SNR=30 | | | | | | |
| | comp=Z,3.6nm,0.7s | | | | | | |
| WB2 | **Warramunga Arr** | 24.79 | 161 | P | P | 07 27 35.2 | -2.1 |
| WR0 | **Warramunga Arr** | 24.86 | 161 | P | P | 07 27 35.8 | -2.2 |
| WR0 | | | | IAmb | IAmb | 07 27 45.6 | |
| | comp=Z,6.3nm,0.6s | | | | | | |
| MBWA | **Marble Bar** | 25.41 | 194 | P | P | 07 27 41.9 | -1.1 |
| MBWA | | | | IAmb | IAmb | 07 27 45.1 | |
| | comp=Z,23nm,1.2s | | | | | | |
| PSA00 | **Pilbara Seismi** | 25.78 | 193 | P | P | 07 27 45.1 | -1.2 |
| PSA00 | **Pilbara Seismi** | 25.78 | 193 | P | P | 07 27 45.4 | -1.0 |
| PSA00 | | | | IAmb | IAmb | 07 27 47.3 | |
| | comp=Z,17nm,0.9s | | | | | | |
| QIS | **Mount Isa** | 27.45 | 152 | P | P | 07 28 03.4 | +1.9 |
| AS31 | **Alice Springs** | 28.18 | 165 | P | P | 07 28 06.4 | -1.5 |
| ASAR | **Alice Springs** | 28.18 | 165 | P | P | 07 28 06.2 | -1.7 |
| | comp=Z,1.5nm,0.6s,baz=342,slow=7.4,SNR=27 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| AS01 | **Alice Springs** | 28.19 | 165 | P | P | 07 28 07.9 | -0.1 |
| CMAR | **Chiang Mai Arr** | 30.38 | 301 | P | P | 07 28 34.0 | +6.5 |
| | comp=Z,0.9nm,0.3s,baz=108,slow=6.5,SNR=5.2 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| MEEK | **Meekatharra** | 30.94 | 193 | P | P | 07 28 30.6 | -1.8 |
| JHS | **Saijyo** | 31.89 | 11 | P | P | 07 28 46.8 | +6.1 |
| | comp=Z,2μm,1.1s | | | | | | |
| FORT | **Forrest** | 34.26 | 177 | P | P | 07 29 00.2 | -1.2 |
| FORT | **Forrest** | 34.26 | 177 | P | P | 07 28 59.6 | -1.7 |
| KMBL | **Kambalda** | 35.03 | 186 | P | P | 07 29 06.7 | -1.3 |
| BLDU | **Ballidu** | 35.21 | 194 | P | P | 07 29 07.6 | -2.0 |
| NWAO | **Narrogin (SRO)** | 37.31 | 192 | P | P | 07 29 26.3 | -1.2 |
| BBOO | **Buckleboo** | 37.45 | 166 | P | P | 07 29 27.8 | -0.9 |
| BBOO | **Buckleboo** | 37.45 | 166 | P | P | 07 29 26.9 | -1.8 |
| STKA | **Stephens Creek** | 38.26 | 158 | P | P | 07 29 33.5 | -2.1 |
| STKA | **Stephens Creek** | 38.26 | 158 | P | P | 07 29 33.3 | -2.3 |
| | comp=Z,1.9nm,0.7s,baz=53,slow=4.6,SNR=2.1 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| ARMA | **Armidale** | 41.73 | 146 | P | P | 07 30 02.2 | -2.4 |
| ARMA | | | | IAmb | IAmb | 07 30 20.8 | |
| | comp=Z,15nm,1.4s | | | | | | |
| PETK | **Petropavlovsk-** | 55.77 | 22 | P | P | 07 31 55.5 | +3.6 |
| | comp=Z,2.2nm,0.8s,baz=195,slow=10,SNR=4.5 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| MKAR | **Makanchi Array** | 57.28 | 326 | P | P | 07 32 06.1 | +3.3 |
| | comp=Z,1.8nm,0.7s,baz=122,slow=7.4,SNR=4.3 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| KURBB | **Kurchatov Arra** | 61.48 | 328 | P | P | 07 32 35.6 | +3.9 |
| | comp=Z,4.3nm,0.7s,baz=124,slow=6.5,SNR=5.2 | | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| BVAR | **Borovoye Array** | 67.06 | 327 | P | P | 07 33 12.2 | +4.0 |
| | comp=Z,4.5nm,0.7s,baz=120,slow=8.8,SNR=13 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| SBA | **Scott Base** | 84.32 | 172 | P | P | 07 34 43.1 | -3.3 |
| PWL | **Port Wells** | 84.69 | 29 | P | P | 07 34 45.0 | -3.7 |
| ILAR | **Eielson Array** | 85.47 | 25 | P | P | 07 34 57.0 | +4.5 |
| | comp=Z,0.2nm,0.7s,baz=232,slow=4.4,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| E28M | **Babbage River** | 88.25 | 21 | P | P | 07 35 02.1 | -3.9 |
| E28M | | | | IAmb | IAmb | 07 35 28.2 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| I28M | **Miner Creek** | 88.39 | 25 | P | P | 07 35 01.6 | -5.2 |
| I28M | | | | IAmb | IAmb | 07 35 23.3 | |
| | comp=Z,4.2nm,1.1s | | | | | | |
| K29M | **Barlow Dome** | 89.59 | 26 | P | P | 07 35 07.0 | -5.5 |
| K29M | | | | IAmb | IAmb | 07 35 33.2 | |
| | comp=Z,4.4nm,1.4s | | | | | | |
| QSPA | **South Pole Qui** | 93.53 | 180 | P | P | 07 35 24.4 | -6.2 |
| QSPA | | | | IAmb | IAmb | 07 35 47.4 | |
| | comp=Z,3.9nm,1.4s | | | | | | |
| MT01 | **Popeta** | 145.85 | 154 | PKPdf | PKPdf | 07 41 49.4 | -4.9 |
| AC05 | **El Transito** | 150.49 | 150 | PKPdf | PKPdf | 07 41 58.5 | -3.6 |

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*AEIC **29** 07:22:19.5±1.5, 52°.6N±0°.1×172°.6W±0°.1, h235km±7km, Error ellipse: s-maj=21.5km s-min=8.7km az=159.0*
**NEIC 29 07:22:19.9±1.9, 53°.1N±0°.2×172°.8W±0°.1, h213km±4km, mb3.9/8, ML3.5(AEIC), Error ellipse: s-maj=25.6km s-min=7.8km az=157.0, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KOFP | **Korovin Flat P** | 1.17 | 223 | | Pn | 07 22 52.4 | +0.2 |
| KOFP | | | | | S | 07 23 18.5 | +1.4 |
| KOWE | **Korovin West** | 1.17 | 230 | | Pn | 07 22 52.2 | +0.1 |
| CLES | **Cleveland East** | 1.78 | 99 | | Pn | 07 22 56.8 | -0.3 |
| CLCO | **Concord Point,** | 1.89 | 99 | | Pn | 07 22 57.9 | -0.3 |
| GSTD | **Great Sitkin T** | 2.31 | 244 | | Pn | 07 23 02.5 | -0.1 |
| GSTD | | | | | S | 07 23 35.2 | -0.3 |
| GSCK | **Great Sitkin C** | 2.34 | 243 | | Pn | 07 23 02.4 | -0.4 |
| NIKH | **Nikolski High** | 2.38 | 92 | | Pn | 07 23 02.4 | -0.8 |
| NIKH | | | | | S | 07 23 36.0 | -0.7 |
| OKSP | **Okmok Steeple** | 2.71 | 86 | | Pn | 07 23 06.9 | 0.0 |
| OKTU | **Okmok Mt. Tuli** | 2.87 | 83 | | Pn | 07 23 08.5 | -0.1 |
| KICM | **Kanaga Island** | 2.95 | 247 | | Pn | 07 23 10.2 | +0.6 |
| KIWB | **Kanaga Island** | 2.95 | 246 | Pn | Pn | 07 23 09.7 | +0.1 |
| KIMD | **Kanaga Island** | 3.04 | 245 | | Pn | 07 23 10.5 | -0.1 |
| MAPS | **Pakushin South** | 3.56 | 77 | | Pn | 07 23 16.8 | +0.1 |
| MAPS | | | | | S | 07 24 01.1 | +0.1 |
| MGOD | **Makushin Gods** | 3.60 | 77 | | Pn | 07 23 17.2 | 0.0 |
| MSW | **Makushin Switc** | 3.67 | 75 | | Pn | 07 23 18.3 | +0.2 |
| MSW | | | | | S | 07 24 05.0 | +1.6 |
| MREP | **Makushin Rep't** | 3.68 | 77 | | Pn | 07 23 18.4 | +0.2 |
| UNV | **Unalaska Valle** | 3.83 | 77 | | Pn | 07 23 19.8 | 0.0 |
| UNV | | | | | S | 07 24 06.1 | -0.6 |
| LVA | **Lava Point** | 4.15 | 73 | | Pn | 07 23 24.7 | +0.8 |
| AKGG | **Akutan Green G** | 4.19 | 72 | | Pn | 07 23 25.5 | +1.2 |
| AMKA | **Amchitka** | 5.16 | 253 | | Pn | 07 23 36.5 | 0.0 |
| KDAK | **Kodiak Island** | 12.36 | 60 | Pn | Pn | 07 25 07.6 | -1.0 |
| J17K | **VABM Dome** | 12.54 | 29 | Pn | Pn | 07 25 10.9 | +0.1 |
| CNPM | **China Poot** | 13.53 | 53 | | Pn | 07 25 24.1 | +0.9 |
| SKT | **Skwentna** | 14.38 | 44 | Pn | Pn | 07 25 32.6 | -1.1 |
| BPAW | **Bear Paw Mtn.** | 15.70 | 37 | | Pn | 07 25 50.9 | +1.2 |
| I23K | **Minto, Yukon-K** | 16.87 | 35 | | Pn | 07 26 03.0 | -0.6 |
| I23K | | | | IAmb | IAmb | 07 26 04.6 | |
| | comp=Z,4.6nm,1.4s | | | | | | |
| J25K | **Salcha River,** | 18.07 | 40 | P | P | 07 26 15.1 | -0.2 |
| J25K | | | | IAmb | IAmb | 07 26 16.7 | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| SCRK | **Sand Creek** | 18.35 | 42 | P | P | 07 26 17.7 | -0.8 |
| SCRK | | | | IAmb | IAmb | 07 26 18.9 | |
| | comp=Z,4.4nm,0.6s | | | | | | |
| J26L | **Joseph Creek** | 18.73 | 41 | P | P | 07 26 22.5 | 0.0 |
| J26L | | | | IAmb | IAmb | 07 26 23.3 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| BCPM | **Bancas Point** | 19.35 | 56 | P | P | 07 26 30.2 | +1.1 |
| D25K | **Kavik River** | 20.33 | 27 | P | P | 07 26 36.4 | -3.1 |
| D25K | | | | IAmb | IAmb | 07 26 48.4 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| C27K | **Jago River** | 21.26 | 28 | P | P | 07 26 52.4 | +3.2 |

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*AEIC **29** 07:25:08.6±1.0, 52°.8N±0°.2×169°.6W±0°.2, h88km±3km, Error ellipse: s-maj=28.1km s-min=7.5km az=155.0*
**NEIC 29 07:25:07.7±1.0, 52°.4N±0°.2×169°.4W±0°.1, h81km±15km, ML3.5(AEIC), Error ellipse: s-maj=28.7km s-min=7.0km az=156.0, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CLCO | **Concord Point,** | 0.49 | 334 | | Pn | 07 25 21.4 | 0.0 |
| CLCO | | | | | Sn | 07 25 31.5 | 0.0 |
| CLES | **Cleveland East** | 0.57 | 326 | | Pn | 07 25 21.5 | -0.6 |
| CLES | **Cleveland East** | 0.57 | 326 | | Sn | 07 25 32.2 | -0.7 |
| NIKH | **Nikolski High** | 0.70 | 26 | | Pn | 07 25 23.7 | +0.4 |
| NIKH | | | | | Sn | 07 25 34.7 | -0.2 |
| OKSP | **Okmok Steeple** | 1.11 | 35 | | Pn | 07 25 28.2 | +0.1 |
| OKSP | | | | | Sn | 07 25 43.6 | +0.1 |
| OKCE | **Okmok Cone E** | 1.30 | 34 | | Pn | 07 25 30.2 | -0.3 |
| OKWE | **Okmok W'ng Wal** | 1.31 | 31 | | Pn | 07 25 29.9 | -0.7 |
| OKNC | **Okmok New Cone** | 1.34 | 34 | | Pn | 07 25 30.8 | -0.1 |
| OKNC | | | | | Sn | 07 25 48.5 | 0.0 |
| MAPS | **Pakushin South** | 2.07 | 44 | | Pn | 07 25 40.5 | +0.1 |
| MAPS | | | | | Sn | 07 26 04.3 | -1.2 |
| MGOD | **Makushin Gods** | 2.09 | 45 | | Sn | 07 26 05.8 | -0.1 |
| MSW | **Makushin Switc** | 2.21 | 44 | | Pn | 07 25 42.2 | -0.1 |
| UNV | **Unalaska Valle** | 2.29 | 48 | | Pn | 07 25 43.9 | +0.6 |
| AKMO | **Akutan Morgan** | 2.67 | 48 | | Pn | 07 25 49.3 | +0.9 |
| LVA | **Lava Point** | 2.70 | 47 | | Pn | 07 25 49.7 | +0.8 |
| KOFP | **Korovin Flat P** | 2.91 | 270 | | Pn | 07 25 51.8 | +0.1 |
| KOWE | **Korovin West** | 3.00 | 272 | | Pn | 07 25 52.9 | 0.0 |
| WECS | **Westdahl Cape** | 3.51 | 50 | | Pn | 07 26 00.6 | +0.7 |
| WEBT | **Westdahl Beart** | 3.56 | 49 | | Pn | 07 26 01.2 | +0.7 |
| WESE | **West Dahl East** | 3.56 | 51 | | Pn | 07 26 01.7 | +1.1 |
| SSLS | **Shishaldin Sou** | 3.98 | 51 | | Pn | 07 26 07.2 | +0.9 |
| ISLZ | **Isanotski Laza** | 4.13 | 53 | | Pn | 07 26 09.0 | +0.7 |
| ISNN | **Isanotski Nort** | 4.16 | 51 | | Pn | 07 26 09.4 | +0.8 |
| GSCK | **Great Sitkin C** | 4.20 | 268 | | Pn | 07 26 09.2 | 0.0 |
| KIWB | **Kanaga Island** | 4.83 | 267 | Pn | Pn | 07 26 17.9 | +0.1 |
| KIMD | **Kanaga Island** | 4.89 | 266 | | Pn | 07 26 18.6 | 0.0 |
| PS1A | **Pavlof South-1** | 5.46 | 53 | | Pn | 07 26 26.7 | +0.4 |
| S12K | **Black Hills** | 5.46 | 49 | Pn | Pn | 07 26 26.6 | +0.3 |
| SDPT | **Sand Point** | 6.06 | 57 | | Pn | 07 26 34.8 | +0.3 |
| CNBA | **Chernabura Isl** | 6.33 | 63 | | Pn | 07 26 38.2 | +0.1 |
| AMKA | **Amchitka** | 7.09 | 267 | | Pn | 07 26 47.3 | -1.3 |
| CHGN | **Chignik** | 7.53 | 54 | Pn | Pn | 07 26 53.0 | -1.5 |
| PLK4 | **Peulik 4** | 9.15 | 50 | Pn | Pn | 07 27 15.9 | -0.8 |
| O16K | **Kokwok River B** | 9.61 | 37 | Pn | Pn | 07 27 22.7 | -0.2 |
| OHAK | **Old Harbor** | 10.48 | 56 | | Pn | 07 27 32.3 | -2.4 |
| N17K | **Nushagak Hills** | 10.59 | 35 | Pn | Pn | 07 27 36.6 | +0.3 |
| KDAK | **Kodiak Island** | 11.04 | 54 | Pn | Pn | 07 27 39.2 | -3.2 |

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*IDC **29** 07:27:14.4±3.5, 53°.76N×90°.77E, h0km, mbtmp3.4/2, ML3.0/2, Error ellipse: s-maj=30.6km s-min=22.9km az=41.0*
**NNC 29 07:27:16.9±4.7, 53°.60N×90°.52E, h0km, mb3.5, mpv3.2, 5C-2D, Error ellipse: s-maj=36.3km s-min=22.6km az=56.0, Suspected Mining explosion., Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | **ZALESOVO INFRA** | 3.40 | 278 | I | I | 07 50 40.0 | |
| |

**IDC 29 07:34:21.1±2.0, 6.79S×129.43E, h0km, mb3.6/2, mbtmp3.5/4, ML3.7/2, Error ellipse: s-maj=145.3km s-min=30.8km az=68.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.92** | **160** | Pn | Pn | 07 37 39.7 | -0.1 |
| | 0.4nm,0.3s,baz=343,slow=13,SNR=28 | | | | | | |
| WRA | | | | Sn | Sn | 07 40 03.2 | -12 |
| | 0.5nm,0.3s,baz=329,slow=24,SNR=7.2 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **17.32** | **166** | Pn | Pn | 07 38 24.7 | +0.1 |
| | 0.1nm,0.3s,baz=341,slow=8.9,SNR=8.3 | | | | | | |
| ASAR | | | | Sn | Sn | 07 41 23.9 | -14 |
| | 0.1nm,0.3s,baz=327,slow=39,SNR=2.8 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.74** | **327** | P | P | 07 45 20.4 | -0.2 |
| | 0.2nm,0.4s,baz=129,slow=6.8,SNR=4.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.04** | **329** | P | P | 07 45 47.2 | +0.3 |
| | 0.3nm,0.4s,baz=142,slow=5.1,SNR=4.3 | | | | | | |
| | 0.3nm,0.4s | | | | | | |

**IDC 29 07:35:38.4±1.8, 54.69N×83.80E, h0km, mbtmp2.7/3, ML2.3/3, Error ellipse: s-maj=15.2km s-min=9.9km az=4.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.96** | **141** | I | I | 07 41 40.0 | |
| | baz=318,slow=313,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.96** | **141** | Pg | Pg | 07 35 56.0 | -0.8 |
| | 1.8nm,0.3s,baz=323,slow=15,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 07 36 11.2 | |
| | 7.3nm,0.3s,baz=325,slow=28,SNR=24 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.19** | **220** | Pn | Pn | 07 36 57.9 | +0.6 |
| | 0.1nm,0.3s,baz=40,slow=14,SNR=4.6 | | | | | | |
| KURBB | | | | Sn | Sn | 07 37 55.7 | -2.0 |
| | baz=36,slow=25,SNR=1.8 | | | | | | |
| KURBB | | | | Lg | Lg | 07 38 24.7 | |
| | 0.1nm,0.3s,baz=43,slow=31,SNR=5.3 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.97** | **188** | Pn | Pn | 07 37 35.0 | -0.4 |
| | 0.1nm,0.3s,baz=1.2,slow=14,SNR=2.1 | | | | | | |
| MKAR | | | | Lg | Lg | 07 39 53.1 | |
| | 0.1nm,0.3s,baz=16,slow=27,SNR=3.0 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **8.11** | **264** | Pn | Pn | 07 37 36.4 | -0.9 |
| | baz=66,slow=14,SNR=2.7 | | | | | | |
| | 0.4nm,0.4s | | | | | | |

**WEL 29 07:37:18.2±1.0, 31.5S±8.1×18.0W±1.8, h354km±15km, M4.5/12, mB4.7/6, ML5.0/9, MLv4.9/12, Mw(mB)3.9/6, Error ellipse: s-maj=0.0km s-min=0.0km az=108.1, confirmed, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GLKZ** | **Green Lake** | **2.52** | **35** | P | Pn | 07 38 13.3 | -0.6 |
| GLKZ | | | | S | S | 07 38 59.4 | +0.9 |
| **HAZ** | **Te Kaha** | **6.75** | **198** | P | P | 07 38 58.9 | 0.0 |
| **OUZ** | **Omahuta** | **6.90** | **234** | P | Pn | 07 38 57.9 | -1.5 |
| **WIAZ** | **Waiheke Island** | **6.98** | **218** | P | Pn | 07 39 00.8 | +0.5 |
| **ABAZ** | **Army Bay** | **7.00** | **220** | P | Pn | 07 39 00.8 | +0.3 |
| **OPRZ** | **Ohinepanea** | **7.22** | **205** | P | P | 07 39 04.7 | +0.3 |
| **CNGZ** | **Carnagh Statio** | **7.34** | **194** | P | P | 07 39 05.2 | -0.6 |
| **MWZ** | **Matawai** | **7.36** | **198** | P | P | 07 39 05.8 | -0.3 |
| MWZ | | | | S | S | 07 40 32.4 | +0.8 |
| **TKGZ** | **Te Karaka** | **7.38** | **196** | P | Pn | 07 39 03.7 | -1.3 |
| TKGZ | | | | S | S | 07 40 31.0 | -0.9 |
| **URZ** | **Urewera** | **7.41** | **201** | P | Pn | 07 39 04.0 | -1.3 |
| URZ | | | | S | S | 07 40 33.2 | +0.6 |
| **KARZ** | **Kaharoa** | **7.49** | **206** | P | P | 07 39 08.0 | +0.4 |
| **OMRZ** | **Omania** | **7.52** | **205** | P | P | 07 39 08.1 | +0.2 |
| **RAGZ** | **Rawiri** | **7.54** | **198** | P | Pn | 07 39 06.8 | -0.1 |
| **TOZ** | **Tahuroa Road** | **7.55** | **211** | P | P | 07 39 09.3 | +1.1 |
| **TARZ** | **Mount Tarawera** | **7.58** | **204** | P | P | 07 39 08.8 | 0.0 |
| **RIGZ** | **Rimuhau** | **7.65** | **196** | P | Pn | 07 39 06.8 | -1.4 |
| RIGZ | | | | S | S | 07 40 38.6 | +0.7 |
| **RRRZ** | **Republican Roa** | **7.67** | **204** | P | Pn | 07 39 09.0 | +0.5 |
| RRRZ | | | | S | S | 07 40 37.5 | -0.8 |
| **MUGZ** | **Murupara** | **7.71** | **202** | P | Pn | 07 39 08.2 | -0.7 |
| MUGZ | | | | S | S | 07 40 40.7 | +1.5 |
| **HRRZ** | **Handcock Road** | **7.80** | **205** | P | Pn | 07 39 10.4 | +0.4 |
| **SNGZ** | **Shannon Statio** | **7.83** | **198** | P | Pn | 07 39 10.3 | +0.1 |
| **KNZ** | **Kokohu** | **7.97** | **196** | P | Pn | 07 39 09.7 | -2.2 |
| KNZ | | | | S | S | 07 40 46.0 | +1.3 |

**ISC 29 07:37:43.2±1.1, 49.73N±0.08×17.72E±0.09, h13km±12km, n6, σ0.35/9, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MORC** | **Moravsky Berou** | **0.12** | **291** | *e*Pg | **Pg** | **07 37 46.6** | **0.0** |
| MORC | | | | *e*SG | **Sg** | **07 37 48.9** | **-0.1** |
| **VRAC** | **Vranov** | **0.85** | **240** | *e*Pg | **Pb** | **07 38 00.0** | **+0.2** |
| **JAVC** | **Velka Javorina** | **0.88** | **182** | *e*Pg | **Pb** | **07 38 00.8** | **+0.5** |
| **KRUC** | **Moravsky** | **1.10** | **233** | *e*Pg | **Pg** | **07 38 04.2** | **-0.1** |
| **OJC** | **Ojcow** | **1.43** | **69** | *e*Pg | **Pn** | **07 38 08.9** | **+0.1** |
| OJC | | | | *e*Sg | **Sb** | **07 38 27.4** | **-0.3** |
| **VYHS** | **Vyhne** | **1.44** | **149** | *e*PG | **Pn** | **07 38 08.9** | **-0.1** |
| VYHS | | | | *e*SG | **Sb** | **07 38 27.7** | **-0.4** |

*IDC **29** 07:47:10.5±1.2, 15.37S×177.29E, h0km, mb3.7/6, mbtmp3.7/6, Error ellipse: s-maj=52.9km s-min=27.1km az=144.0*

**ISC 29 07:47:16.0±1.1, 15.3S±0.3×177.2E±0.3, h35km, n6, σ0.81/6, mb3.4/6, Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STKA** | **Stephens Creek** | **36.37** | **237** | P | **P** | **07 54 17.5** | **+0.6** |
| | 1.8nm,0.7s,baz=95,slow=11,SNR=2.8 | | | | | | |
| | 1.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.05** | **257** | P | **P** | **07 54 56.1** | **-0.3** |
| | 0.4nm,0.8s,baz=95,slow=9.1,SNR=2.4 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **41.54** | **252** | P | **P** | **07 54 59.6** | **-0.8** |
| | 0.6nm,0.7s,baz=87,slow=8.6,SNR=6.2 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.71** | **180** | P | **P** | **07 58 52.1** | **+0.1** |
| | 2.7nm,1.0s,baz=47,slow=2.3,SNR=3.8 | | | | | | |
| | 2.7nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.56** | **46** | P | **P** | **07 59 24.6** | **-0.6** |
| | 0.3nm,0.7s,baz=229,slow=5.2,SNR=3.5 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **84.39** | **15** | P | **P** | **07 59 45.0** | **+0.7** |
| | 0.2nm,0.6s,baz=234,slow=5.2,SNR=2.2 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**IDC 29 07:53:22.4±3.8, 53.79N×88.19E, h0km, mbtmp2.8/3, ML2.2/3, Error ellipse: s-maj=37.1km s-min=21.1km az=47.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **2.00** | **276** | I | I | 08 06 20.0 | |
| | 0.1nm,1.0s,baz=92,slow=324,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.00** | **276** | Pn | Pn | 07 53 57.9 | +0.5 |
| | 1.3nm,0.3s,baz=92,slow=14,SNR=9.0 | | | | | | |
| ZALV | | | | Lg | Lg | 07 54 25.6 | |
| | 1.7nm,0.3s,baz=94,slow=23,SNR=10 | | | | | | |
| | 5.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.73** | **246** | Pn | Pn | 07 55 03.0 | +0.6 |
| | 0.1nm,0.3s,baz=60,slow=14,SNR=4.5 | | | | | | |
| | 0.6nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.95** | **211** | Pn | Pn | 07 55 20.0 | +0.8 |
| | 0.1nm,0.3s,baz=25,slow=13,SNR=1.7 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **29** 07:58:31.3±1.4, 22.22S×170.12E, h0km, mb4.1/6, mbtmp4.1/7, ML3.5/1, Error ellipse: s-maj=37.8km s-min=23.4km az=21.0*

*NEIC **29** 07:58:35.6±0.8, 22.26S±0.2×169.8E±0.1, h10km±2km, mb4.5/10, Error ellipse: s-maj=33.5km s-min=18.5km az=3.0*

**ISC 29 07:58:35.1±1.2, 22.4S±0.2×170.0E±0.1, h21km, n26, σ1.38/27, mb4.3/13, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.35** | **264** | | **Pn** | **07 59 08.8** | **-3.6** |
| **DZM** | **Mont Dzumac** | **3.28** | **275** | | **Pn** | **07 59 22.3** | **-3.1** |
| **DZM** | **Mont Dzumac** | **3.28** | **275** | Pn | **Pn** | **07 59 25.8** | **+0.4** |
| | 4.5nm,0.3s,baz=77,slow=19,SNR=18 | | | | | | |
| DZM | | | | Sn | **Sn** | **08 00 06.4** | **+2.5** |
| | 2.2nm,0.3s,baz=151,slow=19,SNR=4.1 | | | | | | |
| | 18nm,0.5s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **5.60** | **288** | | **Pn** | **07 59 55.7** | **-1.6** |
| **CTA** | **Charters Tower** | **22.22** | **272** | P | **P** | **08 03 32.0** | **+1.5** |
| | 0.3nm,0.6s,baz=82,slow=9.0,SNR=6.3 | | | | | | |
| **CTAO** | **Charters Tower** | **22.22** | **272** | P | **P** | **08 03 30.6** | **+0.1** |
| **STKA** | **Stephens Creek** | **26.90** | **243** | P | **P** | **08 04 14.6** | **-0.1** |
| **STKA** | **Stephens Creek** | **26.90** | **243** | P | **P** | **08 04 17.1** | **+2.4** |
| | 0.8nm,0.3s,baz=104,slow=17,SNR=2.2 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **33.08** | **268** | P | **P** | **08 05 09.1** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 08 05 16.9 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **33.16** | **261** | P | **P** | **08 05 10.7** | **+0.3** |
| | comp=Z,2.3nm,0.8s,baz=89,slow=9.2,SNR=22 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.26** | **268** | P | **P** | **08 05 10.6** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 08 05 19.8 | |
| | comp=Z,10nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.26** | **267** | P | **P** | **08 05 10.6** | **-0.6** |
| **WRAB** | **Tennant Creek** | **33.26** | **267** | P | **P** | **08 05 10.5** | **-0.7** |
| WRAB | | | | IAmb | IAmb | 08 05 19.2 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.27** | **267** | P | **P** | **08 05 11.1** | **-0.2** |
| | comp=Z,1.9nm,0.5s,baz=99,slow=8.1,SNR=42 | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **38.12** | **278** | P | **P** | **08 05 52.8** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **41.70** | **268** | P | **P** | **08 06 22.4** | **-0.4** |
| **QSPA** | **South Pole Qui** | **67.68** | **180** | P | **P** | **08 09 31.7** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 08 10 03.9 | |
| | comp=Z,4.5nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.68** | **180** | P | **P** | **08 09 31.3** | **+0.8** |
| | comp=Z,1.6nm,0.8s,baz=8.4,slow=3.5,SNR=9.8 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.45** | **184** | ⇑P | **P** | **08 11 11.2** | **+0.2** |
| | comp=Z,135nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **86.06** | **182** | P | **P** | **08 11 13.8** | **-0.1** |
| SNAA | | | | IAmb | IAmb | 08 11 17.8 | |
| | comp=Z,6.1nm,1.5s | | | | | | |
| **SNAA** | **Sanae** | **86.06** | **182** | P | **P** | **08 11 14.0** | **0.0** |
| | comp=Z,1.0nm,0.9s,baz=187,slow=10,SNR=11 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.62** | **180** | ⇑P | **P** | **08 11 16.3** | **-0.3** |
| | comp=Z,3.2nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.92** | **181** | ⇑P | **P** | **08 11 18.0** | **-0.1** |
| | comp=Z,2.3nm,0.5s,baz=175,slow=5.5 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.21** | **181** | ⇑P | **P** | **08 11 18.0** | **-1.4** |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **90.14** | **323** | P | **P** | **08 11 33.4** | **-0.3** |
| | comp=Z,0.8nm,0.7s,baz=137,slow=5.9,SNR=4.0 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.71** | **353** | PKPbc | **PKPdf** | **08 18 13.9** | **+0.5** |
| | comp=Z,0.8nm,0.5s,baz=1.4,slow=2.8,SNR=5.0 | | | | | | |

*SOME **29** 07:59:48.8, 39.97N×77.38E, h10km*
*NNC **29** 07:59:49.9±1.2, 40.00N×77.46E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=8.4km s-min=5.9km az=165.0*
*KRNET **29** 07:59:49.4±0.1, 39.93N×77.41E, mb3.2*

**ISC 29 07:59:52.1±1.5, 39.99N±0.07×77.46E±0.04, h10km, n69, σ1.96/105, 18C-13D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TARG** | **Taragay, Kyrgy** | **1.75** | **8** | ⇓*i*P | **Pn** | **08 00 23.2** | **+0.2** |
| | baz=9.0 | | | | | | |
| TARG | | | | ⇓*i*S | **Sb** | **08 00 48.0** | **+1.1** |
| | baz=9.0 | | | | | | |
| **NRN** | **Naryn** | **1.82** | **323** | ⇓*i*P | **Pn** | **08 00 23.5** | **-0.3** |
| | baz=24 | | | | | | |
| NRN | | | | ⇓*i*S | **Sb** | **08 00 48.4** | **-0.3** |
| | baz=24 | | | | | | |
| **KDJ** | **Kajisay** | **2.15** | **354** | ⇑*i*P | **Pn** | **08 00 29.1** | **+0.9** |
| | baz=56 | | | | | | |
| KDJ | | | | ⇑*i*S | **Sb** | **08 00 58.1** | **+0.2** |
| | baz=56 | | | | | | |
| **ULHL** | **Ulahol** | **2.43** | **338** | P | **Pb** | **08 00 34.8** | **-1.3** |
| | SNR=25 | | | | | | |
| **ULHL** | **Ulahol** | **2.43** | **338** | ⇑*i*P | **Pn** | **08 00 32.8** | **+0.7** |
| | baz=40 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sb** | **08 01 04.7** | **-1.5** |
| | baz=40 | | | | | | |
| **PRZ** | **Przheval'sk** | **2.59** | **16** | ⇑*e*P | **Pn** | **08 00 35.2** | **+1.0** |
| | baz=16 | | | | | | |
| PRZ | | | | ⇑*e*S | **Sb** | **08 01 08.9** | **-1.7** |
| | baz=16 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.75** | **336** | ⇓*i*P | **Pn** | **08 00 37.0** | **+0.6** |
| | baz=37 | | | | | | |
| BOOM | | | | ⇓*i*S | **Sn** | **08 01 11.9** | **+2.2** |
| | baz=37 | | | | | | |
| **ARLS** | **Aral** | **3.02** | **309** | ⇑*e*P | **Pn** | **08 00 40.4** | **+0.2** |
| | baz=10.0 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **08 01 17.6** | **+1.0** |
| | baz=10.0 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.04** | **272** | ⇓*e*P | **Pn** | **08 00 40.3** | **-0.2** |
| | baz=73 | | | | | | |
| SFK | | | | ⇓*e*S | **Sn** | **08 01 17.3** | **+0.2** |
| | baz=73 | | | | | | |
| **TNSS** | **Tian-Shan** | **3.07** | **353** | *e*P | **Pb** | **08 00 46.3** | **-0.7** |
| | 40nm,0.5s | | | | | | |
| TNSS | | | | *e*S | **Sb** | **08 01 28.4** | **+3.8** |
| | 33nm,0.6s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.07** | **353** | Pg | **Pb** | **08 00 46.3** | **-0.7** |
| | 40nm,0.6s | | | | | | |
| TNSS | | | | Lg | Lg | 08 01 28.4 | |
| | 33nm,0.7s | | | | | | |
| **IZV** | **Izvestkoviy** | **3.11** | **348** | *e*P | **Pb** | **08 00 47.4** | **-0.1** |
| | 13nm,0.4s | | | | | | |
| IZV | | | | *e*S | **Sg** | **08 01 29.7** | **-2.3** |
| | 62nm,0.7s | | | | | | |
| **IZV** | **Izvestkoviy** | **3.11** | **348** | Pg | **Pb** | **08 00 47.4** | **-0.1** |
| | 13nm,0.4s | | | | | | |
| IZV | | | | Lg | Lg | 08 01 29.7 | |
| | 63nm,0.7s | | | | | | |
| **SATY** | **Saty** | **3.14** | **13** | *e*P | **Pb** | **08 00 48.6** | **+0.4** |
| | 13nm,0.6s | | | | | | |
| SATY | | | | *e*S | **Sg** | **08 01 31.4** | **-1.7** |
| | 42nm,0.3s | | | | | | |
| **SATY** | **Saty** | **3.14** | **13** | Pg | **Pb** | **08 00 48.6** | **+0.4** |
| | 13nm,0.6s | | | | | | |
| SATY | | | | Lg | Lg | 08 01 31.4 | |
| | 42nm,0.7s | | | | | | |
| **UCH** | **Uchtor** | **3.15** | **316** | P | **Sb** | **08 01 31.0** | **+3.7** |
| | SNR=5.8 | | | | | | |
| **MDOK** | **Medeo** | **3.18** | **355** | Pg | **Pb** | **08 00 48.2** | **-0.7** |
| | 28nm,0.6s | | | | | | |
| MDOK | | | | Pg | **Pg** | **08 00 48.8** | **-4.3** |
| | 24nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 08 01 31.4 | |
| | 43nm,0.6s | | | | | | |
| MDOK | | | | Lg | Lg | 08 01 32.2 | |
| | 48nm,0.6s | | | | | | |
| **MTBS** | **Maitube** | **3.23** | **346** | *e*P | **Pb** | **08 00 48.8** | **-0.8** |
| | 13nm,0.6s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **08 01 32.1** | **+3.1** |
| | 52nm,0.5s | | | | | | |
| **MTBS** | **Maitube** | **3.23** | **346** | Pg | **Pb** | **08 00 48.8** | **-0.8** |
| | 13nm,0.6s | | | | | | |
| MTBS | | | | Lg | Lg | 08 01 32.2 | |
| | 52nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.24** | **335** | P | **Pb** | **08 00 49.5** | **-0.5** |
| | SNR=8.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.24** | **335** | Pg | **Pb** | **08 00 47.9** | **-2.0** |
| | 7.6nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 08 01 32.0 | |
| | 33nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.24** | **335** | ⇑*e*P | **Pn** | **08 00 44.2** | **+0.9** |
| | baz=36 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sn** | **08 01 24.2** | **+2.1** |
| | baz=36 | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.25** | **355** | *e*P | **Pb** | **08 00 50.4** | **+0.4** |
| | 24nm,0.3s | | | | | | |
| KOTS | | | | *e*S | **Sg** | **08 01 34.7** | **-1.7** |
| | 71nm,0.4s | | | | | | |
| **KOTS** | **Kotyrbulak** | **3.25** | **355** | Pg | **Pb** | **08 00 50.4** | **+0.4** |
| | 22nm,0.3s | | | | | | |
| KOTS | | | | Lg | Lg | 08 01 34.7 | |
| | 71nm,0.5s | | | | | | |
| **KST** | **Kastek** | **3.25** | **340** | *e*P | **Pb** | **08 00 49.2** | **-0.8** |
| | 7.7nm,0.4s | | | | | | |
| KST | | | | *e*S | **Sb** | **08 01 32.6** | **+3.0** |
| | 37nm,0.6s | | | | | | |
| **KST** | **Kastek** | **3.25** | **340** | Pg | **Pb** | **08 00 49.2** | **-0.8** |
| | 8.2nm,0.7s | | | | | | |
| KST | | | | Lg | Lg | 08 01 32.6 | |
| | 37nm,0.7s | | | | | | |
| **ZHN** | **Zhinishke** | **3.25** | **13** | *e*P | **Pb** | **08 00 48.9** | **-1.2** |
| | 11nm,0.2s | | | | | | |
| ZHN | | | | *e*S | **Sb** | **08 01 31.9** | **+2.1** |
| | 36nm,0.3s | | | | | | |
| **ZHN** | **Zhinishke** | **3.25** | **13** | Pg | **Pb** | **08 00 48.9** | **-1.2** |
| | 12nm,0.3s | | | | | | |
| ZHN | | | | Lg | Lg | 08 01 31.9 | |
| | 36nm,0.3s | | | | | | |
| **KBK** | **Karagaybulak** | **3.27** | **325** | P | **Pb** | **08 00 50.0** | **-0.3** |
| | SNR=12 | | | | | | |
| **KBK** | **Karagaybulak** | **3.27** | **325** | ⇑*i*P | **Pn** | **08 00 44.3** | **+0.7** |
| | baz=27 | | | | | | |
| KBK | | | | ⇑*i*S | **Sn** | **08 01 24.3** | **+1.7** |
| | baz=27 | | | | | | |
| **UZB** | **Uzynbulak** | **3.36** | **20** | *e*P | **Pb** | **08 00 50.7** | **-1.2** |
| | 14nm,0.5s | | | | | | |
| UZB | | | | *e*S | **Sb** | **08 01 35.3** | **+2.4** |
| | 16nm,0.4s | | | | | | |
| **UZB** | **Uzynbulak** | **3.36** | **20** | Pg | **Pb** | **08 00 50.7** | **-1.2** |
| | 14nm,0.8s | | | | | | |
| UZB | | | | Lg | Lg | 08 01 35.3 | |
| | 16nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.46** | **321** | P | **Pb** | **08 00 52.7** | **-0.9** |
| | SNR=6.5 | | | | | | |
| **AAK** | **Ala-Archa** | **3.46** | **321** | Pg | **Pb** | **08 00 52.7** | **-0.9** |
| | 16nm,0.8s | | | | | | |
| AAK | | | | Lg | Lg | 08 01 39.2 | |
| | 113nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **3.46** | **321** | ⇑*i*P | **Pn** | **08 00 46.8** | **+0.6** |
| | baz=22 | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **08 01 28.5** | **+1.2** |
| | baz=22 | | | | | | |
| **DGS** | **Degeres** | **3.48** | **339** | *e*P | **Pb** | **08 00 53.4** | **-0.5** |
| | 7.5nm,0.5s | | | | | | |
| DGS | | | | *e*S | **Sb** | **08 01 40.0** | **+3.6** |
| | 27nm,0.7s | | | | | | |
| **DGS** | **Degeres** | **3.48** | **339** | Pg | **Pb** | **08 00 53.4** | **-0.5** |
| | 7.1nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 08 01 40.0 | |
| | 27nm,0.7s | | | | | | |
| **SHLS** | **Shalkode** | **3.50** | **25** | *e*P | **Pg** | **08 00 57.8** | **-1.4** |
| | 24nm,0.4s | | | | | | |
| SHLS | | | | *e*S | **Sg** | **08 01 47.2** | **+2.7** |
| | 100nm,0.7s | | | | | | |
| **SHLS** | **Shalkode** | **3.50** | **25** | Pg | **Pg** | **08 00 57.8** | **-1.4** |
| | 24nm,0.4s | | | | | | |
| SHLS | | | | Lg | Lg | 08 01 47.2 | |
| | 100nm,0.7s | | | | | | |
| **FRU1** | **Bishkek** | **3.53** | **324** | ⇓*e*P | **Pn** | **08 00 48.4** | **+1.3** |
| | baz=25 | | | | | | |
| FRU1 | | | | ⇓*e*S | **Sn** | **08 01 31.2** | **+2.3** |
| | baz=25 | | | | | | |
| **KURS** | **Kuram** | **3.53** | **8** | *e*P | **Pb** | **08 00 51.9** | **-2.9** |
| | 18nm,1.3s | | | | | | |
| KURS | | | | *e*S | **Sb** | **08 01 37.1** | **-0.6** |
| | 15nm,0.5s | | | | | | |
| **KURS** | **Kuram** | **3.53** | **8** | Pg | **Pb** | **08 00 51.9** | **-2.9** |
| | 18nm,1.1s | | | | | | |
| KURS | | | | Lg | Lg | 08 01 37.1 | |
| | 20nm,0.8s | | | | | | |
| **KPKS** | **Kokpek** | **3.59** | **14** | *e*P | **Pb** | **08 00 55.9** | **+0.1** |
| | 13nm,0.3s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **08 01 44.7** | **-2.6** |
| | 36nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **3.59** | **14** | Pg | **Pb** | **08 00 55.8** | **+0.1** |
| | 13nm,0.4s | | | | | | |
| KPKS | | | | Lg | Lg | 08 01 44.7 | |
| | 36nm,0.5s | | | | | | |
| **OHH** | **Osh** | **3.62** | **280** | ⇑*e*P | **Pn** | **08 00 48.0** | **-0.3** |
| | baz=81 | | | | | | |
| OHH | | | | ⇑*e*S | **Sn** | **08 01 30.9** | **-0.2** |
| | baz=81 | | | | | | |
| **CHMS** | **Chumysh** | **3.63** | **327** | Pg | **Pb** | **08 00 58.0** | **+1.7** |
| | 5.8nm,0.4s | | | | | | |
| CHMS | | | | Lg | Lg | 08 01 43.6 | |
| | 20nm,0.6s | | | | | | |
| **CHMS** | **Chumysh** | **3.63** | **327** | ⇑*e*P | **Pn** | **08 00 49.2** | **+0.8** |
| | baz=28 | | | | | | |
| CHMS | | | | ⇑*e*S | **Sn** | **08 01 32.7** | **+1.4** |
| | baz=28 | | | | | | |
| **PDGK** | **Podgornoye** | **3.66** | **24** | Pg | **Pb** | **08 00 56.1** | **-0.9** |
| | 4.9nm,0.6s | | | | | | |
| PDGK | | | | Lg | Lg | 08 01 44.4 | |
| | 23nm,1.1s | | | | | | |
| **PDGK** | **Podgornoye** | **3.66** | **24** | Pg | **Pb** | **08 00 54.6** | **-2.4** |
| | 15nm,0.6s | | | | | | |
| PDGK | | | | Lg | Lg | 08 01 45.7 | |
| | 52nm,0.7s | | | | | | |
| **KTBS** | **Karatobe** | **3.76** | **351** | *e*P | **Pb** | **08 00 58.3** | **-0.4** |
| | 22nm,0.5s | | | | | | |
| KTBS | | | | *e*S | **Sb** | **08 01 48.7** | **+4.4** |
| | 48nm,0.6s | | | | | | |
| **KTBS** | **Karatobe** | **3.76** | **351** | Pg | **Pb** | **08 00 58.3** | **-0.4** |
| | 23nm,0.7s | | | | | | |
| KTBS | | | | Lg | Lg | 08 01 48.7 | |
| | 49nm,0.9s | | | | | | |
| **CHKK** | **Chushkaly** | **3.87** | **355** | *e*P | **Pb** | **08 01 00.3** | **-0.3** |
| | 16nm,0.4s | | | | | | |
| CHKK | | | | *e*S | **Sb** | **08 01 51.9** | **+4.4** |
| | 26nm,0.4s | | | | | | |
| **CHKK** | **Chushkaly** | **3.87** | **355** | Pg | **Pb** | **08 01 00.3** | **-0.3** |
| | 16nm,0.4s | | | | | | |
| CHKK | | | | Lg | Lg | 08 01 51.9 | |
| | 26nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **3.93** | **341** | *e*P | **Pb** | **08 01 01.0** | **-0.6** |
| | 10nm,0.4s | | | | | | |
| KRBS | | | | *e*S | **Sb** | **08 01 52.9** | **+3.6** |
| | 23nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **3.93** | **341** | Pg | **Pb** | **08 01 01.0** | **-0.6** |
| | 10nm,0.7s | | | | | | |
| KRBS | | | | Lg | Lg | 08 01 52.9 | |
| | 23nm,0.6s | | | | | | |
| **USP** | **Ospenovka** | **3.95** | **327** | P | **Pb** | **08 01 01.7** | **-0.3** |
| | SNR=8.0 | | | | | | |
| **KTMS** | **Ketmen** | **4.07** | **31** | *e*P | **Pb** | **08 01 03.1** | **-0.9** |
| | 2.6nm,0.4s | | | | | | |
| KTMS | | | | *e*S | **Sb** | **08 01 56.5** | **+3.2** |
| | 10nm,0.6s | | | | | | |
| **KTMS** | **Ketmen** | **4.07** | **31** | Pg | **Pb** | **08 01 03.1** | **-0.9** |
| | 2.2nm,0.5s | | | | | | |
| KTMS | | | | Lg | Lg | 08 01 56.5 | |
| | 10nm,0.8s | | | | | | |
| **MRKS** | **Merke** | **4.21** | **312** | *e*P | **Pb** | **08 01 05.9** | **-0.4** |
| | 2.6nm,0.2s | | | | | | |
| MRKS | | | | *e*S | **Sb** | **08 02 01.1** | **+3.9** |
| | 39nm,0.4s | | | | | | |
| **MRKS** | **Merke** | **4.21** | **312** | Pg | **Pb** | **08 01 05.9** | **-0.4** |
| | 2.6nm,0.2s | | | | | | |
| MRKS | | | | Lg | Lg | 08 02 01.2 | |
| | 39nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **4.23** | **4** | *e*P | **Pb** | **08 01 07.0** | **+0.5** |
| | 6.5nm,0.4s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **08 02 03.9** | **-3.9** |
| | 32nm,0.6s | | | | | | |
| **ARXS**

| | | | | | | |
|---|---|---|---|---|---|---|
| **BRLS** | **Borolday** 1.8nm,1.0s | **6.48** | **300** | Pg | **Pb** | **08 01 48.0 +3.1** |
| BRLS | 4.5nm,0.9s | | | Lg | Lg | 08 03 13.9 |

*IDC **29** 08:18:27.4±1.4, 22°.07S×170°.14E, h0km, mb3.9/6, mbtmp3.9/7, ML3.6/1, MS3.7/4, Error ellipse: s-maj=37.9km s-min=30.4km az=21.0*
*NOU **29** 08:18:35.4, 22°.07S×169°.56E, h0km, MLv3.9/7, Southeast of Loyalty Islands*
**ISC 29 08:18:31.5±1.1, 22°.1S±0°.2×170°.1E±0°.1, h25km, n20, σ0s60/20, mb4.1/9, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.00** | **289** | P | **Pn** | **08 19 03.2** | **-0.5** |
| **PINNC** | **Pines Island,** | **2.47** | **258** | P | **Pn** | **08 19 10.4** | **+0.2** |
| **YATNC** | **Mamie plateau,** | **2.94** | **271** | P | **Pn** | **08 19 17.0** | **+0.2** |
| **LIFNC** | **LIFOU** | **2.96** | **297** | P | **Pn** | **08 19 18.1** | **+1.2** |
| **DZM** | **Mont Dzumac** | **3.36** | **270** | P | **Pn** | **08 19 22.9** | **+0.4** |
| **DZM** | **Mont Dzumac** 6.0nm,0.3s,baz=123,slow=10,SNR=112 | **3.36** | **270** | Pn | **Pn** | **08 19 21.6** | **-0.9** |
| DZM | 18nm,0.3s,baz=150,slow=22,SNR=10 | | | Sn | **Sn** | **08 20 01.2** | **-0.4** |
| DZM | comp=Z,318nm,19.2s,baz=112,slow=38 24nm,0.4s | | | LR | LR | 08 20 36.1 | |
| **NOUC** | **Port Laguerre** | **3.49** | **270** | P | **Pn** | **08 19 24.6** | **+0.4** |
| **URZ** | **Urewera** comp=Z,318nm,18.1s,baz=54,slow=33 | **17.17** | **161** | LR | LR | 08 27 54.8 | |
| **STKA** | **Stephens Creek** 4.3nm,1.0s,baz=93,slow=11,SNR=3.7 | **27.09** | **243** | P | **P** | **08 24 13.8** | **+1.4** |
| STKA | comp=Z,198nm,18.0s,baz=57,slow=37 4.3nm,1.0s | | | LR | LR | 08 35 10.6 | |
| **ASAR** | **Alice Springs** 0.7nm,1.0s,baz=83,slow=8.5,SNR=3.2 | **33.29** | **260** | P | **P** | **08 25 07.3** | **-0.1** |
| ASAR | comp=Z,136nm,19.3s,baz=126,slow=35 0.7nm,1.0s | | | LR | LR | 08 37 55.2 | |
| **WRA** | **Warramunga Arr** 0.3nm,0.5s,baz=99,slow=8.4,SNR=6.6 0.3nm,0.5s | **33.37** | **267** | P | **P** | **08 25 07.8** | **-0.3** |
| **QSPA** | **South Pole Qui** 2.8nm,1.0s,baz=3.6,slow=8.6,SNR=6.3 2.8nm,1.0s | **67.93** | **180** | P | **P** | **08 29 27.9** | **-0.1** |
| **TROLL** | **Troll, Antarti** comp=Z,88nm,0.8s | **85.71** | **184** | ⇑P | **P** | **08 31 08.7** | **+0.5** |
| **SNAA** | **Sanae** comp=Z,12nm,0.7s | **86.31** | **182** | ⇑P | **P** | **08 31 11.2** | **+0.1** |
| **SNAA** | **Sanae** comp=Z,1.0nm,0.9s,baz=180,slow=8.1,SNR=2.8 comp=Z,1.0nm,0.9s | **86.31** | **182** | P | **P** | **08 31 11.4** | **+0.3** |
| **VNA3** | **Neumayer Olymp** comp=Z,2.3nm,0.7s | **86.87** | **180** | ⇑P | **P** | **08 31 13.6** | **-0.1** |
| **VNA2** | **Neumayer--Watz** comp=Z,1.9nm,0.8s,baz=166,slow=1.9 | **87.17** | **181** | ⇑P | **P** | **08 31 15.0** | **-0.2** |
| **VNA1** | **Neumayer--Stat** 1.9nm,0.8s | **87.46** | **181** | ⇑P | **P** | **08 31 16.3** | **-0.2** |
| **SONM** | **Songino Array** comp=Z,0.9nm,0.7s,baz=126,slow=3.3,SNR=4.7 comp=Z,0.9nm,0.7s | **89.99** | **323** | P | **P** | **08 31 28.5** | **-0.3** |
| **EKA** | **Eskdalemir Ar** comp=Z,2.1nm,0.6s,baz=357,slow=2.6,SNR=6.0 | **146.47** | **353** | PKPbc | **PKPbc** | **08 38 09.6** | **-0.6** |

*IDC **29** 08:22:06.0±0.6, 10°.18N×56°.90E, h0km, mb4.1/20, mbtmp4.1/21, ML3.0/1, MS3.8/10, Error ellipse: s-maj=16.9km s-min=15.8km az=5.0*
*NEIC **29** 08:22:09.7±1.2, 10°.30N±0°.09×56°.8E±0°.1, h10km±2km, mb4.6/14, Error ellipse: s-maj=26.5km s-min=5.9km az=121.0*
**ISC 29 08:22:08.4±0.6, 10°.22N±0°.09×56°.9E±0°.1, h13km, n46, σ0s80/39, mb4.2/26, MS3.8/10, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WSAR** | **Wadi Sarin** 0.1nm,0.3s,baz=169,slow=6.8,SNR=1.9 4.6nm,0.9s | **13.05** | **7** | Pn | **Pn** | **08 25 13.6** | **-0.1** |
| **ATD** | **Arta Tunnel** comp=Z,14nm,19.5s,baz=278,slow=34 | **13.85** | **277** | LR | LR | 08 29 58.2 | |
| **UOSS** | **Minazif** | **14.66** | **358** | Pn | **Pn** | **08 25 35.5** | **-0.1** |
| **RAYN** | **Ar Rayn** | **17.12** | **322** | P | **Pn** | **08 26 08.0** | **+0.4** |
| **LODK** | **Lodwar** | **22.40** | **254** | P | **P** | **08 27 08.2** | **+1.2** |
| LODK | comp=Z,35nm,1.4s | | | IAmb | IAmb | 08 27 12.0 | |
| **KIBK** | **Kibwezi** | **22.53** | **237** | P | **P** | **08 27 08.0** | **-0.3** |
| KIBK | comp=Z,16nm,0.9s | | | IAmb | IAmb | 08 27 09.0 | |
| **KMBO** | **Kilima Mbogo** | **22.56** | **241** | P | **P** | **08 27 08.9** | **+0.1** |
| KMBO | comp=Z,21nm,1.2s | | | IAmb | IAmb | 08 27 14.0 | |
| **KMBO** | **Kilima Mbogo** comp=Z,3.3nm,0.7s,baz=46,slow=10,SNR=9.4 | **22.56** | **241** | P | **P** | **08 27 07.3** | **-1.6** |
| KMBO | comp=Z,174nm,21.2s,baz=94,slow=34 comp=Z,3.3nm,0.7s | | | LR | LR | 08 34 51.1 | |
| **PALK** | **Pallekele** comp=Z,317nm,19.8s,baz=287,slow=31 | **23.72** | **95** | LR | LR | 08 34 25.6 | |
| **EIL** | **Elat** comp=Z,210nm,18.7s,baz=68,slow=35 | **28.18** | **316** | LR | LR | 08 38 24.6 | |
| **MMAI** | **Mount Meron Ar** comp=Z,249nm,19.2s,baz=84,slow=37 | **30.10** | **322** | LR | LR | 08 40 34.3 | |
| **GNI** | **Garni** comp=Z,7.8nm,0.5s,baz=289,slow=7.8,SNR=3.7 | **31.70** | **342** | P | **P** | **08 28 33.2** | **+1.2** |
| GNI | comp=Z,193nm,19.3s,baz=88,slow=39 comp=Z,7.8nm,0.5s | | | LR | LR | 08 42 50.0 | |
| **KBZ** | **Khabaz** comp=Z,5.2nm,0.8s,baz=173,slow=9.5,SNR=9.0 comp=Z,5.2nm,0.8s | **35.53** | **342** | P | **P** | **08 29 06.2** | **+1.2** |
| **AAK** | **Ala-Archa** comp=Z,106nm,19.3s,baz=268,slow=35 | **35.78** | **22** | LR | LR | 08 42 55.5 | |
| **BRTR** | **Keskin Array B** comp=Z,1.2nm,0.5s,baz=155,slow=10,SNR=6.8 comp=Z,1.2nm,0.5s | **35.93** | **329** | P | **P** | **08 29 09.6** | **+0.8** |
| **ABKAR** | **Akbulak array** | **39.00** | **3** | P | **P** | **08 29 35.5** | **+1.1** |
| **CM31** | **Chiang Mai Arr** | **41.48** | **74** | P | **P** | **08 29 56.6** | **+1.1** |
| CM31 | comp=Z,24nm,1.2s | | | IAmb | IAmb | 08 29 58.8 | |
| **CMAR** | **Chiang Mai Arr** comp=Z,2.5nm,0.3s,baz=268,slow=8.3,SNR=27 | **41.48** | **74** | P | **P** | **08 29 56.0** | **+0.5** |
| CMAR | comp=Z,16nm,18.5s,baz=270,slow=36 comp=Z,2.5nm,0.3s | | | LR | LR | 08 46 43.0 | |
| **MK31** | **Makanchi Array** | **42.35** | **26** | P | **P** | **08 30 02.6** | **+0.3** |
| **MKAR** | **Makanchi Array** comp=Z,1.6nm,0.8s,baz=200,slow=8.0,SNR=7.8 | **42.35** | **26** | P | **P** | **08 30 02.3** | **0.0** |
| MKAR | comp=Z,0.6nm,0.7s,baz=249,slow=6.4,SNR=3.9 comp=Z,1.6nm,0.8s | | | PcP | **PcP** | **08 31 55.3** | **-0.3** |
| **PHRA** | **Phrae** | **42.70** | **74** | P | **P** | **08 30 06.8** | **+1.4** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.9nm,0.9s,baz=219,slow=8.1,SNR=5.6 comp=Z,0.9nm,0.9s | **44.05** | **20** | P | **P** | **08 30 15.9** | **0.0** |
| **BVAR** | **Borovoye Array** comp=Z,1.0nm,0.7s,baz=157,slow=4.1,SNR=3.6 | **44.06** | **12** | PcP | **PcP** | **08 32 01.0** | **-0.2** |
| **AKASG** | **Malin Array Be** comp=Z,0.3nm,0.3s,baz=139,slow=7.2,SNR=6.8 comp=Z,0.3nm,0.3s | **46.34** | **336** | P | **P** | **08 30 32.5** | **-1.5** |
| **TSUM** | **Tsumeb** | **48.53** | **233** | P | **P** | **08 30 52.4** | **+0.7** |
| TSUM | comp=Z,14nm,1.3s | | | IAmb | IAmb | 08 30 55.1 | |
| **ZAA0** | **Zalesovo Array** comp=Z,3.2nm,0.9s | **48.99** | **22** | P | **P** | **08 30 55.5** | **+0.9** |
| ZAA0 | comp=Z,1.5nm,0.7s,baz=228,slow=8.7,SNR=2.4 comp=Z,1.5nm,0.7s | | | IAmb | IAmb | 08 31 25.8 | |
| **ZALV** | **Zalesovo Beam** | **48.99** | **22** | P | **P** | **08 30 53.3** | **-1.2** |
| **BOSA** | **Boshof** | **49.24** | **218** | P | **P** | **08 30 58.1** | **+1.1** |
| **BOSA** | **Boshof** comp=Z,2.4nm,0.7s,baz=44,slow=8.1,SNR=6.9 comp=Z,2.4nm,0.7s | **49.24** | **218** | P | **P** | **08 30 57.4** | **+0.4** |
| **NACGM** | **Naroch** comp=Z,12nm,0.9s,baz=140 | **50.53** | **338** | *eP* | **P** | **08 31 06.7** | **+0.4** |
| **TORD** | **Torodi Ar. Bea** comp=Z,2.9nm,0.7s,baz=75,slow=7.6,SNR=25 comp=Z,2.9nm,0.7s | **54.04** | **279** | P | **P** | **08 31 33.1** | **0.0** |
| **SONM** | **Songino Array** comp=Z,0.8nm,0.5s,baz=258,slow=7.1,SNR=5.2 comp=Z,0.8nm,0.5s | **55.88** | **38** | P | **P** | **08 31 45.9** | **-0.1** |
| **FINES** | **FINESS Array B** comp=Z,1.4nm,0.9s,baz=140,slow=6.5,SNR=3.9 comp=Z,1.4nm,0.9s | **55.89** | **343** | P | **P** | **08 31 45.0** | **-0.6** |
| **HFS** | **Hagfors** | **59.22** | **336** | P | **P** | **08 32 08.5** | **-0.7** |
| | comp=Z,1.4nm,0.6s,baz=182,slow=4.5,SNR=3.6 comp=Z,1.4nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** comp=Z,1.8nm,0.9s,baz=86,slow=5.8,SNR=11 comp=Z,1.8nm,0.9s | **61.18** | **310** | P | **P** | **08 32 22.7** | **-0.3** |
| **ARCES** | **ARCESS Array B** comp=Z,0.7nm,0.5s,baz=147,slow=7.2,SNR=4.7 comp=Z,0.7nm,0.5s | **62.58** | **348** | P | **P** | **08 32 31.5** | **-0.4** |
| **EKA** | **Eskdalemuir Ar** comp=Z,1.1nm,0.6s,baz=115,slow=5.8,SNR=4.7 comp=Z,1.1nm,0.6s | **64.82** | **327** | P | **P** | **08 32 46.2** | **-0.7** |
| **KLR** | **Kul'dur** comp=Z,77nm,19.5s,baz=283,slow=37 | **72.44** | **42** | LR | LR | 09 06 56.3 | |
| **MJAR** | **Matsushiro Arr** comp=Z,1.0nm,0.8s,baz=289,slow=9.2,SNR=4.9 comp=Z,1.0nm,0.8s | **77.05** | **55** | P | **P** | **08 34 01.2** | **-0.4** |
| **WRA** | **Warramunga Arr** comp=Z,1.6nm,0.8s,baz=293,slow=4.4,SNR=25 comp=Z,1.6nm,0.8s | **81.87** | **112** | P | **P** | **08 34 27.4** | **-0.7** |
| **ASAR** | **Alice Springs** comp=Z,0.9nm,0.5s,baz=289,slow=5.0,SNR=14 comp=Z,0.9nm,0.5s | **82.39** | **116** | P | **P** | **08 34 30.1** | **-0.8** |
| **SEY** | **Seymchan** comp=Z,225nm,21.8s,baz=330,slow=39 | **83.48** | **27** | LR | LR | 09 15 46.4 | |
| **STKA** | **Stephens Creek** comp=Z,80nm,18.3s,baz=197,slow=35 | **90.88** | **122** | LR | LR | 09 15 00.1 | |
| **PDAR** | **Pinedale Array** comp=Z,0.5nm,0.7s,baz=101,slow=3.0,SNR=4.0 | **125.83** | **348** | PKP | **PKiKP** | **08 41 11.2** | **+0.2** |
| **NVAR** | **Mina Array Bea** comp=Z,0.2nm,0.6s,baz=48,slow=1.3,SNR=3.1 | **131.40** | **355** | PKP | **PKiKP** | **08 41 22.6** | **+0.3** |
| **TXAR** | **Lajitas Array** comp=Z,0.1nm,0.4s,baz=45,slow=1.5,SNR=2.4 | **136.43** | **335** | PKP | **PKPdf** | **08 41 29.7** | **-1.2** |

*IDC **29** 08:25:42.9±6.5, 37°.63N×71°.82E, h183km±54km, mb3.4/1, mbtmp3.9/6, MS4.0/1, Error ellipse: s-maj=104.1km s-min=40.2km az=141.0*
**ISC 29 08:25:38.1±1.9, 37°.4N±0°.1×72°.1E±0°.2, h150km, n9, σ1s79/11, 3C, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** 9.4nm,0.4s,baz=198,slow=9.6,SNR=14 | **5.56** | **18** | P | **Pn** | **08 27 01.4** | **+2.4** |
| AAK | 13nm,0.6s,baz=180,slow=20,SNR=10.0 | | | S | **Sn** | **08 28 02.0** | **-0.3** |
| **AAK** | **Ala-Archa** 4.9nm,0.3s | **5.56** | **18** | Pn | **Pn** | **08 27 01.4** | **+2.4** |
| AAK | 16nm,0.6s | | | ⇑Sn | **Sn** | **08 28 01.2** | **-1.1** |
| **KK31** | **Karatay Array** 1.0nm,0.3s,baz=163,slow=12,SNR=14 | **5.86** | **348** | ⇑Pn | **Pn** | **08 27 05.2** | **+2.3** |
| KK31 | 6.2nm,0.2s,baz=163,slow=22,SNR=27 | | | ⇑Sn | **Sn** | **08 28 07.4** | **-1.8** |
| **MKAR** | **Makanchi Array** 0.7nm,0.4s,baz=213,slow=11,SNR=10 | **12.05** | **35** | P | **P** | **08 28 29.5** | **-1.9** |
| **KURBB** | **Kurchatov Arra** 1.9nm,0.6s,baz=204,slow=11,SNR=14 | **14.02** | **17** | P | **P** | **08 28 52.8** | **-0.3** |
| **BVAR** | **Borovoye Array** 1.6nm,0.7s,baz=162,slow=11,SNR=4.4 | **15.70** | **356** | P | **P** | **08 29 11.2** | **-0.6** |
| **ZALV** | **Zalesovo Beam** 4.6nm,0.4s,baz=225,slow=11,SNR=18 | **18.75** | **24** | P | **P** | **08 29 45.2** | **0.0** |
| **DAVOX** | **Davos/Dischmat** comp=Z,152nm,18.8s,baz=262,slow=42 | **46.06** | **302** | LR | LR | 08 57 40.1 | |
| **TORD** | **Torodi Ar. Bea** 0.5nm,0.4s,baz=47,slow=5.8,SNR=11 0.5nm,0.4s | **66.65** | **269** | P | **P** | **08 36 12.6** | **-0.3** |

*IDC **29** 08:34:13.9±1.0, 22°.11S×170°.06E, h0km, mb4.1/8, mbtmp4.1/10, ML4.3/2, MS3.9/19, Error ellipse: s-maj=30.5km s-min=21.9km az=163.0*
*NOU **29** 08:34:20.2, 22°.07S×169°.63E, h0km, MLv4.3/11, Southeast of Loyalty Islands*
**ISC 29 08:34:17.9±0.7, 22°.23S±0°.10×170°.01E±0°.08, h25km, n39, σ0s88/27, mb4.1/12, MS4.0/19, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.98** | **292** | P | **Pn** | **08 34 48.7** | **-1.1** |
| **PINNC** | **Pines Island,** | **2.40** | **260** | P | **Pn** | **08 34 56.0** | **+0.4** |
| **YATNC** | **Mamie plateau,** | **2.89** | **273** | P | **Pn** | **08 35 02.7** | **+0.3** |
| **LIFNC** | **LIFOU** | **2.95** | **299** | P | **Pn** | **08 35 03.2** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.31** | **272** | P | **Pn** | **08 35 08.4** | **+0.2** |
| **DZM** | **Mont Dzumac** 19nm,0.3s,baz=112,slow=11,SNR=68 | **3.31** | **272** | Pn | **Pn** | **08 35 08.5** | **+0.4** |
| DZM | 11nm,0.3s,baz=114,slow=20,SNR=7.7 | | | Sn | **Sn** | **08 35 46.1** | **-0.7** |
| DZM | comp=Z,268nm,19.1s,baz=100,slow=31 40nm,0.3s | | | LR | LR | 08 35 58.6 | |
| **NOUC** | **Port Laguerre** | **3.44** | **271** | P | **Pn** | **08 35 10.4** | **+0.5** |
| **RTV** | **Rentapao** | **4.65** | **341** | P | **Pn** | **08 35 28.5** | **+1.9** |
| **DVP** | **Devils Point** | **4.79** | **339** | P | **Pn** | **08 35 29.6** | **+1.1** |
| **KOUNC** | **Koumac, New Ca** | **5.59** | **286** | P | **Pn** | **08 35 40.4** | **+1.0** |
| **MSVF** | **Nonsavu** 0.1nm,0.3s,baz=221,slow=14,SNR=1.6 2.5nm,0.6s | **8.78** | **61** | Pn | **Pn** | **08 36 22.0** | **-1.4** |
| **CTA** | **Charters Tower** 0.5nm,1.2s,baz=96,slow=13,SNR=1.9 | **22.25** | **271** | P | **P** | **08 39 12.9** | **-0.2** |
| CTA | comp=Z,21nm,19.5s,baz=94,slow=37 | | | LR | LR | 08 47 56.5 | |
| **STKA** | **Stephens Creek** 4.7nm,0.9s,baz=98,slow=10,SNR=5.2 | **27.00** | **243** | P | **P** | **08 40 00.2** | **+2.2** |
| STKA | comp=Z,388nm,18.8s,baz=69,slow=36 4.7nm,0.9s | | | LR | LR | 08 50 27.3 | |
| **ASAR** | **Alice Springs** 1.2nm,1.0s,baz=90,slow=9.7,SNR=7.2 | **33.22** | **260** | P | **P** | **08 40 52.6** | **-0.6** |
| ASAR | comp=Z,259nm,21.3s,baz=94,slow=35 1.2nm,1.0s | | | LR | LR | 08 53 30.9 | |
| **WRA** | **Warramunga Arr** 1.5nm,1.0s,baz=98,slow=8.2,SNR=7.5 | **33.31** | **267** | P | **P** | **08 40 53.4** | **-0.5** |
| WRA | comp=Z,528nm,18.4s,baz=42,slow=37 1.5nm,1.0s | | | LR | LR | 08 54 54.0 | |
| **PPT** | **Papeete** comp=Z,101nm,19.5s,baz=315,slow=31 | **38.21** | **90** | LR | LR | 08 54 11.3 | |
| **GUMO** | **Guam** comp=Z,66nm,18.3s,baz=174,slow=35 | **43.30** | **323** | LR | LR | 08 59 38.0 | |
| **NWAO** | **Narrogin (SRO)** comp=Z,446nm,18.1s,baz=130,slow=36 | **47.55** | **245** | LR | LR | 09 02 45.8 | |
| **QSPA** | **South Pole Qui** 3.7nm,1.0s,baz=13,slow=4.2,SNR=6.3 | **67.84** | **180** | P | **P** | **08 45 14.6** | **+0.7** |
| QSPA | comp=Z,81nm,18.2s,baz=22,slow=33 3.7nm,1.0s | | | LR | LR | 09 11 35.6 | |
| **MAW** | **Mawson** comp=Z,72nm,18.1s,baz=140,slow=33 | **75.95** | **202** | LR | LR | 09 16 14.8 | |
| **CMAR** | **Chiang Mai Arr** 1.0nm,0.3s,baz=120,slow=6.8,SNR=1.5 1.0nm,0.3s | **80.38** | **294** | P | **P** | **08 46 28.0** | **+0.4** |
| **MA2** | **Magadan** comp=Z,51nm,18.8s,baz=132,slow=33 | **83.02** | **350** | LR | LR | 09 19 55.6 | |
| **KDAK** | **Kodiak Island** comp=Z,50nm,18.2s,baz=177,slow=35 | **85.60** | **19** | LR | LR | 09 24 07.9 | |
| **TROLL** | **Troll, Antarti** comp=Z,100nm,0.7s | **85.62** | **184** | ⇑P | **P** | **08 46 54.5** | **+0.5** |
| **SNAA** | **Sanae** comp=Z,1.2nm,1.0s,baz=186,slow=9.6,SNR=2.9 | **86.22** | **182** | P | **P** | **08 46 56.9** | **-0.1** |
| SNAA | comp=Z,79nm,19.9s,baz=148,slow=34 comp=Z,1.2nm,1.0s | | | LR | LR | 09 22 45.1 | |
| **VNA3** | **Neumayer Olymp** comp=Z,1.8nm,0.8s | **86.78** | **180** | ⇑P | **P** | **08 46 59.4** | **-0.3** |
| **VNA2** | **Neumayer--Watz** comp=Z,1.7nm,0.7s,baz=183,slow=4.2 | **87.08** | **181** | ⇑P | **P** | **08 47 01.1** | **0.0** |
| **VNA1** | **Neumayer--Stat** comp=Z,2.0nm,1.0s | **87.37** | **181** | ⇑P | **P** | **08 47 03.0** | **+0.6** |
| **YBH** | **Yreka Blue Hor** comp=Z,36nm,18.7s,baz=10,slow=32 | **88.94** | **44** | LR | LR | 09 22 05.1 | |
| **PFO** | **Pinyon Flats O** comp=Z,49nm,20.7s,baz=43,slow=30 | **89.31** | **53** | LR | LR | 09 18 59.9 | |
| **SONM** | **Songino Array** comp=Z,0.5nm,0.4s,baz=144,slow=5.4,SNR=6.3 comp=Z,0.5nm,0.4s | **90.03** | **323** | P | **P** | **08 47 14.7** | **-0.7** |
| **LPIG** | **La Paz** comp=Z,72nm,18.0s,baz=214,slow=31 | **90.06** | **64** | LR | LR | 09 20 29.8 | |
| **NVAR** | **Mina Array Bea** comp=Z,47nm,18.4s,baz=36,slow=32 | **90.24** | **48** | LR | LR | 09 22 28.8 | |
| **BBB** | **Bella Bella** comp=Z,46nm,18.6s,baz=83,slow=32 | **91.57** | **33** | LR | LR | 09 23 09.7 | |
| **ILAR** | **Eielson Array** comp=Z,0.4nm,0.9s,baz=217,slow=5.7,SNR=3.1 comp=Z,0.4nm,0.9s | **92.86** | **17** | P | **P** | **08 47 27.2** | **-0.8** |
| **ANMO** | **Albuquerque** | **97.40** | **55** | LR | LR | 09 22 54.9 | |
| | comp=Z,63nm,22.0s,baz=291,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** comp=Z,72nm,19.2s,baz=262,slow=31 | **97.55** | **62** | LR | LR | 09 24 12.6 | |
| **EKA** | **Eskdalemuir Ar** comp=Z,0.8nm,0.4s,baz=2.4,slow=2.6,SNR=4.1 | **146.54** | **353** | PKPbc | **PKPdf** | **08 53 55.8** | **+0.5** |
| **GERES** | **GERESS Array B** comp=Z,1.6nm,0.2s,baz=70,slow=7.8,SNR=2.6 | **147.44** | **330** | PKPbc | **PKPbc** | **08 53 59.6** | **-0.1** |

**IDC 29 08:57:21.7±2.2, 4°.17N×126°.87E, h0km, mb3.7/3, mbtmp3.7/3, MS4.2/2, Error ellipse: s-maj=156.0km s-min=28.8km az=66.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** 1.3nm,0.8s,baz=343,slow=10,SNR=9.4 1.3nm,0.8s | **25.06** | **163** | P | P | 09 02 48.0 | 0.0 |
| **ASAR** | **Alice Springs** 0.4nm,0.4s,baz=352,slow=7.3,SNR=10 0.4nm,0.4s | **28.51** | **166** | P | P | 09 03 19.1 | 0.0 |
| **HNR** | **Honiara** comp=Z,957nm,20.7s,baz=102,slow=34 | **35.63** | **112** | LR | LR | 09 17 39.3 | |
| **MSVF** | **Nonsavu** comp=Z,76nm,18.4s,baz=166,slow=36 | **54.97** | **115** | LR | LR | 09 30 02.2 | |
| **MKAR** | **Makanchi Array** 0.3nm,0.5s,baz=128,slow=6.6,SNR=2.3 0.3nm,0.5s | **57.28** | **325** | P | P | 09 07 11.2 | -0.1 |

**IDC 29 08:58:58.8±3.6, 54°.57N×87°.15E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=32.2km s-min=21.7km az=42.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** baz=68,slow=318,SNR=3.8 | **1.50** | **246** | I | I | 09 07 30.0 | |
| **ZALV** | **Zalesovo Beam** 1.5nm,0.3s,baz=66,slow=16,SNR=12 | **1.50** | **246** | Pg | Pn | 08 59 24.2 | -2.7 |
| ZALV | 2.2nm,0.3s,baz=62,slow=27,SNR=7.4 | | | Lg | Lg | 08 59 47.2 | |
| **KURBB** | **Kurchatov Arra** 0.1nm,0.3s,baz=54,slow=14,SNR=5.6 0.9nm,0.6s | **6.57** | **237** | Pn | Pn | 09 00 37.0 | +0.5 |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=26,slow=14,SNR=2.1 0.1nm,0.3s | **8.38** | **204** | Pn | Pn | 09 01 03.1 | +1.8 |

**NOU 29 09:00:17.7, 22°.22S×170°.11E, h0km, MLv4.1/11, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.07** | **290** | P | Pn | 09 00 52.7 | -1.0 |
| **PINNC** | **Pines Island,** | **2.50** | **260** | P | Pn | 09 00 59.9 | +0.3 |
| **YATNC** | **Mamie plateau,** | **2.99** | **272** | P | Pn | 09 01 05.2 | -1.2 |
| **LIFNC** | **LIFOU** | **3.03** | **298** | P | Pn | 09 01 06.5 | -0.5 |
| **DZM** | **Mont Dzumac** | **3.40** | **272** | P | Pn | 09 01 12.6 | +0.4 |
| **NOUC** | **Port Laguerre** | **3.53** | **271** | P | Pn | 09 01 14.1 | +0.3 |
| **RTV** | **Rentapao** | **4.68** | **340** | P | Pn | 09 01 30.4 | +0.8 |
| **DVP** | **Devils Point** | **4.82** | **338** | P | Pn | 09 01 31.5 | -0.1 |
| **KOUNC** | **Koumac, New Ca** | **5.68** | **286** | P | Pn | 09 01 44.0 | +0.7 |
| **MSVF** | **Nonsavu** | **8.70** | **61** | P | Pn | 09 02 24.5 | -0.4 |

**IDC 29 09:05:06.2±3.3, 53°.60N×87°.90E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=28.0km s-min=17.3km az=58.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** baz=97,slow=326,SNR=3.9 | **1.86** | **282** | I | I | 09 17 30.0 | |
| **ZALV** | **Zalesovo Beam** 1.5nm,0.3s,baz=96,slow=15,SNR=13 | **1.86** | **282** | Pg | Pn | 09 05 39.4 | +0.2 |
| ZALV | 4.9nm,0.3s,baz=101,slow=30,SNR=20 | | | Lg | Lg | 09 06 05.2 | |
| **KURBB** | **Kurchatov Arra** 0.1nm,0.3s,baz=61,slow=14,SNR=3.0 | **6.49** | **246** | Pn | Pn | 09 06 43.4 | +0.5 |
| KURBB | baz=64,slow=32,SNR=5.7 0.6nm,0.4s | | | Lg | Lg | 09 08 32.9 | |
| **MKAR** | **Makanchi Array** 0.2nm,0.3s,baz=26,slow=14,SNR=2.4 | **7.70** | **210** | Pn | Pn | 09 07 01.2 | +1.6 |
| MKAR | baz=27,slow=32 0.2nm,0.3s | | | Lg | Lg | 09 09 07.6 | |

*UCC **29** 09:13:01.3±0.4, 51°.37N×2°.62E, h6km±1km, ML2.3, Explosion.*
**STR 29 09:13:00.3±1.2, 51°N±14°×±°, h0km, MLv2.7/6, 13D, Error ellipse: s-maj=0.0km s-min=0.0km az=18.1, preliminary, North Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BOST** | **Ostende** | **0.29** | **125** | *dP* | Pg | 09 13 05.8 | -0.1 |
| **ELSH** | **Elham, Standar** | **0.93** | **254** | Pg | Pg | 09 13 16.0 | -2.1 |
| **BSKQ** | **Steenkerk** | **1.23** | **128** | *dP* | Pg | 09 13 22.9 | -0.8 |
| BSKQ | comp=Z,40nm,0.0s | | | *dS* | Sg | 09 13 38.5 | -1.1 |
| **BRQR** | **Ronquire** | **1.32** | **127** | *dP* | Pg | 09 13 24.7 | -1.0 |
| BRQR | | | | *dS* | Sg | 09 13 41.9 | -0.8 |
| **BBOU** | **Bougnies** | **1.35** | **139** | *dP* | Pg | 09 13 25.6 | -0.4 |
| **HMNX** | **Herstmonceux** | **1.50** | **250** | Sn | Sn | 09 13 48.6 | 0.0 |
| **HMNX** | **Herstmonceux** | **1.50** | **250** | Pn | Pn | 09 13 27.1 | -1.2 |
| **BDSL** | **Dessel** | **1.59** | **96** | *dP* | Pn | 09 13 28.6 | -1.0 |
| **BMOL** | **Mol** | **1.60** | **96** | *dP* | Pn | 09 13 29.1 | -0.6 |
| **BMRD** | **Maredsous** | **1.79** | **127** | *dP* | Pn | 09 13 31.1 | -1.2 |
| **DOU** | **Dourbes** | **1.84** | **135** | Pn | Pn | 09 13 31.5 | -1.7 |
| DOU | | | | Sg | Sg | 09 14 00.2 | +0.8 |
| **DOU** | **Dourbes** | **1.84** | **135** | *dP* | Pn | 09 13 31.4 | -1.7 |
| **BOPT** | **Opiter** | **1.96** | **97** | *dP* | Pn | 09 13 34.4 | -0.3 |
| **BCLA** | **Clavier** | **2.00** | **119** | *dP* | Pn | 09 13 33.1 | -2.2 |
| **RCHB** | **Rochefort** | **2.11** | **125** | Pn | Pn | 09 13 34.6 | -2.2 |
| RCHB | | | | Pg | Pb | 09 13 39.6 | +0.3 |
| **MEM** | **Membach** | **2.32** | **109** | *dP* | Pn | 09 13 37.9 | -1.8 |
| **SWN1** | **Swindon** | **2.73** | **274** | Pn | Pn | 09 13 44.1 | -1.2 |
| **WLF** | **Walferdange** | **2.88** | **126** | Pg | Pg | 09 13 55.5 | 0.0 |

*NOU **29** 09:23:31.3, 18°.03S×178°.29W, h593km, mb4.6/57, Fiji Islands Region*
*NEIC **29** 09:23:31.9±1.7, 18°.0S±0°.1×178°.4W±0°.1, h585km±4km, mb4.4/205, Error ellipse: s-maj=15.6km s-min=13.5km az=145.0*
*IDC **29** 09:23:34.1±0.8, 17°.99S×178°.57W, h618km±9km, mb3.7/18, mbtmp4.7/20, Error ellipse: s-maj=14.7km s-min=9.9km az=141.0*
**ISC 29 09:23:32.2±0.3, 17°.99S±0°.07×178°.38W±0°.06, h600km, n480, σ0s81/413, mb4.4/125, 6D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** 332nm,0.7s,baz=137,slow=3.8,SNR=225 | **3.42** | **274** | P | **P** | **09 24 55.1** | **+1.1** |
| MSVF | 55nm,1.1s,baz=30,slow=20,SNR=7.8 | | | S | **S** | **09 26 04.0** | **+3.5

**RRRZ Republican Roa 20.76 191** P P 09 27 19.0 -14
**RTZ Ruatahuna 20.94 190** P P **09 27 32.9 -1.4**
**TARA Tarawa 21.05 335** P P **09 27 35.5 -0.1**
**HIZ Hauiti 21.28 195** P P **09 27 37.1 -0.2**
**BKZ Black Stump Fm 21.56 191** P P **09 27 38.1 -1.8**
**BFZ Birch Farm 23.08 190** P P **09 27 52.8 -0.5**
**SNZO South Karori 23.99 193** P P **09 28 00.2 -1.0**
**QRZ Quartz Range 24.06 197** P P **09 28 01.3 -0.7**
**KHZ Kahutara 25.30 194** P P **09 28 11.3 -1.5**
**OXZ Oxford 26.52 196** P P **09 28 22.6 -1.0**
**RPZ Rata Peaks 27.15 197** P P **09 28 28.5 -0.6**
**PPT Papeete 27.42 94** P P **09 28 33.5 +1.7**
34nm,0.6s,baz=246,slow=20,SNR=1.3
34nm,0.6s
**JCZ Jackson Bay 28.16 200** P P **09 28 37.4 -0.6**
**ODZ Otahua Downs 28.49 196** P P **09 28 39.7 -1.0**
**EIDS Eidsvold 29.27 250** P P **09 28 47.5 -0.3**
**EIDS Eidsvold 29.27 250** P P **09 28 47.7 -0.1**
EIDS IAmb IAmb 09 28 48.2
comp=Z,15nm,0.9s
**MLZ Mavora Lakes 29.53 200** P P **09 28 50.0 +0.3**
**ARMA Armidale 29.93 240** P P **09 28 53.2 -0.3**
**ARMA Armidale 29.93 240** P P **09 28 54.1 +0.6**
**SYZ Scrubby Hill 30.28 197** P P **09 28 55.0 -1.1**
**TVTH Townsville Har 33.00 262** P P **09 29 19.4 -0.2**
**CNB Canberra Magne 33.40 232** P P **09 29 23.0 +0.2**
**CTA Charters Tower 33.46 261** P P **09 29 23.2 -0.2**
**CTAO Charters Tower 33.46 261** P P **09 29 23.3 -0.2**
**CTAO Charters Tower 33.46 261** P P **09 29 23.3 -0.2**
**CAN Canberra 33.68 233** P P **09 29 25.0 -0.1**
**CAN Canberra 33.68 233** P P **09 29 25.5 +0.4**
**YNG Young 33.77 235** P P **09 29 26.5 +0.6**
**PMG Port Moresby 34.51 280** P P **09 29 32.0 -0.2**
**CMSA Cobar Meteorol 35.14 241** P P **09 29 37.5 +0.3**
**MTSU Mount Surprise 35.43 264** P P **09 29 39.5 -0.4**
**QLP Quilpie 35.53 249** P P **09 29 40.5 -0.1**
**JOHN Johnston Islan 35.59 15** P P **09 29 40.3 -0.7**
**GLAD Gladstone 36.81 224** P P **09 29 51.2 +0.4**
**COEN Coen 37.14 271** P P **09 29 54.4 +0.5**
**COEN Coen 37.14 271** P P **09 29 54.1 +0.2**
**TOO Toolangi 37.14 231** P P **09 29 54.4 +0.7**
**TOO Toolangi 37.14 231** P P **09 29 53.8 +0.1**
**MANU Manus Island 37.16 291** P P **09 29 53.9 -0.2**
**BRAT Ballarat 38.29 232** P P **09 30 03.7 +0.8**
**STKA Stephens Creek 38.62 241** P P **09 30 06.2 +0.5**
**STKA Stephens Creek 38.62 241** P P **09 30 05.9 +0.2**
STKA IAmb IAmb 09 30 07.4
comp=Z,10nm,1.1s
**STKA Stephens Creek 38.62 241** P P **09 30 04.9 -0.8**
comp=Z,26nm,0.9s,baz=84,slow=9.7,SNR=38
comp=Z,26nm,0.9s
**INKA Innaminka 38.74 248** P P **09 30 07.5 +0.8**
**ARPS Mount Arapiles 39.63 234** P P **09 30 13.9 +0.2**
**QIS Mount Isa 39.67 259** P P **09 30 13.6 -0.7**
**HTT Hallett 41.13 240** P P **09 30 26.4 +0.7**
**LCRK Leigh Creek 41.25 244** P P **09 30 26.6 0.0**
**JAY Jayapura 42.96 286** P P **09 30 40.4 +0.1**
comp=Z,31nm,0.9s
**OOD Oodnadatta 43.22 248** P P **09 30 42.4 +0.4**
**BBOO Buckleboo 43.39 241** P P **09 30 43.2 -0.1**
**BBOO Buckleboo 43.39 241** P P **09 30 43.3 0.0**
**GENI Genyem 43.42 286** P P **09 30 44.8 +1.0**
comp=Z,28nm,0.8s
**WR0 Warramunga Arr 44.46 260** P P **09 30 50.7 -1.0**
WR0 IAmb IAmb 09 30 52.1
comp=Z,10nm,1.0s
**WB0 Warramunga Arr 44.62 260** P P **09 30 52.2 -0.8**
**WB2 Warramunga Arr 44.64 260** P P **09 30 52.2 -0.9**
**WRAB Tennant Creek 44.64 260** P P **09 30 52.3 -0.8**
**WRA Warramunga Arr 44.65 260** P P **09 30 51.7 -1.5**
comp=Z,7.6nm,0.4s,baz=96,slow=7.2,SNR=258
comp=Z,7.6nm,0.4s
**AS01 Alice Springs 44.76 254** P P **09 30 53.6 -0.4**
**AS31 Alice Springs 44.80 254** P P **09 30 54.1 -0.2**
AS31 IAmb IAmb 09 30 54.9
comp=Z,16nm,0.8s
**ASAR Alice Springs 44.80 254** P P **09 30 53.9 -0.5**
comp=Z,38nm,0.5s,baz=86,slow=9.4,SNR=509
ASAR PcP **PcP** **09 32 23.2 0.0**
comp=Z,1.8nm,0.8s,baz=105,slow=5.6,SNR=2.7
ASAR S **S** **09 36 47.0 -2.3**
comp=Z,2.1nm,1.0s,baz=91,slow=15,SNR=12
comp=Z,38nm,0.5s
**MULG Mulgathing 44.80 245** P P **09 30 53.8 -0.4**
**KDU Kakadu 47.59 269** P P **09 31 14.9 -0.5**
**GUMO Guam 47.95 308** P P **09 31 18.3 +0.2**
**MTN Manton Dam 48.83 269** P P **09 31 24.1 -0.6**
MTN IAmb IAmb 09 31 24.7
comp=Z,20nm,0.9s
**DRS Darwin Rock St 49.14 269** P P **09 31 26.3 -0.6**
**WRKA Warakurna 49.85 252** P P **09 31 31.7 -0.3**
**FORT Forrest 50.00 245** P P **09 31 32.3 -0.7**
**FORT Forrest 50.00 245** P P **09 31 32.1 -0.8**
**KNRA Kununurra 50.51 264** P P **09 31 36.4 -0.5**
KNRA IAmb IAmb 09 31 36.9
comp=Z,13nm,0.8s
**FAKI Fak Fak 50.63 281** P P **09 31 38.1 +0.3**
**FAKI Fak Fak 50.63 281** P P **09 31 37.3 -0.5**
FAKI IAmb IAmb 09 32 18.2
comp=Z,32nm,1.3s
**SWI Sorong 52.29 283** P P **09 31 49.9 +0.1**
comp=Z,63nm,0.8s
**KMBL Kambalda 55.30 244** P P **09 32 10.0 -0.7**
**PSA00 Pilbara Seismi 57.92 255** P P **09 32 28.1 -0.6**
**PSA00 Pilbara Seismi 57.92 255** P P **09 32 28.1 -0.6**
PSA00 IAmb IAmb 09 33 02.4
comp=Z,39nm,1.4s
**MBWA Marble Bar 58.08 256** P P **09 32 29.1 -0.7**
**MBWA Marble Bar 58.08 256** P P **09 32 29.2 -0.6**
MBWA IAmb IAmb 09 32 34.4
comp=Z,34nm,1.4s
**MEEK Meekatharra 58.43 249** P P **09 32 31.3 -0.8**
**KLBR Kellerberrin 58.82 244** P P **09 32 34.0 -0.6**
**EDFI Ende, Flores 58.82 271** P P **09 32 34.2 -0.8**
**NWAO Narrogin (SRO) 59.20 262** P P **09 32 36.8 -0.4**
**BLDU Ballidu 59.77 245** P P **09 32 40.2 -0.8**
**SBA Scott Base 60.34 184** P P **09 32 46.0 +2.2**
**MORW Morawa 60.48 246** P P **09 32 44.7 -0.9**
**TOLI2 Tolitoli 62.76 281** P P **09 33 01.6 +0.9**
**GIRL Giralia 62.90 253** P P **09 33 02.4 +1.0**
**GIRL Giralia 62.90 253** P P **09 33 01.7 +0.3**
**JAGI Jajag, Banyuwa 66.07 269** P P **09 33 20.3 -1.2**
**CASY Casey 66.07 205** P P **09 33 21.1 +0.5**
**JMM Marumori 67.53 326** P P **09 33 30.3 +0.4**
**JGF Kuroka 67.83 322** P P **09 33 32.4 +0.5**
JGF IAmb IAmb 09 34 15.2
comp=Z,19nm,1.5s
**MJAR Matsushiro Arr 67.99 323** P P **09 33 31.8 -1.0**
comp=Z,2.9nm,0.6s,baz=153,slow=5.7,SNR=10
comp=Z,2.9nm,0.6s
**MAJO Matsushiro 68.00 323** P P **09 33 33.3 +0.4**
MAJO IAmb IAmb 09 34 13.0
comp=Z,12nm,1.4s
**UGM Wanagama 69.68 268** P P **09 33 43.0 -0.4**
**UGM Wanagama 69.68 268** P P **09 33 43.4 0.0**
**NIKH Nikolski High 71.15 6** P P **09 33 51.3 +0.1**
baz=190
**JKA Kamikawa-asahi 71.37 331** P P **09 33 54.2 +1.6**
JKA IAmb IAmb 09 34 27.2
comp=Z,20nm,1.5s
**QSPA South Pole Qui 72.06 180** P P **09 33 57.4 +0.9**
QSPA IAmb IAmb 09 33 57.9
comp=Z,7.6nm,0.8s
**QSPA South Pole Qui 72.06 180** P P **09 33 57.3 +0.7**
comp=Z,5.6nm,0.6s,baz=16,slow=1.2,SNR=68
comp=Z,5.6nm,0.6s
**UNV Unalaska Valle 72.27 7** P P **09 33 56.8 -0.8**
**SSLB Suanglung 72.31 303** P P **09 33 57.4 -1.2**
**TPUB Ta-pu 72.33 302** P P **09 33 58.1 -0.7**
**FALS False Pass 73.67 9** P P **09 34 05.6 0.0**
baz=195
**PETK Petropavlovsk- 73.77 345** P P **09 34 06.5 +0.3**
comp=Z,3.7nm,0.6s,baz=106,slow=7.4,SNR=9.3
comp=Z,3.7nm,0.6s
**CHNA Chernabura Isl 74.28 11** P P **09 34 09.8 +0.7**
baz=198
**SDPT Sand Point 74.62 10** P P **09 34 10.8 -0.1**
baz=198
**S12K Black Hills 74.70 9** P P **09 34 11.3 -0.1**
**S12K Black Hills 74.70 9** P P **09 34 10.7 -0.7**
baz=196
**S14K Fog Glacier 75.67 11** P P **09 34 16.1 -0.8**
baz=198

**CHGN Chignik 75.90 11** P P **09 34 18.2 +0.2**
CHGN IAmb IAmb 09 34 18.6
comp=Z,29nm,1.4s
**CHGN Chignik 75.90 11** P P **09 34 17.7 -0.2**
baz=200
**CHIR Chirikof Islan 76.01 13** P P **09 34 18.8 +0.3**
**SAO San Andreas Ge 76.46 44** P P **09 34 23.3 +1.7**
SAO IAmb IAmb 09 34 24.4
comp=Z,19nm,1.3s
**PMPB Monarch Peak 76.58 45** P P **09 34 24.3 +2.0**
PMPB IAmb IAmb 09 35 03.0
comp=Z,16nm,1.3s
**USRK Ussuriysk Ar. 76.70 326** P P **09 34 23.3 +0.6**
comp=Z,1.9nm,0.6s,baz=134,slow=4.3,SNR=5.5
comp=Z,1.9nm,0.6s
**HOPS Hopland Field 76.72 41** P P **09 34 23.8 +0.9**
HOPS IAmb IAmb 09 34 49.0
comp=Z,18nm,1.4s
**SII Sitkinak Islan 77.00 13** P P **09 34 23.9 -0.1**
**SII Sitkinak Islan 77.00 13** P P **09 34 24.4 +0.4**
**R17L Mt. Peulik Vol 77.54 12** P P **09 34 26.7 -0.2**
baz=201
**PLK4 Peulik 4 77.54 12** P P **09 34 27.6 +0.6**
PLK4 IAmb IAmb 09 34 27.7
comp=Z,10nm,0.7s
**OHAK Old Harbor 77.81 14** P P **09 34 28.8 +0.5**
**OHAK Old Harbor 77.81 14** P P **09 34 29.0 +0.7**
OHAK IAmb IAmb 09 34 56.6
comp=Z,18nm,1.3s
**OHAK Old Harbor 77.81 14** P P **09 34 28.2 -0.2**
baz=204
**R18K Karluk 77.87 13** P P **09 34 28.3 -0.4**
baz=203
**CMB Columbia Colle 77.88 43** P P **09 34 30.4 +1.1**
**AFDM Forest Hills D 78.02 42** P P **09 34 31.0 +1.0**
**Q17K Contact Creek 78.22 12** P P **09 34 30.3 -0.4**
baz=202
**MDJ Mudanjiang 78.27 325** P P **09 34 32.3 +1.1**
MDJ pmax pmax
comp=Z,16nm,1.1s
**KDAK Kodiak Island 78.48 14** P P **09 34 32.4 +0.5**
comp=Z,4.0nm,0.7s,baz=203,slow=2.9,SNR=10
comp=Z,4.0nm,0.7s
**MDPB Devils Postpil 78.52 44** P P **09 34 34.6 +1.6**
MDPB IAmb IAmb 09 34 35.6
comp=Z,16nm,1.4s
**P16K Nushagak River 78.55 11** P P **09 34 32.7 +0.5**
baz=200
**YBH Yreka Blue Hor 78.57 39** P P **09 34 35.0 +2.1**
YBH IAmb IAmb 09 34 35.9
comp=Z,16nm,1.5s
**LRDM Redding Peak 78.59 41** IAmb IAmb 09 34 41.2
comp=Z,13nm,1.3s
**M11K Mekoryuk 78.72 6** P P **09 34 33.5 +0.4**
baz=192
**Q18K Katmai Hardscr 78.75 12** P P **09 34 32.8 -0.7**
baz=203
**WAKR Walker 78.76 43** IAmb IAmb 09 34 37.1
comp=Z,18nm,1.3s
**MPK Martis Peak 78.82 42** IAmb IAmb 09 34 37.3
comp=Z,33nm,1.4s
**N14K Kuskokwak Cree 78.82 8** P P **09 34 33.2 -0.4**
baz=196
**PNTR Pine Nut 78.98 43** P P **09 34 37.0 +1.6**
PNTR IAmb IAmb 09 34 38.1
comp=Z,27nm,1.3s
**P17K Kvichak River 78.98 11** P P **09 34 34.2 -0.4**
baz=201
**O16K Kokwok River B 79.06 10** P P **09 34 34.9 0.0**
**O16K Kokwok River B 79.06 10** P P **09 34 34.1 -0.8**
baz=200
**YERR Yerington 79.16 43** IAmb IAmb 09 34 38.8
comp=Z,7.2nm,0.6s
**LHV Little Huntoon 79.23 44** IAmb IAmb 09 34 39.5
comp=Z,13nm,1.3s
**Q20K Shuyak Island 79.27 13** P P **09 34 35.4 -0.7**
baz=205
**N15K Kwethluk River 79.29 9** P P **09 34 37.0 +0.8**
N15K IAmb IAmb 09 34 37.5
comp=Z,12nm,1.2s
**N15K Kwethluk River 79.29 9** P P **09 34 35.5 -0.6**
baz=198
**P18K Big Mountain, 79.40 12** P P **09 34 36.2 -0.6**
baz=202
**O17K Koliganek Bris 79.41 11** P P **09 34 36.7 0.0**
baz=200
**NVAR Mina Array Bea 79.46 44** P P **09 34 39.3 +1.4**
comp=Z,2.0nm,0.7s,baz=225,slow=8.1,SNR=25
comp=Z,2.0nm,0.7s
**M14K Bethel 79.58 8** P P **09 34 37.4 -0.2**
baz=196
**M15K Kasigluk River 79.70 9** P P **09 34 38.2 -0.1**
baz=197
**N16K Nishlik Lake 79.78 10** P P **09 34 38.7 -0.1**
baz=199
**O18K Koktuh Hills 79.83 12** IAmb IAmb 09 34 40.2
comp=Z,26nm,1.2s
**O18K Koktuh Hills 79.83 12** P P **09 34 38.2 -0.8**
baz=202
**P19K Oil Pt 80.04 13** P P **09 34 39.4 -0.7**
baz=204
**L14K Kuka Creek 80.06 8** P P **09 34 39.1 -1.0**
baz=195
**N17K Nushagak Hills 80.10 10** P P **09 34 39.4 -1.0**
baz=200
**M16K Timber Creek 80.28 9** IAmb IAmb 09 34 44.0
comp=Z,23nm,1.1s
**M16K Timber Creek 80.28 9** P P **09 34 41.1 -0.2**
baz=199,SNR=5.3
**O19K Port Alsworth 80.32 12** IAmb IAmb 09 34 43.1
comp=Z,22nm,1.1s
**O19K Port Alsworth 80.32 12** P P **09 34 41.3 -0.2**
baz=203
**ILSW Iliamna Southw 80.36 13** P P **09 34 42.3 +0.3**
ILSW IAmb IAmb 09 34 42.4
comp=Z,29nm,1.4s
**J05D Fort Rock, OR 80.37 38** P P **09 34 44.3 +1.9**
**HOM Homer 80.39 13** P P **09 34 41.5 -0.4**
baz=206
**K13K Kusilvak Mount 80.40 7** P P **09 34 42.0 +0.1**
baz=193
**N18K Kilae Creek 80.47 11** P P **09 34 41.7 -0.7**
baz=202
**L15K Ungalak Mounta 80.54 8** P P **09 34 42.0 -0.6**
baz=196
**SHPR Sheep Range 80.58 47** P P **09 34 45.8 +2.1**
**H04A Detroit Lake 80.64 37** P P **09 34 44.8 +1.1**
H04A IAmb IAmb 09 34 45.8
comp=Z,8.0nm,0.6s
**S11A Rachel 80.76 46** IAmb IAmb 09 34 47.1
comp=Z,14nm,1.3s
**PINE Pine Mountain 80.84 38** IAmb IAmb 09 34 47.9
comp=Z,21nm,1.1s
**L16K Owhat River 80.85 9** IAmb IAmb 09 34 46.4
comp=Z,14nm,1.2s
**L16K Owhat River 80.85 9** P P **09 34 44.3 +0.1**
baz=198,SNR=5.3
**N19K Bonanza Creek 80.86 12** P P **09 34 44.4 0.0**
baz=203
**M17K Holitna River 80.88 10** P P **09 34 44.6 +0.2**
baz=200,SNR=5.6
**PRN Pahroc Range 81.11 46** IAmb IAmb 09 34 48.8
comp=Z,5.4nm,0.6s
**K15K Wolf Creek Mou 81.12 8** P P **09 34 45.6 -0.1**
baz=196
**R11B Troy Canyon, C 81.23 45** P P **09 34 46.3 -0.7**
baz=239
**M18K Stony River 81.24 11** P P **09 34 46.1 -0.1**
baz=202
**BMN Battle Mountai 81.25 43** IAmb IAmb 09 34 49.7
comp=Z,11nm,1.1s
**SEW Seward 81.28 14** P P **09 34 46.2 -0.2**
baz=208
**J14K Nanvaranak Lak 81.32 7** P P **09 34 46.9 +0.3**
baz=194
**L17K Donlin 81.43 9** P P **09 34 48.0 +0.8**
baz=199,SNR=6.0
**WVOR Wild Horse Val 81.45 40** IAmb IAmb 09 34 50.6
comp=Z,9.6nm,1.0s
**O22K Cooper Landing 81.56 14** P P **09 34 48.6 +0.8**
baz=207
**GAMB Gambell 81.67 3** P P **09 34 49.4 +1.0**
baz=186
**L18K Granite Mounta 81.77 10** IAmb IAmb 09 34 51.3
comp=Z,6.5nm,0.7s
**L18K Granite Mounta 81.77 10** P P **09 34 49.7 +0.8**
baz=201,SNR=6.4

**I07A Izee 81.85 39** IAmb IAmb 09 34 52.8
comp=Z,16nm,1.3s
**M19K Big River Lodg 81.88 11** P P **09 34 49.5 -0.1**
baz=203
**K17K Iditarod 81.98 9** P P **09 34 51.3 +1.2**
K17K IAmb IAmb 09 34 52.2
comp=Z,16nm,1.3s
**K17K Iditarod 81.98 9** P P **09 34 50.2 +0.2**
baz=199
**L19K White Mountain 82.06 11** P P **09 34 51.6 +1.2**
L19K IAmb IAmb 09 34 52.2
comp=Z,16nm,1.4s
**L19K White Mountain 82.06 11** P P **09 34 51.0 +0.6**
baz=202,SNR=6.4
**J08A Circle Bar Ran 82.06 40** IAmb IAmb 09 34 53.7
comp=Z,6.2nm,0.7s
**BELA Belgrano 2 82.08 173** P P **09 34 50.7 +0.2**
BELA IAmb IAmb 09 34 51.3
comp=Z,8.3nm,0.7s
**Q12A Willow Creek R 82.09 45** IAmb IAmb 09 34 54.0
comp=Z,7.8nm,0.9s
**RC01 Rabbit Creek A 82.09 14** P P **09 34 51.1 +0.5**
baz=207
**M20K Styx River 82.10 12** P P **09 34 50.9 +0.2**
baz=204
**J16K Anvik River 82.20 8** P P **09 34 52.5 +1.4**
J16K IAmb IAmb 09 34 52.6
comp=Z,5.9nm,0.7s
**J16K Anvik River 82.20 8** P P **09 34 51.2 +0.1**
baz=197
**SUA Susitna One 82.21 13** IAmb IAmb 09 34 53.0
comp=Z,5.3nm,0.6s
**SUA Susitna One 82.21 13** P P **09 34 51.2 -0.1**
baz=206
**PWL Port Wells 82.21 14** P P **09 34 51.2 0.0**
baz=209
**KAIM Kayak Island 82.40 16** P P **09 34 52.0 -0.1**
baz=212
**SPR3 Spring Creek 3 82.41 45** IAmb IAmb 09 34 55.9
comp=Z,12nm,1.5s
**319A Douglas 82.45 54** IAmb IAmb 09 34 56.9
comp=Z,18nm,1.3s
**L20K Farewell, AK 82.51 11** P P **09 34 52.5 -0.2**
baz=203
**SKT Skwentna 82.51 12** P P **09 34 52.2 -0.6**
baz=206
**J17K VABM Dome 82.52 9** P P **09 34 52.4 -0.2**
baz=198
**GLI Glacier Island 82.53 15** P P **09 34 53.2 +0.4**
GLI IAmb IAmb 09 35 22.1
comp=Z,11nm,1.0s
**GLI Glacier Island 82.53 15** P P **09 34 52.7 -0.1**
baz=210
**U15A North Rim 82.55 48** IAmb IAmb 09 34 57.0
comp=Z,26nm,1.5s
**EYAK Cordova Ski Ar 82.58 16** P P **09 34 52.6 -0.4**
baz=211
**CRAG Craig 82.58 24** P P **09 34 52.6 -0.5**
baz=223
**M22K Willow 82.60 13** P P **09 34 52.5 -0.6**
baz=207
**KNK Knik Glacier 82.67 14** P P **09 34 52.5 -1.0**
baz=208
**PMR Palmer 82.68 14** P P **09 34 53.7 +0.2**
**PMR Palmer 82.68 14** P P **09 34 53.9 +0.4**
PMR IAmb IAmb 09 34 54.5
comp=Z,24nm,1.4s
**PMR Palmer 82.68 14** P P **09 34 53.0 -0.5**
baz=208
**J18K Innoko River 82.94 10** IAmb IAmb 09 34 55.9
comp=Z,5.8nm,0.8s
**J18K Innoko River 82.94 10** P P **09 34 54.8 -0.1**
baz=201,SNR=8.3
**PKCU Pink Cliffs 83.03 47** IAmb IAmb 09 34 59.4
comp=Z,11nm,1.0s
**SML Sawmill 83.05 14** P P **09 34 54.9 -0.5**
baz=209
**DUN6 Lazy B Ranch 83.12 53** IAmb IAmb 09 35 00.1
comp=Z,21nm,1.1s
**HAWA Hanford 83.15 37** P P **09 34 57.9 +1.6**
HAWA IAmb IAmb 09 34 58.2
comp=Z,15nm,1.3s
**M23K Glacier View 83.17 14** P P **09 34 55.8 -0.3**
baz=209
**BMRM Bremner River 83.23 16** P P **09 34 56.0 -0.3**
baz=212
**K20K Telida 83.28 11** P P **09 34 57.4 +0.8**
K20K IAmb IAmb 09 34 58.0
comp=Z,24nm,1.5s
**K20K Telida 83.28 11** P P **09 34 56.1 -0.4**
baz=203,SNR=7.8
**MESA MESA 83.29 17** P P **09 34 56.7 -0.2**
baz=215
**H16K Elim 83.30 7** P P **09 34 57.2 +0.7**
baz=195
**SCM Sheep Creek Mo 83.30 14** P P **09 34 56.3 -0.5**
baz=210
**KLU Klutina 83.35 15** P P **09 34 57.2 +0.2**
baz=211
**MTPU Mount Pierson 83.40 47** IAmb IAmb 09 35 01.7
comp=Z,11nm,1.4s
**CRQE Cirque 83.45 17** P P **09 34 56.5 -1.0**
baz=214
**G15K Niukluk 83.45 6** P P **09 34 57.5 +0.2**
baz=194
**E08A Dider Farm, El 83.48 37** IAmb IAmb 09 35 00.5
comp=Z,17nm,1.5s
**S32K Killisnoo 83.52 22** P P **09 34 58.8 +1.0**
baz=221
**WRAK Wrangell Islan 83.58 24** P P **09 34 58.5 +0.5**
baz=224
**J19K Poorman 83.61 10** IAmb IAmb 09 35 00.0
comp=Z,9.8nm,1.4s
**J19K Poorman 83.61 10** P P **09 34 57.8 -0.3**
baz=202
**MFID Camas Ranch 83.72 41** IAmb IAmb 09 35 01.8
comp=Z,18nm,1.5s
**N25K Chitina, Valde 83.78 16** IAmb IAmb 09 34 59.9
comp=Z,8.1nm,0.6s
**N25K Chitina, Valde 83.78 16** P P **09 34 58.0 -1.1**
baz=212
**MAW Mawson 83.79 200** P P **09 34 58.9 -0.2**
comp=Z,1.8nm,0.5s,baz=111,slow=3.0,SNR=12
comp=Z,1.8nm,0.5s
**M24K Tolsona, Glenn 83.81 15** P P **09 34 58.2 -1.0**
baz=211
**GLB Gilahina Butte 83.84 16** IAmb IAmb 09 35 00.7
comp=Z,6.1nm,0.6s
**WAT6 Susitna Watana 83.86 14** P P **09 34 58.6 -1.0**
baz=209,SNR=12
**MCARA McCarthy VSAT 84.00 16** P P **09 35 00.4 +0.3**
baz=214
**E09A Wood Farm, Sta 84.01 37** IAmb IAmb 09 35 02.6
comp=Z,8.8nm,1.1s
**J20K Nowinta River 84.03 10** P P **09 35 00.1 -0.1**
baz=203,SNR=6.9
**121A Cookes Peak, D 84.10 53** P P **09 34 59.9 -1.6**
baz=244
**CTG Chitna Glacier 84.11 17** P P **09 35 00.4 -0.4**
baz=215
**P29M Windy Craggy 84.12 19** P P **09 35 01.0 +0.3**
baz=218
**F10A Beach Ranch, E 84.25 38** IAmb IAmb 09 35 03.7
comp=Z,14nm,1.1s
**O28M Mount Upton 84.28 18** P P **09 35 01.5 -0.4**
baz=216
**G17K Kiwalik Mounta 84.32 7** P P **09 35 00.5 -1.1**
baz=197
**DHY Denali Highway 84.38 14** IAmb IAmb 09 35 03.3
comp=Z,8.4nm,1.1s
**DHY Denali Highway 84.38 14** P P **09 35 00.8 -1.3**
baz=209,SNR=6.9
**B08A Colville Reser 84.39 35** IAmb IAmb 09 35 03.4
comp=Z,4.2nm,0.6s
**PLBC Pleasant Camp 84.42 20** P P **09 35 02.1 0.0**
baz=220
**BPAW Bear Paw Mtn. 84.53 12** P P **09 35 02.4 -0.3**
baz=206
**I20K Naaghedeneel 84.54 10** P P **09 35 02.5 -0.1**
baz=203
**MCK McKinley 84.62 13** P P **09 35 03.4 +0.3**
baz=208
**PAX Paxson 84.72 14** P P **09 35 03.9 +0.2**
baz=211
**P30M Million Dollar 84.75 19** P P **09 35 04.3 +0.4**
baz=219
**SKAG Skagway 84.77 20** P P **09 35 04.3 +0.4**
baz=221

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| T35M | **Bob Quinn** baz=225 | 84.79 | 24 | P | | P | 09 35 04.0 | -0.1 |
| YUK8 | **Steele Glacier** baz=216 | 84.82 | 18 | P | | P | 09 35 04.3 | -0.1 |
| M26K | **Nabesna, AK** comp=Z,15nm,1.2s | 84.86 | 16 | IAmb | | IAmb | 09 35 06.5 | |
| M26K | **Nabesna, AK** baz=214 | 84.86 | 16 | P | | P | 09 35 04.5 | +0.2 |
| H19K | **Roundabout Mou** baz=201 | 84.92 | 9 | P | | P | 09 35 04.4 | 0.0 |
| YUK3 | **Moose Creek** baz=216 | 85.02 | 17 | P | | P | 09 35 05.4 | 0.0 |
| S34M | **Telegraph Cree** baz=224 | 85.11 | 23 | P | | P | 09 35 05.7 | +0.2 |
| M27K | **Edge Creek, AK** comp=Z,9.5nm,1.1s | 85.11 | 16 | IAmb | | IAmb | 09 35 07.6 | |
| M27K | **Edge Creek, AK** baz=215 | 85.11 | 16 | P | | P | 09 35 05.7 | 0.0 |
| H20K | **Anotleneega Mo** baz=202 | 85.12 | 10 | P | | P | 09 35 06.0 | +0.6 |
| YUK4 | **Talbot Arm** baz=218 | 85.19 | 18 | P | | P | 09 35 07.2 | +1.1 |
| L26K | **Log Cabin Wild** comp=Z,7.8nm,1.3s | 85.29 | 15 | IAmb | | IAmb | 09 35 07.9 | |
| L26K | **Log Cabin Wild** baz=213 | 85.29 | 15 | P | | P | 09 35 06.6 | +0.2 |
| K24K | **Donnelly Dome** baz=211 | 85.37 | 14 | P | | P | 09 35 07.0 | +0.2 |
| G19K | **Purcell Mounta** baz=200 | 85.40 | 9 | P | | P | 09 35 07.1 | +0.3 |
| MLY | **Manley** baz=206 | 85.42 | 11 | P | | P | 09 35 07.1 | +0.1 |
| WRH | **Wood River Hil** comp=Z,21nm,1.3s | 85.45 | 13 | IAmb | | IAmb | 09 35 07.9 | |
| Q32M | **Nakina River** baz=223 | 85.45 | 22 | P | | P | 09 35 07.7 | +0.3 |
| O30N | **Mendenhall** baz=220 | 85.52 | 19 | P | | P | 09 35 07.9 | +0.3 |
| RIDG | **Independent Ri** baz=212 | 85.53 | 14 | P | | P | 09 35 07.5 | -0.1 |
| VHRN | **Van Horn** comp=Z,10nm,1.5s | 85.54 | 56 | IAmb | | IAmb | 09 35 12.7 | |
| H21K | **Melozitna Rive** baz=204 | 85.62 | 10 | P | | P | 09 35 08.3 | +0.4 |
| HDA | **Harding Lake** comp=Z,4.0nm,0.5s | 85.63 | 13 | IAmb | | IAmb | 09 35 08.8 | |
| HDA | **Harding Lake** baz=210,SNR=5.2 | 85.63 | 13 | P | | P | 09 35 08.2 | +0.3 |
| L27K | **Beaver Creek,** baz=215 | 85.71 | 16 | P | | P | 09 35 08.4 | 0.0 |
| E17K | **Hotham Inlet** baz=196 | 85.71 | 6 | P | | P | 09 35 07.5 | -0.7 |
| N30M | **Aishikik Lake** baz=219 | 85.75 | 19 | P | | P | 09 35 08.1 | -0.5 |
| I23K | **Minto, Yukon-K** baz=208 | 85.79 | 12 | P | | P | 09 35 08.3 | -0.4 |
| WHY | **Whitehorse** baz=221 | 85.83 | 20 | P | | P | 09 35 08.5 | -0.6 |
| COLA | **College** baz=209 | 85.85 | 13 | P | | P | 09 35 08.8 | -0.1 |
| DLBC | **Dease Lake** comp=Z,1.9nm,0.8s,baz=135,slow=5.2,SNR=3.2 comp=Z,1.9nm,0.8s | 85.90 | 23 | P | | P | 09 35 09.9 | +0.5 |
| DLBC | **Dease Lake** baz=225 | 85.90 | 23 | P | | P | 09 35 09.0 | -0.4 |
| SCRK | **Sand Creek** baz=212 | 85.94 | 14 | P | | P | 09 35 08.8 | -0.7 |
| F19K | **Shaleruckik Mo** baz=200 | 85.96 | 8 | P | | P | 09 35 08.7 | -0.6 |
| ILAR | **Eielson Array** comp=Z,2.1nm,0.4s,baz=220,slow=5.0,SNR=106 comp=Z,2.1nm,0.4s | 85.96 | 13 | P | | P | 09 35 08.8 | -0.6 |
| TXAR | **Lajitas Array** comp=Z,3.2nm,0.7s,baz=214,slow=8.1,SNR=51 comp=Z,3.2nm,0.7s | 86.01 | 58 | P | | P | 09 35 12.9 | +2.2 |
| H22K | **Ishtalitna Cre** baz=206 | 86.08 | 11 | P | | P | 09 35 09.6 | -0.4 |
| M29M | **Somme Creek** comp=Z,5.1nm,1.0s | 86.12 | 17 | IAmb | | IAmb | 09 35 12.4 | |
| M29M | **Somme Creek** baz=218 | 86.12 | 17 | P | | P | 09 35 10.7 | +0.3 |
| ANMO | **Albuquerque** | 86.12 | 52 | P | | P | 09 35 12.3 | +1.1 |
| POKR | **Poker Plat Res** baz=209 | 86.15 | 13 | P | | P | 09 35 09.9 | -0.4 |
| J25K | **Salcha River,** baz=211,SNR=13 | 86.16 | 14 | P | | P | 09 35 10.0 | -0.5 |
| N31M | **Braeburn, Yuko** baz=220 | 86.17 | 19 | P | | P | 09 35 10.2 | -0.4 |
| E18K | **Tukpahlearik C** baz=197 | 86.17 | 7 | P | | P | 09 35 10.7 | +0.2 |
| D17K | **Noatak River** baz=194 | 86.18 | 6 | P | | P | 09 35 10.9 | +0.5 |
| R33M | **Jennings River** baz=224 | 86.23 | 22 | P | | P | 09 35 11.0 | 0.0 |
| G21K | **Allakaket** baz=204 | 86.29 | 10 | P | | P | 09 35 11.0 | 0.0 |
| H23K | **Yukon River** baz=207 | 86.36 | 11 | P | | P | 09 35 11.5 | +0.1 |
| ALPN | **Alpine** comp=Z,6.3nm,1.0s | 86.44 | 57 | IAmb | | IAmb | 09 35 15.9 | |
| K27K | **Chicken** comp=Z,12nm,1.5s | 86.44 | 15 | IAmb | | IAmb | 09 35 13.9 | |
| K27K | **Chicken** baz=214 | 86.44 | 15 | P | | P | 09 35 11.6 | -0.1 |
| F20K | **Avaraart Lake** baz=202 | 86.44 | 9 | P | | P | 09 35 12.4 | +0.7 |
| J26L | **Joseph Creek** comp=Z,5.8nm,0.7s | 86.48 | 14 | IAmb | | IAmb | 09 35 14.0 | |
| J26L | **Joseph Creek** baz=213,SNR=12 | 86.48 | 14 | P | | P | 09 35 12.3 | +0.2 |
| E19K | **Redstone River** baz=200 | 86.62 | 8 | P | | P | 09 35 12.4 | -0.1 |
| DLMT | **Dillon** comp=Z,3.5nm,0.7s | 86.70 | 40 | IAmb | | IAmb | 09 35 15.5 | |
| M30M | **Minto, Yukon** comp=Z,14nm,1.4s | 86.71 | 18 | IAmb | | IAmb | 09 35 15.2 | |
| M30M | **Minto, Yukon** baz=219,SNR=7.6 | 86.71 | 18 | P | | P | 09 35 12.5 | -0.6 |
| L29M | **L29M** baz=218,SNR=8.1 | 86.74 | 17 | P | | P | 09 35 13.1 | -0.1 |
| TPAW | **Teton Pass** comp=Z,6.5nm,1.1s | 86.83 | 42 | IAmb | | IAmb | 09 35 16.2 | |
| FXWY | **Fox Creek** comp=Z,7.1nm,1.4s | 86.85 | 42 | IAmb | | IAmb | 09 35 17.4 | |
| PRP | **Porcupine Dome** baz=211 | 86.90 | 13 | P | | P | 09 35 13.7 | -0.4 |
| SNOW | **Snow King Moun** comp=Z,12nm,1.4s | 86.94 | 42 | IAmb | | IAmb | 09 35 17.0 | |
| G22K | **Bettles** baz=206 | 86.99 | 10 | P | | P | 09 35 14.8 | +0.5 |
| IMW | **Indian Meadow** comp=Z,9.8nm,1.2s | 87.03 | 42 | IAmb | | IAmb | 09 35 18.8 | |
| S22A | **4UR Ranch, Cre** comp=Z,7.2nm,1.4s | 87.04 | 49 | IAmb | | IAmb | 09 35 17.7 | |
| S22A | **4UR Ranch, Cre** baz=244 | 87.04 | 49 | P | | P | 09 35 13.9 | -1.6 |
| G23K | **Bananza Creek** baz=207 | 87.06 | 11 | P | | P | 09 35 14.7 | 0.0 |
| M31M | **Drury Creek, Y** baz=221 | 87.14 | 19 | P | | P | 09 35 15.1 | 0.0 |
| DAWY | **Dawson** baz=217,SNR=5.8 | 87.16 | 16 | P | | P | 09 35 15.2 | 0.0 |
| I26K | **Coal Creek Min** comp=Z,4.9nm,0.9s | 87.25 | 14 | IAmb | | IAmb | 09 35 17.2 | |
| I26K | **Coal Creek Min** baz=213 | 87.25 | 14 | P | | P | 09 35 15.9 | +0.3 |
| EGAK | **Eagle** baz=215 | 87.29 | 15 | P | | P | 09 35 16.3 | +0.6 |
| YHL | **Hebgen Lake** comp=Z,8.6nm,0.9s | 87.33 | 41 | IAmb | | IAmb | 09 35 20.7 | |
| HHC | **Hu-ho-hao-te** | 87.36 | 314 | *e*P | | P | 09 35 14.5 | -2.2 |
| HHC | comp=Z,18nm,0.7s | | | pmax | | pmax | | |
| HHC | comp=Z,63nm,4.8s | | | pmax | | pmax | | |
| PDAR | **Pinedale Array** comp=Z,2.2nm,0.6s,baz=218,slow=3.4,SNR=28 comp=Z,2.2nm,0.6s | 87.39 | 43 | P | | P | 09 35 17.8 | +0.7 |
| BOZ | **Bozeman (W)** comp=Z,6.2nm,1.2s | 87.41 | 40 | IAmb | | IAmb | 09 35 19.6 | |
| F22K | **John River** baz=205 | 87.41 | 10 | P | | P | 09 35 17.2 | +0.9 |
| K29M | **Barlow Dome** comp=Z,12nm,1.4s | 87.49 | 17 | IAmb | | IAmb | 09 35 18.1 | |
| K29M | **Barlow Dome** baz=218,SNR=5.9 | 87.49 | 17 | P | | P | 09 35 16.9 | +0.1 |
| D19K | **Kuna River** baz=199 | 87.49 | 7 | P | | P | 09 35 16.9 | +0.3 |
| COLD | **Coldfoot** | 87.49 | 11 | P | | P | 09 35 17.0 | +0.4 |
| FARO | **Faro, Yukon** baz=222 | 87.49 | 19 | P | | P | 09 35 16.6 | -0.2 |
| SAND | **Sanderson** comp=Z,12nm,1.4s | 87.49 | 58 | IAmb | | IAmb | 09 35 20.2 | |
| H17A | **Grant Village** comp=Z,13nm,1.4s | 87.49 | 42 | IAmb | | IAmb | 09 35 21.2 | |
| H17A | **Grant Village** baz=242 | 87.49 | 42 | P | | P | 09 35 16.8 | -0.7 |
| E20K | **Nigu River** baz=201 | 87.51 | 8 | P | | P | 09 35 16.8 | 0.0 |
| G24K | **Hadweenzic Riv** baz=209 | 87.53 | 12 | P | | P | 09 35 16.1 | -0.7 |
| G25K | **Bearman Lake** baz=210 | 87.86 | 12 | P | | P | 09 35 18.1 | -0.2 |
| I27K | **Kandik River** baz=215 | 87.86 | 14 | P | | P | 09 35 17.4 | -1.0 |
| D20K | **Etivluk River** baz=201 | 87.89 | 8 | P | | P | 09 35 17.5 | -1.0 |
| C19K | **Lookout Ridge** baz=198 | 87.90 | 7 | P | | P | 09 35 17.8 | -0.8 |
| B18K | **Kokolik River** baz=196 | 87.92 | 6 | P | | P | 09 35 17.8 | -0.8 |
| E21K | **Killik River** baz=203 | 87.99 | 9 | P | | P | 09 35 18.5 | -0.4 |
| TOAD | **Toad River Com** baz=230,SNR=5.0 | 88.03 | 25 | P | | P | 09 35 19.0 | -0.3 |
| LIRD | **Liard River Hi** baz=229 | 88.05 | 24 | P | | P | 09 35 19.2 | -0.3 |
| I28M | **Miner Creek** baz=216 | 88.14 | 15 | P | | P | 09 35 19.5 | -0.3 |
| F24K | **Squaw Lake** comp=Z,5.8nm,0.6s | 88.17 | 11 | IAmb | | IAmb | 09 35 58.2 | |
| F24K | **Squaw Lake** baz=209 | 88.17 | 11 | P | | P | 09 35 20.0 | +0.2 |
| E23K | **Chandalar** baz=207 | 88.34 | 10 | P | | P | 09 35 21.0 | +0.4 |
| J30M | **Hart River** baz=220 | 88.39 | 17 | P | | P | 09 35 21.6 | +0.5 |
| H27K | **Steamboat Moun** baz=215 | 88.40 | 14 | P | | P | 09 35 21.7 | +0.8 |
| RWWY | **Rawlins** comp=Z,9.7nm,1.2s | 88.47 | 45 | IAmb | | IAmb | 09 35 23.2 | |
| I29M | **Ogilvie Camp,** comp=Z,9.1nm,1.5s | 88.48 | 16 | IAmb | | IAmb | 09 35 22.6 | |
| I29M | **Ogilvie Camp,** baz=218 | 88.48 | 16 | P | | P | 09 35 22.0 | +0.7 |
| G26K | **Porcupine Rive** baz=213 | 88.50 | 13 | P | | P | 09 35 22.4 | +1.2 |
| T25A | **Trinidad** baz=246 | 88.54 | 50 | P | | P | 09 35 21.2 | -1.3 |
| C21K | **Knifeblade Rid** baz=202 | 88.54 | 8 | P | | P | 09 35 22.7 | +1.2 |
| E24K | **Your Creek** baz=208 | 88.55 | 11 | P | | P | 09 35 22.2 | +0.6 |
| D22K | **Ayikyak River** baz=204 | 88.59 | 9 | P | | P | 09 35 22.8 | +1.0 |
| OZNA | **Ozona** comp=Z,3.4nm,0.8s | 88.65 | 57 | IAmb | | IAmb | 09 35 26.0 | |
| RLMT | **Red Lodge** comp=Z,5.3nm,1.2s | 88.66 | 41 | IAmb | | IAmb | 09 35 26.2 | |
| F25K | **Christian Rive** baz=211 | 88.66 | 12 | P | | P | 09 35 22.8 | +0.6 |
| TGTN | **Hyland Airport** baz=227 | 88.68 | 22 | P | | P | 09 35 23.0 | +0.6 |
| A19K | **Wainwright** baz=196 | 88.80 | 6 | P | | P | 09 35 23.2 | +0.6 |
| G27K | **Doyon Strip** baz=215 | 88.84 | 14 | P | | P | 09 35 23.6 | +0.6 |
| I30M | **Mount Dempster** comp=Z,3.6nm,0.9s | 88.88 | 16 | IAmb | | IAmb | 09 35 24.6 | |
| I30M | **Mount Dempster** baz=220 | 88.88 | 16 | P | | P | 09 35 24.0 | +0.8 |
| D23K | **Nanushuk River** baz=206 | 88.97 | 10 | P | | P | 09 35 24.1 | +0.6 |
| N23A | **Red Feather La** comp=Z,7.8nm,1.2s | 89.00 | 46 | IAmb | | IAmb | 09 35 27.3 | |
| N23A | **Red Feather La** baz=245 | 89.00 | 46 | P | | P | 09 35 23.9 | -0.7 |
| B20K | **Meade River** baz=200 | 89.04 | 7 | P | | P | 09 35 24.6 | +0.9 |
| F26K | **Sheenjek River** baz=212 | 89.05 | 12 | P | | P | 09 35 24.5 | +0.6 |
| ELIB | **Princess Elisa** comp=Z,5.8nm,0.8s | 89.08 | 187 | *d*P | | P | 09 35 24.1 | -0.1 |
| 833A | **Chaparral WMA,** baz=249 | 89.11 | 60 | P | | P | 09 35 23.9 | -1.2 |
| H29M | **Whitestone** baz=218 | 89.14 | 15 | P | | P | 09 35 24.9 | +0.6 |
| HNDO | **Hondo** comp=Z,4.1nm,0.7s | 89.64 | 59 | IAmb | | IAmb | 09 35 31.3 | |
| EPYK | **Eagle Plains** baz=219 | 89.68 | 16 | P | | P | 09 35 26.8 | 0.0 |
| C23K | **Itkillik River** baz=206 | 89.77 | 9 | P | | P | 09 35 28.2 | +1.1 |
| G29M | **Pine Creek** baz=218 | 89.78 | 15 | P | | P | 09 35 28.2 | +0.9 |
| H31M | **Peel River** baz=221 | 89.87 | 17 | P | | P | 09 35 27.9 | +0.2 |
| F28M | **Old Crow** baz=216 | 89.91 | 14 | P | | P | 09 35 28.8 | +0.9 |
| C24K | **Franklin Bluff** baz=208 | 89.97 | 10 | P | | P | 09 35 28.7 | +0.6 |
| E27K | **Coleen River** baz=215 | 89.99 | 13 | P | | P | 09 35 28.4 | +0.1 |
| TROLL | **Troll, Antarti** comp=Z,192nm,0.7s | 90.22 | 180 | ⇓P | | P | 09 35 29.5 | -0.1 |
| G30M | **tAoh Zrail Nji** baz=220 | 90.28 | 15 | P | | P | 09 35 29.5 | -0.2 |
| SNAA | **Sanae** comp=Z,30nm,0.6s | 90.51 | 179 | ⇓P | | P | 09 35 30.3 | -0.6 |
| SNAA | **Sanae** comp=Z,1.3nm,0.6s,baz=205,slow=6.0,SNR=18 comp=Z,1.3nm,0.6s | 90.51 | 179 | P | | P | 09 35 30.6 | -0.2 |
| VNA3 | **Neumayer Olymp** comp=Z,9.5nm,0.7s | 90.65 | 176 | ⇓P | | P | 09 35 31.4 | 0.0 |
| G31M | **Satah River** baz=221 | 90.73 | 16 | P | | P | 09 35 31.9 | +0.3 |
| E28M | **Babbage River** baz=217 | 90.78 | 13 | P | | P | 09 35 31.8 | -0.1 |
| F30M | **Barrier River** baz=220 | 90.87 | 15 | P | | P | 09 35 32.7 | +0.5 |
| LZH | **Lanzhou** | 90.97 | 308 | *e*P | | P | 09 35 36.0 | +2.3 |
| LZH | comp=Z,30nm,1.2s | | | pmax | | pmax | | |
| D27M | **Malcolm River** baz=215 | 91.00 | 13 | P | | P | 09 35 34.6 | +1.7 |
| VNA2 | **Neumayer--Watz** comp=Z,3.5nm,0.6s,baz=179,slow=4.1 | 91.09 | 177 | ⇓P | | P | 09 35 33.5 | +0.1 |
| F31M | **Tsiigehtchic** baz=222 | 91.26 | 16 | P | | P | 09 35 33.9 | -0.1 |
| VNA1 | **Neumayer--Stat** comp=Z,4.4nm,0.7s | 91.32 | 177 | ⇓P | | P | 09 35 34.5 | 0.0 |
| INK | **Inuvik** comp=Z,1.2nm,0.4s,baz=248,slow=1.6,SNR=7.4 comp=Z,1.2nm,0.4s | 91.96 | 15 | P | | P | 09 35 37.0 | -0.3 |
| INK | **Inuvik** baz=222 | 91.96 | 15 | P | | P | 09 35 37.5 | +0.2 |
| YKA | **Yellowknife Ar** comp=Z,0.8nm,0.8s,baz=318,slow=14,SNR=10.0 comp=Z,0.8nm,0.8s | 94.40 | 25 | P | | P | 09 35 48.7 | +0.2 |
| P52A | **Corning** baz=260 | 105.96 | 53 | P | | PKiKP | 09 40 48.0 | -1.1 |
| M53A | **WI Miller and** baz=261 | 107.36 | 51 | P | | PKiKP | 09 40 50.3 | -1.4 |
| MKAR | **Makanchi Array** comp=Z,0.5nm,0.5s,baz=50,slow=1.1,SNR=4.0 | 109.22 | 314 | PKiKP | | PKiKP | 09 40 54.1 | -0.9 |
| L61B | **Northampton** baz=267 | 113.39 | 51 | P | | PKiKP | 09 41 01.3 | -1.7 |
| BVAR | **Borovoye Array** comp=Z,1.3nm,0.4s,baz=106,slow=2.6,SNR=6.2 | 116.93 | 321 | PKP | | PKPdf | 09 41 08.6 | -0.9 |
| ARCES | **ARCESS Array B** comp=Z,1.8nm,0.6s,baz=48,slow=1.8,SNR=8.7 | 126.41 | 350 | PKP | | PKPdf | 09 41 26.4 | -0.8 |
| FINES | **FINESS Array B** comp=Z,1.1nm,0.5s,baz=85,slow=4.2,SNR=7.4 | 133.28 | 344 | PKP | | PKPdf | 09 41 39.4 | -1.0 |
| HFS | **Hagfors** comp=Z,0.5nm,0.4s,baz=54,slow=7.7,SNR=5.3 | 137.02 | 351 | PKhKP | | PKPpre | 09 41 36.7 | |
| AKASG | **Malin Array Be** comp=Z,0.2nm,0.3s,baz=45,slow=4.3,SNR=5.0 | 140.65 | 332 | PKhKP | | PKPpre | 09 41 47.5 | |
| EKA | **Eskdalemuir Ar** comp=Z,0.6nm,0.5s,baz=310,slow=3.1,SNR=4.0 | 142.55 | 4 | PKhKP | | PKPpre | 09 41 53.0 | |
| BRTR | **Keskin Array B** comp=Z,1.5nm,0.5s,baz=99,slow=3.7,SNR=11 | 144.87 | 315 | PKP | | PKPbc | 09 42 02.9 | -0.2 |
| CLL | **Collm** | 145.55 | 347 | | | PKPdf | 09 42 02.9 | +0.1 |
| CLL | | | | PKPbc | | PKPab | 09 42 05.4 | -0.7 |
| DPC | **Dobruska-Polom** | 145.64 | 343 | *e*PKP | | PKPab | 09 42 05.6 | -0.9 |
| KRLC | **Kraliky** | 145.76 | 343 | *e*PKP | | PKPbc | 09 42 05.7 | +0.6 |
| HSKC | **Hora Svate Kat** | 146.12 | 346 | *e*PKP | | PKPbc | 09 42 06.2 | +0.1 |
| MMAI | **Mount Meron Ar** comp=Z,2.0nm,0.4s,baz=64,slow=3.8,SNR=6.3 | 146.22 | 303 | PKPbc | | PKPbc | 09 42 07.2 | +0.3 |
| PRU | **Pruhonice** | 146.44 | 345 | *e*PKP | | PKiKP | 09 42 08.0 | -1.1 |
| KHC | **Kasperske Hory** | 147.47 | 345 | *e*PKP | | PKiKP | 09 42 10.6 | -0.7 |
| GERES | **GERESS Array B** comp=Z,3.3nm,0.5s,baz=29,slow=3.0,SNR=8.1 | 147.70 | 345 | PKPbc | | PKPbc | 09 42 10.4 | 0.0 |
| CONA | **Conrad Observa** comp=Z,13nm,1.3s | 147.95 | 342 | *i* PKP | | PKiKP | 09 42 12.1 | -0.3 |
| RONA | **Rosalia, Austr** comp=Z,7.7nm,0.9s | 148.03 | 341 | *i* PKP | | PKiKP | 09 42 11.9 | -0.6 |
| MOA | **Molln** comp=Z,8.8nm,1.6s | 148.48 | 344 | *i* PKP | | PKiKP | 09 42 13.2 | -0.2 |
| ARSA | **Arzberg** comp=Z,5.7nm,1.2s | 148.66 | 342 | *i* PKP | | PKiKP | 09 42 13.7 | -0.1 |
| BIOA | **Bad Ischl, Aus** comp=Z,2.2nm,0.5s | 148.79 | 344 | *i* PKP | | PKiKP | 09 42 14.3 | +0.3 |
| LESA | **Schwarzleotal** comp=Z,2.7nm,0.5s | 149.28 | 345 | *i* PKP | | PKiKP | 09 42 15.3 | +0.2 |
| SOKA | **Soboth** comp=Z,5.3nm,1.0s | 149.33 | 342 | *i* PKP | | PKPbc | 09 42 14.3 | -0.2 |
| KBA | **Koelnbreinsper** comp=Z,3.5nm,0.8s | 149.43 | 344 | *e*PKP | | PKiKP | 09 42 15.2 | -0.4 |
| OBKA | **Obir** comp=Z,4.9nm,1.0s | 149.62 | 342 | *i* PKP | | PKiKP | 09 42 15.8 | -0.1 |
| RETA | **Reutte** comp=Z,1.7nm,0.6s | 149.64 | 348 | *e*PKP | | PKiKP | 09 42 15.5 | -0.3 |
| WTTA | **Wattenberg** comp=Z,6.0nm,0.7s | 149.67 | 346 | *i* PKP | | PKPbc | 09 42 15.4 | 0.0 |
| MOTA | **Moosalm** comp=Z,4.0nm,0.7s | 149.71 | 347 | *i* PKP | | PKiKP | 09 42 16.2 | +0.1 |
| MYKA | **Terra Mystica** comp=Z,1.7nm,0.5s | 149.77 | 343 | *i* PKP | | PKPbc | 09 42 15.3 | -0.2 |
| SQTA | **Sankt Quirin** comp=Z,2.7nm,0.4s | 149.81 | 347 | *i* PKP | | PKiKP | 09 42 16.1 | -0.2 |
| ABTA | **Abfaltersbach** comp=Z,4.4nm,0.6s | 149.95 | 345 | *e*PKP | | PKPbc | 09 42 15.6 | -0.4 |
| DAVA | **Damuels** comp=Z,12nm,1.2s | 150.01 | 349 | *i* PKiKP | | PKiKP | 09 42 18.0 | +1.2 |
| FETA | **Feichten** comp=Z,2.1nm,0.6s | 150.09 | 347 | *i* PKP | | PKiKP | 09 42 16.7 | -0.2 |
| FUORN | **Ofenpass-Fuorn** | 150.57 | 348 | | | PKiKP | 09 42 18.4 | +0.4 |
| FUORN | | | | PKPab | | PKPab | 09 42 28.2 | +1.1 |
| ESDC | **Sonseca Array** comp=Z,0.2nm,0.5s,baz=344,slow=3.8,SNR=5.5 | 157.86 | 12 | PKPab | | PKPab | 09 42 58.5 | +0.3 |
| TORD | **Torodi Ar. Bea** comp=Z,0.4nm,0.6s,baz=196,slow=5.1,SNR=2.2 | 175.18 | 181 | PKPbc | | PKPab | 09 44 15.2 | +0.1 |

*MEX* ***29*** *09:47:30.9±0.8, 14°.41N×92°.68W, h31km±38km, MD3.7*
*GCG* ***29*** *09:47:31.3±0.4, 14°.72N×92°.41W, h72km±8km, MD3.4*

**ISC 29 09:47:30.6±1.7, 14°.5N±0°.1×92°.60W±0°.07, h43km±31km, n13, σ0s77/25, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **THIG** | | **0.52** | **38** | *e*P | | | **Pn** | **09 47 41.6** | **-0.1** |
| THIG | | | | *e*S | | | **Sn** | **09 47 50.0** | **+0.4** |
| **CHUJ** | **Union Juarez** | **0.76** | **38** | *e*P | | | **Pn** | **09 47 44.5** | **-0.7** |
| CHUJ | | | | *e*S | | | **Sn** | **09 47 56.2** | **+0.6** |
| **PAVE** | **Pavencul** | **0.80** | **30** | *e*P | | | **Pn** | **09 47 45.1** | **-0.7** |
| PAVE | | | | *e*S | | | **Sn** | **09 47 57.0** | **+0.3** |
| **RTAL** | **Retalhuleu** | **0.87** | **88** | *e*P | | | **Pn** | **09 47 45.8** | **-0.7** |
| RTAL | | | | *e*S | | | **Sn** | **09 47 58.6** | **+0.5** |
| **STG3** | **Santiaguito 3,** | **1.02** | **78** | *e*P | | | **Pn** | **09 47 48.3** | **-0.3** |
| STG3 | | | | *e*S | | | **Sn** | **09 48 01.8** | **0.0** |
| **SULM** | **Suchitepequez,** | **1.02** | **101** | *e*P | | | **Pn** | **09 47 48.9** | **+0.5** |
| **HUEH** | **Huehuetenango** | **1.34** | **52** | *e*P | | | **Pn** | **09 47 53.6** | **+0.6** |
| HUEH | | | | *e*S | | | **Sn** | **09 48 09.8** | **+0.1** |
| **PCIG** | | **1.34** | **334** | *e*P | | | **Pn** | **09 47 52.1** | **-0.8** |
| PCIG | | | | *e*S | | | **Sn** | **09 48 09.4** | **-0.2** |
| **FUG** | **Fuego 3** | **1.70** | **91** | *e*P | | | **Pn** | **09 47 57.7** | **-0.2** |
| FUG | | | | *e*S | | | **Sn** | **09 48 18.1** | **-0.5** |
| **CARR** | **Arriaga** | **2.15** | **324** | *e*P | | | **Pn** | **09 48 04.1** | **0.0** |
| CARR | | | | *e*S | | | **Sn** | **09 48 30.3** | **+0.7** |
| **TGIG** | | **2.33** | **348** | *e*P | | | **Pn** | **09 48 05.4** | **-1.1** |
| TGIG | | | | *e*S | | | **Sn** | **09 48 34.1** | **+0.2** |
| **UXUV** | **UXUV** | **3.18** | **332** | *e*P | | | **Pn** | **09 48 18.8** | **+0.7** |
| UXUV | | | | *e*S | | | **Sn** | **09 48 56.9** | **+2.1** |
| **CMIG** | **Matias Romero** | **3.39** | **320** | *e*P | | | **Pn** | **09 48 20.8** | **-0.3** |
| CMIG | | | | *e*S | | | **Sn** | **09 48 58.8** | **-1.3** |

*IDC* ***29*** *09:49:05.6±1.6, 18°.19S×178°.17W, h600km±19km, mb3.1/11, mbtmp4.0/12, Error ellipse: s-maj=18.9km s-min=15.6km az=105.0*

**ISC 29 09:49:04.8±0.7, 18°.2S±0°.1×178°.1W±0°.1, h590km, n17, σ0s82/17, mb3.7/13, 2C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.67** | **276** | P | | | **P** | **09 50 29.2** | **+1.8** |
| | 39nm,0.7s,baz=138,slow=3.9,SNR=28 | | | | | | | | |
| **URZ** | **Urewera** | **20.43** | **191** | P | | | **P** | **09 53 01.8** | **-0.9** |
| | 5.0nm,0.3s,baz=354,slow=4.7,SNR=7.6 5.0nm,0.3s | | | | | | | | |
| **CTA** | **Charters Tower** | **33.67** | **261** | P | | | **P** | **09 54 58.2** | **-0.1** |
| | 0.1nm,0.4s,baz=109,slow=6.9,SNR=5.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | | | **P** | **09 56 27.5** | **-0.5** |
| | 2.0nm,0.5s,baz=95,slow=7.1,SNR=39 2.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.98** | **254** | P | | | **P** | **09 56 28.9** | **-0.1** |
| | 2.7nm,0.4s,baz=89,slow=8.5,SNR=47 2.7nm,0.4s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.29** | **323** | P | | | **P** | **09 59 07.5** | **-0.5** |
| | 0.8nm,0.5s,baz=167,slow=5.5,SNR=2.2 0.8nm,0.5s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.87** | **180** | P | | | **P** | **09 59 29.5** | **+0.6** |
| | 2.0nm,0.6s,baz=122,slow=2.8,SNR=31 2.0nm,0.6s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.02** | **345** | P | | | **P** | **09 59 40.7** | **-0.3** |
| | 2.0nm,0.8s,baz=114,slow=8.0,SNR=4.0 2.0nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.43** | **44** | P | | | **P** | **10 00 11.8** | **+0.7** |
| | 0.2nm,0.6s,baz=218,slow=9.4,SNR=4.0 0.2nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.91** | **57** | P | | | **P** | **10 00 44.8** | **+1.1** |
| | 0.3nm,0.8s,baz=230,slow=5.9,SNR=4.3 0.3nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.09** | **13** | P | | | **P** | **10 00 42.4** | **-1.2** |
| | 0.4nm,0.4s,baz=219,slow=5.1,SNR=11 0.4nm,0.4s | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.36** | **43** | P | | | **P** | **10 00 50.0** | **-0.4** |
| | 0.1nm,0.4s,baz=134,slow=3.9,SNR=3.8 0.1nm,0.4s | | | | | | | | |
| **SNAA** | **Sanae** | **90.31** | **179** | P | | | **P** | **10 01 02.7** | **-0.7** |
| | 0.5nm,0.6s,baz=192,slow=11,SNR=7.0 0.5nm,0.6s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.45** | **176** | ⇑P | | | **P** | **10 01 03.5** | **-0.5** |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.89** | **177** | ⇑P | | | **P** | **10 01 06.2** | **+0.2** |
| | comp=Z,1.5nm,0.6s,baz=178,slow=5.5 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.17** | **315** | PKPbc | | | **PKPdf** | **10 07 36.6** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=143,slow=3.7,SNR=3.9 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.52** | **303** | PKPbc | | | **PKPbc** | **10 07 40.8** | **-0.6** |
| | comp=Z,0.5nm,0.3s,baz=69,slow=7.9,SNR=2.2 | | | | | | | | |

*IDC* ***29*** *09:50:52.4±1.1, 18°.14S×178°.25W, h583km±10km, mb3.2/11, mbtmp4.2/13, Error ellipse: s-maj=21.1km s-min=12.4km az=144.0*

**ISC 29 09:50:53.5±0.7, 18°.1S±0°.2×178°.4W±0°.1, h600km, n19, σ0s98/23, mb3.7/12, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.44** | **275** | P | | | **P** | **09 52 13.1** | **-2.3** |
| | 93nm,0.7s,baz=136,slow=6.3,SNR=36 | | | | | | | | |
| MSVF | | | | S | | | **S** | **09 53 20.4** | **-1.7** |
| | 27nm,1.2s,baz=130,slow=22,SNR=8.1 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.82** | **252** | P | | | **P** | **09 53 59.9** | **-0.3** |
| | 5.7nm,0.6s,baz=98,slow=20,SNR=3.5 | | | | | | | | |
| **CTA** | **Charters Tower** | **33.47** | **261** | P | | | **P** | **09 56 45.4** | **+0.6** |
| | 0.2nm,0.8s,baz=77,slow=8.7,SNR=6.0 | | | | | | | | |
| **STKA** | **Stephens Creek** | **38.60** | **241** | P | | | **P** | **09 57 27.5** | **+0.7** |
| | 3.1nm,0.5s,baz=95,slow=11,SNR=6.1 3.1nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.66** | **260** | P | | | **P** | **09 58 14.7** | **+0.2** |
| | 0.4nm,0.4s,baz=96,slow=6.8,SNR=5.3 | | | | | | | | |
| WRA | | | | PcP | | | **PcP**

5.4nm,0.7s
**MJAR Matsushiro Arr 68.07 323** P **P** **10 00 55.5 +0.9**
2.8nm,0.6s,baz=163,slow=5.7,SNR=7.6
2.8nm,0.6s
**QSPA South Pole Qui 71.98 180** P **P** **10 01 17.1 -0.3**
1.1nm,0.8s,baz=28,slow=7.0,SNR=7.2
1.1nm,0.8s
**PETK Petropavlovsk- 73.85 345** P **P** **10 01 28.4 +0.4**
3.9nm,0.7s,baz=118,slow=7.6,SNR=8.1
3.9nm,0.7s
**NVAR Mina Array Bea 79.51 44** P **P** **10 01 59.4 0.0**
0.6nm,0.6s,baz=223,slow=8.2,SNR=9.4
0.6nm,0.6s
**ILAR Eielson Array 86.04 13** P **P** **10 02 30.5 -0.6**
0.8nm,0.4s,baz=220,slow=4.9,SNR=30
0.8nm,0.4s
**TXAR Lajitas Array 86.04 58** P **P** **10 02 33.4 +1.3**
0.9nm,0.8s,baz=221,slow=6.7,SNR=13
0.9nm,0.8s
**PDAR Pinedale Array 87.44 43** P **P** **10 02 38.5 0.0**
0.5nm,0.6s,baz=202,slow=2.8,SNR=5.4
0.5nm,0.6s
**SNAA Sanae 90.43 179** P **P** **10 02 51.0 -0.8**
1.1nm,1.0s,baz=121,slow=5.9,SNR=1.7
1.1nm,1.0s
**BVAR Borovoye Array 117.01 321** PKP **PKiKP** **10 08 31.2 +0.3**
0.7nm,0.4s,baz=20,slow=4.6,SNR=3.0
**ARCES ARCESS Array B 126.49 350** PKP **PKiKP** **10 08 48.5 -0.6**
2.0nm,0.7s,baz=25,slow=3.2,SNR=5.1
**BRTR Keskin Array B 144.94 315** PKPbc **PKPab** **10 09 25.4 -0.1**
1.5nm,0.8s,baz=103,slow=2.7,SNR=6.3
**MMAI Mount Meron Ar 146.28 303** PKPbc **PKiKP** **10 09 29.6 -1.1**
1.1nm,0.3s,baz=64,slow=4.2,SNR=4.2
**GERES GERESS Array B 147.78 345** PKPbc **PKiKP** **10 09 32.8 -0.5**
0.9nm,0.6s,baz=33,slow=3.2,SNR=6.0

**IDC 29 09:56:09.4±1.6, 2°.20N×128°.64E, h0km, mb3.5/5, mbtmp3.5/5, Error ellipse: s-maj=133.3km s-min=21.6km az=70.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.70** | **166** | P | P | 10 01 12.9 | -0.1 |
| | 0.7nm,0.6s,baz=344,slow=10,SNR=5.4 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **26.21** | **169** | P | P | 10 01 45.7 | -0.5 |
| | 0.3nm,0.7s,baz=358,slow=7.1,SNR=2.6 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **49.36** | **340** | P | P | 10 04 59.1 | -1.8 |
| | 0.5nm,0.6s,baz=167,slow=8.9,SNR=1.9 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.90** | **325** | P | P | 10 06 17.9 | +0.7 |
| | 0.5nm,0.5s,baz=116,slow=8.1,SNR=5.6 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.05** | **327** | P | P | 10 06 45.7 | +0.6 |
| | 0.6nm,0.6s,baz=127,slow=6.4,SNR=7.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |

*UCR **29** 10:21:06.9±1.4, 7°.33N×82°.28W, h0km±51km, MW4.3*
*UPA **29** 10:21:07.2±1.3, 7°.23N×82°.28W, h10km±10km, MD4.3*
*NEIC **29** 10:21:10.2±1.2, 7°.47N±0°.07×82°.23W±0°.08, h10km±2km, mb4.1/8, Error ellipse: s-maj=15.2km s-min=9.7km az=228.0*
*IDC **29** 10:21:10.8±2.9, 7°.99N×81°.97W, h0km, mb3.6/8, mbtmp3.7/10, ML3.8/2, MS3.3/17, Error ellipse: s-maj=96.5km s-min=41.4km az=32.0*
*RSNC **29** 10:21:12.5±0.3, 8°N±4°×8°.2W±°, h14km, M4.1, mB5.0, mb4.1, mBc6.2, Mjma4.0, ML4.2, ML3.8, MLh4.0, MLv4.0, Ms(BB)4.0, Mw(mB)4.3*
*CATAC **29** 10:21:16.5±1.2, 7°.80N×82°.70W, h9km±5km, ML4.1*
**ISC 29 10:21:08.8±1.5, 7°.42N±0°.05×82°.24W±0°.03, h7km±9km, n144, σ1$64/141, mb3.7/10, MS3.2/14, 16C-6D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LIMO3** | **Limones** | **0.92** | **318** | *eP* | **Pg** | **10 21 26.2** | **-0.2** |
| LIMO3 | | | | *eS* | **Sg** | **10 21 38.4** | **+0.1** |
| **NANC3** | **Nancito, Chiri** | **0.96** | **32** | *eP* | **Pg** | **10 21 27.6** | **+0.3** |
| NANC3 | | | | *eS* | **Sn** | **10 21 43.8** | **+1.0** |
| **PEDE3** | **Pedregal, Chir** | **0.98** | **350** | *eP* | **Pg** | **10 21 27.9** | **+0.3** |
| **LOCO3** | **Loma Colorada,** | **1.00** | **350** | *eP* | **Pb** | **10 21 28.9** | **+0.4** |
| **PTPM** | **Petroterminale** | **1.00** | **321** | *iP* | **Pb** | **10 21 27.4** | **-1.1** |
| **LOMA3** | **Las Lomas, Chi** | **1.02** | **352** | *eP* | **Pg** | **10 21 29.0** | **+0.2** |
| **DVD** | **David** | **1.03** | **349** | *eP* | **Pg** | **10 21 28.9** | **+0.2** |
| **GMAL** | **Guarumal, Vera** | **1.06** | **71** | P | **Pb** | **10 21 27.1** | **-2.4** |
| **GMAL** | **Guarumal, Vera** | **1.06** | **71** | *eP* | **Pb** | **10 21 27.6** | **-1.9** |
| GMAL | | | | AMP | | 10 21 29.3 | |
| | comp=Z,5μm,0.1s | | | | | | |
| GMAL | | | | *eS* | **Sb** | **10 21 43.9** | **+0.3** |
| **GMAL** | **Guarumal, Vera** | **1.06** | **71** | *iP* | **Pb** | **10 21 27.6** | **-1.9** |
| **RSUS3** | **Rio de Jesus,** | **1.21** | **62** | *eP* | **Pb** | **10 21 30.5** | **-1.6** |
| RSUS3 | | | | *eS* | **Sn** | **10 21 48.3** | **-0.6** |
| **MARI3** | **Mariato, Verag** | **1.26** | **79** | *eP* | **Pn** | **10 21 30.9** | **-2.0** |
| **MESA3** | **La Mesa, Verag** | **1.28** | **55** | *eP* | **Pb** | **10 21 31.7** | **-1.4** |
| MESA3 | | | | *eS* | **Sn** | **10 21 50.5** | **0.0** |
| **CDITO** | **Canoas** | **1.31** | **332** | *iP* | **Pn** | **10 21 32.1** | **-1.4** |
| CDITO | | | | IAML | | 10 22 01.9 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **BCO2** | **Palmira** | **1.32** | **348** | *eP* | **Pb** | **10 21 33.3** | **-0.8** |
| **CACAO** | **El Cacao, Vera** | **1.37** | **93** | P | Pn | 10 21 31.2 | -3.2 |
| **CACAO** | **El Cacao, Vera** | **1.37** | **93** | *eP* | Pn | 10 21 31.4 | -3.0 |
| CACAO | | | | AMP | | 10 21 32.8 | |
| | comp=Z,3μm,0.1s | | | | | | |
| CACAO | | | | *eS* | **Sn** | **10 21 50.4** | **-2.5** |
| **LNBQ3** | **Los Naranjos,** | **1.38** | **352** | *eP* | **Pn** | **10 21 34.2** | **-0.4** |
| **NELY** | **Ciudad Neily** | **1.41** | **330** | *iP* | **Pn** | **10 21 33.7** | **-1.2** |
| **STIA3** | **Santiago, Vera** | **1.43** | **62** | *eP* | **Pn** | **10 21 34.3** | **-1.0** |
| STIA3 | | | | *eS* | **Sb** | **10 21 53.5** | **-0.7** |
| **BRU2** | **Volcan** | **1.44** | **342** | | **Pn** | **10 21 34.6** | **-0.9** |
| **BRU2** | **Volcan** | **1.44** | **342** | *iP* | **Pn** | **10 21 34.4** | **-1.1** |
| BRU2 | | | | IAML | | 10 21 36.5 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **1.44** | **342** | *eP* | **Pn** | **10 21 34.5** | **-0.9** |
| BRU2 | | | | AMP | | 10 21 36.7 | |
| | comp=Z,4μm,0.6s | | | | | | |
| **BRU2** | **Volcan** | **1.44** | **342** | *eP* | **Pn** | **10 21 34.6** | **-0.9** |
| **MLIR3** | **Monte Lirio, C** | **1.48** | **337** | *eP* | **Pn** | **10 21 35.7** | **-0.3** |
| **FITO** | **Golfito** | **1.50** | **323** | *iP* | **Pn** | **10 21 34.0** | **-2.1** |
| **CHGR2** | **Aguacate** | **1.52** | **4** | *eP* | **Pb** | **10 21 36.8** | **-0.5** |
| CHGR2 | | | | *eS* | **Sg** | **10 21 57.2** | **-0.3** |
| **PTJ1** | **Puerto Jimnez** | **1.53** | **317** | *iP* | **Pn** | **10 21 35.1** | **-1.5** |
| PTJ1 | | | | IAML | | 10 21 35.8 | |
| | comp=Z,26μm,1.0s | | | | | | |
| **PTJ1** | **Puerto Jimnez** | **1.53** | **317** | *eP* | **Pn** | **10 21 35.0** | **-1.6** |
| **PTJ1** | **Puerto Jimnez** | **1.53** | **317** | *eP* | **Pn** | **10 21 35.0** | **-1.5** |
| **EDAD** | **Golfito** | **1.53** | **323** | *eP* | **Pn** | **10 21 34.6** | **-2.0** |
| **JIME** | **Puerto Jimenez** | **1.55** | **316** | *iP* | **Pn** | **10 21 35.1** | **-1.7** |
| **VITO** | **San Vito** | **1.57** | **333** | *eP* | **Pn** | **10 21 36.4** | **-0.9** |
| **PESE3** | **Pese, Herrera** | **1.69** | **73** | *eP* | **Pn** | **10 21 37.9** | **-0.9** |
| PESE3 | | | | *eS* | **Sn** | **10 22 00.7** | **0.0** |
| **CRIS3** | **El Cristo, Coc** | **1.81** | **63** | *eP* | **Pn** | **10 21 39.8** | **-0.7** |
| CRIS3 | | | | *eS* | **Sb** | **10 22 05.3** | **0.0** |
| **EDP2** | **Potrero Grande** | **1.84** | **330** | *iP* | **Pn** | **10 21 40.6** | **-0.2** |
| **CHIT3** | **Chitre** | **1.89** | **73** | *eP* | **Pn** | **10 21 40.2** | **-1.3** |
| CHIT3 | | | | *eS* | **Sn** | **10 22 04.8** | **-0.8** |
| **EDPN** | **Palmar Norte** | **1.95** | **322** | *eP* | **Pn** | **10 21 41.2** | **-1.2** |
| **AZU** | **Azuero** | **1.99** | **79** | P | **Pn** | **10 21 41.1** | **-1.8** |
| **AZU** | **Azuero** | **1.99** | **79** | *eP* | **Pn** | **10 21 41.4** | **-1.5** |
| AZU | | | | AMP | | 10 21 43.3 | |
| | comp=Z,2μm,0.4s | | | | | | |
| AZU | | | | *eS* | **Sn** | **10 22 08.2** | **+0.1** |
| **AZU** | **Azuero** | **1.99** | **79** | *eP* | **Pn** | **10 21 41.4** | **-1.5** |
| **CNI2** | **El Empalme, Bo** | **2.01** | **354** | *eP* | **Pb** | **10 21 44.7** | **-0.9** |
| CNI2 | | | | *eS* | **Sg** | **10 22 13.2** | **-0.2** |
| **ACHO3** | **Achotines, Los** | **2.05** | **90** | *eP* | **Pn** | **10 21 41.6** | **-2.2** |
| ACHO3 | | | | *eS* | **Sn** | **10 22 07.3** | **-2.4** |
| **DRK0** | **Durika** | **2.08** | **332** | *iP* | **Pn** | **10 21 43.6** | **-0.8** |
| DRK0 | | | | IAML | | 10 22 16.2 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **2.08** | **332** | *eP* | **Pn** | **10 21 43.8** | **-0.6** |
| **DRK0** | **Durika** | **2.08** | **332** | *eP* | **Pn** | **10 21 43.8** | **-0.6** |
| **PCRI3** | **Pocri, Los San** | **2.12** | **83** | *eP* | **Pn** | **10 21 43.2** | **-1.5** |
| **OCHAL** | **Ojochal** | **2.17** | **320** | *iP* | **Pn** | **10 21 44.3** | **-1.1** |
| OCHAL | | | | *iS* | **Sn** | **10 22 06.2** | **-6.4** |
| OCHAL | | | | IAML | | 10 22 14.6 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **PNME** | **Penonome** | **2.17** | **61** | *eP* | **Pn** | **10 21 45.5** | **+0.1** |
| PNME | | | | *eS* | **Sb** | **10 22 14.8** | **-0.9** |
| **RGM0** | **Gandoca** | **2.19** | **351** | Pn | **Pn** | **10 21 45.5** | **-0.1** |
| **RGM0** | **Gandoca** | **2.19** | **351** | *iP* | **Pb** | **10 21 48.0** | **-0.8** |
| RGM0 | | | | IAML | | 10 21 48.6 | |
| | comp=Z,3μm,1.0s | | | | | | |
| **RGM0** | **Gandoca** | **2.19** | **351** | *eP* | **Pb** | **10 21 48.2** | **-0.5** |
| **RGM0** | **Gandoca** | **2.19** | **351** | *eP* | **Pn** | **10 21 46.0** | **+0.4** |
| **PEDA3** | **Pedasi** | **2.20** | **87** | *eP* | **Pn** | **10 21 43.6** | **-2.2** |
| PEDA3 | | | | *eS* | **Sn** | **10 22 11.7** | **-1.6** |
| **ZELE** | **Perez Zeledon** | **2.42** | **323** | *eP* | **Pn** | **10 21 48.7** | **-0.3** |
| **BUS1** | **Rivas** | **2.59** | **325** | *iP* | **Pn** | **10 21 51.0** | **-0.6** |
| **LLNJ** | **Naranjito** | **2.75** | **318** | *iP* | **Pn** | **10 21 52.2** | **-1.1** |
| **RAZU** | **San Marcos de** | **2.84** | **322** | *eP* | **Pn** | **10 21 54.6** | **-0.2** |
| **VINA** | **Juan Vinas** | **2.88** | **329** | *eP* | **Pn** | **10 21 55.6** | **+0.3** |
| **REPA** | **Paraso** | **2.88** | **326** | *eP* | **Pn** | **10 21 55.4** | **+0.1** |
| **VERB** | **Verbena** | **2.89** | **330** | *eP* | **Pn** | **10 21 55.6** | **+0.1** |
| **LCR2** | **La Lucha 2** | **2.89** | **323** | | **Pn** | **10 21 55.5** | **0.0** |
| **LCR2** | **La Lucha 2** | **2.89** | **323** | *i* P | **Pn** | **10 21 55.1** | **-0.4** |
| LCR2 | | | | *i* S | **Sn** | **10 22 23.8** | **-7.0** |
| LCR2 | | | | IAML | | 10 22 34.2 | |
| | comp=Z,340nm,1.0s | | | | | | |
| **PCAYA** | **Pacayas** | **2.93** | **328** | *eP* | **Pn** | **10 21 56.4** | **+0.3** |
| **VTCV** | **VTCV, Calle Va** | **2.94** | **330** | *iP* | **Pn** | **10 21 56.7** | **+0.5** |
| **BCIP** | **Isla Barro Col** | **2.95** | **54** | | **Pn** | **10 21 56.2** | **+0.1** |
| **BCIP** | **Isla Barro Col** | **2.95** | **54** | P | **Pn** | **10 21 55.7** | **-0.4** |
| **BCIP** | **Isla Barro Col** | **2.95** | **54** | *eP* | **Pn** | **10 21 56.1** | **0.0** |
| **BCIP** | **Isla Barro Col** | **2.95** | **54** | *eP* | **Pn** | **10 21 56.2** | **+0.1** |
| **RAFA** | **San Farael, Vo** | **2.96** | **329** | *i* P | **Pn** | **10 21 56.8** | **+0.2** |
| RAFA | | | | IAML | | 10 22 48.8 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **RAFA** | **San Farael, Vo** | **2.96** | **329** | *eP* | **Pn** | **10 21 56.8** | **+0.2** |
| **CVTV** | **Tajo** | **2.97** | **330** | *eP* | **Pn** | **10 21 57.1** | **+0.4** |
| **CVTQ** | **Turrialba Volc** | **2.98** | **330** | *eP* | **Pn** | **10 21 57.3** | **+0.4** |
| **VTR0** | **Volcan Turrial** | **2.99** | **330** | *eP* | **Pn** | **10 21 57.5** | **+0.5** |
| **CVTR** | **Volcan Turrial** | **2.99** | **330** | *eP* | **Pn** | **10 21 57.3** | **+0.3** |
| **VICA** | **Volcano Irazu** | **3.00** | **328** | *eP* | **Pn** | **10 21 57.4** | **+0.1** |
| **HDC** | **Heredia** | **3.17** | **324** | | **Pn** | **10 21 59.6** | **+0.3** |
| **HDC** | **Heredia** | **3.17** | **324** | *eP* | **Pn** | **10 21 59.3** | **+0.1** |
| **SOCE** | **Pocosol** | **3.77** | **322** | | **Pn** | **10 22 08.0** | **+0.5** |
| **SOCE** | **Pocosol** | **3.77** | **322** | *i* P | **Pn** | **10 22 06.7** | **-0.7** |
| SOCE | | | | IAML | | 10 22 27.7 | |
| | comp=Z,410nm,1.0s | | | | | | |
| **JTS** | **Las Juntas de** | **3.92** | **317** | | **Pn** | **10 22 09.4** | **0.0** |
| **JTS** | **Las Juntas de** | **3.92** | **317** | Pn | **Pn** | **10 22 08.0** | **-1.5** |
| | comp=Z,12nm,0.3s,baz=116,slow=4.0,SNR=72 | | | | | | |
| JTS | | | | Sn | **Sn** | **10 22 54.2** | **-1.5** |
| | comp=Z,5.1nm,0.3s,baz=123,slow=14,SNR=7.8 | | | | | | |
| JTS | | | | Lg | Lg | 10 23 15.3 | |
| | baz=90,slow=6.4 | | | | | | |
| | comp=Z,38nm,0.4s | | | | | | |
| **JTS** | **Las Juntas de** | **3.92** | **317** | *eP* | **Pn** | **10 22 08.4** | **-1.0** |
| **INDI** | **Punta indio, G** | **4.04** | **307** | *iP* | **Pn** | **10 22 09.6** | **-1.5** |
| INDI | | | | IAML | | 10 22 10.2 | |
| | comp=Z,180nm,1.0s | | | | | | |
| INDI | | | | *iS* | **Sn** | **10 22 52.3** | **-6.4** |
| **PTAC** | **Punta Ardita,** | **4.41** | **93** | P | Pn | 10 22 12.1 | -4.1 |
| PTAC | | | | S | Sn | 10 22 59.9 | -7.9 |
| **ESPN** | **Las Esperanzas** | **5.16** | **337** | | **Pn** | **10 22 27.1** | **+0.5** |
| **ACON** | **Acoyapa** | **5.37** | **328** | | **Pn** | **10 22 28.5** | **-0.9** |
| **ACON** | **Acoyapa** | **5.37** | **328** | P | **Pn** | **10 22 27.4** | **-2.0** |
| | comp=Z,39nm,0.8s | | | | | | |
| **APAC** | **Apartado, Choc** | **5.63** | **85** | P | **Pn** | **10 22 36.7** | **+3.6** |
| | comp=Z,45nm,0.8s,comp=Z,0.2nm | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **6.03** | **326** | Pn | **Pn** | **10 22 38.8** | **+0.2** |
| **CBOC** | **Ciudad Bolivar** | **6.38** | **104** | P | Pn | 10 22 41.1 | -2.4 |
| | comp=Z,10nm,0.7s,comp=Z,0.1nm | | | | | | |
| **PLMC** | **San Jos del P** | **6.43** | **112** | P | Pn | 10 22 42.0 | -2.1 |
| | comp=Z,7.6nm,1.1s,comp=Z,1μmcomp=Z,0.1nm | | | | | | |
| **CNGN** | **Cerro Negro** | **6.69** | **319** | Pn | **Pn** | **10 22 48.2** | **+0.6** |
| **HELC** | **Santa Helena** | **6.78** | **100** | P | **Pn** | **10 22 48.9** | **-0.2** |
| | comp=Z,13nm,0.9s,comp=Z,0.1nm | | | | | | |
| **YOTC** | **Yotoco, Valle** | **6.79** | **120** | P | Pn | 10 22 46.0 | -3.0 |
| | comp=Z,10nm,1.2s,comp=Z,0.0nm | | | | | | |
| **JAMC** | **Jamundi, Valle** | **6.94** | **127** | P | Pn | 10 22 48.4 | -2.8 |
| | comp=Z,8.6nm,0.8s,comp=Z,0.1nm | | | | | | |
| **BBAC** | **Balboa, Cauca** | **7.31** | **137** | P | Pn | 10 22 53.2 | -3.2 |
| | comp=Z,12nm,0.7s,comp=Z,243nmcomp=Z,0.1nm | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **7.32** | **89** | P | Pn | 10 22 52.9 | -3.4 |
| | comp=Z,6.6nm,0.9s,comp=Z,0.0nm | | | | | | |
| ZARC | | | | S | **Sn** | **10 24 12.8** | **-7.0** |
| | comp=Z,6.6nm,0.9s,comp=Z,0.0nm | | | | | | |
| **POPC** | **Popayan, Colom** | **7.36** | **131** | P | Pn | 10 22 56.1 | -0.9 |
| | comp=Z,7.6nm,0.6s,comp=Z,0.0nm | | | | | | |
| **SJCC** | **San Jacinto, C** | **7.41** | **70** | P | **Pn** | **10 22 55.6** | **-1.9** |
| | comp=Z,27nm,0.9s,comp=Z,2μmcomp=Z,0.1nm | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **7.78** | **96** | P | **Pn** | **10 23 00.8** | **-1.8** |
| | comp=Z,6.0nm,0.6s,comp=Z,0.0nm | | | | | | |
| **ORTC** | **Ortega, Tolima** | **7.79** | **116** | P | **Pn** | **10 23 01.8** | **-0.9** |
| | comp=Z,14nm,0.6s,comp=Z,0.1nm | | | | | | |
| **OTAV** | **Otavalo** | **8.07** | **152** | Pn | **Pn** | **10 23 10.3** | **+3.3** |
| **PRAC** | **Prado** | **8.19** | **116** | P | **Pn** | **10 23 08.0** | **-0.3** |
| | comp=Z,6.1nm,0.6s | | | | | | |
| **PULU** | **Pululahua** | **8.24** | **153** | Pn | **Pn** | **10 23 10.0** | **+0.8** |
| **CHIC** | **Chingaza** | **8.90** | **108** | P | **Pn** | **10 23 18.9** | **+0.5** |
| | comp=Z,11nm,0.8s | | | | | | |
| **SLOR** | **San Lorenzo -** | **8.91** | **155** | | **Pn** | **10 23 19.5** | **+0.9** |
| **BARC** | **Barichara** | **9.03** | **95** | P | **Pn** | **10 23 18.9** | **-1.0** |
| **RUSC** | **La Rusia** | **9.22** | **99** | P | **Pn** | **10 23 22.7** | **-0.1** |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **SNET** | **Serv Nac Est T** | **9.27** | **313** | Pn | **Pn** | **10 23 23.4** | **+0.3** |
| **MTO3** | **Montecristo** | **9.85** | **315** | Pn | **Pn** | **10 23 30.8** | **-0.4** |
| **MACC** | **Macarena, Meta** | **9.87** | **122** | P | **Pn** | **10 23 31.0** | **-0.2** |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **APG** | **El Apazote** | **11.04** | **314** | LR | LR | 10 28 26.8 | |
| | comp=Z,12nm,21.5s,baz=168,slow=40 | | | | | | |
| **SDV** | **Santo Domingo** | **11.52** | **82** | LR | LR | 10 28 53.5 | |
| | comp=Z,89nm,19.5s,baz=248,slow=41 | | | | | | |
| **ATAH** | **Atahualpa** | **14.96** | **165** | LR | LR | 10 29 35.3 | |
| | comp=Z,167nm,21.4s,baz=16,slow=33 | | | | | | |
| **CMIG** | **Matias Romero** | **15.64** | **309** | Pn | **Pn** | **10 24 53.1** | **+3.2** |
| | comp=Z,0.3nm,0.3s,baz=130,slow=11,SNR=4.3 | | | | | | |
| CMIG | | | | LR | LR | 10 31 07.6 | |
| | comp=Z,87nm,19.6s,baz=126,slow=38 | | | | | | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **ETMB** | **Extrema** | **23.41** | **137** | P | **P** | **10 26 17.6** | **-1.0** |
| **LPAZ** | **La Paz** | **27.38** | **149** | LR | LR | 10 39 32.2 | |
| | comp=Z,65nm,18.8s,baz=336,slow=40 | | | | | | |
| **DRIO** | **Del Rio** | **27.90** | **324** | P | **P** | **10 27 00.1** | **+0.4** |
| **TKL** | **Tuckaleechee C** | **28.14** | **357** | LR | LR | 10 38 40.0 | |
| | comp=Z,51nm,18.6s,baz=176,slow=38 | | | | | | |
| **V48A** | **Smith Brothers** | **28.50** | **352** | P | **P** | **10 27 04.3** | **-0.6** |
| V48A | | | | IAmb | IAmb | 10 27 04.9 | |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **29.24** | **343** | P | **P** | **10 27 12.3** | **+0.9** |
| WHAR | | | | IAmb | IAmb | 10 27 22.5 | |
| | comp=Z,2.9nm,1.0s | | | | | | |
| **MDP** | **Montagnes des** | **29.51** | **93** | LR | LR | 10 39 00.7 | |
| | comp=Z,59nm,20.5s,baz=312,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **29.70** | **320** | P | **P** | **10 27 16.3** | **+0.5** |
| | comp=Z,0.6nm,0.9s,baz=127,slow=6.0,SNR=4.7 | | | | | | |
| TXAR | | | | LR | LR | 10 40 25.4 | |
| | comp=Z,20nm,18.5s,baz=114,slow=39 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **LVC** | **Limon Verde** | **32.57** | **157** | LR | LR | 10 42 31.7 | |
| | comp=Z,34nm,21.4s,baz=330,slow=39 | | | | | | |
| **ANMO** | **Albuquerque** | **35.30** | **324** | P | **P** | **10 28 06.7** | **+1.9** |
| ANMO | | | | IAmb | IAmb | 10 28 07.3 | |
| | comp=Z,2.2nm,1.0s | | | | | | |
| **ANMO** | **Albuquerque** | **35.30** | **324** | P | **P** | **10 28 06.0** | **+1.2** |
| | comp=Z,1.7nm,0.8s,baz=136,slow=10,SNR=7.4 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **DUN6** | **Lazy B Ranch** | **35.32** | **319** | P | **P** | **10 28 06.8** | **+1.9** |
| **SADO** | **Sadowa** | **37.31** | **4** | LR | LR | 10 43 51.4 | |
| | comp=Z,68nm,18.8s,baz=244,slow=37 | | | | | | |
| **PFO** | **Pinyon Flats O** | **40.97** | **314** | P | **P** | **10 28 53.3** | **+0.7** |
| | comp=Z,2.1nm,0.8s,baz=153,slow=2.3,SNR=3.6 | | | | | | |
| PFO | | | | LR | LR | 10 45 23.1 | |
| | comp=Z,51nm,21.4s,baz=146,slow=36 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **41.35** | **145** | LR | LR | 10 47 50.3 | |
| | comp=Z,51nm,18.7s,baz=332,slow=38 | | | | | | |
| **BSUT** | **Blindstream Ca** | **41.66** | **327** | P | **P** | **10 28 59.6** | **+1.2** |
| **PDAR** | **Pinedale Array** | **42.64** | **330** | P | **P** | **10 29 06.6** | **+0.3** |
| | comp=Z,0.2nm,0.6s,baz=123,slow=10,SNR=2.4 | | | | | | |
| PDAR | | | | LR | LR | 10 49 32.9 | |
| | comp=Z,14nm,18.8s,baz=112,slow=40 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **ELK** | **Elko** | **44.33** | **324** | P | **P** | **10 29 21.8** | **+1.9** |
| | comp=Z,0.4nm,0.5s,baz=120,slow=8.1,SNR=2.0 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **44.84** | **319** | P | **P** | **10 29 25.9** | **+1.8** |
| | comp=Z,0.8nm,0.7s,baz=119,slow=6.6,SNR=7.6 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **NEW** | **Newport** | **50.28** | **330** | LR | LR | 10 54 50.0 | |
| | comp=Z,15nm,19.1s,baz=130,slow=40 | | | | | | |
| **BBB** | **Bella Bella** | **58.25** | **329** | LR | LR | 11 01 28.7 | |
| | comp=Z,15nm,21.0s,baz=127,slow=42 | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.83** | **343** | P | **P** | **10 31 13.9** | **-0.8** |
| | comp=Z,0.1nm,0.5s,baz=133,slow=7.1,SNR=1.8 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **DLBC** | **Dease Lake** | **62.64** | **334** | LR | LR | 11 02 02.1 | |
| | comp=Z,32nm,18.4s,baz=234,slow=39 | | | | | | |
| **BBTS** | **Babate** | **64.72** | **77** | LR | LR | 11 02 03.9 | |
| | comp=Z,46nm,18.0s,baz=316,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **72.67** | **336** | P | **P** | **10 32 37.3** | **+0.2** |
| | comp=Z,0.3nm,0.6s,baz=108,slow=5.8,SNR=5.3 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **73.32** | **328** | LR | LR | 11 07 11.7 | |
| | comp=Z,25nm,19.1s,baz=121,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **141.76** | **241** | PKP | **PKiKP** | **10 40 47.3** | **+2.3** |
| | comp=Z,0.4nm,0.6s,baz=104,slow=2.8,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **142.44** | **247** | PKP | **PKPdf** | **10 40 45.1** | **+1.7** |
| | comp=Z,0.4nm,0.7s,baz=95,slow=3.1,SNR=7.0 | | | | | | |

*TRN **29** 10:25:06.4, 10°.36N×62°.77W, h21km, MD3.4, Venezuela.*
*FUNV **29** 10:25:06.6, 10°.33N×62°.79W, h20km, MW3.4*
**ISC 29 10:25:05.5±1.5, 10°.27N±0°.05×62°.80W±0°.03, h26km±16km, n18, σ1$41/29, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TCE** | **Chacachacare** | **1.11** | **67** | *eP* | **Pb** | **10 25 25.5** | **-0.6** |
| TCE | | | | *eS* | **Sb** | **10 25 40.2** | **-0.1** |
| **PSWY** | **Woodbrook Yout** | **1.31** | **72** | *eS* | **Sn** | **10 25 45.6** | **+0.8** |
| **PSMG** | **Mucurapo Girls** | **1.31** | **72** | *eP* | **Pn** | **10 25 28.5** | **+0.4** |
| PSMG | | | | *eS* | **Sn** | **10 25 44.8** | **0.0** |
| **PSKH** | **Kent House, Po** | **1.32** | **72** | *eS* | **Sn** | **10 25 46.1** | **0.0** |
| **PSQC** | **Port of Spain** | **1.32** | **72** | *eS* | **Sn** | **10 25 45.6** | **+0.5** |
| **CUMV** | **Cumana_UDO** | **1.38** | **277** | *eP* | **Pn** | **10 25 30.4** | **+1.3** |
| CUMV | | | | *eS* | **Sn** | **10 25 47.9** | **+1.2** |
| **TRN** | **Trinidad (W)** | **1.42** | **74** | *eP* | **Pn** | **10 25 30.7** | **+1.0** |
| TRN | | | | *eS* | **Sb** | **10 25 49.7** | **+0.6** |
| **PCRV** | **Puerto La Cruz** | **1.81** | **267** | *eP* | **Pn** | **10 25 35.9** | **+0.8** |
| PCRV | | | | *eS* | **Sn** | **10 25 57.4** | **+0.1** |
| **PCRV** | **Puerto La Cruz** | **1.81** | **267** | *eP* | **Pn** | **10 25 37.5** | **+2.4** |
| PCRV | | | | *eS* | **Sn** | **10 25 59.6** | **+2.3** |
| **GRFF** | **Grenada Fort F** | **2.06** | **30** | *eS* | **Sn** | **10 26 02.4** | **-0.9** |
| **GRGR** | **Grenville** | **2.17** | **31** | *eP* | **Pn** | **10 25 41.2** | **+1.2** |
| GRGR | | | | *eS* | **Sn** | **10 26 05.9** | **-0.2** |
| **GRHS** | **Sauteurs** | **2.25** | **30** | *eP* | **Pn** | **10 25 41.5** | **+0.3** |
| GRHS | | | | *eS* | **Sn** | **10 26 06.1** | **-2.1** |
| **GCMP** | **Grenada, Carri** | **2.58** | **31** | *eS* | **Sn** | **10 26 15.9** | **-0.4** |
| **TACV** | **Tcata** | **4.17** | **269** | *eP* | **Pn** | **10 26 08.0** | **+0.4** |
| TACV | | | | *eS* | **Sn** | **10 26 53.5** | **-2.0** |
| **CACV** | **CAICARA DEL OR** | **4.57** | **234** | *eP* | Pn | 10 26 08.3 | -4.4 |
| CACV | | | | *eS* | Sn | 10 26 54.9 | -10 |
| **LUEV** | **Luepa** | **4.59** | **163** | *eP* | **Pn** | **10 26 14.6** | **+1.1** |
| LUEV | | | | *eS* | **Sn** | **10 27 04.8** | **-1.3** |
| **BENV** | **Beln** | **4.74** | **267** | *eP* | **Pn** | **10 26 16.2** | **+0.8** |
| BENV | | | | *eS* | **Sn** | **10 27 07.4** | **-2.2** |
| **BAUV** | **El Baul** | **5.34** | **256** | *eP* | **Pn** | **10 26 24.1** | **+0.5** |
| BAUV | | | | *eS* | **Sn** | **10 27 20.7** | **-3.5** |

*IDC **29** 10:52:22.9±0.9, 1°.69N×127°.67E, h0km, mb3.8/8, mbtmp3.8/8, Error ellipse: s-maj=83.6km s-min=17.5km az=70.0*
**ISC 29 10:52:37.9±0.9, 1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| QSPA | South Pole Qui | 68.03 | 180 | P | | P | 11 23 03.7 | 0.0 |
| | comp=Z,2.3nm,1.0s,baz=29,slow=3.4,SNR=8.3 | | | | | | | |
| | comp=Z,2.3nm,1.0s | | | | | | | |
| PETK | Petropavlovsk- | 75.55 | 353 | LR | | LR | 11 51 53.5 | |
| | comp=Z,27nm,20.4s,baz=152,slow=32 | | | | | | | |
| BELA | Belgrano 2 | 79.29 | 175 | P | | P | 11 24 10.0 | +0.6 |
| CMAR | Chiang Mai Arr | 80.06 | 295 | P | | P | 11 24 15.7 | +1.1 |
| | comp=Z,0.7nm,0.6s,baz=131,slow=3.7,SNR=1.5 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| SNAA | Sanae | 86.40 | 182 | P | | P | 11 24 45.8 | -0.7 |
| | comp=Z,1.4nm,1.0s,baz=198,slow=6.2,SNR=4.2 | | | | | | | |
| | comp=Z,1.4nm,1.0s | | | | | | | |
| NVAR | Mina Array Bea | 90.31 | 48 | P | | P | 11 25 05.9 | +0.2 |
| | comp=Z,0.3nm,0.6s,baz=234,slow=7.7,SNR=3.6 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| ILAR | Eielson Array | 92.75 | 17 | P | | P | 11 25 15.2 | -1.0 |
| | comp=Z,0.2nm,0.6s,baz=241,slow=5.2,SNR=4.8 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| EKA | Eskdalemuir Ar | 146.32 | 353 | PKPbc | | PKPbc | 11 31 44.2 | -0.6 |
| | comp=Z,2.8nm,0.8s,baz=354,slow=2.9,SNR=3.5 | | | | | | | |
| GERES | GERESS Array B | 147.15 | 330 | PKPbc | | PKPbc | 11 31 47.9 | +0.3 |
| | comp=Z,1.9nm,0.4s,baz=90,slow=3.9,SNR=3.3 | | | | | | | |

*IDC* ***29*** *11:12:51.7±0.8, 80°.25N×2°.84W, h0km, mb3.6/13, mbtmp3.7/16, ML3.5/2, MS3.0/2, Error ellipse: s-maj=23.5km s-min=14.6km az=37.0*
*BER* ***29*** *11:12:51.7±2.7, 80°.44N×1°.81W, h10km, mb(Pn)4.0, ML3.9(NAO), Confirmed Earthquake*
*DNK* ***29*** *11:12:52.1±4.4, 80°.45N×2°.00W, h20km±59km, ML2.6*
*FCIAR* ***29*** *11:12:57.0, 80°.58N×1°.74E, h10km, station SPA0 has station magnitude of 2.60 station HOPEN has station magnitude of 6.10*

**ISC 29 11:12:51.8±0.6, 80°.32N±0°.07×2°.21W±0°.04, h12km, n50, σ2s77/61, mb3.5/11, 1D, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NOR | Nord | 2.62 | 306 | Pn | Pn | 11 13 32.2 | -1.5 |
| NOR | Nord | 2.62 | 306 | *i* P | Pn | 11 13 32.1 | -1.6 |
| NOR | Nord | 2.62 | 306 | *i* P | Pn | 11 13 32.1 | -1.6 |
| KBS | Kingsbay | 2.92 | 112 | Pn | Pn | 11 13 36.5 | -1.4 |
| KBS | Kingsbay | 2.92 | 112 | *e*P | Pn | 11 13 36.5 | -1.4 |
| KBS | | | | *e*S | Sn | 11 14 07.4 | -5.3 |
| KBS | | | | IAML | | 11 14 14.4 | |
| | comp=Z,12nm,0.6s | | | | | | |
| KBS | Kingsbay | 2.92 | 112 | *e*P | Pn | 11 13 36.4 | -1.5 |
| KBS | | | | *e*S | Sn | 11 14 13.7 | +1.0 |
| KBS | Kingsbay | 2.92 | 112 | *i* P | Pn | 11 13 36.5 | -1.4 |
| BRBB | Barentsburg B | 3.80 | 118 | *e*P | Pn | 11 13 47.8 | -2.2 |
| BRBB | | | | *e* | | 11 13 50.8 | |
| BRBA | Barentsburg A | 3.83 | 118 | Pn | Pn | 11 13 50.2 | -0.1 |
| BRBA | Barentsburg A | 3.83 | 118 | *e* | Pn | 11 13 51.2 | +0.9 |
| BRBA | | | | *e*S | Sn | 11 14 29.7 | -5.5 |
| BRBA | | | | IAML | | 11 14 31.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| SPA0 | Spitsbergen Ar | 4.08 | 112 | Pn | Pn | 11 13 53.3 | -0.5 |
| | baz=310,slow=7.4 | | | | | | |
| SPA0 | Spitsbergen Ar | 4.08 | 112 | Pn | Pn | 11 13 53.3 | -0.5 |
| | baz=310,slow=7.4 | | | | | | |
| SPA0 | Spitsbergen Ar | 4.08 | 112 | ↓*i* P | Pn | 11 13 53.2 | -0.5 |
| SPA0 | | | | *e*S | Sn | 11 14 35.5 | -5.8 |
| | comp=Z,8.4nm,0.3s | | | | | | |
| SPITS | Spitsbergen Ar | 4.08 | 112 | Pn | Pn | 11 13 53.0 | -0.8 |
| | comp=Z,58nm,0.3s,baz=313,slow=6.9,SNR=411 | | | | | | |
| SPITS | | | | Sn | Sn | 11 14 37.1 | -4.2 |
| | baz=312,slow=15 | | | | | | |
| HSPB | Hornsund (broa | 4.81 | 125 | Pn | Pn | 11 14 00.9 | -3.0 |
| HSPB | Hornsund (broa | 4.81 | 125 | *e*P | Pn | 11 14 01.3 | -2.6 |
| HSPB | | | | *e* | | 11 14 04.2 | |
| DAG | Danmarks Havn | 4.82 | 231 | *i* P | Pn | 11 14 03.2 | -0.8 |
| DAG | | | | *i* S | Sn | 11 14 57.1 | -2.5 |
| DAG | | | | IAML | | 11 15 02.9 | |
| | comp=Z,46nm,0.7s | | | | | | |
| DAG | Danmarks Havn | 4.82 | 231 | *i* P | Pn | 11 14 03.2 | -0.8 |
| DAG | | | | *i* S | Sn | 11 14 57.1 | -2.5 |
| DAG | | | | IAML | | 11 15 02.9 | |
| | comp=Z,46nm,0.7s | | | | | | |
| HOPEN | Hopen | 6.61 | 111 | Pn | Pn | 11 14 27.1 | -1.3 |
| HOPEN | Hopen | 6.61 | 111 | *e*P | Pn | 11 14 27.3 | -1.2 |
| HOPEN | | | | IAML | | 11 15 37.7 | |
| | comp=Z,9.9nm,0.8s | | | | | | |
| HOPEN | | | | *e*S | Sn | 11 15 38.0 | -5.6 |
| HOPEN | Hopen | 6.61 | 111 | *e*P | Pn | 11 14 26.9 | -1.6 |
| HOPEN | | | | *e*S | Sn | 11 15 37.5 | -6.0 |
| | comp=Z,8µm,0.2s | | | | | | |
| DBG | Daneborg | 7.17 | 222 | Pn | Pn | 11 14 35.6 | -0.7 |
| DBG | | | | Sn | Sn | 11 15 52.1 | -5.4 |
| DBG | Daneborg | 7.17 | 222 | *i* P | Pn | 11 14 35.0 | -1.3 |
| DBG | | | | *i* S | Sn | 11 15 52.7 | -4.8 |
| DBG | | | | IAML | | 11 16 11.8 | |
| | comp=Z,18nm,0.7s | | | | | | |
| DBG | Daneborg | 7.17 | 222 | *i* P | Pn | 11 14 35.0 | -1.3 |
| DBG | | | | *i* S | Sn | 11 15 52.7 | -4.8 |
| DBG | | | | IAML | | 11 16 11.8 | |
| | comp=Z,18nm,0.7s | | | | | | |
| ZFI2 | Zemlya Franca- | 7.99 | 62 | *e*P | Pn | 11 14 45.8 | -1.6 |
| ZFI2 | | | | *e*S | Sn | 11 16 07.0 | -11 |
| OMEGA | Omega | 8.01 | 62 | *e*P | Pn | 11 14 45.7 | -2.0 |
| OMEGA | | | | *e*S | Sn | 11 16 07.0 | -11 |
| NEEM | North Greenlan | 9.58 | 278 | *i* P | Pn | 11 15 06.9 | -2.6 |
| NEEM | | | | *i* S | Sn | 11 16 52.6 | -4.3 |
| NEEM | | | | IAML | | 11 17 00.2 | |
| | comp=Z,10nm,0.6s | | | | | | |
| NEEM | North Greenlan | 9.58 | 278 | *i* P | Pn | 11 15 06.9 | -2.6 |
| NEEM | | | | *e*S | Sn | 11 16 53.9 | -3.0 |
| NEEM | | | | IAML | | 11 17 00.2 | |
| | comp=Z,10nm,0.6s | | | | | | |
| SUMG | Summit | 11.22 | 246 | *i* P | Pn | 11 15 29.0 | -2.9 |
| SUMG | | | | *i* S | Sn | 11 17 26.8 | -10 |
| SUMG | | | | IAML | | 11 17 40.2 | |
| | comp=Z,11nm,0.5s | | | | | | |
| SUMG | Summit | 11.22 | 246 | *i* P | Pn | 11 15 29.0 | -2.9 |
| SUMG | | | | *i* S | Sn | 11 17 26.8 | -10 |
| SUMG | | | | IAML | | 11 17 40.2 | |
| | comp=Z,11nm,0.5s | | | | | | |
| ARCES | ARCESS Array B | 12.76 | 132 | Pn | Pn | 11 15 54.0 | +1.3 |
| | comp=Z,0.1nm,0.3s,baz=335,slow=14,SNR=1.6 | | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| TULEG | Thule | 13.12 | 289 | *i* P | Pn | 11 15 54.6 | -3.0 |
| TULEG | Thule | 13.12 | 289 | *i* P | Pn | 11 15 54.6 | -3.0 |
| UPNV | Upernavik | 13.94 | 267 | *i* P | Pn | 11 16 09.9 | +1.1 |
| UPNV | Upernavik | 13.94 | 267 | *i* P | Pn | 11 16 09.9 | +1.1 |
| SFJD | Kangerlussuaq | 18.12 | 251 | P | P | 11 17 01.6 | -1.5 |
| | comp=Z,0.4nm,0.3s,baz=29,slow=10,SNR=1.9 | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| FINES | FINESS Array B | 20.62 | 140 | P | Pn | 11 17 33.5 | +0.8 |
| | comp=Z,1.3nm,0.7s,baz=335,slow=13,SNR=3.8 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| HFS | Hagfors | 20.82 | 157 | P | Pn | 11 17 34.8 | -0.3 |
| | comp=Z,1.0nm,0.7s,baz=2.5,slow=10,SNR=1.8 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| EKA | Eskdalemuir Ar | 25.11 | 181 | P | P | 11 18 17.0 | +1.1 |
| | comp=Z,1.6nm,0.8s,baz=9.0,slow=9.5,SNR=2.9 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 31.52 | 141 | P | P | 11 19 14.6 | +1.5 |
| | comp=Z,0.5nm,0.4s,baz=347,slow=8.1,SNR=1.7 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| GERES | GERESS Array B | 32.07 | 160 | P | P | 11 19 20.7 | +2.6 |
| | comp=Z,1.2nm,0.2s,baz=343,slow=6.3,SNR=2.4 | | | | | | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| YKA | Yellowknife Ar | 32.54 | 307 | P | P | 11 19 23.7 | +1.7 |
| | comp=Z,0.4nm,0.9s,baz=8.3,slow=9.4,SNR=2.5 | | | | | | |
| | comp=Z,0.4nm,0.9s | | | | | | |
| ILAR | Eielson Array | 33.77 | 334 | P | P | 11 19 35.4 | +2.7 |
| | comp=Z,0.5nm,0.9s,baz=3.3,slow=6.9,SNR=7.1 | | | | | | |
| | comp=Z,0.5nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 39.00 | 87 | P | P | 11 20 20.0 | +2.6 |
| | comp=Z,1.0nm,0.9s,baz=346,slow=7.6,SNR=8.3 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| KBZ | Khabaz | 40.05 | 127 | P | P | 11 20 28.8 | +2.6 |
| | comp=Z,0.6nm,0.3s,baz=34,slow=3.6,SNR=1.9 | | | | | | |
| KBZ | | | | LR | LR | 11 36 24.0 | |
| | comp=Z,18nm,21.0s,baz=78,slow=35 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| ESDC | Sonseca Array | 40.78 | 182 | P | P | 11 20 32.5 | +0.1 |
| | comp=Z,0.3nm,0.4s,baz=0.0,slow=6.7,SNR=2.9 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 43.34 | 85 | P | P | 11 20 55.4 | +2.2 |
| | comp=Z,0.5nm,0.8s,baz=350,slow=6.6,SNR=2.9 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| NEW | Newport | 46.71 | 304 | LR | LR | 11 41 26.2 | |
| | comp=Z,22nm,21.0s,baz=337,slow=37 | | | | | | |
| TXAR | Lajitas Array | 63.19 | 286 | P | P | 11 23 19.9 | +0.5 |
| | comp=Z,0.3nm,0.7s,baz=28,slow=4.1,SNR=6.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| TORD | Torodi Ar. Bea | 67.22 | 176 | P | P | 11 23 47.4 | +1.9 |
| | comp=Z,0.3nm,0.8s,baz=358,slow=6.3,SNR=1.5 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |

*IDC* ***29*** *11:16:22.3±2.1, 11°.40S×123°.56E, h0km, mb3.5/3, mbtmp3.6/5, ML3.6/2, MS4.0/1, Error ellipse: s-maj=148.5km s-min=27.4km az=53.0*
*DJA* ***29*** *11:16:27.4±0.7, 11°.5S×12°.4E±°, h13km±4km, M4.1/9, mb4.3/5, mB6.9/1, MLv4.0/9, Mw(mB)6.8/1*

**ISC 29 11:16:28.5±0.9, 10°.92S±0°.08×124°.27E±0°.08, h35km, n14, σ0s86/18, mb3.7/3, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BATI | Baumata | 0.93 | 320 | P | Pn | 11 16 43.6 | -1.5 |
| BATI | | | | S | Sn | 11 16 55.9 | -1.4 |
| SOEI | Soe | 1.16 | 360 | P | Pn | 11 16 49.4 | +1.0 |
| EDFI | Ende, Flores | 3.34 | 310 | P | Pn | 11 17 18.1 | -0.2 |
| EDFI | | | | S | Sn | 11 17 56.7 | -0.1 |
| BASI | Baing, Sumba | 3.70 | 281 | P | Pn | 11 17 23.6 | +0.4 |
| BASI | | | | S | Sn | 11 18 06.2 | +0.6 |
| BBSI | Bau Bau, Buton | 5.66 | 343 | P | Pn | 11 17 50.2 | 0.0 |
| | 34nm,0.8s,0.2nm | | | | | | |
| BSSI | Bau Bau, Buton | 6.04 | 322 | P | Pn | 11 17 56.3 | +0.8 |
| | 29nm,1.7s,0.2nm | | | | | | |
| PLAI | Plampang | 6.73 | 287 | P | Pn | 11 18 04.0 | -0.9 |
| BKSI | Bulukumba | 6.92 | 323 | P | Pn | 11 18 07.7 | +0.2 |
| | 15nm,1.0s,0.1nm | | | | | | |
| WRA | Warramunga Arr | 13.21 | 134 | Pn | Pn | 11 19 33.3 | -0.4 |
| | 0.2nm,0.3s,baz=305,slow=15,SNR=14 | | | | | | |
| WRA | | | | Sn | Sn | 11 22 00.1 | +0.7 |
| | 0.3nm,0.3s,baz=308,slow=24,SNR=5.1 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| ASAR | Alice Springs | 15.65 | 145 | Pn | Pn | 11 20 06.8 | +0.2 |
| | 0.4nm,0.3s,baz=318,slow=12,SNR=29 | | | | | | |
| ASAR | | | | Sn | Sn | 11 22 57.8 | -1.1 |
| | 0.1nm,0.3s,baz=319,slow=21,SNR=8.6 | | | | | | |
| | 1.6nm,0.4s | | | | | | |
| URZ | Urewera | 54.33 | 129 | LR | LR | 11 50 04.1 | |
| | comp=Z,132nm,18.0s,baz=47,slow=37 | | | | | | |
| SONM | Songino Array | 60.62 | 346 | P | P | 11 26 36.9 | +1.0 |
| | 0.3nm,0.5s,baz=156,slow=7.3,SNR=1.7 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 68.60 | 330 | P | P | 11 27 28.4 | +0.4 |
| | 0.7nm,1.0s,baz=131,slow=6.7,SNR=2.4 | | | | | | |
| | 0.7nm,1.0s | | | | | | |
| KURBB | Kurchatov Arra | 73.05 | 332 | P | P | 11 27 54.0 | -0.9 |
| | 0.1nm,0.2s,baz=138,slow=5.1,SNR=2.1 | | | | | | |
| | 0.1nm,0.2s | | | | | | |

*ISN* ***29*** *11:20:39.4±0.7, 34°.61N×46°.23E, h2km±20km, ML2.8*
*TEH* ***29*** *11:20:40.5, 34°.58N×46°.25E, h8km±53km, ML2.8*

**ISC 29 11:20:40.9±1.5, 34°.60N±0°.04×46°.24E±0°.04, h0km±14km, n12, σ1s07/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| IDHR | Dehrash | 0.15 | 50 | Pg | Pg | 11 20 44.1 | +0.1 |
| GLG1 | Gilan-e-Gharb | 0.56 | 210 | Pg | Pg | 11 20 51.2 | -0.4 |
| ILIN | Lien | 0.67 | 62 | Pg | Pg | 11 20 53.6 | -0.3 |
| KCHF | Cheshme Sefid, | 0.73 | 116 | Pg | Pg | 11 20 54.8 | -0.2 |
| ILBA | Ilam Banvizeh | 0.97 | 182 | Pg | Pb | 11 20 59.0 | -1.7 |
| SNQR | Sonqor, Kerman | 1.17 | 77 | Pg | Pb | 11 21 03.5 | -0.7 |
| IBZA | Bozab | 1.34 | 95 | Pg | Pn | 11 21 05.9 | -1.2 |
| IBDR | Badra | 1.51 | 190 | *e*Pn | Pn | 11 21 09.0 | -0.2 |
| IBDR | | | | *e*Sn | Sg | 11 21 31.5 | +2.1 |
| IKFM | Kafar-mosalman | 1.71 | 128 | Pg | Pn | 11 21 12.5 | +0.6 |
| IKRK | Kirkuk | 1.75 | 298 | *e*Pn | Pn | 11 21 13.0 | +0.4 |
| IKRK | | | | *e*Sn | Sb | 11 21 36.6 | 0.0 |
| BDRS | Dareh Seyedi | 2.28 | 106 | Pn | Pn | 11 21 21.3 | +1.2 |
| RAFI | Al-Rafai | 2.87 | 182 | *e*Pn | Pn | 11 21 28.3 | +0.4 |
| RAFI | | | | *e*Sn | Sn | 11 22 04.0 | +0.8 |

*ISN* ***29*** *11:36:51.6±0.9, 34°.61N×46°.30E, h9km±28km, ML2.8*
*TEH* ***29*** *11:36:52.0, 34°.60N×46°.30E, h8km±49km, ML2.7*

**ISC 29 11:36:52.0±1.4, 34°.61N±0°.04×46°.31E±0°.04, h3km±14km, n15, σ0s67/18, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| IDHR | Dehrash | 0.11 | 34 | Pg | Pg | 11 36 54.6 | +0.3 |
| IGHG | Ghaleghazi | 0.35 | 142 | Pg | Pb | 11 36 59.6 | -1.4 |
| GLG1 | Gilan-e-Gharb | 0.59 | 214 | Pg | Pg | 11 37 03.3 | 0.0 |
| ILIN | Lien | 0.62 | 60 | Pg | Pg | 11 37 04.1 | +0.1 |
| KCHF | Cheshme Sefid, | 0.69 | 118 | Pg | Pg | 11 37 05.2 | -0.1 |
| ILBA | Ilam Banvizeh | 0.98 | 185 | Pg | Pg | 11 37 10.7 | -0.1 |
| SNQR | Sonqor, Kerman | 1.12 | 77 | Pg | Pb | 11 37 13.7 | -0.5 |
| IBZA | Bozab | 1.29 | 96 | Pg | Pg | 11 37 16.7 | 0.0 |
| IBDR | Badra | 1.52 | 192 | *e*Pn | Pg | 11 37 21.0 | -0.2 |
| IBDR | | | | *e*Sn | Sg | 11 37 42.0 | +1.0 |
| IBDR | | | | AML | AML | 11 37 49.7 | |
| | comp=E,127nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 11 37 58.8 | |
| | comp=N,179nm,0.4s | | | | | | |
| IKFM | Kafar-mosalman | 1.67 | 130 | Pg | Pg | 11 37 24.6 | +0.6 |
| IDOB | Doab | 1.75 | 117 | Pg | Pg | 11 37 26.1 | +0.5 |
| IKRK | Kirkuk | 1.80 | 297 | *e*Pn | Pb | 11 37 25.0 | -0.7 |
| IKRK | | | | *e*Sn | Sb | 11 37 48.5 | -0.2 |
| HSAM | Samen | 1.94 | 101 | Pn | Pg | 11 37 28.6 | -0.5 |
| BDRS | Dareh Seyedi | 2.23 | 106 | Pn | Pb | 11 37 32.4 | -0.7 |
| RAFI | Al-Rafai | 2.88 | 183 | *e*Pn | Pn | 11 37 39.0 | +0.2 |
| RAFI | | | | *e*Sn | Sn | 11 38 15.0 | +1.0 |

*IDC* ***29*** *11:40:47.0±0.9, 22°.03S×169°.78E, h0km, mb3.9/8, mbtmp3.8/10, ML4.0/2, MS3.5/7, Error ellipse: s-maj=34.2km s-min=20.5km az=165.0*
*NOU* ***29*** *11:40:56.0, 21°.45S×169°.32E, h0km, MLv4.1/7, Southeast of Loyalty Islands*

**ISC 29 11:40:50.8±0.7, 21°.96S±0°.10×169°.75E±0°.07, h25km, n27, σ0s82/23, mb3.9/8, MS3.7/7, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | Mare, Loyalty | 1.66 | 286 | P | Pn | 11 41 17.9 | -0.5 |
| PINNC | Pines Island, | 2.23 | 253 | P | Pn | 11 41 26.3 | +0.2 |
| LIFNC | LIFOU | 2.62 | 296 | P | Pn | 11 41 32.4 | +0.9 |
| YATNC | Mamie plateau, | 2.65 | 267 | P | Pb | 11 41 35.7 | -1.9 |
| YATNC | Mamie plateau, | 2.65 | 267 | P | Pn | 11 41 31.9 | -0.1 |
| DZM | Mont Dzumac | 3.06 | 267 | P | Pn | 11 41 38.1 | +0.3 |
| DZM | Mont Dzumac | 3.06 | 267 | Pn | Pn | 11 41 38.1 | +0.3 |
| | 3.1nm,0.3s,baz=90,slow=18,SNR=18 | | | | | | |
| DZM | | | | Sn | Sn | 11 42 14.6 | +0.9 |
| | 8.8nm,0.3s,baz=120,slow=20,SNR=3.9 | | | | | | |
| | 6.8nm,0.3s | | | | | | |
| NOUC | Port Laguerre | 3.20 | 267 | P | Pn | 11 41 39.7 | +0.2 |
| RTV | Rentapao | 4.33 | 343 | P | Pn | 11 41 54.6 | -0.5 |
| DVP | Devils Point | 4.46 | 341 | P | Pn | 11 41 56.7 | -0.2 |
| KOUNC | Koumac, New Ca | 5.28 | 284 | P | Pn | 11 42 10.1 | +1.9 |
| MSVF | Nonsavu | 8.87 | 63 | Pn | Pn | 11 42 58.3 | +0.7 |
| | 0.1nm,0.3s,baz=270,slow=20,SNR=1.2 | | | | | | |
| | 1.9nm,0.6s | | | | | | |
| CTA | Charters Tower | 22.00 | 271 | LR | LR | 11 54 32.0 | |
| | comp=Z,18nm,18.0s,baz=90,slow=37 | | | | | | |
| STKA | Stephens Creek | 26.90 | 242 | LR | LR | 11 56 47.0 | |
| | comp=Z,193nm,18.2s,baz=43,slow=36 | | | | | | |
| RAR | Rarotonga | 28.33 | 94 | LR | LR | 11 57 55.8 | |
| | comp=Z,73nm,18.1s,baz=106,slow=36 | | | | | | |
| ASAR | Alice Springs | 33.03 | 260 | P | P | 11 47 23.9 | -0.5 |
| | 0.6nm,0.8s,baz=93,slow=10,SNR=6.9 | | | | | | |
| ASAR | | | | LR | LR | 12 00 07.8 | |
| | comp=Z,145nm,19.6s,baz=104,slow=35 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 33.08 | 267 | P | P | 11 47 24.9 | 0.0 |
| | 0.4nm,0.6s,baz=97,slow=8.3,SNR=6.3 | | | | | | |
| WRA | | | | LR | LR | 12 01 21.5 | |
| | comp=Z,178nm,19.4s,baz=228,slow=37 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 68.11 | 180 | P | P | 11 51 48.4 | 0.0 |
| | 1.2nm,0.9s,baz=0.0,slow=1.0,SNR=2.8 | | | | | | |
| | 1.2nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 80.05 | 294 | P | P | 11 52 59.5 | +0.7 |
| | 0.9nm,0.3s,baz=129,slow=5.0,SNR=1.2 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| SNAA | Sanae | 86.48 | 182 | P | P | 11 53 30.8 | -0.3 |
| | 0.8nm,0.8s,baz=170,slow=17,SNR=2.5 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| SONM | Songino Array | 89.67 | 323 | P | P | 11 53 47.7 | +1.0 |
| | 0.3nm,0.5s,baz=108,slow=4.7,SNR=2.3 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| LPIG | La Paz | 90.17 | 64 | LR | LR | 12 26 40.0 | |
| | comp=Z,33nm,19.4s,baz=142,slow=30 | | | | | | |
| NVAR | Mina Array Bea | 90.24 | 48 | P | P | 11 53 49.3 | -0.4 |
| | 0.5nm,0.7s,baz=224,slow=5.0,SNR=5.0 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| ILAR | Eielson Array | 92.68 | 17 | P | P | 11 53 59.3 | -0.8 |
| | 0.7nm,1.0s,baz=235,slow=6.3,SNR=5.0 | | | | | | |
| | 0.7nm,1.0s | | | | | | |
| DLBC | Dease Lake | 94.23 | 27 | LR | LR | 12 29 57.7 | |
| | comp=Z,18nm,18.6s,baz=295,slow=31 | | | | | | |
| EKA | Eskdalemuir Ar | 146.25 | 353 | PKPbc | PKPbc | 12 00 28.5 | -0.3 |
| | 2.3nm,0.6s,baz=351,slow=3.6,SNR=6.2 | | | | | | |
| GERES | GERESS Array B | 147.09 | 330 | PKPbc | PKPbc | 12 00 32.2 | +0.6 |
| | 1.0nm,0.5s,baz=62,slow=4.8,SNR=5.1 | | | | | | |

*ISN* ***29*** *11:49:43.1±0.6, 34°.65N×46°.23E, h3km±16km, ML2.6*
*TEH* ***29*** *11:49:44.3, 34°.64N×46°.24E, h8km±70km, ML2.8*

**ISC 29 11:49:44.9±1.4, 34°.64N±0°.04×46°.25E±0°.05, h4km±13km, n10, σ0s67/13, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| IDHR | Dehrash | 0.13 | 63 | Pg | Pg | 11 49 48.1 | +0.5 |
| IGHG | Ghaleghazi | 0.41 | 139 | Pg | Pg | 11 49 52.9 | 0.0 |
| GLG1 | Gilan-e-Gharb | 0.60 | 208 | Pg | Pg | 11 49 55.9 | -0.4 |
| ILIN | Lien | 0.65 | 65 | Pg | Pg | 11 49 57.1 | -0.3 |
| KCHF | Cheshme Sefid, | 0.75 | 119 | Pg | Pg | 11 49 58.6 | -0.7 |
| IBZA | Bozab | 1.34 | 97 | Pg | Pb | 11 50 09.9 | -0.9 |
| IBDR | Badra | 1.55 | 190 | *e*Pn | Pb | 11 50 13.5 | -0.7 |
| IBDR | | | | *e*Sn | Sg | 11 50 35.5 | +0.8 |
| IKFM | Kafar-mosalman | 1.73 | 130 | Pg | Pb | 11 50 17.4 | +0.1 |
| IKRK | Kirkuk | 1.74 | 296 | *e*Pn | Pn | 11 50 16.0 | +0.1 |
| IKRK | | | | *e*Sn | Sb | 11 50 39.5 | -0.1 |
| IKRK | | | | AML | AML | 11 51 05.2 | |
| | comp=N,83nm,0.2s | | | | | | |
| IKRK | | | | AML | AML | 11 51 12.3 | |
| | comp=E,77nm,0.7s | | | | | | |
| RAFI | Al-Rafai | 2.91 | 182 | *e*Pn | Pn | 11 50 32.0 | 0.0 |
| RAFI | | | | *e*Sn | Sn | 11 51 08.5 | +1.1 |

*IDC* ***29*** *11:59:05.9±2.2, 9°.72S×113°.44E, h0km, mb3.7/5, mbtmp3.7/5, Error ellipse: s-maj=106.2km s-min=21.3km az=52.0*
*DJA* ***29*** *11:59:14.8±1.1, 10°.5±4°×11°.4E±°, h27km±12km, M4.3/15, mb4.3/6, MLv4.3/15*

**ISC 29 11:59:10.4±1.0, 9°.69S±0°.08×113°.85E±0°.06, h10km, n19, σ2s05/22, mb3.9/5, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| JAGI | Jajag, Banyuwa | 1.25 | 14 | P | Pn | 11 59 34.2 | +0.2 |
| JAGI | | | | S | Sb | 11 59 48.5 | -1.8 |
| DNP | Denpasar | 1.68 | 53 | P | Pn | 11 59 41.6 | +1.7 |
| DNP | | | | S | Sn | 12 00 02.3 | +0.8 |
| SRBI | Singaraja | 2.09 | 40 | P | Pn | 11 59 47.0 | +1.5 |
| PWJI | Pagerwojo | 2.62 | 309 | P | Pn | 11 59 53.8 | +1.0 |
| PWJI | | | | S | Sn | 12 00 24.3 | -0.3 |
| GRJI | Gresik | 3.08 | 334 | P | Pn | 12 00 01.9 | +2.8 |
| GRJI | | | | S | Sn | 12 00 37.8 | +1.8 |
| TWSI | Taliwang, Sumb | 3.14 | 73 | P | Pn | 12 00 02.0 | +2.0 |
| NGJI | Ngawi | 3.30 | 314 | P | Pn | 12 00 05.0 | +2.8 |
| UGM | Wanagama | 3.73 | 298 | P | Pn | 12 00 10.3 | +2.1 |
| PLAI | Plampang | 3.97 | 78 | P | Pn | 12 00 13.5 | +2.0 |
| KPJI | Karang Pucung | 5.40 | 295 | P | Pn | 12 00 35.4 | +4.3 |
| WBSI | Waikabubak, Su | 5.46 | 90 | P | Pn | 12 00 32.6 | +0.6 |
| CMJI | Cimerak | 5.67 | 289 | P | Pn | 12 00 37.3 | +2.6 |
| | 64nm,1.3s,0.3nm | | | | | | |
| BSSI | Bau Bau, Buton | 7.46 | 62 | P | Pn | 12 01 01.4 | +1.9 |
| | 30nm,1.5s,0.1nm | | | | | | |
| EDFI | Ende, Flores | 7.80 | 84 | P | Pn | 12 01 05.2 | +1.0 |
| WRA | Warramunga Arr | 22.25 | 120 | P | P | 12 04 07.1 | -0.6 |
| | 0.3nm,0.3s,baz=294,slow=11,SNR=12 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| ASAR | Alice Springs | 23.66 | 128 | P | P | 12 04 22.4 | 0.0 |
| | 2.1nm,0.6s,baz=303,slow=8.7,SNR=54 | | | | | | |
| | 2.1nm,0.6s | | | | | | |
| STKA | Stephens Creek | 33.88 | 135 | P | P | 12 05 53.1 | -0.4 |
| | 1.3nm,0.5s,baz=294,slow=18,SNR=5.0 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| SONM | Songino Array | 57.65 | 354 | P | P | 12 08 58.2 | -2.8 |
| | 0.6nm,0.3s,baz=181,slow=6.9,SNR=2.9 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 62.89 | 336 | P | P | 12 09 33.2 | -3.6 |
| | 0.5nm,0.6s,baz=142,slow=8.0,SNR=3.8 | | | | | | |
| | 0.5nm,0.6s | | | | | | |

*BJI* ***29*** *12:02:29.1±0.0, 0°.72N×125°.47E, h61km, mb4.6/18, mB5.0/9, Ms4.1/6, Ms7.3/8/6*
*DJA* ***29*** *12:02:30.5±0.5, 1°.1N±3°×12°.5E±°, h18km±5km, M4.8/20, mb5.2/19, mB5.3/13, MLv4.9/20, Mw(mB)4.7/13*
*IDC* ***29*** *12:02:31.5±1.6, 1°.02N×125°.36E, h56km±13km, mb4.2/24, mbtmp4.4/25, MS3.6/21, Error ellipse: s-maj=16.1km s-min=8.1km az=82.0*
*NEIC* ***29*** *12:02:32.3±1.9, 0°.99N±0°.07×125°.38E±0°.03, h55km±7km, mb4.9/70, Error ellipse: s-maj=10.0km s-min=4.2km az=166.0*

**ISC 29 12:02:34.1±0.3, 0°.99N±0°.04×125°.33E±0°.04, h79km, n167, σ1s76/166, mb4.8/65, 1D, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KMSI | Cibinong | 1.41 | 253 | P | Pn | 12 02 55.5 | -2.7 |
| KMSI | | | | S

MYKOM IAmb IAmb 12 07 34.7
comp=Z,42nm,0.9s
**TWG Pinlang 22.09 350** P **P** **12 07 22.5 -0.4**
**MANU Manus Island 22.24 98** P **P** **12 07 23.2 -1.5**
MANU IAmb IAmb 12 07 34.7
comp=Z,39nm,1.3s
**WB0 Warramunga Arr 22.46 157** P **P** **12 07 25.5 -1.4**
WB0 IAmb IAmb 12 07 28.2
comp=Z,27nm,0.7s
**WRAB Tennant Creek 22.59 157** P **P** **12 07 27.0 -1.4**
**WRA Warramunga Arr 22.60 157** P **P** **12 07 27.1 -1.3**
comp=Z,23nm,0.6s,baz=336,slow=11,SNR=223
WRA PcP **PcP** **12 11 19.2 +0.2**
comp=Z,0.7nm,0.5s,baz=308,slow=2.6,SNR=2.7
WRA S **S** **12 11 31.0 +0.4**
comp=Z,3.1nm,0.7s,baz=328,slow=20,SNR=7.6
comp=Z,23nm,0.6s
**WB2 Warramunga Arr 22.60 157** P **P** **12 07 27.0 -1.4**
WB2 IAmb IAmb 12 07 29.7
comp=Z,28nm,0.6s
**TPUB Ta-pu 22.64 349** P **P** **12 07 28.6 -0.3**
TPUB IAmb IAmb 12 07 38.2
comp=Z,62nm,1.3s
**XMIS Christmas Isla 22.65 239** P **P** **12 07 27.4 -1.6**
XMIS IAmb IAmb 12 07 41.3
comp=Z,72nm,1.1s
**MBWA Marble Bar 22.68 194** P **P** **12 07 28.0 -1.3**
MBWA IAmb IAmb 12 07 28.9
comp=Z,34nm,0.8s
**WR0 Warramunga Arr 22.69 157** P **P** **12 07 28.0 -1.4**
WR0 IAmb IAmb 12 07 28.7
comp=Z,23nm,0.5s
**GUMO Guam 23.04 56** P **P** **12 07 31.8 -1.2**
**GUMO Guam 23.04 56** P **P** **12 07 31.3 -1.7**
comp=Z,70nm,0.5s,baz=240,slow=20,SNR=8.4
**PSA00 Pilbara Seismi 23.05 193** P **P** **12 07 31.8 -1.2**
PSA00 IAmb IAmb 12 07 32.7
comp=Z,26nm,0.8s
**COEN Coen 23.09 131** P **P** **12 07 32.2 -1.2**
**PMG Port Moresby 24.07 116** P **P** **12 07 41.9 -0.5**
PMG IAmb IAmb 12 08 03.5
comp=Z,25nm,0.9s
**IPM Ipoh 24.52 279** P **P** **12 07 45.6 -0.8**
**KULM Kulim 25.00 280** P **P** **12 07 50.6 -0.3**
**JOW Kunigami 25.85 6** P **P** **12 07 58.1 -0.3**
**JOW Kunigami 25.85 6** P **P** **12 07 58.5 +0.1**
comp=Z,8.0nm,0.5s,baz=193,slow=12,SNR=2.3
JOW LR LR 12 17 50.6
comp=Z,110nm,21.5s,baz=194,slow=36
comp=Z,8.0nm,0.5s
**GIRL Giralia 25.86 204** P **P** **12 07 58.4 -0.1**
**AS31 Alice Springs 25.89 162** P **P** **12 07 58.4 -0.4**
AS31 IAmb IAmb 12 08 02.6
comp=Z,14nm,0.5s
**ASAR Alice Springs 25.89 162** P **P** **12 07 59.1 +0.3**
comp=Z,47nm,0.9s,baz=340,slow=7.3,SNR=237
ASAR PcP **PcP** **12 11 26.9 +0.7**
comp=Z,2.4nm,0.6s,baz=343,slow=2.1,SNR=7.6
ASAR S **S** **12 12 24.6 +1.4**
comp=Z,4.0nm,1.0s,baz=348,slow=18,SNR=8.7
ASAR LR LR 12 18 54.6
comp=Z,96nm,18.7s,baz=324,slow=38
comp=Z,47nm,0.9s
**RPSI Rantau Prapat 26.44 274** P **P** **12 08 03.7 -0.3**
**RABL Rabaul 27.31 101** P **P** **12 08 12.7 +1.0**
**GSI Gunungsitoli 27.75 271** P **P** **12 08 14.6 -1.0**
GSI IAmb IAmb 12 08 40.5
comp=Z,56nm,1.5s
**CMAR Chiang Mai Arr 31.18 305** P **P** **12 08 45.6 -0.3**
comp=Z,0.5nm,0.2s,baz=122,slow=7.5,SNR=7.4
CMAR PcP **PcP** **12 11 40.0 +0.6**
comp=Z,1.0nm,0.5s,baz=101,slow=1.8,SNR=1.9
CMAR ScP **ScP** **12 15 18.8 +3.3**
comp=Z,1.6nm,0.9s,baz=182,slow=2.8,SNR=7.3
CMAR LR LR 12 21 32.0
comp=Z,51nm,20.5s,baz=105,slow=37
comp=Z,0.5nm,0.2s
**MORW Morawa 31.18 196** P **P** **12 08 44.9 -0.9**
MORW IAmb IAmb 12 08 46.7
comp=Z,33nm,1.0s
**NJ2 Nanjing 31.50 349** *eP* **P** **12 08 50.5 +2.0**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**FORT Forrest 31.70 176** P **P** **12 08 50.8 +0.4**
**JNU Nakatsue 32.39 9** P **P** **12 08 56.1 -0.3**
JNU IAmb IAmb 12 09 08.3
comp=Z,28nm,1.2s
**JNU Nakatsue 32.39 9** P **P** **12 08 55.4 -1.0**
comp=Z,1.6nm,0.5s,baz=165,slow=4.1,SNR=1.4
comp=Z,1.6nm,0.5s
**JMN Monobe 33.54 13** P **P** **12 09 06.4 -0.1**
JMN IAmb IAmb 12 09 16.0
comp=Z,27nm,1.0s
**PZH PanZhiHua 34.03 320** P **P** **12 09 13.8 +2.8**
PZH pmax pmax
comp=Z,8.0nm,1.0s
PZH pmax pmax
comp=Z,110nm,4.1s
**NWAO Narrogin (SRO) 34.59 192** P **P** **12 09 16.0 +0.5**
**NWAO Narrogin (SRO) 34.59 192** LR LR 12 24 13.1
comp=Z,75nm,20.0s,baz=5.0,slow=38
**NWAO Narrogin (SRO) 34.59 192** P **P** **12 09 15.5 0.0**
**BBOO Buckleboo 35.11 164** P **P** **12 09 20.0 0.0**
BBOO IAmb IAmb 12 09 24.5
comp=Z,18nm,0.9s
**INU Inuyama 35.88 16** P **P** **12 09 25.8 -0.7**
**HNR Honiara 36.00 107** P **P** **12 09 27.4 -0.4**
**STKA Stephens Creek 36.14 156** P **P** **12 09 29.2 +0.4**
**STKA Stephens Creek 36.14 156** P **P** **12 09 29.2 +0.4**
comp=Z,8.0nm,0.3s,baz=323,slow=9.7,SNR=38
STKA PcP **PcP** **12 11 53.1 -0.1**
comp=Z,2.6nm,0.8s,baz=349,slow=5.2,SNR=1.8
comp=Z,8.0nm,0.3s
**JGF Kuroka 36.21 17** P **P** **12 09 30.0 +0.5**
**XAN Xi'an 36.29 337** *eP* P 12 09 37.5 +7.3
XAN LR LR
comp=E,230nm,19.2s
XAN LR LR
comp=Z,280nm,22.0s
**KSRS Korea Array 36.37 3** P **P** **12 09 29.9 -0.8**
comp=Z,1.1nm,0.7s,baz=175,slow=9.7,SNR=2.4
KSRS ScP **ScP** **12 15 35.7 +2.3**
comp=Z,2.1nm,0.7s,baz=190,slow=4.1,SNR=5.1
KSRS LR LR 12 24 01.1
comp=Z,75nm,21.6s,baz=180,slow=36
comp=Z,1.1nm,0.7s
**KS19 Wonju Array Si 36.41 3** P **P** **12 09 31.5 +0.4**
KS19 IAmb IAmb 12 09 40.8
comp=Z,11nm,0.8s
**MAJO Matsushiro 37.34 17** P **P** **12 09 38.3 -0.7**
MAJO IAmb IAmb 12 09 51.2
comp=Z,20nm,0.8s
**MAJO Matsushiro 37.34 17** P P 12 09 45.7 +6.7
**MJAR Matsushiro Arr 37.34 17** P **P** **12 09 37.8 -1.2**
comp=Z,2.8nm,0.7s,baz=195,slow=8.7,SNR=9.5
MJAR ScP **ScP** **12 15 40.3 +3.3**
comp=Z,1.3nm,0.8s,baz=190,slow=3.5,SNR=5.0
comp=Z,2.8nm,0.7s
**MJB9 Matsu-Tunnel 37.34 17** P **P** **12 09 38.1 -0.9**
MJB9 IAmb IAmb 12 09 51.1
comp=Z,19nm,0.7s
**HNS HongShan 37.53 346** *eP* **P** **12 09 38.5 -2.1**
HNS LR LR
comp=Z,70nm,19.1s
HNS LR LR
comp=Z,91nm,22.3s
**JMM Marumori 39.36 19** P **P** **12 09 56.1 +0.2**
**ARMA Armidale 40.03 143** P **P** **12 10 01.8 +0.1**
ARMA IAmb IAmb 12 10 04.7
comp=Z,14nm,1.1s
**LZH Lanzhou 40.21 333** *eP* **P** **12 10 06.0 +2.8**
LZH sP sP 12 10 27.3 -3.9
LZH pmax pmax
comp=Z,18nm,1.2s
**HHC Hu-ho-hao-te 41.59 344** *eP* **P** **12 10 16.8 +2.4**
HHC pmax pmax
comp=Z,12nm,0.7s
HHC pmax pmax
comp=Z,97nm,4.1s
HHC LR LR
comp=Z,110nm,16.9s
HHC LR LR
comp=Z,100nm,16.0s
HHC LR LR
comp=Z,86nm,16.8s
**CAN Canberra 42.35 151** P **P** **12 10 20.6 0.0**
CAN IAmb IAmb 12 10 22.7
comp=Z,58nm,1.5s
**CAN Canberra 42.35 151** P **P** **12 10 22.7 +2.0**
**TOO Toolangi 42.66 156** P **P** **12 10 23.0 -0.1**
**USRK Ussuriysk Ar. 43.43 7** P **P** **12 10 29.3 +0.1**
comp=Z,1.8nm,0.6s,baz=176,slow=11,SNR=5.0
comp=Z,1.8nm,0.6s
**MDJ Mudanjiang 43.61 4** P P 12 10 39.5 +9.0
MDJ pmax pmax
comp=Z,28nm,0.7s
**MDJ Mudanjiang 43.61 4** P P 12 10 39.5 +8.9
**BNX BinXian 44.60 2** ‖P P 12 10 47.0 +8.5
BNX pmax pmax
comp=Z,16nm,1.0s
**PALK Pallekele 44.92 279** LR LR 12 30 07.6
comp=Z,81nm,20.6s,baz=107,slow=37
**ASAJ Asahikawa 45.61 17** P **P** **12 10 45.6 -0.9**
comp=Z,2.6nm,0.6s,baz=238,slow=9.5,SNR=6.5
comp=Z,2.6nm,0.6s
**KLR Kul'dur 48.38 6** P **P** **12 11 08.0 +0.1**
comp=Z,1.7nm,0.6s,baz=180,slow=9.1,SNR=6.9
comp=Z,1.7nm,0.6s
**HEH HeiHe 49.12 2** *eP* **P** **12 11 14.3 +0.7**
HEH pmax pmax
comp=Z,5.0nm,0.7s
**SONM Songino Array 49.47 343** P **P** **12 11 15.4 -1.2**
comp=Z,0.7nm,0.6s,baz=160,slow=4.6,SNR=2.5
SONM PcP **PcP** **12 12 37.6 +0.1**
comp=Z,1.7nm,0.7s,baz=158,slow=4.7,SNR=3.6
comp=Z,0.7nm,0.6s
**WMQ Urumqi 54.20 327** *eP* **P** **12 11 55.0 +3.3**
**PETK Petropavlovsk- 58.48 22** P **P** **12 12 22.4 +0.5**
comp=Z,1.6nm,0.7s,baz=167,slow=2.5,SNR=6.1
comp=Z,1.6nm,0.7s
**PET Petropavlovsk 58.78 23** P P 12 12 33.3 +9.3
**MK31 Makanchi Array 59.03 327** P **P** **12 12 25.3 -0.6**
**MKAR Makanchi Array 59.03 327** P **P** **12 12 24.9 -1.0**
comp=Z,1.0nm,0.3s,baz=121,slow=7.7,SNR=15
MKAR PcP **PcP** **12 13 14.0 0.0**
comp=Z,6.3nm,0.7s,baz=128,slow=4.0,SNR=17
MKAR LR LR 12 40 38.1
comp=Z,64nm,18.1s,baz=116,slow=39
comp=Z,1.0nm,0.3s
**MAKZ Makanchi 59.21 327** P **P** **12 12 27.9 +0.8**
**WHZ Wether Hill Ro 59.89 147** P **P** **12 12 32.5 +0.7**
WHZ IAmb IAmb 12 12 48.8
comp=Z,20nm,1.2s
**YAK Yakutsk 60.98 2** P **P** **12 12 39.0 +0.2**
**YAK Yakutsk 60.98 2** LR LR 12 40 45.1
comp=Z,33nm,19.9s,baz=172,slow=38
**YAK Yakutsk 60.98 2** P P 12 12 47.8 +9.0
**KHZ Kahutara 61.19 141** P **P** **12 12 40.6 0.0**
**AAK Ala-Archa 61.48 319** P **P** **12 12 43.1 +0.3**
**AAK Ala-Archa 61.48 319** LR LR 12 43 21.5
comp=Z,17nm,18.7s,baz=110,slow=40
**RTZ Ruatahuna 61.62 136** P **P** **12 12 44.3 +0.6**
**MA2 Magadan 61.69 14** P P 12 12 53.8 +10
**ZALV Zalesovo Beam 62.41 334** P **P** **12 12 46.7 -1.9**
comp=Z,0.6nm,0.3s,baz=103,slow=4.7,SNR=4.7
comp=Z,0.6nm,0.3s
**KURBB Kurchatov Arra 63.31 329** P **P** **12 12 53.6 -1.1**
comp=Z,2.7nm,0.2s,baz=122,slow=6.5,SNR=8.6
comp=Z,2.7nm,0.2s
**KURK Kurchatov 63.31 329** P **P** **12 12 53.8 -0.9**
KURK IAmb IAmb 12 12 55.2
comp=Z,11nm,1.1s
**KURK Kurchatov 63.31 329** P **P** **12 12 53.4 -1.3**
**CHGR Chuyangaron 63.48 313** P **P** **12 12 54.9 -1.3**
CHGR IAmb IAmb 12 13 15.0
comp=Z,8.0nm,1.0s
**SIMJ Simiganj 63.59 313** P **P** **12 12 55.8 -1.2**
**KKAR Karatay Array 64.30 318** P **P** **12 13 00.7 -0.7**
**CASY Casey 67.95 186** P **P** **12 13 25.3 +1.1**
CASY IAmb IAmb 12 13 26.2
comp=Z,6.5nm,0.8s
**CASY Casey 67.95 186** P **P** **12 13 25.2 +1.0**
**DRV Dumont d'Urvil 68.31 174** P **P** **12 13 27.2 +0.7**
**BVAR Borovoye Array 68.86 328** P **P** **12 13 29.1 -1.1**
comp=Z,1.6nm,0.6s,baz=128,slow=7.2,SNR=9.2
comp=Z,1.6nm,0.6s
**BRVK Borovoye 68.94 328** P **P** **12 13 30.3 -0.4**
**TIXI Tiksi 70.59 1** P **P** **12 13 40.8 +0.4**
TIXI IAmb IAmb 12 13 50.0
comp=Z,6.7nm,0.6s
**TIXI Tiksi 70.59 1** LR LR 12 45 37.4
comp=Z,50nm,21.6s,baz=194,slow=37
**ABKAR Akbulak array 73.39 322** P **P** **12 13 56.8 -0.9**
**AKTO Aktyubinsk 74.94 322** LR LR 12 50 32.0
comp=Z,46nm,18.4s,baz=14,slow=38
**VOI Vohitsoka 79.73 248** P **P** **12 14 34.2 +0.1**
VOI IAmb IAmb 12 14 35.0
comp=Z,13nm,0.8s
**SDPT Sand Point 80.24 34** P **P** **12 14 37.5 +1.5**
**MAW Mawson 80.71 200** P **P** **12 14 39.3 +1.0**
comp=Z,5.6nm,0.6s,baz=78,slow=5.5,SNR=38
comp=Z,5.6nm,0.6s
**SBA Scott Base 81.83 172** P **P** **12 14 46.1 +2.0**
SBA IAmb IAmb 12 14 47.3
comp=Z,16nm,1.4s
**GNI Garni 82.16 310** LR LR 12 57 27.4
comp=Z,8.1nm,18.5s,baz=114,slow=40
**K17K Iditarod 82.89 27** P **P** **12 14 51.4 +1.5**
**L18K Granite Mounta 83.53 27** P **P** **12 14 56.2 +3.0**
L18K IAmb IAmb 12 15 06.1
comp=Z,8.7nm,0.8s
**KBZ Khabaz 83.84 314** LR LR 12 56 08.3
comp=Z,24nm,19.8s,baz=118,slow=38
**G19K Purcell Mounta 84.08 24** P **P** **12 14 55.6 -0.3**
G19K IAmb IAmb 12 15 08.5
comp=Z,12nm,0.8s
**H19K Roundabout Mou 84.23 24** P P 12 15 01.5 +4.9
H19K IAmb IAmb 12 15 09.4
comp=Z,12nm,0.8s
**E19K Redstone River 84.28 22** P **P** **12 14 58.8 +1.9**
E19K IAmb IAmb 12 15 09.6
comp=Z,13nm,0.9s
**KIBK Kibwezi 87.32 268** P **P** **12 15 14.3 +1.1**
KIBK IAmb IAmb 12 15 15.1
comp=Z,11nm,1.0s
**KMBO Kilima Mbogo 88.09 269** P **P** **12 15 18.5 +1.4**
**KMBO Kilima Mbogo 88.09 269** P **P** **12 15 18.0 +0.9**
comp=Z,9.9nm,0.7s,baz=71,slow=6.0,SNR=19
KMBO LR LR 12 50 50.0
comp=Z,29nm,21.9s,baz=92,slow=33
comp=Z,9.9nm,0.7s
**ILAR Eielson Array 88.17 25** P **P** **12 15 16.3 +0.2**
comp=Z,0.2nm,0.5s,baz=264,slow=3.9,SNR=2.3
comp=Z,0.2nm,0.5s
**LODK Lodwar 89.91 273** P **P** **12 15 25.5 +0.1**
LODK IAmb IAmb 12 15 27.1
comp=Z,4.8nm,1.1s
**QSPA South Pole Qui 90.91 180** P **P** **12 15 29.8 +0.8**
comp=Z,2.3nm,0.6s,baz=262,slow=0.4,SNR=46
QSPA LR LR 12 57 59.5
comp=Z,46nm,18.2s,baz=356,slow=37
comp=Z,2.3nm,0.6s
**ARCES ARCESS Array B 92.52 340** P **P** **12 15 35.6 -0.6**
comp=Z,1.5nm,0.6s,baz=87,slow=6.2,SNR=6.2
comp=Z,1.5nm,0.6s
**SPITS Spitsbergen Ar 92.88 349** LR LR 13 03 51.5
comp=Z,24nm,18.5s,baz=28,slow=40
**MNK Minsk 93.53 325** *i* P **P** **12 15 40.5 -0.7**
comp=E,8.0nm,0.7s
MNK *i* P **P** **12 15 40.5 -0.7**
comp=N,17nm,0.8s
MNK *i* P **P** **12 15 40.5 -0.7**
comp=Z,16nm,0.8s,baz=83
MNK *i* pP **pP** **12 15 57.6 -4.8**
MNK *i* sP sP 12 16 02.4 -8.3
MNK *i* PP **PP** **12 19 25.7 -0.8**
MNK *i* PPP PPP 12 21 26.3
MNK *i* SKS **SKSac** **12 25 59.9 -8.7**
MNK *i* S **SKSac** **12 26 09.2 +0.7**
MNK *i* sS pS 12 26 58.8 -12
MNK *i* PS **PS** **12 27 56.5 -10**
MNK *i* SS SS 12 33 21.9 +20
MNK *i* LQ LQ 12 53 16.6
MNK *i* LR LR 12 57 55.4
MNK *i* LRM MLR 13 01 30.9
comp=Z,49nm,17.8s
MNK *i* LRM MLR 13 01 36.8
comp=N,315nm,18.3s
MNK *i* LRM MLR 13 01 42.4
comp=E,141nm,19.8s
**FINES FINESS Array B 93.57 332** P **P** **12 15 39.9 -1.3**
comp=E,1.7nm,0.7s,baz=101,slow=3.9,SNR=6.0
comp=E,1.7nm,0.7s
**MBAR Mbarara 94.60 269** LR LR 12 57 21.1
comp=E,26nm,18.8s,baz=110,slow=35
**LBTB Lobatse 99.24 245** LR LR 12 57 09.3
comp=E,57nm,19.8s,baz=126,slow=33
**HFS Hagfors 99.77 332** P **Pdif** **12 16 07.8 -1.5**
comp=E,0.6nm,0.4s,baz=90,slow=8.9,SNR=5.6
HFS LR LR 13 03 54.6
comp=E,50nm,22.0s,baz=68,slow=37
comp=E,0.6nm,0.4s
**TORD Torodi Ar. Bea 122.38 286** PKP **PKiKP** **12 21 21.6 +0.1**
comp=E,2.7nm,0.7s,baz=78,slow=2.2,SNR=18
**TXAR Lajitas Array 124.37 53** PKP **PKiKP** **12 21 25.7 +0.5**
comp=E,0.2nm,0.5s,baz=233,slow=1.3,SNR=3.7
**DBIC Dimbokro 129.71 279** PKP **PKiKP** **12 21 36.3 +0.2**
comp=E,2.7nm,0.8s,baz=90,slow=2.0,SNR=3.2

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*DJA **29** 12:11:50.4±0.5, 13°N±3°×14°3E±°, h101km±9km, M4.8/22, mB5.9/7, mb4.6/22, MLv4.4/1, Mw(mB)5.5/7*
*IDC **29** 12:11:51.0±1.4, 12°.53N×142°.99E, h112km±14km, mb4.1/21, mbtmp4.5/23, MS3.3/9, Error ellipse: s-maj=15.2km s-min=10.7km az=89.0*
*NEIC **29** 12:11:52.5±1.3, 12°.54N±0°.07×142°.95E±0°.06, h121km±8km, mb4.6/62, Error ellipse: s-maj=12.8km s-min=4.0km az=140.0*
**ISC 29 12:11:50.1±0.4, 12°.51N±0°.05×142°.89E±0°.06, h100km, n108, σ1°.04/101, mb4.5/50, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **2.21** | **61** | Pn | **Pn** | **12 12 26.9** | **+1.5** |
| **GUMO** | **Guam** | **2.21** | **61** | P | **Pn** | **12 12 26.4** | **+1.0** |
| | 1μm,0.4s,baz=230,slow=2.6,SNR=319 | | | | | | |
| GUMO | | | | S | **Sn** | **12 12 52.2** | **-0.3** |
| | 582nm,0.3s,baz=351,slow=22,SNR=4.8 | | | | | | |
| **JCJ** | **Chichijima** | **14.52** | **358** | Pn | **Pn** | **12 15 11.0** | **+0.2** |
| **JAY** | **Jayapura** | **15.09** | **188** | P | **Pn** | **12 15 18.9** | **+0.8** |
| | 26nm,1.2s | | | | | | |
| **MANU** | **Manus Island** | **15.13** | **163** | | **Pn** | **12 15 19.8** | **+1.1** |
| MANU | | | | IAmb | IAmb | 12 15 24.0 | |
| | comp=Z,57nm,1.1s | | | | | | |
| **GENI** | **Genyem** | **15.25** | **190** | P | **Pn** | **12 15 22.4** | **+2.3** |
| | comp=Z,18nm,0.5s,comp=Z,3μm | | | | | | |
| **PATS** | **Pohnpei** | **16.22** | **109** | P | **Pn** | **12 15 31.9** | **-0.2** |
| **FAKI** | **Fak Fak** | **18.62** | **215** | P | P | **12 16 01.3** | **+1.3** |
| FAKI | | | | IAmb | IAmb | 12 16 06.8 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **18.62** | **215** | P | **P** | **12 16 01.9** | **+2.0** |
| | comp=Z,36nm,0.7s | | | | | | |
| **RABL** | **Rabaul** | **18.99** | **150** | P | **P** | **12 16 04.0** | **+0.1** |
| **TNTI** | **Ternate** | **19.31** | **234** | P | **P** | **12 16 08.2** | **+0.8** |
| TNTI | | | | IAmb | IAmb | 12 16 08.7 | |
| | comp=Z,30nm,1.0s | | | | | | |
| **TNTI** | **Ternate** | **19.31** | **234** | P | **P** | **12 16 07.9** | **+0.5** |
| | comp=Z,26nm,0.8s | | | | | | |
| **JOW** | **Kunigami** | **19.77** | **318** | P | **P** | **12 16 15.0** | **+2.6** |
| JOW | | | | IAmb | IAmb | 12 16 18.2 | |
| | comp=Z,30nm,0.6s | | | | | | |
| **JOW** | **Kunigami** | **19.77** | **318** | P | **P** | **12 16 14.7** | **+2.3** |
| | comp=Z,29nm,0.5s,baz=130,slow=16,SNR=15 | | | | | | |
| **MSAI** | **Masohi** | **20.99** | **222** | P | **P** | **12 16 26.9** | **+1.3** |
| | comp=Z,28nm,0.8s | | | | | | |
| **NLAI** | **Namlea** | **22.16** | **226** | P | **P** | **12 16 38.4** | **+0.4** |
| | comp=Z,19nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **22.18** | **239** | P | **P** | **12 16 39.0** | **+0.7** |
| **PMG** | **Port Moresby** | **22.19** | **169** | P | **P** | **12 16 37.0** | **-1.3** |
| PMG | | | | IAmb | IAmb | 12 16 45.9 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **YOJ** | **Yonaguni jima** | **22.25** | **305** | P | **P** | **12 16 39.2** | **+0.3** |
| **GTOI** | **Gorontalo** | **22.97** | **241** | P | **P** | **12 16 45.5** | **-0.8** |
| | comp=Z,17nm,0.6s | | | | | | |
| **YULB** | **Yu-li** | **23.18** | **301** | P | **P** | **12 16 48.5** | **+0.3** |
| YULB | | | | IAmb | IAmb | 12 16 49.8 | |
| | comp=Z,29nm,0.9s | | | | | | |
| **NACB** | **Ninganchiao** | **23.26** | **303** | P | **P** | **12 16 48.9** | **-0.1** |
| NACB | | | | IAmb | IAmb | 12 17 06.4 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **JNU** | **Nakatsue** | **23.27** | **334** | P | **P** | **12 16 49.2** | **+0.2** |
| JNU | | | | IAmb | IAmb | 12 16 55.0 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **23.27** | **334** | P | **P** | **12 16 49.1** | **+0.1** |
| | comp=Z,14nm,0.8s,baz=82,slow=4.8,SNR=6.5 | | | | | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **SSLB** | **Suanglung** | **23.63** | **301** | P | **P** | **12 16 52.6** | **+0.3** |
| **YHNB** | **Yeheng** | **23.66** | **304** | P | **P** | **12 16 52.9** | **+0.2** |
| YHNB | | | | IAmb | IAmb | 12 16 55.6 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **23.68** | **72** | T | T | 12 40 56.4 | |
| | baz=253,slow=75,SNR=10 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **23.70** | **72** | T | T | 12 41 16.4 | |
| | baz=253,slow=75,SNR=1.9 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **23.70** | **72** | T | T | 12 41 08.7 | |
| | baz=253,slow=75,SNR=4.3 | | | | | | |
| **LUWI** | **Luwuk** | **24.08** | **237** | P | **P** | **12 16 55.7** | **-0.7** |
| **LUWI** | **Luwuk** | **24.08** | **237** | P | **P** | **12 16 55.4** | **-1.1** |
| **H11N1** | **WAKE ISLAND Hy** | **24.13** | **70** | T | T | 12 42 24.6 | |
| | baz=249,slow=75,SNR=12 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **24.14** | **70** | T | T | 12 42 10.6 | |
| | baz=249,slow=75,SNR=6.0 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **24.15** | **70** | T | T | 12 42 20.5 | |
| | baz=249,slow=75,SNR=5.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.29** | **351** | P | **P** | **12 16 57.4** | **-0.7** |
| | comp=Z,1.3nm,0.6s,baz=114,slow=13,SNR=5.5 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **TOLI2** | **Tolitoli** | **24.66** | **244** | P | **P** | **12 17 01.5** | **-0.3** |
| TOLI2 | | | | IAmb | IAmb | 12 17 03.2 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **MYLDM** | **Lahad Datu** | **25.16** | **255** | P | **P** | **12 17 06.6** | **+0.3** |
| MYLDM | | | | IAmb | IAmb | 12 17 10.1 | |
| | comp=Z,27nm,1.0s | | | | | | |
| **MPSI** | **Mapaga** | **25.81** | **244** | P | **P** | **12 17 11.3** | **-0.9** |
| | comp=Z,16nm,0.8s | | | | | | |
| **COEN** | **Coen** | **26.30** | **179** | P | **P** | **12 17 16.5** | **-0.1** |
| COEN | | | | IAmb | IAmb | 12 17 20.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **27.76** | **205** | P | **P** | **12 17 28.9** | **-0.7** |
| MTN | | | | IAmb | IAmb | 12 17 44.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **28.22** | **334** | P | **P** | **12 17 33.7** | **+0.2** |
| | comp=Z,1.4nm,0.8s,baz=149,slow=11,SNR=1.8 | | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **28.84** | **234** | P | **P** | **12 17 38.9** | **-0.4** |
| KAPI | | | | IAmb | IAmb | 12 17 39.3 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **28.84** | **234** | P | **P** | **12 17 38.7** | **-0.6** |
| | comp=Z,7.6nm,0.6s,baz=176,slow=6.0,SNR=4.3 | | | | | | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **31.30** | **207** | | **P** | **12 18 01.0** | **+0.1** |
| **CTAO** | **Charters Tower** | **32.57** | **174** | P | **P** | **12 18 12.5** | **+0.5** |
| CTAO | | | | IAmb | IAmb | 12 18 13.2 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **32.93** | **346** | P | **P** | **12 18 14.3** | **-0.6** |
| | comp=Z,3.9nm,0.8s,baz=171,slow=12,SNR=6.3 | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.15** | **195** | P | **P** | **12 18 17.1** | **0.0** |
| **WR0** | **Warramunga Arr** | **33.30** | **194** | P | **P** | **12 18 18.3** | **-0.1** |
| **WRAB** | **Tennant Creek** | **33.32** | **195** | P | **P** | **12 18 18.6** | **0.0** |
| **WB2** | **Warramunga Arr** | **33.33** | **195** | P | **P** | **12 18 18.7** | **0.0** |
| WB2 | | | | IAmb | IAmb | 12 18 20.2 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.33** | **195** | P | **P** | **12 18 18.5** | **-0.2** |
| | comp=Z,2.3nm,0.6s,baz=15,slow=9.4,SNR=26 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 20 57.8** | **-0.8** |
| | comp=Z,0.6nm,0.6s,baz=359,slow=3.2,SNR=3.4 | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **35.35** | **235** | P | **P** | **12 18 34.8** | **-1.4** |
| **ENH** | **Enshi** | **35.58** | **305** | P | **P** | **12 18 38.1** | **+0.1** |
| **BJT** | **Baijiatuan** | **36.12** | **324** | P | **P** | **12 18 42.2** | **-0.3** |
| BJT | | | | IAmb | IAmb | 12 18 45.2 | |
| | comp=Z,9.1nm,0.6s | | | | | | |
| **UBPT** | **Khong Chiam** | **36.40** | **279** | P | **P** | **12 18 46.4** | **+1.2** |
| **AS31** | **Alice Springs** | **37.01** | **194** | P | **P** | **12 18 51.7** | **+1.4** |
| **ASAR** | **Alice Springs** | **37.02** | **194** | P | **P** | **12 18 50.5** | **+0.2** |
| | comp=Z,1.1nm,0.4s,baz=23,slow=11,SNR=38 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 21 09.1** | **-0.3** |
| | comp=Z,1.0nm,0.9s,baz=44,slow=3.2,SNR=3.4 | | | | | | |
| ASAR | | | | LR | LR | 12 35 50.8 | |
| | comp=Z,64nm,18.2s,baz=338,slow=39 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **KLR** | **Kul'dur** | **37.75** | **348** | P | **P** | **12 18 56.1** | **-0.1** |
| | comp=Z,2.0nm,0.7s,baz=157,slow=9.3,SNR=5.8 | | | | | | |
| KLR | | | | LR | LR | 12 32 01.4 | |
| | comp=Z,57nm,21.3s,baz=179,slow=32 | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **UGM** | **Wanagama** | **38.03** | **239** | P | **P** | **12 18 58.0** | **-1.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SLVN** | **Son La** | **38.22** | **289** | P | **P** | **12 19 01.0** | **+0.4** |
| SLVN | | | | IAmb | IAmb | 12 19 02.7 | | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| **EIDS** | **Eidsvold** | **38.49** | **168** | P | **P** | **12 19 02.4** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 12 19 02.9 | | |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **MBWA** | **Marble Bar** | **40.46** | **214** | P | **P** | **12 19 18.9** | **-0.2** |
| MBWA | | | | IAmb | IAmb | 12 19 19.7 | | |
| | comp=Z,7.9nm,0.8s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **40.73** | **214** | P | **P** | **12 19 21.0** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 12 19 38.4 | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **CRAI** | **Chiangrai** | **41.41** | **286** | P | **P** | **12 19 28.1** | **+1.1** |
| CRAI | | | | IAmb | IAmb | 12 19 28.8 | | |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.68** | **284** | P | **P** | **12 19 38.3** | **+1.0** |
| | comp=Z,9.5nm,0.8s,baz=86,slow=6.3,SNR=47 | | | | | | | |
| | comp=Z,9.5nm,0.8s | | | | | | | |
| **XMIS** | **Christmas Isla** | **43.46** | **240** | P | **P** | **12 19 41.9** | **-1.8** |
| **ARMA** | **Armidale** | **43.51** | **169** | P | **P** | **12 19 43.8** | **-0.1** |
| ARMA | | | | IAmb | IAmb | 12 19 55.6 | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **44.15** | **182** | P | **P** | **12 19 48.1** | **-0.8** |
| **STKA** | **Stephens Creek** | **44.15** | **182** | P | **P** | **12 19 48.2** | **-0.7** |
| | comp=Z,4.5nm,0.6s,baz=352,slow=9.1,SNR=8.0 | | | | | | | |
| | comp=Z,4.5nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **45.34** | **198** | P | **P** | **12 19 58.4** | **+0.1** |
| **BBOO** | **Buckleboo** | **45.54** | **188** | P | **P** | **12 19 59.7** | **-0.2** |
| BBOO | | | | IAmb | IAmb | 12 20 06.4 | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **46.19** | **327** | P | **P** | **12 20 04.2** | **-0.9** |
| **SONM** | **Songino Array** | **46.52** | **326** | P | **P** | **12 20 08.0** | **+0.4** |
| | comp=Z,2.5nm,0.5s,baz=146,slow=7.0,SNR=12 | | | | | | | |
| SONM | | | | PcP | **PcP** | **12 21 40.0** | **-0.5** | |
| | comp=Z,1.6nm,0.6s,baz=145,slow=3.6,SNR=5.2 | | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | | |
| **SHL** | **Shillong** | **49.65** | **293** | P | **P** | **12 20 31.6** | **-0.6** |
| **YAK** | **Yakutsk** | **50.35** | **352** | P | **P** | **12 20 37.0** | **+0.4** |
| YAK | | | | IAmb | IAmb | 12 20 37.9 | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **50.78** | **298** | P | **P** | **12 20 42.1** | **+1.2** |
| LSA | | | | IAmb | IAmb | 12 20 42.8 | | |
| | comp=Z,8.5nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.93** | **317** | P | **P** | **12 21 53.0** | **+0.3** |
| | comp=Z,2.8nm,0.8s,baz=93,slow=8.9,SNR=15 | | | | | | | |
| | comp=Z,2.8nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **61.14** | **317** | P | **P** | **12 21 54.2** | **+0.2** |
| MAKZ | | | | IAmb | IAmb | 12 21 55.4 | | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **61.38** | **325** | P | **P** | **12 21 54.5** | **-0.9** |
| ZAA0 | | | | IAmb | IAmb | 12 21 55.8 | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.38** | **325** | P | **P** | **12 21 55.1** | **-0.4** |
| | comp=Z,6.2nm,0.4s,baz=109,slow=7.3,SNR=24 | | | | | | | |
| ZALV | | | | PcP | **sP** | **12 22 35.5** | **+5.8** | |
| | comp=Z,2.6nm,0.5s,baz=107,slow=2.6,SNR=6.8 | | | | | | | |
| | comp=Z,6.2nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **64.17** | **320** | P | **P** | **12 22 13.5** | **-0.5** |
| **KURBB** | **Kurchatov Arra** | **64.20** | **320** | P | **P** | **12 22 14.0** | **-0.3** |
| | comp=Z,11nm,0.5s,baz=106,slow=6.7,SNR=64 | | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | | |
| **BTK** | **Batken** | **68.36** | **308** | P | **P** | **12 22 40.3** | **-0.8** |
| **KKAR** | **Karatay Array** | **68.70** | **311** | | **P** | **12 22 42.0** | **-1.1** |
| **GAR** | **Garm** | **68.72** | **307** | | **P** | **12 22 41.6** | **-1.9** |
| GAR | | | | IAmb | IAmb | 12 22 44.2 | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **MLY** | **Manley** | **68.84** | **25** | P | **P** | **12 22 43.6** | **0.0** |
| **PWL** | **Port Wells** | **68.85** | **29** | P | **P** | **12 22 43.1** | **-0.6** |
| PWL | | | | IAmb | IAmb | 12 22 51.1 | | |
| | comp=Z,9.2nm,1.1s | | | | | | | |
| **BVAR** | **Borovoye Array** | **69.57** | **322** | P | **P** | **12 22 48.2** | **-0.1** |
| | comp=Z,11nm,0.4s,baz=91,slow=8.6,SNR=46 | | | | | | | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **CHGR** | **Chuyangaron** | **69.62** | **307** | | **P** | **12 22 49.0** | **0.0** |
| CHGR | | | | IAmb | IAmb | 12 22 49.2 | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **69.64** | **322** | P | **P** | **12 22 48.6** | **-0.1** |
| **SIMJ** | **Simiganj** | **69.74** | **307** | P | **P** | **12 22 49.3** | **-0.5** |
| SIMJ | | | | IAmb | IAmb | 12 22 50.5 | | |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| **KBL** | **Kabul** | **69.77** | **302** | P | **P** | **12 22 49.5** | **-0.7** |
| **ILAR** | **Eielson Array** | **70.36** | **25** | P | **P** | **12 22 51.1** | **-1.8** |
| | comp=Z,0.6nm,0.5s,baz=247,slow=5.9,SNR=18 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **76.04** | **318** | P | **P** | **12 23 25.9** | **-0.7** |
| **ARU** | **Arti** | **76.55** | **325** | P | **P** | **12 23 28.3** | **-1.0** |
| **BELG** | **Belogornoye** | **83.38** | **322** | P | **P** | **12 24 06.0** | **-0.2** |
| | comp=Z,15nm,0.8s,baz=68,slow=11,SNR=7.4 | | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.69** | **27** | P | **P** | **12 24 11.8** | **-0.9** |
| | comp=Z,0.5nm,0.6s,baz=293,slow=5.3,SNR=6.4 | | | | | | | |
| YKA | | | | LR | LR | 13 01 08.8 | | |
| | comp=Z,18nm,19.9s,baz=332,slow=35 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **85.03** | **49** | LR | LR | 13 02 13.7 | | |
| | comp=Z,9.4nm,18.6s,baz=280,slow=36 | | | | | | | |
| **NEW** | **Newport** | **87.31** | **41** | LR | LR | 12 55 13.6 | | |
| | comp=Z,18nm,21.4s,baz=292,slow=30 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.50** | **342** | P | **P** | **12 24 25.6** | **-0.8** |
| | comp=Z,2.6nm,0.9s,baz=62,slow=6.3,SNR=2.3 | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.10** | **51** | P | **P** | **12 24 35.0** | **+0.1** |
| | comp=Z,0.8nm,0.6s,baz=268,slow=5.7,SNR=11 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| **ELK** | **Elko** | **90.73** | **48** | LR | LR | 12 58 28.6 | | |
| | comp=Z,21nm,20.0s,baz=195,slow=31 | | | | | | | |
| **FINES** | **FINESS Array B** | **91.31** | **335** | P | **P** | **12 24 42.7** | **-1.6** |
| | comp=Z,0.8nm,0.4s,baz=62,slow=3.9,SNR=8.0 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **94.09** | **45** | LR | LR | 12 58 48.3 | | |
| | comp=Z,10nm,20.8s,baz=318,slow=30 | | | | | | | |
| **AKASG** | **Malin Array Be** | **94.77** | **324** | LR | LR | 13 09 13.0 | | |
| | comp=Z,16nm,18.7s,baz=60,slow=36 | | | | | | | |
| **LPIG** | **La Paz** | **99.82** | **63** | LR | LR | 13 07 25.3 | | |
| | comp=Z,13nm,18.2s,baz=183,slow=33 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **133.84** | **302** | PKP | **PKPdf** | **12 30 56.1** | **-0.3** | |
| | comp=Z,0.3nm,0.5s,baz=47,slow=3.0,SNR=4.5 | | | | | | | |
| **LPAZ** | **La Paz** | **149.74** | **101** | PKPbc | **PKPbc** | **12 31 30.9** | **+0.8** | |
| | comp=Z,4.9nm,0.8s,baz=265,slow=1.6,SNR=6.9 | | | | | | | |

**IDC 29 12:16:22.2±2.5, 10°.89S×124°.03E, h0km, mb3.5/1, mbtmp3.6/3, ML3.6/2, Error ellipse: s-maj=221.5km s-min=34.4km az=53.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.40** | **133** | P | Pn | 12 19 33.7 | -0.2 |
| | 0.3nm,0.3s,baz=311,slow=15,SNR=11 | | | | | | |
| WRA | | | | Sn | Sn | 12 21 54.2 | -10 |
| | 0.3nm,0.3s,baz=322,slow=24,SNR=7.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **15.81** | **145** | Pn | Pn | 12 20 06.7 | +0.3 |
| | 0.2nm,0.3s,baz=320,slow=13,SNR=9.3 | | | | | | |
| ASAR | | | | Sn | Sn | 12 22 54.7 | -7.7 |
| | 0.1nm,0.3s,baz=97,slow=9.7,SNR=4.1 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.46** | **331** | P | P | 12 27 26.2 | 0.0 |
| | 0.2nm,0.5s,baz=152,slow=6.5,SNR=2.3 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*SOME **29** 12:21:05.9, 44°.55N×84°.65E, h10km*
*NNC **29** 12:21:09.9±4.2, 44°.54N×84°.42E, h0km, mb3.5, mpv3.3, Error ellipse: s-maj=35.1km s-min=15.6km az=123.0*

**ISC 29 12:21:06.2±2.7, 44°.4N±0°.1×84°.6E±0°.1, h10km, n13, σ2s46/19, 2C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MK31** | **Makanchi Array** | **2.87** | **326** | ⇑Pg | **Pb** | **12 21 58.2** | **+0.6** |
| | 2.0nm,0.3s,baz=135,slow=17,SNR=14 | | | | | | |
| MK31 | | | | Lg | Lg | 12 22 36.0 | |
| | 4.5nm,0.2s,baz=143,slow=29,SNR=16 | | | | | | |
| **MAKZ** | **Makanchi** | **3.01** | **323** | ⇑Pn | **Pb** | **12 22 00.1** | **+0.1** |
| | 5.7nm,0.8s | | | | | | |
| MAKZ | | | | ⇓Lg | Lg | 12 22 40.8 | |
| | 12nm,1.1s | | | | | | |
| **ZSN** | **Zaisan** | **3.02** | **3** | *e*P | **Pb** | **12 22 00.1** | **0.0** |
| | 2.9nm,0.2s | | | | | | |
| ZSN | | | | *e*S | **Sb** | **12 22 38.8** | **+1.7** |
| | 13nm,0.5s | | | | | | |
| **ZSN** | **Zaisan** | **3.02** | **3** | Pg | **Pb** | **12 22 00.1** | **0.0** |
| | 2.9nm,0.2s | | | | | | |
| ZSN | | | | Lg | Lg | 12 22 40.4 | |
| | 13nm,0.5s | | | | | | |
| **KTMS** | **Ketmen** | **3.24** | **254** | *e*P | **Pb** | **12 22 05.1** | **+1.3** |
| | 0.5nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sg** | **12 22 47.8** | **-2.4** |
| | 6.5nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **3.46** | **270** | *e*P | **Pb** | **12 22 09.3** | **+1.6** |
| | 1.9nm,0.3s | | | | | | |
| DJR | | | | *e*S | **Sg** | **12 22 54.8** | **-2.7** |
| | 7.7nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **3.46** | **270** | Pg | **Pb** | **12 22 09.3** | **+1.6** |
| | 1.9nm,0.3s | | | | | | |
| DJR | | | | Lg | Lg | 12 22 56.5 | |
| | 7.7nm,0.4s | | | | | | |
| **SHLS** | **Shalkode** | **3.95** | **253** | *e*P | **Pb** | **12 22 14.2** | **-1.7** |
| | 5.1nm,0.3s | | | | | | |
| SHLS | | | | *e*S | **Sb** | **12 23 03.6** | **-0.2** |
| | 29nm,0.7s | | | | | | |
| **SHLS** | **Shalkode** | **3.95** | **253** | Pg | **Pb** | **12 22 14.2** | **-1.7** |
| | 5.1nm,0.3s | | | | | | |
| SHLS | | | | Lg | Lg | 12 23 03.6 | |
| | 29nm,0.7s | | | | | | |
| **KPKS** | **Kokpek** | **4.39** | **259** | *e*P | **Pb** | **12 22 27.7** | **+4.1** |
| | 3.5nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **12 23 26.1** | **-1.2** |
| | 15nm,0.6s | | | | | | |
| **BLB** | **Baldybastay** | **4.42** | **268** | Pg | **Pb** | **12 22 28.1** | **+4.1** |
| | 6.4nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 12 23 25.4 | |
| | 14nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **4.88** | **270** | *e*P | **Pb** | **12 22 35.1** | **+3.3** |
| | 1.0nm,0.2s | | | | | | |
| ARXS | | | | *e*S | **Sg** | **12 23 39.4** | **-3.4** |
| | 7.8nm,0.3s | | | | | | |
| **ARXS** | **Arharly** | **4.88** | **270** | Pg | **Pb** | **12 22 35.1** | **+3.3** |
| | 1.0nm,0.2s | | | | | | |
| ARXS | | | | Lg | Lg | 12 23 39.4 | |
| | 7.8nm,0.3s | | | | | | |

*SJA **29** 12:24:55.5±0.8, 20°.67S×68°.91W, h118km±7km, ML4.3, MW4.3*
*GUC **29** 12:24:56.9±0.7, 20°.72S×68°.95W, h101km±5km, ML4.2*
*IDC **29** 12:24:57.6±0.6, 20°.66S×68°.70W, h109km±5km, mb3.6/9, mbtmp4.0/12, Error ellipse: s-maj=20.3km s-min=6.7km az=94.0*
*VAO **29** 12:24:57.1±0.6, 20°.58S×68°.74W, h93km±4km, mb4.4*
*NEIC **29** 12:24:57.4±1.6, 20°.73S±0°.04×68°.99W±0°.07, h102km±8km, mb4.3/8, ML4.1(GUC), Error ellipse: s-maj=9.6km s-min=6.0km az=73.0*

**ISC 29 12:24:56.8±0.5, 20°.66S±0°.03×68°.90W±0°.05, h104km±4km, n100, σ1s18/123, mb4.0/11, 2C-1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PX03** | **IPOC Station P** | **0.73** | **291** | *e*P | **Pn** | **12 25 14.4** | **-0.6** |
| PX03 | | | | *i* S | **Sn** | **12 25 28.6** | **-0.1** |
| PX03 | | | | IAML | | 12 25 29.6 | |
| | comp=N,11μm,0.6s | | | | | | |
| **GO01** | **Chusmiza** | **1.03** | **345** | | **Pn** | **12 25 19.6** | **+1.3** |
| **GO01** | **Chusmiza** | **1.03** | **345** | *e*P | **Pn** | **12 25 19.2** | **+0.8** |
| GO01 | | | | *e*P | | 12 25 19.4 | |
| GO01 | | | | *e*S | **Sn** | **12 25 36.3** | **+1.8** |
| **GO01** | **Chusmiza** | **1.03** | **345** | *e*P | **Pn** | **12 25 19.4** | **+1.0** |
| GO01 | | | | *i* S | **Sn** | **12 25 35.9** | **+1.4** |
| GO01 | | | | IAML | | 12 25 38.0 | |
| | comp=N,10μm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **1.17** | **196** | | **Pn** | **12 25 19.5** | **-0.1** |
| PB09 | | | | Sn | **Sn** | **12 25 36.8** | **0.0** |
| **PB09** | **IPOC Station P** | **1.17** | **196** | *e*P | **Pn** | **12 25 19.5** | **-0.1** |
| PB09 | | | | *e*S | **Sn** | **12 25 37.7** | **+0.9** |
| PB09 | | | | IAML | | 12 25 39.0 | |
| | comp=Z,4μm,0.6s | | | | | | |
| **PB09** | **IPOC Station P** | **1.17** | **196** | *e*P | **Pn** | **12 25 19.5** | **-0.1** |
| PB09 | | | | *i* S | **Sn** | **12 25 36.4** | **-0.5** |
| PB09 | | | | IAML | | 12 25 38.9 | |
| | comp=N,4μm,0.5s | | | | | | |
| **TA01** | **Diego Aracena** | **1.20** | **274** | Pn | **Pn** | **12 25 19.6** | **-0.1** |
| TA01 | | | | Sn | **Sn** | **12 25 37.1** | **0.0** |
| **TA01** | **Diego Aracena** | **1.20** | **274** | *e*S | **Pn** | **12 25 19.4** | **-0.3** |
| TA01 | | | | *e*P | **Pn** | **12 25 19.4** | **-0.3** |
| TA01 | | | | IAML | | 12 25 19.9 | |
| | comp=Z,4μm,0.2s | | | | | | |
| TA01 | | | | *e*S | **Sn** | **12 25 38.7** | **+1.6** |
| **TA01** | **Diego Aracena** | **1.20** | **274** | ⇑*i* P | **Pn** | **12 25 19.5** | **-0.3** |
| TA01 | | | | *i* S | **Sn** | **12 25 36.7** | **-0.4** |
| TA01 | | | | IAML | | 12 25 37.8 | |
| | comp=E,8μm,0.3s | | | | | | |
| **TA02** | **Huaiquique** | **1.22** | **289** | | **Pn** | **12 25 20.2** | **+0.3** |
| **TA02** | **Huaiquique** | **1.22** | **289** | *e*P | **Pn** | **12 25 20.2** | **+0.3** |
| TA02 | | | | IAML | **S** | **12 25 38.8** | **+1.4** |
| | comp=Z,4μm,0.1s | | | | | | |
| TA02 | | | | *e*S | **S** | **12 25 38.8** | **+1.4** |
| **TA02** | **Huaiquique** | **1.22** | **289** | *e*P | **Pn** | **12 25 20.1** | **+0.2** |
| TA02 | | | | *i* S | **Sn** | **12 25 37.7** | **+0.3** |
| TA02 | | | | IAML | | 12 25 38.8 | |
| | comp=N,5μm,0.1s | | | | | | |
| **LVC** | **Limon Verde** | **1.94** | **180** | | **Pn** | **12 25 30.0** | **+0.9** |
| **LVC** | **Limon Verde** | **1.94** | **180** | *e*P | **Pn** | **12 25 29.6** | **+0.6** |
| LVC | | | | *e*S | **Sn** | **12 25 56.0** | **+2.3** |
| **LVC** | **Limon Verde** | **1.94** | **180** | P | **Pn** | **12 25 29.7** | **+0.6** |
| | comp=N,192nm,0.3s,baz=16,slow=10,SNR=328 | | | | | | |
| LVC | | | | S | **Sn** | **12 25 55.2** | **+1.5** |
| | comp=N,475nm,0.3s,baz=158,slow=18,SNR=32 | | | | | | |
| **LVC** | **Limon Verde** | **1.94** | **180** | ⇓*e*P | **Pn** | **12 25 29.5** | **+0.4** |
| LVC | | | | *i* S | **Sn** | **12 25 53.9** | **+0.2** |
| LVC | | | | IAML | | 12 26 04.2 | |
| | comp=N,4μm,0.3s | | | | | | |
| **LVC** | **Limon Verde** | **1.94** | **180** | *e*P | **Pn** | **12 25 29.7** | **+0.6** |
| **PB04** | **IPOC Station P** | **2.03** | **215** | Pn | **Pn** | **12 25 29.7** | **-0.4** |
| **PB04** | **IPOC Station P** | **2.03** | **215** | *e*P | **Pn** | **12 25 30.3** | **+0.2** |
| PB04 | | | | *e*S | **Sn** | **12 25 56.1** | **+0.7** |
| PB04 | | | | IAML | | 12 26 02.8 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.03** | **215** | ⇑*e*P | **Pn** | **12 25 29.7** | **-0.4** |
| PB04 | | | | *i* S | **Sn** | **12 25 55.0** | **-0.4** |
| PB04 | | | | IAML | | 12 25 59.6 | |
| | comp=E,3μm,0.5s | | | | | | |
| **PX02** | **IPOC Station P** | **2.08** | **324** | *e*P | **Pn** | **12 25 30.3** | **-0.5** |
| PX02 | | | | *i* S | **Sn** | **12 25 54.7** | **-1.9** |
| PX02 | | | | IAML | | 12 26 05.3 | |
| | comp=N,1μm,0.3s | | | | | | |
| **AF01** | **San Pedro de A** | **2.38** | **164** | | **Pn** | **12 25 36.4** | **+1.7** |
| **AF01** | **San Pedro de A** | **2.38** | **164** | *e*P | **Pn** | **12 25 36.8** | **+2.1** |
| AF01 | | | | IAML | | 12 26 54.0 | |
| | comp=Z,827nm,0.6s | | | | | | |
| **AP01** | **Chacalluta** | **2.65** | **329** | | **Pn** | **12 25 38.5** | **+0.5** |
| **AP01** | **Chacalluta** | **2.65** | **329** | *e*P | **Pn** | **12 25 38.2** | **+0.2** |
| AP01 | | | | IAML | | 12 26 20.2 | |
| | comp=Z,1μm,0.8s | | | | | | |
| **AP01** | **Chacalluta** | **2.65** | **329** | *e*P | **Pn** | **12 25 37.6** | **-0.4** |
| AP01 | | | | *i* S | **Sn** | **12 26 07.0** | **-2.7** |
| **PB18** | **Visviri** | **3.11** | **350** | Pn | **Pn** | **12 25 46.4** | **+1.8** |
| **YJA** | **Yavi** | **3.50** | **116** | *e*P | **Pn** | **12 25 52.0** | **+2.3** |
| **PB14** | **IPOC Station P** | **4.18** | **199** | Pn | **Pn** | **12 25 58.1** | **-0.7** |
| **LPAZ** | **La Paz** | **4.41** | **10** | P | **Pn** | **12 26 04.7** | **+2.4** |
| | comp=Z,20nm,0.3s,baz=178,slow=4.3,SNR=93 | | | | | | |
| LPAZ | | | | S | **Sn** | **12 26 54.3** | **+1.4** |
| | comp=Z,26nm,0.7s,baz=23,slow=5.7,SNR=5.8 | | | | | | |
| **GO02** | **Mina Guanaco** | **4.52** | **188** | | **Pn** | **12 26 02.8** | **-0.6** |
| **GO02** | **Mina Guanaco** | **4.52** | **188** | *e*P | **Pn** | **12 26 02.6** | **-0.7** |
| **SLA** | **San Lorenzo** | **5.11** | **143** | *e*P | **Pn** | **12 26 13.8** | **+2.5** |
| **AC01** | **Pan de Azucar** | **5.68** | **196** | | **Pn** | **12 26 15.7** | **-3.1** |
| **AC06** | **Mina Casimiro** | **6.79** | **191** | | **Pn** | **12 26 32.3** | **-1.6** |
| **AC04** | **Llanos de Chal** | **7.76** | **194** | Pn | **Pn** | **12 26 41.5** | **-5.5** |
| **FDPY** | **Filadelfia** | **8.50** | **103** | *e*P | **Pn** | **12 26 55.8** | **-1.2** |
| **BBSD** | **Serra de San D** | **8.58** | **68** | *e*P | **Pn** | **12 26 55.5** | **-2.7** |
| **SIV** | **San Ignacio** | **8.77** | **59** | P | **Pn** | **12 26 59.1** | **-1.7** |
| | comp=Z,19nm,0.6s,baz=246,slow=11,SNR=36 | | | | | | |
| **CO01** | **Juntas del Tor** | **9.34** | **186** | Pn | **Pn** | **12 27 07.9** | **-0.8** |
| **BBLB** | **La Banda, Boli** | **9.72** | **80** | *e*P | **Pn** | **12 27 11.2** | **-2.6** |
| **CO03** | **El Pedregal** | **10.26** | **189** | Pn | **Pn** | **12 27 20.1** | **-1.0** |
| **VBST** | **Vila Bela da S** | **10.44** | **66** | *e*P | **Pn** | **12 27 21.9** | **-1.5** |
| **PAPY** | **Pozo Azul** | **10.45** | **111** | *e*P | **Pn** | **12 27 22.0** | **-1.5** |
| **MURT** | **Porto Murtinho** | **10.59** | **97** | *e*P | **Pn** | **12 27 22.6** | **-2.8** |
| **PTLB** | **Pontes e Lacer** | **10.64** | **62** | Pn | **Pn** | **12 27 27.0** | **+0.8** |
| **PTLB** | **Pontes e Lacer** | **10.64** | **62** | *e*P | **Pn** | **12 27 24.7** | **-1.5** |
| **ETMB** | **Extrema** | **11.09** | **14** | Pn | **Pn** | **12 27 31.8** | **-0.5** |
| **ETMB** | **Extrema** | **11.09** | **14** | *e*P | **Pn** | **12 27 31.9** | **-0.5** |
| **VILB** | **Vilhena** | **11.32** | **49** | Pn | **Pn** | **12 27 36.6** | **+1.2** |
| **VILB** | **Vilhena** | **11.32** | **49** | *e*P | **Pn** | **12 27 33.7** | **-1.7** |
| **CPUP** | **Villa Florida** | **12.02** | **120** | P | **Pn** | **12 27 43.3** | **-1.4** |
| | comp=Z,2.8nm,0.6s,baz=302,slow=12,SNR=5.8 | | | | | | |
| **POCN** | **Pocone** | **12.21** | **73** | *e*P | **Pn** | **12 27 45.1** | **-2.1** |
| **SJPY** | **San Joaquin** | **12.56** | **112** | *e*P | **Pn** | **12 27 50.7** | **-1.2** |
| **RVDE** | **Rio Verde (Bra** | **13.24** | **85** | *e*P | **Pn** | **12 27 57.5** | **-3.2** |
| **RPRD** | **Ribas do Rio P** | **14.24** | **92** | *e*P | **Pn** | **12 28 13.3** | **-0.4** |
| **RODS** | **Rosario do Sul** | **15.67** | **131** | *e*P | **Pn** | **12 28 32.3** | **+0.5** |
| **PTGB** | **Pitanga** | **16.05** | **108** | *e*P | **P** | **12 28 38.1** | **+0.1** |
| **ALGR** | **Alto Alegre (B** | **16.53** | **122** | *e*P | **P** | **12 28 43.0** | **-0.3** |
| **ITAB** | **Concordia** | **16.66** | **116** | P | **P** | **12 28 44.5** | **-0.1** |
| **ITAB** | **Concordia** | **16.66** | **116** | *e*P | **Pn** | **12 28 43.7** | **-0.3** |
| **LDASE** | **Londrina, Braz** | **16.71** | **103** | *e*P | **P** | **12 28 45.8** | **+0.5** |
| **ARAG** | **Araguaiana, MT** | **16.97** | **76** | *e*P | **Pn** | **12 28 46.7** | **-1.2** |
| **CPSB** | **Cacapava Do Su** | **16.98** | **128** | *e*P | **Pn** | **12 28 47.1** | **-0.8** |
| **ITRB** | **Iturama** | **17.44** | **90** | *e*P | **P** | **12 28 53.0** | **-0.3** |
| **PLTB** | **Pedras Altas** | **17.60** | **132** | P | **P** | **12 28 54.0** | **-1.0** |
| **FRTB** | **Fartura** | **18.13** | **102** | *e*P | **P** | **12 29 00.5** | **-0.4** |
| **CNLB** | **Canela** | **18.47** | **121** | *e*P | **P** | **12 29 03.7** | **-1.0** |
| **SNDB** | **Serra Nova Dou** | **18.96** | **66** | *e*P | **P** | **12 29 09.9** | **-0.2** |
| **BB19B** | **Bebedouro** | **19.05** | **95** | *e*P | **P** | **12 29 10.2** | **-0.8** |
| **IPMB** | **Ipameri, GO** | **19.71** | **86** | *e*P | **P** | **12 29 17.8** | **-0.4** |
| **PLCA** | **Paso Flores** | **20.05** | **184** | P | Pn | **12 29 24.3** | **-0.2** |
| | comp=Z,3.0nm,0.9s,baz=336,slow=9.1,SNR=5.5 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **PET01** | **Itanhaem-SP** | **20.31** | **104** | *e*P | **P** | **12 29 24.2** | **-0.3** |
| **VAO** | **Valinhos** | **20.50** | **101** | *e*P | **P** | **12 29 25.4** | **-1.3** |
| **ITTB** | **Itaituba** | **20.65** | **40** | *e*P | **P** | **12 29 27.0** | **-1.3** |
| **BSCB** | **Bom Sucesso** | **22.55** | **95** | *e*P | **P** | **12 29 48.7** | **+0.2** |
| **BOAV** | **Boa Vista** | **24.34** | **21** | P | **P** | **12 30 05.6** | **+0.5** |
| BOAV | | | | IAmb | IAmb | 12 30 07.4 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **BOAV** | **Boa Vista** | **24.34** | **21** | *e*P | **P** | **12 30 04.7** | **-0.4** |
| **SDBA** | **SAO DESIDERIO** | **24.40** | **74** | *e*P | **P** | **12 30 04.5** | **-1.2** |
| **CELP** | **Cerrillos** | **38.57** | **4** | P | **P** | **12 32 09.8** | **+0.2** |
| **SAND** | **Sanderson** | **59.63** | **327** | P | **P** | **12 34 50.5** | **+0.4** |
| SAND | | | | IAmb | IAmb | 12 34 51.5 | |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **59.95** | **325** | P | **P** | **12 34 53.2** | **+0.9** |
| | comp=Z,0.5nm,0.7s,baz=151,slow=8.0,SNR=4.7 | | | | | | |
| TXAR | | | | pP | **pP** | **12 35 19.0** | **+0.2** |
| | comp=Z,0.1nm,0.4s,baz=264,slow=35,SNR=2.4 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **VHRN** | **Van Horn** | **61.79** | **325** | P | **P** | **12 35 05.9** | **+1.0** |
| VHRN | | | | IAmb | IAmb | 12 35 06.2 | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **63.06** | **161** | P | **P** | **12 35 13.5** | **+0.8** |
| SNAA | | | | IAmb | IAmb | 12 35 41.0 | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **63.06** | **161** | P | **P** | **12 35 12.9** | **+0.3** |
| | comp=Z,0.5nm,0.6s,baz=268,slow=14,SNR=1.8 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.52** | **180** | P | **P** | **12 35 55.2** | **+1.1** |
| **QSPA** | **South Pole Qui** | **69.52** | **180** | P | **P** | **12 35 55.1** | **+1.1** |
| | comp=Z,1.2nm,0.7s,baz=181,slow=1.9,SNR=14 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **73.39** | **330** | P | **P** | **12 36 18.3** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=133,slow=9.2,SNR=2.4 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **ULM** | **Lac du Bonnet** | **74.53** | **342** | P | **P** | **12 36 23.8** | **0.0** |
| | comp=Z,2.4nm,0.4s,baz=156,slow=5.8,SNR=7.2 | | | | | | |
| | comp=Z,2.4nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.84** | **322** | P | **P** | **12 36 26.9** | **+0.7** |
| | comp=Z,0.7nm,0.9s,baz=150,slow=6.8,SNR=4.9 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.07** | **71** | P | **P** | **12 36 37.6** | **-1.5** |
| | comp=Z,0.9nm,0.3s,baz=259,slow=5.0,SNR=18 | | | | | | |
| TORD | | | | pP | **pP** | **12 37 06.0** | **-1.1** |
| | comp=Z,0.9nm,0.5s,baz=267,slow=5.2,SNR=3.7 | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **YKA** | **Yellowknife Ar** | **90.40** | **341** | P | **P** | **12 37 46.4** | **+0.5** |
| | comp=Z,1.4nm,0.9s,baz=131,slow=3.7,SNR=7.1 | | | | | | |
| YKA | | | | pP | **pP** | **12 38 15.7** | **+1.2** |
| | comp=Z,0.7nm,0.7s,baz=134,slow=3.6,SNR=4.2 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **130.65** | **208** | PKP | **PKPdf** | **12 43 55.6** | **-0.8** |
| | comp=

**NEIC 29 12:36:03.0±1.5, 40.36N±0.02×127.0W±0.1, h10km±2km, ML2.9/46, MLc3.0/6(NCEDC), Error ellipse: s-maj=15.0km s-min=3.0km az=260.0, Off coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KCTM** | **Capetown** | **2.05** | **86** | | Pn | 12 36 38.0 | +0.5 |
| KCTM | | | | | Sn | 12 37 03.6 | +0.5 |
| **KMPM** | **Mount Pierce** | **2.21** | **87** | Pn | Pn | 12 36 40.7 | +0.8 |
| KMPM | | | | Sn | Sn | 12 37 08.7 | +1.4 |
| KMPM | comp=N,70nm,0.3s | | | IAML | | 12 37 09.2 | |
| KMPM | comp=E,94nm,0.7s | | | IAML | | 12 37 11.2 | |
| **JCC** | **Jacoby Creek,** | **2.32** | **78** | Pn | Pn | 12 36 40.5 | -0.8 |
| JCC | | | | Sn | Sn | 12 37 08.7 | -1.1 |
| **KRPM** | **Rodgers** | **2.41** | **70** | Pn | Pn | 12 36 43.0 | +0.4 |
| KRPM | | | | IAML | | 12 37 09.2 | |
| KRPM | comp=E,54nm,3.6s | | | IAML | | 12 37 15.1 | |
| KRPM | comp=N,42nm,2.1s | | | IAML | | 12 37 15.1 | |
| **KCRM** | **Chalk Rock** | **2.44** | **87** | | Pn | 12 36 43.2 | +0.2 |
| **KMRM** | **Mail Ridge** | **2.53** | **92** | | Pn | 12 36 45.5 | +1.3 |
| KMRM | | | | IAML | | 12 37 18.7 | |
| KMRM | comp=E,39nm,0.7s | | | IAML | | 12 37 20.2 | |
| KMRM | comp=N,39nm,0.8s | | | IAML | | 12 37 20.2 | |
| **KHMM** | **Horse Mountain** | **2.55** | **77** | Pn | Pn | 12 36 44.9 | +0.3 |
| **KRMB** | **Red Mountain** | **2.63** | **63** | Pn | Pn | 12 36 45.2 | -0.4 |
| KRMB | | | | IAML | | 12 37 55.9 | |
| KRMB | comp=N,25nm,2.7s | | | IAML | | 12 37 55.9 | |
| **KCPM** | **Cahto Peak** | **2.72** | **103** | Pn | Pn | 12 36 47.5 | +0.6 |
| **KSXB** | **Camp Six Broad** | **2.79** | **57** | Pn | Pn | 12 36 47.4 | -0.5 |
| KSXB | | | | IAML | | 12 38 32.6 | |
| KSXB | comp=N,23nm,2.6s | | | IAML | | 12 38 32.6 | |
| **KBO** | **Bosley Butte** | **2.80** | **48** | Pn | Pn | 12 36 47.3 | -0.7 |
| KBO | | | | IAML | | 12 37 55.1 | |
| KBO | comp=N,56nm,4.2s | | | IAML | | 12 38 32.7 | |
| KBO | comp=E,80nm,2.1s | | | IAML | | 12 38 32.7 | |
| **GTC** | **Three Chop Rid** | **2.83** | **109** | | Pn | 12 36 48.5 | +0.2 |
| **L02F** | **Cave Junction** | **3.14** | **55** | | Pn | 12 36 52.8 | +0.3 |
| L02F | | | | IAML | | 12 37 16.4 | |
| L02F | comp=E,16nm,3.7s | | | IAML | | 12 37 16.4 | |
| **O02D** | **Mt. Diablo Mer** | **3.24** | **92** | | Pn | 12 36 55.1 | +1.1 |
| O02D | | | | IAML | | 12 37 38.0 | |
| O02D | comp=N,14nm,4.3s | | | IAML | | 12 37 38.0 | |
| **HOPS** | **Hopland Field** | **3.33** | **113** | Pn | Pn | 12 36 55.0 | -0.2 |
| HOPS | | | | IAML | | 12 38 25.7 | |
| HOPS | comp=N,26nm,3.8s | | | IAML | | 12 38 40.6 | |
| HOPS | comp=E,25nm,4.0s | | | IAML | | 12 38 40.6 | |
| **K02D** | **Willamette Mer** | **3.43** | **46** | Pn | Pn | 12 36 56.3 | -0.4 |
| K02D | | | | IAML | | 12 37 48.9 | |
| K02D | comp=E,20nm,3.4s | | | IAML | | 12 38 10.7 | |
| K02D | comp=N,22nm,2.8s | | | IAML | | 12 38 10.7 | |
| **YBH** | **Yreka Blue Hor** | **3.53** | **66** | | Pn | 12 36 59.3 | +1.3 |
| **J01E** | **Myrtle Point** | **3.63** | **38** | Pn | Pn | 12 36 57.9 | -1.4 |
| J01E | | | | IAML | | 12 38 09.6 | |
| J01E | comp=N,41nm,2.4s | | | IAML | | 12 38 09.6 | |
| **HUMO** | **Hull Mountain** | **3.79** | **52** | | Pn | 12 37 01.1 | -0.4 |
| HUMO | | | | IAML | | 12 39 11.5 | |
| HUMO | comp=N,9.0nm,3.3s | | | IAML | | 12 39 11.5 | |
| **MCCM** | **Marconi Confer** | **3.90** | **123** | Pn | Pn | 12 37 02.5 | -0.4 |
| MCCM | | | | IAML | | 12 37 51.9 | |
| MCCM | comp=N,32nm,0.6s | | | IAML | | 12 37 51.9 | |
| **DBO** | **Dodson Butte** | **3.95** | **44** | Pn | Pn | 12 37 03.2 | -0.6 |
| DBO | | | | IAML | | 12 37 36.8 | |
| DBO | comp=N,28nm,3.5s | | | IAML | | 12 37 36.9 | |
| DBO | comp=E,24nm,3.3s | | | IAML | | 12 37 36.9 | |
| **LRDM** | **Redding Peak** | **4.24** | **87** | | Pn | 12 37 07.9 | +0.2 |
| LRDM | | | | IAML | | 12 38 03.6 | |
| LRDM | comp=E,14nm,2.6s | | | IAML | | 12 38 08.2 | |
| LRDM | comp=N,16nm,2.8s | | | IAML | | 12 38 08.2 | |
| **K04D** | **Chiloquin, OR** | **4.55** | **58** | Pn | Pn | 12 37 11.3 | -0.9 |
| **I04A** | **Tendick Farm,** | **4.85** | **43** | Pn | Pn | 12 37 15.7 | -0.4 |
| I04A | | | | IAML | | 12 38 34.7 | |
| I04A | comp=E,17nm,2.9s | | | IAML | | 12 38 34.7 | |
| **J05D** | **Fort Rock, OR** | **5.22** | **54** | | Pn | 12 37 21.2 | -0.1 |
| **SAO** | **San Andreas Ge** | **5.65** | **128** | Pn | Pn | 12 37 24.5 | -2.5 |
| **PINE** | **Pine Mountain** | **5.68** | **51** | Pn | Pn | 12 37 28.6 | +1.0 |
| **BBGB** | **Big Mountain B** | **6.01** | **127** | Pn | Pn | 12 37 33.2 | +1.0 |
| **PMPB** | **Monarch Peak** | **6.40** | **128** | Pn | Pn | 12 37 37.7 | +0.3 |

*IDC 29 12:52:56.6±0.9, 22.93S×169.82E, h0km, mb4.0/8, mbtmp3.9/9, ML3.2/1, MS3.5/10, Error ellipse: s-maj=32.1km s-min=23.7km az=5.0*

**ISC 29 12:53:00.5±0.9, 22.9S±0.2×169.8E±0.1, h25km, n17, σ0.88/11, mb4.1/8, MS3.3/6, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.25** | **284** | Pn | **Pn** | **12 53 49.1** | **-0.8** |
| DZM | 2.4nm,0.3s,baz=130,slow=7.6,SNR=10 | | | Sn | **Sn** | **12 54 28.8** | **+1.0** |
| DZM | 10nm,0.3s,baz=53,slow=11,SNR=4.0 | | | LR | LR | 12 54 30.2 | |
| **MSVF** | **Nonsavu** | **9.27** | **58** | LR | LR | 12 57 58.8 | |
| **HNR** | **Honiara** | **16.41** | **323** | LR | LR | 13 02 27.3 | |
| **URZ** | **Urewera** | **16.52** | **159** | LR | LR | 13 02 17.0 | |
| **PMG** | **Port Moresby** | **25.53** | **298** | LR | LR | 13 06 56.2 | |
| **STKA** | **Stephens Creek** | **26.56** | **244** | LR | LR | 13 08 22.6 | |
| **ASAR** | **Alice Springs** | **32.96** | **261** | P | **P** | **12 59 32.4** | **-1.0** |
| ASAR | 1.1nm,0.9s,baz=90,slow=9.1,SNR=7.3 | | | LR | LR | 13 13 05.3 | |
| **WRA** | **Warramunga Arr** | **33.13** | **268** | P | **P** | **12 59 34.7** | **-0.2** |
| WRA | 0.1nm,0.4s,baz=100,slow=8.5,SNR=1.9 | | | LR | LR | 13 12 59.4 | |
| **GUMO** | **Guam** | **43.74** | **324** | LR | LR | 13 20 29.3 | |
| **NWAO** | **Narrogin (SRO)** | **47.13** | **246** | LR | LR | 13 20 16.8 | |
| **QSPA** | **South Pole Qui** | **67.17** | **180** | P | **P** | **13 03 51.7** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **80.52** | **295** | P | **P** | **13 05 11.9** | **+0.9** |
| **SNAA** | **Sanae** | **85.54** | **182** | P | **P** | **13 05 37.0** | **+0.9** |
| **SONM** | **Songino Array** | **90.47** | **323** | P | **P** | **13 06 00.3** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **90.81** | **48** | P | **P** | **13 06 02.6** | **+0.6** |
| **ILAR** | **Eielson Array** | **93.55** | **17** | P | **P** | **13 06 12.6** | **-1.1** |
| **GERES** | **GERESS Array B** | **147.95** | **330** | PKPbc | **PKPbc** | **13 12 43.3** | **-0.3** |

**KRSZO 29 12:53:10.0±1.2, 47.53N×18.10E, h1km±1km, M1.8/6, Error ellipse: s-maj=6.0km s-min=3.4km az=125.0, Hungary**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **A268A** | **Rede** | **0.15** | **229** | Pg | Pg | 12 53 12.4 | -0.5 |
| A268A | | | | Lg | Lg | 12 53 15.2 | |
| **CSKK** | **Cskako** | **0.20** | **146** | Pg | Pg | 12 53 14.1 | +0.3 |
| CSKK | | | | Lg | Lg | 12 53 17.6 | |
| **A269A** | **Baj** | **0.22** | **61** | Lg | Lg | 12 53 17.1 | |
| **SRO** | **Srobarova** | **0.32** | **28** | Pg | Pb | 12 53 17.9 | -0.6 |
| **MPLH** | **Magyarpolny** | **0.52** | **226** | Pg | Pg | 12 53 20.3 | +0.3 |
| MPLH | | | | Lg | Lg | 12 53 28.3 | |
| **EGYH** | **Egyhazaskeszo** | **0.53** | **258** | Lg | Lg | 12 53 28.1 | |
| **A336A** | **Medovarce** | **0.93** | **41** | Lg | Lg | 12 53 39.3 | |
| **A335A** | **Lovce** | **0.93** | **10** | Pg | Pb | 12 53 29.0 | +0.1 |
| A335A | | | | Lg | Lg | 12 53 40.7 | |
| **VYHS** | **Vyhne** | **1.08** | **27** | Pg | Pb | 12 53 31.4 | -0.2 |
| VYHS | | | | Lg | Lg | 12 53 46.6 | |
| **VYHS** | **Vyhne** | **1.08** | **27** | *e*PG | Pb | 12 53 31.4 | -0.2 |
| VYHS | | | | *e*SG | Sb | 12 53 45.9 | -0.3 |
| VYHS | | | | *e* | | 13 12 38.1 | |
| **MORH** | **Mrgy, Hungar** | **1.37** | **164** | Lg | Lg | 12 53 55.5 | |
| **TRIV** | **Trivento** | **6.29** | **205** | Sn | Sn | 12 55 57.8 | +1.3 |

*IDC 29 13:25:12.4±0.7, 22.36S×170.47E, h0km, mb4.2/13, mbtmp4.2/14, ML4.0/1, Error ellipse: s-maj=23.1km s-min=20.3km az=128.0*

*NEIC 29 13:25:16.4±2.7, 22.39S±0.10×170.12E±0.08, h10km±1km, mb4.7/16, Error ellipse: s-maj=16.6km s-min=12.2km az=167.0*

*NOU 29 13:25:17.3, 22.24S×170.07E, h0km, MLv4.6/11, Southeast of Loyalty Islands*

**ISC 29 13:25:15.2±0.5, 22.37S±0.07×170.25E±0.07, h10km, n72, σ1.922/71, mb4.5/23, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **2.24** | **293** | P | **Pn** | **13 25 52.4** | **0.0** |
| **PINNC** | **Pines Island,** | **2.60** | **264** | P | **Pn** | **13 25 58.4** | **+1.1** |
| **PINNC** | **Pines Island,** | **2.60** | **264** | Pn | **Pn** | **13 25 57.6** | **+0.3** |
| **YATNC** | **Mamie plateau,** | **3.13** | **275** | P | **Pn** | **13 26 04.7** | **+0.1** |
| **LIFNC** | **LIFOU** | **3.22** | **299** | P | **Pn** | **13 26 06.1** | **+0.3** |
| **LIFNC** | **LIFOU** | **3.22** | **299** | Pn | **Pn** | **13 26 05.5** | **-0.3** |
| **DZM** | **Mont Dzumac** | **3.54** | **274** | P | **Pn** | **13 26 11.4** | **+1.1** |
| **DZM** | **Mont Dzumac** | **3.54** | **274** | | **Pn** | **13 26 10.9** | **+0.6** |
| **DZM** | **Mont Dzumac** | **3.54** | **274** | Pn | **Pn** | **13 26 11.4** | **+1.1** |
| DZM | 11nm,0.3s,baz=130,slow=12,SNR=174 | | | Sn | **Sn** | **13 26 54.2** | **+1.9** |
| | 25nm,0.3s,baz=84,slow=14,SNR=14 34nm,0.4s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.67** | **273** | P | **Pn** | **13 26 13.0** | **+1.0** |
| **RTV** | **Rentapao** | **4.87** | **339** | P | **Pn** | **13 26 29.4** | **+0.9** |
| **DVP** | **Devils Point** | **5.01** | **337** | P | **Pn** | **13 26 31.5** | **+1.0** |
| **KOUNC** | **Koumac, New Ca** | **5.84** | **287** | P | **Pn** | **13 26 43.5** | **+1.6** |
| **KOUNC** | **Koumac, New Ca** | **5.84** | **287** | | **Pn** | **13 26 43.1** | **+1.2** |
| **MSVF** | **Nonsavu** | **8.66** | **59** | Pn | **Pn** | **13 27 23.6** | **+2.9** |
| **MSVF** | **Nonsavu** | **8.66** | **59** | Pn | **Pn** | **13 27 23.0** | **+2.3** |
| | 0.4nm,0.3s,baz=198,slow=15,SNR=8.1 | | | | | | |
| **HNR** | **Honiara** | **16.23** | **321** | Pn | **Pn** | **13 29 01.8** | **-1.6** |
| HNR | | | | IAmb | IAmb | 13 29 21.7 | |
| | comp=Z,98nm,1.1s | | | | | | |
| **BKZ** | **Black Stump Fm** | **17.57** | **164** | P | **P** | **13 29 22.6** | **+1.3** |
| **MRZ** | **Mangatainoka R** | **18.78** | **167** | P | **P** | **13 29 35.4** | **+0.8** |
| MRZ | | | | IAmb | IAmb | 13 29 43.1 | |
| | comp=Z,63nm,1.4s | | | | | | |
| **CTA** | **Charters Tower** | **22.48** | **271** | P | **P** | **13 30 16.9** | **+2.1** |
| | comp=Z,0.3nm,0.8s,baz=96,slow=15,SNR=2.8 | | | | | | |
| **CTAO** | **Charters Tower** | **22.48** | **271** | P | **P** | **13 30 15.6** | **+0.7** |
| **STKA** | **Stephens Creek** | **27.14** | **243** | P | **P** | **13 31 00.1** | **+1.4** |
| | comp=Z,2.5nm,0.8s,baz=90,slow=3.0,SNR=2.2 comp=Z,2.5nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **33.42** | **261** | P | **P** | **13 31 53.9** | **-0.5** |
| **ASAR** | **Alice Springs** | **33.42** | **261** | P | **P** | **13 31 54.0** | **-0.3** |
| | comp=Z,3.0nm,1.0s,baz=77,slow=9.4,SNR=18 comp=Z,3.0nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.53** | **267** | P | **P** | **13 31 54.1** | **-1.3** |
| | comp=Z,2.2nm,1.0s,baz=102,slow=9.0,SNR=6.9 comp=Z,2.2nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **38.37** | **278** | P | **P** | **13 32 37.1** | **+0.3** |
| MTN | | | | IAmb | IAmb | 13 32 44.8 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **KNRA** | **Kununurra** | **39.69** | **272** | P | **P** | **13 32 47.0** | **-0.8** |
| **SBA** | **Scott Base** | **55.56** | **181** | P | **P** | **13 34 51.4** | **+1.1** |
| SBA | | | | IAmb | IAmb | 13 34 52.7 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| **CASY** | **Casey** | **57.66** | **204** | P | **P** | **13 35 04.1** | **-1.3** |
| CASY | | | | IAmb | IAmb | 13 35 26.2 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.95** | **332** | P | **P** | **13 35 59.8** | **-1.8** |
| | comp=Z,4.2nm,0.9s,baz=167,slow=5.6,SNR=9.4 comp=Z,4.2nm,0.9s | | | | | | |
| **MAJO** | **Matsushiro** | **65.95** | **332** | P | **P** | **13 36 00.3** | **-1.3** |
| **MJB9** | **Matsu-Tunnel** | **65.95** | **332** | P | **P** | **13 36 00.5** | **-1.1** |
| **JNU** | **Nakatsue** | **66.75** | **325** | P | **P** | **13 36 06.5** | **-0.3** |
| **QSPA** | **South Pole Qui** | **67.70** | **180** | P | **P** | **13 36 11.9** | **-0.7** |
| **QSPA** | **South Pole Qui** | **67.70** | **180** | P | **P** | **13 36 12.1** | **-0.4** |
| | comp=Z,3.3nm,1.0s,baz=5.6,slow=1.7,SNR=8.5 comp=Z,3.3nm,1.0s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **70.85** | **339** | P | **P** | **13 36 31.8** | **-0.2** |
| JKA | | | | IAmb | IAmb | 13 36 41.2 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **71.61** | **326** | P | **P** | **13 36 37.0** | **+0.2** |
| | comp=Z,2.5nm,0.8s,baz=130,slow=4.8,SNR=4.4 comp=Z,2.5nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.94** | **333** | P | **P** | **13 36 56.2** | **-0.1** |
| | comp=Z,2.5nm,0.9s,baz=79,slow=7.5,SNR=2.7 comp=Z,2.5nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.95** | **352** | P | **P** | **13 37 01.1** | **-0.8** |
| | comp=Z,5.4nm,0.9s,baz=196,slow=10,SNR=4.8 comp=Z,5.4nm,0.9s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **80.65** | **294** | P | **P** | **13 37 28.0** | **-0.7** |
| CM31 | | | | IAmb | IAmb | 13 37 31.5 | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.65** | **294** | P | **P** | **13 37 30.0** | **+1.3** |
| | comp=Z,2.4nm,0.7s,baz=131,slow=3.9,SNR=14 comp=Z,2.4nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.49** | **184** | ⇑P | **P** | **13 37 51.8** | **-1.3** |
| | comp=Z,302nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **86.09** | **182** | ⇑P | **P** | **13 37 54.3** | **-1.6** |
| | comp=Z,56nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **86.09** | **182** | P | **P** | **13 37 53.9** | **-2.0** |
| | comp=Z,2.8nm,0.8s,baz=192,slow=9.3,SNR=9.6 comp=Z,2.8nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.64** | **180** | ⇑P | **P** | **13 37 56.9** | **-1.7** |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.94** | **181** | ⇑P | **P** | **13 37 58.7** | **-1.4** |
| | comp=Z,8.0nm,0.7s,baz=175,slow=4.4 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.23** | **180** | ⇑P | **P** | **13 38 00.1** | **-1.4** |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **PWL** | **Port Wells** | **89.44** | **19** | P | **P** | **13 38 11.2** | **-0.7** |
| PWL | | | | IAmb | IAmb | 13 38 11.7 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.17** | **48** | P | **P** | **13 38 15.4** | **-0.7** |
| | comp=Z,0.3nm,0.7s,baz=231,slow=10.0,SNR=2.7 comp=Z,0.3nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **90.28** | **323** | P | **P** | **13 38 16.0** | **-0.3** |
| | comp=Z,2.6nm,1.0s,baz=130,slow=4.8,SNR=9.6 comp=Z,2.6nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **92.93** | **17** | P | **P** | **13 38 25.3** | **-2.7** |
| | comp=Z,0.3nm,0.6s,baz=239,slow=3.8,SNR=6.8 comp=Z,0.3nm,0.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **145.23** | **329** | *e*PKP | **PKPbc** | **13 44 51.8** | **-0.9** |
| **KRLC** | **Kraliky** | **145.38** | **330** | *e*P | **PKPbc** | **13 44 53.2** | **0.0** |
| **KRLC** | **Kraliky** | **145.38** | **330** | *e*P | **PKPbc** | **13 44 53.2** | **0.0** |
| **DPC** | **Dobruska-Polom** | **145.41** | **330** | *e*P | **PKPbc** | **13 44 53.2** | **-0.1** |
| **VYHS** | **Vyhne** | **145.41** | **326** | *e*PDIFF | **PKPbc** | **13 44 52.8** | **-0.5** |
| **VYHS** | **Vyhne** | **145.41** | **326** | *i* P | **PKPbc** | **13 44 52.8** | **-0.5** |
| **JAVC** | **Velka Javorina** | **145.77** | **327** | *e*PKP | **PKPdf** | **13 44 55.0** | **+1.0** |
| **VRAC** | **Vranov** | **146.00** | **329** | *e*PKP | **PKPdf** | **13 44 54.6** | **+0.3** |
| **VRAC** | **Vranov** | **146.00** | **329** | PKPbc | **PKPdf** | **13 44 54.0** | **-0.3** |
| | comp=Z,5.4nm,0.7s,baz=60,slow=0.6,SNR=8.5 | | | | | | |
| **BRG** | **Berggiesshubel** | **146.08** | **333** | Amp | | 13 44 56.6 | |
| | comp=Z,12nm,1.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **146.08** | **333** | *e*P | **PKPdf** | **13 44 54.9** | **+0.5** |
| **CLL** | **Collm** | **146.14** | **334** | *i* x | x | 13 45 02.8 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **CLL** | **Collm** | **146.14** | **334** | *i* PKPbc | **PKPdf** | **13 44 54.1** | **-0.4** |
| | comp=Z,19nm,1.3s | | | | | | |
| **KRUC** | **Moravsky** | **146.26** | **329** | *e*PKP | **PKPdf** | **13 44 55.1** | **+0.3** |
| **EKA** | **Eskdalemuir Ar** | **146.72** | **353** | PKPbc | **PKPdf** | **13 44 54.8** | **-0.5** |
| | comp=Z,6.4nm,0.8s,baz=335,slow=2.6,SNR=11 | | | | | | |
| **ZVC** | **Zvikov** | **147.03** | **331** | *e*P | **PKiKP** | **13 45 02.4** | **+1.8** |
| **CKRC** | **Cesky Krumlov** | **147.42** | **330** | *e*P | **PKPbc** | **13 45 00.8** | **+1.6** |
| **KHC** | **Kasperske Hory** | **147.53** | **331** | *e*P | **PKPbc** | **13 44 59.8** | **+0.3** |
| **GERES** | **GERESS Array B** | **147.68** | **331** | PKPbc | **PKPdf** | **13 44 58.8** | **+1.5** |
| | comp=Z,2.9nm,0.8s,baz=52,slow=2.2,SNR=6.3 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.93** | **332** | PKPbc | **PKPdf** | **13 45 06.0** | **+3.3** |
| | comp=Z,4.0nm,0.7s,baz=104,slow=4.2,SNR=6.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.76** | **232** | PKP | **PKPdf** | **13 45 20.3** | **-0.8** |
| | comp=Z,0.5nm,0.8s,baz=101,slow=2.9,SNR=3.8 | | | | | | |

**IDC 29 13:26:01.7±468.0, 48.36N×48.96E, h0km, Error ellipse: s-maj=166.0km s-min=120.6km az=41.0, Western Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **6.27** | **68** | I | I | 14 03 00.0 | |
| | baz=255,slow=315,SNR=2.0 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **10.99** | **324** | I | I | 14 33 00.0 | |
| | baz=136,slow=310,SNR=1.1 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **23.00** | **62** | I | I | 15 46 20.0 | |
| | baz=270,slow=327,SNR=0.7 | | | | | | |

*BJI 29 13:27:53.0±0.0, 22.20S×170.50E, h5km, mb5.0/44, mB5.3/16, Ms4.9/12, Ms7 4.6/11*

*IDC 29 13:27:53.7±0.6, 22.30S×170.48E, h0km, mb4.6/17, mbtmp4.6/19, ML3.9/2, MS4.2/25, Error ellipse: s-maj=18.5km s-min=15.2km az=92.0*

*MOS 29 13:27:54.5±1.2, 22.28S×170.28E, h10km, mb5.2/18, MS4.5/5, Error ellipse: s-maj=10.5km s-min=9.9km az=2.3*

*NEIC 29 13:27:56.1±2.8, 22.40S±0.10×170.33E±0.08, h10km±1km, mb5.0/46, Error ellipse: s-maj=16.8km s-min=11.6km az=165.0*

*NOU 29 13:28:02.5, 22.08S×169.82E, h0km, MLv5.0/9, Southeast of Loyalty Islands*

*BGR 29 13:28:04.9, 20.06S×170.54E, h33km, Ms4.5*

*GCMT 29 13:28:04.1±0.2, 22.40S±0.01×170.33E±0.02, h22km, MW5.1/101, Moment Tensor Solution. s51,c73; s101,c150; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$5.12±.25; $M_{\theta\theta}$-4.50±.16; $M_{\phi\phi}$-0.62±.15; $M_{r\theta}$3.44±.26; $M_{\theta\phi}$2.47±.11; $M_{\phi r}$-0.54±.26; Best double couple: $M_o$6.44400×$10^{16}$ NP1,$\phi_s$106.00000°,δ62.00000°, λ80.00000°. NP2,$\phi_s$307.00000°,δ30.00000°,λ108.00000°. Principal axes: T 6.2320, Plg72.0000°, Azm353.0000°; N 0.4170, Plg9.0000°, Azm111.0000°; P -6.6560, Plg16.0000°, Azm204.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 29 13:27:55.3±0.3, 22.38S±0.05×170.41E±0.05, h10km, n253, σ1.933/236, mb5.0/70, MS4.4/33, 24C-25D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **2.38** | **292** | P | **Pn** | **13 28 33.2** | **-1.2** |
| **PINNC** | **Pines Island,** | **2.75** | **265** | Pn | **Pn** | **13 28 39.4** | **-0.1** |
| **YATNC** | **Mamie plateau,** | **3.27** | **275** | P | **Pn** | **13 28 47.0** | **+0.3** |
| **LIFNC** | **LIFOU** | **3.35** | **298** | P | **Pn** | **13 28 48.6** | **+0.9** |
| **DZM** | **Mont Dzumac** | **3.68** | **274** | Pn | **Pn** | **13 28 52.4** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.68** | **274** | *e*Pn | **Pn** | **13 28 48.7** | **-3.8** |
| DZM | 482nm,1.1s 1μm,1.1s | | | *e*Sn | **Sn** | **13 29 36.6** | **+0.6** |
| **DZM** | **Mont Dzumac** | **3.68** | **274** | Pn | **Pn** | **13 28 52.8** | **+0.3** |
| DZM | 51nm,0.3s,baz=100,slow=15,SNR=30 20nm,0.3s,baz=61,slow=16,SNR=3.6 | | | Sn | **Sn** | **13 29 34.9** | **-1.1** |
| DZM | comp=Z,2μm,18.8s,baz=82,slow=39 111nm,0.3s | | | LR | LR | 13 30 20.8 | |
| **NOUC** | **Port Laguerre** | **3.81** | **273** | P | **Pn** | **13 28 54.2** | **+0.1** |
| **RTV** | **Rentapao** | **4.92** | **337** | P | **Pn** | **13 29 10.8** | **+1.4** |
| **DVP** | **Devils Point** | **5.07** | **335** | P | **Pn** | **13 29 11.6** | **+0.1** |
| **KOUNC** | **Koumac, New Ca** | **5.98** | **287** | P | **Pn** | **13 29 25.1** | **+1.1** |
| **KOUNC** | **Koumac, New Ca** | **5.98** | **287** | Pn | **Pn** | **13 29 24.0** | **+0.1** |
| **MSVF** | **Nonsavu** | **8.54** | **59** | Pn | **Pn** | **13 30 02.7** | **+3.5** |
| **MSVF** | **Nonsavu** | **8.54** | **59** | Pn | Pn | 13 30 04.5 | +5.3 |
| | 0.9nm,0.3s,baz=207,slow=14,SNR=17 | | | | | | |
| **MSVF** | **Nonsavu** | **8.54** | **59** | P | **Pn** | **13 30 02.7** | **+3.5** |
| **RAO** | **Raoul Island** | **12.54** | **125** | LR | LR | 13 34 40.2 | |
| | comp=Z,1μm,18.6s,baz=326,slow=32 | | | | | | |
| **URZ** | **Urewera** | **16.85** | **162** | Pn | **P** | **13 31 53.5** | **+0.1** |
| URZ | 0.1nm,0.3s,baz=315,slow=20,SNR=2.2 | | | LR | LR | 13 37 17.9 | |
| | comp=Z,2μm,18.7s,baz=64,slow=33 18nm,0.9s | | | | | | |
| **BKZ** | **Black Stump Fm** | **17.53** | **164** | | **Pn** | **13 32 00.4** | **+0.6** |
| **EIDS** | **Eidsvold** | **17.92** | **257** | | **P** | **13 32 05.9** | **+0.5** |
| **ARMA** | **Armidale** | **18.61** | **241** | P | **P** | **13 32 12.4** | **-0.7** |
| **MRZ** | **Mangatainoka R** | **18.75** | **168** | P | **Pn** | **13 32 15.6** | **+0.8** |
| MRZ | | | | IAmb | IAmb | 13 32 18.8 | |
| | comp=Z,118nm,1.3s | | | | | | |
| **AFI** | **Afiamalu** | **18.90** | **67** | P | **P** | **13 32 17.5** | **+1.2** |
| AFI | | | | IAmb | IAmb | 13 32 19.3 | |
| | comp=Z,78nm,0.9s | | | | | | |
| **AFI** | **Afiamalu** | **18.90** | **67** | P | **P** | **13 32 17.5** | **+1.2** |
| AFI | | | | pmax | pmax | | |
| | comp=Z,79nm,0.9s | | | | | | |
| **TCW** | **Tory Channel** | **19.06** | **171** | P | **Pn** | **13 32 19.4** | **+0.8** |
| **MRNZ** | **Matariki Terra** | **19.07** | **175** | | **Pn** | **13 32 19.9** | **+1.2** |
| **TUWZ** | **Tuamarina** | **19.23** | **172** | P | **P** | **13 32 20.3** | **+0.7** |
| **MSWZ** | **Moikau Station** | **19.42** | **169** | P | **P** | **13 32 21.3** | **-0.4** |
| **KHZ** | **Kahutara** | **20.16** | **173** | P | Pn | 13 32 31.6 | +0.1 |
| KHZ | | | | IAmb | IAmb | 13 32 35.6 | |
| | comp=Z,120nm,1.3s | | | | | | |
| **LTZ** | **Lake Taylor** | **20.41** | **176** | P | **P** | **13 32 33.0** | **+0.5** |
| LTZ | | | | IAmb | IAmb | 13 32 36.9 | |
| | comp=Z,76nm,1.3s | | | | | | |
| **OXZ** | **Oxford** | **20.94** | **177** | P | **P** | **13 32 39.3** | **+1.1** |
| OXZ | | | | IAmb | IAmb | 13 32 43.9 | |
| | comp=Z,74nm,1.1s | | | | | | |
| **RPZ** | **Rata Peaks** | **21.29** | **179** | P | **P** | **13 32 43.7** | **+1.7** |
| | comp=Z,31nm,1.0s,baz=70,slow=8.7,SNR=4.2 | | | | | | |
| RPZ | | | | LR | LR | 13 40 04.4 | |
| | comp=Z,998nm,19.4s,baz=336,slow=34 comp=Z,31nm,1.0s | | | | | | |
| **WKZ** | **Wanaka** | **22.42** | **183** | P | **P** | **13 32 55.2** | **+0.9** |
| **CTA** | **Charters Tower** | **22.62** | **271** | P | **P** | **13 32 58.1** | **+1.5** |
| | comp=Z,0.8nm,0.8s,baz=101,slow=13,SNR=8.1 | | | | | | |
| CTA | | | | LR | LR | 13 41 45.7 | |
| | comp=Z,66nm,18.3s,baz=94,slow=37 | | | | | | |
| **CTAO** | **Charters Tower** | **22.62** | **271** | P | **P** | **13 32 56.9** | **+0.3** |
| **CTAO** | **Charters Tower** | **22.62** | **271** | P | **P** | **13 32 56.9** | **+0.3** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **22.70** | **231** | P | **P** | **13 32 58.2** | **+0.9** |
| CAN | | | | IAmb | IAmb | 13 33 02.5 | |
| | comp=Z,104nm,1.6s | | | | | | |
| **CAN** | **Canberra** | **22.70** | **231** | P | **P** | **13 32 58.2** | **+0.9** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,105nm,1.6s | | | | | | |
| **TARA** | **Tarawa** | **23.71** | **6** | P | **P** | **13 33 08.1** | **+0.5** |
| **RABL**

PPT2 *e*S **S** **13 40 57.7 -6.2**
comp=Z,110nm,35.2s
PPT2 *e*SS **SnSn** **13 43 38.2 -6.3**
comp=Z,100nm,23.5s
PPT2 *e*LR LR 13 45 18.7
comp=Z,103nm,25.8s
PPT2 *e*LR LR 13 45 21.0
comp=Z,196nm,26.2s
**PPT Papeete 37.84 90** LR LR 13 49 22.0
comp=Z,244nm,18.1s,baz=292,slow=34
**MTN Manton Dam 38.51 278** P **P** **13 35 18.1 -0.1**
MTN IAmb IAmb 13 35 34.0
comp=Z,18nm,0.8s
**KNRA Kununurra 39.83 272** P **P** **13 35 28.9 -0.3**
KNRA IAmb IAmb 13 35 38.6
comp=Z,65nm,1.8s
**GUMO Guam 43.64 323** LR LR 13 52 54.4
comp=Z,177nm,19.2s,baz=128,slow=34
**SWI Sorong 43.66 294** P **P** **13 35 59.5 -1.1**
comp=Z,24nm,1.3s
**SANI Sanana 47.61 289** P **P** **13 36 32.0 +0.1**
comp=Z,33nm,1.1s,comp=Z,544nm
**NWAO Narrogin (SRO) 47.83 245** LR LR 13 55 04.6
comp=Z,1μm,21.6s,baz=102,slow=34
**TAOE Nuku Hiva Isla 49.26 82** *e*LR LR 13 50 37.9
comp=Z,285nm,22.9s
**RKT Rikitea 50.12 102** *e*LR LR 13 50 59.7
comp=Z,726nm,27.5s
**DAV Davao City (W) 52.75 298** LR LR 13 59 58.4
comp=Z,85nm,19.8s,baz=124,slow=36
**KIP Kipapa 53.33 37**⇓*e*P **P** **13 37 13.2 -1.7**
KIP pmax pmax
comp=Z,22nm,1.2s
**TOLI2 Tolitoli 53.69 289** P **P** **13 37 16.3 -1.5**
TOLI2 IAmb IAmb 13 37 42.1
comp=Z,9.9nm,0.8s
**SBA Scott Base 55.56 181** P **P** **13 37 32.2 +1.8**
**SBA Scott Base 55.56 181** P **P** **13 37 32.2 +1.8**
SBA pmax pmax
comp=Z,10.0nm,1.0s
**JCJ Chichijima 56.25 330** LR LR 13 58 25.2
comp=Z,139nm,20.7s,baz=154,slow=33
**CASY Casey 57.72 204** P **P** **13 37 45.9 0.0**
CASY IAmb IAmb 13 37 47.1
comp=Z,20nm,1.4s
**KSM Kuching 63.15 284** P **P** **13 38 23.0 -0.9**
KSM IAmb IAmb 13 38 34.6
comp=Z,15nm,1.0s
**JOW Kunigami 63.68 318** LR LR 14 06 12.6
comp=Z,135nm,18.0s,baz=117,slow=36
**JGF Kuroka 65.61 331** P **P** **13 38 38.9 -0.7**
JGF IAmb IAmb 13 38 39.8
comp=Z,15nm,0.8s
**MJAR Matsushiro Arr 66.02 332** P **P** **13 38 41.2 -1.0**
comp=Z,13nm,1.0s,baz=164,slow=6.4,SNR=18
MJAR LR LR 14 04 51.5
comp=Z,94nm,21.7s,baz=128,slow=34
comp=Z,13nm,1.0s
**MAJO Matsushiro 66.02 332** P **P** **13 38 41.1 -1.1**
**MAJO Matsushiro 66.02 332***c i*P **P** **13 38 41.4 -0.8**
MAJO pmax pmax
comp=Z,16nm,1.0s
**JNU Nakatsue 66.84 324** P **P** **13 38 46.7 -0.9**
**JNU Nakatsue 66.84 324** LR LR 14 08 11.5
comp=Z,72nm,18.2s,baz=126,slow=36
**QSPA South Pole Qui 67.69 180** P **P** **13 38 52.7 0.0**
QSPA IAmb IAmb 13 38 58.3
comp=Z,14nm,1.1s
**QSPA South Pole Qui 67.69 180** P **P** **13 38 53.3 +0.6**
comp=Z,8.4nm,0.9s,baz=32,slow=1.3,SNR=13
QSPA LR LR 14 05 28.1
comp=Z,272nm,18.8s,baz=38,slow=33
comp=Z,8.4nm,0.9s
**JKA Kamikawa-asahi 70.90 339** P **P** **13 39 12.5 0.0**
**ASAJ Asahikawa 70.91 339** LR LR 14 05 26.0
comp=Z,222nm,21.9s,baz=164,slow=32
**ASAJ Asahikawa 70.91 339** P **P** **13 39 12.5 -0.1**
ASAJ pmax pmax
comp=Z,35nm,1.4s
**TJN Taejon 71.19 324** P **P** **13 39 14.3 -0.1**
**TJN Taejon 71.19 324**⇓*e*P **P** **13 39 14.5 +0.1**
**KSRS Korea Array 71.70 326** P **P** **13 39 17.8 +0.3**
comp=Z,6.8nm,0.8s,baz=148,slow=6.5,SNR=9.3
comp=Z,6.8nm,0.8s
**RPN Rapa Nui 71.87 112** LR LR 14 04 21.6
comp=Z,56nm,19.1s,baz=260,slow=30
**IPM Ipoh 72.80 282** P **P** **13 39 25.0 +0.3**
IPM IAmb IAmb 13 39 37.0
comp=Z,11nm,0.7s
**NJ2 Nanjing 73.21 316** *e*P **P** **13 39 27.0 +0.3**
NJ2 sP **pwP** **13 39 33.8 -1.0**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**YSS Yuzh-Sakhalins 73.39 341** P **P** **13 39 27.8 +0.5**
**YSS Yuzh-Sakhalins 73.39 341** *e*P **P** **13 39 28.1 +0.8**
YSS pmax pmax
comp=Z,10.0nm,1.1s
YSS comp=N,200nm,19.0s MLR MLR
YSS comp=Z,200nm,19.0s MLR MLR
YSS comp=E,200nm,20.0s MLR MLR
**SHEM Shemya Is, Ala 74.85 2** LR LR 14 07 05.0
comp=E,171nm,20.8s,baz=165,slow=31
**USRK Ussuriysk Ar. 75.01 332** P **P** **13 39 36.9 0.0**
comp=E,4.0nm,0.9s,baz=116,slow=4.4,SNR=7.2
comp=E,4.0nm,0.9s
**WHN Wuhan 75.25 312** P **P** **13 39 39.0 +0.4**
WHN pmax pmax
comp=E,36nm,0.9s
**MAW Mawson 75.95 202** P **P** **13 39 42.7 +0.7**
comp=E,4.8nm,0.8s,baz=104,slow=8.3,SNR=5.4
MAW LR LR 14 10 01.2
comp=E,133nm,18.8s,baz=92,slow=33
comp=E,4.8nm,0.8s
**PEA0B Petropavlovsk- 75.97 352**⇓*e*P **P** **13 39 42.0 -0.2**
**PETK Petropavlovsk- 75.97 352** P **P** **13 39 42.1 -0.1**
comp=E,8.4nm,0.9s,baz=145,slow=5.3,SNR=7.5
comp=E,8.4nm,0.9s
**MDJ Mudanjiang 76.39 331** P **P** **13 39 44.8 0.0**
MDJ pmax pmax
comp=E,12nm,1.2s
**TYV Tymovskoe 76.92 342** *e*P **P** **13 39 48.2 +0.6**
TYV *e*S **S** **13 49 37.9 +2.5**
TYV pmax pmax
comp=Z,11nm,1.5s
TYV pmax pmax
comp=Z,100nm,3.3s
TYV smax smax
comp=N,100nm,6.9s
TYV smax smax
comp=E,100nm,6.9s
**CN2 Changchun 77.69 328** P **P** **13 39 51.5 -0.6**
CN2 pmax pmax
comp=E,10.0nm,0.9s
**BNX BinXian 78.23 331** ⇓P **P** **13 39 54.3 -0.8**
BNX pmax pmax
comp=E,11nm,0.8s
**ENH Enshi 78.50 310** P **P** **13 39 57.0 0.0**
ENH IAmb IAmb 13 39 58.2
comp=Z,34nm,1.2s
**BELA Belgrano 2 78.89 175** P **P** **13 39 58.0 -0.5**
BELA IAmb IAmb 13 40 03.0
comp=Z,13nm,1.0s
**LYN LuoYang 78.94 315** P **P** **13 40 00.5 +1.2**
LYN pP pwP 13 40 05.5 -1.9
LYN pmax pmax
comp=Z,39nm,0.6s
LYN pmax pmax
comp=Z,290nm,4.1s
LYN LR LR
comp=Z,410nm,19.2s
LYN LR LR
comp=Z,350nm,18.2s
LYN LR LR
comp=Z,530nm,17.1s
**KLR Kul'dur 79.16 335***ce*P **P** **13 40 00.1 0.0**
KLR pmax pmax
comp=Z,18nm,1.7s
**HNS HongShan 79.25 318** ⇑P **P** **13 40 01.3 +0.4**
HNS *e*S **S** **13 49 58.5 -2.6**
HNS pmax pmax
comp=Z,16nm,1.2s
HNS pmax pmax
comp=Z,150nm,5.7s
HNS LR LR
comp=Z,240nm,15.1s
HNS LR LR
comp=Z,200nm,14.3s
HNS LR LR
comp=Z,200nm,17.5s
**PHRA Phrae 79.72 295** P **P** **13 40 03.6 -0.2**
**CRAI Chiangrai 80.40 296** P **P** **13 40 07.8 +0.2**
**SMAI San Martin Ant 80.52 161** P **P** **13 40 07.3 -0.1**
**CMAR Chiang Mai Arr 80.78 294** P **P** **13 40 10.5 +0.9**
comp=Z,4.9nm,0.9s,baz=139,slow=4.3,SNR=17
comp=Z,4.9nm,0.9s
**KMI Kunming 80.85 302** ⇑P **P** **13 40 12.0 +1.9**
KMI pmax pmax
comp=Z,23nm,1.3s
**XAN Xi'an 81.02 312** P **P** **13 40 11.5 +0.9**
XAN pP PcP 13 40 16.0 -1.1
XAN SKS **SKSac** **13 50 28.0 -1.8**
XAN pmax pmax
comp=Z,20nm,0.7s
**PZH PanZhiHua 82.31 303** P **P** **13 40 19.3 +1.6**
PZH pmax pmax
comp=Z,10.0nm,0.9s
PZH pmax pmax
comp=Z,100nm,5.2s
**XLT XiLinHaoTe 82.61 324** *e*P **P** **13 40 19.0 +0.2**
XLT pmax pmax
comp=Z,12nm,1.0s
**MA2 Magadan 83.23 350** LR LR 14 12 00.5
comp=Z,265nm,21.2s,baz=182,slow=32
**ELIB Princess Elisa 83.26 190** *d*P **P** **13 40 21.6 -0.3**
comp=Z,6.4nm,0.9s
**HHC Hu-ho-hao-te 83.30 319** *e*P **P** **13 40 23.0 +0.5**
HHC pmax pmax
comp=Z,19nm,0.8s
HHC pmax pmax
comp=Z,130nm,5.0s
HHC LR LR
comp=Z,270nm,16.1s
**TNCH TengChong 84.16 300** ⇑P **P** **13 40 26.5 -0.9**
TNCH sP pwP 13 40 34.5 -1.0
TNCH pmax pmax
comp=Z,170nm,3.9s
**ZEA Zeya 84.45 336** *e*P **P** **13 40 27.8 -0.1**
ZEA pmax pmax
comp=Z,10.0nm,1.5s
ZEA MLR MLR
comp=Z,100nm,19.0s
**TROLL Troll, Antarti 85.50 184** ⇓P **P** **13 40 32.9 -0.4**
comp=Z,528nm,0.7s
**KDAK Kodiak Island 85.62 19** P **P** **13 40 33.6 -0.1**
comp=Z,6.6nm,0.8s,baz=208,slow=20,SNR=1.6
comp=Z,2.6nm,0.8s
**LZH Lanzhou 85.63 312** P **P** **13 40 35.5 +1.0**
LZH sP pwP 13 40 43.3 +0.6
LZH S **S** **13 51 05.8 -1.1**
LZH sS ScS 13 51 14.8 -1.8
LZH pmax pmax
comp=Z,21nm,1.2s
LZH pmax pmax
comp=Z,150nm,4.5s
LZH LR LR
comp=Z,190nm,16.1s
LZH LR LR
comp=Z,220nm,18.9s
**NVL N'lazarevskaya 85.90 187** *e*P **P** **13 40 33.4 -1.7**
NVL MLR MLR
comp=Z,184nm,17.0s
**SNAA Sanae 86.09 182** P **P** **13 40 35.2 -1.0**
SNAA IAmb IAmb 13 40 42.6
comp=Z,30nm,1.5s
**SNAA Sanae 86.09 182** ⇓P **P** **13 40 35.7 -0.5**
comp=Z,135nm,1.0s
**SNAA Sanae 86.09 182** P **P** **13 40 35.4 -0.7**
comp=Z,5.4nm,0.8s,baz=198,slow=4.8,SNR=15
comp=Z,5.4nm,0.8s
**SNAA Sanae 86.09 182***d i*P **P** **13 40 35.7 -0.5**
SNAA pmax pmax
comp=Z,17nm,1.3s
**SEY Seymchan 86.21 352**⇓*e*P **P** **13 40 35.8 -0.7**
SEY pmax pmax
comp=Z,17nm,1.2s
**VNA3 Neumayer Olymp 86.63 180** ⇓P **P** **13 40 38.0 -0.8**
comp=Z,15nm,0.7s
**VNA2 Neumayer--Watz 86.94 181** ⇓P **P** **13 40 39.9 -0.4**
comp=Z,12nm,0.7s,baz=172,slow=4.5
**VNA1 Neumayer--Stat 87.22 180** ⇓P **P** **13 40 41.2 -0.4**
comp=Z,10.0nm,0.9s
**CIT Chita 89.13 329** *e*P **P** **13 40 50.4 -0.5**
CIT *e* 13 40 57.0
CIT pmax pmax
comp=Z,44nm,2.6s
**SHL Shillong 89.78 298** P **P** **13 40 53.8 -0.9**
**SHL Shillong 89.78 298** P **P** **13 40 53.8 -0.9**
SHL pmax pmax
comp=Z,21nm,1.1s
**ULN Ulaanbaatar 90.02 323** P **P** **13 40 54.8 -0.5**
ULN IAmb IAmb 13 40 56.5
comp=Z,16nm,1.2s
**ULN Ulaanbaatar 90.02 323***c i*P **P** **13 40 55.2 -0.1**
ULN pmax pmax
comp=Z,11nm,1.2s
**GTA Gaotai 90.06 313** P **P** **13 40 56.0 +0.4**
GTA pP pwP 13 41 04.5 +0.6
GTA pmax pmax
comp=Z,4.0nm,1.3s
GTA LR LR
comp=Z,1μm,14.7s
GTA LR LR
comp=Z,310nm,15.5s
GTA LR LR
comp=Z,400nm,14.3s
**NVAR Mina Array Bea 90.06 48** P **P** **13 40 55.6 -0.2**
comp=Z,0.9nm,0.6s,baz=224,slow=7.9,SNR=10.0
comp=Z,0.9nm,0.6s
**BILL Bilibino 90.20 358** P **P** **13 40 55.0 -0.4**
**BILL Bilibino 90.20 358**⇓*e*P **P** **13 40 54.8 -0.6**
BILL *e* 13 44 28.8
BILL *e*PPP PPP 13 46 26.4
BILL pmax pmax
comp=Z,24nm,1.7s
**SONM Songino Array 90.37 323** P **P** **13 40 56.8 0.0**
comp=Z,8.4nm,0.9s,baz=140,slow=4.4,SNR=23
SONM LR LR 14 23 58.8
comp=Z,59nm,18.1s,baz=167,slow=37
comp=Z,8.4nm,0.9s
**F19K Shaleruckik Mo 92.09 12** P **P** **13 41 03.6 -0.6**
F19K IAmb IAmb 13 41 12.2
comp=Z,16nm,1.5s
**HDA Harding Lake 92.59 17** P **P** **13 41 05.7 -0.9**
HDA IAmb IAmb 13 41 15.8
comp=Z,8.9nm,1.2s
**MDM Murphy Dome 92.69 16** P **P** **13 41 05.6 -1.5**
MDM IAmb IAmb 13 41 06.5
comp=Z,5.9nm,1.2s
**E19K Redstone River 92.74 12** P **P** **13 41 06.8 -0.4**
E19K IAmb IAmb 13 41 13.2
comp=Z,7.0nm,0.9s
**ILAR Eielson Array 92.89 17** P **P** **13 41 06.5 -1.6**
comp=Z,0.7nm,0.6s,baz=236,slow=5.1,SNR=15
comp=Z,0.7nm,0.6s
**SCRK Sand Creek 93.10 18** P **P** **13 41 08.4 -0.7**
**ZAK Zakamensk 93.46 324** *e*P **P** **13 41 10.2 -0.9**
ZAK pmax pmax
comp=Z,9.0nm,1.4s
**J26L Joseph Creek 93.61 18** P **P** **13 41 10.4 -1.1**
**EGAK Eagle 94.52 19** P **P** **13 41 14.1 -1.3**
EGAK IAmb IAmb 13 41 18.2
comp=Z,13nm,1.5s
**WMQ Urumqi 100.14 313** *e*P **Pdif** **13 41 42.8 +1.3**
WMQ LR LR
comp=Z,310nm,14.7s
WMQ LR LR
comp=Z,380nm,13.7s
WMQ LR LR
comp=Z,180nm,18.5s
**MKAR Makanchi Array 104.72 315** Pdiff **Pdif** **13 42 03.4 +1.7**
comp=Z,0.7nm,0.7s,baz=96,slow=8.1,SNR=4.5
MKAR PP **PKiKP** **13 46 19.4 +2.1**
comp=Z,0.4nm,0.7s,baz=105,slow=9.3,SNR=4.2
**KURBB Kurchatov Arra 108.12 318** PP **PP** **13 46 44.6 -1.9**
comp=Z,0.3nm,0.3s,baz=98,slow=6.6,SNR=1.6
**ARCES ARCESS Array B 128.36 345** PKP **PKPdf** **13 47 01.6 +0.1**
comp=Z,1.2nm,0.6s,baz=64,slow=2.8,SNR=5.1
**KIV Kislovodsk 132.13 310** *i* PKiKP **PKPdf** **13 47 09.2 -0.4**
KIV pmax pmax
comp=Z,6.0nm,1.0s
**OBN Obninsk 132.70 326** *e*PKiKP **PKPdf** **13 47 09.4 -0.7**
OBN *e*PPP PPP 13 52 23.8
OBN pmax pmax
comp=Z,3.0nm,0.8s
**FINES FINESS Array B 133.89 337** PKP **PKPdf** **13 47 10.2 -1.9**
comp=Z,2.0nm,0.8s,baz=76,slow=5.9,SNR=3.4
**AKASG Malin Array Be 138.65 323** PKP **PKPdf** **13 47 20.3 -1.1**
comp=Z,0.3nm,0.4s,baz=47,slow=2.4,SNR=4.2
**AKBB Malin Array Si 138.65 323**⇑*i*PKiKP **PKiKP** **13 47 23.6 +0.1**
**BRTR Keskin Array B 139.55 305** PKP **PKPdf** **13 47 22.6 -1.0**
comp=Z,0.7nm,0.8s,baz=48,slow=2.1,SNR=3.1
**KOLS Kolonicke sedl 143.41 324** *e*PKiKP PKPbc 13 47 28.9 +1.7
**KOLS Kolonicke sedl 143.41 324** *e*PKP PKPbc 13 47 28.9 +1.7
**TNR Turnu Rosu 143.98 318** ⇑P PKPbc 13 47 30.4 +1.4
**TNR Turnu Rosu 143.98 318** ⇑PKiKP PKPbc 13 47 30.4 +1.4
**DRGR 144.34 321** ⇑P PKPbc 13 47 30.8 +0.7
**DRGR 144.34 321** ⇑PKiKP PKPbc 13 47 30.8 +0.6
**LANS Liptovska Anna 144.75 326** *e*PKiKP **PKPdf** **13 47 32.7 +0.3**
**LANS Liptovska Anna 144.75 326** *e*PKP **PKPdf** **13 47 32.7 +0.3**
**GZR Gura Zlata 145.03 319** ⇑P **PKPbc** **13 47 31.9 -0.5**
**GZR Gura Zlata 145.03 319** ⇑PKHKP **PKPbc** **13 47 31.9 -0.5**
**BSEG Bad Segeberg 145.07 339** *e*PKPbc **PKPbc** **13 47 31.6 -0.5**
baz=36,slow=3.0
**SURR Surduc 145.24 320** ⇓P **PKPbc** **13 47 33.0 0.0**
**SIRR Siria 145.24 321** ⇑P **PKPab** **13 47 33.8 +0.8**
**PSZ Piszkesteto 145.29 324** ⇓P **PKPbc** **13 47 33.8 +0.6**
**PSZ Piszkesteto 145.29 324** ⇓PKiKP **PKPbc** **13 47 33.8 +0.6**
**MORC Moravsky Berou 145.30 329** *e*PKP **PKPbc** **13 47 32.9 -0.2**
**MORC Moravsky Berou 145.30 329** ⇓P **PKPbc** **13 47 33.1 0.0**
**MORC Moravsky Berou 145.30 329** ⇓PKiKP **PKPbc** **13 47 33.1 0.0**
**OSTC Ostas 145.39 331** *e*PKP **PKPbc** **13 47 33.9 +0.6**
**OSTC Ostas 145.39 331** *e*PKiKP **PKPbc** **13 47 33.9 +0.6**
**CHVC Chvalec 145.44 331** *e*PKP **PKPbc** **13 47 34.0 +0.5**
**CHVC Chvalec 145.44 331** *e*PKiKP **PKPbc** **13 47 34.0 +0.5**
**DPC Dobruska-Polom 145.48 330** *e*PKP **PKPdf** **13 47 34.1 +0.5**
**DPC Dobruska-Polom 145.48 330** *e*PKiKP **PKPdf** **13 47 34.1 +0.5**
**VYHS Vyhne 145.49 326** *e* **PKPdf** **13 47 33.8 +0.1**
**VYHS Vyhne 145.49 326** *e*PKP **PKPdf** **13 47 33.8 +0.1**
**GORT1 Trebel 145.51 338** *e*PKPbc **PKPdf** **13 47 33.2 -0.2**
baz=36,slow=3.0
**UPC Upice 145.51 331** *e*PKP **PKPdf** **13 47 34.3 +0.7**
**UPC Upice 145.51 331** *e*PKiKP **PKPdf** **13 47 34.3 +0.7**
**BZS Buzias 145.61 320** ⇑P **PKPdf** **13 47 28.0 -6.0**
**BZS Buzias 145.61 320** ⇑PKHKP **PKPdf** **13 47 28.0 -6.0**
**JAVC Velka Javorina 145.85 327** *e*PKP **PKPbc** **13 47 35.8 +0.9**
**FLTG Flechtingen 146.07 337** *e*PKPbc **PKPdf** **13 47 34.5 0.0**
baz=36,slow=3.0
**VRAC Vranov 146.08 329** *e*PKP **PKPdf** **13 47 35.5 +0.9**
**VRAC Vranov 146.08 329** PKPbc **PKPdf** **13 47 34.9 +0.2**
comp=Z,23nm,0.9s,baz=44,slow=3.3,SNR=21
**VRAC Vranov 146.08 329** ⇑P **PKPbc** **13 47 36.3 +0.8**
**VRAC Vranov 146.08 329** ⇑PKP2 **PKPbc** **13 47 36.3 +0.8**
**BRG Berggiesshubel 146.15 333** *e*PKP **PKPdf** **13 47 35.8 +1.1**
BRG Amp 13 47 37.6
comp=Z,30nm,0.8s
**BRG Berggiesshubel 146.15 333** P **PKiKP** **13 47 44.2 +5.3**
BRG Amp 13 47 46.9
comp=Z,33nm,1.2s
**BRG Berggiesshubel 146.15 333** *e*PKP2 **PKPdf** **13 47 35.8 +1.1**
BRG pmax pmax
comp=Z,30nm,0.8s
BRG MLR MLR
comp=Z,141nm,24.0s
**BRG Berggiesshubel 146.15 333** *e*PKPbc **PKPdf** **13 47 35.4 +0.7**
baz=36,slow=3.0
**CLL Collm 146.21 334**⇑*i*PKPbc **PKPdf** **13 47 35.2 +0.4**
CLL comp=Z,82nm,1.7s
CLL *i* PKiKP **PKiKP** **13 47 39.8 +0.8**
comp=Z,29nm,0.8s
CLL *i* x x 13 47 43.5
comp=Z,54nm,1.4s
**CLL Collm 146.21 334**⇑*i*PKP2 **PKPdf** **13 47 35.2 +0.4**
CLL pmax pmax
comp=Z,82nm,1.7s
**CLL Collm 146.21 334** *e*PKPbc **PKPdf** **13 47 35.0 +0.2**
baz=36,slow=3.0
**NRDL Niedersach Rie 146.34 338** *e*PKPbc **PKPdf** **13 47 35.4 +0.5**
baz=36,slow=3.0
**KRUC Moravsky 146.34 329** *e*PKP **PKPdf** **13 47 36.0 +0.9**
**RETH Rethem/Aller, 146.38 339** *e*PKPbc **PKPdf** **13 47 35.5 +0.6**
baz=36,slow=3.0
**GOPC GO Pecny, Ondr 146.49 331** *e*PKP **PKPbc** **13 47 37.5 +0.8**
**GOPC GO Pecny, Ondr 146.49 331** *e*PKP2 **PKPbc** **13 47 37.5 +0.8**
**PRU Pruhonice 146.54 331** *e*PKP **PKPbc** **13 47 37.7 +0.9**
**PRU Pruhonice 146.54 331** *e*PKP2 **PKPbc** **13 47 37.7 +0.9**
**HSKC Hora Svate Kat 146.56 333** *e*PKP **PKPbc** **13 47 37.3 +0.4**
**EKA Eskdalemuir Ar 146.74 353** PKPbc **PKPdf** **13 47 36.1 +0.5**
comp=Z,5.8nm,0.5s,baz=358,slow=2.5,SNR=24
**CLZ Clausthal 146.78 337** *e*PKPbc **PKPdf** **13 47 37.3 +1.5**
baz=36,slow=3.0
**MORH Mrgy, Hungar 146.99 323** ⇑P **PKPdf** **13 47 37.3 +1.0**
**GTTG Gottingen 147.17 337** *e*PKPbc **PKPdf** **13 47 38.2 +1.8**
baz=36,slow=3.0
**PLN Plauen 147.18 334** *e*PKPbc **PKPdf** **13 47 38.3 +1.8**
baz=36,slow=3.0
**MOX Moxa 147.27 335** *e*L L 14 55 15.1
comp=Z,62nm,20.9s
**RONA Rosalia, Austr 147.31 327** *i* pPKP pPKPdf 13 47 39.2 +0.7
comp=Z,6.2nm,0.9s
**CONA Conrad Observa 147.37 328** *i* pPKP pPKPdf 13 47 39.6 +0.9
comp=Z,7.8nm,1.2s
**CKRC Cesky Krumlov 147.49 330** *e*PKP **PKPbc** **13 47 40.2 +0.6**
CKRC AMS AMS 14 56 20.0
comp=Z,200nm,20.3s
**CKRC Cesky Krumlov 147.49 330** *e*PKP2 **PKPbc** **13 47 40.2 +0.6**
CKRC MLR MLR
comp=Z,200nm,20.3s
**KHC Kasperske Hory 147.60 331** *e*PKP **PKPbc** **13 47 40.6 +0.7**
KHC *ex* x 13 47 47.5
**KHC Kasperske Hory 147.60 331***c i*PKP2 **PKPbc** **13 47 39.4 -0.5**
KHC pmax pmax
comp=Z,40nm,1.0s
**GEC2 GERESS Array S 147.75 331** *e*PKPbc **PKPbc** **13 47 40.0 -0.4**
baz=36,slow=3.0
**GERES GERESS Array B 147.75 331** PKPbc **PKPbc** **13 47 40.4 0.0**
comp=Z,12nm,0.8s,baz=27,slow=2.4,SNR=16
**ARSA Arzberg 148.00 327** *i* PKiKP **PKPbc** **13 47 42.2 +1.1**
comp=Z,12nm,1.6s
**GRF Grafenberg Arr 148.18 334** *e*L L 14 46 55.4
comp=Z,99nm,21.4s
**MOA Molln 148.20 329** *i* pPKP **PKPbc** **13 47 42.0 +0.4**
comp=Z,4.9nm,0.6s
**BIOA Bad Ischl, Aus 148.61 329** *ep*PKiKP **PKPab** **13 47 47.6 +1.4**
comp=Z,3.6nm,0.5s
**SOKA Soboth 148.63 327** *i* pPKP pPKPdf 13 47 41.8 +1.0
comp=Z,8.7nm,1.5s
**OBKA Obir 148.99 327** *ep*PKiKP **PKPab** **13 47 48.2 +0.5**
comp=Z,7.9nm,1.2s
**KBA Koelnbreinsper 149.19 329** *i* PKP **PKPbc** **13 47 43.7 -0.6**
comp=Z,8.9nm,1.0s
**LESA Schwarzleotal 149.26 330** *i* PKP **PKPbc** **13 47 43.8 -0.6**
comp=Z,7.7nm,0.7s
**BTNL Ternell 149.27 340** *d*PKP **PKPbc** **13 47 43.4 -0.8**
**MEM Membach 149.29 340** *d*PKP **PKPbc** **13 47 44.2 0.0**
**MYKA Terra Mystica 149.36 328** *i* PKP **PKPbc** **13 47 44.3 -0.3**
comp=Z,7.3nm,0.8s
**BCLA Clavier 149.67 341** *d*PKPdf **PKPdf** **13 47 42.5 +2.0**
**ABTA Abfaltersbach 149.83 329** *i* PKP **PKPbc** **13 47 44.8 -1.0**
comp=Z,9.3nm,0.8s
**WATA Walderalm 149.83 331** *e*PKiKP **PKPbc** **13 47 46.3 +0.4**
comp=Z,4.3nm,0.4s
**WTTA Wattenberg 149.85 331** *i* PKiKP **PKPbc** **13 47 46.3 +0.3**
comp=Z,16nm,0.9s
**RCHB Rochefort 149.93 341** *d*PKP **PKPdf** **13 47 43.5 +2.6**
**BMRD Maredsous 149.93 341** *d*PKP **PKPbc** **13 47 45.5 -0.2**
**MOTA Moosalm 150.03 331** *i* PKP **PKPbc** **13 47 45.7 -0.7**
comp=Z,15nm,0.9s
**WLF Walferdange 150.06 339** *d*PKP **PKPbc** **13 47 46.6 +0.5**
**RETA Reutte 150.08 332** *e*PKiKP **PKPbc** **13 47 46.7 +0.3**
comp=Z,3.3nm,0.6s
**SQTA Sankt Quirin 150.08 331** *i* PKP **PKPbc** **13 47 46.1 -0.3**
comp=Z,17nm,1.0s
**DOU Dourbes 150.17 341** *d*PKP **PKPbc** **13 47 45.7 -0.7**
**FETA Feichten 150.45 331** *i* PKP **PKPbc** **13 47 46.8 -0.5**
comp=Z,14nm,1.0s,SNR=11
**DAVA Damuels 150.61 332** *ep*PKiKP **PKiKP** **13 47 52.0 +3.5**
comp=Z,16nm,0.9s
**DAVOX Davos/Dischmat 151.00 332** PKPbc **PKPbc** **13 47 48.7 0.0**
comp=Z,9.1nm,0.5s,baz=322,slow=0.7,SNR=13
**ESDC Sonseca Array 162.10 346** PKPab **PKPab** **13 48 42.8 -0.9**
comp=Z,1.2nm,1.0s,baz=21,slow=4.7,SNR=6.4
**DBIC Dimbokro 163.73 197** PKPab **PKPab** **13 48 51.6 +0.3**
comp=Z,3.7nm,1.0s,baz=136,slow=9.6,SNR=3.2
**TORD Torodi Ar. Bea 165.87 231** PKP **PKPdf** **13 47 59.5 -1.9**
comp=Z,1.3nm,0.9s,baz=157,slow=1.1,SNR=5.7

**IDC 29 13:31:19.9±1.0, 6°29N×125°11E, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=29.7km s-min=11.1km az=113.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **0.91** | **31** | Pg | Pg | 13 31 37.8 | +0.5 |
| | 159nm,0.3s,baz=80,slow=2.0,SNR=13 | | | | | | |
| DAV | | | | Lg | Lg | 13 31 49.6 | |
| | 174nm,0.3s,baz=266,slow=22,SNR=5.1 | | | | | | |
| DAV | | | | LR | LR | 13 31 51.8 | |
| | comp=Z,68nm,18.4s,baz=320,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.61** | **161** | P | P | 13 37 10.0 | +0.7 |
| | 0.5nm,0.6s,baz=341,slow=11,SNR=3.7 | | | | | | |
| WRA | | | | PcP | PcP | 13 40 25.1 | -2.1 |
| | 0.3nm,0.8s,baz=347,slow=2.3,SNR=1.4 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **30.99** | **164** | P | P | 13 37 40.0 | +0.7 |
| | 0.2nm,0.3s,baz=341,slow=7.0,SNR=9.3 | | | | | | |
| ASAR | | | | PcP | PcP | 13 40 34.1 | -1.5 |
| | 0.4nm,0.5s,baz=344,slow=2.9,SNR=4.5 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.54** | **325** | P | P | 13 40 51.0 | +1.1 |
| | 0.4nm,0.5s,baz=123,slow=8.1,SNR=4.2 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.72** | **327** | P | P | 13 41 18.9 | -0.6 |
| | 0.3nm,0.3s,baz=121,slow=5.4,SNR=2.6 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*ISN **29** 13:37:37.2±0.6, 33°16N×46°00E, h6km±6km, ML2.8*
*TEH **29** 13:37:37.5, 33°16N×46°01E, h19km±101km, ML2.9*
**ISC 29 13:37:37.0±1.0, 33°15N±0°04×45°94E±0°07, h9km±7km, n9, σ1§26/13, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBDR** | **Badra** | **0.04** | **192** | *e*Pg | **Pg** | **13 37 38.8** | **0.0** |
| IBDR | | | | *e*Sg | **Sg** | **13 37 40.5** | **+0.4** |
| IBDR | | | | AML | AML | 13 37 58.1 | |
| | comp=E,3μm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 13 37 58.1 | |
| | comp=N,3μm,0.5s | | | | | | |
| **ILBA** | **Ilam Banvizeh** | **0.52** | **25** | Pg | **Pg** | **13 37 46.6** | **-0.7** |
| **GLG1** | **Gilan-e-Gharb** | **0.96** | **358** | Pg | **Pg** | **13 37 56.9** | **+1.4** |
| GLG1 | | | | Sg | **Sn** | **13 38 11.5** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **1.29** | **24** | Pg | **Pg** | **13 38 03.3** | **+1.5** |
| **RAFI** | **Al-Rafai** | **1.43** | **174** | *e*Pg | **Pg** | **13 38 04.5** | **0.0** |
| RAFI | | | | *e*Sg | **Sg** | **13 38 25.0** | **+2.0** |
| RAFI | | | | AML | AML | 13 38 34.1 | |
| | comp=E,200nm,0.8s | | | | | | |
| RAFI | | | | AML | AML | 13 38 44.2 | |
| | comp=N,172nm,0.3s | | | | | | |
| **KCHF** | **Cheshme Sefid,** | **1.45** | **39** | Pg | **Pg** | **13 38 04.6** | **-0.3** |
| **IDHR** | **Dehrash** | **1.53** | **13** | Pg | **Pb** | **13 38 06.8** | **+0.1** |
| **IKFM** | **Kafar-mosalman** | **1.64** | **76** | Pg | **Pg** | **13 38 07.8** | **-0.7** |
| **IKRK** | **Kirkuk** | **2.61** | **330** | *e*Pn | **Pb** | **13 38 22.0** | **-1.9** |
| IKRK | | | | *e*Sn | **Sb** | **13 38 55.2** | **-0.9** |

*IDC **29** 13:40:27.1±1.1, 22°37S×170°40E, h0km, mb3.9/7, mbtmp3.9/8, ML3.9/1, MS3.3/3, Error ellipse: s-maj=30.9km s-min=26.9km az=19.0*
*NOU **29** 13:40:35.2, 22°21S×169°84E, h0km, MLv4.1/11, Southeast of Loyalty Islands*
**ISC 29 13:40:29.7±0.8, 22°55S±0°1×170°28E±0°08, h10km, n26, σ1§08/26, mb4.2/10, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.32** | **296** | P | **Pn** | **13 41 07.6** | **-0.4** |
| **PINNC** | **Pines Island,** | **2.62** | **267** | P | **Pn** | **13 41 13.4** | **+1.3** |
| **YATNC** | **Mamie plateau,** | **3.17** | **277** | P | **Pn** | **13 41 19.5** | **-0.1** |
| **LIFNC** | **LIFOU** | **3.31** | **301** | P | **Pn** | **13 41 20.9** | **-0.6** |
| **DZM** | **Mont Dzumac** | **3.58** | **276** | P | **Pn** | **13 41 26.5** | **+1.1** |
| **DZM** | **Mont Dzumac** | **3.58** | **276** | Pn | **Pn** | **13 41 26.4** | **+1.1** |
| | 9.5nm,0.3s,baz=126,slow=13,SNR=154 | | | | | | |
| DZM | | | | Sn | **Sn** | **13 42 09.0** | **+1.3** |
| | 12nm,0.3s,baz=139,slow=23,SNR=7.7 | | | | | | |
| DZM | | | | LR | LR | 13 42 56.5 | |
| | comp=Z,352nm,19.5s,baz=53,slow=41 | | | | | | |
| | 20nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.70** | **275** | P | **Pn** | **13 41 28.0** | **+1.0** |
| **RTV** | **Rentapao** | **5.00** | **339** | P | **Pn** | **13 41 45.4** | **+0.6** |
| **DVP** | **Devils Point** | **5.14** | **337** | P | **Pn** | **13 41 48.2** | **+1.4** |
| **KOUNC** | **Koumac, New Ca** | **5.91** | **288** | P | **Pn** | **13 41 58.3** | **+1.0** |
| **MSVF** | **Nonsavu** | **8.71** | **58** | Pn | **Pn** | **13 42 37.2** | **+1.4** |
| | 0.3nm,0.3s,baz=254,slow=4.1,SNR=4.5 | | | | | | |
| MSVF | | | | LR | LR | 13 45 39.1 | |
| | comp=Z,135nm,18.9s,baz=153,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **27.10** | **244** | LR | LR | 13 54 50.9 | |
| | comp=Z,104nm,20.8s,baz=316,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **33.43** | **261** | P | **P** | **13 47 09.0** | **+0.1** |
| | 0.8nm,0.8s,baz=77,slow=9.3,SNR=14 | | | | | | |
| | 0.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.55** | **268** | P | **P** | **13 47 09.3** | **-0.7** |
| | 0.6nm,0.8s,baz=99,slow=8.3,SNR=9.7 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **66.08** | **332** | P | **P** | **13 51 14.8** | **-2.1** |
| | 2.4nm,0.8s,baz=165,slow=6.8,SNR=6.1 | | | | | | |
| | 2.4nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.56** | **180** | P | **P** | **13 51 26.4** | **+0.2** |
| | 1.1nm,1.0s,baz=247,slow=1.7,SNR=1.9 | | | | | | |
| | 1.1nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.73** | **294** | P | **P** | **13 52 44.0** | **+0.4** |
| | 0.8nm,0.7s,baz=111,slow=3.2,SNR=4.9 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.36** | **184** | ⇑P | **P** | **13 53 06.2** | **-0.8** |
| | comp=Z,116nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **85.95** | **182** | ⇑P | **P** | **13 53 09.0** | **-0.8** |
| | comp=Z,55nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **85.95** | **182** | P | **P** | **13 53 09.3** | **-0.5** |
| | comp=Z,2.0nm,0.9s,baz=187,slow=7.7,SNR=4.8 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.51** | **180** | ⇑P | **P** | **13 53 11.2** | **-1.3** |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.81** | **181** | ⇑P | **P** | **13 53 13.4** | **-0.5** |
| | comp=Z,3.5nm,0.6s,baz=174,slow=4.9 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.10** | **180** | ⇑P | **P** | **13 53 14.5** | **-0.8** |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **90.40** | **323** | P | **P** | **13 53 30.6** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=140,slow=3.7,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.85** | **353** | PKPbc | **PKPdf** | **14 00 09.3** | **-0.8** |
| | comp=Z,2.5nm,0.6s,baz=354,slow=2.5,SNR=8.9 | | | | | | |
| **GERES** | **GERESS Array B** | **147.81** | **330** | PKPbc | **PKPdf** | **14 00 14.0** | **+2.0** |
| | comp=Z,0.9nm,0.5s,baz=58,slow=5.0,SNR=4.8 | | | | | | |

**IDC 29 13:52:25.0±2.5, 6°12S×149°49E, h0km, mb3.5/3, mbtmp3.8/4, ML2.4/1, Error ellipse: s-maj=48.8km s-min=36.0km az=168.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.00** | **215** | Pn | Pn | 13 53 29.6 | +2.1 |
| | 20nm,0.3s,baz=7.4,slow=6.0,SNR=38 | | | | | | |
| PMG | | | | Sn | Sn | 13 54 12.1 | -3.0 |
| | 17nm,0.3s,baz=190,slow=20,SNR=16 | | | | | | |
| | 46nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.14** | **226** | P | P | 13 56 59.5 | -1.4 |
| | 0.6nm,0.3s,baz=50,slow=11,SNR=8.5 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **22.80** | **136** | P | P | 13 57 29.6 | -0.1 |
| | 1.1nm,0.3s,baz=324,slow=19,SNR=1.5 | | | | | | |
| | 1.1nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **23.00** | **219** | P | P | 13 57 30.9 | -0.8 |
| | 0.4nm,0.3s,baz=57,slow=9.1,SNR=20 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.51** | **285** | PKPbc | PKPbc | 14 12 12.4 | +0.2 |
| | 0.2nm,0.3s,baz=99,slow=2.1,SNR=2.2 | | | | | | |

*NDI **29** 14:01:10.0±2.9, 34°19N×85°12E, h10km, ML3.6, MW4.0, mb4.1(NEIC)*
*BJI **29** 14:01:15.2±0.0, 34°02N×83°99E, h7km, mb4.6/7, ML3.9/2, Ms4.1/8, Ms7 3.8/8*
*IDC **29** 14:01:15.7±0.8, 34°00N×83°94E, h0km, mb3.8/14, mbtmp3.8/18, ML2.9/4, MS3.5/20, Error ellipse: s-maj=27.1km s-min=13.5km az=54.0*
*NEIC **29** 14:01:18.3±2.0, 34°07N±0°10×83°9E±0°1, h10km±2km, mb4.1/13, Error ellipse: s-maj=18.7km s-min=12.1km az=217.0*
**ISC 29 14:01:17.3±0.5, 34°00N±0°05×83°84E±0°05, h10km, n69, σ2§16/56, mb4.1/18, MS3.5/18, 2C-1D, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNLY** | **HANLEY** | **4.25** | **255** | *e*P | **Pb** | **14 02 30.0** | **-2.5** |
| **JOSI** | **Joshimath** | **4.99** | **228** | *e*P | Pn | 14 02 40.3 | +7.8 |
| JOSI | | | | *e*S | **Sb** | **14 03 43.0** | **-2.0** |
| **KLP** | **Kalpa** | **5.31** | **244** | *e*P | Pn | 14 02 43.6 | +6.6 |
| KLP | | | | *e*S | **Sb** | **14 03 50.7** | **-3.6** |
| KLP | | | | IAML | | 14 04 01.7 | |
| | comp=N,46nm,0.8s | | | | | | |
| KLP | | | | IAML | | 14 04 05.3 | |
| | comp=E,88nm,0.9s | | | | | | |
| **PTH** | **Pithoragarh** | **5.40** | **216** | *e*P | **Pn** | **14 02 42.7** | **+4.6** |
| **SMLA** | **Simla** | **6.32** | **245** | *e*P | **Pn** | **14 02 54.8** | **+4.3** |
| SMLA | | | | *e*S | Sn | 14 04 14.8 | +12 |
| SMLA | | | | IAML | | 14 04 24.2 | |
| | comp=N,41nm,0.8s | | | | | | |
| SMLA | | | | IAML | | 14 04 24.3 | |
| | comp=E,54nm,0.7s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.56** | **257** | *e*P | Pn | 14 03 01.2 | +7.1 |
| DHRM | | | | *e*S | Sb | 14 04 23.6 | -6.6 |
| DHRM | | | | IAML | | 14 04 25.6 | |
| | comp=N,46nm,0.9s | | | | | | |
| DHRM | | | | IAML | | 14 04 33.5 | |
| | comp=E,46nm,0.7s | | | | | | |
| **LSA** | **Lhasa** | **7.55** | **123** | P | **Pn** | **14 03 12.0** | **+4.1** |
| LSA | | | | S | **Sb** | **14 04 54.0** | **-5.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,350nm,9.0s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=N,700nm,7.0s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,350nm,7.0s | | | | | | |
| **LSA** | **Lhasa** | **7.55** | **123** | Pn | **Pn** | **14 03 10.2** | **+2.3** |
| **KUDL** | **Kundal** | **8.59** | **229** | *e*P | **Pn** | **14 03 26.0** | **+4.4** |
| **NIL** | **Nilore** | **8.82** | **271** | Pn | **Pn** | **14 03 26.4** | **+1.5** |
| **TARG** | **Taragay, Kyrgy** | **9.07** | **330** | Pn | **Pn** | **14 03 30.6** | **+1.8** |
| **NRN** | **Naryn** | **9.67** | **322** | Pn | **Pn** | **14 03 38.9** | **+2.0** |
| **WMQ** | **Urumqi** | **10.26** | **16** | *e*P | **Pn** | **14 03 46.8** | **+2.2** |
| WMQ | | | | pmax | pmax | | |
| | comp=E,15nm,0.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,300nm,13.1s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,360nm,13.5s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,180nm,18.7s | | | | | | |
| **SHL** | **Shillong** | **10.92** | **138** | Pn | **Pn** | **14 03 53.7** | **-0.2** |
| **AAK** | **Ala-Archa** | **11.32** | **322** | Pn | **Pn** | **14 04 01.7** | **+2.5** |
| | comp=E,0.2nm,0.3s,baz=227,slow=23,SNR=1.1 | | | | | | |
| AAK | | | | Lg | Lg | 14 07 18.0 | |
| | comp=E,0.8nm,0.3s,baz=52,slow=22,SNR=2.0 | | | | | | |
| AAK | | | | LR | LR | 14 09 02.9 | |
| | comp=E,208nm,21.6s,baz=134,slow=41 | | | | | | |
| | comp=E,0.9nm,0.4s | | | | | | |
| **GAR** | **Garm** | **11.97** | **299** | Pn | **Pn** | **14 04 08.3** | **+0.2** |
| **BTK** | **Batken** | **12.03** | **304** | Pn | **Pn** | **14 04 09.8** | **+0.8** |
| **BHPL** | **Bhopal** | **12.10** | **209** | *e*P | **Pn** | **14 04 10.5** | **+0.6** |
| BHPL | | | | *e*S | **Sn** | **14 06 23.3** | **-1.7** |
| **KBL** | **Kabul** | **12.25** | **277** | Pn | **Pn** | **14 04 11.4** | **-0.7** |
| **CHGR** | **Chuyangaron** | **12.72** | **296** | Pn | **Pn** | **14 04 19.1** | **+0.8** |
| **SIMJ** | **Simiganj** | **12.83** | **296** | Pn | **Pn** | **14 04 19.8** | **-0.1** |
| **MK31** | **Makanchi Array** | **12.84** | **355** | Pn | **Pn** | **14 04 17.1** | **-2.8** |
| **MKAR** | **Makanchi Array** | **12.84** | **355** | Pn | **Pn** | **14 04 17.7** | **-2.1** |
| | comp=E,0.1nm,0.3s,baz=183,slow=13,SNR=6.9 | | | | | | |
| MKAR | | | | Sn | **Sn** | **14 06 35.5** | **-7.3** |
| | comp=E,0.3nm,0.3s,baz=307,slow=27,SNR=3.3 | | | | | | |
| MKAR | | | | Lg | Lg | 14 08 05.5 | |
| | baz=152,slow=33,SNR=2.2 | | | | | | |
| MKAR | | | | LR | LR | 14 10 22.6 | |
| | comp=E,38nm,18.3s,baz=174,slow=43 | | | | | | |
| | comp=E,1.6nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **13.82** | **315** | Pn | **Pn** | **14 04 34.2** | **+0.9** |
| **KURBB** | **Kurchatov Arra** | **17.06** | **348** | P | **Pn** | **14 05 14.4** | **-1.4** |
| | baz=166,slow=10,SNR=15 | | | | | | |
| KURBB | | | | LR | LR | 14 12 20.7 | |
| | comp=E,86nm,19.0s,baz=170,slow=39 | | | | | | |
| | comp=E,0.8nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.06** | **348** | ⇓Pg | **P** | **14 05 18.6** | **+0.9** |
| | comp=E,4.9nm,0.7s,baz=197,slow=16 | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 14 05 50.3 | |
| | comp=E,8.3nm,0.6s,baz=201,slow=28 | | | | | | |
| **KURK** | **Kurchatov** | **17.14** | **349** | P | **P** | **14 05 18.2** | **-0.3** |
| **HRA** | **Herat** | **17.87** | **277** | P | **P** | **14 05 28.9** | **+1.9** |
| **ZAA0** | **Zalesovo Array** | **19.96** | **2** | P | **P** | **14 05 50.1** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **19.96** | **2** | P | **P** | **14 05 48.2** | **-1.3** |
| | comp=E,0.2nm,0.3s,baz=190,slow=12,SNR=9.1 | | | | | | |
| ZALV | | | | LR | LR | 14 14 39.7 | |
| | comp=E,91nm,19.3s,baz=213,slow=40 | | | | | | |
| | comp=E,1.8nm,0.6s | | | | | | |
| **CRAI** | **Chiangrai** | **20.08** | **129** | P | **P** | **14 05 50.8** | **-0.3** |
| CRAI | | | | IAmb | IAmb | 14 05 57.0 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **20.53** | **135** | P | **P** | **14 05 55.9** | **-0.1** |
| CM31 | | | | IAmb | IAmb | 14 06 01.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.53** | **135** | P | **P** | **14 05 55.9** | **0.0** |
| | comp=Z,2.8nm,0.9s,baz=311,slow=12,SNR=15 | | | | | | |
| CMAR | | | | LR | LR | 14 15 27.9 | |
| | comp=Z,65nm,18.3s,baz=155,slow=42 | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **20.78** | **83** | *e*P | Pn | 14 06 00.5 | -0.6 |
| XAN | | | | LR | LR | | |
| | comp=Z,1μm,17.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,560nm,17.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,590nm,14.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **21.31** | **337** | P | **P** | **14 06 04.2** | **+0.1** |
| | comp=Z,4.6nm,0.7s,baz=151,slow=11,SNR=17 | | | | | | |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **21.37** | **337** | P | **P** | **14 06 05.3** | **+0.5** |
| BRVK | | | | IAmb | IAmb | 14 06 14.0 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **21.84** | **44** | P | **P** | **14 06 09.9** | **-0.1** |
| | comp=Z,9.8nm,1.0s,baz=232,slow=11,SNR=21 | | | | | | |
| | comp=Z,9.8nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **22.24** | **45** | P | **P** | **14 06 14.1** | **-0.2** |
| ULN | | | | IAmb | IAmb | 14 06 19.7 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **23.34** | **318** | P | **P** | **14 06 27.2** | **+1.5** |
| ABKAR | | | | IAmb | IAmb | 14 06 29.8 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **25.02** | **319** | LR | LR | 14 18 18.2 | |
| | comp=Z,58nm,18.9s,baz=126,slow=41 | | | | | | |
| **HNS** | **HongShan** | **25.24** | **73** | ⇑P | **P** | **14 06 45.3** | **+1.8** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,510nm,11.6s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,85nm,9.2s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,160nm,11.9s | | | | | | |
| **ARU** | **Arti** | **28.34** | **330** | LR | LR | 14 19 19.6 | |
| | comp=Z,87nm,20.8s,baz=121,slow=38 | | | | | | |
| **GNI** | **Garni** | **31.61** | **293** | LR | LR | 14 24 51.9 | |
| | comp=Z,53nm,19.1s,baz=114,slow=45 | | | | | | |
| **BELG** | **Belogornoye** | **31.73** | **316** | LR | LR | 14 21 35.7 | |
| | comp=Z,90nm,20.8s,baz=82,slow=38 | | | | | | |
| **KBZ** | **Khabaz** | **33.04** | **299** | LR | LR | 14 23 27.6 | |
| | comp=Z,58nm,18.2s,baz=75,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **35.71** | **72** | LR | LR | 14 23 18.7 | |
| | comp=Z,69nm,18.1s,baz=310,slow=37 | | | | | | |
| **ARPR** | **Arapgir-MALATY** | **36.61** | **291** | P | **P** | **14 08 24.3** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **38.25** | **60** | LR | LR | 14 25 16.1 | |
| | comp=Z,115nm,18.3s,baz=261,slow=38 | | | | | | |
| **KLR** | **Kul'dur** | **38.25** | **52** | LR | LR | 14 26 09.9 | |
| | comp=Z,87nm,18.0s,baz=142,slow=39 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **40.10** | **283** | LR | LR | 14 27 23.1 | |
| | comp=Z,55nm,20.0s,baz=36,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **40.14** | **293** | LR | LR | 14 27 56.9 | |
| | comp=Z,45nm,19.8s,baz=76,slow=40 | | | | | | |
| **EIL** | **Elat** | **41.45** | **278** | LR | LR | 14 28 15.2 | |
| | comp=Z,84nm,20.2s,baz=73,slow=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **42.65** | **310** | P | **P** | **14 09 14.4** | **+0.5** |
| | comp=Z,0.3nm,0.3s,baz=84,slow=7.6,SNR=4.5 | | | | | | |
| AKASG | | | | LR | LR | 14 29 33.2 | |
| | comp=Z,60nm,21.4s,baz=68,slow=40 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **AKBB** | **Malin Array Si** | **42.65** | **310** | P | **P** | **14 09 14.2** | **+0.3** |
| **KIEV** | **Kiev** | **42.66** | **310** | P | **P** | **14 09 14.4** | **+0.5** |
| KIEV | | | | IAmb | IAmb | 14 09 15.6 | |
| | comp=Z,8.7nm,1.5s | | | | | | |
| **MLR** | **Muntele Rosu** | **45.07** | **303** | P | **P** | **14 09 36.1** | **+2.5** |
| **FINES** | **FINESS Array B** | **45.49** | **325** | P | **P** | **14 09 37.5** | **+1.1** |
| | comp=Z,1.8nm,0.7s,baz=108,slow=13,SNR=6.1 | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **45.86** | **59** | LR | LR | 14 29 50.2 | |
| | comp=Z,72nm,19.9s,baz=230,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **47.59** | **336** | P | **P** | **14 09 54.1** | **+1.2** |
| | comp=Z,1.7nm,0.7s,baz=83,slow=3.8,SNR=3.9 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **HFS** | **Hagfors** | **51.46** | **323** | P | **P** | **14 10 23.2** | **+0.7** |
| | comp=Z,2.1nm,0.7s,baz=91,slow=13,SNR=4.1 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **52.63** | **324** | P | **P** | **14 10 31.3** | **0.0** |
| | comp=Z,1.3nm,0.7s,baz=86,slow=7.2,SNR=4.1 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **52.82** | **309** | P | **P** | **14 10 33.5** | **+0.5** |
| | comp=Z,1.0nm,0.6s,baz=59,slow=4.8,SNR=4.1 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **72.03** | **130** | P | **P** | **14 12 41.2** | **-0.5** |
| | comp=Z,1.4nm,0.7s,baz=325,slow=6.1,SNR=13 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **73.89** | **20** | P | **P** | **14 12 51.1** | **-1.0** |
| | comp=Z,0.3nm,0.7s,baz=305,slow=4.2,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **74.53** | **133** | P | **P** | **14 12 56.1** | **-0.3** |
| | comp=Z,0.8nm,0.7s,baz=315,slow=5.8,SNR=8.8 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.33** | **277** | P | **P** | **14 13 06.3** | **-0.7** |
| | comp=Z,0.3nm,0.6s,baz=36,slow=6.2,SNR=2.0 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.70** | **9** | P | **P** | **14 13 41.0** | **+0.1** |
| | comp=Z,0.2nm,0.6s,baz=334,slow=5.0,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **83.36** | **229** | LR | LR | 14 47 41.9 | |
| | comp=Z,23nm,20.8s,baz=167,slow=33 | | | | | | |
| **BBTS** | **Babate** | **90.27** | **288** | LR | LR | 15 03 49.9 | |
| | comp=Z,161nm,18.1s,baz=318,slow=42 | | | | | | |

*DJA **29** 14:11:04.1±0.6, 3°N±5°×12°5E±°, h10km, M3.8/9, mb3.9/3, mB4.5/1, MLv3.7/9, Mw(mB)3.6/1*
*IDC **29** 14:11:16.1±1.9, 0°85N×124°50E, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=171.0km s-min=27.7km az=63.0*
**ISC 29 14:11:02.4±2.7, 2°8N±0°2×125°0E±0°2, h10km, n7, σ1§48/8, mb3.5/3, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **2.44** | **203** | P | **Pn** | **14 11 41.6** | **-0.7** |
| KMSI | | | | S | **Sn** | **14 12 12.9** | **+0.7** |
| **GTOI** | **Gorontalo** | **2.91** | **222** | P | **Pn** | **14 11 49.0** | **+0.1** |
| GTOI | | | | S | **Sn** | **14 12 22.2** | **-1.8** |
| **LUWI** | **Luwuk** | **4.42** | **210** | P | **Pn** | **14 12 11.9** | **+2.4** |
| **MPSI** | **Mapaga** | **5.62** | **244** | P | **Pn** | **14 12 26.8** | **+0.7** |
| | 7.3nm,0.8s,395nm0.0nm | | | | | | |
| **WRA** | **Warramunga Arr** | **24.43** | **158** | P | **P** | **14 16 20.6** | **-0.9** |
| | 0.9nm,0.4s,baz=333,slow=11,SNR=24 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **27.74** | **162** | P | **P** | **14 16 51.3** | **-0.1** |
| | 0.6nm,0.7s,baz=350,slow=16,SNR=6.6 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.30** | **326** | P | P | 14 21 15.6 | +25 |
| | 0.2nm,0.6s,baz=127,slow=8.6,SNR=1.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*SDD **29** 14:27:44.1±2.5, 19°16N×68°03W, h140km±36km, MD3.3, ML2.3, MW3.0*
*RSPR **29** 14:27:47.6, 19°26N×67°87W, h43km±8km, MD3.2/5*
*NEIC **29** 14:27:47.0±0.9, 19°22N±0°09×67°89W±0°03, h35km±2km, ML2.2/12, Md3.2/5(RSPR), Error ellipse: s-maj=15.2km s-min=4.0km az=346.0*
**ISC 29 14:27:44.9±1.9, 19°22N±0°09×67°87W±0°03, h12km±10km, n38, σ1§04/44, 4C-4D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCDR** | **Punta Cana, DR** | **0.85** | **215** | ⇓*e*P | **Pn** | **14 28 02.5** | **-0.2** |
| **PCDR** | **Punta Cana, DR** | **0.85** | **215** | *e*S | **Sg** | **14 28 12.8** | **+0.3** |
| **PCDR** | **Punta Cana, DR** | **0.85** | **215** | | **Pn** | **14 28 02.5** | **-0.2** |
| **PCDR** | **Punta Cana, DR** | **0.85** | **215** | | **Sg** | **14 28 12.8** | **+0.3** |
| **PCDR** | **Punta Cana, DR** | **0.85** | **215** | IAML | | 14 28 07.4 | |
| | comp=N,177nm,2.2s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.85** | **215** | IAML | | 14 28 35.7 | |
| | comp=E,101nm,2.0s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.85** | **215** | *e*Pg | **Pn** | **14 28 02.9** | **+0.2** |
| PCDR | | | | ⇓*e*Sg | **Sg** | **14 28 12.8** | **+0.3** |
| PCDR | | | | IAML | | 14 28 56.2 | |
| | comp=N,189nm,1.9s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.04** | **136** | ⇓*e*P | **Pn** | **14 28 05.3** | **+0.1** |
| **AGPR** | **Aguadilla, PR** | **1.04** | **136** | *e*S | **Sb** | **14 28 18.6** | **+0.3** |
| **AGPR** | **Aguadilla, PR** | **1.04** | **136** | | **Pg** | **14 28 04.3** | **-0.6** |
| AGPR | | | | IAML | | 14 28 28.1 | |
| | comp=N,76nm,1.9s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.04** | **136** | | **Sb** | **14 28 18.6** | **+0.3** |
| **AGPR** | **Aguadilla, PR** | **1.04** | **136** | ⇑*e*Sg | **Sn** | **14 28 24.6** | **+5.0** |
| AGPR | | | | IAML | | 14 28 25.3 | |
| | comp=E,72nm,0.3s | | | | | | |
| AGPR | | | | IAML | | 14 28 27.8 | |
| | comp=N,74nm,1.4s | | | | | | |
| **MIDR** | **Miches** | **1.14** | **258** | *e*Pg | **Pb** | **14 28 05.8** | **-0.7** |
| MIDR | | | | *e*Sg | **Sn** | **14 28 23.8** | **+1.6** |
| MIDR | | | | IAML | | 14 28 56.1 | |
| | comp=N,19nm,1.0s | | | | | | |
| **MIDR** | **Miches** | **1.14** | **258** | *e*Pg | **Pb** | **14 28 

*NEIC* ***29*** *14:29:16.9±0.3,36.28N±0.01×97.51W±0.01, h8km±5km, mb_Lg2.5/44, ML2.8, ML2.6/52, Error ellipse: s-maj=1.7km s-min=1.5km az=178.0*

**NEIC 29 14:29:16.5±0.2, 36.28N±0.01×97.516W±0.007, h4km±5km, Error ellipse: s-maj=1.8km s-min=0.8km az=171.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CROK** | **Carrier** | **0.44** | **301** | Pg | Pg | 14 29 25.6 | +0.6 |
| CROK | | | | IAML | | 14 29 36.2 | |
| | comp=E,700nm,0.3s | | | | | | |
| **OK048** | **Pawnee Station** | **0.48** | **73** | Pg | Pg | 14 29 26.2 | +0.4 |
| **OK029** | **Liberty Lake** | **0.48** | **174** | Pg | Pg | 14 29 26.4 | +0.6 |
| **BLOK** | **Blackwell** | **0.54** | **27** | Pg | Pg | 14 29 27.4 | +0.4 |
| **OK051** | **E0350 and S346** | **0.59** | **67** | | Pg | 14 29 28.3 | +0.4 |
| OK051 | | | | IAML | | 14 29 40.7 | |
| | comp=E,230nm,0.2s | | | | | | |
| OK051 | | | | IAML | | 14 29 40.9 | |
| | comp=E,351nm,0.2s | | | | | | |
| **GC02** | **Grant County #** | **0.64** | **334** | Pg | Pg | 14 29 28.9 | +0.1 |
| **OK031** | **S. Brethren Rd** | **0.64** | **120** | | Pg | 14 29 29.1 | +0.4 |
| OK031 | | | | IAML | | 14 29 38.1 | |
| | comp=E,284nm,0.2s | | | | | | |
| OK031 | | | | IAML | | 14 29 38.1 | |
| | comp=E,336nm,0.4s | | | | | | |
| **OK052** | **Battle Ridge R** | **0.64** | **116** | Pg | Pg | 14 29 29.2 | +0.3 |
| OK052 | | | | IAML | | 14 29 38.3 | |
| | comp=E,344nm,0.5s | | | | | | |
| **QUOK** | **Quay** | **0.66** | **99** | Pg | Pg | 14 29 29.6 | +0.4 |
| **KAN13** | **South Haven SW** | **0.73** | **2** | | Pg | 14 29 30.9 | +0.2 |
| KAN13 | | | | IAML | | 14 29 48.9 | |
| | comp=N,301nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 14 29 50.2 | |
| | comp=E,386nm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.77** | **332** | | Pg | 14 29 31.4 | +0.2 |
| KAN14 | | | | IAML | | 14 29 43.5 | |
| | comp=N,188nm,0.2s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.77** | **313** | | Pg | 14 29 31.4 | +0.1 |
| OK032 | | | | IAML | | 14 29 45.0 | |
| | comp=N,321nm,0.2s | | | | | | |
| **KAN17** | **Caldwell West** | **0.79** | **345** | | Pg | 14 29 31.9 | +0.2 |
| KAN17 | | | | IAML | | 14 29 42.9 | |
| | comp=E,306nm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 14 29 54.0 | |
| | comp=N,239nm,0.2s | | | | | | |
| **KAN09** | **Caldwell North** | **0.86** | **355** | | Pg | 14 29 33.1 | +0.1 |
| **KAN01** | **Argonia South** | **0.90** | **347** | | Pg | 14 29 33.8 | 0.0 |
| KAN01 | | | | IAML | | 14 29 46.1 | |
| | comp=E,194nm,0.4s | | | | | | |
| **DEOK** | **Depew** | **0.93** | **118** | Pg | Pg | 14 29 34.5 | +0.1 |
| DEOK | | | | IAML | | 14 29 47.3 | |
| | comp=N,208nm,0.4s | | | | | | |
| **OK038** | **West end E0370** | **1.01** | **282** | | Pg | 14 29 35.7 | -0.2 |
| **FNO** | **Franklin** | **1.02** | **175** | | Pg | 14 29 36.0 | -0.1 |
| FNO | | | | IAML | | 14 29 52.4 | |
| | comp=E,128nm,0.2s | | | | | | |
| FNO | | | | IAML | | 14 29 53.5 | |
| | comp=N,147nm,0.2s | | | | | | |
| **CSTR** | **Hydro, Custer** | **1.14** | **237** | | Pg | 14 29 38.1 | -0.3 |
| **TUL3** | **Leonard** | **1.44** | **104** | | Pn | 14 29 42.3 | -1.1 |
| **ELIS** | **Ellis County** | **1.55** | **263** | Pg | Pn | 14 29 45.0 | -0.1 |
| **X34A** | **Smith Ranch, M** | **1.69** | **189** | | Pn | 14 29 47.3 | +0.4 |
| **WMOK** | **Wichita Mounta** | **1.85** | **214** | | Pn | 14 29 49.4 | +0.2 |
| **X37A** | **Clayton** | **2.43** | **133** | IAmb_Lg | | 14 30 38.9 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **3.09** | **326** | IAmb_Lg | | 14 30 55.9 | |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.64** | **66** | IAmb_Lg | | 14 31 18.2 | |
| | comp=Z,10nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.67** | **249** | IAmb_Lg | | 14 31 17.1 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.05** | **206** | IAmb_Lg | | 14 31 25.8 | |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.22** | **114** | IAmb_Lg | | 14 31 36.4 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **SN07** | **Snyder 07** | **4.22** | **222** | IAmb_Lg | | 14 31 37.4 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.30** | **77** | IAmb_Lg | | 14 31 36.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.36** | **102** | IAmb_Lg | | 14 31 42.9 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.38** | **93** | IAmb_Lg | | 14 31 38.6 | |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **POST** | **Post** | **4.59** | **227** | IAmb_Lg | | 14 31 53.2 | |
| | comp=Z,6.6nm,0.7s | | | | | | |
| **P38A** | **Dawn** | **4.59** | **42** | IAmb_Lg | | 14 31 44.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.89** | **305** | IAmb_Lg | | 14 31 50.6 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **5.13** | **194** | IAmb_Lg | | 14 32 06.6 | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.31** | **69** | IAmb_Lg | | 14 32 03.9 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.61** | **281** | IAmb_Lg | | 14 32 23.4 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **FVM** | **French Village** | **5.91** | **71** | IAmb_Lg | | 14 32 26.0 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **6.09** | **199** | IAmb_Lg | | 14 32 40.7 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **OZNA** | **Ozona** | **6.13** | **210** | IAmb_Lg | | 14 32 37.2 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **S44A** | **Carbondale** | **6.76** | **75** | IAmb_Lg | | 14 33 01.0 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **SAND** | **Sanderson** | **7.39** | **213** | IAmb_Lg | | 14 33 19.1 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **N23A** | **Red Feather La** | **8.05** | **307** | IAmb_Lg | | 14 33 51.7 | |
| | comp=Z,7.2nm,1.1s | | | | | | |

**IDC 29 14:32:45.6±7.6, 19.43S×175.66W, h0km, mb3.5/3, mbtmp3.5/3, Error ellipse: s-maj=325.2km s-min=43.5km az=143.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **46.91** | **255** | P | P | 14 41 18.7 | +0.4 |
| | 0.7nm,1.0s,baz=93,slow=8.8,SNR=4.6 0.7nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.94** | **261** | P | P | 14 41 17.8 | -0.7 |
| | 0.4nm,0.9s,baz=98,slow=8.0,SNR=5.1 0.4nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **86.80** | **12** | P | P | 14 45 31.4 | 0.0 |
| | 0.3nm,0.8s,baz=196,slow=6.1,SNR=1.7 0.3nm,0.8s | | | | | | |

*NOU* ***29*** *14:44:53.8, 22.36S×170.33E, h0km, MLv4.4/12, Southeast of Loyalty Islands*

*IDC* ***29*** *14:44:57.0±2.8, 20.18S×169.47E, h0km, mb3.4/2, mbtmp3.6/3, ML4.1/1, Error ellipse: s-maj=121.5km s-min=32.3km az=146.0*

**ISC 29 14:44:57.7±1.2, 21.7S±0.1×170.00E±0.08, h10km, n18, σ2§38/16, 2C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.84** | **276** | P | **Pg** | **14 45 32.3** | **-0.8** |
| **PINNC** | **Pines Island,** | **2.54** | **248** | P | **Pn** | **14 45 38.2** | **-0.8** |
| **LIFNC** | **LIFOU** | **2.73** | **289** | P | **Pb** | **14 45 46.3** | **-0.3** |
| **YATNC** | **Mamie plateau,** | **2.91** | **262** | P | **Pn** | **14 45 44.8** | **+0.7** |
| **DZM** | **Mont Dzumac** | **3.33** | **263** | P | **Pn** | **14 45 51.4** | **+1.5** |
| **DZM** | **Mont Dzumac** | **3.33** | **263** | Pn | **Pn** | **14 45 51.4** | **+1.5** |
| | 17nm,0.3s,baz=110,slow=12,SNR=54 | | | | | | |
| DZM | | | | Sn | **Sn** | **14 46 32.9** | **+3.4** |
| | 10nm,0.3s,baz=309,slow=21,SNR=8.9 40nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.46** | **262** | P | **Pn** | **14 45 53.0** | **+1.4** |
| **RTV** | **Rentapao** | **4.14** | **339** | P | **Pb** | **14 46 09.4** | **-1.3** |
| **DVP** | **Devils Point** | **4.29** | **336** | P | **Pb** | **14 46 10.6** | **-2.6** |
| **KOUNC** | **Koumac, New Ca** | **5.45** | **281** | P | **Pn** | **14 46 23.1** | **+4.1** |
| **NFK** | **Norfolk Island** | **7.56** | **194** | P | Pn | 14 46 37.3 | -11 |
| **MSVF** | **Nonsavu** | **8.54** | **64** | Pn | **Pn** | **14 47 05.1** | **+3.6** |
| | 0.2nm,0.3s,baz=196,slow=17,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **33.31** | **260** | P | **P** | **14 51 34.4** | **-1.6** |
| | 0.4nm,0.7s,baz=94,slow=9.3,SNR=5.5 0.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.34** | **266** | P | **P** | **14 51 34.1** | **-2.0** |
| | 0.2nm,0.4s,baz=93,slow=8.5,SNR=11 0.2nm,0.4s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **87.32** | **180** | ⇑P | P | 14 57 37.1 | -7.4 |
| **VNA2** | **Neumayer--Watz** | **87.62** | **181** | ⇑P | P | 14 57 38.5 | -7.4 |
| | baz=177,slow=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.60** | **345** | PKP | **PKPdf** | **15 04 00.1** | **-2.3** |
| | 4.0nm,1.1s,baz=57,slow=3.3,SNR=4.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.01** | **353** | PKP | **PKPdf** | **15 04 34.8** | **-1.9** |
| | 1.3nm,0.5s,baz=359,slow=2.7,SNR=5.8 | | | | | | |

*IDC* ***29*** *14:47:40.4±1.5, 22.48S×170.39E, h0km, mb4.0/5, mbtmp4.0/6, ML4.2/1, MS3.9/11, Error ellipse: s-maj=46.8km s-min=25.7km az=22.0*

*NEIC* ***29*** *14:47:44.3±1.2, 22.7S±0.1×170.22E±0.07, h10km±1km, mb4.4/7, Error ellipse: s-maj=19.8km s-min=11.3km az=357.0*

*NOU* ***29*** *14:48:02.4, 22.10S×168.77E, h0km, MLv3.3/4, New Caledonia*

**ISC 29 14:47:45.2±0.7, 22.7S±0.1×170.23E±0.08, h21km, n38, σ1§17/31, mb4.4/11, MS3.7/10, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.36** | **300** | P | **Pn** | **14 48 20.2** | **-2.6** |
| **PINNC** | **Pines Island,** | **2.57** | **271** | | **Pn** | **14 48 26.4** | **+0.9** |
| **YATNC** | **Mamie plateau,** | **3.15** | **281** | P | **Pn** | **14 48 33.6** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.55** | **279** | P | **Pn** | **14 48 39.7** | **+0.5** |
| **DZM** | **Mont Dzumac** | **3.55** | **279** | | **Pn** | **14 48 39.2** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.55** | **279** | Pn | **Pn** | **14 48 39.5** | **+0.3** |
| | 19nm,0.3s,baz=125,slow=14,SNR=31 | | | | | | |
| DZM | | | | Sn | **Sn** | **14 49 21.9** | **+1.3** |
| | 22nm,0.3s,baz=132,slow=24,SNR=11 44nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.68** | **278** | P | **Pn** | **14 48 41.3** | **+0.5** |
| **KOUNC** | **Koumac, New Ca** | **5.92** | **290** | | **Pn** | **14 49 11.6** | **-0.1** |
| **MSVF** | **Nonsavu** | **8.85** | **58** | Pn | **Pn** | **14 49 52.9** | **+1.0** |
| **MSVF** | **Nonsavu** | **8.85** | **58** | Pn | **Pn** | **14 49 53.9** | **+1.9** |
| | 0.4nm,0.3s,baz=204,slow=17,SNR=4.3 | | | | | | |
| **HNR** | **Honiara** | **16.46** | **322** | LR | LR | 14 56 34.4 | |
| | comp=Z,866nm,18.7s,baz=216,slow=33 | | | | | | |
| **URZ** | **Urewera** | **16.61** | **161** | LR | LR | 14 56 55.9 | |
| | comp=Z,293nm,19.2s,baz=55,slow=33 | | | | | | |
| **BKZ** | **Black Stump Fm** | **17.27** | **163** | Pn | **P** | **14 51 44.6** | **-1.9** |
| BKZ | | | | IAmb | IAmb | 14 51 53.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **TCW** | **Tory Channel** | **18.78** | **170** | P | **P** | **14 52 01.3** | **-1.7** |
| **RPZ** | **Rata Peaks** | **20.98** | **178** | LR | LR | 15 00 10.9 | |
| | comp=Z,274nm,18.4s,baz=348,slow=35 | | | | | | |
| **CTA** | **Charters Tower** | **22.46** | **272** | P | **P** | **14 52 42.9** | **-0.3** |
| | comp=Z,0.2nm,0.8s,baz=76,slow=14,SNR=2.9 | | | | | | |
| CTA | | | | LR | LR | 15 00 05.0 | |
| | comp=Z,10nm,19.4s,baz=91,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **22.46** | **272** | P | **P** | **14 52 43.3** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 14 52 58.0 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **25.75** | **297** | LR | LR | 15 02 22.5 | |
| | comp=Z,165nm,19.2s,baz=106,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **26.97** | **244** | LR | LR | 15 03 17.8 | |
| | comp=Z,238nm,19.5s,baz=48,slow=34 | | | | | | |
| **AS31** | **Alice Springs** | **33.35** | **261** | P | **P** | **14 54 21.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **33.35** | **261** | P | **P** | **14 54 21.6** | **-0.4** |
| | comp=Z,1.3nm,0.9s,baz=73,slow=8.5,SNR=6.6 | | | | | | |
| ASAR | | | | LR | LR | 15 07 37.5 | |
| | comp=Z,159nm,19.3s,baz=100,slow=36 comp=Z,1.3nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.48** | **268** | P | **P** | **14 54 22.4** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 14 54 37.1 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.49** | **268** | P | **P** | **14 54 22.5** | **-0.8** |
| | comp=Z,1.0nm,0.9s,baz=101,slow=8.3,SNR=6.5 comp=Z,1.0nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **39.68** | **273** | P | **P** | **14 55 15.8** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 14 55 28.1 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **GUMO** | **Guam** | **43.78** | **323** | LR | LR | 15 13 23.7 | |
| | comp=Z,50nm,18.3s,baz=118,slow=35 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.54** | **246** | LR | LR | 15 15 35.0 | |
| | comp=Z,172nm,20.2s,baz=58,slow=35 | | | | | | |
| **CASY** | **Casey** | **57.36** | **205** | P | **P** | **14 57 32.8** | **+1.2** |
| **QSPA** | **South Pole Qui** | **67.38** | **180** | P | **P** | **14 58 40.3** | **+1.6** |
| QSPA | | | | IAmb | IAmb | 14 58 41.8 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.38** | **180** | P | **P** | **14 58 39.1** | **+0.3** |
| | comp=Z,2.3nm,1.0s,baz=294,slow=1.5,SNR=3.9 | | | | | | |
| QSPA | | | | LR | LR | 15 24 35.0 | |
| | comp=Z,49nm,19.2s,baz=48,slow=33 comp=Z,2.3nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.76** | **294** | P | **P** | **14 59 58.1** | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=125,slow=4.5,SNR=2.9 comp=Z,0.5nm,0.5s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.17** | **184** | ⇑P | **P** | **15 00 17.0** | **-2.7** |
| | comp=Z,223nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **85.77** | **182** | ⇑P | **P** | **15 00 21.7** | **-0.9** |
| | comp=Z,38nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **85.77** | **182** | P | **P** | **15 00 21.3** | **-1.2** |
| | comp=Z,2.3nm,1.0s,baz=179,slow=7.5,SNR=4.5 | | | | | | |
| SNAA | | | | LR | LR | 15 35 42.9 | |
| | comp=Z,45nm,19.4s,baz=53,slow=34 comp=Z,2.3nm,1.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.32** | **180** | ⇑P | **P** | **15 00 24.4** | **-0.8** |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.63** | **181** | ⇑P | **P** | **15 00 27.2** | **+0.4** |
| | comp=Z,3.1nm,0.7s,baz=179,slow=2.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **86.91** | **181** | ⇑P | **P** | **15 00 28.7** | **+0.6** |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **ANMO** | **Albuquerque** | **97.49** | **55** | LR | LR | 15 35 45.6 | |
| | comp=Z,128nm,21.8s,baz=324,slow=30 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **147.03** | **353** | PKPbc | **PKPdf** | **15 07 23.2** | **-0.7** |
| | comp=Z,1.3nm,0.5s,baz=356,slow=2.0,SNR=6.4 | | | | | | |

**IDC 29 15:01:36.3±3.1, 17.87S×178.11W, h523km±20km, mb3.3/4, mbtmp4.1/5, Error ellipse: s-maj=64.6km s-min=28.3km az=29.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.66** | **271** | P | P | 15 02 54.0 | +0.2 |
| | 6.6nm,0.4s,baz=22,slow=23,SNR=14 | | | | | | |
| **STKA** | **Stephens Creek** | **38.90** | **241** | P | P | 15 08 17.4 | +0.6 |
| | 2.5nm,0.8s,baz=80,slow=6.1,SNR=2.1 2.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.92** | **259** | P | P | 15 09 03.6 | -0.9 |
| | 1.0nm,0.7s,baz=94,slow=6.7,SNR=25 | | | | | | |
| WRA | | | | PcP | PcP | 15 10 34.5 | -0.5 |
| | 1.7nm,1.2s,baz=91,slow=3.6,SNR=7.1 1.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **45.08** | **254** | P | P | 15 09 05.8 | +0.1 |
| | 6.6nm,0.6s,baz=89,slow=8.2,SNR=228 | | | | | | |
| ASAR | | | | PcP | PcP | 15 10 36.0 | +0.5 |
| | 0.7nm,0.4s,baz=104,slow=3.9,SNR=14 6.6nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.19** | **180** | P | P | 15 12 07.7 | -0.1 |
| | 1.3nm,0.6s,baz=302,slow=0.4,SNR=15 1.3nm,0.6s | | | | | | |

*IDC* ***29*** *15:06:43.1±0.6, 51.23N×176.20W, h0km, mb4.3/29, mbtmp4.3/30, ML4.0/1, MS3.8/35, Error ellipse: s-maj=18.9km s-min=12.1km az=171.0*

*AEIC* ***29*** *15:06:46.8±2.2, 51.04N±0.08×176.08W±0.05, h33km±5km, Error ellipse: s-maj=11.2km s-min=4.7km az=184.0*

*MOS* ***29*** *15:06:46.7±0.9, 51.23N×176.02W, h39km, mb4.8/30, Error ellipse: s-maj=10.8km s-min=7.1km az=109.4*

*NEIC* ***29*** *15:06:48.2±2.0, 51.11N±0.08×176.14W±0.08, h38km±7km, mb4.7/215, ML4.4(AEIC), Error ellipse: s-maj=11.9km s-min=6.8km az=172.0*

**ISC 29 15:06:47.8±0.4, 51.05N±0.06×176.05W±0.03, h35km, n635, σ1§29/575, mb4.7/131, MS3.9/50, 16C-14D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSCK** | **Great Sitkin C** | **0.97** | **356** | | **Pn** | **15 07 04.3** | **-0.6** |
| **ADAG** | **Mount Adagdak** | **0.99** | **340** | | **Pn** | **15 07 04.7** | **-0.6** |
| **GSMY** | **Great Sitkin M** | **0.99** | **360** | | **Pn** | **15 07 04.8** | **-0.5** |
| **KIMD** | **Kanaga Island** | **1.03** | **314** | | **Pn** | **15 07 04.6** | **-1.2** |
| **GSTR** | **Great Sitkin T** | **1.05** | **360** | | **Pn** | **15 07 05.6** | **-0.4** |
| **KIWB** | **Kanaga Island** | **1.06** | **320** | Pn | **Pn** | **15 07 05.2** | **-1.0** |
| **KIRH** | **Kanaga Island** | **1.07** | **323** | | **Pn** | **15 07 05.5** | **-0.8** |
| **KICM** | **Kanaga Island** | **1.13** | **321** | | **Pn** | **15 07 06.5** | **-0.6** |
| **TASE** | **Tanaga Southea** | **1.47** | **303** | | **Pn** | **15 07 11.4** | **-0.5** |
| **TANO** | **Tanaga North** | **1.56** | **305** | | **Pn** | **15 07 13.2** | **+0.2** |
| **KOKL** | **Mount Kliuchef** | **1.72** | **41** | | **Pn** | **15 07 15.3** | **0.0** |
| **KOFP** | **Korovin Flat P** | **1.73** | **44** | | **Pn** | **15 07 15.6** | **+0.2** |
| **KOSE** | **Korovin Southe** | **1.80** | **43** | | **Pn** | **15 07 16.9** | **+0.5** |
| **GAEA** | **Gareloi East** | **1.84** | **295** | | **Pn** | **15 07 17.0** | **+0.1** |
| **GALA** | **Gareloi Lava P** | **1.85** | **294** | | **Pn** | **15 07 16.7** | **-0.3** |
| **GASW** | **Gareloi Southw** | **1.90** | **294** | | **Pn** | **15 07 17.6** | **-0.1** |
| **CESW** | **Semis' Southwe** | **2.87** | **289** | | **Pn** | **15 07 30.5** | **-0.5** |
| **AMKA** | **Amchitka** | **2.94** | **278** | Pn | **Pn** | **15 07 30.3** | **-1.7** |
| **CLCO** | **Concord Point,** | **4.29** | **64** | | **Pn** | **15 07 50.7** | **+0.2** |
| **NIKH** | **Nikolski High** | **4.84** | **64** | Pn | **Pn** | **15 07 58.9** | **+0.8** |
| **NIKH** | **Nikolski High** | **4.84** | **64** | | **Sn** | **15 08 53.6** | **+0.6** |
| NIKH | | | | | LR | 15 08 56.6 | |
| **NIKH** | **Nikolski High** | **4.84** | **64** | P | **Pn** | **15 07 59.8** | **+1.6** |
| | baz=249 | | | | | | |
| NIKH | | | | S | **Sn** | **15 08 51.7** | **-1.3** |
| | baz=249 | | | | | | |
| **MAPS** | **Pakushin South** | **6.22** | **60** | | **Pn** | **15 08 18.4** | **+1.3** |
| MAPS | | | | | **Sn** | **15 09 28.6** | **+1.7** |
| **SHEM** | **Shemya Is, Ala** | **6.33** | **289** | Pn | **Pn** | **15 08 15.1** | **-3.3** |
| | 3.2nm,0.3s,baz=273,slow=20,SNR=1.4 48nm,1.0s | | | | | | |
| **MREP** | **Makushin Rep't** | **6.33** | **60** | | **Pn** | **15 08 20.0** | **+1.4** |
| **MSW** | **Makushin Switc** | **6.35** | **60** | | **Pn** | **15 08 20.0** | **+1.2** |
| **UNV** | **Unalaska Valle** | **6.47** | **61** | | **Sn** | **15 09 34.6** | **+1.6** |
| **UNV** | **Unalaska Valle** | **6.47** | **61** | Pn | **Pn** | **15 08 22.0** | **+1.5** |
| **UNV** | **Unalaska Valle** | **6.47** | **61** | P | **Pn** | **15 08 23.6** | **+3.1** |
| | baz=248 | | | | | | |
| UNV | | | | S | **Sn** | **15 09 32.2** | **-0.8** |
| | baz=248 | | | | | | |
| **P08K** | **Saint George I** | **6.76** | **32** | P | **Pn** | **15 08 26.1** | **+1.7** |
| | baz=217 | | | | | | |
| **AKMO** | **Akutan Morgan** | **6.84** | **60** | | **Pn** | **15 08 27.4** | **+1.9** |
| **LVA** | **Lava Point** | **6.85** | **59** | Pn | **Pn** | **15 08 27.7** | **+2.0** |
| **ZRO** | **Akutan Zero** | **6.85** | **60** | | **Pn** | **15 08 27.9** | **+2.1** |
| **AKBBA** | **Akutan Broad B** | **6.88** | **60** | | **Pn** | **15 08 27.6** | **+1.5** |
| **AHB** | **Akutan Harbor** | **6.95** | **60** | | **Pn** | **15 08 29.6** | **+2.5** |
| **SPIA** | **Saint Paul Isl** | **7.02** | **27** | | **Sn** | **15 09 50.3** | **+3.9** |
| **SPIA** | **Saint Paul Isl** | **7.02** | **27** | Pn | **Pn** | **15 08 28.4** | **+0.4** |
| **SPIA** | **Saint Paul Isl** | **7.02** | **27** | P | **Pn** | **15 08 30.4** | **+2.4** |
| | baz=211 | | | | | | |
| SPIA | | | | S | **Sn** | **15 09 40.3** | **-6.1** |
| | baz=211 | | | | | | |
| **ISLZ** | **Isanotski Laza** | **8.32** | **59** | | **Pn** | **15 08 48.4** | **+2.5** |
| **FALS** | **False Pass** | **8.53** | **59** | P | **Pn** | **15 08 50.8** | **+2.2** |
| | baz=249 | | | | | | |
| **S12K** | **Black Hills** | **9.57** | **55** | Pn | **Pn** | **15 09 05.1** | **+2.2** |
| **S12K** | **Black Hills** | **9.57** | **55** | P | **Pn** | **15 09 04.5** | **+1.6** |
| | baz=247 | | | | | | |
| **SDPT** | **Sand Point** | **10.28** | **59** | Pn | **Pn** | **15 09 11.6** | **-1.0** |
| **SDPT** | **Sand Point** | **10.28** | **59** | P | **Pn** | **15 09 14.3** | **+1.6** |
| | baz=252 | | | | | | |
| SDPT | | | | S | **Sn** | **15 11 01.8** | **-4.8** |
| | baz=252 | | | | | | |
| **CNBA** | **Chernabura Isl** | **10.63** | **63** | Pn | **Pn** | **15 09 15.4** | **-1.9** |
| **CHNA** | **Chernabura Isl** | **10.63** | **63** | P | **Pn** | **15 09 18.0** | **+0.6** |
| | baz=256 | | | | | | |
| **M11K** | **Mekoryuk** | **10.87** | **27** | P | **Pn** | **15 09 21.9** | **+1.3** |
| | baz=215 | | | | | | |
| **S14K** | **Fog Glacier** | **11.09** | **55** | P | **Pn** | **15 09 25.6** | **+1.8** |
| | baz=249 | | | | | | |
| **CHGN** | **Chignik** | **11.69** | **56** | Pn | **Pn** | **15 09 31.4** | **-0.6** |
| **CHGN** | **Chignik** | **11.69** | **56** | P | **Pn** | **15 09 33.9** | **+1.9** |
| | baz=251 | | | | | | |
| **O14K** | **Tigyukauivet M** | **11.77** | **40** | Pn | **Pn** | **15 09 35.7** | **+2.7** |
| **O14K** | **Tigyukauivet M** | **11.77** | **40** | P | **Pn** | **15 09 35.4** | **+2.4** |
| | baz=232 | | | | | | |
| **M13K** | **Dall Lake** | **11.78** | **32** | P | **Pn** | **15 09 35.6** | **+2.6** |
| | baz=223 | | | | | | |
| **N14K** | **Kuskokwak Cree** | **12.03** | **37** | P | **Pn** | **15 09 39.6** | **+3.0** |
| | baz=229 | | | | | | |
| **O15K** | **Ungaliktiuk R** | **12.32** | **42** | P | **Pn** | **15 09 42.6** | **+2.1** |
| | baz=236,SNR=10.0 | | | | | | |
| **M14K** | **Bethel** | **12.50** | **34** | Pn | **Pn** | **15 09 43.8** | **+0.8** |
| **M14K** | **Bethel** | **12.50** | **34** | P | **Pn** | **15 09 45.4** | **+2.5** |
| | baz=225 | | | | | | |
| **K13K** | **Kusilvak Mount** | **12.57** | **25** | Pn | **Pn** | **15 09 46.6** | **+2.7** |
| **K13K** | **Kusilvak Mount** | **12.57** | **25** | P | **Pn** | **15 09 46.1** | **+2.2** |
| | baz=215 | | | | | | |
| **R16K** | **Pilot Point** | **12.59** | **52** | P | **Pn** | **15 09 46.0** | **+1.9** |
| | baz=247 | | | | | | |
| **L14K** | **Kuka Creek** | **12.69** | **30** | Pn | **Pn** | **15 09 49.7** | **+4.2** |
| **L14K** | **Kuka Creek** | **12.69** | **30** | P | **Pn** | **15 09 47.9** | **+2.4** |
| | baz=222 | | | | | | |
| **N15K** | **Kwethluk River** | **12.80** | **38** | Pn | **Pn** | **15 09 50.0** | **+2.9** |
| **N15K** | **Kwethluk River** | **12.80** | **38** | P | **Pn** | **15 09 48.3** | **+1.2** |
| | baz=232,SNR=13 | | | | | | |
| **M15K** | **Kasigluk River** | **12.92** | **36** | P | **Pn** | **15 09 50.3** | **+1.6** |
| | baz=228,SNR=13 | | | | | | |
| **GAMB** | **Gambell** | **12.97** | **9** | P | **Pn** | **15 09 51.7** | **+2.4** |
| | baz=192 | | | | | | |
| **P16K** | **Nushagak River** | **13.05** | **45** | P | **Pn** | **15 09 51.3** | **+0.9** |
| | baz=240 | | | | | | |
| **CHIR** | **Chirikof Islan** | **13.06** | **61** | Pn | **Pn** | **15 09 48.6** | **-2.0** |
| **CHIR** | **Chirikof Islan** | **13.06** | **61** | P | **Pn** | **15 09 52.4** | **+1.7** |
| | baz=257 | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **13.21** | **52** | P | **Pn** | **15 09 53.8** | **+1.0** |
| | baz=248 | | | | | | |
| **PLK4** | **Peulik 4** | **13.21** | **52** | Pn | **Pn** | **15 09 53.0** | **+0.2** |
| **O16K** | **Kokwok River B** | **13.29** | **43** | Pn | **Pn** | **15 09 56.0** | **+2.2** |
| **O16K** | **Kokwok River B** | **13.29** | **43** | P | **Pn** | **15 09 55.1** | **+1.3** |
| | baz=238 | | | | | | |
| **L15K** | **Ugalak Mounta** | **13.32** | **31** | P | **Pn** | **15 09 55.1** | **+0.9** |
| | baz=224 | | | | | | |
| **Q16K** | **King Salmon** | **13.49** | **48** | P | **Pn** | **15 09 58.8** | **+2.3** |
| | baz=244 | | | | | | |
| **N16K** | **Nishlik Lake** | **13.51** | **39** | P | **Pn** | **15 09 59.0** | **+2.2** |
| | baz=

KDAK Sn **Sn** **15 13 05.0 -1.1**
comp=Z,0.3nm,0.3s,baz=162,slow=20,SNR=1.2
KDAK LR LR 15 17 02.6
comp=Z,985nm,19.2s,baz=257,slow=41
**KDAK Kodiak Island** 15.18 55 P **Pn** **15 10 21.2 +1.9**
baz=254
**KDAK Kodiak Island** 15.18 55⇑ *e*P **Pn** **15 10 16.7 -2.6**
**I17K Unalakleet** 15.23 27 P **P** **15 10 23.5 -1.0**
I17K IAmb IAmb 15 10 51.6
comp=Z,43nm,1.1s
**I17K Unalakleet** 15.23 27 P **Pn** **15 10 21.1 +1.2**
baz=220
**O19K Port Alsworth** 15.24 45 P **Pn** **15 10 21.5 +1.4**
baz=243,SNR=5.2
**M18K Stony River** 15.27 39 P **Pn** **15 10 22.0 +1.5**
baz=236,SNR=14
**F14K Arctic Creek** 15.31 15 P **Pn** **15 10 22.6 +1.6**
baz=204
**G15K Niukluk** 15.32 20 P **Pn** **15 10 22.9 +1.8**
baz=210
**J17K VABM Dome** 15.34 30 IAmb IAmb 15 10 28.9
comp=Z,84nm,1.0s
**J17K VABM Dome** 15.34 30 P **Pn** **15 10 23.1 +1.7**
baz=224,SNR=32
**L18K Granite Mounta** 15.37 36 IAmb IAmb 15 10 28.9
comp=Z,65nm,1.0s
**L18K Granite Mounta** 15.37 36 P **Pn** **15 10 23.6 +1.8**
baz=232,SNR=28
**H16K Elim** 15.42 23 P **Pn** **15 10 23.6 +1.2**
baz=214
**N19K Bonanza Creek** 15.47 43 IAmb IAmb 15 10 33.2
comp=Z,33nm,0.8s
**N19K Bonanza Creek** 15.47 43 P **Pn** **15 10 24.2 +1.0**
baz=240,SNR=26
**P19K Oil Pt** 15.51 47 P **Pn** **15 10 24.5 +0.9**
baz=246
**Q20K Shuyak Island** 15.53 52 P **Pn** **15 10 24.5 +0.7**
baz=251
**PET Petropavlovsk** 15.67 287 *e*P **P** **15 10 30.0 +0.6**
PET *e*S **Sn** **15 13 16.9 -1.0**
PET pmax pmax
comp=Z,95nm,1.0s
PET MLR MLR
comp=Z,200nm,15.0s
PET MLR MLR
comp=Z,200nm,16.0s
**F15K North Star Dit** 15.82 17 P **P** **15 10 29.8 -1.3**
baz=207,SNR=8.6
**O20K Slope Mountain** 15.96 46 P **Pn** **15 10 30.9 +1.4**
baz=246
**G16K Koyuk River** 16.03 21 P **P** **15 10 32.3 -1.0**
**G16K Koyuk River** 16.03 21 P **P** **15 10 32.1 -1.2**
baz=213
**L19K White Mountain** 16.04 38 P **P** **15 10 35.3 +1.8**
L19K IAmb IAmb 15 10 36.5
comp=Z,94nm,0.9s
**L19K White Mountain** 16.04 38 P **P** **15 10 32.3 -1.3**
baz=236,SNR=77
**M19K Big River Lodg** 16.07 39 P **Pn** **15 10 32.4 +1.6**
baz=237,SNR=10
**J18K Innoko River** 16.16 32 P **Pn** **15 10 32.7 +0.8**
baz=229
**PEA0B Petropavlovsk-** 16.24 288 *d i*P **P** **15 10 36.4 +0.7**
**PETK Petropavlovsk-** 16.24 288 Pn **Pn** **15 10 33.0 0.0**
comp=Z,5.1nm,0.3s,baz=96,slow=16,SNR=126
**H17K Granite Mounta** 16.26 25 P **Pn** **15 10 33.8 +0.6**
baz=219,SNR=9.8
**CNPM China Poot** 16.40 49 Pn **Pn** **15 10 33.6 -1.4**
CNPM IAmb IAmb 15 10 38.1
comp=Z,42nm,1.3s
**G17K Kiwalik Mounta** 16.52 23 P **P** **15 10 37.9 -0.9**
baz=216
**M20K Styx River** 16.57 40 P **Pn** **15 10 38.1 +0.9**
baz=240
**L20K Farewell, AK** 16.59 38 P **Pn** **15 10 38.1 +0.7**
baz=236,SNR=43
**N20K Mount Spurr** 16.63 43 P **Pn** **15 10 38.9 +1.0**
baz=243
**SPCR Spurr Chakacha** 16.63 43 P **Pn** **15 10 38.9 +1.0**
baz=243
**SPU Mount Spurr** 16.69 43 **Pn** **15 10 39.7 +1.0**
**H18K Honhosa River** 16.85 26 P **Pn** **15 10 41.5 +0.9**
baz=221,SNR=14
**J19K Poorman** 16.88 32 P **Pn** **15 10 41.5 +0.6**
baz=229,SNR=20
**GCSA Galena City Sc** 16.98 29 P **P** **15 10 43.3 -0.6**
baz=225
**K20K Telida** 17.02 35 P **Pn** **15 10 43.0 +0.2**
baz=234,SNR=14
**F17K Baldwin Pennin** 17.16 20 P **Pn** **15 10 44.7 +0.3**
baz=213
**SKT Skwentna** 17.28 41 IAmb IAmb 15 10 51.7
comp=Z,35nm,1.0s
**SKT Skwentna** 17.28 41 P **Pn** **15 10 45.7 -0.3**
baz=242,SNR=23
**G18K Tagagawik** 17.34 24 P **P** **15 10 48.6 +0.8**
**G18K Tagagawik** 17.34 24 P **P** **15 10 47.7 -0.1**
baz=219,SNR=12
**SUA Susitna One** 17.38 43 P **Pn** **15 10 47.8 +0.5**
baz=245
**SEW Seward** 17.44 48 P **Pn** **15 10 48.5 +0.4**
baz=250
**O22K Cooper Landing** 17.45 47 P **Pn** **15 10 47.7 -0.3**
baz=249
**J20K Nowinta River** 17.49 33 P **Pn** **15 10 48.9 +0.2**
baz=232,SNR=14
**E17K Hotham Inlet** 17.58 19 P **P** **15 10 50.7 +0.2**
baz=211
**F18K Selawik** 17.65 22 P **P** **15 10 51.5 +0.3**
baz=216,SNR=11
**RC01 Rabbit Creek A** 17.67 45 P **P** **15 10 52.0 +0.5**
baz=247
**H19K Roundabout Mou** 17.67 27 P **P** **15 10 51.4 -0.1**
baz=224,SNR=15
**M22K Willow** 17.77 43 IAmb IAmb 15 11 16.4
comp=Z,48nm,1.2s
**M22K Willow** 17.77 43 P **P** **15 10 53.2 +0.6**
baz=245
**I20K Naaghedeneel** 17.78 31 IAmb IAmb 15 11 21.7
comp=Z,97nm,1.5s
**I20K Naaghedeneel** 17.78 31 P **P** **15 10 53.0 +0.3**
baz=229,SNR=10
**D17K Noatak River** 17.89 16 P **P** **15 10 55.2 +1.4**
baz=207
**G19K Purcell Mounta** 17.94 25 **P** **15 10 54.6 +0.1**
**G19K Purcell Mounta** 17.94 25 P **P** **15 10 55.4 +0.9**
baz=222,SNR=8.5
**CUT Chulitna** 18.00 41 P **P** **15 10 56.0 +0.9**
baz=243
**C16K Lisburne Hills** 18.05 13 **P** **15 10 55.8 +0.2**
**C16K Lisburne Hills** 18.05 13 P **P** **15 10 56.8 +1.2**
baz=202
**H20K Anotleneega Mo** 18.11 29 P **P** **15 10 57.2 +0.8**
baz=227,SNR=20
**E18K Tukpahlearik C** 18.12 19 P **P** **15 10 57.1 +0.7**
baz=213
**PMR Palmer** 18.14 44 P **Pn** **15 10 56.8 +0.3**
baz=247
**PWL Port Wells** 18.22 47 P **P** **15 10 57.8 +0.1**
baz=250
**RDOG Red Dog Mine** 18.23 16 P **P** **15 10 58.3 +0.7**
baz=207
**F19K Shaleruckik Mo** 18.29 23 P **P** **15 10 57.6 -0.7**
**F19K Shaleruckik Mo** 18.29 23 P **P** **15 10 58.1 -0.2**
baz=219,SNR=12
**KNK Knik Glacier** 18.36 45 P **P** **15 10 58.8 -0.4**
baz=248,SNR=7.9
**P23K Montague Islan** 18.39 50 P **P** **15 10 59.0 -0.4**
baz=254
**C17K DeLong Mountai** 18.57 15 P **Pn** **15 11 02.6 +0.8**
baz=206
**SML Sawmill** 18.57 44 P **P** **15 10 59.9 -1.6**
**SML Sawmill** 18.57 44 P **P** **15 11 00.7 -0.8**
baz=247,SNR=5.4
**BPAW Bear Paw Mtn.** 18.57 36 IAmb IAmb 15 11 05.6
comp=Z,42nm,1.1s
**BPAW Bear Paw Mtn.** 18.57 36 P **P** **15 11 01.7 +0.2**
baz=237,SNR=31
**Q23K Middleton Isla** 18.76 52 P **P** **15 11 03.5 0.0**
baz=256
**GLI Glacier Island** 18.80 47 P **P** **15 11 04.0 +0.1**
baz=251
**M23K Glacier View** 18.83 44 P **P** **15 11 04.2 -0.1**
baz=248,SNR=19
**H21K Melozitna Rive** 18.87 30 P **Pn** **15 11 05.3 -0.2**
**H21K Melozitna Rive** 18.87 30 P **P** **15 11 05.1 +0.4**
baz=230,SNR=22
**WAT1 Susitna Watana** 18.90 41 P **P** **15 11 04.5 -0.6**
baz=244
**E19K Redstone River** 18.91 23 IAmb IAmb 15 11 12.7
comp=Z,33nm,1.1s
**E19K Redstone River** 18.91 23 P **P** **15 11 05.3 +0.1**
baz=219
**F20K Avaraart Lake** 18.98 25 P **Pn** **15 11 06.5 -0.3**
baz=222,SNR=10
**SCM Sheep Creek Mo** 19.02 44 IAmb IAmb 15 11 09.3
comp=Z,24nm,0.8s
**SCM Sheep Creek Mo** 19.02 44 P **P** **15 11 06.5 +0.1**
baz=248,SNR=13
**RND Reindeer** 19.04 39 IAmb IAmb 15 11 08.1
comp=Z,38nm,0.7s
**FID Port Fidalgo** 19.05 48 IAmb IAmb 15 11 08.2
comp=Z,26nm,0.7s
**C18K Utukok River** 19.06 17 IAmb IAmb 15 11 14.3
comp=Z,49nm,0.9s
**C18K Utukok River** 19.06 17 P **Pn** **15 11 07.7 -0.1**
baz=210
**BILL Bilibino** 19.11 340 P **P** **15 11 04.9 -2.4**
BILL IAmb IAmb 15 11 16.1
comp=Z,34nm,1.2s
**BILL Bilibino** 19.11 340 *de*P **Pn** **15 11 07.9 -0.4**
BILL pmax pmax
comp=Z,40nm,1.7s
**WAT6 Susitna Watana** 19.13 42 P **P** **15 11 07.7 0.0**
baz=246,SNR=8.9
**MCK McKinley** 19.16 38 P **P** **15 11 07.3 -0.7**
baz=241,SNR=10
**BWN Browne** 19.18 37 IAmb IAmb 15 11 37.5
comp=Z,98nm,1.2s
**MLY Manley** 19.18 34 IAmb IAmb 15 11 10.1
comp=Z,34nm,0.8s
**MLY Manley** 19.18 34 P **P** **15 11 08.7 +0.5**
baz=235,SNR=52
**G21K Allakaket** 19.23 28 IAmb IAmb 15 11 11.4
comp=Z,55nm,0.9s
**G21K Allakaket** 19.23 28 P **Pn** **15 11 09.7 0.0**
baz=227
**EYAK Cordova Ski Ar** 19.33 49 P **P** **15 11 09.8 +0.1**
baz=254
**H22K Ishtalitna Cre** 19.48 31 P **P** **15 11 12.0 +0.6**
baz=232,SNR=30
**DHY Denali Highway** 19.49 41 IAmb IAmb 15 11 27.3
comp=Z,22nm,0.9s
**DHY Denali Highway** 19.49 41 P **P** **15 11 11.1 -0.5**
baz=245,SNR=23
**KLU Klutina** 19.54 46 P **P** **15 11 11.4 -0.7**
baz=251,SNR=10
**D19K Kuna River** 19.54 20 IAmb IAmb 15 11 14.6
comp=Z,32nm,0.8s
**D19K Kuna River** 19.54 20 P **Pn** **15 11 13.0 -0.5**
baz=216
**NEA2 Nenana** 19.54 36 IAmb IAmb 15 11 34.3
comp=Z,41nm,1.5s
**NEA2 Nenana** 19.54 36 P **P** **15 11 11.3 -0.7**
baz=239,SNR=15
**B18K Kokolik River** 19.59 15 P **Pn** **15 11 13.8 -0.2**
baz=208
**M24K Tolsona, Glenn** 19.63 44 IAmb IAmb 15 11 42.3
comp=Z,28nm,0.7s
**M24K Tolsona, Glenn** 19.63 44 P **P** **15 11 13.0 -0.1**
baz=249
**F21K Alatna River** 19.72 26 IAmb IAmb 15 11 16.6
comp=Z,46nm,0.9s
**F21K Alatna River** 19.72 26 P **P** **15 11 14.5 +0.6**
baz=226,SNR=39
**I23K Minto, Yukon-K** 19.73 34 P **P** **15 11 13.8 -0.3**
I23K IAmb IAmb 15 11 17.3
comp=Z,39nm,0.8s
**I23K Minto, Yukon-K** 19.73 34 P **P** **15 11 14.3 +0.2**
baz=237,SNR=36
**C19K Lookout Ridge** 19.75 18 P **Pn** **15 11 15.6 -0.4**
baz=212
**E20K Nigu River** 19.79 22 P **P** **15 11 15.2 +0.5**
baz=219,SNR=26
**KAIM Kayak Island** 19.82 51 P **P** **15 11 15.6 +0.4**
baz=257
**WRH Wood River Hil** 19.85 37 P **P** **15 11 14.0 -1.3**
**BMRM Bremner River** 19.99 48 P **P** **15 11 16.2 -0.8**
baz=254
**MDM Murphy Dome** 20.04 35 IAmb IAmb 15 11 23.5
comp=Z,30nm,1.1s
**CCB Clear Creek Bu** 20.04 36 P **P** **15 11 15.4 -2.0**
**D20K Etivluk River** 20.05 21 P **P** **15 11 17.1 -0.5**
baz=218,SNR=12
**H23K Yukon River** 20.05 32 IAmb IAmb 15 11 19.8
comp=Z,51nm,0.9s
**H23K Yukon River** 20.05 32 P **P** **15 11 17.3 -0.3**
baz=235,SNR=42
**G22K Bettles** 20.09 28 P **P** **15 11 18.0 0.0**
baz=230,SNR=22
**COLA College** 20.14 36 P **P** **15 11 17.3 -1.2**
COLA IAmb IAmb 15 11 22.0
comp=Z,23nm,0.8s
**COLA College** 20.14 36 P **P** **15 11 17.7 -0.8**
baz=240
**COLA College** 20.14 36 P **P** **15 11 17.3 -1.2**
COLA pmax pmax
comp=Z,23nm,0.8s
**N25K Chitina, Valde** 20.17 46 P **P** **15 11 18.6 -0.5**
baz=253,SNR=9.7
**HARP HAARP** 20.18 44 P **P** **15 11 19.3 +0.3**
baz=250,SNR=7.7
**PAX Paxson** 20.25 42 P **P** **15 11 19.1 -0.7**
baz=248,SNR=15
**HDA Harding Lake** 20.25 38 P **P** **15 11 18.6 -1.2**
HDA IAmb IAmb 15 11 26.1
comp=Z,19nm,0.7s
**HDA Harding Lake** 20.25 38 P **P** **15 11 19.5 -0.2**
baz=242,SNR=23
**F22K John River** 20.28 27 P **P** **15 11 21.1 +1.0**
baz=227,SNR=19
**POKR Poker Plat Res** 20.41 36 IAmb IAmb 15 11 23.8
comp=Z,24nm,0.8s
**POKR Poker Plat Res** 20.41 36 P **P** **15 11 20.5 -1.0**
baz=240,SNR=30
**G23K Bananza Creek** 20.41 30 IAmb IAmb 15 11 23.5
comp=Z,30nm,0.9s
**G23K Bananza Creek** 20.41 30 P **P** **15 11 21.0 -0.6**
baz=232,SNR=26
**ILAR Eon Array** 20.45 37 P **P** **15 11 19.8 -2.1**
comp=Z,2.2nm,0.3s,baz=241,slow=9.9,SNR=30
comp=Z,2.2nm,0.3s
**K24K Donnelly Dome** 20.45 40 P **P** **15 11 21.5 -0.5**
baz=246,SNR=39
**E21K Killik River** 20.47 23 IAmb IAmb 15 11 23.9
comp=Z,29nm,0.9s
**E21K Killik River** 20.47 23 P **P** **15 11 21.8 -0.3**
baz=223,SNR=12
**MA2 Magadan** 20.52 307 P **P** **15 11 21.2 -1.5**
comp=Z,5.4nm,0.6s,baz=121,slow=12,SNR=7.4
MA2 LR LR 15 18 33.9
comp=Z,283nm,20.5s,baz=110,slow=35
comp=Z,5.4nm,0.6s
**MA2 Magadan** 20.52 307⇑ *i*P Pn 15 11 23.8 -1.3
MA2 pmax pmax
comp=Z,18nm,1.2s
**H24K Noodor Dome** 20.63 33 P **P** **15 11 24.3 +0.5**
baz=238
**CRQM Cirque** 20.63 49 P **P** **15 11 24.1 0.0**
CRQM IAmb IAmb 15 11 53.5
comp=Z,34nm,1.4s
**CRQE Cirque** 20.65 49 P **P** **15 11 24.4 +0.1**
baz=257
**SEY Seymchan** 20.65 317 P **P** **15 11 23.2 -0.9**
comp=Z,13nm,0.9s,baz=109,slow=11,SNR=19
comp=Z,13nm,0.9s
**SEY Seymchan** 20.65 317⇑ *e*P **P** **15 11 23.9 -0.2**
SEY pmax pmax
comp=Z,17nm,1.0s
**COLD Coldfoot** 20.68 29 P **P** **15 11 23.9 -0.5**
baz=231,SNR=18
**WAX Waxell Ridge** 20.70 50 P **P** **15 11 24.3 -0.5**
WAX IAmb IAmb 15 11 51.1
comp=Z,19nm,0.8s
**RIDG Independent Ri** 20.80 40 P **P** **15 11 24.3 -1.5**
RIDG IAmb IAmb 15 11 47.7
comp=Z,22nm,0.7s
**RIDG Independent Ri** 20.80 40 P **P** **15 11 24.6 -1.2**
baz=247,SNR=20
**C21K Knifeblade Rid** 20.81 21 P **P** **15 11 26.1 +0.4**
baz=220,SNR=5.2
**MCARA McCarthy VSAT** 20.84 48 P **P** **15 11 25.5 -0.7**
MCARA IAmb IAmb 15 11 30.7
comp=Z,27nm,0.9s
**MCARA McCarthy VSAT** 20.84 48 P **P** **15 11 25.4 -0.7**
baz=255,SNR=7.4
**J25K Salcha River,** 20.95 38 IAmb IAmb 15 11 31.8
comp=Z,35nm,0.8s
**J25K Salcha River,** 20.95 38 P **P** **15 11 25.9 -1.6**
baz=244,SNR=47
**B20K Meade River** 20.98 18 P **P** **15 11 27.9 +0.4**
baz=215
**MESA MESA** 21.09 51 P **P** **15 11 28.1 -0.9**
baz=260
**D22K Ayikyak River** 21.11 24 IAmb IAmb 15 11 30.7
comp=Z,32nm,1.1s
**D22K Ayikyak River** 21.11 24 P **P** **15 11 29.0 0.0**
baz=224
**M26K Nabesna, AK** 21.13 45 P **P** **15 11 30.2 +0.8**
M26K IAmb IAmb 15 11 34.0
comp=Z,31nm,1.4s
**M26K Nabesna, AK** 21.13 45 P **P** **15 11 29.7 +0.4**
baz=253,SNR=14
**L26K Log Cabin Wild** 21.17 43 P **P** **15 11 29.5 -0.3**
**L26K Log Cabin Wild** 21.17 43 P **P** **15 11 29.0 -0.7**
baz=251
**B21K Ikpikpuk River** 21.21 21 P **P** **15 11 29.9 -0.1**
B21K IAmb IAmb 15 11 33.7
comp=Z,49nm,0.9s
**B21K Ikpikpuk River** 21.21 21 P **P** **15 11 29.6 -0.4**
baz=220,SNR=8.2
**G24K Hadweenzic Riv** 21.23 32 IAmb IAmb 15 11 32.5
comp=Z,33nm,1.0s
**G24K Hadweenzic Riv** 21.23 32 P **P** **15 11 30.3 -0.1**
baz=236,SNR=21
**SCRK Sand Creek** 21.25 40 **P** **15 11 28.7 -1.9**
**SCRK Sand Creek** 21.25 40 P **P** **15 11 29.4 -1.2**
baz=248,SNR=74
**GRNC Granite Creek** 21.29 50 P **P** **15 11 31.6 +0.3**
**PRP Porcupine Dome** 21.31 36 P **P** **15 11 30.0 -1.3**
**PRP Porcupine Dome** 21.31 36 P **P** **15 11 30.0 -1.3**
baz=242,SNR=19
**E23K Chandalar** 21.38 27 IAmb IAmb 15 11 59.5
comp=Z,30nm,1.3s
**E23K Chandalar** 21.38 27 P **P** **15 11 31.8 -0.2**
baz=230
**CTG Chitna Glacier** 21.54 49 P **P** **15 11 34.1 +0.3**
baz=258,SNR=8.4
**F24K Squaw Lake** 21.57 30 IAmb IAmb 15 11 35.9
comp=Z,29nm,0.9s
**F24K Squaw Lake** 21.57 30 P **P** **15 11 34.6 +0.6**
baz=234,SNR=24
**H25L Birch Creek** 21.57 34 P **P** **15 11 33.7 -0.2**
baz=240,SNR=17
**J26L Joseph Creek** 21.62 39 IAmb IAmb 15 11 36.2
comp=Z,32nm,0.6s
**J26L Joseph Creek** 21.62 39 P **P** **15 11 34.0 -0.5**
baz=247,SNR=53
**M27K Edge Creek, AK** 21.62 45 IAmb IAmb 15 11 39.4
comp=Z,19nm,0.9s
**M27K Edge Creek, AK** 21.62 45 P **P** **15 11 34.3 -0.4**
baz=254,SNR=14
**LOGN Logan Glacier** 21.67 50 P **P** **15 11 35.0 -0.3**
**D23K Nanushuk River** 21.69 25 IAmb IAmb 15 12 02.4
comp=Z,27nm,1.0s
**D23K Nanushuk River** 21.69 25 P **P** **15 11 34.4 -0.7**
baz=227
**E24K Your Creek** 21.72 28 P **P** **15 11 34.9 -0.7**
baz=232,SNR=13
**G25K Bearman Lake** 21.73 32 P **P** **15 11 35.8 +0.2**
baz=238,SNR=6.5
**TOLK Toolik Lake Re** 21.77 26 P **P** **15 11 35.0 -1.2**
TOLK IAmb IAmb 15 11 56.4
comp=Z,32nm,1.1s
**TOLK Toolik Lake Re** 21.77 26 P **P** **15 11 35.4 -0.7**
baz=229,SNR=11
**L27K Beaver Creek,** 21.84 44 P **P** **15 11 36.3 -0.7**
**L27K Beaver Creek,** 21.84 44 P **P** **15 11 36.9 -0.1**
baz=253,SNR=7.7
**FYU Fort Yukon** 21.92 33 IAmb IAmb 15 11 51.3
comp=Z,32nm,1.1s
**B22K Teshekpuk Lake** 22.02 20 P **P** **15 11 39.3 +0.6**
baz=220
**K27K Chicken** 22.05 41 P **P** **15 11 37.9 -1.2**
K27K IAmb IAmb 15 11 42.6
comp=Z,33nm,0.7s
**K27K Chicken** 22.05 41 P **P** **15 11 38.7 -0.4**
baz=250
**O28M Mount Upton** 22.05 50 P **P** **15 11 38.7 -0.8**
baz=260
**I26K Coal Creek Min** 22.10 37 IAmb IAmb 15 12 02.2
comp=Z,15nm,0.7s
**I26K Coal Creek Min** 22.10 37 P **P** **15 11 38.4 -1.3**
baz=246
**YUK3 Moose Creek** 22.12 47 P **P** **15 11 39.6 -0.5**
baz=257
**PNL Peninsula** 22.29 53 P **P** **15 11 41.5 -0.2**
baz=264
**C23K Itkillik River** 22.31 23 P **P** **15 11 40.3 -1.5**
C23K IAmb IAmb 15 11 42.6
comp=Z,29nm,0.8s
**C23K Itkillik River** 22.31 23 P **P** **15 11 41.5 -0.3**
baz=226,SNR=8.7
**D24K Happy Valley** 22.31 26 IAmb IAmb 15 11 43.5
comp=Z,23nm,1.1s
**D24K Happy Valley** 22.31 26 P **P** **15 11 41.0 -0.9**
baz=230
**F25K Christian Rive** 22.32 31 P **P** **15 11 42.3 +0.2**
baz=237,SNR=18
**YUK8 Steele Glacier** 22.35 49 P **P** **15 11 42.1 -0.5**
baz=259
**G26K Porcupine Rive** 22.61 33 P **P** **15 11 44.7 -0.4**
baz=241,SNR=14
**EGAK Eagle** 22.68 39 IAmb IAmb 15 11 49.2
comp=Z,30nm,0.8s
**EGAK Eagle** 22.68 39 P **P** **15 11 45.7 -0.1**
baz=249,SNR=37
**C24K Franklin Bluff** 22.72 25 IAmb IAmb 15 11 47.2
comp=Z,26nm,0.9s
**C24K Franklin Bluff** 22.72 25 P **P** **15 11 45.6 -0.5**
baz=229
**O29M Mount Kennedy** 22.77 52 P **P** **15 11 46.9 -0.1**
baz=263
**I27K Kandik River** 22.81 37 P **P** **15 11 46.6 -0.6**
baz=247,SNR=19
**F26K Sheenjek River** 22.86 31 P **P** **15 11 47.2 -0.6**
baz=239,SNR=7.7
**YUK4 Talbot Arm** 22.89 49 P **P** **15 11 48.6 +0.3**
baz=280,SNR=6.5
**YUK6 Outpost Mounta** 22.96 50 P **P** **15 11 48.5 -0.5**
baz=262
**D25K Kavik River** 23.10 27 P **P** **15 11 49.6 -0.6**
baz=233,SNR=7.2
**H27K Steamboat Moun** 23.10 36 P **P** **15 11 48.6 -1.6**
baz=246
**P29M Windy Craggy** 23.12 53 P **P** **15 11 49.2 -1.2**
P29M IAmb IAmb 15 12 12.2
comp=Z,19nm,1.1s
**P29M Windy Craggy** 23.12 53 P **P** **15 11 50.0 -0.5**
baz=265
**DAWY Dawson** 23.18 42 IAmb IAmb 15 11 52.8
comp=Z,15nm,1.0s
**DAWY Dawson** 23.18 42 P **P** **15 11 50.5 -0.6**
baz=253,SNR=10
**M29M Somme Creek** 23.18 46 P **P** **15 11 51.6 +0.4**
**M29M Somme Creek** 23.18 46 P **P** **15 11 50.5 -0.6**
baz=258,SNR=7.3
**G27K Doyon Strip** 23.30 34 P **P** **15 11 51.9 -0.3**
baz=244
**I28M Miner Creek** 23.41 38 P **P** **15 11 51.9 -1.4**
I28M IAmb IAmb 15 11 56.5
comp=Z,26nm,0.8s
**I28M Miner Creek** 23.41 38 P **P** **15 11 53.2 -0.1**
baz=250,SNR=38
**L29M L29M** 23.48 45 P **P** **15 11 54.2 +0.2**
baz=257,SNR=13
**N30M Aishikik Lake** 23.65 49 P **P** **15 11 56.1 +0.4**
baz=262
**PLBC Pleasant Camp** 23.81 54 P **P** **15 11 57.9 +0.8**
baz=267
**C26K Camden Bay** 23.87 26 P **P** **15 11 57.5 0.0**
baz=234,SNR=8.9
**K29M Barlow Dome** 23.92 43 P **P** **15 11 58.1 -0.1**
K29M IAmb IAmb 15 12 01.0
comp=Z,16nm,0.7s
**K29M Barlow Dome** 23.92 43 P **P** **15 11 58.5 +0.3**
baz=256,SNR=24
**E27K Coleen River** 23.95 31 IAmb IAmb 15 12 00.4
comp=Z,20nm,1.4s
**E27K Coleen River** 23.95 31 P **P** **15 11 57.8 -0.5**
baz=242,SNR=10.0
**M30M Minto, Yukon** 23.97 46 P **P** **15 11 58.4 -0.2**
baz=260
**I29M Ogilvie Camp,** 24.02 39 IAmb IAmb 15 11 59.8

comp=Z,17nm,0.7s
**I29M Ogilvie Camp, 24.02 39** P **P 15 11 58.5 -0.5**
baz=252,SNR=30
**C27K Jago River 24.04 27** P **P 15 11 58.7 -0.4**
baz=236
**O30N Mendenhall 24.05 51** P **P 15 11 59.6 +0.3**
baz=264
**F28M Old Crow 24.27 33** P **P 15 12 00.4 -0.9**
**F28M Old Crow 24.27 33** P **P 15 12 01.6 +0.2**
baz=245,SNR=11
**H29M Whitestone 24.28 37** P **P 15 12 00.2 -1.2**
baz=250,SNR=29
**J30M Hart River 24.60 41** P **P 15 12 04.0 -0.5**
J30M IAmb IAmb 15 12 07.0
comp=Z,15nm,0.8s
**J30M Hart River 24.60 41** P **P 15 12 04.6 +0.1**
baz=256,SNR=23
**G29M Pine Creek 24.66 36** IAmb IAmb 15 12 06.9
comp=Z,28nm,0.8s
**G29M Pine Creek 24.66 36** P **P 15 12 04.7 -0.1**
baz=249,SNR=26
**D27M Malcolm River 24.66 29** P **P 15 12 05.3 +0.4**
D27M IAmb IAmb 15 12 19.7
comp=Z,16nm,1.2s
**D27M Malcolm River 24.66 29** P **P 15 12 04.8 -0.1**
baz=240
**S32K Killisnoo 24.75 59** P **P 15 12 05.5 -0.1**
baz=273
**R32K Eaglecrest 24.75 57** P **P 15 12 06.3 +0.6**
baz=271
**I30M Mount Dempster 24.75 40** P **P 15 12 05.9 +0.1**
baz=254,SNR=50
**E28M Babbage River 24.82 31** IAmb IAmb 15 12 30.5
comp=Z,16nm,1.3s
**E28M Babbage River 24.82 31** P **P 15 12 06.1 -0.1**
baz=244,SNR=8.3
**EPYK Eagle Plains 24.96 37** IAmb IAmb 15 12 09.7
comp=Z,15nm,0.8s
**EPYK Eagle Plains 24.96 37** P **P 15 12 07.0 -0.5**
baz=251,SNR=8.9
**M31M Drury Creek, Y 25.02 47** P **P 15 12 08.3 +0.1**
baz=263
**E29M Blow River 25.27 32** IAmb IAmb 15 12 14.1
comp=Z,25nm,0.9s
**E29M Blow River 25.27 32** P **P 15 12 10.4 +0.1**
baz=246,SNR=29
**G30M tAoh Zraii Nji 25.34 36** P **P 15 12 11.0 -0.1**
baz=251,SNR=9.8
**D28M Stokes Point 25.40 30** P **P 15 12 11.2 -0.3**
baz=243
**FARO Faro, Yukon 25.51 48** P **P 15 12 12.7 +0.1**
baz=264
**P33M Teslin, Yukon 25.63 52** P **P 15 12 13.8 0.0**
baz=268
**U33K Whale Pass 25.66 62** P **P 15 12 14.1 +0.2**
baz=277
**F30M Barrier River 25.71 35** P **P 15 12 14.7 +0.3**
baz=250
**H31M Peel River 25.73 39** P **P 15 12 13.6 -0.9**
H31M IAmb IAmb 15 12 42.5
comp=Z,12nm,0.8s
**H31M Peel River 25.73 39** P **P 15 12 14.6 +0.1**
baz=255
**CRAG Craig 25.74 63** P **P 15 12 15.1 +0.5**
baz=278
**TYV Tymovskoe 25.77 286** *e*P **P 15 12 17.4 +2.4**
TYV *e*S **S 15 16 48.0 +6.4**
TYV pmax pmax
comp=Z,100nm,2.6s
TYV pmax pmax
comp=Z,17nm,0.9s
TYV smax smax
comp=N,100nm,4.6s
TYV smax smax
comp=E,100nm,4.6s
**Q32M Nakina River 25.91 55** P **P 15 12 17.4 +0.9**
baz=272
**WRAK Wrangell Islan 26.05 61** P **P 15 12 19.9 +2.4**
baz=277
**G31M Satah River 26.06 37** P **P 15 12 17.5 +0.1**
baz=253
**F31M Tsiigehtchic 26.41 36** P **P 15 12 19.1 -1.5**
**F31M Tsiigehtchic 26.41 36** P **P 15 12 20.7 +0.1**
baz=253
**S34M Telegraph Cree 26.56 57** P **P 15 12 23.1 +1.0**
baz=275
**R33M Jennings River 26.56 54** P **P 15 12 23.2 +0.9**
baz=272
**V35K Ketchikan 26.61 63** P **P 15 12 24.2 +1.6**
baz=279
**INK Inuvik 26.75 34** P **P 15 12 23.4 -0.3**
baz=251
**YSS Yuzh-Sakhalins 27.07 278** P **P 15 12 25.0 -1.8**
YSS IAmb IAmb 15 12 30.9
comp=Z,13nm,0.7s
**YSS Yuzh-Sakhalins 27.07 278** *e*P **P 15 12 27.7 +0.9**
YSS *e*S **S 15 16 59.7 -2.5**
YSS *e* 15 18 28.4
YSS pmax pmax
comp=Z,10.0nm,1.0s
YSS MLR MLR
comp=Z,200nm,15.0s
YSS MLR MLR
comp=N,100nm,14.0s
YSS MLR MLR
comp=E,200nm,14.0s
**T35M Bob Quinn 27.13 59** P **P 15 12 28.1 +0.9**
baz=277
**TOAD Toad River Com 29.55 55** P **P 15 12 48.8 -0.1**
baz=277
**C36M Paulatuk 30.33 34** P **P 15 12 54.9 -0.7**
baz=260
**A36M Sachs Harbour 30.55 28** P **P 15 12 57.5 +0.1**
baz=254
**YAK Yakutsk 30.93 312** LR LR 15 25 39.9
comp=E,148nm,18.2s,baz=88,slow=37
**TIXI Tiksi 31.77 330** LR LR 15 27 18.1
comp=E,131nm,18.4s,baz=144,slow=39
**TIXI Tiksi 31.77 330⇑** *e*P **P 15 13 08.1 -0.1**
TIXI pmax pmax
comp=Z,4.0nm,1.2s
**KLR Kul'dur 32.93 288** LR LR 15 27 40.5
comp=Z,213nm,19.5s,baz=175,slow=38
**KLR Kul'dur 32.93 288** *c i*P **P 15 13 17.9 -0.7**
KLR pmax pmax
comp=Z,44nm,1.3s
**ZEA Zeya 33.92 297** *e*P **P 15 13 25.5 -1.7**
ZEA pmax pmax
comp=Z,10.0nm,0.8s
ZEA MLR MLR
comp=E,100nm,19.0s
ZEA MLR MLR
comp=Z,100nm,14.0s
**H11N2 WAKE ISLAND Hy 34.03 210** T T 15 50 05.9
baz=18,slow=76,SNR=67
**H11N3 WAKE ISLAND Hy 34.04 210** T T 15 50 11.2
baz=18,slow=76,SNR=88
**H11N1 WAKE ISLAND Hy 34.05 210** T T 15 50 08.9
baz=18,slow=76,SNR=58
**YKA Yellowknife Ar 34.20 47** P **P 15 13 29.6 +0.1**
comp=Z,1.7nm,0.7s,baz=289,slow=8.8,SNR=6.7
YKA PcP **PcP 15 16 05.9 +0.4**
comp=Z,1.1nm,0.8s,baz=286,slow=3.3,SNR=5.0
YKA LR LR 15 29 51.6
comp=Z,394nm,18.4s,baz=275,slow=41
comp=Z,1.7nm,0.7s
**BRLDA Berland Lookou 34.89 62** P **P 15 13 37.0 +1.2**
BRLDA IAmb IAmb 15 13 38.7
comp=Z,15nm,0.9s
**USA0B Ussuriysk Arra 35.05 279⇑** *e*P **P 15 13 37.3 +0.2**
**USRK Ussuriysk Ar. 35.05 279** P **P 15 13 36.6 -0.4**
comp=Z,6.1nm,0.6s,baz=58,slow=11,SNR=24
comp=Z,6.1nm,0.6s
**HEH HeiHe 35.10 291** *e*P **P 15 13 36.0 -1.4**
HEH pmax pmax
comp=Z,23nm,0.8s
HEH pmax pmax
comp=Z,140nm,4.3s
HEH LR LR
comp=N,230nm,14.4s
HEH LR LR
comp=E,340nm,16.5s
HEH LR LR
comp=Z,390nm,18.6s
**H11S1 WAKE ISLAND Hy 35.24 209** T T 15 51 37.0
baz=18,slow=76,SNR=41
**H11S2 WAKE ISLAND Hy 35.25 209** T T 15 51 58.4
baz=18,slow=76,SNR=34
**H11S3 WAKE ISLAND Hy 35.26 209** T T 15 51 43.0
baz=18,slow=76,SNR=16
**MAJO Matsushiro 35.45 264** P **P 15 13 40.8 +0.2**
MAJO IAmb IAmb 15 13 44.0
comp=Z,15nm,1.2s
**MAJO Matsushiro 35.45 264⇓** *i*P **P 15 13 40.9 +0.2**
MAJO pmax pmax
comp=Z,17nm,1.5s
**MJAR Matsushiro Arr 35.45 264** P **P 15 13 40.4 -0.3**
comp=Z,1.4nm,0.6s,baz=50,slow=8.7,SNR=4.7
MJAR PcP **PcP 15 16 10.6 +0.9**
comp=Z,2.2nm,0.8s,baz=96,slow=2.4,SNR=5.7
MJAR LR LR 15 26 27.5
comp=Z,137nm,21.8s,baz=62,slow=34
comp=Z,1.4nm,0.6s
**B08A Colville Reser 36.01 72** P **P 15 13 46.1 +0.8**
B08A IAmb IAmb 15 14 08.4
comp=Z,14nm,0.9s
**PSTR Posyet 36.59 278⇑** *e*P **P 15 13 51.0 +0.8**
**HAWA Hanford 36.79 75** P **P 15 13 51.4 -0.5**
HAWA IAmb IAmb 15 14 20.5
comp=Z,13nm,0.8s
**YBH Yreka Blue Hor 37.21 83** LR LR 15 26 47.0
comp=Z,194nm,20.6s,baz=300,slow=32
**NEW Newport 37.37 71** P **P 15 13 57.6 +0.7**
NEW IAmb IAmb 15 14 01.8
comp=Z,9.5nm,1.0s
**NEW Newport 37.37 71** LR LR 15 26 55.2
comp=Z,75nm,21.6s,baz=302,slow=32
**NEW Newport 37.37 71** P **P 15 13 57.6 +0.7**
NEW pmax pmax
comp=Z,10.0nm,1.0s
**E09A Wood Farm, Sta 37.58 74** P **P 15 13 57.5 -1.1**
E09A IAmb IAmb 15 14 26.7
comp=Z,9.7nm,1.1s
**F10A Beach Ranch, E 38.40 74** P **P 15 14 06.8 +1.2**
F10A IAmb IAmb 15 14 33.6
comp=Z,6.6nm,0.8s
**J08A Circle Bar Ran 38.97 78** P **P 15 14 11.5 +1.0**
J08A IAmb IAmb 15 14 40.3
comp=Z,9.9nm,1.1s
**CN2 Changchun 39.31 283** P **P 15 14 13.5 +0.4**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
CN2 LR LR
comp=N,200nm,17.0s
CN2 LR LR
comp=E,200nm,17.0s
CN2 LR LR
comp=Z,200nm,18.0s
**JCJ Chichijima 39.55 249** LR LR 15 25 53.3
comp=Z,41nm,21.7s,baz=74,slow=29
**MSO Missoula 39.95 71** P **P 15 14 18.8 +0.2**
MSO IAmb IAmb 15 14 44.8
comp=Z,11nm,1.1s
**HIA Hailar 40.01 293** P **P 15 14 18.7 -0.2**
HIA IAmb IAmb 15 14 19.3
comp=Z,22nm,0.9s
**HIA Hailar 40.01 293** P **P 15 14 18.7 -0.2**
HIA pmax pmax
comp=Z,22nm,0.9s
**OVMT Ovando 40.40 70** P **P 15 14 22.1 -0.3**
**BPMT Black Pine Rid 40.44 71** P **P 15 14 23.4 +0.6**
**LYMT Lyon Mountain 40.86 70** P **P 15 14 27.0 +0.7**
**HLID Hailey 41.36 75** P **P 15 14 31.7 +1.3**
**KSRS Korea Array 41.38 273** P **P 15 14 31.0 +0.7**
comp=Z,6.2nm,0.8s,baz=61,slow=8.2,SNR=9.3
comp=Z,6.2nm,0.8s
**KSRS Korea Array 41.38 273** P **P 15 14 31.0 +0.7**
**EGMT Eagleton 41.82 67** P **P 15 14 34.4 +0.4**
EGMT IAmb IAmb 15 14 58.8
comp=Z,13nm,0.9s
**MDPB Devils Postpil 41.87 86** P **P 15 14 34.6 -0.1**
**NVAR Mina Array Bea 41.87 84** P **P 15 14 37.2 +2.6**
comp=Z,0.8nm,0.7s,baz=283,slow=8.2,SNR=2.5
comp=Z,0.8nm,0.7s
**JNU Nakatsue 42.26 266** LR LR 15 30 33.0
comp=Z,129nm,20.8s,baz=44,slow=34
**TJN Taejon 42.39 272** *de*P **P 15 14 39.2 +0.6**
**YHL Hebgen Lake 42.62 72** P **P 15 14 40.9 +0.1**
YHL IAmb IAmb 15 14 58.4
comp=Z,9.4nm,1.0s
**YHH Holmes Hill 42.85 72** P **P 15 14 43.6 +0.9**
**YNR Norris Junctio 43.00 72** P **P 15 14 45.0 +1.2**
YNR IAmb IAmb 15 15 07.6
comp=Z,18nm,1.2s
**H17A Grant Village 43.23 72** P **P 15 14 46.6 +0.9**
baz=303
**IMW Indian Meadow 43.29 73** P **P 15 14 47.1 +0.9**
IMW IAmb IAmb 15 14 58.4
comp=Z,12nm,1.4s
**FLWY Flagg Ranch 43.33 73** P **P 15 14 47.3 +0.9**
**HVU Hansel Valley 43.35 77** P **P 15 14 46.9 +0.3**
**HVU Hansel Valley 43.35 77** P **P 15 14 46.9 +0.3**
HVU pmax pmax
comp=Z,6.0nm,0.9s
**R11B Troy Canyon, C 43.62 83** P **P 15 14 50.6 +1.7**
baz=307
**Q12A Willow Creek R 43.68 81** P **P 15 14 47.8 -1.5**
Q12A IAmb IAmb 15 15 03.1
comp=Z,12nm,1.2s
**TPNV Topopah Spring 44.06 85** P **P 15 14 52.5 +0.1**
TPNV IAmb IAmb 15 15 16.2
comp=Z,9.1nm,0.8s
**TPNV Topopah Spring 44.06 85** P **P 15 14 52.5 +0.1**
TPNV pmax pmax
comp=Z,9.0nm,0.8s
**PRN Pahroc Range 44.53 83** P **P 15 14 56.0 -0.1**
PRN IAmb IAmb 15 15 18.2
comp=Z,19nm,1.1s
**PDAR Pinedale Array 44.75 74** P **P 15 14 59.4 +1.5**
comp=Z,8.7nm,0.8s,baz=316,slow=4.1,SNR=35
comp=Z,8.7nm,0.8s
**DGMT Dagmar 44.79 64** P **P 15 14 56.5 -1.3**
**XLT XiLinHaoTe 44.94 289** *e*P **P 15 15 00.0 +0.8**
XLT pmax pmax
comp=Z,37nm,1.1s
XLT pmax pmax
comp=Z,140nm,4.4s
XLT LR LR
comp=N,17nm,11.5s
XLT LR LR
comp=E,170nm,12.7s
XLT LR LR
comp=Z,260nm,13.1s
**RDMU Red Mountain 46.02 76** P **P 15 15 07.5 -0.4**
RDMU IAmb IAmb 15 15 37.0
comp=Z,10nm,0.9s
**PFO Pinyon Flats O 46.05 88** LR LR 15 30 26.2
comp=Z,154nm,21.7s,baz=291,slow=31
**TPFO Pinon Flats 46.06 88** P **P 15 15 10.6 +2.4**
baz=311
**RWWY Rawlins 46.80 73** P **P 15 15 12.9 -1.1**
RWWY IAmb IAmb 15 15 34.6
comp=Z,13nm,1.1s
**BJI Beijing 47.13 284** P **P 15 15 17.8 +1.5**
BJI pmax pmax
comp=Z,11nm,0.8s
BJI pmax pmax
comp=Z,40nm,4.6s
**BJT Baijiatuan 47.15 284** P **P 15 15 16.5 0.0**
**BJT Baijiatuan 47.15 284** P **P 15 15 16.5 0.0**
BJT pmax pmax
comp=Z,16nm,0.8s
**MDND Maddock 47.71 62** P **P 15 15 21.1 +0.4**
**ULN Ulaanbaatar 47.95 298** P **P 15 15 21.9 -0.9**
ULN IAmb IAmb 15 15 24.4
comp=Z,6.7nm,0.8s
**ULN Ulaanbaatar 47.95 298** *de*P **P 15 15 22.8 0.0**
ULN pmax pmax
comp=Z,9.0nm,1.0s
**N23A Red Feather La 48.04 73** P **P 15 15 23.5 -0.2**
N23A IAmb IAmb 15 15 35.8
comp=Z,7.6nm,0.9s
**N23A Red Feather La 48.04 73** P **P 15 15 25.1 +1.4**
baz=307
**SONM Songino Array 48.33 298** P **P 15 15 25.1 -0.6**
comp=Z,10nm,1.1s,baz=55,slow=8.9,SNR=22
SONM PcP **PcP 15 16 51.6 -0.3**
comp=Z,1.0nm,0.7s,baz=90,slow=3.2,SNR=2.3
comp=Z,10nm,1.1s
**ULM Lac du Bonnet 48.41 58** P **P 15 15 26.2 +0.1**
comp=Z,5.4nm,0.7s,baz=305,slow=6.2,SNR=7.7
comp=Z,5.4nm,0.7s
**ULM Lac du Bonnet 48.41 58⇓** *e*P **P 15 15 24.7 -1.4**
**ZAK Zakamensk 48.60 303** *e*P **P 15 15 27.2 -0.5**
ZAK pmax pmax
comp=Z,10.0nm,1.2s
**TIA Tai'an 48.92 279** P **P 15 15 30.5 +0.3**
TIA pmax pmax
comp=Z,10.0nm,1.3s
**BRIGG Briggsdale 49.21 73** P **P 15 15 31.8 -0.7**
**W18A Petrified Fore 49.30 82** P **P 15 15 35.1 +1.6**
baz=310
**S22A 4UR Ranch, Cre 49.44 77** P **P 15 15 36.2 +1.7**
baz=309
**HHC Hu-ho-hao-te 49.44 288** *e*P **P 15 15 34.5 +0.2**
HHC pmax pmax
comp=Z,27nm,0.7s
HHC pmax pmax
comp=Z,140nm,3.8s
HHC LR LR
comp=N,200nm,15.3s
HHC LR LR
comp=E,170nm,16.0s
HHC LR LR
comp=Z,220nm,16.8s
**214A Organ Pipe Nat 49.45 87** P **P 15 15 36.8 +2.4**
baz=312
**AGMN Agassiz Nation 49.52 60** P **P 15 15 33.9 -0.7**
AGMN IAmb IAmb 15 15 35.9
comp=Z,11nm,0.9s
**HNS HongShan 49.66 282** ⇑P **P 15 15 36.5 +0.6**
HNS pmax pmax
comp=Z,49nm,1.0s
HNS LR LR
comp=N,130nm,15.9s
HNS LR LR
comp=E,160nm,15.1s
HNS LR LR
comp=Z,190nm,19.8s
**Q24A Divide 49.70 75** P **P 15 15 37.5 +1.0**
baz=309
**SUSD Miller 50.05 66** P **P 15 15 38.3 -0.4**
**KBS Kingsbay 50.20 358⇑** *e*P **P 15 15 38.0 -1.4**
KBS pmax pmax
comp=Z,64nm,2.0s
**SDCO Great Sand Dun 50.25 76** P **P 15 15 41.0 +0.3**
SDCO IAmb IAmb 15 16 03.2
comp=Z,7.2nm,1.1s
**BTO Baotou 50.51 289⇓** *i*P **P 15 15 44.0 +1.6**
BTO pP **pwP 15 15 56.5 -0.5**
BTO sP **sP 15 16 01.8 +6.6**
BTO S **S 15 22 54.8 +0.9**
BTO sS **sS 15 23 12.5 +3.3**
**BTO Baotou 50.51 289** SS **SS 15 26 24.3 -3.4**
BTO pmax pmax
comp=Z,160nm,0.9s
BTO pmax pmax
comp=Z,240nm,4.3s
BTO LR LR
comp=N,360nm,15.3s
BTO LR LR
comp=E,660nm,17.5s
BTO LR LR
comp=Z,700nm,18.2s
**NJ2 Nanjing 50.55 274** *e*P **P 15 15 43.3 +0.6**
NJ2 pmax pmax
comp=Z,12nm,0.5s
**K30B Basset 50.73 68** P **P 15 15 44.5 +0.5**
**SPITS Spitsbergen Ar 50.81 357** P **P 15 15 42.6 -1.5**
comp=Z,3.8nm,0.7s,baz=52,slow=9.3,SNR=5.9
comp=Z,3.8nm,0.7s
**T25A Trinidad 51.31 76** P **P 15 15 50.0 +1.4**
baz=310
**EYMN Ely 52.09 58** P **P 15 15 54.0 0.0**
EYMN IAmb IAmb 15 15 55.3
comp=Z,16nm,1.0s
**LYN LuoYang 52.89 281** P **P 15 16 03.0 +2.9**
LYN pmax pmax
comp=Z,66nm,0.6s
LYN pmax pmax
comp=Z,140nm,3.8s
LYN LR LR
comp=N,340nm,17.9s
LYN LR LR
comp=E,220nm,16.5s
LYN LR LR
comp=Z,340nm,20.6s
**L34A Svendsen Farm, 53.05 67** P **P 15 16 00.9 -0.3**
**SUMG Summit 53.19 15** P **P 15 16 01.3 -1.0**
**SUMG Summit 53.19 15** P **P 15 16 01.3 -1.0**
SUMG pmax pmax
comp=Z,13nm,0.8s
**N35A Tabor 54.18 67** P **P 15 16 09.3 -0.1**
**SFJD Kangerlussuaq 55.29 23** LR LR 15 42 36.3
comp=Z,88nm,20.0s,baz=315,slow=39
**XAN Xi'an 55.42 283** P **P 15 16 19.0 +0.4**
XAN pP pwP 15 16 32.5 -0.2
XAN pmax pmax
comp=Z,37nm,1.0s
XAN LR LR
comp=N,180nm,16.2s
XAN LR LR
comp=E,270nm,19.6s
XAN LR LR
comp=Z,280nm,22.0s
**ZALV Zalesovo Beam 55.50 315** P **P 15 16 17.6 -1.2**
comp=Z,1.5nm,0.5s,baz=44,slow=6.6,SNR=6.7
ZALV PcP **PcP 15 17 19.1 +0.6**
comp=Z,4.6nm,0.8s,baz=56,slow=3.6,SNR=9.0
ZALV LR LR 15 42 09.8
comp=Z,110nm,18.1s,baz=56,slow=38
comp=Z,1.5nm,0.5s
**ZALV Zalesovo Beam 55.50 315** *i*P **P 15 16 17.3 -1.5**
ZALV pmax pmax
comp=Z,2.0nm,0.5s
**MNHN Monahans 56.17 81** P **P 15 16 24.2 +0.2**
MNHN IAmb IAmb 15 16 45.9
comp=Z,7.9nm,0.8s
**SN05 Snyder 5 56.29 78** P **P 15 16 23.3 -1.6**
SN05 IAmb IAmb 15 16 43.1
comp=Z,7.1nm,0.8s
**WMOK Wichita Mounta 56.32 75** P **P 15 16 25.5 +0.5**
WMOK IAmb IAmb 15 16 32.3
comp=Z,4.0nm,0.8s
**WMOK Wichita Mounta 56.32 75** P **P 15 16 25.5 +0.5**
WMOK pmax pmax
comp=Z,4.0nm,0.9s
**LPIG La Paz 56.50 92** LR LR 15 34 52.7
comp=Z,70nm,21.4s,baz=206,slow=30
**SGCY Sterling City 56.79 79** P **P 15 16 28.7 +0.2**
**TXAR Lajitas Array 56.99 83** P **P 15 16 30.7 +0.8**
comp=Z,0.5nm,0.6s,baz=309,slow=5.6,SNR=4.9
comp=Z,0.5nm,0.6s
**DGZ Jazzator, Alta 57.09 310** *de*P **P 15 16 29.9 -0.5**
DGZ pmax pmax
comp=Z,9.0nm,1.1s
**LZH Lanzhou 57.13 288** *e*P **P 15 16 32.5 +1.6**
LZH pP pwP 15 16 45.3 -0.4
LZH pmax pmax
comp=Z,42nm,1.3s
LZH LR LR
comp=N,320nm,14.8s
LZH LR LR
comp=E,260nm,14.8s
LZH LR LR
comp=Z,380nm,15.5s
**P40A Paris 57.13 66** P **P 15 16 30.4 -0.3**
**ABTX Abilene, Hawle 57.23 77** P **P 15 16 31.5 0.0**
**GTA Gaotai 57.29 294** P **P 15 16 32.0 +0.1**
GTA pP sP 15 16 43.5 -1.4
GTA sP pwP 15 16 51.0 +4.4
GTA pmax pmax
comp=Z,13nm,1.1s
GTA LR LR
comp=N,160nm,19.1s
GTA LR LR
comp=E,140nm,16.7s
GTA LR LR
comp=Z,230nm,19.9s
**ENH Enshi 57.63 279** P **P 15 16 34.6 +0.2**
**P43A Skaggs, Pawnee 58.51 65** P **P 15 16 40.5 +0.1**
**ARCES ARCESS Array B 58.69 351** P **P 15 16 40.1 -1.1**
comp=Z,1.4nm,0.8s,baz=30,slow=9.3,SNR=3.7
ARCES PcP **PcP 15 17 30.9 +0.2**
comp=Z,6.3nm,0.7s,baz=26,slow=4.4,SNR=10
ARCES LR LR 15 43 33.5
comp=Z,61nm,19.8s,baz=34,slow=38
comp=Z,1.4nm,0.8s
**FCAR Ozark Folk Cen 59.54 70** P **P 15 16 46.6 -0.9**
FCAR IAmb IAmb 15 16 50.9

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,8.7nm,0.8s | | | | | | | | |
| **MIAR** | **Mount Ida** | **59.60** | **72** | | IAmb | IAmb | 15 17 04.0 | | |
| | comp=Z,9.1nm,0.9s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **59.93** | **68** | | P | **P** | **15 16 49.7** | **-0.4** | |
| **KURK** | **Kurchatov** | **60.48** | **315** | | P | **P** | **15 16 52.3** | **-1.4** | |
| **KURK** | **Kurchatov** | **60.48** | **315** | *c* | *i*P | **P** | **15 16 52.8** | **-1.0** | |
| KURK | | | | | pmax | pmax | | | |
| | comp=Z,47nm,1.0s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.59** | **315** | | P | **P** | **15 16 53.7** | **-0.8** | |
| | comp=Z,34nm,0.7s,baz=44,slow=6.7,SNR=312 | | | | | | | | |
| KURBB | | | | | PcP | **PcP** | **15 17 39.0** | **+0.3** | |
| | comp=Z,3.0nm,0.9s,baz=40,slow=5.8,SNR=5.4 | | | | | | | | |
| **SADO** | **Sadowa** | **60.64** | **54** | | LR | LR | 15 44 39.2 | | |
| | comp=Z,136nm,18.5s,baz=276,slow=38 | | | | | | | | |
| **WMQ** | **Urumqi** | **60.96** | **305** | *e* | P | **P** | **15 16 59.0** | **+1.8** | |
| WMQ | | | | | LR | LR | | | |
| | comp=N,340nm,15.9s | | | | | | | | |
| WMQ | | | | | LR | LR | | | |
| | comp=E,260nm,20.5s | | | | | | | | |
| WMQ | | | | | LR | LR | | | |
| | comp=Z,170nm,17.5s | | | | | | | | |
| **P49A** | **Miami Univ. Ec** | **61.29** | **62** | | P | **P** | **15 16 59.5** | **0.0** | |
| | baz=314 | | | | | | | | |
| **MK31** | **Makanchi Array** | **61.58** | **310** | *d* | *i*P | **P** | **15 17 00.0** | **-1.3** | |
| **MKAR** | **Makanchi Array** | **61.58** | **310** | | P | **P** | **15 17 00.4** | **-0.9** | |
| | comp=Z,5.8nm,0.6s,baz=48,slow=5.7,SNR=47 | | | | | | | | |
| MKAR | | | | | LR | LR | 15 43 27.9 | | |
| | comp=Z,145nm,20.6s,baz=43,slow=36 | | | | | | | | |
| | comp=Z,5.8nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.58** | **310** | *i* | P | **P** | **15 17 00.2** | **-1.1** | |
| MKAR | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **61.72** | **310** | | P | **P** | **15 17 00.5** | **-1.7** | |
| MAKZ | | | | | IAmb | IAmb | 15 17 01.8 | | |
| | comp=Z,6.3nm,0.7s | | | | | | | | |
| **MAKZ** | **Makanchi** | **61.72** | **310** | | P | **P** | **15 17 00.5** | **-1.7** | |
| MAKZ | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **GYA** | **Guiyang** | **62.08** | **278** | ⇑ | P | **P** | **15 17 08.0** | **+2.9** | |
| GYA | | | | | pP | pwP | 15 17 20.0 | +0.7 | |
| GYA | | | | | pmax | pmax | | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **M53A** | **WI Miller and** | **62.17** | **58** | | P | **P** | **15 17 06.6** | **+1.3** | |
| | baz=315 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.24** | **321** | | P | **P** | **15 17 05.4** | **-0.2** | |
| | comp=Z,9.1nm,0.4s,baz=50,slow=6.6,SNR=40 | | | | | | | | |
| BVAR | | | | | PcP | **PcP** | **15 17 45.7** | **+0.5** | |
| | comp=Z,4.6nm,0.5s,baz=44,slow=3.1,SNR=5.5 | | | | | | | | |
| | comp=Z,9.1nm,0.4s | | | | | | | | |
| **BRVK** | **Borovoye** | **62.26** | **321** | | P | **P** | **15 17 05.0** | **-0.7** | |
| **BRVK** | **Borovoye** | **62.26** | **321** | *de* | P | **P** | **15 17 05.8** | **+0.1** | |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.7s | | | | | | | | |
| **J55A** | **Hilton** | **62.38** | **55** | | P | **P** | **15 17 06.6** | **-0.1** | |
| **P52A** | **Corning** | **62.65** | **60** | | P | **P** | **15 17 09.5** | **+1.0** | |
| | baz=315 | | | | | | | | |
| **O53A** | **New Philadelph** | **62.72** | **59** | | P | **P** | **15 17 09.9** | **+0.9** | |
| | baz=315 | | | | | | | | |
| **CLTN** | **Cedars of Leba** | **62.78** | **66** | | IAmb | IAmb | 15 17 13.1 | | |
| | comp=Z,8.7nm,1.0s | | | | | | | | |
| **O54A** | **Avella** | **63.21** | **59** | | P | **P** | **15 17 12.6** | **+0.3** | |
| **ARU** | **Arti** | **63.78** | **330** | | P | **P** | **15 17 15.1** | **-0.7** | |
| ARU | | | | | IAmb | IAmb | 15 17 17.1 | | |
| | comp=Z,9.8nm,1.1s | | | | | | | | |
| **ARU** | **Arti** | **63.78** | **330** | | LR | LR | 15 48 50.1 | | |
| | comp=Z,125nm,18.6s,baz=41,slow=40 | | | | | | | | |
| **ARU** | **Arti** | **63.78** | **330** | ⇓ | *e*P | **P** | **15 17 16.3** | **+0.6** | |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | |
| **Q54A** | **Coxs Mills** | **63.82** | **60** | | IAmb | IAmb | 15 17 38.0 | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **KIRV** | **Kirov** | **64.61** | **336** | | LR | LR | 15 50 05.9 | | |
| | comp=Z,93nm,18.1s,baz=43,slow=40 | | | | | | | | |
| **KIRV** | **Kirov** | **64.61** | **336** | ⇑ | *e*P | **P** | **15 17 21.3** | **+0.2** | |
| **PZH** | **PanZhiHua** | **65.10** | **282** | | P | **P** | **15 17 24.3** | **-0.7** | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| PZH | | | | | pmax | pmax | | | |
| | comp=Z,110nm,4.4s | | | | | | | | |
| **KMI** | **Kunming** | **65.48** | **280** | ⇑ | P | **P** | **15 17 27.8** | **+0.2** | |
| KMI | | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **L61B** | **Northampton** | **65.57** | **52** | | P | **P** | **15 17 27.7** | **0.0** | |
| | baz=318 | | | | | | | | |
| **KMSC** | **Kings Mountain** | **66.30** | **63** | | P | **P** | **15 17 32.8** | **+0.3** | |
| **FINES** | **FINESS Array B** | **66.47** | **349** | | P | **P** | **15 17 32.2** | **-0.8** | |
| | comp=Z,1.3nm,0.7s,baz=12,slow=9.8,SNR=6.0 | | | | | | | | |
| FINES | | | | | PcP | **PcP** | **15 18 02.7** | **+0.3** | |
| | comp=Z,5.9nm,0.8s,baz=72,slow=6.2,SNR=9.6 | | | | | | | | |
| FINES | | | | | LR | LR | 15 48 16.1 | | |
| | comp=Z,50nm,20.4s,baz=36,slow=38 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **66.47** | **349** | *i* | P | **P** | **15 17 31.2** | **-1.9** | |
| FINES | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **67.25** | **141** | *e* | LR | LR | 15 37 49.6 | | |
| | comp=Z,218nm,25.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **67.65** | **311** | | P | **P** | **15 17 41.7** | **+0.5** | |
| | SNR=20 | | | | | | | | |
| **BOOM** | **Boomskoye usch** | **67.81** | **311** | | P | **P** | **15 17 42.0** | **-0.2** | |
| **BOOM** | **Boomskoye usch** | **67.81** | **311** | | P | **P** | **15 17 42.0** | **-0.2** | |
| BOOM | | | | | pmax | pmax | | | |
| | comp=Z,25nm,0.7s | | | | | | | | |
| **ULHL** | **Ulahol** | **67.85** | **310** | | P | **P** | **15 17 43.2** | **+0.7** | |
| | SNR=5.7 | | | | | | | | |
| **USP** | **Ospenovka** | **67.90** | **312** | | P | **P** | **15 17 43.0** | **+0.4** | |
| | SNR=32 | | | | | | | | |
| **CHMS** | **Chumysh** | **67.99** | **312** | | P | **P** | **15 17 43.8** | **+0.7** | |
| | SNR=8.9 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **68.11** | **356** | | P | **P** | **15 17 43.7** | **+0.1** | |
| | comp=Z,1.2nm,0.5s,baz=5.7,slow=6.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.11** | **356** | | P | **P** | **15 17 43.7** | **+0.1** | |
| | comp=Z,2.1nm,0.7s,baz=6.2,slow=6.6,SNR=7.2 | | | | | | | | |
| NOA | | | | | LR | LR | 15 46 07.8 | | |
| | comp=Z,29nm,21.8s,baz=50,slow=35 | | | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.11** | **356** | *e* | P | **P** | **15 17 44.0** | **+0.4** | |
| NOA | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **KBK** | **Karagaybulak** | **68.16** | **311** | | P | **P** | **15 17 45.1** | **+0.7** | |
| | SNR=10.0 | | | | | | | | |
| **AAK** | **Ala-Archa** | **68.39** | **312** | | P | **P** | **15 17 46.4** | **+0.6** | |
| | SNR=17 | | | | | | | | |
| **AAK** | **Ala-Archa** | **68.39** | **312** | | P | **P** | **15 17 45.8** | **0.0** | |
| **AAK** | **Ala-Archa** | **68.39** | **312** | | LR | LR | 15 50 29.7 | | |
| | comp=Z,68nm,18.3s,baz=32,slow=38 | | | | | | | | |
| **AAK** | **Ala-Archa** | **68.39** | **312** | *d* | *i*P | **P** | **15 17 46.3** | **+0.5** | |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,35nm,0.8s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **68.71** | **312** | | P | **P** | **15 17 48.2** | **+0.5** | |
| | SNR=32 | | | | | | | | |
| **HFS** | **Hagfors** | **68.89** | **355** | | P | **P** | **15 17 47.4** | **-1.0** | |
| | comp=Z,3.7nm,0.5s,baz=36,slow=2.8,SNR=31 | | | | | | | | |
| HFS | | | | | LR | LR | 15 48 28.5 | | |
| | comp=Z,31nm,20.2s,baz=20,slow=36 | | | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | | | |
| **AML** | **Almayashu** | **69.15** | **312** | | P | **P** | **15 17 51.9** | **+1.1** | |
| | SNR=13 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **69.23** | **324** | | P | **P** | **15 17 50.2** | **-0.5** | |
| ABKAR | | | | | IAmb | IAmb | 15 17 52.3 | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **KSH** | **Kashi** | **70.07** | **308** | | P | **P** | **15 17 59.8** | **+3.6** | |
| KSH | | | | | pP | pwP | 15 18 12.5 | +1.5 | |
| KSH | | | | | pmax | pmax | | | |
| | comp=Z,54nm,0.9s | | | | | | | | |
| KSH | | | | | LR | LR | | | |
| | comp=N,160nm,18.2s | | | | | | | | |
| KSH | | | | | LR | LR | | | |
| | comp=E,160nm,19.2s | | | | | | | | |
| **BELG** | **Belogornoye** | **70.54** | **333** | | LR | LR | 15 53 35.8 | | |
| | comp=E,47nm,18.2s,baz=353,slow=40 | | | | | | | | |
| **BELG** | **Belogornoye** | **70.54** | **333** | ⇑ | *e*P | **P** | **15 17 59.2** | **+0.6** | |
| BELG | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **CRAI** | **Chiangrai** | **70.55** | **278** | | P | **P** | **15 17 59.7** | **+0.4** | |
| CRAI | | | | | IAmb | IAmb | 15 18 00.8 | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **OBN** | **Obninsk** | **70.77** | **341** | *e* | P | **P** | **15 17 59.4** | **-0.6** | |
| OBN | | | | *e* | | | 15 18 20.5 | | |
| OBN | | | | *e* | | | 15 20 35.9 | | |
| OBN | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.4s | | | | | | | | |
| OBN | | | | | MLR | MLR | | | |
| | comp=Z,62nm,20.0s | | | | | | | | |
| **BTK** | **Batken** | **72.13** | **312** | | P | **P** | **15 18 08.5** | **-0.1** | |
| **BTK** | **Batken** | **72.13** | **312** | | P | **P** | **15 18 08.5** | **-0.1** | |
| BTK | | | | | pmax | pmax | | | |
| | comp=Z,44nm,0.9s | | | | | | | | |
| **PPT2** | **Papeete2** | **72.19** | **153** | *e* | S | **S** | **15 27 26.5** | **-2.5** | |
| | comp=Z,43nm,23.2s | | | | | | | | |
| PPT2 | | | | *e* | SS | **SS** | **15 32 05.5** | **-2.0** | |
| | comp=Z,38nm,21.2s | | | | | | | | |
| PPT2 | | | | *e* | LR | LR | 15 40 13.0 | | |
| | comp=Z,91nm,21.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.77** | **278** | | P | **P** | **15 18 12.6** | **0.0** | |
| | comp=Z,3.9nm,0.8s,baz=29,slow=6.9,SNR=22 | | | | | | | | |
| CMAR | | | | | LR | LR | 15 54 12.9 | | |
| | comp=Z,50nm,18.5s,baz=60,slow=39 | | | | | | | | |
| | comp=Z,3.9nm,0.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.77** | **278** | *i* | P | **P** | **15 18 13.1** | **+0.5** | |
| CMAR | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **MNK** | **Minsk** | **72.93** | **346** | *i* | P | **P** | **15 18 13.1** | **+0.1** | |
| MNK | | | | *i* | | | 15 18 29.8 | | |
| MNK | | | | *i* | | | 15 20 55.4 | | |
| MNK | | | | *i* | PPP | PPP | 15 22 40.2 | | |
| MNK | | | | *i* | S | **S** | **15 27 37.9** | **+1.2** | |
| MNK | | | | *i* | SS | **SS** | **15 32 19.5** | **+3.4** | |
| MNK | | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| MNK | | | | | pmax | pmax | | | |
| | comp=E,5.0nm,0.9s | | | | | | | | |
| MNK | | | | | pmax | pmax | | | |
| | comp=N,7.0nm,0.9s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=N,76nm,17.0s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=E,49nm,17.0s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=Z,58nm,16.0s | | | | | | | | |
| **RAR** | **Rarotonga** | **73.36** | **164** | | LR | LR | 15 44 48.2 | | |
| | comp=Z,253nm,19.4s,baz=298,slow=31 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **73.82** | **4** | | P | **P** | **15 18 18.0** | **-0.2** | |
| | comp=Z,4.1nm,0.8s,baz=353,slow=4.6,SNR=8.9 | | | | | | | | |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **73.82** | **4** | | P | **P** | **15 18 18.0** | **-0.2** | |
| **SIMJ** | **Simiganj** | **74.09** | **312** | | P | **P** | **15 18 19.9** | **-0.3** | |
| **NIL** | **Nilore** | **76.01** | **306** | | P | **P** | **15 18 31.5** | **+0.2** | |
| **NIL** | **Nilore** | **76.01** | **306** | | P | **P** | **15 18 31.5** | **+0.2** | |
| NIL | | | | | pmax | pmax | | | |
| | comp=Z,31nm,0.9s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.37** | **344** | | P | **P** | **15 18 31.6** | **-1.4** | |
| | comp=Z,0.7nm,0.4s,baz=19,slow=6.1,SNR=7.2 | | | | | | | | |
| AKASG | | | | | LR | LR | 15 55 47.9 | | |
| | comp=Z,76nm,19.4s,baz=14,slow=39 | | | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.37** | **344** | *i* | P | **P** | **15 18 32.5** | **-0.5** | |
| AKASG | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **76.37** | **344** | ⇑ | *e*P | **P** | **15 18 32.4** | **-0.6** | |
| **TBI** | **Tubuai** | **77.70** | **155** | *e* | S | **S** | **15 28 29.6** | **-0.4** | |
| | comp=Z,745nm,26.0s | | | | | | | | |
| **TBI** | **Tubuai** | **77.70** | **155** | *e* | LR | LR | 15 42 40.0 | | |
| | comp=Z,608nm,25.5s | | | | | | | | |
| **CLL** | **Collm** | **77.73** | **354** | *e* | P | **P** | **15 18 41.0** | **+0.4** | |
| **CLL** | **Collm** | **77.73** | **354** | *e* | P | **P** | **15 18 41.0** | **+0.4** | |
| **BTNL** | **Ternell** | **78.72** | **359** | *d* | P | **P** | **15 18 46.3** | **+0.1** | |
| **BMRD** | **Maredsous** | **79.02** | **359** | *d* | P | **P** | **15 18 47.6** | **-0.2** | |
| **VRAC** | **Vranov** | **79.44** | **352** | | LR | LR | 15 56 15.0 | | |
| | comp=Z,29nm,19.9s,baz=18,slow=38 | | | | | | | | |
| **KIV** | **Kislovodsk** | **79.58** | **333** | *e* | P | **P** | **15 18 48.6** | **-2.5** | |
| KIV | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **KBZ** | **Khabaz** | **79.72** | **332** | | P | **P** | **15 18 51.0** | **-0.7** | |
| | comp=Z,1.9nm,0.7s,baz=346,slow=4.2,SNR=4.4 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **KBZ** | **Khabaz** | **79.72** | **332** | ⇓ | *e*P | **P** | **15 18 52.2** | **+0.5** | |
| KBZ | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **GERES** | **GERESS Array B** | **80.13** | **353** | | LR | LR | 15 58 18.0 | | |
| | comp=Z,35nm,18.1s,baz=26,slow=39 | | | | | | | | |
| **AKT** | **Akhty** | **80.25** | **328** | *e* | P | **P** | **15 18 54.5** | **-0.3** | |
| AKT | | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **81.97** | **345** | | LR | LR | 16 02 23.5 | | |
| | comp=Z,55nm,18.3s,baz=32,slow=41 | | | | | | | | |
| **RKT** | **Rikitea** | **82.23** | **142** | *e* | LR | LR | 15 44 46.1 | | |
| | comp=Z,651nm,26.8s | | | | | | | | |
| **GNI** | **Garni** | **82.42** | **330** | | LR | LR | 16 01 05.0 | | |
| | comp=Z,128nm,19.5s,baz=23,slow=40 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.00** | **226** | | P | **P** | **15 19 08.7** | **-0.6** | |
| | comp=Z,0.6nm,0.7s,baz=32,slow=5.6,SNR=6.2 | | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.00** | **226** | *i* | P | **P** | **15 19 09.0** | **-0.3** | |
| WRA | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **PSI** | **Prapat** | **84.70** | **268** | | P | **P** | **15 19 17.7** | **-0.6** | |
| PSI | | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **84.73** | **331** | | P | **P** | **15 19 18.0** | **-0.2** | |
| GURO | | | | | IAmb | IAmb | 15 19 21.0 | | |
| | comp=Z,8.4nm,1.1s | | | | | | | | |
| **RPSI** | **Rantau Prapat** | **84.78** | **268** | | P | **P** | **15 19 17.7** | **-0.9** | |
| **BRTR** | **Keskin Array B** | **85.94** | **337** | | P | **P** | **15 19 24.2** | **0.0** | |
| | comp=Z,7.2nm,0.8s,baz=50,slow=2.7,SNR=38 | | | | | | | | |
| BRTR | | | | | LR | LR | 16 02 35.9 | | |
| | comp=Z,25nm,20.0s,baz=92,slow=39 | | | | | | | | |
| | comp=Z,7.2nm,0.8s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **85.94** | **337** | *i* | P | **P** | **15 19 24.3** | **+0.1** | |
| BRTR | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **BNN** | **Bunyan** | **86.21** | **336** | | P | **P** | **15 19 24.3** | **-1.3** | |
| **ASAR** | **Alice Springs** | **86.44** | **225** | | P | **P** | **15 19 27.1** | **+0.6** | |
| | comp=Z,1.0nm,1.0s,baz=20,slow=4.8,SNR=5.6 | | | | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **89.39** | **6** | | P | **P** | **15 19 40.0** | **-0.6** | |
| | comp=Z,2.8nm,0.9s,baz=348,slow=4.9,SNR=17 | | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **91.82** | **334** | | P | **P** | **15 19 52.1** | **0.0** | |
| | comp=Z,5.3nm,0.8s,baz=69,slow=4.8,SNR=4.8 | | | | | | | | |
| MMAI | | | | | LR | LR | 16 08 19.7 | | |
| | comp=Z,43nm,18.0s,baz=7.5,slow=40 | | | | | | | | |
| | comp=Z,5.3nm,0.8s | | | | | | | | |
| **EIL** | **Elat** | **95.10** | **333** | | LR | LR | 16 08 25.4 | | |
| | comp=Z,28nm,20.2s,baz=67,slow=39 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **116.05** | **2** | | PKP | **PKiKP** | **15 25 27.2** | **0.0** | |
| | comp=Z,0.5nm,0.6s,baz=16,slow=2.0,SNR=3.3 | | | | | | | | |
| **H03N2** | **Juan Fernandez** | **119.39** | **108** | | T | T | 17 37 20.8 | | |
| | baz=317,slow=78 | | | | | | | | |
| **H03N1** | **Juan Fernandez** | **119.41** | **108** | | T | T | 17 37 21.7 | | |
| | baz=317,slow=78 | | | | | | | | |
| **H03N3** | **Juan Fernandez** | **119.41** | **108** | | T | T | 17 37 09.1 | | |
| | baz=317,slow=78 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **140.81** | **180** | | PKhKP | PKPpre | 15 26 09.3 | | |
| | comp=Z,1.7nm,0.8s,baz=238,slow=2.1,SNR=5.6 | | | | | | | | |
| **MAW** | **Mawson** | **147.27** | **217** | | PKPbc | **PKPbc** | **15 26 26.7** | **+0.7** | |
| | comp=Z,1.5nm,0.8s,baz=86,slow=1.9,SNR=6.9 | | | | | | | | |
| **BOSA** | **Boshof** | **152.44** | **316** | | PKPbc | **PKPbc** | **15 26 40.3** | **+0.2** | |
| | comp=Z,2.2nm,0.6s,baz=33,slow=3.3,SNR=6.6 | | | | | | | | |

**NOU 29 15:15:03.2, 22.42S×170.35E, h0km, mb4.7/8, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.69** | **265** | P | Pn | 15 15 47.9 | +0.1 |
| **YATNC** | **Mamie plateau,** | **3.23** | **276** | P | Pn | 15 15 54.5 | -0.6 |
| **DZM** | **Mont Dzumac** | **3.63** | **275** | P | Pn | 15 16 00.8 | -0.1 |
| **NOUC** | **Port Laguerre** | **3.76** | **274** | P | Pn | 15 16 02.5 | 0.0 |
| **RTV** | **Rentapao** | **4.95** | **338** | P | Pn | 15 16 18.8 | 0.0 |
| **DVP** | **Devils Point** | **5.09** | **336** | P | Pn | 15 16 20.1 | -0.7 |
| **KOUNC** | **Koumac, New Ca** | **5.95** | **287** | P | Pn | 15 16 32.7 | +0.2 |

*NEIC **29** 15:21:27.4±1.4,50.5°N±0.1°×175.4°W±0.2,h10km±2km, mb4.1/20,ML3.5(AEIC), Error ellipse: s-maj=21.2km s-min=16.3km az=121.0*
*IDC **29** 15:21:35.0±1.6,52.53°N×176.57W,h0km,mb3.8/7, mbtmp3.7/10,ML3.0/2,MS3.5/2, Error ellipse: s-maj=52.7km s-min=19.0km az=178.0*
*AEIC **29** 15:21:40.6±3.3,51.23°N±0.07°×176.2°W±0.2,h5km±7km, Error ellipse: s-maj=15.6km s-min=9.2km az=63.0*

**ISC 29 15:21:28.3±1.2, 50.5°N±0.1°×175.92°W±0.08, h28km, n51, σ1.9s0.50/39, mb4.0/12, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KIMD** | **Kanaga Island** | **1.50** | **327** | | **Pb** | **15 21 56.9** | **+1.4** |
| **GSCK** | **Great Sitkin C** | **1.51** | **354** | | **Pb** | **15 21 56.4** | **+0.7** |
| **GSMY** | **Great Sitkin M** | **1.54** | **357** | | **Pb** | **15 21 56.9** | **+0.7** |
| **KIWB** | **Kanaga Island** | **1.55** | **331** | Pn | **Pb** | **15 21 57.1** | **+0.7** |
| **GSTD** | **Great Sitkin T** | **1.55** | **355** | | **Pb** | **15 21 57.2** | **+0.8** |
| GSTD | | | | | **Sn** | **15 22 11.2** | **-2.2** |
| **KIRH** | **Kanaga Island** | **1.57** | **333** | | **Pb** | **15 21 57.5** | **+0.8** |
| KIRH | | | | | **Sn** | **15 22 12.6** | **-1.3** |
| **GSTR** | **Great Sitkin T** | **1.59** | **357** | Pn | **Pb** | **15 21 57.4** | **+0.4** |
| **KICM** | **Kanaga Island** | **1.62** | **331** | | **Pb** | **15 21 58.8** | **+1.3** |
| **TAFP** | **Tanaga Falls P** | **1.90** | **318** | | **Sn** | **15 22 22.7** | **+0.8** |
| **AMKA** | **Amchitka** | **3.14** | **288** | Pn | **Pb** | **15 22 22.2** | **-1.2** |
| **KDAK** | **Kodiak Island** | **15.43** | **53** | Pn | **Pn** | **15 25 01.7** | **-2.1** |
| | 0.1nm,0.3s,baz=280,slow=6.1,SNR=1.9 | | | | | | |
| | 4.5nm,1.0s | | | | | | |
| **J17K** | **VABM Dome** | **15.77** | **29** | P | **P** | **15 25 11.3** | **-0.6** |
| **L19K** | **White Mountain** | **16.42** | **37** | | **P** | **15 25 19.7** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **16.49** | **289** | Pn | **Pn** | **15 25 17.8** | **+0.4** |
| | 0.4nm,0.3s,baz=94,slow=16,SNR=14 | | | | | | |
| PETK | | | | LR | LR | 15 31 22.9 | |
| | comp=Z,152nm,19.1s,baz=103,slow=38 | | | | | | |
| **SKT** | **Skwentna** | **17.63** | **40** | Pn | **P** | **15 25 34.6** | **+2.1** |
| **RND** | **Reindeer** | **19.41** | **38** | P | **P** | **15 25 50.9** | **-1.1** |
| **MLY** | **Manley** | **19.59** | **33** | P | **P** | **15 25 53.1** | **-0.9** |
| **G21K** | **Allakaket** | **19.66** | **27** | P | **P** | **15 25 54.2** | **-0.5** |
| G21K | | | | | IAmb | IAmb | 15 26 23.4 | |
| | comp=Z,16nm,1.3s | | | | | | |
| **DHY** | **Denali Highway** | **19.85** | **40** | P | **P** | **15 25 56.3** | **-0.6** |
| **I23K** | **Minto, Yukon-K** | **20.14** | **33** | P | **P** | **15 25 57.8** | **-2.0** |
| I23K | | | | | IAmb | IAmb | 15 26 08.6 | |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **H23K** | **Yukon River** | **20.46** | **32** | P | **P** | **15 26 02.6** | **-0.8** |
| H23K | | | | | IAmb | IAmb | 15 26 11.1 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **20.83** | **36** | P | **P** | **15 26 03.5** | **-3.9** |
| | comp=Z,0.5nm,0.9s,baz=239,slow=10,SNR=3.0 | | | | | | |
| **G23K** | **Bananza Creek** | **20.84** | **29** | P | **P** | **15 26 06.0** | **-1.5** |
| G23K | | | | | IAmb | IAmb | 15 26 20.8 | |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **MA2** | **Magadan** | **20.92** | **308** | LR | LR | 15 33 34.8 | |
| | comp=Z,117nm,18.4s,baz=106,slow=37 | | | | | | |
| **E21K** | **Killik River** | **20.93** | **23** | P | **P** | **15 26 06.4** | **-2.1** |
| E21K | | | | | IAmb | IAmb | 15 26 46.4 | |
| | comp=Z,7.6nm,1.0s | | | | | | |
| **H24K** | **Noodor Dome** | **21.03** | **33** | P | **P** | **15 26 07.8** | **-1.8** |
| H24K | | | | | IAmb | IAmb | 15 26 17.8 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **SEY** | **Seymchan** | **21.11** | **318** | P | P | 15 26 02.9 | -7.4 |
| | baz=43,slow=1.7,SNR=3.6 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **RIDG** | **Independent Ri** | **21.16** | **39** | P | **P** | **15 26 10.4** | **-0.6** |
| RIDG | | | | | IAmb | IAmb | 15 26 41.4 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **J25K** | **Salcha River,** | **21.33** | **37** | P | **P** | **15 26 10.8** | **-2.1** |
| J25K | | | | | IAmb | IAmb | 15 26 19.8 | |
| | comp=Z,5.1nm,0.8s | | | | | | |
| **J26L** | **Joseph Creek** | **21.99** | **38** | P | **P** | **15 26 18.9** | **-1.1** |
| **K27K** | **Chicken** | **22.41** | **40** | P | **P** | **15 26 24.3** | **0.0** |
| K27K | | | | | IAmb | IAmb | 15 26 33.9 | |
| | comp=Z,6.1nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **23.05** | **39** | P | **P** | **15 26 30.4** | **-0.7** |
| **I28M** | **Miner Creek** | **23.78** | **38** | P | **P** | **15 26 37.5** | **-0.8** |
| I28M | | | | | IAmb | IAmb | 15 26 47.9 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **K29M** | **Barlow Dome** | **24.26** | **42** | P | **P** | **15 26 43.2** | **+0.4** |
| **I30M** | **Mount Dempster** | **25.12** | **39** | P | **P** | **15 26 50.1** | **-0.4** |
| **KLR** | **Kul'dur** | **33.17** | **289** | P | **P** | **15 28 02.6** | **+0.4** |
| | comp=Z,1.4nm,0.5s,baz=53,slow=7.1,SNR=6.9 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.60** | **210** | T | T | 16 04 57.0 | |
| | baz=18,slow=76,SNR=60 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.61** | **210** | T | T | 16 05 01.2 | |
| | baz=18,slow=76,SNR=65 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.62** | **210** | T | T | 16 04 59.1 | |
| | baz=18,slow=76,SNR=57 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.81** | **210** | T | T | 16 06 29.8 | |
| | baz=18,slow=76,SNR=22 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.83** | **210** | T | T | 16 06 30.7 | |
| | baz=18,slow=76,SNR=21 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.83** | **210** | T | T | 16 06 30.6 | |
| | baz=18,slow=76,SNR=9.2 | | | | | | |
| **PDAR** | **Pinedale Array** | **44.83** | **73** | P | P | 15 29 47.6 | +7.7 |
| | comp=Z,0.6nm,0.8s,baz=313,slow=5.8,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **56.97** | **83** | P | P | 15 31 24.2 | +13 |
| | comp=Z,0.4nm,0.7s,baz=298,slow=4.0,SNR=2.2 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.03** | **315** | P | **P** | **15 31 38.2** | **-0.8** |
| | comp=Z,2.4nm,0.8s,baz=44,slow=6.8,SNR=7.9 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **G24K** | **Hadweenzic Riv** | **21.28** | **32** | P | | **P** | **15 28 28.4** | **+0.4** |
| **SCRK** | **Sand Creek** | **21.29** | **40** | P | | **P** | **15 28 27.9** | **-0.4** |
| **J26L** | **Joseph Creek** | **21.67** | **39** | P | | **P** | **15 28 31.6** | **-0.7** |
| **E24K** | **Your Creek** | **21.76** | **28** | P | | **P** | **15 28 34.0** | **+0.8** |
| E24K | | | | IAmb | | IAmb | 15 28 46.5 | |
| | comp=Z,7.1nm,1.4s | | | | | | | |
| **K27K** | **Chicken** | **22.10** | **41** | P | | **P** | **15 28 36.1** | **-0.8** |
| **EGAK** | **Eagle** | **22.73** | **39** | P | | **P** | **15 28 43.9** | **+0.3** |
| EGAK | | | | IAmb | | IAmb | 15 28 44.6 | |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **I28M** | **Miner Creek** | **23.45** | **38** | P | | **P** | **15 28 50.5** | **-0.5** |
| I28M | | | | IAmb | | IAmb | 15 29 15.2 | |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **H29M** | **Whitestone** | **24.32** | **37** | P | | **P** | **15 28 58.9** | **-0.2** |
| H29M | | | | IAmb | | IAmb | 15 29 14.5 | |
| | comp=Z,5.1nm,1.3s | | | | | | | |
| **G29M** | **Pine Creek** | **24.70** | **36** | P | | **P** | **15 29 02.1** | **-0.4** |
| G29M | | | | IAmb | | IAmb | 15 29 13.2 | |
| | comp=Z,5.7nm,1.2s | | | | | | | |
| **I30M** | **Mount Dempster** | **24.80** | **40** | P | | **P** | **15 29 03.1** | **-0.4** |
| I30M | | | | IAmb | | IAmb | 15 29 05.6 | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **E29M** | **Blow River** | **25.31** | **32** | P | | **P** | **15 29 09.9** | **+1.9** |
| E29M | | | | IAmb | | IAmb | 15 29 13.7 | |
| | comp=Z,5.6nm,1.4s | | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **25.39** | **36** | P | | **P** | **15 29 08.8** | **0.0** |
| G30M | | | | IAmb | | IAmb | 15 29 11.8 | |
| | comp=Z,2.7nm,1.0s | | | | | | | |
| **G31M** | **Satah River** | **26.10** | **37** | P | | **P** | **15 29 15.5** | **+0.4** |
| G31M | | | | IAmb | | IAmb | 15 29 44.7 | |
| | comp=Z,4.8nm,1.4s | | | | | | | |
| **KLR** | **Kul'dur** | **32.88** | **288** | P | | **P** | **15 30 15.5** | **0.0** |
| | comp=Z,2.0nm,0.4s,baz=63,slow=6.3,SNR=5.8 | | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.99** | **209** | T | | T | 16 06 30.0 | |
| | baz=18 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.00** | **209** | T | | T | 16 06 41.9 | |
| | baz=18 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.01** | **209** | T | | T | 16 06 36.8 | |
| | baz=18 | | | | | | | |
| **USRK** | **Uusuriysk Ar.** | **35.00** | **279** | P | | **P** | **15 30 35.3** | **+1.4** |
| | comp=Z,1.0nm,0.5s,baz=56,slow=8.1,SNR=2.0 | | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.20** | **209** | T | | T | 16 07 58.6 | |
| | baz=18 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.22** | **209** | T | | T | 16 08 07.6 | |
| | baz=18 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.22** | **209** | T | | T | 16 08 09.9 | |
| | baz=18 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.56** | **315** | P | | **P** | **15 33 51.4** | **-0.3** |
| | comp=Z,3.7nm,0.7s,baz=43,slow=6.6,SNR=19 | | | | | | | |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.54** | **310** | P | | **P** | **15 33 57.8** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=44,slow=5.3,SNR=2.6 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.22** | **321** | P | | **P** | **15 34 02.6** | **-0.2** |
| | comp=Z,1.4nm,0.5s,baz=51,slow=8.6,SNR=4.9 | | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.71** | **278** | P | | **P** | **15 35 10.5** | **+0.8** |
| | comp=Z,0.5nm,0.3s,baz=34,slow=5.5,SNR=4.1 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **85.93** | **337** | P | | **P** | **15 36 21.7** | **+0.2** |
| | comp=Z,0.8nm,0.8s,baz=49,slow=3.4,SNR=3.9 | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | |

*MOS* ***29*** *15:25:34.9±1.1,56˚.47N×113˚.23E, h7km, mb4.0/9, Error ellipse: s-maj=9.7km s-min=5.7km az=84.9*
*IDC* ***29*** *15:25:35.4±0.7,56˚.45N×113˚.20E, h0km, mb3.7/13, mbtmp3.8/17, ML3.8/3, Error ellipse: s-maj=17.2km s-min=11.2km az=149.0*
*BYKL* ***29*** *15:25:36.8±0.2,56˚.54N×113˚.18E, h3km±3km*
*NEIC* ***29*** *15:25:40.1±2.6,57˚.04N±0˚.05×113˚.1E±0˚.2, h10km±1km, mb4.2/13, Error ellipse: s-maj=17.1km s-min=8.3km az=98.0*

**ISC 29 15:25:36.1±0.4, 56˚.51N±0˚.02×113˚.19E±0˚.02, h10km, n109, σ2992/170, mb3.9/21, 13C-8D, East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVKR** | **Severomuysk** | **0.44** | **152** | *e*Pg | **Pg** | **15 25 44.4** | **-0.3** |
| SVKR | | | | Pmax | | 15 25 45.5 | |
| | 2µm,0.6s | | | | | | |
| SVKR | | | | *e*Sg | **Sg** | **15 25 50.0** | **-0.6** |
| SVKR | | | | Smax | | 15 25 50.7 | |
| | 12µm,0.6s | | | | | | |
| **SVKR** | **Severomuysk** | **0.44** | **152** | *e*PG | **Pg** | **15 25 44.4** | **-0.3** |
| SVKR | | | | *e* | | 15 25 50.1 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,2µm,0.3s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,12µm,0.6s | | | | | | |
| **YOAB** | **Uoyan, Buryati** | **0.90** | **246** | Pmax | | 15 25 01.6 | |
| | comp=N,443nm,0.3s | | | | | | |
| YOAB | | | | *e*Pg | **Pn** | **15 25 54.0** | **-0.8** |
| YOAB | | | | *e*Sg | **Sb** | **15 26 06.0** | **+0.2** |
| YOAB | | | | Smax | | 15 26 21.8 | |
| | comp=N,7µm,1.2s | | | | | | |
| **UKT** | **Uakit** | **1.05** | **166** | ⇑*i*Pg | **Pg** | **15 25 56.1** | **-0.2** |
| UKT | | | | Pmax | | 15 26 06.4 | |
| | comp=N,623nm,0.7s | | | | | | |
| UKT | | | | *e*Sg | **Sb** | **15 26 11.1** | **+0.9** |
| UKT | | | | *e*Sb | **Sn** | **15 26 15.6** | **+3.9** |
| UKT | | | | max | | 15 26 17.0 | |
| | comp=N,2µm,0.3s | | | | | | |
| **UKT** | **Uakit** | **1.05** | **166** | ⇑*i*PG | **Pg** | **15 25 56.1** | **-0.2** |
| UKT | | | | *e* | | 15 26 10.6 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,510nm,0.9s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=E,2µm,0.3s | | | | | | |
| **KMO** | **Kumora** | **1.27** | **242** | *e*Pg | **Pg** | **15 26 00.5** | **-0.1** |
| KMO | | | | Pmax | | 15 26 05.3 | |
| | comp=E,334nm,0.3s | | | | | | |
| KMO | | | | *e*Sg | **Sg** | **15 26 17.4** | **+0.3** |
| KMO | | | | Smax | | 15 26 24.3 | |
| | comp=E,4µm,0.9s | | | | | | |
| **KMO** | **Kumora** | **1.27** | **242** | ⇓*i*PG | **Pg** | **15 26 00.4** | **-0.1** |
| KMO | | | | *e* | | 15 26 17.8 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,273nm,0.5s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,4µm,0.9s | | | | | | |
| **BOD** | **Bodaibo** | **1.39** | **18** | ⇑*i*Pg | **Pg** | **15 26 01.2** | **-1.5** |
| BOD | | | | Pmax | | 15 26 05.3 | |
| | comp=N,653nm,0.5s | | | | | | |
| BOD | | | | *e*Sg | **Sg** | **15 26 19.1** | **-1.6** |
| BOD | | | | Smax | | 15 26 24.6 | |
| | comp=N,2µm,0.6s | | | | | | |
| BOD | | | | *e* | | 15 26 28.4 | |
| **BOD** | **Bodaibo** | **1.39** | **18** | ⇑*i*PG | **Pg** | **15 26 01.2** | **-1.5** |
| BOD | | | | *e* | | 15 26 19.3 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,638nm,0.6s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=N,2µm,0.6s | | | | | | |
| **NLYR** | **Nelyaty** | **1.39** | **90** | ⇓*i*Pg | **Pg** | **15 26 02.0** | **-0.8** |
| NLYR | | | | Pmax | | 15 26 05.5 | |
| | comp=N,846nm,0.8s | | | | | | |
| NLYR | | | | *e*Sg | **Sg** | **15 26 20.3** | **-0.5** |
| NLYR | | | | *e* | | 15 26 24.3 | |
| NLYR | | | | max | | 15 26 26.9 | |
| | comp=N,9µm,0.9s | | | | | | |
| **NLYR** | **Nelyaty** | **1.39** | **90** | ⇓*i*PG | **Pg** | **15 26 01.9** | **-0.8** |
| NLYR | | | | *e* | | 15 26 20.3 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,828nm,0.8s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,9µm,0.9s | | | | | | |
| **NIZB** | **Nizh Angarsk** | **2.17** | **252** | ⇑*i*Pn | **Pb** | **15 26 15.5** | **0.0** |
| NIZB | | | | *e*Pg | **Pg** | **15 26 17.1** | **-0.6** |
| NIZB | | | | max | | 15 26 18.3 | |
| | comp=N,672nm,0.6s | | | | | | |
| NIZB | | | | *e*Sg | **Sg** | **15 26 44.2** | **-1.6** |
| NIZB | | | | Smax | | 15 26 49.3 | |
| | comp=N,2µm,0.5s | | | | | | |
| **CRS** | **Chara** | **2.83** | **80** | *e*PN | **Pg** | **15 26 27.9** | **-2.3** |
| CRS | | | | *e* | | 15 27 04.6 | |
| CRS | | | | pmax | pmax | | |
| | comp=Z,716nm,0.9s | | | | | | |
| CRS | | | | smax | smax | | |
| | comp=E,1µm,1.4s | | | | | | |
| **VTMR** | **Vitim** | **2.96** | **354** | *e*Pn | **Pn** | **15 26 23.8** | **+0.7** |
| VTMR | | | | *e*Pg | **Pb** | **15 26 29.2** | **+0.3** |
| VTMR | | | | *e*PgPg | **Pg** | **15 26 32.7** | **-0.1** |
| VTMR | | | | *e*Sn | **Sn** | **15 26 59.1** | **+0.5** |
| VTMR | | | | *e*Sg | **Sg** | **15 27 06.5** | **-4.6** |
| VTMR | | | | *e*SgSg | **SbSb** | **15 27 14.8** | **+4.6** |
| **SYVR** | **Suvo** | **3.40** | **214** | *e*Pn | **Pn** | **15 26 31.2** | **+2.1** |
| SYVR | | | | *e*Pg | **Pb** | **15 26 38.0** | **+1.7** |
| SYVR | | | | Pmax | | 15 26 43.0 | |
| | comp=E,120nm,0.9s | | | | | | |
| SYVR | | | | *e*Sg | **Sg** | **15 27 22.6** | **-2.4** |
| SYVR | | | | Smax | | 15 27 24.0 | |
| | comp=E,1µm,0.9s | | | | | | |
| **SYVR** | **Suvo** | **3.40** | **214** | *e*PN | **Pn** | **15 26 31.1** | **+2.0** |
| SYVR | | | | *e* | | 15 26 37.7 | |
| SYVR | | | | *e* | | 15 27 22.6 | |
| SYVR | | | | pmax | pmax | | |
| | comp=Z,123nm,0.6s | | | | | | |
| SYVR | | | | smax | smax | | |
| | comp=E,1µm,1.1s | | | | | | |
| **KHNR** | **Khani** | **3.76** | **81** | *e*Pn | **Pn** | **15 26 36.8** | **+2.6** |
| KHNR | | | | *e*Pg | **Pb** | **15 26 44.2** | **+1.6** |
| KHNR | | | | *e*Sn | **Sn** | **15 27 19.5** | **+1.0** |
| KHNR | | | | *e*Sg | **Sg** | **15 27 33.6** | **-3.2** |
| **MXMB** | **Maximikha** | **4.14** | **220** | *e*Pg | **Pb** | **15 26 51.2** | **+2.1** |
| MXMB | | | | *e*Sg | **Sg** | **15 27 45.3** | **-3.7** |
| **OGRR** | **Ongureny** | **4.31** | **231** | *e*Pn | **Pn** | **15 26 44.2** | **+2.5** |
| OGRR | | | | *e*Pg | **Pb** | **15 26 54.2** | **+2.3** |
| OGRR | | | | Pmax | | 15 26 59.1 | |
| | comp=E,52nm,0.7s | | | | | | |
| OGRR | | | | *e*Sn | **Sn** | **15 27 32.4** | **+0.4** |
| OGRR | | | | *e*Sg | **Sg** | **15 27 50.5** | **-3.9** |
| OGRR | | | | Smax | | 15 27 55.8 | |
| | comp=E,321nm,0.8s | | | | | | |
| **OGRR** | **Ongureny** | **4.31** | **231** | *e*PN | **Pn** | **15 26 44.0** | **+2.3** |
| OGRR | | | | *e* | | 15 26 54.9 | |
| OGRR | | | | *e* | | 15 27 49.0 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,53nm,1.9s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=E,369nm,1.4s | | | | | | |
| **TUP** | **Tupik** | **4.38** | **116** | ⇓*i*Pn | **Pn** | **15 26 43.9** | **+1.3** |
| TUP | | | | *e*Pg | **Pb** | **15 26 55.6** | **+2.6** |
| TUP | | | | Pmax | | 15 26 57.9 | |
| | comp=E,115nm,1.0s | | | | | | |
| TUP | | | | *e* | | 15 27 02.5 | |
| TUP | | | | *e*Sn | **Sn** | **15 27 33.5** | **-0.1** |
| TUP | | | | *e*Sg | **Sg** | **15 27 52.2** | **-4.3** |
| TUP | | | | Smax | | 15 28 00.4 | |
| | comp=E,468nm,1.0s | | | | | | |
| **TUP** | **Tupik** | **4.38** | **116** | *e*PN | **Pn** | **15 26 44.1** | **+1.5** |
| TUP | | | | *e* | | 15 26 53.5 | |
| TUP | | | | *e*S | **Sn** | **15 27 34.0** | **+0.4** |
| TUP | | | | *e* | | 15 27 52.2 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,102nm,0.7s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,465nm,1.0s | | | | | | |
| **UZR** | **Uzur** | **4.48** | **227** | *e*Pn | **Pn** | **15 26 46.6** | **+2.6** |
| UZR | | | | *e*Pg | **Pb** | **15 26 57.2** | **+2.4** |
| UZR | | | | *e* | | 15 27 01.5 | |
| UZR | | | | max | | 15 27 04.1 | |
| | comp=N,69nm,1.2s | | | | | | |
| UZR | | | | *e*Sn | **Sn** | **15 27 36.9** | **+0.8** |
| UZR | | | | *e*Sg | **Sg** | **15 27 55.8** | **-4.0** |
| UZR | | | | Smax | | 15 28 06.7 | |
| | comp=N,346nm,1.1s | | | | | | |
| **CIT** | **Chita** | **4.50** | **177** | *e*Pg | **Pg** | **15 26 59.1** | **-3.1** |
| CIT | | | | Pmax | | 15 27 01.1 | |
| | comp=N,175nm,1.4s | | | | | | |
| CIT | | | | *e*Sn | **Sn** | **15 27 38.1** | **+1.3** |
| CIT | | | | *e*Sg | **Sg** | **15 27 58.0** | **-2.5** |
| CIT | | | | Smax | | 15 28 01.2 | |
| | comp=N,692nm,0.6s | | | | | | |
| CIT | | | | *e* | | 15 28 09.8 | |
| **CIT** | **Chita** | **4.50** | **177** | *e*PN | **Pn** | **15 26 46.0** | **+1.7** |
| CIT | | | | *e* | | 15 26 58.9 | |
| CIT | | | | *e*S | **Sn** | **15 27 38.0** | **+1.3** |
| CIT | | | | *e* | | 15 27 57.9 | |
| CIT | | | | pmax | pmax | | |
| | comp=Z,174nm,1.4s | | | | | | |
| CIT | | | | smax | smax | | |
| | comp=E,696nm,0.6s | | | | | | |
| **GORB** | **Goryachinsk** | **4.53** | **221** | *e*Pg | **Pb** | **15 26 58.4** | **+2.7** |
| GORB | | | | *e*Sg | **Sg** | **15 27 56.8** | **-4.7** |
| GORB | | | | *e* | | 15 28 09.1 | |
| **YKLR** | **Yuktali** | **4.68** | **85** | *e*Pn | **Pn** | **15 26 48.2** | **+1.4** |
| YKLR | | | | *e*Pg | **Pb** | **15 27 00.8** | **+2.6** |
| YKLR | | | | *e*Sn | **Sn** | **15 27 40.8** | **-0.3** |
| YKLR | | | | *e*Sg | **Sg** | **15 28 02.0** | **-4.3** |
| **KELR** | **Kotokel** | **4.79** | **220** | *e*Pg | **Pb** | **15 27 03.6** | **+3.6** |
| KELR | | | | *e*Sn | **Sn** | **15 27 43.4** | **-0.3** |
| KELR | | | | *e*Sg | **Sg** | **15 28 05.2** | **-4.5** |
| **ZRHB** | **Zarechye** | **5.30** | **224** | *e*Sg | **Sg** | **15 28 21.7** | **-4.3** |
| ZRHB | | | | Smax | | 15 28 48.9 | |
| | comp=E,970nm,1.0s | | | | | | |
| **TRG** | **Tyrgan** | **5.47** | **229** | *e*Pn | **Pn** | **15 26 59.7** | **+2.1** |
| TRG | | | | *e*Pg | **Pb** | **15 27 13.4** | **+1.8** |
| TRG | | | | Pmax | | 15 27 23.5 | |
| | comp=E,23nm,1.0s | | | | | | |
| TRG | | | | *e*Sn | **Sn** | **15 28 00.4** | **-0.1** |
| TRG | | | | *e*Sg | **Sg** | **15 28 24.7** | **-6.8** |
| TRG | | | | Smax | | 15 28 39.3 | |
| | comp=E,181nm,1.2s | | | | | | |
| **TRG** | **Tyrgan** | **5.47** | **229** | *e*PN | **Pn** | **15 26 59.4** | **+1.8** |
| TRG | | | | *e* | | 15 27 15.1 | |
| TRG | | | | *e*S | **Sn** | **15 28 00.4** | **-0.1** |
| TRG | | | | *e* | | 15 28 24.5 | |
| TRG | | | | pmax | pmax | | |
| | comp=Z,29nm,0.8s | | | | | | |
| TRG | | | | smax | smax | | |
| | comp=E,167nm,1.0s | | | | | | |
| **UUDB** | **Ulan-Yde** | **5.67** | **217** | *e*Pg | **Pb** | **15 27 18.6** | **+3.5** |
| UUDB | | | | max | | 15 27 24.9 | |
| | comp=E,27nm,1.6s | | | | | | |
| UUDB | | | | *e* | | 15 27 42.0 | |
| UUDB | | | | *e*Sn | **Sn** | **15 28 06.3** | **+0.8** |
| UUDB | | | | *e*Sg | **Sg** | **15 28 32.7** | **-5.3** |
| UUDB | | | | Smax | | 15 28 56.5 | |
| | comp=E,238nm,1.8s | | | | | | |
| **KAB** | **Kabansk** | **5.88** | **223** | *e* | **Sn** | **15 28 13.3** | **+2.6** |
| KAB | | | | *e*Sg | **Sg** | **15 28 39.7** | **-5.1** |
| KAB | | | | Smax | | 15 29 15.1 | |
| | comp=E,1µm,1.5s | | | | | | |
| **STDB** | **Stepnoy Dvoret** | **5.90** | **225** | *e*Sg | **Sg** | **15 28 40.6** | **-4.8** |
| **HRMR** | **Khuramsha** | **6.11** | **219** | *e*Pn | **Pn** | **15 27 08.7** | **+2.3** |
| HRMR | | | | *e*Pg | **Pb** | **15 27 26.9** | **+4.3** |
| HRMR | | | | Pmax | | 15 27 36.5 | |
| | comp=E,57nm,0.6s | | | | | | |
| HRMR | | | | *e*Sn | **Sn** | **15 28 17.3** | **+0.9** |
| HRMR | | | | *e*Sg | **Sg** | **15 28 46.4** | **-5.8** |
| HRMR | | | | Smax | | 15 28 52.8 | |
| | comp=E,532nm,0.6s | | | | | | |
| **BGT** | **Bolshoye Golou** | **6.38** | **229** | *e*Pg | **Pb** | **15 27 31.5** | **+4.3** |
| BGT | | | | Pmax | | 15 27 51.2 | |
| | comp=E,18nm,0.6s | | | | | | |
| BGT | | | | *e* | | 15 28 19.8 | |
| BGT | | | | *e*Sg | **Sg** | **15 28 54.2** | **-6.6** |
| BGT | | | | Smax | | 15 29 09.5 | |
| | comp=E,164nm,0.9s | | | | | | |
| **CLNS** | **Chul'man** | **6.46** | **82** | *e*Pn | **Pn** | **15 27 14.9** | **+3.7** |
| CLNS | | | | *e*Pg | Pb | 15 27 32.3 | +3.8 |
| CLNS | | | | *e* | | 15 28 31.6 | |
| CLNS | | | | *e*Sg | **Sg** | **15 28 57.3** | **-5.9** |
| **IRK** | **Irkutsk** | **6.74** | **234** | *e*Pn | **Pn** | **15 27 17.8** | **+2.8** |
| IRK | | | | *e*Pg | Pb | 15 27 38.2 | +5.0 |
| IRK | | | | Pmax | | 15 27 40.8 | |
| | comp=E,72nm,0.1s | | | | | | |
| IRK | | | | *e*Sn | **Sn** | **15 28 32.4** | **+0.7** |
| IRK | | | | *e*Sg | **Sg** | **15 29 05.1** | **-7.0** |
| IRK | | | | Smax | | 15 29 21.4 | |
| | comp=E,410nm,1.3s | | | | | | |
| IRK | | | | *e* | | 15 29 24.3 | |
| **IRK** | **Irkutsk** | **6.74** | **234** | *e*PG | Pb | 15 27 38.0 | +4.8 |
| IRK | | | | *e* | | 15 29 04.9 | |
| IRK | | | | pmax | pmax | | |
| | comp=Z,72nm,0.1s | | | | | | |
| IRK | | | | smax | smax | | |
| | comp=N,412nm,1.2s | | | | | | |
| **LSTR** | **Listvyanka** | **6.76** | **230** | *e*Pn | **Pn** | **15 27 19.2** | **+4.0** |
| LSTR | | | | *e*Pg | Pb | 15 27 38.2 | +4.7 |
| LSTR | | | | Pmax | | 15 27 50.1 | |
| | comp=N,6.0nm,0.4s | | | | | | |
| LSTR | | | | *e*Sn | **Sn** | **15 28 31.3** | **-0.9** |
| LSTR | | | | *e*Sg | **Sg** | **15 29 06.0** | **-6.8** |
| LSTR | | | | Smax | | 15 29 17.7 | |
| | comp=N,155nm,1.6s | | | | | | |
| **KPC** | **Khapcheranga** | **6.83** | **184** | *e*Pn | **Pn** | **15 27 17.3** | **+0.9** |
| KPC | | | | *e*Pg | Pg | 15 27 41.2 | -5.7 |
| KPC | | | | Pmax | | 15 28 08.9 | |
| | comp=N,21nm,1.2s | | | | | | |
| KPC | | | | *e* | | 15 28 37.4 | |
| KPC | | | | *e*Sg | **Sg** | **15 29 09.7** | **-5.6** |
| KPC | | | | Smax | | 15 29 28.8 | |
| | comp=N,264nm,1.4s | | | | | | |
| **KPC** | **Khapcheranga** | **6.83** | **184** | *e*PN | **Pn** | **15 27 17.0** | **+0.6** |
| KPC | | | | *e* | | 15 27 40.0 | |
| KPC | | | | *e* | | 15 29 09.5 | |
| KPC | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| KPC | | | | smax | smax | | |
| | comp=E,267nm,0.8s | | | | | | |
| **IVK** | **Ivanovka** | **6.98** | **231** | *e*Pn | **Pn** | **15 27 20.3** | **+1.9** |
| IVK | | | | *e*Pg | Pg | 15 27 43.4 | -6.3 |
| IVK | | | | Pmax | | 15 28 01.0 | |
| | comp=E,39nm,1.1s | | | | | | |
| IVK | | | | *e*Sn | **Sn** | **15 28 37.3** | **-0.5** |
| IVK | | | | *e*Sg | **Sg** | **15 29 13.3** | **-6.8** |
| IVK | | | | Smax | | 15 29 37.1 | |
| | comp=E,279nm,1.4s | | | | | | |
| **TLY** | **Talaya** | **7.41** | **233** | *e*Pn | **Pn** | **15 27 25.9** | **+1.7** |
| TLY | | | | *e*Pg | Pb | 15 27 49.5 | +4.9 |
| TLY | | | | Pmax | | 15 28 28.1 | |
| | comp=E,15nm,0.9s | | | | | | |
| TLY | | | | *e*Sn | **Sn** | **15 28 47.1** | **-1.1** |
| TLY | | | | *e*Sg | Sg | 15 29 24.4 | -9.2 |
| TLY | | | | Smax | | 15 29 34.7 | |
| | comp=E,83nm,1.2s | | | | | | |
| **ARS** | **Arshan** | **7.80** | **238** | *e*Pg | Pb | 15 27 58.1 | +6.7 |
| ARS | | | | Pmax | | 15 28 02.9 | |
| | comp=E,38nm,0.5s | | | | | | |
| ARS | | | | *e*Sn | **Sn** | **15 28 56.3** | **-1.8** |
| ARS | | | | *e* | | 15 29 20.1 | |
| ARS | | | | *e*Sg | **Sg** | **15 29 38.6** | **-7.8** |
| ARS | | | | *e* | | 15 29 53.4 | |
| ARS | | | | max | | 15 29 55.8 | |
| | comp=E,396nm,1.0s | | | | | | |
| **HIA** | **Hailar** | **8.26** | **149** | *e*Sg | **Sg** | **15 29 53.1** | **-7.9** |
| **HIA** | **Hailar** | **8.26** | **149** | ⇑*e*PN | **Pn** | **15 27 36.9** | **+1.0** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **ZAK** | **Zakamensk** | **8.52** | **228** | *e*Pg | Pg | 15 28 09.2 | -10 |
| ZAK | | | | Pmax | | 15 28 17.3 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| ZAK | | | | *e*Sn | **Sn** | **15 29 13.2** | **-2.4** |
| ZAK | | | | *e*Sg | **Sg** | **15 30 01.2** | **-8.0** |
| ZAK | | | | Smax | | 15 30 20.1 | |
| | comp=Z,104nm,0.9s | | | | | | |
| **ZAK** | **Zakamensk** | **8.52** | **228** | *e*PG | Pg | 15 28 13.1 | -5.9 |
| ZAK | | | | *e* | | 15 30 02.9 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| ZAK | | | | smax | smax | | |
| | comp=N,104nm,0.9s | | | | | | |
| **ZEA** | **Zeya** | **8.52** | **103** | *e*PN | Pn | 15 27 50.5 | +11 |
| **MOY** | **Mondy** | **8.65** | **241** | *e*Pn | **Pn** | **15 27 43.3** | **+1.9** |
| MOY | | | | Pmax | | 15 27 58.1 | |
| | comp=N,22nm,0.8s | | | | | | |
| MOY | | | | *e*Pg | Pg | 15 28 12.3 | -9.3 |
| MOY | | | | *e*Sn | **Sn** | **15 29 17.8** | **-1.1** |
| MOY | | | | *e* | | 15 29 38.7 | |
| MOY | | | | *e*Sg | **Sg** | **15 30 04.9** | **-8.6** |
| MOY | | | | Smax | | 15 30 30.5 | |
| | comp=N,171nm,1.8s | | | | | | |
| **MOY** | **Mondy** | **8.65** | **241** | *e*PN | **Pn** | **15 27 43.2** | **+1.9** |
| MOY | | | | *e* | | 15 28 14.2 | |
| MOY | | | | *e* | | 15 30 06.2 | |
| MOY | | | | pmax | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | |
| MOY | | | | smax | smax | | |
| | comp=N,170nm,2.0s | | | | | | |
| **ORL** | **Orlik** | **8.74** | **249** | *e*Pn | **Pn** | **15 27 45.1** | **+2.6** |
| ORL | | | | *e* | | 15 27 56.1 | |
| ORL | | | | Pmax | | 15 27 57.2 | |
| | comp=N,18nm,1.4s | | | | | | |
| ORL | | | | *e*Pg | Pg | 15 28 14.4 | -8.8 |
| ORL | | | | *e*Sn | **Sn** | **15 29 19.3** | **-1.7** |
| ORL | | | | *e*Sg | **Sg** | **15 30 08.2** | **-8.0** |
| ORL | | | | Smax | | 15 30 16.9 | |
| | comp=N,143nm,1.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **9.44** | **206** | Pn | Pn | 15 28 01.4 | +9.3 |
| **ULN** | **Ulaanbaatar** | **9.44** | **206** | ⇓*e*P | **Pn** | **15 27 52.7** | **+0.6** |
| **SONM** | **Songino Array** | **9.63** | **208** | Pn | **Pn** | **15 27 54.2** | **-0.6** |
| | comp=N,0.4nm,0.3s,baz=26,slow=12,SNR=4.9 | | | | | | |
| SONM | | | | Sn | **Sn** | **15 29 43.3** | **+0.2** |
| | comp=N,0.7nm,0.3s,baz=18,slow=16,SNR=2.2 | | | | | | |
| SONM | | | | Lg | Lg | 15 30 40.3 | |
| | comp=N,1.8nm,0.3s,baz=18,slow=25,SNR=8.8 | | | | | | |
| | comp=N,0.6nm,0.3s | | | | | | |
| **YAK** | **Yakutsk** | **10.07** | **50** | Pn | **Pn** | **15 27 59.5** | **-1.1** |
| **YAK** | **Yakutsk** | **10.07** | **50** | Pn | **Pn** | **15 27 57.9** | **-2.7** |
| | comp=N,0.9nm,0.3s,baz=245,slow=3.5,SNR=1.8 | | | | | | |
| YAK | | | | Sn | **Sn** | **15 29 46.6** | **-7.0** |
| | comp=N,1.8nm,0.3s,baz=345,slow=20,SNR=8.7 | | | | | | |
| YAK | | | | Lg | Lg | 15 30 45.5 | |
| | comp=N,1.8nm,0.3s,baz=332,slow=21,SNR=12 | | | | | | |
| | comp=N,2.7nm,0.3s | | | | | | |
| **YAK** | **Yakutsk** | **10.07** | **50** | *e*P | Pn | 15 27 48.6 | -12 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **HEH** | **HeiHe** | **10.54** | **120** | *e*P | **Pn** | **15 28 06.8** | **-0.3** |
| HEH | | | | S | **Sn** | **15 30 06.8** | **+1.7** |
| HEH | | | | smax | smax | | |
| | comp=N,120nm,0.9s | | | | | | |
| HEH | | | | smax | smax | | |
| | comp=E,98nm,0.7s | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **11.03** | **244** | ⇓*e*P | **Pn** | **15 28 15.2** | **+1.4** |
| **KRAR** | **Krasnoyarsk** | **11.31** | **276** | *c i*P | **Pn** | **15 28 18.9** | **+1.4** |
| **KLR** | **Kul'dur** | **13.34** | **115** | Pn | **Pn** | **15 28 45.4** | **+0.1** |
| | comp=E,0.5nm,0.3s,baz=313,slow=13,SNR=8.5 | | | | | | |
| KLR | | | | Lg | Lg | 15 32 35.5 | |
| | comp=E,0.2nm,0.3s,baz=275,slow=13,SNR=3.5 | | | | | | |
| | comp=E,3.3nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **13.34** | **115** | ⇑*e*P | **Pn** | **15 28 46.3** | **+1.0** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **16.34** | **273** | Pn | **Pn** | **15 29 26.1** | **+0.8** |
| **ZALV** | **Zalesovo Beam** | **16.34** | **273** | Pn | **Pn** | **15 29 25.9** | **+0.6** |
| | comp=Z,0.7nm,0.6s,baz=68,slow=16,SNR=2.4 | | | | | | |
| ZALV | | | | Lg | Lg | 15 34 11.2 | |
| | comp=Z,0.2nm,0.3s,baz=53,slow=22,SNR=1.5 | | | | | | |
| **TIXI** | **Tiksi** | **16.57** | **17** | Pn | **Pn** | **15 29 24.3** | **-3.8** |
| TIXI | | | | IAmb | IAmb | 15 29 31.6 | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **TIXI** | **Tiksi** | **16.57** | **17** | Pn | **Pn** | **15 29 23.2** | **-4.9** |
| | comp=Z,1.1nm,0.3s,baz=233,slow=7.4,SNR=3.3 | | | | | | |
| TIXI | | | | Sn | Sn | 15 32 17.2 | -15 |
| | comp=Z,0.4nm,0.3s,baz=124,slow=18,SNR=5.6 | | | | | | |
| TIXI | | | | Lg | Lg | 15 34 18.7 | |
| | comp=Z,0.5nm,0.3s,baz=338,slow=19,SNR=2.0 | | | | | | |
| **TIXI** | **Tiksi** | **16.57** | **17** | ⇑*e*P | **P** | **15 29 28.6** | **-2.1** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **16.83** | **257** | ⇑*e*P | **P** | **15 29 33.1** | **-0.8** |
| DGZ

comp=Z,2.9nm,0.6s,baz=51,slow=7.6,SNR=21
comp=Z,2.9nm,0.6s

**MKAR Makanchi Array 21.32 256** *i* P **P 15 30 25.0 +2.1**
MKAR pmax pmax
comp=Z,3.0nm,0.6s

**MAKZ Makanchi 21.48 256** P **P 15 30 26.2 +1.6**
**MAKZ Makanchi 21.48 256** P **P 15 30 26.2 +1.6**
MAKZ pmax pmax
comp=Z,3.0nm,0.7s

**BVAR Borovoye Array 24.64 280** P **P 15 30 57.2 +0.7**
comp=Z,2.2nm,0.6s,baz=71,slow=8.5,SNR=10
comp=Z,2.2nm,0.6s

**BRVK Borovoye 24.68 280** P **P 15 31 00.1 +3.3**
BRVK IAmb IAmb 15 31 07.4
comp=Z,12nm,1.5s

**BRVK Borovoye 24.68 280⇑** *e*P **P 15 30 58.9 +2.1**
BRVK pmax pmax
comp=Z,2.0nm,0.9s

**BILL Bilibino 26.31 43** *e*P **P 15 31 13.3 +1.8**
BILL *e* 15 31 53.9
BILL *e*PPP PPP 15 32 02.3
BILL pmax pmax
comp=Z,3.0nm,1.1s

BILL MLR MLR
comp=Z,79nm,15.0s

**ARCES ARCESS Array B 38.10 325** P **P 15 32 56.2 +1.7**
comp=Z,1.0nm,0.7s,baz=54,slow=12,SNR=1.2
comp=Z,1.0nm,0.7s

**D19K Kuna River 38.90 36** P **P 15 33 02.5 +1.2**
**CMAR Chiang Mai Arr 39.47 202** *i* P **P 15 33 04.9 -1.6**
CMAR pmax pmax
comp=Z,1.0nm,0.6s

**E21K Killik River 40.25 35** P **P 15 33 14.2 +1.7**
E21K IAmb IAmb 15 33 35.6
comp=Z,9.4nm,1.4s

**OBN Obninsk 40.99 302** *e*P **P 15 33 20.0 +1.4**
OBN *e* 15 34 56.4
OBN *e*PPP PPP 15 35 21.1
OBN pmax pmax
comp=Z,4.0nm,0.4s

OBN MLR MLR
comp=Z,58nm,19.0s

**D23K Nanushuk River 41.00 33** P **P 15 33 20.0 +1.4**
D23K IAmb IAmb 15 33 29.2
comp=Z,14nm,1.4s

**FIA1 FINESS Array S 41.99 314** P **P 15 33 27.6 +0.8**
**FINES FINESS Array B 41.99 314** P **P 15 33 28.0 +1.2**
comp=Z,2.3nm,0.5s,baz=55,slow=9.0,SNR=20
comp=Z,2.3nm,0.5s

**FINES FINESS Array B 41.99 314** *i* P **P 15 33 28.2 +1.4**
FINES pmax pmax
comp=Z,2.0nm,0.5s

**ILAR Eielson Array 44.68 37** P **P 15 33 50.1 +1.6**
comp=Z,0.5nm,0.8s,baz=309,slow=11,SNR=4.9
comp=Z,0.5nm,0.8s

**E29M Blow River 45.05 30** P **P 15 33 52.9 +1.5**
E29M IAmb IAmb 15 34 35.5
comp=Z,3.6nm,1.4s

**G31M Satah River 47.07 30** P **P 15 34 08.6 +1.3**
**AKASG Malin Array Be 47.21 300** P **P 15 34 09.5 +0.9**
comp=Z,0.5nm,0.5s,baz=45,slow=8.6,SNR=4.7
comp=Z,0.5nm,0.5s

**AKASG Malin Array Be 47.21 300** *i* P **P 15 34 10.8 +2.2**
**L27K Beaver Creek, 47.49 37** P **P 15 34 12.7 +2.0**
L27K IAmb IAmb 15 34 45.0
comp=Z,3.6nm,1.4s

**HFS Hagfors 47.57 318** P **P 15 34 11.8 +0.5**
comp=Z,1.1nm,0.5s,baz=72,slow=9.5,SNR=7.9
comp=Z,1.1nm,0.5s

**NOA NORSAR Array B 47.85 320** P **P 15 34 14.1 +0.5**
comp=Z,0.4nm,0.6s,baz=51,slow=7.0,SNR=1.5
comp=Z,0.4nm,0.6s

**WRA Warramunga Arr 78.21 160** P **P 15 37 36.0 +0.4**
comp=Z,0.5nm,0.8s,baz=348,slow=6.3,SNR=4.7
comp=Z,0.5nm,0.8s

**WRA Warramunga Arr 78.21 160** *i* P **P 15 37 37.0 +1.4**
WRA pmax pmax
comp=Z,1.0nm,0.7s

**ASAR Alice Springs 81.76 161** P **P 15 37 55.4 +0.6**
comp=Z,0.2nm,0.6s,baz=353,slow=5.2,SNR=5.8
comp=Z,0.2nm,0.6s

**TORD Torodi Ar. Bea 90.56 295** P **P 15 38 39.6 +1.1**
comp=Z,0.5nm,0.8s,baz=4.8,slow=4.8,SNR=3.3
comp=Z,0.5nm,0.8s

**QSPA South Pole Qui 146.27 180** PKPbc **PKPab 15 45 15.8 -0.3**
comp=Z,0.9nm,0.8s,baz=6.4,slow=0.7,SNR=2.0

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**IDC 29 15:28:58.5**±1.5**, 49°26S**×**124°33E, h0**km**, mb3.7/3, mbtmp3.7/3, MS3.5/2, Error ellipse: s-maj=198.6km s-min=27.2km az=109.0, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W1** | **Cape Leeuwin H** | **16.19** | **329** | T | T | 15 50 23.5 | |
| | baz=152,slow=75,SNR=35 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **16.20** | **329** | T | T | 15 50 23.5 | |
| | baz=152,slow=75,SNR=33 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **16.21** | **329** | T | T | 15 50 25.5 | |
| | baz=152,slow=75,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **26.63** | **20** | P | P | 15 34 39.0 | +0.2 |
| | 1.2nm,0.7s,baz=192,slow=8.8,SNR=27 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **30.33** | **19** | P | P | 15 35 11.6 | -0.1 |
| | 0.3nm,0.6s,baz=192,slow=8.2,SNR=2.7 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **40.87** | **180** | LR | LR | 15 52 18.6 | |
| | comp=Z,62nm,18.1s,baz=216,slow=34 | | | | | | |
| **SNAA** | **Sanae** | **53.74** | **198** | P | P | 15 38 21.9 | 0.0 |
| | 1.9nm,0.9s,baz=166,slow=10,SNR=4.6 | | | | | | |
| SNAA | | | | LR | LR | 16 00 06.5 | |
| | comp=Z,33nm,19.0s,baz=51,slow=35 | | | | | | |
| | 1.9nm,0.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **145.70** | **45** | PKPbc | PKPdf | 15 48 36.9 | -0.7 |
| | 3.0nm,0.9s,baz=276,slow=3.7,SNR=15 | | | | | | |

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**IDC 29 15:34:28.2**±7.5**, 29°26N**×**86°31E, h0**km**, mb3.5**/2**, mbtmp3.4/3, ML2.8/1, MS3.8/1, Error ellipse: s-maj=380.7km s-min=40.3km az=68.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **17.78** | **351** | P | Pn | 15 38 37.2 | +0.1 |
| | baz=172,slow=13,SNR=1.9 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **IDI** | **Anoyia** | **51.56** | **293** | LR | LR | 16 10 27.5 | |
| | comp=Z,82nm,19.0s,baz=296,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **67.37** | **131** | P | P | 15 45 25.2 | -0.4 |
| | 0.3nm,0.5s,baz=322,slow=6.4,SNR=15 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **69.75** | **134** | P | P | 15 45 41.0 | +0.6 |
| | 0.3nm,0.8s,baz=314,slow=6.4,SNR=4.2 | | | | | | |
| | 0.3nm,0.8s | | | | | | |

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*NOU* ***29*** *15:41:14.9, 22°.03S×169°.84E, h0km, MLv4.6/11, Southeast of Loyalty Islands*

*NEIC* ***29*** *15:41:15.4±2.1, 22°.09S±0°.10×169°.81E±0°.08, h10km±1km, mb4.4/12, Error ellipse: s-maj=17.5km s-min=11.3km az=154.0*

*IDC* ***29*** *15:41:18.9±2.8, 21°.90S×169°.85E, h45km±21km, mb3.9/7, mbtmp4.2/9, ML4.5/2, MS3.8/15, Error ellipse: s-maj=44.4km s-min=17.3km az=160.0*

*BGR* ***29*** *15:41:22.0, 20°.63S×168°.98E, h33km*

**ISC 29 15:41:16.3**±0.6**, 22°10S**±0°.09×**169°91E**±0°.07**, h25**km**, n88**, σ1**s26**/79**, mb4.4**/16**, MS3.9**/11**, 3C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.85** | **289** | P | **Pn** | **15 41 46.4** | **0.0** |
| **PINNC** | **Pines Island,** | **2.34** | **257** | P | **Pn** | **15 41 53.7** | **+0.6** |
| **PINNC** | **Pines Island,** | **2.34** | **257** | | **Pn** | **15 41 53.0** | **-0.2** |
| **YATNC** | **Mamie plateau,** | **2.80** | **270** | P | **Pn** | **15 41 59.3** | **-0.2** |
| **LIFNC** | **LIFOU** | **2.81** | **297** | P | **Pn** | **15 41 59.5** | **-0.1** |
| **LIFNC** | **LIFOU** | **2.81** | **297** | Pn | **Pn** | **15 41 59.1** | **-0.6** |
| **DZM** | **Mont Dzumac** | **3.21** | **270** | P | **Pn** | **15 42 06.0** | **+0.7** |
| **DZM** | **Mont Dzumac** | **3.21** | **270** | Pn | **Pn** | **15 42 04.9** | **-0.3** |
| **DZM** | **Mont Dzumac** | **3.21** | **270** | P | **Pn** | **15 42 06.2** | **+0.9** |
| | 18nm,0.3s,baz=107,slow=13,SNR=256 | | | | | | |
| DZM | | | | S | **Sn** | **15 42 43.4** | **+0.6** |
| | 61nm,0.3s,baz=326,slow=23,SNR=6.3 | | | | | | |
| DZM | | | | LR | LR | 15 42 44.2 | |
| | comp=Z,318nm,19.6s,baz=82,slow=27 | | | | | | |
| | 119nm,0.6s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.34** | **269** | P | **Pn** | **15 42 07.8** | **+0.8** |
| **RTV** | **Rentapao** | **4.50** | **342** | P | **Pn** | **15 42 23.8** | **+0.9** |
| **DVP** | **Devils Point** | **4.64** | **339** | P | **Pn** | **15 42 24.6** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **5.46** | **285** | P | **Pn** | **15 42 37.2** | **+1.1** |
| **KOUNC** | **Koumac, New Ca** | **5.46** | **285** | Pn | **Pn** | **15 42 36.0** | **-0.2** |
| **MSVF** | **Nonsavu** | **8.80** | **62** | Pn | **Pn** | **15 43 23.6** | **+1.6** |
| **MSVF** | **Nonsavu** | **8.80** | **62** | P | **Pn** | **15 43 23.0** | **+0.9** |
| | 0.3nm,0.3s,baz=212,slow=11,SNR=11 | | | | | | |
| MSVF | | | | LR | LR | 15 45 55.2 | |
| | comp=Z,2μm,18.4s,baz=206,slow=32 | | | | | | |
| | 60nm,1.1s | | | | | | |
| **RAO** | **Raoul Island** | **13.08** | **125** | LR | LR | 15 48 42.5 | |
| | comp=Z,343nm,18.2s,baz=340,slow=34 | | | | | | |
| **HNR** | **Honiara** | **15.81** | **321** | LR | LR | 15 50 23.4 | |
| | comp=Z,2μm,18.1s,baz=135,slow=35 | | | | | | |
| **EIDS** | **Eidsvold** | **17.54** | **256** | P | **P** | **15 45 21.5** | **+1.3** |
| **CTA** | **Charters Tower** | **22.16** | **271** | P | **P** | **15 46 11.8** | **+1.3** |
| | 0.4nm,1.0s,baz=99,slow=13,SNR=2.1 | | | | | | |
| CTA | | | | LR | LR | 15 55 03.5 | |
| | comp=Z,32nm,18.1s,baz=92,slow=37 | | | | | | |
| **CTAO** | **Charters Tower** | **22.16** | **271** | | **P** | **15 46 13.4** | **+2.9** |
| CTAO | | | | IAmb | IAmb | 15 46 25.2 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **26.98** | **243** | P | **P** | **15 46 57.1** | **+1.0** |
| **STKA** | **Stephens Creek** | **26.98** | **243** | P | **P** | **15 46 57.5** | **+1.3** |
| | comp=Z,7.0nm,0.9s,baz=83,slow=8.2,SNR=7.7 | | | | | | |
| STKA | | | | LR | LR | 15 56 35.1 | |
| | comp=Z,376nm,20.7s,baz=43,slow=34 | | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **RAR** | **Rarotonga** | **28.17** | **94** | LR | LR | 15 57 33.7 | |
| | comp=Z,136nm,18.0s,baz=252,slow=34 | | | | | | |
| **WR0** | **Warramunga Arr** | **33.04** | **267** | P | **P** | **15 47 48.7** | **-1.2** |
| WR0 | | | | IAmb | IAmb | 15 47 54.5 | |
| | comp=Z,7.9nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **33.16** | **260** | P | **P** | **15 47 50.2** | **-0.8** |
| | comp=Z,1.3nm,0.9s,baz=89,slow=9.1,SNR=9.6 | | | | | | |
| ASAR | | | | LR | LR | 16 01 43.4 | |
| | comp=Z,242nm,18.1s,baz=92,slow=37 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.21** | **267** | P | **P** | **15 47 50.2** | **-1.3** |
| WB0 | | | | IAmb | IAmb | 15 47 52.1 | |
| | comp=Z,6.6nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.22** | **267** | P | **P** | **15 47 51.0** | **-0.5** |
| **WRAB** | **Tennant Creek** | **33.22** | **267** | P | **P** | **15 47 50.7** | **-0.8** |
| **WRA** | **Warramunga Arr** | **33.23** | **267** | P | **P** | **15 47 50.7** | **-0.9** |
| | comp=Z,2.8nm,1.0s,baz=98,slow=8.4,SNR=19 | | | | | | |
| WRA | | | | LR | LR | 16 01 42.3 | |
| | comp=Z,540nm,18.2s,baz=58,slow=37 | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **MTN** | **Manton Dam** | **38.02** | **277** | P | **P** | **15 48 29.6** | **-3.2** |
| MTN | | | | IAmb | IAmb | 15 48 50.3 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **PPT** | **Papeete** | **38.30** | **91** | LR | LR | 16 03 54.5 | |
| | comp=Z,108nm,18.1s,baz=294,slow=35 | | | | | | |
| **KNRA** | **Kununurra** | **39.36** | **272** | P | **P** | **15 48 44.5** | **+0.5** |
| KNRA | | | | IAmb | IAmb | 15 49 00.3 | |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.66** | **267** | P | **P** | **15 49 03.6** | **+0.6** |
| **SBA** | **Scott Base** | **55.83** | **181** | P | **P** | **15 50 52.0** | **+1.0** |
| SBA | | | | IAmb | IAmb | 15 51 06.8 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| **CASY** | **Casey** | **57.78** | **204** | P | **P** | **15 51 03.6** | **-1.4** |
| CASY | | | | IAmb | IAmb | 15 51 17.2 | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.56** | **332** | P | **P** | **15 51 56.3** | **-1.5** |
| | comp=Z,3.3nm,0.9s,baz=164,slow=5.6,SNR=6.2 | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.97** | **180** | LR | LR | 16 19 12.5 | |
| | comp=Z,64nm,18.9s,baz=40,slow=33 | | | | | | |
| **KSRS** | **Korea Array** | **71.21** | **326** | P | **P** | **15 52 31.9** | **-1.2** |
| | comp=Z,2.0nm,0.9s,baz=137,slow=6.3,SNR=4.4 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.63** | **352** | LR | LR | 16 22 29.0 | |
| | comp=Z,51nm,19.0s,baz=154,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.25** | **294** | P | **P** | **15 53 25.6** | **+0.2** |
| | comp=Z,0.7nm,0.8s,baz=129,slow=3.6,SNR=2.8 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **85.51** | **19** | LR | LR | 16 25 39.1 | |
| | comp=Z,66nm,20.3s,baz=220,slow=31 | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.74** | **184** | ⇑P | **P** | **15 53 51.0** | **-2.0** |
| | comp=Z,68nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.91** | **180** | ⇑P | **P** | **15 53 57.6** | **-1.1** |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.21** | **181** | ⇑P | **P** | **15 53 58.8** | **-1.3** |
| | comp=Z,1.9nm,0.6s,baz=181,slow=4.4 | | | | | | |
| **SONM** | **Songino Array** | **89.87** | **323** | P | **P** | **15 54 12.9** | **-0.2** |
| | comp=Z,2.5nm,1.0s,baz=133,slow=4.0,SNR=8.1 | | | | | | |
| | comp=Z,2.5nm,1.0s | | | | | | |
| **NEW** | **Newport** | **95.55** | **40** | LR | LR | 16 37 16.8 | |
| | comp=Z,28nm,18.1s,baz=210,slow=35 | | | | | | |
| **ANMO** | **Albuquerque** | **97.40** | **55** | LR | LR | 16 33 08.3 | |
| | comp=Z,48nm,18.3s,baz=255,slow=32 | | | | | | |
| **MORC** | **Moravsky Berou** | **144.83** | **329** | *e*PKP | **PKPab** | **16 00 48.6** | **-1.4** |
| **KRLC** | **Kraliky** | **144.99** | **329** | *e*PKP | PKPbc | 16 00 50.9 | +0.3 |
| **VYHS** | **Vyhne** | **145.00** | **326** | *e* | **PKPab** | **16 00 50.8** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **145.01** | **330** | *e*PKP | **PKPbc** | **16 00 50.3** | **-0.4** |
| DPC | | | | *ex* | x | 16 00 54.9 | |
| **JAVC** | **Velka Javorina** | **145.37** | **327** | *e*PKP | **PKPbc** | **16 00 51.5** | **-0.4** |
| **VRAC** | **Vranov** | **145.60** | **329** | *e*PKP | **PKPdf** | **16 00 51.4** | **-0.9** |
| **FLTG** | **Flechtingen** | **145.63** | **337** | *e*PKPbc | **PKPdf** | **16 00 51.0** | **-1.2** |
| | baz=39,slow=3.2 | | | | | | |
| **BRG** | **Berggiesshubel** | **145.69** | **333** | *i* P | **PKPdf** | **16 00 52.2** | **-0.2** |
| BRG | | | | Amp | | 16 00 53.0 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **145.69** | **333** | P | **PKiKP** | **16 01 02.4** | **+6.0** |
| BRG | | | | Amp | | 16 01 02.8 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **145.69** | **333** | *e*PKPbc | **PKPdf** | **16 00 51.9** | **-0.5** |
| | baz=39,slow=3.2 | | | | | | |
| **CLL** | **Collm** | **145.75** | **334** | PKPdf | **PKPdf** | **16 00 51.9** | **-0.5** |
| **CLL** | **Collm** | **145.75** | **334** | *i* PKPbc | **PKPdf** | **16 00 51.7** | **-0.8** |
| | comp=Z,16nm,0.9s | | | | | | |
| CLL | | | | *i* x | x | 16 01 01.3 | |
| **CLL** | **Collm** | **145.75** | **334** | *e*PKPbc | **PKPdf** | **16 00 51.8** | **-0.7** |
| | baz=39,slow=3.2 | | | | | | |
| **KRUC** | **Moravsky** | **145.86** | **328** | *e*PKP | **PKPdf** | **16 00 52.0** | **-0.7** |
| **NRDL** | **Niedersach Rie** | **145.91** | **338** | *e*PKPbc | **PKPdf** | **16 00 52.3** | **-0.3** |
| | baz=39,slow=3.2 | | | | | | |
| **CLZ** | **Clausthal** | **146.34** | **337** | *e*PKPbc | **PKPdf** | **16 00 54.1** | **+0.5** |
| | baz=39,slow=3.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.41** | **353** | PKPbc | **PKPdf** | **16 00 52.6** | **-0.9** |
| | comp=Z,2.2nm,0.5s,baz=356,slow=2.4,SNR=12 | | | | | | |
| **ZVC** | **Zvikov** | **146.63** | **331** | *e*PKP | **PKPbc** | **16 00 55.7** | **+0.1** |
| **PLN** | **Plauen** | **146.73** | **334** | *e*PKPbc | **PKPdf** | **16 00 54.9** | **+0.7** |
| | baz=39,slow=3.2 | | | | | | |
| **GTTG** | **Gottingen** | **146.73** | **337** | *e*PKPbc | **PKPbc** | **16 00 55.3** | **-0.5** |
| | baz=39,slow=3.2 | | | | | | |
| **RONA** | **Rongjia, Austr** | **146.82** | **327** | *i* PKP | **PKPbc** | **16 00 56.0** | **-0.3** |
| | comp=Z,3.3nm,0.7s | | | | | | |
| **CONA** | **Conrad Observa** | **146.89** | **327** | *i* PKP | **PKPbc** | **16 00 56.3** | **-0.3** |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **147.02** | **330** | *e*PKP | **PKPbc** | **16 00 56.6** | **-0.2** |
| **KHC** | **Kasperske Hory** | **147.13** | **331** | PKPdf | **PKPdf** | **16 00 55.4** | **+0.5** |
| **KHC** | **Kasperske Hory** | **147.13** | **331** | *e*PKP | **PKPbc** | **16 00 56.4** | **-0.7** |
| **GEC2** | **GERESS Array S** | **147.28** | **330** | *e*PKPbc | **PKPbc** | **16 00 56.5** | **-1.1** |
| | baz=39,slow=3.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.28** | **330** | PKPbc | **PKPdf** | **16 00 56.2** | **+0.9** |
| | comp=Z,1.7nm,0.7s,baz=40,slow=2.3,SNR=9.7 | | | | | | |
| **MOA** | **Molln** | **147.72** | **329** | *e*PKP | **PKPbc** | **16 00 59.0** | **+0.3** |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **SOKA** | **Soboth** | **148.14** | **326** | *i* PKP | **PKPdf** | **16 00 58.2** | **+1.5** |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **OBKA** | **Obir** | **148.50** | **327** | *e*PKP | **PKiKP** | **16 01 02.4** | **-0.1** |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **148.71** | **328** | *i* PKiKP | **PKPab** | **16 01 05.1** | **-0.2** |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **LESA** | **Schwarzleotal** | **148.78** | **330** | *i* PKP | **PKPbc** | **16 01 00.2** | **-1.4** |
| | comp=Z,2.7nm,1.0s | | | | | | |
| **MYKA** | **Terra Mystica** | **148.88** | **328** | *e*PKP | **PKiKP** | **16 01 03.9** | **+0.7** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.35** | **329** | *i* PKP | **PKPbc** | **16 01 01.4** | **-1.7** |
| | comp=Z,4.7nm,1.1s | | | | | | |
| **WATA** | **Walderalm** | **149.36** | **330** | *i* PKiKP | **PKiKP** | **16 01 06.0** | **+1.7** |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **WTTA** | **Wattenberg** | **149.38** | **330** | *e*PKP | **PKPbc** | **16 01 01.3** | **-1.9** |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **MOTA** | **Moosalm** | **149.57** | **331** | *i* PKP | **PKPbc** | **16 01 01.6** | **-2.1** |
| | comp=Z,7.9nm,1.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.61** | **331** | *e*PKP | **PKPbc** | **16 01 03.0** | **-0.8** |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **FETA** | **Feichten** | **149.98** | **331** | *e*PKP | **PKPbc** | **16 01 03.8** | **-0.9** |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.49** | **331** | PKPdf | **PKPdf** | **16 01 00.1** | **-0.7** |

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**IDC 29 15:50:38.1**±11.0**, 7°55S**×**129°79E, h474**km±103km**, mb3.1/1, mbtmp3.4/3, Error ellipse: s-maj=114.1km s-min=99.2km az=165.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.09** | **161** | P | P | 15 53 28.3 | -0.2 |
| | 0.5nm,1.1s,baz=340,slow=12,SNR=6.3 | | | | | | |
| WRA | | | | S | S | 15 55 49.2 | +0.1 |
| | 0.4nm,0.9s,baz=339,slow=22,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **16.51** | **167** | P | P | 15 54 05.5 | +0.7 |
| | 0.1nm,0.4s,baz=342,slow=9.8,SNR=8.4 | | | | | | |
| **STKA** | **Stephens Creek** | **26.59** | **157** | P | P | 15 55 37.0 | -0.2 |
| | 1.4nm,0.6s,baz=336,slow=20,SNR=1.8 | | | | | | |
| | 1.4nm,0.6s | | | | | | |

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*IDC* ***29*** *15:55:29.7±2.3, 15°.57N×94°.46W, h51km±18km, mb3.7/10, mbtmp4.0/13, ML3.6/3, MS3.4/15, Error ellipse: s-maj=28.5km s-min=7.7km az=47.0*

*MEX* ***29*** *15:55:29.1±1.0, 15°.40N×94°.64W, h18km±70km, MD4.5*

*CATAC* ***29*** *15:55:29.0±0.5, 15°.52N×94°.71W, h106km±17km, mb5.1, ML4.9*

**ISC 29 15:55:28.7**±1.1**, 15°44N**±0°.05×**94°69W**±0°.03**, h48**km±11km**, n50, σ1s98/52, mb4.0**/10**, MS3.3**/14**, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUIG** | **Huatulco** | **1.40** | **284** | *e*P | **Pn** | **15 55 51.5** | **-0.3** |
| HUIG | | | | *e*S | **Sn** | **15 56 08.0** | **-1.3** |
| **PCIG** | | **1.44** | **79** | *i* P | **Pn** | **15 55 50.3** | **-2.1** |
| PCIG | | | | *i* S | **Sn** | **15 56 06.6** | **-3.6** |
| **CMIG** | **Matias Romero** | **1.65** | **354** | P | **Pn** | **15 55 54.8** | **-0.5** |
| | 155nm,0.4s,baz=183,slow=13,SNR=752 | | | | | | |
| CMIG | | | | S | **Sn** | **15 56 14.4** | **-1.0** |
| | 939nm,0.5s,baz=288,slow=20,SNR=16 | | | | | | |
| **UXUV** | **UXUV** | **1.94** | **16** | *e*P | **Pn** | **15 55 59.1** | **-0.1** |
| UXUV | | | | *e*S | **Sn** | **15 56 21.3** | **-1.1** |
| **TGIG** | | **2.01** | **48** | *e*P | **Pn** | **15 55 59.8** | **-0.4** |
| TGIG | | | | *e*S | **Sn** | **15 56 22.1** | **-2.2** |
| **THIG** | | **2.40** | **102** | *e*P | **Pn** | **15 56 03.7** | **-1.8** |
| THIG | | | | *e*S | **Sn** | **15 56 30.2** | **-3.6** |
| **PEIG** | **Puerto Escondi** | **2.43** | **284** | *e*P | **Pn** | **15 56 05.8** | **-0.2** |
| PEIG | | | | *e*S | **Sn** | **15 56 31.7** | **-2.8** |
| **TUIG** | **Tuzandepetl** | **2.59** | **6** | *e*P | **Pn** | **15 56 07.1** | **-1.0** |
| TUIG | | | | *e*S | **Sn** | **15 56 43.0** | **+4.5** |
| **CCIG** | **Comitan** | **2.60** | **71** | *e*P | **Pn** | **15 56 09.1** | **+0.7** |
| CCIG | | | | *e*S | **Sn** | **15 56 41.5** | **+2.7** |
| **CCIG** | **Comitan** | **2.60** | **71** | *i* P | **Pn** | **15 56 09.1** | **+0.7** |
| CCIG | | | | *i* S | **Sn** | **15 56 42.5** | **+3.6** |
| CCIG | | | | IAML | | 15 56 46.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **RTAL** | **Retalhuleu** | **3.04** | **107** | *i* P | **Pn** | **15 56 13.5** | **-0.8** |
| RTAL | | | | IAML | | 15 57 10.2 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **YOIG** | **Yosondua** | **3.08** | **298** | *e*P | **Pn** | **15 56 17.4** | **+2.3** |
| YOIG | | | | *e*S | **Sn** | **15 56 49.2** | **-1.8** |
| **PMUV** | **Sontecomapan** | **3.11** | **352** | *e*P | **Pn** | **15 56 13.9** | **-1.5** |
| PMUV | | | | *e*S | **Sn** | **15 56 49.2** | **-2.2** |
| **SOKI** | **Kika Raxquin** | **3.24** | **101** | *i* P | **Pn** | **15 56 18.3** | **+0.9** |
| SOKI | | | | *i* S | **Sn** | **15 57 00.9** | **+6.0** |
| SOKI | | | | IAML | | 15 57 04.0 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **QUIS** | **Sacapulas** | **3.48** | **92** | *i* P | **Pn** | **15 56 20.0** | **-0.5** |
| QUIS | | | | IAML | | 15 57 07.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **CHTG** | **Tecpan** | **3.64** | **100** | *i* P | **Pn** | **15 56 23.5** | **+0.6** |
| CHTG | | | | IAML | | 15 57 22.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **APG** | **El Apazote** | **4.11** | **96** | P | **Pn** | **15 56 29.2** | **0.0** |
| | comp=Z,0.6nm,0.3s,baz=318,slow=12,SNR=83 | | | | | | |
| APG | | | | S | **Sn** | **15 57 12.2** | **-3.9** |
| | comp=Z,60nm,0.9s,baz=326,slow=16,SNR=6.3 | | | | | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **TLIG** | **Tlapa** | **4.27** | **300** | *i* P | **Pn** | **15 56 33.0** | **+1.6** |
| TLIG | | | | IAML | | 15 57 48.3 | |
| | comp=Z,440nm,1.0s | | | | | | |
| **SCIG** | **Sabancuy** | **4.85** | **43** | *e*P | **Pn** | **15 56 37.0** | **-2.2** |
| SCIG | | | | *e*S | Sn | 15 57 24.1 | -10 |
| **PETF** | **Flores** | **4.86** | **72** | *i* P | **Pn** | **15 56 38.5** | **-0.9** |
| PETF | | | | *i* S | **Sn** | **15 57 35.2** | **+0.8** |
| PETF | | | | IAML | | 15 57 37.2 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **4.99** | **107** | *i* P | **Pn** | **15 56 40.3** | **-1.0** |
| NUBE | | | | IAML | | 15 58 09.3 | |
| | comp=Z,290nm,1.0s | | | | | | |
| **CEVE** | **Cerro Verde** | **5.16** | **107** | *i* P | **Pn** | **15 56 44.9** | **+1.2** |
| CEVE | | | | IAML | | 15 58 02.0 | |
| | comp=Z,560nm,1.0s | | | | | | |
| **ESQI** | **Esquipulas** | **5.25** | **99** | *i* P | **Pn** | **15 56 45.3** | **+0.6** |
| ESQI | | | | IAML | | 15 58 17.9 | |
| | comp=Z,680nm,1.0s | | | | | | |
| **JTS** | **Las Juntas de** | **10.79** | **117** | P | **Pn** | **15 58 00.4** | **-0.2** |
| | comp=Z,1.2nm,0.3s,baz=306,slow=19,SNR=1.5 | | | | | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **DRK0** | **Durika** | **12.75** | **117** | *i* P | **Pn** | **15 58 29.6** | **+1.9** |
| DRK0 | | | | IAmb | IAmb | 15 58 31.3 | |
| | comp=Z,45nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **16.11** | **331** | P | **P** | **15 59 14.5** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=159,slow=13,SNR=4.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **LPIG** | **La Paz** | **17.02** | **303** | LR | LR | 16 05 32.1 | |
| | comp=Z,88nm,19.4s,baz=169,slow=35 | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.38** | **24** | LR | LR | 16 09 53.1 | |
| | comp=Z,75nm,18.9s,baz=212,slow=39 | | | | | | |
| **ROSC** | **El Rosal** | **22.63** | **116** | P | **P** | **16 00 26.4** | **+0.2** |
| | comp=Z,11nm,0.8s,baz=104,slow=6.3,SNR=7.4 | | | | | | |
| ROSC | | | | LR | LR | 16 08 29.4 | |
| | comp=Z,92nm,19.1s,baz=74,slow=35 | | | |

*mb4.6/11, Error ellipse: s-maj=17.3km s-min=5.8km az=188.0*
*NOU* ***29*** *15:56:56.7, 22°.025N × 169°.75E, h0km, MLv4.8/13, Southeast of Loyalty Islands*
*IDC* ***29*** *15:56:58.4±2.4, 22°.195N × 169°.94E, h44km±20km, mb4.0/13, mbtmp4.3/14, ML4.9/2, MS3.8/31, Error ellipse: s-maj=19.8km s-min=16.3km az=157.0*
*GCMT* ***29*** *15:57:00.5±0.3, 22°.15S±0°.03 × 169°.99E±0°.03, h31km, MW4.9/55, Moment Tensor Solution. s34,c39; s55,c72; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr2.86±.22; Mθθ-0.94±.16; Mϕϕ-1.92±.14; Mrθ1.05±.20; Mrϕ1.27±.07; Mθϕ-0.82±.15; Best double couple: Mo3.12200 × 10^16 NP1: ϕs138.00000°, δ58.00000°, λ82.00000°. NP2: ϕs332.00000°, δ33.00000°, λ102.00000°. Principal axes: T 3.1800, Plg76.0000°, Azm25.0000°; N -0.1110, Plg6.0000°, Azm143.0000°; P -3.0640, Plg12.0000°, Azm234.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*BGR* ***29*** *15:57:00.4, 20°.67S × 170°.77E, h33km*
**ISC 29 15:56:56.4±0.5, 22°.15S±0°.08 × 169°.95E±0°.07, h25km, n117, σ1 8 10/99, mb4.5/24, MS3.8/27, 5C-1D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | **1.90** | **290** | P | **Pn** | **15 57 26.9** | **-0.4** |
| PINNC | **Pines Island,** | **2.36** | **258** | P | **Pn** | **15 57 34.4** | **+0.8** |
| PINNC | **Pines Island,** | **2.36** | **258** | | **Pn** | **15 57 33.8** | **+0.1** |
| YATNC | **Mamie plateau,** | **2.84** | **271** | P | **Pn** | **15 57 40.1** | **-0.1** |
| LIFNC | **LIFOU** | **2.87** | **298** | P | **Pn** | **15 57 40.4** | **-0.2** |
| LIFNC | **LIFOU** | **2.87** | **298** | Pn | **Pn** | **15 57 40.0** | **-0.6** |
| DZM | **Mont Dzumac** | **3.25** | **271** | P | **Pn** | **15 57 46.7** | **+0.7** |
| DZM | **Mont Dzumac** | **3.25** | **271** | Pn | **Pn** | **15 57 46.1** | **+0.1** |
| DZM | **Mont Dzumac** | **3.25** | **271** | P | **Pn** | **15 57 46.8** | **+0.7** |
| | 29nm,0.3s,baz=120,slow=12,SNR=564 | | | | | | |
| DZM | | | | S | **Sn** | **15 58 24.7** | **+0.7** |
| | 245nm,0.7s,baz=200,slow=21,SNR=8.8 | | | | | | |
| DZM | | | | LR | LR | 15 59 09.4 | |
| | comp=Z,2μm,21.5s,baz=92,slow=40 72nm,0.3s | | | | | | |
| NOUC | **Port Laguerre** | **3.38** | **270** | P | **Pn** | **15 57 48.3** | **+0.6** |
| RTV | **Rentapao** | **4.56** | **341** | P | **Pn** | **15 58 04.9** | **+1.0** |
| DVP | **Devils Point** | **4.70** | **339** | P | **Pn** | **15 58 05.8** | **0.0** |
| KOUNC | **Koumac, New Ca** | **5.51** | **286** | P | **Pn** | **15 58 17.8** | **+0.8** |
| KOUNC | **Koumac, New Ca** | **5.51** | **286** | Pn | **Pn** | **15 58 17.5** | **+0.5** |
| MSVF | **Nonsavu** | **8.79** | **61** | P | **Pn** | **15 59 06.4** | **+4.3** |
| MSVF | **Nonsavu** | **8.79** | **61** | Pn | **Pn** | **15 59 04.8** | **+2.7** |
| MSVF | **Nonsavu** | **8.79** | **61** | P | **Pn** | **15 59 04.7** | **+2.6** |
| | 1.0nm,0.3s,baz=208,slow=12,SNR=26 | | | | | | |
| MSVF | | | | LR | LR | 16 01 35.7 | |
| | comp=Z,2μm,18.1s,baz=211,slow=32 | | | | | | |
| RAO | **Raoul Island** | **13.02** | **125** | LR | LR | 16 04 14.4 | |
| | comp=Z,592nm,18.1s,baz=332,slow=34 | | | | | | |
| HNR | **Honiara** | **15.88** | **321** | LR | LR | 16 05 37.2 | |
| | comp=Z,3μm,18.6s,baz=184,slow=33 | | | | | | |
| EIDS | **Eidsvold** | **17.57** | **256** | | **Pn** | **16 01 00.1** | **+0.5** |
| RPZ | **Rata Peaks** | **21.53** | **178** | LR | LR | 16 09 44.5 | |
| | comp=Z,315nm,18.8s,baz=30,slow=36 | | | | | | |
| CTAO | **Charters Tower** | **22.20** | **271** | P | **P** | **16 01 53.7** | **+2.6** |
| CTAO | | | | IAmb | IAmb | 16 02 05.6 | |
| | comp=Z,18nm,1.1s | | | | | | |
| STKA | **Stephens Creek** | **26.99** | **243** | P | **P** | **16 02 38.3** | **+1.9** |
| STKA | **Stephens Creek** | **26.99** | **243** | P | **P** | **16 02 35.4** | **-1.0** |
| | comp=Z,7.4nm,1.1s,baz=27,slow=9.9,SNR=4.0 | | | | | | |
| STKA | | | | LR | LR | 16 12 37.8 | |
| | comp=Z,390nm,20.2s,baz=63,slow=35 | | | | | | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| WR0 | **Warramunga Arr** | **33.07** | **267** | P | **P** | **16 03 29.7** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 16 03 38.0 | |
| | comp=Z,7.9nm,1.1s | | | | | | |
| ASAR | **Alice Springs** | **33.19** | **260** | P | **P** | **16 03 31.6** | **+0.2** |
| | comp=Z,2.2nm,1.1s,baz=84,slow=8.7,SNR=8.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 06 13.8** | **-0.1** |
| | comp=Z,0.7nm,0.8s,baz=116,slow=2.2,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 16 17 05.1 | |
| | comp=Z,306nm,19.8s,baz=96,slow=36 | | | | | | |
| | comp=Z,2.2nm,1.1s | | | | | | |
| WB0 | **Warramunga Arr** | **33.24** | **267** | P | **P** | **16 03 32.0** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 16 03 44.2 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| WB2 | **Warramunga Arr** | **33.25** | **267** | P | **P** | **16 03 32.3** | **+0.3** |
| WB2 | | | | IAmb | IAmb | 16 03 47.6 | |
| | comp=Z,8.6nm,1.1s | | | | | | |
| WRAB | **Tennant Creek** | **33.26** | **267** | P | **P** | **16 03 31.7** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 16 03 43.0 | |
| | comp=Z,21nm,1.5s | | | | | | |
| WRA | **Warramunga Arr** | **33.26** | **267** | P | **P** | **16 03 31.2** | **-0.9** |
| | comp=Z,1.3nm,0.9s,baz=98,slow=8.4,SNR=14 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 06 12.9** | **-1.3** |
| | comp=Z,0.8nm,0.9s,baz=105,slow=2.1,SNR=3.8 | | | | | | |
| WRA | | | | LR | LR | 16 17 33.2 | |
| | comp=Z,572nm,18.6s,baz=106,slow=37 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| FITZ | **Fitzroy Crossi** | **41.69** | **267** | P | **P** | **16 04 44.9** | **+1.4** |
| GUMO | **Guam** | **43.20** | **323** | LR | LR | 16 24 03.5 | |
| | comp=Z,60nm,18.7s,baz=158,slow=38 | | | | | | |
| NWAO | **Narrogin (SRO)** | **47.54** | **245** | LR | LR | 16 25 25.8 | |
| | comp=Z,401nm,18.5s,baz=86,slow=36 | | | | | | |
| KAPI | **Kappang** | **51.41** | **282** | LR | LR | 16 27 07.8 | |
| | comp=Z,57nm,21.9s,baz=117,slow=35 | | | | | | |
| DAV | **Davao City (W)** | **52.27** | **299** | LR | LR | 16 28 43.7 | |
| | comp=Z,57nm,20.2s,baz=124,slow=36 | | | | | | |
| SBA | **Scott Base** | **55.78** | **181** | P | **P** | **16 06 32.7** | **+1.9** |
| SBA | | | | IAmb | IAmb | 16 06 53.1 | |
| | comp=Z,8.2nm,1.1s | | | | | | |
| JOW | **Kunigami** | **63.23** | **318** | LR | LR | 16 31 50.5 | |
| | comp=Z,38nm,21.1s,baz=37,slow=33 | | | | | | |
| MJAR | **Matsushiro Arr** | **65.62** | **332** | P | **P** | **16 07 37.0** | **-1.4** |
| | comp=Z,3.2nm,0.9s,baz=161,slow=5.3,SNR=7.9 | | | | | | |
| MJAR | | | | LR | LR | 16 35 35.9 | |
| | comp=Z,16nm,19.5s,baz=146,slow=35 | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| JNU | **Nakatsue** | **66.41** | **325** | LR | LR | 16 37 23.3 | |
| | comp=Z,26nm,18.1s,baz=120,slow=36 | | | | | | |
| QSPA | **South Pole Qui** | **67.92** | **180** | P | **P** | **16 07 51.9** | **-1.0** |
| QSPA | **South Pole Qui** | **67.92** | **180** | P | **P** | **16 07 51.9** | **-1.0** |
| | comp=Z,4.2nm,1.0s,baz=10,slow=4.1,SNR=7.8 | | | | | | |
| QSPA | | | | LR | LR | 16 33 57.2 | |
| | comp=Z,54nm,19.3s,baz=48,slow=33 | | | | | | |
| | comp=Z,4.2nm,1.0s | | | | | | |
| JKA | **Kamikawa-asahi** | **70.54** | **339** | P | **P** | **16 08 09.0** | **-0.1** |
| ASAJ | **Asahikawa** | **70.55** | **339** | LR | LR | 16 35 17.6 | |
| | comp=Z,51nm,21.7s,baz=165,slow=33 | | | | | | |
| KSRS | **Korea Array** | **71.27** | **326** | P | **P** | **16 08 13.7** | **0.0** |
| | comp=Z,2.0nm,0.9s,baz=150,slow=4.6,SNR=3.4 | | | | | | |
| KSRS | | | | LR | LR | 16 39 56.4 | |
| | comp=Z,23nm,18.0s,baz=140,slow=36 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| USRK | **Ussuriysk Ar.** | **74.61** | **333** | P | **P** | **16 08 33.5** | **+0.2** |
| | comp=Z,5.7nm,1.1s,baz=163,slow=5.3,SNR=4.5 | | | | | | |
| | comp=Z,5.7nm,1.1s | | | | | | |
| PETK | **Petropavlovsk-** | **75.69** | **352** | P | **P** | **16 08 38.0** | **-1.3** |
| | comp=Z,7.9nm,1.0s,baz=123,slow=5.5,SNR=6.0 | | | | | | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| MAW | **Mawson** | **76.00** | **202** | P | **P** | **16 08 39.7** | **-1.3** |
| | comp=Z,1.6nm,0.9s,baz=180,slow=3.0,SNR=2.7 | | | | | | |
| MAW | | | | LR | LR | 16 38 24.7 | |
| | comp=Z,38nm,19.5s,baz=126,slow=33 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| CMAR | **Chiang Mai Arr** | **80.30** | **294** | P | **P** | **16 09 06.2** | **+0.4** |
| | comp=Z,1.7nm,0.9s,baz=124,slow=3.3,SNR=9.7 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| KMI | **Kunming** | **80.37** | **302** | ⇓P | **P** | **16 09 08.8** | **+2.5** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,11nm,1.4s | | | | | | |
| MA2 | **Magadan** | **82.94** | **350** | LR | LR | 16 41 46.9 | |
| | comp=Z,49nm,20.4s,baz=158,slow=32 | | | | | | |
| SNAA | **Sanae** | **86.30** | **182** | ⇑P | **P** | **16 09 35.8** | **-0.1** |
| | comp=Z,24nm,0.6s | | | | | | |
| SNAA | **Sanae** | **86.30** | **182** | P | **P** | **16 09 35.2** | **-0.7** |
| | comp=Z,2.4nm,1.0s,baz=135,slow=7.4,SNR=4.8 | | | | | | |
| | comp=Z,2.4nm,1.0s | | | | | | |
| VNA3 | **Neumayer Olymp** | **86.86** | **180** | ⇑P | **P** | **16 09 37.7** | **-0.9** |
| | comp=Z,5.2nm,0.8s | | | | | | |
| VNA2 | **Neumayer--Watz** | **87.16** | **181** | ⇑P | **P** | **16 09 39.4** | **-0.6** |
| | comp=Z,3.1nm,0.6s,baz=175,slow=5.3 | | | | | | |
| VNA1 | **Neumayer--Stat** | **87.45** | **181** | ⇑P | **P** | **16 09 40.4** | **-0.9** |
| | comp=Z,7.3nm,1.0s | | | | | | |
| YBH | **Yreka Blue Hor** | **88.92** | **44** | LR | LR | 16 41 14.6 | |
| | comp=Z,31nm,20.7s,baz=282,slow=30 | | | | | | |
| PFO | **Pinyon Flats O** | **89.31** | **53** | LR | LR | 16 41 25.5 | |
| | comp=Z,47nm,21.0s,baz=218,slow=30 | | | | | | |
| YAK | **Yakutsk** | **89.83** | **342** | LR | LR | 16 44 43.1 | |
| | comp=Z,37nm,21.7s,baz=138,slow=32 | | | | | | |
| SONM | **Songino Array** | **89.93** | **323** | P | **P** | **16 09 53.1** | **-0.4** |
| | comp=Z,3.0nm,0.9s,baz=138,slow=4.7,SNR=16 | | | | | | |
| SONM | | | | LR | LR | 16 52 24.9 | |
| | comp=Z,17nm,18.2s,baz=138,slow=37 | | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| LPIG | **La Paz** | **90.08** | **64** | LR | LR | 16 42 40.1 | |
| | comp=Z,91nm,18.1s,baz=214,slow=30 | | | | | | |
| NVAR | **Mina Array Bea** | **90.23** | **48** | P | **P** | **16 09 53.4** | **-1.9** |
| | comp=Z,0.3nm,0.5s,baz=246,slow=8.3,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| BBB | **Bella Bella** | **91.54** | **33** | LR | LR | 16 46 13.5 | |
| | comp=Z,45nm,18.1s,baz=232,slow=32 | | | | | | |
| ILAR | **Eielson Array** | **92.80** | **17** | P | **P** | **16 10 03.0** | **-3.2** |
| | comp=Z,0.4nm,0.7s,baz=237,slow=5.4,SNR=4.1 | | | | | | |
| NEW | **Newport** | **95.57** | **40** | LR | LR | 16 50 02.3 | |
| | comp=Z,27nm,18.6s,baz=292,slow=33 | | | | | | |
| ANMO | **Albuquerque** | **97.40** | **55** | LR | LR | 16 45 53.3 | |
| | comp=Z,44nm,20.3s,baz=240,slow=30 | | | | | | |
| TXAR | **Lajitas Array** | **97.56** | **62** | LR | LR | 16 46 59.1 | |
| | comp=Z,72nm,18.9s,baz=248,slow=31 | | | | | | |
| TIXI | **Tiksi** | **97.71** | **348** | LR | LR | 16 48 36.5 | |
| | comp=Z,33nm,21.1s,baz=175,slow=32 | | | | | | |
| PDAR | **Pinedale Array** | **98.09** | **47** | LR | LR | 16 49 50.6 | |
| | comp=Z,13nm,19.6s,baz=268,slow=32 | | | | | | |
| R50A | **Paris** | **115.40** | **57** | PKPdf | **PKPdf** | **16 15 34.8** | **-1.4** |
| V53A | **Saluda** | **116.19** | **60** | PKPdf | **PKiKP** | **16 15 39.5** | **+1.7** |
| ARCES | **ARCESS Array B** | **128.03** | **345** | PKP | **PKPdf** | **16 15 58.7** | **-0.9** |
| | comp=Z,1.3nm,0.8s,baz=64,slow=2.8,SNR=3.8 | | | | | | |
| KRLC | **Kraliky** | **145.05** | **329** | *e*PKP | **PKPbc** | **16 16 30.7** | **-0.2** |
| DPC | **Dobruska-Polom** | **145.08** | **330** | *e*PKP | **PKPbc** | **16 16 31.0** | **0.0** |
| DPC | | | | *ep*PKP | **PKiKP** | **16 16 35.4** | **0.0** |
| FLTG | **Flechtingen** | **145.70** | **337** | *e*PKPbc | **PKPdf** | **16 16 32.2** | **-0.2** |
| | baz=37,slow=3.0 | | | | | | |
| PVCC | **Panska Ves** | **145.74** | **332** | *e*PKP | **PKPbc** | **16 16 33.3** | **+0.3** |
| BRG | **Berggiesshubel** | **145.75** | **333** | Amp | | 16 16 34.0 | |
| | comp=Z,25nm,0.9s | | | | | | |
| BRG | **Berggiesshubel** | **145.75** | **333** | Amp | | 16 16 37.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| BRG | **Berggiesshubel** | **145.75** | **333** | *e*PKPbc | **PKPdf** | **16 16 32.9** | **+0.2** |
| | baz=37,slow=3.0 | | | | | | |
| BRG | **Berggiesshubel** | **145.75** | **333** | *i* PKP | **PKPdf** | **16 16 33.0** | **+0.3** |
| BRG | **Berggiesshubel** | **145.75** | **333** | P | **PKiKP** | **16 16 37.2** | **+0.5** |
| CLL | **Collm** | **145.82** | **334** | PKPdf | **PKPbc** | **16 16 33.4** | **+0.2** |
| CLL | **Collm** | **145.82** | **334** | ⇑*i*PKPbc | **PKPdf** | **16 16 32.6** | **-0.1** |
| | comp=Z,29nm,1.0s | | | | | | |
| CLL | **Collm** | **145.82** | **334** | *e*PKPbc | **PKPdf** | **16 16 32.7** | **0.0** |
| | baz=37,slow=3.0 | | | | | | |
| NRDL | **Niedersach Rie** | **145.97** | **338** | *e*PKPbc | **PKPdf** | **16 16 33.2** | **+0.4** |
| | baz=37,slow=3.0 | | | | | | |
| RETH | **Rethem/Aller,** | **146.02** | **339** | *e*PKPbc | **PKPdf** | **16 16 33.2** | **+0.3** |
| | baz=37,slow=3.0 | | | | | | |
| EKA | **Eskdalemuir Ar** | **146.46** | **353** | PKPbc | **PKPdf** | **16 16 33.6** | **-0.1** |
| | comp=Z,2.3nm,0.5s,baz=352,slow=2.2,SNR=15 | | | | | | |
| ZVC | **Zvikov** | **146.70** | **331** | *e*PKP | **PKPbc** | **16 16 35.8** | **-0.2** |
| TANN | **Tannenbergstha** | **146.72** | **333** | *e*PKPbc | **PKPbc** | **16 16 35.7** | **-0.4** |
| | baz=37,slow=3.0 | | | | | | |
| PLN | **Plauen** | **146.79** | **334** | *e*PKPbc | **PKPbc** | **16 16 35.9** | **-0.4** |
| | baz=37,slow=3.0 | | | | | | |
| RONA | **Rosalia, Austr** | **146.88** | **327** | *i* PKP | **PKPbc** | **16 16 36.5** | **-0.1** |
| | comp=Z,6.4nm,1.1s | | | | | | |
| CONA | **Conrad Observa** | **146.95** | **327** | *i* PKP | **PKPbc** | **16 16 36.3** | **-0.5** |
| | comp=Z,7.8nm,1.4s | | | | | | |
| CKRC | **Cesky Krumlov** | **147.09** | **330** | *e*PKP | **PKPbc** | **16 16 36.6** | **-0.5** |
| MANZ | **Manzenberg** | **147.19** | **333** | *e*PKPbc | **PKPbc** | **16 16 37.1** | **-0.3** |
| | baz=37,slow=3.0 | | | | | | |
| KHC | **Kasperske Hory** | **147.20** | **331** | *e*PKP | **PKPbc** | **16 16 36.9** | **-0.5** |
| KHC | | | | *ep*PKP | **PKiKP** | **16 16 41.1** | **+1.3** |
| ROTZ | **Rotzenmuhle** | **147.32** | **333** | *e*PKPbc | **PKPbc** | **16 16 37.3** | **-0.4** |
| | baz=37,slow=3.0 | | | | | | |
| GEC2 | **GERESS Array S** | **147.35** | **330** | PKPdf | **PKPbc** | **16 16 37.5** | **-0.4** |
| GEC2 | **GERESS Array S** | **147.35** | **330** | *e*PKPbc | **PKPbc** | **16 16 37.4** | **-0.6** |
| | baz=37,slow=3.0 | | | | | | |
| GERES | **GERESS Array B** | **147.35** | **330** | PKPbc | **PKPbc** | **16 16 37.3** | **-0.6** |
| | comp=Z,4.2nm,0.7s,baz=29,slow=3.0,SNR=16 | | | | | | |
| ARSA | **Arzberg** | **147.58** | **327** | *i* PKP | **PKPbc** | **16 16 38.7** | **+0.2** |
| | comp=Z,2.4nm,1.1s | | | | | | |
| MOA | **Molln** | **147.79** | **329** | *i* PKP | **PKPbc** | **16 16 38.9** | **-0.2** |
| | comp=Z,2.9nm,0.7s | | | | | | |
| BIOA | **Bad Ischl, Aus** | **148.20** | **329** | *e*PKP | **PKPbc** | **16 16 40.3** | **+0.1** |
| | comp=Z,3.8nm,0.8s | | | | | | |
| SOKA | **Soboth** | **148.21** | **326** | *i* PKP | **PKPbc** | **16 16 39.6** | **-0.8** |
| | comp=Z,5.2nm,1.0s | | | | | | |
| OBKA | **Obir** | **148.57** | **327** | *i* PKiKP | **PKPab** | **16 16 44.4** | **-0.3** |
| | comp=Z,3.8nm,0.7s | | | | | | |
| KBA | **Koelnbreinsper** | **148.78** | **328** | *i* PKP | **PKPbc** | **16 16 40.9** | **-1.0** |
| | comp=Z,4.6nm,1.1s | | | | | | |
| LESA | **Schwarzleotal** | **148.85** | **330** | *e*PKP | **PKPbc** | **16 16 41.2** | **-0.7** |
| | comp=Z,2.1nm,0.4s | | | | | | |
| MYKA | **Terra Mystica** | **148.94** | **328** | *i* PKP | **PKPbc** | **16 16 41.2** | **-1.1** |
| | comp=Z,1.6nm,0.5s | | | | | | |
| ABTA | **Abfaltersbach** | **149.41** | **329** | *i* PKP | **PKPbc** | **16 16 42.7** | **-0.7** |
| | comp=Z,6.1nm,1.2s | | | | | | |
| WATA | **Walderalm** | **149.42** | **330** | *i* PKP | **PKPbc** | **16 16 42.9** | **-0.5** |
| | comp=Z,5.5nm,0.9s | | | | | | |
| WTTA | **Wattenberg** | **149.45** | **330** | *i* PKP | **PKPbc** | **16 16 42.7** | **-0.9** |
| | comp=Z,6.3nm,1.0s | | | | | | |
| MOTA | **Moosalm** | **149.63** | **331** | *i* PKP | **PKPbc** | **16 16 42.9** | **-1.1** |
| | comp=Z,3.3nm,0.9s | | | | | | |
| RETA | **Reutte** | **149.68** | **331** | *i* PKP | **PKPbc** | **16 16 42.6** | **-1.4** |
| | comp=Z,4.1nm,0.9s | | | | | | |
| SQTA | **Sankt Quirin** | **149.68** | **331** | *i* PKP | **PKPbc** | **16 16 43.6** | **-0.4** |
| | comp=Z,8.0nm,1.0s | | | | | | |
| FETA | **Feichten** | **150.04** | **331** | *i* PKP | **PKPbc** | **16 16 44.6** | **-0.4** |
| | comp=Z,5.6nm,0.9s | | | | | | |
| DAVA | **Damuels** | **150.22** | **332** | *e*PKP | **PKPbc** | **16 16 44.5** | **-1.0** |
| | comp=Z,4.2nm,0.9s | | | | | | |
| FUORN | **Ofenpass-Fuorn** | **150.56** | **331** | PKPbc | **PKPbc** | **16 16 46.1** | **-0.3** |
| SGRT | **San Giovanni R** | **150.84** | **318** | PKPbc | **PKiKP** | **16 16 50.5** | **+2.9** |
| TORD | **Torodi Ar. Bea** | **165.68** | **233** | PKP | **PKPdf** | **16 16 59.1** | **-0.8** |
| | comp=Z,0.7nm,0.9s,baz=349,slow=1.5,SNR=3.2 | | | | | | |

*DNK* ***29*** *16:10:39.9±2.6, 80°.33N × 5°.17W, h0km±57km, ML1.6*
**BER 29 16:10:35.7±2.5, 80°.35N × 1°.90W, h10km, mb(Pn)2.9, ML1.7** (DNK), **Confirmed Earthquake, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| NOR | **Nord** | **2.64** | **306** | *i* P | Pn | 16 11 18.4 | +0.1 |
| NOR | | | | *i* S | Sn | 16 11 45.6 | -4.7 |
| NOR | | | | IAML | | 16 11 58.4 | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| NOR | **Nord** | **2.64** | **306** | *i* P | Pn | 16 11 18.4 | +0.1 |
| NOR | | | | *i* S | Sn | 16 11 45.6 | -4.7 |
| NOR | | | | IAML | | 16 11 58.4 | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| KBS | **Kingsbay** | **2.88** | **113** | *e*P | Pn | 16 11 19.9 | -1.6 |
| KBS | | | | *e*S | Sn | 16 11 51.2 | -4.8 |
| KBS | | | | IAML | | 16 11 55.4 | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| BRBA | **Barentsburg A** | **3.79** | **119** | *e*P | Pn | 16 11 32.2 | -1.9 |
| SPA0 | **Spitsbergen Ar** | **4.04** | **113** | *e*P | Pn | 16 11 36.5 | -0.9 |
| SPA0 | | | | *e*S | Sn | 16 12 20.4 | -4.3 |
| SPA0 | | | | IAML | | 16 12 24.0 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| DAG | **Danmarks Havn** | **4.88** | **231** | *i* P | Pn | 16 11 46.0 | -2.9 |
| DAG | | | | *i* S | Sn | 16 12 38.5 | -6.8 |
| DAG | | | | IAML | | 16 12 55.9 | |
| | comp=Z,2.0nm,1.3s | | | | | | |
| DAG | **Danmarks Havn** | **4.88** | **231** | *i* P | Pn | 16 11 46.0 | -2.9 |
| DAG | | | | *i* S | Sn | 16 12 38.5 | -6.8 |
| DAG | | | | IAML | | 16 12 55.9 | |
| | comp=Z,2.0nm,1.3s | | | | | | |
| DBG | **Daneborg** | **7.23** | **223** | *i* S | Sn | 16 13 35.7 | -7.4 |
| DBG | | | | IAML | | 16 13 42.7 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| DBG | **Daneborg** | **7.23** | **223** | *i* S | Sn | 16 13 35.7 | -7.4 |
| DBG | | | | IAML | | 16 13 42.7 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| NEEM | **North Greenlan** | **9.63** | **278** | *i* S | Sn | 16 14 24.7 | -18 |
| NEEM | | | | IAML | | 16 14 31.4 | |
| | comp=Z,2.7nm,1.0s | | | | | | |

*MOS* ***29*** *16:14:11.0±1.2, 56°.54N × 113°.29E, h8km, mb3.8/1, Error ellipse: s-maj=13.4km s-min=7.2km az=82.4*
*IDC* ***29*** *16:14:12.5±1.0, 56°.54N × 113°.11E, h0km, mb3.7/7, mbtmp3.8/11, ML4.0/3, MS3.0/5, Error ellipse: s-maj=21.7km s-min=11.4km az=150.0*
*BYKL* ***29*** *16:14:12.8±0.2, 56°.53N × 113°.21E*
**ISC 29 16:14:12.0±1.1, 56°.54N±0°.02 × 113°.22E±0°.02, h1km±8km, n67, σ3 8 13/126, mb3.7/7, MS2.9/4, 8C-5D, East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SVKR | **Severomuysk** | **0.46** | **156** | ⇑*i*Pg | **Pg** | **16 14 20.4** | **-0.4** |
| SVKR | | | | Pmax | | 16 14 21.4 | |
| | 2μm,0.6s | | | | | | |
| SVKR | | | | *e*Sg | **Sg** | **16 14 25.7** | **-1.1** |
| SVKR | | | | Smax | | 16 14 32.1 | |
| | 11μm,0.3s | | | | | | |
| SVKR | **Severomuysk** | **0.46** | **156** | ⇑*i*PG | **Pg** | **16 14 20.4** | **-0.4** |
| SVKR | | | | *e* | | 16 14 25.5 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,2μm,0.3s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,9μm,0.5s | | | | | | |
| YOAB | **Uoyan, Buryati** | **0.92** | **245** | *e*Pg | **Pg** | **16 14 29.7** | **0.0** |
| YOAB | | | | Pmax | | 16 14 35.2 | |
| | comp=N,246nm,0.2s | | | | | | |
| YOAB | | | | *e*Sg | **Sg** | **16 14 42.1** | **+0.5** |
| YOAB | | | | Smax | | 16 14 58.7 | |
| | comp=N,3μm,0.3s | | | | | | |
| UKT | **Uakit** | **1.08** | **168** | ⇑*i*Pg | **Pg** | **16 14 32.0** | **-0.6** |
| UKT | | | | Pmax | | 16 14 36.7 | |
| | comp=N,387nm,0.8s | | | | | | |
| UKT | | | | *e*Sg | **Sg** | **16 14 46.8** | **+0.3** |
| UKT | | | | *e*Sb | **Sn** | **16 14 51.6** | **+1.7** |
| UKT | | | | max | | 16 14 52.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| UKT | **Uakit** | **1.08** | **168** | ⇑*i*PG | **Pg** | **16 14 32.1** | **-0.6** |
| UKT | | | | *e* | | 16 14 46.6 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,62nm,0.1s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=E,1μm,0.2s | | | | | | |
| KMO | **Kumora** | **1.30** | **241** | ⇓*i*Pg | **Pg** | **16 14 36.2** | **-0.8** |
| KMO | | | | Pmax | | 16 14 38.5 | |
| | comp=E,253nm,0.4s | | | | | | |
| KMO | | | | *e* | | 16 14 40.9 | |
| KMO | | | | *e*Sg | **Sg** | **16 14 53.4** | **-0.4** |
| KMO | | | | Smax | | 16 15 00.1 | |
| | comp=E,2μm,0.8s | | | | | | |
| KMO | **Kumora** | **1.30** | **241** | ⇓*i*PG | **Pg** | **16 14 36.2** | **-0.8** |
| KMO | | | | *e* | | 16 14 54.3 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,237nm,0.3s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,2μm,0.8s | | | | | | |
| BOD | **Bodaibo** | **1.35** | **18** | ⇑*i*Pg | **Pn** | **16 14 37.2** | **-0.8** |
| BOD | | | | Pmax | | 16 14 39.2 | |
| | comp=N,342nm,0.3s | | | | | | |
| BOD | | | | *e*Sg | **Sg** | **16 14 55.2** | **-0.3** |
| BOD | | | | *e* | | 16 14 58.5 | |
| BOD | | | | max | | 16 14 59.6 | |
| | comp=N,1μm,0.3s | | | | | | |
| BOD | **Bodaibo** | **1.35** | **18** | ⇑*i*PG | **Pn** | **16 14 37.1** | **-0.9** |
| BOD | | | | *e* | | 16 14 55.3 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,344nm,0.3s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=E,1μm,0.3s | | | | | | |
| NLYR | **Nelyaty** | **1.38** | **91** | ⇓*i*Pg | **Pn** | **16 14 37.9** | **-0.5** |
| NLYR | | | | *e* | | 16 14 40.0 | |
| NLYR | | | | max | | 16 14 41.4 | |
| | comp=E,586nm,0.3s | | | | | | |
| NLYR | | | | *e*Sg | **Sg** | **16 14 56.3** | **+0.1** |
| NLYR | | | | *e* | | 16 15 00.2 | |
| NLYR | | | | max | | 16 15 01.4 | |
| | comp=E,4μm,0.9s | | | | | | |
| NLYR | **Nelyaty** | **1.38** | **91** | ⇓*i*PG | **Pn** | **16 14 37.9** | **-0.5** |
| NLYR | | | | *e* | | 16 14 55.9 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,589nm,0.2s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,4μm,0.7s | | | | | | |
| NIZB | **Nizh Angarsk** | **2.19** | **251** | ⇑*i*Pn | **Pb** | **16 14 51.5** | **-1.0** |
| NIZB | | | | *e*Pg | **Pg** | **16 14 53.2** | **-0.8** |
| NIZB | | | | Pmax | | 16 14 54.1 | |
| | comp=N,519nm,0.4s | | | | | | |
| NIZB | | | | *e*PgPg | **PnPn** | **16 14 58.3** | **+1.7** |
| NIZB | | | | *e*Sg | **Sg** | **16 15 21.6** | **-0.9** |
| NIZB | | | | Smax | | 16 15 25.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| CRS | **Chara** | **2.81** | **80** | *e*Pn | **Pn** | **16 14 59.7** | **+1.7** |
| CRS | | | | *e*Pg | **Pb** | **16 15 04.1** | **+1.2** |
| CRS | | | | Pmax | | 16 15 06.4 | |
| | comp=N,502nm,0.8s | | | | | | |
| CRS | | | | *e*Sn | **Sn** | **16 15 32.5** | **0.0** |
| CRS | | | | *e*Sg | **Sg** | **16 15 40.6** | **-1.5** |
| CRS | | | | Smax | | 16 15 44.2 | |
| | comp=N,712nm,0.9s | | | | | | |
| CRS | | | | *e* | | 16 15 59.4 | |
| CRS | **Chara** | **2.81** | **80** | *e*PN | **Pb** | **16 15 03.9** | **+1.0** |
| CRS | | | | *e* | | 16 15 40.7 | |
| CRS | | | | pmax | pmax | | |
| | comp=Z,486nm,0.8s | | | | | | |
| CRS | | | | smax | smax | | |
| | comp=E,662nm,0.9s | | | | | | |
| VTMR | **Vitim** | **2.93** | **353** | *e*Pn | **Pn** | **16 14 59.8** | **+0.1** |
| VTMR | | | | *e*Pg | **Pb** | **16 15 05.6** | **+0.6** |
| VTMR | | | | *e*PgPg | **Pg** | **16 15 08.7** | **+0.5** |
| VTMR | | | | *e*Sn | **Sn** | **16 15 35.7** | **+0.2** |
| VTMR

CIT Pmax 16 15 36.2
comp=N,93nm,1.3s
CIT *e*Sn **Sn** **16 16 14.4 -0.6**
CIT *e*Sg **Sg** **16 16 32.9 -4.5**
CIT Smax 16 16 36.7
comp=N,472nm,0.6s
**CIT Chita 4.53 177** *e*PN **Pn** **16 15 21.2 -0.5**
CIT *e* 16 15 33.7
CIT *e*S **Sn** **16 16 13.8 -1.2**
CIT *e* 16 16 33.8
CIT pmax pmax
comp=Z,93nm,1.3s
CIT smax smax
comp=E,473nm,0.6s
**GORB Goryachinsk 4.56 221** *e*Pn **Pn** **16 15 23.9 +1.8**
GORB *e*Pg **Pb** **16 15 34.3 +1.5**
GORB *e* 16 15 39.9
GORB *e*Sg **Sb** **16 16 32.7 +4.4**
**YKLR Yuktali 4.67 86** *e*Pg **Pb** **16 15 36.4 +1.8**
YKLR *e* 16 15 40.4
YKLR *e*Sn **Sn** **16 16 16.5 -1.8**
YKLR *e*Sg **Sb** **16 16 36.4 +5.2**
**KELR Kotokel 4.82 220** *e*Pn **Pn** **16 15 26.8 +1.2**
KELR *e*Pg **Pb** **16 15 39.3 +2.1**
KELR *e*Sn **Sn** **16 16 19.8 -2.2**
KELR *e*Sg **Sb** **16 16 40.9 +5.3**
**TRG Tyrgan 5.50 229** *e*Pn **Pn** **16 15 36.0 +1.0**
TRG *e* 16 15 49.0
TRG max 16 15 57.1
comp=E,18nm,0.6s
TRG *e*Sn **Sn** **16 16 36.7 -2.1**
TRG *e*Sg **Sb** **16 17 01.8 +6.7**
TRG Smax 16 17 21.6
comp=E,94nm,0.9s
**TRG Tyrgan 5.50 229** *e*PN **Pn** **16 15 35.3 +0.3**
TRG *e* 16 15 51.1
TRG *e*S **Sn** **16 16 36.5 -2.3**
TRG *e* 16 17 00.7
TRG pmax pmax
comp=Z,30nm,0.8s
TRG smax smax
comp=E,94nm,0.9s
**UUDB Ulan-Yde 5.70 217** *e*Pn **Pn** **16 15 39.9 +2.1**
UUDB *e*Pg **Pb** **16 15 55.1 +2.9**
UUDB Pmax 16 16 30.3
comp=E,15nm,0.7s
UUDB *e*Sn **Sn** **16 16 42.0 -1.8**
UUDB *e*Sg **Sg** **16 17 08.5 -6.5**
UUDB Smax 16 17 16.5
comp=E,119nm,1.4s
**STDB Stepnoy Dvoret 5.93 225** *e*Sg **Sg** **16 17 15.7 -6.7**
**HRMR Khuramsha 6.14 219** *e*Pn **Pn** **16 15 46.0 +2.1**
HRMR *e*Pg **Pb** **16 16 02.9 +3.1**
HRMR Pmax 16 16 07.9
comp=E,42nm,0.5s
HRMR *e* 16 17 02.0
HRMR *e*Sg **Sg** **16 17 22.4 -6.8**
HRMR Smax 16 17 32.5
comp=E,294nm,0.6s
**BGT Bolshoye Golou 6.42 229** *e*Pg **Pb** **16 16 08.1 +3.8**
BGT Pmax 16 16 18.8
comp=E,6.0nm,0.5s
BGT *e*Sg **Sg** **16 17 31.4 -6.5**
BGT Smax 16 17 32.6
comp=E,50nm,0.8s
**CLNS Chul'man 6.44 82** *e*Pn **Pn** **16 15 50.6 +2.7**
CLNS *e*Pg **Pb** **16 16 08.2 +3.4**
CLNS Pmax 16 16 13.4
comp=E,35nm,0.8s
CLNS *e*Sn **Sn** **16 17 00.1 -1.9**
CLNS *e*Sg **Sg** **16 17 31.0 -7.7**
CLNS Smax 16 17 54.1
comp=E,189nm,1.4s
**IRK Irkutsk 6.77 234** *e*Sg **Sg** **16 17 41.3 -7.8**
IRK Smax 16 17 49.3
comp=E,245nm,0.8s
**IRK Irkutsk 6.77 234** *e*PG **Pb** **16 16 14.7 +4.4**
IRK *e* 16 17 40.6
IRK pmax pmax
comp=Z,79nm,0.1s
IRK smax smax
comp=E,239nm,0.5s
**LSTR Listvyanka 6.79 230** *e*Pg **Pb** **16 16 13.9 +3.2**
LSTR Pmax 16 16 14.1
comp=E,11nm,0.5s
LSTR *e*Sn **Sn** **16 17 07.9 -2.6**
LSTR *e*Sg **Sg** **16 17 41.8 -8.0**
LSTR Smax 16 17 49.5
comp=E,82nm,1.3s
**KPC Khapcheranga 6.87 185** *e* **Pn** **16 15 53.0 -0.8**
KPC *e*Pg **Pb** **16 16 16.4 +4.4**
KPC *e*Pg Pg 16 16 44.1 +21
comp=E,15nm,1.6s
KPC *e* 16 17 23.6
KPC *e*Sg **Sg** **16 17 45.6 -6.7**
KPC Smax 16 18 04.6
comp=E,152nm,1.3s
**KPC Khapcheranga 6.87 185** *e*PN **Pn** **16 15 52.9 -0.8**
KPC *e* 16 16 15.5
KPC *e* 16 17 43.9
KPC pmax pmax
comp=Z,9.0nm,0.6s
KPC smax smax
comp=E,152nm,1.6s
**IVK Ivanovka 7.01 231** *e*Pg **Pb** **16 16 18.8 +4.3**
IVK *e* 16 16 22.0
IVK max 16 16 24.6
comp=E,5.0nm,0.1s
IVK *e*Sn **Sn** **16 17 13.3 -2.8**
IVK *e*Sg **Sg** **16 17 49.4 -7.7**
IVK Smax 16 17 56.8
comp=E,132nm,1.4s
**TLY Talaya 7.44 233** *e*Pg **Pb** **16 16 25.2 +3.5**
TLY Pmax 16 16 48.3
comp=E,10.0nm,0.9s
TLY *e*Sn **Sn** **16 17 25.4 -1.1**
TLY *e*Sg Sg 16 18 01.9 -8.7
TLY Smax 16 18 14.6
comp=E,45nm,1.0s
**ARS Arshan 7.83 238** *e*Pn **Pn** **16 16 08.3 +1.2**
ARS *e*Pg Pb 16 16 33.7 +5.2
ARS Pmax 16 16 38.7
comp=E,25nm,0.6s
ARS *e* 16 17 38.1
ARS *e*Sg Sg 16 18 14.1 -9.2
ARS Smax 16 18 27.5
comp=E,249nm,1.2s
**ZAK Zakamensk 8.55 228** *e*Sg **Sg** **16 18 37.8 -8.5**
ZAK *e* 16 18 52.3
ZAK max 16 18 59.9
comp=E,57nm,1.2s
**MOY Mondy 8.68 241** *e*Pn **Pn** **16 16 20.1 +1.4**
MOY *e* 16 16 30.7
MOY max 16 17 10.1
comp=E,16nm,0.8s
MOY *e* 16 17 57.7
MOY *e* 16 18 15.1
MOY *e*Sg Sg 16 18 40.5 -10
MOY Smax 16 19 06.3
comp=E,80nm,1.8s
**MOY Mondy 8.68 241** *e*PN **Pn** **16 16 21.6 +2.9**
MOY *e* 16 16 50.7
MOY *e* 16 18 41.3
MOY pmax pmax
comp=Z,11nm,0.5s
MOY smax smax
comp=N,80nm,2.0s
**ORL Orlik 8.76 248** *e*Pn **Pn** **16 16 20.6 +0.8**
ORL *e* 16 16 32.4
ORL *e*Pg Pg 16 16 51.3 -8.4
ORL Pmax 16 16 54.9
comp=N,13nm,1.1s
ORL *e*Sn **Sn** **16 17 55.2 -4.0**
ORL *e*Sg Sg 16 18 43.9 -9.2
ORL Smax 16 18 52.2
comp=N,66nm,1.2s
**SONM Songino Array 9.67 208** Pn **Pn** **16 16 33.2 +0.9**
comp=N,0.3nm,0.3s,baz=26,slow=12,SNR=4.4
SONM Sn **Sn** **16 18 23.6 +2.2**
comp=N,0.3nm,0.3s,baz=25,slow=23,SNR=3.7
SONM Lg Lg 16 19 17.7
comp=N,1.1nm,0.3s,baz=18,slow=24,SNR=9.6
SONM LR LR 16 20 38.7
comp=N,46nm,21.7s,baz=106,slow=40
comp=N,0.5nm,0.4s
**YAK Yakutsk 10.04 50** Pn **Pn** **16 16 35.6 -1.6**
comp=N,1.7nm,0.3s,baz=245,slow=6.4,SNR=6.2
YAK Sn **Sn** **16 18 22.6 -7.7**
comp=N,2.3nm,0.3s,baz=331,slow=21,SNR=7.4
YAK Lg Lg 16 19 20.3
comp=N,0.8nm,0.3s,baz=166,slow=23,SNR=11
comp=N,4.7nm,0.3s
**KLR Kul'dur 13.34 115** Pn **Pn** **16 17 23.0 +0.7**
comp=N,0.6nm,0.3s,baz=304,slow=13,SNR=14
KLR Sn **Sn** **16 19 49.2 -1.8**
comp=N,0.1nm,0.3s,baz=258,slow=20,SNR=1.9
KLR Lg Lg 16 21 10.2
comp=N,0.2nm,0.3s,baz=229,slow=20,SNR=2.2
comp=N,2.8nm,0.5s
**ZALV Zalesovo Beam 16.35 273** Pn **Pn** **16 18 03.9 +1.4**
comp=N,0.8nm,0.4s,baz=62,slow=9.9,SNR=2.5
ZALV Lg Lg 16 22 51.0
comp=N,0.1nm,0.3s,baz=48,slow=31,SNR=1.8
**TIXI Tiksi 16.54 17** Pn **Pn** **16 17 59.9 -4.8**
comp=N,0.3nm,0.3s,baz=261,slow=13,SNR=2.6
TIXI Sn Sn 16 20 48.3 -20
comp=N,0.2nm,0.3s,baz=302,slow=15,SNR=2.1
TIXI Lg Lg 16 22 51.8
comp=N,0.2nm,0.3s,baz=334,slow=16,SNR=2.2
**USRK Ussuriysk Ar. 17.13 128** Lg Lg 16 23 13.6
comp=N,0.1nm,0.3s,baz=13,slow=29,SNR=2.2
**SEY Seymchan 20.48 56** Lg Lg 16 24 55.2
comp=N,0.1nm,0.3s,baz=209,slow=16,SNR=2.3
**KURK Kurchatov 21.17 269** P **P** **16 19 00.1 +1.8**
**KURBB Kurchatov Arra 21.26 269** P **P** **16 19 00.1 +0.7**
comp=N,1.4nm,0.4s,baz=64,slow=12,SNR=7.3
comp=N,1.4nm,0.4s
**MKAR Makanchi Array 21.34 256** P **P** **16 19 00.8 +0.5**
comp=N,3.7nm,0.9s,baz=52,slow=8.9,SNR=13
comp=N,3.7nm,0.9s
**KSRS Korea Array 21.48 147** LR LR 16 28 15.0
comp=N,25nm,19.2s,baz=25,slow=39
**BVAR Borovoye Array 24.65 280** P **P** **16 19 34.3 +0.5**
comp=N,1.5nm,0.6s,baz=76,slow=7.9,SNR=8.9
comp=N,1.5nm,0.6s
**ARU Arti 29.51 293** LR LR 16 33 21.8
comp=N,40nm,19.5s,baz=73,slow=39
**CMAR Chiang Mai Arr 39.51 202** LR LR 16 41 13.9
comp=N,11nm,20.9s,baz=160,slow=41
**FINES FINESS Array B 41.98 314** P **P** **16 22 03.9 -0.2**
comp=N,1.3nm,0.5s,baz=63,slow=9.3,SNR=15
comp=N,1.3nm,0.5s
**HFS Hagfors 47.55 318** P **P** **16 22 47.5 -0.9**
comp=N,0.7nm,0.4s,baz=49,slow=10.0,SNR=6.3
comp=N,0.7nm,0.4s
**NOA NORSAR Array B 47.84 320** P **P** **16 22 50.7 -0.1**
comp=N,0.4nm,0.6s,baz=47,slow=7.7,SNR=1.7
comp=N,0.4nm,0.6s
**YKA Yellowknife Ar 55.62 25** LR LR 16 50 16.2
comp=N,35nm,20.2s,baz=280,slow=39
**ASAR Alice Springs 81.79 161** P **P** **16 26 32.3 +0.1**
comp=N,0.2nm,0.7s,baz=346,slow=4.0,SNR=2.0
comp=N,0.2nm,0.7s
**MBWA Marble Bar 46.53 262** P **P** **16 43 12.9 +0.3**
**MJAR Matsushiro Arr 65.87 332** P **P** **16 45 28.7 -1.6**
comp=Z,1.3nm,0.7s,baz=156,slow=3.4,SNR=5.9
comp=Z,1.3nm,0.7s
**QSPA South Pole Qui 67.68 180** P **P** **16 45 40.5 -1.3**
QSPA IAmb IAmb 16 45 52.2
comp=Z,6.0nm,1.1s
**QSPA South Pole Qui 67.68 180** P **P** **16 45 40.4 -1.3**
comp=Z,1.1nm,1.0s,baz=113,slow=3.0,SNR=7.3
comp=Z,2.1nm,1.0s
**JKA Kamikawa-asahi 70.79 339** P **P** **16 46 01.8 +0.8**
**CMAR Chiang Mai Arr 80.46 294** P **P** **16 46 58.4 +1.4**
comp=Z,0.7nm,0.6s,baz=131,slow=4.1,SNR=3.9
comp=Z,0.7nm,0.6s
**TROLL Troll, Antarti 85.46 184** ⇓P **P** **16 47 21.1 -1.1**
comp=Z,128nm,0.7s
**SNAA Sanae 86.06 182** ⇓P **P** **16 47 24.1 -1.0**
comp=Z,15nm,0.4s
**SNAA Sanae 86.06 182** P **P** **16 47 22.8 -2.2**
comp=Z,2.0nm,0.8s,baz=189,slow=13,SNR=2.5
comp=Z,2.0nm,0.8s
**VNA3 Neumayer Olymp 86.62 180** ⇓P **P** **16 47 26.0 -1.8**
comp=Z,2.8nm,0.6s
**VNA2 Neumayer--Watz 86.92 181** ⇓P **P** **16 47 28.0 -1.2**
comp=Z,2.4nm,0.6s,baz=179,slow=5.0
**VNA1 Neumayer--Stat 87.20 181** ⇓P **P** **16 47 29.9 -0.7**
comp=Z,1.1nm,0.5s
**SONM Songino Array 90.16 323** P **P** **16 47 45.2 +0.2**
comp=Z,5.9nm,1.3s,baz=146,slow=6.1,SNR=6.5
comp=Z,5.9nm,1.3s
**ILAR Eielson Array 93.02 17** P **P** **16 47 57.2 -0.5**
comp=Z,0.6nm,1.0s,baz=226,slow=4.8,SNR=2.2
comp=Z,0.6nm,1.0s
**DPC Dobruska-Polom 145.32 330** *e*PKP **PKPbc** **16 54 21.7 -0.5**
DPC *ex* 16 54 31.9
**EKA Eskdalemuir Ar 146.71 353** PKPbc **PKPdf** **16 54 24.7 +0.1**
comp=Z,0.8nm,0.5s,baz=343,slow=2.2,SNR=2.3
**CONA Conrad Observa 147.19 327** *e*PKP **PKiKP** **16 54 31.0 +0.7**
comp=Z,3.4nm,1.3s
**CKRC Cesky Krumlov 147.33 330** *e*PKP **PKPab** **16 54 29.5 -0.5**
**KHC Kasperske Hory 147.44 331** *e*PKP **PKiKP** **16 54 31.5 +0.8**
**GERES GERESS Array B 147.59 330** PKPbc **PKiKP** **16 54 30.0 -1.2**
comp=Z,1.4nm,0.9s,baz=75,slow=1.5,SNR=5.5
**SOKA Soboth 148.44 326** *e*PKP **PKPab** **16 54 35.3 +0.6**
comp=Z,0.9nm,0.6s
**KBA Koelnbreinsper 149.01 328** *i* PKP **PKPab** **16 54 36.0 -1.0**
comp=Z,1.5nm,0.8s
**LESA Schwarzleotal 149.09 329** *e*PKP **PKPab** **16 54 38.0 +0.8**
comp=Z,3.9nm,1.5s
**ABTA Abfaltersbach 149.65 329** *e*PKP **PKPab** **16 54 38.5 -1.0**
comp=Z,2.6nm,1.2s
**WATA Walderalm 149.66 330** *e*PKP **PKPab** **16 54 44.2 +4.5**
comp=Z,1.5nm,0.4s
**WTTA Wattenberg 149.69 330** *e*PKiKP **PKPab** **16 54 41.3 +1.5**
comp=Z,5.7nm,1.3s
**MOTA Moosalm 149.87 331** *e*PKiKP **PKPab** **16 54 42.1 +1.6**
comp=Z,6.8nm,1.4s
**SQTA Sankt Quirin 149.92 331** *e*PKP **PKPab** **16 54 39.7 -0.9**
comp=Z,5.3nm,1.2s
**FETA Feichten 150.28 331** *e*PKP **PKPab** **16 54 39.7 -2.6**
comp=Z,3.7nm,1.2s

**IDC 29 16:29:44.6±2.4, 3°50'N×129°06'E, h0km, mb3.2/3, mbtmp3.3/3, Error ellipse: s-maj=140.0km s-min=28.8km az=69.0, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.86** | **168** | P | P | 16 34 59.9 | 0.0 |
| | 0.7nm,0.6s,baz=348,slow=11,SNR=7.5 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **27.41** | **170** | P | P | 16 35 32.1 | 0.0 |
| | 0.2nm,0.8s,baz=355,slow=9.7,SNR=1.7 | | | | | | |
| | 0.2nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.09** | **324** | P | P | 16 39 46.8 | 0.0 |
| | 0.2nm,0.6s,baz=131,slow=6.6,SNR=1.9 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC **29** 16:34:42.3±0.9, 22°52'S×170°02'E, h0km, mb4.2/9, mbtmp4.2/11, ML4.5/2, MS3.2/6, Error ellipse: s-maj=26.1km s-min=20.2km az=166.0*
*NOU **29** 16:34:44.7, 22°33'S×169°90'E, h0km, MLv4.4/10, Southeast of Loyalty Islands*
*NEIC **29** 16:34:47.1±2.1, 22°5'S±0°1×169°82'E±0°03, h10km±1km, mb4.4/16, Error ellipse: s-maj=19.7km s-min=3.2km az=169.0*

**ISC 29 16:34:46.3±0.6, 22°39'S±0°08×170°01'E±0°07, h21km, n64, σ1°21/62, mb4.4/18, MS3.2/4, 5D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.05** | **296** | P | **Pn** | **16 35 18.4** | **-1.1** |
| **PINNC** | **Pines Island,** | **2.38** | **264** | P | **Pn** | **16 35 23.4** | **-0.7** |
| **PINNC** | **Pines Island,** | **2.38** | **264** | | **Pn** | **16 35 23.4** | **-0.7** |
| **YATNC** | **Mamie plateau,** | **2.91** | **276** | P | **Pn** | **16 35 30.1** | **-1.3** |
| **LIFNC** | **LIFOU** | **3.04** | **301** | P | **Pn** | **16 35 32.3** | **-0.8** |
| **LIFNC** | **LIFOU** | **3.04** | **301** | Pn | **Pn** | **16 35 32.7** | **-0.5** |
| **DZM** | **Mont Dzumac** | **3.32** | **275** | P | **Pn** | **16 35 36.6** | **-0.5** |
| **DZM** | **Mont Dzumac** | **3.32** | **275** | Pn | **Pn** | **16 35 37.1** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.32** | **275** | Pn | **Pn** | **16 35 36.9** | **-0.2** |
| | 19nm,0.3s,baz=121,slow=7.9,SNR=248 | | | | | | |
| DZM | | | | Sn | **Sn** | **16 36 17.0** | **+1.0** |
| | 17nm,0.3s,baz=132,slow=22,SNR=7.3 | | | | | | |
| DZM | | | | LR | LR | 16 36 56.0 | |
| | comp=Z,99nm,18.2s,baz=179,slow=40 | | | | | | |
| | 49nm,0.4s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.45** | **274** | P | **Pn** | **16 35 38.5** | **-0.3** |
| **RTV** | **Rentapao** | **4.81** | **342** | P | **Pn** | **16 35 57.6** | **+0.1** |
| **DVP** | **Devils Point** | **4.95** | **339** | P | **Pn** | **16 35 58.7** | **-0.7** |
| **KOUNC** | **Koumac, New Ca** | **5.64** | **288** | P | **Pn** | **16 36 09.2** | **+0.3** |
| **KOUNC** | **Koumac, New Ca** | **5.64** | **288** | Pn | **Pn** | **16 36 09.5** | **+0.6** |
| **MSVF** | **Nonsavu** | **8.86** | **60** | Pn | Pn | 16 36 58.0 | +4.8 |
| **MSVF** | **Nonsavu** | **8.86** | **60** | Pn | **Pn** | **16 36 53.9** | **+0.7** |
| | 0.3nm,0.3s,baz=211,slow=10,SNR=6.6 | | | | | | |
| | 14nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **16.95** | **161** | LR | LR | 16 43 29.4 | |
| | comp=Z,129nm,19.4s,baz=48,slow=31 | | | | | | |
| **EIDS** | **Eidsvold** | **17.57** | **257** | P | **P** | **16 38 52.1** | **+1.2** |
| **BKZ** | **Black Stump Fm** | **17.61** | **163** | | **P** | **16 38 52.1** | **+0.7** |
| BKZ | | | | IAmb | IAmb | 16 38 54.5 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **MRZ** | **Mangatainoka R** | **18.81** | **167** | P | **Pn** | **16 39 06.9** | **+1.9** |
| MRZ | | | | IAmb | IAmb | 16 39 08.9 | |
| | comp=Z,47nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **22.26** | **271** | P | **P** | **16 39 41.8** | **-0.2** |
| | comp=Z,0.2nm,0.8s,baz=94,slow=12,SNR=2.3 | | | | | | |
| **CTAO** | **Charters Tower** | **22.26** | **271** | P | **P** | **16 39 43.7** | **+1.7** |
| CTAO | | | | IAmb | IAmb | 16 40 03.2 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **PMG** | **Port Moresby** | **25.44** | **297** | LR | LR | 16 48 40.4 | |
| | comp=Z,70nm,18.8s,baz=64,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **26.93** | **243** | P | **P** | **16 40 27.3** | **+1.1** |
| **STKA** | **Stephens Creek** | **26.93** | **243** | P | **P** | **16 40 25.6** | **-0.6** |
| | comp=Z,1.9nm,0.7s,baz=97,slow=10,SNR=4.4 | | | | | | |
| STKA | | | | LR | LR | 16 49 56.6 | |
| | comp=Z,58nm,21.3s,baz=30,slow=34 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **WR0** | **Warramunga Arr** | **33.12** | **267** | P | **P** | **16 41 20.5** | **-0.7** |
| WR0 | | | | IAmb | IAmb | 16 41 37.8 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **33.20** | **261** | P | **P** | **16 41 22.1** | **+0.2** |
| **ASAR** | **Alice Springs** | **33.20** | **261** | P | **P** | **16 41 20.6** | **-1.3** |
| | comp=Z,3.4nm,0.7s,baz=84,slow=9.3,SNR=44 | | | | | | |
| ASAR | | | | LR | LR | 16 55 21.5 | |
| | comp=Z,45nm,18.0s,baz=124,slow=37 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.29** | **268** | P | **P** | **16 41 22.3** | **-0.4** |
| WB0 | | | | IAmb | IAmb | 16 41 26.0 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.30** | **267** | P | **P** | **16 41 22.3** | **-0.4** |
| WB2 | | | | IAmb | IAmb | 16 41 32.5 | |
| | comp=Z,9.4nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **33.30** | **267** | P | **P** | **16 41 22.1** | **-0.6** |
| WRAB | | | | IAmb | IAmb | 16 41 25.7 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.31** | **267** | P | **P** | **16 41 20.9** | **-1.9** |
| | comp=Z,1.5nm,0.8s,baz=102,slow=8.4,SNR=26 | | | | | | |
| WRA | | | | LR | LR | 16 55 26.4 | |
| | comp=Z,74nm,18.5s,baz=22,slow=37 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **38.16** | **278** | P | **P** | **16 42 03.4** | **-1.0** |
| **KNRA** | **Kununurra** | **39.47** | **272** | P | **P** | **16 42 16.2** | **+0.8** |
| KNRA | | | | IAmb | IAmb | 16 42 19.5 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.74** | **268** | P | **P** | **16 42 34.5** | **+0.3** |

**DJA 29 16:46:14.6±0.6, 8°S±6°×117°7'E±°, h15km±4km, M3.6/8, mb3.8/1, MLv3.6/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.63** | **148** | P | Pg | 16 46 26.2 | -0.7 |
| **SRBI** | **Singaraja** | **1.33** | **275** | P | Pn | 16 46 38.6 | 0.0 |
| **PLAI** | **Plampang** | **1.36** | **117** | P | Pn | 16 46 39.0 | -0.1 |
| PLAI | | | | S | Sb | 16 46 57.7 | +0.6 |
| **DNP** | **Denpasar** | **1.41** | **250** | P | Pg | 16 46 41.7 | 0.0 |
| **JAGI** | **Jajag, Banyuwa** | **2.39** | **263** | P | Pn | 16 46 53.2 | 0.0 |
| JAGI | | | | S | Sn | 16 47 21.6 | -0.7 |
| **WBSI** | **Waikabubak, Su** | **3.15** | **117** | P | Pn | 16 47 03.6 | -0.2 |
| **BSSI** | **Bau Bau, Buton** | **4.41** | **63** | P | Pn | 16 47 20.7 | -0.4 |
| **BKSI** | **Bulukumba** | **4.56** | **51** | P | Pn | 16 47 22.9 | -0.2 |
| **EDFI** | **Ende, Flores** | **5.11** | **97** | P | Pn | 16 47 30.8 | 0.0 |

*IDC **29** 16:52:46.4±1.5, 56°63N×113°39E, h0km, mb3.5/7, mbtmp3.5/9, ML2.8/2, Error ellipse: s-maj=37.6km s-min=24.5km az=45.0*
*MOS **29** 16:52:46.8±1.7, 56°51N×113°23E, h8km, mb3.6/1, Error ellipse: s-maj=17.0km s-min=8.8km az=86.1*
*BYKL **29** 16:52:49.0±0.2, 56°53N×113°20E, h7km±3km*

**ISC 29 16:52:48.5±0.6, 56°45N±0°02×113°02E±0°02, h10km, n51, σ2°61/91, mb3.4/7, 2C, East of Lake Baikal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVKR** | **Severomuysk** | **0.45** | **138** | *e*Pg | **Pg** | **16 52 56.4** | **-0.9** |
| SVKR | | | | *e*Sg | **Sg** | **16 53 02.3** | **-0.9** |
| SVKR | | | | Pmax | | | |
| | 783nm,0.4s | | | | | | |
| SVKR | | | | Smax | | | |
| | 6µm,0.6s | | | | | | |
| **SVKR** | **Severomuysk** | **0.45** | **138** | *e*PG | **Pg** | **16 52 56.4** | **-0.9** |
| SVKR | | | | *e* | | 16 53 02.2 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,783nm,0.4s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,6µm,0.6s | | | | | | |
| **YOAB** | **Uoyan, Buryati** | **0.79** | **248** | *e*Pg | **Pn** | **16 53 05.8** | **+0.1** |
| YOAB | | | | *e*Sg | **Sn** | **16 53 17.8** | **+0.2** |
| YOAB | | | | Pmax | | | |
| | comp=N,124nm,0.2s | | | | | | |
| YOAB | | | | Smax | | | |
| | comp=N,3µm,1.3s | | | | | | |
| **UKT** | **Uakit** | **1.02** | **160** | *e*Pg | **Pn** | **16 53 08.5** | **-0.5** |
| UKT | | | | *e*Pb | **Pb** | **16 53 11.2** | **+2.9** |
| UKT | | | | *e*Sg | **Sb** | **16 53 22.7** | **+0.9** |
| UKT | | | | *e* | | 16 53 28.3 | |
| UKT | | | | max | | | |
| | comp=N,242nm,0.5s | | | | | | |
| UKT | | | | max | | | |
| | comp=N,636nm,0.4s | | | | | | |
| **UKT** | **Uakit** | **1.02** | **160** | *e*PG | **Pn** | **16 53 08.7** | **-0.3** |
| UKT | | | | *e* | | 16 53 23.0 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,235nm,0.4s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=E,642nm,0.4s | | | | | | |
| **KMO** | **Kumora** | **1.17** | **242** | *e*Pg | **Pg** | **16 53 12.5** | **+1.6** |
| KMO | | | | *e*Pb | **Pn** | **16 53 14.5** | **+3.6** |
| KMO | | | | *e*Sg | **Sn** | **16 53 30.2** | **+3.4** |
| KMO | | | | max | | | |
| | comp=E,142nm,0.4s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=E,1µm,0.8s | | | | | | |
| **KMO** | **Kumora** | **1.17** | **242** | *e*PG | **Pg** | **16 53 13.5** | **+2.6** |
| KMO | | | | *e* | | 16 53 28.9 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,135nm,0.4s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,1µm,0.9s | | | | | | |
| **BOD** | **Bodaibo** | **1.47** | **21** | ⇑*i*Pg | **Pn** | **16 53 13.1** | **-2.0** |
| BOD | | | | *e*Sg | **Sn** | **16 53 31.3** | **-3.1** |
| BOD | | | | *e*Sb | **Sg** | **16 53 34.2** | **-1.7** |
| BOD | | | | Pmax | | | |
| | comp=N,329nm,0.4s | | | | | | |
| BOD | | | | max | | | |
| | comp=N,1µm,0.5s | | | | | | |
| **NLYR** | **Nelyaty** | **1.49** | **87** | *e*Pg | **Pn** | **16 53 14.3** | **-1.1** |
| NLYR | | | | *e*Sg | **Sn** | **16 53 32.2** | **-2.6** |
| NLYR | | | | *e* | | 16 53 36.2 | |
| NLYR | | | | Pmax | | | |
| | comp=N,292nm,0.3s | | | | | | |
| NLYR | | | | max | | | |
| | comp=N,3µm,0.9s | | | | | | |
| **NLYR** | **Nelyaty** | **1.49** | **87** | *e*PG | **Pn** | **16 53 14.2** | **-1.1** |
| NLYR | | | | *e* | | 16 53 32.3 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,291nm,0.3s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,3µm,0.8s | | | | | | |
| **NIZB** | **Nizh Angarsk** | **2.06** | **252** | *e*Pn | **Pg** | **16 53 26.3** | **-1.8** |
| NIZB | | | | *e*Pg | **Pb** | **16 53 29.0** | **+2.9** |
| NIZB | | | | *e* | | 16 53 31.6 | |
| NIZB | | | | *e*Sg | **Sg** | **16 53 57.6** | **+2.8** |
| NIZB | | | | Pmax | | | |
| | comp=N,275nm,0.8s | | | | | | |
| NIZB | | | | Smax | | | |
| | comp=N,698nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CRS** | **Chara** | **2.93** | **79** | *e*PN | **Pb** | **16 53 40.2** | **-0.6** |
| CRS | | | | *e* | | 16 54 16.4 | | |
| CRS | | | | pmax | pmax | | | |
| | comp=Z,249nm,0.8s | | | | | | | |
| CRS | | | | smax | smax | | | |
| | comp=E,468nm,1.0s | | | | | | | |
| **VTMR** | **Vitim** | **3.01** | **355** | *e*Pn | **Pn** | **16 53 36.1** | **-0.1** |
| VTMR | | | | *e*Pg | **Pb** | **16 53 41.2** | **-1.0** |
| VTMR | | | | *e*PgPg | **Pg** | **16 53 44.5** | **-1.7** |
| VTMR | | | | *e*Sg | **Sb** | **16 54 19.0** | **+0.1** |
| **SYVR** | **Suvo** | **3.29** | **213** | *e*Pn | **Pb** | **16 53 43.1** | **-3.9** |
| SYVR | | | | *e*Pg | **Pg** | **16 53 50.0** | **-1.6** |
| SYVR | | | | *e* | | 16 54 15.1 | | |
| SYVR | | | | *e*Sg | **Sg** | **16 54 34.5** | **+0.3** |
| SYVR | | | | *e* | | 16 54 42.1 | | |
| SYVR | | | | Pmax | | | | |
| | comp=E,60nm,0.8s | | | | | | | |
| SYVR | | | | Smax | | | | |
| | comp=E,436nm,0.9s | | | | | | | |
| **SYVR** | **Suvo** | **3.29** | **213** | *e*PN | **Pb** | **16 53 43.2** | **-3.8** |
| SYVR | | | | *e* | | 16 53 49.9 | | |
| SYVR | | | | *e* | | 16 54 34.4 | | |
| SYVR | | | | pmax | pmax | | | |
| | comp=Z,61nm,0.9s | | | | | | | |
| SYVR | | | | smax | smax | | | |
| | comp=N,445nm,0.9s | | | | | | | |
| **KHNR** | **Khani** | **3.87** | **80** | *e*Pn | **Pn** | **16 53 48.5** | **+0.5** |
| KHNR | | | | *e*Pg | **Pb** | **16 53 57.0** | **+0.2** |
| KHNR | | | | *e* | | 16 54 33.8 | | |
| KHNR | | | | *e*Sg | **Sb** | **16 54 45.0** | **+1.4** |
| KHNR | | | | *e* | | 16 54 55.7 | | |
| **OGRR** | **Ongureny** | **4.20** | **230** | *e*Pn | **Pn** | **16 53 55.6** | **+3.0** |
| OGRR | | | | *e*Pg | **Pg** | **16 54 06.9** | **-2.0** |
| OGRR | | | | *e*Sn | **Sn** | **16 54 43.8** | **+2.1** |
| OGRR | | | | *e*Sg | **Sg** | **16 55 02.3** | **-1.0** |
| OGRR | | | | *e* | | 16 55 07.1 | | |
| OGRR | | | | Pmax | | | | |
| | comp=N,28nm,1.0s | | | | | | | |
| OGRR | | | | max | | | | |
| | comp=N,111nm,1.1s | | | | | | | |
| **OGRR** | **Ongureny** | **4.20** | **230** | *e*PN | **Pn** | **16 53 56.1** | **+3.5** |
| OGRR | | | | *e* | | 16 54 07.0 | | |
| OGRR | | | | *e* | | 16 55 01.6 | | |
| OGRR | | | | pmax | pmax | | | |
| | comp=Z,30nm,3.0s | | | | | | | |
| OGRR | | | | smax | smax | | | |
| | comp=E,110nm,1.3s | | | | | | | |
| **UZR** | **Uzur** | **4.37** | **226** | *e*Pg | **Pg** | **16 54 10.2** | **-2.0** |
| UZR | | | | *e* | | 16 54 39.1 | | |
| UZR | | | | *e*Sg | **Sg** | **16 55 08.2** | **-0.6** |
| UZR | | | | Pmax | | | | |
| | comp=E,31nm,0.8s | | | | | | | |
| UZR | | | | Smax | | | | |
| | comp=E,118nm,0.8s | | | | | | | |
| **GORB** | **Goryachinsk** | **4.42** | **220** | *e*Pg | **Pg** | **16 54 10.6** | **-2.6** |
| GORB | | | | *e* | | 16 54 15.0 | | |
| GORB | | | | *e*Sg | **Sg** | **16 55 08.8** | **-1.7** |
| **TUP** | **Tupik** | **4.44** | **114** | ⇑*i*Pn | **Pn** | **16 53 56.1** | **+0.2** |
| TUP | | | | *e*Pg | **Pb** | **16 54 07.6** | **+1.1** |
| TUP | | | | *e*Sn | **Sn** | **16 54 45.8** | **-1.7** |
| TUP | | | | *e*Sg | **Sb** | **16 55 04.6** | **+4.6** |
| TUP | | | | *e* | | 16 55 08.3 | | |
| TUP | | | | Pmax | | | | |
| | comp=E,36nm,0.6s | | | | | | | |
| TUP | | | | max | | | | |
| | comp=E,211nm,0.9s | | | | | | | |
| **CIT** | **Chita** | **4.45** | **176** | *e*Sn | **Sn** | **16 54 49.8** | **+2.0** |
| CIT | | | | *e* | | 16 55 03.3 | | |
| CIT | | | | *e*Sg | **Sg** | **16 55 09.9** | **-1.3** |
| CIT | | | | Smax | | | | |
| | comp=E,240nm,0.7s | | | | | | | |
| **CIT** | **Chita** | **4.45** | **176** | *e*PN | **Pn** | **16 53 55.4** | **-0.6** |
| CIT | | | | *e* | | 16 54 09.3 | | |
| CIT | | | | *e* | | 16 55 08.8 | | |
| CIT | | | | pmax | pmax | | | |
| | comp=Z,74nm,1.3s | | | | | | | |
| CIT | | | | smax | smax | | | |
| | comp=E,247nm,0.8s | | | | | | | |
| **KELR** | **Kotokel** | **4.68** | **220** | *e*Pg | **Pg** | **16 54 15.5** | **-2.6** |
| KELR | | | | *e*Sn | **Sn** | **16 54 55.0** | **+1.5** |
| KELR | | | | *e*Sg | **Sg** | **16 55 17.5** | **-1.2** |
| **YKLR** | **Yuktali** | **4.78** | **85** | *e*Pn | **Pn** | **16 54 01.1** | **+0.5** |
| YKLR | | | | *e*Pg | **Pb** | **16 54 13.2** | **+0.9** |
| YKLR | | | | *e*Sn | **Sn** | **16 54 53.0** | **-3.0** |
| YKLR | | | | *e*Sg | **Sb** | **16 55 13.6** | **+3.7** |
| **TRG** | **Tyrgan** | **5.36** | **229** | *e*Pg | **Pg** | **16 54 26.6** | **-4.5** |
| TRG | | | | *e* | | 16 55 05.8 | | |
| TRG | | | | *e*Sg | **Sg** | **16 55 37.4** | **-3.0** |
| TRG | | | | Pmax | | | | |
| | comp=E,12nm,0.7s | | | | | | | |
| TRG | | | | Smax | | | | |
| | comp=E,62nm,1.4s | | | | | | | |
| **UUDB** | **Ulan-Yde** | **5.57** | **217** | *e*Pg | **Pg** | **16 54 30.5** | **-4.5** |
| UUDB | | | | *e*Sg | **Sg** | **16 55 44.6** | **-2.5** |
| UUDB | | | | Pmax | | | | |
| | comp=E,25nm,1.6s | | | | | | | |
| UUDB | | | | Smax | | | | |
| | comp=E,81nm,1.8s | | | | | | | |
| **KAB** | **Kabansk** | **5.78** | **223** | *e*Sg | **Sg** | **16 55 51.0** | **-2.8** |
| KAB | | | | Smax | | | | |
| | comp=E,486nm,0.9s | | | | | | | |
| **HRMR** | **Khuramsha** | **6.01** | **219** | *e*Pn | **Pn** | **16 54 20.1** | **+2.7** |
| HRMR | | | | *e*Pg | Pg | 16 54 38.6 | -4.9 | |
| HRMR | | | | *e* | | 16 55 40.7 | | |
| HRMR | | | | *e*Sg | **Sg** | **16 55 58.6** | **-2.6** |
| HRMR | | | | Pmax | | | | |
| | comp=E,22nm,0.6s | | | | | | | |
| HRMR | | | | Smax | | | | |
| | comp=E,197nm,0.7s | | | | | | | |
| **BGT** | **Bolshoye Golou** | **6.27** | **229** | *e*Pg | Pg | 16 54 43.6 | -5.0 | |
| BGT | | | | *e*Sn | **Sn** | **16 55 34.9** | **+2.1** |
| BGT | | | | *e*Sg | **Sg** | **16 56 06.5** | **-3.3** |
| BGT | | | | Pmax | | | | |
| | comp=E,24nm,1.1s | | | | | | | |
| BGT | | | | Smax | | | | |
| | comp=E,84nm,1.5s | | | | | | | |
| **CLNS** | **Chul'man** | **6.56** | **82** | *e* | **Pb** | **16 54 40.8** | **-1.8** |
| CLNS | | | | *e*Sg | **Sb** | **16 56 08.7** | **+7.7** |
| **IRK** | **Irkutsk** | **6.63** | **234** | *e*Pn | Pn | 16 54 30.0 | +4.1 | |
| IRK | | | | *e*Pg | Pg | 16 54 49.5 | -5.8 | |
| IRK | | | | *e*Sg | **Sg** | **16 56 17.5** | **-3.5** |
| IRK | | | | Pmax | | | | |
| | comp=E,71nm,0.1s | | | | | | | |
| IRK | | | | Smax | | | | |
| | comp=E,148nm,1.1s | | | | | | | |
| **IRK** | **Irkutsk** | **6.63** | **234** | *e*PG | **Pg** | **16 54 50.7** | **-4.6** |
| IRK | | | | *e* | | 16 56 16.8 | | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,55nm,0.2s | | | | | | | |
| IRK | | | | smax | smax | | | |
| | comp=E,146nm,0.7s | | | | | | | |
| **KPC** | **Khapcheranga** | **6.77** | **184** | *e*Pn | **Pn** | **16 54 30.5** | **+2.6** |
| KPC | | | | *e*Pg | Pg | 16 54 52.8 | -5.2 | |
| KPC | | | | *e* | | 16 56 00.5 | | |
| KPC | | | | *e*Sg | **Sg** | **16 56 20.8** | **-4.8** |
| KPC | | | | Pmax | | | | |
| | comp=E,12nm,1.3s | | | | | | | |
| KPC | | | | Smax | | | | |
| | comp=E,94nm,0.8s | | | | | | | |
| **KPC** | **Khapcheranga** | **6.77** | **184** | *e*PN | **Pn** | **16 54 28.2** | **+0.3** |
| KPC | | | | *e* | | 16 54 49.4 | | |
| KPC | | | | *e* | | 16 56 20.7 | | |
| KPC | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| KPC | | | | smax | smax | | | |
| | comp=E,93nm,0.9s | | | | | | | |
| **IVK** | **Ivanovka** | **6.87** | **231** | *e*Sg | **Sg** | **16 56 25.5** | **-3.5** |
| IVK | | | | Smax | | | | |
| | comp=E,141nm,1.6s | | | | | | | |
| **TLY** | **Talaya** | **7.30** | **233** | *e*Sg | **Sg** | **16 56 39.3** | **-3.2** |
| TLY | | | | Smax | | | | |
| | comp=E,28nm,1.1s | | | | | | | |
| **ARS** | **Arshan** | **7.70** | **238** | *e*Pg | Pg | 16 55 10.5 | -5.2 | |
| ARS | | | | *e*Sn | **Sn** | **16 56 09.1** | **+1.3** |
| ARS | | | | *e*Sg | **Sg** | **16 56 51.0** | **-4.3** |
| ARS | | | | Pmax | | | | |
| | comp=E,16nm,1.0s | | | | | | | |
| ARS | | | | Smax | | | | |
| | comp=E,141nm,1.3s | | | | | | | |
| **ZAK** | **Zakamensk** | **8.41** | **228** | *e*Sg | **Sg** | **16 57 13.3** | **-4.8** |
| ZAK | | | | *e* | | 16 57 28.2 | | |
| ZAK | | | | max | | | | |
| | comp=E,36nm,1.1s | | | | | | | |
| **MOY** | **Mondy** | **8.54** | **241** | *e* | | 16 56 33.3 | | |
| MOY | | | | *e*Sg | **Sg** | **16 57 17.5** | **-4.9** |
| MOY | | | | Smax | | | | |
| | comp=E,53nm,1.8s | | | | | | | |
| **ORL** | **Orlik** | **8.63** | **249** | *e*Pn | Pn | 16 54 57.3 | +3.9 | |
| ORL | | | | *e*Sn | **Sn** | **16 56 31.3** | **+0.5** |
| ORL | | | | *e* | | 16 56 50.5 | | |
| ORL | | | | *e*Sg | **Sg** | **16 57 19.6** | **-5.6** |
| ORL | | | | max | | | | |
| | comp=E,5.0nm,0.6s | | | | | | | |
| ORL | | | | Smax | | | | |
| | comp=E,43nm,1.3s | | | | | | | |
| **SONM** | **Songino Array** | **9.54** | **208** | Pn | **Pn** | **16 55 06.3** | **+0.4** |
| | comp=E,0.3nm,0.3s,baz=16,slow=11,SNR=2.6 | | | | | | | |
| SONM | | | | Lg | Lg | 16 57 51.0 | | |
| | comp=E,0.7nm,0.3s,baz=16,slow=25,SNR=9.8 | | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.25** | **273** | Pn | **P** | **16 56 39.5** | **-0.1** |
| | comp=E,0.1nm,0.3s,baz=69,slow=10,SNR=2.2 | | | | | | | |
| | comp=E,0.5nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **21.06** | **269** | P | **P** | **16 57 35.1** | **+2.7** |
| **KURBB** | **Kurchatov Arra** | **21.15** | **269** | P | **P** | **16 57 35.1** | **+1.7** |
| | comp=E,1.0nm,0.6s,baz=60,slow=11,SNR=9.3 | | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **21.22** | **256** | P | **P** | **16 57 36.3** | **+2.1** |
| | comp=E,1.4nm,0.7s,baz=53,slow=9.3,SNR=11 | | | | | | | |
| | comp=E,1.4nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **24.56** | **280** | P | **P** | **16 58 09.6** | **+1.4** |
| | comp=E,0.8nm,0.6s,baz=71,slow=9.4,SNR=5.1 | | | | | | | |
| | comp=E,0.8nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **41.96** | **314** | P | **P** | **17 00 37.8** | **-1.3** |
| | comp=E,1.0nm,0.6s,baz=68,slow=9.1,SNR=7.0 | | | | | | | |
| | comp=E,1.0nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | **47.55** | **318** | P | **P** | **17 01 22.9** | **-0.6** |
| | comp=E,1.3nm,0.7s,baz=98,slow=7.7,SNR=2.7 | | | | | | | |
| | comp=E,1.3nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **78.19** | **160** | P | **P** | **17 04 48.7** | **+0.8** |
| | comp=E,0.2nm,0.8s,baz=350,slow=6.3,SNR=1.6 | | | | | | | |
| | comp=E,0.2nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **81.74** | **161** | P | **P** | **17 05 06.9** | **-0.2** |
| | comp=E,0.4nm,1.0s,baz=357,slow=4.6,SNR=1.4 | | | | | | | |
| | comp=E,0.4nm,1.0s | | | | | | | |

**NOU 29 16:52:57.4, 22°.25S×170°.22E, h0km, ML4.0/8, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YATNC** | **Mamie plateau,** | **3.09** | **273** | P | Pn | 16 53 47.6 | +0.1 |
| **LIFNC** | **LIFOU** | **3.14** | **297** | P | Pn | 16 53 48.7 | +0.6 |
| **DZM** | **Mont Dzumac** | **3.50** | **272** | P | Pn | 16 53 52.9 | -0.4 |
| **NOUC** | **Port Laguerre** | **3.63** | **272** | P | Pn | 16 53 54.7 | -0.2 |
| **RTV** | **Rentapao** | **4.75** | **339** | P | Pn | 16 54 10.5 | +0.3 |
| **DVP** | **Devils Point** | **4.89** | **337** | P | Pn | 16 54 11.8 | -0.4 |
| **KOUNC** | **Koumac, New Ca** | **5.78** | **286** | P | Pn | 16 54 24.8 | +0.3 |

*IDC **29** 16:56:13.3±0.6, 60°.17S×24°.33W, h0km, mb4.3/8, mbtmp4.3/8, ML5.5/1, MS3.5/13, Error ellipse: s-maj=27.4km s-min=18.9km az=33.0*
*NEIC **29** 16:56:15.9±2.0, 60°.15S±0°.1×24°.2W±0°.3, h10km±1km, mb4.8/26, Error ellipse: s-maj=25.7km s-min=17.5km az=53.0*

**ISC 29 16:56:15.0±0.4, 60°.11S±0°.09×24°.2W±0°.1, h10km, n111, σ1°11/95, mb4.7/21, MS3.5/11, 8C-1D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **12.42** | **155** | ⇑P | **Pn** | **16 59 08.8** | **-2.6** |
| | comp=Z,19nm,0.4s | | | | | | |
| VNA1 | | | | ⇑S | Sn | 17 01 18.0 | -12 |
| | comp=Z,22nm,0.6s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **12.61** | **158** | ⇑P | **Pn** | **16 59 11.8** | **-2.4** |
| | comp=Z,105nm,0.5s | | | | | | |
| VNA3 | | | | ⇓S | Sn | 17 01 16.9 | -18 |
| | comp=Z,2.7nm,0.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **12.81** | **155** | ⇑P | **Pn** | **16 59 14.3** | **-2.6** |
| | comp=Z,18nm,0.3s,baz=319,slow=15 | | | | | | |
| VNA2 | | | | ⇑S | Sn | 17 01 21.3 | -18 |
| | comp=Z,3.0nm,0.6s,baz=318,slow=15 | | | | | | |
| **SNAA** | **Sanae** | **14.37** | **152** | Pn | **Pn** | **16 59 35.7** | **-2.5** |
| **SNAA** | **Sanae** | **14.37** | **152** | ⇑P | **Pn** | **16 59 35.9** | **-2.3** |
| | comp=Z,974nm,0.3s | | | | | | |
| SNAA | | | | ⇑S | Sn | 17 02 01.2 | -16 |
| | comp=Z,306nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **14.37** | **152** | Pn | **Pn** | **16 59 36.0** | **-2.3** |
| | comp=Z,23nm,0.3s,baz=174,slow=22,SNR=266 | | | | | | |
| SNAA | | | | Sn | Sn | 17 02 00.8 | -17 |
| | baz=243,slow=20 | | | | | | |
| SNAA | | | | LR | LR | 17 04 20.5 | |
| | comp=Z,112nm,19.4s,baz=252,slow=34 | | | | | | |
| **TROLL** | **Troll, Antarti** | **15.90** | **149** | ⇑P | **Pn** | **16 59 56.4** | **-2.1** |
| | comp=Z,2μm,0.4s | | | | | | |
| **BELA** | **Belgrano 2** | **18.18** | **187** | | **P** | **17 00 27.8** | **+0.5** |
| **PMSA** | **Palmer Station** | **18.79** | **239** | LR | LR | 17 06 32.7 | |
| | comp=Z,118nm,21.8s,baz=82,slow=33 | | | | | | |
| **EFI** | **East Falkland** | **20.60** | **279** | P | **P** | **17 00 53.7** | **-0.2** |
| **QSPA** | **South Pole Qui** | **30.12** | **180** | P | **P** | **17 02 25.3** | **+0.8** |
| QSPA | | | | IAmb | IAmb | 17 03 13.5 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **TRQA** | **Tornquist** | **32.48** | **296** | P | **P** | **17 02 44.7** | **-0.6** |
| TRQA | | | | IAmb | IAmb | 17 02 58.1 | |
| | comp=Z,28nm,1.5s | | | | | | |
| **PLCA** | **Paso Flores** | **34.40** | **283** | P | **P** | **17 03 00.9** | **-1.2** |
| PLCA | | | | IAmb | IAmb | 17 04 05.4 | |
| | comp=Z,26nm,1.7s | | | | | | |
| **PLCA** | **Paso Flores** | **34.40** | **283** | P | **P** | **17 03 00.8** | **-1.3** |
| | comp=Z,3.1nm,0.7s,baz=152,slow=7.7,SNR=14 | | | | | | |
| PLCA | | | | LR | LR | 17 15 58.3 | |
| | comp=Z,61nm,18.3s,baz=150,slow=34 | | | | | | |
| | comp=Z,3.1nm,0.7s | | | | | | |
| **GO06** | **Curarrehue** | **35.74** | **283** | P | **P** | **17 03 13.1** | **-0.6** |
| **MAW** | **Mawson** | **35.96** | **139** | P | **P** | **17 03 15.5** | **+0.4** |
| | comp=Z,2.4nm,0.8s,baz=261,slow=11,SNR=5.3 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **BO02** | **Sierra Bellavi** | **39.22** | **289** | P | **P** | **17 03 42.6** | **-0.6** |
| **GO05** | **Huala** | **39.59** | **287** | P | **P** | **17 03 43.6** | **-2.6** |
| GO05 | | | | IAmb | IAmb | 17 03 58.0 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **BO01** | **Tunca** | **39.69** | **289** | P | **P** | **17 03 46.2** | **-0.9** |
| BO01 | | | | IAmb | IAmb | 17 03 49.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **BO04** | **La Punta** | **39.80** | **290** | P | **P** | **17 03 46.9** | **-1.1** |
| BO04 | | | | IAmb | IAmb | 17 03 50.6 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MT08** | **Bocatoma Ro** | **39.97** | **291** | P | **P** | **17 03 48.2** | **-1.5** |
| **MT09** | **Talagante** | **40.15** | **290** | P | **P** | **17 03 48.9** | **-2.2** |
| MT09 | | | | IAmb | IAmb | 17 03 52.9 | |
| | comp=Z,33nm,1.1s | | | | | | |
| **SUR** | **Sutherland** | **40.43** | **67** | LR | LR | 17 16 41.9 | |
| | comp=Z,74nm,18.1s,baz=202,slow=30 | | | | | | |
| **MT02** | **Curacav** | **40.65** | **290** | P | **P** | **17 03 53.8** | **-1.2** |
| MT02 | | | | IAmb | IAmb | 17 03 57.0 | |
| | comp=Z,20nm,1.1s | | | | | | |
| **CPUP** | **Villa Florida** | **40.71** | **311** | P | **P** | **17 03 55.3** | **-0.2** |
| | comp=Z,1.6nm,0.7s,baz=162,slow=9.5,SNR=3.6 | | | | | | |
| CPUP | | | | LR | LR | 17 17 43.9 | |
| | comp=Z,54nm,20.3s,baz=217,slow=32 | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | |
| **VA06** | **Catapilco** | **41.30** | **290** | P | **P** | **17 04 00.0** | **-0.3** |
| VA06 | | | | IAmb | IAmb | 17 05 28.4 | |
| | comp=Z,38nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **42.12** | **183** | P | **P** | **17 04 09.3** | **+2.8** |
| **CO01** | **Juntas del Tor** | **42.91** | **294** | P | **P** | **17 04 14.3** | **+0.5** |
| CO01 | | | | IAmb | IAmb | 17 04 18.4 | |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **AC05** | **El Transito** | **43.96** | **294** | P | **P** | **17 04 21.0** | **-1.1** |
| AC05 | | | | IAmb | IAmb | 17 04 25.2 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **44.57** | **108** | T | T | 17 52 37.2 | |
| | baz=225,slow=75 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **44.58** | **108** | T | T | 17 52 39.8 | |
| | baz=225,slow=75 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **44.59** | **108** | T | T | 17 52 38.9 | |
| | baz=225,slow=75 | | | | | | |
| **BOSA** | **Boshof** | **45.66** | **69** | P | **P** | **17 04 35.7** | **0.0** |
| **BOSA** | **Boshof** | **45.66** | **69** | P | **P** | **17 04 35.5** | **-0.3** |
| | comp=Z,3.3nm,0.9s,baz=212,slow=8.9,SNR=4.9 | | | | | | |
| BOSA | | | | LR | LR | 17 19 09.4 | |
| | comp=Z,50nm,21.3s,baz=202,slow=30 | | | | | | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **GO02** | **Mina Guanaco** | **46.81** | **298** | P | **P** | **17 04 44.9** | **-0.1** |
| GO02 | | | | IAmb | IAmb | 17 05 00.2 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **BDFB** | **Brasilia** | **47.69** | **328** | LR | LR | 17 23 13.1 | |
| | comp=Z,56nm,20.0s,baz=153,slow=34 | | | | | | |
| **LVC** | **Limon Verde** | **48.74** | **300** | P | **P** | **17 04 59.0** | **-1.1** |
| LVC | | | | IAmb | IAmb | 17 05 00.4 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **48.74** | **300** | LR | LR | 17 27 46.9 | |
| | comp=Z,32nm,18.9s,baz=198,slow=39 | | | | | | |
| **LBTB** | **Lobatse** | **48.88** | **67** | LR | LR | 17 22 07.7 | |
| | comp=Z,44nm,18.2s,baz=188,slow=32 | | | | | | |
| **CASY** | **Casey** | **49.53** | **158** | P | **P** | **17 05 06.2** | **+1.2** |
| **PB09** | **IPOC Station P** | **49.60** | **300** | P | **P** | **17 05 06.7** | **+0.3** |
| **SIV** | **San Ignacio** | **51.53** | **312** | LR | LR | 17 28 12.7 | |
| | comp=Z,39nm,19.0s,baz=112,slow=37 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **52.66** | **12** | T | T | 18 02 53.2 | |
| | baz=185 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **52.66** | **12** | T | T | 18 02 57.2 | |
| | baz=185,slow=74 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **52.68** | **12** | T | T | 18 02 46.9 | |
| | baz=185,slow=74 | | | | | | |
| **LPAZ** | **La Paz** | **54.03** | **305** | P | **P** | **17 05 39.4** | **-0.7** |
| | comp=Z,2.5nm,0.8s,baz=164,slow=12,SNR=9.0 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **MCPB** | **Macapa, AP** | **63.39** | **328** | P | **P** | **17 06 43.3** | **-1.1** |
| **DBIC** | **Dimbokro** | **68.31** | **21** | P | **P** | **17 07 16.0** | **0.0** |
| | comp=Z,3.4nm,0.7s,baz=172,slow=8.1,SNR=3.7 | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **BOAV** | **Boa Vista** | **68.47** | **320** | P | **P** | **17 07 14.8** | **-2.3** |
| BOAV | | | | IAmb | IAmb | 17 08 15.1 | |
| | comp=Z,14nm,1.7s | | | | | | |
| **MDP** | **Montagnes des** | **68.78** | **329** | LR | LR | 17 34 33.7 | |
| | comp=Z,36nm,20.8s,baz=108,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.91** | **26** | P | **P** | **17 08 02.5** | **+1.0** |
| | comp=Z,4.8nm,0.6s,baz=203,slow=5.9,SNR=39 | | | | | | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| **LTZ** | **Lake Taylor** | **76.58** | **192** | P | **P** | **17 08 05.3** | **+0.1** |
| **SDV** | **Santo Domingo** | **78.00** | **313** | LR | LR | 17 42 02.4 | |
| | comp=Z,58nm,21.7s,baz=240,slow=35 | | | | | | |
| **TKNZ** | **Takaka Hill** | **78.23** | **193** | P | **P** | **17 08 14.0** | **-0.4** |
| **STKA** | **Stephens Creek** | **87.60** | **168** | P | **P** | **17 09 02.3** | **-0.8** |
| | comp=Z,3.8nm,0.8s,baz=129,slow=7.9,SNR=4.0 | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **KEST** | **Kesra** | **99.41** | **27** | LR | LR | 17 49 16.1 | |
| | comp=Z,43nm,18.8s,baz=230,slow=32 | | | | | | |
| **MSU** | **Marysvale** | **121.55** | **293** | PKPdf | **PKiKP** | **17 15 09.3** | **+1.0** |
| **PSUT** | **Pine Spring** | **122.34** | **292** | PKPdf | **PKiKP** | **17 15 10.9** | **+1.1** |
| **HWUT** | **Hardware Ranch** | **123.75** | **296** | PKPdf | **PKiKP** | **17 15 13.0** | **+0.5** |
| **PDAR** | **Pinedale Array** | **123.78** | **298** | PKP | **PKPdf** | **17 15 12.0** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=130,slow=8.0,SNR=4.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **123.87** | **20** | PKP | **PKiKP** | **17 15 11.9** | **0.0** |
| | comp=Z,1.4nm,0.9s,baz=196,slow=1.6,SNR=3.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **124.35** | **288** | PKP | **PKiKP** | **17 15 14.3** | **+0.5** |
| | comp=Z,0.6nm,0.5s,baz=144,slow=2.6,SNR=5.8 | | | | | | |
| **LOHW** | **Long Hollow** | **124.92** | **298** | PKPdf | **PKiKP** | **17 15 15.6** | **+0.8** |
| **FINES** | **FINESS Array B** | **127.24** | **28** | PKP | **PKPdf** | **17 15 17.8** | **-0.1** |
| | comp=Z,4.6nm,0.7s,baz=236,slow=1.5,SNR=14 | | | | | | |
| **FIA1** | **FINESS Array S** | **127.24** | **28** | PKPdf | **PKPdf** | **17 15 18.2** | **+0.3** |
| **ABKAR** | **Akbulak array** | **128.32** | **56** | PKPdf | **PKPdf** | **17 15 20.5** | **+0.1** |
| **BVAR** | **Borovoye Array** | **135.54** | **59** | PKP | **PKPdf** | **17 15 34.6** | **+0.7** |
| | comp=Z,1.2nm,0.5s,baz=208,slow=4.8,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **136.58** | **73** | PKhKP | PKPpre | 17 15 24.3 | |
| | comp=Z,0.2nm,0.6s,baz=190,slow=6.0,SNR=3.5 | | | | | | |
| MKAR | | | | PKP | **PKPdf** | **17 15 35.6** | **-0.5** |
| | comp=Z,0.7nm,0.9s,baz=256,slow=3.0,SNR=3.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **137.50** | **67** | PKP | **PKPdf** | **17 15 37.2** | **-0.5** |
| | comp=Z,0.6nm,0.2s,baz=231,slow=2.9,SNR=1.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **140.22** | **313** | PKP | **PKPdf** | **17 15 41.7** | **-0.5** |
| | comp=Z,1.0nm,0.6s,baz=112,slow=1.9,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **142.60** | **67** | PKP | **PKPdf** | **17 15 46.2** | **-0.5** |
| | comp=Z,0.7nm,0.6s,baz=29,slow=3.3,SNR=3.7 | | | | | | |
| **R33M** | **Jennings River** | **144.87** | **302** | PKPdf | **PKPdf** | **17 15 51.2** | **+0.4** |
| **R32K** | **Eaglecrest** | **145.79** | **298** | | **PKPab** | **17 15 54.5** | **+1.3** |
| **P33M** | **Teslin, Yukon** | **146.09** | **302** | PKPbc | **PKPab** | **17 15 55.0** | **+0.5** |
| **P32M** | **Atlin** | **146.15** | **301** | PKPbc | **PKPab** | **17 15 55.2** | **+0.6** |
| **M31M** | **Drury Creek, Y** | **147.75** | **304** | PKPbc | **PKPbc** | **17 15 59.1** | **+0.7** |
| **O30N** | **Mendenhall** | **147.78** | **301** | PKPbc | **PKiKP** | **17 15 59.5** | **-0.9** |
| **N31M** | **Braeburn, Yuko** | **147.99** | **303** | PKPbc | **PKPbc** | **17 15 59.8** | **+0.8** |
| **A36M** | **Sachs Harbour** | **148.49** | **324** | PKPbc | **PKPbc** | **17 16 00.3** | **+0.4** |
| **N30M** | **Aishikik Lake** | **148.53** | **302** | PKPbc | **PKiKP** | **17 16 02.3** | **+0.3** |
| **SONM** | **Songino Array** | **149.20** | **91** | PKPbc | **PKPbc** | **17 16 02.6** | **-0.1** |
| | comp=Z,4.1nm,0.8s,baz=231,slow=2.5,SNR=22 | | | | | | |
| **H31M** | **Peel River** | **149.30** | **311** | PKPbc | **PKPbc** | **17 16 02.4** | **+0.1** |
| **M29M** | **Somme Creek** | **149.56** | **303** | PKPbc | **PKPbc** | **17 16 03.5** | **+0.4** |
| **G30M** | **tAoh Zraii Nji** | **150.44** | **312** | PKPbc | **PKiKP** | **17 16 05.4** | **-0.3** |
| **H29M** | **Whitestone** | **150.99** | **310** | PKPbc | **PKPbc** | **17 16 06.1** | **-0.2** |
| **VRDI** | **Verde Repeater** | **151.17** | **299** | PKPbc | **PKiKP** | **17 16 07.4** | **-0.2** |
| **RAGM** | **Ragged Mountai** | **151.35** | **297** | PKPbc | **PKiKP** | **17 16 08.3** | **+0.5** |
| **HIN** | **Hinchinbrook I** | **152.18** | **296** | PKPbc | **PKiKP** | **17 16 09.4** | **0.0** |
| **G27K** | **Doyon Strip** | **152.42** | **311** | PKPbc | **PKPbc** | **17 16 09.4** | **-0.2** |
| **I26K** | **Coal Creek Min** | **152.56** | **307** | PKPbc | **PKiKP** | **17 16 10.3** | **+0.2** |
| **PWL** | **Port Wells** | **153.19** | **296** | PKPbc | **PKiKP** | **17 16 11.8** | **+0.2** |
| **F26K** | **Sheenjek River** | **153.58** | **312** | PKPbc | **PKiKP** | **17 16 12.9** | **+0.7** |
| **DHY** | **Denali Highway** | **153.58** | **301** | PKPbc | **PKPbc** | **17 16 12.3** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **153.83** | **146** | PKPab | **PKPab** | **17 16 26.7** | **0.0** |
| | comp=Z,0.5nm,0.6s,baz=173,slow=5.1,SNR=4.5 | | | | | | |
| **KDAK** | **Kodiak Island** | **153.85** | **288** | PKPbc | **PKiKP** | **17 16 13.7** | **+0.8** |
| **KDAK** | **Kodiak Island** | **153.85** | **288** | PKPbc | **PKiKP** | **17 16 13.1** | **+0.1** |
| | comp=Z,3.0nm,0.5s,baz=163,slow=3.7,SNR=7.6 | | | | | | |
| **ILAR** | **Eielson Array** | **153.91** | **305** | PKPbc | **PK

BPAW IAmb IAmb 17 03 15.7
comp=Z,5.4nm,1.3s
**E19K Redstone River 18.98 22 P P 17 03 16.1 +0.5**
E19K IAmb IAmb 17 03 39.9
comp=Z,5.5nm,1.1s
**RND Reindeer 19.09 39 P P 17 03 17.5 +0.5**
**MLY Manley 19.24 33 P P 17 03 19.6 +1.0**
MLY IAmb IAmb 17 03 23.8
comp=Z,5.5nm,1.3s
**DHY Denali Highway 19.54 41 P P 17 03 22.7 +0.7**
DHY IAmb IAmb 17 03 38.4
comp=Z,5.9nm,1.5s
**F21K Alatna River 19.78 26 P P 17 03 25.3 +0.9**
**G23K Bananza Creek 20.47 30 P P 17 03 32.9 +0.9**
**ILAR Eielson Array 20.50 37 P P 17 03 32.0 -0.2**
comp=Z,0.4nm,0.5s,baz=239,slow=10,SNR=2.5
comp=Z,0.4nm,0.5s
**E21K Killik River 20.53 23 P P 17 03 31.9 -0.7**
**RIDG Independent Ri 20.85 40 P P 17 03 35.5 -0.7**
**J25K Salcha River, 21.01 38 P P 17 03 36.5 -1.3**
J25K IAmb IAmb 17 03 42.8
comp=Z,3.1nm,1.1s
**D22K Ayikyak River 21.17 23 P P 17 03 39.7 +0.2**
**G24K Hadweenzic Riv 21.29 32 P P 17 03 41.3 +0.6**
G24K IAmb IAmb 17 03 49.4
comp=Z,4.8nm,1.3s
**SCRK Sand Creek 21.29 40 P P 17 03 39.5 -1.4**
**J26L Joseph Creek 21.67 39 P P 17 03 44.8 -0.1**
J26L IAmb IAmb 17 04 03.4
comp=Z,1.8nm,0.8s
**K27K Chicken 22.10 41 P P 17 03 49.5 +0.1**
**I28M Miner Creek 23.45 38 P P 17 04 04.4 +0.8**
**K29M Barlow Dome 23.96 43 P P 17 04 09.0 +0.4**
K29M IAmb IAmb 17 04 29.1
comp=Z,3.3nm,1.3s
**I29M Ogilvie Camp, 24.07 39 P P 17 04 08.9 -0.5**
I29M IAmb IAmb 17 04 12.1
comp=Z,2.4nm,1.2s
**H29M Whitestone 24.33 37 P P 17 04 11.7 -0.1**
**I30M Mount Dempster 24.80 40 P P 17 04 16.1 -0.2**
I30M IAmb IAmb 17 04 18.5
comp=Z,1.5nm,0.8s
**KURBB Kurchatov Arra 60.65 315 P P 17 09 04.5 -0.4**
comp=Z,1.4nm,0.5s,baz=42,slow=6.8,SNR=8.0
comp=Z,1.4nm,0.5s
**MKAR Makanchi Array 61.63 310 P P 17 09 10.9 -0.8**
comp=Z,0.2nm,0.5s,baz=43,slow=7.4,SNR=4.4
comp=Z,0.2nm,0.5s

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**IDC 29 17:00:05.5±4.2, 47°.53N×93°.22W, h0km, mbtmp2.4/1, ML0.8/1, Error ellipse: s-maj=69.8km s-min=28.2km az=58.0, Minnesota**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **3.24** | **328** | Pn | Pn | 17 00 56.9 | -0.7 |
| | 0.2nm,0.3s,baz=149,slow=14,SNR=1.8 | | | | | | |
| ULM | | | | Pg | Pb | 17 01 02.8 | -1.1 |
| | 0.8nm,0.3s,baz=150,slow=16,SNR=6.0 | | | | | | |
| ULM | | | | Sn | Sn | 17 01 34.7 | -2.2 |
| | 0.8nm,0.3s,baz=162,slow=19,SNR=2.3 | | | | | | |
| ULM | | | | Lg | Lg | 17 01 45.7 | |
| | 1.8nm,0.3s,baz=76,slow=20,SNR=9.8 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **I10CA** | **LAC DU BONNET** | **3.26** | **326** | I | I | 17 21 00.0 | |
| | 0.1nm,1.0s,baz=144,slow=321,SNR=11 | | | | | | |
| **PDAR** | **Pinedale Array** | **12.48** | **254** | Lg | Lg | 17 06 30.0 | |
| | 0.1nm,0.3s,baz=65,slow=32,SNR=2.0 | | | | | | |
| **I56US** | **NEWPORT INFRASI** | **6.04** | **281** | I | I | 18 40 30.0 | |
| | baz=86,slow=320,SNR=0.6 | | | | | | |

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*NEIC **29** 17:00:42.0±0.8, 18°.2S±0°.2×177°.98W±0°.09, h592km±11km, mb4.1/21, Error ellipse: s-maj=22.6km s-min=12.8km az=176.0*
*IDC **29** 17:00:44.2±1.3, 18°.14S×178°.31W, h609km±10km, mb3.0/7, mbtmp4.0/9, Error ellipse: s-maj=25.8km s-min=17.3km az=141.0*
**ISC 29 17:00:42.0±0.7, 18°.2S±0°.1×178°.1W±0°.1, h590km, n35, σ1§10/39, mb4.0/18, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.68** | **277** | P | P | 17 02 05.9 | +1.2 |
| **MSVF** | **Nonsavu** | **3.68** | **277** | P | P | 17 02 05.7 | +1.1 |
| | 52nm,0.6s,baz=156,slow=4.4,SNR=66 | | | | | | |
| MSVF | | | | S | S | 17 03 15.6 | +3.6 |
| | 15nm,1.1s,baz=148,slow=19,SNR=6.6 | | | | | | |
| **AFI** | **Afiamalu** | **7.45** | **56** | P | P | 17 02 34.6 | -1.3 |
| **LIFNC** | **LIFOU** | **14.04** | **257** | P | P | 17 03 38.5 | -2.9 |
| **DZM** | **Mont Dzumac** | **14.99** | **253** | P | P | 17 03 50.6 | 0.0 |
| | 2.4nm,0.6s,baz=142,slow=20,SNR=1.4 | | | | | | |
| **THZ** | **Tophouse** | **24.68** | **196** | P | P | 17 05 18.4 | +0.6 |
| **KHZ** | **Kahutara** | **25.14** | **195** | P | P | 17 05 20.2 | -1.4 |
| **GVZ** | **Greta Valley S** | **25.78** | **195** | P | P | 17 05 25.7 | -1.6 |
| **LTZ** | **Lake Taylor** | **25.80** | **196** | P | P | 17 05 27.4 | -0.2 |
| **TOO** | **Toolangi** | **37.19** | **231** | P | P | 17 07 04.9 | +0.5 |
| TOO | | | | IAmb | IAmb | 17 07 45.8 | |
| | comp=Z,16nm,1.2s | | | | | | |
| **STKA** | **Stephens Creek** | **38.72** | **242** | P | P | 17 07 17.5 | +0.7 |
| | comp=Z,1.4nm,0.7s,baz=101,slow=16,SNR=1.7 | | | | | | |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.82** | **260** | P | P | 17 08 04.9 | 0.0 |
| WB0 | | | | IAmb | IAmb | 17 08 11.0 | |
| | comp=Z,6.7nm,1.3s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.84** | **260** | P | P | 17 08 04.8 | -0.2 |
| WB2 | | | | IAmb | IAmb | 17 08 40.2 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.84** | **260** | P | P | 17 08 04.9 | -0.2 |
| **WRA** | **Warramunga Arr** | **44.85** | **260** | P | P | 17 08 04.2 | -1.0 |
| | comp=Z,0.7nm,0.5s,baz=94,slow=7.3,SNR=34 | | | | | | |
| WRA | | | | PcP | PcP | 17 09 34.5 | +0.4 |
| | comp=Z,0.3nm,0.3s,baz=90,slow=3.8,SNR=11 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **44.97** | **255** | P | P | 17 08 06.3 | +0.2 |
| **ASAR** | **Alice Springs** | **44.98** | **255** | P | P | 17 08 06.1 | 0.0 |
| | comp=Z,2.1nm,0.8s,baz=88,slow=8.7,SNR=29 | | | | | | |
| ASAR | | | | PcP | PcP | 17 09 34.5 | 0.0 |
| | comp=Z,1.8nm,0.8s,baz=104,slow=4.0,SNR=14 | | | | | | |
| ASAR | | | | S | S | 17 14 00.4 | -2.2 |
| | comp=Z,0.4nm,0.9s,baz=89,slow=16,SNR=4.0 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.33** | **323** | P | P | 17 10 44.8 | -0.6 |
| | comp=Z,0.9nm,0.5s,baz=167,slow=5.1,SNR=4.3 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **UGM** | **Wanagama** | **69.92** | **268** | P | P | 17 10 55.4 | 0.0 |
| **QSPA** | **South Pole Qui** | **71.83** | **180** | P | P | 17 11 06.7 | +0.9 |
| **QSPA** | **South Pole Qui** | **71.83** | **180** | P | P | 17 11 06.7 | +0.9 |
| | comp=Z,1.5nm,1.0s,baz=127,slow=1.2,SNR=5.8 | | | | | | |
| | comp=Z,1.5nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.06** | **345** | P | P | 17 11 18.2 | -0.2 |
| | comp=Z,2.4nm,1.0s,baz=110,slow=7.9,SNR=5.4 | | | | | | |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **O18K** | **Koktuh Hills** | **80.01** | **12** | P | P | 17 11 50.3 | -0.3 |
| O18K | | | | IAmb | IAmb | 17 11 51.1 | |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **L18K** | **Granite Mounta** | **81.96** | **10** | P | P | 17 11 59.8 | -0.7 |
| L18K | | | | IAmb | IAmb | 17 12 37.5 | |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **K17K** | **Iditarod** | **82.18** | **9** | P | P | 17 12 02.2 | +0.6 |
| K17K | | | | IAmb | IAmb | 17 12 05.4 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **SUA** | **Susitna One** | **82.38** | **13** | P | P | 17 12 02.1 | -0.7 |
| SUA | | | | IAmb | IAmb | 17 12 03.6 | |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **J17K** | **VABM Dome** | **82.71** | **9** | P | P | 17 12 04.7 | +0.4 |
| J17K | | | | IAmb | IAmb | 17 12 33.8 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **J18K** | **Innoko River** | **83.13** | **10** | P | P | 17 12 06.7 | +0.3 |
| J18K | | | | IAmb | IAmb | 17 12 20.3 | |
| | comp=Z,6.2nm,1.3s | | | | | | |
| **K20K** | **Telida** | **83.47** | **11** | P | P | 17 12 08.1 | +0.1 |
| K20K | | | | IAmb | IAmb | 17 12 25.8 | |
| | comp=Z,5.5nm,1.4s | | | | | | |
| **J19K** | **Poorman** | **83.80** | **10** | P | P | 17 12 09.5 | -0.1 |
| **TABL** | **Table Mountain** | **83.89** | **17** | P | P | 17 12 10.8 | +0.4 |
| TABL | | | | IAmb | IAmb | 17 12 28.6 | |
| | comp=Z,8.1nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.93** | **57** | P | P | 17 12 22.3 | +1.3 |
| | comp=Z,0.1nm,0.3s,baz=216,slow=5.6,SNR=2.9 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **J25K** | **Salcha River,** | **86.33** | **14** | P | P | 17 12 21.7 | -0.2 |
| **BRTR** | **Keskin Array B** | **145.21** | **315** | PKPbc | PKPdf | 17 19 13.2 | -0.4 |
| | comp=Z,0.8nm,0.6s,baz=109,slow=3.2,SNR=5.0 | | | | | | |
| **GERES** | **GERESS Array B** | **147.99** | **345** | PKPbc | PKPbc | 17 19 21.7 | -0.2 |
| | comp=Z,0.3nm,0.5s,baz=302,slow=2.5,SNR=4.9 | | | | | | |

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*IDC **29** 17:01:22.4±0.8, 15°.75N×146°.89E, h0km, mb3.9/17, mbtmp3.9/18, ML3.4/1, MS3.0/6, Error ellipse: s-maj=22.9km s-min=17.3km az=95.0*
*NEIC **29** 17:01:22.4±1.3, 15°.52N±0°.10×147°.35E±0°.06, h10km±1km, mb4.7/11, Error ellipse: s-maj=17.5km s-min=7.7km az=198.0*
**ISC 29 17:01:26.9±0.7, 15°.71N±0°.09×146°.9E±0°.1, h33km, n43, σ1§32/34, mb4.2/22, MS2.9/7, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **2.88** | **223** | Pn | Pn | 17 02 10.9 | +0.4 |
| **GUMO** | **Guam** | **2.88** | **223** | Pn | Pn | 17 02 11.2 | +0.8 |
| | 5.2nm,0.3s,baz=69,slow=6.4,SNR=16 | | | | | | |
| GUMO | | | | Sn | Sn | 17 02 43.9 | 0.0 |
| | 20nm,0.3s,baz=36,slow=19,SNR=8.1 | | | | | | |
| | 13nm,0.3s | | | | | | |
| **PATS** | **Pohnpei** | **14.25** | **127** | Pn | Pn | 17 04 37.2 | -9.3 |
| **H11S3** | **WAKE ISLAND Hy** | **19.12** | **79** | T | T | 17 25 05.4 | |
| | baz=263,slow=74,SNR=9.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.14** | **79** | T | T | 17 25 11.3 | |
| | baz=263,slow=74,SNR=6.8 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.14** | **79** | T | T | 17 25 07.6 | |
| | baz=263,slow=74,SNR=6.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.46** | **75** | T | T | 17 25 37.5 | |
| | baz=258 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.47** | **75** | T | T | 17 25 38.2 | |
| | baz=258 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.48** | **75** | T | T | 17 25 40.1 | |
| | baz=258 | | | | | | |
| **JOW** | **Kunigami** | **20.55** | **306** | P | P | 17 06 01.9 | -1.0 |
| | 4.9nm,0.8s,baz=96,slow=19,SNR=1.7 | | | | | | |
| | 4.9nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **22.14** | **341** | P | P | 17 06 17.2 | -2.7 |
| | 0.5nm,0.5s,baz=173,slow=11,SNR=2.3 | | | | | | |
| MJAR | | | | LR | LR | 17 13 54.5 | |
| | comp=Z,37nm,21.4s,baz=162,slow=34 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **JNU** | **Nakatsue** | **22.60** | **323** | LR | LR | 17 13 51.6 | |
| | comp=Z,29nm,21.8s,baz=134,slow=33 | | | | | | |
| **FAKI** | **Fak Fak** | **23.50** | **219** | P | P | 17 06 32.3 | -1.8 |
| FAKI | | | | IAmb | IAmb | 17 07 08.4 | |
| | comp=Z,38nm,1.4s | | | | | | |
| **KSRS** | **Korea Array** | **27.41** | **326** | LR | LR | 17 17 00.7 | |
| | comp=Z,35nm,20.1s,baz=140,slow=34 | | | | | | |
| **HNR** | **Honiara** | **28.13** | **152** | LR | LR | 17 16 50.0 | |
| | comp=Z,772nm,20.6s,baz=194,slow=33 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **28.55** | **354** | P | P | 17 07 19.8 | +0.1 |
| JKA | | | | IAmb | IAmb | 17 07 22.9 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **28.55** | **354** | LR | LR | 17 18 19.8 | |
| | comp=Z,31nm,21.4s,baz=168,slow=36 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.09** | **339** | P | P | 17 07 41.6 | -0.6 |
| | comp=Z,2.4nm,0.9s,baz=201,slow=18,SNR=2.5 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.51** | **200** | P | P | 17 08 37.2 | -0.8 |
| | comp=Z,0.6nm,0.8s,baz=28,slow=9.9,SNR=4.2 | | | | | | |
| WRA | | | | PcP | PcP | 17 10 55.7 | -0.2 |
| | comp=Z,0.2nm,0.6s,baz=14,slow=3.0,SNR=1.3 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **39.58** | **213** | P | P | 17 08 55.0 | -0.4 |
| **ASAR** | **Alice Springs** | **41.14** | **198** | P | P | 17 09 08.0 | -0.2 |
| | comp=Z,0.1nm,0.5s,baz=22,slow=10,SNR=4.2 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **45.56** | **216** | P | P | 17 09 44.3 | +0.3 |
| PSA00 | | | | IAmb | IAmb | 17 10 12.1 | |
| | comp=Z,10nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.81** | **281** | P | P | 17 09 47.6 | +1.5 |
| | comp=Z,2.0nm,0.6s,baz=84,slow=6.1,SNR=12 | | | | | | |
| CMAR | | | | LR | LR | 17 30 07.2 | |
| | comp=Z,17nm,18.8s,baz=340,slow=38 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **46.19** | **323** | P | P | 17 09 48.5 | -0.3 |
| | comp=Z,0.3nm,0.5s,baz=148,slow=7.3,SNR=2.7 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **TIXI** | **Tiksi** | **56.95** | **353** | P | P | 17 11 09.4 | +0.7 |
| TIXI | | | | IAmb | IAmb | 17 11 33.7 | |
| | comp=Z,5.8nm,1.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.08** | **323** | P | P | 17 11 36.2 | -1.4 |
| | comp=Z,0.8nm,0.6s,baz=106,slow=9.4,SNR=5.1 | | | | | | |
| ZALV | | | | LR | LR | 17 36 42.8 | |
| | comp=Z,21nm,21.1s,baz=159,slow=35 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **61.36** | **315** | P | P | 17 11 41.0 | +1.4 |
| **MKAR** | **Makanchi Array** | **61.36** | **315** | P | P | 17 11 41.2 | +1.5 |
| | comp=Z,2.0nm,0.5s,baz=93,slow=7.9,SNR=28 | | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **61.57** | **315** | P | P | 17 11 42.5 | +1.4 |
| MAKZ | | | | IAmb | IAmb | 17 11 43.5 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **64.25** | **319** | P | P | 17 11 59.4 | +0.6 |
| **KURBB** | **Kurchatov Arra** | **64.30** | **319** | P | P | 17 12 00.0 | +0.9 |
| | comp=Z,7.6nm,0.6s,baz=98,slow=7.0,SNR=47 | | | | | | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **65.83** | **25** | P | P | 17 12 07.6 | -1.2 |
| | comp=Z,0.6nm,0.8s,baz=243,slow=4.0,SNR=4.9 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.50** | **321** | P | P | 17 12 32.7 | +0.5 |
| | comp=Z,3.1nm,0.8s,baz=100,slow=6.5,SNR=12 | | | | | | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **G31M** | **Satah River** | **71.29** | **24** | P | P | 17 12 43.0 | +0.1 |
| G31M | | | | IAmb | IAmb | 17 13 05.2 | |
| | comp=Z,9.5nm,1.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **76.30** | **318** | | P | 17 13 13.1 | +0.5 |
| **YKA** | **Yellowknife Ar** | **80.09** | **28** | P | P | 17 13 35.7 | +2.4 |
| | comp=Z,0.8nm,0.8s,baz=283,slow=5.6,SNR=3.0 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **HATC** | **Hat Creek Radi** | **81.13** | **50** | P | P | 17 13 36.1 | -3.4 |
| **NVAR** | **Mina Array Bea** | **84.08** | **52** | P | P | 17 13 55.5 | +0.5 |
| | comp=Z,0.6nm,0.7s,baz=297,slow=6.0,SNR=2.8 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.67** | **342** | P | P | 17 14 02.2 | +0.1 |
| | comp=Z,1.3nm,0.7s,baz=60,slow=7.2,SNR=8.0 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **89.09** | **46** | P | P | 17 14 21.8 | +2.3 |
| | comp=Z,0.2nm,0.5s,baz=357,slow=1.8,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **90.06** | **336** | P | P | 17 14 22.8 | -0.5 |
| | comp=Z,0.7nm,0.5s,baz=113,slow=5.0,SNR=5.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **DBIC** | **Dimbokro** | **144.26** | **306** | PKP | PKPdf | 17 20 59.5 | -1.1 |
| | comp=Z,5.6nm,0.8s,baz=52,slow=3.4,SNR=4.7 | | | | | | |
| **LPAZ** | **La Paz** | **146.35** | **96** | PKPbc | PKiKP | 17 21 07.8 | -1.3 |
| | comp=Z,0.5nm,0.5s,baz=338,slow=11,SNR=1.7 | | | | | | |

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*IDC **29** 17:12:59.6±2.9, 18°.05S×178°.00W, h555km±32km, mb3.3/10, mbtmp4.2/10, Error ellipse: s-maj=18.3km s-min=15.8km az=127.0*
*NEIC **29** 17:13:01.8±1.0, 17°.9S±0°.1×178°.0W±0°.2, h586km±13km, mb4.3/21, Error ellipse: s-maj=32.9km s-min=7.9km az=63.0*
**ISC 29 17:13:02.4±0.7, 18°.0S±0°.1×178°.1W±0°.1, h590km, n36, σ1§07/39, mb4.1/20, 1C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.69** | **274** | P | P | 17 14 25.0 | -0.2 |
| **URZ** | **Urewera** | **20.61** | **191** | P | P | 17 16 58.9 | -3.1 |
| | 5.8nm,0.3s,baz=350,slow=3.5,SNR=8.8 | | | | | | |
| | 5.8nm,0.3s | | | | | | |
| **KHZ** | **Kahutara** | **25.36** | **195** | P | P | 17 17 42.1 | -1.9 |
| **LTZ** | **Lake Taylor** | **26.02** | **196** | P | P | 17 17 47.4 | -2.6 |
| LTZ | | | | IAmb | IAmb | 17 18 25.2 | |
| | comp=Z,31nm,1.3s | | | | | | |
| **EIDS** | **Eidsvold** | **29.53** | **250** | P | P | 17 18 20.6 | -0.2 |
| EIDS | | | | IAmb | IAmb | 17 18 29.9 | |
| | comp=Z,6.5nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **33.74** | **261** | P | P | 17 18 56.2 | -0.4 |
| CTAO | | | | IAmb | IAmb | 17 19 07.4 | |
| | comp=Z,9.9nm,1.2s | | | | | | |
| **COEN** | **Coen** | **37.42** | **270** | P | P | 17 19 27.0 | 0.0 |
| COEN | | | | IAmb | IAmb | 17 19 52.2 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **38.86** | **241** | P | P | 17 19 38.2 | -0.2 |
| | comp=Z,1.8nm,0.9s,baz=90,slow=11,SNR=1.8 | | | | | | |
| | comp=Z,1.8nm,0.9s | | | | | | |
| **WR0** | **Warramunga Arr** | **44.73** | **260** | P | P | 17 20 24.8 | +0.1 |
| WR0 | | | | IAmb | IAmb | 17 20 25.7 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.89** | **260** | P | P | 17 20 25.4 | -0.5 |
| **WRAB** | **Tennant Creek** | **44.91** | **260** | P | P | 17 20 25.8 | -0.3 |
| **WRA** | **Warramunga Arr** | **44.92** | **260** | P | P | 17 20 26.3 | +0.1 |
| | comp=Z,1.8nm,0.5s,baz=95,slow=7.3,SNR=92 | | | | | | |
| WRA | | | | PcP | PcP | 17 21 55.4 | +0.7 |
| | comp=Z,0.1nm,0.3s,baz=88,slow=3.9,SNR=1.3 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.06** | **254** | P | P | 17 20 27.6 | +0.3 |
| **ASAR** | **Alice Springs** | **45.06** | **254** | P | P | 17 20 27.9 | +0.6 |
| | comp=Z,6.3nm,0.7s,baz=86,slow=8.7,SNR=95 | | | | | | |
| ASAR | | | | PcP | PcP | 17 21 55.8 | +0.6 |
| | comp=Z,0.3nm,0.4s,baz=103,slow=3.8,SNR=1.5 | | | | | | |
| ASAR | | | | S | S | 17 26 25.0 | +0.6 |
| | comp=Z,0.6nm,0.8s,baz=90,slow=17,SNR=4.3 | | | | | | |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **49.11** | **268** | P | P | 17 20 57.8 | +0.2 |
| MTN | | | | IAmb | IAmb | 17 21 40.3 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **KNRA** | **Kununurra** | **50.79** | **264** | P | P | 17 21 09.7 | -0.1 |
| KNRA | | | | IAmb | IAmb | 17 21 29.8 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.32** | **261** | P | P | 17 21 28.5 | +0.6 |
| **SOEI** | **Soe** | **56.38** | **270** | P | P | 17 21 50.4 | +0.9 |
| SOEI | | | | IAmb | IAmb | 17 22 08.2 | |
| | comp=Z,24nm,1.5s | | | | | | |
| **MBWA** | **Marble Bar** | **58.35** | **256** | P | P | 17 22 02.5 | -0.1 |
| MBWA | | | | IAmb | IAmb | 17 22 03.4 | |
| | comp=Z,43nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **60.34** | **184** | P | P | 17 22 16.7 | +1.9 |
| **CASY** | **Casey** | **66.18** | **205** | P | P | 17 22 52.7 | +0.5 |
| **MJAR** | **Matsushiro Arr** | **68.17** | **323** | P | P | 17 23 04.7 | -0.3 |
| | comp=Z,1.2nm,0.5s,baz=167,slow=6.1,SNR=7.7 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **68.18** | **323** | P | P | 17 23 04.0 | -0.9 |
| MJB9 | | | | IAmb | IAmb | 17 23 32.2 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **UGM** | **Wanagama** | **69.95** | **268** | P | P | 17 23 15.1 | -1.0 |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | P | 17 23 28.4 | +0.8 |
| QSPA | | | | IAmb | IAmb | 17 24 01.5 | |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.05** | **180** | P | P | 17 23 28.4 | +0.8 |
| | comp=Z,2.7nm,0.6s,baz=106,slow=4.9,SNR=35 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **72.55** | **303** | P | P | 17 23 29.8 | -1.2 |
| **PETK** | **Petropavlovsk-** | **73.85** | **345** | P | P | 17 23 37.9 | +0.2 |
| | comp=Z,2.5nm,0.7s,baz=126,slow=6.4,SNR=3.1 | | | | | | |
| | comp=Z,2.5nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.28** | **44** | P | P | 17 24 08.0 | 0.0 |
| | comp=Z,0.5nm,0.7s,baz=219,slow=7.0,SNR=2.2 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.91** | **13** | P | P | 17 24 39.3 | -1.0 |
| | comp=Z,0.4nm,0.4s,baz=220,slow=5.3,SNR=6.3 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.21** | **290** | P | P | 17 24 58.5 | +1.7 |
| | comp=Z,0.5nm,0.4s,baz=144,slow=5.1,SNR=4.7 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.07** | **177** | ⇑P | P | 17 25 05.3 | +0.8 |
| | comp=Z,1.7nm,0.7s,baz=182,slow=5.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.07** | **315** | PKPbc | PKPbc | 17 31 35.1 | +0.3 |
| | comp=Z,1.3nm,0.7s,baz=144,slow=5.2,SNR=8.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.46** | **303** | PKPbc | PKPbc | 17 31 39.5 | +0.7 |
| | comp=Z,1.7nm,0.4s,baz=63,slow=7.6,SNR=5.3 | | | | | | |
| **GERES** | **GERESS Array B** | **147.78** | **345** | PKPbc | PKPbc | 17 31 42.4 | +0.6 |
| | comp=Z,0.9nm,0.4s,baz=40,slow=3.6,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.17** | **177** | PKPab | PKPab | 17 33 44.3 | -1.8 |
| | comp=Z,0.6nm,0.8s,baz=224,slow=4.0,SNR=2.4 | | | | | | |

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*NEIC **29** 17:15:35.9±1.3, 51°.00N±0°.02×176°.04W±0°.07, h28km±7km, mb3.8/19, ML3.0(AEIC), Error ellipse: s-maj=7.0km s-min=2.0km az=67.0*
*AEIC **29** 17:15:37.1±1.8, 51°.10N±0°.07×176°.12W±0°.08, h21km±7km, Error ellipse: s-maj=11.1km s-min=6.0km az=159.0*
*IDC **29** 17:15:38.2±11.0, 51°.10N×175°.59W, h62km±61km, mb3.4/5, mbtmp3.8/7, ML3.3/2, Error ellipse: s-maj=203.6km s-min=27.6km az=170.0*
**ISC 29 17:15:34.8±1.1, 50°.95N±0°.10×175°.99W±0°.05, h28km, n54, σ1§15/52, mb3.8/9, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSCK** | **Great Sitkin C** | **1.07** | **354** | | Pn | 17 15 54.1 | +0.2 |
| GSCK | | | | | Sn | 17 16 08.3 | +0.5 |
| **GSMY** | **Great Sitkin M** | **1.09** | **358** | | Pn | 17 15 54.1 | -0.2 |
| **GSTD** | **Great Sitkin T** | **1.11** | **355** | | Pn | 17 15 54.8 | +0.3 |
| GSTD | | | | | Sn | 17 16 08.7 | -0.3 |
| **KIMD** | **Kanaga Island** | **1.13** | **317** | | Pn | 17 15 53.9 | -0.7 |
| KIMD | | | | | Sn | 17 16 09.3 | +0.1 |
| **GSTR** | **Great Sitkin T** | **1.15** | **358** | | Sn | 17 16 10.2 | +0.5 |
| **GSTR** | **Great Sitkin T** | **1.15** | **358** | | Pn | 17 15 55.3 | +0.3 |
| **KIWB** | **Kanaga Island** | **1.16** | **322** | | Pn | 17 15 54.2 | -0.9 |
| **KIRH** | **Kanaga Island** | **1.18** | **324** | | Pn | 17 15 54.9 | -0.4 |
| **KINC** | **Kanaga Island** | **1.21** | **324** | | Pn | 17 15 55.5 | -0.4 |
| **KICM** | **Kanaga Island** | **1.23** | **323** | | Pn | 17 15 56.1 | 0.0 |
| **TASE** | **Tanaga Southea** | **1.56** | **305** | | Pn | 17 16 01.1 | +0.5 |
| **TAFP** | **Tanaga Falls P** | **1.57** | **308** | | Pn | 17 16 01.0 | +0.2 |
| TAFP | | | | | Sn | 17 16 19.9 | -0.2 |
| **TANO** | **Tanaga North** | **1.65** | **307** | | Pn | 17 16 02.8 | +0.9 |
| **KOKL** | **Mount Kliuchef** | **1.77** | **38** | | Pn | 17 16 04.7 | +1.2 |
| **GAEA** | **Gareloi East** | **1.92** | **297** | | Pn | 17 16 06.4 | +0.8 |
| **GALAA** | **Gareloi Lava P** | **1.93** | **296** | | Pn | 17 16 06.6 | +0.9 |
| **GANE** | **Gareloi Northe** | **1.95** | **298** | | Pn | 17 16 07.0 | +1.0 |
| **AMKA** | **Amchitka** | **3.00** | **280** | Pn | Pn | 17 16 20.3 | 0.0 |
| **NIKH** | **Nikolski High** | **4.85** | **63** | Pn | Pn | 17 16 44.6 | -1.2 |
| **SPIA** | **Saint Paul Isl** | **7.09** | **26** | Pn | Pn | 17 17 20.4 | +3.8 |
| **CHGN** | **Chignik** | **11.71** | **56** | Pn | Pn | 17 18 19.9 | +0.1 |
| **M17K** | **Holitna River** | **14.64** | **37** | P | P | 17 19 05.8 | 0.0 |
| **KDAK** | **Kodiak Island** | **15.21** | **54** | Pn | Pn | 17 19 08.4 | +1.2

baz=18,slow=76,SNR=3.3
**H11S3 WAKE ISLAND Hy 35.19 209** T T 18 00 35.2
baz=18,slow=76,SNR=3.6
KURBB **Kurchatov Arra 60.69 315** P **P** **17 25 43.2 +0.1**
comp=Z,1.8nm,0.5s,baz=42,slow=6.5,SNR=16
comp=Z,1.8nm,0.5s
**MKAR Makanchi Array 61.67 310** P **P** **17 25 49.3 -0.6**
comp=Z,0.3nm,0.5s,baz=49,slow=5.4,SNR=6.3
comp=Z,0.3nm,0.5s
**BVAR Borovoye Array 62.34 321** P **P** **17 25 54.3 0.0**
comp=Z,0.8nm,0.3s,baz=52,slow=7.7,SNR=9.5
comp=Z,0.8nm,0.3s

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*IDC **29** 17:20:26.1±1.5, 15°.11S×173°.41W, h0km, mb3.9/4, mbtmp3.9/4, MS3.5/4, Error ellipse: s-maj=45.4km s-min=36.9km az=90.0*
**ISC 29 17:20:30.8±1.6, 15°.1S±0°.3×173°.4W±0°.3, h30km, n10, σ0°78/8, mb4.0/4, MS3.5/4, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPT** | **Papeete** | **23.03** | **99** | LR | LR | 17 31 28.1 | |
| | comp=Z,34nm,21.1s,baz=254,slow=29 | | | | | | |
| **URZ** | **Urewera** | **24.51** | **198** | P | **P** | **17 25 47.0** | **-0.5** |
| | 13nm,0.9s,baz=352,slow=3.1,SNR=2.0 | | | | | | |
| | 13nm,0.9s | | | | | | |
| **HNR** | **Honiara** | **26.60** | **279** | LR | LR | 17 35 18.9 | |
| | comp=Z,774nm,18.8s,baz=54,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.87** | **257** | P | **P** | **17 29 21.7** | **-0.1** |
| | 0.3nm,0.6s,baz=88,slow=7.2,SNR=6.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 30 42.6** | **+0.5** |
| | 0.5nm,0.8s,baz=94,slow=3.6,SNR=1.9 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **50.16** | **252** | P | **P** | **17 29 23.8** | **-0.2** |
| | 1.3nm,0.8s,baz=86,slow=8.2,SNR=24 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 30 43.6** | **+0.5** |
| | 0.4nm,0.8s,baz=95,slow=4.3,SNR=1.1 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **DAV** | **Davao City (W)** | **64.32** | **286** | LR | LR | 17 58 16.5 | |
| | comp=Z,21nm,18.0s,baz=166,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **74.91** | **180** | P | **P** | **17 32 09.1** | **+0.3** |
| | 1.0nm,0.8s,baz=23,slow=6.0,SNR=6.2 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **TIXI** | **Tiksi** | **94.73** | **344** | LR | LR | 18 10 54.4 | |
| | comp=Z,21nm,21.1s,baz=24,slow=32 | | | | | | |
| GERES | **GERESS Array B** | **145.87** | **352** | PKPbc | **PKPdf** | **17 40 05.5** | **-1.3** |
| | 0.3nm,0.5s,baz=15,slow=4.1,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.92** | **321** | PKPbc | **PKPdf** | **17 40 08.0** | **+0.7** |
| | 1.7nm,0.8s,baz=75,slow=4.7,SNR=10.0 | | | | | | |

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*IDC **29** 17:27:56.6±1.1, 51°.08N×176°.13W, h0km, mb3.9/22, mbtmp4.0/24, ML3.7/2, MS3.2/8, Error ellipse: s-maj=30.3km s-min=16.0km az=165.0*
*NEIC **29** 17:28:00.0±1.8, 50°.93N±0°.09×176°.02W±0°.08, h27km±9km, mb4.0/60, ML3.7(AEIC), Error ellipse: s-maj=13.6km s-min=6.5km az=163.0*
*AEIC **29** 17:28:00.6±1.8, 50°.99N±0°.03×176°.08W±0°.08, h33km±5km, Error ellipse: s-maj=7.1km s-min=4.5km az=72.0*
*MOS **29** 17:28:03.3±1.1, 51°.82N×176°.16W, h31km, mb4.4/11, Error ellipse: s-maj=14.5km s-min=9.1km az=105.8*
**ISC 29 17:28:00.8±0.6, 51°.02N±0°.07×176°.04W±0°.05, h28km, n160, σ1°35/152, mb4.2/38, MS3.0/7, 5C-9D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSCK** | **Great Sitkin C** | **1.00** | **355** | | **Pn** | **17 28 19.1** | **+0.1** |
| **GSMY** | **Great Sitkin M** | **1.03** | **359** | | **Pn** | **17 28 19.3** | **-0.1** |
| **GSTD** | **Great Sitkin T** | **1.04** | **356** | | **Pb** | **17 28 20.2** | **-0.1** |
| GSTD | | | | | **Sn** | **17 28 34.4** | **+1.1** |
| **KIMD** | **Kanaga Island** | **1.06** | **315** | | **Pn** | **17 28 19.4** | **-0.3** |
| KIMD | | | | | **Sb** | **17 28 34.4** | **+0.4** |
| **GSTR** | **Great Sitkin T** | **1.08** | **359** | Pn | **Pn** | **17 28 19.8** | **-0.3** |
| **GSSP** | **Great Sitkin S** | **1.08** | **355** | | **Pn** | **17 28 19.9** | **-0.2** |
| GSSP | | | | | **Sb** | **17 28 35.5** | **+0.9** |
| **KIWB** | **Kanaga Island** | **1.09** | **321** | Pn | **Pn** | **17 28 18.4** | **-1.9** |
| **KIRH** | **Kanaga Island** | **1.10** | **324** | | **Pn** | **17 28 20.2** | **-0.2** |
| **KICM** | **Kanaga Island** | **1.16** | **322** | | **Pn** | **17 28 21.2** | **+0.1** |
| **TASE** | **Tanaga Southea** | **1.50** | **304** | | **Pn** | **17 28 25.5** | **-0.4** |
| **TAFP** | **Tanaga Falls P** | **1.50** | **307** | | **Sn** | **17 28 45.3** | **+0.6** |
| **TANO** | **Tanaga North** | **1.58** | **305** | | **Pn** | **17 28 26.7** | **-0.3** |
| **KOKL** | **Mount Kliuchef** | **1.74** | **40** | | **Pn** | **17 28 29.6** | **+0.5** |
| **KOFP** | **Korovin Flat P** | **1.74** | **43** | | **Pn** | **17 28 29.9** | **+0.7** |
| **GAEA** | **Gareloi East** | **1.86** | **295** | | **Pn** | **17 28 31.1** | **+0.2** |
| GAEA | | | | | **Sn** | **17 28 55.1** | **+1.7** |
| **GASW** | **Gareloi Southw** | **1.92** | **294** | | **Pn** | **17 28 32.2** | **+0.5** |
| **AMKA** | **Amchitka** | **2.96** | **279** | Pn | **Pn** | **17 28 45.3** | **-0.6** |
| **NIKH** | **Nikolski High** | **4.85** | **63** | Pn | **Pn** | **17 29 11.9** | **0.0** |
| **OKTU** | **Okmok Mt. Tuli** | **5.46** | **61** | | **Pn** | **17 29 22.4** | **+2.2** |
| **MAPS** | **Pakushin South** | **6.23** | **60** | | **Pn** | **17 29 33.3** | **+2.5** |
| **UNV** | **Unalaska Valle** | **6.48** | **60** | Pn | **Pn** | **17 29 35.1** | **+0.9** |
| **LVA** | **Lava Point** | **6.86** | **59** | Pn | **Pn** | **17 29 38.1** | **-1.4** |
| **SPIA** | **Saint Paul Isl** | **7.04** | **27** | Pn | **Pn** | **17 29 44.9** | **+2.9** |
| **SDPT** | **Sand Point** | **10.29** | **59** | Pn | **Pn** | **17 30 27.1** | **+0.7** |
| **CNBA** | **Chernabura Isl** | **10.63** | **63** | Pn | **Pn** | **17 30 29.8** | **-1.3** |
| **CHGN** | **Chignik** | **11.70** | **56** | Pn | **Pn** | **17 30 46.3** | **+0.6** |
| **O14K** | **Tigyukauivet M** | **11.79** | **40** | Pn | **Pn** | **17 30 48.8** | **+1.9** |
| **N15K** | **Kwethluk River** | **12.82** | **38** | Pn | **Pn** | **17 31 02.5** | **+1.5** |
| **PLK4** | **Peulik 4** | **13.23** | **52** | Pn | **Pn** | **17 31 05.8** | **-0.9** |
| **O16K** | **Kokwok River B** | **13.31** | **43** | | **Pn** | **17 31 10.4** | **+2.8** |
| **K15K** | **Wolf Creek Mou** | **13.79** | **29** | Pn | **Pn** | **17 31 15.8** | **+1.6** |
| **M16K** | **Timber Creek** | **13.79** | **37** | Pn | **Pn** | **17 31 14.2** | **-0.1** |
| **SII** | **Sitkinak Islan** | **14.03** | **58** | Pn | **Pn** | **17 31 17.1** | **-0.4** |
| **L16K** | **Owhat River** | **14.05** | **34** | P | **P** | **17 31 25.4** | **+0.1** |
| **N17K** | **Nushagak Hills** | **14.20** | **41** | Pn | **Pn** | **17 31 21.7** | **+1.9** |
| **M17K** | **Holitna River** | **14.61** | **37** | Pn | **Pn** | **17 31 26.2** | **+0.8** |
| **OHAK** | **Old Harbor** | **14.67** | **56** | Pn | **Pn** | **17 31 25.9** | **-0.3** |
| **O18K** | **Koktuh Hills** | **14.71** | **45** | Pn | **Pn** | **17 31 27.6** | **+0.8** |
| **J16K** | **Anvik River** | **14.81** | **28** | | **P** | **17 31 35.2** | **+1.5** |
| **N18K** | **Kilae Creek** | **14.82** | **42** | Pn | **Pn** | **17 31 28.5** | **+0.2** |
| **Q19K** | **Cape Douglas,** | **15.04** | **50** | Pn | **Pn** | **17 31 30.7** | **-0.5** |
| **K17K** | **Iditarod** | **15.14** | **33** | Pn | **Pn** | **17 31 34.1** | **+1.7** |
| K17K | | | | IAmb | IAmb | 17 31 54.4 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **15.19** | **54** | Pn | **Pn** | **17 31 31.0** | **-2.2** |
| KDAK | | | | IAmb | IAmb | 17 31 46.5 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **15.19** | **54** | Pn | **Pn** | **17 31 31.5** | **-1.6** |
| | comp=Z,0.3nm,0.3s,baz=286,slow=4.0,SNR=14 | | | | | | |
| KDAK | | | | LR | LR | 17 37 56.5 | |
| | comp=Z,108nm,20.6s,baz=254,slow=39 | | | | | | |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **KDAK** | **Kodiak Island** | **15.19** | **54** | P | **Pn** | **17 31 31.0** | **-2.2** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **I17K** | **Unalakleet** | **15.25** | **26** | | **P** | **17 31 39.7** | **+1.1** |
| **J17K** | **VABM Dome** | **15.36** | **30** | | **P** | **17 31 40.1** | **+0.3** |
| **L18K** | **Granite Mounta** | **15.39** | **36** | Pn | **Pn** | **17 31 36.4** | **+0.7** |
| L18K | | | | IAmb | IAmb | 17 31 43.2 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **N19K** | **Bonanza Creek** | **15.48** | **42** | | **Pn** | **17 31 37.5** | **+0.4** |
| N19K | | | | IAmb | IAmb | 17 31 47.5 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **P19K** | **Oil Pt** | **15.52** | **47** | Pn | **Pn** | **17 31 38.4** | **+1.0** |
| P19K | | | | IAmb | IAmb | 17 32 05.2 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **SYI** | **Shuyak Island** | **15.54** | **52** | Pn | **Pn** | **17 31 37.3** | **-0.4** |
| **PET** | **Petropavlovsk** | **15.69** | **287** | Pn | **Pn** | **17 31 40.5** | **+0.9** |
| **PET** | **Petropavlovsk** | **15.69** | **287** | *eP* | **Pn** | **17 31 40.7** | **+1.1** |
| PET | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **L19K** | **White Mountain** | **16.06** | **38** | Pn | **Pn** | **17 31 45.4** | **+0.9** |
| L19K | | | | IAmb | IAmb | 17 31 51.3 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **J18K** | **Innoko River** | **16.18** | **32** | Pn | **Pn** | **17 31 46.7** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **16.26** | **288** | Pn | **Pn** | **17 31 46.5** | **-0.5** |
| | comp=Z,1.7nm,0.3s,baz=95,slow=15,SNR=51 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **CNPM** | **China Poot** | **16.41** | **49** | Pn | **Pn** | **17 31 47.2** | **-1.7** |
| CNPM | | | | IAmb | IAmb | 17 32 24.1 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **H18K** | **Honhosa River** | **16.87** | **26** | Pn | **Pn** | **17 31 54.8** | **+0.1** |
| H18K | | | | IAmb | IAmb | 17 32 23.3 | |
| | comp=Z,19nm,1.5s | | | | | | |
| **J19K** | **Poorman** | **16.89** | **32** | | **P** | **17 31 56.8** | **0.0** |
| **SKT** | **Skwentna** | **17.29** | **41** | | **Pn** | **17 31 58.9** | **-1.1** |
| **G18K** | **Tagagawik** | **17.36** | **24** | Pn | **Pn** | **17 32 00.1** | **-0.7** |
| **SUA** | **Susitna One** | **17.39** | **43** | Pn | **Pn** | **17 32 00.9** | **-0.4** |
| **H19K** | **Roundabout Mou** | **17.69** | **27** | | **P** | **17 32 06.0** | **+0.4** |
| **GHO** | **Glory Hole Cre** | **18.31** | **44** | | **Pn** | **17 32 11.1** | **-1.5** |
| **F19K** | **Shaleruckik Mo** | **18.32** | **23** | P | **Pn** | **17 32 12.1** | **-0.4** |
| **SML** | **Sawmill** | **18.59** | **44** | P | **P** | **17 32 14.8** | **-0.7** |
| SML | | | | IAmb | IAmb | 17 32 54.5 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **18.59** | **36** | P | **P** | **17 32 14.8** | **-0.7** |
| BPAW | | | | IAmb | IAmb | 17 32 27.2 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **GLI** | **Glacier Island** | **18.81** | **47** | P | **P** | **17 32 16.9** | **-1.0** |
| GLI | | | | IAmb | IAmb | 17 32 43.8 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **H21K** | **Melozitna River** | **18.89** | **30** | P | **P** | **17 32 19.2** | **+0.4** |
| **E19K** | **Redstone River** | **18.94** | **23** | P | **Pn** | **17 32 20.0** | **-0.1** |
| E19K | | | | IAmb | IAmb | 17 33 01.2 | |
| | comp=Z,17nm,1.5s | | | | | | |
| **HIN** | **Hinchinbrook I** | **18.95** | **49** | P | **P** | **17 32 16.9** | **-2.5** |
| HIN | | | | IAmb | IAmb | 17 32 53.1 | |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **RND** | **Reindeer** | **19.06** | **39** | P | **P** | **17 32 20.3** | **-0.4** |
| RND | | | | IAmb | IAmb | 17 32 23.5 | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **RND** | **Reindeer** | **19.06** | **39** | P | **P** | **17 32 20.3** | **-0.4** |
| RND | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **FID** | **Port Fidalgo** | **19.06** | **48** | P | **P** | **17 32 17.7** | **-2.9** |
| FID | | | | IAmb | IAmb | 17 32 21.6 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **19.15** | **340** | *eP* | **P** | **17 32 16.5** | **-5.0** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **MLY** | **Manley** | **19.20** | **33** | P | **P** | **17 32 22.9** | **+0.6** |
| **G21K** | **Allakaket** | **19.25** | **28** | | **P** | **17 32 22.1** | **-0.5** |
| **KLU** | **Klutina** | **19.55** | **46** | P | **P** | **17 32 25.6** | **-0.5** |
| KLU | | | | IAmb | IAmb | 17 33 00.2 | |
| | comp=Z,9.8nm,1.4s | | | | | | |
| **D19K** | **Kuna River** | **19.57** | **20** | P | **P** | **17 32 26.9** | **+0.8** |
| **F21K** | **Alatna River** | **19.74** | **26** | P | **Pn** | **17 32 29.2** | **-0.5** |
| F21K | | | | IAmb | IAmb | 17 32 30.9 | |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **19.75** | **34** | P | **P** | **17 32 26.9** | **-1.3** |
| I23K | | | | IAmb | IAmb | 17 32 31.1 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **MDM** | **Murphy Dome** | **20.06** | **35** | P | **P** | **17 32 31.5** | **0.0** |
| MDM | | | | IAmb | IAmb | 17 33 06.0 | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **H23K** | **Yukon River** | **20.07** | **32** | P | **P** | **17 32 30.1** | **-1.5** |
| H23K | | | | | **Pn** | **17 32 33.0** | **-0.6** |
| H23K | | | | IAmb | IAmb | 17 32 34.0 | |
| | comp=Z,7.5nm,0.9s | | | | | | |
| **N25K** | **Chitina, Valde** | **20.19** | **46** | P | **P** | **17 32 32.9** | **-0.1** |
| **PAX** | **Paxson** | **20.26** | **42** | P | **P** | **17 32 31.2** | **-2.6** |
| PAX | | | | IAmb | IAmb | 17 32 41.0 | |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **PAX** | **Paxson** | **20.26** | **42** | P | **P** | **17 32 31.2** | **-2.6** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **HDA** | **Harding Lake** | **20.27** | **38** | P | **P** | **17 32 34.0** | **+0.2** |
| HDA | | | | IAmb | IAmb | 17 32 54.4 | |
| | comp=Z,4.5nm,0.6s | | | | | | |
| **G23K** | **Bananza Creek** | **20.44** | **30** | IAmb | IAmb | 17 32 43.8 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **20.46** | **37** | P | **P** | **17 32 34.1** | **-1.8** |
| | comp=Z,0.9nm,0.5s,baz=236,slow=10,SNR=8.7 | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | |
| **E21K** | **Killik River** | **20.49** | **23** | P | **P** | **17 32 36.6** | **+0.4** |
| **GLB** | **Gilahina Butte** | **20.50** | **47** | P | **P** | **17 32 36.1** | **-0.3** |
| **MA2** | **Magadan** | **20.55** | **307** | P | **P** | **17 32 35.5** | **-1.4** |
| | comp=Z,2.9nm,0.8s,baz=126,slow=19,SNR=1.9 | | | | | | |
| MA2 | | | | LR | LR | 17 39 58.2 | |
| | comp=Z,44nm,18.3s,baz=107,slow=35 | | | | | | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **SEY** | **Seymchan** | **20.68** | **317** | P | **P** | **17 32 38.0** | **-0.3** |
| | comp=Z,3.1nm,1.0s,baz=128,slow=13,SNR=5.0 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **20.68** | **317** | *eP* | **P** | **17 32 35.4** | **-2.9** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.6s | | | | | | |
| **RIDG** | **Independent Ri** | **20.82** | **40** | P | **P** | **17 32 39.0** | **-0.8** |
| RIDG | | | | IAmb | IAmb | 17 32 57.6 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **J25K** | **Salcha River,** | **20.97** | **38** | IAmb | IAmb | 17 32 46.4 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **I28M** | **Miner Creek** | **23.42** | **38** | IAmb | IAmb | 17 33 10.7 | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **K29M** | **Barlow Dome** | **23.93** | **43** | | **P** | **17 33 11.4** | **-0.9** |
| K29M | | | | IAmb | IAmb | 17 33 15.6 | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **I29M** | **Ogilvie Camp,** | **24.04** | **39** | IAmb | IAmb | 17 33 27.7 | |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **J30M** | **Hart River** | **24.62** | **41** | | **P** | **17 33 18.3** | **-0.2** |
| J30M | | | | IAmb | IAmb | 17 33 23.2 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **G29M** | **Pine Creek** | **24.67** | **36** | | **P** | **17 33 19.2** | **+0.3** |
| **I30M** | **Mount Dempster** | **24.77** | **40** | | **P** | **17 33 19.8** | **-0.1** |
| **E29M** | **Blow River** | **25.29** | **32** | | **P** | **17 33 24.9** | **+0.5** |
| **G30M** | **tAoh Zraii Nji** | **25.36** | **36** | P | **P** | **17 33 25.9** | **+0.8** |
| G30M | | | | IAmb | IAmb | 17 33 36.0 | |
| | comp=Z,3.5nm,1.1s | | | | | | |
| **H31M** | **Peel River** | **25.74** | **39** | P | **P** | **17 33 27.3** | **-1.4** |
| H31M | | | | IAmb | IAmb | 17 33 52.6 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **G31M** | **Satah River** | **26.08** | **37** | P | **P** | **17 33 31.1** | **-0.4** |
| **YSS** | **Yuzh-Sakhalins** | **27.09** | **278** | *eP* | **P** | **17 33 43.5** | **+2.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **DLBC** | **Dease Lake** | **27.11** | **56** | LR | LR | 17 44 56.8 | |
| | comp=Z,72nm,19.4s,baz=268,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **30.96** | **312** | LR | LR | 17 45 45.0 | |
| | comp=Z,25nm,21.6s,baz=56,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **32.95** | **288** | LR | LR | 17 48 15.8 | |
| | comp=Z,31nm,19.1s,baz=112,slow=37 | | | | | | |
| **KLR** | **Kul'dur** | **32.95** | **288** | *dP* | **P** | **17 34 33.2** | **+0.5** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.01** | **210** | T | T | 18 11 20.4 | |
| | baz=18,slow=76,SNR=9.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.02** | **210** | T | T | 18 11 20.4 | |
| | baz=18,slow=76,SNR=8.4 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.02** | **210** | T | T | 18 11 19.8 | |
| | baz=18,slow=76,SNR=10.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.07** | **280** | P | **P** | **17 34 48.6** | **-2.5** |
| | comp=Z,1.6nm,0.6s,baz=59,slow=12,SNR=9.1 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **HEH** | **HeiHe** | **35.12** | **291** | *eP* | **P** | **17 34 51.0** | **-0.5** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.22** | **209** | T | T | 18 12 52.4 | |
| | baz=16 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.23** | **209** | T | T | 18 12 50.5 | |
| | baz=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.23** | **209** | T | T | 18 12 50.7 | |
| | baz=16 | | | | | | |
| **BNX** | **BinXian** | **37.14** | **285** | ⇓P | **P** | **17 35 08.0** | **-0.8** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **41.39** | **273** | P | **P** | **17 35 45.3** | **+1.0** |
| | comp=Z,1.3nm,0.7s,baz=54,slow=7.9,SNR=4.5 | | | | | | |
| KSRS | | | | LR | LR | 17 56 43.7 | |
| | comp=Z,8.4nm,18.0s,baz=220,slow=42 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **41.39** | **273** | *eP* | **P** | **17 35 48.6** | **+4.2** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **44.75** | **74** | P | **P** | **17 36 13.1** | **+1.3** |
| | comp=Z,1.1nm,0.6s,baz=301,slow=4.6,SNR=9.0 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **47.97** | **298** | ⇓P | **P** | **17 36 37.2** | **+0.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,2.5s | | | | | | |
| **SONM** | **Songino Array** | **48.36** | **298** | P | **P** | **17 36 40.2** | **+0.3** |
| | comp=Z,1.1nm,0.7s,baz=56,slow=9.1,SNR=5.3 | | | | | | |
| SONM | | | | LR | LR | 17 58 47.7 | |
| | comp=Z,53nm,18.3s,baz=98,slow=38 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **48.36** | **298** | *eP* | **P** | **17 36 41.9** | **+2.0** |
| **HHC** | **Hu-ho-hao-te** | **49.46** | **288** | *eP* | P | 17 36 43.8 | -4.6 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,52nm,4.2s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.84** | **357** | P | **P** | **17 36 59.2** | **+0.9** |
| | comp=Z,20nm,1.2s,baz=58,slow=8.0,SNR=5.1 | | | | | | |
| | comp=Z,20nm,1.2s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.53** | **315** | P | **P** | **17 37 31.8** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=42,slow=4.5,SNR=2.0 | | | | | | |
| ZALV | | | | PcP | **PcP** | **17 38 30.2** | **-2.4** |
| | comp=Z,0.8nm,0.6s,baz=29,slow=3.4,SNR=4.9 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **57.12** | **310** | *eP* | **P** | **17 37 44.8** | **+0.2** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.73** | **351** | P | **P** | **17 37 54.8** | **-0.6** |
| | comp=Z,1.9nm,0.9s,baz=31,slow=7.4,SNR=1.9 | | | | | | |
| ARCES | | | | PcP | **PcP** | **17 38 44.7** | **-0.3** |
| | comp=Z,2.4nm,0.9s,baz=22,slow=3.9,SNR=6.4 | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **60.52** | **315** | *deP* | **P** | **17 38 07.8** | **-0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.62** | **315** | P | **P** | **17 38 07.1** | **-1.6** |
| | comp=Z,5.0nm,0.5s,baz=43,slow=6.6,SNR=69 | | | | | | |
| KURBB | | | | PcP | **PcP** | **17 38 53.1** | **+0.3** |
| | comp=Z,0.3nm,0.3s,baz=39,slow=4.4,SNR=4.2 | | | | | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **SADO** | **Sadowa** | **60.65** | **54** | LR | LR | 18 05 53.7 | |
| | comp=Z,30nm,18.8s,baz=290,slow=38 | | | | | | |
| **MK31** | **Makanchi Array** | **61.61** | **310** | *deP* | **P** | **17 38 14.5** | **-1.0** |
| **MKAR** | **Makanchi Array** | **61.61** | **310** | P | **P** | **17 38 14.6** | **-0.9** |
| | comp=Z,1.0nm,0.5s,baz=46,slow=6.1,SNR=18 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.27** | **321** | P | **P** | **17 38 19.4** | **-0.5** |
| | comp=Z,2.3nm,0.3s,baz=52,slow=7.2,SNR=23 | | | | | | |
| BVAR | | | | PcP | **PcP** | **17 39 00.1** | **+0.7** |
| | comp=Z,1.1nm,0.5s,baz=34,slow=3.8,SNR=3.6 | | | | | | |
| | comp=Z,2.3nm,0.3s | | | | | | |
| **BRVK** | **Borovoye** | **62.29** | **321** | *eP* | **P** | **17 38 20.7** | **+0.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,2.5s | | | | | | |
| **PZH** | **PanZhiHua** | **65.12** | **282** | P | **P** | **17 38 35.8** | **-3.4** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.8s | | | | | | |
| **FINES** | **FINESS Array B** | **66.50** | **349** | P | **P** | **17 38 46.9** | **-0.4** |
| | comp=Z,0.4nm,0.5s,baz=353,slow=4.3,SNR=1.3 | | | | | | |
| FINES | | | | PcP | **PcP** | **17 39 16.9** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=20,slow=4.4,SNR=4.1 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **68.14** | **356** | P | **P** | **17 38 58.0** | **+0.2** |
| | comp=Z,0.3nm,0.5s,baz=6.9,slow=6.6,SNR=2.1 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **68.42** | **312** | *deP* | **P** | **17 39 00.9** | **+0.9** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,14nm,1.7s | | | | | | |
| **HFS** | **Hagfors** | **68.92** | **355** | P | **P** | **17 39 02.2** | **-0.4** |
| | comp=Z,1.2nm,0.5s,baz=12,slow=3.5,SNR=13 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **KSH** | **Kashi** | **70.10** | **309** | P | **P** | **17 39 14.5** | **+4.1** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.78** | **278** | P | **P** | **17 39 26.8** | **+0.1** |
| | comp=Z,0.8nm,0.3s,baz=25,slow=7.8,SNR=4.8 | | | | | | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.78** | **278** | *ceP* | **P** | **17 39 27.6** | **+0.9** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **73.85** | **4** | P | **P** | **17 39 32.9** | **+0.4** |
| | comp=Z,0.9nm,0.7s,baz=339,slow=4.5,SNR=3.7 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| AKASG | **Malin Array Be** | **76.40** | **344** | P | **P** | **17 39 46.4** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=3.3,slow=4.5,SNR=2.1 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **79.89** | **354** | ⇓*eP* | **P** | **17 40 05.5** | **-1.1** |
| KHC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| **VYHS** | **Vyhne** | **80.05** | **350** | *eP* | **P** | **17 40 05.0** | **-2.5** |
| **VYHS** | **Vyhne** | **80.05** | **350** | *eP* | **P** | **17 40 05.0** | **-2.5** |
| GERES | **GERESS Array B** | **80.17** | **353** | *eP* | **P** | **17 40 06.9** | **-1.3** |
| **WRA** | **Warramunga Arr** | **82.99** | **226** | P | **P** | **17 40 22.9** | **-0.4** |
| | comp=Z,0.3nm,0.8s,baz=32,slow=5.5,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |
| **BR131** | **Keskin Array S** | **85.97** | **337** | ⇓*eP* | **P** | **17 40 38.8** | **+0.4** |
| **BRTR** | **Keskin Array B** | **85.97** | **337** | P | **P** | **17 40 38.6** | **+0.2** |
| | comp=Z,1.3nm,0.8s,baz=27,slow=2.1,SNR=6.0 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **85.97** | **337** | *ceP* | **P** | **17 40 38.9** | **+0.5** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **89.42** | **6** | P | **P** | **17 40 55.3** | **+0.4** |
| | comp=Z,0.3nm,0.7s,baz=7.2,slow=3.6,SNR=2.8 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **H03N2** | **Juan Fernandez**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TSUM** | **Tsumeb** | **86.73** | **109** | LR | LR | 18 34 12.7 | |
| | comp=Z,34nm,18.3s,baz=353,slow=35 | | | | | | |
| **BOSA** | **Boshof** | **90.73** | **120** | LR | LR | 18 36 21.8 | |
| | comp=Z,37nm,18.8s,baz=191,slow=35 | | | | | | |
| **KDAK** | **Kodiak Island** | **97.11** | **328** | LR | LR | 18 41 24.4 | |
| | comp=Z,49nm,18.1s,baz=238,slow=36 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.78** | **282** | T | T | 20 16 15.3 | |
| | baz=98,slow=75,SNR=14 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.79** | **282** | T | T | 20 16 23.4 | |
| | baz=98,slow=75,SNR=11 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.80** | **282** | T | T | 20 16 35.7 | |
| | baz=98,slow=75,SNR=9.7 | | | | | | |
| **ASAR** | **Alice Springs** | **131.92** | **216** | PKP | **PKiKP** | **18 03 09.4** | **+1.7** |
| | 0.4nm,1.0s,baz=128,slow=1.5,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **134.54** | **219** | PKP | **PKPdf** | **18 03 11.1** | **-0.6** |
| | 0.5nm,0.8s,baz=154,slow=1.4,SNR=2.8 | | | | | | |

*ISK **29** 17:45:35.6,34˚.75N×32˚.40E,h4km,ML1.9/10*
*AFAD **29** 17:45:44.7±0.0,35˚.10N×32˚.83E,h9km±2km,ML1.6*

**NIC 29 17:45:38.1,34˚.89N×32˚.52E,h24km±1km,MI1.8/7,3C-1D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NATA** | **Nata** | **0.12** | **158** | ↑ *i* | P | Pb | 17 45 42.7 | -0.1 |
| NATA | | | | | S | Sb | 17 45 46.6 | +0.7 |
| NATA | | | | | AML | AML | 17 45 46.9 | |
| | 3.8nm,0.3s | | | | | | | |
| NATA | | | | | AML | AML | 17 45 47.0 | |
| | 3.4nm,0.2s | | | | | | | |
| **AKMS** | **Akamas** | **0.20** | **311** | ↑ *e* | P | Pb | 17 45 43.7 | +0.1 |
| AKMS | | | | | S | Sb | 17 45 48.0 | +0.7 |
| AKMS | | | | | AML | AML | 17 45 48.2 | |
| | 0.8nm,0.2s | | | | | | | |
| AKMS | | | | | AML | AML | 17 45 48.7 | |
| | 1.0nm,0.2s | | | | | | | |
| **ALFC** | **Alefka** | **0.27** | **14** | ↑ *i* | P | Pb | 17 45 44.9 | +0.2 |
| ALFC | | | | | S | Sb | 17 45 50.0 | +0.8 |
| ALFC | | | | | AML | AML | 17 45 51.2 | |
| | 0.4nm,0.1s | | | | | | | |
| ALFC | | | | | AML | AML | 17 45 54.1 | |
| | 0.4nm,0.2s | | | | | | | |
| **TROD** | **Troodos** | **0.29** | **79** | ↓ *i* | P | Pb | 17 45 45.1 | 0.0 |
| TROD | | | | | S | Sb | 17 45 50.4 | +0.5 |
| TROD | | | | | AML | AML | 17 45 52.3 | |
| | 0.2nm,0.1s | | | | | | | |
| TROD | | | | | AML | AML | 17 45 52.4 | |
| | 0.2nm,0.2s | | | | | | | |
| **LEF** | **Lefka** | **0.38** | **53** | | Pg | Pb | 17 45 46.2 | -0.2 |
| LEF | | | | | Sg | Sn | 17 45 54.2 | -0.7 |
| **LEF** | **Lefka** | **0.38** | **53** | | P | Pb | 17 45 46.2 | -0.1 |
| **ASGA** | **Asgata** | **0.61** | **100** | | P | Pn | 17 45 51.1 | -0.3 |
| ASGA | | | | | S | Sn | 17 46 01.4 | +0.9 |
| ASGA | | | | | AML | AML | 17 46 02.6 | |
| | 0.2nm,0.4s | | | | | | | |
| ASGA | | | | | AML | AML | 17 46 02.6 | |
| | 0.3nm,0.6s | | | | | | | |
| **CSS** | **Mathiatis** | **0.67** | **84** | | Pg | Pb | 17 45 51.7 | +0.4 |
| CSS | | | | | Sg | Sn | 17 46 03.2 | +1.1 |
| **CSS** | **Mathiatis** | **0.67** | **84** | | P | Pn | 17 45 52.1 | -0.1 |
| CSS | | | | | S | Sn | 17 46 03.6 | +1.6 |
| CSS | | | | | AML | AML | 17 46 06.1 | |
| CSS | | | | | AML | AML | 17 46 07.0 | |
| **MVOU** | **Mavrovouni** | **0.93** | **82** | | P | Pn | 17 45 56.3 | +0.6 |
| MVOU | | | | | S | Sn | 17 46 11.6 | +3.4 |
| MVOU | | | | | AML | AML | 17 46 14.2 | |
| MVOU | | | | | AML | AML | 17 46 15.4 | |
| **TEKE** | **Tekeli-Mersin** | **1.34** | **21** | | Pn | Pb | 17 46 04.0 | +1.4 |
| **GAZI** | **Gazipasa** | **1.35** | **353** | | Pn | Pb | 17 46 03.6 | +0.8 |
| **AKKU** | **Akkuyu-Mersin** | **1.52** | **33** | | Pn | Pb | 17 46 06.6 | +0.9 |
| **GULN** | **MERSIN_Gulnar** | **1.54** | **33** | | P | Pb | 17 46 06.5 | +0.5 |
| GULN | | | | | S | Sn | 17 46 23.8 | +0.4 |
| **IKL** | **Isikli** | **1.65** | **35** | | Pn | Pb | 17 46 08.5 | +0.7 |
| **TEVE** | **Tevekalti-Mers** | **1.72** | **26** | | Pn | Pb | 17 46 09.9 | +0.8 |
| **KEBE** | **Keben-Mersin** | **1.83** | **32** | | Pn | Pb | 17 46 11.5 | +0.4 |
| **KIZK** | **Mersin** | **2.07** | **39** | | Pn | Pb | 17 46 14.6 | -0.4 |
| **KIZK** | **Mersin** | **2.07** | **39** | | P | Pb | 17 46 14.5 | -0.5 |
| KIZK | | | | | S | Sn | 17 46 36.0 | -0.4 |
| KIZK | | | | | *i* AML | AML | 17 47 10.0 | |
| | comp=N,5.0nm,2.1s | | | | | | | |
| **HDMB** | **Hadim** | **2.07** | **359** | | Pn | Pb | 17 46 14.5 | -0.7 |
| **KERG** | **Konya-Eregli** | **2.84** | **27** | | P | Pb | 17 46 26.0 | -2.1 |
| KERG | | | | | S | Sb | 17 47 00.6 | -2.0 |
| KERG | | | | | *i* AML | AML | 17 47 05.0 | |
| | comp=E,3.5nm,0.5s | | | | | | | |
| KERG | | | | | *i* AML | AML | 17 47 56.0 | |
| | comp=N,3.1nm,2.6s | | | | | | | |

**IDC 29 17:50:07.2±5.9,28˚.96N×90˚.21E,h0km,mb3.5/2, mbtmp3.4/3,ML3.0/1,MS2.9/2,Error ellipse: s-maj=413.5km s-min=35.3km az=63.0,Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **18.85** | **343** | P | P | 17 54 28.9 | +0.1 |
| | baz=166,slow=10,SNR=3.0 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.28** | **353** | LR | LR | 18 06 43.1 | |
| | comp=Z,18nm,19.5s,baz=105,slow=39 | | | | | | |
| **JNU** | **Nakatsue** | **34.94** | **73** | LR | LR | 18 12 53.2 | |
| | comp=Z,23nm,19.0s,baz=217,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.63** | **134** | P | P | 18 00 47.4 | +0.6 |
| | 0.2nm,0.4s,baz=326,slow=6.6,SNR=12 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **67.12** | **137** | P | P | 18 01 02.2 | -0.7 |
| | 0.3nm,0.5s,baz=315,slow=5.7,SNR=8.9 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*NEIC **29** 18:18:18.6±1.9,22˚.9N±0˚.1×144˚.2E±0˚.2,h35km±2km, mb4.5/20,Error ellipse: s-maj=28.7km s-min=12.4km az=58.0*
*IDC **29** 18:18:19.5±3.6,22˚.91N×144˚.18E,h50km±32km,mb3.8/23, mbtmp4.1/26,ML3.3/3,MS3.3/10,Error ellipse: s-maj=21.8km s-min=13.8km az=85.0*

**ISC 29 18:18:17.8±0.6,22˚.95N±0˚.08×144˚.2E±0˚.1,h34km,n60, σ1§18/54,mb4.2/29,MS3.3/6,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **4.50** | **337** | Pn | **Pn** | **18 19 23.5** | **-0.1** |
| **JCJ** | **Chichijima** | **4.50** | **337** | P | Pn | 18 19 18.9 | -4.7 |
| | 52nm,0.6s,baz=198,slow=23,SNR=1.1 | | | | | | |
| JCJ | | | | S | **Sn** | **18 20 09.7** | **-5.1** |
| | 46nm,0.5s,baz=103,slow=23,SNR=1.6 | | | | | | |
| **GUMO** | **Guam** | **9.34** | **176** | LR | LR | 18 23 03.3 | |
| | comp=Z,52nm,20.9s,baz=5.0,slow=30 | | | | | | |
| **JGF** | **Kuroka** | **13.93** | **336** | Pn | **Pn** | **18 21 32.7** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **14.49** | **340** | P | **Pn** | **18 21 40.7** | **+0.2** |
| | 0.1nm,0.3s,baz=154,slow=10,SNR=10 | | | | | | |
| MJAR | | | | | LR | LR | 18 27 16.8 | |
| | comp=Z,92nm,18.2s,baz=184,slow=37 | | | | | | |
| | 2.6nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **14.50** | **340** | Pn | **Pn** | **18 21 42.4** | **+1.9** |
| **MJB9** | **Matsu-Tunnel** | **14.50** | **340** | Pn | **Pn** | **18 21 38.9** | **-1.7** |
| **JOW** | **Kunigami** | **14.93** | **288** | P | **Pn** | **18 21 48.3** | **+1.8** |
| | 0.2nm,0.3s,baz=54,slow=16,SNR=2.4 | | | | | | |
| JOW | | | | | LR | LR | 18 26 57.5 | |
| | comp=Z,210nm,19.5s,baz=89,slow=35 | | | | | | |
| | 11nm,0.9s | | | | | | |
| **JMM** | **Marumori** | **15.15** | **350** | Pn | **Pn** | **18 21 49.3** | **+0.1** |
| JMM | | | | | IAmb | IAmb | 18 21 57.4 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **JNU** | **Nakatsue** | **15.49** | **314** | Pn | **Pn** | **18 21 54.4** | **+0.6** |
| JNU | | | | | IAmb | IAmb | 18 22 00.8 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **JNU** | **Nakatsue** | **15.49** | **314** | P | **Pn** | **18 21 55.2** | **+1.5** |
| | comp=Z,0.2nm,0.3s,baz=56,slow=15,SNR=1.9 | | | | | | |
| JNU | | | | | LR | LR | 18 27 29.3 | |
| | comp=Z,53nm,18.8s,baz=144,slow=35 | | | | | | |
| | comp=Z,13nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **20.11** | **320** | P | **P** | **18 22 47.8** | **-0.8** |
| | comp=Z,1.7nm,0.6s,baz=143,slow=8.7,SNR=2.1 | | | | | | |
| KSRS | | | | | LR | LR | 18 29 56.1 | |
| | comp=Z,113nm,21.0s,baz=135,slow=35 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **KS19** | **Wonju Array Si** | **20.17** | **320** | | Pn | | 18 22 51.8 | +0.4 |
| KS19 | | | | | IAmb | IAmb | 18 23 10.6 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **ASAJ** | **Asahikawa** | **21.15** | **357** | P | **P** | **18 23 01.2** | **+1.4** |
| | comp=Z,5.2nm,1.0s,baz=162,slow=16,SNR=2.4 | | | | | | |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.40** | **94** | T | T | 18 45 12.6 | |
| | baz=283,slow=74,SNR=23 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.40** | **94** | T | T | 18 45 13.9 | |
| | baz=283,slow=74,SNR=20 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.42** | **94** | T | T | 18 45 14.3 | |
| | baz=283,slow=74,SNR=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.51** | **98** | T | T | 18 45 21.2 | |
| | baz=287 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.52** | **98** | T | T | 18 45 23.5 | |
| | baz=287 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.53** | **98** | T | T | 18 45 24.8 | |
| | baz=287 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **23.45** | **338** | P | **P** | **18 23 24.7** | **+0.6** |
| | comp=Z,6.0nm,0.9s,baz=140,slow=8.8,SNR=9.4 | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **DAV** | **Davao City (W)** | **23.86** | **231** | LR | LR | 18 30 53.8 | |
| | comp=Z,62nm,21.5s,baz=26,slow=32 | | | | | | |
| **KLR** | **Kul'dur** | **28.00** | **343** | P | **P** | **18 24 07.3** | **+1.9** |
| | comp=Z,8.4nm,0.7s,baz=146,slow=7.4,SNR=27 | | | | | | |
| | comp=Z,8.4nm,0.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **31.83** | **16** | P | **P** | **18 24 40.1** | **+0.9** |
| | comp=Z,2.4nm,0.9s,baz=187,slow=10,SNR=2.2 | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **UBPT** | **Khong Chiam** | **37.27** | **265** | P | **P** | **18 25 25.3** | **-1.4** |
| **SONM** | **Songino Array** | **38.98** | **319** | P | **P** | **18 25 41.7** | **+0.8** |
| | comp=Z,0.9nm,0.6s,baz=101,slow=7.5,SNR=7.1 | | | | | | |
| SONM | | | | | LR | LR | 18 41 58.6 | |
| | comp=Z,69nm,19.9s,baz=106,slow=36 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **YAK** | **Yakutsk** | **40.30** | **349** | P | **P** | **18 25 52.6** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** | **42.42** | **273** | P | **P** | **18 26 10.2** | **+0.7** |
| | comp=Z,0.7nm,0.5s,baz=60,slow=8.3,SNR=5.2 | | | | | | |
| CMAR | | | | | LR | LR | 18 42 09.2 | |
| | comp=Z,25nm,21.9s,baz=95,slow=34 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **43.67** | **193** | P | **P** | **18 26 17.9** | **-1.6** |
| **WRAB** | **Tennant Creek** | **43.69** | **193** | P | **P** | **18 26 18.9** | **-0.7** |
| **WB2** | **Warramunga Arr** | **43.70** | **193** | P | **P** | **18 26 19.0** | **-0.7** |
| WB2 | | | | | IAmb | IAmb | 18 26 23.6 | |
| | comp=Z,9.3nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.70** | **193** | P | **P** | **18 26 19.4** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=15,slow=9.1,SNR=52 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.64** | **205** | P | **P** | **18 26 28.4** | **+1.1** |
| **ASAR** | **Alice Springs** | **47.40** | **193** | P | **P** | **18 26 48.5** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=9.5,slow=8.1,SNR=9.4 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.81** | **321** | P | **P** | **18 27 37.2** | **+0.2** |
| | comp=Z,1.5nm,0.6s,baz=105,slow=8.7,SNR=6.8 | | | | | | |
| ZALV | | | | | PcP | **PcP** | **18 28 42.5** | **0.0** |
| | comp=Z,0.4nm,0.4s,baz=123,slow=5.3,SNR=1.9 | | | | | | |
| ZALV | | | | | LR | LR | 18 51 03.1 | |
| | comp=Z,41nm,20.8s,baz=97,slow=36 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.53** | **312** | P | **P** | **18 27 43.6** | **+1.2** |
| | comp=Z,2.0nm,0.6s,baz=94,slow=9.0,SNR=21 | | | | | | |
| MKAR | | | | | PcP | **PcP** | **18 28 45.4** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=86,slow=4.9,SNR=2.0 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **STKA** | **Stephens Creek** | **54.57** | **183** | P | **P** | **18 27 41.7** | **-1.0** |
| | comp=Z,3.4nm,1.0s,baz=356,slow=16,SNR=3.0 | | | | | | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **57.19** | **316** | P | **P** | **18 28 01.6** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **57.24** | **316** | P | **P** | **18 28 01.8** | **+0.1** |
| | comp=Z,2.5nm,0.9s,baz=93,slow=7.8,SNR=26 | | | | | | |
| KURBB | | | | | PcP | **PcP** | **18 28 56.3** | **+0.4** |
| | comp=Z,0.6nm,0.7s,baz=94,slow=3.9,SNR=2.1 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **60.51** | **27** | P | **P** | **18 28 24.5** | **+0.3** |
| | comp=Z,0.7nm,0.8s,baz=256,slow=6.2,SNR=6.2 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.32** | **319** | P | **P** | **18 28 37.4** | **+0.7** |
| | comp=Z,7.6nm,0.6s,baz=88,slow=7.5,SNR=37 | | | | | | |
| | comp=Z,7.6nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **62.38** | **319** | P | **P** | **18 28 37.6** | **+0.6** |
| BRVK | | | | | IAmb | IAmb | 18 28 38.9 | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **63.00** | **308** | P | **P** | **18 28 42.2** | **+0.8** |
| KKAR | | | | | IAmb | IAmb | 18 28 43.4 | |
| | comp=Z,3.7nm,0.9s | | | | | | |
| **GAR** | **Garm** | **63.72** | **303** | | **P** | **18 28 47.1** | **+0.7** |
| **CHGR** | **Chuyangaron** | **64.67** | **303** | | **P** | **18 28 53.5** | **+1.0** |
| **SIMJ** | **Simiganj** | **64.78** | **303** | | **P** | **18 28 53.9** | **+0.6** |
| SIMJ | | | | | IAmb | IAmb | 18 28 55.4 | |
| | comp=Z,9.4nm,0.8s | | | | | | |
| **KBL** | **Kabul** | **65.54** | **299** | P | **P** | **18 28 58.9** | **+0.5** |
| KBL | | | | | IAmb | IAmb | 18 29 00.2 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **ARU** | **Arti** | **68.80** | **324** | P | **P** | **18 29 18.6** | **+0.2** |
| ARU | | | | | IAmb | IAmb | 18 29 19.8 | |
| | comp=Z,5.6nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **69.29** | **316** | P | **P** | **18 29 21.6** | **0.0** |
| **ARCES** | **ARCESS Array B** | **78.03** | **342** | P | **P** | **18 30 10.9** | **-1.6** |
| | comp=Z,1.0nm,0.7s,baz=54,slow=8.4,SNR=1.6 | | | | | | |
| ARCES | | | | | LR | LR | 19 09 40.4 | |
| | comp=Z,35nm,19.6s,baz=186,slow=40 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.65** | **52** | P | **P** | **18 30 32.4** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=15,slow=3.7,SNR=8.8 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **82.16** | **314** | P | **P** | **18 30 36.1** | **+0.8** |
| | comp=Z,6.8nm,0.8s,baz=74,slow=3.0,SNR=14 | | | | | | |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **KIV** | **Kislovodsk** | **82.20** | **314** | P | **P** | **18 30 35.5** | **-0.1** |
| KIV | | | | | IAmb | IAmb | 18 30 47.1 | |
| | comp=Z,7.6nm,1.1s | | | | | | |
| **FINES** | **FINESS Array B** | **82.45** | **335** | P | **P** | **18 30 35.1** | **-1.4** |
| | comp=Z,1.5nm,0.7s,baz=65,slow=4.7,SNR=6.8 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **AKASG** | **Mai Array Be** | **87.02** | **325** | P | **P** | **18 30 57.9** | **-1.8** |
| | comp=Z,0.2nm,0.2s,baz=57,slow=3.4,SNR=6.6 | | | | | | |
| | comp=Z,0.2nm,0.2s | | | | | | |
| **HFS** | **Hagfors** | **87.93** | **338** | P | **P** | **18 31 03.3** | **-0.6** |
| | comp=Z,0.9nm,0.7s,baz=316,slow=4.0,SNR=1.7 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **88.11** | **339** | P | **P** | **18 31 04.8** | **0.0** |
| | comp=Z,1.5nm,1.1s,baz=46,slow=5.3,SNR=3.7 | | | | | | |
| | comp=Z,1.5nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **90.14** | **314** | P | **P** | **18 31 14.0** | **-1.0** |
| | comp=Z,0.9nm,0.8s,baz=62,slow=2.9,SNR=6.2 | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **145.87** | **130** | PKPbc | **PKPbc** | **18 37 53.9** | **0.0** |
| | comp=Z,3.9nm,1.1s,baz=209,slow=4.9,SNR=4.4 | | | | | | |
| **LPAZ** | **La Paz** | **148.91** | **84** | PKPbc | **PKiKP** | **18 38 05.0** | **0.0** |
| | comp=Z,1.0nm,0.6s,baz=207,slow=2.3,SNR=2.7 | | | | | | |

*IDC **29** 18:25:42.0±1.8,8˚.33S×120˚.50E,h0km,mb3.8/4, mbtmp3.9/6,ML4.1/2,Error ellipse: s-maj=224.3km s-min=20.4km az=55.0*
*DJA **29** 18:26:04.2±0.5,9˚.5S±4˚×12˚.1E±˚,h199km±7km,M3.9/15, mb4.0/2,MLv3.9/15*
*NEIC **29** 18:26:05.3±1.5,8˚.6S±0˚.1×121˚.2E±0˚.1,h193km±9km, mb4.1/11,Error ellipse: s-maj=22.3km s-min=17.6km az=62.0*

**ISC 29 18:26:03.7±0.6,8˚.55S±0˚.05×121˚.12E±0˚.05,h200km,n40, σ1§65/45,mb3.6/5,Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDFI** | **Ende, Flores** | **0.60** | **110** | P | **Pn** | **18 26 31.8** | **+0.4** |
| **MMRI** | **Maumere** | **1.11** | **95** | Pn | **Pn** | **18 26 34.8** | **+0.5** |
| **MMRI** | **Maumere** | **1.11** | **95** | P | **Pn** | **18 26 34.5** | **+0.2** |
| **BASI** | **Baing, Sumba** | **1.74** | **198** | P | **Pn** | **18 26 40.5** | **+0.8** |
| BASI | | | | S | **Sn** | **18 27 08.6** | **+0.8** |
| **WBSI** | **Waikabubak, Su** | **2.02** | **237** | P | **Pn** | **18 26 43.6** | **+1.1** |
| WBSI | | | | S | **Sn** | **18 27 12.1** | **-0.6** |
| **BSSI** | **Bau Bau, Buton** | **2.47** | **345** | P | **Pn** | **18 26 47.9** | **+0.6** |
| **BATI** | **Baumata** | **3.01** | **123** | P | **Pn** | **18 26 54.3** | **+0.8** |
| **PLAI** | **Plampang** | **3.31** | **265** | P | **Pn** | **18 26 59.3** | **+2.2** |
| **SOEI** | **Soe** | **3.34** | **111** | Pn | **Pn** | **18 26 58.1** | **+0.7** |
| **SOEI** | **Soe** | **3.34** | **111** | P | **Pn** | **18 26 58.2** | **+0.7** |
| **BKSI** | **Bulukumba** | **3.35** | **343** | P | **Pn** | **18 26 58.6** | **+1.0** |
| **BBSI** | **Bau Bau** | **3.37** | **26** | P | **Pn** | **18 26 58.3** | **+0.5** |
| **TWSI** | **Taliwang, Sumb** | **4.19** | **267** | P | **Pn** | **18 27 08.8** | **+0.9** |
| **BNSI** | **Bone** | **4.24** | **346** | P | **Pn** | **18 27 10.1** | **+1.6** |
| **SRBI** | **Singaraja** | **5.86** | **274** | P | **Pn** | **18 27 28.2** | **-1.0** |
| | 34nm,0.6s,0.2nm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **6.89** | **270** | Pn | **Pn** | **18 27 41.0** | **-1.6** |
| JAGI | | | | Sn | **Sn** | **18 28 56.2** | **-4.7** |
| **JAGI** | **Jajag, Banyuwa** | **6.89** | **270** | P | **Pn** | **18 27 41.6** | **-0.9** |
| **KNRA** | **Kununurra** | **10.30** | **134** | Pn | **Pn** | **18 28 25.2** | **-1.7** |
| **FITZ** | **Fitzroy Crossi** | **10.46** | **156** | Pn | **Pn** | **18 28 29.1** | **+0.2** |
| **MTN** | **Manton Dam** | **10.73** | **114** | Pn | **Pn** | **18 28 31.4** | **-1.0** |
| **FAKI** | **Fak Fak** | **12.40** | **64** | Pn | **Pn** | **18 28 52.9** | **-0.9** |
| **MBWA** | **Marble Bar** | **12.61** | **186** | P | **P** | **18 29 01.3** | **+1.2** |
| **PSA00** | **Pilbara Seismi** | **13.01** | **185** | P | **P** | **18 29 04.9** | **+0.3** |
| **KKM** | **Kota Kinabalu** | **15.30** | **341** | | **P** | **18 29 31.5** | **+1.5** |
| KKM | | | | IAmb | IAmb | 18 29 42.8 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **17.02** | **132** | P | **Pn** | **18 29 49.9** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 18 30 31.1 | |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.09** | **133** | P | **Pn** | **18 29 50.9** | **-0.3** |
| | comp=Z,0.5nm,0.3s,baz=307,slow=13,SNR=28 | | | | | | |
| WRA | | | | S | **S** | **18 32 52.4** | **-5.2** |
| | comp=Z,1.1nm,0.6s,baz=305,slow=26,SNR=2.8 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **17.09** | **133** | P | **Pn** | **18 29 50.9** | **-0.2** |
| WRAB | | | | IAmb | IAmb | 18 29 58.1 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **17.10** | **133** | | **Pn** | **18 29 51.1** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 18 29 58.8 | |
| | comp=Z,15nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **17.25** | **133** | P | **Pn** | **18 29 52.4** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 18 30 20.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **19.39** | **142** | | **Pn** | **18 30 16.7** | **-1.6** |
| AS31 | | | | IAmb | IAmb | 18 30 17.8 | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **19.39** | **142** | P | **Pn** | **18 30 16.9** | **-1.4** |
| | comp=Z,0.8nm,0.3s,baz=327,slow=12,SNR=70 | | | | | | |
| ASAR | | | | S | **S** | **18 33 41.2** | **-2.1** |
| | comp=Z,0.2nm,0.6s,baz=317,slow=22,SNR=4.3 | | | | | | |
| | comp=Z,1.6nm,0.3s | | | | | | |
| **COEN** | **Coen** | **22.29** | **106** | P | **P** | **18 30 45.8** | **+1.0** |
| **BBOO** | **Buckleboo** | **27.83** | **152** | P | **P** | **18 31 36.4** | **+1.8** |
| **STKA** | **Stephens Creek** | **30.02** | **143** | P | **P** | **18 31 53.8** | **-0.1** |
| **STKA** | **Stephens Creek** | **30.02** | **143** | P | **P** | **18 31 56.3** | **+2.3** |
| | comp=Z,1.4nm,0.3s,baz=311,slow=9.5,SNR=4.9 | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.03** | **332** | P | **P** | **18 36 21.5** | **-1.0** |
| | comp=Z,0.5nm,0.5s,baz=144,slow=8.1,SNR=7.0 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.38** | **338** | P | **P** | **18 36 47.9** | **-1.7** |
| | comp=Z,0.6nm,0.5s,baz=133,slow=6.3,SNR=2.6 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.51** | **333** | P | **P** | **18 36 49.7** | **-0.8** |
| | comp=Z,0.2nm,0.6s,baz=140,slow=5.9,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **SBA** | **Scott Base** | **73.10** | **171** | P | **P** | **18 37 14.8** | **+3.2** |
| SBA | | | | IAmb | IAmb | 18 37 38.8 | |
| | comp=Z,3.5nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.44** | **180** | P | **P** | **18 38 00.2** | **+1.9** |

**DJA 29 18:28:07.8±1.1,9˚S±16˚×11˚0E±˚,h49km±79km,M3.8/9, mb4.2/1,MLv3.5/9,South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UGM** | **Wanagama** | **1.25** | **17** | P | Pn | 18 28 29.3 | +0.4 |
| **YOGI** | **Yogyakarta** | **1.29** | **6** | P | Pn | 18 28 29.7 | +0.2 |
| YOGI | | | | S | Sn | 18 28 45.6 | -0.1 |
| **PWJI** | **Pagerwojo** | **1.96** | **57** | P | Pn | 18 28 38.4 | -0.2 |
| PWJI | | | | S | Sn | 18 29 00.3 | -1.7 |
| **SMRI** | **Semarang** | **2.07** | **8** | P | Pn | 18 28 40.8 | +0.7 |
| **CMJI** | **Cimerak** | **2.14** | **308** | P | Pn | 18 28 41.1 | +0.1 |
| **NGJI** | **Ngawi** | **2.16** | **37** | P | Pn | 18 28 40.7 | -0.7 |
| **CNJI** | **Cibinong** | **3.48** | **301** | P | Pn | 18 28 59.1 | -0.4 |
| **KASI** | **Kota Agung** | **6.64** | **302** | P | Pn | 18 29 42.8 | -0.1 |

**DJA 29 18:29:04.9±0.7,1˚N±4˚×12˚5E±˚,h21km±7km,M3.9/13, mb4.0/2,MLv3.8/13,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **1.42** | **252** | P | Pn | 18 29 29.7 | +0.3 |
| KMSI | | | | S | Sb | 18 29 48.3 | 0.0 |
| **GTOI** | **Gorontalo** | **2.35** | **261** | P | Pn | 18 29 44.0 | +1.7 |
| GTOI | | | | S | Sb | 18 30 13.7 | -1.4 |
| **LBMI** | **Labuha** | **2.72** | **127** | P | Pn | 18 29 47.5 | +0.1 |
| **SANI** | **Sanana** | **3.11** | **168** | P | Pn | 18 29 51.5 | -1.3 |
| **LUWI** | **Luwuk** | **3.27** | **231** | P | Pn | 18 29 56.1 | +1.1 |
| **MRSI** | **Marisa** | **3.43** | **261** | P | Pn | 18 29 58.4 | +1.2 |
| **NLAI** | **Namlea** | **4.58** | **157** | P | Pn | 18 30 12.3 | -0.6 |
| **MPSI** | **Mapaga** | **5.47** | **263** | P | Pn | 18 30 24.4 | -0.9 |
| | 11nm,0.9s,0.0nm | | | | | | |

*IDC **29** 18:29:11.8±2.1,51˚.61N×176˚.37W,h0km,mb3.7/10, mbtmp3.8/11,MS3.3/4,Error ellipse: s-maj=60.0km s-min=23.0km az=178.0*
*AEIC **29** 18:29:12.8±1.5,50˚.97N±0˚.08×176˚.08W±0˚.08,h42km±9km, Error ellipse: s-maj=11.6km s-min=6.7km az=170.0*
*NEIC **29** 18:29:13.2±2.0,50˚.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **E24K** | **Your Creek** | **21.78** | **28** | P | | **P** | **18 33 58.1** | **-3.7** |
| **K27K** | **Chicken** | **22.11** | **41** | P | | **P** | **18 34 04.7** | **-0.7** |
| K27K | | | | IAmb | | IAmb | 18 34 48.4 | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| **EGAK** | **Eagle** | **22.75** | **39** | P | | **P** | **18 34 12.7** | **+0.5** |
| **BBB** | **Bella Bella** | **29.43** | **69** | LR | | LR | 18 44 43.2 | |
| | comp=Z,27nm,18.8s,baz=342,slow=32 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.97** | **209** | T | | T | 19 12 29.5 | |
| | baz=18,slow=76,SNR=17 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.98** | **209** | T | | T | 19 12 31.8 | |
| | baz=18,slow=76,SNR=13 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.99** | **209** | T | | T | 19 12 30.1 | |
| | baz=18,slow=76,SNR=14 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.01** | **280** | P | | **P** | **18 36 03.3** | **+0.9** |
| | comp=Z,1.0nm,0.7s,baz=59,slow=9.5,SNR=5.6 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.18** | **209** | T | | T | 19 14 09.0 | |
| | baz=18,slow=76,SNR=6.7 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.20** | **209** | T | | T | 19 14 08.6 | |
| | baz=18,slow=76,SNR=3.7 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.20** | **209** | T | | T | 19 14 10.6 | |
| | baz=18,slow=76,SNR=3.6 | | | | | | | |
| **PDAR** | **Pinedale Array** | **44.81** | **73** | P | | **P** | **18 37 26.5** | **+2.4** |
| | comp=Z,0.5nm,0.6s,baz=285,slow=7.0,SNR=5.5 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.49** | **315** | P | | **P** | **18 38 43.2** | **-1.3** |
| | comp=Z,0.5nm,0.5s,baz=46,slow=12,SNR=2.0 | | | | | | | |
| ZALV | | | | PcP | | **PcP** | **18 39 46.4** | **+2.2** |
| | comp=Z,0.4nm,0.4s,baz=43,slow=6.5,SNR=1.7 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.58** | **315** | P | | **P** | **18 39 20.5** | **+0.3** |
| | comp=Z,2.8nm,0.5s,baz=43,slow=6.6,SNR=18 | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.57** | **310** | P | | **P** | **18 39 26.9** | **-0.1** |
| | comp=Z,0.5nm,0.6s,baz=47,slow=6.5,SNR=6.5 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.24** | **321** | P | | **P** | **18 39 31.6** | **+0.2** |
| | comp=Z,1.3nm,0.4s,baz=50,slow=7.3,SNR=10.0 | | | | | | | |
| | comp=Z,1.3nm,0.4s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **64.61** | **64** | LR | | LR | 19 08 38.3 | |
| | comp=Z,24nm,18.2s,baz=290,slow=37 | | | | | | | |
| **HFS** | **Hagfors** | **68.93** | **355** | P | | **P** | **18 40 15.0** | **+0.7** |
| | comp=Z,0.5nm,0.4s,baz=358,slow=10,SNR=5.6 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **GERES** | **GERESS Array B** | **80.17** | **353** | LR | | LR | 19 18 38.4 | |
| | comp=Z,16nm,18.4s,baz=88,slow=37 | | | | | | | |
| **BRTR** | **Keskin Array B** | **85.95** | **337** | P | | **P** | **18 41 51.2** | **+1.1** |
| | comp=Z,0.8nm,0.7s,baz=23,slow=3.9,SNR=5.7 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **ESDC** | **Sonseca Array** | **89.43** | **6** | LR | | LR | 19 22 54.8 | |
| | comp=Z,16nm,18.4s,baz=96,slow=36 | | | | | | | |

**NOU 29 18:31:07.1, 22°.95S × 172°.07E, h0 km, mb4.5/6, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PINNC** | **Pines Island,** | **4.28** | **274** | P | Pn | 18 32 13.3 | -0.2 |
| **YATNC** | **Mamie plateau,** | **4.87** | **279** | P | Pn | 18 32 20.5 | -1.2 |
| **LIFNC** | **LIFOU** | **4.98** | **295** | P | Pn | 18 32 23.0 | -0.2 |
| **DZM** | **Mont Dzumac** | **5.28** | **278** | P | Pn | 18 32 27.4 | +0.1 |
| **NOUC** | **Port Laguerre** | **5.40** | **278** | P | Pn | 18 32 29.1 | +0.2 |
| **KOUNC** | **Koumac, New Ca** | **7.62** | **287** | P | Pn | 18 32 59.4 | 0.0 |

**NAM 29 18:31:20.9±4.3, 19°.74S × 14°.50E, h23 km ± 14 km, ML0.8, 13C-7D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ST3N** | **ST3** | **0.00** | **24** | ⇑ | *i* P | Pb | 18 31 26.9 | +1.8 |
| ST3N | | | | | *i* S | Sb | 18 31 28.5 | +0.6 |
| ST3N | | | | | *i* S | | 18 31 28.7 | |
| ST3N | | | | | IAML | | 18 31 29.1 | |
| | comp=Z,7.6nm,0.0s | | | | | | | |
| **ST3N** | **ST3** | **0.00** | **24** | ⇑ | P | Pb | 18 31 26.8 | +1.8 |
| ST3N | | | | | *i* S | Sb | 18 31 28.5 | +0.6 |
| ST3N | | | | | *i* S | | 18 31 28.7 | |
| ST3N | | | | | IAML | | 18 31 29.1 | |
| | comp=Z,7.5nm,0.0s | | | | | | | |
| **ST9N** | **ST9** | **0.07** | **141** | ⇓ | *i* P | Pb | 18 31 25.8 | +0.6 |
| ST9N | | | | | *i* S | Sb | 18 31 26.9 | -1.3 |
| ST9N | | | | | IAML | | 18 31 27.6 | |
| | comp=Z,153nm,0.1s | | | | | | | |
| **ST9N** | **ST9** | **0.07** | **141** | ⇓ | P | Pb | 18 31 25.8 | +0.5 |
| ST9N | | | | | *i* S | Sb | 18 31 26.9 | -1.3 |
| ST9N | | | | | IAML | | 18 31 27.6 | |
| | comp=Z,151nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.11** | **87** | ⇓ | *i* P | Pb | 18 31 26.3 | +0.8 |
| ST1N | | | | | *i* S | Sb | 18 31 27.7 | -1.0 |
| ST1N | | | | | *i* S | Sb | 18 31 27.7 | -1.0 |
| ST1N | | | | | IAML | | 18 31 28.0 | |
| | comp=Z,22nm,0.1s | | | | | | | |
| **ST1N** | **ST1** | **0.11** | **87** | ⇑ | P | Pb | 18 31 26.3 | +0.7 |
| ST1N | | | | | *i* S | Sb | 18 31 27.7 | -1.0 |
| ST1N | | | | | *i* S | Sb | 18 31 27.7 | -1.0 |
| ST1N | | | | | IAML | | 18 31 28.0 | |
| | comp=Z,22nm,0.0s | | | | | | | |
| **ST6N** | **ST6** | **0.11** | **238** | ⇓ | *i* P | Pn | 18 31 27.9 | +0.5 |
| ST6N | | | | | *i* S | Sb | 18 31 30.5 | +1.8 |
| ST6N | | | | | IAML | | 18 31 30.7 | |
| | comp=Z,11nm,0.0s | | | | | | | |
| **ST6N** | **ST6** | **0.11** | **238** | ⇓ | *i* P | Pn | 18 31 27.9 | +0.5 |
| ST6N | | | | | *i* S | Sb | 18 31 30.4 | +1.6 |
| ST6N | | | | | *i* S | | 18 31 30.5 | |
| ST6N | | | | | IAML | | 18 31 30.7 | |
| | comp=Z,11nm,0.0s | | | | | | | |
| **ST8N** | **ST8** | **0.18** | **287** | ⇑ | *i* P | Pn | 18 31 29.9 | +1.6 |
| ST8N | | | | | *i* S | Sb | 18 31 33.6 | +3.7 |
| ST8N | | | | | *i* S | | 18 31 33.6 | |
| ST8N | | | | | IAML | | 18 31 34.3 | |
| | comp=Z,1.2nm,0.0s | | | | | | | |
| **ST8N** | **ST8** | **0.18** | **287** | ⇑ | *i* P | Pn | 18 31 29.9 | +1.6 |
| ST8N | | | | | *i* S | Sb | 18 31 33.6 | +3.8 |
| ST8N | | | | | *i* S | | 18 31 33.9 | |
| ST8N | | | | | IAML | | 18 31 34.1 | |
| | comp=Z,1.2nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.21** | **153** | ⇑ | *i* P | Pb | 18 31 26.8 | +0.1 |
| ST2N | | | | | *i* S | Sb | 18 31 28.5 | -1.9 |
| ST2N | | | | | *i* S | | 18 31 28.6 | |
| ST2N | | | | | IAML | | 18 31 29.1 | |
| | comp=Z,35nm,0.1s | | | | | | | |
| **ST2N** | **ST2** | **0.21** | **153** | ⇑ | *i* P | Pb | 18 31 26.8 | +0.1 |
| ST2N | | | | | *i* S | Sb | 18 31 28.5 | -1.9 |
| ST2N | | | | | *i* S | | 18 31 28.6 | |
| ST2N | | | | | IAML | | 18 31 29.1 | |
| | comp=Z,36nm,0.1s | | | | | | | |
| **ST5N** | **ST5** | **0.25** | **101** | ⇑ | *i* P | Pb | 18 31 27.6 | +0.4 |
| ST5N | | | | | *i* S | Sb | 18 31 29.8 | -1.6 |
| ST5N | | | | | IAML | | 18 31 30.0 | |
| | comp=Z,12nm,0.0s | | | | | | | |
| **ST5N** | **ST5** | **0.25** | **101** | ⇑ | *i* P | Pb | 18 31 27.6 | +0.5 |
| ST5N | | | | | *i* S | Sb | 18 31 29.8 | -1.6 |
| ST5N | | | | | IAML | | 18 31 30.0 | |
| | comp=Z,12nm,0.0s | | | | | | | |
| **ST10N** | **ST10** | **0.27** | **202** | ⇑ | *i* P | Pn | 18 31 29.3 | -0.3 |
| ST10N | | | | | *i* S | Sb | 18 31 32.9 | +0.9 |
| ST10N | | | | | *i* S | Sn | 18 31 33.0 | -2.1 |
| ST10N | | | | | IAML | | 18 31 33.9 | |
| | comp=Z,12nm,0.1s | | | | | | | |
| **ST10N** | **ST10** | **0.27** | **202** | ⇑ | *i* P | Pn | 18 31 29.3 | -0.3 |
| ST10N | | | | | *i* S | Sb | 18 31 32.9 | +0.9 |
| ST10N | | | | | *i* S | Sn | 18 31 33.0 | -2.1 |
| ST10N | | | | | IAML | | 18 31 33.9 | |
| | comp=Z,12nm,0.0s | | | | | | | |
| **ST11N** | **ST11** | **0.34** | **75** | ⇑ | *i* P | Pn | 18 31 29.9 | -0.6 |
| ST11N | | | | | *i* S | Sb | 18 31 34.5 | +0.8 |
| ST11N | | | | | IAML | | 18 31 34.7 | |
| | comp=Z,3.0nm,0.1s | | | | | | | |
| **ST11N** | **ST11** | **0.34** | **75** | ⇓ | *i* P | Pn | 18 31 30.3 | -0.3 |
| ST11N | | | | | *i* S | Sb | 18 31 34.5 | +0.8 |
| ST11N | | | | | IAML | | 18 31 34.7 | |
| | comp=Z,3.0nm,0.0s | | | | | | | |
| **ST4N** | **ST4** | **0.47** | **108** | ⇑ | *i* P | Pb | 18 31 31.4 | +0.7 |
| ST4N | | | | | *i* S | Sb | 18 31 36.3 | -1.0 |
| ST4N | | | | | IAML | | 18 31 37.4 | |
| | comp=Z,2.6nm,0.0s | | | | | | | |
| **ST4N** | **ST4** | **0.47** | **108** | ⇓ | P | Pb | 18 31 31.4 | +0.7 |
| ST4N | | | | | IAML | | 18 31 37.4 | |
| | comp=Z,2.6nm,0.0s | | | | | | | |

*UPA **29** 18:32:30.8±1.3, 8°.63N × 77°.32W, h8 km ± 6 km, MW4.1*
*RSNC **29** 18:32:31.9±0.0, 9°N±1° × 7°.7W±°, h8 km ± 1 km, M3.3, ML3.1*

**ISC 29 18:32:29.7±1.4, 8°.66N±0°.03 × 77°.24W±0°.02, h15 km ± 11 km, n35, σ1°44/62, Panama-Colombia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CAPC** | **Capurgana** | **0.11** | **260** | P | | **Pb** | **18 32 33.8** | **+0.3** |
| CAPC | | | | S | | **Sb** | **18 32 36.6** | **+0.6** |
| **UPD2** | **Meteti** | **0.77** | **262** | *e*P | | **Pg** | **18 32 44.4** | **-0.3** |
| UPD2 | | | | *i* S | | **Sg** | **18 32 55.4** | **+0.5** |
| **LCBC** | **Los crdobas,** | **0.89** | **77** | P | | **Pn** | **18 32 48.5** | **+0.8** |
| LCBC | | | | S | | **Sn** | **18 33 01.1** | **+0.8** |
| **LCBC** | **Los crdobas,** | **0.89** | **77** | *i* P | | **Pn** | **18 32 49.2** | **+1.5** |
| LCBC | | | | *i* S | | **Sn** | **18 33 04.5** | **+4.3** |
| **APAC** | **Apartado, Choc** | **1.00** | **139** | P | | **Pn** | **18 32 49.9** | **+0.7** |
| APAC | | | | S | | **Sn** | **18 33 08.1** | **+5.1** |
| **TOTI** | **Torti** | **1.09** | **285** | *e*P | | **Pb** | **18 32 49.1** | **-1.1** |
| TOTI | | | | *e*S | | **Sb** | **18 33 03.1** | **-1.1** |
| **PTAC** | **Punta Ardita,** | **1.60** | **200** | P | | **Pn** | **18 32 57.1** | **-0.3** |
| PTAC | | | | S | | **Sn** | **18 33 17.9** | **+0.1** |
| **PTAC** | **Punta Ardita,** | **1.60** | **200** | *e*P | | **Pn** | **18 32 57.5** | **+0.1** |
| PTAC | | | | *e*S | | **Sn** | **18 33 18.2** | **+0.4** |
| **URCC** | **San Jos de Ur** | **1.92** | **118** | P | | **Pn** | **18 33 01.8** | **0.0** |
| URCC | | | | S | | **Sn** | **18 33 24.8** | **-0.9** |
| **URCC** | **San Jos de Ur** | **1.92** | **118** | *e*P | | **Pn** | **18 33 02.3** | **+0.5** |
| URCC | | | | *e*S | | **Sn** | **18 33 25.3** | **-0.4** |
| **CHPO** | **Chepo, Panama** | **1.92** | **286** | *e*S | | **Sn** | **18 33 26.4** | **+0.7** |
| **DBBC** | **Dabeiba** | **1.92** | **148** | P | | **Pn** | **18 33 02.3** | **+0.3** |
| DBBC | | | | S | | **Sb** | **18 33 28.7** | **+0.3** |
| **UPA** | **Univ. de Panam** | **2.29** | **278** | *e*P | | **Pn** | **18 33 07.8** | **+0.9** |
| UPA | | | | *e*S | | **Sn** | **18 33 35.1** | **+0.3** |
| **SJCC** | **San Jacinto, C** | **2.38** | **59** | P | | **Pn** | **18 33 08.1** | **-0.2** |
| SJCC | | | | S | | **Sn** | **18 33 37.6** | **+0.3** |
| **BCIP** | **Isla Barro Col** | **2.61** | **281** | P | | **Pn** | **18 33 12.3** | **+0.9** |
| BCIP | | | | S | | **Sn** | **18 33 43.3** | **+0.4** |
| **BCIP** | **Isla Barro Col** | **2.61** | **281** | *e*P | | **Pn** | **18 33 11.9** | **+0.6** |
| BCIP | | | | *e*S | | **Sn** | **18 33 43.2** | **+0.4** |
| **ZARC** | **Zaragoza, Cauc** | **2.63** | **116** | P | | **Pn** | **18 33 12.0** | **+0.4** |
| ZARC | | | | S | | **Sn** | **18 33 41.9** | **-1.4** |
| **HELC** | **Santa Helena** | **2.98** | **145** | P | | **Pn** | **18 33 17.1** | **+0.3** |
| HELC | | | | S | | **Sn** | **18 33 54.1** | **+1.6** |
| **CBOC** | **Ciudad Bolivar** | **3.03** | **156** | P | | **Pn** | **18 33 19.9** | **+2.6** |
| CBOC | | | | S | | **Sb** | **18 33 58.3** | **-2.1** |
| **AZU** | **Azuero** | **3.12** | **254** | P | | **Pn** | **18 33 18.8** | **+0.5** |
| AZU | | | | S | | **Sn** | **18 33 54.1** | **-1.3** |
| **AZU** | **Azuero** | **3.12** | **254** | *e*P | | **Pn** | **18 33 19.2** | **+0.9** |
| **CHIT3** | **Chitre** | **3.22** | **258** | *e*P | | **Pn** | **18 33 20.1** | **+0.4** |
| **PTBC** | **PUERTO BERRIO,** | **3.47** | **127** | P | | **Pn** | **18 33 23.2** | **0.0** |
| PTBC | | | | S | | **Sn** | **18 34 03.0** | **-1.1** |
| **CACAO** | **El Cacao, Vera** | **3.81** | **250** | P | | **Pn** | **18 33 28.4** | **+0.5** |
| **PLMC** | **San Jos del P** | **3.85** | **166** | P | | **Pn** | **18 33 29.3** | **+0.9** |
| **BRJC** | **Barrancabermej** | **3.85** | **115** | P | | **Pn** | **18 33 29.8** | **+1.4** |
| BRJC | | | | S | | **Sn** | **18 34 14.7** | **+1.3** |
| **NORC** | **Norcasia** | **3.87** | **142** | P | | **Pn** | **18 33 30.3** | **+1.5** |
| **SMRC** | **Santa Marta, M** | **3.88** | **50** | P | | **Pn** | **18 33 31.8** | **+2.9** |
| **OCAC** | **Ocana** | **3.91** | **96** | P | | **Pn** | **18 33 29.9** | **+0.6** |
| OCAC | | | | S | | **Sn** | **18 34 13.0** | **-2.0** |
| **SPBC** | **San Pablo de B** | **4.34** | **133** | P | | **Pn** | **18 33 35.2** | **0.0** |
| SPBC | | | | S | | **Sn** | **18 34 23.4** | **-2.2** |
| **BARC** | **Barichara** | **4.52** | **117** | P | | **Pn** | **18 33 38.8** | **+1.0** |
| BARC | | | | S | | **Sn** | **18 34 29.0** | **-1.2** |
| **PAMC** | **Pamplona, Colo** | **4.69** | **106** | P | | **Pn** | **18 33 41.4** | **+1.0** |
| PAMC | | | | S | | **Sn** | **18 34 34.2** | **-0.5** |
| **YOTC** | **Yotoco, Valle** | **4.73** | **169** | P | | **Pn** | **18 33 41.7** | **+1.1** |
| **CRJC** | **Cerrejon, Guaj** | **4.90** | **61** | P | | **Pn** | **18 33 42.3** | **-0.6** |
| CRJC | | | | S | | **Sn** | **18 34 36.1** | **-3.3** |
| **RUSC** | **La Rusia** | **4.96** | **123** | P | | **Pn** | **18 33 44.5** | **+0.4** |
| RUSC | | | | S | | **Sn** | **18 34 40.2** | **-1.2** |

*IDC **29** 18:44:43.5±2.1, 5°.66S × 151°.66E, h43 km ± 18 km, mb4.1/18, mbtmp4.3/19, ML2.8/1, MS3.4/10, Error ellipse: s-maj=18.1km s-min=13.0km az=98.0*
*NEIC **29** 18:44:44.8±1.1, 5°.74S±0°.07 × 151°.8E±0°.1, h56 km ± 13 km, mb4.8/22, Error ellipse: s-maj=15.9km s-min=9.3km az=101.0*

**ISC 29 18:44:45.1±0.5, 5°.69S±0°.05 × 151°.65E±0°.07, h57 km, n56, σ1°09/57, mb4.5/26, MS3.5/7, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.57** | **19** | | | **Pn** | **18 45 10.4** | **-0.3** |
| RABL | | | | | Sn | **Sn** | **18 45 28.2** | **-1.9** |
| **MANU** | **Manus Island** | **5.60** | **310** | | | **Pn** | **18 46 06.5** | **+0.7** |
| **PMG** | **Port Moresby** | **5.78** | **230** | | | **Pn** | **18 46 08.1** | **-0.3** |
| **PMG** | **Port Moresby** | **5.78** | **230** | P | | **Pn** | **18 46 07.9** | **-0.4** |
| | 15nm,0.3s,baz=32,slow=17,SNR=32 | | | | | | | |
| PMG | | | | S | | **Sn** | **18 47 13.5** | **+0.2** |
| | 135nm,0.4s,baz=295,slow=22,SNR=10.0 | | | | | | | |
| PMG | | | | LR | | LR | 18 48 16.9 | |
| | comp=Z,189nm,21.7s,baz=19,slow=37 | | | | | | | |
| | 54nm,0.4s | | | | | | | |
| **HNR** | **Honiara** | **9.03** | **115** | LR | | LR | 18 50 18.8 | |
| | comp=Z,2μm,19.3s,baz=198,slow=37 | | | | | | | |
| **COEN** | **Coen** | **11.71** | **225** | Pn | | **Pn** | **18 47 30.0** | **+0.5** |
| **CTA** | **Charters Tower** | **15.24** | **200** | P | | **P** | **18 48 19.8** | **-1.0** |
| | 0.2nm,0.7s,baz=7.8,slow=18,SNR=2.3 | | | | | | | |
| CTA | | | | LR | | LR | 18 53 59.5 | |
| | comp=Z,15nm,18.4s,baz=30,slow=36 | | | | | | | |
| **CTAO** | **Charters Tower** | **15.24** | **200** | P | | **P** | **18 48 21.7** | **+0.9** |
| **EIDS** | **Eidsvold** | **19.58** | **182** | | | **P** | **18 49 08.7** | **+0.2** |
| **GUMO** | **Guam** | **20.30** | **341** | P | | **P** | **18 49 17.6** | **+1.2** |
| GUMO | | | | IAmb | | IAmb | 18 49 19.8 | |
| | comp=Z,61nm,0.9s | | | | | | | |
| **GUMO** | **Guam** | **20.30** | **341** | P | | **P** | **18 49 16.6** | **+0.2** |
| | comp=Z,56nm,0.8s,baz=169,slow=9.0,SNR=6.5 | | | | | | | |
| GUMO | | | | LR | | LR | 18 57 44.3 | |
| | comp=Z,60nm,18.1s,baz=158,slow=38 | | | | | | | |
| | comp=Z,56nm,0.8s | | | | | | | |
| **MTN** | **Manton Dam** | **21.45** | **249** | P | | **P** | **18 49 29.0** | **+0.2** |
| **DZM** | **Mont Dzumac** | **21.68** | **140** | P | | **P** | **18 49 31.7** | **+0.4** |
| | comp=Z,4.4nm,0.6s,baz=37,slow=4.0,SNR=3.0 | | | | | | | |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **WB0** | **Warramunga Arr** | **21.85** | **229** | P | | **P** | **18 49 32.6** | **-0.6** |
| WB0 | | | | IAmb | | IAmb | 18 49 36.0 | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **WR0** | **Warramunga Arr** | **21.86** | **228** | P | | **P** | **18 49 33.7** | **+0.5** |
| WR0 | | | | IAmb | | IAmb | 18 49 36.1 | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **21.99** | **228** | P | | **P** | **18 49 33.8** | **-0.8** |
| WRAB | | | | IAmb | | IAmb | 18 49 37.2 | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **21.99** | **228** | P | | **P** | **18 49 34.0** | **-0.6** |
| WB2 | | | | IAmb | | IAmb | 18 49 37.4 | |
| | comp=Z,28nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.00** | **228** | P | | **P** | **18 49 34.0** | **-0.7** |
| | comp=Z,29nm,0.7s,baz=53,slow=9.8,SNR=93 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **18 53 31.9** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=42,slow=2.2,SNR=2.5 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **18 57 05.8** | **+1.6** |
| | comp=Z,1.3nm,0.8s,baz=48,slow=2.7,SNR=6.3 | | | | | | | |
| | comp=Z,29nm,0.7s | | | | | | | |
| **KNRA** | **Kununurra** | **24.55** | **244** | P | | **P** | **18 49 59.4** | **-0.4** |
| KNRA | | | | IAmb | | IAmb | 18 50 27.7 | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **ARMA** | **Armidale** | **24.60** | **180** | P | | **P** | **18 49 58.2** | **-2.0** |
| ARMA | | | | IAmb | | IAmb | 18 50 06.9 | |
| | comp=Z,66nm,1.9s | | | | | | | |
| **AS31** | **Alice Springs** | **24.72** | **222** | P | | **P** | **18 50 01.4** | **+0.1** |
| **ASAR** | **Alice Springs** | **24.73** | **222** | P | | **P** | **18 50 01.4** | **+0.2** |
| | comp=Z,13nm,0.7s,baz=57,slow=8.8,SNR=174 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **18 53 38.7** | **+1.5** |
| | comp=Z,0.3nm,0.7s,baz=41,slow=3.0,SNR=1.4 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **18 57 14.3** | **+2.9** |
| | comp=Z,0.7nm,0.9s,baz=46,slow=2.1,SNR=4.3 | | | | | | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **SOEI** | **Soe** | **27.42** | **260** | | | **P** | **18 50 26.0** | **+0.1** |
| SOEI | | | | IAmb | | IAmb | 18 51 01.5 | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **27.70** | **199** | P | | **P** | **18 50 27.2** | **-0.8** |
| **STKA** | **Stephens Creek** | **27.70** | **199** | P | | **P** | **18 50 26.9** | **-1.1** |
| | comp=Z,2.2nm,0.7s,baz=5.9,slow=11,SNR=3.7 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.23** | **242** | P | | **P** | **18 50 31.9** | **-0.9** |
| **MSVF** | **Nonsavu** | **28.44** | **117** | P | | **P** | **18 50 35.3** | **+0.4** |
| | comp=Z,11nm,0.5s,baz=89,slow=23,SNR=4.8 | | | | | | | |
| | comp=Z,11nm,0.5s | | | | | | | |
| **DAV** | **Davao City (W)** | **28.94** | **296** | LR | | LR | 19 01 53.1 | |
| | comp=Z,40nm,18.3s,baz=108,slow=36 | | | | | | | |
| **BBOO** | **Buckleboo** | **30.65** | **206** | P | | **P** | **18 50 52.8** | **-1.4** |
| **FORT** | **Forrest** | **33.38** | **219** | P | | **P** | **18 51 17.6** | **-0.6** |
| **MBWA** | **Marble Bar** | **34.54** | **241** | P | | **P** | **18 51 27.1** | **-1.3** |
| **MBWA** | **Marble Bar** | **34.54** | **241** | P | | **P** | **18 51 27.7** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **34.59** | **240** | P | | **P** | **18 51 28.0** | **-0.8** |
| PSA00 | | | | IAmb | | IAmb | 18 52 25.6 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **34.59** | **240** | P | | **P** | **18 51 27.2** | **-1.6** |
| PSA00 | | | | IAmb | | IAmb | 18 52 25.0 | |
| | comp=Z,36nm,1.3s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **37.24** | **288** | P | | **P** | **18 51 51.7** | **0.0** |
| KKM | | | | IAmb | | IAmb | 18 53 09.5 | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **37.30** | **264** | P | | **P** | **18 51 49.7** | **-2.4** |
| **JOW** | **Kunigami** | **39.46** | **326** | P | | **P** | **18 52 10.1** | **+0.1** |
| **JOW** | **Kunigami** | **39.46** | **326** | P | | **P** | **18 52 09.8** | **-0.3** |
| | comp=Z,7.1nm,0.8s,baz=117,slow=12,SNR=2.4 | | | | | | | |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.73** | **342** | P | | **P** | **18 53 55.6** | **+1.6** |
| | comp=Z,1.2nm,0.7s,baz=153,slow=9.7,SNR=3.1 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.22** | **296** | P | | **P** | **18 54 28.4** | **+1.4** |
| | comp=Z,0.4nm,0.3s,baz=114,slow=4.4,SNR=1.4 | | | | | | | |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.80** | **4** | P | | **P** | **18 54 38.1** | **+0.7** |
| | comp=Z,1.8nm,0.6s,baz=145,slow=6.3,SNR=4.8 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **61.41** | **185** | P | | **P** | **18 54 56.4** | **+1.4** |
| **SONM** | **Songino Array** | **66.47** | **329** | P | | **P** | **18 55 28.6** | **-0.1** |
| | comp=Z,2.0nm,0.6s,baz=139,slow=5.2,SNR=13 | | | | | | | |
| SONM | | | | LR | | LR | 19 24 06.0 | |
| | comp=Z,38nm,19.6s,baz=190,slow=36 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **CCD** | **Concordia, Ant** | **71.24** | **187** | P | | **P** | **18 55 59.6** | **+1.3** |
| **MKAR** | **Makanchi Array** | **80.24** | **319** | LR | | LR | 19 32 09.1 | |
| | comp=Z,22nm,19.7s,baz=166,slow=36 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.26** | **327** | P | | **P** | **18 56 53.0** | **-1.9** |
| | comp=Z,1.2nm,0.6s,baz=115,slow=6.5,SNR=5.7 | | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.41** | **22** | P | | **P** | **18 57 05.3** | **-0.7** |
| | comp=Z,0.9nm,0.5s,baz=254,slow=5.0,SNR=9.5 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.79** | **322** | P | | **P** | **18 57 06.7** | **-1.5** |
| | comp=Z,0.2nm,0.3s,baz=98,slow=3.7,SNR=4.1 | | | | | | | |
| KURBB | | | | LR | | LR | 19 35 26.1 | |
| | comp=Z,23nm,19.5s,baz=167,slow=36 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.28** | **180** | P | | **P** | **18 57 10.6** | **0.0** |
| | comp=Z,3.2nm,0.8s,baz=352,slow=1.9,SNR=17 | | | | | | | |
| | comp=Z,3.2nm,0.8s | | | | | | | |
| **MAW** | **Mawson** | **84.31** | **203** | P | | **P** | **18 57 11.1** | **+0.6** |
| | comp=Z,0.7nm,0.3s,baz=256,slow=9.5,SNR=1.9 | | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **84.44** | **314** | LR | | LR | 19 36 06.4 | |
| | comp=Z,21nm,18.9s,baz=116,slow=36 | | | | | | | |
| **BVAR** | **Borovoye Array** | **89.26** | **323** | P | | **P** | **18 57 33.0** | **-1.9** |
| | comp=Z,1.0nm,0.6s,baz=49,slow=6.5,SNR=5.4 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.53** | **52** | P | | **P** | **18 57 55.2** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=249,slow=6.5,SNR=3.7 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **96.66** | **320** | LR | | LR | 19 42 33.8 | |
| | comp=Z,20nm,20.2s,baz=58,slow=36 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.47** | **286** | PKPbc | | **PKPbc** | **19 04 28.4** | **-0.6** |
| | comp=Z,2.3nm,0.6s,baz=83,slow=2.4,SNR=30 | | | | | | | |
| **BDFB** | **Brasilia** | **151.22** | **138** | PKPbc | | **PKPbc** | **19 04 32.2** | **-1.1** |
| | comp=Z,3.7nm,0.6s,baz=166,slow=4.2,SNR=5.1 | | | | | | | |

*IDC **29** 18:51:10.8±1.9, 36°.01N × 140°.17E, h78 km ± 16 km, mb3.5/10, mbtmp3.8/14, MS3.2/2, Error ellipse: s-maj=22.0km s-min=13.2km az=64.0*
*NEIC **29** 18:51:11.0±1.0, 36°.05N±0°.06 × 140°.11E±0°.09, h72 km ± 1 km, mb4.4/12, Error ellipse: s-maj=11.4km s-min=8.4km az=114.0*
*NIED **29** 18:51:11.0, 36°.02N × 140°.08E, h61 km, MW3.8, Moment Tensor Solution. s3 Moment tensor: Scale 10^14 Nm; Mrr5.71; Mθθ-0.30; Mφφ-5.41; Mrθ-0.37; Mrφ-0.74; Mθφ3.26; Fault plane solution: M06.50000×10^14 NP1:φs1.00000°, δ60.00000°, λ83.00000°. NP2:φs195.00000°, δ31.00000°, λ102.00000°.*
*JMA **29** 18:51:11.0±0.1, 36°.0N±0°.3 × 140°.1E±0°.4, h61 km, MV3.5/38, SOUTHERN IBARAKI PREF*
*JMA Felt I J1 at SOUTHERN IBARAK

**MAKZ Makanchi 44.02 303 P P 18 59 09.7 -1.1**
**PMG Port Moresby 45.62 170** LR LR 19 18 36.7
comp=Z,110nm,19.0s,baz=122,slow=36
**KURK Kurchatov 45.77 309** P P **18 59 24.4 -0.2**
KURK IAmb IAmb 18 59 26.2
comp=Z,7.4nm,0.9s
**KURBB Kurchatov Arra 45.84 309** P P **18 59 24.8 -0.3**
comp=Z,3.0nm,0.7s,baz=86,slow=8.2,SNR=27
comp=Z,3.0nm,0.7s
**H18K Honhosa River 46.09 31 P P 18 59 28.2 +1.4**
**ACHA Angle Creek He 47.10 41** P P **18 59 33.7 -1.2**
ACHA IAmb IAmb 18 59 34.8
comp=Z,7.6nm,1.4s
**BVAR Borovoye Array 50.52 313** P P **19 00 01.4 +0.3**
comp=Z,0.6nm,0.4s,baz=82,slow=7.1,SNR=4.9
comp=Z,0.6nm,0.4s
**ILAR Eielson Array 50.94 32** P P **19 00 04.1 0.0**
comp=Z,0.7nm,0.8s,baz=272,slow=6.1,SNR=5.3
comp=Z,0.7nm,0.8s
**I30M Mount Dempster 55.31 31** P P **19 00 38.1 +1.8**
**WB0 Warramunga Arr 55.70 187** P P **19 00 39.4 -0.1**
WB0 IAmb IAmb 19 01 14.9
comp=Z,7.4nm,1.4s
**G31M Satah River 55.80 28** P P **19 00 40.3 +0.7**
G31M IAmb IAmb 19 00 41.6
comp=Z,5.5nm,1.2s
**WRAB Tennant Creek 55.87 187** P P **19 00 40.6 -0.1**
WRAB IAmb IAmb 19 00 42.1
comp=Z,2.7nm,1.1s
**WR0 Warramunga Arr 55.88 186** P P **19 00 40.8 +0.1**
**WRA Warramunga Arr 55.88 187** P P **19 00 40.1 -0.7**
comp=Z,0.9nm,0.6s,baz=1.7,slow=7.5,SNR=26
comp=Z,0.9nm,0.6s
**ABKAR Akbulak array 57.83 310** P P **19 00 54.2 0.0**
ABKAR IAmb IAmb 19 01 28.0
comp=Z,1.6nm,0.8s
**ASAR Alice Springs 59.61 187** P P **19 01 07.2 +0.4**
comp=Z,0.2nm,0.5s,baz=19,slow=12,SNR=9.2
comp=Z,0.2nm,0.5s
**MBWA Marble Bar 60.02 202** P P **19 01 09.7 +0.1**
**AKASG Malin Array Be 74.49 322** P P **19 02 40.1 -0.8**
comp=Z,0.4nm,0.5s,baz=47,slow=5.4,SNR=4.3
comp=Z,0.4nm,0.5s
**NB2 NORSAR Subarra 74.75 337** P P **19 02 42.3 0.0**
comp=Z,3.6nm,1.1s,baz=40,slow=5.9
**NOA NORSAR Array B 74.75 337** P P **19 02 42.3 0.0**
comp=Z,0.2nm,0.4s,baz=43,slow=5.7,SNR=3.9
comp=Z,0.2nm,0.4s

*NEIC **29** 18:54:17.5±1.6, 19°.9S×0°.2×177°.4W±0°.1, h316km±8km, mb4.3/37, Error ellipse: s-maj=27.2km s-min=8.7km az=144.0*
*IDC **29** 18:54:18.1±4.8, 19°.74S×177°.56W, h336km±48km, mb3.6/9, mbtmp4.4/10, Error ellipse: s-maj=22.0km s-min=17.5km az=17.0*
*NOU **29** 18:54:20.6, 19°.91S×177°.41W, h337km, mb4.5/12, Fiji Islands Region*
**ISC 29 18:54:15.5±0.5, 19°.95S±0°.08×177°.44W±0°.07, h300km, n80, σ2°.49/76, mb4.1/21, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **7.14** | **84** | P | Pn | 18 56 04.0 | +5.4 |
| **NIUE** | **Niue** | **7.14** | **84** | | **Pn** | **18 56 01.1** | **+2.5** |
| NIUE | | | | | **S** | **18 57 23.7** | **+1.7** |
| **AFI** | **Afiamalu** | **8.09** | **43** | | **Pn** | **18 56 10.7** | **+0.3** |
| **RTV** | **Rentapao** | **13.55** | **277** | P | **Pn** | **18 57 21.1** | **+4.3** |
| **MARNC** | **Mare, Loyalty** | **13.68** | **261** | P | **Pn** | **18 57 21.6** | **+3.2** |
| **DVP** | **Devils Point** | **13.79** | **277** | P | **Pn** | **18 57 23.9** | **+4.2** |
| **PINNC** | **Pines Island,** | **14.34** | **257** | P | **Pn** | **18 57 29.3** | **+3.1** |
| **DZM** | **Mont Dzumac** | **15.20** | **259** | P | **Pn** | **18 57 39.1** | **+2.6** |
| **DZM** | **Mont Dzumac** | **15.20** | **259** | P | **Pn** | **18 57 38.7** | **+2.2** |
| | 23nm,0.7s,baz=85,slow=18,SNR=19 | | | | | | |
| **OUZ** | **Omahuta** | **17.15** | **206** | P | **Pn** | **18 58 00.8** | **+1.8** |
| **MXZ** | **Matakaoa Point** | **17.94** | **191** | P | **P** | **18 58 00.4** | **-4.0** |
| **URZ** | **Urewera** | **18.85** | **193** | P | **P** | **18 58 17.1** | **+2.9** |
| | 35nm,1.7s | | | | | | |
| **URZ** | **Urewera** | **18.85** | **193** | P | **P** | **18 58 15.9** | **+1.8** |
| | 8.8nm,0.4s,baz=31,slow=2.5,SNR=20 | | | | | | |
| URZ | | | | S | **S** | **19 01 28.0** | **-4.3** |
| | 18nm,1.0s,baz=292,slow=21,SNR=1.8 | | | | | | |
| **RTZ** | **Ruatahuna** | **19.22** | **193** | P | **P** | **18 58 13.8** | **-4.4** |
| **BKZ** | **Black Stump Fm** | **19.86** | **194** | P | **P** | **18 58 27.5** | **+2.6** |
| | 12nm,1.6s | | | | | | |
| **BFZ** | **Birch Farm** | **21.36** | **193** | P | **P** | **18 58 42.7** | **+3.1** |
| | 46nm,1.7s | | | | | | |
| **BFZ** | **Birch Farm** | **21.36** | **193** | P | **P** | **18 58 37.0** | **-2.7** |
| **MRZ** | **Mangatainoka R** | **21.49** | **195** | P | P | 18 58 35.4 | -5.5 |
| **QRZ** | **Quartz Range** | **22.51** | **200** | P | **P** | **18 58 52.6** | **+2.6** |
| | 59nm,2.1s | | | | | | |
| **QRZ** | **Quartz Range** | **22.51** | **200** | P | **P** | **18 58 51.0** | **+1.0** |
| **TUWZ** | **Tuamarina** | **22.64** | **197** | P | **P** | **18 58 47.7** | **-3.4** |
| **THZ** | **Tophouse** | **23.24** | **199** | P | **P** | **18 58 56.0** | **-0.7** |
| **DSZ** | **Denniston Nort** | **23.57** | **200** | P | **P** | **18 59 01.9** | **+2.1** |
| **GVZ** | **Greta Valley S** | **24.31** | **197** | P | **P** | **18 59 06.1** | **-0.3** |
| **LTZ** | **Lake Taylor** | **24.36** | **199** | P | **P** | **18 59 04.7** | **-2.2** |
| **INZ** | **Inchbonnie** | **24.57** | **200** | P | **P** | **18 59 03.8** | **-4.9** |
| **JCZ** | **Jackson Bay** | **26.67** | **202** | P | **P** | **18 59 29.7** | **+2.2** |
| **WHZ** | **Wether Hill Ro** | **28.54** | **202** | P | **P** | **18 59 45.6** | **+1.6** |
| **EIDS** | **Eidsvold** | **29.50** | **254** | P | **P** | **18 59 52.3** | **-0.4** |
| **ARMA** | **Armidale** | **29.78** | **243** | P | **P** | **18 59 55.9** | **+0.6** |
| ARMA | | | | | IAmb IAmb | 19 00 07.4 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **33.26** | **236** | P | **P** | **19 00 25.6** | **+0.2** |
| **CTA** | **Charters Tower** | **34.07** | **263** | P | **P** | **19 00 31.8** | **-0.8** |
| | comp=Z,0.3nm,0.5s,baz=92,slow=9.5,SNR=10 | | | | | | |
| **CTAO** | **Charters Tower** | **34.07** | **263** | P | **P** | **19 00 32.2** | **-0.3** |
| CTAO | | | | | IAmb IAmb | 19 01 04.5 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **TOO** | **Toolangi** | **36.65** | **233** | P | **P** | **19 00 54.9** | **+0.8** |
| TOO | | | | | IAmb IAmb | 19 01 19.1 | |
| | comp=Z,24nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **38.50** | **244** | P | **P** | **19 01 09.9** | **+0.2** |
| **STKA** | **Stephens Creek** | **38.50** | **244** | P | **P** | **19 01 09.3** | **-0.3** |
| | comp=Z,2.9nm,0.4s,baz=92,slow=9.7,SNR=11 | | | | | | |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **43.27** | **243** | P | **P** | **19 01 47.7** | **-0.6** |
| BBOO | | | | | IAmb IAmb | 19 01 47.9 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **45.16** | **256** | P | **P** | **19 02 02.4** | **-1.0** |
| | comp=Z,9.9nm,0.6s,baz=92,slow=8.2,SNR=205 | | | | | | |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.18** | **262** | P | **P** | **19 02 02.0** | **-1.5** |
| WB0 | | | | | IAmb IAmb | 19 02 14.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.20** | **261** | P | **P** | **19 02 02.1** | **-1.6** |
| | comp=Z,5.9nm,0.6s,baz=97,slow=8.1,SNR=12 | | | | | | |
| | comp=Z,5.9nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **50.00** | **246** | P | **P** | **19 02 39.0** | **-1.1** |
| **NWAO** | **Narrogin (SRO)** | **59.09** | **243** | P | **P** | **19 03 44.3** | **-0.8** |
| **CASY** | **Casey** | **64.69** | **205** | P | **P** | **19 04 21.2** | **-0.3** |
| CASY | | | | | IAmb IAmb | 19 04 22.3 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.08** | **323** | P | P | 19 04 52.2 | -3.4 |
| | comp=Z,2.0nm,0.6s,baz=160,slow=5.8,SNR=7.6 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.12** | **180** | P | **P** | **19 04 56.3** | **+0.7** |
| QSPA | | | | | IAmb IAmb | 19 05 30.9 | |
| | comp=Z,8.6nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **70.12** | **180** | P | **P** | **19 04 56.0** | **+0.4** |
| | comp=Z,2.5nm,0.8s,baz=50,slow=0.7,SNR=11 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.88** | **345** | P | **P** | **19 05 26.6** | **-2.4** |
| | comp=Z,2.7nm,0.6s,baz=119,slow=8.4,SNR=4.7 | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.26** | **43** | P | **P** | **19 05 52.6** | **-1.0** |
| | comp=Z,1.2nm,0.7s,baz=228,slow=8.4,SNR=8.5 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **KVN** | **Kaiserville** | **80.75** | **43** | P | **P** | **19 05 55.2** | **-0.9** |
| **N15K** | **Kwethluk River** | **81.07** | **9** | P | **P** | **19 05 56.1** | **-0.9** |
| **O18K** | **Koktuh Hills** | **81.56** | **11** | P | **P** | **19 05 56.9** | **-2.8** |
| **L16K** | **Owhat River** | **82.64** | **9** | P | **P** | **19 06 04.6** | **-0.5** |
| **I07A** | **Izee** | **82.83** | **38** | P | **P** | **19 06 05.5** | **-1.2** |
| I07A | | | | | IAmb IAmb | 19 06 06.8 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **KNB** | **Kanab** | **83.14** | **47** | P | **P** | **19 06 08.4** | **-0.2** |
| **U15A** | **North Rim** | **83.20** | **47** | P | **P** | **19 06 08.9** | **-0.1** |
| **J16K** | **Anvik River** | **84.00** | **8** | P | **P** | **19 06 12.2** | **+0.1** |
| **SCM** | **Sheep Creek Mo** | **84.97** | **14** | P | **P** | **19 06 14.2** | **-2.8** |
| SCM | | | | | IAmb IAmb | 19 06 15.8 | |
| | comp=Z,8.1nm,1.2s | | | | | | |
| **K20K** | **Telida** | **85.03** | **10** | P | P | 19 06 14.0 | -3.1 |
| **J19K** | **Poorman** | **85.38** | **9** | P | **P** | **19 06 18.9** | **0.0** |
| **VHRN** | **Van Horn** | **85.91** | **55** | P | **P** | **19 06 22.7** | **+0.2** |
| VHRN | | | | | IAmb IAmb | 19 06 23.2 | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array 86.31** | | **57** | P | **P** | **19 06 24.3** | **-0.1** |
| | comp=Z,0.8nm,0.7s,baz=221,slow=8.0,SNR=7.4 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array 87.66** | | **13** | P | P | 19 06 24.4 | -5.4 |
| | comp=Z,0.3nm,0.5s,baz=201,slow=4.6,SNR=2.7 | | | | | | |
| **PDAR** | **Pinedale Array 88.20** | | **43** | P | **P** | **19 06 31.2** | **-2.0** |
| | comp=Z,0.3nm,0.5s,baz=256,slow=2.6,SNR=3.4 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B 128.47 350** | | | PKP | **PKPdf** | **19 12 43.2** | **-2.9** |
| | comp=Z,0.7nm,0.5s,baz=46,slow=2.6,SNR=5.7 | | | | | | |
| **AKASG** | **Malin Array Be 142.78 332** | | | PKhKP | PKPpre | 19 13 06.0 | |
| | comp=Z,0.5nm,0.4s,baz=42,slow=4.0,SNR=6.3 | | | | | | |
| **EKA** | **Eskdalemuir Ar 144.41** | | **6** | PKP | **PKPab** | **19 13 11.4** | **-3.5** |
| | comp=Z,0.6nm,0.4s,baz=317,slow=3.0,SNR=4.4 | | | | | | |
| **BRTR** | **Keskin Array B 146.85 313** | | | PKPbc | **PKPdf** | **19 13 19.5** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=126,slow=2.5,SNR=5.8 | | | | | | |
| **MMAI** | **Mount Meron Ar 147.99 301** | | | PKPbc | **PKPdf** | **19 13 24.1** | **+1.5** |
| | comp=Z,1.6nm,0.5s,baz=68,slow=6.4,SNR=4.7 | | | | | | |
| **GERES** | **GERESS Array B 149.81 345** | | | PKPbc | **PKPdf** | **19 13 27.1** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=19,slow=6.2,SNR=4.3 | | | | | | |
| **CONA** | **Conrad Observa 150.07 342** | | | *i* PKP | **PKPdf** | **19 13 28.8** | **+3.2** |
| | comp=Z,1.2nm,0.6s | | | | | | |
| **RONA** | **Rosalia, Austr 150.15 341** | | | *i* PKP | **PKPdf** | **19 13 28.7** | **+3.1** |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **LESA** | **Schwarzleotal 151.38 346** | | | *i* PKP | **PKPdf** | **19 13 31.7** | **+4.1** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **SOKA** | **Soboth 151.45 342** | | | *e*PKP | **PKPdf** | **19 13 31.4** | **+3.6** |
| | comp=Z,2.2nm,1.2s | | | | | | |
| **KBA** | **Koelnbreinsper 151.54 344** | | | *i* PKP | **PKPdf** | **19 13 31.6** | **+3.6** |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg 151.76 347** | | | *e*PKP | **PKPdf** | **19 13 32.2** | **+3.9** |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **MOTA** | **Moosalm 151.80 348** | | | *e*PKP | **PKPdf** | **19 13 32.4** | **+4.1** |
| | comp=Z,4.9nm,1.4s | | | | | | |
| **MYKA** | **Terra Mystica 151.88 344** | | | *i* PKP | **PKPdf** | **19 13 31.8** | **+3.5** |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **SQTA** | **Sankt Quirin 151.90 347** | | | *i* PKP | **PKPdf** | **19 13 32.5** | **+4.1** |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **ABTA** | **Abfaltersbach 152.05 345** | | | *i* PKP | **PKPdf** | **19 13 32.2** | **+3.6** |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **DAVA** | **Damuels 152.08 349** | | | *e*PKP | **PKPdf** | **19 13 32.9** | **+4.2** |
| | comp=Z,5.8nm,1.5s | | | | | | |

*ISN **29** 18:55:39.8±0.6, 34°.61N×46°.16E, h6km±3km, ML3.9*
*TEH **29** 18:55:40.2, 34°.62N×46°.21E, h6km±35km, ML3.8*
*IDC **29** 18:55:41.5±1.0, 34°.67N×46°.13E, h0km, mb3.8/14, mbtmp3.9/23, ML3.8/7, MS2.8/8, Error ellipse: s-maj=19.9km s-min=12.6km az=160.0*
*NEIC **29** 18:55:42.0±2.4, 34°.64N±0°.05×46°.23E±0°.09, h10km±2km, mb4.1/8, Error ellipse: s-maj=14.9km s-min=3.0km az=234.0*
*AFAD **29** 18:55:45.3±0.0, 34°.71N×45°.51E, h7km±4km, MW3.9*
**ISC 29 18:55:40.5±1.2, 34°.64N±0°.03×46°.18E±0°.03, h1km±9km, n109, σ2°.19/117, mb3.9/23, MS2.9/4, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.18** | **69** | Pg | **Pg** | **18 55 45.1** | **+1.1** |
| **IGHG** | **Ghaleghazi** | **0.44** | **134** | Pg | **Pb** | **18 55 49.8** | **-1.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.51** | **255** | Pg | **Pb** | **18 55 51.3** | **-0.9** |
| **GLG1** | **Gilan-e-Gharb** | **0.57** | **204** | Pg | **Pb** | **18 55 52.2** | **-1.1** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **117** | Pg | **Pb** | **18 55 55.8** | **-1.4** |
| KCHF | | | | Sg | **Sb** | **18 56 08.4** | **-0.1** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **179** | Pg | **Pb** | **18 56 00.3** | **-0.5** |
| **SNQR** | **Sonqor, Kerman** | **1.21** | **79** | Pg | **Pb** | **18 56 00.4** | **-0.5** |
| **IBZA** | **Bozab** | **1.39** | **96** | Pg | **Pg** | **18 56 07.9** | **+0.7** |
| **IBDR** | **Badra** | **1.54** | **188** | *e*Pg | **Pb** | **18 56 09.0** | **-0.7** |
| IBDR | | | | *e*Sg | **Sg** | **18 56 29.4** | **-0.4** |
| IBDR | | | | AML | AML | 18 56 41.4 | |
| | comp=E,2μm,0.8s | | | | | | |
| IBDR | | | | AML | AML | 18 56 47.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.61** | **340** | Pg | **Pg** | **18 56 11.6** | **+0.1** |
| **IKRK** | **Kirkuk** | **1.69** | **297** | *e*Pn | **Pb** | **18 56 11.5** | **-1.0** |
| IKRK | | | | *e*Sn | **Sg** | **18 56 35.2** | **+0.3** |
| IKRK | | | | AML | AML | 18 56 44.1 | |
| | comp=N,2μm,0.6s | | | | | | |
| IKRK | | | | AML | AML | 18 56 46.0 | |
| | comp=E,2μm,0.7s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.77** | **128** | Pg | **Pg** | **18 56 14.1** | **-0.4** |
| **IDOB** | **Doab** | **1.86** | **117** | Pn | **Pg** | **18 56 15.9** | **-0.2** |
| **HSAM** | **Samen** | **2.04** | **101** | Pn | **Pg** | **18 56 18.4** | **-1.3** |
| **MAHB** | **Mahabad** | **2.16** | **350** | Pn | **Pb** | **18 56 20.7** | **+0.1** |
| **BDRS** | **Dareh Seyedi** | **2.33** | **106** | Pn | **Pb** | **18 56 22.6** | **-1.0** |
| **HAGD** | **Aghdareh** | **2.44** | **85** | Pn | **Pb** | **18 56 24.3** | **-1.1** |
| **IHSH** | **Hashtrud** | **2.80** | **18** | Pn | **Pb** | **18 56 29.7** | **-1.9** |
| **RAFI** | **Al-Rafai** | **2.91** | **181** | *e*Pn | **Pn** | **18 56 28.0** | **+0.2** |
| RAFI | | | | *e*Sn | **Sn** | **18 57 03.5** | **+0.1** |
| RAFI | | | | AML | AML | 18 57 26.6 | |
| | comp=N,446nm,0.3s | | | | | | |
| RAFI | | | | AML | AML | 18 57 26.9 | |
| | comp=E,430nm,0.4s | | | | | | |
| **IAZR** | **Azarshahr** | **3.04** | **357** | Pn | **Pb** | **18 56 33.0** | **-2.6** |
| **YOVA** | **Hakkari_Yksek** | **3.32** | **333** | P | **Pn** | **18 56 36.3** | **+2.5** |
| YOVA | | | | S | **Sn** | **18 57 15.6** | **+1.6** |
| **CUKT** | **Cukurca** | **3.34** | **322** | *e*P | **Pn** | **18 56 34.6** | **+0.6** |
| **CUKT** | **Cukurca** | **3.34** | **322** | P | **Pn** | **18 56 36.1** | **+2.1** |
| CUKT | | | | S | **Sb** | **18 57 17.8** | **-4.0** |
| **ISRB** | **Sarab** | **3.40** | **20** | Pn | **Pb** | **18 56 37.9** | **-3.8** |
| **HAKT** | **HAKKARI** | **3.54** | **326** | P | **Pn** | **18 56 37.7** | **+0.9** |
| HAKT | | | | S | **Sn** | **18 57 19.1** | **-0.3** |
| **ITBZ** | **Tabriz** | **3.59** | **360** | Pn | **Pn** | **18 56 40.4** | **+3.0** |
| **ISHB** | **Shabestar** | **3.67** | **353** | Pn | **Pn** | **18 56 41.3** | **+2.7** |
| **IHRS** | **Heris** | **3.74** | **10** | Pn | **Pn** | **18 56 42.0** | **+2.4** |
| **IQOM** | **Qom** | **4.03** | **86** | Pn | **Pn** | **18 56 45.3** | **+1.7** |
| **SIRT** | **Sirnak** | **4.17** | **314** | *e*P | **Pn** | **18 56 44.6** | **-0.7** |
| **SIRT** | **Sirnak** | **4.17** | **314** | Pn | **Pn** | **18 56 45.7** | **+0.4** |
| **SIRN** | **Sırnak** | **4.18** | **314** | P | **Pn** | **18 56 45.2** | **-0.3** |
| SIRN | | | | S | **Sn** | **18 57 29.8** | **-5.2** |
| **GAS1** | **Astara - Iran** | **4.31** | **29** | Pn | **Pn** | **18 56 50.2** | **+3.0** |
| **GRMI** | **Germi** | **4.38** | **18** | Pn | **Pn** | **18 56 51.3** | **+3.0** |
| **PERV** | **Siirt/Pervari-** | **4.42** | **319** | P | **Pn** | **18 56 50.9** | **+2.1** |
| **JHBN** | **Jahan bin** | **4.45** | **121** | Pn | **Pn** | **18 56 51.2** | **+1.9** |
| **GEVA** | **Gevas** | **4.45** | **326** | P | **Pn** | **18 56 52.5** | **+3.2** |
| GEVA | | | | S | **Sn** | **18 57 37.7** | **-4.1** |
| **TVAN** | **Van** | **4.48** | **331** | P | **Pn** | **18 56 48.0** | **-1.8** |
| **AKDM** | **Akdamar-Van** | **4.50** | **326** | *e*P | **Pn** | **18 56 51.9** | **+2.0** |
| **VANB** | **Van** | **4.55** | **331** | *e*P | **Pn** | **18 56 53.3** | **+2.8** |
| **ZNGN** | **Zangian** | **4.64** | **121** | Pn | **Pn** | **18 56 53.9** | **+1.8** |
| **MIDY** | **Mardin/Midyat-** | **4.76** | **307** | P | **Pn** | **18 56 55.0** | **+1.5** |
| MIDY | | | | S | **Sn** | **18 57 45.2** | **-4.2** |
| **SRTM** | **Siirt_Merkez** | **4.80** | **315** | P | **Pn** | **18 56 55.1** | **+1.1** |
| SRTM | | | | S | **Sn** | **18 57 48.1** | **-2.3** |
| **VMUR** | **Van-Muradiye** | **4.82** | **335** | P | **Pn** | **18 56 57.8** | **+3.4** |
| **CLDR** | **Caldiran** | **4.85** | **339** | *e*P | **Pn** | **18 56 50.9** | **-3.9** |
| **CLDR** | **Caldiran** | **4.85** | **339** | P | **Pn** | **18 56 52.4** | **-2.4** |
| **BTMN** | **Batman** | **5.13** | **311** | P | **Pg** | **18 57 16.5** | **-2.3** |
| **MARD** | **Mardin** | **5.13** | **303** | P | **Pn** | **18 56 59.9** | **+1.3** |
| MARD | | | | S | **Sn** | **18 57 58.8** | **+0.2** |
| **GURO** | **Guroymak-BITLI** | **5.14** | **321** | *e*P | **Pn** | **18 56 59.7** | **+1.0** |
| **GURO** | **Guroymak-BITLI** | **5.14** | **321** | Pn | **Pn** | **18 57 00.9** | **+2.1** |
| **SVAN** | **Silvan-Diyarba** | **5.34** | **313** | *e*P | **Pn** | **18 57 01.8** | **+0.5** |
| **SVAN** | **Silvan-Diyarba** | **5.34** | **313** | P | **Pn** | **18 57 02.1** | **+0.8** |
| **MAZI** | **Mazidag** | **5.43** | **303** | *e*P | **Pn** | **18 57 03.5** | **+0.8** |
| **MUSM** | **Mu-Merkez** | **5.54** | **319** | P | **Pn** | **18 57 04.2** | **-0.1** |
| **AGRB** | **Hanur-Agry** | **5.55** | **334** | *e*P | **Pn** | **18 57 02.8** | **-1.6** |
| **GNI** | **Garni** | **5.62** | **349** | Pn | **Pn** | **18 57 07.6** | **+2.3** |
| **GNI** | **Garni** | **5.62** | **349** | Pn | **Pn** | **18 57 08.9** | **+3.5** |
| | comp=E,0.7nm,0.3s,baz=184,slow=20,SNR=2.1 | | | | | | |
| GNI | | | | Lg | Lg | 18 58 39.2 | |
| | comp=E,0.6nm,0.3s,baz=176,slow=19,SNR=1.1 | | | | | | |
| GNI | | | | LR | LR | 18 58 41.4 | |
| | comp=E,16nm,21.2s,baz=181,slow=32 | | | | | | |
| | comp=E,3.0nm,0.5s | | | | | | |
| **KLNJ** | **Kolanjah** | **5.81** | **127** | Pn | **Pn** | **18 57 09.9** | **+1.7** |
| **KARS** | **Kars** | **6.47** | **339** | Pn | **Pn** | **18 57 14.1** | **-2.9** |
| **SVRC** | **Sivrice-ELAZID** | **6.68** | **306** | *e*P | **Pn** | **18 57 21.4** | **+1.5** |
| **ARPR** | **Arapgir-MALATY** | **7.70** | **308** | Pn | **Pn** | **18 57 33.6** | **-0.3** |
| **GAZ** | **Gaziantep** | **7.71** | **292** | | **Pn** | **18 57 33.8** | **-0.1** |
| **ASF** | **Jabal al Asfar** | **8.14** | **255** | Pn | **Pn** | **18 57 40.2** | **+0.2** |
| | comp=E,0.8nm,0.3s,baz=30,slow=1.2,SNR=7.8 | | | | | | |
| | comp=E,4.8nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.11** | **263** | Pn | **Pn** | **18 57 53.0** | **-0.2** |
| | comp=E,0.9nm,0.3s,baz=82,slow=20,SNR=4.0 | | | | | | |
| MMAI | | | | Lg | Lg | 19 00 29.8 | |
| | comp=E,0.9nm,0.3s,baz=81,slow=28,SNR=3.5 | | | | | | |
| MMAI | | | | LR | LR | 19 02 11.1 | |
| | comp=E,46nm,19.8s,baz=16,slow=43 | | | | | | |
| | comp=E,0.4nm,0.2s | | | | | | |
| **KBZ** | **Khabaz** | **9.43** | **345** | LR | LR | 19 01 53.1 | |
| | comp=E,46nm,21.7s,baz=138,slow=40 | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **9.69** | **345** | LR | LR | 19 01 27.1 | |
| | comp=E,118nm,19.1s,baz=56,slow=36 | | | | | | |
| **EIL** | **Elat** | **10.73** | **246** | Pn | **Pn** | **18 58 17.8** | **+2.5** |
| | comp=E,0.4nm,0.3s,baz=71,slow=16,SNR=2.9 | | | | | | |
| EIL | | | | Lg | Lg | 19 01 23.6 | |
| | comp=E,0.3nm,0.3s,baz=77,slow=6.8,SNR=3.5 | | | | | | |
| | comp=E,6.1nm,0.9s | | | | | | |
| **RAYN** | **Ar Rayn** | **11.09** | **183** | | **Pn** | **18 58 19.9** | **-0.4** |
| **BRTR** | **Keskin Array B** | **11.22** | **301** | Pn | **Pn** | **18 58 24.3** | **+2.2** |
| | comp=E,0.5nm,0.7s,baz=121,slow=14,SNR=3.8 | | | | | | |
| **UOSS** | **Minazif** | **12.99** | **135** | | **Pn** | **18 58 45.5** | **-0.7** |
| **WSAR** | **Wadi Sarin** | **15.72** | **133** | Pn | **Pn** | **18 59 19.9** | **-3.3** |
| | comp=E,1.3nm,0.3s,baz=314,slow=9.6,SNR=16 | | | | | | |
| WSAR | | | | Sn | **Sn** | **19 02 07.5** | **-11** |
| | comp=E,0.3nm,0.3s,baz=216,slow=19,SNR=2.2 | | | | | | |
| **IDI** | **Anoyia** | **17.47** | **278** | P | **P** | **18 59 47.7** | **+1.0** |
| | comp=E,9.4nm,0.8s,baz=33,slow=17,SNR=1.8 | | | | | | |
| **BELG** | **Belogornoye** | **17.78** | **3** | P | **P** | **18 59 50.1** | **+0.1** |
| | comp=E,0.4nm,0.3s,baz=202,slow=11,SNR=2.6 | | | | | | |
| | comp=E,7.1nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **17.79** | **31** | | **P** | **18 59 50.1** | **0.0** |
| **AKTO** | **Aktyubinsk** | **18.00** | **25** | P | **P** | **18 59 52.5** | **0.0** |
| | comp=E,0.3nm,0.3s,baz=213,slow=8.5,SNR=10 | | | | | | |
| | comp=E,2.3nm,0.6s | | | | | | |
| **MLR** | **Muntele Rosu** | **18.86** | **311** | P | **Pn** | **19 00 02.3** | **-0.2** |
| | comp=E,0.1nm,0.3s,baz=146,slow=18,SNR=2.4 | | | | | | |
| | comp=E,1.9nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **20.25** | **328** | P | **P** | **19 00 16.8** | **-0.2** |
| | comp=E,1.3nm,0.5s,baz=140,slow=9.2,SNR=18 | | | | | | |
| | comp=E,1.3nm,0.5s | | | | | | |
| **KIEV** | **Kiev** | **20.25** | **328** | | Pn | 19 00 17.7 | -1.3 |
| KIEV | | | | | IAmb IAmb | 19 00 19.0 | |
| | comp=E,4.1nm,0.7s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **22.72** | **316** | *e*P | **P** | **19 00 47.2** | **+3.5** |
| **AAK** | **Ala-Archa** | **23.43** | **62** | LR | LR | 19 10 27.1 | |
| | comp=Z,20nm,18.5s,baz=265,slow=38 | | | | | | |
| **PSZ** | **Piszkesteto** | **23.66** | **312** | P | **P** | **19 00 54.6** | **+1.2** |
| PSZ | | | | | IAmb IAmb | 19 00 56.2 | |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **LANS** | **Liptovska Anna** | **24.45** | **315** | *e*P | **P** | **19 01 03.6** | **+2.8** |
| **OJC** | **Ojcow** | **24.75** | **317** | P | **P** | **19 01 03.8** | **+0.3** |
| OJC | | | | | IAmb IAmb | 19 01 06.3 | |
| | comp=E,6.0nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **25.12** | **35** | P | **P** | **19 01 07.9** | **+1.2** |
| BRVK | | | | | IAmb IAmb | 19 01 11.9 | |
| | comp=Z,6.4nm,1.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **25.15** | **36** | P | **P** | **19 01 09.4** | **+2.4** |
| | comp=Z,2.2nm,0.6s,baz=238,slow=8.7,SNR=11 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **SUW** | **Suwalki** | **25.22** | **327** | P | **P** | **19 01 06.1** | **-1.5** |
| **MORC** | **Moravsky Berou** | **25.85** | **315** | P | **P** | **19 01 13.3** | **-0.2** |
| **CONA** | **Conrad Observa** | **26.18** | **310** | *e*pP | **P** | **19 01 18.2** | **+1.7** |
| | comp=Z,0.8nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **26.18** | **308** | *i* P | **P** | **19 01 19.9** | **+3.4** |
| | comp=Z,1.3nm,0.6s | | | | | | |
| **FURI** | **Furi** | **26.53** | **197** | LR | LR | 19 10 47.4 | |
| | comp=Z,50nm,19.7s,baz=248,slow=34 | | | | | | |
| **OBKA** | **Obir** | **26.62** | **306** | *e*pP | **P** | **19 01 26.4** | **+5.9** |
| | comp=Z,0.3nm,0.2s | | | | | | |
| **MOA** | **Molln** | **27.18** | **309** | *i* P | **P** | **19 01 25.5** | **0.0** |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **MYKA** | **Terra Mystica** | **27.25** | **306** | *e*P | **P** | **19 01 27.2** | **+1.0** |
| | comp=Z,1.4nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **27.56** | **307** | *e

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,28nm,0.6s | | | | | | |
| QIS | **Mount Isa** | **16.26 201** | P | **P** | **19 01 21.1** | **+2.1** |
| QIS | **Mount Isa** | **16.26 201** | P | **Pn** | **19 01 19.1** | **+1.5** |
| | comp=Z,8.1nm,0.6s | | | | | | |
| MSAI | **Masohi** | **16.76 276** | P | **P** | **19 01 27.3** | **+2.7** |
| | comp=Z,44nm,0.6s,comp=Z,455nm | | | | | | |
| WRAB | **Tennant Creek** | **18.22 216** | P | **P** | **19 01 40.3** | **-0.4** |
| WRA | **Warramunga Arr** | **18.24 216** | P | **P** | **19 01 40.6** | **-0.3** |
| | comp=Z,12nm,0.6s,baz=39,slow=12,SNR=78 | | | | | | |
| WRA | | | S | **S** | **19 04 56.8** | **-7.8** |
| | comp=Z,1.4nm,0.6s,baz=32,slow=24,SNR=4.6 | | | | | | |
| WRA | | | LR | LR | 19 10 10.1 | | |
| | comp=Z,170nm,18.7s,baz=16,slow=41 | | | | | | |
| NLAI | **Namlea** | **18.59 276** | P | **P** | **19 01 46.2** | **+1.5** |
| | comp=Z,50nm,0.6s,comp=Z,688nm | | | | | | |
| GUMO | **Guam** | **18.78 358** | LR | LR | 19 09 10.0 | | |
| | comp=Z,40nm,19.1s,baz=160,slow=37 | | | | | | |
| KNRA | **Kununurra** | **19.51 237** | P | **P** | **19 01 54.0** | **-0.7** |
| KNRA | **Kununurra** | **19.51 237** | P | **P** | **19 01 54.1** | **-0.7** |
| | comp=Z,35nm,0.7s | | | | | | |
| SANI | **Sanana** | **19.86 279** | P | **P** | **19 01 58.1** | **-0.5** |
| | comp=Z,54nm,0.7s | | | | | | |
| EIDS | **Eidsvold** | **20.64 166** | P | Pn | 19 02 11.8 | +1.9 |
| EIDS | **Eidsvold** | **20.64 166** | P | **P** | **19 02 08.5** | **+1.6** |
| EIDS | **Eidsvold** | **20.64 166** | P | **P** | **19 02 08.4** | **+1.6** |
| | comp=Z,27nm,0.6s | | | | | | |
| QLP | **Quilpie** | **21.21 183** | P | **P** | **19 02 17.9** | **+4.9** |
| QLP | **Quilpie** | **21.21 183** | P | **P** | **19 02 14.6** | **+1.5** |
| | comp=Z,34nm,1.1s | | | | | | |
| ASAR | **Alice Springs** | **21.48 211** | P | **P** | **19 02 17.2** | **+1.3** |
| | comp=Z,5.7nm,0.7s,baz=35,slow=7.8,SNR=5.2 | | | | | | |
| ASAR | | | LR | LR | 19 11 13.3 | | |
| | comp=Z,106nm,20.3s,baz=22,slow=38 | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| SOEI | **Soe** | **21.63 257** | P | **P** | **19 02 17.8** | **+0.1** |
| SOEI | **Soe** | **21.63 257** | P | **P** | **19 02 18.7** | **+1.0** |
| | comp=Z,65nm,0.6s | | | | | | |
| BATI | **Baumata** | **22.29 256** | P | **P** | **19 02 26.1** | **+1.3** |
| | comp=Z,99nm,0.6s,comp=Z,1µm | | | | | | |
| KMSI | **Cibinong** | **22.39 284** | P | **P** | **19 02 26.4** | **+0.6** |
| INKA | **Innaminka** | **22.80 191** | P | **P** | **19 02 32.5** | **+2.6** |
| BBSI | **Bau Bau** | **22.95 268** | P | **P** | **19 02 33.9** | **+2.3** |
| | comp=Z,31nm,1.2s | | | | | | |
| LUWI | **Luwuk** | **23.20 280** | P | **P** | **19 02 32.0** | **-1.9** |
| LUWI | | | IAmb | IAmb | 19 02 36.2 | | |
| | comp=Z,153nm,1.3s | | | | | | |
| LUWI | **Luwuk** | **23.20 280** | P | **P** | **19 02 34.8** | **+0.8** |
| | comp=Z,126nm,1.4s,comp=Z,2µm | | | | | | |
| FITZ | **Fitzroy Crossi** | **23.30 235** | P | **P** | **19 02 33.2** | **-1.7** |
| FITZ | **Fitzroy Crossi** | **23.30 235** | P | **P** | **19 02 33.7** | **-1.1** |
| MMRI | **Maumere** | **23.45 261** | P | **P** | **19 02 33.7** | **-2.5** |
| MMRI | | | IAmb | IAmb | 19 02 36.5 | | |
| | comp=Z,55nm,0.5s | | | | | | |
| MMRI | **Maumere** | **23.45 261** | P | **P** | **19 02 34.9** | **-1.3** |
| DAV | **Davao City (W)** | **23.47 301** | LR | LR | 19 12 36.7 | | |
| | comp=Z,7.8nm,19.2s,baz=109,slow=38 | | | | | | |
| EDFI | **Ende, Flores** | **24.00 260** | P | **P** | **19 02 38.7** | **-2.6** |
| MRSI | **Marisa** | **24.34 283** | P | **P** | **19 02 45.0** | **+0.8** |
| | comp=Z,54nm,0.5s | | | | | | |
| BASI | **Baing, Sumba** | **25.29 257** | P | **P** | **19 02 54.2** | **+1.3** |
| | comp=Z,119nm,1.3s | | | | | | |
| TOLI2 | **Tolitoli** | **25.62 284** | P | **P** | **19 02 54.7** | **-1.2** |
| TOLI2 | | | IAmb | IAmb | 19 02 59.5 | | |
| | comp=Z,19nm,0.6s | | | | | | |
| ARMA | **Armidale** | **25.62 168** | | **P** | **19 02 56.0** | **+0.1** |
| ARMA | **Armidale** | **25.62 168** | P | **P** | **19 02 57.5** | **+1.6** |
| | comp=Z,29nm,1.0s | | | | | | |
| KAPI | **Kappang** | **25.77 269** | P | **P** | **19 02 56.5** | **-0.8** |
| KAPI | **Kappang** | **25.77 269** | LR | LR | 19 15 53.8 | | |
| | comp=Z,58nm,18.1s,baz=82,slow=42 | | | | | | |
| CMSA | **Cobar Meteorol** | **26.11 180** | P | **P** | **19 03 01.6** | **+1.5** |
| DZM | **Mont Dzumac** | **26.15 132** | eLR | LR | 19 09 41.8 | | |
| | comp=Z,165nm,29.4s | | | | | | |
| MPSI | **Mapaga** | **26.29 282** | P | **P** | **19 03 01.1** | **-0.9** |
| | comp=Z,11nm,0.5s | | | | | | |
| WBSI | **Waikabubak, Su** | **26.36 259** | P | **P** | **19 03 02.6** | **0.0** |
| | comp=Z,25nm,0.7s | | | | | | |
| STKA | **Stephens Creek** | **26.71 188** | P | **P** | **19 03 05.2** | **-0.4** |
| STKA | **Stephens Creek** | **26.71 188** | P | **P** | **19 03 05.3** | **-0.2** |
| | comp=Z,5.2nm,0.7s,baz=347,slow=9.9,SNR=8.4 | | | | | | |
| STKA | | | LR | LR | 19 14 27.4 | | |
| | comp=Z,107nm,19.0s,baz=26,slow=38 | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| BBOO | **Buckleboo** | **28.79 197** | P | **P** | **19 03 23.7** | **-0.4** |
| YNG | **Young** | **28.97 175** | P | **P** | **19 03 27.2** | **+1.5** |
| | comp=Z,209nm,1.1s | | | | | | |
| MBWA | **Marble Bar** | **29.65 235** | P | **P** | **19 03 31.8** | **0.0** |
| MBWA | | | IAmb | IAmb | 19 04 03.2 | | |
| | comp=Z,49nm,1.4s | | | | | | |
| MBWA | **Marble Bar** | **29.65 235** | P | **P** | **19 03 32.3** | **+0.4** |
| | comp=Z,17nm,0.6s | | | | | | |
| PSAC2 | **Pilbara Seismi** | **29.71 235** | P | **P** | **19 03 32.5** | **+0.2** |
| | comp=Z,29nm,2.0s | | | | | | |
| PSA00 | **Pilbara Seismi** | **29.76 235** | P | **P** | **19 03 32.1** | **-0.7** |
| PSA00 | **Pilbara Seismi** | **29.76 235** | P | **P** | **19 03 31.7** | **-1.1** |
| PSA00 | | | IAmb | IAmb | 19 04 03.9 | | |
| | comp=Z,30nm,1.3s | | | | | | |
| PSA00 | **Pilbara Seismi** | **29.76 235** | P | **P** | **19 03 33.1** | **+0.3** |
| | comp=Z,20nm,1.4s | | | | | | |
| PSAD3 | **Pilbara Seismi** | **29.84 235** | P | **P** | **19 03 33.8** | **+0.2** |
| | comp=Z,15nm,1.1s | | | | | | |
| CAN | **Canberra** | **30.04 174** | P | **P** | **19 03 36.3** | **+1.1** |
| CAN | | | IAmb | IAmb | 19 04 22.7 | | |
| | comp=Z,78nm,1.6s | | | | | | |
| CAN | **Canberra** | **30.04 174** | P | **P** | **19 03 36.8** | **+1.6** |
| FORT | **Forrest** | **30.26 211** | P | **P** | **19 03 37.2** | **+0.1** |
| FORT | | | IAmb | IAmb | 19 03 39.1 | | |
| | comp=Z,34nm,0.7s | | | | | | |
| FORT | **Forrest** | **30.26 211** | P | **P** | **19 03 37.7** | **+0.5** |
| | comp=Z,59nm,0.7s | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | **31.47 41** | T | T | 19 37 07.4 | | |
| | baz=222,slow=75,SNR=20 | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | **31.48 41** | T | T | 19 37 07.9 | | |
| | baz=222,slow=75,SNR=8.2 | | | | | | |
| H11S1 | **WAKE ISLAND Hy** | **31.48 41** | T | T | 19 37 08.3 | | |
| | baz=222,slow=75,SNR=11 | | | | | | |
| TOO | **Toolangi** | **32.13 180** | P | **P** | **19 03 54.5** | **+1.0** |
| TOO | | | IAmb | IAmb | 19 04 12.5 | | |
| | comp=Z,77nm,1.9s | | | | | | |
| TOO | **Toolangi** | **32.13 180** | P | **P** | **19 03 54.8** | **+1.3** |
| | comp=Z,18nm,1.0s | | | | | | |
| JCJ | **Chichijima** | **32.37 354** | P | **P** | **19 03 53.7** | **-1.9** |
| JCJ | **Chichijima** | **32.37 354** | LR | LR | 19 15 06.0 | | |
| | comp=Z,48nm,21.8s,baz=160,slow=32 | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | **32.49 40** | T | T | 19 38 29.6 | | |
| | baz=220 | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | **32.50 40** | T | T | 19 38 29.0 | | |
| | baz=220,slow=74,SNR=3.0 | | | | | | |
| H11N2 | **WAKE ISLAND Hy** | **32.50 39** | T | T | 19 38 26.7 | | |
| | baz=220,slow=74,SNR=2.6 | | | | | | |
| MEEK | **Meekatharra** | **33.39 228** | P | **P** | **19 04 05.6** | **+0.9** |
| | comp=Z,43nm,1.5s | | | | | | |
| MSVF | **Nonsavu** | **34.02 114** | P | **P** | **19 04 11.4** | **+1.1** |
| MSVF | | | pP | **pP** | **19 04 28.9** | **-1.4** |
| MSVF | | | sP | **sP** | **19 04 37.2** | **-3.2** |
| KMBL | **Kambalda** | **34.19 218** | P | **P** | **19 04 12.0** | **+0.4** |
| SBUM | **Sibu** | **34.24 282** | P | **P** | **19 04 11.6** | **-0.6** |
| SBUM | | | IAmb | IAmb | 19 04 13.8 | | |
| | comp=Z,17nm,1.7s | | | | | | |
| KSM | **Kuching** | **35.91 280** | P | **P** | **19 04 24.6** | **-2.0** |
| KSM | | | IAmb | IAmb | 19 04 28.3 | | |
| | comp=Z,14nm,0.8s | | | | | | |
| JOW | **Kunigami** | **36.09 333** | P | **P** | **19 04 27.6** | **-0.2** |
| | comp=Z,4.5nm,0.6s,baz=120,slow=14,SNR=1.9 | | | | | | |
| JOW | | | LR | LR | 19 16 06.1 | | |
| | comp=Z,28nm,20.1s,baz=124,slow=31 | | | | | | |
| | comp=Z,4.5nm,0.6s | | | | | | |
| MORW | **Morawa** | **36.64 226** | P | **P** | **19 04 31.3** | **-1.3** |
| YOJ | **Yonaguni jima** | **36.88 324** | P | **P** | **19 04 32.9** | **-1.7** |
| KLBR | **Kellerberrin** | **36.97 222** | P | **P** | **19 04 35.7** | **+0.4** |
| | comp=Z,26nm,0.9s | | | | | | |
| BLDU | **Balliduu** | **37.07 224** | P | **P** | **19 04 36.5** | **+0.3** |
| | comp=Z,52nm,1.8s | | | | | | |
| YULB | **Yu-li** | **37.11 321** | P | **P** | **19 04 34.6** | **-2.0** |
| NWAO | **Narrogin (SRO)** | **38.15 220** | P | **P** | **19 04 44.1** | **-1.2** |
| JHJ2 | **Mitsune** | **38.59 352** | P | **P** | **19 04 46.8** | **-2.1** |
| KNMB | **Chin-men Tao** | **39.73 319** | P | **P** | **19 04 57.7** | **-0.9** |
| XMIS | **Christmas Isla** | **39.90 260** | P | **P** | **19 04 59.5** | **-0.7** |
| JMN | **Monobe** | **40.37 345** | P | **P** | **19 05 03.6** | **-0.1** |
| JNU | **Nakatsue** | **40.69 341** | P | **P** | **19 05 05.3** | **-1.1** |
| JNU | | | IAmb | IAmb | 19 05 38.9 | | |
| | comp=Z,60nm,1.9s | | | | | | |
| JNU | **Nakatsue** | **40.69 341** | LR | LR | 19 18 35.0 | | |
| | comp=Z,58nm,21.4s,baz=128,slow=31 | | | | | | |
| JGF | **Kuroka** | **41.41 350** | P | **P** | **19 05 10.4** | **-1.9** |
| JGF | | | IAmb | IAmb | 19 05 34.5 | | |
| | comp=Z,44nm,1.8s | | | | | | |
| MJAR | **Matsushiro Arr** | **42.19 351** | P | **P** | **19 05 18.2** | **-0.4** |
| | comp=Z,1.4nm,0.4s,baz=176,slow=9.4,SNR=4.3 | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | |
| MAJO | **Matsushiro** | **42.19 351** | P | **P** | **19 05 17.8** | **-0.9** |
| MAJO | | | IAmb | IAmb | 19 05 18.0 | | |
| | comp=Z,27nm,1.8s | | | | | | |
| MYKOM | **Kota Tinggi** | **42.32 278** | P | **P** | **19 05 19.5** | **-0.5** |
| MYKOM | | | IAmb | IAmb | 19 05 21.4 | | |
| | comp=Z,62nm,1.7s | | | | | | |
| QRZ | **Quartz Range** | **42.81 150** | P | **P** | **19 05 24.9** | **+1.2** |
| JMM | **Marumori** | **43.17 354** | P | **P** | **19 05 24.1** | **-2.4** |
| JMM | | | IAmb | IAmb | 19 05 57.4 | | |
| | comp=Z,73nm,1.7s | | | | | | |
| URZ | **Urewera** | **43.53 143** | P | **P** | **19 05 29.2** | **-0.2** |
| | comp=Z,17nm,0.9s,baz=220,slow=9.6,SNR=2.0 | | | | | | |
| | comp=Z,17nm,0.9s | | | | | | |
| FOZ | **Fox Glacier** | **43.65 154** | P | **P** | **19 05 31.3** | **+1.0** |
| RTZ | **Ruatahuna** | **43.69 144** | P | **P** | **19 05 31.9** | **+1.1** |
| RTZ | | | IAmb | IAmb | 19 05 34.6 | | |
| | comp=Z,29nm,1.0s | | | | | | |
| BSWZ | **Blackbirch Sta** | **44.15 149** | P | **P** | **19 05 35.9** | **+1.5** |
| RPZ | **Rata Peaks** | **44.34 154** | P | **P** | **19 05 37.4** | **+1.6** |
| RPZ | | | IAmb | IAmb | 19 06 19.2 | | |
| | comp=Z,41nm,1.3s | | | | | | |
| LBZ | **Lake Benmore** | **44.50 155** | P | **P** | **19 05 37.9** | **+0.7** |
| LBZ | | | IAmb | IAmb | 19 06 11.5 | | |
| | comp=Z,40nm,1.4s | | | | | | |
| NJ2 | **Nanjing** | **45.05 327** | *e*P | **P** | **19 05 42.3** | **+0.7** |
| NJ2 | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| IPM | **Ipoh** | **45.59 281** | P | **P** | **19 05 45.8** | **-0.5** |
| IPM | | | IAmb | IAmb | 19 05 47.5 | | |
| | comp=Z,12nm,0.5s | | | | | | |
| KSRS | **Korea Array** | **45.62 340** | P | **P** | **19 05 45.4** | **-0.6** |
| | comp=Z,1.8nm,0.5s,baz=159,slow=8.6,SNR=6.9 | | | | | | |
| KSRS | | | LR | LR | 19 23 15.6 | | |
| | comp=Z,28nm,20.5s,baz=150,slow=34 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| JTM | **Tennabayashi** | **46.05 355** | P | **P** | **19 05 49.0** | **-0.3** |
| KULM | **Kulim** | **46.12 282** | P | **P** | **19 05 49.2** | **-1.2** |
| KULM | | | IAmb | IAmb | 19 05 51.3 | | |
| | comp=Z,9.7nm,0.6s | | | | | | |
| RPSI | **Rantau Prapat** | **47.32 279** | P | **P** | **19 05 58.3** | **-1.5** |
| RPSI | | | IAmb | IAmb | 19 06 00.5 | | |
| | comp=Z,30nm,1.3s | | | | | | |
| SRIT | **Nakonsritamara** | **47.92 287** | P | **P** | **19 06 04.0** | **-0.4** |
| SRIT | | | IAmb | IAmb | 19 06 05.8 | | |
| | comp=Z,16nm,0.5s | | | | | | |
| GSI | **Gunungsitoli** | **48.44 276** | P | **P** | **19 06 07.3** | **-1.1** |
| GSI | **Gunungsitoli** | **48.44 276** | P | **P** | **19 06 07.6** | **-0.8** |
| JKA | **Kamikawa-asahi** | **49.26 357** | P | **P** | **19 06 14.7** | **+0.6** |
| JKA | | | IAmb | IAmb | 19 07 21.1 | | |
| | comp=Z,52nm,1.9s | | | | | | |
| LHMI | **Lhok Sumawe** | **49.72 281** | P | **P** | **19 06 18.0** | **-0.2** |
| MLSI | **Meulaboh, Aceh** | **50.07 280** | P | **P** | **19 06 19.7** | **-1.1** |
| PHRA | **Phrae** | **50.60 299** | P | **P** | **19 06 24.1** | **-0.6** |
| USA0B | **Ussuriysk Arra** | **50.78 347** | P | **P** | **19 06 24.1** | **-1.5** |
| USA0B | | | IAmb | IAmb | 19 06 47.3 | | |
| | comp=Z,57nm,1.9s | | | | | | |
| USRK | **Ussuriysk Ar.** | **50.78 347** | P | **P** | **19 06 25.6** | **0.0** |
| | comp=Z,8.7nm,0.6s,baz=168,slow=7.8,SNR=40 | | | | | | |
| | comp=Z,8.7nm,0.6s | | | | | | |
| CRAI | **Chiangrai** | **51.18 301** | P | **P** | **19 06 30.5** | **+1.4** |
| HNS | **HongShan** | **51.32 328** | ||P | **P** | **19 06 29.5** | **-0.3** |
| HNS | | | pmax | pmax | | | |
| | comp=Z,15nm,0.5s | | | | | | |
| CMAR | **Chiang Mai Arr** | **51.71 298** | P | **P** | **19 06 33.6** | **+0.5** |
| | comp=Z,1.7nm,0.4s,baz=121,slow=5.8,SNR=12 | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | |
| MDJ | **Mudanjiang** | **51.73 345** | P | P | 19 06 19.0 | -14 | |
| MDJ | | | PP | PP | 19 08 18.0 | -13 | |
| MDJ | | | PcS | PcS | 19 11 32.0 | -11 | |
| MDJ | | | S | S | 19 13 32.0 | -16 | |
| YSS | **Yuzh-Sakhalins** | **52.08 358** | P | **P** | **19 06 35.5** | **+0.2** |
| YSS | | | IAmb | IAmb | 19 06 36.9 | | |
| | comp=Z,29nm,1.6s | | | | | | |
| XAN | **Xi'an** | **52.27 321** | *e*P | **P** | **19 06 38.0** | **+0.9** |
| XAN | | | pP | pP | 19 06 54.3 | -4.1 | |
| XAN | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | **PanZhiHua** | **52.95 309** | P | **P** | **19 06 42.5** | **+0.2** |
| PZH | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| PZH | | | pmax | pmax | | | |
| | comp=Z,110nm,5.3s | | | | | | |
| HHC | **Hu-ho-hao-te** | **52.55 329** | *e*P | **P** | **19 07 03.3** | **+2.6** |
| HHC | | | pmax | pmax | | | |
| | comp=Z,21nm,0.6s | | | | | | |
| HHC | | | pmax | pmax | | | |
| | comp=Z,59nm,3.9s | | | | | | |
| PETK | **Petropavlovsk-** | **59.07 8** | P | **P** | **19 07 25.1** | **-0.2** |
| | comp=Z,2.5nm,0.4s,baz=197,slow=5.3,SNR=4.9 | | | | | | |
| | comp=Z,2.5nm,0.4s | | | | | | |
| GTA | **Gaotai** | **61.33 321** | P | **P** | **19 07 42.0** | **+0.8** |
| GTA | | | sP | pP | 19 08 05.5 | +2.4 | |
| GTA | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| DRV | **Dumont d'Urvil** | **61.39 183** | P | **P** | **19 07 42.0** | **+1.2** |
| SONM | **Songino Array** | **63.13 331** | P | **P** | **19 07 52.6** | **-0.5** |
| | comp=Z,0.9nm,0.7s,baz=161,slow=7.0,SNR=6.5 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| PPT2 | **Papeete2** | **64.41 107** | *e*LR | LR | 19 27 25.2 | | |
| PPT2 | | | eLR | LR | 19 27 27.4 | | |
| | comp=Z,143nm,28.2s | | | | | | |
| | comp=Z,180nm,25.0s | | | | | | |
| CASY | **Casey** | **65.58 195** | P | **P** | **19 08 08.8** | **+0.3** |
| CASY | **Casey** | **65.58 195** | P | **P** | **19 08 09.1** | **+0.6** |
| YAK | **Yakutsk** | **68.25 352** | P | **P** | **19 08 25.2** | **-0.3** |
| CCD | **Concordia, Ant** | **70.92 186** | P | **P** | **19 08 43.2** | **+0.9** |
| WMQ | **Urumqi** | **71.37 320** | *e*P | **P** | **19 08 46.5** | **+1.4** |
| SBA | **Scott Base** | **73.36 175** | P | **P** | **19 08 58.1** | **+1.8** |
| MKAR | **Makanchi Array** | **76.09 321** | P | **P** | **19 09 12.0** | **-0.6** |
| | comp=Z,0.7nm,0.5s,baz=99,slow=7.8,SNR=16 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| MAKZ | **Makanchi** | **76.29 321** | P | **P** | **19 09 13.1** | **-0.7** |
| O14K | **Tigyukauivet M** | **76.79 25** | P | **P** | **19 09 15.7** | **-0.5** |
| O14K | | | IAmb | IAmb | 19 09 16.2 | | |
| | comp=Z,34nm,1.2s | | | | | | |
| ZALV | **Zalesovo Beam** | **77.69 328** | P | **P** | **19 09 19.8** | **-1.5** |
| | comp=Z,1.2nm,0.7s,baz=110,slow=2.9,SNR=8.0 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| RKT | **Rikitea** | **78.21 112** | *e*LR | LR | 19 33 48.0 | | |
| | comp=Z,490nm,29.0s | | | | | | |
| O16K | **Kokwok River B** | **78.33 26** | P | **P** | **19 09 25.7** | **+0.8** |
| K15K | **Wolf Creek Mou** | **78.46 22** | P | **P** | **19 09 25.3** | **-0.2** |
| K15K | | | IAmb | IAmb | 19 10 46.1 | | |
| | comp=Z,32nm,1.6s | | | | | | |
| N17K | **Nushagak Hills** | **79.21 25** | P | **P** | **19 09 29.8** | **+0.1** |
| KURBB | **Kurchatov Arra** | **79.85 323** | P | **P** | **19 09 32.7** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=124,slow=4.6,SNR=6.8 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| K17K | **Iditarod** | **79.94 23** | P | **P** | **19 09 34.4** | **+0.9** |
| K17K | | | IAmb | IAmb | 19 12 01.7 | | |
| | comp=Z,34nm,1.8s | | | | | | |
| KDAK | **Kodiak Island** | **79.94 29** | LR | LR | 19 39 18.1 | | |
| | comp=Z,24nm,21.4s,baz=229,slow=31 | | | | | | |
| CNPM | **China Poot** | **81.35 27** | P | **P** | **19 09 41.3** | **+0.1** |
| CNPM | | | IAmb | IAmb | 19 10 28.5 | | |
| | comp=Z,43nm,1.5s | | | | | | |
| G18K | **Tagagawik** | **81.56 20** | P | **P** | **19 09 42.7** | **+0.5** |
| K20K | **Telida** | **81.92 23** | P | **P** | **19 09 45.4** | **+1.3** |
| MAW | **Mawson** | **82.37 203** | P | **P** | **19 09 46.7** | **+0.4** |
| | comp=Z,5.1nm,0.6s,baz=100,slow=8.2,SNR=12 | | | | | | |
| | comp=Z,5.1nm,0.6s | | | | | | |
| RC01 | **Rabbit Creek A** | **82.70 26** | P | **P** | **19 09 48.0** | **-0.2** |
| RC01 | | | IAmb | IAmb | 19 10 38.5 | | |
| | comp=Z,36nm,1.8s | | | | | | |
| SML | **Sawmill** | **83.61 26** | P | **P** | **19 09 53.2** | **+0.3** |
| GLI | **Glacier Island** | **83.79 27** | P | **P** | **19 09 54.0** | **+0.2** |
| GLI | | | IAmb | IAmb | 19 11 18.1 | | |
| | comp=Z,8.6nm,1.0s | | | | | | |
| HIN | **Hinchinbrook I** | **83.88 28** | P | **P** | **19 09 54.3** | **0.0** |
| HIN | | | IAmb | IAmb | 19 11 47.4 | | |
| | comp=Z,24nm,1.3s | | | | | | |
| QSPA | **South Pole Qui** | **84.67 180** | P | **P** | **19 09 58.5** | **+0.1** |
| QSPA | | | IAmb | IAmb | 19 09 59.8 | | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| QSPA | **South Pole Qui** | **84.67 180** | P | **P** | **19 09 58.4** | **+0.1** |
| | comp=Z,7.3nm,0.6s,baz=322,slow=0.8,SNR=93 | | | | | | |
| QSPA | | | LR | LR | 19 50 33.5 | | |
| | comp=Z,54nm,18.3s,baz=29,slow=38 | | | | | | |
| | comp=Z,7.3nm,0.6s | | | | | | |
| HMT | **Hamilton** | **84.90 28** | P | **P** | **19 09 59.7** | **+0.3** |
| HMT | | | IAmb | IAmb | 19 13 14.0 | | |
| | comp=Z,45nm,1.7s | | | | | | |
| ILAR | **Eielson Array** | **85.38 23** | P | **P** | **19 09 59.5** | **-2.2** |
| | comp=Z,2.2nm,0.5s,baz=242,slow=4.7,SNR=4.4 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| BVAR | **Borovoye Array** | **85.40 324** | P | **P** | **19 10 01.1** | **-1.0** |
| | comp=Z,1.3nm,0.5s,baz=122,slow=6.5,SNR=12 | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | |
| GLB | **Gilahina Butte** | **85.48 27** | P | **P** | **19 10 02.8** | **+0.5** |
| VRDI | **Verde Repeater** | **85.57 27** | P | **P** | **19 10 03.0** | **0.0** |
| CTGM | **Chitina Glacie** | **86.47 28** | P | **P** | **19 10 07.8** | **+0.5** |
| CTGM | | | IAmb | IAmb | 19 10 45.2 | | |
| | comp=Z,17nm,1.4s | | | | | | |
| M27K | **Edge Creek, AK** | **86.64 26** | P | **P** | **19 10 09.0** | **+0.8** |
| M27K | | | IAmb | IAmb | 19 11 04.4 | | |
| | comp=Z,19nm,1.6s | | | | | | |
| M29M | **Somme Creek** | **88.19 27** | P | **P** | **19 10 14.4** | **-1.1** |
| BBB | **Bella Bella** | **91.85 38** | LR | LR | 19 47 21.4 | | |
| | comp=Z,18nm,18.6s,baz=289,slow=33 | | | | | | |
| ELIB | **Princess Elisa** | **94.51 195** | *d*P | **P** | **19 10 45.3** | **+0.5** |
| | comp=Z,2.0nm,0.6s | | | | | | |
| YBH | **Yreka Blue Hor** | **94.73 49** | LR | LR | 19 49 20.0 | | |
| | comp=Z,15nm,18.5s,baz=256,slow=33 | | | | | | |
| BELA | **Belgrano 2** | **96.94 180** | P | **P** | **19 10 56.4** | **+0.8** |
| BELA | | | IAmb | IAmb | 19 10 59.8 | | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| PFO | **Pinyon Flats O** | **99.50 57** | LR | LR | 19 50 39.0 | | |
| | comp=Z,35nm,18.1s,baz=231,slow=32 | | | | | | |
| PLCA | **Paso Flores** | **123.45 147** | PKP | **PKPdf** | **19 16 21.2** | **-0.8** |
| | comp=Z,1.0nm,0.6s,baz=185,slow=2.8,SNR=7.3 | | | | | | |
| LPAZ | **La Paz** | **140.31 123** | PKP | **PKPdf** | **19 16 52.1** | **-2.9** |
| | comp=Z,0.5nm,0.4s,baz=196,slow=7.4,SNR=2.3 | | | | | | |
| TORD | **Torodi Ar. Bea** | **143.59 285** | PKP | PKPab | 19 16 56.8 | 0.0 |
| | comp=Z,0.8nm,0.5s,baz=56,slow=4.5,SNR=15 | | | | | | |
| ETMB | **Extrema** | **144.91 115** | PKPdf | **PKPab** | **19 17 01.2** | **-0.6** |
| AQDB | **Aquidauana** | **146.91 141** | PKPbc | **PKPdf** | **19 17 07.0** | **+1.3** |
| DBIC | **Dimbokro** | **150.61 274** | PKPbc | **PKPbc** | **19 17 17.0** | **-0.4** |
| | comp=Z,5.2nm,0.7s,baz=62,slow=1.2,SNR=7.3 | | | | | | |

**NOU 29 19:02:57.7, 22.50S×170.56E, h0km, MLv4.4/8, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | **2.56** | **293** | P | Pn | 19 03 38.6 | -1.8 |
| YATNC | **Mamie plateau,** | **3.43** | **277** | P | Pn | 19 03 52.1 | -0.3 |
| LIFNC | **LIFOU** | **3.53** | **298** | P | Pn | 19 03 54.5 | +0.7 |
| DZM | **Mont Dzumac** | **3.84** | **276** | P | Pn | 19 03 57.7 | -0.4 |
| NOUC | **Port Laguerre** | **3.96** | **275** | P | Pn | 19 03 59.6 | -0.2 |
| RTV | **Rentapao** | **5.09** | **336** | P | Pn | 19 04 15.6 | +0.3 |
| DVP | **Devils Point** | **5.25** | **334** | P | Pn | 19 04 16.8 | -0.6 |
| KOUNC | **Koumac, New Ca** | **6.15** | **287** | P | Pn | 19 04 30.6 | +0.7 |

**DJA 29 19:12:50.4±0.6, 11.5S±6.1×12.4E±, h10km, M3.7/10, mb3.9/4, mB5.0/1, MLv3.6/10, Mw(mB)4.3/1, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BATI | **Baumata** | **0.88** | **329** | P | Pg | 19 13 07.1 | -0.3 |
| SOEI | **Soe** | **1.22** | **7** | P | Pb | 19 13 12.9 | -0.7 |
| MMRI | **Maumere** | **2.97** | **321** | P | Pn | 19 13 38.0 | +0.4 |
| EDFI | **Ende, Flores** | **3.26** | **312** | P | Pn | 19 13 41.3 | -0.4 |
| BASI | **Baing, Sumba** | **3.56** | **282** | P | Pn | 19 13 45.0 | -0.8 |
| WBSI | **Waikabubak, Su** | **4.84** | **285** | P | Pn | 19 14 03.5 | +0.1 |
| BSSI | **Bau Bau, Buton** | **5.99** | **323** | P | Pn | 19 14 20.7 | +1.5 |
| | 17nm,1.9s,0.2nm | | | | | | |
| PLAI | **Plampang** | **6.60** | **288** | P | Pn | 19 14 27.4 | -0.2 |
| | 31nm,1.1s | | | | | | |
| BKSI | **Bulukumba** | **6.87** | **325** | P | Pn | 19 14 30.9 | -0.3 |
| | 8.9nm,1.1s,0.0nm | | | | | | |

*NOU **29** 19:16:27.7, 30.35S×175.89W, h0km, mb4.8/32, Kermadec Islands Region*
*IDC **29** 19:16:36.7±0.5, 30.32S×177.46W, h0km, mb4.4/11, mbtmp4.4/12, ML3.4/1, MS3.5/10, Error ellipse: s-maj=22.7km s-min=14.6km az=75.0*
*NEIC **29** 19:16:43.6±2.1, 30.33S±0.08×177.65W±0.08, h35km±1km, mb4.8/35, Error ellipse: s-maj=16.8km s-min=4.8km az=138.0*

**ISC 29 19:16:41.6±0.4, 30.41S±0.05×177.50W±0.08, h33km, n209, σ2$31/188, mb4.8/36, MS3.7/8, 5C, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RAO | **Raoul Island** | **1.21** | **342** | | **Pn** | **19 17 01.1** | **-1.1** |
| RAO | **Raoul Island** | **1.21** | **342** | Pn | **Pn** | **19 17 00.8** | **-1.4** |
| | 11µm,0.3s,baz=222,slow=12,SNR=551 | | | | | | |
| RAO | | | | LR | LR | 19 17 10.8 | |
| | comp=Z,285nm,20.3s,baz=94,slow=30 | | | | | | |
| RAO | | | | Sn | **Sn** | **19 17 16.1** | **-1.4** |
| | 4µm,0.3s,baz=284,slow=24,SNR=26 | | | | | | |
| PKGZ | **Pakihiroa** | **8.29** | **205** | P | **Pn** | **19 18 36.0** | **-3.5** |
| HAZ | **Te Kaha** | **8.30** | **207** | P | **Pn** | **19 18 36.5** | **-3.1** |
| RUGZ | **Raukumara Rang** | **8.53** | **207** | P | **Pn** | **19 18 40.1** | **-2.7** |
| TWGZ | **Tauwhareparae** | **8.60** | **205** | P | **Pn** | **19 18 40.6** | **-3.2** |
| CNGZ | **Carnagh Statio** | **8.80** | **203** | P | **Pn** | **19 18 42.1** | **-4.3** |
| OUZ | **Omahu

| | | | | | | |
|---|---|---|---|---|---|---|
| **MHCZ** | **Mount Hutt** | **15.72 211** | P | **Pn** | **19 20 17.1** | **-3.4** |
| **WVZ** | **Waitaha Valley** | **15.75 213** | P | **Pn** | **19 20 20.9** | **+0.1** |
| **RPZ** | **Rata Peaks** | **16.09 211** | P | **P** | **19 20 27.6** | **-0.7** |
| **RPZ** | **Rata Peaks** | **16.09 211** | Pn | **Pn** | **19 20 20.3** | **-5.0** |
| **RPZ** | **Rata Peaks** | **16.09 211** | Pn | **Pn** | **19 20 22.7** | **-2.6** |
| | comp=Z,2.0nm,0.3s,baz=1.8,slow=10.0,SNR=9.8 | | | | | |
| RPZ | | | Sn | Sn | 19 23 06.8 | -16 |
| | comp=Z,1.0nm,0.3s,baz=301,slow=19,SNR=1.5 | | | | | |
| **RPZ** | **Rata Peaks** | **16.09 211** | P | **Pn** | **19 20 22.8** | **-2.6** |
| **ARCZ** | **Arundel** | **16.22 211** | P | **Pn** | **19 20 21.7** | **-5.2** |
| **FOZ** | **Fox Glacier** | **16.53 214** | Pn | **Pn** | **19 20 26.1** | **-4.7** |
| FOZ | | | IAmb | IAmb | 19 20 37.2 | |
| | comp=Z,181nm,1.7s | | | | | |
| **FOZ** | **Fox Glacier** | **16.53 214** | P | **Pn** | **19 20 27.8** | **-3.1** |
| **DZM** | **Mont Dzumac** | **16.62 296** | P | **Pn** | **19 20 32.3** | **+0.2** |
| **DZM** | **Mont Dzumac** | **16.62 296** | Pn | **Pn** | **19 20 32.4** | **+0.2** |
| | comp=Z,0.1nm,0.3s,baz=271,slow=23,SNR=1.7 | | | | | |
| DZM | | | LR | LR | 19 25 45.9 | |
| | comp=Z,352nm,18.2s,baz=184,slow=33 | | | | | |
| | comp=Z,4.3nm,1.0s | | | | | |
| **LBZ** | **Lake Benmore** | **17.01 212** | Pn | **Pn** | **19 20 32.7** | **-4.1** |
| LBZ | | | IAmb | IAmb | 19 20 38.2 | |
| | comp=Z,81nm,1.9s | | | | | |
| **LBZ** | **Lake Benmore** | **17.01 212** | P | **Pn** | **19 20 33.2** | **-3.7** |
| **ODZ** | **Otahua Downs** | **17.33 209** | P | **Pn** | **19 20 40.4** | **-0.4** |
| **ODZ** | **Otahua Downs** | **17.33 209** | Pn | **Pn** | **19 20 34.8** | **-6.1** |
| **ODZ** | **Otahua Downs** | **17.33 209** | P | **Pn** | **19 20 37.3** | **-3.6** |
| **WKZ** | **Wanaka** | **17.88 213** | Pn | **Pn** | **19 20 42.7** | **-5.0** |
| **WKZ** | **Wanaka** | **17.88 213** | P | **Pn** | **19 20 45.2** | **-2.5** |
| **EAZ** | **Earnscleugh** | **18.06 211** | P | **Pn** | **19 20 48.6** | **-1.3** |
| **RAR** | **Rarotonga** | **18.38 64** | P | **P** | **19 20 49.6** | **-4.1** |
| | comp=Z,13nm,0.5s,baz=96,slow=10,SNR=1.9 | | | | | |
| **MLZ** | **Mavora Lakes** | **18.71 213** | | **P** | **19 20 51.2** | **-6.0** |
| MLZ | | | IAmb | IAmb | 19 20 54.7 | |
| | comp=Z,100nm,2.0s | | | | | |
| **WHZ** | **Wether Hill Ro** | **19.18 212** | P | **P** | **19 20 58.0** | **-4.4** |
| WHZ | | | IAmb | IAmb | 19 20 59.3 | |
| | comp=Z,71nm,1.7s | | | | | |
| **ARMA** | **Armidale** | **26.59 262** | P | **P** | **19 22 20.9** | **+4.0** |
| **ARMA** | **Armidale** | **26.59 262** | P | **P** | **19 22 19.4** | **+2.4** |
| ARMA | | | IAmb | IAmb | 19 22 26.3 | |
| | comp=Z,32nm,1.4s | | | | | |
| **MGCD** | **Mangrove Creek** | **26.77 256** | P | **P** | **19 22 22.8** | **+4.3** |
| **MGCD** | **Mangrove Creek** | **26.77 256** | P | **P** | **19 22 20.9** | **+2.5** |
| | comp=Z,33nm,0.8s | | | | | |
| **EIDS** | **Eidsvold** | **28.17 273** | P | **P** | **19 22 34.2** | **+3.2** |
| **EIDS** | **Eidsvold** | **28.17 273** | P | **P** | **19 22 31.0** | **-0.1** |
| **EIDS** | **Eidsvold** | **28.17 273** | P | **P** | **19 22 31.7** | **+0.6** |
| | comp=Z,13nm,1.1s | | | | | |
| **YNG** | **Young** | **28.99 253** | P | **P** | **19 22 42.4** | **+4.1** |
| **RK1H** | **Rockhampton Ha** | **29.32 276** | P | **P** | **19 22 44.4** | **+3.1** |
| | comp=Z,18nm,0.7s | | | | | |
| **TOO** | **Toolangi** | **31.36 247** | P | **P** | **19 23 01.7** | **+2.5** |
| **TOO** | **Toolangi** | **31.36 247** | P | **P** | **19 23 01.3** | **+2.1** |
| TOO | | | IAmb | IAmb | 19 23 27.7 | |
| | comp=Z,17nm,1.2s | | | | | |
| **TOO** | **Toolangi** | **31.36 247** | P | **P** | **19 23 01.2** | **+1.9** |
| **CMSA** | **Cobar Meteorol** | **31.49 258** | P | **P** | **19 23 02.9** | **+2.5** |
| **CMSA** | **Cobar Meteorol** | **31.49 258** | P | **P** | **19 23 02.3** | **+1.9** |
| | comp=Z,26nm,2.1s | | | | | |
| **QLP** | **Quilpie** | **33.74 267** | P | **P** | **19 23 21.9** | **+1.7** |
| | comp=Z,21nm,0.8s | | | | | |
| **CTA** | **Charters Tower** | **34.23 279** | P | **P** | **19 23 26.6** | **+2.1** |
| **CTA** | **Charters Tower** | **34.23 279** | LR | LR | 19 35 23.0 | |
| | comp=Z,9.6nm,19.5s,baz=102,slow=33 | | | | | |
| **CTAO** | **Charters Tower** | **34.23 279** | P | **P** | **19 23 26.6** | **+2.1** |
| **CTAO** | **Charters Tower** | **34.23 279** | P | **P** | **19 23 25.9** | **+1.5** |
| CTAO | | | IAmb | IAmb | 19 23 35.2 | |
| | comp=Z,24nm,1.1s | | | | | |
| **CTAO** | **Charters Tower** | **34.23 279** | P | **P** | **19 23 26.1** | **+1.7** |
| CTAO | | | pP | **pP** | **19 23 34.1** | **+1.3** |
| CTAO | | | sP | **pwP** | **19 23 38.4** | **+0.4** |
| **STKA** | **Stephens Creek** | **34.90 257** | P | **P** | **19 23 32.4** | **+2.3** |
| **STKA** | **Stephens Creek** | **34.90 257** | P | **P** | **19 23 31.2** | **+1.1** |
| **STKA** | **Stephens Creek** | **34.90 257** | P | **P** | **19 23 32.8** | **+2.7** |
| | comp=Z,6.1nm,1.6s | | | | | |
| **STKA** | **Stephens Creek** | **34.90 257** | P | **P** | **19 23 31.4** | **+1.3** |
| | comp=Z,8.7nm,0.4s,baz=102,slow=12,SNR=46 | | | | | |
| STKA | | | PcP | **PcP** | **19 26 03.1** | **+0.6** |
| | comp=Z,1.3nm,0.6s,baz=315,slow=4.3,SNR=1.7 | | | | | |
| STKA | | | LR | LR | 19 36 25.3 | |
| | comp=Z,128nm,18.6s,baz=31,slow=34 | | | | | |
| | comp=Z,8.7nm,0.4s | | | | | |
| **INKA** | **Innaminka** | **36.45 264** | P | **P** | **19 23 46.0** | **+2.6** |
| **HTT** | **Hallett** | **36.91 254** | P | **P** | **19 23 49.8** | **+2.3** |
| **HTT** | **Hallett** | **36.91 254** | P | **P** | **19 23 49.6** | **+2.2** |
| | comp=Z,24nm,1.2s | | | | | |
| **LCRK** | **Leigh Creek** | **38.00 258** | P | **P** | **19 23 58.1** | **+1.5** |
| **BBOO** | **Buckleboo** | **39.38 254** | P | **P** | **19 24 09.5** | **+1.3** |
| **BBOO** | **Buckleboo** | **39.38 254** | P | **P** | **19 24 08.5** | **+0.3** |
| **BBOO** | **Buckleboo** | **39.38 254** | P | **P** | **19 24 09.0** | **+0.8** |
| | comp=Z,26nm,1.6s | | | | | |
| **COEN** | **Coen** | **39.69 286** | P | **P** | **19 24 13.5** | **+2.6** |
| **COEN** | **Coen** | **39.69 286** | P | **P** | **19 24 11.4** | **+0.5** |
| COEN | | | IAmb | IAmb | 19 25 33.2 | |
| | comp=Z,71nm,1.9s | | | | | |
| **QIS** | **Mount Isa** | **39.75 274** | P | **P** | **19 24 13.6** | **+2.2** |
| **QIS** | **Mount Isa** | **39.75 274** | P | **P** | **19 24 12.9** | **+1.5** |
| | comp=Z,7.2nm,1.0s | | | | | |
| **OOD** | **Oodnadatta** | **40.77 262** | P | **P** | **19 24 21.9** | **+2.2** |
| **MULG** | **Mulgathing** | **41.55 257** | P | **P** | **19 24 27.0** | **+0.9** |
| **AS01** | **Alice Springs** | **43.50 267** | P | **P** | **19 24 43.6** | **+1.5** |
| **AS31** | **Alice Springs** | **43.54 267** | P | **P** | **19 24 41.5** | **-0.9** |
| **AS31** | **Alice Springs** | **43.54 267** | P | **P** | **19 24 43.4** | **+0.9** |
| | comp=Z,3.2nm,0.8s | | | | | |
| **ASAR** | **Alice Springs** | **43.54 267** | P | **P** | **19 24 42.0** | **-0.5** |
| | comp=Z,4.2nm,0.5s,baz=103,slow=6.8,SNR=69 | | | | | |
| ASAR | | | PcP | **PcP** | **19 26 30.0** | **+0.1** |
| | comp=Z,1.0nm,0.7s,baz=111,slow=5.1,SNR=2.6 | | | | | |
| ASAR | | | ScP | **ScP** | **19 30 20.3** | **+1.3** |
| | comp=Z,0.3nm,0.7s,baz=113,slow=4.1,SNR=5.0 | | | | | |
| | comp=Z,4.2nm,0.5s | | | | | |
| **DRV** | **Dumont d'Urvil** | **44.29 203** | P | **P** | **19 24 49.0** | **+1.2** |
| **WR0** | **Warramunga Arr** | **44.35 272** | P | **P** | **19 24 48.7** | **-0.2** |
| WR0 | | | IAmb | IAmb | 19 24 54.4 | |
| | comp=Z,12nm,1.0s | | | | | |
| **WRAB** | **Tennant Creek** | **44.53 272** | P | **P** | **19 24 49.9** | **-0.4** |
| WRAB | | | IAmb | IAmb | 19 24 55.4 | |
| | comp=Z,14nm,0.7s | | | | | |
| **WRA** | **Warramunga Arr** | **44.53 272** | P | **P** | **19 24 49.8** | **-0.6** |
| | comp=Z,9.7nm,0.5s,baz=111,slow=7.8,SNR=66 | | | | | |
| WRA | | | PcP | **PcP** | **19 26 32.4** | **-0.9** |
| | comp=Z,1.1nm,0.8s,baz=118,slow=3.6,SNR=2.0 | | | | | |
| WRA | | | LR | LR | 19 41 59.5 | |
| | comp=Z,110nm,19.8s,baz=28,slow=34 | | | | | |
| | comp=Z,9.7nm,0.5s | | | | | |
| **FORT** | **Forrest** | **46.46 255** | P | **P** | **19 25 06.5** | **+1.0** |
| **FORT** | **Forrest** | **46.46 255** | P | **P** | **19 25 05.2** | **-0.4** |
| **WRKA** | **Warakurna** | **47.91 263** | P | **P** | **19 25 17.8** | **+0.8** |
| **WRKA** | **Warakurna** | **47.91 263** | P | **P** | **19 25 16.2** | **-0.8** |
| | comp=Z,11nm,2.5s | | | | | |
| **SBA** | **Scott Base** | **48.06 184** | P | **P** | **19 25 21.3** | **+4.0** |
| SBA | | | pP | **sP** | **19 25 29.4** | **+0.2** |
| **KDU** | **Kakadu** | **49.35 280** | P | **P** | **19 25 28.7** | **+0.7** |
| | comp=Z,15nm,2.3s | | | | | |
| **MTN** | **Manton Dam** | **50.41 279** | P | **P** | **19 25 35.1** | **-1.1** |
| MTN | | | IAmb | IAmb | 19 27 20.6 | |
| | comp=Z,20nm,1.4s | | | | | |
| **MTN** | **Manton Dam** | **50.41 279** | P | **P** | **19 25 36.8** | **+0.6** |
| | comp=Z,11nm,1.4s | | | | | |
| **KNRA** | **Kununurra** | **51.14 274** | P | **P** | **19 25 40.9** | **-0.7** |
| KNRA | | | IAmb | IAmb | 19 25 46.2 | |
| | comp=Z,19nm,1.3s | | | | | |
| **KNRA** | **Kununurra** | **51.14 274** | P | **P** | **19 25 41.5** | **-0.1** |
| | comp=Z,7.6nm,0.7s | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.79 270** | P | **P** | **19 25 54.1** | **+0.2** |
| **FITZ** | **Fitzroy Crossi** | **52.79 270** | P | **P** | **19 25 54.2** | **+0.2** |
| | comp=Z,180nm,0.7s | | | | | |
| **CCD** | **Concordia, Ant** | **53.06 196** | P | **P** | **19 25 57.3** | **+1.7** |
| **FAKI** | **Fak Fak** | **54.75 290** | P | **P** | **19 26 09.2** | **+0.9** |
| **FAKI** | **Fak Fak** | **54.75 290** | P | **P** | **19 26 05.7** | **-2.6** |
| FAKI | | | IAmb | IAmb | 19 27 07.9 | |
| | comp=Z,18nm,1.0s | | | | | |
| **CASY** | **Casey** | **55.33 208** | P | **P** | **19 26 12.5** | **+0.7** |
| **CASY** | **Casey** | **55.33 208** | P | **P** | **19 26 12.4** | **+0.7** |
| **MBWA** | **Marble Bar** | **56.66 263** | P | **P** | **19 26 19.8** | **-2.1** |
| **GUMO** | **Guam** | **56.80 315** | P | **P** | **19 26 20.0** | **-2.8** |
| **MORW** | **Morawa** | **56.94 253** | P | **P** | **19 26 22.3** | **-1.5** |
| **QSPA** | **South Pole Qui** | **59.70 180** | P | **P** | **19 26 45.0** | **+2.4** |
| QSPA | | | IAmb | IAmb | 19 26 56.4 | |
| | comp=Z,13nm,0.6s | | | | | |
| **QSPA** | **South Pole Qui** | **59.70 180** | P | **P** | **19 26 45.3** | **+2.7** |
| | comp=Z,4.3nm,0.7s,baz=7.8,slow=0.6,SNR=47 | | | | | |
| | comp=Z,4.3nm,0.7s | | | | | |
| **QSPA** | **South Pole Qui** | **59.70 180** | P | **P** | **19 26 45.1** | **+2.5** |
| QSPA | | | pP | **sP** | **19 26 54.0** | **-0.8** |
| QSPA | | | sP | **pwP** | **19 26 57.6** | **+0.4** |
| **SANI** | **Sanana** | **60.38 287** | P | **P** | **19 26 47.4** | **-0.5** |
| **MAW** | **Mawson** | **72.45 200** | P | **P** | **19 28 05.4** | **+1.1** |
| | comp=Z,1.7nm,0.6s,baz=144,slow=5.3,SNR=2.0 | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | |
| **KKM** | **Kota Kinabalu** | **72.97 288** | P | **P** | **19 28 07.1** | **-1.3** |
| KKM | | | IAmb | IAmb | 19 30 15.5 | |
| | comp=Z,19nm,1.0s | | | | | |
| **JOW** | **Kunigami** | **76.99 312** | LR | LR | 19 59 27.6 | |
| | comp=Z,44nm,19.7s,baz=37,slow=33 | | | | | |
| **TROLL** | **Troll, Antarti** | **77.86 180** | ⇑P | **P** | **19 28 36.4** | **+0.8** |
| | comp=Z,316nm,0.8s | | | | | |
| **SNAA** | **Sanae** | **78.13 178** | P | **P** | **19 28 36.9** | **0.0** |
| SNAA | | | IAmb | IAmb | 19 30 16.3 | |
| | comp=Z,9.8nm,1.5s | | | | | |
| **SNAA** | **Sanae** | **78.13 178** | ⇑P | **P** | **19 28 37.9** | **+0.9** |
| | comp=Z,23nm,0.4s | | | | | |
| **SNAA** | **Sanae** | **78.13 178** | P | **P** | **19 28 37.0** | **0.0** |
| | comp=Z,2.0nm,0.6s,baz=98,slow=6.3,SNR=6.3 | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | |
| **VNA3** | **Neumayer Olymp** | **78.26 176** | ⇑P | **P** | **19 28 38.5** | **+0.8** |
| | comp=Z,1.0nm,0.7s | | | | | |
| **MJAR** | **Matsushiro Arr** | **78.50 325** | P | **P** | **19 28 39.4** | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=177,slow=9.4,SNR=2.1 | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | |
| **VNA2** | **Neumayer--Watz** | **78.70 177** | ⇑P | **P** | **19 28 41.3** | **+1.2** |
| | comp=Z,7.4nm,0.8s,baz=172,slow=5.2 | | | | | |
| **VNA1** | **Neumayer--Stat** | **78.93 176** | ⇑P | **P** | **19 28 42.4** | **+1.2** |
| | comp=Z,5.1nm,0.8s | | | | | |
| **H03S2** | **Juan Fernandez** | **80.09 123** | T | T | 20 58 19.6 | |
| | baz=238,slow=74,SNR=31 | | | | | |
| **H03S1** | **Juan Fernandez** | **80.11 123** | T | T | 20 58 20.8 | |
| | baz=238,slow=74,SNR=31 | | | | | |
| **H03S3** | **Juan Fernandez** | **80.11 123** | T | T | 20 58 19.6 | |
| | baz=238,slow=74,SNR=29 | | | | | |
| **H03N3** | **Juan Fernandez** | **80.29 123** | T | T | 20 58 29.1 | |
| | baz=241,slow=73,SNR=14 | | | | | |
| **H03N2** | **Juan Fernandez** | **80.29 123** | T | T | 20 58 24.4 | |
| | baz=241,slow=73,SNR=14 | | | | | |
| **H03N1** | **Juan Fernandez** | **80.30 123** | T | T | 20 58 12.2 | |
| | baz=241,slow=73,SNR=13 | | | | | |
| **H06S1** | **SOCORRO T** | **80.50 62** | T | T | 21 01 51.3 | |
| | SNR=6.9 | | | | | |
| **PLCA** | **Paso Flores** | **82.18 133** | P | **P** | **19 28 59.5** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=195,slow=12,SNR=1.9 | | | | | |
| PLCA | | | LR | LR | 20 02 54.6 | |
| | comp=Z,21nm,18.1s,baz=190,slow=34 | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | |
| **PEA0B** | **Petropavlovsk-** | **85.94 345** | P | **P** | **19 29 18.8** | **+1.0** |
| **PETK** | **Petropavlovsk-** | **85.94 345** | P | **P** | **19 29 18.8** | **+1.0** |
| | comp=Z,4.8nm,0.7s,baz=112,slow=6.1,SNR=14 | | | | | |
| | comp=Z,4.8nm,0.7s | | | | | |
| **GSI** | **Gunungsitoli** | **86.28 274** | P | **P** | **19 29 20.4** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** | **87.41 326** | P | **P** | **19 29 26.2** | **+0.9** |
| | comp=Z,1.7nm,0.7s,baz=106,slow=4.7,SNR=4.3 | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | |
| **YBH** | **Yreka Blue Hor** | **87.78 38** | LR | LR | 19 59 19.9 | |
| | comp=Z,18nm,21.7s,baz=238,slow=29 | | | | | |
| **NVAR** | **Mina Array Bea** | **87.95 42** | P | **P** | **19 29 27.9** | **-0.4** |
| | comp=Z,1.1nm,1.0s,baz=202,slow=6.8,SNR=2.6 | | | | | |
| NVAR | | | LR | LR | 20 02 42.0 | |
| | comp=Z,28nm,18.9s,baz=272,slow=31 | | | | | |
| | comp=Z,1.1nm,1.0s | | | | | |
| **CPUP** | **Villa Florida** | **99.64 128** | LR | LR | 20 06 58.4 | |
| | comp=Z,21nm,20.5s,baz=219,slow=30 | | | | | |
| **MKAR** | **Makanchi Array** | **118.11 310** | PKP | **PKPdf** | **19 35 24.2** | **-0.7** |
| | comp=Z,0.3nm,0.4s,baz=86,slow=0.1,SNR=8.9 | | | | | |
| **ZALV** | **Zalesovo Beam** | **118.33 318** | PKP | **PKPdf** | **19 35 23.8** | **-1.2** |
| | comp=Z,0.8nm,0.6s,baz=129,slow=3.9,SNR=4.0 | | | | | |
| **KURBB** | **Kurchatov Arra** | **121.41 314** | PKP | **PKPdf** | **19 35 30.3** | **-0.7** |
| | comp=Z,1.5nm,0.6s,baz=106,slow=1.8,SNR=15 | | | | | |
| **KKAR** | **Karaganda Array** | **125.44 304** | PKP | **PKPdf** | **19 35 38.8** | **-0.3** |
| **BVAR** | **Borovoye Array** | **126.72 316** | PKP | **PKPdf** | **19 35 41.2** | **0.0** |
| | comp=Z,2.8nm,0.5s,baz=103,slow=1.2,SNR=21 | | | | | |
| **BRVK** | **Borovoye** | **126.78 316** | PKPdf | **PKiKP** | **19 35 42.0** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **138.69 348** | PKhKP | PKPpre | 19 35 55.9 | |
| | comp=Z,0.9nm,0.8s,baz=106,slow=3.9,SNR=4.3 | | | | | |
| ARCES | | | PKP | **PKPdf** | **19 36 02.6** | **-0.6** |
| | comp=Z,1.4nm,0.7s,baz=64,slow=3.1,SNR=5.3 | | | | | |
| **FIA1** | **FINESS Array S** | **145.30 340** | | **PKPbc** | **19 36 15.1** | **0.0** |
| **FINES** | **FINESS Array B** | **145.31 340** | PKPbc | **PKPbc** | **19 36 14.9** | **-0.1** |
| | comp=Z,12nm,0.4s,baz=53,slow=4.2,SNR=225 | | | | | |
| **KBZ** | **Khabaz** | **145.48 304** | PKPbc | **PKPab** | **19 36 16.6** | **+0.2** |
| | comp=Z,4.1nm,0.8s,baz=109,slow=3.8,SNR=5.8 | | | | | |
| **KIV** | **Kislovodsk** | **145.59 304** | | **PKPdf** | **19 36 15.6** | **-0.8** |
| **SIRT** | **Sirnak** | **146.32 293** | PKPdf | **PKPbc** | **19 36 19.4** | **+0.3** |
| **NC204** | **NORSAR Array S** | **148.65 352** | | **PKPbc** | **19 36 24.7** | **+0.1** |
| **NC405** | **NORSAR Array S** | **148.69 351** | PKPdf | **PKPdf** | **19 36 21.7** | **+0.8** |
| **NB201** | **NORSAR Array S** | **148.81 352** | PKPbc | **PKiKP** | **19 36 25.8** | **-0.6** |
| **NOA** | **NORSAR Array B** | **148.83 352** | PKPbc | **PKPbc** | **19 36 24.7** | **-0.4** |
| | comp=Z,2.5nm,0.7s,baz=15,slow=4.4,SNR=11 | | | | | |
| **NC602** | **NORSAR Array S** | **149.08 351** | PKPdf | **PKPdf** | **19 36 22.1** | **+0.6** |
| **HFS** | **Hagfors** | **149.34 349** | PKPbc | **PKPbc** | **19 36 25.9** | **-0.5** |
| | comp=Z,3.8nm,0.7s,baz=64,slow=3.4,SNR=11 | | | | | |
| **ARPR** | **Arapgir-MALATY** | **149.47 296** | PKPbc | **PKiKP** | **19 36 28.8** | **+0.1** |
| **GAZ** | **Gaziantep** | **150.49 293** | PKPbc | **PKPbc** | **19 36 27.7** | **-2.3** |
| **PABE** | **Paberze** | **150.65 335** | PKPbc | **PKPbc** | **19 36 29.5** | **-0.1** |
| **BNN** | **Bunyan** | **151.43 296** | PKPbc | **PKPbc** | **19 36 32.4** | **+0.2** |
| **AKASG** | **Malin Array Be** | **151.57 323** | PKPbc | **PKPbc** | **19 36 31.9** | **0.0** |
| | comp=Z,2.9nm,0.4s,baz=48,slow=2.9,SNR=39 | | | | | |
| **AKBB** | **Malin Array Si** | **151.57 323** | PKPbc | **PKPbc** | **19 36 30.8** | **-1.2** |
| **KIEV** | **Kiev** | **151.59 323** | | **PKPbc** | **19 36 31.6** | **-0.4** |
| **MMAI** | **Mount Meron Ar** | **151.95 284** | PKPbc | **PKiKP** | **19 36 35.0** | **+1.1** |
| | comp=Z,4.9nm,0.4s,baz=85,slow=7.4,SNR=16 | | | | | |
| **BRTR** | **Keskin Array B** | **152.99 299** | PKPbc | **PKPbc** | **19 36 35.6** | **-0.1** |
| | comp=Z,1.5nm,0.6s,baz=134,slow=4.5,SNR=11 | | | | | |
| **KWP** | **Kalwaria Pacla** | **155.48 327** | PKPab | **PKPab** | **19 36 56.7** | **-0.5** |
| **GERES** | **GERESS Array B** | **159.71 338** | PKPab | **PKPab** | **19 37 14.9** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=33,slow=5.8,SNR=3.7 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.80 177** | PKP | **PKPdf** | **19 36 41.0** | **0.0** |
| | comp=Z,0.8nm,1.1s,baz=132,slow=2.1,SNR=3.2 | | | | | |
| TORD | | | PKPab | **PKPab** | **19 37 30.1** | **+0.5** |
| | comp=Z,1.0nm,0.7s,baz=194,slow=2.0,SNR=5.2 | | | | | |
| **ESDC** | **Sonseca Array** | **169.35 28** | PKP | **PKPdf** | **19 36 47.6** | **+2.1** |
| | comp=Z,0.2nm,0.3s,baz=14,slow=0.5,SNR=2.3 | | | | | |

**DJA 29 19:25:39.5±0.3, 8°S±4°×11°7E±°, h10km, M3.5/12, mb3.6/2, MLv3.5/12, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.46** | **174** | P | | P | Pg | 19 25 48.7 | +0.2 |
| **PLAI** | **Plampang** | **1.08** | **120** | P | | P | Pg | 19 26 00.0 | -0.3 |
| **SRBI** | **Singaraja** | **1.61** | **277** | P | | Pn | Pn | 19 26 07.3 | -0.7 |
| **DNP** | **Denpasar** | **1.65** | **256** | P | | Pn | Pn | 19 26 08.8 | +0.2 |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **266** | P | | Pn | Pn | 19 26 21.8 | -0.6 |
| **WBSI** | **Waikabubak, Su** | **2.87** | **118** | P | | Pn | Pn | 19 26 25.8 | +0.4 |
| **BSSI** | **Bau Bau, Buton** | **4.21** | **60** | P | | Pn | Pn | 19 26 43.7 | -0.1 |
| **BKSI** | **Bulukumba** | **4.40** | **48** | P | | Pn | Pn | 19 26 46.0 | -0.3 |
| **EDFI** | **Ende, Flores** | **4.83** | **96** | P | | Pn | Pn | 19 26 52.6 | +0.2 |
| **BNSI** | **Bone** | **5.04** | **40** | P | | Pn | Pn | 19 26 56.1 | +0.8 |

**NEIC 29 19:36:54.0±0.9, 37.41N±0.03×97.87W±0.02, h5km±2km, mb_Lg2.8/67, ML3.2/40, Error ellipse: s-maj=4.8km s-min=3.3km az=9.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.15** | **222** | | | | Pg | 19 36 57.6 | +0.5 |
| KAN12 | | | | IAML | | | | 19 37 00.5 | |
| | comp=E,6μm,0.2s | | | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.20** | **204** | | | | Pg | 19 36 58.8 | +0.8 |
| KAN08 | | | | IAML | | | | 19 37 01.3 | |
| | comp=N,3μm,0.4s | | | | | | | | |
| **KS21** | **Milan North St** | **0.21** | **127** | IAML | | | | 19 37 01.9 | |
| | comp=N,5μm,0.2s | | | | | | | | |
| KS21 | | | | IAML | | | | 19 37 03.2 | |
| | comp=N,6μm,0.2s | | | | | | | | |
| **KS21** | **Milan North St** | **0.21** | **127** | | | | Pg | 19 36 59.1 | +1.0 |
| **KAN01** | **Argonia South** | **0.27** | **161** | | | | Pg | 19 36 60.0 | +0.6 |
| KAN01 | | | | IAML | | | | 19 37 06.3 | |
| | comp=E,3μm,0.3s | | | | | | | | |
| KAN01 | | | | IAML | | | | 19 37 06.3 | |
| | comp=N,4μm,0.5s | | | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.30** | **180** | | | | Pg | 19 37 00.4 | +0.5 |
| KAN05 | | | | IAML | | | | 19 37 08.4 | |
| | comp=N,4μm,0.5s | | | | | | | | |
| **KAN09** | **Caldwell North** | **0.34** | **144** | | | | Pg | 19 37 01.3 | +0.7 |
| **KAN17** | **Caldwell West** | **0.38** | **167** | | | | Pg | 19 37 01.9 | +0.6 |
| KAN17 | | | | IAML | | | | 19 37 12.2 | |
| | comp=E,4μm,0.3s | | | | | | | | |
| **KAN14** | **Manchester OK** | **0.46** | **189** | | | | Pg | 19 37 03.1 | +0.2 |
| KAN14 | | | | IAML | | | | 19 37 15.8 | |
| | comp=N,1μm,0.6s | | | | | | | | |
| **KAN13** | **South Haven SW** | **0.51** | **142** | | | | Pg | 19 37 04.0 | +0.3 |
| KAN13 | | | | IAML | | | | 19 37 10.9 | |
| | comp=E,2μm,0.4s | | | | | | | | |
| KAN13 | | | | IAML | | | | 19 37 14.8 | |
| | comp=N,2μm,0.3s | | | | | | | | |
| **GC02** | **Grant County #** | **0.56** | **179** | Pg | | Pg | Pg | 19 37 05.1 | +0.3 |
| **OK032** | **Salt Plains WL** | **0.66** | **204** | | | | Pg | 19 37 07.2 | +0.5 |
| **BLOK** | **Blackwell** | **0.83** | **141** | Pg | | Pg | Pg | 19 37 10.2 | +0.1 |
| **CROK** | **Carrier** | **0.91** | **186** | | | | Pg | 19 37 11.4 | -0.1 |
| CROK | | | | IAML | | | | 19 37 33.5 | |
| | comp=E,656nm,0.4s | | | | | | | | |
| CROK | | | | IAML | | | | 19 37 40.1 | |
| | comp=N,1μm,0.8s | | | | | | | | |
| **OK035** | **E0210 Rd and N** | **0.97** | **224** | Pg | | Pg | Pg | 19 37 12.8 | +0.2 |
| **NOKA** | **Waynoka** | **1.15** | **228** | | | | Pg | 19 37 15.1 | -1.0 |
| **OK038** | **West end E0370** | **1.16** | **217** | | | | Pb | 19 37 16.6 | 0.0 |
| OK038 | | | | IAML | | | | 19 37 42.7 | |
| | comp=N,488nm,0.4s | | | | | | | | |
| OK038 | | | | IAML | | | | 19 37 42.8 | |
| | comp=N,399nm,0.5s | | | | | | | | |
| **T35A** | **Sooner Cattle** | **1.19** | **114** | Pg | | Pg | Pn | 19 37 17.4 | +0.1 |
| **R32A** | **Long Quarter,** | **1.21** | **327** | Pn | | Pn | Pn | 19 37 18.9 | +1.3 |
| R32A | | | | IAML | | | | 19 37 40.2 | |
| | comp=E,372nm,0.3s | | | | | | | | |
| R32A | | | | IAML | | | | 19 37 40.4 | |
| | comp=N,418nm,0.4s | | | | | | | | |
| **OK051** | **E0350 and S346** | **1.23** | **137** | | | | Pg | 19 37 17.5 | -0.1 |
| **OK048** | **Pawnee Station** | **1.24** | **143** | | | | Pg | 19 37 17.5 | -0.3 |
| OK048 | | | | IAML | | | | 19 37 38.2 | |
| | comp=N,530nm,0.3s | | | | | | | | |
| **QUOK** | **Quay** | **1.55** | **143** | | | | Pn | 19 37 22.7 | +0.4 |
| **OK029** | **Liberty Lake** | **1.65** | **168** | | | | Pn | 19 37 24.2 | +0.6 |
| **OK052** | **Battle Ridge R** | **1.66** | **148** | | | | Pn | 19 37 24.1 | +0.4 |
| **OK031** | **S. Brethren Rd** | **1.68** | **150** | | | | Pn | 19 37 24.7 | +0.7 |
| **ADOK** | **Arcadia Dam** | **1.80** | **167** | | | | Pb | 19 37 26.8 | -0.7 |
| **ELIS** | **Ellis County** | **1.83** | **223** | | | | Pb | 19 37 28.2 | +0.2 |
| **CSTR** | **Hydro, Custer** | **1.88** | **201** | | | | Pn | 19 37 27.8 | +0.9 |
| **DEOK** | **Depew** | **1.92** | **144** | | | | Pb | 19 37 28.8 | -0.7 |
| **KSU1** | **Kansas State U** | **1.96** | **30** | | | | Pn | 19 37 27.7 | -0.2 |
| **CBKS** | **Cedar Bluff** | **2.03** | **314** | | | | Pb | 19 37 30.7 | -0.8 |
| **FNO** | **Franklin** | **2.18** | **170** | | | | Pn | 19 37 31.4 | +0.4 |
| **TUL3** | **Leonard** | **2.24** | **131** | Pn | | Pn | Pn | 19 37 29.7 | -2.1 |
| **W35A** | **Tecumseh** | **2.39** | **160** | | | | Pn | 19 37 32.8 | -1.1 |
| **RLO** | **Rose Lookout** | **2.60** | **118** | Pn | | Pn | Pn | 19 37 36.9 | +0.1 |
| **X34A** | **Smith Ranch, M** | **2.80** | **179** | | | | Pb | 19 37 45.1 | +0.5 |
| X34A | | | | IAmb_Lg | | | | 19 38 27.7 | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| **U38A** | **Gravette** | **2.96** | **108** | | | | Pn | 19 37 42.0 | +0.3 |
| U38A | | | | IAmb_Lg | | | | 19 38 28.5 | |
| | comp=Z,21nm,0.7s | | | | | | | | |
| **SMWD** | **Samnorwood** | **3.00** | **220** | | | | Pn | 19 37 41.0 | -1.2 |
| SMWD | | | | IAmb_Lg | | | | 19 38 35.2 | |
| | comp=Z,31nm,1.2s | | | | | | | | |
| **HHAR** | **Hobbs** | **3.35** | **108** | | | | Pn | 19 37 47.6 | +0.5 |
| **X37A** | **Clayton** | **3.47** | **144** | Pn | | Pn | Pn | 19 37 47.7 | -1.0 |
| X37A | | | | IAmb_Lg | | | | 19 38 49.6 | |
| | comp=Z,30nm,0.7s | | | | | | | | |
| **N35A** | **Tabor** | **3.86** | **26** | | | | Pg | 19 38 06.3 | -1.7 |
| **AMTX** | **Amarillo** | **3.98** | **232** | Pn | | Pn

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LTZ | Lake Taylor | 25.84 | 196 | P | P | 19 42 57.7 | -2.4 |
| INZ | Inchbonnie | 26.02 | 198 | P | P | 19 43 00.2 | -1.4 |
| FOZ | Fox Glacier | 27.25 | 199 | P | P | 19 43 11.3 | -1.0 |
| EIDS | Eidsvold | 29.42 | 250 | P | P | 19 43 32.1 | +0.5 |
| EIDS | Eidsvold | 29.42 | 250 | P | P | 19 43 31.4 | -0.2 |
| MLZ | Mavora Lakes | 29.43 | 200 | P | P | 19 43 31.0 | -0.3 |
| WHZ | Wether Hill Ro | 29.95 | 200 | P | P | 19 43 34.1 | -1.7 |
| ARMA | Armidale | 30.03 | 240 | P | P | 19 43 37.1 | +0.2 |
| ARMA | Armidale | 30.03 | 240 | P | P | 19 43 36.5 | -0.4 |
| ARMA | | | | IAmb | IAmb | 19 43 43.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 19 44 07.5 | -0.2 |
| CTAO | Charters Tower | 33.66 | 261 | P | P | 19 44 07.1 | -0.6 |
| CTAO | | | | IAmb | IAmb | 19 44 08.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| CAN | Canberra | 33.75 | 233 | P | P | 19 44 08.8 | +0.5 |
| PMG | Port Moresby | 34.77 | 280 | P | P | 19 44 17.2 | +0.2 |
| QLP | Quilpie | 35.69 | 250 | P | P | 19 44 25.1 | +0.7 |
| TOO | Toolangi | 37.20 | 231 | P | P | 19 44 37.3 | +0.6 |
| TOO | | | | IAmb | IAmb | 19 45 00.6 | |
| | comp=Z,16nm,1.4s | | | | | | |
| COEN | Coen | 37.37 | 271 | P | P | 19 44 38.6 | +0.2 |
| MANU | Manus Island | 37.45 | 291 | P | P | 19 44 39.3 | +0.3 |
| STKA | Stephens Creek | 38.73 | 242 | P | P | 19 44 49.3 | +0.1 |
| | comp=Z,6.3nm,0.5s,baz=76,slow=9.3,SNR=20 | | | | | | |
| | comp=Z,6.3nm,0.5s | | | | | | |
| HTT | Hallett | 41.24 | 240 | P | P | 19 45 11.2 | +2.0 |
| BBOO | Buckleboo | 43.51 | 241 | P | P | 19 45 27.3 | +0.5 |
| BBOO | Buckleboo | 43.51 | 241 | P | P | 19 45 26.9 | +0.1 |
| BBOO | | | | IAmb | IAmb | 19 45 27.4 | |
| | comp=Z,16nm,0.7s | | | | | | |
| GENI | Genyem | 43.70 | 286 | P | P | 19 45 31.3 | +2.7 |
| WRAB | Tennant Creek | 44.84 | 260 | P | P | 19 45 36.0 | -1.3 |
| WRAB | | | | IAmb | IAmb | 19 45 37.2 | |
| | comp=Z,9.4nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 19 45 36.1 | -1.3 |
| | comp=Z,7.9nm,0.5s,baz=96,slow=7.2,SNR=167 | | | | | | |
| WRA | | | | PcP | PcP | 19 47 06.1 | -0.1 |
| | comp=Z,1.4nm,0.3s,baz=90,slow=3.5,SNR=6.5 | | | | | | |
| WRA | | | | ScP | ScP | 19 50 05.0 | +2.0 |
| | comp=Z,0.2nm,0.6s,baz=84,slow=3.6,SNR=1.7 | | | | | | |
| | comp=Z,7.9nm,0.5s | | | | | | |
| AS01 | Alice Springs | 44.93 | 254 | P | P | 19 45 38.1 | +0.1 |
| ASAR | Alice Springs | 44.97 | 254 | P | P | 19 45 38.0 | -0.2 |
| | comp=Z,37nm,0.6s,baz=87,slow=8.9,SNR=762 | | | | | | |
| ASAR | | | | PcP | PcP | 19 47 06.9 | +0.2 |
| | comp=Z,2.8nm,0.4s,baz=103,slow=3.7,SNR=10.0 | | | | | | |
| ASAR | | | | ScP | ScP | 19 50 05.0 | +1.4 |
| | comp=Z,0.6nm,0.6s,baz=97,slow=4.2,SNR=4.3 | | | | | | |
| ASAR | | | | S | S | 19 51 34.0 | -0.9 |
| | comp=Z,2.0nm,0.9s,baz=83,slow=16,SNR=9.6 | | | | | | |
| | comp=Z,37nm,0.6s | | | | | | |
| MTN | Manton Dam | 49.06 | 269 | P | P | 19 46 08.0 | -1.0 |
| MTN | | | | IAmb | IAmb | 19 46 09.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| WRKA | Warakurna | 50.01 | 252 | P | P | 19 46 16.1 | +0.2 |
| FORT | Forrest | 50.13 | 245 | P | P | 19 46 17.0 | +0.4 |
| FORT | Forrest | 50.13 | 245 | P | P | 19 46 15.9 | -0.7 |
| FORT | | | | IAmb | IAmb | 19 46 16.2 | |
| | comp=Z,21nm,0.8s | | | | | | |
| KNRA | Kununurra | 50.73 | 264 | P | P | 19 46 20.4 | -0.7 |
| KNRA | | | | IAmb | IAmb | 19 46 21.4 | |
| | comp=Z,13nm,0.8s | | | | | | |
| FAKI | Fak Fak | 50.89 | 281 | P | P | 19 46 22.8 | +0.4 |
| FAKI | Fak Fak | 50.89 | 281 | P | P | 19 46 21.9 | -0.5 |
| FAKI | | | | IAmb | IAmb | 19 46 49.9 | |
| | comp=Z,16nm,1.1s | | | | | | |
| FITZ | Fitzroy Crossi | 53.24 | 261 | P | P | 19 46 39.2 | 0.0 |
| KMBL | Kambalda | 55.43 | 244 | P | P | 19 46 53.9 | -0.4 |
| SOEI | Soe | 56.34 | 270 | P | P | 19 47 03.3 | +2.4 |
| SOEI | Soe | 56.34 | 270 | P | P | 19 47 01.9 | +1.0 |
| SOEI | | | | IAmb | IAmb | 19 47 03.0 | |
| | comp=Z,27nm,0.7s | | | | | | |
| PSA00 | Pilbara Seismi | 58.10 | 256 | P | P | 19 47 12.1 | -0.5 |
| PSA00 | Pilbara Seismi | 58.10 | 256 | P | P | 19 47 11.7 | -1.0 |
| MBWA | Marble Bar | 58.27 | 256 | P | P | 19 47 13.7 | -0.1 |
| MBWA | Marble Bar | 58.27 | 256 | P | P | 19 47 12.9 | -0.9 |
| MBWA | | | | IAmb | IAmb | 19 47 56.9 | |
| | comp=Z,31nm,1.2s | | | | | | |
| MMRI | Maumere | 58.57 | 271 | P | P | 19 47 15.4 | -0.5 |
| MMRI | | | | IAmb | IAmb | 19 47 16.0 | |
| | comp=Z,19nm,0.6s | | | | | | |
| MEEK | Meekatharra | 58.59 | 249 | P | P | 19 47 15.3 | -0.6 |
| KLBR | Kellerberrin | 58.95 | 244 | P | P | 19 47 18.6 | +0.4 |
| BLDU | Ballidu | 59.90 | 245 | P | P | 19 47 24.2 | -0.4 |
| SBA | Scott Base | 60.16 | 184 | P | P | 19 47 27.4 | +2.0 |
| MORW | Morawa | 60.62 | 246 | P | P | 19 47 29.1 | -0.1 |
| MORW | | | | IAmb | IAmb | 19 47 38.6 | |
| | comp=Z,52nm,1.5s | | | | | | |
| TOLI2 | Tolitoli | 63.03 | 281 | P | P | 19 47 46.2 | +1.0 |
| TOLI2 | Tolitoli | 63.03 | 281 | P | P | 19 47 46.1 | +1.0 |
| GIRL | Giralia | 63.07 | 253 | P | P | 19 47 45.6 | +0.4 |
| JHJ2 | Mitsune | 64.92 | 322 | P | P | 19 47 57.0 | +0.3 |
| JHJ2 | Mitsune | 64.92 | 322 | P | P | 19 47 57.2 | +0.5 |
| JAGI | Jajag, Banyuwa | 66.30 | 269 | P | P | 19 48 05.1 | -0.6 |
| JAGI | Jajag, Banyuwa | 66.30 | 269 | P | P | 19 48 04.1 | -1.6 |
| JAGI | | | | IAmb | IAmb | 19 48 05.1 | |
| | comp=Z,20nm,0.7s | | | | | | |
| MYLDM | Lahad Datu | 66.64 | 284 | P | P | 19 48 07.1 | -0.7 |
| MYLDM | | | | IAmb | IAmb | 19 48 20.6 | |
| | comp=Z,19nm,1.3s | | | | | | |
| JGF | Kuroka | 68.12 | 322 | P | P | 19 48 16.4 | 0.0 |
| MJAR | Matsushiro Arr | 68.28 | 323 | P | P | 19 48 16.9 | -0.5 |
| | comp=Z,7.1nm,0.6s,baz=160,slow=5.8,SNR=26 | | | | | | |
| | comp=Z,7.1nm,0.6s | | | | | | |
| MAJO | Matsushiro | 68.29 | 323 | P | P | 19 48 17.6 | +0.2 |
| MAJO | Matsushiro | 68.29 | 323 | P | P | 19 48 16.9 | -0.4 |
| JOW | Kunigami | 68.60 | 309 | P | P | 19 48 19.7 | +0.2 |
| JOW | | | | IAmb | IAmb | 19 48 28.7 | |
| | comp=Z,26nm,1.2s | | | | | | |
| KKM | Kota Kinabalu | 69.07 | 284 | P | P | 19 48 22.5 | -0.1 |
| KKM | | | | IAmb | IAmb | 19 48 25.9 | |
| | comp=Z,15nm,1.0s | | | | | | |
| JSD | Sado | 69.32 | 324 | P | P | 19 48 23.8 | +0.4 |
| JSD | | | | IAmb | IAmb | 19 48 53.4 | |
| | comp=Z,16nm,1.1s | | | | | | |
| UGM | Wanagama | 69.90 | 268 | P | P | 19 48 27.9 | +0.3 |
| UGM | Wanagama | 69.90 | 268 | P | P | 19 48 26.9 | -0.7 |
| YOJ | Yonaguni jima | 71.32 | 305 | P | P | 19 48 35.9 | +0.3 |
| JKA | Kamikawa-asahi | 71.64 | 331 | P | P | 19 48 37.8 | +0.7 |
| JKA | | | | IAmb | IAmb | 19 48 59.0 | |
| | comp=Z,29nm,1.5s | | | | | | |
| QSPA | South Pole Qui | 71.87 | 180 | P | P | 19 48 38.9 | +0.7 |
| QSPA | South Pole Qui | 71.87 | 180 | P | P | 19 48 39.0 | +0.7 |
| | comp=Z,3.6nm,0.6s,baz=191,slow=5.2,SNR=59 | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | |
| YULB | Yu-li | 72.14 | 303 | P | P | 19 48 39.5 | -0.9 |
| YULB | | | | IAmb | IAmb | 19 48 58.3 | |
| | comp=Z,16nm,1.2s | | | | | | |
| SSLB | Suanglung | 72.61 | 303 | P | P | 19 48 42.2 | -0.9 |
| TPUB | Ta-pu | 72.63 | 302 | P | P | 19 48 41.8 | -1.5 |
| KSM | Kuching | 72.98 | 277 | P | P | 19 48 46.1 | +0.7 |
| PETK | Petropavlovsk- | 74.01 | 345 | P | P | 19 48 49.8 | -0.6 |
| | comp=Z,8.6nm,0.6s,baz=123,slow=7.5,SNR=15 | | | | | | |
| | comp=Z,8.6nm,0.6s | | | | | | |
| KSRS | Korea Array | 75.08 | 318 | P | P | 19 48 57.6 | +0.9 |
| | comp=Z,1.2nm,0.6s,baz=118,slow=7.1,SNR=5.3 | | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | | |
| CHGN | Chignik | 76.03 | 11 | P | P | 19 49 00.6 | -0.9 |
| CHGN | | | | IAmb | IAmb | 19 49 30.8 | |
| | comp=Z,20nm,1.2s | | | | | | |
| USRK | Ussuriysk Ar. | 76.99 | 326 | P | P | 19 49 08.3 | +1.3 |
| | comp=Z,1.2nm,0.4s,baz=135,slow=3.4,SNR=9.3 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| SII | Sitkinak Islan | 77.13 | 13 | P | P | 19 49 07.3 | -0.3 |
| SII | | | | IAmb | IAmb | 19 49 39.5 | |
| | comp=Z,23nm,1.0s | | | | | | |
| R16K | Pilot Point | 77.39 | 11 | P | P | 19 49 08.7 | -0.1 |
| OHAK | Old Harbor | 77.94 | 14 | P | P | 19 49 12.0 | +0.2 |
| OHAK | | | | IAmb | IAmb | 19 49 45.8 | |
| | comp=Z,23nm,1.5s | | | | | | |
| MDJ | Mudanjiang | 78.56 | 325 | P | P | 19 49 15.8 | +0.3 |
| MDJ | | | | IAmb | IAmb | 19 49 17.7 | |
| | comp=Z,16nm,0.9s | | | | | | |
| KDAK | Kodiak Island | 78.61 | 14 | P | P | 19 49 15.5 | +0.1 |
| KDAK | | | | IAmb | IAmb | 19 49 26.4 | |
| | comp=Z,20nm,1.4s | | | | | | |
| NVAR | Mina Array Bea | 79.44 | 44 | P | P | 19 49 21.4 | +0.8 |
| | comp=Z,0.7nm,0.7s,baz=225,slow=8.8,SNR=1.8 | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | |
| P18K | Big Mountain, | 79.53 | 12 | P | P | 19 49 19.5 | -0.9 |
| P18K | | | | IAmb | IAmb | 19 49 20.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| O18K | Koktuh Hills | 79.97 | 12 | P | P | 19 49 22.2 | -0.4 |
| O18K | | | | IAmb | IAmb | 19 49 23.2 | |
| | comp=Z,15nm,0.8s | | | | | | |
| M16K | Timber Creek | 80.42 | 9 | P | P | 19 49 25.9 | +1.0 |
| M16K | | | | IAmb | IAmb | 19 49 27.0 | |
| | comp=Z,19nm,1.1s | | | | | | |
| ILSW | Iliamna Southw | 80.50 | 12 | P | P | 19 49 24.7 | -0.7 |
| ILSW | | | | IAmb | IAmb | 19 49 25.6 | |
| | comp=Z,12nm,0.7s | | | | | | |
| PINE | Pine Mountain | 80.84 | 38 | P | P | 19 49 28.6 | +0.9 |
| M17K | Holitna River | 81.02 | 10 | P | P | 19 49 28.8 | +0.9 |
| M17K | | | | IAmb | IAmb | 19 49 30.1 | |
| | comp=Z,11nm,0.8s | | | | | | |
| K15K | Wolf Creek Mou | 81.28 | 8 | IAmb | IAmb | 19 49 31.2 | |
| | comp=Z,18nm,0.8s | | | | | | |
| BELA | Belgrano 2 | 81.86 | 173 | P | P | 19 49 32.1 | -0.1 |
| M19K | Big River Lodg | 82.02 | 11 | P | P | 19 49 33.0 | -0.1 |
| GLI | Glacier Island | 82.65 | 15 | IAmb | IAmb | 19 49 36.2 | |
| | comp=Z,7.9nm,0.6s | | | | | | |
| GHO | Glory Hole Cre | 83.01 | 14 | IAmb | IAmb | 19 49 38.7 | |
| | comp=Z,12nm,0.6s | | | | | | |
| J18K | Innoko River | 83.08 | 10 | IAmb | IAmb | 19 49 39.5 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| HEH | HeiHe | 83.28 | 328 | *e*P | P | 19 49 40.0 | +0.4 |
| HEH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| K20K | Telida | 83.42 | 11 | IAmb | IAmb | 19 49 40.9 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| SCM | Sheep Creek Mo | 83.43 | 14 | IAmb | IAmb | 19 49 40.8 | |
| | comp=Z,15nm,0.6s | | | | | | |
| VRDI | Verde Repeater | 83.87 | 16 | P | P | 19 49 42.3 | -0.2 |
| N25K | Chitina, Valde | 83.89 | 15 | IAmb | IAmb | 19 49 43.4 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| GLB | Gilahina Butte | 83.96 | 16 | IAmb | IAmb | 19 49 43.5 | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| LOGN | Logan Glacier | 84.20 | 17 | IAmb | IAmb | 19 49 45.1 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| RND | Reindeer | 84.48 | 13 | P | P | 19 49 44.9 | -0.4 |
| RND | | | | IAmb | IAmb | 19 49 45.9 | |
| | comp=Z,10nm,0.7s | | | | | | |
| ENH | Enshi | 84.64 | 304 | P | P | 19 49 45.6 | -1.3 |
| ENH | | | | IAmb | IAmb | 19 49 48.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| M27K | Edge Creek, AK | 85.23 | 16 | IAmb | IAmb | 19 49 50.5 | |
| | comp=Z,9.8nm,1.1s | | | | | | |
| MLY | Manley | 85.56 | 11 | P | P | 19 49 49.2 | -1.2 |
| CCB | Clear Creek Bu | 85.79 | 13 | IAmb | IAmb | 19 49 51.1 | |
| | comp=Z,5.9nm,0.5s | | | | | | |
| TXAR | Lajitas Array | 85.92 | 58 | P | P | 19 49 55.1 | +2.0 |
| | comp=Z,0.6nm,0.8s,baz=254,slow=6.5,SNR=4.2 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| ILAR | Eielson Array | 86.09 | 13 | P | P | 19 49 52.1 | -0.9 |
| | comp=Z,2.0nm,0.4s,baz=220,slow=4.9,SNR=38 | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| POKR | Poker Plat Res | 86.28 | 12 | IAmb | IAmb | 19 49 54.8 | |
| | comp=Z,9.2nm,0.6s | | | | | | |
| XAN | Xi'an | 86.64 | 307 | P | P | 19 49 58.0 | +1.7 |
| XAN | | | | pP | PcP | 19 50 06.5 | +8.7 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=N,790nm,13.0s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,450nm,16.8s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,470nm,9.8s | | | | | | |
| PDAR | Pinedale Array | 87.37 | 43 | P | P | 19 50 00.4 | +0.6 |
| | comp=Z,0.5nm,0.7s,baz=308,slow=3.2,SNR=2.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| I29M | Ogilvie Camp | 88.60 | 16 | IAmb | IAmb | 19 50 10.6 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| ELIB | Princess Elisa | 88.92 | 187 | *d*P | P | 19 50 06.2 | -0.2 |
| | comp=Z,3.1nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 89.23 | 290 | P | P | 19 50 10.2 | +1.5 |
| | comp=Z,2.9nm,0.9s,baz=113,slow=2.6,SNR=15 | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | |
| H29M | Whitestone | 89.27 | 15 | IAmb | IAmb | 19 50 08.8 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| PZH | PanZhiHua | 89.52 | 298 | P | P | 19 50 11.0 | +1.0 |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,5.1s | | | | | | |
| G30M | tAoh Zraii Nji | 90.40 | 15 | IAmb | IAmb | 19 50 13.8 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| VNA3 | Neumayer Olymp | 90.45 | 176 | ⇑P | P | 19 50 13.4 | 0.0 |
| | comp=Z,4.6nm,0.6s | | | | | | |
| G31M | Satih River | 90.85 | 16 | IAmb | IAmb | 19 50 15.8 | |
| | comp=Z,7.2nm,0.8s | | | | | | |
| VNA2 | Neumayer--Watz | 90.89 | 177 | ⇑P | P | 19 50 16.0 | +0.6 |
| | comp=Z,3.2nm,0.7s,baz=199,slow=5.0 | | | | | | |
| PLCA | Paso Flores | 90.95 | 134 | P | P | 19 50 18.0 | +1.6 |
| | comp=Z,1.0nm,0.9s,baz=255,slow=12,SNR=1.6 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| VNA1 | Neumayer--Stat | 91.12 | 177 | ⇑P | P | 19 50 16.2 | -0.2 |
| | comp=Z,4.4nm,1.0s | | | | | | |
| SONM | Songjiang Array | 93.93 | 319 | P | P | 19 50 30.9 | +1.0 |
| | comp=Z,0.5nm,0.5s,baz=116,slow=3.4,SNR=4.9 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 109.52 | 314 | PKiKP | PKiKP | 19 55 37.6 | -0.9 |
| | comp=Z,0.5nm,0.5s,baz=82,slow=1.1,SNR=12 | | | | | | |
| KURBB | Kurchatov Arra | 112.26 | 318 | PKiKP | PKiKP | 19 55 42.5 | -1.0 |
| | comp=Z,0.7nm,0.7s,baz=98,slow=1.5,SNR=9.0 | | | | | | |
| BVAR | Borovoye Array | 117.22 | 321 | PKP | PKiKP | 19 55 52.2 | -0.8 |
| | comp=Z,1.3nm,0.4s,baz=113,slow=1.4,SNR=13 | | | | | | |
| ARCES | ARCESS Array B | 126.63 | 350 | PKP | PKPdf | 19 56 09.4 | -1.2 |
| | comp=Z,0.6nm,0.4s,baz=17,slow=0.9,SNR=9.0 | | | | | | |
| FINES | FINESS Array B | 133.52 | 344 | PKP | PKPdf | 19 56 22.6 | -1.3 |
| | comp=Z,0.7nm,0.4s,baz=72,slow=4.5,SNR=7.3 | | | | | | |
| NOA | NORSAR Array B | 136.68 | 353 | PKP | PKiKP | 19 56 30.3 | -1.4 |
| | comp=Z,0.6nm,0.8s,baz=43,slow=2.4,SNR=2.2 | | | | | | |
| AKASG | Malin Array Be | 140.93 | 332 | PKhKP | PKPpre | 19 56 31.8 | |
| | comp=Z,0.3nm,0.3s,baz=46,slow=3.8,SNR=6.2 | | | | | | |
| EKA | Eskdalemuir Ar | 142.72 | 5 | PKhKP | PKPpre | 19 56 37.5 | |
| | comp=Z,0.4nm,0.5s,baz=345,slow=2.3,SNR=5.0 | | | | | | |
| GAZ | Gaziantep | 143.71 | 309 | PKPdf | PKPdf | 19 56 43.1 | -0.2 |
| BSEG | Bad Segeberg | 143.72 | 352 | *e*PKPbc | PKPdf | 19 56 41.9 | -0.7 |
| | baz=13,slow=2.6 | | | | | | |
| BRTR | Keskin Array B | 145.16 | 315 | PKPbc | PKPab | 19 56 46.8 | -1.3 |
| | comp=Z,3.7nm,0.7s,baz=92,slow=1.8,SNR=24 | | | | | | |
| OSTC | Ostas | 145.73 | 344⇑ | *e*PKP | PKPab | 19 56 48.8 | -0.9 |
| CHVC | Chvalec | 145.74 | 344⇑ | *e*PKP | PKPab | 19 56 48.8 | -1.0 |
| CHVC | | | | *e*PKPAB | PKiKP | 19 56 50.5 | -0.1 |
| CLZ | Clausthal | 145.75 | 351 | *e*PKPbc | PKPab | 19 56 48.6 | -1.2 |
| | baz=13,slow=2.6 | | | | | | |
| CLL | Collm | 145.79 | 348 | *e*PKPbc | PKPab | 19 56 48.3 | -1.6 |
| | baz=13,slow=2.6 | | | | | | |
| BRG | Berggiesshubel | 146.00 | 346 | *e*PKPbc | PKPab | 19 56 49.1 | -1.7 |
| | baz=13,slow=2.6 | | | | | | |
| KRLC | Kraliky | 146.01 | 343⇑ | *e*PKP | PKPab | 19 56 49.6 | -1.3 |
| PVCC | Panska Ves | 146.17 | 345⇑ | *e*PKP | PKPab | 19 56 50.0 | -1.4 |
| MLR | Muntele Rosu | 146.20 | 329 | | PKPbc | 19 56 49.0 | -0.6 |
| MAUC | Maruska | 146.33 | 341⇑ | *e*PKP | PKiKP | 19 56 50.7 | -1.2 |
| MMAI | Mount Meron Ar | 146.51 | 303 | PKPbc | PKiKP | 19 56 51.2 | -1.7 |
| | comp=Z,5.1nm,0.5s,baz=67,slow=6.1,SNR=17 | | | | | | |
| PRU | Pruhonice | 146.68 | 345⇑ | *e*PKP | PKiKP | 19 56 51.2 | -1.3 |
| PRU | | | | *e*PKPAB | PKPab | 19 56 53.9 | +0.4 |
| TANN | Tannenbergstha | 146.75 | 348 | *e*PKPbc | PKiKP | 19 56 51.3 | -1.4 |
| | baz=13,slow=2.6 | | | | | | |
| MANZ | Manzenberg | 147.22 | 348 | *e*PKPbc | PKiKP | 19 56 52.4 | -1.3 |
| | baz=13,slow=2.6 | | | | | | |
| ZVC | Zvikov | 147.27 | 345⇑ | *e*PKP | PKiKP | 19 56 52.5 | -1.3 |
| ROTZ | Rotzenmuhle | 147.41 | 348 | *e*PKPbc | PKiKP | 19 56 53.0 | -1.0 |
| | baz=13,slow=2.6 | | | | | | |
| KHC | Kasperske Hory | 147.71 | 346⇑ | *e*PKP | PKiKP | 19 56 53.8 | -0.9 |
| KHC | | | | *e*PKPAB | PKPab | 19 56 58.7 | +0.9 |
| CKRC | Cesky Krumlov | 147.82 | 344⇑ | *e*PKP | PKiKP | 19 56 54.3 | -0.6 |
| GEC2 | GERESS Array S | 147.94 | 345 | *e*PKPbc | PKiKP | 19 56 54.3 | -1.0 |
| | baz=13,slow=2.6 | | | | | | |
| GERES | GERESS Array B | 147.94 | 345 | PKPbc | PKiKP | 19 56 54.0 | -1.3 |
| | comp=Z,3.9nm,0.6s,baz=35,slow=3.6,SNR=22 | | | | | | |
| CONA | Conrad Observa | 148.21 | 342 | *e*PKP | PKiKP | 19 56 55.4 | -0.4 |
| | comp=Z,8.0nm,1.1s,SNR=6.5 | | | | | | |
| RONA | Rosalia, Austr | 148.28 | 341 | *i* PKP | PKiKP | 19 56 55.5 | -0.4 |
| | comp=Z,4.8nm,0.8s | | | | | | |
| MOA | Molln | 148.72 | 344 | *i* PKP | PKiKP | 19 56 56.0 | -0.8 |
| | comp=Z,4.5nm,1.1s | | | | | | |
| ARSA | Arzberg | 148.92 | 342 | *e*PKP | PKiKP | 19 56 55.8 | -1.5 |
| | comp=Z,1.9nm,1.0s | | | | | | |
| BIOA | Bad Ischl, Aus | 149.03 | 344 | *i* PKP | PKiKP | 19 56 56.9 | -0.6 |
| | comp=Z,4.4nm,1.0s | | | | | | |
| RJOB | Jochberg | 149.20 | 346 | *e*PKPbc | PKiKP | 19 56 57.1 | -0.8 |
| | baz=13,slow=2.6 | | | | | | |
| BFO | Black Forest | 149.47 | 352 | | PKiKP | 19 56 57.4 | -1.0 |
| BFO | Black Forest | 149.47 | 352 | *e*PKPbc | PKiKP | 19 56 57.9 | -0.4 |
| | baz=13,slow=2.6 | | | | | | |
| LESA | Schwarzleotal | 149.52 | 345 | *i* PKP | PKiKP | 19 56 57.9 | -0.7 |
| | comp=Z,5.8nm,0.9s | | | | | | |
| SOKA | Soboth | 149.58 | 342 | *i* PKP | PKiKP | 19 56 57.5 | -1.2 |
| | comp=Z,3.7nm,0.9s | | | | | | |
| KBA | Koelnbreinsper | 149.68 | 344 | *i* PKP | PKiKP | 19 56 57.9 | -1.2 |
| | comp=Z,4.0nm,0.6s | | | | | | |
| UBR | Ueberruh | 149.82 | 349 | *e*PKPbc | PKiKP | 19 56 58.5 | -0.6 |
| | baz=13,slow=2.6 | | | | | | |
| WATA | Walderalm | 149.85 | 347 | *i* PKP | PKiKP | 19 56 58.9 | -0.5 |
| | comp=Z,4.4nm,0.5s | | | | | | |
| OBKA | Obir | 149.87 | 342 | *e*PKP | PKiKP | 19 56 58.6 | -0.8 |
| | comp=Z,4.6nm,1.8s | | | | | | |
| RETA | Reutte | 149.88 | 348 | *i* PKP | PKiKP | 19 56 58.6 | -0.7 |
| | comp=Z,1.5nm,0.5s | | | | | | |
| WTTA | Wattenberg | 149.91 | 347 | *i* PKP | PKiKP | 19 56 59.2 | -0.4 |
| | comp=Z,6.9nm,0.7s,SNR=6.6 | | | | | | |
| MOTA | Moosalm | 149.94 | 347 | *i* PKP | PKiKP | 19 56 59.1 | -0.5 |
| | comp=Z,7.0nm,1.0s | | | | | | |
| MYKA | Terra Mystica | 150.01 | 344 | *i* PKP | PKiKP | 19 56 58.7 | -0.9 |
| | comp=Z,4.6nm,0.6s | | | | | | |
| SQTA | Sankt Quirin | 150.04 | 347 | *i* PKP | PKiKP | 19 56 59.4 | -0.3 |
| | comp=Z,5.9nm,0.6s | | | | | | |
| ABTA | Abfaltersbach | 150.19 | 345 | *i* PKP | PKiKP | 19 56 59.1 | -0.9 |
| | comp=Z,8.1nm,0.6s,SNR=6.8 | | | | | | |
| DAVA | Damuels | 150.24 | 349 | *i* PKP | PKiKP | 19 57 00.1 | 0.0 |
| | comp=Z,9.9nm,1.2s | | | | | | |
| FETA | Feichten | 150.33 | 348 | *i* PKP | PKiKP | 19 57 00.3 | -0.1 |
| | comp=Z,5.0nm,0.8s | | | | | | |
| FUORN | Ofenpass-Fuorn | 150.81 | 348 | | PKiKP | 19 57 01.5 | 0.0 |
| CTI | Castel Tesino | 151.05 | 346 | | PKPab | 19 57 11.3 | -0.6 |
| ESDC | Sonseca Array | 158.00 | 12 | PKPab | PKPab | 19 57 41.3 | -0.5 |
| | comp=Z,0.7nm,0.8s,baz=344,slow=4.1,SNR=5.1 | | | | | | |

*NEIC **29** 19:44:19.0±1.8, 18°.2S±0°.1×177°.9W±0°.1, h637km±8km, mb4.3/56, Error ellipse: s-maj=22.3km s-min=17.3km az=140.0*

*IDC **29** 19:44:20.3±1.5, 18°.21S×178°.08W, h647km±17km, mb3.4/9, mbtmp4.4/11, Error ellipse: s-maj=26.3km s-min=13.0km az=152.0*

**ISC 29 19:44:19.7±0.6, 18°.3S±0°.1×177°.98W±0°.10, h650km, n75, σ0°.93/77, mb4.2/36, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 3.82 | 278 | P | P | 19 45 46.1 | -1.7 |
| MSVF | Nonsavu | 3.82 | 278 | P | P | 19 45 47.4 | -0.5 |
| | 20nm,0.5s,baz=150,slow=4.3,SNR=24 | | | | | | |
| AFI | Afiamalu | 7.38 | 55 | | P | 19 46 13.4 | -2.0 |
| LIFNC | LIFOU | 14.15 | 258 | P | P | 19 47 16.2 | -2.0 |
| DZM | Mont Dzumac | 15.10 | 253 | P | P | 19 47 28.1 | +1.1 |
| DZM | | | | IAmb | IAmb | 19 47 29.5 | |
| | comp=Z,22nm,1.1s | | | | | | |
| DZM | Mont Dzumac | 15.10 | 253 | P | P | 19 47 28.0 | +1.0 |
| | comp=Z,14nm,0.8s,baz=160,slow=18,SNR=13 | | | | | | |
| KOUNC | Koumac, New Ca | 16.88 | 259 | P | P | 19 47 44.9 | +1.7 |
| INZ | Inchbonnie | 25.97 | 198 | P | P | 19 49 02.2 | -1.7 |
| EIDS | Eidsvold | 29.53 | 251 | P | P | 19 49 34.6 | -0.3 |
| EIDS | | | | IAmb | IAmb | 19 49 35.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| ARMA | Armidale | 30.11 | 241 | P | P | 19 49 40.5 | +0.6 |
| CTAO | Charters Tower | 33.79 | 261 | P | P | 19 50 11.3 | +0.3 |
| CAN | Canberra | 33.80 | 233 | P | P | 19 50 12.0 | +1.0 |
| PMG | Port Moresby | 34.93 | 280 | P | P | 19 50 21.2 | +0.7 |
| TOO | Toolangi | 37.25 | 231 | P | P | 19 50 39.6 | +0.5 |
| TOO | | | | IAmb | IAmb | 19 51 13.4 | |
| | comp=Z,18nm,1.4s | | | | | | |
| COEN | Coen | 37.52 | 271 | P | P | 19 50 42.3 | +0.7 |
| MANU | Manus Island | 37.62 | 291 | P | P | 19 50 43.3 | +0.9 |
| MANU | | | | IAmb | IAmb | 19 51 12.8 | |
| | comp=Z,20nm,1.1s | | | | | | |
| STKA | Stephens Creek | 38.81 | 242 | P | P | 19 50 52.8 | +1.0 |
| STKA | Stephens Creek | 38.81 | 242 | P | P | 19 50 52.4 | +0.6 |
| | comp=Z,6.8nm,0.5s,baz=87,slow=9.3,SNR=21 | | | | | | |
| | comp=Z,6.8nm,0.5s | | | | | | |
| BBOO | Buckleboo | 43.59 | 241 | P | P | 19 51 29.7 | +0.5 |
| WR0 | Warramunga Arr | 44.78 | 260 | P | P | 19 51 38.3 | -0.2 |
| WR0 | | | | IAmb | IAmb | 19 51 39.4 | |
| | comp=Z,6.3nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 44.96 | 260 | P | P | 19 51 39.3 | -0.6 |
| WRA | Warramunga Arr | 44.97 | 260 | P | P | 19 51 39.5 | -0.4 |
| | comp=Z,12nm,0.4s,baz=97,slow=6.9,SNR=383 | | | | | | |
| WRA | | | | PcP | PcP | 19 53 06.8 | +0.2 |
| | comp=Z,1.0nm,0.6s,baz=96,slow=3.2,SNR=3.0 | | | | | | |
| | comp=Z,12nm,0.4s | | | | | | |
| AS31 | Alice Springs | 45.08 | 255 | P | P | 19 51 41.0 | +0.2 |
| AS31 | | | | IAmb | IAmb | 19 51 41.8 | |
| | comp=Z,6.9nm,0.8s | | | | | | |
| ASAR | Alice Springs | 45.09 | 255 | P | P | 19 51 41.1 | +0.3 |
| | comp=Z,32nm,0.7s,baz=89,slow=8.2,SNR=356 | | | | | | |
| ASAR | | | | PcP | PcP | 19 53 07.3 | +0.3 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CCB | Clear Creek Bu | 85.86 | 13 | P | P | 19 55 51.8 | -0.2 |
| ILAR | Eielson Array | 86.16 | 13 | P | P | 19 55 52.5 | -1.0 |
| | comp=Z,0.4nm,0.5s,baz=226,slow=4.9,SNR=7.5 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| F19K | Shaleruckik Mo | 86.19 | 8 | P | P | 19 55 54.7 | +1.1 |
| F19K | | | | IAmb | IAmb | 19 56 05.9 | |
| | comp=Z,4.4nm,1.2s | | | | | | |
| J25K | Salcha River, | 86.35 | 13 | P | P | 19 55 53.8 | -0.7 |
| J26L | Joseph Creek | 86.67 | 14 | P | P | 19 55 55.4 | -0.6 |
| E19K | Redstone River | 86.86 | 8 | P | P | 19 55 57.2 | +0.5 |
| E19K | | | | IAmb | IAmb | 19 56 22.3 | |
| | comp=Z,10nm,1.4s | | | | | | |
| M30M | Minto, Yukon | 86.87 | 18 | P | P | 19 55 57.1 | +0.2 |
| M30M | | | | IAmb | IAmb | 19 55 58.1 | |
| | comp=Z,5.4nm,1.3s | | | | | | |
| PDAR | Pinedale Array | 87.34 | 43 | P | P | 19 56 00.6 | +0.7 |
| | comp=Z,0.7nm,0.6s,baz=216,slow=2.8,SNR=8.0 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| K29M | Barlow Dome | 87.66 | 17 | P | P | 19 56 01.1 | +0.4 |
| G24K | Hadweenzic Riv | 87.73 | 12 | P | P | 19 55 59.9 | -1.0 |
| G24K | | | | IAmb | IAmb | 19 56 00.7 | |
| | comp=Z,5.3nm,1.5s | | | | | | |
| I30M | Mount Dempster | 89.05 | 16 | P | P | 19 56 07.6 | +0.4 |
| H29M | Whitestone | 89.33 | 15 | P | P | 19 56 07.1 | -1.1 |
| H29M | | | | IAmb | IAmb | 19 56 17.0 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| CMAR | Chiang Mai Arr | 89.40 | 290 | P | P | 19 56 11.1 | +1.4 |
| | comp=Z,1.5nm,0.9s,baz=116,slow=2.1,SNR=6.4 | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | |
| LODK | Lodwar | 144.18 | 250 | PKPdf | PKPbc | 20 02 44.2 | -0.2 |
| BUR08 | Bucovina Ar. S | 145.12 | 332 | PKPdf | PKPbc | 20 02 45.0 | -1.2 |
| BR131 | Keskin Array S | 145.34 | 315 | PKPdf | PKPdf | 20 02 43.4 | -2.3 |
| BRTR | Keskin Array B | 145.34 | 315 | PKPbc | PKPbc | 20 02 47.2 | +0.1 |
| | comp=Z,1.0nm,0.7s,baz=133,slow=5.0,SNR=6.2 | | | | | | |
| MMAI | Mount Meron Ar | 146.69 | 303 | PKPbc | PKiKP | 20 02 51.6 | -1.3 |
| | comp=Z,2.5nm,0.7s,baz=64,slow=6.6,SNR=6.3 | | | | | | |

*ASIES* ***29*** *19:53:23.6,24.2°82N×122.7°41E,h15km,ML4.5,Mw4.1, Moment Tensor Solution. Moment tensor: Scale $10^{22}$Nm; $M_{rr}$-0.27; $M_{\theta\theta}$1.11; $M_{\phi\phi}$-0.95; $M_{r\theta}$0.64; $M_{\theta\phi}$0.99; $M_{\phi r}$-0.59; Fault plane solution: $M_0$1.68728×$10^{22}$ NP1: $\phi_s$290.42000°,δ79.74000°,λ-29.94000°. NP2:$\phi_s$26.28000°, δ60.59000°,λ-168.20000°. Principal axes: T Plg12.7830°, Azm341.4950°; N Plg58.5090°, Azm93.2340°; P Plg28.2420°, Azm244.4950°;*

*TAP* ***29*** *19:53:23.6,24.2°82N×122.7°41E,h15km,ML4.5,C*

*JMA* ***29*** *19:53:24.4-0.1,24.1°8N-0.1°9×122.1°5E±0.4,h39km±2km, MV3.8/16,NW OFF ISHIGAKIJIMA IS*

*NIED* ***29*** *19:53:24.4,24.7°9N×122.7°45E,h39km,MW4.2,Moment Tensor Solution. s2 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$-1.25; $M_{\theta\theta}$1.98; $M_{\phi\phi}$-0.73; $M_{r\theta}$-0.95; $M_{\theta\phi}$0.61; $M_{\phi r}$-0.05; Fault plane solution: $M_0$1.94000×$10^{15}$ NP1:$\phi_s$88.00000°, δ61.00000°,λ-76.00000°. NP2:$\phi_s$242.00000°,δ32.00000°, λ-113.00000°.*

*IDC* ***29*** *19:53:29.8±4.3,24.6°86N×122.8°50E,h64km±46km,mb3.5/9, mbtmp3.7/11,ML3.0/2,MS3.4/22 Error ellipse: s-maj=37.7km s-min=15.1km az=62.0*

**ISC 29 19:53:21.3±1.1,24.2°82N±0.9°02×122.8°50E±0.9°02,h7km±8km, n187,σ1§04/250,mb3.7/9,MS3.4/19,13C-39D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| EOS2 | EOS2 | 0.47 | 212 | ⇑*i* | P | Pn | 19 53 33.3 | -1.1 |
| | baz=204 | | | | | | | |
| EOS2 | | | | *i* | S | Sb | 19 53 40.3 | +1.3 |
| | baz=204 | | | | | | | |
| TWB1 | Santiao Chiao | 0.50 | 292 | ⇑*i* | P | Pb | 19 53 32.8 | +0.2 |
| | baz=296 | | | | | | | |
| TWB1 | | | | | S | Sg | 19 53 38.2 | +0.6 |
| | baz=296 | | | | | | | |
| EGS | | 0.52 | 273 | ⇓*i* | P | Pb | 19 53 32.9 | +0.1 |
| | baz=264 | | | | | | | |
| EGS | | | | | S | Sb | 19 53 39.9 | -0.7 |
| | baz=264 | | | | | | | |
| JYNG | Yonagunijimaku | 0.55 | 132 | | P | Pn | 19 53 35.6 | +0.1 |
| JYNG | | | | | S | Sn | 19 53 43.9 | -1.1 |
| EOS3 | EOS3 | 0.56 | 198 | ⇑ | eP | Pn | 19 53 35.1 | -0.5 |
| | baz=196 | | | | | | | |
| YOJ | Yonaguni jima | 0.58 | 128 | | P | Pn | 19 53 36.4 | +0.3 |
| YOJ | Yonaguni jima | 0.58 | 128 | ⇑ | *i*P | Pn | 19 53 36.4 | +0.3 |
| | baz=114 | | | | | | | |
| YOJ | | | | | eS | Sn | 19 53 44.9 | -1.0 |
| | baz=114 | | | | | | | |
| YOJ | Yonaguni jima | 0.58 | 128 | | P | Pn | 19 53 36.5 | +0.3 |
| YOJ | | | | | S | Sn | 19 53 44.7 | -1.2 |
| NTC | Toucheng | 0.61 | 273 | | eP | Pb | 19 53 34.8 | +0.4 |
| | baz=274 | | | | | | | |
| SXI1 | Grass Mountain | 0.63 | 296 | ⇑ | *i*P | Pn | 19 53 35.5 | -1.3 |
| | baz=300 | | | | | | | |
| TIPB | Shuangxi | 0.63 | 284 | ⇓ | eP | Pb | 19 53 35.1 | +0.3 |
| | baz=286 | | | | | | | |
| TIPB | | | | | S | Sg | 19 53 42.6 | +0.8 |
| | baz=286 | | | | | | | |
| ESAO | Su ao | 0.65 | 248 | | eP | Pb | 19 53 34.9 | -0.1 |
| | baz=253 | | | | | | | |
| ESAO | | | | | eS | Sg | 19 53 42.9 | +0.6 |
| | baz=253 | | | | | | | |
| ILA | Ilan | 0.69 | 266 | | eP | Pn | 19 53 36.3 | -1.2 |
| | baz=265 | | | | | | | |
| ILA | | | | | eS | Sb | 19 53 44.9 | -0.6 |
| | baz=265 | | | | | | | |
| NWF | Wu-fen Shan | 0.70 | 291 | ⇓ | P | Pn | 19 53 37.0 | -0.8 |
| | baz=294 | | | | | | | |
| NWF | | | | | S | Sb | 19 53 45.8 | -0.1 |
| | baz=294 | | | | | | | |
| WFSB | Wu-fen Shan | 0.70 | 291 | ⇑ | P | Pn | 19 53 36.8 | -0.9 |
| | baz=293 | | | | | | | |
| WFSB | | | | | S | Sb | 19 53 45.7 | -0.2 |
| | baz=293 | | | | | | | |
| EOS4 | EOS4 | 0.72 | 194 | ⇑ | P | Pn | 19 53 38.0 | +0.4 |
| | baz=180 | | | | | | | |
| EOS4 | | | | | eS | Sn | 19 53 46.8 | -1.9 |
| | baz=180 | | | | | | | |
| NDS | Dongshan | 0.74 | 256 | ⇓ | *i*P | Pb | 19 53 36.6 | 0.0 |
| | baz=254 | | | | | | | |
| NDS | | | | | eS | Sb | 19 53 46.1 | -0.9 |
| | baz=254 | | | | | | | |
| TNOU | National Taiwa | 0.74 | 296 | ⇓ | *i*P | Pn | 19 53 37.4 | -0.9 |
| | baz=299 | | | | | | | |
| TNOU | | | | | S | Sg | 19 53 45.6 | +0.4 |
| | baz=299 | | | | | | | |
| EWUT | Wuta | 0.76 | 241 | ⇓ | *i*P | Pb | 19 53 37.0 | +0.1 |
| | baz=246 | | | | | | | |
| EWUT | | | | | eS | Sg | 19 53 46.2 | +0.4 |
| | baz=246 | | | | | | | |
| TWE | Neicheng | 0.77 | 263 | ⇓ | *i*P | Pb | 19 53 37.0 | 0.0 |
| | baz=261 | | | | | | | |
| TWE | | | | | eS | Sg | 19 53 46.1 | +0.1 |
| | baz=261 | | | | | | | |
| ENA | Nanau | 0.80 | 241 | ⇓ | *i*P | Pb | 19 53 37.6 | 0.0 |
| | baz=245 | | | | | | | |
| ENA | | | | | eS | Sg | 19 53 47.1 | +0.1 |
| | baz=245 | | | | | | | |
| FUSB | Fushanzhiwuyua | 0.83 | 266 | ⇓ | *i*P | Pb | 19 53 38.4 | +0.2 |
| | baz=265 | | | | | | | |
| FUSB | | | | | S | Sg | 19 53 47.7 | -0.5 |
| | baz=265 | | | | | | | |
| TWA | Mucha | 0.85 | 281 | ⇓ | *i*P | Pn | 19 53 39.4 | -0.4 |
| | baz=282 | | | | | | | |
| TWA | | | | *i* | S | Sb | 19 53 50.1 | -0.1 |
| | baz=282 | | | | | | | |
| EAHA | Aohua | 0.85 | 235 | | P | Pn | 19 53 38.9 | -0.9 |
| | baz=244 | | | | | | | |
| EAHA | | | | *i* | S | Sg | 19 53 49.0 | +0.3 |
| | baz=244 | | | | | | | |
| EHP | Heping Village | 0.86 | 234 | | eP | Pn | 19 53 39.4 | -0.5 |
| | baz=244 | | | | | | | |
| EHP | | | | | eS | Sg | 19 53 49.4 | +0.3 |
| | baz=244 | | | | | | | |
| ENTT | Nioudou | 0.87 | 258 | ⇓ | *i*P | Pb | 19 53 38.7 | -0.1 |
| | baz=243 | | | | | | | |
| ENTT | | | | | eS | Sg | 19 53 49.4 | 0.0 |
| | baz=243 | | | | | | | |
| NHY | Taipei | 0.88 | 285 | ⇑ | P | Pn | 19 53 40.0 | -0.2 |
| | baz=286 | | | | | | | |
| NHY | | | | *i* | S | Sb | 19 53 51.0 | +0.2 |
| | baz=286 | | | | | | | |
| PCYT | Pengchaiyu | 0.90 | 334 | ⇑ | *i*P | Pn | 19 53 39.9 | -0.5 |
| | baz=339 | | | | | | | |
| NHDH | Xindian Distri | 0.90 | 279 | *i* | P | Pn | 19 53 40.3 | -0.1 |
| | baz=280 | | | | | | | |
| NHDH | | | | | eS | Sb | 19 53 51.4 | -0.2 |
| | baz=280 | | | | | | | |
| YM08 | YM08 | 0.91 | 294 | ⇓ | *i*P | Pn | 19 53 39.9 | -0.7 |
| | baz=296 | | | | | | | |
| YM08 | | | | | eS | Sg | 19 53 50.8 | +0.2 |
| | baz=296 | | | | | | | |
| YM01 | YM01 | 0.91 | 291 | ⇓ | *i*P | Pn | 19 53 40.2 | -0.4 |
| | baz=293 | | | | | | | |
| YM01 | | | | | S | Sg | 19 53 50.5 | -0.1 |
| | baz=293 | | | | | | | |
| NWLT | Wulai | 0.91 | 267 | ⇓ | P | Pn | 19 53 39.9 | -0.7 |
| | baz=267 | | | | | | | |
| NWLT | | | | | S | Sg | 19 53 50.1 | -0.6 |
| | baz=267 | | | | | | | |
| NDT | Datong Townshi | 0.93 | 257 | ⇓ | eP | Pn | 19 53 40.0 | -0.8 |
| | baz=243 | | | | | | | |
| NDT | | | | | eS | Sg | 19 53 50.0 | -1.2 |
| | baz=243 | | | | | | | |
| TAP | Taipei | 0.93 | 284 | ⇓ | P | Pn | 19 53 40.6 | -0.3 |
| | baz=284 | | | | | | | |
| TAP | | | | *i* | S | Sb | 19 53 52.7 | +0.3 |
| | baz=284 | | | | | | | |
| LATG | Datong | 0.93 | 252 | ⇓ | *i*P | Pn | 19 53 40.1 | -0.9 |
| | baz=237 | | | | | | | |
| LATG | | | | | eS | Sg | 19 53 50.7 | -0.7 |
| | baz=237 | | | | | | | |
| TATO | Taipei | 0.94 | 280 | | P | Pn | 19 53 40.7 | -0.2 |
| TWY | Chenhua | 0.94 | 299 | ⇓ | P | Pn | 19 53 40.8 | -0.2 |
| | baz=301 | | | | | | | |
| TWY | | | | *i* | S | Sb | 19 53 52.8 | +0.2 |
| | baz=301 | | | | | | | |
| ANP | Anpu | 0.96 | 292 | | eP | Pn | 19 53 40.8 | -0.7 |
| | baz=294 | | | | | | | |
| ANP | | | | | S | Sg | 19 53 53.0 | +0.6 |
| | baz=294 | | | | | | | |
| NTST | Danshui | 1.02 | 290 | | P | Pn | 19 53 42.2 | +0.2 |
| | baz=291 | | | | | | | |
| NTST | | | | | S | Sn | 19 53 55.3 | -1.3 |
| | baz=291 | | | | | | | |
| TWS1 | Kuangyinshan | 1.02 | 286 | ⇓ | eP | Pb | 19 53 41.1 | -0.4 |
| | baz=287 | | | | | | | |
| TWS1 | | | | | eS | Sg | 19 53 53.9 | -0.5 |
| | baz=287 | | | | | | | |
| YHNB | Yeheng | 1.04 | 262 | | P | Pn | 19 53 42.1 | -0.3 |
| YHNB | Yeheng | 1.04 | 262 | ⇓ | *i*P | Pn | 19 53 41.9 | -0.6 |
| | baz=246 | | | | | | | |
| YHNB | | | | | eS | Sg | 19 53 53.6 | -1.1 |
| | baz=246 | | | | | | | |
| ETL | Fush Village | 1.04 | 231 | | P | Pn | 19 53 42.3 | -0.1 |
| | baz=238 | | | | | | | |
| ETL | | | | | eS | Sb | 19 53 55.1 | -0.4 |
| | baz=238 | | | | | | | |
| NACB | Ninganchiao | 1.05 | 232 | | P | Pn | 19 53 42.3 | -0.2 |
| NACB | Ninganchiao | 1.05 | 232 | ⇓ | *i*P | Pn | 19 53 42.1 | -0.4 |
| | baz=239 | | | | | | | |
| NACB | | | | | eS | Sb | 19 53 55.3 | -0.5 |
| | baz=239 | | | | | | | |
| NSK | Sanguang | 1.05 | 262 | ⇓ | *i*P | Pn | 19 53 42.0 | -0.6 |
| | baz=270 | | | | | | | |
| NSK | | | | | eS | Sg | 19 53 53.7 | -1.5 |
| | baz=270 | | | | | | | |
| NNSB | Datong | 1.09 | 249 | ⇓ | *i*P | Pn | 19 53 42.8 | -0.4 |
| | baz=247 | | | | | | | |
| NNSB | | | | | eS | Sg | 19 53 56.0 | -0.5 |
| | baz=247 | | | | | | | |
| NNS | Nan Shan | 1.10 | 250 | ⇓ | *i*P | Pn | 19 53 42.8 | -0.5 |
| | baz=237 | | | | | | | |
| NNS | | | | | eS | Sb | 19 53 56.4 | -1.0 |
| | baz=237 | | | | | | | |
| TWD | Chiawan | 1.11 | 228 | | P | Pn | 19 53 43.4 | +0.1 |
| | baz=232 | | | | | | | |
| TWD | | | | | eS | Sb | 19 53 57.0 | -0.5 |
| | baz=232 | | | | | | | |
| ETLH | Xiulin Townshi | 1.11 | 237 | ⇓ | P | Pn | 19 53 43.4 | -0.1 |
| | baz=244 | | | | | | | |
| ETLH | | | | | eS | Sn | 19 53 58.0 | -1.1 |
| | baz=244 | | | | | | | |
| HWA | Hwalien | 1.17 | 224 | | eP | Pg | 19 53 46.4 | +2.5 |
| | baz=201 | | | | | | | |
| HWA | | | | | eS | Sn | 19 54 00.8 | +0.3 |
| | baz=201 | | | | | | | |
| NCUH | Zhongli | 1.21 | 277 | | eP | Pg | 19 53 44.7 | +0.2 |
| | baz=277 | | | | | | | |
| IRIF | Tomote-Funau | 1.22 | 113 | | P | Pg | 19 53 45.5 | +0.9 |
| ETM | Tongmen | 1.25 | 227 | ⇑ | P | Pg | 19 53 46.1 | +0.7 |
| | baz=206 | | | | | | | |
| TEYL | Yanliau Villag | 1.26 | 221 | | eP | Pg | 19 53 46.9 | +1.4 |
| | baz=218 | | | | | | | |
| LXIB | Xiulin Townshi | 1.27 | 232 | ⇓ | *i*P | Pg | 19 53 45.9 | +0.1 |
| | baz=211 | | | | | | | |
| LXIB | | | | | eS | Sg | 19 54 03.7 | +1.4 |
| | baz=211 | | | | | | | |
| NFF | Wufeng Townshi | 1.27 | 262 | ⇓ | *i*P | Pg | 19 53 46.3 | +0.5 |
| | baz=260 | | | | | | | |
| NFF | | | | | eS | Sb | 19 54 01.7 | -0.7 |
| | baz=260 | | | | | | | |
| FUSS | Fushou | 1.28 | 244 | ⇓ | eP | Pg | 19 53 46.5 | +0.6 |
| | baz=241 | | | | | | | |
| FUSS | | | | | eS | Sg | 19 54 03.1 | +0.6 |
| | baz=241 | | | | | | | |
| WHF | Hehuan Shan | 1.31 | 239 | ⇑ | P | Pg | 19 53 47.1 | +0.5 |
| | baz=246 | | | | | | | |
| WHF | | | | | eS | Sb | 19 54 02.9 | -0.9 |
| | baz=246 | | | | | | | |
| TWT | Tachien | 1.33 | 245 | ⇑ | P | Pg | 19 53 47.9 | +1.0 |
| | baz=243 | | | | | | | |
| TWT | | | | | eS | Sn | 19 54 03.9 | -0.8 |
| | baz=243 | | | | | | | |
| SHUL | Shoufeng | 1.34 | 220 | ⇓ | eP | Pg | 19 53 47.6 | +0.6 |
| | baz=202 | | | | | | | |
| SHUL | | | | | eS | Sg | 19 54 04.4 | -0.1 |
| | baz=202 | | | | | | | |
| TDCB | Techi | 1.35 | 246 | ⇓ | eP | Pg | 19 53 47.9 | +0.6 |
| | baz=243 | | | | | | | |
| TDCB | | | | | eS | Sb | 19 54 03.7 | -1.0 |
| | baz=243 | | | | | | | |
| LIOB | Emei | 1.36 | 263 | | eP | Pb | 19 53 47.2 | 0.0 |
| | baz=262 | | | | | | | |
| LIOB | | | | | eS | Sb | 19 54 03.7 | -1.2 |
| | baz=262 | | | | | | | |
| NSTT | Nanjuang | 1.38 | 262 | | P | Pb | 19 53 47.5 | 0.0 |
| | baz=261 | | | | | | | |
| NSTT | | | | | eS | Sn | 19 54 04.5 | -1.1 |
| | baz=261 | | | | | | | |
| SBCB | Hsinchu | 1.38 | 269 | | eP | Pb | 19 53 47.6 | +0.1 |
| | baz=268 | | | | | | | |
| SBCB | | | | | eS | Sn | 19 54 03.5 | -2.1 |
| | baz=268 | | | | | | | |
| HSN | Hsinchu | 1.39 | 270 | | eP | Pn | 19 53 47.0 | -0.3 |
| | baz=270 | | | | | | | |
| HSN | | | | | eS | Sn | 19 54 03.5 | -2.5 |
| | baz=270 | | | | | | | |
| ESL | Shilin | 1.40 | 224 | ⇓ | *i*P | Pg | 19 53 48.1 | -0.1 |
| | baz=205 | | | | | | | |
| ESL | | | | | eS | Sn | 19 54 04.7 | -1.4 |
| | baz=205 | | | | | | | |
| HATJ | Hateruma jima | 1.41 | 122 | | P | Pg | 19 53 48.9 | +0.5 |
| TEGC | Jichi Village | 1.41 | 219 | | eP | Pg | 19 53 49.0 | +0.5 |
| | baz=200 | | | | | | | |
| TEGC | | | | | eS | Sb | 19 54 06.1 | -0.2 |
| | baz=200 | | | | | | | |
| CHGB | Renai | 1.43 | 238 | ⇓ | *i*P | Pg | 19 53 49.2 | +0.4 |
| | baz=244 | | | | | | | |
| CHGB | | | | | eS | Sg | 19 54 07.1 | -0.2 |
| | baz=244 | | | | | | | |
| OWD | Renai | 1.49 | 235 | | eP | Pg | 19 53 50.2 | +0.3 |
| | baz=246 | | | | | | | |
| OWD | | | | | eS | Sn | 19 54 06.8 | -1.6 |
| | baz=246 | | | | | | | |
| JKRS | Kuro-shima | 1.49 | 113 | | P | Pg | 19 53 50.0 | +0.1 |
| WARBT | Fenglin Townsh | 1.50 | 223 | ⇓ | eP | Pb | 19 53 49.4 | -0.1 |
| | baz=204 | | | | | | | |
| WARBT | | | | | eS | Sn | 19 54 07.6 | -0.9 |
| | baz=204 | | | | | | | |
| WUSB | Renai | 1.51 | 237 | ⇓ | *i*P | Pg | 19 53 50.6 | +0.3 |
| | baz=248 | | | | | | | |
| WUSB | | | | | S | Sg | 19 54 09.7 | -0.2 |
| | baz=248 | | | | | | | |
| EGFH | Guangfu | 1.51 | 221 | | eP | Pg | 19 53 50.0 | -0.3 |
| | baz=201 | | | | | | | |
| WHP | Taichung City | 1.52 | 249 | ⇓ | P | Pg | 19 53 51.1 | +0.6 |
| | baz=247 | | | | | | | |
| WHP | | | | | eS | Sb | 19 54 09.2 | -0.2 |
| | baz=247 | | | | | | | |
| JIJ | Ishigaki jima | 1.56 | 107 | | eP | Pg | 19 53 50.4 | -0.8 |
| NMLH | Miaoli | 1.58 | 260 | | eP | Pb | 19 53 51.0 | 0.0 |
| | baz=258 | | | | | | | |
| NMLH | | | | | eS | Sg | 19 54 11.9 | -0.4 |
| | baz=258 | | | | | | | |
| VWDT | VWDT | 1.64 | 230 | ⇓ | eP | Pg | 19 53 52.4 | -0.3 |
| | baz=210 | | | | | | | |
| VWDT | | | | | eS | Sn | 19 54 11.4 | -0.5 |
| | baz=210 | | | | | | | |
| NSY | Sanyi | 1.64 | 256 | | eP | Pb | 19 53 51.9 | 0.0 |
| | baz=271 | | | | | | | |
| WCS | Beigang Elemen | 1.64 | 243 | | eP | Pg | 19 53 53.3 | +0.6 |
| | baz=240 | | | | | | | |
| TWQ1 | Liyutan | 1.64 | 254 | | eP | Pg | 19 53 53.0 | +0.1 |
| | baz=252 | | | | | | | |
| TWQ1 | | | | | eS | Sn | 19 54 11.7 | -0.5 |
| | baz=252 | | | | | | | |
| HGSD | Ruisui | 1.65 | 217 | ⇓ | eP | Pb | 19 53 51.6 | -0.5 |
| | baz=200 | | | | | | | |
| JISG | Ishigakijimahi | 1.66 | 98 | | eP | Pb | 19 53 51.7 | -0.5 |
| EHYH | Wanrong | 1.69 | 219 | | eP | Pb | 19 53 52.1 | -0.7 |
| | baz=216 | | | | | | | |
| EHY | Hungye | 1.70 | 220 | | P | Pb | 19 53 52.0 | -1.0 |
| | baz=217 | | | | | | | |
| EHY | | | | | eS | Sn | 19 54 11.7 | -1.8 |
| | baz=217 | | | | | | | |
| SSLB | Suanglung | 1.75 | 234 | | P | Pg | 19 53 54.6 | -0.3 |
| SSLB | Suanglung | 1.75 | 234 | | P | Pb | 19 53 53.9 | +0.1 |
| | baz=216 | | | | | | | |
| SSLB | | | | | eS | Sg | 19 54 16.6 | -1.0 |
| | baz=216 | | | | | | | |
| TYC | Yuchr | 1.76 | 239 | ⇓ | eP | Pg | 19 53 54.7 | -0.4 |
| | baz=220 | | | | | | | |
| WDJ | Dajia District | 1.76 | 255 | | eP | Pg | 19 53 54.6 | -0.5 |
| | baz=272 | | | | | | | |
| ECBN | Changbin | 1.78 | 213 | | eP | Pb | 19 53 53.4 | -0.9 |
| | baz=210 | | | | | | | |
| ECBN | | | | | eS | Sb | 19 54 15.7 | -1.2 |
| | baz=210 | | | | | | | |
| YULB | Yu-li | 1.80 | 218 | | P | Pb | 19 53 53.6 | -1.1 |
| YULB | Yu-li | 1.80 | 218 | ⇓ | eP | Pn | 19 53 53.2 | +0.3 |
| | baz=215 | | | | | | | |
| YULB | | | | | eS | Sn | 19 54 15.4 | -0.6 |
| | baz=215 | | | | | | | |
| EYUL | Yuli | 1.82 | 217 | | eP | Pb | 19 53 54.0 | -1.0 |
| | baz=214 | | | | | | | |
| EYUL | | | | | eS | Sn | 19 54 16.1 | -0.5 |
| | baz=214 | | | | | | | |
| TWF1 | Yuli | 1.83 | 217 | | P | Pb | 19 53 53.7 | -1.5 |
| | baz=202 | | | | | | | |
| WHYT | Xinyi Township | 1.88 | 234 | | eP | Pb | 19 53 55.7 | -0.3 |
| | baz=216 | | | | | | | |
| WHYT | | | | | eS | Sg | 19 54 20.7 | -1.0 |
| | baz=216 | | | | | | | |
| WJS | Zhushan | 1.90 | 239 | | eP | Pb | 19 53 56.6 | +0.2 |
| | baz=218 | | | | | | | |
| WJS | | | | | eS | Sg | 19 54 21.7 | -0.7 |
| | baz=218 | | | | | | | |
| WNT | Mingjian | 1.91 | 241 | | eP | Pg | 19 53 57.3 | -0.6 |
| | baz=239 | | | | | | | |
| CHKH | Chenggong | 1.91 | 212 | | eP | Pb | 19 53 55.0 | -1.6 |
| | baz=196 | | | | | | | |
| CHKH | | | | | eS | Sn | 19 54 16.8 | -2.0 |
| | baz=196 | | | | | | | |
| WCHH | Zhanghua | 1.92 | 248 | | eP | Pb | 19 53 57.0 | +0.3 |
| | baz=264 | | | | | | | |
| FULB | Fuli | 1.96 | 215 | | eP | Pb | 19 53 56.1 | -1.3 |
| | baz=196 | | | | | | | |
| FULB | | | | | eS | Sn | 19 54 19.2 | -0.7 |
| | baz=196 | | | | | | | |
| CHKT | Chengkung | 2.00 | 212 | | eP | Pn | 19 53 55.7 | +0.1 |
| | baz=194 | | | | | | | |
| JTJ | Tarama | 2.01 | 95 | | eP | Pg | 19 53 58.6 | -1.2 |
| EHD | Haiduan | 2.04 | 216 | | eP | Pb | 19 53 57.5 | -1.3 |
| | baz=213 | | | | | | | |
| CHN5 | Tsauling | 2.06 | 234 | | eP | Pb | 19 53 59.6 | +0.4 |
| | baz=214 | | | | | | | |
| ECS | Chishang | 2.08 | 215 | | eP | Pn | 19 53 57.5 | +0.8 |
| | baz=212 | | | | | | | |
| WGK | Gukeng | 2.10 | 238 | ⇑ | P | Pb | 19 54 00.4 | +0.6 |
| | baz=253 | | | | | | | |
| ELDTW | Lidau | 2.12 | 220 | | eP | Pn | 19 53 58.1 | +0.7 |
| | baz=205 | | | | | | | |
| ELDTW | | | | | eS | Sn | 19 54 23.8 | -0.2 |
| | baz=205 | | | | | | | |
| WDLH | Douliu | 2.12 | 238 | | eP | Pb | 19 54 00.2 | +0.1 |
| | baz=254 | | | | | | | |
| EDH | Donghe | 2.14 | 211 | | eP | Pn | 19 53 57.7 | +0.2 |
| | baz=196 | | | | | | | |
| EDH | | | | *i* | S | Sn | 19 54 23.6 | -0.9 |
| | baz=196 | | | | | | | |
| WRL | Guolierlin Hig | 2.15 | 245 | | eP | Pb | 19 53 60.0 | -0.6 |
| | baz=243 | | | | | | | |
| WCKO | Fanlu | 2.21 | 232 | | eP | Pb | 19 54 02.2 | +0.4 |
| | baz=213 | | | | | | | |
| WTK | Tuku | 2.24 | 240 | | eP | Pb | 19 54 01.4 | -0.7 |
| | baz=238 | | | | | | | |
| CHN2 | Minshiung | 2.25 | 236 | | eP | Pb | 19 54 02.0 | -0.4 |
| | baz=217 | | | | | | | |
| STYH | Taoyuan | 2.28 | 224 | | eP | Pb | 19 54 00.9 | -1.9 |
| | baz=206 | | | | | | | |
| LONT | Longtian | 2.28 | 214 | | eP | Pb | 19 54 01.2 | -1.8 |
| | baz=211 | | | | | | | |
| LONT | | | | | eS | Sn | 19 54 25.1 | -2.9 |
| | baz=211 | | | | | | | |
| TPUB | Ta-pu | 2.29 | 229 | | P | Pb | 19 54 02.7 | -0.3 |
| TPUB | Ta-pu | 2.29 | 229 | | eP | Pb | 19 54 02.5 | -0.5 |
| | baz=210 | | | | | | | |
| WTP | Ta-pu | 2.33 | 228 | | P | Pb | 19 54 03.0 | -0.8 |
| | baz=210 | | | | | | | |
| LDUT | Ludao | 2.34 | 204 | | eP | Pn | 19 54 00.6 | +0.3 |
| | baz=202 | | | | | | | |
| LDUT | | | | | eS | Sn | 19 54 26.6 | -2.7 |
| | baz=202 | | | | | | | |
| TWGBT | Beinan | 2.38 | 213 | | P | Pn | 19 54 02.1 | +1.2 |
| TWGBT | Beinan | 2.38 | 213 | | eP | Pn | 19 54 01.1 | +0.2 |
| | baz=211 | | | | | | | |
| WSF | Szhu | 2.39 | 241 | | eP | Pb | 19 54 02.5 | -2.3 |
| | baz=255 | | | | | | | |
| WSF | | | | | eS | Sn | 19 54 31.6 | +1.0 |
| | baz=255 | | | | | | | |
| TWK | Hsinying | 2.41 | 230 | | eP | Pb | 19 54 04.5 | -0.6 |
| | baz=212 | | | | | | | |
| JIRB | Irabujima | 2.42 | 89 | | eP | Pb | 19 54 04.8 | -0.5 |
| SNST | Tainan City | 2.43 | 229 | | eP | Pb | 19 54 03.5 | -1.9 |
| | baz=227 | | | | | | | |
| CHN1 | Nanshi | 2.43 | 228 | | eP | Pb | 19 54 04.3 | -1.2 |
| | baz=226 | | | | | | | |
| WSL | Shuilin Townsh | 2.45 | 239 | | eP | Pb | 19 54 04.2 | -1.5 |
| | baz=253 | | | | | | | |
| SGST | Jiashian | 2.47 | 226 | | eP | Pb | 19 54 04.2 | -1.8 |
| | baz=207 | | | | | | | |
| SLGT | Liugui | 2.49 | 223 | | eP | Pb | 19 54 05.0 | -1.5 |
| | baz=207 | | | | | | | |
| SLGT | | | | | eS | Sb | 19 54 36.3 | -1.1 |
| | baz=207 | | | | | | | |
| ICHU | Yijhu | 2.50 | 235 | | eP | Pb | 19 54 06.4 | -0.2 |
| | baz=233 | | | | | | | |
| CHN8 | Yiju | 2.56 | 235 | | eP | Pb | 19 54 05.8 | -1.8 |
| | baz=233 | | | | | | | |
| SCST | Cishan | 2.66 | 224 | | eP | Pb | 19 54 08.7 | -0.7 |
| | baz=222 | | | | | | | |
| MATB | Ma-tsu | 2.67 | 300 | | eP | Pn | 19 54 04.6 | -0.2 |
| | baz=300 | | | | | | | |
| TSMG | Majia | 2.71 | 219 | | eP | Pb | 19 54 07.5 | -2.7 |
| | baz=217 | | | | | | | |
| TWM1 | Shoushan | 2.75 | 224 | | eP | Pn | 19 54 07.9 | +1.9 |
| | baz=222 | | | | | | | |
| TSCK | Chigu Township | 2.77 | 233 | | eP | Pn | 19 54 07.2 | +1.0 |
| | baz=216 | | | | | | | |
| SGLT | Jiouru | 2.78 | 222 | | eP | Pb | 19 54 10.0 | -1.5 |
| | baz=206 | | | | | | | |
| MASBT | Mashibuluo | 2.79 | 218 | | eP | Pb | 19 54 08.5 | -3.0 |
| | baz=204 | | | | | | | |
| MASBT | | | | | eS | Sn | 19 54 41.2 | +0.8 |
| | baz=204 | | | | | | | |
| EAST | Anshuo | 2.86 | 212 | | eP | Pn | 19 54 09.4 | +1.9 |
| | baz=210 | | | | | | | |
| TAWH | Dawu Township | 2.88 | 211 | | eP | Pn | 19 54 09.6 | +1.9 |
| | baz=209 | | | | | | | |
| LAY | Lan-yu | 2.90 | 198 | | eP | Pn | 19 54 08.7 | +0.6 |
| | baz=195 | | | | | | | |
| LAY | | | | | eS | Sn | 19 54 41.0 | -2.3 |
| | baz=195 | | | | | | | |
| LYUB | Lan-yu | 2.93 | 197 | | eP | Pn | 19 54 09.8 | +1.4 |
| | baz=195 | | | | | | | |
| LYUB | | | | | eS | Sn | 19 54 42.2 | -1.7 |
| | baz=195 | | | | | | | |
| PNG | Penghu | 2.97 | 246 | | eP | Pn | 19 54 10.4 | +1.5 |
| | baz=244 | | | | | | | |
| PHUB | P'eng-hu | 2.98 | 245 | | eP | Pn | 19 54 09.4 | +0.3 |
| | baz=243 | | | | | | | |
| SCZT | Fangliau | 2.99 | 216 | | eP | Pb | 19 54 12.6 | -2.4 |

baz=200
**LYJJ Jianjiangzhen 3.02 305** *e*P **Pn** 19 54 09.7 +0.1
baz=306
**SLIU Shizi 3.03 211** *e*P **Pn** 19 54 10.7 +0.9
baz=200
**WDGT Dungji 3.03 240** *e*P **Pn** 19 54 11.4 +1.6
baz=238
**PTMZ Houxiangcun 3.08 275** *e*P **Pn** 19 54 10.0 -0.4
baz=274
**VCHM Qimei 3.24 241** *e*P **Pn** 19 54 13.9 +1.3
baz=239
**HEN Hengchun 3.24 210** *e*P **Pn** 19 54 14.4 +1.8
baz=197
**MHZQ Yeshan 3.39 293** *e*P **Pn** 19 54 13.8 -0.9
baz=293
**KNM Kinmen 3.73 265** *e*P **Pn** 19 54 20.3 +0.9
baz=264
**KNMB Chin-men Tao 3.76 265** *e*P **Pn** 19 54 19.1 -0.8
baz=265
**ZPLA Ao Xicun 4.42 259** *e*P **Pn** 19 54 28.9 -0.1
baz=259
**SXFK Yanhouchang 4.66 291** *e*P **Pn** 19 54 31.3 -1.0
baz=291
**JOW Kunigami 5.57 68** P **Pn** 19 54 48.6 +3.8
0.7nm,0.3s,baz=136,slow=13,SNR=2.6
4.0nm,0.5s
**KSRS Korea Array 13.42 19** P **P** 19 56 38.2 -3.6
0.2nm,0.3s,baz=200,slow=12,SNR=2.0
0.7nm,0.6s
**MJAR Matsushiro Arr 17.83 45** LR LR 20 05 09.5
comp=Z,65nm,18.5s,baz=224,slow=39
**JCJ Chichijima 17.84 78** LR LR 20 03 22.4
comp=Z,18nm,18.3s,baz=106,slow=33
**DAV Davao City (W) 17.89 170** LR LR 20 05 04.7
comp=Z,70nm,19.3s,baz=344,slow=39
**CMAR Chiang Mai Arr 22.78 258** P **P** 19 58 27.1 +2.4
0.6nm,0.4s,baz=63,slow=8.3,SNR=2.5
CMAR LR LR 20 08 37.4
comp=Z,50nm,20.4s,baz=90,slow=40
0.6nm,0.4s
**ASAJ Asahikawa 25.28 35** LR LR 20 09 12.6
comp=Z,77nm,18.0s,baz=214,slow=37
**KLR Kul'dur 25.42 14** LR LR 20 08 58.6
comp=Z,76nm,19.2s,baz=198,slow=37
**SONM Songino Array 26.27 335** P **P** 19 58 59.6 +2.1
4.0nm,0.9s,baz=147,slow=9.0,SNR=21
SONM LR LR 20 10 43.0
comp=Z,98nm,18.4s,baz=121,slow=39
4.0nm,0.9s
**KAPI Kappang 29.78 186** LR LR 20 12 00.6
comp=Z,26nm,18.3s,baz=341,slow=37
**YAK Yakutsk 37.51 6** LR LR 20 16 05.3
comp=Z,58nm,19.6s,baz=175,slow=36
**PETK Petropavlovsk- 38.67 34** LR LR 20 17 39.2
comp=Z,29nm,18.6s,baz=230,slow=38
**MKAR Makanchi Array 38.73 315** P **P** 20 00 47.5 +1.3
1.0nm,0.8s,baz=99,slow=10.0,SNR=11
1.0nm,0.8s
**MA2 Magadan 39.94 22** LR LR 20 17 57.7
comp=Z,42nm,18.6s,baz=246,slow=37
**ZALV Zalesovo Beam 40.38 326** P **P** 20 01 00.2 +0.4
0.5nm,0.3s,baz=119,slow=8.6,SNR=4.8
ZALV LR LR 20 18 23.4
comp=Z,39nm,19.1s,baz=120,slow=37
0.5nm,0.3s
**KURBB Kurchatov Arra 42.41 319** P **P** 20 01 17.2 +0.7
0.5nm,0.9s,baz=108,slow=8.2,SNR=4.0
0.5nm,0.9s
**AAK Ala-Archa 43.09 307** LR LR 20 19 59.5
comp=Z,52nm,18.6s,baz=98,slow=37
**WRA Warramunga Arr 45.96 164** P **P** 20 01 46.6 +1.3
0.9nm,0.5s,baz=346,slow=8.7,SNR=21
0.9nm,0.5s
**TIXI Tiksi 47.00 3** LR LR 20 23 20.9
comp=Z,44nm,21.1s,baz=208,slow=38
**BVAR Borovoye Array 47.95 320** P **P** 20 02 01.4 +0.9
0.9nm,0.5s,baz=100,slow=8.1,SNR=8.6
0.9nm,0.5s
**ASAR Alice Springs 49.45 166** P **P** 20 02 14.3 +2.0
0.5nm,0.5s,baz=347,slow=8.8,SNR=15
0.5nm,0.5s
**ARU Arti 55.33 323** LR LR 20 28 46.2
comp=Z,33nm,18.1s,baz=94,slow=38
**NWAO Narrogin (SRO) 57.65 185** LR LR 20 28 40.4
comp=Z,45nm,18.4s,baz=232,slow=37
**GNI Garni 65.43 305** LR LR 20 36 12.8
comp=Z,28nm,19.2s,baz=90,slow=39
**OBN Obninsk 67.75 322** LR LR 20 34 16.2
comp=Z,27nm,20.9s,baz=346,slow=36
**SPITS Spitsbergen Ar 69.12 348** LR LR 20 38 14.5
comp=Z,44nm,18.1s,baz=38,slow=39
**FINES FINESS Array B 71.50 330** LR LR 20 38 25.5
comp=Z,56nm,21.2s,baz=60,slow=38
**BRTR Keskin Array B 73.76 307** P **P** 20 04 56.8 +0.1
0.6nm,0.7s,baz=93,slow=4.9,SNR=3.9
0.6nm,0.7s
**HFS Hagfors 77.60 331** LR LR 20 42 36.4
comp=Z,52nm,18.5s,baz=50,slow=38
**NOA NORSAR Array B 78.22 332** LR LR 20 43 34.2
comp=Z,23nm,18.1s,baz=80,slow=38

### TAP 29 19:54:17.7, 24.83N×122.35E, h16km, ML3.6, D, Taiwan region

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.37** | **299** | *i* P | | | Pb | 19 54 25.9 | -0.1 |
| | baz=299 | | | | | | | | |
| TWB1 | | | | S | | | Sb | 19 54 31.2 | -0.3 |
| | baz=299 | | | | | | | | |
| **EGS** | | **0.38** | **273** | *e*P | | | Pg | 19 54 25.4 | 0.0 |
| | baz=265 | | | | | | | | |
| EGS | | | | *e*S | | | Sb | 19 54 32.2 | +0.5 |
| | baz=265 | | | | | | | | |
| **EOS2** | **EOS2** | **0.42** | **195** | *e*P | | | Pg | 19 54 26.2 | +0.1 |
| | baz=197 | | | | | | | | |
| EOS2 | | | | *e*S | | | Sb | 19 54 33.0 | +0.4 |
| | baz=197 | | | | | | | | |
| **NTC** | **Toucheng** | **0.47** | **273** | *e*P | | | Pg | 19 54 27.1 | 0.0 |
| | baz=273 | | | | | | | | |
| NTC | | | | *e*S | | | Sg | 19 54 33.7 | +0.2 |
| | baz=273 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.50** | **287** | P | | | Pb | 19 54 28.3 | +0.3 |
| | baz=286 | | | | | | | | |
| TIPB | | | | *e*S | | | Sb | 19 54 34.9 | -0.2 |
| | baz=286 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.51** | **302** | *e*P | | | Pb | 19 54 28.9 | +0.7 |
| | baz=301 | | | | | | | | |
| **ESAO** | **Su ao** | **0.52** | **242** | P | | | Pg | 19 54 27.8 | -0.2 |
| | baz=249 | | | | | | | | |
| ESAO | | | | *e*S | | | Sg | 19 54 35.1 | 0.0 |
| | baz=249 | | | | | | | | |
| **EOS3** | **EOS3** | **0.54** | **183** | *e*P | | | Pg | 19 54 28.4 | +0.1 |
| | baz=183 | | | | | | | | |
| EOS3 | | | | *e*S | | | Sn | 19 54 37.6 | -1.5 |
| | baz=183 | | | | | | | | |
| **ILA** | **Ilan** | **0.55** | **264** | *e*P | | | Pb | 19 54 29.6 | +0.7 |
| | baz=263 | | | | | | | | |
| ILA | | | | *e*S | | | Sb | 19 54 37.6 | +1.1 |
| | baz=263 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.57** | **295** | P | | | Pn | 19 54 30.3 | -0.9 |
| | baz=295 | | | | | | | | |
| NWF | | | | *e*S | | | Sb | 19 54 38.4 | +1.2 |
| | baz=295 | | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.57** | **295** | *e*P | | | Pb | 19 54 29.6 | +0.4 |
| | baz=295 | | | | | | | | |
| WFSB | | | | *e*S | | | Sb | 19 54 37.7 | +0.6 |
| | baz=295 | | | | | | | | |
| **NDS** | **Dongshan** | **0.61** | **252** | *e*P | | | Pb | 19 54 29.9 | 0.0 |
| | baz=251 | | | | | | | | |
| NDS | | | | *e*S | | | Sb | 19 54 38.3 | +0.1 |
| | baz=251 | | | | | | | | |
| **TNOU** | **National Taiwa** | **0.61** | **302** | P | | | Pb | 19 54 30.1 | +0.1 |
| | baz=301 | | | | | | | | |
| TNOU | | | | *e*S | | | Sb | 19 54 39.4 | +1.0 |
| | baz=301 | | | | | | | | |
| **TWE** | **Neicheng** | **0.63** | **260** | P | | | Pg | 19 54 30.1 | +0.1 |
| | baz=260 | | | | | | | | |
| TWE | | | | *e*S | | | Sb | 19 54 39.2 | +0.4 |
| | baz=260 | | | | | | | | |
| **EWUT** | **Wuta** | **0.64** | **234** | *e*P | | | Pg | 19 54 30.2 | -0.1 |
| | baz=233 | | | | | | | | |
| EWUT | | | | *e*S | | | Sb | 19 54 39.8 | +0.6 |
| | baz=233 | | | | | | | | |
| **ENA** | **Nanau** | **0.68** | **234** | P | | | Pg | 19 54 30.6 | -0.5 |
| | baz=233 | | | | | | | | |
| ENA | | | | *e*S | | | Sb | 19 54 41.0 | +0.6 |
| | baz=233 | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.69** | **265** | *e*P | | | Pb | 19 54 32.0 | +0.6 |
| | baz=264 | | | | | | | | |
| FUSB | | | | *e*S | | | Sb | 19 54 41.5 | +0.7 |
| | baz=264 | | | | | | | | |
| **EOS4** | **EOS4** | **0.70** | **182** | *e*P | | | Pg | 19 54 31.7 | +0.3 |
| | baz=182 | | | | | | | | |
| EOS4 | | | | *e*S | | | Sn | 19 54 42.2 | -0.7 |
| | baz=182 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.74** | **256** | *e*P | | | Pb | 19 54 32.6 | +0.5 |
| | baz=255 | | | | | | | | |
| ENTT | | | | *e*S | | | Sb | 19 54 42.6 | +0.7 |
| | baz=255 | | | | | | | | |
| **NHY** | **Taipei** | **0.74** | **287** | *e*P | | | Pb | 19 54 32.7 | +0.6 |
| | baz=286 | | | | | | | | |
| NHY | | | | *e*S | | | Sn | 19 54 44.1 | -0.2 |
| | baz=286 | | | | | | | | |
| **EAHA** | **Aohua** | **0.74** | **228** | *e*P | | | Pg | 19 54 32.0 | -0.2 |
| | baz=240 | | | | | | | | |
| EAHA | | | | *e*S | | | Sb | 19 54 42.5 | +0.4 |
| | baz=240 | | | | | | | | |
| **EHP** | **Heping Village** | **0.76** | **227** | *e*P | | | Pg | 19 54 32.7 | +0.2 |
| | baz=238 | | | | | | | | |
| EHP | | | | *e*S | | | Sb | 19 54 43.6 | +1.1 |
| | baz=238 | | | | | | | | |
| **NWLT** | **Wulai** | **0.77** | **266** | P | | | Pg | 19 54 32.8 | +0.1 |
| | baz=266 | | | | | | | | |
| NWLT | | | | *e*S | | | Sb | 19 54 43.7 | +0.7 |
| | baz=266 | | | | | | | | |
| **YM01** | **YM01** | **0.78** | **294** | *e*P | | | Pn | 19 54 33.9 | -0.1 |
| | baz=294 | | | | | | | | |
| YM01 | | | | *e*S | | | Sb | 19 54 44.1 | +1.0 |
| | baz=294 | | | | | | | | |
| **YM08** | **YM08** | **0.78** | **298** | *e*P | | | Pg | 19 54 33.2 | +0.3 |
| | baz=297 | | | | | | | | |
| YM08 | | | | *e*S | | | Sg | 19 54 43.9 | +0.8 |
| | baz=297 | | | | | | | | |
| **NDT** | **Datong Townshi** | **0.79** | **254** | *e*P | | | Pg | 19 54 33.2 | +0.1 |
| | baz=259 | | | | | | | | |
| NDT | | | | *e*S | | | Sg | 19 54 44.3 | +0.7 |
| | baz=259 | | | | | | | | |
| **LATG** | **Datong** | **0.80** | **249** | P | | | Pb | 19 54 33.2 | -0.1 |
| | baz=234 | | | | | | | | |
| LATG | | | | *e*S | | | Sg | 19 54 44.6 | +0.6 |
| | baz=234 | | | | | | | | |
| **TWY** | **Chenhua** | **0.81** | **303** | *e*P | | | Pn | 19 54 34.5 | +0.1 |
| | baz=303 | | | | | | | | |
| TWY | | | | *e*S | | | Sn | 19 54 45.8 | -0.3 |
| | baz=303 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.89** | **288** | *e*P | | | Pb | 19 54 34.6 | -0.1 |
| | baz=287 | | | | | | | | |
| TWS1 | | | | *e*S | | | Sg | 19 54 47.1 | +0.5 |
| | baz=287 | | | | | | | | |
| **YHNB** | **Yeheng** | **0.90** | **260** | *e*P | | | Pg | 19 54 35.1 | -0.1 |
| | baz=244 | | | | | | | | |
| YHNB | | | | *e*S | | | Sg | 19 54 47.1 | +0.1 |
| | baz=244 | | | | | | | | |
| **NSK** | **Sanguang** | **0.91** | **261** | *e*P | | | Pb | 19 54 35.2 | +0.1 |
| | baz=277 | | | | | | | | |
| NSK | | | | *e*S | | | Sb | 19 54 47.2 | +0.2 |
| | baz=277 | | | | | | | | |
| **ETL** | **Fush Village** | **0.94** | **225** | *e*P | | | Pg | 19 54 35.7 | -0.2 |
| | baz=234 | | | | | | | | |
| ETL | | | | *e*S | | | Sn | 19 54 49.1 | -0.1 |
| | baz=234 | | | | | | | | |
| **NACB** | **Ninganchiao** | **0.95** | **227** | *e*P | | | Pb | 19 54 35.4 | -0.2 |
| | baz=236 | | | | | | | | |
| NACB | | | | *e*S | | | Sg | 19 54 48.9 | +0.4 |
| | baz=236 | | | | | | | | |
| **NNSB** | **Datong** | **0.96** | **246** | *e*P | | | Pg | 19 54 36.3 | -0.1 |
| | baz=235 | | | | | | | | |
| NNSB | | | | *e*S | | | Sg | 19 54 48.9 | -0.2 |
| | baz=235 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.00** | **232** | *e*P | | | Pb | 19 54 36.8 | +0.2 |
| | baz=232 | | | | | | | | |
| **FUSS** | **Fushou** | **1.16** | **240** | *e*P | | | Pg | 19 54 39.9 | -0.2 |
| | baz=240 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.20** | **236** | *e*P | | | Pb | 19 54 40.5 | +0.3 |
| | baz=235 | | | | | | | | |
| **LIOB** | **Emei** | **1.23** | **262** | *e*P | | | Pg | 19 54 42.7 | +1.3 |
| | baz=261 | | | | | | | | |
| **TDCB** | **Techi** | **1.23** | **242** | *e*P | | | Pg | 19 54 41.2 | -0.1 |
| | baz=242 | | | | | | | | |
| **OWD** | **Renai** | **1.38** | **231** | *e*P | | | Pb | 19 54 43.3 | +0.2 |
| | baz=231 | | | | | | | | |
| **WUSB** | **Renai** | **1.40** | **234** | *e*P | | | Pg | 19 54 44.3 | -0.3 |
| | baz=218 | | | | | | | | |

### TRN 29 19:57:54.7, 17.32N×61.37W, h28km, MD3.6, North-east of Antigua., Leeward Islands

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **ANBD** | **Bethesda, Anti** | **0.47** | **235** | *e*P | | | Pn | 19 58 06.4 | +0.9 |
| ANBD | | | | *e*S | | | Sn | 19 58 14.5 | +1.7 |
| **ANWB** | **Willy Bob** | **0.53** | **311** | *e*P | | | Pn | 19 58 07.3 | +0.9 |
| ANWB | | | | *e*S | | | Sn | 19 58 15.9 | +1.5 |
| **MBWH** | | **0.97** | **234** | *e*P | | | Pb | 19 58 14.1 | +1.1 |
| MBWH | | | | *e*S | | | Sb | 19 58 28.4 | +2.9 |
| **MBFL** | **Flemmings, Mon** | **0.99** | **235** | *e*P | | | Pb | 19 58 14.6 | +1.4 |
| MBFL | | | | *e*S | | | Sb | 19 58 28.0 | +2.2 |
| **MLYT** | **Lee's Yard** | **0.99** | **233** | *e*P | | | Pb | 19 58 14.8 | +1.6 |
| MLYT | | | | *e*S | | | Sb | 19 58 28.3 | +2.5 |
| **SKI** | **Saint Kitts** | **1.31** | **271** | *e*P | | | Pb | 19 58 18.8 | +0.1 |
| SKI | | | | *e*S | | | Sb | 19 58 36.8 | +1.7 |
| **TBG** | **Guadaloupe-3** | **1.48** | **190** | *e*P | | | Pb | 19 58 21.6 | 0.0 |
| TBG | | | | *e*S | | | Sb | 19 58 40.5 | +0.6 |

*IDC* ***29*** *20:02:35.2±2.1, 1.75N×126.13E, h0km, mb3.3/3, mbtmp3.4/3, Error ellipse: s-maj=181.7km s-min=26.0km az=65.0*
*DJA* ***29*** *20:02:40.5±0.4, 2.N±6°×12.6E±°, h10km, M3.4/6, mb3.6/1, MLv3.3/6*

### ISC 29 20:02:41.3±1.6, 1.9N±0.2×126.5E±0.1, h47km, n6, σ0.71/6, mb3.3/3, Northern Molucca Sea

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **TNTI** | **Ternate** | **1.43** | **144** | P | | P | **Pn** | **20 03 05.3** | **+0.5** |
| **KMSI** | **Cibinong** | **2.89** | **242** | P | | P | **Pn** | **20 03 25.2** | **+0.4** |
| **GTOI** | **Gorontalo** | **3.75** | **250** | P | | P | **Pn** | **20 03 37.0** | **+0.3** |
| **WRA** | **Warramunga Arr** | **23.05** | **161** | P | | P | **P** | **20 07 41.9** | **-1.0** |
| | 0.4nm,0.3s,baz=338,slow=11,SNR=12 | | | | | | | | |
| | 0.4nm,0.3s | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.44** | **165** | P | | | **P** | **20 08 13.7** | **-0.2** |
| | 0.1nm,0.4s,baz=345,slow=8.8,SNR=1.8 | | | | | | | | |
| | 0.1nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.91** | **326** | P | | | **P** | **20 12 35.6** | **0.0** |
| | 0.7nm,0.8s,baz=124,slow=7.3,SNR=6.0 | | | | | | | | |
| | 0.7nm,0.8s | | | | | | | | |

### NEIC 29 20:06:06.1±0.6, 37.32N±0.03×97.86W±0.01, h5km±1km, mb_Lg2.7/52, ML3.0/38, Error ellipse: s-maj=5.3km s-min=2.9km az=347.0, Kansas

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.11** | **260** | | | | Pg | 20 06 08.7 | +0.3 |
| KAN12 | | | | IAML | | | | 20 06 11.0 | |
| | comp=N,5μm,0.3s | | | | | | | | |
| KAN12 | | | | IAML | | | | 20 06 11.0 | |
| | comp=E,7μm,0.2s | | | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.12** | **224** | | | | Pg | 20 06 09.3 | +0.6 |
| KAN08 | | | | IAML | | | | 20 06 11.8 | |
| | comp=E,4μm,0.1s | | | | | | | | |
| KAN08 | | | | IAML | | | | 20 06 11.8 | |
| | comp=N,5μm,0.3s | | | | | | | | |
| **KS21** | **Milan North St** | **0.16** | **101** | IAML | | | | 20 06 13.7 | |
| | comp=N,4μm,0.2s | | | | | | | | |
| KS21 | | | | IAML | | | | 20 06 14.9 | |
| | comp=N,3μm,0.1s | | | | | | | | |
| **KS21** | **Milan North St** | **0.16** | **101** | | | | Pg | 20 06 09.7 | +0.3 |
| **KAN01** | **Argonia South** | **0.18** | **153** | | | | Pg | 20 06 10.4 | +0.7 |
| **KAN05** | **Bluff City Nor** | **0.21** | **182** | | | | Pg | 20 06 11.0 | +0.8 |
| KAN05 | | | | IAML | | | | 20 06 17.1 | |
| | comp=N,3μm,0.3s | | | | | | | | |
| **KAN09** | **Caldwell North** | **0.27** | **133** | | | | Pg | 20 06 11.9 | +0.6 |
| KAN09 | | | | IAML | | | | 20 06 20.2 | |
| | comp=N,4μm,0.3s | | | | | | | | |
| **KAN17** | **Caldwell West** | **0.28** | **164** | | | | Pg | 20 06 12.4 | +0.8 |
| KAN17 | | | | IAML | | | | 20 06 21.3 | |
| | comp=N,4μm,0.3s | | | | | | | | |
| **KAN14** | **Manchester OK** | **0.37** | **193** | | | | Pg | 20 06 13.9 | +0.7 |
| **KAN13** | **South Haven SW** | **0.43** | **134** | | | | Pg | 20 06 14.9 | +0.5 |
| KAN13 | | | | IAML | | | | 20 06 23.6 | |
| | comp=E,1μm,0.3s | | | | | | | | |
| KAN13 | | | | IAML | | | | 20 06 25.3 | |
| | comp=N,1μm,0.3s | | | | | | | | |
| **GC02** | **Grant County #** | **0.46** | **180** | Pg | | Pg | | 20 06 15.7 | +0.6 |
| **OK032** | **Salt Plains WL** | **0.58** | **209** | | | Pg | | 20 06 17.8 | +0.5 |
| **BLOK** | **Blackwell** | **0.76** | **137** | Pg | | Pg | | 20 06 20.9 | +0.2 |
| **CROK** | **Carrier** | **0.82** | **187** | Pg | | Pg | | 20 06 22.2 | +0.4 |
| CROK | | | | IAML | | | | 20 06 44.0 | |
| | comp=E,591nm,0.4s | | | | | | | | |
| CROK | | | | IAML | | | | 20 06 50.6 | |
| | comp=N,845nm,0.7s | | | | | | | | |
| **OK035** | **E0210 Rd and N** | **0.91** | **228** | | | | Pg | 20 06 23.6 | 0.0 |
| OK035 | | | | IAML | | | | 20 06 50.2 | |
| | comp=N,349nm,0.4s | | | | | | | | |
| **NOKA** | **Waynoka** | **1.09** | **232** | Pg | | Pg | | 20 06 26.6 | -0.5 |
| NOKA | | | | IAML | | | | 20 06 48.6 | |
| | comp=N,329nm,0.2s | | | | | | | | |
| NOKA | | | | IAML | | | | 20 06 50.9 | |
| | comp=E,371nm,0.3s | | | | | | | | |
| **T35A** | **Sooner Cattle** | **1.15** | **110** | Pg | | Pg | | 20 06 27.8 | -0.4 |
| **OK051** | **E0350 and S346** | **1.15** | **134** | | | Pg | | 20 06 28.0 | -0.2 |
| **OK048** | **Pawnee Station** | **1.16** | **140** | | | Pg | | 20 06 28.2 | -0.2 |
| OK048 | | | | IAML | | | | 20 06 48.8 | |
| | comp=E,503nm,0.3s | | | | | | | | |
| OK048 | | | | IAML | | | | 20 06 48.9 | |
| | comp=E,256nm,0.4s | | | | | | | | |
| **R32A** | **Long Quarter,** | **1.29** | **329** | | | | Pn | 20 06 29.3 | -1.6 |
| **QUOK** | **Quay** | **1.47** | **141** | | | | Pn | 20 06 33.4 | 0.0 |
| **OK029** | **Liberty Lake** | **1.55** | **168** | Pg | | Pn | | 20 06 34.6 | +0.1 |
| **OK052** | **Battle Ridge R** | **1.57** | **147** | | | | Pn | 20 06 35.0 | +0.3 |
| **ELIS** | **Ellis County** | **1.77** | **226** | | | | Pb | 20 06 38.9 | -0.2 |
| **CSTR** | **Hydro, Custer** | **1.80** | **202** | | | | Pb | 20 06 38.7 | -0.8 |
| **DEOK** | **Depew** | **1.83** | **143** | | | | Pn | 20 06 39.0 | +0.7 |
| **KSU1** | **Kansas State U** | **2.04** | **29** | | | | Pn | 20 06 41.5 | +0.4 |
| **CBKS** | **Cedar Bluff** | **2.10** | **316** | | | | Pn | 20 06 42.8 | +0.7 |
| **TUL3** | **Leonard** | **2.18** | **129** | | | | Pn | 20 06 43.1 | +0.1 |
| **W35A** | **Tecumseh** | **2.30** | **159** | | | | Pn | 20 06 44.7 | 0.0 |
| **RLO** | **Rose Lookout** | **2.55** | **116** | | | | Pn | 20 06 49.1 | +0.9 |
| **WMOK** | **Wichita Mounta** | **2.68** | **196** | | | | Pn | 20 06 51.1 | +1.1 |
| **X34A** | **Smith Ranch, M** | **2.71** | **179** | | | | Pb | 20 06 56.3 | +1.2 |
| **U38A** | **Gravette** | **2.92** | **106** | Pn | | Pn | | 20 06 54.2 | +1.0 |
| U38A | | | | IAmb_Lg | | | | 20 07 44.9 | |
| | comp=Z,27nm,0.7s | | | | | | | | |
| **SMWD** | **Samnorwood** | **2.93** | **222** | | | | Pn | 20 06 54.7 | +1.3 |
| **HHAR** | **Hobbs** | **3.31** | **107** | | | | Pn | 20 06 59.7 | +1.1 |
| **X37A** | **Clayton** | **3.39** | **143** | Pn | | Pn | | 20 07 00.0 | +0.3 |
| X37A | | | | IAmb_Lg | | | | 20 08 00.6 | |
| | comp=Z,25nm,0.8s | | | | | | | | |
| **AMTX** | **Amarillo** | **3.93** | **233** | | | | Pn | 20 07 09.2 | +2.0 |
| AMTX | | | | IAmb_Lg | | | | 20 08 20.6 | |
| | comp=Z,24nm,0.9s | | | | | | | | |
| **N35A** | **Tabor** | **3.94** | **25** | | | | Pb | 20 07 17.1 | +1.0 |
| **RTBA** | **Rita Blanca** | **4.01** | **259** | | | | Pn | 20 07 09.0 | +0.7 |
| **BGNE** | **Belgrade** | **4.09** | **357** | IAmb_Lg | | | | 20 08 14.4 | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **P38A** | **Dawn** | **4.11** | **55** | | | | Pn | 20 07 09.2 | -0.3 |
| P38A | | | | IAmb_Lg | | | | 20 08 21.9 | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **DKNS** | **Dickens** | **4.42** | **215** | IAmb_Lg | | | | 20 08 31.5 | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.47** | **90** | IAmb_Lg | | | | 20 08 30.9 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **76** | Pn | | Pn | | 20 07 12.1 | -3.4 |
| **FCAR** | **Ozark Folk Cen** | **4.83** | **105** | IAmb_Lg | | | | 20 08 48.0 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.96** | **123** | Pn | | Pn | | 20 07 19.3 | -2.0 |
| X40A | | | | IAmb_Lg | | | | 20 08 45.4 | |
| | comp=Z,9.8nm,0.7s | | | | | | | | |
| **P40A** | **Paris** | **5.07** | **62** | IAmb_Lg | | | | 20 08 55.4 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **UALR** | **University of** | **5.14** | **118** | IAmb_Lg | | | | 20 09 04.0 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **MSTX** | **Muleshoe** | **5.21** | **232** | IAmb_Lg | | | | 20 09 01.4 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **T25A** | **Trinidad** | **5.23** | **270** | IAmb_Lg | | | | 20 08 58.4 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.30** | **80** | IAmb_Lg | | | | 20 09 04.4 | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **T42A** | **Van Buren** | **5.41** | **91** | IAmb_Lg | | | | 20 09 04.1 | |
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| **Z41A** | **Richland Creek** | **5.79** | **133** | IAmb_Lg | | | | 20 09 19.3 | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **FVM** | **French Village** | **5.94** | **81** | IAmb_Lg | | | | 20 09 15.5 | |
| | comp=Z,8.7nm,0.9s | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.97** | **93** | IAmb_Lg | | | | 20 09 14.3 | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **Q24A** | **Divide** | **5.97** | **288** | IAmb_Lg | | | | 20 09 32.5 | |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.09** | **276** | Pn | | Pn | | 20 07 35.1 | -1.9 |
| **BRDY** | **Brady** | **6.09** | **189** | Pn | | Pn | | 20 07 34.1 | -2.7 |
| **ECSD** | **EROS Data Cent** | **6.48** | **8** | IAmb_Lg | | | | 20 09 29.8 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| **S44A** | **Carbondale** | **6.85** | **84** | IAmb_Lg | | | | 20 09 42.2 | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **JCT** | **Junction City** | **7.01** | **194** | IAmb_Lg | | | | 20 10 03.5 | |
| | comp=Z,9.3nm,0.8s | | | | | | | | |
| **PHWY** | **Pilot Hill** | **7.11** | **306** | IAmb_Lg | | | | 20 09 56.9 | |
| | comp=Z,7.4nm,0.9s | | | | | | | | |
| **N23A** | **Red Feather La** | **7.23** | **302** | IAmb_Lg | | | | 20 09 55.0 | |
| | comp=Z,8.7nm,0.8s | | | | | | | | |
| **SMCO** | **Snowmass** | **7.41** | **287** | Pn | | Pn | | 20 07 51.9 | -3.3 |
| **HNDO** | **Hondo** | **7.86** | **189** | IAmb_Lg | | | | 20 10 34.0 | |
| | comp=Z,6.4nm,0.8s | | | | | | | | |
| **VHRN** | **Van Horn** | **8.79** | **224** | IAmb_Lg | | | | 20 10 58.5 | |
| | comp=Z,4.7nm,0.9s | | | | | | | | |

### IDC 29 20:21:28.7±1.7, 5.90S×140.33E, h0km, mb3.9/2, mbtmp3.8/5, ML3.0/3, Error ellipse: s-maj=38.3km s-min=17.5km az=104.0, Irian Jaya

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **PMG** | **Port Moresby** | **7.61** | **118** | Pn | | Pn | Pn | 20 23 21.2 | +0.2 |
| | 1.5nm,0.3s,baz=305,slow=16,SNR=2.1 | | | | | | | | |
| | 16nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **15.12** | **202** | Pn | | Pn | Pn | 20 25 04.1 | +0.3 |
| | 0.1nm,0.3s,baz=29,slow=13,SNR=9.9 | | | | | | | | |
| WRA | | | | Sn | | Sn | Sn | 20 27 54.5 | +2.3 |
| | 0.1nm,0.3s,baz=25,slow=24,SNR=2.2 | | | | | | | | |
| WRA | | | | Lg | | Lg | Lg | 20 29 31.2 | |
| | baz=25,slow=31,SNR=1.7 | | | | | | | | |
| | 0.6nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **18.71** | **199** | P | | P | P | 20 25 48.2 | -0.8 |
| | 0.3nm,0.3s,baz=21,slow=12,SNR=36 | | | | | | | | |
| ASAR | | | | S | | Sn | Sn | 20 29 20.0 | +0.6 |
| | 0.2nm,0.7s,baz=20,slow=24,SNR=1.9 | | | | | | | | |
| ASAR | | | | Lg | | Lg | Lg | 20 31 24.7 | |
| | 0.1nm,0.3s,baz=22,slow=31,SNR=1.4 | | | | | | | | |
| | 2.0nm,0.7s | | | | | | | | |
| **STKA** | **Stephens Creek** | **25.87** | **178** | P | | P | P | 20 27 03.0 | +0.8 |
| | 0.5nm,0.3s,baz=1.2,slow=7.7,SNR=8.3 | | | | | | | | |
| | 0.5nm,0.3s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **82.83** | **325** | P | | P | P | 20 33 54.7 | -0.3 |
| | 0.7nm,0.7s,baz=105,slow=5.5,SNR=4.9 | | | | | | | | |
| | 0.7nm,0.7s | | | | | | | | |

### VIE 29 20:29:24.2±0.2, 47.56N×15.66E, h5km±3km, ml0.6/2, Error ellipse: s-maj=1.5km s-min=1.1km az=47.0, Austria

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | h m s | ISC |
| **ARSA** | **Arzberg** | **0.32** | **197** | *i* Pg | | | Pg | 20 29 30.6 | +0.1 |
| | 0.4nm,0.1s | | | | | | | | |
| ARSA | | | | *i* Sg | | | Sg | 20 29 34.7 | 0.0 |
| | 0.9nm,0.1s | | | | | | | | |
| **CONA** | **Conrad Observa** | **0.39** | **20** | *i* Pg | | | Pg | 20 29 32.3 | +0.5 |
| | 0.1nm,0.1s | | | | | | | | |
| CONA | | | | *e*Sg | | | Sg | 20 29 38.0 | +1.0 |
| | 0.2nm,0.1s | | | | | | | | |

*DNK* ***29*** *20:29:53.1±1.4, 51.31N×16.11E, h38km±57km, ML3.0*
*IPEC* ***29*** *20:29:54.9±0.2, 51.60N×16.16E, h1km, ML3.4/4, Error ellipse: s-maj=2.0km s-min=1.2km az=35.0*
*IDC

*PRU **29** 20:29:57.7, 51°.53N×16°.05E, h0km*
**ISC 29 20:29:54.2**±0.5,**51°.66N**±0°.02×**16°.18E**±0°.02,**h0km**,**n126,**
**σ1s46/206,mb3.5/7,7C-4D,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.83** | **175** | *e*Pg | **Pg** | **20 30 10.0** | **0.0** |
| KSP | | | | *e*Sg | **Sg** | **20 30 20.3** | **-0.4** |
| **KSP** | **Ksiaz** | **0.83** | **175** | *e*Pg | **Pg** | **20 30 10.1** | **0.0** |
| **KSP** | **Ksiaz** | **0.83** | **175** | Pg | **Pg** | **20 30 09.9** | **-0.1** |
| KSP | | | | Sg | **Sg** | **20 30 20.1** | **-0.6** |
| **CHVC** | **Chvalec** | **1.08** | **184** | *e*PG | **Pg** | **20 30 15.0** | **+0.1** |
| CHVC | | | | *e*SG | **Sg** | **20 30 28.4** | **-0.5** |
| | comp=Z,356nm,0.6s | | | | | | |
| **OSTC** | **Ostas** | **1.11** | **179** | *e*PG | **Pg** | **20 30 15.7** | **+0.2** |
| OSTC | | | | *e*SG | **Sg** | **20 30 29.4** | **-0.4** |
| | comp=Z,270nm,0.6s | | | | | | |
| **UPC** | **Upice** | **1.16** | **185** | *e*PG | **Pg** | **20 30 16.3** | **-0.2** |
| UPC | | | | *e*SG | **Sg** | **20 30 30.5** | **-1.1** |
| **DPC** | **Dobruska-Polom** | **1.32** | **176** | *e*Pg | **Pg** | **20 30 18.8** | **-0.7** |
| DPC | | | | *e*Sg | **Sg** | **20 30 34.6** | **-2.0** |
| **PVCC** | **Panska Ves** | **1.52** | **222** | *e*PG | **Pn** | **20 30 22.3** | **-0.4** |
| PVCC | | | | *e*SG | **Sg** | **20 30 41.8** | **-1.4** |
| | comp=Z,702nm,0.6s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.61** | **241** | Pn | **Pn** | **20 30 22.8** | **-1.2** |
| BRG | | | | Pg | **Pb** | **20 30 24.6** | **-0.2** |
| BRG | | | | Sg | **Sn** | **20 30 44.8** | **-0.7** |
| BRG | | | | Amp | | 20 30 45.4 | |
| | comp=Z,443nm,0.5s | | | | | | |
| **KRLC** | **Kraliky** | **1.64** | **166** | *e*PG | **Pn** | **20 30 24.2** | **-0.1** |
| KRLC | | | | *e*SG | **Sn** | **20 30 45.0** | **-1.1** |
| | comp=Z,336nm,0.6s | | | | | | |
| **RUE** | **Ruedersdorf** | **1.69** | **300** | *e*P | **Pn** | **20 30 24.7** | **-0.3** |
| **GKP** | **Gorka Klasztor** | **1.73** | **22** | *e*P | Pg | 20 30 34.3 | +6.9 |
| **PRA** | **Prague** | **1.94** | **215** | *e*PN | **Pn** | **20 30 28.1** | **-0.3** |
| PRA | | | | *e*PG | **Pb** | **20 30 30.1** | **-0.4** |
| PRA | | | | *e*SG | **Sb** | **20 30 54.2** | **-1.0** |
| **GOPC** | **GO Pecny, Ondr** | **1.96** | **207** | *e*PG | **Pb** | **20 30 30.6** | **-0.2** |
| **PRU** | **Pruhonice** | **1.97** | **212** | *e*PN | **Pn** | **20 30 28.1** | **-0.8** |
| PRU | | | | *e*PG | **Pb** | **20 30 30.3** | **-0.7** |
| PRU | | | | *e*SG | **Sn** | **20 30 54.2** | **-0.1** |
| | comp=Z,841nm,1.9s | | | | | | |
| **CLL** | **Collm** | **2.02** | **261** | *i* Pn | **Pn** | **20 30 28.8** | **-0.7** |
| | comp=Z,63nm,0.5s | | | | | | |
| CLL | | | | *i* Pg | **Pb** | **20 30 31.8** | **0.0** |
| CLL | | | | *i* x | x | 20 30 35.5 | |
| CLL | | | | *e*Sg | **Sb** | **20 30 57.0** | **-0.4** |
| | comp=Z,137nm,0.6s | | | | | | |
| **CLL** | **Collm** | **2.02** | **261** | *e*Pn | **Pn** | **20 30 28.9** | **-0.7** |
| CLL | | | | *e*Sg | **Sb** | **20 30 57.8** | **+0.4** |
| **CLL** | **Collm** | **2.02** | **261** | Pg | **Pg** | **20 30 35.6** | **+2.7** |
| CLL | | | | Pn | **Pn** | **20 30 28.7** | **-0.7** |
| CLL | | | | Sn | **Sb** | **20 30 56.7** | **-0.7** |
| **HSKC** | **Hora Svate Kat** | **2.03** | **240** | *e*PG | **Pb** | **20 30 31.4** | **-0.6** |
| HSKC | | | | *e*SG | **Sb** | **20 30 57.0** | **-0.8** |
| | comp=Z,361nm,0.8s | | | | | | |
| **RAC** | **Raciborz** | **2.03** | **140** | *e*PG | **Pg** | **20 30 33.4** | **+0.2** |
| RAC | | | | *e*SG | **Sg** | **20 30 59.2** | **-0.3** |
| **MORC** | **Moravsky Berou** | **2.08** | **155** | *e*Pn | **Pn** | **20 30 30.1** | **-0.3** |
| | baz=335 | | | | | | |
| MORC | | | | *e*Sg | **Sn** | **20 30 58.0** | **+1.0** |
| | comp=Z,244nm,0.9s,baz=335 | | | | | | |
| **MORC** | **Moravsky Berou** | **2.08** | **155** | ⇓P | **Pn** | **20 30 30.1** | **-0.3** |
| MORC | | | | ⇓S | **Sb** | **20 30 58.5** | **-0.7** |
| **MORC** | **Moravsky Berou** | **2.08** | **155** | *e*Pn | **Pn** | **20 30 30.2** | **-0.2** |
| MORC | | | | *e*Sg | **Sb** | **20 30 59.7** | **+0.5** |
| **OKC** | **Ostrava-Krasne** | **2.22** | **145** | *e*PN | **Pn** | **20 30 32.0** | **-0.2** |
| **OKC** | **Ostrava-Krasne** | **2.22** | **145** | *e*Sg | **Sb** | **20 31 03.8** | **+0.7** |
| **VRAC** | **Vranov** | **2.37** | **173** | *e*Pn | **Pn** | **20 30 33.8** | **-0.6** |
| | baz=353 | | | | | | |
| VRAC | | | | *e*Sg | **Sb** | **20 31 07.0** | **-0.6** |
| | comp=Z,186nm,0.7s,baz=353 | | | | | | |
| **VRAC** | **Vranov** | **2.37** | **173** | *e*PN | **Pn** | **20 30 33.9** | **-0.5** |
| VRAC | | | | *e*SG | **Sb** | **20 31 07.1** | **-0.6** |
| **VRAC** | **Vranov** | **2.37** | **173** | Pn | **Pn** | **20 30 35.1** | **+0.7** |
| | comp=Z,11nm,0.3s,baz=343,slow=14,SNR=34 | | | | | | |
| VRAC | | | | Pg | **Pg** | **20 30 39.1** | **-0.6** |
| | comp=Z,13nm,0.3s,baz=348,slow=16,SNR=14 | | | | | | |
| VRAC | | | | Sn | **Sn** | **20 31 04.1** | **-0.1** |
| | comp=Z,7.7nm,0.3s,baz=232,slow=10,SNR=5.6 | | | | | | |
| VRAC | | | | Lg | Lg | 20 31 08.4 | |
| | comp=Z,15nm,0.3s,baz=67,slow=20,SNR=13 | | | | | | |
| | comp=Z,33nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **2.37** | **173** | ⇑P | **Pn** | **20 30 34.5** | **0.0** |
| VRAC | | | | ⇓S | **Sb** | **20 31 07.2** | **-0.5** |
| **ZVC** | **Zvikov** | **2.56** | **210** | *e*PN | **Pn** | **20 30 36.4** | **-0.6** |
| **KRUC** | **Moravsky** | **2.61** | **177** | *e*Pn | **Pn** | **20 30 37.3** | **-0.3** |
| | baz=357 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **20 31 14.6** | **+0.2** |
| | comp=Z,208nm,1.1s,baz=357 | | | | | | |
| **TANN** | **Tannenbergstha** | **2.66** | **243** | *e*Sg | **Sb** | **20 31 17.2** | **+1.3** |
| **OJC** | **Ojcow** | **2.71** | **121** | *e*Sg | **Sg** | **20 31 21.7** | **+0.5** |
| **OJC** | **Ojcow** | **2.71** | **121** | Pg | **Pg** | **20 30 48.0** | **+1.9** |
| OJC | | | | Pn | **Pn** | **20 30 38.3** | **-0.7** |
| **OJC** | **Ojcow** | **2.71** | **121** | Pn | **Pn** | **20 30 38.0** | **-1.0** |
| **OJC** | **Ojcow** | **2.71** | **121** | *e*Pg | **Pg** | **20 30 46.8** | **+0.7** |
| **WERD** | **Werda** | **2.73** | **245** | *e*Sg | **Sb** | **20 31 19.4** | **+1.4** |
| **JAVC** | **Velka Javorina** | **2.97** | **161** | *e*Pn | **Pn** | **20 30 42.0** | **-0.6** |
| | baz=341 | | | | | | |
| **KHC** | **Kasperske Hory** | **3.03** | **214** | *e*PN | **Pn** | **20 30 42.8** | **-0.8** |
| KHC | | | | *e*PG | **Pb** | **20 30 49.1** | **0.0** |
| KHC | | | | *e*SG | **Sb** | **20 31 28.4** | **+1.7** |
| | comp=Z,84nm,0.9s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.03** | **214** | Pg | **Pg** | **20 30 51.4** | **-0.9** |
| KHC | | | | Pn | **Pn** | **20 30 42.7** | **-0.8** |
| KHC | | | | Sn | **Sn** | **20 31 21.1** | **+0.6** |
| **MOX** | **Moxa** | **3.05** | **252** | *e*Sg | **Sg** | **20 31 29.6** | **-2.5** |
| **MANZ** | **Manzenberg** | **3.08** | **239** | *e*Pn | **Pn** | **20 30 43.8** | **-0.3** |
| MANZ | | | | *e*Pg | **Pg** | **20 30 52.1** | **-1.1** |
| **CKRC** | **Cesky Krumlov** | **3.09** | **204** | *e*PN | **Pn** | **20 30 44.1** | **-0.2** |
| CKRC | | | | *e*PG | **Pb** | **20 30 50.3** | **+0.2** |
| CKRC | | | | *e*SG | **Sg** | **20 31 31.4** | **-2.0** |
| | comp=Z,99nm,0.7s | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **3.16** | **235** | *e*Pn | **Pn** | **20 30 44.8** | **-0.5** |
| ROTZ | | | | *e*Pg | **Pb** | **20 30 52.6** | **+1.4** |
| ROTZ | | | | *e*Sg | **Sb** | **20 31 32.6** | **+2.4** |
| **GEC2** | **GERESS Array S** | **3.24** | **210** | *e*Pn | **Pn** | **20 30 45.9** | **-0.5** |
| GEC2 | | | | *e*Pg | **Pb** | **20 30 52.6** | **-0.1** |
| **GERES** | **GERESS Array B** | **3.24** | **210** | Pn | **Pn** | **20 30 45.8** | **-0.5** |
| | comp=Z,3.7nm,0.3s,baz=31,slow=13,SNR=77 | | | | | | |
| GERES | | | | Pg | **Pb** | **20 30 51.9** | **-0.8** |
| | comp=Z,7.5nm,0.3s,baz=27,slow=19,SNR=32 | | | | | | |
| GERES | | | | Sn | Sn | 20 31 16.1 | -10 |
| | comp=Z,4.5nm,0.3s,baz=25,slow=24,SNR=7.5 | | | | | | |
| GERES | | | | Lg | Lg | 20 31 33.2 | |
| | comp=Z,7.2nm,0.3s,baz=28,slow=32,SNR=5.7 | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| **LANS** | **Liptovska Anna** | **3.28** | **139** | *e*PN | **Pn** | **20 30 47.9** | **+1.0** |
| LANS | | | | *e*PG | **Pg** | **20 30 56.8** | **-0.3** |
| LANS | | | | *e*SG | **Sg** | **20 31 39.4** | **-0.2** |
| **WET** | **Wettzell** | **3.29** | **221** | *e*Pn | **Pn** | **20 30 46.9** | **-0.1** |
| WET | | | | *e*Sg | **Sb** | **20 31 36.1** | **+2.0** |
| **NIE** | **Niedzica** | **3.46** | **129** | Pn | **Pn** | **20 30 50.2** | **+0.9** |
| NIE | | | | *e*Pg | **Pg** | **20 31 00.8** | **+0.3** |
| NIE | | | | *e*Sg | **Sg** | **20 31 44.5** | **-0.8** |
| **NIE** | **Niedzica** | **3.46** | **129** | Pg | **Pg** | **20 31 02.9** | **+2.4** |
| NIE | | | | Pn | **Pn** | **20 30 50.8** | **+1.4** |
| **ZST** | **Bratislava** | **3.52** | **170** | *e*PN | **Pn** | **20 30 52.0** | **+1.8** |
| ZST | | | | *e*PG | **Pg** | **20 31 00.6** | **-1.1** |
| ZST | | | | *e*SG | **Sg** | **20 31 45.3** | **-2.0** |
| **BSD** | **Bornholm Skovb** | **3.54** | **348** | *e*P | **Pn** | **20 30 51.5** | **+1.1** |
| **BSD** | **Bornholm Skovb** | **3.54** | **348** | *i* P | **Pn** | **20 30 50.0** | **-0.4** |
| BSD | | | | *e* | | 20 31 05.9 | |
| BSD | | | | IAML | | 20 31 51.7 | |
| | comp=Z,16nm,0.5s | | | | | | |
| **VYHS** | **Vyhne** | **3.61** | **151** | *e*PN | **Pn** | **20 30 51.5** | **+0.2** |
| VYHS | | | | *e*PG | **Pg** | **20 31 04.1** | **+0.8** |
| VYHS | | | | *e*SG | **Sg** | **20 31 48.2** | **-1.8** |
| **CLZ** | **Clausthal** | **3.61** | **275** | *e*Pn | **Pn** | **20 30 52.3** | **+0.8** |
| CLZ | | | | *e*Sg | **Sg** | **20 31 49.8** | **-0.5** |
| **GRF** | **Grafenberg Arr** | **3.72** | **240** | *e*Pn | **Pn** | **20 30 52.8** | **-0.1** |
| GRF | | | | *e*Sg | **Sg** | **20 31 51.0** | **-2.7** |
| **CONA** | **Conrad Observa** | **3.75** | **183** | *e*Pn | **Pn** | **20 30 53.2** | **-0.1** |
| | comp=Z,11nm,0.5s,SNR=18 | | | | | | |
| CONA | | | | *e*Sg | **Sb** | **20 31 49.6** | **+2.4** |
| | comp=Z,99nm,0.9s | | | | | | |
| **RONA** | **Rosalia, Austr** | **3.97** | **179** | *i* Pn | **Pn** | **20 30 56.5** | **+0.1** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| RONA | | | | *e*Sg | **Sg** | **20 31 59.2** | **-2.5** |
| | comp=Z,39nm,0.5s | | | | | | |
| **MOA** | **Molln** | **4.01** | **199** | *i* Pn | **Pn** | **20 30 56.7** | **-0.3** |
| | comp=Z,16nm,0.4s,SNR=34 | | | | | | |
| MOA | | | | *e*Sg | **Sg** | **20 32 02.4** | **-0.7** |
| | comp=Z,57nm,0.6s | | | | | | |
| **KECS** | **Kecovo** | **4.22** | **137** | *e*PN | **Pn** | **20 30 59.7** | **-0.1** |
| KECS | | | | *e*PG | **Pg** | **20 31 14.9** | **-0.2** |
| **LUNU** | **Lund** | **4.29** | **339** | *i* P | **Pn** | **20 31 00.0** | **-0.8** |
| LUNU | | | | *e*S | **Sn** | **20 31 50.7** | **-0.8** |
| **BIOA** | **Bad Ischl, Aus** | **4.30** | **204** | *i* Pn | **Pn** | **20 31 00.6** | **-0.3** |
| | comp=Z,5.4nm,0.4s,SNR=18 | | | | | | |
| BIOA | | | | *e*Sg | **Sg** | **20 32 11.9** | **-0.6** |
| | comp=Z,36nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **4.44** | **186** | *e*Pn | **Pn** | **20 31 03.5** | **+0.7** |
| | comp=Z,3.3nm,0.5s | | | | | | |
| ARSA | | | | *e*Sg | **Sg** | **20 32 18.3** | **+1.6** |
| | comp=Z,35nm,0.6s | | | | | | |
| **PSZ** | **Piszkesteto** | **4.46** | **146** | ⇑P | **Pn** | **20 31 04.2** | **+1.1** |
| **MPLH** | **Magyarpolny** | **4.58** | **168** | Pn | **Pn** | **20 31 05.2** | **+0.4** |
| **KWP** | **Kalwaria Pacla** | **4.63** | **114** | Pn | **Pn** | **20 31 06.1** | **+0.7** |
| **KOLS** | **Kolonicke sedl** | **4.77** | **123** | *e*PN | **Pn** | **20 31 07.7** | **+0.4** |
| KOLS | | | | *e*PG | **Pg** | **20 31 26.0** | **+0.5** |
| KOLS | | | | *e*SG | **Sg** | **20 32 26.5** | **-0.8** |
| **BJUU** | **Bjuv** | **4.80** | **338** | *e*P | **Pn** | **20 31 07.8** | **+0.1** |
| **LESA** | **Schwarzleotal** | **4.82** | **210** | *e*Pn | **Pn** | **20 31 07.5** | **-0.5** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| LESA | | | | *e*Sg | **Sg** | **20 32 26.9** | **-2.0** |
| | comp=Z,11nm,0.4s | | | | | | |
| **SUW** | **Suwalki** | **4.85** | **58** | *e*P | **Pb** | **20 31 18.5** | **-1.5** |
| **KBA** | **Koelnbreinsper** | **4.95** | **203** | *i* Pn | **Pn** | **20 31 10.1** | **+0.1** |
| | comp=Z,17nm,0.4s,SNR=15 | | | | | | |
| KBA | | | | *e*Sg | **Sg** | **20 32 35.5** | **+2.4** |
| | comp=Z,53nm,0.6s | | | | | | |
| **DEL** | **Delary** | **5.00** | **345** | *i* P | **Pn** | **20 31 11.0** | **+0.5** |
| DEL | | | | *e*S | **Sn** | **20 32 06.4** | **-2.5** |
| **SOKA** | **Soboth** | **5.05** | **189** | *i* Pn | **Pn** | **20 31 10.8** | **-0.4** |
| | comp=Z,4.0nm,0.5s,SNR=7.6 | | | | | | |
| SOKA | | | | *e*Sg | **Sg** | **20 32 35.2** | **-1.1** |
| | comp=Z,15nm,0.7s | | | | | | |
| **HOLU** | **Holmets** | **5.08** | **126** | Pn | **Pn** | **20 31 12.0** | **+0.4** |
| **WATA** | **Walderalm** | **5.27** | **216** | *i* Pn | **Pn** | **20 31 14.9** | **+0.6** |
| | comp=Z,13nm,0.6s,SNR=11 | | | | | | |
| WATA | | | | *e*Sg | **Sg** | **20 32 40.1** | **-3.3** |
| | comp=Z,4.0nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **5.27** | **192** | *i* Pn | **Pn** | **20 31 14.9** | **+0.7** |
| | comp=Z,3.7nm,0.6s | | | | | | |
| OBKA | | | | *e*Sg | **Sg** | **20 32 43.0** | **-0.4** |
| | comp=Z,52nm,0.7s | | | | | | |
| **MYKA** | **Terra Mystica** | **5.31** | **199** | *i* Pn | **Pn** | **20 31 14.6** | **-0.2** |
| | comp=Z,2.1nm,0.6s | | | | | | |
| MYKA | | | | *e*Sg | **Sg** | **20 32 42.5** | **-2.2** |
| | comp=Z,18nm,0.6s | | | | | | |
| **WTTA** | **Wattenberg** | **5.31** | **216** | *i* Pn | **Pn** | **20 31 15.1** | **+0.2** |
| | comp=Z,6.6nm,0.6s,SNR=6.9 | | | | | | |
| WTTA | | | | Sg | **Sg** | **20 32 45.7** | **+1.0** |
| | comp=Z,20nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **5.44** | **219** | *i* Pn | **Pn** | **20 31 16.5** | **-0.2** |
| | comp=Z,0.7nm,0.2s | | | | | | |
| MOTA | | | | *e*Sg | **Sg** | **20 32 54.7** | **+5.7** |
| | comp=Z,23nm,0.6s | | | | | | |
| **RETA** | **Reutte** | **5.47** | **222** | *i* Pn | **Pn** | **20 31 16.4** | **-0.6** |
| | comp=Z,3.2nm,0.4s | | | | | | |
| RETA | | | | *e*Sg | **Sg** | **20 32 49.9** | **+0.1** |
| | comp=Z,19nm,0.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **5.48** | **207** | *i* Pn | **Pn** | **20 31 17.5** | **+0.4** |
| | comp=Z,9.5nm,0.8s,SNR=8.6 | | | | | | |
| ABTA | | | | *e*Sg | **Sg** | **20 32 45.9** | **-4.2** |
| | comp=Z,34nm,0.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **5.50** | **218** | *i* Pn | **Pn** | **20 31 18.1** | **+0.6** |
| | comp=Z,2.8nm,0.2s,SNR=6.2 | | | | | | |
| SQTA | | | | *e*Sg | **Sg** | **20 32 54.1** | **+3.2** |
| | comp=Z,31nm,0.6s | | | | | | |
| **PBUR** | **Paburge** | **5.54** | **36** | *e*P | **Pb** | **20 31 30.6** | **-1.1** |
| **MORS** | **Morshin** | **5.55** | **114** | Pn | **Pn** | **20 31 19.7** | **+1.7** |
| **MORH** | **Mrgy, Hungar** | **5.69** | **162** | ⇑P | **Pn** | **20 31 19.7** | **-0.3** |
| **MORH** | **Mrgy, Hungar** | **5.69** | **162** | Pn | **Pn** | **20 31 19.8** | **-0.1** |
| | comp=Z,6.9nm,0.8s,comp=Z,0.0nm | | | | | | |
| **FETA** | **Feichten** | **5.85** | **220** | *i* Pn | **Pn** | **20 31 22.4** | **+0.1** |
| | comp=Z,1.4nm,0.4s | | | | | | |
| FETA | | | | *e*Sg | **Sg** | **20 32 56.5** | **-5.7** |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **DAVA** | **Damuels** | **6.00** | **226** | *i* Pn | **Pn** | **20 31 24.1** | **-0.3** |
| | comp=Z,1.2nm,0.4s | | | | | | |
| DAVA | | | | Sg | **Sg** | **20 33 11.8** | **+4.9** |
| | comp=Z,20nm,0.7s | | | | | | |
| **PABE** | **Paberze** | **6.03** | **47** | *e*P | **Pb** | **20 31 35.7** | **-4.3** |
| **RNPP5** | **Staryi Chortor** | **6.09** | **90** | Pn | **Pn** | **20 31 26.7** | **+1.3** |
| **STNU** | **Starunia** | **6.11** | **116** | Pn | **Pn** | **20 31 27.1** | **+1.4** |
| **RAKU** | **Rahkiv** | **6.32** | **122** | Pn | **Pn** | **20 31 29.4** | **+0.8** |
| **DAVOX** | **Davos/Dischmat** | **6.39** | **223** | Pn | **Pn** | **20 31 28.9** | **-0.9** |
| | comp=Z,0.7nm,0.3s,baz=16,slow=13,SNR=12 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **20 32 40.6** | **-3.0** |
| | comp=Z,0.4nm,0.3s,baz=227,slow=23,SNR=1.2 | | | | | | |
| DAVOX | | | | Lg | Lg | 20 33 12.1 | |
| | comp=Z,0.8nm,0.3s,baz=197,slow=16,SNR=3.8 | | | | | | |
| | comp=Z,3.7nm,0.6s | | | | | | |
| **DRGR** | | **6.49** | **136** | ⇑P | **Pn** | **20 31 31.2** | **+0.2** |
| **SIRR** | **Siria** | **6.49** | **144** | ⇑P | **Pn** | **20 31 31.3** | **+0.2** |
| **HORU** | **Horodok** | **6.99** | **107** | Pn | **Pn** | **20 31 40.3** | **+2.5** |
| **SURR** | **Surduc** | **7.10** | **144** | ⇑P | **Pn** | **20 31 36.0** | **-3.3** |
| **BURAR** | **Bucovina Array** | **7.13** | **121** | ⇓P | **Pn** | **20 31 40.8** | **+1.0** |
| **NACGM** | **Naroch** | **7.14** | **59** | *e*P | **Pn** | **20 31 42.5** | **+2.7** |
| | comp=Z,14nm,1.1s,baz=248 | | | | | | |
| **MI30** | **MI30,Zelenitsa** | **7.60** | **92** | Pn | **Pn** | **20 31 47.1** | **+0.9** |
| **GZR** | **Gura Zlata** | **7.65** | **143** | ⇑P | **Pn** | **20 31 48.6** | **+1.7** |
| **AK20** | **Malin Array Si** | **8.11** | **91** | Pn | **Pn** | **20 31 53.7** | **+0.5** |
| **AK19** | **Malin Array Si** | **8.12** | **92** | Pn | **Pn** | **20 31 53.2** | **-0.1** |
| **AK21** | **Malin Array Si** | **8.13** | **91** | Pn | **Pn** | **20 31 53.8** | **+0.4** |
| **AK22** | **Malin Array Si** | **8.15** | **91** | Pn | **Pn** | **20 31 54.4** | **+0.7** |
| **AK18** | **Malin Array Si** | **8.15** | **92** | Pn | **Pn** | **20 31 53.4** | **-0.3** |
| **AK13** | **Malin Array Si** | **8.17** | **92** | Pn | **Pn** | **20 31 53.5** | **-0.5** |
| **AK15** | **Malin Array Si** | **8.20** | **92** | Pn | **Pn** | **20 31 54.3** | **0.0** |
| **AK14** | **Malin Array Si** | **8.20** | **92** | Pn | **Pn** | **20 31 54.5** | **+0.2** |
| **AK04** | **Malin Array Si** | **8.21** | **91** | Pn | **Pn** | **20 31 54.8** | **+0.2** |
| **AK11** | **Malin Array Si** | **8.22** | **92** | Pn | **Pn** | **20 31 54.7** | **0.0** |
| **AK12** | **Malin Array Si** | **8.22** | **92** | Pn | **Pn** | **20 31 54.1** | **-0.6** |
| **AKASG** | **Malin Array Be** | **8.26** | **92** | Pn | **Pn** | **20 31 55.2** | **+0.1** |
| | comp=Z,4.0nm,0.6s,baz=282,slow=12,SNR=23 | | | | | | |
| AKASG | | | | Sn | **Sn** | **20 33 27.0** | **-2.0** |
| | comp=Z,1.2nm,0.3s,baz=281,slow=25,SNR=5.1 | | | | | | |
| AKASG | | | | Lg | Lg | 20 34 23.5 | |
| | comp=Z,0.5nm,0.3s,baz=281,slow=31,SNR=1.3 | | | | | | |
| **HFS** | **Hagfors** | **8.60** | **352** | Pn | **Pn** | **20 31 60.0** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=166,slow=13,SNR=4.3 | | | | | | |
| HFS | | | | Sn | **Sn** | **20 33 35.5** | **-2.0** |
| | comp=Z,0.2nm,0.3s,baz=170,slow=24,SNR=1.9 | | | | | | |
| HFS | | | | Lg | Lg | 20 34 30.1 | |
| | comp=Z,0.3nm,0.3s,baz=169,slow=32,SNR=1.8 | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **9.79** | **346** | Pn | **Pn** | **20 32 17.0** | **+0.8** |
| | baz=155,slow=13,SNR=4.1 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **11.21** | **25** | Pn | **Pn** | **20 32 35.6** | **+0.1** |
| | comp=Z,0.4nm,0.3s,baz=207,slow=10,SNR=16 | | | | | | |
| FINES | | | | Sn | **Sn** | **20 34 35.6** | **-5.7** |
| | comp=Z,0.7nm,0.3s,baz=210,slow=22,SNR=7.2 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **VAF** | **Ylistaro** | **11.93** | **14** | *e*P | **Pn** | **20 32 46.4** | **+1.1** |
| **EKA** | **Eskdalemuir Ar** | **12.08** | **295** | Pn | **Pn** | **20 32 44.1** | **-3.3** |
| | baz=100,slow=14 | | | | | | |
| **ARCES** | **ARCES Array B** | **18.46** | **10** | P | **P** | **20 34 10.1** | **-1.1** |
| | comp=Z,1.0nm,0.6s,baz=198,slow=11,SNR=4.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **32.49** | **66** | P | **P** | **20 36 29.0** | **+2.9** |
| | comp=Z,0.9nm,0.6s,baz=291,slow=8.5,SNR=6.0 | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.08** | **66** | P | **P** | **20 37 15.9** | **+1.7** |
| | comp=Z,0.4nm,0.4s,baz=297,slow=9.0,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.08** | **59** | P | **P** | **20 37 33.7** | **+2.7** |
| | comp=Z,0.4nm,0.5s,baz=298,slow=7.3,SNR=3.6 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **40.16** | **202** | P | **P** | **20 37 32.3** | **+0.3** |
| | comp=Z,0.3nm,0.7s,baz=13,slow=8.7,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **54.79** | **56** | P | **P** | **20 39 28.7** | **+3.0** |
| | comp=Z,0.4nm,0.7s,baz=314,slow=6.7,SNR=4.9 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.73** | **336** | P | **P** | **20 40 01.5** | **+1.4** |
| | comp=Z,0.8nm,0.7s,baz=32,slow=7.3,SNR=2.5 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **PDAR** | **Pinedale Array** | **74.84** | **322** | P | **P** | **20 41 38.2** | **+1.7** |
| | comp=Z,0.3nm,0.6s,baz=38,slow=5.8,SNR=2.4 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |

*IDC **29** 20:33:14.8±1.1, 22°.31S×169°.79E, h0km, mb4.0/6, mbtmp4.0/8, ML3.5/1, MS3.5/5, Error ellipse: s-maj=35.1km s-min=23.5km az=168.0*
*NEIC **29** 20:33:19.3±0.8, 22°.26S±0°.09×169°.4E±0°.1, h10km±2km, mb4.6/6, Error ellipse: s-maj=21.5km s-min=12.5km*

*az=121.0*
*NOU **29** 20:33:32.4, 22°.04S×168°.48E, h0km, MLv3.6/7, New Caledonia*
**ISC 29 20:33:18.1**±0.8,**22°.22S**±0°.10×**169°.49E**±0°.08,**h10km**,**n51,**
**σ1s52/48,mb4.1/10,MS3.3/3,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **1.54** | **298** | P | **Pn** | **20 33 46.1** | **+0.5** |
| **PINNC** | **Pines Island,** | **1.93** | **258** | P | **Pb** | **20 33 53.5** | **+0.2** |
| **PINNC** | **Pines Island,** | **1.93** | **258** | | **Pn** | **20 33 51.5** | **+0.5** |
| **YATNC** | **Mamie plateau,** | **2.41** | **273** | P | **Pn** | **20 33 59.4** | **+1.8** |
| **LIFNC** | **LIFOU** | **2.54** | **304** | P | **Pb** | **20 34 03.6** | **-0.1** |
| **LIFNC** | **LIFOU** | **2.54** | **304** | | **Pn** | **20 34 00.2** | **+0.9** |
| **DZM** | **Mont Dzumac** | **2.82** | **272** | P | **Pn** | **20 34 05.7** | **+2.3** |
| **DZM** | **Mont Dzumac** | **2.82** | **272** | | **Pn** | **20 34 04.7** | **+1.4** |
| **DZM** | **Mont Dzumac** | **2.82** | **272** | Pn | **Pn** | **20 34 05.6** | **+2.3** |
| | 5.9nm,0.3s,baz=93,slow=15,SNR=15 | | | | | | |
| DZM | | | | Sn | **Sb** | **20 34 42.9** | **-0.4** |
| | 14nm,0.3s,baz=94,slow=20,SNR=6.3 | | | | | | |
| | 11nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **2.95** | **272** | P | **Pn** | **20 34 07.5** | **+2.4** |
| **KOUNC** | **Koumac, New Ca** | **5.12** | **288** | | **Pn** | **20 34 35.4** | **+0.5** |
| **MSVF** | **Nonsavu** | **9.21** | **63** | Pn | Pn | 20 35 25.9 | -5.2 |
| | 4.4nm,0.7s,baz=306,slow=23,SNR=0.8 | | | | | | |
| **HNR** | **Honiara** | **15.67** | **323** | Pn | **Pn** | **20 36 58.1** | **-1.0** |
| HNR | | | | IAmb | IAmb | 20 37 06.3 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **HNR** | **Honiara** | **15.67** | **323** | LR | LR | 20 42 01.3 | |
| | comp=Z,1μm,19.8s,baz=196,slow=33 | | | | | | |
| **URZ** | **Urewera** | **17.28** | **159** | LR | LR | 20 42 44.3 | |
| | comp=Z,156nm,18.5s,baz=30,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **21.77** | **271** | P | **P** | **20 38 06.8** | **-3.4** |
| | comp=Z,0.2nm,0.8s,baz=244,slow=1.4,SNR=1.9 | | | | | | |
| CTA | | | | LR | LR | 20 46 36.0 | |
| | comp=Z,13nm,18.7s,baz=92,slow=36 | | | | | | |
| **STKA** | **Stephens Creek** | **26.57** | **243** | LR | LR | 20 48 16.0 | |
| | comp=Z,97nm,20.5s,baz=39,slow=34 | | | | | | |
| **WR0** | **Warramunga Arr** | **32.64** | **267** | P | **P** | **20 39 49.6** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 20 40 33.6 | |
| | comp=Z,8.3nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **32.75** | **260** | P | **P** | **20 39 52.5** | **+1.1** |
| | comp=Z,2.5nm,0.9s,baz=87,slow=8.7,SNR=13 | | | | | | |
| ASAR | | | | LR | LR | 20 52 32.9 | |
| | comp=Z,85nm,20.6s,baz=106,slow=35 | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **32.81** | **268** | P | **P** | **20 39 51.7** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 20 39 53.8 | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **32.82** | **267** | P | **P** | **20 39 50.6** | **-1.5** |
| **WRAB** | **Tennant Creek** | **32.82** | **267** | P | **P** | **20 39 51.7** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 20 40 11.9 | |
| | comp=Z,10nm,1

baz=26
OWD Renai 0.30 287⇑iP Pg 20 36 17.3 +0.1
baz=292
OWD S Sg 20 36 21.4 -0.2
baz=292
ETL Fush Village 0.32 23 eP Pg 20 36 17.8 +0.4
baz=26
ETL eS Sg 20 36 22.2 +0.1
baz=26
NACB Ninganchiao 0.32 18 P Pg 20 36 17.8 +0.3
NACB Ninganchiao 0.32 18⇑iP Pg 20 36 17.6 0.0
baz=21
NACB eS Sg 20 36 22.0 -0.2
baz=21
VWDT VWDT 0.33 250⇑iP Pb 20 36 18.3 -0.2
baz=244
VWDT eS Sg 20 36 22.7 +0.3
baz=244
ETLH Xiulin Townshi 0.34 359⇓iP Pg 20 36 18.0 +0.1
baz=2.0
ETLH eS Sg 20 36 22.5 -0.2
baz=2.0
WHF Hehuan Shan 0.34 324⇓iP Pg 20 36 18.1 0.0
baz=319
WHF eS Sg 20 36 22.9 -0.2
baz=319
CHGB Renai 0.34 304⇓iP Pg 20 36 18.2 +0.2
baz=309
CHGB S Sg 20 36 23.1 +0.1
baz=309
WUSB Renai 0.36 290⇓iP Pb 20 36 18.6 -0.3
baz=295
WUSB S Sg 20 36 23.3 0.0
baz=295
HGSD Ruisui 0.38 189 ⇓P Pg 20 36 18.9 +0.5
baz=192
HGSD eS Sb 20 36 25.3 +0.5
baz=192
EHY Hungye 0.39 203⇓iP Pg 20 36 18.4 -0.3
baz=192
EHY S Sg 20 36 23.8 -0.3
baz=192
EHYH Wanrong 0.39 199 ⇓P Pg 20 36 18.4 -0.4
baz=196
EHYH eS Sg 20 36 24.1 -0.1
baz=196
FUSS Fushou 0.44 330⇓iP Pg 20 36 20.0 +0.3
baz=325
FUSS eS Sg 20 36 25.5 -0.3
baz=325
TWT Tachien 0.48 324⇓iP Pb 20 36 20.8 -0.2
baz=318
TWT eS Sg 20 36 26.8 -0.2
baz=318
TDCB Techi 0.49 322⇓iP Pb 20 36 20.9 -0.2
baz=318
TDCB eS Sg 20 36 26.6 -0.5
baz=318
SSLB Suanglung 0.49 261 P Pb 20 36 20.9 -0.3
SSLB Suanglung 0.49 261⇑iP Pg 20 36 20.6 0.0
baz=268
SSLB eS Sg 20 36 26.5 -0.7
baz=268
EHP Heping Village 0.50 28 eP Pg 20 36 20.8 0.0
baz=31
EHP eS Sg 20 36 28.1 +0.6
baz=31
YULB Yu-li 0.50 200 P Pg 20 36 20.2 -0.6
YULB Yu-li 0.50 200 P Pg 20 36 19.9 -0.9
baz=191
YULB eS Sg 20 36 27.3 -0.3
baz=191
EAHA Aohua 0.52 27 ⇑P Pg 20 36 21.0 -0.1
baz=29
EAHA S Sg 20 36 28.0 0.0
baz=29
EYUL Yuli 0.54 196 eP Pg 20 36 21.6 +0.1
baz=199
EYUL eS Sb 20 36 29.2 -0.3
baz=199
TWF1 Yuli 0.54 199⇓eP Pg 20 36 20.5 -1.0
baz=195
TWF1 eS Sg 20 36 28.5 -0.3
baz=195
ECBN Changbin 0.55 183 eP Pb 20 36 22.3 +0.2
baz=180
ECBN eS Sb 20 36 31.2 +1.4
baz=180
WCS Beigang Elemen 0.56 290⇓iP Pb 20 36 22.1 -0.2
baz=290
WCS eS Sg 20 36 29.2 -0.1
baz=290
NNSB Datong 0.57 351⇓iP Pg 20 36 22.2 +0.1
baz=352
NNSB eS Sg 20 36 29.2 -0.5
baz=352
NNS Nan Shan 0.58 350⇓iP Pg 20 36 22.5 +0.2
baz=352
NNS eS Sg 20 36 30.3 +0.2
baz=352
WHYT Xinyi Township 0.60 254 eP Pb 20 36 23.2 +0.1
baz=252
WHYT iS Sb 20 36 31.1 -0.2
baz=252
ENA Nanau 0.61 23⇑iP Pg 20 36 22.4 -0.4
baz=25
ENA S Sg 20 36 31.1 +0.2
baz=25
EWUT Wuta 0.64 25 ⇑P Pg 20 36 22.9 -0.4
baz=27
EWUT S Sg 20 36 31.6 -0.1
baz=27
WHP Taichung City 0.64 310⇓iP Pb 20 36 23.6 -0.1
baz=310
WHP eS Sg 20 36 31.7 -0.2
baz=310
LATG Datong 0.67 3⇑iP Pg 20 36 23.8 -0.2
baz=5.0
LATG S Sg 20 36 32.8 -0.1
baz=5.0
CHKH Chenggong 0.68 187⇓eP Pg 20 36 23.6 -0.5
baz=185
CHKH eS Sb 20 36 34.2 +0.8
baz=185
FULB Fuli 0.69 195 eP Pg 20 36 23.7 -0.6
baz=203
FULB eS Sn 20 36 35.0 -1.3
baz=203
WJS Zhushan 0.69 266 eP Pn 20 36 25.7 -0.4
baz=268
WJS eS Sb 20 36 34.5 +0.6
baz=268
ALS Alishan 0.72 241 eP Pb 20 36 25.3 +0.2
baz=238
ALS eS Sg 20 36 34.4 -0.1
baz=238
NDT Datong Townshi 0.73 2 eP Pg 20 36 25.1 0.0
baz=4.0
NDT eS Sg 20 36 34.4 -0.4
baz=4.0
WNT Mingjian 0.73 271 eP Pn 20 36 26.2 -0.4
baz=272
WNT S Sn 20 36 37.0 -0.4
baz=272
EHD Haiduan 0.76 200 eP Pb 20 36 24.2 -1.4
baz=197
EHD S Sg 20 36 35.3 -0.4
baz=197
CHKT Chengkung 0.77 188 eP Pb 20 36 24.9 -0.9
baz=185
CHKT eS Sg 20 36 37.0 +1.0
baz=185
ENTT Nioudou 0.77 5 P Pb 20 36 25.5 -0.5
baz=8.0
ENTT S Sb 20 36 35.4 -0.9
baz=8.0
ESAO Su ao 0.78 25 eP Pb 20 36 25.5 -0.5
baz=21
ESAO S Sb 20 36 36.0 -0.4
baz=21
CHN5 Tsauling 0.79 250 iP Pn 20 36 26.9 -0.5
baz=241
CHN5 iS Sn 20 36 38.8 -0.1
baz=241
NDS Dongshan 0.79 15 eP Pb 20 36 25.6 -0.6
baz=17
NDS eS Sb 20 36 36.5 -0.3
baz=17

ELDTW Lidau 0.80 213 P Pb 20 36 24.9 -1.6
baz=219
ELDTW eS Sb 20 36 35.8 -1.3
baz=219
EOS4 EOS4 0.80 71 P Pb 20 36 26.4 +0.2
baz=72
ECS Chishang 0.81 198 eP Pg 20 36 26.9 +0.4
baz=195
ECS eS Sn 20 36 38.4 -0.9
baz=195
YHNB Yeheng 0.81 353 P Pg 20 36 26.7 +0.2
YHNB Yeheng 0.81 353 P Pb 20 36 26.5 0.0
baz=354
YHNB eS Sb 20 36 36.7 -0.6
baz=354
TWQ1 Liyutan 0.81 307 eP Pn 20 36 27.4 -0.2
baz=313
TWQ1 eS Sn 20 36 38.6 -0.7
baz=313
TWC Suao 0.81 24 eP Pb 20 36 25.9 -0.6
baz=21
TWC eS Sb 20 36 36.9 -0.4
baz=21
NSK Sanguang 0.81 352 ⇓P Pg 20 36 26.8 +0.1
baz=354
NSK S Sb 20 36 36.3 -1.1
baz=354
NFF Wufeng Townshi 0.83 336 eP Pg 20 36 27.1 +0.1
baz=338
NFF eS Sg 20 36 38.6 +0.6
baz=338
NSY Sanyi 0.86 310 eP Pn 20 36 28.6 +0.3
baz=310
NSY eS Sn 20 36 40.4 -0.2
baz=310
WGK Gukeng 0.86 258 P Pn 20 36 28.5 +0.1
baz=256
WGK eS Sn 20 36 40.7 0.0
baz=256
TWE Neicheng 0.87 11 eP Pb 20 36 26.7 -0.8
baz=14
TWE eS Sb 20 36 38.1 -0.8
baz=14
EOS3 EOS3 0.87 61 eP Pg 20 36 28.2 +0.6
baz=59
WCHH Zhanghua 0.87 284 eP Pg 20 36 27.9 +0.1
baz=283
WCHH iS Sn 20 36 41.1 +0.1
baz=283
NSTT Nanjuang 0.88 330⇓iP Pn 20 36 28.3 -0.3
baz=331
NSTT eS Sb 20 36 39.2 -0.1
baz=331
WDLH Douliu 0.89 259 ⇑P Pn 20 36 28.9 +0.2
baz=257
WDLH S Sn 20 36 42.1 +0.9
baz=257
LIOB Emei 0.89 331⇓iP Pn 20 36 28.4 -0.3
baz=332
LIOB eS Sn 20 36 40.5 -0.8
baz=332
FUSB Fushanzhiwuyua 0.89 6 eP Pb 20 36 27.4 -0.6
baz=8.0
FUSB eS Sb 20 36 38.5 -1.3
baz=8.0
EDH Donghe 0.91 191 eP Pb 20 36 26.8 -1.4
baz=188
EDH eS Sb 20 36 39.5 -0.6
baz=188
NWLT Wulai 0.91 1 iP Pb 20 36 28.0 -0.3
baz=3.0
NWLT eS Sb 20 36 39.4 -0.7
baz=3.0
WDJ Dajia District 0.91 302 ⇑P Pn 20 36 29.8 +0.9
baz=302
WDJ eS Sn 20 36 41.8 0.0
baz=302
WCKO Fanlu 0.91 242 eP Pn 20 36 29.4 +0.3
baz=240
WCKO eS Sn 20 36 41.5 -0.4
baz=240
NMLH Miaoli 0.92 317 P Pn 20 36 30.0 +0.8
baz=327
NMLH eS Sn 20 36 41.8 -0.3
baz=327
STYH Taoyuan 0.95 223⇑eP Pg 20 36 29.1 -0.1
baz=221
STYH eS Sg 20 36 41.8 +0.1
baz=221
TPUB Ta-pu 0.97 234 P Pn 20 36 29.7 -0.1
TPUB Ta-pu 0.97 234 eP Pn 20 36 30.1 +0.3
baz=221
TPUB eS Sn 20 36 43.2 0.0
baz=221
CHN2 Minshiung 0.98 250 eP Pn 20 36 30.9 +0.9
baz=248
CHN2 eS Sn 20 36 44.6 +1.0
baz=248
LONT Longtian 1.01 199 eP Pb 20 36 29.6 -0.4
baz=197
LONT eS Sb 20 36 41.9 -1.2
baz=197
WTP Ta-pu 1.01 232 ⇑P Pg 20 36 30.7 +0.3
baz=230
WTP eS Sn 20 36 44.6 +0.2
baz=230
WRL Guolierlin Hig 1.01 272 eP Pg 20 36 31.0 +0.6
baz=271
WRL eS Sn 20 36 45.5 +1.1
baz=271
WTK Tuku 1.02 260 eP Pg 20 36 30.8 +0.3
baz=259
WTK eS Sn 20 36 45.8 +1.3
baz=259
SBCB Hsinchu 1.03 334 eP Pn 20 36 30.6 -0.1
baz=336
CHY Chiayi 1.04 250 eP Pg 20 36 31.3 +0.4
baz=247
CHY eS Sn 20 36 46.1 +1.1
baz=247
HSN Hsinchu 1.04 333 eP Pg 20 36 32.5 +1.5
baz=337
HSN eS Sn 20 36 46.4 +1.3
baz=337
EGS 1.06 23 eP Pb 20 36 31.0 +0.2
baz=25
NHDH Xindian Distri 1.09 2 eP Pn 20 36 31.5 0.0
baz=4.0
NHDH eS Sb 20 36 45.4 0.0
baz=4.0
TWK Hsinying 1.09 237 eP Pg 20 36 32.1 +0.2
baz=224
TWK eS Sn 20 36 47.2 +0.8
baz=224
WTCT Ta-ch'eng 1.10 270 eP Pb 20 36 30.6 -0.9
baz=269
WTCT eS Sg 20 36 47.2 +0.7
baz=269
TATO Taipei 1.10 0 P Pb 20 36 31.4 -0.2
TWG Pinlang 1.11 200 eP Pb 20 36 30.6 -1.0
baz=186
TWGBT Beinan 1.11 200 P Pb 20 36 29.7 -1.9
TWGBT Beinan 1.11 200 eP Pb 20 36 29.4 -2.3
baz=186
CHN1 Nanshi 1.11 233 P Pg 20 36 32.6 +0.3
baz=230
CHN1 S Sg 20 36 48.3 +1.6
baz=230
SNST Tainan City 1.11 235 eP Pg 20 36 32.8 +0.5
baz=232
SNST S Sg 20 36 48.2 +1.4
baz=232
TWA Mucha 1.11 5 eP Pb 20 36 31.7 -0.1
baz=360
TWA eS Sn 20 36 46.6 -0.2
baz=360
NCUH Zhongli 1.13 346 iP Pg 20 36 33.3 +0.6
baz=348
NCUH iS Sg 20 36 49.9 +2.5
baz=348
SGST Jiashian 1.14 227 eP Pg 20 36 32.8 0.0
baz=224
SGST eS Sg 20 36 49.0 +1.4
baz=224
TIPB Shuangxi 1.14 16 eP Pn 20 36 31.4 -0.8
baz=18
TIPB eS Sb 20 36 46.7 -0.2
baz=18

TTN Taitung 1.15 196 eP Pn 20 36 30.4 -1.9
baz=177
SLGT Liugui 1.16 222 eP Pn 20 36 32.4 -0.1
baz=219
SLGT eS Sg 20 36 48.6 +0.2
baz=219
TAP Taipei 1.17 1 eP Pg 20 36 33.6 +0.2
baz=3.0
TAP eS Sn 20 36 48.2 0.0
baz=3.0
WSF Szhu 1.18 259 eP Pg 20 36 33.5 0.0
baz=257
WSF S Sg 20 36 49.7 +0.7
baz=257
LDUT Ludao 1.19 181 eP Pn 20 36 30.5 -2.3
baz=179
WSL Shuilin Townsh 1.20 254 eP Pg 20 36 34.2 +0.2
baz=265
WSL S Sg 20 36 51.3 +1.6
baz=265
ICHU Yijhu 1.22 246 eP Pg 20 36 34.5 +0.2
baz=243
ICHU S Sg 20 36 52.0 +1.9
baz=243
TWB1 Santiao Chiao 1.23 22 eP Pn 20 36 33.1 -0.2
baz=25
TWB1 eS Sn 20 36 50.0 +0.4
baz=25
NWF Wu-fen Shan 1.23 13 eP Pn 20 36 33.2 -0.2
baz=14
NWF eS Sb 20 36 49.6 +0.2
baz=14
WFSB Wu-fen Shan 1.23 13 eP Pn 20 36 33.2 -0.2
baz=14
WFSB eS Sb 20 36 49.2 -0.2
baz=14
TWS1 Kuangyinshan 1.23 357 eP Pn 20 36 33.0 -0.4
baz=11
TWS1 eS Sg 20 36 50.7 +0.1
baz=11
SXI1 Grass Mountain 1.27 16 eP Pn 20 36 33.5 -0.5
baz=19
YM01 YM01 1.28 3 eP Pn 20 36 33.8 -0.3
baz=5.0
YM01 eS Sn 20 36 51.0 0.0
baz=5.0
CHN8 Yiju 1.28 246 eP Pb 20 36 34.8 +0.3
baz=244
CHN8 eS Sg 20 36 52.8 +0.6
baz=244
NTST Danshui 1.29 359 eP Pn 20 36 34.4 +0.1
baz=13
NTST eS Sg 20 36 52.9 +0.3
baz=13
TNOU National Taiwa 1.30 12 eP Pn 20 36 34.6 +0.2
baz=23
ANP Anpu 1.31 1 eP Pn 20 36 34.4 -0.3
baz=17
ANP eS Sn 20 36 51.8 -0.2
baz=17
YM08 YM08 1.32 4 eP Pn 20 36 33.6 -1.1
baz=7.0
SCST Cishan 1.33 223 eP Pg 20 36 36.7 +0.2
baz=220
SCST eS Sg 20 36 56.0 +2.1
baz=220
ECL Taimali 1.35 201 eP Pn 20 36 35.2 +0.1
baz=186
SCLT Jiali 1.37 240 eP Pg 20 36 38.2 +1.0
baz=237
SCLT eS Sg 20 36 55.0 -0.1
baz=237
TSMG Majia 1.39 214 eP Pb 20 36 36.8 +0.4
baz=225
TWY Chenhua 1.41 4 eP Pn 20 36 36.3 +0.5
baz=7.0
TWM1 Shoushan 1.43 223 eP Pg 20 36 39.3 +1.0
baz=222
JYNG Yonagunijimaku 1.46 66 eP Pn 20 36 36.4 -0.1
SGLT Jiouru 1.46 219 eP Pg 20 36 40.5 +1.6
baz=207
TSCK Chigu Township 1.47 241 eP Pb 20 36 38.4 +0.6
baz=240
MASBT Mashibuluo 1.48 212 eP Pn 20 36 36.4 -0.3
baz=205
YOJ Yonaguni jima 1.51 67 P Pn 20 36 37.1 -0.2
YOJ Yonaguni jima 1.51 67 eP Pn 20 36 37.0 -0.2
baz=64
YOJ Yonaguni jima 1.51 67 eP Pn 20 36 37.2 -0.2
EAST Anshuo 1.59 202 eP Pn 20 36 38.2 -0.2
baz=188
TAW Tawu 1.60 200 eP Pn 20 36 37.1 -1.3
baz=188
TAWH Dawu Township 1.62 200 eP Pb 20 36 40.6 +0.4
baz=188
SCZT Fangliau 1.69 208 eP Pb 20 36 41.9 +0.4
baz=188
SLIU Shizi 1.76 201 eP Pb 20 36 42.3 -0.5
baz=189
WDGT Dungji 1.78 251 eP Pn 20 36 41.5 +0.6
baz=250
PHUB P'eng-hu 1.79 259 eP Pn 20 36 41.5 +0.4
baz=258
PNG Penghu 1.79 261 eP Pb 20 36 42.3 -1.0
baz=259
PNG eS Sb 20 37 04.8 -0.8
baz=259
LAY Lan-yu 1.82 178 eP Pn 20 36 39.5 -2.0
baz=166
HEN Hengchun 1.98 201 eP Pb 20 36 47.5 +1.1
baz=190
VCHM Qimei 2.00 251 eP Pn 20 36 45.0 +1.1
baz=248
VCHM eS Sb 20 37 09.8 -1.7
baz=248
IRIF Iriomote-Funau 2.10 77 P Pn 20 36 45.8 +0.4
JKRS Kuro-shima 2.34 80 eP Pn 20 36 49.2 +0.6
PTMZ Houxiangcun 2.45 299 eP Pn 20 36 49.4 -0.8
baz=301
JIJ Ishigaki jima 2.48 78 P Pn 20 36 50.3 -0.2
JIJ S Sn 20 37 19.9 -0.6
MATB Ma-tsu 2.67 329 eP Pn 20 36 53.1 -0.1
baz=335
JISG Ishigakijimahi 2.68 74 P Pn 20 36 53.2 -0.1
JISG S Sn 20 37 24.3 -1.1
KNM Kinmen 2.84 282 eP Pn 20 36 57.0 +1.4
baz=281
KNMB Chin-men Tao 2.89 282 eP Pn 20 36 56.2 -0.1
baz=283
ZPLA Ao Xicun 3.42 272 eP Pn 20 37 03.6 +0.1
baz=268
SXFK Yanhouchang 4.30 307 eP Pn 20 37 14.9 -0.7
baz=310

*IDC **29** 20:50:52.5±0.7, 22°.23S×170°.21E, h0km, mb4.6/14, mbtmp4.6/15, ML4.5/1, MS3.8/19, Error ellipse: s-maj=23.6km s-min=16.5km az=90.0*
*NOU **29** 20:50:54.3, 22°.15S×170°.02E, h0km, MLv5.0/20, Southeast of Loyalty Islands*
*NEIC **29** 20:50:55.6±1.5, 22°.14S±0°.04×169°.9E±0°.1, h10km±1km, mb4.9/31, Error ellipse: s-maj=16.7km s-min=7.9km az=93.0*
*BGR **29** 20:51:00.6, 20°.63S×171°.52E, h33km*
**ISC 29 20:50:57.3±0.4, 22°.17S±0°.06×169°.99E±0°.06, h25km, n187, σ1§40/172, mb4.9/43, MS3.8/17, 11C-11D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MARNC | Mare, Loyalty | 1.95 | 290 | P | Pn | 20 51 28.1 | -0.7 |
| PINNC | Pines Island, | 2.40 | 259 | P | Pn | 20 51 34.8 | -0.1 |
| PINNC | Pines Island, | 2.40 | 259 | Pn | Pn | 20 51 33.8 | -1.2 |
| YATNC | Mamie plateau, | 2.88 | 272 | P | Pn | 20 51 40.6 | -1.0 |
| LIFNC | LIFOU | 2.91 | 298 | P | Pn | 20 51 41.1 | -1.0 |
| LIFNC | LIFOU | 2.91 | 298 | Pn | Pn | 20 51 40.7 | -1.4 |
| DZM | Mont Dzumac | 3.29 | 271 | P | Pn | 20 51 47.9 | +0.5 |
| DZM | Mont Dzumac | 3.29 | 271 | Pn | Pn | 20 51 47.0 | -0.3 |
| DZM | Mont Dzumac | 3.29 | 271 | ePn | Pn | 20 51 44.9 | -2.5 |
| | 727nm,1.2s | | | | | | |
| DZM | | | | eSn | Sn | 20 52 21.3 | -4.4 |
| | 2μm,1.1s | | | | | | |
| DZM | Mont Dzumac | 3.29 | 271 | Pn | Pn | 20 51 47.3 | -0.1 |
| | 41nm,0.3s,baz=123,slow=11,SNR=423 | | | | | | |
| DZM | | | | Sn | Sn | 20 52 25.9 | +0.2 |
| | 77nm,0.3s,baz=65,slow=16,SNR=7.0 | | | | | | |

DZM LR LR 20 53 05.8
comp=Z,2µm,18.9s,baz=164,slow=38
100nm,0.3s
**NOUC Port Laguerre 3.42 270** P **Pn** **20 51 49.4 +0.4**
**RTV Rentapao 4.60 341** P **Pn** **20 52 05.4 +0.1**
**DVP Devils Point 4.74 339** P **Pn** **20 52 07.2 0.0**
**KOUNC Koumac, New Ca 5.55 286** P **Pn** **20 52 19.6 +1.2**
**KOUNC Koumac, New Ca 5.55 286** Pn **Pn** **20 52 18.9 +0.5**
**NFK Norfolk Island 7.09 195** P **Pn** **20 52 40.0 +0.5**
**MSVF Nonsavu 8.77 61** Pn Pn 20 53 06.6 +3.9
**MSVF Nonsavu 8.77 61** Pn Pn 20 53 06.1 +3.4
0.5nm,0.3s,baz=248,slow=11,SNR=8.9
**HNR Honiara 15.92 321** **Pn** **20 54 38.4 -1.4**
**HNR Honiara 15.92 321** LR LR 21 00 05.3
comp=Z,5µm,18.6s,baz=142,slow=34
**URZ Urewera 17.16 161** LR LR 20 59 46.1
comp=Z,627nm,21.8s,baz=52,slow=31
**RTZ Ruatahuna 17.45 161** **P** **20 55 01.2 +1.0**
**EIDS Eidsvold 17.60 256** **Pn** **20 54 59.3 -1.6**
**BKZ Black Stump Fm 17.83 163** P **P** **20 55 04.5 +0.2**
**MRZ Mangatainoka R 19.03 167** P **P** **20 55 16.6 -0.8**
MRZ IAmb IAmb 20 55 28.5
comp=Z,81nm,1.3s
**TCW Tory Channel 19.32 170** P **Pn** **20 55 22.2 +0.4**
**TUWZ Tuamarina 19.49 171** P **Pn** **20 55 23.9 +0.2**
**KHZ Kahutara 20.41 172** P **P** **20 55 31.8 -0.6**
KHZ IAmb IAmb 20 55 39.7
comp=Z,102nm,1.3s
**OXZ Oxford 21.17 176** P **P** **20 55 40.4 -0.3**
OXZ IAmb IAmb 20 55 48.3
comp=Z,67nm,1.1s
**RPZ Rata Peaks 21.50 178** P **P** **20 55 43.5 -0.8**
**RPZ Rata Peaks 21.50 178** P **P** **20 55 41.9 -2.4**
comp=Z,6.3nm,0.4s,baz=253,slow=12,SNR=7.8
comp=Z,6.3nm,0.4s
**CTA Charters Tower 22.23 271** LR LR 21 04 39.6
comp=Z,42nm,18.1s,baz=92,slow=37
**CTAO Charters Tower 22.23 271** P **P** **20 55 51.6 -0.7**
**DCZ Deep Cove 23.35 185** P **P** **20 56 05.7 +2.0**
DCZ IAmb IAmb 20 56 09.7
comp=Z,29nm,1.0s
**CMSA Cobar Meteorol 23.56 242** P **P** **20 56 07.9 +2.0**
**RABL Rabaul 24.86 313** P **P** **20 56 17.5 -0.6**
RABL IAmb IAmb 20 56 31.4
comp=Z,29nm,0.8s
**STKA Stephens Creek 27.01 243** P **P** **20 56 38.8 +1.4**
**STKA Stephens Creek 27.01 243** P **P** **20 56 38.6 +1.1**
comp=Z,10.0nm,1.0s,baz=92,slow=13,SNR=10
STKA LR LR 21 06 51.9
comp=Z,421nm,18.2s,baz=55,slow=35
comp=Z,10.0nm,1.0s
**RAR Rarotonga 28.09 94** LR LR 21 05 04.2
comp=Z,108nm,22.0s,baz=265,slow=31
**LCRK Leigh Creek 29.58 247** P **P** **20 57 01.4 +1.1**
**OOD Oodnadatta 31.52 253** P **P** **20 57 19.1 +1.5**
**BBOO Buckleboo 31.79 243** P **P** **20 57 20.5 +0.6**
**MULG Mulgathing 33.12 248** P **P** **20 57 32.4 +0.8**
**ASAR Alice Springs 33.22 260** P **P** **20 57 32.9 +0.4**
comp=Z,8.7nm,1.0s,baz=86,slow=8.9,SNR=43
ASAR PcP **PcP** **21 00 14.7 -0.3**
comp=Z,1.7nm,0.9s,baz=104,slow=2.8,SNR=4.9
ASAR LR LR 21 10 39.4
comp=Z,212nm,19.9s,baz=96,slow=36
comp=Z,8.7nm,1.0s
**WRAB Tennant Creek 33.29 267** P **P** **20 57 32.0 -1.1**
WRAB IAmb IAmb 20 57 33.1
comp=Z,26nm,1.6s
**WRA Warramunga Arr 33.30 267** P **P** **20 57 32.6 -0.6**
comp=Z,3.6nm,0.6s,baz=100,slow=8.3,SNR=43
WRA PcP **PcP** **21 00 14.1 -1.1**
comp=Z,0.8nm,0.8s,baz=106,slow=3.0,SNR=3.1
WRA LR LR 21 11 37.7
comp=Z,580nm,18.4s,baz=50,slow=37
comp=Z,3.6nm,0.6s
**GENI Genyem 34.89 300** P **P** **20 57 47.0 -0.1**
**TBI Tubuai 37.33 100** *e*S **S** **21 03 52.6 -1.7**
comp=Z,883nm,35.0s
TBI *e*SS **SS** **21 06 34.9 -3.4**
comp=Z,1µm,25.5s
TBI *e*LR LR 21 08 13.3
comp=Z,630nm,27.8s
**WRKA Warakurna 38.21 257** P **P** **20 58 16.0 +0.6**
**PPT2 Papeete2 38.22 91** *e*S **S** **21 04 11.1 +3.1**
comp=Z,204nm,21.0s
PPT2 *e*SS **SS** **21 07 03.8 +7.3**
comp=Z,563nm,24.8s
PPT2 *e*LR LR 21 08 36.5
comp=Z,94nm,27.5s
PPT2 *e*LR LR 21 08 41.1
comp=Z,108nm,23.5s
**PPT Papeete 38.22 91** LR LR 21 09 41.0
comp=Z,115nm,21.0s,baz=282,slow=30
**FAKI Fak Fak 41.32 292** P **P** **20 58 40.1 -1.2**
FAKI IAmb IAmb 20 58 44.3
comp=Z,26nm,1.0s
**SWI Sorong 43.23 294** P **P** **20 58 57.9 +1.1**
comp=Z,30nm,1.0s
**SOEI Soe 45.49 278** P **P** **20 59 13.2 -1.8**
**SOEI Soe 45.49 278** P **P** **20 59 14.7 -0.4**
comp=Z,25nm,1.1s
**SANI Sanana 47.18 289** P **P** **20 59 28.3 +0.1**
comp=Z,25nm,1.1s
**NWAO Narrogin (SRO) 47.56 245** LR LR 21 18 59.9
comp=Z,305nm,19.6s,baz=92,slow=35
**EDFI Ende, Flores 48.22 278** P **P** **20 59 36.2 -0.3**
comp=Z,9.4nm,1.2s
**BBSI Bau Bau 48.70 283** P **P** **20 59 40.5 +0.5**
comp=Z,26nm,1.1s
**BASI Baing, Sumba 48.72 276** P **P** **20 59 41.3 +1.2**
**TAOE Nuku Hiva Isla 49.62 83** *e*LR LR 21 13 41.7
comp=Z,230nm,26.5s
**KAPI Kappang 51.45 282** LR LR 21 20 33.9
comp=Z,69nm,21.9s,baz=126,slow=34
**DAV Davao City (W) 52.32 299** LR LR 21 23 07.5
comp=Z,39nm,18.3s,baz=112,slow=37
**SBA Scott Base 55.76 181** P **P** **21 00 32.2 +0.7**
SBA IAmb IAmb 21 00 33.2
comp=Z,15nm,1.1s
**JCJ Chichijima 55.88 330** LR LR 21 24 04.6
comp=Z,43nm,19.3s,baz=114,slow=36
**MJAR Matsushiro Arr 65.66 332** P **P** **21 01 38.9 -0.6**
comp=Z,7.8nm,0.9s,baz=167,slow=6.9,SNR=16
MJAR LR LR 21 26 07.5
comp=Z,45nm,21.2s,baz=152,slow=32
comp=Z,7.8nm,0.9s
**MAJO Matsushiro 65.66 332** P **P** **21 01 38.7 -0.9**
**JNU Nakatsue 66.45 325** LR LR 21 31 02.7
comp=Z,30nm,18.3s,baz=131,slow=36
**QSPA South Pole Qui 67.90 180** P **P** **21 01 53.1 -0.5**
**QSPA South Pole Qui 67.90 180** P **P** **21 01 52.2 -1.4**
comp=Z,15nm,1.0s,baz=22,slow=3.1,SNR=23
QSPA LR LR 21 28 41.1
comp=Z,85nm,18.5s,baz=34,slow=33
comp=Z,15nm,1.0s
**ASAJ Asahikawa 70.58 339** LR LR 21 28 38.1
comp=Z,128nm,21.9s,baz=156,slow=32
**KSRS Korea Array 71.31 326** P **P** **21 02 15.0 +0.2**
comp=Z,5.1nm,0.8s,baz=150,slow=6.4,SNR=11
comp=Z,5.1nm,0.8s
**YSS Yuzh-Sakhalins 73.07 341** P **P** **21 02 24.7 -0.3**
**GSI Gunungsitoli 74.25 278** P **P** **21 02 33.8 +1.0**
GSI IAmb IAmb 21 02 37.3
comp=Z,14nm,1.0s
**USRK Ussuriysk Ar. 74.65 333** P **P** **21 02 34.9 +0.5**
comp=Z,3.9nm,0.7s,baz=159,slow=5.3,SNR=7.7
comp=Z,3.9nm,0.7s
**PETK Petropavlovsk- 75.72 352** P **P** **21 02 39.7 -0.6**
comp=Z,7.2nm,1.1s,baz=120,slow=8.8,SNR=3.5
PETK LR LR 21 30 26.2
comp=Z,106nm,21.8s,baz=108,slow=31
comp=Z,7.2nm,1.1s
**MAW Mawson 76.00 202** P **P** **21 02 41.3 -0.6**
comp=Z,3.2nm,0.8s,baz=94,slow=9.9,SNR=4.8
MAW LR LR 21 32 08.8
comp=Z,48nm,18.9s,baz=136,slow=33
comp=Z,3.2nm,0.8s
**MDJ Mudanjiang 76.02 332** P **P** **21 02 42.2 -0.1**
MDJ IAmb IAmb 21 02 44.0
comp=Z,13nm,1.0s
**CN2 Changchun 77.32 329** P **P** **21 02 49.5 -0.1**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**BNX BinXian 77.87 331** ⇓P P 21 02 47.8 -4.9
BNX pmax pmax
comp=Z,8.0nm,0.8s
**ENH Enshi 78.07 310** P **P** **21 02 53.9 -0.4**
**BELA Belgrano 2 79.13 175** P **P** **21 02 58.1 -1.3**
BELA IAmb IAmb 21 03 22.9
comp=Z,27nm,1.8s
**BJT Baijiatuau 79.64 321** P **P** **21 03 02.2 -0.3**
**CRAI Chiangrai 79.97 297** P **P** **21 03 04.2 -0.6**
**CMAR Chiang Mai Arr 80.35 294** P **P** **21 03 08.2 +1.4**
comp=Z,4.7nm,1.0s,baz=136,slow=4.3,SNR=13
comp=Z,4.7nm,1.0s
**KMI Kunming 80.42 302** ⇓P **P** **21 03 09.8 +2.4**
KMI pmax pmax
comp=Z,10.0nm,1.4s
**SMAI San Martin Ant 80.84 161** P **P** **21 03 08.5 -0.2**
SMAI IAmb IAmb 21 03 23.1
comp=Z,26nm,1.6s
**HEH HeiHe 81.35 334** *e*P **P** **21 03 11.3 -0.2**
HEH pmax pmax
comp=Z,5.0nm,1.9s
**PZH PanZhiHua 81.88 303** P **P** **21 03 16.5 +1.5**
PZH pmax pmax
comp=Z,9.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,5.2s
**MA2 Magadan 82.97 350** LR LR 21 35 53.8
comp=Z,118nm,21.0s,baz=144,slow=32
**ELIB Princess Elisa 83.39 190** *d*P **P** **21 03 21.6 -0.6**
comp=Z,4.5nm,1.2s
**BTO Baotou 83.69 318** *e*P **P** **21 03 28.8 +4.7**
BTO pP **pwP** **21 03 36.8 -0.1**
BTO sP **sP** **21 03 40.0 +7.0**
BTO pmax pmax
comp=Z,14nm,0.9s
BTO pmax pmax
comp=Z,140nm,6.0s
**TROLL Troll, Antarti 85.67 184** ⇑P **P** **21 03 33.3 -0.4**
comp=Z,259nm,0.5s
**SNAA Sanae 86.28 182** P **P** **21 03 35.0 -1.7**
SNAA IAmb IAmb 21 03 46.1
comp=Z,13nm,1.1s
**SNAA Sanae 86.28 182** ⇑P **P** **21 03 34.8 -1.9**
comp=Z,55nm,0.5s
**SNAA Sanae 86.28 182** P **P** **21 03 35.6 -1.0**
comp=Z,3.6nm,0.6s,baz=172,slow=6.5,SNR=8.8
comp=Z,3.6nm,0.6s
**VNA3 Neumayer Olymp 86.84 180** ⇑P **P** **21 03 36.5 -2.8**
comp=Z,8.0nm,0.7s
**VNA2 Neumayer--Watz 87.14 181** ⇑P **P** **21 03 39.1 -1.6**
comp=Z,7.5nm,0.6s,baz=178,slow=4.1
**VNA1 Neumayer--Stat 87.42 181** ⇑P **P** **21 03 41.0 -1.1**
comp=Z,6.8nm,0.8s
**ISA Isabella, Lake 88.78 51** P **P** **21 03 50.7 +1.5**
ISA IAmb IAmb 21 06 40.8
comp=Z,4.6nm,0.6s
**ULN Ulaanbaatar 89.62 323** P **P** **21 03 52.1 -0.8**
ULN IAmb IAmb 21 03 54.8
comp=Z,9.0nm,1.1s
**GTA Gaotai 89.64 313** P **P** **21 03 54.3 +1.1**
GTA pP sP 21 04 04.0 +1.8
GTA pmax pmax
comp=Z,3.0nm,1.4s
**SONM Songino Array 89.97 323** P **P** **21 03 54.9 +0.3**
comp=Z,6.5nm,1.0s,baz=123,slow=4.8,SNR=29
comp=Z,6.5nm,1.0s
**ILAR Eielson Array 92.81 17** P **P** **21 04 04.6 -2.6**
comp=Z,0.6nm,0.7s,baz=220,slow=4.4,SNR=5.1
comp=Z,0.6nm,0.7s
**P17A Butcher Ranch, 95.97 50** P **P** **21 04 21.4 -1.1**
P17A IAmb IAmb 21 04 24.8
comp=Z,3.5nm,0.8s
**ARCES ARCESS Array B 128.07 345** PKP **PKPdf** **21 09 59.8 -0.7**
comp=Z,1.8nm,0.9s,baz=45,slow=2.0,SNR=3.9
**FINES FINESS Array B 133.55 337** PKP **PKiKP** **21 10 11.6 -0.7**
comp=Z,1.5nm,0.7s,baz=90,slow=2.8,SNR=4.8
**ARR Arges 143.49 318** ⇑P PKPbc 21 10 27.9 +0.8
**DRGR 143.94 321** ⇓P PKPbc 21 10 28.8 +0.4
**LOT Lotru 143.98 318** ⇓P PKPbc 21 10 28.9 +0.2
**GZR Gura Zlata 144.62 319** ⇓P PKPbc 21 10 30.5 -0.1
**BSEG Bad Segeberg 144.74 339** *e*PKPbc PKPbc 21 10 30.3 -0.3
baz=35,slow=2.9
**SURR Surduc 144.83 320** ⇓P **PKPdf** **21 10 31.5 -0.6**
**SIRR Siria 144.84 321** ⇓P **PKPdf** **21 10 31.7 -0.4**
**PSZ Piszkesteto 144.90 324** **PKPab** **21 10 31.4 0.0**
**PSZ Piszkesteto 144.90 324** ⇑P **PKPdf** **21 10 32.2 -0.1**
**MORC Moravsky Berou 144.93 329** *e*PKP **PKPbc** **21 10 31.2 -0.2**
**MORC Moravsky Berou 144.93 329** ⇓P **PKPdf** **21 10 31.6 -0.6**
**OSTC Ostas 145.02 331** *e*PKP **PKPdf** **21 10 32.4 +0.1**
**KARP Karpathos 145.03 301** **PKPbc** **21 10 31.4 -0.8**
**CHVC Chvalec 145.07 331** *e*PKP **PKPdf** **21 10 32.1 -0.3**
**KRLC Kraliky 145.09 330** *e*PKP **PKPab** **21 10 31.9 -0.1**
**HERR Herculane 145.10 318** ⇑P **PKPdf** **21 10 32.6 +0.1**
**VYHS Vyhne 145.11 326** *e*PKP **PKPdf** **21 10 32.8 +0.3**
**UPC Upice 145.15 331** *e*PKP **PKPdf** **21 10 32.3 -0.2**
**GORT1 Trebel 145.18 337** *e*PKPbc **PKPab** **21 10 31.8 -0.2**
baz=35,slow=2.9
**BZS Buzias 145.21 320** ⇑P **PKPbc** **21 10 32.1 -0.3**
**JAVC Velka Javorina 145.47 327** *e*PKP **PKPab** **21 10 34.7 +1.3**
**MDVR Moldovita 145.58 319** ⇑P **PKPab** **21 10 34.2 +0.2**
**VRAO Vranov 145.70 329** *e*PKP **PKPab** **21 10 34.2 0.0**
**VRAC Vranov 145.70 329** ⇓P **PKPab** **21 10 34.4 +0.2**
**FLTG Flechtingen 145.73 337** *e*PKPbc **PKPdf** **21 10 33.0 -0.4**
baz=35,slow=2.9
**PVCC Panska Ves 145.78 332** *e*PKP **PKPab** **21 10 34.2 -0.2**
**BRG Berggiesshubel 145.79 333** *i* PKP **PKPab** **21 10 34.2 -0.3**
BRG Amp 21 10 35.5
comp=Z,21nm,1.0s
**BRG Berggiesshubel 145.79 333** P **PKiKP** **21 10 44.4 +6.7**
BRG Amp 21 10 46.3
comp=Z,19nm,0.9s
**BRG Berggiesshubel 145.79 333** *e*PKPbc **PKPbc** **21 10 33.9 -0.2**
baz=35,slow=2.9
**CLL Collm 145.85 334** PKPdf **PKPdf** **21 10 33.3 -0.3**
**CLL Collm 145.85 334** *e*PKPbc **PKPbc** **21 10 33.8 -0.4**
baz=35,slow=2.9
**KRUC Moravsky 145.97 328** *e*PKP **PKPab** **21 10 34.9 -0.3**
**NRDL Niedersach Rie 146.00 338** *e*PKPbc **PKPbc** **21 10 34.5 -0.1**
baz=35,slow=2.9
**BOVS Bovan 146.15 317** ⇑P **PKPdf** **21 10 33.3 -1.1**
**EKA Eskdalemuir Ar 146.49 353** PKPbc **PKPbc** **21 10 34.9 -1.1**
comp=Z,2.5nm,0.5s,baz=354,slow=2.9,SNR=21
**MORH Mrgy, Hungar 146.60 323** ⇓P **PKPbc** **21 10 36.5 -0.1**
**ZVC Zvikov 146.73 331** *e*PKP **PKPab** **21 10 37.5 -0.6**
**TANN Tannenbergstha 146.76 334** *e*PKPbc **PKPbc** **21 10 36.7 -0.3**
baz=35,slow=2.9
**PLN Plauen 146.83 334** *e*PKPbc **PKPbc** **21 10 36.9 -0.3**
baz=35,slow=2.9
**GTTG Gottingen 146.83 337** *e*PKPbc **PKPbc** **21 10 36.8 -0.3**
baz=35,slow=2.9
**MOX Moxa 146.92 335** *e*PKPbc **PKPbc** **21 10 37.0 -0.5**
baz=35,slow=2.9
**RONA Rosalia, Austr 146.93 327** *i* PKP **PKPbc** **21 10 37.7 +0.1**
comp=Z,4.8nm,1.2s
**IBBN Ibbenburen 146.94 340** *e*PKPbc **PKPbc** **21 10 37.0 -0.3**
baz=35,slow=2.9
**CONA Conrad Observa 146.99 327** *i* PKP **PKPab** **21 10 38.5 -0.8**
comp=Z,4.3nm,1.2s
**CKRC Cesky Krumlov 147.12 330** *e*PKP **PKPbc** **21 10 37.8 -0.3**
CKRC *ex* x 21 10 48.6
**MANZ Manzenberg 147.23 333** *e*PKPbc **PKPbc** **21 10 38.1 -0.2**
baz=35,slow=2.9
**KHC Kasperske Hory 147.24 331** **PKPbc** **21 10 37.6 -0.8**
**KHC Kasperske Hory 147.24 331** *e*PKP **PKPbc** **21 10 38.4 0.0**
KHC *ex* x 21 10 49.1
**ROTZ Rotzenmuhle 147.36 333** *e*PKPbc **PKPbc** **21 10 38.5 -0.2**
baz=35,slow=2.9
**GEC2 GERESS Array S 147.39 330** *e*PKPbc **PKPbc** **21 10 38.5 -0.4**
baz=35,slow=2.9
**GERES GERESS Array B 147.39 330** PKPbc **PKPbc** **21 10 38.9 0.0**
comp=Z,3.2nm,0.8s,baz=45,slow=3.3,SNR=18
**WET Wettzell 147.54 332** *e*PKPbc **PKPbc** **21 10 39.3 +0.1**
baz=35,slow=2.9
**ARSA Arzberg 147.62 327** *i* PKP **PKPab** **21 10 41.9 +0.2**
comp=Z,3.9nm,1.0s
**FNA Florina 147.67 312** PKPdf **PKPdf** **21 10 36.6 -0.5**
**GRA1 Grafenberg Arr 147.83 334** PKPdf **PKPdf** **21 10 36.7 -0.3**
**GRFO Grafenberg 147.83 334** PKPdf **PKPdf** **21 10 35.9 -1.1**
**MOA Molln 147.83 329** *i* PKiKP **PKPab** **21 10 42.2 -0.3**
comp=Z,3.3nm,1.0s
**KBN Korca 148.15 312** PKPdf **PKPdf** **21 10 37.4 -0.6**
**BIOA Bad Ischl, Aus 148.24 329** *i* PKiKP **PKPab** **21 10 44.1 -0.1**
comp=Z,3.6nm,1.0s
**SOKA Soboth 148.25 326** *i* PKP **PKPbc** **21 10 40.7 -0.6**
comp=Z,2.4nm,0.9s
**OBKA Obir 148.61 327** *i* PKP **PKiKP** **21 10 43.5 -0.2**
comp=Z,2.5nm,1.0s
**KBA Koelnbreinsper 148.82 328** *e*PKP **PKPbc** **21 10 42.2 -0.6**
comp=Z,2.0nm,0.4s
**LESA Schwarzleotal 148.89 330** *i* PKP **PKPbc** **21 10 42.1 -0.8**
comp=Z,3.1nm,1.1s
**MYKA Terra Mystica 148.98 328** *e*PKiKP **PKPab** **21 10 45.9 -1.4**
comp=Z,2.8nm,0.8s
**SABO M.te Sabotino 149.45 327** **PKPbc** **21 10 42.2 -2.1**
**ABTA Abfaltersbach 149.45 329** *i* PKP **PKPbc** **21 10 43.3 -1.1**
comp=Z,4.3nm,1.0s
**WATA Walderalm 149.46 330** *i* PKP **PKiKP** **21 10 45.5 -0.1**
comp=Z,5.5nm,1.4s
**WTTA Wattenberg 149.49 330** *i* PKP **PKiKP** **21 10 45.3 -0.4**
comp=Z,11nm,1.3s
**MOTA Moosalm 149.67 331** *e*PKP **PKPbc** **21 10 43.0 -2.0**
comp=Z,6.5nm,1.0s
**STAL STALIGIAL 149.70 328** PKPdf **PKPdf** **21 10 41.4 +1.1**
**RETA Reutte 149.72 332** *i* PKiKP **PKPab** **21 10 48.0 -2.3**
comp=Z,1.0nm,0.5s
**SQTA Sankt Quirin 149.72 331** *e*PKP **PKPbc** **21 10 44.1 -1.0**
comp=Z,6.6nm,1.0s
**WLF Walferdange 149.74 339** PKPdf **PKPdf** **21 10 41.5 +1.3**
**WLF Walferdange 149.74 339** *e*PKPbc **PKPbc** **21 10 44.8 0.0**
baz=35,slow=2.9
**FETA Feichten 150.08 331** *i* PKP **PKPbc** **21 10 45.8 -0.2**
comp=Z,2.5nm,0.9s
**DAVA Damuels 150.25 332** *i* PKP **PKPbc** **21 10 45.6 -0.8**
comp=Z,4.4nm,1.0s
**CTI Castel Tesino 150.37 329** PKPdf **PKPdf** **21 10 42.1 +0.7**
**FUORN Ofenpass-Fuorn 150.59 331** PKPdf **PKPdf** **21 10 42.3 +0.4**
**ESDC Sonseca Array 161.81 345** PKPab **PKPab** **21 11 41.1 -0.8**
comp=Z,1.1nm,0.9s,baz=18,slow=4.6,SNR=5.9
**TORD Torodi Ar. Bea 165.69 233** PKP **PKPdf** **21 10 59.5 -1.3**
comp=Z,1.0nm,1.1s,baz=127,slow=1.0,SNR=4.0

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**MDD 29 20:55:36.1±1.3, 28°.26N×16°.52W, h8$^{km}_{\pm 8}$km, mb_Lg1.3/5, Error ellipse: s-maj=6.7km s-min=4.6km az=162.0, Canary Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MACI** | **Morro de la Ar** | **0.01** | **135** | P | | Pg | | 20 55 37.8 | 0.0 |
| MACI | | | | S | | Sg | | 20 55 39.1 | +0.1 |
| MACI | | | | *i* Vmb_Lg | | | | 20 55 42.4 | |
| **CDIE** | **La Orotava (Te** | **0.04** | **305** | P | | Pg | | 20 55 37.9 | -0.1 |
| CDIE | | | | S | | Sg | | 20 55 39.3 | -0.1 |
| **CDIE** | **La Orotava (Te** | **0.04** | **305** | S | | Sg | | 20 55 41.6 | +2.1 |
| **CFOR** | **Fortaleza, Los** | **0.08** | **310** | P | | Pg | | 20 55 38.6 | +0.1 |
| CFOR | | | | S | | Sg | | 20 55 40.6 | +0.4 |
| CFOR | | | | *i* Vmb_Lg | | | | 20 55 42.0 | |
| **CFOR** | **Fortaleza, Los** | **0.08** | **310** | S | | Sg | | 20 55 42.8 | +2.5 |
| CFOR | | | | *i* Vmb_Lg | | | | 20 55 43.6 | |
| **CCAN** | **Las Canadas** | **0.09** | **244** | P | | Pg | | 20 55 38.5 | -0.1 |
| CCAN | | | | S | | Sg | | 20 55 40.1 | -0.1 |
| CCAN | | | | *i* Vmb_Lg | | | | 20 55 40.2 | |
| **CCAN** | **Las Canadas** | **0.09** | **244** | P | | Pg | | 20 55 40.7 | +2.2 |
| CCAN | | | | S | | Sg | | 20 55 42.2 | +2.0 |
| CCAN | | | | *i* Vmb_Lg | | | | 20 55 42.6 | |
| **CGUI** | **Guimar, Teneri** | **0.09** | **48** | P | | Pg | | 20 55 38.7 | +0.2 |
| CGUI | | | | S | | Sg | | 20 55 40.5 | +0.3 |
| CGUI | | | | *i* Vmb_Lg | | | | 20 55 41.3 | |
| **CGUI** | **Guimar, Teneri** | **0.09** | **48** | P | | Pg | | 20 55 41.0 | +2.5 |
| CGUI | | | | S | | Sg | | 20 55 42.7 | +2.5 |
| CGUI | | | | *i* Vmb_Lg | | | | 20 55 43.1 | |
| **CREA** | **Los Realejos,** | **0.11** | **330** | S | | Sg | | 20 55 40.7 | +0.2 |
| CREA | | | | *i* Vmb_Lg | | | | 20 55 41.4 | |
| **CREA** | **Los Realejos,** | **0.11** | **330** | *i* Vmb_Lg | | | | 20 55 42.8 | |
| CREA | | | | S | | Sg | | 20 55 43.0 | +2.5 |
| **CNOR** | **Icod de los Vi** | **0.13** | **293** | P | | Pg | | 20 55 39.4 | +0.2 |
| CNOR | | | | S | | Sg | | 20 55 41.6 | +0.3 |
| **CNOR** | **Icod de los Vi** | **0.13** | **293** | P | | Pg | | 20 55 41.5 | +2.4 |
| CNOR | | | | S | | Sg | | 20 55 43.9 | +2.6 |
| **GUIA** | **Guia de Isora,** | **0.18** | **266** | S | | Sg | | 20 55 43.2 | +0.7 |

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*TRN **29** 21:11:25.3, 10°.83N×62°.29W, h89km, MD3.3, North of the Paria peninsula.*
*FUNV **29** 21:11:26.7, 10°.79N×62°.28W, h74km, MW3.8*
**ISC 29 21:11:23.6±1.4, 10°.78N±0°.04×62°.29W±0°.04, h105$^{km}_{\pm 12}$km, n24, σ1°45/44, 1C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TCE** | **Chacachacare** | **0.54** | **99** | *e*P | | **Pn** | | **21 11 41.2** | **+1.0** |
| TCE | | | | *e*S | | **Sn** | | **21 11 51.5** | **-1.1** |
| **TRN** | **Trinidad (W)** | **0.89** | **99** | *e*P | | **Pn** | | **21 11 44.6** | **+1.4** |
| TRN | | | | *e*S | | **Sn** | | **21 11 57.4** | **-0.6** |
| **TPP** | **Pointe-a-Pierr** | **0.95** | **119** | *e*P | | **Pn** | | **21 11 43.7** | **-0.1** |
| **TBH** | **Brigand Hill** | **1.24** | **104** | *e*P | | **Pn** | | **21 11 47.3** | **+0.2** |
| TBH | | | | *e*S | | **Sn** | | **21 12 05.7** | **+0.9** |
| **GRFF** | **Grenada Fort F** | **1.37** | **23** | *e*P | | **Pn** | | **21 11 48.7** | **+0.1** |
| GRFF | | | | *e*S | | **Sn** | | **21 12 06.0** | **-1.5** |
| **GRGR** | **Grenville** | **1.48** | **25** | *e*P | | **Pn** | | **21 11 50.2** | **+0.4** |
| GRGR | | | | *e*S | | **Sn** | | **21 12 08.8** | **-1.1** |
| **GRW** | **Mount Saint Ca** | **1.50** | **24** | *e*P | | **Pn** | | **21 11 51.1** | **+0.9** |
| GRW | | | | *e*S | | **Sn** | | **21 12 09.3** | **-1.2** |
| **TPR** | **Prospect** | **1.54** | **75** | *e*P | | **Pn** | | **21 11 51.6** | **+1.0** |
| TPR | | | | *e*S | | **Sn** | | **21 12 10.4** | **-0.8** |
| **GRHS** | **Sauteurs** | **1.57** | **24** | *e*P | | **Pn** | | **21 11 51.2** | **+0.3** |
| GRHS | | | | *e*S | | **Sn** | | **21 12 09.9** | **-1.8** |
| **GRSS** | **Sisters** | **1.65** | **24** | *e*P | | **Pn** | | **21 11 52.9** | **+1.0** |
| GRSS | | | | *e*S | | **Sn** | | **21 12 12.9** | **-0.6** |
| **GCMP** | **Grenada, Carri** | **1.89** | **27** | *e*P | | **Pn** | | **21 11 55.8** | **+0.8** |
| GCMP | | | | *e*S | | **Sn** | | **21 12 18.4** | **-0.6** |
| **PCRV** | **Puerto La Cruz** | **2.38** | **256** | *e*P | | **Pn** | | **21 12 03.3** | **+2.0** |
| PCRV | | | | *e*S | | **Sn** | | **21 12 29.1** | **-1.2** |
| **PCRV** | **Puerto La Cruz** | **2.38** | **256** | *e*P | | **Pn** | | **21 12 03.6** | **+2.3** |
| PCRV | | | | *e*S | | **Sn** | | **21 12 30.8** | **+0.5** |
| **SVT** | **Saint Vincent** | **2.58** | **23** | *e*P | | **Pn** | | **21 12 04.5** | **+0.5** |
| SVT | | | | *e*S | | **Sn** | | **21 12 33.5** | **-1.5** |
| **SVB** | **Belmont** | **2.67** | **22** | *e*P | | **Pn** | | **21 12 05.9** | **+0.7** |
| SVB | | | | *e*S | | **Sn** | | **21 12 37.0** | **-0.2** |
| **SLB** | **Belfond** | **3.26** | **22** | *e*S | | **Sn** | | **21 12 50.9** | **-0.3** |
| **SLBI** | **Saint Lucia, B** | **3.47** | **22** | *e*P | | **Pn** | | **21 12 16.9** | **+1.2** |
| SLBI | | | | *e*S | | **Sn** | | **21 12 55.6** | **-0.4** |
| **TACV** | **Tcata** | **4.70** | **263** | *e*P | | **Pn** | | **21 12 34.1** | **+1.7** |
| TACV | | | | *e*S | | **Sn** | | **21 13 23.9** | **-2.0** |
| **LUEV** | **Luepa** | **4.98** | **170** | *e*P | | **Pn** | | **21 12 37.8** | **+1.6** |
| LUEV | | | | *e*S | | **Sn** | | **21 13 30.0** | **-2.7** |
| **CACV** | **CAICARA DEL OR** | **5.27** | **233** | *e*P | | Pn | | 21 12 36.1 | -4.0 |
| CACV | | | | *e*S | | Sn | | 21 13 28.1 | -12 |
| **BENV** | **Beln** | **5.28** | **262** | *e*P | | **Pn** | | **21 12 42.0** | **+1.8** |
| BENV | | | | *e*S | | **Sn** | | **21 13 37.4** | **-2.6** |
| **TURV** | **Turiamo** | **5.46** | **267** | *e*P | | **Pn** | | **21 12 44.5** | **+1.8** |
| TURV | | | | *e*S | | **Sn** | | **21 13 41.8** | **-2.4** |
| **BAUV** | **El Baul** | **5.95** | **253** | *e*P | | **Pn** | | **21 12 50.1** | **+0.9** |
| BAUV | | | | *e*S | | **Sn** | | **21 13 53.0** | **-3.1** |
| **BAUV** | **El Baul** | **5.95** | **253** | *e*P | | **Pn** | | **21 12 50.5** | **+1.2** |
| BAUV | | | | *e*S | | **Sn** | | **21 13 54.9** | **-1.3** |

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*IDC **29** 21:15:26.5±1.0, 22°.96N×144°.53E, h0km, mb4.0/18, mbtmp4.0/20, ML3.4/2, MS3.4/1, Error ellipse: s-maj=36.1km s-min=17.1km az=79.0*
*NEIC **29** 21:15:28.0±1.4, 23°.0N±0°.1×144°.7E±0°.2, h10km±2km, mb4.5/14, Error ellipse: s-maj=40.9km s-min=10.9km az=57.0*
**ISC 29 21:15:28.4±0.9, 23°.06N±0°.09×144°.5E±0°.2, h10km, n37, σ1°14/40, mb4.2/24, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JCJ** | **Chichijima** | **4.52** | **333** | Pn | | **Pn** | | **21 16 38.1** | **+1.2** |
| JCJ | | | | Sn | | **Sn** | | **21 17 28.6** | **-1.0** |
| **JCJ** | **Chichijima** | **4.52** | **333** | Pn | | **Pn** | | **21 16 34.0** | **-2.9** |
| | 12nm,0.3s,baz=264,slow=18,SNR=11 | | | | | | | | |
| JCJ | | | | Sn | | **Sn** | | **21 17 25.6** | **-4.0** |
| | 16nm,0.3s,baz=115,slow=24,SNR=6.3 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **14.49** | **339** | Pn | | **Pn** | | **21 18 54.7** | **+1.2** |
| | 0.1nm,0.3s,baz=156,slow=10,SNR=6.2 | | | | | | | | |
| | 1.0nm,0.5s | | | | | | | | |
| **JMM** | **Marumori** | **15.09** | **349** | Pn | | **Pn** | | **21 19 02.4** | **+0.7** |
| JMM | | | | IAmb | IAmb | | | 21 19 24.9 | |
| | comp=Z,48nm,1.4s | | | | | | | | |
| **JNU** | **Nakatsue** | **15.61** | **313** | | | **P** | | **21 19 13.5** | **+0.6** |
| **JNU** | **Nakatsue** | **15.61** | **313** | Pn | | **Pn** | | **21 19 10.3** | **+1.7** |
| | comp=Z,0.2nm,0.3s,baz=171,slow=12,SNR=1.1 | | | | | | | | |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **KSRS** | **Korea Array** | **20.20** | **319** | P | | **P** | | **21 20 04.7** | **+1.4** |
| | comp=Z,1

comp=Z,5.3nm,1.0s
**PETK Petropavlovsk- 31.65 15** P **P** **21 21 52.2 +0.6**
comp=Z,2.0nm,0.9s,baz=200,slow=7.8,SNR=1.7
comp=Z,2.0nm,0.9s
**SONM Songino Array 39.08 319** P **P** **21 22 56.4 +0.7**
comp=Z,0.7nm,0.7s,baz=114,slow=8.4,SNR=5.6
SONM LR LR 21 39 52.7
comp=Z,52nm,20.3s,baz=116,slow=37
comp=Z,0.7nm,0.7s
**CMAR Chiang Mai Arr 42.69 273** P **P** **21 23 25.7 0.0**
comp=Z,0.4nm,0.3s,baz=69,slow=8.4,SNR=2.1
comp=Z,0.4nm,0.3s
**WB0 Warramunga Arr 43.69 194** P **P** **21 23 33.2 -0.5**
WB0 IAmb IAmb 21 23 36.0
comp=Z,14nm,1.4s
**WB2 Warramunga Arr 43.87 194** P **P** **21 23 33.8 -1.4**
WB2 IAmb IAmb 21 23 49.6
comp=Z,6.9nm,1.2s
**WRA Warramunga Arr 43.87 194** P **P** **21 23 34.3 -0.8**
comp=Z,0.4nm,0.3s,baz=16,slow=8.9,SNR=19
comp=Z,0.4nm,0.3s
**ASAR Alice Springs 47.57 193** P **P** **21 24 03.2 -1.1**
comp=Z,0.4nm,0.6s,baz=12,slow=7.6,SNR=5.4
comp=Z,0.4nm,0.6s
**ZALV Zalesovo Beam 53.90 321** P **P** **21 24 52.0 +0.2**
comp=Z,0.7nm,0.5s,baz=98,slow=7.6,SNR=4.9
comp=Z,0.7nm,0.5s
**MK31 Makanchi Array 54.66 312** P **P** **21 24 56.5 -1.1**
MK31 IAmb IAmb 21 25 04.3
comp=Z,8.0nm,1.4s
**MKAR Makanchi Array 54.66 312** P **P** **21 24 58.0 +0.4**
comp=Z,1.3nm,0.6s,baz=89,slow=8.8,SNR=11
MKAR PcP **PcP** **21 26 00.5 +0.1**
comp=Z,0.8nm,0.7s,baz=93,slow=3.7,SNR=2.5
comp=Z,1.3nm,0.6s
**MAKZ Makanchi 54.88 312** P **P** **21 24 58.9 -0.2**
MAKZ IAmb IAmb 21 25 19.4
comp=Z,7.8nm,1.2s
**KURK Kurchatov 57.30 316** P **P** **21 25 16.0 -0.3**
**KURBB Kurchatov Arra 57.35 316** P **P** **21 25 17.2 +0.5**
comp=Z,0.7nm,0.3s,baz=91,slow=7.4,SNR=12
comp=Z,0.7nm,0.3s
**BVAR Borovoye Array 62.42 319** P **P** **21 25 52.5 +1.0**
comp=Z,6.3nm,0.5s,baz=87,slow=7.4,SNR=49
comp=Z,6.3nm,0.5s
**BRVK Borovoye 62.48 319** P **P** **21 25 52.6 +0.7**
BRVK IAmb IAmb 21 25 53.7
comp=Z,3.1nm,0.7s
**KKAR Karatay Array 63.15 308** P **P** **21 25 57.3 +0.7**
**CHGR Chuyangaron 64.84 303** P **P** **21 26 07.8 0.0**
**SIMJ Simiganj 64.95 303** P **P** **21 26 08.8 +0.1**
**KBL Kabul 65.72 299** P **P** **21 26 13.5 -0.3**
**ABKAR Akbulak array 69.40 316** P **P** **21 26 36.2 -0.3**
ABKAR IAmb IAmb 21 26 37.5
comp=Z,2.0nm,0.7s
**ARCES ARCESS Array B 78.01 342** P **P** **21 27 27.4 +0.7**
comp=Z,3.0nm,1.0s,baz=68,slow=7.2,SNR=3.7
comp=Z,3.0nm,1.0s
**KBZ Khabaz 82.28 314** P **P** **21 27 51.0 +0.8**
comp=Z,4.2nm,0.8s,baz=55,slow=2.4,SNR=10.0
comp=Z,4.2nm,0.8s
**KVAR Kislovodsk Arr 82.32 314** P **P** **21 27 51.0 +0.4**
comp=Z,0.8nm,0.3s,baz=250,slow=19,SNR=2.5
comp=Z,0.8nm,0.3s
**FINES FINESS Array B 82.46 335** P **P** **21 27 51.3 +0.5**
comp=Z,1.1nm,0.6s,baz=74,slow=4.6,SNR=8.1
comp=Z,1.1nm,0.6s
**AKASG Malin Array Be 87.09 325** P **P** **21 28 13.7 -0.7**
comp=Z,0.5nm,0.5s,baz=60,slow=3.8,SNR=4.9
comp=Z,0.5nm,0.5s
**HFS Hagfors 87.93 338** P **P** **21 28 18.0 -0.2**
comp=Z,0.5nm,0.4s,baz=46,slow=4.2,SNR=1.5
comp=Z,0.5nm,0.4s
**BRTR Keskin Array B 90.27 314** P **P** **21 28 28.9 -1.0**
comp=Z,0.7nm,0.6s,baz=63,slow=5.0,SNR=5.3
comp=Z,0.7nm,0.6s
**PLCA Paso Flores 145.73 129** PKPbc **PKPbc** **21 35 07.0 -0.8**
comp=Z,1.2nm,0.8s,baz=209,slow=5.0,SNR=3.2

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*NEIC **29** 21:19:14.0±2.0, 41.°16N±0.°01×112.°92W±0.°02, h0km±1km, ML1.1/20, Error ellipse: s-maj=2.9km s-min=2.0km az=121.0*

*IDC **29** 21:19:17.1±1.8, 41.°29N×113.°31W, h0km, mbtmp1.7/1, ML2.8/1, Error ellipse: s-maj=97.8km s-min=10.1km az=157.0*

**ISC 29 21:19:13.7±1.1, 41.°17N±0.°05×112.°85W±0.°04, h0km, n13, σ0§48/11, Utah**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **BGU** | **Big Grassy Mou** | **0.28** | **209** | Pg | | **Pg** | **21 19 19.7** | **+0.6** |
| BGU | | | | IAML | | | 21 19 26.5 | |
| | comp=E,32nm,0.3s | | | | | | | |
| **SPUT** | **South Promonto** | **0.33** | **65** | Pg | | **Pb** | **21 19 22.7** | **+0.1** |
| SPUT | | | | IAML | | | 21 19 29.9 | |
| | comp=N,22nm,0.3s | | | | | | | |
| **HVU** | **Hansel Valley** | **0.61** | **5** | Pg | | **Pb** | **21 19 27.7** | **+0.3** |
| HVU | | | | IAML | | | 21 19 40.1 | |
| | comp=E,9.9nm,0.4s | | | | | | | |
| **CTU** | **Camp Tracy** | **0.96** | **119** | Pg | | **Pb** | **21 19 33.4** | **0.0** |
| CTU | | | | IAML | | | 21 19 52.2 | |
| | comp=N,5.4nm,0.3s | | | | | | | |
| **DUG** | **Dugway, Tooele** | **0.97** | **178** | | | **Pb** | **21 19 33.4** | **-0.2** |
| DUG | | | | IAML | | | 21 19 53.0 | |
| | comp=N,5.9nm,0.4s | | | | | | | |
| DUG | | | | IAML | | | 21 19 54.1 | |
| | comp=N,6.1nm,0.5s | | | | | | | |
| **TCUT** | **Toone Canyon** | **1.09** | **92** | | | **Pn** | **21 19 36.7** | **+0.2** |
| **NLU** | **North Lily Min** | **1.35** | **154** | Pg | | **Pg** | **21 19 39.0** | **-0.6** |
| NLU | | | | IAML | | | 21 19 45.9 | |
| | comp=N,2.3nm,1.3s | | | | | | | |
| **BSUT** | **Blindstream Ca** | **1.71** | **111** | | | **Pn** | **21 19 45.6** | **+0.5** |
| BSUT | | | | IAML | | | 21 20 13.2 | |
| | comp=E,1.6nm,1.3s | | | | | | | |
| **ELK** | **Elko** | **1.86** | **258** | | | **Pn** | **21 19 47.2** | **+0.2** |
| ELK | | | | IAML | | | 21 20 08.6 | |
| | comp=E,1.7nm,0.9s | | | | | | | |
| **ELK** | **Elko** | **1.86** | **258** | Pg | | **Pb** | **21 19 48.0** | **-0.7** |
| | comp=E,0.4nm,0.3s,baz=68,slow=10,SNR=8.6 | | | | | | | |
| ELK | | | | Lg | | Lg | 21 20 05.3 | |
| | comp=E,0.4nm,0.3s,baz=291,slow=14,SNR=4.8 | | | | | | | |
| **PDAR** | **Pinedale Array** | **2.93** | **56** | Pn | | **Pg** | **21 20 09.3** | **-0.5** |
| | comp=E,0.1nm,0.3s,baz=234,slow=15,SNR=2.4 | | | | | | | |
| PDAR | | | | Lg | | Lg | 21 20 50.0 | |
| | comp=E,0.2nm,0.3s,baz=236,slow=27,SNR=3.7 | | | | | | | |
| | comp=E,0.2nm,0.3s | | | | | | | |
| **I56US** | **NEWPORT INFRAS 7.72 338** | | | I | | I | 22 05 50.0 | |
| | baz=157,slow=318,SNR=1.5 | | | | | | | |
| **I10CA** | **LAC DU BONNET 14.80 47** | | | I | | I | 22 58 10.0 | |
| | baz=240,slow=316,SNR=2.3 | | | | | | | |

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**IDC 29 21:19:38.4±7.1, 23.°00N×144.°84E, h0km, mb3.6/4, mbtmp3.6/4, Error ellipse: s-maj=279.5km s-min=28.5km az=77.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **39.35** | **319** | P | | P | 21 27 09.4 | -0.2 |
| | 0.1nm,0.4s,baz=114,slow=6.5,SNR=1.6 | | | | | | | |
| | 0.1nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Ar** | **43.89** | **194** | P | | P | 21 27 46.8 | -0.1 |
| | 0.2nm,0.3s,baz=14,slow=8.8,SNR=9.8 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.96** | **312** | P | | P | 21 29 12.6 | +1.2 |
| | 0.4nm,0.6s,baz=95,slow=8.5,SNR=2.7 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.69** | **319** | P | | P | 21 30 04.2 | -0.8 |
| | 1.2nm,0.4s,baz=92,slow=7.5,SNR=9.2 | | | | | | | |
| | 1.2nm,0.4s | | | | | | | |

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**DJA 29 21:31:28.3±1.9, 2.°S±14.°×14.°1E±.°, h15km±7km, M4.5/3, mb5.8/1, MLv3.9/3, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **0.42** | **229** | P | | Pb | 21 31 37.9 | +0.5 |
| JAY | | | | S | | Sb | 21 31 44.5 | +0.9 |
| **GENI** | **Genyem** | **0.92** | **248** | P | | Pb | 21 31 45.9 | -0.1 |
| GENI | | | | S | | Sn | 21 31 59.1 | -0.6 |
| **MMPI** | **Merauke** | **6.22** | **186** | P | | Pn | 21 33 00.3 | +0.7 |

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*IDC **29** 21:33:39.6±0.5, 8.°70N×83.°01W, h0km, mb4.6/29, mbtmp4.6/35, ML4.3/6, MS4.7/55, Error ellipse: s-maj=17.6km s-min=9.4km az=47.0*

*MOS **29** 21:33:40.5±0.9, 8.°69N×83.°10W, h16km, mb5.5/54, MS4.9/11, Error ellipse: s-maj=8.4km s-min=5.2km az=109.2*

*BGR **29** 21:33:41.3, 8.°70N×83.°48W, h19km±2km, mb5.5*

*UPA **29** 21:33:41.3±1.2, 8.°62N×83.°13W, h4km±5km, MW5.4*

*UCR **29** 21:33:41.5±0.7, 8.°56N×83.°17W, h19km±1km, MW5.7, Fault plane solution: NP1:φ≈297.29000°, δ≈55.61000°, λ≈77.85000°.*

*CATAC **29** 21:33:42.2±0.4, 8.°50N×83.°19W, h7km, ML5.5*

*NEIC **29** 21:33:42.3±1.6, 8.°67N±0.°05×83.°13W±0.°04, h14km±1km, mb5.3/201, Mwb5.3/36, Mww5.4/44, Error ellipse: s-maj=9.2km s-min=6.7km az=183.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr=1.04; Mθθ=-1.04; Mφφ=-0.00; Mrθ=0.15; Mθφ=0.51; Mφr=0.07; Fault plane solution: M₀1.17000×10¹⁷ NP1:φ≈104.40000°, δ≈48.41000°, λ≈79.28000°. NP2:φ≈300.32000°, δ≈42.70000°, λ≈101.84000°. Principal axes: T 1.0666, Plg81.0000°, Azm312.0000°; N 0.1888, Plg8.0000°, Azm112.0000°; P -1.2554, Plg3.0000°, Azm202.0000°;*

*NEIC **29** 21:33:43.7, 8.°59N×82.°98W, h22km, Moment Tensor Solution. Duration: 2≈6 Moment tensor: Scale 10¹⁷Nm; Mrr=1.61; Mθθ=-1.10; Mφφ=-0.50; Mrθ=0.58; Mθφ=0.70; Mφr=-0.18; Fault plane solution: M₀1.70000×10¹⁷ NP1: φ≈117.87000°, δ≈55.35000°, λ≈83.63000°. NP2: φ≈308.99000°, δ≈35.16000°, λ≈99.13000°. Principal axes: T 1.7262, Plg79.0000°, Azm5.0000°; N -0.0543, Plg5.0000°, Azm122.0000°; P -1.6719, Plg10.0000°, Azm212.0000°;*

*NEIC **29** 21:33:43.7, 8.°69N×83.°08W, h22km*

*NEIC **29** 21:33:43.4, 8.°68N×83.°11W, h19km*

*RSNC **29** 21:33:43.8±0.4, 9.°N±3.°×8.°3W±.°, h1km±3km, M5.1, mB5.5, mb5.2, ML4.6, Mw(mB)5.0, MwMwp5.2, Mwp5.4*

*GCMT **29** 21:33:46.3±0.1, 8.°60N±0.°01×83.°12W±0.°01, h20km, MW5.4/144, Moment Tensor Solution. s137,c253; s144,c291; Duration: 1≈3 Moment tensor: Scale 10¹⁷ Nm; Mrr1.64±.02; Mθθ-1.18±.02; Mφφ-0.46±.02; Mrθ0.29±.03; Mθφ0.81±.01; Mφr-0.19±.03; Best double couple: M₀1.70800×10¹⁷ NP1:φ≈123.00000°, δ≈51.00000°, λ≈90.00000°. NP2:φ≈303.00000°, δ≈39.00000°, λ≈90.00000°. Principal axes: T 1.6750, Plg84.0000°, Azm34.0000°; N 0.0620, Plg0.0000°, Azm303.0000°; P -1.7410, Plg6.0000°, Azm213.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 29 21:33:42.0±0.5, 8.°60N±0.°02×83.°18W±0.°02, h18km±2km, n1078, σ1§47/1111, mb5.3/201, MS4.9/85, 31C-63D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.03** | **44** | eP | | **Pg** | **21 33 44.4** | **-0.8** |
| FITO | | | | eS | | **Sg** | **21 33 47.0** | **-0.3** |
| **EDAD** | **Golfito** | **0.05** | **11** | eP | | **Pg** | **21 33 44.6** | **-0.7** |
| **PTJ1** | **Puerto Jimnez** | **0.14** | **242** | iP | | **Pb** | **21 33 45.5** | **-0.7** |
| PTJ1 | | | | IAML | | | 21 34 02.8 | |
| | comp=Z,2000μm,1.0s | | | | | | | |
| **PTJ1** | **Puerto Jimnez** | **0.14** | **242** | iP | | **Pb** | **21 33 45.6** | **-0.5** |
| PTJ1 | | | | eS | | **Sg** | **21 33 49.5** | **+0.7** |
| **PTJ1** | **Puerto Jimnez** | **0.14** | **242** | eP | | **Pb** | **21 33 45.6** | **-0.5** |
| **JIME** | **Puerto Jimenez** | **0.16** | **247** | eP | | **Pb** | **21 33 45.9** | **-0.6** |
| **NELY** | **Ciudad Neily** | **0.23** | **78** | eP | | **Pb** | **21 33 47.3** | **-0.4** |
| NELY | | | | eS | | **Sg** | **21 33 52.1** | **+1.0** |
| **VITO** | **San Vito** | **0.30** | **43** | eP | | **Pg** | **21 33 48.9** | **+0.3** |
| **CDITO** | **Canoas** | **0.30** | **95** | iP | | **Pg** | **21 33 47.6** | **-1.0** |
| CDITO | | | | iS | | **Sg** | **21 33 53.4** | **+0.4** |
| CDITO | | | | IAML | | | 21 33 57.9 | |
| | comp=Z,660μm,1.0s | | | | | | | |
| **MLIR3** | **Monte Lirio, C** | **0.40** | **61** | iP | | **Pg** | **21 33 50.5** | **+0.2** |
| MLIR3 | | | | eS | | **Sg** | **21 33 56.1** | **+0.2** |
| **EDP2** | **Potrero Grande** | **0.41** | **360** | eP | | **Pg** | **21 33 50.7** | **+0.2** |
| **EDPN** | **Palmar Norte** | **0.45** | **322** | eP | | **Pg** | **21 33 50.8** | **-0.5** |
| EDPN | | | | eS | | **Sb** | **21 33 58.4** | **+0.5** |
| **PTPM** | **Petroterminale** | **0.49** | **143** | iP | | **Pg** | **21 33 51.5** | **-0.5** |
| PTPM | | | | eS | | **Sb** | **21 33 59.8** | **+0.7** |
| **BRU2** | **Volcan** | **0.52** | **68** | | | **Pg** | **21 33 52.0** | **-0.5** |
| BRU2 | | | | Sg | | **Sg** | **21 33 58.1** | **-1.4** |
| **BRU2** | **Volcan** | **0.52** | **68** | iP | | **Pg** | **21 33 51.6** | **-0.9** |
| BRU2 | | | | iS | | **Sb** | **21 34 00.4** | **+0.4** |
| BRU2 | | | | IAML | | | 21 34 03.2 | |
| | comp=Z,230μm,1.0s | | | | | | | |
| **BRU2** | **Volcan** | **0.52** | **68** | iP | | **Pg** | **21 33 52.0** | **-0.5** |
| BRU2 | | | | iS | | **Sb** | **21 34 00.3** | **+0.3** |
| **BRU2** | **Volcan** | **0.52** | **68** | eP | | **Pg** | **21 33 51.9** | **-0.5** |
| **EDBA** | **Buenos Aires** | **0.57** | **350** | eP | | **Pb** | **21 33 53.2** | **-0.3** |
| **LIMO3** | **Limones** | **0.58** | **148** | iP | | **Pb** | **21 33 53.2** | **-0.6** |
| LIMO3 | | | | iS | | **Sg** | **21 34 02.9** | **+1.3** |
| **BCO2** | **Palmira** | **0.65** | **80** | iP | | **Pb** | **21 33 54.1** | **-0.9** |
| BCO2 | | | | iS | | **Sg** | **21 34 04.0** | **+0.4** |
| **DRK0** | **Durika** | **0.66** | **354** | iP | | **Pb** | **21 33 54.0** | **-1.2** |
| DRK0 | | | | IAML | | | 21 34 07.6 | |
| | comp=Z,470μm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **0.66** | **354** | iP | | **Pb** | **21 33 54.4** | **-0.8** |
| DRK0 | | | | eS | | **Sb** | **21 34 04.1** | **-0.1** |
| **DRK0** | **Durika** | **0.66** | **354** | eP | | **Pb** | **21 33 54.4** | **-0.8** |
| **OCHAL** | **Ojochal** | **0.68** | **317** | iP | | **Pb** | **21 33 53.9** | **-1.5** |
| OCHAL | | | | iS | | **Sg** | **21 34 05.4** | **+1.0** |
| OCHAL | | | | IAML | | | 21 34 10.7 | |
| | comp=Z,100μm,1.0s | | | | | | | |
| **DVD** | **David** | **0.74** | **103** | iP | | **Pb** | **21 33 55.0** | **-1.4** |
| DVD | | | | iS | | **Sb** | **21 34 05.5** | **-0.7** |
| **LNBQ3** | **Los Naranjos,** | **0.75** | **75** | iP | | **Pb** | **21 33 55.2** | **-1.5** |
| LNBQ3 | | | | iS | | **Sg** | **21 34 07.2** | **+0.4** |
| **LOCO3** | **Loma Colorada,** | **0.77** | **104** | iP | | **Pb** | **21 33 55.9** | **-1.1** |
| LOCO3 | | | | iS | | **Sg** | **21 34 08.0** | **+0.5** |
| **PEDE3** | **Pedregal, Chir** | **0.78** | **106** | iP | | **Pb** | **21 33 55.9** | **-1.2** |
| PEDE3 | | | | iS | | **Sb** | **21 34 07.2** | **-0.1** |
| **LOMA3** | **Las Lomas, Chi** | **0.80** | **102** | iP | | **Pb** | **21 33 56.2** | **-1.2** |
| **PSOM3** | **Paja de Sombre** | **0.85** | **84** | iP | | **Pb** | **21 33 56.7** | **-1.6** |
| PSOM3 | | | | iS | | **Sb** | **21 34 08.3** | **-1.1** |
| **ZELE** | **Perez Zeledon** | **0.93** | **326** | eP | | **Pb** | **21 33 59.2** | **-0.6** |
| **BRIBI** | **Bribri** | **1.06** | **18** | eP | | **Pb** | **21 34 02.2** | **+0.2** |
| **CHGR2** | **Aguacate** | **1.07** | **72** | iP | | **Pb** | **21 34 00.3** | **-1.9** |
| **CNI2** | **El Empalme, Bo** | **1.07** | **40** | iP | | **Pb** | **21 34 00.8** | **-1.3** |
| CNI2 | | | | iS | | **Sb** | **21 34 14.5** | **-1.3** |
| **BUS1** | **Rivas** | **1.10** | **329** | eP | | **Pb** | **21 34 01.2** | **-1.6** |
| **RGM0** | **Gandoca** | **1.13** | **30** | iP | | **Pb** | **21 34 03.7** | **+0.6** |
| RGM0 | | | | iS | | **Sg** | **21 34 23.8** | **+5.0** |
| RGM0 | | | | IAML | | | 21 34 32.5 | |
| | comp=Z,170μm,1.0s | | | | | | | |
| **RGM0** | **Gandoca** | **1.13** | **30** | iP | | **Pb** | **21 34 03.5** | **+0.4** |
| **RGM0** | **Gandoca** | **1.13** | **30** | eP | | **Pb** | **21 34 03.5** | **+0.4** |
| **LLNJ** | **Naranjito** | **1.26** | **314** | eP | | **Pn** | **21 34 03.9** | **-0.9** |
| **SVQ2** | **Quepos** | **1.28** | **310** | eP | | **Pn** | **21 34 04.6** | **-0.5** |
| **TURIB** | **Turrialba** | **1.39** | **339** | eP | | **Pn** | **21 34 05.9** | **-0.8** |
| **ABE2** | **San Pablo** | **1.40** | **322** | eP | | **Pn** | **21 34 07.1** | **+0.2** |
| **LCR2** | **La Lucha 2** | **1.40** | **324** | Pn | | **Pn** | **21 34 05.7** | **-1.3** |
| **LCR2** | **La Lucha 2** | **1.40** | **324** | iP | | **Pn** | **21 34 06.1** | **-0.8** |
| LCR2 | | | | iS | | **Sg** | **21 34 28.3** | **+1.0** |
| LCR2 | | | | IAML | | | 21 34 29.7 | |
| | comp=Z,99μm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **1.40** | **324** | eP | | **Pn** | **21 34 05.5** | **-1.4** |
| **REPA** | **Paraso** | **1.40** | **331** | eP | | **Pn** | **21 34 06.2** | **-0.6** |
| **VERB** | **Verbena** | **1.43** | **339** | eP | | **Pn** | **21 34 07.1** | **-0.2** |
| **PCAYA** | **Pacayas** | **1.45** | **334** | eP | | **Pn** | **21 34 07.2** | **-0.4** |
| **RITA** | **Parrita** | **1.46** | **309** | eP | | **Pb** | **21 34 08.7** | **0.0** |
| **NANC3** | **Nancito, Chiri** | **1.47** | **104** | iP | | **Pn** | **21 34 06.4** | **-1.3** |
| NANC3 | | | | iS | | **Sn** | **21 34 25.5** | **-1.2** |
| **VTCV** | **VTCV, Calle Va** | **1.48** | **338** | eP | | **Pn** | **21 34 07.4** | **-0.6** |
| **TAAN** | **Batan** | **1.48** | **353** | eP | | **Pn** | **21 34 08.4** | **+0.5** |
| **RAFA** | **San Farael, Vo** | **1.49** | **335** | iP | | **Pn** | **21 34 08.0** | **-0.2** |
| RAFA | | | | iS | | **Sg** | **21 34 29.8** | **-0.4** |
| RAFA | | | | IAML | | | 21 34 37.0 | |
| | comp=Z,230μm,1.0s | | | | | | | |
| **RAFA** | **San Farael, Vo** | **1.49** | **335** | eP | | **Pn** | **21 34 07.6** | **-0.7** |
| **CVTV** | **Tajo** | **1.50** | **338** | eP | | **Pn** | **21 34 08.0** | **-0.4** |
| **CVTQ** | **Turrialba Volc** | **1.51** | **337** | eP | | **Pn** | **21 34 08.2** | **-0.4** |
| **VTLA** | **Turrialba Volc** | **1.51** | **337** | eP | | **Pn** | **21 34 08.1** | **-0.5** |
| **IRES** | **Siquirres** | **1.52** | **348** | eP | | **Pn** | **21 34 08.7** | **+0.3** |
| **LCOCO** | **El Coco** | **1.52** | **346** | eP | | **Pn** | **21 34 08.5** | **+0.1** |
| **VTR0** | **Volcan Turrial** | **1.52** | **338** | eP | | **Pn** | **21 34 08.3** | **-0.5** |
| **CVTR** | **Volcan Turrial** | **1.52** | **338** | eP | | **Pn** | **21 34 08.0** | **-0.8** |
| **VICA** | **Volcano Irazu** | **1.52** | **334** | eP | | **Pn** | **21 34 08.2** | **-0.7** |
| **RVLA** | **Villa Bonita** | **1.55** | **345** | eP | | **Pn** | **21 34 08.9** | **+0.1** |
| **CVIMO** | **Finca Echandi** | **1.60** | **332** | eP | | **Pn** | **21 34 09.5** | **-0.3** |
| **DOMI** | **Santo Domingo** | **1.64** | **327** | eP | | **Pn** | **21 34 10.5** | **+0.3** |
| **SANTA** | **Santa Ana** | **1.66** | **323** | eP | | **Pn** | **21 34 11.2** | **+0.8** |
| **HDC** | **Heredia** | **1.67** | **326** | | | **Pn** | **21 34 10.5** | **-0.1** |
| **HDC** | **Heredia** | **1.67** | **326** | iP | | **Pb** | **21 34 12.2** | **-0.2** |
| HDC | | | | iS | | **Sg** | **21 34 37.3** | **+1.3** |
| HDC | | | | IAML | | | 21 34 48.3 | |
| | comp=E,74μm,1.0s | | | | | | | |
| **HDC** | **Heredia** | **1.67** | **326** | eP | | **Pb** | **21 34 12.9** | **+0.5** |
| **HDC** | **Heredia** | **1.67** | **326** | iP | | **Pb** | **21 34 09.8** | **-0.8** |
| **TCS1** | **Tacares** | **1.81** | **322** | iP | | **Pn** | **21 34 13.7** | **+1.2** |
| TCS1 | | | | IAML | | | 21 34 43.9 | |
| | comp=Z,560μm,1.0s | | | | | | | |
| **TCS1** | **Tacares** | **1.81** | **322** | eP | | **Pn** | **21 34 12.6** | **+0.1** |
| **CARI** | **Cariari** | **1.84** | **343** | eP | | **Pn** | **21 34 13.2** | **+0.4** |
| **SRA1** | **San Ramn** | **1.96** | **319** | eP | | **Pn** | **21 34 15.4** | **+0.8** |
| **MESA3** | **La Mesa, Verag** | **2.02** | **103** | iP | | **Pn** | **21 34 15.1** | **-0.2** |
| **TRT1** | **Tortuguero** | **2.05** | **345** | eP | | **Pn** | **21 34 15.9** | **+0.2** |
| **RSUS3** | **Rio de Jesus,** | **2.09** | **107** | eP | | **Pn** | **21 34 17.0** | **+0.8** |
| **GMAL** | **Guarumal, Vera** | **2.10** | **113** | P | | **Pn** | **21 34 15.3** | **-1.0** |
| GMAL | | | | S | | **Sn** | **21 34 42.2** | **+0.2** |
| **GMAL** | **Guarumal, Vera** | **2.10** | **113** | eP | | **Pn** | **21 34 16.3** | **0.0** |
| **CBL1** | **Cabuya** | **2.13** | **298** | eP | | **Pn** | **21 34 15.6** | **-1.2** |
| **STIA3** | **Santiago, Vera** | **2.24** | **103** | eP | | **Pn** | **21 34 18.5** | **+0.2** |
| **SOCE** | **Pocosol** | **2.27** | **321** | | | **Pn** | **21 34 19.4** | **+0.6** |
| **SOCE** | **Pocosol** | **2.27** | **321** | iP | | **Pb** | **21 34 21.5** | **-1.1** |
| SOCE | | | | iS | | **Sg** | **21 34 54.7** | **-0.5** |
| SOCE | | | | IAML | | | 21 34 59.5 | |
| | comp=Z,56μm,1.0s | | | | | | | |
| **MARI3** | **Mariato, Verag** | **2.36** | **113** | eP | | **Pn** | **21 34 20.5** | **+0.5** |
| MARI3 | | | | eS | | **Sn** | **21 34 49.0** | **+0.5** |
| **COVE** | **Coope Vega, Sa** | **2.43** | **330** | iP | | **Pb** | **21 34 23.9** | **-1.3** |
| COVE | | | | iS | | **Sg** | **21 35 00.0** | **-0.2** |
| COVE | | | | IAML | | | 21 35 16.7 | |
| | comp=Z,27μm,1.0s | | | | | | | |
| **JTS** | **Las Juntas de** | **2.43** | **314** | Pn | | **Pn** | **21 34 20.6** | **-0.3** |
| **JTS** | **Las Juntas de** | **2.43** | **314** | Pn | | **Pn** | **21 34 21.2** | **+0.3** |
| | comp=Z,344nm,0.3s,baz=88,slow=16,SNR=215 | | | | | | | |
| JTS | | | | Sn | | **Sb** | **21 34 53.0** | **-1.9** |
| | comp=Z,571nm,0.3s,baz=312,slow=22,SNR=3.5 | | | | | | | |
| JTS | | | | LR | | LR | 21 35 25.5 | |
| | comp=Z,16μm,18.6s,baz=80,slow=43 | | | | | | | |
| | comp=Z,826nm,0.3s | | | | | | | |
| **JTS** | **Las Juntas de** | **2.43** | **314** | iP | | **Pn** | **21 34 21.3** | **+0.4** |
| JTS | | | | pmax | | pmax | | |
| | comp=Z,1μm,1.4s | | | | | | | |
| **JTS** | **Las Juntas de** | **2.43** | **314** | iP | | **Pn** | **21 34 21.4** | **+0.5** |
| JTS | | | | eS | | **Sb** | **21 34 52.7** | **-2.2** |
| **JTS** | **Las Juntas de** | **2.43** | **314** | eP | | **Pn** | **21 34 20.6** | **-0.3** |
| **CRIS3** | **El Cristo, Coc** | **2.56** | **98** | iP | | **Pn** | **21 34 22.9** | **+0.2** |
| CRIS3 | | | | iS | | **Sn** | **21 34 54.6** | **+1.3** |
| **CACAO** | **El Cacao, Vera** | **2.61** | **118** | P | | **Pn** | **21 34 23.5** | **+0.1** |
| CACAO | | | | S | | **Sn** | **21 34 56.5** | **+1.8** |
| **CACAO** | **El Cacao, Vera** | **2.61** | **118** | iP | | **Pn** | **21 34 23.1** | **-0.3** |
| **INDI** | **Punta indio, G** | **2.62** | **299** | iP | | **Pn** | **21 34 24.8** | **+1.3** |
| INDI | | | | IAML | | | 21 35 15.6 | |
| | comp=Z,13μm,1.0s | | | | | | | |
| **PESE3** | **Pese, Herrera** | **2.63** | **105** | eP | | **Pn** | **21 34 24.4** | **+0.7** |
| **CHIT3** | **Chitre** | **2.80** | **103** | eP | | **Pn** | **21 34 27.0** | **+0.9** |
| CHIT3 | | | | eS | | **Sn** | **21 34 59.3** | **-0.2** |
| **PNME** | **Penonome** | **2.82** | **92** | eP | | **Pn** | **21 34 27.9** | **+1.6** |
| PNME | | | | iS | | **Sn** | **21 34 59.1** | **-0.8** |
| **AZU** | **Azuero** | **2.98** | **105** | P | | **Pn** | **21 34 30.1** | **+1.6** |
| AZU | | | | S | | **Sn** | **21 35 06.9** | **+3.0** |
| **AZU** | **Azuero** | **2.98** | **105** | iP | | **Pn** | **21 34 29.7** | **+1.1** |
| AZU | | | | iS | | **Sn** | **21 35 04.4** | **+0.5** |
| **AZU** | **Azuero** | **2.98** | **105** | eP | | **Pn** | **21 34 29.5** | **+0.9** |
| **GPS2** | **Hotel Rincn d** | **3.03** | **315** | eP | | **Pn** | **21 34 31.8** | **+2.6** |
| **ALIBA** | **Liberia Airpor** | **3.06** | **310** | eP | | **Pn** | **21 34 32.2** | **+2.7** |
| **PCRI3** | **Pocri, Los San** | **3.17** | **107** | iP | | **Pn** | **21 34 33.0** | **+1.9** |
| **ACHO3** | **Achotines, Los** | **3.20** | **111** | iP | | **Pn** | **21 34 32.5** | **+1.0** |
| **ZANG** | **Zanguenga, Cho** | **3.29** | **84** | eP | | **Pn** | **21 34 34.2** | **+1.5** |
| **PEDA3** | **Pedasi** | **3.30** | **109** | eP | | **Pn** | **21 34 34.2** | **+1.3** |
| **MLIR** | **Monte Lirio** | **3.34** | **79** | eP | | **Pn** | **21 34 34.2** | **+0.7** |
| **BCIP** | **Isla Barro Col** | **3.35** | **80** | Pn | | **Pn** | **21 34 33.6** | **+0.1** |
| **BCIP** | **Isla Barro Col** | **3.35** | **80** | P | | **Pn** | **21 34 34.4** | **+0.9** |
| **BCIP** | **Isla Barro Col** | **3.35** | **80** | iS | | **Sb** | **21 35 24.4** | **+3.1** |
| **BCIP** | **Isla Barro Col** | **3.35** | **80** | P | | **Pn** | **21 34 33.6** | **+0.1** |
| **BCIP** | **Isla Barro Col** | **3.35** | **80** | iP | | **Pn** | **21 34 33.9** | **+0.3** |
| BCIP | | | | eP | | Pb | 21 34 34.4 | -6.5 |
| BCIP | | | | eS | | **Sb** | **21 35 21.3** | **0.0** |
| **BCIP** | **Isla Barro Col** | **3.35** | **80** | eP | | **Pn** | **21 34 33.6** | **+0.1** |
| **BLUN** | **Bluefields** | **3.43** | **350** | iP | | **Pn** | **21 34 34.0** | **-0.7** |
| BLUN | | | | IAML | | | 21 34 47.4 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| **LCRUZ** | **La Cruz** | **3.45** | **316** | eP | | **Pn** | **21 34 38.7** | **+3.7** |
| **FRIJ** | **El Hiral** | **3.46** | **79** | eP | | **Pn** | **21 34 35.9** | **+0.8** |
| **TABO3** | **Taboga, Panama** | **3.59** | **87** | eP | | **Pn** | **21 34 39.1** | **+2.3** |
| **UPA** | **Univ. de Panam** | **3.62** | **84** | eP | | **Pn** | **21 34 37.3** | **0.0** |
| **ESPN** | **Las Esperanzas** | **3.74** | **343** | iP | | **Pn** | **21 34 37.6** | **-1.3** |
| ESPN | | | | iS | | **Sb

**PACN Al O del Volca 5.26 318** *i* P **Pn** **21 35 03.6 +3.7**
PACN IAML 21 35 27.3
comp=Z,740nm,1.0s

**TELN Telica 5.36 318** *i* P **Pn** **21 35 04.7 +3.4**
TELN IAML 21 35 10.9
comp=Z,42nm,1.0s

**HERN Volcan Telica 5.36 318** *i* P **Pn** **21 35 04.5 +3.1**
HERN IAML 21 35 38.6
comp=Z,1µm,1.0s

**QUEN Al S del Volca 5.36 318** *i* P **Pn** **21 35 04.8 +3.5**
QUEN IAML 21 35 13.8
comp=Z,640nm,1.0s

**LIMN Finca el Limon 5.43 325** *i* P **Pn** **21 35 05.3 +3.0**
LIMN IAML 21 36 46.5
comp=Z,2µm,1.0s

**PKGN Cerro Pekin 5.50 318** *i* P **Pn** **21 35 06.4 +3.2**
PKGN IAML 21 35 19.6
comp=Z,2µm,1.0s

**PTAC Punta Ardita, 5.51 105** P **Pn** **21 35 03.1 -0.2**
comp=Z,271nm,1.0s,comp=Z,4µm

**PTAC Punta Ardita, 5.51 105** *eP* **Pn** **21 35 03.3 0.0**

**CRIN San Cristobal 5.58 317** **Pn** **21 35 06.7 +2.5**

**CRIN San Cristobal 5.58 317** *i* P **Pn** **21 35 06.9 +2.6**
CRIN IAML 21 35 18.3
comp=Z,2µm,1.0s

**CRIN San Cristobal 5.58 317**⇑ *eP* **Pn** **21 35 05.7 +1.4**

**CAPC Capurgana 5.76 89** P **Pn** **21 35 11.1 +4.4**
comp=Z,488nm,1.2s,comp=Z,8µmcomp=Z,21µm

**SOMN Somoto 5.86 325** *i* P **Pn** **21 35 11.1 +2.9**
SOMN IAML 21 35 14.9
comp=Z,400nm,1.0s

**APAC Apartado, Choc 6.57 96** P **Pn** **21 35 21.0 +3.2**
comp=Z,450nm,1.2s,comp=Z,8µmcomp=Z,20µm

**LCBC Los crdobas, 6.74 87** P **Pn** **21 35 23.0 +2.9**
comp=Z,529nm,1.1s,comp=Z,7µmcomp=Z,28µm
LCBC S **Sn** **21 36 43.1 +6.6**
comp=Z,529nm,1.1s,comp=Z,7µmcomp=Z,28µm

**LCBC Los crdobas, 6.74 87** *eP* **Pn** **21 35 20.4 +0.3**

**TGUH Tegucigalpa,Un 6.75 324** Pn **Pn** **21 35 22.5 +2.1**

**DBBC Dabeiba 7.08 102** P **Pn** **21 35 27.2 +2.2**
comp=Z,118nm,1.3s,comp=Z,1µm

**GR1C Gorgona, Isla 7.47 138** P **Pn** **21 35 29.8 -0.4**

**UREC San Jos de Ur 7.61 96** P **Pn** **21 35 34.0 +1.8**
comp=Z,136nm,0.8s,comp=Z,2µm

**PLMC San Jos del P 7.77 118** P **Pn** **21 35 34.3 -0.1**
comp=Z,105nm,0.9s,comp=Z,2µm
PLMC S **Sn** **21 37 02.0 -0.1**
comp=Z,105nm,0.9s,comp=Z,2µm

**SNET Serv Nac Est T 7.80 311** **Pn** **21 35 36.9 +2.1**

**HELC Santa Helena 7.95 107** P **Pn** **21 35 39.1 +1.9**
comp=Z,131nm,1.0s,comp=Z,2µmcomp=Z,8µm
HELC S **Sn** **21 37 04.8 -2.2**
comp=Z,131nm,1.0s,comp=Z,2µmcomp=Z,8µm

**SJCC San Jacinto, C 8.00 80** P **Pn** **21 35 38.2 +0.6**
comp=Z,339nm,0.8s,comp=Z,12µmcomp=Z,20µm
SJCC S **Sn** **21 37 09.2 +1.5**
comp=Z,339nm,0.8s,comp=Z,12µmcomp=Z,20µm

**MTO3 Montecristo 8.36 314** **Pn** **21 35 44.7 +2.0**

**JAMC Jamundi, Valle 8.39 129** P **Pn** **21 35 46.2 +3.1**
comp=Z,53nm,1.3s,comp=Z,1µmcomp=Z,6µm

**ESQI Esquipulas 8.46 315** **Pn** **21 35 46.4 +2.5**

**BBAC Balboa, Cauca 8.81 138** P **Pn** **21 35 52.0 +3.2**
comp=Z,189nm,1.1s,comp=Z,2µmcomp=Z,9µm

**POPC Popayan, Colom 8.84 133** P **Pn** **21 35 52.7 +3.5**
comp=Z,189nm,1.8s,comp=Z,2µmcomp=Z,6µm

**TULM Tulcn-Chalpat 9.50 145** Pn **Pn** **21 36 00.5 +2.0**

**OTAV Otavalo 9.55 150** Pn **Pn** **21 36 00.4 +1.2**

**OTAV Otavalo 9.55 150** *eP* **Pn** **21 36 02.3 +3.1**

**OTAV Otavalo 9.55 150** *eP* **Pn** **21 36 01.6 +2.3**

**ROSC El Rosal 9.55 112** Pn **Pn** **21 36 01.8 +2.5**
comp=Z,3.1nm,0.3s,baz=11,slow=6.5,SNR=28
ROSC Sn **Sn** **21 37 46.4 -0.1**
comp=Z,2.0nm,0.3s,baz=237,slow=22,SNR=1.1
ROSC LR LR 21 39 29.9
comp=Z,4µm,18.4s,baz=330,slow=37

**ROSC El Rosal 9.55 112** P **Pn** 21 36 05.3 +6.1
comp=Z,82nm,1.5s,comp=Z,2µmcomp=Z,6µm

**APG El Apazote 9.56 312** **Pn** **21 36 01.1 +2.0**
comp=Z,1.2nm,0.3s,baz=134,slow=5.9,SNR=74
APG Sn **Sn** **21 37 50.2 +3.9**
baz=182,slow=22
comp=Z,9.3nm,0.5s

**IMBA Imbabura, San 9.64 149** Pn **Pn** **21 36 02.6 +2.1**

**BETC Betania 9.69 127** P **Pn** **21 36 04.8 +4.1**

**PULU Pululahua 9.71 151** **Pn** **21 36 03.4 +2.0**

**GARC Garzon, Huila 9.95 129** P **Pn** **21 36 07.6 +3.0**
comp=Z,105nm,0.9s,comp=Z,2µmcomp=Z,4µm

**FLOC Florencia 10.23 133** P **Pn** **21 36 12.2 +4.0**
comp=Z,163nm,1.2s,comp=Z,2µmcomp=Z,4µm

**ANTS Antisana-Sarah 10.32 151** **Pn** **21 36 12.6 +2.6**

**RUSC La Rusia 10.37 104** P **Pn** **21 36 15.0 +4.5**
comp=Z,139nm,1.1s,comp=Z,2µmcomp=Z,6µm

**SLOR San Lorenzo - 10.38 153** **Pn** **21 36 13.8 +3.2**

**PETF Flores 10.53 322** Pn **Pn** **21 36 13.7 +1.5**

**HUEH Huehuetenango 10.53 310** Pn **Pn** **21 36 14.4 +1.9**

**PIAT Ana Tenorio 10.72 153** P **Pn** **21 36 18.9 +3.7**
comp=Z,21nm,1.7s,comp=Z,455nmcomp=Z,2µm

**MTDJ Mount Denham 11.03 29** **Pn** **21 36 18.5 -0.6**

**MACC Macarena, Meta 11.28 124** P **Pn** **21 36 26.1 +3.5**
comp=Z,59nm,0.7s,comp=Z,2µm

**CCIG Comitan 11.61 312** **Pn** **21 36 28.6 +1.4**

**PAYG Puerto Ayora 11.62 218** **Pn** **21 36 30.5 +3.3**

**PAYG Puerto Ayora 11.62 218** P Pn 21 36 34.6 +7.3
comp=Z,263nm,1.3s,comp=Z,4µmcomp=Z,12µm

**PTGC Puerto Gaitan, 11.81 111** P **Pn** **21 36 32.8 +3.0**
comp=Z,86nm,0.9s,comp=Z,2µmcomp=Z,4µm

**SDV Santo Domingo 12.40 88** Pn **Pn** **21 36 37.1 -0.9**

**SDV Santo Domingo 12.40 88** Pn **Pn** **21 36 36.7 -1.4**
comp=Z,3.7nm,0.3s,baz=261,slow=9.3,SNR=6.6
SDV Sn **Sn** **21 38 54.9 -1.1**
comp=Z,3.7nm,0.3s,baz=17,slow=19,SNR=1.7
comp=Z,19nm,0.7s

**SDV Santo Domingo 12.40 88** P **Pn** **21 36 39.8 +1.7**
comp=Z,65nm,0.9s,comp=Z,1µmcomp=Z,8µm

**SDV Santo Domingo 12.40 88** *eP* **Pn** **21 36 38.8 +0.8**

**ARNL Arenillas 12.46 165** **Pn** **21 36 39.7 +1.0**

**CHIV Chivirico 13.06 29** **Pn** **21 36 44.0 -2.9**

**MCRA Macar, Loja 13.28 166** P **Pn** **21 36 52.1 +2.2**
comp=Z,17nm,1.2s,comp=Z,282nmcomp=Z,1µm

**CMIG Matias Romero 14.19 308** Pn **Pn** **21 37 03.2 +0.9**
comp=Z,4.5nm,0.3s,baz=136,slow=12,SNR=24
CMIG Sn **Sn** **21 39 42.8 +3.5**
comp=Z,0.7nm,0.3s,baz=67,slow=22,SNR=1.0
comp=Z,14nm,0.5s

**BAUV El Baul 14.96 88** Pn **Pn** **21 37 11.5 -1.4**

**SDDR Presa de Saban 15.47 47** Pn **Pn** **21 37 19.5 -0.1**

**SDDR Presa de Saban 15.47 47** *eP* **P** **21 37 24.8 +0.7**

**ATAH Atahualpa 16.34 163** Pn **P** **21 37 33.2 -0.9**
comp=Z,0.2nm,0.3s,baz=30,slow=8.5,SNR=15
ATAH Sn **Sn** **21 40 36.1 +3.6**
comp=Z,0.2nm,0.3s,baz=293,slow=20,SNR=1.0
ATAH LR LR 21 43 12.2
comp=Z,8µm,19.1s,baz=334,slow=35
comp=Z,7.6nm,0.8s

**061Z Ochoppi 17.30 7** Pn **Pn** **21 37 41.1 -1.7**
061Z IAmb IAmb 21 37 48.5
comp=Z,258nm,1.1s

**TLIG Tlapa 17.43 302** P **Pn** **21 37 44.8 +0.2**

**MLPR Magueyes Islan 18.24 58** P **Pn** **21 37 53.0 -1.4**

**TBTG Tabatinga, AM 18.34 133** P **P** **21 37 55.2 -0.6**
TBTG IAmb IAmb 21 38 05.3
comp=Z,180nm,1.2s

**TBTG Tabatinga, AM 18.34 133** P **Pn** **21 37 58.2 +2.4**
comp=Z,139nm,1.4s,comp=Z,3µm

**TBTG Tabatinga, AM 18.34 133** *eP* **P** **21 37 55.8 0.0**

**PCRV Puerto La Cruz 18.36 84** P **P** **21 37 55.8 -0.2**
comp=Z,2.0nm,0.3s,baz=234,slow=5.3,SNR=8.5
PCRV LR LR 21 47 16.3
comp=Z,3µm,19.0s,slow=45
comp=Z,31nm,1.0s

**PCRV Puerto La Cruz 18.36 84** *eP* **P** **21 37 52.4 -3.6**

**AGPR Aguadilla, PR 18.43 56** P **P** **21 37 55.5 -1.1**
AGPR IAmb IAmb 21 38 06.7
comp=Z,323nm,1.2s

**OBIP Obispado Ponce 18.64 58** P **P** **21 37 57.6 -1.4**

**AOPR Arecibo Observ 18.66 57** P **P** **21 37 57.8 -1.5**
AOPR IAmb IAmb 21 38 09.7
comp=Z,292nm,1.6s

**AOPR Arecibo Observ 18.66 57** *eP* **Pn** **21 38 01.4 +1.7**

**AOPR Arecibo Observ 18.66 57** *eS* **S** **21 41 39.3 +7.8**

**CELP Cerrillos 18.68 58** P **P** **21 37 59.2 -0.2**

**GCPR Guaynabo City 19.20 58** P **P** **21 38 04.7 -0.5**

**CZSB Cruzeiro do Su 19.29 147** P **Pn** **21 38 07.1 -0.1**
CZSB IAmb IAmb 21 38 14.9
comp=Z,138nm,1.1s

**CZSB Cruzeiro do Su 19.29 147** P **Pn** **21 38 08.7 +1.4**

**CZSB Cruzeiro do Su 19.29 147** *eP* **P** **21 38 06.4 +0.2**

**DWPF Disney Wildern 19.48 5** P **P** **21 38 08.2 +0.2**

**JRQG Juriquilla Cam 20.56 308** P Pn 21 38 22.3 -0.3

**MOIG Morelia 20.62 304** P **P** **21 38 21.9 +1.0**
MOIG IAmb IAmb 21 38 34.5
comp=Z,309nm,1.8s

**TCE Chacachacare 21.22 83** *eP* P 21 38 13.4 -14

**NNA Nana 21.40 163** P **P** **21 38 29.1 0.0**
NNA IAmb IAmb 21 38 35.8
comp=Z,123nm,1.2s

**NNA Nana 21.40 163** P **P** **21 38 29.7 +0.6**
comp=Z,17nm,0.5s,baz=334,slow=7.5,SNR=8.8
comp=Z,17nm,0.5s

**NNA Nana 21.40 163***c* *iP* **P** **21 38 29.9 +0.7**
NNA pmax pmax
comp=Z,130nm,1.4s

**GRHS Sauteurs 21.48 79** *eP* **P** **21 38 34.3 +4.3**

**TPP Pointe-a-Pierr 21.50 84** *eP* P 21 38 22.3 -7.8

**TRN Trinidad (W) 21.56 83** *eP* **P** **21 38 30.9 0.0**

**SMRT St. Maarten 21.68 62** P **P** **21 38 30.2 -1.9**

**GCMP Grenada, Carri 21.72 78** *eP* **P** **21 38 37.3 +4.7**

**GCMP Grenada, Carri 21.72 78** *eS* Sn 21 42 41.8 -0.1

**MBWH 22.00 66** *eP* **P** **21 38 39.6 +4.0**

**SVB Belmont 22.01 76** *eP* **P** **21 38 37.3 +1.5**

**TEFE Tefe 22.06 122** *eP* **P** **21 38 36.1 -0.1**

**GDHS Morne Mazeau, 22.24 68** P **P** **21 38 37.7 -0.5**
GDHS IAmb IAmb 21 38 42.7
comp=Z,167nm,1.0s

**FDF Fort de France 22.40 72** P **P** **21 38 39.6 -0.4**

**FDF Fort de France 22.40 72** P **P** **21 38 39.6 -0.4**
FDF pmax pmax
comp=Z,247nm,1.3s

**SVN Savane Anatole 22.41 72** *eP* **P** **21 38 41.4 +1.3**

**SLBI Saint Lucia, B 22.42 74** *eP* **P** **21 38 40.3 +0.2**

**SLBI Saint Lucia, B 22.42 74** *eS* S 21 42 48.4 +2.7

**BIM Bigot 22.43 73** *eP* **P** **21 38 41.7 +1.5**

**SLAC Saint Lucia, A 22.47 74** *eP* **P** **21 38 40.3 -0.3**

**SLAC Saint Lucia, A 22.47 74** *eS* Sn 21 42 54.4 -5.4

**ANBD Bethesda, Anti 22.48 66** *eP* **P** **21 38 41.3 +0.6**

**ANWB Willy Bob 22.67 64** *eP* **P** **21 38 42.1 -0.7**

**ILAM Ilet Lapin Mar 22.67 72** *eP* **P** **21 38 43.1 +0.4**

**TIGA Tifton 22.73 359** P **P** **21 38 42.1 -1.0**

**BRAL Brewton 22.74 351** P **P** **21 38 43.3 0.0**

**ZAIG Zacatecas 23.34 309** P **P** **21 38 50.9 +0.9**

**BOAV Boa Vista 23.37 104** P **P** **21 38 48.9 -1.0**
BOAV IAmb IAmb 21 38 58.5
comp=Z,89nm,1.3s

**BOAV Boa Vista 23.37 104** *eP* **P** **21 38 49.7 -0.2**

**HBVL Hebbronville 23.50 323** P **P** **21 38 50.2 -0.9**

**BBGH Gun Hill 23.62 77** *eP* **P** **21 38 55.3 +2.8**

**HKT Hockley 24.32 333** P **P** **21 38 58.8 0.0**
HKT IAmb IAmb 21 39 01.9
comp=Z,156nm,1.5s

**HKT Hockley 24.32 333***d* *iP* **P** **21 38 59.9 +1.1**
HKT pmax pmax
comp=Z,136nm,1.7s

**CSU Charleston Sou 24.43 6** P **P** **21 38 59.4 -0.4**

**NHSC New Hope 24.54 6** P **P** **21 39 01.1 +0.3**

**GOGA Godfrey 24.69 359** P **P** **21 39 02.3 +0.1**
GOGA IAmb IAmb 21 39 12.4
comp=Z,74nm,1.0s

**GOGA Godfrey 24.69 359** P **P** **21 39 02.3 +0.1**
GOGA pmax pmax
comp=Z,75nm,1.0s

**833A Chaparral WMA, 24.87 324** P **P** **21 39 03.9 0.0**
833A IAmb IAmb 21 39 16.9
comp=Z,74nm,1.4s

**833A Chaparral WMA, 24.87 324** P **P** **21 39 03.1 -0.8**
baz=139

**ETMB Extrema 24.90 137** P **P** **21 39 03.1 -1.1**

**ETMB Extrema 24.90 137** *eP* **P** **21 39 03.8 -0.5**

**MACA Manacapuru-AM 25.29 117** P **P** **21 39 07.7 -0.1**

**MACA Manacapuru-AM 25.29 117** *eP* **P** **21 39 06.9 -0.9**

**435B Jarrell 25.85 331** P **P** **21 39 12.0 -0.7**
baz=146

**FPAL Fort Paine 25.91 355** P **P** **21 39 13.0 -0.3**

**Z41A Richland Creek 26.10 341** P **P** **21 39 14.6 -0.3**

**OXF Oxford 26.42 348** P **P** **21 39 17.9 +0.1**

**OXF Oxford 26.42 348** P **P** **21 39 17.9 +0.1**
OXF pmax pmax
comp=Z,245nm,1.2s

**SAML Samuel 26.47 131** P **P** **21 39 17.0 -1.5**

**SAML Samuel 26.47 131** P **P** **21 39 17.0 -1.5**
SAML pmax pmax
comp=Z,33nm,0.9s

**SAML Samuel 26.47 131** *eP* **P** **21 39 16.9 -1.5**

**JCT Junction City 26.75 327** P **P** **21 39 19.9 -1.0**

**JCT Junction City 26.75 327** P **P** **21 39 19.9 -1.0**
JCT pmax pmax
comp=Z,58nm,1.4s

**TKL Tuckaleechee C 26.94 359** LR LR 21 50 42.1
comp=Z,4µm,18.5s,baz=173,slow=38

**UALR University of 27.38 343** P **P** **21 39 25.6 -0.9**
UALR IAmb IAmb 21 39 32.9
comp=Z,77nm,1.1s

**WVT Waverly 27.73 352** P **P** **21 39 28.0 -1.6**

**WVT Waverly 27.73 352** P **P** **21 39 28.0 -1.6**
WVT pmax pmax
comp=Z,23nm,1.0s

**HPIG 28.04 313** P **P** **21 39 32.5 -0.2**

**X37A Clayton 28.19 338** P **P** **21 39 33.5 -0.2**
X37A IAmb IAmb 21 39 39.6
comp=Z,76nm,1.4s

**TXAR Lajitas Array 28.20 320** P **P** **21 39 34.7 +0.6**
comp=Z,0.6nm,0.6s,baz=148,slow=7.4,SNR=5.6
TXAR ScP **ScP** **21 46 31.2 +3.1**
comp=Z,0.2nm,0.5s,baz=134,slow=5.2,SNR=1.8
comp=Z,0.6nm,0.6s

**LPAZ La Paz 28.87 149** P **P** **21 39 40.7 +0.1**
comp=Z,6.7nm,0.7s,baz=337,slow=8.9,SNR=24
LPAZ LR LR 21 52 18.3
comp=Z,2µm,19.4s,baz=309,slow=39
comp=Z,6.7nm,0.7s

**MNHN Monahans 29.06 324** P **P** **21 39 40.8 -0.9**

**PB18 Visviri 29.33 153** P **P** **21 39 45.5 +0.9**

**WCI Wyandotte Cave 29.63 355** P **P** **21 39 46.4 -0.1**
WCI IAmb IAmb 21 39 53.6
comp=Z,63nm,1.1s

**WCI Wyandotte Cave 29.63 355** P **P** **21 39 46.4 -0.1**
WCI pmax pmax
comp=Z,63nm,1.1s

**SLBS Sierra La Lagu 29.68 304** P **P** **21 39 48.5 +1.3**
SLBS IAmb IAmb 21 39 58.9
comp=Z,97nm,1.6s

**WMOK Wichita Mounta 29.70 333** **P** **21 39 46.5 -0.7**

**WMOK Wichita Mounta 29.70 333** P **P** **21 39 46.5 -0.7**
WMOK pmax pmax
comp=Z,13nm,1.1s

**LPIG La Paz 30.16 304** P **P** **21 39 52.2 +0.8**
comp=Z,27nm,0.3s,baz=123,slow=4.3,SNR=1.3

**CCM Cathedral Cave 30.21 347** P **P** **21 39 50.4 -1.3**

**CCM Cathedral Cave 30.21 347** P **P** **21 39 50.4 -1.3**
CCM pmax pmax
comp=Z,111nm,1.1s

**ITTB Itaituba 30.25 114** *eP* **P** **21 39 52.1 -0.1**

**MDP Montagnes des 30.51 95** LR LR 21 52 44.6
comp=Z,3µm,18.8s,baz=288,slow=38

**MAL2 Monte Alegre, 30.77 109** P **P** **21 39 55.8 -1.1**
MAL2 IAmb IAmb 21 40 10.6
comp=Z,70nm,1.0s

**P49A Miami Univ. Ec 30.83 358** P **P** **21 39 56.8 -0.3**
baz=177

**P52A Corning 30.91 2** P **P** **21 39 57.8 0.0**

**P52A Corning 30.91 2** P **P** **21 39 58.4 +0.5**
baz=182,SNR=11

**MCWV Mont Chateau 31.07 5** P **P** **21 39 58.2 -0.9**

**SDMD Soldier's Deli 31.20 10** P **P** **21 39 58.8 -1.5**

**GO01 Chusmiza 31.29 154** P **P** **21 40 02.5 +0.6**
GO01 IAmb IAmb 21 40 09.8
comp=Z,59nm,1.2s

**VILB Vilhena 31.30 133** P **P** **21 39 59.4 -2.1**

**VILB Vilhena 31.30 133** *eP* **P** **21 40 00.1 -1.5**

**TA02 Huaiquique 31.43 156** P **P** **21 40 03.5 +1.0**

**ACSO Alum Creek Sta 31.50 0** P **P** **21 40 02.4 -0.5**

**O53A New Philadelph 31.56 3** P **P** **21 40 03.9 +0.3**
baz=184,SNR=8.8

**TA01 Diego Aracena 31.68 156** P **P** **21 40 05.3 +0.6**
TA01 IAmb IAmb 21 40 12.2
comp=Z,44nm,1.1s

**NPGB Novo Progresso 31.79 118** *eP* **P** **21 40 04.6 -1.2**

**MVL Millersville 31.85 10** P **P** **21 40 06.1 0.0**
MVL IAmb IAmb 21 40 14.9
comp=Z,57nm,1.2s

**SSPA Standing Stone 32.25 8** P **P** **21 40 09.3 -0.2**
SSPA IAmb IAmb 21 40 13.1
comp=Z,77nm,1.2s

**P38A Dawn 32.25 345** P **P** **21 40 08.6 -1.0**
P38A IAmb IAmb 21 40 17.8
comp=Z,64nm,1.1s

**MCPB Macapa, AP 32.26 104** *eP* **P** **21 40 10.4 +0.4**

**VBST Vila Bela da S 32.50 135** *eP* **P** **21 40 11.4 -0.6**

**KSU1 Kansas State U 32.67 340** P **P** **21 40 12.7 -0.6**
KSU1 IAmb IAmb 21 40 21.5
comp=Z,75nm,1.4s

**M53A WI Miller and 32.78 3** P **P** **21 40 14.5 +0.3**
baz=184

**SIV San Ignacio 32.80 138** LR LR 21 54 52.3
comp=Z,2µm,18.1s,baz=320,slow=39

**121A Cookes Peak, D 32.97 320** P **P** **21 40 16.6 +0.4**
baz=131

**PDRB Porto dos Gac 33.09 127** *eP* **P** **21 40 15.4 -1.8**

**PB09 IPOC Station P 33.16 156** P **P** **21 40 18.8 +0.8**
PB09 IAmb IAmb 21 40 25.9
comp=Z,47nm,1.1s

**N38A Joes South For 33.28 346** P **P** **21 40 17.9 -0.7**

**PB04 IPOC Station P 33.29 158** P **P** **21 40 19.0 -0.1**
PB04 IAmb IAmb 21 40 26.4
comp=Z,41nm,1.1s

**CLDB Colider 33.41 125** *eP* **P** **21 40 18.1 -2.0**

**Y22D IRIS PASSCAL I 33.47 323** P **P** **21 40 21.0 +0.5**
baz=134

**CBKS Cedar Bluff 33.56 336** P **P** **21 40 21.3 +0.1**

**CBKS Cedar Bluff 33.56 336** P **P** **21 40 21.3 +0.1**
CBKS pmax pmax
comp=Z,17nm,0.7s

**L44A Lake County Fo 33.70 354** P **P** **21 40 22.7 +0.5**
baz=171

**PTLB Pontes e Lacer 33.74 135** P **P** **21 40 21.4 -1.4**

**PTLB Pontes e Lacer 33.74 135** *eP* **P** **21 40 21.9 -0.9**

**ANMO Albuquerque 33.80 324** P **P** **21 40 22.4 -1.1**

**ANMO Albuquerque 33.80 324** P **P** **21 40 24.1 +0.6**
comp=Z,2.8nm,0.8s,baz=137,slow=13,SNR=7.4
comp=Z,2.8nm,0.8s

**ANMO Albuquerque 33.80 324**⇑ *eP* **P** **21 40 24.8 +1.3**
ANMO pmax pmax
comp=Z,4.0nm,1.5s

**DUN6 Lazy B Ranch 33.83 318** P **P** **21 40 24.1 +0.5**

**WVNY West Valley, N 33.91 6** P **P** **21 40 23.2 -0.9**

**BBSD Serra de San D 33.98 139** *eP* **P** **21 40 24.0 -1.0**

**LVC Limon Verde 34.02 156** P **P** **21 40 26.1 +0.4**
LVC IAmb IAmb 21 40 33.7
comp=Z,75nm,1.4s

**LVC Limon Verde 34.02 156** LR LR 21 55 37.7
comp=Z,1µm,18.7s,baz=320,slow=39

**LVC Limon Verde 34.02 156** *eP* **P** **21 40 27.9 +2.2**

**LVC Limon Verde 34.02 156** *eP* **P** **21 40 24.9 -0.7**

**BINY Binghamton 34.06 10** P **P** **21 40 24.8 -0.6**

**T25A Trinidad 34.32 329** P **P** **21 40 27.9 -0.1**
baz=140

**SCIA State Center 34.34 347** P **P** **21 40 26.9 -0.9**

**AF01 San Pedro de A 34.63 155** P **P** **21 40 31.6 +0.7**

**M65A Busby, Falmout 34.65 17** P **P** **21 40 31.5 +1.0**
baz=202

**TUC Tucson 34.81 317** P **P** **21 40 32.9 +0.8**
TUC IAmb IAmb 21 40 43.5
comp=Z,86nm,1.9s

**TUC Tucson 34.81 317** P **P** **21 40 32.9 +0.8**
TUC pmax pmax
comp=Z,86nm,1.9s

**L61B Northampton 34.96 14** P **P** **21 40 33.5 +0.4**
baz=198

**PTET Porto Estrela 35.10 133** *eP* **P** **21 40 33.5 -1.2**

**BCX Boston College 35.22 16** P **P** **21 40 34.9 -0.5**
BCX IAmb IAmb 21 40 38.5
comp=Z,38nm,1.2s

**PB14 IPOC Station P 35.30 160** P **P** **21 40 37.6 +1.0**

**SDCO Great Sand Dun 35.34 329** P **P** **21 40 37.0 +0.2**

**NBRS Nobres 35.46 130** *eP* **P** **21 40 36.8 -1.0**

**PECO Prince Edward 35.61 8** P **P** **21 40 38.2 -0.4**
PECO IAmb IAmb 21 40 41.2
comp=Z,80nm,1.5s

**W18A Petrified Fore 35.88 321** P **P** **21 40 42.6 +1.2**
baz=131

**214A Organ Pipe Nat 36.01 314** P **P** **21 40 44.8 +2.4**
baz=124

**S22A 4UR Ranch, Cre 36.04 327** P **P** **21 40 43.2 +0.3**
baz=138

**GO02 Mina Guanaco 36.08 159** P **P** **21 40 43.6 +0.3**
GO02 IAmb IAmb 21 40 50.9
comp=Z,48nm,1.1s

**Q24A Divide 36.10 330** P **P** **21 40 43.3 -0.1**
baz=141

**SADO Sadowa 36.20 5** P **P** **21 40 42.9 -0.9**
SADO IAmb IAmb 21 40 45.9
comp=Z,110nm,1.6s

**SADO Sadowa 36.20 5** LR LR 21 56 42.7
comp=Z,2µm,18.4s,baz=194,slow=38

**BBLB La Banda, Boli 36.23 139** *eP* **P** **21 40 44.0 -0.3**

**PIX Pinacate 36.26 313** P **P** **21 40 44.8 +0.4**

**OGNE Ogallala 36.30 336** P **P** **21 40 44.7 -0.1**

**PRPB Parauapebas 36.35 113** *eP* **P** **21 40 45.1 -0.4**

**SALV Santo Antonio 36.52 132** *eP* **P** **21 40 46.2 -0.6**

**TMAB Tom-Au,PA,Br 36.63 106** *eP* **P** **21 40 46.4 -1.4**

**LBNH Lisbon 36.83 14** P **P** **21 40 48.1 -1.0**

**LBNH Lisbon 36.83 14** P **P** **21 40 48.2 -1.0**
LBNH pmax pmax
comp=Z,27nm,1.1s

**ECSD EROS Data Cent 36.91 344** P **P** **21 40 48.8 -1.1**
ECSD IAmb IAmb 21 40 57.7
comp=Z,84nm,1.1s

**WUAZ Wupatki 37.16 320** P **P** **21 40 52.3 -0.1**

**SMCO Snowmass 37.18 329** P **P** **21 40 52.4 -0.3**

**MNTQ Montreal, Queb 37.68 11** P **P** **21 40 55.4 -0.9**
MNTQ IAmb IAmb 21 40 58.4
comp=Z,68nm,1.4s

**SNDB Serra Nova Dou 37.72 122** *eP* **P** **21 40 56.2 -0.8**

**AC06 Mina Casimiro 37.84 161** P **P** **21 40 58.4 +0.5**
AC06 IAmb IAmb 21 41 05.2
comp=Z,77nm,1.7s

**N23A Red Feather La 37.99 332** P **P** **21 40 59.1 -0.3**
baz=142

**GLA Glamis 38.03 314** P **P** **21 41 00.5 +0.9**

**GLA Glamis 38.03 314** P **P** **21 41 00.5 +0.9**
GLA pmax pmax
comp=Z,217nm,1.7s

**PP1B Ponte de Pedra 38.20 133** *eP* **P** **21 40 59.5 -1.6**

**TRQ Mont Tremblant 38.21 10** P **P** **21 40 59.8 -1.1**

**FDPY Filadelfia 38.22 144** *eP* **P** **21 41 01.9 +0.8**

**HMU Henry Mountain 38.36 324** P **P** **21 41 01.3 -1.3**

**PKME Peaks-Kenny Pk 38.45 16** P **P** **21 41 02.4 -0.4**
PKME IAmb IAmb 21 41 18.1
comp=Z,159nm,1.9s

**RVDE Rio Verde (Bra 39.10 135** *eP* **P** **21 41 07.0 -1.7**

**MURT Porto Murtinho 39.17 141** *eP* **P** **21 41 07.9 -1.2**

**AC05 El Transito 39.25 162** P **P** **21 41 10.9 +1.1**
AC05 IAmb IAmb 21 41 17.3
comp=Z,74nm,1.4s

**LCO Las Campanas 39.28 163** P **P** **21 41 10.2 -0.1**

**LCO Las Campanas 39.28 163** P **P** **21 41 10.2 -0.1**
LCO pmax pmax
comp=Z,26nm,1.2s

**ARAG Araguaiana, MT 39.35 128** *eP* **P** **21 41 09.1 -1.6**

**SMTB Santa Maria do 39.47 115** *eP* **P** **21 41 11.2 -0.6**

**TPFO Pinon Flats 39.48 314** P **P** **21 41 14.0 +2.1**
baz=121

**PFO Pinyon Flats O 39.49 314** P **P** **21 41 12.5 +0.6**
PFO IAmb IAmb 21 41 22.5
comp=Z,103nm,1.6s

**PFO Pinyon Flats O 39.49 314** P **P** **21 41 13.7 +1.8**
comp=Z,14nm,1.1s,baz=102,slow=9.1,SNR=15
comp=Z,14nm,1.1s

**PFO Pinyon Flats O 39.49 314***c* *iP* **P** **21 41 13.4 +1.5**
PFO pmax pmax
comp=Z,69nm,1.5s

**V12A Nelson 39.54 318** P **P** **21 41 12.9 +0.6**

**AQDB Aquidauana 39.56 137** P **P** **21 41 11.5 -1.0**

**AQDB Aquidauana 39.56 137** *eP* **P** **21 41 11.8 -0.7**

**MVU Marysvale 39.60 323** P **P** **21 41 12.7 -0.2**
MVU IAmb IAmb 21 41 17.9
comp=Z,151nm,1.8s

**DVLD Doverlandia 39.62 129** *eP* **P** **21 41 12.5 -0.6**

**NBBC Barra do Corda 40.30 109** *eP* **P** **21 41 17.9 -0.9**

**CO01 Juntas del Tor 40.37 162** P **P** **21 41 19.6 +0.3**

**PAPY Pozo Azul 40.61 144** *eP* **P** **21 41 21.2 +0.1**

**RPRD Ribas do Rio P 40.93 135** *eP* **P** **21 41 23.4 -0.5**

**AGMN Agassiz Nation 40.99 347** P **P** **21 41 23.0 -0.9**
AGMN IAmb IAmb 21 41 31.9
comp=Z,137nm,1.4s

**CO03 El Pedregal 41.01 164** P **P** **21 41 25.2 +0.8**
**PD31 Pinedale Array 41.16 330** P **P** **21 41 25.2 -0.5**
**PDAR Pinedale Array 41.16 330** P **P** **21 41 26.1 +0.4**
comp=Z,3.9nm,1.1s,baz=138,slow=8.5,SNR=11
PDAR PcP **PcP** **21 43 24.9 0.0**
comp=Z,0.6nm,0.6s,baz=138,slow=4.3,SNR=1.6
comp=Z,3.9nm,1.1s
**BATG Bathurst New B 41.20 18** P **P** **21 41 26.4 +0.7**
BATG IAmb IAmb 21 42 09.4
comp=Z,110nm,1.8s
**CO02 Combarbal 41.26 164** P **P** **21 41 27.0 +0.5**
**R11B Troy Canyon, C 41.56 321** P **P** **21 41 30.7 +1.6**
baz=127
**AMBA Amambai (Brazi 41.75 139** *e*P **P** **21 41 29.6 -1.0**
**AHID Auburn Hatcher 41.93 329** P **P** **21 41 31.9 -0.2**
**H03N2 Juan Fernandez 42.00 175** T T 22 26 05.2
baz=354,slow=76,SNR=58
**H03N1 Juan Fernandez 42.01 175** T T 22 26 06.2
baz=354,slow=76,SNR=59
**H03N3 Juan Fernandez 42.02 175** T T 22 26 05.0
baz=354,slow=76,SNR=70
**SNOW Snow King Moun 42.26 330** P **P** **21 41 34.8 0.0**
**ZON Zonda 42.26 161** P **P** **21 41 35.8 +1.1**
ZON IAmb IAmb 21 41 42.2
comp=Z,76nm,1.5s
**ZON Zonda 42.26 161** P **P** **21 41 35.8 +1.1**
ZON pmax pmax
comp=Z,76nm,1.5s
**BDFB Brasilia 42.35 125** P **P** **21 41 34.9 -0.7**
**BDFB Brasilia 42.35 125** P **P** **21 41 35.2 -0.4**
comp=Z,9.7nm,0.9s,baz=296,slow=13,SNR=7.1
BDFB LR LR 21 59 52.4
comp=Z,1µm,18.7s,baz=312,slow=37
comp=Z,9.7nm,0.9s
**BDFB Brasilia 42.35 125** *e*P **P** **21 41 35.1 -0.5**
**TPH Tonopah 42.45 319** P **P** **21 41 36.3 0.0**
**TPH Tonopah 42.45 319** P **P** **21 41 36.3 0.0**
TPH pmax pmax
comp=Z,134nm,1.1s
**SJPY San Joaquin 42.56 142** *e*P **P** **21 41 36.4 -0.8**
**RLMT Red Lodge 42.80 333** P **P** **21 41 38.6 -0.5**
**ULM Lac du Bonnet 42.84 348** P **P** **21 41 37.3 -1.7**
ULM IAmb IAmb 21 41 46.5
comp=Z,94nm,1.2s
**ULM Lac du Bonnet 42.84 348** P **P** **21 41 38.3 -0.8**
comp=Z,14nm,0.5s,baz=174,slow=9.4,SNR=29
ULM LR LR 22 00 45.1
comp=Z,709nm,19.4s,baz=164,slow=38
comp=Z,14nm,0.5s
**ULM Lac du Bonnet 42.84 348**⇧ *e*P **P** **21 41 38.0 -1.1**
**CPUP Villa Florida 42.85 145** P **P** **21 41 38.5 -0.9**
**CPUP Villa Florida 42.85 145** P **P** **21 41 39.4 -0.1**
comp=Z,5.3nm,0.8s,baz=329,slow=8.5,SNR=6.8
CPUP LR LR 22 02 07.9
comp=Z,1µm,18.7s,baz=324,slow=40
comp=Z,5.3nm,0.8s
**VA03 San Esteban 42.86 164** P **P** **21 41 40.2 +0.7**
VA03 IAmb IAmb 21 41 46.9
comp=Z,141nm,1.9s
**H17A Grant Village 42.86 331** P **P** **21 41 39.6 -0.1**
baz=138
**NVAR Mina Array Bea 43.35 319** P **P** **21 41 44.3 +0.7**
comp=Z,4.3nm,0.6s,baz=122,slow=8.8,SNR=23
NVAR LR LR 22 01 20.2
comp=Z,732nm,20.9s,baz=120,slow=38
comp=Z,4.3nm,0.6s
**PCMB Pacaembu 43.39 134** *e*P **P** **21 41 43.2 -0.7**
**SDBA SAO DESIDERIO 43.39 118** *e*P **P** **21 41 43.1 -0.9**
**IPMB Ipameri, GO 43.47 128** *e*P **P** **21 41 43.6 -1.1**
**DGMT Dagmar 43.51 340** P **P** **21 41 44.6 +0.1**
DGMT IAmb IAmb 21 41 53.8
comp=Z,72nm,1.2s
**MT03 Universidad Ad 43.56 165** P **P** **21 41 46.0 +0.7**
MT03 IAmb IAmb 21 42 07.4
comp=Z,58nm,1.1s
**RPN Rapa Nui 43.64 215** LR LR 21 55 34.1
comp=Z,2µm,20.4s,baz=22,slow=30
**MT08 Bocatoma Ro 43.65 164** P **P** **21 41 46.7 +0.7**
MT08 IAmb IAmb 21 42 00.9
comp=Z,32nm,0.9s
**MT09 Talagante 43.71 165** P **P** **21 41 47.1 +0.7**
MT09 IAmb IAmb 21 41 53.2
comp=Z,81nm,1.7s
**BMN Battle Mountai 43.83 322** P **P** **21 41 47.8 +0.4**
**BMN Battle Mountai 43.83 322** P **P** **21 41 47.8 +0.4**
BMN pmax pmax
comp=Z,25nm,1.1s
**MT13 San Alfonso 43.86 164** P **P** **21 41 48.5 +0.9**
MT13 IAmb IAmb 21 42 05.2
comp=Z,96nm,1.6s
**PMPB Monarch Peak 43.88 315** P **P** **21 41 48.5 +0.7**
**LMEL Las Melosas 43.98 164** P **P** **21 41 49.3 +0.6**
LMEL IAmb IAmb 21 41 56.1
comp=Z,56nm,1.5s
**BO04 La Punta 44.00 165** P **P** **21 41 49.1 +0.4**
BO04 IAmb IAmb 21 42 05.5
comp=Z,57nm,1.4s
**BOZ Bozeman (W) 44.26 331** P **P** **21 41 50.5 -0.3**
BOZ IAmb IAmb 21 41 59.4
comp=Z,49nm,1.4s
**BOZ Bozeman (W) 44.26 331** P **P** **21 41 50.5 -0.3**
BOZ pmax pmax
comp=Z,49nm,1.4s
**BO01 Tunca 44.27 166** P **P** **21 41 50.9 +0.1**
BO01 IAmb IAmb 21 41 57.5
comp=Z,52nm,1.5s
**CMB Columbia Colle 44.51 317** P **P** **21 41 53.8 +1.0**
**CMB Columbia Colle 44.51 317** P **P** **21 41 53.8 +1.0**
CMB pmax pmax
comp=Z,47nm,1.7s
**PTGB Pitanga 44.91 138** *e*P **P** **21 41 55.0 -1.2**
**BB19B Bebedouro 45.03 131** *e*P **P** **21 41 56.2 -0.9**
**JANB Januaria 45.13 121** *e*P **P** **21 41 56.6 -1.4**
**EGMT Eagleton 45.27 335** P **P** **21 41 59.1 +0.4**
EGMT IAmb IAmb 21 42 06.9
comp=Z,84nm,1.7s
**AFDM Forest Hills D 45.38 318** P **P** **21 42 00.6 +0.9**
AFDM IAmb IAmb 21 42 09.2
comp=Z,41nm,1.6s
**CRSM Crissiumal (Br 45.65 143** *e*P **P** **21 42 00.8 -1.1**
**ITQB Itaqui 45.84 147** P **P** **21 42 03.0 -0.3**
**ITQB Itaqui 45.84 147** *e*P **P** **21 42 02.2 -1.1**
**UNIS Unistalda (Bra 46.23 145** *e*P **P** **21 42 06.4 -0.1**
**MSO Missoula 46.25 331** P **P** **21 42 06.3 -0.2**
**BI02 San Fabin de 46.39 167** P **P** **21 42 08.2 +0.5**
BI02 IAmb IAmb 21 42 15.9
comp=Z,89nm,2.0s
**PSAL Palomas, Salto 46.45 149** *e*P **P** **21 42 09.1 +1.0**
**RCLB Rio Claro- Sao 46.59 132** *e*P **P** **21 42 08.7 -0.7**
**ITAB Concordia 46.63 141** P **P** **21 42 08.1 -1.4**
**ITAB Concordia 46.63 141** *e*P **P** **21 42 08.3 -1.3**
**BMO Blue Mountains 46.63 327** P **P** **21 42 08.3 -1.2**
**BMO Blue Mountains 46.63 327** P **P** **21 42 08.3 -1.2**
BMO pmax pmax
comp=Z,15nm,1.2s
**NBPN Ponto Novo - B 46.92 114** *e*P **P** **21 42 10.6 -1.6**
**RODS Rosario do Sul 47.14 146** *e*P **P** **21 42 13.4 -0.2**
**ALGR Alto Alegre (B 47.21 143** *e*P **P** **21 42 12.3 -1.9**
**DiAM Diamantina, MG 47.27 125** *e*P **P** **21 42 13.8 -1.1**
**F10A Beach Ranch, E 47.32 328** P **P** **21 42 14.7 -0.2**
**VAO Valinhos 47.35 132** P **P** **21 42 14.4 -1.0**
VAO IAmb IAmb 21 42 30.5
comp=Z,22nm,1.0s
**VAO Valinhos 47.35 132** *e*P **P** **21 42 14.7 -0.7**
**SCHQ Schefferville 47.92 13** P **P** **21 42 18.9 -0.4**
comp=Z,7.3nm,0.7s,baz=241,slow=9.2,SNR=5.9
SCHQ LR LR 22 03 27.7
comp=Z,1µm,18.9s,baz=204,slow=37
comp=Z,7.3nm,0.7s
**PET01 Itanhaem-SP 47.92 134** *e*P **P** **21 42 20.0 +0.3**
**YBH Yreka Blue Hor 47.98 320** P **P** **21 42 20.1 0.0**
comp=Z,4.0nm,0.9s,baz=103,slow=6.7,SNR=4.8
YBH LR LR 22 07 02.5
comp=Z,494nm,18.4s,baz=148,slow=42
comp=Z,4.0nm,0.9s
**PINE Pine Mountain 48.04 323** P **P** **21 42 20.9 +0.2**
**CPSB Cacapava Do Su 48.16 145** *e*P **P** **21 42 21.0 -0.5**
**FFC Flin Flon 48.39 346** P **P** **21 42 22.9 0.0**
**FFC Flin Flon 48.39 346** P **P** **21 42 22.9 0.0**
FFC pmax pmax
comp=Z,210nm,2.0s
**GDU01 Guandu, BA 48.63 117** *e*P **P** **21 42 23.5 -1.8**
**G06A Carlson Farm, 48.72 325** P **P** **21 42 26.2 +0.6**
G06A IAmb IAmb 21 42 38.5
comp=Z,54nm,1.5s

**NEW Newport 48.80 330** LR LR 22 08 13.7
comp=Z,468nm,18.4s,baz=137,slow=42
**HAWA Hanford 48.82 327** P **P** **21 42 25.8 -0.6**
**PLTB Pedras Altas 49.10 146** P **P** **21 42 28.5 -0.2**
PLTB IAmb IAmb 21 42 35.0
comp=Z,54nm,1.2s
**PLTB Pedras Altas 49.10 146** *e*P **P** **21 42 28.9 +0.3**
**GO06 Curarrehue 49.16 168** P **P** **21 42 29.4 +0.3**
GO06 IAmb IAmb 21 42 44.9
comp=Z,42nm,1.6s
**RCBR Riachuelo 49.27 105** LR LR 22 04 44.3
comp=Z,610nm,18.3s,baz=332,slow=38
**CMC01 Camacan, BA 49.38 119** *e*P **P** **21 42 30.1 -1.0**
**TER01 Tubaro-SC 49.43 140** *e*P **P** **21 42 31.2 -0.1**
**SJMB Sao Joao De Ma 49.51 124** *e*P **P** **21 42 31.2 -0.8**
**GUA01 Guaratinga, BA 49.67 120** *e*P **P** **21 42 32.4 -0.9**
**BSFB Barra de Sao F 49.85 123** *e*P **P** **21 42 33.8 -0.9**
**NAN01 Guarapari, ES 49.98 122** *e*P **P** **21 42 35.8 +0.2**
**LL04 Puerto Octay 50.26 169** P **P** **21 42 37.3 0.0**
LL04 IAmb IAmb 21 42 53.9
comp=Z,46nm,1.4s
**PLCA Paso Flores 50.45 168** P **P** **21 42 39.0 +0.1**
**PLCA Paso Flores 50.45 168** P **P** **21 42 38.9 +0.1**
comp=Z,13nm,0.8s,baz=341,slow=9.0,SNR=32
PLCA LR LR 22 00 15.7
comp=Z,396nm,18.6s,baz=14,slow=32
comp=Z,13nm,0.8s
**PLCA Paso Flores 50.45 168** P **P** **21 42 39.0 +0.1**
PLCA pmax pmax
comp=Z,20nm,0.9s
**TRQA Tornquist 50.46 158** P **P** **21 42 38.6 -0.4**
TRQA IAmb IAmb 21 42 45.2
comp=Z,68nm,1.6s
**TRQA Tornquist 50.46 158** P **P** **21 42 38.6 -0.4**
TRQA pmax pmax
comp=Z,68nm,1.6s
**RIB01 Linhares ES 50.46 124** *e*P **P** **21 42 38.4 -0.8**
**CAM01 Campos-RJ 50.72 127** *e*P **P** **21 42 41.4 +0.2**
**NBBL Bica de Lurdes 50.83 109** *e*P **P** **21 42 40.9 -1.2**
**ALF01 Guarapari-ES 50.84 125** *e*P **P** **21 42 42.1 +0.1**
**LL01 San Ignacio de 51.68 170** P **P** **21 42 48.2 +0.3**
LL01 IAmb IAmb 21 43 03.2
comp=Z,39nm,1.4s
**LL02 Futaleuf 52.57 170** P **P** **21 42 54.8 +0.2**
LL02 IAmb IAmb 21 43 08.0
comp=Z,54nm,1.1s
**BBB Bella Bella 56.76 329** LR LR 22 11 45.8
comp=Z,471nm,18.9s,baz=124,slow=40
**YKA Yellowknife Ar 58.44 343** P **P** **21 43 36.0 -0.5**
comp=Z,3.7nm,0.8s,baz=138,slow=7.0,SNR=16
YKA LR LR 22 10 10.6
comp=Z,790nm,18.6s,baz=147,slow=38
comp=Z,3.7nm,0.8s
**TAOE Nuku Hiva Isla 59.34 254** *e*S **S** **21 51 50.4 -1.8**
TAOE *e*SS **SS** **21 55 48.5 +1.2**
comp=Z,208nm,39.9s
TAOE *e*LQ LQ 21 58 41.3
comp=Z,3µm,30.0s
TAOE *e*LR LR 22 01 10.0
comp=Z,543nm,23.8s
**TOAD Toad River Com 59.43 336** P **P** **21 43 43.2 -0.4**
baz=130
**RKT Rikitea 59.67 237** *e*P P 21 43 38.7 -7.1
comp=Z,575nm,28.5s
RKT *e*S **S** **21 51 47.9 -8.0**
comp=Z,2µm,31.0s
RKT *e*SS **SS** **21 55 53.0 +1.0**
comp=Z,1µm,28.2s
RKT *e*LQ LQ 21 58 51.1
comp=Z,3µm,32.2s
RKT *e*LR LR 22 01 27.6
comp=Z,5µm,23.8s
**U35K Hyder 59.76 332** P **P** **21 43 45.9 0.0**
baz=123
**KOTAN Kotaneelee Air 59.81 338** P **P** **21 43 45.8 -0.3**
baz=132
**LIRD Liard River Hi 60.13 336** P **P** **21 43 47.6 -0.8**
baz=129
**V35K Ketchikan 60.21 330** P **P** **21 43 48.5 -0.4**
baz=121
**T35M Bob Quinn 60.46 333** P **P** **21 43 51.3 +0.6**
baz=124
**CRAG Craig 61.02 330** P **P** **21 43 55.5 +1.0**
baz=120
**WRAK Wrangell Islan 61.13 331** P **P** **21 43 57.0 +1.8**
baz=121
**DLBC Dease Lake 61.18 334** P **P** **21 43 56.0 +0.4**
**DLBC Dease Lake 61.18 334** P **P** **21 43 55.9 +0.3**
comp=Z,7.8nm,1.2s,baz=105,slow=3.8,SNR=6.4
DLBC LR LR 22 13 46.3
comp=Z,751nm,18.6s,baz=115,slow=39
comp=Z,7.8nm,1.2s
**DLBC Dease Lake 61.18 334** P **P** **21 43 56.5 +0.9**
baz=124
**U33K Whale Pass 61.34 331** P **P** **21 43 56.8 +0.1**
baz=120
**S34M Telegraph Cree 61.37 333** P **P** **21 43 57.3 +0.5**
baz=123
**WTLY Watson Lake, Y 61.64 336** P **P** **21 43 59.2 +0.5**
baz=126
**WRGLY Wrigley 61.70 341** P **P** **21 43 58.5 -0.4**
baz=133
**R33M Jennings River 62.12 335** P **P** **21 44 03.0 +0.9**
baz=124
**TGTN Hyland Airport 62.29 337** P **P** **21 44 03.5 +0.4**
baz=128
**SFJD Kangerlussuaq 62.34 14** LR LR 22 10 50.6
comp=Z,1µm,20.9s,baz=222,slow=36
**Q32M Nahina River 62.44 334** P **P** **21 44 04.4 +0.1**
baz=122
**S32K Killisnoo 62.72 332** P **P** **21 44 06.7 +0.9**
baz=120
**SIT Sitka 62.87 331** P **P** **21 44 06.8 -0.1**
baz=119
**R32K Eaglecrest 63.09 332** P **P** **21 44 09.3 +0.9**
baz=120
**P33M Teslin, Yukon 63.35 335** P **P** **21 44 10.2 0.0**
baz=122
**P32M Atlin 63.41 334** P **P** **21 44 10.6 +0.1**
baz=121
**R31K City Hall, Gus 63.72 332** P **P** **21 44 12.8 +0.3**
baz=119
**S31K Pelican 63.73 332** P **P** **21 44 13.0 +0.4**
baz=118
**N32M Quiet Lake 63.97 336** P **P** **21 44 14.8 +0.6**
baz=123
**SKAG Skagway 64.05 333** P **P** **21 44 15.5 +0.9**
baz=120
**WHY Whitehorse 64.46 335** P **P** **21 44 17.4 -0.1**
baz=121
**PLBC Pleasant Camp 64.51 333** P **P** **21 44 18.4 +0.7**
baz=119
**FARO Faro, Yukon 64.66 337** P **P** **21 44 19.2 +0.5**
baz=123
**O30N Mendenhall 65.03 334** P **P** **21 44 21.4 +0.3**
baz=120,SNR=11
**M31M Drury Creek, Y 65.06 336** P **P** **21 44 21.8 +0.5**
baz=122
**P30M Million Dollar 65.09 334** P **P** **21 44 22.0 +0.5**
baz=118
**P29M Windy Craggy 65.21 333** P **P** **21 44 22.0 -0.3**
baz=117
**PMOZ Porto Moniz, M 65.22 58** *e*P **P** **21 44 26.3 +3.3**
**N31M Braeburn, Yuko 65.26 335** P **P** **21 44 23.0 +0.4**
baz=120
**BBTS Babate 65.36 78** LR LR 22 11 49.9
comp=Z,335nm,20.4s,baz=144,slow=35
**N30M Aishikik Lake 65.79 335** P **P** **21 44 26.7 +0.6**
baz=119,SNR=10
**O29M Mount Kennedy 65.89 333** P **P** **21 44 27.3 +0.4**
baz=117
**PNL Peninsula 65.98 332** P **P** **21 44 27.9 +0.7**
baz=116
**YUK6 Outpost Mounta 66.09 334** P **P** **21 44 29.4 +1.2**
baz=117
**C36M Paulatuk 66.16 345** P **P** **21 44 27.2 -1.0**
baz=135
**M30M Minto, Yukon 66.22 336** P **P** **21 44 28.5 -0.3**
baz=120,SNR=13
**YUK4 Talbot Arm 66.40 334** P **P** **21 44 30.8 +0.7**
baz=117
**ICESG Greenland Ices 66.67 16** *i*P **P** **21 44 30.2 -1.6**
ICESG IAmb IAmb 21 44 42.0
comp=Z,93nm,1.3s
**O28M Mount Upton 66.81 333** P **P** **21 44 33.8 +0.9**
baz=116

**M29M Somme Creek 66.83 335** P **P** **21 44 33.5 +0.7**
baz=118,SNR=24
**YUK8 Steele Glacier 66.85 334** P **P** **21 44 33.7 +0.6**
baz=116
**H31M Peel River 66.99 340** P **P** **21 44 33.9 +0.3**
baz=123,SNR=12
**L29M L29M 67.01 336** P **P** **21 44 34.1 +0.3**
baz=118,SNR=15
**J30M Hart River 67.04 338** P **P** **21 44 34.6 +0.5**
baz=121,SNR=18
**K29M Barlow Dome 67.13 337** P **P** **21 44 34.5 -0.2**
K29M IAmb IAmb 21 44 41.9
comp=Z,22nm,1.1s
**K29M Barlow Dome 67.13 337** P **P** **21 44 34.6 0.0**
baz=119,SNR=18
**LOGN Logan Glacier 67.20 333** P **P** **21 44 36.2 +1.0**
LOGN IAmb IAmb 21 44 45.6
comp=Z,40nm,1.4s
**MESA MESA 67.36 332** P **P** **21 44 36.9 +0.7**
baz=114
**YUK3 Moose Creek 67.37 334** P **P** **21 44 36.7 +0.4**
baz=116
**I30M Mount Dempster 67.39 339** P **P** **21 44 36.6 +0.3**
baz=121,SNR=69
**CTG Chitna Glacier 67.41 333** P **P** **21 44 37.4 +0.9**
baz=114
**GRNC Granite Creek 67.50 333** P **P** **21 44 36.9 -0.2**
GRNC IAmb IAmb 21 44 47.5
comp=Z,25nm,1.3s
**G31M Satah River 67.58 341** P **P** **21 44 37.2 -0.1**
baz=124,SNR=29
**J29N Klondike Camp 67.69 337** P **P** **21 44 38.5 +0.4**
baz=119
**F31M Tsiigehtchic 67.70 341** P **P** **21 44 38.5 +0.5**
baz=124,SNR=8.3
**BGLC Bering Glacier 67.95 332** P **P** **21 44 39.0 -0.7**
baz=112
**DAWY Dawson 67.96 337** P **P** **21 44 39.4 -0.4**
baz=118
**CRQE Cirque 68.11 333** P **P** **21 44 41.4 +0.5**
baz=113
**EPYK Eagle Plains 68.11 340** P **P** **21 44 40.4 -0.3**
baz=121
**INK Inuvik 68.13 342** P **P** **21 44 40.8 +0.1**
**INK Inuvik 68.13 342** LR LR 22 17 40.1
comp=Z,1µm,18.1s,baz=118,slow=39
**INK Inuvik 68.13 342** P **P** **21 44 41.0 +0.4**
baz=125,SNR=10
**INK Inuvik 68.13 342** P **P** **21 44 40.8 +0.1**
INK pmax pmax
comp=Z,86nm,1.3s
**I29M Ogilvie Camp, 68.17 338** P **P** **21 44 41.2 +0.1**
baz=119,SNR=28
**M27K Edge Creek, AK 68.22 335** P **P** **21 44 41.8 +0.2**
baz=114
**G30M tAoh Zraii Nji 68.26 340** P **P** **21 44 41.8 +0.2**
baz=122
**A36M Sachs Harbour 68.31 347** P **P** **21 44 40.6 -1.2**
baz=134
**MCARA McCarthy VSAT 68.32 333** P **P** **21 44 43.4 +1.3**
**MCARA McCarthy VSAT 68.32 333** P **P** **21 44 43.3 +1.3**
baz=113
**KAIM Kayak Island 68.41 332** P **P** **21 44 41.6 -1.1**
baz=111
**F30M Barrier River 68.45 341** P **P** **21 44 43.1 +0.4**
baz=122,SNR=17
**L27K Beaver Creek, 68.49 335** P **P** **21 44 43.5 +0.3**
baz=115,SNR=21
**H29M Whitestone 68.61 339** P **P** **21 44 44.4 +0.6**
baz=119
**M26K Nabesna, AK 68.71 334** P **P** **21 44 45.0 +0.4**
baz=113
**I28M Miner Creek 68.81 338** P **P** **21 44 45.5 +0.4**
baz=117,SNR=18
**G29M Pine Creek 68.83 340** P **P** **21 44 45.5 +0.4**
baz=120,SNR=22
**BMRM Bremner River 68.88 333** P **P** **21 44 46.6 +0.9**
baz=111
**EGAK Eagle 68.97 337** P **P** **21 44 45.8 -0.2**
**EGAK Eagle 68.97 337** P **P** **21 44 45.4 -0.6**
baz=116,SNR=11
**K27K Chicken 69.00 336** P **P** **21 44 46.7 +0.4**
baz=115
**N25K Chitina, Valde 69.11 333** P **P** **21 44 47.9 +0.8**
baz=112,SNR=12
**L26K Log Cabin Wild 69.11 335** P **P** **21 44 47.5 +0.4**
baz=113,SNR=14
**Q23K Middleton Isla 69.16 331** P **P** **21 44 48.3 +1.1**
baz=109
**EYAK Cordova Ski Ar 69.25 332** P **P** **21 44 48.8 +0.9**
baz=110
**SUMG Summit 69.31 13** P **P** **21 44 47.0 -1.5**
**SUMG Summit 69.31 13** P **P** **21 44 47.0 -1.5**
SUMG pmax pmax
comp=Z,75nm,1.0s
**SUMG Summit 69.31 13** *e*P **P** **21 44 47.5 -1.0**
SUMG IAmb IAmb 21 44 59.3
comp=Z,63nm,0.9s
**I27K Kandik River 69.50 338** P **P** **21 44 50.2 +0.8**
baz=116,SNR=61
**E29M Blow River 69.54 341** P **P** **21 44 49.8 +0.3**
baz=120,SNR=8.9
**HARP HAARP 69.64 334** P **P** **21 44 51.0 +0.7**
baz=111
**FID Port Fidalgo 69.66 332** P **P** **21 44 51.0 +0.6**
FID IAmb IAmb 21 45 00.6
comp=Z,46nm,1.5s
**KLU Klutina 69.66 333** P **P** **21 44 50.8 +0.3**
KLU IAmb IAmb 21 45 05.9
comp=Z,27nm,1.1s
**KLU Klutina 69.66 333** P **P** **21 44 51.0 +0.5**
baz=110
**H27K Steamboat Moun 69.75 338** P **P** **21 44 51.4 +0.5**
baz=116,SNR=14
**SCRK Sand Creek 69.75 336** P **P** **21 44 51.8 +0.7**
baz=113,SNR=17
**J26L Joseph Creek 69.79 336** P **P** **21 44 51.9 +0.6**
baz=114,SNR=16
**F28M Old Crow 69.80 340** P **P** **21 44 51.0 -0.2**
baz=118,SNR=10
**P23K Montague Islan 69.85 331** P **P** **21 44 52.0 +0.5**
baz=108
**I26K Coal Creek Min 69.96 337** P **P** **21 44 52.2 +0.1**
baz=114
**M24K Tolsona, Glenn 69.98 334** P **P** **21 44 53.4 +1.0**
baz=110
**GLI Glacier Island 69.99 332** P **P** **21 44 52.3 -0.1**
baz=109
**PAX Paxson 69.99 335** P **P** **21 44 52.9 +0.4**
baz=111
**RIDG Independent Ri 70.01 335** P **P** **21 44 52.5 -0.1**
**RIDG Independent Ri 70.01 335** P **P** **21 44 53.3 +0.7**
baz=112,SNR=13
**G27K Doyon Strip 70.05 339** P **P** **21 44 52.8 0.0**
baz=116
**E28M Babbage River 70.17 341** P **P** **21 44 53.3 -0.1**
baz=119,SNR=16
**D28M Stokes Point 70.28 342** P **P** **21 44 54.6 +0.6**
baz=120
**SCM Sheep Creek Mo 70.40 333** P **P** **21 44 55.9 +0.8**
baz=109
**K24K Donnelly Dome 70.42 335** P **P** **21 44 55.7 +0.6**
baz=111,SNR=6.6
**BORG Borgarnes 70.47 24** LR LR 22 13 09.8
comp=Z,866nm,19.5s,baz=232,slow=34
**PPT Papeete 70.54 248** LR LR 22 08 41.6
comp=Z,602nm,18.1s,baz=98,slow=30
**PPT2 Papeete2 70.55 248** *e*P **P** **21 44 53.5 -3.2**
comp=Z,115nm,25.8s
PPT2 *e*S **S** **21 54 08.1 -1.9**
comp=Z,386nm,27.2s
PPT2 *e*SS **SS** **21 58 37.0 -4.8**
comp=Z,308nm,29.5s
PPT2 *e*LQ LQ 22 03 28.6
comp=Z,421nm,25.5s
PPT2 *e*LR LR 22 06 25.1
comp=Z,394nm,23.5s
PPT2 *e*LR LR 22 06 25.5
comp=Z,248nm,22.0s
**J25K Salcha River, 70.55 336** P **P** **21 44 56.5 +0.6**
baz=112,SNR=20
**PWL Port Wells 70.55 332** P **P** **21 44 55.8 -0.1**
baz=108
**M23K Glacier View 70.57 333** P **P** **21 44 56.6 +0.6**
baz=109,SNR=6.0
**E27K Coleen River 70.65 340** P **P** **21 44 56.6 +0.3**
baz=117,SNR=9.6
**KNK Knik Glacier 70.78 332** P **P** **21 44 57.1 -0.2**

KNK **Knik Glacier** 70.78 332 P P 21 44 57.5 +0.2
baz=108,SNR=8.1
WAT6 **Susitna Watana** 70.83 334 P P 21 44 57.6 -0.1
baz=109,SNR=19
DHY **Denali Highway** 70.84 334 P P 21 44 57.6 -0.2
baz=109
NEEM **North Greenlan** 70.84 7 eP P 21 44 56.1 -1.6
SML **Sawmill** 70.85 333 P P 21 44 58.0 +0.2
baz=108,SNR=13
SEW **Seward** 70.86 331 P P 21 44 57.9 +0.2
baz=106
G26K **Porcupine Rive** 70.87 339 P P 21 44 57.6 -0.1
baz=114
D27M **Malcolm River** 70.93 341 P P 21 44 58.6 +0.5
baz=118
PRP **Porcupine Dome** 70.95 337 P P 21 44 58.6 +0.1
baz=112
O22K **Cooper Landing** 71.10 331 P P 21 44 59.3 +0.1
baz=106
GHO **Glory Hole Cre** 71.10 333 P P 21 44 59.4 +0.1
GHO IAmb IAmb 21 45 06.6
comp=Z,31nm,0.9s
HDA **Harding Lake** 71.12 336 P P 21 44 59.3 0.0
baz=110,SNR=18
PMR **Palmer** 71.14 333 P P 21 44 59.6 +0.2
PMR IAmb IAmb 21 45 08.5
comp=Z,20nm,1.1s
PMR **Palmer** 71.14 333 P P 21 44 59.6 +0.2
baz=107
PMR **Palmer** 71.14 333 P P 21 44 59.6 +0.2
PMR pmax pmax
comp=Z,20nm,1.1s
ILAR **Eielson Array** 71.22 336 P P 21 44 59.6 -0.3
comp=Z,2.6nm,0.6s,baz=112,slow=5.8,SNR=26
ILAR LR LR 22 20 55.9
comp=Z,404nm,19.4s,baz=98,slow=40
comp=Z,2.6nm,0.6s
FYU **Fort Yukon** 71.25 338 P P 21 45 00.5 +0.5
FYU IAmb IAmb 21 45 07.7
comp=Z,48nm,1.3s
WAT1 **Susitna Watana** 71.27 334 P P 21 45 00.2 0.0
baz=108
RC01 **Rabbit Creek A** 71.28 332 P P 21 45 00.4 +0.1
baz=107
F26K **Sheenjek River** 71.31 339 P P 21 45 01.1 +0.7
baz=114,SNR=6.9
H25L **Birch Creek** 71.35 338 P P 21 45 00.9 +0.3
baz=112,SNR=5.6
CCB **Clear Creek Bu** 71.55 336 P P 21 45 01.7 -0.1
CCB IAmb IAmb 21 45 10.3
comp=Z,31nm,1.5s
POKR **Poker Plat Res** 71.56 336 P P 21 45 02.0 +0.1
baz=110
RND **Reindeer** 71.58 334 P P 21 45 02.4 +0.3
RND **Reindeer** 71.58 334 P P 21 45 02.4 +0.3
RND pmax pmax
comp=Z,132nm,1.2s
G25K **Bearman Lake** 71.64 338 P P 21 45 03.2 +0.9
baz=112,SNR=10
M22K **Willow** 71.64 333 P P 21 45 02.7 +0.2
baz=106
MCK **McKinley** 71.72 335 P P 21 45 03.1 +0.2
baz=108,SNR=10
F25K **Christian Rive** 71.79 339 P P 21 45 04.3 +1.0
baz=112,SNR=16
HOM **Homer** 71.80 330 P P 21 45 04.4 +0.9
baz=104
MDM **Murphy Dome** 71.82 336 P P 21 45 03.8 +0.3
MDM IAmb IAmb 21 45 12.3
comp=Z,56nm,1.5s
KDAK **Kodiak Island** 71.83 328 LR LR 22 18 33.0
comp=Z,262nm,19.9s,baz=125,slow=38
KDAK **Kodiak Island** 71.83 328 P P 21 45 03.8 +0.2
baz=103
KDAK **Kodiak Island** 71.83 328 eP P 21 45 02.1 -1.5
KDAK pmax pmax
comp=Z,35nm,1.3s
SUA **Susitna One** 71.85 332 P P 21 45 04.2 +0.3
baz=106,SNR=13
CAPN **Captain Cook N** 71.85 331 P P 21 45 04.2 +0.5
baz=105
CUT **Chulitna** 71.90 333 P P 21 45 04.3 +0.4
baz=106
Q20K **Shuyak Island** 71.92 329 P P 21 45 05.0 +0.9
baz=103
C27K **Jago River** 71.97 341 P P 21 45 05.1 +0.8
baz=115
H24K **Noodor Dome** 71.98 337 P P 21 45 04.9 +0.4
baz=110
NEA2 **Nenana** 72.04 336 P P 21 45 04.8 -0.1
baz=108,SNR=6.7
BWN **Browne** 72.08 335 P P 21 45 04.9 -0.1
OHAK **Old Harbor** 72.08 327 P P 21 45 05.6 +0.5
OHAK IAmb IAmb 21 45 15.3
comp=Z,25nm,1.1s
OHAK **Old Harbor** 72.08 327 P P 21 45 05.6 +0.5
baz=102
TBI **Tubuai** 72.12 242 eS S 21 54 25.0 -2.8
comp=Z,3µm,31.0s
TBI eSS SS 21 59 03.1 -2.5
comp=Z,1µm,33.5s
TBI eLQ LQ 22 03 58.4
comp=Z,2µm,30.0s
TBI eLR LR 22 07 12.5
comp=Z,1µm,24.8s
G24K **Hadweenzic Riv** 72.13 338 P P 21 45 05.8 +0.5
baz=110,SNR=12
I23K **Minto, Yukon-K** 72.34 336 P P 21 45 07.2 +0.7
baz=108
SKT **Skwentna** 72.35 333 P P 21 45 06.8 0.0
baz=105,SNR=17
O20K **Slope Mountain** 72.39 330 P P 21 45 07.2 +0.1
baz=104,SNR=7.0
SII **Sitkinak Islan** 72.43 327 P P 21 45 07.9 +0.6
baz=101
N20K **Mount Spurr** 72.46 332 P P 21 45 07.6 +0.1
baz=104
SPCR **Spurr Chakacha** 72.46 332 P P 21 45 07.0 -0.5
baz=104
C26K **Camden Bay** 72.47 341 P P 21 45 08.4 +1.2
baz=114
MORF **Marmelete** 72.54 54 eP P 21 45 09.3 +0.9
comp=Z,92nm,1.8s
MORF **Marmelete** 72.54 54 eP P 21 45 09.3 +0.9
MORF IAmb IAmb 21 45 11.7
comp=Z,172nm,2.0s
MORF eS S 21 54 33.0 +0.6
MORF **Marmelete** 72.54 54 eP P 21 45 09.3 +0.9
MORF eS S 21 54 33.0 +0.6
F24K **Squaw Lake** 72.56 339 P P 21 45 08.9 +0.9
baz=110
P19K **Oil Pt** 72.58 330 P P 21 45 08.2 0.0
baz=103
H23K **Yukon River** 72.62 337 P P 21 45 08.9 +0.6
baz=108
Q19K **Cape Douglas,** 72.63 329 P P 21 45 08.8 +0.3
baz=102
PNCL **Nicolau / Gran** 72.67 53 eP P 21 45 11.0 +1.9
comp=Z,40nm,2.2s
BPAW **Bear Paw Mtn.** 72.69 335 P P 21 45 08.7 -0.1
baz=106,SNR=13
D25K **Kavik River** 72.71 341 P P 21 45 09.0 +0.3
baz=112,SNR=19
R18K **Karluk** 72.77 328 P P 21 45 09.7 +0.4
baz=101
PCAS **Casmilo, Conde** 72.79 51 eP P 21 45 09.8 0.0
comp=Z,73nm,1.6s
MLY **Manley** 72.86 336 P P 21 45 09.9 +0.1
baz=107,SNR=19
PPLA **Purkeypile** 72.88 333 P P 21 45 09.7 -0.3
baz=105
MESJ **Messejana** 72.90 53 eP P 21 45 11.8 +1.3
comp=Z,41nm,1.6s
MESJ **Messejana** 72.90 53 eP P 21 45 11.4 +0.9
MESJ IAmb IAmb 21 45 12.5
comp=Z,22nm,1.1s
MESJ eS S 21 54 37.0 +0.6
MESJ **Messejana** 72.90 53 eP P 21 45 11.4 +0.9
MESJ eS S 21 54 37.0 +0.6
PMTG **Montargil** 72.95 52 eP P 21 45 12.0 +1.2
comp=Z,42nm,1.8s
E24K **Your Creek** 72.97 339 P P 21 45 11.0 +0.6
baz=110
PCVE **Castro Verde** 73.04 53 eP P 21 45 12.3 +1.0
comp=Z,39nm,2.0s
M20K **Styx River** 73.06 332 P P 21 45 10.7 -0.3
baz=104,SNR=9.3

PGAV **Gavieira, Arco** 73.08 49 eP P 21 45 12.7 +1.1
comp=Z,62nm,1.4s
PGAV **Gavieira, Arco** 73.08 49 eLR LR 22 08 25.5
comp=Z,377nm,18.0s
CHIR **Chirikof Islan** 73.08 326 P P 21 45 11.5 +0.3
baz=100
G23K **Bananza Creek** 73.09 338 P P 21 45 12.1 +1.0
baz=108,SNR=20
PBEJ **Beja** 73.19 53 eP P 21 45 13.4 +1.2
comp=Z,45nm,1.6s
CHUM **Lake Minchumin** 73.20 334 P P 21 45 11.6 -0.1
baz=105
Q18K **Katmai Hardscr** 73.27 329 P P 21 45 12.3 -0.1
baz=101
PVAQ **Vaqueiros** 73.29 54 eP P 21 45 14.3 +1.5
comp=Z,47nm,1.6s
PVAQ eS SKiKP 21 54 48.3 +4.4
PVAQ **Vaqueiros** 73.29 54 eLR LR 22 07 42.9
comp=Z,732nm,20.0s
PVIS **Viseu** 73.29 50 eP P 21 45 12.5 -0.3
comp=Z,48nm,1.4s
COLD **Coldfoot** 73.31 338 P P 21 45 13.2 +0.8
baz=108,SNR=16
H22K **Ishtalitna Cre** 73.36 337 P P 21 45 12.7 +0.1
baz=106,SNR=13
E23K **Chandalar** 73.37 339 P P 21 45 13.4 +0.7
baz=108,SNR=15
POLO **Lamas de Olo** 73.40 49 eP P 21 45 11.9 -1.6
comp=Z,27nm,1.5s
PESTR **Estremoz** 73.44 52 P P 21 45 13.0 -0.6
PESTR IAmb IAmb 21 45 23.0
comp=Z,32nm,1.0s
PESTR **Estremoz** 73.44 52 eP P 21 45 13.7 0.0
comp=Z,71nm,1.5s
N19K **Bonanza Creek** 73.45 331 P P 21 45 12.6 -0.8
baz=102,SNR=9.0
PVRL **Vila Real** 73.45 50 eP P 21 45 15.0 +1.3
comp=Z,53nm,1.5s
D24K **Happy Valley** 73.46 340 P P 21 45 13.6 +0.5
baz=110
P18K **Big Mountain,** 73.53 329 P P 21 45 13.4 -0.4
baz=101
L20K **Farewell, AK** 73.54 333 P P 21 45 13.4 -0.4
baz=103,SNR=19
MTE **Manteigas** 73.54 50 P P 21 45 13.9 -0.4
MTE IAmb IAmb 21 45 21.1
comp=Z,34nm,1.2s
MTE **Manteigas** 73.54 50 eP P 21 45 15.5 +1.2
comp=Z,38nm,1.3s
MTE eS SKiKP 21 54 45.2 +0.9
MTE **Manteigas** 73.54 50 eLR LR 22 08 20.5
comp=Z,677nm,20.0s
TOLK **Toolik Lake Re** 73.54 340 P P 21 45 14.6 +0.9
baz=109
PCBR **Castelo Branco** 73.57 51 eP P 21 45 14.7 +0.3
comp=Z,36nm,1.4s
O18K **Koktuh Hills** 73.61 330 P P 21 45 13.9 -0.3
baz=101
C24K **Franklin Bluff** 73.61 341 P P 21 45 15.0 +1.0
baz=110
PMRV **Marv??o** 73.61 51 eP P 21 45 15.8 +1.1
comp=Z,31nm,1.5s
PMRV eS S 21 54 48.9 +4.4
PMRV **Marv??o** 73.61 51 eLR LR 22 08 10.7
comp=Z,426nm,20.0s
M19K **Big River Lodg** 73.64 332 P P 21 45 14.6 +0.2
baz=103
Q17K **Contact Creek** 73.65 328 P P 21 45 15.0 +0.3
baz=100
G22K **Bettles** 73.71 338 P P 21 45 15.5 +0.8
baz=107
R17L **Mt. Peulik Vol** 73.79 328 P P 21 45 15.7 +0.4
baz=100
K20K **Telida** 73.83 334 P P 21 45 15.2 -0.2
baz=103,SNR=12
PBAR **Barrancos** 73.85 53 eP P 21 45 17.2 +1.2
comp=Z,50nm,1.5s
H21K **Melozitna Rive** 73.86 336 P P 21 45 15.5 -0.1
baz=105
L19K **White Mountain** 73.92 332 P P 21 45 15.7 -0.3
baz=102
MVO **Moncorvo** 73.97 50 eP P 21 45 16.3 -0.5
comp=Z,40nm,1.3s
MVO eS S 21 54 53.6 +5.1
MVO **Moncorvo** 73.97 50 eLR LR 22 07 29.6
comp=Z,314nm,20.0s
D23K **Nanushuk River** 74.03 340 P P 21 45 17.1 +0.6
baz=108
J20K **Nowinta River** 74.05 334 P P 21 45 16.5 -0.2
baz=103,SNR=14
N18K **Kilae Creek** 74.10 331 P P 21 45 17.0 -0.1
baz=101,SNR=6.5
P17K **Kvichak River** 74.10 329 P P 21 45 16.6 -0.4
baz=100
Q16K **King Salmon** 74.12 329 P P 21 45 18.0 +0.8
baz=100
F22K **John River** 74.13 338 P P 21 45 17.8 +0.7
baz=106
E22K **Anaktuvuk Pass** 74.17 339 P P 21 45 17.4 -0.1
baz=107
PBRG **Braganca** 74.21 49 eP P 21 45 19.7 +1.5
comp=Z,46nm,1.4s
M18K **Stony River** 74.22 332 P P 21 45 17.3 -0.5
baz=101,SNR=12
C23K **Itkillik River** 74.28 341 P P 21 45 18.7 +0.8
baz=108,SNR=6.8
I20K **Naaghedeneel** 74.33 335 P P 21 45 18.2 -0.1
baz=103
G21K **Allakaket** 74.36 337 P P 21 45 19.2 +0.7
baz=105,SNR=28
O17K **Koliganek Bris** 74.53 330 P P 21 45 19.6 0.0
baz=100
F21K **Alatna River** 74.54 338 P P 21 45 20.5 +1.0
baz=105,SNR=19
PMSA **Palmer Station** 74.57 172 LR LR 22 12 27.4
comp=Z,217nm,20.1s,baz=336,slow=31
J19K **Poorman** 74.64 334 P P 21 45 19.9 -0.3
baz=102
H20K **Anotleneega Mo** 74.66 336 P P 21 45 19.9 -0.3
baz=103
D22K **Ayikyak River** 74.69 339 P P 21 45 20.2 -0.2
baz=106
N17K **Nushagak Hills** 74.70 330 P P 21 45 20.7 +0.1
baz=100
CHGN **Chignik** 74.70 326 P P 21 45 21.1 +0.5
CHGN IAmb IAmb 21 45 28.1
comp=Z,49nm,1.0s
CHGN **Chignik** 74.70 326 P P 21 45 20.9 +0.3
baz=97
L18K **Granite Mounta** 74.77 332 P P 21 45 21.0 +0.1
baz=101
P16K **Nushagak River** 74.86 329 P P 21 45 21.2 -0.3
baz=98
M17K **Holitna River** 74.97 331 P P 21 45 22.3 +0.1
baz=100
O16K **Kokwok River B** 75.00 329 P P 21 45 21.8 -0.5
baz=99
J18K **Innoko River** 75.01 334 P P 21 45 22.1 -0.2
baz=101,SNR=5.2
E21K **Kilik River** 75.03 339 P P 21 45 22.9 +0.5
baz=105
CHNA **Chernabura Isl** 75.19 324 P P 21 45 23.1 -0.3
baz=96
H19K **Roundabout Mou** 75.31 336 P P 21 45 24.1 +0.2
baz=102,SNR=9.0
GCSA **Galena City Sc** 75.33 335 P P 21 45 23.7 -0.3
baz=101
S14K **Fog Glacier** 75.33 326 P P 21 45 25.0 +0.6
baz=96
F20K **Avaraart Lake** 75.34 337 P P 21 45 24.5 +0.4
baz=103
B22K **Teshekpuk Lake** 75.35 341 P P 21 45 24.5 +0.4
baz=106
N16K **Nishlik Lake** 75.47 330 P P 21 45 25.7 +0.7
baz=98
L17K **Donlin** 75.49 332 P P 21 45 25.4 +0.2
baz=99
C21K **Knifeblade Rid** 75.50 339 P P 21 45 25.5 +0.5
baz=104
B21K **Ikpikpuk River** 75.56 340 P P 21 45 24.4 -0.9
baz=104
K17K **Iditarod** 75.59 333 P P 21 45 25.7 0.0
baz=99
M16K **Timber Creek** 75.64 331 P P 21 45 26.9 +1.0
baz=98
G19K **Purcell Mounta** 75.69 336 P P 21 45 26.5 +0.4
baz=101,SNR=13
SDPT **Sand Point** 75.75 325 P P 21 45 27.7 +1.0
baz=96
E20K **Nigu River** 75.79 338 P P 21 45 27.7 +0.9
baz=103,SNR=8.2
MDT **Midelt** 75.81 58 LR LR 22 14 00.2
comp=Z,317nm,20.5s,baz=290,slow=32
O15K **Ungalikthiuk R** 75.82 329 P P 21 45 26.8 -0.2
baz=97
DAG **Danmarks Havn** 75.96 12 eP P 21 45 26.3 -1.2
PAB **San Pablo** 75.97 51 P P 21 45 27.7 -0.7
PAB IAmb IAmb 21 45 37.9
comp=Z,25nm,1.1s
PAB **San Pablo** 75.97 51 P P 21 45 27.7 -0.7
PAB pmax pmax
comp=Z,25nm,1.2s
L16K **Owhat River** 75.98 332 P P 21 45 28.6 +0.8
baz=98
E19K **Redstone River** 76.00 338 P P 21 45 28.6 +0.6
baz=101
H18K **Honhosa River** 76.03 335 P P 21 45 28.9 +0.8
baz=100,SNR=6.7
D20K **Etivluk River** 76.04 339 P P 21 45 28.7 +0.5
baz=102
J17K **VABM Dome** 76.05 333 P P 21 45 28.7 +0.5
baz=99
N15K **Kwethluk River** 76.08 330 P P 21 45 29.5 +1.0
baz=97
F19K **Shaleruckik Mo** 76.09 337 P P 21 45 28.7 +0.3
baz=101
ESDC **Sonseca Array** 76.27 51 P P 21 45 30.0 -0.1
comp=Z,21nm,1.1s,baz=278,slow=5.2,SNR=50
ESDC LR LR 22 15 48.0
comp=Z,516nm,19.0s,baz=268,slow=33
comp=Z,21nm,1.1s
G18K **Tagagawik** 76.27 336 P P 21 45 30.7 +1.2
baz=100,SNR=10
ESBB **Sonseca Array** 76.27 51 P P 21 45 29.0 -1.1
ESBB IAmb IAmb 21 45 32.5
comp=Z,40nm,1.2s
M15K **Kasigluk River** 76.43 330 P P 21 45 31.2 +0.7
baz=97
B20K **Meade River** 76.50 340 P P 21 45 31.3 +0.6
baz=102
D19K **Kuna River** 76.53 339 P P 21 45 31.0 +0.1
baz=101
O14K **Tigyukauivet M** 76.56 329 P P 21 45 30.8 -0.4
baz=96
H17K **Granite Mounta** 76.64 335 P P 21 45 32.4 +0.8
baz=98
S12K **Black Hills** 76.68 325 P P 21 45 32.7 +0.7
baz=94
J16K **Anvik River** 76.71 333 P P 21 45 33.4 +1.4
baz=97
F18K **Selawik** 76.79 336 P P 21 45 32.9 +0.6
baz=99
I17K **Unalakleet** 76.83 334 P P 21 45 33.4 +0.8
baz=97
N14K **Kuskokwak Cree** 76.84 330 P P 21 45 32.9 +0.1
baz=96
L15K **Ungalak Mounta** 76.93 331 P P 21 45 34.5 +1.2
baz=96
JMIC **Jan Mayen** 76.93 19 LR LR 22 18 20.4
comp=Z,288nm,20.1s,baz=246,slow=35
K15K **Wolf Creek Mou** 77.02 332 P P 21 45 35.1 +1.4
baz=96
G17K **Kiwalik Mounta** 77.03 335 P P 21 45 34.3 +0.5
baz=98
M14K **Bethel** 77.06 330 P P 21 45 35.1 +1.1
baz=96
C19K **Lookout Ridge** 77.17 339 P P 21 45 35.5 +0.9
baz=100
EKB **Eskdalemuir** 77.28 35 P P 21 45 34.4 -1.0
EKB IAmb IAmb 21 45 40.6
comp=Z,39nm,1.2s
E18K **Tukpahlearik C** 77.28 337 P P 21 45 35.4 +0.3
baz=98
EKA **Eskdalemuir Ar** 77.30 35 P P 21 45 34.3 -1.2
comp=Z,2.8nm,0.7s,baz=259,slow=5.5,SNR=9.0
comp=Z,2.8nm,0.7s
SMAI **San Martin Ant** 77.39 174 P P 21 45 36.0 +0.4
SMAI IAmb IAmb 21 45 49.4
comp=Z,44nm,1.1s
FALS **False Pass** 77.40 324 P P 21 45 36.3 +0.3
baz=93
L14K **Kuka Creek** 77.47 331 P P 21 45 36.8 +0.5
baz=95
DBIC **Dimbokro** 77.53 85 P P 21 45 37.5 0.0
comp=Z,22nm,1.1s,baz=266,slow=6.9,SNR=8.9
DBIC LR LR 22 19 49.6
comp=Z,176nm,20.1s,baz=250,slow=36
comp=Z,22nm,1.1s
H16K **Elim** 77.59 334 P P 21 45 37.6 +0.7
baz=96
C18K **Utukok River** 77.67 338 P P 21 45 38.3 +0.9
baz=98
E17K **Hotham Inlet** 77.70 337 P P 21 45 37.7 +0.2
baz=97,SNR=6.3
M13K **Dall Lake** 77.72 330 P P 21 45 39.0 +1.3
baz=94
B18K **Kokolik River** 77.99 339 P P 21 45 40.0 +0.9
baz=98
J14K **Nanvaranak Lak** 78.00 332 P P 21 45 40.6 +1.4
baz=94
NOR **Nord** 78.17 8 eP P 21 45 38.1 -1.8
RDOG **Red Dog Mine** 78.23 338 P P 21 45 40.7 +0.2
baz=96
D17K **Noatak River** 78.26 337 P P 21 45 41.4 +0.8
baz=96
C17K **DeLong Mountai** 78.38 338 P P 21 45 41.9 +0.7
baz=96
G15K **Niukluk** 78.39 335 P P 21 45 42.4 +1.0
baz=94
K13K **Kusilvak Mount** 78.45 331 P P 21 45 42.7 +1.0
baz=93
F15K **North Star Dit** 78.70 335 P P 21 45 44.2 +1.1
baz=94
ANM **Nome** 78.93 334 P P 21 45 44.9 +0.5
baz=93
M11K **Mekoryuk** 79.13 330 P P 21 45 46.0 +0.5
baz=92
C16K **Lisburne Hills** 79.16 338 P P 21 45 46.5 +1.0
baz=94
UNV **Unalaska Valle** 79.18 323 P P 21 45 47.2 +1.4
baz=90
F14K **Arctic Creek** 79.38 335 P P 21 45 48.1 +1.3
baz=92
TNA **Tin City** 80.05 335 P P 21 45 51.7 +1.3
baz=91
CEST **Esterri de Car** 80.15 48 P P 21 45 50.9 -0.7
CEST IAmb IAmb 21 46 06.5
comp=Z,68nm,1.7s
NIKH **Nikolski High** 80.60 322 P P 21 45 54.6 +1.0
baz=88
CLF **Chambon-Foret** 80.62 43 P P 21 45 53.2 -0.6
RAR **Rarotonga** 80.77 247 LR LR 22 14 01.6
comp=Z,687nm,18.2s,baz=88,slow=30
P08K **Saint George I** 80.89 326 P P 21 45 55.5 +0.5
baz=88
SPIA **Saint Paul Isl** 81.25 327 P P 21 45 57.7 +0.7
baz=88
GAMB **Gambell** 81.70 333 P P 21 46 00.7 +1.5
baz=87
DOU **Dourbes** 82.04 41 dP P 21 46 01.4 0.0
BMRD **Maredsous** 82.14 40 dP P 21 46 03.6 +1.7
BGES **Gesves** 82.34 40 dP P 21 46 03.1 +0.2
RCHB **Rochefort** 82.44 40 dP P 21 46 03.7 +0.2
BCLA **Clavier** 82.47 40 dP P 21 46 04.0 +0.4
KBS **Kingsbay** 82.60 11 P P 21 46 03.5 -0.2
KBS **Kingsbay** 82.60 11 eP P 21 46 04.5 +0.7
KBS pmax pmax
comp=Z,58nm,1.8s
BSTI **Sart Tilman** 82.63 40 dP P 21 46 04.5 +0.1
MEM **Membach** 82.91 40 dP P 21 46 06.6 +0.8
BHOU **Houvegnez** 82.93 40 dP P 21 46 05.6 -0.4
WLF **Walferdange** 83.08 41 P P 21 46 06.2 -0.5
WLF IAmb IAmb 21 46 15.8
comp=Z,26nm,1.3s
WLF **Walferdange** 83.08 41 dP P 21 46 07.7 +0.9
WLF **Walferdange** 83.08 41 P P 21 46 06.3 -0.5
WLF pmax pmax
comp=Z,26nm,1.3s
WLF **Walferdange** 83.08 41 eP P 21 46 06.6 -0.2
comp=Z,76nm,2.0s,baz=279,slow=4.9
TORD **Torodi Ar. Bea** 83.12 78 P P 21 46 07.1 -0.5
comp=Z,5.9nm,1.2s,baz=280,slow=4.7,SNR=19
TORD LR LR 22 22 41.1
comp=Z,314nm,20.6s,baz=278,slow=36
comp=Z,5.9nm,1.2s

**AHRW Bad Neuenahr-A 83.59 40** *eP* **P 21 46 08.5 -0.9**
comp=Z,31nm,1.4s,baz=279,slow=4.9
**SPITS Spitsbergen Ar 83.59 12** P **P 21 46 08.7 -0.2**
comp=Z,3.0nm,0.8s,baz=285,slow=4.0,SNR=1.6
SPITS LR LR 22 24 37.0
comp=Z,1µm,19.7s,baz=237,slow=37
comp=Z,3.0nm,0.8s
**HSPB Hornsund (broa 83.64 13** *eP* **P 21 46 10.3 +1.2**
HSPB *eL* L 22 21 01.6
comp=Z,942nm,22.0s
**ECH Echery 83.88 42** P **P 21 46 10.1 -0.9**
ECH IAmb IAmb 21 46 11.8
comp=Z,36nm,1.6s
**ECH Echery 83.88 42** P **P 21 46 10.1 -0.9**
ECH pmax pmax
comp=Z,36nm,1.6s
**NBO00 NORSAR Array S 84.46 29** P **P 21 46 13.4 -0.2**
**TNS Taunus Mts 84.50 40** *eP* **P 21 46 13.6 -0.5**
comp=Z,44nm,1.6s,baz=279,slow=4.9
**NB2 NORSAR Subarra 84.67 29** P **P 21 46 13.9 -0.8**
comp=Z,164nm,2.0s,baz=277,slow=5.3
**NB2 NORSAR Subarra 84.67 29** P **P 21 46 13.9 -0.8**
baz=277,slow=5.3
**NOA NORSAR Array B 84.67 29** P **P 21 46 14.0 -0.8**
comp=Z,5.3nm,1.0s,baz=277,slow=5.1,SNR=11
NOA LR LR 22 24 03.0
comp=Z,301nm,18.4s,baz=275,slow=36
comp=Z,5.3nm,1.0s
**NOA NORSAR Array B 84.67 29** P **P 21 46 14.0 -0.8**
**RETH Rethem/Aller, 84.76 38** *eP* **P 21 46 14.7 -0.5**
comp=Z,60nm,1.6s,baz=279,slow=4.9
**STU Stuttgart 85.16 42** P **P 21 46 16.3 -1.1**
STU IAmb IAmb 21 46 19.0
comp=Z,14nm,0.8s
**STU Stuttgart 85.16 42** P **P 21 46 16.3 -1.1**
STU pmax pmax
comp=Z,14nm,0.8s
**NRDL Niedersach Rie 85.24 38** *eP* **P 21 46 17.3 -0.3**
comp=Z,43nm,1.5s,baz=279,slow=4.9
**UBBA Unterbreizbach 85.41 39** *eP* **P 21 46 17.9 -0.5**
comp=Z,49nm,2.0s,baz=279,slow=4.9
**CLZ Clausthal 85.49 38** *eP* **P 21 46 18.4 -0.6**
comp=Z,49nm,1.6s,baz=279,slow=4.9
**TAM Tamanrasset 85.53 68** P **P 21 46 19.8 -0.2**
TAM IAmb IAmb 21 46 35.3
comp=Z,20nm,1.2s
**TAM Tamanrasset 85.53 68** P **P 21 46 19.8 -0.2**
TAM pmax pmax
comp=Z,20nm,1.2s
**DAVA Damuels 85.82 43** *i* P **P 21 46 20.1 -0.8**
comp=Z,23nm,1.1s,SNR=7.7
**DAVOX Davos/Dischmat 85.89 43** LR LR 22 19 25.6
comp=Z,676nm,19.6s,baz=276,slow=32
**FLTG Flechtingen 85.95 38** *eP* **P 21 46 19.9 -1.3**
comp=Z,66nm,1.8s,baz=279,slow=4.9
**HFS Hagfors 86.02 30** P **P 21 46 20.7 -0.7**
comp=Z,7.9nm,0.9s,baz=285,slow=4.0,SNR=16
HFS LR LR 22 22 10.9
comp=Z,510nm,20.0s,baz=282,slow=34
comp=Z,7.9nm,0.9s
**FUORN Ofenpass-Fuorn 86.17 44** P **P 21 46 22.3 -0.5**
FUORN IAmb IAmb 21 46 24.2
comp=Z,45nm,1.8s
**GRFO Grafenberg 86.34 40** P **P 21 46 22.7 -0.6**
GRFO IAmb IAmb 21 46 25.2
comp=Z,27nm,1.3s
**GRFO Grafenberg 86.34 40** P **P 21 46 22.7 -0.6**
GRFO pmax pmax
comp=Z,27nm,1.3s
**GRA1 Grafenberg Arr 86.34 40** P **P 21 46 22.6 -0.6**
GRA1 IAmb IAmb 21 46 25.3
comp=Z,26nm,1.3s
**GRF Grafenberg Arr 86.34 40** P **P 21 46 22.7 -0.6**
GRF pmax pmax
comp=Z,26nm,1.3s
**RETA Reutte 86.38 43** *i* P **P 21 46 24.1 +0.5**
comp=Z,20nm,1.5s,SNR=7.5
**FETA Feichten 86.43 43** *i* P **P 21 46 23.8 -0.2**
comp=Z,15nm,1.2s,SNR=8.0
**MOX Moxa 86.45 39** *eP* **P 21 46 23.4 -0.4**
comp=Z,30nm,1.6s,baz=279,slow=4.9
MOX *ep*P **pP 21 46 28.2 -1.4**
**NEUB Neuenburg 86.45 39** *eP* **P 21 46 22.8 -0.9**
baz=279,slow=4.9
**VSL Villasalto 86.56 51** P **P 21 46 23.4 -1.2**
VSL IAmb IAmb 21 46 27.0
comp=Z,33nm,1.1s
**MOTA Moosalm 86.63 43** *eP* **P 21 46 25.2 +0.3**
comp=Z,12nm,1.3s
**SQTA Sankt Quirin 86.72 43** *i* P **P 21 46 25.0 -0.3**
comp=Z,16nm,1.5s,SNR=6.2
**WATA Walderalm 86.95 43** *i* P **P 21 46 27.1 +0.6**
comp=Z,9.3nm,1.2s
**ROTZ Rotzenmuhle 86.96 40** *ep*P pP 21 46 31.2 -1.0
**WTTA Wattenberg 87.00 43** *i* P **P 21 46 27.3 +0.5**
comp=Z,15nm,1.7s,SNR=7.1
**TANN Tannenbergstha 87.02 40** *eP* **P 21 46 26.0 -0.6**
comp=Z,59nm,1.6s,baz=279,slow=4.9
**KEST Kesra 87.08 54** P **P 21 46 26.8 -0.4**
KEST IAmb IAmb 21 46 44.0
comp=Z,18nm,1.3s
**KEST Kesra 87.08 54** P **P 21 46 27.0 -0.2**
KEST LR LR 22 21 34.5
comp=Z,200nm,20.1s,baz=262,slow=33
comp=Z,4.4nm,1.1s
**CLL Collm 87.20 39** P **P 21 46 26.7 -0.7**
CLL IAmb IAmb 21 46 33.6
comp=Z,23nm,1.2s
**CLL Collm 87.20 39** *i* P **P 21 46 26.6 -0.7**
CLL *i* 21 46 31.9
CLL *i* *PP **sP 21 46 36.4 +1.0**
CLL pmax pmax
comp=Z,54nm,1.7s
CLL MLR MLR
comp=Z,400nm,20.4s
**CLL Collm 87.20 39** *eP* **P 21 46 26.4 -0.9**
comp=Z,57nm,1.7s,baz=279,slow=4.9
**CTI Castel Tesino 87.21 44** P **P 21 46 26.5 -1.2**
CTI IAmb IAmb 21 46 33.4
comp=Z,30nm,1.4s
**CTI Castel Tesino 87.21 44** P **P 21 46 26.5 -1.2**
CTI pmax pmax
comp=Z,30nm,1.4s
**WET Wettzell 87.50 41** *eP* **P 21 46 28.5 -0.4**
comp=Z,120nm,2.0s,baz=279,slow=4.9
**HSKC Hora Svate Kat 87.59 39** *eP* **P 21 46 28.2 -1.2**
HSKC AMS AMS 22 20 20.0
comp=Z,700nm,22.9s
**LESA Schwarzleotal 87.67 43** *i* P **P 21 46 29.5 -0.4**
comp=Z,14nm,1.4s
**ABTA Abfaltersbach 87.68 43** *i* P **P 21 46 29.3 -0.6**
comp=Z,20nm,1.3s,SNR=13
**BRG Berggiesshubel 87.86 39** *eP* **P 21 46 30.4 -0.3**
BRG Amp 21 46 32.7
comp=Z,65nm,1.8s
**BRG Berggiesshubel 87.86 39** *eP* **P 21 46 30.3 -0.3**
BRG SP **PnS 21 58 11.0 -4.2**
BRG pmax pmax
comp=Z,65nm,1.8s
**BRG Berggiesshubel 87.86 39** *eP* **P 21 46 30.0 -0.6**
comp=Z,78nm,1.9s,baz=279,slow=4.9
**KHC Kasperske Hory 87.96 41** P **P 21 46 30.3 -0.8**
**KHC Kasperske Hory 87.96 41** *eP* **P 21 46 29.0 -2.2**
KHC *eS* **S 21 57 11.0 -2.9**
KHC AMS AMS 22 19 20.0
comp=Z,1µm,23.6s
**KHC Kasperske Hory 87.96 41** *ceP* **P 21 46 30.7 -0.5**
KHC pmax pmax
comp=Z,22nm,1.3s
**RICC Richard 88.02 39** *eP* **P 21 46 30.8 -0.6**
**GEC2 GERESS Array S 88.09 41** P **P 21 46 30.9 -1.0**
GEC2 IAmb IAmb 21 46 33.7
comp=Z,26nm,1.4s
**GEC2 GERESS Array S 88.09 41** *eP* **P 21 46 30.6 -1.3**
comp=Z,49nm,1.8s,baz=279,slow=4.9
GEC2 *ep*P **pP 21 46 36.6 -1.1**
**GERES GERESS Array B 88.09 41** P **P 21 46 31.5 -0.4**
comp=Z,3.3nm,1.0s,baz=300,slow=2.6,SNR=17
GERES LR LR 22 20 05.4
comp=Z,1000nm,21.7s,baz=267,slow=32
comp=Z,3.3nm,1.0s
**KBA Koelnbreinsper 88.18 43** *i* P **P 21 46 32.7 +0.3**
comp=Z,28nm,1.2s,SNR=9.0
**BIOA Bad Ischl, Aus 88.27 42** *i* P **P 21 46 32.0 -0.6**
comp=Z,17nm,1.5s,SNR=13
**ZVC Zvikov 88.29 40** *eP* **P 21 46 31.7 -1.0**
ZVC AMS AMS 22 19 30.0
comp=Z,2µm,23.7s
**PVCC Panska Ves 88.32 39** AMS AMS 22 20 40.0
comp=Z,600nm,18.2s
**PRA Prague 88.32 40** AMS AMS 22 19 40.0
comp=Z,1µm,20.9s
**PRU Pruhonice 88.41 40** *eP* **P 21 46 32.3 -0.9**
PRU AMS AMS 22 19 40.0
comp=Z,1µm,22.3s
**PRU Pruhonice 88.41 40** *eP* **P 21 46 32.3 -0.9**
PRU MLR MLR
comp=Z,1µm,22.3s
**ARCES ARCESS Array B 88.41 19** P **P 21 46 32.2 -0.7**
comp=Z,5.0nm,1.0s,baz=296,slow=3.9,SNR=3.9
ARCES LR LR 22 23 49.0
comp=Z,175nm,21.4s,baz=296,slow=34
comp=Z,5.0nm,1.0s
**PRED Cave del Predi 88.45 43** P **P 21 46 31.4 -2.2**
PRED IAmb IAmb 21 46 33.8
comp=Z,20nm,1.1s
**MYKA Terra Mystica 88.47 43** *i* P **P 21 46 33.1 -0.6**
comp=Z,16nm,1.1s,SNR=8.4
**CKRC Cesky Krumlov 88.49 41** *eP* **P 21 46 32.6 -1.1**
CKRC *e*SKS **S 21 57 10.1 -8.8**
CKRC AMS AMS 22 19 50.0
comp=Z,1µm,21.4s
**CKRC Cesky Krumlov 88.49 41** *eP* **P 21 46 32.6 -1.1**
CKRC *e* 21 57 10.1
CKRC MLR MLR
comp=Z,1µm,21.4s
**SABO M.te Sabotino 88.56 44** P **P 21 46 33.3 -0.8**
SABO IAmb IAmb 21 46 35.5
comp=Z,42nm,1.5s
**GOPC GO Pecny, Ondr 88.58 40** *eP* **P 21 46 32.9 -1.2**
GOPC AMS AMS 22 20 00.0
comp=Z,1µm,19.9s
**GOPC GO Pecny, Ondr 88.58 40** *eP* **P 21 46 32.9 -1.2**
GOPC MLR MLR
comp=Z,1µm,19.9s
**MOA Molln 88.65 42** *eP* **P 21 46 34.8 +0.4**
comp=Z,4.1nm,1.3s
**OBKA Obir 89.10 43** *i* P **P 21 46 36.5 -0.2**
comp=Z,14nm,1.5s,SNR=10.0
**TREC Trest 89.15 40** AMS AMS 22 20 10.0
comp=Z,1µm,22.2s
**LJU Ljubljana 89.18 44** *i* P **P 21 46 36.4 -0.6**
**UPC Upice 89.22 39** *eP* **P 21 46 35.1 -2.0**
UPC AMS AMS 22 20 10.0
comp=Z,500nm,20.4s
**UPC Upice 89.22 39** *eP* **P 21 46 35.1 -2.0**
UPC MLR MLR
comp=Z,500nm,20.4s
**CHVC Chvalec 89.23 39** *eP* **P 21 46 36.7 -0.4**
CHVC AMS AMS 22 20 10.0
comp=Z,400nm,24.8s
**CHVC Chvalec 89.23 39** *eP* **P 21 46 36.7 -0.4**
CHVC MLR MLR
comp=Z,400nm,24.8s
**KSP Ksiaz 89.33 39** *eP* **P 21 46 34.7 -2.8**
**OSTC Ostas 89.34 39** *eP* **P 21 46 37.0 -0.6**
OSTC AMS AMS 22 20 00.0
comp=Z,500nm,30.3s
**OSTC Ostas 89.34 39** *eP* **P 21 46 37.0 -0.6**
OSTC MLR MLR
comp=Z,500nm,30.3s
**SOKA Soboth 89.40 43** *eP* **P 21 46 37.4 -0.7**
comp=Z,12nm,1.4s,SNR=12
**PDKS Podkum 89.50 44** *i* P **P 21 46 37.6 -0.9**
**BILL Bilibino 89.59 339** P **P 21 46 39.1 +0.7**
**BILL Bilibino 89.59 339** *ci* P **P 21 46 39.4 +1.0**
BILL *e**PP **pP 21 46 45.5 +1.2**
BILL *e* 21 50 11.0
BILL *e*PPP PPP 21 52 09.2
BILL pmax pmax
comp=Z,23nm,1.4s
**ARSA Arzberg 89.61 42** *i* P **P 21 46 37.8 -1.1**
comp=Z,4.4nm,1.4s
**CONA Conrad Observa 89.69 42** *eP* **P 21 46 39.0 -0.3**
comp=Z,15nm,1.2s,SNR=10
**KRUC Moravsky 89.78 40** *eP* **P 21 46 38.9 -0.8**
**KRLC Kraliky 89.80 39** *eP* **P 21 46 39.2 -0.6**
KRLC AMS AMS 22 21 40.0
comp=Z,800nm,21.7s
**KRLC Kraliky 89.80 39** *eP* **P 21 46 39.2 -0.6**
KRLC MLR MLR
comp=Z,800nm,21.7s
**VRAC Vranov 89.86 40** *eP* **P 21 46 39.3 -0.8**
**VRAC Vranov 89.86 40** P **P 21 46 39.0 -1.0**
VRAC LR LR 22 21 54.5
comp=Z,1µm,20.7s,baz=283,slow=32
comp=Z,3.8nm,1.0s
**RONA Rosalia, Austr 90.02 42** *i* P **P 21 46 40.0 -0.9**
comp=Z,20nm,1.4s,SNR=6.4
**BELA Belgrano 2 90.39 171** P **P 21 46 41.7 -0.2**
BELA IAmb IAmb 21 46 54.4
comp=Z,43nm,1.7s
**ZST Bratislava 90.44 41** *eP* **P 21 46 43.0 +0.2**
**ZST Bratislava 90.44 41** *eP* **P 21 46 43.0 +0.2**
**JAVC Velka Javorina 90.65 40** *eP* **P 21 46 43.5 -0.3**
**OKC Ostrava-Krasne 90.72 39** AMS AMS 22 21 20.0
comp=Z,900nm,20.6s
**VAE Valguarnera 90.79 52** LR LR 22 21 52.0
comp=Z,786nm,21.6s,baz=312,slow=32
**SRO Srobarova 91.32 41** *eP* **P 21 46 46.8 0.0**
SRO pmax pmax
comp=Z,34nm,1.9s
**SRO Srobarova 91.32 41** *eP* **P 21 46 46.8 0.0**
**VYHS Vyhne 91.49 41** *eP* **P 21 46 46.8 -0.9**
VYHS pmax pmax
comp=Z,38nm,1.8s
**VYHS Vyhne 91.49 41** *eP* **P 21 46 46.8 -0.9**
**FINES FINESS Array B 91.51 27** P **P 21 46 47.4 -0.1**
comp=Z,3.6nm,0.9s,baz=310,slow=5.3,SNR=5.7
FINES LR LR 22 23 04.3
comp=Z,431nm,21.5s,baz=284,slow=32
comp=Z,3.6nm,0.9s
**OJC Ojcow 91.65 39** *eP* **P 21 46 47.2 -1.2**
OJC *e*SP SP 21 58 58.9 +2.4
OJC *e*SS SS 22 03 41.2 -13
**OJC Ojcow 91.65 39** P **P 21 46 47.8 -0.5**
OJC IAmb IAmb 21 46 54.7
comp=Z,14nm,1.1s
**OJC Ojcow 91.65 39** P **P 21 46 47.8 -0.5**
OJC pmax pmax
comp=Z,14nm,1.1s
**LANS Liptovska Anna 91.72 40** *eP* **P 21 46 50.8 +2.0**
LANS pmax pmax
comp=Z,10.0nm,1.6s
**LANS Liptovska Anna 91.72 40** *eP* **P 21 46 50.8 +2.0**
**BEL Belsk 91.81 37** *eP* **P 21 46 46.9 -2.1**
**LVZ Lovozero 92.13 20**⇑ *eP* **P 21 46 51.5 +1.2**
LVZ pmax pmax
comp=Z,9.0nm,1.1s
**NIE Niedzica 92.17 39** *eP* **P 21 46 49.3 -1.5**
NIE *e*SP SP 21 59 15.9 +14
NIE *e*SS SS 22 04 14.2 +12
**PSZ Piszkesteto 92.32 41** P **P 21 46 50.7 -0.9**
**PSZ Piszkesteto 92.32 41** P **P 21 46 50.7 -0.9**
PSZ pmax pmax
comp=Z,49nm,1.6s
**SUW Suwalki 92.55 35** *eP* **P 21 46 51.5 -0.9**
**VNA3 Neumayer Olymp 92.85 162**⇑ P **P 21 46 53.1 -0.3**
comp=Z,4.1nm,0.8s
**VNA1 Neumayer--Stat 93.11 161**⇑ P **P 21 46 54.8 +0.3**
comp=Z,8.8nm,1.3s
**VNA2 Neumayer--Watz 93.47 161**⇑ P **P 21 46 54.7 -1.5**
comp=Z,1.2nm,0.6s,baz=298,slow=3.9
**KOLS Kolonicke sedl 93.56 40** *eP* **P 21 46 58.3 +1.1**
KOLS pmax pmax
comp=Z,5.0nm,1.0s
**KOLS Kolonicke sedl 93.56 40** *eP* **P 21 46 58.3 +1.1**
**KWP Kalwaria Pacla 93.62 39** *eP* **P 21 46 56.8 -0.7**
**KWP Kalwaria Pacla 93.62 39** P **P 21 46 56.6 -0.9**
**KWP Kalwaria Pacla 93.62 39** P **P 21 46 56.6 -0.9**
KWP pmax pmax
comp=Z,36nm,1.6s
**LVV L'vov 94.38 38** *eP* **P 21 47 00.7 -0.2**
LVV *e* 21 57 37.6
LVV *eS* **S 21 58 07.8 -4.4**
LVV *ePS* **PS 21 59 37.0 +7.7**
LVV pmax pmax
comp=Z,60nm,1.8s
LVV MLR MLR
comp=N,300nm,19.0s
LVV MLR MLR
comp=E,100nm,19.0s
LVV MLR MLR
comp=Z,300nm,19.0s
**SNAA Sanae 95.07 162** P **P 21 47 02.9 -0.8**
SNAA IAmb IAmb 21 47 09.7
comp=Z,29nm,1.6s
**SNAA Sanae 95.07 162** LR LR 22 29 16.6
comp=Z,150nm,19.7s,baz=270,slow=35
**SNAA Sanae 95.07 162**⇓ *eP* **P 21 47 03.4 -0.3**
SNAA pmax pmax
comp=Z,5.0nm,1.2s
**TROLL Troll, Antarti 96.79 162**⇑ P **P 21 47 11.3 -0.3**
comp=Z,138nm,0.8s
**MLR Muntele Rosu 97.02 42** P **P 21 47 11.9 -1.4**
MLR IAmb IAmb 21 47 15.1
comp=Z,16nm,1.3s
**MLR Muntele Rosu 97.02 42** LR LR 22 28 40.8
comp=Z,508nm,19.1s,baz=297,slow=34
**MLR Muntele Rosu 97.02 42** P **P 21 47 11.9 -1.4**
MLR pmax pmax
comp=Z,15nm,1.3s
**SEY Seymchan 97.11 338**⇑ *eP* Pdif 21 47 14.7 +1.6
SEY pmax pmax
comp=Z,1.0nm,1.1s
**TIXI Tiksi 97.16 350** LR LR 22 34 56.5
comp=Z,425nm,18.9s,baz=31,slow=38
**TIXI Tiksi 97.16 350**⇓ *eP* **P 21 47 13.0 -0.1**
TIXI pmax pmax
comp=Z,8.0nm,1.1s
**AKASG Malin Array Be 97.18 36** LR LR 22 29 07.6
comp=Z,746nm,19.5s,baz=270,slow=34
**QSPA South Pole Qui 98.59 180** P Pdif 21 47 20.3 +0.5
comp=Z,1.8nm,0.8s,baz=72,slow=2.3,SNR=3.4
QSPA LR LR 22 25 03.4
comp=Z,257nm,19.0s,baz=158,slow=31
comp=Z,1.8nm,0.8s
**OBN Obninsk 99.22 30** LR LR 22 30 28.9
comp=Z,377nm,18.9s,baz=352,slow=34
**OBN Obninsk 99.22 30** *eP* **Pdif 21 47 21.3 -1.4**
OBN *e* 21 51 25.8
OBN pmax pmax
comp=Z,11nm,1.5s
OBN MLR MLR
comp=Z,369nm,18.0s
**IDI Anoyia 99.52 52** LR LR 22 28 53.3
comp=Z,117nm,21.6s,baz=302,slow=33
**MA2 Magadan 99.69 335** LR LR 22 37 45.9
comp=Z,349nm,19.9s,baz=48,slow=39
**NVL N'lazarevskaya 99.72 160** *eP* **Pdif 21 47 38.7 +14**
NVL pmax pmax
comp=Z,6.0nm,0.9s
NVL MLR MLR
comp=Z,267nm,20.0s
**ANN Anapa 104.72 39** *eP* **Pdif 21 47 37.4 -10**
**H11S2 WAKE ISLAND Hyl 106.02 292** T T 23 46 15.0
baz=77
**H11S1 WAKE ISLAND Hyl 106.02 292** T T 23 46 27.1
baz=77
**H11S3 WAKE ISLAND Hyl 106.03 292** T T 23 46 29.1
baz=77
**MAK Makhachkala 111.86 37** *eP* **Pdif 21 48 16.1 -3.1**
MAK *i* 21 52 13.0
MAK *e* 21 52 56.5
MAK *e*PPP PPP 21 55 16.3
MAK *e* 21 58 50.0
MAK *e*SP SP 22 02 31.9 +2.7
MAK *e*PS **PS 22 02 32.4 +0.5**
MAK *e*SS **SS 22 08 37.3 +3.0**
MAK *e*SSS SSS 22 12 44.9
MAK pmax pmax
comp=Z,166nm,0.9s
**DZM Mont Dzumac 112.02 250** *e*LR LR 22 25 42.9
comp=Z,145nm,24.4s
**ZALV Zalesovo Beam 116.87 8** PKP **PKiKP 21 52 26.2 +0.6**
comp=Z,0.5nm,0.5s,baz=350,slow=2.3,SNR=7.0
ZALV PP **PP 21 53 31.8 -1.5**
comp=Z,2.9nm,1.0s,baz=350,slow=7.5,SNR=6.1
**KURK Kurchatov 118.85 13**⇑ *i*PKIKP **PKiKP 21 52 31.3 +1.7**
**KURBB Kurchatov Arra 118.92 13** PKP **PKiKP 21 52 30.0 +0.3**
comp=Z,0.2nm,0.2s,baz=350,slow=1.4,SNR=3.0
**MDJ Mudanjiang 119.33 334** PKP **PKiKP 21 52 33.0 +2.3**
MDJ PP **PP 21 53 57.3 +6.5**
MDJ AMB AMB
comp=Z,140nm,4.1s
MDJ LR LR
comp=Z,240nm,24.4s
MDJ LR LR
comp=Z,210nm,24.4s
**MJAR Matsushiro Arr 120.63 322** PKP **PKiKP 21 52 33.8 +0.2**
comp=Z,0.6nm,0.4s,baz=51,slow=2.6,SNR=1.8
**DGZ Jazzator, Alta 121.36 7**⇑ *i*PKIKP **PKiKP 21 52 36.4 +1.6**
**SONM Songino Array 123.17 352** PKP **PKPdf 21 52 37.5 -0.7**
comp=Z,2.4nm,1.1s,baz=20,slow=2.4,SNR=4.6
**MKAR Makanchi Array 123.35 12** PKP **PKPdf 21 52 38.1 -0.3**
comp=Z,0.3nm,0.4s,baz=0.0,slow=1.8,SNR=8.0
**KSRS Korea Array 125.72 330** PKP **PKiKP 21 52 44.0 +0.4**
comp=Z,6.9nm,1.0s,baz=45,slow=2.0,SNR=8.6
**KSRS Korea Array 125.72 330** PKIKP **PKiKP 21 52 44.0 +0.4**
**WMQ Urumqi 127.17 8** *e*PKP **PKiKP 21 52 46.5 +0.1**
WMQ LR LR
comp=Z,760nm,24.1s
WMQ LR LR
comp=Z,400nm,19.1s
WMQ LR LR
comp=Z,670nm,18.1s
**KSH Kashi 128.37 21** PKP **PKPdf 21 52 48.0 -0.4**
KSH LR LR
comp=Z,310nm,17.9s
KSH LR LR
comp=Z,300nm,18.2s
KSH LR LR
comp=Z,610nm,18.9s
**HHC Hu-ho-hao-te 128.95 346** *e*PKP **PKPdf 21 52 47.0 -2.4**
HHC LR LR
comp=Z,430nm,15.3s
HHC LR LR
comp=Z,190nm,16.0s
HHC LR LR
comp=Z,650nm,18.3s
**BTO Baotou 129.55 347** *e*PKP **PKPdf 21 52 49.5 -1.0**
BTO PP **PP 21 54 59.5 +0.4**
BTO SS SS 22 12 20.0 -0.1
BTO LR LR
comp=Z,890nm,19.8s
BTO LR LR
comp=Z,750nm,20.4s
BTO LR LR
comp=Z,920nm,18.1s
**HNS HongShan 131.27 341**⇑ PKP **PKiKP 21 52 55.3 +0.6**
HNS *e*PP PP 21 55 20.8 +11
HNS LR LR
comp=Z,380nm,17.5s
HNS LR LR
comp=Z,230nm,19.9s
HNS LR LR
comp=Z,480nm,19.4s
**GTA Gaotai 132.15 357** PKP **PKPdf 21 52 55.5 0.0**
GTA LR LR
comp=Z,89nm,17.9s
GTA LR LR
comp=Z,290nm,23.1s
GTA LR LR
comp=Z,170nm,23.5s
**LYN LuoYang 134.60 342** PKP **PKiKP 21 53 01.0 -0.5**
LYN PKS **PKSdf 21 56 36.5 0.0**
**LZH Lanzhou 135.06 352** *e*PKP **PKPdf 21 52 59.0 -2.2**
LZH PP PP 21 55 42.5 +8.0
LZH PKS **PKSdf 21 56 36.8 -0.9**
LZH AMB AMB
comp=Z,200nm,8.6s
LZH LR LR
comp=Z,570nm,22.0s
LZH LR LR
comp=Z,390nm,21.3s
LZH LR LR
comp=Z,570nm,23.4s
**XAN Xi'an 136.07 345** PKP **PKiKP 21 53 08.3 +3.7**
XAN PKS **PKSdf 21 56 41.8 +2.5**
XAN LR LR
comp=Z,690nm,19.6s
XAN LR LR
comp=Z,290nm,19.0s
XAN LR LR
comp=Z,700nm,20.6s
**WHN Wuhan 137.60 337** PKP **PKPdf 21 53 05.3 -0.5**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WHN | | | | | PP | **PP** | **21 55 51.3** | **+0.8** |
| WHN | | | | | LR | LR | | |
| | comp=Z,1μm,18.5s | | | | | | | |
| **CD2** | **Chengdu** | **140.16** | **351** | | PKP | **PKPdf** | **21 53 10.0** | **-0.5** |
| CD2 | | | | | PP | **PP** | **21 56 07.5** | **+1.3** |
| CD2 | | | | | AMB | AMB | | |
| | comp=Z,120nm,5.5s | | | | | | | |
| CD2 | | | | | LR | LR | | |
| | comp=Z,470nm,17.8s | | | | | | | |
| CD2 | | | | | LR | LR | | |
| | comp=Z,320nm,19.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **141.51** | **243** | | PKhKP | PKPpre | 21 53 07.0 | |
| | comp=Z,2.2nm,0.8s,baz=112,slow=3.2,SNR=11 | | | | | | | |
| ASAR | | | | | PKP | **PKPdf** | **21 53 13.2** | **+0.1** |
| | comp=Z,5.2nm,0.9s,baz=112,slow=2.5,SNR=12 | | | | | | | |
| **LSA** | **Lhasa** | **141.53** | **8** | | PKP | **PKPdf** | **21 53 14.8** | **+1.2** |
| **WRAB** | **Tennant Creek** | **142.02** | **249** | | PKPdf | **PKPdf** | **21 53 13.7** | **-0.4** |
| **WRAB** | **Tennant Creek** | **142.02** | **249** | | PKIKP | **PKPdf** | **21 53 13.7** | **-0.4** |
| **WRA** | **Warramunga Arr** | **142.03** | **249** | | PKhKP | PKPpre | 21 53 08.9 | |
| | comp=Z,3.9nm,0.8s,baz=97,slow=3.0,SNR=23 | | | | | | | |
| WRA | | | | | PKP | **PKPdf** | **21 53 13.8** | **-0.4** |
| | comp=Z,6.3nm,1.0s,baz=94,slow=3.0,SNR=16 | | | | | | | |
| **GYA** | **Guiyang** | **143.86** | **345** | | PKP | PKPab | 21 53 14.5 | +0.2 |
| GYA | | | | | AMB | AMB | | |
| | comp=Z,110nm,4.6s | | | | | | | |
| GYA | | | | | LR | LR | | |
| | comp=Z,450nm,19.8s | | | | | | | |
| **PZH** | **PanZhiHua** | **144.78** | **352** | | PKP | **PKPab** | **21 53 17.3** | **-0.4** |
| PZH | | | | | pPKP | **PKiKP** | **21 53 23.0** | **+0.3** |
| PZH | | | | | PP | **PP** | **21 56 36.5** | **+2.3** |
| PZH | | | | | AMB | AMB | | |
| | comp=Z,110nm,5.0s | | | | | | | |
| PZH | | | | | LR | LR | | |
| | comp=Z,280nm,21.0s | | | | | | | |
| PZH | | | | | LR | LR | | |
| | comp=Z,260nm,19.0s | | | | | | | |
| PZH | | | | | LR | LR | | |
| | comp=Z,350nm,18.6s | | | | | | | |
| **SHL** | **Shillong** | **145.70** | **8** | | PKPdf | **PKPdf** | **21 53 18.7** | **-1.9** |
| **SHL** | **Shillong** | **145.70** | **8** | | PKP2 | **PKPdf** | **21 53 18.7** | **-1.9** |
| **KMI** | **Kunming** | **145.99** | **350** | ↑ | PKPbc | **PKPdf** | **21 53 21.0** | **-0.2** |
| KMI | | | | | LR | LR | | |
| | comp=Z,220nm,24.7s | | | | | | | |
| KMI | | | | | LR | LR | | |
| | comp=Z,320nm,18.8s | | | | | | | |
| KMI | | | | | LR | LR | | |
| | comp=Z,240nm,17.9s | | | | | | | |
| **TNCH** | **TengChong** | **146.53** | **357** | | PKPbc | **PKPdf** | **21 53 21.5** | **-0.6** |
| TNCH | | | | | PKPab | **PKiKP** | **21 53 26.0** | **-0.4** |
| TNCH | | | | | sPKP | | 21 53 27.8 | |
| TNCH | | | | | PP | **PP** | **21 56 49.8** | **+5.1** |
| TNCH | | | | | PKS | **PKSdf** | **21 56 53.0** | **-4.8** |
| TNCH | | | | | SKS | **SKSdf** | **22 00 27.5** | **-3.3** |
| TNCH | | | | | AMB | AMB | | |
| | comp=Z,190nm,8.4s | | | | | | | |
| TNCH | | | | | LR | LR | | |
| | comp=Z,340nm,17.1s | | | | | | | |
| TNCH | | | | | LR | LR | | |
| | comp=Z,180nm,14.5s | | | | | | | |
| TNCH | | | | | LR | LR | | |
| | comp=Z,590nm,19.6s | | | | | | | |
| **KNRA** | **Kununurra** | **148.02** | **254** | | | **PKPbc** | **21 53 27.9** | **+0.3** |
| **H01W1** | **Cape Leeuwin H** | **149.38** | **209** | | T | T | 00 41 14.3 | |
| | baz=145,slow=75,SNR=5.3 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **149.39** | **209** | | T | T | 00 41 14.3 | |
| | baz=145,slow=75,SNR=5.0 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **149.40** | **209** | | T | T | 00 41 15.6 | |
| | baz=145,slow=75,SNR=4.3 | | | | | | | |
| **QIZ** | **Qiongzhong** | **149.69** | **335** | | PKPbc | **PKPdf** | **21 53 26.8** | **-0.4** |
| QIZ | | | | | PP | **PP** | **21 57 04.5** | **+1.1** |
| QIZ | | | | | SS | SS | 22 16 15.8 | -1.4 |
| QIZ | | | | | AMB | AMB | | |
| | comp=Z,700nm,5.9s | | | | | | | |
| QIZ | | | | | LR | LR | | |
| | comp=Z,460nm,16.0s | | | | | | | |
| QIZ | | | | | LR | LR | | |
| | comp=Z,400nm,21.0s | | | | | | | |
| QIZ | | | | | LR | LR | | |
| | comp=Z,620nm,17.2s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **150.46** | **248** | | | **PKPbc** | **21 53 33.5** | **-0.1** |
| **CRAI** | **Chiangrai** | **151.14** | **353** | | PKPdf | **PKPdf** | **21 53 29.6** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **153.03** | **356** | | PKP | **PKPdf** | **21 53 32.8** | **+0.5** |
| | comp=Z,4.6nm,0.9s,baz=293,slow=2.0,SNR=12 | | | | | | | |

*JMA **29** 21:35:46.1±0.2,22°.1N±1°.0×121°.8E±0°.5,h18km,MV4.0/17, TAIWAN REGION*
*TAP **29** 21:35:47.0,22°.03N×121°.60E,h12km,ML3.4,C*
**ISC 29 21:35:45.7±0.9,22°.05N±0°.04×121°.68E±0°.03,h16km±6km, n98,σ1°12/184,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LYUB** | **Lan-yu** | **0.10** | **239** | P | | **Pg** | **21 35 49.5** | **+0.4** |
| | baz=207 | | | | | | | |
| LYUB | | | | *e*S | | **Sg** | **21 35 51.7** | **+0.3** |
| | baz=207 | | | | | | | |
| **LAY** | **Lan-yu** | **0.12** | **263** | *i* P | | **Pg** | **21 35 49.3** | **-0.1** |
| | baz=278 | | | | | | | |
| LAY | | | | S | | **Sg** | **21 35 51.5** | **-0.4** |
| | baz=278 | | | | | | | |
| **LDUT** | **Ludao** | **0.65** | **343** | P | | **Pb** | **21 35 59.0** | **+0.4** |
| | baz=3.0 | | | | | | | |
| LDUT | | | | *e*S | | **Sb** | **21 36 08.7** | **+1.4** |
| | baz=3.0 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **0.74** | **258** | *e*P | | **Pn** | **21 36 01.3** | **-0.1** |
| | baz=274 | | | | | | | |
| TSEB | | | | *e*S | | **Sb** | **21 36 10.8** | **+0.9** |
| | baz=274 | | | | | | | |
| **TAWH** | **Dawu Township** | **0.78** | **291** | *e*P | | **Pb** | **21 36 01.1** | **+0.1** |
| | baz=297 | | | | | | | |
| TAWH | | | | *e*S | | **Sb** | **21 36 11.4** | **0.0** |
| | baz=297 | | | | | | | |
| **SLIU** | **Shizi** | **0.83** | **281** | *e*P | | **Pg** | **21 36 00.9** | **-1.0** |
| | baz=286 | | | | | | | |
| SLIU | | | | *e*S | | **Sg** | **21 36 10.3** | **-2.6** |
| | baz=286 | | | | | | | |
| **EAST** | **Anshuo** | **0.83** | **293** | *e*P | | **Pg** | **21 36 01.2** | **-0.8** |
| | baz=299 | | | | | | | |
| EAST | | | | *e*S | | **Sg** | **21 36 11.6** | **-1.4** |
| | baz=299 | | | | | | | |
| **TTN** | **Taitung** | **0.85** | **325** | *e*P | | **Pn** | **21 36 03.3** | **+0.3** |
| | baz=344 | | | | | | | |
| TTN | | | | *e*S | | **Sn** | **21 36 15.6** | **+0.4** |
| | baz=344 | | | | | | | |
| **ECL** | **Taimali** | **0.86** | **309** | *e*P | | **Pb** | **21 36 01.9** | **-0.4** |
| | baz=316 | | | | | | | |
| ECL | | | | *e*S | | **Sb** | **21 36 13.6** | **0.0** |
| | baz=316 | | | | | | | |
| **HEN** | **Hengchun** | **0.87** | **267** | *e*P | | **Pb** | **21 36 02.0** | **-0.4** |
| | baz=270 | | | | | | | |
| HEN | | | | *e*S | | **Sg** | **21 36 11.2** | **-3.0** |
| | baz=270 | | | | | | | |
| **TWGBT** | **Beinan** | **0.94** | **324** | *e*P | | **Pb** | **21 36 03.9** | **+0.3** |
| | baz=315 | | | | | | | |
| TWGBT | | | | *e*S | | **Sb** | **21 36 16.6** | **+0.8** |
| | baz=315 | | | | | | | |
| **EDH** | **Donghe** | **0.98** | **339** | *e*P | | **Pb** | **21 36 04.0** | **-0.2** |
| | baz=357 | | | | | | | |
| EDH | | | | *e*S | | **Sb** | **21 36 17.6** | **+0.7** |
| | baz=357 | | | | | | | |
| **LONT** | **Longtian** | **0.99** | **329** | *e*P | | **Pb** | **21 36 04.6** | **+0.1** |
| | baz=346 | | | | | | | |
| LONT | | | | *e*S | | **Sb** | **21 36 18.4** | **+1.2** |
| | baz=346 | | | | | | | |
| **SCZT** | **Fangliau** | **1.03** | **288** | *e*P | | **Pb** | **21 36 04.8** | **-0.3** |
| | baz=293 | | | | | | | |
| **CHKT** | **Chengkung** | **1.08** | **345** | *e*P | | **Pg** | **21 36 05.6** | **-1.0** |
| | baz=1.0 | | | | | | | |
| CHKT | | | | *e*S | | **Sb** | **21 36 19.9** | **+0.1** |
| | baz=1.0 | | | | | | | |
| **MASBT** | **Mashibuluo** | **1.11** | **300** | *e*P | | **Pb** | **21 36 06.5** | **-0.1** |
| | baz=306 | | | | | | | |
| MASBT | | | | *e*S | | **Sb** | **21 36 21.6** | **+0.7** |
| | baz=306 | | | | | | | |
| **ECS** | **Chishang** | **1.12** | **338** | *e*P | | **Pn** | **21 36 07.0** | **+0.3** |
| | baz=353 | | | | | | | |
| ECS | | | | *e*S | | **Sn** | **21 36 22.9** | **+1.1** |
| | baz=353 | | | | | | | |
| **TSMG** | **Majia** | **1.15** | **304** | *e*P | | **Pn** | **21 36 07.6** | **+0.4** |
| | baz=322 | | | | | | | |
| **CHKH** | **Chenggong** | **1.16** | **347** | *e*P | | **Pg** | **21 36 06.7** | **-1.5** |
| | baz=2.0 | | | | | | | |
| CHKH | | | | *e*S | | **Sg** | **21 36 22.2** | **-1.2** |
| | baz=2.0 | | | | | | | |
| **EHD** | **Haiduan** | **1.17** | **338** | *e*P | | **Pn** | **21 36 07.9** | **+0.4** |
| | baz=352 | | | | | | | |
| EHD | | | | *e*S | | **Sn** | **21 36 24.3** | **+1.2** |
| | baz=352 | | | | | | | |
| **FULB** | **Fuli** | **1.19** | **343** | *e*P | | **Pg** | **21 36 07.2** | **-1.5** |
| | baz=358 | | | | | | | |
| FULB | | | | *e*S | | **Sb** | **21 36 24.0** | **+0.8** |
| | baz=358 | | | | | | | |
| **ECBN** | **Changbin** | **1.27** | **351** | *e*P | | **Pn** | **21 36 08.7** | **-0.2** |
| | baz=4.0 | | | | | | | |
| ECBN | | | | *e*S | | **Sg** | **21 36 25.1** | **-1.8** |
| | baz=4.0 | | | | | | | |
| **EYUL** | **Yuli** | **1.33** | **346** | *e*P | | **Pn** | **21 36 09.8** | **+0.1** |
| | baz=358 | | | | | | | |
| EYUL | | | | *e*S | | **Sg** | **21 36 27.4** | **-1.3** |
| | baz=358 | | | | | | | |
| **SLGT** | **Liugui** | **1.33** | **315** | *e*P | | **Pg** | **21 36 10.7** | **-0.8** |
| | baz=320 | | | | | | | |
| SLGT | | | | *e*S | | **Sb** | **21 36 27.4** | **+0.2** |
| | baz=320 | | | | | | | |
| **TWF1** | **Yuli** | **1.34** | **345** | *e*P | | **Pn** | **21 36 09.9** | **+0.1** |
| | baz=359 | | | | | | | |
| TWF1 | | | | *e*S | | **Sb** | **21 36 26.9** | **-0.4** |
| | baz=359 | | | | | | | |
| **SCST** | **Cishan** | **1.37** | **307** | *e*P | | **Pg** | **21 36 12.4** | **+0.2** |
| | baz=321 | | | | | | | |
| **YULB** | **Yu-li** | **1.38** | **345** | *e*P | | **Pn** | **21 36 10.4** | **+0.1** |
| | baz=357 | | | | | | | |
| YULB | | | | *e*S | | **Sb** | **21 36 28.1** | **-0.4** |
| | baz=357 | | | | | | | |
| **STYH** | **Taoyuan** | **1.39** | **323** | *e*P | | **Pg** | **21 36 11.6** | **-0.9** |
| | baz=337 | | | | | | | |
| STYH | | | | *e*S | | **Sg** | **21 36 30.4** | **-0.2** |
| | baz=337 | | | | | | | |
| **TWM1** | **Shoushan** | **1.39** | **304** | *e*P | | **Pg** | **21 36 13.1** | **+0.6** |
| | baz=319 | | | | | | | |
| TWM1 | | | | *e*S | | **Sg** | **21 36 32.7** | **+2.0** |
| | baz=319 | | | | | | | |
| **SGST** | **Jiashian** | **1.44** | **316** | *e*P | | **Pg** | **21 36 12.9** | **-0.5** |
| | baz=321 | | | | | | | |
| SGST | | | | *e*S | | **Sg** | **21 36 32.5** | **+0.3** |
| | baz=321 | | | | | | | |
| **HGSD** | **Ruisui** | **1.45** | **351** | *e*P | | **Pn** | **21 36 11.4** | **+0.1** |
| | baz=3.0 | | | | | | | |
| HGSD | | | | *e*S | | **Sb** | **21 36 30.3** | **-0.2** |
| | baz=3.0 | | | | | | | |
| **EHY** | **Hungye** | **1.48** | **347** | *e*P | | **Pn** | **21 36 12.1** | **+0.3** |
| | baz=360 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **21 36 31.4** | **+0.6** |
| | baz=360 | | | | | | | |
| **WTP** | **Ta-pu** | **1.54** | **321** | P | | **Pg** | **21 36 14.7** | **-0.7** |
| | baz=327 | | | | | | | |
| WTP | | | | *e*S | | **Sg** | **21 36 36.1** | **+0.7** |
| | baz=327 | | | | | | | |
| **CHN1** | **Nanshi** | **1.55** | **317** | *e*P | | **Pg** | **21 36 15.4** | **-0.1** |
| | baz=323 | | | | | | | |
| CHN1 | | | | *e*S | | **Sg** | **21 36 36.8** | **+1.2** |
| | baz=323 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.57** | **322** | *e*P | | **Pg** | **21 36 15.0** | **-1.0** |
| | baz=327 | | | | | | | |
| TPUB | | | | *e*S | | **Sg** | **21 36 36.4** | **-0.1** |
| | baz=327 | | | | | | | |
| **SNST** | **Tainan City** | **1.59** | **317** | *e*P | | **Pg** | **21 36 15.9** | **-0.4** |
| | baz=323 | | | | | | | |
| SNST | | | | *e*S | | **Sg** | **21 36 37.3** | **+0.2** |
| | baz=323 | | | | | | | |
| **EGFH** | **Guangfu** | **1.62** | **352** | *e*P | | **Pb** | **21 36 15.2** | **-0.1** |
| | baz=8.0 | | | | | | | |
| EGFH | | | | *e*S | | **Sb** | **21 36 36.1** | **+0.6** |
| | baz=8.0 | | | | | | | |
| **TWK** | **Hsinying** | **1.63** | **318** | *e*P | | **Pg** | **21 36 16.0** | **-1.1** |
| | baz=324 | | | | | | | |
| TWK | | | | *e*S | | **Sg** | **21 36 38.0** | **-0.4** |
| | baz=324 | | | | | | | |
| **TEGC** | **Jichi Village** | **1.65** | **356** | *e*S | | **Sb** | **21 36 36.5** | **+0.2** |
| | baz=12 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.68** | **351** | *e*P | | **Pn** | **21 36 14.3** | **-0.1** |
| | baz=6.0 | | | | | | | |
| WARBT | | | | *e*S | | **Sb** | **21 36 37.9** | **+0.8** |
| | baz=6.0 | | | | | | | |
| **WCKO** | **Fanlu** | **1.70** | **325** | *e*P | | **Pg** | **21 36 17.6** | **-0.8** |
| | baz=312 | | | | | | | |
| WCKO | | | | *e*S | | **Sg** | **21 36 40.8** | **+0.4** |
| | baz=312 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.73** | **357** | *e*P | | **Pn** | **21 36 15.3** | **+0.2** |
| | baz=12 | | | | | | | |
| SHUL | | | | *e*S | | **Sb** | **21 36 38.3** | **-0.2** |
| | baz=12 | | | | | | | |
| **VWDT** | **VWDT** | **1.76** | **344** | *e*P | | **Pb** | **21 36 16.7** | **-1.0** |
| | baz=1.0 | | | | | | | |
| VWDT | | | | *e*S | | **Sb** | **21 36 39.6** | **+0.1** |
| | baz=1.0 | | | | | | | |
| **ESL** | **Shilin** | **1.77** | **353** | *e*P | | **Pn** | **21 36 16.6** | **+1.0** |
| | baz=8.0 | | | | | | | |
| ESL | | | | *e*S | | **Sn** | **21 36 39.0** | **+1.2** |
| | baz=8.0 | | | | | | | |
| **CHN5** | **Tsauling** | **1.79** | **329** | *e*P | | **Pg** | **21 36 19.0** | **-1.2** |
| | baz=347 | | | | | | | |
| CHN5 | | | | *e*S | | **Sg** | **21 36 43.9** | **+0.4** |
| | baz=347 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.80** | **335** | *e*P | | **Pb** | **21 36 18.3** | **0.0** |
| | baz=352 | | | | | | | |
| WHYT | | | | *e*S | | **Sg** | **21 36 43.1** | **-0.7** |
| | baz=352 | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.81** | **358** | *e*P | | **Pb** | **21 36 18.2** | **-0.2** |
| | baz=2.0 | | | | | | | |
| TEYL | | | | *e*S | | **Sb** | **21 36 41.4** | **+0.6** |
| | baz=2.0 | | | | | | | |
| **TSCK** | **Chigu Township** | **1.83** | **307** | *e*P | | **Pb** | **21 36 18.2** | **-0.6** |
| | baz=313 | | | | | | | |
| TSCK | | | | *e*S | | **Sb** | **21 36 42.0** | **+0.6** |
| | baz=313 | | | | | | | |
| **SSLB** | **Suanglung** | **1.85** | **339** | *e*P | | **Pb** | **21 36 19.1** | **-0.1** |
| | baz=356 | | | | | | | |
| SSLB | | | | *e*S | | **Sb** | **21 36 43.1** | **+1.0** |
| | baz=356 | | | | | | | |
| **ETM** | **Tongmen** | **1.91** | **355** | *e*P | | **Pn** | **21 36 17.6** | **0.0** |
| | baz=9.0 | | | | | | | |
| ETM | | | | *e*S | | **Sn** | **21 36 42.5** | **+1.2** |
| | baz=9.0 | | | | | | | |
| **WDLH** | **Douliu** | **1.94** | **327** | *e*P | | **Pb** | **21 36 21.1** | **+0.4** |
| | baz=315 | | | | | | | |
| WDLH | | | | *e*S | | **Sg** | **21 36 46.2** | **-1.9** |
| | baz=315 | | | | | | | |
| **OWD** | **Renai** | **1.95** | **346** | *e*P | | **Pn** | **21 36 19.4** | **+1.1** |
| | baz=351 | | | | | | | |
| OWD | | | | *e*S | | **Sb** | **21 36 44.3** | **-0.7** |
| | baz=351 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.97** | **353** | *e*P | | **Pn** | **21 36 19.2** | **+0.6** |
| | baz=357 | | | | | | | |
| LXIB | | | | *e*S | | **Sn** | **21 36 43.6** | **+0.5** |
| | baz=357 | | | | | | | |
| **WSL** | **Shuilin Townsh** | **1.98** | **318** | *e*S | | **Sb** | **21 36 46.8** | **+1.0** |
| | baz=324 | | | | | | | |
| **TYC** | **Yuchr** | **1.99** | **338** | *e*P | | **Pg** | **21 36 22.2** | **-1.8** |
| | baz=354 | | | | | | | |
| TYC | | | | *e*S | | **Sg** | **21 36 48.0** | **-1.8** |
| | baz=354 | | | | | | | |
| **WUSB** | **Renai** | **2.00** | **345** | *e*P | | **Pb** | **21 36 20.6** | **-1.1** |
| | baz=2.0 | | | | | | | |
| WUSB | | | | *e*S | | **Sb** | **21 36 46.4** | **-0.1** |
| | baz=2.0 | | | | | | | |
| **WTK** | **Tuku** | **2.01** | **324** | *e*P | | **Pb** | **21 36 21.4** | **-0.5** |
| | baz=313 | | | | | | | |
| WTK | | | | *e*S | | **Sb** | **21 36 47.4** | **+0.6** |
| | baz=313 | | | | | | | |
| **WNT** | **Mingjian** | **2.03** | **333** | *e*P | | **Pg** | **21 36 23.2** | **-1.6** |
| | baz=339 | | | | | | | |
| WNT | | | | *e*S | | **Sg** | **21 36 50.0** | **-1.1** |
| | baz=339 | | | | | | | |
| **CHGB** | **Renai** | **2.05** | **347** | *e*P | | **Pb** | **21 36 21.5** | **-1.2** |
| | baz=4.0 | | | | | | | |
| CHGB | | | | *e*S | | **Sb** | **21 36 48.1** | **+0.1** |
| | baz=4.0 | | | | | | | |
| **NACB** | **Ninganchiao** | **2.11** | **358** | *e*P | | **Pn** | **21 36 20.5** | **+0.1** |
| | baz=12 | | | | | | | |
| NACB | | | | *e*S | | **Sn** | **21 36 47.4** | **+1.1** |
| | baz=12 | | | | | | | |
| **WCS** | **Beigang Elemen** | **2.12** | **341** | *e*P | | **Pb** | **21 36 23.2** | **-0.5** |
| | baz=356 | | | | | | | |
| WCS | | | | *e*S | | **Sb** | **21 36 50.9** | **+1.2** |
| | baz=356 | | | | | | | |
| **WHF** | **Hehuan Shan** | **2.12** | **350** | *e*P | | **Pn** | **21 36 21.9** | **+1.0** |
| | baz=5.0 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **21 36 48.8** | **+1.9** |
| | baz=5.0 | | | | | | | |
| **EOS4** | **EOS4** | **2.14** | **16** | *e*P | | **Pn** | **21 36 21.2** | **+0.8** |
| | baz=18 | | | | | | | |
| EOS4 | | | | *e*S | | **Sn** | **21 36 47.6** | **+1.1** |
| | baz=18 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **2.15** | **355** | *e*P | | **Pn** | **21 36 21.6** | **+0.6** |
| | baz=360 | | | | | | | |
| ETLH | | | | *e*S | | **Sb** | **21 36 50.3** | **-0.5** |
| | baz=360 | | | | | | | |
| **FUSS** | **Fushou** | **2.22** | **350** | *e*P | | **Pn** | **21 36 23.3** | **+1.2** |
| | baz=3.0 | | | | | | | |
| **TWT** | **Tachien** | **2.24** | **348** | *e*P | | **Pb** | **21 36 24.8** | **-1.1** |
| | baz=352 | | | | | | | |
| TWT | | | | *e*S | | **Sb** | **21 36 52.7** | **-0.7** |
| | baz=352 | | | | | | | |
| **EOS3** | **EOS3** | **2.30** | **15** | *e*P | | **Pn** | **21 36 24.1** | **+1.3** |
| | baz=15 | | | | | | | |
| EOS3 | | | | *e*S | | **Sn** | **21 36 52.5** | **+1.8** |
| | baz=15 | | | | | | | |
| **WHP** | **Taichung City** | **2.31** | **343** | *e*P | | **Pb** | **21 36 26.8** | **-0.3** |
| | baz=359 | | | | | | | |
| WHP | | | | *e*S | | **Sb** | **21 36 57.3** | **+1.8** |
| | baz=359 | | | | | | | |
| **ENA** | **Nanau** | **2.36** | **1** | *e*P | | **Pn** | **21 36 24.6** | **+0.7** |
| | baz=15 | | | | | | | |
| ENA | | | | *e*S | | **Sn** | **21 36 53.3** | **+0.8** |
| | baz=15 | | | | | | | |
| **VCHM** | **Qimei** | **2.37** | **299** | P | | **Pn** | **21 36 24.6** | **+0.6** |
| | baz=305 | | | | | | | |
| VCHM | | | | *e*S | | **Sn** | **21 36 50.8** | **-1.9** |
| | baz=305 | | | | | | | |
| **NNSB** | **Datong** | **2.38** | **354** | *e*P | | **Pb** | **21 36 26.4** | **-1.8** |
| | baz=6.0 | | | | | | | |
| **EWUT** | **Wuta** | **2.38** | **2** | *e*P | | **Pn** | **21 36 25.1** | **+1.0** |
| | baz=15 | | | | | | | |
| EWUT | | | | *e*S | | **Sn** | **21 36 54.2** | **+1.3** |
| | baz=15 | | | | | | | |
| **EOS2** | **EOS2** | **2.41** | **12** | *e*P | | **Pn** | **21 36 26.1** | **+1.8** |
| | baz=12 | | | | | | | |
| EOS2 | | | | *e*S | | **Sn** | **21 36 55.0** | **+1.6** |
| | baz=12 | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.42** | **307** | *e*P | | **Pn** | **21 36 24.1** | **-0.5** |
| | baz=312 | | | | | | | |
| **TWQ1** | **Liyutan** | **2.43** | **340** | *e*P | | **Pb** | **21 36 28.7** | **-0.4** |
| | baz=346 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sb** | **21 37 00.2** | **+1.5** |
| | baz=346 | | | | | | | |
| **LATG** | **Datong** | **2.47** | **357** | *e*P | | **Pn** | **21 36 26.9** | **+1.5** |
| | baz=1.0 | | | | | | | |
| LATG | | | | *e*S | | **Sb** | **21 36 58.9** | **-1.3** |
| | baz=1.0 | | | | | | | |
| **ENTT** | **Nioudou** | **2.58** | **358** | *e*P | | **Pn** | **21 36 29.0** | **+2.2** |
| | baz=1.0 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **2.62** | **349** | *e*P | | **Pb** | **21 36 30.9** | **-1.4** |
| | baz=4.0 | | | | | | | |
| NFF | | | | *e*S | | **Sb** | **21 37 03.7** | **-0.5** |
| | baz=4.0 | | | | | | | |
| **YHNB** | **Yeheng** | **2.62** | **354** | *e*P | | **Pn** | **21 36 29.6** | **+2.2** |
| | baz=358 | | | | | | | |
| YHNB | | | | *e*S | | **Sn** | **21 37 00.9** | **+2.0** |
| | baz=358 | | | | | | | |
| **NSK** | **Sanguang** | **2.63** | **354** | *e*P | | **Pb** | **21 36 30.4** | **-2.0** |
| | baz=9.0 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **21 37 02.2** | **+3.1** |
| | baz=9.0 | | | | | | | |
| **LIOB** | **Emei** | **2.65** | **347** | *e*P | | **Pb** | **21 36 32.0** | **-0.9** |
| | baz=2.0 | | | | | | | |
| LIOB | | | | *e*S | | **Sb** | **21 37 05.8** | **+0.7** |
| | baz=2.0 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.69** | **27** | P | | **Pn** | **21 36 29.7** | **+1.3** |
| | baz=27 | | | | | | | |
| YOJ | | | | *e*S | | **Sn** | **21 37 03.4** | **+2.8** |
| | baz=27 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.69** | **27** | P | | **Pn** | **21 36 30.1** | **+1.8** |
| **FUSB** | **Fushanzhiwuyua** | **2.69** | **358** | *e*P | | **Pn** | **21 36 30.8** | **+2.3** |
| | baz=2.0 | | | | | | | |
| FUSB | | | | *e*S | | **Sb** | **21 37 04.3** | **-2.2** |
| | baz=2.0 | | | | | | | |
| **NWLT** | **Wulai** | **2.71** | **357** | *e*P | | **Pn** | **21 36 31.1** | **+2.3** |
| | baz=1.0 | | | | | | | |
| NWLT | | | | *e*S | | **Sn** | **21 37 04.3** | **+3.1** |
| | baz=1.0 | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.80** | **44** | P | | **Pn** | **21 36 30.6** | **+0.8** |
| HATJ | | | | S | | **Sn** | **21 37 03.8** | **+0.7** |
| **TIPB** | **Shuangxi** | **2.91** | **3** | *e*P | | **Pn** | **21 36 34.0** | **+2.7** |
| | baz=17 | | | | | | | |
| TIPB | | | | *e*S | | **Sn** | **21 37 07.8** | **+1.8** |
| | baz=17 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **2.95** | **39** | P | | **Pn** | **21 36 33.0** | **+1.0** |
| IRIF | | | | S | | **Sn** | **21 37 07.6** | **+0.6** |
| **JKRS** | **Kuro-shima** | **3.06** | **44** | P | | **Pn** | **21 36 34.5** | **+1.1** |
| JKRS | | | | S | | **Sn** | **21 37 10.4** | **+0.8** |
| **JIJ** | **Ishigaki jima** | **3.23** | **44** | P | | **Pn** | **21 36 36.2** | **+0.4** |
| JIJ | | | | S | | **Sn** | **21 37 12.7** | **-1.2** |
| **JISG** | **Ishigakijimahi** | **3.50** | **43** | P | | **Pn** | **21 36 39.9** | **+0.5** |
| JISG | | | | S | | **Sn** | **21 37 20.6** | **+0.2** |
| **JTJ** | **Tarama** | **3.79** | **47** | P | | **Pn** | **21 36 44.1** | **+0.7** |
| JTJ | | | | *e*S | | **Sn** | **21 37 28.1** | **+0.4** |
| **KNMB** | **Chin-men Tao** | **3.86** | **309** | *e*P | | **Pn** | **21 36 44.8** | **+0.4** |
| | baz=315 | | | | | | | |
| KNMB | | | | *e*S | | **Sn** | **21 37 28.6** | **-0.8** |
| | baz=315 | | | | | | | |
| **JIRB** | **Irabujima** | **4.24** | **49** | *e*P | | **Pn** | **21 36 50.4** | **+0.9** |
| **JMJ2** | **Miyako jima3** | **4.29** | **51** | *e*P | | **Pn** | **21 36 50.7** | **+0.4** |
| JMJ2 | | | | S | | **Sn** | **21 37 40.6** | **+0.6** |
| **JIKM** | **Ikemajima** | **4.35** | **48** | P | | **Pn** | **21 36 51.8** | **+0.7** |
| **MATB** | **Ma-tsu** | **4.38** | **339** | *e*P | | **Pn** | **21 36 53.8** | **+2.3** |
| | baz=344 | | | | | | | |
| MATB | | | | *e*S | | **Sn** | **21 37 42.5** | **+0.4** |
| | baz=344 | | | | | | | |
| **MHZQ** | **Yeshan** | **4.70** | **330** | *e*P | | **Pn** | **21 36 56.5** | **+0.5** |
| | baz=324 | | | | | | | |
| MHZQ | | | | *e*S | | **Sn** | **21 37 50.0** | **-0.1** |
| | baz=324 | | | | | | | |

*IDC **29** 21:44:54.0±2.1,22°.29S×170°.13E,h0km,mb3.9/4, mbtmp3.9/5,ML3.6/1,MS2.4/2,Error ellipse: s-maj=52.9km s-min=34.1km az=18.0*
**ISC 29 21:44:58.3±2.0,22°.4S±0°.4×170°.0E±0°.2,h21km,n7, σ0s31/7,mb3.9/4,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.31** | **275** | Pn | | **Pn** | **21 45 49.4** | **+0.4** |
| | 6.4nm,0.3s,baz=98,slow=15,SNR=15 | | | | | | | |
| DZM | | | | LR | | LR | 21 46 24.1 | |
| | comp=Z,83nm,19.2s,baz=114,slow=26 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **21 46 27.4** | **-0.3** |
| | 2.1nm,0.3s,baz=106,slow=22,SNR=3.7 25nm,0.6s | | | | | | | |
| **CTA** | **Charters Tower** | **22.25** | **271** | LR | | LR | 21 56 44.3 | |
| | comp=Z,5.7nm,19.9s,baz=340,slow=32 | | | | | | | |
| **STKA** | **Stephens Creek** | **26.92** | **243** | P | | **P** | **21 50 38.3** | **+0.2** |
| | 1.9nm,0.8s,baz=96,slow=11,SNR=4.3 1.9nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.19** | **261** | P | | **P** | **21 51 33.8** | **-0.1** |
| | 1.3nm,0.9s,baz=96,slow=8.3,SNR=9.6 1.3nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.30** | **267** | P | | **P** | **21 51 34.5** | **-0.3** |
| | 0.8nm,0.6s,baz=100,slow=8.3,SNR=14 0.8nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.68** | **180** | P | | **P** | **21 55 53.7** | **-0.1** |
| | 1.6nm,0.9s,baz=300,slow=2.9,SNR=4.1 1.6nm,0.9s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.71** | **353** | PKPbc | | **PKPdf** | **22 04 36.5** | **-0.1** |
| | 0.5nm,0.5s,baz=12,slow=3.6,SNR=1.9 | | | | | | | |

*IDC **29** 21:49:54.6±1.6,22°.25S×170°.09E,h0km,mb4.0/5, mbtmp4.0/6,ML3.8/1,Error ellipse: s-maj=39.5km s-min=31.7km az=21.0*
**ISC 29 21:49:58.4±1.3,22°.3S±0°.3×170°.0E±0°.1,h21km,n11, σ0s87/12,mb4.1/8,4C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res

2.0nm,0.8s,baz=337,slow=0.5,SNR=9.4
2.0nm,0.8s
**TROLL Troll, Antarti 85.51 184** ⇑P **P 22 02 34.4 -0.2**
comp=Z,187nm,0.8s
**VNA3 Neumayer Olymp 86.67 180** ⇑P **P 22 02 39.0 -1.2**
comp=Z,2.4nm,0.8s
**VNA2 Neumayer--Watz 86.97 181** ⇑P **P 22 02 41.0 -0.7**
comp=Z,2.4nm,0.6s,baz=177,slow=4.9
**VNA1 Neumayer--Stat 87.26 181** ⇑P **P 22 02 42.5 -0.5**
comp=Z,4.8nm,1.1s
**SONM Songino Array 90.09 323** P **P 22 02 57.1 +0.2**
comp=Z,0.7nm,0.8s,baz=134,slow=4.3,SNR=3.7
comp=Z,0.7nm,0.8s
**EKA Eskdalemuir Ar 146.65 353** PKPbc **PKPdf 22 09 36.8 +0.2**
comp=Z,0.5nm,0.5s,baz=358,slow=2.9,SNR=4.2

*KRSC **29** 21:51:48.8±1.3,53˚.63N×161˚.94E, h48km±29km, Ml4.6*
*MOS **29** 21:51:51.5±1.0,53˚.70N×161˚.77E, h55km, mb4.5/18, Error ellipse: s-maj=6.8km s-min=4.3km az=89.4*
*NEIC **29** 21:51:53.4±1.5,53˚.93N±0˚.09×161˚.5E±0˚.2, h41km±7km, mb4.4/27, Error ellipse: s-maj=14.9km s-min=10.9km az=134.0*
*IDC **29** 21:51:54.4±0.8,53˚.87N×161˚.50E, h54km±5km, mb3.8/23, mbtmp4.1/27, MS4.4/3, Error ellipse: s-maj=16.8km s-min=9.7km az=138.0*
**ISC 29 21:51:52.2±0.5,53˚.65N±0˚.03×161˚.86E±0˚.04, h47km±4km, h47km:pP-P,n176,σ1$40/243,mb4.2/57,MS4.6/5,6C-8D, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPN** | **Mys Shipunski** | **1.23** | **244** | *eP* | **Pn** | **21 52 12.2** | **-0.8** |
| SPN | | | | *eS* | **Sn** | **21 52 27.1** | **-1.3** |
| **SPN** | **Mys Shipunski** | **1.23** | **244** | PN | **Pn** | **21 52 12.1** | **-0.8** |
| SPN | | | | S | **Sn** | **21 52 27.1** | **-1.3** |
| **KII** | **Karymskiy** | **1.48** | **286** | *eP* | **Pn** | **21 52 15.1** | **-1.3** |
| **KII** | **Karymskiy** | **1.48** | **286** | PN | **Pn** | **21 52 15.1** | **-1.3** |
| **NLC** | **Nalytchevo** | **1.58** | **253** | *eP* | **Pn** | **21 52 16.9** | **-0.8** |
| NLC | | | | *eS* | **Sn** | **21 52 36.1** | **-0.8** |
| **NLC** | **Nalytchevo** | **1.58** | **253** | PN | **Pn** | **21 52 16.9** | **-0.8** |
| NLC | | | | S | **Sn** | **21 52 36.1** | **-0.8** |
| **TUMD** | **Tumrok D** | **1.77** | **332** | *eP* | **Pn** | **21 52 19.4** | **-1.0** |
| TUMD | | | | *eS* | **Sn** | **21 52 40.2** | **-1.5** |
| **SMAR** | **Somma** | **1.87** | **259** | *eP* | **Pn** | **21 52 21.8** | **-0.1** |
| SMAR | | | | *eS* | **Sn** | **21 52 43.6** | **-0.9** |
| **SMAR** | **Somma** | **1.87** | **259** | PN | **Pn** | **21 52 21.8** | **-0.1** |
| SMAR | | | | S | **Sn** | **21 52 43.5** | **-0.9** |
| **UGLR** | **Uglovaya** | **1.87** | **257** | *eP* | **Pn** | **21 52 21.8** | **0.0** |
| UGLR | | | | *eS* | **Sn** | **21 52 44.4** | **+0.1** |
| **UGLR** | **Uglovaya** | **1.87** | **257** | PN | **Pn** | **21 52 21.8** | **0.0** |
| UGLR | | | | S | **Sn** | **21 52 44.3** | **+0.1** |
| **AVH** | **Avacha** | **1.91** | **260** | *eP* | **Pn** | **21 52 22.6** | **+0.3** |
| AVH | | | | *eS* | **Sn** | **21 52 45.2** | **+0.1** |
| **AVH** | **Avacha** | **1.91** | **260** | PN | **Pn** | **21 52 22.5** | **+0.3** |
| AVH | | | | S | **Sn** | **21 52 45.2** | **+0.1** |
| **TUMR** | **Tumrok** | **1.92** | **329** | *eP* | **Pn** | **21 52 22.2** | **-0.2** |
| TUMR | | | | *eS* | **Sn** | **21 52 45.5** | **+0.1** |
| **TUMR** | **Tumrok** | **1.92** | **329** | PN | **Pn** | **21 52 22.2** | **-0.2** |
| TUMR | | | | S | **Sn** | **21 52 45.5** | **+0.1** |
| **KOK** | **Koryaka** | **1.96** | **261** | *eP* | **Pn** | **21 52 22.9** | **-0.2** |
| KOK | | | | *eS* | **Sn** | **21 52 46.1** | **-0.3** |
| **KOK** | **Koryaka** | **1.96** | **261** | PN | **Pn** | **21 52 22.8** | **-0.2** |
| KOK | | | | S | **Sn** | **21 52 46.1** | **-0.3** |
| **DALK** | **Dalny** | **1.96** | **253** | *eP* | **Pn** | **21 52 22.7** | **-0.2** |
| DALK | | | | *eS* | **Sn** | **21 52 45.7** | **-0.7** |
| **DALK** | **Dalny** | **1.96** | **253** | PN | **Pn** | **21 52 22.7** | **-0.2** |
| DALK | | | | S | **Sn** | **21 52 45.6** | **-0.7** |
| **PET** | **Petropavlovsk** | **2.02** | **253** | | **Pn** | **21 52 23.5** | **-0.3** |
| PET | | | | Sn | **Sn** | **21 52 45.7** | **-2.2** |
| **PET** | **Petropavlovsk** | **2.02** | **253** | *eP* | **Pn** | **21 52 23.7** | **-0.1** |
| PET | | | | *eS* | **Sn** | **21 52 47.1** | **-0.7** |
| **PET** | **Petropavlovsk** | **2.02** | **253** | PN | **Pn** | **21 52 23.6** | **-0.1** |
| PET | | | | S | **Sn** | **21 52 47.1** | **-0.7** |
| **INSR** | **Institute** | **2.04** | **255** | *eP* | **Pn** | **21 52 24.1** | **+0.1** |
| INSR | | | | *eS* | **Sn** | **21 52 48.3** | **+0.1** |
| **INSR** | **Institute** | **2.04** | **255** | PN | **Pn** | **21 52 24.0** | **+0.1** |
| INSR | | | | S | **Sn** | **21 52 48.2** | **+0.1** |
| **KMNR** | **Kamenistaya** | **2.31** | **337** | *eP* | **Pn** | **21 52 28.5** | **+0.6** |
| KMNR | | | | *eS* | **Sn** | **21 52 56.6** | **+1.5** |
| **KMNR** | **Kamenistaya** | **2.31** | **337** | PN | **Pn** | **21 52 28.4** | **+0.6** |
| KMNR | | | | S | **Sn** | **21 52 56.5** | **+1.5** |
| **GNL** | **Ganaly** | **2.33** | **273** | *eP* | **Pn** | **21 52 28.6** | **+0.5** |
| **GNL** | **Ganaly** | **2.33** | **273** | PN | **Pn** | **21 52 28.6** | **+0.5** |
| **KRMR** | **Karymshinskiy** | **2.39** | **251** | *eP* | **Pn** | **21 52 28.9** | **+0.2** |
| KRMR | | | | *eS* | **Sn** | **21 52 57.1** | **+0.3** |
| **KRMR** | **Karymshinskiy** | **2.39** | **251** | PN | **Pn** | **21 52 28.9** | **+0.2** |
| KRMR | | | | S | **Sn** | **21 52 57.1** | **+0.3** |
| **BZGR** | **Bezymyannyi-Gr** | **2.39** | **344** | *eP* | **Pn** | **21 52 29.1** | **+0.1** |
| BZGR | | | | *eS* | **Sn** | **21 52 57.7** | **+0.6** |
| **BZGR** | **Bezymyannyi-Gr** | **2.39** | **344** | PN | **Pn** | **21 52 29.0** | **+0.1** |
| BZGR | | | | S | **Sn** | **21 52 57.6** | **+0.6** |
| **BZP** | **Bezymyannyi-Pe** | **2.39** | **342** | *eS* | **Sn** | **21 52 58.4** | **+1.3** |
| **BZMR** | **Bezymyannaya** | **2.42** | **341** | *eP* | **Pn** | **21 52 29.9** | **+0.5** |
| BZMR | | | | *eS* | **Sn** | **21 52 59.4** | **+1.6** |
| **BZMR** | **Bezymyannaya** | **2.42** | **341** | PN | **Pn** | **21 52 29.9** | **+0.5** |
| BZMR | | | | S | **Sn** | **21 52 59.4** | **+1.6** |
| **BZWR** | **Bezymyannyi-We** | **2.45** | **342** | *eP* | **Pn** | **21 52 31.0** | **+1.3** |
| **BZWR** | **Bezymyannyi-We** | **2.45** | **342** | PN | **Pn** | **21 52 31.0** | **+1.3** |
| **ZLN** | **Zelenaya** | **2.45** | **346** | *eP* | **Pn** | **21 52 31.5** | **+1.7** |
| ZLN | | | | *eS* | **Sn** | **21 53 00.0** | **+1.6** |
| **ZLN** | **Zelenaya** | **2.45** | **346** | PN | **Pn** | **21 52 31.4** | **+1.7** |
| ZLN | | | | S | **Sn** | **21 53 00.0** | **+1.6** |
| **KIRR** | **Kirishev** | **2.47** | **340** | *eP* | **Pn** | **21 52 30.7** | **+0.7** |
| **KIRR** | **Kirishev** | **2.47** | **340** | PN | **Pn** | **21 52 30.7** | **+0.7** |
| **KPT** | **Kopyto** | **2.50** | **338** | *eP* | **Pn** | **21 52 31.0** | **+0.5** |
| **KPT** | **Kopyto** | **2.50** | **338** | PN | **Pn** | **21 52 30.9** | **+0.5** |
| **MTVR** | **Mutnovka** | **2.51** | **244** | *eP* | **Pn** | **21 52 31.1** | **+0.5** |
| MTVR | | | | *eS* | **Sn** | **21 53 00.1** | **0.0** |
| **MTVR** | **Mutnovka** | **2.51** | **244** | PN | **Pn** | **21 52 31.1** | **+0.5** |
| MTVR | | | | S | **Sn** | **21 53 00.0** | **0.0** |
| **LGNR** | **Loginova** | **2.53** | **345** | *eP* | **Pn** | **21 52 31.9** | **+0.9** |
| LGNR | | | | *eS* | **Sn** | **21 52 32.1** | **+1.5** |
| **LGNR** | **Loginova** | **2.53** | **345** | PN | **Pn** | **21 52 31.8** | **+0.9** |
| LGNR | | | | S | **Sn** | **21 53 02.1** | **+1.5** |
| **GRL** | **Gorelyy** | **2.54** | **246** | *eP* | **Pn** | **21 52 31.5** | **+0.6** |
| GRL | | | | *eS* | **Sn** | **21 53 00.4** | **-0.3** |
| **GRL** | **Gorelyy** | **2.54** | **246** | PN | **Pn** | **21 52 31.5** | **+0.6** |
| GRL | | | | S | **Sn** | **21 53 00.3** | **-0.3** |
| **CIRR** | **Tsirk** | **2.55** | **346** | *eP* | **Pn** | **21 52 32.4** | **+1.2** |
| CIRR | | | | *eS* | **Sn** | **21 53 03.7** | **+2.7** |
| **CIRR** | **Tsirk** | **2.55** | **346** | PN | **Pn** | **21 52 32.3** | **+1.2** |
| CIRR | | | | S | **Sn** | **21 53 03.7** | **+2.7** |
| **PEA0B** | **Petropavlovsk-** | **2.55** | **259** | Pn | **Pn** | **21 52 32.0** | **+0.9** |
| **PEA0B** | **Petropavlovsk-** | **2.55** | **259** | PN | **Pn** | **21 52 31.9** | **+0.9** |
| PEA0B | | | | S | **Sn** | **21 53 02.6** | **+1.8** |
| **PETK** | **Petropavlovsk-** | **2.55** | **259** | P | **Pn** | **21 52 31.3** | **+0.3** |
| | 29nm,0.3s,baz=77,slow=17,SNR=179 | | | | | | |
| PETK | | | | S | **Sn** | **21 53 00.5** | **-0.3** |
| | 113nm,0.3s,baz=73,slow=20,SNR=5.2 | | | | | | |
| PETK | | | | LR | LR | 21 53 48.0 | |
| | comp=Z,238nm,19.9s,baz=86,slow=48 | | | | | | |
| **KBTR** | **Krutoberegovo** | **2.62** | **12** | *eS* | **Sn** | **21 53 01.3** | **-1.2** |
| **KBG** | **Krutoberegovo** | **2.65** | **10** | *eP* | **Pn** | **21 52 32.3** | **-0.1** |
| KBG | | | | *eS* | **Sn** | **21 53 02.8** | **-0.5** |
| **KBG** | **Krutoberegovo** | **2.65** | **10** | PN | **Pn** | **21 52 32.3** | **-0.1** |
| KBG | | | | S | **Sn** | **21 53 02.8** | **-0.5** |
| **KOZ** | **Kozyrevsk** | **2.67** | **335** | *eP* | **Pn** | **21 52 33.4** | **+0.7** |
| KOZ | | | | *eS* | **Sn** | **21 53 05.2** | **+1.4** |
| **KOZ** | **Kozyrevsk** | **2.67** | **335** | PN | **Pn** | **21 52 33.3** | **+0.7** |
| KOZ | | | | S | **Sn** | **21 53 05.1** | **+1.4** |
| **KRSR** | **Krestovskiy** | **2.68** | **344** | *eP* | **Pn** | **21 52 33.1** | **+0.3** |
| KRSR | | | | *eS* | **Sn** | **21 53 04.0** | **0.0** |
| **KRSR** | **Krestovskiy** | **2.68** | **344** | PN | **Pn** | **21 52 33.1** | **+0.3** |
| KRSR | | | | S | **Sn** | **21 53 04.0** | **0.0** |
| **ASAK** | **Asacha** | **2.71** | **244** | *eP* | **Pn** | **21 52 34.2** | **+0.9** |
| ASAK | | | | *eS* | **Sn** | **21 53 06.7** | **+1.9** |
| **ASAK** | **Asacha** | **2.71** | **244** | PN | **Pn** | **21 52 34.1** | **+0.9** |
| ASAK | | | | S | **Sn** | **21 53 06.7** | **+1.9** |
| **KLY** | **Klyuchi** | **2.76** | **346** | *eP* | **Pn** | **21 52 34.1** | **+0.2** |
| KLY | | | | *eS* | **Sn** | **21 53 05.4** | **-0.4** |
| **KLY** | **Klyuchi** | **2.76** | **346** | PN | **Pn** | **21 52 34.0** | **+0.2** |
| KLY | | | | S | **Sn** | **21 53 05.4** | **-0.4** |
| **BKI** | **Bering** | **2.86** | **55** | *eP* | **Pn** | **21 52 34.8** | **-0.4** |
| BKI | | | | *eS* | **Sn** | **21 53 04.7** | **-3.7** |
| **BKI** | **Bering** | **2.86** | **55** | PN | **Pn** | **21 52 34.8** | **-0.4** |
| BKI | | | | S | **Sn** | **21 53 04.6** | **-3.7** |
| **APC** | **Apacha** | **2.92** | **257** | *eP* | **Pn** | **21 52 37.6** | **+1.5** |
| APC | | | | *eS* | **Sn** | **21 53 11.5** | **+1.7** |
| **APC** | **Apacha** | **2.92** | **257** | PN | **Pn** | **21 52 37.5** | **+1.5** |
| APC | | | | S | **Sn** | **21 53 11.4** | **+1.7** |
| **ESO** | **Esso** | **2.92** | **322** | *eP* | **Pn** | **21 52 36.2** | **0.0** |
| ESO | | | | *eS* | **Sn** | **21 53 09.0** | **-0.9** |
| **ESO** | **Esso** | **2.92** | **322** | PN | **Pn** | **21 52 36.1** | **0.0** |
| ESO | | | | S | **Sn** | **21 53 09.0** | **-0.9** |
| **SRDR** | **Sredinnyy** | **2.94** | **336** | *eP* | **Pn** | **21 52 36.3** | **-0.1** |
| **SRDR** | **Sredinnyy** | **2.94** | **336** | PN | **Pn** | **21 52 36.3** | **-0.1** |
| **KDTR** | **Khodutka, Kamc** | **2.95** | **233** | *eP* | **Pn** | **21 52 36.7** | **+0.2** |
| KDTR | | | | *eS* | **Sn** | **21 53 09.2** | **-1.4** |
| **KDTR** | **Khodutka, Kamc** | **2.95** | **233** | PN | **Pn** | **21 52 36.6** | **+0.2** |
| KDTR | | | | S | **Sn** | **21 53 09.1** | **-1.4** |
| **SKR** | **Severo-Kuril's** | **4.62** | **232** | *e*PN | **Pn** | **21 52 59.8** | **+0.4** |
| SKR | | | | *eS* | **Sn** | **21 53 50.0** | **-1.6** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,88nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,267nm,0.9s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,262nm,0.8s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,600nm,15.0s | | | | | | |
| **MA2** | **Magadan** | **8.52** | **319** | Pn | **Pn** | **21 53 48.8** | **-4.0** |
| **MA2** | **Magadan** | **8.52** | **319** | P | **Pn** | **21 53 51.2** | **-1.5** |
| | comp=Z,8.9nm,0.5s,baz=126,slow=9.9,SNR=3.8 | | | | | | |
| **MA2** | **Magadan** | **8.52** | **319** | ⇑*e*PN | **Pn** | **21 53 53.0** | **+0.3** |
| MA2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **SEY** | **Seymchan** | **10.54** | **336** | ⇑*e*PN | **Pn** | **21 54 20.4** | **0.0** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **TYV** | **Tymovskoe** | **12.09** | **264** | *e*PN | **P** | **21 54 49.6** | **-3.6** |
| TYV | | | | *eS* | Sn | 21 57 04.7 | +10 |
| TYV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,100nm,3.4s | | | | | | |
| TYV | | | | smax | smax | | |
| | comp=E,100nm,4.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **13.90** | **249** | *e*P | **Pn** | **21 55 08.9** | **+2.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,200nm,14.0s | | | | | | |
| **BILL** | **Bilibino** | **14.59** | **7** | *e*P | **Pn** | **21 55 15.2** | **-0.2** |
| BILL | | | | *eS* | **Sn** | **21 57 55.0** | **-0.5** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,61nm,18.0s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **15.81** | **241** | Pn | **Pn** | **21 55 30.6** | **-0.8** |
| **ASAJ** | **Asahikawa** | **15.81** | **241** | P | **Pn** | **21 55 31.8** | **+0.3** |
| | comp=Z,3.6nm,0.7s,baz=87,slow=25,SNR=1.7 | | | | | | |
| **ASAJ** | **Asahikawa** | **15.81** | **241** | P | **Pn** | **21 55 30.6** | **-0.8** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **ERM** | **Erimo** | **17.06** | **235** | Pn | **Pn** | **21 55 44.9** | **-2.2** |
| ERM | | | | IAmb | IAmb | 21 56 26.0 | |
| | comp=Z,40nm,1.2s | | | | | | |
| **ERM** | **Erimo** | **17.06** | **235** | ⇓*e*P | **Pn** | **21 55 46.8** | **-0.3** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **18.89** | **309** | *de*P | **P** | **21 56 05.8** | **-2.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **KLR** | **Kul'dur** | **19.20** | **269** | P | **P** | **21 56 11.6** | **-0.3** |
| | comp=Z,2.5nm,0.5s,baz=80,slow=10,SNR=9.6 | | | | | | |
| **KLR** | **Kul'dur** | **19.20** | **269** | ⇓*e*P | **Pn** | **21 56 12.3** | **-0.8** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.8s | | | | | | |
| **F15K** | **North Star Dit** | **20.46** | **41** | | Pn | 21 56 26.9 | -1.0 |
| **HEH** | **HeiHe** | **21.37** | **275** | *e*P | **P** | **21 56 36.0** | **+0.7** |
| HEH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **N15K** | **Kwethluk River** | **21.52** | **57** | P | **P** | **21 56 38.9** | **+2.0** |
| N15K | | | | IAmb | IAmb | 21 57 03.8 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **21.64** | **256** | P | **P** | **21 56 37.7** | **-0.5** |
| **USA0B** | **Ussuriysk Arra** | **21.64** | **256** | P | **P** | **21 56 37.7** | **-0.5** |
| USA0B | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.64** | **256** | P | **P** | **21 56 37.7** | **-0.5** |
| | comp=Z,1.2nm,0.5s,baz=47,slow=12,SNR=5.8 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **M17K** | **Holitna River** | **22.85** | **54** | P | **P** | **21 56 52.1** | **+1.1** |
| M17K | | | | IAmb | IAmb | 21 57 11.3 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **TIXI** | **Tiksi** | **23.03** | **334** | P | **P** | **21 56 50.9** | **-1.8** |
| **TIXI** | **Tiksi** | **23.03** | **334** | P | **P** | **21 56 50.9** | **-1.8** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **BNX** | **BinXian** | **23.46** | **264** | ⇓P | **P** | **21 56 55.8** | **-1.4** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **23.73** | **233** | P | **P** | **21 57 01.4** | **+1.7** |
| | comp=Z,1.5nm,0.4s,baz=17,slow=10,SNR=7.0 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **23.73** | **233** | P | **P** | **21 57 02.0** | **+2.3** |
| MJB9 | | | | IAmb | IAmb | 21 57 16.7 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **23.73** | **233** | P | **P** | **21 57 02.1** | **+2.4** |
| MAJO | | | | IAmb | IAmb | 21 57 16.7 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **23.73** | **233** | ⇑*e*P | **P** | **21 57 01.6** | **+1.9** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **K20K** | **Telida** | **24.49** | **49** | P | **P** | **21 57 08.8** | **+2.4** |
| **ILAR** | **Eielson Array** | **27.67** | **46** | P | **P** | **21 57 37.0** | **+1.9** |
| | comp=Z,0.6nm,0.8s,baz=274,slow=8.0,SNR=5.6 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **28.41** | **249** | P | **P** | **21 57 41.7** | **-0.2** |
| | comp=Z,0.6nm,0.4s,baz=47,slow=9.0,SNR=2.7 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.08** | **172** | T | T | 22 35 31.1 | |
| | baz=354,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.09** | **171** | T | T | 22 35 32.9 | |
| | baz=354 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.10** | **172** | T | T | 22 35 50.2 | |
| | baz=354,slow=74 | | | | | | |
| **R32K** | **Eaglecrest** | **34.72** | **56** | P | **P** | **21 58 39.2** | **+2.1** |
| **SONM** | **Songino Array** | **34.80** | **283** | P | **P** | **21 58 36.6** | **-1.5** |
| | comp=Z,0.3nm,0.3s,baz=59,slow=9.0,SNR=3.3 | | | | | | |
| SONM | | | | PcP | **PcP** | **22 01 11.4** | **+1.0** |
| | comp=Z,1.0nm,0.6s,baz=60,slow=3.3,SNR=5.1 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.28** | **172** | T | T | 22 36 34.0 | |
| | baz=352 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.29** | **172** | T | T | 22 36 34.2 | |
| | baz=352 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.29** | **172** | T | T | 22 36 35.5 | |
| | baz=352 | | | | | | |
| **JOW** | **Kunigami** | **36.50** | **236** | P | **P** | **21 58 55.4** | **+2.7** |
| **DGZ** | **Jazzator, Alta** | **44.37** | **297** | ⇑*e*P | **P** | **21 59 56.7** | **-1.0** |
| DGZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **46.76** | **351** | P | **P** | **22 00 15.9** | **-0.1** |
| | comp=Z,8.0nm,0.7s,baz=43,slow=6.2,SNR=4.8 | | | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **48.33** | **302** | P | **P** | **22 00 26.9** | **-1.6** |
| **KURK** | **Kurchatov** | **48.33** | **302** | P | **P** | **22 00 27.0** | **-1.6** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.44** | **302** | P | **P** | **22 00 26.9** | **-2.4** |
| | comp=Z,0.6nm,0.3s,baz=51,slow=8.0,SNR=1.7 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **48.86** | **296** | P | **P** | **22 00 30.3** | **-2.4** |
| MK31 | | | | IAmb | IAmb | 22 00 44.1 | |
| | comp=Z,3.6nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **48.86** | **296** | P | **P** | **22 00 30.3** | **-2.4** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.86** | **296** | P | **P** | **22 00 30.5** | **-2.2** |
| | comp=Z,1.0nm,0.5s,baz=54,slow=6.5,SNR=21 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.86** | **296** | *i* P | **P** | **22 00 31.2** | **-1.5** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **49.02** | **296** | P | **P** | **22 00 31.5** | **-2.4** |
| MAKZ | | | | IAmb | IAmb | 22 00 35.5 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **MAKZ** | **Makanchi** | **49.02** | **296** | P | **P** | **22 00 31.5** | **-2.4** |
| MAKZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **50.87** | **309** | P | **P** | **22 00 45.5** | **-2.3** |
| | comp=Z,2.3nm,0.4s,baz=49,slow=7.7,SNR=22 | | | | | | |
| BVAR | | | | PcP | **PcP** | **22 02 03.7** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=62,slow=3.5,SNR=4.6 | | | | | | |
| | comp=Z,2.3nm,0.4s | | | | | | |
| **BRVK** | **Borovoye** | **50.89** | **309** | | **P** | **22 00 46.7** | **-1.3** |
| BRVK | | | | IAmb | IAmb | 22 00 47.9 | |
| | comp=Z,2.4nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **50.89** | **309** | ⇓*e*P | **P** | **22 00 46.3** | **-1.7** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.08** | **342** | P | **P** | **22 01 03.1** | **-0.9** |
| | comp=Z,1.5nm,0.8s,baz=34,slow=8.8,SNR=5.4 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **ARU** | **Arti** | **53.70** | **318** | P | **P** | **22 01 07.5** | **-1.2** |
| **ARU** | **Arti** | **53.70** | **318** | *d* iP | **P** | **22 01 07.9** | **-0.8** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **KIRV** | **Kirov** | **55.57** | **324** | ⇓*e*P | **P** | **22 01 21.9** | **-0.3** |
| **JLU** | **Jordanelle** | **56.83** | **65** | P | **P** | **22 01 34.1** | **+2.2** |
| JLU | | | | IAmb | IAmb | 22 01 37.1 | |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **CRAI** | **Chiangrai** | **57.11** | **259** | P | **P** | **22 01 34.3** | **+0.5** |
| CRAI | | | | IAmb | IAmb | 22 01 35.8 | |
| | comp=Z,3.8nm,1.1s | | | | | | |
| **KSH** | **Kashi** | **57.16** | **293** | P | **P** | **22 01 37.5** | **+3.5** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **58.23** | **311** | P | **P** | **22 01 40.3** | **-0.9** |
| ABKAR | | | | IAmb | IAmb | 22 01 41.1 | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **PHRA** | **Phrae** | **58.55** | **258** | P | **P** | **22 01 44.7** | **+0.9** |
| **CMAR** | **Chiang Mai Arr** | **59.33** | **259** | P | **P** | **22 01 50.7** | **+1.4** |
| | comp=Z,4.4nm,0.7s,baz=25,slow=6.9,SNR=24 | | | | | | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **59.33** | **259** | *ce*P | **P** | **22 01 51.0** | **+1.8** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **60.02** | **337** | P | **P** | **22 01 53.6** | **+0.2** |
| | comp=Z,5.7nm,0.6s,baz=33,slow=7.7,SNR=43 | | | | | | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **BELG** | **Belogornoye** | **60.97** | **320** | LR | LR | 22 32 54.2 | |
| | comp=Z,359nm,20.8s,baz=322,slow=40 | | | | | | |
| **OBN** | **Obninsk** | **62.61** | **328** | *e*P | **P** | **22 02 11.3** | **+0.4** |
| OBN | | | | *e**PP | **pP** | **22 02 23.8** | **+0.6** |
| OBN | | | | *e**SP | **sP** | **22 02 30.0** | **+1.8** |
| OBN | | | | *e* | | 22 02 47.7 | |
| OBN | | | | *e* | | 22 04 25.3 | |
| OBN | | | | *e*S | **S** | **22 10 34.5** | **-0.5** |
| OBN | | | | *e*SS | **SS** | **22 14 40.9** | **+2.0** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,380nm,19.0s | | | | | | |
| **NOA** | **NORSAR Array B** | **63.29** | **345** | P | **P** | **22 02 15.2** | **-0.3** |
| | comp=Z,1.8nm,0.5s,baz=28,slow=6.0,SNR=18 | | | | | | |
| NOA | | | | pP | **pwP** | **22 02 30.4** | **-1.8** |
| | comp=Z,1.4nm,0.8s,baz=20,slow=6.7,SNR=3.9 | | | | | | |
| | comp=Z,1.8nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **63.73** | **343** | P | **P** | **22 02 18.1** | **-0.2** |
| | comp=Z,1.1nm,0.5s,baz=42,slow=4.6,SNR=12 | | | | | | |
| HFS | | | | pP | **pP** | **22 02 33.0** | **+2.2** |
| | comp=Z,0.7nm,0.4s,baz=58,slow=8.9,SNR=1.9 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **MNK** | **Minsk** | **65.69** | **333** | *i* P | **P** | **22 02 27.0** | **-4.2** |
| MNK | | | | *i* *PP | **pP** | **22 02 41.1** | **-2.4** |
| MNK | | | | *i* *SP | **pwP** | **22 02 48.0** | **-0.3** |
| MNK | | | | *i* | | 22 02 58.0 | |
| MNK | | | | *i* S | **S** | **22 11 09.2** | **-4.0** |
| MNK | | | | *i* *SS | **sS** | **22 11 33.4** | **-1.1** |
| MNK | | | | *i* SS | **SS** | **22 15 20.7** | **-6.2** |
| MNK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.0s | | | | | | |
| MNK | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=N,293nm,18.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=Z,407nm,18.0s | | | | | | |
| MNK | | | | MLR | MLR | | |
| | comp=E,164nm,18.0s | | | | | | |
| **AKASG** | **Malin Array Be** | **68.67** | **330** | P | **P** | **22 02 49.6** | **-0.5** |
| | comp=E,2.1nm,0.5s,baz=30,slow=6.2,SNR=10 | | | | | | |
| | comp=E,2.1nm,0.5s | | | | | | |
| **AKBB** | **Malin Array Si** | **68.67** | **330** | ⇓*e*P | **P** | **22 02 49.9** | **-0.2** |
| **AKT** | **Akhty** | **69.67** | **313** | *e*P | **P** | **22 02 56.0** | **-0.6** |
| AKT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **69.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NELY** | **Ciudad Neily** | **0.25** | **70** | *eP* | | Pg | 22 00 35.9 | +0.1 |
| NELY | | | | *eS* | | Sg | 22 00 40.8 | +1.0 |
| **VITO** | **San Vito** | **0.33** | **40** | *eP* | | Pb | 22 00 37.4 | +0.1 |
| **EDP2** | **Potrero Grande** | **0.45** | **1** | *eP* | | Pb | 22 00 39.2 | 0.0 |
| **BRU2** | **Volcan** | **0.54** | **65** | ǁ*eP* | | Pb | 22 00 40.6 | -0.1 |
| **DRK0** | **Durika** | **0.70** | **355** | ǁ*eP* | | Pb | 22 00 42.8 | -0.7 |
| **BUS1** | **Rivas** | **1.13** | **331** | *eP* | | Pn | 22 00 49.9 | -1.3 |

*IDC* ***29*** *22:02:59.7±1.2,8.°20S×116.°85E,h0km,mb3.9/6, mbtmp3.9/7,ML3.2/1,Error ellipse: s-maj=25.9km s-min=18.9km az=72.0*
*DJA* ***29*** *22:03:02.6±0.2,8.°5S×2.°×11.°7E±.°,h10km,M4.2/15,mb4.5/4, mB5.2/1,MLv4.1/15,Mw(mB)4.5/1*
*NEIC* ***29*** *22:03:03.9±1.5,8.°3S±0.°1×116.°86E±0.°04,h28km±7km, mb4.2/7,Error ellipse: s-maj=16.4km s-min=6.0km az=178.0*

**ISC 29 22:03:04.5**±0.6,**8.°26S**±0.°05×**116.°86E**±0.°04,**h35**km,**n35,** σ1ᵗ**03**/40,**mb4.0**/8,**Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.48** | **177** | P | | **Pn** | **22 03 14.0** | **-0.8** |
| TWSI | | | | S | | **Sn** | **22 03 21.4** | **-0.6** |
| **PLAI** | **Plampang** | **1.07** | **122** | P | | **Pn** | **22 03 23.6** | **+0.6** |
| PLAI | | | | S | | **Sn** | **22 03 39.4** | **+2.7** |
| **SRBI** | **Singaraja** | **1.64** | **276** | P | | **Pn** | **22 03 31.9** | **+1.1** |
| SRBI | | | | S | | **Sn** | **22 03 53.0** | **+2.3** |
| **DNP** | **Denpasar** | **1.68** | **256** | P | | **Pn** | **22 03 32.0** | **+0.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.69** | **265** | | | **Pn** | **22 03 45.1** | **-0.1** |
| JAGI | | | | | Sn | **Sn** | **22 04 16.6** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **2.69** | **265** | P | | **Pn** | **22 03 44.9** | **-0.3** |
| **WBSI** | **Waikabubak, Su** | **2.85** | **119** | P | | **Pn** | **22 03 48.5** | **+0.9** |
| **BASI** | **Baing, Sumba** | **4.16** | **118** | P | | **Pn** | **22 04 07.4** | **+1.9** |
| **BSSI** | **Bau Bau, Buton** | **4.17** | **60** | P | | **Pn** | **22 04 05.1** | **-0.6** |
| **KAPI** | **Kappang** | **4.32** | **42** | | | **Pn** | **22 04 07.0** | **-0.7** |
| **KAPI** | **Kappang** | **4.32** | **42** | Pn | | **Pn** | **22 04 06.9** | **-0.8** |
| | 1.4nm,0.3s,baz=195,slow=7.0,SNR=15 | | | | | | | |
| KAPI | | | | | Sn | **Sn** | **22 04 56.4** | **-0.5** |
| | 5.6nm,0.3s,baz=328,slow=20,SNR=6.1 | | | | | | | |
| KAPI | | | | | Lg | Lg | 22 05 15.0 | |
| | 11nm,0.3s,baz=66,slow=20,SNR=4.6 | | | | | | | |
| | 3.4nm,0.3s | | | | | | | |
| **BKSI** | **Bulukumba** | **4.36** | **48** | P | | **Pn** | **22 04 07.7** | **-0.6** |
| **EDFI** | **Ende, Flores** | **4.80** | **96** | P | | **Pn** | **22 04 15.2** | **+0.7** |
| **BNSI** | **Bone** | **5.01** | **40** | P | | **Pn** | **22 04 18.8** | **+1.5** |
| **MMRI** | **Maumere** | **5.33** | **94** | | | **Pn** | **22 04 21.8** | **+0.1** |
| **MMRI** | **Maumere** | **5.33** | **94** | P | | **Pn** | **22 04 21.7** | **0.0** |
| | 67nm,0.9s,0.2nm | | | | | | | |
| **UGM** | **Wanagama** | **6.28** | **273** | Pn | | **Pn** | **22 04 34.3** | **-0.5** |
| **FITZ** | **Fitzroy Crossi** | **12.98** | **140** | Pn | | **Pn** | **22 06 05.8** | **-0.8** |
| **MBWA** | **Marble Bar** | **13.12** | **168** | Pn | | **Pn** | **22 06 08.4** | **-0.1** |
| **PSA00** | **Pilbara Seismi** | **13.55** | **168** | Pn | | **Pn** | **22 06 14.4** | **+0.2** |
| **KNRA** | **Kununurra** | **13.78** | **123** | Pn | | **Pn** | **22 06 15.6** | **-1.8** |
| **GIRL** | **Giralia** | **14.52** | **190** | Pn | | **Pn** | **22 06 25.8** | **-1.8** |
| **FAKI** | **Fak Fak** | **16.21** | **72** | Pn | | **Pn** | **22 06 49.9** | **+0.2** |
| FAKI | | | | IAmb | | IAmb | 22 07 13.5 | |
| | comp=Z,36nm,1.3s | | | | | | | |
| **WB0** | **Warramunga Arr** | **20.48** | **126** | | | **P** | **22 07 40.2** | **+0.8** |
| WB0 | | | | IAmb | | IAmb | 22 07 41.2 | |
| | comp=Z,8.8nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.52** | **126** | P | | **P** | **22 07 41.0** | **+1.1** |
| | comp=Z,8.1nm,0.6s,baz=300,slow=12,SNR=140 | | | | | | | |
| | comp=Z,8.1nm,0.6s | | | | | | | |
| **GSI** | **Gunungsitoli** | **21.44** | **295** | P | | **P** | **22 07 49.9** | **0.0** |
| **AS31** | **Alice Springs** | **22.39** | **135** | P | | **P** | **22 08 00.4** | **+0.4** |
| AS31 | | | | IAmb | | IAmb | 22 08 03.7 | |
| | comp=Z,1.7nm,0.4s | | | | | | | |
| **ASAR** | **Alice Springs** | **22.39** | **135** | P | | **P** | **22 08 01.4** | **+1.3** |
| | comp=Z,3.3nm,0.7s,baz=314,slow=9.9,SNR=23 | | | | | | | |
| | comp=Z,3.3nm,0.7s | | | | | | | |
| **STKA** | **Stephens Creek** | **32.88** | **139** | P | | **P** | **22 09 34.7** | **-0.7** |
| **STKA** | **Stephens Creek** | **32.88** | **139** | P | | **P** | **22 09 34.2** | **-1.1** |
| | comp=Z,1.2nm,0.5s,baz=298,slow=7.7,SNR=3.5 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **56.61** | **352** | P | | **P** | **22 12 44.5** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=162,slow=7.2,SNR=3.2 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.85** | **334** | P | | **P** | **22 13 26.8** | **-0.1** |
| | comp=Z,1.0nm,0.7s,baz=140,slow=6.9,SNR=5.3 | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.61** | **340** | P | | **P** | **22 13 57.7** | **+0.2** |
| | comp=Z,0.5nm,0.5s,baz=142,slow=6.6,SNR=2.7 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **81.73** | **180** | P | | **P** | **22 15 20.4** | **+1.0** |
| QSPA | | | | IAmb | | IAmb | 22 15 43.1 | |
| | comp=Z,2.5nm,1.4s | | | | | | | |
| **BELA** | **Belgrano 2** | **92.54** | **186** | P | | **P** | **22 16 11.7** | **-0.1** |
| BELA | | | | IAmb | | IAmb | 22 16 37.3 | |
| | comp=Z,2.3nm,1.3s | | | | | | | |

**UCR 29 22:16:25.0**±0.8,**8.°53N×83.°15W,h20**km±3km,**MW3.5,1C, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.10** | **356** | *eP* | | Pg | 22 16 28.1 | -0.8 |
| FITO | | | | *eS* | | Sg | 22 16 30.5 | -1.0 |
| **EDAD** | **Golfito** | **0.12** | **351** | *eP* | | Pb | 22 16 28.3 | +0.7 |
| EDAD | | | | *eS* | | Sg | 22 16 31.0 | -1.1 |
| **PTJ1** | **Puerto Jimnez** | **0.15** | **273** | ⇑*iP* | | Pg | 22 16 29.4 | -0.1 |
| PTJ1 | | | | *eS* | | Sg | 22 16 33.6 | +1.1 |
| **JIME** | **Puerto Jimenez** | **0.18** | **273** | *eP* | | Pg | 22 16 29.5 | -0.3 |
| **NELY** | **Ciudad Neily** | **0.23** | **59** | *eP* | | Pg | 22 16 30.7 | +0.1 |
| NELY | | | | *eS* | | Sg | 22 16 35.6 | +1.2 |
| **EDP2** | **Potrero Grande** | **0.48** | **357** | *eP* | | Pb | 22 16 34.5 | -0.4 |
| EDP2 | | | | *eS* | | Sb | 22 16 42.0 | +0.4 |
| **BRU2** | **Volcan** | **0.52** | **60** | *eP* | | Pg | 22 16 35.7 | 0.0 |
| **EDPN** | **Palmar Norte** | **0.53** | **325** | *eP* | | Pb | 22 16 34.8 | -0.9 |
| EDPN | | | | *eS* | | Sb | 22 16 42.1 | -0.7 |
| **EDBA** | **Buenos Aires** | **0.64** | **349** | *eP* | | Pb | 22 16 37.1 | -0.4 |
| EDBA | | | | *eS* | | Sg | 22 16 46.7 | +0.2 |
| **BRIBI** | **Bribri** | **1.13** | **15** | *eP* | | Pb | 22 16 46.4 | +0.5 |
| BRIBI | | | | *eS* | | Sg | 22 17 02.8 | +1.0 |

*IDC* ***29*** *22:22:23.9±1.3,15.°89S×173.°90W,h0km,mb4.1/5, mbtmp4.1/5,Error ellipse: s-maj=52.5km s-min=31.1km az=138.0*
*NEIC* ***29*** *22:22:41.1±1.0,16.°0S±0.°1×173.°9W±0.°2,h144km±13km, mb4.4/10,Error ellipse: s-maj=21.9km s-min=15.5km az=66.0*

**ISC 29 22:22:38.5**±0.7,**16.°0S**±0.°1×**174.°06W**±0.°10,**h115**km,**n19,** σ0ᵗ**87**/21,**mb4.1**/8,**Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **3.05** | **46** | | | **Pn** | **22 23 27.2** | **+1.7** |
| AFI | | | | | | **Sn** | **22 23 59.9** | **-1.8** |
| **NIUE** | **Niue** | **4.96** | **128** | | | **Pn** | **22 23 51.9** | **+1.0** |
| **PINNC** | **Pines Island,** | **18.63** | **247** | | | **Pn** | **22 26 49.5** | **+0.5** |
| PINNC | | | | | IAmb | IAmb | 22 26 55.9 | |
| | comp=Z,71nm,1.2s | | | | | | | |
| **DZM** | **Mont Dzumac** | **19.38** | **249** | | | **Pn** | **22 26 57.6** | **-0.2** |
| DZM | | | | | IAmb | IAmb | 22 26 58.1 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **STKA** | **Stephens Creek** | **43.17** | **240** | P | | **P** | **22 30 28.2** | **+0.1** |
| **STKA** | **Stephens Creek** | **43.17** | **240** | P | | **P** | **22 30 28.7** | **+0.6** |
| | comp=Z,2.3nm,0.5s,baz=114,slow=10.0,SNR=4.5 | | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **BBOO** | **Buckleboo** | **47.95** | **240** | P | | **P** | **22 31 05.4** | **-0.3** |
| **WB0** | **Warramunga Arr** | **49.05** | **258** | P | | **P** | **22 31 14.4** | **+0.1** |
| WB0 | | | | IAmb | | IAmb | 22 31 16.2 | |
| | comp=Z,13nm,1.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.09** | **257** | P | | **P** | **22 31 14.9** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=92,slow=6.8,SNR=41 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **22 32 37.1** | **+0.4** |
| | comp=Z,0.3nm,0.7s,baz=88,slow=3.9,SNR=1.9 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **49.31** | **252** | P | | **P** | **22 31 16.1** | **-0.2** |
| AS31 | | | | IAmb | | IAmb | 22 31 18.2 | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **49.32** | **252** | P | | **P** | **22 31 16.4** | **0.0** |
| | comp=Z,5.8nm,0.6s,baz=87,slow=8.2,SNR=62 | | | | | | | |
| | comp=Z,5.8nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **54.57** | **243** | P | | **P** | **22 31 54.5** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **62.42** | **254** | P | | **P** | **22 32 49.5** | **-0.4** |
| PSA00 | | | | IAmb | | IAmb | 22 32 54.3 | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.01** | **180** | P | | **P** | **22 34 01.9** | **+0.4** |
| QSPA | | | | IAmb | | IAmb | 22 34 15.7 | |
| | comp=Z,3.8nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **74.01** | **180** | P | | **P** | **22 34 02.6** | **+1.1** |
| | comp=Z,0.8nm,1.0s,baz=237,slow=16,SNR=1.5 | | | | | | | |
| | comp=Z,0.8nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **83.19** | **11** | P | | **P** | **22 34 51.7** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=202,slow=4.2,SNR=2.8 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **BELA** | **Belgrano 2** | **83.46** | **172** | P | | **P** | **22 34 51.2** | **-1.7** |
| **ARCES** | **ARCESS Array B** | **125.15** | **352** | PKP | | **PKPdf** | **22 41 24.3** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=27,slow=2.0,SNR=5.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.24** | **320** | PKPbc | | **PKPbc** | **22 42 06.2** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=56,slow=2.9,SNR=8.3 | | | | | | | |

*UCR* ***29*** *22:23:40.9±1.1,8.°54N×83.°15W,h19km±5km,MW3.6*

**CATAC 29 22:23:40.6**±0.7,**8.°60N×83.°14W,h10**km±4km,**ML3.3, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.04** | **329** | *eP* | | Pg | 22 23 43.4 | +1.0 |
| **EDAD** | **Golfito** | **0.06** | **332** | *eP* | | Pg | 22 23 43.7 | +0.9 |
| **PTJ1** | **Puerto Jimnez** | **0.17** | **250** | *i* P | | Pg | 22 23 44.9 | +0.5 |
| PTJ1 | | | | *i* S | | Sg | 22 23 49.3 | +2.4 |
| PTJ1 | | | | | IAML | | 22 23 56.0 | |
| | comp=Z,17μm,1.0s | | | | | | | |
| **PTJ1** | **Puerto Jimnez** | **0.17** | **250** | *eP* | | Pg | 22 23 44.8 | +0.5 |
| PTJ1 | | | | *eS* | | Sg | 22 23 49.3 | +2.4 |
| **JIME** | **Puerto Jimenez** | **0.20** | **253** | *eS* | | Sg | 22 23 49.6 | +2.1 |
| **NELY** | **Ciudad Neily** | **0.20** | **74** | *eP* | | Pg | 22 23 46.1 | +1.4 |
| NELY | | | | *eS* | | Sg | 22 23 50.8 | +3.3 |
| **CDITO** | **Canoas** | **0.26** | **95** | *i* P | | Pg | 22 23 46.6 | +0.7 |
| CDITO | | | | *i* S | | Sb | 22 23 52.1 | +0.1 |
| CDITO | | | | | IAML | | 22 23 55.8 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **EDP2** | **Potrero Grande** | **0.42** | **355** | *eP* | | Pb | 22 23 49.9 | -0.2 |
| EDP2 | | | | *eS* | | Sb | 22 23 57.7 | +1.1 |
| **BRU2** | **Volcan** | **0.48** | **66** | *i* P | | Pb | 22 23 50.8 | -0.5 |
| BRU2 | | | | *i* S | | Sb | 22 23 58.3 | -0.2 |
| BRU2 | | | | | IAML | | 22 24 10.5 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **BRU2** | **Volcan** | **0.48** | **66** | *eP* | | Pb | 22 23 50.8 | -0.5 |
| **EDPN** | **Palmar Norte** | **0.48** | **319** | *eS* | | Sb | 22 23 57.7 | -0.7 |
| **DRK0** | **Durika** | **0.67** | **351** | *i* P | | Pg | 22 23 53.5 | -0.2 |
| DRK0 | | | | *i* S | | Sb | 22 24 03.5 | -0.5 |
| DRK0 | | | | | IAML | | 22 24 04.7 | |
| | comp=Z,6μm,1.0s | | | | | | | |
| **DRK0** | **Durika** | **0.67** | **351** | *eP* | | Pg | 22 23 53.7 | 0.0 |
| **BRIBI** | **Bribri** | **1.06** | **15** | *eP* | | Pn | 22 24 01.4 | -0.1 |
| BRIBI | | | | *eS* | | Sn | 22 24 18.9 | +2.5 |
| **BUS1** | **Rivas** | **1.13** | **328** | *eP* | | Pg | 22 24 01.1 | -1.2 |
| BUS1 | | | | *eS* | | Sg | 22 24 17.0 | -0.1 |
| **LCR2** | **La Lucha 2** | **1.43** | **323** | *i* P | | Pn | 22 24 05.0 | -1.8 |
| LCR2 | | | | *i* S | | Sg | 22 24 27.0 | +0.4 |
| LCR2 | | | | | IAML | | 22 24 34.5 | |
| | comp=Z,270nm,1.0s | | | | | | | |
| **VTCV** | **VTCV, Calle Va** | **1.50** | **337** | *eP* | | Pn | 22 24 07.7 | 0.0 |
| **CVTV** | **Tajo** | **1.52** | **337** | *eP* | | Pn | 22 24 08.4 | +0.1 |
| **LCOCO** | **El Coco** | **1.54** | **344** | *eP* | | Pn | 22 24 08.4 | +0.3 |

**TRN 29 22:29:56.6,17.°49N×62.°16W,h59km,MD3.8,South-west of Barbuda.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ANWB** | **Willy Bob** | **0.40** | **63** | *eP* | | Pn | 22 30 18.8 | +1.3 |
| ANWB | | | | *eS* | | Sn | 22 30 17.8 | +2.4 |
| **SKI** | **Saint Kitts** | **0.57** | **255** | *eP* | | Pn | 22 30 10.9 | +1.5 |
| SKI | | | | *eS* | | Sn | 22 30 20.9 | +2.3 |
| **SKOC** | **St. Kitts, UWI** | **0.58** | **251** | *eP* | | Pn | 22 30 10.8 | +1.4 |
| SKOC | | | | *eS* | | Sn | 22 30 21.2 | +2.6 |
| **ANBD** | **Bethesda, Anti** | **0.58** | **139** | *eP* | | Pn | 22 30 10.9 | +1.5 |
| ANBD | | | | *eS* | | Sn | 22 30 21.2 | +2.6 |
| **MBFL** | **Flemmings, Mon** | **0.73** | **184** | *eP* | | Pn | 22 30 12.6 | +1.3 |
| **MBWH** | | **0.74** | **182** | *eP* | | Pn | 22 30 12.7 | +1.3 |
| MBWH | | | | *eS* | | Sn | 22 30 23.6 | +1.5 |
| **MLYT** | **Lee's Yard** | **0.76** | **182** | *eP* | | Pn | 22 30 12.4 | +0.7 |
| MLYT | | | | *eS* | | Sn | 22 30 25.0 | +2.4 |
| **TBG** | **Guadaloupe-3** | **1.70** | **163** | *eP* | | Pn | 22 30 25.8 | +1.8 |
| TBG | | | | *eS* | | Sn | 22 30 47.6 | +2.9 |
| **SVN** | **Savane Anatole** | **2.80** | **160** | *eS* | | Sn | 22 31 13.1 | +1.5 |
| **BIM** | **Bigot** | **3.13** | **160** | *eP* | | Pn | 22 30 45.4 | +1.7 |
| BIM | | | | *eS* | | Sn | 22 31 22.1 | +2.2 |
| **AOPR** | **Arecibo Observ** | **4.45** | **282** | *eP* | | Pn | 22 31 03.3 | +1.6 |

*IDC* ***29*** *22:57:27.4±2.6,38.°20N×74.°24E,h126km±26km,mb3.7/7, mbtmp3.9/13,Error ellipse: s-maj=24.4km s-min=17.3km az=64.0*
*NNC* ***29*** *22:57:31.8±2.2,38.°79N×73.°34E,h0km,mb4.0,mpv3.6, Error ellipse: s-maj=17.3km s-min=13.4km az=145.0*
*NEIC* ***29*** *22:57:31.1±2.3,38.°49N±0.°06×73.°59E±0.°10,h124km±3km, mb4.2/5,Error ellipse: s-maj=11.2km s-min=8.3km az=115.0*

**ISC 29 22:57:27.6**±0.6,**38.°27N**±0.°04×**73.°71E**±0.°06,**h107**km,**n52,** σ1ᵗ**97**/63,**mb4.1**/8,**7C-5D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DRK** | **Karamyk** | **1.92** | **309** | | | **Pn** | **22 58 02.0** | **+2.3** |
| DRK | | | | | Sn | **Sn** | **22 58 25.2** | **+1.0** |
| **GAR** | **Garm** | **2.76** | **286** | Pn | | **Pn** | **22 58 11.8** | **+1.4** |
| GAR | | | | | Sn | **Sn** | **22 58 43.5** | **+0.2** |
| **BTK** | **Batken** | **2.87** | **309** | | | **Pn** | **22 58 13.9** | **+2.0** |
| BTK | | | | | Sn | **Sn** | **22 58 47.1** | **+1.2** |
| **CHGR** | **Chuyangaron** | **3.60** | **278** | Pn | | **Pn** | **22 58 22.5** | **+1.0** |
| CHGR | | | | | Sn | **Sn** | **22 58 51.9** | **-1.4** |
| **NRN** | **Naryn** | **3.61** | **28** | Pn | | **Pn** | **22 58 23.2** | **+1.3** |
| **SIMJ** | **Simiganj** | **3.71** | **277** | Pn | | **Pn** | **22 58 24.1** | **+1.0** |
| **AML** | **Almayashu** | **3.85** | **360** | P | | **Pn** | **22 58 26.9** | **+1.7** |
| | SNR=27 | | | | | | | |
| **UCH** | **Uchtor** | **4.00** | **9** | P | | **Pn** | **22 58 29.1** | **+1.9** |
| | SNR=6.3 | | | | | | | |
| **EKS2** | **Erkin-Say** | **4.38** | **1** | P | | **Pn** | **22 58 34.2** | **+2.1** |
| | SNR=11 | | | | | | | |
| **AAK** | **Ala-Archa** | **4.40** | **8** | Pn | | **Pn** | **22 58 33.4** | **+1.1** |
| **AAK** | **Ala-Archa** | **4.40** | **8** | P | | **Pn** | **22 58 33.5** | **+1.2** |
| | 7.2nm,0.3s,baz=186,slow=5.5,SNR=16 | | | | | | | |
| AAK | | | | | S | **Sn** | **22 59 23.9** | **+1.3** |
| | 12nm,0.4s,baz=12,slow=21,SNR=8.2 | | | | | | | |
| **AAK** | **Ala-Archa** | **4.40** | **8** | ⇑Pn | | **Pn** | **22 58 33.7** | **+1.3** |
| | 4.4nm,0.5s | | | | | | | |
| AAK | | | | | Sn | **Sn** | **22 59 21.7** | **-0.9** |
| | 34nm,0.8s | | | | | | | |
| AAK | | | | | ⇑Lg | Lg | 22 59 39.9 | |
| | 19nm,0.8s | | | | | | | |
| **ULHL** | **Ulahol** | **4.41** | **25** | P | | **Pn** | **22 58 34.3** | **+1.8** |
| | SNR=20 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **4.54** | **21** | Pn | | **Pn** | **22 58 36.3** | **+2.0** |
| **NIL** | **Nilore** | **4.63** | **185** | Pn | | **Pn** | 22 58 41.4 | +6.0 |
| **TARG** | **Taragay, Kyrgy** | **4.67** | **41** | Pn | | **Pn** | **22 58 37.4** | **+1.2** |
| **CHMS** | **Chumysh** | **4.79** | **9** | P | | **Pn** | **22 58 39.2** | **+1.8** |
| | SNR=5.3 | | | | | | | |
| **CHMS** | **Chumysh** | **4.79** | **9** | ⇑Pn | | **Pn** | **22 58 38.8** | **+1.3** |
| | 4.4nm,0.4s | | | | | | | |
| CHMS | | | | ⇓Pg | | | 22 58 52.1 | |
| | 8.0nm,0.6s | | | | | | | |
| CHMS | | | | ⇑Sn | | **Sn** | **22 59 31.3** | **-0.5** |
| | 14nm,0.9s | | | | | | | |
| CHMS | | | | ⇓Lg | | Lg | 22 59 50.8 | |
| | 9.5nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.86** | **17** | P | | **Pn** | **22 58 40.5** | **+1.9** |
| | SNR=7.6 | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.86** | **17** | ⇑Pn | | **Pn** | **22 58 40.2** | **+1.6** |
| | 5.3nm,0.5s | | | | | | | |
| TKM2 | | | | ⇓Pg | | | 22 58 53.6 | |
| | 6.4nm,0.6s | | | | | | | |
| TKM2 | | | | ⇓Sn | | **Sn** | **22 59 34.1** | **+0.3** |
| | 13nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 22 59 54.4 | |
| | 16nm,0.9s | | | | | | | |
| **KBL** | **Kabul** | **5.30** | **227** | Pn | | Pn | 22 58 49.0 | +4.4 |
| **KK31** | **Karatay Array** | **5.40** | **334** | ⇑Pn | | **Pn** | **22 58 46.5** | **+0.7** |
| | 6.3nm,0.3s,baz=136,slow=12,SNR=351 | | | | | | | |
| KK31 | | | | ⇓Sn | | **Sn** | **22 59 42.3** | **-4.4** |
| | 4.8nm,0.3s,baz=40,slow=84,SNR=3.7 | | | | | | | |
| **KKAR** | **Karatay Array** | **5.40** | **334** | Pn | | **Pn** | **22 58 46.5** | **+0.8** |
| **PRZ** | **Przheval'sk** | **5.52** | **39** | Pn | | **Pn** | **22 58 49.9** | **+2.4** |
| **JMU** | **Jammu** | **5.63** | **170** | *eP* | | **Pn** | **22 58 53.3** | **+4.5** |
| **THN** | **Thein Dam** | **6.05** | **164** | *eP* | | **Pn** | **22 58 59.0** | **+4.4** |
| THN | | | | *eS* | | **Sn** | **23 00 04.0** | **+1.5** |
| THN | | | | | IAML | | 23 00 10.4 | |
| | comp=E,60nm,0.4s | | | | | | | |
| THN | | | | | IAML | | 23 00 13.5 | |
| | comp=N,68nm,0.4s | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.37** | **160** | *eP* | | **Pn** | **22 59 02.6** | **+3.5** |
| DHRM | | | | *eS* | | **Sn** | **23 00 11.3** | **+0.7** |
| DHRM | | | | | IAML | | 23 00 16.2 | |
| | comp=E,125nm,0.4s | | | | | | | |
| DHRM | | | | | IAML | | 23 00 18.8 | |
| | comp=N,109nm,0.4s | | | | | | | |
| **HNLY** | **HANLEY** | **6.96** | **140** | *eP* | | **Pn** | **22 59 10.5** | **+3.1** |
| HNLY | | | | *eS* | | **Sn** | **23 00 24.8** | **-0.6** |
| **BHK** | **Bhakra** | **7.19** | **161** | *eS* | | **Sn** | **23 00 28.9** | **-1.4** |
| **SMLA** | **Simla** | **7.67** | **157** | *eP* | | **Pn** | **22 59 19.7** | **+3.1** |
| SMLA | | | | *eS* | | **Sn** | **23 00 38.7** | **-3.2** |
| SMLA | | | | | IAML | | 23 00 47.2 | |
| | comp=N,65nm,0.4s | | | | | | | |
| SMLA | | | | | IAML | | 23 00 48.8 | |
| | comp=E,52nm,0.3s | | | | | | | |
| **KUDL** | **Kundal** | **10.37** | **166** | *eP* | | **Pn** | **22 59 53.5** | **+0.4** |
| KUDL | | | | *eS* | | **Sn** | **23 01 42.1** | **-5.3** |
| KUDL | | | | | IAML | | 23 01 49.4 | |
| | comp=E,15nm,0.5s | | | | | | | |
| KUDL | | | | | IAML | | 23 01 50.5 | |
| | comp=N,13nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **10.48** | **33** | Pn | | **Pn** | **22 59 55.1** | **+0.6** |
| **MK31** | **Makanchi Array** | **10.60** | **34** | Pn | | **Pn** | **22 59 56.8** | **+0.6** |
| **MKAR** | **Makanchi Array** | **10.60** | **34** | P | | **Pn** | **22 59 53.4** | **-2.8** |
| | comp=N,0.8nm,0.6s,baz=216,slow=13,SNR=10 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.81** | **14** | P | | **Pn** | **23 00 23.6** | **-2.0** |
| | comp=N,0.4nm,0.6s,baz=196,slow=13,SNR=2.0 | | | | | | | |
| **KURK** | **Kurchatov** | **12.92** | **14** | Pn | | **P** | **23 00 30.1** | **-3.4** |
| **ABKAR** | **Akbulak array** | **14.79** | **322** | Pn | | **Pn** | **23 00 49.1** | **-2.0** |
| **BVAR** | **Borovoye Array** | **14.93** | **352** | P | | **Pn** | **23 00 53.7** | **+0.8** |
| | comp=N,1.2nm,0.5s,baz=169,slow=12,SNR=9.5 | | | | | | | |
| **BRVK** | **Borovoye** | **14.98** | **352** | Pn | | **Pn** | **23 00 53.1** | **-0.4** |
| **AKTO** | **Aktyubinsk** | **16.50** | **322** | P | | **P** | **23 01 14.9** | **+1.6** |
| | comp=N,0.7nm,0.3s,baz=141,slow=4.4,SNR=5.6 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **17.43** | **22** | P | | **P** | **23 01 22.9** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **17.43** | **22** | P | | **P** | **23 01 22.6** | **-0.9** |
| | comp=N,1.9nm,0.4s,baz=205,slow=11,SNR=11 | | | | | | | |
| **WSAR** | **Wadi Sarin** | **19.77** | **225** | P | | **Pn** | **23 01 50.9** | **-0.9** |
| | comp=N,5.1nm,0.7s,baz=74,slow=8.3,SNR=7.7 | | | | | | | |
| | comp=N,5.1nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.55** | **125** | P | | P | 23 03 16.7 | -5.5 |
| | comp=N,1.0nm,0.3s,baz=321,slow=8.7,SNR=7.0 | | | | | | | |
| | comp=N,1.0nm,0.3s | | | | | | | |
| **FIA1** | **FINESS Array S** | **37.27** | **324** | P | | **P** | **23 04 28.9** | **+0.3** |
| **FINES** | **FINESS Array B** | **37.27** | **324** | P | | **P** | **23 04 29.1** | **+0.5** |
| | comp=N,0.8nm,0.3s,baz=114,slow=9.9,SNR=16 | | | | | | | |
| | comp=N,0.8nm,0.3s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.37** | **336** | P | | **P** | **23 04 54.2** | **-0.1** |
| | comp=N,3.9nm,1.1s,baz=104,slow=5.1,SNR=3.6 | | | | | | | |
| | comp=N,3.9nm,1.1s | | | | | | | |
| **PUK** | **Puka** | **40.74** | **293** | P | | **P** | **23 04 58.3** | **+0.4** |
| PUK | | | | | IAmb | IAmb | 23 05 12.1 | |
| | comp=Z,6.7nm,1.3s | | | | | | | |
| **HFS** | **Hagfors** | **43.04** | **321** | P | | **P** | **23 05 16.7** | **+0.5** |
| | comp=Z,2.6nm,0.5s,baz=94,slow=8.1,SNR=20 | | | | | | | |
| | comp=Z,2.6nm,0.5s | | | | | | | |
| **NC303** | **NORSAR Array S** | **44.23** | **322** | P | | **P** | **23 05 26.1** | **+0.3** |
| NC303 | | | | | IAmb | IAmb | 23 05 32.4 | |
| | comp=Z,8.2nm,1.2s | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.30** | **322** | P | | **P** | **23 05 26.5** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=93,slow=7.8,SNR=3.9 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.91** | **270** | P | | **P** | **23 08 14.9** | **-0.1** |
| | comp=Z,1.1nm,0.5s,baz=45,slow=5.9,SNR=27 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |

*UCR* ***29*** *22:59:22.2±0.6,8.°54N×83.°16W,h21km±2km,MW3.5*

**UPA 29 22:59:22.5**±0.4,**8.°54N×83.°11W,h10**km±8km,**ML3.2, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.09** | **333** | *eP* | | Pg | 22 59 25.5 | +0.5 |
| FITO | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FORT | Forrest | 50.17 | 245 | P | | P | | 23 14 18.0 | -1.1 |
| FAKI | Fak Fak | 50.95 | 281 | P | | P | | 23 14 24.7 | -0.4 |
| FAKI | | | | IAmb | | IAmb | | 23 14 32.6 | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| MJAR | Matsushiro Arr | 68.34 | 323 | P | | P | | 23 16 19.5 | -0.9 |
| | comp=Z,2.5nm,0.5s,baz=164,slow=6.1,SNR=8.4 | | | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | | | |
| UGM | Wanagama | 69.96 | 268 | P | | P | | 23 16 30.3 | -0.3 |
| QSPA | South Pole Qui | 71.84 | 180 | P | | P | | 23 16 42.1 | +1.2 |
| QSPA | South Pole Qui | 71.84 | 180 | P | | P | | 23 16 42.1 | +1.2 |
| | comp=Z,2.0nm,1.0s,baz=0.0,slow=4.0,SNR=12 | | | | | | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| PEA0B | Petropavlovsk- | 74.05 | 345 | P | | P | | 23 16 52.8 | -0.7 |
| PETK | Petropavlovsk- | 74.05 | 345 | P | | P | | 23 16 53.5 | +0.1 |
| | comp=Z,3.1nm,0.6s,baz=113,slow=7.6,SNR=8.4 | | | | | | | | |
| | comp=Z,3.1nm,0.6s | | | | | | | | |
| KDAK | Kodiak Island | 78.62 | 14 | P | | P | | 23 17 18.2 | -0.1 |
| KDAK | | | | IAmb | | IAmb | | 23 17 29.9 | |
| | comp=Z,26nm,1.4s | | | | | | | | |
| O16K | Kokwok River B | 79.22 | 10 | P | | P | | 23 17 19.6 | -1.9 |
| O16K | | | | IAmb | | IAmb | | 23 17 21.0 | |
| | comp=Z,8.8nm,0.9s | | | | | | | | |
| NVAR | Mina Array Bea | 79.42 | 44 | P | | P | | 23 17 23.5 | +0.1 |
| | comp=Z,0.5nm,0.7s,baz=214,slow=9.5,SNR=2.5 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |
| O18K | Koktuh Hills | 79.98 | 11 | P | | P | | 23 17 25.2 | -0.4 |
| M16K | Timber Creek | 80.44 | 9 | P | | P | | 23 17 28.0 | +0.1 |
| M16K | | | | IAmb | | IAmb | | 23 17 31.4 | |
| | comp=Z,17nm,1.4s | | | | | | | | |
| K15K | Wolf Creek Mou | 81.30 | 8 | P | | P | | 23 17 32.8 | +0.5 |
| K15K | | | | IAmb | | IAmb | | 23 17 34.5 | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| SCM | Sheep Creek Mo | 83.44 | 14 | P | | P | | 23 17 42.5 | -0.7 |
| RND | Reindeer | 84.49 | 13 | P | | P | | 23 17 48.4 | 0.0 |
| RND | | | | IAmb | | IAmb | | 23 17 48.7 | |
| | comp=Z,4.7nm,0.7s | | | | | | | | |
| CCB | Clear Creek Bu | 85.81 | 13 | P | | P | | 23 17 53.4 | -1.2 |
| TXAR | Lajitas Array | 85.89 | 57 | P | | P | | 23 17 58.1 | +2.2 |
| | comp=Z,0.8nm,0.8s,baz=235,slow=5.9,SNR=8.1 | | | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | | | |
| ILAR | Eielson Array | 86.11 | 13 | P | | P | | 23 17 55.2 | -0.8 |
| | comp=Z,1.1nm,0.8s,baz=229,slow=5.5,SNR=8.8 | | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | | |
| CMAR | Chiang Mai Arr | 89.29 | 290 | P | | P | | 23 18 12.8 | +0.8 |
| | comp=Z,1.9nm,0.3s,baz=121,slow=3.0,SNR=5.8 | | | | | | | | |
| | comp=Z,1.9nm,0.3s | | | | | | | | |
| MKAR | Makanchi Array | 109.57 | 314 | PKiKP | | PKiKP | | 23 23 41.2 | -0.8 |
| | comp=Z,0.5nm,0.6s,baz=110,slow=6.3,SNR=4.2 | | | | | | | | |
| BVAR | Borovoye Array | 117.28 | 321 | PKP | | PKPdf | | 23 23 55.9 | -0.6 |
| | comp=Z,0.8nm,0.4s,baz=74,slow=1.1,SNR=4.4 | | | | | | | | |
| ARCES | ARCESS Array B | 126.67 | 350 | PKP | | PKPdf | | 23 24 12.4 | -1.7 |
| | comp=Z,3.8nm,1.0s,baz=356,slow=1.8,SNR=4.5 | | | | | | | | |
| EKA | Eskdalemuir Ar | 142.74 | 5 | PKP | | PKPdf | | 23 24 43.9 | -0.3 |
| | comp=Z,0.4nm,0.5s,baz=344,slow=2.8,SNR=3.7 | | | | | | | | |
| VLDR | Vladesti | 144.94 | 328 | ⇓P | | PKPbc | | 23 24 49.9 | +0.9 |
| OJC | Ojcow | 145.00 | 340 | | | PKPdf | | 23 24 48.6 | +0.2 |
| BURAR | Bucovina Array | 145.03 | 332 | ⇑P | | PKPab | | 23 24 50.5 | +0.1 |
| GHRR | | 145.13 | 328 | ⇓P | | PKPab | | 23 24 50.8 | +0.1 |
| TESR | Tescani | 145.18 | 330 | ⇓P | | PKPdf | | 23 24 49.8 | +1.0 |
| KOLS | Kolonicke sedl | 145.21 | 336 | *e* | | PKPbc | | 23 24 50.3 | +0.5 |
| BRTR | Keskin Array B | 145.22 | 315 | PKPbc | | PKPdf | | 23 24 49.9 | +0.6 |
| | comp=Z,1.7nm,0.7s,baz=132,slow=3.8,SNR=14 | | | | | | | | |
| KIRS | Kirsehir-Merke | 145.31 | 314 | ⇑P | | PKPbc | | 23 24 50.7 | +0.2 |
| CFR | Carcaliu | 145.36 | 327 | ⇑P | | PKPbc | | 23 24 50.5 | +0.2 |
| TPGR | Topolog | 145.43 | 326 | ⇑P | | PKPbc | | 23 24 51.3 | +0.7 |
| VRI | Vrincioaia | 145.60 | 329 | ⇓P | | PKPbc | | 23 24 51.6 | +0.6 |
| BMR | Baia Mare | 145.73 | 334 | ⇓P | | PKPbc | | 23 24 51.8 | +0.5 |
| OSTC | Ostas | 145.77 | 344 | *e*PKP | | PKPbc | | 23 24 51.9 | +0.5 |
| CHVC | Chvalec | 145.78 | 344 | *e*PKP | | PKPbc | | 23 24 52.0 | +0.6 |
| TURR | Turia | 145.81 | 330 | ⇑P | | PKPbc | | 23 24 52.5 | +0.8 |
| CLL | Collm | 145.83 | 348 | | | PKPbc | | 23 24 51.3 | -0.1 |
| CLL | Collm | 145.83 | 348 | ⇓*i*PKPbc | | PKPbc | | 23 24 51.4 | -0.1 |
| | comp=Z,11nm,0.9s | | | | | | | | |
| UPC | Upice | 145.87 | 344 | *e*PKP | | PKPbc | | 23 24 52.3 | +0.7 |
| COVR | Voineasa-Covas | 145.87 | 329 | ⇑P | | PKPbc | | 23 24 51.6 | -0.2 |
| BRG | Berggiesshubel | 146.03 | 346 | Amp | | | | 23 24 52.9 | |
| | comp=Z,3.8nm,0.7s | | | | | | | | |
| BRG | Berggiesshubel | 146.03 | 346 | *e*P | | PKPbc | | 23 24 52.5 | +0.5 |
| LANS | Liptovska Anna | 146.03 | 339 | *e* | | PKPbc | | 23 24 53.5 | +1.3 |
| KRLC | Kraliky | 146.05 | 343 | *e*PKP | | PKPbc | | 23 24 52.6 | +0.4 |
| MORC | Moravsky Berou | 146.10 | 342 | ⇑P | | PKPdf | | 23 24 50.7 | +0.4 |
| DOPR | Dopca | 146.18 | 330 | ⇑P | | PKPbc | | 23 24 53.6 | +1.0 |
| MLR | Muntele Rosu | 146.25 | 329 | ⇑P | | PKPbc | | 23 24 53.1 | +0.1 |
| MAUC | Maruska | 146.38 | 341 | *e*PKP | | PKPbc | | 23 24 53.9 | +0.8 |
| CJR | Cluj-Napoca | 146.43 | 333 | ⇓P | | PKPbc | | 23 24 54.0 | +0.6 |
| MMAI | Mount Meron Ar | 146.57 | 303 | PKPbc | | PKPbc | | 23 24 53.8 | -0.4 |
| | comp=Z,2.2nm,0.6s,baz=73,slow=6.2,SNR=8.8 | | | | | | | | |
| LTVH | Ltavrtes, Hu | 146.61 | 335 | ⇑P | | PKPab | | 23 24 59.9 | +3.5 |
| PRU | Pruhonice | 146.72 | 345 | *e*PKP | | PKPbc | | 23 24 54.2 | +0.2 |
| DRGR | | 146.75 | 334 | ⇑P | | PKPbc | | 23 24 54.7 | +0.4 |
| VYHS | Vyhne | 146.81 | 339 | *e* | | PKPbc | | 23 24 54.9 | +0.6 |
| VYHS | | | | *e* | | | | 23 31 14.6 | |
| VYHS | | | | *e* | | | | 23 46 04.3 | |
| ARR | Arges | 146.98 | 330 | ⇑P | | PKPbc | | 23 24 55.9 | +1.0 |
| HUMR | Humele | 147.42 | 329 | ⇑P | | PKPbc | | 23 24 55.7 | -0.3 |
| SIRR | Siria | 147.61 | 334 | ⇓P | | PKPbc | | 23 24 56.9 | +0.4 |
| KHC | Kasperske Hory | 147.75 | 346 | | | PKPbc | | 23 24 57.0 | +0.2 |
| KHC | Kasperske Hory | 147.75 | 346 | *e*PKP | | PKPbc | | 23 24 57.3 | +0.5 |
| GZR | Gura Zlata | 147.81 | 332 | ⇑P | | PKPbc | | 23 24 57.0 | -0.1 |
| SURR | Surduc | 147.82 | 333 | ⇓P | | PKPbc | | 23 24 57.0 | +0.1 |
| CKRC | Cesky Krumlov | 147.86 | 345 | *e*PKP | | PKPbc | | 23 24 57.4 | +0.4 |
| GERES | GERESS Array B | 147.99 | 345 | PKPbc | | PKPbc | | 23 24 57.6 | +0.1 |
| | comp=Z,2.4nm,0.5s,baz=7.6,slow=4.0,SNR=12 | | | | | | | | |
| BZS | Buzias | 148.15 | 333 | ⇑P | | PKPbc | | 23 24 57.9 | +0.1 |
| CONA | Conrad Observa | 148.25 | 342 | *i* PKP | | PKPbc | | 23 24 58.4 | +0.2 |
| | comp=Z,4.3nm,0.8s | | | | | | | | |
| RONA | Rosalia, Austr | 148.32 | 341 | *i* PKP | | PKPbc | | 23 24 58.8 | +0.5 |
| | comp=Z,3.1nm,0.6s | | | | | | | | |
| HERR | Herculane | 148.37 | 332 | ⇓P | | PKPbc | | 23 24 58.3 | -0.1 |
| BIOA | Bad Ischl, Aus | 149.07 | 345 | *i* PKP | | PKPbc | | 23 24 60.0 | -0.1 |
| | comp=Z,3.7nm,1.0s | | | | | | | | |
| BFO | Black Forest | 149.51 | 352 | | | PKPbc | | 23 25 00.8 | -0.3 |
| LESA | Schwarzleotal | 149.56 | 346 | *e*PKP | | PKPbc | | 23 25 01.5 | +0.1 |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| SOKA | Soboth | 149.62 | 342 | *i* PKP | | PKPbc | | 23 25 00.8 | -0.6 |
| | comp=Z,3.1nm,1.0s | | | | | | | | |
| BOVS | Bovan | 149.66 | 331 | ⇑P | | PKPbc | | 23 25 01.1 | -0.4 |
| KBA | Koelnbreinsper | 149.72 | 344 | *e*PKP | | PKPbc | | 23 25 01.9 | +0.1 |
| | comp=Z,4.5nm,1.0s | | | | | | | | |
| WATA | Walderalm | 149.89 | 347 | *i* PKP | | PKPbc | | 23 25 01.8 | -0.4 |
| | comp=Z,3.5nm,0.6s | | | | | | | | |
| RETA | Reutte | 149.91 | 348 | *i* PKP | | PKPbc | | 23 25 02.1 | -0.1 |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| WTTA | Wattenberg | 149.95 | 347 | *i* PKP | | PKPbc | | 23 25 02.5 | +0.1 |
| | comp=Z,7.7nm,0.6s | | | | | | | | |
| MOTA | Moosalm | 149.98 | 347 | *i* PKP | | PKPbc | | 23 25 01.9 | -0.5 |
| | comp=Z,3.5nm,0.9s | | | | | | | | |
| MYKA | Terra Mystica | 150.05 | 344 | *e*PKP | | PKPbc | | 23 25 01.9 | -0.6 |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| SQTA | Sankt Quirin | 150.08 | 347 | *i* PKP | | PKPbc | | 23 25 02.7 | +0.1 |
| | comp=Z,4.7nm,0.6s | | | | | | | | |
| ABTA | Abfaltersbach | 150.23 | 345 | *i* PKP | | PKPbc | | 23 25 02.4 | -0.5 |
| | comp=Z,5.2nm,0.6s | | | | | | | | |
| PRED | Cave del Predi | 150.25 | 344 | | | PKPbc | | 23 25 02.9 | -0.1 |
| PRED | | | | PKPab | | PKPab | | 23 25 10.7 | -0.8 |
| DAVA | Damuels | 150.28 | 349 | *e*PKP | | PKiKP | | 23 25 03.9 | +0.3 |
| | comp=Z,8.0nm,1.4s | | | | | | | | |
| FETA | Feichten | 150.37 | 348 | *i* PKP | | PKPbc | | 23 25 03.2 | -0.1 |
| | comp=Z,3.1nm,0.7s | | | | | | | | |
| STAL | STALIGIAL | 150.64 | 345 | | | PKPbc | | 23 25 03.0 | -0.8 |
| FUORN | Ofenpass-Fuorn | 150.84 | 348 | | | PKPbc | | 23 25 04.8 | +0.2 |
| CTI | Castel Tesino | 151.09 | 346 | | | PKPbc | | 23 25 05.2 | +0.3 |
| CTI | | | | PKPab | | PKPab | | 23 25 14.2 | -0.9 |

*IDC* ***29*** *23:10:29.6±1.4, 8.°44S×115.°81E, h0km, mb3.9/5, mbtmp4.0/6, ML4.2/1, Error ellipse: s-maj=29.0km s-min=21.7km az=60.0*

*NEIC* ***29*** *23:10:31.2±1.6, 8.°4S±0.°1×115.°98E±0.°05, h10km±2km, mb4.4/7, Error ellipse: s-maj=17.4km s-min=9.0km az=354.0*

*DJA* ***29*** *23:10:33.7±0.4, 8.°S±4.′×11.°6E±.′, h10km±4km, M4.6/13, mb4.7/6, mB4.7/2, MLv4.5/13, Mw(mB)4.0/2*

**ISC 29 23:10:31.6±0.6, 8.°36S±0.°06×116.°02E±0.°04, h10km, n36, σ1§46/40, mb4.1/8, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SRBI | Singaraja | 0.84 | 289 | P | Pn | 23 10 50.8 | +1.3 |
| DNP | Denpasar | 0.86 | 248 | P | Pn | 23 10 52.0 | +2.2 |
| TWSI | Taliwang, Sumb | 0.93 | 114 | P | Pn | 23 10 50.6 | -0.1 |
| PLAI | Plampang | 1.80 | 105 | P | Pb | 23 11 05.1 | +0.5 |
| PLAI | | | | S | Sb | 23 11 27.8 | +0.6 |
| JAGI | Jajag, Banyuwa | 1.85 | 266 | Pg | Pg | 23 11 05.6 | -1.6 |
| JAGI | | | | Sg | Sg | 23 11 28.7 | -2.5 |
| JAGI | Jajag, Banyuwa | 1.85 | 266 | P | Pg | 23 11 05.4 | -1.7 |
| WBSI | Waikabubak, Su | 3.57 | 111 | P | Pn | 23 11 28.8 | +1.8 |
| GRJI | Gresik | 3.79 | 292 | P | Pn | 23 11 31.9 | +1.8 |
| GRJI | | | | S | Sn | 23 12 17.8 | +3.0 |
| BASI | Baing, Sumba | 4.86 | 113 | P | Pn | 23 11 46.4 | +1.5 |
| BSSI | Bau Bau, Buton | 4.95 | 64 | P | Pn | 23 11 47.3 | +1.3 |
| KAPI | Kappang | 4.97 | 48 | Pn | Pn | 23 11 46.3 | -0.1 |
| KAPI | | | | Sn | Sn | 23 12 42.9 | -1.1 |
| KAPI | Kappang | 4.97 | 48 | Pn | Pn | 23 11 46.4 | +0.1 |
| | 8.7nm,0.3s,baz=238,slow=4.6,SNR=9.9 | | | | | | |
| KAPI | | | | Sn | Sn | 23 12 41.3 | -2.7 |
| | 3.8nm,0.3s,baz=221,slow=19,SNR=3.5 | | | | | | |
| KAPI | | | | Lg | Lg | 23 13 14.4 | |
| | 8.1nm,0.3s,baz=169,slow=16,SNR=3.8 | | | | | | |
| | 24nm,0.2s | | | | | | |
| BKSI | Bulukumba | 5.07 | 54 | P | Pn | 23 11 49.0 | +1.4 |
| | 54nm,0.6s,908nm0.4nm | | | | | | |
| UGM | Wanagama | 5.46 | 274 | Pn | Pn | 23 11 53.7 | +0.6 |
| UGM | Wanagama | 5.46 | 274 | P | Pn | 23 11 56.0 | +2.9 |
| EDFI | Ende, Flores | 5.62 | 94 | P | Pn | 23 11 57.0 | +1.6 |
| | 51nm,0.7s,590nm | | | | | | |
| BNSI | Bone | 5.65 | 46 | P | Pn | 23 11 57.4 | +1.7 |
| MMRI | Maumere | 6.16 | 93 | Pn | Pn | 23 12 03.3 | +0.7 |
| SOEI | Soe | 8.26 | 100 | Pn | Pn | 23 12 32.7 | +1.0 |
| MBWA | Marble Bar | 13.22 | 165 | Pn | Pn | 23 13 38.3 | -1.2 |
| FITZ | Fitzroy Crossi | 13.46 | 137 | Pn | Pn | 23 13 41.2 | -1.6 |
| PSA00 | Pilbara Seismi | 13.65 | 165 | Pn | Pn | 23 13 44.0 | -1.3 |
| GIRL | Giralia | 14.31 | 187 | Pn | Pn | 23 13 53.2 | -1.1 |
| KNRA | Kununurra | 14.43 | 121 | Pn | Pn | 23 13 55.0 | -1.0 |
| MTN | Manton Dam | 15.51 | 108 | | Pn | 23 14 10.1 | -0.5 |
| MTN | | | | IAmb | IAmb | 23 14 27.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| MORW | Morawa | 20.60 | 180 | Pn | Pn | 23 15 12.0 | -1.3 |
| MORW | | | | IAmb | IAmb | 23 15 37.4 | |
| | comp=Z,66nm,1.5s | | | | | | |
| WB0 | Warramunga Arr | 21.10 | 124 | P | P | 23 15 16.8 | +0.3 |
| WB0 | | | | IAmb | IAmb | 23 15 20.9 | |
| | comp=Z,7.9nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 21.14 | 125 | P | P | 23 15 17.1 | +0.1 |
| | comp=Z,4.5nm,0.5s,baz=302,slow=12,SNR=30 | | | | | | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| AS31 | Alice Springs | 22.92 | 134 | P | P | 23 15 35.3 | -0.6 |
| AS31 | | | | IAmb | IAmb | 23 15 43.6 | |
| | comp=Z,2.6nm,0.6s | | | | | | |
| ASAR | Alice Springs | 22.92 | 134 | P | P | 23 15 36.5 | +0.6 |
| | comp=Z,5.2nm,0.8s,baz=305,slow=8.9,SNR=20 | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | |
| STKA | Stephens Creek | 33.36 | 138 | P | P | 23 17 11.0 | +0.9 |
| MJAR | Matsushiro Arr | 49.28 | 24 | P | P | 23 19 22.3 | +1.5 |
| | comp=Z,0.6nm,0.3s,baz=214,slow=8.7,SNR=4.1 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| SONM | Songino Array | 56.59 | 352 | P | P | 23 20 15.6 | +0.9 |
| | comp=Z,0.7nm,0.5s,baz=170,slow=7.3,SNR=5.6 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 62.58 | 335 | P | P | 23 20 54.9 | -1.0 |
| | comp=Z,0.2nm,0.4s,baz=143,slow=6.6,SNR=5.7 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| BOSA | Boshof | 86.72 | 242 | P | P | 23 23 15.8 | -0.7 |
| BOSA | | | | IAmb | IAmb | 23 23 28.2 | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| LBTB | Lobatse | 86.90 | 245 | | P | 23 23 17.6 | +0.2 |

*SJA* ***29*** *23:11:23.9±0.7, 21.°88S×68.°90W, h125km±3km, ML4.0, MW3.9*

*VAO* ***29*** *23:11:24.5±0.5, 21.°68S×68.°64W, h98km±5km, mb4.5*

*NEIC* ***29*** *23:11:24.8±2.1, 21.°84S±0.°05×68.°83W±0.°06, h117km±6km, mb4.3/14, ML4.2(GUC), Error ellipse: s-maj=9.3km s-min=5.6km az=55.0*

*GUC* ***29*** *23:11:25.7±0.8, 21.°89S×68.°87W, h112km±4km, ML4.2*

*IDC* ***29*** *23:11:25.1±0.8, 21.°89S×68.°42W, h102km±8km, mb3.8/4, mbtmp4.1/7, MS3.0/1, Error ellipse: s-maj=32.5km s-min=16.0km az=125.0*

**ISC 29 23:11:24.1±0.6, 21.°80S±0.°03×68.°76W±0.°04, h116km±6km, n97, σ1§73/122, mb4.3/4, 3C-2D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB09 | IPOC Station P | 0.44 | 270 | | Pn | 23 11 42.4 | +1.0 |
| PB09 | | | | Sn | Sn | 23 11 55.0 | +0.4 |
| PB09 | IPOC Station P | 0.44 | 270 | *e*P | Pn | 23 11 42.5 | +1.0 |
| PB09 | | | | *e*S | Sn | 23 11 56.2 | +1.7 |
| PB09 | | | | IAML | | 23 11 58.9 | |
| | comp=Z,3μm,0.4s | | | | | | |
| PB09 | IPOC Station P | 0.44 | 270 | ⇑*i*P | Pn | 23 11 42.5 | +1.0 |
| PB09 | | | | *i* S | Sn | 23 11 54.9 | +0.4 |
| LVC | Limon Verde | 0.82 | 189 | | Pn | 23 11 45.1 | +0.7 |
| LVC | | | | Sn | Sn | 23 11 59.3 | -0.5 |
| LVC | Limon Verde | 0.82 | 189 | *e*P | Pn | 23 11 45.0 | +0.5 |
| LVC | | | | *e*S | Sn | 23 12 00.4 | +0.6 |
| LVC | | | | IAML | | 23 12 01.5 | |
| | comp=Z,1μm,0.4s | | | | | | |
| LVC | Limon Verde | 0.82 | 189 | LR | LR | 23 11 44.2 | |
| | comp=Z,31nm,18.2s,baz=280,slow=22 | | | | | | |
| LVC | | | | P | Pn | 23 11 45.1 | +0.7 |
| | comp=Z,833nm,0.4s,baz=14,slow=8.3,SNR=2761 | | | | | | |
| LVC | | | | S | Sn | 23 11 59.7 | -0.1 |
| | comp=Z,2μm,0.3s,baz=87,slow=23,SNR=54 | | | | | | |
| LVC | Limon Verde | 0.82 | 189 | *e*P | Pn | 23 11 44.6 | +0.2 |
| LVC | | | | *i* S | Sn | 23 11 59.4 | -0.5 |
| LVC | Limon Verde | 0.82 | 189 | *e*P | Pn | 23 11 45.0 | +0.5 |
| LVC | | | | *e*S | Sn | 23 11 59.5 | -0.3 |
| AF01 | San Pedro de A | 1.27 | 155 | | Pn | 23 11 50.4 | +1.4 |
| AF01 | | | | Sn | Sn | 23 12 09.1 | +1.4 |
| AF01 | San Pedro de A | 1.27 | 155 | *e*P | Pn | 23 11 50.0 | +1.1 |
| AF01 | | | | *e*S | Sn | 23 12 09.7 | +2.0 |
| AF01 | | | | IAML | | 23 12 30.0 | |
| | comp=Z,2μm,0.5s | | | | | | |
| AF01 | San Pedro de A | 1.27 | 155 | ⇓*i*P | Pn | 23 11 50.5 | +1.6 |
| AF01 | | | | *i* S | Sn | 23 12 07.8 | +0.1 |
| AF01 | | | | IAML | | 23 12 11.0 | |
| | comp=E,3μm,0.6s | | | | | | |
| PB04 | IPOC Station P | 1.39 | 247 | | Pn | 23 11 50.7 | +0.5 |
| PB04 | | | | Sn | Sn | 23 12 09.2 | -0.8 |
| PB04 | IPOC Station P | 1.39 | 247 | *e*P | Pn | 23 11 50.3 | +0.1 |
| PB04 | | | | *e*S | Sn | 23 12 10.5 | +0.6 |
| PB04 | | | | IAML | | 23 12 13.1 | |
| | comp=Z,3μm,0.5s | | | | | | |
| PB04 | IPOC Station P | 1.39 | 247 | ⇑*i*P | Pn | 23 11 50.9 | +0.8 |
| PB04 | | | | *i* S | Sn | 23 12 09.1 | -0.8 |
| PB04 | | | | IAML | | 23 12 12.1 | |
| | comp=E,5μm,0.3s | | | | | | |
| PX03 | IPOC Station P | 1.61 | 330 | *e*P | Pn | 23 11 53.2 | +0.6 |
| PATCX | Punta Patache | 1.62 | 307 | | Pn | 23 11 53.7 | +0.9 |
| TA01 | Diego Aracena | 1.81 | 313 | | Pn | 23 11 55.5 | +0.5 |
| TA01 | | | | Sn | Sn | 23 12 18.9 | +0.5 |
| TA01 | Diego Aracena | 1.81 | 313 | *e*P | Pn | 23 11 55.2 | +0.3 |
| TA01 | | | | *e*S | Sn | 23 12 19.5 | +1.0 |
| TA01 | | | | IAML | | 23 12 27.0 | |
| | comp=Z,640nm,0.5s | | | | | | |
| TA01 | Diego Aracena | 1.81 | 313 | *e*P | Pn | 23 11 55.4 | +0.5 |
| TA01 | | | | *i* S | Sn | 23 12 18.4 | -0.1 |
| TA01 | | | | IAML | | 23 12 21.3 | |
| | comp=E,2μm,0.2s | | | | | | |
| HMBC | Humberstone | 1.84 | 325 | | Pn | 23 11 56.3 | +0.7 |
| HMBC | Humberstone | 1.84 | 325 | *e*P | Pn | 23 11 56.1 | +0.6 |
| HMBC | | | | *e*S | Sn | 23 12 20.7 | +1.2 |
| HMBC | | | | IAML | | 23 12 22.6 | |
| | comp=Z,3μm,0.3s | | | | | | |
| HMBC | Humberstone | 1.84 | 325 | ⇑*i*P | Pn | 23 11 56.4 | +0.9 |
| HMBC | | | | *i* S | Sn | 23 12 19.9 | +0.4 |
| HMBC | | | | IAML | | 23 12 23.2 | |
| | comp=N,4μm,0.4s | | | | | | |
| GO01 | Chusmiza | 2.16 | 349 | | Pn | 23 12 01.5 | +1.6 |
| GO01 | Chusmiza | 2.16 | 349 | *e*P | Pn | 23 12 01.9 | +2.0 |
| GO01 | | | | *e*S | Sn | 23 12 30.0 | +2.8 |
| GO01 | Chusmiza | 2.16 | 349 | *e*P | Pn | 23 12 01.8 | +2.0 |
| GO01 | | | | *i* S | Sn | 23 12 29.8 | +2.6 |
| YJA | Yavi | 3.04 | 98 | *e*P | Pn | 23 12 14.4 | +3.2 |
| YJA | | | | *e*S | Sn | 23 12 52.4 | +4.9 |
| YJA | Yavi | 3.04 | 98 | *e*P | Pn | 23 12 13.9 | +2.7 |
| PB14 | IPOC Station P | 3.19 | 208 | | Pn | 23 12 13.0 | -0.1 |
| PB14 | IPOC Station P | 3.19 | 208 | *e*P | Pn | 23 12 13.0 | -0.1 |
| PB14 | | | | *e*S | Sn | 23 12 37.1 | -14 |
| PB14 | | | | IAML | | 23 12 42.9 | |
| | comp=Z,350nm,0.5s | | | | | | |
| PB14 | IPOC Station P | 3.19 | 208 | *e*P | Pn | 23 12 13.0 | -0.1 |
| GO02 | Mina Guanaco | 3.43 | 193 | | Pn | 23 12 16.0 | -0.3 |
| GO02 | Mina Guanaco | 3.43 | 193 | *e*P | Pn | 23 12 16.5 | +0.3 |
| GO02 | | | | *e*S | Sn | 23 12 43.6 | -13 |
| GO02 | Mina Guanaco | 3.43 | 193 | ⇓*i*P | Pn | 23 12 16.1 | -0.1 |
| AZAP | Zapla | 4.17 | 126 | *e*P | Pn | 23 12 27.8 | +1.6 |
| SLA | San Lorenzo | 4.18 | 135 | *e*P | Pn | 23 12 27.9 | +1.9 |
| PB18 | Visviri | 4.24 | 351 | | Pn | 23 12 29.7 | +2.4 |
| AC01 | Pan de Azucar | 4.64 | 201 | Pn | Pn | 23 12 30.6 | -1.5 |
| AC01 | Pan de Azucar | 4.64 | 201 | *e*P | Pn | 23 12 30.6 | -1.5 |
| AC01 | | | | *e*S | Sn | 23 13 21.6 | -3.5 |
| AC01 | | | | IAML | | 23 14 02.9 | |
| | comp=Z,102nm,0.7s | | | | | | |
| AC01 | Pan de Azucar | 4.64 | 201 | *e*P | Pn | 23 12 30.7 | -1.5 |
| LPAZ | La Paz | 5.52 | 6 | P | Pn | 23 12 47.2 | +2.6 |
| | comp=Z,13nm,0.4s,baz=212,slow=4.0,SNR=95 | | | | | | |
| LPAZ | | | | S | Sn | 23 13 40.3 | -6.8 |
| | comp=Z,17nm,0.8s,baz=168,slow=14,SNR=5.1 | | | | | | |
| AC06 | Mina Casimiro | 5.72 | 194 | | Pn | 23 12 44.4 | -2.3 |
| GO03 | Copiap | 5.92 | 193 | Pn | Pn | 23 12 47.4 | -2.0 |
| AC04 | Llanos de Chal | 6.71 | 198 | Pn | Pn | 23 12 56.0 | -4.2 |
| AC05 | El Transito | 7.14 | 191 | Pn | Pn | 23 13 03.7 | -2.3 |
| LCO | Las Campanas | 7.39 | 193 | | Pn | 23 13 06.0 | -3.5 |
| BBSD | Serra de San D | 8.95 | 61 | *e*P | Pn | 23 13 28.6 | -1.9 |
| SIV | San Ignacio | 9.29 | 53 | P | Pn | 23 13 33.2 | -2.0 |
| | comp=Z,9.8nm,0.5s,baz=248,slow=9.5,SNR=60 | | | | | | |
| SIV | | | | S | Sn | 23 15 10.6 | -7.4 |
| | comp=Z,2.5nm,0.5s,baz=306,slow=23,SNR=10 | | | | | | |
| VA03 | San Esteban | 11.04 | 188 | | Pn | 23 13 55.6 | -3.0 |
| PTLB | Pontes e Lacer | 11.10 | 57 | Pn | Pn | 23 13 56.6 | -2.8 |
| CPUP | Villa Florida | 11.38 | 116 | Pn | Pn | 23 14 01.3 | -1.9 |
| CPUP | Villa Florida | 11.38 | 116 | P | Pn | 23 14 00.3 | -2.8 |
| | comp=Z,1.4nm,0.7s,baz=324,slow=12,SNR=2.4 | | | | | | |
| CPUP | | | | LR | LR | 23 19 17.8 | |
| | comp=Z,72nm,18.0s,baz=42,slow=43 | | | | | | |
| VILB | Vilhena | 12.01 | 44 | Pn | Pn | 23 14 10.9 | -0.6 |
| VILB | Vilhena | 12.01 | 44 | *e*P | Pn | 23 14 10.8 | -0.8 |
| ETMB | Extrema | 12.16 | 12 | Pn | Pn | 23 14 11.7 | -2.0 |
| ETMB | Extrema | 12.16 | 12 | *e*P | Pn | 23 14 11.6 | -2.0 |
| BO01 | Tunca | 12.71 | 189 | Pn | Pn | 23 14 19.6 | -1.1 |
| SALV | Santo Antonio | 13.69 | 67 | *e*P | Pn | 23 14 32.6 | -0.9 |
| SAML | Samuel | 13.86 | 24 | Pn | Pn | 23 14 36.2 | +0.5 |
| SAML | Samuel | 13.86 | 24 | *e*P | Pn | 23 14 35.8 | +0.1 |
| CRSM | Crissiumal (Br | 14.53 | 116 | *e*P | Pn | 23 14 45.8 | +1.6 |
| BI02 | San Fabin de | 14.97 | 188 | Pn | Pn | 23 14 49.4 | -0.3 |
| PDRB | Porto dos Gac | 15.34 | 51 | *e*P | Pn | 23 14 53.6 | -0.8 |
| ITAB | Concordia | 16.07 | 113 | | P | 23 15 05.2 | +0.6 |
| ITAB | | | | IAmb | IAmb | 23 15 06.3 | |
| | comp=Z,19nm,0.7s | | | | | | |
| CPSB | Cacapava Do Su | 16.20 | 125 | *e*P | P | 23 15 06.3 | +0.3 |
| PCMB | Pacaembu | 16.27 | 93 | *e*P | Pn | 23 15 06.0 | +0.1 |
| LDASE | Londrina, Braz | 16.38 | 99 | *e*P | Pn | 23 15 07.5 | +0.2 |
| PLTB | Pedras Altas | 16.77 | 129 | | Pn | 23 15 11.2 | -0.8 |
| PLTB | | | | IAmb | IAmb | 23 15 13.0 | |
| | comp=Z,16nm,1.4s | | | | | | |
| TRQA | Tornquist | 17.23 | 162 | P | Pn | 23 15 17.9 | +0.4 |
| ITRB | Iturama | 17.34 | 86 | *e*P | Pn | 23 15 19.8 | +0.7 |
| TBTG | Tabatinga, AM | 17.54 | 356 | P | Pn | 23 15 21.1 | -0.4 |
| FRTB | Fartura | 17.80 | 99 | *e*P | Pn | 23 15 24.8 | +0.2 |
| GO06 | Curarrehue | 17.88 | 187 | P | Pn | 23 15 24.7 | -0.8 |
| TEFE | Tefe | 18.62 | 13 | *e*P | P | 23 15 32.7 | 0.0 |
| BB19B | Bebedouro | 18.86 | 92 | *e*P | P | 23 15 35.6 | +0.3 |
| LL04 | Puerto Octay | 19.30 | 188 | P | P | 23 15 38.8 | -1.1 |
| LL04 | | | | IAmb | IAmb | 23 15 43.8 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| SNDB | Serra Nova Dou | 19.34 | 62 | *e*P | P | 23 15 40.3 | -0.4 |
| NPGB | Novo Progresso | 19.56 | 43 | *e*P | P | 23 15 42.9 | -0.1 |
| RCLB | Rio Claro- Sao | 19.68 | 96 | *e*P | P | 23 15 44.1 | -0.2 |
| IPMB | Ipameri,

*IDC **29** 23:26:04.2±1.8, 12°.31N×86°.81W, h61km±32km, mb3.4/4, mbtmp3.7/6, ML3.7/2, MS2.7/2, Error ellipse: s-maj=76.8km s-min=12.5km az=42.0*

*CATAC **29** 23:26:04.3±0.3, 12°.03N±0'.05×87°.04W±0'.04, h36km±3km, ML4.3*

**ISC 29 23:26:04.2±0.9, 12°.09N±0'.05×87°.04W±0'.04, h66km±7km, n90, σ0°79/136, mb3.6/4, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **COPN** | **Copaltepe** | **0.45** | **78** | *i* P | | **Pn** | **23 26 16.0** | **-0.2** |
| COPN | | | | | IAML | | 23 26 30.9 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **PACN** | **Al O del Volca** | **0.48** | **30** | *i* P | | **Pn** | **23 26 16.6** | **+0.1** |
| PACN | | | | *i* S | | **Sn** | **23 26 26.3** | **+0.9** |
| PACN | | | | | IAML | | 23 26 33.3 | |
| | comp=Z,15μm,1.0s | | | | | | | |
| **BC86** | **Nagarote** | **0.50** | **69** | *i* P | | **Pn** | **23 26 16.0** | **-0.6** |
| BC86 | | | | | IAML | | 23 26 26.8 | |
| | comp=Z,14μm,1.0s | | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **0.52** | **53** | *i* P | | **Pn** | **23 26 16.7** | **-0.2** |
| LEVN | | | | *i* S | | **Sn** | **23 26 26.9** | **+0.8** |
| LEVN | | | | | IAML | | 23 26 32.1 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **ROCN** | **Rota Cerro Neg** | **0.52** | **34** | *i* P | | **Pn** | **23 26 17.0** | **+0.1** |
| ROCN | | | | *i* S | | **Sn** | **23 26 26.8** | **+0.6** |
| ROCN | | | | | IAML | | 23 26 28.6 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **0.53** | **39** | *e*P | | **Pn** | **23 26 16.8** | **-0.2** |
| CNGN | | | | *e*S | | **Sn** | **23 26 26.5** | **+0.1** |
| **CNGN** | **Cerro Negro** | **0.53** | **39** | *i* P | | **Pn** | **23 26 16.4** | **-0.7** |
| CNGN | | | | *i* S | | **Sn** | **23 26 26.5** | **+0.1** |
| CNGN | | | | | IAML | | 23 26 30.2 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| **CNGN** | **Cerro Negro** | **0.53** | **39** | *e*P | | **Pn** | **23 26 16.8** | **-0.2** |
| **QUEN** | **Al S del Volca** | **0.54** | **20** | *i* P | | **Pn** | **23 26 17.2** | **+0.1** |
| QUEN | | | | *i* S | | **Sn** | **23 26 27.2** | **+0.7** |
| QUEN | | | | | IAML | | 23 26 28.5 | |
| | comp=Z,28μm,1.0s | | | | | | | |
| **CHNN** | **El Viejo** | **0.54** | **351** | *i* P | | **Pn** | **23 26 16.6** | **-0.5** |
| CHNN | | | | *i* S | | **Sn** | **23 26 26.3** | **-0.2** |
| CHNN | | | | | IAML | | 23 26 28.2 | |
| | comp=Z,21μm,1.0s | | | | | | | |
| **TELN** | **Telica** | **0.56** | **22** | *i* P | | **Pn** | **23 26 17.3** | **-0.1** |
| TELN | | | | *i* S | | **Sn** | **23 26 27.5** | **+0.6** |
| TELN | | | | | IAML | | 23 26 31.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **HERN** | **Volcan Telica** | **0.56** | **21** | *i* P | | **Pn** | **23 26 17.3** | **-0.1** |
| HERN | | | | *i* S | | **Sn** | **23 26 27.4** | **+0.4** |
| HERN | | | | | IAML | | 23 26 27.7 | |
| | comp=Z,12μm,1.0s | | | | | | | |
| **BC84** | **Volcan Momotom** | **0.58** | **58** | *i* P | | **Pn** | **23 26 17.3** | **-0.2** |
| BC84 | | | | *i* S | | **Sn** | **23 26 27.0** | **-0.2** |
| BC84 | | | | | IAML | | 23 26 28.5 | |
| | comp=Z,13μm,1.0s | | | | | | | |
| **PKGN** | **Cerro Pekin** | **0.58** | **6** | *i* P | | **Pn** | **23 26 17.5** | **-0.1** |
| PKGN | | | | *i* S | | **Sn** | **23 26 28.0** | **+0.7** |
| PKGN | | | | | IAML | | 23 26 31.6 | |
| | comp=Z,40μm,1.0s | | | | | | | |
| **MOMN** | **Momotombo** | **0.58** | **57** | *i* P | | **Pn** | **23 26 17.3** | **-0.3** |
| MOMN | | | | *i* S | | **Sn** | **23 26 27.5** | **+0.1** |
| MOMN | | | | | IAML | | 23 26 29.9 | |
| | comp=Z,470nm,1.0s | | | | | | | |
| **ILCN** | **San Idelfonso** | **0.59** | **34** | *i* P | | **Pn** | **23 26 17.5** | **-0.1** |
| ILCN | | | | *i* S | | **Sn** | **23 26 28.1** | **+0.6** |
| ILCN | | | | | IAML | | 23 26 30.8 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **CRIN** | **San Cristobal** | **0.61** | **359** | *e*P | | **Pn** | **23 26 17.9** | **-0.1** |
| CRIN | | | | *e*S | | **Sn** | **23 26 27.7** | **-0.2** |
| **CRIN** | **San Cristobal** | **0.61** | **359** | *i* P | | **Pn** | **23 26 17.9** | **-0.1** |
| CRIN | | | | *i* S | | **Sn** | **23 26 29.2** | **+1.2** |
| CRIN | | | | | IAML | | 23 26 33.6 | |
| | comp=Z,35μm,1.0s | | | | | | | |
| **CRIN** | **San Cristobal** | **0.61** | **359** | *e*P | | **Pn** | **23 26 17.9** | **-0.1** |
| CRIN | | | | *e*S | | **Sn** | **23 26 28.6** | **+0.6** |
| **AMTN** | **Mateare** | **0.61** | **76** | *i* P | | **Pn** | **23 26 18.1** | **+0.2** |
| AMTN | | | | *i* S | | **Sn** | **23 26 28.9** | **+1.0** |
| AMTN | | | | | IAML | | 23 26 39.0 | |
| | comp=Z,21μm,1.0s | | | | | | | |
| **SAPS** | **Ciudad Sandino** | **0.63** | **82** | *i* P | | **Pn** | **23 26 17.8** | **-0.2** |
| SAPS | | | | *i* S | | **Sn** | **23 26 28.3** | **+0.2** |
| SAPS | | | | | IAML | | 23 26 32.1 | |
| | comp=Z,17μm,1.0s | | | | | | | |
| **MOM2** | **El Cardon** | **0.65** | **57** | *i* P | | **Pn** | **23 26 17.9** | **-0.3** |
| MOM2 | | | | *i* S | | **Sn** | **23 26 29.1** | **+0.6** |
| MOM2 | | | | | IAML | | 23 26 37.1 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| **APYN** | **Apoyeque** | **0.69** | **78** | *i* P | | **Pn** | **23 26 18.6** | **-0.2** |
| APYN | | | | *i* S | | **Sn** | **23 26 30.0** | **+0.6** |
| APYN | | | | | IAML | | 23 26 30.9 | |
| | comp=Z,360nm,1.0s | | | | | | | |
| **APQ2** | **Apoyeque** | **0.71** | **81** | *i* P | | **Pn** | **23 26 19.0** | **+0.1** |
| APQ2 | | | | *i* S | | **Sn** | **23 26 30.0** | **+0.3** |
| APQ2 | | | | | IAML | | 23 26 31.0 | |
| | comp=Z,15μm,1.0s | | | | | | | |
| **RA5A7** | **El Crucero** | **0.72** | **97** | *i* P | | **Pn** | **23 26 19.6** | **+0.4** |
| RA5A7 | | | | | IAML | | 23 26 34.9 | |
| | comp=Z,34μm,1.0s | | | | | | | |
| **CRUN** | **El Crucero** | **0.73** | **98** | *i* P | | **Pn** | **23 26 19.2** | **-0.1** |
| CRUN | | | | | IAML | | 23 26 34.9 | |
| | comp=Z,27nm,1.0s | | | | | | | |
| **APQN** | **BB Volcan Apoy** | **0.74** | **79** | *i* P | | **Pn** | **23 26 19.3** | **0.0** |
| APQN | | | | *i* S | | **Sn** | **23 26 31.2** | **+0.9** |
| **USIM** | **UNAN** | **0.75** | **88** | *i* P | | **Pn** | **23 26 19.5** | **+0.1** |
| USIM | | | | *i* S | | **Sn** | **23 26 30.5** | **-0.1** |
| USIM | | | | | IAML | | 23 26 33.0 | |
| | comp=Z,32μm,1.0s | | | | | | | |
| **ALLN** | **Telcor Managua** | **0.75** | **85** | *i* P | | **Pn** | **23 26 19.5** | **+0.1** |
| ALLN | | | | *i* S | | **Sn** | **23 26 31.1** | **+0.4** |
| ALLN | | | | | IAML | | 23 26 32.4 | |
| | comp=Z,24μm,1.0s | | | | | | | |
| **UNAN** | **Cigeo UNAN** | **0.75** | **88** | *i* P | | **Pn** | **23 26 19.5** | **0.0** |
| UNAN | | | | *i* S | | **Sn** | **23 26 31.1** | **+0.4** |
| UNAN | | | | | IAML | | 23 26 34.5 | |
| | comp=Z,68μm,1.0s | | | | | | | |
| **TISN** | **Laguna Tiscapa** | **0.76** | **86** | *i* P | | **Pn** | **23 26 19.5** | **0.0** |
| TISN | | | | | IAML | | 23 26 31.7 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **ENAN** | **Enatrel Managu** | **0.76** | **88** | *i* P | | **Pn** | **23 26 19.6** | **0.0** |
| ENAN | | | | *i* S | | **Sn** | **23 26 31.6** | **+0.7** |
| ENAN | | | | | IAML | | 23 26 37.5 | |
| | comp=Z,22μm,1.0s | | | | | | | |
| **MGA1** | **Managua** | **0.78** | **85** | *i* P | | **Pn** | **23 26 19.7** | **0.0** |
| MGA1 | | | | *i* S | | **Sn** | **23 26 31.8** | **+0.6** |
| MGA1 | | | | | IAML | | 23 26 32.1 | |
| | comp=Z,13μm,1.0s | | | | | | | |
| **R4DEC** | **Barrio San Lui** | **0.78** | **85** | *i* P | | **Pn** | **23 26 19.8** | **+0.1** |
| R4DEC | | | | *i* P | | **Pn** | **23 26 19.8** | **+0.1** |
| R4DEC | | | | *i* S | | **Sn** | **23 26 31.5** | **+0.3** |
| R4DEC | | | | | IAML | | 23 26 32.0 | |
| | comp=Z,9μm,1.0s | | | | | | | |
| R4DEC | | | | | IAML | | 23 26 32.1 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **R0529** | **La Mascota** | **0.79** | **87** | *i* P | | **Pn** | **23 26 19.8** | **-0.1** |
| R0529 | | | | | IAML | | 23 26 36.1 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **WILN** | **Americas 2** | **0.84** | **85** | *i* P | | **Pn** | **23 26 20.4** | **-0.1** |
| WILN | | | | *i* S | | **Sn** | **23 26 33.3** | **+0.8** |
| WILN | | | | | IAML | | 23 26 37.5 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| **BC87** | **San Francisco** | **0.84** | **60** | *i* P | | **Pn** | **23 26 20.4** | **-0.2** |
| BC87 | | | | *i* S | | **Sn** | **23 26 33.3** | **+0.6** |
| BC87 | | | | | IAML | | 23 26 35.4 | |
| | comp=Z,12μm,1.0s | | | | | | | |
| **AERN** | **Aeropuerto Man** | **0.85** | **86** | *i* P | | **Pn** | **23 26 20.7** | **0.0** |
| AERN | | | | *i* S | | **Sn** | **23 26 33.6** | **+0.7** |
| AERN | | | | | IAML | | 23 26 35.0 | |
| | comp=Z,22μm,1.0s | | | | | | | |
| **MASN** | **Masaya** | **0.88** | **96** | *i* P | | **Pn** | **23 26 21.0** | **0.0** |
| MASN | | | | *i* S | | **Sn** | **23 26 33.2** | **-0.2** |
| MASN | | | | | IAML | | 23 26 35.5 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **BRAN** | **Las Pilas** | **0.92** | **47** | *i* P | | **Pn** | **23 26 18.5** | **-3.1** |
| BRAN | | | | *i* S | | **Sn** | **23 26 29.8** | **-4.6** |
| BRAN | | | | | IAML | | 23 26 31.2 | |
| | comp=Z,12μm,1.0s | | | | | | | |
| **AESN** | **El Sauce Leon** | **0.94** | **31** | *i* P | | **Pn** | **23 26 21.7** | **0.0** |
| AESN | | | | *i* S | | **Sn** | **23 26 34.6** | **-0.1** |
| AESN | | | | | IAML | | 23 26 39.4 | |
| | comp=Z,4μm,1.0s | | | | | | | |
| **SBEN** | **San Benito** | **0.99** | **77** | *i* P | | **Pn** | **23 26 22.8** | **+0.5** |
| SBEN | | | | *i* S | | **Sn** | **23 26 36.7** | **+0.9** |
| SBEN | | | | | IAML | | 23 26 41.0 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| **NADN** | **Granada** | **1.04** | **109** | *i* P | | **Pn** | **23 26 22.1** | **-0.9** |
| NADN | | | | *i* S | | **Sn** | **23 26 35.4** | **-1.6** |
| **LIMN** | **Finca el Limon** | **1.17** | **34** | *i* P | | **Pn** | **23 26 25.6** | **+0.7** |
| LIMN | | | | | IAML | | 23 26 42.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **ARIN** | **Rivas** | **1.34** | **118** | *i* P | | **Pn** | **23 26 26.3** | **-0.6** |
| ARIN | | | | | IAML | | 23 26 26.8 | |
| | comp=Z,5μm,1.0s | | | | | | | |
| ARIN | | | | *i* S | | **Sn** | **23 26 42.5** | **-1.4** |
| **AMPH** | **Amapala** | **1.34** | **333** | *e*P | | **Pn** | **23 26 27.5** | **+0.5** |
| AMPH | | | | *e*S | | **Sn** | **23 26 44.2** | **+0.2** |
| **AMPH** | **Amapala** | **1.34** | **333** | *i* S | | **Sn** | **23 26 43.7** | **-0.2** |
| **BOAB** | **BOACO BROADBAN** | **1.39** | **75** | *i* P | | **Pn** | **23 26 27.8** | **+0.2** |
| BOAB | | | | *i* S | | **Sn** | **23 26 45.6** | **+0.4** |
| BOAB | | | | | IAML | | 23 26 55.7 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **SOMN** | **Somoto** | **1.39** | **17** | *i* P | | **Pn** | **23 26 30.5** | **+2.7** |
| SOMN | | | | | IAML | | 23 26 51.3 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CNCH** | **Conchagua** | **1.42** | **327** | *e*P | | **Pn** | **23 26 28.3** | **+0.2** |
| CNCH | | | | *e*S | | **Sn** | **23 26 45.8** | **-0.2** |
| CNCH | | | | *e*S | | | 23 26 47.0 | |
| **CNCH** | **Conchagua** | **1.42** | **327** | *i* S | | **Sn** | **23 26 46.4** | **+0.4** |
| **JAPN** | **Al SSO del Vol** | **1.44** | **112** | *i* P | | **Pn** | **23 26 28.4** | **+0.1** |
| JAPN | | | | | IAML | | 23 26 58.6 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **MORN** | **Al O del Volca** | **1.46** | **111** | *i* P | | **Pn** | **23 26 28.8** | **+0.2** |
| MORN | | | | | IAML | | 23 26 34.1 | |
| | comp=Z,7μm,1.0s | | | | | | | |
| **OCON** | **Estacion meteo** | **1.63** | **20** | *i* P | | **Pn** | **23 26 31.9** | **+1.0** |
| OCON | | | | | IAML | | 23 26 55.6 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **LCRUZ** | **La Cruz** | **1.71** | **126** | *e*P | | **Pn** | **23 26 32.1** | **+0.3** |
| **BLLM** | **Bellamira** | **1.79** | **319** | *e*P | | **Pn** | **23 26 33.5** | **+0.5** |
| **LCY** | **Lacayo** | **1.81** | **318** | *e*P | | **Pn** | **23 26 33.8** | **+0.5** |
| **RANC** | **El Ranchito** | **1.81** | **318** | *e*P | | **Pn** | **23 26 33.9** | **+0.5** |
| RANC | | | | *e*S | | **Sn** | **23 26 55.7** | **+0.2** |
| **RANC** | **El Ranchito** | **1.81** | **318** | *i* P | | **Pn** | **23 26 33.9** | **+0.5** |
| RANC | | | | *i* S | | **Sn** | **23 26 55.4** | **-0.1** |
| RANC | | | | | IAML | | 23 26 57.5 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **ACON** | **Acoyapa** | **1.83** | **93** | *e*P | | **Pn** | **23 26 33.2** | **-0.3** |
| ACON | | | | *e*S | | **Sn** | **23 26 55.7** | **0.0** |
| **PACA** | **Pacayal** | **1.86** | **318** | *e*P | | **Pn** | **23 26 34.7** | **+0.7** |
| **PACA** | **Pacayal** | **1.86** | **318** | *i* P | | **Pn** | **23 26 34.8** | **+0.7** |
| PACA | | | | | IAML | | 23 27 02.3 | |
| | comp=Z,11μm,1.0s | | | | | | | |
| **YUSH** | **Yuscaran** | **1.87** | **6** | *i* P | | **Pn** | **23 26 35.5** | **+1.4** |
| **FAGO** | **Alcalda de S** | **1.91** | **327** | *e*P | | **Pn** | **23 26 35.0** | **+0.4** |
| FAGO | | | | *e*S | | **Sn** | **23 26 57.4** | **-0.3** |
| **TGUH** | **Tegucigalpa,Un** | **1.97** | **353** | *i* P | | **Pn** | **23 26 37.1** | **+1.5** |
| TGUH | | | | | IAML | | 23 27 02.4 | |
| | comp=Z,830nm,1.0s | | | | | | | |
| **CAHU** | **Cacacuatique** | **2.03** | **326** | *e*P | | **Pn** | **23 26 37.4** | **+1.0** |
| **ALIBA** | **Liberia Airpor** | **2.08** | **135** | *e*P | | **Pn** | **23 26 37.9** | **+0.9** |
| **TECO** | **Alcaldia de Te** | **2.23** | **311** | *i* P | | **Pn** | **23 26 39.1** | **+0.2** |
| TECO | | | | | IAML | | 23 27 13.3 | |
| | comp=Z,490nm,1.0s | | | | | | | |
| **COLC** | **Colonia** | **2.29** | **128** | *e*P | | **Pn** | **23 26 40.5** | **+0.7** |
| **SCLA** | **Alcaldia de Sa** | **2.30** | **314** | *i* P | | **Pn** | **23 26 41.1** | **+1.2** |
| SCLA | | | | | IAML | | 23 27 11.2 | |
| | comp=Z,350nm,1.0s | | | | | | | |
| **CUI** | **Cuipilapa** | **2.32** | **127** | *e*P | | **Pn** | **23 26 40.6** | **+0.3** |
| **COEG** | **Centro de Oper** | **2.36** | **311** | *i* P | | **Pn** | **23 26 40.8** | **+0.1** |
| COEG | | | | | IAML | | 23 27 18.5 | |
| | comp=Z,570nm,1.0s | | | | | | | |
| **COMHN** | **El Horno** | **2.40** | **348** | *i* P | | **Pn** | **23 26 41.5** | **+0.1** |
| **LFRS** | **El Faro** | **2.50** | **308** | *e*S | | **Sn** | **23 27 12.0** | **-0.1** |
| **LOMA** | **Loma Larga** | **2.59** | **307** | *e*P | | **Pn** | **23 26 43.8** | **-0.2** |
| **ESPN** | **Las Esperanzas** | **2.68** | **87** | *e*P | | **Pn** | **23 26 46.0** | **+0.9** |
| **JTS** | **Las Juntas de** | **2.72** | **131** | P | | **Pn** | **23 26 45.9** | **+0.3** |
| | comp=Z,19nm,0.3s,baz=279,slow=13,SNR=18 | | | | | | | |
| JTS | | | | S | | **Sn** | **23 27 17.5** | **+0.2** |
| | comp=Z,64nm,0.4s,baz=323,slow=23,SNR=6.1 | | | | | | | |
| | comp=Z,23nm,0.5s | | | | | | | |
| **JTS** | **Las Juntas de** | **2.72** | **131** | *e*P | | **Pn** | **23 26 46.8** | **+1.2** |
| **PMON** | **Piamonte** | **2.75** | **306** | *e*P | | **Pn** | **23 26 47.0** | **+0.9** |
| **MTO3** | **Montecristo** | **3.22** | **316** | *e*P | | **Pn** | **23 26 53.3** | **+0.6** |
| **NUBE** | **Las Nubes** | **3.22** | **304** | *e*P | | **Pn** | **23 26 52.9** | **+0.3** |
| **APG** | **El Apazote** | **4.42** | **311** | P | | **Pn** | **23 27 09.8** | **+0.8** |
| | comp=Z,0.2nm,0.4s,baz=144,slow=12,SNR=2.6 | | | | | | | |
| **CMIG** | **Matias Romero** | **9.08** | **304** | P | | **Pn** | **23 28 13.3** | **+0.7** |
| | comp=Z,0.5nm,0.3s,baz=143,slow=8.8,SNR=5.6 | | | | | | | |
| CMIG | | | | S | | **Sn** | **23 29 54.1** | **+0.8** |
| | comp=Z,1.6nm,0.6s,baz=112,slow=2.2,SNR=1.8 | | | | | | | |
| CMIG | | | | LR | | LR | 23 32 15.5 | |
| | comp=Z,44nm,19.5s,baz=186,slow=41 | | | | | | | |
| | comp=Z,1.7nm,0.4s | | | | | | | |
| **SDV** | **Santo Domingo** | **16.44** | **100** | LR | | LR | 23 37 18.2 | |
| | comp=Z,34nm,20.1s,baz=161,slow=42 | | | | | | | |
| **TXAR** | **Lajitas Array** | **23.11** | **320** | P | | **P** | **23 31 05.4** | **+0.5** |
| | comp=Z,2.6nm,0.6s,baz=137,slow=9.8,SNR=40 | | | | | | | |
| | comp=Z,2.6nm,0.6s | | | | | | | |
| **PDAR** | **Pinedale Array** | **36.28** | **332** | P | | **P** | **23 33 01.9** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=128,slow=13,SNR=2.6 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.24** | **319** | P | | **P** | **23 33 18.8** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=145,slow=6.4,SNR=1.9 | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **38.74** | **351** | P | | **P** | **23 33 19.9** | **-2.1** |
| | comp=Z,2.0nm,0.6s,baz=101,slow=10,SNR=3.3 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **139.50** | **248** | PKP | | **PKPdf** | **23 45 24.6** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=46,slow=2.7,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **139.55** | **253** | PKP | | **PKPdf** | **23 45 25.6** | **+0.3** |
| | comp=Z,0.6nm,0.7s,baz=84,slow=1.8,SNR=7.6 | | | | | | | |

*IDC **29** 23:26:25.5±0.8, 22°.10S×169°.96E, h0km, mb4.3/10, mbtmp4.3/12, ML4.6/2, MS3.8/18, Error ellipse: s-maj=24.5km s-min=20.6km az=144.0*

*NEIC **29** 23:26:28.8±2.1, 22°.11S±0'.09×169°.75E±0'.07, h10km±1km, mb4.6/15, Error ellipse: s-maj=14.6km s-min=10.9km az=175.0*

*NOU **29** 23:26:30.5, 22°.01S×169°.53E, h0km, MLv4.6/11, Southeast of Loyalty Islands*

*BGR **29** 23:26:35.9, 20.31S×169.69E, h33km*

**ISC 29 23:26:30.0±0.5, 22°.10S±0'.07×169°.77E±0'.06, h25km, n93, σ1°14/87, mb4.4/20, MS3.8/14, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **1.73** | **290** | | P | **Pn** | **23 26 58.2** | **-0.3** |
| **PINNC** | **Pines Island,** | **2.21** | **256** | | P | **Pn** | **23 27 05.6** | **+0.5** |
| **PINNC** | **Pines Island,** | **2.21** | **256** | | | **Pn** | **23 27 05.2** | **0.0** |
| **YATNC** | **Mamie plateau,** | **2.67** | **270** | | P | **Pn** | **23 27 11.4** | **-0.1** |
| **LIFNC** | **LIFOU** | **2.70** | **299** | | P | **Pn** | **23 27 11.3** | **-0.5** |
| **LIFNC** | **LIFOU** | **2.70** | **299** | | | **Pn** | **23 27 10.2** | **-1.6** |
| LIFNC | | | | | Sn | **Sn** | **23 27 40.4** | **-3.2** |
| **DZM** | **Mont Dzumac** | **3.08** | **270** | | P | **Pn** | **23 27 17.7** | **+0.5** |
| **DZM** | **Mont Dzumac** | **3.08** | **270** | | | **Pn** | **23 27 17.5** | **+0.3** |
| DZM | | | | | Sn | **Sn** | **23 27 49.5** | **-3.9** |
| **DZM** | **Mont Dzumac** | **3.08** | **270** | | Pn | **Pn** | **23 27 17.8** | **+0.6** |
| | 14nm,0.3s,baz=119,slow=12,SNR=128 | | | | | | | |
| DZM | | | | | Sn | **Sn** | **23 27 55.6** | **+2.2** |
| | baz=90,slow=20 | | | | | | | |
| DZM | | | | | LR | LR | 23 28 13.1 | |
| | comp=Z,798nm,20.4s,baz=92,slow=33 | | | | | | | |
| | 59nm,0.2s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.22** | **269** | | P | **Pn** | **23 27 19.5** | **+0.6** |
| **RTV** | **Rentapao** | **4.46** | **343** | | P | **Pn** | **23 27 36.6** | **+0.5** |
| **DVP** | **Devils Point** | **4.60** | **341** | | P | **Pn** | **23 27 39.6** | **+1.7** |
| **KOUNC** | **Koumac, New Ca** | **5.34** | **286** | | P | **Pn** | **23 27 48.2** | **0.0** |
| **KOUNC** | **Koumac, New Ca** | **5.34** | **286** | | | **Pn** | **23 27 48.1** | **0.0** |
| **MSVF** | **Nonsavu** | **8.91** | **62** | | | **Pn** | **23 28 37.6** | **+0.2** |
| **MSVF** | **Nonsavu** | **8.91** | **62** | | Pn | **Pn** | **23 28 35.2** | **-2.2** |
| | 0.4nm,0.3s,baz=273,slow=12,SNR=9.0 | | | | | | | |
| MSVF | | | | | LR | LR | 23 31 21.3 | |
| | comp=Z,950nm,18.4s,baz=208,slow=34 | | | | | | | |
| | 18nm,1.1s | | | | | | | |
| **HNR** | **Honiara** | **15.73** | **322** | | Pn | **Pn** | **23 30 11.3** | **+1.2** |
| HNR | | | | | IAmb | IAmb | 23 30 30.0 | |
| | comp=Z,81nm,1.1s | | | | | | | |
| **HNR** | **Honiara** | **15.73** | **322** | | LR | LR | 23 35 25.5 | |
| | comp=Z,2μm,18.9s,baz=146,slow=34 | | | | | | | |
| **URZ** | **Urewera** | **17.30** | **160** | | LR | LR | 23 35 47.7 | |
| | comp=Z,188nm,18.2s,baz=42,slow=33 | | | | | | | |
| **EIDS** | **Eidsvold** | **17.42** | **256** | | | **Pn** | **23 30 31.3** | **-0.1** |
| **RTZ** | **Ruatahuna** | **17.59** | **161** | | | **P** | **23 30 33.7** | **-0.7** |
| RTZ | | | | | IAmb | IAmb | 23 30 53.5 | |
| | comp=Z,34nm,1.1s | | | | | | | |
| **MRZ** | **Mangatainoka R** | **19.15** | **166** | | P | **P** | **23 30 50.1** | **-1.4** |
| MRZ | | | | | IAmb | IAmb | 23 30 54.9 | |
| | comp=Z,33nm,1.0s | | | | | | | |
| **CTA** | **Charters Tower** | **22.03** | **271** | | P | **P** | **23 31 24.5** | **+1.7** |
| | comp=Z,0.5nm,0.8s,baz=111,slow=12,SNR=7.0 | | | | | | | |
| CTA | | | | | LR | LR | 23 39 20.6 | |
| | comp=Z,33nm,19.5s,baz=92,slow=35 | | | | | | | |
| **CTAO** | **Charters Tower** | **22.03** | **271** | | P | **P** | **23 31 23.3** | **+0.5** |
| **PMG** | **Port Moresby** | **25.11** | **297** | | LR | LR | 23 40 10.0 | |
| | comp=Z,236nm,18.3s,baz=135,slow=33 | | | | | | | |
| **COEN** | **Coen** | **26.52** | **283** | | P | **P** | **23 32 06.2** | **+0.4** |
| COEN | | | | | IAmb | IAmb | 23 32 07.9 | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.86** | **243** | | P | **P** | **23 32 09.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **26.86** | **243** | | P | **P** | **23 32 10.1** | **+1.3** |
| | comp=Z,4.9nm,0.7s,baz=93,slow=13,SNR=7.1 | | | | | | | |
| STKA | | | | | LR | LR | 23 42 05.1 | |
| | comp=Z,291nm,18.4s,baz=38,slow=35 | | | | | | | |
| | comp=Z,4.9nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.03** | **260** | | P | **P** | **23 33 04.2** | **+0.6** |
| | comp=Z,2.3nm,0.7s,baz=78,slow=9.2,SNR=17 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **23 35 48.0** | **+0.9** |
| | comp=Z,1.2nm,0.9s,baz=94,slow=3.5,SNR=5.1 | | | | | | | |
| ASAR | | | | | LR | LR | 23 45 48.7 | |
| | comp=Z,259nm,20.1s,baz=89,slow=35 | | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.08** | **267** | | P | **P** | **23 33 03.6** | **-0.4** |
| WB0 | | | | | IAmb | IAmb | 23 33 18.5 | |
| | comp=Z,9.8nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.10** | **267** | | P | **P** | **23 33 03.6** | **-0.6** |
| | comp=Z,2.0nm,0.6s,baz=99,slow=8.0,SNR=33 | | | | | | | |
| WRA | | | | | PcP | **PcP** | **23 35 47.9** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=86,slow=3.7,SNR=4.0 | | | | | | | |
| WRA | | | | | LR | LR | 23 46 58.8 | |
| | comp=Z,292nm,18.8s,baz=76,slow=37 | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **38.16** | **248** | | P | **P** | **23 33 48.2** | **+0.7** |
| **FAKI** | **Fak Fak** | **41.10** | **292** | | P | **P** | **23 34 11.8** | **-0.4** |
| FAKI | | | | | IAmb | IAmb | 23 34 21.3 | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.53** | **267** | | P | **P** | **23 34 15.5** | **-0.1** |
| **NWAO** | **Narrogin (SRO)** | **47.41** | **245** | | LR | LR | 23 55 31.6 | |
| | comp=Z,110nm,19.0s,baz=218,slow=37 | | | | | | | |
| **KAPI** | **Kappang** | **51.23** | **282** | | LR | LR | 23 59 20.0 | |
| | comp=Z,40nm,18.3s,baz=141,slow=38 | | | | | | | |
| **TOLI2** | **Tolitoli** | **53.04** | **289** | | P | **P** | **23 35 46.0** | **+0.6** |
| TOLI2 | | | | | IAmb | IAmb | 23 35 59.2 | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **SBA** | **Scott Base** | **55.83** | **181** | | P | **P** | **23 36 05.7** | **+1.0** |
| SBA | | | | | IAmb | IAmb | 23 36 06.5 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.50** | **332** | | P | **P** | **23 37 10.1** | **-1.1** |
| | comp=Z,1.8nm,0.6s,baz=175,slow=7.3,SNR=5.8 | | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **JNU** | **Nakatsue** | **66.27** | **325** | | LR | LR | 00 02 35.8 | |
| | comp=Z,36nm,21.8s,baz=124,slow=33 | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.97** | **180** | | P | **P** | **23 37 26.8** | **0.0** |
| **QSPA** | **South Pole Qui** | **67.97** | **180** | | P | **P** | **23 37 25.6** | **-1.1** |
| | comp=Z,4.0nm,1.0s,baz=13,slow=3.6,SNR=6.3 | | | | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **71.14** | **326** | | P | **P** | **23 37 47.2** | **+0.8** |
| | comp=Z,1.5nm,0.7s,baz=158,slow=7.3,SNR=4.2 | | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.49** | **333** | | P | **P** | **23 38 06.2** | **0.0** |
| | comp=Z,1.9nm,0.8s,baz=90,slow=3.8,SNR=5.0 | | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.13** | **294** | | P | **P** | **23 38 39.5** | **+1.0** |
| | comp=Z,0.9nm,0.3s,baz=130,slow=4.2,SNR=8.9 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **MA2** | **Magadan** | **82.86** | **350** | | LR | LR | 00 09 57.4 | |
| | comp=Z,36nm,21.2s,baz=252,slow=32 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.73** | **184** | | ⇑P | **P** | **23 39 05.8** | **-1.0** |
| | comp=Z,164nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **86.34** | **182** | | P | **P** | **23 39 08.7** | **-0.9** |
| | comp=Z,1.2nm,0.5s,baz=177,slow=10,SNR=2.0 | | | | | | | |
| SNAA | | | | | LR | LR | 00 14 37.8 | |
| | comp=Z,51nm,21.4s,baz=224,slow=34 | | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.91** | **180** | | ⇑P | **P** | **23 39

*TRN **29** 23:30:37.2, 10°.16N×62°.05W, h28km, MD3.6, Gulf of Paria.*
*FUNV **29** 23:30:38.8, 10°.38N×62°.12W, h23km, MW3.5*
**ISC 29 23:30:37.2±1.5, 10°.23N±0°.04×62°.15W±0°.04, h24km±16km, n23, σ1s29/38, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TCE** | **Chacachacare** | **0.60** | **40** | *eP* | **Pb** | **23 30 49.1** | **-0.1** |
| TCE | | | | *eS* | **Sn** | **23 30 58.9** | **-0.6** |
| **TPP** | **Pointe-a-Pierr** | **0.69** | **83** | *eP* | **Pb** | **23 30 50.1** | **-0.5** |
| **TRN** | **Trinidad (W)** | **0.84** | **60** | *eP* | **Pb** | **23 30 52.8** | **-0.3** |
| TRN | | | | *eS* | **Sb** | **23 31 04.2** | **+0.1** |
| **TBH** | **Brigand Hill** | **1.09** | **77** | *eP* | **Pn** | **23 30 56.2** | **-0.9** |
| **TPR** | **Prospect** | **1.65** | **55** | *eP* | **Pn** | **23 31 03.6** | **-1.1** |
| **GRFF** | **Grenada Fort F** | **1.85** | **12** | *eP* | **Pn** | **23 31 08.7** | **+1.1** |
| GRFF | | | | *eS* | **Sn** | **23 31 31.2** | **+0.9** |
| **GRGR** | **Grenville** | **1.95** | **14** | *eP* | **Pn** | **23 31 09.0** | **+0.1** |
| GRGR | | | | *eS* | **Sn** | **23 31 33.7** | **+1.0** |
| **GRW** | **Mount Saint Ca** | **1.98** | **14** | *eP* | **Pn** | **23 31 10.1** | **+0.7** |
| **GRHS** | **Sauteurs** | **2.04** | **14** | *eP* | **Pn** | **23 31 10.9** | **+0.7** |
| GRHS | | | | *eS* | **Sn** | **23 31 35.1** | **+0.1** |
| **GRSS** | **Sisters** | **2.12** | **14** | *eP* | **Pn** | **23 31 12.6** | **+1.4** |
| GRSS | | | | *eS* | **Sn** | **23 31 37.8** | **+0.9** |
| **GCMP** | **Grenada, Carri** | **2.35** | **17** | *eP* | **Pn** | **23 31 15.4** | **+1.0** |
| GCMP | | | | *eS* | **Sn** | **23 31 42.5** | **-0.1** |
| **PCRV** | **Puerto La Cruz** | **2.45** | **269** | *eP* | **Pn** | **23 31 16.8** | **+0.9** |
| PCRV | | | | *eS* | **Sn** | **23 31 44.9** | **-0.3** |
| **PCRV** | **Puerto La Cruz** | **2.45** | **269** | *eP* | **Pn** | **23 31 17.0** | **+1.2** |
| PCRV | | | | *eS* | **Sn** | **23 31 47.1** | **+1.9** |
| **SVOC** | **Richmond Hill,** | **3.04** | **17** | *eP* | **Pn** | **23 31 23.9** | **0.0** |
| **SVB** | **Belmont** | **3.15** | **16** | *eP* | **Pn** | **23 31 25.9** | **+0.5** |
| SVB | | | | *eS* | **Sn** | **23 32 02.5** | **+0.2** |
| **SLBI** | **Saint Lucia, B** | **3.94** | **17** | *eP* | **Pn** | **23 31 36.3** | **0.0** |
| SLBI | | | | *eS* | **Sn** | **23 32 20.5** | **-1.3** |
| **BIM** | **Bigot** | **4.39** | **14** | *eP* | **Pn** | **23 31 43.5** | **+1.0** |
| **LUEV** | **Luepa** | **4.41** | **171** | *eP* | **Pn** | **23 31 45.0** | **+2.1** |
| LUEV | | | | *eS* | **Sn** | **23 32 34.3** | **+0.6** |
| **TACV** | **Tcata** | **4.81** | **269** | *eP* | **Pn** | **23 31 49.1** | **+0.8** |
| TACV | | | | *eS* | **Sn** | **23 32 40.8** | **-2.5** |
| **CACV** | **CAICARA DEL OR** | **5.08** | **239** | *eP* | Pn | 23 31 47.3 | -4.7 |
| CACV | | | | *eS* | Sn | 23 32 39.1 | -11 |
| **BENV** | **Beln** | **5.38** | **268** | *eP* | **Pn** | **23 31 57.0** | **+0.9** |
| BENV | | | | *eS* | **Sn** | **23 32 53.8** | **-3.6** |
| **BAUV** | **El Baul** | **5.95** | **258** | *eP* | **Pn** | **23 32 04.2** | **+0.3** |
| BAUV | | | | *eS* | **Sn** | **23 33 08.2** | **-3.3** |
| **BAUV** | **El Baul** | **5.95** | **258** | *eP* | **Pn** | **23 32 04.9** | **+0.9** |
| BAUV | | | | *eS* | **Sn** | **23 33 11.1** | **-0.4** |

*IDC **29** 23:32:07.1±0.9, 33°.96N×83°.87E, h0km, mb3.8/10, mbtmp3.7/13, ML2.9/3, MS3.6/36, Error ellipse: s-maj=30.7km s-min=17.2km az=52.0*
*BJI **29** 23:32:09.6±0.0, 34°.01N×84°.03E, h5km, mb4.3/6, ML3.8/1, Ms4.0/6, Ms7 3.6/6*
**ISC 29 23:32:12.8±0.8, 34°.0N±0°.1×83°.7E±0°.1, h35km, n43, σ1s63/18, mb3.8/10, MS3.7/34, 1D, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSA** | **Lhasa** | **7.67** | **122** | Pn | **Pn** | **23 34 03.8** | **+1.3** |
| LSA | | | | Sn | **Sn** | **23 35 28.0** | **-0.4** |
| LSA | | | | LR | LR | | |
| | comp=N,730nm,7.3s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=E,450nm,6.2s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,660nm,8.7s | | | | | | |
| **WMQ** | **Urumqi** | **10.25** | **16** | *eP* | **Pn** | **23 34 36.0** | **-1.4** |
| WMQ | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=N,390nm,13.5s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=E,460nm,9.7s | | | | | | |
| WMQ | | | | LR | LR | | |
| | comp=Z,260nm,18.3s | | | | | | |
| **AAK** | **Ala-Archa** | **11.22** | **323** | LR | LR | 23 39 29.0 | |
| | comp=Z,175nm,21.2s,baz=134,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.79** | **356** | Pn | **Pn** | **23 35 10.1** | **-2.0** |
| | 0.1nm,0.3s,baz=179,slow=11,SNR=5.0 | | | | | | |
| MKAR | | | | LR | LR | 23 41 07.9 | |
| | comp=Z,91nm,18.8s,baz=176,slow=42 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.00** | **349** | P | **Pn** | **23 36 08.1** | **+0.4** |
| | baz=167,slow=10,SNR=7.9 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.92** | **2** | P | **P** | **23 36 40.8** | **-0.5** |
| | 0.2nm,0.3s,baz=179,slow=14,SNR=6.4 | | | | | | |
| ZALV | | | | LR | LR | 23 45 21.2 | |
| | comp=Z,103nm,19.5s,baz=203,slow=40 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.64** | **135** | P | **P** | **23 36 47.4** | **-2.0** |
| | 1.5nm,0.4s,baz=308,slow=12,SNR=20 | | | | | | |
| CMAR | | | | LR | LR | 23 44 25.6 | |
| | comp=Z,68nm,20.2s,baz=310,slow=36 | | | | | | |
| | 1.5nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **21.23** | **337** | P | **P** | **23 36 56.2** | **+0.7** |
| | 3.5nm,0.8s,baz=151,slow=9.8,SNR=9.1 | | | | | | |
| | 3.5nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **21.89** | **44** | P | **P** | **23 37 01.3** | **-1.5** |
| | 5.1nm,1.1s,baz=235,slow=11,SNR=12 | | | | | | |
| SONM | | | | LR | LR | 23 46 50.3 | |
| | comp=Z,75nm,20.8s,baz=238,slow=40 | | | | | | |
| | 5.1nm,1.1s | | | | | | |
| **AKTO** | **Aktyubinsk** | **24.92** | **319** | P | **P** | **23 37 33.2** | **+0.8** |
| | 1.6nm,0.8s,baz=123,slow=9.0,SNR=4.5 | | | | | | |
| AKTO | | | | LR | LR | 23 49 21.4 | |
| | comp=Z,61nm,20.3s,baz=52,slow=41 | | | | | | |
| | 1.6nm,0.8s | | | | | | |
| **HNS** | **HongShan** | **25.34** | **73** | ⇓P | **P** | **23 37 36.8** | **+0.4** |
| HNS | | | | *eS* | **S** | **23 42 04.5** | **+4.2** |
| HNS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=N,690nm,12.7s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=E,110nm,10.8s | | | | | | |
| HNS | | | | LR | LR | | |
| | comp=Z,190nm,15.9s | | | | | | |
| **PALK** | **Pallekele** | **26.78** | **187** | LR | LR | 23 49 14.9 | |
| | comp=Z,81nm,20.0s,baz=18,slow=38 | | | | | | |
| **ARU** | **Arti** | **28.25** | **330** | LR | LR | 23 50 09.3 | |
| | comp=Z,93nm,20.9s,baz=124,slow=38 | | | | | | |
| **GNI** | **Garni** | **31.48** | **293** | LR | LR | 23 52 58.3 | |
| | comp=Z,53nm,19.0s,baz=118,slow=40 | | | | | | |
| **BELG** | **Belogornoye** | **31.62** | **316** | LR | LR | 23 52 27.3 | |
| | comp=Z,124nm,21.6s,baz=91,slow=38 | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **33.08** | **300** | LR | LR | 23 53 43.2 | |
| | comp=Z,78nm,21.4s,baz=291,slow=39 | | | | | | |
| **KIRV** | **Kirov** | **33.49** | **328** | LR | LR | 23 53 51.3 | |
| | comp=Z,63nm,19.8s,baz=126,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **35.81** | **72** | LR | LR | 23 53 48.0 | |
| | comp=Z,42nm,18.2s,baz=225,slow=36 | | | | | | |
| **KLR** | **Kul'dur** | **38.31** | **52** | LR | LR | 23 55 36.0 | |
| | comp=Z,90nm,18.3s,baz=264,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **38.33** | **60** | LR | LR | 23 55 59.6 | |
| | comp=Z,128nm,18.3s,baz=249,slow=38 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **39.98** | **282** | LR | LR | 23 58 28.8 | |
| | comp=Z,70nm,18.9s,baz=37,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **40.02** | **293** | LR | LR | 23 59 42.4 | |
| | comp=Z,50nm,20.8s,baz=94,slow=41 | | | | | | |
| **EIL** | **Elat** | **41.33** | **278** | LR | LR | 23 59 36.8 | |
| | comp=Z,97nm,20.9s,baz=72,slow=40 | | | | | | |
| **AKASG** | **Malin Array Be** | **42.54** | **310** | LR | LR | 00 00 10.7 | |
| | comp=Z,97nm,19.5s,baz=80,slow=39 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.06** | **71** | LR | LR | 00 01 34.7 | |
| | comp=Z,53nm,18.7s,baz=272,slow=40 | | | | | | |
| **TIXI** | **Tiksi** | **44.45** | **19** | LR | LR | 23 59 45.3 | |
| | comp=Z,81nm,19.0s,baz=202,slow=37 | | | | | | |
| **MLR** | **Muntele Rosu** | **44.95** | **303** | LR | LR | 00 02 39.7 | |
| | comp=Z,121nm,19.9s,baz=76,slow=41 | | | | | | |
| **FINES** | **FINESS Array B** | **45.39** | **325** | P | **P** | **23 40 29.1** | **+1.5** |
| | 1.7nm,0.8s,baz=151,slow=8.7,SNR=5.5 | | | | | | |
| FINES | | | | LR | LR | 00 00 58.7 | |
| | comp=Z,86nm,18.6s,baz=97,slow=38 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **47.51** | **336** | LR | LR | 00 00 07.6 | |
| | comp=Z,74nm,18.2s,baz=117,slow=35 | | | | | | |
| **VRAC** | **Vranov** | **50.75** | **309** | LR | LR | 00 05 01.2 | |
| | comp=Z,116nm,18.3s,baz=80,slow=39 | | | | | | |
| **HFS** | **Hagfors** | **51.36** | **323** | P | **P** | **23 41 14.7** | **+1.1** |
| | 1.8nm,0.8s,baz=145,slow=5.4,SNR=3.5 | | | | | | |
| HFS | | | | LR | LR | 00 03 37.4 | |
| | comp=Z,75nm,19.1s,baz=88,slow=37 | | | | | | |
| | 1.8nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NOA** | **NORSAR Array B** | **52.53** | **324** | P | **P** | **23 41 22.4** | **0.0** |
| | 0.7nm,0.7s,baz=87,slow=7.3,SNR=4.0 | | | | | | |
| NOA | | | | LR | LR | 00 04 37.3 | |
| | comp=Z,58nm,20.9s,baz=95,slow=37 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **52.70** | **309** | P | **P** | **23 41 24.1** | **+0.2** |
| | 0.4nm,0.6s,baz=32,slow=4.6,SNR=1.6 | | | | | | |
| GERES | | | | LR | LR | 00 06 11.6 | |
| | comp=Z,77nm,21.7s,baz=69,slow=39 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **55.68** | **307** | LR | LR | 00 08 37.9 | |
| | comp=Z,71nm,18.7s,baz=75,slow=39 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **55.86** | **241** | LR | LR | 00 06 34.4 | |
| | comp=Z,61nm,18.4s,baz=87,slow=37 | | | | | | |
| **ESDC** | **Sonseca Array** | **67.64** | **304** | LR | LR | 00 16 25.9 | |
| | comp=Z,42nm,18.3s,baz=42,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **72.15** | **130** | P | **P** | **23 43 32.6** | **-1.5** |
| | 0.6nm,0.6s,baz=325,slow=6.3,SNR=12 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **73.48** | **343** | LR | LR | 00 20 29.4 | |
| | comp=Z,33nm,18.5s,baz=34,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **73.89** | **20** | LR | LR | 00 18 30.2 | |
| | comp=Z,44nm,20.5s,baz=252,slow=38 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.21** | **277** | P | **P** | **23 43 58.3** | **+0.3** |
| | 0.4nm,0.6s,baz=53,slow=6.8,SNR=3.5 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **83.30** | **229** | LR | LR | 00 19 53.2 | |
| | comp=Z,38nm,18.7s,baz=142,slow=34 | | | | | | |
| **SCHQ** | **Schefferville** | **87.93** | **343** | LR | LR | 00 30 07.2 | |
| | comp=Z,30nm,18.9s,baz=211,slow=40 | | | | | | |
| **BBB** | **Bella Bella** | **89.74** | **19** | LR | LR | 00 31 57.9 | |
| | comp=Z,41nm,18.4s,baz=238,slow=40 | | | | | | |

*UCR **29** 23:40:04.1±0.8, 8°.58N×83°.15W, h20km±2km, MW3.6*
*CATAC **29** 23:40:04.0±0.6, 8°.61N×83°.15W, h10km±4km, ML3.2*
**UPA 29 23:40:03.7±0.8, 8°.63N×83°.14W, h12km±3km, MW3.3, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITO** | **Golfito** | **0.01** | **259** | *eP* | Pg | 23 40 06.8 | +1.0 |
| FITO | | | | *eS* | Sg | 23 40 09.3 | +2.0 |
| **EDAD** | **Golfito** | **0.03** | **319** | *eP* | Pg | 23 40 07.1 | +1.1 |
| EDAD | | | | *eS* | Sg | 23 40 09.7 | +2.1 |
| **PTJ1** | **Puerto Jimnez** | **0.18** | **240** | *i* P | Pg | 23 40 07.8 | 0.0 |
| PTJ1 | | | | IAML | | 23 40 08.5 | |
| | comp=Z,22µm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | Sg | 23 40 12.8 | +2.2 |
| **PTJ1** | **Puerto Jimnez** | **0.18** | **240** | *eP* | Pb | 23 40 08.4 | -0.6 |
| **PTJ1** | **Puerto Jimnez** | **0.18** | **240** | *eP* | Pg | 23 40 08.3 | +0.6 |
| PTJ1 | | | | *eS* | Sg | 23 40 12.7 | +2.1 |
| **NELY** | **Ciudad Neily** | **0.20** | **83** | *eP* | Pb | 23 40 09.5 | +0.2 |
| NELY | | | | *eS* | Sg | 23 40 14.1 | +3.0 |
| **JIME** | **Puerto Jimenez** | **0.20** | **244** | *eP* | Pg | 23 40 08.6 | +0.5 |
| JIME | | | | *eS* | Sg | 23 40 13.1 | +2.0 |
| **VITO** | **San Vito** | **0.26** | **42** | *eP* | Pb | 23 40 11.1 | +0.7 |
| **CDITO** | **Canoas** | **0.27** | **101** | *i* P | Pb | 23 40 10.0 | -0.6 |
| CDITO | | | | *i* S | Sb | 23 40 15.5 | +0.3 |
| CDITO | | | | IAML | | 23 40 19.0 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **EDP2** | **Potrero Grande** | **0.39** | **355** | *eP* | Pb | 23 40 13.0 | +0.5 |
| EDP2 | | | | *eS* | Sb | 23 40 20.3 | +1.8 |
| **EDPN** | **Palmar Norte** | **0.45** | **317** | *eP* | Pb | 23 40 13.3 | -0.3 |
| **BRU2** | **Volcan** | **0.48** | **70** | *i* P | Pb | 23 40 14.1 | 0.0 |
| BRU2 | | | | *i* S | Sb | 23 40 22.0 | +0.8 |
| BRU2 | | | | IAML | | 23 40 25.1 | |
| | comp=Z,920nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.48** | **70** | *eP* | Pb | 23 40 14.1 | -0.1 |
| BRU2 | | | | *eS* | Sb | 23 40 22.2 | +1.0 |
| **BRU2** | **Volcan** | **0.48** | **70** | *eP* | Pb | 23 40 14.1 | -0.1 |
| BRU2 | | | | *eS* | Sb | 23 40 21.9 | +0.7 |
| **PTPM** | **Petroterminale** | **0.49** | **148** | *eP* | Pb | 23 40 14.1 | -0.2 |
| **EDBA** | **Buenos Aires** | **0.55** | **346** | *eP* | Pb | 23 40 15.6 | +0.3 |
| **BCO2** | **Palmira** | **0.61** | **81** | *eP* | Pb | 23 40 16.2 | -0.3 |
| BCO2 | | | | *eS* | Sb | 23 40 26.0 | +0.8 |
| **DRK0** | **Durika** | **0.64** | **351** | *i* P | Pb | 23 40 16.7 | -0.2 |
| DRK0 | | | | *i* S | Sb | 23 40 26.4 | +0.5 |
| DRK0 | | | | IAML | | 23 40 28.8 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.64** | **351** | *eP* | Pb | 23 40 16.7 | -0.2 |
| DRK0 | | | | *eS* | Sb | 23 40 26.5 | +0.6 |
| **DRK0** | **Durika** | **0.64** | **351** | *eP* | Pb | 23 40 16.7 | -0.2 |
| **DVD** | **David** | **0.71** | **105** | *eP* | Pg | 23 40 17.1 | -0.5 |
| **BRIBI** | **Bribri** | **1.03** | **16** | *eP* | Pn | 23 40 24.3 | +0.3 |
| BRIBI | | | | *eS* | Sn | 23 40 41.2 | +2.9 |
| **CNI2** | **El Empalme, Bo** | **1.03** | **40** | *eP* | Pb | 23 40 22.1 | -1.4 |
| **CHGR2** | **Aguacate** | **1.03** | **73** | *eP* | Pb | 23 40 22.4 | -1.2 |
| CHGR2 | | | | *eS* | Sg | 23 40 37.4 | +0.2 |
| **BUS1** | **Rivas** | **1.10** | **327** | *eP* | Pb | 23 40 23.9 | -1.0 |
| **LCR2** | **La Lucha 2** | **1.40** | **323** | *i* P | Pn | 23 40 29.3 | +0.1 |
| LCR2 | | | | *i* S | Sg | 23 40 48.6 | -0.2 |
| LCR2 | | | | IAML | | 23 40 51.3 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **VTCV** | **VTCV, Calle Va** | **1.47** | **337** | *eP* | Pn | 23 40 30.3 | +0.2 |
| **CVTV** | **Tajo** | **1.49** | **336** | *eP* | Pb | 23 40 31.2 | -0.4 |
| **JTS** | **Las Juntas de** | **2.43** | **313** | *eP* | Pn | 23 40 42.7 | -0.6 |

*IDC **29** 23:47:24.8±1.1, 22°.33S×169°.76E, h0km, mb4.0/7, mbtmp4.0/8, ML3.5/1, MS3.5/6, Error ellipse: s-maj=31.1km s-min=28.0km az=20.0*
*NOU **29** 23:47:28.2, 22°.04S×169°.57E, h0km, MLv4.0/8, Southeast of Loyalty Islands*
**ISC 29 23:47:28.8±1.0, 22°.2S±0°.1×169°.8E±0°.1, h25km, n22, σ1s11/20, mb4.0/7, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.76** | **293** | P | **Pn** | **23 47 55.6** | **-2.2** |
| **PINNC** | **Pines Island,** | **2.19** | **258** | P | **Pn** | **23 48 03.5** | **-0.1** |
| **YATNC** | **Mamie plateau,** | **2.67** | **272** | P | **Pn** | **23 48 09.9** | **-0.4** |
| **LIFNC** | **LIFOU** | **2.74** | **300** | P | **Pn** | **23 48 10.5** | **-0.7** |
| **DZM** | **Mont Dzumac** | **3.08** | **272** | P | **Pn** | **23 48 15.7** | **-0.3** |
| **DZM** | **Mont Dzumac** | **3.08** | **272** | Pn | **Pn** | **23 48 15.7** | **-0.3** |
| | 5.5nm,0.3s,baz=119,slow=13,SNR=38 | | | | | | |
| DZM | | | | Sn | **Sn** | **23 48 53.4** | **+1.2** |
| | 4.0nm,0.3s,baz=64,slow=22,SNR=6.5 | | | | | | |
| DZM | | | | LR | LR | 23 49 31.9 | |
| | comp=Z,316nm,20.8s,baz=238,slow=41 | | | | | | |
| | 16nm,0.4s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.21** | **271** | P | **Pn** | **23 48 17.6** | **-0.2** |
| **RTV** | **Rentapao** | **4.55** | **344** | P | **Pn** | **23 48 34.9** | **-1.3** |
| **DVP** | **Devils Point** | **4.68** | **341** | P | **Pn** | **23 48 38.2** | **+0.2** |
| **MSVF** | **Nonsavu** | **8.96** | **62** | LR | LR | 23 51 57.4 | |
| | comp=Z,114nm,18.4s,baz=350,slow=30 | | | | | | |
| **HNR** | **Honiara** | **15.81** | **322** | LR | LR | 23 56 43.2 | |
| | comp=Z,1µm,19.4s,baz=356,slow=35 | | | | | | |
| **URZ** | **Urewera** | **17.22** | **160** | LR | LR | 23 56 48.5 | |
| | comp=Z,120nm,19.1s,baz=31,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **33.01** | **260** | P | **P** | **23 54 00.6** | **-1.7** |
| | 0.7nm,0.8s,baz=91,slow=8.1,SNR=4.3 | | | | | | |
| ASAR | | | | LR | LR | 00 06 58.4 | |
| | comp=Z,73nm,20.5s,baz=96,slow=36 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.09** | **267** | P | **P** | **23 54 02.1** | **-0.9** |
| | 0.6nm,0.5s,baz=97,slow=8.1,SNR=4.8 | | | | | | |
| WRA | | | | LR | LR | 00 07 46.2 | |
| | comp=Z,97nm,18.2s,baz=337,slow=37 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.58** | **332** | P | **P** | **23 58 12.3** | **+1.8** |
| | 0.8nm,0.3s,baz=171,slow=8.6,SNR=1.8 | | | | | | |
| | 0.8nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.88** | **180** | P | **P** | **23 58 24.7** | **-0.3** |
| | 0.3nm,0.4s,baz=294,slow=1.6,SNR=7.9 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.57** | **333** | P | **P** | **23 59 07.1** | **+1.6** |
| | 1.5nm,0.9s,baz=70,slow=13,SNR=2.8 | | | | | | |
| | 1.5nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.17** | **295** | P | **P** | **23 59 38.4** | **+1.0** |
| | 1.6nm,0.3s,baz=140,slow=4.7,SNR=1.9 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **89.86** | **323** | P | **P** | **00 00 24.6** | **-1.0** |
| | 1.1nm,0.9s,baz=128,slow=4.2,SNR=1.9 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **138.97** | **305** | PKP | **PKPdf** | **00 06 53.4** | **-0.1** |
| | 0.5nm,0.8s,baz=53,slow=2.0,SNR=4.3 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.48** | **353** | PKPbc | **PKPdf** | **00 07 05.2** | **-0.9** |
| | 2.2nm,0.8s,baz=356,slow=2.5,SNR=3.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.30** | **330** | PKPbc | **PKPbc** | **00 07 09.9** | **-0.3** |
| | 0.5nm,0.3s,baz=77,slow=8.4,SNR=3.8 | | | | | | |

*IDC **29** 23:50:57.4±3.0, 21°.78S×169°.77E, h0km, mb3.4/3, mbtmp3.5/4, ML3.7/1, Error ellipse: s-maj=135.5km s-min=30.3km az=161.0*
**ISC 29 23:50:59.5±2.5, 22°.5S±1°.1×169°.9E±0°.2, h25km, n6, σ0s50/7, mb3.6/3, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **3.24** | **266** | Pn | **Pn** | **23 51 48.5** | **-0.3** |
| | 9.0nm,0.3s,baz=82,slow=19,SNR=31 | | | | | | |
| DZM | | | | Sn | **Sn** | **23 52 26.7** | **+0.1** |
| | 4.5nm,0.3s,baz=72,slow=10,SNR=4.3 | | | | | | |
| | 32nm,0.4s | | | | | | |
| **CTA** | **Charters Tower** | **22.17** | **270** | P | **P** | **23 55 54.5** | **+0.7** |
| | 0.2nm,0.6s,baz=86,slow=11,SNR=2.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **33.21** | **260** | P | **P** | **23 57 34.6** | **0.0** |
| | 0.5nm,0.6s,baz=76,slow=9.1,SNR=6.2 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.26** | **267** | P | **P** | **23 57 34.5** | **-0.5** |
| | 1.0nm,0.5s,baz=98,slow=8.3,SNR=19 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.18** | **353** | PKPbc | **PKPbc** | **00 10 37.0** | **-0.2** |
| | 2.1nm,0.8s,baz=359,slow=2.3,SNR=4.7 | | | | | | |
| **GERES** | **GERESS Array B** | **147.09** | **331** | PKPbc | **PKiKP** | **00 10 43.0** | **+0.3** |
| | 1.6nm,0.6s,baz=36,slow=5.1,SNR=4.6 | | | | | | |

*NEIC **29** 23:56:20.3±0.5, 37°.36N±0°.02×97°.86W±0°.03, h10km±6km, mb_Lg3.0/117, ML3.3/38, Error ellipse: s-maj=3.6km s-min=3.0km az=73.0*
*IDC **29** 23:56:21.4±1.8, 37°.46N×98°.13W, h0km, mbtmp3.3/3, ML4.0/2, Error ellipse: s-maj=28.6km s-min=12.0km az=101.0*
**ISC 29 23:56:20.0±0.9, 37°.38N±0°.03×97°.85W±0°.03, h11km±7km, n93, σ1s14/54, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.14** | **235** | | **Pg** | **23 56 23.4** | **+0.1** |
| KAN12 | | | | Sg | **Sg** | **23 56 25.4** | **-0.2** |
| **KAN08** | **Anthony NE Sta** | **0.18** | **212** | | **Pg** | **23 56 23.9** | **0.0** |
| KAN08 | | | | Sg | **Sg** | **23 56 26.2** | **-0.4** |
| KAN08 | | | | IAML | | 23 56 26.4 | |
| | comp=E,6µm,0.1s | | | | | | |
| KAN08 | | | | IAML | | 23 56 26.4 | |
| | comp=N,9µm,0.3s | | | | | | |
| **KS21** | **Milan North St** | **0.18** | **121** | | **Pg** | **23 56 24.3** | **+0.3** |
| KS21 | | | | Sg | **Sg** | **23 56 26.1** | **-0.6** |
| **KAN01** | **Argonia South** | **0.24** | **161** | | **Pg** | **23 56 25.1** | **+0.1** |
| KAN01 | | | | Sg | **Sg** | **23 56 28.0** | **-0.2** |
| KAN01 | | | | IAML | | 23 56 31.3 | |
| | comp=N,6µm,0.4s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.27** | **183** | | **Pg** | **23 56 25.6** | **+0.1** |
| KAN05 | | | | IAML | | 23 56 32.1 | |
| | comp=N,6µm,0.6s | | | | | | |
| **KAN09** | **Caldwell North** | **0.31** | **142** | | **Pg** | **23 56 26.5** | **+0.3** |
| KAN09 | | | | IAML | | 23 56 33.7 | |
| | comp=E,6µm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 23 56 34.9 | |
| | comp=N,6µm,0.4s | | | | | | |
| **KAN17** | **Caldwell West** | **0.34** | **168** | | **Pg** | **23 56 27.0** | **+0.2** |
| KAN17 | | | | IAML | | 23 56 37.4 | |
| | comp=E,4µm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.43** | **192** | | **Pg** | **23 56 28.5** | **+0.1** |
| KAN14 | | | | Sg | **Sg** | **23 56 34.0** | **-0.2** |
| KAN14 | | | | IAML | | 23 56 41.0 | |
| | comp=N,2µm,0.6s | | | | | | |
| **KAN13** | **South Haven SW** | **0.47** | **140** | | **Pg** | **23 56 29.5** | **+0.2** |
| KAN13 | | | | IAML | | 23 56 38.3 | |
| | comp=E,3µm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 23 56 40.0 | |
| | comp=N,3µm,0.5s | | | | | | |
| **GC02** | **Grant County #** | **0.53** | **180** | Pg | **Pg** | **23 56 30.3** | **+0.1** |
| **OK032** | **Salt Plains WL** | **0.64** | **207** | | **Pg** | **23 56 32.4** | **0.0** |
| OK032 | | | | Sg | **Sg** | **23 56 40.8** | **-0.1** |
| **BLOK** | **Blackwell** | **0.80** | **140** | Pg | **Pg** | **23 56 35.2** | **-0.2** |
| BLOK | | | | IAML | | 23 56 48.3 | |
| | comp=E,2µm,0.2s | | | | | | |
| BLOK | | | | IAML | | 23 56 48.7 | |
| | comp=N,2µm,0.3s | | | | | | |
| **CROK** | **Carrier** | **0.88** | **187** | Pg | **Pg** | **23 56 36.5** | **-0.4** |
| CROK | | | | IAML | | 23 56 58.1 | |
| | comp=E,1µm,0.4s | | | | | | |
| **OK035** | **E0210 Rd and N** | **0.96** | **226** | | **Pg** | **23 56 37.9** | **-0.5** |
| **NOKA** | **Waynoka** | **1.14** | **230** | Pg | **Pg** | **23 56 41.3** | **-0.6** |
| NOKA | | | | IAML | | 23 57 04.3 | |
| | comp=N,813nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 23 57 05.5 | |
| | comp=E,668nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.15** | **219** | | **Pg** | **23 56 41.6** | **-0.4** |
| OK038 | | | | IAML | | 23 57 14.3 | |
| | comp=E,980nm,0.3s | | | | | | |
| **OK051** | **E0350 and S346** | **1.19** | **137** | | **Pg** | **23 56 42.3** | **-0.6** |
| **OK048** | **Pawnee Station** | **1.21** | **142** | Pg | **Pg** | **23 56 42.8** | **-0.4** |
| OK048 | | | | IAML | | 23 57 03.3 | |
| | comp=E,473nm,0.3s | | | | | | |
| OK048 | | | | IAML | | 23 57 03.4 | |
| | comp=E,735nm,0.4s | | | | | | |
| **R32A** | **Long Quarter,** | **1.24** | **327** | | **Pg** | **23 56 44.1** | **+0.1** |
| **QUOK** | **Quay** | **1.52** | **142** | Pg | **Pn** | **23 56 47.9** | **+0.8** |
| **OK029** | **Liberty Lake** | **1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **T25A** | **Trinidad** | **5.24** | **269** | lAmb_Lg | | 23 59 12.6 | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.28** | **81** | lAmb_Lg | | 23 59 17.9 | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **WLAR** | **White Oak Lake** | **5.34** | **132** | lAmb_Lg | | 23 59 11.2 | | |
| | comp=Z,26nm,0.7s | | | | | | | |
| **T42A** | **Van Buren** | **5.41** | **92** | lAmb_Lg | | 23 59 18.3 | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **237A** | **Washetta, Mont** | **5.62** | **162** | lAmb_Lg | | 23 59 31.7 | | |
| | comp=Z,33nm,0.9s | | | | | | | |
| **Z41A** | **Richland Creek** | **5.83** | **133** | lAmb_Lg | | 23 59 39.8 | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| **FVM** | **French Village** | **5.92** | **82** | lAmb_Lg | | 23 59 30.7 | | |
| | comp=Z,18nm,0.9s | | | | | | | |
| **Q24A** | **Divide** | **5.96** | **288** | lAmb_Lg | | 23 59 33.2 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **BRIGG** | **Briggsdale** | **5.97** | **304** | lAmb_Lg | | 23 59 34.9 | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.97** | **94** | lAmb_Lg | | 23 59 42.7 | | |
| | comp=Z,26nm,0.7s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.09** | **276** | lAmb_Lg | | 23 59 42.1 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.42** | **8** | lAmb_Lg | | 23 59 45.6 | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.53** | **88** | lAmb_Lg | | 23 59 51.3 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **435B** | **Jarrell** | **6.58** | **178** | lAmb_Lg | | 23 59 53.1 | | |
| | comp=Z,24nm,0.8s | | | | | | | |
| **SIUC** | **Southern Illin** | **6.87** | **85** | lAmb_Lg | | 00 00 07.3 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **6.91** | **68** | lAmb_Lg | | 23 59 57.9 | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| **OZNA** | **Ozona** | **6.99** | **204** | lAmb_Lg | | 00 00 18.1 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **JCT** | **Junction City** | **7.07** | **194** | lAmb_Lg | | 00 00 17.1 | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **PHWY** | **Pilot Hill** | **7.08** | **306** | lAmb_Lg | | 00 00 16.0 | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **SUSD** | **Miller** | **7.11** | **354** | lAmb_Lg | | 00 00 17.3 | | |
| | comp=Z,19nm,0.7s | | | | | | | |
| **Y45A** | **Yeager Farm, C** | **7.62** | **115** | lAmb_Lg | | 00 00 35.9 | | |
| | comp=Z,22nm,0.8s | | | | | | | |
| **PECS** | **Pecos** | **7.78** | **221** | lAmb_Lg | | 00 00 35.9 | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **L42A** | **Oliver, Polo** | **7.82** | **51** | lAmb_Lg | | 00 00 43.7 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **HNDO** | **Hondo** | **7.92** | **189** | lAmb_Lg | | 00 00 44.8 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **JFWS** | **Jewell Farm** | **8.03** | **44** | lAmb_Lg | | 00 00 40.2 | | |
| | comp=Z,22nm,0.7s | | | | | | | |
| **RSSD** | **Black Hills** | **8.21** | **327** | lAmb_Lg | | 00 01 01.0 | | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.26** | **104** | lAmb_Lg | | 00 00 45.2 | | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **K22A** | **Casper** | **8.48** | **311** | lAmb_Lg | | 00 01 05.4 | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **I40A** | **Norwalk** | **8.52** | **38** | lAmb_Lg | | 00 01 02.6 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **8.54** | **7** | lAmb_Lg | | 00 00 53.4 | | |
| | comp=Z,9.9nm,0.8s | | | | | | | |
| **SPMN** | **Marine on St.** | **8.71** | **24** | lAmb_Lg | | 00 00 57.7 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **VHRN** | **Van Horn** | **8.84** | **224** | lAmb_Lg | | 00 01 21.3 | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **TXAR** | **Lajitas Array** | **9.38** | **213** | Pn | **Pn** | **23 58 35.0** | **-0.2** | |
| | comp=Z,0.1nm,0.3s,baz=31,slow=11,SNR=8.3 | | | | | | | |
| TXAR | | | | Lg | Lg | 00 01 11.5 | | |
| | comp=Z,0.2nm,0.3s,baz=38,slow=19,SNR=2.3 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **PDAR** | **Pinedale Array** | **10.46** | **305** | Pn | **Pn** | **23 58 51.0** | **+1.0** | |
| | comp=Z,0.3nm,0.3s,baz=124,slow=16,SNR=2.9 | | | | | | | |
| PDAR | | | | Lg | Lg | 00 01 39.7 | | |
| | comp=Z,0.2nm,0.3s,baz=112,slow=36,SNR=1.4 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **12.95** | **6** | Pn | **Pn** | **23 59 21.3** | **-2.5** | |
| | comp=Z,1.5nm,0.6s,baz=180,slow=13,SNR=2.2 | | | | | | | |
| ULM | | | | Sn | Sn | 00 01 37.6 | -10 | |
| | comp=Z,0.2nm,0.3s,baz=108,slow=20,SNR=1.9 | | | | | | | |
| ULM | | | | Lg | Lg | 00 03 01.6 | | |
| | comp=Z,0.1nm,0.3s,baz=108,slow=19,SNR=2.4 | | | | | | | |

**NEIC 30 00:12:55.9±1.1, 37°37N±0°03×97°85W±0°02, h5km±2km, mb_Lg3.1/123, ML3.5/40, Error ellipse: s-maj=4.7km s-min=3.0km az=337.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.14** | **239** | Pg | Pg | 00 12 59.5 | +0.8 |
| KAN12 | | | | IAML | | 00 13 01.8 | |
| | comp=N,17μm,0.4s | | | | | | |
| KAN12 | | | | IAML | | 00 13 03.1 | |
| | comp=E,14μm,0.4s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **120** | IAML | | 00 13 03.2 | |
| | comp=E,11μm,0.2s | | | | | | |
| KS21 | | | | IAML | | 00 13 03.2 | |
| | comp=E,10μm,0.1s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **120** | Pg | Pg | 00 13 00.5 | +1.3 |
| **KAN08** | **Anthony NE Sta** | **0.18** | **215** | Pg | Pg | 00 13 00.1 | +0.7 |
| KAN08 | | | | IAML | | 00 13 02.6 | |
| | comp=N,15μm,0.3s | | | | | | |
| **KAN01** | **Argonia South** | **0.23** | **162** | | Pg | 00 13 01.2 | +0.9 |
| KAN01 | | | | | Sg | 00 13 04.3 | +1.0 |
| KAN01 | | | | IAML | | 00 13 07.4 | |
| | comp=N,9μm,0.4s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.26** | **185** | | Pg | 00 13 01.8 | +0.8 |
| KAN05 | | | | Sg | Sg | 00 13 05.3 | +0.8 |
| KAN05 | | | | IAML | | 00 13 08.3 | |
| | comp=N,8μm,0.6s | | | | | | |
| **KAN09** | **Caldwell North** | **0.30** | **142** | | Pg | 00 13 02.6 | +1.0 |
| KAN09 | | | | Sg | Sg | 00 13 06.8 | +1.3 |
| KAN09 | | | | IAML | | 00 13 11.2 | |
| | comp=N,9μm,0.4s | | | | | | |
| **KAN17** | **Caldwell West** | **0.33** | **169** | | Pg | 00 13 03.1 | +0.8 |
| KAN17 | | | | Sg | Sg | 00 13 07.6 | +0.9 |
| KAN17 | | | | IAML | | 00 13 12.3 | |
| | comp=N,8μm,0.4s | | | | | | |
| **KAN14** | **Manchester OK** | **0.42** | **193** | | Pg | 00 13 04.7 | +0.6 |
| **KAN13** | **South Haven SW** | **0.46** | **141** | | Pb | 00 13 05.7 | -0.8 |
| KAN13 | | | | IAML | | 00 13 17.6 | |
| | comp=E,4μm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 00 13 20.6 | |
| | comp=N,4μm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.52** | **181** | | Pg | 00 13 06.5 | +0.6 |
| **OK032** | **Salt Plains WL** | **0.64** | **207** | | Pg | 00 13 08.6 | +0.4 |
| **BLOK** | **Blackwell** | **0.79** | **140** | Pg | Pg | 00 13 11.6 | +0.5 |
| **CROK** | **Carrier** | **0.87** | **187** | Pg | Pg | 00 13 12.7 | +0.1 |
| CROK | | | | IAML | | 00 13 33.4 | |
| | comp=E,1μm,0.4s | | | | | | |
| **OK035** | **E0210 Rd and N** | **0.96** | **226** | | Pg | 00 13 14.2 | 0.0 |
| **NOKA** | **Waynoka** | **1.14** | **230** | Pg | Pg | 00 13 17.7 | -0.1 |
| NOKA | | | | IAML | | 00 13 40.3 | |
| | comp=N,1μm,0.3s | | | | | | |
| NOKA | | | | IAML | | 00 13 41.6 | |
| | comp=E,784nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.15** | **219** | | Pg | 00 13 17.9 | 0.0 |
| OK038 | | | | IAML | | 00 13 46.9 | |
| | comp=E,1μm,0.3s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.16** | **113** | | Pb | 00 13 18.5 | +0.1 |
| **OK051** | **E0350 and S346** | **1.18** | **137** | | Pg | 00 13 18.5 | -0.1 |
| **OK048** | **Pawnee Station** | **1.20** | **143** | Pg | Pb | 00 13 19.0 | -0.1 |
| OK048 | | | | IAML | | 00 13 41.6 | |
| | comp=E,893nm,0.4s | | | | | | |
| **R32A** | **Long Quarter,** | **1.25** | **327** | | Pn | 00 13 20.1 | +0.1 |
| R32A | | | | IAML | | 00 13 41.5 | |
| | comp=E,1μm,0.3s | | | | | | |
| R32A | | | | IAML | | 00 13 41.7 | |
| | comp=N,963nm,0.4s | | | | | | |
| **QUOK** | **Quay** | **1.51** | **142** | | Pb | 00 13 24.2 | -0.1 |
| **OK029** | **Liberty Lake** | **1.60** | **169** | | Pb | 00 13 25.6 | -0.3 |
| **OK052** | **Battle Ridge R** | **1.61** | **148** | | Pn | 00 13 25.4 | +0.5 |
| **OK031** | **S. Brethren Rd** | **1.63** | **150** | | Pb | 00 13 26.1 | -0.4 |
| **ADOK** | **Arcadia Dam** | **1.76** | **167** | | Pb | 00 13 27.9 | -0.7 |
| **ELIS** | **Ellis County** | **1.82** | **225** | | Pb | 00 13 29.6 | -0.1 |
| **CSTR** | **Hydro, Custer** | **1.85** | **202** | | Pn | 00 13 29.1 | +0.8 |
| **DEOK** | **Depew** | **1.87** | **144** | | Pn | 00 13 29.2 | +0.6 |
| **KSU1** | **Kansas State U** | **1.98** | **29** | | Pb | 00 13 31.7 | -0.7 |
| **OKCSW** | **OKLAHOMA CITY** | **1.99** | **170** | | Pn | 00 13 30.7 | +0.5 |
| **CBKS** | **Cedar Bluff** | **2.07** | **315** | | Pn | 00 13 32.6 | +1.3 |
| **FNO** | **Franklin** | **2.14** | **170** | | Pn | 00 13 32.9 | +0.6 |
| **TUL3** | **Leonard** | **2.20** | **131** | | Pn | 00 13 34.3 | +1.2 |
| **W35A** | **Tecumseh** | **2.35** | **160** | | Pn | 00 13 36.0 | +0.9 |
| **RLO** | **Rose Lookout** | **2.57** | **117** | | Pn | 00 13 38.4 | +0.3 |
| **WMOK** | **Wichita Mounta** | **2.74** | **196** | Pn | Pn | 00 13 40.8 | +0.4 |
| **X34A** | **Smith Ranch, M** | **2.77** | **180** | | Pn | 00 13 42.5 | +1.7 |
| **U38A** | **Gravette** | **2.92** | **108** | Pn | Pn | 00 13 44.8 | +1.7 |
| U38A | | | | lAmb_Lg | | 00 14 33.4 | |
| | comp=Z,43nm,0.7s | | | | | | |
| **SMWD** | **Samnorwood** | **2.98** | **221** | | Pn | 00 13 44.9 | +1.0 |
| SMWD | | | | lAmb_Lg | | 00 14 36.4 | |
| | comp=Z,48nm,0.9s | | | | | | |
| **HHAR** | **Hobbs** | **3.32** | **108** | | Pn | 00 13 49.7 | +1.3 |
| **LOOK** | **Love County** | **3.42** | **171** | | Pn | 00 13 50.0 | +0.2 |
| LOOK | | | | lAmb_Lg | | 00 14 51.9 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.43** | **143** | Pn | Pn | 00 13 51.4 | +1.5 |
| X37A | | | | lAmb_Lg | | 00 14 50.9 | |
| | comp=Z,71nm,0.7s | | | | | | |
| **S39A** | **Bolivar** | **3.61** | **84** | Pn | Pn | 00 13 53.7 | +1.3 |
| **WTFS** | **Witchita Falls** | **3.63** | **188** | | Pn | 00 13 53.4 | +0.6 |
| **N35A** | **Tabor** | **3.88** | **26** | | Pn | 00 13 57.7 | +1.5 |
| **AMTX** | **Amarillo** | **3.98** | **232** | | Pn | 00 13 59.2 | +1.7 |
| AMTX | | | | lAmb_Lg | | 00 15 09.4 | |
| | comp=Z,42nm,1.0s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.03** | **258** | | Pn | 00 13 59.8 | +1.5 |
| **BGNE** | **Belgrade** | **4.04** | **357** | lAmb_Lg | | 00 15 07.3 | |
| | comp=Z,59nm,0.7s | | | | | | |
| **P38A** | **Dawn** | **4.06** | **55** | Pn | Pn | 00 13 59.5 | +0.9 |
| P38A | | | | lAmb_Lg | | 00 15 10.3 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **FW06** | **Azle** | **4.40** | **177** | lAmb_Lg | | 00 15 15.8 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.45** | **91** | lAmb_Lg | | 00 15 16.5 | |
| | comp=Z,38nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.47** | **128** | lAmb_Lg | | 00 15 23.2 | |
| | comp=Z,47nm,0.7s | | | | | | |
| **DKNS** | **Dickens** | **4.47** | **215** | lAmb_Lg | | 00 15 23.1 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **R40A** | **Maddies Statio** | **4.51** | **77** | Pn | Pn | 00 14 05.8 | +1.0 |
| R40A | | | | lAmb_Lg | | 00 15 20.4 | |
| | comp=Z,48nm,0.8s | | | | | | |
| **FW07** | **Weatherford** | **4.66** | **179** | lAmb_Lg | | 00 15 28.6 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.72** | **149** | lAmb_Lg | | 00 15 30.4 | |
| | comp=Z,61nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **4.83** | **319** | Pn | Pn | 00 14 10.1 | +0.8 |
| **FCAR** | **Ozark Folk Cen** | **4.83** | **106** | lAmb_Lg | | 00 15 29.0 | |
| | comp=Z,34nm,0.7s | | | | | | |
| **TREL** | **Terrell** | **4.85** | **162** | lAmb_Lg | | 00 15 38.2 | |
| | comp=Z,44nm,0.7s | | | | | | |
| **FW16** | **Waxahatchie** | **4.94** | **171** | lAmb_Lg | | 00 15 37.7 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.94** | **113** | | Pn | 00 14 11.6 | +0.8 |
| **SN07** | **Snyder 07** | **4.95** | **211** | lAmb_Lg | | 00 15 34.7 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **4.95** | **45** | | Pn | 00 14 12.1 | +1.2 |
| **X40A** | **Basin Creek Fa** | **4.98** | **124** | lAmb_Lg | | 00 15 39.1 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **P40A** | **Paris** | **5.03** | **63** | | Pn | 00 14 13.2 | +1.2 |
| P40A | | | | lAmb_Lg | | 00 15 36.3 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **UALR** | **University of** | **5.16** | **119** | lAmb_Lg | | 00 15 48.8 | |
| | comp=Z,29nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.24** | **269** | lAmb_Lg | | 00 15 46.7 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **5.25** | **231** | lAmb_Lg | | 00 15 57.5 | |
| | comp=Z,32nm,1.2s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.28** | **81** | Pn | Pn | 00 14 16.4 | +1.1 |
| **CCM** | **Cathedral Cave** | **5.28** | **81** | lAmb_Lg | | 00 15 52.5 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.33** | **132** | lAmb_Lg | | 00 15 47.0 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.40** | **92** | | Pn | 00 14 17.3 | +0.3 |
| T42A | | | | lAmb_Lg | | 00 15 52.1 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **5.61** | **162** | lAmb_Lg | | 00 16 07.1 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **SCIA** | **State Center** | **5.77** | **37** | lAmb_Lg | | 00 16 05.5 | |
| | comp=Z,47nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **5.82** | **133** | lAmb_Lg | | 00 16 13.7 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.96** | **93** | lAmb_Lg | | 00 16 15.4 | |
| | comp=Z,33nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **5.97** | **288** | lAmb_Lg | | 00 16 11.1 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **5.97** | **304** | lAmb_Lg | | 00 16 13.0 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **CCAR** | **Cane Creek** | **6.03** | **123** | lAmb_Lg | | 00 16 19.8 | |
| | comp=Z,26nm,0.7s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.09** | **276** | lAmb_Lg | | 00 16 17.0 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **SLM** | **Saint Louis** | **6.14** | **76** | lAmb_Lg | | 00 16 10.0 | |
| | comp=Z,36nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.42** | **8** | lAmb_Lg | | 00 16 21.9 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **6.58** | **178** | lAmb_Lg | | 00 16 30.1 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **HALT** | **Halls** | **6.99** | **99** | lAmb_Lg | | 00 16 56.1 | |
| | comp=Z,36nm,0.7s | | | | | | |
| **JCT** | **Junction City** | **7.07** | **194** | lAmb_Lg | | 00 16 46.0 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.08** | **306** | lAmb_Lg | | 00 16 57.4 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **SUSD** | **Miller** | **7.11** | **354** | lAmb_Lg | | 00 16 52.4 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **7.21** | **302** | lAmb_Lg | | 00 16 49.9 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **OXF** | **Oxford** | **7.41** | **110** | lAmb_Lg | | 00 16 58.6 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **Y45A** | **Yeager Farm, C** | **7.61** | **115** | lAmb_Lg | | 00 17 04.2 | |
| | comp=Z,27nm,0.9s | | | | | | |
| **PECS** | **Pecos** | **7.78** | **221** | lAmb_Lg | | 00 17 19.4 | |
| | comp=Z,16nm,0.9s | | | | | | |
| **HNDO** | **Hondo** | **7.91** | **189** | lAmb_Lg | | 00 17 20.9 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.03** | **44** | lAmb_Lg | | 00 17 13.0 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **SAND** | **Sanderson** | **8.21** | **207** | lAmb_Lg | | 00 17 27.8 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **RSSD** | **Black Hills** | **8.21** | **327** | lAmb_Lg | | 00 17 37.1 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.25** | **104** | lAmb_Lg | | 00 17 18.3 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **DRIO** | **Del Rio** | **8.26** | **197** | lAmb_Lg | | 00 17 26.9 | |
| | comp=Z,11nm,1.0s | | | | | | |
| **RWWY** | **Rawlins** | **8.42** | **304** | lAmb_Lg | | 00 17 35.2 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **K22A** | **Casper** | **8.49** | **311** | lAmb_Lg | | 00 17 34.8 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **I40A** | **Norwalk** | **8.52** | **38** | lAmb_Lg | | 00 17 31.7 | |
| | comp=Z,17nm,0.7s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **8.54** | **7** | lAmb_Lg | | 00 17 38.0 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **SPMN** | **Marine on St.** | **8.71** | **24** | lAmb_Lg | | 00 17 35.7 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **VHRN** | **Van Horn** | **8.84** | **224** | lAmb_Lg | | 00 17 48.3 | |
| | comp=Z,12nm,0.9s | | | | | | |

*RSPR **30** 00:13:07.5, 18.05N×68.26W, h73km±4km, MD3.2/20*
*NEIC **30** 00:13:07.2±1.6, 18.0N±0.1×68.21W±0.03, h77km±15km, ML3.5/33, Md3.2/20(RSPR), Error ellipse: s-maj=15.5km s-min=2.9km az=192.0*
*OSPL **30** 00:13:09.0±2.7, 18.20N×68.26W, h76km±13km, ML3.3*
*SDD **30** 00:13:09.6±2.9, 18.25N×68.19W, h70km±13km, MD3.6, ML3.5, MW3.6*

**ISC 30 00:13:07.0±1.1, 18°20N±0°07×68°22W±0°03, h81km±8km, n78, σ1°23/106, 21C-12D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCDR** | **Punta Cana, DR** | **0.35** | **334** | *i*P | **Pn** | **00 13 19.5** | **-0.2** |
| **PCDR** | **Punta Cana, DR** | **0.35** | **334** | | **Pn** | **00 13 19.4** | **-0.2** |
| PCDR | | | | | **Sn** | **00 13 28.9** | **-0.1** |
| PCDR | | | | IAML | | 00 13 31.5 | |
| | comp=E,1μm,0.5s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.35** | **334** | ↓*e*Pg | **Pn** | **00 13 19.4** | **-0.2** |
| PCDR | | | | *e*Sg | **Sn** | **00 13 29.3** | **+0.3** |
| PCDR | | | | IAML | | 00 13 30.9 | |
| | comp=N,3μm,0.6s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **0.35** | **334** | *i*P | **Pn** | **00 13 19.4** | **-0.2** |
| PCDR | | | | *e*S | **Sn** | **00 13 29.3** | **+0.3** |
| PCDR | | | | IAML | | 00 13 31.8 | |
| | comp=Z,1μm,0.6s | | | | | | |
| **SADR** | **Isla Saona** | **0.53** | **269** | ↑*e*Pg | **Pn** | **00 13 21.4** | **+0.4** |
| SADR | | | | ↓*e*Sg | **Sn** | **00 13 32.7** | **+1.2** |
| SADR | | | | IAML | | 00 13 35.3 | |
| | comp=N,4μm,0.6s | | | | | | |
| **HIDR** | **Higuey Centro** | **0.61** | **310** | ↓*e*Pg | **Pn** | **00 13 20.8** | **-1.0** |
| HIDR | | | | *e*Sg | **Sn** | **00 13 31.7** | **-1.2** |
| HIDR | | | | ↑*e*Sg | | 00 13 31.8 | |
| HIDR | | | | IAML | | 00 13 32.7 | |
| | comp=N,4μm,0.3s | | | | | | |
| **PRSN** | **Puerto Rico Se** | **1.02** | **89** | ↑*e*P | **Pn** | **00 13 27.8** | **+1.6** |
| **PRSN** | **Puerto Rico Se** | **1.02** | **89** | *e*S | **Sn** | **00 13 41.9** | **+1.2** |
| **PRSN** | **Puerto Rico Se** | **1.02** | **89** | | **Pn** | **00 13 26.9** | **+0.6** |
| PRSN | | | | | **Sn** | **00 13 41.6** | **+0.8** |
| PRSN | | | | IAML | | 00 13 45.4 | |
| | comp=N,1μm,0.3s | | | | | | |
| PRSN | | | | IAML | | 00 13 46.7 | |
| | comp=E,804nm,0.2s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.07** | **100** | ↓*e*P | **Pn** | **00 13 27.1** | **+0.2** |
| **CRPR** | **Cabo Rojo, PR** | **1.07** | **100** | *e*S | **Sn** | **00 13 42.3** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **1.07** | **100** | | **Pn** | **00 13 27.0** | **+0.2** |
| CRPR | | | | | **Sn** | **00 13 40.7** | **-1.1** |
| **CRPR** | **Cabo Rojo, PR** | **1.07** | **100** | ↑*e*Pg | **Pn** | **00 13 27.1** | **+0.2** |
| CRPR | | | | IAML | | 00 13 48.6 | |
| | comp=N,147nm,0.3s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **1.07** | **100** | *i*P | **Pn** | **00 13 27.1** | **+0.2** |
| CRPR | | | | IAML | | 00 13 55.6 | |
| | comp=Z,237nm,0.5s | | | | | | |
| **LSP** | **Las Mesas** | **1.08** | **91** | ↑*e*P | **Pn** | **00 13 27.4** | **+0.4** |
| **LSP** | **Las Mesas** | **1.08** | **91** | *e*S | **Sn** | **00 13 42.6** | **+0.6** |
| **LSP** | **Las Mesas** | **1.08** | **91** | | **Pn** | **00 13 27.4** | **+0.4** |
| LSP | | | | | **Sn** | **00 13 42.6** | **+0.6** |
| **AGPR** | **Aguadilla, PR** | **1.08** | **76** | ↑*e*P | **Pn** | **00 13 27.9** | **+0.8** |
| **AGPR** | **Aguadilla, PR** | **1.08** | **76** | | **Pn** | **00 13 27.8** | **+0.8** |
| AGPR | | | | | **Sn** | **00 13 43.6** | **+1.5** |
| AGPR | | | | IAML | | 00 13 46.4 | |
| | comp=N,732nm,0.3s | | | | | | |
| AGPR | | | | IAML | | 00 13 50.4 | |
| | comp=E,763nm,0.3s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.08** | **76** | ↓*e*Pg | **Pn** | **00 13 27.8** | **+0.8** |
| AGPR | | | | *e*Sg | **Sn** | **00 13 41.2** | **-0.9** |
| AGPR | | | | IAML | | 00 13 46.4 | |
| | comp=N,691nm,0.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **1.08** | **76** | *i*P | **Pn** | **00 13 27.8** | **+0.8** |
| AGPR | | | | *e*S | **Sn** | **00 13 44.3** | **+2.2** |
| AGPR | | | | IAML | | 00 13 48.5 | |
| | comp=Z,396nm,0.1s | | | | | | |
| **MIDR** | **Miches** | **1.11** | **315** | ↑*e*Sg | **Sn** | **00 13 41.8** | **-0.9** |
| MIDR | | | | IAML | | 00 13 46.2 | |
| | comp=N,438nm,0.2s | | | | | | |
| **MLPR** | **Magueyes Islan** | **1.14** | **101** | ↑*i*P | **Pn** | **00 13 26.8** | **-1.0** |
| **MLPR** | **Magueyes Islan** | **1.14** | **101** | *e*S | **Sn** | **00 13 42.7** | **-0.6** |
| **MLPR** | **Magueyes Islan** | **1.14** | **101** | | **Pn** | **00 13 26.7** | **-1.0** |
| MLPR | | | | | **Sn** | **00 13 42.2** | **-1.1** |
| **GBPR** | **Guanica, Bosqu** | **1.29** | **100** | ↓*e*P | **Pn** | **00 13 30.3** | **+0.6** |
| **GBPR** | **Guanica, Bosqu** | **1.29** | **100** | *e*S | **Sn** | **00 13 47.8** | **+1.1** |
| **GBPR** | **Guanica, Bosqu** | **1.29** | **100** | | **Pn** | **00 13 30.3** | **+0.6** |
| GBPR | | | | | **Sn** | **00 13 47.8** | **+1.1** |
| **AOPR** | **Arecibo Observ** | **1.40** | **84** | ↑*e*P | **Sn** | **00 13 31.8** | **+0.8** |
| **AOPR** | **Arecibo Observ** | **1.40** | **84** | *e*S | **Sn** | **00 13 51.0** | **+1.9** |
| **AOPR** | **Arecibo Observ** | **1.40** | **84** | | **Pn** | **00 13 31.0** | **0.0** |
| AOPR | | | | | **Sn** | **00 13 50.7** | **+1.5** |
| **AOPR** | **Arecibo Observ** | **1.40** | **84** | ↑*e*Pg | **Pn** | **00 13 31.2** | **+0.2** |
| AOPR | | | | ↑*e*Sg | **Sn** | **00 13 50.7** | **+1.5** |
| AOPR | | | | IAML | | 00 13 56.6 | |
| | comp=N,2μm,0.3s | | | | | | |
| **AOPR** | **Arecibo Observ** | **1.40** | **84** | *e*P | **Pn** | **00 13 31.1** | **+0.2** |
| AOPR | | | | *e*S | **Sn** | **00 13 50.9** | **+1.8** |
| **UUPR** | **Utuado, UPR, P** | **1.42** | **88** | ↓*e*P | **Pn** | **00 13 31.8** | **+0.5** |
| **UUPR** | **Utuado, UPR, P** | **1.42** | **88** | *e*S | **Sn** | **00 13 50.3** | **+0.6** |
| **UUPR** | **Utuado, UPR, P** | **1.42** | **88** | | **Pn** | **00 13 31.4** | **+0.1** |
| **OBIP** | **Obispado Ponce** | **1.54** | **96** | ↑*e*P | **Pn** | **00 13 32.0** | **-0.8** |
| **OBIP** | **Obispado Ponce** | **1.54** | **96** | *e*S | **Sn** | **00 13 51.5** | **-0.9** |
| **OBIP** | **Obispado Ponce** | **1.54** | **96** | | **Pn** | **00 13 31.7** | **-1.1** |
| OBIP | | | | | **Sn** | **00 13 50.9** | **-1.5** |
| **CELP** | **Cerrillos** | **1.56** | **94** | ↑*e*P | **Pn** | **00 13 33.1** | **0.0** |
| **CELP** | **Cerrillos** | **1.56** | **94** | *e*S | **Sn** | **00 13 53.5** | **+0.5** |
| **CELP** | **Cerrillos** | **1.56** | **94** | | **Pn** | **00 13 32.8** | **-0.3** |
| CELP | | | | | **Sn** | **00 13 53.0** | **+0.1** |
| CELP | | | | IAML | | 00 13 59.9 | |
| | comp=N,290nm,0.3s | | | | | | |
| CELP | | | | IAML | | 00 14 02.2 | |
| | comp=E,264nm,0.3s | | | | | | |
| **CELP** | **Cerrillos** | **1.56** | **94** | ↑*e*Pg | **Pn** | **00 13 32.9** | **-0.3** |
| CELP | | | | ↑*e*Sg | **Sn** | **00 13 53.4** | **+0.5** |
| CELP | | | | IAML | | 00 13 59.9 | |
| | comp=N,307nm,0.2s | | | | | | |
| **EMPR** | **Esperanza - Ma** | **1.63** | **80** | ↑*e*P | **Pn** | **00 13 34.5** | **+0.5** |
| **EMPR** | **Esperanza - Ma** | **1.63** | **80** | *e*S | **Sn** | **00 13 55.8** | **+1.4** |
| **EMPR** | **Esperanza - Ma** | **1.63** | **80** | | **Pn** | **00 13 34.4** | **+0.5** |
| EMPR | | | | | **Sn** | **00 13 55.5** | **+1.1** |
| EMPR | | | | IAML | | 00 14 02.5 | |
| | comp=N,601nm,0.3s | | | | | | |
| **SDD** | **Santo Domingo** | **1.63** | **279** | ↓*e*P | **Pn** | **00 13 34.6** | **+0.6** |
| **SDD** | **Santo Domingo** | **1.63** | **279** | *e*S | **Sn** | **00 13 55.1** | **+0.7** |
| **SDD** | **Santo Domingo** | **1.63** | **279** | | **Pn** | **00 13 34.1** | **+0.1** |
| SD

*MW4.7/73,Moment Tensor Solution. s18,c19; s73,c89; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_T$~0.45±.10; $M_{θθ}$~0.10±.08; $M_{φφ}$0.55±.07; $M_{θφ}$0.42±.22; $M_{θθ}$1.40±.07; $M_{rr}$0.07±.17; Best double couple: $M_0$1.51100×$10^{16}$ NP1:$ϕ_s$262.00000°,δ83.00000°,λ-20.00000°. NP2: $ϕ_s$354.00000°,δ70.00000°,λ-172.00000°. Principal axes: T 1.7110, Plg9.0000°, Azm309.0000°; N -0.3990, Plg69.0000°, Azm62.0000°; P -1.3120, Plg19.0000°, Azm216.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*NEIC **30** 00:14:11.8±1.5,22°.49S×170°.11E±0°.08,h10km±1km, mb4.6/17 Error ellipse: s-maj=12.0km s-min=6.6km az=93.0*

*NOU **30** 00:14:29.0,21°.89S×168°.75E,h0km,MLv4.0/6,Loyalty Islands*

**ISC 30 00:14:12.5±0.4,22°.50S±0°.07×170°.21E±0°.06,h21km,n123, σ1§26/89,mb4.6/24,MS3.9/39,5C-2D,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PINNC | **Pines Island,** | **2.56** | **267** | P | **Pn** | **00 14 52.8** | **+0.1** |
| PINNC | **Pines Island,** | **2.56** | **267** | | **Pn** | **00 14 52.1** | **-0.6** |
| YATNC | **Mamie plateau,** | **3.10** | **277** | P | **Pn** | **00 14 59.6** | **-0.7** |
| YATNC | **Mamie plateau,** | **3.10** | **277** | P | **Pn** | **00 14 59.9** | **-0.4** |
| LIFNC | **LIFOU** | **3.25** | **301** | P | **Pn** | **00 15 00.6** | **-1.6** |
| LIFNC | **LIFOU** | **3.25** | **301** | P | **Pb** | **00 15 11.7** | **+2.2** |
| LIFNC | **LIFOU** | **3.25** | **301** | | **Pn** | **00 15 00.3** | **-1.9** |
| DZM | **Mont Dzumac** | **3.51** | **276** | P | **Pn** | **00 15 06.0** | **0.0** |
| DZM | **Mont Dzumac** | **3.51** | **276** | Pn | **Pn** | **00 15 05.8** | **-0.2** |
| DZM | **Mont Dzumac** | **3.51** | **276** | *e*Pn | **Pn** | **00 15 04.7** | **-1.3** |
| | 405nm,1.2s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **00 15 47.2** | **+0.2** |
| | 609nm,1.2s | | | | | | |
| DZM | **Mont Dzumac** | **3.51** | **276** | Pn | **Pn** | **00 15 06.3** | **+0.3** |
| | 23nm,0.3s,baz=135,slow=13,SNR=145 | | | | | | |
| DZM | | | | Sn | **Sn** | **00 15 45.9** | **-1.1** |
| | 9.1nm,0.3s,baz=96,slow=18,SNR=3.6 | | | | | | |
| DZM | | | | LR | LR | 00 16 23.1 | |
| | comp=Z,2μm,20.7s,baz=63,slow=37 | | | | | | |
| | 57nm,0.3s | | | | | | |
| NOUC | **Port Laguerre** | **3.64** | **275** | P | **Pn** | **00 15 07.8** | **+0.2** |
| RTV | **Rentapao** | **4.97** | **340** | P | Pb | 00 15 32.8 | -6.0 |
| KOUNC | **Koumac, New Ca** | **5.84** | **288** | P | **Pn** | **00 15 37.4** | **-0.5** |
| KOUNC | **Koumac, New Ca** | **5.84** | **288** | Pn | **Pn** | **00 15 37.2** | **-0.8** |
| MSVF | **Nonsavu** | **8.76** | **59** | Pn | **Pn** | **00 16 19.8** | **+1.7** |
| MSVF | **Nonsavu** | **8.76** | **59** | Pn | **Pn** | **00 16 21.0** | **+2.9** |
| | 0.3nm,0.3s,baz=178,slow=14,SNR=7.9 | | | | | | |
| MSVF | | | | LR | LR | 00 19 01.3 | |
| | comp=Z,1μm,20.2s,baz=186,slow=34 | | | | | | |
| RAO | **Raoul Island** | **12.63** | **125** | LR | LR | 00 20 57.6 | |
| | comp=Z,1μm,20.9s,baz=88,slow=33 | | | | | | |
| HNR | **Honiara** | **16.30** | **321** | Pn | **Pn** | **00 17 59.1** | **-1.2** |
| HNR | **Honiara** | **16.30** | **321** | LR | LR | 00 22 54.8 | |
| | comp=Z,4μm,21.8s,baz=186,slow=32 | | | | | | |
| URZ | **Urewera** | **16.79** | **161** | LR | LR | 00 24 03.1 | |
| | comp=Z,438nm,18.1s,baz=64,slow=35 | | | | | | |
| RTZ | **Ruatahuna** | **17.08** | **162** | Pn | **Pn** | **00 18 10.7** | **+0.6** |
| RTZ | | | | IAmb | IAmb | 00 18 30.1 | |
| | comp=Z,63nm,1.2s | | | | | | |
| BKZ | **Black Stump Fm** | **17.46** | **164** | P | **P** | **00 18 15.6** | **-0.3** |
| EIDS | **Eidsvold** | **17.72** | **257** | P | **Pn** | **00 18 17.2** | **-0.8** |
| MRZ | **Mangatainoka R** | **18.67** | **167** | P | **Pn** | **00 18 29.6** | **0.0** |
| MRZ | | | | IAmb | IAmb | 00 18 35.0 | |
| | comp=Z,30nm,1.0s | | | | | | |
| BFZ | **Birch Farm** | **18.84** | **166** | P | **Pn** | **00 18 32.2** | **+0.6** |
| BFZ | | | | IAmb | IAmb | 00 18 51.4 | |
| | comp=Z,38nm,1.4s | | | | | | |
| TCW | **Tory Channel** | **18.97** | **171** | P | **Pn** | **00 18 34.1** | **+0.8** |
| MSWZ | **Moikau Station** | **19.34** | **168** | P | **Pn** | **00 18 37.4** | **-0.2** |
| RPZ | **Rata Peaks** | **21.18** | **178** | P | **P** | **00 18 59.2** | **+2.8** |
| | comp=Z,4.2nm,0.3s,baz=133,slow=11,SNR=3.6 | | | | | | |
| CTA | **Charters Tower** | **22.44** | **272** | P | **P** | **00 19 11.2** | **+0.9** |
| | comp=Z,0.2nm,0.7s,baz=119,slow=10,SNR=2.1 | | | | | | |
| CTA | | | | LR | LR | 00 26 45.5 | |
| | comp=Z,20nm,19.6s,baz=92,slow=34 | | | | | | |
| CTAO | **Charters Tower** | **22.44** | **272** | P | **P** | **00 19 08.6** | **-1.7** |
| PMG | **Port Moresby** | **25.65** | **297** | LR | LR | 00 28 15.2 | |
| | comp=Z,562nm,20.2s,baz=121,slow=33 | | | | | | |
| STKA | **Stephens Creek** | **27.05** | **244** | P | **P** | **00 19 52.9** | **-0.6** |
| STKA | **Stephens Creek** | **27.05** | **244** | P | **P** | **00 19 52.9** | **-0.6** |
| | comp=Z,3.2nm,0.7s,baz=86,slow=15,SNR=4.2 | | | | | | |
| STKA | | | | LR | LR | 00 29 41.1 | |
| | comp=Z,254nm,20.4s,baz=67,slow=34 | | | | | | |
| | comp=Z,3.2nm,0.7s | | | | | | |
| RAR | **Rarotonga** | **27.87** | **93** | LR | LR | 00 31 37.3 | |
| | comp=Z,116nm,18.1s,baz=275,slow=38 | | | | | | |
| ASAR | **Alice Springs** | **33.36** | **261** | P | **P** | **00 20 49.7** | **+0.1** |
| | comp=Z,1.6nm,0.8s,baz=83,slow=9.1,SNR=11 | | | | | | |
| ASAR | | | | LR | LR | 00 33 30.1 | |
| | comp=Z,210nm,20.3s,baz=95,slow=35 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| WB0 | **Warramunga Arr** | **33.47** | **268** | P | **P** | **00 20 50.2** | **-0.3** |
| WB0 | | | | IAmb | IAmb | 00 21 04.5 | |
| | comp=Z,9.9nm,1.2s | | | | | | |
| WRA | **Warramunga Arr** | **33.48** | **268** | P | **P** | **00 20 50.1** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=97,slow=8.3,SNR=8.3 | | | | | | |
| WRA | | | | LR | LR | 00 33 06.9 | |
| | comp=Z,270nm,21.3s,baz=66,slow=34 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| TBI | **Tubuai** | **37.07** | **99** | *e*LR | LR | 00 31 19.9 | |
| | comp=Z,2μm,29.2s | | | | | | |
| PPT2 | **Papeete2** | **38.02** | **90** | *e*S | **S** | **00 27 14.9** | **-6.2** |
| | comp=Z,64nm,26.0s | | | | | | |
| PPT2 | | | | *e*SS | **SS** | **00 30 10.9** | **+2.5** |
| | comp=Z,328nm,25.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 00 31 44.1 | |
| | comp=Z,217nm,31.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 00 31 47.5 | |
| | comp=Z,306nm,28.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 00 31 47.9 | |
| | comp=Z,191nm,31.2s | | | | | | |
| PPT | **Papeete** | **38.02** | **90** | LR | LR | 00 32 16.9 | |
| | comp=Z,156nm,21.1s,baz=294,slow=29 | | | | | | |
| FAKI | **Fak Fak** | **41.63** | **292** | P | **P** | **00 21 59.1** | **-0.5** |
| FAKI | | | | IAmb | IAmb | 00 22 08.5 | |
| | comp=Z,22nm,1.0s | | | | | | |
| FITZ | **Fitzroy Crossi** | **41.91** | **268** | P | **P** | **00 22 02.5** | **+0.6** |
| GUMO | **Guam** | **43.62** | **323** | LR | LR | 00 36 51.1 | |
| | comp=Z,85nm,20.6s,baz=168,slow=31 | | | | | | |
| MBWA | **Marble Bar** | **46.70** | **262** | P | **P** | **00 22 39.7** | **-0.4** |
| NWAO | **Narrogin (SRO)** | **47.61** | **245** | LR | LR | 00 42 48.4 | |
| | comp=Z,258nm,18.1s,baz=74,slow=36 | | | | | | |
| TAOE | **Nuku Hiva Isla** | **49.46** | **82** | *e*LR | LR | 00 37 07.8 | |
| | comp=Z,173nm,26.1s | | | | | | |
| RKT | **Rikitea** | **50.28** | **102** | *e*LR | LR | 00 37 27.6 | |
| | comp=Z,708nm,26.8s | | | | | | |
| KAPI | **Kappang** | **51.71** | **282** | LR | LR | 00 44 23.2 | |
| | comp=Z,130nm,21.7s,baz=120,slow=35 | | | | | | |
| DAV | **Davao City (W)** | **52.65** | **299** | LR | LR | 00 46 10.3 | |
| | comp=Z,67nm,20.0s,baz=128,slow=36 | | | | | | |
| TOLI2 | **Tolitoli** | **53.55** | **289** | P | **P** | **00 23 31.1** | **-1.1** |
| TOLI2 | | | | IAmb | IAmb | 00 23 40.8 | |
| | comp=Z,6.6nm,0.8s | | | | | | |
| SBA | **Scott Base** | **55.44** | **181** | P | **P** | **00 23 46.2** | **+1.2** |
| SBA | | | | IAmb | IAmb | 00 23 56.9 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| JCJ | **Chichijima** | **56.26** | **330** | LR | LR | 00 48 20.6 | |
| | comp=Z,35nm,18.9s,baz=110,slow=36 | | | | | | |
| JOW | **Kunigami** | **63.64** | **318** | LR | LR | 00 50 14.9 | |
| | comp=Z,42nm,20.5s,baz=134,slow=34 | | | | | | |
| MJAR | **Matsushiro Arr** | **66.04** | **332** | LR | LR | 00 54 41.3 | |
| | comp=Z,32nm,19.0s,baz=141,slow=37 | | | | | | |
| JNU | **Nakatsue** | **66.83** | **325** | LR | LR | 00 54 20.2 | |
| | comp=Z,39nm,18.2s,baz=128,slow=36 | | | | | | |
| QSPA | **South Pole Qui** | **67.58** | **180** | P | **P** | **00 25 07.7** | **+0.3** |
| QSPA | **South Pole Qui** | **67.58** | **180** | P | **P** | **00 25 08.1** | **+0.7** |
| | comp=Z,4.0nm,0.9s,baz=35,slow=3.4,SNR=11 | | | | | | |
| QSPA | | | | LR | LR | 00 51 42.0 | |
| | comp=Z,65nm,18.9s,baz=40,slow=33 | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| KSRS | **Korea Array** | **71.69** | **326** | LR | LR | 00 56 14.4 | |
| | comp=Z,39nm,19.4s,baz=130,slow=35 | | | | | | |
| RPN | **Rapa Nui** | **71.99** | **112** | LR | LR | 00 49 11.3 | |
| | comp=Z,122nm,20.9s,baz=258,slow=29 | | | | | | |
| NJ2 | **Nanjing** | **73.17** | **316** | *e*P | **P** | **00 25 43.3** | **+1.5** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| USRK | **Uesuriysk Ar.** | **75.03** | **333** | LR | LR | 00 56 34.1 | |
| | comp=Z,41nm,20.5s,baz=187,slow=34 | | | | | | |
| MAW | **Mawson** | **75.77** | **202** | P | **P** | **00 25 55.8** | **-0.7** |
| | comp=Z,2.5nm,0.8s,baz=153,slow=14,SNR=2.2 | | | | | | |
| MAW | | | | LR | LR | 00 55 20.8 | |
| | comp=Z,60nm,19.3s,baz=130,slow=33 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| PETK | **Petropavlovsk-** | **76.06** | **352** | LR | LR | 00 54 09.4 | |
| | comp=Z,131nm,21.1s,baz=147,slow=32 | | | | | | |
| TIA | **Tai'an** | **76.97** | **318** | P | **P** | **00 26 04.3** | **+0.6** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.5s | | | | | | |
| BELA | **Belgrano 2** | **78.79** | **175** | P | **P** | **00 26 12.6** | **-0.7** |
| BELA | | | | IAmb | IAmb | 00 26 13.6 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| KLR | **Kul'dur** | **79.19** | **335** | LR | LR | 01 00 42.6 | |
| | comp=Z,35nm,19.1s,baz=179,slow=35 | | | | | | |
| HNS | **HongShan** | **79.22** | **318** | *e*P | **P** | **00 26 19.0** | **+2.9** |
| HNS | | | | LR | LR | | |
| | comp=Z,120nm,18.3s | | | | | | |
| CMAR | **Chiang Mai Arr** | **80.66** | **294** | P | **P** | **00 26 25.9** | **+1.6** |
| | comp=Z,0.7nm,0.3s,baz=115,slow=5.3,SNR=4.8 | | | | | | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| XAN | **Xi'an** | **80.97** | **312** | *e*P | **P** | **00 26 26.5** | **+0.8** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.4s | | | | | | |
| PZH | **PanZhiHua** | **82.22** | **303** | P | **P** | **00 26 33.5** | **+0.9** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.4s | | | | | | |
| ELIB | **Princess Elisa** | **83.11** | **190** | *d*P | **P** | **00 26 35.9** | **-0.6** |
| | comp=Z,3.3nm,1.1s | | | | | | |
| ELIB | | | | *d*PP | **PP** | **00 29 46.1** | **-0.9** |
| HHC | **Hu-ho-hao-te** | **83.27** | **319** | *e*P | **P** | **00 26 39.0** | **+1.3** |
| HHC | | | | pP | pP | 00 26 42.8 | 0.0 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,100nm,5.6s | | | | | | |
| MA2 | **Magadan** | **83.32** | **350** | LR | LR | 00 59 04.2 | |
| | comp=Z,101nm,21.2s,baz=184,slow=32 | | | | | | |
| TROLL | **Troll, Antarti** | **85.37** | **184** | ⇑P | **P** | **00 26 48.0** | **0.0** |
| | comp=Z,312nm,0.8s | | | | | | |
| KDAK | **Kodiak Island** | **85.79** | **19** | LR | LR | 00 58 42.0 | |
| | comp=Z,88nm,20.3s,baz=236,slow=31 | | | | | | |
| SNAA | **Sanae** | **85.96** | **182** | P | **P** | **00 26 51.0** | **+0.1** |
| SNAA | | | | IAmb | IAmb | 00 27 08.0 | |
| | comp=Z,9.9nm,1.3s | | | | | | |
| SNAA | **Sanae** | **85.96** | **182** | ⇑P | **P** | **00 26 47.4** | **-3.4** |
| | comp=Z,56nm,0.7s | | | | | | |
| SNAA | **Sanae** | **85.96** | **182** | P | **P** | **00 26 49.4** | **-1.5** |
| | comp=Z,3.6nm,0.9s,baz=200,slow=18,SNR=4.4 | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| VNA3 | **Neumayer Olymp** | **86.52** | **180** | ⇑P | **P** | **00 26 53.0** | **-0.6** |
| | comp=Z,6.6nm,0.8s | | | | | | |
| VNA2 | **Neumayer--Watz** | **86.82** | **181** | ⇑P | **P** | **00 26 54.5** | **-0.5** |
| | comp=Z,7.2nm,0.8s,baz=174,slow=5.6 | | | | | | |
| VNA1 | **Neumayer--Stat** | **87.11** | **181** | ⇑P | **P** | **00 26 56.1** | **-0.3** |
| | comp=Z,9.7nm,1.1s | | | | | | |
| YBH | **Yreka Blue Hor** | **89.01** | **44** | LR | LR | 01 00 22.0 | |
| | comp=Z,19nm,18.4s,baz=230,slow=31 | | | | | | |
| PFO | **Pinyon Flats O** | **89.33** | **53** | LR | LR | 00 58 26.4 | |
| | comp=Z,64nm,21.1s,baz=238,slow=30 | | | | | | |
| LPIG | **La Paz** | **90.01** | **64** | LR | LR | 00 59 29.9 | |
| | comp=Z,52nm,19.1s,baz=224,slow=30 | | | | | | |
| NVAR | **Mina Array Bea** | **90.28** | **48** | LR | LR | 00 59 26.0 | |
| | comp=Z,68nm,20.5s,baz=270,slow=30 | | | | | | |
| SONM | **Songino Array** | **90.35** | **323** | P | **P** | **00 27 11.5** | **-0.7** |
| | comp=Z,1.1nm,0.9s,baz=153,slow=2.9,SNR=4.7 | | | | | | |
| SONM | | | | LR | LR | 01 09 40.4 | |
| | comp=Z,41nm,18.7s,baz=116,slow=37 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| BBB | **Bella Bella** | **91.70** | **33** | LR | LR | 01 02 48.9 | |
| | comp=Z,36nm,18.5s,baz=209,slow=32 | | | | | | |
| PALK | **Pallekele** | **92.29** | **277** | LR | LR | 01 11 47.8 | |
| | comp=Z,63nm,18.8s,baz=115,slow=37 | | | | | | |
| ILAR | **Eielson Array** | **93.06** | **17** | LR | LR | 01 04 03.1 | |
| | comp=Z,67nm,20.0s,baz=248,slow=32 | | | | | | |
| ELK | **Elko** | **93.45** | **47** | LR | LR | 01 01 12.5 | |
| | comp=Z,48nm,21.5s,baz=239,slow=30 | | | | | | |
| PLCA | **Paso Flores** | **95.51** | **138** | LR | LR | 00 59 10.7 | |
| | comp=Z,48nm,20.9s,baz=188,slow=28 | | | | | | |
| NEW | **Newport** | **95.68** | **40** | LR | LR | 01 10 53.0 | |
| | comp=Z,41nm,18.2s,baz=219,slow=36 | | | | | | |
| ANMO | **Albuquerque** | **97.40** | **55** | LR | LR | 01 02 39.5 | |
| | comp=Z,48nm,21.8s,baz=239,slow=30 | | | | | | |
| TXAR | **Lajitas Array** | **97.52** | **61** | LR | LR | 01 02 37.5 | |
| | comp=Z,44nm,22.0s,baz=254,slow=30 | | | | | | |
| TIXI | **Tiksi** | **98.10** | **348** | LR | LR | 01 07 43.9 | |
| | comp=Z,35nm,18.8s,baz=204,slow=33 | | | | | | |
| KOLS | **Kolonicke sedl** | **143.40** | **324** | *e*PKP | **PKPdf** | **00 33 46.7** | **+1.4** |
| MORC | **Moravsky Berou** | **145.31** | **328** | *e*PKP | **PKPbc** | **00 33 48.4** | **-0.1** |
| CHVC | **Chvalec** | **145.45** | **331** | *e*PKP | **PKPbc** | **00 33 48.7** | **-0.2** |
| KRLC | **Kraliky** | **145.47** | **329** | *e*PKP | **PKPdf** | **00 33 47.1** | **-1.8** |
| VYHS | **Vyhne** | **145.49** | **326** | *e*PKP | **PKiKP** | **00 33 53.1** | **+0.1** |
| DPC | **Dobruska-Polom** | **145.50** | **330** | *e*PKP | **PKPab** | **00 33 49.2** | **-0.1** |
| JAVC | **Velka Javorina** | **145.85** | **327** | *e*PKP | **PKPab** | **00 33 51.3** | **+0.6** |
| VRAC | **Vranov** | **146.08** | **329** | *e*PKP | **PKPbc** | **00 33 50.6** | **-0.3** |
| VRAC | **Vranov** | **146.08** | **329** | PKPbc | **PKPdf** | **00 33 49.9** | **-0.1** |
| | comp=Z,1.2nm,0.3s,baz=63,slow=8.3,SNR=3.1 | | | | | | |
| KRUC | **Mokrsky** | **146.35** | **328** | *e*PKP | **PKPbc** | **00 33 51.1** | **-0.5** |
| EKA | **Eskdalemuir Ar** | **146.83** | **353** | PKPbc | **PKPdf** | **00 33 49.9** | **-1.1** |
| | comp=Z,2.6nm,0.6s,baz=344,slow=2.1,SNR=11 | | | | | | |
| ZVC | **Zvikov** | **147.11** | **331** | *e*PKP | **PKPab** | **00 33 55.0** | **-0.4** |
| RONA | **Rosalia, Austr** | **147.31** | **327** | PKiKP | **PKiKP** | **00 33 57.5** | **+0.7** |
| | comp=Z,5.6nm,1.2s | | | | | | |
| CONA | **Conrad Observa** | **147.37** | **327** | PKP | **PKPab** | **00 33 56.4** | **-0.2** |
| | comp=Z,3.0nm,1.2s | | | | | | |
| CKRC | **Cesky Krumlov** | **147.50** | **330** | *e*PKP | **PKPbc** | **00 33 54.8** | **-0.2** |
| KHC | **Kasperske Hory** | **147.61** | **331** | *e*PKP | **PKiKP** | **00 33 57.0** | **-0.4** |
| KHC | | | | *ex* | x | 00 34 01.9 | |
| GERES | **GERESS Array B** | **147.77** | **330** | PKPbc | **PKPbc** | **00 33 55.7** | **-0.1** |
| | comp=Z,0.8nm,0.6s,baz=344,slow=2.5,SNR=2.1 | | | | | | |
| MOA | **Molln** | **148.21** | **329** | PKiKP | **PKiKP** | **00 33 59.0** | **+0.4** |
| | comp=Z,3.6nm,1.1s | | | | | | |
| SOKA | **Soboth** | **148.63** | **326** | PKP | **PKPdf** | **00 33 54.6** | **+0.3** |
| | comp=Z,2.2nm,1.2s | | | | | | |
| OBKA | **Obir** | **148.99** | **326** | *e*PKP | **PKPdf** | **00 33 55.0** | **+0.1** |
| | comp=Z,3.7nm,1.8s | | | | | | |
| KBA | **Koelnbreinsper** | **149.20** | **328** | *e*PKP | **PKPbc** | **00 33 59.6** | **-0.1** |
| | comp=Z,3.0nm,0.5s | | | | | | |
| LESA | **Schwarzleotal** | **149.27** | **329** | PKP | **PKPdf** | **00 33 56.1** | **+0.7** |
| | comp=Z,1.5nm,0.5s | | | | | | |
| ABTA | **Abfaltersbach** | **149.83** | **329** | PKP | **PKPdf** | **00 33 56.3** | **0.0** |
| | comp=Z,3.2nm,1.2s | | | | | | |
| MOTA | **Moosalm** | **150.05** | **331** | PKP | **PKPdf** | **00 33 56.3** | **-0.5** |
| | comp=Z,4.1nm,1.3s | | | | | | |
| RETA | **Reutte** | **150.09** | **331** | *ep*PKP | **PKPbc** | **00 34 00.8** | **-0.9** |
| | comp=Z,0.9nm,0.4s | | | | | | |
| SQTA | **Sank Quirin** | **150.09** | **331** | PKP | **PKPbc** | **00 34 01.7** | **-0.1** |
| | comp=Z,5.3nm,1.2s | | | | | | |
| FETA | **Feichten** | **150.46** | **331** | PKP | **PKPdf** | **00 33 58.4** | **+1.0** |
| | comp=Z,5.7nm,1.3s | | | | | | |

*NEIC **30** 00:37:24.3±1.3,5°.57N±0°.03×95°.2E±0°.1,h88km±12km, mb4.1/7,Error ellipse: s-maj=15.9km s-min=3.8km az=99.0*

*IDC **30** 00:37:31.9±10.0,5°.27N×94°.82E,h176km±91km,mb3.4/10, mbtmp3.9/11,Error ellipse: s-maj=67.7km s-min=14.8km az=55.0*

**ISC 30 00:37:21.3±0.8,5°.52N±0°.09×94°.97E±0°.09,h63km,n34, σ1§21/26,mb4.0/15,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LHMI | **Lhok Sumawe** | **1.99** | **98** | Pn | **Pn** | **00 37 53.4** | **+0.7** |
| LHMI | | | | Sn | **Sn** | **00 38 16.4** | **-0.2** |
| RPSI | **Rantau Prapat** | **4.84** | **125** | Pn | **Pn** | **00 38 31.7** | **0.0** |
| GSI | **Gunungsitoli** | **4.93** | **148** | Pn | **Pn** | **00 38 34.8** | **+1.9** |
| SRIT | **Nakonsritamara** | **5.52** | **56** | Pn | **Pn** | **00 38 40.2** | **-0.7** |
| KULM | **Kulim** | **5.66** | **92** | Pn | **Pn** | **00 38 44.0** | **+1.1** |
| IPM | **Ipoh** | **6.12** | **99** | Pn | **Pn** | **00 38 48.1** | **-1.1** |
| CMAR | **Chiang Mai Arr** | **13.43** | **16** | P | **P** | **00 40 39.8** | **+3.4** |
| | 1.0nm,0.3s,baz=215,slow=11,SNR=5.3 | | | | | | |
| H08S2 | **Diego Garcia H** | **25.96** | **240** | T | T | 01 09 47.1 | |
| | baz=60,slow=76,SNR=41 | | | | | | |
| H08S3 | **Diego Garcia H** | **25.96** | **240** | T | T | 01 09 50.8 | |
| | baz=60,slow=76,SNR=77 | | | | | | |
| H08S1 | **Diego Garcia H** | **25.97** | **240** | T | T | 01 09 49.0 | |
| | baz=60,slow=76,SNR=7.7 | | | | | | |
| NRN | **Naryn** | **39.57** | **337** | P | **P** | **00 44 47.2** | **+0.4** |
| NRN | | | | IAmb | IAmb | 00 44 48.7 | |
| | comp=Z,2.3nm,0.6s | | | | | | |
| BOOM | **Boomskoye usch** | **40.51** | **338** | P | **P** | **00 44 54.6** | **+0.3** |
| MK31 | **Makanchi Array** | **42.55** | **347** | P | **P** | **00 45 10.2** | **-0.6** |
| MK31 | | | | IAmb | IAmb | 00 45 23.1 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| MKAR | **Makanchi Array** | **42.55** | **347** | P | **P** | **00 45 11.7** | **+0.9** |
| | comp=Z,0.5nm,0.4s,baz=163,slow=6.7,SNR=5.8 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| MAKZ | **Makanchi** | **42.63** | **347** | P | **P** | **00 45 11.2** | **-0.4** |
| SONM | **Songino Array** | **43.28** | **11** | P | **P** | **00 45 17.7** | **+0.8** |
| | comp=Z,0.4nm,0.4s,baz=189,slow=8.6,SNR=2.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| WB0 | **Warramunga Arr** | **46.21** | **124** | P | **P** | **00 45 38.5** | **-1.9** |
| WRA | **Warramunga Arr** | **46.25** | **124** | P | **P** | **00 45 39.7** | **-1.1** |
| | comp=Z,1.1nm,0.9s,baz=302,slow=9.3,SNR=10.0 | | | | | | |
| | comp=Z,1.1nm,0.9s | | | | | | |
| KURBB | **Kurchatov Arra** | **47.02** | **346** | P | **P** | **00 45 47.4** | **+1.1** |
| | comp=Z,1.3nm,0.6s,baz=167,slow=7.1,SNR=23 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |
| KURK | **Kurchatov** | **47.08** | **346** | P | **P** | **00 45 47.4** | **+0.7** |
| KURK | | | | IAmb | IAmb | 00 45 48.1 | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| ASAR | **Alice Springs** | **47.79** | **129** | P | **P** | **00 45 51.5** | **-1.3** |
| | comp=Z,0.4nm,0.4s,baz=298,slow=8.1,SNR=5.2 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| ZAA0 | **Zalesovo Array** | **48.98** | **352** | P | **P** | **00 46 01.3** | **0.0** |
| ZAA0 | | | | IAmb | IAmb | 00 46 02.7 | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| ZALV | **Zalesovo Beam** | **48.98** | **352** | P | **P** | **00 46 01.9** | **+0.6** |
| | comp=Z,1.9nm,0.4s,baz=184,slow=7.2,SNR=11 | | | | | | |
| | comp=Z,1.9nm,0.4s | | | | | | |
| ABKAR | **Akbulak array** | **52.68** | **332** | P | **P** | **00 46 29.2** | **0.0** |
| ABKAR | | | | IAmb | IAmb | 00 46 31.4 | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| AKTO | **Aktyubinsk** | **54.40** | **332** | P | **P** | **00 46 41.0** | **-0.8** |
| | comp=Z,1.1nm,0.5s,baz=95,slow=5.4,SNR=3.2 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| H04N2 | **CROZET ISLANDS** | **64.16** | **212** | T | T | 01 57 30.1 | |
| | baz=50,slow=75,SNR=20 | | | | | | |
| H04N1 | **CROZET ISLANDS** | **64.17** | **212** | T | T | 01 57 28.0 | |
| | baz=50,slow=75,SNR=10 | | | | | | |
| H04N3 | **CROZET ISLANDS** | **64.18** | **212** | T | T | 01 57 27.0 | |
| | baz=50,slow=75,SNR=10 | | | | | | |
| H04S1 | **CROZET ISLANDS** | **64.54** | **211** | T | T | 01 57 49.2 | |
| | baz=49,slow=76,SNR=4.1 | | | | | | |
| H04S3 | **CROZET ISLANDS** | **64.55** | **211** | T | T | 01 57 48.9 | |
| | baz=49,slow=76,SNR=4.0 | | | | | | |
| H04S2 | **CROZET ISLANDS** | **64.56** | **211** | T | T | 01 57 50.2 | |
| | baz=49,slow=76,SNR=3.6 | | | | | | |
| BRTR | **Keskin Array B** | **64.59** | **311** | P | **P** | **00 47 51.0** | **-1.5** |
| | comp=Z,0.3nm,0.6s,baz=116,slow=3.4,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | |
| FINES | **FINESS Array B** | **75.16** | **332** | P | **P** | **00 48 55.8** | **-0.9** |
| | comp=Z,1.4nm,0.9s,baz=104,slow=5.9,SNR=3.4 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| ARCES | **ARCESS Array B** | **77.75** | **340** | P | **P** | **00 49 10.6** | **-0.6** |
| | comp=Z,1.7nm,0.8s,baz=98,slow=6.5,SNR=3.8 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |

*MOS **30** 00:44:57.5±1.1,29°.64N×51°.33E,h10km,mb4.5/30,Error ellipse: s-maj=6.5km s-min=4.3km az=106.8*

*IDC **30** 00:44:58.5±0.9,29°.70N×51°.21E,h0km,mb4.2/19, mbtmp4.2/24,ML3.8/5,MS3.2/13,Error ellipse: s-maj=20.4km s-min=13.9km az=1.0*

*NEIC **30** 00:44:59.8±1.6,29°.71N±0°.06×51°.36E±0°.08,h10km±1km, mb4.3/43,Error ellipse: s-maj=14.8km s-min=5.7km az=226.0*

*TEH **30** 00:45:00.7,29°.73N×51°.30E,h17km±17km,ML4.2*

*OMAN **30** 00:45:02.3±0.4,29°.64N×51°.42E,h15km,mb4.5/22, ml3.7/1,ms2.5/3,Error ellipse: s-maj=4.0km s-min=3.2km az=27.0*

*DSN **30** 00:45:06.4±2.3,29°.21N×51°.41E,h15km,ML3.8/13,Error ellipse: s-maj=32.3km s-min=11.0km az=4.0*

**ISC 30 00:45:01.3±0.4,29°.71N±0°.04×51°.33E±0°.03,h20km,n331, σ1§40/352,mb4.4/80,MS3.0/12,31C-16D,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KAZ2 | **Kazeron-Fars-I** | **0.31** | **109** | Pg | **Pb** | **00 45 07.6** | **-0.6** |
| AHBU | **AHRAM** | **0.85** | **182** | Pg | **Pb** | **00 45 17.0** | **-0.3** |
| SHI | **Shiraz** | **1.03** | **94** | Pg | **Pb** | **00 45 20.9** | **+0.2** |
| ABEH | **Behbahan** | **1.28** | **314** | Pg | **Pn** | **00 45 24.6** | **+0.5** |
| KLNJ | **Kolanjah** | **1.31** | **10** | Pg | **Pn** | **00 45 25.3** | **+0.5** |
| DSBU | **Dashti - Bushe** | **1.35** | **182** | Pg | **Pn** | **00 45 27.0** | **+2.0** |
| QIR1 | **Qir** | **1.94** | **129** | Pn | **Pn** | **00 45 35.1** | **+1.9** |
| IBRJ | **Brojen** | **2.19** | **359** | Pn | **Pn** | **00 45 38.6** | **+1.8** |
| IRAM | **Ramesheh** | **2.28** | **23** | Pn | **Pn** | **00 45 39.9** | **+1.9** |
| JHRM | **Jahrom** | **2.31** | **121** | Pn | **Pn** | **00 45 39.8** | **+1.6** |
| ZNGN | **Zangian** | **2.43** | **351** | Pn | **Pn** | **00 45 41.8** | **+1.6** |
| JHBN | **Jahan bin** | **2.57** | **347** | Pn | **

**UOSS Minazif** 6.43 136 P Pn **00 46 35.3 +0.4**
**HATD Hatta, Dubai** 6.48 138 P Pn **00 46 35.9 +0.3**
**HATD Hatta, Dubai** 6.48 138 P Pn **00 46 36.3 +0.8**
HATD S Sn **00 47 49.3 +0.4**
**IDHR Dehrash** 6.50 321 Pn Pn **00 46 36.8 +0.8**
**ASHO Ashiyiah** 6.54 139 *i* P Pn **00 46 36.8 +0.4**
SNR=26
**ASHO Ashiyiah** 6.54 139 P Pn **00 46 36.9 +0.4**
SNR=29
**IPRN Peran** 6.57 7 Pn Pn **00 46 38.5 +1.6**
**IGZV Ghazvin** 6.72 352 Pn Pn **00 46 40.0 +1.0**
**KGS1 Ghasr-e-Shirin** 6.82 316 Pn Pn **00 46 40.5 +0.4**
**ALNE Al Ain** 6.88 144 *i* P Pn **00 46 41.2 +0.2**
SNR=16
**ALNE Al Ain** 6.88 144 P Pn **00 46 41.9 +0.8**
SNR=16
ALNE S Sn **00 47 57.5 -1.3**
**MZR Muzera** 6.96 163 *i* P Pn **00 46 42.7 +0.6**
SNR=27
**MZR Muzera** 6.96 163 P Pn **00 46 42.9 +0.8**
SNR=33
**BSRN Basiran** 7.07 70 Pn Pn **00 46 45.8 +2.0**
**IGLO Ghaloghah** 7.09 17 Pn Pn **00 46 45.9 +1.9**
**ITEG Tejag** 7.10 62 Pn Pn **00 46 46.0 +1.8**
**IKOO Kooshah** 7.12 66 Pn Pn **00 46 46.5 +1.9**
**TAPT Tabas- Tapeh t** 7.14 42 Pn Pn **00 46 47.0 +2.3**
**SOHO SOHO** 7.24 139 P Pn **00 46 45.4 -0.6**
**SOHO SOHO** 7.24 139 P Pn **00 46 45.9 -0.1**
SOHO P Pn **00 46 45.9 -0.1**
**AFRZ Afriz** 7.53 59 Pn Pn **00 46 51.7 +1.6**
**ARQ Araqi** 7.87 143 P Pn **00 46 55.1 +0.4**
SNR=11
ARQ S Sn **00 48 22.6 -0.6**
**RAYN Ar Rayn** 8.07 222 Pn Pn **00 46 57.0 -0.4**
**RAYN Ar Rayn** 8.07 222 P Pn **00 46 57.3 -0.1**
**RAYN Ar Rayn** 8.07 222 P Pn **00 46 57.2 -0.3**
**RAYN Ar Rayn** 8.07 222 P Pn **00 46 57.0 -0.4**
**HOQ Hoqain** 8.12 137 P Pn **00 46 58.5 +0.5**
**SBZV Sabzevar** 8.49 37 Pn Pn **00 47 04.6 +1.3**
**ISRB Sarab** 8.64 340 Pn Pn **00 47 06.0 +0.6**
**BSY Bisya** 8.71 141 P Pn **00 47 06.3 +0.1**
**SMDO Samad** 8.96 136 P Pn **00 47 09.4 -0.2**
SNR=7.9
SMDO P Pn **00 47 09.4 -0.2**
SNR=7.9
**IAZR Azarshahr** 9.11 332 Pn Pn **00 47 13.3 +1.5**
**WSAR Wadi Sarin** 9.18 133 Pn Pn **00 47 11.9 -0.8**
1.6nm,0.3s,baz=313,slow=11,SNR=16
WSAR Sn Sn 00 48 47.4 -8.1
0.7nm,0.3s,baz=112,slow=19,SNR=1.2
6.0nm,0.5s
**IAKL Akhelmad** 9.27 40 Pn Pn **00 47 16.1 +2.0**
**IHRS Heris** 9.29 339 Pn Pn **00 47 15.4 +1.1**
**IPAY Payeh** 9.30 42 Pn Pn **00 47 16.2 +1.7**
**IKRD Kardeh** 9.83 42 Pn Pn **00 47 23.6 +2.0**
**IMYA Miami** 9.89 46 Pn Pn **00 47 24.3 +1.8**
**SRVN Saravan** 10.00 101 Pn Pn **00 47 26.0 +2.0**
**MHTO MHTO** 10.56 144 P Pn **00 47 32.2 +0.7**
SNR=24
**SIRT Sirnak** 10.73 319 Pn Pn **00 47 32.7 -1.2**
**DOK Doka** 11.34 166 P Pn **00 47 40.5 -1.6**
SNR=16
DOK P Pn **00 47 40.5 -1.6**
SNR=16
**GURO Guroymak-BITLI** 11.70 321 Pn Pn **00 47 45.7 -1.5**
**GNI Garni** 11.72 334 Pn Pn **00 47 48.6 +1.1**
0.3nm,0.3s,baz=16,slow=15,SNR=2.8
GNI LR LR 00 52 16.6
comp=Z,82nm,18.1s,baz=166,slow=38
6.8nm,1.0s
**GNI Garni** 11.72 334⇓ *e*P Pn 00 47 44.5 -3.0
**WHFO Wadi Hawf** 11.95 169 P Pn **00 47 50.3 -0.4**
SNR=45
**DMTO DMTO** 12.39 164 P Pn **00 47 55.1 -1.5**
SNR=34
**ABTO Aybut** 12.43 171 P Pn **00 47 57.2 0.0**
**ASF Jabal al Asfar** 12.63 285 Pn Pn **00 48 00.1 +0.2**
1.0nm,0.3s,baz=43,slow=0.6,SNR=3.7
ASF Sn Sn **00 50 15.7 -4.2**
1.1nm,0.3s,baz=47,slow=1.9,SNR=3.0
2.4nm,0.3s
**ASF Jabal al Asfar** 12.63 285 P Pn **00 48 00.9 +1.1**
**KARS Kars** 12.80 330 Pn Pn **00 48 01.2 -1.1**
**KARS Kars** 12.80 330 P Pn **00 48 01.2 -1.1**
**SHMJ Saham** 13.65 287 P Pn **00 48 15.1 +1.3**
**GHAJ Ghor Haditha** 13.68 281 P Pn **00 48 16.2 +2.1**
**LISJ El Lisan** 13.75 280 P Pn **00 48 18.4 +3.3**
**UJAP Al Uja** 13.81 283 P Pn **00 48 17.6 +1.7**
**MMAI Mount Meron Ar** 14.00 288 Pn Pn **00 48 17.6 -1.0**
0.5nm,0.3s,baz=100,slow=18,SNR=2.8
MMAI Sn Sn **00 50 48.0 -5.4**
0.9nm,0.3s,baz=101,slow=37,SNR=3.3
0.2nm,0.2s
**SALP Salfit** 14.05 284 P Pn **00 48 22.2 +2.9**
**ARPR Arapgir-MALATY** 14.22 315 Pn Pn **00 48 20.7 -0.9**
**EIL Elat** 14.24 274 LR LR 00 54 56.6
comp=Z,86nm,18.8s,baz=68,slow=42
**EIL Elat** 14.24 274 P Pn **00 48 24.3 +2.5**
**KBZ Khabaz** 15.52 337 Pn Pn **00 48 41.3 +2.4**
0.2nm,0.3s,baz=114,slow=4.5,SNR=13
12nm,1.0s
**KBZ Khabaz** 15.52 337⇓ *e*P Pn **00 48 40.0 +1.1**
**SHA1 Shidzhatmaz** 15.61 336 *de*P Pn **00 48 40.9 +0.6**
**BNN Bunyan** 15.69 310 Pn Pn **00 48 40.7 -0.6**
**KVAR Kislovodsk Arr** 15.79 337 Pn P **00 48 47.6 +1.3**
baz=253,slow=20
**KIV Kislovodsk** 15.79 337 Pn Pn **00 48 43.4 +0.8**
KIV IAmb IAmb 00 48 49.8
comp=Z,25nm,0.8s
**KIV Kislovodsk** 15.79 337 ⇑P P **00 48 46.3 +0.1**
**KIV Kislovodsk** 15.79 337 *e*P Pn **00 48 44.8 +2.3**
KIV pmax pmax
comp=Z,29nm,1.1s
KIV MLR MLR
comp=Z,24nm,13.0s
**LABN Labinsk** 17.11 333 *e*P Pn **00 48 56.7 -2.4**
LABN *e*S Sn **00 52 08.8 +0.1**
LABN pmax pmax
comp=Z,10.0nm,0.6s
**SIMJ Simiganj** 17.11 54 Pn Pn **00 48 58.3 -1.1**
**CHGR Chuyangaron** 17.22 54 Pn Pn **00 48 59.2 -1.4**
**CHGR Chuyangaron** 17.22 54 P Pn **00 48 59.3 -1.4**
CHGR pmax pmax
comp=Z,11nm,0.7s
**BR131 Keskin Array S** 17.61 309 *de*P Pn **00 49 06.3 +0.7**
**BRTR Keskin Array B** 17.61 309 P Pn **00 49 07.0 +1.4**
comp=Z,1.4nm,0.8s,baz=137,slow=11,SNR=8.2
**BRTR Keskin Array B** 17.61 309 *ce*P Pn **00 49 07.4 +1.8**
BRTR pmax pmax
comp=Z,1.0nm,0.8s
**ERBR Yeremizino-Bor** 18.10 335 *e*P Pn **00 49 12.8 +1.4**
ERBR pmax pmax
comp=Z,13nm,0.6s
**GAR Garm** 18.18 54 P Pn **00 49 10.7 -2.0**
**ANN Anapa** 18.64 328 *e*P Pn **00 49 19.7 +1.7**
ANN *e*S S **00 52 53.5 +4.3**
ANN pmax pmax
comp=Z,21nm,0.9s
**BTK Batken** 18.99 52 P P **00 49 20.4 -1.3**
**BTK Batken** 18.99 52 P P **00 49 20.4 -1.3**
BTK pmax pmax
comp=Z,7.0nm,0.7s
**NIL Nilore** 19.06 72 P P **00 49 21.7 -0.7**
**NIL Nilore** 19.06 72 P P **00 49 23.3 +0.9**
**NIL Nilore** 19.06 72 P P **00 49 21.7 -0.7**
NIL pmax pmax
comp=Z,21nm,0.5s
**DRK Karamyk** 19.43 54 P P **00 49 27.0 +0.3**
DRK IAmb IAmb 00 49 35.4
comp=Z,11nm,0.6s
**DRK Karamyk** 19.43 54 P P **00 49 27.0 +0.3**
DRK pmax pmax
comp=Z,11nm,0.6s
**TRKS Terek-Say** 19.91 48 P P **00 49 32.7 +0.9**
**KKAR Karatay Array** 20.36 44 P P **00 49 35.9 -0.6**
**KKAR Karatay Array** 20.36 44 P P **00 49 35.9 -0.6**
KKAR pmax pmax
comp=Z,5.0nm,0.8s
**ARK Arkit** 20.58 49 P P **00 49 41.0 +2.0**
**ABKAR Akbulak array** 20.59 16 P P **00 49 38.4 -0.6**
**THN Thein Dam** 21.06 76 *e*P P **00 49 44.7 +0.6**
THN IAmb IAmb 00 49 53.1
comp=Z,16nm,0.7s
**AKTO Aktyubinsk** 21.30 12 P P **00 49 47.6 +1.0**

comp=Z,12nm,0.6s,baz=198,slow=9.0,SNR=46
AKTO LR LR 01 00 20.6
comp=Z,67nm,18.2s,baz=45,slow=43
comp=Z,12nm,0.6s
**DHRM DHARAMSHALA** 21.55 77 *e*P P **00 49 50.3 +0.7**
DHRM IAmb IAmb 00 49 54.2
comp=Z,57nm,0.6s
**KUDL Kundal** 22.07 88 *e*P P **00 49 55.2 +0.3**
KUDL IAmb IAmb 00 49 59.8
comp=Z,7.6nm,0.8s
**SMLA Simla** 22.32 80 *e*P P **00 49 57.6 0.0**
SMLA IAmb IAmb 00 50 01.2
comp=Z,22nm,0.6s
**KSH Kashi** 22.46 58 P P **00 49 55.8 -3.4**
KSH pP pP 00 49 58.8 -6.4
KSH pmax pmax
comp=Z,12nm,0.5s
**AAK Ala-Archa** 22.63 49 LR LR 01 00 18.7
comp=Z,67nm,18.8s,baz=262,slow=40
**AAK Ala-Archa** 22.63 49⇑ *e*P P **00 50 00.7 -0.4**
AAK pmax pmax
comp=Z,5.0nm,1.0s
**VRH Novokhopyorsk** 22.64 344 *e*P P **00 50 00.1 -0.7**
VRH *i* S S **00 54 04.8 -2.8**
VRH pmax pmax
comp=Z,33nm,0.7s
VRH smax smax
comp=E,55nm,1.6s
**BELG Belogornoye** 22.82 354 LR LR 01 02 08.2
comp=E,56nm,18.6s,baz=217,slow=45
**BELG Belogornoye** 22.82 354 *di*P P **00 50 01.7 -1.1**
BELG pmax pmax
comp=Z,5.0nm,0.9s
**NRN Naryn** 23.14 53 P P **00 50 05.4 -1.2**
NRN IAmb IAmb 00 50 09.7
comp=Z,15nm,1.1s
**NRN Naryn** 23.14 53 P P **00 50 05.4 -1.2**
NRN pmax pmax
comp=Z,15nm,1.1s
**VSR Storozhevoye** 23.33 340 *e*P P **00 50 05.3 -2.6**
VSR pmax pmax
comp=Z,20nm,1.0s
**ALN Alexandroupoli** 23.37 305 P P **00 50 07.7 -0.8**
ALN IAmb IAmb 00 50 33.7
comp=Z,13nm,1.4s
**ALN Alexandroupoli** 23.37 305 P P **00 50 07.7 -0.8**
ALN pmax pmax
comp=Z,13nm,1.4s
**BOOM Boomskoye usch** 23.53 51 P P **00 50 10.4 +0.2**
**BOOM Boomskoye usch** 23.53 51 P P **00 50 10.4 +0.2**
BOOM pmax pmax
comp=Z,109nm,1.4s
**TPGR Topolog** 23.57 316 ⇑P P **00 50 10.9 +0.5**
**VORR Voronezh** 23.72 341 *e*P P **00 50 11.9 +0.1**
VORR pmax pmax
comp=Z,40nm,0.4s
**HNLY HANLEY** 23.81 76 *e*P P **00 50 14.1 +0.6**
**FURI Furi** 23.86 212 LR LR 01 00 19.7
comp=Z,35nm,18.7s,baz=172,slow=39
**CFR Carcaliu** 23.91 317 ⇓P P **00 50 13.8 +0.1**
**CFR Carcaliu** 23.91 317 P P **00 50 13.7 +0.1**
**MILM Milestii Mici** 24.50 321 ⇑P P **00 50 18.9 -0.2**
**MILM Milestii Mici** 24.50 321 *c* *i*P P **00 50 18.7 -0.4**
MILM pmax pmax
comp=Z,9.0nm,0.6s
**KIS Kishinev** 24.55 321⇑ *i*P P **00 50 18.7 -0.8**
comp=Z,9.0nm,0.6s
**LPSR Galich'ya Gora** 24.63 342 *e*P P **00 50 19.5 -0.7**
LPSR pmax pmax
comp=Z,40nm,0.8s
**SPBR Spulber** 25.04 317 ⇓P P **00 50 25.3 +1.3**
**VRI Vrincioaia** 25.11 317 ⇑P P **00 50 25.2 +0.4**
**VRI Vrincioaia** 25.11 317 P P **00 50 25.1 +0.4**
**NEHR Nehoiu** 25.15 315 ⇑P P **00 50 26.4 +1.4**
**PLOR Plostina** 25.15 317 ⇑P P **00 50 26.4 +1.3**
**PLOR Plostina** 25.15 317 P P **00 50 26.4 +1.3**
**MLR Muntele Rosu** 25.39 315 P P **00 50 27.7 +0.3**
MLR IAmb IAmb 00 50 35.6
comp=Z,9.1nm,0.8s
**MLR Muntele Rosu** 25.39 315 ⇑P P **00 50 28.9 +1.5**
**MLR Muntele Rosu** 25.39 315 P P **00 50 27.7 +0.3**
MLR pmax pmax
comp=Z,9.0nm,0.8s
**COVR Voineasa-Covas** 25.41 316 ⇓P P **00 50 28.4 +1.0**
**SORM Soroca** 25.49 323 ⇑P P **00 50 27.8 -0.3**
**SORM Soroca** 25.49 323 P P **00 50 27.7 -0.3**
**TESR Tescani** 25.50 318 ⇑P P **00 50 29.0 +0.8**
**ARXS Arharly** 25.51 48 *e*P P **00 50 28.8 +0.4**
**ONER Baraj Valea Uz** 25.55 317 ⇑P P **00 50 29.1 +0.5**
**TURR Turia** 25.63 317 ⇓P P **00 50 30.6 +1.1**
**OZUR** 25.79 316 ⇑P P **00 50 30.9 0.0**
**BOSR Bodos** 25.86 316 ⇑P P **00 50 32.8 +1.3**
**DOPR Dopca** 25.97 316 ⇓P P **00 50 33.3 +0.9**
**ARR Arges** 26.15 314 ⇑P P **00 50 35.3 +1.2**
**DRBR Darabani** 26.47 321 ⇓P P **00 50 38.7 +1.8**
**FNA Florina** 26.71 303 P P **00 50 39.5 +0.2**
**FNA Florina** 26.71 303 P P **00 50 39.5 +0.2**
FNA pmax pmax
comp=Z,3.0nm,0.7s
**AKASG Malin Array Be** 26.73 328 P P **00 50 38.8 -0.5**
comp=Z,1.8nm,0.3s,baz=135,slow=9.1,SNR=26
AKASG LR LR 01 03 24.0
comp=Z,18nm,18.2s,baz=132,slow=41
comp=Z,1.8nm,0.3s
**AKASG Malin Array Be** 26.73 328 *ce*P P **00 50 38.5 -0.7**
AKASG pmax pmax
comp=Z,2.0nm,0.3s
**AKBB Malin Array Si** 26.73 328 *di*P P **00 50 38.8 -0.4**
**KIEV Kiev** 26.73 328 P P **00 50 38.2 -1.0**
KIEV IAmb IAmb 00 50 43.7
comp=Z,5.4nm,0.8s
**KIEV Kiev** 26.73 328 P P **00 50 38.3 -1.0**
KIEV pmax pmax
comp=Z,5.0nm,0.8s
**BURAR Bucovina Array** 26.92 319 ⇑P P **00 50 43.0 +1.8**
**BURAR Bucovina Array** 26.92 319 P P **00 50 42.9 +1.8**
**BRVK Borovoye** 27.15 25 P P **00 50 42.8 -0.2**
**BRVK Borovoye** 27.15 25⇓ *e*P P **00 50 40.0 -3.0**
BRVK pmax pmax
comp=Z,2.0nm,0.8s
**BVAR Borovoye Array** 27.17 26 P P **00 50 44.4 +1.3**
comp=Z,4.1nm,0.5s,baz=225,slow=7.8,SNR=19
BVAR PcP **PcP** **00 54 03.5 +0.3**
comp=Z,0.4nm,0.3s,baz=203,slow=3.1,SNR=4.3
comp=Z,4.1nm,0.5s
**ARU Arti** 27.19 9 P P **00 50 43.6 +0.2**
ARU IAmb IAmb 00 51 05.3
comp=Z,5.1nm,0.7s
**ARU Arti** 27.19 9 LR LR 01 04 11.3
comp=Z,39nm,19.6s,baz=225,slow=42
**ARU Arti** 27.19 9 *d* *i*P P **00 50 43.5 +0.2**
ARU 00 51 25.6
ARU S S **00 55 25.4 +4.5**
ARU SS **SnSn** **00 56 30.7 +1.8**
ARU pmax pmax
comp=Z,3.0nm,0.9s
**GZR Gura Zlata** 27.33 313 ⇑P P **00 50 44.7 -0.1**
**OBN Obninsk** 27.51 342 *de*P P **00 50 46.0 -0.1**
OBN *e* 00 51 30.6
OBN pmax pmax
comp=Z,6.0nm,0.9s
OBN MLR MLR
comp=Z,25nm,14.0s
**DRGR** 27.99 315 ⇑P P **00 50 51.4 +0.7**
**DRGR** 27.99 315 P P **00 50 51.4 +0.7**
**PUK Puka** 28.12 305 P P **00 50 52.0 +0.1**
PUK IAmb IAmb 00 51 02.5
comp=Z,11nm,1.4s
**SIRR Siria** 28.41 314 ⇑P P **00 50 55.2 +0.8**
**KIRV Kirov** 28.90 358 LR LR 01 05 46.5
comp=Z,44nm,18.9s,baz=216,slow=43
**KIRV Kirov** 28.90 358 *c* *i*P P **00 50 58.9 +0.4**
**KURBB Kurchatov Arra** 29.19 37 P P **00 51 02.8 +1.5**
comp=Z,4.3nm,0.8s,baz=236,slow=9.2,SNR=39
comp=Z,4.3nm,0.8s
**MAKZ Makanchi** 29.25 46 P P **00 51 01.7 -0.2**
MAKZ IAmb IAmb 00 51 03.7
comp=Z,3.0nm,0.8s
**MAKZ Makanchi** 29.25 46 P P **00 51 01.7 -0.2**
MAKZ pmax pmax
comp=Z,3.0nm,0.8s
**KOLS Kolonicke sedl** 29.28 319 *e*P P **00 51 03.4 +1.3**
KOLS pmax pmax
comp=Z,4.0nm,0.7s
**KOLS Kolonicke sedl** 29.28 319 *e*P P **00 51 03.4 +1.3**

**KURK Kurchatov** 29.29 37 P P **00 51 02.1 0.0**
KURK IAmb IAmb 00 51 04.6
comp=Z,7.4nm,0.9s
**KURK Kurchatov** 29.29 37 P P **00 51 03.8 +1.7**
**KURK Kurchatov** 29.29 37 *ce*P P **00 51 03.6 +1.5**
KURK pmax pmax
comp=Z,11nm,1.3s
**KWP Kalwaria Pacla** 29.40 321 P P **00 51 02.5 -0.6**
KWP IAmb IAmb 00 51 09.8
comp=Z,7.0nm,1.0s
**KWP Kalwaria Pacla** 29.40 321 P P **00 51 02.5 -0.6**
KWP pmax pmax
comp=Z,7.0nm,1.0s
**MK31 Makanchi Array** 29.44 46⇑ *e*P P **00 51 01.3 -2.3**
**MKAR Makanchi Array** 29.44 46 P P **00 51 04.3 +0.8**
comp=Z,1.9nm,0.8s,baz=231,slow=7.4,SNR=9.2
comp=Z,1.9nm,0.8s
**MKAR Makanchi Array** 29.44 46 *ce*P P **00 51 04.6 +1.0**
MKAR pmax pmax
comp=Z,2.0nm,0.8s
**MNK Minsk** 29.99 332 *i* P P **00 51 05.3 -3.0**
comp=E,7.0nm,0.7s
MNK *i* P P **00 51 05.3 -3.0**
comp=N,8.0nm,0.8s
MNK *i* P P **00 51 05.3 -3.0**
comp=Z,5.0nm,0.6s,baz=136
MNK *i* PP PnPn **00 52 03.2 -1.8**
MNK *i* S S **00 56 03.1 -1.9**
MNK *i* LQ LQ 01 00 46.0
MNK *i* LR LR 01 03 02.3
**MNK Minsk** 29.99 332 *i* P P **00 51 05.3 -3.0**
MNK *i* 00 52 03.2
MNK *i* S S **00 56 03.1 -1.9**
MNK pmax pmax
comp=N,8.0nm,0.8s
MNK pmax pmax
comp=Z,5.0nm,0.6s
MNK pmax pmax
comp=E,7.0nm,0.7s
**CUC Castrocucco** 30.71 299 P P **00 51 14.9 0.0**
CUC IAmb IAmb 00 51 26.5
comp=Z,2.8nm,0.8s
**LANS Liptovska Anna** 31.01 318 *e*P P **00 51 18.9 +1.5**
LANS pmax pmax
comp=Z,2.0nm,0.9s
**LANS Liptovska Anna** 31.01 318 *e*P P **00 51 18.9 +1.5**
**OJC Ojcow** 31.32 320 P P **00 51 19.3 -0.8**
OJC IAmb IAmb 00 51 25.9
comp=Z,3.4nm,0.7s
**OJC Ojcow** 31.32 320 P P **00 51 19.3 -0.8**
OJC pmax pmax
comp=Z,3.0nm,0.7s
**PABE Paberze** 32.31 331 P P **00 51 28.4 -0.4**
**MORC Moravsky Berou** 32.41 318 P P **00 51 29.8 0.0**
MORC IAmb IAmb 00 51 30.8
comp=Z,2.3nm,0.7s
**MORC Moravsky Berou** 32.41 318 P P **00 51 29.8 0.0**
MORC pmax pmax
comp=Z,2.0nm,0.7s
**CAMP Campotosto** 32.92 303 P P **00 51 34.2 -0.2**
CAMP IAmb IAmb 00 51 43.0
comp=Z,4.3nm,0.9s
**NRCA Norcia** 33.19 304 P P **00 51 36.8 +0.1**
NRCA IAmb IAmb 00 51 47.7
comp=Z,3.2nm,0.8s
**FDMO Fiordimonte** 33.24 304 P P **00 51 37.3 +0.2**
FDMO IAmb IAmb 00 51 42.3
comp=Z,2.8nm,0.8s
**DPC Dobruska-Polom** 33.37 318 *e*P P **00 51 38.7 +0.6**
**DPC Dobruska-Polom** 33.37 318 *e*P P **00 51 38.7 +0.6**
**KMBO Kilima Mbogo** 33.48 206 LR LR 01 05 32.2
comp=Z,69nm,18.3s,baz=93,slow=37
**CHVC Chvalec** 33.62 318 *e*P P **00 51 39.8 -0.5**
**CHVC Chvalec** 33.62 318 *e*P P **00 51 39.8 -0.5**
**MOA Molln** 33.69 313 *e*P P **00 51 40.6 -0.2**
comp=Z,2.4nm,0.7s
**DGZ Jazzator, Alta** 33.76 44⇑ *e*P P **00 51 41.5 -0.1**
DGZ pmax pmax
comp=Z,2.0nm,0.9s
**BIOA Bad Ischl, Aus** 34.04 312 *e*P P **00 51 44.0 +0.1**
comp=Z,2.9nm,0.6s
**ZALV Zalesovo Beam** 34.25 35 P P **00 51 46.4 +0.8**
comp=Z,4.4nm,0.3s,baz=248,slow=8.7,SNR=41
comp=Z,4.4nm,0.3s
**ZALV Zalesovo Beam** 34.25 35 *i* P P **00 51 46.4 +0.8**
ZALV pmax pmax
comp=Z,5.0nm,0.3s
**ZVC Zvikov** 34.28 316 *e*P P **00 51 46.4 +0.4**
**KHC Kasperske Hory** 34.55 315 *e*P P **00 51 48.5 +0.2**
KHC *e*pP **pP** **00 51 52.3 -2.5**
**KHC Kasperske Hory** 34.55 315 *e*P P **00 51 48.5 +0.2**
KHC *e* 00 51 52.3
**LESA Schwarzleotal** 34.58 312 *e*P P **00 51 48.6 -0.1**
comp=Z,2.7nm,0.7s
**ZCCA Zocca** 35.00 306 P P **00 51 53.2 +0.9**
**WTTA Wattenberg** 35.21 311 *e*P P **00 51 54.1 -0.2**
comp=Z,3.3nm,0.5s,SNR=6.0
**WATA Walderalm** 35.27 311 *i* P P **00 51 54.0 -0.7**
comp=Z,2.1nm,0.5s
**SQTA Sankt Quirin** 35.48 311 *i* P P **00 51 56.1 -0.4**
comp=Z,5.1nm,0.4s,SNR=13
**MOTA Moosalm** 35.58 311 *e*P P **00 51 56.8 -0.6**
comp=Z,3.1nm,0.4s
**VSL Villasalto** 35.61 297 P P **00 51 57.6 0.0**
VSL IAmb IAmb 00 52 11.1
comp=Z,7.0nm,1.2s
**CLL Collm** 35.68 318 *e*P P **00 51 58.0 0.0**
**CLL Collm** 35.68 318 *e*P P **00 51 58.0 0.0**
**FETA Feichten** 35.75 310 *i* P P **00 51 58.8 -0.1**
comp=Z,3.6nm,0.8s,SNR=6.4
**RETA Reutte** 35.84 311 *e*P P **00 51 58.8 -0.8**
comp=Z,1.4nm,0.3s
**FINES FINESS Array B** 35.85 340 P P **00 51 58.6 -0.7**
comp=Z,1.0nm,0.2s,baz=141,slow=8.9,SNR=18
comp=Z,1.0nm,0.2s
**FUORN Ofenpass-Fuorn** 35.96 310 P P **00 52 01.0 +0.2**
**MSSA Maissana** 36.02 306 P P **00 52 00.3 -0.8**
MSSA IAmb IAmb 00 52 24.3
comp=Z,6.3nm,0.9s
**SHL Shillong** 36.04 87 P P **00 51 59.5 -2.1**
**SHL Shillong** 36.04 87 P P **00 51 59.5 -2.1**
SHL pmax pmax
comp=Z,10.0nm,0.9s
**BSD Bornholm Skovb** 36.31 325 *e*P P **00 52 02.9 -0.4**
**DAVA Damuels** 36.38 311 *e*P P **00 52 03.5 -0.7**
**BJUU Bjuv** 37.71 325 *e*P P **00 52 15.4 +0.2**
**SENIN Lac Senin/Sane** 37.91 308 P P **00 52 16.7 -0.7**
**BNI Bardonecchia** 38.13 306 P P **00 52 18.5 -0.7**
BNI IAmb IAmb 00 52 39.1
comp=Z,6.4nm,1.1s
**BNI Bardonecchia** 38.13 306 P P **00 52 18.5 -0.7**
BNI pmax pmax
comp=Z,6.0nm,1.2s
**FABU Falkenberg** 38.30 327 *e*P P **00 52 20.5 +0.3**
**BORU Boraas** 38.59 327 *e*P P **00 52 22.5 -0.1**
**HFS Hagfors** 39.49 331 P P **00 52 29.6 -0.5**
comp=Z,2.8nm,0.2s,baz=139,slow=9.0,SNR=77
comp=Z,2.8nm,0.2s
**KNGR Kungurtug, Tuv** 40.20 45⇓ *e*P P **00 52 35.2 -1.1**
KNGR pmax pmax
comp=Z,4.0nm,1.0s
**NB2 NORSAR Subarra** 41.01 331 P P **00 52 41.4 -1.4**
comp=Z,0.8nm,0.5s,baz=121,slow=8.6
**NOA NORSAR Array B** 41.01 331 P P **00 52 41.8 -0.9**
comp=Z,0.5nm,0.4s,baz=128,slow=8.4,SNR=10
NOA LR LR 01 11 21.8
comp=Z,19nm,19.9s,baz=185,slow=39
comp=Z,0.5nm,0.4s
**KONO Kongsberg** 41.02 329 P P **00 52 41.8 -1.0**
**KONO Kongsberg** 41.02 329 P P **00 52 41.8 -1.0**
KONO pmax pmax
comp=Z,15nm,1.3s
**CEST Esterri de Car** 41.85 302 P P **00 52 49.5 -0.6**
CEST IAmb IAmb 00 53 02.6
comp=Z,4.1nm,0.8s
**KEV Kevo** 42.42 348 P P **00 52 53.5 -0.6**
**KEV Kevo** 42.42 348 P P **00 52 53.5 -0.6**
KEV pmax pmax
comp=Z,18nm,1.2s
**ARCES ARCESS Array B** 42.52 347 P P **00 52 54.8 -0.2**
comp=Z,0.9nm,0.5s,baz=147,slow=7.3,SNR=11
comp=Z,0.9nm,0.5s
**PZH PanZhiHua** 44.31 81 P P **00 53 10.8 +0.7**
PZH pmax pmax
comp=Z,9.0nm,0.8s

PZH pmax pmax
comp=Z,110nm,4.0s
**CMAR Chiang Mai Arr 44.62 93** P **P 00 53 12.4 -0.1**
comp=Z,0.9nm,0.3s,baz=287,slow=9.3,SNR=4.2
comp=Z,0.9nm,0.3s
**CMAR Chiang Mai Arr 44.62 93** *ce*P **P 00 53 13.6 +1.1**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**KMI Kunming 45.57 83** ⇓P **P 00 53 20.8 +0.5**
KMI pmax pmax
comp=Z,13nm,0.7s
**SONM Songino Array 45.57 51** P **P 00 53 21.1 +1.2**
comp=Z,1.3nm,0.8s,baz=270,slow=9.1,SNR=6.2
comp=Z,1.3nm,0.8s
**ESDC Sonseca Array 45.90 298** P **P 00 53 22.9 +0.4**
comp=Z,0.3nm,0.5s,baz=75,slow=7.8,SNR=7.5
comp=Z,0.3nm,0.5s
**ULN Ulaanbaatar 46.02 51**⇑ *e*P **P 00 53 24.0 +0.5**
ULN pmax pmax
comp=Z,7.0nm,2.5s
**EKA Eskdalemuir Ar 46.09 320** P **P 00 53 23.2 -0.6**
comp=Z,1.6nm,0.3s,baz=102,slow=8.3,SNR=40
comp=Z,1.6nm,0.3s
**ESK Eskdalemuir 46.12 320** P **P 00 53 23.1 -0.8**
**ESK Eskdalemuir 46.12 320** P **P 00 53 23.2 -0.8**
ESK pmax pmax
comp=Z,21nm,1.4s
**DSB Dublin 47.66 317** P **P 00 53 35.0 -1.1**
**TORD Torodi Ar. Bea 48.67 261** P **P 00 53 44.5 +0.1**
comp=Z,3.0nm,0.4s,baz=56,slow=8.5,SNR=22
comp=Z,3.0nm,0.4s
**HHC Hu-ho-hao-te 49.54 60** *e*P **P 00 53 50.0 -0.8**
HHC PP **PP 00 55 41.8 -3.2**
HHC pmax pmax
comp=Z,9.0nm,0.6s
HHC pmax pmax
comp=Z,66nm,4.5s
**SPITS Spitsbergen Ar 50.98 351** P **P 00 54 01.9 +0.8**
comp=Z,3.1nm,0.5s,baz=136,slow=9.8,SNR=9.2
comp=Z,3.1nm,0.5s
**LYN LuoYang 51.32 68** *e*P **P 00 54 05.5 +1.3**
LYN pmax pmax
comp=Z,30nm,0.5s
LYN pmax pmax
comp=Z,180nm,5.4s
**TIA Tai'an 54.66 65** P **P 00 54 29.5 +0.7**
TIA pmax pmax
comp=Z,7.0nm,0.6s
**DBIC Dimbokro 57.46 258** P **P 00 54 48.2 -0.9**
comp=Z,1.6nm,0.4s,baz=54,slow=5.5,SNR=1.4
comp=Z,1.6nm,0.4s
**TSUM Tsumeb 58.51 218** LR LR 01 21 16.2
comp=Z,100nm,18.6s,baz=152,slow=37
**KLR Kul'dur 62.14 47** LR LR 01 25 11.2
comp=Z,42nm,18.1s,baz=179,slow=39
**KSRS Korea Array 62.67 61** P **P 00 55 27.1 +2.5**
comp=Z,0.6nm,0.3s,baz=274,slow=6.9,SNR=4.6
comp=Z,0.6nm,0.3s
**SEY Seymchan 68.77 29** *ce*P **P 00 56 05.3 +1.8**
SEY pmax pmax
comp=Z,7.0nm,1.7s
**ILAR Eielson Array 84.76 8** P **P 00 57 33.7 0.0**
comp=Z,0.5nm,0.8s,baz=316,slow=2.5,SNR=4.7
comp=Z,0.5nm,0.8s

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*IDC **30** 00:52:19.2±1.9, 17°.74S×178°.37W, h540km±22km, mb2.8/5, mbtmp3.8/6, Error ellipse: s-maj=47.2km s-min=21.3km az=153.0*

**ISC 30 00:52:19.6±1.0, 17°.7S±0°.3×178°.5W±0°.2, h547km, n6, σ0s43/6, mb3.2/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.34** | **269** | P | **P** | **00 53 36.3** | **-0.4** |
| | 41nm,0.7s,baz=94,slow=5.5,SNR=26 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.63** | **259** | P | **P** | **00 59 44.2** | **+0.1** |
| | 0.2nm,0.6s,baz=95,slow=7.4,SNR=4.6 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **44.81** | **254** | P | **P** | **00 59 46.0** | **+0.5** |
| | 2.3nm,0.5s,baz=89,slow=8.0,SNR=29 | | | | | | |
| | 2.3nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.36** | **180** | P | **P** | **01 02 50.0** | **-0.2** |
| | 1.0nm,1.0s,baz=239,slow=1.8,SNR=1.9 | | | | | | |
| | 1.0nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.29** | **44** | P | **P** | **01 03 28.9** | **-0.2** |
| | 0.5nm,0.7s,baz=222,slow=9.4,SNR=5.9 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.91** | **58** | P | **P** | **01 04 02.6** | **+0.3** |
| | 0.4nm,0.7s,baz=214,slow=5.4,SNR=5.3 | | | | | | |
| | 0.4nm,0.7s | | | | | | |

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**IDC 30 01:05:58.1±3.3, 10°.34S×118°.91E, h0km, mb3.7/2, mbtmp3.3/4, ML3.0/2, Error ellipse: s-maj=184.8km s-min=28.7km az=52.0, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **17.68** | **124** | P | Pn | 01 10 05.3 | -0.7 |
| | baz=294,slow=13,SNR=1.0 | | | | | | |
| | 0.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **19.50** | **135** | P | Pn | 01 10 27.7 | -0.5 |
| | 0.1nm,0.3s,baz=324,slow=14,SNR=2.1 | | | | | | |
| | 0.4nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **58.97** | **350** | P | P | 01 15 59.8 | +0.3 |
| | 0.5nm,0.5s,baz=166,slow=7.6,SNR=3.6 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.60** | **333** | P | P | 01 16 43.4 | -0.4 |
| | 0.7nm,0.8s,baz=147,slow=6.7,SNR=2.8 | | | | | | |
| | 0.7nm,0.8s | | | | | | |

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*IDC **30** 01:10:01.6±2.2, 34°.38N×46°.29E, h0km, mb3.6/7, mbtmp3.6/9, ML3.0/2, MS2.7/3, Error ellipse: s-maj=47.4km s-min=19.8km az=160.0*

*TEH **30** 01:10:03.3, 34°.65N×46°.31E, h8km±20km, ML3.8*

*ISN **30** 01:10:03.4±0.9, 34°.68N×46°.32E, h16km±5km, ML3.9*

**ISC 30 01:10:03.2±1.3, 34°.64N±0°.03×46°.30E±0°.03, h3km±9km, n82, σ1s51/83, mb3.5/7, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.09** | **53** | Pg | **Pg** | **01 10 05.6** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **0.39** | **144** | Pg | **Pg** | **01 10 11.4** | **+0.7** |
| **KGS1** | **Ghasr-e-Shirin** | **0.60** | **257** | Pg | **Pg** | **01 10 15.5** | **+0.8** |
| **GLG1** | **Gilan-e-Gharb** | **0.62** | **211** | Pg | **Pg** | **01 10 15.5** | **+0.4** |
| **KCHF** | **Cheshme Sefid,** | **0.72** | **121** | Pg | **Pg** | **01 10 17.0** | **0.0** |
| KCHF | | | | Sg | **Sb** | **01 10 28.3** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **184** | Pg | **Pg** | **01 10 23.0** | **+0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.12** | **79** | Pg | **Pg** | **01 10 24.7** | **+0.1** |
| **IBZA** | **Bozab** | **1.30** | **97** | Pg | **Pn** | **01 10 27.4** | **-1.1** |
| **IBDR** | **Badra** | **1.56** | **191** | *e*Pg | **Pb** | **01 10 32.0** | **-0.7** |
| IBDR | | | | *e*Sg | **Sg** | **01 10 53.7** | **+0.4** |
| IBDR | | | | AML | AML | 01 10 59.3 | |
| | comp=E,4μm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 01 11 01.0 | |
| | comp=N,2μm,0.7s | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.64** | **336** | Pg | **Pb** | **01 10 33.4** | **-0.8** |
| **IKRK** | **Kirkuk** | **1.77** | **296** | *e*Pn | **Pn** | **01 10 35.0** | **+0.2** |
| IKRK | | | | *e*Sn | **Sb** | **01 10 59.0** | **0.0** |
| IKRK | | | | AML | AML | 01 11 08.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 01 11 08.1 | |
| | comp=N,3μm,0.4s | | | | | | |
| **IDOB** | **Doab** | **1.78** | **118** | Pg | **Pb** | **01 10 36.6** | **+0.1** |
| **HSAM** | **Samen** | **1.95** | **102** | Pn | **Pb** | **01 10 39.1** | **-0.5** |
| **MAHB** | **Mahabad** | **2.17** | **347** | Pn | **Pb** | **01 10 42.1** | **-1.1** |
| **BDRS** | **Dareh Seyedi** | **2.25** | **107** | Pn | **Pb** | **01 10 43.1** | **-1.5** |
| **IHSH** | **Hashtrud** | **2.77** | **16** | Pn | **Pb** | **01 10 51.2** | **-2.3** |
| **QABG** | **Abgarm-Qazvin** | **2.89** | **68** | Pn | **Pn** | **01 10 52.4** | **+2.0** |
| **RAFI** | **Al-Rafai** | **2.92** | **183** | *e*Pn | **Pn** | **01 10 52.0** | **+1.5** |
| RAFI | | | | *e*Sn | **Sn** | **01 11 27.0** | **+1.0** |
| RAFI | | | | AML | AML | 01 11 52.9 | |
| | comp=E,346nm,0.6s | | | | | | |
| RAFI | | | | AML | AML | 01 12 04.8 | |
| | comp=N,312nm,0.6s | | | | | | |
| **IAZR** | **Azarshahr** | **3.04** | **355** | Pn | **Pn** | **01 10 54.5** | **+2.1** |
| **ISRB** | **Sarab** | **3.36** | **19** | Pn | **Pn** | **01 10 58.5** | **+1.7** |
| **CUKT** | **Cukurca** | **3.39** | **321** | *e*P | **Pn** | **01 10 58.3** | **+1.2** |
| **ITBZ** | **Tabriz** | **3.58** | **358** | Pn | **Pn** | **01 11 02.0** | **+2.2** |
| **ISHB** | **Shabestar** | **3.67** | **352** | Pn | **Pn** | **01 11 02.2** | **+1.1** |
| **IHRS** | **Heris** | **3.72** | **9** | Pn | **Pn** | **01 11 04.0** | **+2.4** |
| **IQOM** | **Qom** | **3.94** | **86** | Pn | **Pn** | **01 11 06.2** | **+1.5** |
| **SIRT** | **Sirnak** | **4.23** | **313** | *e*P | **Pn** | **01 11 09.1** | **+0.5** |
| **GAS1** | **Astara - Iran** | **4.26** | **28** | Pn | **Pn** | **01 11 10.3** | **+1.3** |
| **IPIR** | **Pirpir** | **4.30** | **116** | Pn | **Pn** | **01 11 10.8** | **+1.0** |
| **QAMS** | **Qamsar** | **4.32** | **101** | Pn | **Pn** | **01 11 11.9** | **+1.9** |
| **GRMI** | **Germi** | **4.35** | **17** | Pn | **Pn** | **01 11 12.3** | **+2.0** |
| **JHBN** | **Jahan bin** | **4.37** | **122** | Pn | **Pn** | **01 11 12.4** | **+1.6** |
| **IVRN** | **Varamin** | **4.48** | **84** | Pn | **Pn** | **01 11 13.3** | **+1.3** |
| **AKDM** | **Akdamar-Van** | **4.54** | **325** | *e*P | **Pn** | **01 11 13.7** | **+0.7** |
| **ZNGN** | **Zangian** | **4.57** | **122** | Pn | **Pn** | **01 11 14.8** | **+1.3** |
| **IKLH** | **Kolahrood** | **4.58** | **105** | Pn | **Pn** | **01 11 15.2** | **+1.6** |
| **VANB** | **Van** | **4.58** | **330** | *e*P | **Pn** | **01 11 14.6** | **+1.1** |
| **IDMV** | **Damavand** | **4.79** | **77** | Pn | **Pn** | **01 11 18.3** | **+1.8** |
| **MAKU** | **Maku** | **4.88** | **345** | Pn | **Pn** | **01 11 19.4** | **+1.9** |
| **KRSH** | **Karshahi** | **4.88** | **96** | Pn | **Pn** | **01 11 19.4** | **+1.8** |
| **ISFB** | **Sefidab** | **4.92** | **92** | Pn | **Pn** | **01 11 18.9** | **+0.9** |
| **IBRJ** | **Brojen** | **4.97** | **122** | Pn | **Pn** | **01 11 20.7** | **+1.7** |
| **GURO** | **Guroymak-BITLI** | **5.19** | **320** | *e*P | **Pn** | **01 11 23.1** | **+1.2** |
| **IGAR** | **Gharneh** | **5.29** | **113** | Pn | **Pn** | **01 11 24.8** | **+1.5** |
| **IZEF** | **Zefreh** | **5.32** | **107** | Pn | **Pn** | **01 11 25.0** | **+1.3** |
| **IFIR** | **Firoozkooh** | **5.38** | **78** | Pn | **Pn** | **01 11 26.4** | **+1.7** |
| **SVAN** | **Silvan-Diyarba** | **5.40** | **312** | *e*P | **Pn** | **01 11 24.5** | **-0.1** |
| **MAZI** | **Mazidag** | **5.51** | **302** | *e*P | **Pn** | **01 11 24.2** | **-2.0** |
| **ILAS** | **Lasjerd** | **5.52** | **80** | Pn | **Pn** | **01 11 28.0** | **+1.5** |
| **AGRB** | **Hanur-Agry** | **5.58** | **333** | *e*P | **Pn** | **01 11 30.7** | **+3.4** |
| **GNI** | **Garni** | **5.63** | **348** | Pg | **Pg** | **01 11 50.2** | **-1.0** |
| **GNI** | **Garni** | **5.63** | **348** | LR | LR | 01 13 33.1 | |
| | comp=N,31nm,18.5s,baz=172,slow=36 | | | | | | |
| **DYBB** | **Diyarbakir** | **5.97** | **305** | *e*P | **Pn** | **01 11 31.9** | **-0.6** |
| **BNGB** | **Bingl** | **6.25** | **316** | *e*P | **Pn** | **01 11 36.7** | **+0.2** |
| **ANAR** | **Anarak** | **6.35** | **101** | Pn | **Pn** | **01 11 38.5** | **+0.7** |
| **SVRC** | **Sivrice-ELAZID** | **6.75** | **306** | *e*P | **Pn** | **01 11 43.2** | **-0.1** |
| **PTK** | **Pertek** | **6.98** | **309** | *e*P | **Pn** | **01 11 46.1** | **-0.3** |
| **ASF** | **Jabal al Asfar** | **8.24** | **255** | P | **Pn** | **01 12 04.0** | **+0.4** |
| **TPRV** | **Parvadeh(Tabas** | **8.79** | **98** | Pn | **Pn** | **01 12 13.1** | **+1.8** |
| **TKDS** | **Koohdasht(Taba** | **9.03** | **93** | Pn | **Pn** | **01 12 16.1** | **+1.5** |
| **MMAI** | **Mount Meron Ar** | **9.21** | **263** | Pn | **Pn** | **01 12 16.8** | **-0.1** |
| | comp=N,0.5nm,0.3s,baz=81,slow=19,SNR=3.0 | | | | | | |
| MMAI | | | | Lg | Lg | 01 14 54.6 | |
| | comp=N,0.8nm,0.3s,baz=78,slow=27,SNR=2.5 | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | |
| **KBZ** | **Khabaz** | **9.45** | **345** | LR | LR | 01 16 14.9 | |
| | comp=N,36nm,19.9s,baz=122,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **11.29** | **300** | Pn | **Pn** | **01 12 48.2** | **+2.6** |
| | baz=118,slow=18,SNR=13 | | | | | | |
| | comp=N,1.5nm,0.8s | | | | | | |
| **SHME** | **Shamm** | **12.06** | **133** | Pn | **Pn** | **01 12 54.3** | **-1.7** |
| **MSFE** | **Esma-Masafi** | **12.59** | **135** | Pn | **Pn** | **01 13 01.0** | **-2.2** |
| **NAZ** | **Nazwa, Dubai** | **12.59** | **137** | Pn | **Pn** | **01 13 02.6** | **-0.6** |
| **ASUD** | **Al Ashush, Dub** | **12.70** | **139** | Pn | **Pn** | **01 13 03.1** | **-1.5** |
| **MDH** | **Madha** | **12.72** | **134** | Pn | **Pn** | **01 13 03.2** | **-1.7** |
| **FAQ** | **Al Faqa, Dubai** | **12.74** | **138** | Pn | **Pn** | **01 13 04.3** | **-1.0** |
| **UOSS** | **Minazif** | **12.93** | **136** | Pn | **Pn** | **01 13 05.5** | **-2.4** |
| **HATD** | **Hatta, Dubai** | **12.98** | **136** | Pn | **Pn** | **01 13 06.1** | **-2.5** |
| **ASHO** | **Ashiyiah** | **13.05** | **137** | Pn | **Pn** | **01 13 07.2** | **-2.4** |
| ASHO | | | | Sn | Sn | 01 15 21.2 | -14 |
| **ALNE** | **Al Ain** | **13.38** | **140** | Pn | **Pn** | **01 13 11.9** | **-2.1** |
| **SOHO** | **SOHO** | **13.75** | **137** | Pn | **Pn** | **01 13 15.8** | **-3.2** |
| **KOLS** | **Kolonicke sedl** | **22.78** | **316** | *e*P | **P** | **01 15 08.6** | **+1.9** |
| **BVAR** | **Borovoye Array** | **25.09** | **36** | P | **P** | **01 15 29.5** | **+0.6** |
| | comp=N,0.9nm,0.7s,baz=238,slow=8.5,SNR=5.7 | | | | | | |
| | comp=N,0.9nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **28.30** | **46** | P | **P** | **01 15 58.6** | **+0.8** |
| | comp=N,0.3nm,0.5s,baz=252,slow=9.2,SNR=3.8 | | | | | | |
| | comp=N,0.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **29.77** | **340** | P | **P** | **01 16 12.2** | **+1.5** |
| | comp=N,4.7nm,1.2s,baz=138,slow=13,SNR=3.7 | | | | | | |
| | comp=N,4.7nm,1.2s | | | | | | |
| **HFS** | **Hagfors** | **33.12** | **330** | P | **P** | **01 16 42.1** | **+1.9** |
| | comp=N,0.5nm,0.3s,baz=123,slow=10,SNR=7.1 | | | | | | |
| | comp=N,0.5nm,0.3s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.59** | **317** | P | **P** | **01 17 34.8** | **-0.7** |
| | comp=N,0.7nm,0.6s,baz=104,slow=9.0,SNR=2.5 | | | | | | |
| | comp=N,0.7nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **39.95** | **292** | P | **P** | **01 17 37.5** | **-1.3** |
| | comp=N,0.4nm,0.8s,baz=72,slow=8.1,SNR=4.5 | | | | | | |
| | comp=N,0.4nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.59** | **253** | P | **P** | **01 18 22.9** | **-1.9** |
| | comp=N,0.3nm,1.0s,baz=45,slow=7.7,SNR=1.6 | | | | | | |
| | comp=N,0.3nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.24** | **95** | LR | LR | 01 43 11.6 | |
| | comp=N,14nm,18.1s,baz=195,slow=40 | | | | | | |

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**TRN 30 01:17:36.1, 17°.85N×61°.17W, h20km, MD3.5, North-east of Barbuda., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANWB** | **Willy Bob** | **0.62** | **253** | *e*P | Pn | 01 17 50.6 | +0.8 |
| **ANBD** | **Bethesda, Anti** | **0.98** | **216** | *e*P | Pg | 01 17 56.0 | +0.8 |
| ANBD | | | | *e*S | Sg | 01 18 10.5 | +2.3 |
| **MBWH** | | **1.47** | **222** | *e*P | Pb | 01 18 03.2 | +0.3 |
| MBWH | | | | *e*S | Sg | 01 18 23.6 | -0.2 |
| **MBFL** | **Flemmings, Mon** | **1.48** | **223** | *e*P | Pb | 01 18 03.2 | +0.1 |
| **SKI** | **Saint Kitts** | **1.59** | **251** | *e*P | Pb | 01 18 04.9 | +0.1 |
| SKI | | | | *e*S | Sg | 01 18 26.3 | -1.1 |

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**NOU 30 01:30:10.8, 22°.01S×169°.24E, h0km, MLv3.8/7, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.24** | **295** | P | Pg | 01 30 33.9 | -0.7 |
| **PINNC** | **Pines Island,** | **1.77** | **250** | P | Pn | 01 30 41.9 | -0.7 |
| **YATNC** | **Mamie plateau,** | **2.18** | **268** | P | Pn | 01 30 49.2 | +0.8 |
| **LIFNC** | **LIFOU** | **2.23** | **303** | P | Pn | 01 30 48.8 | -0.2 |
| **NOUC** | **Port Laguerre** | **2.73** | **268** | P | Pn | 01 30 55.5 | -0.4 |
| **DVP** | **Devils Point** | **4.38** | **347** | P | Pn | 01 31 18.4 | -0.2 |

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*ISK **30** 01:36:05.7, 35°.89N×28°.38E, h18km, ML3.7/22*

*HLW **30** 01:36:05.5, 35°.86N×28°.50E, h26km±13km, Md4.3, Ml4.0*

*IDC **30** 01:36:06.8±3.3, 35°.94N×28°.39E, h43km±42km, mb3.3/4, mbtmp3.4/6, ML3.2/2, MS2.8/4, Error ellipse: s-maj=33.3km s-min=21.1km az=129.0*

*AFAD **30** 01:36:07.8±0.0, 35°.94N×28°.40E, h26km±1km, MW3.7*

*ATH **30** 01:36:07.7, 35°.69N×28°.49E, h28km±4km, ML3.5/11, Error ellipse: s-maj=4.2km s-min=0.8km az=21.0*

*NIC **30** 01:36:07.8, 35°.66N×28°.56E, h32km±36km, Ml3.6/12*

*THE **30** 01:36:07.2, 35°.94N×28°.30E, h2km±1km, ML3.4/7, Error ellipse: s-maj=2.4km s-min=0.6km az=115.0*

*GII **30** 01:36:09.0±0.4, 35°.530N±0°.004×28°.621E±0°.001, h20km, Md3.5/3, Mws3.6/3, confirmed*

**ISC 30 01:36:06.8±0.9, 35°.82N±0°.03×28°.49E±0°.03, h46km±13km, n159, σ1s30/208, mb3.4/4, MS2.7/3, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IZZE** | **Mula-Seydike** | **0.86** | **44** | P | **Pn** | **01 36 22.9** | **+0.4** |
| IZZE | | | | S | **Sn** | **01 36 33.0** | **-1.0** |
| **MRSB** | **Marmaris-Mugla** | **0.92** | **345** | Pg | **Pn** | **01 36 22.4** | **-1.0** |
| MRSB | | | | Sg | **Sn** | **01 36 34.7** | **-0.9** |
| **FETY** | **Fethiye** | **0.94** | **31** | Pg | **Pn** | **01 36 24.3** | **+0.6** |
| FETY | | | | Sg | **Sn** | **01 36 37.9** | **+1.8** |
| **FETY** | **Fethiye** | **0.94** | **31** | P | **Pn** | **01 36 23.8** | **+0.1** |
| **TURN** | **Turunc** | **0.97** | **348** | Pg | **Pn** | **01 36 23.4** | **-0.6** |
| TURN | | | | Sg | **Sn** | **01 36 35.7** | **-1.0** |
| **TURN** | **Turunc** | **0.97** | **348** | P | **Pn** | **01 36 23.4** | **-0.6** |
| **AKAS** | **Kas** | **0.99** | **65** | Pg | **Pn** | **01 36 25.9** | **+1.4** |
| **AKAS** | **Kas** | **0.99** | **65** | P | **Pn** | **01 36 25.3** | **+0.8** |
| **DALY** | **Dalyan (Mula)** | **1.00** | **8** | Pg | **Pn** | **01 36 24.4** | **0.0** |
| DALY | | | | Sg | **Sn** | **01 36 38.0** | **+0.6** |
| **SABU** | **Mula-Dalaman** | **1.07** | **21** | P | **Pn** | **01 36 25.4** | **0.0** |
| SABU | | | | S | **Sn** | **01 36 38.3** | **-0.9** |
| **KARP** | **Karpathos** | **1.11** | **256** | Pg | **Pn** | **01 36 26.3** | **+0.3** |
| KARP | | | | Sg | **Sn** | **01 36 40.5** | **+0.3** |
| **KARP** | **Karpathos** | **1.11** | **256** | P | **Pn** | **01 36 26.8** | **+0.8** |
| KARP | | | | S | **Sn** | **01 36 40.9** | **+0.7** |
| | 4μm,0.4s | | | | | | |
| **KARP** | **Karpathos** | **1.11** | **256** | P | **Pn** | **01 36 26.8** | **+0.8** |
| **KARP** | **Karpathos** | **1.11** | **256** | P | **Pn** | **01 36 26.8** | **+0.8** |
| KARP | | | | S | **Sn** | **01 36 42.4** | **+2.2** |
| KARP | | | | AML | AML | 01 36 43.7 | |
| | 7.6nm,0.4s | | | | | | |
| KARP | | | | AML | AML | 01 36 46.2 | |
| | 7.4nm,0.4s | | | | | | |
| **KARP** | **Karpathos** | **1.11** | **256** | P | **Pn** | **01 36 27.0** | **+0.9** |
| KARP | | | | S | **Sn** | **01 36 40.0** | **-0.2** |
| KARP | | | | AML | AML | 01 36 43.3 | |
| | comp=N,7506μm,0.4s | | | | | | |
| KARP | | | | AML | AML | 01 36 44.0 | |
| | comp=E,7700μm,0.4s | | | | | | |
| **DATC** | **Datca-Mugla** | **1.15** | **325** | Pg | **Pn** | **01 36 25.9** | **-0.5** |
| DATC | | | | Sg | **Sn** | **01 36 40.8** | **-0.2** |
| **DAT** | **Datca** | **1.16** | **321** | Pg | **Pn** | **01 36 25.9** | **-0.9** |
| DAT | | | | Sg | **Sn** | **01 36 40.8** | **-0.8** |
| **DAT** | **Datca** | **1.16** | **321** | P | **Pn** | **01 36 25.9** | **-0.9** |
| DAT | | | | S | **Sn** | **01 36 40.1** | **-1.4** |
| **DAT** | **Datca** | **1.16** | **321** | P | **Pn** | **01 36 25.9** | **-0.9** |
| DAT | | | | S | **Sn** | **01 36 41.0** | **-0.6** |
| **YAZI** | **Mula-Dat§a-** | **1.20** | **316** | P | **Pn** | **01 36 26.1** | **-1.0** |
| YAZI | | | | S | **Sn** | **01 36 40.1** | **-2.1** |
| **DEMR** | **Demre-Antalya** | **1.22** | **70** | Pn | **Pn** | **01 36 29.2** | **+1.7** |
| **CAME** | **Cameli-Denizli** | **1.30** | **30** | Pn | **Pn** | **01 36 29.6** | **+1.0** |
| **YER** | **Yerkesik** | **1.32** | **353** | Pn | **Pn** | **01 36 28.7** | **-0.2** |
| **YER** | **Yerkesik** | **1.32** | **353** | P | **Pn** | **01 36 29.1** | **+0.2** |
| YER | | | | S | **Sn** | **01 36 46.1** | **+0.8** |
| **KNIK** | **Mula-Seydike** | **1.34** | **40** | P | **Pn** | **01 36 30.2** | **+0.9** |
| **NISR** | **Nisiros** | **1.35** | **306** | P | **Pn** | **01 36 28.5** | **-0.7** |
| NISR | | | | S | **Sn** | **01 36 45.1** | **-0.9** |
| | comp=E,2μm,0.4s | | | | | | |
| **NISR** | **Nisiros** | **1.35** | **306** | P | **Pn** | **01 36 30.8** | **+1.6** |
| NISR | | | | S | **Sn** | **01 36 48.7** | **+2.8** |
| NISR | | | | AML | AML | 01 36 52.9 | |
| | comp=E,3730μm,0.5s | | | | | | |
| NISR | | | | AML | AML | 01 36 57.7 | |
| | comp=N,2518μm,0.4s | | | | | | |
| **MULA** | **Mugla, Merkez-** | **1.44** | **355** | P | **Pn** | **01 36 30.9** | **+0.4** |
| MULA | | | | S | **Sn** | **01 36 46.2** | **-2.1** |
| **CAEL** | **Denizli, Camel** | **1.46** | **27** | P | **Pn** | **01 36 31.9** | **+1.0** |
| CAEL | | | | S | **Sn** | **01 36 47.2** | **-1.7** |
| **ELL** | **Elmali** | **1.47** | **51** | Pn | **Pn** | **01 36 32.4** | **+1.4** |
| **ELL** | **Elmali** | **1.47** | **51** | P | **Pn** | **01 36 33.1** | **+2.0** |
| ELL | | | | S | **Sn** | **01 36 52.4** | **+3.2** |
| ELL | | | | AML | AML | 01 37 03.7 | |
| | comp=N,1.4nm,0.4s | | | | | | |
| ELL | | | | AML | AML | 01 37 05.0 | |
| | comp=N,2.3nm,0.8s | | | | | | |
| **BDRM** | **Kayabasi** | **1.50** | **326** | P | **Pn** | **01 36 30.1** | **-1.2** |
| **DNZT** | **Denizli-Tavas-** | **1.52** | **16** | P | **Pn** | **01 36 32.2** | **+0.6** |
| **BODT** | **Bodrum** | **1.56** | **323** | Pn | **Pn** | **01 36 31.0** | **-1.1** |
| **BODT** | **Bodrum** | **1.56** | **323** | P | **Pn** | **01 36 31.0** | **-1.1** |
| **MLSB** | **Milas** | **1.58** | **339** | Pn | **Pn** | **01 36 32.1** | **-0.2** |
| **AKUM** | **Antalya-Kumluc** | **1.58** | **71** | P | **Pn** | **01 36 34.1** | **+1.7** |
| **YKAV** | **Yalikavak-Bodr** | **1.62** | **324** | Pn | **Pn** | **01 36 31.8** | **-1.1** |
| **GOLH** | **Golhisar** | **1.66** | **31** | P | **Pn** | **01 36 35.1** | **+1.6** |
| GOLH | | | | S | **Sn** | **01 36 54.0** | **+0.4** |
| **TAVA** | **DENIZLI_Tavas** | **1.68** | **12** | P | **Pn** | **01 36 34.1** | **+0.4** |
| TAVA | | | | S | **Sn** | **01 36 52.9** | **-1.2** |
| **APMY** | **Acipayam-Deniz** | **1.77** | **21** | Pn | **Pn** | **01 36 35.9** | **+0.8** |
| **DIDI** | **Didim-Aydin** | **1.85** | **327** | Pn | **Pn** | **01 36 35.4** | **-0.6** |
| **DNIZ** | **Denizli-Tavas-** | **1.85** | **14** | P | **Pn** | **01 36 36.5** | **+0.3** |
| **KORT** | **Korkueli** | **1.91** | **51** | P | **Pn** | **01 36 39.0** | **+2.1** |
| **DDIM** | **Aydin, Didim** | **1.91** | **329** | P | **Pn** | **01 36 37.8** | **+0.9** |
| **ESEN** | **Aydn-Nazilli** | **1.97** | **357** | P | **Pn** | **01 36 38.5** | **+0.7** |
| ESEN | | | | S | **Sn** | **01 37 00.3** | **-1.0** |
| **ZKR** | **Zakros** | **1.98** | **250** | Pn | **Pn** | **01 36 38.5** | **+0.6** |
| **ZKR** | **Zakros** | **1.98** | **250** | P | **Pn** | **01 36 39.3** | **+1.4** |
| ZKR | | | | S | **Sn** | **01 37 03.0** | **+1.5** |
| | comp=N,582nm,0.6s | | | | | | |
| **ZKR** | **Zakros** | **1.98** | **250** | P | **Pn** | **01 36 39.3** | **+1.4** |
| ZKR | | | | S | **Sn** | **01 37 02.2** | **+0.7** |
| ZKR | | | | AML | AML | 01 37 15.9 | |
| | comp=N,1.4nm,0.5s | | | | | | |
| ZKR | | | | AML | AML | 01 37 18.9 | |
| | comp=N,0.8nm,0.9s | | | | | | |
| **ZKR** | **Zakros** | **1.98** | **250** | P | **Pn** | **01 36 39.2** | **+1.3** |
| ZKR | | | | S | **Sn** | **01 37 00.5** | **-1.0** |
| ZKR | | | | AML | AML | 01 37 17.1 | |
| | comp=E,1474μm,0.4s | | | | | | |
| ZKR | | | | AML | AML | 01 37 20.1 | |
| | comp=N,850μm,0.8s | | | | | | |
| **INCE** | **Denizli-Bozkur** | **2.08** | **25** | Pn | **Pn** | **01 36 40.0** | **+0.7** |
| **GCAM** | **G?zelcaml?** | **2.13** | **332** | Pn | **Pn** | **01 36 39.6** | **-0.2** |
| **GCAM** | **G?zelcaml?** | **2.13** | **332** | P | **Pn** | **01 36 39.2** | **-0.7** |
| **NAZL** | **Nazilli-Aydin** | **2.14** | **356** | Pn | **Pn** | **01 36 40.7** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.17** | **347** | Pn | **Pn** | **01 36 40.4** | **-0.2** |
| **BUCA** | **Burdur, Bucak-** | **2.25** | **47** | P | **Pn** | **01 36 44.6** | **+3.1** |
| **BRDR** | **BURDUR-Merkez** | **2.26** | **34** | P | **Pn** | **01 36 43.2** | **+1.5** |
| **IZMR** | **zmir-demi** | **2.35** | **350** | P | **Pn** | **01 36 42.8** | **-0.1** |
| IZMR | | | | S | **Sn** | **01 37 06.3** | **-4.2** |
| **KIRA** | **zmir-Kiraz** | **2.37** | **358** | P | **Pn** | **01 36 42.8** | **-0.5** |
| **THR4** | **Santorini-Mono** | **2.50** | **284** | P | **Pn** | **01 36 44.3** | **-0.7** |
| **THR6** | **Thira Island,** | **2.56** | **283** | P | **Pn** | **01 36 45.9** | **+0.2** |
| **THR3** | **Thira Island,** | **2.57** | **284** | P | **Pn** | **01 36 45.7** | **-0.1** |
| **GMLD** | **Gumuldur** | **2.58** | **331** | Pn | **Pn** | **01 36 46.5** | **+0.5** |
| **THR5** | **Thira Island,** | **2.61** | **284** | P | **Pn**

| | | | | | | |
|---|---|---|---|---|---|---|
| IMMV | | | | AML | AML | 01 38 00.7 |
| | comp=E,397µm,0.5s | | | | | |
| **GVD** | **Gavdhos** | **3.73 256** | | Pn | **Pn** | **01 37 02.9 +1.1** |
| **GVD** | **Gavdhos** | **3.73 256** | | P | **Pn** | **01 37 02.5 +0.7** |
| GVD | | | | S | **Sn** | **01 37 45.5 +1.0** |
| | comp=E,180nm,0.3s | | | | | |
| **GVD** | **Gavdhos** | **3.73 256** | | P | **Pn** | **01 37 02.6 +0.8** |
| GVD | | | | AML | AML | 01 37 54.6 |
| | comp=E,379µm,0.3s | | | | | |
| GVD | | | | AML | AML | 01 37 54.8 |
| | comp=N,300µm,0.4s | | | | | |
| **APOL** | **The Sanctuary** | **3.76 107** | | P | **Pn** | **01 37 03.5 +1.2** |
| APOL | | | | S | **Sn** | **01 37 45.6 +0.3** |
| APOL | | | | AML | AML | 01 37 49.7 |
| | comp=N,0.8nm,0.4s | | | | | |
| APOL | | | | AML | AML | 01 37 50.2 |
| | comp=N,0.6nm,0.3s | | | | | |
| **RODP** | **Rodopos** | **3.86 267** | | P | **Pn** | **01 37 04.3 +0.7** |
| **KNDR** | **Palaiochora Ch** | **3.96 263** | | P | **Pn** | **01 37 06.7 +1.7** |
| **ASGA** | **Asgata** | **4.03 104** | | P | **Pn** | **01 37 07.0 +1.0** |
| ASGA | | | | S | **Sn** | **01 37 51.7 -0.2** |
| ASGA | | | | AML | AML | 01 37 55.8 |
| | comp=N,0.5nm,0.3s | | | | | |
| ASGA | | | | AML | AML | 01 38 00.0 |
| | comp=N,0.4nm,0.3s | | | | | |
| **ASGA** | **Asgata** | **4.03 104** | | P | **Pn** | **01 37 06.9 +1.0** |
| **CSS** | **Mathiatis** | **4.05 101** | | P | **Pn** | **01 37 06.5 +0.2** |
| **CSS** | **Mathiatis** | **4.05 101** | | P | **Pn** | **01 37 07.3 +1.0** |
| **CSS** | **Mathiatis** | **4.05 101** | | P | **Pn** | **01 37 07.0 +0.7** |
| CSS | | | | S | **Sn** | **01 37 52.7 +0.3** |
| CSS | | | | AML | AML | 01 37 56.4 |
| | comp=N,0.2nm,0.3s | | | | | |
| CSS | | | | AML | AML | 01 38 04.7 |
| | comp=N,0.2nm,0.3s | | | | | |
| **ATHAL** | **Athalassa** | **4.06 98** | | P | **Pn** | **01 37 07.9 +1.4** |
| ATHAL | | | | S | **Sn** | **01 37 53.5 +0.7** |
| ATHAL | | | | AML | AML | 01 38 02.5 |
| | comp=N,0.4nm,0.7s | | | | | |
| ATHAL | | | | AML | AML | 01 38 02.7 |
| | comp=N,0.4nm,0.5s | | | | | |
| **ANKY** | **Antikythira Is** | **4.21 272** | | P | **Pn** | **01 37 10.0 +1.6** |
| **MVOU** | **Mavrovouni** | **4.28 99** | | P | **Pn** | **01 37 10.0 +0.7** |
| MVOU | | | | S | **Sn** | **01 37 59.1 +1.1** |
| MVOU | | | | AML | AML | 01 38 04.9 |
| | comp=N,0.2nm,0.3s | | | | | |
| MVOU | | | | AML | AML | 01 38 04.9 |
| | comp=N,0.2nm,0.2s | | | | | |
| **KTHA** | **Kythira Island** | **4.42 277** | | P | **Pn** | **01 37 12.9 +1.6** |
| KTHA | | | | AML | AML | 01 38 05.0 |
| | comp=E,238µm,0.6s | | | | | |
| KTHA | | | | AML | AML | 01 38 05.5 |
| | comp=N,161µm,0.4s | | | | | |
| **VLI** | **Veliai** | **4.57 283** | | P | **Pn** | **01 37 15.4 +2.0** |
| **MATC** | **Matruh** | **4.59 194** | | P | **Pn** | **01 37 14.4 +0.8** |
| | baz=194 | | | | | |
| **DB3** | **El Dabaa** | **4.77 179** | | P | **Pn** | **01 37 16.6 +0.5** |
| | baz=181 | | | | | |
| DB3 | | | | S | **Sn** | **01 38 07.2 -3.0** |
| | baz=181 | | | | | |
| **SLUM** | **Salum** | **5.11 213** | | P | **Pn** | **01 37 21.1 +0.3** |
| | baz=214 | | | | | |
| **BRTR** | **Keskin Array B** | **5.64 45** | | P | **Pn** | **01 37 29.0 +0.8** |
| | comp=N,0.1nm,0.3s,baz=230,slow=9.4,SNR=4.4 | | | | | |
| BRTR | | | | S | **Sn** | **01 38 31.8 0.0** |
| | comp=N,1.9nm,0.5s,baz=212,slow=29,SNR=9.3 | | | | | |
| | comp=N,0.3nm,0.4s | | | | | |
| **MMA0B** | **Mount Meron ar** | **6.37 114** | | P | **Pn** | **01 37 38.7 +0.6** |
| **MMA0B** | **Mount Meron ar** | **6.37 114** | | S | **Sn** | **01 38 49.1 -0.4** |
| **MMAI** | **Mount Meron Ar** | **6.37 114** | | P | **Pn** | **01 37 38.8 +0.7** |
| | comp=N,2.6nm,0.3s,baz=312,slow=12,SNR=17 | | | | | |
| MMAI | | | | S | **Sn** | **01 38 48.1 -1.4** |
| | comp=N,6.9nm,0.3s,baz=309,slow=28,SNR=16 | | | | | |
| MMAI | | | | LR | LR | 01 41 27.4 |
| | comp=N,36nm,18.5s,baz=281,slow=49 | | | | | |
| | comp=N,1.1nm,0.2s | | | | | |
| **HNAT** | **Natroun** | **6.43 163** | | P | **Pn** | **01 37 39.4 +0.5** |
| | baz=163 | | | | | |
| **KOT** | **Kottamia** | **6.52 154** | | P | **Pn** | **01 37 40.4 +0.2** |
| | baz=153 | | | | | |
| KOT | | | | S | **Sn** | **01 38 50.0 -3.2** |
| | baz=153 | | | | | |
| **HHAG** | **Hagoal** | **6.59 152** | | P | **Pn** | **01 37 42.6 +1.4** |
| | baz=151 | | | | | |
| **AMAZ** | **Amatzia** | **6.86 127** | | S | **Sn** | **01 39 00.7 -0.9** |
| **AMAZ** | **Amatzia** | **6.86 127** | | P | **Pn** | **01 37 45.4 +0.6** |
| **KZIT** | **Kziot** | **6.96 133** | | S | **Sn** | **01 39 01.9 -2.2** |
| **KZIT** | **Kziot** | **6.96 133** | | P | **Pn** | **01 37 46.6 +0.3** |
| **UJAP** | **Al Uja** | **6.97 122** | | P | **Pn** | **01 37 45.9 -0.4** |
| **SWA2** | | **7.04 202** | | P | **Pn** | **01 37 47.3 -0.1** |
| | baz=203 | | | | | |
| **YTIR** | **Yattir** | **7.10 127** | | P | **Pn** | **01 37 48.6 +0.4** |
| **DSI** | **Dead Sea** | **7.14 124** | | S | **Sn** | **01 39 06.9 -1.6** |
| **DSI** | **Dead Sea** | **7.14 124** | | P | **Pn** | **01 37 49.6 +0.9** |
| **GHAJ** | **Ghor Haditha** | **7.43 125** | | P | **Pn** | **01 37 54.1 +1.5** |
| **NBNS** | **Bani Suef** | **7.56 161** | | P | **Pn** | **01 37 54.4 -0.1** |
| | baz=161 | | | | | |
| **PRNI** | **Paran** | **7.72 133** | | P | **Pn** | **01 37 56.7 0.0** |
| **KRMI** | **Paran Flat** | **7.74 136** | | P | **Pn** | **01 37 56.8 0.0** |
| **ASF** | **Jabal al Asfar** | **7.88 115** | | P | **Pn** | **01 37 57.7 -1.1** |
| **HRFI** | **Mount Harif** | **7.97 135** | | S | **Sn** | **01 39 26.2 -2.8** |
| **HRFI** | **Mount Harif** | **7.97 135** | | P | **Pn** | **01 38 00.7 +0.6** |
| **MBRI** | **Mt Berech** | **8.09 136** | | P | **Pn** | **01 38 02.1 +0.4** |
| **EIL** | **Elat** | **8.20 137** | | P | **Pn** | **01 38 05.7 +2.5** |
| **EIL** | **Elat** | **8.20 137** | | S | **Sn** | **01 39 31.9 -2.6** |
| **EIL** | **Elat** | **8.20 137** | | P | **Pn** | **01 38 03.2 0.0** |
| **HSNJ** | **Maan** | **8.21 131** | | P | **Pn** | **01 38 05.2 +1.8** |
| **GRB** | **Gharib** | **8.37 153** | | P | **Pn** | **01 38 05.8 +0.3** |
| | baz=153 | | | | | |
| **NUB** | **Nuweibaa** | **8.54 141** | | P | **Pn** | **01 38 09.0 +1.1** |
| | baz=141 | | | | | |
| **HKAT** | **Jabal Katrina** | **8.64 146** | | P | **Pn** | **01 38 09.4 0.0** |
| | baz=146 | | | | | |
| HKAT | | | | S | **Sn** | **01 39 40.4 -5.3** |
| | baz=146 | | | | | |
| **HFRF** | **Wahat Farafira** | **8.65 181** | | P | **Pn** | **01 38 09.1 -0.3** |
| | baz=182 | | | | | |
| **SOKA** | **Soboth** | **14.81 321** | *i* | Pn | **Pn** | **01 39 33.7 +0.5** |
| | comp=N,1.3nm,0.6s | | | | | |
| **OBKA** | **Obir** | **14.95 320** | *e* | Pn | **Pn** | **01 39 36.0 +0.9** |
| | comp=N,0.4nm,0.4s | | | | | |
| **KEST** | **Kesra** | **15.54 275** | | P | **P** | **01 39 46.0 -0.4** |
| | comp=N,7.2nm,0.8s,baz=305,slow=2.0,SNR=13 | | | | | |
| **KRUC** | **Moravsky** | **15.93 330** | *e* | PN | **P** | **01 39 49.9 -0.7** |
| **VRAC** | **Vranov** | **16.05 331** | *e* | PN | **P** | **01 39 51.6 -0.3** |
| **ABTA** | **Abfaltersbach** | **16.19 317** | *e* | Pn | **Pn** | **01 39 51.4 +0.4** |
| | comp=N,0.4nm,0.3s | | | | | |
| **LESA** | **Schwarzleotal** | **16.52 319** | *e* | Pn | **P** | **01 39 55.9 -1.3** |
| **WTTA** | **Wattenberg** | **16.98 317** | *e* | Pn | **P** | **01 40 03.1 +0.6** |
| | comp=N,2.2nm,0.3s | | | | | |
| **WATA** | **Walderalm** | **17.06 318** | *e* | Pn | **P** | **01 40 04.1 +0.8** |
| | comp=N,2.6nm,0.4s | | | | | |
| **SQTA** | **Sankt Quirin** | **17.19 317** | *e* | Pn | **P** | **01 40 05.0 +0.3** |
| | comp=N,2.0nm,0.4s | | | | | |
| **MOTA** | **Moosalm** | **17.32 317** | *e* | Pn | **Pn** | **01 40 05.1 -0.2** |
| | comp=N,0.4nm,0.3s | | | | | |
| **FETA** | **Feichten** | **17.35 316** | *e* | Pn | **P** | **01 40 07.6 +1.1** |
| | comp=N,2.2nm,0.6s | | | | | |
| **RETA** | **Reutte** | **17.59 317** | *i* | Pn | **P** | **01 40 08.7 -0.4** |
| | comp=N,1.0nm,0.3s | | | | | |
| **DAVA** | **Damuels** | **17.98 315** | *e* | Pn | **Pn** | **01 40 13.1 -0.3** |
| | comp=N,2.5nm,0.3s | | | | | |
| **FINES** | **FINESS Array B** | **25.69 357** | | P | **P** | **01 41 30.3 -1.9** |
| | comp=N,0.7nm,0.5s,baz=159,slow=13,SNR=5.6 | | | | | |
| | comp=N,0.7nm,0.5s | | | | | |
| **ESDC** | **Sonseca Array** | **25.87 288** | | P | **P** | **01 41 33.0 -1.1** |
| | comp=N,1.2nm,0.6s,baz=81,slow=9.4,SNR=19 | | | | | |
| ESDC | | | | LR | LR | 01 50 46.6 |
| | comp=N,57nm,19.4s,baz=44,slow=34 | | | | | |
| | comp=N,1.2nm,0.6s | | | | | |
| **HFS** | **Hagfors** | **26.14 343** | | LR | LR | 01 52 49.6 |
| | comp=N,23nm,20.4s,baz=137,slow=39 | | | | | |
| **NOA** | **NORSAR Array B** | **27.54 342** | | LR | LR | 01 53 14.8 |
| | comp=N,12nm,18.7s,baz=210,slow=38 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.03 234** | | P | **P** | **01 42 38.6 +0.7** |
| | comp=N,0.2nm,0.3s,baz=34,slow=9.5,SNR=4.6 | | | | | |
| | comp=N,0.2nm,0.3s | | | | | |
| **MKAR** | **Makanchi Array** | **41.14 57** | | P | **P** | **01 43 47.5 +1.1** |
| | comp=N,0.3nm,0.6s,baz=276,slow=7.1,SNR=1.7 | | | | | |
| | comp=N,0.3nm,0.6s | | | | | |

*IDC **30** 01:43:01.2±3.7, 17°.85S×167°.51E, h0km, mb4.1/4, mbtmp4.1/5, ML3.8/1, MS3.4/15, Error ellipse: s-maj=77.2km s-min=32.7km az=33.0*
*NOU **30** 01:43:01.4, 17°.79S×167°.55E, h6km, MLv4.5/9, Vanuatu Islands*
*NEIC **30** 01:43:02.3±1.7, 17°.83S±0°.1×167°.64E±0°.09, h10km±1km, mb4.6/13, Error ellipse: s-maj=19.6km s-min=11.2km az=32.0*

**ISC 30 01:43:03.5**±0.7, **17°.93S**±0°.08×**167°.63E**±0°.08, **h23km, n42, σ1s43/31, mb4.5/9, MS3.4/12, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **0.57** | **69** | P | **Pb** | **01 43 13.7** | **-1.1** |
| **RTV** | **Rentapao** | **0.77** | **80** | P | **Pb** | **01 43 17.6** | **-0.6** |
| **LIFNC** | **LIFOU** | **2.86** | **187** | P | **Pn** | **01 43 49.5** | **+1.8** |
| **LIFNC** | **LIFOU** | **2.86** | **187** | Pn | **Pn** | **01 43 47.2** | **-0.5** |
| LIFNC | | | | | **Sn** | **01 44 17.8** | **-3.7** |
| **KOUNC** | **Koumac, New Ca** | **4.10** | **230** | P | **Pn** | **01 44 05.6** | **+0.8** |
| **KOUNC** | **Koumac, New Ca** | **4.10** | **230** | | **Pn** | **01 44 05.8** | **+1.0** |
| **DZM** | **Mont Dzumac** | **4.27** | **195** | P | **Pn** | **01 44 08.3** | **+1.0** |
| **DZM** | **Mont Dzumac** | **4.27** | **195** | | **Pn** | **01 44 08.2** | **+1.0** |
| **DZM** | **Mont Dzumac** | **4.27** | **195** | Pn | **Pn** | **01 44 07.9** | **+0.6** |
| | 5.5nm,0.3s,baz=335,slow=5.2,SNR=39 | | | | | | |
| DZM | | | | Sn | **Sn** | **01 44 53.9** | **-2.5** |
| | 4.5nm,0.3s,baz=275,slow=20,SNR=3.0 | | | | | | |
| DZM | | | | LR | LR | 01 45 25.1 | |
| | comp=Z,111nm,21.1s,baz=40,slow=33 | | | | | | |
| | 9.6nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **4.33** | **197** | P | **Pn** | **01 44 09.1** | **+1.0** |
| **PINNC** | **Pines Island,** | **4.66** | **182** | Pn | **Pn** | **01 44 14.4** | **+1.8** |
| **MSVF** | **Nonsavu** | **9.93** | **90** | LR | LR | 01 48 22.1 | |
| | comp=Z,338nm,20.1s,baz=270,slow=32 | | | | | | |
| **HNR** | **Honiara** | **11.27** | **318** | LR | LR | 01 49 44.8 | |
| | comp=Z,2µm,18.2s,baz=156,slow=36 | | | | | | |
| **CTA** | **Charters Tower** | **20.33** | **261** | P | Pn | 01 47 39.8 | -0.5 |
| | 0.2nm,0.7s,baz=75,slow=8.5,SNR=3.8 | | | | | | |
| CTA | | | | LR | LR | 01 54 59.5 | |
| | comp=Z,15nm,18.2s,baz=90,slow=36 | | | | | | |
| **URZ** | **Urewera** | **21.89** | **160** | LR | LR | 01 54 09.3 | |
| | comp=Z,62nm,20.7s,baz=103,slow=30 | | | | | | |
| **MRZ** | **Mangatainoka R** | **23.67** | **165** | P | **P** | **01 48 14.9** | **+1.5** |
| MRZ | | | | IAmb | IAmb | 01 48 28.8 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **27.31** | **234** | P | **P** | **01 48 47.6** | **+1.0** |
| **STKA** | **Stephens Creek** | **27.31** | **234** | P | **P** | **01 48 47.4** | **+0.8** |
| | comp=Z,3.2nm,0.6s,baz=42,slow=12,SNR=2.3 | | | | | | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **31.48** | **261** | P | **P** | **01 49 23.6** | **-0.3** |
| **WB2** | **Warramunga Arr** | **31.52** | **261** | P | **P** | **01 49 23.4** | **-0.7** |
| WB2 | | | | IAmb | IAmb | 01 49 53.5 | |
| | comp=Z,13nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.53** | **261** | P | **P** | **01 49 24.1** | **-0.1** |
| | comp=Z,1.1nm,0.8s,baz=91,slow=8.5,SNR=9.3 | | | | | | |
| WRA | | | | LR | LR | 02 01 08.2 | |
| | comp=Z,103nm,19.9s,baz=12,slow=35 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **31.99** | **254** | P | **P** | **01 49 28.6** | **+0.3** |
| **ASAR** | **Alice Springs** | **31.99** | **254** | P | **P** | **01 49 28.1** | **-0.3** |
| | comp=Z,1.8nm,0.6s,baz=78,slow=9.1,SNR=17 | | | | | | |
| | comp=Z,1.8nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **39.87** | **263** | P | **P** | **01 50 36.7** | **+0.9** |
| **PPT** | **Papeete** | **40.69** | **96** | LR | LR | 02 05 24.2 | |
| | comp=Z,60nm,19.5s,baz=31,slow=33 | | | | | | |
| **SOEI** | **Soe** | **42.80** | **275** | P | **P** | **01 50 58.0** | **-2.0** |
| **NWAO** | **Narrogin (SRO)** | **47.47** | **245** | LR | LR | 02 11 10.1 | |
| | comp=Z,110nm,19.4s,baz=360,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **65.86** | **340** | LR | LR | 02 18 25.1 | |
| | comp=Z,22nm,19.4s,baz=123,slow=32 | | | | | | |
| **PETK** | **Petropavlovsk-** | **71.26** | **354** | LR | LR | 02 23 05.2 | |
| | comp=Z,15nm,18.2s,baz=84,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **72.12** | **180** | P | **P** | **01 54 28.3** | **+2.3** |
| QSPA | | | | IAmb | IAmb | 01 54 42.7 | |
| | comp=Z,5.3nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **72.12** | **180** | P | **P** | **01 54 28.2** | **+2.2** |
| | comp=Z,1.1nm,0.6s,baz=308,slow=1.4,SNR=14 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.58** | **295** | LR | LR | 02 30 19.9 | |
| | comp=Z,9.0nm,18.2s,baz=180,slow=37 | | | | | | |
| **MA2** | **Magadan** | **78.44** | **351** | LR | LR | 02 24 26.0 | |
| | comp=Z,14nm,20.6s,baz=92,slow=32 | | | | | | |
| **BELA** | **Belgrano 2** | **83.52** | **175** | P | **P** | **01 55 29.5** | **+0.3** |
| BELA | | | | IAmb | IAmb | 01 55 41.4 | |
| | comp=Z,3.8nm,1.0s | | | | | | |
| **J18K** | **Innoko River** | **85.75** | **15** | P | **P** | **01 55 40.8** | **+0.4** |
| J18K | | | | IAmb | IAmb | 01 56 03.2 | |
| | comp=Z,6.2nm,1.4s | | | | | | |
| **SUA** | **Susitna One** | **85.79** | **19** | P | **P** | **01 55 41.2** | **+0.4** |
| SUA | | | | IAmb | IAmb | 01 56 22.7 | |
| | comp=Z,4.9nm,1.4s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **87.43** | **45** | LR | LR | 02 35 19.0 | |
| | comp=Z,14nm,18.1s,baz=246,slow=36 | | | | | | |
| **PALK** | **Pallekele** | **89.31** | **278** | LR | LR | 02 39 25.8 | |
| | comp=Z,30nm,18.1s,baz=106,slow=38 | | | | | | |
| **LPIG** | **La Paz** | **90.23** | **65** | LR | LR | 02 29 23.2 | |
| | comp=Z,32nm,18.9s,baz=220,slow=31 | | | | | | |
| **EPYK** | **Eagle Plains** | **93.64** | **19** | P | **P** | **01 56 15.8** | **-1.8** |
| **YNR** | **Norris Junctio** | **96.69** | **45** | P | **P** | **01 56 32.2** | **-0.1** |
| **FUORN** | **Ofenpass-Fuorn** | **145.83** | **332** | PKPdf | **PKPdf** | **02 02 39.9** | **-0.9** |

*ISN **30** 01:50:31.3±0.8, 34°.65N×46°.31E, h16km±5km, ML2.9*
*TEH **30** 01:50:31.2, 34°.65N×46°.32E, h11km±15km, ML2.9*

**ISC 30 01:50:31.3**±0.9, **34°.67N**±0°.05×**46°.32E**±0°.04, **h11**km±7km, **n10, σ0s74/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.06** | **62** | Pg | **Pg** | **01 50 34.0** | **+0.1** |
| IDHR | | | | Sg | **Sg** | **01 50 36.2** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **0.40** | **149** | Pg | **Pb** | **01 50 39.5** | **-1.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.63** | **255** | Pg | **Pg** | **01 50 43.3** | **-0.2** |
| KGS1 | | | | Sg | **Sb** | **01 50 52.8** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.65** | **212** | Pg | **Pg** | **01 50 43.5** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **123** | Pg | **Pg** | **01 50 44.8** | **-0.4** |
| **SNQR** | **Sonqor, Kerman** | **1.09** | **80** | Pg | **Pn** | **01 50 52.7** | **-0.1** |
| **IBZA** | **Bozab** | **1.29** | **99** | Pg | **Pg** | **01 50 56.1** | **+0.1** |
| **IBDR** | **Badra** | **1.59** | **192** | *e*Pg | **Pb** | **01 51 00.0** | **-0.7** |
| IBDR | | | | *e*Sg | **Sb** | **01 51 20.5** | **-0.2** |
| IBDR | | | | AML | AML | 01 51 26.9 | |
| | comp=E,311nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 01 51 28.0 | |
| | comp=N,135nm,0.6s | | | | | | |
| **IKRK** | **Kirkuk** | **1.78** | **295** | *e*Pn | **Pb** | **01 51 03.0** | **-1.0** |
| IKRK | | | | *e*Sn | **Sb** | **01 51 27.0** | **+0.7** |
| IKRK | | | | AML | AML | 01 51 32.4 | |
| | comp=E,128nm,1.0s | | | | | | |
| IKRK | | | | AML | AML | 01 51 35.9 | |
| | comp=N,166nm,0.3s | | | | | | |
| **RAFI** | **Al-Rafai** | **2.94** | **183** | *e*Pn | **Pn** | **01 51 19.0** | **+1.0** |
| RAFI | | | | *e*Sn | **Sn** | **01 51 54.5** | **+1.2** |

*IDC **30** 01:54:21.9±1.2, 1°.08S×97°.22E, h0km, mb4.0/10, mbtmp4.0/11, ML4.5/1, MS3.1/3, Error ellipse: s-maj=52.2km s-min=18.4km az=51.0*
*DJA **30** 01:54:24.3±2.1, 1°.S±4°×9°.7E±°, h14km±15km, M4.7/16, mb4.8/7, mB5.4/2, MLv4.7/16, Mw(mB)4.8/2*
*NEIC **30** 01:54:27.4±1.8, 0°.80S±0°.08×97°.5E±0°.1, h27km±5km, mb4.4/12, Error ellipse: s-maj=19.5km s-min=9.6km az=71.0*

**ISC 30 01:54:25.6**±0.7, **0°.91S**±0°.06×**97°.50E**±0°.08, **h23km, n54, σ1s28/43, mb4.3/15, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBSI** | **Pulau Batu** | **1.15** | **43** | P | **Pn** | **01 54 46.1** | **-0.2** |
| **SISI** | **Saibi** | **1.65** | **105** | P | **Pn** | **01 54 53.8** | **+0.7** |
| **GSI** | **Gunungsitoli** | **2.20** | **2** | | **Pn** | **01 54 59.8** | **-1.0** |
| GSI | | | | Sn | **Sn** | **01 55 23.0** | **-4.3** |
| **GSI** | **Gunungsitoli** | **2.20** | **2** | P | **Pn** | **01 55 00.1** | **-0.6** |
| **SBSI** | **Sibolga** | **2.81** | **30** | P | **Pn** | **01 55 11.6** | **+2.4** |
| **PDSI** | **Padang** | **2.96** | **90** | P | **Pn** | **01 55 11.4** | **+0.1** |
| PDSI | | | | S | **Sn** | **01 55 43.4** | **-2.8** |
| **PPSI** | **Pulau Pagai** | **3.12** | **126** | P | **Pn** | **01 55 14.0** | **+0.7** |
| PPSI | | | | S | **Sn** | **01 55 47.8** | **-2.1** |
| **SNSI** | **Sinabang, Aceh** | **3.50** | **340** | P | **Pn** | **01 55 17.7** | **-0.9** |
| **RPSI** | **Rantau Prapat** | **3.85** | **22** | | **Pn** | **01 55 23.7** | **+0.2** |
| **KCSI** | **Kotacane, Aceh** | **4.41** | **4** | P | **Pn** | **01 55 31.4** | **+0.2** |
| **MLSI** | **Meulaboh, Aceh** | **5.25** | **348** | P | **Pn** | **01 55 41.4** | **-1.4** |
| | 25nm,0.4s,0.5nm | | | | | | |
| **LHMI** | **Lhok Sumawe** | **6.12** | **355** | P | **Pn** | **01 55 54.8** | **+0.1** |
| | 46nm,0.7s,0.3nm | | | | | | |
| **IPM** | **Ipoh** | **6.41** | **33** | | **Pn** | **01 55 59.9** | **+1.3** |
| **MNAI** | **Manna** | **6.44** | **122** | Pn | **Pn** | **01 55 59.3** | **+0.2** |
| **MNAI** | **Manna** | **6.44** | **122** | P | **Pn** | **01 55 59.5** | **+0.4** |
| | 332nm,1.9s | | | | | | |
| **KULM** | **Kulim** | **6.92** | **27** | Pn | **Pn** | **01 56 05.9** | **+0.3** |
| **KASI** | **Kota Agung** | **8.36** | **123** | P | **Pn** | **01 56 25.2** | **-0.2** |
| **PALK** | **Pallekele** | **18.62** | **296** | LR | LR | 02 04 50.7 | |
| | comp=Z,64nm,20.0s,baz=115,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **19.30** | **4** | P | **Pn** | **01 58 50.8** | **+0.6** |
| | 0.6nm,0.3s,baz=195,slow=11,SNR=5.8 | | | | | | |
| CMAR | | | | LR | LR | 02 06 21.4 | |
| | comp=Z,37nm,18.0s,baz=165,slow=37 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.92** | **69** | P | **Pn** | **01 58 57.4** | **-0.4** |
| KKM | | | | IAmb | IAmb | 01 58 57.6 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **22.59** | **101** | LR | LR | 02 09 25.2 | |
| | comp=Z,64nm,20.3s,baz=138,slow=40 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.80** | **254** | T | T | 02 27 31.6 | |
| | baz=74,slow=75,SNR=29 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.81** | **254** | T | T | 02 27 33.8 | |
| | baz=74,slow=75,SNR=46 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.82** | **254** | T | T | 02 27 28.1 | |
| | baz=74,slow=75,SNR=16 | | | | | | |
| **KNRA** | **Kununurra** | **34.16** | **117** | P | **P** | **02 01 10.5** | **+1.2** |
| KNRA | | | | IAmb | IAmb | 02 01 11.4 | |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **37.20** | **157** | T | T | 02 41 00.9 | |
| | baz=334,slow=76,SNR=5.2 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **37.21** | **157** | T | T | 02 41 02.0 | |
| | baz=334,slow=76,SNR=6.3 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **37.21** | **157** | T | T | 02 41 03.7 | |
| | baz=334,slow=76,SNR=5.1 | | | | | | |
| **WB0** | **Warramunga Arr** | **40.68** | **120** | P | **P** | **02 02 05.4** | **+0.8** |
| **WRA** | **Warramunga Arr** | **40.70** | **120** | P | **P** | **02 02 05.3** | **+0.6** |
| | comp=Z,1.2nm,0.8s,baz=302,slow=9.1,SNR=17 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **40.71** | **120** | P | **P** | **02 02 06.2** | **+1.4** |
| **ASAR** | **Alice Springs** | **41.92** | **125** | P | **P** | **02 02 16.4** | **+1.7** |
| | comp=Z,0.7nm,0.4s,baz=292,slow=7.4,SNR=5.5 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **GAR** | **Garm** | **46.91** | **331** | P | **P** | **02 02 55.4** | **+0.9** |
| GAR | | | | IAmb | IAmb | 02 02 55.4 | |
| | comp=Z,7.5nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **49.16** | **8** | P | **P** | **02 03 13.1** | **+1.3** |
| | comp=Z,0.6nm,0.5s,baz=201,slow=12,SNR=3.8 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **49.35** | **346** | P | **P** | **02 03 13.0** | **-0.1** |
| MK31 | | | | IAmb | IAmb | 02 03 14.9 | |
| | comp=Z,2.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **49.35** | **346** | P | **P** | **02 03 14.3** | **+1.2** |
| | comp=Z,2.4nm,0.6s,baz=155,slow=8.5,SNR=18 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.83** | **345** | P | **P** | **02 03 47.0** | **+0.4** |
| | comp=Z,0.6nm,0.6s,baz=164,slow=7.3,SNR=6.2 | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **55.67** | **351** | P | **P** | **02 04 00.3** | **+0.5** |
| **ZALV** | **Zalesovo Beam** | **55.67** | **351** | P | **P** | **02 04 00.8** | **+1.0** |
| | comp=Z,4.4nm,0.3s,baz=165,slow=6.7,SNR=16 | | | | | | |
| | comp=Z,4.4nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **58.33** | **341** | P | **P** | **02 04 18.5** | **-0.2** |
| | comp=Z,1.5nm,0.7s,baz=123,slow=11,SNR=4.4 | | | | | | |
| | comp=Z,1.5nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **59.50** | **332** | P | **P** | **02 04 26.8** | **-0.2** |
| ABKAR | | | | IAmb | IAmb | 02 04 27.4 | |
| | comp=Z,1.8nm,0.8s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **60.22** | **215** | T | T | 03 10 30.8 | |
| | baz=56,slow=75,SNR=46 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **60.23** | **215** | T | T | 03 10 29.1 | |
| | baz=56,slow=75,SNR=37 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **60.24** | **215** | T | T | 03 10 29.7 | |
| | baz=56,slow=75,SNR=40 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **60.54** | **214** | T | T | 03 10 57.9 | |
| | baz=60,slow=74,SNR=18 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **60.55** | **214** | T | T | 03 10 52.6 | |
| | baz=60,slow=74,SNR=5.3 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **60.56** | **214** | T | T | 03 10 56.6 | |
| | baz=60 | | | | | | |
| **KBZ** | **Khabaz** | **65.85** | **320** | P | **P** | **02 05 10.1** | **+0.7** |
| | comp=Z,1.7nm,0.7s,baz=189,slow=3.6,SNR=4.8 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **CASY** | **Casey** | **65.89** | **174** | P | **P** | **02 05 06.5** | **-2.7** |
| CASY | | | | IAmb | IAmb | 02 05 17.4 | |
| | comp=Z,2.9nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **70.75** | **313** | P | **P** | **02 05 39.4** | **-1.0** |
| | comp=Z,0.7nm,0.8s,baz=125,slow=7.8,SNR=5.0 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **BUR08** | **Bucovina Ar. S** | **78.81** | **319** | P | **P** | **02 06 27.7** | **+0.8** |
| **LVZ** | **Lovozero** | **80.90** | **340** | P | **P** | **02 06 37.6** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **84.61** | **340** | P | **P** | **02 06 57.1** | **+0.2** |
| | comp=Z,1.9nm,0.9s,baz=134,slow=3.9,SNR=3.8 | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **145.27** | **34** | PKPbc | **PKPbc** | **02 14 01.7** | **-0.3** |
| | comp=Z,0.4nm,0.8s,baz=201,slow=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M17K | | | | | IAmb | IAmb | 02 06 37.7 | |
| | comp=Z,7.3nm,1.1s | | | | | | | |
| **BELA** | **Belgrano 2** | **81.80** | **173** | | P | **P** | **02 06 38.7** | **+0.3** |
| **L18K** | **Granite Mounta** | **82.02** | **10** | | P | **P** | **02 06 40.1** | **+0.5** |
| L18K | | | | | IAmb | IAmb | 02 06 59.9 | |
| | comp=Z,10nm,1.5s | | | | | | | |
| **GLI** | **Glacier Island** | **82.76** | **15** | | P | **P** | **02 06 42.1** | **-1.3** |
| GLI | | | | | IAmb | IAmb | 02 06 43.6 | |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| **J18K** | **Innoko River** | **83.18** | **10** | | P | **P** | **02 06 44.9** | **-0.6** |
| J18K | | | | | IAmb | IAmb | 02 06 56.4 | |
| | comp=Z,9.7nm,1.4s | | | | | | | |
| **X18A** | **Snowflake** | **83.44** | **51** | | P | **P** | **02 06 47.6** | **0.0** |
| **K20K** | **Telida** | **83.52** | **11** | | P | **P** | **02 06 46.9** | **-0.2** |
| **TABL** | **Table Mountain** | **83.96** | **18** | | P | **P** | **02 06 48.8** | **-0.8** |
| TABL | | | | | IAmb | IAmb | 02 07 12.9 | |
| | comp=Z,6.4nm,1.0s | | | | | | | |
| **MG05** | **Puerto Natales** | **85.23** | **143** | | P | **P** | **02 06 56.1** | **+0.2** |
| **TXAR** | **Lajitas Array** | **86.06** | **58** | | P | **P** | **02 07 01.2** | **+0.8** |
| | comp=Z,0.3nm,0.8s,baz=211,slow=6.9,SNR=3.6 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.13** | **315** | | PKPbc | **PKPdf** | **02 13 52.5** | **-0.3** |
| | comp=Z,0.5nm,0.5s,baz=120,slow=2.3,SNR=4.8 | | | | | | | |

*CATAC **30** 02:08:41.0±0.9, 8°.38N×83°.03W, h30km, ML3.7*
*UPA **30** 02:08:42.8±0.9, 8°.63N×83°.17W, h7km±11km, MW3.4*
*UCR **30** 02:08:43.2±0.7, 8°.58N×83°.19W, h20km±2km, MW3.8*
**ISC 30 02:08:43.5**±0.9, **8°.61N**±0°.04×**83°.18W**±0°.03, **h16**km±5km, **n31**, **σ0§87/44**, **Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FITO** | **Golfito** | **0.04** | **56** | *eP* | | **Pg** | **02 08 46.0** | **-0.3** |
| FITO | | | | *eS* | | **Sg** | **02 08 48.5** | **+0.3** |
| **EDAD** | **Golfito** | **0.05** | **21** | *eP* | | **Pg** | **02 08 46.3** | **-0.2** |
| EDAD | | | | *eS* | | **Sg** | **02 08 49.0** | **+0.5** |
| **JIME** | **Puerto Jimenez** | **0.15** | **245** | *eP* | | **Pg** | **02 08 47.6** | **+0.1** |
| **NELY** | **Ciudad Neily** | **0.24** | **79** | *eP* | | **Pg** | **02 08 49.0** | **+0.2** |
| **CDITO** | **Canoas** | **0.31** | **96** | *i* P | | **Pg** | **02 08 49.7** | **-0.3** |
| CDITO | | | | *i* S | | **Sb** | **02 08 55.1** | **-0.4** |
| CDITO | | | | IAML | | | 02 09 02.4 | |
| | comp=Z,3μm,1.0s | | | | | | | |
| **MLIR3** | **Monte Lirio, C** | **0.40** | **62** | *eP* | | **Pg** | **02 08 52.0** | **+0.3** |
| **EDP2** | **Potrero Grande** | **0.41** | **1** | *eP* | | **Pg** | **02 08 52.0** | **+0.2** |
| **EDPN** | **Palmar Norte** | **0.45** | **323** | *eP* | | **Pg** | **02 08 52.1** | **-0.4** |
| **PTPM** | **Petroterminale** | **0.50** | **143** | *eP* | | **Pg** | **02 08 53.2** | **-0.2** |
| **BRU2** | **Volcan** | **0.52** | **69** | *i* P | | **Pg** | **02 08 53.4** | **-0.5** |
| BRU2 | | | | *i* S | | **Sb** | **02 09 01.7** | **-0.1** |
| BRU2 | | | | IAML | | | 02 09 04.1 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **BRU2** | **Volcan** | **0.52** | **69** | *eP* | | **Pg** | **02 08 53.5** | **-0.4** |
| BRU2 | | | | *eS* | | **Sb** | **02 09 02.0** | **+0.2** |
| **BRU2** | **Volcan** | **0.52** | **69** | *eP* | | **Pg** | **02 08 53.5** | **-0.4** |
| BRU2 | | | | *eS* | | **Sb** | **02 09 01.8** | **0.0** |
| **EDBA** | **Buenos Aires** | **0.56** | **351** | *eP* | | **Pg** | **02 08 54.5** | **-0.2** |
| **LIMO3** | **Limones** | **0.59** | **148** | *eP* | | **Pg** | **02 08 55.2** | **0.0** |
| **DRK0** | **Durika** | **0.66** | **355** | *i* P | | **Pg** | **02 08 55.7** | **-0.7** |
| DRK0 | | | | IAML | | | 02 08 56.7 | |
| | comp=Z,8μm,1.0s | | | | | | | |
| DRK0 | | | | *i* S | | **Sb** | **02 09 05.7** | **0.0** |
| **DRK0** | **Durika** | **0.66** | **355** | *eP* | | **Pg** | **02 08 55.7** | **-0.7** |
| DRK0 | | | | *eS* | | **Sb** | **02 09 05.5** | **-0.1** |
| **DRK0** | **Durika** | **0.66** | **355** | *eP* | | **Pg** | **02 08 55.7** | **-0.7** |
| **BCO2** | **Palmira** | **0.66** | **80** | *eP* | | **Pg** | **02 08 55.8** | **-0.6** |
| BCO2 | | | | *eS* | | **Sb** | **02 09 05.8** | **+0.1** |
| **OCHAL** | **Ojochal** | **0.67** | **317** | *i* P | | **Pg** | **02 08 55.5** | **-1.1** |
| OCHAL | | | | *i* S | | **Sb** | **02 09 06.0** | **+0.1** |
| OCHAL | | | | IAML | | | 02 09 09.7 | |
| | comp=Z,770nm,1.0s | | | | | | | |
| **BRIBI** | **Bribri** | **1.06** | **18** | *eP* | | **Pb** | **02 09 03.5** | **0.0** |
| **CNI2** | **El Empalme, Bo** | **1.08** | **41** | *eP* | | **Pb** | **02 09 02.2** | **-1.6** |
| **BUS1** | **Rivas** | **1.09** | **330** | *eP* | | **Pb** | **02 09 02.8** | **-1.5** |
| **RGM0** | **Gandoca** | **1.13** | **30** | *i* P | | **Pn** | **02 09 04.9** | **+0.2** |
| RGM0 | | | | IAML | | | 02 09 32.1 | |
| | comp=Z,1μm,1.0s | | | | | | | |
| **ABE2** | **San Pablo** | **1.39** | **322** | *eP* | | **Pn** | **02 09 08.0** | **-0.5** |
| **LCR2** | **La Lucha 2** | **1.39** | **324** | *i* P | | **Pn** | **02 09 07.8** | **-0.6** |
| LCR2 | | | | *i* S | | **Sg** | **02 09 29.4** | **+0.9** |
| LCR2 | | | | IAML | | | 02 09 29.9 | |
| | comp=Z,530nm,1.0s | | | | | | | |
| **LCR2** | **La Lucha 2** | **1.39** | **324** | *eP* | | **Pn** | **02 09 07.2** | **-1.2** |
| **VERB** | **Verbena** | **1.42** | **339** | *eP* | | **Pn** | **02 09 08.4** | **-0.4** |
| **RAFA** | **San Farael, Vo** | **1.48** | **335** | *i* P | | **Pn** | **02 09 09.1** | **-0.7** |
| RAFA | | | | IAML | | | 02 09 35.4 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **CVTV** | **Tajo** | **1.50** | **338** | *eP* | | **Pn** | **02 09 10.4** | **+0.4** |
| **SOCE** | **Pocosol** | **2.26** | **321** | *i* P | | **Pn** | **02 09 22.4** | **+2.1** |
| SOCE | | | | *i* S | | **Sn** | **02 09 50.1** | **+2.2** |
| SOCE | | | | IAML | | | 02 09 59.8 | |
| | comp=Z,450nm,1.0s | | | | | | | |
| **COVE** | **Coope Vega, Sa** | **2.42** | **330** | *i* P | | **Pb** | **02 09 25.0** | **-1.7** |
| COVE | | | | IAML | | | 02 10 03.1 | |
| | comp=Z,160nm,1.0s | | | | | | | |
| COVE | | | | *i* S | | **Sg** | **02 10 03.5** | **+2.1** |

**IDC 30 02:31:43.5**±6.3, **5°.54S**×**134°.52E**, **h0**km, **mb3.6/1, mbtmp3.4/3, ML3.0/2, MS2.9/1, Error ellipse: s-maj=332.8km s-min=35.3km az=79.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.31** | **181** | | Pn | Pn | 02 35 07.5 | -0.1 |
| | 0.1nm,0.3s,baz=357,slow=13,SNR=2.3 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **18.03** | **182** | P | | Pn | 02 35 55.7 | 0.0 |
| | 0.1nm,0.3s,baz=14,slow=12,SNR=2.7 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.01** | **4** | LR | | LR | 02 55 07.8 | |
| | comp=Z,15nm,18.1s,baz=289,slow=33 | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.56** | **325** | P | | P | 02 42 54.5 | 0.0 |
| | 0.4nm,0.6s,baz=141,slow=7.1,SNR=2.3 | | | | | | | |
| | 0.4nm,0.6s | | | | | | | |

*NOU **30** 02:33:39.6, 22°.24S×170°.38E, h0km, MLv4.9/7, Southeast of Loyalty Islands*
*IDC **30** 02:33:40.7±1.3, 22°.60S×170°.38E, h0km, mb4.0/6, mbtmp4.0/7, ML3.6/1, MS3.2/1, Error ellipse: s-maj=40.3km s-min=32.0km az=171.0*
**ISC 30 02:33:47.3**±0.9, **22°.2S**±0°.2×**170°.0E**±0°.1, **h25**km, **n24, σ1§41/23, mb4.2/9, 3C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **1.94** | **291** | P | | **Pn** | **02 34 18.5** | **-0.2** |
| **PINNC** | **Pines Island,** | **2.37** | **259** | P | | **Pn** | **02 34 24.5** | **-0.2** |
| **YATNC** | **Mamie plateau,** | **2.86** | **272** | P | | **Pn** | **02 34 31.6** | **+0.2** |
| **LIFNC** | **LIFOU** | **2.91** | **298** | P | | **Pn** | **02 34 32.1** | **+0.1** |
| **DZM** | **Mont Dzumac** | **3.27** | **271** | P | | **Pn** | **02 34 37.2** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.27** | **271** | Pn | | **Pn** | **02 34 37.4** | **+0.2** |
| | 5.3nm,0.3s,baz=129,slow=9.6,SNR=176 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **02 35 14.5** | **-0.9** |
| | 7.5nm,0.3s,baz=14,slow=20,SNR=11 | | | | | | | |
| | 20nm,0.3s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.40** | **271** | P | | **Pn** | **02 34 39.2** | **+0.4** |
| **MSVF** | **Nonsavu** | **8.79** | **61** | LR | | LR | 02 38 36.4 | |
| | comp=Z,147nm,18.2s,baz=205,slow=34 | | | | | | | |
| **ASAR** | **Alice Springs** | **33.20** | **260** | P | | **P** | **02 40 22.9** | **+0.5** |
| | 1.5nm,1.0s,baz=88,slow=9.6,SNR=6.6 | | | | | | | |
| | 1.5nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.28** | **267** | P | | **P** | **02 40 22.9** | **-0.2** |
| | 0.6nm,0.5s,baz=100,slow=8.3,SNR=5.6 | | | | | | | |
| | 0.6nm,0.5s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.88** | **180** | P | | P | 02 44 38.0 | -5.5 |
| | 0.7nm,0.9s,baz=225,slow=1.4,SNR=1.7 | | | | | | | |
| | 0.7nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.34** | **294** | P | | **P** | **02 45 57.7** | **+0.8** |
| | 1.5nm,0.3s,baz=132,slow=3.8,SNR=4.3 | | | | | | | |
| | 1.5nm,0.3s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.82** | **180** | ⇑P | | **P** | **02 46 28.4** | **-0.9** |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.12** | **181** | ⇑P | | **P** | **02 46 29.8** | **-0.9** |
| | comp=Z,2.2nm,0.6s,baz=174,slow=5.5 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.41** | **181** | ⇑P | | **P** | **02 46 31.7** | **-0.3** |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **89.98** | **323** | P | | **P** | **02 46 44.6** | **-0.1** |
| | comp=Z,1.7nm,1.0s,baz=142,slow=5.1,SNR=4.7 | | | | | | | |
| | comp=Z,1.7nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.83** | **17** | P | | **P** | **02 46 55.3** | **-2.0** |
| | comp=Z,0.3nm,0.8s,baz=243,slow=5.9,SNR=2.3 | | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MORC** | **Moravsky Berou** | **144.94** | **329** | *e*PKP | | **PKPab** | **02 53 20.3** | **-1.1** |
| **JAVC** | **Velka Javorina** | **145.48** | **327** | *e*PKP | | **PKPab** | **02 53 23.8** | **+0.3** |
| **VRAC** | **Vranov** | **145.71** | **329** | *e*PKP | | **PKPbc** | **02 53 23.4** | **-0.5** |
| **BRG** | **Berggiesshubel** | **145.80** | **333** | *e*P | | **PKPbc** | **02 53 23.8** | **-0.3** |
| BRG | | | | | Amp | | 02 53 25.0 | |
| | comp=Z,6.5nm,0.9s | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.80** | **333** | P | | **PKiKP** | **02 53 33.2** | **+5.5** |
| BRG | | | | | Amp | | 02 53 33.8 | |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| **KRUC** | **Moravsky** | **145.97** | **328** | *e*PKP | | **PKPbc** | **02 53 24.0** | **-0.7** |
| **EKA** | **Eskdalemuir Ar** | **146.51** | **353** | PKPbc | | **PKPdf** | **02 53 24.4** | **-0.2** |
| | comp=Z,2.6nm,0.8s,baz=350,slow=1.8,SNR=6.3 | | | | | | | |

*JMA **30** 02:42:42.0±0.3, 25°.1N×122°.4E±0°.5, h10km±4km, MV2.3/10, NW OFF ISHIGAKIJIMA IS*
*TAP **30** 02:42:42.2, 24°.83N×122°.42E, h8km, ML3.1, C*
**ISC 30 02:42:42.0**±1.0, **24°.80N**±0°.02×**122°.42E**±0°.02, **h10**km±8km, **n68, σ0§57/128, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.42** | **204** | *i* P | | **Pg** | **02 42 51.0** | **+0.8** |
| | baz=203 | | | | | | | |
| EOS2 | | | | *i* S | | **Sb** | **02 42 57.8** | **0.0** |
| | baz=203 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.44** | **298** | P | | **Pg** | **02 42 50.3** | **-0.3** |
| | baz=294 | | | | | | | |
| TWB1 | | | | *i* S | | **Sg** | **02 42 56.2** | **-0.2** |
| | baz=294 | | | | | | | |
| **EGS** | | **0.45** | **275** | P | | **Pg** | **02 42 50.7** | **0.0** |
| | baz=271 | | | | | | | |
| EGS | | | | *i* S | | **Sg** | **02 42 56.5** | **-0.1** |
| | baz=271 | | | | | | | |
| **EOS3** | **EOS3** | **0.52** | **190** | *e*P | | **Pg** | **02 42 52.9** | **+0.7** |
| | baz=190 | | | | | | | |
| EOS3 | | | | *e*S | | **Sb** | **02 43 02.7** | **+1.9** |
| | baz=190 | | | | | | | |
| **TWC** | **Suao** | **0.55** | **250** | *e*P | | **Pg** | **02 42 52.3** | **-0.4** |
| | baz=246 | | | | | | | |
| TWC | | | | *e*S | | **Sb** | **02 43 02.5** | **+0.8** |
| | baz=246 | | | | | | | |
| **TIPB** | **Shuangxi** | **0.56** | **287** | *e*P | | **Pg** | **02 42 53.2** | **+0.3** |
| | baz=284 | | | | | | | |
| TIPB | | | | S | | **Sg** | **02 43 01.0** | **+0.6** |
| | baz=284 | | | | | | | |
| **ESAO** | **Su ao** | **0.57** | **247** | P | | **Pg** | **02 42 52.8** | **-0.3** |
| | baz=244 | | | | | | | |
| ESAO | | | | *e*S | | **Sg** | **02 43 00.1** | **-0.5** |
| | baz=244 | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.57** | **300** | *i* P | | **Pg** | **02 42 53.3** | **+0.2** |
| | baz=298 | | | | | | | |
| SXI1 | | | | *e*S | | **Sg** | **02 43 00.9** | **+0.2** |
| | baz=298 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.59** | **126** | *e*P | | **Pg** | **02 42 53.4** | **-0.1** |
| JYNG | | | | S | | **Sg** | **02 43 01.3** | **0.0** |
| **ILA** | **Ilan** | **0.61** | **267** | *e*P | | **Pg** | **02 42 54.4** | **+0.5** |
| | baz=264 | | | | | | | |
| ILA | | | | *e*S | | **Sb** | **02 43 04.8** | **+1.4** |
| | baz=264 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.64** | **122** | *i* P | | **Pg** | **02 42 54.2** | **-0.1** |
| | baz=124 | | | | | | | |
| YOJ | | | | *i* S | | **Sg** | **02 43 02.6** | **-0.1** |
| | baz=124 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.64** | **122** | P | | **Pg** | **02 42 54.2** | **-0.1** |
| YOJ | | | | S | | **Sg** | **02 43 02.1** | **-0.5** |
| **NWF** | **Wu-fen Shan** | **0.64** | **295** | *e*P | | **Pg** | **02 42 54.9** | **+0.5** |
| | baz=292 | | | | | | | |
| NWF | | | | *i* S | | **Sg** | **02 43 03.5** | **+0.7** |
| | baz=292 | | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.64** | **295** | *e*P | | **Pb** | **02 42 55.0** | **-0.3** |
| | baz=292 | | | | | | | |
| WFSB | | | | *i* S | | **Sb** | **02 43 03.6** | **-0.6** |
| | baz=292 | | | | | | | |
| **NDS** | **Dongshan** | **0.66** | **255** | *e*P | | **Pg** | **02 42 54.9** | **+0.1** |
| | baz=253 | | | | | | | |
| NDS | | | | S | | **Sb** | **02 43 05.2** | **+0.3** |
| | baz=253 | | | | | | | |
| **TNOU** | **National Taiwa** | **0.68** | **301** | *e*P | | **Pg** | **02 42 54.4** | **-0.8** |
| | baz=298 | | | | | | | |
| TNOU | | | | S | | **Sg** | **02 43 04.5** | **+0.4** |
| | baz=298 | | | | | | | |
| **EWUT** | **Wuta** | **0.68** | **239** | *e*P | | **Pg** | **02 42 55.1** | **-0.1** |
| | baz=237 | | | | | | | |
| EWUT | | | | *e*S | | **Sg** | **02 43 04.0** | **-0.2** |
| | baz=237 | | | | | | | |
| **EOS4** | **EOS4** | **0.69** | **188** | *e*P | | **Pb** | **02 42 55.8** | **-0.1** |
| | baz=187 | | | | | | | |
| EOS4 | | | | *e*S | | **Sb** | **02 43 06.6** | **+1.3** |
| | baz=187 | | | | | | | |
| **TWE** | **Neicheng** | **0.69** | **263** | *e*P | | **Pg** | **02 42 55.1** | **-0.3** |
| | baz=260 | | | | | | | |
| TWE | | | | *e*S | | **Sg** | **02 43 04.4** | **0.0** |
| | baz=260 | | | | | | | |
| **ENA** | **Nanau** | **0.72** | **239** | *e*P | | **Pg** | **02 42 54.9** | **-1.1** |
| | baz=236 | | | | | | | |
| ENA | | | | *e*S | | **Sg** | **02 43 04.8** | **-0.6** |
| | baz=236 | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.76** | **267** | P | | **Pg** | **02 42 56.8** | **+0.2** |
| | baz=264 | | | | | | | |
| FUSB | | | | *e*S | | **Sg** | **02 43 06.4** | **-0.2** |
| | baz=264 | | | | | | | |
| **EAHA** | **Aohua** | **0.78** | **233** | P | | **Pg** | **02 42 57.3** | **+0.2** |
| | baz=231 | | | | | | | |
| EAHA | | | | *e*S | | **Sg** | **02 43 06.8** | **-0.4** |
| | baz=231 | | | | | | | |
| **TWA** | **Mucha** | **0.78** | **283** | *e*S | | **Sg** | **02 43 07.7** | **+0.5** |
| | baz=281 | | | | | | | |
| **EHP** | **Heping Village** | **0.79** | **232** | *e*P | | **Pg** | **02 42 57.2** | **-0.1** |
| | baz=229 | | | | | | | |
| EHP | | | | *e*S | | **Sb** | **02 43 08.5** | **-0.1** |
| | baz=229 | | | | | | | |
| **ENTT** | **Nioudou** | **0.79** | **258** | *e*P | | **Pg** | **02 42 57.1** | **-0.2** |
| | baz=256 | | | | | | | |
| ENTT | | | | *e*S | | **Sg** | **02 43 07.7** | **+0.1** |
| | baz=256 | | | | | | | |
| **NHDH** | **Xindian Distri** | **0.83** | **281** | *e*S | | **Sg** | **02 43 08.8** | **+0.1** |
| | baz=279 | | | | | | | |
| **NWLT** | **Wulai** | **0.83** | **268** | P | | **Pg** | **02 42 58.2** | **+0.1** |
| | baz=266 | | | | | | | |
| NWLT | | | | *i* S | | **Sg** | **02 43 09.6** | **+0.7** |
| | baz=266 | | | | | | | |
| **YM01** | **YM01** | **0.84** | **294** | *e*P | | **Pg** | **02 42 58.3** | **0.0** |
| | baz=292 | | | | | | | |
| YM01 | | | | S | | **Sg** | **02 43 09.5** | **+0.2** |
| | baz=292 | | | | | | | |
| **YM08** | **YM08** | **0.84** | **297** | *e*P | | **Pg** | **02 42 58.2** | **-0.1** |
| | baz=295 | | | | | | | |
| YM08 | | | | *i* S | | **Sg** | **02 43 08.9** | **-0.4** |
| | baz=295 | | | | | | | |
| **NDT** | **Datong Townshi** | **0.85** | **257** | *e*P | | **Pg** | **02 42 58.1** | **-0.2** |
| | baz=254 | | | | | | | |
| NDT | | | | S | | **Sb** | **02 43 10.8** | **+0.5** |
| | baz=254 | | | | | | | |
| **LATG** | **Datong** | **0.85** | **252** | *e*P | | **Pg** | **02 42 58.3** | **-0.2** |
| | baz=250 | | | | | | | |
| LATG | | | | S | | **Sb** | **02 43 10.4** | **-0.2** |
| | baz=250 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.88** | **339** | *e*P | | **Pb** | **02 42 59.4** | **0.0** |
| | baz=338 | | | | | | | |
| PCYT | | | | *e*S | | **Sg** | **02 43 10.7** | **+0.2** |
| | baz=338 | | | | | | | |
| **TWY** | **Chenhua** | **0.88** | **302** | P | | **Pg** | **02 42 59.2** | **+0.3** |
| | baz=300 | | | | | | | |
| TWY | | | | *e*S | | **Sg** | **02 43 10.5** | **+0.1** |
| | baz=300 | | | | | | | |
| **ANP** | **Anpu** | **0.90** | **295** | *e*P | | **Pg** | **02 42 58.1** | **-1.3** |
| | baz=293 | | | | | | | |
| ANP | | | | *e*S | | **Sg** | **02 43 10.2** | **-0.9** |
| | baz=293 | | | | | | | |
| **YHNB** | **Yeheng** | **0.96** | **262** | P | | **Pg** | **02 43 00.2** | **-0.2** |
| | baz=260 | | | | | | | |
| YHNB | | | | *e*S | | **Sg** | **02 43 12.3** | **-0.6** |
| | baz=260 | | | | | | | |
| **ETL** | **Fush Village** | **0.97** | **229** | P | | **Pg** | **02 43 00.6** | **-0.1** |
| | baz=227 | | | | | | | |
| ETL | | | | S | | **Sb** | **02 43 14.0** | **+0.2** |
| | baz=227 | | | | | | | |
| **NSK** | **Sanguang** | **0.97** | **263** | *e*P | | **Pg** | **02 43 00.3** | **-0.4** |
| | baz=260 | | | | | | | |
| NSK | | | | *e*S | | **Sg** | **02 43 11.9** | **-1.6** |
| | baz=260 | | | | | | | |
| **NACB** | **Ninganchiao** | **0.98** | **230** | *e*P | | **Pg** | **02 43 00.4** | **-0.4** |
| | baz=229 | | | | | | | |
| NACB | | | | *e*S | | **Sg** | **02 43 13.6** | **0.0** |
| | baz=229 | | | | | | | |
| **NNSB** | **Datong** | **1.01** | **249** | P | | **Pg** | **02 43 00.9** | **-0.6** |
| | baz=247 | | | | | | | |
| NNSB | | | | S | | **Sb** | **02 43 16.1** | **+0.8** |
| | baz=247 | | | | | | | |
| **NNS** | **Nan Shan** | **1.02** | **249** | *e*P | | **Pg** | **02 43 01.4** | **-0.2** |
| | baz=247 | | | | | | | |
| NNS | | | | *e*S | | **Sg** | **02 43 14.3** | **-0.5** |
| | baz=247 | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **1.04** | **235** | P | | **Pg** | **02 43 01.4** | **-0.6** |
| | baz=234 | | | | | | | |
| ETLH | | | | *e*S | | **Sg** | **02 43 16.0** | **+0.4** |
| | baz=234 | | | | | | | |
| **TWD** | **Chiawan** | **1.04** | **226** | P | | **Pg** | **02 43 01.2** | **-0.8** |
| | baz=225 | | | | | | | |
| TWD | | | | *e*S | | **Sg** | **02 43 15.0** | **-0.5** |
| | baz=225 | | | | | | | |
| **NCUH** | **Zhongli** | **1.13** | **279** | *e*S | | **Sn** | **02 43 21.0** | **+1.4** |
| | baz=277 | | | | | | | |
| **ETM** | **Tongmen** | **1.19** | **226** | *e*P | | **Pb** | **02 43 04.2** | **-0.5** |
| | baz=224 | | | | | | | |
| ETM | | | | *e*S | | **Sb** | **02 43 20.3** | **+0.2** |
| | baz=224 | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.20** | **262** | *e*P | | **Pb** | **02 43 05.0** | **+0.1** |
| | baz=260 | | | | | | | |
| NFF | | | | *e*S | | **Sb** | **02 43 20.6** | **+0.2** |
| | baz=260 | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.20** | **230** | *e*P | | **Pb** | **02 43 04.4** | **-0.6** |
| | baz=228 | | | | | | | |
| LXIB | | | | *e*S | | **Sb** | **02 43 21.1** | **+0.4** |
| | baz=228 | | | | | | | |
| **FUSS** | **Fushou** | **1.21** | **243** | *e*P | | **Pb** | **02 43 05.1** | **0.0** |
| | baz=241 | | | | | | | |
| FUSS | | | | *e*S | | **Sg** | **02 43 20.4** | **-0.5** |
| | baz=241 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.24** | **238** | *i* P | | **Pb** | **02 43 05.3** | **-0.4** |
| | baz=237 | | | | | | | |
| WHF | | | | *e*S | | **Sg** | **02 43 21.4** | **-0.6** |
| | baz=237 | | | | | | | |
| **SHUL** | **Shoufeng** | **1.28** | **218** | *e*P | | **Pg** | **02 43 07.9** | **+1.4** |
| | baz=217 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.28** | **111** | P | | **Pn** | **02 43 05.3** | **-0.7** |
| IRIF | | | | S | | **Sb** | **02 43 21.8** | **-0.9** |
| **NSTT** | **Nanjuang** | **1.30** | **263** | *e*P | | **Pg** | **02 43 07.6** | **+0.6** |
| | baz=261 | | | | | | | |
| **SBCB** | **Hsinchu** | **1.30** | **270** | *e*S | | **Sb** | **02 43 22.6** | **-0.9** |
| | baz=268 | | | | | | | |
| **ESL** | **Shilin** | **1.33** | **223** | *e*S | | **Sn** | **02 43 25.1** | **+0.5** |
| | baz=221 | | | | | | | |
| **CHGB** | **Renai** | **1.35** | **237** | *e*P | | **Pn** | **02 43 07.6** | **+0.4** |
| | baz=236 | | | | | | | |
| CHGB | | | | *e*S | | **Sg** | **02 43 26.3** | **+0.6** |
| | baz=236 | | | | | | | |
| **OWD** | **Renai** | **1.41** | **234** | *e*P | | **Pn** | **02 43 08.3** | **+0.3** |
| | baz=232 | | | | | | | |
| OWD | | | | *e*S | | **Sb** | **02 43 25.9** | **-0.8** |
| | baz=232 | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.44** | **221** | *e*P | | **Pn** | **02 43 08.3** | **+0.2** |
| | baz=220 | | | | | | | |
| WARBT | | | | *e*S | | **Sn** | **02 43 26.1** | **-1.0** |
| | baz=220 | | | | | | | |
| **WUSB** | **Renai** | **1.44** | **236** | P | | **Pb** | **02 43 09.1** | **+0.1** |
| | baz=235 | | | | | | | |
| WUSB | | | | S | | **Sb** | **02 43 28.0** | **+0.6** |
| | baz=235 | | | | | | | |
| **WHP** | **Taichung City** | **1.44** | **249** | *e*P | | **Pb** | **02 43 09.5** | **+0.5** |
| | baz=247 | | | | | | | |
| WHP | | | | *e*S | | **Sg** | **02 43 28.8** | **+0.4** |
| | baz=247 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.47** | **120** | *e*P | | **Pn** | **02 43 08.7** | **+0.1** |
| HATJ | | | | *e*S | | **Sn** | **02 43 27.7** | **-0.1** |
| **WCS** | **Beigang Elemen** | **1.56** | **242** | *e*P | | **Pg** | **02 43 11.9** | **-0.1** |
| | baz=240 | | | | | | | |
| WCS | | | | *e*S | | **Sn** | **02 43 29.5** | **-0.7** |
| | baz=240 | | | | | | | |
| **VWDT** | **VWDT** | **1.57** | **228** | *e*P | | **Pb** | **02 43 10.9** | **-0.2** |
| | baz=227 | | | | | | | |
| VWDT | | | | *e*S | | **Sn** | **02 43 29.8** | **-0.5** |
| | baz=227 | | | | | | | |
| **HGSD** | **Ruisui** | **1.59** | **215** | *e*P | | **Pn** | **02 43 09.8** | **-0.4** |
| | baz=214 | | | | | | | |
| HGSD | | | | *e*S | | **Sn** | **02 43 30.0** | **-0.9** |
| | baz=214 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.63** | **105** | *e*P | | **Pn** | **02 43 11.6** | **+0.8** |
| JIJ | | | | *e*S | | **Sn** | **02 43 32.2** | **+0.4** |
| **SSLB** | **Suanglung** | **1.68** | **233** | *e*P | | **Pb** | **02 43 13.4** | **+0.4** |
| | baz=232 | | | | | | | |
| SSLB | | | | *e*S | | **Sg** | **02 43 35.5** | **-0.4** |
| | baz=232 | | | | | | | |
| **TYC** | **Yuchr** | **1.68** | **238** | *e*P | | **Pb** | **02 43 13.3** | **+0.3** |
| | baz=237 | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.81** | **233** | *e*P | | **Pb** | **02 43 15.1** | **-0.1** |
| | baz=231 | | | | | | | |
| WHYT | | | | *e*S | | **Sg** | **02 43 39.4** | **-0.7** |
| | baz=231 | | | | | | | |
| **CHN5** | **Tsauling** | **1.99** | **233** | *e*P | | **Pb** | **02 43 18.1** | **-0.3** |
| | baz=232 | | | | | | | |
| CHN5 | | | | *e*S | | **Sb** | **02 43 42.6** | **-0.7** |
| | baz=232 | | | | | | | |
| **WDLH** | **Douliu** | **2.04** | **238** | *e*P | | **Pb** | **02 43 18.9** | **-0.3** |
| | baz=236 | | | | | | | |
| WDLH | | | | *e*S | | **Sb** | **02 43 44.9** | **+0.1** |
| | baz=236 | | | | | | | |

*AZER **30** 02:56:14.5, 41°.11N×46°.79E, h7km, ml2.9*
*DRS **30** 02:56:15.4, 40°.90N×47°.01E, h18km*
*TIF **30** 02:56:15.9, 41°.06N×46°.99E, h34km±1km*
*NSSP **30** 02:56:17.0, 40°.98N×46°.68E, h10km, Ms3.3*
**ISC 30 02:56:16.8**±1.1, **41°.05N**±0°.01×**46°.87E**±0°.01, **h2**km±10km, **n59, σ1§14/114, 4C-4D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SEKA** | **Sheki** | **0.29** | **58** | P | | **Pb** | **02 56 24.0** | **-0.8** |
| SEKA | | | | S | | **Sb** | **02 56 29.4** | **-0.7** |
| **MNGR** | **Mingechevir, A** | **0.32** | **150** | P | | **Pb** | **02 56 25.6** | **+0.4** |
| MNGR | | | | S | | **Sb** | **02 56 32.5** | **+1.7** |
| **VSHL** | **Vashlovani** | **0.40** | **297** | P | | **Pb** | **02 56 26.6** | **+0.1** |
| VSHL | | | | S | | **Sb** | **02 56 34.4** | **+1.3** |
| **GANJ** | **Ganja** | **0.58** | **226** | P | | **Pg** | **02 56 28.4** | **+0.5** |
| GANJ | | | | S | | **Sg

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GNBR** | **Gunib** | **1.34** | **3** | *e*Pg | **Pb** | **02 56 42.9** | **+0.3** |
| | 300nm,0.0s | | | | | | | |
| GNBR | | | | *e*Sg | **Sn** | **02 57 03.4** | **+2.6** |
| | 500nm,0.1s | | | | | | | |
| **BLQ** | **Beylaqan** | **1.43** | **158** | Pn | **Pn** | **02 56 43.2** | **-0.5** |
| BLQ | | | | Sn | **Sn** | **02 57 03.2** | **+0.2** |
| **DRN** | **Derbent** | **1.47** | **48** | *e*Pg | **Pb** | **02 56 43.5** | **-1.2** |
| | 320nm,0.0s | | | | | | | |
| DRN | | | | *e*Sg | **Sn** | **02 57 04.0** | **0.0** |
| | 240nm,0.2s | | | | | | | |
| **XNZR** | **Khunzakh** | **1.49** | **355** | *e*Pg | **Pg** | **02 56 45.7** | **+0.3** |
| | 360nm,0.0s | | | | | | | |
| XNZR | | | | *e*Sg | **Sn** | **02 57 08.1** | **+3.2** |
| | 400nm,0.0s | | | | | | | |
| **SGKR** | **Sergokala** | **1.52** | **22** | *e*Pg | **Pg** | **02 56 45.4** | **-0.5** |
| | 160nm,0.0s | | | | | | | |
| SGKR | | | | *e*Sg | **Sg** | **02 57 07.6** | **+1.9** |
| | 280nm,0.1s | | | | | | | |
| **SIZA** | **Siyzn** | **1.53** | **88** | Pn | **Pg** | **02 56 45.6** | **-0.6** |
| SIZA | | | | Sn | **Sg** | **02 57 09.2** | **+3.2** |
| **ARKR** | **Arakani** | **1.55** | **3** | *e*Pg | **Pg** | **02 56 46.7** | **+0.1** |
| | 320nm,0.0s | | | | | | | |
| ARKR | | | | *e*Sg | **Sg** | **02 57 09.2** | **+2.5** |
| | 400nm,0.1s | | | | | | | |
| **ATGJ** | **Altiaghaj** | **1.58** | **96** | Pn | **Pg** | **02 56 46.4** | **-0.6** |
| ATGJ | | | | Sn | **Sg** | **02 57 09.3** | **+1.9** |
| **QRD** | **Qoradiz** | **1.63** | **168** | Pn | **Pn** | **02 56 46.0** | **-0.4** |
| QRD | | | | Sn | **Sb** | **02 57 08.5** | **+0.1** |
| **GBS** | **Qobustan** | **1.66** | **108** | Pn | **Pg** | **02 56 47.5** | **-1.0** |
| GBS | | | | Sn | **Sg** | **02 57 11.0** | **+1.0** |
| **UNCR** | **Uncukul** | **1.66** | **358** | *e*Pg | **Pg** | **02 56 48.3** | **-0.3** |
| | 320nm,0.0s | | | | | | | |
| UNCR | | | | *e*Sg | **Sg** | **02 57 12.3** | **+2.1** |
| | 520nm,0.1s | | | | | | | |
| **BTLR** | **Botlikh** | **1.68** | **343** | *e*Pg | **Pg** | **02 56 48.6** | **-0.3** |
| | 400nm,0.0s | | | | | | | |
| BTLR | | | | *e*Sg | **Sg** | **02 57 13.1** | **+2.3** |
| | 560nm,0.0s | | | | | | | |
| **BUJR** | **Buynaksk** | **1.78** | **6** | *e*Pg | **Pb** | **02 56 49.2** | **-0.8** |
| | 280nm,0.2s | | | | | | | |
| BUJR | | | | *e*Sg | **Sg** | **02 57 14.6** | **+0.6** |
| | 480nm,0.1s | | | | | | | |
| **KAPZ** | **Kaputan** | **1.81** | **247** | ⇓*i*P | **Pn** | **02 56 49.1** | **+0.1** |
| KAPZ | | | | ⇓*i*S | **Sn** | **02 57 12.6** | **0.0** |
| **GNI** | **Garni** | **1.85** | **242** | ⇑*i*P | **Pn** | **02 56 50.5** | **+0.9** |
| GNI | | | | ⇑*i*S | **Sb** | **02 57 15.0** | **-0.1** |
| **CHRG** | **Chargali** | **1.94** | **312** | P | **Pn** | **02 56 50.0** | **-0.7** |
| CHRG | | | | S | **Sn** | **02 57 15.2** | **-0.5** |
| **SBZ** | **Shahbuz** | **1.94** | **212** | Pn | **Pb** | **02 56 51.9** | **-0.9** |
| SBZ | | | | Sn | **Sb** | **02 57 18.0** | **+0.6** |
| **ALIB** | **&Aumlli-Bayram** | **1.96** | **123** | Sn | **Sg** | **02 57 20.4** | **+0.7** |
| **DBC** | **Dubki** | **1.97** | **359** | *e*Pg | **Pb** | **02 56 52.1** | **-1.2** |
| | 250nm,0.0s | | | | | | | |
| DBC | | | | *e*Sg | **Sg** | **02 57 19.9** | **0.0** |
| | 500nm,0.0s | | | | | | | |
| **NRKZ** | **NAREK** | **1.98** | **239** | *e*P | **Pb** | **02 56 52.8** | **-0.8** |
| NRKZ | | | | *e*S | **Sb** | **02 57 19.9** | **+1.1** |
| **DLMR** | **Dylym** | **2.02** | **355** | *e*Pg | **Pb** | **02 56 52.6** | **-1.6** |
| | 200nm,0.0s | | | | | | | |
| DLMR | | | | *e*Sg | **Sg** | **02 57 20.7** | **-1.1** |
| | 320nm,0.1s | | | | | | | |
| **HYR** | **Heyderabad** | **2.04** | **230** | Sn | **Sn** | **02 57 18.0** | **-0.1** |
| **DMNI** | **Dmanisi** | **2.04** | **279** | P | **Pn** | **02 56 51.8** | **-0.4** |
| DMNI | | | | S | **Sn** | **02 57 18.1** | **-0.2** |
| **AMBZ** | **Amberd** | **2.09** | **252** | ⇓*i*P | **Pn** | **02 56 54.3** | **+1.3** |
| AMBZ | | | | ⇓*i*S | **Sb** | **02 57 21.5** | **-0.6** |
| **TRLG** | **Trialeti** | **2.14** | **284** | P | **Pn** | **02 56 52.9** | **-0.7** |
| TRLG | | | | S | **Sn** | **02 57 20.9** | **+0.1** |
| **GLBA** | **Clilabad** | **2.15** | **147** | Pn | **Pb** | **02 56 54.7** | **-1.7** |
| GLBA | | | | Sn | **Sb** | **02 57 23.4** | **-0.1** |
| **NAX** | **Nakhchivan** | **2.15** | **210** | Pn | **Pn** | **02 56 52.5** | **-1.1** |
| NAX | | | | Sn | **Sn** | **02 57 21.6** | **+0.6** |
| **ORD** | **Ordubad** | **2.23** | **198** | Pn | **Pn** | **02 56 55.0** | **+0.4** |
| ORD | | | | Sn | **Sb** | **02 57 25.6** | **-0.1** |
| **ARUZ** | **Aruch** | **2.25** | **251** | ⇓*i*P | **Pb** | **02 56 57.4** | **-0.7** |
| ARUZ | | | | ⇑*i*S | **Sb** | **02 57 26.7** | **+0.3** |
| **GUDG** | **Gudauri** | **2.28** | **309** | P | **Pn** | **02 56 56.7** | **+1.1** |
| GUDG | | | | S | **Sn** | **02 57 25.6** | **+1.3** |
| **YRD** | **Yardimli** | **2.38** | **153** | Pn | **Pn** | **02 56 56.6** | **-0.3** |
| YRD | | | | Sn | **Sn** | **02 57 26.1** | **-0.6** |
| **MTEO** | **Meteo** | **2.39** | **314** | P | **Pn** | **02 56 57.2** | **0.0** |
| MTEO | | | | S | **Sn** | **02 57 26.5** | **-0.7** |
| **VNNZ** | **Vanand** | **2.51** | **249** | *e*P | **Pb** | **02 57 01.1** | **-1.4** |
| VNNZ | | | | *e*S | Sn | 02 56 34.2 | -56 |
| **LRK** | **Lerik** | **2.66** | **154** | Pn | **Pn** | **02 57 01.4** | **+0.6** |
| LRK | | | | Sn | **Sn** | **02 57 34.9** | **+1.3** |
| **LKRN** | **Lenkeran, Azer** | **2.76** | **147** | Sn | **Sn** | **02 57 37.5** | **+1.6** |
| **ASTR** | **Astara** | **2.90** | **149** | Pn | **Pn** | **02 57 04.6** | **+0.8** |
| ASTR | | | | Sn | **Sn** | **02 57 39.9** | **+0.7** |

*ISN **30** 03:00:10.3±0.5,36°.28N×45°.35E,h5km±370km,ML3.2*
*TEH **30** 03:00:11.3,36°.24N×45°.52E,h5km,ML3.3*
**ISC 30 03:00:11.7**±0.9,**36°.26N**±0°.03×**45°.54E**±0°.04,**h10**km,**n33,**
**σ2§15/36,Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SDS1** | **Sardasht. Az.** | **0.12** | **202** | Pg | **Pg** | **03 00 13.3** | **-1.4** |
| **MAHB** | **Mahabad** | **0.52** | **14** | Pg | **Pg** | **03 00 21.8** | **0.0** |
| **IKRK** | **Kirkuk** | **1.30** | **229** | *e*Pn | **Pg** | **03 00 36.0** | **-0.7** |
| IKRK | | | | *e*Sn | **Sn** | **03 00 55.0** | **+1.6** |
| IKRK | | | | AML | AML | 03 00 57.3 | |
| | comp=E,687nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 03 00 58.2 | |
| | comp=N,587nm,0.5s | | | | | | |
| **IAZR** | **Azarshahr** | **1.46** | **14** | Pg | **Pb** | **03 00 39.2** | **+0.1** |
| **IDHR** | **Dehrash** | **1.70** | **156** | Pg | **Pb** | **03 00 42.5** | **-0.7** |
| **KGS1** | **Ghasr-e-Shirin** | **1.75** | **179** | Pg | **Pg** | **03 00 44.6** | **-0.7** |
| **CUKT** | **Cukurca** | **1.84** | **303** | *e*P | **Pb** | **03 00 45.7** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **2.10** | **156** | Pn | **Pb** | **03 00 49.5** | **-0.5** |
| **GLG1** | **Gilan-e-Gharb** | **2.16** | **172** | Pn | **Pb** | **03 00 50.1** | **-0.9** |
| **SNQR** | **Sonqor, Kerman** | **2.20** | **129** | Pn | **Pb** | **03 00 51.1** | **-0.7** |
| **ISRB** | **Sarab** | **2.31** | **47** | Pn | **Pb** | **03 00 53.2** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **2.33** | **148** | Pn | **Pb** | **03 00 52.9** | **-1.0** |
| **IHRS** | **Heris** | **2.38** | **30** | Pn | **Pb** | **03 00 54.0** | **-0.7** |
| **IMRD** | **Marand** | **2.45** | **3** | Pn | **Pb** | **03 00 55.1** | **-0.8** |
| **IBZA** | **Bozab** | **2.60** | **133** | Pn | **Pb** | **03 00 56.7** | **-1.9** |
| **SIRT** | **Sirnak** | **2.78** | **297** | *e*P | **Pn** | **03 00 56.3** | **0.0** |
| **VANB** | **Van** | **2.89** | **324** | *e*P | **Pb** | **03 01 03.2** | **-0.2** |
| **AKDM** | **Akdamar-Van** | **2.90** | **316** | *e*P | **Pb** | **03 01 02.7** | **-1.0** |
| **GRMI** | **Germi** | **3.15** | **36** | Pn | **Pb** | **03 01 04.9** | **-3.0** |
| **IBDR** | **Badra** | **3.16** | **174** | *e*Pn | **Pn** | **03 01 04.0** | **+2.5** |
| IBDR | | | | *e*Sn | **Sb** | **03 01 43.0** | **-3.5** |
| IBDR | | | | AML | AML | 03 01 57.5 | |
| | comp=E,102nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 03 01 58.3 | |
| | comp=N,90nm,0.6s | | | | | | |
| **MAKU** | **Maku** | **3.16** | **348** | Pn | **Pb** | **03 01 05.2** | **-2.9** |
| **HSAM** | **Samen** | **3.23** | **128** | Pn | **Pb** | **03 01 05.8** | **-3.5** |
| **HAGD** | **Aghdareh** | **3.27** | **115** | Pn | **Pb** | **03 01 06.6** | **-3.3** |
| **QABG** | **Abgarm-Qazvin** | **3.32** | **98** | Pn | **Pn** | **03 01 07.0** | **+3.0** |
| **IKFM** | **Kafar-mosalman** | **3.32** | **145** | Pn | **Pn** | **03 01 06.5** | **+2.8** |
| **GAS1** | **Astara - Iran** | **3.38** | **50** | Pn | **Pb** | **03 01 08.2** | **-3.4** |
| **JIR1** | **Jirandeh** | **3.46** | **81** | Pn | **Pn** | **03 01 08.7** | **+3.0** |
| **BDRS** | **Dareh Seyedi** | **3.58** | **129** | Pn | **Pn** | **03 01 10.4** | **+3.0** |
| **AGRB** | **Hanur-Agry** | **3.88** | **329** | *e*P | **Pb** | **03 01 19.0** | **-1.2** |
| **SVAN** | **Silvan-Diyarba** | **3.95** | **300** | *e*P | **Pn** | **03 01 12.5** | **+0.1** |
| **RAFI** | **Al-Rafai** | **4.55** | **174** | *e*Pn | **Pn** | **03 01 23.0** | **+2.4** |
| RAFI | | | | *e*Sn | **Sn** | **03 02 16.0** | **+2.4** |
| **QAMS** | **Qamsar** | **5.42** | **116** | Pn | **Pn** | **03 01 36.4** | **+3.5** |
| **JHBN** | **Jahan bin** | **5.84** | **132** | Pn | **Pn** | **03 01 41.2** | **+2.6** |

*IDC **30** 03:00:16.6±6.4,39°.32N×141°.67E,h0km,mb4.0/5,*
*mbtmp3.9/6,ML2.9/1,Error ellipse: s-maj=158.4km*
*s-min=34.2km az=174.0*
*JMA **30** 03:00:46.1±0.1,42°.1N±0°.4×140°.9E±0°.7,h121km±1km,*
*MV2.9/38,UCHIURA BAY REGION*
**ISC 30 03:00:46.3**±0.9,**42°.04N**±0°.05×**140°.95E**±0°.04,**h122**km±6km,
**n23,σ0§53/32,mb3.9/5,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKB** | **Kayabe** | **0.16** | **158** | P | **Pn** | **03 01 02.9** | **-0.1** |
| JKB | | | | *e*S | **Sn** | **03 01 15.4** | **-0.1** |
| **JNB** | **Noboribetsu** | **0.43** | **8** | P | **Pn** | **03 01 03.5** | **-0.5** |
| **JYM2** | **Yakumo 2** | **0.44** | **280** | *i* P | **Pn** | **03 01 03.8** | **-0.2** |
| **JSR** | **Shiriuchi** | **0.65** | **218** | *i* P | **Pn** | **03 01 05.5** | **+0.1** |
| JSR | | | | S | **Sn** | **03 01 19.7** | **0.0** |
| **JOT** | **Ohata** | **0.66** | **174** | P | **Pn** | **03 01 05.8** | **+0.3** |
| **JOMM** | **Oshimamatsumae** | **0.87** | **234** | P | **Pn** | **03 01 07.4** | **+0.2** |
| JOMM | | | | *e*S | **Sn** | **03 01 23.8** | **+0.7** |
| **JEW** | **Eniwo** | **0.88** | **25** | P | **Pn** | **03 01 07.4** | **+0.1** |
| JEW | | | | *e*S | **Sn** | **03 01 23.7** | **+0.4** |
| **JHST** | **Hiyamasetana** | **0.89** | **296** | P | **Pn** | **03 01 07.0** | **-0.3** |
| JHST | | | | S | **Sn** | **03 01 22.4** | **-0.9** |
| **JSH** | **Shimam** | **0.90** | **312** | P | **Pn** | **03 01 07.5** | **0.0** |
| **JIAM** | **Iburiatsuma** | **0.93** | **51** | P | **Pn** | **03 01 08.0** | **+0.3** |
| JIAM | | | | S | **Sn** | **03 01 24.6** | **+0.7** |
| **JOSM** | **Okushiri--Mats** | **1.10** | **273** | P | **Pn** | **03 01 08.9** | **-0.4** |
| JOSM | | | | S | **Sn** | **03 01 26.5** | **-0.4** |
| **JTM** | **Tenmabayashi** | **1.25** | **176** | P | **Pn** | **03 01 11.2** | **+0.2** |
| JTM | | | | S | **Sn** | **03 01 30.2** | **+0.4** |
| **JBT2** | **Biratori 2** | **1.28** | **54** | P | **Pn** | **03 01 11.2** | **-0.1** |
| **JISS** | **Ishikarishitsu** | **1.28** | **15** | P | **Pn** | **03 01 11.7** | **+0.4** |
| **JNBK** | **Urakawa-nobuka** | **1.36** | **79** | *i* P | **Pn** | **03 01 12.0** | **-0.1** |
| **JANG** | **Nango** | **1.72** | **165** | P | **Pn** | **03 01 15.7** | **-0.7** |
| **JCH** | **Churui** | **1.88** | **71** | P | **Pn** | **03 01 18.1** | **-0.1** |
| JCH | | | | S | **Sn** | **03 01 41.9** | **-0.8** |
| **USRK** | **Ussuriysk Ar.** | **6.91** | **291** | Pn | **Pn** | **03 02 25.2** | **+0.3** |
| | 0.1nm,0.3s,baz=105,slow=14,SNR=7.1 | | | | | | |
| | 3.1nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.42** | **308** | P | **P** | **03 07 55.4** | **-0.2** |
| | 2.5nm,0.5s,baz=85,slow=8.1,SNR=9.5 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **41.33** | **297** | P | **P** | **03 08 18.9** | **-0.9** |
| | 0.5nm,0.5s,baz=81,slow=8.4,SNR=5.1 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.78** | **304** | P | **P** | **03 08 32.3** | **+0.8** |
| | 1.9nm,0.8s,baz=78,slow=8.9,SNR=7.9 | | | | | | |
| | 1.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **45.53** | **35** | P | **P** | **03 08 52.9** | **-0.4** |
| | 0.5nm,0.8s,baz=271,slow=6.0,SNR=6.2 | | | | | | |
| | 0.5nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **47.05** | **309** | P | **P** | **03 09 06.5** | **+1.3** |
| | 2.3nm,0.4s,baz=70,slow=9.4,SNR=8.3 | | | | | | |
| | 2.3nm,0.4s | | | | | | |

*JMA **30** 03:10:03.7±0.2,33°.0N±0°.6×14°.1E±°,h49km,MV3.4/22,E*
*OFF HACHIJOJIMA ISLAND*
*IDC **30** 03:10:08.4±1.9,32°.74N×139°.93E,h68km±17km,mb3.3/2,*
*mbtmp3.6/3,Error ellipse: s-maj=167.5km s-min=17.4km*
*az=73.0*
**ISC 30 03:10:03.3**±2.2,**32°.98N**±0°.07×**141°.0E**±0°.1,**h42**km±28km,
**n16,σ1§53/24,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ2** | **Mitsune** | **1.01** | **278** | P | **Pn** | **03 10 21.6** | **+0.7** |
| **JHJ2** | **Mitsune** | **1.01** | **278** | P | **Pn** | **03 10 21.7** | **+0.7** |
| **JHCJ** | **Hachijojimakas** | **1.02** | **276** | P | **Pn** | **03 10 21.7** | **+0.5** |
| JHCJ | | | | *e*S | **Sn** | **03 10 33.8** | **-0.5** |
| **JHJ** | **Hachijo jima 2** | **1.04** | **278** | P | **Pn** | **03 10 21.7** | **+0.3** |
| | 256nm,0.3s,baz=344,slow=16,SNR=86 | | | | | | |
| JHJ | | | | S | **Sn** | **03 10 30.8** | **-4.0** |
| | 334nm,0.3s,baz=66,slow=20,SNR=17 | | | | | | |
| **JAOM** | **Aogashimamukai** | **1.17** | **244** | P | **Pn** | **03 10 24.2** | **+1.1** |
| JAOM | | | | *e*S | **Sn** | **03 10 38.5** | **+0.6** |
| **JMKN** | **Mikurajimanish** | **1.50** | **308** | P | **Pn** | **03 10 28.1** | **+0.5** |
| JMKN | | | | *e*S | **Sn** | **03 10 44.8** | **-1.1** |
| **JMYK** | **Miyake Tsubota** | **1.63** | **312** | *e*P | **Pn** | **03 10 30.4** | **+1.0** |
| JMYK | | | | *e*S | **Sn** | **03 10 49.2** | **0.0** |
| **BSO1** | **Boso 1** | **1.67** | **359** | P | **Pn** | **03 10 30.0** | **+0.4** |
| **BSO3** | **Boso 3** | **1.87** | **347** | P | **Pn** | **03 10 32.7** | **+0.3** |
| BSO3 | | | | *e*S | **Sn** | **03 10 54.4** | **-0.3** |
| **JOD2** | **Odawara 2** | **2.78** | **326** | *e*P | **Pn** | **03 10 45.8** | **+0.4** |
| JOD2 | | | | *e*S | **Sn** | **03 11 15.7** | **-2.0** |
| **JGF** | **Kuroka** | **4.00** | **312** | P | **Pn** | **03 11 04.8** | **+2.7** |
| **MJAR** | **Matsushiro Arr** | **4.24** | **328** | P | **Pn** | **03 11 07.8** | **+2.5** |
| | 3.5nm,0.3s,baz=146,slow=11,SNR=18 | | | | | | |
| MJAR | | | | S | **Sn** | **03 11 53.7** | **+0.1** |
| | 3.0nm,0.5s,baz=273,slow=30,SNR=4.5 | | | | | | |
| **MAJO** | **Matsushiro** | **4.24** | **328** | P | **Pn** | **03 11 08.0** | **+2.7** |
| **JMM** | **Marumori** | **4.88** | **358** | P | **Pn** | **03 11 14.3** | **+0.2** |
| **WRA** | **Warramunga Arr** | **53.01** | **188** | P | **P** | **03 19 15.4** | **-0.5** |
| | 0.8nm,0.7s,baz=3.8,slow=7.6,SNR=10 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **56.73** | **188** | P | **P** | **03 19 42.5** | **-0.4** |
| | 0.3nm,0.5s,baz=356,slow=6.7,SNR=4.6 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*PDG **30** 03:29:01.0±0.1,42°.72N×18°.14E,h16km,MD2.7/2,*
*ML2.6/11,Error ellipse: s-maj=0.2km s-min=0.1km*
*az=90.0*
**ISC 30 03:29:00.8**±0.8,**42°.71N**±0°.04×**18°.13E**±0°.02,**h12**km±6km,
**n25,σ1§01/50,6C-5D,Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DBRK** | **Dubrovnik** | **0.04** | **160** | *i* Pg | **Pg** | **03 29 03.2** | **+0.1** |
| DBRK | | | | Sg | **Sg** | **03 29 04.3** | **-0.4** |
| **STON** | **Ston** | **0.35** | **297** | *i* Pg | **Pg** | **03 29 08.5** | **+0.6** |
| STON | | | | Sg | **Sb** | **03 29 14.2** | **-0.3** |
| **BRY** | **Bratogost** | **0.36** | **58** | ⇑*i*Pg | **Pg** | **03 29 07.8** | **-0.3** |
| BRY | | | | ⇑*i*Sg | **Sg** | **03 29 13.5** | **+0.6** |
| **CEME** | **Cevo** | **0.61** | **105** | ⇑*i*Pg | **Pg** | **03 29 12.2** | **-0.4** |
| CEME | | | | *i* Sg | **Sb** | **03 29 22.0** | **+0.1** |
| **NKME** | **Niksic** | **0.61** | **84** | ⇓*i*Pg | **Pg** | **03 29 12.5** | **-0.2** |
| NKME | | | | *i* Sg | **Sb** | **03 29 22.3** | **+0.2** |
| **BUM** | **Brajici-Budva** | **0.70** | **126** | ⇑*i*Pg | **Pg** | **03 29 14.2** | **-0.2** |
| BUM | | | | *i* Sg | **Sb** | **03 29 25.3** | **+0.7** |
| **UPM** | **Unac-Piva** | **0.76** | **49** | ⇑*i*Pg | **Pg** | **03 29 15.0** | **-0.4** |
| UPM | | | | *i* Sg | **Sn** | **03 29 26.8** | **-2.1** |
| **PDG** | **Podgorica** | **0.88** | **108** | ⇑*i*Pg | **Pb** | **03 29 17.4** | **-0.6** |
| PDG | | | | *i* Sg | **Sn** | **03 29 31.3** | **-0.4** |
| **LSTV** | **Lastovo** | **0.91** | **274** | *i* Pg | **Pn** | **03 29 19.5** | **+0.1** |
| LSTV | | | | Sg | **Sn** | **03 29 32.3** | **-0.1** |
| **DRME** | **Dracevica, Mon** | **0.94** | **123** | ⇓*i*Pg | **Pb** | **03 29 17.9** | **-1.2** |
| DRME | | | | *i* Sg | **Sn** | **03 29 33.0** | **-0.3** |
| **MAKA** | **Makarska** | **0.99** | **306** | *e*Pg | **Pb** | **03 29 19.8** | **-0.1** |
| MAKA | | | | Sg | **Sn** | **03 29 36.0** | **+1.5** |
| **KOME** | **Kolasin** | **1.03** | **82** | ⇓*i*Pg | **Pb** | **03 29 20.1** | **-0.6** |
| KOME | | | | *i* Sg | **Sn** | **03 29 36.1** | **+0.5** |
| **RICI** | **Ricice** | **1.07** | **317** | *e*Pg | **Pn** | **03 29 21.1** | **-0.1** |
| RICI | | | | Sg | **Sn** | **03 29 38.2** | **+1.8** |
| **PLE** | **Pljevlja** | **1.11** | **56** | ⇓*i*Pg | **Pb** | **03 29 21.4** | **-0.7** |
| PLE | | | | *i* Sg | **Sn** | **03 29 38.9** | **+1.2** |
| **IVA** | **Berane** | **1.31** | **82** | ⇓*i*Pg | **Pb** | **03 29 25.3** | **-0.1** |
| IVA | | | | *i* Sg | **Sg** | **03 29 44.9** | **+1.9** |
| **HVAR** | **Hvar** | **1.32** | **291** | *e*Pg | **Pg** | **03 29 26.6** | **+0.5** |
| HVAR | | | | Sg | **Sg** | **03 29 45.6** | **+2.4** |
| **PVY** | **Plav** | **1.36** | **94** | ⇑*i*Pg | **Pg** | **03 29 27.0** | **+0.1** |
| PVY | | | | *i* Sg | **Sg** | **03 29 46.3** | **+1.8** |
| **KIJV** | **Kijevo** | **1.80** | **316** | *i* Pn | **Pg** | **03 29 34.8** | **-0.5** |
| KIJV | | | | Sn | **Sg** | **03 30 00.3** | **+1.6** |
| **ZIRJ** | **Zirje** | **2.05** | **298** | *e*Pn | **Pg** | **03 29 39.3** | **-0.7** |
| ZIRJ | | | | Sn | **Sg** | **03 30 05.3** | **-1.2** |
| **MORI** | **Morici** | **2.11** | **304** | *e*Pn | **Pb** | **03 29 39.5** | **+0.6** |
| MORI | | | | Sn | **Sg** | **03 30 07.7** | **-0.9** |
| **UDBI** | **Udbina** | **2.50** | **317** | *e*Pg | **Pg** | **03 29 48.9** | **+0.2** |
| UDBI | | | | Sn | **Sg** | **03 30 20.0** | **-1.1** |
| **DUGI** | **Dugi Otok** | **2.58** | **301** | *e*Pn | **Pb** | **03 29 45.7** | **-1.2** |
| DUGI | | | | Sn | **Sb** | **03 30 19.8** | **+1.2** |
| **VIRC** | **Vir** | **2.74** | **306** | *e*Pn | **Pb** | **03 29 48.2** | **-1.4** |
| VIRC | | | | Sn | **Sb** | **03 30 22.9** | **-0.3** |
| **PLIT** | **Plitvice** | **2.82** | **321** | *e*Pg | **Pg** | **03 29 54.2** | **-0.7** |
| PLIT | | | | Sn | **Sb** | **03 30 26.6** | **+0.8** |
| **NVLJ** | **Novalja** | **3.00** | **309** | *e*Pn | **Pb** | **03 29 52.4** | **-1.8** |
| NVLJ | | | | Sn | **Sb** | **03 30 29.3** | **-1.4** |

*IDC **30** 03:31:08.0±1.4,11°.02S×124°.01E,h0km,mb4.0/4,*
*mbtmp3.9/6,ML3.7/2,MS3.1/4,Error ellipse:*
*s-maj=197.6km s-min=22.4km az=53.0*
**ISC 30 03:31:12.8**±1.1,**10°.8S**±0°.4×**124°.6E**±0°.5,**h35**km,**n11,**
**σ1§53/8,mb3.9/4,Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAPI** | **Kappang** | **7.44** | **320** | LR | LR | 03 36 12.5 | |
| | comp=Z,136nm,20.2s,baz=162,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.12** | **135** | Pn | **Pn** | **03 34 17.3** | **+0.6** |
| | 0.4nm,0.3s,baz=310,slow=13,SNR=20 | | | | | | |
| WRA | | | | Sn | **Sn** | **03 36 39.6** | **-1.8** |
| | 0.5nm,0.3s,baz=311,slow=22,SNR=7.3 | | | | | | |
| WRA | | | | LR | LR | 03 39 39.3 | |
| | comp=Z,82nm,21.7s,baz=247,slow=38 | | | | | | |
| | 0.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **15.62** | **146** | Pn | **Pn** | **03 34 51.0** | **+0.6** |
| | 0.4nm,0.3s,baz=321,slow=12,SNR=39 | | | | | | |
| ASAR | | | | Sn | **Sn** | **03 37 41.5** | **-1.0** |
| | 0.3nm,0.3s,baz=320,slow=22,SNR=9.1 | | | | | | |
| ASAR | | | | LR | LR | 03 41 23.6 | |
| | comp=Z,100nm,19.8s,baz=338,slow=39 | | | | | | |
| | 3.1nm,0.7s | | | | | | |
| **DAV** | **Davao City (W)** | **17.75** | **3** | LR | LR | 03 44 27.8 | |
| | comp=Z,30nm,18.5s,baz=150,slow=44 | | | | | | |
| **STKA** | **Stephens Creek** | **26.25** | **146** | P | **P** | **03 36 46.3** | **+1.5** |
| | 2.7nm,0.9s,baz=300,slow=16,SNR=2.3 | | | | | | |
| | 2.7nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.50** | **319** | P | **P** | **03 38 30.2** | **-1.7** |
| | 0.7nm,0.3s,baz=141,slow=5.8,SNR=4.5 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.61** | **330** | P | **P** | **03 42 12.9** | **+0.6** |
| | 1.0nm,0.8s,baz=133,slow=8.0,SNR=2.3 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **70.38** | **225** | T | T | 04 59 22.3 | |
| | baz=82,slow=75,SNR=7.9 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **70.39** | **225** | T | T | 04 59 20.9 | |
| | baz=82,slow=75,SNR=6.5 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **70.39** | **225** | T | T | 04 59 21.6 | |
| | baz=82,slow=75,SNR=7.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.73** | **337** | P | **P** | **03 42 38.0** | **+0.9** |
| | 0.6nm,0.3s,baz=129,slow=11,SNR=3.8 | | | | | | |
| | 0.6nm,0.3s | | | | | | |

*IDC **30** 03:32:48.3±1.1,25°.59N×141°.20E,h0km,mb4.0/8,*
*mbtmp4.0/8,Error ellipse: s-maj=34.9km s-min=26.8km*
*az=79.0*
*JMA **30** 03:32:49.6±0.3,25°.6N±0°.4×14°.1E±°,h44km,MV3.9/4,*
*IOTO ISLANDS REGION*
*NEIC **30** 03:32:55.0±1.6,25°.57N±0°.09×141°.6E±0°.1,h38km±9km,*
*mb4.5/18,Error ellipse: s-maj=18.7km s-min=12.4km*
*az=108.0*
**ISC 30 03:32:53.6**±0.7,**25°.57N**±0°.08×**141°.4E**±0°.1,**h35**km,**n37,**
**σ1§41/34,mb4.4/17,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHH2** | **Haha-jima-NKT2** | **1.29** | **34** | *e*P | **Pn** | **03 33 15.2** | **+0.1** |
| JHH2 | | | | *e*S | **Sn** | **03 33 34.2** | **+3.1** |
| **CBIJ** | **Chichi jima** | **1.69** | **26** | *e*P | **Pn** | **03 33 20.3** | **-0.4** |
| CBIJ | | | | S | **Sn** | **03 33 42.3** | **+1.2** |
| **JCJ** | **Chichijima** | **1.69** | **26** | | **Pn** | **03 33 20.5** | **-0.2** |
| JCJ | | | | Sn | **Sn** | **03 33 40.8** | **-0.3** |
| **JCJ** | **Chichijima** | **1.69** | **26** | Pn | Pn | 03 33 15.5 | -5.1 |
| | 135nm,0.3s,baz=279,slow=21,SNR=25 | | | | | | |
| JCJ | | | | Sn | **Sn** | **03 33 37.7** | **-3.4** |
| | 127nm,0.3s,baz=234,slow=22,SNR=21 | | | | | | |
| **KSRS** | **Korea Array** | **16.47** | **319** | Pn | **Pn** | **03 36 44.5** | **+2.6** |
| | 0.3nm,0.3s,baz=134,slow=11,SNR=13 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **24.25** | **99** | T | T | 04 03 18.1 | |
| | baz=288,slow=74,SNR=22 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **24.25** | **99** | T | T | 04 03 18.4 | |
| | baz=288,slow=74,SNR=13 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **24.26** | **99** | T | T | 04 03 19.2 | |
| | baz=288,slow=74,SNR=22 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **24.48** | **102** | T | T | 04 03 34.3 | |
| | baz=291,slow=75,SNR=428 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **24.48** | **102** | T | T | 04 03 35.2 | |
| | baz=291,slow=75,SNR=462 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **24.50** | **102** | T | T | 04 03 35.6 | |
| | baz=291,slow=75,SNR=609 | | | | | | |
| **SONM** | **Songino Array** | **35.33** | **318** | P | **P** | **03 39 46.2** | **+0.6** |
| | 1.1nm,0.9s,baz=135,slow=4.7,SNR=4.9 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.57** | **189** | P | **P** | **03 41 09.4** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 03 41 19.5 | |
| | comp=Z,15nm,1.4s | |

*Mwp4.3/12,Error ellipse: s-maj=1.7km s-min=0.3km az=92.0*
*MCSM **30** 03:33:05.6±0.2,44°N±2°×1°7E±°,h10km,mb4.6,mB4.8, MLv4.7,Mw(mB)4.0*
*PRU **30** 03:33:05.3,44°.02N×16°.44E,h10km, M4.6*
*BEO **30** 03:33:05.5±0.4,44°.10N×16°.71E,h5km±2km,ML4.4/4*
*TIR **30** 03:33:05.6,43°.36N×16°.47E,h0km±13km, Ml4.7*
*BNS **30** 03:33:07.4±0.2,43°.71N×15°.94E,h10km,ML4.4*
*NAO **30** 03:33:26.1,45°.58N×17°.56E,h33km,mb3.8*
**ISC 30 03:33:04.5±0.8,44°.02N±0°.02×16°.57E±0°.02,h17km±4km, n744,σ2°00/908,mb4.5/67,MS3.6/29,79C-82D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KIJV** | **Kijevo** | **0.12** | **263** | *i* | Pg | | **Pg** | **03 33 07.1** | **-1.3** |
| KIJV | | | | | Sg | | **Sg** | **03 33 09.6** | **-1.3** |
| **A050A** | **Klekovaca** | **0.46** | **356** | ⇓*i* | Pg | | **Pg** | **03 33 11.7** | **-2.2** |
| A050A | | | | | eSg | | **Sg** | **03 33 18.8** | **-1.5** |
| **MORI** | **Morici** | **0.64** | **256** | *i* | Pg | | **Pg** | **03 33 16.0** | **-1.2** |
| MORI | | | | | Sg | | **Sg** | **03 33 26.3** | **+0.3** |
| **RICI** | **Ricice** | **0.66** | **142** | *i* | Pg | | **Pg** | **03 33 15.9** | **-1.7** |
| RICI | | | | | Sg | | **Sb** | **03 33 26.9** | **+0.3** |
| **ZIRJ** | **Zirje** | **0.77** | **242** | *i* | Pg | | **Pb** | **03 33 18.1** | **-1.3** |
| ZIRJ | | | | | Sg | | **Sg** | **03 33 29.9** | **+0.3** |
| **UDBI** | **Udbina** | **0.77** | **311** | *i* | Pg | | **Pb** | **03 33 18.2** | **-1.4** |
| UDBI | | | | | Sg | | **Sg** | **03 33 28.8** | **-1.1** |
| **MAKA** | **Makarska** | **0.80** | **156** | *i* | Pg | | **Pb** | **03 33 18.3** | **-1.7** |
| MAKA | | | | | Sg | | **Sg** | **03 33 31.1** | **+0.4** |
| **HVAR** | **Hvar** | **0.85** | **186** | *i* | Pg | | **Pb** | **03 33 19.1** | **-1.7** |
| HVAR | | | | | Sg | | **Sg** | **03 33 32.6** | **+0.4** |
| **BLY** | **Banja Luka** | **0.85** | **31** | *e* | Pg | | **Pb** | **03 33 19.7** | **-1.2** |
| BLY | | | | | eSg | | **Sb** | **03 33 31.8** | **-0.2** |
| **BLY** | **Banja Luka** | **0.85** | **31** | ⇓*i* | Pg | | **Pb** | **03 33 19.5** | **-1.4** |
| BLY | | | | | eSg | | **Sb** | **03 33 30.9** | **-1.1** |
| **PRIJ** | **Prijedor** | **0.96** | **6** | *e* | Pg | | **Pb** | **03 33 21.6** | **-1.2** |
| PRIJ | | | | | eSg | | **Sb** | **03 33 34.1** | **-1.2** |
| **A051A** | **Mrakovica** | **1.02** | **13** | ⇓*i* | Pg | | **Pb** | **03 33 22.8** | **-1.0** |
| A051A | | | | | eSg | | **Sb** | **03 33 36.4** | **+0.6** |
| **DUGI** | **Dugi Otok** | **1.09** | **269** | *i* | Pg | | **Pb** | **03 33 24.1** | **-0.9** |
| DUGI | | | | | Sg | | **Sg** | **03 33 41.2** | **+1.2** |
| **PLIT** | **Plitvice** | **1.09** | **322** | *i* | Pg | | **Pb** | **03 33 23.9** | **-1.2** |
| **VIRC** | **Vir** | **1.13** | **285** | *i* | Pg | | **Pn** | **03 33 24.2** | **-1.3** |
| VIRC | | | | | Sg | | **Sg** | **03 33 41.1** | **+0.1** |
| **LSTV** | **Lastovo** | **1.27** | **169** | *i* | Pg | | **Pn** | **03 33 26.2** | **-1.4** |
| LSTV | | | | | Sg | | **Sg** | **03 33 46.1** | **+0.5** |
| **DOB** | **Doboj** | **1.31** | **56** | ⇓*i* | Pg | | **Pn** | **03 33 26.6** | **-1.4** |
| DOB | | | | | eSg | | **Sb** | **03 33 44.7** | **-0.4** |
| **NVLJ** | **Novalja** | **1.34** | **295** | *i* | Pn | | **Pn** | **03 33 28.3** | **-0.2** |
| NVLJ | | | | | Sn | | **Sg** | **03 33 49.4** | **+1.7** |
| **STON** | **Ston** | **1.41** | **144** | *e* | Pg | | **Pn** | **03 33 29.1** | **-0.3** |
| STON | | | | | eSg | | **Sg** | **03 33 51.5** | **+1.4** |
| **STON** | **Ston** | **1.41** | **144** | *i* | Pn | | **Pn** | **03 33 28.6** | **-0.9** |
| STON | | | | | Sn | | **Sg** | **03 33 51.7** | **+1.6** |
| **STON** | **Ston** | **1.41** | **144** | *e* | Pg | | **Sb** | **03 33 29.1** | **-0.3** |
| STON | | | | | eSg | | **Sb** | **03 33 49.1** | **+1.0** |
| **RABC** | **Rab** | **1.48** | **300** | *i* | Pn | | **Pb** | **03 33 31.2** | **-0.3** |
| RABC | | | | | Sn | | **Sg** | **03 33 52.8** | **+0.6** |
| **MOSL** | **Moslavina** | **1.60** | **5** | *i* | Pn | | **Pn** | **03 33 32.3** | **+0.2** |
| MOSL | | | | | Sn | | **Sb** | **03 33 53.8** | **+0.3** |
| **KLINJ** | **Klinje** | **1.69** | **119** | *e* | Pn | | **Pb** | **03 33 34.6** | **-0.7** |
| KLINJ | | | | | eSn | | **Sb** | **03 33 56.5** | **+0.2** |
| **HAPS** | **Han Pijesak,BI** | **1.72** | **87** | *e* | Pg | | **Pb** | **03 33 35.0** | **-0.7** |
| **HAPS** | **Han Pijesak,BI** | **1.72** | **87** | ⇑*i* | Pn | | **Pn** | **03 33 34.8** | **+1.0** |
| HAPS | | | | | eSn | | **Sb** | **03 33 57.4** | **+0.4** |
| **BOJS** | **Bojanci** | **1.76** | **328** | ⇓*e* | Pn | | **Pn** | **03 33 35.0** | **+0.8** |
| BOJS | | | | | eSn | | **Sb** | **03 33 58.4** | **+0.3** |
| BOJS | | | | | IAML | | | 03 34 04.8 | |
| | comp=Z,3μm,0.5s | | | | | | | | |
| **BOJS** | **Bojanci** | **1.76** | **328** | ⇓*i* | Pn | | **Pn** | **03 33 35.1** | **+0.8** |
| BOJS | | | | | eSn | | **Sb** | **03 33 57.8** | **-0.3** |
| **DBRK** | **Dubrovnik** | **1.77** | **139** | *i* | Pn | | **Pn** | **03 33 35.3** | **+0.8** |
| DBRK | | | | | Sn | | **Sg** | **03 34 00.4** | **-1.2** |
| **OZLJ** | **Ozalj** | **1.78** | **334** | *i* | Pn | | **Pb** | **03 33 35.7** | **-1.0** |
| OZLJ | | | | | Sn | | **Sb** | **03 33 59.7** | **+1.0** |
| **BRY** | **Bratogost** | **1.82** | **127** | ⇑*i* | Pn | | **Pb** | **03 33 36.5** | **-0.9** |
| BRY | | | | | eSn | | **Sb** | **03 34 00.3** | **+0.4** |
| **BRY** | **Bratogost** | **1.82** | **127** | ⇑*i* | Pn | | **Pb** | **03 33 36.6** | **-0.9** |
| BRY | | | | | i Sn | | **Sg** | **03 34 03.2** | **+0.1** |
| **TREB** | **Trebinje** | **1.84** | **135** | *e* | Pn | | **Pn** | **03 33 36.4** | **+1.1** |
| TREB | | | | | eSg | | **Sg** | **03 34 03.9** | **+0.2** |
| **TREB** | **Trebinje** | **1.84** | **135** | ⇓*i* | Pn | | **Pn** | **03 33 36.3** | **+1.0** |
| TREB | | | | | eSn | | **Sb** | **03 34 01.0** | **+0.6** |
| **ZAG** | **Zagreb** | **1.85** | **347** | *i* | Pn | | **Pn** | **03 33 36.2** | **+0.6** |
| ZAG | | | | | Sn | | **Sb** | **03 34 00.2** | **-0.7** |
| **UPM** | **Unac-Piva** | **1.88** | **115** | ⇑*i* | Pn | | **Pn** | **03 33 37.3** | **+1.2** |
| UPM | | | | | eSn | | **Sb** | **03 34 01.4** | **-0.4** |
| **UPM** | **Unac-Piva** | **1.88** | **115** | *e* | Pn | | **Pn** | **03 33 37.3** | **+1.2** |
| UPM | | | | | i Sn | | **Sg** | **03 34 04.3** | **-0.8** |
| **PTJ** | **Puntijarka** | **1.94** | **347** | *i* | Pn | | **Pn** | **03 33 37.0** | **+0.3** |
| PTJ | | | | | Sn | | **Sb** | **03 34 04.5** | **+1.2** |
| **GCIS** | **Gornji Cirnik** | **1.96** | **340** | *i* | Pn | | **Pn** | **03 33 37.6** | **+0.5** |
| **CRES** | **Cresnjev** | **1.97** | **337** | ⇓*i* | Pn | | **Pn** | **03 33 37.9** | **+0.7** |
| CRES | | | | | eSn | | **Sb** | **03 34 04.6** | **+0.3** |
| CRES | | | | | IAML | | | 03 34 13.1 | |
| | comp=Z,4μm,0.7s | | | | | | | | |
| **RIY** | **Rijeka** | **1.98** | **312** | *i* | Pn | | **Pb** | **03 33 40.1** | **0.0** |
| RIY | | | | | Sn | | **Sg** | **03 34 07.2** | **-1.1** |
| **SMRN** | **Sveta Marina** | **2.01** | **301** | *i* | Pn | | **Pb** | **03 33 39.7** | **-0.8** |
| SMRN | | | | | Sn | | **Sb** | **03 34 06.1** | **+0.9** |
| **BBLS** | **Lazi&#263i** | **2.05** | **93** | *e* | Pn | | **Pn** | **03 33 39.5** | **+1.1** |
| **BBLS** | **Lazi&#263i** | **2.05** | **93** | ⇑*i* | Pn | | **Pn** | **03 33 39.4** | **+1.1** |
| BBLS | | | | | eSn | | **Sb** | **03 34 05.8** | **-0.8** |
| **RUDO** | **Rudo** | **2.06** | **100** | *e* | Pn | | **Pn** | **03 33 38.8** | **+0.3** |
| RUDO | | | | | eSn | | **Sn** | **03 34 05.3** | **+1.5** |
| **CESS** | **Cesta pri Krsk** | **2.11** | **338** | ⇓*i* | Pn | | **Pn** | **03 33 39.9** | **+0.8** |
| **KALN** | **Kalnik** | **2.11** | **358** | *i* | Pn | | **Pn** | **03 33 39.1** | **-0.1** |
| KALN | | | | | Sn | | **Sb** | **03 34 08.2** | **-0.1** |
| **LEGS** | **Legarje** | **2.12** | **336** | ⇓*i* | Pn | | **Pn** | **03 33 40.0** | **+0.7** |
| **NKME** | **Niksic** | **2.14** | **125** | *e* | Pn | | **Pn** | **03 33 41.1** | **+1.6** |
| NKME | | | | | i Sn | | **Sb** | **03 34 11.0** | **+1.9** |
| **PLE** | **Pljevlja** | **2.16** | **108** | ⇓*i* | Pn | | **Pn** | **03 33 40.8** | **+1.0** |
| PLE | | | | | i Sn | | **Sb** | **03 34 10.7** | **+1.0** |
| **LOBO** | **Lobor** | **2.17** | **351** | *i* | Pn | | **Pn** | **03 33 40.6** | **+0.7** |
| LOBO | | | | | Sn | | **Sb** | **03 34 09.1** | **-0.7** |
| **TEKS** | **Tekeris** | **2.19** | **75** | *e* | Pn | | **Pn** | **03 33 40.3** | **+0.1** |
| TEKS | | | | | eSn | | **Sn** | **03 34 07.6** | **+0.7** |
| **TEKS** | **Tekeris** | **2.19** | **75** | *e* | Pn | | **Pn** | **03 33 40.3** | **+0.1** |
| TEKS | | | | | eSn | | **Sn** | **03 34 07.7** | **+0.8** |
| **CEME** | **Cevo** | **2.26** | **130** | ⇑*i* | Pn | | **Pn** | **03 33 42.8** | **+1.6** |
| CEME | | | | | i Sn | | **Sb** | **03 34 14.0** | **+1.4** |
| **CEY** | **Cerknica** | **2.30** | **319** | *i* | Pn | | **Pn** | **03 33 43.4** | **+1.7** |
| **CEY** | **Cerknica** | **2.30** | **319** | ⇓*i* | Pn | | **Pn** | **03 33 43.2** | **+1.5** |
| CEY | | | | | eSn | | **Sn** | **03 34 11.5** | **+1.9** |
| **KOVH** | **Kovagotottos** | **2.33** | **27** | ⇓*i* | P | | **Pn** | **03 33 41.6** | **-0.5** |
| **SGRT** | **San Giovanni R** | **2.34** | **195** | | | | **Pn** | **03 33 42.2** | **-0.2** |
| **BUM** | **Brajici-Budva** | **2.42** | **135** | *e* | Pn | | **Pn** | **03 33 45.0** | **+1.7** |
| BUM | | | | | i Sn | | **Sb** | **03 34 18.1** | **+1.0** |
| **KOGS** | **Kog** | **2.44** | **355** | ⇓*i* | Pn | | **Pn** | **03 33 43.8** | **+0.2** |
| **KOME** | **Kolasin** | **2.44** | **118** | *e* | Pn | | **Pn** | **03 33 45.0** | **+1.3** |
| KOME | | | | | i Sn | | **Sb** | **03 34 17.9** | **0.0** |
| **BEHE** | **Becsehely** | **2.46** | **3** | ⇓*i* | Pn | | **Pn** | **03 33 44.3** | **+0.5** |
| BEHE | | | | | eSn | | **Sn** | **03 34 14.8** | **+1.4** |
| **DIVS** | **Divibare** | **2.47** | **87** | *e* | Pn | | **Pn** | **03 33 44.6** | **+0.5** |
| **LJU** | **Ljubljana** | **2.49** | **325** | *i* | Pn | | **Pn** | **03 33 45.4** | **+1.1** |
| **PDG** | **Podgorica** | **2.52** | **128** | | Pn | | **Pn** | **03 33 47.1** | **+2.4** |
| **PDG** | **Podgorica** | **2.52** | **128** | *e* | Pn | | **Pb** | **03 33 47.9** | **-1.4** |
| PDG | | | | | eSg | | **Sg** | **03 34 25.1** | **-0.5** |
| **PDG** | **Podgorica** | **2.52** | **128** | ⇑*P* | | | **Pb** | **03 33 47.5** | **-1.9** |
| **PDG** | **Podgorica** | **2.52** | **128** | ⇑*i* | Pn | | **Pn** | **03 33 46.6** | **+1.9** |
| PDG | | | | | eSn | | **Sn** | **03 34 17.8** | **+2.7** |
| **PDG** | **Podgorica** | **2.52** | **128** | ⇓*P* | | | **Pb** | **03 33 48.0** | **-1.4** |
| **PDG** | **Podgorica** | **2.52** | **128** | *e* | Pn | | **Pn** | **03 33 46.4** | **+1.7** |
| PDG | | | | | i Sn | | **Sb** | **03 34 20.3** | **+0.2** |
| **GUMA** | **Gualdo di Mace** | **2.54** | **249** | | Pn | | **Pn** | **03 33 45.6** | **+0.6** |
| **FRGS** | **Fruska Gora** | **2.58** | **63** | *e* | Pn | | **Pn** | **03 33 45.3** | **-0.2** |
| FRGS | | | | | eSn | | **Sn** | **03 34 16.5** | **0.0** |
| **FRGS** | **Fruska Gora** | **2.58** | **63** | *e* | Pn | | **Sn** | **03 33 47.2** | **+1.7** |
| FRGS | | | | | eSn | | **Sn** | **03 34 18.4** | **+1.9** |
| **SJES** | **Sjenica** | **2.58** | **106** | *e* | Pn | | **Pn** | **03 33 47.3** | **+1.6** |
| **SJES** | **Sjenica** | **2.58** | **106** | ⇑*i* | Pn | | **Pn** | **03 33 47.2** | **+1.6** |
| SJES | | | | | eSn | | **Sn** | **03 34 18.8** | **+2.1** |
| **MORH** | **Mrgy, Hungar** | **2.64** | **33** | *e* | Pn | | **Pn** | **03 33 47.5** | **+1.2** |
| MORH | | | | | eSn | | **Sn** | **03 34 19.6** | **+1.7** |
| **MORH** | **Mrgy, Hungar** | **2.64** | **33** | ⇑*P* | | | **Pn** | **03 33 46.2** | **-0.1** |
| **MORH** | **Mrgy, Hungar** | **2.64** | **33** | *i* | Pn | | **Pn** | **03 33 45.9** | **-0.4** |
| **DRME** | **Dracevica, Mon** | **2.65** | **133** | ⇓*i* | Pn | | **Pn** | **03 33 48.7** | **+2.2** |
| DRME | | | | | eSn | | **Sn** | **03 34 20.5** | **+2.3** |
| **DRME** | **Dracevica, Mon** | **2.65** | **133** | ⇓*i* | Pn | | **Pn** | **03 33 48.3** | **+1.8** |
| DRME | | | | | *i* Sn | | **Sb** | **03 34 23.6** | **-0.1** |
| **IVA** | **Berane** | **2.68** | **114** | ⇑*i* | Pn | | **Pn** | **03 33 48.2** | **+1.3** |
| IVA | | | | | *i* Sn | | **Sb** | **03 34 23.6** | **-1.0** |
| **FDMO** | **Fiordimonte** | **2.72** | **250** | | Pn | | **Pn** | **03 33 48.2** | **+0.7** |
| **CAMP** | **Campotosto** | **2.75** | **238** | | Pn | | **Pn** | **03 33 49.0** | **+1.1** |
| **TRUS** | **Trudelj** | **2.77** | **84** | *e* | Pn | | **Pn** | **03 33 48.6** | **+0.5** |
| **NRCA** | **Norcia** | **2.79** | **246** | | Pn | | **Pn** | **03 33 49.5** | **+1.1** |
| **INTR** | **Introdacqua** | **2.80** | **225** | | Pn | | **Pn** | **03 33 48.9** | **+0.2** |
| **PVY** | **Plav** | **2.85** | **119** | *e* | Pn | | **Pn** | **03 33 50.8** | **+1.4** |
| PVY | | | | | *i* Sn | | **Sb** | **03 34 28.0** | **-1.7** |
| **OBKA** | **Obir** | **2.87** | **331** | *e* | Pn | | **Pn** | **03 33 50.8** | **+1.2** |
| | comp=Z,85nm,0.3s,SNR=70 | | | | | | | | |
| OBKA | | | | | eSn | | **Sn** | **03 34 26.3** | **+2.5** |
| | comp=Z,1μm,0.8s | | | | | | | | |
| **OBKA** | **Obir** | **2.87** | **331** | *e* | Pn | | **Pn** | **03 33 50.0** | **+0.4** |
| OBKA | | | | | eSn | | **Sn** | **03 34 25.3** | **+1.5** |
| **OBKA** | **Obir** | **2.87** | **331** | *e* | Pn | | **Pn** | **03 33 50.0** | **+0.4** |
| **SOKA** | **Soboth** | **2.87** | **338** | *e* | Pn | | **Pn** | **03 33 50.0** | **+0.4** |
| | comp=Z,142nm,0.3s,SNR=184 | | | | | | | | |
| SOKA | | | | | eSn | | **Sn** | **03 34 25.3** | **+1.5** |
| | comp=Z,355nm,0.5s | | | | | | | | |
| **SABO** | **M.te Sabotino** | **2.88** | **314** | | Pn | | **Pn** | **03 33 50.7** | **+1.0** |
| **AVAS** | **Avala Beograd** | **2.91** | **75** | *e* | Pn | | **Pn** | **03 33 49.9** | **-0.1** |
| AVAS | | | | | eSn | | **Sn** | **03 34 23.9** | **-0.7** |
| **GRUS** | **Gruza** | **2.99** | **91** | *e* | Pn | | **Pn** | **03 33 52.1** | **+0.9** |
| **BCI** | **Bajram Curri** | **3.04** | **122** | | P | | **Pb** | **03 33 56.2** | **-2.1** |
| | baz=109 | | | | | | | | |
| BCI | | | | | S | | **Sb** | **03 34 35.8** | **+0.7** |
| | baz=109 | | | | | | | | |
| BCI | | | | | AMP | | | | |
| | comp=N,28nm,0.7s,baz=109 | | | | | | | | |
| **PUK** | **Puka** | **3.13** | **128** | | Pn | | **Pn** | **03 33 55.9** | **+2.7** |
| **PUK** | **Puka** | **3.13** | **128** | | P | | **Pb** | **03 33 57.0** | **-2.9** |
| | baz=116 | | | | | | | | |
| PUK | | | | | S | | **Sb** | **03 34 34.9** | **-3.0** |
| | baz=116 | | | | | | | | |
| PUK | | | | | AMP | | | | |
| | comp=N,14nm,0.8s,baz=116 | | | | | | | | |
| **MPLH** | **Magyarpolny** | **3.22** | **12** | | Pn | | **Pn** | **03 33 54.5** | **+0.1** |
| **PRED** | **Cave del Predi** | **3.22** | **320** | | Pn | | **Pn** | **03 33 55.4** | **+0.9** |
| **NOCI** | **Noci** | **3.25** | **173** | | P | | **Pn** | **03 33 54.8** | **0.0** |
| | baz=169 | | | | | | | | |
| NOCI | | | | | S | | **Sn** | **03 34 29.2** | **-3.8** |
| | baz=169 | | | | | | | | |
| **PTCC** | **Patocco-Chiusa** | **3.30** | **317** | ⇑*P* | | | **Pn** | **03 33 57.0** | **+1.6** |
| **ARSA** | **Arzberg** | **3.31** | **348** | *e* | Pn | | **Pn** | **03 33 56.2** | **+0.6** |
| | comp=N,86nm,0.3s,SNR=105 | | | | | | | | |
| ARSA | | | | | eSn | | **Sn** | **03 34 34.8** | **+0.2** |
| | comp=N,168nm,0.4s | | | | | | | | |
| **ARSA** | **Arzberg** | **3.31** | **348** | ⇓*P* | | | **Pn** | **03 33 56.1** | **+0.4** |
| **ARSA** | **Arzberg** | **3.31** | **348** | ⇓*i* | Pn | | **Pn** | **03 33 56.1** | **+0.4** |
| ARSA | | | | | eSn | | **Sn** | **03 34 35.0** | **+0.3** |
| **ARSA** | **Arzberg** | **3.31** | **348** | *e* | Pn | | **Pn** | **03 33 56.2** | **+0.6** |
| ARSA | | | | | eSn | | **Sn** | **03 34 34.9** | **+0.2** |
| **MYKA** | **Terra Mystica** | **3.33** | **323** | *i* | Pn | | **Pn** | **03 33 57.2** | **+1.3** |
| | comp=N,42nm,0.5s,SNR=39 | | | | | | | | |
| MYKA | | | | | *i* Sn | | **Sn** | **03 34 37.3** | **+2.1** |
| | comp=N,302nm,0.4s | | | | | | | | |
| **PAOL** | **Paolisi** | **3.33** | **207** | | Pn | | **Pn** | **03 33 56.4** | **+0.5** |
| **SVIS** | **Svilajnac** | **3.35** | **84** | *e* | Pn | | **Pn** | **03 33 57.3** | **+1.2** |
| SVIS | | | | | eSn | | **Sn** | **03 34 36.7** | **+1.2** |
| **MATE** | **Matera** | **3.37** | **178** | ⇓*P* | | | **Pn** | **03 33 56.1** | **-0.3** |
| **SELS** | **Selova** | **3.40** | **102** | *e* | Pn | | **Pn** | **03 33 58.0** | **+1.2** |
| **BANR** | **Banloc** | **3.53** | **66** | ⇓*P* | | | **Pn** | **03 34 00.5** | **+2.0** |
| **STAL** | **STALIGIAL** | **3.53** | **311** | | Pn | | **Pn** | **03 33 59.8** | **+1.1** |
| **VRSS** | **Vrsac** | **3.57** | **70** | *e* | Pn | | **Pn** | **03 33 59.1** | **-0.1** |
| VRSS | | | | | eSn | | **Sn** | **03 34 40.3** | **-0.6** |
| **TIR** | **Tirane** | **3.61** | **137** | | Pn | | **Pn** | **03 34 01.2** | **+1.5** |
| **TIR** | **Tirane** | **3.61** | **137** | | P | | **Pn** | **03 34 01.9** | **+2.2** |
| | baz=127 | | | | | | | | |
| TIR | | | | | S | | **Sn** | **03 34 45.7** | **+3.9** |
| | baz=127 | | | | | | | | |
| TIR | | | | | AMP | | | | |
| | comp=E,3.1nm,0.9s,baz=127 | | | | | | | | |
| **TIR** | **Tirane** | **3.61** | **137** | | P | | **Pn** | **03 34 01.6** | **+1.9** |
| **TIR** | **Tirane** | **3.61** | **137** | *e* | Pn | | **Pn** | **03 34 01.7** | **+2.0** |
| **TIR** | **Tirane** | **3.61** | **137** | ⇑*P* | | | **Pn** | **03 34 01.6** | **+2.0** |
| **TIR** | **Tirane** | **3.61** | **137** | ⇑*P* | | | **Pn** | **03 34 01.7** | **+2.0** |
| **TIR** | **Tirane** | **3.61** | **137** | *P* | | | **Pn** | **03 34 01.2** | **+1.5** |
| **TIR** | **Tirane** | **3.61** | **137** | *Pn* | | | **Pn** | **03 34 01.6** | **+2.0** |
| **RONA** | **Rosalia, Austr** | **3.69** | **357** | *i* | Pn | | **Pn** | **03 34 01.3** | **+0.6** |
| | comp=E,290nm,0.3s,SNR=318 | | | | | | | | |
| RONA | | | | | *i* Sn | | **Sn** | **03 34 43.7** | **-0.2** |
| | comp=E,13nm,0.2s | | | | | | | | |
| **KUBS** | **Kucevo** | **3.69** | **82** | *e* | Pn | | **Pn** | **03 33 59.8** | **-1.0** |
| KUBS | | | | | eSn | | **Sn** | **03 34 43.4** | **-0.5** |
| **BOVS** | **Bovan** | **3.73** | **94** | *e* | Pn | | **Pn** | **03 34 01.7** | **+0.3** |
| **BOVS** | **Bovan** | **3.73** | **94** | ⇓*P* | | | **Pn** | **03 34 01.8** | **+0.4** |
| **TEOL** | **Teolo** | **3.74** | **293** | | Pn | | **Pn** | **03 34 02.6** | **+1.0** |
| **MDVR** | **Moldovita** | **3.76** | **77** | *e* | Pn | | **Pn** | **03 34 01.9** | **+0.1** |
| **MDVR** | **Moldovita** | **3.76** | **77** | ⇓*P* | | | **Pn** | **03 34 02.3** | **+0.4** |
| **KBA** | **Koelnbreinsper** | **3.81** | **325** | *i* | Pn | | **Pn** | **03 34 04.2** | **+1.6** |
| | comp=E,12nm,0.3s,SNR=32 | | | | | | | | |
| KBA | | | | | *i* Sn | | **Sn** | **03 34 49.7** | **+2.7** |
| | comp=E,200nm,0.4s | | | | | | | | |
| **KBA** | **Koelnbreinsper** | **3.81** | **325** | ⇑*P* | | | **Pn** | **03 34 04.2** | **+1.6** |
| **BZS** | **Buzias** | **3.93** | **64** | *e* | Pn | | **Pn** | **03 34 03.9** | **-0.2** |
| **BZS** | **Buzias** | **3.93** | **64** | ⇑*P* | | | **Pn** | **03 34 03.7** | **-0.3** |
| **BZS** | **Buzias** | **3.93** | **64** | ⇑*P* | | | **Pn** | **03 34 04.2** | **+0.1** |
| **BZS** | **Buzias** | **3.93** | **64** | *P* | | | **Pn** | **03 34 04.1** | **+0.1** |
| **CONA** | **Conrad Observa** | **3.94** | **353** | *i* | Pn | | **Pn** | **03 34 04.8** | **+0.5** |
| | comp=E,87nm,0.3s,SNR=198 | | | | | | | | |
| CONA | | | | | eSn | | **Sn** | **03 34 49.1** | **-1.1** |
| | comp=E,73nm,0.5s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **3.95** | **315** | *i* | Pn | | **Pn** | **03 34 06.3** | **+1.8** |
| | comp=E,27nm,0.2s,SNR=64 | | | | | | | | |
| ABTA | | | | | *i* Sn | | **Sn** | **03 34 52.2** | **+1.7** |
| | comp=E,392nm,0.7s | | | | | | | | |
| **SRO** | **Srobarova** | **3.98** | **17** | *e* | PN | | **Pn** | **03 34 05.8** | **+1.0** |
| SRO | | | | | eSN | | **Sn** | **03 34 52.1** | **+1.0** |
| **BARS** | **Barje** | **4.00** | **106** | *e* | Pn | | **Pn** | **03 34 06.2** | **+1.1** |
| **CTI** | **Castel Tesino** | **4.04** | **302** | | Pn | | **Pn** | **03 34 07.1** | **+1.5** |
| **CTI** | **Castel Tesino** | **4.04** | **302** | | P | | **Pn** | **03 34 06.9** | **+1.3** |
| **CTI** | **Castel Tesino** | **4.04** | **302** | | P | | **Pn** | **03 34 07.1** | **+1.5** |
| **ZCCA** | **Zocca** | **4.04** | **277** | | Pn | | **Pn** | **03 34 07.6** | **+2.0** |
| **CUC** | **Castrocucco** | **4.06** | **188** | | Pn | | **Pn** | **03 34 06.2** | **+0.3** |
| **CUC** | **Castrocucco** | **4.06** | **188** | ⇓*P* | | | **Pn** | **03 34 06.2** | **+0.3** |
| **CAVE** | **Cavezzo** | **4.08** | **284** | | P | | **Pn** | **03 34 08.9** | **+2.8** |
| **ZAGS** | **Zajecar** | **4.09** | **91** | *e* | Pn | | **Pn** | **03 34 06.6** | **+0.3** |
| **MOA** | **Molln** | **4.16** | **338** | *i* | Pn | | **Pn** | **03 34 08.7** | **+1.5** |
| | comp=E,72nm,0.3s,SNR=122 | | | | | | | | |
| MOA | | | | | *i* Sn | | **Sn** | **03 34 58.3** | **+2.9** |
| | comp=E,360nm,0.5s | | | | | | | | |
| **MOA** | **Molln** | **4.16** | **338** | *e* | Pn | | **Pn** | **03 34 08.7** | **+1.5** |
| MOA | | | | | eSn | | **Sn** | **03 34 58.1** | **+2.7** |
| **MOA** | **Molln** | **4.16** | **338** | *e* | Pn | | **Pn** | **03 34 08.7** | **+1.5** |
| MOA | | | | | eSn | | **Sn** | **03 34 58.1** | **+2.7** |
| **VLO** | **Vlora** | **4.16** | **148** | | Pn | | **Pn** | **03 34 08.8** | **+1.6** |
| **VLO** | **Vlora** | **4.16** | **148** | | P | | **Pn** | **03 34 08.9** | **+1.7** |
| | baz=140 | | | | | | | | |
| VLO | | | | | S | | **Sn** | **03 34 56.0** | **+0.6** |
| | baz=140 | | | | | | | | |
| VLO | | | | | AMP | | | | |
| | comp=N,4.0nm,0.6s,baz=140 | | | | | | | | |
| **VLO** | **Vlora** | **4.16** | **148** | | P | | **Pn** | **03 34 08.6** | **+1.4** |
| **VLO** | **Vlora** | **4.16** | **148** | | P | | **Pn** | **03 34 08.8** | **+1.6** |
| **BSZH** | **Besenyszg** | **4.18** | **37** | ⇑*P* | | | **Pn** | **03 34 08.0** | **+0.5** |
| **SCTE** | **Santa Cesarea** | **4.19** | **160** | | | | **Pn** | **03 34 08.2** | **+0.5** |
| **SCTE** | **Santa Cesarea** | **4.19** | **160** | | P | | **Pn** | **03 34 08.1** | **+0.5** |
| | baz=154 | | | | | | | | |
| SCTE | | | | | S | | **Sn** | **03 34 53.7** | **-2.5** |
| | baz=154 | | | | | | | | |
| **ZST** | **Bratislava** | **4.19** | **5** | *e* | P | | **Pn** | **03 34 07.9** | **+0.2** |
| ZST | | | | | *e* | | | 03 34 55.6 | |
| **ZST** | **Bratislava** | **4.19** | **5** | *e* | PN | | **Pn** | **03 34 07.9** | **+0.2** |
| ZST | | | | | eSN | | **Sn** | **03 34 55.6** | **-0.7** |
| **BIOA** | **Bad Ischl, Aus** | **4.21** | **332** | *i* | Pn | | **Pn** | **03 34 09.3** | **+1.4** |
| | comp=N,26nm,0.3s,SNR=51 | | | | | | | | |
| BIOA | | | | | eSn | | **Sn** | **03 34 59.0** | **+2.4** |
| | comp=N,277nm,0.6s | | | | | | | | |
| **SIRR** | **Siria** | **4.24** | **56** | ⇑*P* | | | **Pn** | **03 34 08.7** | **+0.3** |
| **DOSS** | **Dosso del Somm** | **4.25** | **298** | *P* | | | **Pn** | **03 34 09.9** | **+1.3** |
| **OHR** | **Ohrid** | **4.26** | **132** | *e* | Pn | | **Pn** | **03 34 12.3** | **+3.5** |
| **OHR** | **Ohrid** | **4.26** | **132** | *i* | Pn | | **Pn** | **03 34 12.2** | **+3.4** |
| **HERR** | **Herculane** | **4.27** | **76** | ⇑*P* | | | **Pn** | **03 34 09.4** | **+0.7** |
| **SURR** | **Surduc** | **4.31** | **64** | ⇓*P* | | | **Pn** | **03 34 09.1** | **-0.2** |
| **DJES** | **Djerdap** | **4.32** | **79** | ⇑*S* | | | **Sn** | **03 34 59.4** | **+0.1** |
| **CASP** | **Castiglione de** | **4.34** | **256** | | Pn | | **Pn** | **03 34 09.6** | **-0.1** |
| **LESA** | **Schwarzleotal** | **4.36** | **323** | *i* | Pn | | **Pn** | **03 34 12.4** | **+2.3** |
| | comp=N,123nm,0.4s | | | | | | | | |
| LESA | | | | | *i* Sn | | **Sn** | **03 35 03.2** | **+2.6** |
| | comp=N,247nm,0.6s | | | | | | | | |
| **BALD** | **Monte Baldo** | **4.42** | **294** | | P | | **Pn** | **03 34 11.9** | **+0.9** |
| **BLKB** | **Belogradchik** | **4.43** | **93** | ⇓*S* | | | **Sn** | **03 35 02.7** | **+0.5** |
| **RMGR** | **Halanga-Turnu** | **4.44** | **80** | ⇑*P* | | | **Pn** | **03 34 12.7** | **+1.7** |
| RMGR | | | | ⇑*S* | | | **Sn** | **03 35 02.7** | **+0.5** |
| **VLC** | **Villacollemand** | **4.46** | **274** | ⇑*P* | | | **Pn** | **03 34 13.7** | **+2.3** |
| **ZAPS** | **Zavoj** | **4.46** | **98** | *ePn* | | | **Pn** | **03 34 12.4** | **+1.0** |
| **GAGG** | **Gaggia** | **4.48** | **299** | | P | | **Pn** | **03 34 13.2** | **+1.4** |
| **SMOL** | **Smolenice** | **4.53** | **7** | *e* | P | | **Pn** | **03 34 12.6** | **+0.2** |
| **PSZ** | **Piszkesteto** | **4.54** | **30** | | Pn | | **Pn** | **03 34 11.5** | **-1.0** |
| **PSZ** | **Piszkesteto** | **4.54** | **30** | ⇑*P* | | | **Pn** | **03 34 11.7** | **-0.8** |
| **PSZ** | **Piszkesteto** | **4.54** | **30** | ⇑*P* | | | **Pn** | **03 34 12.0** | **-0.5** |
| **PSZ** | **Piszkesteto** | **4.54** | **30** | *P* | | | **Pn** | **03 34 11.9** | **-0.5** |
| **PRMA** | **PARMA** | **4.55** | **282** | | Pn | | **Pn** | **03 34 14.2** | **+1.7** |
| **RJOB** | **Jochberg** | **4.56** | **326** | *ePn* | | | **Pn** | **03 34 15.0** | **+2.2** |
| **RJOB** | **Jochberg** | **4.56** | **326** | *ePn* | | | **Pn** | **03 34 15.0** | **+2.2** |
| **PUNG** | **Punghina** | **4.58** | **85** | ⇓*P*

comp=Z,73nm,0.7s,comp=Z,776nmcomp=Z,0.7nm
**FUR Furstenfeldbru 5.54 320** *e*Pn **Pn 03 34 28.3 +2.0**
**FUR Furstenfeldbru 5.54 320** *e*Pn **Pn 03 34 28.3 +2.0**
**VDL Val di Lei 5.60 299** P **Pn 03 34 29.7 +2.5**
**CBBR Cluj-Babes-Bol 5.63 58** ⇑P **Pn 03 34 28.7 +1.2**
**CJR Cluj-Napoca 5.63 59** ⇑P **Pn 03 34 29.6 +2.1**
**CJR Cluj-Napoca 5.63 59** P **Pn 03 34 29.6 +2.1**
**ZVC Zvikov 5.66 344** *e*PN **Pn 03 34 28.9 +1.0**
ZVC *e*SN **Sn 03 35 30.9 -1.6**
ZVC AMS AMS 03 36 40.0
comp=Z,800nm,10.2s
**DAVA Damuels 5.72 307** *i* Pn **Pn 03 34 31.5 +2.7**
comp=Z,15nm,0.2s,SNR=35
DAVA *i* Sn **Sn 03 35 39.5 +5.4**
comp=Z,133nm,0.5s
**DAVA Damuels 5.72 307** ⇑P **Pn 03 34 31.4 +2.6**
**PGF Pioggiola 5.72 258** *e*P **Pn 03 34 29.5 +0.7**
SNR=1.0
PGF *e*Sn **Sn 03 35 27.9 -6.2**
comp=Z,78nm,0.8s,SNR=1.0
**PGF Pioggiola 5.72 258** ⇑P **Pn 03 34 30.5 +1.7**
**WET Wettzell 5.72 335** *e*Pn **Pn 03 34 28.9 +0.1**
WET *e*Sn **Sn 03 35 34.5 +0.5**
**WET Wettzell 5.72 335** *e*Pn **Pn 03 34 28.9 +0.1**
**PGB Panagyurishte 5.75 103** *i* P **Pn 03 34 31.7 +2.6**
**CEL Celeste 5.78 185** Pn **Pn 03 34 28.6 -1.0**
**CEL Celeste 5.78 185** ⇑P **Pn 03 34 29.0 -0.5**
**CEL Celeste 5.78 185** Pn **Pn 03 34 29.0 -0.5**
comp=Z,79nm,0.7s,comp=Z,751nmcomp=Z,0.3nm
**MORC Moravsky Berou 5.80 6** Pn **Pn 03 34 29.8 +0.1**
**MORC Moravsky Berou 5.80 6** *e*PN **Pn 03 34 29.9 +0.1**
MORC *e*SN **Sn 03 35 32.9 -3.0**
**MORC Moravsky Berou 5.80 6** ⇓P **Pn 03 34 30.0 +0.2**
**MORC Moravsky Berou 5.80 6** ⇑P **Pn 03 34 31.5 +1.7**
**MORC Moravsky Berou 5.80 6** P **Pn 03 34 31.5 +1.7**
**UBR Ueberruh 5.81 311** *e*Pn **Pn 03 34 31.8 +1.8**
**UBR Ueberruh 5.81 311** *e*Pn **Pn 03 34 31.8 +1.8**
**THE Thessaloniki 5.82 123** P **Pn 03 34 32.6 +2.5**
**MMB Musomishta 5.83 113** *i* P **Pn 03 34 32.9 +2.7**
**ARR Arges 5.90 74** ⇓P **Pn 03 34 33.5 +2.2**
**OKC Ostrava-Krasne 5.92 10** *e*PN **Pn 03 34 32.2 +0.8**
OKC AMS AMS 03 37 10.0
comp=Z,1μm,8.5s
**OKC Ostrava-Krasne 5.92 10** *e*P **Pn 03 34 32.2 +0.8**
OKC MLR MLR
comp=Z,1μm,8.5s
**MDB Medias 5.92 66** ⇑P **Pn 03 34 33.0 +1.6**
**MDB Medias 5.92 66** P **Pn 03 34 33.0 +1.6**
**HORT Hortiatis 5.92 123** P **Pn 03 34 33.6 +2.0**
**SRS Serrai 5.94 117** P **Pn 03 34 33.7 +2.0**
**SRS Serrai 5.94 117** *e*Pn **Pn 03 34 34.4 +2.7**
**NIE Niedzica 5.98 24** *e*P **Pn 03 34 33.8 +1.6**
NIE *e*S **Sn 03 35 40.5 +0.2**
**NIE Niedzica 5.98 24** Pn **Pn 03 34 33.9 +1.6**
comp=Z,25nm,0.8s,comp=Z,244nmcomp=Z,0.1nm
**NVR Nevrokopi 6.00 114** P **Pn 03 34 35.8 +3.3**
**GOPC GO Pecny, Ondr 6.02 349** *e*PN **Pn 03 34 33.6 +0.8**
**GOPC GO Pecny, Ondr 6.02 349** *e*P **Pn 03 34 33.6 +0.8**
**TSLK Tsoukalades, L 6.03 148** P **Pn 03 34 33.5 +0.6**
**TYRN Tyrnavos 6.03 134** P **Pn 03 34 34.3 +1.4**
**HUMR Humele 6.06 82** ⇓P **Pn 03 34 34.4 +1.1**
**BMR Baia Mare 6.06 50** ⇑P **Pn 03 34 33.5 +0.2**
**BMR Baia Mare 6.06 50** P **Pn 03 34 33.5 +0.2**
**KRLC Kraliky 6.06 1** *e*PN **Pn 03 34 34.6 +1.2**
**KRLC Kraliky 6.06 1** *e*P **Pn 03 34 34.6 +1.2**
**LKD2 Lefkada island 6.06 148** P **Pn 03 34 33.8 +0.4**
**NYDR Nydri-Lefkada 6.14 148** P **Pn 03 34 34.5 +1.0**
**MTUR Matau 6.18 76** ⇑P **Pn 03 34 37.2 +2.1**
**MTUR Matau 6.18 76** P **Pn 03 34 37.2 +2.1**
**EVGI Lefkada island 6.21 149** P **Pn 03 34 35.5 +0.1**
**PRA Prague 6.23 347** *e*PN **Pn 03 34 36.8 +1.2**
**PRA Prague 6.23 347** *e*P **Pn 03 34 36.8 +1.2**
**COPA Copaceanca 6.23 86** ⇓P **Pn 03 34 36.4 +0.8**
COPA ⇑S **Sn 03 35 47.9 +1.5**
**NORI Noerdlinger Ri 6.25 321** *e*Pn **Pn 03 34 37.2 +1.3**
**ARCR ARCALIA 6.26 58** ⇓P **Pn 03 34 38.2 +2.1**
**PLD Plovdiv 6.27 105** *e*Pn **Pn 03 34 38.0 +1.8**
**KOLS Kolonicke sedl 6.29 37** *e*P **Pn 03 34 37.8 +1.2**
KOLS *e* 03 35 46.7
**KOLS Kolonicke sedl 6.29 37** *e*PN **Pn 03 34 37.8 +1.2**
KOLS *e*PG **Pg 03 35 06.2 +1.2**
KOLS *e*SN **Sn 03 35 46.7 -1.4**
**FSK Fiskardo 6.32 150** P **Pn 03 34 36.6 -0.3**
**DPC Dobruska-Polom 6.34 359** *e*PN **Pn 03 34 37.9 +0.7**
DPC AMS AMS 03 37 50.0
comp=Z,400nm,7.9s
**DPC Dobruska-Polom 6.34 359** *e*P **Pn 03 34 37.9 +0.7**
DPC MLR MLR
comp=Z,400nm,7.9s
**WILA Wila 6.35 305** *e*Pn **Pn 03 34 39.1 +1.7**
**KOKK Kokkinochori, 6.36 118** P **Pn 03 34 40.4 +2.9**
**RZN Rozhen 6.43 108** *i* P **Pn 03 34 41.5 +2.8**
**EVR Evrytania 6.44 141** P **Pn 03 34 41.8 +3.2**
**DMLN Damoulianata-K 6.45 152** P **Pn 03 34 38.4 -0.3**
**ROTZ Rotzenmuhle 6.48 334** *e*Pn **Pn 03 34 39.2 0.0**
ROTZ *e*Sn **Sn 03 35 52.0 -0.6**
**ROTZ Rotzenmuhle 6.48 334** *e*Pn **Pn 03 34 39.2 0.0**
**UPC Upice 6.50 357** *e*PN **Pn 03 34 40.4 +1.0**
UPC AMS AMS 03 37 20.0
comp=Z,400nm,9.9s
**UPC Upice 6.50 357** *e*P **Pn 03 34 40.4 +1.0**
UPC MLR MLR
comp=Z,400nm,9.9s
**MAKR Makrakomi, Fth 6.51 138** P **Pn 03 34 41.5 +1.9**
**OSTC Ostas 6.54 358** *e*PN **Pn 03 34 41.2 +1.2**
**OSTC Ostas 6.54 358** *e*P **Pn 03 34 41.2 +1.2**
**PVO Paravola 6.56 144** P **Pn 03 34 41.3 +1.1**
**OJC Ojcow 6.58 18** *e*P **Pn 03 34 41.4 +0.9**
OJC *e*S **Sn 03 35 50.4 -4.7**
**OJC Ojcow 6.58 18** Pn **Pn 03 34 40.6 +0.1**
**OJC Ojcow 6.58 18** ⇑P **Pn 03 34 41.5 +0.9**
**OJC Ojcow 6.58 18** P **Pn 03 34 40.6 +0.1**
**OJC Ojcow 6.58 18** Pn **Pn 03 34 41.4 +0.9**
comp=Z,24nm,1.0s,comp=Z,370nmcomp=Z,0.1nm
**CHVC Chvalec 6.58 357** *e*PN **Pn 03 34 41.4 +0.9**
**CHVC Chvalec 6.58 357** *e*P **Pn 03 34 41.4 +0.9**
**KAVA Kavala 6.60 115** P **Pn 03 34 42.8 +2.1**
**SBF Sospel 6.60 272** *e*Pn **Pn 03 34 41.6 +0.8**
SNR=1.0
SBF *e*Sn **Sn 03 35 54.7 -1.0**
comp=Z,116nm,0.5s
**OUR Ouranopolis 6.62 121** P **Pn 03 34 43.5 +2.5**
**PSDA Pessada-Kefalo 6.63 151** P **Pn 03 34 41.2 0.0**
**PVCC Panska Ves 6.65 349** *e*PN **Pn 03 34 42.4 +0.9**
**PVCC Panska Ves 6.65 349** *e*P **Pn 03 34 42.4 +0.9**
**PAIG Paliouri 6.69 125** P **Pn 03 34 44.0 +2.0**
**MANZ Manzenberg 6.70 334** *e*Pn **Pn 03 34 42.2 +0.1**
MANZ *e*Sn **Sn 03 35 56.5 -1.6**
**MANZ Manzenberg 6.70 334** *e*Pn **Pn 03 34 42.2 +0.1**
**MSS Messtetten 6.73 311** *e*Pn **Pn 03 34 43.9 +1.3**
**RICC Richard 6.74 346** *e*PN **Pn 03 34 43.1 +0.4**
**ANX Ano Chora 6.75 142** P **Pn 03 34 44.6 +1.6**
**GRA1 Grafenberg Arr 6.75 329** Pn **Pn 03 34 44.2 +1.3**
**GRF Grafenberg Arr 6.75 329** P **Pn 03 34 44.2 +1.3**
**GRFO Grafenberg 6.75 329** Pn **Pn 03 34 44.3 +1.4**
**GRFO Grafenberg 6.75 329** P **Pn 03 34 44.3 +1.4**
**KSP Ksiaz 6.83 359** *e*P **Pn 03 34 44.4 +0.6**
**KSP Ksiaz 6.83 359** ⇑P **Pn 03 34 44.5 +0.6**
**KSP Ksiaz 6.83 359** Pn **Pn 03 34 44.6 +0.7**
comp=Z,35nm,0.8s,comp=Z,0.3nm
**MLR Muntele Rosu 6.83 74** Pn **Pn 03 34 45.5 +1.4**
**MLR Muntele Rosu 6.83 74** Pn **Pn 03 34 46.2 +2.1**
comp=Z,1.9nm,0.3s,baz=260,slow=16,SNR=15
MLR Lg Lg 03 36 45.9
comp=Z,0.5nm,0.3s,baz=112,slow=11,SNR=3.8
comp=Z,7.3nm,0.6s
**MLR Muntele Rosu 6.83 74** ⇑P **Pn 03 34 46.3 +2.2**
**MLR Muntele Rosu 6.83 74** Pn **Pn 03 34 46.1 +2.1**
comp=Z,28nm,0.9s,comp=Z,0.2nm
**OZUR 6.86 69** ⇓P **Pn 03 34 46.0 +1.8**
**ELND Elena 6.86 96** ⇑P **Pn 03 34 45.3 +1.0**
**EFP Efpalio 6.88 142** P **Pn 03 34 45.9 +1.3**
**CLTB Caltabellotta 6.92 203** Pn **Pn 03 34 48.1 +2.8**
**CLTB Caltabellotta 6.92 203** ⇑P **Pn 03 34 48.6 +3.4**
**HSKC Hora Svate Kat 6.93 343** *e*PN **Pn 03 34 45.3 0.0**
HSKC AMS AMS 03 37 30.0
comp=Z,800nm,10.6s
**THAS Thassos island 6.93 117** P **Pn 03 34 47.0 +1.7**
**UPR University Cam 6.95 144** P **Pn 03 34 49.6 +4.0**
**SENIN Lac Senin/Sane 6.96 293** Pn **Pn 03 34 47.0 +1.1**
**AXAR Agios Charalam 6.96 137** P **Pn 03 34 47.0 +1.2**
**STU Stuttgart 6.97 316** Pn **Pn 03 34 46.5 +0.7**
**STU Stuttgart 6.97 316** ⇑P **Pn 03 34 47.0 +1.1**
**STU Stuttgart 6.97 316** *e*Pn **Pn 03 34 45.3 -0.6**
**STU Stuttgart 6.97 316** P **Pn 03 34 46.5 +0.7**
**STU Stuttgart 6.97 316** *e*Pn **Pn 03 34 45.3 -0.6**
**SULR 6.97 81** ⇑P **Pn 03 34 47.4 +1.5**
**TANN Tannenbergstha 6.98 338** *e*Pn **Pn 03 34 46.6 +0.5**
TANN *e*Sn **Sn 03 36 04.3 -0.7**
**TANN Tannenbergstha 6.98 338** *e*Pn **Pn 03 34 46.6 +0.5**
**TURR Turia 6.99 70** ⇑P **Pn 03 34 47.8 +1.7**
**RAFF Raffo Rosso 7.00 195** Pn **Pn 03 34 48.9 +2.6**
**KWP Kalwaria Pacla 7.01 35** *e*P **Pn 03 34 49.4 +3.0**
KWP *e*S **Sn 03 36 04.6 -1.2**
**KWP Kalwaria Pacla 7.01 35** Pn **Pn 03 34 47.7 +1.3**
**KWP Kalwaria Pacla 7.01 35** ⇑P **Pn 03 34 49.3 +2.9**
**KWP Kalwaria Pacla 7.01 35** P **Pn 03 34 47.7 +1.3**
**KWP Kalwaria Pacla 7.01 35** Pn **Pn 03 34 48.6 +2.2**
comp=Z,20nm,0.6s,comp=Z,0.2nm
**VSL Villasalto 7.03 232** Pn **Pn 03 34 47.6 +1.0**
**VSL Villasalto 7.03 232** ⇑P **Pn 03 34 48.1 +1.5**
**BURAR Bucovina Array 7.03 56** ⇑P **Pn 03 34 48.2 +1.4**
**BURAR Bucovina Array 7.03 56** P **Pn 03 34 48.1 +1.4**
**MBDF Montbardon 7.06 279** *e*Pn **Pn 03 34 45.3 -1.9**
SNR=1.0
MBDF *e*Sn **Sn 03 36 02.1 -5.0**
comp=Z,94nm,0.5s,SNR=1.0
**NEHR Nehoiu 7.07 75** ⇓P **Pn 03 34 48.9 +1.7**
**LTHK Lithakia 7.08 151** P **Pn 03 34 47.1 -0.3**
**BRG Berggiesshubel 7.08 346** Pn **Pn 03 34 47.7 +0.3**
BRG Amp 03 34 49.1
comp=Z,15nm,0.4s
**BRG Berggiesshubel 7.08 346** Pg **Pg 03 35 23.1 +3.0**
BRG Sn **Sn 03 36 04.8 -2.7**
BRG r 03 36 14.7
BRG r 03 36 38.3
BRG Amp 03 36 40.0
comp=Z,88nm,0.8s
BRG Amp 03 37 03.0
comp=E,1.6nm,8.0s
BRG Amp 03 37 08.0
comp=N,0.6nm,9.5s
BRG Amp 03 37 42.0
comp=Z,0.7nm,7.0s
BRG *er* 03 54 09.9
BRG r 03 54 38.5
BRG Amp 03 54 43.7
comp=Z,4.4nm,0.8s
**BRG Berggiesshubel 7.08 346** *e*Pn **Pn 03 34 47.7 +0.3**
**BRG Berggiesshubel 7.08 346** P **Pn 03 34 47.6 +0.3**
BRG pmax pmax
comp=Z,15nm,0.4s
**BRG Berggiesshubel 7.08 346** *e*Pn **Pn 03 34 47.7 +0.3**
**BNI Bardonecchia 7.15 282** Pn **Pn 03 34 48.6 +0.3**
**BNI Bardonecchia 7.15 282** ⇑P **Pn 03 34 48.7 +0.3**
**BNI Bardonecchia 7.15 282** P **Pn 03 34 48.6 +0.3**
**LPG La Plagne 7.15 285** *e*Pn **Pn 03 34 48.2 -0.3**
SNR=1.0
LPG *e*Sn **Sn 03 36 05.2 -4.2**
comp=Z,105nm,0.4s
**BFO Black Forest 7.16 310** Pn **Pn 03 34 49.1 +0.7**
**BFO Black Forest 7.16 310** ⇑P **Pn 03 34 49.2 +0.7**
**BFO Black Forest 7.16 310** *e*Pn **Pn 03 34 49.2 +0.7**
BFO *e*Sn **Sn 03 36 07.8 -1.6**
**BFO Black Forest 7.16 310** P **Pn 03 34 49.1 +0.7**
**BFO Black Forest 7.16 310** *e*Pn **Pn 03 34 49.2 +0.7**
**LPL La Plagne 7.16 285** *e*Pn **Pn 03 34 48.9 +0.2**
SNR=1.0
LPL *e*Sn **Sn 03 36 04.3 -5.5**
comp=Z,91nm,0.4s
**DRO Drossia 7.20 146** P **Pn 03 34 50.1 +1.1**
**ISR Istrita 7.21 78** ⇑P **Pn 03 34 51.1 +2.0**
**ISR Istrita 7.21 78** P **Pn 03 34 51.1 +2.0**
**ISR Istrita 7.21 78** Pn **Pn 03 34 51.6 +2.5**
comp=Z,53nm,0.8s,comp=Z,0.4nm
**KLV Kalavryta, Ach 7.31 143** P **Pn 03 34 51.4 +0.9**
**ONER Baraj Valea Uz 7.32 68** ⇑P **Pn 03 34 52.3 +1.7**
**LMR La Mourre 7.33 268** *e*P **Pn 03 34 51.1 +0.3**
LMR *e*Sn **Sn 03 36 06.3 -7.2**
comp=Z,29nm,0.3s
**PLOR3 Plostina Array 7.38 72** Pn **Pn 03 34 53.9 +2.4**
comp=Z,24nm,1.0s,comp=Z,0.1nm
**PLOR Plostina 7.38 72** ⇓P **Pn 03 34 53.0 +1.4**
**PLOR Plostina 7.38 72** P **Pn 03 34 52.9 +1.4**
**PLOR5 Plostina Array 7.39 72** Pn **Pn 03 34 54.2 +2.6**
comp=Z,25nm,1.0s,comp=Z,0.1nm
**MOX Moxa 7.43 335** *e*Pn **Pn 03 34 52.3 +0.1**
**MOX Moxa 7.43 335** *e*Pn **Pn 03 34 52.3 +0.1**
**VRI Vrincioaia 7.44 72** ⇓P **Pn 03 34 54.6 +2.3**
**VRI Vrincioaia 7.44 72** P **Pn 03 34 54.5 +2.3**
**VRI Vrincioaia 7.44 72** Pn **Pn 03 34 54.9 +2.6**
comp=Z,15nm,0.9s,comp=Z,181nmcomp=Z,0.1nm
**GUR Goura 7.48 142** P **Pn 03 34 53.4 +0.4**
**TESR Tescani 7.53 67** Pn **Pn 03 34 56.9 +3.3**
comp=Z,15nm,0.8s,comp=Z,445nmcomp=Z,0.1nm
**ALN Alexandroupoli 7.67 111** Pn **Pn 03 34 57.2 +1.9**
**ALN Alexandroupoli 7.67 111** P **Pn 03 34 58.6 +3.2**
**ALN Alexandroupoli 7.67 111** ⇓P **Pn 03 34 57.4 +2.0**
**ALN Alexandroupoli 7.67 111** P **Pn 03 34 57.3 +1.9**
**CLL Collm 7.68 343** Pn **Pn 03 34 55.6 +0.1**
**CLL Collm 7.68 343** *e*Pn **Pn 03 34 56.0 +0.5**
CLL *ex* x 03 35 04.0
CLL *e*Pg Pb 03 35 28.0 +11
CLL *e*Sn Sn 03 36 09.0 -13
CLL *ex* x 03 36 20.0
CLL *ex* x 03 36 25.0
CLL *ex* x 03 37 00.0
CLL AMS AMS 03 37 00.0
CLL *e*Sg Sb 03 37 06.0 +18
CLL *ex* x 03 37 11.0
comp=Z,253nm,1.4s
**CLL Collm 7.68 343** *e*Pn **Pn 03 34 55.7 +0.1**
**CLL Collm 7.68 343** *e*P **Pn 03 34 56.0 +0.5**
**CLL Collm 7.68 343** *e*Pn **Pn 03 34 55.7 +0.1**
**ORIF Oris-en-Rattie 7.70 280** *e*Sn **Sn 03 36 18.4 -4.5**
comp=Z,136nm,0.6s
**LVV L'vov 7.72 39** *e*P **Pn 03 34 55.1 -1.1**
LVV *i* S **Sn 03 36 22.4 -0.8**
LVV pmax pmax
comp=Z,80nm,1.0s
LVV MLR MLR
comp=E,200nm,7.0s
LVV MLR MLR
comp=N,400nm,6.0s
LVV MLR MLR
comp=Z,500nm,6.0s
**LOUT Loutraki 7.73 139** P **Pn 03 34 57.7 +1.4**
**VILL Villia 7.75 137** P **Pn 03 34 57.6 +1.0**
**HINF Hinteralfeld 7.77 303** *e*Pn **Pn 03 34 56.2 -0.6**
SNR=1.0
HINF *e*Sn **Sn 03 36 18.8 -5.6**
comp=Z,46nm,0.4s
**ECH Echery 7.77 306** Pn **Pn 03 34 56.7 -0.1**
**ECH Echery 7.77 306** ⇑P **Pn 03 34 57.4 +0.5**
**ECH Echery 7.77 306** P **Pn 03 34 56.7 -0.1**
**CDF Champ du Feu 7.80 308** *e*Pn **Pn 03 34 57.9 +0.6**
SNR=1.0
CDF *e*Sn **Sn 03 36 19.8 -5.4**
CDF *e*Sg Sb 03 37 11.3 +19
comp=Z,74nm,0.6s
**KYMI Kymi, Euboea I 7.81 131** P **Pn 03 35 01.1 +3.7**
**ENEZ Enez 7.81 112** P **Pn 03 34 59.7 +2.3**
**CABF La Chapelle 7.83 293** *e*Pn **Pn 03 34 57.3 -0.4**
SNR=1.0
**CAVK Edirne/Enez-Ca 7.84 112** ⇑P **Pn 03 35 00.1 +2.3**
**NEUB Neuenburg 7.89 337** *e*Pn **Pn 03 35 00.2 +1.8**
**NEUB Neuenburg 7.89 337** *e*Pn **Pn 03 35 00.2 +1.8**
**SMRF Simiane la Rot 7.93 273** *e*Pn **Pn 03 35 00.2 +1.1**
SNR=1.0
**SMRF Simiane la Rot 7.93 273** *e*Pg Pb 03 35 27.7 +6.2
SMRF *e*Sn **Sn 03 36 20.7 -7.7**
comp=Z,25nm,0.4s,SNR=1.0
**GHRR 7.94 71** Pn **Pn 03 35 03.9 +4.8**
**UBBA Unterbreizbach 8.13 329** *e*Pn **Pn 03 35 04.7 +3.1**
**UBBA Unterbreizbach 8.13 329** *e*Pn **Pn 03 35 04.7 +3.1**
**HAU Haudompre 8.16 303** *e*Pn **Pn 03 35 02.4 +0.3**
SNR=1.0
HAU *e*Sn **Sn 03 36 28.0 -5.9**
comp=Z,57nm,0.4s,SNR=1.0
**HARR Harsova 8.17 81** ⇓P **Pn 03 35 02.7 +0.4**
**HARR Harsova 8.17 81** P **Pn 03 35 02.7 +0.4**
**TNS Taunus Mts 8.31 321** *e*Pn **Pn 03 35 05.9 +1.6**
**TNS Taunus Mts 8.31 321** *e*Pn **Pn 03 35 05.9 +1.6**
**CFR Carcaliu 8.33 78** ⇑P **Pn 03 35 05.3 +0.7**
**CFR Carcaliu 8.33 78** P **Pn 03 35 05.2 +0.7**
**EZN Ezine 8.39 117** Pn **Pn 03 35 08.0 +2.7**
comp=Z,42nm,1.4s,comp=Z,454nm
**TPGR Topolog 8.52 80** ⇓P **Pn 03 35 07.8 +0.7**
**VIVF Saint-Julien-l 8.56 280** *e*Pn **Pn 03 35 06.7 -1.0**
SNR=1.0
VIVF *e*Sn **Sn 03 36 40.3 -3.5**
comp=Z,20nm,0.4s,SNR=1.0
**SSB Saint Sauveur 8.67 283** Pn **Pn 03 35 08.8 -0.4**
**SSB Saint Sauveur 8.67 283** ⇑P **Pn 03 35 09.1 -0.1**
**SSB Saint Sauveur 8.67 283** P **Pn 03 35 08.8 -0.4**
**PAGF Fort de Pagny 8.77 305** *e*Pn **Pn 03 35 10.9 +0.4**
PAGF *e*Sn **Sn 03 36 42.9 -6.1**
PAGF *e*Sg 03 37 37.1
comp=Z,81nm,0.8s
**KOE Koeppel 8.79 320** *e*Pn **Pn 03 35 12.7 +2.0**
**BGG Burgeitz 8.82 318** *e*Pn **Pn 03 35 13.1 +1.9**
**SFTF Sexfontaines 9.04 302** *e*P **Pn 03 35 15.3 +1.1**
SFTF *e*Sn **Sn 03 36 49.7 -5.8**
comp=Z,132nm,1.2s
**MILM Milestii Mici 9.08 67** *e*P **Pn 03 35 17.4 +2.7**
MILM MLR MLR
comp=Z,1μm,10.8s
MILM MLR MLR
comp=E,900nm,10.0s
**WLF Walferdange 9.10 312** Pn **Pn 03 35 16.4 +1.5**
**WLF Walferdange 9.10 312** *d*P **Pn 03 35 16.9 +1.9**
**WLF Walferdange 9.10 312** *e*Pn **Pn 03 35 17.8 +2.8**
**WLF Walferdange 9.10 312** P **Pn 03 35 16.5 +1.5**
**WLF Walferdange 9.10 312** *e*Pn **Pn 03 35 17.8 +2.8**
**KIS Kishinev 9.10 67** *e*P **Pn 03 35 17.4 +2.4**
KIS *e*L L 03 37 44.0
KIS LqM 03 38 31.0
comp=E,1μm,5.4s
KIS LRM MLR 03 39 22.0
comp=E,900nm,10.0s
**MEZF Maizieres J'vi 9.15 303** *e*P **Pn 03 35 18.3 +2.6**
MEZF *e*Sn **Sn 03 36 52.0 -6.3**
comp=E,18nm,0.4s
**AHRW Bad Neuenahr-A 9.17 319** *e*Pn **Pn 03 35 18.3 +2.3**
**AHRW Bad Neuenahr-A 9.17 319** *e*Pn **Pn 03 35 17.7 +1.7**
**DKL Dikili 9.19 119** ⇓P **Pn 03 35 20.0 +3.7**
**HILG Hillesheim 9.20 316** *e*Pn **Pn 03 35 18.3 +1.8**
**SMF Signal de Mont 9.35 291** *e*Pn **Pn 03 35 18.2 -0.2**
SNR=1.0
SMF *e*Sn **Sn 03 36 57.1 -6.0**
comp=E,18nm,0.4s,SNR=1.0
**HOBG Hohbusch 9.36 321** *e*Pn **Pn 03 35 20.9 +2.4**
**BNS Bensberg 9.41 321** *e*Pn **Pn 03 35 21.9 +2.6**
**LOR Lormes 9.48 294** *e*Pn **Pn 03 35 20.2 -0.1**
SNR=1.0
**LOR Lormes 9.48 294** *e*P **Pn 03 35 20.9 +0.6**
LOR *e*Sn **Sn 03 37 02.6 -3.8**
comp=E,39nm,0.4s
**LOR Lormes 9.48 294** ⇑P **Pn 03 35 20.9 +0.6**
**RNPP5 Staryi Chortor 9.56 38** Pn **Pn 03 35 24.2 +2.9**
**BHOU Houvegnez 9.58 315** *d*P **Pn 03 35 24.3 +2.7**
BHOU *d*S **Sn 03 37 09.3 +0.5**
**KLL Kalltalsperre 9.61 317** *e*Pn **Pn 03 35 23.8 +1.8**
**RNPP8 Varash 9.62 37** Pn **Pn 03 35 25.5 +3.3**
**LUBAR Lubar, Ukraine 9.65 48** Pn **Pn 03 35 25.5 +2.9**
**DREG Dreilaegerbach 9.66 317** *e*Pn **Pn 03 35 24.4 +1.7**
DREG *e*Sn **Sn 03 37 08.6 -2.1**
comp=E,14nm,0.8s
**SSF Saint Saulge 9.66 293** *e*Pn **Pn 03 35 21.2 -1.5**
SNR=1.0
SSF *e*Sn **Sn 03 37 04.2 -6.6**
comp=E,8.7nm,0.4s
**BTNL Ternell 9.66 316** *d*P **Pn 03 35 24.8 +2.0**
BTNL *d*S **Sn 03 37 08.1 -2.7**
**AVF Avril sur Loir 9.70 291** *e*Pn **Pn 03 35 20.6 -2.7**
SNR=1.0
**AVF Avril sur Loir 9.70 291** *e*P **Pn 03 35 26.1 +2.8**
AVF *e*Sn **Sn 03 37 04.7 -7.1**
comp=E,30nm,0.8s
**BUG Bochum--Univer 9.71 323** *e*Pn **Pn 03 35 26.1 +2.8**
**BUG Bochum--Univer 9.71 323** *e*Pn **Pn 03 35 26.1 +2.8**
**MEM Membach 9.74 316** *d*P **Pn 03 35 25.5 +1.8**
MEM *d*S **Sn 03 37 10.1 -2.6**
**LAUG Laupendahl 9.79 322** *e*Pn **Pn 03 35 27.0 +2.6**
**RCHB Rochefort 9.87 312** *d*P **Pn 03 35 28.1 +2.6**
RCHB *d*S **Sn 03 37 12.1 -3.8**
**BSTI Sart Tilman 9.94 315** *d*P **Pn 03 35 29.5 +2.9**
**KEST Kesra 9.96 216** Pn **Pn 03 35 30.3 +3.3**
comp=E,1.1nm,0.3s,baz=355,slow=5.0,SNR=34
KEST LR LR 03 39 15.3
comp=E,87nm,19.8s,baz=178,slow=38
**BCLA Clavier 9.98 314** *d*P **Pn 03 35 28.6 +1.5**
BCLA *d*S **Sn 03 37 17.4 -1.3**
**BGF Bois d'Agland 10.00 289** *e*Pn **Pn 03 35 26.5 -0.9**
SNR=1.0
BGF *e*Sn **Sn 03 37 13.5 -5.7**
comp=E,53nm,0.5s
**BEBN Eben Emael 10.02 316** *d*P **Pn 03 35 30.2 +2.6**
BEBN *d*S **Sn 03 37 18.0 -1.5**
**GIVF Givet 10.06 311** *e*P **Pn 03 35 31.5 +3.4**
GIVF *e*Sn **Sn 03 37 11.7 -8.8**
GIVF *e*Sg 03 38 17.6
comp=E,13nm,0.4s
**BGES Gesves 10.07 313** *d*P **Pn 03 35 30.9 +2.6**
BGES *d*S **Sn 03 37 20.0 -0.9**
**DOU Dourbes 10.18 311** *d*P **Pn 03 35 32.2 +2.4**
DOU *d*S **Sn 03 37 23.2 -0.2**
**BMRD Maredsous 10.20 312** *d*P **Pn 03 35 31.6 +1.6**
BMRD *d*S **Sn 03 37 23.6 -0.3**
**MI28 Mi28,Pidlybu 10.20 43** Pn **Pn 03 35 33.2 +3.1**
**HYF Humbligny 10.28 293** *e*P **Pn 03 35 32.1 +0.8**
HYF *e*Sn **Sn 03 37 19.2 -6.9**
comp=E,166nm,0.5s
**MI30 MI30,Zelenitsa 10.35 45** Pn **Pn 03 35 34.5 +2.4**
**BAIF Baives 10.37 310** *e*P **Pn 03 35 35.4 +3.0**
BAIF *e*Sn **Sn 03 37 20.6 -7.6**
BAIF *e*Sg 03 38 30.7
comp=E,29nm,0.9s
**TCF Toulx Ste Croi 10.40 288** *e*P **Pn 03 35 35.6 +2.8**
TCF *e*Sn **Sn 03 37 23.2 -5.7**
comp=E,17nm,0.4s
**CAF Calviac 10.41 280** *e*Pn **Pn 03 35 29.5 -3.6**
SNR=1.0
**CAF Calviac 10.41 280** *e*P **Pn 03 35 35.6 +2.5**
CAF *e*Sn Sn 03 37 19.8 -10
comp=E,9.5nm,0.5s
**MTLF Montolieu 10.42 271** *e*Pn **Pn 03 35 33.1 -0.1**
SNR=1.0
**MTLF Montolieu 10.42 271** *e*P **Pn 03 35 36.1 +2.9**
MTLF *e*Sn **Sn 03 37 21.6 -8.0**
comp=E,15nm,0.8s
**RJF Les Rejaudoux 10.80 282** *e*Pn **Pn 03 35 34.5 -3.9**
**RJF Les Rejaudoux 10.80 282** *e*P **Pn 03 35 40.8 +2.4**
RJF *e*Sn **Sn 03 37 32.7 -6.2**
comp=E,8.1nm,0.6s
**IDI Anoyia 10.82 141** Pn **Pn 03 35 37.9 -0.7**
**IDI Anoyia 10.82 141** Pn **Pn 03 35 37.6 -1.0**
comp=E,4.1nm,0.4s,baz=239,slow=7.2,SNR=20
IDI Sn Sn 03 37 30.3 -9.0
comp=E,2.0nm,0.3s,baz=282,slow=19,SNR=3.5
IDI LR LR 03 41 21.3
comp=E,102nm,19.6s,baz=346,slow=46
**AK01 Malin Array Si 10.86 48** Pn **Pn 03 35 41.8 +2.7**
**AKASG Malin Array Be 10.87 48** Pn **Pn 03 35 40.9 +1.6**
comp=E,0.9nm,0.3s,baz=234,slow=13,SNR=13
AKASG LR LR 03 40 10.6
comp=E,170nm,20.9s,baz=230,slow=39
comp=E,1.8nm,0.7s
**AKASG Malin Array Be 10.87 48** *e*P **Pn 03 35 42.6 +3.4**
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**AKBB Malin Array Si 10.87 48** *de*P **Pn 03 35 42.0 +2.8**
**SUW Suwalki 10.89 21** *e*P **Pn 03 35 41.8 +2.2**
**SUW Suwalki 10.89 21** Pn **Pn 03 35 40.7 +1.1**
**SUW Suwalki 10.89 21** P **Pn 03 35 40.7 +1.1**
**BSD Bornholm Skovb 11.16 355** *e*P **Pn 03 35 43.9 +0.8**
**CEST Esterri de Car 11.26 268** Pn **Pn 03 35 47.9 +3.2**
**LFF La Frestale 11.35 280** *e*Pn **Pn 03 35 46.1 +0.2**
LFF *e*Sn **Sn 03 37 44.1 -8.2**
comp=Z,31nm,0.9s
**KARP Karpathos 11.74 133** Pn **Pn 03 35 52.7 +1.5**
**EPF Esparros 11.83 271** *e*Pn **Pn 03 35 52.7 +0.2**
SNR=1.0
**EPF Esparros 11.83 271** *e*P **Pn 03 35 57.1 +4.6**
EPF *e*Sn Sn 03 37 52.8 -11
comp=Z,2.5nm,0.6s
**MFF Saint Martin d 12.05 288** *e*Pn **Pn 03 35 52.7 -2.7**
SNR=1.0
**MFF Saint Martin d 12.05 288** *e*P **Pn 03 35 58.4 +3.0**

MFF eSn Sn 03 38 00.8 -8.6
comp=Z,12nm,0.7s
**BJUU Bjuv 12.28 351** eP Pn 03 35 58.4 -0.1
**TATN Tataouine 12.36 205** Pn Pn 03 35 59.9 +0.1
**PABE Paberze 12.44 20** Pn Pn 03 36 01.3 +0.7
**ETSF Etsaut 12.50 271** eP Pn 03 36 06.1 +4.4
ETSF eSn Sn 03 38 12.3 -8.2
comp=Z,8.9nm,1.0s
**DEL Delary 12.58 353** i P Pn 03 36 03.0 +0.4
**FLN La Foliniere 12.69 298** ePn Pn 03 36 01.1 -3.0
SNR=1.0
**FLN La Foliniere 12.69 298** eP Pn 03 36 06.5 +2.4
FLN eSn Sn 03 38 14.4 -10
comp=Z,8.5nm,0.5s
**NACGM Naroch 12.74 28** eP Pn 03 36 07.1 +2.3
comp=N,840nm,1.3s
**MNK Minsk 12.81 31** i P Pn 03 36 05.1 -0.6
comp=E,24nm,1.0s
MNK i P Pn 03 36 05.1 -0.6
comp=N,20nm,0.8s
MNK i P Pn 03 36 05.1 -0.6
comp=Z,19nm,0.9s,baz=220
MNK i S Sn 03 38 28.0 +0.2
MNK i LQ LQ 03 39 46.5
MNK i LR LR 03 40 44.1
MNK i LRM MLR 03 41 11.7
comp=E,158nm,16.4s
MNK i LRM MLR 03 41 32.4
comp=Z,212nm,13.2s
MNK i LRM MLR 03 41 34.6
comp=N,115nm,12.5s
**MNK Minsk 12.81 31** c i P Pn 03 36 04.0 -1.7
**GRR Gorron 12.84 296** eP Pn 03 36 08.4 +2.3
GRR eSn Sn 03 38 22.1 -6.4
comp=N,9.4nm,0.6s
**SJPF Ste Jean 12.94 272** eP Pn 03 36 09.4 +1.7
SJPF eSn Sn 03 38 21.3 -10
comp=N,1.1nm,0.3s
**FABU Falkenberg 13.22 351** eP Pn 03 36 13.0 +1.7
**BR131 Keskin Array S 13.42 103** d iP Pn 03 36 17.0 +2.7
**BRTR Keskin Array B 13.42 103** Pn Pn 03 36 17.2 +2.9
baz=297,slow=11,SNR=14
BRTR LR LR 03 41 59.0
comp=N,96nm,21.3s,baz=292,slow=40
comp=N,3.0nm,0.9s
**BRTR Keskin Array B 13.42 103** eP Pn 03 36 17.7 +3.4
**BORU Boraas 13.84 351** eP Pn 03 36 21.7 +1.9
**SGMF Saint Gilles 13.92 294** ePn Pn 03 36 18.1 -2.8
**SGMF Saint Gilles 13.92 294** eP Pn 03 36 23.1 +2.2
**QUIF Quistinic 14.26 293** ePn Pn 03 36 22.6 -3.0
SNR=1.0
**QUIF Quistinic 14.26 293** eP Pn 03 36 27.3 +1.7
**ROSF Rostrenen 14.40 294** ePn Pn 03 36 24.3 -3.2
SNR=1.0
**ROSF Rostrenen 14.40 294** eP Pn 03 36 29.5 +2.0
**ANN Anapa 14.93 80** eP Pn 03 36 33.9 -0.8
ANN pmax pmax
comp=Z,64nm,1.5s
ANN MLR MLR
comp=Z,252nm,13.0s
**BNN Bunyan 15.34 103** P P 03 36 44.0 -1.0
BNN IAmb IAmb 03 36 48.7
comp=Z,37nm,0.9s
**CSS Mathiatis 15.76 119** P P 03 36 48.6 -0.9
CSS IAmb IAmb 03 36 55.4
comp=Z,50nm,0.7s
**VSU Vasula 15.77 20**⇑ eP P 03 36 47.8 -1.6
VSU pmax pmax
comp=Z,24nm,0.6s
**ESDC Sonseca Array 15.90 261** Pn P 03 36 52.1 +1.0
comp=Z,0.4nm,0.3s,baz=68,slow=12,SNR=66
ESDC LR LR 03 43 19.6
comp=Z,85nm,18.0s,baz=80,slow=39
**PAB San Pablo 16.22 261** P P 03 36 55.0 +0.4
**PAB San Pablo 16.22 261** P P 03 36 55.1 +0.4
PAB pmax pmax
comp=Z,6.0nm,0.8s
**HFS Hagfors 16.23 355** Pn Pn 03 36 52.5 +0.9
comp=Z,0.3nm,0.3s,baz=163,slow=11,SNR=12
HFS LR LR 03 44 01.9
comp=Z,81nm,19.2s,baz=186,slow=41
comp=Z,1.3nm,0.6s
**SOC Sochi 16.71 83** eP Pn 03 36 58.1 +0.4
SOC e 03 40 05.6
SOC pmax pmax
comp=Z,21nm,0.8s
SOC MLR MLR
comp=Z,71nm,15.0s
**VSR Storozhevoye 16.81 57** eP Pn 03 36 59.3 +0.4
VSR pmax pmax
comp=Z,7.0nm,0.6s
**VORR Voronezh 16.97 55** eP P 03 37 02.3 -0.4
VORR pmax pmax
comp=Z,16nm,1.4s
**EKA Eskdalemuir Ar 17.00 319** Pn P 03 37 04.8 +1.8
baz=114,slow=11
**ARPR Arapgir-MALATY 17.00 99** Pn Pn 03 37 01.9 +0.2
**OBN Obninsk 17.00 42**⇑ eP P 03 37 02.7 -0.4
OBN eS Sn 03 40 09.1 -0.7
OBN pmax pmax
comp=Z,11nm,0.7s
OBN MLR MLR
comp=Z,169nm,13.0s
**ESK Eskdalemuir 17.01 319** P P 03 37 04.8 +1.6
**ESK Eskdalemuir 17.01 319** P P 03 37 04.8 +1.6
ESK pmax pmax
comp=Z,16nm,1.2s
**ERBR Yeremizino-Bor 17.02 76** eP P 03 37 04.0 +0.5
ERBR eS Sn 03 40 13.9 +3.5
ERBR pmax pmax
comp=Z,32nm,0.8s
**GAZ Gaziantep 17.08 107** P 03 37 04.5 +0.3
**LPSR Galich'ya Gora 17.11 52** eP Pn 03 37 01.3 -1.5
LPSR pmax pmax
comp=Z,10.0nm,0.7s
**PBRG Braganca 17.21 271** eP P 03 37 07.6 +2.0
comp=Z,25nm,1.8s
**LABN Labinsk 17.28 80** eP P 03 37 06.3 0.0
LABN eS Sn 03 40 11.1 -5.6
LABN pmax pmax
comp=Z,56nm,1.3s
LABN MLR MLR
comp=Z,195nm,11.0s
**NB2 NORSAR Subarra 17.35 351** P Pn 03 37 06.3 +0.6
comp=Z,1.8nm,0.6s,baz=164,slow=14
**NOA NORSAR Array B 17.35 351** P Pn 03 37 05.4 -0.2
baz=162,slow=12,SNR=3.0
NOA LR LR 03 43 27.3
comp=Z,31nm,19.0s,baz=160,slow=36
comp=Z,0.8nm,0.7s
**MVO Moncorvo 17.60 269** A A 03 45 24.1
comp=Z,58nm,18.0s
**MOS Moscow 17.85 42** eP Pn 03 37 08.9 -2.9
**POLO Lamas de Olo 18.09 270** eP P 03 37 17.2 +1.8
comp=Z,16nm,1.6s
**MTE Manteigas 18.21 267** A A 03 45 32.6
comp=Z,89nm,18.0s
**PGAV Gavieira, Arco 18.27 272** A A 03 46 17.4
comp=Z,79nm,16.0s
**MMAI Mount Meron Ar 18.34 120** P P 03 37 18.6 +0.5
comp=Z,7.6nm,0.6s,baz=314,slow=10,SNR=14
MMAI LR LR 03 46 29.7
comp=Z,76nm,19.0s,baz=260,slow=44
**FINES FINESS Array B 18.34 15** P Pn 03 37 16.9 -1.0
comp=Z,0.4nm,0.3s,baz=191,slow=9.1,SNR=16
FINES S Sn 03 40 31.8 -10
comp=Z,1.1nm,0.5s,baz=206,slow=18,SNR=1.8
FINES PcP PcP 03 41 48.1 -0.4
comp=Z,0.5nm,0.4s,baz=192,slow=2.7,SNR=3.8
FINES LR LR 03 45 21.6
comp=Z,54nm,20.9s,baz=201,slow=40
comp=Z,2.7nm,0.5s
**PCBR Castelo Branco 18.36 265** eP Pn 03 37 20.4 +2.2
**VRH Novokhopyorsk 18.36 58** eP Pn 03 37 19.9 +1.8
VRH pmax pmax
comp=Z,10.0nm,0.5s
**PMRV Marv??o 18.45 264** A A 03 44 56.5
comp=Z,61nm,18.0s
**KIV Kislovodsk 18.77 81** P Pn 03 37 23.4 +0.1
**KIV Kislovodsk 18.77 81** eP Pn 03 37 23.2 -0.1
KIV pmax pmax
comp=Z,15nm,1.1s
KIV MLR MLR
comp=Z,43nm,14.0s
**SHA1 Shidzhatmaz 18.79 82**⇓ eP Pn 03 37 24.3 +0.6
**KBZ Khabaz 18.96 82** P P 03 37 24.9 +0.2
comp=Z,0.2nm,0.3s,baz=293,slow=10,SNR=9.7
KBZ LR LR 03 45 53.3
comp=Z,110nm,20.5s,baz=286,slow=41
comp=Z,3.5nm,0.8s
**KBZ Khabaz 18.96 82**⇑ eP Pn 03 37 25.9 +0.4
KBZ pmax pmax
comp=Z,7.0nm,1.1s
**EVO Evora 19.24 262** eP Pn 03 37 29.6 +0.6
**NCK Nalchik 19.50 82**⇑ eP Pn 03 37 33.5 +1.5
NCK pmax pmax
comp=Z,12nm,0.5s
**PVAQ Vaqueiros 19.52 259** P Pn 03 37 32.5 +0.1
**PVAQ Vaqueiros 19.52 259** eP Pn 03 37 32.6 +0.3
comp=Z,47nm,1.8s
PVAQ A A 03 44 54.4
comp=Z,63nm,18.0s
**ASF Jabal al Asfar 19.84 120** P P 03 37 34.8 +0.3
comp=Z,0.7nm,0.3s,baz=83,slow=0.2,SNR=9.2
comp=Z,3.2nm,0.4s
**GURO Guroymak-BITLI 19.86 97** P Pn 03 37 36.6 +0.2
GURO IAmb IAmb 03 37 38.5
comp=Z,30nm,0.9s
**MDT Midelt 19.96 243** P Pn 03 37 36.9 -0.7
comp=Z,0.3nm,0.3s,baz=61,slow=13,SNR=5.4
MDT LR LR 03 44 59.3
comp=Z,56nm,18.1s,baz=62,slow=36
comp=Z,2.9nm,0.6s
**EIL Elat 20.46 128**⇓ P P 03 37 42.5 +1.1
**EIL Elat 20.46 128** P P 03 37 42.3 +1.0
comp=Z,6.2nm,0.5s,baz=346,slow=11,SNR=8.9
comp=Z,6.2nm,0.5s
**GNI Garni 21.21 91** P P 03 37 50.9 +1.4
GNI IAmb IAmb 03 37 52.2
comp=Z,24nm,0.8s
**GNI Garni 21.21 91** P P 03 37 51.0 +1.4
comp=Z,19nm,0.7s,baz=323,slow=1.9,SNR=12
GNI LR LR 03 48 38.8
comp=Z,70nm,18.1s,baz=298,slow=44
comp=Z,19nm,0.7s
**GNI Garni 21.21 91** c i P P 03 37 51.1 +1.6
GNI pmax pmax
comp=Z,41nm,1.3s
**BELG Belogornoye 22.18 57** P P 03 38 00.1 +0.5
comp=Z,75nm,0.9s,baz=61,slow=2.5,SNR=22
BELG LR LR 03 47 13.4
comp=Z,108nm,20.1s,baz=249,slow=38
comp=Z,75nm,0.9s
**BELG Belogornoye 22.18 57** c i P P 03 37 59.9 +0.3
BELG pmax pmax
comp=Z,14nm,1.0s
**MAK Makhachkala 22.41 82** eP P 03 37 58.7 -3.4
MAK eS S 03 42 03.3 -4.1
MAK pmax pmax
comp=Z,145nm,0.8s
MAK MLR MLR
comp=Z,305nm,11.0s
**AKT Akhty 22.95 85** eP P 03 38 08.0 0.0
AKT ePPP PPP 03 38 39.7
AKT eS S 03 42 15.2 -2.3
AKT pmax pmax
comp=Z,21nm,1.0s
**TAM Tamanrasset 23.05 207** P P 03 38 08.7 -0.5
**TAM Tamanrasset 23.05 207**⇓ P P 03 38 11.0 +1.8
**TAM Tamanrasset 23.05 207** P P 03 38 08.7 -0.5
TAM pmax pmax
comp=Z,9.0nm,1.3s
**KIRV Kirov 24.86 43** LR LR 03 48 48.9
comp=Z,112nm,19.2s,baz=239,slow=38
**KIRV Kirov 24.86 43** d iP P 03 38 25.9 +0.1
**ARCES ARCESS Array B 25.99 7** P P 03 38 35.6 -0.5
comp=Z,1.4nm,0.6s,baz=185,slow=8.5,SNR=5.4
ARCES LR LR 03 49 51.7
comp=Z,78nm,20.0s,baz=161,slow=39
comp=Z,1.4nm,0.6s
**AKTO Aktyubinsk 28.57 62** LR LR 03 51 45.8
comp=Z,87nm,18.5s,baz=210,slow=39
**ARU Arti 29.11 50** P P 03 39 03.0 -1.1
**ARU Arti 29.11 50** LR LR 03 51 07.5
comp=Z,108nm,18.5s,baz=256,slow=37
**ARU Arti 29.11 50**⇑ eP P 03 39 03.9 -0.2
ARU pmax pmax
comp=Z,17nm,1.0s
**BORG Borgarnes 29.57 328** LR LR 03 50 49.2
comp=Z,42nm,20.3s,baz=141,slow=36
**ABKAR Akbulak array 29.92 64** P P 03 39 09.8 -1.6
**TORD Torodi Ar. Bea 33.31 207** P P 03 39 41.0 -0.4
comp=Z,2.0nm,0.7s,baz=11,slow=10,SNR=12
TORD LR LR 03 56 23.4
comp=Z,30nm,18.6s,baz=251,slow=42
comp=Z,2.0nm,0.7s
**BRVK Borovoye 35.92 56** P P 03 40 04.2 +0.5
BRVK IAmb IAmb 03 40 05.5
comp=Z,9.2nm,0.7s
**BRVK Borovoye 35.92 56**⇑ P P 03 40 04.7 +1.0
**BRVK Borovoye 35.92 56** c iP P 03 40 04.5 +0.8
BRVK pmax pmax
comp=Z,11nm,1.0s
**BVAR Bovoye Array 35.99 56** P P 03 40 04.8 +0.5
comp=Z,3.7nm,0.6s,baz=264,slow=7.8,SNR=18
comp=Z,3.7nm,0.6s
**UOSS Minazif 37.36 107** P P 03 40 15.3 -0.9
UOSS IAmb IAmb 03 40 46.0
comp=Z,17nm,1.2s
**KKAR Karatay Array 38.51 72** P P 03 40 25.9 +0.1
**KKAR Karatay Array 38.51 72** P P 03 40 25.9 +0.1
KKAR pmax pmax
comp=Z,3.0nm,0.9s
**FURI Furi 39.93 145** LR LR 03 58 20.0
comp=Z,36nm,19.4s,baz=12,slow=38
**GAR Garm 39.96 78** P P 03 40 38.9 +0.8
**AAK Ala-Archa 41.40 71** LR LR 04 01 07.3
comp=Z,91nm,18.8s,baz=293,slow=41
**AAK Ala-Archa 41.40 71**⇑ eP P 03 40 50.2 +0.2
AAK pmax pmax
comp=Z,8.0nm,1.7s
**KURBB Kurchatov Arra 41.42 58** P P 03 40 49.5 -0.4
comp=Z,0.8nm,0.5s,baz=286,slow=9.5,SNR=10
comp=Z,0.8nm,0.5s
**KURK Kurchatov 41.45 58** P P 03 40 49.5 -0.6
**KURK Kurchatov 41.45 58** d iP P 03 40 50.1 0.0
KURK pmax pmax
comp=Z,5.0nm,1.3s
**DBIC Dimbokro 41.67 213** P P 03 40 51.0 -1.2
comp=Z,1.7nm,0.5s,baz=353,slow=8.1,SNR=3.5
comp=Z,1.7nm,0.5s
**DBIC Dimbokro 41.67 213** P P 03 40 51.0 -1.2
**SFJD Kangerlussuaq 41.70 327** LR LR 03 57 37.9
comp=Z,60nm,19.4s,baz=91,slow=35
**KSH Kashi 43.70 75** P P 03 41 09.5 +0.8
KSH pP pP 03 41 14.3 0.0
KSH pmax pmax
comp=Z,4.0nm,0.4s
**ZALV Zalesovo Beam 44.23 52** P P 03 41 12.9 +0.4
comp=Z,1.8nm,0.4s,baz=281,slow=8.9,SNR=15
ZALV LR LR 04 00 38.5
comp=Z,71nm,19.3s,baz=282,slow=37
comp=Z,1.8nm,0.4s
**ZALV Zalesovo Beam 44.23 52** eP P 03 41 12.9 +0.4
ZALV pmax pmax
comp=Z,3.0nm,0.6s
**MK31 Makanchi Array 45.01 62** c eP P 03 41 18.8 -0.2
**MKAR Makanchi Array 45.01 62** P P 03 41 18.9 -0.1
comp=Z,1.7nm,0.5s,baz=286,slow=7.5,SNR=25
MKAR PcP PcP 03 42 59.3 -0.4
comp=Z,0.7nm,0.7s,baz=348,slow=2.8,SNR=1.8
MKAR LR LR 04 03 12.9
comp=Z,67nm,18.3s,baz=295,slow=40
comp=Z,1.7nm,0.5s
**DGZ Jazzator, Alta 47.14 57**⇓ eP P 03 41 36.8 +1.0
DGZ pmax pmax
comp=Z,3.0nm,0.6s
**SCHQ Schefferville 52.21 313** P P 03 42 15.3 +1.1
comp=Z,6.2nm,0.7s,baz=72,slow=6.3,SNR=9.9
SCHQ LR LR 04 02 28.4
comp=Z,38nm,18.2s,baz=29,slow=34
comp=Z,6.2nm,0.7s
**TIXI Tiksi 55.24 21** LR LR 04 09 11.7
comp=Z,59nm,18.3s,baz=206,slow=39
**BATG Bathurst New B 55.24 305** P P 03 42 38.0 +1.6
**G65A Princeton 57.19 303** P P 03 42 51.4 +1.0
**SONM Songino Array 59.12 52** P P 03 43 04.9 +0.8
comp=Z,1.9nm,0.7s,baz=294,slow=10.0,SNR=10.0
comp=Z,1.9nm,0.7s
**ULN Ulaanbaatar 59.48 51**⇓ eP P 03 43 07.8 +1.2
ULN pmax pmax
comp=Z,1.0nm,0.9s
**TRQ Mont Tremblant 60.76 307** P P 03 43 15.2 -0.1
**C36M Paulatuk 63.29 345** P P 03 43 31.7 0.0
**INK Inuvik 65.77 348** P P 03 43 49.7 +1.7
INK IAmb IAmb 03 44 04.5
comp=Z,4.5nm,1.3s
**INK Inuvik 65.77 348** P P 03 43 49.7 +1.7
INK pmax pmax
comp=Z,4.0nm,1.3s
**SSPA Standing Stone 66.01 304** P P 03 43 51.3 +1.3
SSPA IAmb IAmb 03 43 58.5
comp=Z,5.5nm,0.8s
**HHC Hu-ho-hao-te 66.20 56** eP P 03 43 52.0 +0.6
HHC pmax pmax
comp=Z,10.0nm,0.6s
HHC pmax pmax
comp=Z,77nm,4.8s
HHC LR LR
comp=N,72nm,14.5s
HHC LR LR
comp=E,77nm,14.5s
HHC LR LR
comp=Z,140nm,15.3s
**E29M Blow River 66.29 350** P P 03 43 51.8 +0.4
E29M IAmb IAmb 03 44 03.1
comp=Z,4.4nm,1.0s
**F31M Tsiigehtchic 66.61 348** P P 03 43 53.1 -0.2
**YKA Yellowknife Ar 66.87 338** P P 03 43 56.0 +0.8
comp=Z,0.7nm,0.6s,baz=321,slow=5.1,SNR=15
comp=Z,0.7nm,0.6s
**YKA Yellowknife Ar 66.87 338** c eP P 03 43 54.7 -0.4
YKA pmax pmax
comp=Z,1.0nm,0.5s
**D23K Nanushuk River 66.94 355** P P 03 43 56.0 +0.6
**G30M tAoh Zraii Nji 67.40 349** P P 03 43 59.0 +0.5
G30M IAmb IAmb 03 44 24.1
comp=Z,3.9nm,1.2s
**C18K Utukok River 67.64 359** P P 03 44 00.5 +0.5
**F25K Christian Rive 67.90 353** P P 03 44 02.4 +0.7
F25K IAmb IAmb 03 44 38.1
comp=Z,6.4nm,1.2s
**H29M Whitestone 68.41 349** P P 03 44 04.4 -0.5
H29M IAmb IAmb 03 44 09.4
comp=Z,8.6nm,1.4s
**HEH HeiHe 68.52 40** eP P 03 44 06.3 +0.6
HEH pmax pmax
comp=Z,9.0nm,0.8s
**FFC Flin Flon 68.65 327** P P 03 44 06.9 +0.4
FFC IAmb IAmb 03 44 11.9
comp=Z,4.2nm,0.7s
**FFC Flin Flon 68.65 327** P P 03 44 06.9 +0.4
FFC pmax pmax
comp=Z,4.0nm,0.7s
**E19K Redstone River 68.75 357** P P 03 44 08.0 +1.1
E19K IAmb IAmb 03 44 41.4
comp=Z,7.5nm,1.2s
**EYMN Ely 68.76 317** P P 03 44 08.1 +0.8
**PZH PanZhiHua 68.79 73** P P 03 44 09.3 +1.3
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,100nm,4.4s
**COWI Conover 68.81 314** P P 03 44 08.2 +0.5
COWI IAmb IAmb 03 44 13.8
comp=Z,3.9nm,0.8s
**I30M Mount Dempster 69.07 348** P P 03 44 09.3 +0.2
I30M IAmb IAmb 03 44 35.0
comp=Z,3.3nm,1.0s
**LBTB Lobatse 69.19 171** LR LR 04 16 07.7
comp=Z,34nm,18.6s,baz=358,slow=37
**ULM Lac du Bonnet 69.26 321** P P 03 44 12.2 +1.9
comp=Z,2.2nm,0.7s,baz=29,slow=4.3,SNR=4.0
comp=Z,2.2nm,0.7s
**ULM Lac du Bonnet 69.26 321**⇑ eP P 03 44 13.7 +3.3
**I28M Miner Creek 69.35 350** P P 03 44 12.0 +1.2
**G21K Allakaket 69.53 356** P P 03 44 10.9 -0.9
G21K IAmb IAmb 03 44 24.0
comp=Z,3.5nm,0.9s
**J30M Hart River 69.67 348** P P 03 44 13.7 +0.9
J30M IAmb IAmb 03 44 18.9
comp=Z,2.1nm,0.5s
**G40A Rib Lake 69.92 314** P P 03 44 14.9 +0.3
**MA2 Magadan 70.11 23** LR LR 04 19 01.6
comp=Z,35nm,18.6s,baz=91,slow=39
**H21K Melozitna Rive 70.35 355** P P 03 44 18.0 +1.2
H21K IAmb IAmb 03 44 26.7
comp=Z,10nm,1.2s
**DAWY Dawson 70.60 349** P P 03 44 19.3 +0.9
DAWY IAmb IAmb 03 44 41.0
comp=Z,7.5nm,1.5s
**J26L Joseph Creek 70.70 351** P P 03 44 20.3 +1.2
J26L IAmb IAmb 03 44 37.4
comp=Z,4.0nm,1.2s
**ILAR Eielson Array 70.78 353** P P 03 44 18.7 -0.7
comp=Z,0.5nm,0.7s,baz=8.5,slow=6.7,SNR=4.1
comp=Z,0.5nm,0.7s
**MLY Manley 70.84 354** P P 03 44 21.0 +1.1
**KLR Kul'dur 71.23 39** LR LR 04 18 35.3
comp=Z,44nm,18.5s,baz=310,slow=38
**KLR Kul'dur 71.23 39**⇓ eP P 03 44 22.9 +0.4
KLR pmax pmax
comp=Z,3.0nm,1.4s
**FARO Faro, Yukon 71.37 346** P P 03 44 25.4 +2.2
FARO IAmb IAmb 03 45 06.7
comp=Z,6.2nm,1.5s
**RIDG Independent Ri 71.58 351** P P 03 44 25.8 +1.4
RIDG IAmb IAmb 03 44 44.8
comp=Z,5.5nm,1.0s
**L42A Oliver, Polo 71.86 311** P P 03 44 25.9 -0.5
**L27K Beaver Creek, 71.88 350** P P 03 44 26.8 +0.6
**M29M Somme Creek 72.01 348** P P 03 44 28.1 +1.0
M29M IAmb IAmb 03 45 04.5
comp=Z,5.5nm,1.5s
**CMAR Chiang Mai Arr 72.01 82** P P 03 44 26.9 -0.7
comp=Z,2.2nm,0.3s,baz=291,slow=6.3,SNR=5.8
comp=Z,2.2nm,0.3s
**CMAR Chiang Mai Arr 72.01 82** eP P 03 44 28.5 +0.9
CMAR pmax pmax
comp=Z,2.0nm,0.3s
**RND Reindeer 72.29 353** P P 03 44 28.7 0.0
**RND Reindeer 72.29 353** P P 03 44 28.7 0.0
RND pmax pmax
comp=Z,2.0nm,1.0s
**DHY Denali Highway 72.48 352** P P 03 44 30.2 +0.3
DHY IAmb IAmb 03 44 38.4
comp=Z,5.2nm,1.0s
**BOSA Boshof 72.72 172** P P 03 44 32.1 +0.6
comp=Z,1.0nm,0.4s,baz=345,slow=5.8,SNR=11
BOSA LR LR 04 17 53.5
comp=Z,38nm,18.4s,baz=356,slow=37
comp=Z,1.0nm,0.4s
**ECSD EROS Data Cent 74.27 316** P P 03 44 41.2 +0.6
ECSD IAmb IAmb 03 44 45.3
comp=Z,3.0nm,0.7s
**SUA Susitna One 74.37 354** P P 03 44 41.6 +0.6
SUA IAmb IAmb 03 44 46.5
comp=Z,7.1nm,1.0s
**CCM Cathedral Cave 75.47 309** P P 03 44 48.4 +0.7
CCM IAmb IAmb 03 44 51.7
comp=Z,7.6nm,0.7s
**CCM Cathedral Cave 75.47 309** P P 03 44 48.4 +0.7
CCM pmax pmax
comp=Z,8.0nm,0.7s
**X48A Hartselle 75.55 304** P P 03 44 48.1 0.0
**P38A Dawn 75.62 312** P P 03 44 49.5 +1.1
**T42A Van Buren 76.11 308** P P 03 44 52.3 +1.0
T42A IAmb IAmb 03 44 55.7
comp=Z,3.8nm,0.7s
**NJ2 Nanjing 76.38 59** eP P 03 44 53.5 +0.6
NJ2 pmax pmax
comp=Z,14nm,0.5s
**PETK Petropavlovsk- 77.65 23** LR LR 04 22 50.9
comp=Z,15nm,18.7s,baz=84,slow=38
**YSS Yuzh-Sakhalins 77.72 34** eP P 03 45 01.1 +0.9
YSS pmax pmax
comp=Z,30nm,0.7s
YSS MLR MLR
comp=Z,200nm,16.0s
**KSRS Korea Array 77.86 49** P P 03 45 01.6 +0.5
comp=Z,0.8nm,0.5s,baz=328,slow=4.3,SNR=3.3
comp=Z,0.8nm,0.5s
**KDAK Kodiak Island 78.16 354** P P 03 45 03.4 +1.0
**KDAK Kodiak Island 78.16 354** P P 03 45 03.4 +1.0
KDAK pmax pmax
comp=Z,27nm,1.5s
**NEW Newport 79.50 331** LR LR 04 22 26.8
comp=Z,25nm,20.7s,baz=33,slow=37
**BPMT Black Pine Rid 79.67 327** P P 03 45 11.7 +0.4

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|---|---|---|---|---|---|---|---|---|
| **ASAJ** | **Asahikawa** | **79.93** | **36** | P | **P** | **03 45 12.6** | **+0.2** |
| | comp=Z,2.9nm,0.6s,baz=250,slow=15,SNR=1.8 | | | | | | |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **81.07** | **323** | P | **P** | **03 45 19.8** | **+0.9** |
| | comp=Z,0.7nm,0.5s,baz=62,slow=5.5,SNR=8.9 | | | | | | |
| PDAR | | | | LR | LR | 04 21 31.1 | |
| | comp=Z,24nm,18.2s,baz=2.0,slow=36 | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **BMO** | **Blue Mountains** | **82.47** | **329** | P | **P** | **03 45 27.0** | **+1.0** |
| BMO | | | | IAmb | IAmb | 03 45 31.0 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **BMO** | **Blue Mountains** | **82.47** | **329** | P | **P** | **03 45 27.0** | **+1.0** |
| BMO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **82.68** | **50** | LR | LR | 04 24 35.6 | |
| | comp=Z,24nm,19.9s,baz=316,slow=37 | | | | | | |
| **HWUT** | **Hardware Ranch** | **82.88** | **324** | P | **P** | **03 45 29.9** | **+1.5** |
| HWUT | | | | IAmb | IAmb | 03 45 35.2 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **MFID** | **Camas Ranch** | **83.12** | **327** | P | **P** | **03 45 30.7** | **+1.2** |
| MFID | | | | IAmb | IAmb | 03 45 35.0 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **BSUT** | **Blindstream Ca** | **83.40** | **322** | P | **P** | **03 45 32.7** | **+1.4** |
| **MJAR** | **Matsushiro Arr** | **83.93** | **44** | LR | LR | 04 26 06.0 | |
| | comp=Z,37nm,18.1s,baz=303,slow=38 | | | | | | |
| **ELK** | **Elko** | **85.14** | **325** | LR | LR | 04 24 42.2 | |
| | comp=Z,36nm,18.5s,baz=33,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.35** | **326** | P | **P** | **03 45 56.4** | **+0.8** |
| | comp=Z,0.7nm,0.8s,baz=35,slow=4.9,SNR=3.5 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **88.84** | **311** | P | **P** | **03 45 59.5** | **+1.5** |
| | comp=Z,0.3nm,0.5s,baz=61,slow=6.4,SNR=9.0 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **JTS** | **Las Juntas de** | **91.09** | **285** | LR | LR | 04 25 11.9 | |
| | comp=Z,16nm,18.2s,baz=100,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.40** | **96** | PKP | **PKPdf** | **03 52 00.1** | **-0.9** |
| | comp=Z,0.2nm,0.5s,baz=308,slow=2.2,SNR=2.0 | | | | | | |
| **QSPA** | **South Pole Qui** | **133.87** | **180** | PKP | **PKiKP** | **03 52 21.4** | **+0.7** |
| | comp=Z,1.2nm,0.8s,baz=104,slow=8.3,SNR=1.3 | | | | | | |

*RHSSO **30** 03:37:52.9±0.4, 44.°08N× 16.°58E, h4km±2km, ML2.5/11*
**ISC 30 03:37:52.1**±1.2, **44.°07N**±0.°02×**16.°59E**±0.°02, **h0**km±10km,
**n35**, σ0**°75**/67, **4C-1D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIJV** | **Kijevo** | **0.15** | **246** | *i* Pg | **Pg** | **03 37 55.0** | **+0.1** |
| KIJV | | | | Sg | **Sg** | **03 37 57.5** | **+0.6** |
| **A050A** | **Klekovaca** | **0.42** | **354** | ⇑*i* Pg | **Pg** | **03 37 59.7** | **-0.4** |
| A050A | | | | *e*Sg | **Sg** | **03 38 06.6** | **+1.0** |
| **MORI** | **Morici** | **0.67** | **253** | *i* Pg | **Pg** | **03 38 04.4** | **-0.5** |
| MORI | | | | Sg | **Sg** | **03 38 14.8** | **+1.2** |
| **RICI** | **Ricice** | **0.69** | **145** | *e*Pg | **Pg** | **03 38 04.4** | **-0.9** |
| RICI | | | | Sg | **Sg** | **03 38 15.2** | **+0.9** |
| **UDBI** | **Udbina** | **0.75** | **308** | *e*Pg | **Pg** | **03 38 06.4** | **-0.1** |
| UDBI | | | | Sg | **Sg** | **03 38 16.7** | **+0.4** |
| **ZIRJ** | **Zirje** | **0.80** | **239** | *e*Pg | **Pg** | **03 38 06.8** | **-0.6** |
| ZIRJ | | | | Sg | **Sg** | **03 38 18.5** | **+0.7** |
| **BLY** | **Banja Luka** | **0.80** | **32** | ⇑*i* Pg | **Pg** | **03 38 07.3** | **-0.2** |
| BLY | | | | *e*Sg | **Sg** | **03 38 17.7** | **-0.2** |
| **MAKA** | **Makarska** | **0.84** | **158** | *e*Pg | **Pg** | **03 38 06.6** | **-1.5** |
| MAKA | | | | Sg | **Sg** | **03 38 19.8** | **+0.8** |
| **HVAR** | **Hvar** | **0.89** | **187** | *i* Pg | **Pg** | **03 38 07.5** | **-1.6** |
| HVAR | | | | Sg | **Sg** | **03 38 20.9** | **+0.2** |
| **PRIJ** | **Prijedor** | **0.92** | **5** | ⇑*i* Pg | **Pg** | **03 38 09.2** | **-0.4** |
| PRIJ | | | | *e*Sg | **Sg** | **03 38 21.9** | **+0.4** |
| **A051A** | **Mrakovica** | **0.97** | **13** | ⇓*i* Pg | **Pg** | **03 38 10.5** | **-0.3** |
| A051A | | | | *e*Sg | **Sg** | **03 38 23.5** | **+0.1** |
| **PLIT** | **Plitvice** | **1.07** | **320** | *e*Pg | **Pg** | **03 38 11.6** | **-1.0** |
| PLIT | | | | Sg | **Sg** | **03 38 26.5** | **+0.1** |
| **DUGI** | **Dugi Otok** | **1.11** | **267** | *i* Pg | **Pg** | **03 38 12.4** | **-0.9** |
| DUGI | | | | Sg | **Sb** | **03 38 29.0** | **-0.2** |
| **VIRC** | **Vir** | **1.13** | **282** | *i* Pg | **Pg** | **03 38 13.2** | **-0.5** |
| VIRC | | | | Sg | **Sn** | **03 38 30.6** | **-0.7** |
| **DOB** | **Doboj** | **1.27** | **58** | *e*Pg | **Pg** | **03 38 15.9** | **-0.5** |
| DOB | | | | *e*Sg | **Sg** | **03 38 33.3** | **+0.4** |
| **LSTV** | **Lastovo** | **1.31** | **170** | *e*Pg | **Pn** | **03 38 16.5** | **-1.2** |
| LSTV | | | | Sg | **Sg** | **03 38 35.2** | **+1.0** |
| **NVLJ** | **Novalja** | **1.33** | **293** | *e*Pg | **Pg** | **03 38 18.4** | **+0.8** |
| NVLJ | | | | Sg | **Sn** | **03 38 37.6** | **+1.2** |
| **STON** | **Ston** | **1.44** | **146** | *e*Pg | **Pn** | **03 38 17.8** | **-1.6** |
| STON | | | | Sn | **Sg** | **03 38 40.5** | **+2.2** |
| **STON** | **Ston** | **1.44** | **146** | *e*Pg | **Pn** | **03 38 19.2** | **-0.2** |
| STON | | | | *e*Sg | **Sb** | **03 38 38.8** | **+0.2** |
| **RABC** | **Rab** | **1.47** | **298** | *e*Pg | **Pb** | **03 38 20.4** | **+0.2** |
| RABC | | | | Sg | **Sg** | **03 38 40.7** | **+1.5** |
| **MOSL** | **Moslavina** | **1.55** | **4** | *e*Pg | **Pn** | **03 38 20.4** | **-0.6** |
| MOSL | | | | Sg | **Sn** | **03 38 41.6** | **-0.3** |
| **HAPS** | **Han Pijesak,BI** | **1.70** | **88** | *e*Pn | **Pn** | **03 38 23.7** | **+0.6** |
| HAPS | | | | *e*Sn | **Sn** | **03 38 45.5** | **-0.1** |
| **KLINJ** | **Klinje** | **1.70** | **121** | *e*Sn | **Sn** | **03 38 45.4** | **-0.2** |
| **BOJS** | **Bojanci** | **1.73** | **327** | *e*Pn | **Pn** | **03 38 23.0** | **-0.4** |
| BOJS | | | | *e*Sn | **Sn** | **03 38 45.4** | **-0.7** |
| **OZLJ** | **Ozalj** | **1.75** | **333** | *i* Pn | **Pb** | **03 38 24.5** | **-0.4** |
| OZLJ | | | | Sg | **Sg** | **03 38 48.7** | **+0.5** |
| **DBRK** | **Dubrovnik** | **1.80** | **140** | *i* Pn | **Pn** | **03 38 24.6** | **+0.3** |
| DBRK | | | | Sn | **Sn** | **03 38 47.9** | **+0.1** |
| **BRY** | **Bratogost** | **1.83** | **129** | *e*Pn | **Pn** | **03 38 25.5** | **+0.5** |
| BRY | | | | *e*Sn | **Sn** | **03 38 49.8** | **+0.9** |
| **TREB** | **Trebinje** | **1.86** | **136** | *e*Pn | **Pn** | **03 38 25.1** | **-0.1** |
| TREB | | | | *e*Sn | **Sn** | **03 38 50.3** | **+0.9** |
| **UPM** | **Unac-Piva** | **1.89** | **116** | *e*Sn | **Sn** | **03 38 50.5** | **+0.2** |
| **BBLS** | **Lazi&#263i** | **2.04** | **95** | *e*Pn | **Pn** | **03 38 27.8** | **+0.1** |
| BBLS | | | | *e*Sn | **Sn** | **03 38 53.8** | **-0.2** |
| **RUDO** | **Rudo** | **2.06** | **102** | *e*Pn | **Pn** | **03 38 28.2** | **+0.3** |
| RUDO | | | | *e*Sn | **Sn** | **03 38 54.8** | **+0.5** |
| **CEY** | **Cerknica** | **2.27** | **318** | *e*Pn | **Pn** | **03 38 30.7** | **-0.2** |
| CEY | | | | *e*Sn | **Sn** | **03 38 59.1** | **-0.6** |
| **PDG** | **Podgorica** | **2.54** | **129** | *e*Pn | **Pn** | **03 38 35.2** | **+0.7** |
| PDG | | | | *e*Sn | **Sn** | **03 39 06.3** | **+0.2** |
| **DRME** | **Dracevica, Mon** | **2.67** | **134** | ⇑*i* Pn | **Pn** | **03 38 36.4** | **+0.1** |
| DRME | | | | *e*Sn | **Sn** | **03 39 10.1** | **+0.7** |
| **OBKA** | **Obir** | **2.84** | **330** | *e*Pn | **Pn** | **03 38 39.0** | **+0.3** |

*PDG **30** 03:45:29.0±0.4, 44.°08N× 16.°64E, h1km, ML2.9/11, Error ellipse: s-maj=1.3km s-min=1.7km az=0.0*
*RHSSO **30** 03:45:30.5±0.3, 44.°04N× 16.°58E, h4km±1km, ML2.7/19*
*BEO **30** 03:45:31.0±0.4, 44.°08N× 16.°65E, h0km, ML2.5/4*
*PRU **30** 03:45:32.1, 44.°16N× 16.°96E, h10km*
**ISC 30 03:45:30.1**±1.1, **44.°06N**±0.°02×**16.°61E**±0.°02, **h3**km±9km,
**n87**, σ1**°06**/167, **6C-5D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIJV** | **Kijevo** | **0.15** | **250** | *i* Pg | **Pg** | **03 45 33.1** | **0.0** |
| KIJV | | | | Sg | **Sg** | **03 45 35.5** | **+0.4** |
| **A050A** | **Klekovaca** | **0.43** | **353** | ⇓*i* Pg | **Pg** | **03 45 37.8** | **-0.5** |
| A050A | | | | *e*Sg | **Sg** | **03 45 45.3** | **+1.4** |
| **MORI** | **Morici** | **0.68** | **254** | *i* Pg | **Pg** | **03 45 42.0** | **-1.0** |
| MORI | | | | Sg | **Sg** | **03 45 52.2** | **+0.4** |
| **RICI** | **Ricice** | **0.68** | **146** | *e*Pg | **Pg** | **03 45 42.1** | **-1.1** |
| RICI | | | | Sg | **Sg** | **03 45 52.5** | **+0.5** |
| **UDBI** | **Udbina** | **0.77** | **308** | *i* Pg | **Pg** | **03 45 44.5** | **-0.3** |
| UDBI | | | | Sg | **Sg** | **03 45 54.7** | **0.0** |
| **ZIRJ** | **Zirje** | **0.80** | **240** | *i* Pg | **Pg** | **03 45 44.3** | **-1.2** |
| ZIRJ | | | | Sg | **Sg** | **03 45 56.5** | **+0.5** |
| **BLY** | **Banja Luka** | **0.81** | **31** | *e*Pg | **Pg** | **03 45 45.8** | **+0.2** |
| BLY | | | | *e*Sg | **Sb** | **03 45 57.1** | **-1.0** |
| **BLY** | **Banja Luka** | **0.81** | **31** | ⇓*i* Pg | **Pg** | **03 45 45.7** | **+0.2** |
| BLY | | | | *e*Sg | **Sb** | **03 45 56.9** | **-1.2** |
| **MAKA** | **Makarska** | **0.83** | **159** | *i* Pg | **Pg** | **03 45 44.5** | **-1.4** |
| MAKA | | | | Sg | **Sg** | **03 45 57.7** | **+1.1** |
| **HVAR** | **Hvar** | **0.89** | **187** | *i* Pg | **Pg** | **03 45 45.3** | **-1.8** |
| HVAR | | | | Sg | **Sg** | **03 45 58.8** | **+0.2** |
| **PRIJ** | **Prijedor** | **0.92** | **5** | *e*Pg | **Pg** | **03 45 47.5** | **-0.3** |
| PRIJ | | | | *e*Sg | **Sb** | **03 46 00.7** | **-0.7** |
| **A051A** | **Mrakovica** | **0.98** | **13** | ⇓*i* Pg | **Pg** | **03 45 49.2** | **+0.3** |
| A051A | | | | *e*Sg | **Sb** | **03 46 02.6** | **-0.6** |
| **PLIT** | **Plitvice** | **1.08** | **320** | *i* Pg | **Pg** | **03 45 49.8** | **-1.1** |
| PLIT | | | | Sg | **Sg** | **03 46 04.7** | **-0.2** |
| **DUGI** | **Dugi Otok** | **1.12** | **267** | *i* Pg | **Pg** | **03 45 50.1** | **-1.4** |
| DUGI | | | | Sg | **Sg** | **03 46 07.2** | **+1.2** |
| **VIRC** | **Vir** | **1.14** | **282** | *i* Pg | **Pg** | **03 45 50.8** | **-1.1** |
| VIRC | | | | Sg | **Sg** | **03 46 07.7** | **+1.0** |
| **DOB** | **Doboj** | **1.27** | **57** | *e*Pg | **Pg** | **03 45 53.2** | **-1.2** |
| DOB | | | | *e*Sg | **Sb** | **03 46 11.4** | **0.0** |
| **LSTV** | **Lastovo** | **1.31** | **171** | *e*Pg | **Pn** | **03 45 54.1** | **-1.2** |
| LSTV | | | | Sg | **Sg** | **03 46 13.1** | **+1.0** |
| **NVLJ** | **Novalja** | **1.34** | **293** | *e*Pg | **Pn** | **03 45 55.0** | **-0.8** |
| NVLJ | | | | Sg | **Sg** | **03 46 14.1** | **+0.8** |
| **STON** | **Ston** | **1.43** | **146** | *e*Pg | **Pn** | **03 45 55.4** | **-1.6** |
| STON | | | | *e*Sg | **Sg** | **03 46 17.9** | **+1.9** |
| **STON** | **Ston** | **1.43** | **146** | *e*Pn | **Pn** | **03 45 55.3** | **-1.7** |
| STON | | | | Sn | **Sg** | **03 46 17.6** | **+1.6** |
| **STON** | **Ston** | **1.43** | **146** | ⇓*i* Pg | **Pn** | **03 45 55.2** | **-1.7** |
| STON | | | | *e*Sg | **Sb** | **03 46 16.3** | **+0.3** |
| **RABC** | **Rab** | **1.48** | **299** | *e*Pn | **Pn** | **03 45 57.9** | **+0.2** |
| RABC | | | | Sg | **Sg** | **03 46 18.8** | **+1.2** |
| **MOSL** | **Moslavina** | **1.56** | **4** | *i* Pn | **Pn** | **03 45 58.2** | **-0.6** |
| MOSL | | | | Sg | **Sn** | **03 46 19.6** | **0.0** |
| **HAPS** | **Han Pijesak,BI** | **1.69** | **88** | *e*Pg | **Pn** | **03 46 01.1** | **+0.4** |
| HAPS | | | | *e*Sg | **Sb** | **03 46 23.8** | **+0.1** |
| **HAPS** | **Han Pijesak,BI** | **1.69** | **88** | ⇑*i* Pn | **Pn** | **03 46 00.8** | **+0.1** |
| HAPS | | | | *e*Sn | **Sn** | **03 46 22.9** | **-0.1** |
| **KLINJ** | **Klinje** | **1.69** | **121** | *e*Pn | **Pn** | **03 46 01.2** | **+0.5** |
| KLINJ | | | | *e*Sn | **Sn** | **03 46 23.2** | **+0.3** |
| **BOJS** | **Bojanci** | **1.74** | **327** | ⇑*i* Pn | **Pn** | **03 46 01.1** | **-0.1** |
| BOJS | | | | *e*Sn | **Sn** | **03 46 24.6** | **+0.7** |
| **OZLJ** | **Ozalj** | **1.75** | **333** | *e*Pn | **Pn** | **03 46 01.7** | **+0.3** |
| OZLJ | | | | Sg | **Sb** | **03 46 26.1** | **+0.8** |
| **DBRK** | **Dubrovnik** | **1.79** | **140** | *e*Pn | **Pn** | **03 46 01.9** | **0.0** |
| DBRK | | | | Sn | **Sb** | **03 46 27.3** | **+1.0** |
| **BRY** | **Bratogost** | **1.82** | **129** | ⇑*i* Pn | **Pn** | **03 46 02.8** | **+0.3** |
| BRY | | | | *e*Sn | **Sn** | **03 46 26.1** | **-0.1** |
| **BRY** | **Bratogost** | **1.82** | **129** | *e*Pn | **Pn** | **03 46 03.6** | **+1.1** |
| BRY | | | | *i* Sn | **Sg** | **03 46 30.1** | **+1.5** |
| **TREB** | **Trebinje** | **1.85** | **136** | *e*Pn | **Pn** | **03 46 03.5** | **+0.7** |
| TREB | | | | *e*Sg | **Sg** | **03 46 29.6** | **+0.1** |
| **TREB** | **Trebinje** | **1.85** | **136** | *e*Pn | **Pn** | **03 46 03.3** | **+0.5** |
| TREB | | | | *e*Sn | **Sn** | **03 46 26.4** | **-0.3** |
| **UPM** | **Unac-Piva** | **1.88** | **116** | *e*Pn | **Pn** | **03 46 02.8** | **-0.5** |
| UPM | | | | *e*Sn | **Sn** | **03 46 28.2** | **+0.6** |
| **UPM** | **Unac-Piva** | **1.88** | **116** | *e*Pn | **Pn** | **03 46 04.4** | **+1.1** |
| UPM | | | | *i* Sn | **Sg** | **03 46 31.3** | **+0.9** |
| **PTJ** | **Puntijarka** | **1.90** | **346** | *e*Pn | **Pn** | **03 46 03.3** | **-0.3** |
| PTJ | | | | Sn | **Sb** | **03 46 29.5** | **-0.3** |
| **RIY** | **Rijeka** | **1.97** | **311** | *e*Pg | **Pb** | **03 46 06.5** | **-0.2** |
| RIY | | | | Sn | **Sb** | **03 46 32.1** | **+0.4** |
| **SMRN** | **Sveta Marina** | **2.01** | **300** | *e*Pn | **Pn** | **03 46 05.7** | **+0.8** |
| SMRN | | | | Sn | **Sb** | **03 46 32.7** | **+0.1** |
| **BBLS** | **Lazi&#263i** | **2.03** | **94** | *e*Pn | **Pn** | **03 46 06.3** | **+1.0** |
| **BBLS** | **Lazi&#263i** | **2.03** | **94** | *e*Pn | **Pn** | **03 46 05.5** | **+0.2** |
| BBLS | | | | *e*Sn | **Sn** | **03 46 32.0** | **+0.7** |
| **RUDO** | **Rudo** | **2.05** | **101** | *e*Pn | **Pn** | **03 46 05.6** | **+0.1** |
| RUDO | | | | *e*Sn | **Sn** | **03 46 31.3** | **-0.3** |
| **KALN** | **Kalnik** | **2.08** | **357** | *i* Pn | **Pn** | **03 46 05.3** | **-0.6** |
| KALN | | | | Sn | **Sn** | **03 46 33.5** | **+1.2** |
| **LOBO** | **Lobor** | **2.13** | **350** | *e*Pn | **Pn** | **03 46 06.1** | **-0.6** |
| LOBO | | | | Sn | **Sn** | **03 46 35.1** | **+1.4** |
| **NKME** | **Niksic** | **2.14** | **126** | *e*Pn | **Pn** | **03 46 08.0** | **+1.1** |
| NKME | | | | *i* Sn | **Sb** | **03 46 37.9** | **+1.3** |
| **PLE** | **Pljevlja** | **2.15** | **109** | *e*Pn | **Pn** | **03 46 08.1** | **+1.1** |
| PLE | | | | *i* Sn | **Sb** | **03 46 37.9** | **+1.1** |
| **CEME** | **Cevo** | **2.27** | **131** | ⇑*i* Pn | **Pn** | **03 46 09.7** | **+1.1** |
| CEME | | | | *i* Sn | **Sb** | **03 46 40.7** | **+0.5** |
| **CEY** | **Cerknica** | **2.29** | **318** | *e*Pn | **Pn** | **03 46 09.4** | **+0.6** |
| CEY | | | | *e*Sn | **Sn** | **03 46 37.5** | **0.0** |
| **BEHE** | **Becsehely** | **2.42** | **3** | *e*Pn | **Pn** | **03 46 10.8** | **+0.2** |
| BEHE | | | | *e*Sn | **Sn** | **03 46 41.6** | **+0.9** |
| **BUM** | **Brajici-Budva** | **2.43** | **136** | *e*Pn | **Pn** | **03 46 11.9** | **+1.1** |
| BUM | | | | *i* Sn | **Sb** | **03 46 44.7** | **-0.1** |
| **KOME** | **Kolasin** | **2.44** | **119** | ⇓*i* Pn | **Pn** | **03 46 12.1** | **+1.1** |
| KOME | | | | *i* Sn | **Sb** | **03 46 45.0** | **-0.2** |
| **PDG** | **Podgorica** | **2.53** | **129** | *e*Pn | **Pn** | **03 46 14.1** | **+2.0** |
| PDG | | | | *e*Sg | **Sb** | **03 46 49.6** | **+1.9** |
| **PDG** | **Podgorica** | **2.53** | **129** | *e*Pn | **Pn** | **03 46 12.0** | **-0.1** |
| PDG | | | | *e*Sn | **Sn** | **03 46 44.1** | **+0.7** |
| **PDG** | **Podgorica** | **2.53** | **129** | *e*Pn | **Pn** | **03 46 13.5** | **+1.4** |
| PDG | | | | *i* Sn | **Sb** | **03 46 47.1** | **-0.6** |
| **FRGS** | **Fruska Gora** | **2.54** | **63** | ⇑*i* Pn | **Pn** | **03 46 12.1** | **-0.2** |
| FRGS | | | | *e*Sn | **Sn** | **03 46 44.9** | **+1.1** |
| **SJES** | **Sjenica** | **2.57** | **107** | *e*Pn | **Pn** | **03 46 13.6** | **+0.8** |
| **SJES** | **Sjenica** | **2.57** | **107** | ⇑*i* Pn | **Pn** | **03 46 12.6** | **-0.2** |
| SJES | | | | *e*Sn | **Sn** | **03 46 45.4** | **+0.7** |
| **MORH** | **Mrgy, Hungar** | **2.59** | **33** | *e*Pn | **Pn** | **03 46 13.0** | **0.0** |
| MORH | | | | *e*Sn | **Sn** | **03 46 45.6** | **+0.5** |
| **DRME** | **Dracevica, Mon** | **2.66** | **134** | *e*Pn | **Pn** | **03 46 14.5** | **+0.6** |
| DRME | | | | *e*Sn | **Sn** | **03 46 46.6** | **-0.1** |
| **DRME** | **Dracevica, Mon** | **2.66** | **134** | *e*Pn | **Pn** | **03 46 15.2** | **+1.3** |
| DRME | | | | *i* Sn | **Sb** | **03 46 50.3** | **-1.1** |
| **IVA** | **Berane** | **2.67** | **115** | *e*Pn | **Pn** | **03 46 15.5** | **+1.3** |
| IVA | | | | *i* Sn | **Sb** | **03 46 50.6** | **-1.3** |
| **TRUS** | **Trudelj** | **2.74** | **85** | *e*Pn | **Pn** | **03 46 14.8** | **-0.3** |
| **SOKA** | **Soboth** | **2.84** | **338** | *e*Pn | **Pn** | **03 46 16.3** | **-0.3** |
| | 2.1nm,0.4s,SNR=7.8 | | | | | | |
| SOKA | | | | *e*Sn | **Sn** | **03 46 51.7** | **+0.3** |
| | 2.1nm,0.4s | | | | | | |
| **OBKA** | **Obir** | **2.85** | **330** | *e*Pn | **Pn** | **03 46 17.0** | **+0.3** |
| | 1.9nm,0.2s | | | | | | |
| OBKA | | | | *e*Sn | **Sn** | **03 46 51.5** | **0.0** |
| | 10.0nm,0.4s | | | | | | |
| **OBKA** | **Obir** | **2.85** | **330** | *e*Pn | **Pn** | **03 46 16.9** | **+0.3** |
| OBKA | | | | *e*Sn | **Sn** | **03 46 51.9** | **+0.4** |
| **PVY** | **Plav** | **2.85** | **120** | *e*Pn | **Pn** | **03 46 17.9** | **+1.2** |
| PVY | | | | *i* Sn | **Sb** | **03 46 54.9** | **-2.2** |
| **ARSA** | **Arzberg** | **3.28** | **347** | *i* Pn | **Pn** | **03 46 22.7** | **+0.2** |
| | 1.8nm,0.3s | | | | | | |
| ARSA | | | | *e*Sn | **Sn** | **03 47 02.1** | **0.0** |
| | 1.5nm,0.3s | | | | | | |
| **ARSA** | **Arzberg** | **3.28** | **347** | *e*Pn | **Pn** | **03 46 22.3** | **-0.2** |
| ARSA | | | | *e*Sn | **Sn** | **03 47 02.0** | **-0.1** |
| **SELS** | **Selova** | **3.38** | **103** | *e*Pn | **Pn** | **03 46 24.7** | **+0.8** |
| **RONA** | **Rosalia, Austr** | **3.65** | **357** | Pn | **Pn** | **03 46 27.6** | **+0.1** |
| | 2.2nm,0.2s,SNR=12 | | | | | | |
| RONA | | | | *i* Sn | **Sn** | **03 47 09.8** | **-1.3** |
| | 2.8nm,0.5s | | | | | | |
| **KBA** | **Koelnbreinsper** | **3.79** | **324** | *e*Pn | **Pb** | **03 46 36.8** | **-1.0** |
| | 0.8nm,0.2s | | | | | | |
| **CONA** | **Conrad Observa** | **3.91** | **353** | *i* Pn | **Pn** | **03 46 31.4** | **+0.3** |
| | 0.9nm,0.3s,SNR=6.8 | | | | | | |
| CONA | | | | *i* Sn | **Sn** | **03 47 15.3** | **-2.3** |
| | 1.0nm,0.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **3.94** | **314** | *e*Pn | **Pn** | **03 46 31.8** | **+0.2** |
| | 0.4nm,0.1s | | | | | | |
| ABTA | | | | *e*Sn | **Sn** | **03 47 19.0** | **+0.5** |
| | 5.7nm,0.6s | | | | | | |
| **BARS** | **Barje** | **3.99** | **106** | *e*Pn | **Pn** | **03 46 33.8** | **+1.5** |
| **MOA** | **Molln** | **4.13** | **338** | *i* Pn | **Pn** | **03 46 35.1** | **+1.0** |
| | 1.3nm,0.3s | | | | | | |
| MOA | | | | *i* Sn | **Sn** | **03 47 21.5** | **-1.5** |
| | 1.1nm,0.3s | | | | | | |
| **MOA** | **Molln** | **4.13** | **338** | *e*Pn | **Pn** | **03 46 35.1** | **+1.0** |
| MOA | | | | *e*Sn | **Sn** | **03 47 21.5** | **-1.5** |
| **BIOA** | **Bad Ischl, Aus** | **4.18** | **331** | *e*Pn | **Pn** | **03 46 37.3** | **+2.4** |
| | 1.7nm,0.4s | | | | | | |
| BIOA | | | | *i* Sn | **Sn** | **03 47 23.1** | **-1.2** |
| | 2.0nm,0.5s | | | | | | |
| **LESA** | **Schwarzleotal** | **4.35** | **322** | *i* Pn | **Pn** | **03 46 39.3** | **+2.1** |
| | 1.0nm,0.2s | | | | | | |
| LESA | | | | *e*Sn | **Sn** | **03 47 29.1** | **+0.7** |
| | 9.5nm,0.5s | | | | | | |
| **VYHS** | **Vyhne** | **4.70** | **18** | *e*PN | **Pn** | **03 46 42.1** | **+0.2** |
| VYHS | | | | *e*SN | **Sn** | **03 47 34.4** | **-2.6** |
| **WTTA** | **Wattenberg** | **4.73** | **314** | *i* Pn | **Pn** | **03 46 45.1** | **+2.6** |
| | 2.4nm,0.3s | | | | | | |
| WTTA | | | | *i* Sn | **Sn** | **03 47 39.2** | **+1.1** |
| | 7.9nm,0.5s | | | | | | |
| **WATA** | **Walderalm** | **4.81** | **315** | *e*Pn | **Pn** | **03 46 45.8** | **+2.1** |
| | 1.4nm,0.2s | | | | | | |
| WATA | | | | *i* Sn | **Sn** | **03 47 40.1** | **+0.2** |
| | 9.7nm,0.7s | | | | | | |
| **SQTA** | **Sankt Quirin** | **4.93** | **312** | *e*Pn | **Pn** | **03 46 45.5** | **+0.2** |
| | 2.3nm,0.3s | | | | | | |
| SQTA | | | | *i* Sn | **Sn** | **03 47 44.3** | **+1.4** |
| | 3.3nm,0.4s | | | | | | |
| **KRUC** | **Moravsky** | **5.01** | **358** | *e*PN | **Pn** | **03 46 44.7** | **-1.5** |
| KRUC | | | | *e*SG | **Sn** | **03 47 41.6** | **-3.0** |
| **CKRC** | **Cesky Krumlov** | **5.02** | **342** | *e*SN | **Sn** | **03 47 43.7** | **-1.2** |
| **MOTA** | **Moosalm** | **5.06** | **312** | *e*Pn | **Pn** | **03 46 48.9** | **+1.8** |
| | 1.0nm,0.3s | | | | | | |
| MOTA | | | | *i* Sn | **Sn** | **03 47 47.8** | **+1.6** |
| | 5.0nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **5.08** | **308** | *e*Pn | **Pn** | **03 46 48.1** | **+0.8** |
| | 1.7nm,0.5s | | | | | | |
| FETA | | | | *i* Sn | **Sn** | **03 47 47.7** | **+1.1** |
| | 0.7nm,0.4s | | | | | | |
| **RETA** | **Reutte** | **5.33** | **312** | *i* Pn | **Pn** | **03 46 52.4** | **+1.6** |
| | 1.0nm,0.5s | | | | | | |
| RETA | | | | *i* Sn | **Sn** | **03 47 54.3** | **+1.6** |
| | 1.3nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **5.49** | **339** | *e*PN | **Pn** | **03 46 53.9** | **+1.1** |
| KHC | | | | *e*SN | **Sn** | **03 47 53.9** | **-2.5** |

**JMA 30 03:49:52.8**±0.4, **27.°N**×3.°×**12.°6E**±.°, **h223**km, **MV3.7**/19, **NW OFF OKINAWAJIMA IS, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKE** | **Kume jima 2** | **1.24** | **128** | P | Pn | 03 50 27.1 | +0.5 |
| **JAGN** | **Aguni-jima** | **1.47** | **110** | P | Pn | 03 50 28.7 | +0.4 |
| JAGN | | | | S | S | 03 50 54.4 | -1.5 |
| **JIH** | **Iheya** | **2.03** | **91** | P | Pn | 03 50 33.8 | +0.5 |
| JIH | | | | S | S | 03 51 02.3 | -2.4 |
| **JJT3** | **Tamagusuku3** | **2.10** | **116** | *e*P | Pn | 03 50 34.0 | 0.0 |
| JJT3 | | | | S | S | 03 51 05.7 | -0.4 |
| **JNTH** | **Nagotoyohara** | **2.16** | **105** | P | Pn | 03 50 35.2 | +0.6 |
| **JOW** | **Kunigami** | **2.32** | **96** | P | Pn | 03 50 36.6 | +0.3 |
| JOW | | | | S | S | 03 51 07.4 | -2.6 |
| **JOGS** | **Gusukube** | **2.34** | **186** | P | Pn | 03 50 36.1 | -0.4 |
| **JMJ2** | **Miyako jima3** | **2.37** | **188** | P | Pn | 03 50 37.7 | +0.8 |
| JMJ2 | | | | *e*S | S | 03 51 11.4 | +0.3 |
| **JYRO** | **Yoronjima** | **2.46** | **91** | *i* P | Pn | 03 50 37.8 | +0.1 |
| JYRO | | | | S | S | 03 51 09.4 | -3.2 |
| **JOKE** | **Okinoerabujima** | **2.57** | **83** | *e*P | Pn | 03 50 38.7 | -0.3 |
| **JTJ** | **Tarama** | **2.60** | **200** | P | Pn | 03 50 39.5 | +0.1 |
| JTJ | | | | S | S | 03 51 13.4 | -2.2 |
| **JISG** | **Ishigakijimahi** | **2.79** | **207** | P | Pn | 03 50 41.4 | 0.0 |
| JISG | | | | S | S | 03 51 17.1 | -2.2 |
| **JTK** | **Tokunoshima** | **2.97** | **76** | P | Pn | 03 50 42.8 | -0.6 |
| **JIJ** | **Ishigaki jima** | **3.06** | **208** | P | Pn | 03 50 43.9 | -0.6 |
| JIJ | | | | S | S | 03 51 21.2 | -3.6 |
| **JAMN** | **Amaminishikomi** | **3.29** | **69** | P | Pn | 03 50 46.1 | -0.8 |
| JAMN | | | | *e*S | S | 03 51 25.5 | -3.9 |
| **JMZ** | **Minamidaito 2** | **5.12** | **103** | P | Pn | 03 51 09.7 | +0.4 |
| JMZ | | | | *e*S | S | 03 52 05.2 | -4.4 |

*PDG **30** 03:51:06.9±0.6, 44.°04N× 16.°65E, h2km±1km, ML3.3/10, Error ellipse: s-maj=0.9km s-min=1.5km az=0.0*
*RHSSO **30** 03:51:08.9±0.3, 44.°03N× 16.°52E, h5km±1km, ML3.3/21*
*LDG **30** 03:51:10.3±0.3, 44.°26N× 16.°66E, h2km, ML3.3/20, Error ellipse: s-maj=5.1km s-min=4.7km az=11.0*
*BEO **30** 03:51:10.2±0.5, 44.°08N× 16.°66E, h5km±3km, ML3.1/5*
*PRU **30** 03:51:11.9, 44.°15N× 16.°64E, h10km*
**ISC 30 03:51:08.9**±1.0, **44.°07N**±0.°02×**16.°60E**±0.°02, **h6**km±8km,
**n144**, σ1**°88**/238, **15C-16D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIJV** | **Kijevo** | **0.15** | **245** | *i* Pg | **Pg** | **03 51 12.0** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IVA | | | | *i* Sn | **Sb** | 03 52 29.0 | -1.6 | | |
| **TRUS** | **Trudelj** | **2.75** | **85** | *e*Pn | **Pn** | 03 51 53.6 | 0.0 | | |
| **SOKA** | **Soboth** | **2.83** | **338** | Pn | **Pn** | 03 51 55.2 | +0.3 | | |
| | 8.0nm,0.4s,SNR=19 | | | | | | | | |
| SOKA | | | | *e*Sn | **Sn** | 03 52 27.8 | -1.6 | | |
| | 15nm,0.5s | | | | | | | | |
| **OBKA** | **Obir** | **2.84** | **330** | *e*Pn | **Pn** | 03 51 55.8 | +0.9 | | |
| | 5.3nm,0.2s,SNR=7.8 | | | | | | | | |
| OBKA | | | | *e*Sn | **Sg** | 03 52 39.5 | -0.5 | | |
| | 43nm,0.5s | | | | | | | | |
| **OBKA** | **Obir** | **2.84** | **330** | *e*Pn | **Pn** | 03 51 54.8 | -0.1 | | |
| OBKA | | | | *e*Sn | **Sn** | 03 52 29.3 | -0.1 | | |
| **AVAS** | **Avala Beograd** | **2.88** | **76** | *e*Pn | **Pn** | 03 51 56.1 | +0.7 | | |
| AVAS | | | | *e*Sn | **Sn** | 03 52 30.1 | -0.2 | | |
| **GRUS** | **Gruza** | **2.98** | **92** | *e*Pn | **Pn** | 03 51 56.8 | 0.0 | | |
| **ARSA** | **Arzberg** | **3.27** | **347** | *e*Pn | **Pn** | 03 52 01.5 | +0.7 | | |
| | 8.7nm,0.3s,SNR=17 | | | | | | | | |
| ARSA | | | | *e*Sn | **Sn** | 03 52 39.8 | -0.2 | | |
| | 14nm,0.5s | | | | | | | | |
| **ARSA** | **Arzberg** | **3.27** | **347** | *e*Pn | **Pn** | 03 52 01.4 | +0.6 | | |
| ARSA | | | | *e*Sn | **Sn** | 03 52 39.9 | -0.2 | | |
| **MYKA** | **Terra Mystica** | **3.30** | **322** | *e*Pn | **Pn** | 03 52 04.4 | +3.2 | | |
| | 3.2nm,0.4s | | | | | | | | |
| MYKA | | | | *e*Sn | **Sg** | 03 52 57.8 | +2.9 | | |
| | 11nm,0.3s | | | | | | | | |
| **SELS** | **Selova** | **3.39** | **103** | *e*Pn | **Pn** | 03 52 03.1 | +0.6 | | |
| **MATE** | **Matera** | **3.42** | **179** | ⇑P | **Pn** | 03 52 04.2 | +1.4 | | |
| **RONA** | **Rosalia, Austr** | **3.64** | **357** | *e*Pn | **Pn** | 03 52 06.5 | +0.6 | | |
| | 24nm,0.4s,SNR=24 | | | | | | | | |
| RONA | | | | *e*Sn | **Sn** | 03 52 49.4 | +0.3 | | |
| | 4.7nm,0.3s | | | | | | | | |
| **KUBS** | **Kucevo** | **3.67** | **83** | *e*Pn | **Pn** | 03 52 04.9 | -1.3 | | |
| **BOVS** | **Bovan** | **3.72** | **95** | ⇑P | **Pn** | 03 52 08.5 | +1.5 | | |
| **MDVR** | **Moldovita** | **3.73** | **77** | ⇓P | **Pn** | 03 52 07.9 | +0.7 | | |
| **KBA** | **Koelnbreinsper** | **3.78** | **324** | *i* Pn | **Pn** | 03 52 11.2 | +3.3 | | |
| | 1.3nm,0.3s | | | | | | | | |
| KBA | | | | *i* Sn | **Sn** | 03 52 53.6 | +0.8 | | |
| | 4.6nm,0.3s | | | | | | | | |
| **BZS** | **Buzias** | **3.89** | **65** | *e*Pn | **Pn** | 03 52 09.8 | +0.5 | | |
| **BZS** | **Buzias** | **3.89** | **65** | ⇑P | **Pn** | 03 52 10.0 | +0.7 | | |
| **CONA** | **Conrad Observa** | **3.89** | **353** | *i* Pn | **Pn** | 03 52 10.1 | +0.7 | | |
| | 4.6nm,0.3s,SNR=32 | | | | | | | | |
| CONA | | | | *e*Sn | **Sn** | 03 52 57.7 | +2.2 | | |
| | 8.7nm,0.4s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **3.93** | **314** | *e*Pn | **Pn** | 03 52 10.8 | +0.9 | | |
| | 1.6nm,0.2s,SNR=8.2 | | | | | | | | |
| ABTA | | | | *i* Sn | **Sn** | 03 53 01.4 | +5.0 | | |
| | 20nm,0.6s | | | | | | | | |
| **SRO** | **Srobarova** | **3.93** | **17** | *e*PN | **Pn** | 03 52 10.8 | +1.0 | | |
| **BARS** | **Barje** | **4.00** | **106** | *e*Pn | **Pn** | 03 52 11.8 | +1.0 | | |
| **ZAGS** | **Zajecar** | **4.08** | **92** | *e*Pn | **Pn** | 03 52 11.8 | -0.1 | | |
| **MOA** | **Molln** | **4.12** | **338** | Pn | **Pn** | 03 52 13.9 | +1.5 | | |
| | 3.0nm,0.3s,SNR=23 | | | | | | | | |
| MOA | | | | *i* Sn | **Sn** | 03 53 01.6 | +0.8 | | |
| | 17nm,0.5s | | | | | | | | |
| **MOA** | **Molln** | **4.12** | **338** | *e*Pn | **Pn** | 03 52 13.9 | +1.5 | | |
| MOA | | | | *e*Sn | **Sn** | 03 53 01.5 | +0.6 | | |
| **ZST** | **Bratislava** | **4.14** | **5** | *e*PN | **Pn** | 03 52 13.2 | +0.5 | | |
| ZST | | | | *e*SN | **Sn** | 03 53 02.0 | +0.5 | | |
| **BIOA** | **Bad Ischl, Aus** | **4.17** | **331** | *i* Pn | **Pn** | 03 52 13.9 | +0.7 | | |
| | 2.1nm,0.3s | | | | | | | | |
| BIOA | | | | *e*Sn | **Sn** | 03 53 03.6 | +1.4 | | |
| | 17nm,0.4s | | | | | | | | |
| **SIRR** | **Siria** | **4.20** | **57** | ⇑P | **Pn** | 03 52 13.9 | +0.3 | | |
| **HERR** | **Herculane** | **4.24** | **77** | ⇓P | **Pn** | 03 52 14.5 | +0.4 | | |
| **SURR** | **Surduc** | **4.27** | **65** | ⇑P | **Pn** | 03 52 15.4 | +0.9 | | |
| **LESA** | **Schwarzleotal** | **4.33** | **322** | *i* Pn | **Pn** | 03 52 17.5 | +2.1 | | |
| | 2.7nm,0.3s | | | | | | | | |
| LESA | | | | *i* Sn | **Sn** | 03 53 09.2 | +2.9 | | |
| | 16nm,0.5s | | | | | | | | |
| **BLKB** | **Belogradchik** | **4.42** | **94** | ⇓S | **Sn** | 03 53 10.7 | +2.2 | | |
| **ZAPS** | **Zavoj** | **4.45** | **98** | *e*Pn | **Pn** | 03 52 17.9 | +0.9 | | |
| **PSZ** | **Piszkesteto** | **4.48** | **30** | ⇓P | **Pn** | 03 52 17.4 | -0.1 | | |
| PSZ | | | | ⇑S | **Sn** | 03 53 11.3 | +1.3 | | |
| **VYHS** | **Vyhne** | **4.69** | **19** | *e*PN | **Pn** | 03 52 20.7 | +0.4 | | |
| VYHS | | | | *e*SN | **Sn** | 03 53 12.8 | -2.2 | | |
| **WTTA** | **Wattenberg** | **4.72** | **314** | *e*Pn | **Pn** | 03 52 22.9 | +2.0 | | |
| | 3.6nm,0.2s,SNR=9.7 | | | | | | | | |
| WTTA | | | | *i* Sn | **Sn** | 03 53 21.1 | +5.1 | | |
| | 32nm,0.6s | | | | | | | | |
| **WATA** | **Walderalm** | **4.80** | **315** | *i* Pn | **Pn** | 03 52 24.0 | +2.1 | | |
| | 2.1nm,0.3s,SNR=9.3 | | | | | | | | |
| WATA | | | | *i* Sn | **Sn** | 03 53 23.0 | +5.1 | | |
| | 32nm,0.7s | | | | | | | | |
| **FNA** | **Florina** | **4.83** | **131** | *e*Pn | **Pn** | 03 52 24.0 | +1.8 | | |
| **JAVC** | **Velka Javorina** | **4.85** | **8** | *e*PN | **Pn** | 03 52 22.9 | +0.4 | | |
| **TIP** | **Timpagrande** | **4.89** | **179** | ⇓P | **Pn** | 03 52 23.0 | -0.1 | | |
| **SQTA** | **Sankt Quirin** | **4.92** | **312** | *i* Pn | **Pn** | 03 52 26.2 | +2.7 | | |
| | 3.0nm,0.2s,SNR=8.2 | | | | | | | | |
| SQTA | | | | *i* Sn | **Sn** | 03 53 22.8 | +2.0 | | |
| | 5.9nm,0.4s | | | | | | | | |
| **KRUC** | **Moravsky** | **5.00** | **358** | *e*PN | **Pn** | 03 52 24.5 | 0.0 | | |
| KRUC | | | | *e*SN | **Sn** | 03 53 20.2 | -2.3 | | |
| **CKRC** | **Cesky Krumlov** | **5.01** | **342** | *e*PN | **Pn** | 03 52 25.3 | +0.6 | | |
| CKRC | | | | *e*SN | **Sn** | 03 53 20.9 | -2.0 | | |
| **MOTA** | **Moosalm** | **5.05** | **312** | *i* Pn | **Pn** | 03 52 28.0 | +2.6 | | |
| | 3.0nm,0.2s | | | | | | | | |
| MOTA | | | | *i* Sn | **Sn** | 03 53 26.5 | +2.3 | | |
| | 20nm,0.7s | | | | | | | | |
| **FETA** | **Feichten** | **5.07** | **308** | *e*Pn | **Pn** | 03 52 27.6 | +1.9 | | |
| | 1.0nm,0.4s | | | | | | | | |
| FETA | | | | *i* Sn | **Sn** | 03 53 29.4 | +4.8 | | |
| | 4.8nm,0.5s | | | | | | | | |
| **DRGR** | | **5.09** | **56** | *e*Pn | **Pn** | 03 52 27.1 | +1.2 | | |
| **DRGR** | | **5.09** | **56** | ⇑P | **Pn** | 03 52 27.1 | +1.2 | | |
| **KECS** | **Kecovo** | **5.17** | **30** | *e*PN | **Pn** | 03 52 29.2 | +2.3 | | |
| **VRAC** | **Vranov** | **5.24** | **360** | *e*PN | **Pn** | 03 52 27.3 | -0.5 | | |
| **VRAC** | **Vranov** | **5.24** | **360** | ⇓P | **Pn** | 03 52 27.0 | -0.9 | | |
| **LOT** | **Lotru** | **5.29** | **72** | ⇓P | **Pn** | 03 52 29.6 | +1.0 | | |
| **RETA** | **Reutte** | **5.32** | **312** | *i* Pn | **Pn** | 03 52 30.9 | +1.8 | | |
| | 0.8nm,0.3s | | | | | | | | |
| RETA | | | | *i* Sn | **Sn** | 03 53 32.5 | +1.9 | | |
| | 9.8nm,0.7s | | | | | | | | |
| **MAUC** | **Maruska** | **5.37** | **9** | *e*PN | **Pn** | 03 52 30.6 | +1.0 | | |
| **LANS** | **Liptovska Anna** | **5.45** | **20** | *e*PN | **Pn** | 03 52 33.8 | +3.0 | | |
| **KHC** | **Kasperske Hory** | **5.47** | **339** | *e*PN | **Pn** | 03 52 32.2 | +1.1 | | |
| KHC | | | | *e*SN | **Sn** | 03 53 33.2 | -1.1 | | |
| **ZVC** | **Zvikov** | **5.62** | **344** | *e*PN | **Pn** | 03 52 34.0 | +1.0 | | |
| ZVC | | | | *e*SN | **Sn** | 03 53 35.1 | -2.8 | | |
| **DAVA** | **Damuels** | **5.70** | **307** | *e*Sn | **Sn** | 03 53 41.8 | +1.7 | | |
| | 8.7nm,0.6s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **5.75** | **6** | *e*PN | **Pn** | 03 52 34.7 | -0.1 | | |
| MORC | | | | *e*SN | **Sn** | 03 53 37.7 | -3.4 | | |
| **MORC** | **Moravsky Berou** | **5.75** | **6** | ⇓P | **Pn** | 03 52 35.4 | +0.6 | | |
| MORC | | | | ⇑S | **Sn** | 03 53 42.2 | +1.1 | | |
| **PGF** | **Pioggiola** | **5.75** | **257** | *e*Pn | **Pn** | 03 52 35.7 | +0.8 | | |
| PGF | | | | *e*Sn | **Sn** | 03 53 40.2 | -1.0 | | |
| | 6.5nm,0.6s | | | | | | | | |
| **KRLC** | **Kraliky** | **6.01** | **1** | *e*PN | **Pn** | 03 52 39.7 | +1.3 | | |
| **OSTC** | **Ostas** | **6.50** | **358** | *e*PN | **Pn** | 03 52 45.6 | +0.5 | | |
| **SBF** | **Sospel** | **6.62** | **271** | *e*Pn | **Pn** | 03 52 46.6 | -0.2 | | |
| SBF | | | | *e*Sn | **Sn** | 03 53 59.3 | -3.2 | | |
| | 19nm,0.7s | | | | | | | | |
| **MBDF** | **Montbardon** | **7.07** | **279** | *e*Pn | **Pn** | 03 52 53.0 | -0.1 | | |
| MBDF | | | | *e*Sn | **Sn** | 03 54 08.6 | -5.2 | | |
| | 3.3nm,0.4s | | | | | | | | |
| **LPG** | **La Plagne** | **7.15** | **285** | *e*Pn | **Pn** | 03 52 54.3 | 0.0 | | |
| LPG | | | | *e*Sn | **Sn** | 03 54 10.7 | -5.3 | | |
| | 5.4nm,0.6s | | | | | | | | |
| **LPL** | **La Plagne** | **7.17** | **285** | *e*Pn | **Pn** | 03 52 54.3 | -0.2 | | |
| LPL | | | | *e*Sn | Sn | 03 54 09.4 | -6.9 | | |
| | 2.8nm,0.3s | | | | | | | | |
| **LMR** | **La Mourre** | **7.35** | **268** | *e*Pn | **Pn** | 03 52 58.0 | +1.2 | | |
| LMR | | | | *e*Sn | **Sn** | 03 54 16.7 | -3.7 | | |
| | 3.1nm,0.3s | | | | | | | | |
| **CLL** | **Collm** | **7.64** | **343** | *e*Pn | **Pn** | 03 53 03.0 | +2.3 | | |
| CLL | | | | *ex* | x | 03 53 07.0 | | | |
| CLL | | | | *e*Sn | Sn | 03 54 14.0 | -13 | | |
| CLL | | | | *ex* | x | 03 54 29.0 | | | |
| CLL | | | | *ex* | x | 03 55 05.0 | | | |
| CLL | | | | *e*Sg | **Sg** | 03 55 11.0 | -2.9 | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **7.71** | **280** | *e*Pn | **Pn** | 03 53 02.7 | +0.9 | | |
| ORIF | | | | *e*Sn | **Sn** | 03 54 23.5 | -6.0 | | |
| | comp=Z,5.7nm,0.5s | | | | | | | | |
| **HINF** | **Hinteralfeld** | **7.75** | **302** | *e*Pn | **Pn** | 03 53 00.9 | -1.5 | | |
| **HINF** | **Hinteralfeld** | **7.75** | **302** | *e*P | **Pn** | 03 53 05.3 | +2.9 | | |
| HINF | | | | *e*Sn | **Sn** | 03 54 24.3 | -6.2 | | |
| | comp=Z,4.2nm,0.5s | | | | | | | | |
| **CDF** | **Champ du Feu** | **7.78** | **307** | *e*Pn | **Pn** | 03 53 02.8 | 0.0 | | |
| **CDF** | **Champ du Feu** | **7.78** | **307** | *e*P | **Pn** | 03 53 06.6 | +3.8 | | |
| CDF | | | | *e*Sn | **Sn** | 03 54 24.4 | -6.9 | | |
| | comp=Z,1.2nm,0.3s | | | | | | | | |
| **CABF** | **La Chapelle** | **7.83** | **293** | *e*P | **Pn** | 03 53 06.3 | +2.9 | | |
| CABF | | | | *e*Sn | Sn | 03 54 24.9 | -7.5 | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **SMRF** | **Simiane la Rot** | **7.95** | **273** | *e*P | Pn | 03 53 10.1 | +5.1 | | |
| SMRF | | | | *e*Sn | **Sn** | 03 54 30.1 | -5.1 | | |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| **HAU** | **Haudompre** | **8.14** | **302** | *e*Pn | **Pn** | 03 53 06.1 | -1.6 | | |
| HAU | | | | *e*Sn | Sn | 03 54 33.0 | -7.0 | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **8.57** | **279** | *e*Pn | **Pn** | 03 53 12.7 | -0.8 | | |
| VIVF | | | | *e*Sn | **Sn** | 03 54 44.6 | -5.9 | | |
| | comp=Z,1.3nm,0.3s | | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **9.14** | **303** | *e*P | **Pn** | 03 53 24.8 | +3.5 | | |
| **SMF** | **Signal de Mont** | **9.34** | **290** | *e*Pn | **Pn** | 03 53 22.9 | -1.2 | | |
| SMF | | | | *e*Sn | Sn | 03 55 02.4 | -7.1 | | |
| | comp=Z,3.8nm,0.4s | | | | | | | | |
| **LOR** | **Lormes** | **9.47** | **294** | *e*Pn | **Pn** | 03 53 25.1 | -0.8 | | |
| **SSF** | **Saint Saulge** | **9.66** | **293** | *e*Pn | **Pn** | 03 53 26.2 | -2.2 | | |
| SSF | | | | *e*Sn | Sn | 03 55 09.4 | -7.8 | | |
| | comp=Z,1.5nm,0.4s | | | | | | | | |
| **AVF** | **Avril sur Loir** | **9.70** | **291** | *e*Pn | **Pn** | 03 53 27.5 | -1.5 | | |
| AVF | | | | *e*Sn | **Sn** | 03 55 11.8 | -6.4 | | |
| | comp=Z,1.3nm,0.3s | | | | | | | | |
| **BGF** | **Bois d'Agland** | **10.00** | **289** | *e*Pn | **Pn** | 03 53 31.9 | -1.2 | | |
| BGF | | | | *e*Sn | **Sn** | 03 55 19.4 | -6.3 | | |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **10.40** | **287** | *e*Pn | **Pn** | 03 53 37.4 | -1.2 | | |
| TCF | | | | *e*Sn | Sn | 03 55 28.0 | -7.4 | | |

**IDC 30 04:25:21.8±49.0, 17°.83S×179°.30W, h586km±141km, mb3.3/3, mbtmp4.1/4, Error ellipse: s-maj=1002.0km s-min=126.9km az=80.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.52** | **272** | P | P | 04 26 37.3 | 0.0 |
| | 7.0nm,0.6s,baz=28,slow=24,SNR=7.7 | | | | | | |
| **STKA** | **Stephens Creek** | **37.92** | **241** | P | P | 04 31 50.5 | 0.0 |
| | 1.2nm,0.4s,baz=67,slow=13,SNR=1.7 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **WRA** | **Warrunga Arr** | **43.81** | **260** | P | P | 04 32 36.9 | -0.3 |
| | 1.4nm,0.5s,baz=96,slow=7.1,SNR=41 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **43.99** | **254** | P | P | 04 32 38.5 | -0.1 |
| | 5.3nm,0.6s,baz=89,slow=8.4,SNR=59 | | | | | | |
| | 5.3nm,0.6s | | | | | | |

*TEH **30** 04:33:07.1, 36°.23N×45°.54E, h5km, ML3.5*
*ISN **30** 04:33:07.8±0.6, 36°.26N×45°.52E, h17km, ML3.2*
**ISC 30 04:33:08.0±0.8, 36°.22N±0°.03×45°.54E±0°.03, h10km, n35, σ2s 9°09/38, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDS1** | **Sardasht. Az.** | **0.09** | **213** | Pg | **Pg** | 04 33 09.6 | -1.0 |
| SDS1 | | | | Sg | **Sg** | 04 33 11.1 | -1.3 |
| **MAHB** | **Mahabad** | **0.56** | **13** | Pg | **Pg** | 04 33 18.3 | -0.6 |
| **IKRK** | **Kirkuk** | **1.28** | **230** | *e*Pn | **Pg** | 04 33 32.5 | 0.0 |
| IKRK | | | | *e*Sn | **Sn** | 04 33 51.2 | +2.1 |
| IKRK | | | | AML | AML | 04 33 53.5 | |
| | comp=E,446nm,0.6s | | | | | | |
| IKRK | | | | AML | AML | 04 33 56.8 | |
| | comp=N,417nm,0.7s | | | | | | |
| **IAZR** | **Azarshahr** | **1.49** | **13** | Pg | **Pb** | 04 33 35.2 | -0.8 |
| **IDHR** | **Dehrash** | **1.67** | **155** | Pg | **Pb** | 04 33 38.5 | -0.4 |
| **KGS1** | **Ghasr-e-Shirin** | **1.71** | **179** | Pg | **Pg** | 04 33 40.6 | -0.3 |
| **IHSH** | **Hashtrud** | **1.75** | **51** | Pg | **Pb** | 04 33 39.6 | -0.8 |
| **CUKT** | **Cukurca** | **1.86** | **304** | P | **Pg** | 04 33 42.6 | -1.1 |
| **ITBZ** | **Tabriz** | **2.06** | **13** | Pn | **Pb** | 04 33 44.6 | -1.0 |
| **IGHG** | **Ghaleghazi** | **2.07** | **156** | Pn | **Pb** | 04 33 44.8 | -0.9 |
| **GLG1** | **Gilan-e-Gharb** | **2.12** | **172** | Pn | **Pb** | 04 33 45.6 | -1.0 |
| **SNQR** | **Sonqor, Kerman** | **2.18** | **128** | Pn | **Pb** | 04 33 46.8 | -0.8 |
| **KCHF** | **Cheshme Sefid,** | **2.30** | **147** | Pn | **Pb** | 04 33 48.2 | -1.4 |
| **ISRB** | **Sarab** | **2.33** | **46** | Pn | **Pb** | 04 33 49.1 | -1.1 |
| **IHRS** | **Heris** | **2.41** | **29** | Pn | **Pb** | 04 33 49.5 | -2.0 |
| **IBZA** | **Bozab** | **2.58** | **132** | Pn | **Pb** | 04 33 52.3 | -2.2 |
| **ILBA** | **Ilam Banvizeh** | **2.65** | **168** | Pn | **Pb** | 04 33 52.8 | -2.7 |
| **SIRT** | **Sirnak** | **2.80** | **298** | *e*P | **Pb** | 04 33 55.9 | -2.2 |
| **SIRT** | **Sirnak** | **2.80** | **298** | *e*S | **Sg** | 04 34 37.5 | -0.3 |
| **VANB** | **Van** | **2.92** | **325** | *e*P | **Pb** | 04 33 58.3 | -2.0 |
| **AKDM** | **Akdamar-Van** | **2.93** | **317** | *e*P | **Pb** | 04 33 59.9 | -0.5 |
| **IBDR** | **Badra** | **3.12** | **174** | *e*Pn | **Pn** | 04 33 59.0 | +1.8 |
| IBDR | | | | *e*Sn | **Sn** | 04 34 35.5 | +0.9 |
| **GRMI** | **Germi** | **3.19** | **35** | Pn | **Pb** | 04 34 00.9 | -3.8 |
| **MAKU** | **Maku** | **3.20** | **348** | Pn | **Pn** | 04 34 00.6 | +2.1 |
| **HSAM** | **Samen** | **3.21** | **128** | Pn | **Pb** | 04 34 01.6 | -3.6 |
| **IKFM** | **Kafar-mosalman** | **3.29** | **144** | Pn | **Pb** | 04 34 02.7 | -3.7 |
| **QABG** | **Abgarm-Qazvin** | **3.32** | **98** | Pn | **Pn** | 04 34 02.7 | +2.6 |
| **BDRS** | **Dareh Seyedi** | **3.55** | **129** | Pn | **Pb** | 04 34 06.7 | -4.4 |
| **GURO** | **Guroymak-BITLI** | **3.64** | **311** | *e*P | **Pb** | 04 34 09.3 | -3.1 |
| **SVAN** | **Silvan-Diyarba** | **3.97** | **300** | *e*P | Pb | 04 34 12.9 | -5.1 |
| **MAZI** | **Mazidag** | **4.27** | **288** | *e*P | **Pn** | 04 34 15.4 | +2.3 |
| **RAFI** | **Al-Rafai** | **4.51** | **174** | *e*Pn | **Pn** | 04 34 18.0 | +1.7 |
| RAFI | | | | *e*Sn | **Sn** | 04 35 09.5 | +0.6 |
| **MZPU** | **Pul - Mazandar** | **4.87** | **86** | Pn | **Pn** | 04 34 24.0 | +2.5 |
| **IPIR** | **Pirpir** | **5.65** | **127** | Pn | **Pn** | 04 34 34.8 | +2.5 |
| **JHBN** | **Jahan bin** | **5.82** | **132** | Pn | **Pn** | 04 34 37.1 | +2.5 |

*IDC **30** 04:47:26.0±1.5, 4°.05S×135°.55E, h0km, mb4.0/4, mbtmp4.0/6, ML3.9/2, MS3.1/7, Error ellipse: s-maj=71.0km s-min=27.4km az=83.0*
**ISC 30 04:47:27.8±1.3, 4°.37S±0°.09×135°.7E±0°.5, h20km, n12, σ2s 26°/8, mb4.0/4, MS2.9/5, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.54** | **185** | Pn | **P** | 04 51 08.6 | -1.5 |
| | 0.3nm,0.3s,baz=1.2,slow=13,SNR=13 | | | | | | |
| WRA | | | | Sn | **Sn** | 04 53 56.5 | -1.0 |
| | 0.3nm,0.3s,baz=8.7,slow=22,SNR=6.4 | | | | | | |
| WRA | | | | LR | LR | 04 57 44.1 | |
| | comp=Z,91nm,18.5s,baz=332,slow=39 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| **KAPI** | **Kappang** | **15.88** | **267** | LR | LR | 04 58 36.9 | |
| | comp=Z,97nm,19.6s,baz=90,slow=42 | | | | | | |
| **ASAR** | **Alice Springs** | **19.26** | **185** | P | **Pn** | 04 51 56.5 | +4.2 |
| | 1.0nm,0.3s,baz=7.7,slow=11,SNR=52 | | | | | | |
| ASAR | | | | S | **S** | 04 55 26.9 | -1.8 |
| | 0.9nm,0.8s,baz=20,slow=29,SNR=2.8 | | | | | | |
| | 5.0nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **27.93** | **169** | LR | LR | 05 05 42.1 | |
| | comp=Z,81nm,18.5s,baz=19,slow=39 | | | | | | |
| **JNU** | **Nakatsue** | **37.56** | **353** | LR | LR | 05 06 53.6 | |
| | comp=Z,20nm,20.6s,baz=125,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **42.23** | **351** | LR | LR | 05 12 47.6 | |
| | comp=Z,5.1nm,19.4s,baz=205,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **48.66** | **7** | LR | LR | 05 15 23.4 | |
| | comp=Z,13nm,20.2s,baz=184,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.29** | **324** | P | **P** | 04 58 33.1 | -0.6 |
| | 0.6nm,0.6s,baz=130,slow=7.9,SNR=5.7 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.36** | **326** | P | **P** | 04 58 57.5 | -0.7 |
| | 1.3nm,0.2s,baz=104,slow=3.0,SNR=4.2 | | | | | | |
| | 1.3nm,0.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **78.96** | **326** | P | **P** | 04 59 30.6 | +0.5 |
| | 1.1nm,0.7s,baz=108,slow=8.0,SNR=3.9 | | | | | | |
| | 1.1nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **85.59** | **180** | LR | LR | 05 39 43.9 | |
| | comp=Z,28nm,18.3s,baz=286,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **88.59** | **25** | P | **P** | 05 00 18.6 | -0.5 |
| | 0.5nm,0.8s,baz=272,slow=4.3,SNR=3.3 | | | | | | |
| | 0.5nm,0.8s | | | | | | |

*IDC **30** 04:54:12.9±1.0, 37°.44N×97°.80W, h0km, mb3.3/1, mbtmp3.4/6, ML3.3/5, MS2.9/1, Error ellipse: s-maj=13.2km s-min=11.1km az=109.0*
*NEIC **30** 04:54:14.1±0.6, 37°.36N±0°.03×97°.851W±0°.008, h10km±6km, mb_Lg3.2/137, ML3.6/34, Error ellipse: s-maj=3.8km s-min=0.9km az=177.0*
**ISC 30 04:54:14.3±0.9, 37°.36N±0°.04×97°.86W±0°.03, h11km±6km, n142, σ1s 08/126, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.13** | **239** | Pg | **Pg** | 04 54 17.4 | 0.0 |
| KAN12 | | | | Sg | **Sg** | 04 54 19.4 | -0.3 |
| KAN12 | | | | IAML | | 04 54 19.6 | |
| | comp=N,21µm,0.4s | | | | | | |
| KAN12 | | | | IAML | | 04 54 21.1 | |
| | comp=E,25µm,0.5s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.17** | **214** | Pg | **Pg** | 04 54 17.9 | -0.1 |
| KAN08 | | | | IAML | | 04 54 20.4 | |
| | comp=E,15µm,0.2s | | | | | | |
| KAN08 | | | | IAML | | 04 54 20.4 | |
| | comp=N,16µm,0.3s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **117** | | **Pg** | 04 54 18.2 | +0.1 |
| KS21 | | | | Sg | **Sg** | 04 54 20.6 | -0.2 |
| **KAN01** | **Argonia South** | **0.23** | **160** | Pg | **Pg** | 04 54 19.0 | 0.0 |
| KAN01 | | | | Sg | **Sg** | 04 54 22.5 | +0.3 |
| KAN01 | | | | IAML | | 04 54 25.4 | |
| | comp=N,11µm,0.4s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.26** | **183** | Sg | **Sg** | 04 54 23.1 | +0.1 |
| **KAN09** | **Caldwell North** | **0.30** | **140** | Pg | **Pg** | 04 54 20.3 | +0.1 |
| KAN09 | | | | Sg | **Sg** | 04 54 24.4 | +0.1 |
| KAN09 | | | | IAML | | 04 54 27.4 | |
| | comp=N,9µm,0.2s | | | | | | |
| KAN09 | | | | IAML | | 04 54 27.6 | |
| | comp=E,11µm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.33** | **167** | Pg | **Pg** | 04 54 20.9 | 0.0 |
| KAN17 | | | | Sg | **Sg** | 04 54 25.4 | +0.2 |
| KAN17 | | | | IAML | | 04 54 31.3 | |
| | comp=E,8µm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.42** | **192** | Sg | **Sg** | 04 54 28.0 | 0.0 |
| **KAN13** | **South Haven SW** | **0.46** | **139** | Pg | **Pg** | 04 54 23.4 | +0.1 |
| KAN13 | | | | Sg | **Sg** | 04 54 29.0 | -0.5 |
| KAN13 | | | | IAML | | 04 54 33.9 | |
| | comp=N,4µm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.51** | **180** | Pg | **Pg** | 04 54 24.1 | -0.1 |
| GC02 | | | | Sg | **Sg** | 04 54 31.3 | +0.3 |
| **OK032** | **Salt Plains WL** | **0.63** | **207** | Pg | **Pg** | 04 54 26.4 | -0.1 |
| OK032 | | | | Sg | **Sg** | 04 54 34.5 | -0.1 |
| **BLOK** | **Blackwell** | **0.79** | **139** | Pg | **Pg** | 04 54 29.3 | -0.2 |
| BLOK | | | | Sg | **Sg** | 04 54 39.9 | 0.0 |
| BLOK | | | | IAML | | 04 54 40.5 | |
| | comp=E,3µm,0.4s | | | | | | |
| BLOK | | | | IAML | | 04 54 41.7 | |
| | comp=N,3µm,0.3s | | | | | | |
| **CROK** | **Carrier** | **0.86** | **187** | Pg | **Pg** | 04 54 30.6 | -0.3 |
| CROK | | | | IAML | | 04 54 49.5 | |
| | comp=E,2µm,0.7s | | | | | | |
| CROK | | | | IAML | | 04 54 59.1 | |
| | comp=N,3µm,0.6s | | | | | | |
| **NOKA** | **Waynoka** | **1.13** | **230** | Pg | **Pg** | 04 54 35.3 | -0.6 |
| NOKA | | | | IAML | | 04 54 58.2 | |
| | comp=N,1µm,0.3s | | | | | | |
| NOKA | | | | IAML | | 04 54 59.4 | |
| | comp=E,1µm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.13** | **219** | Pg | **Pg** | 04 54 35.5 | -0.6 |
| OK038 | | | | IAML | | 04 54 57.8 | |
| | comp=E,2µm,0.4s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.16** | **112** | Pg | **Pg** | 04 54 36.1 | -0.5 |
| **OK051** | **E0350 and S346** | **1.19** | **136** | Pg | **Pg** | 04 54 36.5 | -0.6 |
| **OK048** | **Pawnee Station** | **1.20** | **142** | Pg | **Pg** | 04 54 36.6 | -0.7 |
| OK048 | | | | IAML | | 04 54 57.3 | |
| | comp=E,2µm,0.3s | | | | | | |
| **R32A** | **Long Quarter,** | **1.25** | **328** | Pn | **Pg** | 04 54 37.9 | -0.5 |
| **QUOK** | **Quay** | **1.51** | **142** | Pn | **Pn** | 04 54 41.7 | +0.5 |
| **OK029** | **Liberty Lake** | **1.60** | **168** | Pn | **Pn** | 04 54 43.4 | +0.9 |
| **OK052** | **Battle Ridge R** | **1.61** | **148** | Pn | **Pn** | 04 54 43.5 | +0.9 |
| **OK031** | **S. Brethren Rd** | **1.63** | **150** | Pn | **Pn** | 04 54 44.0 | +1.1 |
| **ADOK** | **Arcadia Dam** | **1.75** | **167** | Pn | **Pn** | 04 54 45.9 | +1.3 |
| **ELIS** | **Ellis County** | **1.80** | **225** | Pn | **Pb** | 04 54 47.1 | -0.2 |
| **CSTR** | **Hydro, Custer** | **1.84** | **202** | Pn | **Pn** | 04 54 46.7 | +0.9 |
| **DEOK** | **Depew** | **1.87** | **144** | Pn | **Pn** | 04 54 47.0 | +0.8 |
| **OKCSW** | **OKLAHOMA CITY** | **1.98** | **170** | Pn | **Pn** | 04 54 48.7 | +0.9 |
| OKCSW | | | | IAmb_Lg | | 04 55 15

comp=Z,32nm,0.8s
**PBMO Poplar Bluff 5.97 93** Pn **Pn** **04 55 43.2 +0.6**
**BRIGG Briggsdale 5.97 305** IAmb_Lg 04 57 30.4
comp=Z,40nm,0.8s
**CCAR Cane Creek 6.03 123** IAmb_Lg 04 57 36.1
comp=Z,36nm,1.0s
**BRDY Brady 6.14 189** Pn **Pn** **04 55 45.1 +0.2**
**SLM Saint Louis 6.15 76** Pn **Pn** **04 55 45.8 +0.8**
SLM IAmb_Lg 04 57 26.7
comp=Z,54nm,1.0s
**N41A Harden Midland 6.39 56** Pn **Pn** **04 55 49.6 +1.3**
**ECSD EROS Data Cent 6.43 8** Pn **Pn** **04 55 49.4 +0.4**
ECSD IAmb_Lg 04 57 39.5
comp=Z,37nm,0.9s
**GNAR Gosnell 6.45 100** IAmb_Lg 04 57 52.3
comp=Z,42nm,0.8s
**CGM3 Cape Girardeau 6.53 88** Pn **Pn** **04 55 50.9 +0.6**
CGM3 IAmb_Lg 04 57 45.2
comp=Z,27nm,0.8s
**435B Jarrell 6.57 178** IAmb_Lg 04 57 48.3
comp=Z,43nm,0.8s
**S44A Carbondale 6.84 85** Pn **Pn** **04 55 54.7 +0.1**
**OZNA Ozona 6.97 204** Pn **Pn** **04 55 56.5 0.0**
**HALT Halls 7.00 99** IAmb_Lg 04 57 57.5
comp=Z,35nm,0.7s
**143A Socs Landing, 7.04 129** IAmb_Lg 04 58 12.8
comp=Z,20nm,0.8s
**JCT Junction City 7.05 194** Pn **Pn** **04 55 56.4 -1.2**
JCT IAmb_Lg 04 58 15.4
comp=Z,36nm,0.8s
**PHWY Pilot Hill 7.08 306** Pn **Pn** **04 55 58.9 +0.8**
PHWY IAmb_Lg 04 58 10.0
comp=Z,17nm,0.8s
**SUSD Miller 7.12 354** IAmb_Lg 04 58 11.3
comp=Z,30nm,0.8s
**Q44A Meyer Farm, Va 7.13 75** Pn **Pn** **04 55 59.4 +0.9**
Q44A IAmb_Lg 04 58 08.1
comp=Z,44nm,0.9s
**S22A 4UR Ranch, Cre 7.14 276** Pn **Pn** **04 55 57.1 -1.8**
**N23A Red Feather La 7.21 302** Pn **Pn** **04 56 01.1 +1.3**
**MNHN Monahans 7.25 215** Pn **Pn** **04 56 01.3 +1.1**
**ANMO Albuquerque 7.36 253** Pn **Pn** **04 56 00.8 -1.1**
**ANMO Albuquerque 7.36 253** Pn **Pn** **04 56 04.9 +3.0**
comp=Z,0.1nm,0.3s,baz=342,slow=6.4,SNR=2.0
ANMO Lg Lg 04 58 00.7
comp=Z,0.6nm,0.3s,baz=346,slow=17,SNR=2.1
comp=Z,0.3nm,0.3s
**SMCO Snowmass 7.40 287** Pn **Pn** **04 56 03.3 +0.8**
**OXF Oxford 7.42 110** Pn **Pn** **04 56 02.7 +0.2**
OXF IAmb_Lg 04 58 22.3
comp=Z,37nm,0.8s
**I37A Lemond, Waseca 7.46 26** Pn **Pn** **04 56 01.1 -1.9**
I37A IAmb_Lg 04 58 20.9
comp=Z,31nm,0.8s
**MLDN Muldoon 7.59 175** IAmb_Lg 04 58 34.7
comp=Z,25nm,0.9s
**Y45A Yeager Farm, C 7.62 115** Pn **Pn** **04 56 05.0 -0.2**
Y45A IAmb_Lg 04 58 26.4
comp=Z,30nm,0.7s
**PECS Pecos 7.77 221** IAmb_Lg 04 58 27.7
comp=Z,26nm,0.8s
**OLIL Olney 7.82 77** IAmb_Lg 04 58 21.3
comp=Z,31nm,1.0s
**HNDO Hondo 7.91 189** IAmb_Lg 04 58 29.2
comp=Z,24nm,1.0s
**JFWS Jewell Farm 8.04 44** Pn **Pn** **04 56 10.3 -0.7**
JFWS IAmb_Lg 04 58 37.2
comp=Z,36nm,0.8s
**Y22D IRIS PASSCAL I 8.07 249** IAmb_Lg 04 58 47.4
comp=Z,35nm,1.1s
**WVT Waverly 8.14 96** Pn **Pn** **04 56 11.5 -0.9**
**SAND Sanderson 8.20 207** Pn **Pn** **04 56 13.7 +0.4**
**RSSD Black Hills 8.22 327** Pn **Pn** **04 56 15.4 +1.7**
RSSD IAmb_Lg 04 58 54.9
comp=Z,17nm,0.8s
**PLAL Pickwick Lake 8.26 104** Pn **Pn** **04 56 15.4 +1.4**
**RWWY Rawlins 8.42 304** Pn **Pn** **04 56 16.9 +0.5**
RWWY IAmb_Lg 04 58 48.2
comp=Z,15nm,0.8s
**ALPN Alpine 8.47 216** Pn **Pn** **04 56 17.3 +0.3**
**735A Kenedy 8.49 180** IAmb_Lg 04 58 56.5
comp=Z,18nm,0.8s
**K22A Casper 8.49 311** Pn **Pn** **04 56 18.6 +1.3**
K22A IAmb_Lg 04 58 59.4
comp=Z,24nm,1.0s
**I40A Norwalk 8.53 38** IAmb_Lg 04 58 49.0
comp=Z,20nm,0.8s
**F33A 5 Mile Ranch, 8.55 7** Pn **Pn** **04 56 17.6 -0.4**
F33A IAmb_Lg 04 58 55.7
comp=Z,19nm,0.8s
**M44A Midewin, Midew 8.60 59** IAmb_Lg 04 58 56.9
comp=Z,29nm,0.9s
**SPMN Marine on St. 8.72 24** Pn **Pn** **04 56 20.6 +0.3**
SPMN IAmb_Lg 04 58 53.5
comp=Z,18nm,0.8s
**VHRN Van Horn 8.83 224** Pn **Pn** **04 56 23.4 +1.4**
VHRN IAmb_Lg 04 59 15.3
comp=Z,29nm,1.2s
**Z47A Carrollton 9.02 115** IAmb_Lg 04 59 02.4
comp=Z,18nm,1.0s
**833A Chaparral WMA, 9.11 189** IAmb_Lg 04 59 11.2
comp=Z,13nm,1.0s
**TXAR Lajitas Array 9.37 213** Pn **Pn** **04 56 28.5 -0.8**
comp=Z,0.3nm,0.3s,baz=32,slow=11,SNR=19
TXAR Lg Lg 04 59 06.7
comp=Z,0.4nm,0.3s,baz=6.0,slow=18,SNR=7.4
comp=Z,0.3nm,0.3s
**I42A Draeger Farm, 9.41 43** Pn **Pn** **04 56 30.0 +0.2**
I42A IAmb_Lg 04 59 20.1
comp=Z,16nm,0.8s
**E28A Huff 9.44 348** IAmb_Lg 04 59 23.2
comp=Z,28nm,0.9s
**G40A Rib Lake 9.77 34** Pn **Pn** **04 56 36.0 +1.3**
**PDAR Pinedale Array 10.46 305** Pn **Pn** **04 56 44.0 -0.4**
comp=Z,0.3nm,0.3s,baz=119,slow=14,SNR=7.3
PDAR Lg Lg 04 59 38.7
comp=Z,0.4nm,0.3s,baz=106,slow=27,SNR=6.4
comp=Z,0.4nm,0.4s
**COWI Conover 10.88 34** Pn **Pn** **04 56 49.0 -1.0**
**TKL Tuckaleechee C 11.46 94** Pn **Pn** **04 56 55.0 -2.9**
comp=Z,0.1nm,0.3s,baz=0.0,slow=1.0,SNR=2.9
TKL Lg Lg 05 00 07.5
comp=Z,0.2nm,0.3s,baz=0.0,slow=20,SNR=3.5
comp=Z,2.2nm,0.8s
**EYMN Ely 11.56 22** Pn **Pn** **04 56 57.7 -1.5**
**DGMT Dagmar 12.03 339** Pn **Pn** **04 57 05.0 -0.6**
**ULM Lac du Bonnet 12.96 6** Pn Pn 04 57 13.2 -5.1
comp=Z,0.3nm,0.3s,baz=180,slow=14,SNR=1.4
ULM Sn Sn 04 59 31.6 -11
comp=Z,0.4nm,0.3s,baz=90,slow=20,SNR=2.0
ULM Lg Lg 05 00 49.6
baz=211,slow=5.9,SNR=1.9
comp=Z,0.7nm,0.3s
**BBB Bella Bella 25.85 315** LR LR 05 10 02.8
comp=Z,22nm,18.1s,baz=72,slow=37
**ILAR Eielson Array 39.66 330** P **P** **05 01 47.3 +1.4**
comp=Z,0.3nm,0.6s,baz=108,slow=7.5,SNR=3.3
comp=Z,0.3nm,0.6s

**IDC 30 05:00:14.5±2.9, 53°58N×87°73E, h0km, mbtmp3.2/2, ML2.8/2, Error ellipse: s-maj=26.4km s-min=16.8km az=58.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.77** | **283** | I | I | 05 11 50.0 | |
| | baz=98,slow=319,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.77** | **283** | Pn | Pn | 05 00 45.9 | -0.5 |
| | 1.7nm,0.3s,baz=101,slow=15,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 05 01 09.9 | |
| | 2.3nm,0.3s,baz=104,slow=25,SNR=10.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.39** | **246** | Pn | Pn | 05 01 51.0 | +1.1 |
| | 0.1nm,0.3s,baz=64,slow=15,SNR=4.9 | | | | | | |
| KURBB | | | | Lg | Lg | 05 03 38.0 | |
| | baz=64,slow=31 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.63** | **209** | Pn | Pn | 05 02 08.1 | +1.2 |
| | 0.3nm,0.3s,baz=28,slow=14,SNR=7.0 | | | | | | |
| MKAR | | | | Lg | Lg | 05 04 14.3 | |
| | 0.1nm,0.3s,baz=32,slow=30,SNR=6.1 | | | | | | |
| | 0.4nm,0.3s | | | | | | |

*UPA **30** 05:00:44.8±0.9, 8°.57N×83°.18W, h16km±2km, MW3.2*
*CATAC **30** 05:00:44.8±1.0, 8°.56N×83°.18W, h10km±6km, ML2.7*

**ISC 30 05:00:44.7±1.1, 8°.58N±0°.04×83°.18W±0°.03, h14km±10km, n15, σ0°69/27, 2C-3D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PTJ1** | **Puerto Jimnez** | **0.13** | **252** | *i* P | **Pg** | **05 00 48.2** | **0.0** |
| PTJ1 | | | | IAML | | 05 00 48.3 | |
| | comp=Z,6μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | **Sb** | **05 00 51.8** | **+0.1** |
| **PTJ1** | **Puerto Jimnez** | **0.13** | **252** | ⇑*i* P | **Pg** | **05 00 48.2** | **0.0** |
| PTJ1 | | | | *i* S | **Sb** | **05 00 51.7** | **0.0** |
| **CDITO** | **Canoas** | **0.30** | **90** | *i* P | **Pg** | **05 00 51.2** | **+0.1** |
| CDITO | | | | *i* S | **Sb** | **05 00 57.4** | **+0.5** |
| CDITO | | | | IAML | | 05 01 01.3 | |
| | comp=Z,600nm,1.0s | | | | | | |
| **MLIR3** | **Monte Lirio, C** | **0.41** | **58** | *e*P | **Pb** | **05 00 53.8** | **-0.1** |
| MLIR3 | | | | *e*S | **Sb** | **05 01 00.3** | **+0.2** |
| **PTPM** | **Petroterminale** | **0.47** | **141** | ⇑*e*P | **Pb** | **05 00 54.5** | **-0.4** |
| PTPM | | | | *e*S | **Sb** | **05 01 02.9** | **+1.2** |
| **BRU2** | **Volcan** | **0.53** | **66** | *i* P | **Pg** | **05 00 55.4** | **+0.1** |
| BRU2 | | | | *i* S | **Sb** | **05 01 04.5** | **+1.0** |
| BRU2 | | | | IAML | | 05 01 13.5 | |
| | comp=Z,250nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.53** | **66** | ⇓*i* P | **Pg** | **05 00 55.7** | **+0.4** |
| BRU2 | | | | *e*S | **Sb** | **05 01 05.3** | **+1.8** |
| **BCO2** | **Palmira** | **0.66** | **78** | ⇓*i* P | **Pg** | **05 00 57.8** | **0.0** |
| BCO2 | | | | *i* S | **Sb** | **05 01 07.8** | **+0.6** |
| **DRK0** | **Durika** | **0.69** | **355** | *i* P | **Pg** | **05 00 58.1** | **-0.1** |
| DRK0 | | | | IAML | | 05 01 10.5 | |
| | comp=Z,930nm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.69** | **355** | ⇓*i* P | **Pg** | **05 00 58.2** | **0.0** |
| DRK0 | | | | *e*S | **Sb** | **05 01 08.8** | **+0.7** |
| **OCHAL** | **Ojochal** | **0.69** | **319** | *i* P | **Pg** | **05 00 58.5** | **+0.2** |
| OCHAL | | | | IAML | | 05 01 11.2 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **DVD** | **David** | **0.73** | **101** | *e*P | **Pg** | **05 00 58.5** | **-0.6** |
| DVD | | | | *e*S | **Sg** | **05 01 09.0** | **+0.2** |
| **CHGR2** | **Aguacate** | **1.09** | **71** | *e*P | **Pb** | **05 01 04.3** | **-1.0** |
| CHGR2 | | | | *e*S | **Sb** | **05 01 19.0** | **-0.4** |
| **CNI2** | **El Empalme, Bo** | **1.10** | **40** | *e*P | **Pb** | **05 01 04.9** | **-0.6** |
| CNI2 | | | | *e*S | **Sb** | **05 01 18.3** | **-1.4** |
| **LCR2** | **La Lucha 2** | **1.42** | **325** | *i* P | **Pb** | **05 01 11.2** | **+0.1** |
| LCR2 | | | | IAML | | 05 01 32.9 | |
| | comp=Z,120nm,1.0s | | | | | | |

**IDC 30 05:13:45.1±1.7, 8°.48N×121°.15E, h0km, mb4.0/3, mbtmp4.0/3, Error ellipse: s-maj=369.2km s-min=27.7km az=66.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **31.09** | **155** | P | P | 05 20 05.3 | 0.0 |
| | 1.4nm,0.6s,baz=334,slow=9.5,SNR=18 | | | | | | |
| | 1.4nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **34.30** | **159** | P | P | 05 20 33.4 | -0.1 |
| | 1.0nm,0.4s,baz=338,slow=7.1,SNR=17 | | | | | | |
| | 1.0nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.90** | **334** | P | P | 05 23 10.1 | -0.1 |
| | 0.7nm,0.5s,baz=117,slow=5.0,SNR=3.5 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

*TEH **30** 05:27:07.2, 38°.76N×48°.80E, h20km±69km, ML2.7*
*AZER **30** 05:27:07.8, 38°.85N×48°.67E, h38km, ml2.8*
*TIF **30** 05:27:08.2, 38°.98N×48°.25E, h4km±2km*
**ISC 30 05:27:09.5±1.1, 38°.84N±0°.03×48°.75E±0°.04, h33km±3km, n35, σ1§38/53, Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **0.13** | **170** | P | **Pb** | **05 27 15.8** | **+0.4** |
| LKRN | | | | S | **Sb** | **05 27 21.5** | **+2.0** |
| **ASTR** | **Astara** | **0.28** | **173** | P | **Pb** | **05 27 18.0** | **+0.8** |
| **LRK** | **Lerik** | **0.38** | **238** | P | **Pb** | **05 27 18.0** | **-0.4** |
| LRK | | | | S | **Sn** | **05 27 25.2** | **+0.4** |
| **YRD** | **Yardimli** | **0.40** | **281** | P | **Pb** | **05 27 18.0** | **-0.8** |
| YRD | | | | S | **Sb** | **05 27 25.2** | **0.0** |
| **GAS1** | **Astara - Iran** | **0.46** | **171** | Pg | **Pb** | **05 27 18.9** | **-0.6** |
| **GLBA** | **Cilalbad** | **0.49** | **325** | P | **Pb** | **05 27 19.0** | **-0.9** |
| GLBA | | | | S | **Sb** | **05 27 27.4** | **+0.3** |
| **GRMI** | **Germi** | **0.67** | **267** | Pg | **Pn** | **05 27 21.5** | **-1.3** |
| **SAAT** | **Saatly** | **1.05** | **346** | P | **Pn** | **05 27 27.8** | **-0.1** |
| SAAT | | | | S | **Sn** | **05 27 43.1** | **+1.8** |
| **ALIB** | **&Aumlli-Bayram** | **1.13** | **10** | P | **Pn** | **05 27 29.7** | **+0.7** |
| **QRD** | **Qoradiz** | **1.27** | **300** | P | **Pn** | **05 27 30.3** | **-0.6** |
| QRD | | | | S | **Sn** | **05 27 47.0** | **+0.1** |
| **BLQ** | **Beylaqan** | **1.27** | **314** | P | **Pn** | **05 27 30.2** | **-0.8** |
| BLQ | | | | S | **Sn** | **05 27 46.8** | **-0.1** |
| **ISRB** | **Sarab** | **1.32** | **220** | Pg | **Pn** | **05 27 31.8** | **0.0** |
| **IHRS** | **Heris** | **1.44** | **249** | Pg | **Pn** | **05 27 33.4** | **-0.1** |
| **ZRD** | **Zardab** | **1.66** | **330** | Sn | **Sn** | **05 27 57.1** | **+0.8** |
| **BRDA** | **Brd** | **1.87** | **320** | Pn | **Pn** | **05 27 38.6** | **-0.5** |
| BRDA | | | | Sn | **Sn** | **05 28 04.0** | **+2.5** |
| **IHSH** | **Hashtrud** | **1.93** | **218** | Pn | **Pn** | **05 27 40.1** | **-0.2** |
| **IML** | **Ismayilli** | **2.00** | **348** | Pn | **Pn** | **05 27 41.1** | **+0.1** |
| IML | | | | Sn | **Sn** | **05 28 04.6** | **-0.3** |
| **ORD** | **Ordubad** | **2.15** | **273** | Pn | **Pn** | **05 27 42.7** | **-0.4** |
| ORD | | | | Sn | **Sn** | **05 28 09.6** | **+0.8** |
| **SIZA** | **Siyzn** | **2.23** | **3** | Pg | **Pn** | **05 27 48.8** | **+4.5** |
| SIZA | | | | Sg | **Sb** | **05 28 17.8** | **+1.2** |
| **JIR1** | **Jirandeh** | **2.29** | **158** | Pn | **Pn** | **05 27 43.7** | **-1.4** |
| **XNQ** | **Khinaliq** | **2.37** | **349** | Pn | **Pn** | **05 27 45.2** | **-1.1** |
| XNQ | | | | Sn | **Sn** | **05 28 13.9** | **-0.5** |
| **IMRD** | **Marand** | **2.38** | **268** | Pn | **Pn** | **05 27 47.0** | **+0.6** |
| **ISHB** | **Shabestar** | **2.52** | **258** | Pn | **Pn** | **05 27 49.1** | **+0.8** |
| **SBZ** | **Shahbuz** | **2.55** | **284** | Pg | **Pn** | **05 27 51.5** | **+2.9** |
| SBZ | | | | Sn | **Sn** | **05 28 19.8** | **+1.3** |
| **NAX** | **Nakhchivan** | **2.56** | **278** | Sn | **Sn** | **05 28 21.7** | **+3.0** |
| **GANJ** | **Ganja** | **2.60** | **315** | Pn | **Pn** | **05 27 48.7** | **-0.5** |
| GANJ | | | | Sn | **Sn** | **05 28 17.6** | **-2.1** |
| **SEKA** | **Sheki** | **2.65** | **334** | Pn | **Pn** | **05 27 48.4** | **-1.5** |
| SEKA | | | | Sn | **Sn** | **05 28 18.7** | **-2.2** |
| **IGZV** | **Ghazvin** | **2.71** | **154** | Pn | **Pn** | **05 27 49.9** | **-1.1** |
| **KLST** | **Kelardasht - M** | **2.96** | **141** | Pn | **Pn** | **05 27 52.8** | **-1.6** |
| **GDB** | **GEDABAY** | **2.98** | **310** | Pn | **Pn** | **05 27 54.4** | **-0.1** |
| GDB | | | | Sn | **Sn** | **05 28 27.9** | **-1.2** |
| **VSHL** | **Vashlovani** | **2.99** | **324** | P | **Pn** | **05 27 55.1** | **+0.5** |
| VSHL | | | | S | **Sn** | **05 28 28.3** | **-1.0** |
| **QABG** | **Abgarm-Qazvin** | **3.20** | **168** | Pn | **Pn** | **05 27 57.0** | **-0.6** |
| **MZPU** | **Pul - Mazandar** | **3.28** | **136** | Pn | **Pn** | **05 27 57.8** | **-0.9** |
| **IALA** | **Alasht** | **4.24** | **129** | Pn | **Pn** | **05 28 11.4** | **-0.7** |
| **CHRG** | **Chargali** | **4.54** | **321** | P | **Pn** | **05 28 15.4** | **-0.5** |
| CHRG | | | | S | **Sn** | **05 29 04.9** | **-2.7** |

*IDC **30** 05:34:52.1±0.5, 7°.67N×37°.37W, h0km, mb4.4/22, mbtmp4.4/24, ML3.7/2, MS4.0/71, Error ellipse: s-maj=17.5km s-min=12.4km az=153.0*
*NEIC **30** 05:34:54.5±1.0, 7°.54N±0°.10×37°.37W±0°.03, h10km±1km, mb4.8/185, Error ellipse: s-maj=16.6km s-min=5.6km az=185.0*
*GCMT **30** 05:34:56.5±0.2, 7°.72N±0°.01×37°.41W±0°.01, h12km, MW4.9/104, Moment Tensor Solution. s37,c47; s104,c159; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-0.36±.06; $M_{\theta\theta}$-0.02±.07; $M_{\phi\phi}$0.38±.06; $M_{r\theta}$-0.32±.18; $M_{\theta\phi}$-2.53±.05; $M_{\phi r}$0.99±.17; Best double couple: $M_o$2.72300×$10^{16}$ NP1:$\phi_s$2.00000°, $\delta$88.00000°, $\lambda$21.00000°. NP2:$\phi_s$271.00000°, $\delta$69.00000°, $\lambda$178.00000°. Principal axes: T 2.9910, Plg16.0000°, Azm229.0000°; N -0.5360, Plg69.0000°, Azm8.0000°; P -2.4550, Plg13.0000°, Azm135.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
**ISC 30 05:34:53.5±0.3, 7°.53N±0°.06×37°.32W±0°.06, h11km, n304, σ1§11/184, mb4.7/146, MS4.1/72, 6D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NBCL** | **Cascavel-CE** | **11.71** | **185** | *e*P | **Pn** | **05 37 43.2** | **+2.5** |
| **NBPB** | **Pedra_Branca-C** | **13.18** | **190** | *e*P | **Pn** | **05 38 03.4** | **+2.6** |
| **RCBR** | **Riachuelo** | **13.34** | **174** | Pn | **Pn** | **05 38 03.6** | **+0.6** |
| **RCBR** | **Riachuelo** | **13.34** | **174** | Pn | **Pn** | **05 38 03.4** | **+0.3** |
| | 1.1nm,0.3s,baz=63,slow=16,SNR=17 | | | | | | |
| RCBR | | | | Sn | **Sn** | **05 40 25.0** | **-6.5** |
| | 0.7nm,0.3s,baz=243,slow=23,SNR=6.0 | | | | | | |
| RCBR | | | | LR | LR | 05 42 05.1 | |
| | comp=Z,212nm,18.1s,baz=349,slow=32 | | | | | | |
| | 4.7nm,0.5s | | | | | | |
| **TMAB** | **Tom-Au,PA,Br** | **14.57** | **228** | *e*P | **Pn** | **05 38 18.9** | **-1.0** |
| **SACV** | **Santiago Islan** | **15.34** | **60** | | **Pn** | **05 38 24.5** | **-5.7** |
| **MDP** | **Montagnes des** | **15.42** | **262** | Pn | **Pn** | **05 38 30.0** | **-1.2** |
| | 0.1nm,0.3s,baz=75,slow=16,SNR=2.4 | | | | | | |
| MDP | | | | LR | LR | 05 43 17.4 | |
| | comp=Z,431nm,22.0s,baz=77,slow=33 | | | | | | |
| | 4.0nm,0.7s | | | | | | |
| **MCPB** | **Macapa, AP** | **16.66** | **243** | *e*P | **Pn** | **05 38 45.2** | **-2.0** |
| **PRPB** | **Parauapebas** | **18.45** | **223** | *e*P | **P** | **05 39 08.7** | **-0.7** |
| **SMTB** | **Santa Maria do** | **19.23** | **212** | *e*P | **P** | **05 39 18.7** | **+0.8** |
| **MAL2** | **Monte Alegre,** | **19.31** | **241** | P | **P** | **05 39 17.9** | **-1.0** |
| **SDBA** | **SAO DESIDERIO** | **21.19** | **201** | *e*P | **P** | **05 39 40.3** | **+1.0** |
| **BBTS** | **Babate** | **21.58** | **69** | P | **P** | **05 39 44.9** | **+1.4** |
| | 58nm,1.0s,baz=134,slow=4.4,SNR=7.0 | | | | | | |
| BBTS | | | | LR | LR | 05 46 01.7 | |
| | comp=Z,486nm,20.3s,baz=140,slow=31 | | | | | | |
| | 58nm,1.0s | | | | | | |
| **ITTB** | **Itaituba** | **21.85** | **238** | *e*P | **P** | **05 39 45.4** | **-1.0** |
| **NPGB** | **Novo Progresso** | **23.09** | **232** | *e*P | **P** | **05 39 59.4** | **-0.2** |
| **JANB** | **Januaria** | **23.48** | **197** | *e*P | **P** | **05 40 04.9** | **+1.3** |
| **BOAV** | **Boa Vista** | **23.66** | **259** | P | **P** | **05 40 04.5** | **-0.9** |
| BOAV | | | | IAmb | IAmb | 05 40 06.0 | |
| | comp=Z,24nm,1.1s | | | | | | |
| **BOAV** | **Boa Vista** | **23.66** | **259** | *e*P | **P** | **05 40 04.2** | **-1.1** |
| **SNDB** | **Serra Nova Dou** | **23.84** | **216** | *e*P | **P** | **05 40 08.4** | **+1.4** |
| **H05S1** | **Guadeloupe/Mar** | **24.07** | **289** | T | T | 06 04 48.3 | |
| | SNR=52 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **24.79** | **293** | T | T | 06 05 39.8 | |
| | SNR=6.1 | | | | | | |
| **BDFB** | **Brasilia** | **25.34** | **205** | P | **P** | **05 40 21.8** | **+1.0** |
| | comp=Z,9.7nm,0.8s,baz=45,slow=11,SNR=14 | | | | | | |
| BDFB | | | | LR | LR | 05 49 50.5 | |
| | comp=Z,218nm,18.7s,baz=345,slow=35 | | | | | | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **MACA** | **Manacapuru-AM** | **25.62** | **246** | P | **P** | **05 40 23.3** | **0.0** |
| MACA | | | | IAmb | IAmb | 05 40 26.0 | |
| | comp=Z,29nm,1.2s | | | | | | |
| **MACA** | **Manacapuru-AM** | **25.62** | **246** | *e*P | **P** | **05 40 22.9** | **-0.4** |
| **CLDB** | **Colider** | **25.93** | **225** | *e*P | **P** | **05 40 26.2** | **+0.1** |
| **SJMB** | **Sao Joao De Ma** | **26.34** | **188** | *e*P | **P** | **05 40 33.1** | **+3.4** |
| **DIAM** | **Diamantina, MG** | **26.41** | **194** | *e*P | **P** | **05 40 33.1** | **+2.5** |
| **PDRB** | **Porto dos Gac** | **27.10** | **226** | *e*P | **P** | **05 40 37.5** | **+0.8** |
| **PCRV** | **Puerto La Cruz** | **27.12** | **278** | LR | LR | 05 50 54.3 | |
| | comp=Z,147nm,20.6s,slow=36 | | | | | | |
| **ARAG** | **Araguaiana, MT** | **27.18** | **212** | *e*P | **P** | **05 40 39.2** | **+1.8** |
| **H10N3** | **ASCENSION HYDR** | **27.40** | **123** | T | T | 06 09 23.4 | |
| | baz=303,slow=75,SNR=24 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **27.40** | **123** | T | T | 06 09 23.7 | |
| | baz=303,slow=75,SNR=27 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **27.42** | **123** | T | T | 06 09 24.8 | |
| | baz=303,slow=75,SNR=25 | | | | | | |
| **ASCN** | **Ascension** | **27.56** | **123** | P | **P** | **05 40 41.5** | **+0.6** |
| **H10S3** | **ASCENSION HYDR** | **27.89** | **126** | T | T | 06 10 12.2 | |
| | baz=277,slow=74,SNR=19 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **27.91** | **126** | T | T | 06 10 08.0 | |
| | baz=303,slow=74,SNR=17 | | | | | | |
| **TEFE** | **Tefe** | **29.38** | **249** | *e*P | **P** | **05 40 56.7** | **-0.4** |
| **SALV** | **Santo Antonio** | **29.55** | **218** | *e*P | **P** | **05 40 59.1** | **+0.6** |
| **IGPR** | **InterUniversit** | **29.89** | **293** | P | **P** | **05 41 02.0** | **+0.5** |
| **CELP** | **Cerrillos** | **30.35** | **293** | P | **P** | **05 41 05.1** | **-0.5** |
| **BAUV** | **El Baul** | **30.43** | **275** | P | **P** | **05 41 05.8** | **-0.7** |
| **VILB** | **Vilhena** | **30.51** | **228** | P | **P** | **05 41 06.6** | **-0.5** |
| VILB | | | | IAmb | IAmb | 05 41 10.2 | |
| | comp=Z,8.9nm,0.9s | | | | | | |
| **SAML** | **Samuel** | **30.53** | **238** | P | **P** | **05 41 07.6** | **+0.3** |
| SAML | | | | IAmb | IAmb | 05 41 09.0 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **SAML** | **Samuel** | **30.53** | **238** | *e*P | **P** | **05 41 07.5** | **+0.3** |
| **PTLB** | **Pontes e Lacer** | **31.44** | **223** | P | **P** | **05 41 16.1** | **+0.9** |
| PTLB | | | | IAmb | IAmb | 05 41 17.8 | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **PTLB** | **Pontes e Lacer** | **31.44** | **223** | *e*P | **P** | **05 41 16.8** | **+1.6** |
| **DBIC** | **Dimbokro** | **32.22** | **89** | P | **P** | **05 41 22.1** | **0.0** |
| | comp=Z,5.7nm,0.6s,baz=260,slow=7.9,SNR=9.8 | | | | | | |
| DBIC | | | | LR | LR | 05 50 16.1 | |
| | comp=Z,133nm,22.0s,baz=228,slow=29 | | | | | | |
| | comp=Z,5.7nm,0.6s | | | | | | |
| **SDV** | **Santo Domingo** | **32.99** | **275** | P | **P** | **05 41 29.1** | **-0.1** |
| SDV | | | | IAmb | IAmb | 05 41 32.3 | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **SDV** | **Santo Domingo** | **32.99** | **275** | LR | LR | 05 55 05.1 | |
| | comp=Z,70nm,20.4s,baz=96,slow=37 | | | | | | |
| **SIV** | **San Ignacio** | **33.15** | **225** | LR | LR | 05 54 27.0 | |
| | comp=Z,748nm,18.4s,baz=106,slow=35 | | | | | | |
| **ETMB** | **Extrema** | **33.54** | **240** | P | **P** | **05 41 33.5** | **-0.2** |
| ETMB | | | | IAmb | IAmb | 05 41 34.9 | |
| | comp=Z,9.5nm,1.0s | | | | | | |
| **ETMB** | **Extrema** | **33.54** | **240** | *e*P | **P** | **05 41 33.5** | **-0.2** |
| **BBSD** | **Serra de San D** | **33.66** | **223** | *e*P | **P** | **05 41 36.2** | **+1.4** |
| **TBTG** | **Tabatinga, AM** | **34.54** | **251** | P | **P** | **05 41 41.5** | **-0.9** |
| TBTG | | | | IAmb | IAmb | 05 41 43.1 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **SDDR** | **Presa de Saban** | **34.90** | **292** | P | **P** | **05 41 45.2** | **-0.3** |
| **ROSC** | **El Rosal** | **36.88** | **268** | P | **P** | **05 42 03.8** | **+0.8** |
| | comp=Z,7.5nm,0.6s,baz=57,slow=20,SNR=5.0 | | | | | | |
| ROSC | | | | LR | LR | 05 58 39.6 | |
| | comp=Z,227nm,18.4s,baz=76,slow=39 | | | | | | |
| | comp=Z,7.5nm,0.6s | | | | | | |
| **AVE** | **Averroes** | **37.73** | **43** | P | **P** | **05 42 10.1** | **+0.6** |
| **CZSB** | **Cruzeiro do Su** | **38.40** | **248** | P | **P** | **05 42 14.5** | **-0.9** |
| CZSB | | | | IAmb | IAmb | 05 42 15.4 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **CZSB** | **Cruzeiro do Su** | **38.40** | **248** | *e*P | **P** | **05 42 14.3** | **-1.0** |
| **LPAZ** | **La Paz** | **38.60** | **232** | P | **P** | **05 42 18.9** | **+1.2** |
| | comp=Z,13nm,0.8s,baz=51,slow=6.0,SNR=54 | | | | | | |
| LPAZ | | | | LR | LR | 05 57 22.4 | |
| | comp=Z,310nm,20.8s,baz=74,slow=35 | | | | | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **38.75** | **78** | P | **P** | **05 42 18.6** | **+0.3** |
| | comp=Z,9.7nm,0.6s,baz=276,slow=9.2,SNR=113 | | | | | | |
| TORD | | | | LR | LR | 05 56 15.6 | |
| | comp=Z,231nm,21.8s,baz=258,slow=33 | | | | | | |
| | comp=Z,9.7nm,0.6s | | | | | | |
| **CPUP** | **Villa Florida** | **38.86** | **209** | LR | LR | 05 57 56.7 | |
| | comp=Z,362nm,20.2s,baz=35,slow=36 | | | | | | |
| **MDT** | **Midelt** | **39.40** | **46** | LR | LR | 05 58 21.1 | |
| | comp=Z,271nm,18.5s,baz=246,slow=36 | | | | | | |
| **MORF** | **Marmelete** | **39.45** | **37** | *e*P | **P** | **05 42 24.8** | **+0.9** |
| **PBDV** | **Barranco-do-Ve** | **39.84** | **38** | *e*P | **P** | **05 42 27.2** | **0.0** |
| | comp=Z,66nm,1.4s | | | | | | |
| **MESJ** | **Messejana** | **40.06** | **37** | *e*P | **P** | **05 

comp=Z,1.2nm,0.4s,baz=253,slow=7.7,SNR=5.5
ESDC LR LR 05 58 03.0
comp=Z,319nm,19.5s,baz=213,slow=32
comp=Z,1.2nm,0.4s
**TAM Tamanrasset 43.86 65** P **P** **05 43 01.2 +0.7**
**ARNL Arenillas 44.05 257** P **P** **05 43 00.7 -1.2**
**GO02 Mina Guanaco 45.20 223** P **P** **05 43 10.9 -0.3**
GO02 IAmb IAmb 05 43 11.7
comp=Z,7.9nm,0.6s
**HDC Heredia 46.29 277** P **P** **05 43 21.7 +1.9**
**PAL Palisades 46.56 322** P **P** **05 43 21.3 -0.1**
**BATG Bathurst New B 46.59 333** P **P** **05 43 21.2 -0.4**
**W59A Clinton 46.65 312** P **P** **05 43 22.7 +0.5**
W59A IAmb IAmb 05 43 40.3
comp=Z,8.4nm,0.7s
**WUPA West Chester U 47.03 319** P **P** **05 43 25.4 +0.3**
**NHSC New Hope 47.10 309** P **P** **05 43 26.1 +0.3**
**JTS Las Juntas de 47.11 277** LR LR 06 06 16.1
comp=Z,40nm,18.8s,baz=98,slow=40
**W57A Gilead 47.78 311** IAmb IAmb 05 43 34.1
comp=Z,9.7nm,1.0s
**BIRD Birdtown, Kers 47.93 311** IAmb IAmb 05 43 35.4
comp=Z,11nm,1.0s
**L59A Walton 47.94 322** P **P** **05 43 32.4 +0.1**
L59A IAmb IAmb 05 43 35.1
comp=Z,12nm,1.1s
**S57A Dark Hollow, R 48.19 315** IAmb IAmb 05 43 37.5
comp=Z,13nm,1.1s
**J59A Piesco 48.37 324** IAmb IAmb 05 43 37.6
comp=Z,9.1nm,1.1s
**JSC Jenkinsville 48.39 310** IAmb IAmb 05 43 39.0
comp=Z,8.4nm,1.0s
**CEST Esterri de Car 48.69 38** P **P** **05 43 39.1 +0.9**
CEST IAmb IAmb 05 43 40.6
comp=Z,16nm,1.2s
**J58A Remsen 48.77 323** P **P** **05 43 38.8 +0.2**
J58A IAmb IAmb 05 43 41.8
comp=Z,12nm,1.1s
**KMSC Kings Mountain 48.78 311** P **P** **05 43 38.8 0.0**
KMSC IAmb IAmb 05 43 40.8
comp=Z,14nm,1.4s
**Q56A Snyder Ridge, 48.96 316** IAmb IAmb 05 43 55.8
comp=Z,16nm,1.2s
**BLA Blacksburg 48.98 314** P **P** **05 43 40.5 +0.2**
**U54A Nelsons Funny 49.70 312** IAmb IAmb 05 44 04.4
comp=Z,8.6nm,1.0s
**BG3 Lake Jocassee 49.93 310** IAmb IAmb 05 43 51.4
comp=Z,15nm,1.0s
**V53A Saluda 50.10 311** IAmb IAmb 05 43 52.1
comp=Z,9.0nm,1.2s
**P53A Whipple 50.68 316** IAmb IAmb 05 43 55.8
comp=Z,23nm,1.4s
**TKL Tuckaleechee C 50.82 310** LR LR 06 00 46.0
comp=Z,270nm,21.8s,baz=123,slow=31
**TZTN Tazewell 50.99 312** IAmb IAmb 05 43 58.9
comp=Z,16nm,1.2s
**KEST Kesra 51.00 50** P **P** **05 43 56.1 +0.3**
comp=Z,4.3nm,0.8s,baz=217,slow=4.3,SNR=6.3
KEST LR LR 06 06 26.6
comp=Z,370nm,18.6s,baz=188,slow=37
comp=Z,4.3nm,0.8s
**Q52A Bidwell 51.06 315** IAmb IAmb 05 43 58.3
comp=Z,17nm,1.2s
**CPCT Cooper Cave 51.31 310** P **P** **05 43 58.4 +0.3**
**SADO Sadowa 51.86 323** LR LR 06 01 18.9
comp=Z,110nm,21.0s,baz=50,slow=31
**ACSO Alum Creek Sta 52.11 316** IAmb IAmb 05 44 06.8
comp=Z,11nm,0.8s
**R50A Paris 52.24 313** IAmb IAmb 05 44 08.4
comp=Z,9.6nm,1.1s
**SWET Sewanee 52.31 309** IAmb IAmb 05 44 23.4
comp=Z,14nm,1.4s
**CLF Chambon-Foret 52.45 33** P **P** **05 44 06.5 +0.2**
**SCHQ Schefferville 52.75 339** LR LR 06 03 00.2
comp=Z,88nm,21.2s,baz=162,slow=32
**P49A Miami Univ. Ec 53.02 315** IAmb IAmb 05 44 14.0
comp=Z,17nm,1.1s
**V48A Smith Brothers 53.17 309** IAmb IAmb 05 44 14.9
comp=Z,7.2nm,0.9s
**T47A Sharon Grove 53.81 311** IAmb IAmb 05 44 20.0
comp=Z,12nm,0.8s
**PLAL Pickwick Lake 53.89 308** IAmb IAmb 05 44 19.9
comp=Z,8.5nm,1.2s
**WVT Waverly 54.07 310** P **P** **05 44 17.8 -0.6**
WVT IAmb IAmb 05 44 20.8
comp=Z,5.6nm,0.8s
**BLO Bloomington 54.17 313** P **P** **05 44 18.9 -0.2**
**BI02 San Fabin de 54.27 214** P **P** **05 44 20.1 +0.2**
BI02 IAmb IAmb 05 44 32.3
comp=Z,8.4nm,0.9s
**EKA Eskdalemuir Ar 54.86 23** P **P** **05 44 22.8 -1.1**
comp=Z,2.5nm,0.8s,baz=213,slow=6.0,SNR=6.1
comp=Z,2.5nm,0.8s
**DOU Dourbes 54.92 32** *dP* **P** **05 44 23.7 -0.7**
**BMRD Maredsous 55.13 32** *dP* **P** **05 44 25.8 -0.1**
**ECH Echery 55.26 35** P **P** **05 44 26.9 0.0**
ECH IAmb IAmb 05 44 46.7
comp=Z,14nm,1.2s
**RCHB Rochefort 55.29 32** *dP* **P** **05 44 27.6 +0.6**
**BGES Gesves 55.34 32** *dP* **P** **05 44 27.8 +0.3**
**VAE Valguarnera 55.43 49** LR LR 06 06 45.8
comp=Z,391nm,21.0s,baz=280,slow=35
**Q44A Meyer Farm, Va 55.88 312** IAmb IAmb 05 44 34.4
comp=Z,13nm,0.9s
**MEM Membach 55.95 32** *dP* **P** **05 44 31.8 0.0**
**BTNL Ternell 56.01 32** *dP* **P** **05 44 32.0 -0.2**
**DAVOX Davos/Dischmat 56.12 37** LR LR 06 04 55.3
comp=Z,427nm,21.3s,baz=253,slow=32
**DAVA Damuels 56.36 37** *i P* **P** **05 44 35.3 +0.3**
comp=Z,4.4nm,0.8s
**FETA Feichten 56.74 37** *eP* **P** **05 44 36.7 -1.0**
comp=Z,4.7nm,1.3s
**CTI Castel Tesino 56.86 39** P **P** **05 44 39.4 +0.9**
CTI IAmb IAmb 05 44 48.2
comp=Z,7.4nm,0.6s
**PLCA Paso Flores 56.93 210** P **P** **05 44 39.1 +0.2**
comp=Z,1.9nm,1.0s,baz=56,slow=18,SNR=2.4
PLCA LR LR 06 11 24.4
comp=Z,222nm,18.2s,baz=37,slow=38
comp=Z,1.9nm,1.0s
**RETA Reutte 56.98 37** *i P* **P** **05 44 38.6 -0.7**
comp=Z,4.0nm,0.9s
**MOTA Moosalm 57.12 37** *i P* **P** **05 44 42.0 +1.6**
comp=Z,5.3nm,0.9s
**SQTA Sankt Quirin 57.13 37** *i P* **P** **05 44 40.0 -0.4**
comp=Z,6.6nm,0.8s
**WATA Walderalm 57.40 37** *eP* **P** **05 44 41.8 -0.6**
comp=Z,4.6nm,0.9s
**WTTA Wattenberg 57.41 38** *i P* **P** **05 44 43.3 +0.9**
comp=Z,4.0nm,0.9s
**CIMO Cimolais 57.47 39** IAmb IAmb 05 44 55.2
comp=Z,3.2nm,0.7s
**ABTA Abfaltersbach 57.71 38** *i P* **P** **05 44 44.1 -0.4**
comp=Z,4.5nm,0.9s
**MGMO Mountain Grove 57.78 309** IAmb IAmb 05 44 47.0
comp=Z,9.2nm,1.0s
**R40A Maddies Statio 58.10 311** IAmb IAmb 05 45 03.9
comp=Z,12nm,1.4s
**LESA Schwarzleotal 58.11 38** *i P* **P** **05 44 46.6 -0.6**
comp=Z,2.1nm,0.6s
**BORG Borgarnes 58.24 8** LR LR 06 01 48.8
comp=Z,20nm,21.8s,baz=203,slow=28
**P40A Paris 58.31 312** IAmb IAmb 05 44 50.5
comp=Z,10nm,0.8s
**MYKA Terra Mystica 58.35 39** *i P* **P** **05 44 49.4 +0.4**
comp=Z,9.5nm,1.6s
**KBA Koelnbreinsper 58.36 38** *eP* **P** **05 44 49.6 +0.4**
comp=Z,4.9nm,1.0s
**S39A Bolivar 58.73 310** IAmb IAmb 05 44 53.5
comp=Z,6.1nm,0.8s
**BIOA Bad Ischl, Aus 58.81 38** *eP* **P** **05 44 51.3 -0.7**
comp=Z,0.1nm,0.3s
**OBKA Obir 58.87 39** *i P* **P** **05 44 53.3 +0.7**
comp=Z,6.4nm,1.0s
**SOKA Soboth 59.25 39** *i P* **P** **05 44 55.1 -0.1**
comp=Z,6.1nm,1.3s
**MOA Molln 59.26 38** *i P* **P** **05 44 57.2 +2.0**
comp=Z,3.6nm,0.8s
**GERES GERESS Array B 59.36 37** LR LR 06 06 19.7
comp=Z,216nm,21.2s,baz=268,slow=32
**ARSA Arzberg 59.78 39** *i P* **P** **05 44 59.6 +0.8**
comp=Z,4.9nm,0.7s
**SFJD Kangerlussuaq 60.08 354** LR LR 06 05 33.5
comp=Z,32nm,21.6s,baz=167,slow=31
**CLL Collm 60.09 34** *eSx* Sx 05 53 24.0
CLL *eSSS* SSS 05 59 48.0
CLL AMS AMS 06 06 00.0
comp=Z,200nm,21.6s
**TUL3 Leonard 60.21 307** IAmb IAmb 05 45 03.7
comp=Z,11nm,1.0s
**TSUM Tsumeb 60.25 117** LR LR 06 04 55.0
comp=Z,186nm,21.0s,baz=328,slow=30
**CONA Conrad Observa 60.27 38** *i P* **P** **05 45 02.0 -0.2**
comp=Z,5.0nm,1.2s
**FRB Frobisher Bay 60.42 345** LR LR 06 07 10.5
comp=Z,110nm,20.0s,baz=108,slow=32
**RONA Rosalia, Austr 60.45 39** *eP* **P** **05 45 03.1 -0.2**
comp=Z,8.4nm,1.2s
**SPMN Marine on St. 60.72 318** IAmb IAmb 05 45 19.3
comp=Z,9.2nm,0.9s
**FW13 Cleburne 60.83 303** IAmb IAmb 05 45 08.2
comp=Z,8.4nm,0.9s
**MPLH Magyarpolny 61.02 40** P **P** **05 45 07.3 +0.1**
comp=Z,23nm,1.1s
**OK048 Pawnee Station 61.23 307** P **P** **05 45 08.9 +0.1**
**VRAC Vranov 61.27 37** LR LR 06 08 01.1
comp=Z,212nm,21.9s,baz=250,slow=32
**N35A Tabor 61.34 313** P **P** **05 45 09.5 0.0**
**DPC Dobruska-Polom 61.54 36** P **P** **05 45 10.8 0.0**
comp=Z,4.5nm,1.1s
**WMOK Wichita Mounta 62.36 305** P **P** **05 45 16.4 -0.2**
WMOK IAmb IAmb 05 45 17.2
comp=Z,6.5nm,1.4s
**JCT Junction City 62.54 300** P **P** **05 45 17.9 0.0**
JCT IAmb IAmb 05 45 19.8
comp=Z,7.3nm,1.1s
**ECSD EROS Data Cent 62.83 316** IAmb IAmb 05 45 36.9
comp=Z,9.5nm,1.4s
**IDI Anoyia 63.06 54** LR LR 06 12 12.3
comp=Z,204nm,22.0s,baz=294,slow=36
**APMT Aspermont 63.22 303** IAmb IAmb 05 45 23.6
comp=Z,8.1nm,1.0s
**OJC Ojcow 63.54 37** P **P** **05 45 24.8 +0.7**
comp=Z,5.2nm,0.8s
**OZNA Ozna 63.73 301** IAmb IAmb 05 45 27.5
comp=Z,12nm,1.4s
**NOA NORSAR Array B 64.33 24** LR LR 06 08 21.8
comp=Z,110nm,21.7s,baz=235,slow=31
**ULM Lac du Bonnet 64.42 323** P **P** **05 45 28.1 -1.7**
comp=Z,6.9nm,1.1s,baz=111,slow=8.0,SNR=3.5
ULM LR LR 06 08 53.1
comp=Z,103nm,21.3s,baz=100,slow=32
comp=Z,6.9nm,1.1s
**SAND Sanderson 64.47 300** IAmb IAmb 05 45 32.4
comp=Z,5.5nm,1.0s
**HFS Hagfors 64.86 25** P **P** **05 45 30.8 -1.7**
comp=Z,2.1nm,0.8s,baz=180,slow=8.6,SNR=4.1
HFS LR LR 06 08 39.2
comp=Z,118nm,22.0s,baz=244,slow=31
comp=Z,2.1nm,0.8s
**KARP Karpathos 64.93 54** P **P** **05 45 33.6 0.0**
**KARP Karpathos 64.93 54** P **P** **05 45 34.2 +0.6**
comp=Z,90nm,1.1s
**SUMG Summit 64.99 360** P **P** **05 45 34.2 +0.5**
**EZN Ezine 65.04 50** P **P** **05 45 34.5 +0.4**
comp=Z,13nm,1.1s
**TXAR Lajitas Array 65.75 299** P **P** **05 45 38.3 -0.7**
comp=Z,0.4nm,0.6s,baz=104,slow=6.8,SNR=7.5
comp=Z,0.4nm,0.6s
**ALPN Alpine 65.82 300** IAmb IAmb 05 45 50.9
comp=Z,5.3nm,0.9s
**MLR Muntele Rosu 66.03 43** P **P** **05 45 40.7 +0.1**
**MLR Muntele Rosu 66.03 43** P **P** **05 45 40.4 -0.2**
comp=Z,14nm,1.4s
**VHRN Van Horn 67.01 300** IAmb IAmb 05 45 49.3
comp=Z,8.8nm,1.4s
**KMPD K-Podol'skiy 67.15 40** P **P** **05 45 46.3 -1.2**
**RNPP5 Staryi Chortor 67.53 37** P **P** **05 45 50.0 +0.2**
**RNPP8 Varash 67.54 37** P **P** **05 45 50.0 +0.1**
**RNPP9 Sopachiv 67.58 37** P **P** **05 45 50.6 +0.4**
**SUR Sutherland 68.06 129** LR LR 06 08 36.0
comp=Z,116nm,20.7s,baz=292,slow=30
**LUBAR Lubar, Ukraine 68.32 39** P **P** **05 45 54.0 -0.9**
**MBAR Mbarara 68.34 94** LR LR 06 13 55.1
comp=Z,39nm,18.6s,baz=282,slow=34
**MI28 MI28,Pidlybu 68.53 38** P **P** **05 45 56.0 -0.1**
**ANMO Albuquerque 68.64 304** LR LR 06 12 25.8
comp=Z,264nm,20.9s,baz=100,slow=33
**MI30 MI30,Zelenitsa 68.80 38** P **P** **05 45 57.8 0.0**
**N23A Red Feather La 68.97 311** IAmb IAmb 05 46 01.7
comp=Z,6.7nm,1.1s
**LBTB Lobatse 69.22 120** LR LR 06 10 11.5
comp=Z,114nm,21.0s,baz=304,slow=31
**S22A 4UR Ranch, Cre 69.24 307** IAmb IAmb 05 46 21.4
comp=Z,6.8nm,1.4s
**AK19 Malin Array Si 69.30 38** P **P** **05 46 00.6 -0.3**
**AK20 Malin Array Si 69.31 38** P **P** **05 46 00.5 -0.5**
**AK21 Malin Array Si 69.33 38** P **P** **05 46 00.7 -0.4**
**AK18 Malin Array Si 69.33 38** P **P** **05 46 00.7 -0.4**
**AK14 Malin Array Si 69.34 39** P **P** **05 46 00.8 -0.4**
**AK22 Malin Array Si 69.35 38** P **P** **05 46 00.8 -0.4**
**AK15 Malin Array Si 69.36 39** P **P** **05 46 00.8 -0.5**
**AK12 Malin Array Si 69.37 39** P **P** **05 46 00.9 -0.5**
**AK07 Malin Array Si 69.38 39** P **P** **05 46 01.2 -0.2**
**AK11 Malin Array Si 69.39 39** P **P** **05 46 00.9 -0.6**
**AK05 Malin Array Si 69.39 39** P **P** **05 46 01.0 -0.5**
**AK04 Malin Array Si 69.40 39** P **P** **05 46 01.0 -0.5**
**AK02 Malin Array Si 69.41 39** P **P** **05 46 01.0 -0.6**
**AK10 Malin Array Si 69.42 39** P **P** **05 46 01.4 -0.3**
**AKASG Malin Array Be 69.43 39** P **P** **05 46 01.3 -0.4**
comp=Z,1.6nm,0.6s,baz=259,slow=6.0,SNR=9.2
AKASG LR LR 06 13 49.5
comp=Z,98nm,21.4s,baz=244,slow=34
comp=Z,1.6nm,0.6s
**AK08 Malin Array Si 69.43 39** P **P** **05 46 01.3 -0.4**
**AK09 Malin Array Si 69.44 39** P **P** **05 46 01.4 -0.4**
**BOSA Boshof 70.15 124** P **P** **05 46 07.9 +1.2**
comp=Z,9.9nm,1.0s,baz=334,slow=1.3,SNR=8.9
BOSA LR LR 06 10 27.5
comp=Z,131nm,19.6s,baz=345,slow=30
comp=Z,9.9nm,1.0s
**BR105 Keskin Array S 70.57 51** P **P** **05 46 09.6 +0.4**
comp=Z,5.8nm,1.0s,comp=Z,57nm
**BR106 Keskin Array S 70.58 51** P **P** **05 46 09.6 +0.4**
comp=Z,4.4nm,0.9s,comp=Z,39nm
**BR104 Keskin Array S 70.59 51** P **P** **05 46 09.7 +0.4**
comp=Z,5.1nm,0.9s,comp=Z,44nm
**BRTR Keskin Array B 70.59 51** P **P** **05 46 09.4 +0.1**
comp=Z,2.5nm,0.8s,baz=252,slow=5.9,SNR=14
BRTR LR LR 06 16 49.3
comp=Z,106nm,21.9s,baz=256,slow=36
comp=Z,2.5nm,0.8s
**O20A White River Ci 70.61 310** IAmb IAmb 05 46 30.9
comp=Z,6.8nm,1.1s
**FINES FINESS Array B 70.89 27** P **P** **05 46 10.5 +0.1**
comp=Z,1.4nm,0.6s,baz=264,slow=5.7,SNR=9.0
FINES LR LR 06 13 55.0
comp=Z,142nm,20.4s,baz=242,slow=33
comp=Z,1.4nm,0.6s
**EIL Elat 70.92 61** LR LR 06 16 39.7
comp=Z,195nm,21.2s,baz=249,slow=35
**MMAI Mount Meron Ar 71.46 58** LR LR 06 17 29.5
comp=Z,76nm,21.4s,baz=226,slow=36
**LPIG La Paz 71.46 293** LR LR 06 19 17.3
comp=Z,43nm,18.3s,baz=42,slow=37
**X18A Snowflake 71.47 304** IAmb IAmb 05 46 18.3
comp=Z,5.7nm,1.0s
**RDMU Red Mountain 71.67 310** IAmb IAmb 05 46 18.7
comp=Z,7.9nm,1.1s
**PDAR Pinedale Array 71.90 312** P **P** **05 46 18.2 +1.0**
comp=Z,0.2nm,0.4s,baz=97,slow=6.3,SNR=5.9
PDAR LR LR 06 13 53.8
comp=Z,110nm,21.7s,baz=114,slow=33
comp=Z,0.2nm,0.4s
**P18A Preston Nutter 72.09 309** IAmb IAmb 05 46 21.3
comp=Z,12nm,1.5s
**YMP Mirror Lake Pl 72.56 314** IAmb IAmb 05 46 43.2
comp=Z,7.4nm,0.9s
**BSUT Blindstream Ca 72.57 310** IAmb IAmb 05 46 24.5
comp=Z,5.4nm,1.0s
**ASF Jabal al Asfar 72.68 59** LR LR 06 20 40.3
comp=Z,995nm,18.9s,baz=333,slow=38
**WUAZ Wupatki 72.70 305** IAmb IAmb 05 46 38.1
comp=Z,6.7nm,1.1s
**SNOW Snow King Moun 72.84 313** IAmb IAmb 05 46 25.8
comp=Z,6.0nm,0.9s
**FLWY Flagg Ranch 72.87 314** IAmb IAmb 05 46 27.6
comp=Z,9.5nm,0.9s
**TPAW Teton Pass 72.99 313** IAmb IAmb 05 46 44.2
comp=Z,9.6nm,1.1s
**YFT Old Faithful 73.00 314** IAmb IAmb 05 46 51.6
comp=Z,9.9nm,1.1s
**IMW Indian Meadow 73.02 314** IAmb IAmb 05 46 45.4
comp=Z,15nm,1.2s
**TCUT Toone Canyon 73.11 311** IAmb IAmb 05 46 27.3
comp=Z,8.1nm,0.8s
**HWUT Hardware Ranch 73.27 311** IAmb IAmb 05 46 35.6
comp=Z,7.3nm,0.9s
**YHL Hebgen Lake 73.29 314** IAmb IAmb 05 46 29.6
comp=Z,6.9nm,0.9s
**ARCES ARCESS Array B 73.68 19** LR LR 06 14 28.9
comp=Z,98nm,20.2s,baz=228,slow=32
**SPUT South Promonto 73.90 311** IAmb IAmb 05 46 31.5
comp=Z,8.3nm,1.4s
**BGU Big Grassy Mou 74.32 310** IAmb IAmb 05 46 53.7
comp=Z,11nm,1.3s
**DLMT Dillon 74.34 315** IAmb IAmb 05 46 34.6
comp=Z,11nm,1.1s
**OBN Obninsk 74.66 35** LR LR 06 17 52.5
comp=Z,118nm,19.8s,baz=150,slow=35
**KMBO Kilima Mbogo 74.86 93** LR LR 06 18 06.5
comp=Z,40nm,18.9s,baz=265,slow=35
**FURI Furi 75.10 83** LR LR 06 18 49.8
comp=Z,60nm,18.4s,baz=288,slow=35
**SPITS Spitsbergen Ar 75.62 10** LR LR 06 11 55.5
comp=Z,68nm,21.3s,baz=207,slow=30
**ELK Elko 75.98 310** P **P** **05 46 40.7 -0.5**
**ELK Elko 75.98 310** LR LR 06 15 55.2
comp=Z,166nm,22.0s,baz=94,slow=32
**PFO Pinyon Flats O 76.85 303** LR LR 06 20 29.0
comp=Z,98nm,18.1s,baz=68,slow=36
**YKA Yellowknife Ar 77.49 332** P **P** **05 46 47.9 -1.1**
comp=Z,4.7nm,1.2s,baz=94,slow=6.3,SNR=7.5
YKA LR LR 06 16 50.5
comp=Z,121nm,20.9s,baz=84,slow=33
comp=Z,4.7nm,1.2s
**NEW Newport 77.64 318** LR LR 06 16 35.6
comp=Z,49nm,21.7s,baz=106,slow=32
**RPN Rapa Nui 77.65 240** LR LR 06 17 24.3
comp=Z,89nm,20.1s,baz=80,slow=33
**KBZ Khabaz 77.77 47** P **P** **05 46 51.7 +0.8**
comp=Z,5.7nm,0.9s,baz=301,slow=1.1,SNR=9.0
KBZ LR LR 06 23 43.5
comp=Z,34nm,18.7s,baz=294,slow=38
comp=Z,5.7nm,0.9s
**BRLDA Berland Lookou 78.13 324** IAmb IAmb 05 47 22.9
comp=Z,12nm,1.3s
**NVAR Mina Array Bea 78.31 308** P **P** **05 46 54.3 -0.1**
comp=Z,0.5nm,0.6s,baz=96,slow=5.5,SNR=4.4
NVAR LR LR 06 20 48.5
comp=Z,75nm,18.5s,baz=90,slow=35
comp=Z,0.5nm,0.6s
**LHV Little Huntoon 78.47 307** IAmb IAmb 05 46 58.9
comp=Z,7.1nm,1.1s
**GNI Garni 79.13 51** LR LR 06 22 36.8
comp=Z,69nm,21.7s,baz=290,slow=36
**BELG Belogorsk Array 81.00 38** LR LR 06 22 52.4
comp=Z,44nm,19.6s,baz=261,slow=36
**YBH Yreka Blue Hor 81.61 311** LR LR 06 21 29.1
comp=Z,125nm,18.9s,baz=90,slow=34
**KIRV Kirov 81.93 32** LR LR 06 20 11.9
comp=Z,82nm,21.0s,baz=272,slow=33
**BBB Bella Bella 84.60 322** LR LR 06 21 14.8
comp=Z,65nm,20.8s,baz=62,slow=33
**DLBC Dease Lake 85.06 328** LR LR 06 21 30.5
comp=Z,84nm,20.8s,baz=102,slow=33
**INK Inuvik 85.36 338** P **P** **05 47 31.6 +1.0**
INK IAmb IAmb 05 47 33.7
comp=Z,4.7nm,0.8s
**INK Inuvik 85.36 338** LR LR 06 23 06.2
comp=Z,207nm,19.2s,baz=82,slow=34
**R33M Jennings River 85.44 329** IAmb IAmb 05 47 55.5
comp=Z,11nm,1.4s
**F31M Tsiigehtchic 85.57 337** P **P** **05 47 32.7 +1.1**
**S34M Telegraph Cree 85.71 328** IAmb IAmb 05 47 36.1
comp=Z,13nm,1.4s
**G31M Satah River 85.86 337** P **P** **05 47 33.8 +0.7**
G31M IAmb IAmb 05 47 40.3
comp=Z,7.1nm,0.8s
**H31M Peel River 86.07 336** IAmb IAmb 05 47 57.2
comp=Z,9.1nm,1.1s
**FARO Faro, Yukon 86.20 332** IAmb IAmb 05 47 38.8
comp=Z,5.2nm,1.0s
**P33M Teslin, Yukon 86.26 330** IAmb IAmb 05 47 39.1
comp=Z,4.2nm,0.8s
**ARU Arti 87.03 34** LR LR 06 23 52.5
comp=Z,175nm,21.0s,baz=281,slow=34
**H29M Whitestone 87.60 337** P **P** **05 47 42.2 +0.5**
H29M IAmb IAmb 05 47 44.8
comp=Z,6.0nm,1.0s
**AKTO Aktyubinsk 87.65 40** LR LR 06 27 25.5
comp=Z,46nm,19.5s,baz=135,slow=36
**DAWY Dawson 88.53 335** IAmb IAmb 05 47 49.5
comp=Z,6.1nm,1.4s
**ABKAR Akbulak array 89.07 41** P **P** **05 47 49.7 +0.8**
ABKAR IAmb IAmb 05 47 51.0
comp=Z,7.8nm,1.5s
**M27K Edge Creek, AK 90.07 333** IAmb IAmb 05 47 58.0
comp=Z,7.0nm,1.2s
**ILAR Eielson Array 91.42 336** P **P** **05 47 58.6 -1.0**
comp=Z,1.6nm,1.1s,baz=46,slow=2.6,SNR=7.8
ILAR LR LR 06 26 20.4
comp=Z,110nm,20.3s,baz=68,slow=34
comp=Z,1.6nm,1.1s
**WSAR Wadi Sarin 92.49 66** LR LR 06 31 48.0
comp=Z,93nm,19.1s,baz=298,slow=37
**KDAK Kodiak Island 96.71 331** LR LR 06 31 42.7
comp=Z,90nm,18.9s,baz=81,slow=35
**KURBB Kurchatov Arra 100.08 36** LR LR 06 33 11.7
comp=Z,50nm,20.4s,baz=175,slow=35
**KSH Kashi 102.76 47** P **Pdif** **05 48 55.5 +3.9**
**WMQ Urumqi 108.78 39** Pdif **Pdif** **05 49 19.8 +1.5**
WMQ LR LR
comp=Z,120nm,21.3s

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*NEIC **30** 05:47:13.3±0.5, 20.°1S±0.°1×177.°5W±0.°1, h508km±10km, mb4.2/17, Error ellipse: s-maj=22.8km s-min=13.7km az=133.0*
*IDC **30** 05:47:15.8±3.0, 20.°09S×177.°72W, h529km±44km, mb3.6/4, mbtmp4.5/5, Error ellipse: s-maj=116.4km s-min=27.7km az=25.0*

**ISC 30 05:47:13.0±0.8, 20.°2S±0.°1×177.°5W±0.°1, h500km, n28, σ1s09/28, mb4.2/15, 2C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.91** | **300** | P | **P** | **05 48 42.5** | **+3.2** |
| **MSVF** | **Nonsavu** | **4.91** | **300** | P | **P** | **05 48 41.5** | **+2.2** |
| | 14nm,0.4s,baz=294,slow=23,SNR=66 | | | | | | |
| **NIUE** | **Niue** | **7.21** | **82** | P | **P** | **05 49 00.7** | **-0.7** |
| **AFI** | **Afiamalu** | **8.33** | **42** | P | **P** | **05 49 12.2** | **-0.9** |
| **EIDS** | **Eidsvold** | **29.38** | **254** | P | **P** | **05 52 34.6** | **-0.5** |
| EIDS | | | | IAmb | IAmb | 05 52 35.2 | |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **29.61** | **244** | P | **P** | **05 52 36.9** | **-0.3** |
| **CTAO** | **Charters Tower** | **34.00** | **264** | P | **P** | **05 53 13.6** | **-1.1** |
| CTAO | | | | IAmb | IAmb | 05 53 15.5 | |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **TOO** | **Toolangi** | **36.44** | **234** | P | **P** | **05 53 34.6** | **-0.3** |
| TOO | | | | IAmb | IAmb | 05 53 42.6 | |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **STKA** | **Stephens Creek** | **38.34** | **244** | P | **P** | **05 53 50.2** | **-0.3** |
| **STKA** | **Stephens Creek** | **38.34** | **244** | P | **P** | **05 53 50.1** | **-0.4** |
| | comp=Z,4.1nm,0.5s,baz=91,slow=12,SNR=9.2 | | | | | | |
| | comp=Z,4.1nm,0.5s | | | | | | |
| **MCQ** | **Macquarie Isla** | **38.61** | **202** | P | **P** | **05 53 52.9** | **+0.6** |
| **BBOO** | **Buckleboo** | **43.09** | **243** | P | **P** | **05 54 27.7** | **-0.8** |
| **WR0** | **Warramunga Arr** | **44.93** | **262** | P | **P** | **05 54 42.3** | **-0.6** |
| **AS31** | **Alice Springs** | **45.05** | **256** | P | **P** | **05 54 43.3** | **-0.6** |
| AS31 | | | | IAmb | IAmb | 05 54 43.9 | |
| | comp=Z,4.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **256** | P | **P** | **05 54 43.2** | **-0.6** |
| | comp=Z,13nm,0.5s,baz=96,slow=7.6,SNR=203 | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **WB0** | **Warramunga Arr** | **45.09** | **262** | P | **P** | **05 54 43.3** | **-0.9** |
| WB0 | | | | IAmb | IAmb | 05 54 43.8 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **45.10** | **262** | P | **P** | **05 54 43.0** | **-1.3** |
| WB2 | | | | IAmb | IAmb | 05 54 44.1 | |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.12** | **262** | P | **P** | **05 54 43.4** | **-1.0** |
| | comp=Z,2.4nm,0.3s,baz=97,slow=7.5,SNR=98 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **FORT** | **Forrest** | **49.84** | **246** | P | **P** | **05 55 18.8** | **-1.0** |
| **SBA** | **Scott Base** | **58.16** | **184** | P | **P** | **05 56 18.5** | **+0.7** |
| **PSA00** | **Pilbara Seismi** | **58.20** | **257** | P | **P** | **05 56 18.4** | **-0.6** |
| PSA00 | | | | IAmb | IAmb | 05 56 34.5 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **58.38** | **257** | P | **P** | **05 56 19.1** | **-1.2** |

| | | | | | | |
|---|---|---|---|---|---|---|
| MBWA | | | | IAmb | IAmb | 05 56 20.0 |
| | comp=Z,10nm,0.8s | | | | | |
| **CASY** | **Casey** | **64.40 205** | P | **P** | | **05 56 59.3 +0.3** |
| CASY | | | IAmb | IAmb | | 05 57 00.1 |
| | comp=Z,2.4nm,0.7s | | | | | |
| **QSPA** | **South Pole Qui** | **69.83 180** | P | **P** | | **05 57 33.2 +0.6** |
| **QSPA** | **South Pole Qui** | **69.83 180** | P | **P** | | **05 57 33.8 +1.2** |
| | comp=Z,1.9nm,0.7s,baz=37,slow=0.5,SNR=20 | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | |
| **BELA** | **Belgrano 2** | **79.75 173** | P | **P** | | **05 58 28.7 +0.7** |
| **VNA3** | **Neumayer Olymp** | **88.37 176** | ⇑P | **P** | | **05 59 10.6 -0.2** |
| | comp=Z,4.7nm,0.6s | | | | | |
| **VNA2** | **Neumayer--Watz** | **88.81 177** | ⇑P | **P** | | **05 59 12.3 -0.5** |
| | comp=Z,2.8nm,0.6s,baz=183,slow=4.1 | | | | | |

*IDC **30** 05:53:25.9±1.0,2˚.14N×128˚.73E, h0km, mb3.9/9, mbtmp3.9/9, MS3.8/2, Error ellipse: s-maj=90.8km s-min=16.6km az=72.0*

**ISC 30 05:53:37.5±0.9, 2˚.2N±0˚.2×129˚.0E±0˚.6, h100km, n10, σ0s97/9, mb4.0/9, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.61** | **167** | P | **P** | **05 58 28.3** | **-1.8** |
| | 0.7nm,0.5s,baz=346,slow=11,SNR=3.5 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **26.14** | **170** | P | **P** | **05 59 01.8** | **-0.7** |
| | 0.4nm,0.5s,baz=350,slow=7.3,SNR=2.1 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **35.10** | **358** | P | **P** | **06 00 21.1** | **0.0** |
| | 0.9nm,0.5s,baz=185,slow=9.4,SNR=4.6 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.92** | **162** | P | **P** | **06 00 29.2** | **+0.9** |
| | 1.5nm,0.5s,baz=339,slow=14,SNR=4.8 | | | | | | |
| | 1.5nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **49.49** | **340** | P | **P** | **06 02 17.6** | **-0.3** |
| | 0.5nm,0.3s,baz=166,slow=9.5,SNR=3.8 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.12** | **325** | P | **P** | **06 03 35.0** | **+0.5** |
| | 1.5nm,0.6s,baz=114,slow=7.7,SNR=13 | | | | | | |
| MKAR | | | | LR | LR | 06 33 07.6 | |
| | comp=Z,53nm,19.6s,baz=299,slow=40 | | | | | | |
| | 1.5nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.99** | **332** | LR | LR | 06 34 54.1 | |
| | comp=Z,102nm,19.1s,baz=281,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.27** | **327** | P | **P** | **06 04 02.3** | **+0.3** |
| | 1.3nm,0.6s,baz=126,slow=6.1,SNR=12 | | | | | | |
| | 1.3nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **69.85** | **327** | P | **P** | **06 04 37.0** | **-0.4** |
| | 0.8nm,0.6s,baz=113,slow=11,SNR=5.2 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **92.11** | **180** | P | **P** | **06 06 36.2** | **+0.7** |
| | 0.9nm,0.8s,baz=156,slow=0.4,SNR=2.3 | | | | | | |
| | 0.9nm,0.8s | | | | | | |

**IDC 30 05:56:32.3±8.7, 18˚.16S×178˚.09W, h580km±31km, mb2.9/3, mbtmp3.9/4, Error ellipse: s-maj=283.2km s-min=31.3km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.70** | **276** | P | P | 05 57 54.4 | 0.0 |
| | 26nm,0.7s,baz=134,slow=15,SNR=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.89** | **260** | P | P | 06 03 56.0 | -0.4 |
| | 0.5nm,0.5s,baz=96,slow=6.7,SNR=12 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.02** | **254** | P | P | 06 03 57.6 | +0.1 |
| | 3.3nm,0.5s,baz=87,slow=8.5,SNR=42 | | | | | | |
| | 3.3nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **86.06** | **13** | P | P | 06 08 11.8 | 0.0 |
| | 0.2nm,0.4s,baz=220,slow=4.7,SNR=5.1 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*IDC **30** 06:00:24.6±2.6,54˚.18N×86˚.33E, h0km, mbtmp2.9/2, ML2.6/2, Error ellipse: s-maj=21.2km s-min=12.3km az=60.0*

*NNC **30** 06:00:28.1±1.3,53˚.98N×86˚.21E, h0km, mb3.2, mpv2.2, Error ellipse: s-maj=25.0km s-min=6.4km az=6.0, Suspected Mining explosion.*

**ISC 30 06:00:26.1±5.6, 54˚.5N±0˚.4×83˚.90E±0˚.09, h0km, n7, σ0s51/7, 3C-2D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.75** | **133** | I | I | 06 06 30.0 | |
| | baz=74,slow=318,SNR=2.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **0.75** | **133** | ⇑P | **Pn** | **06 00 44.1** | **+0.1** |
| | 0.1nm,0.5s | | | | | | |
| ZAA0 | | | | ⇑S | **Sn** | **06 00 55.5** | **-0.5** |
| | 0.4nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.75** | **133** | Pg | **Pg** | **06 00 40.6** | **+0.2** |
| | 1.7nm,0.3s,baz=76,slow=18,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 06 00 56.0 | |
| | 4.8nm,0.3s,baz=77,slow=30,SNR=8.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.05** | **223** | Pn | **Pb** | **06 01 55.1** | **-0.2** |
| | 0.1nm,0.3s,baz=52,slow=13,SNR=8.0 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.05** | **223** | ⇓Pn | **Pb** | **06 01 54.9** | **-0.4** |
| | 1.9nm,0.8s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 06 03 33.6 | |
| | 3.3nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **7.75** | **188** | ⇓Pn | **Pn** | **06 02 20.2** | **+0.1** |
| | 0.1nm,0.3s,baz=27,slow=14,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.75** | **188** | Pn | **Pn** | **06 02 20.8** | **+0.7** |
| | 0.2nm,0.3s,baz=25,slow=13,SNR=5.8 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

*NEIC **30** 06:09:28.2±0.7, 17˚.8S±0˚.2×177˚.9W±0˚.1, h582km±16km, mb4.1/20, Error ellipse: s-maj=27.9km s-min=11.9km az=161.0*

*IDC **30** 06:09:29.6±1.8, 17˚.79S×178˚.18W, h586km±22km, mb3.2/8, mbtmp4.1/9, Error ellipse: s-maj=34.3km s-min=16.5km az=146.0*

**ISC 30 06:09:29.1±0.7, 17˚.8S±0˚.1×178˚.1W±0˚.1, h590km, n30, σ0s88/30, mb4.0/17, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.70** | **271** | P | **P** | **06 10 51.3** | **-0.5** |
| | 66nm,0.7s,baz=180,slow=20,SNR=35 | | | | | | |
| **AFI** | **Afiamalu** | **7.20** | **58** | P | **P** | **06 11 17.8** | **-2.9** |
| **DZM** | **Mont Dzumac** | **15.16** | **251** | P | **P** | **06 12 38.8** | **-0.3** |
| DZM | | | | IAmb | IAmb | 06 13 02.1 | |
| | comp=Z,7.3nm,1.0s | | | | | | |
| **WKZ** | **Wanaka** | **29.01** | **199** | P | **P** | **06 14 42.1** | **-0.5** |
| **EIDS** | **Eidsvold** | **29.60** | **250** | P | **P** | **06 14 47.8** | **-0.2** |
| EIDS | | | | IAmb | IAmb | 06 14 48.0 | |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **30.26** | **240** | P | **P** | **06 14 53.9** | **+0.2** |
| ARMA | | | | IAmb | IAmb | 06 15 22.6 | |
| | comp=Z,7.2nm,1.1s | | | | | | |
| **RABL** | **Rabaul** | **32.14** | **291** | P | **P** | **06 15 10.3** | **+0.5** |
| **CTAO** | **Charters Tower** | **33.78** | **260** | P | **P** | **06 15 23.8** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 06 15 24.1 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **34.01** | **233** | P | **P** | **06 15 25.2** | **0.0** |
| **COEN** | **Coen** | **37.43** | **270** | P | **P** | **06 15 53.8** | **+0.1** |
| **TOO** | **Toolangi** | **37.47** | **231** | P | **P** | **06 15 54.0** | **+0.3** |
| TOO | | | | IAmb | IAmb | 06 16 04.2 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **STKA** | **Stephens Creek** | **38.95** | **241** | P | **P** | **06 16 04.8** | **-1.0** |
| **STKA** | **Stephens Creek** | **38.95** | **241** | P | **P** | **06 16 06.3** | **+0.6** |
| | comp=Z,2.9nm,0.5s,baz=92,slow=14,SNR=5.9 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **43.73** | **241** | P | **P** | **06 16 43.3** | **-0.1** |
| **WR0** | **Warramunga Arr** | **44.77** | **259** | P | **P** | **06 16 51.5** | **-0.2** |
| **WB0** | **Warramunga Arr** | **44.93** | **260** | P | **P** | **06 16 52.7** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 06 16 53.1 | |
| | comp=Z,3.4nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **44.95** | **259** | P | **P** | **06 16 53.0** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 06 16 53.3 | |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **259** | P | **P** | **06 16 52.7** | **-0.4** |
| | comp=Z,2.4nm,0.5s,baz=96,slow=7.2,SNR=61 | | | | | | |
| | comp=Z,2.4nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **45.12** | **254** | P | **P** | **06 16 54.3** | **0.0** |
| AS31 | | | | IAmb | IAmb | 06 16 55.2 | |
| | comp=Z,3.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **45.12** | **254** | P | **P** | **06 16 54.5** | **+0.1** |
| | comp=Z,10nm,0.6s,baz=87,slow=8.7,SNR=125 | | | | | | |
| | comp=Z,10nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.13** | **268** | P | **P** | **06 17 24.5** | **+0.1** |
| MTN | | | | IAmb | IAmb | 06 17 31.3 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **FORT** | **Forrest** | **50.33** | **245** | P | **P** | **06 17 31.9** | **-1.0** |
| **KNRA** | **Kununurra** | **50.82** | **264** | P | **P** | **06 17 35.9** | **-0.8** |
| KNRA | | | | IAmb | IAmb | 06 17 40.8 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **56.40** | **270** | P | **P** | **06 18 15.9** | **-0.3** |
| **QSPA** | **South Pole Qui** | **72.22** | **180** | P | **P** | **06 19 56.0** | **+0.9** |
| **QSPA** | **South Pole Qui** | **72.22** | **180** | P | **P** | **06 19 55.9** | **+0.8** |
| | comp=Z,2.2nm,0.9s,baz=87,slow=2.8,SNR=6.6 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.15** | **44** | P | **P** | **06 20 34.6** | **+0.7** |
| | comp=Z,0.6nm,0.7s,baz=225,slow=9.4,SNR=6.6 | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.68** | **58** | P | **P** | **06 21 09.0** | **+2.2** |
| | comp=Z,0.8nm,0.8s,baz=218,slow=5.8,SNR=10 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **85.75** | **13** | P | **P** | **06 21 06.4** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=226,slow=4.9,SNR=5.6 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **PDAR** | **Pinedale Array** | **87.08** | **43** | P | **P** | **06 21 14.4** | **+1.2** |
| | comp=Z,0.5nm,0.7s,baz=174,slow=3.0,SNR=4.8 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |

**INMG 30 06:11:55.1±1.4, 41˚.50N×7˚.16W, h8km±8km, ML0.9, 2C-3D, Error ellipse: s-maj=3.3km s-min=2.3km az=120.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MVO** | **Moncorvo** | **0.35** | **164** | ⇓*i*Pg | Pg | 06 12 01.7 | -0.3 |
| MVO | | | | *e*Sg | Sg | 06 12 06.5 | -0.1 |
| MVO | | | | A | A | 06 12 06.7 | |
| | 6.4nm,0.2s | | | | | | |
| **MVO** | **Moncorvo** | **0.35** | **164** | ⇓*i*Pg | Pn | 06 12 07.8 | +1.2 |
| MVO | | | | *e*Sg | Sb | 06 12 12.7 | +3.4 |
| MVO | | | | A | A | 06 12 12.9 | |
| | 18nm,0.3s | | | | | | |
| **PBRG** | **Braganca** | **0.44** | **46** | ⇓*e*Pg | Pg | 06 12 03.3 | -0.3 |
| PBRG | | | | *e*Sg | Sg | 06 12 09.3 | -0.1 |
| PBRG | | | | A | A | 06 12 09.6 | |
| | 4.8nm,0.1s | | | | | | |
| **PBRG** | **Braganca** | **0.44** | **46** | *e*Pg | Pn | 06 12 09.3 | +1.5 |
| PBRG | | | | *e*Sg | Sb | 06 12 15.2 | +3.3 |
| PBRG | | | | A | A | 06 12 16.3 | |
| | 6.7nm,0.2s | | | | | | |
| **PVRL** | **Vila Real** | **0.47** | **242** | *e*Sg | Sg | 06 12 10.3 | -0.3 |
| **PVRL** | **Vila Real** | **0.47** | **242** | *e*Pg | Pn | 06 12 09.8 | +1.5 |
| PVRL | | | | *e*Sg | Sb | 06 12 16.9 | +4.0 |
| **POLO** | **Lamas de Olo** | **0.49** | **255** | ⇑*e*Pg | Pg | 06 12 04.4 | -0.3 |
| POLO | | | | *e*Sg | Sg | 06 12 10.6 | -0.6 |
| **POLO** | **Lamas de Olo** | **0.49** | **255** | ⇑*i*P | Pn | 06 12 10.6 | +2.0 |
| POLO | | | | *e*S | Sb | 06 12 17.6 | +4.1 |
| **PCAB** | **Cabril** | **0.68** | **288** | *e*S | Sg | 06 12 17.4 | +0.2 |
| **PCAB** | **Cabril** | **0.68** | **288** | *e*P | Pn | 06 12 14.1 | +3.0 |
| PCAB | | | | *e*S | Sn | 06 12 23.1 | +1.1 |
| PCAB | | | | A | A | 06 12 23.9 | |
| | 8.4nm,0.5s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.95** | **300** | *e*P | Pg | 06 12 12.7 | -0.7 |
| PGAV | | | | *e*S | Sg | 06 12 25.1 | -0.7 |
| PGAV | | | | A | A | 06 12 26.9 | |
| | 1.7nm,0.2s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.95** | **300** | *e*P | Pn | 06 12 18.9 | +4.0 |
| PGAV | | | | *e*S | Sn | 06 12 31.4 | +2.7 |
| PGAV | | | | A | A | 06 12 33.1 | |
| | 4.2nm,0.5s | | | | | | |
| **PVIS** | **Viseu** | **0.96** | **216** | *e*S | Sg | 06 12 25.5 | -0.5 |
| PVIS | | | | A | A | 06 12 28.4 | |
| | 4.3nm,0.8s | | | | | | |
| **PVIS** | **Viseu** | **0.96** | **216** | *e*P | Pn | 06 12 18.9 | +3.9 |
| PVIS | | | | *e*S | Sn | 06 12 31.6 | +2.8 |
| PVIS | | | | A | A | 06 12 32.3 | |
| | 7.9nm,0.1s | | | | | | |
| **MTE** | **Manteigas** | **1.14** | **195** | *e*S | Sg | 06 12 30.4 | -1.3 |
| **MTE** | **Manteigas** | **1.14** | **195** | *e*S | Sn | 06 12 36.3 | +3.1 |

**IDC 30 06:12:57.7±1.9, 53˚.37S×137˚.27W, h0km, mb4.3/2, mbtmp4.3/2, MS3.7/26, Error ellipse: s-maj=312.6km s-min=45.8km az=173.0, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RKT** | **Rikitea** | **30.26** | **4** | *e*LR | LR | 06 27 25.6 | |
| | 720nm,23.0s | | | | | | |
| **TBI** | **Tubuai** | **31.37** | **338** | *e*LR | LR | 06 28 07.8 | |
| | 2μm,27.5s | | | | | | |
| TBI | | | | *e*LR | LR | 06 28 20.7 | |
| | 871nm,30.2s | | | | | | |
| **RPN** | **Rapa Nui** | **33.40** | **49** | LR | LR | 06 29 25.9 | |
| | comp=Z,141nm,18.7s,baz=218,slow=30 | | | | | | |
| **URZ** | **Urewera** | **34.55** | **277** | LR | LR | 06 30 53.3 | |
| | comp=Z,180nm,18.1s,baz=217,slow=31 | | | | | | |
| **RAR** | **Rarotonga** | **36.44** | **323** | LR | LR | 06 31 48.8 | |
| | comp=Z,146nm,18.4s,baz=112,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **36.80** | **180** | LR | LR | 06 32 28.1 | |
| | comp=Z,153nm,18.8s,baz=80,slow=32 | | | | | | |
| **PPT2** | **Papeete2** | **36.98** | **340** | *e*LR | LR | 06 30 36.0 | |
| | 200nm,24.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 06 30 43.4 | |
| | 223nm,23.0s | | | | | | |
| **PPT** | **Papeete** | **37.00** | **340** | LR | LR | 06 32 37.7 | |
| | comp=Z,136nm,18.1s,baz=149,slow=32 | | | | | | |
| **PMSA** | **Palmer Station** | **37.11** | **137** | LR | LR | 06 30 50.2 | |
| | comp=Z,229nm,18.7s,baz=260,slow=29 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **44.45** | **356** | *e*LR | LR | 06 34 13.7 | |
| | 188nm,22.1s | | | | | | |
| **H03S2** | **Juan Fernandez** | **45.13** | **89** | T | T | 07 08 27.2 | |
| | baz=222,slow=74,SNR=212 | | | | | | |
| **H03S1** | **Juan Fernandez** | **45.14** | **89** | T | T | 07 08 28.6 | |
| | baz=222,slow=74,SNR=214 | | | | | | |
| **H03S3** | **Juan Fernandez** | **45.15** | **89** | T | T | 07 08 27.7 | |
| | baz=222,slow=74,SNR=285 | | | | | | |
| **H03N3** | **Juan Fernandez** | **45.40** | **88** | T | T | 07 09 02.4 | |
| | baz=226,slow=72,SNR=188 | | | | | | |
| **H03N2** | **Juan Fernandez** | **45.41** | **88** | T | T | 07 08 59.9 | |
| | baz=226,slow=72,SNR=186 | | | | | | |
| **H03N1** | **Juan Fernandez** | **45.42** | **88** | T | T | 07 08 60.0 | |
| | baz=226,slow=72,SNR=126 | | | | | | |
| **PLCA** | **Pas Flores** | **45.55** | **102** | LR | LR | 06 34 53.5 | |
| | comp=Z,89nm,21.3s,baz=225,slow=29 | | | | | | |
| **SNAA** | **Sanae** | **51.19** | **163** | LR | LR | 06 41 05.7 | |
| | comp=Z,65nm,20.8s,baz=50,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **52.58** | **284** | *e*LR | LR | 06 37 55.9 | |
| | 94nm,22.8s | | | | | | |
| **LVC** | **Limon Verde** | **59.32** | **87** | LR | LR | 06 44 22.0 | |
| | comp=Z,47nm,18.4s,baz=210,slow=32 | | | | | | |
| **STKA** | **Stephens Creek** | **60.04** | **256** | LR | LR | 06 44 47.8 | |
| | comp=Z,72nm,19.4s,baz=203,slow=32 | | | | | | |
| **CPUP** | **Villa Florida** | **63.44** | **99** | LR | LR | 06 46 27.3 | |
| | comp=Z,81nm,18.3s,baz=217,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **64.66** | **83** | LR | LR | 06 44 56.9 | |
| | comp=Z,20nm,21.9s,baz=206,slow=30 | | | | | | |
| **ATAH** | **Atahualpa** | **66.04** | **68** | LR | LR | 06 45 48.7 | |
| | comp=Z,63nm,21.3s,baz=218,slow=30 | | | | | | |
| **ASAR** | **Alice Springs** | **70.68** | **256** | P | P | 06 24 15.4 | +0.1 |
| | 1.8nm,0.8s,baz=137,slow=7.2,SNR=18 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **72.60** | **235** | T | T | 07 44 28.5 | |
| | baz=144,slow=76,SNR=30 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **72.61** | **235** | T | T | 07 44 29.2 | |
| | baz=144,slow=76,SNR=32 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **72.62** | **235** | T | T | 07 44 30.0 | |
| | baz=144,slow=76,SNR=22 | | | | | | |
| **WRA** | **Warramunga Arr** | **73.30** | **259** | P | P | 06 24 31.1 | +0.1 |
| | 2.2nm,0.7s,baz=145,slow=5.2,SNR=28 | | | | | | |
| WRA | | | | LR | LR | 06 54 29.6 | |
| | comp=Z,78nm,18.1s,baz=330,slow=34 | | | | | | |
| | 2.2nm,0.7s | | | | | | |
| **BDFB** | **Brasilia** | **77.17** | **99** | LR | LR | 06 55 14.0 | |
| | comp=Z,39nm,18.4s,baz=136,slow=33 | | | | | | |
| **JTS** | **Las Juntas de** | **77.39** | **53** | LR | LR | 06 51 23.0 | |
| | comp=Z,48nm,20.0s,baz=182,slow=30 | | | | | | |
| **ROSC** | **El Rosal** | **78.21** | **65** | LR | LR | 06 52 31.4 | |
| | comp=Z,46nm,21.8s,baz=112,slow=30 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **87.97** | **70** | LR | LR | 06 59 42.2 | |
| | comp=Z,24nm,19.1s,slow=32 | | | | | | |
| **MDP** | **Montagnes des** | **90.85** | **83** | LR | LR | 07 00 42.3 | |
| | comp=Z,22nm,18.8s,baz=169,slow=32 | | | | | | |
| **RCBR** | **Riachuelo** | **92.11** | **103** | LR | LR | 07 03 44.0 | |
| | comp=Z,26nm,19.4s,baz=133,slow=33 | | | | | | |
| **SUR** | **Sutherland** | **92.50** | **162** | LR | LR | 07 04 49.3 | |
| | comp=Z,44nm,18.2s,baz=148,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.90** | **15** | LR | LR | 07 00 19.3 | |
| | comp=Z,43nm,18.6s,baz=266,slow=31 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **95.56** | **11** | LR | LR | 07 02 27.0 | |
| | comp=Z,28nm,18.1s,baz=172,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **96.95** | **165** | LR | LR | 07 04 08.8 | |
| | comp=Z,53nm,19.2s,baz=200,slow=32 | | | | | | |
| **PDAR** | **Pinedale Array** | **98.69** | **20** | LR | LR | 07 03 05.9 | |
| | comp=Z,18nm,20.0s,baz=176,slow=30 | | | | | | |
| **DAV** | **Davao City (W)** | **99.90** | **269** | LR | LR | 07 11 07.7 | |
| | comp=Z,37nm,18.5s,baz=330,slow=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **145.72** | **94** | PKPbc | PKPdf | 06 32 37.0 | -0.5 |
| | 0.9nm,0.8s,baz=225,slow=2.7,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **154.04** | **271** | PKPab | PKPab | 06 33 11.3 | -0.6 |
| | 0.4nm,0.5s,baz=134,slow=4.8,SNR=3.7 | | | | | | |

*NEIC **30** 06:29:25.2±0.8, 35˚.39N±0˚.01×98˚.11W±0˚.02, h5km±3km, mb_Lg2.0/3, ML2.5, ML2.5/32, Error ellipse: s-maj=2.0km s-min=1.5km az=100.0*

**NEIC 30 06:29:24.9±0.5, 35˚.384N±0˚.006×98˚.13W±0˚.02, h5km±1km, Error ellipse: s-maj=2.6km s-min=2.1km az=87.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CSTR** | **Hydro, Custer** | **0.53** | **300** | Pg | Pg | 06 29 35.0 | 0.0 |
| CSTR | | | | Sg | Sb | 06 29 44.1 | -0.6 |
| **OKCSW** | **OKLAHOMA CITY** | **0.57** | **88** | Pg | Pb | 06 29 36.9 | -0.5 |
| OKCSW | | | | IAML | | 06 29 47.2 | |
| | comp=N,188nm,0.4s | | | | | | |
| OKCSW | | | | IAML | | 06 29 53.1 | |
| | comp=E,247nm,0.6s | | | | | | |
| **FNO** | **Franklin** | **0.61** | **102** | Pg | Pg | 06 29 37.2 | +0.6 |
| FNO | | | | IAML | | 06 29 52.1 | |
| | comp=E,128nm,0.3s | | | | | | |
| **OK029** | **Liberty Lake** | **0.69** | **53** | Pg | Pg | 06 29 38.2 | +0.1 |
| OK029 | | | | IAML | | 06 29 48.0 | |
| | comp=E,221nm,0.3s | | | | | | |
| OK029 | | | | IAML | | 06 29 51.0 | |
| | comp=E,247nm,0.5s | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.82** | **163** | | Pg | 06 29 41.1 | +0.5 |
| X34A | | | | IAML | | 06 30 08.7 | |
| | comp=E,132nm,0.8s | | | | | | |
| X34A | | | | IAML | | 06 30 09.9 | |
| | comp=N,147nm,1.1s | | | | | | |
| **WMOK** | **Wichita Mounta** | **0.84** | **220** | | Pg | 06 29 40.9 | -0.2 |
| WMOK | | | | Sg | Sg | 06 29 51.8 | -0.1 |
| **W35A** | **Tecumseh** | **1.05** | **102** | IAmb_Lg | | 06 30 00.4 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **CROK** | **Carrier** | **1.12** | **6** | Pg | Pg | 06 29 46.0 | -0.6 |
| **OK031** | **S. Brethren Rd** | **1.20** | **61** | | Pg | 06 29 47.4 | -0.5 |
| OK031 | | | | IAML | | 06 30 08.6 | |
| | comp=Z,196nm,0.1s | | | | | | |
| **OK038** | **West end E0370** | **1.20** | **336** | | Pb | 06 29 48.1 | -0.1 |
| **OK052** | **Battle Ridge R** | **1.24** | **60** | Pg | Pg | 06 29 48.0 | -0.7 |
| **QUOK** | **Quay** | **1.40** | **55** | Pg | Pn | 06 29 50.6 | -0.5 |
| **DEOK** | **Depew** | **1.41** | **71** | | Pn | 06 29 51.0 | -0.3 |
| **OK048** | **Pawnee Station** | **1.41** | **43** | | Pn | 06 29 51.2 | -0.1 |
| **OK032** | **Salt Plains WL** | **1.42** | **357** | | Pn | 06 29 51.3 | -0.1 |
| **GC02** | **Grant County #** | **1.48** | **8** | | Pn | 06 29 52.2 | 0.0 |
| **KAN14** | **Manchester OK** | **1.58** | **5** | | Pn | 06 29 53.6 | 0.0 |
| **LOOK** | **Love County** | **1.59** | **150** | | Pn | 06 29 53.8 | 0.0 |
| **WTFS** | **Witchita Falls** | **1.64** | **190** | | Pn | 06 29 54.1 | -0.3 |
| **KAN17** | **Caldwell West** | **1.68** | **10** | | Pn | 06 29 54.4 | -0.7 |
| **KAN13** | **South Haven SW** | **1.71** | **18** | | Pn | 06 29 54.7 | -0.7 |
| **KAN05** | **Bluff City Nor** | **1.73** | **7** | Pn | Pn | 06 29 55.6 | -0.1 |
| **SMWD** | **Samnorwood** | **1.75** | **261** | | Pn | 06 29 55.9 | -0.2 |
| **KAN01** | **Argonia South** | **1.79** | **10** | | Pn | 06 29 56.5 | 0.0 |
| **KAN09** | **Caldwell North** | **1.80** | **13** | | Pn | 06 29 57.3 | +0.7 |
| **TUL3** | **Leonard** | **1.98** | **74** | | Pn | 06 29 59.8 | +0.8 |
| **Z35A** | **Perchaven, San** | **2.17** | **160** | Pn | Pn | 06 30 02.2 | +0.4 |
| **X37A** | **Clayton** | **2.40** | **108** | | Pn | 06 30 05.8 | +0.9 |
| **PLPT** | **Palo Pinto** | **2.57** | **183** | | Pn | 06 30 07.3 | 0.0 |
| **RLO** | **Rose Lookout** | **2.64** | **72** | | Pn | 06 30 09.8 | +1.5 |
| **HHAR** | **Hobbs** | **3.52** | **74** | Pn | Pn | 06 30 20.8 | +0.5 |
| **MIAR** | **Mount Ida** | **3.83** | **101** | Pn | Pn | 06 30 25.8 | +1.2 |
| **WHAR** | **Wooly Hollow** | **4.78** | **89** | Pn | Pn | 06 30 38.0 | +0.4 |

*IDC **30** 06:32:02.3±1.2, 0˚.57N×122˚.00E, h0km, mb3.6/4, mbtmp3.6/4, MS3.3/2, Error ellipse: s-maj=199.0km s-min=20.4km az=61.0*

*DJA **30** 06:32:22.6±0.7, 0˚.N±9˚×12˚2E±˚, h138km±8km, M3.4/6, MLv3.4/6*

**ISC 30 06:32:20.5±1.0, 0˚.3N±0˚.1×121˚.66E±0˚.06, h150km, n11, σ1s61/12, mb3.5/4, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **0.33** | **57** | P | **Pn** | **06 32 42.7** | **+1.6** |
| MRSI | | | | S | **Sn** | **06 32 58.3** | **+1.5** |
| **GTOI** | **Gorontalo** | **1.39** | **76** | P | **Pn** | **06 32 49.6** | **+0.7** |
| GTOI | | | | S | **Sn** | **06 33 11.6** | **+1.0** |
| **LUWI** | **Luwuk** | **1.73** | **140** | P | **Pn** | **06 32 54.3** | **+1.8** |
| **MPSI** | **Mapaga** | **1.77** | **271** | P | **Pn** | **06 32 54.8** | **+1.9** |
| **KMSI** | **Cibinong** | **2.33** | **83** | P | **Pn** | **06 33 00.6** | **+1.0** |
| **SGKI** | **Sangatta, Kali** | **4.14** | **259** | P | **Pn** | **06 33 23.3** | **+0.7** |
| **WRA** | **Warramunga Arr** | **23.64** | **149** | P | **P** | **06 37 16.2** | **-2.0** |
| | 0.3nm,0.4s,baz=327,slow=11,SNR=17 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **26.62** | **154** | P | **P** | **06 37 43.6** | **-1.6** |
| | 0.5nm,0.9s,baz=344,slow=15,SNR=5.8 | | | | | | |
| | 0.5nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **27.15** | **111** | LR | LR | 06 51 10.1 | |
| | comp=Z,60nm,19.4s,baz=105,slow=43 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.67** | **329** | P | **P** | **06 41 54.1** | **-1.1** |
| | 0.7nm,0.5s,baz=122,slow=8.7,SNR=11 | | | | | | |
| MKAR | | | | LR | LR | 07 07 20.4 | |
| | comp=Z,26nm,21.9s,baz=192,slow=37 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.05** | **330** | P | **P** | **06 42 23.9** | **-1.0** |
| | 0.6nm,0.4s,baz=136,slow=5.2,SNR=11 | | | | | | |
| | 0.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IMYA | Miami | 1.50 | 36 | Pg | | Pg | 06 45 42.4 | +0.8 |
| TAPT | Tabas- Tapeh t | 1.55 | 262 | Pg | | Pg | 06 45 41.8 | -0.7 |
| AFRZ | Afriz | 1.70 | 180 | Pg | | Pg | 06 45 44.8 | -0.5 |
| IKRD | Kardeh | 1.70 | 14 | Pg | | Pg | 06 45 45.6 | +0.3 |
| SBZV | Sabzevar | 1.70 | 318 | Pg | | Pg | 06 45 44.6 | -0.9 |
| SHRT | Shahrakht | 1.81 | 144 | Pg | | Pb | 06 45 45.5 | -0.6 |
| TKDS | Koohdasht(Taba | 2.18 | 227 | Pn | | Pb | 06 45 51.4 | -0.9 |
| ITEG | Tejag | 2.23 | 186 | Pn | | Pb | 06 45 52.5 | -0.9 |
| TNSJ | Nastanj | 2.30 | 240 | Pn | | Pb | 06 45 52.9 | -1.6 |
| IEMG | Emamgholi | 2.31 | 353 | Pn | | Pb | 06 45 53.9 | -0.7 |
| IDAH | Dahanechah | 2.48 | 163 | Pn | | Pb | 06 45 56.4 | -1.3 |
| IKOO | Kooshah | 2.69 | 180 | Pn | | Pb | 06 45 58.5 | -2.8 |
| TPRV | Parvadeh(Tabas | 2.85 | 223 | Pn | | Pb | 06 46 00.5 | -3.4 |
| BSRN | Basiran | 3.15 | 178 | Pn | | Pn | 06 46 04.3 | +1.7 |
| MRVT | Maraveh tapeh | 3.46 | 318 | Pn | | Pn | 06 46 09.7 | +2.9 |
| IMND | Minoodasht | 3.62 | 307 | Pn | | Pn | 06 46 11.1 | +2.3 |
| IANJ | Anjilo | 4.19 | 276 | Pn | | Pn | 06 46 19.4 | +2.4 |
| IGLO | Ghaloghah | 4.44 | 290 | Pn | | Pn | 06 46 23.4 | +3.0 |
| IBAF | Bafgh | 4.56 | 220 | Pn | | Pn | 06 46 24.8 | +2.8 |
| ANAR | Anarak | 4.79 | 248 | Pn | | Pn | 06 46 27.1 | +1.9 |
| ICHK | Chekchek | 4.80 | 235 | Pn | | Pn | 06 46 27.7 | +2.3 |
| ILAS | Lasjerd | 4.97 | 275 | Pn | | Pn | 06 46 30.5 | +2.8 |
| IFIR | Firoozkooh | 5.15 | 278 | Pn | | Pn | 06 46 32.7 | +2.6 |
| IALA | Alasht | 5.15 | 282 | Pn | | Pn | 06 46 32.9 | +2.6 |
| KHGB | Koh Gabri | 5.20 | 205 | Pn | | Pn | 06 46 33.7 | +2.8 |
| ISAD | Sadrabad | 5.49 | 236 | Pn | | Pn | 06 46 37.4 | +2.6 |
| IPRN | Peran | 5.55 | 284 | Pn | | Pn | 06 46 38.3 | +2.7 |
| ISFB | Sefidab | 5.64 | 264 | Pn | | Pn | 06 46 38.4 | +1.7 |
| IDMV | Damavand | 5.73 | 277 | Pn | | Pn | 06 46 40.8 | +2.6 |
| KRSH | Karshahi | 5.80 | 260 | Pn | | Pn | 06 46 41.3 | +2.3 |
| IVRN | Varamin | 5.98 | 271 | Pn | | Pn | 06 46 43.4 | +1.9 |
| IZEF | Zefreh | 5.99 | 250 | Pn | | Pn | 06 46 43.8 | +2.1 |
| KBAM | BAM | 5.99 | 185 | Pn | | Pn | 06 46 44.3 | +2.6 |
| MZPU | Pul - Mazandar | 6.20 | 284 | Pn | | Pn | 06 46 47.8 | +3.3 |
| IKLH | Kolahrood | 6.42 | 256 | Pn | | Pn | 06 46 50.2 | +2.5 |
| QAMS | Qamsar | 6.45 | 260 | Pn | | Pn | 06 46 50.1 | +2.0 |
| IRAM | Ramesheh | 6.46 | 241 | Pn | | Pn | 06 46 50.2 | +2.0 |
| KLST | Kelardasht - M | 6.62 | 284 | Pn | | Pn | 06 46 53.3 | +2.9 |
| AKTO | Aktyubinsk | 15.32 | 358 | Pn | | Pn | 06 48 47.8 | -1.3 |
| | 0.3nm,0.3s,baz=160,slow=11,SNR=2.6 | | | | | | | |
| AKTO | | | | | Sn | Sn | 06 51 28.1 | -11 |
| | 0.3nm,0.3s,baz=90,slow=2.0,SNR=1.8 | | | | | | | |
| | 1.2nm,0.5s | | | | | | | |
| BVAR | Borovoye Array | 19.63 | 21 | P | | Pn | 06 49 43.3 | +0.6 |
| | 0.1nm,0.3s,baz=203,slow=10.0,SNR=10.0 | | | | | | | |
| | 2.2nm,0.6s | | | | | | | |
| BRTR | Keskin Array B | 20.65 | 290 | P | | Pn | 06 49 53.2 | -1.7 |
| | 0.8nm,0.8s,baz=96,slow=12,SNR=2.9 | | | | | | | |
| | 0.8nm,0.8s | | | | | | | |
| KURBB | Kurchatov Arra | 20.98 | 36 | P | | Pn | 06 49 58.5 | -0.1 |
| | 1.0nm,0.9s,baz=236,slow=10,SNR=6.6 | | | | | | | |
| | 1.0nm,0.9s | | | | | | | |
| MKAR | Makanchi Array | 21.00 | 49 | P | | P | 06 50 00.9 | +4.6 |
| | 0.4nm,0.7s,baz=236,slow=10,SNR=3.6 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| ARU | Arti | 21.31 | 359 | P | | P | 06 49 59.0 | -0.5 |
| | 3.8nm,0.4s,baz=186,slow=3.7,SNR=7.9 | | | | | | | |
| | 3.8nm,0.4s | | | | | | | |
| NOA | NORSAR Array B | 39.80 | 326 | LR | | LR | 07 12 08.6 | |
| | comp=Z,8.2nm,18.5s,baz=330,slow=41 | | | | | | | |
| TORD | Torodi Ar. Bea | 55.91 | 262 | P | | P | 06 54 51.6 | +0.4 |
| | 0.2nm,0.5s,baz=55,slow=5.8,SNR=2.0 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |

*BJI **30** 06:59:13.1±0.0,37.°54N×71.°77E,h120km,mb4.5/23, mB4.6/7*
*MOS **30** 06:59:13.7±0.9,37.°42N×71.°90E,h121km,mb4.1/7,Error ellipse: s-maj=9.8km s-min=4.4km az=79.8*
*IDC **30** 06:59:14.3±3.2,37.°39N×71.°88E,h113km±28km,mb3.6/16, mbtmp4.2/21,Error ellipse: s-maj=20.3km s-min=12.5km az=15.0*
*NEIC **30** 06:59:14.6±1.5,37.°38N±0.°07×71.°80E±0.°10,h117km±8km, mb4.3/5,Error ellipse: s-maj=11.6km s-min=9.3km az=56.0*
*NNC **30** 06:59:18.8±1.1,37.°82N×71.°86E,h192km±14km,mb3.7, mpv4.7,Error ellipse: s-maj=11.2km s-min=6.3km az=19.0*

**ISC 30 06:59:15.4±0.5,37.°35N±0.°05×71.°95E±0.°05,h130km,n137, σ2°37/140,mb4.0/26,8C-6D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| GAR | Garm | 2.09 | 322 | | | Pn | 06 59 48.1 | -2.4 |
| GAR | | | | Sn | | Sn | 07 00 12.7 | -4.8 |
| DRK | Karamyk | 2.13 | 357 | | | Pn | 06 59 50.1 | -1.0 |
| DRK | Karamyk | 2.13 | 357 | PN | | Pn | 06 59 50.1 | -1.0 |
| CHGR | Chuyangaron | 2.56 | 301 | | | Pn | 06 59 53.1 | -3.2 |
| CHGR | Chuyangaron | 2.56 | 301 | PN | | Pn | 06 59 53.2 | -3.2 |
| SIMJ | Simiganj | 2.67 | 300 | | | Pn | 06 59 54.6 | -3.2 |
| BTK | Batken | 2.84 | 342 | | | Pn | 06 59 59.2 | -0.8 |
| BTK | Batken | 2.84 | 342 | PN | | Pn | 06 59 59.2 | -0.8 |
| OHH | Osh | 3.23 | 11 | PN | | Pn | 07 00 04.4 | -0.6 |
| KSH | Kashi | 3.83 | 54 | P | | Pn | 07 00 08.0 | -4.9 |
| KSH | | | | S | | Sn | 07 00 48.0 | -9.5 |
| KSH | | | | smax | | smax | | |
| | comp=N,2μm,0.5s | | | | | | | |
| KSH | | | | smax | | smax | | |
| | comp=E,980nm,0.5s | | | | | | | |
| NIL | Nilore | 3.84 | 164 | | | Pn | 07 00 13.4 | +0.3 |
| NIL | Nilore | 3.84 | 164 | PN | | Pn | 07 00 13.4 | +0.3 |
| TRKS | Terek-Say | 4.22 | 352 | PN | | Pn | 07 00 14.4 | -2.7 |
| ARK | Arkit | 4.44 | 0 | PN | | Pn | 07 00 18.8 | -2.2 |
| ARLS | Aral | 4.86 | 21 | PN | | Pn | 07 00 25.2 | -1.5 |
| AML | Almayashu | 4.96 | 15 | P | | Pn | 07 00 27.1 | -1.0 |
| | SNR=138 | | | | | | | |
| NRN | Naryn | 5.14 | 36 | | | Pn | 07 00 28.9 | -1.7 |
| NRN | Naryn | 5.14 | 36 | PN | | Pn | 07 00 28.9 | -1.7 |
| JMU | Jammu | 5.22 | 152 | *e*S | | Sn | 07 01 26.0 | -4.6 |
| JMU | | | | IAML | | | 07 01 28.4 | |
| | comp=E,486nm,0.6s | | | | | | | |
| UCH | Uchtor | 5.25 | 21 | P | | Pn | 07 00 31.4 | -0.8 |
| | SNR=14 | | | | | | | |
| EKS2 | Erkin-Say | 5.48 | 14 | P | | Pn | 07 00 34.3 | -0.7 |
| | SNR=102 | | | | | | | |
| AAK | Ala-Archa | 5.63 | 20 | P | | Pn | 07 00 36.1 | -0.8 |
| | SNR=108 | | | | | | | |
| AAK | Ala-Archa | 5.63 | 20 | | | Pn | 07 00 36.3 | -0.6 |
| AAK | Ala-Archa | 5.63 | 20 | P | | Pn | 07 00 36.7 | -0.2 |
| | comp=E,178nm,0.3s,baz=179,slow=6.4,SNR=251 | | | | | | | |
| AAK | | | | S | | Sn | 07 01 38.3 | -2.3 |
| | comp=E,34nm,0.4s,baz=320,slow=21,SNR=6.6 | | | | | | | |
| AAK | Ala-Archa | 5.63 | 20 | ⇑P | | Pn | 07 00 36.4 | -0.6 |
| | comp=E,110nm,0.4s | | | | | | | |
| AAK | | | | ⇑S | | Sn | 07 01 37.8 | -2.8 |
| | comp=E,63nm,0.6s | | | | | | | |
| AAK | Ala-Archa | 5.63 | 20 | *ce*PN | | Pn | 07 00 36.3 | -0.6 |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,84nm,0.4s | | | | | | | |
| KBK | Karagaybulak | 5.77 | 23 | P | | Pn | 07 00 38.6 | -0.3 |
| | SNR=25 | | | | | | | |
| THN | Thein Dam | 5.80 | 147 | *e*P | | Pn | 07 00 39.3 | +0.1 |
| THN | | | | *e*S | | Sn | 07 01 40.5 | -4.1 |
| THN | | | | IAML | | | 07 01 43.3 | |
| | comp=N,210nm,0.7s | | | | | | | |
| THN | | | | IAML | | | 07 01 47.7 | |
| | comp=E,236nm,0.4s | | | | | | | |
| FRU1 | Bishkek | 5.82 | 20 | | | Pn | 07 00 39.4 | -0.1 |
| FRU1 | Bishkek | 5.82 | 20 | PN | | Pn | 07 00 39.4 | -0.1 |
| KK31 | Karatay Array | 5.85 | 350 | P | | Pn | 07 00 37.9 | -1.9 |
| | comp=E,88nm,0.4s,baz=173,slow=12,SNR=866 | | | | | | | |
| KK31 | | | | ⇑S | | Sn | 07 01 40.1 | -5.6 |
| | comp=E,35nm,0.4s,baz=163,slow=22,SNR=9.5 | | | | | | | |
| KK31 | Karatay Array | 5.85 | 350 | PN | | Pn | 07 00 37.9 | -1.9 |
| KKAR | Karatay Array | 5.85 | 350 | Pn | | Pn | 07 00 37.9 | -1.9 |
| KKAR | Karatay Array | 5.85 | 350 | PN | | Pn | 07 00 37.9 | -1.9 |
| BRLS | Boroldaу | 5.90 | 345 | Pg | | Pn | 07 00 35.2 | -5.2 |
| | comp=E,51nm,0.5s | | | | | | | |
| BRLS | | | | Lg | | Lg | 07 01 34.4 | |
| | comp=E,145nm,0.8s | | | | | | | |
| ULHL | Ulahol | 5.90 | 33 | P | | Pn | 07 00 39.7 | -0.9 |
| | SNR=13 | | | | | | | |
| BOOM | Boomskoye usch | 5.98 | 30 | | | Pn | 07 00 40.9 | -0.8 |
| BOOM | Boomskoye usch | 5.98 | 30 | PN | | Pn | 07 00 40.9 | -0.8 |
| CHMS | Chumysh | 6.03 | 20 | P | | Pn | 07 00 41.6 | -0.6 |
| | SNR=81 | | | | | | | |
| CHMS | Chumysh | 6.03 | 20 | ⇑P | | Pn | 07 00 41.5 | -0.8 |
| | comp=E,129nm,0.4s | | | | | | | |
| CHMS | | | | ⇓S | | Sn | 07 01 45.9 | -4.2 |
| | comp=E,35nm,0.6s | | | | | | | |
| CHMS | Chumysh | 6.03 | 20 | PN | | Pn | 07 00 41.5 | -0.8 |
| USP | Ospenovka | 6.22 | 17 | P | | Pn | 07 00 43.5 | -1.3 |
| | SNR=81 | | | | | | | |
| DHRM | DHARAMSHALA | 6.22 | 144 | *e*P | | Pn | 07 00 43.7 | -1.4 |
| DHRM | | | | *e*S | | Sn | 07 01 49.8 | -5.3 |
| DHRM | | | | IAML | | | 07 01 55.2 | |
| | comp=E,969nm,0.3s | | | | | | | |
| DHRM | | | | IAML | | | 07 01 56.0 | |
| | comp=N,601nm,0.2s | | | | | | | |
| TKM2 | Tokmak 2 | 6.22 | 26 | P | | Pn | 07 00 44.2 | -0.7 |
| | SNR=64 | | | | | | | |
| TKM2 | Tokmak 2 | 6.22 | 26 | ⇑P | | Pn | 07 00 44.1 | -0.9 |
| | comp=N,72nm,0.6s | | | | | | | |
| TKM2 | Tokmak 2 | 6.22 | 26 | PN | | Pn | 07 00 44.8 | -0.2 |
| TARG | Taragay, Kyrgy | 6.29 | 44 | | | Pn | 07 00 46.0 | -0.1 |
| TARG | Taragay, Kyrgy | 6.29 | 44 | PN | | Pn | 07 00 46.0 | -0.1 |
| DGS | Degeres | 6.57 | 25 | P | | Pn | 07 00 48.4 | -1.1 |
| | comp=N,64nm,0.8s | | | | | | | |
| IZV | Izvestkoviy | 6.70 | 31 | P | | Pn | 07 00 50.0 | -1.5 |
| MTBS | Maitube | 6.71 | 29 | P | | Pn | 07 00 51.1 | -0.3 |
| | comp=N,11nm,0.3s | | | | | | | |
| TNSS | Tian-Shan | 6.84 | 32 | P | | Pn | 07 00 52.4 | -1.1 |
| | comp=N,10nm,0.6s | | | | | | | |
| KRBS | Karabastau | 6.94 | 23 | P | | Pn | 07 00 53.1 | -1.4 |
| | comp=N,52nm,0.5s | | | | | | | |
| BHK | Bhakra | 6.98 | 147 | *e*P | | Pn | 07 00 54.4 | -0.6 |
| BHK | | | | *e*S | | Sn | 07 02 06.4 | -6.6 |
| BHK | | | | *e*S | | | 07 02 06.8 | |
| MDOK | Medeo | 6.99 | 32 | PN | | Pn | 07 00 53.5 | -1.8 |
| KOTS | Kotyrbulak | 7.07 | 32 | P | | Pn | 07 00 55.4 | -1.0 |
| | comp=N,44nm,0.4s | | | | | | | |
| PRZ | Przheval'sk | 7.13 | 42 | | | Pn | 07 00 57.2 | +0.1 |
| PRZ | Przheval'sk | 7.13 | 42 | PN | | Pn | 07 00 57.2 | +0.1 |
| KTBS | Karatobe | 7.30 | 28 | P | | Pn | 07 00 57.5 | -1.9 |
| | comp=N,15nm,0.6s | | | | | | | |
| KUU | Kurty | 7.33 | 26 | P | | Pn | 07 00 58.0 | -1.8 |
| | comp=N,5.2nm,0.0s | | | | | | | |
| CHKK | Chushkaly | 7.54 | 29 | P | | Pn | 07 01 01.7 | -0.8 |
| | comp=N,37nm,0.6s | | | | | | | |
| SMLA | Simla | 7.56 | 144 | *e*P | | Pn | 07 01 01.1 | -1.8 |
| SMLA | | | | *e*S | | Sn | 07 02 18.7 | -8.4 |
| SMLA | | | | *e*S | | | 07 02 18.9 | |
| SMLA | | | | IAML | | | 07 02 23.4 | |
| | comp=N,161nm,0.3s | | | | | | | |
| SMLA | | | | IAML | | | 07 02 23.9 | |
| | comp=E,224nm,0.6s | | | | | | | |
| KURS | Kuram | 7.75 | 36 | P | | Pn | 07 01 04.6 | -0.8 |
| | comp=E,18nm,1.0s | | | | | | | |
| KLP | Kalpa | 7.79 | 136 | *e*P | | Pn | 07 01 02.9 | -3.4 |
| KLP | | | | *e*S | | Sn | 07 02 24.8 | -8.4 |
| KLP | | | | IAML | | | 07 02 36.0 | |
| | comp=E,216nm,0.3s | | | | | | | |
| KLP | | | | IAML | | | 07 02 37.3 | |
| | comp=N,299nm,0.8s | | | | | | | |
| BTLS | Baital | 7.84 | 11 | P | | Pn | 07 01 04.5 | -2.0 |
| | comp=N,61nm,0.4s | | | | | | | |
| UZB | Uzynbulak | 7.92 | 41 | P | | Pn | 07 01 06.5 | -1.3 |
| | comp=N,7.5nm,0.6s | | | | | | | |
| KPKS | Kokpek | 7.98 | 38 | P | | Pn | 07 01 07.4 | -1.1 |
| | comp=N,26nm,0.7s | | | | | | | |
| SHLS | Shalkode | 8.16 | 42 | P | | Pn | 07 01 13.1 | +2.2 |
| | comp=N,24nm,0.7s | | | | | | | |
| ARXS | Arharly | 8.17 | 31 | P | | Pn | 07 01 09.2 | -2.0 |
| | comp=N,24nm,0.7s | | | | | | | |
| ARXS | Arharly | 8.17 | 31 | *e*PN | | Pn | 07 01 09.1 | -2.0 |
| BLB | Baldybastay | 8.36 | 34 | P | | Pn | 07 01 11.6 | -2.1 |
| | comp=N,36nm,0.6s | | | | | | | |
| KNOS | Konyrlen | 8.88 | 36 | P | | Pn | 07 01 19.2 | -1.6 |
| | comp=N,8.7nm,1.0s | | | | | | | |
| DJR | Jarkent | 9.15 | 38 | P | | Pn | 07 01 22.5 | -1.8 |
| | comp=N,5.3nm,0.3s | | | | | | | |
| JOSI | Joshimath | 9.26 | 135 | *e*S | | Sn | 07 02 58.5 | -10 |
| KUDL | Kundal | 9.94 | 156 | *e*P | | Pn | 07 01 31.5 | -3.4 |
| KUDL | | | | *e*S | | Sn | 07 03 13.9 | -11 |
| KUDL | | | | *e*S | | | 07 03 14.7 | |
| KUDL | | | | IAML | | | 07 03 15.9 | |
| | comp=E,38nm,0.5s | | | | | | | |
| KUDL | | | | IAML | | | 07 03 19.7 | |
| | comp=N,40nm,0.5s | | | | | | | |
| PTH | Pithoragarh | 10.40 | 136 | *e*P | | Pn | 07 01 37.7 | -3.5 |
| PTH | | | | *e*S | | Sn | 07 03 26.5 | -10 |
| LGTI | Lohaghat | 10.49 | 136 | *e*S | | Sn | 07 03 23.8 | -14 |
| AJM | Ajmer | 11.08 | 167 | *e*P | | Pn | 07 01 47.8 | -2.4 |
| MAKZ | Makanchi | 12.02 | 35 | | | Pn | 07 02 00.5 | -1.9 |
| MAKZ | Makanchi | 12.02 | 35 | ⇓P | | Pn | 07 01 59.3 | -3.1 |
| | comp=N,24nm,1.5s | | | | | | | |
| MAKZ | Makanchi | 12.02 | 35 | P | | Pn | 07 02 00.5 | -1.9 |
| MK31 | Makanchi Array | 12.15 | 36 | ⇑P | | Pn | 07 02 02.4 | -1.8 |
| | comp=N,12nm,0.9s,baz=217,slow=14,SNR=57 | | | | | | | |
| MK31 | Makanchi Array | 12.15 | 36 | *i* P | | Pn | 07 02 03.2 | -0.9 |
| MKAR | Makanchi Array | 12.15 | 36 | P | | Pn | 07 02 02.8 | -1.3 |
| | comp=N,9.4nm,0.9s,baz=222,slow=12,SNR=55 | | | | | | | |
| WMQ | Urumqi | 13.59 | 57 | *e*P | | Pn | 07 02 25.0 | +2.2 |
| WMQ | | | | pmax | | pmax | | |
| | comp=N,13nm,0.6s | | | | | | | |
| KURBB | Kurchatov Arra | 14.08 | 17 | P | | Pn | 07 02 24.8 | -4.0 |
| | comp=N,5.6nm,1.0s,baz=208,slow=12,SNR=29 | | | | | | | |
| KURBB | Kurchatov Arra | 14.08 | 17 | ⇓P | | Pn | 07 02 24.2 | -4.6 |
| | comp=N,14nm,0.9s | | | | | | | |
| KURBB | Kurchatov Arra | 14.08 | 17 | P | | Pn | 07 02 24.2 | -4.6 |
| KURK | Kurchatov | 14.18 | 18 | | | Pn | 07 02 26.3 | -3.9 |
| KURK | Kurchatov | 14.18 | 18 | ⇓P | | Pn | 07 02 25.7 | -4.5 |
| | comp=N,13nm,0.9s | | | | | | | |
| KURK | Kurchatov | 14.18 | 18 | *i* P | | Pn | 07 02 25.2 | -5.0 |
| AB31 | Akbulak array | 14.74 | 328 | ⇓P | | Pn | 07 02 32.9 | -4.3 |
| | comp=N,2.6nm,0.5s,baz=143,slow=12,SNR=108 | | | | | | | |
| AB31 | Akbulak array | 14.74 | 328 | P | | Pn | 07 02 32.9 | -4.3 |
| ABKAR | Akbulak array | 14.74 | 328 | | | Pn | 07 02 33.4 | -3.8 |
| BVAR | Borovoye Array | 15.71 | 357 | P | | Pn | 07 02 46.7 | -2.6 |
| | comp=N,3.8nm,0.4s,baz=159,slow=13,SNR=30 | | | | | | | |
| BVAR | | | | S | | Sn | 07 05 41.5 | -2.0 |
| | comp=N,1.0nm,0.6s,baz=181,slow=17,SNR=2.3 | | | | | | | |
| BRVK | Borovoye | 15.75 | 356 | | | Pn | 07 02 47.0 | -2.8 |
| BRVK | | | | IAmb | | IAmb | 07 02 51.9 | |
| | comp=Z,12nm,0.9s | | | | | | | |
| BRVK | Borovoye | 15.75 | 356 | ⇓P | | Pn | 07 02 45.7 | -4.1 |
| | comp=Z,20nm,1.4s | | | | | | | |
| BRVK | Borovoye | 15.75 | 356 | *i* P | | Pn | 07 02 46.8 | -3.0 |
| AKTO | Aktyubinsk | 16.45 | 327 | P | | Pn | 07 02 57.3 | -1.1 |
| | comp=Z,20nm,0.7s,baz=132,slow=9.6,SNR=17 | | | | | | | |
| AKTO | | | | S | | Sn | 07 05 43.2 | -18 |
| | comp=Z,9.4nm,0.9s,baz=148,slow=11,SNR=4.4 | | | | | | | |
| DGZ | Jazzator, Alta | 16.64 | 37 | *i* P | | Pn | 07 02 58.8 | -2.1 |
| LSA | Lhasa | 17.72 | 110 | P | | Pn | 07 03 15.5 | +1.1 |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | | |
| GOMU | GeErMu | 18.35 | 87 | P | | Pn | 07 03 23.0 | +1.2 |
| GOMU | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| ZALV | Zalesovo Beam | 18.82 | 24 | P | | P | 07 03 25.0 | +0.2 |
| | comp=Z,9.1nm,0.6s,baz=221,slow=11,SNR=29 | | | | | | | |
| ZALV | Zalesovo Beam | 18.82 | 24 | *i* P | | P | 07 03 24.6 | -0.2 |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| SHL | Shillong | 20.62 | 119 | P | | P | 07 03 45.4 | +0.7 |
| SHL | | | | IAmb | | IAmb | 07 03 46.1 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| SHL | Shillong | 20.62 | 119 | P | | P | 07 03 45.4 | +0.7 |
| SHL | | | | pmax | | pmax | | |
| | comp=Z,23nm,1.2s | | | | | | | |
| ARU | Arti | 21.09 | 339 | P | | P | 07 03 48.9 | -0.3 |
| ARU | Arti | 21.09 | 339 | P | | P | 07 03 49.3 | +0.1 |
| | comp=Z,3.7nm,0.5s,baz=165,slow=8.1,SNR=6.3 | | | | | | | |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| ARU | Arti | 21.09 | 339 | *ce*P | | P | 07 03 49.0 | -0.2 |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | | |
| GNI | Garni | 21.37 | 286 | *i* P | | P | 07 03 59.5 | +6.9 |
| GNI | | | | pmax | | pmax | | |
| | comp=Z,29nm,1.8s | | | | | | | |
| GTA | Gaotai | 21.91 | 76 | P | | P | 07 04 01.0 | +2.8 |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.6s | | | | | | | |
| NCK | Nalchik | 22.38 | 295 | *i* P | | P | 07 04 09.0 | +6.2 |
| NCK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| KNGR | Kungurtug, Tuv | 22.53 | 46 | *i* P | | P | 07 04 06.1 | +1.7 |
| KNGR | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| BELG | Belogornoye | 22.72 | 319 | *i* P | | P | 07 04 07.2 | +1.2 |
| BELG | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| SHA1 | Shidzhatmaz | 23.08 | 295 | *i* P | | P | 07 04 15.7 | +5.9 |
| KIV | Kislovodsk | 23.08 | 296 | *e*P | | P | 07 04 16.4 | +6.7 |
| KIV | | | | *e*S | | S | 07 08 16.0 | +5.3 |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| TNCH | TengChong | 25.74 | 111 | *e*P | | P | 07 04 38.3 | +4.2 |
| TNCH | | | | pP | | pP | 07 05 01.5 | -1.7 |
| TNCH | | | | pmax | | pmax | | |
| | comp=Z,68nm,0.9s | | | | | | | |
| SONM | Songino Array | 27.23 | 56 | P | | P | 07 04 48.6 | +1.5 |
| | comp=Z,0.8nm,0.6s,baz=250,slow=9.5,SNR=4.9 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |
| PZH | PanZhiHua | 27.39 | 105 | P | | P | 07 04 51.3 | +2.5 |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,90nm,4.2s | | | | | | | |
| CMAR | Chiang Mai Arr | 30.22 | 121 | P | | P | 07 05 16.1 | +2.3 |
| | comp=Z,1.2nm,0.3s,baz=306,slow=7.9,SNR=4.3 | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| HHC | Hu-ho-hao-te | 30.76 | 71 | *e*P | | P | 07 05 20.0 | +1.6 |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,50nm,4.0s | | | | | | | |
| AKASG | Malin Array Be | 33.02 | 308 | P | | P | 07 05 39.4 | +1.5 |
| | comp=Z,0.2nm,0.3s,baz=78,slow=6.8,SNR=4.1 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| TIA | Tai'an | 35.94 | 78 | P | | P | 07 06 05.5 | +2.2 |
| TIA | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| FINES | FINESS Array B | 37.21 | 325 | P | | P | 07 06 13.9 | +0.2 |
| | comp=Z,0.9nm,0.3s,baz=118,slow=11,SNR=12 | | | | | | | |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| FINES | FINESS Array B | 37.21 | 325 | *i* P | | P | 07 06 14.3 | +0.6 |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| ARCES | ARCESS Array B | 40.65 | 337 | P | | P | 07 06 42.8 | +0.5 |
| | comp=Z,2.4nm,0.9s,baz=101,slow=6.4,SNR=5.1 | | | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| HEH | HeiHe | 41.13 | 54 | *e*P | | P | 07 06 48.0 | +1.6 |
| HEH | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| HFS | Hagfors | 42.87 | 321 | P | | P | 07 07 00.5 | +0.1 |
| | comp=Z,2.3nm,0.6s,baz=98,slow=11,SNR=10 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| KSRS | Korea Array | 43.89 | 72 | P | | P | 07 07 10.2 | +1.3 |
| | comp=Z,0.9nm,0.6s,baz=271,slow=8.4,SNR=4.5 | | | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | | | |
| KLR | Kul'dur | 44.03 | 55 | P | | P | 07 07 10.8 | +1.0 |
| | comp=Z,1.1nm,0.5s,baz=314,slow=8.2,SNR=4.7 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| USRK | Ussuriysk Ar. | 45.09 | 62 | P | | P | 07 07 19.3 | +1.0 |
| | comp=Z,2.0nm,0.8s,baz=325,slow=9.3,SNR=4.9 | | | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| KMBO | Kilima Mbogo | 49.97 | 228 | P | | P | 07 07 57.4 | +0.8 |
| | comp=Z,1.3nm,0.3s,baz=60,slow=8.1,SNR=3.6 | | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | | |
| MJAR | Matsushiro Arr | 51.94 | 69 | P | | P | 07 08 11.4 | +0.5 |
| | comp=Z,2.0nm,0.7s,baz=290,slow=11,SNR=5.2 | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| ESDC | Sonseca Array | 57.73 | 298 | P | | P | 07 08 52.4 | -0.2 |
| | comp=Z,0.9nm,0.7s,baz=65,slow=7.6,SNR=5.0 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| TORD | Torodi Ar. Bea | 66.50 | 269 | P | | P | 07 09 50.5 | -0.8 |
| | comp=Z,0.6nm,0.9s,baz=34,slow=6.8,SNR=4.1 | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | |
| YKA | Yellowknife Ar | 80.36 | 3 | P | | P | 07 11 12.4 | +0.7 |
| | comp=Z,1.9nm,0.7s,baz=351,slow=6.2,SNR=15 | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | |
| WRA | Warramunga Arr | 81.80 | 123 | P | | P | 07 11 20.2 | +0.2 |
| | comp=Z,0.8nm,0.6s,baz=323,slow=5.0,SNR=9.0 | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | |

**IDC 30 06:59:22.9±2.8,54.°14N×86.°45E,h0km,mbtmp3.0/2, ML2.7/2,Error ellipse: s-maj=23.8km s-min=14.6km az=52.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| I46RU | ZALESOVO INFRA | 0.98 | 260 | I | | I | 07 05 40.0 | |
| | baz=79,slow=316,SNR=0.7 | | | | | | | |
| ZALV | Zalesovo Beam | 0.98 | 259 | Pg | | Pg | 06 59 40.4 | -1.3 |
| | 1.0nm,0.3s,baz=77,slow=16,SNR=9.7 | | | | | | | |
| ZALV | | | | Lg | | Lg | 06 59 55.8 | |
| | 1.2nm,0.3s,baz=79,slow=26,SNR=6.2 | | | | | | | |
| KURBB | Kurchatov Arra | 5.99 | 237 | Pn | | Pn | 07 00 53.8 | +1.0 |
| | 0.1nm,0.3s,baz=54,slow=13,SNR=12 | | | | | | | |
| | 0.9nm,0.5s | | | | | | | |
| MKAR | Makanchi Array | 7.82 | 202 | Pn | | Pn | 07 01 18.7 | +0.8 |
| | 0.1nm,0.3s,baz=25,slow=14,SNR=5.8 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |

*NIED **30** 07:00:04.6,40.°16N×142.°41E,h34km,MW3.9,Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$5.97; $M_{θθ}$-0.38; $M_{φφ}$-5.59; $M_{rθ}$3.10; $M_{rφ}$-0.66; $M_{θφ}$5.85; Fault plane solution: $M_0$8.80000×$10^{14}$ NP1:φ22.00000°, δ70.00000°, λ100.00000°. NP2:φ176.00000°, δ22.00000°, λ65.00000°.*
*JMA **30** 07:00:04.6±0.1,40.°2N±0.°3×142.°4E±0.°7,h34km±1km, MV3.9/40,NE OFF IWATE PREF*
*IDC **30** 07:00:07.9±2.6,40.°10N×142.°48E,h78km±22km,mb3.6/9, mbtmp3.9/12,MS2.9/7,Error ellipse: s-maj=28.4km s-min=21.9km az=106.0*

**ISC 30 07:00:04.9±1.3,40.°16N±0.°04×142.°37E±0.°08,h41km±12km, n35,σ1°39/35,mb3.7/9,MS3.1/3,14D,Near east coast of e

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KURBB | **Kurchatov Arra** | **44.73** | **306** | P | | **P** | **07 08 13.8** | **0.0** |
| | 3.1nm,0.6s,baz=82,slow=8.6,SNR=11 | | | | | | | |
| | 3.1nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **46.47** | **34** | P | | **P** | **07 08 27.8** | **+0.3** |
| | 0.4nm,0.8s,baz=268,slow=5.7,SNR=4.8 | | | | | | | |
| | 0.4nm,0.8s | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.07** | **311** | P | | **P** | **07 08 48.1** | **+0.4** |
| | 2.0nm,0.5s,baz=76,slow=11,SNR=6.1 | | | | | | | |
| | 2.0nm,0.5s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **57.17** | **311** | P | | **P** | **07 09 46.8** | **-0.6** |
| | 2.2nm,0.7s,baz=61,slow=10,SNR=2.3 | | | | | | | |
| | 2.2nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.26** | **189** | P | | **P** | **07 10 07.3** | **-1.7** |
| | 0.3nm,0.6s,baz=4.9,slow=6.9,SNR=2.2 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| ARCES | **ARCESS Array B** | **61.34** | **339** | LR | | LR | 07 41 06.6 | |
| | comp=Z,16nm,18.4s,baz=175,slow=40 | | | | | | | |
| **HFS** | **Hagfors** | **71.55** | **336** | P | | **P** | **07 11 19.6** | **-1.7** |
| | 1.3nm,0.6s,baz=61,slow=12,SNR=2.3 | | | | | | | |
| | 1.3nm,0.6s | | | | | | | |
| **NOA** | **NORSAR Array B** | **71.59** | **337** | LR | | LR | 07 46 38.1 | |
| | comp=Z,4.9nm,18.2s,baz=235,slow=39 | | | | | | | |
| AKASG | **Malin Array Be** | **72.29** | **322** | P | | **P** | **07 11 25.1** | **-0.7** |
| | 0.3nm,0.3s,baz=46,slow=6.5,SNR=5.4 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |

*IDC **30** 07:01:55.5±1.0,22°.10S×169°.80E, h0km, mb4.0/7, mbtmp4.0/8, ML3.5/1, MS3.4/4, Error ellipse: s-maj=35.1km s-min=24.0km az=168.0*
*NOU **30** 07:01:56.9,22°.05S×169°.72E, h0km, MLv4.0/10, Southeast of Loyalty Islands*
*NEIC **30** 07:01:56.1±0.9,21°.95S±0°.10×169°.8E±0°.1, h10km±1km, mb4.5/9, Error ellipse: s-maj=19.3km s-min=16.6km az=85.0*

**ISC 30 07:01:59.3±0.6, 22°.04S±0°.08×169°.70E±0°.07, h25km, n38, σ1♀00/38, mb4.0/11, MS3.3/3, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | **1.64** | **289** | P | | **Pn** | **07 02 26.4** | **-0.2** |
| PINNC | **Pines Island,** | **2.16** | **254** | P | | **Pn** | **07 02 34.1** | **+0.4** |
| PINNC | **Pines Island,** | **2.16** | **254** | | | **Pn** | **07 02 33.5** | **-0.2** |
| YATNC | **Mamie plateau,** | **2.61** | **269** | P | | **Pn** | **07 02 39.9** | **+0.1** |
| LIFNC | **LIFOU** | **2.61** | **298** | P | | **Pn** | **07 02 40.6** | **+0.7** |
| LIFNC | **LIFOU** | **2.61** | **298** | | | **Pn** | **07 02 38.6** | **-1.2** |
| **DZM** | **Mont Dzumac** | **3.02** | **269** | P | | **Pn** | **07 02 46.3** | **+0.7** |
| **DZM** | **Mont Dzumac** | **3.02** | **269** | | | **Pn** | **07 02 46.1** | **+0.5** |
| **DZM** | **Mont Dzumac** | **3.02** | **269** | Pn | | **Pn** | **07 02 46.4** | **+0.8** |
| | 6.3nm,0.3s,baz=126,slow=13,SNR=100 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **07 03 22.4** | **+1.4** |
| | 5.8nm,0.3s,baz=81,slow=21,SNR=7.7 | | | | | | | |
| | 12nm,0.3s | | | | | | | |
| ONTNC | **Ouen Toro** | **3.02** | **264** | P | | **Pn** | **07 02 45.9** | **+0.4** |
| ONTNC | **Ouen Toro** | **3.02** | **264** | | | **Pn** | **07 02 45.2** | **-0.3** |
| NOUC | **Port Laguerre** | **3.15** | **269** | P | | **Pn** | **07 02 48.0** | **+0.7** |
| **RTV** | **Rentapao** | **4.39** | **344** | P | | **Pn** | **07 03 04.9** | **+0.5** |
| KOUNC | **Koumac, New Ca** | **5.26** | **285** | P | | **Pn** | **07 03 17.8** | **+1.5** |
| KOUNC | **Koumac, New Ca** | **5.26** | **285** | | | **Pn** | **07 03 16.7** | **+0.4** |
| **MSVF** | **Nonsavu** | **8.95** | **63** | Pn | | **Pn** | **07 04 09.4** | **+2.3** |
| | 0.3nm,0.3s,baz=109,slow=18,SNR=2.8 | | | | | | | |
| MSVF | | | | LR | | LR | 07 06 45.3 | |
| | comp=Z,301nm,18.2s,baz=186,slow=33 | | | | | | | |
| **MRZ** | **Mangatainoka R** | **19.22** | **166** | P | | **Pn** | **07 06 22.0** | **-0.6** |
| MRZ | | | | IAmb | | IAmb | 07 06 36.5 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **CTA** | **Charters Tower** | **21.96** | **271** | P | | **P** | **07 06 51.5** | **+0.2** |
| | comp=Z,0.4nm,1.0s,baz=83,slow=12,SNR=4.2 | | | | | | | |
| **STKA** | **Stephens Creek** | **26.83** | **243** | LR | | LR | 07 17 54.8 | |
| | comp=Z,83nm,18.4s,baz=26,slow=36 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.97** | **260** | P | | **P** | **07 08 33.0** | **+0.7** |
| | comp=Z,2.1nm,1.0s,baz=89,slow=9.0,SNR=10 | | | | | | | |
| ASAR | | | | LR | | LR | 07 22 27.9 | |
| | comp=Z,36nm,18.7s,baz=20,slow=37 | | | | | | | |
| | comp=Z,2.1nm,1.0s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.01** | **267** | P | | **P** | **07 08 31.4** | **-1.3** |
| WB0 | | | | IAmb | | IAmb | 07 08 37.5 | |
| | comp=Z,4.9nm,1.1s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.02** | **267** | P | | **P** | **07 08 31.8** | **-1.0** |
| **WRA** | **Warramunga Arr** | **33.03** | **267** | P | | **P** | **07 08 33.0** | **+0.1** |
| | comp=Z,1.2nm,0.9s,baz=96,slow=8.0,SNR=9.3 | | | | | | | |
| WRA | | | | LR | | LR | 07 22 56.4 | |
| | comp=Z,98nm,18.6s,baz=338,slow=38 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **SBA** | **Scott Base** | **55.88** | **181** | P | | **P** | **07 11 34.2** | **-0.3** |
| **JNU** | **Nakatsue** | **66.19** | **325** | P | | **P** | **07 12 43.8** | **-1.2** |
| **QSPA** | **South Pole Qui** | **68.03** | **180** | P | | **P** | **07 12 56.5** | **0.0** |
| QSPA | | | | IAmb | | IAmb | 07 12 57.9 | |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.03** | **180** | P | | **P** | **07 12 56.4** | **0.0** |
| | comp=Z,3.6nm,1.0s,baz=16,slow=1.7,SNR=7.1 | | | | | | | |
| | comp=Z,3.6nm,1.0s | | | | | | | |
| USA0B | **Ussuriysk Arra** | **74.41** | **333** | P | | **P** | **07 13 33.3** | **-1.7** |
| USA0B | | | | IAmb | | IAmb | 07 13 37.9 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.04** | **295** | P | | **P** | **07 14 09.1** | **+1.9** |
| | comp=Z,1.2nm,0.3s,baz=140,slow=4.6,SNR=4.1 | | | | | | | |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| **P18K** | **Big Mountain,** | **86.10** | **17** | P | | **P** | **07 14 36.0** | **-1.7** |
| **M17K** | **Holitna River** | **87.25** | **15** | P | | **P** | **07 14 41.8** | **-1.4** |
| M17K | | | | IAmb | | IAmb | 07 14 51.8 | |
| | comp=Z,9.4nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **89.70** | **323** | P | | **P** | **07 14 56.5** | **+1.2** |
| | comp=Z,0.3nm,0.4s,baz=156,slow=7.6,SNR=2.2 | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.33** | **48** | P | | **P** | **07 14 58.7** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=238,slow=5.2,SNR=2.9 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.77** | **17** | P | | **P** | **07 15 08.3** | **-0.6** |
| | comp=Z,0.4nm,0.8s,baz=220,slow=5.4,SNR=2.4 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.32** | **353** | PKPbc | | **PKPbc** | **07 21 36.9** | **-0.6** |
| | comp=Z,0.8nm,0.5s,baz=1.9,slow=2.5,SNR=6.7 | | | | | | | |
| CKRC | **Cesky Krumlov** | **146.87** | **330** | ePKP | | **PKPab** | **07 21 40.4** | **-0.3** |
| **KHC** | **Kasperske Hory** | **146.99** | **331** | ePKP | | **PKPab** | **07 21 40.5** | **-0.7** |
| GERES | **GERESS Array B** | **147.14** | **330** | PKPbc | | **PKPab** | **07 21 40.7** | **-1.1** |
| | comp=Z,1.5nm,0.6s,baz=72,slow=4.3,SNR=4.6 | | | | | | | |

*TRN **30** 07:41:38.7, 18°.72N×64°.40W, h160km, MD0.0, Near South-east of Anegada, V.I.*
*NEIC **30** 07:41:42.0±0.7, 18°.9N±0°.1×64°.36W±0°.05, h35km±2km, ML2.8/27, Md3.5/11(RSPR), Error ellipse: s-maj=22.1km s-min=6.7km az=11.0*
*RSPR **30** 07:41:42.7, 18°.86N×64°.35W, h37km±17km, MD3.5/11*

**ISC 30 07:41:42.2±1.7, 18°.8N±0°.1×64°.37W±0°.04, h42km, n51, σ0♀67/58, 12C, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SMRT** | **St. Maarten** | **1.45** | **122** | Pn | | **Pn** | **07 07 06.0** | **0.0** |
| **HUMP** | **Col San Antoni** | **1.56** | **245** | eP | | **Pn** | **07 07 06.9** | **-0.6** |
| **HUMP** | **Col San Antoni** | **1.56** | **245** | eS | | **Sn** | **07 07 26.7** | **+0.2** |
| **HUMP** | **Col San Antoni** | **1.56** | **245** | | | **Pn** | **07 07 06.9** | **-0.6** |
| HUMP | | | | | | **Sn** | **07 07 26.7** | **+0.2** |
| **HUMP** | **Col San Antoni** | **1.56** | **245** | IAML | | | 07 07 33.2 | |
| | comp=N,83nm,0.2s | | | | | | | |
| HUMP | | | | IAML | | | 07 07 33.8 | |
| | comp=E,96nm,0.2s | | | | | | | |
| **GCPR** | **Guaynabo City** | **1.71** | **253** | eP | | **Pn** | **07 07 08.9** | **-0.5** |
| **GCPR** | **Guaynabo City** | **1.71** | **253** | eS | | **Sn** | **07 07 29.5** | **-0.6** |
| **GCPR** | **Guaynabo City** | **1.71** | **253** | | | **Pn** | **07 07 08.9** | **-0.5** |
| GCPR | | | | | | **Sn** | **07 07 29.5** | **-0.6** |
| **PDPR** | **Patillas Dam,** | **1.76** | **243** | eP | | **Pn** | **07 07 10.1** | **-0.1** |
| **PDPR** | **Patillas Dam,** | **1.76** | **243** | eS | | **Sn** | **07 07 31.5** | **0.0** |
| **PDPR** | **Patillas Dam,** | **1.76** | **243** | Pn | | **Pn** | **07 07 09.8** | **+0.5** |
| **IGPR** | **InterUniversit** | **1.86** | **243** | eP | | **Pn** | **07 07 11.7** | **+0.1** |
| **IGPR** | **InterUniversit** | **1.86** | **243** | eS | | **Sn** | **07 07 34.3** | **+0.5** |
| **IGPR** | **InterUniversit** | **1.86** | **243** | | | **Pn** | **07 07 11.7** | **+0.1** |
| IGPR | | | | | | **Sn** | **07 07 34.3** | **+0.5** |
| **IGPR** | **InterUniversit** | **1.86** | **243** | IAML | | | 07 07 41.5 | |
| | comp=E,122nm,0.3s | | | | | | | |
| IGPR | | | | IAML | | | 07 07 45.5 | |
| | comp=N,61nm,0.2s | | | | | | | |
| **EMPR** | **Esperanza - Ma** | **2.08** | **261** | eP | | **Pn** | **07 07 14.6** | **0.0** |
| **EMPR** | **Esperanza - Ma** | **2.08** | **261** | eS | | **Sn** | **07 07 39.0** | **-0.3** |
| **EMPR** | **Esperanza - Ma** | **2.08** | **261** | | | **Pn** | **07 07 14.6** | **0.0** |
| EMPR | | | | | | **Sn** | **07 07 39.0** | **-0.3** |
| **EMPR** | **Esperanza - Ma** | **2.08** | **261** | IAML | | | 07 07 17.3 | |
| | comp=E,124nm,1.0s | | | | | | | |
| EMPR | | | | IAML | | | 07 07 18.2 | |
| | comp=N,127nm,1.8s | | | | | | | |
| **SKI** | **Saint Kitts** | **2.14** | **133** | eP | | **Pn** | **07 07 16.3** | **+0.8** |
| **SKOC** | **St. Kitts, UWI** | **2.18** | **134** | eP | | **Pn** | **07 07 16.8** | **+0.9** |
| **CELP** | **Cerrillos** | **2.23** | **251** | eP | | **Pn** | **07 07 16.6** | **0.0** |
| **CELP** | **Cerrillos** | **2.23** | **251** | eS | | **Sn** | **07 07 43.4** | **+0.4** |
| **CELP** | **Cerrillos** | **2.23** | **251** | | | **Pn** | **07 07 16.6** | **0.0** |
| CELP | | | | | | **Sn** | **07 07 43.4** | **+0.4** |
| **CELP** | **Cerrillos** | **2.23** | **251** | IAML | | | 07 07 44.5 | |
| | comp=N,30nm,0.7s | | | | | | | |
| **OBIP** | **Obispado Ponce** | **2.26** | **250** | Pn | | **Pn** | **07 07 15.8** | **-1.3** |
| OBIP | | | | IAML | | | 07 07 46.9 | |
| | comp=E,29nm,1.3s | | | | | | | |
| **UUPR** | **Utuado, UPR, P** | **2.30** | **256** | eP | | **Pn** | **07 07 17.7** | **0.0** |
| **UUPR** | **Utuado, UPR, P** | **2.30** | **256** | eS | | **Sn** | **07 07 44.8** | **0.0** |
| **UUPR** | **Utuado, UPR, P** | **2.30** | **256** | | | **Pn** | **07 07 17.7** | **0.0** |
| UUPR | | | | | | **Sn** | **07 07 44.8** | **0.0** |
| **AOPR** | **Arecibo Observ** | **2.31** | **259** | eP | | **Pn** | **07 07 18.0** | **+0.2** |
| **AOPR** | **Arecibo Observ** | **2.31** | **259** | eS | | **Sn** | **07 07 45.0** | **-0.1** |
| **AOPR** | **Arecibo Observ** | **2.31** | **259** | | | **Pn** | **07 07 18.0** | **+0.2** |
| AOPR | | | | | | **Sn** | **07 07 45.0** | **-0.1** |
| **AOPR** | **Arecibo Observ** | **2.31** | **259** | IAML | | | 07 07 51.8 | |
| | comp=N,65nm,0.2s | | | | | | | |
| AOPR | | | | IAML | | | 07 07 51.9 | |
| | comp=E,104nm,0.4s | | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.31** | **259** | eP | | **Pn** | **07 07 18.5** | **+0.6** |
| AOPR | | | | eS | | **Sn** | **07 07 46.8** | **+1.7** |
| **AGPR** | **Aguadilla, PR** | **2.62** | **263** | eP | | **Pn** | **07 07 22.5** | **+0.4** |
| **AGPR** | **Aguadilla, PR** | **2.62** | **263** | eS | | **Sn** | **07 07 53.0** | **+0.2** |
| **AGPR** | **Aguadilla, PR** | **2.62** | **263** | | | **Pn** | **07 07 22.5** | **+0.4** |
| AGPR | | | | | | **Sn** | **07 07 53.0** | **+0.2** |
| **LSP** | **Las Mesas** | **2.66** | **256** | eP | | **Pn** | **07 07 23.1** | **+0.5** |
| **LSP** | **Las Mesas** | **2.66** | **256** | | | **Pn** | **07 07 23.1** | **+0.5** |
| **MLPR** | **Magueyes Islan** | **2.68** | **252** | eP | | **Pn** | **07 07 22.6** | **-0.3** |
| **MLPR** | **Magueyes Islan** | **2.68** | **252** | eS | | **Sn** | **07 07 54.2** | **+0.2** |
| **MLPR** | **Magueyes Islan** | **2.68** | **252** | | | **Pn** | **07 07 22.6** | **-0.3** |
| MLPR | | | | | | **Sn** | **07 07 54.2** | **+0.2** |
| **MLPR** | **Magueyes Islan** | **2.68** | **252** | IAML | | | 07 07 43 15.8 | |
| | comp=N,30nm,3.0s | | | | | | | |
| MLPR | | | | IAML | | | 07 07 43 39.5 | |
| | comp=E,27nm,3.0s | | | | | | | |
| **PRSN** | **Puerto Rico Se** | **2.70** | **258** | Pn | | **Pn** | **07 07 21.0** | **-2.2** |
| PRSN | | | | IAML | | | 07 07 43 21.4 | |
| | comp=E,61nm,0.3s | | | | | | | |
| **ANWB** | **Willy Bob** | **2.71** | **115** | eP | | **Pn** | **07 07 22.8** | **-0.5** |
| ANWB | | | | eS | | **Sn** | **07 07 56.6** | **+1.7** |
| **CRPR** | **Cabo Rojo, PR** | **2.73** | **253** | eP | | **Pn** | **07 07 24.0** | **+0.5** |
| **CRPR** | **Cabo Rojo, PR** | **2.73** | **253** | eS | | **Sn** | **07 07 55.9** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **2.73** | **253** | | | **Pn** | **07 07 24.0** | **+0.5** |
| CRPR | | | | | | **Sn** | **07 07 55.9** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **2.73** | **253** | IAML | | | 07 07 43 00.5 | |
| | comp=N,33nm,2.6s | | | | | | | |
| CRPR | | | | IAML | | | 07 07 44 13.9 | |
| | comp=E,29nm,3.0s | | | | | | | |
| **MBFL** | **Flemmings, Mon** | **2.91** | **135** | eP | | **Pn** | **07 07 25.9** | **-0.2** |
| MBFL | | | | eS | | **Sn** | **07 07 59.8** | **-0.1** |
| **ANBD** | **Bethesda, Anti** | **3.04** | **125** | eP | | **Pn** | **07 07 26.0** | **-1.9** |
| ANBD | | | | eS | | **Sn** | **07 07 43 02.2** | **-0.8** |

**IDC 30 07:44:51.9±4.0, 10°.52N×127°.18E, h0km, mb3.3/4, mbtmp3.3/4, Error ellipse: s-maj=330.3km s-min=24.4km az=67.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **31.08** | **167** | P | | P | 07 51 12.5 | +0.4 |
| | 0.2nm,0.7s,baz=349,slow=9.1,SNR=3.1 | | | | | | | |
| | 0.2nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **34.61** | **169** | P | | P | 07 51 42.4 | -0.6 |
| | 0.1nm,0.3s,baz=344,slow=7.1,SNR=1.3 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.37** | **322** | P | | P | 07 54 06.5 | +0.6 |
| | 0.2nm,0.5s,baz=117,slow=7.5,SNR=3.6 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |
| KURBB | **Kurchatov Arra** | **56.38** | **325** | P | | P | 07 54 34.2 | -0.8 |
| | 0.2nm,0.5s,baz=129,slow=7.4,SNR=1.6 | | | | | | | |
| | 0.2nm,0.5s | | | | | | | |

**IDC 30 07:50:18.7±2.6, 53°.64N×87°.10E, h0km, mbtmp2.7/2, ML2.5/2, Error ellipse: s-maj=24.7km s-min=16.1km az=69.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.39** | **284** | I | | I | 07 58 40.0 | |
| | baz=103,slow=323,SNR=3.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.39** | **284** | Pg | | Pg | 07 50 43.1 | -2.2 |
| | 1.3nm,0.3s,baz=99,slow=17,SNR=20 | | | | | | | |
| ZALV | | | | Lg | | Lg | 07 51 03.7 | |
| | 1.9nm,0.3s,baz=106,slow=28,SNR=7.6 | | | | | | | |
| KURBB | **Kurchatov Arra** | **6.08** | **244** | Pn | | Pn | 07 51 50.5 | +0.7 |
| | baz=62,slow=13,SNR=2.3 | | | | | | | |
| KURBB | | | | Lg | | Lg | 07 53 31.5 | |
| | baz=64,slow=33,SNR=2.7 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.51** | **206** | Pn | | Pn | 07 52 11.2 | +1.7 |
| | 0.2nm,0.3s,baz=26,slow=14,SNR=5.9 | | | | | | | |
| | 0.3nm,0.3s | | | | | | | |

*NEIC **30** 07:57:01.4±1.7, 22°.5S±0°.1×176°.9W±0°.1, h182km±7km, mb4.9/62, Error ellipse: s-maj=18.6km s-min=15.4km az=155.0*
*IDC **30** 07:57:05.0±1.3, 22°.31S×177°.10W, h208km±10km, mb4.0/16, mbtmp4.5/16, Error ellipse: s-maj=15.4km s-min=12.9km az=148.0*
*NOU **30** 07:57:05.0, 22°.50S×176°.67W, h233km, mb4.7/40, South of Fiji Islands*

**ISC 30 07:57:03.4±0.3, 22°.66S±0°.05×177°.00W±0°.07, h200km, n512, σ2♀01/522, mb4.7/55, 39C-7D, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RIZ** | **Raoul Island** | **6.61** | **187** | P | | Pn | 07 58 42.9 | +4.4 |
| **MSVF** | **Nonsavu** | **6.76** | **316** | | | **Pn** | **07 58 40.1** | **-0.5** |
| **MSVF** | **Nonsavu** | **6.76** | **316** | P | | **Pn** | **07 58 41.0** | **+0.4** |
| | 83nm,0.7s,baz=124,slow=16,SNR=73 | | | | | | | |
| **NIUE** | **Niue** | **7.51** | **63** | P | | **Pn** | **07 58 47.7** | **-2.6** |
| **NIUE** | **Niue** | **7.51** | **63** | Pn | | **Pn** | **07 58 47.0** | **-3.3** |
| **AFI** | **Afiamalu** | **10.02** | **31** | Pn | | Pn | 07 59 15.5 | -7.5 |
| **PINNC** | **Pines Island,** | **14.37** | **267** | P | | **P** | **08 00 18.6** | **-0.7** |
| **RTV** | **Rentapao** | **14.51** | **287** | P | | **P** | **08 00 22.7** | **+1.8** |
| **DVP** | **Devils Point** | **14.75** | **287** | P | | **P** | **08 00 26.1** | **+2.6** |
| **LIFNC** | **LIFOU** | **14.77** | **274** | P | | **P** | **08 00 25.8** | **+2.0** |
| **LIFNC** | **LIFOU** | **14.77** | **274** | P | | **P** | **08 00 24.6** | **+0.9** |
| **YATNC** | **Mamie plateau,** | **14.92** | **269** | P | | **P** | **08 00 28.3** | **+2.8** |
| **OUZ** | **Omahuta** | **14.97** | **211** | P | | **P** | **08 00 28.4** | **+2.6** |
| **OUZ** | **Omahuta** | **14.97** | **211** | P | | P | 08 00 30.5 | +4.6 |
| **NFK** | **Norfolk Island** | **14.97** | **242** | P | | **P** | **08 00 28.7** | **+2.7** |
| **WCZ** | **Waipu Caves** | **15.22** | **208** | P | | **P** | **08 00 32.4** | **+3.7** |
| **DZM** | **Mont Dzumac** | **15.33** | **269** | P | | **P** | **08 00 31.3** | **+1.2** |
| **DZM** | **Mont Dzumac** | **15.33** | **269** | P | | **P** | **08 00 33.8** | **+3.7** |
| | 39nm,0.8s,baz=88,slow=16,SNR=22 | | | | | | | |
| **KUZ** | **Kuaotunu** | **15.39** | **203** | P | | **P** | **08 00 33.1** | **+2.6** |
| **HAZ** | **Te Kaha** | **15.70** | **195** | P | | **Pn** | **08 00 36.4** | **+2.4** |
| HAZ | | | | S | | S | 08 03 17.5 | -11 |
| **PKGZ** | **Pakihiroa** | **15.74** | **194** | P | | **Pn** | **08 00 38.1** | **+3.6** |
| PKGZ | | | | S | | **S** | **08 03 20.0** | **-9.0** |
| **PUZ** | **Puketiti** | **15.89** | **194** | P | | **Pn** | **08 00 37.8** | **+1.4** |
| PUZ | | | | S | | S | 08 03 20.9 | -12 |
| **RUGZ** | **Raukumara Rang** | **15.93** | **196** | P | | **Pn** | **08 00 38.5** | **+1.6** |
| RUGZ | | | | S | | **S** | **08 03 23.9** | **-9.5** |
| **MWZ** | **Matawai** | **16.31** | **195** | P | | **Pn** | **08 00 43.4** | **+2.0** |
| MWZ | | | | S | | S | 08 03 30.9 | -11 |
| **TOZ** | **Tahuroa Road** | **16.35** | **202** | P | | **Pn** | **08 00 45.3** | **+3.5** |
| **URZ** | **Urewera** | **16.35** | **197** | P | | **Pn** | **08 00 43.4** | **+1.6** |
| **URZ** | **Urewera** | **16.35** | **197** | P | | **Pn** | **08 00 42.9** | **+1.1** |
| | 25nm,0.5s,baz=23,slow=23,SNR=3.0 | | | | | | | |
| **URZ** | **Urewera** | **16.35** | **197** | P | | **Pn** | **08 00 41.9** | **+0.1** |
| URZ | | | | S | | **S** | **08 03 33.1** | **-9.0** |
| **OMRZ** | **Omania** | **16.41** | **199** | P | | **Pn** | **08 00 45.7** | **+3.1** |
| **RAGZ** | **Rawiri** | **16.50** | **196** | P | | **Pn** | **08 00 45.1** | **+1.4** |
| RAGZ | | | | S | | **S** | **08 03 36.7** | **-8.4** |
| **RIGZ** | **Rimuhau** | **16.61** | **194** | P | | **Pn** | **08 00 47.4** | **+2.4** |
| RIGZ | | | | S | | **S** | **08 03 38.1** | **-9.3** |
| **HSRZ** | **Hossack Road** | **16.64** | **199** | P | | S | 08 04 06.0 | +18 |
| **MUGZ** | **Murupara** | **16.65** | **197** | P | | **Pn** | **08 00 46.1** | **+0.7** |
| **HRRZ** | **Handcock Road** | **16.70** | **199** | P | | **Pn** | **08 00 47.8** | **+1.7** |
| **RTZ** | **Ruatahuna** | **16.72** | **197** | P | | **Pn** | **08 00 44.7** | **-1.6** |
| RTZ | | | | S | | **S** | **08 03 42.3** | **-7.4** |
| **SNGZ** | **Shannon Statio** | **16.78** | **195** | P | | **Pn** | **08 00 48.2** | **+1.2** |
| SNGZ | | | | S | | S | 08 03 39.5 | -11 |
| **TLZ** | **Tolley Road** | **16.88** | **201** | P | | **Pn** | **08 00 51.1** | **+2.9** |
| **MTHZ** | **Maungataniwha** | **16.98** | **197** | P | | **Pn** | **08 00 49.4** | **0.0** |
| MTHZ | | | | S | | **S** | **08 03 47.5** | **-7.2** |
| **NMHZ** | **Naumai** | **17.22** | **196** | P | | **Pn** | **08 00 52.8** | **+0.5** |
| **NMHZ** | **Naumai** | **17.22** | **196** | P | | **S** | **08 03 54.9** | **-4.7** |
| **HIZ** | **Hauiti** | **17.27** | **202** | P | | **Pn** | **08 00 53.5** | **+0.7** |
| **HIZ** | **Hauiti** | **17.27** | **202** | P | | **Pn** | **08 00 55.3** | **+2.5** |
| **RATZ** | **Rangitukua** | **17.30** | **199** | P | | **Pn** | **08 00 54.4** | **+1.3** |
| **BKZ** | **Black Stump Fm** | **17.37** | **197** | P | | **Pn** | **08 00 54.2** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **17.37** | **197** | P | | **Pn** | **08 00 52.2** | **-1.7** |
| **BKZ** | **Black Stump Fm** | **17.37** | **197** | P | | **S** | **08 03 58.9** | **-3.6** |
| **NTVZ** | **North Tongarir** | **17.54** | **199** | P | | **Pn** | **08 00 56.2** | **+0.2** |
| **KRVZ** | **Karewarewa** | **17.55** | **199** | P | | **P** | **08 00 51.4** | **-2.9** |
| **TMVZ** | **Te Maari** | **17.55** | **199** | P | | **Pn** | **08 00 56.6** | **+0.5** |
| **ETVZ** | **East Tongariro** | **17.56** | **199** | P | | **Pn** | **08 00 56.4** | **+0.1** |
| **MCHZ** | **McNeill Hill** | **17.57** | **196** | P | | **Pn** | **08 00 55.5** | **-0.8** |
| **MCHZ** | **McNeill Hill** | **17.57** | **196** | P | | **S** | **08 04 00.4** | **-6.1** |
| **WTVZ** | **West Tongariro** | **17.58** | **199** | P | | **Pn** | **08 00 56.7** | **+0.2** |
| **TWVZ** | **Taurewa** | **17.59** | **200** | P | | **Pn** | **08 00 57.0** | **+0.4** |
| **NNVZ** | **North Ngauruho** | **17.59** | **199** | P | | **Pn** | **08 00 57.1** | **+0.4** |
| **OTVZ** | **Oturere** | **17.60** | **199** | P | | **Pn** | **08 00 55.0** | **-1.8** |
| **KWHZ** | **Kaweka Forest** | **17.63** | **197** | P | | **Pn** | **08 00 56.4** | **-0.6** |
| **KWHZ** | **Kaweka Forest** | **17.63** | **197** | P | | **S** | **08 04 02.2** | **-5.5** |
| **SNVZ** | **South Ngauruho** | **17.63** | **199** | P | | **Pn** | **08 00 56.8** | **-0.4** |
| **NGZ** | **Ngauruhoe** | **17.63** | **199** | P | | **Pn** | **08 00 57.9** | **+0.7** |
| **TUVZ** | **Tukino** | **17.70** | **199** | P | | **Pn** | **08 00 58.5** | **+0.5** |
| **FWVZ** | **Far West T-bar** | **17.72** | **199** | P | | **Pn** | **08 00 58.0** | **-0.3** |
| **WHVZ** | **Whangaehu Hut** | **17.73** | **199** | P | | **Pn** | **08 00 57.3** | **-1.2** |
| **WNVZ** | **Wahianoa** | **17.77** | **199** | P | | **Pn** | **08 00 57.1** | **-1.8** |
| **WNVZ** | **Wahianoa** | **17.77** | **199** | P | | **S** | **08 04 09.5** | **-1.3** |
| **PKVZ** | **Pokaka** | **17.82** | **200** | P | | **Pn** | **08 00 58.6** | **-0.6** |
| **KRHZ** | **Kereru** | **17.85** | **197** | P | | **Pn** | **08 00 57.9** | **-1.6** |
| **KRHZ** | **Kereru** | **17.85** | **197** | P | | **S** | **08 04 06.0** | **-6.1** |
| **KAHZ** | **Kahuranaki** | **17.86** | **196** | P | | **Pn** | **08 00 59.6** | **-0.1** |
| **KAHZ** | **Kahuranaki** | **17.86** | **196** | P | | **S** | **08 04 07.3** | **-5.0** |
| **VRZ** | **Vera Road** | **17.86** | **201** | P | | **Pn** | **08 01 00.3** | **+0.7** |
| **PXZ** | **Pawanui** | **18.08** | **195** | P | | **Pn** | **08 01 01.8** | **-0.5** |
| **PXZ** | **Pawanui** | **18.08** | **195** | P | | **S** | **08 04 11.1** | **-5.6** |
| **PNHZ** | **Pukenui** | **18.14** | **197** | P | | **Pn** | **08 01 02.0** | **-1.0** |
| **PNHZ** | **Pukenui** | **18.14** | **197** | P | | **S** | **08 04 14.0** | **-4.0** |
| **NEZ** | **North Egmont** | **18.22** | **203** | P | | **Pn** | **08 01 06.0** | **+2.0** |
| **WPHZ** | **Waipukurau** | **18.22** | **196** | P | | **S** | **08 04 15.3** | **-4.2** |
| **LREZ** | **Lake Rotokare** | **18.28** | **202** | P | | **Pn** | **08 01 06.8** | **+2.3** |
| **PRHZ** | **Porangahau** | **18.36** | **196** | P | | **S** | **08 04 14.1** | **-8.1** |
| **DVHZ** | **Dannevirke** | **18.51** | **197** | P | | **S** | **08 04 20.4** | **-4.9** |
| **ANWZ** | **Angora Road** | **18.59** | **196** | P | | **S** | **08 04 20.4** | **-6.2** |
| **POWZ** | **Post Office Ro** | **18.71** | **197** | P | | **S** | **08 04 27.0** | **-2.1** |
| **PRWZ** | **Pori Road** | **18.81** | **197** | P | | **S** | **08 04 25.8** | **-5.2** |
| **BFZ** | **Birch Farm** | **18.85** | **196** | P | | **Pn** | **08 01 10.2** | **-1.1** |
| **BFZ** | **Birch Farm** | **18.85** | **196** | P | | **Pn** | **08 01 08.7** | **-2.6** |
| **BFZ** | **Birch Farm** | **18.85** | **196** | P | | **S** | **08 04 25.4** | **-6.6** |
| **MRZ** | **Mangatainoka R** | **19.01** | **198** | P | | **P** | **08 01 09.7** | **-0.4** |
| **MRZ** | **Mangatainoka R** | **19.01** | **198** | P | | **S** | **08 04 25.7** | **-

comp=Z,1.8nm,0.8s
PETK **Petropavlovsk-** 78.59 345 P P 08 08 39.7 -2.8
comp=Z,1.5nm,0.7s,baz=127,slow=9.2,SNR=2.4
comp=Z,1.5nm,0.7s
MAW **Mawson** 79.86 200 P P 08 08 50.3 +1.0
comp=Z,4.8nm,0.6s,baz=156,slow=10,SNR=5.7
comp=Z,4.8nm,0.6s
S14K **Fog Glacier** 80.01 10 P P 08 08 49.4 -0.8
baz=196
SII **Sitkinak Islan** 81.23 13 P P 08 08 55.9 -0.7
baz=201
USRK **Ussuriysk Ar.** 81.27 326 P P 08 08 56.0 -1.0
comp=Z,1.7nm,0.8s,baz=175,slow=5.2,SNR=4.5
comp=Z,1.7nm,0.8s
YBH **Yreka Blue Hor** 81.40 38 P P 08 08 58.8 +0.8
PNTR **Pine Nut** 81.56 42 P P 08 09 00.5 +1.4
PLK4 **Peulik 4** 81.83 11 P P 08 09 01.9 +2.1
NVAR **Mina Array Bea** 81.96 43 P P 08 09 01.9 +0.8
comp=Z,0.9nm,0.8s,baz=221,slow=8.0,SNR=5.7
comp=Z,0.9nm,0.8s
NJ2 **Nanjing** 81.97 309 *e*P P 08 09 02.5 +1.5
NJ2 pmax pmax
comp=Z,13nm,0.6s
OHAK **Old Harbor** 82.03 13 P P 08 08 59.9 -0.9
baz=202
R18K **Karluk** 82.12 12 P P 08 09 00.2 -0.9
baz=201
Q17K **Contact Creek** 82.51 11 P P 08 09 02.0 -1.3
baz=200
KDAK **Kodiak Island** 82.70 13 P P 08 09 04.1 -0.1
baz=203
O15K **Ungalikthiuk R** 82.76 9 P P 08 09 03.4 -1.1
baz=196
Q16K **King Salmon** 82.77 11 P P 08 09 04.0 -0.5
baz=199
Q18K **Katmai Hardscr** 83.03 11 P P 08 09 04.8 -1.3
baz=200
J05D **Fort Rock, OR** 83.23 37 P P 08 09 07.6 +0.1
N14K **Kuskokwak Cree** 83.23 8 P P 08 09 06.2 -0.7
baz=194
P17K **Kvichak River** 83.30 10 P P 08 09 06.5 -0.7
baz=199
O16K **Kokwok River B** 83.41 10 P P 08 09 06.7 -1.1
baz=197
Q19K **Cape Douglas,** 83.55 12 P P 08 09 07.7 -0.8
baz=202
R11B **Troy Canyon, C** 83.64 44 P P 08 09 09.1 -0.6
baz=235
N15K **Kwethluk River** 83.68 8 P P 08 09 08.4 -0.7
baz=196
P18K **Big Mountain,** 83.69 11 P P 08 09 07.9 -1.4
baz=200
O17K **Koliganek Bris** 83.74 10 P P 08 09 08.6 -0.8
baz=198
M14K **Bethel** 84.01 7 P P 08 09 10.3 -0.4
baz=194
M15K **Kasigluk River** 84.11 8 P P 08 09 10.7 -0.6
baz=195
O18K **Koktuh Hills** 84.13 11 P P 08 09 10.5 -1.0
O18K IAmb IAmb 08 09 11.3
comp=Z,23nm,0.8s
O18K **Koktuh Hills** 84.13 11 P P 08 09 10.1 -1.4
baz=200
N16K **Nishlik Lake** 84.16 9 P P 08 09 11.3 -0.3
baz=197
P19K **Oil Pt** 84.30 12 P P 08 09 11.2 -1.2
baz=202
N17K **Nushagak Hills** 84.44 10 P P 08 09 12.5 -0.5
baz=198
L14K **Kuka Creek** 84.50 7 P P 08 09 12.9 -0.3
baz=193
CNPM **China Poot** 84.58 13 P P 08 09 12.6 -1.1
CNPM IAmb IAmb 08 09 13.9
comp=Z,16nm,0.7s
ELIB **Princess Elisa** 84.61 186 *d*P P 08 09 16.3 +2.2
comp=Z,9.0nm,0.8s
HOM **Homer** 84.62 13 P P 08 09 13.8 -0.1
baz=203
ILSW **Iliamna Southw** 84.63 12 P P 08 09 12.6 -1.5
M16K **Timber Creek** 84.66 9 P P 08 09 13.9 -0.1
M16K IAmb IAmb 08 09 15.4
comp=Z,36nm,1.3s
M16K **Timber Creek** 84.66 9 P P 08 09 14.2 +0.2
baz=197
U15A **North Rim** 84.73 47 P P 08 09 16.7 +1.3
N18K **Kilae Creek** 84.80 10 P P 08 09 14.2 -0.6
baz=199
O20K **Slope Mountain** 84.82 12 P P 08 09 14.0 -1.0
baz=202
L15K **Ungalak Mounta** 84.96 7 P P 08 09 15.0 -0.6
baz=194
N19K **Bonanza Creek** 85.16 11 P P 08 09 15.2 -1.5
baz=201
M17K **Holitna River** 85.24 9 P P 08 09 16.6 -0.3
baz=198
L16K **Owhat River** 85.25 8 P P 08 09 16.2 -0.7
baz=196
SEW **Seward** 85.48 13 P P 08 09 17.9 -0.2
baz=205
K15K **Wolf Creek Mou** 85.56 7 P P 08 09 18.2 -0.3
baz=194
M18K **Stony River** 85.57 10 P P 08 09 17.7 -0.9
baz=200
TROLL **Troll, Antarti** 85.58 180 ⇑P P 08 09 20.6 +1.7
comp=Z,197nm,0.5s
Q23K **Middleton Isla** 85.59 15 P P 08 09 17.8 -0.8
baz=208
O22K **Cooper Landing** 85.77 13 P P 08 09 18.7 -0.8
baz=205
J14K **Nanvaranak Lak** 85.78 6 P P 08 09 19.3 -0.2
baz=192
L17K **Donlin** 85.82 9 P P 08 09 19.7 -0.1
baz=197
P23K **Montague Islan** 85.84 14 P P 08 09 18.7 -1.2
baz=207
N20K **Mount Spurr** 85.93 12 P P 08 09 18.8 -1.7
baz=203
SPCR **Spurr Chakacha** 85.93 12 P P 08 09 19.2 -1.3
baz=203
VNA3 **Neumayer Olymp** 85.93 176 ⇑P P 08 09 22.1 +1.6
comp=Z,9.8nm,0.7s
VNA3 ⇑x x 08 15 17.7
comp=Z,2.4nm,0.9s
L18K **Granite Mounta** 86.13 9 P P 08 09 21.0 -0.3
L18K IAmb IAmb 08 09 22.1
comp=Z,10nm,0.8s
L18K **Granite Mounta** 86.13 9 P P 08 09 21.1 -0.2
baz=199
M19K **Big River Lodg** 86.20 11 P P 08 09 20.5 -1.2
baz=201
RC01 **Rabbit Creek A** 86.32 13 P P 08 09 21.2 -1.1
baz=205
K17K **Iditarod** 86.37 9 P P 08 09 22.5 0.0
baz=197
L19K **White Mountain** 86.38 10 P P 08 09 21.7 -0.9
L19K IAmb IAmb 08 09 48.2
comp=Z,36nm,1.9s
L19K **White Mountain** 86.38 10 P P 08 09 21.9 -0.7
baz=200
VNA2 **Neumayer--Watz** 86.38 177 ⇑P P 08 09 24.4 +1.8
comp=Z,3.4nm,0.5s,baz=179,slow=3.5
VNA2 ⇑x x 08 15 19.9
comp=Z,0.8nm,1.0s,baz=248,slow=0.4
M20K **Styx River** 86.40 11 P P 08 09 22.4 -0.4
baz=202
PWL **Port Wells** 86.41 14 P P 08 09 21.7 -1.1
PWL IAmb IAmb 08 09 22.6
comp=Z,15nm,0.7s
PWL **Port Wells** 86.41 14 P P 08 09 21.6 -1.1
baz=206,SNR=6.4
SUA **Susitna One** 86.46 12 P P 08 09 22.0 -1.1
baz=204,SNR=11
KAIM **Kayak Island** 86.50 16 P P 08 09 22.6 -0.6
baz=210
VNA1 **Neumayer--Stat** 86.61 176 ⇑P P 08 09 25.7 +2.0
comp=Z,4.6nm,0.8s
VNA1 ⇑x x 08 15 19.3
comp=Z,2.4nm,0.9s
J16K **Anvik River** 86.63 7 P P 08 09 23.2 -0.5
baz=195
GLI **Glacier Island** 86.70 14 P P 08 09 23.2 -0.9
GLI **Glacier Island** 86.70 14 P P 08 09 23.0 -1.1
baz=207
EYAK **Cordova Ski Ar** 86.72 15 P P 08 09 22.9 -1.3
baz=209
SKT **Skwentna** 86.78 12 P P 08 09 23.2 -1.3
baz=203
L20K **Farewell, AK** 86.82 11 P P 08 09 24.0 -0.7
baz=201
M22K **Willow** 86.84 12 P P 08 09 24.1 -0.6
baz=205,SNR=6.6
KNK **Knik Glacier** 86.88 13 P P 08 09 23.9 -1.1
baz=206
PMR **Palmer** 86.90 13 P P 08 09 24.2 -0.8
PMR IAmb IAmb 08 09 24.9
comp=Z,8.4nm,0.6s
PMR **Palmer** 86.90 13 P P 08 09 23.5 -1.5
baz=206,SNR=9.3
GHO **Glory Hole Cre** 87.11 13 P P 08 09 25.5 -0.7
PLCA **Paso Flores** 87.12 133 P P 08 09 29.9 +3.0
comp=Z,1.4nm,0.9s,baz=198,slow=6.5,SNR=3.6
comp=Z,1.4nm,0.9s
SML **Sawmill** 87.26 13 P P 08 09 26.1 -0.7
baz=206
J18K **Innoko River** 87.31 9 P P 08 09 26.6 -0.4
baz=199
WRAK **Wrangell Islan** 87.32 23 P P 08 09 26.6 -0.6
baz=220
MESA **MESA** 87.35 17 P P 08 09 26.5 -1.0
baz=212
BMRM **Bremner River** 87.36 15 P P 08 09 26.7 -0.7
baz=210
M23K **Glacier View** 87.38 13 P P 08 09 26.9 -0.5
baz=207
CUT **Chulitna** 87.41 12 P P 08 09 26.2 -1.3
baz=204
TXAR **Lajitas Array** 87.44 57 P P 08 09 29.7 +1.1
comp=Z,2.0nm,0.8s,baz=207,slow=7.8,SNR=14
TXAR PKKPbc **PKKPbc** 08 27 23.4 +5.8
comp=Z,0.2nm,0.7s,baz=86,slow=4.0,SNR=3.8
comp=Z,2.0nm,0.8s
SCM **Sheep Creek Mo** 87.50 14 P P 08 09 26.7 -1.3
SCM **Sheep Creek Mo** 87.50 14 P P 08 09 27.2 -0.8
baz=207
KLU **Klutina** 87.51 14 P P 08 09 27.1 -1.0
baz=208
CRQE **Cirque** 87.55 16 P P 08 09 27.7 -0.6
baz=211,SNR=5.4
K20K **Telida** 87.61 10 P P 08 09 27.6 -0.8
K20K IAmb IAmb 08 09 28.6
comp=Z,9.2nm,0.8s
K20K **Telida** 87.61 10 P P 08 09 27.4 -1.1
baz=201
PNL **Peninsula** 87.63 18 P P 08 09 28.3 -0.3
baz=214
PINM **Pinnacle** 87.74 17 P P 08 09 28.8 -0.4
baz=214
N25K **Chitina, Valde** 87.92 15 P P 08 09 29.7 -0.4
N25K IAmb IAmb 08 09 30.6
comp=Z,13nm,0.8s
N25K **Chitina, Valde** 87.92 15 P P 08 09 29.2 -0.8
baz=210,SNR=8.0
G15K **Niukluk** 87.94 5 P P 08 09 29.4 -0.5
baz=192
GLB **Gilahina Butte** 87.96 15 P P 08 09 29.3 -0.9
GLB IAmb IAmb 08 09 30.7
comp=Z,9.5nm,0.9s
J19K **Poorman** 87.97 9 P P 08 09 29.4 -0.7
baz=200
M24K **Tolsona, Glenn** 87.99 14 P P 08 09 29.5 -0.9
baz=208
WAT6 **Susitna Watana** 88.08 13 P P 08 09 30.5 -0.4
baz=207,SNR=14
P29M **Windy Craggy** 88.08 19 P P 08 09 30.3 -0.5
baz=216
MCARA **McCarthy VSAT** 88.11 16 P P 08 09 30.8 0.0
baz=211
WAT1 **Susitna Watana** 88.14 13 P P 08 09 29.9 -1.0
baz=206
LOGN **Logan Glacier** 88.15 17 P P 08 09 30.8 -0.5
LOGN IAmb IAmb 08 09 32.0
comp=Z,8.1nm,0.7s
CTG **Chitna Glacier** 88.18 17 P P 08 09 31.0 -0.3
baz=212,SNR=5.8
CTGM **Chitina Glacie** 88.18 17 P P 08 09 31.3 0.0
CTGM IAmb IAmb 08 09 32.2
comp=Z,9.1nm,0.7s
O28M **Mount Upton** 88.33 17 P P 08 09 31.6 -0.7
baz=214,SNR=6.4
PLBC **Pleasant Camp** 88.36 19 P P 08 09 31.6 -0.4
baz=217
J20K **Nowinta River** 88.37 10 P P 08 09 30.9 -1.0
J20K IAmb IAmb 08 12 12.3
comp=Z,20nm,1.7s
J20K **Nowinta River** 88.37 10 P P 08 09 31.1 -0.8
baz=201
O29M **Mount Kennedy** 88.39 18 P P 08 09 31.7 -0.6
baz=215
GYA **Guiyang** 88.52 299 P P 08 09 33.5 -0.2
GYA pmax pmax
comp=Z,22nm,0.9s
RND **Reindeer** 88.59 12 P P 08 09 32.4 -0.7
DHY **Denali Highway** 88.60 13 P P 08 09 32.4 -0.9
baz=207,SNR=5.2
SKAG **Skagway** 88.68 20 P P 08 09 33.1 -0.4
baz=218
P30M **Million Dollar** 88.71 19 P P 08 09 33.5 -0.3
baz=216
BPAW **Bear Paw Mtn.** 88.83 11 P P 08 09 33.3 -0.9
baz=204
YUK8 **Steele Glacier** 88.87 17 P P 08 09 34.2 -0.5
baz=214
MCK **McKinley** 88.87 12 P P 08 09 33.3 -1.1
baz=206,SNR=9.6
S34M **Telegraph Cree** 88.89 23 P P 08 09 34.0 -0.5
baz=222
I20K **Naaghedeneel** 88.90 9 P P 08 09 34.1 -0.3
baz=201
YUK6 **Outpost Mounta** 88.97 18 P P 08 09 34.7 -0.5
baz=215
M26K **Nabesna, AK** 88.99 15 P P 08 09 34.7 -0.3
M26K IAmb IAmb 08 09 35.9
comp=Z,11nm,1.1s
M26K **Nabesna, AK** 88.99 15 P P 08 09 34.6 -0.4
baz=211,SNR=6.5
YUK3 **Moose Creek** 89.09 16 P P 08 09 35.3 -0.5
baz=213,SNR=13
S22A **4UR Ranch, Cre** 89.15 48 P P 08 09 35.6 -1.1
baz=240
YUK4 **Talbot Arm** 89.22 17 P P 08 09 36.5 +0.2
baz=215
M27K **Edge Creek, AK** 89.22 16 P P 08 09 36.0 -0.2
baz=212,SNR=10
P32M **Atlin** 89.30 20 P P 08 09 36.5 0.0
baz=219
H19K **Roundabout Mou** 89.31 8 P P 08 09 35.6 -0.7
baz=199
G18K **Tagagawik** 89.38 7 P P 08 09 35.6 -1.0
baz=197
L26K **Log Cabin Wild** 89.44 15 P P 08 09 36.8 -0.2
L26K **Log Cabin Wild** 89.44 15 P P 08 09 36.7 -0.4
baz=211,SNR=6.3
O30N **Mendenhall** 89.49 19 P P 08 09 36.8 -0.6
O30N **Mendenhall** 89.49 19 P P 08 09 36.7 -0.6
baz=217
H20K **Anotleneega Mo** 89.50 9 P P 08 09 36.5 -0.7
baz=200,SNR=5.2
K24K **Donnelly Dome** 89.58 13 P P 08 09 37.0 -0.7
baz=208,SNR=8.1
NEA2 **Nenana** 89.63 12 P P 08 09 36.4 -1.4
NEA2 IAmb IAmb 08 09 37.7
comp=Z,6.5nm,0.7s
NEA2 **Nenana** 89.63 12 P P 08 09 36.5 -1.4
baz=206,SNR=7.6
RIDG **Independent Ri** 89.72 14 P P 08 09 37.4 -1.0
baz=209
MLY **Manley** 89.73 11 P P 08 09 36.6 -1.8
MLY IAmb IAmb 08 09 37.6
comp=Z,10nm,0.6s
MLY **Manley** 89.73 11 P P 08 09 36.9 -1.4
baz=204,SNR=16
N30M **Aishikik Lake** 89.75 18 P P 08 09 38.0 -0.6
baz=216
WHY **Whitehorse** 89.77 19 P P 08 09 38.1 -0.6
baz=218
G19K **Purcell Mounta** 89.81 8 P P 08 09 37.8 -0.9
baz=198
L27K **Beaver Creek,** 89.83 15 P P 08 09 38.4 -0.5
L27K IAmb IAmb 08 13 10.7
comp=Z,10nm,1.1s
L27K **Beaver Creek,** 89.83 15 P P 08 09 38.5 -0.5
baz=212,SNR=7.7
HDA **Harding Lake** 89.87 13 P P 08 09 37.9 -1.2
HDA **Harding Lake** 89.87 13 P P 08 09 37.7 -1.4
baz=208,SNR=21
PDAR **Pinedale Array** 89.90 43 P P 08 09 40.1 +0.1
comp=Z,0.6nm,0.7s,baz=222,slow=1.8,SNR=6.2
comp=Z,0.6nm,0.7s
CCB **Clear Creek Bu** 89.92 12 P P 08 09 37.9 -1.3
F18K **Selawik** 89.94 7 P P 08 09 38.7 -0.5
baz=196
H21K **Melozitna Rive** 89.96 10 P P 08 09 38.5 -0.9
H21K **Melozitna Rive** 89.96 10 P P 08 09 38.4 -0.9
baz=202,SNR=6.7
R33M **Jennings River** 90.06 22 P P 08 09 39.8 -0.4
baz=222
P33M **Teslin, Yukon** 90.06 20 P P 08 09 39.7 -0.4
baz=220
I23K **Minto, Yukon-K** 90.08 11 P P 08 09 38.7 -1.2
I23K IAmb IAmb 08 09 40.7
comp=Z,37nm,1.9s
I23K **Minto, Yukon-K** 90.08 11 P P 08 09 38.8 -1.2
baz=205,SNR=8.0
COLA **College** 90.11 12 P P 08 09 39.2 -0.8
baz=207
MDM **Murphy Dome** 90.11 12 P P 08 09 38.7 -1.4
MDM IAmb IAmb 08 09 39.7
comp=Z,12nm,0.8s
SCRK **Sand Creek** 90.12 14 P P 08 09 39.8 -0.5
SCRK **Sand Creek** 90.12 14 P P 08 09 39.3 -1.0
baz=210,SNR=6.4
N31M **Braeburn, Yuko** 90.15 18 P P 08 09 40.7 +0.3
N31M **Braeburn, Yuko** 90.15 18 P P 08 09 40.1 -0.3
baz=217
M29M **Somme Creek** 90.18 17 P P 08 09 40.3 -0.3
M29M IAmb IAmb 08 09 41.7
comp=Z,9.0nm,0.8s
M29M **Somme Creek** 90.18 17 P P 08 09 40.4 -0.2
baz=215,SNR=8.2
E17K **Hotham Inlet** 90.19 6 P P 08 09 39.6 -0.8
baz=194
ILAR **Eielson Array** 90.21 12 P P 08 09 39.3 -1.3
comp=Z,5.0nm,0.7s,baz=224,slow=5.9,SNR=30
comp=Z,5.0nm,0.7s
J25K **Salcha River,** 90.38 13 P P 08 09 40.5 -0.9
J25K IAmb IAmb 08 09 41.6
comp=Z,8.9nm,0.7s
J25K **Salcha River,** 90.38 13 P P 08 09 40.5 -0.9
baz=209,SNR=12
F19K **Shaleruckik Mo** 90.39 7 P P 08 09 40.3 -1.0
F19K IAmb IAmb 08 09 41.2
comp=Z,7.8nm,0.8s
F19K **Shaleruckik Mo** 90.39 7 P P 08 09 40.5 -0.7
baz=198,SNR=6.7
POKR **Poker Plat Res** 90.41 12 P P 08 09 40.1 -1.4
POKR IAmb IAmb 08 09 41.0
comp=Z,10nm,0.7s
POKR **Poker Plat Res** 90.41 12 P P 08 09 40.1 -1.4
baz=207
H22K **Ishtalitna Cre** 90.41 10 P P 08 09 40.4 -1.1
baz=204,SNR=15
K27K **Chicken** 90.60 15 P P 08 09 41.8 -0.6
baz=212
E18K **Tukpahlearik C** 90.64 6 P P 08 09 41.6 -0.9
baz=195
G21K **Allakaket** 90.66 9 P P 08 09 42.1 -0.5
baz=202
H23K **Yukon River** 90.66 11 P P 08 09 41.4 -1.3
baz=205
J26L **Joseph Creek** 90.67 14 P P 08 09 42.4 -0.4
J26L **Joseph Creek** 90.67 14 P P 08 09 42.5 -0.4
baz=210,SNR=26
M30M **Minto, Yukon** 90.74 17 P P 08 09 42.9 -0.3
baz=216
L29M **L29M** 90.81 17 P P 08 09 43.5 +0.1
baz=215,SNR=8.3
F20K **Avaraart Lake** 90.85 8 P P 08 09 42.5 -0.9
F20K IAmb IAmb 08 09 44.2
comp=Z,11nm,1.1s
F20K **Avaraart Lake** 90.85 8 P P 08 09 43.2 -0.2
baz=200,SNR=5.7
RDOG **Red Dog Mine** 91.04 5 P P 08 09 43.7 -0.7
baz=193
E19K **Redstone River** 91.05 7 P P 08 09 43.8 -0.6
baz=198
M31M **Drury Creek, Y** 91.12 19 P P 08 09 44.3 -0.6
baz=219
PRP **Porcupine Dome** 91.14 13 P P 08 09 44.1 -1.0
baz=209
DAWY **Dawson** 91.28 16 P P 08 09 45.3 -0.3
DAWY **Dawson** 91.28 16 P P 08 09 45.1 -0.5
baz=214,SNR=13
F21K **Alatna River** 91.32 9 P P 08 09 45.4 -0.3
baz=202
G22K **Bettles** 91.34 10 P P 08 09 45.3 -0.4
baz=203
G23K **Bananza Creek** 91.38 10 P P 08 09 45.1 -0.9
baz=205
EGAK **Eagle** 91.45 15 P P 08 09 46.0 -0.3
EGAK IAmb IAmb 08 09 46.9
comp=Z,9.4nm,0.7s
EGAK **Eagle** 91.45 15 P P 08 09 45.5 -0.8
baz=213,SNR=10.0
I26K **Coal Creek Min** 91.45 14 P P 08 09 45.9 -0.4
baz=211
FARO **Faro, Yukon** 91.45 19 P P 08 09 45.5 -1.0
baz=220
HHC **Hu-ho-hao-te** 91.52 314 *e*P P 08 09 49.3 +1.9
HHC pmax pmax
comp=Z,28nm,0.5s
HHC pmax pmax
comp=Z,62nm,4.5s
K29M **Barlow Dome** 91.57 16 P P 08 09 47.0 -0.1
K29M IAmb IAmb 08 09 48.2
comp=Z,9.2nm,0.8s
K29M **Barlow Dome** 91.57 16 P P 08 09 46.8 -0.3
baz=216,SNR=8.2
CMAR **Chiang Mai Arr** 91.71 289 P P 08 09 47.6 -1.0
comp=Z,1.4nm,0.3s,baz=132,slow=3.1,SNR=14
comp=Z,1.4nm,0.3s
TOAD **Toad River Com** 91.72 24 P P 08 09 47.8 0.0
baz=226
H25L **Birch Creek** 91.74 12 P P 08 09 47.4 -0.2
baz=208
F22K **John River** 91.78 9 P P 08 09 47.0 -0.8
baz=203
G24K **Hadweenzic Riv** 91.82 11 P P 08 09 47.2 -0.8
baz=207
COLD **Coldfoot** 91.83 10 P P 08 09 47.6 -0.4
baz=204
E20K **Nigu River** 91.94 8 P P 08 09 47.8 -0.8
baz=199
D19K **Kuna River** 91.94 7 P P 08 09 47.9 -0.7
baz=197
APMT **Aspermont** 91.94 55 P P 08 09 49.9 +0.5
I27K **Kandik River** 92.04 14 P P 08 09 48.5 -0.6
baz=212,SNR=5.8
G25K **Bearman Lake** 92.13 12 P P 08 09 48.8 -0.5
baz=208
I28M **Miner Creek** 92.29 15 P P 08 09 49.6 -0.8
baz=214,SNR=8.2
D20K **Etivluk River** 92.32 7 P P 08 09 49.5 -0.8
baz=199
C19K **Lookout Ridge** 92.37 6 P P 08 09 50.1 -0.4
baz=196
E21K **Killik River** 92.39 8 P P 08 09 49.8 -0.8
baz=201
E22K **Anaktuvuk Pass** 92.41 9 P P 08 09 50.1 -0.6
baz=203
J30M **Hart River** 92.47 16 P P 08 09 50.8 -0.4
baz=217
F24K **Squaw Lake** 92.48 11 P P 08 09 50.6 -0.5
baz=207
PZH **PanZhiHua** 92.54 298 P P 08 09 53.5 +1.1
PZH pmax pmax
comp=Z,8.0nm,1.0s
PZH pmax pmax
comp=Z,100nm,4.7s
H27K **Steamboat Moun** 92.59 14 P P 08 09 51.6 0.0
baz=212,SNR=6.8
I29M **Ogilvie Camp,** 92.61 15 P P 08 09 51.5 -0.2
baz=215
E23K **Chandalar** 92.68 10 P P 08 09 52.2 +0.1
baz=205
G26K **Porcupine Rive** 92.74 12 P P 08 09 52.4 +0.2
baz=210,SNR=6.2
E24K **Your Creek** 92.88 10 P P 08 09 52.5 -0.4
baz=206
F25K **Christian Rive** 92.94 12 P P 08 09 53.3 0.0
baz=209
C21K **Knifeblade Rid** 92.96 8 P P 08 09 53.2 0.0
baz=200
I30M **Mount Dempster** 92.98 16 P P 08 09 53.4 -0.2
I30M **Mount Dempster** 92.98 16 P P 08 09 53.2 -0.3

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=217 | | | | | | | | |
| D22K | **Ayikyak River** | 92.98 | 9 | P | | **P** | 08 09 53.5 | +0.2 | |
| | baz=202 | | | | | | | | |
| G27K | **Doyon Strip** | 93.06 | 13 | P | | **P** | 08 09 53.6 | -0.1 | |
| | baz=212 | | | | | | | | |
| H29M | **Whitestone** | 93.30 | 15 | P | | **P** | 08 09 54.9 | +0.1 | |
| | baz=215,SNR=7.0 | | | | | | | | |
| F26K | **Sheenjek River** | 93.31 | 12 | P | | **P** | 08 09 55.3 | +0.4 | |
| | baz=210 | | | | | | | | |
| D23K | **Nanushuk River** | 93.34 | 9 | P | | **P** | 08 09 55.1 | +0.1 | |
| | baz=204 | | | | | | | | |
| EPYK | **Eagle Plains** | 93.81 | 15 | P | | **P** | 08 09 56.9 | -0.3 | |
| | baz=217 | | | | | | | | |
| G29M | **Pine Creek** | 93.94 | 14 | P | | **P** | 08 09 57.9 | +0.1 | |
| | baz=216 | | | | | | | | |
| H31M | **Peel River** | 93.96 | 16 | P | | **P** | 08 09 57.5 | -0.4 | |
| | baz=219 | | | | | | | | |
| F28M | **Old Crow** | 94.11 | 13 | P | | **P** | 08 09 58.3 | -0.2 | |
| | baz=214 | | | | | | | | |
| C23K | **Itkillik River** | 94.15 | 9 | P | | **P** | 08 09 58.6 | 0.0 | |
| | baz=204 | | | | | | | | |
| E27K | **Coleen River** | 94.24 | 13 | P | | **P** | 08 09 58.4 | -0.7 | |
| | baz=212 | | | | | | | | |
| C24K | **Franklin Bluff** | 94.33 | 10 | P | | **P** | 08 09 59.2 | -0.2 | |
| | baz=206 | | | | | | | | |
| D25K | **Kavik River** | 94.34 | 10 | P | | **P** | 08 09 59.0 | -0.6 | |
| | baz=208 | | | | | | | | |
| G30M | **tAoh Zraii Nji** | 94.42 | 15 | P | | **P** | 08 09 59.9 | -0.1 | |
| | baz=217 | | | | | | | | |
| G31M | **Satah River** | 94.85 | 16 | P | | **P** | 08 10 01.3 | -0.6 | |
| | baz=219 | | | | | | | | |
| E28M | **Babbage River** | 95.01 | 13 | P | | **P** | 08 10 02.5 | -0.1 | |
| | baz=214 | | | | | | | | |
| F30M | **Barrier River** | 95.03 | 15 | P | | **P** | 08 10 03.2 | +0.5 | |
| | baz=218 | | | | | | | | |
| C27K | **Jago River** | 95.07 | 11 | P | | **P** | 08 10 02.7 | -0.2 | |
| | baz=210 | | | | | | | | |
| E29M | **Blow River** | 95.18 | 14 | P | | **P** | 08 10 03.1 | -0.2 | |
| | baz=216 | | | | | | | | |
| D27M | **Malcolm River** | 95.25 | 12 | P | | **P** | 08 10 02.7 | -1.1 | |
| | baz=213 | | | | | | | | |
| F31M | **Tsiigehtchic** | 95.38 | 15 | P | | **P** | 08 10 04.0 | -0.2 | |
| | baz=219 | | | | | | | | |
| D28M | **Stokes Point** | 95.77 | 13 | P | | **P** | 08 10 05.7 | -0.3 | |
| | baz=215 | | | | | | | | |
| C36M | **Paulatuk** | 99.24 | 17 | P | | **Pdif** | 08 10 21.6 | 0.0 | |
| | baz=228 | | | | | | | | |
| M53A | **WI Miller and** | 109.21 | 52 | P | | **PKiKP** | 08 15 08.8 | -0.7 | |
| | baz=256 | | | | | | | | |
| ZALV | **Zalesovo Beam** | 112.75 321 | | PKiKP | | **PKiKP** | 08 15 14.6 | -1.2 | |
| | comp=Z,1.9nm,0.6s,baz=147,slow=2.0,SNR=5.9 | | | | | | | | |
| MKAR | **Makanchi Array** | 113.35 313 | | PKiKP | | **PKiKP** | 08 15 16.0 | -1.3 | |
| | comp=Z,0.5nm,0.4s,baz=239,slow=1.8,SNR=6.7 | | | | | | | | |
| KURBB | **Kurchatov Arra** | 115.16 325 | | PKiKP | | **PKiKP** | 08 15 21.5 | -1.1 | |
| | comp=Z,0.8nm,0.5s,baz=97,slow=2.0,SNR=7.8 | | | | | | | | |
| KURBB | | | | SKP | | | 08 18 37.8 | | |
| | comp=Z,0.5nm,0.2s,baz=83,slow=2.1,SNR=7.4 | | | | | | | | |
| BVAR | **Borovoye Array** | 121.32 319 | | PKP | | **PKiKP** | 08 15 31.4 | -1.1 | |
| | comp=Z,4.0nm,0.5s,baz=116,slow=1.5,SNR=17 | | | | | | | | |
| BVAR | | | | SKP | | | 08 18 48.9 | | |
| | comp=Z,0.7nm,0.6s,baz=67,slow=5.3,SNR=4.1 | | | | | | | | |
| ARU | **Arti** | 127.50 325 | | PKP | | **PKiKP** | 08 15 43.3 | -1.3 | |
| | comp=Z,3.5nm,0.4s,baz=299,slow=1.6,SNR=5.8 | | | | | | | | |
| AKTO | **Aktyubinsk** | 129.29 317 | | PKP | | **PKiKP** | 08 15 47.6 | -0.8 | |
| | comp=Z,2.1nm,0.6s,baz=94,slow=4.5,SNR=6.7 | | | | | | | | |
| ARCES | **ARCESS Array B** | 131.20 350 | | PKP | | **PKiKP** | 08 15 50.8 | -0.9 | |
| | comp=Z,2.9nm,0.6s,baz=48,slow=1.8,SNR=8.4 | | | | | | | | |
| BELG | **Belogornoye** | 134.88 323 | | PKP | | **PKiKP** | 08 15 58.1 | -1.5 | |
| | comp=Z,5.1nm,0.5s,baz=339,slow=6.4,SNR=3.8 | | | | | | | | |
| FINES | **FINESS Array B** | 138.10 344 | | PKhKP | | PKPpre | 08 15 55.6 | | |
| | comp=Z,1.7nm,0.8s,baz=58,slow=4.7,SNR=3.5 | | | | | | | | |
| FINES | | | | PKP | | **PKiKP** | **08 16 04.4** | **-1.5** | |
| | comp=Z,1.3nm,0.5s,baz=37,slow=2.5,SNR=6.8 | | | | | | | | |
| FINES | | | | SKP | | | 08 19 17.5 | | |
| | comp=Z,2.2nm,0.6s,baz=94,slow=6.1,SNR=6.6 | | | | | | | | |
| HFS | **Hagfors** | 141.81 351 | | PKhKP | | PKPpre | 08 16 03.3 | | |
| | comp=Z,2.0nm,0.5s,baz=63,slow=6.8,SNR=9.7 | | | | | | | | |
| BORU | **Boraas** | 144.35 351 | *eP* | | | PKPbc | 08 16 12.4 | -1.6 | |
| FABU | **Falkenberg** | 144.97 351 | *eP* | | | PKPbc | 08 16 14.2 | -1.8 | |
| DEL | **Delary** | 145.29 349 | *i P* | | | **PKPab** | **08 16 15.6** | **-1.8** | |
| AKASG | **Malin Array Be** | 145.34 330 | | PKPbc | | **PKPdf** | **08 16 15.5** | **-1.6** | |
| | comp=Z,6.1nm,0.4s,baz=44,slow=4.1,SNR=36 | | | | | | | | |
| AKASG | | | | SKPbc | | **SKiKP** | **08 19 37.5** | **-0.7** | |
| | comp=Z,0.8nm,0.4s,baz=43,slow=3.1,SNR=6.1 | | | | | | | | |
| KIEV | **Kiev** | 145.36 330 | | PKP | | **PKPdf** | **08 16 15.4** | **-1.7** | |
| MI30 | **MI30,Zelenitsa** | 145.78 331 | | PKP | | **PKPdf** | **08 16 16.4** | **-1.4** | |
| MI28 | **MI28,Pidlybu** | 145.87 332 | | PKP | | **PKPbc** | **08 16 17.5** | **-1.5** | |
| MI29 | **MI29, Kamyanyy** | 146.16 331 | | PKP | | **PKPdf** | **08 16 17.1** | **-1.4** | |
| RNPP9 | **Sopachiv** | 146.26 334 | | PKP | | **PKPbc** | **08 16 18.7** | **-1.4** | |
| RNPP8 | **Varash** | 146.34 334 | | PKP | | **PKPbc** | **08 16 18.5** | **-1.8** | |
| BSD | **Bornholm Skovb** | 146.39 348 | *eP* | | | **PKPbc** | **08 16 19.1** | **-1.2** | |
| RNPP5 | **Staryi Chortor** | 146.40 334 | | PKP | | **PKPbc** | **08 16 18.5** | **-2.0** | |
| LUBAR | **Lubar, Ukraine** | 146.56 331 | | PKP | | **PKPbc** | **08 16 19.2** | **-1.8** | |
| EKA | **Eskdalemuir Ar** | 147.05 6 | | PKPbc | | **PKPbc** | **08 16 21.3** | **-0.9** | |
| | comp=Z,3.0nm,0.6s,baz=343,slow=2.6,SNR=12 | | | | | | | | |
| ASF | **Jabal al Asfar** | 149.55 295 | | PKPbc | | **PKiKP** | **08 16 27.5** | **-1.0** | |
| | comp=Z,3.3nm,0.6s,baz=29,slow=2.0,SNR=4.8 | | | | | | | | |
| BRTR | **Keskin Array B** | 148.96 310 | | PKPbc | | **PKiKP** | **08 16 27.1** | **-2.1** | |
| | comp=Z,3.1nm,0.6s,baz=143,slow=5.6,SNR=16 | | | | | | | | |
| KIRS | **Kirsehir-Merke** | 149.00 309 | ⇓P | | | **PKiKP** | **08 16 27.3** | **-1.8** | |
| BURAR | **Bucovina Array** | 149.39 330 | ⇓P | | | **PKiKP** | **08 16 29.4** | **-0.3** | |
| GHRR | | 149.39 326 | ⇑P | | | **PKiKP** | **08 16 29.4** | **-0.2** | |
| TESR | **Tescani** | 149.48 327 | ⇑P | | | **PKiKP** | **08 16 27.8** | **-2.0** | |
| CFR | **Carcaliu** | 149.57 324 | ⇓P | | | **PKPbc** | **08 16 27.5** | **-1.6** | |
| TPGR | **Topolog** | 149.62 323 | ⇑P | | | **PKiKP** | **08 16 29.1** | **-1.1** | |
| KOLS | **Kolonicke sedl** | 149.65 334 | *e*PKP | | | **PKiKP** | **08 16 30.1** | **0.0** | |
| MMAI | **Mount Meron Ar** | 149.66 297 | | PKPbc | | **PKiKP** | **08 16 30.2** | **-0.5** | |
| | comp=Z,6.1nm,0.5s,baz=82,slow=6.0,SNR=8.6 | | | | | | | | |
| ONER | **Baraj Valea Uz** | 149.73 327 | ⇑P | | | **PKiKP** | **08 16 29.2** | **-1.1** | |
| VRI | **Vrincioaia** | 149.88 326 | ⇑P | | | **PKiKP** | **08 16 28.9** | **-1.8** | |
| PLOR | **Plostina** | 149.93 326 | ⇑P | | | **PKiKP** | **08 16 29.6** | **-1.2** | |
| NIE | **Niedzica** | 150.00 337 | *e*PKP | | | **PKiKP** | **08 16 30.5** | **-0.4** | |
| NIE | | | *e*PP | | | **PP** | **08 20 06.7** | **+1.1** | |
| KSP | **Ksiaz** | 150.02 343 | *e*PKP | | | **PKiKP** | **08 16 30.0** | **-0.8** | |
| TLBR | **Topalu** | 150.02 323 | ⇑P | | | **PKiKP** | **08 16 29.5** | **-1.4** | |
| TURR | **Turia** | 150.11 327 | ⇓P | | | **PKiKP** | **08 16 29.3** | **-1.9** | |
| COVR | **Voineasa-Covas** | 150.16 326 | ⇑P | | | **PKiKP** | **08 16 30.1** | **-1.2** | |
| OZUR | | 150.20 327 | ⇑P | | | **PKiKP** | **08 16 30.9** | **-0.4** | |
| BOSR | **Bodos** | 150.27 327 | ⇑P | | | **PKiKP** | **08 16 31.2** | **-0.3** | |
| OSTC | **Ostas** | 150.30 343 | ⇑*e*PKP | | | **PKiKP** | **08 16 31.4** | **0.0** | |
| CLL | **Collm** | 150.37 347 | *i* PKPbc | | | **PKiKP** | **08 16 30.4** | **-1.1** | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| CLL | | | *i* (PKiKP) | | | | 08 16 32.6 | | |
| CLL | | | *i x* | | | x | 08 16 34.3 | | |
| CLL | | | *i* PKPab | | | **PKPab** | **08 16 36.2** | **-1.6** | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| NEHR | **Nehoiu** | 150.39 326 | ⇑P | | | **PKiKP** | **08 16 30.7** | **-1.1** | |
| DPC | **Dobruska-Polom** | 150.46 343 | ⇑*e*PKP | | | **PKiKP** | **08 16 31.4** | **-0.4** | |
| DOPR | **Dopca** | 150.49 327 | ⇑P | | | **PKiKP** | **08 16 31.4** | **-0.6** | |
| LANS | **Liptovska Anna** | 150.52 338 | *e*PKP | | | **PKiKP** | **08 16 32.4** | **+0.5** | |
| LANS | | | *e* | | | | 08 16 38.2 | | |
| MLR | **Muntele Rosu** | 150.53 326 | PKPbc | | | **PKiKP** | **08 16 30.9** | **-1.3** | |
| | comp=Z,8.3nm,0.7s,baz=49,slow=1.7,SNR=8.2 | | | | | | | | |
| MLR | **Muntele Rosu** | 150.53 326 | ⇑P | | | **PKiKP** | **08 16 31.2** | **-1.0** | |
| BRG | **Berggiesshubel** | 150.57 346 | *e*PKP | | | **PKiKP** | **08 16 31.3** | **-0.6** | |
| BRG | | | Amp | | | | 08 16 32.1 | | |
| | comp=Z,7.5nm,0.8s | | | | | | | | |
| BRG | **Berggiesshubel** | 150.57 346 | P | | | **PKPab** | **08 16 35.3** | **-3.3** | |
| BRG | | | Amp | | | | 08 16 37.1 | | |
| | comp=Z,5.9nm,1.0s | | | | | | | | |
| KRLC | **Kraliky** | 150.57 342 | ⇑*e*PKP | | | **PKiKP** | **08 16 31.7** | **-0.3** | |
| MORC | **Moravsky Berou** | 150.61 341 | *e*PKP | | | **PKiKP** | **08 16 31.5** | **-0.6** | |
| MORC | **Moravsky Berou** | 150.61 341 | ⇑P | | | **PKiKP** | **08 16 31.3** | **-0.8** | |
| CJR | **Cluj-Napoca** | 150.80 330 | ⇑P | | | **PKiKP** | **08 16 31.4** | **-1.2** | |
| MAUC | **Maruska** | 150.88 340 | ⇑*e*PKP | | | **PKiKP** | **08 16 32.6** | **-0.1** | |
| HSKC | **Hora Svate Kat** | 150.94 346 | ⇑*e*PKP | | | **PKiKP** | **08 16 32.6** | **-0.1** | |
| PRU | **Pruhonice** | 151.25 344 | ⇑*e*PKP | | | **PKiKP** | **08 16 33.0** | **-0.3** | |
| GOPC | **GO Pecny, Ondr** | 151.26 344 | ⇑*e*PKP | | | **PKiKP** | **08 16 33.2** | **-0.2** | |
| ARR | **Arges** | 151.28 327 | ⇑P | | | **PKiKP** | **08 16 34.1** | **+0.4** | |
| VYHS | **Vyhne** | 151.30 338 | *e*PKP | | | **PKiKP** | **08 16 33.2** | **-0.3** | |
| VYHS | | | *e* | | | | 08 16 40.9 | | |
| VRAC | **Vranov** | 151.31 341 | *e*PKP | | | **PKiKP** | **08 16 32.7** | **-0.8** | |
| JAVC | **Velka Javorina** | 151.38 340 | *e*PKP | | | **PKiKP** | **08 16 34.2** | **+0.5** | |
| KRUC | **Moravsky** | 151.59 341 | *e*PKP | | | **PKiKP** | **08 16 33.7** | **-0.4** | |
| LOT | **Lotru** | 151.65 328 | ⇑P | | | **PKPbc** | **08 16 32.4** | **-1.7** | |
| ZVC | **Zvikov** | 151.85 344 | ⇑*e*PKP | | | **PKiKP** | **08 16 34.7** | **+0.1** | |
| SIRR | **Siria** | 152.01 332 | ⇑P | | | **PKiKP** | **08 16 34.9** | **-0.1** | |
| GZR | **Gura Zlata** | 152.17 329 | ⇑P | | | **PKiKP** | **08 16 34.8** | **-0.7** | |
| SURR | **Surduc** | 152.20 331 | ⇑P | | | **PKPbc** | **08 16 32.2** | **-3.0** | |
| KHC | **Kasperske Hory** | 152.28 345 | ⇑*e*PKP | | | **PKiKP** | **08 16 35.4** | **-0.2** | |
| CKRC | **Cesky Krumlov** | 152.39 344 | ⇑*e*PKP | | | **PKiKP** | **08 16 35.7** | **-0.1** | |
| GERES | **GERESS Array B** | 152.52 345 | PKPbc | | | **PKiKP** | **08 16 35.5** | **-0.6** | |
| | comp=Z,2.5nm,0.6s,baz=343,slow=1.8,SNR=6.6 | | | | | | | | |
| BZS | **Buzias** | 152.53 331 | ⇑P | | | **PKiKP** | **08 16 35.8** | **-0.3** | |
| HERR | **Herculane** | 152.72 329 | ⇓P | | | **PKiKP** | **08 16 35.4** | **-1.1** | |
| CONA | **Conrad Observa** | 152.77 341 | *i* PKiKP | | | **PKiKP** | **08 16 36.4** | **-0.3** | |
| | comp=Z,4.8nm,0.7s | | | | | | | | |
| RONA | **Rosalia, Austr** | 152.84 340 | *i* PKiKP | | | **PKiKP** | **08 16 36.4** | **-0.3** | |
| | comp=Z,2.8nm,0.5s | | | | | | | | |
| MDVR | **Moldovita** | 153.12 330 | ⇑P | | | **PKPbc** | **08 16 35.4** | **-1.9** | |
| MORH | **Mrgy, Hungar** | 153.29 335 | ⇓P | | | **PKiKP** | **08 16 37.2** | **-0.5** | |
| MOA | **Molln** | 153.29 343 | *e*PKP | | | **PKPbc** | **08 16 35.6** | **-2.0** | |
| | comp=Z,1.8nm,1.0s | | | | | | | | |
| LESA | **Schwarzleotal** | 154.09 345 | *i* PKiKP | | | **PKiKP** | **08 16 39.0** | **-0.4** | |
| | comp=Z,4.2nm,0.9s | | | | | | | | |
| SOKA | **Soboth** | 154.14 341 | *e*PKiKP | | | **PKiKP** | **08 16 38.6** | **-0.9** | |
| | comp=Z,0.5nm,0.5s | | | | | | | | |
| KBA | **Koelnbreinsper** | 154.25 344 | *e*PKP | | | **PKPbc** | **08 16 37.6** | **-2.2** | |
| | comp=Z,2.1nm,0.5s | | | | | | | | |
| WTTA | **Wattenberg** | 154.49 346 | *e*PKiKP | | | **PKiKP** | **08 16 39.5** | **-0.9** | |
| | comp=Z,2.1nm,0.5s | | | | | | | | |
| MYKA | **Terra Mystica** | 154.58 343 | *e*PKiKP | | | **PKiKP** | **08 16 39.5** | **-0.9** | |
| | comp=Z,1.8nm,0.4s | | | | | | | | |
| ABTA | **Abfaltersbach** | 154.77 345 | *i* PKiKP | | | **PKiKP** | **08 16 40.1** | **-0.7** | |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| FETA | **Feichten** | 154.91 347 | *i* PKiKP | | | **PKiKP** | **08 16 39.8** | **-1.4** | |
| | comp=Z,5.9nm,1.6s | | | | | | | | |
| ESDC | **Sonseca Array** | 162.03 18 | PKPab | | | **PKPab** | **08 17 27.4** | **-0.8** | |
| | comp=Z,0.6nm,0.7s,baz=316,slow=4.1,SNR=4.1 | | | | | | | | |
| DBIC | **Dimbokro** | 162.39 153 | PKPab | | | **PKPab** | **08 17 33.0** | **+2.6** | |
| | comp=Z,6.3nm,0.9s,baz=176,slow=2.5,SNR=3.4 | | | | | | | | |
| TORD | **Torodi Ar. Bea** | 170.46 172 | PKP | | | **PKPdf** | **08 16 47.5** | **-0.6** | |
| | comp=Z,0.8nm,0.7s,baz=330,slow=3.6,SNR=4.4 | | | | | | | | |
| TORD | | | PKPab | | | **PKPab** | **08 18 08.1** | **+2.3** | |
| | comp=Z,1.3nm,0.4s,baz=196,slow=3.0,SNR=12 | | | | | | | | |
| TORD | | | PP | | | **PP** | **08 22 00.2** | **+5.3** | |
| | comp=Z,0.7nm,0.9s,baz=170,slow=2.6,SNR=3.7 | | | | | | | | |

**IDC 30 07:59:47.9±2.8, 54.15N×86.59E, h0km, mbtmp3.1/2, ML2.8/2, Error ellipse: s-maj=23.6km s-min=13.9km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | **ZALESOVO INFRA** | **1.06** | **260** | I | I | 08 05 50.0 | |
| | baz=79,slow=318,SNR=1.4 | | | | | | |
| ZALV | **Zalesovo Beam** | **1.06** | **260** | Pg | Pg | 08 00 06.9 | -1.3 |
| | 0.7nm,0.3s,baz=80,slow=16,SNR=7.0 | | | | | | |
| ZALV | | | | Lg | Lg | 08 00 23.3 | |
| | 1.9nm,0.3s,baz=78,slow=30,SNR=14 | | | | | | |
| KURBB | **Kurchatov Arra** | **6.07** | **238** | Pn | Pn | 08 01 19.8 | +1.1 |
| | 0.1nm,0.3s,baz=55,slow=14,SNR=7.9 | | | | | | |
| | 1.3nm,0.5s | | | | | | |
| MKAR | **Makanchi Array** | **7.86** | **202** | Pn | Pn | 08 01 44.1 | +0.8 |
| | 0.2nm,0.3s,baz=24,slow=13,SNR=6.2 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*IDC **30** 08:02:05.0±0.6, 8.73N×83.00W, h0km, mb4.2/16, mbtmp4.3/21, ML3.9/5, MS3.9/35, Error ellipse: s-maj=22.9km s-min=11.9km az=48.0*
*UPA **30** 08:02:06.7±1.2, 8.62N×83.12W, h1km±3km, MW4.7*
*UCR **30** 08:02:07.0±0.6, 8.55N×83.18W, h21km±1km, MW5.4, Fault plane solution: NP1:ϕs=267.18000°, δ41.03000°, λ74.66000°.*
*CATAC **30** 08:02:08.2±0.3, 8.62N×83.15W, h4km±1km, MB5.3, mb5.3, ML5.0*
*NEIC **30** 08:02:09.5±1.9, 8.72N±0.07×83.09W±0.06, h14km±5km, mb4.8/46, Mwr4.7/19, Error ellipse: s-maj=12.2km s-min=7.4km az=215.0, Moment Tensor Solution. Moment tensor: Scale 10^16Nm; Mrr 0.84; Mθθ -0.74; Mϕϕ -0.09; Mrθ 0.46; Mθϕ 0.27; Mϕr -0.74; Fault plane solution: Mo 1.21000×10^16 NP1:ϕs 134.49000°, δ68.71000°, λ107.97000°. NP2:ϕs 272.71000°, δ27.59000°, λ51.62000°. Principal axes: T 1.2864, Plg62.0000°, Azm72.0000°; N -0.1672, Plg17.0000°, Azm308.0000°; P -1.1192, Plg22.0000°, Azm211.0000°.*
*RSNC **30** 08:02:09.1±0.2, 9.7N±2.2×8.3W±1.2, h14km, M4.5, mB5.0, mb4.6, mBc6.2, Mjma4.5, ML4.7, ML5.0, MLh4.7, MLv4.8, Ms(BB)4.1, Mw(mB)4.4, MwMwp4.6, Mwp5.0*
*NEIC **30** 08:02:10.5, 8.73N±3.08W, h23km*
*GCMT **30** 08:02:13.5±0.3, 8.61N±0.02×82.98W±0.03, h24km, MW4.8/92, Moment Tensor Solution. s37,c44; s92,c129; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr 2.14±.12; Mθθ -1.73±.07; Mϕϕ -0.41±.07; Mrθ 0.07±.08; Mθϕ 0.88±.04; Mϕr 0.25±.11; Best double couple: Mo 2.16900×10^16 NP1:ϕs 303.00000°, δ46.00000°, λ99.00000°. NP2: ϕs 110.00000°, δ45.00000°, λ80.00000°. Principal axes: T 2.1710, Plg83.0000°, Azm291.0000°; N -0.0050, Plg7.0000°, Azm117.0000°; P -2.1680, Plg1.0000°, Azm27.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 30 08:02:07.9±0.6, 8.60N±0.02×83.15W±0.02, h17km±3km, n540, σ1$26/565, mb4.6/36, MS3.9/32, 10C-48D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FITO | **Golfito** | **0.02** | **355** | ⇑*e*P | **Pg** | **08 02 10.1** | **-0.7** |
| FITO | | | | *e*S | **Sg** | **08 02 12.6** | **-0.3** |
| EDAD | **Golfito** | **0.05** | **344** | ⇑*e*P | **Pg** | **08 02 10.4** | **-0.7** |
| EDAD | | | | *e*S | **Sg** | **08 02 13.0** | **-0.1** |
| PTJ1 | **Puerto Jimnez** | **0.16** | **245** | *i* P | **Pg** | **08 02 11.5** | **-0.8** |
| PTJ1 | | | | IAML | | 08 02 12.1 | |
| | comp=Z,1100μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | **Sg** | **08 02 15.7** | **+0.6** |
| PTJ1 | **Puerto Jimnez** | **0.16** | **245** | ⇑*i*P | **Pg** | **08 02 11.4** | **-0.8** |
| PTJ1 | | | | *e*S | **Sg** | **08 02 14.3** | **-0.7** |
| PTJ1 | **Puerto Jimnez** | **0.16** | **245** | ⇑*e*P | **Pg** | **08 02 11.4** | **-0.8** |
| JIME | **Puerto Jimenez** | **0.18** | **249** | ⇑*e*P | **Pg** | **08 02 11.6** | **-0.9** |
| JIME | | | | *e*S | **Sg** | **08 02 15.7** | **+0.2** |
| NELY | **Ciudad Neily** | **0.21** | **77** | ⇓*e*P | **Pb** | **08 02 13.1** | **-0.2** |
| NELY | | | | *e*S | **Sb** | **08 02 17.9** | **+0.9** |
| CDITO | **Canoas** | **0.28** | **96** | *i* P | **Pb** | **08 02 14.0** | **-0.5** |
| CDITO | | | | *i* S | **Sb** | **08 02 19.7** | **+0.8** |
| CDITO | | | | IAML | | 08 02 27.8 | |
| | comp=Z,130μm,1.0s | | | | | | |
| VITO | **San Vito** | **0.28** | **40** | ⇓*e*P | **Pb** | **08 02 14.7** | **0.0** |
| MLIR3 | **Monte Lirio, C** | **0.38** | **60** | ⇓*i*P | **Pb** | **08 02 16.2** | **0.0** |
| MLIR3 | | | | *i* S | **Sb** | **08 02 21.3** | **-0.5** |
| EDP2 | **Potrero Grande** | **0.41** | **357** | ⇓*e*P | **Pb** | **08 02 16.4** | **-0.4** |
| EDP2 | | | | *e*S | **Sb** | **08 02 23.8** | **+1.0** |
| EDPN | **Palmar Norte** | **0.47** | **320** | ⇓*e*P | **Pg** | **08 02 16.4** | **-0.9** |
| EDPN | | | | *e*S | **Sg** | **08 02 23.7** | **0.0** |
| PTPM | **Petroterminale** | **0.48** | **146** | *e*P | **Pg** | **08 02 17.1** | **-0.5** |
| PTPM | | | | *e*S | **Sn** | **08 02 26.4** | **-1.7** |
| BRU2 | **Volcan** | **0.49** | **68** | *i* P | **Pg** | **08 02 17.4** | **-0.5** |
| BRU2 | **Volcan** | **0.49** | **68** | *i* P | **Pb** | **08 02 17.7** | **-0.6** |
| BRU2 | | | | *i* S | **Sb** | **08 02 24.7** | **-0.6** |
| BRU2 | | | | IAML | | 08 02 32.0 | |
| | comp=Z,63μm,1.0s | | | | | | |
| BRU2 | **Volcan** | **0.49** | **68** | ⇓*i*P | **Pb** | **08 02 17.8** | **-0.4** |
| BRU2 | | | | *e*S | **Sb** | **08 02 26.1** | **+0.8** |
| BRU2 | **Volcan** | **0.49** | **68** | ⇓*e*P | **Pb** | **08 02 17.8** | **-0.6** |
| EDBA | **Buenos Aires** | **0.57** | **348** | ⇓*e*P | **Pg** | **08 02 18.9** | **-0.4** |
| BCO2 | **Palmira** | **0.63** | **80** | ⇓*i*P | **Pg** | **08 02 20.0** | **-0.4** |
| BCO2 | | | | *i* S | **Sb** | **08 02 29.9** | **+0.8** |
| DRK0 | **Durika** | **0.66** | **352** | *i* P | **Pg** | **08 02 20.3** | **-0.7** |
| DRK0 | | | | *i* S | **Sg** | **08 02 29.5** | **-0.3** |
| DRK0 | | | | IAML | | 08 02 30.2 | |
| | comp=Z,180μm,1.0s | | | | | | |
| DRK0 | **Durika** | **0.66** | **352** | ⇓*i*P | **Pg** | **08 02 20.1** | **-0.9** |
| DRK0 | | | | *e*S | **Sb** | **08 02 30.2** | **0.0** |
| DRK0 | **Durika** | **0.66** | **352** | ⇓*e*P | **Pg** | **08 02 20.1** | **-0.9** |
| OCHAL | **Ojochal** | **0.69** | **315** | *i* P | **Pg** | **08 02 19.8** | **-1.7** |
| OCHAL | | | | *i* S | **Sg** | **08 02 30.1** | **-0.6** |
| OCHAL | | | | IAML | | 08 02 33.8 | |
| | comp=Z,29μm,1.0s | | | | | | |
| DVD | **David** | **0.71** | **104** | *e*P | **Pg** | **08 02 20.8** | **-1.1** |
| DVD | | | | *e*S | **Sb** | **08 02 31.7** | **+0.2** |
| LOCO3 | **Loma Colorada,** | **0.75** | **105** | *e*P | **Pg** | **08 02 21.5** | **-1.2** |
| LOCO3 | | | | *e*S | **Sb** | **08 02 32.8** | **+0.2** |
| PEDE3 | **Pedregal, Chir** | **0.76** | **107** | *e*P | **Pg** | **08 02 21.4** | **-1.3** |
| PEDE3 | | | | *e*S | **Sb** | **08 02 33.2** | **+0.5** |
| LOMA3 | **Las Lomas, Chi** | **0.77** | **103** | *e*P | **Pg** | **08 02 21.7** | **-1.3** |
| LOMA3 | | | | *e*S | **Sn** | **08 02 33.9** | **-1.5** |
| PSOM3 | **Paja de Sombre** | **0.82** | **84** | ⇓*i*P | **Pb** | **08 02 22.6** | **-1.3** |
| PSOM3 | | | | *e*S | **Sg** | **08 02 34.5** | **-0.5** |
| ZELE | **Perez Zeledon** | **0.94** | **324** | ⇓*e*P | **Pb** | **08 02 24.3** | **-1.5** |
| CHGR2 | **Aguacate** | **1.05** | **72** | *e*P | **Pb** | **08 02 26.0** | **-1.7** |
| CHGR2 | | | | *e*S | **Sb** | **08 02 40.7** | **-0.5** |
| BRIBI | **Bribri** | **1.06** | **16** | ⇓*e*P | **Pn** | **08 02 27.9** | **-0.1** |
| CNI2 | **El Empalme, Bo** | **1.06** | **40** | ⇓*i*P | **Pb** | **08 02 26.5** | **-1.3** |
| CNI2 | | | | *i* S | **Sn** | **08 02 42.2** | **-0.2** |
| BUS1 | **Rivas** | **1.11** | **328** | ⇓*e*P | **Pb** | **08 02 26.9** | **-2.1** |
| RGM0 | **Gandoca** | **1.12** | **29** | Pn | **Pb** | **08 02 28.2** | **-0.6** |
| RGM0 | **Gandoca** | **1.12** | **29** | *i* P | **Pg** | **08 02 29.6** | **0.0** |
| RGM0 | | | | *i* S | **Sg** | **08 02 46.7** | **+2.5** |
| RGM0 | | | | IAML | | 08 02 56.6 | |
| | comp=Z,35μm,1.0s | | | | | | |
| RGM0 | **Gandoca** | **1.12** | **29** | ⇓*i*P | **Pg** | **08 02 29.4** | **-0.2** |
| RGM0 | | | | *e*S | **Sg** | **08 02 45.4** | **+1.1** |
| RGM0 | **Gandoca** | **1.12** | **29** | ⇓*e*P | **Pg** | **08 02 29.2** | **-0.3** |
| LLNJ | **Naranjito** | **1.27** | **313** | *e*P | **Pn** | **08 02 29.1** | **-1.9** |
| RAZU | **San Marcos de** | **1.35** | **321** | *e*P | **Pn** | **08 02 30.6** | **-1.6** |
| TURIB | **Turrialba** | **1.40** | **338** | ⇓*e*P | **Pn** | **08 02 31.3** | **-1.4** |
| REPA | **Paraso** | **1.41** | **330** | ⇓*e*P | **Pn** | **08 02 31.4** | **-1.6** |
| LCR2 | **La Lucha 2** | **1.41** | **323** | Pn | **Pn** | **08 02 31.9** | **-1.1** |
| LCR2 | **La Lucha 2** | **1.41** | **323** | *i* P | **Pn** | **08 02 31.7** | **-1.4** |
| LCR2 | | | | *i* S | **Sg** | **08 02 53.8** | **+0.2** |
| LCR2 | | | | IAML | | 08 02 54.4 | |
| | comp=Z,20μm,1.0s | | | | | | |
| LCR2 | **La Lucha 2** | **1.41** | **323** | ⇓*e*P | **Pn** | **08 02 31.2** | **-1.9** |
| ABE2 | **San Pablo** | **1.41** | **321** | *e*P | **Pn** | **08 02 31.9** | **-1.2** |
| VINA | **Juan Vinas** | **1.41** | **335** | ⇓*e*P | **Pn** | **08 02 31.7** | **-1.3** |
| VERB | **Verbena** | **1.44** | **338** | ⇓*e*P | **Pn** | **08 02 32.1** | **-1.2** |
| RVSTA | **Santa Teresita** | **1.45** | **340** | ⇓*e*P | **Pn** | **08 02 32.6** | **-0.9** |
| NANC3 | **Nancito, Chiri** | **1.45** | **104** | *e*P | **Pn** | **08 02 32.5** | **-1.0** |
| NANC3 | | | | *e*S | **Sb** | **08 02 52.6** | **-0.1** |
| PCAYA | **Pacayas** | **1.46** | **334** | ⇓*e*P | **Pn** | **08 02 32.6** | **-1.1** |
| TAGO | **Cartago** | **1.47** | **329** | ⇓*e*P | **Pn** | **08 02 32.4** | **-1.4** |
| VTCV | **VTCV, Calle Va** | **1.48** | **338** | ⇓*e*P | **Pn** | **08 02 33.0** | **-1.1** |
| TAAN | **Batan** | **1.48** | **353** | ⇓*e*P | **Pn** | **08 02 33.9** | **0.0** |
| RAFA | **San Farael, Vo** | **1.49** | **334** | *i* P | **Pn** | **08 02 33.4** | **-0.9** |
| RAFA | | | | *i* S | **Sg** | **08 02 55.5** | **-0.8** |
| RAFA | | | | IAML | | 08 03 01.9 | |
| | comp=Z,74μm,1.0s | | | | | | |
| RAFA | **San Farael, Vo** | **1.49** | **334** | ⇓*e*P | **Pn** | **08 02 33.1** | **-1.2** |
| CVTV | **Tajo** | **1.51** | **337** | ⇓*e*P | **Pn** | **08 02 33.5** | **-1.1** |
| CVTQ | **Turrialba Volc** | **1.52** | **336** | ⇓*e*P | **Pn** | **08 02

**CNTA3 Canitas, Panam 4.26 81** *e*P Pn **08 03 13.9 +1.9**
CNTA3 *e*S Sn **08 04 03.3 +1.9**
**BOAB BOACO BROADBAN 5.55 327** Pn Pn **08 03 16.8 +0.7**
**BOAB BOACO BROADBAN 5.55 327** *i* P Pn **08 03 17.7 +1.6**
BOAB IAML 08 04 40.8
comp=Z,610nm,1.0s
**SAPS Ciudad Sandino 4.77 318** *i* P Pn **08 03 21.7 +2.5**
SAPS IAML 08 03 45.4
comp=Z,500nm,1.0s
**TOTI Torti 4.80 86** *e*P Pn **08 03 20.6 +1.1**
TOTI *e*S Sn **08 04 18.0 +3.2**
**COPN Copaltepe 4.91 317** *i* P Pn **08 03 23.3 +2.3**
COPN IAML 08 03 47.2
comp=Z,230nm,1.0s
**PRVC Isla de Provid 5.06 20** P Pn **08 03 22.0 -1.1**
**UPD2 Meteti 5.08 90** *e*P Pn **08 03 24.9 +1.6**
UPD2 *e*S Sn **08 04 22.3 +0.5**
**LEVN Ruinas Leon Vi 5.08 318** *i* P Pn **08 03 26.5 +3.1**
LEVN IAML 08 03 52.9
comp=Z,330nm,1.0s
LEVN IAmb IAmb 08 03 52.9
comp=Z,270nm,1.0s
**CNGA Al SSO del Vol 5.21 318** *i* P Pn **08 03 25.2 0.0**
CNGA IAML 08 03 26.3
comp=Z,400nm,1.0s
CNGA IVmB_BB 08 03 26.3
comp=Z,5µm,1.0s
**CNGN Cerro Negro 5.21 318** Pn **08 03 25.9 +0.7**
**CNGN Cerro Negro 5.21 318** P Pn **08 03 26.5 +1.3**
comp=Z,192nm,0.8s,comp=Z,2µmcomp=Z,0.6nm
**CNGN Cerro Negro 5.21 318** *i* P Pn **08 03 27.1 +1.9**
CNGN IAmb IAmb 08 03 49.2
comp=Z,200nm,0.8s
CNGN IVmB_BB 08 03 59.0
comp=Z,2µm,1.0s
CNGN IAML 08 05 05.1
comp=Z,280nm,1.0s
**ROCN Rota Cerro Neg 5.25 318** *i* P Pn **08 03 28.4 +2.6**
ROCN IVmB_BB 08 03 31.9
comp=Z,2µm,1.0s
ROCN IAML 08 03 32.0
comp=Z,200nm,1.0s
ROCN IAmb IAmb 08 03 32.3
comp=Z,130nm,0.4s
**PACN Al O del Volca 5.27 318** *i* P Pn **08 03 28.2 +2.2**
PACN IVmB_BB 08 03 33.3
comp=Z,2µm,1.0s
PACN IAML 08 03 33.4
comp=Z,200nm,1.0s
**TEL3 Telica 3 5.36 318** *i* P Pn **08 03 30.0 +2.8**
TEL3 IVmB_BB 08 03 30.5
comp=Z,4µm,1.0s
**LIMN Finca el Limon 5.44 325** *i* P Pn **08 03 30.2 +1.8**
LIMN IAML 08 03 31.4
comp=Z,400nm,1.0s
LIMN IAmb IAmb 08 03 31.5
comp=Z,310nm,0.9s
LIMN IVmB_BB 08 03 57.0
comp=Z,3µm,1.0s
**PTAC Punta Ardita, 5.49 105** P Pn **08 03 28.2 -0.8**
comp=Z,100nm,1.0s,comp=Z,2µmcomp=Z,0.8nm
**PKGN Cerro Pekin 5.52 317** *i* P Pn **08 03 31.9 +2.5**
PKGN IAML 08 04 01.2
comp=Z,500nm,1.0s
PKGN IVmB_BB 08 04 01.2
comp=Z,4µm,1.0s
PKGN IAmb IAmb 08 04 01.6
comp=Z,470nm,0.8s
PKGN *i* S Sn **08 04 35.4 +2.9**
**CRIN San Cristobal 5.59 317** Pn **08 03 31.8 +1.4**
**CRIN San Cristobal 5.59 317** P Pn **08 03 31.6 +1.1**
comp=Z,375nm,0.8s,comp=Z,4µm
**CAPC Capurgana 5.74 89** P Pn **08 03 36.2 +3.8**
comp=Z,118nm,0.9s,comp=Z,2µmcomp=Z,0.7nm
**OCON Estacion meteo 5.97 327** *i* P Pn **08 03 34.4 -1.2**
OCON IAML 08 03 40.4
comp=Z,380nm,1.0s
OCON IAmb IAmb 08 03 40.5
comp=Z,220nm,0.5s
OCON IVmB_BB 08 03 49.2
comp=Z,4µm,1.0s
**SOLC Bahia Solano 6.17 112** P Pn **08 03 37.7 -0.6**
**APAC Apartado, Choc 6.54 96** P Pn **08 03 47.8 +4.3**
comp=Z,97nm,1.3s,comp=Z,2µmcomp=Z,2µmcomp=Z,0.8nm
**TGUH Tegucigalpa,Un 6.76 324** Pn Pn **08 03 47.9 +1.3**
**TGUH Tegucigalpa,Un 6.76 324** P Pn **08 03 48.6 +2.0**
comp=Z,131nm,0.7s,comp=Z,2µmcomp=Z,0.8nm
**DBBC Dabeiba 7.06 102** P Pn **08 03 54.3 +3.6**
comp=Z,29nm,0.7s,comp=Z,311nmcomp=Z,0.1nm
**CBOC Ciudad Bolivar 7.59 111** P Pn **08 03 58.6 +0.6**
comp=Z,25nm,0.9s,comp=Z,403nmcomp=Z,0.1nm
**UREC San Jos de Ur 7.59 96** P Pn **08 04 00.1 +2.2**
comp=Z,24nm,0.9s,comp=Z,17µmcomp=Z,0.5nm
**PLMC San Jos del P 7.75 118** P Pn **08 03 59.5 -0.6**
comp=Z,24nm,0.9s,comp=Z,2µmcomp=Z,0.2nm
**SNET Serv Nac Est T 7.81 311** Pn **08 04 02.2 +1.2**
**HELC Santa Helena 7.93 107** P Pn **08 04 04.1 +1.2**
comp=Z,22nm,0.8s,comp=Z,328nmcomp=Z,0.1nm
**SJCC San Jacinto, C 7.97 80** P Pn **08 04 03.9 +0.7**
comp=Z,77nm,1.1s,comp=Z,795nmcomp=Z,0.2nm
**YOTC Yotoco, Valle 8.18 124** P Pn **08 04 08.6 +2.5**
comp=Z,15nm,0.9s
**ZARC Zaragoza, Cauc 8.29 97** P Pn **08 04 08.5 +1.0**
comp=Z,34nm,1.0s,comp=Z,453nm
**MTO3 Montecristo 8.38 314** Pn **08 04 09.9 +1.1**
**JAMC Jamundi, Valle 8.38 129** P Pn **08 04 10.5 +1.6**
comp=Z,20nm,1.4s,comp=Z,316nm
**ESQI Esquipulas 8.47 315** Pn **08 04 12.4 +2.4**
**NORC Norcasia 8.76 110** P Pn **08 04 17.7 +3.7**
comp=Z,12nm,1.0s
**BBAC Balboa, Cauca 8.79 138** P Pn **08 04 16.0 +1.4**
comp=Z,24nm,1.3s,comp=Z,317nm
**POPC Popayan, Colom 8.82 133** P Pn **08 04 17.2 +2.2**
comp=Z,40nm,1.3s,comp=Z,385nm
**PTBC PUERTO BERRIO, 8.86 103** P Pn **08 04 18.1 +2.7**
comp=Z,11nm,1.0s
**ARGC Ariguani, Magd 8.88 81** P Pn **08 04 18.3 +2.7**
comp=Z,43nm,1.1s
**ORTC Ortega, Tolima 9.14 120** P Pn **08 04 22.0 +2.8**
comp=Z,23nm,1.5s
**GCUF Volcan Galeras 9.34 141** P Pn **08 04 26.6 +4.3**
comp=Z,53nm,1.2s,comp=Z,1µm
**SPBC San Pablo de B 9.47 107** P Pn **08 04 26.9 +3.0**
comp=Z,18nm,1.1s
**TULM Tulcn-Chalpat 9.48 145** Pn Pn **08 04 28.0 +3.7**
**ROSC El Rosal 9.54 113** Pn Pn **08 04 25.7 +0.7**
comp=Z,3.2nm,0.3s,baz=322,slow=19,SNR=8.2
**OTAV Otavalo 9.54 150** Pn Pn **08 04 26.7 +1.6**
**OTAV Otavalo 9.54 150** P Pn **08 04 26.9 +1.9**
comp=Z,11nm,1.2s
**OTAV Otavalo 9.54 150** *e*P Pn **08 04 27.0 +1.9**
**PRAC Prado 9.54 120** P Pn **08 04 27.7 +2.9**
comp=Z,14nm,0.9s
**APG El Apazote 9.57 312** Pn Pn **08 04 27.7 +2.4**
comp=Z,0.2nm,0.3s,baz=96,slow=7.6,SNR=21
**IMBA Imbabura, San 9.63 149** Pn **08 04 28.6 +2.2**
**PULU Pululahua 9.70 151** Pn Pn **08 04 29.0 +1.7**
**OCAC Ocana 9.73 91** P Pn **08 04 30.3 +2.8**
comp=Z,39nm,0.7s
**CHIC Chingaza 10.16 112** P Pn **08 04 37.2 +3.7**
comp=Z,23nm,0.9s
**URMC La Uribe, Meta 10.22 121** P Pn **08 04 37.0 +2.9**
comp=Z,23nm,0.9s
**ANTS Antisana-Sarah 10.31 151** Pn **08 04 39.3 +3.5**
**RUSC La Rusia 10.35 104** P Pn **08 04 39.0 +2.9**
comp=Z,35nm,1.1s
**PPLP Puerto Lpez 10.36 167** P Pn **08 04 39.9 +4.0**
**SLOR San Lorenzo - 10.37 153** Pn **08 04 40.4 +4.0**
**VILC Villavicencio, 10.40 115** P Pn 08 04 41.9 +5.3
comp=Z,74nm,0.7s,comp=Z,780nm
**PAMC Pamplona, Colo 10.43 96** P Pn **08 04 39.9 +2.6**
**HUEH Huehuetenango 10.54 310** Pn **08 04 40.5 +1.9**
**PIAT Ana Tenorio 10.71 153** P Pn **08 04 45.3 +4.2**
comp=Z,3.4nm,0.9s
**MTDJ Mount Denham 11.01 29** Pn Pn **08 04 44.8 -0.1**
**MTDJ Mount Denham 11.01 29** P Pn **08 04 47.5 +2.6**
comp=Z,50nm,1.4s
**MACC Macarena, Meta 11.27 124** P Pn **08 04 49.1 +0.8**
comp=Z,17nm,0.7s,comp=Z,319nm
**URIC Uribia, Colomb 11.41 73** P Pn **08 04 47.5 -2.8**
comp=Z,31nm,0.9s
**CCIG Comitan 11.62 312** Pn **08 04 55.3 +1.9**
**PAYG Puerto Ayora 11.64 218** P Pn **08 04 58.0 +4.5**
comp=Z,66nm,1.4s
**PTLC Puerto Leguiza 11.81 135** P Pn 08 05 02.6 +6.8
comp=Z,41nm,1.6s,comp=Z,912nm

**SDV Santo Domingo 12.38 88** Pn Pn **08 05 01.2 -2.5**
comp=Z,2.5nm,0.3s,baz=339,slow=17,SNR=1.6
SDV Sn Sn **08 07 20.0 -1.5**
comp=Z,2.5nm,0.3s,baz=356,slow=9.8,SNR=1.5
SDV LR LR 08 10 28.0
comp=Z,500nm,19.1s,baz=268,slow=41
comp=Z,8.4nm,0.3s
**ARNL Arenillas 12.46 166** Pn **08 05 07.3 +2.7**
**MCRA Macar, Loja 13.28 166** P Pn **08 05 19.7 +3.8**
comp=Z,4.1nm,1.3s
**CMIG Matias Romero 14.21 308** Pn Pn **08 05 29.0 +0.5**
comp=Z,1.4nm,0.3s,baz=130,slow=10,SNR=12
comp=Z,3.3nm,0.3s
**BAUV El Baul 14.94 88** Pn Pn **08 05 37.6 -0.9**
**SDDR Presa de Saban 15.45 47** Pn Pn **08 05 45.9 +0.5**
SDDR IAmb IAmb 08 06 06.5
comp=Z,31nm,0.9s
**SDDR Presa de Saban 15.45 47** P Pn **08 05 45.3 -0.1**
**ATAH Atahualpa 16.34 163** Pn P **08 05 58.8 -1.2**
comp=Z,0.2nm,0.3s,baz=342,slow=7.6,SNR=4.8
ATAH LR LR 08 11 37.6
comp=Z,794nm,19.0s,baz=333,slow=35
comp=Z,6.6nm,0.9s
**TLIG Tlapa 17.44 302** P **08 06 13.5 +1.6**
**TBTG Tabatinga, AM 18.33 133** P P **08 06 22.3 +0.7**
TBTG IAmb IAmb 08 06 38.6
comp=Z,78nm,1.4s
**TBTG Tabatinga, AM 18.33 133** *e*P P **08 06 22.3 +0.7**
**PCRV Puerto La Cruz 18.34 84** P Pn **08 06 19.4 -2.4**
comp=Z,0.1nm,0.3s,baz=233,slow=7.3,SNR=2.3
PCRV LR LR 08 15 10.4
comp=Z,348nm,19.2s,slow=43
comp=Z,11nm,1.0s
**CZSB Cruzeiro do Su 19.28 147** P Pn **08 06 34.2 +1.1**
CZSB IAmb IAmb 08 06 48.4
comp=Z,39nm,1.1s
**CZSB Cruzeiro do Su 19.28 147** *e*P Pn **08 06 34.7 +1.5**
**JRQG Juriquilla Cam 20.58 308** P Pn 08 06 48.5 -0.2
**MOIG Morelia 20.64 304** P Pn 08 06 49.6 +0.1
MOIG IAmb IAmb 08 06 59.5
comp=Z,16nm,0.5s
**NNA Nana 21.40 163** P P **08 06 56.0 +0.9**
comp=Z,4.1nm,0.4s,baz=346,slow=4.2,SNR=2.3
comp=Z,4.1nm,0.4s
**SMRT St. Maarten 21.65 62** P P **08 06 57.5 -0.4**
**TEFE Tefe 22.04 122** *e*P P **08 07 02.0 0.0**
**352A Blakely 22.82 356** P P **08 07 10.3 +0.1**
352A IAmb IAmb 08 07 13.2
comp=Z,47nm,1.1s
**255A Hazlehurst 23.21 1** P P **08 07 15.3 +1.1**
**BOAV Boa Vista 23.34 104** *e*P P **08 07 15.8 +0.1**
**ZAIG Zacatecas 23.36 309** P P **08 07 18.2 +2.1**
**250A Grady 23.44 353** P P **08 07 17.3 +0.8**
250A IAmb IAmb 08 07 19.0
comp=Z,31nm,1.1s
**154A Montrose 23.89 0** P P **08 07 21.6 +0.7**
**441A DeRidder 23.95 338** P P **08 07 22.3 +0.9**
**152A Waverly Hall 23.99 357** P P **08 07 21.4 -0.4**
152A IAmb IAmb 08 07 23.0
comp=Z,14nm,0.8s
**CSU Charleston Sou 24.43 6** P P **08 07 26.9 +1.1**
**VBMS Vicksburg 24.47 345** P P **08 07 27.0 +0.8**
**146A Union 24.53 348** P P **08 07 27.2 +0.4**
**NHSC New Hope 24.54 6** P P **08 07 27.6 +0.9**
**GOGA Godfrey 24.69 359** P P **08 07 28.2 0.0**
GOGA IAmb IAmb 08 07 31.0
comp=Z,44nm,1.2s
**833A Chaparral WMA, 24.88 324** P P **08 07 29.1 -0.8**
833A IAmb IAmb 08 07 30.4
comp=Z,17nm,1.3s
**833A Chaparral WMA, 24.88 324** P P **08 07 29.2 -0.8**
baz=139
**ETMB Extrema 24.89 137** P P **08 07 29.1 -1.1**
**ETMB Extrema 24.89 137** *e*P P **08 07 28.8 -1.4**
**MACA Manacapuru-AM 25.27 117** P P **08 07 33.2 -0.4**
MACA IAmb IAmb 08 07 42.6
comp=Z,20nm,1.0s
**435B Jarrell 25.86 331** P P **08 07 38.5 -0.3**
baz=146
**SAML Samuel 26.45 131** *e*P P **08 07 42.9 -1.4**
**TKL Tuckaleechee C 26.93 359** LR LR 08 19 06.9
comp=Z,400nm,18.5s,baz=172,slow=38
**V58A Windy Hill, Pi 27.31 7** P P **08 07 52.0 +0.1**
V58A IAmb IAmb 08 07 53.5
comp=Z,38nm,1.1s
**CLTN Cedars of Leba 27.51 354** P P **08 07 53.0 -0.7**
**TZTN Tazewell 27.82 359** P P **08 07 56.5 +0.1**
TZTN IAmb IAmb 08 07 59.0
comp=Z,21nm,1.3s
**WHAR Wooly Hollow 27.85 344** P P **08 07 55.6 -1.1**
WHAR IAmb IAmb 08 07 57.5
comp=Z,31nm,1.1s
**U49A Red Boiling Sp 27.88 355** P P **08 07 56.5 -0.5**
**TXAR Lajitas Array 28.22 320** P P **08 08 01.1 +0.9**
comp=Z,0.4nm,0.8s,baz=133,slow=8.7,SNR=4.3
TXAR PcP PcP **08 11 13.8 0.0**
comp=Z,1.0nm,1.0s,baz=174,slow=2.7,SNR=4.9
comp=Z,0.4nm,0.8s
**FCAR Ozark Folk Cen 28.37 345** P P **08 08 00.1 -1.2**
FCAR IAmb IAmb 08 08 01.9
comp=Z,23nm,1.1s
**T57A Hurt 28.49 7** P P **08 08 02.6 +0.2**
T57A IAmb IAmb 08 08 04.1
comp=Z,29nm,1.3s
**BLA Blacksburg 28.59 5** P P **08 08 03.9 +0.6**
BLA IAmb IAmb 08 08 05.5
comp=Z,21nm,1.0s
**PBMO Poplar Bluff 28.82 348** P P **08 08 04.3 -1.0**
**LPAZ La Paz 28.86 149** P P **08 08 06.8 +0.2**
comp=Z,2.3nm,0.8s,baz=331,slow=10,SNR=9.3
LPAZ LR LR 08 20 44.1
comp=Z,172nm,18.9s,baz=312,slow=39
comp=Z,2.3nm,0.8s
**S57A Dark Hollow, R 29.27 7** P P **08 08 09.9 +0.5**
S57A IAmb IAmb 08 08 10.8
comp=Z,21nm,1.4s
**R50A Paris 29.57 358** P P **08 08 11.6 -0.3**
R50A IAmb IAmb 08 08 14.8
comp=Z,18nm,1.3s
**R58B Mineral 29.61 8** P P **08 08 11.8 -0.6**
**R55A Marlinton 29.67 5** P P **08 08 13.4 +0.4**
R55A IAmb IAmb 08 08 15.2
comp=Z,22nm,1.1s
**ITTB Itaituba 30.23 114** *e*P P **08 08 17.5 -0.6**
**MDP Montagnes des 30.48 95** LR LR 08 21 10.2
comp=Z,301nm,18.7s,baz=278,slow=38
**Q56A Snyder Ridge, 30.51 6** P P **08 08 21.5 +1.2**
Q56A IAmb IAmb 08 08 22.9
comp=Z,23nm,1.0s
**R40A Maddies Statio 30.68 346** P P **08 08 21.0 -0.8**
R40A IAmb IAmb 08 08 22.4
comp=Z,9.7nm,1.1s
**MAL2 Monte Alegre, 30.75 109** P P **08 08 22.8 +0.1**
MAL2 IAmb IAmb 08 08 31.3
comp=Z,20nm,0.9s
**P49A Miami Univ. Ec 30.83 358** P P **08 08 22.8 -0.3**
baz=177
**P52A Corning 30.91 2** P P **08 08 23.6 -0.2**
baz=182
**P57A Homestead Farm 31.09 8** P P **08 08 26.3 +0.9**
**VILB Vilhena 31.28 133** P P **08 08 27.2 -0.1**
VILB IAmb IAmb 08 08 27.7
comp=Z,11nm,1.0s
**VILB Vilhena 31.28 133** *e*P P **08 08 26.7 -0.7**
**O53A New Philadelph 31.56 3** P P **08 08 29.8 +0.3**
baz=184
**NPGB Novo Progresso 31.77 118** *e*P P **08 08 30.7 -1.0**
**VBST Vila Bela da S 32.48 135** *e*P P **08 08 37.1 -0.8**
**M53A WI Miller and 32.77 3** P P **08 08 40.2 0.0**
baz=184
**PDRB Porto dos Gac 33.07 127** *e*P P **08 08 41.0 -2.2**
**CLDB Colider 33.40 125** *e*P P **08 08 44.8 -1.1**
**PTLB Pontes e Lacer 33.72 135** *e*P P **08 08 47.9 -0.8**
**BBSD Serra de San D 33.96 139** *e*P P **08 08 50.1 -0.7**
**LVC Limon Verde 34.02 156** LR LR 08 24 23.7
comp=Z,112nm,19.3s,baz=318,slow=39
**LVC Limon Verde 34.02 156** *e*P P **08 08 53.0 +1.3**
**T25A Trinidad 34.33 329** P P **08 08 54.8 +0.7**
baz=140
**L61B Northampton 34.95 14** P P **08 08 59.7 +0.6**
baz=198
**PTET Porto Estrela 35.09 133** *e*P P **08 08 59.5 -1.0**
**NBRS Nobres 35.45 130** *e*P P **08 09 02.9 -0.8**
**W18A Petrified Fore 35.90 321** P P **08 09 08.7 +1.1**
baz=131

**214A Organ Pipe Nat 36.02 314** P P **08 09 09.8 +1.2**
baz=124
**S22A 4UR Ranch, Cre 36.05 327** P P **08 09 09.6 +0.6**
baz=138
**Q24A Divide 36.11 330** P P **08 09 09.9 +0.4**
baz=141
**SADO Sadowa 36.20 5** LR LR 08 25 07.5
comp=Z,178nm,18.0s,baz=245,slow=38
**BBLB La Banda, Boli 36.21 139** *e*P P **08 09 09.6 -0.6**
**SALV Santo Antonio 36.50 132** *e*P P **08 09 11.4 -1.3**
**SNDB Serra Nova Dou 37.70 122** *e*P P **08 09 21.6 -1.4**
**PANT Pantanal (Braz 37.90 137** *e*P P **08 09 22.9 -1.7**
**N23A Red Feather La 37.99 332** P P **08 09 26.2 +0.8**
baz=141
**FDPY Filadelfia 38.20 144** *e*P P **08 09 27.3 +0.3**
**BLYC Blythe 38.22 315** P P **08 09 27.9 +0.8**
BLYC IAmb IAmb 08 09 29.8
comp=Z,13nm,1.1s
**W13A Hualapai Mount 38.55 318** P P **08 09 31.2 +1.0**
**MURT Porto Murtinho 39.15 141** *e*P P **08 09 33.4 -1.7**
**AC05 El Transito 39.24 162** P P **08 09 37.2 +1.3**
**ARAG Araguaiana, MT 39.33 128** *e*P P **08 09 34.8 -1.9**
**SMTB Santa Maria do 39.45 115** *e*P P **08 09 37.1 -0.6**
**TPFO Pinon Flats 39.50 314** P P **08 09 38.9 +0.9**
baz=121
**AQDB Aquidauana 39.55 137** *e*P P **08 09 37.3 -1.1**
**RSSD Black Hills 39.78 336** P P **08 09 39.1 -1.2**
**PAPY Pozo Azul 40.60 144** *e*P P **08 09 46.9 -0.2**
**PDAR Pinedale Array 41.17 330** P P **08 09 51.0 -0.8**
comp=Z,0.5nm,0.7s,baz=146,slow=8.8,SNR=6.7
PDAR PcP PcP **08 11 50.3 -0.7**
comp=Z,0.6nm,0.9s,baz=133,slow=4.0,SNR=4.4
PDAR LR LR 08 30 49.0
comp=Z,56nm,18.0s,baz=124,slow=42
comp=Z,0.5nm,0.7s
**R11B Troy Canyon, C 41.58 321** P P **08 09 55.9 +0.7**
baz=127
**AMBA Amambai (Brazi 41.74 139** *e*P P **08 09 55.4 -1.1**
**H03N2 Juan Fernandez 42.00 175** T T 08 54 35.2
baz=354,slow=76,SNR=46
**H03N1 Juan Fernandez 42.01 175** T T 08 54 35.0
baz=354,slow=76,SNR=45
**H03N3 Juan Fernandez 42.02 175** T T 08 54 27.8
baz=354,slow=76,SNR=45
**BDFB Brasilia 42.33 125** P P **08 09 59.5 -2.0**
comp=Z,4.2nm,0.8s,baz=326,slow=6.5,SNR=4.7
comp=Z,4.2nm,0.8s
**SJPY San Joaquin 42.55 142** *e*P P **08 10 01.9 -1.1**
**CPUP Villa Florida 42.84 145** LR LR 08 29 31.7
comp=Z,109nm,18.8s,baz=1.0,slow=38
**ULM Lac du Bonnet 42.84 348** P P **08 10 02.4 -2.7**
comp=Z,5.1nm,0.6s,baz=165,slow=8.6,SNR=9.3
ULM LR LR 08 28 50.2
comp=Z,69nm,18.1s,baz=108,slow=38
comp=Z,5.1nm,0.6s
**H17A Grant Village 42.87 331** P P **08 10 06.3 +0.5**
baz=138
**NVAR Mina Array Bea 43.36 319** P P **08 10 10.2 +0.4**
comp=Z,2.0nm,0.8s,baz=134,slow=7.1,SNR=14
NVAR LR LR 08 30 31.4
comp=Z,74nm,21.7s,baz=122,slow=39
comp=Z,2.0nm,0.8s
**RPN Rapa Nui 43.66 215** LR LR 08 24 18.4
comp=Z,170nm,19.1s,baz=32,slow=30
**JANB Januaria 45.11 121** *e*P P **08 10 22.7 -1.1**
**ITQB Itaqui 45.83 147** *e*P P **08 10 28.6 -0.7**
**PSAL Palomas, Salto 46.44 149** *e*P P **08 10 34.1 +0.1**
**DIAM Diamantina, MG 47.25 125** *e*P P **08 10 39.7 -1.1**
**SCHQ Schefferville 47.91 13** LR LR 08 31 52.6
comp=Z,114nm,18.9s,baz=254,slow=37
**YBH Yreka Blue Hor 47.99 320** LR LR 08 35 27.3
comp=Z,65nm,18.2s,baz=141,slow=42
**CMC01 Camacan, BA 49.35 119** *e*P P **08 10 55.4 -1.5**
**PLCA Paso Flores 50.45 168** P P **08 11 04.4 -0.5**
comp=Z,4.2nm,0.8s,baz=342,slow=10,SNR=10.0
PLCA LR LR 08 28 41.8
comp=Z,43nm,18.4s,baz=10,slow=32
comp=Z,4.2nm,0.8s
**FRB Frobisher Bay 56.03 8** LR LR 08 36 07.0
comp=Z,152nm,18.5s,baz=216,slow=36
**BBB Bella Bella 56.77 329** LR LR 08 39 02.8
comp=Z,54nm,18.4s,baz=106,slow=39
**YKA Yellowknife Ar 58.45 343** P P **08 12 01.2 -1.4**
comp=Z,3.4nm,0.9s,baz=132,slow=7.8,SNR=16
comp=Z,3.4nm,0.9s
**TOAD Toad River Com 59.44 336** P P **08 12 08.8 -0.8**
baz=130
**RKT Rikitea 59.69 237** *e*LR LR 08 29 48.1
comp=Z,416nm,24.0s
**KOTAN Kotaneelee Air 59.81 338** P P **08 12 12.7 +0.5**
baz=131
**LIRD Liard River Hi 60.14 336** P P **08 12 13.5 -0.9**
baz=129
**T35M Bob Quinn 60.47 333** P P **08 12 17.5 +0.7**
baz=124
**CRAG Craig 61.03 330** P P **08 12 21.4 +0.9**
baz=120
**WRAK Wrangell Islan 61.14 331** P P **08 12 20.9 -0.4**
baz=121
**DLBC Dease Lake 61.19 334** LR LR 08 43 03.1
comp=Z,88nm,18.4s,baz=110,slow=40
**DLBC Dease Lake 61.19 334** P P **08 12 21.5 -0.2**
baz=124
**U33K Whale Pass 61.35 331** P P **08 12 22.9 +0.2**
baz=120
**S34M Telegraph Cree 61.38 333** P P **08 12 23.3 +0.4**
baz=123
**WRGLY Wrigley 61.70 341** P P **08 12 23.7 -1.3**
baz=133
**R33M Jennings River 62.13 335** P P **08 12 28.4 +0.3**
baz=124
**SFJD Kangerlussuaq 62.33 14** LR LR 08 39 15.4
comp=Z,119nm,20.9s,baz=217,slow=36
**Q32M Nakina River 62.45 334** P P **08 12 30.3 -0.1**
baz=122
**S32K Killisnoo 62.73 332** P P **08 12 32.8 +0.9**
baz=120
**SIT Sitka 62.88 331** P P **08 12 33.6 +0.7**
baz=119
**R32K Eaglecrest 63.10 332** P P **08 12 35.0 +0.5**
baz=120
**P33M Teslin, Yukon 63.36 335** P P **08 12 36.7 +0.4**
baz=122
**P32M Atlin 63.41 334** P P **08 12 36.8 +0.2**
baz=121
**N32M Quiet Lake 63.98 336** P P **08 12 40.3 0.0**
baz=123
**SKAG Skagway 64.06 333** P P **08 12 41.3 +0.5**
baz=120
**O30N Mendenhall 65.04 334** P P **08 12 47.6 +0.4**
baz=119
**M31M Drury Creek, Y 65.07 336** P P **08 12 47.3 -0.1**
baz=122
**P30M Million Dollar 65.10 334** P P **08 12 48.3 +0.6**
baz=118
**P29M Windy Craggy 65.22 333** P P **08 12 48.2 -0.1**
baz=117
**N31M Braeburn, Yuko 65.26 335** P P **08 12 49.1 +0.5**
baz=120
**N30M Aishikik Lake 65.80 335** P P **08 12 52.7 +0.5**
baz=119
**YUK6 Outpost Mounta 66.10 334** P P **08 12 55.1 +0.8**
baz=117
**M30M Minto, Yukon 66.22 336** P P **08 12 54.8 0.0**
baz=119
**O28M Mount Upton 66.82 333** P P **08 12 58.9 -0.1**
baz=115
**M29M Somme Creek 66.84 335** P P **08 12 58.7 -0.1**
baz=118
**YUK8 Steele Glacier 66.86 334** P P **08 12 58.5 -0.7**
baz=116
**H31M Peel River 66.99 340** P P **08 12 59.4 -0.3**
baz=123
**L29M L29M 67.02 336** P P **08 12 59.6 -0.3**
baz=118
**J30M Hart River 67.05 338** P P **08 13 00.1 -0.1**
baz=121
**K29M Barlow Dome 67.13 337** P P **08 13 00.8 0.0**
baz=119,SNR=5.6
**YUK3 Moose Creek 67.38 334** P P **08 13 01.9 -0.5**
baz=116
**I30M Mount Dempster 67.40 339** P P **08 13 02.1 -0.3**
baz=121,SNR=12
**G31M Satah River 67.59 341** P P **08 13 03.2 -0.1**
baz=124,SNR=7.4
**J29N Klondike Camp 67.70 337** P P **08 13 04.3 +0.1**
baz=119
**F31M Tsiigehtchic 67.71 341** P P **08 13 03.5 -0.6**

baz=124
DAWY **Dawson** 67.97 337 P P 08 13 05.6 -0.3
baz=117
EPYK **Eagle Plains** 68.11 340 P P 08 13 06.5 -0.2
baz=121
INK **Inuvik** 68.13 342 LR LR 08 46 14.7
comp=Z,104nm,18.8s,baz=265,slow=39
INK **Inuvik** 68.13 342 P P 08 13 06.6 -0.1
baz=125,SNR=6.2
I29M **Ogilvie Camp,** 68.17 338 P P 08 13 07.3 +0.2
baz=119,SNR=11
M27K **Edge Creek, AK** 68.23 335 P P 08 13 07.4 -0.3
baz=114
G30M **tAoh Zraii Nji** 68.26 340 P P 08 13 07.5 -0.2
baz=122
MCARA **McCarthy VSAT** 68.33 333 P P 08 13 08.2 0.0
baz=113
KAIM **Kayak Island** 68.42 332 P P 08 13 08.8 +0.1
baz=111
F30M **Barrier River** 68.46 341 P P 08 13 08.8 -0.1
baz=122,SNR=9.3
L27K **Beaver Creek,** 68.50 335 P P 08 13 09.2 0.0
baz=115,SNR=9.6
H29M **Whitestone** 68.61 339 P P 08 13 09.8 -0.1
baz=119
M26K **Nabesna, AK** 68.72 334 P P 08 13 10.5 -0.2
baz=113
I28M **Miner Creek** 68.81 338 P P 08 13 11.4 +0.1
baz=117
G29M **Pine Creek** 68.84 340 P P 08 13 11.0 -0.2
baz=120,SNR=9.7
BMRM **Bremner River** 68.88 333 P P 08 13 11.7 0.0
baz=111
EGAK **Eagle** 68.97 337 P P 08 13 11.6 -0.5
baz=116,SNR=6.4
K27K **Chicken** 69.01 336 P P 08 13 12.4 0.0
baz=115
N25K **Chitina, Valde** 69.11 333 P P 08 13 13.0 -0.1
baz=112
L26K **Log Cabin Wild** 69.12 335 P P 08 13 13.2 +0.1
baz=113
Q23K **Middleton Isla** 69.17 331 P P 08 13 13.4 +0.1
baz=109
EYAK **Cordova Ski Ar** 69.26 332 P P 08 13 13.8 -0.1
baz=110
SUMG **Summit** 69.30 13 *i* P P 08 13 12.0 -2.5
I27K **Kandik River** 69.51 338 P P 08 13 15.4 -0.1
baz=116,SNR=15
E29M **Blow River** 69.54 341 P P 08 13 15.4 -0.2
baz=120
HARP **HAARP** 69.65 334 P P 08 13 16.4 +0.1
baz=111
KLU **Klutina** 69.67 333 P P 08 13 16.3 -0.2
baz=110
H27K **Steamboat Moun** 69.75 338 P P 08 13 17.2 +0.2
baz=116,SNR=5.3
SCRK **Sand Creek** 69.76 336 P P 08 13 17.5 +0.4
baz=113
J26L **Joseph Creek** 69.80 336 P P 08 13 17.3 0.0
baz=114,SNR=12
F28M **Old Crow** 69.81 340 P P 08 13 17.3 0.0
baz=118
P23K **Montague Islan** 69.86 331 P P 08 13 17.4 -0.3
baz=108
I26K **Coal Creek Min** 69.97 337 P P 08 13 18.0 -0.2
baz=114
GLI **Glacier Island** 69.99 332 P P 08 13 19.0 +0.5
baz=109
PAX **Paxson** 70.00 334 P P 08 13 18.3 -0.3
baz=111
RIDG **Independent Ri** 70.02 335 P P 08 13 18.9 +0.3
baz=112,SNR=8.7
G27K **Doyon Strip** 70.06 339 P P 08 13 18.8 0.0
baz=116
E28M **Babbage River** 70.17 341 P P 08 13 19.6 +0.1
baz=119
D28M **Stokes Point** 70.28 342 P P 08 13 20.2 +0.2
baz=120
SCM **Sheep Creek Mo** 70.41 333 P P 08 13 20.9 -0.3
baz=109
K24K **Donnelly Dome** 70.43 335 P P 08 13 21.1 -0.1
baz=111
BORG **Borgarnes** 70.45 24 LR LR 08 41 34.9
comp=Z,84nm,19.5s,baz=197,slow=34
J25K **Salcha River,** 70.56 336 P P 08 13 21.8 -0.2
baz=112,SNR=8.4
PWL **Port Wells** 70.56 332 P P 08 13 21.2 -0.8
baz=108
PPT2 **Papeete2** 70.57 248 *e*LR LR 08 34 46.7
comp=Z,50nm,22.0s
M23K **Glacier View** 70.58 333 P P 08 13 21.5 -0.5
baz=109
E27K **Coleen River** 70.65 340 P P 08 13 22.2 -0.3
baz=117
KNK **Knik Glacier** 70.79 332 P P 08 13 22.8 -0.5
baz=108
WAT6 **Susitna Watana** 70.84 334 P P 08 13 23.6 -0.2
baz=109,SNR=6.6
DHY **Denali Highway** 70.85 334 P P 08 13 23.5 -0.3
baz=109
SML **Sawmill** 70.86 333 P P 08 13 23.6 -0.2
baz=108
G26K **Porcupine Rive** 70.88 339 P P 08 13 23.3 -0.4
baz=114
D27M **Malcolm River** 70.93 341 P P 08 13 23.8 -0.4
baz=118
HDA **Harding Lake** 71.12 336 P P 08 13 24.7 -0.6
baz=110,SNR=10
PMR **Palmer** 71.15 333 P P 08 13 25.0 -0.5
baz=107
ILAR **Eielson Array** 71.23 336 P P 08 13 25.4 -0.6
comp=Z,4.5nm,0.9s,baz=111,slow=4.2,SNR=28
ILAR LR LR 08 49 19.9
comp=Z,46nm,19.1s,baz=181,slow=40
comp=Z,4.5nm,0.9s
WAT1 **Susitna Watana** 71.27 334 P P 08 13 26.1 -0.2
baz=108
RC01 **Rabbit Creek A** 71.28 332 P P 08 13 26.1 -0.3
baz=106
F26K **Sheenjek River** 71.31 339 P P 08 13 26.4 0.0
baz=114
H25L **Birch Creek** 71.36 338 P P 08 13 26.6 -0.1
baz=112
POKR **Poker Plat Res** 71.56 336 P P 08 13 27.7 -0.3
baz=110
COLA **College** 71.65 336 P P 08 13 28.5 0.0
baz=110
G25K **Bearman Lake** 71.65 338 P P 08 13 28.5 +0.1
baz=112
M22K **Willow** 71.65 333 P P 08 13 28.1 -0.3
baz=106
MCK **McKinley** 71.72 335 P P 08 13 28.6 -0.4
baz=108
F25K **Christian Rive** 71.80 339 P P 08 13 29.2 -0.2
baz=112
CAPN **Captain Cook N** 71.86 331 P P 08 13 28.8 -0.9
baz=105
Q20K **Shuyak Island** 71.94 329 P P 08 13 30.4 +0.2
baz=103
NEA2 **Nenana** 72.05 336 P P 08 13 30.5 -0.4
baz=108,SNR=6.9
G24K **Hadweenzic Riv** 72.13 338 P P 08 13 31.6 +0.2
baz=110
I23K **Minto, Yukon-K** 72.34 336 P P 08 13 32.1 -0.5
baz=108,SNR=6.3
SKT **Skwentna** 72.36 333 P P 08 13 32.2 -0.6
baz=105
O20K **Slope Mountain** 72.40 330 P P 08 13 32.9 -0.2
baz=104
C26K **Camden Bay** 72.48 341 P P 08 13 32.7 -0.6
baz=114
F24K **Squaw Lake** 72.57 339 P P 08 13 33.7 -0.3
baz=110
P19K **Oil Pt** 72.59 330 P P 08 13 33.8 -0.5
baz=103
H23K **Yukon River** 72.63 337 P P 08 13 33.9 -0.4
baz=108
BPAW **Bear Paw Mtn.** 72.70 335 P P 08 13 34.3 -0.6
baz=106,SNR=6.1
D25K **Kavik River** 72.71 341 P P 08 13 34.3 -0.5
baz=112
R18K **Karluk** 72.78 328 P P 08 13 34.9 -0.4
baz=101
MLY **Manley** 72.86 336 P P 08 13 35.4 -0.5
baz=107,SNR=8.1
E24K **Your Creek** 72.98 339 P P 08 13 36.4 0.0
baz=110
M20K **Styx River** 73.06 332 P P 08 13 36.6 -0.5
baz=104
G23K **Bananza Creek** 73.09 338 P P 08 13 37.1 0.0
baz=108,SNR=5.5
Q18K **Katmai Hardscr** 73.28 329 P P 08 13 38.1 -0.4
baz=101
COLD **Coldfoot** 73.32 338 P P 08 13 38.7 +0.3
baz=108
H22K **Ishtalitna Cre** 73.37 337 P P 08 13 38.4 -0.3
baz=106
E23K **Chandalar** 73.37 339 P P 08 13 38.8 0.0
baz=109
N19K **Bonanza Creek** 73.46 331 P P 08 13 39.1 -0.3
baz=102
P18K **Big Mountain,** 73.54 329 P P 08 13 39.2 -0.6
baz=101
L20K **Farewell, AK** 73.55 333 P P 08 13 39.3 -0.6
baz=103
TOLK **Toolik Lake Re** 73.55 340 P P 08 13 39.6 -0.2
baz=109
Q17K **Contact Creek** 73.66 328 P P 08 13 40.2 -0.5
baz=100
G22K **Bettles** 73.72 338 P P 08 13 40.9 +0.2
baz=107
R17L **Mt. Peulik Vol** 73.80 328 P P 08 13 41.3 -0.2
baz=100
H21K **Melozitna Rive** 73.87 336 P P 08 13 41.7 0.0
baz=105
L19K **White Mountain** 73.92 332 P P 08 13 42.0 0.0
baz=102
D23K **Nanushuk River** 74.03 340 P P 08 13 42.6 +0.1
baz=108
J20K **Nowinta River** 74.06 334 P P 08 13 42.5 -0.3
baz=103
N18K **Kilae Creek** 74.11 331 P P 08 13 42.7 -0.5
baz=101
F22K **John River** 74.14 338 P P 08 13 42.9 -0.3
baz=106
E22K **Anaktuvuk Pass** 74.18 339 P P 08 13 42.9 -0.6
baz=107
M18K **Stony River** 74.23 332 P P 08 13 43.1 -0.8
baz=101
C23K **Itkillik River** 74.28 341 P P 08 13 44.0 0.0
baz=108
G21K **Allakaket** 74.37 337 P P 08 13 44.4 -0.2
baz=105
F21K **Alatna River** 74.54 338 P P 08 13 45.6 0.0
baz=105
J19K **Poorman** 74.65 334 P P 08 13 45.6 -0.7
baz=102
L18K **Granite Mounta** 74.77 332 P P 08 13 46.6 -0.3
baz=100
E21K **Killik River** 75.04 339 P P 08 13 48.1 -0.3
baz=105
CHNA **Chernabura Isl** 75.20 324 P P 08 13 49.4 -0.2
baz=96
H19K **Roundabout Mou** 75.31 336 P P 08 13 49.7 -0.3
baz=102
GCSA **Galena City Sc** 75.34 335 P P 08 13 50.5 +0.4
baz=101
F20K **Avaraart Lake** 75.35 337 P P 08 13 50.6 +0.4
baz=103
K17K **Iditarod** 75.60 333 P P 08 13 52.3 +0.6
baz=99
M16K **Timber Creek** 75.65 331 P P 08 13 52.6 +0.5
baz=98
G19K **Purcell Mounta** 75.69 336 P P 08 13 52.5 +0.2
baz=101
SDPT **Sand Point** 75.76 325 P P 08 13 53.3 +0.5
baz=95
E20K **Nigu River** 75.79 338 P P 08 13 53.2 +0.4
baz=103
L16K **Owhat River** 75.99 332 P P 08 13 53.8 -0.1
baz=98
E19K **Redstone River** 76.01 338 P P 08 13 53.7 -0.3
baz=101
A22K **Sinclair Lake** 76.03 341 P P 08 13 54.1 +0.2
baz=104
H18K **Honhosa River** 76.03 335 P P 08 13 54.3 +0.1
baz=100
D20K **Etivluk River** 76.05 339 P P 08 13 54.3 +0.1
baz=102
J17K **VABM Dome** 76.06 333 P P 08 13 54.6 +0.3
baz=99
N15K **Kwethluk River** 76.09 330 P P 08 13 54.1 -0.5
baz=97
F19K **Shaleruckik Mo** 76.10 337 P P 08 13 54.5 +0.1
baz=101
ESDC **Sonseca Array** 76.25 51 P P 08 13 55.5 -0.5
comp=Z,7.1nm,1.1s,baz=280,slow=6.0,SNR=19
ESDC LR LR 08 44 13.1
comp=Z,52nm,18.7s,baz=278,slow=33
comp=Z,7.1nm,1.1s
G18K **Tagagawik** 76.28 336 P P 08 13 55.7 +0.1
baz=100
M15K **Kasigluk River** 76.44 330 P P 08 13 56.6 +0.1
baz=96
B20K **Meade River** 76.51 340 P P 08 13 56.8 +0.1
baz=102
O14K **Tigyukauivet M** 76.57 329 P P 08 13 57.6 +0.3
baz=96
F18K **Oolowik** 76.79 336 P P 08 13 58.4 +0.1
baz=99
G17K **Kiwalik Mounta** 77.03 335 P P 08 14 00.4 +0.6
baz=98
M14K **Bethel** 77.07 330 P P 08 14 00.7 +0.7
baz=95
C19K **Lookout Ridge** 77.18 339 P P 08 14 00.9 +0.3
baz=100
EKA **Eskdalemuir Ar** 77.28 35 P P 08 13 59.3 -2.1
comp=Z,7.7nm,0.8s,baz=257,slow=5.6,SNR=4.5
comp=Z,1.7nm,0.8s
E18K **Tukpahlearik C** 77.29 337 P P 08 14 01.2 0.0
baz=98
L14K **Kuka Creek** 77.48 331 P P 08 14 02.4 +0.1
baz=95
DBIC **Dimbokro** 77.50 85 P P 08 14 02.3 -1.1
comp=Z,10nm,1.0s,baz=265,slow=5.0,SNR=5.3
comp=Z,10nm,1.0s
E17K **Hotham Inlet** 77.71 337 P P 08 14 03.8 +0.2
baz=97
RDOG **Red Dog Mine** 78.24 338 P P 08 14 06.4 -0.1
baz=96
D17K **Noatak River** 78.27 337 P P 08 14 06.8 +0.1
baz=96
F15K **North Star Dit** 78.71 335 P P 08 14 09.5 +0.4
baz=94
M11K **Mekoryuk** 79.14 330 P P 08 14 12.3 +0.7
baz=92
UNV **Unalaska Valle** 79.19 323 P P 08 14 12.2 +0.2
baz=90
F14K **Arctic Creek** 79.39 335 P P 08 14 12.9 +0.1
baz=92
TNA **Tin City** 80.06 335 P P 08 14 15.7 -0.7
baz=91
TORD **Torodi Ar. Bea** 83.10 78 P P 08 14 32.7 -0.9
comp=Z,1.6nm,1.1s,baz=267,slow=5.2,SNR=5.7
comp=Z,1.6nm,1.1s
SPITS **Spitsbergen Ar** 83.59 12 LR LR 08 53 02.0
comp=Z,110nm,19.7s,baz=244,slow=37
NOA **NORSAR Array B** 84.65 29 P P 08 14 40.2 -0.4
comp=Z,1.6nm,0.9s,baz=281,slow=4.6,SNR=4.0
NOA LR LR 08 52 28.2
comp=Z,29nm,18.4s,baz=280,slow=36
comp=Z,1.6nm,0.9s
DAVOX **Davos/Dischmat** 85.87 43 LR LR 08 47 20.2
comp=Z,67nm,19.9s,baz=261,slow=32
HFS **Hagfors** 86.00 30 P P 08 14 47.2 -0.2
comp=Z,2.8nm,0.7s,baz=210,slow=8.3,SNR=3.7
HFS LR LR 08 50 25.8
comp=Z,58nm,19.1s,baz=278,slow=34
comp=Z,2.8nm,0.7s
ARCES **ARCESS Array B** 88.40 19 LR LR 08 52 23.8
comp=Z,24nm,21.5s,baz=229,slow=34
VRAC **Vranov** 89.84 40 LR LR 08 50 19.5
comp=Z,136nm,20.3s,baz=272,slow=32
VAE **Valguarnera** 90.77 52 LR LR 08 50 17.1
comp=Z,82nm,19.5s,baz=313,slow=32
FINES **FINESS Array B** 91.50 27 LR LR 08 51 29.2
comp=Z,46nm,20.7s,baz=265,slow=32
AKASG **Malin Array Be** 97.16 36 LR LR 08 57 22.9
comp=Z,72nm,19.7s,baz=250,slow=34
MA2 **Magadan** 99.70 335 LR LR 09 06 42.7
comp=Z,41nm,19.1s,baz=122,slow=39
DZM **Mont Dzumac** 112.04 250 *e*LR LR 08 53 48.5
comp=Z,65nm,22.1s
WMQ **Urumqi** 127.17 8 *e*PKP PKiKP 08 21 13.0 +0.6
WMQ LR LR
comp=Z,83nm,19.5s
TIA **Tai'an** 131.51 338 PKP PKiKP 08 21 26.3 +5.0
NJ2 **Nanjing** 134.43 334 *e*P PKiKP 08 21 27.5 +0.3
NJ2 pmax pmax
comp=Z,9.0nm,0.9s
ASAR **Alice Springs** 141.53 243 PKhKP PKPpre 08 21 34.5
comp=Z,1.7nm,0.9s,baz=103,slow=3.0,SNR=10
WRA **Warramunga Arr** 142.05 249 PKhKP PKPpre 08 21 34.4
comp=Z,2.4nm,1.0s,baz=101,slow=3.0,SNR=12
PZH **PanZhiHua** 144.78 352 PKP **PKPdf** 08 21 44.8 -0.2
CMAR **Chiang Mai Arr** 153.03 356 PKPbc **PKPbc** 08 22 04.6 -1.0
comp=Z,1.2nm,0.3s,baz=312,slow=2.7,SNR=7.0

*NNC **30** 08:02:12.1±0.8, 49°.98N×78°.14E, h0km, mb3.3, mpv3.0, Error ellipse: s-maj=8.5km s-min=3.8km az=91.0, Suspected Mining explosion.*
*IDC **30** 08:02:14.5±1.2, 50°.04N×78°.79E, h0km, mbtmp2.5/2, ML2.1/1, Error ellipse: s-maj=14.7km s-min=7.6km az=65.0*

**ISC 30 08:02:12.2±1.1, 50°.06N±0°.04×78°.18E±0°.08, h0km, n21, σ0s 61/31, 12C-11D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR07** | **Kurchatov Arra** | **0.56** | **22** | ⇑P | | **Pb** | **08 02 25.2** | **+0.2** |
| KUR07 | | | | ⇑S | | **Sb** | **08 02 34.0** | **+0.5** |
| **KUR06** | **Kurchatov Arra** | **0.58** | **22** | ⇓P | | **Pb** | **08 02 25.4** | **+0.1** |
| KUR06 | | | | ⇓S | | **Sb** | **08 02 34.7** | **+0.6** |
| **KUR17** | **Kurchatov Arra** | **0.60** | **18** | ⇑P | | **Pb** | **08 02 26.2** | **+0.7** |
| KUR17 | | | | ⇑S | | **Sb** | **08 02 35.8** | **+1.2** |
| **KUR16** | **Kurchatov Arra** | **0.60** | **20** | ⇑P | | **Pb** | **08 02 25.9** | **+0.3** |
| KUR16 | | | | ⇑S | | **Sb** | **08 02 35.2** | **+0.6** |
| **KURBB** | **Kurchatov Arra** | **0.60** | **22** | Pg | | **Pb** | **08 02 25.9** | **+0.3** |
| | 1.1nm,0.3s,baz=164,slow=19,SNR=36 | | | | | | | |
| KURBB | | | | Lg | | Lg | 08 02 35.2 | |
| | 1.7nm,0.3s,baz=162,slow=37,SNR=16 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.60** | **22** | ⇑P | | **Pb** | **08 02 25.6** | **0.0** |
| | 8.1nm,0.3s | | | | | | | |
| KURBB | | | | ⇓S | | **Sb** | **08 02 35.8** | **+1.1** |
| | 118nm,0.8s | | | | | | | |
| **KUR15** | **Kurchatov Arra** | **0.61** | **24** | ⇓P | | **Pb** | **08 02 25.5** | **-0.2** |
| KUR15 | | | | ⇓S | | **Sb** | **08 02 35.1** | **+0.3** |
| **KUR14** | **Kurchatov Arra** | **0.61** | **25** | ⇑P | | **Pb** | **08 02 25.4** | **-0.4** |
| KUR14 | | | | ⇑S | | **Sb** | **08 02 34.3** | **-0.6** |
| **KUR05** | **Kurchatov Arra** | **0.62** | **21** | ⇓P | | **Pb** | **08 02 25.9** | **-0.1** |
| KUR05 | | | | ⇓S | | **Sb** | **08 02 34.8** | **-0.5** |
| **KUR04** | **Kurchatov Arra** | **0.64** | **21** | ⇓P | | **Pb** | **08 02 26.4** | **+0.1** |
| KUR04 | | | | ⇑S | | **Sb** | **08 02 35.8** | **-0.1** |
| **KURK** | **Kurchatov** | **0.71** | **23** | ⇑P | | **Pb** | **08 02 27.0** | **-0.4** |
| | 4.5nm,0.4s | | | | | | | |
| KURK | | | | ⇓S | | **Sb** | **08 02 37.6** | **-0.1** |
| | 65nm,0.8s | | | | | | | |
| **SEM** | **Semipalatinsk** | **1.37** | **75** | P | | **Pb** | **08 02 40.3** | **+1.4** |
| | 5.6nm,0.2s | | | | | | | |
| SEM | | | | S | | **Sn** | **08 02 58.0** | **+0.2** |
| | 51nm,0.5s | | | | | | | |
| **MAKZ** | **Makanchi** | **4.12** | **141** | ⇓Lg | | Lg | 08 04 19.7 | |
| | 8.0nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **4.27** | **139** | Pn | | **Pn** | **08 03 17.7** | **-0.7** |
| | 0.1nm,0.3s,baz=322,slow=9.9,SNR=8.9 | | | | | | | |
| MK31 | | | | ⇓Pg | | **Pb** | **08 03 27.6** | **-0.4** |
| | 0.5nm,0.3s,baz=322,slow=16,SNR=6.5 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 08 04 22.9 | |
| | 7.3nm,0.7s,baz=317,slow=26,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **4.27** | **139** | Pn | | **Pn** | **08 03 18.1** | **-0.3** |
| | 0.1nm,0.3s,baz=325,slow=11,SNR=13 | | | | | | | |
| MKAR | | | | Lg | | Lg | 08 04 18.2 | |
| | 0.5nm,0.3s,baz=324,slow=23,SNR=5.1 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **ZSN** | **Zaisan** | **5.14** | **118** | Pg | | **Pb** | **08 03 43.4** | **+0.5** |
| | 2.5nm,0.4s | | | | | | | |
| ZSN | | | | Lg | | Lg | 08 04 46.3 | |
| | 7.9nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.65** | **44** | Pn | | **Pn** | **08 03 36.3** | **-1.1** |
| | 0.8nm,0.3s,baz=239,slow=13,SNR=2.5 | | | | | | | |
| ZALV | | | | Lg | | Lg | 08 05 08.1 | |
| | 0.3nm,0.3s,baz=229,slow=26,SNR=2.7 | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.65** | **44** | I | | I | 08 35 30.0 | |
| | baz=225,slow=328,SNR=2.6 | | | | | | | |
| **BTLS** | **Baital** | **5.75** | **211** | Pg | | **Pg** | **08 04 03.3** | **+0.9** |
| | 1.8nm,0.4s | | | | | | | |
| BTLS | | | | Lg | | Lg | 08 05 20.3 | |
| | 1.8nm,0.6s | | | | | | | |
| **ARXS** | **Arharly** | **5.86** | **182** | Pg | | **Pg** | **08 04 04.3** | **-0.1** |
| | 1.4nm,0.8s | | | | | | | |
| ARXS | | | | Lg | | Lg | 08 05 21.8 | |
| | 7.1nm,0.6s | | | | | | | |
| **BLB** | **Baldybastay** | **5.97** | **178** | Pg | | **Pg** | **08 04 06.2** | **-0.4** |
| | 3.4nm,0.4s | | | | | | | |
| BLB | | | | Lg | | Lg | 08 05 25.7 | |
| | 11nm,0.8s | | | | | | | |

*IDC **30** 08:11:34.9±2.5, 17°.92S×178°.43W, h549km±21km, mb3.0/5, mbtmp3.9/6, Error ellipse: s-maj=83.7km s-min=21.9km az=148.0*

**ISC 30 08:11:35.1±1.6, 17°.8S±0°.5×178°.5W±0°.3, h550km, n6, σ0s 52/7, mb3.5/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.25** | **270** | P | | **P** | **08 12 52.2** | **+0.4** |
| | 18nm,0.7s,baz=114,slow=5.8,SNR=17 | | | | | | | |
| **STKA** | **Stephens Creek** | **38.59** | **241** | P | | **P** | **08 18 11.1** | **-0.3** |
| | 1.2nm,0.4s,baz=102,slow=9.3,SNR=7.2 | | | | | | | |
| | 1.2nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.54** | **259** | P | | **P** | **08 18 58.9** | **+0.4** |
| | 0.5nm,0.3s,baz=98,slow=6.9,SNR=18 | | | | | | | |
| | 0.5nm,0.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **44.71** | **254** | P | | **P** | **08 19 00.0** | **+0.1** |
| | 6.3nm,0.6s,baz=88,slow=8.3,SNR=107 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **08 20 30.0** | **-0.4** |
| | 0.2nm,0.5s,baz=95,slow=3.4,SNR=1.9 | | | | | | | |
| | 6.3nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.78** | **13** | P | | **P** | **08 23 15.4** | **-0.5** |
| | 0.1nm,0.5s,baz=218,slow=5.0,SNR=4.3 | | | | | | | |
| | 0.1nm,0.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.02** | **58** | P | | **P** | **08 23 18.6** | **+0.5** |
| | 0.2nm,0.6s,baz=208,slow=3.7,SNR=5.2 | | | | | | | |
| | 0.2nm,0.6s | | | | | | | |

**ISC 30 08:23:22.5±1.2, 64°.88N±0°.02×139°.30W±0°.02, h5km±11km, n21, σ0s 58/38, Southern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **I28M** | **Miner Creek** | **0.63** | **335** | P | | **Pg** | **08 23 34.5** | **-0.1** |
| | baz=154,SNR=24 | | | | | | | |
| I28M | | | | S | | **Sg** | **08 23 42.8** | **0.0** |
| | baz=154 | | | | | | | |
| **J29N** | **Klondike Camp** | **0.64** | **133** | S | | **Sg** | **08 23 43.7** | **+0.7** |
| | baz=313 | | | | | | | |
| **I29M** | **Ogilvie Camp,** | **0.64** | **41** | P | | **Pg** | **08 23 34.9** | **+0.2** |
| | baz=220,SNR=18 | | | | | | | |
| I29M | | | | S | | **Sg** | **08 23 43.4** | **+0.5** |
| | baz=220 | | | | | | | |
| **EGAK** | **Eagle** | **0.80** | **263** | P | | **Pg** | **08 23 37.2** | **-0.7** |
| | baz=82,SNR=26 | | | | | | | |
| EGAK | | | | S | | **Sg** | **08 23 47.6** | **-0.7** |
| | baz=82 | | | | | | | |
| **DAWY** | **Dawson** | **0.82** | **183** | P | | **Pg** | **08 23 38.3** | **+0.1** |
| | baz=3.4,SNR=21 | | | | | | | |
| DAWY | | | | S | | **Sg** | **08 23 49.0** | **+0.1** |
| | baz=3.4 | | | | | | | |
| **I27K** | **Kandik River** | **1.22** | **308** | P | | **Pg** | **08 23 45.5** | **-0.2** |
| | baz=126,SNR=15 | | | | | | | |
| I27K | | | | S | | **Sg** | **08 24 01.8** | **+0.3** |
| | baz=126 | | | | | | | |
| I27K | | | | S | | **Sg** | **08 24 01.8** | **+0.3** |
| | baz=126 | | | | | | | |
| **I30M** | **Mount Dempster** | **1.28** | **73** | P | | **Pg** | **08 23 46.4** | **-0.7** |
| | baz=255,SNR=22 | | | | | | | |
| I30M | | | | S | | **Sb** | **08 24 04.5** | **+0.4** |
| | baz=255 | | | | | | | |
| **K29M** | **Barlow Dome** | **1.30** | **143** | P | | **Pg** | **08 23 47.1** | **-0.2** |
| | baz=324,SNR=15 | | | | | | | |
| K29M | | | | S | | **Sb** | **08 24 04.9** | **+0.4** |
| | baz=324 | | | | | | | |
| **J30M** | **Hart River** | **1.31** | **102** | P | | **Pg** | **08 23 46.6** | **-1.0** |
| | baz=284,SNR=14 | | | | | | | |
| J30M | | | | S | | **Sb** | **08 24 05.1** | **+0.3** |
| | baz=284 | | | | | | | |
| **H29M** | **Whitestone** | **1.40** | **16** | P | | **Pn** | **08 23 47.9** | **-0.8** |
| | baz=196,SNR=31 | | | | | | | |
| H29M | | | | S | | **Sg** | **08 24 07.2** | **0.0** |
| | baz=196 | | | | | | | |
| **K27K** | **Chicken** | **1.48** | **236** | Pb | | **Pn** | **08 23 49.7** | **-0.1** |
| | baz=54 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| K27K | | | | S | | Sb | 08 24 08.8 | -0.8 |
| | baz=54 | | | | | | | |
| K27K | | | | S | | Sb | 08 24 08.8 | -0.8 |
| | baz=54 | | | | | | | |
| **H27K** | **Steamboat Moun** | **1.64** | **327** | Pb | | **Pn** | **08 23 52.3** | **+0.3** |
| | baz=145 | | | | | | | |
| H27K | | | | Sb | | **Sb** | **08 24 15.0** | **+0.7** |
| | baz=145 | | | | | | | |
| **I26K** | **Coal Creek Min** | **1.69** | **286** | Pb | | **Pn** | **08 23 53.0** | **+0.3** |
| | baz=103 | | | | | | | |
| I26K | | | | Sb | | **Sb** | **08 24 16.2** | **+0.7** |
| | baz=103 | | | | | | | |
| I26K | | | | Sb | | **Sb** | **08 24 16.2** | **+0.7** |
| | baz=103 | | | | | | | |
| **L29M** | **L29M** | **1.85** | **163** | Sb | | **Sb** | **08 24 21.0** | **+0.6** |
| | baz=344 | | | | | | | |
| **J26L** | **Joseph Creek** | **1.87** | **260** | P | | **Pn** | **08 23 54.8** | **-0.5** |
| | baz=77,SNR=13 | | | | | | | |
| J26L | | | | S | | **Sn** | **08 24 19.1** | **-0.3** |
| | baz=77 | | | | | | | |
| J26L | | | | S | | **Sn** | **08 24 19.1** | **-0.3** |
| | baz=77 | | | | | | | |
| **L27K** | **Beaver Creek,** | **2.14** | **213** | Sb | | **Sb** | **08 24 29.2** | **+0.5** |
| | baz=31 | | | | | | | |
| **SCRK** | **Sand Creek** | **2.23** | **248** | Sb | | **Sb** | **08 24 31.7** | **+0.5** |
| | baz=64 | | | | | | | |
| **H31M** | **Peel River** | **2.27** | **64** | Sb | | **Sb** | **08 24 32.8** | **+0.4** |
| | baz=248 | | | | | | | |
| **M29M** | **Somme Creek** | **2.48** | **171** | Sb | | **Sb** | **08 24 39.2** | **+0.9** |
| | baz=352 | | | | | | | |
| **L26K** | **Log Cabin Wild** | **2.58** | **226** | Sg | | **Sg** | **08 24 46.6** | **+1.2** |
| | baz=42 | | | | | | | |
| **J25K** | **Salcha River,** | **2.62** | **267** | Sb | | **Sb** | **08 24 43.0** | **+0.6** |
| | baz=82 | | | | | | | |

*CATAC **30** 08:31:31.4±0.8, 8°.64N×83°.18W, h8km±6km, ML2.5*
*UPA **30** 08:31:32.3±0.9, 8°.68N×83°.15W, h19km±3km, MW3.0*

**ISC 30 08:31:31.5±1.0, 8°.68N±0°.04×83°.18W±0°.03, h12km±10km, n13, σ0s85/23, 3D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PTJ1** | **Puerto Jimnez** | **0.19** | **221** | *i* P | **Pg** | **08 31 34.9** | **-0.8** |
| PTJ1 | | | | IAML | | 08 31 35.6 | |
| | comp=Z,4μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | **Sg** | **08 31 39.3** | **+0.7** |
| **CDITO** | **Canoas** | **0.32** | **109** | *i* P | **Pg** | **08 31 38.3** | **+0.3** |
| CDITO | | | | *i* S | **Sb** | **08 31 43.5** | **-0.8** |
| CDITO | | | | IAML | | 08 31 59.1 | |
| | comp=Z,300nm,1.0s | | | | | | |
| **MLIR3** | **Monte Lirio, C** | **0.37** | **72** | *eP* | **Pb** | **08 31 40.5** | **+0.5** |
| MLIR3 | | | | *eS* | **Sb** | **08 31 45.8** | **0.0** |
| **BRU2** | **Volcan** | **0.49** | **77** | *i* P | **Pg** | **08 31 41.8** | **+0.5** |
| BRU2 | | | | *i* S | **Sb** | **08 31 49.6** | **+0.1** |
| BRU2 | | | | IAML | | 08 31 53.0 | |
| | comp=Z,240nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.49** | **77** | *eP* | **Pb** | **08 31 42.2** | **-0.1** |
| BRU2 | | | | *eS* | **Sb** | **08 31 50.5** | **+1.0** |
| **PTPM** | **Petroterminale** | **0.56** | **148** | *eP* | **Pb** | **08 31 43.5** | **+0.3** |
| PTPM | | | | *eS* | **Sb** | **08 31 50.9** | **-0.2** |
| **DRK0** | **Durika** | **0.58** | **353** | *i* P | **Pg** | **08 31 43.9** | **+0.9** |
| DRK0 | | | | IAML | | 08 31 45.3 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **OCHAL** | **Ojochal** | **0.62** | **312** | *i* P | **Pg** | **08 31 44.0** | **+0.3** |
| OCHAL | | | | *i* S | **Sb** | **08 31 53.5** | **+0.4** |
| OCHAL | | | | IAML | | 08 31 57.3 | |
| | comp=Z,99nm,1.0s | | | | | | |
| **BCO2** | **Palmira** | **0.64** | **86** | *i* P | **Pg** | **08 31 44.3** | **+0.2** |
| BCO2 | | | | *eS* | **Sb** | **08 31 53.8** | **+0.1** |
| **DVD** | **David** | **0.76** | **109** | *eS* | **Sb** | **08 31 56.6** | **-0.3** |
| **PSOM3** | **Paja de Sombre** | **0.84** | **89** | *eP* | **Pg** | **08 31 47.6** | **-0.3** |
| PSOM3 | | | | *eS* | **Sb** | **08 31 59.2** | **-0.2** |
| **CNI2** | **El Empalme, Bo** | **1.02** | **43** | *eP* | **Pb** | **08 31 49.4** | **-1.6** |
| CNI2 | | | | *eS* | **Sb** | **08 32 01.9** | **-2.5** |
| **LCR2** | **La Lucha 2** | **1.34** | **322** | *i* P | **Pn** | **08 31 56.4** | **+0.2** |
| LCR2 | | | | IAML | | 08 32 18.4 | |
| | comp=Z,52nm,1.0s | | | | | | |

**IDC 30 08:33:04.6±6.6, 5°.05S×146°.00E, h176km±71km, mb3.6/3, mbtmp4.2/5, Error ellipse: s-maj=79.6km s-min=25.6km az=134.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.47** | **165** | P | Pn | 08 34 12.6 | +0.9 |
| | 27nm,0.4s,baz=311,slow=12,SNR=9.7 | | | | | | |
| PMG | | | | S | Sn | 08 35 03.9 | -0.3 |
| | 11nm,0.3s,baz=3.6,slow=12,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.65** | **216** | P | P | 08 37 09.2 | -0.1 |
| | 7.0nm,0.6s,baz=41,slow=11,SNR=107 | | | | | | |
| **ASAR** | **Alice Springs** | **21.87** | **211** | P | P | 08 37 43.8 | +0.2 |
| | 3.8nm,0.7s,baz=42,slow=7.5,SNR=20 | | | | | | |
| | 3.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **85.01** | **23** | P | P | 08 45 20.1 | +0.2 |
| | 1.7nm,0.7s,baz=249,slow=5.2,SNR=32 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **85.42** | **324** | P | P | 08 45 21.5 | -0.7 |
| | 0.8nm,0.6s,baz=113,slow=3.7,SNR=2.4 | | | | | | |
| | 0.8nm,0.6s | | | | | | |

**IDC 30 08:40:24.4±1.2, 27°.04N×100°.00E, h0km, mb3.5/5, mbtmp3.5/5, Error ellipse: s-maj=65.8km s-min=21.6km az=60.0, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **21.36** | **12** | P | P | 08 45 13.2 | -0.2 |
| | 0.4nm,0.4s,baz=195,slow=10,SNR=3.3 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.17** | **329** | P | P | 08 45 42.9 | +0.5 |
| | 0.6nm,0.5s,baz=124,slow=10,SNR=6.5 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.35** | **141** | P | P | 08 50 14.2 | -0.4 |
| | 0.7nm,0.6s,baz=329,slow=7.8,SNR=10.0 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **57.61** | **315** | P | P | 08 50 15.5 | -0.6 |
| | 0.4nm,0.5s,baz=76,slow=6.6,SNR=3.7 | | | | | | |
| | 0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **60.11** | **144** | P | P | 08 50 34.2 | +0.4 |
| | 0.4nm,0.6s,baz=327,slow=6.7,SNR=5.9 | | | | | | |
| | 0.4nm,0.6s | | | | | | |

*IDC **30** 08:41:57.9±2.4, 39°.53N×142°.07E, h70km±21km, mb3.5/6, mbtmp3.8/10, Error ellipse: s-maj=24.9km s-min=14.9km az=115.0*
*JMA **30** 08:41:57.0±0.1, 39°.5N±0°.2×142°.1E±0°.5, h60km, MV3.7/40, SOUTHERN IWATE PREF*
*JMA Felt I J1 at SOUTHERN IWATE PREF .*
*NEIC **30** 08:41:57.7±2.2, 39°.43N±0°.05×141°.9E±0°.1, h68km±10km, mb4.4/12, Error ellipse: s-maj=13.6km s-min=6.8km az=95.0*

**ISC 30 08:41:57.0±0.8, 39°.49N±0°.04×142°.07E±0°.06, h61km±6km, n50, σ0s88/58, mb4.2/11, 6D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MIYJ** | **Miyakonagasawa** | **0.21** | **295** | *i* P | **Pn** | **08 42 06.5** | **-0.1** |
| MIYJ | | | | S | **Sn** | **08 42 13.1** | **-0.4** |
| **JTH** | **Tanohata** | **0.48** | **341** | *i* P | **Pn** | **08 42 08.6** | **-0.1** |
| JTH | | | | S | **Sn** | **08 42 17.1** | **-0.3** |
| **OFUJ** | **Ofunato** | **0.51** | **218** | *i* P | **Pn** | **08 42 09.1** | **0.0** |
| OFUJ | | | | S | **Sn** | **08 42 17.8** | **-0.1** |
| **JOM** | **Ohasama** | **0.60** | **269** | *i* P | **Pn** | **08 42 10.0** | **-0.1** |
| JOM | | | | S | **Sn** | **08 42 19.4** | **-0.3** |
| **JKZ** | **Kuzumaki** | **0.76** | **311** | ↓*i* P | **Pn** | **08 42 12.0** | **0.0** |
| JKZ | | | | ↓S | **Sn** | **08 42 22.7** | **-0.3** |
| **JKMT** | **Kesennumamotoy** | **0.82** | **215** | *i* P | **Pn** | **08 42 12.6** | **-0.1** |
| JKMT | | | | S | **Sn** | **08 42 23.8** | **-0.4** |
| **JMK** | **Ichinoseki** | **0.85** | **231** | *i* P | **Pn** | **08 42 12.9** | **-0.1** |
| JMK | | | | S | **Sn** | **08 42 24.7** | **-0.2** |
| **JANG** | **Nango** | **0.98** | **334** | ↓*i* P | **Pn** | **08 42 14.5** | **-0.3** |
| JANG | | | | ↓S | **Sn** | **08 42 27.3** | **-0.7** |
| **JRG** | **Rokugo** | **1.11** | **266** | ↓*i* P | **Pn** | **08 42 16.3** | **-0.2** |
| JRG | | | | ↓S | **Sn** | **08 42 29.4** | **-1.7** |
| **JIO** | **Ouri** | **1.17** | **209** | *i* P | **Pn** | **08 42 17.2** | **-0.1** |
| JIO | | | | S | **Sn** | **08 42 31.8** | **-0.6** |
| **JAH** | **Hinai** | **1.31** | **303** | *i* P | **Pn** | **08 42 19.0** | **0.0** |
| JAH | | | | S | **Sn** | **08 42 35.6** | **0.0** |
| **JYK** | **Kaneyama** | **1.45** | **247** | *i* P | **Pn** | **08 42 21.1** | **+0.2** |
| JYK | | | | S | **Sn** | **08 42 39.4** | **+0.5** |
| **JTM** | **Tenmabayashi** | **1.51** | **330** | | **Pn** | **08 42 21.6** | **-0.1** |
| **JTM** | **Tenmabayashi** | **1.51** | **330** | *i* P | **Pn** | **08 42 21.7** | **-0.1** |
| JTM | | | | S | **Sn** | **08 42 40.4** | **-0.1** |
| **JMM** | **Marumori** | **1.90** | **212** | | **Pn** | **08 42 26.4** | **-0.7** |
| **ERM** | **Erimo** | **2.66** | **18** | Pn | **Pn** | **08 42 37.2** | **-0.1** |
| **JSD** | **Sado** | **3.31** | **245** | Pn | **Pn** | **08 42 46.4** | **+0.1** |
| **MAJO** | **Matsushiro** | **4.24** | **227** | | **Pn** | **08 42 59.8** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **4.24** | **227** | P | **Pn** | **08 43 01.2** | **+2.3** |
| | 4.8nm,0.5s,baz=33,slow=13,SNR=19 | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **4.24** | **227** | Pn | **Pn** | **08 42 59.3** | **+0.3** |
| **ASAJ** | **Asahikawa** | **4.64** | **5** | P | **Pn** | **08 43 04.4** | **-0.1** |
| | 4.7nm,0.3s,baz=210,slow=10,SNR=13 | | | | | | |
| ASAJ | | | | S | **Sn** | **08 43 55.9** | **-1.2** |
| | 3.7nm,0.4s,baz=74,slow=28,SNR=1.8 | | | | | | |
| **JKA** | **Kamikawa-asahi** | **4.64** | **5** | Pn | **Pn** | **08 43 04.7** | **+0.1** |
| **JGF** | **Kuroka** | **5.39** | **225** | Pn | **Pn** | **08 43 15.3** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **8.87** | **305** | P | **Pn** | **08 44 03.8** | **+1.4** |
| | 3.1nm,0.6s,baz=112,slow=15,SNR=12 | | | | | | |
| **KSRS** | **Korea Array** | **11.28** | **264** | P | **Pn** | **08 44 38.3** | **+3.1** |
| | 1.3nm,0.4s,baz=75,slow=14,SNR=5.5 | | | | | | |
| **JOW** | **Kunigami** | **17.08** | **227** | P | **Pn** | **08 45 50.4** | **-1.2** |
| JOW | | | | IAmb | IAmb | 08 46 01.1 | |
| | comp=Z,30nm,1.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.05** | **125** | T | T | 09 18 19.9 | |
| | baz=318,slow=75,SNR=389 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.06** | **125** | T | T | 09 18 20.6 | |
| | baz=318,slow=75,SNR=465 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.07** | **125** | T | T | 09 18 21.3 | |
| | baz=318,slow=75,SNR=332 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.85** | **127** | T | T | 09 19 28.2 | |
| | baz=319,slow=76,SNR=40 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.85** | **127** | T | T | 09 19 28.6 | |
| | baz=319,slow=76,SNR=55 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.86** | **127** | T | T | 09 19 20.5 | |
| | baz=319,slow=76,SNR=39 | | | | | | |
| **GSTR** | **Great Sitkin T** | **31.35** | **52** | P | **P** | **08 48 12.3** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **40.68** | **310** | P | **P** | **08 49 30.8** | **-0.4** |
| | comp=Z,1.4nm,0.5s,baz=81,slow=7.8,SNR=5.6 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **C18K** | **Utukok River** | **41.86** | **27** | P | **P** | **08 49 39.7** | **-1.0** |
| **G18K** | **Tagagawik** | **42.28** | **32** | P | **P** | **08 49 45.5** | **+1.4** |
| G18K | | | | IAmb | IAmb | 08 50 29.0 | |
| | comp=Z,6.7nm,1.4s | | | | | | |
| **H18K** | **Honhosa River** | **42.30** | **33** | P | **P** | **08 49 44.8** | **+0.6** |
| **F19K** | **Shaleruckik Mo** | **42.77** | **30** | P | **P** | **08 49 48.4** | **+0.3** |
| **D19K** | **Kuna River** | **42.93** | **28** | P | **P** | **08 49 49.9** | **+0.5** |
| **H19K** | **Roundabout Mou** | **43.14** | **32** | P | **P** | **08 49 52.3** | **+1.3** |
| H19K | | | | IAmb | IAmb | 08 50 31.8 | |
| | comp=Z,11nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.30** | **300** | P | **P** | **08 49 52.2** | **-0.4** |
| | comp=Z,0.9nm,0.7s,baz=83,slow=9.7,SNR=10 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **44.86** | **306** | P | **P** | **08 50 04.0** | **-1.1** |
| **KURBB** | **Kurchatov Arra** | **44.94** | **306** | P | **P** | **08 50 04.9** | **-0.7** |
| | comp=Z,1.6nm,0.4s,baz=82,slow=8.4,SNR=6.4 | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **45.20** | **29** | P | **P** | **08 50 08.8** | **+1.3** |
| E22K | | | | IAmb | IAmb | 08 50 10.5 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **E24K** | **Your Creek** | **46.45** | **29** | P | **P** | **08 50 19.1** | **+1.7** |
| **ILAR** | **Eielson Array** | **47.16** | **34** | P | **P** | **08 50 23.7** | **+0.8** |
| | comp=Z,0.3nm,0.7s,baz=274,slow=6.3,SNR=7.0 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **56.77** | **309** | P | **P** | **08 51 33.9** | **-0.7** |
| ABKAR | | | | IAmb | IAmb | 08 51 34.6 | |
| | comp=Z,1.5nm,0.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **59.55** | **188** | P | **P** | **08 51 53.2** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 08 52 29.9 | |
| | comp=Z,8.2nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **59.56** | **188** | P | **P** | **08 51 53.0** | **-1.2** |
| | comp=Z,0.5nm,0.5s,baz=4.8,slow=6.9,SNR=9.1 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **75.59** | **46** | P | **P** | **08 53 36.2** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=264,slow=1.8,SNR=3.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |

**IDC 30 08:50:04.5±2.8, 53°.58N×87°.08E, h0km, mbtmp3.0/2, ML2.4/2, Error ellipse: s-maj=25.7km s-min=16.7km az=66.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.39** | **286** | I | I | 08 58 30.0 | |
| | baz=103,slow=319,SNR=3.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.39** | **286** | Pg | Pg | 08 50 29.4 | -1.7 |
| | 0.8nm,0.3s,baz=108,slow=13,SNR=17 | | | | | | |
| ZALV | | | | Lg | Lg | 08 50 49.2 | |
| | 1.5nm,0.3s,baz=109,slow=35,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.04** | **244** | Pn | Pn | 08 51 36.0 | +1.0 |
| | baz=57,slow=13,SNR=2.0 | | | | | | |
| KURBB | | | | Lg | Lg | 08 53 15.4 | |
| | 0.1nm,0.3s,baz=62,slow=33,SNR=1.8 | | | | | | |
| | 1.1nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.45** | **206** | Pn | Pn | 08 51 55.8 | +1.3 |
| | 0.1nm,0.3s,baz=26,slow=13,SNR=4.2 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

**NOU 30 08:52:18.6, 16°.46S×167°.38E, h0km, MLv4.4/12, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **1.48** | **149** | P | Pn | 08 52 46.2 | -0.3 |
| **RTV** | **Rentapao** | **1.66** | **143** | P | Pn | 08 52 49.4 | +0.4 |
| **LIFNC** | **LIFOU** | **4.30** | **182** | P | Pn | 08 53 24.4 | -0.9 |
| **KOUNC** | **Koumac, New Ca** | **5.02** | **215** | P | Pn | 08 53 35.9 | +0.7 |
| **YATNC** | **Mamie plateau,** | **5.59** | **185** | P | Pn | 08 53 42.0 | -1.1 |
| **DZM** | **Mont Dzumac** | **5.65** | **189** | P | Pn | 08 53 43.7 | -0.3 |
| **NOUC** | **Port Laguerre** | **5.70** | **190** | P | Pn | 08 53 45.0 | +0.4 |
| **ONTNC** | **Ouen Toro** | **5.88** | **188** | P | Pn | 08 53 47.4 | +0.3 |

*AFAD **30** 08:53:23.7±0.0, 36°.40N×28°.73E, h6km±3km, MW3.5*
*ISK **30** 08:53:23.1, 36°.48N×28°.76E, h5km, ML3.2/17*

**ISC 30 08:53:24.5±1.2, 36°.47N±0°.04×28°.73E±0°.02, h10km±9km, n29, σ1s53/43, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FETY** | **Fethiye** | **0.33** | **60** | Pg | **Pg** | **08 53 30.1** | **-0.9** |
| FETY | | | | Sg | **Sg** | **08 53 35.9** | **+0.4** |
| **FETY** | **Fethiye** | **0.33** | **60** | P | **Pb** | **08 53 31.3** | **-1.1** |
| FETY | | | | S | **Sb** | **08 53 37.0** | **-0.9** |
| **DALY** | **Dalyan (Mula)** | **0.35** | **350** | Pg | **Pg** | **08 53 30.8** | **-0.7** |
| DALY | | | | Sg | **Sg** | **08 53 36.9** | **+0.7** |
| **MRSB** | **Marmaris-Mugla** | **0.49** | **300** | Pg | **Pg** | **08 53 34.1** | **0.0** |
| **TURN** | **Turunc** | **0.50** | **308** | Pg | **Pg** | **08 53 34.1** | **0.0** |
| **CAME** | **Cameli-Denizli** | **0.66** | **44** | Pg | **Pg** | **08 53 36.3** | **-1.0** |
| **AKAS** | **Kas** | **0.74** | **108** | Pg | **Pb** | **08 53 38.2** | **-1.4** |
| **YER** | **Yerkesik** | **0.76** | **332** | Pg | **Pb** | **08 53 39.1** | **-0.7** |
| **KNIK** | **Mula-Seydike** | **0.78** | **61** | P | **Pb** | **08 53 39.0** | **-1.1** |
| KNIK | | | | S | **Sn** | **08 53 51.9** | **-1.4** |
| KNIK | | | | *i* AML | AML | 08 53 54.0 | |
| | comp=N,721nm,0.6s | | | | | | |
| KNIK | | | | *i* AML | AML | 08 53 54.0 | |
| | comp=E,490nm,0.4s | | | | | | |
| **DAT** | **Datca** | **0.96** | **286** | Pg | **Pn** | **08 53 43.5** | **-0.7** |
| **DAT** | **Datca** | **0.96** | **286** | P | **Pg** | **08 53 42.3** | **-0.7** |
| DAT | | | | S | **Sn** | **08 53 57.7** | **-0.3** |
| DAT | | | | *i* AML | AML | 08 54 03.0 | |
| | comp=N,365nm,0.7s | | | | | | |
| DAT | | | | *i* AML | AML | 08 54 03.0 | |
| | comp=E,360nm,0.8s | | | | | | |
| **ELL** | **Elmali** | **0.99** | **73** | Pg | **Pb** | **08 53 42.8** | **-1.0** |
| **TAVA** | **DENIZLI_Tavas** | **1.00** | **8** | P | **Pg** | **08 53 43.3** | **-0.5** |
| TAVA | | | | S | **Sn** | **08 53 59.0** | **0.0** |
| TAVA | | | | *i* AML | AML | 08 54 03.0 | |
| | comp=N,253nm,0.3s | | | | | | |
| TAVA | | | | *i* AML | AML | 08 54 07.0 | |
| | comp=E,292nm,0.4s | | | | | | |
| **YAZI** | **Mula-Dat§a-** | **1.05** | **282** | P | **Pg** | **08 53 43.7** | **-0.9** |
| YAZI | | | | S | **Sn** | **08 53 59.7** | **-0.2** |
| YAZI | | | | *i* AML | AML | 08 54 01.0 | |
| | comp=N,147nm,0.4s | | | | | | |
| YAZI | | | | *i* AML | AML | 08 54 07.0 | |
| | comp=E,127nm,0.4s | | | | | | |
| **APMY** | **Acipayam-Deniz** | **1.10** | **24** | Pg | **Pg** | **08 53 45.1** | **-0.5** |
| **MLSB** | **Milas** | **1.12** | **317** | Pn | **Pn** | **08 53 46.1** | **-0.2** |
| **DNIZ** | **Denizli-Tavas-** | **1.18** | **12** | P | **Pn** | **08 53 47.0** | **-0.2** |
| DNIZ | | | | S | **Sn** | **08 54 03.3** | **0.0** |
| DNIZ | | | | *i* AML | AML | 08 54 08.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| DNIZ | | | | *i* AML | AML | 08 54 09.0 | |
| | comp=E,3μm,0.3s | | | | | | |
| **BODT** | **Bodrum** | **1.28** | **298** | Pn | **Pn** | **08 53 48.3** | **-0.2** |
| **AKUM** | **Antalya-Kumluc** | **1.31** | **96** | P | **Pg** | **08 53 49.4** | **-0.2** |
| AKUM | | | | S | **Sn** | **08 54 12.0** | **+5.7** |
| AKUM | | | | *i* AML | AML | 08 54 19.0 | |
| | comp=N,185nm,0.8s | | | | | | |
| AKUM | | | | *i* AML | AML | 08 54 21.0 | |
| | comp=E,192nm,0.5s | | | | | | |
| **ESEN** | **Aydn-Nazilli** | **1.36** | **347** | P | **Pb** | **08 53 49.8** | **-0.2** |
| ESEN | | | | S | **Sn** | **08 54 08.4** | **+0.8** |
| ESEN | | | | *i* AML | AML | 08 54 12.0 | |
| | comp=N,230nm,0.6s | | | | | | |
| ESEN | | | | *i* AML | AML | 08 54 14.0 | |
| | comp=E,291nm,0.5s | | | | | | |
| **INCE** | **Denizli-Bozkur** | **1.41** | **28** | P | **Pg** | **08 53 51.5** | **-0.1** |
| INCE | | | | S | **Sg** | **08 54 13.6** | **+3.7** |
| INCE | | | | *i* AML | AML | 08 54 14.0 | |
| | comp=N,381nm,0.5s | | | | | | |
| INCE | | | | *i* AML | AML | 08 54 15.0 | |
| | comp=E,272nm,0.5s | | | | | | |
| **NAZL** | **Nazilli-Aydin** | **1.53** | **347** | Pn | **Pg** | **08 53 53.3** | **-0.6** |
| **DDIM** | **Aydin, Didim** | **1.55** | **310** | P | **Pg** | **08 53 54.3** | **+0.2** |
| DDIM | | | | S | **Sg** | **08 54 17.5** | **+3.3** |
| DDIM | | | | *i* AML | AML | 08 54 27.0 | |
| | comp=N,295nm,0.7s | | | | | | |
| DDIM | | | | *i* AML | AML | 08 54 29.0 | |
| | comp=E,311nm,0.8s | | | | | | |
| **ANTB** | **Antalya** | **1.60** | **74** | Pn | **Pb** | **08 53 53.4** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.62** | **336** | Pn | **Pb** | **08 53 54.0** | **-0.5** |
| **BRDR** | **BURDUR-Merkez** | **1.62** | **41** | P | **Pg** | **08 53 54.6** | **-1.0** |
| BRDR | | | | S | **Sg** | **08 54 20.2** | **+3.5** |
| BRDR | | | | *i* AML | AML | 08 54 23.0 | |
| | comp=E,112nm,0.4s | | | | | | |
| BRDR | | | | *i* AML | AML | 08 54 26.0 | |
| | comp=N,161nm,0.7s | | | | | | |
| **KIRA** | **zmir-Kiraz** | **1.74** | **351** | P | **Pb** | **08 53 55.9** | **-0.8** |
| KIRA | | | | S | **Sg** | **08 54 19.8** | **-0.8** |
| KIRA | | | | *i* AML | AML | 08 54 26.0 | |
| | comp=N,154nm,0.5s | | | | | | |
| KIRA | | | | *i* AML | AML | 08 54 28.0 | |
| | comp=E,102nm,0.4s | | | | | | |
| **BCK** | **Bucak** | **1.79** | **56** | Pn | **Pb** | **08 53 56.2** | **-1.2** |
| **BASM** | **Basmaki-Afyon** | **1.79** | **36** | Pn | **Pb** | **08 53 56.2** | **-1.2** |

**ISC 30 09:02:15.4±1.1, 66°.19N±0°.02×135°.40W±0°.03, h6km±10km, n18, σ0s62/32, Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EPYK** | **Eagle Plains** | **0.56** | **289** | P | **Pg** | **09 02 26.7** | **+0.4** |
| | baz=109,SNR=25 | | | | | | |
| EPYK | | | | S | **Sg** | **09 02 33.8** | **+0.2** |
| | baz=109 | | | | | | |
| **H31M** | **Peel River** | **0.58** | **131** | P | **Pg** | **09 02 26.7** | **+0.2** |
| | baz=312,SNR=166 | | | | | | |
| H31M | | | | S | **Sg** | **09 02 34.3** | **+0.3** |
| | baz=312 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **0.86** | **338** | P | **Pg** | **09 02 32.4** | **+0.5** |
| | baz=158 | | | | | | |
| G30M | | | | S | **Sg** | **09 02 43.1** | **0.0** |
| | baz=158 | | | | | | |
| **G31M** | **Satah River** | **0.86** | **31** | P | **Pg** | **09 02 31.9** | **-0.1** |
| | baz=212,SNR=79 | | | | | | |
| G31M | | | | Sb | **Sb** | **09 02 44.9** | **+0.3** |
| | baz=212 | | | | | | |
| **I30M** | **Mount Dempster** | **1.05** | **203** | P | **Pg** | **09 02 35.3** | **-0.3** |
| | baz=22,SNR=126 | | | | | | |
| I30M | | | | S | **Sb** | **09 02 49.8** | **-0.3** |
| | baz=22 | | | | | | |
| **H29M** | **Whitestone** | **1.21** | **273** | P | **Pb** | **09 02 38.2** | **-0.4** |
| | baz=90,SNR=88 | | | | | | |
| H29M | | | | S | **Sn** | **09 02 54.7** | **-0.8** |
| | baz=90 | | | | | | |
| **G29M** | **Pine Creek** | **1.28** | **306** | P | **Pn** | **09 02 39.3** | **-0.5** |
| | baz=124,SNR=75 | | | | | | |
| G29M | | | | S | **Sn** | **09 02 57.0** | **-0.2** |
| | baz=124 | | | | | | |
| **F31M** | **Tsiigehtchic** | **1.42** | **27** | P | **Pn** | **09 02 41.0** | **-0.7** |
| | baz=209,SNR=17 | | | | | | |
| F31M | | | | S | **Sb** | **09 03 01.0** | **+0.5** |
| | baz=209 | | | | | | |
| **F30M** | **Barrier River** | **1.44** | **354** | P | **Pn** | **09 02 41.9** | **-0.1** |
| | baz=174,SNR=48 | | | | | | |
| F30M | | | | S | **Sg** | **09 03 01.5** | **0.0** |
| | baz=174 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **1.46** | **237** | P | **Pn** | **09 02 42.4** | **0.0** |
| | baz=54,SNR=12 | | | | | | |
| I29M | | | | S | **Sg** | **09 03 02.9** | **+0.6** |
| | baz=54 | | | | | | |
| **J30M** | **Hart River** | **1.67** | **194** | P | **Pn** | **09 02 45.3** | **0.0** |
| | baz=13,SNR=50 | | | | | | |
| J30M | | | | S | **Sb** | **09 03 07.9** | **0.0** |
| | baz=13 | | | | | | |
| **I28M** | **Miner Creek** | **2.01** | **250** | Sb | **Sg** | **09 03 19.2** | **-0.8** |
| | baz=66 | | | | | | |
| **J29N** | **Klondike Camp** | **2.11** | **215** | Sb | **Sg** | **09 03 22.7** | **-0.3** |
| | baz=33 | | | | | | |
| **INK** | **Inuvik** | **2.25** | **18** | P | **Pn** | **09 02 52.9** | **-0.2** |
| | baz=200,SNR=15 | | | | | | |
| INK | | | | Sb | **Sb** | **09 03 25.7** | **+1.3** |
| | baz=200 | | | | | | |
| **F28M** | **Old Crow** | **2.27** | **311** | Sb | **Sg** | **09 03 26.8** | **-1.5** |
| | baz=127 | | | | | | |
| **H27K** | **Steamboat Moun** | **2.48** | **274** | P | **Pn** | **09 02 57.2** | **+0.7** |
| | baz=88,SNR=6.5 | | | | | | |
| H27K | | | | S | **Sn** | **09 03 28.0** | **+0.9** |
| | baz=88 | | | | | | |
| **K29M** | **Barlow Dome** | **2.52** | **202** | Sb | **Sb** | **09 03 33.6** | **+1.2** |
| | baz=20 | | | | | | |
| **G27K** | **Doyon Strip** | **2.58** | **287** | P | **Pn** | **09 02 58.1** | **+0.3** |
| | baz=101 | | | | | | |
| G27K | | | | S | **Sn** | **09 03 29.2** | **-0.3** |
| | baz=101 | | | | | | |

**IDC 30 09:17:49.2±1.4, 65°.80S×179°.10E, h0km, mb3.9/4, mbtmp3.9/4, MS3.7/9, Error ellipse: s-maj=59.8km s-min=27.2km az=51.0, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
|

*IDC **30** 09:19:18.2±3.0,53°.54N×87°.77E,h0km,mbtmp3.3/2, ML2.8/2,Error ellipse: s-maj=25.6km s-min=15.3km az=67.0*

*NNC **30** 09:19:20.1±2.4,53°.47N×87°.55E,h0km,mb3.0,mpv2.7, Error ellipse: s-maj=23.2km s-min=11.9km az=64.0, Suspected Mining explosion.*

**ISC 30 09:19:18.9±3.6,53°.6N±0°.1×87°.6E±0°.2,h0km,n8,σ1§13/9, 6C-2D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.71** | **283** | I | I | 09 30 40.0 | |
| | baz=101,slow=318,SNR=6.1 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **1.71** | **283** | ⇑Pn | **Pb** | **09 19 50.5** | **-0.6** |
| | 1.0nm,0.7s | | | | | | |
| ZAA0 | | | | ⇑Sn | **Sg** | **09 20 14.5** | **+0.8** |
| | 6.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.71** | **283** | Pn | **Pn** | **09 19 50.1** | **+0.2** |
| | 0.9nm,0.3s,baz=104,slow=14,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 09 20 15.4 | |
| | 1.9nm,0.3s,baz=105,slow=27,SNR=14 | | | | | | |
| **KURK** | **Kurchatov** | **6.25** | **246** | ⇑Lg | Lg | 09 22 36.6 | |
| | 14nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.35** | **246** | Pn | **Pn** | **09 20 54.1** | **+0.5** |
| | 0.2nm,0.3s,baz=60,slow=14,SNR=2.1 | | | | | | |
| KURBB | | | | Lg | Lg | 09 22 38.6 | |
| | baz=64,slow=32 | | | | | | |
| | 2.2nm,0.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.35** | **246** | ⇑Pn | **Pn** | **09 20 54.0** | **+0.3** |
| | 1.6nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 22 36.9 | |
| | 15nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **7.62** | **209** | ⇑Pn | **Pn** | **09 21 12.5** | **+1.3** |
| | 0.4nm,0.6s | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **09 22 36.2** | **-2.0** |
| | 1.2nm,0.7s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 09 23 16.0 | |
| | 3.3nm,0.9s,baz=28,slow=30,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.62** | **209** | Pn | **Pn** | **09 21 11.3** | **+0.1** |
| | 0.2nm,0.3s,baz=27,slow=14,SNR=4.6 | | | | | | |
| MKAR | | | | Sn | **Sn** | **09 22 38.8** | **+0.6** |
| | 0.1nm,0.3s,baz=27,slow=25,SNR=4.1 | | | | | | |
| MKAR | | | | Lg | Lg | 09 23 18.2 | |
| | 0.1nm,0.3s,baz=32,slow=30,SNR=7.4 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*TRN **30** 09:30:50.9,10°.74N×62°.88W,h114km,MD3.9,North of the Paria peninsula.*

*FUNV **30** 09:30:51.3,10°.59N×62°.84W,h16km,MW3.9*

**ISC 30 09:30:49.1±1.3,10°.67N±0°.03×62°.92W±0°.02,h17km±10km, n29,σ1§93/49,2C-1D,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TCE** | **Chacachacare** | **1.15** | **89** | *eP* | **Pn** | **09 31 13.6** | **+3.2** |
| TCE | | | | *eS* | **Sn** | **09 31 30.6** | **+4.8** |
| **TPP** | **Pointe-a-Pierr** | **1.49** | **104** | *eP* | **Pg** | **09 31 17.4** | **-0.4** |
| TPP | | | | *eS* | **Sg** | **09 31 37.2** | **-0.1** |
| **TRN** | **Trinidad (W)** | **1.49** | **91** | *eP* | **Pg** | **09 31 17.2** | **-0.7** |
| TRN | | | | *eS* | **Sb** | **09 31 35.7** | **+0.7** |
| **PCRV** | **Puerto La Cruz** | **1.76** | **254** | ⇑*eP* | **Pg** | **09 31 22.5** | **-0.5** |
| PCRV | | | | *eS* | **Sn** | **09 31 43.1** | **+2.3** |
| **PCRV** | **Puerto La Cruz** | **1.76** | **254** | *eP* | **Pg** | **09 31 22.5** | **-0.5** |
| PCRV | | | | *eS* | **Sb** | **09 31 44.8** | **+2.1** |
| **GRFF** | **Grenada Fort F** | **1.79** | **40** | *eP* | **Pb** | **09 31 20.7** | **-0.8** |
| GRFF | | | | *eS* | **Sn** | **09 31 42.5** | **+0.8** |
| **TBH** | **Brigand Hill** | **1.83** | **96** | *eP* | **Pb** | **09 31 22.3** | **+0.1** |
| TBH | | | | *eS* | **Sb** | **09 31 44.9** | **+0.1** |
| **GRGR** | **Grenville** | **1.91** | **40** | *eP* | **Pn** | **09 31 21.9** | **+1.0** |
| GRGR | | | | *eS* | **Sn** | **09 31 45.0** | **+0.4** |
| **GRW** | **Mount Saint Ca** | **1.93** | **40** | *eP* | **Pn** | **09 31 22.4** | **+1.3** |
| GRW | | | | *eS* | **Sn** | **09 31 45.8** | **+0.8** |
| **GRHS** | **Sauteurs** | **1.99** | **39** | *eP* | **Pn** | **09 31 22.3** | **+0.3** |
| GRHS | | | | *eS* | **Sn** | **09 31 46.7** | **+0.2** |
| **GRSS** | **Sisters** | **2.06** | **38** | *eP* | **Pn** | **09 31 24.4** | **+1.4** |
| GRSS | | | | *eS* | **Sn** | **09 31 49.0** | **+0.7** |
| **TPR** | **Prospect** | **2.17** | **76** | *eP* | **Pn** | **09 31 25.9** | **+1.5** |
| TPR | | | | *eS* | **Sn** | **09 31 51.6** | **+0.7** |
| **GCMP** | **Grenada, Carri** | **2.32** | **39** | *eP* | **Pn** | **09 31 27.4** | **+0.9** |
| GCMP | | | | *eS* | **Sn** | **09 31 54.0** | **-0.8** |
| **SVOC** | **Richmond Hill,** | **2.98** | **34** | *eP* | **Pn** | **09 31 35.6** | **+0.1** |
| SVOC | | | | *eS* | **Sn** | **09 32 08.9** | **-1.9** |
| **SVT** | **Saint Vincent** | **2.98** | **33** | *eP* | **Pn** | **09 31 35.4** | **-0.2** |
| **SVB** | **Belmont** | **3.06** | **32** | *eP* | **Pn** | **09 31 36.7** | **+0.1** |
| SVB | | | | *eS* | **Sn** | **09 32 10.3** | **-2.6** |
| **SLAC** | **Saint Lucia, A** | **3.77** | **31** | *eP* | **Pn** | **09 31 47.2** | **+0.7** |
| SLAC | | | | *eS* | **Sn** | **09 32 28.0** | **-2.4** |
| **SLBI** | **Saint Lucia, B** | **3.84** | **30** | *eP* | **Pn** | **09 31 46.9** | **-0.5** |
| SLBI | | | | *eS* | **Sn** | **09 32 28.0** | **-4.0** |
| **TACV** | **Tcata** | **4.07** | **263** | *eP* | **Pn** | **09 31 52.8** | **+2.1** |
| TACV | | | | *eS* | **Sn** | **09 32 38.5** | **+0.5** |
| **BIM** | **Bigot** | **4.23** | **25** | *eP* | **Pn** | **09 31 52.7** | **-0.1** |
| BIM | | | | *eS* | **Sn** | **09 32 37.7** | **-4.1** |
| **BENV** | **Beln** | **4.66** | **262** | *eP* | **Pn** | **09 32 00.7** | **+1.9** |
| BENV | | | | *eS* | **Sn** | **09 32 51.8** | **-0.6** |
| **CACV** | **CAICARA DEL OR** | **4.72** | **229** | ⇑*eP* | Pn | 09 31 55.4 | -4.2 |
| CACV | | | | *eS* | Sn | 09 32 43.4 | -11 |
| **LUEV** | **Luepa** | **5.01** | **163** | ⇓*eP* | **Pn** | **09 32 02.9** | **-0.8** |
| LUEV | | | | *eS* | **Sn** | **09 32 56.2** | **-5.1** |
| **BAUV** | **El Baul** | **5.33** | **252** | *eP* | **Pn** | **09 32 08.5** | **+0.6** |
| BAUV | | | | *eS* | **Sn** | **09 33 06.2** | **-2.7** |
| **BAUV** | **El Baul** | **5.33** | **252** | *eP* | **Pn** | **09 32 08.8** | **+0.9** |
| BAUV | | | | *eS* | **Sn** | **09 33 06.4** | **-2.5** |
| **ANBD** | **Bethesda, Anti** | **6.44** | **10** | *eS* | **Pg** | **09 32 55.3** | **+2.9** |
| **ANBD** | **Bethesda, Anti** | **6.44** | **10** | *eP* | Pn | 09 32 30.5 | +7.3 |
| **ANWB** | **Willy Bob** | **7.04** | **9** | *eS* | **Pg** | **09 33 02.4** | **-1.6** |
| **ANWB** | **Willy Bob** | **7.04** | **9** | *eP* | Pn | 09 32 36.4 | +5.0 |

**ISC 30 09:32:09.4±1.2,66°.24N±0°.02×135°.43W±0°.03,h8km±9km, n38,σ0§57/59,Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EPYK** | **Eagle Plains** | **0.54** | **285** | P | **Pg** | **09 32 19.8** | **+0.1** |
| | baz=104,SNR=215 | | | | | | |
| EPYK | | | | S | **Sg** | **09 32 27.0** | **+0.2** |
| | baz=104 | | | | | | |
| **H31M** | **Peel River** | **0.62** | **134** | P | **Pg** | **09 32 21.4** | **0.0** |
| | baz=315,SNR=802 | | | | | | |
| H31M | | | | S | **Sg** | **09 32 29.9** | **+0.4** |
| | baz=315 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **0.81** | **337** | P | **Pg** | **09 32 24.9** | **-0.1** |
| | baz=157,SNR=485 | | | | | | |
| G30M | | | | S | **Sg** | **09 32 35.5** | **+0.1** |
| | baz=157 | | | | | | |
| **G31M** | **Satah River** | **0.83** | **34** | P | **Pg** | **09 32 25.3** | **0.0** |
| | baz=214,SNR=657 | | | | | | |
| G31M | | | | S | **Sb** | **09 32 37.1** | **-0.2** |
| | baz=214 | | | | | | |
| **I30M** | **Mount Dempster** | **1.09** | **201** | P | **Pg** | **09 32 29.7** | **-0.6** |
| | baz=21,SNR=667 | | | | | | |
| I30M | | | | S | **Sg** | **09 32 44.4** | **0.0** |
| | baz=21 | | | | | | |
| **H29M** | **Whitestone** | **1.19** | **270** | P | **Pg** | **09 32 31.8** | **-0.4** |
| | baz=88,SNR=998 | | | | | | |
| H29M | | | | S | **Sb** | **09 32 48.1** | **+0.3** |
| | baz=88 | | | | | | |
| **G29M** | **Pine Creek** | **1.24** | **304** | P | **Pg** | **09 32 32.5** | **-0.6** |
| | baz=122,SNR=506 | | | | | | |
| G29M | | | | S | **Sb** | **09 32 49.5** | **+0.4** |
| | baz=122 | | | | | | |
| **F31M** | **Tsiigehtchic** | **1.38** | **28** | P | **Pn** | **09 32 34.3** | **-0.6** |
| | baz=209,SNR=122 | | | | | | |
| F31M | | | | S | **Sb** | **09 32 53.3** | **+0.1** |
| | baz=209 | | | | | | |
| **F30M** | **Barrier River** | **1.38** | **354** | P | **Pn** | **09 32 34.8** | **-0.2** |
| | baz=174,SNR=294 | | | | | | |
| F30M | | | | S | **Sg** | **09 32 54.2** | **+0.4** |
| | baz=174 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **1.48** | **235** | Pb | **Pn** | **09 32 36.6** | **+0.3** |
| | baz=52,SNR=60 | | | | | | |
| I29M | | | | S | **Sn** | **09 32 55.6** | **-0.2** |
| | baz=52 | | | | | | |
| **J30M** | **Hart River** | **1.71** | **193** | P | **Pn** | **09 32 39.1** | **-0.6** |
| | baz=12,SNR=426 | | | | | | |
| J30M | | | | S | **Sn** | **09 33 01.8** | **0.0** |
| | baz=12 | | | | | | |
| **I28M** | **Miner Creek** | **2.02** | **249** | P | **Pn** | **09 32 42.8** | **-0.9** |
| | baz=65,SNR=23 | | | | | | |
| I28M | | | | S | **Sn** | **09 33 09.1** | **-0.2** |
| | baz=65 | | | | | | |
| **J29N** | **Klondike Camp** | **2.14** | **214** | S | **Sn** | **09 33 12.5** | **+0.2** |
| | baz=32 | | | | | | |
| **INK** | **Inuvik** | **2.21** | **19** | P | **Pn** | **09 32 45.7** | **-0.6** |
| | baz=200,SNR=48 | | | | | | |
| INK | | | | S | **Sn** | **09 33 14.6** | **+0.9** |
| | baz=200 | | | | | | |
| **F28M** | **Old Crow** | **2.23** | **310** | P | **Pn** | **09 32 46.2** | **-0.4** |
| | baz=126,SNR=38 | | | | | | |
| F28M | | | | S | **Sn** | **09 33 14.7** | **+0.4** |
| | baz=126 | | | | | | |
| **E29M** | **Blow River** | **2.36** | **337** | P | **Pn** | **09 32 48.2** | **-0.2** |
| | baz=155,SNR=20 | | | | | | |
| E29M | | | | S | **Sn** | **09 33 18.3** | **+0.7** |
| | baz=155 | | | | | | |
| **H27K** | **Steamboat Moun** | **2.47** | **273** | P | **Pn** | **09 32 49.4** | **-0.5** |
| | baz=87,SNR=77 | | | | | | |
| H27K | | | | S | **Sn** | **09 33 19.6** | **-0.7** |
| | baz=87 | | | | | | |
| **G27K** | **Doyon Strip** | **2.56** | **286** | P | **Pn** | **09 32 51.2** | **+0.1** |
| | baz=100,SNR=80 | | | | | | |
| G27K | | | | S | **Sn** | **09 33 21.3** | **-1.2** |
| | baz=100 | | | | | | |
| **K29M** | **Barlow Dome** | **2.56** | **201** | P | **Pn** | **09 32 51.1** | **-0.2** |
| | baz=19,SNR=18 | | | | | | |
| K29M | | | | S | **Sn** | **09 33 23.6** | **+0.8** |
| | baz=19 | | | | | | |
| **I27K** | **Kandik River** | **2.61** | **259** | P | **Pn** | **09 32 51.9** | **-0.1** |
| | baz=73,SNR=37 | | | | | | |
| I27K | | | | Sb | **Sb** | **09 33 30.2** | **+1.4** |
| | baz=73 | | | | | | |
| I27K | | | | Sb | **Sb** | **09 33 30.2** | **+1.4** |
| | baz=73 | | | | | | |
| **DAWY** | **Dawson** | **2.75** | **219** | P | **Pn** | **09 32 53.7** | **-0.2** |
| | baz=36,SNR=28 | | | | | | |
| DAWY | | | | S | **Sn** | **09 33 27.2** | **0.0** |
| | baz=36 | | | | | | |
| **EGAK** | **Eagle** | **2.80** | **241** | P | **Pn** | **09 32 53.7** | **-0.7** |
| | baz=56,SNR=13 | | | | | | |
| **E28M** | **Babbage River** | **2.85** | **328** | P | **Pn** | **09 32 55.1** | **-0.1** |
| | baz=144 | | | | | | |
| **E27K** | **Coleen River** | **3.09** | **312** | P | **Pn** | **09 32 58.4** | **-0.2** |
| | baz=126 | | | | | | |
| **I26K** | **Coal Creek Min** | **3.32** | **257** | P | **Pn** | **09 33 01.0** | **-0.6** |
| | baz=70 | | | | | | |
| **G26K** | **Porcupine Rive** | **3.41** | **286** | P | **Pn** | **09 33 02.2** | **-0.6** |
| | baz=98 | | | | | | |
| **D27M** | **Malcolm River** | **3.68** | **328** | P | **Pn** | **09 33 05.7** | **-0.9** |
| | baz=142,SNR=57 | | | | | | |
| **F26K** | **Sheenjek River** | **3.72** | **297** | P | **Pn** | **09 33 06.7** | **-0.5** |
| | baz=109,SNR=7.5 | | | | | | |
| **M30M** | **Minto, Yukon** | **3.73** | **190** | P | **Pn** | **09 33 07.0** | **-0.2** |
| | baz=8.6,SNR=18 | | | | | | |
| **J26L** | **Joseph Creek** | **3.82** | **247** | P | **Pn** | **09 33 08.0** | **-0.7** |
| | baz=59,SNR=14 | | | | | | |
| **M29M** | **Somme Creek** | **4.03** | **200** | P | **Pn** | **09 33 11.1** | **-0.3** |
| | baz=18,SNR=7.3 | | | | | | |
| **L27K** | **Beaver Creek** | **4.21** | **224** | P | **Pn** | **09 33 14.1** | **+0.2** |
| | baz=38,SNR=8.8 | | | | | | |
| **SCRK** | **Sand Creek** | **4.27** | **242** | P | **Pn** | **09 33 14.1** | **-0.7** |
| | baz=54 | | | | | | |
| **J25K** | **Salcha River,** | **4.46** | **253** | P | **Pn** | **09 33 17.1** | **-0.2** |
| | baz=64 | | | | | | |
| **N30M** | **Aishikik Lake** | **4.86** | **189** | P | **Pn** | **09 33 22.7** | **0.0** |
| | baz=8.0 | | | | | | |
| **F24K** | **Squaw Lake** | **5.07** | **290** | P | **Pn** | **09 33 25.5** | **-0.2** |
| | baz=99 | | | | | | |
| **N32M** | **Quiet Lake** | **5.21** | **167** | P | **Pn** | **09 33 26.9** | **-0.8** |
| | baz=350 | | | | | | |
| **C36M** | **Paulatuk** | **5.32** | **49** | P | **Pn** | **09 33 27.7** | **-1.2** |
| | baz=239 | | | | | | |

*LVSN **30** 09:32:49.5±6.5,58°.16N×23°.21E,h0km±62km,ML2.1*

**HEL 30 09:32:48.8±0.6,60°.61N×28°.95E,h0km,ML1.4, Explosion,Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VJF** | **Virojoki** | **0.69** | **265** | PB | Pg | 09 33 01.7 | -0.4 |
| VJF | | | | MSG | | 09 33 10.6 | |
| | comp=Z,4.7nm,0.2s | | | | | | |
| VJF | | | | SG | Sg | 09 33 12.1 | +1.1 |
| **RUF** | **Ruokolahti** | **0.82** | **360** | PG | Pg | 09 33 03.7 | -0.7 |
| RUF | | | | MSG | | 09 33 14.2 | |
| | comp=Z,3.3nm,0.2s | | | | | | |
| RUF | | | | SB | Sg | 09 33 15.0 | 0.0 |
| **PVF** | **Pernaja** | **1.53** | **269** | PG | Pn | 09 33 16.0 | -1.3 |
| | baz=87 | | | | | | |
| PVF | | | | MSG | | 09 33 34.7 | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **1.63** | **302** | PG | Pn | 09 33 17.9 | -0.8 |
| | baz=122 | | | | | | |
| FIA0 | | | | MSG | | 09 33 37.5 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| **ARBE** | **Arbavere** | **1.90** | **233** | *eP* | Pn | 09 33 22.9 | +0.6 |
| ARBE | | | | *eS* | Sg | 09 33 49.7 | -0.1 |
| ARBE | | | | AML | AML | 09 33 51.0 | |
| | comp=Z,38nm,0.8s | | | | | | |
| ARBE | | | | AML | AML | 09 33 52.0 | |
| | comp=E,75nm,0.1s | | | | | | |
| ARBE | | | | AML | AML | 09 33 52.9 | |
| | comp=N,82nm,0.1s | | | | | | |
| **ARBE** | **Arbavere** | **1.90** | **233** | PG | Pn | 09 33 23.2 | +0.8 |
| **KAF** | **Kangasniemi** | **1.97** | **321** | PG | Pn | 09 33 24.3 | +0.9 |
| | baz=138 | | | | | | |
| KAF | | | | MSG | | 09 33 47.4 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| **MEF** | **Metsahovi** | **2.29** | **262** | *eP* | Pb | 09 33 29.9 | -1.0 |
| MEF | | | | *eS* | Sb | 09 33 58.8 | -1.1 |
| MEF | | | | AML | AML | 09 34 06.6 | |
| | comp=N,11nm,0.8s | | | | | | |
| MEF | | | | AML | AML | 09 34 16.8 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| MEF | | | | AML | AML | 09 34 17.9 | |
| | comp=E,5.8nm,0.9s | | | | | | |
| **MEF** | **Metsahovi** | **2.29** | **262** | MSG | | 09 33 56.7 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| MEF | | | | SG | Sg | 09 34 01.3 | -1.1 |
| **VSU** | **Vasula** | **2.43** | **209** | *eS* | Sn | 09 33 51.6 | -8.5 |
| VSU | | | | AML | AML | 09 34 00.8 | |
| | comp=Z,21nm,0.1s | | | | | | |
| VSU | | | | AML | AML | 09 34 04.8 | |
| | comp=N,43nm,0.5s | | | | | | |
| VSU | | | | AML | AML | 09 34 05.5 | |
| | comp=E,41nm,0.6s | | | | | | |
| **SUF** | **Sumiainen** | **2.50** | **329** | MSG | | 09 34 02.6 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| SUF | | | | SG | Sg | 09 34 08.1 | -0.9 |
| **JOF** | **Joensuu** | **2.57** | **25** | PB | Pn | 09 33 33.5 | +1.8 |
| | baz=202 | | | | | | |
| JOF | | | | SB | Sb | 09 34 06.3 | -1.6 |
| **RMF** | **Romuvaara** | **3.65** | **7** | SB | Sb | 09 34 36.9 | -1.9 |

**IDC 30 09:35:45.3±3.9,20°.52N×121°.83E,h0km,mb3.7/3, mbtmp3.7/3,MS2.7/2,Error ellipse: s-maj=296.0km s-min=27.8km az=61.0,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.67** | **268** | LR | LR | 09 48 46.8 | |
| | comp=Z,16nm,21.0s,baz=105,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.42** | **319** | P | P | 09 43 33.4 | -0.2 |
| | 0.4nm,0.6s,baz=118,slow=8.3,SNR=4.0 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.04** | **162** | P | P | 09 43 38.6 | -0.2 |
| | 1.8nm,0.8s,baz=343,slow=9.0,SNR=16 | | | | | | |
| | 1.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **45.47** | **164** | P | P | 09 44 06.3 | -0.1 |
| | 0.4nm,0.3s,baz=344,slow=7.0,SNR=9.3 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **NOA** | **NORSAR Array B** | **81.73** | **333** | LR | LR | 10 25 56.3 | |
| | comp=Z,5.3nm,19.4s,baz=335,slow=37 | | | | | | |

**IDC 30 09:36:55.2±2.5,54°.64N×83°.82E,h0km,mbtmp2.5/2, ML2.5/2,Error ellipse: s-maj=19.5km s-min=11.4km az=167.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.91** | **140** | I | I | 09 43 00.0 | |
| | baz=317,slow=319,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.91** | **140** | Pg | Pg | 09 37 12.2 | -0.4 |
| | 4.4nm,0.3s,baz=325,slow=16,SNR=21 | | | | | | |
| ZALV | | | | Lg | Lg | 09 37 26.1 | |
| | 7.7nm,0.3s,baz=321,slow=28,SNR=7.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.16** | **221** | Pn | Pn | 09 38 14.0 | +0.4 |
| | 0.1nm,0.3s,baz=40,slow=13,SNR=3.0 | | | | | | |
| KURBB | | | | Lg | Lg | 09 39 42.4 | |
| | 0.1nm,0.3s,baz=43,slow=30,SNR=5.7 | | | | | | |
| | 0.3nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.92** | **188** | Pn | Pn | 09 38 50.7 | -0.8 |
| | 0.1nm,0.3s,baz=19,slow=15,SNR=2.1 | | | | | | |
| | 0.1nm,0.4s | | | | | | |

**IDC 30 09:57:53.7±3.8,17°.96S×178°.24W,h588km±29km, mb2.6/3,mbtmp3.5/4,Error ellipse: s-maj=227.3km s-min=28.3km az=158.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.54** | **273** | P | P | 09 59 15.3 | 0.0 |
| | 8.6nm,0.6s,baz=105,slow=5.4,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.78** | **260** | P | P | 10 05 16.2 | -0.3 |
| | 0.2nm,0.4s,baz=96,slow=7.6,SNR=7.8 | | | | | | |
| WRA | | | | PcP | PcP | 10 06 45.6 | -0.2 |
| | 0.3nm,1.0s,baz=91,slow=3.6,SNR=1.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.93** | **254** | P | P | 10 05 17.6 | 0.0 |
| | 0.6nm,0.6s,baz=87,slow=8.6,SNR=14 | | | | | | |
| ASAR | | | | PcP | PcP | 10 06 46.0 | -0.3 |
| | 0.3nm,0.6s,baz=104,slow=3.7,SNR=1.3 | | | | | | |
| | 0.6nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **85.89** | **58** | P | P | 10 09 32.5 | -0.2 |
| | 0.4nm,0.8s,baz=227,slow=6.0,SNR=4.6 | | | | | | |
| | 0.4nm,0.8s | | | | | | |

**NOU 30 10:10:46.3,22°.14S×170°.33E,h0km,ML3.9/9,Southeast of Loyalty Islands,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.23** | **287** | P | Pn | 10 11 23.3 | -1.3 |
| **PINNC** | **Pines Island,** | **2.71** | **259** | P | Pn | 10 11 30.8 | -0.3 |
| **LIFNC** | **LIFOU** | **3.18** | **295** | P | Pn | 10 11 37.9 | +0.3 |
| **YATNC** | **Mamie plateau,** | **3.19** | **271** | P | Pn | 10 11 37.2 | -0.6 |
| **ONTNC** | **Ouen Toro** | **3.59** | **267** | P | Pn | 10 11 43.3 | 0.0 |
| **DZM** | **Mont Dzumac** | **3.60** | **270** | P | Pn | 10 11 43.2 | -0.3 |
| **NOUC** | **Port Laguerre** | **3.73** | **270** | P | Pn | 10 11 45.9 | +0.7 |
| **KOUNC** | **Koumac, New Ca** | **5.85** | **285** | P | Pn | 10 12 15.0 | +0.7 |

**WEL 30 10:15:31.5±1.0,36°S±12°×177°8E±1°.6,h212km±15km, M3.5/9,ML3.9/13,MLv3.5/9,Error ellipse: s-maj=0.0km s-min=0.0km az=117.6,confirmed,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **1.99** | **184** | S | S | 10 16 42.3 | +1.1 |
| **HAZ** | **Te Kaha** | **2.25** | **194** | P | Pn | 10 16 12.8 | -0.5 |
| HAZ | | | | S | S | 10 16 45.2 | -0.6 |
| **RUGZ** | **Raukumara Rang** | **2.47** | **195** | P | Pn | 10 16 15.4 | -0.4 |
| RUGZ | | | | S | S | 10 16 50.8 | +0.5 |
| **TWGZ** | **Tauwhareparae** | **2.63** | **189** | P | Pn | 10 16 18.0 | +0.5 |
| TWGZ | | | | S | S | 10 16 55.6 | +2.3 |
| **MARZ** | **Manawahe** | **2.81** | **210** | P | Pn | 10 16 20.0 | +0.5 |
| **MWZ** | **Matawai** | **2.86** | **195** | P | Pn | 10 16 20.2 | +0.2 |
| MWZ | | | | S | S | 10 16 58.6 | +0.7 |
| **URZ** | **Urewera** | **2.90** | **202** | P | Pn | 10 16 20.2 | -0.2 |
| URZ | | | | S | S | 10 16 59.1 | +0.6 |
| **TKGZ** | **Te Karaka** | **2.91** | **190** | P | Pn | 10 16 20.4 | -0.1 |
| TKGZ | | | | S | S | 10 16 59.2 | +0.5 |
| **CNGZ** | **Carnagh Statio** | **2.91** | **184** | P | Pn | 10 16 21.7 | +1.1 |
| **RAGZ** | **Rawiri** | **3.04** | **196** | P | Pn | 10 16 22.6 | +0.5 |
| RAGZ | | | | S | S | 10 17 02.4 | +0.7 |
| **RIGZ** | **Rimuhau** | **3.18** | **190** | P | Pn | 10 16 23.3 | -0.5 |
| RIGZ | | | | S | S | 10 17 04.6 | +0.1 |
| **SNGZ** | **Shannon Statio** | **3.33** | **195** | P | Pn | 10 16 25.5 | 0.0 |
| SNGZ | | | | S | S | 10 17 09.1 | +1.4 |
| **KNZ** | **Kokohu** | **3.50** | **190** | P | Pn | 10 16 27.0 | -0.5 |
| KNZ | | | | S | S | 10 17 11.2 | -0.1 |
| **MTHZ** | **Maungataniwha** | **3.52** | **201** | P | Pn | 10 16 26.6 | -1.2 |
| MTHZ | | | | S | S | 10 17 12.7 | +0.8 |
| **MHGZ** | **Mahia Peninsul** | **3.60** | **187** | P | Pn | 10 16 29.0 | +0.2 |
| MHGZ | | | | S | S | 10 17 14.5 | +1.0 |
| **TLZ** | **Tolley Road** | **3.62** | **220** | P | Pn | 10 16 30.0 | +0.9 |
| **WHHZ** | **Waihua** | **3.63** | **195** | P | Pn | 10 16 29.3 | +0.2 |
| WHHZ | | | | S | S | 10 17 15.4 | +1.2 |
| **MRHZ** | **Matea Rd** | **3.65** | **206** | P | Pn | 10 16 29.0 | -0.4 |
| MRHZ | | | | S | S | 10 17 15.1 | +0.5 |
| **NMHZ** | **Naumai** | **3.76** | **200** | P | Pn | 10 16 30.9 | +0.1 |
| NMHZ | | | | S | S | 10 17 18.6 | +1.5 |
| **ARHZ** | **Aropaoanui** | **3.87** | **197** | P | Pn | 10 16 31.7 | -0.2 |
| ARHZ | | | | S | S | 10 17 19.6 | +0.3 |
| **BKZ** | **Black Stump Fm** | **3.92** | **203** | P | Pn | 10 16 31.9 | -0.7 |
| BKZ | | | | S | S | 10 17 20.4 | -0.1 |
| **MCHZ** | **McNeill Hill** | **4.12** | **200** | P | Pn | 10 16 34.6 | -0.4 |
| MCHZ | | | | S | S | 10 17 25.2 | +0.4 |
| **HIZ** | **Hauiti** | **4.12** | **224** | P | Pn | 10 16 36.7 | +1.6 |
| **NTVZ** | **North Tongarir** | **4.17** | **212** | P | Pn | 10 16 35.4 | -0.3 |
| NTVZ | | | | S | S | 10 17 26.4 | +0.3 |
| **TMVZ** | **Te Maari** | **4.17** | **211** | P | Pn | 10 16 35.7 | -0.1 |
| **KWHZ** | **Kaweka Forest** | **4.18** | **202** | P | Pn | 10 16 35.3 | -0.5 |
| KWHZ | | | | S | S | 10 17 26.6 | +0.3 |
| **ETVZ** | **East Tongariro** | **4.18** | **211** | P | Pn | 10 16 35.7 | -0.3 |
| **NNVZ** | **North Ngauruho** | **4.22** | **212** | P | Pn | 10 16 36.9 | +0.4 |
| **OTVZ** | **Oturere** | **4.22** | **211** | P | Pn | 10 16 36.3 | -0.3 |
| **SNVZ** | **South Ngauruho** | **4.25** | **211** | P | Pn | 10 16 36.5 | -0.4 |
| SNVZ | | | | S | S | 10 17 27.9 | -0.3 |
| **NGZ** | **Ngauruhoe** | **4.26** | **212** | P | Pn | 10 16 36.9 | -0.1 |
| **TUVZ** | **Tukino** | **4.32** | **210** | P | Pn | 10 16 37.1 | -0.6 |
| TUVZ | | | | S | S | 10 17 30.7 | +1.1 |
| **FWVZ** | **Far West T-bar** | **4.35** | **211** | P | Pn | 10 16 37.7 | -0.5 |
| **WNVZ** | **Wahianoa** | **4.39** | **211** | P | Pn | 10 16 37.8 | -0.8 |
| **KRHZ** | **Kereru** | **4.39** | **202** | P | Pn | 10 16 36.9 | -1.6 |
| KRHZ | | | | S | S | 10 17 29.3 | -1.8 |
| **MOVZ** | **Moawhango** | **4.40** | **209** | P | Pn | 10 16 37.1 | -1.5 |
| MOVZ | | | | S | S | 10 17 29.2 | -2.1 |
| **KAHZ** | **Kahuranaki** | **4.40** | **196** | P | Pn | 10 16 38.0 | -0.6 |
| KAHZ | | | | S | S | 10 17 31.2 | -0.1 |
| **PXZ** | **Pawanui** | **4.63** | **196** | P | Pn | 10 16 39.9 | -1.4 |
| PXZ | | | | S | S | 10 17 34.7 | -1.7 |
| **PNHZ** | **Pukenui** | **4.69** | **202** | P | Pn | 10 16 40.4 | -1.9 |
| PNHZ | | | | S | S | 10 17 36.1 | -1.8 |
| **WPHZ** | **Waipukurau** | **4.76** | **199** | P | Pn | 10 16 41.7 | -1.4 |
| WPHZ | | | | S | S | 10 17 38.6 | -0.9 |
| **PRHZ** | **Porangahau** | **4.91** | **197** | P | Pn | 10 16 43.4 | -1.5 |
| PRHZ | | | | S | S | 10 17 42.1 | -0.6 |
| **DVHZ** | **Dannevirke**

| | | | | | | |
|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **20.35** | **190** | P | **P** | **10 20 53.2 -1.9** |
| **PMG** | **Port Moresby** | **21.31** | **123** | LR | LR | 10 30 15.2 |
| | comp=Z,33nm,19.8s,baz=328,slow=39 | | | | | |
| **WB0** | **Warramunga Arr** | **22.34** | **167** | P | **P** | **10 21 17.0 +0.5** |
| WB0 | | | | IAmb | IAmb | 10 21 24.5 |
| | comp=Z,15nm,1.1s | | | | | |
| **WRAB** | **Tennant Creek** | **22.49** | **167** | P | **P** | **10 21 18.8 +0.7** |
| WRAB | | | | IAmb | IAmb | 10 21 46.7 |
| | comp=Z,16nm,1.5s | | | | | |
| **WRA** | **Warramunga Arr** | **22.49** | **167** | P | **P** | **10 21 19.1 +0.9** |
| | comp=Z,2.7nm,0.9s,baz=345,slow=11,SNR=12 | | | | | |
| | comp=Z,2.7nm,0.9s | | | | | |
| **WB2** | **Warramunga Arr** | **22.50** | **167** | P | **P** | **10 21 18.0 -0.2** |
| WB2 | | | | IAmb | IAmb | 10 21 25.8 |
| | comp=Z,7.0nm,0.8s | | | | | |
| **WR0** | **Warramunga Arr** | **22.55** | **167** | P | **P** | **10 21 17.2 -1.7** |
| WR0 | | | | IAmb | IAmb | 10 21 28.7 |
| | comp=Z,14nm,1.5s | | | | | |
| **JOW** | **Kunigami** | **24.61** | **358** | LR | LR | 10 30 09.1 |
| | comp=Z,31nm,22.0s,baz=283,slow=34 | | | | | |
| **ASAR** | **Alice Springs** | **26.03** | **170** | P | **P** | **10 21 52.0 +0.4** |
| | comp=Z,1.0nm,0.8s,baz=352,slow=7.7,SNR=5.9 | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | |
| **JNU** | **Nakatsue** | **30.91** | **3** | LR | LR | 10 34 18.0 |
| | comp=Z,17nm,19.3s,baz=136,slow=35 | | | | | |
| **JHJ2** | **Mitsune** | **32.45** | **17** | P | **P** | **10 22 48.5 0.0** |
| **KSRS** | **Korea Array** | **35.21** | **358** | P | **P** | **10 23 12.6 +0.3** |
| | comp=Z,0.6nm,0.5s,baz=172,slow=10.0,SNR=3.1 | | | | | |
| KSRS | | | | LR | LR | 10 39 30.0 |
| | comp=Z,10.0nm,18.0s,baz=185,slow=40 | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.30** | **13** | P | **P** | **10 23 12.9 -0.3** |
| | comp=Z,1.2nm,0.6s,baz=196,slow=10,SNR=2.2 | | | | | |
| | comp=Z,1.2nm,0.6s | | | | | |
| **STKA** | **Stephens Creek** | **35.80** | **162** | P | **P** | **10 23 18.2 +0.7** |
| **STKA** | **Stephens Creek** | **35.80** | **162** | P | **P** | **10 23 19.0 +1.4** |
| | comp=Z,2.4nm,0.8s,baz=338,slow=10,SNR=2.1 | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.27** | **64** | T | T | 11 06 54.2 |
| | baz=255,slow=75 | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.28** | **64** | T | T | 11 06 59.4 |
| | baz=255,slow=75 | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.28** | **64** | T | T | 11 06 59.2 |
| | baz=255,slow=75 | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.87** | **62** | T | T | 11 07 42.1 |
| | baz=255,slow=75 | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.88** | **62** | T | T | 11 07 59.0 |
| | baz=255 | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.88** | **62** | T | T | 11 07 41.8 |
| | baz=255,slow=75 | | | | | |
| **KOUNC** | **Koumac, New Ca** | **41.17** | **125** | P | **P** | **10 24 02.6 -0.2** |
| KOUNC | | | | IAmb | IAmb | 10 24 40.7 |
| | comp=Z,15nm,0.9s | | | | | |
| **ASAJ** | **Asahikawa** | **43.52** | **14** | LR | LR | 10 41 20.7 |
| | comp=Z,31nm,19.1s,baz=208,slow=35 | | | | | |
| **PINNC** | **Pines Island,** | **44.73** | **125** | P | **P** | **10 24 31.1 -0.6** |
| **SONM** | **Songino Array** | **49.62** | **340** | P | **P** | **10 25 09.9 +0.4** |
| | comp=Z,0.9nm,0.4s,baz=170,slow=9.0,SNR=4.7 | | | | | |
| SONM | | | | LR | LR | 10 46 35.3 |
| | comp=Z,25nm,21.5s,baz=178,slow=37 | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | |
| **MKAR** | **Makanchi Array** | **60.25** | **325** | P | **P** | **10 26 25.4 -0.8** |
| | comp=Z,0.6nm,0.5s,baz=121,slow=7.6,SNR=10 | | | | | |
| MKAR | | | | LR | LR | 10 53 40.6 |
| | comp=Z,23nm,18.9s,baz=82,slow=37 | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.39** | **327** | P | **P** | **10 26 52.8 -1.1** |
| | comp=Z,0.9nm,0.6s,baz=124,slow=6.3,SNR=4.5 | | | | | |
| | comp=Z,0.9nm,0.6s | | | | | |
| **J17K** | **VABM Dome** | **80.05** | **26** | P | **P** | **10 28 28.1 +0.9** |
| J17K | | | | IAmb | IAmb | 10 28 30.1 |
| | comp=Z,25nm,1.4s | | | | | |
| **K17K** | **Iditarod** | **80.21** | **27** | P | **P** | **10 28 28.0 -0.1** |
| K17K | | | | IAmb | IAmb | 10 28 52.8 |
| | comp=Z,14nm,1.2s | | | | | |
| **ILAR** | **Eielson Array** | **85.56** | **25** | P | **P** | **10 28 55.3 -0.4** |
| | comp=Z,0.3nm,0.9s,baz=258,slow=4.5,SNR=2.5 | | | | | |
| | comp=Z,0.3nm,0.9s | | | | | |
| **QSPA** | **South Pole Qui** | **92.01** | **180** | P | **P** | **10 29 26.9 +0.5** |
| QSPA | | | | IAmb | IAmb | 10 29 38.9 |
| | comp=Z,4.3nm,1.3s | | | | | |
| **MLR** | **Muntele Rosu** | **97.72** | **316** | LR | LR | 11 19 43.0 |
| | comp=Z,16nm,19.2s,baz=1.5,slow=39 | | | | | |

**HEL 30 10:33:52.5±0.4, 61°01'N×28°21'E, h0km, ML1.2, Explosion, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RUF** | **Ruokolahti** | **0.55** | **40** | PG | Pg | 10 34 02.5 | -0.5 |
| RUF | | | | SG | Sg | 10 34 09.4 | -0.7 |
| RUF | | | | MSG | | 10 34 10.2 | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| **VJF** | **Virojoki** | **0.57** | **215** | PG | Pg | 10 34 02.9 | -0.6 |
| VJF | | | | MSG | | 10 34 10.9 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| VJF | | | | SG | Sg | 10 34 11.1 | +0.3 |
| **FIA0** | **FINESS Array S** | **1.12** | **294** | PG | Pg | 10 34 13.5 | -0.4 |
| FIA0 | | | | SG | Sg | 10 34 26.5 | -2.0 |
| FIA0 | | | | MSG | | 10 34 26.7 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| **PVF** | **Pernaja** | **1.24** | **249** | PG | Pg | 10 34 14.0 | -2.3 |
| PVF | | | | MSG | | 10 34 30.1 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| **KAF** | **Kangasniemi** | **1.43** | **321** | PN | Pn | 10 34 18.7 | -1.1 |
| KAF | | | | MSG | | 10 34 35.5 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| KAF | | | | SN | Sn | 10 34 40.8 | +1.6 |
| **SUF** | **Sumiainen** | **1.97** | **331** | PG | Pb | 10 34 28.2 | -1.0 |
| SUF | | | | MSG | | 10 34 51.1 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| SUF | | | | SG | Sb | 10 34 53.8 | -0.6 |
| **KEF** | **Keuruu** | **1.98** | **307** | PG | Pb | 10 34 28.3 | -0.9 |
| KEF | | | | MSG | | 10 34 51.3 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| KEF | | | | SG | Sb | 10 34 54.1 | -0.3 |
| **MEF** | **Metsahovi** | **2.04** | **249** | MSG | | 10 34 53.1 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| MEF | | | | SG | Sb | 10 34 56.9 | +0.6 |
| **NIF** | **Nilsia** | **2.40** | **356** | SG | Sb | 10 35 06.0 | -0.6 |
| **JOF** | **Joensuu** | **2.41** | **36** | SG | Sb | 10 35 05.9 | -1.0 |
| **VAF** | **Ylistaro** | **3.31** | **310** | SB | Sn | 10 35 28.4 | +2.9 |

**LVSN 30 10:34:30.7±4.1, 59°39'N×26°85E, h0km±23km, ML1.6, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARBE** | **Arbavere** | **0.45** | **276** | *e*P | Pg | 10 34 38.0 | -1.3 |
| ARBE | | | | *e*S | Sg | 10 34 43.6 | -1.4 |
| ARBE | | | | AML | AML | 10 34 54.0 | |
| | comp=E,140nm,1.0s | | | | | | |
| ARBE | | | | AML | AML | 10 35 03.6 | |
| | comp=Z,69nm,0.6s | | | | | | |
| ARBE | | | | AML | AML | 10 35 05.9 | |
| | comp=N,145nm,0.7s | | | | | | |
| **MEF** | **Metsahovi** | **1.49** | **305** | *e*P | Pn | 10 34 55.9 | -2.8 |
| MEF | | | | *e*S | Sg | 10 35 17.7 | -1.0 |
| MEF | | | | AML | AML | 10 35 21.5 | |
| | comp=E,4.0nm,0.4s | | | | | | |
| MEF | | | | AML | AML | 10 35 22.0 | |
| | comp=Z,4.8nm,0.6s | | | | | | |
| MEF | | | | AML | AML | 10 35 22.0 | |
| | comp=N,5.9nm,0.6s | | | | | | |
| **MTSE** | **Matsula** | **1.71** | **248** | *e*S | Sn | 10 35 22.4 | -1.9 |

**JMA 30 10:35:50.2±0.1, 24°2N±0.4×123°8E±0.3, h17km±1km, MV0.7/8, NEAR ISHIGAKIJIMA ISLAND, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **0.14** | **314** | P | Pg | 10 35 54.2 | -0.1 |
| **JKRS** | **Kuro-shima** | **0.15** | **89** | *i* P | Pg | 10 35 54.4 | 0.0 |
| JKRS | | | | *e*S | Sb | 10 35 57.7 | +0.2 |
| **HATJ** | **Hateruma jima** | **0.18** | **191** | *i* P | Pg | 10 35 54.6 | -0.2 |
| HATJ | | | | *e*S | Sg | 10 35 58.0 | +0.1 |
| **JIJ** | **Ishigaki jima** | **0.30** | **65** | P | Pg | 10 35 56.5 | -0.2 |
| JIJ | | | | S | Sg | 10 36 01.0 | -0.2 |
| **JISG** | **Ishigakijimahi** | **0.55** | **51** | *e*S | Sb | 10 36 09.1 | +0.1 |
| **JTJ** | **Tarama** | **0.88** | **63** | *e*S | Sg | 10 36 19.4 | +0.3 |

*IDC **30** 10:36:10.2±0.9, 2°11N×128°79E, h0km, mb3.8/8, mbtmp3.8/8, MS3.5/4, Error ellipse: s-maj=73.9km s-min=16.2km az=74.0*

**ISC 30 10:36:15.8±0.9, 2°1N±0°2×129°0E±0°6, h40km, n14, σ0s52/8, mb3.9/8, MS4.0/3, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **19.43** | **53** | LR | LR | 10 47 01.1 | |
| | comp=Z,30nm,18.2s,baz=296,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.56** | **167** | P | **P** | **10 41 12.6** | **-0.2** |
| | 0.8nm,0.6s,baz=343,slow=10,SNR=10 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **26.09** | **170** | P | **P** | **10 41 46.0** | **0.0** |
| | 0.6nm,0.7s,baz=355,slow=7.2,SNR=8.0 | | | | | | |
| | 0.6nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **35.16** | **359** | P | **P** | **10 43 06.4** | **+0.6** |
| | 0.9nm,0.5s,baz=170,slow=9.9,SNR=5.0 | | | | | | |
| | 0.9nm,0.5s | | | | | | |
| **STKA** | **Stephens Creek** | **35.89** | **161** | P | **P** | **10 43 12.4** | **+0.2** |
| | 0.8nm,0.4s,baz=340,slow=12,SNR=4.3 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.39** | **64** | T | T | 11 26 45.4 | |
| | baz=250,slow=75,SNR=3.3 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.41** | **64** | T | T | 11 26 44.7 | |
| | baz=250,slow=75,SNR=3.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.41** | **64** | T | T | 11 26 45.1 | |
| | baz=250,slow=75,SNR=4.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.98** | **3** | P | **P** | **10 44 02.4** | **-0.6** |
| | 1.1nm,0.8s,baz=165,slow=6.0,SNR=2.5 | | | | | | |
| USRK | | | | LR | LR | 11 00 32.6 | |
| | comp=Z,17nm,19.9s,baz=325,slow=35 | | | | | | |
| | 1.1nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **49.53** | **340** | P | **P** | **10 45 03.0** | **+0.3** |
| | 0.4nm,0.3s,baz=152,slow=6.4,SNR=2.6 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.13** | **325** | P | **P** | **10 46 19.4** | **+0.1** |
| | 1.2nm,0.5s,baz=115,slow=8.9,SNR=9.0 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.28** | **327** | P | **P** | **10 46 46.2** | **-0.7** |
| | 1.0nm,0.5s,baz=126,slow=6.4,SNR=12 | | | | | | |
| | 1.0nm,0.5s | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **85.83** | **314** | LR | LR | 11 30 17.1 | |
| | comp=Z,136nm,21.9s,baz=273,slow=38 | | | | | | |
| **OBN** | **Obninsk** | **89.64** | **325** | LR | LR | 11 31 01.8 | |
| | comp=Z,62nm,21.8s,baz=223,slow=37 | | | | | | |

**TAP 30 10:36:49.0, 24°91N×122°05E, h11km, ML1.2, D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.11** | **329** | P | Pg | 10 36 52.4 | +0.5 |
| | baz=332 | | | | | | |
| TWB1 | | | | S | Sg | 10 36 54.9 | +0.9 |
| | baz=332 | | | | | | |
| **EGS** | | **0.13** | **238** | *e*P | Pg | 10 36 52.7 | +0.6 |
| | baz=234 | | | | | | |
| EGS | | | | *e*S | Sg | 10 36 55.3 | +1.0 |
| | baz=234 | | | | | | |
| **TIPB** | **Shuangxi** | **0.21** | **286** | *e*P | Pb | 10 36 54.2 | -0.6 |
| | baz=285 | | | | | | |
| TIPB | | | | *e*S | Sg | 10 36 58.3 | +1.7 |
| | baz=285 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.24** | **319** | *e*P | Pb | 10 36 55.2 | -0.2 |
| | baz=318 | | | | | | |

*RSNC **30** 10:39:01.4±0.5, 10°N±5°×7°9W±°, h26km±6km, M3.0, ML2.9*
*UPA **30** 10:39:03.0±1.0, 9°44N×79°41W, h17km±2km, MW4.0*

**ISC 30 10:39:02.3±1.4, 9°49N±0°07×79°39W±0°03, h29km±9km, n33, σ1s27/63, 6C-7D, Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPO** | **Chepo, Panama** | **0.42** | **140** | ⇑*i*P | **Pb** | **10 39 11.9** | **+0.5** |
| CHPO | | | | *e*S | **Sb** | **10 39 18.0** | **+0.4** |
| **UPA** | **Univ. de Panam** | **0.53** | **196** | ⇓*e*P | **Pb** | **10 39 12.8** | **-0.4** |
| UPA | | | | *e*S | **Sb** | **10 39 20.4** | **-0.1** |
| **BCIP** | **Isla Barro Col** | **0.55** | **234** | P | **Pb** | **10 39 13.0** | **-0.5** |
| BCIP | | | | S | **Sb** | **10 39 19.8** | **-1.2** |
| **BCIP** | **Isla Barro Col** | **0.55** | **234** | ⇓*i*P | **Pb** | **10 39 13.2** | **-0.3** |
| BCIP | | | | *e*S | **Sb** | **10 39 21.1** | **0.0** |
| **CNTA3** | **Canitas, Panam** | **0.56** | **119** | *e*P | **Pb** | **10 39 13.6** | **-0.1** |
| CNTA3 | | | | *e*S | **Sb** | **10 39 22.1** | **+0.5** |
| **FLAM** | **Flamenco Islan** | **0.59** | **194** | *e*P | **Pb** | **10 39 13.9** | **-0.4** |
| FLAM | | | | *e*S | **Sb** | **10 39 21.6** | **-0.7** |
| **TOTI** | **Torti** | **1.20** | **118** | ⇑*i*P | **Pn** | **10 39 23.6** | **+0.3** |
| TOTI | | | | *e*S | **Sn** | **10 39 39.4** | **+0.8** |
| **PNME** | **Penonome** | **1.36** | **223** | ⇓*e*P | **Pn** | **10 39 25.8** | **+0.3** |
| PNME | | | | *e*S | **Sn** | **10 39 42.5** | **0.0** |
| **UPD2** | **Meteti** | **1.65** | **125** | ⇓*i*P | **Pn** | **10 39 30.4** | **+1.0** |
| UPD2 | | | | *e*S | **Sn** | **10 39 51.4** | **+1.7** |
| **CHIT3** | **Chitre** | **1.83** | **214** | ⇓*e*P | **Pn** | **10 39 31.6** | **-0.3** |
| CHIT3 | | | | *e*S | **Sn** | **10 39 54.1** | **-0.1** |
| **AZU** | **Azuero** | **1.90** | **207** | P | **Pn** | **10 39 32.3** | **-0.6** |
| AZU | | | | S | **Sn** | **10 39 55.1** | **-0.8** |
| **AZU** | **Azuero** | **1.90** | **207** | ⇓*i*P | **Pn** | **10 39 32.5** | **-0.4** |
| AZU | | | | *e*S | **Sn** | **10 39 55.5** | **-0.4** |
| **PCRI3** | **Pocri, Los San** | **1.96** | **202** | ⇓*i*P | **Pn** | **10 39 34.4** | **+0.7** |
| PCRI3 | | | | *e*S | **Sn** | **10 39 57.1** | **-0.2** |
| **PESE3** | **Pese, Herrera** | **1.98** | **218** | *e*P | **Pn** | **10 39 34.0** | **0.0** |
| PESE3 | | | | *e*S | **Sn** | **10 39 58.4** | **+0.5** |
| **STIA3** | **Santiago, Vera** | **2.09** | **229** | *e*P | **Pn** | **10 39 35.7** | **+0.2** |
| STIA3 | | | | *e*S | **Sn** | **10 40 01.5** | **+1.0** |
| **CAPC** | **Capurgana** | **2.19** | **113** | P | **Pn** | **10 39 36.7** | **-0.1** |
| CAPC | | | | S | **Sn** | **10 40 02.6** | **-0.3** |
| **ACHO3** | **Achotines, Los** | **2.20** | **201** | ⇑*e*P | **Pn** | **10 39 37.3** | **+0.3** |
| ACHO3 | | | | *e*S | **Sn** | **10 40 04.2** | **+0.8** |
| **RSUS3** | **Rio de Jesus,** | **2.30** | **230** | ⇑*e*P | **Pn** | **10 39 39.0** | **+0.6** |
| RSUS3 | | | | *e*S | **Sn** | **10 40 07.3** | **+1.5** |
| **MARI3** | **Mariato, Verag** | **2.42** | **221** | ⇑*e*P | **Pn** | **10 39 43.3** | **+0.3** |
| MARI3 | | | | *e*S | **Sn** | **10 40 10.1** | **+1.4** |
| **GMAL** | **Guarumal, Vera** | **2.50** | **227** | P | **Pn** | **10 39 40.9** | **-0.3** |
| **CACAO** | **El Cacao, Vera** | **2.58** | **214** | P | **Pn** | **10 39 42.2** | **0.0** |
| **CACAO** | **El Cacao, Vera** | **2.58** | **214** | *e*P | **Pn** | **10 39 42.6** | **+0.4** |
| CACAO | | | | *e*S | **Sn** | **10 40 13.4** | **+0.7** |
| **NANC3** | **Nancito, Chiri** | **2.63** | **242** | *e*P | **Pn** | **10 39 44.0** | **+1.1** |
| NANC3 | | | | *e*S | **Sn** | **10 40 14.8** | **+1.0** |
| **PTAC** | **Punta Ardita,** | **2.81** | **146** | P | **Pn** | **10 39 43.8** | **-1.5** |
| PTAC | | | | S | **Sn** | **10 40 16.6** | **-1.6** |
| **LCBC** | **Los crdobas,** | **3.05** | **102** | P | **Pn** | **10 39 50.4** | **+1.7** |
| LCBC | | | | S | **Sn** | **10 40 24.6** | **+0.3** |
| **LCBC** | **Los crdobas,** | **3.05** | **102** | ⇑*e*P | **Pn** | **10 39 50.7** | **+2.0** |
| LCBC | | | | *e*S | **Sn** | **10 40 25.8** | **+1.6** |
| **APAC** | **Apartado, Choc** | **3.20** | **119** | P | **Pn** | **10 39 52.8** | **+2.1** |
| APAC | | | | S | **Sb** | **10 40 34.4** | **-2.6** |
| **DBBC** | **Dabeiba** | **3.99** | **128** | P | **Pn** | **10 40 03.4** | **+1.6** |
| DBBC | | | | S | **Sn** | **10 40 51.6** | **+3.9** |
| **SJCC** | **San Jacinto, C** | **4.17** | **84** | P | **Pn** | **10 40 04.1** | **-0.1** |
| SJCC | | | | S | **Sn** | **10 40 47.7** | **-4.3** |
| **UREC** | **San Jos de Ur** | **4.19** | **114** | P | **Pn** | **10 40 05.2** | **+0.9** |
| UREC | | | | S | **Sn** | **10 40 49.0** | **-3.4** |
| **UREC** | **San Jos de Ur** | **4.19** | **114** | *e*P | **Pn** | **10 40 05.3** | **+0.9** |
| UREC | | | | *e*S | **Sn** | **10 40 52.8** | **+0.4** |
| **ZARC** | **Zaragoza, Cauc** | **4.90** | **114** | P | **Pn** | **10 40 14.5** | **+0.3** |
| **CBOC** | **Ciudad Bolivar** | **4.92** | **137** | P | **Pn** | **10 40 14.4** | **-0.2** |
| CBOC | | | | S | **Sn** | **10 41 10.7** | **0.0** |

**WEL 30 10:54:34.9±1.1, 34°S±10°×18°0W±2°2, h33km, M4.3/11, mB4.9/4, ML4.4/14, MLv4.3/11, Mw(mB)4.2/4, Error ellipse: s-maj=0.0km s-min=0.0km az=109.1, confirmed, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **3.93** | **202** | P | Pn | 10 55 34.5 | +1.6 |
| MXZ | | | | S | Sn | 10 56 21.4 | +3.4 |
| **PKGZ** | **Pakihiroa** | **4.28** | **202** | P | Pn | 10 55 38.1 | +0.4 |
| PKGZ | | | | S | Sn | 10 56 28.4 | +1.8 |
| **HAZ** | **Te Kaha** | **4.29** | **206** | P | Pn | 10 55 39.0 | +1.2 |
| HAZ | | | | S | Sn | 10 56 29.6 | +3.0 |
| **PUZ** | **Puketiti** | **4.42** | **200** | P | Pn | 10 55 39.3 | -0.4 |
| PUZ | | | | S | Sn | 10 56 31.0 | +1.0 |
| **RUGZ** | **Raukumara Rang** | **4.51** | **206** | P | Pn | 10 55 42.1 | +1.1 |
| RUGZ | | | | S | Sn | 10 56 33.1 | +0.7 |
| **TWGZ** | **Tauwhareparae** | **4.60** | **202** | P | Pn | 10 55 42.2 | 0.0 |
| TWGZ | | | | S | Sn | 10 56 37.6 | +3.1 |
| **CNGZ** | **Carnagh Statio** | **4.82** | **198** | P | Pn | 10 55 45.4 | +0.3 |
| **TKGZ** | **Te Karaka** | **4.88** | **202** | P | Pn | 10 55 46.3 | +0.3 |
| TKGZ | | | | S | Sn | 10 56 41.7 | +0.3 |
| **OPRZ** | **Ohinepanea** | **4.88** | **216** | P | Pn | 10 55 47.3 | +1.3 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **MWZ** | **Matawai** | **4.89** | **205** | P | Pn | 10 55 45.7 -0.4 |
| MWZ | | | | S | Sn | 10 56 40.8 -0.8 |
| **URZ** | **Urewera** | **4.98** | **209** | P | Pn | 10 55 46.5 -0.8 |
| URZ | | | | S | Sn | 10 56 42.6 -1.2 |
| **RAGZ** | **Rawiri** | **5.08** | **205** | P | Pn | 10 55 48.2 -0.5 |
| RAGZ | | | | S | Sn | 10 56 45.6 -0.6 |
| **RIGZ** | **Rimuhau** | **5.15** | **201** | P | Pn | 10 55 48.4 -1.3 |
| RIGZ | | | | S | Sn | 10 56 47.9 -0.2 |
| **MKAZ** | **Moumakai** | **5.16** | **230** | P | Pn | 10 55 50.6 +0.9 |
| **MUGZ** | **Murupara** | **5.31** | **210** | P | Pn | 10 55 50.1 -1.7 |
| **PRGZ** | **Paritu Road** | **5.32** | **199** | P | Pn | 10 55 52.4 +0.3 |
| **RTZ** | **Ruatahuna** | **5.34** | **208** | P | Pn | 10 55 51.8 -0.6 |
| **SNGZ** | **Shannon Statio** | **5.36** | **204** | P | Pn | 10 55 51.5 -1.1 |
| **ALRZ** | **Allen Road** | **5.56** | **212** | P | Pn | 10 55 55.5 +0.2 |
| **TLZ** | **Tolley Road** | **5.77** | **219** | P | Pn | 10 55 59.8 +1.6 |
| **ARHZ** | **Aropaoanui** | **5.91** | **204** | P | Pn | 10 55 56.3 -3.8 |
| **BKZ** | **Black Stump Fm** | **6.01** | **208** | P | Pn | 10 55 59.0 -2.5 |
| **MCHZ** | **McNeill Hill** | **6.17** | **206** | P | Pn | 10 56 02.8 -0.9 |
| **KWHZ** | **Kaweka Forest** | **6.26** | **207** | P | Pn | 10 56 01.9 -3.1 |
| **HIZ** | **Hauiti** | **6.27** | **221** | P | Pn | 10 56 06.7 +1.7 |
| **NTVZ** | **North Tongarir** | **6.30** | **213** | P | Pn | 10 56 05.1 -0.5 |
| **TMVZ** | **Te Maari** | **6.30** | **213** | P | Pn | 10 56 05.1 -0.5 |
| **ETVZ** | **East Tongariro** | **6.31** | **213** | P | Pn | 10 56 04.7 -1.1 |
| **SNVZ** | **South Ngauruho** | **6.39** | **213** | P | Pn | 10 56 05.7 -1.1 |
| **TWVZ** | **Taurewa** | **6.39** | **215** | P | Pn | 10 56 06.0 -0.7 |
| **NGZ** | **Ngauruhoe** | **6.39** | **213** | P | Pn | 10 56 05.1 -1.8 |
| **KAHZ** | **Kahuranaki** | **6.42** | **203** | P | Pn | 10 56 03.9 -3.3 |
| **KRHZ** | **Kereru** | **6.47** | **207** | P | Pn | 10 56 05.5 -2.3 |
| **FWVZ** | **Far West T-bar** | **6.48** | **213** | P | Pn | 10 56 07.8 -0.4 |
| **WHVZ** | **Whangaehu Hut** | **6.49** | **213** | P | Pn | 10 56 07.1 -1.2 |
| **MOVZ** | **Moawhango** | **6.52** | **211** | P | Pn | 10 56 06.4 -2.1 |
| **PXZ** | **Pawanui** | **6.64** | **202** | P | Pn | 10 56 07.4 -2.8 |
| **PNHZ** | **Pukenui** | **6.77** | **207** | P | Pn | 10 56 09.2 -2.7 |
| **PRHZ** | **Porangahau** | **6.93** | **203** | P | Pn | 10 56 10.4 -3.7 |
| **DVHZ** | **Dannevirke** | **7.12** | **205** | P | Pn | 10 56 12.4 -4.3 |
| **ANWZ** | **Angora Road** | **7.16** | **203** | P | Pn | 10 56 14.7 -2.6 |
| **BFZ** | **Birch Farm** | **7.43** | **203** | P | Pn | 10 56 15.7 -5.3 |

**WEL 30 10:55:24.8±0.9, 40°S±3°×17°4E±°, h102km±7km, M2.2/6, MLv2.2/6, Error ellipse: s-maj=0.0km s-min=0.0km az=88.1, confirmed, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LREZ** | **Lake Rotokare** | **0.41** | **28** | P | Pn | 10 55 41.3 | +1.1 |
| LREZ | | | | S | Sn | 10 55 55.0 | +3.2 |
| **NMEZ** | **Namu Road** | **0.46** | **333** | P | Pn | 10 55 41.5 | +0.9 |
| NMEZ | | | | S | Sn | 10 55 55.6 | +3.2 |
| **PREZ** | **Palmer Road** | **0.48** | **1** | P | Pn | 10 55 41.5 | +0.7 |
| PREZ | | | | S | Sn | 10 55 55.3 | +2.6 |
| **KHEZ** | **Kahui Hut** | **0.54** | **349** | P | Pn | 10 55 42.0 | +0.8 |
| KHEZ | | | | S | Sn | 10 55 55.8 | +2.3 |
| **NEZ** | **North Egmont** | **0.55** | **356** | P | Pn | 10 55 41.8 | +0.4 |
| NEZ | | | | S | Sn | 10 55 56.0 | +2.3 |
| **NBEZ** | **Newall Road No** | **0.60** | **338** | S | Sn | 10 55 56.7 | +2.6 |
| **DREZ** | **Durham Road** | **0.64** | **4** | P | Pn | 10 55 41.9 | 0.0 |
| DREZ | | | | S | Sn | 10 55 56.5 | +1.9 |
| **WAZ** | **Wanganui** | **0.65** | **84** | P | Pn | 10 55 42.9 | +0.9 |
| WAZ | | | | S | Sn | 10 55 58.4 | +3.5 |
| **MHEZ** | **Mangahewa** | **0.76** | **10** | S | Sn | 10 55 58.1 | +1.5 |
| **DUWZ** | **D'Urville Isla** | **0.99** | **190** | P | Pn | 10 55 46.8 | +1.4 |
| DUWZ | | | | S | Sn | 10 56 04.0 | +3.1 |
| **KIW** | **Kapiti Island** | **1.19** | **151** | P | Pn | 10 55 48.1 | +0.6 |
| KIW | | | | S | Sn | 10 56 05.1 | +0.5 |
| **OGWZ** | **Otaki Gorge** | **1.26** | **142** | P | Pn | 10 55 49.2 | +0.8 |
| OGWZ | | | | S | Sn | 10 56 07.0 | +0.9 |
| **MRZ** | **Mangatainoka R** | **1.38** | **128** | P | Pn | 10 55 50.7 | +1.0 |
| MRZ | | | | S | Sn | 10 56 07.9 | -0.6 |
| **TCW** | **Tory Channel** | **1.39** | **176** | P | Pn | 10 55 51.0 | +1.1 |
| TCW | | | | S | Sn | 10 56 09.3 | +0.5 |
| **MTW** | **Mount Morrison** | **1.69** | **143** | P | Pn | 10 55 53.5 | +0.1 |
| MTW | | | | S | Sn | 10 56 14.2 | -1.0 |
| **MRNZ** | **Matariki Terra** | **1.90** | **213** | P | Pn | 10 55 56.7 | +0.5 |
| MRNZ | | | | S | Sn | 10 56 21.3 | +1.3 |
| **BSWZ** | **Blackbirch Sta** | **1.90** | **186** | S | Sn | 10 56 21.3 | +1.2 |
| **PLWZ** | **Palliser** | **1.94** | **155** | P | Pn | 10 55 56.5 | -0.2 |
| PLWZ | | | | S | Sn | 10 56 21.4 | +0.4 |
| **THZ** | **Tophouse** | **2.15** | **206** | P | Pn | 10 56 00.0 | +0.5 |
| THZ | | | | S | Sn | 10 56 27.5 | +1.4 |
| **DSZ** | **Denniston Nort** | **2.62** | **222** | P | Pn | 10 56 05.1 | -0.4 |
| **KHZ** | **Kahutara** | **2.63** | **190** | S | Sn | 10 56 37.0 | 0.0 |
| **GVZ** | **Greta Valley S** | **3.25** | **195** | S | Sn | 10 56 49.6 | -2.3 |

*IDC **30** 10:56:44.4±3.4, 6°72N×72°93W, h154km±54km, mbtmp4.1/2, Error ellipse: s-maj=610.7km s-min=8.0km az=132.0*
*RSNC **30** 10:56:48.1±0.0, 7°N±1°×7°3W±°, h136km±3km, M3.3, mb3.7, mB4.2, ML2.9, Mw(mB)3.3*

**ISC 30 10:56:44.3±1.1, 6°85N±0°03×73°11W±0°04, h154km±7km, n45, σ1s48/82, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARC** | **Barichara** | **0.26** | **195** | P | Pn | **10 57 05.9** | **+0.3** |
| BARC | | | | S | Sn | **10 57 20.9** | **-0.8** |
| **BRJC** | **Barrancabermej** | **0.64** | **282** | P | Pn | **10 57 07.6** | **+0.8** |
| BRJC | | | | S | Sn | **10 57 24.3** | **+0.3** |
| **PAMC**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YOTC** | **Yotoco, Valle** | **4.29 229** | P | **Pn** | **10 57 48.9** | **+0.3** | | |
| **SMRC** | **Santa Marta, M** | **4.43 346** | P | **Pn** | **10 57 51.3** | **+1.0** | | |
| SMRC | | | S | **Sn** | **10 58 39.2** | **-2.6** | | |
| **CAPC** | **Capurgana** | **4.56 293** | P | **Pn** | **10 57 50.8** | **-1.2** | | |
| CAPC | | | S | Sn | 10 58 35.4 | -9.4 | | |
| **PTAC** | **Punta Ardita,** | **4.67 274** | P | **Pn** | **10 57 53.2** | **-0.2** | | |
| **MACC** | **Macarena, Meta** | **4.73 189** | P | **Pn** | **10 57 53.4** | **-0.8** | | |
| MACC | | | S | **Sn** | **10 58 46.4** | **-2.4** | | |
| **URIC** | **Uribia, Colomb** | **4.95 13** | P | **Pn** | **10 57 56.5** | **-0.7** | | |
| URIC | | | S | **Sn** | **10 58 51.1** | **-3.0** | | |
| **JAMC** | **Jamundi, Valle** | **5.06 225** | P | **Pn** | **10 57 59.2** | **+0.4** | | |
| | 9.8nm,0.7s | | | | | | | |
| JAMC | | | S | **Sn** | **10 58 57.6** | **+0.7** | | |
| | 9.8nm,0.7s | | | | | | | |
| **MALC** | **Bahia Malaga** | **5.06 236** | P | **Pn** | **10 58 00.7** | **+2.1** | | |
| **GARC** | **Garzon, Huila** | **5.20 207** | P | **Pn** | **10 58 00.3** | **-0.4** | | |
| GARC | | | S | **Sn** | **10 58 57.5** | **-2.9** | | |
| **POPC** | **Popayan, Colom** | **5.56 220** | P | **Pn** | **10 58 05.8** | **+0.4** | | |
| | 3.5nm,0.6s | | | | | | | |
| **FLOC** | **Florencia** | **5.81 206** | P | **Pn** | **10 58 08.9** | **+0.3** | | |
| | 6.4nm,0.8s | | | | | | | |
| FLOC | | | S | **Sn** | **10 59 11.3** | **-3.2** | | |
| | 6.4nm,0.8s | | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.32 221** | P | **Pn** | **10 58 16.8** | **+1.3** | | |
| BBAC | | | S | **Sn** | **10 59 24.2** | **-2.8** | | |
| **ASAR** | **Alice Springs** | **149.13 234** | PKPbc | **PKPbc** | **11 16 15.2** | **-0.1** | | |
| | 0.4nm,0.8s,baz=115,slow=4.0,SNR=4.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.35 241** | PKPbc | **PKPbc** | **11 16 18.1** | **-0.3** | | |
| | 0.3nm,0.4s,baz=107,slow=2.8,SNR=13 | | | | | | | |

**HEL 30 10:56:54.5±0.1, 64°10N×28°11E, h0km, ML1.3, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIF** | **Nilsia** | **0.72** | **191** | PB | Pg | 10 57 07.8 | -0.5 |
| NIF | | | | SG | Sg | 10 57 17.2 | -0.4 |
| **RMF** | **Romuvaara** | **0.81** | **81** | PG | Pg | 10 57 09.5 | -0.5 |
| RMF | | | | MSG | | 10 57 19.7 | |
| | comp=Z,2.5nm,0.2s | | | | | | |
| RMF | | | | SG | Sg | 10 57 20.0 | -0.4 |
| **OUL** | **Oulu** | **1.38** | **317** | PN | Pb | 10 57 21.2 | +0.1 |
| OUL | | | | SG | Sg | 10 57 37.5 | -1.2 |
| **OBF4** | **Vikkela, Lumij** | **1.49** | **300** | PG | Pn | 10 57 21.4 | -1.0 |
| OBF4 | | | | MSG | | 10 57 39.1 | |
| | comp=Z,1.5nm,0.2s | | | | | | |
| OBF4 | | | | SG | Sg | 10 57 40.9 | -1.4 |
| **OUF** | **Merijarvi** | **1.50** | **282** | PG | Pn | 10 57 21.4 | -1.2 |
| | baz=102 | | | | | | |
| OUF | | | | MSG | | 10 57 39.6 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| OUF | | | | SG | Sg | 10 57 40.4 | -2.2 |
| **SUF** | **Sumiainen** | **1.64** | **213** | PN | Pn | 10 57 24.4 | -0.1 |
| SUF | | | | MSG | | 10 57 43.5 | |
| | comp=Z,1.5nm,0.2s | | | | | | |
| SUF | | | | SN | Sn | 10 57 46.2 | 0.0 |
| **OBF0** | **Syolatti, Pyha** | **1.73** | **285** | PG | Pn | 10 57 25.7 | -0.1 |
| OBF0 | | | | MSG | | 10 57 46.3 | |
| | comp=Z,2.2nm,0.2s | | | | | | |
| OBF0 | | | | SG | Sn | 10 57 47.8 | -0.8 |
| **JOF** | **Joensuu** | **1.86** | **128** | PG | Pn | 10 57 27.8 | +0.3 |
| JOF | | | | SG | Sn | 10 57 52.1 | +0.3 |
| **MSF** | **Maaselka** | **1.87** | **12** | PB | Pn | 10 57 27.3 | -0.3 |
| | baz=190 | | | | | | |
| MSF | | | | SG | Sn | 10 57 51.1 | -0.8 |
| **RANF** | **Ranua** | **2.01** | **344** | PG | Pn | 10 57 30.5 | +0.9 |
| RANF | | | | SB | Sn | 10 57 55.8 | +0.5 |
| **KU6** | **Riekki** | **2.08** | **21** | PG | Pn | 10 57 31.2 | +0.6 |
| | baz=199 | | | | | | |
| KU6 | | | | MSG | | 10 57 56.2 | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| KU6 | | | | SG | Sn | 10 57 57.7 | +0.5 |
| **KAF** | **Kangasniemi** | **2.15** | **203** | PG | Pb | 10 57 33.0 | -1.3 |
| | baz=22 | | | | | | |
| KAF | | | | MSG | | 10 57 58.2 | |
| | comp=Z,2.8nm,0.2s | | | | | | |
| KAF | | | | SG | Sb | 10 58 01.4 | 0.0 |
| **OLKF** | **Oulanka, Finla** | **2.30** | **13** | PG | Pb | 10 57 36.0 | -0.8 |
| OLKF | | | | MSG | | 10 58 02.4 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| OLKF | | | | SG | Sb | 10 58 04.3 | -1.5 |
| **KEF** | **Keuruu** | **2.43** | **219** | PG | Pb | 10 57 37.3 | -1.7 |
| KEF | | | | MSG | | 10 58 06.3 | |
| | comp=Z,2.8nm,0.2s | | | | | | |
| KEF | | | | SG | Sb | 10 58 08.7 | -0.8 |
| **TOF** | **Tornio** | **2.56** | **323** | MSG | | 10 58 09.9 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| TOF | | | | SB | Sn | 10 58 10.6 | +1.7 |
| **VAF** | **Ylistaro** | **2.65** | **249** | MSG | | 10 58 12.8 | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| VAF | | | | SG | Sb | 10 58 14.7 | -1.1 |
| **RNF** | **Rovaniemi** | **2.67** | **342** | SB | Sb | 10 58 14.3 | -2.1 |
| **RUF** | **Ruokolahti** | **2.71** | **171** | MSG | | 10 58 14.3 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| RUF | | | | SG | Sb | 10 58 17.4 | -0.1 |
| **FIA0** | **FINESS Array S** | **2.82** | **200** | PB | Pb | 10 57 43.3 | -2.4 |
| | baz=19 | | | | | | |
| FIA0 | | | | MSG | | 10 58 17.7 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| FIA0 | | | | SG | Sb | 10 58 19.7 | -1.0 |
| **VRF** | **Varrio** | **3.72** | **9** | SB | Sb | 10 58 43.3 | -3.3 |
| **NUR** | **Nurmijrvi** | **3.94** | **206** | SG | Sb | 10 58 56.7 | +3.7 |
| **RAJF** | **Raja-Jooseppi** | **4.40** | **1** | PN | Pn | 10 58 04.6 | +2.1 |
| **LANU** | **Lannavaara** | **4.68** | **331** | SN | Sn | 10 58 59.2 | -2.1 |
| **HEF** | **Hetta** | **4.69** | **339** | PB | Pb | 10 58 12.9 | -4.6 |
| **ARBE** | **Arbavere** | **4.78** | **193** | SN | Sn | 10 58 59.5 | -4.2 |

*NEIC **30** 11:11:30.9±1.7,22°14S±0°10×170°18E±0°03,h10km±1km, mb4.6/19,Error ellipse: s-maj=16.4km s-min=5.4km az=182.0*
*NOU **30** 11:11:31.9,22°15S×170°08E,h0km,MLv4.4/11, Southeast of Loyalty Islands*
*IDC **30** 11:11:34.8±2.2,22°13S×170°21E,h47km±19km,mb4.1/17, mbtmp4.3/19,ML4.7/2,MS3.5/22,Error ellipse: s-maj=16.5km s-min=15.6km az=148.0*

**ISC 30 11:11:32.3±0.4, 22°18S±0°07×170°19E±0°07, h25km, n86, σ1§24/75, mb4.5/29, MS3.5/18, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.58** | **260** | P | **Pn** | **11 12 13.2** | **+0.7** |
| **PINNC** | **Pines Island,** | **2.58** | **260** | | **Pn** | **11 12 11.9** | **-0.6** |
| **YATNC** | **Mamie plateau,** | **3.06** | **272** | P | **Pn** | **11 12 19.1** | **-0.1** |
| **LIFNC** | **LIFOU** | **3.08** | **296** | P | **Pn** | **11 12 20.4** | **+1.0** |
| **ONTNC** | **Ouen Toro** | **3.47** | **267** | P | **Pn** | **11 12 26.2** | **+1.5** |
| **ONTNC** | **Ouen Toro** | **3.47** | **267** | | **Pn** | **11 12 24.6** | **-0.1** |
| **DZM** | **Mont Dzumac** | **3.48** | **271** | P | **Pn** | **11 12 26.0** | **+1.0** |
| **DZM** | **Mont Dzumac** | **3.48** | **271** | | **Pn** | **11 12 25.0** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.48** | **271** | P | **Pn** | **11 12 25.9** | **+0.9** |
| | 18nm,0.3s,baz=66,slow=19,SNR=162 | | | | | | |
| DZM | | | | S | **Sn** | **11 13 06.8** | **+1.4** |
| | 75nm,0.4s,baz=117,slow=23,SNR=6.6 | | | | | | |
| | 86nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.61** | **270** | P | **Pn** | **11 12 27.6** | **+1.0** |
| **RTV** | **Rentapao** | **4.67** | **339** | P | **Pn** | **11 12 43.1** | **+1.9** |
| **DVP** | **Devils Point** | **4.81** | **337** | P | **Pn** | **11 12 44.2** | **+1.0** |
| **KOUNC** | **Koumac, New Ca** | **5.74** | **285** | P | **Pn** | **11 12 57.5** | **+1.6** |
| **KOUNC** | **Koumac, New Ca** | **5.74** | **285** | Pn | **Pn** | **11 12 55.6** | **-0.4** |
| **MSVF** | **Nonsavu** | **8.61** | **61** | P | **Pn** | **11 13 38.8** | **+3.3** |
| **MSVF** | **Nonsavu** | **8.61** | **61** | | **Pn** | **11 13 38.6** | **+3.1** |
| **MSVF** | **Nonsavu** | **8.61** | **61** | P | **Pn** | **11 13 37.4** | **+1.9** |
| | 0.7nm,0.3s,baz=212,slow=12,SNR=11 | | | | | | |
| MSVF | | | | LR | LR | 11 16 53.9 | |
| | comp=Z,203nm,18.5s,baz=302,slow=37 | | | | | | |
| | 21nm,0.8s | | | | | | |
| **RAO** | **Raoul Island** | **12.82** | **126** | LR | LR | 11 18 19.3 | |
| | comp=Z,631nm,20.8s,baz=25,slow=32 | | | | | | |
| **HNR** | **Honiara** | **16.04** | **321** | LR | LR | 11 21 18.0 | |
| | comp=Z,240nm,18.2s,baz=194,slow=36 | | | | | | |
| **URZ** | **Urewera** | **17.10** | **161** | LR | LR | 11 20 50.8 | |
| | comp=Z,229nm,18.8s,baz=57,slow=32 | | | | | | |
| **RTZ** | **Ruatahuna** | **17.39** | **162** | Pn | **P** | **11 15 33.6** | **-0.9** |
| RTZ | | | | IAmb | IAmb | 11 15 43.9 | |
| | comp=Z,69nm,1.2s | | | | | | |
| **BKZ** | **Black Stump Fm** | **17.77** | **164** | P | **P** | **11 15 40.6** | **+2.0** |
| **EIDS** | **Eidsvold** | **17.78** | **256** | | **P** | **11 15 38.7** | **-0.1** |
| **MRZ** | **Mangatainoka R** | **18.98** | **167** | P | **Pn** | **11 15 52.8** | **0.0** |
| MRZ | | | | IAmb | IAmb | 11 16 03.1 | |
| | comp=Z,44nm,1.1s | | | | | | |
| **MSWZ** | **Moikau Station** | **19.65** | **169** | P | **P** | **11 15 59.2** | **0.0** |
| **RPZ** | **Rata Peaks** | **21.49** | **178** | P | **P** | **11 16 21.3** | **+2.1** |
| | comp=Z,15nm,0.9s,baz=351,slow=16,SNR=4.3 | | | | | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **22.42** | **271** | LR | LR | 11 24 56.9 | |
| | comp=Z,11nm,18.7s,baz=94,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **22.42** | **271** | P | **P** | **11 16 31.0** | **+1.6** |
| CTAO | | | | IAmb | IAmb | 11 16 56.9 | |
| | comp=Z,33nm,1.4s | | | | | | |
| **PMG** | **Port Moresby** | **25.49** | **296** | LR | LR | 11 25 23.0 | |
| | comp=Z,214nm,20.4s,baz=112,slow=32 | | | | | | |
| **COEN** | **Coen** | **26.92** | **283** | P | **P** | **11 17 12.2** | **+0.4** |
| **STKA** | **Stephens Creek** | **27.18** | **243** | P | **P** | **11 17 15.5** | **+1.5** |
| | comp=Z,4.1nm,0.9s,baz=89,slow=10,SNR=3.9 | | | | | | |
| STKA | | | | LR | LR | 11 26 58.1 | |
| | comp=Z,77nm,19.3s,baz=3.7,slow=34 | | | | | | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **RAR** | **Rarotonga** | **27.91** | **94** | LR | LR | 11 26 36.0 | |
| | comp=Z,37nm,19.5s,baz=265,slow=32 | | | | | | |
| **WR0** | **Warramunga Arr** | **33.30** | **267** | P | **P** | **11 18 07.3** | **-0.9** |
| WR0 | | | | IAmb | IAmb | 11 18 10.5 | |
| | comp=Z,7.1nm,1.2s | | | | | | |
| **AS31** | **Alice Springs** | **33.40** | **260** | P | **P** | **11 18 09.3** | **+0.2** |
| **ASAR** | **Alice Springs** | **33.40** | **260** | P | **P** | **11 18 09.2** | **+0.1** |
| | comp=Z,1.1nm,0.8s,baz=92,slow=8.2,SNR=13 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 20 47.6** | **-2.9** |
| | comp=Z,1.5nm,1.1s,baz=104,slow=3.0,SNR=3.9 | | | | | | |
| ASAR | | | | LR | LR | 11 31 31.1 | |
| | comp=Z,91nm,20.0s,baz=103,slow=36 | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.47** | **267** | P | **P** | **11 18 09.2** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 11 18 35.4 | |
| | comp=Z,13nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.48** | **267** | P | **P** | **11 18 09.1** | **-0.8** |
| WB2 | | | | IAmb | IAmb | 11 18 35.2 | |
| | comp=Z,10nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.49** | **267** | P | **P** | **11 18 09.2** | **-0.7** |
| | comp=Z,1.4nm,0.6s,baz=99,slow=8.0,SNR=21 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 20 48.1** | **-2.6** |
| | comp=Z,0.6nm,0.8s,baz=96,slow=3.4,SNR=3.3 | | | | | | |
| WRA | | | | LR | LR | 11 30 17.1 | |
| | comp=Z,121nm,21.6s,baz=8.0,slow=34 | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **PPT** | **Papeete** | **38.03** | **90** | LR | LR | 11 30 27.2 | |
| | comp=Z,88nm,20.0s,baz=192,slow=30 | | | | | | |
| **MTN** | **Manton Dam** | **38.29** | **277** | P | **P** | **11 18 50.6** | **-0.5** |
| MTN | | | | IAmb | IAmb | 11 18 55.5 | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **39.63** | **272** | P | **P** | **11 19 02.7** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **41.92** | **267** | P | **P** | **11 19 22.7** | **+1.6** |
| **GUMO** | **Guam** | **43.36** | **323** | LR | LR | 11 37 22.3 | |
| | comp=Z,63nm,18.3s,baz=138,slow=36 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.73** | **245** | P | **P** | **11 20 07.7** | **+0.4** |
| | comp=Z,20nm,1.1s,baz=76,slow=8.3,SNR=2.3 | | | | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **KAPI** | **Kappang** | **51.63** | **282** | LR | LR | 11 44 51.5 | |
| | comp=Z,44nm,18.1s,baz=118,slow=39 | | | | | | |
| **DAV** | **Davao City (W)** | **52.48** | **299** | LR | LR | 11 42 56.9 | |
| | comp=Z,29nm,20.9s,baz=330,slow=36 | | | | | | |
| **SBA** | **Scott Base** | **55.75** | **181** | P | **P** | **11 21 07.4** | **+0.9** |
| SBA | | | | IAmb | IAmb | 11 21 10.2 | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **CASY** | **Casey** | **57.82** | **204** | P | **P** | **11 21 24.5** | **+3.2** |
| CASY | | | | IAmb | IAmb | 11 22 08.6 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **JOW** | **Kunigami** | **63.40** | **318** | LR | LR | 11 49 11.7 | |
| | comp=Z,16nm,18.0s,baz=57,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.75** | **332** | P | **P** | **11 22 13.9** | **-1.2** |
| | comp=Z,2.5nm,0.6s,baz=165,slow=6.3,SNR=5.5 | | | | | | |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **JNU** | **Nakatsue** | **66.56** | **325** | P | **P** | **11 22 19.7** | **-0.7** |
| **JNU** | **Nakatsue** | **66.56** | **325** | P | **P** | **11 22 19.9** | **-0.5** |
| | comp=Z,7.6nm,0.8s,baz=152,slow=5.8,SNR=9.2 | | | | | | |
| JNU | | | | LR | LR | 11 49 50.0 | |
| | comp=Z,20nm,19.7s,baz=124,slow=34 | | | | | | |
| | comp=Z,7.6nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.89** | **180** | P | **P** | **11 22 28.6** | **0.0** |
| **QSPA** | **South Pole Qui** | **67.89** | **180** | P | **P** | **11 22 28.1** | **-0.5** |
| | comp=Z,5.7nm,0.9s,baz=25,slow=5.3,SNR=17 | | | | | | |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **71.42** | **326** | P | **P** | **11 22 50.5** | **0.0** |
| | comp=Z,2.4nm,0.8s,baz=136,slow=5.5,SNR=10 | | | | | | |
| KSRS | | | | LR | LR | 11 53 31.4 | |
| | comp=Z,24nm,18.8s,baz=130,slow=35 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **RPN** | **Rapa Nui** | **72.13** | **113** | LR | LR | 11 47 16.0 | |
| | comp=Z,40nm,19.7s,baz=248,slow=30 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.74** | **333** | P | **P** | **11 23 09.8** | **-0.2** |
| | comp=Z,3.2nm,1.0s,baz=163,slow=7.2,SNR=5.3 | | | | | | |
| | comp=Z,3.2nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.75** | **352** | P | **P** | **11 23 15.2** | **-0.4** |
| | comp=Z,2.2nm,0.8s,baz=118,slow=6.8,SNR=5.7 | | | | | | |
| PETK | | | | LR | LR | 11 51 28.5 | |
| | comp=Z,37nm,20.6s,baz=182,slow=32 | | | | | | |
| | comp=Z,2.2nm,0.8s | | | | | | |
| **BELA** | **Belgrano 2** | **79.11** | **175** | P | **P** | **11 23 33.4** | **-0.8** |
| BELA | | | | IAmb | IAmb | 11 23 35.7 | |
| | comp=Z,4.7nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.52** | **294** | P | **P** | **11 23 44.0** | **+1.2** |
| | comp=Z,0.9nm,0.4s,baz=139,slow=3.1,SNR=8.6 | | | | | | |
| CMAR | | | | LR | LR | 12 00 54.7 | |
| | comp=Z,10nm,19.5s,baz=190,slow=37 | | | | | | |
| | comp=Z,0.9nm,0.4s | | | | | | |
| **MA2** | **Magadan** | **83.00** | **350** | LR | LR | 11 54 03.6 | |
| | comp=Z,47nm,20.2s,baz=183,slow=31 | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.68** | **184** | P | **P** | **11 24 08.3** | **-0.5** |
| | comp=Z,366nm,0.8s | | | | | | |
| **SEY** | **Seymchan** | **85.99** | **352** | P | **P** | **11 24 08.5** | **-1.4** |
| | comp=Z,1.1nm,0.5s,baz=156,slow=23,SNR=2.7 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **86.28** | **182** | P | **P** | **11 24 10.6** | **-1.1** |
| | comp=Z,68nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **86.28** | **182** | P | **P** | **11 24 11.0** | **-0.6** |
| | comp=Z,1.6nm,0.5s,baz=151,slow=10,SNR=3.4 | | | | | | |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.83** | **180** | P | **P** | **11 24 13.3** | **-1.0** |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.14** | **181** | P | **P** | **11 24 15.0** | **-0.8** |
| | comp=Z,5.4nm,0.6s,baz=175,slow=4.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.42** | **181** | P | **P** | **11 24 16.4** | **-0.7** |
| | comp=Z,5.4nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.08** | **48** | P | **P** | **11 24 28.9** | **-1.6** |
| | comp=Z,0.4nm,0.6s,baz=236,slow=9.6,SNR=4.2 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **90.09** | **323** | P | **P** | **11 24 29.9** | **-0.2** |
| | comp=Z,3.5nm,1.0s,baz=146,slow=4.7,SNR=14 | | | | | | |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **PALK** | **Palkele** | **92.24** | **277** | LR | LR | 12 08 58.3 | |
| | comp=Z,28nm,18.1s,baz=122,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **92.76** | **17** | P | **P** | **11 24 39.5** | **-2.5** |
| | comp=Z,0.5nm,0.7s,baz=231,slow=4.8,SNR=7.7 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **EGAK** | **Eagle** | **94.40** | **19** | P | **P** | **11 24 48.0** | **-1.4** |
| EGAK | | | | IAmb | IAmb | 11 24 50.7 | |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **128.12** | **345** | PKP | **PKPdf** | **11 30 35.1** | **-0.4** |
| | comp=Z,1.2nm,0.5s,baz=85,slow=1.3,SNR=8.3 | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.21** | **330** | *e*PKP | **PKPdf** | **11 31 07.7** | **0.0** |
| **CLL** | **Collm** | **145.94** | **334** | | **PKPdf** | **11 31 07.9** | **-0.9** |
| **EKA** | **Eskdalemuir Ar** | **146.52** | **353** | PKPbc | **PKPdf** | **11 31 09.8** | **+0.1** |
| | comp=Z,7.8nm,0.6s,baz=360,slow=2.6,SNR=42 | | | | | | |
| **EKB** | **Eskdalemuir** | **146.52** | **353** | PKPdf | **PKPdf** | **11 31 09.7** | **0.0** |
| **ZVC** | **Zvikov** | **146.83** | **331** | *e*PKP | **PKPbc** | **11 31 12.5** | **+0.3** |
| **CKRC** | **Cesky Krumlov** | **147.22** | **330** | *e*PKP | **PKPbc** | **11 31 13.4** | **0.0** |
| **KHC** | **Kasperske Hory** | **147.33** | **331** | | **PKPbc** | **11 31 12.8** | **-0.9** |
| **KHC** | **Kasperske Hory** | **147.33** | **331** | *e*PKP | **PKPbc** | **11 31 13.5** | **-0.2** |
| **GERES** | **GERESS Array B** | **147.48** | **331** | PKPbc | **PKPbc** | **11 31 13.8** | **-0.4** |
| | comp=Z,1.7nm,0.3s,baz=1.4,slow=3.9,SNR=2.2 | | | | | | |
| **FNA** | **Florina** | **147.82** | **312** | | **PKPbc** | **11 31 15.3** | **0.0** |
| **FUORN** | **Ofenpass-Fuorn** | **150.69** | **331** | | **PKPbc** | **11 31 22.0** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** | **165.84** | **233** | PKP | **PKPdf** | **11 31 35.0** | **-0.8** |
| | comp=Z,1.0nm,1.0s,baz=213,slow=0.5,SNR=3.6 | | | | | | |

*KRNET **30** 11:44:30.9±0.1, 42°53N×76°87E, h26km, mb3.0*
*NNC **30** 11:44:31.6±0.5, 42°63N×76°87E, h0km±2km, mb3.8, mpv3.9,Error ellipse: s-maj=3.6km s-min=1.7km az=170.0*
*SOME **30** 11:44:31.3, 42°67N×76°87E, h15km*
*KNET **30** 11:44:33.8±0.4, 42°57N×76°65E, h10km±2km, ml2.6, Error ellipse: s-maj=3.2km s-min=2.6km az=91.0*

**ISC 30 11:44:31.1±1.0, 42°57N±0°02×76°81E±0°01, h11km±8km, n78, σ1§16/144, 37C-20D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNSS** | **Tian-Shan** | **0.48** | **12** | *e*P | **Pg** | **11 44 40.5** | **0.0** |
| | 50nm,0.1s | | | | | | |
| TNSS | | | | *e*S | **Sg** | **11 44 46.6** | **-0.3** |
| | 341nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** | **0.48** | **12** | P | **Pg** | **11 44 40.5** | **0.0** |
| | 50nm,0.1s | | | | | | |
| TNSS | | | | S | **Sg** | **11 44 46.2** | **-0.7** |
| | 341nm,0.2s | | | | | | |
| **KDJ** | **Kajisay** | **0.52** | **148** | ⇑*e*P | **Pg** | **11 44 40.4** | **-0.9** |
| | baz=49 | | | | | | |
| KDJ | | | | ⇑*e*S | **Sg** | **11 44 47.3** | **-0.9** |
| | baz=49 | | | | | | |
| **ULHL** | **Ulahol** | **0.53** | **232** | P | **Pg** | **11 44 42.1** | **+0.6** |
| | 96nm,0.2s,SNR=185 | | | | | | |
| ULHL | | | | ⇓S | **Sg** | **11 44 49.7** | **+1.2** |
| | 492nm,0.2s | | | | | | |
| **ULHL** | **Ulahol** | **0.53** | **232** | ⇑*e*P | **Pg** | **11 44 41.8** | **+0.3** |
| | baz=39 | | | | | | |
| ULHL | | | | ⇑*e*S | **Sg** | **11 44 49.6** | **+1.1** |
| | baz=39 | | | | | | |
| **MDOK** | **Medeo** | **0.62** | **17** | *e*P | **Pg** | **11 44 42.9** | **-0.2** |
| | 33nm,0.1s | | | | | | |
| MDOK | | | | *e*S | **Sg** | **11 44 50.7** | **-0.6** |
| | 399nm,0.4s | | | | | | |
| **MDOK** | **Medeo** | **0.62** | **17** | ⇑P | **Pg** | **11 44 42.7** | **-0.4** |
| | 5.3nm,0.2s | | | | | | |
| MDOK | | | | Pg | **Pg** | **11 44 42.9** | **-0.2** |
| | 33nm,0.1s | | | | | | |
| MDOK | | | | Lg | Lg | 11 44 50.2 | |
| | 399nm,0.4s | | | | | | |
| MDOK | | | | ⇓S | **Sg** | **11 44 50.7** | **-0.6** |
| | 257nm,0.4s | | | | | | |
| **MTBS** | **Maitube** | **0.62** | **334** | *e*P | **Pb** | **11 44 43.6** | **-0.4** |
| | 38nm,0.2s | | | | | | |
| MTBS | | | | *e*S | **Sb** | **11 44 52.1** | **-0.7** |
| | 176nm,0.2s | | | | | | |
| **MTBS** | **Maitube** | **0.62** | **334** | P | **Pb** | **11 44 43.6** | **-0.4** |
| | 57nm,0.3s | | | | | | |
| MTBS | | | | S | **Sb** | **11 44 51.7** | **-1.2** |
| | 176nm,0.2s | | | | | | |
| **AAA** | **Alma-Ata** | **0.64** | **7** | *e*P | **Pg** | **11 44 43.7** | **+0.2** |
| | 69nm,0.2s | | | | | | |
| AAA | | | | *e*S | **Sb** | **11 44 52.5** | **-0.8** |
| | 31nm,0.1s | | | | | | |
| **AAA** | **Alma-Ata** | **0.64** | **7** | P | **Pg** | **11 44 43.7** | **+0.2** |
| | 69nm,0.2s | | | | | | |
| AAA | | | | S | **Sg** | **11 44 51.7** | **-0.3** |
| | 31nm,0.1s | | | | | | |
| **BOOM** | **Boomskoye usch** | **0.65** | **263** | ⇓*e*P | **Pb** | **11 44 44.3** | **-0.2** |
| | baz=67 | | | | | | |
| BOOM | | | | ⇓*e*S | **Sb** | **11 44 53.8** | **+0.3** |
| | baz=67 | | | | | | |
| **KOTS** | **Kotyrbulak** | **0.70** | **19** | *e*P | **Pg** | **11 44 44.5** | **-0.2** |
| | 37nm,0.2s | | | | | | |
| KOTS | | | | *e*S | **Sb** | **11 44 54.2** | **-0.8** |
| | 326nm,0.2s | | | | | | |
| **KOTS** | **Kotyrbulak** | **0.70** | **19** | P | **Pg** | **11 44 44.5** | **-0.2** |
| | 37nm,0.2s | | | | | | |
| KOTS | | | | S | **Sg** | **11 44 53.0** | **-0.9** |
| | 326nm,0.2s | | | | | | |
| **KST** | **Kastek** | **0.78** | **307** | *e*P | **Pb** | **11 44 46.8** | **+0.1** |
| | 93nm,0.2s | | | | | | |
| KST | | | | *e*S | **Sb** | **11 44 57.8** | **+0.5** |
| | 232nm,0.4s | | | | | | |
| **KST** | **Kastek** | **0.78** | **307** | P | **Pb** | **11 44 46.8** | **+0.1** |
| | 97nm,0.3s | | | | | | |
| KST | | | | S | **Sb** | **11 44 57.0** | **-0.4** |
| | 232nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.96** | **292** | ⇓P | **Pn** | **11 44 50.3** | **-0.4** |
| | 16nm,0.1s,SNR=65 | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **11 45 04.1** | **-0.2** |
| | 287nm,0.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.96** | **292** | ⇑P | **Pn** | **11 44 50.1** | **-0.5** |
| | 4.6nm,0.2s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **11 45 03.8** | **-0.6** |
| | 84nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **0.96** | **292** | ⇑*e*P | **Pg** | **11 44 49.9** | **+0.4** |
| | baz=93 | | | | | | |
| TKM2 | | | | ⇑*e*S | **Sn** | **11 45 03.7** | **-0.7** |
| | baz=93 | | | | | | |
| **DGS** | **Degeres** | **1.01** | **312** | *e*P | **Pn** | **11 44 51.0** | **-0.3** |
| | 41nm,0.1s | | | | | | |
| DGS | | | | *e*S | **Sn** | **11 45 05.1** | **-0.5** |
| | 90nm,0.4s | | | | | | |
| **DGS** | **Degeres** | **1.01** | **312** | P | **Pn** | **11 44 51.1** | **-0.3** |
| | 40nm,0.3s | | | | | | |
| DGS | | | | S | **Sn** | **11 45 04.3** | **-1.3** |
| | 90nm,0.4s | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **1.12** | **138** | ⇓*e*P | **Pb** | **11 44 50.8** | **-1.9** |
| | baz=39 | | | | | | |
| TARG | | | | ⇓*e*S | **Sb** | **11 45 05.1** | **-2.4** |
| | baz=39 | | | | | | |
| **KTBS** | **Karatobe** | **1.14** | **355** | *e*P | **Pn** | **11 44 52.8** | **-0.3** |
| | 16nm,0.1s | | | | | | |
| KTBS | | | | *e*S | **Sn** | **11 45 08.3** | **-0.4** |
| | 162nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** | **1.14** | **355** | P | **Pn** | **11 44 52.8** | **-0.3** |
| | 16nm,0.1s | | | | | | |
| KTBS | | | | S | **Sb** | **11 45 07.2** | **-0.5** |
| | 162nm,0.3s | | | | | | |
| **PRZ** | **Przheval'sk** | **1.18** | **94** | ⇑*e*P | **Pn** | **11 44 51.9** | **-1.8** |
| | baz=91 | | | | | | |
| PRZ | | | | ⇑*e*S | **Sb** | **11 45 07.1** | **-

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KPKS** | **Kokpek** | **1.64** | **56** | *e*P | | **Pb** | **11 45 00.5** | **-0.9** |
| | 119nm,0.1s | | | | | | | | |
| KPKS | | | | *e*S | | **Sb** | **11 45 22.1** | **0.0** |
| | 55nm,0.2s | | | | | | | | |
| **KPKS** | **Kokpek** | **1.64** | **56** | P | | **Pb** | **11 45 00.5** | **-0.9** |
| | 119nm,0.1s | | | | | | | | |
| KPKS | | | | S | | **Sn** | **11 45 20.8** | **-0.2** |
| | 55nm,0.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **1.71** | **273** | ⇑P | | **Pg** | **11 45 03.6** | **-0.3** |
| | 18nm,0.2s,SNR=12 | | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **11 45 25.9** | **-0.1** |
| | 46nm,0.3s | | | | | | | | |
| **AAK** | **Ala-Archa** | **1.71** | **273** | Pn | | **Pg** | **11 45 03.4** | **-0.4** |
| | 2.3nm,0.2s | | | | | | | | |
| AAK | | | | Sn | | **Sg** | **11 45 26.7** | **+0.7** |
| | 22nm,0.3s | | | | | | | | |
| **AAK** | **Ala-Archa** | **1.71** | **273** | ⇑*e*P | | **Pb** | **11 45 02.2** | **-0.4** |
| | baz=74 | | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sb** | **11 45 24.9** | **+0.8** |
| | baz=74 | | | | | | | | |
| **UZB** | **Uzynbulak** | **1.73** | **70** | *e*P | | **Pn** | **11 45 01.7** | **+0.6** |
| | 115nm,0.2s | | | | | | | | |
| UZB | | | | *e*S | | **Sb** | **11 45 23.7** | **-1.0** |
| | 115nm,0.4s | | | | | | | | |
| **UZB** | **Uzynbulak** | **1.73** | **70** | P | | **Pb** | **11 45 02.4** | **-0.5** |
| | 56nm,0.2s | | | | | | | | |
| UZB | | | | S | | **Sb** | **11 45 23.7** | **-1.0** |
| | 115nm,0.4s | | | | | | | | |
| **ARXS** | **Arharly** | **1.80** | **24** | *e*P | | **Pb** | **11 45 04.0** | **0.0** |
| | 88nm,0.3s | | | | | | | | |
| ARXS | | | | *e*S | | **Sg** | **11 45 27.6** | **-1.4** |
| | 187nm,0.3s | | | | | | | | |
| **ARXS** | **Arharly** | **1.80** | **24** | P | | **Pb** | **11 45 04.1** | **0.0** |
| | 88nm,0.3s | | | | | | | | |
| ARXS | | | | S | | **Sb** | **11 45 26.7** | **0.0** |
| | 187nm,0.3s | | | | | | | | |
| **SGDS** | **Sogindy** | **1.82** | **300** | P | | **Pg** | **11 45 06.1** | **+0.1** |
| | 16nm,0.1s | | | | | | | | |
| SGDS | | | | S | | **Sg** | **11 45 30.2** | **+0.5** |
| | 74nm,0.4s | | | | | | | | |
| **USP** | **Ospenovka** | **1.83** | **293** | ⇑P | | **Pg** | **11 45 05.6** | **-0.6** |
| | 11nm,0.1s,SNR=8.1 | | | | | | | | |
| USP | | | | ⇓S | | **Sg** | **11 45 30.4** | **+0.5** |
| | 36nm,0.1s | | | | | | | | |
| **USP** | **Ospenovka** | **1.83** | **293** | ⇑*e*P | | **Pb** | **11 45 04.0** | **-0.6** |
| | baz=94 | | | | | | | | |
| USP | | | | ⇑*i*S | | **Sb** | **11 45 27.9** | **+0.4** |
| | baz=94 | | | | | | | | |
| **BLB** | **Baldybastay** | **1.95** | **38** | P | | **Pb** | **11 45 06.3** | **-0.4** |
| | 294nm,0.3s | | | | | | | | |
| BLB | | | | S | | **Sb** | **11 45 30.4** | **-0.7** |
| | 79nm,0.3s | | | | | | | | |
| **ARLS** | **Aral** | **1.98** | **250** | ⇓*e*P | | **Pn** | **11 45 05.8** | **+1.2** |
| | baz=51 | | | | | | | | |
| ARLS | | | | ⇓*e*S | | **Sb** | **11 45 31.3** | **-0.5** |
| | baz=51 | | | | | | | | |
| **SHLS** | **Shalkode** | **2.04** | **72** | *e*P | | **Pg** | **11 45 13.0** | **+2.9** |
| | 56nm,0.3s | | | | | | | | |
| SHLS | | | | *e*S | | **Sg** | **11 45 43.1** | **+6.6** |
| | 317nm,0.3s | | | | | | | | |
| **SHLS** | **Shalkode** | **2.04** | **72** | Pg | | **Pg** | **11 45 13.5** | **+3.4** |
| | 56nm,0.3s | | | | | | | | |
| SHLS | | | | Lg | | Lg | 11 45 43.1 | | |
| | 319nm,0.4s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.24** | **273** | ⇓P | | **Pg** | **11 45 12.9** | **-1.1** |
| | 15nm,0.2s,SNR=25 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.24** | **273** | ⇑*e*P | | **Pn** | **11 45 09.5** | **+1.3** |
| | baz=74 | | | | | | | | |
| EKS2 | | | | ⇑*e*S | | **Sb** | **11 45 37.5** | **-1.8** |
| | baz=74 | | | | | | | | |
| **AML** | **Almayashu** | **2.35** | **260** | ⇑P | | **Pb** | **11 45 14.4** | **+0.8** |
| | 18nm,0.2s,SNR=10 | | | | | | | | |
| **AML** | **Almayashu** | **2.35** | **260** | ⇓*e*P | | **Pn** | **11 45 11.1** | **+1.2** |
| | baz=61 | | | | | | | | |
| AML | | | | ⇓*i*S | | **Sn** | **11 45 40.4** | **+1.4** |
| | baz=61 | | | | | | | | |
| **KNOS** | **Konyrlen** | **2.48** | **43** | Pg | | **Pb** | **11 45 16.1** | **+0.3** |
| | 31nm,0.3s | | | | | | | | |
| KNOS | | | | Lg | | Lg | 11 45 47.3 | | |
| | 37nm,0.3s | | | | | | | | |
| **MRKS** | **Merke** | **2.65** | **275** | *e*P | | **Pg** | **11 45 20.5** | **-1.3** |
| | 10.0nm,0.2s | | | | | | | | |
| MRKS | | | | *e*S | | **Sg** | **11 45 55.8** | **-0.3** |
| | 60nm,0.3s | | | | | | | | |
| **MRKS** | **Merke** | **2.65** | **275** | Pg | | **Pg** | **11 45 21.0** | **-0.8** |
| | 11nm,0.2s | | | | | | | | |
| MRKS | | | | Lg | | Lg | 11 45 55.8 | | |
| | 60nm,0.3s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **2.69** | **25** | *e*P | | **Pb** | **11 45 19.4** | **+0.2** |
| | 52nm,0.3s | | | | | | | | |
| TDK | | | | *e*S | | **Sb** | **11 45 54.0** | **+1.8** |
| | 147nm,0.4s | | | | | | | | |
| **TDK** | **Taldyqorghan** | **2.69** | **25** | Pg | | **Pb** | **11 45 20.0** | **+0.7** |
| | 52nm,0.3s | | | | | | | | |
| TDK | | | | Lg | | Lg | 11 45 53.0 | | |
| | 147nm,0.4s | | | | | | | | |
| **DJR** | **Jarkent** | **2.79** | **50** | *e*P | | **Pb** | **11 45 20.9** | **-0.1** |
| | 22nm,0.3s | | | | | | | | |
| DJR | | | | *e*S | | **Sb** | **11 45 56.7** | **+1.4** |
| | 22nm,0.3s | | | | | | | | |
| **DJR** | **Jarkent** | **2.79** | **50** | Pg | | **Pb** | **11 45 21.5** | **+0.5** |
| | 22nm,0.3s | | | | | | | | |
| DJR | | | | Lg | | Lg | 11 45 56.7 | | |
| | 22nm,0.3s | | | | | | | | |
| **BTLS** | **Baital** | **3.17** | **322** | *e*P | | **Pb** | **11 45 29.0** | **+1.5** |
| | 7.5nm,0.3s | | | | | | | | |
| BTLS | | | | *e*S | | **Sg** | **11 46 10.7** | **-2.3** |
| | 9.0nm,0.5s | | | | | | | | |
| **BTLS** | **Baital** | **3.17** | **322** | Pg | | **Pg** | **11 45 29.7** | **-2.1** |
| | 6.4nm,0.4s | | | | | | | | |
| BTLS | | | | Lg | | Lg | 11 46 10.7 | | |
| | 9.0nm,0.5s | | | | | | | | |
| **MNAS** | **Manas** | **3.18** | **270** | ⇑*i*P | | **Pn** | **11 45 22.6** | **+1.4** |
| | baz=71 | | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sn** | **11 46 00.1** | **+1.0** |
| | baz=71 | | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.28** | **33** | *e*P | | **Pb** | **11 45 29.9** | **+0.6** |
| | 10nm,0.1s | | | | | | | | |
| KAPS | | | | *e*S | | **Sb** | **11 46 11.8** | **+2.6** |
| | 165nm,0.3s | | | | | | | | |
| **KAPS** | **Kapalarasan** | **3.28** | **33** | Pg | | **Pb** | **11 45 30.2** | **+1.0** |
| | 10nm,0.1s | | | | | | | | |
| KAPS | | | | Lg | | Lg | 11 46 11.8 | | |
| | 180nm,0.3s | | | | | | | | |
| **ARK** | **Arkit** | **3.68** | **259** | ⇑*e*P | | **Pn** | **11 45 29.3** | **+1.3** |
| | baz=60 | | | | | | | | |
| ARK | | | | ⇑*e*S | | **Sn** | **11 46 11.9** | **+0.5** |
| | baz=60 | | | | | | | | |
| **KK31** | **Karatay Array** | **4.66** | **279** | ⇓Pg | | **Pg** | **11 45 57.1** | **-3.2** |
| | 0.9nm,0.5s,baz=0.0,slow=0.1,SNR=8.5 | | | | | | | | |
| KK31 | | | | ⇑Lg | | Lg | 11 46 59.2 | | |
| | 5.5nm,0.3s,baz=92,slow=28,SNR=8.8 | | | | | | | | |
| **MK31** | **Makanchi Array** | **5.75** | **41** | Pn | | **Pn** | **11 45 59.1** | **+2.8** |
| | 0.9nm,0.2s,baz=216,slow=15,SNR=27 | | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 11 47 33.0 | | |
| | 1.7nm,0.6s,baz=217,slow=16,SNR=4.9 | | | | | | | | |
| **KURK** | **Kurchatov** | **8.24** | **8** | ⇑Lg | | Lg | 11 48 52.5 | | |
| | 8.1nm,0.8s | | | | | | | | |

**VIE 30 11:46:12.3±0.3, 46°.65N×15°.20E, *h*0km, *mb*0.2/1, *ml*0.7/2, Error ellipse: s-maj=3.5km s-min=1.0km az=18.0, Suspected Mining explosion., Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SOKA** | **Soboth** | **0.12** | **285** | *e*Pg | | Pg | 11 46 14.6 | +0.1 |
| | 1.8nm,0.1s | | | | | | | |
| SOKA | | | | *i* Sg | | Sg | 11 46 16.2 | +0.2 |
| | 3.1nm,0.2s | | | | | | | |
| **OBKA** | **Obir** | **0.47** | **253** | *e*Pg | | Pg | 11 46 21.4 | +0.2 |
| OBKA | | | | *e*Sg | | Sg | 11 46 28.1 | +0.9 |
| | 1.1nm,0.3s | | | | | | | |

**LJU 30 11:46:36.3, 45°.93N×14°.81E, *h*0km, *ML*0.3, Suspected explosion, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VISS** | **Visnje** | **0.12** | **170** | *i* Pg | | Pg | 11 46 38.7 | 0.0 |
| VISS | | | | | | IAML | 11 46 43.3 | |
| | comp=Z,24nm,0.2s | | | | | | | |
| **PDKS** | **Podkum** | **0.19** | **44** | *i* Pg | | Pg | 11 46 40.1 | +0.2 |
| PDKS | | | | | | IAML | 11 46 44.3 | |
| | comp=Z,3.4nm,0.1s | | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **0.19** | **337** | *i* Pg | | Pg | 11 46 40.1 | +0.2 |
| **GBRS** | **Gornja Briga** | **0.40** | **180** | *i* Pg | | Pg | 11 46 44.4 | +0.5 |
| GBRS | | | | | | IAML | 11 46 51.9 | |
| | comp=Z,0.8nm,0.1s | | | | | | | |

*MOS **30** 12:00:18.3±0.9, 44°.54N×148°.31E, h67km, mb4.2/1, Error ellipse: s-maj=10.2km s-min=8.2km az=59.5*
*NIED **30** 12:00:18.2, 44°.05N×148°.14E, h0km, MW4.0, Moment Tensor Solution. s3 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.19; $M_{\theta\theta}$-0.20; $M_{\phi\phi}$0.01; $M_{r\theta}$0.59; $M_{\theta\phi}$-0.25; $M_{r\phi}$0.89; Fault plane solution: $M_0$1.11000×$10^{15}$ NP1:$\phi_s$33.00000°, $\delta$84.00000°, $\lambda$80.00000°. NP2:$\phi_s$272.00000°, $\delta$12.00000°, $\lambda$148.00000°.*
*JMA **30** 12:00:18.2±0.3, 44°N±1°×14°8E±°, h0km, MV4.7/27, SE OFF ETOROFU*
*SKHL **30** 12:00:18.7±0.2, 44°.40N×148°.30E, h70km±4km, mb5.0/5*
*IDC **30** 12:00:21.5±2.0, 44°.60N×148°.27E, h77km±17km, mb3.5/19, mbtmp3.8/27, MS3.0/8, Error ellipse: s-maj=16.8km s-min=12.3km az=139.0*
*NEIC **30** 12:00:23.1±1.4, 44°.6N±0°.1×148°.1E±0°.1, h85km±5km, mb4.3/17, Error ellipse: s-maj=18.4km s-min=12.1km az=142.0*

**ISC 30 12:00:18.8±1.1, 44°.42N±0°.06×148°.39E±0°.07, *h*55km±9km, *n*93,σ1°.42/100, *mb*3.9/28, *MS*3.0/4, 1C-3D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **0.89** | **336** | *i* P | | **Pn** | **12 00 34.4** | **-0.8** |
| KUR | | | | | | AMB | 12 00 35.1 | |
| | 3μm,1.0s | | | | | | | |
| KUR | | | | | | AMB | 12 00 35.2 | |
| | 1μm,0.3s | | | | | | | |
| KUR | | | | | *e*S | **Sn** | **12 00 46.3** | **-0.9** |
| KUR | | | | | A | A | 12 00 49.4 | |
| | 9μm,1.0s | | | | | | | |
| KUR | | | | | A | A | 12 00 49.4 | |
| | 11μm,1.0s | | | | | | | |
| KUR | | | | | A | A | 12 00 49.6 | |
| | 5μm,0.5s | | | | | | | |
| KUR | | | | | A | A | 12 00 49.6 | |
| | 7μm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **0.89** | **336** | *d* iPN | | **Pn** | **12 00 34.4** | **-0.8** |
| KUR | | | | | *e*S | **Sn** | **12 00 46.1** | **-1.1** |
| KUR | | | | | pmax | pmax | | |
| | comp=N,996nm,0.4s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,230nm,0.4s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,3μm,1.1s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,11μm,1.5s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,9μm,1.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,5μm,0.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,4μm,0.2s | | | | | | | |
| **SHO** | **Shikotan** | **1.25** | **244** | *i* P | | **Pn** | **12 00 38.9** | **-1.0** |
| SHO | | | | | | AMB | 12 00 39.2 | |
| | comp=N,320nm,0.3s | | | | | | | |
| SHO | | | | | *i* S | **Sn** | **12 00 52.9** | **-2.8** |
| SHO | | | | | A | A | 12 00 57.4 | |
| | comp=N,920nm,0.5s | | | | | | | |
| SHO | | | | | A | A | 12 00 57.4 | |
| | comp=N,2μm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **1.25** | **244** | ⇓*i* PN | | **Pn** | **12 00 38.8** | **-1.1** |
| SHO | | | | | *i* S | **Sn** | **12 00 52.3** | **-3.4** |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,275nm,0.2s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=N,110nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,101nm,0.3s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=N,475nm,0.2s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.86** | **259** | *i* P | | **Pn** | **12 00 47.3** | **-0.8** |
| YUK | | | | | | AMB | 12 00 49.7 | |
| | comp=E,470nm,0.2s | | | | | | | |
| YUK | | | | | *i* S | **Sn** | **12 01 08.6** | **-1.9** |
| YUK | | | | | A | A | 12 01 15.6 | |
| | comp=E,1μm,0.5s | | | | | | | |
| YUK | | | | | A | A | 12 01 15.6 | |
| | comp=E,3μm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.86** | **259** | *d* iPN | | **Pn** | **12 00 47.9** | **-0.2** |
| YUK | | | | | *i* S | **Sn** | **12 01 08.5** | **-1.9** |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,761nm,0.3s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=N,363nm,0.2s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,3μm,0.5s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.18** | **242** | P | | **Pn** | **12 00 51.7** | **-1.0** |
| NEM2 | | | | | *e*S | **Sn** | **12 01 16.3** | **-2.2** |
| **JRA** | **Rausu** | **2.40** | **259** | P | | **Pn** | **12 00 56.3** | **+0.8** |
| JRA | | | | | *e*S | **Sn** | **12 01 24.7** | **+0.9** |
| **JNSB** | **Nemuroshibetsu** | **2.52** | **256** | P | | **Pn** | **12 00 58.1** | **+0.9** |
| **JKHN** | **Kushirohamanak** | **2.69** | **241** | P | | **Pn** | **12 00 59.2** | **-0.4** |
| JKHN | | | | | *e*S | **Sn** | **12 01 29.3** | **-1.7** |
| **JNK** | **Nakash** | **2.78** | **254** | P | | **Pn** | **12 01 01.1** | **+0.4** |
| JNK | | | | | S | **Sn** | **12 01 32.8** | **-0.2** |
| **JAK** | **Akkeshi** | **3.03** | **243** | P | | **Pn** | **12 01 03.9** | **-0.3** |
| **JAR** | **Ashorobuto** | **3.52** | **253** | *e*P | | **Pn** | **12 01 12.1** | **+1.2** |
| **JOB** | **Onbets** | **3.64** | **247** | *e*P | | **Pn** | **12 01 13.2** | **+0.7** |
| **JCH** | **Churui** | **4.08** | **245** | *e*P | | **Pn** | **12 01 18.9** | **+0.3** |
| JCH | | | | | *e*S | **Sn** | **12 02 03.9** | **-1.0** |
| **JKK2** | **Kamakawa 2** | **4.10** | **264** | *e*P | | **Pn** | **12 01 21.5** | **+2.7** |
| **JKA** | **Kamikawa-asahi** | **4.17** | **268** | | | **Pn** | **12 01 21.6** | **+1.8** |
| **JKA** | **Kamikawa-asahi** | **4.17** | **268** | *e*P | | **Pn** | **12 01 21.6** | **+1.8** |
| **ASAJ** | **Asahikawa** | **4.17** | **268** | P | | **Pn** | **12 01 20.7** | **+0.8** |
| | comp=N,15nm,0.5s,baz=61,slow=19,SNR=37 | | | | | | | |
| ASAJ | | | | | S | **Sn** | **12 02 10.6** | **+3.3** |
| | comp=N,26nm,0.7s,baz=148,slow=8.1,SNR=2.0 | | | | | | | |
| ASAJ | | | | | LR | LR | 12 03 03.4 | |
| | comp=N,189nm,21.1s,baz=157,slow=40 | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.17** | **268** | PN | | **Pn** | **12 01 21.6** | **+1.8** |
| **ERM** | **Erimo** | **4.52** | **240** | | | **Pn** | **12 01 27.1** | **+2.6** |
| **ERM** | **Erimo** | **4.52** | **240** | PN | | **Pn** | **12 01 27.1** | **+2.6** |
| **JNBK** | **Urakawa-nobuka** | **4.63** | **244** | P | | **Pn** | **12 01 26.7** | **+0.5** |
| **YSS** | **Yuzh-Sakhalins** | **4.69** | **305** | | | **Pn** | **12 01 27.0** | **+0.1** |
| **YSS** | **Yuzh-Sakhalins** | **4.69** | **305** | *e*P | | **Pn** | **12 01 27.5** | **+0.6** |
| YSS | | | | | | AMB | AMB | 12 01 30.0 |
| | comp=N,20nm,0.5s | | | | | | | |
| YSS | | | | | *e*S | **Sn** | **12 02 19.0** | **-0.9** |
| YSS | | | | | A | A | 12 02 26.7 | |
| | comp=N,20nm,0.5s | | | | | | | |
| YSS | | | | | A | A | 12 02 26.7 | |
| | comp=N,10.0nm,0.5s | | | | | | | |
| YSS | | | | | AMS | AMS | 12 03 03.9 | |
| | comp=N,200nm,16.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.69** | **305** | ⇑*e*PN | | **Pn** | **12 01 27.7** | **+0.8** |
| YSS | | | | | *e*S | **Sn** | **12 02 21.3** | **+1.4** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | | |
| YSS | | | | | smax | smax | | |
| | comp=N,20nm,1.0s | | | | | | | |
| YSS | | | | | smax | smax | | |
| | comp=E,30nm,1.0s | | | | | | | |
| YSS | | | | | MLR | MLR | | |
| | comp=Z,200nm,16.0s | | | | | | | |
| **JWK2** | **Keihoku** | **4.70** | **283** | P | | **Pn** | **12 01 30.8** | **+3.8** |
| **JTM** | **Tenmabayashi** | **6.51** | **239** | Pn | | **Pn** | **12 01 52.1** | **+0.3** |
| **TYV** | **Tymovskoe** | **7.51** | **331** | *e*P | | **Pn** | **12 02 07.4** | **+1.8** |
| TYV | | | | | | AMB | AMB | 12 02 08.9 |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **8.15** | **37** | *e*P | | **Pn** | **12 02 15.6** | **+1.3** |
| SKR | | | | | | AMB | AMB | 12 02 18.9 |
| | comp=Z,20nm,0.4s | | | | | | | |
| SKR | | | | | *e*S | **Sn** | **12 03 42.7** | **-2.3** |
| SKR | | | | | A | A | 12 03 54.5 | |
| | comp=Z,10.0nm,0.4s | | | | | | | |
| SKR | | | | | A | A | 12 03 54.5 | |
| | comp=Z,80nm,0.4s | | | | | | | |
| SKR | | | | | AMS | AMS | 12 05 13.9 | |
| | comp=Z,600nm,18.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **8.15** | **37** | *e*PN | | **Pn** | **12 02 15.6** | **+1.3** |
| SKR | | | | | MLR | MLR | | |
| | comp=Z,600nm,18.0s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **10.64** | **32** | Pn | | **Pn** | **12 02 50.5** | **+2.3** |
| **PEA0B** | **Petropavlovsk-** | **10.64** | **32** | PN | | **Pn** | **12 02 50.6** | **+2.3** |
| **PETK** | **Petropavlovsk-** | **10.64** | **32** | P | | **Pn** | **12 02 49.0** | **+0.7** |
| | comp=Z,1.6nm,0.7s,baz=205,slow=12,SNR=7.5 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.04** | **228** | P | | **Pn** | **12 02 55.9** | **+2.0** |
| | comp=Z,0.8nm,0.5s,baz=349,slow=11,SNR=2.6 | | | | | | | |
| MJAR | | | | | | LR | LR | 12 07 20.2 |
| | comp=Z,61nm,19.9s,baz=60,slow=38 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **11.76** | **275** | Pn | | **Pn** | **12 03 04.1** | **+0.5** |
| **USA0B** | **Ussuriysk Arra** | **11.76** | **275** | PN | | **Pn** | **12 03 04.1** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **11.76** | **275** | P | | **Pn** | **12 03 04.1** | **+0.5** |
| | comp=Z,3.4nm,0.7s,baz=98,slow=12,SNR=12 | | | | | | | |
| **KLR** | **Kul'dur** | **12.36** | **299** | P | | **Pn** | **12 03 13.1** | **+1.2** |
| | comp=Z,2.1nm,0.7s,baz=99,slow=14,SNR=8.2 | | | | | | | |
| KLR | | | | | | LR | LR | 12 07 48.6 |
| | comp=Z,80nm,21.3s,baz=98,slow=37 | | | | | | | |
| **KLR** | **Kul'dur** | **12.36** | **299** | *e*P | | **Pn** | **12 03 12.7** | **+0.9** |
| **MA2** | **Magadan** | **15.24** | **5** | LR | | LR | 12 09 10.7 | |
| | comp=Z,36nm,18.5s,baz=36,slow=35 | | | | | | | |
| **KSRS** | **Korea Array** | **16.93** | **253** | P | | **Pn** | **12 04 12.2** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=80,slow=9.0,SNR=4.2 | | | | | | | |
| **JNU** | **Nakatsue** | **17.67** | **236** | P | | **P** | **12 04 22.9** | **+1.5** |
| | comp=Z,9.2nm,0.9s,baz=87,slow=9.9,SNR=3.5 | | | | | | | |
| **SEY** | **Seymchan** | **18.69** | **6** | P | | **P** | **12 04 30.6** | **-1.5** |
| | comp=Z,0.6nm,0.3s,baz=165,slow=14,SNR=3.9 | | | | | | | |
| **SONM** | **Songino Array** | **29.04** | **292** | P | | **P** | **12 06 14.0** | **+0.3** |
| | comp=Z,0.7nm,0.5s,baz=79,slow=9.5,SNR=4.4 | | | | | | | |
| SONM | | | | | | LR | LR | 12 20 18.9 |
| | comp=Z,30nm,18.4s,baz=40,slow=41 | | | | | | | |
| | comp=Z,0.7nm,0.5s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.05** | **142** | T | | T | 12 37 03.2 | |
| | baz=334,slow=74 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.07** | **142** | T | | T | 12 37 05.8 | |
| | baz=334 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.07** | **142** | T | | T | 12 37 06.1 | |
| | baz=334,slow=74 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.05** | **143** | T | | T | 12 38 14.8 | |
| | baz=334,slow=76,SNR=428 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.05** | **143** | T | | T | 12 38 19.4 | |
| | baz=334,slow=76,SNR=222 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.07** | **143** | T | | T | 12 38 18.0 | |
| | baz=334,slow=76,SNR=230 | | | | | | | |
| **G18K** | **Tagagawik** | **35.58** | **34** | P | | **P** | **12 07 11.5** | **+1.0** |
| **E19K** | **Redstone River** | **36.44** | **32** | P | | **P** | **12 07 19.4** | **+1.6** |
| E19K | | | | | | IAmb | IAmb | 12 07 38.5 |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **B20K** | **Meade River** | **37.03** | **28** | P | | **P** | **12 07 22.9** | **+0.1** |
| **B21K** | **Ikpikpuk River** | **37.81** | **29** | P | | **P** | **12 07 30.1** | **+0.7** |
| **SUA** | **Susitna One** | **38.80** | **42** | P | | **P** | **12 07 39.1** | **+1.2** |
| **CCB** | **Clear Creek Bu** | **40.03** | **37** | P | | **P** | **12 07 49.0** | **+1.1** |
| **HDA** | **Harding Lake** | **40.40** | **37** | P | | **P** | **12 07 50.5** | **-0.6** |
| HDA | | | | | | IAmb | IAmb | 12 07 52.7 |
| | comp=Z,5.7nm,1.3s | | | | | | | |
| **IL31** | | **40.42** | **37** | P | | **P** | **12 07 51.4** | **+0.3** |
| **ILAR** | **Eielson Array** | **40.42** | **37** | P | | **P** | **12 07 51.1** | **-0.1** |
| | comp=Z,0.4nm,0.5s,baz=261,slow=7.7,SNR=6.9 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.31** | **307** | LR | | LR | 12 24 59.2 | |
| | comp=Z,26nm,20.7s,baz=124,slow=36 | | | | | | | |
| **K27K** | **Chicken** | **42.56** | **38** | P | | **P** | **12 08 10.2** | **+1.5** |
| K27K | | | | | | IAmb | IAmb | 12 08 10.8 |
| | comp=Z,4.2nm,0.9s | | | | | | | |
| **L27K** | **Beaver Creek,** | **42.80** | **39** | P | | **P** | **12 08 12.6** | **+1.9** |
| L27K | | | | | | IAmb | IAmb | 12 08 13.2 |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **GRNC** | **Granite Creek** | **43.22** | **42** | P | | **P** | **12 08 16.0** | **+1.6** |
| GRNC | | | | | | IAmb | IAmb | 12 08 16.5 |
| | comp=Z,3.9nm,0.7s | | | | | | | |
| **I28M** | **Miner Creek** | **43.29** | **35** | P | | **P** | **12 08 16.2** | **+1.5** |
| I28M | | | | | | IAmb | IAmb | 12 08 17.6 |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **CTGM** | **Chitina Glacie** | **43.38** | **42** | P | | **P** | **12 08 16.7** | **+1.1** |
| CTGM | | | | | | IAmb | IAmb | 12 08 40.3 |
| | comp=Z,8.9nm,1.4s | | | | | | | |
| **DAWY** | **Dawson** | **43.72** | **37** | P | | **P** | **12 08 19.0** | **+0.8** |
| **I30M** | **Mount Dempster** | **44.80** | **35** | P | | **P** | **12 08 28.4** | **+1.6** |
| I30M | | | | | | IAmb | IAmb | 12 08 29.4 |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **J30M** | **Hart River** | **44.95** | **36** | P | | **P** | **12 08 29.6** | **+1.6** |
| **MKAR** | **Makanchi Array** | **45.06** | **297** | P | | **P** | **12 08 28.8** | **-0.3** |
| | comp=Z,0.5nm,0.4s,baz=82,slow=8.9,SNR=8.8 | | | | | | | |
| MKAR | | | | | PcP | **PcP** | **12 10 08.9** | **-0.1** |
| | comp=Z,1.0nm,0.6s,baz=71,slow=5.3,SNR=6.4 | | | | | | | |
| MKAR | | | | | LR | LR | 12 28 37.3 | |
| | comp=Z,39nm,21.4s,baz=84,slow=38 | | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | | |
| **H31M** | **Peel River** | **45.52** | **34** | P | | **P** | **12 08 34.0** | **+1.6** |
| H31M | | | | | | IAmb | IAmb | 12 09 01.1 |
| | comp=Z,4.6nm,1.2s | | | | | | | |
| **KURK** | **Kurchatov** | **45.89** | **304** | *e*P | | **P** | **12 08 34.8** | **-0.7** |
| **KURK** | **Kurchatov** | **45.89** | **304** | P | | **P** | **12 08 34.8** | **-0.7** |
| KURK | | | | | | | 12 10 11.3 | |
| **KURBB** | **Kurchatov Arra** | **45.98** | **304** | P | | **P** | **12 08 34.8** | **-1.4** |
| | comp=Z,0.5nm,0.3s,baz=69,slow=8.2,SNR=4.4 | | | | | | | |
| KURBB | | | | | PcP | **PcP** | **12 10 11.3** | **-0.7** |
| | comp=Z,1.0nm,0.3s,baz=74,slow=3.3,SNR=5.8 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **48.57** | **254** | P | | **P** | **12 08 57.0** | **+0.3** |
| | comp=Z,0.5nm,0.3s,baz=42,slow=7.6,SNR=5.0 | | | | | | | |
| CMAR | | | | | | LR | LR | 12 32 24.9 |
| | comp=Z,9.1nm,18.4s,baz=90,slow=40 | | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.77** | **309** | P | | **P** | **12 09 04.1** | **-1.4** |
| | comp=Z,0.4nm,0.5s,baz=100,slow=7.9,SNR=1.5 | | | | | | | |
| BVAR | | | | | PcP | **PcP** | **12 10 24.7** | **-0.9** |
| | comp=Z,0.8nm,0.5s,baz=48,slow=2.1,SNR=4.2 | | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.74** | **34** | P | | **P** | **12 09 41.9** | **-0.3** |
| | comp=Z,0.7nm,0.7s,baz=309,slow=7.6,SNR=5.0 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **FINES** | **FINESS Array B** | **64.68** | **333** | P | | **P** | **12 10 48.5** | **-1.9** |
| | comp=Z,1.3nm,0.6s,baz=46,slow=6.2,SNR=8.2 | | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.33** | **195** | P | | **P** | **12 10 55.5** | **+0.4** |
| | comp=Z,1.2nm,0.8s,baz=8.3,slow=6.5,SNR=9.3 | | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **66.47** | **59** | P | | **P** | **12 11 03.5** | **+0.9** |
| | comp=Z,0.4nm,0.5s,baz=296

*MD4.0/34,MV4.0/34,E OFF MIYAGI PREF*
*JMA Felt I J1 at E OFF MIYAGI PREF .*
**ISC 30 12:02:55.3±1.5,38°38N±0.04°×142°11E±0.07,h20km±4km, n34,σ1ş27/25,mb4.0/7,6D,Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JIKH** | **Ishinomakikobu** | **0.51** | **263** | P | **Pn** | **12 03 07.0** | **-0.5** |
| JIKH | | | | S | **Sn** | **12 03 14.4** | **-1.3** |
| **JIKH** | **Ishinomakikobu** | **0.51** | **263** | A | A | 12 03 07.0 | |
| | comp=E,6.0nm,1.8s,comp=N,14nm,7.0s | | | | | | |
| **JIO** | **Ouri** | **0.60** | **277** | P | **Pn** | **12 03 08.4** | **-0.3** |
| JIO | | | | S | **Sn** | **12 03 16.8** | **-1.1** |
| **JIO** | **Ouri** | **0.60** | **277** | A | A | 12 03 08.4 | |
| | comp=E,7.0nm,1.9s,comp=N,22nm,0.4s | | | | | | |
| **JKMT** | **Kesennumamotoy** | **0.66** | **311** | ⇓P | **Pn** | **12 03 08.8** | **-0.7** |
| JKMT | | | | ⇓S | **Sg** | **12 03 17.7** | **+0.5** |
| **OFUJ** | **Ofunato** | **0.78** | **334** | ⇓*i*P | **Pb** | **12 03 10.1** | **-0.1** |
| OFUJ | | | | ⇓S | **Sb** | **12 03 19.9** | **-0.5** |
| **OFUJ** | **Ofunato** | **0.78** | **334** | A | A | 12 03 10.1 | |
| | comp=E,6.0nm,0.8s,comp=N,3.0nm,0.7s | | | | | | |
| **JMK** | **Ichinoseki** | **0.90** | **310** | ⇓*i*P | **Pg** | **12 03 12.5** | **-0.4** |
| JMK | | | | ⇓S | **Sb** | **12 03 24.0** | **+0.2** |
| **JOFO** | **Osakifurukawao** | **0.97** | **284** | A | A | 12 03 13.7 | |
| | comp=E,12nm,4.2s,comp=N,13nm,1.7s | | | | | | |
| **JOU** | **Okura** | **1.14** | **270** | P | **Pg** | **12 03 16.6** | **-0.8** |
| JOU | | | | S | **Sn** | **12 03 31.1** | **-0.1** |
| **JOU** | **Okura** | **1.14** | **270** | A | A | 12 03 16.6 | |
| | comp=E,6.0nm,0.5s,comp=N,10.0nm,0.8s | | | | | | |
| **JMM** | **Marumori** | **1.16** | **244** | P | **Pb** | **12 03 16.2** | **-0.4** |
| JMM | | | | S | **Sb** | **12 03 30.6** | **-0.6** |
| **JMST** | **Minamisoumatoc** | **1.17** | **236** | A | A | 12 03 17.3 | |
| | comp=E,3.0nm,0.5s,comp=N,4.0nm,0.8s | | | | | | |
| **JOM** | **Ohasama** | **1.27** | **330** | P | **Pn** | **12 03 17.7** | **-0.2** |
| JOM | | | | S | **Sn** | **12 03 33.2** | **-1.1** |
| **JFK** | **Kawauchi** | **1.41** | **224** | *i* P | **Pn** | **12 03 19.6** | **-0.3** |
| JFK | | | | S | **Sn** | **12 03 36.5** | **-1.3** |
| **JYA** | **Atsumi** | **1.89** | **277** | A | A | 12 03 27.5 | |
| | comp=E,6.0nm,1.2s,comp=N,4.0nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.60** | **241** | Pn | **Pn** | **12 03 53.7** | **+3.7** |
| MJAR | comp=N,0.5nm,0.3s,baz=151,slow=24,SNR=18 | | | Sn | **Sb** | **12 04 43.7** | **+2.0** |
| | comp=N,0.3nm,0.3s,baz=284,slow=26,SNR=1.3 comp=N,6.0nm,0.5s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **5.58** | **201** | Pn | **Pn** | **12 04 15.8** | **-1.3** |
| JHJ | comp=N,16nm,0.3s,baz=252,slow=24,SNR=6.2 | | | Sn | **Sn** | **12 05 19.1** | **-1.6** |
| | comp=N,20nm,0.3s,baz=35,slow=20,SNR=4.0 comp=N,40nm,0.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.58** | **311** | Pn | Pn | 12 05 20.6 | +8.6 |
| | comp=N,0.1nm,0.3s,baz=126,slow=14,SNR=2.2 comp=N,3.6nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 28.40** | **124** | | T | T | 12 38 59.7 | |
| | baz=316,slow=76,SNR=7.2 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 28.41** | **124** | | T | T | 12 39 05.0 | |
| | baz=316,slow=76,SNR=379 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 28.42** | **124** | | T | T | 12 38 59.5 | |
| | baz=316,slow=76,SNR=7.4 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 29.16** | **126** | | T | T | 12 39 59.3 | |
| | baz=318,slow=76,SNR=4.8 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 29.16** | **126** | | T | T | 12 40 07.1 | |
| | baz=318,slow=76,SNR=2.9 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 29.18** | **126** | | T | T | 12 40 01.4 | |
| | baz=318,slow=76,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.43** | **311** | P | P | 12 10 47.4 | +7.2 |
| | comp=N,0.8nm,0.4s,baz=76,slow=6.1,SNR=2.2 comp=N,0.8nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.89** | **301** | P | P | 12 11 07.5 | +7.2 |
| | comp=N,1.3nm,0.7s,baz=94,slow=9.1,SNR=7.2 comp=N,1.3nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.62** | **307** | P | P | 12 11 21.4 | +7.4 |
| | comp=N,3.2nm,0.5s,baz=82,slow=8.1,SNR=14 comp=N,3.2nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **48.06** | **33** | P | **P** | **12 11 34.8** | **+1.8** |
| | comp=N,0.3nm,0.8s,baz=277,slow=7.1,SNR=2.5 comp=N,0.3nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **50.09** | **312** | P | P | 12 11 56.3 | +7.7 |
| | comp=N,0.9nm,0.5s,baz=57,slow=7.8,SNR=4.3 comp=N,0.9nm,0.5s | | | | | | |
| **INK** | **Inuvik** | **52.94** | **28** | LR | LR | 12 35 55.5 | |
| | comp=N,29nm,19.5s,baz=262,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.47** | **189** | P | **P** | **12 12 49.5** | **-0.4** |
| | comp=N,1.9nm,0.8s,baz=5.0,slow=7.1,SNR=18 comp=N,1.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **62.20** | **189** | P | **P** | **12 13 15.6** | **+0.2** |
| | comp=N,0.8nm,0.7s,baz=10.0,slow=5.2,SNR=13 comp=N,0.8nm,0.7s | | | | | | |
| **KEST** | **Kesra** | **94.28** | **323** | LR | LR | 13 02 59.1 | |
| | comp=N,36nm,18.4s,baz=278,slow=38 | | | | | | |

*IDC **30** 12:06:25.6±1.2,25°.63N×109°.82W,h0km,mb3.0/1, mbtmp3.1/6,ML3.3/5,MS3.3/16,Error ellipse: s-maj=24.2km s-min=10.6km az=110.0*
*MEX **30** 12:06:28.4±0.4,25°.82N×110°.07W,h5km±9km,MD4.1*
**ISC 30 12:06:23.8±1.4,25°.76N±0°.03×110°.19W±0°.03,h5km±11km, n41,σ1ş60/41,MS3.4/9,2C-1D,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EVAR0** | **San Evaristo** | **0.96** | **209** | *e*P | **Pn** | **12 06 44.2** | **+0.3** |
| EVAR0 | | | | *e*S | **Sn** | **12 06 57.7** | **-0.3** |
| EVAR0 | | | | ⇑*e* | | 12 07 19.6 | |
| EVAR0 | | | | IAML | | 12 07 19.6 | |
| | comp=N,1μm,0.8s | | | | | | |
| **UAGRB** | **Rancho Ultima** | **0.98** | **259** | *e*P | **Pg** | **12 06 43.1** | **+0.4** |
| UAGRB | | | | *e*S | **Sb** | **12 06 57.2** | **+0.7** |
| **TSIG** | **Topolobambo** | **1.05** | **98** | *e*P | **Pn** | **12 06 44.3** | **-0.8** |
| TSIG | | | | *i* S | **Sb** | **12 06 56.7** | **-1.7** |
| **TSIG** | **Topolobambo** | **1.05** | **98** | *e*P | **Pn** | **12 06 44.4** | **-0.8** |
| TSIG | | | | *e*S | **Sn** | **12 07 00.1** | **0.0** |
| **NE77** | **Loreto B.C.S** | **1.09** | **284** | *e*P | **Pg** | **12 06 43.8** | **-0.9** |
| NE77 | | | | *e*S | **Sg** | **12 06 58.6** | **-0.2** |
| NE77 | | | | IAML | | 12 07 00.9 | |
| | comp=N,4μm,0.3s | | | | | | |
| NE77 | | | | ⇑*e* | | 12 07 00.9 | |
| NE77 | | | | ⇓*e* | | 12 07 01.6 | |
| NE77 | | | | IAML | | 12 07 01.6 | |
| | comp=E,4μm,0.5s | | | | | | |
| **NE80** | **Navojoa** | **1.44** | **36** | *e*P | **Pn** | **12 06 48.9** | **-1.6** |
| NE80 | | | | *e*S | **Sn** | **12 07 07.7** | **-2.2** |
| NE80 | | | | IAML | | 12 07 08.6 | |
| | comp=N,3μm,0.1s | | | | | | |
| NE80 | | | | *e* | | 12 07 08.6 | |
| **SNIRB** | **San Nicol¡s** | **1.45** | **303** | *e*P | **Pn** | **12 06 48.5** | **-2.1** |
| SNIRB | | | | *e*S | **Sn** | **12 07 06.7** | **-3.4** |
| **LPIG** | **La Paz** | **1.65** | **184** | Pg | **Pb** | **12 06 53.9** | **-0.8** |
| LPIG | comp=N,10nm,0.3s,baz=202,slow=3.3,SNR=14 | | | Lg | Lg | 12 07 16.1 | |
| | comp=N,26nm,0.3s,baz=354,slow=9.2,SNR=7.2 | | | | | | |
| **LPIG** | **La Paz** | **1.65** | **184** | *e*P | **Pg** | **12 06 54.9** | **-0.5** |
| LPIG | | | | *e*S | **Sb** | **12 07 15.3** | **-0.4** |
| **LPIG** | **La Paz** | **1.65** | **184** | *e*P | **Pn** | **12 06 53.3** | **-0.1** |
| **CDOB** | **Cd. Obregon** | **1.65** | **2** | *e*P | **Pn** | **12 06 52.4** | **-1.0** |
| CDOB | | | | *e*S | **Sn** | **12 07 14.1** | **-1.0** |
| **CSIG** | **Choix** | **1.95** | **56** | *e*P | **Pn** | **12 06 57.0** | **-0.6** |
| CSIG | | | | *e*S | **Sn** | **12 07 19.3** | **-3.1** |
| **SLBS** | **Sierra La Lagu** | **2.07** | **174** | *e*P | **Pb** | **12 07 01.6** | **-0.3** |
| SLBS | | | | *e*S | **Sn** | **12 07 25.9** | **+0.4** |
| **SLBS** | **Sierra La Lagu** | **2.07** | **174** | *e*P | **Pb** | **12 07 00.4** | **-1.5** |
| **SRIG** | **Santa Rosalia** | **2.41** | **311** | *e*P | **Pb** | **12 07 08.2** | **+0.5** |
| SRIG | | | | *i* S | **Sn** | **12 07 35.0** | **+1.3** |
| **SRIG** | **Santa Rosalia** | **2.41** | **311** | *e*P | **Pn** | **12 07 02.2** | **-1.7** |
| **SSIG** | **Sanalona** | **2.91** | **108** | *e*P | **Pb** | **12 07 16.7** | **+0.4** |
| SSIG | | | | *e*S | **Sn** | **12 07 44.9** | **-1.3** |
| **HPIG** | | **4.22** | **73** | *e*P | **Pn** | **12 07 29.3** | **+0.2** |
| HPIG | | | | *i* S | **Sn** | **12 08 20.9** | **+2.1** |
| **PDIG** | **Papasquiaro** | **4.39** | **98** | *e*P | **Pb** | **12 07 40.3** | **-1.3** |
| PDIG | | | | *e*S | **Sb** | **12 08 36.1** | **+1.1** |
| **NZIG** | **Nacozari, Sono** | **4.63** | **7** | *i* P | **Pg** | **12 07 53.9** | **+1.3** |
| **TXAR** | **Lajitas Array** | **6.80** | **57** | Pn | **Pn** | **12 08 03.7** | **-0.6** |
| | comp=N,0.1nm,0.3s,baz=222,slow=13,SNR=4.3 | | | | | | |
| TXAR | | | | Sn | **Sn** | **12 09 19.4** | **-2.7** |
| | comp=N,0.2nm,0.3s,baz=248,slow=16,SNR=4.4 | | | | | | |
| TXAR | | | | Lg | Lg | 12 09 54.8 | |
| | comp=N,0.8nm,0.3s,baz=247,slow=28,SNR=5.4 | | | | | | |
| TXAR | | | | LR | LR | 12 10 54.8 | |
| | comp=N,316nm,18.9s,baz=238,slow=41 comp=N,0.2nm,0.4s | | | | | | |
| **PFO** | **Pinyon Flats O** | **9.54** | **327** | LR | LR | 12 11 54.0 | |
| | comp=N,83nm,18.6s,baz=221,slow=33 | | | | | | |
| **ANMO** | **Albuquerque** | **9.71** | **18** | Pn | **Pn** | **12 08 47.1** | **+2.8** |
| | comp=N,0.1nm,0.3s,baz=311,slow=22,SNR=2.3 | | | | | | |
| ANMO | | | | Lg | Lg | 12 11 33.1 | |
| | comp=N,0.1nm,0.3s,baz=31,slow=12,SNR=3.8 | | | | | | |
| ANMO | | | | LR | LR | 12 13 02.6 | |
| | comp=N,168nm,18.7s,baz=192,slow=41 comp=N,0.4nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **14.38** | **333** | Pn | **P** | **12 09 56.8** | **+1.4** |
| | baz=158,slow=10,SNR=8.6 | | | | | | |
| NVAR | | | | LR | LR | 12 15 39.3 | |
| | comp=N,75nm,19.4s,baz=154,slow=38 comp=N,0.8nm,0.8s | | | | | | |
| **ELK** | **Elko** | **15.53** | **346** | Pn | **P** | **12 10 12.0** | **+3.8** |
| | comp=N,0.1nm,0.3s,baz=171,slow=9.3,SNR=5.1 comp=N,0.7nm,0.7s | | | | | | |
| **CMIG** | **Matias Romero** | **16.64** | **118** | LR | LR | 12 15 52.8 | |
| | comp=N,105nm,21.8s,baz=278,slow=35 | | | | | | |
| **PDAR** | **Pinedale Array** | **16.98** | **2** | P | **P** | **12 10 25.4** | **+1.1** |
| | comp=N,0.1nm,0.3s,baz=178,slow=9.6,SNR=2.5 | | | | | | |
| PDAR | | | | LR | LR | 12 17 04.9 | |
| | comp=N,129nm,20.1s,baz=176,slow=37 comp=N,0.1nm,0.3s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **19.00** | **330** | LR | LR | 12 17 36.8 | |
| | comp=N,64nm,19.6s,baz=228,slow=35 | | | | | | |
| **APG** | **El Apazote** | **21.33** | **116** | LR | LR | 12 18 48.6 | |
| | comp=N,22nm,20.2s,baz=294,slow=35 | | | | | | |
| **NEW** | **Newport** | **23.12** | **348** | LR | LR | 12 21 00.1 | |
| | comp=N,103nm,20.3s,baz=174,slow=38 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.70** | **60** | LR | LR | 12 21 55.8 | |
| | comp=N,137nm,19.4s,baz=252,slow=38 | | | | | | |
| **ULM** | **Lac du Bonnet** | **26.84** | **21** | LR | LR | 12 21 47.3 | |
| | comp=N,50nm,18.4s,baz=356,slow=34 | | | | | | |
| **BBB** | **Bella Bella** | **29.68** | **337** | LR | LR | 12 23 48.7 | |
| | comp=N,76nm,18.7s,baz=188,slow=35 | | | | | | |
| **SADO** | **Sadowa** | **31.39** | **45** | LR | LR | 12 26 11.4 | |
| | comp=N,101nm,19.3s,baz=249,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.85** | **357** | LR | LR | 12 29 06.4 | |
| | comp=N,130nm,19.6s,baz=198,slow=37 | | | | | | |
| **ROSC** | **El Rosal** | **40.14** | **115** | LR | LR | 12 32 50.4 | |
| | comp=N,54nm,20.4s,baz=85,slow=40 | | | | | | |
| **SDV** | **Santo Domingo** | **41.12** | **107** | LR | LR | 12 32 46.9 | |
| | comp=N,50nm,19.0s,baz=272,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **45.55** | **339** | P | P | 12 14 49.0 | +4.8 |
| | comp=N,0.2nm,0.6s,baz=153,slow=6.1,SNR=1.9 comp=N,0.2nm,0.6s | | | | | | |
| **H03N2** | **Juan Fernandez** | **65.95** | **152** | T | T | 13 29 19.0 | |
| | baz=331,slow=77,SNR=5.3 | | | | | | |
| **H03N1** | **Juan Fernandez** | **65.96** | **152** | T | T | 13 29 20.8 | |
| | baz=331,slow=77,SNR=8.0 | | | | | | |
| **H03N3** | **Juan Fernandez** | **65.97** | **152** | T | T | 13 29 19.8 | |
| | baz=331,slow=77,SNR=6.8 | | | | | | |

**IDC 30 12:12:37.0±1.7,2°.14N×125°.09E,h0km,mb3.6/4, mbtmp3.6/4,MS3.5/3,Error ellipse: s-maj=190.7km s-min=22.0km az=65.0,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.75** | **158** | P | P | 12 17 50.8 | -0.5 |
| | 1.9nm,0.7s,baz=335,slow=11,SNR=22 1.9nm,0.7s | | | | | | |
| **PMG** | **Port Moresby** | **24.80** | **118** | LR | LR | 12 28 34.7 | |
| | comp=Z,57nm,19.9s,baz=238,slow=39 | | | | | | |
| **ASAR** | **Alice Springs** | **27.05** | **162** | P | P | 12 18 22.1 | +0.7 |
| | 0.2nm,0.4s,baz=345,slow=7.8,SNR=9.1 0.2nm,0.4s | | | | | | |
| **MSVF** | **Nonsavu** | **55.77** | **113** | LR | LR | 12 47 16.7 | |
| | comp=Z,83nm,18.1s,baz=63,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.95** | **327** | P | P | 12 22 33.1 | +1.8 |
| | 0.4nm,0.5s,baz=120,slow=8.5,SNR=2.6 0.4nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.21** | **328** | P | P | 12 22 58.6 | -1.8 |
| | 0.3nm,0.4s,baz=127,slow=6.2,SNR=4.5 0.3nm,0.4s | | | | | | |
| **BELG** | **Belogornoye** | **80.67** | **323** | LR | LR | 13 03 08.3 | |
| | comp=Z,18nm,20.4s,baz=53,slow=38 | | | | | | |

*ISN **30** 12:21:08.6±0.5,34°.64N×46°.19E,h9km±7km,ML2.8*
*TEH **30** 12:21:09.3,34°.64N×46°.18E,h10km,ML2.7*
**ISC 30 12:21:09.1±1.1,34°.65N±0°.05×46°.19E±0°.03,h12km±12km, n13,σ0ş54/16,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.17** | **73** | Pg | **Pg** | **12 21 13.0** | **-0.1** |
| **IGHG** | **Ghaleghazi** | **0.45** | **135** | Pg | **Pg** | **12 21 17.9** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.51** | **254** | Pg | **Pg** | **12 21 19.4** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **203** | Pg | **Pg** | **12 21 20.4** | **-0.1** |
| **KCHF** | **Cheshme Sefid,** | **0.80** | **118** | Pg | **Pb** | **12 21 24.7** | **-0.3** |
| **ILBA** | **Ilam Banvizeh** | **1.02** | **179** | Pg | **Pg** | **12 21 28.5** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.21** | **80** | Pg | **Pn** | **12 21 32.5** | **+0.5** |
| **IBDR** | **Badra** | **1.55** | **188** | *e*Pn | **Pb** | **12 21 38.0** | **+0.3** |
| IBDR | | | | *e*Sn | **Sg** | **12 21 59.5** | **+0.6** |
| IBDR | | | | AML | AML | 12 22 08.2 | |
| | comp=N,77nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 12 22 09.3 | |
| | comp=E,118nm,0.9s | | | | | | |
| **IKRK** | **Kirkuk** | **1.69** | **297** | *e*Pn | **Pb** | **12 21 40.0** | **-0.1** |
| IKRK | | | | *e*Sn | **Sg** | **12 22 03.5** | **0.0** |
| IKRK | | | | AML | AML | 12 22 12.1 | |
| | comp=N,164nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 12 22 14.6 | |
| | comp=E,184nm,0.2s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.78** | **129** | Pg | **Pg** | **12 21 42.9** | **-0.3** |
| **IDOB** | **Doab** | **1.86** | **117** | Pn | **Pb** | **12 21 43.8** | **+0.7** |
| **BHD** | **Baghdad** | **2.04** | **228** | *e*Pn | **Pb** | **12 21 45.0** | **-1.0** |
| BHD | | | | *e*Sn | **Sb** | **12 22 11.0** | **-0.3** |
| **BDRS** | **Dareh Seyedi** | **2.33** | **106** | Pn | **Pb** | **12 21 50.4** | **-0.9** |

**NOU 30 12:22:42.4,22°.12S×170°.48E,h0km,ML3.9/10, Southeast of Loyalty Islands,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.36** | **285** | P | Pn | 12 23 21.5 | -1.0 |
| **PINNC** | **Pines Island,** | **2.85** | **260** | P | Pn | 12 23 29.1 | -0.1 |
| **LIFNC** | **LIFOU** | **3.30** | **293** | P | Pn | 12 23 35.7 | +0.3 |
| **YATNC** | **Mamie plateau,** | **3.33** | **270** | P | Pn | 12 23 34.6 | -1.2 |
| **ONTNC** | **Ouen Toro** | **3.73** | **266** | P | Pn | 12 23 41.8 | +0.5 |
| **DZM** | **Mont Dzumac** | **3.74** | **270** | P | Pn | 12 23 41.3 | -0.2 |
| **NOUC** | **Port Laguerre** | **3.87** | **269** | P | Pn | 12 23 42.9 | -0.3 |
| **KOUNC** | **Koumac, New Ca** | **5.98** | **284** | P | Pn | 12 24 13.2 | +1.0 |

*ISN **30** 12:27:11.0±0.6,34°.62N×46°.31E,h8km±9km,ML2.9*
*TEH **30** 12:27:12.4,34°.63N×46°.31E,h8km±38km,ML2.7*
**ISC 30 12:27:11.8±1.1,34°.63N±0°.05×46°.29E±0°.04,h10km±11km, n12,σ0ş50/15,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.10** | **49** | Pg | **Pg** | **12 27 14.8** | **+0.1** |
| **IGHG** | **Ghaleghazi** | **0.38** | **142** | Pg | **Pb** | **12 27 20.3** | **-0.4** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **212** | Pg | **Pb** | **12 27 24.2** | **-0.3** |
| **KCHF** | **Cheshme Sefid,** | **0.71** | **120** | Pg | **Pg** | **12 27 25.7** | **0.0** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **184** | Pg | **Pn** | **12 27 31.9** | **-0.1** |
| **SNQR** | **Sonqor, Kerman** | **1.12** | **78** | Pg | **Pn** | **12 27 34.1** | **+0.3** |
| **IBZA** | **Bozab** | **1.31** | **97** | Pg | **Pg** | **12 27 37.0** | **+0.1** |
| **IBDR** | **Badra** | **1.55** | **191** | *e*Pn | **Pg** | **12 27 41.0** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **12 28 02.0** | **+0.5** |
| IBDR | | | | AML | AML | 12 28 09.8 | |
| | comp=N,135nm,0.6s | | | | | | |
| IBDR | | | | AML | AML | 12 28 15.1 | |
| | comp=E,148nm,0.5s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.70** | **130** | Pg | **Pg** | **12 27 44.4** | **+0.1** |
| **IKRK** | **Kirkuk** | **1.77** | **296** | *e*Pn | **Pb** | **12 27 44.0** | **-0.4** |
| IKRK | | | | *e*Sn | **Sg** | **12 28 08.5** | **-0.4** |
| IKRK | | | | AML | AML | 12 28 13.4 | |
| | comp=N,348nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 12 28 17.7 | |
| | comp=E,175nm,0.4s | | | | | | |
| **BHD** | **Baghdad** | **2.09** | **230** | *e*Pn | **Pn** | **12 27 48.0** | **+1.2** |
| BHD | | | | *e*Sn | **Sb** | **12 28 15.5** | **-0.2** |
| **BDRS** | **Dareh Seyedi** | **2.25** | **107** | Pn | **Pb** | **12 27 52.3** | **-0.4** |

*IDC **30** 12:27:16.0±2.2,21°.79N×143°.65E,h284km±21km,mb3.1/8, mbtmp3.9/11,Error ellipse: s-maj=92.6km s-min=13.7km az=79.0*
**ISC 30 12:27:16.3±2.3,21°.9N±0°.1×144°.0E±0°.7,h300km,n11, σ0ş81/12,mb3.2/7,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **5.41** | **343** | P | **Pn** | **12 28 36.9** | **-1.7** |
| | 19nm,0.3s,baz=272,slow=22,SNR=9.5 | | | | | | |
| JCJ | | | | S | **S** | **12 29 44.6** | **-0.2** |
| | 37nm,0.5s,baz=292,slow=22,SNR=6.3 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **11.77** | **342** | P | **P** | **12 29 57.9** | **+0.3** |
| | 108nm,0.9s,baz=84,slow=16,SNR=2.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.42** | **342** | P | **Pn** | **12 30 40.0** | **+0.5** |
| | 1.0nm,0.4s,baz=167,slow=11,SNR=5.3 | | | | | | |
| **KSRS** | **Korea Array** | **20.80** | **322** | P | **P** | **12 31 35.9** | **+0.7** |
| | 0.8nm,0.7s,baz=147,slow=8.7,SNR=4.5 0.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.66** | **193** | P | **P** | **12 34 43.7** | **-0.6** |
| | 1.0nm,0.6s,baz=12,slow=8.8,SNR=22 1.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **46.36** | **193** | P | **P** | **12 35 13.0** | **-0.3** |
| | 0.3nm,0.7s,baz=18,slow=12,SNR=5.8 0.3nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.51** | **321** | P | **P** | **12 36 13.6** | **+0.1** |
| | 0.4nm,0.4s,baz=134,slow=8.5,SNR=2.1 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.11** | **312** | P | **P** | **12 36 17.6** | **-0.3** |
| | 0.3nm,0.5s,baz=75,slow=11,SNR=2.6 0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.88** | **317** | P | **P** | **12 36 37.2** | **0.0** |
| | 0.9nm,0.5s,baz=92,slow=7.5,SNR=8.0 0.9nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **63.00** | **319** | P | **P** | **12 37 12.3** | **+0.7** |
| | 1.8nm,0.4s,baz=93,slow=7.6,SNR=8.3 1.8nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **83.31** | **335** | P | **P** | **12 39 10.6** | **+1.0** |
| | 0.5nm,0.4s,baz=92,slow=5.7,SNR=7.0 0.5nm,0.4s | | | | | | |

**NOU 30 12:28:32.4,22°.22S×170°.80E,h0km,MLv3.8/11, Southeast of Loyalty Islands,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.68** | **285** | P | Pn | 12 29 15.9 | -0.9 |
| **PINNC** | **Pines Island,** | **3.13** | **262** | P | Pn | 12 29 22.7 | -0.3 |
| **LIFNC** | **LIFOU** | **3.61** | **293** | P | Pn | 12 29 30.1 | +0.5 |
| **YATNC** | **Mamie plateau,** | **3.63** | **272** | P | Pn | 12 29 28.8 | -1.1 |
| **ONTNC** | **Ouen Toro** | **4.03** | **268** | P | Pn | 12 29 35.8 | +0.4 |
| **DZM** | **Mont Dzumac** | **4.04** | **271** | P | Pn | 12 29 35.5 | -0.1 |
| **NOUC** | **Port Laguerre** | **4.17** | **271** | P | Pn | 12 29 37.4 | +0.1 |
| **DVP** | **Devils Point** | **5.10** | **331** | P | Pn | 12 29 50.0 | -0.1 |
| **KOUNC** | **Koumac, New Ca** | **6.29** | **284** | P | Pn | 12 30 07.4 | +0.9 |
| **MSVF** | **Nonsavu** | **8.15** | **58** | P | Pn | 12 30 31.9 | -0.2 |

*CNRM **30** 12:29:17.9,34°.97N×3°.12W,h14km,ML2.2*
*MDD **30** 12:29:19.7±0.9,35°.04N×3°.12W,h17km±6km,mb_Lg2.5/6, Error ellipse: s-maj=8.3km s-min=6.5km az=83.0*
*SFS **30** 12:29:19.3,35°.03N×3°.13W,h13km,ML2.5/13,ML2.7/10, MLv2.4/13*
**ISC 30 12:29:18.2±1.0,35°.02N±0°.03×3°.11W±0°.03,h18km±3km, n41,σ1ş17/55,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GOG** | **Mont Gurugu** | **0.23** | **24** | P | **Pg** | **12 29 23.3** | **-0.4** |
| **GOG** | **Mont Gurugu** | **0.23** | **24** | S | **Sg** | **12 29 27.4** | **0.0** |
| **EMEL** | **Melilla** | **0.31** | **23** | P | **Pb** | **12 29 24.9** | **-0.3** |
| EMEL | | | | S | **Sb** | **12 29 29.6** | **-0.4** |
| **EMLI** | **Melilla** | **0.31** | **24** | P | **Pb** | **12 29 24.8** | **-0.5** |
| **EMLI** | **Melilla** | **0.31** | **24** | Pg | **Pb** | **12 29 25.0** | **-0.2** |
| EMLI | | | | Sg | **Sb** | **12 29 30.0** | **0.0** |
| **CHAS** | **Isla Isabel II** | **0.58** | **73** | P | **Pb** | **12 29 29.7** | **0.0** |
| **CHAS** | **Isla Isabel II** | **0.58** | **73** | Pg | **Pb** | **12 29 29.8** | **0.0** |
| CHAS | | | | Sg | **Sb** | **12 29 38.3** | **+0.7** |
| **TAF** | **Taforalt** | **0.60** | **109** | P | **Pb** | **12 29 30.4** | **+0.2** |
| **TAF** | **Taforalt** | **0.60** | **109** | S | **Sb** | **12 29 39.0** | **+0.6** |
| **PALE** | **Palemas** | **0.71** | **287** | P | **Pg** | **12 29 31.6** | **-0.6** |
| **PALE** | **Palemas** | **0.71** | **287** | S | **Sb** | **12 29 43.9** | **+2.4** |
| **AKLM** | **AKL** | **0.80** | **231** | P | **Pg** | **12 29 32.2** | **-1.6** |
| **AKLM** | **AKL** | **0.80** | **231** | S | **Sg** | **12 29 44.6** | **+0.1** |
| **EALB** | **Alboran** | **0.93** | **4** | P | **Pg** | **12 29 35.6** | **-0.5** |
| **EALB** | **Alboran** | **0.93** | **4** | Pg | **Pg** | **12 29 35.8** | **-0.5** |
| EALB | | | | Sg | **Sb** | **12 29 48.3** | **+0.7** |
| **EALB** | **Alboran** | **0.93** | **4** | P | **Pg** | **12 29 35.7** | **-0.5** |
| EALB | | | | S | **Sn** | **12 29 50.1** | **+1.1** |
| EALB | | | | *i* Vmb_Lg | | 12 29 51.5 | |
| **PVLZ** | **Peæn de** | **0.99** | **279** | Pg | **Pg** | **12 29 36.9** | **-0.5** |
| PVLZ | | | | Sg | **Sg** | **12 29 49.6** | **-0.9** |
| **EBER** | **Berja** | **1.89** | **5** | P | **Pn** | **12 29 49.5** | **-0.2** |
| **EBER** | **Berja** | **1.89** | **5** | Pn | **Pn** | **12 29 49.4** | **-0.2** |
| EBER | | | | Sn | **Sn** | **12 30 11.8** | **-1.4** |
| **EBER** | **Berja** | **1.89** | **5** | P | **Pn** | **12 29 49.0** | **-0.7** |
| EBER | | | | S | **Sn** | **12 30 12.5** | **-0.6** |
| EBER | | | | *i* Vmb_Lg | | 12 31 02.9 | |
| **ELGU** | **Los Guajares,** | **1.90** | **347** | P | **Pn** | **12 29 48.8** | **-1.0** |
| **ELGU** | **Los Guajares,** | **1.90** | **347** | Pn | **Pn** | **12 29 48.8** | **-0.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **69.87** | **25** | P | | **P** | **13 02 52.9** | **-1.4** |
| | 0.4nm,0.6s,baz=248,slow=5.9,SNR=8.7<br>0.4nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **73.76** | **322** | P | | **P** | **13 03 18.9** | **+1.1** |
| | 1.0nm,0.4s,baz=108,slow=4.8,SNR=6.3<br>1.0nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.45** | **52** | P | | **P** | **13 04 27.3** | **+0.4** |
| | 0.5nm,0.6s,baz=269,slow=4.8,SNR=7.9<br>0.5nm,0.6s | | | | | | | |

*KRSC **30** 13:10:34.5±1.6,59.00N×158.27E,h30km±17km, Ml4.0*
*NERS **30** 13:10:48.6,58.98N×157.91E,h11km*
**ISC 30 13:10:38.2±0.8,58.74N±0.03×158.63E±0.03,h10km,n31,**
**σ2$41/48,Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALN** | **Palana** | **0.78** | **63** | *e*P | **Pg** | **13 10 51.6** | **-1.5** |
| PALN | | | | *e*S | **Sg** | **13 11 03.5** | **+0.3** |
| **TIGL** | **Tigil** | **0.98** | **179** | *e*P | **Pg** | **13 10 56.7** | **-0.3** |
| TIGL | | | | *e*S | **Sn** | **13 11 13.4** | **+1.5** |
| **OSSR** | **Ossora** | **2.35** | **76** | *e*P | **Pn** | **13 11 15.4** | **-1.3** |
| OSSR | | | | *e*S | **Sn** | **13 11 45.0** | **-0.6** |
| **SRKR** | **Sorokina** | **2.50** | **146** | *e*P | **Pn** | **13 11 20.7** | **+1.8** |
| **SRDR** | **Sredinnyy** | **2.50** | **166** | *e*P | **Pn** | **13 11 19.3** | **+0.4** |
| SRDR | | | | *e*S | **Sb** | **13 11 52.3** | **-1.8** |
| **KLY** | **Klyuchi** | **2.67** | **155** | *e*P | **Pb** | **13 11 24.7** | **-1.3** |
| KLY | | | | *e*S | **Sb** | **13 12 01.4** | **+2.6** |
| **KRSR** | **Krestovskiy** | **2.74** | **157** | *e*P | **Pn** | **13 11 24.9** | **+2.7** |
| **KOZ** | **Kozyrevsk** | **2.78** | **165** | *e*P | **Pn** | **13 11 23.4** | **+0.7** |
| KOZ | | | | *e*S | **Sb** | **13 11 59.6** | **-2.3** |
| **ESO** | **Esso** | **2.83** | **179** | *e*P | **Pn** | **13 11 23.8** | **+0.4** |
| ESO | | | | *e*S | **Sn** | **13 12 00.4** | **+2.9** |
| **KPT** | **Kopyto** | **2.92** | **162** | *e*P | **Pn** | **13 11 27.1** | **+2.4** |
| **KIRR** | **Kirishev** | **2.95** | **161** | *e*P | **Pn** | **13 11 27.3** | **+2.1** |
| **ZLN** | **Zelenaya** | **2.98** | **156** | *e*P | **Pn** | **13 11 28.5** | **+3.0** |
| **BZMR** | **Bezymyannaya** | **2.99** | **159** | *e*P | **Pn** | **13 11 28.0** | **+2.2** |
| **BZP** | **Bezymyannyi-Pe** | **3.02** | **159** | *e*P | **Pn** | **13 11 29.0** | **+2.8** |
| **BZGR** | **Bezymyannyi-Gr** | **3.03** | **157** | *e*P | **Pn** | **13 11 28.1** | **+1.9** |
| BZGR | | | | *e*S | **Sb** | **13 12 08.4** | **-0.8** |
| **KMNR** | **Kamenistaya** | **3.12** | **163** | *e*P | **Pn** | **13 11 29.5** | **+2.0** |
| **EVEN** | **Evensk** | **3.19** | **5** | *e*P | **Pg** | **13 11 37.3** | **-2.0** |
| EVEN | | | | *e* | | 13 12 19.2 | |
| EVEN | | | | *e*Sg | **Sg** | **13 12 23.8** | **+3.2** |
| EVEN | | | | Sgmax | | 13 12 36.6 | |
| | 200nm,0.8s | | | | | | |
| EVEN | | | | Sgmax | | 13 12 36.6 | |
| | 160nm,0.6s | | | | | | |
| **TUMR** | **Tumrok** | **3.57** | **166** | *e*P | **Pn** | **13 11 34.6** | **+1.0** |
| **TUMD** | **Tumrok D** | **3.68** | **164** | *e*P | **Pn** | **13 11 36.5** | **+1.5** |
| **GADL** | **Gadlja** | **3.87** | **287** | *e*P | **Pb** | **13 11 43.3** | **-3.1** |
| GADL | | | | *e*Sg | **Sg** | **13 12 38.4** | **-3.9** |
| GADL | | | | Sgmax | | 13 13 04.9 | |
| | 290nm,0.6s | | | | | | |
| GADL | | | | Sgmax | | 13 13 04.9 | |
| | 210nm,0.6s | | | | | | |
| **TLAR** | **Talaya** | **3.94** | **310** | *e*P | **Pn** | **13 11 42.7** | **+4.0** |
| TLAR | | | | *e*Pg | **Pg** | **13 11 53.9** | **+0.3** |
| TLAR | | | | *e*Sg | **Sg** | **13 12 43.7** | **-0.9** |
| TLAR | | | | Sgmax | | 13 13 01.7 | |
| | 130nm,0.6s | | | | | | |
| TLAR | | | | Sgmax | | 13 13 01.7 | |
| | 50nm,0.4s | | | | | | |
| **OMS** | **Omsukchan** | **4.04** | **341** | *e*P | **Pb** | **13 11 49.8** | **+0.5** |
| OMS | | | | *e*Pg | **Pg** | **13 11 57.0** | **+1.6** |
| OMS | | | | Pgmax | | 13 11 58.3 | |
| | 20nm,0.3s | | | | | | |
| OMS | | | | *e*Sg | **Sg** | **13 12 46.0** | **-1.6** |
| OMS | | | | Sgmax | | 13 12 59.5 | |
| | 60nm,0.6s | | | | | | |
| OMS | | | | Sgmax | | 13 12 59.5 | |
| | 20nm,0.4s | | | | | | |
| **MA2** | **Magadan** | **4.13** | **285** | *e*P | **Pn** | **13 11 45.1** | **+3.9** |
| MA2 | | | | *e*Sg | **Sg** | **13 12 47.3** | **-3.3** |
| MA2 | | | | Sgmax | | 13 13 16.9 | |
| | 90nm,1.0s | | | | | | |
| **MGD** | **Magadan 1** | **4.24** | **291** | *e* | Pn | 13 11 31.4 | -11 |
| MGD | | | | *e*Sg | **Sg** | **13 12 50.6** | **-3.6** |
| MGD | | | | Sgmax | | 13 13 11.6 | |
| | 90nm,0.6s | | | | | | |
| **GNL** | **Ganaly** | **5.08** | **185** | *e*P | **Pn** | **13 11 58.1** | **+3.8** |
| **SEY** | **Seymchan** | **5.19** | **327** | *e*Pg | **Pg** | **13 12 18.2** | **+0.7** |
| SEY | | | | *e*Sg | **Sg** | **13 13 21.1** | **-3.6** |
| SEY | | | | Sgmax | | 13 13 38.9 | |
| | 30nm,0.7s | | | | | | |
| **TLON** | **Talon** | **5.22** | **285** | *e*Sg | **Sg** | **13 13 22.9** | **-2.5** |
| TLON | | | | Sgmax | | 13 13 33.8 | |
| | 120nm,0.6s | | | | | | |
| **KOK** | **Koryaka** | **5.47** | **180** | *e*P | **Pn** | **13 12 02.8** | **+3.2** |
| **AVH** | **Avacha** | **5.49** | **179** | *e*P | **Pn** | **13 12 03.1** | **+3.1** |
| **SMAR** | **Somma** | **5.50** | **179** | *e*P | **Pn** | **13 12 03.5** | **+3.3** |
| **SUUS** | **Susuman** | **6.53** | **313** | *e*Pg | **Pg** | **13 12 43.5** | **+0.5** |
| SUUS | | | | *e*Sg | **Sg** | **13 14 04.5** | **-2.9** |
| SUUS | | | | Sgmax | | 13 14 13.7 | |
| | 40nm,1.0s | | | | | | |

*NIED **30** 15:02:13.0,39.09N×143.19E,h17km, MW3.5,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-1.22; Mθθ1.35; Mφφ-0.12; Mrθ0.88; Mθφ-0.96; Mφr-0.21; Fault plane solution: M₀1.78000×10¹⁴ NP1: φs286.00000°,δ61.00000°,λ-103.00000°. NP2: φs131.00000°,δ31.00000°,λ-68.00000°.*
*JMA **30** 15:02:13.0±0.2,39.1N±0.4×143.2E±0.8,h17km±2km, MV3.6/32,FAR E OFF SANRIKU*
*IDC **30** 15:02:18.3±5.3,38.95N×143.28E,h52km±49km,mb3.3/5, mbtmp3.5/6,ML2.7/1,MS2.7/1,Error ellipse: s-maj=38.3km s-min=26.7km az=82.0*
**ISC 30 15:02:12.3±3.8,39.12N±0.06×143.14E±0.08,h3km±24km, n24,σ1$08/28,mb3.6/5,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MIYJ** | **Miyakonagasawa** | **1.12** | **295** | P | **Pb** | **15 02 34.2** | **-0.2** |
| MIYJ | | | | *e*S | **Sb** | **15 02 48.7** | **-0.7** |
| **OFUJ** | **Ofunato** | **1.15** | **269** | P | **Pb** | **15 02 34.5** | **-0.3** |
| OFUJ | | | | *e*S | **Sb** | **15 02 49.8** | **-0.3** |
| **JTH** | **Tanohata** | **1.28** | **310** | P | **Pn** | **15 02 37.0** | **-0.2** |
| JTH | | | | *e*S | **Sb** | **15 02 54.1** | **0.0** |
| **JKMT** | **Kesennumamotoy** | **1.33** | **257** | *i* P | **Pn** | **15 02 37.2** | **-0.7** |
| **JOM** | **Ohasama** | **1.48** | **284** | P | **Pn** | **15 02 39.7** | **-0.2** |
| JOM | | | | S | **Sn** | **15 02 58.9** | **-0.8** |
| **JMK** | **Ichinoseki** | **1.50** | **264** | P | **Pn** | **15 02 40.1** | **-0.1** |
| **JIO** | **Ouri** | **1.55** | **245** | *i* P | **Pn** | **15 02 40.3** | **-0.5** |
| **JANG** | **Nango** | **1.77** | **316** | P | **Pn** | **15 02 43.6** | **-0.4** |
| JANG | | | | S | **Sn** | **15 03 06.5** | **-0.5** |
| **JRG** | **Rokugo** | **1.97** | **279** | *e*P | **Pn** | **15 02 47.7** | **+1.1** |
| **JOU** | **Okura** | **2.08** | **250** | *e*P | **Pn** | **15 02 49.1** | **+1.0** |
| JOU | | | | *e*S | **Sn** | **15 03 15.3** | **+0.7** |
| **JYK** | **Kaneyama** | **2.18** | **266** | *e*P | **Pn** | **15 02 50.7** | **+1.3** |
| **JAH** | **Hinai** | **2.21** | **300** | *e*P | **Pn** | **15 02 50.9** | **+1.0** |
| JAH | | | | *e*S | **Sb** | **15 03 19.4** | **-1.3** |
| **JMM** | **Marumori** | **2.23** | **237** | P | **Pn** | **15 02 50.4** | **+0.3** |
| **JTM** | **Tenmabayashi** | **2.31** | **317** | P | **Pn** | **15 02 52.6** | **+1.3** |
| JTM | | | | *e*S | **Sn** | **15 03 21.5** | **+1.4** |
| **MJAR** | **Matsushiro Arr** | **4.67** | **238** | P | **Pn** | **15 03 26.2** | **+2.3** |
| | 0.4nm,0.3s,baz=42,slow=11,SNR=26<br>3.5nm,0.5s | | | | | | |
| **YAK** | **Yakutsk** | **24.38** | **345** | LR | LR | 15 17 38.8 | |
| | comp=Z,15nm,18.3s,baz=224,slow=38 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.16** | **126** | T | T | 15 37 33.6 | |
| | baz=319,slow=74,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.17** | **127** | T | T | 15 37 33.2 | |
| | baz=319,slow=74,SNR=14 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.18** | **126** | T | T | 15 37 31.8 | |
| | baz=319,slow=74,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.56** | **311** | P | **P** | **15 10 02.6** | **+1.7** |
| | 0.4nm,0.3s,baz=93,slow=9.3,SNR=1.5<br>0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **44.20** | **301** | P | **P** | **15 10 24.2** | **+1.7** |
| | 0.4nm,0.7s,baz=83,slow=10.0,SNR=2.3<br>0.4nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.83** | **307** | P | **P** | **15 10 35.0** | **-0.4** |
| | 0.4nm,0.5s,baz=81,slow=8.6,SNR=4.5<br>0.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **47.01** | **33** | P | **P** | **15 10 44.5** | **0.0** |
| | 0.3nm,0.6s,baz=267,slow=6.5,SNR=4.0<br>0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **59.32** | **190** | P | **P** | **15 12 13.7** | **-1.9** |
| | 0.7nm,0.7s,baz=8.6,slow=6.9,SNR=8.1<br>0.7nm,0.7s | | | | | | |

*IDC **30** 15:10:59.0±1.8,22.54N×142.45E,h211km±18km,mb3.1/7, mbtmp3.7/10,Error ellipse: s-maj=33.5km s-min=14.3km az=83.0*
**ISC 30 15:10:58.1±1.2,22.5N±0.1×142.3E±0.2,h200km,n10,**
**σ1$08/11,mb3.3/7,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **4.62** | **358** | P | **Pn** | **15 12 09.6** | **+1.8** |
| | 22nm,0.3s,baz=297,slow=23,SNR=12 | | | | | | |
| JCJ | | | | S | **Sn** | **15 13 01.4** | **-1.3** |
| | 23nm,0.3s,baz=283,slow=22,SNR=13 | | | | | | |
| **JOW** | **Kunigami** | **13.51** | **292** | P | **P** | **15 14 04.7** | **+0.1** |
| | 4.6nm,0.7s,baz=112,slow=16,SNR=1.7 | | | | | | |
| **KSRS** | **Korea Array** | **19.45** | **323** | P | **P** | **15 15 10.6** | **+1.1** |
| | 0.4nm,0.4s,baz=147,slow=9.0,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.86** | **191** | P | **P** | **15 18 37.2** | **+0.4** |
| | 0.9nm,0.6s,baz=12,slow=8.5,SNR=14<br>0.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **46.57** | **191** | P | **P** | **15 19 06.3** | **+0.2** |
| | 0.3nm,0.7s,baz=14,slow=13,SNR=8.1<br>0.3nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.61** | **312** | P | **P** | **15 19 58.7** | **-0.2** |
| | 0.3nm,0.5s,baz=97,slow=8.3,SNR=2.1<br>0.3nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.44** | **317** | P | **P** | **15 20 18.4** | **-0.5** |
| | 0.3nm,0.5s,baz=91,slow=7.5,SNR=5.7<br>0.3nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **61.59** | **319** | P | **P** | **15 20 53.8** | **-0.4** |
| | 0.4nm,0.4s,baz=90,slow=7.2,SNR=3.2<br>0.4nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **61.73** | **27** | P | **P** | **15 20 54.9** | **0.0** |
| | 0.3nm,0.8s,baz=249,slow=6.7,SNR=2.8<br>0.3nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **82.17** | **334** | P | **P** | **15 22 54.8** | **-1.6** |
| | 1.0nm,0.8s,baz=35,slow=5.1,SNR=5.3<br>1.0nm,0.8s | | | | | | |

**IDC 30 15:11:12.9±2.2,4.74S×128.69E,h0km,mb3.4/1, mbtmp3.2/3,ML3.1/2,Error ellipse: s-maj=129.4km s-min=31.8km az=67.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **16.08** | **160** | Pn | Pn | 15 15 00.2 | -0.3 |
| | 0.1nm,0.3s,baz=340,slow=11,SNR=6.5<br>0.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **19.48** | **166** | P | P | 15 15 41.7 | +0.1 |
| | 0.1nm,0.3s,baz=332,slow=10,SNR=5.9<br>0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.64** | **327** | P | P | 15 21 59.0 | 0.0 |
| | 0.2nm,0.4s,baz=121,slow=7.6,SNR=1.6<br>0.2nm,0.4s | | | | | | |

*BJI **30** 15:20:56.0±0.0,1.41S×138.90E,h25km,mb4.7/68, mB5.2/57,Ms4.6/56,Ms7 4.3/60*
*MOS **30** 15:20:56.6±0.9,1.22S×138.44E,h10km,mb5.2/43,Error ellipse: s-maj=12.5km s-min=5.5km az=112.5*
*IDC **30** 15:20:57.1±0.6,1.23S×138.49E,h0km,mb4.4/16, mbtmp4.5/18,ML5.0/2,MS3.9/34,Error ellipse: s-maj=26.2km s-min=13.8km az=79.0*
*DJA **30** 15:20:58.0±0.6,1°S±7°×13°9E±°,h10km,M4.6/15, mb4.6/15,mB5.2/12,MLv4.9/6,Mw(mB)4.5/12, MwMwp4.5/4,Mwp4.9/4*
*GCMT **30** 15:21:00.1±0.2,1.34S±0.02×138.34E±0.03,h12km±1km, MW4.9/82,Moment Tensor Solution. s33,c36; s82,c123; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-1.65±. 13; Mθθ1.06±.08; Mφφ0.59±.09; Mrθ-1.27±.27; Mθφ0.94±.05; Mφr2.46±.39; Best double couple: M₀2.96900×10¹⁶ NP1:φs173.00000°,δ78.00000°,λ-111.00000°. NP2: φs54.00000°,δ24.00000°,λ-32.00000°. Principal axes: T 2.1900, Plg30.0000°, Azm280.0000°; N 1.5610, Plg20.0000°, Azm178.0000°; P -3.7480, Plg53.0000°, Azm59.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **30** 15:21:02.1±1.6,1.26S±0.03×138.44E±0.06,h35km±4km, mb5.2/164 Error ellipse: s-maj=9.7km s-min=2.5km az=116.0*
**ISC 30 15:21:00.9±0.4,1.27S±0.04×138.55E±0.04,h26km±2km, h27km:pP-P,n338,σ1$85/324,mb5.1/138,MS4.1/57, 12C-3D,Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **2.08** | **129** | P | **Pn** | **15 21 32.5** | **-1.6** |
| GENI | | | | S | **Sn** | **15 21 59.0** | **-0.2** |
| **JAY** | **Jayapura** | **2.48** | **120** | P | **Pn** | **15 21 37.2** | **-2.5** |
| **TABU** | **Tabubil** | **4.78** | **146** | P | Pn | 15 22 17.2 | +5.8 |
| **KMPI** | **Kaimana, Papua** | **5.39** | **244** | P | **Pn** | **15 22 21.3** | **+1.6** |
| **FAKI** | **Fak Fak** | **6.51** | **255** | P | **Pn** | **15 22 35.5** | **+0.4** |
| **FAKI** | **Fak Fak** | **6.51** | **255** | Pn | **Pn** | **15 22 33.6** | **-1.5** |
| **FAKI** | **Fak Fak** | **6.51** | **255** | P | **Pn** | **15 22 33.8** | **-1.3** |
| | 57nm,0.8s,1μm2μm0.4nm | | | | | | |
| **SWI** | **Sorong** | **7.30** | **273** | P | **Pn** | **15 22 45.0** | **-1.0** |
| | 36nm,1.2s,660nm2μm0.2nm | | | | | | |
| **MANU** | **Manus Island** | **8.84** | **95** | Pn | **Pn** | **15 23 09.0** | **+1.8** |
| **MSAI** | **Masohi** | **9.84** | **258** | P | **Pn** | **15 23 21.0** | **+0.2** |
| | 41nm,0.8s,838nm | | | | | | |
| **TNTI** | **Ternate** | **11.37** | **280** | Pn | **Pn** | **15 23 42.7** | **+0.9** |
| **PMG** | **Port Moresby** | **11.77** | **134** | Pn | **Pn** | **15 23 49.0** | **+1.7** |
| **PMG** | **Port Moresby** | **11.77** | **134** | Pn | **Pn** | **15 23 50.6** | **+3.4** |
| | 0.4nm,0.3s,baz=262,slow=10,SNR=2.5 | | | | | | |
| PMG | | | | LR | LR | 15 29 56.8 | |
| | comp=Z,2μm,18.0s,baz=354,slow=46 | | | | | | |
| **PMG** | **Port Moresby** | **11.77** | **134** | *i* P | **Pn** | **15 23 50.1** | **+2.8** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,52nm,1.3s | | | | | | |
| **KDU** | **Kakadu** | **12.84** | **208** | P | **Pn** | **15 23 59.0** | **-2.9** |
| **COEN** | **Coen** | **13.41** | **160** | P | **Pn** | **15 24 11.6** | **+2.0** |
| **COEN** | **Coen** | **13.41** | **160** | Pn | **Pn** | **15 24 08.8** | **-0.9** |
| **DRS** | **Darwin Rock St** | **13.43** | **214** | P | **Pn** | **15 24 08.7** | **-1.3** |
| **MTN** | **Manton Dam** | **13.65** | **212** | P | **Pn** | **15 24 11.7** | **-1.2** |
| **MTN** | **Manton Dam** | **13.65** | **212** | Pn | **Pn** | **15 24 10.7** | **-2.2** |
| **RABL** | **Rabaul** | **13.90** | **102** | Pn | **Pn** | **15 24 17.6** | **+1.2** |
| **DAV** | **Davao City (W)** | **15.37** | **303** | Pn | **Pn** | **15 24 34.3** | **-2.0** |
| DAV | | | | IAmb | IAmb | 15 24 44.1 | |
| | comp=Z,92nm,0.5s | | | | | | |
| **DAV** | **Davao City (W)** | **15.37** | **303** | Pn | **Pn** | **15 24 36.0** | **-0.3** |
| | comp=Z,28nm,0.3s,baz=207,slow=4.5,SNR=1.4 | | | | | | |
| DAV | | | | Sn | **Sn** | **15 27 26.1** | **+0.2** |
| | comp=Z,37nm,0.3s,baz=43,slow=13,SNR=1.5 | | | | | | |
| DAV | | | | LR | LR | 15 31 15.6 | |
| | comp=Z,577nm,18.8s,baz=119,slow=40 | | | | | | |
| | comp=Z,80nm,0.4s | | | | | | |
| **LUWI** | **Luwuk** | **15.78** | **271** | Pn | **Pn** | **15 24 39.4** | **-2.2** |
| **BBSI** | **Bau Bau** | **16.49** | **255** | P | **P** | **15 24 54.7** | **+1.5** |
| | comp=Z,52nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **16.52** | **239** | | **Pn** | **15 24 49.5** | **-1.6** |
| **SOEI** | **Soe** | **16.52** | **239** | P | **P** | **15 24 53.7** | **+0.1** |
| **KNRA** | **Kununurra** | **17.27** | **213** | Pn | **Pn** | **15 24 57.5** | **-2.9** |
| **MTSU** | **Mount Surprise** | **17.69** | **162** | P | **P** | **15 25 07.9** | **+1.5** |
| **MMRI** | **Maumere** | **17.82** | **245** | Pn | **Pn** | **15 25 03.5** | **-3.8** |
| **TOLI2** | **Tolitoli** | **17.93** | **278** | P | **P** | **15 25 14.5** | **+5.5** |
| **TOLI2** | **Tolitoli** | **17.93** | **278** | | **Pn** | **15 25 07.0** | **-1.6** |
| **EDFI** | **Ende, Flores** | **18.36** | **246** | P | **Pn** | **15 25 14.7** | **+0.7** |
| **WRAB** | **Tennant Creek** | **19.00** | **192** | P | **P** | **15 25 19.6** | **-1.1** |
| **WRAB** | **Tennant Creek** | **19.00** | **192** | P | **P** | **15 25 19.6** | **-1.1** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,64nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **19.01** | **192** | P | **P** | **15 25 20.8** | **-0.1** |
| | comp=Z,2.4nm,0.3s,baz=16,slow=12,SNR=102 | | | | | | |
| WRA | | | | S | Sn | 15 28 43.6 | -10 |
| | comp=Z,1.6nm,0.8s,baz=15,slow=22,SNR=2.1 | | | | | | |
| WRA | | | | LR | LR | 15 32 58.5 | |
| | comp=Z,1μm,20.5s,baz=24,slow=38 | | | | | | |
| | comp=Z,36nm,0.7s | | | | | | |
| **WB1** | **Warramunga Ar.** | **19.02** | **192** | P | **P** | **15 25 21.6** | **+0.5** |
| **KAPI** | **Kappang** | **19.14** | **258** | LR | LR | 15 33 54.6 | |
| | comp=Z,284nm,18.2s,baz=76,slow=41 | | | | | | |
| **KAPI** | **Kappang** | **19.14** | **258** | *i* P | **Pn** | **15 25 29.1** | **+5.8** |
| **QIS** | **Mount Isa** | **19.19** | **177** | P | **P** | **15 25 23.7** | **+0.8** |
| **CTA** | **Charters Tower** | **20.16** | **159** | LR | LR | 15 33 55.9 | |
| | comp=Z,90nm,19.9s,baz=345,slow=38 | | | | | | |
| **CTAO** | **Charters Tower** | **20.16** | **159** | P | **P** | **15 25 34.0** | **+0.5** |
| **CTAO** | **Charters Tower** | **20.16** | **159** | P | **P** | **15 25 34.0** | **+0.5** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.99** | **216** | P | **P** | **15 25 41.9** | **-0.5** |
| **MYLDM** | **Lahad Datu** | **21.03** | **288** | P | **P** | **15 25 43.0** | **0.0** |
| MYLDM | | | | IAmb | IAmb | 15 25 52.3 | |
| | comp=Z,138nm,1.6s | | | | | | |
| **PATS** | **Pohnpei** | **21.30** | **68** | P | **P** | **15 25 45.4** | **-0.4** |
| **BKB** | **Balikpapan** | **21.65** | **270** | P | **P** | **15 25 47.3** | **-2.4** |
| **AS01** | **Alice Springs** | **22.70** | **191** | P | **P** | **15 26 01.4** | **+0.6** |
| **ASAR** | **Alice Springs** | **22.71** | **191** | P | **P** | **15 26 00.7** | **-0.3** |
| | comp=Z,20nm,0.7s,baz=18,slow=11,SNR=129 | | | | | | |
| ASAR | | | | S | **S** | **15 30 08.2** | **+0.1** |
| | comp=Z,2.4nm,0.9s,baz=9.0,slow=24,SNR=4.0 | | | | | | |
| ASAR | | | | LR | LR | 15 35 13.5 | |
| | comp=Z,958nm,19.6s,baz=12,slow=38 | | | | | | |
| | comp=Z,20nm,0.7s | | | | | | |
| **KKM** | **Kota Kinabalu** | **23.46** | **288** | P | **P** | **15 26 07.7** | **-1.0** |
| KKM | | | | IAmb | IAmb | 15 26 14.8 | |
| | comp=Z,202nm,2.0s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **25.33** | **253** | P | **P** | **15 26 31.0** | **+5.1** |
| **JAGI** | **Jajag, Banyuwa** | **25.33** | **253** | P | **P** | **15 26 24.5** | **-1.4** |
| **WRKA** | **Warakurna** | **25.62** | **202** | P | **P** | **15 26 30.6** | **+2.1** |
| **QLP** | **Quilpie** | **25.75** | **168** | P | **P** | **15 26 34.2** | **+4.6** |
| **INKA** | **Innaminka** | **26.40** | **176** | P | **P** | **15 26 39.0** | **+3.6** |
| **SBUM** | **Sibu** | **26.59** | **278** | P | **P** | **15 26 36.3** | **-1.1** |
| **EIDS** | **Eidsvold** | **26.83** | **154** | P | **P** | **15 26 44.3** | **+4.9** |
| **EIDS** | **Eidsvold** | **26.83** | **154** | P | **P** | **15 26 40.9** | **+1.5** |
| EIDS | | | | IAmb | IAmb | 15 26 48.5 | |
| | comp=Z,70nm,1.1s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **27.19** | **221** | P | **P** | **15 26 42.1** | **-0.6** |
| **PSA00** | **Pilbara Seismi** | **27.19** | **221** | P | **P** | **15 26 41.5** | **-1.2** |
| PSA00 | | | | IAmb | IAmb | 15 26 45.7 | |
| | comp=Z,40nm,1.2s | | | | | | |
| **KSM** | **Kuching** | **28.37** | **275** | P | **P** | **15 26 50.8** | **-2.5** |
| **JCJ** | **Chichijima** | **28.42** | **7** | LR | LR | 15 35 26.9 | |
| | comp=Z,156nm,21.8s,baz=189,slow=31 | | | | | | |
| **LCRK** | **Leigh Creek** | **29.02** | **181** | P | **P** | **15 27 02.3** | **+3.5** |
| **JOW** | **Kunigami** | **29.65** | **341** | P | **P** | **15 27 03.4** | **-1.1** |
| JOW | | | | IAmb | IAmb | 15 27 07.2 | |
| | comp=Z,90nm,1.6s | | | | | | |
| **JOW** | **Kunigami** | **29.65** | **341** | LR | LR | 15 36 26.6 | |
| | comp=Z,410nm,20.6s,baz=144,slow=31 | | | | | | |
| **STKA** | **Stephens Creek** | **30.57** | **175** | P | **P** | **15 27 17.2** | **+4.6** |
| **STKA** | **Stephens Creek** | **30.57** | **175** | P | **P** | **15 27 12.6** | **0.0** |
| | comp=Z,7.3nm,0.8s,baz=348,slow=9.0,SNR=8.3 | | | | | | |
| STKA | | | | LR | LR | 15 39 57.0 | |
| | comp=Z,790nm,18.9s,baz=349,slow=37 | | | | | | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **30.57** | **175** | *i* P | **P** | **15 27 13.9** | **+1.3** |
| **CMSA** | **Cobar Meteorol** | **30.85** | **168** | P | **P** | **15 27 19.1** | **+4.0** |
| **FORT** | **Forrest** | **30.99** | **198** | P | **P** | **15 27 17.9** | **+1.6** |
| | comp=Z,54nm,1.2s | | | | | | |
| **FORT** | **Forrest** | **30.99** | **198** | P | **P** | **15 27 14.3** | **-2.0** |
| FORT | | | | IAmb | IAmb | 15 28 04.8 | |
| | comp=Z,56nm,1.1s | | | | | | |
| **MEEK** | **Meekatharra** | **31.68** | **216** | P | **P** | **15 27 24.7** | **+2.2** |
| **DZM** | **Mont Dzumac** | **34.12** | **129** | *e*S | **S** | **15 33 12.0** | **+3.2** |
| | comp=Z,172nm,24.3s | | | | | | |
| DZM | | | | *e*LR | LR | 15 36 46.3 | |
| | comp=Z,789nm,30.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **34.12** | **129** | LR | LR | 15 41 22.3 | |
| | comp=Z,316nm,19.7s,baz=334,slow=36 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **34.23** | **2** | LR | LR | 15 38 25.9 | |
| | comp=Z,214nm,21.1s,baz=80,slow=31 | | | | | | |
| **QIZ** | **Qiongzhong** | **34.68** | **307** | P | **P** | **15 27 47.8** | **-0.9** |
| QIZ | | | | S | **S** | **15 33 15.5** | **-1.8** |
| QIZ | | | | LR | LR | | |
| | comp=Z,380nm,13.5s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,340nm,15.2s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,410nm,16.8s | | | | | | |
| **JNU** | **Nakatsue** | **34.97** | **349** | P | **P** | **15 27 50.8** | **-0.3** |
| **JNU** | **Nakatsue** | **34.97** | **349** | LR | LR | 15 41 09.4 | |
| | comp=Z,274nm,18.5s,baz=128,slow=35 | | | | | | |
| **MORW** | **Morawa** | **35.00** | **216** | P | **P** | **15 27 51.2** | **-0.1** |
| **JMN** | **Monobe** | **35.09** | **353** | P | **P** | **15 27 51.4** | **-0.8** |
| JMN | | | | IAmb | IAmb | 15 27 53.3 | |
| | comp=Z,34nm,0.9s | | | | | | |
| **SSE** | **Sheshan** | **36.18** | **334** | P | **P** | **15 28 02.0** | **+0.6** |
| SSE | | | | S | **S** | **15 33 44.0** | **+4.0** |
| SSE | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| SSE | | | | pmax | pmax | | |
| | comp=Z,120nm,5.6s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,160nm,18.6s | | | | | | |
| SSE | | | | LR | LR | | |
| | comp=Z,160nm,18.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **37.32** | **210** | LR | LR | 15 46 09.0 | |
| | comp=Z,412nm,19.6s,baz=68,slow=40 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **37.62** | **360** | P | **P** | **15 28 12.0** | **-1.7** |
| | comp=Z,1.5nm,0.6s,baz=189,slow=8.8,SNR=4.5 | | | | | | |
| MJAR | | | | LR | LR | 15 41 17.1 | |
| | comp=Z,122nm,19.9s,baz=170,slow=32 | | | | | | |
| | comp=Z,1.5nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **37.62** | **360** | P | **P** | **15 28 12.0** | **-1.7** |
| **MAJO** | **Matsushiro** | **37.62** | **360** | P | **P** | **15 28 13.8** | **+0.1** |
| **MAJO** | **Matsushiro** | **37.62** | **360** | *i* P | **P** | **15 28 12.8** | **-0.9** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **IPM** | **Ipoh** | **37.93** | **279** | P | **P** | **15 28 15.1** | **-1.5** |
| **NJ2** | **Nanjing** | **38.04** | **332** | *e*P | **P** | **15 28 20.5** | **+3.3** |
| NJ2 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DL2** | **Dalian** | **42.91** | **341** | P | **P** | **15** | **28** | **58.5 +1.1** |
| DL2 | | | | S | S | 15 | 35 | 30.0 +9.2 |
| DL2 | | | | pmax | pmax | | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| DL2 | | | | pmax | pmax | | | |
| | comp=Z,280nm,6.2s | | | | | | | |
| DL2 | | | | LR | LR | | | |
| | comp=Z,260nm,15.2s | | | | | | | |
| DL2 | | | | LR | LR | | | |
| | comp=Z,300nm,16.2s | | | | | | | |
| DL2 | | | | LR | LR | | | |
| | comp=Z,270nm,16.7s | | | | | | | |
| **CRAI** | **Chiangrai** | **43.08** | **302** | P | **P** | **15** | **28** | **57.7 -1.5** |
| **LYN** | **LuoYang** | **43.23** | **328** | *e*P | **P** | **15** | **29** | **00.0 -0.1** |
| LYN | | | | sP | pP | 15 | 29 | 07.0 -0.4 |
| LYN | | | | S | **S** | **15** | **35** | **23.8 -1.8** |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.9s | | | | | | | |
| LYN | | | | pmax | pmax | | | |
| | comp=Z,250nm,4.2s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,360nm,8.9s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,240nm,12.0s | | | | | | | |
| LYN | | | | LR | LR | | | |
| | comp=Z,230nm,11.3s | | | | | | | |
| **KMI** | **Kunming** | **43.48** | **310** | ⇑P | **P** | **15** | **29** | **03.5 +0.9** |
| KMI | | | | S | **S** | **15** | **35** | **29.8 -0.3** |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.2s | | | | | | | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,130nm,3.9s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,180nm,16.0s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,240nm,16.9s | | | | | | | |
| KMI | | | | LR | LR | | | |
| | comp=Z,350nm,27.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.60** | **299** | P | **P** | **15** | **29** | **02.9 -0.5** |
| | comp=Z,4.0nm,0.9s,baz=122,slow=7.3,SNR=18 | | | | | | | |
| CMAR | | | | PcP | **PcP** | **15** | **30** | **50.6 -0.1** |
| | comp=Z,0.6nm,0.3s,baz=98,slow=2.0,SNR=1.8 | | | | | | | |
| CMAR | | | | S | **S** | **15** | **35** | **27.1 -4.6** |
| | comp=Z,0.5nm,0.3s,baz=323,slow=31,SNR=1.4 | | | | | | | |
| CMAR | | | | LR | LR | 15 | 45 | 35.4 |
| | comp=Z,121nm,21.6s,baz=140,slow=34 | | | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.60** | **299** | *i* P | **P** | **15** | **29** | **03.5 +0.1** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **HNS** | **HongShan** | **44.37** | **333** | ⇑P | **P** | **15** | **29** | **09.0 -0.2** |
| HNS | | | | S | **S** | **15** | **35** | **43.0 +0.8** |
| HNS | | | | ScS | **SS** | **15** | **39** | **02.0 +0.3** |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| HNS | | | | pmax | pmax | | | |
| | comp=Z,240nm,7.0s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,330nm,16.7s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,190nm,19.1s | | | | | | | |
| HNS | | | | LR | LR | | | |
| | comp=Z,370nm,19.1s | | | | | | | |
| **VLA** | **Vladivostok** | **44.60** | **353** | *i* P | **P** | **15** | **29** | **09.6 -1.3** |
| VLA | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **XAN** | **Xi'an** | **44.82** | **324** | P | **P** | **15** | **29** | **12.5 -0.5** |
| XAN | | | | pP | sP | 15 | 29 | 23.0 -0.1 |
| XAN | | | | S | **S** | **15** | **35** | **50.0 +1.0** |
| XAN | | | | SS | **ScS** | **15** | **39** | **02.5 -6.7** |
| XAN | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.7s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,220nm,17.5s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,290nm,21.2s | | | | | | | |
| XAN | | | | LR | LR | | | |
| | comp=Z,410nm,21.0s | | | | | | | |
| **PZH** | **PanZhiHua** | **44.97** | **311** | P | **P** | **15** | **29** | **14.8 +0.4** |
| PZH | | | | S | **S** | **15** | **35** | **52.8 +1.2** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,150nm,6.0s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,190nm,17.4s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,180nm,17.3s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,280nm,20.0s | | | | | | | |
| **ASAJ** | **Asahikawa** | **45.33** | **4** | LR | LR | 15 | 45 | 22.8 |
| | comp=Z,114nm,22.0s,baz=180,slow=32 | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **45.65** | **353** | *i* P | **P** | **15** | **29** | **18.1 -1.2** |
| **USRK** | **Ussuriysk Ar.** | **45.65** | **353** | P | **P** | **15** | **29** | **19.4 +0.1** |
| | comp=Z,3.7nm,0.9s,baz=152,slow=8.6,SNR=13 | | | | | | | |
| USRK | | | | S | **S** | **15** | **35** | **57.0 -3.5** |
| | comp=Z,1.2nm,0.7s,baz=150,slow=34,SNR=1.3 | | | | | | | |
| | comp=Z,3.7nm,0.9s | | | | | | | |
| **TIY** | **Taiyuan** | **45.70** | **331** | *e*P | **P** | **15** | **29** | **21.5 +1.6** |
| TIY | | | | S | **S** | **15** | **36** | **05.5 +3.9** |
| TIY | | | | pmax | pmax | | | |
| | comp=Z,140nm,5.7s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=Z,280nm,11.2s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=Z,210nm,13.7s | | | | | | | |
| TIY | | | | LR | LR | | | |
| | comp=Z,290nm,17.5s | | | | | | | |
| **BJT** | **Baijiatuau** | **45.91** | **336** | P | **P** | **15** | **29** | **20.6 -0.8** |
| **BJT** | **Baijiatuau** | **45.91** | **336** | P | **P** | **15** | **29** | **20.6 -0.8** |
| BJT | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **BJI** | **Beijing** | **45.93** | **336** | P | **P** | **15** | **29** | **21.5 0.0** |
| BJI | | | | S | **S** | **15** | **36** | **08.0 +3.4** |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| BJI | | | | pmax | pmax | | | |
| | comp=Z,100nm,6.3s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,150nm,19.1s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,74nm,16.1s | | | | | | | |
| BJI | | | | LR | LR | | | |
| | comp=Z,160nm,17.7s | | | | | | | |
| **CD2** | **Chengdu** | **46.02** | **317** | P | **P** | **15** | **29** | **23.0 +0.4** |
| CD2 | | | | pP | sP | 15 | 29 | 32.3 -0.4 |
| CD2 | | | | sP | pwP | 15 | 29 | 36.0 +3.7 |
| CD2 | | | | PP | **PP** | **15** | **31** | **07.3 -3.5** |
| CD2 | | | | S | **S** | **15** | **36** | **07.3 +0.8** |
| CD2 | | | | sS | sS | 15 | 36 | 23.8 +5.7 |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.2s | | | | | | | |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,210nm,4.6s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,200nm,13.6s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,310nm,13.6s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,320nm,12.2s | | | | | | | |
| **MDJ** | **Mudanjiang** | **46.38** | **351** | P | **P** | **15** | **29** | **24.8 -0.3** |
| MDJ | | | | PP | **PP** | **15** | **31** | **11.3 -3.1** |
| MDJ | | | | S | **S** | **15** | **36** | **15.5 +4.4** |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.5s | | | | | | | |
| MDJ | | | | pmax | pmax | | | |
| | comp=Z,250nm,8.0s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,260nm,18.8s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,210nm,17.6s | | | | | | | |
| MDJ | | | | LR | LR | | | |
| | comp=Z,300nm,19.9s | | | | | | | |
| **MDJ** | **Mudanjiang** | **46.38** | **351** | P | **P** | **15** | **29** | **24.2 -0.9** |
| MDJ | | | | IAmb | IAmb | 15 | 29 | 28.0 |
| | comp=Z,60nm,1.8s | | | | | | | |
| **CN2** | **Changchun** | **46.38** | **347** | *e*P | **P** | **15** | **29** | **24.8 -0.3** |
| CN2 | | | | *e*S | **S** | **15** | **36** | **15.3 +4.2** |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| CN2 | | | | pmax | pmax | | | |
| | comp=Z,100nm,3.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,200nm,15.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,300nm,15.0s | | | | | | | |
| CN2 | | | | LR | LR | | | |
| | comp=Z,300nm,16.0s | | | | | | | |
| **BNX** | **BinXian** | **47.84** | **349** | ⇓P | **P** | **15** | **29** | **36.0 -0.4** |
| BNX | | | | sP | **pP** | **15** | **29** | **42.8 -1.1** |
| BNX | | | | S | **S** | **15** | **36** | **34.5 +2.6** |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.5s | | | | | | | |
| BNX | | | | pmax | pmax | | | |
| | comp=Z,320nm,6.5s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=Z,160nm,10.7s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=Z,110nm,8.8s | | | | | | | |
| BNX | | | | LR | LR | | | |
| | comp=Z,210nm,16.6s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **48.17** | **4** | P | **P** | **15** | **29** | **37.2 -1.7** |
| YSS | | | | IAmb | IAmb | 15 | 29 | 39.0 |
| | comp=Z,32nm,1.3s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **48.17** | **4** | *e*P | **P** | **15** | **29** | **38.0 -0.9** |
| YSS | | | | *e*S | **S** | **15** | **36** | **31.3 -5.1** |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,200nm,6.7s | | | | | | | |
| YSS | | | | smax | smax | | | |
| | comp=N,100nm,6.7s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **48.17** | **4** | P | **P** | **15** | **29** | **38.7 -0.2** |
| YSS | | | | pP | **pP** | **15** | **29** | **45.4 -0.9** |
| **HHC** | **Hu-ho-hao-te** | **48.59** | **333** | *e*P | **P** | **15** | **29** | **45.8 +3.3** |
| HHC | | | | S | **S** | **15** | **36** | **45.5 +2.6** |
| HHC | | | | pmax | pmax | | | |
| | comp=N,12nm,0.5s | | | | | | | |
| HHC | | | | pmax | pmax | | | |
| | comp=N,110nm,4.0s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=N,250nm,17.7s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=N,250nm,15.9s | | | | | | | |
| HHC | | | | LR | LR | | | |
| | comp=N,380nm,18.2s | | | | | | | |
| **LZH** | **Lanzhou** | **49.25** | **322** | P | **P** | **15** | **29** | **48.0 +0.3** |
| LZH | | | | pP | pP | 15 | 29 | 56.8 +1.8 |
| LZH | | | | S | **S** | **15** | **36** | **56.5 +4.1** |
| LZH | | | | sS | sS | 15 | 37 | 11.5 +7.4 |
| LZH | | | | pmax | pmax | | | |
| | comp=N,37nm,1.2s | | | | | | | |
| LZH | | | | pmax | pmax | | | |
| | comp=N,300nm,5.8s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=N,210nm,14.8s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=N,240nm,14.4s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=N,380nm,14.8s | | | | | | | |
| **XLT** | **XiLinHaoTe** | **49.27** | **339** | *e*P | **P** | **15** | **29** | **45.3 -2.3** |
| XLT | | | | pP | pP | 15 | 29 | 50.3 -4.7 |
| XLT | | | | S | **S** | **15** | **36** | **55.8 +3.6** |
| XLT | | | | pmax | pmax | | | |
| | comp=N,7.0nm,1.0s | | | | | | | |
| XLT | | | | pmax | pmax | | | |
| | comp=N,180nm,5.4s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=N,170nm,15.0s | | | | | | | |
| XLT | | | | LR | LR | | | |
| | comp=N,170nm,15.1s | | | | | | | |
| **KLR** | **Kul'dur** | **50.65** | **354** | LR | LR | 15 | 48 | 11.1 |
| | comp=N,186nm,21.0s,baz=174,slow=32 | | | | | | | |
| **KLR** | **Kul'dur** | **50.65** | **354** | *ce*P | **P** | **15** | **29** | **56.8 -1.0** |
| KLR | | | | pmax | pmax | | | |
| | comp=Z,41nm,1.7s | | | | | | | |
| **TUWZ** | **Tuamarina** | **51.14** | **146** | P | **P** | **15** | **30** | **02.0 +0.3** |
| **RTZ** | **Ruatahuna** | **51.15** | **141** | P | **P** | **15** | **30** | **01.1 -0.8** |
| **LTZ** | **Lake Taylor** | **51.16** | **148** | P | **P** | **15** | **30** | **01.9 0.0** |
| **TCW** | **Tory Channel** | **51.18** | **146** | P | **P** | **15** | **30** | **02.3 +0.3** |
| **BKZ** | **Black Stump Fm** | **51.18** | **142** | P | **P** | **15** | **30** | **02.0 -0.2** |
| **PLWZ** | **Palliser** | **51.97** | **145** | P | **P** | **15** | **30** | **07.6 -0.4** |
| **HEH** | **HeiHe** | **52.21** | **351** | *e*P | **P** | **15** | **30** | **09.0 -0.5** |
| HEH | | | | pP | **pP** | **15** | **30** | **15.8 -1.2** |
| HEH | | | | sP | **sP** | **15** | **30** | **18.3 -1.5** |
| HEH | | | | S | **S** | **15** | **37** | **34.8 +2.1** |
| HEH | | | | sS | **sS** | **15** | **37** | **45.5 +1.6** |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.3s | | | | | | | |
| HEH | | | | pmax | pmax | | | |
| | comp=Z,340nm,6.4s | | | | | | | |
| HEH | | | | LR | LR | | | |
| | comp=Z,200nm,16.1s | | | | | | | |
| HEH | | | | LR | LR | | | |
| | comp=Z,140nm,15.4s | | | | | | | |
| HEH | | | | LR | LR | | | |
| | comp=Z,260nm,16.6s | | | | | | | |
| **SHL** | **Shillong** | **52.40** | **304** | P | **P** | **15** | **30** | **08.5 -3.1** |
| SHL | | | | IAmb | IAmb | 15 | 31 | 42.5 |
| | comp=Z,14nm,0.4s | | | | | | | |
| **SHL** | **Shillong** | **52.40** | **304** | P | **P** | **15** | **30** | **08.5 -3.1** |
| SHL | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.4s | | | | | | | |
| **HIA** | **Hailar** | **52.90** | **345** | P | **P** | **15** | **30** | **12.7 -2.0** |
| HIA | | | | IAmb | IAmb | 15 | 30 | 18.7 |
| | comp=Z,65nm,1.9s | | | | | | | |
| **HIA** | **Hailar** | **52.90** | **345** | P | **P** | **15** | **30** | **12.7 -2.0** |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,65nm,1.9s | | | | | | | |
| **NIUE** | **Niue** | **53.45** | **113** | P | **P** | **15** | **30** | **18.2 -1.0** |
| **GTA** | **Gaotai** | **53.83** | **323** | P | **P** | **15** | **30** | **22.0 +0.1** |
| GTA | | | | sP | pwP | 15 | 30 | 35.0 +3.2 |
| GTA | | | | S | **S** | **15** | **37** | **57.8 +2.4** |
| GTA | | | | sS | sS | 15 | 38 | 13.0 +5.8 |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.5s | | | | | | | |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,170nm,9.1s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,85nm,13.8s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,140nm,13.1s | | | | | | | |
| GTA | | | | LR | LR | | | |
| | comp=Z,140nm,17.8s | | | | | | | |
| **JOHN** | **Johnston Islan** | **54.23** | **68** | P | **P** | **15** | **30** | **23.8 -1.1** |
| **LSA** | **Lhasa** | **54.70** | **308** | P | **P** | **15** | **30** | **30.5 +1.7** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **LSA** | **Lhasa** | **54.70** | **308** | P | **P** | **15** | **30** | **27.0 -1.8** |
| LSA | | | | IAmb | IAmb | 15 | 30 | 31.0 |
| | comp=Z,46nm,1.8s | | | | | | | |
| **LSA** | **Lhasa** | **54.70** | **308** | P | **P** | **15** | **30** | **27.0 -1.8** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,46nm,1.8s | | | | | | | |
| **ZEA** | **Zeya** | **55.62** | **352** | *e*P | **P** | **15** | **30** | **34.4 0.0** |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=N,100nm,7.2s | | | | | | | |
| ZEA | | | | pmax | pmax | | | |
| | comp=Z,100nm,8.1s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.11** | **335** | P | **P** | **15** | **30** | **37.4 -0.8** |
| ULN | | | | IAmb | IAmb | 15 | 30 | 42.7 |
| | comp=Z,54nm,1.9s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.11** | **335** | *ce*P | **P** | **15** | **30** | **39.0 +0.8** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.7s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **56.51** | **14** | *i* P | **P** | **15** | **30** | **37.9 -2.9** |
| **PETK** | **Petropavlovsk-** | **56.51** | **14** | P | **P** | **15** | **30** | **40.7 -0.1** |
| | comp=Z,4.5nm,1.1s,baz=184,slow=9.4,SNR=5.6 | | | | | | | |
| PETK | | | | LR | LR | 15 | 49 | 58.9 |
| | comp=Z,44nm,20.9s,baz=201,slow=31 | | | | | | | |
| | comp=Z,4.5nm,1.1s | | | | | | | |
| **PET** | **Petropavlovsk** | **56.66** | **14** | *e*P | P | 15 | 30 | 48.0 +6.2 |
| PET | | | | *e*S | S | 15 | 38 | 44.6 +12 |
| PET | | | | pmax | pmax | | | |
| | comp=Z,100nm,12.1s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,100nm,16.0s | | | | | | | |
| **CIT** | **Chita** | **57.14** | **342** | *e*P | **P** | **15** | **30** | **46.0 +0.6** |
| CIT | | | | *e* | | 15 | 30 | 53.4 |
| CIT | | | | *e* | | 15 | 31 | 45.2 |
| CIT | | | | *e* | | 15 | 32 | 52.0 |
| CIT | | | | pmax | pmax | | | |
| | comp=Z,87nm,1.7s | | | | | | | |
| **PALK** | **Pallekele** | **58.33** | **279** | LR | LR | 15 | 59 | 09.7 |
| | comp=Z,91nm,18.2s,baz=100,slow=39 | | | | | | | |
| **ZAK** | **Zakamensk** | **59.63** | **335** | *e*P | **P** | **15** | **31** | **02.1 -0.7** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.5s | | | | | | | |
| **IRK** | **Irkutsk** | **60.62** | **337** | *e*P | **P** | **15** | **31** | **09.3 -0.2** |
| IRK | | | | *e*S | S | 15 | 39 | 54.3 +30 |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,675nm,1.9s | | | | | | | |
| **MA2** | **Magadan** | **61.43** | **7** | P | **P** | **15** | **31** | **14.4 -0.3** |
| MA2 | | | | IAmb | IAmb | 15 | 31 | 15.9 |
| | comp=Z,33nm,1.2s | | | | | | | |
| **MA2** | **Magadan** | **61.43** | **7** | LR | LR | 15 | 57 | 10.7 |
| | comp=Z,34nm,19.7s,baz=196,slow=35 | | | | | | | |
| **MA2** | **Magadan** | **61.43** | **7** | *ce*P | **P** | **15** | **31** | **13.6 -1.2** |
| MA2 | | | | pmax | pmax | | | |
| | comp=Z,48nm,2.5s | | | | | | | |
| **MA2** | **Magadan** | **61.43** | **7** | P | **P** | **15** | **31** | **15.0 +0.2** |
| | comp=Z,25nm,2.1s | | | | | | | |
| **MA2** | **Magadan** | **61.43** | **7** | P | **P** | **15** | **31** | **15.3 +0.6** |
| MA2 | | | | pP | **pP** | **15** | **31** | **22.0 -0.3** |
| MA2 | | | | sP | **sP** | **15** | **31** | **24.9 -0.2** |
| **MOY** | **Mondy** | **61.56** | **334** | *e*P | **P** | **15** | **31** | **16.6 +0.6** |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,73nm,1.8s | | | | | | | |
| **HYB** | **Hyderabad** | **61.92** | **290** | *e*P | **P** | **15** | **31** | **17.6 -1.4** |
| **KNGR** | **Kungurtug, Tuv** | **62.39** | **332** | *i* P | **P** | **15** | **31** | **20.6 -1.0** |
| KNGR | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.4s | | | | | | | |
| **YAK** | **Yakutsk** | **63.50** | **355** | P | **P** | **15** | **31** | **26.8 -1.7** |
| YAK | | | | IAmb | IAmb | 15 | 31 | 36.3 |
| | comp=Z,24nm,1.1s | | | | | | | |
| **YAK** | **Yakutsk** | **63.50** | **355** | LR | LR | 15 | 55 | 41.0 |
| | comp=Z,166nm,21.2s,baz=160,slow=33 | | | | | | | |
| **YAK** | **Yakutsk** | **63.50** | **355** | *e*P | **P** | **15** | **31** | **27.9 -0.6** |
| YAK | | | | *e* | | 15 | 32 | 03.9 |
| YAK | | | | *e* | | 15 | 33 | 47.9 |
| YAK | | | | *e*PPP | PPP | 15 | 35 | 15.8 |
| YAK | | | | *e*S | **S** | **15** | **40** | **00.0 0.0** |
| YAK | | | | *e*'SS | **sS** | **15** | **40** | **17.8 +5.8** |
| YAK | | | | *e* | | 15 | 41 | 12.7 |
| YAK | | | | *e*SS | **SS** | **15** | **44** | **08.6 +1.1** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,9.0nm,1.8s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,4.0nm,1.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,71nm,4.4s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,106nm,4.4s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,120nm,6.7s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=E,107nm,7.4s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=N,77nm,3.0s | | | | | | | |
| **YAK** | **Yakutsk** | **63.50** | **355** | P | **P** | **15** | **31** | **28.8 +0.2** |
| YAK | | | | pP | **pP** | **15** | **31** | **35.2 -0.9** |
| YAK | | | | PcP | **PcP** | **15** | **32** | **05.8 +0.8** |
| **WMQ** | **Urumqi** | **63.80** | **321** | *e*P | **P** | **15** | **31** | **32.5 +1.5** |
| WMQ | | | | S | **S** | **15** | **40** | **07.5 +2.9** |
| WMQ | | | | pmax | pmax | | | |
| | comp=N,23nm,1.7s | | | | | | | |
| WMQ | | | | pmax | pmax | | | |
| | comp=N,140nm,3.8s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=N,160nm,12.7s | | | | | | | |
| WMQ | | | | LR | LR | | | |
| | comp=N,75nm,18.3s | | | | | | | |
| **SEY** | **Seymchan** | **64.88** | **7** | *ce*P | **P** | **15** | **31** | **38.5 +0.9** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.7s | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **65.27** | **179** | P | **P** | **15** | **31** | **41.3 +1.3** |
| **DGZ** | **Jazzator, Alta** | **67.00** | **327** | *i* P | **P** | **15** | **31** | **51.9 +0.1** |
| DGZ | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.4s | | | | | | | |
| **ZSN** | **Zaisan** | **67.32** | **324** | *e*P | **P** | **15** | **31** | **53.1 -0.6** |
| | comp=Z,7.1nm,1.0s,baz=324 | | | | | | | |
| **ZSN** | **Zaisan** | **67.32** | **324** | *e*P | **P** | **15** | **31** | **53.0 -0.6** |
| ZSN | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **CASY** | **Casey** | **67.84** | **192** | P | **P** | **15** | **31** | **56.7 +0.2** |
| **CASY** | **Casey** | **67.84** | **192** | P | **P** | **15** | **31** | **57.6 +1.1** |
| **MK31** | **Makanchi Array** | **68.56** | **322** | *ce*P | **P** | **15** | **32** | **02.5 +1.0** |
| **MKAR** | **Makanchi Array** | **68.56** | **322** | P | **P** | **15** | **32** | **01.9 +0.4** |
| | comp=Z,3.4nm,0.8s,baz=112,slow=7.5,SNR=21 | | | | | | | |
| MKAR | | | | S | **S** | **15** | **41** | **02.3 -0.1** |
| | comp=Z,0.3nm,0.8s,baz=1.4,slow=15,SNR=0.9 | | | | | | | |
| | comp=Z,3.4nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.56** | **322** | *i* P | **P** | **15** | **32** | **02.0 +0.5** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **MAKZ** | **Makanchi** | **68.76** | **322** | P | **P** | **15** | **32** | **02.5 -0.2** |
| MAKZ | | | | IAmb | IAmb | 15 | 32 | 10.8 |
| | comp=Z,22nm,1.2s | | | | | | | |
| **MAKZ** | **Makanchi** | **68.76** | **322** | P | **P** | **15** | **32** | **02.5 -0.2** |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.3s | | | | | | | |
| **MAKZ** | **Makanchi** | **68.76** | **322** | P | **P** | **15** | **32** | **03.0 +0.3** |
| MAKZ | | | | pP | **pP** | **15** | **32** | **10.1 -0.2** |
| MAKZ | | | | PcP | **PcP** | **15** | **32** | **29.5 +2.2** |
| **SHLS** | **Shalkode** | **68.85** | **318** | *e*P | **P** | **15** | **32** | **01.3 -2.2** |
| | comp=Z,13nm,1.0s,baz=318 | | | | | | | |
| **SHLS** | **Shalkode** | **68.85** | **318** | *e*P | **P** | **15** | **32** | **01.3 -2.2** |
| SHLS | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **UZB** | **Uzynbulak** | **69.15** | **318** | *e*P | **P** | **15** | **32** | **04.9 -0.5** |
| | comp=Z,16nm,1.1s,baz=317 | | | | | | | |
| **UZB** | **Uzynbulak** | **69.15** | **318** | *e*P | **P** | **15** | **32** | **04.9 -0.5** |
| UZB | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **KPKS** | **Kokpek** | **69.50** | **318** | *e*P | **P** | **15** | **32** | **06.9 -0.5** |
| | comp=Z,14nm,1.2s,baz=318 | | | | | | | |
| **KPKS** | **Kokpek** | **69.50** | **318** | *e*P | **P** | **15** | **32** | **06.9 -0.5** |
| KPKS | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| **ZHN** | **Zhinishke** | **69.55** | **317** | *e*P | **P** | **15** | **32** | **07.3 -0.5** |
| | comp=Z,12nm,1.1s,baz=317 | | | | | | | |
| **ZHN** | **Zhinishke** | **69.55** | **317** | *e*P | **P** | **15** | **32** | **07.3 -0.5** |
| ZHN | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **KSH** | **Kashi** | **69.99** | **313** | P | **P** | **15** | **32** | **12.5 +1.9** |
| KSH | | | | sP | pwP | 15 | 32 | 27.5 +6.5 |
| KSH | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **TDK** | **Taldyqorghan** | **70.28** | **319** | *e*P | **P** | **15** | **32** | **11.7 -0.4** |
| | comp=Z,12nm,1.1s,baz=319 | | | | | | | |
| **TDK** | **Taldyqorghan** | **70.28** | **319** | *e*P | **P** | **15** | **32** | **11.7 -0.4** |
| TDK | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **NIL** | **Nilore** | **70.35** | **306** | P | **P** | **15** | **32** | **12.0 -0.9** |
| NIL | | | | IAmb | IAmb | 15 | 32 | 14.1 |
| | comp=Z,19nm,1.0s | | | | | | | |
| **NIL** | **Nilore** | **70.35** | **306** | P | **P** | **15** | **32** | **12.0 -0.9** |
| NIL | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **NIL** | **Nilore** | **70.35** | **306** | P | **P** | **15** | **32** | **13.1 +0.3** |
| NIL | | | | pP | **pP** | **15** | **32** | **20.3 0.0** |
| **MDOK** | **Medeo** | **70.49** | **317** | *e*P | **P** | **15** | **32** | **13.1 -0.6** |
| | baz=317 | | | | | | | |
| **MDOK** | **Medeo** | **70.49** | **317** | *e*P | **P** | **15** | **32** | **13.0 -0.6** |
| **TNSS** | **Tian-Shan** | **70.52** | **317** | *e*P | **P** | **15** | **32** | **13.4 -0.8** |
| | baz=317 | | | | | | | |
| **TNSS** | **Tian-Shan** | **70.52** | **317** | *e*P | **P** | **15** | **32** | **13.3 -0.8** |
| **AAA** | **Alma-Ata** | **70.60** | **317** | *e*P | **P** | **15** | **32** | **13.8 -0.5** |
| | comp=Z,15nm,1.0s,baz=317 | | | | | | | |
| **AAA** | **Alma-Ata** | **70.60** | **317** | *e*P | **P** | **15** | **32** | **13.7 -0.5** |
| AAA | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| **NRN** | **Naryn** | **70.61** | **315** | P | **P** | **15** | **32** | **13.8 -0.8** |
| NRN | | | | IAmb | IAmb | 15 | 32 | 19.8 |
| | comp=Z,27nm,1.8s | | | | | | | |
| **NRN** | **Naryn** | **70.61** | **315** | P | **P** | **15** | **32** | **13.8 -0.8** |
| NRN | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.62** | **330** | P | **P** | **15** | **32** | **13.6 -0.4** |
| | comp=Z,2.3nm,0.7s,baz=118,slow=4.7,SNR=11 | | | | | | | |
| ZALV | | | | LR | LR | 16 | 02 | 51.1 |
| | comp=Z,119nm,21.8s,baz=108,slow=36 | | | | | | | |
| | comp=Z,2.3nm,0.7s | | | | | | | |
| **SEM** | **Semipalatinsk** | **71.39** | **325** | *e*P | **P** | **15** | **32** | **18.2 -0.9** |
| | baz=325 | | | | | | | |
| **SEM** | **Semipalatinsk** | **71.39** | **325** | *e*P | **P** | **15** | **32** | **18.1 -0.9** |
| **BILL** | **Bilibino** | **71.79** | **11** | ⇓*e*P | **P** | **15** | **32** | **23.1 +2.3** |
| BILL | | | | *i* | | 15 | 35 | 00.2 |
| BILL | | | | *e*PPP | PPP | 15 | 36 | 40.7 |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,38nm,5.7s | | | | | | | |
| BILL | | | | MLR | MLR | | | |

comp=Z,60nm,18.0s
**AAK Ala-Archa 72.07 316 P P 15 32 22.1 -1.2**
AAK IAmb IAmb 15 32 30.7
comp=Z,53nm,1.9s
**AAK Ala-Archa 72.07 316 LR LR** 16 06 39.4
comp=Z,66nm,18.8s,baz=95,slow=38
**AAK Ala-Archa 72.07 316** *ce*P **P 15 32 25.6 +2.4**
AAK pmax pmax
comp=Z,20nm,1.7s
**SGDS Sogindy 72.25 317** *e*P **P 15 32 23.7 -0.5**
baz=316
**SGDS Sogindy 72.25 317** *e*P **P 15 32 23.6 -0.5**
**PPT Papeete 72.34 108** LR LR 16 00 55.5
comp=Z,39nm,21.1s,baz=227,slow=33
**PPT2 Papeete2 72.34 108** *e*LR LR 15 54 25.2
comp=Z,119nm,28.0s
PPT2 *e*LR LR 15 54 36.5
comp=Z,151nm,29.2s
**PPTF Pamatai, Papee 72.35 108** P **P 15 32 24.9 -0.4**
**KURK Kurchatov 72.46 325** P **P 15 32 24.4 -0.7**
KURK IAmb IAmb 15 32 32.9
comp=Z,23nm,1.2s
**KURK Kurchatov 72.46 325** *ce*P **P 15 32 25.4 +0.3**
KURK pmax pmax
comp=Z,31nm,1.7s
**KURBB Kurchatov Arra 72.47 325** P **P 15 32 24.6 -0.6**
comp=Z,4.0nm,0.9s,baz=113,slow=5.8,SNR=28
KURBB LR LR 16 05 30.2
comp=Z,51nm,19.4s,baz=174,slow=37
comp=Z,4.0nm,0.9s
**TBI Tubuai 72.97 114** *e*LR LR 15 54 47.4
comp=Z,2µm,36.8s
**TIXI Tiksi 73.07 357** LR LR 16 01 58.5
comp=Z,120nm,21.1s,baz=190,slow=34
**BTLS Baital 73.17 318** *e*P **P 15 32 29.4 -0.2**
baz=318
**BTLS Baital 73.17 318** *e*P **P 15 32 29.3 -0.2**
**GAR Garm 74.04 311** P **P 15 32 32.7 -2.2**
**CHGR Chuyangaron 74.83 311** P **P 15 32 38.0 -1.5**
CHGR IAmb IAmb 15 32 40.6
comp=Z,27nm,0.8s
**CHGR Chuyangaron 74.83 311** P **P 15 32 38.0 -1.5**
CHGR pmax pmax
comp=Z,27nm,0.8s
**SIMJ Simiganj 74.94 311** P **P 15 32 39.5 -0.7**
**KKAR Karatay Array 75.00 315** P **P 15 32 39.0 -1.2**
**KKAR Karatay Array 75.00 315** P **P 15 32 39.1 -1.2**
KKAR pmax pmax
comp=Z,20nm,1.5s
**BRLS Borolday 75.46 315** *e*P **P 15 32 43.0 +0.1**
baz=315
**BRLS Borolday 75.46 315** *e*P **P 15 32 43.0 +0.1**
**BVAR Borovoye Array 78.05 325** P **P 15 32 57.4 0.0**
comp=Z,9.9nm,0.6s,baz=114,slow=7.1,SNR=66
comp=Z,9.9nm,0.6s
**BRVK Borovoye 78.12 325** P **P 15 32 57.6 -0.1**
**BRVK Borovoye 78.12 325** *ce*P **P 15 32 58.1 +0.4**
BRVK pmax pmax
comp=Z,40nm,1.7s
**KDAK Kodiak Island 79.95 30** LR LR 16 03 26.2
comp=Z,50nm,19.9s,baz=245,slow=32
**N19K Bonanza Creek 80.06 27** P **P 15 33 08.5 +0.2**
**J19K Poorman 80.75 24** IAmb IAmb 15 33 16.0
comp=Z,41nm,1.7s
**H19K Roundabout Mou 81.03 22** P **P 15 33 13.0 -0.2**
**G19K Purcell Mounta 81.04 22** P **P 15 33 13.7 +0.4**
G19K IAmb IAmb 15 33 24.8
comp=Z,26nm,1.3s
**M20K Styx River 81.05 26** IAmb IAmb 15 33 15.9
comp=Z,45nm,1.6s
**F19K Shaleruckik Mo 81.07 21** IAmb IAmb 15 34 29.6
comp=Z,34nm,1.9s
**K20K Telida 81.16 25** IAmb IAmb 15 33 17.3
comp=Z,63nm,1.9s
**J20K Nowinta River 81.42 24** IAmb IAmb 15 33 18.7
comp=Z,68nm,2.0s
**C19K Lookout Ridge 81.46 19** IAmb IAmb 15 33 24.6
comp=Z,30nm,1.2s
**E19K Redstone River 81.53 21** P **P 15 33 15.9 0.0**
E19K IAmb IAmb 15 33 27.3
comp=Z,18nm,0.9s
**F20K Avaraart Lake 81.90 21** P **P 15 33 19.0 +1.2**
**H21K Melozitna Rive 82.48 23** IAmb IAmb 15 33 23.9
comp=Z,48nm,2.0s
**I21K Tanana 82.64 23** IAmb IAmb 15 33 25.1
comp=Z,37nm,1.8s
**BPAW Bear Paw Mtn. 82.70 25** IAmb IAmb 15 33 25.3
comp=Z,47nm,2.0s
**PWL Port Wells 82.94 28** P **P 15 33 23.1 -0.3**
PWL IAmb IAmb 15 33 31.2
comp=Z,20nm,1.1s
**KNK Knik Glacier 83.03 28** IAmb IAmb 15 33 32.4
comp=Z,28nm,1.1s
**SML Sawmill 83.19 27** IAmb IAmb 15 33 32.7
comp=Z,31nm,1.2s
**RND Reindeer 83.40 26** IAmb IAmb 15 33 29.8
comp=Z,38nm,1.6s
**ABKAR Akbulak array 83.53 320** IAmb IAmb 15 33 34.5
comp=Z,28nm,1.4s
**NEA2 Nenana 83.65 24** IAmb IAmb 15 34 08.7
comp=Z,32nm,2.0s
**SCM Sheep Creek Mo 83.66 27** P **P 15 33 27.6 +0.4**
SCM IAmb IAmb 15 33 34.9
comp=Z,34nm,1.3s
**SCM Sheep Creek Mo 83.66 27** P **P 15 33 27.6 +0.4**
SCM pmax pmax
comp=Z,34nm,1.3s
**I23K Minto, Yukon-K 83.69 24** IAmb IAmb 15 33 31.3
comp=Z,42nm,1.8s
**H23K Yukon River 83.81 23** IAmb IAmb 15 33 39.5
comp=Z,25nm,1.8s
**DHY Denali Highway 83.96 26** IAmb IAmb 15 33 31.1
comp=Z,25nm,1.4s
**WRH Wood River Hil 84.02 25** IAmb IAmb 15 33 29.5
comp=Z,30nm,1.6s
**CCB Clear Creek Bu 84.19 25** P **P 15 33 28.5 -1.2**
**COLA College 84.23 24** P **P 15 33 28.2 -1.7**
COLA pmax pmax
comp=Z,12nm,1.7s
**KLU Klutina 84.23 28** IAmb IAmb 15 33 31.9
comp=Z,24nm,1.3s
**E23K Chandalar 84.45 21** P **P 15 33 30.6 -0.5**
E23K IAmb IAmb 15 33 41.0
comp=Z,25nm,1.2s
**SVE Sverdlovsk 84.46 327** *e*P **P 15 33 31.4 +0.2**
SVE pmax pmax
comp=Z,35nm,1.5s
**ILAR Eielson Array 84.60 25** P **P 15 33 31.0 -0.8**
comp=Z,1.7nm,1.0s,baz=262,slow=4.4,SNR=8.9
ILAR LR LR 16 10 35.0
comp=Z,35nm,18.3s,baz=258,slow=35
comp=Z,1.7nm,1.0s
**G24K Hadweenzic Riv 84.86 23** P **P 15 33 32.9 -0.2**
G24K IAmb IAmb 15 33 43.1
comp=Z,16nm,1.4s
**AKTO Aktyubinsk 84.94 321** P **P 15 33 34.0 +0.2**
comp=Z,2.3nm,0.7s,baz=89,slow=6.0,SNR=11
AKTO LR LR 16 14 01.0
comp=Z,62nm,19.7s,baz=225,slow=38
comp=Z,2.3nm,0.7s
**J25K Salcha River, 85.19 25** P **P 15 33 32.9 -1.9**
J25K IAmb IAmb 15 33 35.7
comp=Z,18nm,1.6s
**GLB Gilahina Butte 85.21 28** IAmb IAmb 15 33 43.8
comp=Z,23nm,1.2s
**ARU Arti 85.52 327** P **P 15 33 35.7 -0.9**
ARU IAmb IAmb 15 33 44.3
comp=Z,18nm,1.3s
**ARU Arti 85.52 327** P **P 15 33 36.4 -0.2**
comp=Z,1.7nm,0.4s,baz=128,slow=19,SNR=8.1
comp=Z,1.7nm,0.4s
**ARU Arti 85.52 327** *c i*P **P 15 33 37.7 +1.1**
ARU 15 36 51.2
ARU S **S 15 44 02.4 -4.1**
ARU SS **SS 15 49 46.0 +3.7**
ARU pmax pmax
comp=Z,22nm,1.7s
**ARU Arti 85.52 327** P **P 15 33 36.1 -0.5**
comp=Z,14nm,1.2s
**TGL Tana Glacier 85.55 29** IAmb IAmb 15 33 45.1
comp=Z,27nm,1.2s
**FYU Fort Yukon 85.70 23** P **P 15 33 37.9 +0.6**
**F25K Christian Rive 85.78 22** IAmb IAmb 15 33 40.4
comp=Z,26nm,1.6s
**GRNC Granite Creek 86.06 29** P **P 15 33 38.1 -1.4**
GRNC IAmb IAmb 15 33 51.9
comp=Z,21nm,1.2s

**M27K Edge Creek, AK 86.28 27** IAmb IAmb 15 33 49.0
comp=Z,25nm,1.4s
**F26K Sheenjek River 86.36 22** P **P 15 33 41.3 +0.8**
**LOGN Logan Glacier 86.44 29** IAmb IAmb 15 33 49.8
comp=Z,17nm,1.1s
**K27K Chicken 86.48 26** IAmb IAmb 15 33 44.1
comp=Z,32nm,1.6s
**EGAK Eagle 87.00 25** IAmb IAmb 15 33 52.1
comp=Z,20nm,1.4s
**G27K Doyon Strip 87.14 23** P **P 15 33 43.5 -0.9**
G27K IAmb IAmb 15 33 48.2
comp=Z,30nm,2.0s
**E27K Coleen River 87.40 22** IAmb IAmb 15 37 07.3
comp=Z,18nm,0.9s
**O29M Mount Kennedy 87.56 30** IAmb IAmb 15 33 55.6
comp=Z,17nm,1.3s
**I28M Miner Creek 87.61 24** P **P 15 33 47.7 +0.9**
**DAWY Dawson 87.65 26** IAmb IAmb 15 33 56.3
comp=Z,15nm,1.1s
**M29M Somme Creek 87.86 28** P **P 15 33 47.6 -0.4**
**P29M Windy Craggy 87.90 30** IAmb IAmb 15 33 57.1
comp=Z,15nm,1.1s
**N30M Aishikik Lake 88.40 29** P **P 15 33 51.0 +0.4**
N30M IAmb IAmb 15 33 53.0
comp=Z,28nm,1.6s
**G29M Pine Creek 88.58 23** IAmb IAmb 15 33 59.6
comp=Z,17nm,1.2s
**M30M Minto, Yukon 88.65 27** P **P 15 33 52.2 +0.5**
M30M IAmb IAmb 15 33 54.1
comp=Z,23nm,1.8s
**QSPA South Pole Qui 88.66 180** P **P 15 33 51.2 -0.6**
QSPA IAmb IAmb 15 33 55.2
comp=Z,19nm,1.5s
**QSPA South Pole Qui 88.66 180** P **P 15 33 52.0 +0.2**
comp=Z,6.8nm,1.1s,baz=346,slow=3.0,SNR=8.9
QSPA LR LR 16 12 40.7
comp=Z,222nm,21.8s,baz=4.5,slow=35
comp=Z,6.8nm,1.1s
**O30N Mendenhall 88.83 29** IAmb IAmb 15 33 55.6
comp=Z,27nm,1.6s
**J30M Hart River 89.03 25** IAmb IAmb 15 33 56.8
comp=Z,23nm,1.3s
**I30M Mount Dempster 89.07 25** P **P 15 33 54.1 +0.4**
I30M IAmb IAmb 15 33 56.5
comp=Z,23nm,1.7s
**G30M tAoh Zraii Nji 89.29 23** IAmb IAmb 15 34 04.2
comp=Z,12nm,1.1s
**WHY Whitehorse 89.41 29** IAmb IAmb 15 33 57.6
comp=Z,23nm,1.5s
**M31M Drury Creek, Y 89.74 28** P **P 15 33 55.8 -0.9**
M31M IAmb IAmb 15 33 59.4
comp=Z,19nm,1.8s
**FARO Faro, Yukon 90.23 28** IAmb IAmb 15 34 07.4
comp=Z,12nm,1.3s
**N32M Quiet Lake 90.31 29** IAmb IAmb 15 34 08.7
comp=Z,18nm,1.2s
**R33M Jennings River 91.33 31** P **P 15 34 03.9 -0.5**
R33M IAmb IAmb 15 34 06.5
comp=Z,19nm,1.6s
**GRNB Grenville Isla 91.90 36** IAmb IAmb 15 34 11.7
comp=Z,15nm,1.2s
**GNI Garni 93.73 310** LR LR 16 20 47.0
comp=Z,18nm,21.0s,baz=76,slow=38
**KBZ Khabaz 94.97 314** LR LR 16 22 47.7
comp=Z,30nm,19.1s,baz=56,slow=39
**KIV Kislovodsk 95.11 314** *e*P **P 15 34 21.3 -0.8**
KIV pmax pmax
comp=Z,5.0nm,1.1s
**VRH Novokhopyorsk 95.28 321** *e*P **P 15 34 20.6 -1.9**
VRH pmax pmax
comp=Z,19nm,1.8s
**ELIB Princess Elisa 96.42 196** *d*P **P 15 34 30.4 +2.8**
**VORR Voronezh 96.80 322** *e*P **P 15 34 29.4 -0.1**
VORR pmax pmax
comp=Z,16nm,1.7s
**O02D Mt. Diablo Mer 97.44 50** P Pdif 15 34 33.7 +0.9
**YKA Yellowknife Ar 98.86 27** P Pdif 15 34 38.7 +0.2
comp=Z,0.5nm,0.8s,baz=297,slow=6.7,SNR=3.7
comp=Z,0.5nm,0.8s
**FURI Furi 99.95 279** LR LR 16 19 44.3
comp=Z,64nm,19.3s,baz=106,slow=35
**NVL N'lazarevskaya 100.21 196** *e*P **Pdif 15 34 46.4 +2.0**
NVL pmax pmax
comp=Z,5.0nm,0.9s
NVL MLR MLR
comp=Z,137nm,18.0s
**NVAR Mina Array Bea 101.08 51** P **Pdif 15 34 50.2 +0.9**
comp=Z,0.1nm,0.4s,baz=261,slow=4.5,SNR=2.1
**BRTR Keskin Array B 102.27 310** PP **PP 15 39 08.2 +1.5**
comp=Z,0.3nm,0.6s,baz=69,slow=13,SNR=1.6
**BRG Berggiesshubel 112.14 326** *e*PKP **PKiKP 15 39 38.1 +3.9**
BRG Amp 15 39 39.4
comp=Z,5.7nm,1.0s
**BRG Berggiesshubel 112.14 326** P PKiKP 15 39 43.1 +8.9
BRG Amp 15 39 44.0
comp=Z,6.1nm,1.0s
**BRG Berggiesshubel 112.14 326** *e*PKIKP **PKiKP 15 39 38.1 +3.9**
BRG pmax pmax
comp=Z,6.0nm,1.0s
**CLL Collm 112.46 326** *e*PKIKP **PKiKP 15 39 38.0 +3.2**
CLL *e* 15 40 19.0
**S39A Bolivar 120.20 46 PKPdf 15 39 49.2 -0.9**
**HODGE Hodges 129.74 45** PKPpre 15 39 53.3
**JSC Jenkinsville 130.41 44** PKPpre 15 39 54.8
**JSC Jenkinsville 130.41 44** PKHKP PKPpre 15 39 54.8
**BO02 Sierra Bellavi 134.81 145 PKPdf 15 40 15.5 -2.7**
**TORD Torodi Ar. Bea 135.69 288** PKP **PKPdf 15 40 20.3 +0.1**
comp=Z,0.5nm,0.7s,baz=72,slow=1.6,SNR=2.6
**ROSC El Rosal 146.99 83** PKPbc **PKPab 15 40 44.3 -0.1**
comp=Z,10.0nm,0.4s,baz=336,slow=10.0,SNR=4.6
**LPAZ La Paz 148.40 125** PKPbc **PKPbc 15 40 47.7 +0.8**
comp=Z,5.0nm,1.0s,baz=232,slow=2.1,SNR=8.7
**CPUP Villa Florida 148.56 152** PKPbc **PKPbc 15 40 46.9 +0.6**
comp=Z,3.1nm,0.8s,baz=248,slow=10,SNR=4.3
**SDV Santo Domingo 149.98 74 PKPdf 15 40 45.4 -0.2**
**PDPR Patillas Dam, 150.69 54** PKPdf **PKPdf 15 40 43.4 -2.9**
PDPR **pPKPdf 15 40 54.8 +0.1**

*IDC **30** 15:22:01.1±1.0,22.°04S×169.°86E, h0km, mb4.3/6, mbtmp4.3/6, MS4.0/1, Error ellipse: s-maj=36.5km s-min=27.8km az=79.0*
*NEIC **30** 15:22:04.2±2.0,22.°2S±0.°1×169.°72E±0.°05, h10km±1km, mb4.6/12, Error ellipse: s-maj=26.0km s-min=4.0km az=346.0*
**ISC 30 15:22:05.5±0.6, 22.°2S±0.°1×169.°72E±0.°09, h25km, n33, σ0$98/32, mb4.6/12, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| ONTNC | Ouen Toro | 3.03 | 267 | | | Pn | 15 22 51.0 | -0.9 |
| KOUNC | Koumac, New Ca | 5.31 | 286 | | | Pn | 15 23 22.9 | -0.4 |
| MSVF | Nonsavu | 8.98 | 62 | | | Pn | 15 24 13.6 | -0.2 |
| MSVF | Nonsavu | 8.98 | 62 | LR | | LR | 15 26 51.1 | |
| | comp=Z,948nm,18.0s,baz=227,slow=33 | | | | | | | |
| RTZ | Ruatahuna | 17.55 | 161 | | | Pn | 15 26 08.3 | -0.2 |
| RTZ | | | | IAmb | IAmb | | 15 26 42.7 | |
| | comp=Z,51nm,1.4s | | | | | | | |
| BKZ | Black Stump Fm | 17.92 | 163 | P | | Pn | 15 26 13.2 | +0.2 |
| MRZ | Mangatainoka R | 19.11 | 166 | P | | P | 15 26 25.3 | -1.2 |
| BFZ | Birch Farm | 19.28 | 165 | P | | P | 15 26 28.1 | -0.3 |
| BFZ | | | | IAmb | IAmb | | 15 26 55.9 | |
| | comp=Z,41nm,1.2s | | | | | | | |
| CTAO | Charters Tower | 21.98 | 271 | P | | P | 15 26 58.4 | +0.6 |
| CTAO | | | | IAmb | IAmb | | 15 27 01.2 | |
| | comp=Z,17nm,0.9s | | | | | | | |
| CAN | Canberra | 22.35 | 230 | P | | P | 15 27 01.6 | -0.1 |
| CAN | | | | IAmb | IAmb | | 15 27 06.7 | |
| | comp=Z,33nm,1.2s | | | | | | | |
| MGBR | Mount Gambier | 29.49 | 232 | P | | P | 15 28 08.4 | +0.7 |
| ASAR | Alice Springs | 32.97 | 260 | P | | P | 15 28 38.8 | +0.2 |
| | comp=Z,2.2nm,0.7s,baz=81,slow=9.1,SNR=3.8 | | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| WRAB | Tennant Creek | 33.04 | 267 | P | | P | 15 28 41.4 | +2.2 |
| WRA | Warramunga Arr | 33.05 | 267 | P | | P | 15 28 38.6 | -0.6 |
| | comp=Z,2.3nm,0.6s,baz=97,slow=8.4,SNR=5.6 | | | | | | | |
| | comp=Z,2.3nm,0.6s | | | | | | | |
| FORT | Forrest | 38.09 | 248 | P | | P | 15 29 22.7 | +0.3 |
| MBWA | Marble Bar | 46.30 | 261 | P | | P | 15 30 28.2 | -1.2 |
| NWAO | Narrogin (SRO) | 47.34 | 245 | P | | P | 15 30 36.6 | -0.9 |
| SBA | Scott Base | 55.77 | 181 | P | | P | 15 31 40.5 | +0.7 |
| SBA | | | | IAmb | IAmb | | 15 31 42.7 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| QSPA | South Pole Qui | 67.91 | 180 | P | | P | 15 33 02.4 | +0.4 |
| QSPA | | | | IAmb | IAmb | | 15 33 07.9 | |
| | comp=Z,8.1nm,1.0s | | | | | | | |
| QSPA | South Pole Qui | 67.91 | 180 | P | | P | 15 33 02.3 | +0.4 |
| | comp=Z,7.2nm,1.1s,baz=355,slow=1.5,SNR=11 | | | | | | | |
| | comp=Z,7.2nm,1.1s | | | | | | | |
| PETK | Petropavlovsk- | 75.67 | 353 | P | | P | 15 33 46.9 | -1.5 |
| | comp=Z,2.5nm,0.9s,baz=129,slow=4.2,SNR=5.8 | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | |
| CMAR | Chiang Mai Arr | 80.11 | 295 | P | | P | 15 34 15.0 | +1.2 |
| | comp=Z,2.0nm,0.9s,baz=141,slow=4.0,SNR=8.1 | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| TROLL | Troll, Antarti | 85.67 | 184 | ⇑P | | P | 15 34 41.5 | -0.4 |
| | comp=Z,214nm,0.7s | | | | | | | |
| SNAA | Sanae | 86.28 | 182 | ⇑P | | P | 15 34 44.9 | 0.0 |
| | comp=Z,39nm,0.6s | | | | | | | |
| SNAA | Sanae | 86.28 | 182 | P | | P | 15 34 44.8 | 0.0 |
| | comp=Z,3.1nm,0.9s,baz=198,slow=11,SNR=5.4 | | | | | | | |
| | comp=Z,3.1nm,0.9s | | | | | | | |
| VNA3 | Neumayer Olymp | 86.85 | 180 | ⇑P | | P | 15 34 47.4 | -0.2 |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| VNA2 | Neumayer--Watz | 87.15 | 181 | ⇑P | | P | 15 34 49.0 | 0.0 |
| | comp=Z,5.2nm,0.6s,baz=173,slow=4.9 | | | | | | | |
| VNA1 | Neumayer--Stat | 87.44 | 181 | ⇑P | | P | 15 34 49.6 | -0.8 |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| EKA | Eskdalemuir Ar | 146.44 | 353 | PKPbc | | PKPdf | 15 41 42.2 | -0.6 |
| | comp=Z,3.3nm,0.6s,baz=345,slow=2.4,SNR=12 | | | | | | | |
| ZVC | Zvikov | 146.60 | 331 | *e*PKP | | PKPdf | 15 41 44.5 | +1.3 |
| ZVC | | | | *ex* | | x | 15 41 50.0 | |
| CKRC | Cesky Krumlov | 146.98 | 330 | *e*PKP | | PKPdf | 15 41 45.5 | +1.6 |
| CKRC | | | | *ex* | | x | 15 41 52.0 | |
| KHC | Kasperske Hory | 147.10 | 331 | *e*PKP | | PKPdf | 15 41 46.0 | +1.9 |
| KHC | | | | *ex* | | x | 15 41 51.2 | |
| GERES | GERESS Array B | 147.25 | 330 | PKPbc | | PKPdf | 15 41 46.2 | +1.8 |
| | comp=Z,3.1nm,0.8s,baz=35,slow=3.6,SNR=9.9 | | | | | | | |

**NOU 30 15:31:21.9, 22.°34S×171.°90E, h0km, mb3.7/6, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| MARNC | Mare, Loyalty | 3.69 | 283 | P | | Pn | 15 32 20.3 | 0.0 |
| PINNC | Pines Island, | 4.13 | 265 | P | | Pn | 15 32 25.9 | -0.3 |
| YATNC | Mamie plateau, | 4.65 | 273 | P | | Pn | 15 32 32.6 | -0.8 |
| ONTNC | Ouen Toro | 5.04 | 269 | P | | Pn | 15 32 39.6 | +0.8 |
| DZM | Mont Dzumac | 5.06 | 272 | P | | Pn | 15 32 39.3 | +0.1 |
| NOUC | Port Laguerre | 5.19 | 272 | P | | Pn | 15 32 40.6 | -0.3 |

*JMA **30** 15:38:13.3±0.3, 40.°9N±0.°4×143.°2E±0.°8, h8km±4km, MD4.2/38, MV4.5/38, E OFF AOMORI PREF*
*JMA Felt I J1 at E OFF AOMORI PREF .*
*NIED **30** 15:38:13.3, 40.°88N×143.°15E, h8km, MW4.1, Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁵Nm; Mrr0.67; Mθθ-0.30; Mφφ-0.38; Mrθ0.11; Mθφ-0.86; Mφr0.90; Fault plane solution: M₀1.37000×10¹⁵ NP1:φs14.00000°, δ72.00000°, λ,57.00000°. NP2:φs258.00000°, δ37.00000°, λ148.00000°.*
*MOS **30** 15:38:15.1±0.9, 40.°97N×143.°17E, h41km, mb4.5/15 Error ellipse: s-maj=9.6km s-min=6.5km az=97.2*
*NEIC **30** 15:38:16.2±2.2, 40.°93N±0.°05×143.°15E±0.°09, h39km±6km, mb4.5/59, Error ellipse: s-maj=10.0km s-min=6.1km az=114.0*
*IDC **30** 15:38:17.5±1.8, 40.°92N×143.°18E, h45km±14km, mb3.9/16, mbtmp4.1/22, ML3.6/6, MS3.9/9, Error ellipse: s-maj=21.2km s-min=10.9km az=96.0*
**ISC 30 15:38:15.2±1.4, 40.°88N±0.°04×143.°27E±0.°05, h33km±4km, n178, σ1$37/181, mb4.4/59, MS4.0/11, 9C-4D, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| ERM | Erimo | 1.14 | 356 | P | | Pn | 15 38 34.8 | 0.0 |
| ERM | Erimo | 1.14 | 356 | | | Pn | 15 38 34.4 | -0.5 |
| ERM | | | | Sn | | Sn | 15 38 48.3 | -1.1 |
| ERM | Erimo | 1.14 | 356 | *ce*P | | Pn | 15 38 33.9 | -0.9 |
| ERM | | | | pmax | pmax | | | |
| | comp=Z,276nm,0.7s | | | | | | | |
| JEM | Erimo | 1.14 | 356 | P | | Pn | 15 38 34.8 | 0.0 |
| JEM | Erimo | 1.14 | 356 | *i* P | | Pn | 15 38 34.6 | -0.2 |
| JEM | | | | S | | Sn | 15 38 49.7 | +0.4 |
| JKEN | Kujiedanarisaw | 1.36 | 241 | *i* P | | Pn | 15 38 37.0 | -0.9 |
| JKEN | | | | S | | Sn | 15 38 53.8 | -1.0 |
| JTH | Tanohata | 1.42 | 229 | P | | Pn | 15 38 38.3 | -0.4 |
| JTH | | | | S | | Sn | 15 38 56.6 | +0.4 |
| JANG | Nango | 1.42 | 250 | *i* P | | Pn | 15 38 38.1 | -0.6 |
| JANG | | | | *e*S | | Sn | 15 38 57.4 | +1.0 |
| JARK | Aomorirokkasho | 1.45 | 276 | *i* P | | Pn | 15 38 38.1 | -0.9 |
| JARK | | | | S | | Sn | 15 38 56.0 | -0.8 |
| JNBK | Urakawa-nobuka | 1.46 | 345 | *i* P | | Pn | 15 38 39.2 | +0.1 |
| JNBK | | | | S | | Sn | 15 38 58.3 | +1.2 |
| JNBK | Urakawa-nobuka | 1.46 | 345 | A | | A | 15 38 39.2 | |
| | comp=E,6.0nm,0.5s,comp=N,5.0nm,2.0s | | | | | | | |
| JAHD | Aomorihigashid | 1.51 | 286 | A | | A | 15 38 39.3 | |
| | comp=E,8.0nm,0.6s,comp=N,13nm,0.5s | | | | | | | |
| JTM | Tenmabayashi | 1.67 | 268 | P | | Pn | 15 38 42.3 | +0.2 |
| JTM | Tenmabayashi | 1.67 | 268 | | | Pn | 15 38 41.6 | -0.5 |
| JTM | | | | Sn | | Sn | 15 39 01.7 | -0.6 |
| JTM | Tenmabayashi | 1.67 | 268 | *e*P | | Pn | 15 38 41.9 | -0.2 |
| JTM | | | | *e*S | | Sn | 15 39 02.6 | +0.2 |
| JTM | Tenmabayashi | 1.67 | 268 | A | | A | 15 38 41.9 | |
| | comp=E,3.0nm,1.2s,comp=N,3.0nm,1.6s | | | | | | | |
| JCH | Churui | 1.74 | 2 | P | | Pn | 15 38 43.3 | +0.3 |
| JCH | | | | *e*S | | Sn | 15 39 03.9 | -0.2 |
| JOT | Ohata | 1.75 | 288 | *i* P | | Pn | 15 38 42.9 | -0.3 |
| JOT | | | | S | | Sn | 15 39 03.7 | -0.6 |
| JOT | Ohata | 1.75 | 288 | A | | A | 15 38 42.9 | |
| | comp=E,3.0nm,0.6s,comp=N,3.0nm,1.0s | | | | | | | |
| JKB | Kayabe | 1.96 | 302 | *e*P | | Pn | 15 38 45.8 | -0.3 |
| JKB | | | | *e*S | | Sn | 15 39 09.3 | -0.2 |
| JIAM | Iburiatsuma | 2.02 | 330 | *e*P | | Pn | 15 38 48.8 | +1.9 |
| JIAM | Iburiatsuma | 2.02 | 330 | A | | A | 15 38 48.8 | |
| | comp=E,8.0nm,1.3s,comp=N,10.0nm,0.4s | | | | | | | |
| JBT2 | Biratori 2 | 2.02 | 341 | P | | Pn | 15 38 47.7 | +0.8 |
| JOM | Ohasama | 2.06 | 228 | P | | Pn | 15 38 48.4 | +0.9 |
| JOM | Ohasama | 2.06 | 228 | A | | A | 15 38 48.4 | |
| | comp=E,3.0nm,0.6s,comp=N,4.0nm,0.6s | | | | | | | |
| JAK | Akkeshi | 2.37 | 26 | P | | Pn | 15 38 51.9 | +0.1 |
| JEW | Eniwo | 2.39 | 326 | P | | Pn | 15 38 53.2 | +1.3 |
| JEW | Eniwo | 2.39 | 326 | A | | A | 15 38 53.2 | |
| | comp=E,5.0nm,0.8s,comp=N,5.0nm,1.1s | | | | | | | |
| JAR | Ashorobuto | 2.45 | 9 | *i* P | | Pn | 15 38 52.6 | -0.2 |
| JMK | Ichinoseki | 2.48 | 220 | *i* P | | Pn | 15 38 54.7 | +1.4 |
| JOMM | Oshimamatsumae | 2.54 | 286 | P | | Pn | 15 38 55.0 | +0.9 |
| JKA | Kamikawa-asahi | 3.28 | 352 | | | Pn | 15 39 04.9 | +0.8 |
| ASAJ | Asahikawa | 3.28 | 352 | P | | Pn | 15 39 05.7 | +1.5 |
| | comp=N,7.4nm,0.3s,baz=203,slow=15,SNR=96 | | | | | | | |
| ASAJ | | | | S | | Sn | 15 39 42.9 | +0.9 |
| | comp=N,82nm,0.5s,baz=301,slow=25,SNR=6.0 | | | | | | | |
| | comp=N,15nm,0.2s | | | | | | | |
| JMM | Marumori | 3.56 | 213 | P | | Pn | 15 39 08.9 | +0.8 |
| JMM | Marumori | 3.56 | 213 | Pn | | Pn | 15 39 08.4 | +0.3 |
| JMM | | | | Sn | | Sn | 15 39 48.1 | -1.0 |
| YUK | Yuzh-Kuril'sk | 3.69 | 30 | *d i* P | | Pn | 15 39 10.0 | +0.1 |
| YUK | | | | *i* S | | Sn | 15 39 50.9 | -1.4 |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,239nm,0.2s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=E,70nm,0.1s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=N,1µm,0.4s | | | | | | | |
| YUK | | | | smax | smax | | | |
| | comp=E,679nm,0.4s | | | | | | | |
| SHO | Shikotan | 3.99 | 40 | *e*P | | Pn | 15 39 14.4 | +0.4 |
| SHO | | | | *i* S | | Sn | 15 39 56.0 | -3.6 |
| SHO | | | | pmax | pmax | | | |
| | comp=Z,36nm,0.2s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=E,329nm,0.3s | | | | | | | |
| SHO | | | | smax | smax | | | |
| | comp=N,145nm,0.2s | | | | | | | |
| JSD | Sado | 4.80 | 235 | P | | Pn | 15 39 26.8 | +1.7 |
| JSD | Sado | 4.80 | 235 | Pn | | Pn | 15 39 26.1 | +0.9 |
| KUR | Kuril'sk | 5.51 | 36 | *i* P | | Pn | 15 39 37.4 | +2.6 |
| MAJO | Matsushiro | 5.86 | 224 | P | | Pn | 15 39 42.1 | +2.3 |
| MAJO | Matsushiro | 5.86 | 224 | Pn | | Pn | 15 39 41.6 | +1.9 |
| MAJO | Matsushiro | 5.86 | 224 | *i* P | | Pn | 15 39 41.9 | +2.1 |
| MJAR | Matsushiro Arr | 5.86 | 224 | P | | Pn | 15 39 41.9 | +2.1 |
| | comp=N,0.4nm,0.3s,baz=30,slow=14,SNR=28 | | | | | | | |
| | comp=N,4.7nm,0.5s | | | | | | | |
| YSS | Yuzh-Sakhalins | 6.09 | 357 | Pn | | Pn | 15 39 43.5 | +0.7 |
| YSS | Yuzh-Sakhalins | 6.09 | 357 | *e*P | | Pn | 15 39 50.9 | +8.1 |
| YSS | | | | *e*S | | Sn | 15 40 51.7 | +0.5 |

YSS pmax pmax
comp=Z,10.0nm,0.5s
YSS smax smax
comp=N,10.0nm,1.4s
YSS smax smax
comp=E,10.0nm,0.8s
**JGF Kuroka 7.02 223** P **Pn** **15 39 58.7 +3.0**
**JGF Kuroka 7.02 223** **Pn** **15 39 58.4 +2.7**
**INU Inuyama 7.39 224** Pn **Pn** **15 40 03.2 +2.5**
**JHJ2 Mitsune 8.22 201** P **Pn** **15 40 13.9 +1.7**
**JHJ2 Mitsune 8.22 201** Pn **Pn** **15 40 12.5 +0.4**
**JHJ Hachijo jima 2 8.23 201** P **Pn** **15 40 13.3 +1.1**
comp=E,12nm,0.3s,baz=280,slow=23,SNR=9.0
JHJ S **Sn** **15 41 38.9 -5.1**
comp=E,101nm,0.8s,baz=278,slow=22,SNR=2.4
comp=E,30nm,0.3s
**USA0B Ussuriysk Arra 8.96 295** *i* P **Pn** **15 40 21.6 -0.6**
**USRK Ussuriysk Ar. 8.96 295** P **Pn** **15 40 23.8 +1.6**
comp=E,1.0nm,0.3s,baz=101,slow=15,SNR=23
comp=E,9.9nm,0.6s
**JMN Monobe 10.33 229** Pn **Pn** **15 40 40.1 -1.0**
**MDJ Mudanjiang 10.73 295** Pn **Pn** **15 40 48.1 +1.7**
**KLR Kul'dur 11.65 320** P **Pn** **15 41 01.0 +1.9**
comp=E,0.1nm,0.3s,baz=121,slow=14,SNR=4.6
comp=E,1.7nm,0.7s
**KLR Kul'dur 11.65 320** *e*P **Pn** **15 40 59.4 +0.3**
KLR pmax pmax
comp=Z,9.0nm,1.3s
**KSRS Korea Array 12.39 259** P **Pn** **15 41 11.9 +2.8**
comp=Z,0.3nm,0.3s,baz=64,slow=14,SNR=6.0
comp=Z,1.0nm,0.5s
**BNX BinXian 12.53 298** ⇓P **Pn** **15 41 12.0 +1.0**
BNX pmax pmax
comp=Z,13nm,0.8s
**JNU Nakatsue 12.56 236** Pn **Pn** **15 41 11.4 -0.1**
**HEH HeiHe 14.51 316** *e*P **P** **15 41 43.5 -0.7**
HEH pmax pmax
comp=Z,3.0nm,1.1s
**ZEA Zeya 16.79 325** *e*P **Pn** **15 42 04.8 -2.7**
ZEA pmax pmax
comp=Z,10.0nm,1.2s
**TIA Tai'an 20.94 266** P **P** **15 42 54.8 -0.3**
TIA pmax pmax
comp=Z,16nm,0.7s
**YAK Yakutsk 22.72 343** P **P** **15 43 09.2 -4.7**
YAK IAmb IAmb 15 43 11.9
comp=Z,14nm,0.8s
**YAK Yakutsk 22.72 343** *e*P **P** **15 43 09.4 -4.5**
YAK pmax pmax
comp=Z,13nm,0.9s
YAK pmax pmax
comp=N,7.0nm,1.3s
YAK pmax pmax
comp=E,5.0nm,1.7s
**HHC Hu-ho-hao-te 23.91 280** *e*P **P** **15 43 24.5 -1.6**
HHC pmax pmax
comp=Z,15nm,0.6s
HHC pmax pmax
comp=Z,49nm,3.6s
**NACB Ninganchiao 24.62 234** P **P** **15 43 33.1 +0.6**
NACB IAmb IAmb 15 43 46.2
comp=Z,19nm,0.9s
**YULB Yu-li 25.38 233** P **P** **15 43 38.1 -1.3**
YULB IAmb IAmb 15 44 04.3
comp=Z,26nm,1.5s
**ULN Ulaanbaatar 26.63 297** *ce*P **P** **15 43 47.5 -3.2**
ULN pmax pmax
comp=Z,5.0nm,1.7s
**H11N2 WAKE ISLAND Hy 29.17 129** T T 16 15 06.4
baz=322,slow=75,SNR=110
**H11N1 WAKE ISLAND Hy 29.18 129** T T 16 15 07.6
baz=322,slow=75,SNR=70
**H11N3 WAKE ISLAND Hy 29.18 129** T T 16 15 06.7
baz=322,slow=75,SNR=87
**ZAK Zakamensk 29.22 303** *e*P **P** **15 44 13.0 -0.8**
ZAK pmax pmax
comp=Z,3.0nm,1.1s
**BILL Bilibino 29.94 17** *de* *e* P **P** **15 44 20.3 +0.5**
BILL 15 45 24.0
BILL pmax pmax
comp=Z,6.0nm,1.2s
BILL MLR MLR
comp=Z,44nm,16.0s
**H11S1 WAKE ISLAND Hy 30.01 131** T T 16 16 01.7
baz=324,slow=74
**H11S3 WAKE ISLAND Hy 30.02 131** T T 16 16 03.5
baz=324
**H11S2 WAKE ISLAND Hy 30.03 131** T T 16 16 07.8
baz=324,slow=74
**PZH PanZhiHua 37.05 260** P **P** **15 45 22.8 +0.6**
PZH pmax pmax
comp=Z,7.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,4.7s
**DGZ Jazzator, Alta 39.44 302** *e*P **P** **15 45 42.3 +0.2**
DGZ pmax pmax
comp=Z,6.0nm,0.7s
**L16K Owhat River 39.78 39** P **P** **15 45 43.7 -0.8**
L16K IAmb IAmb 15 46 26.9
comp=Z,11nm,1.2s
**C18K Utukok River 40.20 28** P **P** **15 45 46.6 -1.5**
C18K IAmb IAmb 15 46 24.7
comp=Z,13nm,1.4s
**ZALV Zalesovo Beam 40.50 309** P **P** **15 45 50.9 +0.3**
comp=Z,4.4nm,0.7s,baz=77,slow=8.7,SNR=12
ZALV PcP **PcP** **15 47 53.0 +0.3**
comp=Z,0.7nm,0.4s,baz=103,slow=4.7,SNR=2.7
comp=Z,4.4nm,0.7s
**WMQ Urumqi 40.52 293** *e*P **P** **15 45 52.0 +0.9**
WMQ pmax pmax
comp=Z,13nm,0.9s
WMQ LR LR
comp=N,160nm,14.3s
WMQ LR LR
comp=Z,79nm,18.3s
**G18K Tagagawik 40.62 32** P **P** **15 45 50.5 -1.0**
G18K IAmb IAmb 15 46 22.6
comp=Z,8.1nm,1.4s
**H18K Honhosa River 40.63 34** P **P** **15 45 50.2 -1.5**
**E19K Redstone River 41.42 30** P **P** **15 45 58.1 0.0**
**H19K Roundabout Mou 41.48 33** P **P** **15 45 59.9 +1.4**
H19K IAmb IAmb 15 46 04.3
comp=Z,17nm,1.4s
**CRAI Chiangrai 41.77 254** P **P** **15 46 01.4 -0.1**
CRAI IAmb IAmb 15 46 03.5
comp=Z,5.3nm,0.8s
**O18K Koktuh Hills 41.82 42** P **P** **15 46 01.4 0.0**
**B20K Meade River 41.91 26** P **P** **15 46 02.9 +0.9**
**B21K Ikpikpuk River 42.71 27** P **P** **15 46 08.7 +0.2**
**G21K Allakaket 42.77 32** P **P** **15 46 09.9 +0.8**
G21K IAmb IAmb 15 46 32.5
comp=Z,11nm,1.4s
**F21K Alatna River 42.83 31** P **P** **15 46 09.9 +0.3**
**H21K Melozitna Rive 43.00 33** P **P** **15 46 10.8 -0.1**
**D22K Ayikyak River 43.30 28** P **P** **15 46 13.5 +0.2**
**KDAK Kodiak Island 43.31 45** P **P** **15 46 12.8 -0.7**
**KDAK Kodiak Island 43.31 45** P **P** **15 46 12.9 -0.7**
KDAK pmax pmax
comp=Z,53nm,1.3s
**I21K Tanana 43.32 34** P **P** **15 46 14.0 +0.4**
I21K IAmb IAmb 15 46 30.8
comp=Z,8.5nm,1.5s
**MK31 Makanchi Array 43.41 299** *ce*P **P** **15 46 15.3 +0.7**
**MKAR Makanchi Array 43.41 299** P **P** **15 46 14.6 0.0**
comp=Z,2.0nm,0.6s,baz=84,slow=10,SNR=22
comp=Z,2.0nm,0.6s
**E22K Anaktuvuk Pass 43.55 30** P **P** **15 46 15.4 0.0**
**CMAR Chiang Mai Arr 43.94 253** P **P** **15 46 19.8 +0.7**
comp=Z,0.8nm,0.6s,baz=51,slow=6.2,SNR=5.6
CMAR LR LR 16 04 14.5
comp=Z,38nm,18.2s,baz=220,slow=36
comp=Z,0.8nm,0.6s
**CMAR Chiang Mai Arr 43.94 253** *i* P **P** **15 46 20.2 +1.1**
CMAR pmax pmax
comp=Z,1.0nm,0.8s
**H23K Yukon River 44.35 33** P **P** **15 46 21.6 -0.3**
H23K IAmb IAmb 15 46 46.5
comp=Z,9.8nm,1.3s
**E24K Your Creek 44.79 30** P **P** **15 46 24.7 -0.6**
**KURK Kurchatov 44.79 305** P **P** **15 46 23.9 -1.7**
KURK IAmb IAmb 15 46 26.0
comp=Z,8.4nm,0.7s
**KURK Kurchatov 44.79 305** *ce*P **P** **15 46 25.4 -0.1**
KURK pmax pmax
comp=Z,5.0nm,0.7s
**KURBB Kurchatov Arra 44.87 305** P **P** **15 46 25.9 -0.2**
comp=Z,6.4nm,0.4s,baz=78,slow=8.7,SNR=19
comp=Z,6.4nm,0.4s
**MDM Murphy Dome 44.91 34** P **P** **15 46 25.8 -0.6**
**PWL Port Wells 45.16 40** P **P** **15 46 28.6 +0.2**
**G24K Hadweenzic Riv 45.18 32** P **P** **15 46 28.9 +0.5**
G24K IAmb IAmb 15 47 04.1
comp=Z,6.0nm,1.4s
**ILAR Eielson Array 45.50 34** P **P** **15 46 32.6 +1.7**
comp=Z,0.5nm,0.7s,baz=260,slow=5.7,SNR=5.1
comp=Z,0.5nm,0.7s
**D25K Kavik River 45.58 28** P **P** **15 46 32.0 +0.4**
**M24K Tolsona, Glenn 46.05 38** P **P** **15 46 36.3 +0.8**
**J25K Salcha River, 46.16 34** P **P** **15 46 36.8 +0.6**
**F26K Sheenjek River 46.44 30** P **P** **15 46 38.9 +0.5**
**RIDG Independent Ri 46.47 36** P **P** **15 46 40.4 +1.7**
RIDG IAmb IAmb 15 47 08.0
comp=Z,8.2nm,1.4s
**SCRK Sand Creek 46.82 35** P **P** **15 46 40.3 -1.2**
**J26L Joseph Creek 46.95 35** P **P** **15 46 42.9 +0.4**
**BERG Berg Lake 47.49 40** P **P** **15 46 47.9 +1.2**
**K27K Chicken 47.65 35** P **P** **15 46 48.5 +0.7**
**L27K Beaver Creek, 47.91 36** P **P** **15 46 51.4 +1.5**
L27K IAmb IAmb 15 47 05.7
comp=Z,4.4nm,1.2s
**F28M Old Crow 48.07 30** P **P** **15 46 53.6 +2.5**
F28M IAmb IAmb 15 47 15.2
comp=Z,4.7nm,1.2s
**I28M Miner Creek 48.35 33** P **P** **15 46 52.7 -0.6**
I28M IAmb IAmb 15 47 12.1
comp=Z,5.9nm,1.4s
**E29M Blow River 48.71 29** P **P** **15 46 55.8 -0.1**
E29M IAmb IAmb 15 47 19.3
comp=Z,5.5nm,1.4s
**TABL Table Mountain 48.73 40** P **P** **15 46 55.2 -1.2**
**H29M Whitestone 48.86 32** P **P** **15 46 57.9 +0.7**
H29M IAmb IAmb 15 47 39.2
comp=Z,4.7nm,1.2s
**G29M Pine Creek 48.88 31** P **P** **15 46 57.8 +0.5**
G29M IAmb IAmb 15 47 13.0
comp=Z,6.8nm,1.4s
**BOOM Boomskoye usch 49.09 295** P **P** **15 46 59.0 -0.3**
**BOOM Boomskoye usch 49.09 295** P **P** **15 46 59.1 -0.3**
BOOM pmax pmax
comp=Z,36nm,1.5s
**BVAR Borovoye Array 49.13 310** P **P** **15 46 59.7 +0.3**
comp=Z,2.0nm,0.5s,baz=72,slow=9.0,SNR=13
comp=Z,2.0nm,0.5s
**BRVK Borovoye 49.18 310** P **P** **15 46 59.1 -0.7**
BRVK IAmb IAmb 15 47 09.8
comp=Z,3.8nm,1.1s
**BRVK Borovoye 49.18 310** *ce*P **P** **15 47 00.3 +0.6**
BRVK pmax pmax
comp=Z,2.0nm,1.3s
**G30M tAoh Zraii Nji 49.57 31** P **P** **15 47 03.4 +0.8**
G30M IAmb IAmb 15 47 20.6
comp=Z,4.2nm,0.9s
**G31M Satah River 50.33 31** P **P** **15 47 09.9 +1.6**
G31M IAmb IAmb 15 47 36.1
comp=Z,5.1nm,1.1s
**H31M Peel River 50.55 32** P **P** **15 47 12.2 +2.2**
H31M IAmb IAmb 15 47 20.6
comp=Z,12nm,1.5s
**KKAR Karatay Array 52.52 298** P **P** **15 47 23.8 -1.2**
**KKAR Karatay Array 52.52 298** P **P** **15 47 23.8 -1.2**
KKAR pmax pmax
comp=Z,2.0nm,0.7s
**ARU Arti 54.48 317** P **P** **15 47 38.3 -0.9**
ARU IAmb IAmb 15 47 40.3
comp=Z,6.4nm,1.0s
**ARU Arti 54.48 317** *d* *i* P **P** **15 47 40.0 +0.8**
ARU 15 49 40.4
ARU S **S** **15 55 17.7 +2.1**
ARU SS **SS** **15 58 55.4 -2.3**
ARU pmax pmax
comp=Z,7.0nm,0.9s
**CHGR Chuyangaron 55.38 294** P **P** **15 47 43.6 -2.5**
**CHGR Chuyangaron 55.38 294** P **P** **15 47 43.6 -2.5**
CHGR pmax pmax
comp=Z,8.0nm,0.8s
**SIMJ Simiganj 55.48 294** P **P** **15 47 45.4 -1.5**
SIMJ IAmb IAmb 15 48 05.7
comp=Z,5.6nm,1.2s
**JOKA Jonika Flow 56.32 93** P **P** **15 47 54.0 +1.0**
**ABKAR Akbulak array 56.62 309** P **P** **15 47 54.1 -0.5**
ABKAR IAmb IAmb 15 48 07.0
comp=Z,4.0nm,1.0s
**KIRV Kirov 58.09 322** *ce*P **P** **15 48 05.8 +1.0**
**CTAO Charters Tower 60.71 177** P **P** **15 48 25.3 +2.0**
**CTAO Charters Tower 60.71 177** P **P** **15 48 25.3 +2.0**
CTAO pmax pmax
comp=Z,13nm,1.3s
**FITZ Fitzroy Crossi 60.91 199** P **P** **15 48 23.4 -1.4**
**WRA Warramunga Arr 61.07 190** P **P** **15 48 26.4 +0.6**
comp=Z,1.1nm,0.8s,baz=6.5,slow=6.9,SNR=18
comp=Z,1.1nm,0.8s
**WRA Warramunga Arr 61.07 190** *i* P **P** **15 48 26.3 +0.5**
WRA pmax pmax
comp=Z,1.0nm,0.7s
**TULEG Thule 61.10 8** P **P** **15 48 25.8 +0.4**
**ASAR Alice Springs 64.80 189** P **P** **15 48 51.8 +1.2**
comp=Z,0.5nm,0.6s,baz=2.0,slow=5.8,SNR=8.1
comp=Z,0.5nm,0.6s
**PSA00 Pilbara Seismi 65.83 204** P **P** **15 48 54.7 -2.6**
PSA00 IAmb IAmb 15 49 12.4
comp=Z,7.0nm,1.1s
**PSA00 Pilbara Seismi 65.83 204** P **P** **15 48 54.9 -2.4**
PSA00 IAmb IAmb 15 49 24.2
comp=Z,33nm,1.4s
**FINES FINESS Array B 66.09 332** P **P** **15 48 58.7 +0.2**
comp=Z,2.2nm,0.5s,baz=45,slow=7.6,SNR=22
FINES LR LR 16 22 14.4
comp=Z,99nm,18.5s,baz=68,slow=40
comp=Z,2.2nm,0.5s
**SUMG Summit 66.84 1** P **P** **15 49 02.6 -1.0**
SUMG IAmb IAmb 15 49 34.9
comp=Z,5.8nm,1.2s
**SUMG Summit 66.84 1** P **P** **15 49 02.6 -1.0**
SUMG pmax pmax
comp=Z,6.0nm,1.2s
**KIV Kislovodsk 69.49 311** *e*P **P** **15 49 21.5 +1.2**
KIV pmax pmax
comp=Z,14nm,1.1s
**KBZ Khabaz 69.51 310** P **P** **15 49 21.5 +1.2**
comp=Z,3.7nm,0.6s,baz=53,slow=3.9,SNR=7.8
comp=Z,3.7nm,0.6s
**KBZ Khabaz 69.51 310** *ce*P **P** **15 49 21.0 +0.7**
KBZ pmax pmax
comp=Z,5.0nm,0.8s
**SHA1 Shidzhatmaz 69.64 311** *ce*P **P** **15 49 24.5 +3.1**
**HFS Hagfors 71.18 336** P **P** **15 49 30.7 +0.5**
comp=Z,1.1nm,0.4s,baz=44,slow=8.8,SNR=11
HFS LR LR 16 26 58.8
comp=Z,187nm,18.5s,baz=58,slow=41
comp=Z,1.1nm,0.4s
**NOA NORSAR Array B 71.20 338** P **P** **15 49 30.7 +0.3**
comp=Z,0.6nm,0.6s,baz=37,slow=6.1,SNR=4.0
NOA LR LR 16 25 23.2
comp=Z,80nm,21.1s,baz=60,slow=40
comp=Z,0.6nm,0.6s
**AKASG Malin Array Be 72.14 322** P **P** **15 49 36.3 +0.1**
comp=Z,1.0nm,0.5s,baz=40,slow=6.7,SNR=8.9
AKASG LR LR 16 24 39.2
comp=Z,46nm,18.5s,baz=65,slow=39
comp=Z,1.0nm,0.5s
**AKASG Malin Array Be 72.14 322** *i* P **P** **15 49 36.0 -0.2**
AKASG pmax pmax
comp=Z,1.0nm,0.5s
**AKBB Malin Array Si 72.14 322** *ce*P **P** **15 49 35.7 -0.5**
AKBB pmax pmax
comp=Z,3.0nm,0.9s
**PDAR Pinedale Array 73.97 47** P **P** **15 49 48.8 +1.4**
comp=Z,0.3nm,0.5s,baz=117,slow=1.7,SNR=3.6
comp=Z,0.3nm,0.5s
**CLL Collm 78.47 331** *e*P **P** **15 50 13.0 +0.4**
**CLL Collm 78.47 331** *e*P **P** **15 50 13.0 +0.4**
**VRAC Vranov 78.67 328** LR LR 16 27 40.6
comp=Z,83nm,21.6s,baz=60,slow=38
**EKA Esdalemuir Ar 79.98 341** P **P** **15 50 21.4 +0.7**
comp=Z,0.6nm,0.5s,baz=21,slow=4.9,SNR=4.7
comp=Z,0.6nm,0.5s
**GERES GERESS Array B 80.19 329** LR LR 16 31 42.6
comp=Z,97nm,18.5s,baz=62,slow=40
**MMAI Mount Meron Ar 80.90 306** P **P** **15 50 27.4 +1.2**
comp=Z,2.0nm,0.6s,baz=66,slow=6.5,SNR=3.9
comp=Z,2.0nm,0.6s
**DAVOX Davos/Dischmat 83.36 330** LR LR 16 31 47.6
comp=Z,96nm,18.5s,baz=82,slow=38
**ESDC Sonseca Array 94.45 335** LR LR 16 39 18.2
comp=Z,75nm,18.5s,baz=40,slow=39
**SNAA Sanae 144.84 198** PKP **PKPdf** **15 57 47.6 +0.1**
comp=Z,4.8nm,1.1s,baz=112,slow=5.3,SNR=6.5

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**IDC 30 15:38:28.5±11.0, 22°39S×179°64W, h664km±75km, mb2.4/2, mbtmp3.5/3, Error ellipse: s-maj=282.8km s-min=39.4km az=145.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **5.12** | **334** | P | P | 15 40 06.4 | -0.2 |
| | 4.4nm,0.6s,baz=285,slow=23,SNR=8.7 | | | | | | |
| **ASAR** | **Alice Springs** | **42.63** | **259** | P | P | 15 45 29.1 | -0.9 |
| | 0.2nm,0.4s,baz=90,slow=6.8,SNR=4.2 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.87** | **264** | P | P | 15 45 32.5 | +0.7 |
| | 0.5nm,0.5s,baz=101,slow=8.2,SNR=8.2 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **151.55** | **341** | PKPbc | PKPbc | 15 57 09.6 | 0.0 |
| | 0.3nm,0.5s,baz=18,slow=3.5,SNR=1.9 | | | | | | |

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**TRN 30 15:39:15.9, 17°79N×62°41W, h14km, MD3.6, North-west of Barbuda., Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKI** | **Saint Kitts** | **0.55** | **215** | *e*P | Pn | 15 39 29.5 | +0.2 |
| SKI | | | | *e*S | Sn | 15 39 38.5 | +0.1 |
| **SKOC** | **St. Kitts, UWI** | **0.58** | **212** | *e*P | Pn | 15 39 29.9 | +0.2 |
| SKOC | | | | *e*S | Sn | 15 39 39.2 | +0.2 |
| **ANWB** | **Willy Bob** | **0.61** | **101** | *e*P | Pn | 15 39 30.1 | 0.0 |
| ANWB | | | | *e*S | Sn | 15 39 40.4 | +0.7 |
| **ANBD** | **Bethesda, Anti** | **0.96** | **140** | *e*P | Pn | 15 39 36.0 | +1.0 |
| ANBD | | | | *e*S | Sn | 15 39 51.1 | +2.7 |
| **MBFL** | **Flemmings, Mon** | **1.05** | **170** | *e*P | Pn | 15 39 37.9 | +1.7 |
| MBFL | | | | *e*S | Sn | 15 39 53.9 | +3.2 |
| **MBWH** | | **1.06** | **169** | *e*P | Pg | 15 39 37.6 | +1.2 |
| MBWH | | | | *e*S | Sn | 15 39 54.3 | +3.3 |
| **AOPR** | **Arecibo Observ** | **4.17** | **278** | *e*P | Pn | 15 40 21.1 | +2.0 |

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*DJA **30** 15:45:43.8±0.5, 8°S×11°7E±°, h10km, M4.1/6, MLv4.1/6*
*IDC **30** 15:46:00.4±8.3, 8°31S×117°14E, h172km±76km, mb3.1/4, mbtmp3.6/5, Error ellipse: s-maj=93.9km s-min=17.6km az=63.0*

**ISC 30 15:45:44.5±0.9, 8°31S±0°08×116°86E±0°07, h10km, n10, σ1s81/10, mb4.0/3, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.42** | **177** | P | **Pg** | **15 45 53.0** | **+0.1** |
| **PLAI** | **Plampang** | **1.04** | **119** | P | **Pg** | **15 46 04.5** | **0.0** |
| **SRBI** | **Singaraja** | **1.65** | **278** | P | **Pn** | **15 46 12.7** | **-0.8** |
| **DNP** | **Denpasar** | **1.67** | **257** | P | **Pn** | **15 46 14.2** | **+0.3** |
| **BSSI** | **Bau Bau, Buton** | **4.20** | **59** | P | **Pn** | **15 46 47.2** | **-1.5** |
| **KAPI** | **Kappang** | **4.36** | **41** | P | **Pb** | **15 47 04.8** | **+3.6** |
| | 11nm,0.3s,baz=215,slow=14,SNR=4.0 | | | | | | |
| KAPI | | | | S | **Sb** | **15 47 53.0** | **-1.0** |
| | 12nm,0.3s,baz=207,slow=23,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.49** | **126** | P | **P** | **15 50 21.6** | **-1.3** |
| | 0.7nm,0.6s,baz=302,slow=12,SNR=9.1 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **22.35** | **135** | P | **P** | **15 50 44.0** | **+1.0** |
| | 0.8nm,0.6s,baz=306,slow=9.5,SNR=9.6 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.90** | **334** | P | **P** | **15 56 09.1** | **-1.9** |
| | 0.7nm,0.7s,baz=140,slow=7.5,SNR=5.2 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.67** | **340** | P | P | 15 56 38.5 | -3.2 |
| | 0.5nm,0.5s,baz=133,slow=6.1,SNR=2.7 | | | | | | |
| | 0.5nm,0.5s | | | | | | |

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*DJA **30** 15:48:18.1±0.6, 14°N±4°×12°1E±°, h82km±8km, M4.8/11, mB5.5/6, mb4.8/11, Mw(mB)4.9/6*
*BJI **30** 15:48:22.8±0.0, 13°57N×120°78E, h148km, mb4.4/32, mB4.7/8*
*NEIC **30** 15:48:23.9±1.4, 13°69N±0°09×120°8E±0°1, h127km±8km, mb4.6/59, Error ellipse: s-maj=14.6km s-min=12.6km az=90.0*
*IDC **30** 15:48:27.6±3.8, 13°65N×120°70E, h174km±35km, mb3.6/20, mbtmp4.1/21, MS3.8/2, Error ellipse: s-maj=19.4km s-min=13.0km az=64.0*

**ISC 30 15:48:25.3±0.4, 13°70N±0°05×120°73E±0°07, h150km, n101, σ1s12/100, mb4.4/54, 3C-1D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **8.13** | **144** | Pn | **Pn** | **15 50 17.2** | **-3.3** |
| **MYLDM** | **Lahad Datu** | **8.74** | **195** | Pn | **Pn** | **15 50 29.0** | **+0.3** |
| **KKM** | **Kota Kinabalu** | **8.81** | **211** | Pn | **Pn** | **15 50 28.1** | **-1.5** |
| **TWG** | **Pinlang** | **9.08** | **2** | Pn | **Pn** | **15 50 31.9** | **-1.2** |
| **YULB** | **Yu-li** | **9.66** | **3** | Pn | **Pn** | **15 50 38.6** | **-2.1** |
| **SBUM** | **Sibu** | **13.99** | **218** | | **P** | **15 51 41.6** | **+1.3** |
| **LUWI** | **Luwuk** | **14.78** | **172** | P | **P** | **15 51 51.3** | **+2.1** |
| | 27nm,0.9s,1μm | | | | | | |
| **JOW** | **Kunigami** | **14.85** | **27** | | **P** | **15 51 51.0** | **+1.1** |
| **JOW** | **Kunigami** | **14.85** | **27** | P | **P** | **15 51 51.9** | **+2.0** |
| | 18nm,0.9s,baz=137,slow=19,SNR=5.5 | | | | | | |
| **KSM** | **Kuching** | **15.93** | **221** | P | **P** | **15 52 02.1** | **+0.2** |
| **SLVN** | **Son La** | **17.74** | **298** | P | **P** | **15 52 21.8** | **-0.1** |
| **GYA** | **Guiyang** | **18.30** | **316** | ⇑P | **Pn** | **15 52 29.5** | **-0.3** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| GYA | | | | LR | LR | | |
| | comp=Z,180nm,11.0s | | | | | | |
| **NJ2** | **Nanjing** | **18.35** | **355** | *e*P | **Pn** | **15 52 30.5** | **+0.3** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **KAPI** | **Kappang** | **18.62** | **183** | LR | LR | 15 59 32.7 | |
| | comp=Z,49nm,19.2s,baz=44,slow=36 | | | | | | |
| **ENH** | **Enshi** | **19.49** | **330** | P | **P** | **15 52 40.7** | **-0.1** |
| ENH | | | | IAmb | IAmb | 15 52 49.1 | |
| | comp=Z,9.7nm,0.6s | | | | | | |
| **FAKI** | **Fak Fak** | **20.08** | **144** | P | **P** | **15 52 47.5** | **+0.3** |
| | comp=Z,29nm,1.2s | | | | | | |
| **PHRA** | **Phrae** | **20.26** | **286** | P | **P** | **15 52 50.6** | **+1.5** |
| **MYKOM** | **Kota Tinggi** | **20.46** | **236** | P | **P** | **15 52 51.8** | **+0.4** |
| MYKOM | | | | IAmb | IAmb | 15 52 52.9 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **CRAI** | **Chiangrai** | **20.51** | **291** | P | **P** | **15 52 51.3** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **21.45** | **286** | P | **P** | **15 53 02.4** | **+0.4** |
| | comp=Z,3.6nm,0.8s,baz=90,slow=8.0,SNR=26 | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **KULM** | **Kulim** | **21.48** | **249** | P | **P** | **15 53 01.7** | **-0.5** |
| **PZH** | **PanZhiHua** | **21.87** | **309** | P | **P** | **15 53 07.5** | **+1.1** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.4s | | | | | | |
| **LYN** | **LuoYang** | **22.07** | **342** | *e*P | **P** | **15 53 09.0** | **+0.9** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,35nm,0.8s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=Z,310nm,5.4s | | | | | | |
| **EDFI** | **Ende, Flores** | **22.32** | **177** | P | **P** | **15 53 11.9** | **+1.0** |
| | comp=Z,24nm,0.6s | | | | | | |
| **TIA** | **Tai'an** | **22.65** | **352** | P | **P** | **15 53 13.5** | **-0.3** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **XAN** | **Xi'an** | **22.91** | **334** | ⇓P | **P** | **15 53 15.5** | **-0.8** |
| XAN | | | | pP | pP | 15 53 40.5 | -3.9 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| **JMN** | **Monobe** | **23.25** | **29** | P | **P** | **15 53 17.8** | **-1.5** |
| **TNCH** | **TengChong** | **23.75** | **302** | P | **P** | **15 53 24.0** | **-0.2** |
| TNCH | | | | pP | pP | 15 53 52.0 | -0.5 |
| TNCH | | | | S | **S** | **15 57 26.8** | **-2.0** |
| TNCH | | | | sS | sS | 15 58 15.8 | -6.6 |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.8s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,98nm,3.9s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,75nm,4.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,110nm,14.6s | | | | | | |
| **JCJ** | **Chichijima** | **24.07** | **53** | P | **P** | **15 53 26.2** | **-0.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HNS** | **HongShan** | **24.21** | **348** | ⇑P | | **P** | **15 53 27.8** | **-0.1** |
| HNS | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **24.51** | **14** | P | | **P** | **15 53 31.6** | **+0.9** |
| | comp=Z,1.0nm,0.9s,baz=193,slow=10.0,SNR=4.1 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **LZH** | **Lanzhou** | **26.96** | **329** | *e*P | | **P** | **15 53 54.5** | **+1.4** |
| LZH | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **28.21** | **345** | *e*P | | **P** | **15 54 00.0** | **-4.1** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,52nm,4.8s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,88nm,5.6s | | | | | | | |
| **MTN** | **Manton Dam** | **28.32** | **158** | P | | **P** | **15 54 04.8** | **-0.3** |
| MTN | | | | IAmb | | IAmb | 15 54 12.8 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| **SHL** | **Shillong** | **29.55** | **298** | P | | **P** | **15 54 15.7** | **-0.5** |
| **GTA** | **Gaotai** | **31.55** | **328** | P | | **P** | **15 54 34.3** | **+0.7** |
| GTA | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| **LSA** | **Lhasa** | **31.63** | **305** | P | | **P** | **15 54 35.4** | **+0.6** |
| LSA | | | | IAmb | | IAmb | 15 54 36.6 | |
| | comp=Z,18nm,1.3s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.89** | **15** | P | | **P** | **15 54 35.8** | **-0.5** |
| | comp=Z,1.3nm,0.7s,baz=190,slow=7.3,SNR=4.7 | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | |
| **BNX** | **BinXian** | **32.43** | **9** | ⇑P | | **P** | **15 54 41.5** | **+0.5** |
| BNX | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **MBWA** | **Marble Bar** | **34.65** | **182** | P | | **P** | **15 55 00.3** | **-0.2** |
| **ULN** | **Ulaanbaatar** | **35.92** | **344** | P | | **P** | **15 55 11.4** | **+0.2** |
| **WRA** | **Warramunga Arr** | **36.01** | **158** | P | | **P** | **15 55 11.2** | **-1.0** |
| | comp=Z,0.6nm,0.6s,baz=330,slow=10,SNR=6.8 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **39.31** | **161** | P | | **P** | **15 55 39.4** | **-0.5** |
| | comp=Z,0.4nm,0.4s,baz=339,slow=7.5,SNR=4.7 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **MORW** | **Morawa** | **42.76** | **186** | P | | **P** | **15 56 07.1** | **-0.8** |
| **MKAR** | **Makanchi Array** | **46.05** | **324** | P | | **P** | **15 56 34.6** | **+0.7** |
| | comp=Z,7.0nm,0.7s,baz=131,slow=9.1,SNR=42 | | | | | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **MAKZ** | **Makanchi** | **46.24** | **323** | P | | **P** | **15 56 36.0** | **+0.6** |
| MAKZ | | | | IAmb | | IAmb | 15 56 37.0 | |
| | comp=Z,6.7nm,0.6s | | | | | | | |
| **NIL** | **Nilore** | **47.33** | **303** | P | | **P** | **15 56 43.4** | **-0.8** |
| NIL | | | | IAmb | | IAmb | 15 56 44.9 | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| **NRN** | **Naryn** | **47.60** | **314** | P | | **P** | **15 56 46.8** | **+0.4** |
| NRN | | | | IAmb | | IAmb | 15 56 48.2 | |
| | comp=Z,7.3nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **49.01** | **29** | P | | **P** | **15 56 57.7** | **+1.0** |
| | comp=Z,0.9nm,0.7s,baz=248,slow=1.1,SNR=6.0 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.07** | **333** | P | | **P** | **15 56 56.7** | **-0.4** |
| | comp=Z,4.1nm,0.3s,baz=125,slow=7.0,SNR=21 | | | | | | | |
| | comp=Z,4.1nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **49.09** | **315** | P | | **P** | **15 56 58.3** | **+0.7** |
| **PET** | **Petropavlovsk** | **49.41** | **29** | P | | **P** | **15 57 01.2** | **+1.6** |
| **KURBB** | **Kurchatov Arra** | **50.21** | **326** | P | | **P** | **15 57 06.2** | **+0.5** |
| | comp=Z,17nm,0.8s,baz=127,slow=7.7,SNR=120 | | | | | | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **50.21** | **326** | P | | **P** | **15 57 06.4** | **+0.7** |
| **BTK** | **Batken** | **50.86** | **311** | P | | **P** | **15 57 11.1** | **+0.1** |
| BTK | | | | IAmb | | IAmb | 15 57 12.0 | |
| | comp=Z,3.7nm,0.5s | | | | | | | |
| **GAR** | **Garm** | **50.94** | **309** | P | | **P** | **15 57 11.9** | **+0.3** |
| **CHGR** | **Chuyangaron** | **51.73** | **309** | P | | **P** | **15 57 17.8** | **+0.3** |
| **SIMJ** | **Simiganj** | **51.84** | **309** | P | | **P** | **15 57 18.4** | **0.0** |
| **KKAR** | **Karatay Array** | **52.00** | **314** | P | | **P** | **15 57 19.8** | **+0.5** |
| KKAR | | | | IAmb | | IAmb | 15 57 20.6 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **TARA** | **Tarawa** | **53.05** | **99** | P | | **P** | **15 57 28.2** | **+0.8** |
| **BVAR** | **Borovoye Array** | **55.79** | **326** | P | | **P** | **15 57 46.8** | **+0.1** |
| | comp=Z,3.5nm,0.5s,baz=116,slow=10,SNR=20 | | | | | | | |
| | comp=Z,3.5nm,0.5s | | | | | | | |
| **BRVK** | **Borovoye** | **55.86** | **326** | P | | **P** | **15 57 47.7** | **+0.6** |
| **ABKAR** | **Akbulak array** | **60.75** | **319** | P | | **P** | **15 58 21.4** | **+0.2** |
| ABKAR | | | | IAmb | | IAmb | 15 58 22.2 | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **63.40** | **327** | P | | **P** | **15 58 38.0** | **-0.6** |
| **RAYN** | **Ar Rayn** | **71.28** | **290** | P | | **P** | **15 59 29.4** | **+0.5** |
| RAYN | | | | IAmb | | IAmb | 15 59 30.9 | |
| | comp=Z,8.4nm,1.0s | | | | | | | |
| **C16K** | **Lisburne Hills** | **71.42** | **22** | P | | **P** | **15 59 30.4** | **+1.5** |
| **L14K** | **Kuka Creek** | **71.65** | **30** | P | | **P** | **15 59 31.4** | **+1.1** |
| L14K | | | | IAmb | | IAmb | 15 59 46.7 | |
| | comp=Z,18nm,1.1s | | | | | | | |
| **KBZ** | **Khabaz** | **71.90** | **312** | P | | **P** | **15 59 32.2** | **+0.1** |
| | comp=Z,2.0nm,0.7s,baz=117,slow=6.8,SNR=4.8 | | | | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **KIV** | **Kislovodsk** | **72.05** | **312** | P | | **P** | **15 59 33.3** | **+0.1** |
| KIV | | | | IAmb | | IAmb | 15 59 35.0 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **F17K** | **Baldwin Pennin** | **72.75** | **24** | P | | **P** | **15 59 38.4** | **+1.6** |
| F17K | | | | IAmb | | IAmb | 15 59 44.7 | |
| | comp=Z,20nm,1.1s | | | | | | | |
| **GURO** | **Guroymak-BITLI** | **72.82** | **306** | P | | **P** | **15 59 39.0** | **+1.1** |
| GURO | | | | IAmb | | IAmb | 15 59 40.2 | |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| **C18K** | **Utukok River** | **72.99** | **22** | P | | **P** | **15 59 39.2** | **+0.9** |
| C18K | | | | IAmb | | IAmb | 16 00 13.4 | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **E18K** | **Tukpahlearik C** | **73.09** | **23** | P | | **P** | **15 59 40.9** | **+2.1** |
| E18K | | | | IAmb | | IAmb | 16 00 10.6 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **H17K** | **Granite Mounta** | **73.18** | **26** | P | | **P** | **15 59 40.4** | **+1.1** |
| H17K | | | | IAmb | | IAmb | 16 00 08.7 | |
| | comp=Z,23nm,1.5s | | | | | | | |
| **L16K** | **Owhat River** | **73.21** | **29** | P | | **P** | **15 59 40.2** | **+0.6** |
| L16K | | | | IAmb | | IAmb | 15 59 47.6 | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **M16K** | **Timber Creek** | **73.43** | **30** | P | | **P** | **15 59 41.7** | **+0.8** |
| **J17K** | **VABM Dome** | **73.46** | **28** | P | | **P** | **15 59 41.9** | **+0.9** |
| J17K | | | | IAmb | | IAmb | 16 00 19.5 | |
| | comp=Z,16nm,1.4s | | | | | | | |
| **C19K** | **Lookout Ridge** | **73.61** | **22** | P | | **P** | **15 59 43.8** | **+1.9** |
| C19K | | | | IAmb | | IAmb | 15 59 48.9 | |
| | comp=Z,15nm,1.3s | | | | | | | |
| **K17K** | **Iditarod** | **73.79** | **28** | P | | **P** | **15 59 44.0** | **+1.1** |
| K17K | | | | IAmb | | IAmb | 15 59 57.0 | |
| | comp=Z,27nm,1.5s | | | | | | | |
| **D19K** | **Kuna River** | **74.11** | **22** | P | | **P** | **15 59 45.8** | **+1.0** |
| D19K | | | | IAmb | | IAmb | 16 00 24.7 | |
| | comp=Z,12nm,1.2s | | | | | | | |
| **B20K** | **Meade River** | **74.52** | **21** | P | | **P** | **15 59 48.4** | **+1.4** |
| **L18K** | **Granite Mounta** | **74.53** | **29** | P | | **P** | **15 59 48.9** | **+1.6** |
| L18K | | | | IAmb | | IAmb | 16 00 22.5 | |
| | comp=Z,12nm,1.4s | | | | | | | |
| **J20K** | **Nowinta River** | **75.66** | **27** | P | | **P** | **15 59 55.4** | **+1.8** |
| J20K | | | | IAmb | | IAmb | 16 00 29.8 | |
| | comp=Z,8.7nm,1.4s | | | | | | | |
| **H23K** | **Yukon River** | **77.51** | **25** | P | | **P** | **16 00 05.7** | **+1.6** |
| **I23K** | **Minto, Yukon-K** | **77.65** | **26** | P | | **P** | **16 00 06.3** | **+1.5** |
| **NEA2** | **Nenana** | **77.83** | **26** | P | | **P** | **16 00 07.0** | **+1.1** |
| **RND** | **Reindeer** | **78.06** | **27** | P | | **P** | **16 00 07.7** | **+0.5** |
| **CCB** | **Clear Creek Bu** | **78.36** | **26** | P | | **P** | **16 00 09.1** | **+0.4** |
| **ILAR** | **Eielson Array** | **78.74** | **26** | P | | **P** | **16 00 10.3** | **-0.5** |
| | comp=Z,0.5nm,0.8s,baz=295,slow=4.8,SNR=3.0 | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **78.80** | **301** | P | | **P** | **16 00 13.0** | **+1.1** |
| | comp=Z,1.3nm,0.5s,baz=82,slow=10,SNR=3.7 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **78.94** | **300** | P | | **P** | **16 00 13.5** | **+0.9** |
| GHAJ | | | | IAmb | | IAmb | 16 00 14.9 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.10** | **339** | P | | **P** | **16 00 12.8** | **+0.1** |
| | comp=Z,1.5nm,0.5s,baz=82,slow=7.4,SNR=21 | | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.17** | **308** | P | | **P** | **16 00 13.0** | **-0.9** |
| | comp=Z,1.1nm,0.7s,baz=95,slow=6.2,SNR=7.6 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **79.60** | **348** | P | | **P** | **16 00 14.1** | **-1.2** |
| | comp=Z,1.6nm,0.4s,baz=68,slow=8.2,SNR=1.3 | | | | | | | |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **80.30** | **331** | P | | **P** | **16 00 18.5** | **-0.8** |
| | comp=Z,1.0nm,0.6s,baz=70,slow=11,SNR=6.4 | | | | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **80.48** | **320** | P | | **P** | **16 00 19.6** | **-0.9** |
| | comp=Z,0.1nm,0.3s,baz=79,slow=3.2,SNR=4.3 | | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | | |
| **HFS** | **Hagfors** | **86.49** | **331** | P | | **P** | **16 00 49.9** | **-1.1** |
| | comp=Z,1.3nm,0.5s,baz=90,slow=3.0,SNR=8.1 | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **IDI** | **Anoyia** | **86.88** | **305** | LR | | LR | 16 44 51.9 | |
| | comp=Z,219nm,18.2s,baz=95,slow=39 | | | | | | | |
| **NOA** | **NORSAR Array B** | **87.27** | **333** | P | | **P** | **16 00 53.9** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=68,slow=4.7,SNR=5.4 | | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | | |
| **PLCA** | **Paso Flores** | **151.31** | **162** | PKPbc | | **PKiKP** | **16 08 02.5** | **+0.5** |
| | comp=Z,2.5nm,0.8s,baz=239,slow=3.5,SNR=6.4 | | | | | | | |
| **LPAZ** | **La Paz** | **171.06** | **108** | PKP | | **PKPdf** | **16 08 15.9** | **-1.5** |
| | comp=Z,0.8nm,0.6s,baz=247,slow=1.8,SNR=4.1 | | | | | | | |

*IDC* ***30*** *15:55:05.5±0.9, 22.˚14S×170.˚14E, h0km, mb4.0/13, mbtmp4.0/14, ML4.1/1, MS3.8/8, Error ellipse: s-maj=26.0km s-min=21.2km az=123.0*

*NEIC* ***30*** *15:55:06.9±2.3, 22.˚26S±0.˚09×170.˚27E±0.˚07, h10km±1km, mb4.5/16, Error ellipse: s-maj=15.8km s-min=11.7km az=353.0*

*NOU* ***30*** *15:55:10.6, 22.˚05S×169.˚83E, h0km, MLv4.2/10, Southeast of Loyalty Islands*

**ISC 30 15:55:08.4±0.5, 22.˚26S±0.˚07×170.˚18E±0.˚06, h21km, n62, σ1§01/57, mb4.2/17, MS3.8/7, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.14** | **291** | P | | **Pn** | **15 55 41.9** | **-1.0** |
| **PINNC** | **Pines Island,** | **2.56** | **262** | | | **Pn** | **15 55 48.3** | **-0.2** |
| **YATNC** | **Mamie plateau,** | **3.06** | **273** | P | | **Pn** | **15 55 54.9** | **-0.6** |
| **LIFNC** | **LIFOU** | **3.11** | **298** | P | | **Pn** | **15 55 55.6** | **-0.6** |
| **LIFNC** | **LIFOU** | **3.11** | **298** | | | **Pn** | **15 55 56.0** | **-0.2** |
| **ONTNC** | **Ouen Toro** | **3.45** | **269** | P | | **Pn** | **15 56 01.4** | **+0.5** |
| **ONTNC** | **Ouen Toro** | **3.45** | **269** | | | **Pn** | **15 56 01.0** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.47** | **272** | P | | **Pn** | **15 56 01.4** | **+0.1** |
| **DZM** | **Mont Dzumac** | **3.47** | **272** | Pn | | **Pn** | **15 56 01.2** | **0.0** |
| | 20nm,0.3s,baz=131,slow=15,SNR=312 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **15 56 40.0** | **-1.8** |
| | 11nm,0.3s,baz=202,slow=18,SNR=4.6 | | | | | | | |
| DZM | | | | LR | | LR | 15 56 44.7 | |
| | comp=Z,278nm,22.0s,baz=347,slow=29 | | | | | | | |
| | 40nm,0.3s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.60** | **272** | P | | **Pn** | **15 56 03.2** | **+0.3** |
| **RTV** | **Rentapao** | **4.74** | **339** | P | | **Pn** | **15 56 19.6** | **+0.9** |
| **DVP** | **Devils Point** | **4.88** | **337** | P | | **Pn** | **15 56 20.4** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **5.75** | **286** | P | | **Pn** | **15 56 32.9** | **+0.4** |
| **KOUNC** | **Koumac, New Ca** | **5.75** | **286** | | | **Pn** | **15 56 33.0** | **+0.5** |
| **MSVF** | **Nonsavu** | **8.66** | **60** | | | **Pn** | **15 57 09.4** | **-3.1** |
| **MSVF** | **Nonsavu** | **8.66** | **60** | Pn | | Pn | 15 57 18.2 | +5.7 |
| | 0.3nm,0.3s,baz=152,slow=23,SNR=10 | | | | | | | |
| MSVF | | | | Sn | | **Sn** | **15 58 51.7** | **+2.0** |
| | 0.8nm,0.3s,baz=241,slow=20,SNR=5.0 | | | | | | | |
| **URZ** | **Urewera** | **17.02** | **161** | LR | | LR | 16 04 34.4 | |
| | comp=Z,586nm,18.1s,baz=60,slow=33 | | | | | | | |
| **RTZ** | **Ruatahuna** | **17.31** | **162** | Pn | | **Pn** | **15 59 07.4** | **-1.5** |
| RTZ | | | | IAmb | | IAmb | 15 59 14.3 | |
| | comp=Z,52nm,1.3s | | | | | | | |
| **MRZ** | **Mangatainoka R** | **18.91** | **167** | P | | **Pn** | **15 59 28.1** | **-0.2** |
| MRZ | | | | IAmb | | IAmb | 15 59 42.1 | |
| | comp=Z,57nm,1.5s | | | | | | | |
| **TCW** | **Tory Channel** | **19.21** | **171** | P | | **Pn** | **15 59 31.8** | **-0.1** |
| **LTZ** | **Lake Taylor** | **20.54** | **176** | P | | **P** | **15 59 46.1** | **+0.6** |
| **RPZ** | **Rata Peaks** | **21.41** | **178** | LR | | LR | 16 07 49.0 | |
| | comp=Z,394nm,18.2s,baz=342,slow=36 | | | | | | | |
| **CTA** | **Charters Tower** | **22.41** | **271** | LR | | LR | 16 07 37.9 | |
| | comp=Z,11nm,19.4s,baz=88,slow=34 | | | | | | | |
| **CTAO** | **Charters Tower** | **22.41** | **271** | P | | **P** | **16 00 07.0** | **+1.2** |
| **PMG** | **Port Moresby** | **25.52** | **296** | LR | | LR | 16 09 21.6 | |
| | comp=Z,257nm,19.3s,baz=109,slow=34 | | | | | | | |
| **STKA** | **Stephens Creek** | **27.13** | **243** | P | | **P** | **16 00 50.8** | **+0.7** |
| **STKA** | **Stephens Creek** | **27.13** | **243** | P | | **P** | **16 00 51.9** | **+1.8** |
| | comp=Z,2.7nm,0.7s,baz=82,slow=11,SNR=5.1 | | | | | | | |
| STKA | | | | LR | | LR | 16 10 50.4 | |
| | comp=Z,273nm,19.4s,baz=57,slow=35 | | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | | |
| **RAR** | **Rarotonga** | **27.91** | **94** | P | | **P** | **16 00 56.6** | **-0.6** |
| **WR0** | **Warramunga Arr** | **33.28** | **267** | P | | **P** | **16 01 44.3** | **-0.4** |
| WR0 | | | | IAmb | | IAmb | 16 01 57.6 | |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| **ASAR** | **Alice Springs** | **33.38** | **260** | P | | **P** | **16 01 45.4** | **-0.1** |
| | comp=Z,0.9nm,0.7s,baz=86,slow=9.1,SNR=9.2 | | | | | | | |
| ASAR | | | | LR | | LR | 16 14 24.3 | |
| | comp=Z,147nm,21.1s,baz=100,slow=35 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.46** | **267** | P | | **P** | **16 01 44.8** | **-1.4** |
| WB2 | | | | IAmb | | IAmb | 16 02 16.2 | |
| | comp=Z,8.4nm,1.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.47** | **267** | P | | **P** | **16 01 45.7** | **-0.7** |
| | comp=Z,0.8nm,0.7s,baz=99,slow=8.4,SNR=9.8 | | | | | | | |
| WRA | | | | LR | | LR | 16 13 59.3 | |
| | comp=Z,148nm,22.0s,baz=62,slow=34 | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | |
| **MTN** | **Manton Dam** | **38.29** | **277** | P | | **P** | **16 02 27.8** | **+0.1** |
| **KNRA** | **Kununurra** | **39.62** | **272** | P | | **P** | **16 02 39.4** | **+0.6** |
| KNRA | | | | IAmb | | IAmb | 16 03 01.0 | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.90** | **267** | P | | **P** | **16 02 58.0** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **47.69** | **245** | P | | **P** | **16 03 43.9** | **+0.3** |
| **NWAO** | **Narrogin (SRO)** | **47.69** | **245** | LR | | LR | 16 23 07.9 | |
| | comp=Z,247nm,19.4s,baz=38,slow=35 | | | | | | | |
| **SBA** | **Scott Base** | **55.67** | **181** | P | | **P** | **16 04 41.7** | **-0.8** |
| SBA | | | | IAmb | | IAmb | 16 05 19.0 | |
| | comp=Z,8.5nm,1.5s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.82** | **332** | P | | **P** | **16 05 51.0** | **-1.2** |
| | comp=Z,2.5nm,0.8s,baz=169,slow=6.5,SNR=5.4 | | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.81** | **180** | P | | **P** | **16 06 04.8** | **+0.1** |
| **QSPA** | **South Pole Qui** | **67.81** | **180** | P | | **P** | **16 06 05.1** | **+0.4** |
| | comp=Z,2.9nm,0.9s,baz=356,slow=4.5,SNR=7.4 | | | | | | | |
| | comp=Z,2.9nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **71.48** | **326** | P | | **P** | **16 06 27.2** | **-0.3** |
| | comp=Z,1.7nm,0.8s,baz=134,slow=6.4,SNR=6.4 | | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.81** | **333** | P | | **P** | **16 06 46.6** | **-0.4** |
| | comp=Z,1.5nm,0.9s,baz=185,slow=11,SNR=4.8 | | | | | | | |
| | comp=Z,1.5nm,0.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.83** | **352** | P | | **P** | **16 06 52.6** | **-0.1** |
| | comp=Z,2.8nm,0.9s,baz=190,slow=5.9,SNR=4.8 | | | | | | | |
| | comp=Z,2.8nm,0.9s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.54** | **294** | P | | **P** | **16 07 20.9** | **+1.3** |
| | comp=Z,0.6nm,0.7s,baz=140,slow=4.3,SNR=2.5 | | | | | | | |
| | comp=Z,0.6nm,0.7s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.60** | **184** | ⇑P | | **P** | **16 07 44.9** | **-0.2** |
| | comp=Z,100nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **86.19** | **182** | P | | **P** | **16 07 48.9** | **+1.0** |
| SNAA | | | | IAmb | | IAmb | 16 08 00.1 | |
| | comp=Z,3.8nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **86.19** | **182** | P | | **P** | **16 07 50.0** | **+2.2** |
| | comp=Z,0.6nm,0.6s,baz=157,slow=7.7,SNR=1.6 | | | | | | | |
| | comp=Z,0.6nm,0.6s | | | | | | | |
| **O18K** | **Koktuh Hills** | **86.58** | **17** | P | | **P** | **16 07 50.5** | **+0.8** |
| **VNA3** | **Neumayer Olymp** | **86.75** | **180** | ⇑P | | **P** | **16 07 49.9** | **-0.7** |
| **VNA2** | **Neumayer--Watz** | **87.05** | **181** | ⇑P | | **P** | **16 07 51.7** | **-0.3** |
| | baz=183,slow=4.4 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.34** | **181** | ⇑P | | P | 16 07 39.9 | -13 |
| **NVAR** | **Mina Array Bea** | **90.14** | **48** | P | | **P** | **16 08 08.6** | **+1.3** |
| | comp=Z,0.3nm,0.7s,baz=249,slow=6.7,SNR=2.3 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **90.15** | **323** | P | | **P** | **16 08 07.2** | **+0.1** |
| | comp=Z,1.3nm,0.8s,baz=148,slow=8.5,SNR=6.5 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **92.84** | **17** | P | | **P** | **16 08 20.8** | **+1.8** |
| | comp=Z,0.4nm,0.7s,baz=207,slow=5.8,SNR=4.3 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **MORC** | **Moravsky Berou** | **145.10** | **329** | *e*PKP | | **PKPbc** | **16 14 41.8** | **-1.8** |
| **JAVC** | **Velka Javorina** | **145.64** | **327** | *e*PKP | | **PKPab** | **16 14 46.9** | **+1.2** |
| **VRAC** | **Vranov** | **145.87** | **329** | *e*PKP | | **PKPab** | **16 14 46.5** | **0.0** |
| **CLL** | **Collm** | **146.01** | **334** | *e*PKPbc | | **PKPab** | **16 14 47.0** | **+0.1** |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **KRUC** | **Moravsky** | **146.13** | **329** | *e*PKP | | **PKPab** | **16 14 47.2** | **-0.3** |
| **EKA** | **Eskdalemuir Ar** | **146.60** | **353** | PKPbc | | **PKPdf** | **16 14 46.7** | **+0.2** |
| | comp=Z,0.7nm,0.4s,baz=353,slow=2.9,SNR=7.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.55** | **331** | PKPbc | | **PKPbc** | **16 14 49.9** | **-1.2** |
| | comp=Z,0.4nm,0.4s,baz=70,slow=3.2,SNR=3.6 | | | | | | | |

*BJI* ***30*** *16:24:44.1±0.0, 21.˚94S×170.˚80E, h9km, mb5.0/58, mB5.4/59, Ms5.0/60, Ms7 4.8/60*

*IDC* ***30*** *16:24:44.9±0.5, 22.˚12S×170.˚34E, h0km, mb4.7/18, mbtmp4.7/20, ML4.3/2, MS4.9/49, Error ellipse: s-maj=19.3km s-min=14.0km az=89.0*

*NEIC* ***30*** *16:24:46.7±1.9, 22.˚25S±0.˚09×170.˚24E±0.˚07, h11km±1km, mb5.2/105, Ms_20 5.3/543, Mwb5.5/41, Mww5.5/38, Error ellipse: s-maj=15.3km s-min=10.8km az=165.0, Moment Tensor Solution. Moment tensor: Scale 10¹⁷Nm; Mrr1.12; Mθθ-0.71; Mφφ-0.41; Mrθ1.83; Mθφ0.85; Mφr-0.05; Fault plane solution: M0 2.24000×10¹⁷ NP1: φs100.26000°, δ74.70000°, λ69.39000°. NP2: φs335.19000°, δ25.47000°, λ142.13000°. Principal axes: T 2.3155, Plg56.0000°, Azm344.0000°; N -0.1500, Plg20.0000°, Azm106.0000°; P -2.1655, Plg27.0000°, Azm206.0000°;*

*MOS* ***30*** *16:24:46.2±1.6, 21.˚99S×169.˚91E, h10km, mb5.2/21, MS5.0/23 Error ellipse: s-maj=9.7km s-min=9.7km az=139.3*

*NEIC* ***30*** *16:24:47.1, 22.˚21S×170.˚21E, h26km, Moment Tensor Solution. Duration: 2s7 Moment tensor: Scale 10¹⁷Nm; Mrr1.66; Mθθ-1.37; Mφφ-0.29; Mrθ1.27; Mθφ1.08; Mφr-0.13; Fault plane solution: M0 2.26000×10¹⁷ NP1: φs105.83000°, δ63.04000°, λ72.81000°. NP2: φs320.15000°, δ31.62000°, λ120.16000°. Principal axes: T 2.1511, Plg67.0000°, Azm343.0000°; N 0.2264, Plg15.0000°, Azm114.0000°; P -2.3775, Plg16.0000°, Azm208.0000°;*

*NEIC* ***30*** *16:24:47.1, 22.˚21S×170.˚21E, h26km*

*NEIC* ***30*** *16:24:47.5, 22.˚22S×170.˚23E, h16km*

*NOU* ***30*** *16:24:49.5, 22.˚21S×170.˚12E, h0km, mb5.1/88, Southeast of Loyalty Islands*

*GCMT* ***30*** *16:24:53.7±0.1, 22.˚25S±0.˚01×170.˚14E±0.˚01, h22km, MW5.5/145, Moment Tensor Solution. s138,c259; s145,c281; Duration: 1s4 Moment tensor: Scale 10¹⁷ Nm; Mrr1.62±.02; Mθθ-1.28±.02; Mφφ-0.33±.02; Mrθ1.30±.04; Mθφ1.01±.01; Mφr-0.29±.03; Best double couple: M0 2.22500×10¹⁷ NP1: φs110.00000°, δ64.00000°, λ77.00000°. NP2: φs318.00000°, δ29.00000°, λ115.00000°. Principal axes: T 2.1210, Plg68.0000°, Azm354.0000°; N 0.2120, Plg12.0000°, Azm115.0000°; P -2.3300, Plg18.0000°, Azm209.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*BGR* ***30*** *16:24:55.8, 20.˚58S×169.˚09E, h33km, Ms5.1*

**ISC 30 16:24:46.7±0.5, 22.˚28S±0.˚04×170.˚32E±0.˚04, h11km±2km, h11km:pP-P,n740,σ1§84/486, mb5.1/105, MS5.2/358, 29C-25D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.27** | **290** | P | | **Pb** | **16 25 25.7** | **-2.0** |
| **PINNC** | **Pines Island,** | **2.68** | **262** | P | | **Pn** | **16 25 29.9** | **+0.1** |
| **PINNC** | **Pines Island,** | **2.68** | **262** | Pn | | **Pn** | **16 25 28.7** | **-1.1** |
| **YATNC** | **Mamie plateau,** | **3.19** | **273** | P | | **Pn** | **16 25 38.1** | **+1.3** |
| **LIFNC** | **LIFOU** | **3.23** | **297** | P | | **Pn** | **16 25 37.6** | **+0.2** |
| **LIFNC** | **LIFOU** | **3.23** | **297** | | | **Pn** | **16 25 36.1** | **-1.3** |
| **ONTNC** | **Ouen Toro** | **3.58** | **269** | P | | **Pn** | **16 25 42.0** | **-0.2** |
| **ONTNC** | **Ouen Toro** | **3.58** | **269** | | | **Pn** | **16 25 41.0** | **-1.2** |
| **DZM** | **Mont Dzumac** | **3.60** | **273** | P | | **Pn** | **16 25 41.9** | **-0.7** |
| **DZM** | **Mont Dzumac** | **3.60** | **273** | | | **Pn** | **16 25 41.4** | **-1.1** |
| **DZM** | **Mont Dzumac** | **3.60** | **273** | *e*Pn | | **Pn** | **16 25 41.1** | **-1.4** |
| | 2μm,1.6s | | | | | | | |
| DZM | | | | *e*Sn | | **Sn** | **16 26 23.0** | **-2.1** |
| | 3μm,1.3s | | | | | | | |
| **DZM** | **Mont Dzumac** | **3.60** | **273** | Pn | | **Pn** | **16 25 41.8** | **-0.7** |
| | 47nm,0.3s,baz=125,slow=13,SNR=633 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **16 26 20.5** | **-4.5** |
| | 39nm,0.3s,baz=94,slow=20,SNR=4.6 | | | | | | | |
| | 164nm,0.3s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.73** | **272** | P | | **Pn** | **16 25 43.5** | **-0.7** |
| **RTV** | **Rentapao** | **4.80** | **338** | P | | **Pn** | **16 25 59.7** | **+0.7** |
| **DVP** | **Devils Point** | **4.95** | **336** | P | | **Pn** | **16 26 00.8** | **-0.2** |
| **KOUNC** | **Koumac, New Ca** | **5.88** | **286** | P | | **Pn** | **16 26 14.2** | **+0.4** |
| **KOUNC** | **Koumac, New Ca** | **5.88** | **286** | Pn | | **Pn** | **16 26 12.3** | **-1.5** |
| **MSVF** | **Nonsavu** | **8.56** | **59** | P | | Pn | 16 26 57.0 | +6.3 |
| **MSVF** | **Nonsavu** | **8.56** | **59** | | | **Pn** | **16 26 54.3

**AULRC Lightning Ridg 21.31 246** P **P** **16 29 36.1 +2.5**
comp=Z,126nm,1.2s
RPZ **Rata Peaks** **21.39 179** P **P** **16 29 34.0 -0.3**
RPZ IAmb IAmb 16 29 37.3
comp=Z,130nm,1.4s
**RPZ Rata Peaks 21.39 179** P **P** **16 29 35.8 +1.5**
comp=Z,53nm,1.1s,baz=31,slow=5.9,SNR=8.0
RPZ LR LR 16 37 19.5
comp=Z,5µm,19.1s,baz=346,slow=35
comp=Z,53nm,1.1s
**MQZ McQueen's Vall 21.46 175** P **P** **16 29 35.5 +0.5**
MQZ IAmb IAmb 16 29 38.1
comp=Z,264nm,1.8s
**AUAYR Ayr State High 21.56 273** P **P** **16 29 38.7 +2.3**
**AUDCS Dubbo College 21.64 238** P **P** **16 29 40.1 +2.9**
**AUUHS Ulladulla High 21.68 229** P **P** **16 29 40.7 +3.2**
**JCZ Jackson Bay 21.78 183** P **P** **16 29 41.8 +3.2**
**LBZ Lake Benmore 22.05 180** P **P** **16 29 41.7 +0.2**
LBZ IAmb IAmb 16 30 02.0
comp=Z,93nm,1.2s
**TV1H Townsville Har 22.19 273** P **P** **16 29 46.4 +3.2**
**CNB Canberra Magne 22.44 230** P **P** **16 29 49.4 +3.6**
**WKZ Wanaka 22.52 182** P **P** **16 29 46.6 +0.1**
WKZ IAMs_20 IAMs_20 16 37 39.4
comp=Z,8µm,19.0s
**CTA Charters Tower 22.54 271** LR LR 16 38 18.2
comp=Z,149nm,18.1s,baz=91,slow=36
**CTAO Charters Tower 22.54 271** P **P** **16 29 49.2 +2.3**
**CTAO Charters Tower 22.54 271** P **P** **16 29 46.4 -0.5**
CTAO IAmb IAmb 16 30 00.7
comp=Z,115nm,1.6s
**CTAO Charters Tower 22.54 271** P **P** **16 29 46.4 -0.5**
CTAO pmax pmax
comp=Z,115nm,1.6s
CTAO MLR MLR
comp=Z,2µm,18.0s
**YNG Young 22.66 233** P **P** **16 29 51.5 +3.4**
**CAN Canberra 22.70 230** P **P** **16 29 50.9 +2.4**
**CAN Canberra 22.70 230** P **P** **16 29 46.5 -2.0**
CAN IAmb IAmb 16 30 04.7
comp=Z,66nm,1.1s
**CAN Canberra 22.70 230** P **P** **16 29 46.5 -2.0**
CAN pmax pmax
comp=Z,66nm,1.1s
CAN MLR MLR
comp=Z,4µm,18.0s
**ODZ Otahua Downs 22.71 179** P **P** **16 29 47.0 -1.5**
ODZ IAmb IAmb 16 30 03.5
comp=Z,139nm,1.9s
**MLZ Mavora Lakes 23.10 184** P **P** **16 29 51.8 -0.8**
MLZ IAMs_20 IAMs_20 16 38 22.8
comp=Z,10µm,18.0s
**DCZ Deep Cove 23.28 186** P **P** **16 29 52.4 -1.8**
DCZ IAmb IAmb 16 30 15.0
comp=Z,152nm,1.7s
**MILA Mila 23.49 226** P **P** **16 29 59.8 +3.2**
**WHZ Wether Hill Ro 23.64 184** P **P** **16 29 57.0 -0.9**
WHZ IAmb IAmb 16 30 23.4
comp=Z,90nm,1.5s
WHZ IAMs_20 IAMs_20 16 38 30.9
comp=Z,8µm,18.0s
**CMSA Cobar Meteorol 23.78 242** P **P** **16 30 01.8 +2.4**
**QLP Quilpie 24.12 255** P **P** **16 30 05.9 +3.2**
**SYZ Scrubby Hill 24.22 182** P **P** **16 30 07.3 +3.9**
**MTSU Mount Surprise 24.73 275** P **P** **16 30 12.3 +3.9**
**RABL Rabaul 25.15 313** P **P** **16 30 11.3 -0.8**
RABL IAmb IAmb 16 30 34.6
comp=Z,125nm,1.6s
**PMG Port Moresby 25.64 296** P **P** **16 30 14.9 -1.7**
**PMG Port Moresby 25.64 296** LR LR 16 39 03.7
comp=Z,3µm,20.0s,baz=111,slow=34
**PMG Port Moresby 25.64 296** *i* P **P** **16 30 13.5 -3.1**
PMG pmax pmax
comp=Z,20nm,0.9s
**AUMAG Moama Anglican 26.13 233** P **P** **16 30 25.2 +4.3**
**TOO Toolangi 26.26 229** P **P** **16 30 26.3 +4.2**
**TOO Toolangi 26.26 229** P **P** **16 30 21.2 -0.9**
TOO IAmb IAmb 16 30 38.8
comp=Z,68nm,1.3s
**TOO Toolangi 26.26 229** P **P** **16 30 21.2 -0.9**
TOO pmax pmax
comp=Z,68nm,1.3s
TOO MLR MLR
comp=Z,5µm,19.0s
**COEN Coen 27.06 283** P **P** **16 30 31.6 +2.2**
**COEN Coen 27.06 283** P **P** **16 30 28.8 -0.6**
**STKA Stephens Creek 27.24 243** P **P** **16 30 32.4 +1.5**
**STKA Stephens Creek 27.24 243** P **P** **16 30 31.6 +0.7**
comp=Z,17nm,0.8s,baz=90,slow=12,SNR=21
STKA PcP **PcP** **16 33 51.7 +0.8**
comp=Z,5.0nm,0.9s,baz=100,slow=5.0,SNR=2.0
STKA LR LR 16 40 42.1
comp=Z,4µm,19.5s,baz=76,slow=35
comp=Z,17nm,0.8s
**STKA Stephens Creek 27.24 243** *i* P **P** **16 30 27.5 -3.4**
**KAVG Kavieng 27.25 313** P **P** **16 30 34.7 +3.6**
**INKA Innaminka 27.31 252** P **P** **16 30 32.8 +1.2**
**RAR Rarotonga 27.78 93** LR LR 16 41 34.1
comp=Z,1µm,18.0s,baz=264,slow=36
**MOO Moorlands 27.88 218** P **P** **16 30 39.1 +2.6**
**TAU Tasmania Unive 28.10 218** P **P** **16 30 38.5 0.0**
**TAU Tasmania Unive 28.10 218** P **P** **16 30 38.5 0.0**
TAU pmax pmax
comp=Z,157nm,1.8s
TAU MLR MLR
comp=Z,5µm,19.0s
**QIS Mount Isa 28.62 268** P P 16 30 48.0 +4.6
**HTT Hallett 29.79 241** P **P** **16 30 58.0 +4.3**
**LCRK Leigh Creek 29.82 247** P **P** **16 30 56.5 +2.6**
comp=Z,53nm,1.0s
**MANU Manus Island 30.03 309** P **P** **16 30 54.2 -1.8**
MANU IAmb IAmb 16 31 16.1
comp=Z,41nm,1.4s
**WHYH Whyalla 30.80 243** P **P** **16 31 05.0 +2.4**
comp=Z,58nm,0.8s
**PATS Pohnpei 31.23 337** IAMs_20 IAMs_20 16 41 17.0
comp=Z,5µm,21.0s
**OOD Oodnadatta 31.79 253** P **P** **16 31 14.3 +3.0**
**BBOO Buckleboo 32.01 243** P **P** **16 31 16.5 +3.2**
**BBOO Buckleboo 32.01 243** P **P** **16 31 12.6 -0.7**
BBOO IAmb IAmb 16 31 19.6
comp=Z,42nm,1.1s
**MULG Mulgathing 33.37 248** P **P** **16 31 28.7 +3.5**
**AS01 Alice Springs 33.46 260** P **P** **16 31 27.6 +1.5**
**ASAR Alice Springs 33.50 260** P **P** **16 31 26.1 -0.3**
comp=Z,4.0nm,0.7s,baz=80,slow=8.9,SNR=65
ASAR LR LR 16 45 23.1
comp=Z,3µm,18.0s,baz=98,slow=37
comp=Z,4.0nm,0.7s
**WRAB Tennant Creek 33.59 267** P **P** **16 31 25.7 -1.5**
**WRAB Tennant Creek 33.59 267** P **P** **16 31 25.7 -1.5**
WRAB pmax pmax
comp=Z,22nm,1.3s
**WRA Warramunga Arr 33.60 267** P **P** **16 31 26.0 -1.3**
comp=Z,3.1nm,0.5s,baz=100,slow=8.3,SNR=75
WRA PcP **PcP** **16 34 07.4 -0.3**
comp=Z,1.5nm,0.7s,baz=90,slow=2.9,SNR=1.9
WRA LR LR 16 45 23.2
comp=Z,2µm,19.4s,baz=102,slow=37
comp=Z,3.1nm,0.5s
**JAY Jayapura 34.82 300** P **P** **16 31 35.2 -2.8**
comp=Z,26nm,1.1s,comp=Z,645nm
**GENI Genyem 35.21 300** P **P** **16 31 43.8 +2.6**
**GENI Genyem 35.21 300** P **P** **16 31 41.5 +0.3**
comp=Z,51nm,1.1s
**TBI Tubuai 37.01 100** *eP* **P** **16 31 55.1 -1.5**
TBI *eS* **S** **16 37 38.9 -3.3**
comp=Z,1µm,35.8s
TBI *eSS* **SnSn** **16 40 20.7 +5.3**
comp=Z,835nm,25.2s
TBI *eLR* LR 16 41 55.9
comp=Z,8µm,32.8s
TBI *eLR* LR 16 41 58.4
comp=Z,5µm,26.8s
**KDU Kakadu 37.25 278** P **P** **16 32 01.5 +2.8**
**PPT2 Papeete2 37.91 90** *eP* **P** **16 32 02.4 -2.0**
comp=Z,1µm,25.0s
PPT2 *eS* **S** **16 37 50.6 -5.6**
comp=Z,103nm,26.0s
PPT2 *eSS* **SS** **16 40 50.7 +8.0**
comp=Z,253nm,26.2s
PPT2 *eLR* LR 16 42 19.7
comp=Z,2µm,28.2s
PPT2 *eLR* LR 16 42 20.1
comp=Z,929nm,25.5s
comp=Z,611nm,26.8s

**PPT Papeete 37.92 90** LR LR 16 46 16.4
comp=Z,630nm,18.2s,baz=259,slow=34
**MTN Manton Dam 38.42 277** P **P** **16 32 12.4 +3.8**
**MTN Manton Dam 38.42 277** P **P** **16 32 06.5 -2.1**
MTN IAmb IAmb 16 32 13.3
comp=Z,25nm,0.7s
**WRKA Warakurna 38.48 257** P **P** **16 32 12.7 +3.6**
**FORT Forrest 38.56 248** P **P** **16 32 08.1 -1.6**
**XMAS Kiritimati 39.68 57** IAMs_20 IAMs_20 16 47 27.8
comp=Z,3µm,18.0s
**KNRA Kununurra 39.75 272** P **P** **16 32 18.9 -0.9**
**WAKE Wake Island 41.46 355** IAMs_20 IAMs_20 16 48 02.4
comp=Z,4µm,18.0s
**FAKI Fak Fak 41.64 292** P **P** **16 32 33.3 -2.1**
FAKI IAmb IAmb 16 32 47.7
comp=Z,59nm,1.0s
**FITZ Fitzroy Crossi 42.03 267** P **P** **16 32 36.6 -1.9**
**GUMO Guam 43.51 323** LR LR 16 49 42.7
comp=Z,911nm,19.9s,baz=128,slow=34
**SWI Sorong 43.55 294** P **P** **16 32 51.2 +0.3**
comp=Z,45nm,0.9s,comp=Z,711nm
**SOEI Soe 45.80 278** IAMs_20 IAMs_20 16 53 28.6
comp=Z,2µm,18.0s
**PSA00 Pilbara Seismi 46.65 261** P **P** **16 33 13.7 -1.8**
**PSA00 Pilbara Seismi 46.65 261** P **P** **16 33 14.3 -1.2**
PSA00 IAmb IAmb 16 33 40.2
comp=Z,24nm,1.0s
**MBWA Marble Bar 46.83 261** P **P** **16 33 15.5 -1.5**
MBWA IAmb IAmb 16 33 34.6
comp=Z,19nm,0.8s
**MBWA Marble Bar 46.83 261** IAMs_20 IAMs_20 16 53 56.3
comp=Z,2µm,18.0s
**MEEK Meekatharra 47.01 254** P **P** **16 33 21.7 +3.3**
**SANI Sanana 47.50 289** P **P** **16 33 24.2 +2.0**
**SANI Sanana 47.50 289** P **P** **16 33 23.2 +1.0**
comp=Z,58nm,1.0s,comp=Z,763nm
**NWAO Narrogin (SRO) 47.80 245** P **P** **16 33 23.3 -1.0**
**NWAO Narrogin (SRO) 47.80 245** IAMs_20 IAMs_20 16 51 44.1
comp=Z,4µm,22.0s
**NWAO Narrogin (SRO) 47.80 245** LR LR 16 52 49.9
comp=Z,3µm,20.1s,baz=86,slow=35
**NWAO Narrogin (SRO) 47.80 245** P **P** **16 33 23.3 -1.0**
NWAO pmax pmax
comp=Z,92nm,1.5s
NWAO MLR MLR
comp=Z,4µm,22.0s
**MMRI Maumere 48.08 279** P **P** **16 33 25.2 -1.6**
**EDFI Ende, Flores 48.54 278** P **P** **16 33 31.1 +0.7**
comp=Z,16nm,1.4s
**MORW Morawa 49.04 250** P **P** **16 33 33.0 -1.0**
**TAOE Nuku Hiva Isla 49.33 82** P **P** **16 33 34.7 -1.7**
**TAOE Nuku Hiva Isla 49.33 82** *eP* **P** **16 33 33.3 -3.2**
comp=Z,124nm,26.6s
TAOE *eS* **S** **16 40 39.3 -3.9**
comp=Z,464nm,25.0s
TAOE *eSS* **SS** **16 44 17.9 +2.9**
comp=Z,210nm,27.7s
TAOE *eLR* LR 16 47 33.8
comp=Z,979nm,23.9s
**RKT Rikitea 50.22 102** *eS* **S** **16 40 58.7 +3.4**
comp=Z,698nm,28.0s
RKT *eLR* LR 16 48 01.6
comp=Z,3µm,27.5s
**LUWI Luwuk 50.81 288** P **P** **16 33 49.3 +1.7**
**LUWI Luwuk 50.81 288** P **P** **16 33 44.4 -3.2**
**LUWI Luwuk 50.81 288** P **P** **16 33 48.3 +0.7**
comp=Z,64nm,1.2s,comp=Z,1µm
**BKSI Bulukumba 51.31 281** P **P** **16 33 51.3 0.0**
comp=Z,15nm,0.8s
**GTOI Gorontalo 51.40 290** P **P** **16 33 54.3 +2.3**
comp=Z,17nm,1.1s,comp=Z,224nm
**KAPI Kappang 51.77 282** P **P** **16 33 58.0 +3.2**
**KAPI Kappang 51.77 282** P **P** **16 33 51.9 -2.9**
**KAPI Kappang 51.77 282** P **P** **16 33 55.8 +1.0**
comp=Z,6.9nm,0.4s,baz=172,slow=10.0,SNR=1.6
KAPI LR LR 16 55 33.2
comp=Z,551nm,22.0s,baz=118,slow=36
comp=Z,6.9nm,0.4s
**KAPI Kappang 51.77 282** *i* P **P** **16 33 51.0 -3.8**
KAPI pmax pmax
comp=Z,20nm,1.3s
**DAV Davao City (W) 52.63 298** LR LR 16 56 48.0
comp=Z,415nm,19.7s,baz=126,slow=37
**TOLI2 Tolitoli 53.58 289** P **P** **16 34 09.1 +0.9**
**TOLI2 Tolitoli 53.58 289** P **P** **16 34 04.9 -3.3**
TOLI2 IAmb IAmb 16 34 21.1
comp=Z,30nm,1.1s
**MPSI Mapaga 53.99 288** P **P** **16 34 13.8 +2.6**
comp=Z,27nm,1.2s
**SBA Scott Base 55.66 181** P **P** **16 34 22.3 -0.1**
SBA IAmb IAmb 16 34 36.6
comp=Z,18nm,1.0s
**SBA Scott Base 55.66 181** IAMs_20 IAMs_20 16 55 42.5
comp=Z,2µm,18.0s
**SBA Scott Base 55.66 181** P **P** **16 34 22.3 -0.1**
SBA pmax pmax
comp=Z,18nm,1.0s
SBA MLR MLR
comp=Z,2µm,18.0s
**JCJ Chichijima 56.12 330** LR LR 16 55 24.0
comp=Z,525nm,20.8s,baz=132,slow=33
**UGM Wanagama 59.13 274** IAMs_20 IAMs_20 16 58 55.0
comp=Z,2µm,19.0s
**STKI Sintang 61.39 283** P P 16 35 09.8 +6.5
**SBUM Sibu 61.77 286** P **P** **16 35 03.7 -2.2**
**JHJ Hachijo jima 2 62.32 331** LR LR 17 03 34.5
comp=Z,391nm,18.2s,baz=70,slow=38
**KSM Kuching 63.05 284** P **P** **16 35 16.1 +1.6**
**KSM Kuching 63.05 284** P **P** **16 35 12.9 -1.6**
KSM IAmb IAmb 16 35 27.4
comp=Z,20nm,0.9s
**JGF Kuroka 65.49 331** P **P** **16 35 32.8 +2.8**
**JGF Kuroka 65.49 331** P **P** **16 35 28.4 -1.6**
JGF IAmb IAmb 16 35 30.4
comp=Z,14nm,0.7s
**MJAR Matsushiro Arr 65.89 332** P **P** **16 35 30.8 -1.8**
comp=Z,8.5nm,0.7s,baz=168,slow=6.5,SNR=30
MJAR LR LR 17 01 38.7
comp=Z,411nm,21.7s,baz=126,slow=34
comp=Z,8.5nm,0.7s
**MAJO Matsushiro 65.90 332** P **P** **16 35 36.2 +3.6**
**MAJO Matsushiro 65.90 332** P **P** **16 35 30.9 -1.7**
**MAJO Matsushiro 65.90 332** *i* P **P** **16 35 30.6 -2.0**
MAJO pmax pmax
comp=Z,16nm,0.7s
**TPUB Ta-pu 66.25 310** P **P** **16 35 33.0 -2.2**
**SSLB Suanglung 66.33 311** P **P** **16 35 38.1 +2.4**
**SSLB Suanglung 66.33 311** P **P** **16 35 32.7 -3.0**
**YHNB Yeheng 66.61 312** P **P** **16 35 41.2 +3.7**
**JNU Nakatsue 66.71 325** P P 16 35 42.8 +4.9
**JNU Nakatsue 66.71 325** P **P** **16 35 36.8 -1.1**
**JNU Nakatsue 66.71 325** LR LR 17 05 18.0
comp=Z,347nm,18.1s,baz=122,slow=36
**QSPA South Pole Qui 67.79 180** P **P** **16 35 44.0 -0.5**
**QSPA South Pole Qui 67.79 180** P **P** **16 35 44.6 +0.1**
comp=Z,10.0nm,1.0s,baz=358,slow=1.6,SNR=27
QSPA LR LR 17 02 23.4
comp=Z,1µm,19.2s,baz=34,slow=33
comp=Z,10.0nm,1.0s
**ERM Erimo 68.73 339** IAMs_20 IAMs_20 17 00 25.1
comp=Z,2µm,21.0s
**JEM Erimo 68.73 339** IAMs_20 IAMs_20 17 00 27.7
comp=Z,2µm,22.0s
**QZH Quanzhou 68.73 310** P **P** **16 35 52.0 +1.2**
QZH S **S** **16 44 57.0 +2.8**
QZH pmax pmax
comp=Z,440nm,5.6s
QZH LR LR
comp=Z,690nm,17.9s
QZH LR LR
comp=Z,700nm,18.6s
**JKA Kamikawa-asahi 70.78 339** IAMs_20 IAMs_20 17 01 18.7
comp=Z,1µm,22.0s
**ASAJ Asahikawa 70.78 339** LR LR 17 02 14.0
comp=Z,1µm,21.8s,baz=162,slow=32
**SSE Sheshan 70.96 317** P **P** **16 36 04.3 -0.1**
SSE S **S** **16 45 21.5 +1.3**
SSE pmax pmax
comp=Z,14nm,0.7s
SSE pmax pmax
comp=Z,130nm,4.3s
SSE LR LR
comp=Z,190nm,18.2s
SSE LR LR
comp=Z,160nm,18.1s
**TJN Taejon 71.06 324** P **P** **16 36 07.9 +3.0**

**TJN Taejon 71.06 324** *ceP* **P** **16 36 03.7 -1.2**
**KSRS Korea Array 71.57 326** P **P** **16 36 07.9 0.0**
comp=Z,7.2nm,0.8s,baz=143,slow=5.9,SNR=28
KSRS LR LR 17 04 48.7
comp=Z,345nm,20.6s,baz=130,slow=34
comp=Z,7.2nm,0.8s
**QIZ Qiongzhong 71.96 300** P **P** **16 36 11.0 +0.3**
QIZ S **S** **16 45 35.5 +3.3**
QIZ pmax pmax
comp=Z,420nm,7.8s
QIZ LR LR
comp=Z,290nm,16.8s
QIZ LR LR
comp=Z,280nm,21.0s
QIZ LR LR
comp=Z,290nm,16.8s
**RPN Rapa Nui 71.98 112** LR LR 16 59 38.8
comp=Z,449nm,20.4s,baz=234,slow=29
**INCN Inchon 72.27 325** P P 16 36 17.4 +5.2
**INCN Inchon 72.27 325** P **P** **16 36 10.0 -2.2**
**INCN Inchon 72.27 325** P **P** **16 36 10.0 -2.2**
INCN pmax pmax
comp=Z,92nm,1.6s
INCN MLR MLR
comp=Z,500nm,19.0s
**IPM Ipoh 72.71 282** P **P** **16 36 18.6 +3.3**
**IPM Ipoh 72.71 282** IAmb IAmb 16 36 27.5
comp=Z,14nm,0.9s
**NJ2 Nanjing 73.08 316** *eP* **P** **16 36 19.5 +2.4**
NJ2 pmax pmax
comp=Z,11nm,0.6s
NJ2 pmax pmax
comp=Z,160nm,5.2s
NJ2 LR LR
comp=Z,260nm,15.6s
NJ2 LR LR
comp=Z,340nm,14.7s
NJ2 LR LR
comp=Z,370nm,15.7s
**YSS Yuzh-Sakhalins 73.27 341** IAMs_20 IAMs_20 17 05 47.4
comp=Z,1µm,20.0s
**YSS Yuzh-Sakhalins 73.27 341** *ceP* **P** **16 36 17.6 -0.2**
YSS *e* 16 38 59.1
YSS *e*PPP PPP 16 40 48.4
YSS *e*S **S** **16 45 43.4 -2.6**
YSS *e* 16 46 21.6
YSS *e*SS **SS** **16 50 25.8 -2.6**
YSS pmax pmax
comp=Z,300nm,4.1s
YSS pmax pmax
comp=Z,20nm,1.1s
YSS MLR MLR
comp=Z,900nm,19.0s
YSS MLR MLR
comp=N,900nm,17.0s
YSS MLR MLR
comp=E,400nm,16.0s
**UBPT Khong Chiam 73.67 294** P P 16 36 25.8 +4.9
**UBPT Khong Chiam 73.67 294** P **P** **16 36 19.9 -1.0**
**PSI Prapat 73.93 280** P **P** **16 36 25.3 +2.6**
**VLA Vladivostok 74.06 332** *i* P **P** **16 36 21.7 -0.9**
VLA pmax pmax
comp=Z,42nm,2.4s
**GSI Gunungsitoli 74.56 278** P P 16 36 31.0 +4.8
**GSI Gunungsitoli 74.56 278** P **P** **16 36 24.4 -1.8**
GSI IAmb IAmb 16 36 39.5
comp=Z,34nm,1.1s
**GSI Gunungsitoli 74.56 278** P **P** **16 36 26.0 -0.2**
comp=Z,31nm,1.1s
**SHEM Shemya Is, Ala 74.76 2** LR LR 17 04 14.4
comp=Z,873nm,20.9s,baz=164,slow=32
**USA0B Ussuriysk Arra 74.88 332** *i* P **P** **16 36 25.0 -2.4**
**USRK Ussuriysk Ar. 74.88 332** P **P** **16 36 26.7 -0.7**
comp=Z,5.4nm,0.8s,baz=131,slow=5.8,SNR=8.5
USRK LR LR 17 07 51.0
comp=Z,397nm,19.5s,baz=144,slow=35
comp=Z,5.4nm,0.8s
**WHN Wuhan 75.13 312** P **P** **16 36 27.5 -1.6**
WHN S **S** **16 46 11.8 +4.2**
WHN LR LR
comp=Z,1µm,20.5s
**PET Petropavlovsk 75.66 353** *eP* P 16 36 37.6 +6.0
PET *e* 16 46 54.7
PET pmax pmax
comp=Z,100nm,14.0s
PET MLR MLR
comp=Z,600nm,18.0s
**PEA0B Petropavlovsk- 75.86 352** *ceP* **P** **16 36 31.8 -1.0**
**PETK Petropavlovsk- 75.86 352** P **P** **16 36 31.8 -1.0**
comp=Z,8.2nm,0.9s,baz=130,slow=4.8,SNR=11
PETK LR LR 17 03 49.7
comp=Z,1µm,21.8s,baz=154,slow=31
comp=Z,8.2nm,0.9s
**MAW Mawson 76.01 202** P **P** **16 36 34.6 +1.0**
comp=Z,6.3nm,0.7s,baz=117,slow=8.4,SNR=9.3
MAW LR LR 17 08 37.4
comp=Z,549nm,18.1s,baz=92,slow=35
comp=Z,6.3nm,0.7s
**DL2 Dalian 76.03 323** P **P** **16 36 34.3 +0.2**
DL2 S **S** **16 46 23.0 +5.7**
DL2 pmax pmax
comp=Z,47nm,1.0s
DL2 pmax pmax
comp=Z,400nm,8.0s
DL2 LR LR
comp=Z,310nm,16.6s
DL2 LR LR
comp=Z,320nm,19.0s
DL2 LR LR
comp=Z,440nm,18.6s
**MDJ Mudanjiang 76.26 331** P P 16 36 40.8 +5.6
**MDJ Mudanjiang 76.26 331** P **P** **16 36 34.8 -0.4**
MDJ PP **PP** **16 39 26.5 -0.4**
MDJ S **S** **16 46 22.3 +2.7**
MDJ sS sS 16 46 31.0 +7.8
MDJ SS **SS** **16 51 17.5 +3.4**
MDJ pmax pmax
comp=Z,13nm,1.4s
MDJ pmax pmax
comp=Z,320nm,8.8s
MDJ LR LR
comp=Z,340nm,17.6s
MDJ LR LR
comp=Z,260nm,16.3s
MDJ LR LR
comp=Z,700nm,23.6s
**CLES Cleveland East 76.74 12** IAMs_20 IAMs_20 17 04 14.8
comp=Z,1µm,20.0s
**TIA Tai'an 76.87 318** P **P** **16 36 39.0 +0.1**
TIA S **S** **16 46 33.5 +6.8**
TIA pmax pmax
comp=Z,28nm,1.3s
TIA pmax pmax
comp=Z,360nm,7.8s
TIA LR LR
comp=Z,280nm,15.1s
TIA LR LR
comp=Z,290nm,19.4s
TIA LR LR
comp=Z,370nm,15.8s
**CN2 Changchun 77.56 328** *eP* **P** **16 36 41.5 -1.1**
CN2 PP **PP** **16 39 41.8 +3.9**
CN2 *eS* **S** **16 46 35.0 +1.2**
CN2 SS **SS** **16 51 35.0 +1.2**
CN2 pmax pmax
comp=Z,10.0nm,0.8s
CN2 pmax pmax
comp=Z,300nm,9.0s
CN2 LR LR
comp=Z,200nm,17.0s
CN2 LR LR
comp=Z,400nm,17.0s
CN2 LR LR
comp=Z,400nm,19.0s
**BNX BinXian 78.11 331** ||P **P** **16 36 44.8 -0.8**
BNX pmax pmax
comp=Z,8.0nm,0.8s
**ENH Enshi 78.38 310** P **P** **16 36 51.4 +3.9**
**GYA Guiyang 78.38 305** ||P **P** **16 36 50.0 +2.3**
GYA PP **PP** **16 39 44.5 -0.7**
GYA S **S** **16 46 44.8 +1.2**
GYA pmax pmax
comp=Z,330nm,6.2s
GYA LR LR
comp=Z,300nm,24.5s
**LYN LuoYang 78.81 315** *eP* **P** **16 36 50.3 +0.5**

LYN pP sP 16 36 54.5 +1.9
LYN S **S** **16 46 51.0 +3.3**
LYN sS sS 16 46 54.0 +2.7
LYN pmax pmax
comp=Z,34nm,1.1s
LYN pmax pmax
comp=Z,550nm,7.2s
LYN LR LR
comp=Z,450nm,16.1s
LYN LR LR
comp=Z,310nm,15.1s
LYN LR LR
comp=Z,830nm,19.9s
**BELA Belgrano 2 79.00 175** P **P** **16 36 49.4 -0.8**
BELA IAmb IAmb 16 37 02.1
comp=Z,19nm,1.0s
**KLR Kul'dur 79.04 335** LR LR 17 06 38.9
comp=Z,739nm,22.0s,baz=146,slow=32
**KLR Kul'dur 79.04 335** *ce*P **P** **16 36 47.1 -3.6**
KLR pmax pmax
comp=Z,13nm,1.7s
**HNS HongShan 79.12 318** ⇑P **P** **16 36 51.5 +0.1**
HNS S **S** **16 46 51.5 +0.7**
HNS pmax pmax
comp=Z,19nm,1.0s
HNS pmax pmax
comp=Z,400nm,7.7s
HNS LR LR
comp=Z,420nm,17.9s
HNS LR LR
comp=Z,490nm,17.9s
HNS LR LR
comp=Z,620nm,17.9s
**PHRA Phrae 79.60 295** P **P** **16 36 51.5 -2.9**
**BJT Baijiatuau 79.91 321** P P 16 37 01.4 +5.8
**BJT Baijiatuau 79.91 321** IAmb IAmb 16 36 56.8
comp=Z,41nm,1.8s
**BJI Beijing 79.92 321** P **P** **16 36 56.0 +0.3**
BJI S **S** **16 46 56.5 -2.7**
BJI pmax pmax
comp=Z,5.0nm,1.1s
BJI pmax pmax
comp=Z,130nm,8.7s
BJI LR LR
comp=Z,200nm,20.8s
BJI LR LR
comp=Z,130nm,24.3s
BJI LR LR
comp=Z,340nm,22.1s
**CRAI Chiangrai 80.29 296** IAmb IAmb 16 37 11.9
comp=Z,39nm,1.7s
**CMAR Chiang Mai Arr 80.67 294** P **P** **16 37 01.8 +1.5**
comp=Z,4.9nm,0.7s,baz=134,slow=4.0,SNR=31
CMAR LR LR 17 16 30.9
comp=Z,104nm,18.4s,baz=135,slow=38
comp=Z,4.9nm,0.7s
**KMI Kunming 80.73 302** ⇑P **P** **16 37 02.0 +1.3**
KMI sP pwP 16 37 10.3 +0.9
KMI S **S** **16 47 11.5 +2.7**
KMI pmax pmax
comp=Z,19nm,1.6s
KMI pmax pmax
comp=Z,340nm,8.6s
KMI LR LR
comp=Z,170nm,19.5s
KMI LR LR
comp=Z,340nm,18.6s
KMI LR LR
comp=Z,190nm,20.2s
**TIY Taiyuan 80.74 317** ⇓P **P** **16 37 01.0 +0.7**
TIY S **S** **16 47 10.3 +2.2**
TIY pmax pmax
comp=Z,17nm,0.7s
TIY pmax pmax
comp=Z,220nm,7.5s
TIY LR LR
comp=Z,280nm,17.6s
TIY LR LR
comp=Z,240nm,18.4s
TIY LR LR
comp=Z,380nm,18.4s
**XAN Xi'an 80.90 312** ⇑P **P** **16 37 02.0 +0.8**
XAN pP sP 16 37 05.3 +1.3
XAN S **S** **16 47 13.3 +3.5**
XAN pmax pmax
comp=Z,28nm,0.9s
XAN pmax pmax
comp=Z,540nm,7.4s
XAN LR LR
comp=Z,300nm,18.2s
XAN LR LR
comp=Z,410nm,17.3s
XAN LR LR
comp=Z,530nm,17.9s
**CNBA Chernabura Isl 81.00 17** IAMs_20 IAMs_20 17 06 29.8
comp=Z,1μm,20.0s
**HEH HeiHe 81.57 334** *e*P **P** **16 37 03.5 -0.8**
HEH pmax pmax
comp=Z,7.0nm,1.3s
**PZH PanZhiHua 82.19 303** P **P** **16 37 08.0 -0.3**
PZH S **S** **16 47 23.5 -0.2**
PZH pmax pmax
comp=Z,20nm,1.2s
PZH pmax pmax
comp=Z,270nm,6.6s
PZH LR LR
comp=Z,230nm,19.0s
PZH LR LR
comp=Z,210nm,19.6s
PZH LR LR
comp=Z,310nm,19.4s
**XLT XiLinHaoTe 82.48 324** *e*P **P** **16 37 08.3 -1.0**
XLT S **SKSac** **16 47 29.5 -0.8**
XLT pmax pmax
comp=Z,8.0nm,1.1s
XLT pmax pmax
comp=Z,240nm,9.4s
XLT LR LR
comp=Z,340nm,18.5s
XLT LR LR
comp=Z,410nm,18.2s
**CD2 Chengdu 82.88 307** P **P** **16 37 11.8 +0.1**
CD2 sP PcP 16 37 18.0 +1.6
CD2 S **S** **16 47 29.5 -0.9**
CD2 sS SKKSac 16 47 39.0 +1.6
CD2 SS **SS** **16 52 54.3 +0.3**
CD2 pmax pmax
comp=Z,10.0nm,0.7s
CD2 pmax pmax
comp=Z,360nm,7.9s
CD2 LR LR
comp=Z,380nm,16.1s
CD2 LR LR
comp=Z,370nm,18.4s
**MA2 Magadan 83.12 350** IAMs_20 IAMs_20 17 08 57.6
comp=Z,1μm,21.0s
**HHC Hu-ho-hao-te 83.17 319** *e*P **P** **16 37 14.3 +1.3**
HHC S **SKSac** **16 47 35.0 -0.1**
HHC sS SKKSac 16 47 41.8 +2.5
HHC SS **SS** **16 53 01.5 +3.4**
HHC pmax pmax
comp=Z,13nm,0.5s
HHC pmax pmax
comp=Z,270nm,5.6s
HHC LR LR
comp=Z,340nm,17.3s
HHC LR LR
comp=Z,270nm,17.7s
HHC LR LR
comp=Z,450nm,17.2s
**ELIB Princess Elisa 83.34 190** *d*P **P** **16 37 13.4 -0.1**
comp=Z,13nm,1.1s
**PMSA Palmer Station 83.73 159** LR LR 17 11 57.5
comp=Z,579nm,18.1s,baz=232,slow=34
**BTO Baotou 83.97 318** *e*P **P** **16 37 19.8 +2.7**
BTO pP **pwP** **16 37 24.5 -1.3**
BTO sP **PcP** **16 37 26.5 +5.4**
BTO S **S** **16 47 43.5 +2.3**
BTO sS **ScS** **16 47 54.8 +1.2**
BTO pmax pmax
comp=Z,18nm,0.5s
BTO pmax pmax
comp=Z,670nm,6.6s
BTO LR LR
comp=Z,580nm,19.0s
BTO LR LR
comp=Z,580nm,17.5s
BTO LR LR
comp=Z,950nm,16.3s
**TNCH TengChong 84.04 300** P **P** **16 37 17.8 -0.1**
TNCH S **S** **16 47 43.8 +1.1**
TNCH SS **SS** **16 53 14.0 +2.4**
TNCH pmax pmax
comp=Z,15nm,0.6s
TNCH pmax pmax
comp=Z,290nm,8.2s
TNCH LR LR
comp=Z,110nm,6.6s
TNCH LR LR
comp=Z,130nm,3.8s
**SII Sitkinak Islan 84.05 19** IAMs_20 IAMs_20 17 14 26.4
comp=Z,1μm,18.0s
**ZEA Zeya 84.33 336** *e*P **P** **16 37 18.0 -0.5**
ZEA *e*S **S** **16 47 45.6 +1.7**
ZEA pmax pmax
comp=N,10.0nm,1.0s
ZEA pmax pmax
comp=Z,10.0nm,1.6s
ZEA pmax pmax
comp=N,100nm,3.5s
ZEA pmax pmax
comp=Z,100nm,7.0s
ZEA smax smax
comp=E,200nm,15.7s
**PLK4 Peulik 4 84.34 17** IAMs_20 IAMs_20 17 14 36.9
comp=Z,1μm,19.0s
**LZH Lanzhou 85.50 312** ⇑P **P** **16 37 24.3 -0.7**
LZH sP pwP 16 37 37.5 +3.8
LZH PP **PP** **16 40 43.3 -0.5**
LZH S **S** **16 48 00.0 +3.3**
LZH pmax pmax
comp=Z,380nm,5.2s
LZH LR LR
comp=Z,240nm,17.2s
LZH LR LR
comp=Z,330nm,18.6s
LZH LR LR
comp=Z,430nm,18.2s
**KDAK Kodiak Island 85.55 19** LR LR 17 09 06.3
comp=Z,839nm,20.7s,baz=231,slow=31
**TROLL Troll, Antarti 85.59 184** ⇑P **P** **16 37 24.6 -0.4**
comp=Z,567nm,0.6s
**O16K Kokwok River B 85.59 15** IAMs_20 IAMs_20 17 14 03.9
comp=Z,979nm,20.0s
**NVL N'lazarevskaya 85.98 187** *e*P **P** **16 37 30.2 +3.5**
NVL *e*S **SKSac** **16 47 50.3 -1.9**
NVL pmax pmax
comp=Z,11nm,0.8s
NVL MLR MLR
comp=Z,485nm,17.0s
**SEY Seymchan 86.10 352** P **P** **16 37 25.6 -1.6**
comp=Z,5.5nm,0.9s,baz=132,slow=4.7,SNR=10
SEY LR LR 17 10 26.6
comp=Z,1μm,21.5s,baz=150,slow=32
comp=Z,5.5nm,0.9s
**SEY Seymchan 86.10 352** *ce*P **P** **16 37 27.0 -0.1**
SEY pmax pmax
comp=Z,22nm,1.7s
**SNAA Sanae 86.18 182** P **P** **16 37 26.6 -1.2**
SNAA IAmb IAmb 16 37 40.2
comp=Z,17nm,1.0s
SNAA IAMs_20 IAMs_20 17 14 40.8
comp=Z,1μm,19.0s
**SNAA Sanae 86.18 182** ⇑P **P** **16 37 27.4 -0.5**
comp=Z,112nm,0.7s
**SNAA Sanae 86.18 182** P **P** **16 37 27.3 -0.5**
comp=Z,4.6nm,0.7s,baz=177,slow=2.8,SNR=15
SNAA LR LR 17 14 43.1
comp=Z,1μm,18.0s,baz=178,slow=35
comp=Z,4.6nm,0.7s
**SNAA Sanae 86.18 182** *ce*P **P** **16 37 27.8 0.0**
SNAA pmax pmax
comp=Z,15nm,1.3s
**Q19K Cape Douglas, 86.20 18** IAMs_20 IAMs_20 17 09 03.2
comp=Z,1μm,20.0s
**O18K Koktuh Hills 86.56 17** IAMs_20 IAMs_20 17 12 50.5
comp=Z,998nm,21.0s
**N17K Nushagak Hills 86.63 15** IAMs_20 IAMs_20 17 14 37.4
comp=Z,1μm,20.0s
**M16K Timber Creek 86.64 14** IAMs_20 IAMs_20 17 07 22.6
comp=Z,870nm,20.0s
**VNA3 Neumayer Olymp 86.73 180** ⇑P **P** **16 37 29.9 -0.5**
comp=Z,21nm,0.7s
**MCCM Marconi Confer 86.80 47** IAMs_20 IAMs_20 17 17 11.4
comp=Z,746nm,18.0s
**P19K Oil Pt 86.92 18** IAMs_20 IAMs_20 17 16 08.3
comp=Z,1μm,18.0s
**VNA2 Neumayer--Watz 87.04 181** ⇑P **P** **16 37 31.4 -0.5**
comp=Z,21nm,0.6s,baz=174,slow=5.1
**HOPS Hopland Field 87.11 46** IAMs_20 IAMs_20 17 15 05.7
comp=Z,850nm,18.0s
**J14K Nanvaranak Lak 87.24 12** IAMs_20 IAMs_20 17 11 21.1
comp=Z,1μm,20.0s
**VNA1 Neumayer--Stat 87.32 180** ⇑P **P** **16 37 33.1 -0.2**
comp=Z,10.0nm,1.0s
**M17K Holitna River 87.33 15** IAMs_20 IAMs_20 17 14 59.8
comp=Z,963nm,18.0s
**CNPM China Poot 87.39 18** IAMs_20 IAMs_20 17 14 55.7
comp=Z,900nm,19.0s
**JCC Jacoby Creek, 87.45 44** IAMs_20 IAMs_20 17 13 19.6
comp=Z,819nm,18.0s
**N19K Bonanza Creek 87.56 16** IAMs_20 IAMs_20 17 14 01.1
comp=Z,1μm,20.0s
**O02D Mt. Diablo Mer 87.92 45** IAMs_20 IAMs_20 17 08 11.0
comp=Z,761nm,20.0s
**PASC Pasadena Art C 88.11 52** IAMs_20 IAMs_20 17 10 05.6
comp=Z,1μm,19.0s
**K17K Iditarod 88.28 14** IAMs_20 IAMs_20 17 09 01.0
comp=Z,795nm,20.0s
**J16K Anvik River 88.30 13** IAMs_20 IAMs_20 17 10 53.3
comp=Z,1μm,20.0s
**M19K Big River Lodg 88.51 16** IAMs_20 IAMs_20 17 14 30.1
comp=Z,854nm,20.0s
**ANM Nome 88.59 10** IAMs_20 IAMs_20 17 11 00.9
comp=Z,1μm,21.0s
**ISA Isabella, Lake 88.61 50** P **P** **16 37 38.6 -1.5**
ISA IAmb IAmb 16 38 08.9
comp=Z,22nm,1.7s
**ISA Isabella, Lake 88.61 50** P **P** **16 37 38.6 -1.5**
ISA pmax pmax
comp=Z,22nm,1.7s
**L19K White Mountain 88.63 16** IAMs_20 IAMs_20 17 15 21.3
comp=Z,882nm,20.0s
**YBH Yreka Blue Hor 88.78 44** P **P** **16 37 40.3 -0.4**
**YBH Yreka Blue Hor 88.78 44** LR LR 17 13 12.6
comp=Z,433nm,18.0s,baz=255,slow=33
**YBH Yreka Blue Hor 88.78 44** P **P** **16 37 40.3 -0.4**
YBH pmax pmax
comp=Z,10.0nm,1.5s
YBH MLR MLR
comp=Z,500nm,21.0s
**I17K Unalakleet 88.82 12** IAMs_20 IAMs_20 17 12 50.2
comp=Z,1μm,20.0s
**CIT Chita 89.00 329** *e*P **P** **16 37 40.2 -1.3**
CIT pmax pmax
comp=Z,56nm,1.5s
**HUMO Hull Mountain 89.08 43** IAMs_20 IAMs_20 17 09 26.6
comp=Z,815nm,20.0s
**RC01 Rabbit Creek A 89.10 18** IAMs_20 IAMs_20 17 10 44.9
comp=Z,848nm,21.0s
**PFO Pinyon Flats O 89.11 53** LR LR 17 09 40.9
comp=Z,962nm,20.4s,baz=234,slow=30
**SUA Susitna One 89.12 18** IAMs_20 IAMs_20 17 16 10.3
comp=Z,951nm,20.0s
**M22K Willow 89.53 18** IAMs_20 IAMs_20 17 16 58.1
comp=Z,1μm,18.0s
**SHL Shillong 89.66 298** IAmb IAmb 16 37 47.7
comp=Z,14nm,0.9s
**KNK Knik Glacier 89.73 18** IAMs_20 IAMs_20 17 15 51.6
comp=Z,773nm,19.0s
**F15K North Star Dit 89.77 10** IAMs_20 IAMs_20 17 10 31.0
comp=Z,1μm,20.0s
**K20K Telida 89.82 15** IAMs_20 IAMs_20 17 16 08.7
comp=Z,740nm,19.0s
**LPIG La Paz 89.83 64** LR LR 17 11 53.6
comp=Z,725nm,18.2s,baz=246,slow=32
**GHO Glory Hole Cre 89.88 18** IAMs_20 IAMs_20 17 19 56.5
comp=Z,791nm,19.0s
**ULN Ulaanbaatar 89.89 323** P **P** **16 37 44.5 -1.3**
ULN IAmb IAmb 16 37 47.7
comp=Z,20nm,1.3s
**ULN Ulaanbaatar 89.89 323** *ce*P **P** **16 37 43.8 -2.1**
ULN pmax pmax
comp=Z,23nm,1.7s
**COR Corvallis 89.91 41** IAMs_20 IAMs_20 17 09 28.3
comp=Z,1μm,20.0s
**H17K Granite Mounta 89.91 12** IAMs_20 IAMs_20 17 13 23.1
comp=Z,1μm,20.0s
**GTA Gaotai 89.93 313** P **P** **16 37 46.5 +0.3**
GTA pP pwP 16 37 52.8 -2.1
GTA PP **PP** **16 41 19.0 -0.4**
GTA S **S** **16 48 41.0 +2.0**
GTA SS **SS** **16 54 39.8 +2.4**
GTA pmax pmax
comp=Z,4.0nm,1.4s
GTA pmax pmax
comp=Z,170nm,9.1s
GTA LR LR
comp=Z,110nm,17.9s
GTA LR LR
comp=Z,220nm,17.9s
GTA LR LR
comp=Z,340nm,21.1s
**J19K Poorman 90.00 14** IAMs_20 IAMs_20 17 09 51.3
comp=Z,833nm,19.0s
**CUT Chulitna 90.02 17** IAMs_20 IAMs_20 17 18 20.1
comp=Z,906nm,18.0s
**NVAR Mina Array Bea 90.06 48** P **P** **16 37 46.4 -0.6**
comp=Z,0.8nm,0.6s,baz=221,slow=7.5,SNR=5.7
NVAR LR LR 17 12 52.2
comp=Z,965nm,18.5s,baz=258,slow=32
comp=Z,0.8nm,0.6s
**YAK Yakutsk 90.06 342** LR LR 17 16 29.6
comp=Z,427nm,19.3s,baz=136,slow=34
**YAK Yakutsk 90.06 342** *e*P **P** **16 37 44.0 -2.0**
YAK *e**PP **sP** **16 37 50.9 +2.0**
YAK *e* 16 41 17.6
YAK *e*PPP PPP 16 43 12.9
YAK *e*S **SKSac** **16 48 13.3 -3.1**
YAK *e* 16 48 40.1
YAK *e*SS **SS** **16 54 36.8 -1.1**
YAK *e*SSS SSS 16 58 07.0
YAK pmax pmax
comp=Z,15nm,0.9s
YAK pmax pmax
comp=N,7.0nm,2.7s
YAK pmax pmax
comp=E,7.0nm,2.2s
YAK pmax pmax
comp=Z,153nm,5.6s
YAK pmax pmax
comp=N,53nm,4.8s
YAK pmax pmax
comp=E,82nm,4.8s
YAK smax smax
comp=E,108nm,4.0s
YAK smax smax
comp=N,46nm,6.9s
YAK MLR MLR
comp=Z,640nm,24.0s
YAK MLR MLR
comp=E,218nm,20.0s
YAK MLR MLR
comp=N,319nm,19.0s
**SML Sawmill 90.08 18** IAMs_20 IAMs_20 17 22 39.8
comp=Z,886nm,18.0s
**BILL Bilibino 90.10 358** ⇓*e*P **P** **16 37 44.2 -1.9**
BILL *e* 16 41 16.1
BILL pmax pmax
comp=Z,20nm,1.3s
BILL MLR MLR
comp=Z,245nm,18.0s
**RAGM Ragged Mountai 90.11 21** IAMs_20 IAMs_20 17 14 24.6
comp=Z,718nm,19.0s
**SUCK Suckling Hills 90.17 21** IAMs_20 IAMs_20 17 17 56.2
comp=Z,1μm,19.0s
**HMT Hamilton 90.20 21** IAMs_20 IAMs_20 17 21 50.2
comp=Z,1μm,19.0s
**SONM Songino Array 90.24 323** P **P** **16 37 47.2 -0.3**
comp=Z,5.8nm,0.8s,baz=137,slow=2.3,SNR=26
SONM LR LR 17 20 37.6
comp=Z,337nm,18.0s,baz=120,slow=37
comp=Z,5.8nm,0.8s
**H18K Honhosa River 90.42 13** IAMs_20 IAMs_20 17 11 57.2
comp=Z,1μm,21.0s
**BERG Berg Lake 90.43 21** IAMs_20 IAMs_20 17 26 27.0
comp=Z,853nm,18.0s
**J20K Nowinta River 90.50 15** IAMs_20 IAMs_20 17 16 49.5
comp=Z,839nm,19.0s
**J05D Fort Rock, OR 90.52 43** P **P** **16 37 47.7 -1.2**
**SNH Sunshine Point 90.56 21** IAMs_20 IAMs_20 17 12 07.7
comp=Z,842nm,19.0s
**WAX Waxell Ridge 90.76 21** IAMs_20 IAMs_20 17 17 03.8
comp=Z,854nm,19.0s
**MESA MESA 90.86 22** IAMs_20 IAMs_20 17 20 05.7
comp=Z,860nm,19.0s
**I20K Naaghedeneel 90.95 14** IAMs_20 IAMs_20 17 14 00.3
comp=Z,763nm,20.0s
**PINE Pine Mountain 90.96 42** IAmb IAmb 16 38 06.7
comp=Z,27nm,2.0s
**G18K Tagagawik 91.01 12** IAMs_20 IAMs_20 17 14 27.1
comp=Z,1μm,20.0s
**ISLE Juniper Island 91.04 21** IAMs_20 IAMs_20 17 17 23.4
comp=Z,767nm,19.0s
**NLWA Neilton Lookou 91.07 38** IAMs_20 IAMs_20 17 12 57.8
comp=Z,911nm,19.0s
**BPAW Bear Paw Mtn. 91.21 16** IAMs_20 IAMs_20 17 17 10.4
comp=Z,885nm,19.0s
**RND Reindeer 91.21 17** IAMs_20 IAMs_20 17 16 05.5
comp=Z,954nm,20.0s
**TABL Table Mountain 91.33 22** IAMs_20 IAMs_20 17 20 40.1
comp=Z,750nm,18.0s
**DHY Denali Highway 91.36 18** IAMs_20 IAMs_20 17 12 16.5
comp=Z,836nm,20.0s
**S31K Pelican 91.42 25** IAMs_20 IAMs_20 17 10 51.9
comp=Z,794nm,20.0s
**BBB Bella Bella 91.46 33** LR LR 17 10 29.6
comp=Z,625nm,21.0s,baz=242,slow=30
**BCPM Bancas Point 91.51 23** IAMs_20 IAMs_20 17 19 00.9
comp=Z,935nm,18.0s
**G19K Purcell Mounta 91.54 13** IAMs_20 IAMs_20 17 14 15.0
comp=Z,1μm,20.0s
**BWN Browne 91.66 16** IAMs_20 IAMs_20 17 16 50.6
comp=Z,904nm,18.0s
**S32K Killisnoo 91.77 26** IAMs_20 IAMs_20 17 12 02.0
comp=Z,733nm,20.0s
**I21K Tanana 91.85 15** IAMs_20 IAMs_20 17 16 55.1
comp=Z,887nm,20.0s
**PRN Pahroc Range 91.86 50** P **P** **16 37 54.4 -0.9**
**P29M Windy Craggy 91.98 24** IAMs_20 IAMs_20 17 12 00.3
comp=Z,985nm,21.0s
**F19K Shaleruckik Mo 92.01 12** IAMs_20 IAMs_20 17 11 54.4
comp=Z,1μm,21.0s
**E18K Tukpahlearik C 92.01 11** IAMs_20 IAMs_20 17 13 39.3
comp=Z,928nm,20.0s
**WRAK Wrangell Islan 92.04 28** IAMs_20 IAMs_20 17 22 21.0
comp=Z,676nm,18.0s
**H21K Melozitna River 92.06 14** IAMs_20 IAMs_20 17 18 34.7
comp=Z,830nm,18.0s
**O29M Mount Kennedy 92.14 23** IAMs_20 IAMs_20 17 12 07.5
comp=Z,779nm,20.0s
**M26K Nabesna, AK 92.15 20** IAmb IAmb 16 37 59.1
comp=Z,19nm,1.6s
**RDOG Red Dog Mine 92.20 10** IAMs_20 IAMs_20 17 12 08.3
comp=Z,1μm,20.0s
**WRH Wood River Hil 92.26 17** IAMs_20 IAMs_20 17 16 58.3
comp=Z,1μm,19.0s
**R32K Eaglecrest 92.31 26** IAMs_20 IAMs_20 17 10 57.5
comp=Z,815nm,21.0s
**PALK Pallekele 92.36 277** LR LR 17 22 09.2
comp=Z,658nm,18.9s,baz=116,slow=37
**PALK Pallekele 92.36 277** *i*P **P** **16 37 55.3 -2.7**
**I23K Minto, Yukon-K 92.47 16** IAMs_20 IAMs_20 17 24 36.8
comp=Z,888nm,18.0s
**CCB Clear Creek Bu 92.48 17** IAMs_20 IAMs_20 17 16 56.0
comp=Z,1μm,19.0s
**M27K Edge Creek, AK 92.48 20** IAmb IAmb 16 37 59.7
comp=Z,20nm,1.5s
**L26K Log Cabin Wild 92.51 19** IAMs_20 IAMs_20 17 22 56.0
comp=Z,752nm,19.0s
**HDA Harding Lake 92.52 17** IAmb IAmb 16 38 27.7
comp=Z,14nm,1.4s
HDA IAMs_20 IAMs_20 17 13 15.2
comp=Z,963nm,20.0s
**RIDG Independent Ri 92.60 18** IAMs_20 IAMs_20 17 22 05.4
comp=Z,826nm,18.0s
**F20K Avaraart Lake 92.60 13** P **P** **16 37 56.8 -0.9**
F20K IAmb IAmb 16 39 30.8
comp=Z,21nm,1.6s
F20K IAMs_20 IAMs_20 17 14 19.0
comp=Z,1μm,21.0s

**G21K Allakaket 92.62 14** IAMs_20 IAMs_20 17 18 29.5
comp=Z,709nm,19.0s
**COLA College 92.64 17** IAMs_20 IAMs_20 17 17 48.3
comp=Z,884nm,19.0s
**COLA College 92.64 17** *i* P **P 16 37 56.2 -1.8**
COLA pmax pmax
comp=Z,11nm,1.3s
**E19K Redstone River 92.66 12** IAMs_20 IAMs_20 17 12 14.6
comp=Z,1µm,21.0s
**ILAR Eielson Array 92.82 17** P **P 16 37 57.4 -1.5**
comp=Z,0.8nm,0.6s,baz=236,slow=4.8,SNR=6.3
ILAR LR LR 17 17 44.7
comp=Z,836nm,18.2s,baz=226,slow=34
comp=Z,0.8nm,0.6s
**POKR Poker Plat Res 92.95 17** IAMs_20 IAMs_20 17 18 15.4
comp=Z,922nm,19.0s
**H23K Yukon River 92.97 15** IAMs_20 IAMs_20 17 17 19.7
comp=Z,862nm,20.0s
**C18K Utukok River 93.01 10** IAMs_20 IAMs_20 17 13 29.8
comp=Z,1µm,20.0s
**HAWA Hanford 93.11 41** IAMs_20 IAMs_20 17 19 07.1
comp=Z,1µm,18.0s
**J25K Salcha River, 93.11 18** IAMs_20 IAMs_20 17 13 44.9
comp=Z,899nm,22.0s
**F21K Alatna River 93.22 13** IAMs_20 IAMs_20 17 13 46.3
comp=Z,1µm,21.0s
**ELK Elko 93.23 47** IAMs_20 IAMs_20 17 18 18.7
comp=Z,1µm,18.0s
**T35M Bob Quinn 93.30 28** IAMs_20 IAMs_20 17 22 45.6
comp=Z,697nm,19.0s
**ZAK Zakamensk 93.34 324** *e*P **P 16 38 00.0 -1.7**
ZAK pmax pmax
comp=Z,9.0nm,1.4s
**O30N Mendenhall 93.36 23** IAMs_20 IAMs_20 17 13 33.8
comp=Z,778nm,20.0s
**D19K Kuna River 93.40 11** IAMs_20 IAMs_20 17 15 37.2
comp=Z,829nm,20.0s
**N30M Aishikik Lake 93.46 22** IAMs_20 IAMs_20 17 20 40.5
comp=Z,955nm,18.0s
**K27K Chicken 93.64 19** IAmb IAmb 16 38 05.8
comp=Z,12nm,1.3s
**M29M Somme Creek 93.66 21** P **P 16 38 01.9 -1.0**
M29M IAmb IAmb 16 39 09.2
comp=Z,12nm,1.7s
**C19K Lookout Ridge 93.69 10** IAMs_20 IAMs_20 17 14 24.6
comp=Z,1µm,21.0s
**WUAZ Wupatki 93.72 53** IAMs_20 IAMs_20 17 12 05.2
comp=Z,954nm,20.0s
**BMO Blue Mountains 93.75 43** IAMs_20 IAMs_20 17 14 25.1
comp=Z,928nm,19.0s
**PRP Porcupine Dome 93.77 17** IAMs_20 IAMs_20 17 17 45.1
comp=Z,888nm,19.0s
**N31M Braeburn, Yuko 93.94 23** IAMs_20 IAMs_20 17 13 34.3
comp=Z,753nm,21.0s
**E21K Killik River 94.14 12** IAMs_20 IAMs_20 17 16 36.4
comp=Z,958nm,20.0s
**I26K Coal Creek Min 94.26 18** P **P 16 38 03.3 -2.1**
I26K IAMs_20 IAMs_20 17 23 17.0
comp=Z,691nm,19.0s
**DLBC Dease Lake 94.27 27** LR LR 17 13 53.7
comp=Z,572nm,19.8s,baz=275,slow=31
**M30M Minto, Yukon 94.32 22** IAmb IAmb 16 38 28.6
comp=Z,12nm,1.5s
M30M IAMs_20 IAMs_20 17 22 46.1
comp=Z,872nm,19.0s
**E22K Anaktuvuk Pass 94.33 13** IAMs_20 IAMs_20 17 15 03.8
comp=Z,1µm,21.0s
**FYU Fort Yukon 94.64 16** IAMs_20 IAMs_20 17 19 26.2
comp=Z,918nm,19.0s
**N32M Quiet Lake 94.72 24** IAMs_20 IAMs_20 17 12 13.9
comp=Z,1µm,22.0s
**F24K Squaw Lake 94.72 15** IAMs_20 IAMs_20 17 22 11.2
comp=Z,832nm,18.0s
**E23K Chandalar 94.75 14** IAMs_20 IAMs_20 17 19 53.9
comp=Z,737nm,20.0s
**D22K Ayikyak River 94.77 13** IAMs_20 IAMs_20 17 16 47.3
comp=Z,1µm,20.0s
**B20K Meade River 94.89 11** IAMs_20 IAMs_20 17 14 43.5
comp=Z,946nm,19.0s
**M31M Drury Creek, Y 94.91 23** IAMs_20 IAMs_20 17 16 28.9
comp=Z,834nm,20.0s
**B21K Ikpikpuk River 95.02 12** IAMs_20 IAMs_20 17 15 29.7
comp=Z,1µm,21.0s
**E24K Your Creek 95.02 14** IAMs_20 IAMs_20 17 16 38.1
comp=Z,954nm,20.0s
**TOLK Toolik Lake Re 95.23 14** IAMs_20 IAMs_20 17 20 47.5
comp=Z,916nm,19.0s
**D23K Nanushuk River 95.25 13** IAMs_20 IAMs_20 17 15 55.1
comp=Z,1µm,21.0s
**NEW Newport 95.44 40** IAMs_20 IAMs_20 17 19 07.7
comp=Z,826nm,18.0s
**NEW Newport 95.44 40** LR LR 17 17 58.8
comp=Z,694nm,18.0s,baz=237,slow=34
**PLCA Paso Flores 95.61 138** P **P 16 38 14.7 +2.2**
comp=Z,3.6nm,1.1s,baz=216,slow=4.5,SNR=3.5
PLCA LR LR 17 11 23.3
comp=Z,278nm,21.6s,baz=230,slow=29
comp=Z,3.6nm,1.1s
**F26K Sheenjek River 95.78 16** IAMs_20 IAMs_20 17 20 32.2
comp=Z,852nm,20.0s
**G27K Doyon Strip 95.78 17** IAMs_20 IAMs_20 17 15 27.4
comp=Z,842nm,20.0s
**D24K Happy Valley 95.81 14** IAMs_20 IAMs_20 17 15 30.7
comp=Z,847nm,20.0s
**J30M Hart River 95.81 20** IAMs_20 IAMs_20 17 23 48.5
comp=Z,682nm,18.0s
**C23K Itkillik River 95.98 13** IAMs_20 IAMs_20 17 16 58.4
comp=Z,1µm,20.0s
**HWUT Hardware Ranch 96.10 48** IAMs_20 IAMs_20 17 20 03.8
comp=Z,774nm,18.0s
**D25K Kavik River 96.48 14** IAMs_20 IAMs_20 17 20 32.7
comp=Z,785nm,19.0s
**MSO Missoula 96.74 42** IAMs_20 IAMs_20 17 19 05.1
comp=Z,1µm,18.0s
**F28M Old Crow 96.84 17** IAMs_20 IAMs_20 17 24 35.5
comp=Z,794nm,20.0s
**G29M Pine Creek 96.88 18** IAMs_20 IAMs_20 17 16 26.4
comp=Z,865nm,22.0s
**DLMT Dillon 96.97 44** IAMs_20 IAMs_20 17 13 13.4
comp=Z,886nm,22.0s
**ANMO Albuquerque 97.19 55** LR LR 17 13 35.1
comp=Z,861nm,21.5s,baz=256,slow=30
**TPAW Teton Pass 97.28 46** IAMs_20 IAMs_20 17 21 07.7
comp=Z,662nm,18.0s
**FXWY Fox Creek 97.29 46** IAMs_20 IAMs_20 17 21 17.1
comp=Z,722nm,18.0s
**TXAR Lajitas Array 97.32 61** LR LR 17 13 32.8
comp=Z,689nm,21.0s,baz=250,slow=30
**C27K Jago River 97.33 15** IAMs_20 IAMs_20 17 17 11.8
comp=Z,710nm,20.0s
**SNOW Snow King Moun 97.40 46** IAMs_20 IAMs_20 17 19 11.0
comp=Z,644nm,19.0s
**IMW Indian Meadow 97.45 46** IAMs_20 IAMs_20 17 25 51.2
comp=Z,602nm,18.0s
**LOHW Long Hollow 97.56 46** IAMs_20 IAMs_20 17 21 35.0
comp=Z,663nm,18.0s
**BOZ Bozeman (W) 97.69 44** IAMs_20 IAMs_20 17 14 19.3
comp=Z,804nm,20.0s
**D27M Malcolm River 97.72 16** IAMs_20 IAMs_20 17 21 27.4
comp=Z,970nm,18.0s
**O20A White River Ci 97.83 50** IAMs_20 IAMs_20 17 15 46.9
comp=Z,1µm,20.0s
**TIXI Tiksi 97.91 348** LR LR 17 23 42.6
comp=Z,349nm,18.1s,baz=161,slow=36
**E29M Blow River 97.92 17** IAMs_20 IAMs_20 17 16 53.9
comp=Z,716nm,21.0s
**PDAR Pinedale Array 97.93 47** LR LR 17 15 01.8
comp=Z,262nm,21.0s,baz=248,slow=31
**BRLDA Berland Lookou 97.96 35** IAMs_20 IAMs_20 17 14 26.3
comp=Z,1µm,22.0s
**LKWY Lake 98.07 45** IAMs_20 IAMs_20 17 19 37.7
comp=Z,832nm,19.0s
**SDCO Great Sand Dun 98.93 53** IAMs_20 IAMs_20 17 20 33.3
comp=Z,883nm,18.0s
**INK Inuvik 99.09 18** LR LR 17 17 33.9
comp=Z,670nm,21.0s,baz=246,slow=32
**EGMT Eagleton 99.82 42** IAMs_20 IAMs_20 17 19 24.7
comp=Z,771nm,19.0s
**K22A Casper 99.96 48** IAMs_20 IAMs_20 17 21 47.0
comp=Z,940nm,18.0s
**WMQ Urumqi 100.02 313** *e*P **Pdif 16 38 33.3 +1.2**
WMQ LR LR
comp=Z,190nm,15.3s
WMQ LR LR
comp=Z,190nm,22.9s
WMQ LR LR
comp=Z,240nm,22.9s
**AMTX Amarillo 100.84 57** IAMs_20 IAMs_20 17 20 46.0
comp=Z,965nm,18.0s
**JCT Junction City 100.87 62** IAMs_20 IAMs_20 17 15 36.3
comp=Z,848nm,20.0s
**KSCO Kaye Shedlock' 101.49 53** IAMs_20 IAMs_20 17 17 18.9
comp=Z,920nm,20.0s
**LAO LASA Array 101.58 44** IAMs_20 IAMs_20 17 16 00.4
comp=Z,903nm,21.0s
**735A Kendy 101.98 64** IAMs_20 IAMs_20 17 19 49.8
comp=Z,845nm,18.0s
**RSSD Black Hills 102.17 47** IAMs_20 IAMs_20 17 22 34.4
comp=Z,958nm,18.0s
**435B Jarrell 102.77 62** IAMs_20 IAMs_20 17 16 23.8
comp=Z,857nm,21.0s
**WMOK Wichita Mounta 103.05 58** IAMs_20 IAMs_20 17 20 10.7
comp=Z,1µm,19.0s
**DGMT Dagmar 103.46 43** IAMs_20 IAMs_20 17 22 10.1
comp=Z,812nm,19.0s
**CBKS Cedar Bluff 103.56 53** IAMs_20 IAMs_20 17 27 13.0
comp=Z,615nm,18.0s
**OK038 West end E0370 103.61 56** IAMs_20 IAMs_20 17 23 28.4
comp=Z,913nm,18.0s
**HKT Hockley 103.95 63** IAMs_20 IAMs_20 17 18 01.2
comp=Z,614nm,20.0s
**OK032 Salt Plains WL 104.12 56** IAMs_20 IAMs_20 17 22 42.8
comp=Z,993nm,18.0s
**R32A Long Quarter, 104.22 54** IAMs_20 IAMs_20 17 23 05.2
comp=Z,970nm,18.0s
**MKAR Makanchi Array 104.59 315** Pdiff **Pdif 16 38 52.7 +0.4**
comp=Z,0.5nm,0.6s,baz=105,slow=6.6,SNR=4.4
**E28A Huff 105.16 46** IAMs_20 IAMs_20 17 30 27.4
comp=Z,633nm,18.0s
**BGNE Belgrade 105.48 51** IAMs_20 IAMs_20 17 24 46.5
comp=Z,836nm,18.0s
**SUSD Miller 105.75 48** IAMs_20 IAMs_20 17 27 21.1
comp=Z,893nm,18.0s
**KSU1 Kansas State U 105.98 54** IAMs_20 IAMs_20 17 22 17.0
comp=Z,949nm,19.0s
**MDND Maddock 106.22 45** IAMs_20 IAMs_20 17 20 20.4
comp=Z,950nm,20.0s
**U38A Gravette 106.97 57** IAMs_20 IAMs_20 17 20 55.4
comp=Z,1µm,20.0s
**N35A Tabor 107.16 52** IAMs_20 IAMs_20 17 25 15.1
comp=Z,832nm,19.0s
**F33A 5 Mile Ranch, 107.92 47** IAMs_20 IAMs_20 17 20 58.6
comp=Z,661nm,21.0s
**143A Socs Landing, 108.37 62** IAMs_20 IAMs_20 17 20 08.9
comp=Z,933nm,21.0s
**N38A Joes South For 108.92 53** IAMs_20 IAMs_20 17 22 10.6
comp=Z,630nm,20.0s
**VBMS Vicksburg 108.97 62** IAMs_20 IAMs_20 17 20 26.8
comp=Z,757nm,21.0s
**SCIA State Center 109.19 52** IAMs_20 IAMs_20 17 23 09.6
comp=Z,799nm,20.0s
**SPMN Marine on St. 110.18 48** IAMs_20 IAMs_20 17 22 58.5
comp=Z,792nm,20.0s
**146A Union 110.27 62** IAMs_20 IAMs_20 17 20 57.2
comp=Z,760nm,22.0s
**OXF Oxford 110.42 60** IAMs_20 IAMs_20 17 22 25.2
comp=Z,936nm,20.0s
**Z47A Carrollton 111.20 62** IAMs_20 IAMs_20 17 22 53.1
comp=Z,772nm,20.0s
**E38A The Farm, Brul 111.30 47** IAMs_20 IAMs_20 17 32 22.0
comp=Z,783nm,18.0s
**P43A Skaggs, Pawnee 111.45 55** IAMs_20 IAMs_20 17 27 19.7
comp=Z,755nm,19.0s
**I40A Norwalk 111.46 50** IAMs_20 IAMs_20 17 23 59.6
comp=Z,1µm,20.0s
**G40A Rib Lake 112.00 49** IAMs_20 IAMs_20 17 26 27.6
comp=Z,794nm,19.0s
**WVT Waverly 112.04 59** IAMs_20 IAMs_20 17 27 19.8
comp=Z,830nm,18.0s
**LRAL Lakeview Retre 112.04 62** IAMs_20 IAMs_20 17 28 11.4
comp=Z,754nm,18.0s
**X48A Hartselle 112.31 61** IAMs_20 IAMs_20 17 22 53.3
comp=Z,851nm,21.0s
**T47A Sharon Grove 112.78 58** IAMs_20 IAMs_20 17 24 54.5
comp=Z,627nm,20.0s
**COWI Conover 112.87 48** IAMs_20 IAMs_20 17 32 22.5
comp=Z,724nm,18.0s
**M44A Midewin, Midew 112.88 53** IAMs_20 IAMs_20 17 26 47.6
comp=Z,563nm,19.0s
**HQIL Hanson Quary C 113.09 53** IAMs_20 IAMs_20 17 21 43.0
comp=Z,808nm,21.0s
**P46A Rosedale 113.20 55** IAMs_20 IAMs_20 17 29 49.1
comp=Z,799nm,18.0s
**BVAR Borovoye Array 113.38 320** PKiKP **PKiKP 16 43 24.6 +0.1**
comp=Z,0.3nm,0.4s,baz=111,slow=3.2,SNR=2.7
**SFIN Lafayette 113.41 54** IAMs_20 IAMs_20 17 28 31.7
comp=Z,879nm,18.0s
**F42A Maple Grove Fa 113.51 48** IAMs_20 IAMs_20 17 31 01.6
comp=Z,747nm,18.0s
**H43A Windswept, Lux 113.58 50** IAMs_20 IAMs_20 17 24 02.5
comp=Z,916nm,20.0s
**U49A Red Boiling Sp 113.74 59** IAMs_20 IAMs_20 17 24 36.8
comp=Z,706nm,20.0s
**152A Waverly Hall 113.84 63** IAMs_20 IAMs_20 17 27 36.9
comp=Z,722nm,18.0s
**L46A Eue Claire 114.28 53** IAMs_20 IAMs_20 17 25 17.3
comp=Z,904nm,20.0s
**Y52A Lilburn 114.62 62** IAMs_20 IAMs_20 17 23 56.4
comp=Z,1µm,21.0s
**GOGA Godfrey 115.02 62** IAMs_20 IAMs_20 17 26 40.1
comp=Z,861nm,19.0s
**154A Montrose 115.16 63** IAMs_20 IAMs_20 17 26 55.0
comp=Z,593nm,20.0s
**R50A Paris 115.18 57** IAMs_20 IAMs_20 17 29 15.9
comp=Z,793nm,18.0s
**TZTN Tazewell 115.51 59** IAMs_20 IAMs_20 17 27 51.8
comp=Z,865nm,19.0s
**255A Hazlehurst 115.55 64** IAMs_20 IAMs_20 17 28 49.4
comp=Z,623nm,20.0s
**S51A Beattyville 115.66 58** IAMs_20 IAMs_20 17 28 24.5
comp=Z,740nm,19.0s
**E46A Sault Ste Mari 116.23 48** IAMs_20 IAMs_20 17 25 50.5
comp=Z,925nm,21.0s
**AAM Ann Arbor 116.26 53** IAMs_20 IAMs_20 17 26 34.8
comp=Z,812nm,20.0s
**M50A Fremont 116.60 54** IAMs_20 IAMs_20 17 29 09.1
comp=Z,784nm,18.0s
**257A Skidaway Islan 116.77 64** IAMs_20 IAMs_20 17 28 11.7
comp=Z,545nm,20.0s
**N51A Ashland 117.05 54** IAMs_20 IAMs_20 17 24 23.9
comp=Z,564nm,22.0s
**S54A Dingess, Beckl 117.47 58** IAMs_20 IAMs_20 17 30 49.5
comp=Z,745nm,18.0s
**Y57A Sumter 117.65 62** IAMs_20 IAMs_20 17 26 20.7
comp=Z,796nm,21.0s
**NHSC New Hope 117.67 63** IAMs_20 IAMs_20 17 28 24.5
comp=Z,562nm,20.0s
**M52A Chesterland 117.88 54** IAMs_20 IAMs_20 17 29 09.8
comp=Z,780nm,19.0s
**BLA Blacksburg 118.09 59** IAMs_20 IAMs_20 17 28 30.1
comp=Z,835nm,20.0s
**Y58A Scranton 118.22 62** IAMs_20 IAMs_20 17 26 59.0
comp=Z,719nm,20.0s
**M53A Wi Miller and 118.38 54** IAMs_20 IAMs_20 17 28 47.1
comp=Z,678nm,20.0s
**TULEG Thule 118.53 13** IAMs_20 IAMs_20 17 25 01.3
comp=Z,686nm,20.0s
**X58A Rowland 118.59 62** IAMs_20 IAMs_20 17 27 08.6
comp=Z,853nm,20.0s
**ERPA Erie 118.95 53** IAMs_20 IAMs_20 17 31 31.1
comp=Z,805nm,19.0s
**SAML Samuel 119.08 115** IAMs_20 IAMs_20 17 24 35.8
comp=Z,524nm,21.0s
**BOSA Boshof 119.21 215** PKP **PKiKP 16 43 37.1 +0.3**
comp=Z,1.7nm,0.9s,baz=134,slow=12,SNR=1.4
**Q56A Snyder Ridge, 119.27 57** IAMs_20 IAMs_20 17 29 14.1
comp=Z,808nm,20.0s
**Y60A Bolivia 119.43 63** IAMs_20 IAMs_20 17 27 46.0
comp=Z,670nm,21.0s
**P57A Homestead Farm 120.22 56** IAMs_20 IAMs_20 17 31 05.2
comp=Z,825nm,19.0s
**ARU Arti 120.27 323** IAMs_20 IAMs_20 17 42 11.4
comp=Z,455nm,19.0s
**ARU Arti 120.27 323** PKP **PKPdf 16 43 35.7 -1.8**
comp=Z,1.3nm,0.4s,baz=156,slow=10.0,SNR=3.0
**ARU Arti 120.27 323** *i* PKiKP **PKPdf 16 43 37.4 -0.2**
ARU 16 44 58.8
ARU 16 50 48.1
**T59A Double "B" Far 120.34 59** IAMs_20 IAMs_20 17 29 00.6
comp=Z,760nm,19.0s
**L56A Greenwood 120.75 53** IAMs_20 IAMs_20 17 32 26.9
comp=Z,784nm,19.0s
**AKTO Aktyubinsk 120.97 316** PKP **PKPdf 16 43 36.8 -2.3**
comp=Z,0.9nm,0.4s,baz=162,slow=3.2,SNR=2.4
**P61A Hammonton 122.72 56** IAMs_20 IAMs_20 17 33 59.3
comp=Z,756nm,18.0s
**L61B Northampton 124.38 53 PKPdf 16 43 44.0 -1.9**
**LMQ La Malbaie 125.79 47 PKPdf 16 43 46.5 -1.9**
**D62A Allapoint, All 126.70 47** PKPdf **PKPdf 16 43 48.2 -2.0**
**BELG Belogornoye 127.19 320** PKP **PKiKP 16 43 52.9 +1.4**
comp=Z,9.1nm,0.8s,baz=90,slow=6.1,SNR=5.6
**HUMP Col San Antoni 127.37 84 PKPdf 16 43 50.1 -2.2**
**KIBK Kibwezi 127.39 249** IAMs_20 IAMs_20 17 36 15.5
comp=Z,514nm,18.0s
**PQI Presque Isle 127.45 48 PKPdf 16 43 49.7 -1.9**
PQI IAMs_20 IAMs_20 17 33 12.3
comp=Z,727nm,20.0s
**KEV Kevo 127.72 345** IAMs_20 IAMs_20 17 40 00.3
comp=Z,693nm,20.0s
**ARCES ARCESS Array B 128.25 345** PKP **PKiKP 16 43 54.2 +1.1**
comp=Z,2.7nm,0.8s,baz=74,slow=1.8,SNR=7.3
**KMBO Kilima Mbogo 128.68 249** IAMs_20 IAMs_20 17 37 38.9
comp=Z,464nm,18.0s
**KMBO Kilima Mbogo 128.68 249** PKP **PKiKP 16 43 57.0 +1.0**
comp=Z,0.8nm,0.3s,baz=32,slow=3.5,SNR=3.5
**KMBO Kilima Mbogo 128.68 249** PKiKP **PKiKP 16 43 57.0 +1.0**
**SMRT St. Maarten 129.91 85** IAMs_20 IAMs_20 17 42 24.2
comp=Z,427nm,20.0s
**FURI Furi 131.76 262** IAMs_20 IAMs_20 17 40 19.8
comp=Z,662nm,19.0s
**KIV Kislovodsk 132.00 310** *i* PKiKP **PKPdf 16 43 57.8 -2.7**
KIV pmax pmax
comp=Z,4.0nm,1.0s
**LODK Lodwar 132.51 253** IAMs_20 IAMs_20 17 35 35.4
comp=Z,414nm,20.0s
**FINES FINESS Array B 133.76 337** PKhKP **PKPpre** 16 43 60.0
comp=Z,1.4nm,0.8s,baz=101,slow=8.1,SNR=2.5
FINES SKP 16 47 37.0
comp=Z,4.7nm,0.8s,baz=66,slow=9.2,SNR=9.3
**MBAR Mbarara 134.52 245** IAMs_20 IAMs_20 17 39 42.0
comp=Z,570nm,19.0s
**PABE Paberze 138.47 332** IAMs_20 IAMs_20 17 46 22.4
comp=Z,530nm,21.0s
**AKASG Malin Array Be 138.52 323** PKP **PKPdf 16 44 09.6 -2.7**
comp=Z,1.0nm,0.7s,baz=61,slow=1.8,SNR=4.2
AKASG SKPbc **SKPbc 16 47 47.1 +0.2**
comp=Z,0.9nm,0.6s,baz=50,slow=3.7,SNR=5.0
**KIEV Kiev 138.54 323** IAMs_20 IAMs_20 17 45 58.1
comp=Z,485nm,22.0s
**NOA NORSAR Array B 138.62 345** PKP **PKPdf 16 44 12.4 +0.1**
comp=Z,0.5nm,0.7s,baz=12,slow=4.0,SNR=1.5
NOA SKPbc **SKPbc 16 47 45.9 -1.0**
comp=Z,1.5nm,0.9s,baz=18,slow=4.3,SNR=3.4
**HFS Hagfors 138.75 342** PKhKP PKPpre 16 44 00.9
comp=Z,0.8nm,0.6s,baz=2,slow=5.8,SNR=1.3
HFS PKP **PKPdf 16 44 09.5 -3.0**
comp=Z,0.6nm,0.4s,baz=359,slow=5.8,SNR=5.6
HFS SKPbc **SKPbc 16 47 45.6 -1.6**
comp=Z,2.8nm,1.0s,baz=328,slow=10,SNR=3.7
**BRTR Keskin Array B 139.43 306** PKP **PKPdf 16 44 13.5 -1.0**
comp=Z,0.3nm,0.6s,baz=7.6,slow=4.4,SNR=1.8
**SUW Suwalki 139.77 330** IAMs_20 IAMs_20 17 46 24.6
comp=Z,609nm,22.0s
**RCBR Riachuelo 142.06 134** IAMs_20 IAMs_20 17 51 01.5
comp=Z,498nm,18.0s
**MLR Muntele Rosu 142.89 317** IAMs_20 IAMs_20 17 51 52.7
comp=Z,438nm,20.0s
**MLR Muntele Rosu 142.89 317** PKP **PKPdf 16 44 20.7 +0.2**
comp=Z,1.7nm,0.4s,baz=358,slow=1.6,SNR=3.5
**KOLS Kolonicke sedl 143.28 324** *e*PKiKP **PKPdf 16 44 22.3 +1.3**
**KOLS Kolonicke sedl 143.28 324** *e*PKP **PKPdf 16 44 22.3 +1.3**
**RGN Rugen 143.42 338** IAMs_20 IAMs_20 17 45 50.4
comp=Z,520nm,22.0s
**ELND Elena 144.02 313** ⇑P PKPbc 16 44 21.1 +0.7
**MARR Marisel-Cluj 144.04 321** ⇑P PKPbc 16 44 20.3 -0.2
**DRGR 144.22 321** ⇓P **PKPdf 16 44 22.4 -0.4**
**LANS Liptovska Anna 144.63 326** *e*PKiKP **PKPdf 16 44 24.6 +1.2**
**LANS Liptovska Anna 144.63 326** *e*PKP **PKPdf 16 44 24.6 +1.2**
**ALN Alexandroupoli 144.67 310 PKPab 16 44 21.6 -0.7**
**ALN Alexandroupoli 144.67 310** PKiKP **PKPab 16 44 21.6 -0.7**
**OKC Ostrava-Krasne 144.84 328** AMS AMS 17 45 40.0
comp=Z,400nm,20.2s
**GZR Gura Zlata 144.90 319** ⇑P **PKPdf 16 44 23.5 -0.5**
**SURR Surduc 145.11 320** ⇑P **PKPdf 16 44 24.2 0.0**
**SIRR Siria 145.11 321** ⇑P **PKPdf 16 44 24.4 +0.1**
**PSZ Piszkesteto 145.16 324** IAMs_20 IAMs_20 17 53 39.5
comp=Z,459nm,20.0s
**PSZ Piszkesteto 145.16 324** ⇑P **PKPdf 16 44 24.5 +0.1**
**MORC Moravsky Berou 145.18 329** IAMs_20 IAMs_20 17 51 28.9
comp=Z,404nm,20.0s
**MORC Moravsky Berou 145.18 329** *e*PKP **PKPbc 16 44 23.1 -0.8**
**MORC Moravsky Berou 145.18 329** ⇑P **PKPbc 16 44 23.7 -0.2**
**OSTC Ostas 145.26 331** *e*PKP **PKPbc 16 44 22.7 -1.4**
OSTC AMS AMS 17 51 50.0
comp=Z,600nm,21.4s
**OSTC Ostas 145.26 331** *e*PKiKP **PKPbc 16 44 22.7 -1.4**
OSTC MLR MLR
comp=Z,600nm,21.4s
**CHVC Chvalec 145.31 331** *e*PKP **PKPbc 16 44 23.9 -0.4**
CHVC AMS AMS 17 51 40.0
comp=Z,600nm,19.1s
**CHVC Chvalec 145.31 331** *e*PKiKP **PKPbc 16 44 23.9 -0.4**
CHVC MLR MLR
comp=Z,600nm,19.1s
**MAUC Maruska 145.31 328** *e*PKP **PKPdf 16 44 25.1 +0.6**
**DPC Dobruska-Polom 145.36 330** *e*PKP **PKPbc 16 44 24.1 -0.3**
DPC AMS AMS 17 45 50.0
comp=Z,400nm,23.9s
**DPC Dobruska-Polom 145.36 330** *e*PKiKP **PKPbc 16 44 24.1 -0.3**
DPC MLR MLR
comp=Z,400nm,23.9s
**VYHS Vyhne 145.37 326** *e*PKiKP **PKPdf 16 44 24.7 +0.1**
**VYHS Vyhne 145.37 326** *e*PKP **PKPdf 16 44 24.7 +0.1**
VYHS *e* 16 50 30.2
**HERR Herculane 145.38 318** ⇑P **PKPdf 16 44 24.8 0.0**
**UPC Upice 145.39 331** *e*PKP **PKPbc 16 44 24.1 -0.4**
UPC AMS AMS 17 51 30.0
comp=Z,600nm,19.3s
**UPC Upice 145.39 331** *e*PKiKP **PKPbc 16 44 24.1 -0.4**
UPC MLR MLR
comp=Z,600nm,19.3s
**BZS Buzias 145.48 320** ⇑P **PKPab 16 44 25.3 +0.2**
**JAVC Velka Javorina 145.72 327** *e*PKP **PKPab 16 44 25.9 -0.1**
**MDVR Moldovita 145.86 319** ⇑P **PKPab 16 44 26.5 -0.1**
**FLTG Flechtingen 145.95 337** *e*PKPbc **PKPdf 16 44 25.0 -0.4**
baz=39,slow=3.1
**VRAC Vranov 145.95 329** *e*PKP **PKPbc 16 44 26.0 -0.3**
**VRAC Vranov 145.95 329** PKPbc **PKPbc 16 44 26.1 -0.3**
comp=Z,18nm,1.0s,baz=56,slow=3.4,SNR=25
**VRAC Vranov 145.95 329** ⇓P **PKPab 16 44 26.5 -0.3**
**PVCC Panska Ves 146.01 332** *e*PKP **PKPab 16 44 27.0 0.0**
**PVCC Panska Ves 146.01 332** *e*PKiKP **PKPab 16 44 27.0 0.0**
**BRG Berggiesshubel 146.02 333** *i* PKP **PKPbc 16 44 26.5 0.0**
BRG Amp 16 44 28.3
comp=Z,28nm,0.9s
**BRG Berggiesshubel 146.02 333** *i* PKiKP **PKPbc 16 44 26.4 0.0**
BRG pmax pmax
comp=Z,28nm,0.9s
**BRG Berggiesshubel 146.02 333** *e*PKPbc **PKPdf 16 44 25.6 -0.1**
baz=39,slow=3.1
**SRO Srobarova 146.07 325** *e*PKP **PKPab 16 44 27.1 -0.1**
**SMOL Smolenice 146.07 327** *e*PKiKP **PKPab 16 44 26.9 -0.4**
**CLL Collm 146.08 334** IAMs_20 IAMs_20 17 49 49.7
comp=Z,415nm,20.0s
**CLL Collm 146.08 334** *i* PKiKP **PKPdf 16 44 26.0 +0.3**
CLL *i* 16 44 29.2
CLL pmax pmax
comp=Z,82nm,1.5s
CLL MLR MLR
comp=Z,400nm,20.9s
**CLL Collm 146.08 334** *e*PKPbc **PKPdf 16 44 25.4 -0.4**
baz=39,slow=3.1
**RICC Richard 146.20 332** *e*PKP **PKPab 16 44 27.4 -0.3**
**KRUC Moravsky 146.21 329** *e*PKP **PKPdf 16 44 26.1 +0.1**
**NRDL Niedersach Rie 146.21 338** *e*PKPbc **PKPbc 16 44 26.2 -0.6**
baz=39,slow=3.1
**GOPC GO Pecny, Ondr 146.36 331** *e*PKP **PKPdf 16 44 26.0 -0.3**
GOPC AMS AMS 17 46 50.0
comp=Z,500nm,21.6s
**GOPC GO Pecny, Ondr 146.36 331** *e*PKP2 **PKPdf 16 44 26.0 -0.3**
GOPC MLR MLR
comp=Z,500nm,21.6s
**PRA Prague 146.41 332** *e*PKP **PKPdf 16 44 25.9 -0.4**
PRA AMS AMS 17 48 30.0
comp=Z,500nm,23.1s
**PRA Prague 146.41 332** *e*PKP2 **PKPdf 16 44 25.9 -0.4**
PRA MLR MLR
comp=Z,500nm,23.1s
**PRU Pruhonice 146.42 331** *e*PKP **PKPbc 16 44 27.0 -0.7**
PRU AMS AMS 17 46 30.0
comp=Z,500nm,24.1s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PRU** | **Pruhonice** | **146.42 331** | *e*PKP2 | **PKPbc** | **16 44 27.0** | **-0.7** |
| PRU | | | MLR | MLR | | | |
| | comp=Z,500nm,24.1s | | | | | | |
| **BOVS** | **Bovan** | **146.44 317** | ⇓P | **PKPbc** | **16 44 27.1** | **-0.8** |
| **HSKC** | **Hora Svate Kat** | **146.44 333** | *e*PKP | **PKPdf** | **16 44 25.4** | **-1.0** |
| HSKC | | | AMS | AMS | 17 54 20.0 | | |
| | comp=Z,500nm,20.7s | | | | | | |
| **ZST** | **Bratislava** | **146.44 327** | *e*PKP2 | **PKPab** | **16 44 28.2** | **-0.5** |
| **ZST** | **Bratislava** | **146.44 327** | *e*PKP | **PKPab** | **16 44 28.2** | **-0.5** |
| **TREC** | **Trest** | **146.48 330** | *e*PKP | **PKPbc** | **16 44 27.6** | **-0.3** |
| **TREC** | **Trest** | **146.48 330** | *e*PKP2 | **PKPbc** | **16 44 27.6** | **-0.3** |
| **EKA** | **Eskdalemuir Ar** | **146.63 353** | PKPbc | **PKPdf** | **16 44 26.6** | **0.0** |
| | comp=Z,8.2nm,0.5s,baz=0.1,slow=2.6,SNR=70 | | | | | | |
| **ESK** | **Eskdalemuir** | **146.65 353** | | **PKPdf** | **16 44 25.9** | **-0.6** |
| **ESK** | **Eskdalemuir** | **146.65 353** | PKIKP | **PKPdf** | **16 44 26.0** | **-0.6** |
| **CLZ** | **Clausthal** | **146.66 337** | *e*PKPbc | **PKPbc** | **16 44 27.6** | **-0.7** |
| | baz=39,slow=3.1 | | | | | | |
| **FRGS** | **Fruska Gora** | **146.80 320** | *e*P | **PKiKP** | **16 44 31.3** | **-0.4** |
| **MORH** | **Mrgy, Hungar** | **146.86 323** | ⇑P | **PKPbc** | **16 44 28.1** | **-0.9** |
| **ZVC** | **Zvikov** | **146.97 331** | *e*PKP | **PKPab** | **16 44 29.9** | **-0.8** |
| ZVC | | | AMS | AMS | 17 46 40.0 | | |
| | comp=Z,500nm,23.0s | | | | | | |
| **TANN** | **Tannenbergstha** | **146.99 334** | *e*PKPbc | **PKPbc** | **16 44 28.5** | **-0.9** |
| | baz=39,slow=3.1 | | | | | | |
| **MOX** | **Moxa** | **147.15 335** | *e*L | L | 17 50 37.7 | | |
| | comp=Z,298nm,21.3s | | | | | | |
| **RONA** | **Rosalia, Austr** | **147.18 327** | *e*PKP | **PKPbc** | **16 44 29.8** | **-0.2** |
| | comp=Z,11nm,0.8s | | | | | | |
| **IDI** | **Anoyia** | **147.21 301** | PKPbc | **PKPbc** | **16 44 31.0** | **+0.5** |
| | comp=Z,14nm,0.7s,baz=102,slow=9.3,SNR=7.1 | | | | | | |
| **CONA** | **Conrad Observa** | **147.24 328** | *i* PKP | **PKPbc** | **16 44 30.2** | **0.0** |
| | comp=Z,10nm,1.6s,SNR=5.9 | | | | | | |
| **TEKS** | **Tekeris** | **147.30 320** | *e*P | **PKPbc** | **16 44 30.1** | **-0.3** |
| **CKRC** | **Cesky Krumlov** | **147.37 330** | *e*PKP | **PKPbc** | **16 44 29.3** | **-1.1** |
| CKRC | | | AMS | AMS | 17 46 40.0 | | |
| | comp=Z,500nm,26.6s | | | | | | |
| **CKRC** | **Cesky Krumlov** | **147.37 330** | *e*PKP2 | **PKPbc** | **16 44 29.3** | **-1.1** |
| CKRC | | | MLR | MLR | | | |
| | comp=Z,500nm,26.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **147.47 331** | IAMs_20 | IAMs_20 | 17 51 00.6 | | |
| | comp=Z,445nm,21.0s | | | | | | |
| **KHC** | **Kasperske Hory** | **147.47 331** | *e*PKP | **PKPbc** | **16 44 30.9** | **+0.1** |
| KHC | | | AMS | AMS | 17 49 00.0 | | |
| | comp=Z,500nm,19.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **147.47 331** | *c i*PKP2 | **PKPbc** | **16 44 30.7** | **-0.1** |
| KHC | | | pmax | pmax | | | |
| | comp=Z,53nm,1.3s | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **147.59 333** | *e*PKPbc | **PKPbc** | **16 44 30.4** | **-0.7** |
| | baz=39,slow=3.1 | | | | | | |
| **GEC2** | **GERESS Array S** | **147.63 331** | *e*PKPbc | **PKPbc** | **16 44 30.4** | **-0.9** |
| | baz=39,slow=3.1 | | | | | | |
| **GERES** | **GERESS Array B** | **147.63 331** | PKPbc | **PKPbc** | **16 44 30.9** | **-0.4** |
| | comp=Z,9.5nm,0.7s,baz=35,slow=4.9,SNR=20 | | | | | | |
| **SJES** | **Sjenica** | **147.72 317** | *e*P | **PKPab** | **16 44 36.6** | **+2.6** |
| **BBLS** | **Lazi&#263i** | **147.75 319** | *e*P | **PKPbc** | **16 44 32.3** | **+0.6** |
| **WET** | **Wettzell** | **147.77 332** | *e*PKPbc | **PKPbc** | **16 44 30.7** | **-0.9** |
| | baz=39,slow=3.1 | | | | | | |
| **ARSA** | **Arzberg** | **147.87 327** | *e*PKP | **PKPbc** | **16 44 31.4** | **-0.5** |
| | comp=Z,8.1nm,1.6s | | | | | | |
| **RUDO** | **Rudo** | **147.90 318** | *e*P | **PKiKP** | **16 44 33.3** | **-0.7** |
| **HAPS** | **Han Pijesak,BI** | **147.91 319** | *e*P | **PKPbc** | **16 44 32.8** | **+0.6** |
| **GRA1** | **Grafenberg Arr** | **148.05 334** | IAMs_20 | IAMs_20 | 17 58 30.9 | | |
| | comp=Z,332nm,20.0s | | | | | | |
| **GRF** | **Grafenberg Arr** | **148.05 334** | *e*L | L | 17 51 17.2 | | |
| | comp=Z,333nm,21.0s | | | | | | |
| **GRFO** | **Grafenberg** | **148.06 334** | IAMs_20 | IAMs_20 | 17 51 06.9 | | |
| | comp=Z,341nm,20.0s | | | | | | |
| **MOA** | **Molln** | **148.08 329** | *e*PKP | **PKPbc** | **16 44 32.2** | **-0.3** |
| | comp=Z,10nm,1.0s | | | | | | |
| **PUK** | **Puka** | **148.38 315** | PKPdf | **PKPdf** | **16 44 28.4** | **-1.6** |
| PUK | | | | **PKPbc** | **16 44 33.9** | **+0.4** |
| **BIOA** | **Bad Ischl, Aus** | **148.49 329** | *e*PKP | **PKPbc** | **16 44 33.3** | **-0.2** |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **SOKA** | **Soboth** | **148.50 327** | *e*PKP | **PKPbc** | **16 44 33.1** | **-0.6** |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **A051A** | **Mrakovica** | **148.56 323** | *e*P | **PKPbc** | **16 44 33.2** | **-0.6** |
| **BLY** | **Banja Luka** | **148.56 322** | *e*P | **PKPab** | **16 44 36.2** | **-1.0** |
| **PDG** | **Podgorica** | **148.59 317** | IAMs_20 | IAMs_20 | 17 55 39.6 | | |
| | comp=Z,369nm,20.0s | | | | | | |
| **PDG** | **Podgorica** | **148.59 317** | *e*P | **PKPbc** | **16 44 33.9** | **0.0** |
| **PDG** | **Podgorica** | **148.59 317** | ⇑P | **PKPbc** | **16 44 33.4** | **-0.5** |
| **TIR** | **Tirane** | **148.73 314** | IAMs_20 | IAMs_20 | 17 53 09.2 | | |
| | comp=Z,636nm,22.0s | | | | | | |
| **DRME** | **Dracevica, Mon** | **148.76 316** | *e*P | **PKPab** | **16 44 37.7** | **-0.4** |
| **BRY** | **Bratogost** | **148.80 318** | *e*P | **PKPbc** | **16 44 34.3** | **-0.3** |
| **CRES** | **Cresnjev** | **148.84 325** | *e*P | **PKPbc** | **16 44 34.4** | **0.0** |
| **OBKA** | **Obir** | **148.86 327** | *e*PKP | **PKPdf** | **16 44 30.6** | **0.0** |
| | comp=Z,3.6nm,1.3s | | | | | | |
| **OBKA** | **Obir** | **148.86 327** | *e*P | **PKPab** | **16 44 37.5** | **-1.0** |
| **KBA** | **Koelnbreinsper** | **149.06 329** | *e*PKP | **PKiKP** | **16 44 37.4** | **+0.9** |
| | comp=Z,23nm,1.2s | | | | | | |
| **LESA** | **Schwarzleotal** | **149.13 330** | *e*PKiKP | **PKPbc** | **16 44 35.1** | **-0.1** |
| | comp=Z,9.2nm,0.6s | | | | | | |
| **BTNL** | **Ternell** | **149.15 340** | *d*PKP | **PKPbc** | **16 44 34.5** | **-0.6** |
| BTNL | | | *d*PKPab | **sPKPbc** | **16 44 37.9** | **-0.1** |
| **MEM** | **Membach** | **149.17 340** | *d*PcP | **PKPbc** | **16 44 34.2** | **-0.9** |
| MEM | | | *d*PKiKP | **sPKPbc** | **16 44 38.2** | **+0.2** |
| **LJU** | **Ljubljana** | **149.19 326** | *e*PKPbc | **PKPbc** | **16 44 34.3** | **-1.0** |
| **MYKA** | **Terra Mystica** | **149.24 328** | *e*PKiKP | **PKPbc** | **16 44 35.3** | **-0.2** |
| | comp=Z,12nm,0.8s | | | | | | |
| **CRNS** | **Crni Vrh** | **149.30 326** | *e*PKPbc | **PKPbc** | **16 44 34.2** | **-1.4** |
| **BSTI** | **Sart Tilman** | **149.32 341** | *d*PKP | **PKPbc** | **16 44 34.9** | **-0.6** |
| BSTI | | | *d*PKPab | **PKPab** | **16 44 38.9** | **-1.1** |
| **STON** | **Ston** | **149.33 318** | *e*P | **PKPbc** | **16 44 35.7** | **0.0** |
| **BHOU** | **Houvegnez** | **149.39 340** | *d*PKP | **PKPbc** | **16 44 35.2** | **-0.5** |
| **BCLA** | **Clavier** | **149.55 341** | *d*PKP | **PKPbc** | **16 44 34.7** | **-1.3** |
| **STU** | **Stuttgart** | **149.59 335** | IAMs_20 | IAMs_20 | 17 56 45.6 | | |
| | comp=Z,317nm,20.0s | | | | | | |
| **BGES** | **Gesves** | **149.65 341** | *d*PKiKP | **PKiKP** | **16 44 38.8** | **+1.5** |
| **ABTA** | **Abfaltersbach** | **149.70 329** | *i* PKP | **PKPbc** | **16 44 35.7** | **-1.0** |
| | comp=Z,10nm,0.9s,SNR=8.3 | | | | | | |
| **WATA** | **Walderalm** | **149.70 331** | *e*PKiKP | **PKPbc** | **16 44 36.6** | **-0.1** |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **SABO** | **M.te Sabotino** | **149.71 327** | IAMs_20 | IAMs_20 | 17 54 31.1 | | |
| | comp=Z,510nm,21.0s | | | | | | |
| **WTTA** | **Wattenberg** | **149.73 331** | *i* PKiKP | **PKPbc** | **16 44 36.3** | **-0.5** |
| | comp=Z,7.3nm,0.6s,SNR=7.4 | | | | | | |
| **RCHB** | **Rochefort** | **149.81 341** | *d*PKP | **PKPbc** | **16 44 34.8** | **-1.9** |
| RCHB | | | *d*PKiKP | **PKiKP** | **16 44 37.1** | **-0.5** |
| RCHB | | | *d*PKPab | **PKPab** | **16 44 40.7** | **-1.3** |
| **BMRD** | **Maredsous** | **149.81 341** | *d*PKiKP | **PKPab** | **16 44 40.0** | **-2.1** |
| **MOTA** | **Moosalm** | **149.91 331** | *e*PKP | **PKPbc** | **16 44 36.5** | **-0.8** |
| | comp=Z,20nm,0.9s | | | | | | |
| **WLF** | **Walferdange** | **149.94 339** | IAMs_20 | IAMs_20 | 17 59 03.8 | | |
| | comp=Z,556nm,18.0s | | | | | | |
| **WLF** | **Walferdange** | **149.94 339** | *d*PKP | **PKPbc** | **16 44 36.4** | **-0.6** |
| WLF | | | *d*PKPab | **sPKPbc** | **16 44 40.8** | **+0.8** |
| **RETA** | **Reutte** | **149.95 332** | *e*PKiKP | **PKiKP** | **16 44 37.6** | **-0.6** |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **STAL** | **STALIGIAL** | **149.95 328** | IAMs_20 | IAMs_20 | 17 55 52.2 | | |
| | comp=Z,435nm,21.0s | | | | | | |
| **SQTA** | **Sankt Quirin** | **149.96 331** | *e*PKiKP | **PKPbc** | **16 44 36.8** | **-0.5** |
| | comp=Z,19nm,0.9s | | | | | | |
| **DOU** | **Dourbes** | **150.05 341** | *d*PKP | **PKPbc** | **16 44 35.3** | **-1.9** |
| DOU | | | *d*PKiKP | **sPKPbc** | **16 44 40.4** | **+0.2** |
| **CIMO** | **Cimolais** | **150.05 328** | IAMs_20 | IAMs_20 | 17 55 54.6 | | |
| | comp=Z,490nm,21.0s | | | | | | |
| **BFO** | **Black Forest** | **150.29 335** | PKPdf | **PKPdf** | **16 44 30.2** | **-2.6** |
| BFO | | | | **PKPbc** | **16 44 37.4** | **-0.6** |
| BFO | | | IAMs_20 | IAMs_20 | 18 05 30.0 | | |
| | comp=Z,299nm,19.0s | | | | | | |
| **BFO** | **Black Forest** | **150.29 335** | PKIKP | **PKPdf** | **16 44 30.2** | **-2.6** |
| BFO | | | | | 16 44 37.4 | | |
| BFO | | | MLR | MLR | | | |
| | comp=Z,300nm,19.0s | | | | | | |
| **FETA** | **Feichten** | **150.32 331** | *i* PKP | **PKPbc** | **16 44 37.0** | **-1.3** |
| | comp=Z,19nm,0.9s,SNR=9.4 | | | | | | |
| **DAVA** | **Damuels** | **150.49 332** | *ep*PKP | **PKiKP** | **16 44 39.0** | **-0.4** |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **CTI** | **Castel Tesino** | **150.62 329** | | **PKPbc** | **16 44 38.4** | **-0.5** |
| CTI | | | IAMs_20 | IAMs_20 | 17 53 10.8 | | |
| | comp=Z,575nm,20.0s | | | | | | |
| **CTI** | **Castel Tesino** | **150.62 329** | PKIKP | **PKPbc** | **16 44 38.4** | **-0.5** |
| CTI | | | MLR | MLR | | | |
| | comp=Z,600nm,20.0s | | | | | | |
| **ECH** | **Echery** | **150.82 337** | IAMs_20 | IAMs_20 | 17 59 52.1 | | |
| | comp=Z,369nm,18.0s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.83 331** | IAMs_20 | IAMs_20 | 17 57 39.4 | | |
| | comp=Z,316nm,20.0s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.88 332** | PKPbc | **PKPbc** | **16 44 39.2** | **-0.4** |
| | comp=Z,25nm,1.0s,baz=314,slow=1.1,SNR=20 | | | | | | |
| **TIP** | **Timpagrande** | **151.86 313** | IAMs_20 | IAMs_20 | 17 55 37.0 | | |
| | comp=Z,406nm,22.0s | | | | | | |
| **FDMO** | **Fiordimonte** | **151.95 323** | IAMs_20 | IAMs_20 | 17 58 05.1 | | |
| | comp=Z,446nm,20.0s | | | | | | |
| **CUC** | **Castrocucco** | **152.07 315** | IAMs_20 | IAMs_20 | 17 59 19.6 | | |
| | comp=Z,328nm,20.0s | | | | | | |
| **INTR** | **Introdacqua** | **152.12 320** | | **PKPbc** | **16 44 40.9** | **-1.6** |
| **PRMA** | **PARMA** | **152.20 329** | IAMs_20 | IAMs_20 | 18 04 15.6 | | |
| | comp=Z,466nm,19.0s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **152.30 334** | PKPdf | **PKPdf** | **16 44 33.9** | **-2.3** |
| SENIN | | | | **sPKPdf** | **16 44 40.7** | **+1.6** |
| **CEL** | **Celeste** | **152.89 312** | IAMs_20 | IAMs_20 | 17 57 31.5 | | |
| | comp=Z,334nm,21.0s | | | | | | |
| **MSSA** | **Maissana** | **152.91 329** | IAMs_20 | IAMs_20 | 17 57 26.5 | | |
| | comp=Z,563nm,20.0s | | | | | | |
| **BNI** | **Bardonecchia** | **153.62 333** | IAMs_20 | IAMs_20 | 18 03 03.0 | | |
| | comp=Z,400nm,20.0s | | | | | | |
| **SSB** | **Saint Sauveur** | **154.27 336** | IAMs_20 | IAMs_20 | 17 51 35.3 | | |
| | comp=Z,312nm,19.0s | | | | | | |
| **CEST** | **Esterri de Car** | **157.77 338** | IAMs_20 | IAMs_20 | 17 55 40.0 | | |
| | comp=Z,457nm,22.0s | | | | | | |
| **KEST** | **Kesra** | **158.68 313** | PKPab | **PKPab** | **16 45 17.4** | **-2.8** |
| | comp=Z,2.1nm,0.6s,baz=45,slow=1.4,SNR=4.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **161.99 346** | PKPab | **PKPab** | **16 45 32.9** | **-1.4** |
| | comp=Z,0.7nm,0.6s,baz=9.5,slow=3.2,SNR=5.3 | | | | | | |
| **DBIC** | **Dimbokro** | **163.80 197** | PKPab | **PKPab** | **16 45 43.0** | **+0.2** |
| | comp=Z,4.4nm,0.8s,baz=154,slow=0.9,SNR=4.6 | | | | | | |
| **DBIC** | **Dimbokro** | **163.80 197** | PKP2 | **PKPab** | **16 45 43.0** | **+0.2** |
| **MESJ** | **Messejana** | **164.44 356** | *e*PP | **PP** | **16 49 31.3** | **+1.3** |
| MESJ | | | | IAMs_20 | IAMs_20 | 18 03 23.8 | |
| | comp=Z,676nm,18.5s | | | | | | |
| **MORF** | **Marmelete** | **165.00 357** | *e*PP | **PP** | **16 49 34.2** | **+1.2** |
| MORF | | | | IAMs_20 | IAMs_20 | 18 01 20.7 | |
| | comp=Z,596nm,16.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.87 232** | PKP | **PKPdf** | **16 44 51.7** | **-0.9** |
| | comp=Z,2.8nm,1.0s,baz=100,slow=1.8,SNR=8.0 | | | | | | |
| TORD | | | PKPab | **pPKPab** | **16 45 53.8** | **-0.5** |
| | comp=Z,1.1nm,0.9s,baz=100,slow=3.9,SNR=1.5 | | | | | | |

*TEH **30** 16:27:28.8, 34.67N×46.32E, h8km±28km, ML2.8*
*ISN **30** 16:27:28.0±0.9, 34.67N×46.30E, h4km±9km, ML2.9*
**ISC 30 16:27:29.0±1.1, 34.69N±0.05×46.31E±0.04, h6km±10km, n14, σ0.83/18, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.06** | **79** | Pg | **Pg** | **16 27 31.2** | **+0.3** |
| **IGHG** | **Ghaleghazi** | **0.42** | **149** | Pg | **Pg** | **16 27 37.0** | **-0.1** |
| **KGS1** | **Ghasr-e-Shirin** | **0.62** | **253** | Pg | **Pg** | **16 27 41.2** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.66** | **210** | Pg | **Pg** | **16 27 41.3** | **-0.5** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **124** | Pg | **Pg** | **16 27 42.2** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **1.06** | **185** | Pg | **Pg** | **16 27 48.9** | **-0.6** |
| **SNQR** | **Sonqor, Kerman** | **1.10** | **81** | Pg | **Pg** | **16 27 49.5** | **-0.6** |
| **IBZA** | **Bozab** | **1.30** | **99** | Pg | **Pg** | **16 27 53.5** | **-0.4** |
| **IBDR** | **Badra** | **1.61** | **192** | *e*Pn | **Pb** | **16 27 58.5** | **-0.6** |
| IBDR | | | | *e*Sn | **Sg** | **16 28 20.5** | **-0.2** |
| IBDR | | | | AML | AML | 16 28 24.9 | |
| | comp=N,138nm,0.5s | | | | | | |
| IBDR | | | | AML | AML | 16 28 25.4 | |
| | comp=E,265nm,0.3s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.72** | **132** | Pg | **Pg** | **16 28 01.8** | **-0.3** |
| **IKRK** | **Kirkuk** | **1.77** | **294** | *e*Pn | **Pb** | **16 28 01.0** | **-0.9** |
| IKRK | | | | *e*Sn | **Sg** | **16 28 25.7** | **-0.2** |
| IKRK | | | | AML | AML | 16 28 31.4 | |
| | comp=E,157nm,0.6s | | | | | | |
| IKRK | | | | AML | AML | 16 28 33.9 | |
| | comp=N,170nm,0.7s | | | | | | |
| **IDOB** | **Doab** | **1.79** | **120** | Pg | **Pg** | **16 28 02.7** | **-0.6** |
| **BHD** | **Baghdad** | **2.14** | **229** | *e*Pn | **Pn** | **16 28 06.0** | **+0.7** |
| BHD | | | | *e*Sn | **Sb** | **16 28 34.0** | **-1.0** |
| **RAFI** | **Al-Rafai** | **2.96** | **183** | *e*Pn | **Pn** | **16 28 18.0** | **+1.4** |
| RAFI | | | | *e*Sn | **Sn** | **16 28 54.0** | **+1.6** |

*IDC **30** 16:28:24.3±1.3, 22.26S×170.32E, h0km, mb4.0/9, mbtmp4.0/10, ML4.0/1, Error ellipse: s-maj=35.7km s-min=29.8km az=119.0*
*NEIC **30** 16:28:27.6±1.6, 22.4S±0.2×170.2E±0.1, h10km±1km, mb4.8/7, Error ellipse: s-maj=25.6km s-min=18.8km az=178.0*
**ISC 30 16:28:26.6±0.8, 22.3S±0.2×170.17E±0.08, h10km, n26, σ0.93/28, mb4.2/14, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PINNC** | **Pines Island,** | **2.53** | **263** | Pn | **Pn** | **16 29 07.1** | **-0.7** |
| **ONTNC** | **Ouen Toro** | **3.44** | **270** | Pn | **Pn** | **16 29 21.0** | **+0.8** |
| **DZM** | **Mont Dzumac** | **3.46** | **274** | Pn | **Pn** | **16 29 20.6** | **-0.1** |
| **DZM** | **Mont Dzumac** | **3.46** | **274** | Pn | **Pn** | **16 29 21.8** | **+1.2** |
| | 13nm,0.3s,baz=109,slow=11,SNR=8.6 | | | | | | |
| DZM | | | | Sn | **Sn** | **16 30 01.7** | **0.0** |
| | 16nm,0.3s,baz=115,slow=19,SNR=2.5 | | | | | | |
| | 31nm,0.3s | | | | | | |
| **KOUNC** | **Koumac, New Ca** | **5.75** | **287** | Pn | **Pn** | **16 29 52.2** | **+0.1** |
| **MSVF** | **Nonsavu** | **8.71** | **60** | Pn | **Pn** | **16 30 34.4** | **+1.6** |
| | 0.1nm,0.3s,baz=222,slow=14,SNR=2.1 | | | | | | |
| **COEN** | **Coen** | **26.93** | **283** | P | **P** | **16 34 09.9** | **+1.6** |
| COEN | | | | IAmb | IAmb | 16 34 30.1 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **33.35** | **261** | P | **P** | **16 35 05.6** | **+0.4** |
| | comp=Z,0.8nm,0.8s,baz=94,slow=8.5,SNR=2.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **16 41 31.6** | **-0.2** |
| | comp=Z,0.2nm,0.9s,baz=125,slow=1.4,SNR=1.0 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.44** | **267** | P | **P** | **16 35 05.8** | **-0.2** |
| WB2 | | | | IAmb | IAmb | 16 35 06.9 | |
| | comp=Z,34nm,2.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.45** | **267** | P | **P** | **16 35 05.7** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=97,slow=8.4,SNR=2.0 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **MTN** | **Manton Dam** | **38.29** | **278** | P | **P** | **16 35 47.9** | **+0.3** |
| MTN | | | | IAmb | IAmb | 16 35 52.5 | |
| | comp=Z,23nm,1.4s | | | | | | |
| **FAKI** | **Fak Fak** | **41.53** | **292** | P | **P** | **16 36 14.9** | **+0.4** |
| **MBWA** | **Marble Bar** | **46.68** | **261** | P | **P** | **16 36 55.7** | **-0.1** |
| MBWA | | | | IAmb | IAmb | 16 36 58.0 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **TOLI2** | **Tolitoli** | **53.46** | **289** | P | **P** | **16 37 48.7** | **+1.3** |
| TOLI2 | | | | IAmb | IAmb | 16 37 58.7 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.87** | **332** | P | **P** | **16 39 11.4** | **-1.1** |
| | comp=Z,2.2nm,0.9s,baz=177,slow=7.2,SNR=4.4 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.74** | **180** | P | **P** | **16 39 24.7** | **+0.4** |
| **QSPA** | **South Pole Qui** | **67.74** | **180** | P | **P** | **16 39 24.1** | **-0.2** |
| | comp=Z,1.7nm,0.9s,baz=0.8,slow=6.7,SNR=2.1 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **71.53** | **326** | P | **P** | **16 39 47.4** | **-0.3** |
| | comp=Z,1.5nm,0.8s,baz=151,slow=6.5,SNR=4.1 | | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.86** | **333** | P | **P** | **16 40 06.8** | **-0.5** |
| | comp=Z,1.0nm,0.8s,baz=161,slow=6.1,SNR=2.8 | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.89** | **352** | P | **P** | **16 40 12.3** | **-0.8** |
| | comp=Z,1.6nm,0.9s,baz=175,slow=8.7,SNR=3.7 | | | | | | |
| | comp=Z,1.6nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.56** | **294** | P | **P** | **16 40 41.2** | **+1.5** |
| | comp=Z,1.1nm,0.7s,baz=144,slow=3.7,SNR=4.7 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **90.19** | **323** | P | **P** | **16 41 25.5** | **-1.9** |
| | comp=Z,1.7nm,1.0s,baz=145,slow=5.4,SNR=3.6 | | | | | | |
| | comp=Z,1.7nm,1.0s | | | | | | |
| **CLL** | **Collm** | **146.06** | **334** | PKPdf | **PKPdf** | **16 48 04.2** | **-1.6** |
| **EKA** | **Eskdalemuir Ar** | **146.66** | **353** | PKPbc | **PKPdf** | **16 48 06.3** | **-0.4** |
| | comp=Z,2.0nm,0.7s,baz=355,slow=2.5,SNR=6.9 | | | | | | |
| **EKB** | **Eskdalemuir** | **146.66** | **353** | PKPdf | **PKPdf** | **16 48 05.8** | **-0.9** |
| **GERES** | **GERESS Array B** | **147.60** | **331** | PKPbc | **PKPbc** | **16 48 11.2** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=80,slow=1.2,SNR=2.3 | | | | | | |

**JMA 30 16:28:38.8±0.1, 24.2N±0.4×123.9E±0.3, h17km±1km, MV0.7/8, NEAR ISHIGAKIJIMA ISLAND, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKRS** | **Kuro-shima** | **0.14** | **88** | *i* P | Pg | 16 28 42.8 | 0.0 |
| JKRS | | | | *e*S | Sb | 16 28 46.0 | +0.1 |
| **IRIF** | **Iriomote-Funau** | **0.15** | **312** | P | Pg | 16 28 42.9 | 0.0 |
| **HATJ** | **Hateruma jima** | **0.18** | **194** | *i* P | Pg | 16 28 43.2 | -0.2 |
| HATJ | | | | *e*S | Sg | 16 28 46.5 | +0.1 |
| **JIJ** | **Ishigaki jima** | **0.29** | **64** | P | Pg | 16 28 44.9 | -0.2 |
| JIJ | | | | *e*S | Sg | 16 28 49.4 | -0.1 |
| **JISG** | **Ishigakijimahi** | **0.55** | **50** | P | Pg | 16 28 49.6 | -0.1 |
| **JTJ** | **Tarama** | **0.87** | **62** | *e*P | Pb | 16 28 55.6 | 0.0 |

**TAP 30 16:29:07.6, 24.84N×121.98E, h12km, ML2.3, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.05** | **274** | P | Pg | 16 29 10.0 | +0.2 |
| | baz=270 | | | | | | |
| EGS | | | | *e*S | Sg | 16 29 11.7 | +0.3 |
| | baz=270 | | | | | | |
| **NTC** | **Toucheng** | **0.14** | **275** | P | Pg | 16 29 11.5 | +0.6 |
| | baz=283 | | | | | | |
| NTC | | | | S | Sg | 16 29 14.3 | +1.0 |
| | baz=283 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.17** | **2** | P | Pg | 16 29 11.8 | +0.4 |
| | baz=3.0 | | | | | | |
| TWB1 | | | | *i* S | Sg | 16 29 14.1 | +0.1 |
| | baz=3.0 | | | | | | |
| **TIPB** | **Shuangxi** | **0.19** | **312** | *i* P | Pg | 16 29 12.4 | +0.5 |
| | baz=305 | | | | | | |
| TIPB | | | | S | Sg | 16 29 15.2 | +0.4 |
| | baz=305 | | | | | | |
| **ILA** | **Ilan** | **0.23** | **250** | S | Sg | 16 29 16.8 | +1.2 |
| | baz=240 | | | | | | |
| **TWC** | **Suao** | **0.26** | **208** | *e*P | Pg | 16 29 13.4 | +0.4 |
| | baz=209 | | | | | | |
| TWC | | | | *e*S | Sg | 16 29 16.7 | +0.1 |
| | baz=209 | | | | | | |
| **SXI1** | **Grass Mountain** | **0.27** | **339** | P | Pb | 16 29 13.9 | -0.6 |
| | baz=344 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.29** | **321** | *e*P | Pb | 16 29 14.4 | -0.5 |
| | baz=315 | | | | | | |
| NWF | | | | *e*S | Sb | 16 29 19.2 | -0.6 |
| | baz=315 | | | | | | |
| **WFSB** | **Wu-fen Shan** | **0.29** | **321** | *e*P | Pb | 16 29 14.5 | -0.3 |
| | baz=315 | | | | | | |
| WFSB | | | | *e*S | Sg | 16 29 18.6 | +1.0 |
| | baz=315 | | | | | | |
| **TWE** | **Neicheng** | **0.31** | **247** | P | Pg | 16 29 14.4 | +0.5 |
| | baz=238 | | | | | | |
| TWE | | | | *e*S | Sg | 16 29 18.6 | +0.5 |
| | baz=238 | | | | | | |
| **NDS** | **Dongshan** | **0.32** | **229** | P | Pb | 16 29 14.7 | -0.6 |
| | baz=231 | | | | | | |
| NDS | | | | *e*S | Sg | 16 29 18.7 | +0.3 |
| | baz=231 | | | | | | |
| **TNOU** | **National Taiwa** | **0.36** | **328** | P | Pb | 16 29 15.8 | -0.3 |
| | baz=319 | | | | | | |
| TNOU | | | | *e*S | Sg | 16 29 20.4 | +0.7 |
| | baz=319 | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **0.37** | **257** | P | Pg | 16 29 15.4 | +0.4 |
| | baz=257 | | | | | | |
| FUSB | | | | S | Sg | 16 29 20.0 | +0.1 |
| | baz=257 | | | | | | |
| **TWA** | **Mucha** | **0.39** | **291** | *e*P | Pb | 16 29 16.1 | -0.4 |
| | baz=290 | | | | | | |
| TWA | | | | *e*S | Sg | 16 29 21.2 | +0.7 |
| | baz=290 | | | | | | |
| **NHY** | **Taipei** | **0.42** | **298** | *e*S | Sb | 16 29 23.1 | -0.3 |
| | baz=290 | | | | | | |
| **ENTT** | **Nioudou** | **0.43** | **242** | P | Pg | 16 29 16.6 | +0.5 |
| | baz=242 | | | | | | |
| ENTT | | | | S | Sg | 16 29 22.1 | +0.3 |
| | baz=242 | | | | | | |
| **NHDH** | **Xindian Distri** | **0.43** | **286** | *e*P | Pb | 16 29 16.9 | -0.3 |
| | baz=279 | | | | | | |
| NHDH | | | | *e*S | Sb | 16 29 22.9 | -0.8 |
| | baz=279 | | | | | | |
| **EWUT** | **Wuta** | **0.44** | **205** | *e*P | Pb | 16 29 17.2 | -0.1 |
| | baz=211 | | | | | | |
| EWUT | | | | *e*S | Sb | 16 29 22.9 | -0.8 |
| | baz=211 | | | | | | |
| **NWLT** | **Wulai** | **0.44** | **262** | *e*P | Pg | 16 29 16.7 | +0.4 |
| | baz=261 | | | | | | |
| NWLT | | | | *e*S | Sg | 16 29 22.1 | 0.0 |
| | baz=261 | | | | | | |
| **ENA** | **Nanau** | **0.47** | **208** | *e*P | Pg | 16 29 17.3 | +0.5 |
| | baz=213 | | | | | | |
| ENA | | | | *e*S | Sg | 16 29 23.8 | +0.8 |
| | baz=213 | | | | | | |
| **EOS2** | **EOS2** | **0.48** | **152** | *e*S | Sb | 16 29 25.2 | +0.4 |
| | ba

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WRA | | | PcP | **PcP** | **16 40 13.2** | **+0.1** |
| | comp=Z,0.6nm,0.9s,baz=106,slow=3.2,SNR=2.4 | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | |
| **MTN** | **Manton Dam** | **38.33 278** | P | **P** | **16 38 13.9** | **+0.3** |
| MTN | | | IAmb | IAmb | 16 38 30.5 | |
| | comp=Z,32nm,1.6s | | | | | |
| **FAKI** | **Fak Fak** | **41.56 292** | P | **P** | **16 38 39.8** | **-0.7** |
| FAKI | | | IAmb | IAmb | 16 38 53.8 | |
| | comp=Z,30nm,1.1s | | | | | |
| **MBWA** | **Marble Bar** | **46.73 261** | P | **P** | **16 39 23.1** | **+1.2** |
| MBWA | | | IAmb | IAmb | 16 39 47.3 | |
| | comp=Z,13nm,1.1s | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.88 332** | P | **P** | **16 41 36.4** | **-1.8** |
| | comp=Z,2.4nm,0.9s,baz=170,slow=5.8,SNR=5.8 | | | | | |
| | comp=Z,2.4nm,0.9s | | | | | |
| **MAJO** | **Matsushiro** | **65.88 332** | P | **P** | **16 41 37.5** | **-0.7** |
| **MJB9** | **Matsu-Tunnel** | **65.88 332** | P | **P** | **16 41 37.6** | **-0.6** |
| MJB9 | | | IAmb | IAmb | 16 41 57.7 | |
| | comp=Z,12nm,1.2s | | | | | |
| **JSD** | **Sado** | **67.11 333** | P | **P** | **16 41 46.0** | **-0.1** |
| **QSPA** | **South Pole Qui** | **67.76 180** | P | **P** | **16 41 50.5** | **+0.5** |
| QSPA | | | IAmb | IAmb | 16 42 16.1 | |
| | comp=Z,4.9nm,1.2s | | | | | |
| **QSPA** | **South Pole Qui** | **67.76 180** | P | **P** | **16 41 51.7** | **+1.6** |
| | comp=Z,1.5nm,0.8s,baz=292,slow=2.2,SNR=5.5 | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | |
| **KSRS** | **Korea Array** | **71.54 326** | P | **P** | **16 42 13.4** | **0.0** |
| | comp=Z,2.0nm,0.8s,baz=147,slow=7.8,SNR=8.5 | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | |
| **USRK** | **Ussuriysk Ar.** | **74.86 333** | P | **P** | **16 42 31.6** | **-1.4** |
| | comp=Z,0.9nm,0.8s,baz=151,slow=3.3,SNR=2.9 | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | |
| **PETK** | **Petropavlovsk-** | **75.88 352** | P | **P** | **16 42 37.5** | **-1.1** |
| | comp=Z,1.6nm,0.8s,baz=218,slow=8.7,SNR=4.1 | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | |
| **BELA** | **Belgrano 2** | **78.98 175** | P | **P** | **16 42 55.0** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **80.59 294** | P | **P** | **16 43 07.0** | **+1.5** |
| | comp=Z,1.4nm,0.8s,baz=157,slow=3.8,SNR=7.2 | | | | | |
| | comp=Z,1.4nm,0.8s | | | | | |
| **SDPT** | **Sand Point** | **81.29 16** | P | **P** | **16 43 07.2** | **-1.1** |
| **TROLL** | **Troll, Antarti** | **85.55 184** | ⇓P | **P** | **16 43 29.3** | **-1.2** |
| | comp=Z,84nm,0.5s | | | | | |
| **SNAA** | **Sanae** | **86.15 182** | P | **P** | **16 43 31.9** | **-1.4** |
| SNAA | | | IAmb | IAmb | 16 43 45.0 | |
| | comp=Z,6.5nm,1.3s | | | | | |
| **SNAA** | **Sanae** | **86.15 182** | ⇓P | **P** | **16 43 32.3** | **-1.1** |
| | comp=Z,15nm,0.5s | | | | | |
| **SNAA** | **Sanae** | **86.15 182** | P | **P** | **16 43 32.1** | **-1.2** |
| | comp=Z,0.9nm,0.9s,baz=211,slow=5.9,SNR=2.4 | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.70 180** | ⇓P | **P** | **16 43 35.3** | **-0.8** |
| | comp=Z,1.0nm,0.4s | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.01 181** | ⇓P | **P** | **16 43 35.6** | **-1.9** |
| | comp=Z,2.2nm,0.6s,baz=181,slow=4.9 | | | | | |
| **SONM** | **Songino Array** | **90.20 323** | P | **P** | **16 43 51.8** | **-1.2** |
| | comp=Z,1.5nm,0.8s,baz=123,slow=4.1,SNR=5.6 | | | | | |
| | comp=Z,1.5nm,0.8s | | | | | |
| **ILAR** | **Eielson Array** | **92.88 17** | P | **P** | **16 44 02.8** | **-2.0** |
| | comp=Z,0.4nm,0.8s,baz=228,slow=5.4,SNR=2.3 | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | |
| **VRAC** | **Vranov** | **145.92 329** | PKPbc | **PKPdf** | **16 50 31.1** | **-0.1** |
| | comp=Z,3.1nm,0.8s,baz=78,slow=5.4,SNR=4.1 | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.65 353** | PKPbc | **PKPdf** | **16 50 32.6** | **+0.4** |
| | comp=Z,1.6nm,0.5s,baz=4.1,slow=3.3,SNR=11 | | | | | |
| **GERES** | **GERESS Array B** | **147.60 331** | PKPbc | **PKPbc** | **16 50 36.6** | **-0.2** |
| | comp=Z,0.3nm,0.4s,baz=46,slow=4.2,SNR=3.5 | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.86 332** | PKPbc | **PKPbc** | **16 50 43.8** | **-1.5** |
| | comp=Z,1.3nm,0.3s,baz=132,slow=10,SNR=4.3 | | | | | |

*IDC **30** 16:35:07.2± 1.3, 21°.98S× 170°.09E, h0km, mb3.7/5, mbtmp3.7/6, ML3.3/1, Error ellipse: s-maj=36.7km s-min=29.5km az=164.0*

**ISC 30 16:35:10.9± 1.1, 22°.0S± 0°.2× 170°.2E± 0°.1, h25km, n8, σ 1°36/9, mb4.0/5, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **3.45** | **268** | Pn | **Pn** | **16 36 02.9** | **-0.2** |
| | 2.8nm,0.3s,baz=127,slow=14,SNR=10.0 | | | | | | |
| DZM | | | | Sn | **Sn** | **16 36 44.8** | **+1.5** |
| | 12nm,0.3s,baz=73,slow=11,SNR=7.9 | | | | | | |
| | 15nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **33.40** | **260** | P | **P** | **16 41 46.0** | **-1.7** |
| | 0.3nm,0.8s,baz=77,slow=8.7,SNR=1.6 | | | | | | |
| | 0.3nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.47** | **267** | P | **P** | **16 41 46.6** | **-1.7** |
| | 0.4nm,0.4s,baz=98,slow=8.2,SNR=6.0 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.60** | **332** | P | **P** | **16 45 52.9** | **+0.2** |
| | 0.7nm,0.5s,baz=158,slow=7.0,SNR=4.6 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **68.05** | **180** | P | **P** | **16 46 09.1** | **+0.9** |
| | 1.2nm,1.1s,baz=16,slow=2.0,SNR=2.1 | | | | | | |
| | 1.2nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **89.95** | **323** | P | **P** | **16 48 08.7** | **+0.7** |
| | 0.5nm,0.5s,baz=129,slow=3.9,SNR=3.5 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.36** | **353** | PKPbc | **PKPdf** | **16 54 47.1** | **-0.8** |
| | 1.1nm,0.5s,baz=17,slow=3.2,SNR=5.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.33** | **331** | PKPbc | **PKPbc** | **16 54 53.1** | **+0.7** |
| | 0.3nm,0.4s,baz=49,slow=3.0,SNR=2.8 | | | | | | |

*IDC **30** 16:40:05.1± 5.0, 31°.36S× 179°.97W, h395km± 47km, mb2.9/3, mbtmp3.8/4, Error ellipse: s-maj=54.9km s-min=28.1km az=35.0*

**ISC 30 16:40:07.1± 1.4, 31°.73S± 0°.10× 179°.9E± 0°.2, h400km, n84, σ 2°47/83, mb3.3/3, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HAZ** | **Te Kaha** | **6.26** | **196** | P | **Pn** | **16 41 45.8** | **+3.4** |
| **OUZ** | **Omahuta** | **6.32** | **235** | P | **P** | **16 41 47.5** | **+4.4** |
| **RUGZ** | **Raukumara Rang** | **6.49** | **196** | P | **P** | **16 41 48.1** | **+3.1** |
| **TWGZ** | **Tauwhareparae** | **6.63** | **193** | P | **S** | **16 43 09.1** | **+1.4** |
| **MWZ** | **Matawai** | **6.88** | **196** | P | **S** | **16 43 14.1** | **+1.4** |
| **LIRZ** | **Lichensteins R** | **6.90** | **204** | P | P | 16 41 59.3 | +9.2 |
| **TKGZ** | **Te Karaka** | **6.91** | **194** | P | **S** | **16 43 13.5** | **+0.3** |
| **URZ** | **Urewera** | **6.91** | **199** | P | **P** | **16 41 52.2** | **+2.0** |
| **URZ** | **Urewera** | **6.91** | **199** | P | **P** | **16 41 51.8** | **+1.6** |
| | 9.0nm,0.3s,baz=41,slow=0.4,SNR=28 | | | | | | |
| **URZ** | **Urewera** | **6.91** | **199** | P | **P** | **16 41 52.1** | **+2.0** |
| **URZ** | **Urewera** | **6.91** | **199** | P | **S** | **16 43 12.9** | **-0.5** |
| **RAGZ** | **Rawiri** | **7.06** | **196** | P | **P** | **16 41 54.8** | **+2.9** |
| **RAGZ** | **Rawiri** | **7.06** | **196** | P | **S** | **16 43 15.2** | **-1.3** |
| **RIGZ** | **Rimuhau** | **7.18** | **194** | P | **P** | **16 41 55.6** | **+2.4** |
| **RIGZ** | **Rimuhau** | **7.18** | **194** | P | **S** | **16 43 19.4** | **+0.4** |
| **MUGZ** | **Murupara** | **7.21** | **200** | P | **P** | **16 41 55.5** | **+2.0** |
| **RTZ** | **Ruatahuna** | **7.28** | **198** | P | **P** | **16 41 56.3** | **+1.9** |
| **RTZ** | **Ruatahuna** | **7.28** | **198** | P | **S** | **16 43 22.7** | **+1.6** |
| **SNGZ** | **Shannon Statio** | **7.35** | **196** | P | **P** | **16 41 57.6** | **+2.6** |
| **SNGZ** | **Shannon Statio** | **7.35** | **196** | P | **S** | **16 43 24.2** | **+1.8** |
| **PRGZ** | **Paritu Road** | **7.37** | **192** | P | **S** | **16 43 21.0** | **-1.9** |
| **TLZ** | **Tolley Road** | **7.50** | **207** | P | **P** | **16 42 01.3** | **+4.5** |
| **KNZ** | **Kokohu** | **7.50** | **193** | P | **S** | **16 43 21.2** | **-4.4** |
| **MTHZ** | **Maungataniwha** | **7.54** | **199** | P | **P** | **16 41 59.3** | **+2.1** |
| **MTHZ** | **Maungataniwha** | **7.54** | **199** | P | **S** | **16 43 26.4** | **0.0** |
| **MRHZ** | **Matea Rd** | **7.64** | **201** | P | **P** | **16 41 59.7** | **+1.3** |
| **WHHZ** | **Waihua** | **7.65** | **196** | P | **S** | **16 43 28.6** | **-0.1** |
| **NMHZ** | **Naumai** | **7.78** | **198** | P | **P** | **16 42 01.8** | **+1.9** |
| **NMHZ** | **Naumai** | **7.78** | **198** | P | **S** | **16 43 31.0** | **-0.5** |
| **RATZ** | **Rangitukua** | **7.88** | **204** | P | **P** | **16 42 03.9** | **+2.9** |
| **ARHZ** | **Aropaoanui** | **7.89** | **197** | P | **S** | **16 43 32.9** | **-0.7** |
| **BKZ** | **Black Stump Fm** | **7.93** | **200** | P | **P** | **16 42 01.9** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **7.93** | **200** | P | **P** | **16 42 02.0** | **+0.4** |
| **BKZ** | **Black Stump Fm** | **7.93** | **200** | P | **S** | **16 43 33.2** | **-1.4** |
| **HIZ** | **Hauiti** | **7.93** | **210** | P | **P** | **16 42 05.4** | **+3.8** |
| **HIZ** | **Hauiti** | **7.93** | **210** | P | **P** | **16 42 05.2** | **+3.6** |
| **MCHZ** | **McNeill Hill** | **8.13** | **198** | P | **P** | **16 42 05.6** | **+1.8** |
| **ETVZ** | **East Tongariro** | **8.15** | **204** | P | **P** | **16 42 06.0** | **+1.9** |
| **WTVZ** | **West Tongariro** | **8.17** | **204** | P | **P** | **16 42 06.4** | **+2.1** |
| **NNVZ** | **North Ngauruho** | **8.18** | **204** | P | **P** | **16 42 06.6** | **+2.2** |
| **TWVZ** | **Taurewa** | **8.19** | **205** | P | **P** | **16 42 07.1** | **+2.7** |
| **KWHZ** | **Kaweka Forest** | **8.19** | **199** | P | **P** | **16 42 05.5** | **+1.0** |
| **NGZ** | **Ngauruhoe** | **8.22** | **204** | P | **P** | **16 42 07.2** | **+2.3** |
| **TUVZ** | **Tukino** | **8.29** | **204** | P | **P** | **16 42 07.0** | **+1.4** |
| **WHVZ** | **Whangaehu Hut** | **8.32** | **204** | P | **P** | **16 42 07.3** | **+1.2** |
| **WNVZ** | **Wahianoa** | **8.36** | **204** | P | **P** | **16 42 07.6** | **+1.1** |
| **MOVZ** | **Moawhango** | **8.38** | **203** | P | **P** | **16 42 07.3** | **+0.7** |
| **KRHZ** | **Kereru** | **8.41** | **199** | P | **P** | **16 42 07.7** | **+0.9** |
| **PKVZ** | **Pokaka** | **8.41** | **205** | P | **P** | **16 42 08.4** | **+1.5** |
| **KAHZ** | **Kahuranaki** | **8.42** | **196** | P | **P** | **16 42 08.9** | **+1.9** |
| **PXZ** | **Pawanui** | **8.65** | **196** | P | **P** | **16 42 11.0** | **+1.5** |
| **PNHZ** | **Pukenui** | **8.71** | **199** | P | **P** | **16 42 10.7** | **+0.6** |
| **WPHZ** | **Waipukurau** | **8.78** | **198** | P | **P** | **16 42 12.2** | **+1.3** |
| **DVHZ** | **Dannevirke** | **9.07** | **198** | P | **Pn** | **16 42 14.7** | **+0.5** |
| **ANWZ** | **Angora Road** | **9.15** | **197** | P | **Pn** | **16 42 16.9** | **+1.8** |
| **BFZ** | **Birch Farm** | **9.41** | **197** | P | **P** | **16 42 17.9** | **-0.1** |
| **BFZ** | **Birch Farm** | **9.41** | **197** | P | **Pn** | **16 42 18.6** | **+0.5** |
| **TIWZ** | **Tintock** | **9.60** | **199** | P | **S** | **16 44 07.7** | **-1.8** |
| **CPWZ** | **Castlepoint** | **9.64** | **197** | P | **S** | **16 44 10.3** | **-0.1** |
| **HOWZ** | **Holdsworth Sta** | **9.81** | **200** | P | **S** | **16 44 09.6** | **-4.4** |
| **OGWZ** | **Otaki Gorge** | **9.84** | **202** | P | **S** | **16 44 12.3** | **-2.3** |
| **TMWZ** | **Te Maipa** | **9.90** | **198** | P | **S** | **16 44 11.4** | **-4.4** |
| **KIW** | **Kapiti Island** | **9.97** | **202** | P | **S** | **16 44 13.9** | **-3.2** |
| **MTW** | **Mount Morrison** | **10.06** | **199** | P | **S** | **16 44 15.6** | **-3.3** |
| **CAW** | **Cannon Point** | **10.14** | **201** | P | **S** | **16 44 18.7** | **-2.0** |
| **TRWZ** | **Traveller** | **10.23** | **198** | P | **S** | **16 44 20.5** | **-2.0** |
| **DUWZ** | **D'Urville Isla** | **10.26** | **206** | P | **S** | **16 44 19.3** | **-3.9** |
| **PAWZ** | **Paruwai Farm** | **10.29** | **199** | P | **S** | **16 44 20.6** | **-3.0** |
| **MSWZ** | **Moikau Station** | **10.37** | **200** | P | **S** | **16 44 21.5** | **-3.8** |
| **TCW** | **Tory Channel** | **10.49** | **204** | P | **S** | **16 44 24.2** | **-3.6** |
| **PLWZ** | **Palliser** | **10.51** | **199** | P | **S** | **16 44 26.3** | **-1.9** |
| **TUWZ** | **Tuamarina** | **10.80** | **205** | P | **S** | **16 44 28.9** | **-5.2** |
| **NNZ** | **Nelson** | **10.83** | **207** | P | **S** | **16 44 31.7** | **-2.9** |
| **QRZ** | **Quartz Range** | **10.85** | **211** | P | **S** | **16 44 36.3** | **+1.1** |
| **BSWZ** | **Blackbirch Sta** | **11.08** | **204** | P | **S** | **16 44 37.0** | **-2.7** |
| **MRNZ** | **Matariki Terra** | **11.23** | **209** | P | **S** | **16 44 40.6** | **-2.2** |
| **THZ** | **Tophouse** | **11.48** | **207** | P | **S** | **16 44 41.4** | **-6.5** |
| **KHZ** | **Kahutara** | **11.81** | **204** | P | **P** | **16 42 45.0** | **+0.5** |
| **KHZ** | **Kahutara** | **11.81** | **204** | P | **S** | **16 44 50.3** | **-4.3** |
| **ASAR** | **Alice Springs** | **41.27** | **269** | P | **P** | **16 47 14.6** | **-0.9** |
| | 0.4nm,0.6s,baz=109,slow=7.0,SNR=7.1 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.38** | **275** | P | **P** | **16 47 23.4** | **-1.0** |
| | 0.6nm,0.3s,baz=111,slow=8.0,SNR=23 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **58.39** | **180** | P | **P** | **16 49 22.9** | **+0.9** |
| | 1.2nm,1.0s,baz=25,slow=0.7,SNR=1.9 | | | | | | |
| | 1.2nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **145.73** | **338** | PKPbc | **PKPdf** | **16 58 56.7** | **-1.1** |
| | 1.5nm,0.6s,baz=38,slow=3.9,SNR=14 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.60** | **296** | PKPbc | **PKPbc** | **16 59 11.6** | **-3.3** |
| | 0.4nm,0.5s,baz=112,slow=2.7,SNR=2.7 | | | | | | |

**IDC 30 16:43:59.0± 4.6, 20°.80S× 169°.08E, h0km, mb3.4/2, mbtmp3.3/3, ML2.9/1, Error ellipse: s-maj=188.2km s-min=31.4km az=145.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **2.76** | **242** | Pn | Pn | 16 44 45.5 | +0.8 |
| | 1.7nm,0.3s,baz=116,slow=14,SNR=2.4 | | | | | | |
| DZM | | | | Sn | Sn | 16 45 20.3 | +1.5 |
| | 2.6nm,0.3s,baz=143,slow=23,SNR=3.9 | | | | | | |
| | 6.7nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.54** | **265** | P | P | 16 50 31.6 | -0.5 |
| | 0.3nm,0.6s,baz=97,slow=8.1,SNR=4.8 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **32.63** | **258** | P | P | 16 50 32.0 | -0.8 |
| | 0.4nm,0.7s,baz=80,slow=9.3,SNR=2.9 | | | | | | |
| | 0.4nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **145.03** | **352** | PKPbc | PKPbc | 17 03 35.6 | -1.8 |
| | 0.5nm,0.5s,baz=337,slow=2.9,SNR=3.7 | | | | | | |
| **GERES** | **GERESS Array B** | **145.78** | **331** | PKPbc | PKPab | 17 03 41.1 | +0.6 |
| | 0.4nm,0.6s,baz=25,slow=2.6,SNR=2.5 | | | | | | |

*IDC **30** 16:51:43.3± 1.0, 0°.75S× 134°.55E, h0km, mb4.1/9, mbtmp4.1/10, ML4.0/1, MS3.8/1, Error ellipse: s-maj=50.8km s-min=17.0km az=74.0*
*NEIC **30** 16:51:51± 1.4, 0°.9S± 0°.1× 134°.2E± 0°.1, h44km± 10km, mb4.1/13, Error ellipse: s-maj=17.7km s-min=15.9km az=115.0*

**ISC 30 16:51:48.1± 0.7, 0°.94S± 0°.08× 134°.10E± 0°.10, h27km, n26, σ 0°87/26, mb4.0/11, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.70** | **223** | Pn | **Pb** | **16 52 34.3** | **-1.4** |
| FAKI | | | | Sn | **Sb** | **16 53 08.1** | **-0.3** |
| **MTN** | **Manton Dam** | **12.19** | **194** | Pn | **Pn** | **16 54 40.9** | **+0.8** |
| **KNRA** | **Kununurra** | **15.56** | **199** | Pn | **Pn** | **16 55 25.1** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 16 55 42.1 | |
| | comp=Z,12nm,0.6s | | | | | | |
| **COEN** | **Coen** | **15.75** | **146** | Pn | **Pn** | **16 55 28.7** | **+0.5** |
| COEN | | | | IAmb | IAmb | 16 56 05.3 | |
| | comp=Z,26nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.88** | **179** | P | **P** | **16 56 06.5** | **0.0** |
| WRAB | | | | IAmb | IAmb | 16 56 19.5 | |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.89** | **179** | P | **Pn** | **16 56 07.2** | **-0.1** |
| | comp=Z,0.5nm,0.3s,baz=360,slow=11,SNR=51 | | | | | | |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **18.91** | **179** | P | **P** | **16 56 06.6** | **-0.3** |
| WR0 | | | | IAmb | IAmb | 16 56 25.8 | |
| | comp=Z,11nm,1.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.97** | **205** | P | **Pn** | **16 56 08.4** | **+0.1** |
| **CTAO** | **Charters Tower** | **22.44** | **149** | P | **P** | **16 56 46.1** | **+1.0** |
| CTAO | | | | IAmb | IAmb | 16 57 29.2 | |
| | comp=Z,11nm,1.3s | | | | | | |
| **AS31** | **Alice Springs** | **22.59** | **180** | P | **P** | **16 56 47.4** | **+0.6** |
| **ASAR** | **Alice Springs** | **22.59** | **180** | P | **P** | **16 56 47.4** | **+0.6** |
| | comp=Z,2.0nm,0.6s,baz=12,slow=12,SNR=37 | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **JCJ** | **Chichijima** | **28.94** | **15** | LR | LR | 17 07 22.6 | |
| | comp=Z,213nm,20.6s,baz=126,slow=33 | | | | | | |
| **STKA** | **Stephens Creek** | **31.58** | **168** | P | **P** | **16 58 07.7** | **-0.8** |
| **STKA** | **Stephens Creek** | **31.58** | **168** | P | **P** | **16 58 08.2** | **-0.3** |
| | comp=Z,1.7nm,0.8s,baz=338,slow=12,SNR=1.8 | | | | | | |
| | comp=Z,1.7nm,0.8s | | | | | | |
| **BBOO** | **Buckleboo** | **31.76** | **177** | P | **P** | **16 58 10.2** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **39.57** | **301** | P | **P** | **16 59 19.0** | **+1.6** |
| | comp=Z,1.7nm,0.9s,baz=124,slow=7.1,SNR=8.0 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **NIUE** | **Niue** | **57.70** | **112** | P | **P** | **17 01 36.3** | **-0.5** |
| **MK31** | **Makanchi Array** | **65.61** | **324** | P | **P** | **17 02 30.3** | **+0.5** |
| **MKAR** | **Makanchi Array** | **65.61** | **324** | P | **P** | **17 02 30.4** | **+0.6** |
| | comp=Z,2.5nm,0.5s,baz=107,slow=8.8,SNR=33 | | | | | | |
| | comp=Z,2.5nm,0.5s | | | | | | |
| **MAKZ** | **Makanchi** | **65.80** | **324** | P | **P** | **17 02 31.4** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **68.13** | **331** | P | **P** | **17 02 44.6** | **-1.0** |
| | comp=Z,0.8nm,0.6s,baz=123,slow=5.5,SNR=3.9 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.66** | **326** | P | **P** | **17 02 55.2** | **0.0** |
| | comp=Z,0.6nm,0.3s,baz=118,slow=5.7,SNR=7.6 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **KKAR** | **Karatay Array** | **71.66** | **316** | P | **P** | **17 03 08.2** | **+0.6** |
| KKAR | | | | IAmb | IAmb | 17 03 08.7 | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **75.25** | **326** | P | **P** | **17 03 28.6** | **+0.1** |
| | comp=Z,1.0nm,0.7s,baz=110,slow=6.5,SNR=3.9 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **86.16** | **25** | P | **P** | **17 04 24.4** | **-2.3** |
| | comp=Z,0.7nm,0.6s,baz=255,slow=4.9,SNR=5.6 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **89.00** | **180** | P | **P** | **17 04 41.6** | **+1.2** |
| | comp=Z,2.5nm,0.8s,baz=328,slow=1.2,SNR=13 | | | | | | |
| | comp=Z,2.5nm,0.8s | | | | | | |

*NEIC **30** 16:56:02.4± 0.6, 19°.6N± 0°.1× 64°.38W± 0°.03, h35km± 2km, ML2.8/25, Md3.5/5(RSPR), Error ellipse: s-maj=17.8km s-min=3.3km az=8.0*
*RSPR **30** 16:56:05.8, 19°.54N× 64°.47W, h56km± 28km, MD3.5/5*

**ISC 30 16:56:02.6± 2.5, 19°.5N± 0°.2× 64°.40W± 0°.07, h27km, n25, σ 0°89/27, 2C-4D, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SMRT** | **St. Maarten** | **1.92** | **139** | Pn | **Pn** | **16 56 34.0** | **+0.5** |
| **HUMP** | **Col San Antoni** | **1.94** | **226** | ⇓eP | **Pb** | **16 56 36.0** | **-1.3** |
| **HUMP** | **Col San Antoni** | **1.94** | **226** | eS | **Sn** | **16 56 57.5** | **+0.3** |
| **HUMP** | **Col San Antoni** | **1.94** | **226** | | **Sn** | **16 56 57.5** | **+0.3** |
| **HUMP** | **Col San Antoni** | **1.94** | **226** | | **Pn** | **16 56 34.5** | **+0.7** |
| **GCPR** | **Guaynabo City** | **2.00** | **233** | Pn | **Pn** | **16 56 34.6** | **0.0** |
| GCPR | | | | IAML | | 16 57 02.2 | |
| | comp=E,36nm,2.3s | | | | | | |
| **PDPR** | **Patillas Dam,** | **2.14** | **226** | ⇓eP | **Pn** | **16 56 38.2** | **+1.6** |
| **PDPR** | **Patillas Dam,** | **2.14** | **226** | eS | **Sn** | **16 57 03.3** | **+1.0** |
| **PDPR** | **Patillas Dam,** | **2.14** | **226** | Pn | **Pn** | **16 56 36.5** | **-0.1** |
| **SABA** | **Saba** | **2.18** | **150** | Pn | **Pn** | **16 56 37.2** | **+0.1** |
| SABA | | | | IAML | | 16 57 53.8 | |
| | comp=N,132nm,1.0s | | | | | | |
| **IGPR** | **InterUniversit** | **2.23** | **227** | Pn | **Pn** | **16 56 37.9** | **0.0** |
| IGPR | | | | IAML | | 16 57 09.8 | |
| | comp=N,36nm,0.3s | | | | | | |
| IGPR | | | | IAML | | 16 57 17.0 | |
| | comp=E,38nm,0.3s | | | | | | |
| **CELP** | **Cerrillos** | **2.51** | **236** | ⇑eP | **Pn** | **16 56 43.0** | **+1.3** |
| **CELP** | **Cerrillos** | **2.51** | **236** | | **Pn** | **16 56 41.1** | **-0.6** |
| CELP | | | | IAML | | 16 57 26.9 | |
| | comp=N,21nm,2.7s | | | | | | |
| **AOPR** | **Arecibo Observ** | **2.52** | **243** | ⇓eP | **Pn** | **16 56 42.9** | **+1.1** |
| **AOPR** | **Arecibo Observ** | **2.52** | **243** | | **Pn** | **16 56 41.5** | **-0.3** |
| AOPR | | | | IAML | | 16 57 23.6 | |
| | comp=E,50nm,0.5s | | | | | | |
| AOPR | | | | IAML | | 16 57 26.0 | |
| | comp=N,48nm,1.2s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **2.77** | **248** | Pn | **Pn** | **16 56 44.6** | **-0.6** |
| AGPR | | | | IAML | | 16 57 19.9 | |
| | comp=E,92nm,1.9s | | | | | | |
| AGPR | | | | IAML | | 16 58 18.1 | |
| | comp=N,91nm,2.5s | | | | | | |
| **MLPR** | **Magueyes Islan** | **2.94** | **239** | ⇓eP | **Pn** | **16 56 48.6** | **+1.0** |
| **MLPR** | **Magueyes Islan** | **2.94** | **239** | eS | **Sn** | **16 57 22.5** | **+0.4** |
| **MLPR** | **Magueyes Islan** | **2.94** | **239** | | **Pn** | **16 56 47.6** | **0.0** |
| MLPR | | | | | **Sn** | **16 57 22.0** | **0.0** |
| MLPR | | | | IAML | | 16 57 39.6 | |
| | comp=N,23nm,1.9s | | | | | | |
| MLPR | | | | IAML | | 16 57 54.5 | |
| | comp=E,24nm,2.8s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **2.98** | **240** | ⇓eP | **Pn** | **16 56 49.4** | **+1.3** |
| **CRPR** | **Cabo Rojo, PR** | **2.98** | **240** | eS | **Sn** | **16 57 24.2** | **+1.3** |
| **CRPR** | **Cabo Rojo, PR** | **2.98** | **240** | | **Pn** | **16 56 47.5** | **-0.6** |
| CRPR | | | | | **Sn** | **16 57 23.1** | **+0.2** |
| CRPR | | | | IAML | | 16 57 29.2 | |
| | comp=N,31nm,2.4s | | | | | | |
| CRPR | | | | IAML | | 16 57 45.2 | |
| | comp=E,26nm,2.7s | | | | | | |
| **PCDR** | **Punta Cana, DR** | **3.90** | **256** | Pn | **Pn** | **16 57 02.4** | **+1.6** |
| **ABD** | **La Joyeuse, An** | **4.10** | **137** | Pn | **Pn** | **16 57 03.8** | **+0.3** |
| **SDDR** | **Presa de Saban** | **6.53** | **267** | Pn | **Pn** | **16 57 35.9** | **-1.1** |

*IDC **30** 17:14:37.7± 0.6, 22°.21S× 170°.36E, h0km, mb4.4/15, mbtmp4.5/17, ML3.9/2, MS4.0/31, Error ellipse: s-maj=20.6km s-min=15.6km az=87.0*
*NOU **30** 17:14:40.5, 22°.25S× 170°.12E, h0km, mb4.8/27, Southeast of Loyalty Islands*
*NEIC **30** 17:14:41.2± 2.3, 22°.23S± 0°.10× 170°.07E± 0°.08, h10km± 1km, mb4.9/25, Error ellipse: s-maj=16.9km s-min=12.4km az=174.0*
*GCMT **30** 17:14:46.2± 0.3, 22°.27S± 0°.02× 170°.22E± 0°.03, h23km± 1km, MW4.9/56, Moment Tensor Solution. s26,c28; s56,c78; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr 1.95± .18; Mθθ -1.49± .11; Mϕϕ -0.46± .11; Mrθ 1.41± .16; Mϕθ 1.02± .07; Mϕr 0.07± .15; Best double couple: Mo 2.48000×10^16 NP1: ϕs 103.00000°, δ 63.00000°, λ 72.00000°. NP2: ϕs 319.00000°, δ 33.00000°, λ 121.00000°. Principal axes: T 2.5140, Plg67.0000°, Azm338.0000°; N -0.0720, Plg16.0000°, Azm112.0000°; P -2.4450, Plg16.0000°, Azm207.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 30 17:14:41.8± 0.4, 22°.28S± 0°.06× 170°.23E± 0°.06, h21km, n159, σ 1°15/142, mb4.9/40, MS4.0/29, 5C-7D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.19** | **291** | P | **Pn** | **17 15 15.7** | **-1.3** |
| **PINNC** | **Pines Island,** | **2.59** | **262** | P | **Pn** | **17 15 22.1** | **-0.5** |
| **PINNC** | **Pines Island,** | **2.59** | **262** | Pn | **Pn** | **17 15 21.8** | **-0.8** |
| **YATNC** | **Mamie plateau,** | **3.10** | **273**

comp=Z,116nm,18.3s,baz=144,slow=35
**MEEK Meekatharra 46.93 254** P **P** **17 23 12.0 +0.7**
**NWAO Narrogin (SRO) 47.72 245** LR LR 17 41 59.1
comp=Z,413nm,21.6s,baz=98,slow=34
**BLDU Ballidu 48.26 248** P **P** **17 23 22.9 +1.4**
**KAPI Kappang 51.69 282** P **P** **17 23 49.0 +1.3**
comp=Z,10.0nm,0.5s
**KAPI Kappang 51.69 282** LR LR 17 45 38.1
comp=Z,60nm,20.7s,baz=98,slow=36
**DAV Davao City (W) 52.56 299** LR LR 17 44 34.1
comp=Z,65nm,19.7s,baz=154,slow=34
**JAGI Jajag, Banyuwa 55.49 275** P **P** **17 24 14.3 -1.4**
comp=Z,69nm,0.8s,comp=Z,2µm
**SBA Scott Base 55.65 181** P **P** **17 24 16.9 +1.1**
SBA IAmb IAmb 17 24 17.5
comp=Z,9.2nm,0.9s
**JCJ Chichijima 56.08 330** LR LR 17 44 34.1
comp=Z,65nm,21.9s,baz=116,slow=32
**KSM Kuching 62.97 284** P **P** **17 25 07.3 -0.2**
KSM IAmb IAmb 17 25 13.3
comp=Z,5.0nm,0.8s
**JOW Kunigami 63.49 318** LR LR 17 52 37.3
comp=Z,68nm,18.1s,baz=135,slow=36
**MJAR Matsushiro Arr 65.86 332** P **P** **17 25 24.6 -1.3**
comp=Z,7.6nm,0.9s,baz=162,slow=5.9,SNR=14
comp=Z,7.6nm,0.9s
**MAJO Matsushiro 65.86 332** P **P** **17 25 24.1 -1.8**
MAJO IAmb IAmb 17 25 27.1
comp=Z,9.7nm,0.8s
**JNU Nakatsue 66.67 325** P **P** **17 25 29.9 -1.2**
**JNU Nakatsue 66.67 325** LR LR 17 54 53.6
comp=Z,41nm,18.0s,baz=132,slow=36
**QSPA South Pole Qui 67.79 180** P **P** **17 25 36.4 -1.6**
**QSPA South Pole Qui 67.79 180** P **P** **17 25 37.7 -0.3**
comp=Z,10.0nm,0.9s,baz=22,slow=2.3,SNR=24
QSPA LR LR 17 52 33.4
comp=Z,158nm,18.3s,baz=28,slow=34
comp=Z,10.0nm,0.9s
**ASAJ Asahikawa 70.76 339** LR LR 17 51 56.5
comp=Z,170nm,21.9s,baz=153,slow=32
**KSRS Korea Array 71.52 326** P **P** **17 26 01.0 -0.1**
comp=Z,6.0nm,0.9s,baz=142,slow=6.2,SNR=21
KSRS LR LR 17 54 41.5
comp=Z,38nm,20.2s,baz=30,slow=34
comp=Z,6.0nm,0.9s
**NJ2 Nanjing 73.03 316** *e*P **P** **17 26 12.3 +2.0**
NJ2 pmax pmax
comp=Z,9.0nm,0.5s
**USRK Ussuriysk Ar. 74.85 333** P **P** **17 26 20.2 -0.4**
comp=Z,3.8nm,0.9s,baz=164,slow=4.4,SNR=12
comp=Z,3.8nm,0.9s
**PETK Petropavlovsk- 75.85 352** P **P** **17 26 25.1 -1.1**
comp=Z,5.4nm,0.9s,baz=161,slow=5.5,SNR=9.3
PETK LR LR 17 53 32.0
comp=Z,145nm,21.8s,baz=147,slow=31
comp=Z,5.4nm,0.9s
**MAW Mawson 75.98 202** P **P** **17 26 27.0 +0.1**
comp=Z,4.4nm,0.8s,baz=54,slow=5.7,SNR=5.6
MAW LR LR 17 56 26.7
comp=Z,65nm,19.8s,baz=102,slow=33
comp=Z,4.4nm,0.8s
**MDJ Mudanjiang 76.22 331** P **P** **17 26 28.5 0.0**
MDJ pmax pmax
comp=Z,8.0nm,1.0s
**TIA Tai'an 76.82 318** P **P** **17 26 32.0 -0.1**
TIA pmax pmax
comp=Z,26nm,0.8s
**CN2 Changchun 77.52 329** *e*P **P** **17 26 35.0 -0.9**
CN2 pmax pmax
comp=Z,10.0nm,0.6s
**BELA Belgrano 2 79.00 175** P **P** **17 26 42.4 -1.4**
**HNS HongShan 79.07 318** *e*P **P** **17 26 45.5 +0.9**
**CMAR Chiang Mai Arr 80.59 294** P **P** **17 26 54.6 +1.3**
comp=Z,2.5nm,0.8s,baz=136,slow=4.4,SNR=11
CMAR LR LR 18 05 55.4
comp=Z,25nm,18.0s,baz=65,slow=38
comp=Z,2.5nm,0.8s
**KMI Kunming 80.66 302** ⇓P **P** **17 26 55.5 +1.7**
KMI pmax pmax
comp=Z,11nm,0.8s
**XAN Xi'an 80.83 312** P **P** **17 26 54.5 +0.2**
XAN sP PcP 17 27 01.0 +0.1
XAN pmax pmax
comp=Z,17nm,0.8s
**PZH PanZhiHua 82.12 303** P **P** **17 27 03.5 +2.1**
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,110nm,4.7s
**XLT XiLinHaoTe 82.43 324** *e*P **P** **17 26 59.0 -3.6**
XLT pmax pmax
comp=Z,8.0nm,0.9s
**MA2 Magadan 83.11 350** LR LR 17 58 52.1
comp=Z,158nm,21.1s,baz=185,slow=32
**HHC Hu-ho-hao-te 83.12 319** *e*P **P** **17 27 08.3 +2.1**
HHC pmax pmax
comp=Z,25nm,0.5s
HHC pmax pmax
comp=Z,100nm,4.0s
**ELIB Princess Elisa 83.32 190** *d*P **P** **17 27 06.3 -0.6**
comp=Z,3.4nm,1.1s
**LZH Lanzhou 85.44 312** *e*P **P** **17 27 19.8 +1.6**
LZH pP sP 17 27 25.5 +0.1
LZH pmax pmax
comp=Z,16nm,1.3s
**TROLL Troll, Antarti 85.58 184** ⇑P **P** **17 27 17.6 -0.8**
comp=Z,513nm,0.8s
**SNAA Sanae 86.18 182** P **P** **17 27 20.1 -1.1**
SNAA IAmb IAmb 17 27 21.1
comp=Z,9.2nm,1.1s
**SNAA Sanae 86.18 182** ⇑P **P** **17 27 19.5 -1.7**
comp=Z,86nm,0.8s
**SNAA Sanae 86.18 182** P **P** **17 27 20.0 -1.2**
comp=Z,3.4nm,0.8s,baz=185,slow=5.0,SNR=12
SNAA LR LR 18 02 10.3
comp=Z,108nm,20.9s,baz=118,slow=33
comp=Z,3.4nm,0.8s
**VNA3 Neumayer Olymp 86.73 180** ⇑P **P** **17 27 22.6 -1.3**
comp=Z,9.8nm,0.7s
**VNA2 Neumayer--Watz 87.03 181** ⇑P **P** **17 27 24.5 -0.9**
comp=Z,9.4nm,0.7s,baz=168,slow=4.4
**VNA1 Neumayer--Stat 87.32 181** ⇑P **P** **17 27 25.9 -0.9**
comp=Z,8.2nm,0.9s
**YBH Yreka Blue Hor 88.84 44** LR LR 17 59 02.6
comp=Z,67nm,21.2s,baz=280,slow=30
**PFO Pinyon Flats O 89.18 53** LR LR 17 59 03.4
comp=Z,105nm,20.4s,baz=256,slow=30
**SHL Shillong 89.58 298** P **P** **17 27 37.6 -0.8**
SHL IAmb IAmb 17 27 39.9
comp=Z,9.4nm,0.9s
**ULN Ulaanbaatar 89.84 323** P **P** **17 27 37.8 -1.3**
ULN IAmb IAmb 17 27 39.7
comp=Z,8.8nm,1.2s
**LPIG La Paz 89.90 64** LR LR 18 01 37.8
comp=Z,52nm,18.2s,baz=236,slow=31
**NVAR Mina Array Bea 90.12 48** P **P** **17 27 39.1 -1.7**
comp=Z,0.4nm,0.6s,baz=219,slow=7.0,SNR=2.2
NVAR LR LR 18 03 02.8
comp=Z,110nm,18.1s,baz=278,slow=32
comp=Z,0.4nm,0.6s
**SONM Songino Array 90.19 323** P **P** **17 27 40.3 -0.4**
comp=Z,5.4nm,1.0s,baz=140,slow=4.9,SNR=19
comp=Z,5.4nm,1.0s
**PALK Pallekele 92.28 277** LR LR 18 12 00.9
comp=Z,90nm,18.8s,baz=81,slow=37
**ILAR Eielson Array 92.85 17** P **P** **17 27 50.5 -2.0**
comp=Z,0.6nm,0.8s,baz=221,slow=4.7,SNR=6.3
comp=Z,0.6nm,0.8s
**ANMO Albuquerque 97.26 55** LR LR 18 02 31.9
comp=Z,87nm,21.7s,baz=3.0,slow=30
**TXAR Lajitas Array 97.40 61** LR LR 18 03 15.7
comp=Z,83nm,21.5s,baz=253,slow=30
**TIXI Tiksi 97.89 348** LR LR 18 07 17.8
comp=Z,66nm,20.3s,baz=204,slow=32
**PSZ Piszkesteto 145.11 324** **PKPbc 17 34 15.0 -2.2**
**MORC Moravsky Berou 145.14 329** *e*PKP **PKPbc 17 34 16.0 -1.2**
**VYHS Vyhne 145.32 326** *e*PKP **PKPbc 17 34 17.6 -0.2**
**UPC Upice 145.35 331** *e*PKP **PKPbc 17 34 17.6 -0.2**
**JAVC Velka Javorina 145.68 327** *e*PKP **PKPab 17 34 19.5 +0.2**
**VRAC Vranov 145.91 329** *e*PKP **PKPdf 17 34 19.2 +0.2**
**BRG Berggiesshubel 145.99 333** *e*PKP **PKPdf 17 34 19.4 +0.4**
BRG Amp 17 34 20.9
comp=Z,16nm,1.1s
**CLL Collm 146.05 334** PKPdf **PKPdf 17 34 18.7 -0.4**
**CLL Collm 146.05 334** *i* PKPbc **PKPdf 17 34 18.8 -0.3**
comp=Z,15nm,1.0s
CLL *i* PKiKP **PKiKP 17 34 23.7 +0.4**
comp=Z,17nm,1.3s
CLL *e*PP **PP 17 37 42.0 +0.7**
**KRUC Moravsky 146.17 329** *e*PKP **PKPdf 17 34 19.8 +0.4**
**EKA Eskdalemuir Ar 146.62 353** PKPbc **PKPdf 17 34 19.8 -0.2**
comp=Z,6.1nm,0.8s,baz=336,slow=2.6,SNR=22
**ESK Eskdalemuir 146.64 353** **PKPdf 17 34 19.6 -0.4**
**RONA Rosalia, Austr 147.13 327** *e*PKP **PKPbc 17 34 23.0 -0.3**
comp=Z,6.6nm,1.0s
**CONA Conrad Observa 147.20 328** *e*pPKP **PKPab 17 34 24.7 -0.5**
comp=Z,4.0nm,0.8s
**CKRC Cesky Krumlov 147.33 330** *e*PKP **PKPbc 17 34 23.6 -0.2**
**KHC Kasperske Hory 147.44 331** PKPdf **PKPdf 17 34 22.5 +0.9**
**KHC Kasperske Hory 147.44 331** *e*PKP **PKPab 17 34 25.6 -0.5**
**GERES GERESS Array B 147.59 331** PKPbc **PKPbc 17 34 23.8 -0.8**
comp=Z,3.4nm,0.9s,baz=45,slow=2.3,SNR=8.3
**ARSA Arzberg 147.82 327** *e*pPKP **PKiKP 17 34 26.2 -0.9**
comp=Z,3.4nm,1.1s
**MOA Molln 148.03 329** *e*PKP **PKPbc 17 34 24.6 -1.1**
comp=Z,5.1nm,1.2s
**PUK Puka 148.32 315** PKPdf **PKPdf 17 34 22.4 -0.9**
**BIOA Bad Ischl, Aus 148.45 329** *e*pPKP **PKPab 17 34 30.7 +0.6**
comp=Z,2.1nm,0.8s
**SOKA Soboth 148.46 326** *e*pPKP **PKPbc 17 34 26.4 -0.6**
comp=Z,3.7nm,0.8s
**PDG Podgorica 148.54 317** PKPdf **PKPdf 17 34 23.1 -0.4**
**KBA Koelnbreinsper 149.02 329** *e*PKiKP **PKiKP 17 34 30.7 +0.9**
comp=Z,5.4nm,0.9s
**LESA Schwarzleotal 149.09 330** *e*PKiKP **PKiKP 17 34 30.3 +0.5**
comp=Z,1.6nm,0.4s
**MEM Membach 149.14 340** *d*PKP **PKiKP 17 34 30.5 +0.8**
**MYKA Terra Mystica 149.19 328** *e*PKiKP **PKiKP 17 34 30.1 +0.1**
comp=Z,2.9nm,0.9s
**BHOU Houvegnez 149.36 340** *d*PKP **PKPab 17 34 33.1 -0.6**
**BCLA Clavier 149.52 341** *d*PKP **PKPab 17 34 32.9 -1.4**
**ABTA Abfaltersbach 149.66 329** *e*pPKP **PKPbc 17 34 28.8 -1.1**
comp=Z,3.1nm,1.2s
**WATA Walderalm 149.66 331** *e*PKiKP **PKiKP 17 34 31.5 +0.4**
comp=Z,3.2nm,1.0s
**WTTA Wattenberg 149.69 330** *e*pPKP **PKPbc 17 34 28.9 -1.3**
comp=Z,9.0nm,1.2s
**MOTA Moosalm 149.87 331** *e*pPKP **PKPbc 17 34 29.7 -0.9**
comp=Z,6.6nm,1.2s
**STAL STALIGIAL 149.91 328** PKPdf **PKPdf 17 34 24.2 -1.5**
**WLF Walferdange 149.91 339** *d*PKP **PKiKP 17 34 32.8 +1.5**
**SQTA Sankt Quirin 149.92 331** *e*PKP **PKPbc 17 34 30.6 -0.1**
comp=Z,2.1nm,0.7s
**CIMO Cimolais 150.01 328** PKPbc **PKPbc 17 34 30.0 -0.8**
**DOU Dourbes 150.02 341** *d*PKP **PKiKP 17 34 31.5 0.0**
**FETA Feichten 150.28 331** *e*PKP **PKPdf 17 34 25.5 -0.9**
comp=Z,2.2nm,1.0s
FETA *e*pPKP **sPKPdf 17 34 34.6 +0.7**
comp=Z,5.1nm,0.9s
**DAVA Damuels 150.45 332** *e*PKiKP **PKiKP 17 34 34.2 +1.5**
comp=Z,7.1nm,0.8s
**ECH Echery 150.79 336** PKPbc **PKiKP 17 34 33.3 +0.1**
**FUORN Ofenpass-Fuorn 150.79 331** **PKPdf 17 34 29.1 +1.8**
**FDMO Fiordimonte 151.90 323** PKPab **PKPab 17 34 43.5 -1.0**
**ZCCA Zocca 152.13 327** PKPdf **PKPdf 17 34 27.8 -1.4**
**ESDC Sonseca Array 161.97 345** PKPab **PKPab 17 35 26.4 -1.3**
comp=Z,0.6nm,0.7s,baz=34,slow=3.4,SNR=4.7
**TORD Torodi Ar. Bea 165.80 232** PKP **PKPdf 17 34 45.2 -0.8**
comp=Z,0.7nm,0.8s,baz=300,slow=2.9,SNR=3.5

*GUC **30** 17:24:58.1±0.8,20°.42S×69°.89W,h75km±3km, ML3.5*
*IDC **30** 17:25:02.6±1.7,20°.77S×69°.01W,h142km±15km,mb3.9/1, mbtmp3.6/4,Error ellipse: s-maj=57.6km s-min=13.3km az=100.0*
**ISC 30 17:24:54.9±1.1,20°.33S±0°.04×69°.95W±0°.09,h89km±7km, n22,σ1°23/20,1C,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TA02** | **Huaiquique** | **0.18** | **290** | *e*P | **Pn** | **17 25 08.5** | **+0.7** |
| TA02 | | | | *i* S | **Sn** | **17 25 17.1** | **-0.2** |
| TA02 | | | | IAML | | 17 25 18.0 | |
| comp=N,9µm,0.1s | | | | | | | |
| **PX03** | **IPOC Station P** | **0.31** | **103** | *e*P | **Pn** | **17 25 08.2** | **-0.3** |
| PX03 | | | | *e*S | **Sn** | **17 25 18.0** | **-0.6** |
| PX03 | | | | IAML | | 17 25 18.4 | |
| comp=N,2µm,0.3s | | | | | | | |
| **TA01** | **Diego Aracena** | **0.32** | **223** | ⇑*i*P | **Pn** | **17 25 08.9** | **+0.5** |
| TA01 | | | | *i* S | **Sn** | **17 25 18.1** | **-0.2** |
| TA01 | | | | IAML | | 17 25 18.6 | |
| comp=E,6µm,0.2s | | | | | | | |
| **GO01** | **Chusmiza** | **0.97** | **47** | *e*P | **Pn** | **17 25 16.1** | **+1.3** |
| GO01 | | | | *i* S | **Sn** | **17 25 31.3** | **+1.7** |
| **PX02** | **IPOC Station P** | **1.38** | **350** | *e*P | **Pn** | **17 25 19.8** | **+0.5** |
| PX02 | | | | *i* S | **Sn** | **17 25 38.1** | **+0.5** |
| **PB09** | **IPOC Station P** | **1.60** | **156** | *e*P | **Pn** | **17 25 23.4** | **+1.3** |
| PB09 | | | | *e*S | **Sn** | **17 25 42.7** | **0.0** |
| **AP01** | **Chacalluta** | **1.99** | **349** | *i* S | **Sn** | **17 25 53.6** | **+2.3** |
| **LVC** | **Limon Verde** | **2.46** | **157** | P | **Pn** | **17 25 35.3** | **+1.6** |
| comp=E,7.3nm,0.2s,baz=0.0,slow=13,SNR=29 | | | | | | | |
| LVC | | | | S | **Sn** | **17 26 03.3** | **+0.1** |
| comp=E,18nm,0.3s,baz=264,slow=22,SNR=12 | | | | | | | |
| **LVC** | **Limon Verde** | **2.46** | **157** | *e*P | **Pn** | **17 25 35.0** | **+1.4** |
| LVC | | | | *e*S | **Sn** | **17 26 04.4** | **+1.2** |
| LVC | | | | IAML | | 17 26 05.2 | |
| comp=E,124nm,0.4s | | | | | | | |
| **LPAZ** | **La Paz** | **4.38** | **24** | P | Pn | 17 26 10.3 | +11 |
| comp=E,0.9nm,0.4s,baz=205,slow=15,SNR=3.8 | | | | | | | |
| LPAZ | | | | S | Sn | 17 27 03.6 | +14 |
| comp=E,2.8nm,0.4s,baz=152,slow=7.0,SNR=5.7 | | | | | | | |
| **SIV** | **San Ignacio** | **9.48** | **64** | P | **Pn** | **17 27 08.0** | **-0.7** |
| comp=E,1.0nm,0.6s,baz=231,slow=13,SNR=5.3 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **15.30** | **210** | T | T | 17 43 46.7 | |
| baz=33,slow=72,SNR=7.8 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **15.30** | **210** | T | T | 17 44 16.4 | |
| baz=33,slow=72,SNR=6.9 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **15.31** | **210** | T | T | 17 43 54.1 | |
| baz=33,slow=72,SNR=5.9 | | | | | | | |
| **PLCA** | **Paso Flores** | **20.34** | **181** | P | **P** | **17 29 24.2** | **+0.1** |
| comp=E,1.4nm,0.6s,baz=352,slow=11,SNR=5.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.89** | **71** | P | **P** | **17 36 41.3** | **-2.2** |
| comp=E,1.3nm,0.4s,baz=260,slow=5.3,SNR=17 | | | | | | | |
| comp=E,1.3nm,0.4s | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **26.76** | **278** | T | T | 20 03 27.4 | |
| baz=101,slow=75,SNR=23 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **26.76** | **278** | T | T | 20 03 28.8 | |
| baz=101,slow=75,SNR=20 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **26.77** | **278** | T | T | 20 03 28.7 | |
| baz=101,slow=75,SNR=20 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **26.81** | **280** | T | T | 20 03 32.1 | |
| baz=101,slow=74,SNR=9.7 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **26.82** | **280** | T | T | 20 03 31.6 | |
| baz=101,slow=74,SNR=13 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **26.83** | **280** | T | T | 20 03 29.3 | |
| baz=101,slow=74,SNR=8.7 | | | | | | | |

*NOU **30** 17:34:20.2,22°.24S×170°.58E,h0km,ML4.2/11,Southeast of Loyalty Islands*
*IDC **30** 17:34:22.6±1.4,22°.14S×170°.34E,h0km,mb3.7/4, mbtmp3.7/5,ML3.6/1,MS3.7/4,Error ellipse: s-maj=42.8km s-min=29.0km az=175.0*
**ISC 30 17:34:29.0±1.2,22°.1S±0°.1×170°.3E±0°.1,h51km,n19, σ1°55/17,mb3.7/4,MS3.5/3,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **2.20** | **285** | P | **Pn** | **17 35 01.1** | **-1.9** |
| **PINNC** | **Pines Island,** | **2.70** | **258** | P | **Pn** | **17 35 07.6** | **-2.3** |
| **LIFNC** | **LIFOU** | **3.14** | **294** | P | **Pn** | **17 35 15.4** | **-0.5** |
| **YATNC** | **Mamie plateau,** | **3.17** | **270** | P | **Pn** | **17 35 13.9** | **-2.4** |
| **ONTNC** | **Ouen Toro** | **3.57** | **266** | P | **Pn** | **17 35 20.7** | **-1.2** |
| **DZM** | **Mont Dzumac** | **3.58** | **269** | P | **Pn** | **17 35 20.7** | **-1.4** |
| **DZM** | **Mont Dzumac** | **3.58** | **269** | Pn | **Pn** | **17 35 20.2** | **-1.8** |
| 5.6nm,0.3s,baz=139,slow=12,SNR=102 | | | | | | | |
| DZM | | | | Sn | **Sn** | **17 36 04.7** | **+1.5** |
| 2.8nm,0.3s,baz=52,slow=22,SNR=3.0 | | | | | | | |
| 15nm,0.4s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.71** | **269** | P | **Pn** | **17 35 22.4** | **-1.4** |
| **RTV** | **Rentapao** | **4.62** | **337** | P | **Pn** | **17 35 34.5** | **-1.8** |
| **KOUNC** | **Koumac, New Ca** | **5.81** | **284** | P | **Pn** | **17 35 52.6** | **0.0** |
| **HNR** | **Honiara** | **16.04** | **320** | LR | LR | 17 43 30.8 | |
| comp=Z,1µm,21.4s,baz=1.0,slow=34 | | | | | | | |
| **ASAR** | **Alice Springs** | **33.52** | **260** | P | **P** | **17 41 04.6** | **+0.6** |
| 0.4nm,0.7s,baz=88,slow=9.3,SNR=9.3 | | | | | | | |
| ASAR | | | | LR | LR | 17 55 30.7 | |
| comp=Z,81nm,18.1s,baz=89,slow=38 | | | | | | | |
| 0.4nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.59** | **267** | P | **P** | **17 41 04.5** | **-0.1** |
| 0.4nm,0.5s,baz=100,slow=8.2,SNR=11 | | | | | | | |
| 0.4nm,0.5s | | | | | | | |
| **PPT** | **Papeete** | **37.93** | **91** | LR | LR | 17 56 08.6 | |
| comp=Z,118nm,18.7s,baz=324,slow=34 | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.98** | **180** | P | **P** | **17 45 23.3** | **+0.7** |
| 0.9nm,1.0s,baz=323,slow=2.4,SNR=1.7 | | | | | | | |
| 0.9nm,1.0s | | | | | | | |
| **ASAJ** | **Asahikawa** | **70.60** | **339** | LR | LR | 18 09 00.2 | |
| comp=Z,13nm,22.0s,baz=123,slow=29 | | | | | | | |
| **SONM** | **Songino Array** | **90.08** | **323** | P | **P** | **17 47 25.0** | **+1.6** |
| 0.3nm,0.3s,baz=106,slow=3.6,SNR=3.4 | | | | | | | |
| 0.3nm,0.3s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.44** | **353** | PKPbc | **PKPab** | **17 54 04.5** | **-0.5** |
| 0.9nm,0.4s,baz=3.1,slow=2.5,SNR=16 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.45** | **331** | PKPbc | **PKPab** | **17 54 08.3** | **-1.0** |
| 0.5nm,0.6s,baz=94,slow=3.9,SNR=3.2 | | | | | | | |

*NSSP **30** 17:36:57.7,38°.55N×43°.15E,h10km,Ms3.2*
*ISK **30** 17:36:58.9,38°.67N×43°.17E,h4km,ML3.5/13*
*AFAD **30** 17:36:59.6±0.0,38°.61N×43°.15E,h20km±1km,MW3.6*
*TEH **30** 17:36:59.5,38°.67N×43°.12E,h7km±24km,ML3.0*
**ISC 30 17:37:00.1±1.0,38°.66N±0°.02×43°.13E±0°.02,h8km±8km, n56,σ1°09/82,1C-1D,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VANB** | **Van** | **0.21** | **108** | Pg | **Pg** | **17 37 04.8** | **+0.4** |
| VANB | | | | Sg | **Sg** | **17 37 08.9** | **+1.6** |
| **VANB** | **Van** | **0.21** | **108** | Pg | **Pg** | **17 37 04.8** | **+0.4** |
| **TVAN** | **Van** | **0.25** | **121** | P | **Pg** | **17 37 04.8** | **-0.4** |
| TVAN | | | | S | **Sg** | **17 37 08.9** | **+0.3** |
| **TVAN** | **Van** | **0.25** | **121** | Pg | **Pg** | **17 37 04.7** | **-0.4** |
| **AKDM** | **Akdamar-Van** | **0.35** | **200** | Pg | **Pg** | **17 37 06.5** | **-0.5** |
| AKDM | | | | Sg | **Sb** | **17 37 13.3** | **-1.2** |
| **AKDM** | **Akdamar-Van** | **0.35** | **200** | Pg | **Pg** | **17 37 06.7** | **-0.3** |
| **GEVA** | **Gevas** | **0.35** | **190** | P | **Pg** | **17 37 06.8** | **-0.2** |
| GEVA | | | | S | **Sg** | **17 37 12.0** | **+0.3** |
| **GEVA** | **Gevas** | **0.35** | **190** | Pg | **Pg** | **17 37 06.8** | **-0.2** |
| **ADCV** | **BITLIS_Adilcev** | **0.35** | **295** | P | **Pb** | **17 37 08.0** | **-0.8** |
| ADCV | | | | S | **Sb** | **17 37 14.4** | **-0.1** |
| **ERCV** | **ERCIS-VAN** | **0.39** | **24** | Pg | **Pg** | **17 37 06.7** | **-1.2** |
| **VMUR** | **Van-Muradiye** | **0.48** | **46** | P | **Pg** | **17 37 09.7** | **+0.3** |
| VMUR | | | | S | **Sb** | **17 37 17.7** | **-0.4** |
| **VMUR** | **Van-Muradiye** | **0.48** | **46** | Pg | **Pg** | **17 37 09.7** | **+0.3** |
| **MLAZ** | **Malazgirt-MUS** | **0.66** | **317** | Pg | **Pg** | **17 37 12.9** | **0.0** |
| **OZAP** | **Van, Ozalp-Mer** | **0.67** | **90** | P | **Pb** | **17 37 14.1** | **-0.1** |
| OZAP | | | | S | **Sn** | **17 37 26.4** | **-0.5** |
| **DORK** | **Agr/Tutak/Do** | **0.78** | **339** | P | **Pg** | **17 37 14.9** | **-0.2** |
| DORK | | | | S | **Sb** | **17 37 26.2** | **-0.6** |
| **CLDR** | **Caldiran** | **0.78** | **51** | Pg | Pg | 17 37 08.2 | -6.9 |
| **CLDR** | **Caldiran** | **0.78** | **51** | P | Pg | 17 37 08.4 | -6.7 |
| CLDR | | | | S | **Sg** | **17 37 20.1** | **-5.2** |
| **BLIS** | **Bitlis-Merkez** | **0.83** | **253** | P | **Pg** | **17 37 15.9** | **-0.3** |
| BLIS | | | | S | **Sg** | **17 37 26.2** | **-0.8** |
| **BLIS** | **Bitlis-Merkez** | **0.83** | **253** | Pg | **Pg** | **17 37 15.8** | **-0.3** |
| **PERV** | **Siirt/Pervari-** | **0.85** | **213** | P | **Pg** | **17 37 15.7** | **-0.8** |
| PERV | | | | S | **Sn** | **17 37 30.3** | **-0.9** |
| **GURO** | **Guroymak-BITLI** | **0.87** | **263** | Pg | **Pg** | **17 37 16.6** | **-0.2** |
| GURO | | | | Sg | **Sb** | **17 37 29.5** | **+0.1** |
| **AGRB** | **Hanur-Agry** | **0.92** | **353** | Pg | **Pg** | **17 37 17.1** | **-0.7** |
| **AGRB** | **Hanur-Agry** | **0.92** | **353** | Pg | **Pg** | **17 37 17.1** | **-0.7** |
| **DYDN** | **Diyadin** | **0.98** | **26** | P | **Pg** | **17 37 18.6** | **-0.5** |
| DYDN | | | | S | **Sn** | **17 37 37.5** | **+2.8** |
| **KOTA** | **Agri, Merkez-K** | **1.14** | **3** | P | **Pg** | **17 37 21.4** | **-0.7** |
| KOTA | | | | S | **Sn** | **17 37 38.3** | **-0.2** |
| **SRTM** | **Siirt_Merkez** | **1.16** | **235** | P | **Pn** | **17 37 22.8** | **0.0** |
| SRTM | | | | S | **Sn** | **17 37 40.0** | **+1.1** |
| **HAKT** | **HAKKARI** | **1.19** | **157** | P | **Pb** | **17 37 21.6** | **-1.4** |
| HAKT | | | | S | **Sn** | **17 37 39.3** | **-0.4** |
| **MUSM** | **Mu-Merkez** | **1.27** | **273** | P | **Pn** | **17 37 23.5** | **-0.8** |
| MUSM | | | | S | **Sb** | **17 37 39.4** | **-1.5** |
| **MUSM** | **Mu-Merkez** | **1.27** | **273** | Pg | **Pn** | **17 37 23.5** | **-0.8** |
| **SIRT** | **Sirnak** | **1.28** | **206** | Pn | **Pg** | **17 37 24.9** | **+0.3** |
| **SIRN** | **Sirnak** | **1.29** | **206** | P | **Pb** | **17 37 24.8** | **+0.1** |
| SIRN | | | | S | **Sb** | **17 37 41.6** | **+0.1** |
| **EATA** | **Eleskirt** | **1.30** | **338** | P | **Pn** | **17 37 24.7** | **-0.2** |
| EATA | | | | S | **Sn** | **17 37 44.1** | **+1.5** |
| **MAKU** | **Maku** | **1.39** | **60** | Pg | **Pn** | **17 37 25.8** | **-0.2** |
| **VRTB** | **Varto-Mus** | **1.40** | **291** | Pn | **Pg** | **17 37 26.9** | **-0.1** |
| **VRTB** | **Varto-Mus** | **1.40** | **291** | P | **Pg** | **17 37 27.1** | **+0.2** |
| VRTB | | | | S | **Sg** | **17 37 46.2** | **+1.1** |
| **CUKT** | **Cukurca** | **1.46** | **165** | Pn | **Pn** | **17 37 26.7** | **-0.2** |
| **CUKT** | **Cukurca** | **1.46** | **165** | P | **Pn** | **17 37 26.4** | **-0.5** |
| CUKT | | | | S | **Sg** | **17 37 49.6** | **+2.6** |
| **VNNZ** | **Vanand** | **1.54** | **20** | *e*P | **Pg** | **17 37 29.2** | **-0.4** |
| VNNZ | | | | *e*S | **Sg** | **17 37 52.5** | **+3.0** |
| **TASB** | **TASBURUN-IGDIR** | **1.58** | **33** | Pn | **Pn** | **17 37 27.7** | **-1.3** |
| **SVAN** | **Silvan-Diyarba** | **1.60** | **252** | Pn | **Pb** | **17 37 29.7** | **-0.3** |
| **SVAN** | **Silvan-Diyarba** | **1.60** | **252** | P | **Pb** | **17 37 30.0** | **+0.1** |
| SVAN | | | | S | **Sg** | **17 37 52.3** | **+0.7** |
| **BTMN** | **Batman** | **1.65** | **243** | P | **Pb** | **17 37 31.0** | **+0.1** |
| BTMN | | | | S | **Sg** | **17 37 53.9** | **+0.6** |
| **KOPR** | **Koprukoy-ERZUR** | **1.66** | **324** | Pn | **Pn** | **17 37 29.9** | **+0.2** |
| **ARUZ** | **Aruch** | **1.78** | **24** | *e*P | **Pb** | **17 37 33.2** | **+0.1** |
| **NRKZ** | **NAREK** | **1.79** | **41** | *e*P | **Pb** | **17 37 33.1** | **-0.1** |
| NRKZ | | | | *e*S | **Sg** | **17 37 59.4** | **+1.8** |
| **MIDY** | **Mardin/Midyat-** | **1.85** | **228** | P | **Pb** | **17 37 34.0** | **-0.3** |
| MIDY | | | | S | **Sb** | **17 37 58.1** | **+0.5** |
| **AMBZ** | **Amberd** | **1.93** | **26** | *e*P | **Pb** | **17 37 35.5** | **-0.2** |
| AMBZ | | | | *e*S | **Sg** | **17 38 02.9** | **+0.6** |
| **GNI** | **Garni** | **1.94** | **39** | ⇓*i*P | **Pb** | **17 37 35.6** | **-0.3** |
| GNI | | | | ⇑*i*S | **Sg** | **17 38 03.3** | **+0.8** |
| **BNGB** | **Bingl** | **1.94** | **281** | Pn | **Pn** | **17 37 34.1** | **+0.6** |
| **KARS** | **Kars** | **1.97** | **359** | Pn | **Pn** | **17 37 33.8** | **-0.1** |
| **SENK** | **Senkaya-Erzuru** | **1.99** | **343** | Pn | **Pn** | **17 37 34.3** | **0.0** |
| **IMRD** | **Marand** | **2.01** | **88** | Pn | **Pb** | **17 37 35.7** | **-1.3** |
| **ITBZ** | **Tabriz** | **2.41** | **99** | Pn | **Pn** | **17 37 41.1** | **+1.2** |
| **IAZR** | **Azarshahr** | **2.45** | **113** | Pn | **Pb** | **17 37 42.7** | **-1.8** |
| **IHRS** | **Heris** | **3.09** | **95** | Pn | **Pn** | **17 37 50.5** | **+1.1** |
| **ISRB** | **Sarab** | **3.67** | **102** | Pn | **Pn** | **17 37 58.9** | **+1.7** |

**NOU 30 17:47:44.5,22°.36S×170°.47E,h0km,MLv4.1/10, Southeast of Loyalty Islands,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **2.43** | **291** | P | Pn | 17 48 24.8 | -0.6 |
| **PINNC** | **Pines Island,** | **2.81** | **264** | P | Pn | 17 48 30.5 | -0.2 |
| **YATNC** | **Mamie plateau,** | **3.33** | **274** | P | Pn | 17 48 36.8 | -1.1 |
| **LIFNC** | **LIFOU** | **3.39** | **297** | P | Pn | 17 48 38.7 | 0.0 |
| **ONTNC** | **Ouen Toro** | **3.72** | **270** | P | Pn | 17 48 43.3 | +0.1 |
| **DZM** | **Mont Dzumac** | **3.74** | **274** | P | Pn | 17 48 43.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,1.2s | | | | | | |
| **JMM** | **Marumori** | **19.57** | **349** | P | **Pn** | **18 01 20.7** | **-0.1** |
| JMM | | | | IAmb | IAmb | 18 01 58.0 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **20.15** | **87** | T | T | 18 22 49.7 | |
| | baz=275,slow=75,SNR=3.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.16** | **87** | T | T | 18 22 46.8 | |
| | baz=275,slow=75,SNR=4.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.17** | **87** | T | T | 18 22 49.4 | |
| | baz=275,slow=75,SNR=4.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.30** | **84** | T | T | 18 22 60.0 | |
| | baz=271 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.30** | **83** | T | T | 18 22 54.3 | |
| | baz=271 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.31** | **84** | T | T | 18 23 06.3 | |
| | baz=271 | | | | | | |
| **MANU** | **Manus Island** | **20.66** | **175** | P | **P** | **18 01 27.0** | **-1.8** |
| **SSLB** | **Suanglung** | **23.37** | **287** | P | **P** | **18 01 56.9** | **+1.8** |
| SSLB | | | | IAmb | IAmb | 18 02 25.1 | |
| | comp=Z,12nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **24.20** | **324** | P | **P** | **18 02 04.2** | **+1.6** |
| | comp=Z,0.8nm,0.7s,baz=151,slow=8.6,SNR=4.7 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **FAKI** | **Fak Fak** | **25.06** | **213** | P | **P** | **18 02 12.4** | **+1.9** |
| **COEN** | **Coen** | **32.48** | **184** | P | **P** | **18 03 14.9** | **-1.3** |
| COEN | | | | IAmb | IAmb | 18 03 25.6 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **MTN** | **Manton Dam** | **34.33** | **205** | P | **P** | **18 03 32.5** | **+0.4** |
| MTN | | | | IAmb | IAmb | 18 03 52.4 | |
| | comp=Z,17nm,1.2s | | | | | | |
| **SOEI** | **Soe** | **35.11** | **218** | P | **P** | **18 03 37.5** | **-1.5** |
| SOEI | | | | IAmb | IAmb | 18 03 52.4 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **SBUM** | **Sibu** | **36.29** | **248** | P | **P** | **18 03 50.6** | **+1.6** |
| **KNRA** | **Kununurra** | **37.86** | **207** | P | **P** | **18 04 01.7** | **-0.3** |
| KNRA | | | | IAmb | IAmb | 18 04 02.9 | |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **39.69** | **196** | P | **P** | **18 04 17.1** | **-0.2** |
| WB0 | | | | IAmb | IAmb | 18 04 17.8 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **WR0** | **Warramunga Arr** | **39.83** | **196** | P | **P** | **18 04 17.7** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 18 04 19.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **39.86** | **196** | P | **P** | **18 04 18.3** | **-0.4** |
| WRAB | | | | IAmb | IAmb | 18 04 19.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **39.87** | **196** | P | **P** | **18 04 18.5** | **-0.2** |
| **WRA** | **Warramunga Arr** | **39.87** | **196** | P | **P** | **18 04 18.6** | **-0.2** |
| | comp=Z,9.4nm,0.6s,baz=13,slow=8.8,SNR=64 | | | | | | |
| | comp=Z,9.4nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.38** | **209** | P | **P** | **18 04 31.4** | **+0.4** |
| **AS31** | **Alice Springs** | **43.54** | **195** | P | **P** | **18 04 48.7** | **+0.2** |
| **ASAR** | **Alice Springs** | **43.54** | **195** | P | **P** | **18 04 48.0** | **-0.5** |
| | comp=Z,1.6nm,0.6s,baz=14,slow=6.3,SNR=23 | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **45.63** | **259** | P | **P** | **18 05 08.1** | **+2.9** |
| KULM | | | | IAmb | IAmb | 18 05 43.7 | |
| | comp=Z,18nm,1.5s | | | | | | |
| **MBWA** | **Marble Bar** | **46.90** | **214** | P | **P** | **18 05 15.2** | **+0.3** |
| MBWA | | | | IAmb | IAmb | 18 05 18.2 | |
| | comp=Z,27nm,1.5s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **47.18** | **213** | P | **P** | **18 05 17.4** | **+0.4** |
| PSA00 | | | | IAmb | IAmb | 18 05 32.2 | |
| | comp=Z,25nm,1.4s | | | | | | |
| **STKA** | **Stephens Creek** | **50.38** | **184** | P | **P** | **18 05 40.3** | **-0.9** |
| | comp=Z,1.1nm,0.4s,baz=332,slow=15,SNR=3.7 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **FORT** | **Forrest** | **51.91** | **199** | P | **P** | **18 05 52.8** | **+0.2** |
| **BBOO** | **Buckleboo** | **51.95** | **190** | P | **P** | **18 05 51.6** | **-1.3** |
| **MORW** | **Morawa** | **55.28** | **212** | P | **P** | **18 06 16.3** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **57.90** | **323** | P | **P** | **18 06 35.3** | **0.0** |
| | comp=Z,1.0nm,0.7s,baz=76,slow=6.3,SNR=4.4 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.31** | **314** | P | **P** | **18 06 39.1** | **+0.8** |
| | comp=Z,0.4nm,0.6s,baz=83,slow=10,SNR=2.6 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **C19K** | **Lookout Ridge** | **60.53** | **20** | P | **P** | **18 06 54.1** | **+0.9** |
| **D19K** | **Kuna River** | **60.74** | **21** | P | **P** | **18 06 54.1** | **-0.5** |
| D19K | | | | IAmb | IAmb | 18 07 36.8 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **SKT** | **Skwentna** | **61.10** | **29** | P | **P** | **18 06 56.4** | **-0.7** |
| SKT | | | | IAmb | IAmb | 18 07 24.4 | |
| | comp=Z,9.4nm,1.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.18** | **318** | P | **P** | **18 06 57.6** | **-0.1** |
| | comp=Z,1.0nm,0.2s,baz=99,slow=7.1,SNR=5.7 | | | | | | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **H21K** | **Melozitna Rive** | **61.62** | **25** | P | **P** | **18 07 01.3** | **+0.8** |
| **I21K** | **Tanana** | **61.80** | **25** | P | **P** | **18 07 02.9** | **+1.2** |
| I21K | | | | IAmb | IAmb | 18 07 31.2 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **F21K** | **Alatna River** | **61.88** | **23** | P | **P** | **18 07 03.0** | **+0.8** |
| F21K | | | | IAmb | IAmb | 18 07 42.1 | |
| | comp=Z,4.7nm,1.4s | | | | | | |
| **MLY** | **Manley** | **62.27** | **25** | P | **P** | **18 07 04.8** | **0.0** |
| **D22K** | **Ayikyak River** | **62.73** | **21** | P | **P** | **18 07 09.1** | **+1.3** |
| D22K | | | | IAmb | IAmb | 18 07 33.0 | |
| | comp=Z,9.7nm,1.4s | | | | | | |
| **I23K** | **Minto, Yukon-K** | **62.86** | **26** | P | **P** | **18 07 09.4** | **+0.8** |
| **ILAR** | **Eielson Array** | **63.80** | **26** | P | **P** | **18 07 14.0** | **-0.8** |
| | comp=Z,0.8nm,0.7s,baz=254,slow=4.9,SNR=9.4 | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **J25K** | **Salcha River,** | **64.40** | **27** | P | **P** | **18 07 17.8** | **-1.1** |
| **KHZ** | **Kahutara** | **66.07** | **158** | P | **P** | **18 07 29.2** | **-0.4** |
| **BVAR** | **Borovoye Array** | **66.35** | **320** | P | **P** | **18 07 31.6** | **+0.1** |
| | comp=Z,2.2nm,0.7s,baz=89,slow=7.5,SNR=12 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **M29M** | **Somme Creek** | **67.21** | **29** | P | **P** | **18 07 37.9** | **+1.0** |
| **L29M** | **L29M** | **67.40** | **29** | P | **P** | **18 07 39.1** | **+1.1** |
| **H29M** | **Whitestone** | **67.52** | **25** | P | **P** | **18 07 38.9** | **+0.3** |
| **M30M** | **Minto, Yukon** | **67.99** | **29** | P | **P** | **18 07 42.0** | **+0.4** |
| **H31M** | **Peel River** | **69.14** | **26** | P | **P** | **18 07 49.0** | **+0.3** |
| H31M | | | | IAmb | IAmb | 18 08 24.3 | |
| | comp=Z,9.2nm,1.4s | | | | | | |
| **G31M** | **Satah River** | **69.20** | **25** | P | **P** | **18 07 49.3** | **+0.4** |
| **YKA** | **Yellowknife Ar** | **78.15** | **28** | P | **P** | **18 08 41.1** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=289,slow=5.9,SNR=2.9 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.36** | **52** | P | **P** | **18 09 09.5** | **0.0** |
| | comp=Z,1.0nm,0.7s,baz=266,slow=5.3,SNR=6.7 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **86.82** | **335** | P | **P** | **18 09 25.2** | **-0.7** |
| | comp=Z,0.6nm,0.5s,baz=64,slow=4.4,SNR=5.0 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **147.93** | **91** | PKPbc | **PKPbc** | **18 16 26.8** | **-0.8** |
| | comp=Z,1.6nm,0.8s,baz=125,slow=0.9,SNR=6.1 | | | | | | |

*JMA **30** 18:09:13.8±0.5,45°N±2°×14°3E±°, h290km±3km, MV3.4/30, NE OFF HOKKAIDO*
*IDC **30** 18:09:15.1±1.1,45°.24N×143°.32E, h284km±14km, mb3.1/8, mbtmp3.8/14, Error ellipse: s-maj=26.6km s-min=15.5km az=160.0*

**ISC 30 18:09:14.2±0.7,45°.11N±0°.07×143°.43E±0°.07, h284km±6km, n36,σ1°06/44, mb3.3/8, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSE** | **Soyaes** | **0.62** | **256** | *e*P | **Pn** | **18 09 51.7** | **+0.4** |
| JSE | | | | S | **S** | **18 10 20.4** | **-0.2** |
| **JMP** | **Maruseppu** | **1.10** | **183** | P | **Pn** | **18 09 54.4** | **+0.8** |
| **JWK2** | **Keihoku** | **1.10** | **281** | P | **Pn** | **18 09 54.0** | **+0.7** |
| JWK2 | | | | *e*S | **S** | **18 10 23.8** | **-0.6** |
| **ASAJ** | **Asahikawa** | **1.16** | **211** | P | **Pn** | **18 09 55.0** | **+1.2** |
| | 122nm,0.5s,baz=8.3,slow=6.5,SNR=230 | | | | | | |
| **JTKR** | **Abashiri--Toko** | **1.19** | **163** | P | **Pn** | **18 09 55.1** | **+1.2** |
| JTKR | | | | S | **S** | **18 10 26.5** | **+1.1** |
| **JKK2** | **Kamakawa 2** | **1.33** | **202** | P | **Pn** | **18 09 55.8** | **+1.0** |
| **JSS** | **Shosan** | **1.33** | **238** | *e*P | **Pn** | **18 09 55.7** | **+1.0** |
| **JRBN** | **Rebuntou** | **1.70** | **282** | *e*P | **Pn** | **18 09 56.5** | **-0.6** |
| JRBN | | | | S | **S** | **18 10 28.5** | **-2.8** |
| **JNK** | **Nakash** | **1.78** | **148** | *e*P | **Pn** | **18 09 58.7** | **+0.9** |
| **JAR** | **Ashorobuto** | **1.83** | **172** | *i* P | **Pn** | **18 09 59.6** | **+1.3** |
| JAR | | | | S | **S** | **18 10 34.2** | **+1.0** |
| **JFR** | **Furan** | **2.04** | **198** | P | **Pn** | **18 10 01.0** | **+1.1** |
| **JAK** | **Akkeshi** | **2.30** | **156** | *e*P | **Pn** | **18 10 02.5** | **+0.4** |
| JAK | | | | S | **S** | **18 10 39.3** | **-1.0** |
| **NEM2** | **Nemuro 2** | **2.41** | **136** | *e*P | **Pn** | **18 10 02.5** | **-0.6** |
| NEM2 | | | | S | **S** | **18 10 39.4** | **-2.7** |
| **JBT2** | **Biratori 2** | **2.45** | **199** | P | **Pn** | **18 10 04.3** | **+0.7** |
| **JCH** | **Churui** | **2.49** | **181** | P | **Pn** | **18 10 03.8** | **-0.1** |
| JCH | | | | *e*S | **S** | **18 10 41.7** | **-1.9** |
| **JEW** | **Eniwo** | **2.68** | **213** | P | **Pn** | **18 10 07.5** | **+1.7** |
| **JNBK** | **Urakawa-nobuka** | **2.87** | **190** | P | **Pn** | **18 10 07.7** | **+0.1** |
| **JOT** | **Ohata** | **4.11** | **206** | P | **Pn** | **18 10 20.7** | **-0.2** |
| **JOSM** | **Okushiri--Mats** | **4.17** | **225** | P | **Pn** | **18 10 21.9** | **+0.4** |
| **JSI2** | **Shiura 2** | **4.61** | **210** | P | **Pn** | **18 10 26.7** | **+0.1** |
| **JANG** | **Nango** | **4.94** | **197** | P | **Pn** | **18 10 29.6** | **-0.9** |
| **JIW** | **Iwasaki** | **5.17** | **210** | P | **Pn** | **18 10 32.9** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **8.21** | **268** | P | **Pn** | **18 11 10.5** | **+0.3** |
| | 3.9nm,0.7s,baz=76,slow=12,SNR=8.2 | | | | | | |
| **KLR** | **Kul'dur** | **8.96** | **302** | P | **Pn** | **18 11 19.2** | **-0.2** |
| | 3.6nm,0.5s,baz=116,slow=12,SNR=17 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **9.43** | **207** | P | **Pn** | **18 11 26.8** | **+1.4** |
| | 1.2nm,0.4s,baz=20,slow=10,SNR=6.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **12.29** | **44** | P | **P** | **18 12 01.0** | **-0.9** |
| | 2.2nm,0.8s,baz=224,slow=8.3,SNR=11 | | | | | | |
| **MA2** | **Magadan** | **15.15** | **14** | P | **Pn** | **18 12 33.7** | **-0.9** |
| | 3.8nm,0.6s,baz=158,slow=11,SNR=4.0 | | | | | | |
| **SEY** | **Seymchan** | **18.59** | **13** | P | **P** | **18 13 09.9** | **-0.7** |
| | 4.0nm,0.6s,baz=196,slow=8.0,SNR=33 | | | | | | |
| **SONM** | **Songino Array** | **25.50** | **289** | P | **P** | **18 14 17.2** | **+0.2** |
| | 0.4nm,0.3s,baz=86,slow=8.8,SNR=6.4 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **41.59** | **295** | P | **P** | **18 16 34.8** | **+0.3** |
| | 0.4nm,0.6s,baz=78,slow=9.1,SNR=2.3 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **41.99** | **37** | P | **P** | **18 16 38.1** | **+0.7** |
| | 0.7nm,0.7s,baz=282,slow=8.5,SNR=7.9 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **56.14** | **33** | P | **P** | **18 18 24.4** | **+0.3** |
| | 0.8nm,0.6s,baz=309,slow=7.6,SNR=6.6 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **62.43** | **331** | P | **P** | **18 19 06.3** | **-0.6** |
| | 1.8nm,0.9s,baz=48,slow=6.8,SNR=11 | | | | | | |
| | 1.8nm,0.9s | | | | | | |
| **HFS** | **Hagfors** | **67.38** | **335** | P | **P** | **18 19 38.2** | **-0.4** |
| | 2.3nm,0.9s,baz=45,slow=11,SNR=4.1 | | | | | | |
| | 2.3nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **76.01** | **341** | P | **P** | **18 20 30.1** | **+0.2** |
| | 0.2nm,0.4s,baz=22,slow=5.1,SNR=5.1 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **84.06** | **54** | P | **P** | **18 21 14.9** | **+1.6** |
| | 0.2nm,0.4s,baz=292,slow=4.8,SNR=2.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*NEIC **30** 18:11:32.5±2.3, 15°.44S±0°.08×174°.5W±0°.1, h225km±14km, mb4.6/14, Error ellipse: s-maj=16.6km s-min=12.1km az=79.0*
*IDC **30** 18:11:36.3±3.7, 15°.33S×174°.87W, h254km±32km, mb3.6/11, mbtmp4.2/12, Error ellipse: s-maj=24.4km s-min=17.0km az=116.0*

**ISC 30 18:11:34.4±0.5, 15°.44S±0°.08×174°.42W±0°.08, h250km, n34,σ2s00/38, mb4.2/18, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **2.97** | **60** | Pn | **Pn** | **18 12 23.8** | **-2.9** |
| AFI | | | | Sn | **S** | **18 13 04.3** | **-3.7** |
| **NIUE** | **Niue** | **5.61** | **131** | Pn | **Pn** | **18 12 56.0** | **-1.7** |
| NIUE | | | | Sn | **S** | **18 14 01.1** | **-3.1** |
| **MSVF** | **Nonsavu** | **7.58** | **251** | Pn | **Pn** | **18 13 20.9** | **-1.5** |
| **MSVF** | **Nonsavu** | **7.58** | **251** | P | **Pn** | **18 13 20.6** | **-1.8** |
| | 4.5nm,0.7s,baz=87,slow=14,SNR=3.8 | | | | | | |
| **MRZ** | **Mangatainoka R** | **26.60** | **197** | P | **P** | **18 16 47.2** | **-2.6** |
| MRZ | | | | IAmb | IAmb | 18 17 19.6 | |
| | comp=Z,22nm,1.1s | | | | | | |
| **THZ** | **Tophouse** | **28.43** | **200** | P | **P** | **18 17 04.9** | **-1.2** |
| **DSZ** | **Denniston Nort** | **28.79** | **202** | P | **P** | **18 17 09.1** | **-0.2** |
| **LTZ** | **Lake Taylor** | **29.55** | **200** | P | **P** | **18 17 12.5** | **-3.4** |
| LTZ | | | | IAmb | IAmb | 18 17 34.7 | |
| | comp=Z,39nm,1.4s | | | | | | |
| **INZ** | **Inchbonnie** | **29.78** | **201** | P | **P** | **18 17 15.6** | **-2.4** |
| **DCZ** | **Deep Cove** | **33.72** | **204** | P | **P** | **18 17 51.4** | **-0.7** |
| DCZ | | | | IAmb | IAmb | 18 18 10.8 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **33.78** | **202** | P | **P** | **18 17 53.0** | **+0.3** |
| WHZ | | | | IAmb | IAmb | 18 18 14.4 | |
| | comp=Z,47nm,1.5s | | | | | | |
| **STKA** | **Stephens Creek** | **43.17** | **240** | P | **P** | **18 19 09.4** | **-1.5** |
| **WR0** | **Warramunga Arr** | **48.69** | **257** | P | **P** | **18 19 52.0** | **-2.0** |
| WR0 | | | | IAmb | IAmb | 18 20 30.3 | |
| | comp=Z,8.4nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **48.87** | **257** | P | **P** | **18 19 52.9** | **-2.5** |
| **WRA** | **Warramunga Arr** | **48.88** | **257** | P | **P** | **18 19 53.4** | **-2.1** |
| | comp=Z,1.3nm,0.8s,baz=89,slow=7.0,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 21 16.6** | **+0.6** |
| | comp=Z,0.4nm,0.7s,baz=93,slow=3.5,SNR=5.4 | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **49.17** | **252** | P | **P** | **18 19 55.3** | **-2.3** |
| **ASAR** | **Alice Springs** | **49.17** | **252** | P | **P** | **18 19 55.8** | **-1.9** |
| | comp=Z,9.3nm,0.7s,baz=89,slow=7.5,SNR=108 | | | | | | |
| ASAR | | | | PcP | **sP** | **18 21 17.4** | **-0.7** |
| | comp=Z,0.9nm,0.5s,baz=95,slow=4.0,SNR=5.9 | | | | | | |
| | comp=Z,9.3nm,0.7s | | | | | | |
| **SBA** | **Scott Base** | **63.14** | **184** | P | **P** | **18 21 38.4** | **+3.2** |
| SBA | | | | IAmb | IAmb | 18 21 39.5 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.37** | **343** | P | **P** | **18 22 32.7** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=126,slow=8.9,SNR=4.4 | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.61** | **180** | P | **P** | **18 22 48.0** | **+1.9** |
| QSPA | | | | IAmb | IAmb | 18 22 49.1 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.61** | **180** | P | **P** | **18 22 48.2** | **+2.2** |
| | comp=Z,7.0nm,0.7s,baz=332,slow=0.6,SNR=58 | | | | | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.01** | **42** | P | **P** | **18 22 52.1** | **+3.3** |
| | comp=Z,0.4nm,0.7s,baz=222,slow=9.3,SNR=3.1 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **SEY** | **Seymchan** | **82.30** | **345** | P | **P** | **18 23 28.2** | **+0.6** |
| | comp=Z,1.7nm,1.0s,baz=83,slow=16,SNR=2.2 | | | | | | |
| | comp=Z,1.7nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **82.67** | **12** | P | **P** | **18 23 30.5** | **+1.0** |
| | comp=Z,0.4nm,0.5s,baz=217,slow=5.4,SNR=8.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **PDAR** | **Pinedale Array** | **82.95** | **42** | P | **P** | **18 23 34.2** | **+2.5** |
| | comp=Z,0.9nm,0.7s,baz=202,slow=3.4,SNR=8.9 | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **BELA** | **Belgrano 2** | **84.10** | **172** | P | **P** | **18 23 38.2** | **+1.5** |
| BELA | | | | IAmb | IAmb | 18 23 38.8 | |
| | comp=Z,3.7nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **87.44** | **199** | P | **P** | **18 23 54.7** | **+1.4** |
| | comp=Z,4.5nm,0.7s,baz=110,slow=7.5,SNR=6.4 | | | | | | |
| | comp=Z,4.5nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.70** | **289** | P | **P** | **18 24 14.7** | **+0.7** |
| | comp=Z,0.6nm,0.3s,baz=102,slow=3.1,SNR=3.8 | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **92.92** | **177** | P | **P** | **18 24 20.0** | **+1.2** |
| | comp=Z,1.0nm,0.9s,baz=189,slow=13,SNR=2.5 | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **117.31** | **322** | PKP | **PKiKP** | **18 29 50.1** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=261,slow=3.9,SNR=3.9 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **144.63** | **245** | PKP | **PKPdf** | **18 30 43.3** | **+0.8** |
| | comp=Z,1.8nm,0.5s,baz=44,slow=2.7,SNR=6.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.56** | **320** | PKPbc | **PKPab** | **18 30 43.7** | **-0.9** |
| | comp=Z,0.8nm,0.7s,baz=98,slow=2.5,SNR=5.0 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.82** | **308** | PKPbc | **PKiKP** | **18 30 50.9** | **-1.2** |
| | comp=Z,1.1nm,0.6s,baz=76,slow=6.1,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.60** | **121** | PKP | **PKPdf** | **18 31 15.5** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=326,slow=3.0,SNR=2.5 | | | | | | |

*DJA **30** 18:27:27.7±0.4, 9°S±4°×107°8E±°, h10km, M3.7/9, mb4.1/2, MLv3.5/9*
*IDC **30** 18:27:28.3±4.0, 8°.27S×108°.19E, h0km, mb3.3/4, mbtmp3.3/4, Error ellipse: s-maj=219.7km s-min=25.5km az=48.0*

**ISC 30 18:27:34.5±1.3, 8°.7S±0°.1×108°.10E±0°.09, h55km, n10,σ1°77/10, mb3.2/4, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMJI** | **Cimerak** | **0.95** | **21** | P | **Pn** | **18 27 50.9** | **-0.8** |
| **KPJI** | **Karang Pucung** | **1.56** | **32** | P | **Pn** | **18 28 01.2** | **+1.2** |
| **CNJI** | **Cibinong** | **1.66** | **325** | P | **Pn** | **18 27 59.4** | **-1.9** |
| **SKJI** | **Sukabumi** | **2.26** | **317** | P | **Pn** | **18 28 10.1** | **+0.7** |
| **UGM** | **Wanagama** | **2.51** | **73** | P | **Pn** | **18 28 12.5** | **-0.4** |
| **JAGI** | **Jajag, Banyuwa** | **5.99** | **89** | P | **Pn** | **18 28 58.2** | **-2.4** |
| | 27nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.73** | **117** | P | **P** | **18 33 19.7** | **+1.6** |
| | 0.1nm,0.4s,baz=290,slow=11,SNR=1.2 | | | | | | |
| | 0.1nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **28.84** | **124** | P | **P** | **18 33 30.2** | **+2.3** |
| | 0.2nm,0.5s,baz=300,slow=9.5,SNR=5.1 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.82** | **340** | P | **P** | **18 37 33.0** | **-1.2** |
| | 0.5nm,0.6s,baz=130,slow=8.8,SNR=4.8 | | | | | | |
| | 0.5nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.39** | **340** | P | **P** | **18 38 03.8** | **-0.8** |
| | 0.2nm,0.5s,baz=152,slow=6.2,SNR=2.4 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*NEIC **30** 18:29:52.4±2.2, 18°.1S±0°.1×177°.9W±0°.1, h563km±8km, mb4.6/47, Error ellipse: s-maj=19.4km s-min=14.7km az=160.0*
*IDC **30** 18:29:54.0±1.4, 18°.21S×178°.06W, h585km±16km, mb3.5/10, mbtmp4.4/12, Error ellipse: s-maj=19.5km s-min=13.3km az=155.0*
*NOU **30** 18:29:57.2, 18°.28S×178°.49W, h574km, mb4.6/29, Fiji Islands Region*

**ISC 30 18:29:54.4±0.6, 18°.14S±0°.10×178°.12W±0°.09, h590km, n103,σ1s31/102, mb4.6/38, 5C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **3.67** | **276** | P | **P** | **18 31 17.0** | **0.0** |
| **MSVF** | **Nonsavu** | **3.67** | **276** | P | **P** | **18 31 16.3** | **-0.7** |
| **MSVF** | **Nonsavu** | **3.67** | **276** | P | **P** | **18 31 17.1** | **0.0** |
| | 120nm,0.8s,baz=125,slow=11,SNR=52 | | | | | | |
| **AFI** | **Afiamalu** | **7.41** | **56** | P | P | 18 31 41.9 | -6.1 |
| **NIUE** | **Niue** | **7.82** | **98** | P | P | 18 31 44.9 | -6.9 |
| **LIFNC** | **LIFOU** | **14.05** | **257** | P | **P** | **18 32 52.2** | **-1.8** |
| **LIFNC** | **LIFOU** | **14.05** | **257** | P | **P** | **18 32 51.1** | **-2.9** |
| **PINNC** | **Pines Island,** | **14.24** | **249** | P | **P** | **18 32 53.7** | **-2.1** |
| **DZM** | **Mont Dzumac** | **15.02** | **252** | | **P** | **18 33 03.2** | **+0.1** |
| DZM | | | | IAmb | IAmb | 18 33 06.7 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.02** | **252** | P | **P** | **18 33 02.9** | **-0.3** |
| | comp=Z,15nm,0.7s,baz=90,slow=20,SNR=19 | | | | | | |
| **ONTNC** | **Quen Toro** | **15.06** | **251** | P | **P** | **18 33 02.7** | **-0.7** |
| **KOUNC** | **Koumac, New Ca** | **16.78** | **259** | P | **P** | **18 33 21.2** | **+1.8** |
| **KOUNC** | **Koumac, New Ca** | **16.78** | **259** | P | **P** | **18 33 20.2** | **+0.8** |
| KOUNC | | | | IAmb | IAmb | 18 33 22.1 | |
| | comp=Z,16nm,0.6s | | | | | | |
| **OUZ** | **Omahuta** | **18.54** | **202** | P | **P** | **18 33 37.9** | **+2.7** |
| **KUZ** | **Kuaotunu** | **19.31** | **195** | P | **P** | **18 33 45.1** | **+2.9** |
| **TOZ** | **Tahuroa Road** | **20.30** | **195** | P | **P** | **18 33 51.3** | **+0.2** |
| TOZ | | | | IAmb | IAmb | 18 34 15.8 | |
| | comp=Z,22nm,1.3s | | | | | | |
| **URZ** | **Urewera** | **20.47** | **191** | P | **P** | **18 33 50.2** | **-2.5** |
| | comp=Z,14nm,0.5s,baz=4.1,slow=2.4,SNR=14 | | | | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| **RTZ** | **Ruatahuna** | **20.84** | **191** | P | **P** | **18 33 53.5** | **-2.6** |
| RTZ | | | | IAmb | IAmb | 18 34 17.9 | |
| | comp=Z,44nm,1.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **21.47** | **192** | P | **P** | **18 33 57.9** | **-3.7** |
| **BFZ** | **Birch Farm** | **22.98** | **191** | P | **P** | **18 34 16.4** | **+1.3** |
| **BFZ** | **Birch Farm** | **22.98** | **191** | P | **P** | **18 34 13.9** | **-1.2** |
| **MRZ** | **Mangatainoka R** | **23.09** | **192** | P | **P** | **18 34 13.7** | **-2.3** |
| MRZ | | | | IAmb | IAmb | 18 34 27.0 | |
| | comp=Z,36nm,1.3s | | | | | | |
| **TCW** | **Tory Channel** | **23.90** | **194** | P | **P** | **18 34 22.1** | **-1.1** |
| **QRZ** | **Quartz Range** | **24.00** | **198** | P | **P** | **18 34 23.8** | **-0.3** |
| **QRZ** | **Quartz Range** | **24.00** | **198** | P | **P** | **18 34 23.6** | **-0.5** |
| **TKNZ** | **Takaka Hill** | **24.07** | **197** | P | **P** | **18 34 22.7** | **-2.0** |
| **NNZ** | **Nelson** | **24.13** | **196** | P | **P** | **18 34 23.4** | **-1.8** |
| **TUWZ** | **Tuamarina** | **24.19** | **195** | P | **P** | **18 34 24.4** | **-1.3** |
| **THZ** | **Tophouse** | **24.76** | **196** | P | **P** | **18 34 28.8** | **-2.1** |
| THZ | | | | IAmb | IAmb | 18 34 29.0 | |
| | comp=Z,28nm,1.3s | | | | | | |
| **DSZ** | **Denniston Nort** | **25.05** | **198** | P | **P** | **18 34 30.9** | **-2.6** |
| **KHZ** | **Kahutara** | **25.22** | **195** | P | **P** | **18 34 32.6** | **-2.2** |
| **LTZ** | **Lake Taylor** | **25.88** | **196** | P | **P** | **18 34 38.3** | **-2.5** |
| LTZ | | | | IAmb | IAmb | 18 35 05.1 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **INZ** | **Inchbonnie** | **26.06** | **198** | P | **P** | **18 34 41.0** | **-1.2** |
| **OXZ** | **Oxford** | **26.45** | **196** | P | **P** | **18 34 44.4** | **-1.2** |
| OXZ | | | | IAmb | IAmb | 18 35 19.2 | |
| | comp=Z,38nm,1.3s | | | | | | |
| **FOZ** | **Fox Glacier** | **27.29** | **199** | P | **P** | **18 34 50.8** | **-2.1** |
| **LBZ** | **Lake Benmore

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,0.9nm,0.7s,baz=224,slow=8.9,SNR=5.3 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **J05D** | **Fort Rock, OR** | **80.33** | **38** | P | | **P** | **18 41 05.9** | **+0.6** |
| **TIA** | **Tai'an** | **81.61** | **312** | P | | **P** | **18 41 11.3** | **-0.5** |
| TIA | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **I07A** | **Izee** | **81.82** | **38** | P | | **P** | **18 41 13.2** | **+0.4** |
| **BELA** | **Belgrano 2** | **81.90** | **173** | P | | **P** | **18 41 12.3** | **-0.3** |
| **U15A** | **North Rim** | **82.47** | **48** | P | | **P** | **18 41 16.6** | **+0.1** |
| **J18K** | **Innoko River** | **83.04** | **10** | P | | **P** | **18 41 17.1** | **-1.3** |
| J18K | | | | IAmb | | IAmb | 18 41 20.3 | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.89** | **58** | P | | **P** | **18 41 33.8** | **+0.7** |
| | comp=Z,0.9nm,0.7s,baz=210,slow=6.9,SNR=8.6 | | | | | | | |
| | comp=Z,0.9nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.05** | **13** | P | | **P** | **18 41 31.5** | **-1.4** |
| | comp=Z,0.2nm,0.4s,baz=213,slow=6.5,SNR=2.5 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.33** | **43** | P | | **P** | **18 41 39.2** | **-0.6** |
| | comp=Z,0.3nm,0.6s,baz=204,slow=3.3,SNR=4.2 | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **87.63** | **314** | *e*P | | **P** | **18 41 39.5** | **-1.6** |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | | |
| HHC | | | | pmax | | pmax | | |
| | comp=Z,63nm,4.0s | | | | | | | |
| **ELIB** | **Princess Elisa** | **88.96** | **187** | *d*P | | **P** | **18 41 46.7** | **-0.1** |
| | comp=Z,4.3nm,0.7s | | | | | | | |
| **PZH** | **PanZhiHua** | **89.51** | **298** | P | | **P** | **18 41 51.0** | **+0.8** |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,90nm,0.8s | | | | | | | |
| PZH | | | | pmax | | pmax | | |
| | comp=Z,100nm,5.1s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **90.08** | **180** | ⇑P | | **P** | **18 41 51.0** | **-0.9** |
| | comp=Z,117nm,0.5s | | | | | | | |
| **SNAA** | **Sanae** | **90.36** | **179** | ⇑P | | **P** | **18 41 52.1** | **-1.1** |
| | comp=Z,32nm,0.6s | | | | | | | |
| **SNAA** | **Sanae** | **90.36** | **179** | P | | **P** | **18 41 52.8** | **-0.4** |
| | comp=Z,1.2nm,0.7s,baz=178,slow=15,SNR=8.9 | | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.49** | **176** | ⇑P | | **P** | **18 41 53.7** | **-0.1** |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.93** | **177** | ⇑P | | **P** | **18 41 56.1** | **+0.3** |
| | comp=Z,4.2nm,0.7s,baz=187,slow=5.0 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.16** | **177** | ⇑P | | **P** | **18 41 57.1** | **+0.4** |
| | comp=Z,4.7nm,0.8s | | | | | | | |

*ISN **30** 18:31:07.7±0.9, 34°.62N×46°.17E, h10km±10km, ML2.8*
*TEH **30** 18:31:07.7, 34.61N×46.19E, h11km±26km, ML2.8*

**ISC 30 18:31:08.2±1.0, 34°.63N±0°.05×46°.17E±0°.05, h10km, n11, σ1°03/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.19** | **70** | Pg | **Pg** | **18 31 12.1** | **-0.3** |
| **IGHG** | **Ghaleghazi** | **0.45** | **133** | Pg | **Pg** | **18 31 16.3** | **-0.7** |
| **GLG1** | **Gilan-e-Gharb** | **0.56** | **203** | Pg | **Pg** | **18 31 18.6** | **-0.5** |
| **ILBA** | **Ilam Banvizeh** | **1.01** | **178** | Pg | **Pg** | **18 31 26.7** | **-0.9** |
| **IBZA** | **Bozab** | **1.41** | **96** | Pg | **Pg** | **18 31 34.4** | **-0.8** |
| **IBDR** | **Badra** | **1.53** | **188** | *e*Pn | **Pg** | **18 31 36.5** | **-1.1** |
| IBDR | | | | *e*Sn | **Sg** | **18 31 57.0** | **-0.5** |
| IBDR | | | | AML | AML | 18 32 07.2 | |
| | comp=E,195nm,1.0s | | | | | | |
| IBDR | | | | AML | AML | 18 32 07.5 | |
| | comp=N,91nm,0.5s | | | | | | |
| **IKRK** | **Kirkuk** | **1.69** | **297** | *e*Pn | **Pb** | **18 31 39.0** | **-0.3** |
| IKRK | | | | *e*Sn | **Sg** | **18 32 02.0** | **-0.4** |
| IKRK | | | | AML | AML | 18 32 11.6 | |
| | comp=E,136nm,0.4s | | | | | | |
| IKRK | | | | AML | AML | 18 32 12.2 | |
| | comp=N,132nm,0.6s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.78** | **128** | Pg | **Pg** | **18 31 41.2** | **-1.0** |
| **IDOB** | **Doab** | **1.86** | **116** | Pn | **Pg** | **18 31 42.6** | **-1.4** |
| **BHD** | **Baghdad** | **2.02** | **228** | *e*Pn | **Pn** | **18 31 43.0** | **+0.8** |
| BHD | | | | *e*Sn | **Sb** | **18 32 09.5** | **-0.6** |
| **RAFI** | **Al-Rafai** | **2.90** | **181** | *e*Pn | **Pn** | **18 31 56.0** | **+1.6** |
| RAFI | | | | *e*Sn | **Sn** | **18 32 31.0** | **+1.6** |

**IDC 30 18:37:13.8±21.0, 19°.91S×168°.49E, h0km, mb4.3/3, mbtmp4.3/3, ML2.3/1, MS3.4/1, Error ellipse: s-maj=360.4km s-min=62.6km az=89.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **2.88** | **221** | Pn | Pn | 18 38 00.2 | -0.8 |
| | 0.4nm,0.3s,baz=132,slow=15,SNR=26 | | | | | | |
| **RPZ** | **Rata Peaks** | **23.83** | **175** | LR | LR | 18 50 56.3 | |
| | comp=Z,88nm,20.4s,baz=301,slow=34 | | | | | | |
| **STKA** | **Stephens Creek** | **26.89** | **238** | P | P | 18 42 57.4 | +0.8 |
| | 3.1nm,0.6s,baz=89,slow=11,SNR=8.5 | | | | | | |
| | 3.1nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.08** | **264** | P | P | 18 43 42.2 | -0.6 |
| | 0.7nm,0.5s,baz=95,slow=7.9,SNR=14 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **32.28** | **257** | P | P | 18 43 44.6 | +0.1 |
| | 7.9nm,0.6s,baz=89,slow=7.9,SNR=116 | | | | | | |
| | 7.9nm,0.6s | | | | | | |

*IDC **30** 18:45:31.8±0.9, 55°.35S×27°.91W, h0km, mb4.2/4, mbtmp4.2/5, ML4.3/1, MS3.5/2, Error ellipse: s-maj=33.2km s-min=23.8km az=74.0*
*NEIC **30** 18:45:33.8±1.4, 55°.4S±0°.1×28°.2W±0°.2, h10km±1km, mb4.4/9, Error ellipse: s-maj=24.4km s-min=16.7km az=19.0*

**ISC 30 18:45:35.3±0.7, 55°.4S±0°.1×28°.20W±0°.08, h26km, n27, σ0°86/26, mb4.4/6, 5C, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **4.92** | **280** | | **Pn** | **18 46 48.2** | **+0.7** |
| HOPE | | | | Sn | **Sn** | **18 47 41.0** | **-2.4** |
| **ESPZ** | **Base Esperanza** | **16.59** | **229** | Pn | **Pn** | **18 49 25.2** | **-0.5** |
| **VNA1** | **Neumayer--Stat** | **17.63** | **158** | ⇑P | **P** | **18 49 39.0** | **-0.5** |
| | comp=Z,1.3nm,0.5s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **17.81** | **160** | ⇑P | **P** | **18 49 41.5** | **0.0** |
| | comp=Z,3.1nm,0.6s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **18.02** | **158** | ⇑P | **Pn** | **18 49 43.2** | **-0.4** |
| | comp=Z,2.1nm,0.5s,baz=314,slow=13 | | | | | | |
| **EFI** | **East Falkland** | **18.07** | **269** | | **P** | **18 49 45.1** | **+0.7** |
| **SNAA** | **Sanae** | **19.58** | **156** | P | **P** | **18 50 00.6** | **-0.5** |
| **SNAA** | **Sanae** | **19.58** | **156** | ⇑P | **P** | **18 50 00.8** | **-0.2** |
| | comp=Z,91nm,0.5s | | | | | | |
| **SNAA** | **Sanae** | **19.58** | **156** | P | **P** | **18 50 00.8** | **-0.2** |
| | comp=Z,0.8nm,0.3s,baz=302,slow=11,SNR=34 | | | | | | |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **PMSA** | **Palmer Station** | **19.92** | **227** | P | **Pn** | **18 50 05.9** | **-0.4** |
| PMSA | | | | IAmb | IAmb | 18 50 26.4 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **TROLL** | **Troll, Antarti** | **21.10** | **154** | ⇑P | **P** | **18 50 16.4** | **-1.1** |
| | comp=Z,49nm,0.3s | | | | | | |
| **BELA** | **Belgrano 2** | **22.70** | **184** | P | **P** | **18 50 34.3** | **-0.2** |
| BELA | | | | IAmb | IAmb | 18 50 51.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.87** | **180** | P | **P** | **18 52 24.4** | **+0.3** |
| QSPA | | | | IAmb | IAmb | 18 52 28.3 | |
| | comp=Z,12nm,1.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.87** | **180** | P | **P** | **18 52 24.8** | **+0.7** |
| | comp=Z,2.9nm,0.7s,baz=30,slow=3.5,SNR=19 | | | | | | |
| | comp=Z,2.9nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **46.37** | **77** | P | **P** | **18 53 58.5** | **-0.8** |
| **BOSA** | **Boshof** | **46.37** | **77** | P | **P** | **18 53 58.4** | **-0.9** |
| | comp=Z,2.8nm,1.0s,baz=222,slow=6.9,SNR=3.1 | | | | | | |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **46.70** | **184** | P | **P** | **18 54 02.4** | **+1.2** |
| SBA | | | | IAmb | IAmb | 18 54 15.4 | |
| | comp=Z,6.1nm,1.4s | | | | | | |
| **LBTB** | **Lobatse** | **49.37** | **75** | LR | LR | 19 13 04.7 | |
| | comp=Z,33nm,18.7s,baz=186,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **49.52** | **306** | P | **P** | **18 54 25.5** | **+1.1** |
| LPAZ | | | | IAmb | IAmb | 18 54 26.5 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **49.52** | **306** | P | **P** | **18 54 25.7** | **+1.3** |
| | comp=Z,2.7nm,0.7s,baz=183,slow=5.6,SNR=11 | | | | | | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **OPO** | **Ambohidratompo** | **66.64** | **89** | LR | LR | 19 22 12.3 | |
| | comp=Z,40nm,18.1s,baz=45,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.76** | **31** | P | **P** | **18 57 01.4** | **+0.2** |
| | comp=Z,1.7nm,0.7s,baz=203,slow=5.0,SNR=8.2 | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **124.06** | **28** | PKP | **PKPdf** | **19 04 29.0** | **-0.7** |
| | comp=Z,0.8nm,0.6s,baz=219,slow=2.4,SNR=3.6 | | | | | | |
| **H29M** | **Whitestone** | **146.15** | **317** | PKPdf | **PKPbc** | **19 05 11.1** | **-0.4** |
| **G29M** | **Pine Creek** | **146.20** | **318** | PKPdf | **PKPbc** | **19 05 11.8** | **+0.1** |
| **E29M** | **Blow River** | **146.51** | **321** | PKPdf | **PKPbc** | **19 05 12.5** | **-0.1** |
| **ILAR** | **Eielson Array** | **149.25** | **313** | PKPbc | **PKiKP** | **19 05 20.6** | **-0.5** |
| | comp=Z,3.0nm,0.7s,baz=121,slow=1.9,SNR=27 | | | | | | |

*JMA **30** 18:48:02.9±0.9, 45°.10N×151°.00E, h58km±7km, mb4.5/2, KURILE ISLANDS REGION*

**SKHL 30 18:48:01.4±0.5, 45°.10N×151°.00E, h58km±7km, mb4.5/2, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.22** | **275** | *e*P | Pn | 18 48 35.3 | -0.5 |
| KUR | | | | AMB | AMB | 18 48 37.8 | |
| | 70nm,0.5s | | | | | | |
| KUR | | | | *e*S | Sn | 18 49 00.9 | -1.1 |
| KUR | | | | A | A | 18 49 06.2 | |
| | 270nm,0.4s | | | | | | |
| KUR | | | | A | A | 18 49 06.2 | |
| | 270nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **3.23** | **249** | *i* P | Pn | 18 48 49.7 | +0.2 |
| SHO | | | | AMB | AMB | 18 48 50.0 | |
| | 20nm,0.2s | | | | | | |
| SHO | | | | *i* S | Sn | 18 49 25.5 | -1.2 |
| SHO | | | | A | A | 18 49 27.9 | |
| | 90nm,0.3s | | | | | | |
| SHO | | | | A | A | 18 49 27.9 | |
| | 140nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.82** | **256** | *i* P | Pn | 18 48 56.9 | -0.8 |
| YUK | | | | AMB | AMB | 18 48 59.9 | |
| | 60nm,0.3s | | | | | | |
| YUK | | | | *e*S | Sn | 18 49 38.7 | -2.7 |
| YUK | | | | A | A | 18 49 42.7 | |
| | 230nm,0.5s | | | | | | |
| YUK | | | | A | A | 18 49 42.7 | |
| | 170nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **4.16** | **247** | P | Pn | 18 49 01.0 | -1.3 |
| NEM2 | | | | *e*S | Sn | 18 49 45.2 | -4.3 |
| **JRA** | **Rausu** | **4.36** | **257** | *e*P | Pn | 18 49 02.9 | -2.2 |
| **JNK** | **Nakash** | **4.75** | **254** | *e*P | Pn | 18 49 09.1 | -1.4 |
| JNK | | | | *e*S | Sn | 18 50 00.1 | -4.1 |
| **JAK** | **Akkeshi** | **5.01** | **247** | *e*P | Pn | 18 49 11.8 | -2.1 |
| JAK | | | | *e*S | Sn | 18 50 04.8 | -5.7 |
| **JTKR** | **Abashiri--Toko** | **5.19** | **260** | *e*P | Pn | 18 49 12.8 | -3.6 |
| **JAR** | **Ashorobuto** | **5.50** | **253** | *e*P | Pn | 18 49 19.5 | -1.2 |
| JAR | | | | *e*S | Sn | 18 50 16.9 | -5.7 |
| **JOB** | **Onbets** | **5.62** | **249** | *e*P | Pn | 18 49 20.1 | -2.1 |
| JOB | | | | *e*S | Sn | 18 50 19.0 | -6.3 |
| **JKK2** | **Kamakawa 2** | **6.03** | **261** | *e*P | Pn | 18 49 23.9 | -4.1 |
| **JCH** | **Churui** | **6.05** | **248** | P | Pn | 18 49 25.6 | -2.7 |
| JCH | | | | *e*S | Sn | 18 50 27.7 | -8.5 |
| **JNBK** | **Urakawa-nobuka** | **6.61** | **248** | *e*P | Pn | 18 49 32.9 | -3.0 |
| **JANG** | **Nango** | **8.43** | **239** | *e*S | Sn | 18 51 24.3 | -10 |

**IDC 30 18:55:34.8±52.0, 20°.06S×179°.38W, h0km, mb3.7/3, mbtmp3.7/3, Error ellipse: s-maj=937.6km s-min=154.0km az=82.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STKA** | **Stephens Creek** | **36.82** | **243** | P | P | 19 02 44.8 | +0.1 |
| | 2.8nm,0.8s,baz=66,slow=6.9,SNR=3.5 | | | | | | |
| | 2.8nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **43.37** | **256** | P | P | 19 03 39.3 | +0.1 |
| | 0.3nm,0.5s,baz=82,slow=8.4,SNR=7.4 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.38** | **262** | P | P | 19 03 38.9 | -0.5 |
| | 0.4nm,0.4s,baz=100,slow=8.3,SNR=10 | | | | | | |
| | 0.4nm,0.4s | | | | | | |

*JMA **30** 18:58:31.3±0.2, 41°.3N±0°.4×139°.0E±0°.9, h28km, MV3.9/37, W OFF AOMORI PREF*
*IDC **30** 18:58:38.5±2.4, 41°.15N×138°.40E, h55km±33km, mb3.3/1, mbtmp3.2/4, ML2.5/3, Error ellipse: s-maj=33.4km s-min=20.7km az=41.0*

**ISC 30 18:58:32.3±1.9, 41°.31N±0°.06×139°.00E±0°.06, h25km±16km, n16, σ1°16/25, 2D, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOMM** | **Oshimamatsumae** | **0.79** | **74** | *i* P | **Pn** | **18 58 46.5** | **-1.3** |
| JOMM | | | | S | **Sb** | **18 58 56.4** | **-1.3** |
| **JOSM** | **Okushiri--Mats** | **0.85** | **25** | P | **Pn** | **18 58 47.3** | **-1.4** |
| JOSM | | | | *e*S | **Sb** | **18 58 58.5** | **-0.9** |
| **JIW** | **Iwasaki** | **1.05** | **133** | ⇓*i*P | **Pn** | **18 58 50.2** | **-1.2** |
| JIW | | | | ⇓S | **Sn** | **18 59 03.3** | **-2.0** |
| **JSR** | **Shiriuchi** | **1.09** | **78** | P | **Pn** | **18 58 51.5** | **-0.5** |
| JSR | | | | S | **Sn** | **18 59 05.3** | **-0.9** |
| **JSI2** | **Shiura 2** | **1.10** | **103** | *i* P | **Pn** | **18 58 51.2** | **-0.8** |
| JSI2 | | | | S | **Sn** | **18 59 05.8** | **-0.6** |
| **JHST** | **Hiyamasetana** | **1.29** | **30** | P | **Pb** | **18 58 55.9** | **0.0** |
| JHST | | | | S | **Sb** | **18 59 12.8** | **+0.8** |
| **JYM2** | **Yakumo 2** | **1.30** | **52** | P | **Pb** | **18 58 56.2** | **0.0** |
| JYM2 | | | | S | **Sb** | **18 59 12.7** | **+0.1** |
| **JSH** | **Shimam** | **1.54** | **30** | *e*P | **Pn** | **18 58 58.2** | **0.0** |
| **JOT** | **Ohata** | **1.55** | **87** | P | **Pn** | **18 58 57.9** | **-0.3** |
| **JKB** | **Kayabe** | **1.63** | **69** | *e*P | **Pn** | **18 58 59.4** | **0.0** |
| **JTM** | **Tenmabayashi** | **1.65** | **108** | *e*P | **Pn** | **18 58 59.8** | **+0.1** |
| **JAH** | **Hinai** | **1.68** | **132** | *i* P | **Pn** | **18 58 59.8** | **-0.3** |
| JAH | | | | *e*S | **Sn** | **18 59 20.4** | **-0.4** |
| **ASAJ** | **Asahikawa** | **3.86** | **42** | P | **Pb** | **18 59 41.4** | **+1.7** |
| | 0.2nm,0.3s,baz=209,slow=19,SNR=1.3 | | | | | | |
| | 5.8nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.80** | **188** | P | **Pn** | **18 59 45.3** | **+2.2** |
| | 0.1nm,0.3s,baz=355,slow=20,SNR=6.9 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **5.91** | **302** | P | **Pn** | **18 59 59.6** | **+1.4** |
| | 0.4nm,0.3s,baz=105,slow=14,SNR=13 | | | | | | |
| USRK | | | | S | **Sn** | **19 01 03.5** | **-1.6** |
| | 6.5nm,0.6s,baz=110,slow=23,SNR=5.0 | | | | | | |
| | 0.6nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **61.09** | **185** | P | **P** | **19 08 45.4** | **+1.2** |
| | 0.3nm,0.5s,baz=1.4,slow=7.4,SNR=7.5 | | | | | | |
| | 0.3nm,0.5s | | | | | | |

*NEIC **30** 19:05:06.2±2.4, 43°.61N±0°.06×105°.17W±0°.10, h0km±1km, ML3.2/76, Error ellipse: s-maj=13.2km s-min=8.8km az=56.0*
*IDC **30** 19:05:07.7±2.5, 43°.55N×105°.40W, h0km, mbtmp3.3/2, ML3.1/2, Error ellipse: s-maj=57.0km s-min=10.7km az=152.0*

**ISC 30 19:05:06.0±1.1, 43°.56N±0°.06×105°.28W±0°.06, h0km, n28, σ1°23/14, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.07** | **58** | Pg | **Pn** | **19 05 28.8** | **+0.4** |
| **K22A** | **Casper** | **1.28** | **226** | | **Pn** | **19 05 32.7** | **+1.3** |
| **PHWY** | **Pilot Hill** | **2.26** | **183** | Pn | **Pb** | **19 05 47.5** | **-0.3** |
| **RWWY** | **Rawlins** | **2.34** | **218** | Pn | **Pb** | **19 05 48.9** | **-0.3** |
| RWWY | | | | IAML | | 19 06 26.4 | |
| | 113nm,0.5s | | | | | | |
| RWWY | | | | IAML | | 19 06 31.3 | |
| | 150nm,1.2s | | | | | | |
| **N23A** | **Red Feather La** | **2.70** | **191** | Pn | **Pb** | **19 05 55.5** | **+0.1** |
| N23A | | | | IAML | | 19 06 40.4 | |
| | comp=N,92nm,0.4s | | | | | | |
| N23A | | | | IAML | | 19 06 40.8 | |
| | comp=E,72nm,0.5s | | | | | | |
| **BRIGG** | **Briggsdale** | **3.06** | **166** | | **Pg** | **19 06 04.0** | **-0.6** |
| **LAO** | **LASA Array** | **3.20** | **348** | Pn | **Pn** | **19 05 59.4** | **+1.7** |
| **PD31** | **Pinedale Array** | **3.23** | **257** | Pn | **Pn** | **19 05 59.5** | **+1.4** |
| **PDAR** | **Pinedale Array** | **3.23** | **257** | Pn | **Pb** | **19 06 02.2** | **-2.1** |
| | comp=E,2.0nm,0.3s,baz=82,slow=13,SNR=8.8 | | | | | | |
| PDAR | | | | Lg | Lg | 19 06 45.1 | |
| | comp=E,6.0nm,0.3s,baz=81,slow=30,SNR=4.8 | | | | | | |
| | comp=E,1.7nm,0.3s | | | | | | |
| **RLMT** | **Red Lodge** | **3.26** | **300** | Pn | **Pn** | **19 06 00.4** | **+1.9** |
| RLMT | | | | IAML | | 19 07 07.7 | |
| | comp=E,50nm,0.8s | | | | | | |
| RLMT | | | | IAML | | 19 07 58.6 | |
| | comp=E,46nm,4.3s | | | | | | |
| **OGNE** | **Ogallala** | **3.55** | **136** | | **Pn** | **19 06 03.0** | **+0.5** |
| **YMP** | **Mirror Lake Pl** | **3.70** | **290** | | **Pn** | **19 06 04.3** | **-0.4** |
| **LOHW** | **Long Hollow** | **3.87** | **273** | | **Pn** | **19 06 07.8** | **+0.9** |
| LOHW | | | | IAML | | 19 07 13.1 | |
| | comp=E,27nm,0.9s | | | | | | |
| **FLWY** | **Flagg Ranch** | **3.95** | **280** | IAML | | 19 08 10.0 | |
| | comp=E,40nm,4.6s | | | | | | |
| **SNOW** | **Snow King Moun** | **3.98** | **271** | IAML | | 19 07 41.3 | |
| | comp=E,36nm,1.6s | | | | | | |
| SNOW | | | | IAML | | 19 07 41.5 | |
| | comp=E,46nm,1.5s | | | | | | |
| **YNR** | **Norris Junctio** | **4.05** | **288** | IAML | | 19 08 27.2 | |
| | comp=E,25nm,5.0s | | | | | | |
| **YFT** | **Old Faithful** | **4.10** | **285** | IAML | | 19 06 42.3 | |
| | comp=E,28nm,2.2s | | | | | | |
| **IMW** | **Indian Meadow** | **4.11** | **277** | IAML | | 19 06 41.4 | |
| | comp=E,32nm,0.5s | | | | | | |
| IMW | | | | IAML | | 19 07 27.2 | |
| | comp=E,23nm,2.2s | | | | | | |
| **TPAW** | **Teton Pass** | **4.12** | **271** | IAML | | 19 07 36.9 | |
| | comp=E,21nm,3.6s | | | | | | |
| TPAW | | | | IAML | | 19 07 43.9 | |
| | comp=E,33nm,1.6s | | | | | | |
| **AHID** | **Auburn Hatcher** | **4.33** | **261** | IAML | | 19 07 39.5 | |
| | comp=E,28nm,1.8s | | | | | | |
| AHID | | | | IAML | | 19 09 16.1 | |
| | comp=E,31nm,4.7s | | | | | | |
| **RDMU** | **Red Mountain** | **4.37** | **228** | IAML | | 19 07 34.0 | |
| | comp=N,24nm,1.4s | | | | | | |
| RDMU | | | | IAML | | 19 08 53.0 | |
| | comp=E,24nm,3.7s | | | | | | |
| **YHB** | **Horse Butte** | **4.42** | **288** | IAML | | 19 08 48.7 | |
| | comp=N,20nm,5.0s | | | | | | |
| **YHL** | **Hebgen Lake** | **4.43** | **289** | IAML | | 19 07 41.5 | |
| | comp=N,25nm,1.4s | | | | | | |
| YHL | | | | IAML | | 19 07 49.2 | |
| | comp=E,23nm,1.4s | | | | | | |
| **SMCO** | **Snowmass** | **4.55** | **197** | IAML | | 19 07 45.5 | |
| | comp=E,26nm,1.1s | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.97** | **296** | IAML | | 19 08 48.2 | |
| | comp=E,15nm,4.7s | | | | | | |
| BOZ | | | | IAML | | 19 09 24.6 | |
| | comp=E,22nm,4.5s | | | | | | |
| **BSUT** | **Blindstream Ca** | **5.07** | **235** | IAML | | 19 08 10.9 | |
| | comp=N,12nm,2.7s | | | | | | |
| BSUT | | | | IAML | | 19 09 27.0 | |
| | comp=E,14nm,4.1s | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.29** | **41** | Pn | **Pn** | **19 07 21.3** | **+0.2** |
| | comp=E,0.4nm,0.3s,baz=228,slow=14,SNR=1.4 | | | | | | |
| ULM | | | | Lg | Lg | 19 09 55.5 | |
| | comp=E,0.3nm,0.3s,baz=313,slow=21,SNR=3.0 | | | | | | |
| | comp=E,1.1nm,0.3s | | | | | | |
| **I56US** | **NEWPORT INFRAS** | **9.50** | **304** | I | I | 20 00 11.6 | |
| | baz=115,slow=313,SNR=2.3 | | | | | | |

**NOU 30 19:11:41.7, 22°.23S×172°.77E, h0km, mb4.1/7, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **4.46** | **279** | P | Pn | 19 12 50.3 | -0.4 |
| **PINNC** | **Pines Island,** | **4.94** | **265** | P | Pn | 19 12 56.9 | -0.3 |
| **YATNC** | **Mamie plateau,** | **5.45** | **271** | P | Pn | 19 13 04.1 | -0.2 |
| **ONTNC** | **Ouen Toro** | **5.85** | **268** | P | Pn | 19 13 09.7 | 0.0 |
| **DZM** | **Mont Dzumac** | **5.87** | **270** | P | Pn | 19 13 09.8 | -0.2 |
| **NOUC** | **Port Laguerre** | **6.00** | **270** | P | Pn | 19 13 11.8 | +0.1 |

*SOME **30** 19:12:05.6, 39°.13N×72°.20E, h5km*
*NNC **30** 19:12:12.8±1.1, 38°.74N×72°.79E, h197km±23km, mb2.5, mpv3.6, Error ellipse: s-maj=16.7km s-min=6.3km az=9.0*

**ISC 30 19:12:02.2±2.7, 39°.0N±0°.1×72°.21E±0°.08, h10km, n6, σ2°32/11, 6C-1D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRKS** | **Merke** | **3.84** | **11** | *e*P | **Pg** | **19 13 14.3** | **-1.5** |
| MRKS | 13nm,0.2s | | | *e*S | **Sg** | **19 14 03.7** | **-1.9** |
| | 29nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **4.05** | **25** | ⇑P | **Pb** | **19 13 15.7** | **+2.1** |
| AAK | 6.2nm,0.5s | | | ⇑S | **Sb** | **19 14 06.0** | **+3.3** |
| | 22nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **4.32** | **343** | ⇑P | **Pg** | **19 13 22.9** | **-2.0** |
| KK31 | 3.7nm,0.2s | | | ⇑S | **Sg** | **19 14 19.0** | **-1.8** |
| | 2.0nm,0.3s | | | | | | |
| **BRLS** | **Borolday** | **4.43** | **337** | *e*P | **Pb** | **19 13 22.0** | **+1.9** |
| BRLS | 24nm,0.3s | | | *e*S | **Sb** | **19 14 16.8** | **+3.3** |
| | 8.6nm,1.1s | | | | | | |
| **CHMS** | **Chumysh** | **4.46** | **25** | ⇑P | **Pb** | **19 13 20.9** | **+0.4** |
| CHMS | 5.0nm,0.7s | | | ⇓S | **Sb** | **19 14 14.7** | **+0.4** |
| | 13nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **13.52** | **323** | ⇑P | **P** | **19 15 22.4** | **-0.7** |
| | 1.1nm,0.6s,baz=129,slow=14,SNR=20 | | | | | | |

*IDC **30** 19:32:35.8±39.0, 17°.22S×175°.93W, h0km, mb4.5/3, mbtmp4.5/3, Error ellipse: s-maj=735.1km s-min=154.1km az=79.0*
*NEIC **30** 19:32:37.2±0.8, 16°.3S±0°.1×176°.14W±0°.04, h10km±1km, mb4.8/17, Error ellipse: s-maj=22.5km s-min=6.7km az=358.0*

**ISC 30 19:32:40.0±0.8, 16°.3S±0°.1×176°.2W±0°.1, h35km, n24, σ1°02/24, mb4.7/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.85** | **62** | Pn | **Pn** | **19 33 49.9** | **-0.8** |
| **NIUE** | **Niue** | **6.57** | **116** | Pn | **Pn** | **19 34 13.3** | **-0.9** |
| **MSWZ** | **Moikau Station** | **26.12** | **195** | P | **P** | **19 38 10.5** | **-0.3** |
| **EIDS** | **Eidsvold** | **31.85** | **248** | P | **P** | **19 38 60.0** | **-1.9** |
| **ARMA** | **Armidale** | **32.61** | **239** | P | **P** | **19 39 07.9** | **-0.7** |
| **CTAO** | **Charters Tower** | **35.85** | **258** | P | **P** | **19 39 37.9** | **+1.1** |
| **COEN** | **Coen** | **39.27** | **268** | P | **P** | **19 40 07.0** | **+1.2** |
| COEN | | | | IAmb | IAmb | 19 40 56.4 | |
| | comp=Z,50nm,1.9s | | | | | | |
| **STKA** | **Stephens Creek** | **41.29** | **240** | P | **P** | **19 40 21.0** | **-1.3** |
| **STKA** | **Stephens Creek** | **41.29** | **240** | P | **P** | **19 40 22.6** | **+0.3** |
| | comp=Z,3.0nm,0.5s,baz=80,slow=11,SNR=8.0 | | | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **46.07** | **240** | P | **P** | **19 41 00.1** | **-0.7** |
| **WR0** | **Warramunga Arr** | **46.86** | **258** | P | **P** | **19 41 07.5** | **+0.4** |
| **WB0** | **Warramunga Arr** | **47.01** | **258** | P | **P** | **19 41 08.4** | **+0.1** |
| **WB2** | **Warramunga Arr** | **47.04** | **258** | P | **P** | **19 41 08.4** | **-0.1** |
| WB2 | | | | IAmb | IAmb | 19 42 07.7 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **47.04** | **258** | P | **P** | **19 41 08.4** | **-0.2** |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **J17K** | **VABM Dome** | **9.06** | **63** | Pn | | **Pn** | **19 39 50.5** | **+0.6** |
| **H17K** | **Granite Mounta** | **9.15** | **53** | Pn | | **Pn** | **19 39 52.4** | **+1.2** |
| **C16K** | **Lisburne Hills** | **9.43** | **28** | Pn | | **Pn** | **19 39 51.8** | **-3.1** |
| **H18K** | **Honhosa River** | **9.84** | **53** | Pn | | **Pn** | **19 40 01.3** | **+0.6** |
| **G18K** | **Tagagawik** | **10.02** | **49** | Pn | | **Pn** | **19 40 03.0** | **0.0** |
| **H19K** | **Roundabout Mou** | **10.72** | **52** | Pn | | **Pn** | **19 40 13.7** | **+1.0** |
| **L19K** | **White Mountain** | **10.88** | **71** | Pn | | **Pn** | **19 40 16.2** | **+1.4** |
| **J20K** | **Nowinta River** | **11.35** | **61** | Pn | | **Pn** | **19 40 22.8** | **+1.5** |
| **M20K** | **Styx River** | **11.70** | **72** | Pn | | **Pn** | **19 40 26.4** | **+0.2** |
| **H21K** | **Melozitna Rive** | **12.21** | **54** | Pn | | **Pn** | **19 40 35.1** | **+2.1** |
| **ILAR** | **Eielson Array** | **14.54** | **59** | P | | **P** | **19 41 10.4** | **-0.5** |
| | 1.6nm,0.7s,baz=265,slow=11,SNR=10 | | | | | | | |
| **SEY** | **Seymchan** | **14.61** | **293** | P | | **P** | **19 41 11.7** | **0.0** |
| | 1.6nm,0.5s,baz=86,slow=12,SNR=7.1 | | | | | | | |
| **J25K** | **Salcha River,** | **15.19** | **60** | Pn | | **Pn** | **19 41 12.3** | **-1.1** |
| J25K | | | | IAmb | | IAmb | 19 41 22.8 | |
| | comp=Z,5.9nm,1.2s | | | | | | | |
| **RIDG** | **Independent Ri** | **15.42** | **63** | Pn | | **Pn** | **19 41 15.4** | **-1.0** |
| RIDG | | | | IAmb | | IAmb | 19 41 47.7 | |
| | comp=Z,6.7nm,1.4s | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **15.51** | **253** | P | | **Pn** | **19 41 19.1** | **+1.4** |
| **PETK** | **Petropavlovsk-** | **15.51** | **253** | P | | **P** | **19 41 22.2** | **+0.5** |
| | comp=Z,3.9nm,0.8s,baz=66,slow=15,SNR=11 | | | | | | | |
| **J26L** | **Joseph Creek** | **15.96** | **61** | Pn | | **Pn** | **19 41 23.3** | **-0.2** |
| **I26K** | **Coal Creek Min** | **16.15** | **58** | | | **Pn** | **19 41 23.3** | **-2.5** |
| I26K | | | | IAmb | | IAmb | 19 41 29.4 | |
| | comp=Z,7.6nm,1.2s | | | | | | | |
| **F28M** | **Old Crow** | **17.63** | **50** | | | **P** | **19 41 46.2** | **+1.1** |
| **H29M** | **Whitestone** | **18.14** | **55** | Pn | | **Pn** | **19 41 49.3** | **-1.3** |
| H29M | | | | IAmb | | IAmb | 19 42 07.9 | |
| | comp=Z,11nm,1.5s | | | | | | | |
| **INK** | **Inuvik** | **20.07** | **48** | P | | **Pn** | **19 42 14.3** | **+0.7** |
| | comp=Z,1.5nm,0.3s,baz=278,slow=12,SNR=3.4 | | | | | | | |
| | comp=Z,1.5nm,0.3s | | | | | | | |
| **BMO** | **Blue Mountains** | **38.05** | **86** | P | | **P** | **19 44 55.2** | **-1.5** |
| BMO | | | | IAmb | | IAmb | 19 45 36.9 | |
| | comp=Z,4.0nm,1.5s | | | | | | | |
| **INU** | **Inuyama** | **38.47** | **250** | P | | **P** | **19 44 58.6** | **-1.5** |
| **SONM** | **Songino Array** | **43.96** | **289** | P | | **P** | **19 45 44.2** | **-1.1** |
| | comp=Z,0.4nm,0.6s,baz=26,slow=6.9,SNR=1.5 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.78** | **310** | P | | **P** | **19 47 01.3** | **+1.0** |
| | comp=Z,1.3nm,0.9s,baz=42,slow=7.7,SNR=13 | | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | | |
| **BVAR** | **Borovoye Array** | **54.76** | **317** | P | | **P** | **19 47 08.5** | **+1.1** |
| | comp=Z,1.1nm,0.7s,baz=46,slow=8.3,SNR=5.8 | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.38** | **305** | P | | **P** | **19 47 12.2** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=42,slow=7.4,SNR=4.6 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **NOA** | **NORSAR Array B** | **58.74** | **355** | LR | | LR | 20 13 55.0 | |
| | comp=Z,6.0nm,19.4s,baz=355,slow=37 | | | | | | | |
| **HFS** | **Hagfors** | **59.53** | **354** | LR | | LR | 20 14 38.5 | |
| | comp=Z,14nm,19.5s,baz=20,slow=37 | | | | | | | |
| **QSPA** | **South Pole Qui** | **150.15** | **180** | PKPbc | | **PKPbc** | **19 57 27.9** | **+0.7** |
| | comp=Z,1.4nm,0.8s,baz=339,slow=1.6,SNR=5.7 | | | | | | | |

*IDC **30** 19:43:33.5±3.3,20.12N×147.15E,h0km,mb3.6/8, mbtmp3.6/8,Error ellipse: s-maj=132.6km s-min=24.3km az=81.0*

**ISC 30 19:43:39.5±3.2,20.1N±0.2×147.1E±0.9,h40km,n11, σ0s87/8,mb3.6/8,Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H11N1** | **WAKE ISLAND Hy** | **18.66** | **88** | T | | T | T | 20 07 29.6 | |
| | baz=274,slow=75,SNR=7.2 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **18.66** | **88** | T | | T | T | 20 07 31.0 | |
| | baz=274,slow=75,SNR=6.9 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **18.67** | **88** | T | | T | T | 20 07 33.2 | |
| | baz=274,slow=75,SNR=5.1 | | | | | | | | |
| **KSRS** | **Korea Array** | **24.02** | **320** | P | | **P** | **P** | **19 48 50.2** | **-0.4** |
| | 1.4nm,0.9s,baz=151,slow=9.4,SNR=5.7 | | | | | | | | |
| | 1.4nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **41.69** | **198** | P | | **P** | **P** | **19 51 25.7** | **+1.2** |
| | 0.3nm,0.6s,baz=11,slow=8.4,SNR=1.9 | | | | | | | | |
| | 0.3nm,0.6s | | | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **197** | P | | **P** | **P** | **19 51 52.5** | **-1.4** |
| | 0.3nm,0.8s,baz=8.7,slow=14,SNR=1.5 | | | | | | | | |
| | 0.3nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.71** | **322** | P | | **P** | **P** | **19 53 25.9** | **-0.1** |
| | 0.6nm,0.5s,baz=141,slow=5.5,SNR=2.0 | | | | | | | | |
| | 0.6nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.44** | **313** | P | | **P** | **P** | **19 53 31.7** | **+0.4** |
| | 0.3nm,0.8s,baz=96,slow=9.8,SNR=2.2 | | | | | | | | |
| | 0.3nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **61.16** | **317** | P | | **P** | **P** | **19 53 49.8** | **-0.1** |
| | 0.4nm,0.6s,baz=91,slow=7.7,SNR=5.2 | | | | | | | | |
| | 0.4nm,0.6s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **66.23** | **320** | P | | **P** | **P** | **19 54 23.6** | **+0.3** |
| | 0.5nm,0.5s,baz=89,slow=9.3,SNR=3.3 | | | | | | | | |
| | 0.5nm,0.5s | | | | | | | | |
| **FINES** | **FINESS Array B** | **86.16** | **336** | P | | **P** | **P** | **19 56 16.4** | **+0.2** |
| | 1.1nm,0.8s,baz=70,slow=2.2,SNR=5.4 | | | | | | | | |
| | 1.1nm,0.8s | | | | | | | | |

*IDC **30** 19:53:17.0±4.3,21.67S×175.77W,h146km±35km,mb3.5/4, mbtmp4.1/6,Error ellipse: s-maj=30.3km s-min=24.8km az=117.0*

**ISC 30 19:53:17.0±0.9,21.6S±0.2×175.7W±0.1,h150km,n13, σ0s89/12,mb3.8/5,1C,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **7.06** | **302** | P | | **Pn** | **Pn** | **19 54 58.1** | **+0.2** |
| | 16nm,0.6s,baz=124,slow=14,SNR=12 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.61** | **265** | P | | **Pn** | **Pn** | **19 57 02.2** | **+0.8** |
| | 8.4nm,0.8s,baz=68,slow=14,SNR=4.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **46.39** | **257** | P | | **P** | **P** | **20 01 27.5** | **-1.2** |
| | 2.1nm,0.8s,baz=91,slow=7.6,SNR=15 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **20 03 01.9** | **+0.7** |
| | 0.8nm,0.8s,baz=112,slow=3.9,SNR=5.3 | | | | | | | | |
| | 2.1nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.61** | **263** | P | | **P** | **P** | **20 01 28.9** | **-1.5** |
| | 1.6nm,0.9s,baz=95,slow=8.1,SNR=22 | | | | | | | | |
| | 1.6nm,0.9s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **68.47** | **180** | P | | **P** | **P** | **20 04 03.0** | **+0.2** |
| | 1.2nm,0.6s,baz=225,slow=1.3,SNR=13 | | | | | | | | |
| | 1.2nm,0.6s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.36** | **42** | P | | **P** | **P** | **20 05 11.1** | **-0.8** |
| | 0.3nm,0.6s,baz=224,slow=7.6,SNR=2.8 | | | | | | | | |
| | 0.3nm,0.6s | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.57** | **176** | ⇑P | | P | P | 20 05 53.8 | +6.1 |
| | comp=Z,0.5nm,0.2s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **121.32** | **320** | PKP | | **PKPdf** | **PKPdf** | **20 11 51.9** | **-0.2** |
| | comp=Z,0.5nm,0.4s,baz=100,slow=2.7,SNR=4.5 | | | | | | | | |
| **FINES** | **FINESS Array B** | **137.42** | **345** | PKP | | **PKPdf** | **PKPdf** | **20 12 23.3** | **+1.0** |
| | comp=Z,1.2nm,0.9s,baz=101,slow=5.8,SNR=2.4 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **145.02** | **332** | PKPbc | | PKPbc | PKPbc | 20 12 35.5 | -0.5 |
| | comp=Z,2.7nm,0.5s,baz=41,slow=4.1,SNR=17 | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **145.86** | **8** | PKPbc | | **PKPbc** | **PKPbc** | **20 12 38.7** | **+0.3** |
| | comp=Z,0.4nm,0.4s,baz=311,slow=2.8,SNR=4.6 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **149.19** | **313** | PKPbc | | **PKPbc** | **PKPbc** | **20 12 48.4** | **+0.2** |
| | comp=Z,1.3nm,0.5s,baz=150,slow=6.2,SNR=12 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **150.25** | **299** | PKPbc | | **PKiKP** | **PKiKP** | **20 12 52.0** | **+0.4** |
| | comp=Z,1.8nm,0.5s,baz=70,slow=7.2,SNR=9.0 | | | | | | | | |

*IDC **30** 19:53:46.0±1.2,16.39N×91.10W,h0km,mb3.6/3, mbtmp3.6/4,ML3.0/1,Error ellipse: s-maj=42.8km s-min=12.3km az=61.0*
*CATAC **30** 19:53:47.0±0.7,14.39N×92.04W,h74km±5km,ML4.0*
*GCG **30** 19:53:47.3±2.1,14.33N×92.03W,h70km,MD4.0*
*SNET **30** 19:53:48.0±1.1,14.48N×91.80W,h90km±7km,ML4.0*

**ISC 30 19:53:47.1±1.0,14.45N±0.07×91.95W±0.05,h94km±6km, n36,σ0s96/53,mb3.6/3,2D,Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RTAL** | **Retalhuleu** | **0.26** | **73** | *e*P | | **Pn** | **Pn** | **19 54 00.2** | **-0.6** |
| RTAL | | | | *e*S | | **Sn** | **Sn** | **19 54 11.1** | **0.0** |
| **RTAL** | **Retalhuleu** | **0.26** | **73** | *i*P | | **Pn** | **Pn** | **19 54 00.2** | **-0.6** |
| RTAL | | | | *i*S | | **Sn** | **Sn** | **19 54 11.7** | **+0.7** |
| RTAL | | | | IAML | | | | 19 54 13.9 | |
| | comp=Z,5μm,1.0s | | | | | | | | |
| **SULM** | **Suchitepequez,** | **0.40** | **110** | *e*P | | **Pn** | **Pn** | **19 54 02.4** | **+0.8** |
| **STG3** | **Santiaguito 3,** | **0.45** | **54**⇓ | *e*P | | **Pn** | **Pn** | **19 54 02.3** | **+0.2** |
| **QUEO** | **Labor Ovalle** | **0.60** | **45** | *i*P | | **Pn** | **Pn** | **19 54 03.2** | **-0.2** |
| QUEO | | | | *i*S | | **Sn** | **Sn** | **19 54 14.0** | **-1.6** |
| QUEO | | | | IAML | | | | 19 54 30.5 | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| **SOKI** | **Kika Raxquin** | **0.65** | **55** | *i*P | | **Pn** | **Pn** | **19 54 03.8** | **-0.2** |
| SOKI | | | | *i*S | | **Sn** | **Sn** | **19 54 17.5** | **+1.0** |
| SOKI | | | | IAML | | | | 19 54 22.3 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **HUEH** | **Huehuetenango** | **0.97** | **27** | *e*P | | **Pn** | **Pn** | **19 54 06.7** | **-0.3** |
| HUEH | | | | *e*S | | **Sn** | **Sn** | **19 54 22.8** | **+0.9** |
| **HUEH** | **Huehuetenango** | **0.97** | **27** | *i*P | | **Pn** | **Pn** | **19 54 07.1** | **+0.1** |
| HUEH | | | | IAML | | | | 19 54 07.3 | |
| | comp=Z,6μm,1.0s | | | | | | | | |
| HUEH | | | | *i*S | | **Sn** | **Sn** | **19 54 21.0** | **-0.9** |
| **CHTG** | **Tecpan** | **0.99** | **71** | *i*P | | **Pn** | **Pn** | **19 54 07.1** | **-0.1** |
| CHTG | | | | IAML | | | | 19 54 07.6 | |
| | comp=Z,8μm,1.0s | | | | | | | | |
| **FUG** | **Fuego 3** | **1.08** | **90** | *e*P | | **Pn** | **Pn** | **19 54 08.4** | **+0.3** |
| FUG | | | | *e*S | | **Sn** | **Sn** | **19 54 22.9** | **-1.0** |
| **QUIS** | **Sacapulas** | **1.18** | **45** | *i*P | | **Pn** | **Pn** | **19 54 09.6** | **+0.3** |
| QUIS | | | | IAML | | | | 19 54 09.8 | |
| | comp=Z,4μm,1.0s | | | | | | | | |
| QUIS | | | | *i*S | | **Sn** | **Sn** | **19 54 26.5** | **+0.4** |
| **PCG** | **Pacaya** | **1.30** | **92** | *e*P | | **Pn** | **Pn** | **19 54 11.6** | **+0.8** |
| PCG | | | | *e*S | | **Sn** | **Sn** | **19 54 28.7** | **-0.1** |
| **GUMI** | **Mixco** | **1.31** | **82** | *i*P | | **Pn** | **Pn** | **19 54 10.9** | **0.0** |
| GUMI | | | | IAML | | | | 19 54 11.2 | |
| | comp=Z,3μm,1.0s | | | | | | | | |
| **GCG4** | **OSOP** | **1.38** | **84** | *i*P | | **Pn** | **Pn** | **19 54 11.4** | **-0.3** |
| GCG4 | | | | IAML | | | | 19 54 12.0 | |
| | comp=Z,2μm,1.0s | | | | | | | | |
| **APG** | **El Apazote** | **1.54** | **69** | Pg | | **Pn** | **Pn** | **19 54 13.7** | **-0.1** |
| | comp=Z,7.0nm,0.3s,baz=307,slow=8.9,SNR=507 | | | | | | | | |
| APG | | | | Lg | | Lg | Lg | 19 54 34.2 | |
| | comp=Z,3.6nm,0.3s,baz=176,slow=20,SNR=22 | | | | | | | | |
| APG | | | | LR | | LR | LR | 19 54 51.6 | |
| | comp=Z,10nm,20.3s,baz=242,slow=43 | | | | | | | | |
| **NBG** | **Las Nubes** | **1.56** | **85** | *e*P | | **Pn** | **Pn** | **19 54 15.0** | **+0.9** |
| NBG | | | | *e*S | | **Sn** | **Sn** | **19 54 36.4** | **+1.9** |
| **AVCB** | **Coban** | **1.81** | **56** | *i*P | | **Pn** | **Pn** | **19 54 16.9** | **-0.2** |
| AVCB | | | | *i*S | | **Sn** | **Sn** | **19 54 41.7** | **+1.8** |
| AVCB | | | | IAML | | | | 19 55 36.7 | |
| | comp=Z,7μm,1.0s | | | | | | | | |
| **CCIG** | **Comitan** | **1.83** | **354** | *i*P | | **Pn** | **Pn** | **19 54 18.1** | **+0.6** |
| CCIG | | | | IAML | | | | 19 54 53.3 | |
| | comp=Z,510nm,1.0s | | | | | | | | |
| **LOAL** | **Lomas de Alarc** | **2.15** | **102** | *i*S | | **Sn** | **Sn** | **19 54 48.8** | **+1.0** |
| **NUBE** | **Las Nubes** | **2.17** | **104** | *e*P | | **Pn** | **Pn** | **19 54 21.1** | **-0.8** |
| **NUBE** | **Las Nubes** | **2.17** | **104** | *i*P | | **Pn** | **Pn** | **19 54 21.3** | **-0.6** |
| NUBE | | | | IAML | | | | 19 54 50.5 | |
| | comp=Z,460nm,1.0s | | | | | | | | |
| NUBE | | | | *i*S | | **Sn** | **Sn** | **19 54 50.7** | **+2.2** |
| **MRL** | **Marmol** | **2.28** | **74**⇓ | *e*P | | **Pn** | **Pn** | **19 54 24.0** | **+0.7** |
| MRL | | | | *e*S | | **Sn** | **Sn** | **19 54 49.1** | **-2.0** |
| **SBLS** | **San Blas** | **2.34** | **105** | *e*P | | **Pn** | **Pn** | **19 54 24.6** | **+0.5** |
| **CEVE** | **Cerro Verde** | **2.34** | **105** | *e*P | | **Pn** | **Pn** | **19 54 24.5** | **+0.3** |
| CEVE | | | | IAML | | | | 19 54 56.8 | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| **CEVE** | **Cerro Verde** | **2.34** | **105** | *i*P | | **Pn** | **Pn** | **19 54 25.8** | **+1.7** |
| CEVE | | | | IAML | | | | 19 54 56.7 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **SNJE** | **San Jose** | **2.35** | **104** | *e*S | | **Sn** | **Sn** | **19 54 51.9** | **-0.7** |
| **MTO3** | **Montecristo** | **2.51** | **91** | *e*P | | **Pn** | **Pn** | **19 54 25.8** | **-0.6** |
| **MTO3** | **Montecristo** | **2.51** | **91** | *i*P | | **Pn** | **Pn** | **19 54 25.7** | **-0.6** |
| MTO3 | | | | IAML | | | | 19 54 25.9 | |
| | comp=Z,70nm,1.0s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.55** | **108** | *e*P | | **Pn** | **Pn** | **19 54 26.6** | **-0.3** |
| JAYA | | | | *e*S | | **Sn** | **Sn** | **19 54 55.8** | **-1.7** |
| JAYA | | | | IAML | | | | 19 54 59.8 | |
| | comp=Z,469nm,0.2s | | | | | | | | |
| **JAYA** | **Jayaque - finc** | **2.55** | **108** | *i*P | | **Pn** | **Pn** | **19 54 26.9** | **0.0** |
| JAYA | | | | *i*S | | **Sn** | **Sn** | **19 54 57.9** | **+0.5** |
| JAYA | | | | IAML | | | | 19 55 00.3 | |
| | comp=Z,1μm,1.0s | | | | | | | | |
| **PMON** | **Piamonte** | **2.66** | **106** | *e*P | | **Pn** | **Pn** | **19 54 28.3** | **0.0** |
| PMON | | | | *e*S | | **Sn** | **Sn** | **19 54 58.9** | **-1.0** |
| **CMIG** | **Matias Romero** | **3.86** | **313** | Pn | | **Pn** | **Pn** | **19 54 44.6** | **+0.4** |
| | comp=Z,1.3nm,0.3s,baz=104,slow=9.5,SNR=12 | | | | | | | | |
| CMIG | | | | Sn | | **Sn** | **Sn** | **19 55 28.0** | **-0.6** |
| | comp=Z,10.0nm,0.3s,baz=34,slow=5.7,SNR=6.0 | | | | | | | | |
| | comp=Z,3.9nm,0.3s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **18.35** | **326** | Pn | | **P** | **P** | **19 57 53.8** | **-0.6** |
| | baz=151,slow=11 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.36** | **321** | P | | **P** | **P** | **20 00 18.5** | **+2.0** |
| | comp=Z,0.8nm,0.7s,baz=122,slow=6.8,SNR=5.4 | | | | | | | | |
| | comp=Z,0.8nm,0.7s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.60** | **347** | P | | **P** | **P** | **20 02 34.4** | **-1.6** |
| | comp=Z,0.4nm,0.6s,baz=139,slow=7.9,SNR=2.0 | | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **62.45** | **337** | P | | **P** | **P** | **20 03 59.9** | **-0.1** |
| | comp=Z,0.5nm,0.7s,baz=112,slow=4.1,SNR=5.0 | | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | | |

*IDC **30** 19:56:07.0±2.1,8.12S×116.23E,h0km,mb3.2/3, mbtmp3.3/4,ML3.2/1,Error ellipse: s-maj=58.9km s-min=28.6km az=54.0*
*DJA **30** 19:56:10.4±0.4,8.5S±5.1×11.6E±.,h10km,M3.8/8,mb4.0/1, MLv3.7/8*

**ISC 30 19:56:09.6±0.9,8.04S±0.07×116.33E±0.05,h10km,n12, σ0s89/14,mb3.3/3,Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.88** | **142** | P | | P | **Pg** | **19 56 25.9** | **-0.7** |
| TWSI | | | | S | | S | **Sg** | **19 56 39.8** | **+1.6** |
| **SRBI** | **Singaraja** | **1.10** | **268** | P | | P | **Pb** | **19 56 31.7** | **+0.9** |
| **DNP** | **Denpasar** | **1.27** | **240** | P | | P | **Pn** | **19 56 33.7** | **+0.3** |
| **PLAI** | **Plampang** | **1.63** | **119** | P | | P | **Pn** | **19 56 38.9** | **+0.5** |
| PLAI | | | | S | | S | **Sn** | **19 56 59.7** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.19** | **259** | P | | P | **Pn** | **19 56 46.5** | **+0.3** |
| **WBSI** | **Waikabubak, Su** | **3.42** | **118** | P | | P | **Pn** | **19 57 02.4** | **-0.7** |
| **BSSI** | **Bau Bau, Buton** | **4.54** | **66** | P | | P | **Pn** | **19 57 19.2** | **+0.7** |
| **KAPI** | **Kappang** | **4.54** | **49** | Pn | | Pn | **Pn** | **19 57 18.8** | **+0.4** |
| | 1.0nm,0.3s,baz=202,slow=19,SNR=1.5 | | | | | | | | |
| | 3.8nm,0.5s | | | | | | | | |
| **EDFI** | **Ende, Flores** | **5.35** | **98** | P | | P | **Pn** | **19 57 30.6** | **+0.9** |
| **WRA** | **Warramunga Arr** | **21.08** | **126** | P | | **P** | **P** | **20 00 53.6** | **-0.7** |
| | 1.2nm,0.8s,baz=299,slow=12,SNR=8.7 | | | | | | | | |
| | 1.2nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.92** | **135** | P | | **P** | **P** | **20 01 13.0** | **-1.0** |
| | 0.4nm,0.8s,baz=312,slow=10,SNR=3.5 | | | | | | | | |
| | 0.4nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.43** | **334** | P | | **P** | **P** | **20 06 32.0** | **-0.9** |
| | 0.3nm,0.7s,baz=139,slow=9.3,SNR=1.9 | | | | | | | | |
| | 0.3nm,0.7s | | | | | | | | |

*TEH **30** 20:02:46.6,34.61N×46.27E,h8km±29km,ML2.8*
*ISN **30** 20:02:46.2±0.8,34.62N×46.29E,h8km±9km,ML2.9*

**ISC 30 20:02:47.3±0.9,34.62N±0.03×46.26E±0.03,h10km,n19, σ1s20/23,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.13** | **52** | Pg | | **Pg** | **Pg** | **20 02 49.4** | **-1.2** |
| **IGHG** | **Ghaleghazi** | **0.38** | **138** | Pg | | **Pg** | **Pg** | **20 02 54.6** | **-0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.57** | **259** | Pg | | **Pg** | **Pg** | **20 02 57.8** | **-0.5** |
| **GLG1** | **Gilan-e-Gharb** | **0.58** | **210** | Pg | | **Pg** | **Pg** | **20 02 57.7** | **-0.9** |
| **KCHF** | **Cheshme Sefid,** | **0.73** | **118** | Pg | | **Pg** | **Pg** | **20 03 00.4** | **-1.1** |
| **ILBA** | **Ilam Banvizeh** | **0.99** | **183** | Pg | | **Pg** | **Pg** | **20 03 05.7** | **-0.7** |
| **SNQR** | **Sonqor, Kerman** | **1.15** | **78** | Pg | | **Pg** | **Pg** | **20 03 08.4** | **-1.1** |
| **IBZA** | **Bozab** | **1.33** | **96** | Pg | | **Pg** | **Pg** | **20 03 11.8** | **-1.0** |
| **IBDR** | **Badra** | **1.53** | **190** | *e*Pn | | **Pb** | **Pb** | **20 03 15.0** | **-0.8** |
| IBDR | | | | *e*Sn | | **Sg** | **Sg** | **20 03 37.0** | **+0.5** |
| IBDR | | | | AML | | AML | AML | 20 03 42.2 | |
| | comp=E,181nm,0.6s | | | | | | | | |
| IBDR | | | | AML | | AML | AML | 20 03 49.5 | |
| | comp=N,172nm,0.9s | | | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.71** | **129** | Pg | | **Pg** | **Pg** | **20 03 19.8** | **-0.4** |
| **IKRK** | **Kirkuk** | **1.76** | **297** | *e*Pn | | **Pb** | **Pb** | **20 03 19.0** | **-0.7** |
| IKRK | | | | *e*Sn | | **Sg** | **Sg** | **20 03 43.0** | **-0.9** |
| **IDOB** | **Doab** | **1.79** | **117** | Pg | | **Pg** | **Pg** | **20 03 21.1** | **-0.7** |
| **HSAM** | **Samen** | **1.98** | **101** | Pn | | **Pb** | **Pb** | **20 03 22.6** | **-1.0** |
| **BHD** | **Baghdad** | **2.06** | **230** | *e*Pn | | **Pb** | **Pb** | **20 03 23.0** | **-1.9** |
| BHD | | | | *e*Sn | | **Sb** | **Sb** | **20 03 50.0** | **-0.5** |
| **MAHB** | **Mahabad** | **2.19** | **348** | Pn | | **Pb** | **Pb** | **20 03 26.3** | **-0.8** |
| **BDRS** | **Dareh Seyedi** | **2.27** | **106** | Pn | | **Pb** | **Pb** | **20 03 27.6** | **-1.0** |
| **RAFI** | **Al-Rafai** | **2.89** | **182** | *e*Pn | | **Pn** | **Pn** | **20 03 35.0** | **+1.6** |
| RAFI | | | | *e*Sn | | **Sn** | **Sn** | **20 04 09.5** | **+1.3** |
| **ISRB** | **Sarab** | **3.40** | **19** | Pn | | **Pn** | **Pn** | **20 03 42.4** | **+1.7** |
| **ISHB** | **Shabestar** | **3.69** | **352** | Pn | | **Pn** | **Pn** | **20 03 47.1** | **+2.4** |

*IDC **30** 20:14:24.6±4.3,24.78N×122.38E,h107km±46km,mb3.5/8, mbtmp3.9/10,MS2.5/1,Error ellipse: s-maj=29.0km s-min=14.8km az=65.0*
*JMA **30** 20:14:24.2±0.2,25.1×122.3E±0.5,h100km±2km, MV3.9/19,TAIWAN REGION*
*ASIES **30** 20:14:24.1,24.72N×122.31E,h100km,ML4.7,Mw4.0, Moment Tensor Solution. Moment tensor: Scale 10²²Nm; Mrr-0.35; Mθθ0.42; Mϕϕ-0.07; Mrθ0.40; Mrϕ-0.22; Mθϕ-1.20; Fault plane solution: Mo1.34004×10²² NP1: ϕs336.41000°,δ84.02000°,λ-75.26000°. NP2:ϕs88.02000°, δ15.88000°,λ-157.62000°. Principal axes: T Plg37.3340°, Azm53.3380°; N Plg14.6560°, Azm154.8440°; P Plg48.9200°, Azm262.3020°;*
*TAP **30** 20:14:24.1,24.72N×122.31E,h100km,ML4.7,C*
*NIED **30** 20:14:24.2,24.66N×122.30E,h100km,MW3.9,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr-2.24; Mθθ1.55; Mϕϕ0.69; Mrθ3.23; Mθϕ-0.96; Mrϕ-5.94; Fault plane solution: Mo7.10000×10¹⁴ NP1: ϕs330.00000°,δ82.00000°,λ-83.00000°. NP2: ϕs109.00000°,δ11.00000°,λ-130.00000°.*

**ISC 30 20:14:24.2±0.7,24.71N±0.03×122.32E±0.02,h102km±4km, n181,σ0s97/326,mb3.7/7,87C-6D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **EOS2** | **EOS2** | **0.30** | **196** | *e*P | | **Pn** | **Pn** | **20 14 39.4** | **+0.4** |
| | baz=209 | | | | | | | | |
| EOS2 | | | | *e*S | | | **Sn** | **20 14 51.2** | **+1.3** |
| | baz=209 | | | | | | | | |
| **EGS** | | **0.38** | **291** | *e*P | | **Pn** | **Pn** | **20 14 39.5** | **+0.1** |
| | baz=283 | | | | | | | | |
| EGS | | | | *e*S | | | **Sn** | **20 14 50.0** | **-0.9** |
| | baz=283 | | | | | | | | |
| **EOS3** | **EOS3** | **0.42** | **180** | *i*P | | **Pn** | **Pn** | **20 14 40.3** | **+0.7** |
| | baz=195 | | | | | | | | |
| EOS3 | | | | *e*S | | | **Sn** | **20 14 51.2** | **+0.3** |
| | baz=195 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.42** | **315**⇓ | *i*P | | **Pn** | **Pn** | **20 14 39.6** | **-0.1** |
| | baz=308 | | | | | | | | |
| TWB1 | | | | *i*S | | | **Sn** | **20 14 50.5** | **-0.8** |
| | baz=308 | | | | | | | | |
| **TWC** | **Suao** | **0.44** | **257**⇑ | *i*P | | **Pn** | **Pn** | **20 14 39.5** | **-0.3** |
| | baz=254 | | | | | | | | |
| TWC | | | | *i*S | | | **Sn** | **20 14 50.4** | **-1.1** |
| | baz=254 | | | | | | | | |
| **ESAO** | **Su ao** | **0.45** | **253**⇑ | *i*P | | **Pn** | **Pn** | **20 14 39.8** | **-0.1** |
| | baz=251 | | | | | | | | |
| ESAO | | | | *i*S | | | **Sn** | **20 14 50.7** | **-0.9** |
| | baz=251 | | | | | | | | |
| **NTC** | **Toucheng** | **0.47** | **288** | *e*P | | **Pn** | **Pn** | **20 14 39.8** | **-0.2** |
| | baz=286 | | | | | | | | |
| NTC | | | | *e*S | | | **Sn** | **20 14 51.4** | **-0.4** |
| | baz=286 | | | | | | | | |
| **TIPB** | **Shuangxi** | **0.52** | **300**⇑ | *i*P | | **Pn** | **Pn** | **20 14 40.4** | **0.0** |
| | baz=296 | | | | | | | | |
| TIPB | | | | *i*S | | | **Sn** | **20 14 51.6** | **-0.9** |
| | baz=296 | | | | | | | | |
| **ILA** | **Ilan** | **0.52** | **276** | ⇑P | | **Pn** | **Pn** | **20 14 40.6** | **+0.2** |
| | baz=274 | | | | | | | | |
| ILA | | | | S | | | **Sn** | **20 14 52.4** | **-0.1** |
| | baz=274 | | | | | | | | |
| **NDS** | **Dongshan** | **0.56** | **262**⇑ | *i*P | | **Pn** | **Pn** | **20 14 40.8** | **+0.2** |
| | baz=260 | | | | | | | | |
| NDS | | | | S | | | **Sn** | **20 14 52.1** | **-0.9** |
| | baz=260 | | | | | | | | |
| **SXI1** | **Grass Mountain** | **0.56** | **314**⇓ | *i*P | | **Pn** | **Pn** | **20 14 40.7** | **-0.1** |
| | baz=303 | | | | | | | | |
| **EWUT** | **Wuta** | **0.56** | **242**⇑ | *i*P | | **Pn** | **Pn** | **20

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ANP | | | | *e*S | **Sn** | 20 14 56.7 | -1.4 | |
| | baz=295 | | | | | | | | |
| **NSK** | **Sanguang** | **0.88** | **268** | ⇑*i*P | **Pn** | 20 14 43.7 | +0.1 | |
| | baz=274 | | | | | | | | |
| NSK | | | | *i* S | **Sn** | 20 14 57.8 | -0.4 | |
| | baz=274 | | | | | | | | |
| **NNSB** | **Datong** | **0.90** | **252** | ⇑*i*P | **Pn** | 20 14 44.1 | +0.3 | |
| | baz=246 | | | | | | | | |
| NNSB | | | | *e*S | **Sn** | 20 14 58.6 | 0.0 | |
| | baz=246 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.90** | **253** | ⇑*i*P | **Pn** | 20 14 44.2 | +0.3 | |
| | baz=246 | | | | | | | | |
| NNS | | | | *i* S | **Sn** | 20 14 58.7 | 0.0 | |
| | baz=246 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.91** | **296** | ⇑*i*P | **Pn** | 20 14 42.9 | -1.0 | |
| | baz=295 | | | | | | | | |
| TWS1 | | | | *i* S | **Sn** | 20 14 57.1 | -1.5 | |
| | baz=295 | | | | | | | | |
| **TWD** | **Chiawan** | **0.91** | **227** | ⇑*i*P | **Pn** | 20 14 43.4 | -0.5 | |
| | baz=222 | | | | | | | | |
| TWD | | | | *i* S | **Sn** | 20 14 58.0 | -0.7 | |
| | baz=222 | | | | | | | | |
| **NTST** | **Danshui** | **0.91** | **300** | ⇑P | **Pn** | 20 14 44.0 | +0.1 | |
| | baz=299 | | | | | | | | |
| NTST | | | | S | **Sn** | 20 14 58.4 | -0.2 | |
| | baz=299 | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **0.91** | **237** | ⇑*i*P | **Pn** | 20 14 43.9 | -0.1 | |
| | baz=235 | | | | | | | | |
| ETLH | | | | *e*S | **Sn** | 20 14 58.1 | -0.8 | |
| | baz=235 | | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.94** | **346** | ⇓*i*P | **Pn** | 20 14 44.6 | +0.4 | |
| | baz=340 | | | | | | | | |
| PCYT | | | | *e*S | **Sn** | 20 14 59.2 | 0.0 | |
| | baz=340 | | | | | | | | |
| **HWA** | **Hwalien** | **0.98** | **222** | ⇑*i*P | **Pn** | 20 14 44.6 | +0.1 | |
| | baz=220 | | | | | | | | |
| HWA | | | | *i* S | **Sn** | 20 15 00.6 | +0.7 | |
| | baz=220 | | | | | | | | |
| **ETM** | **Tongmen** | **1.06** | **226** | ⇑*i*P | **Pn** | 20 14 45.1 | -0.4 | |
| | baz=233 | | | | | | | | |
| ETM | | | | *e*S | **Sn** | 20 15 00.2 | -1.2 | |
| | baz=233 | | | | | | | | |
| **NCUH** | **Zhongli** | **1.06** | **284** | ⇑P | **Pn** | 20 14 46.0 | +0.5 | |
| | baz=275 | | | | | | | | |
| NCUH | | | | *i* S | **Sn** | 20 15 02.1 | +0.6 | |
| | baz=275 | | | | | | | | |
| **TEYL** | **Yanliau Villag** | **1.07** | **218** | ⇑*i*P | **Pn** | 20 14 45.4 | -0.1 | |
| | baz=218 | | | | | | | | |
| TEYL | | | | *e*S | **Sn** | 20 15 00.8 | -0.8 | |
| | baz=218 | | | | | | | | |
| **LXIB** | **Xiulin Townshi** | **1.07** | **231** | ⇑*i*P | **Pn** | 20 14 45.3 | -0.5 | |
| | baz=229 | | | | | | | | |
| LXIB | | | | *i* S | **Sn** | 20 15 02.0 | -0.1 | |
| | baz=229 | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **1.10** | **266** | ⇑*i*P | **Pn** | 20 14 46.1 | +0.2 | |
| | baz=275 | | | | | | | | |
| NFF | | | | *i* S | **Sn** | 20 15 02.0 | -0.3 | |
| | baz=275 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.11** | **240** | ⇓*i*P | **Pn** | 20 14 46.7 | +0.1 | |
| | baz=233 | | | | | | | | |
| WHF | | | | S | **Sn** | 20 15 03.5 | +0.3 | |
| | baz=233 | | | | | | | | |
| **TWT** | **Tachien** | **1.14** | **247** | ⇑*i*P | **Pn** | 20 14 47.4 | +0.9 | |
| | baz=239 | | | | | | | | |
| TWT | | | | *i* S | **Sn** | 20 15 03.6 | +0.3 | |
| | baz=239 | | | | | | | | |
| **SHUL** | **Shoufeng** | **1.15** | **217** | ⇑*i*P | **Pn** | 20 14 46.3 | -0.1 | |
| | baz=208 | | | | | | | | |
| SHUL | | | | *e*S | **Sn** | 20 15 03.1 | -0.1 | |
| | baz=208 | | | | | | | | |
| **TDCB** | **Techi** | **1.15** | **247** | ⇑*i*P | **Pn** | 20 14 47.4 | +0.7 | |
| | baz=240 | | | | | | | | |
| TDCB | | | | *e*S | **Sn** | 20 15 03.3 | -0.3 | |
| | baz=240 | | | | | | | | |
| **LIOB** | **Emei** | **1.19** | **267** | ⇑*i*P | **Pn** | 20 14 47.2 | +0.3 | |
| | baz=266 | | | | | | | | |
| LIOB | | | | S | **Sn** | 20 15 04.0 | -0.1 | |
| | baz=266 | | | | | | | | |
| **NSTT** | **Nanjuang** | **1.20** | **267** | ⇑*i*P | **Pn** | 20 14 47.2 | +0.1 | |
| | baz=265 | | | | | | | | |
| NSTT | | | | *i* S | **Sn** | 20 15 03.8 | -0.6 | |
| | baz=265 | | | | | | | | |
| **ESL** | **Shilin** | **1.21** | **222** | ⇑*i*P | **Pn** | 20 14 46.3 | -0.8 | |
| | baz=228 | | | | | | | | |
| ESL | | | | *e*S | **Sn** | 20 15 02.8 | -1.6 | |
| | baz=228 | | | | | | | | |
| **SBCB** | **Hsinchu** | **1.22** | **274** | ⇑*i*P | **Pn** | 20 14 47.6 | +0.4 | |
| | baz=273 | | | | | | | | |
| SBCB | | | | S | **Sn** | 20 15 04.0 | -0.6 | |
| | baz=273 | | | | | | | | |
| **TEGC** | **Jichi Village** | **1.23** | **216** | *e*P | **Pn** | 20 14 47.1 | -0.2 | |
| | baz=207 | | | | | | | | |
| TEGC | | | | *e*S | **Sn** | 20 15 04.5 | -0.2 | |
| | baz=207 | | | | | | | | |
| **CHGB** | **Renai** | **1.23** | **239** | ⇑*i*P | **Pn** | 20 14 48.1 | +0.5 | |
| | baz=231 | | | | | | | | |
| CHGB | | | | S | **Sn** | 20 15 04.8 | -0.4 | |
| | baz=231 | | | | | | | | |
| **HSN** | **Hsinchu** | **1.23** | **275** | ⇑P | **Pn** | 20 14 47.4 | 0.0 | |
| | baz=275 | | | | | | | | |
| HSN | | | | *i* S | **Sn** | 20 15 04.2 | -0.7 | |
| | baz=275 | | | | | | | | |
| **OWD** | **Renai** | **1.29** | **235** | ⇑*i*P | **Pn** | 20 14 48.4 | +0.2 | |
| | baz=229 | | | | | | | | |
| OWD | | | | *e*S | **Sn** | 20 15 05.8 | -0.5 | |
| | baz=229 | | | | | | | | |
| **WARBT** | **Fenglin Townsh** | **1.30** | **221** | ⇑*i*P | **Pn** | 20 14 47.4 | -0.9 | |
| | baz=226 | | | | | | | | |
| WARBT | | | | *i* S | **Sn** | 20 15 04.8 | -1.6 | |
| | baz=226 | | | | | | | | |
| **WUSB** | **Renai** | **1.31** | **237** | ⇑*i*P | **Pn** | 20 14 49.0 | +0.5 | |
| | baz=230 | | | | | | | | |
| WUSB | | | | S | **Sn** | 20 15 07.0 | +0.3 | |
| | baz=230 | | | | | | | | |
| **EGFH** | **Guangfu** | **1.32** | **218** | *i* P | **Pn** | 20 14 47.7 | -0.7 | |
| | baz=226 | | | | | | | | |
| EGFH | | | | *i* S | **Sn** | 20 15 05.5 | -1.3 | |
| | baz=226 | | | | | | | | |
| **WHP** | **Taichung City** | **1.32** | **251** | ⇑*i*P | **Pn** | 20 14 49.6 | +1.0 | |
| | baz=259 | | | | | | | | |
| WHP | | | | S | **Sn** | 20 15 07.7 | +0.7 | |
| | baz=259 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.34** | **106** | P | **Pn** | 20 14 48.5 | -0.1 | |
| IRIF | | | | S | **Sn** | 20 15 07.0 | -0.1 | |
| **NMLH** | **Miaoli** | **1.40** | **263** | ⇑P | **Pn** | 20 14 49.9 | +0.5 | |
| | baz=262 | | | | | | | | |
| NMLH | | | | *e*S | **Sn** | 20 15 08.3 | -0.3 | |
| | baz=262 | | | | | | | | |
| **VWDT** | **VWDT** | **1.44** | **229** | ⇑*i*P | **Pn** | 20 14 50.2 | +0.4 | |
| | baz=223 | | | | | | | | |
| VWDT | | | | *e*S | **Sn** | 20 15 08.4 | -0.8 | |
| | baz=223 | | | | | | | | |
| **WCS** | **Beigang Elemen** | **1.44** | **244** | ⇑*e*P | **Pn** | 20 14 50.7 | +0.9 | |
| | baz=251 | | | | | | | | |
| WCS | | | | *i* S | **Sn** | 20 15 10.4 | +1.2 | |
| | baz=251 | | | | | | | | |
| **NSY** | **Sanyi** | **1.45** | **259** | ⇑*i*P | **Pn** | 20 14 50.7 | +0.7 | |
| | baz=257 | | | | | | | | |
| NSY | | | | S | **Sn** | 20 15 09.8 | +0.2 | |
| | baz=257 | | | | | | | | |
| **TWQ1** | **Liyutan** | **1.46** | **256** | ⇑*i*P | **Pn** | 20 14 50.5 | +0.4 | |
| | baz=255 | | | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | 20 15 09.2 | -0.5 | |
| | baz=255 | | | | | | | | |
| **HGSD** | **Ruisui** | **1.46** | **214** | ⇑*i*P | **Pn** | 20 14 49.9 | -0.3 | |
| | baz=206 | | | | | | | | |
| HGSD | | | | *e*S | **Sn** | 20 15 09.6 | -0.2 | |
| | baz=206 | | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.50** | **115** | P | **Pn** | 20 14 51.0 | +0.4 | |
| HATJ | | | | *e*S | **Sn** | 20 15 10.9 | +0.3 | |
| **EHYH** | **Wanrong** | **1.50** | **217** | P | **Pn** | 20 14 49.8 | -0.8 | |
| | baz=224 | | | | | | | | |
| EHYH | | | | *e*S | **Sn** | 20 15 08.4 | -2.3 | |
| | baz=224 | | | | | | | | |
| **EHY** | **Hungye** | **1.51** | **218** | ⇑*i*P | **Pn** | 20 14 49.5 | -1.2 | |
| | baz=224 | | | | | | | | |
| EHY | | | | *e*S | **Sn** | 20 15 08.4 | -2.4 | |
| | baz=224 | | | | | | | | |
| **SSLB** | **Suanglung** | **1.55** | **234** | P | **Pn** | 20 14 51.9 | +0.7 | |
| **SSLB** | **Suanglung** | **1.55** | **234** | ⇑*i*P | **Pn** | 20 14 51.6 | +0.3 | |
| | baz=229 | | | | | | | | |
| SSLB | | | | S | **Sn** | 20 15 13.2 | +1.5 | |
| | baz=229 | | | | | | | | |
| **TYC** | **Yuchr** | **1.56** | **239** | ⇑*i*P | **Pn** | 20 14 52.2 | +0.9 | |
| | baz=235 | | | | | | | | |
| TYC | | | | S | **Sn** | 20 15 13.1 | +1.2 | |
| | baz=235 | | | | | | | | |
| **WDJ** | **Dajia District** | **1.57** | **257** | ⇑*i*P | **Pn** | 20 14 52.1 | +0.6 | |
| | baz=256 | | | | | | | | |
| WDJ | | | | *i* S | **Sn** | 20 15 12.8 | +0.6 | |
| | baz=256 | | | | | | | | |
| **ECBN** | **Changbin** | **1.60** | **210** | ⇑*i*P | **Pn** | 20 14 51.5 | -0.3 | |
| | baz=203 | | | | | | | | |
| ECBN | | | | *e*S | **Sn** | 20 15 11.3 | -1.4 | |
| | baz=203 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.61** | **107** | P | **Pn** | 20 14 52.2 | +0.3 | |
| JKRS | | | | S | **Sn** | 20 15 13.0 | 0.0 | |
| **YULB** | **Yu-li** | **1.61** | **216** | ⇑*i*P | **Pn** | 20 14 50.9 | -1.1 | |
| | baz=222 | | | | | | | | |
| YULB | | | | *e*S | **Sn** | 20 15 10.8 | -2.2 | |
| | baz=222 | | | | | | | | |
| **TWF1** | **Yuli** | **1.64** | **215** | ⇑*i*P | **Pn** | 20 14 51.4 | -1.0 | |
| | baz=221 | | | | | | | | |
| TWF1 | | | | *e*S | **Sn** | 20 15 11.8 | -2.0 | |
| | baz=221 | | | | | | | | |
| **WHYT** | **Xinyi Township** | **1.68** | **233** | ⇑P | **Pn** | 20 14 54.2 | +1.4 | |
| | baz=241 | | | | | | | | |
| WHYT | | | | *i* S | **Sn** | 20 15 16.7 | +2.1 | |
| | baz=241 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.69** | **101** | *i* P | **Pn** | 20 14 52.9 | -0.1 | |
| JIJ | | | | S | **Sn** | 20 15 14.0 | -0.9 | |
| **WNT** | **Mingjian** | **1.71** | **241** | ⇑*i*P | **Pn** | 20 14 53.9 | +0.7 | |
| | baz=240 | | | | | | | | |
| WNT | | | | S | **Sn** | 20 15 16.2 | +1.0 | |
| | baz=240 | | | | | | | | |
| **CHKH** | **Chenggong** | **1.73** | **209** | ⇑*i*P | **Pn** | 20 14 52.7 | -0.8 | |
| | baz=202 | | | | | | | | |
| CHKH | | | | *e*S | **Sn** | 20 15 13.5 | -2.2 | |
| | baz=202 | | | | | | | | |
| **FULB** | **Fuli** | **1.77** | **212** | ⇑*i*P | **Pn** | 20 14 53.7 | -0.3 | |
| | baz=220 | | | | | | | | |
| FULB | | | | *e*S | **Sn** | 20 15 16.5 | -0.2 | |
| | baz=220 | | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.81** | **93** | *i* P | **Pn** | 20 14 54.6 | +0.1 | |
| JISG | | | | S | **Sn** | 20 15 17.2 | -0.3 | |
| **CHKT** | **Chengkung** | **1.83** | **209** | ⇑*i*P | **Pn** | 20 14 53.9 | -0.8 | |
| | baz=202 | | | | | | | | |
| CHKT | | | | S | **Sn** | 20 15 15.4 | -2.4 | |
| | baz=202 | | | | | | | | |
| **ALS** | **Alishan** | **1.83** | **230** | P | **Pn** | 20 14 56.1 | +1.1 | |
| | baz=222 | | | | | | | | |
| ALS | | | | S | **Sn** | 20 15 20.0 | +1.6 | |
| | baz=222 | | | | | | | | |
| **EHD** | **Haiduan** | **1.86** | **214** | *e*P | **Pn** | 20 14 53.9 | -1.3 | |
| | baz=212 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.86** | **234** | ⇑*i*P | **Pn** | 20 14 56.1 | +0.9 | |
| | baz=243 | | | | | | | | |
| CHN5 | | | | *e*S | **Sn** | 20 15 20.2 | +1.3 | |
| | baz=243 | | | | | | | | |
| **ECS** | **Chishang** | **1.90** | **212** | *e*P | **Pn** | 20 14 54.9 | -0.7 | |
| | baz=211 | | | | | | | | |
| ECS | | | | *e*S | **Sn** | 20 15 18.9 | -0.6 | |
| | baz=211 | | | | | | | | |
| **WGK** | **Gukeng** | **1.90** | **238** | ⇑*i*P | **Pn** | 20 14 56.5 | +0.8 | |
| | baz=237 | | | | | | | | |
| WGK | | | | *e*S | **Sn** | 20 15 21.2 | +1.6 | |
| | baz=237 | | | | | | | | |
| **WDLH** | **Douliu** | **1.92** | **238** | ⇑P | **Pn** | 20 14 56.7 | +0.8 | |
| | baz=237 | | | | | | | | |
| WDLH | | | | *i* S | **Sn** | 20 15 21.2 | +1.2 | |
| | baz=237 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.93** | **219** | P | **Pn** | 20 14 55.4 | -0.7 | |
| | baz=211 | | | | | | | | |
| ELDTW | | | | *e*S | **Sn** | 20 15 18.6 | -1.7 | |
| | baz=211 | | | | | | | | |
| **WRL** | **Guolierlin Hig** | **1.95** | **246** | ⇑*i*P | **Pn** | 20 14 56.5 | +0.3 | |
| | baz=252 | | | | | | | | |
| WRL | | | | *i* S | **Sn** | 20 15 21.2 | +0.6 | |
| | baz=252 | | | | | | | | |
| **EDH** | **Donghe** | **1.96** | **209** | ⇑P | **Pn** | 20 14 55.9 | -0.5 | |
| | baz=203 | | | | | | | | |
| EDH | | | | *e*S | **Sn** | 20 15 19.3 | -1.7 | |
| | baz=203 | | | | | | | | |
| **WCKO** | **Fanlu** | **2.02** | **231** | ⇑P | **Pn** | 20 14 58.1 | +1.0 | |
| | baz=230 | | | | | | | | |
| WCKO | | | | *i* S | **Sn** | 20 15 23.3 | +1.1 | |
| | baz=230 | | | | | | | | |
| **WTK** | **Tuku** | **2.04** | **240** | *e*P | **Pn** | 20 14 58.0 | +0.6 | |
| | baz=239 | | | | | | | | |
| WTK | | | | *e*S | **Sn** | 20 15 23.5 | +0.8 | |
| | baz=239 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **2.04** | **246** | *e*P | **Pn** | 20 14 57.4 | 0.0 | |
| | baz=251 | | | | | | | | |
| WTCT | | | | *e*S | **Sn** | 20 15 21.8 | -1.0 | |
| | baz=251 | | | | | | | | |
| **CHN2** | **Minshiung** | **2.05** | **236** | ⇑*i*P | **Pn** | 20 14 58.7 | +1.1 | |
| | baz=244 | | | | | | | | |
| CHN2 | | | | *i* S | **Sn** | 20 15 24.6 | +1.6 | |
| | baz=244 | | | | | | | | |
| **STYH** | **Taoyuan** | **2.08** | **223** | ⇑P | **Pn** | 20 14 58.9 | +0.9 | |
| | baz=222 | | | | | | | | |
| STYH | | | | S | **Sn** | 20 15 25.2 | +1.4 | |
| | baz=222 | | | | | | | | |
| **TPUB** | **Ta-pu** | **2.09** | **228** | P | **Pn** | 20 14 58.6 | +0.5 | |
| **TPUB** | **Ta-pu** | **2.09** | **228** | ⇑*i*P | **Pn** | 20 14 58.9 | +0.9 | |
| | baz=227 | | | | | | | | |
| TPUB | | | | *e*S | **Sn** | 20 15 24.2 | +0.3 | |
| | baz=227 | | | | | | | | |
| **LONT** | **Longtian** | **2.10** | **212** | *e*P | **Pn** | 20 14 57.2 | -1.0 | |
| | baz=210 | | | | | | | | |
| LONT | | | | S | **Sn** | 20 15 22.6 | -1.5 | |
| | baz=210 | | | | | | | | |
| **CHY** | **Chiayi** | **2.11** | **236** | *e*P | **Pn** | 20 14 59.2 | +0.9 | |
| | baz=243 | | | | | | | | |
| CHY | | | | *e*S | **Sn** | 20 15 25.7 | +1.3 | |
| | baz=243 | | | | | | | | |
| **WTP** | **Ta-pu** | **2.13** | **227** | ⇑*i*P | **Pn** | 20 14 59.5 | +0.8 | |
| | baz=226 | | | | | | | | |
| WTP | | | | *e*S | **Sn** | 20 15 25.0 | -0.1 | |
| | baz=226 | | | | | | | | |
| **JTJ** | **Tarama** | **2.17** | **91** | P | **Pn** | 20 14 59.7 | +0.7 | |
| JTJ | | | | S | **Sn** | 20 15 26.1 | +0.4 | |
| **LDUT** | **Ludao** | **2.17** | **201** | ⇓*i*P | **Pn** | 20 14 58.3 | -0.8 | |
| | baz=200 | | | | | | | | |
| LDUT | | | | S | **Sn** | 20 15 23.8 | -2.0 | |
| | baz=200 | | | | | | | | |
| **WSF** | **Szhu** | **2.19** | **241** | ⇑*i*P | **Pn** | 20 14 59.6 | +0.2 | |
| | baz=240 | | | | | | | | |
| WSF | | | | *e*S | **Sn** | 20 15 26.6 | +0.3 | |
| | baz=240 | | | | | | | | |
| **TWGBT** | **Beinan** | **2.20** | **211** | P | **Pn** | 20 14 58.7 | -0.8 | |
| **TWGBT** | **Beinan** | **2.20** | **211** | *e*P | **Pn** | 20 14 58.1 | -1.4 | |
| | baz=210 | | | | | | | | |
| TWGBT | | | | *e*S | **Sn** | 20 15 24.4 | -2.0 | |
| | baz=210 | | | | | | | | |
| **TWG** | **Pinlang** | **2.20** | **212** | *e*P | **Pn** | 20 14 58.2 | -1.3 | |
| | baz=210 | | | | | | | | |
| TWG | | | | *e*S | **Sn** | 20 15 24.9 | -1.6 | |
| | baz=210 | | | | | | | | |
| **TWK** | **Hsinying** | **2.21** | **230** | ⇑*i*P | **Pn** | 20 15 00.3 | +0.7 | |
| | baz=228 | | | | | | | | |
| TWK | | | | *e*S | **Sn** | 20 15 27.0 | +0.3 | |
| | baz=228 | | | | | | | | |
| **TTN** | **Taitung** | **2.22** | **209** | *e*P | **Pn** | 20 14 59.8 | 0.0 | |
| | baz=214 | | | | | | | | |
| TTN | | | | *e*S | **Sn** | 20 15 26.8 | -0.2 | |
| | baz=214 | | | | | | | | |
| **SNST** | **Tainan City** | **2.23** | **229** | P | **Pn** | 20 15 00.8 | +0.9 | |
| | baz=228 | | | | | | | | |
| SNST | | | | *i* S | **Sn** | 20 15 27.9 | +0.7 | |
| | baz=228 | | | | | | | | |
| **CHN1** | **Nanshi** | **2.23** | **228** | ⇑*i*P | **Pn** | 20 15 00.8 | +0.8 | |
| | baz=226 | | | | | | | | |
| CHN1 | | | | *i* S | **Sn** | 20 15 27.7 | +0.4 | |
| | baz=226 | | | | | | | | |
| **WSL** | **Shuilin Townsh** | **2.25** | **239** | *e*P | **Pn** | 20 15 00.5 | +0.4 | |
| | baz=245 | | | | | | | | |
| WSL | | | | *e*S | **Sn** | 20 15 28.7 | +1.1 | |
| | baz=245 | | | | | | | | |
| **SGST** | **Jiashian** | **2.27** | **225** | ⇑*i*P | **Pn** | 20 15 00.4 | 0.0 | |
| | baz=224 | | | | | | | | |
| SGST | | | | S | **Sn** | 20 15 28.2 | +0.1 | |
| | baz=224 | | | | | | | | |
| **SLGT** | **Liugui** | **2.29** | **222** | *e*P | **Pn** | 20 15 02.0 | +1.3 | |
| | baz=229 | | | | | | | | |
| SLGT | | | | S | **Sn** | 20 15 30.8 | +2.1 | |
| | baz=229 | | | | | | | | |
| **ICHU** | **Yijhu** | **2.30** | **235** | ⇑*i*P | **Pn** | 20 15 01.4 | +0.6 | |
| | baz=234 | | | | | | | | |
| ICHU | | | | *e*S | **Sn** | 20 15 29.4 | +0.7 | |
| | baz=234 | | | | | | | | |
| **CHN8** | **Yiju** | **2.36** | **235** | ⇑*i*P | **Pn** | 20 15 01.9 | +0.3 | |
| | baz=234 | | | | | | | | |
| CHN8 | | | | *i* S | **Sn** | 20 15 30.6 | +0.4 | |
| | baz=234 | | | | | | | | |
| **CHN3** | **Shinhua** | **2.42** | **228** | P | **Pn** | 20 15 03.6 | +1.2 | |
| | baz=227 | | | | | | | | |
| CHN3 | | | | *i* S | **Sn** | 20 15 34.2 | +2.6 | |
| | baz=227 | | | | | | | | |
| **SSHA** | **Shanhua** | **2.43** | **230** | *e*P | **Pn** | 20 15 03.8 | +1.2 | |
| | baz=229 | | | | | | | | |
| SSHA | | | | *i* S | **Sn** | 20 15 33.2 | +1.3 | |
| | baz=229 | | | | | | | | |
| **ECL** | **Taimali** | **2.45** | **211** | P | **Pn** | 20 15 01.6 | -1.2 | |
| | baz=210 | | | | | | | | |
| ECL | | | | *e*S | **Sn** | 20 15 29.3 | -3.0 | |
| | baz=210 | | | | | | | | |
| **SCST** | **Cishan** | **2.47** | **223** | *i* P | **Pn** | 20 15 04.4 | +1.4 | |
| | baz=222 | | | | | | | | |
| SCST | | | | *e*S | **Sn** | 20 15 34.6 | +1.8 | |
| | baz=222 | | | | | | | | |
| **SCLT** | **Jiali** | **2.47** | **232** | *i* P | **Pn** | 20 15 03.8 | +0.7 | |
| | baz=231 | | | | | | | | |
| SCLT | | | | *i* S | **Sn** | 20 15 33.8 | +0.9 | |
| | baz=231 | | | | | | | | |
| **TSMG** | **Majia** | **2.52** | **218** | *e*P | **Pn** | 20 15 04.4 | +0.8 | |
| | baz=216 | | | | | | | | |
| **TAI1** | **Yung-k'ang** | **2.54** | **230** | *e*P | **Pn** | 20 15 04.4 | +0.6 | |
| | baz=239 | | | | | | | | |
| TAI1 | | | | *e*S | **Sn** | 20 15 36.2 | +1.9 | |
| | baz=239 | | | | | | | | |
| **TWM1** | **Shoushan** | **2.56** | **223** | P | **Pn** | 20 15 06.3 | +2.0 | |
| | baz=222 | | | | | | | | |
| TWM1 | | | | *e*S | **Sn** | 20 15 36.0 | +1.1 | |
| | baz=222 | | | | | | | | |
| **TSCK** | **Chigu Township** | **2.57** | **233** | *i* P | **Pn** | 20 15 04.9 | +0.6 | |
| | baz=232 | | | | | | | | |
| TSCK | | | | S | **Sn** | 20 15 34.9 | -0.2 | |
| | baz=232 | | | | | | | | |
| **MATB** | **Ma-tsu** | **2.58** | **304** | *e*P | **Pn** | 20 15 03.5 | -1.0 | |
| | baz=304 | | | | | | | | |
| **SGLT** | **Jiouru** | **2.59** | **221** | *e*P | **Pn** | 20 15 06.5 | +1.9 | |
| | baz=219 | | | | | | | | |
| **JIRB** | **Irabujima** | **2.59** | **87** | P | **Pn** | 20 15 05.6 | +1.0 | |
| JIRB | | | | S | **Sn** | 20 15 35.6 | -0.1 | |
| **MASBT** | **Mashibuluo** | **2.60** | **217** | P | **Pn** | 20 15 05.7 | +0.9 | |
| | baz=228 | | | | | | | | |
| MASBT | | | | *e*S | **Sn** | 20 15 36.5 | +0.7 | |
| | baz=228 | | | | | | | | |
| **VWUC** | **VWUC** | **2.62** | **277** | ⇑*i*P | **Pn** | 20 15 04.5 | -0.6 | |
| | baz=276 | | | | | | | | |
| **JIKM** | **Ikemajima** | **2.67** | **85** | P | **Pn** | 20 15 06.7 | +1.1 | |
| JIKM | | | | S | **Sn** | 20 15 37.9 | +0.5 | |
| **EAST** | **Anshuo** | **2.68** | **211** | P | **Pn** | 20 15 05.0 | -0.9 | |
| | baz=204 | | | | | | | | |
| **TAW** | **Tawu** | **2.68** | **209** | *e*P | **Pn** | 20 15 04.8 | -1.0 | |
| | baz=204 | | | | | | | | |
| TAW | | | | *e*S | **Sn** | 20 15 35.8 | -1.9 | |
| | baz=204 | | | | | | | | |
| **TAWH** | **Dawu Township** | **2.70** | **209** | *e*P | **Pn** | 20 15 05.2 | -0.8 | |
| | baz=204 | | | | | | | | |
| TAWH | | | | *e*S | **Sn** | 20 15 36.4 | -1.8 | |
| | baz=204 | | | | | | | | |
| **JMJ** | **Miyako jima 2** | **2.70** | **87** | P | **Pn** | 20 15 06.0 | -0.1 | |
| **JMJ2** | **Miyako jima3** | **2.73** | **89** | P | **Pn** | 20 15 07.4 | +1.0 | |
| JMJ2 | | | | *e*S | **Sn** | 20 15 39.7 | +0.7 | |
| **LAY** | **Lan-yu** | **2.75** | **195** | ⇑*i*P | **Pn** | 20 15 05.8 | -0.9 | |
| | baz=194 | | | | | | | | |
| LAY | | | | *e*S | **Sn** | 20 15 37.0 | -2.5 | |
| | baz=194 | | | | | | | | |
| **PNG** | **Penghu** | **2.77** | **246** | P | **Pn** | 20 15 06.3 | -0.7 | |
| | baz=245 | | | | | | | | |
| PNG | | | | *e*S | **Sn** | 20 15 37.8 | -2.0 | |
| | baz=245 | | | | | | | | |
| **LYUB** | **Lan-yu** | **2.78** | **194** | ⇑*i*P | **Pn** | 20 15 05.8 | -1.3 | |
| | baz=192 | | | | | | | | |
| **PHUB** | **P'eng-hu** | **2.78** | **245** | *e*P | **Pn** | 20 15 06.3 | -0.7 | |
| | baz=244 | | | | | | | | |
| PHUB | | | | *e*S | **Sn** | 20 15 37.2 | -2.9 | |
| | baz=244 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.80** | **214** | *e*P | **Pn** | 20 15 08.2 | +0.7 | |
| | baz=212 | | | | | | | | |
| **JOGS** | **Gusukube** | **2.81** | **88** | P | **Pn** | 20 15 08.6 | +1.2 | |
| JOGS | | | | *e*S | **Sn** | 20 15 42.0 | +1.3 | |
| **WDGT** | **Dungji** | **2.83** | **240** | *e*P | **Pn** | 20 15 07.6 | -0.1 | |
| | baz=230 | | | | | | | | |
| WDGT | | | | S | **Sn** | 20 15 39.7 | -1.5 | |
| | baz=230 | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **2.93** | **277** | *e*P | **Pn** | 20 15 08.5 | -0.5 | |
| | baz=277 | | | | | | | | |
| **XPSS** | **Dashiqiu** | **2.93** | **319** | *e*P | **Pn** | 20 15 08.2 | -0.9 | |
| | baz=320 | | | | | | | | |
| **LYJJ** | **Jianjiangzhen** | **2.95** | **309** | *e*P | **Pn** | 20 15 08.7 | -0.7 | |
| | baz=307 | | | | | | | | |
| LYJJ | | | | *e*S | **Sn** | 20 15 43.2 | -0.9 | |
| | baz=307 | | | | | | | | |
| **VCHM** | **Qimei** | **3.04** | **241** | *e*P | **Pn** | 20 15 10.2 | -0.3 | |
| | baz=232 | | | | | | | | |
| VCHM | | | | S | **Sn** | 20 15 44.6 | -1.6 | |
| | baz=232 | | | | | | | | |
| **HEN** | **Hengchun** | **3.06** | **209** | *e*P | **Pn** | 20 15 11.2 | +0.4 | |
| | baz=218 | | | | | | | | |
| HEN | | | | *e*S | **Sn** | 20 15 46.8 | 0.0 | |
| | baz=218 | | | | | | | | |
| **MHZQ** | **Yeshan** | **3.28** | **296** | *e*P | **Pn** | 20 15 13.2 | -0.6 | |
| | baz=296 | | | | | | | | |
| **KNM** | **Kinmen** | **3.55** | **266** | *e*P | **Pn** | 20 15 18.4 | +1.0 | |
| | baz=259 | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.59** | **267** | *e*P | **Pn** | 20 15 17.0 | -0.9 | |
| | baz=259 | | | | | | | | |
| **ZPLA** | **Ao Xicun** | **4.24** | **260** | *e*P | **Pn** | 20 15 25.9 | -0.8 | |
| | baz=260 | | | | | | | | |
| **SXFK** | **Yanhouchang** | **4.55** | **293** | *e*P | **Pn** | 20 15 30.4 | -0.5 | |
| | baz=293 | | | | | | | | |
| **JOW** | **Kunigami** | **5.77** | **67** | P | **Pn** | 20 15 46.5 | -0.9 | |
| **JOW** | **Kunigami** | **5.77** | **67** | P | **Pn** | 20 15 46.4 | -1.0 | |
| | 62nm,0.3s,baz=288,slow=20,SNR=323 | | | | | | | | |
| JOW | | | | S | **Sn** | 20 16 48.4 | -3.9 | |
| | 12nm,0.3s,baz=121,slow=25,SNR=1.5 | | | | | | | | |
| **JMZ** | **Minamidaito 2** | **8.13** | **80** | P | **Pn** | 20 16 17.5 | -2.0 | |
| **KSRS** | **Korea Array** | **13.58** | **19** | P | **Pn** | 20 17 34.4 | +1.9 | |
| | 4.7nm,0.5s,baz=198,slow=11,SNR=24 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.03** | **45** | P | **P** | 20 18 26.4 | -0.8 | |
| | 1.2nm,0.7s,baz=204,slow=9.4,SNR=4.1 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **20.98** | **20** | P | **P** | 20 18 59.3 | 0.0 | |
| | 1.2nm,0.4s,baz=200,slow=9.0,SNR=6.9 | | | | | | | | |
| | 1.2nm,0.4s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.60** | **259** | P | **P** | 20 19 17.6 | +1.1 | |
| | 0.9nm,0.7s,baz=61,slow=7.6,SNR=5.2 | | | | | | | | |
| CMAR | | | | LR | LR | 20 27 13.1 | | | |
| | comp=Z,11nm,20.7s,baz=190,slow=34 | | | | | | | | |
| | 0.9nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **26.31** | **335** | P | **P** | 20 19 50.2 | -0.2 | | |
| | 1.6nm,0.8s,baz=153,slow=11,SNR=8.7 | | | | | | | | |
| | 1.6nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.69** | **315** | P | **P** | 20 21 37.9 | -0.2 | | |
| | 0.5nm,0.4s,baz=102,slow=8.4,SNR=12 | | | | | | | | |
| | 0.5nm,0.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.38** | **326** | P | **P** | 20 21 50.6 | -1.3 | | |
| | 0.7nm,0.4s,baz=110,slow=8.1,SNR=4.9 | | | | | | | | |
| | 0.7nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.90** | **164** | P | **P** | 20 22 36.6 | -0.1 | | |
| | 4.4nm,0.6s,baz=346,slow=8.6,SNR=17 | | | | | | | | |
| | 4.4nm,0.6s |

comp=Z,28nm,1.1s
**SDCO Great Sand Dun 5.44 230** Pn Pn 20 16 34.1 -1.7
**OK051 E0350 and S346 5.58 150** IAmb_Lg 20 18 21.4
comp=Z,28nm,1.1s
**MVCO Mesa Verde 7.62 239** Pn Pn 20 17 03.8 -1.9
**SN07 Snyder 07 8.31 184** IAmb_Lg 20 19 35.6
comp=Z,8.3nm,1.2s

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**IDC 30 20:15:53.0±2.6, 11°08S×123°89E, h0km, mb3.4/1, mbtmp3.6/3, ML3.6/2, MS2.9/2, Error ellipse: s-maj=244.5km s-min=34.4km az=52.0, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **7.29 325** | | LR | LR | 20 20 53.5 | |
| | comp=Z,60nm,18.6s,baz=124,slow=41 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.38 132** | | Pn | Pn | 20 19 03.7 | -0.5 |
| | 0.3nm,0.3s,baz=310,slow=13,SNR=10 | | | | | | |
| WRA | | | | Sn | Sn | 20 21 28.6 | -5.2 |
| | 0.2nm,0.3s,baz=234,slow=27,SNR=5.4 | | | | | | |
| | 0.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **15.74 144** | | Pn | Pn | 20 19 36.8 | +0.6 |
| | 0.3nm,0.3s,baz=318,slow=12,SNR=22 | | | | | | |
| ASAR | | | | Sn | Sn | 20 22 27.4 | -4.1 |
| | 0.1nm,0.3s,baz=317,slow=22,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 20 26 09.3 | |
| | comp=Z,57nm,20.5s,baz=226,slow=39 | | | | | | |
| | 1.7nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.55 331** | | P | P | 20 26 57.5 | 0.0 |
| | 0.2nm,0.5s,baz=152,slow=5.9,SNR=1.7 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

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*IDC **30** 20:37:08.0±0.5, 37°.43N×97°.70W, h0km, mb4.2/15, mbtmp4.1/24, ML3.6/9, MS3.2/22, Error ellipse: s-maj=9.9km s-min=7.8km az=133.0*
*NEIC **30** 20:37:08.1±1.0, 37°.34N±0°.03×97°.87W±0°.02, h5km±1km, mb3.8/22, mb_Lg4.2/155, ML4.3/36, Mwr3.9/59, Error ellipse: s-maj=5.2km s-min=2.9km az=352.0, Moment Tensor Solution. Moment tensor: Scale 10^15 Nm; Mrr=0.62; Mθθ 0.82; Mϕϕ-0.20; Mrθ-0.49; Mθϕ 0.25; Mrϕ 0.41; Fault plane solution: M0 1.01000×10^15 NP1: ϕs=228.11000°, δs=39.70000°, λ=-141.61000°. NP2: ϕs=106.75000°, δs=66.63000°, λ=-56.95000°. Principal axes: T 0.9840, Plg 15.0000°, Azm 173.0000°; N 0.0526, Plg 30.0000°, Azm 272.0000°; P -1.0366, Plg 56.0000°, Azm 60.0000°;*
*NEIC **30** 20:37:08.1, 37°.34N×97°.87W, h5km*
**ISC 30 20:37:07.8±1.1, 37°38N±0°.03×97°81W±0°.03, h4km±7km, n165, σ1§26/86, mb4.2/18, MS3.4/15, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KS21** | **Milan North St** | **0.15 129** | | | **Pg** | **20 37 11.9** | **+1.1** |
| **KAN12** | **Harper NE Stat** | **0.17 241** | | | **Pg** | **20 37 11.2** | **+0.1** |
| KAN12 | | | | Sg | **Sg** | **20 37 13.2** | **-0.2** |
| **KAN08** | **Anthony NE Sta** | **0.20 220** | | | **Pg** | **20 37 11.7** | **0.0** |
| KAN08 | | | | Sg | **Sg** | **20 37 13.5** | **-0.8** |
| KAN08 | | | | IAML | | 20 37 14.3 | |
| | comp=N,157μm,0.5s | | | | | | |
| KAN08 | | | | IAML | | 20 37 16.0 | |
| | comp=E,121μm,0.7s | | | | | | |
| **KAN01** | **Argonia South** | **0.23 170** | | | **Pg** | **20 37 12.6** | **+0.3** |
| KAN01 | | | | | **Sg** | **20 37 16.0** | **+0.7** |
| **KAN05** | **Bluff City Nor** | **0.28 190** | | | **Pg** | **20 37 13.2** | **+0.1** |
| KAN05 | | | | Sg | **Sg** | **20 37 16.7** | **0.0** |
| KAN05 | | | | IAML | | 20 37 20.0 | |
| | comp=N,70μm,0.7s | | | | | | |
| **KAN09** | **Caldwell North** | **0.29 148** | | | **Pg** | **20 37 14.0** | **+0.7** |
| KAN09 | | | | IAML | | 20 37 19.9 | |
| | comp=E,49μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 20 37 20.3 | |
| | comp=N,39μm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.34 174** | | | **Pg** | **20 37 14.5** | **+0.2** |
| KAN17 | | | | Sg | **Sg** | **20 37 18.6** | **-0.1** |
| KAN17 | | | | IAML | | 20 37 22.3 | |
| | comp=N,37μm,0.6s | | | | | | |
| **KAN14** | **Manchester OK** | **0.44 196** | | | **Pg** | **20 37 16.1** | **-0.1** |
| KAN14 | | | | IAML | | 20 37 28.9 | |
| | comp=N,36μm,0.7s | | | | | | |
| **KAN13** | **South Haven SW** | **0.45 144** | | | **Pg** | **20 37 17.0** | **+0.5** |
| KAN13 | | | | IAML | | 20 37 25.5 | |
| | comp=N,18μm,0.4s | | | | | | |
| **GC02** | **Grant County #** | **0.53 184** | | Pg | **Pg** | **20 37 17.9** | **-0.1** |
| **OK032** | **Salt Plains WL** | **0.66 209** | | | **Pg** | **20 37 20.1** | **-0.3** |
| OK032 | | | | IAML | | 20 37 30.5 | |
| | comp=N,15μm,0.6s | | | | | | |
| OK032 | | | | IAML | | 20 37 36.3 | |
| | comp=N,18μm,0.9s | | | | | | |
| **BLOK** | **Blackwell** | **0.78 142** | | Pg | **Pg** | **20 37 23.2** | **+0.4** |
| BLOK | | | | IAML | | 20 37 34.3 | |
| | comp=E,13μm,0.3s | | | | | | |
| BLOK | | | | IAML | | 20 37 35.8 | |
| | comp=N,12μm,0.8s | | | | | | |
| **CROK** | **Carrier** | **0.89 189** | | Pg | **Pg** | **20 37 24.3** | **-0.5** |
| CROK | | | | IAML | | 20 37 47.7 | |
| | comp=E,10μm,0.8s | | | | | | |
| **NOKA** | **Waynoka** | **1.17 231** | | Pg | **Pg** | **20 37 29.1** | **-1.0** |
| NOKA | | | | IAML | | 20 37 56.3 | |
| | comp=N,11μm,0.6s | | | | | | |
| NOKA | | | | IAML | | 20 38 02.1 | |
| | comp=E,11μm,0.6s | | | | | | |
| **OK038** | **West end E0370** | **1.17 220** | | | **Pg** | **20 37 29.3** | **-1.0** |
| **OK051** | **E0350 and S346** | **1.17 138** | | | **Pg** | **20 37 30.3** | **+0.1** |
| **OK048** | **Pawnee Station** | **1.19 144** | | | **Pg** | **20 37 30.4** | **-0.1** |
| OK048 | | | | IAML | | 20 37 51.5 | |
| | comp=E,7μm,0.3s | | | | | | |
| **R32A** | **Long Quarter,** | **1.26 326** | | | **Pg** | **20 37 31.9** | **-0.1** |
| **QUOK** | **Quay** | **1.50 143** | | | **Pn** | **20 37 35.6** | **+0.2** |
| **OK052** | **Battle Ridge R** | **1.60 149** | | | **Pn** | **20 37 37.3** | **+0.3** |
| **OK029** | **Liberty Lake** | **1.61 170** | | Pg | **Pn** | **20 37 37.2** | **+0.2** |
| **ADOK** | **Arcadia Dam** | **1.76 168** | | | **Pn** | **20 37 39.6** | **+0.5** |
| **DEOK** | **Depew** | **1.86 145** | | | **Pn** | **20 37 41.1** | **+0.6** |
| **CSTR** | **Hydro, Custer** | **1.87 202** | | | **Pn** | **20 37 40.8** | **+0.2** |
| **KSU1** | **Kansas State U** | **1.96 28** | | | **Pb** | **20 37 43.6** | **-0.5** |
| KSU1 | | | | IAmb_Lg | | 20 38 13.5 | |
| | comp=Z,2μm,0.7s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.09 314** | | | **Pn** | **20 37 44.7** | **+1.1** |
| **FNO** | **Franklin** | **2.15 171** | | Pn | **Pn** | **20 37 44.4** | **0.0** |
| **TUL3** | **Leonard** | **2.19 132** | | | **Pn** | **20 37 45.8** | **+0.9** |
| **RLO** | **Rose Lookout** | **2.55 118** | | Pn | **Pn** | **20 37 51.1** | **+1.2** |
| **WMOK** | **Wichita Mounta** | **2.75 197** | | Pn | **Pn** | **20 37 52.4** | **-0.4** |
| **X34A** | **Smith Ranch, M** | **2.77 180** | | Pn | **Pn** | **20 37 53.6** | **+0.6** |
| **U38A** | **Gravette** | **2.90 108** | | | **Pn** | **20 37 56.0** | **+1.2** |
| **SMWD** | **Samnorwood** | **3.00 222** | | | **Pn** | **20 37 56.8** | **+0.6** |
| SMWD | | | | IAmb_Lg | | 20 38 48.6 | |
| | comp=Z,833nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.42 144** | | IAmb_Lg | | 20 39 02.2 | |
| | comp=Z,675nm,1.0s | | | | | | |
| **LOOK** | **Love County** | **3.42 171** | | IAmb_Lg | | 20 39 02.1 | |
| | comp=Z,630nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.04 55** | | IAmb_Lg | | 20 39 23.7 | |
| | comp=Z,328nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.06 258** | | IAmb_Lg | | 20 39 26.4 | |
| | comp=Z,499nm,1.1s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.13 295** | | IAmb_Lg | | 20 39 21.5 | |
| | comp=Z,742nm,0.9s | | | | | | |
| **FW06** | **Azle** | **4.40 177** | | IAmb_Lg | | 20 39 27.5 | |
| | comp=Z,322nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.43 91** | | IAmb_Lg | | 20 39 33.0 | |
| | comp=Z,300nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **4.45 128** | | IAmb_Lg | | 20 39 38.8 | |
| | comp=Z,360nm,0.8s | | | | | | |
| **FW07** | **Weatherford** | **4.67 180** | | IAmb_Lg | | 20 39 40.9 | |
| | comp=Z,446nm,1.0s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.92 113** | | IAmb_Lg | | 20 39 49.4 | |
| | comp=Z,345nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **4.93 45** | | IAmb_Lg | | 20 39 47.9 | |
| | comp=Z,533nm,0.8s | | | | | | |
| **FW16** | **Waxahatchie** | **4.94 171** | | IAmb_Lg | | 20 39 55.4 | |
| | comp=Z,482nm,1.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.96 124** | | IAmb_Lg | | 20 39 51.0 | |
| | comp=Z,304nm,1.1s | | | | | | |
| **SN07** | **Snyder 07** | **4.97 211** | | IAmb_Lg | | 20 39 46.8 | |
| | comp=Z,517nm,1.1s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.98 198** | | IAmb_Lg | | 20 39 50.4 | |
| | comp=Z,261nm,1.0s | | | | | | |
| **SN05** | **Snyder 5** | **5.15 210** | | IAmb_Lg | | 20 40 02.0 | |
| | comp=Z,304nm,0.8s | | | | | | |
| **POST** | **Post** | **5.26 216** | | IAmb_Lg | | 20 40 07.2 | |
| | comp=Z,515nm,1.3s | | | | | | |
| **MSTX** | **Muleshoe** | **5.28 231** | | IAmb_Lg | | 20 40 04.4 | |
| | comp=Z,536nm,1.3s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.32 132** | | IAmb_Lg | | 20 40 07.7 | |
| | comp=Z,473nm,1.1s | | | | | | |
| **237A** | **Washetta, Mont** | **5.61 162** | | IAmb_Lg | | 20 40 19.6 | |
| | comp=Z,544nm,1.0s | | | | | | |
| **SCIA** | **State Center** | **5.75 37** | | IAmb_Lg | | 20 40 22.9 | |
| | comp=Z,384nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.93 94** | | IAmb_Lg | | 20 40 16.6 | |
| | comp=Z,379nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **5.99 288** | | IAmb_Lg | | 20 40 22.8 | |
| | comp=Z,440nm,0.8s | | | | | | |
| **CCAR** | **Cane Creek** | **6.01 123** | | IAmb_Lg | | 20 40 27.3 | |
| | comp=Z,257nm,1.1s | | | | | | |
| **HBAR** | **Harrisburg** | **6.04 105** | | IAmb_Lg | | 20 40 28.3 | |
| | comp=Z,483nm,1.2s | | | | | | |
| **SLM** | **Saint Louis** | **6.11 76** | | IAmb_Lg | | 20 40 25.2 | |
| | comp=Z,411nm,1.1s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.12 276** | | IAmb_Lg | | 20 40 30.1 | |
| | comp=Z,347nm,0.9s | | | | | | |
| **GNAR** | **Gosnell** | **6.42 100** | | IAmb_Lg | | 20 40 41.6 | |
| | comp=Z,328nm,0.9s | | | | | | |
| **PARMO** | **Parma** | **6.49 94** | | IAmb_Lg | | 20 40 39.9 | |
| | comp=Z,338nm,0.8s | | | | | | |
| **PEBM** | **Pemiscott Bayo** | **6.51 99** | | IAmb_Lg | | 20 40 39.0 | |
| | comp=Z,440nm,0.8s | | | | | | |
| **ODSA** | **Odessa** | **6.54 218** | | IAmb_Lg | | 20 40 44.4 | |
| | comp=Z,206nm,0.7s | | | | | | |
| **PVMO** | **Potageville** | **6.57 96** | | IAmb_Lg | | 20 40 35.3 | |
| | comp=Z,435nm,1.1s | | | | | | |
| **MET** | **Memphis--Engin** | **6.75 107** | | IAmb_Lg | | 20 40 55.6 | |
| | comp=Z,307nm,1.0s | | | | | | |
| **S44A** | **Carbondale** | **6.81 85** | | IAmb_Lg | | 20 40 42.9 | |
| | comp=Z,304nm,1.1s | | | | | | |
| **SIUC** | **Southern Illin** | **6.83 85** | | IAmb_Lg | | 20 40 47.9 | |
| | comp=Z,207nm,0.7s | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **6.88 68** | | IAmb_Lg | | 20 40 46.5 | |
| | comp=Z,314nm,1.1s | | | | | | |
| **HICK** | **Hickman** | **6.92 94** | | IAmb_Lg | | 20 40 55.0 | |
| | comp=Z,398nm,1.0s | | | | | | |
| **OZNA** | **Ozona** | **7.00 204** | | IAmb_Lg | | 20 41 01.1 | |
| | comp=Z,227nm,0.8s | | | | | | |
| **143A** | **Socs Landing,** | **7.03 130** | | IAmb_Lg | | 20 41 04.5 | |
| | comp=Z,229nm,1.3s | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.09 75** | | IAmb_Lg | | 20 40 59.4 | |
| | comp=Z,368nm,1.1s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **7.17 276** | | IAmb_Lg | | 20 41 09.8 | |
| | comp=Z,194nm,1.2s | | | | | | |
| **MNHN** | **Monahans** | **7.28 216** | | IAmb_Lg | | 20 41 02.6 | |
| | comp=Z,207nm,0.9s | | | | | | |
| **T45A** | **Paducah** | **7.33 90** | | IAmb_Lg | | 20 41 09.2 | |
| | comp=Z,257nm,0.7s | | | | | | |
| **HDIL** | **Hopedale** | **7.35 62** | | IAmb_Lg | | 20 41 16.6 | |
| | comp=Z,364nm,0.8s | | | | | | |
| **OXF** | **Oxford** | **7.39 110** | | IAmb_Lg | | 20 41 20.9 | |
| | comp=Z,191nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **7.40 253** | | Pn | **Pn** | **20 38 58.6** | **+1.7** |
| | comp=Z,0.4nm,0.3s,baz=62,slow=13,SNR=8.4 | | | | | | |
| ANMO | | | | Pg | Pg | 20 39 25.3 | -4.3 |
| | comp=Z,2.8nm,0.3s,baz=73,slow=17,SNR=11 | | | | | | |
| ANMO | | | | Lg | Lg | 20 40 58.7 | |
| | comp=Z,16nm,0.3s,baz=146,slow=20,SNR=8.5 | | | | | | |
| | comp=Z,7nm,0.6s | | | | | | |
| **Y45A** | **Yeager Farm, C** | **7.59 115** | | IAmb_Lg | | 20 41 19.9 | |
| | comp=Z,175nm,0.8s | | | | | | |
| **MLDN** | **Muldoon** | **7.60 175** | | IAmb_Lg | | 20 41 22.6 | |
| | comp=Z,206nm,0.9s | | | | | | |
| **OLIL** | **Olney** | **7.78 77** | | IAmb_Lg | | 20 41 23.2 | |
| | comp=Z,338nm,1.2s | | | | | | |
| **L42A** | **Oliver, Polo** | **7.79 51** | | IAmb_Lg | | 20 41 32.0 | |
| | comp=Z,317nm,0.9s | | | | | | |
| **HNDO** | **Hondo** | **7.93 189** | | IAmb_Lg | | 20 41 25.7 | |
| | comp=Z,237nm,0.8s | | | | | | |
| **JFWS** | **Jewell Farm** | **8.00 44** | | IAmb_Lg | | 20 41 30.8 | |
| | comp=Z,211nm,0.8s | | | | | | |
| **RSSD** | **Black Hills** | **8.22 327** | | IAmb_Lg | | 20 41 48.9 | |
| | comp=Z,256nm,0.8s | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.23 104** | | IAmb_Lg | | 20 41 29.5 | |
| | comp=Z,153nm,1.3s | | | | | | |
| **SAND** | **Sanderson** | **8.23 207** | | IAmb_Lg | | 20 41 51.2 | |
| | comp=Z,169nm,1.0s | | | | | | |
| **DRIO** | **Del Rio** | **8.28 197** | | IAmb_Lg | | 20 41 39.0 | |
| | comp=Z,144nm,0.8s | | | | | | |
| **RWWY** | **Rawlins** | **8.44 304** | | IAmb_Lg | | 20 41 43.2 | |
| | comp=Z,261nm,0.8s | | | | | | |
| **I40A** | **Norwalk** | **8.49 38** | | IAmb_Lg | | 20 41 50.9 | |
| | comp=Z,136nm,0.9s | | | | | | |
| **ALPN** | **Alpine** | **8.50 216** | | IAmb_Lg | | 20 41 47.2 | |
| | comp=Z,205nm,1.1s | | | | | | |
| **735A** | **Kenedy** | **8.50 180** | | IAmb_Lg | | 20 41 51.6 | |
| | comp=Z,217nm,1.1s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **8.53 7** | | IAmb_Lg | | 20 41 40.4 | |
| | comp=Z,159nm,0.8s | | | | | | |
| **SPMN** | **Marine on St.** | **8.69 24** | | IAmb_Lg | | 20 41 47.5 | |
| | comp=Z,142nm,0.8s | | | | | | |
| **Z47A** | **Carrollton** | **8.99 115** | | IAmb_Lg | | 20 41 57.1 | |
| | comp=Z,118nm,1.1s | | | | | | |
| **EPT** | **El Paso** | **9.09 235** | | IAmb_Lg | | 20 42 09.0 | |
| | comp=Z,121nm,1.0s | | | | | | |
| **833A** | **Chaparral WMA,** | **9.13 189** | | IAmb_Lg | | 20 42 04.7 | |
| | comp=Z,187nm,1.1s | | | | | | |
| **I42A** | **Draeger Farm,** | **9.38 43** | | IAmb_Lg | | 20 42 14.1 | |
| | comp=Z,118nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **9.40 213** | | Pn | **Pn** | **20 39 23.4** | **-0.8** |
| | comp=Z,1.1nm,0.3s,baz=30,slow=12,SNR=33 | | | | | | |
| TXAR | | | | Pg | | 20 39 58.1 | |
| | comp=Z,2.0nm,0.3s,baz=20,slow=15,SNR=13 | | | | | | |
| TXAR | | | | Sn | **Sn** | **20 41 07.8** | **-2.5** |
| | comp=Z,2.4nm,0.3s,baz=95,slow=28,SNR=1.6 | | | | | | |
| TXAR | | | | Lg | Lg | 20 42 00.8 | |
| | comp=Z,5.6nm,0.3s,baz=22,slow=30,SNR=6.0 | | | | | | |
| TXAR | | | | LR | LR | 20 44 00.5 | |
| | comp=Z,32nm,19.5s,baz=15,slow=44 | | | | | | |
| | comp=Z,4.5nm,0.5s | | | | | | |
| **E28A** | **Huff** | **9.43 348** | | IAmb_Lg | | 20 42 16.3 | |
| | comp=Z,237nm,0.8s | | | | | | |
| **121A** | **Cookes Peak, D** | **9.51 242** | | IAmb_Lg | | 20 42 19.7 | |
| | comp=Z,131nm,1.1s | | | | | | |
| **G40A** | **Rib Lake** | **9.73 34** | | IAmb_Lg | | 20 42 24.5 | |
| | comp=Z,110nm,0.9s | | | | | | |
| **PDAR** | **Pinedale Array** | **10.48 305** | | Pn | **Pn** | **20 39 38.0** | **-1.1** |
| | comp=Z,2.1nm,0.3s,baz=108,slow=14,SNR=17 | | | | | | |
| PDAR | | | | Sn | **Sn** | **20 41 39.2** | **+2.1** |
| | comp=Z,1.4nm,0.3s,baz=24,slow=20,SNR=2.1 | | | | | | |
| PDAR | | | | Lg | Lg | 20 42 35.4 | |
| | comp=Z,5.4nm,0.3s,baz=103,slow=32,SNR=6.9 | | | | | | |
| **TKL** | **Tuckaleechee C** | **11.43 94** | | Pn | **Pn** | **20 39 51.3** | **-0.5** |
| | comp=Z,0.9nm,0.3s,baz=217,slow=9.1,SNR=9.7 | | | | | | |
| TKL | | | | Sn | **Sn** | **20 41 56.1** | **-3.8** |
| | comp=Z,0.6nm,0.3s,baz=304,slow=23,SNR=1.2 | | | | | | |
| TKL | | | | Lg | Lg | 20 42 58.2 | |
| | comp=Z,0.6nm,0.3s,baz=353,slow=15,SNR=2.0 | | | | | | |
| TKL | | | | LR | LR | 20 44 08.3 | |
| | comp=Z,45nm,20.5s,baz=304,slow=37 | | | | | | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **ULM** | **Lac du Bonnet** | **12.94 6** | | Pn | Pn | 20 40 07.8 | -4.6 |
| | comp=Z,1.5nm,0.3s,baz=180,slow=12,SNR=9.3 | | | | | | |
| ULM | | | | Sn | Sn | 20 42 25.4 | -11 |
| | comp=Z,2.6nm,0.3s,baz=102,slow=22,SNR=6.1 | | | | | | |
| ULM | | | | Lg | Lg | 20 43 46.2 | |
| | comp=Z,1.3nm,0.3s,baz=95,slow=14,SNR=2.1 | | | | | | |
| ULM | | | | LR | LR | 20 45 37.5 | |
| | comp=Z,46nm,20.2s,baz=314,slow=40 | | | | | | |
| | comp=Z,3.8nm,0.3s | | | | | | |
| **ELK** | **Elko** | **13.95 289** | | Pn | **Pn** | **20 40 28.9** | **+2.4** |
| | comp=Z,0.1nm,0.3s,baz=82,slow=2.6,SNR=4.3 | | | | | | |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **GWY** | **Greenwater Val** | **15.16 271** | | IAmb | IAmb | 20 40 51.6 | |
| | comp=Z,7.7nm,1.4s | | | | | | |
| **BMN** | **Battle Mountai** | **15.42 287** | | IAmb | IAmb | 20 40 53.7 | |
| | comp=Z,4.5nm,1.0s | | | | | | |
| **SADO** | **Sadowa** | **15.88 56** | | Pn | **Pn** | **20 40 47.2** | **-4.8** |
| | comp=Z,0.3nm,0.3s,baz=231,slow=13,SNR=2.2 | | | | | | |
| SADO | | | | Lg | Lg | 20 45 15.8 | |
| | comp=Z,0.3nm,0.3s,baz=342,slow=18,SNR=1.9 | | | | | | |
| SADO | | | | LR | LR | 20 47 00.4 | |
| | comp=Z,73nm,19.7s,baz=198,slow=38 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **DSP** | **Deep Springs** | **16.03 276** | | P | **Pn** | **20 40 56.0** | **+2.0** |
| **KVN** | **Kaiserville** | **16.04 282** | | P | **P** | **20 40 58.8** | **+1.0** |
| KVN | | | | IAmb | IAmb | 20 41 00.9 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.21 280** | | Pn | **Pn** | **20 40 58.7** | **+2.1** |
| | comp=Z,0.1nm,0.3s,baz=90,slow=8.8,SNR=17 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **RYN** | **Ryan** | **16.38 281** | | | **Pn** | **20 40 57.8** | **-0.8** |
| RYN | | | | IAmb | IAmb | 20 41 05.6 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **BMO** | **Blue Mountains** | **16.46 303** | | | **Pn** | **20 40 59.0** | **-0.6** |
| **M57A** | **Sunshine Farm,** | **16.47 70** | | Pn | **Pn** | **20 40 57.7** | **-2.0** |
| M57A | | | | IAmb | IAmb | 20 41 19.5 | |
| **WVOR** | **Wild Horse Val** | **16.75 294** | | | **Pn** | **20 41 02.1** | **-1.2** |
| WVOR | | | | IAmb | IAmb | 20 41 08.6 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| **F10A** | **Beach Ranch, E** | **16.82 307** | | P | **P** | **20 41 08.0** | **+1.5** |
| F10A | | | | IAmb | IAmb | 20 41 09.3 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **LPIG** | **La Paz** | **17.02 222** | | LR | LR | 20 47 55.4 | |
| | comp=Z,78nm,20.2s,baz=43,slow=38 | | | | | | |
| **PAHR** | **Pah Rah Range** | **17.03 284** | | Pn | **Pn** | **20 41 05.8** | **-1.3** |
| **BINY** | **Binghamton** | **17.44 67** | | Pn | **Pn** | **20 41 09.7** | **-2.2** |
| **KSPA** | **Keystone Colle** | **17.51 69** | | Pn | **Pn** | **20 41 10.2** | **-2.7** |
| KSPA | | | | IAmb | IAmb | 20 41 28.6 | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **FFC** | **Flin Flon** | **17.58 352** | | | **Pn** | **20 41 12.2** | **-1.4** |
| **NEW** | **Newport** | **17.81 314** | | P | **P** | **20 41 19.1** | **+1.8** |
| | comp=Z,0.3nm,0.3s,baz=136,slow=8.6,SNR=3.2 | | | | | | |
| NEW | | | | LR | LR | 20 48 49.8 | |
| | comp=Z,58nm,18.9s,baz=137,slow=39 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **CMB** | **Columbia Colle** | **17.87 279** | | P | **P** | **20 41 19.1** | **+1.1** |
| CMB | | | | IAmb | IAmb | 20 41 20.9 | |
| | comp=Z,4.6nm,0.9s | | | | | | |
| **HAWA** | **Hanford** | **18.46 306** | | P | **P** | **20 41 22.8** | **-1.7** |
| HAWA | | | | IAmb | IAmb | 20 41 28.6 | |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **WBO** | **Williamsburg** | **18.55 59** | | P | **P** | **20 41 24.0** | **-1.5** |
| **TRY** | **Troy** | **19.21 66** | | P | **P** | **20 41 31.4** | **-1.3** |
| **YBH** | **Yreka Blue Hor** | **19.66 291** | | P | **Pn** | **20 41 40.4** | **+1.3** |
| **YBH** | **Yreka Blue Hor** | **19.66 291** | | P | **Pn** | **20 41 39.5** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=84,slow=5.7,SNR=27 | | | | | | |
| YBH | | | | LR | LR | 20 50 44.4 | |
| | comp=Z,42nm,18.1s,baz=104,slow=41 | | | | | | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **LON** | **Longmire** | **20.06 305** | | P | Pn | 20 41 43.6 | -0.2 |
| LON | | | | IAmb | IAmb | 20 41 45.1 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **CMIG** | **Matias Romero** | **20.38 172** | | P | Pn | 20 41 48.1 | +0.6 |
| | comp=Z,1.2nm,0.4s,baz=7.1,slow=6.3,SNR=4.2 | | | | | | |
| CMIG | | | | LR | LR | 20 52 51.2 | |
| | comp=Z,27nm,18.4s,baz=6.5,slow=46 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **BBB** | **Bella Bella** | **25.87 315** | | LR | LR | 20 53 43.0 | |
| | comp=Z,52nm,20.4s,baz=89,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **27.19 343** | | P | **P** | **20 42 52.7** | **+0.5** |
| | comp=Z,2.6nm,0.9s,baz=147,slow=8.5,SNR=7.9 | | | | | | |
| YKA | | | | Lg | Lg | 20 51 30.9 | |
| | baz=148,slow=25,SNR=3.6 | | | | | | |
| YKA | | | | LR | LR | 20 54 04.5 | |
| | comp=Z,99nm,19.6s,baz=128,slow=38 | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **SCHQ** | **Schefferville** | **27.35 40** | | LR | LR | 20 53 49.7 | |
| | comp=Z,50nm,20.2s,baz=248,slow=37 | | | | | | |
| **DLBC** | **Dease Lake** | **29.70 326** | | LR | LR | 20 55 42.6 | |
| | comp=Z,58nm,20.1s,baz=81,slow=38 | | | | | | |
| **FRB** | **Frobisher Bay** | **31.73 24** | | LR | LR | 20 56 17.1 | |
| | comp=Z,124nm,18.9s,baz=300,slow=36 | | | | | | |
| **INK** | **Inuvik** | **36.71 339** | | LR | LR | 20 59 59.8 | |
| | comp=Z,109nm,18.7s,baz=259,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **39.66 330** | | P | **P** | **20 44 41.7** | **+1.2** |
| | comp=Z,3.6nm,0.8s,baz=106,slow=7.0,SNR=32 | | | | | | |
| ILAR | | | | PcP | **PcP** | **20 46 47.5** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=151,slow=1.6,SNR=4.4 | | | | | | |
| | comp=Z,3.6nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **40.83 318** | | LR | LR | 21 01 32.1 | |
| | comp=Z,64nm,18.0s,baz=231,slow=36 | | | | | | |
| **JMIC** | **Jan Mayen** | **54.95 24** | | LR | LR | 21 10 45.5 | |
| | comp=Z,36nm,18.7s,baz=277,slow=37 | | | | | | |
| **LPAZ** | **La Paz** | **60.26 147** | | P | **P** | **20 47 18.6** | **+0.5** |
| | comp=Z,1.2nm,0.7s,baz=18,slow=5.6,SNR=4.5 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **62.66 40** | | P | **P** | **20 47 32.4** | **-1.0** |
| | comp=Z,2.0nm,0.9s,baz=297,slow=5.5,SNR=6.4 | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.67 19** | | P | **P** | **20 47 52.7** | **-0.1** |
| | comp=Z,5.7nm,1.0s,baz=354,slow=6.1,SNR=4.5 | | | | | | |
| ARCES | | | | LR | LR | 21 16 19.4 | |
| | comp=Z,29nm,18.6s,baz=339,slow=36 | | | | | | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **NOA** | **NORSAR Array B** | **66.31 30** | | LR | LR | 21 15 48.1 | |
| | comp=Z,21nm,19.4s,baz=320,slow=35 | | | | | | |
| **TIXI** | **Tiksi** | **66.40 345** | | LR | LR | 21 18 24.7 | |
| | comp=Z,38nm,19.9s,baz=88,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **67.84 30** | | P | **P** | **20 48 06.8** | **0.0** |
| | comp=Z,1.1nm,0.7s,baz=286,slow=7.0,SNR=6.2 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **69.93 55** | | P | **P** | **20 48 20.3** | **0.0** |
| | comp=Z,0.8nm,0.9s,baz=316,slow=9.0,SNR=5.1 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **BDFB** | **Brasilia** | **70.52 129** | | LR | LR | 21 20 58.9 | |
| | comp=Z,8nm,20.5s,baz=302,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **71.53 25** | | P | **P** | **20 48 29.8** | **+0.3** |
| | comp=Z,3.6nm,0.9s,baz=331,slow=7.4,SNR=8.5 | | | | | | |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **ABTA** | **Abfaltersbach** | **75.60 42** | | *e*pP | pP | 20 48 55.3 | +0.1 |
| | comp=Z,1.2nm,0.8s | | | | | | |
| **OBKA** | **Obir** | **76.83 41** | | *e*pP | pP | 20 49 01.8 | -0.5 |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **ARSA** | **Arzberg** | **76.84 40** | | *e*P | **P** | **20 48 59.2** | **-1.7** |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **SOKA** | **Soboth** | **76.97 41** | | *e*pP | **P** | **20 49 02.4** | **+0.8** |
| | comp=Z,1.4nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **80.71 31** | | P | **P** | **20 49 22.1** | **+0.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TCW | Tory Channel | 0.79 | 13 | P | | Pb | 20 51 32.3 | -0.5 |
| SNZO | South Karori | 0.83 | 37 | P | | Pn | 20 51 34.1 | -0.2 |
| BHW | Baring Head | 0.84 | 48 | P | | Pn | 20 51 34.7 | +0.2 |
| THZ | Tophouse | 0.87 | 284 | P | | Pb | 20 51 34.0 | -0.3 |
| WEL | Wellington | 0.88 | 38 | P | | Pn | 20 51 35.4 | +0.4 |
| NNZ | Nelson | 0.91 | 327 | P | | Pb | 20 51 34.1 | -0.8 |
| PLWZ | Palliser | 1.00 | 66 | P | | Pn | 20 51 36.6 | 0.0 |
| MSWZ | Moikau Station | 1.07 | 59 | P | | Pb | 20 51 37.6 | 0.0 |
| MRNZ | Matariki Terra | 1.12 | 301 | P | | Pn | 20 51 38.3 | 0.0 |
| CAW | Cannon Point | 1.16 | 42 | P | | Pn | 20 51 39.1 | +0.2 |
| DUWZ | D'Urville Isla | 1.18 | 356 | P | | Pn | 20 51 38.8 | -0.4 |
| PAWZ | Paruwai Farm | 1.20 | 61 | P | | Pn | 20 51 39.1 | -0.3 |
| GVZ | Greta Valley S | 1.24 | 217 | P | | Pb | 20 51 40.6 | +0.1 |
| TKNZ | Takaka Hill | 1.24 | 319 | P | | Pn | 20 51 37.0 | -3.0 |
| KIW | Kapiti Island | 1.29 | 31 | P | | Pn | 20 51 41.2 | -0.2 |
| TRWZ | Traveller | 1.36 | 65 | P | | Pn | 20 51 41.1 | -0.6 |
| MTW | Mount Morrison | 1.37 | 54 | P | | Pn | 20 51 41.4 | -0.4 |
| OGWZ | Otaki Gorge | 1.44 | 37 | P | | Pn | 20 51 42.9 | +0.2 |
| LTZ | Lake Taylor | 1.54 | 238 | P | | Pn | 20 51 44.7 | +0.7 |
| HOWZ | Holdsworth Sta | 1.55 | 46 | P | | Pn | 20 51 43.8 | -0.4 |
| AMCZ | Amberley | 1.57 | 220 | P | | Pn | 20 51 44.9 | +0.4 |
| QRZ | Quartz Range | 1.62 | 315 | P | | Pb | 20 51 46.3 | -0.6 |
| QRZ | Quartz Range | 1.62 | 315 | P | | Pn | 20 51 46.1 | +1.0 |
| TMWZ | Te Maipa | 1.64 | 59 | P | | Pn | 20 51 44.8 | -0.7 |
| DSZ | Denniston Nort | 1.69 | 277 | P | | Pb | 20 51 47.5 | -0.6 |
| MRZ | Mangatainoka R | 1.75 | 42 | P | | Pn | 20 51 46.7 | -0.3 |
| TIWZ | Tintock | 1.84 | 50 | P | | Pn | 20 51 48.9 | +0.7 |
| OKCZ | Okains Bay | 1.89 | 202 | P | | Pn | 20 51 48.8 | 0.0 |
| OXZ | Oxford | 2.00 | 227 | P | | Pn | 20 51 49.9 | -0.5 |
| MQZ | McQueen's Vall | 2.00 | 210 | P | | Pn | 20 51 49.6 | -0.8 |
| PRWZ | Pori Road | 2.04 | 46 | P | | Pn | 20 51 50.3 | -0.6 |
| POWZ | Post Office Ro | 2.05 | 40 | P | | Pn | 20 51 51.2 | 0.0 |
| INZ | Inchbonnie | 2.06 | 248 | P | | Pn | 20 52 52.6 | +1.4 |
| AKCZ | Akaroa Harbour | 2.07 | 203 | P | | Pn | 20 51 51.1 | -0.2 |
| BFZ | Birch Farm | 2.11 | 53 | P | | Pn | 20 51 50.7 | -1.2 |
| BFZ | Birch Farm | 2.11 | 53 | P | | Pn | 20 51 50.7 | -1.2 |
| RACZ | Rakaia | 2.24 | 218 | P | | Pn | 20 51 53.0 | -0.6 |
| DVHZ | Dannevirke | 2.32 | 44 | P | | Pn | 20 51 53.6 | -1.2 |
| WAZ | Wanganui | 2.33 | 18 | P | | Pb | 20 51 59.4 | +0.2 |
| MHCZ | Mount Hutt | 2.39 | 229 | P | | Pn | 20 51 55.8 | -0.1 |
| LREZ | Lake Rotokare | 2.53 | 6 | P | | Pb | 20 52 02.9 | +0.4 |
| WACZ | Wakanui South | 2.54 | 219 | P | | Pn | 20 51 57.5 | -0.3 |
| NMEZ | Namu Road | 2.57 | 357 | P | | Pb | 20 52 02.5 | -0.6 |
| PNHZ | Pukenui | 2.63 | 39 | P | | Pn | 20 51 58.3 | -0.8 |
| PREZ | Palmer Road | 2.64 | 2 | P | | Pb | 20 52 02.8 | -1.5 |
| WVZ | Waitaha Valley | 2.67 | 245 | P | | Pn | 20 52 00.8 | +1.1 |
| KHEZ | Kahui Hut | 2.68 | 360 | P | | Pn | 20 52 02.0 | +2.2 |
| KHEZ | Kahui Hut | 2.68 | 360 | P | | Pb | 20 52 03.8 | -1.3 |
| NEZ | North Egmont | 2.71 | 1 | P | | Pb | 20 52 03.5 | -2.0 |
| NBEZ | Newall Road No | 2.71 | 357 | P | | Pb | 20 52 07.7 | +2.1 |
| PKE | Pukeiti | 2.78 | 359 | P | | Pb | 20 52 04.3 | -2.6 |
| RPZ | Rata Peaks | 2.80 | 231 | P | | Pn | 20 52 01.3 | -0.1 |
| RPZ | Rata Peaks | 2.80 | 231 | P | | Pn | 20 52 01.2 | -0.2 |
| MTVZ | Mangateitei | 2.81 | 23 | P | | Pb | 20 52 07.6 | +0.2 |
| PKVZ | Pokaka | 2.87 | 21 | P | | Pn | 20 52 04.0 | +1.7 |
| ARCZ | Arundel | 2.88 | 226 | P | | Pn | 20 52 02.3 | -0.2 |
| MOVZ | Moawhango | 2.88 | 27 | P | | Pn | 20 52 02.9 | +0.3 |
| WNVZ | Wahianoa | 2.90 | 25 | P | | Pn | 20 52 04.7 | +1.7 |
| VRZ | Vera Road | 2.90 | 11 | P | | Pn | 20 52 04.8 | +2.0 |
| TRVZ | Turoa | 2.91 | 24 | P | | Pn | 20 52 08.1 | -1.1 |
| KRHZ | Kereru | 2.93 | 38 | P | | Pn | 20 52 02.1 | -1.1 |
| WHVZ | Whangaehu Hut | 2.94 | 24 | P | | Pn | 20 52 04.8 | +1.3 |
| MAVZ | Matarangi | 2.95 | 24 | P | | Pb | 20 52 07.9 | -1.9 |
| TUVZ | Tukino | 2.98 | 25 | P | | Pn | 20 52 05.0 | +1.0 |
| COVZ | Chateau Observ | 3.00 | 23 | P | | Pb | 20 52 09.7 | -0.9 |
| NGZ | Ngauruhoe | 3.04 | 24 | P | | Pb | 20 52 08.3 | -3.0 |
| SNVZ | South Ngauruho | 3.04 | 24 | P | | Pn | 20 52 07.3 | +2.4 |
| GCSZ | Gaunt Creek Bo | 3.05 | 243 | P | | Pn | 20 52 06.8 | +2.0 |
| OTVZ | Oturere | 3.07 | 24 | P | | Pb | 20 52 09.3 | -2.6 |
| NNVZ | North Ngauruho | 3.09 | 23 | P | | Pn | 20 52 07.7 | +2.2 |
| TWVZ | Taurewa | 3.10 | 21 | P | | Pn | 20 52 07.1 | +1.5 |
| WTVZ | West Tongariro | 3.10 | 23 | P | | Pn | 20 52 08.7 | +3.1 |
| ETVZ | East Tongariro | 3.11 | 25 | P | | Pn | 20 52 07.0 | +1.2 |
| TMVZ | Te Maari | 3.13 | 24 | P | | Pn | 20 52 07.2 | +1.2 |
| KRVZ | Karewarewa | 3.13 | 23 | P | | Pb | 20 52 11.1 | -1.7 |
| NTVZ | North Tongarir | 3.14 | 24 | P | | Pn | 20 52 07.6 | +1.4 |
| KATZ | Kakaramea | 3.26 | 23 | P | | Pb | 20 52 14.4 | -0.6 |
| FOZ | Fox Glacier | 3.48 | 242 | P | | Pn | 20 52 12.9 | +2.3 |
| HIZ | Hauiti | 3.52 | 11 | P | | Pn | 20 52 13.8 | +2.5 |
| LBZ | Lake Benmore | 3.71 | 228 | P | | Pn | 20 52 14.0 | +0.2 |
| TLZ | Tolley Road | 3.82 | 18 | P | | Pn | 20 52 16.5 | +1.0 |
| ODZ | Otahua Downs | 3.93 | 218 | P | | Pn | 20 52 15.8 | -1.2 |
| ODZ | Otahua Downs | 3.93 | 218 | P | | Pn | 20 52 16.1 | -0.9 |
| TOZ | Tahuroa Road | 4.39 | 15 | P | | Pn | 20 52 26.2 | +3.0 |
| RUGZ | Raukumara Rang | 4.89 | 36 | P | | Pn | 20 52 30.7 | +0.5 |
| AWAZ | Awhitu Peninsu | 4.93 | 6 | P | | Pn | 20 53 33.4 | +2.7 |
| MKAZ | Moumakai | 4.95 | 10 | P | | Pn | 20 52 33.5 | +2.6 |

**TEH 30 20:52:30.6, 37°35N×56°97E, h8km±36km, ML3.2, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MRVT | Maraveh tapeh | 0.76 | 294 | Pg | Pb | 20 52 46.1 | -0.1 |
| SBZV | Sabzevar | 1.09 | 151 | Pg | Pn | 20 52 52.6 | +0.2 |
| IMND | Minoodasht | 1.25 | 266 | Pg | Pg | 20 52 55.6 | +1.1 |
| IEMG | Emamgholi | 1.35 | 87 | Pg | Pg | 20 52 57.1 | +0.6 |
| IAKL | Akhelmad | 1.61 | 117 | Pg | Pg | 20 53 01.8 | +0.2 |
| IPAY | Payeh | 1.86 | 118 | Pn | Pg | 20 53 06.0 | -0.3 |
| IKRD | Kardeh | 2.12 | 105 | Pn | Pb | 20 53 09.8 | +0.4 |
| IMOG | Moghan | 2.27 | 122 | Pn | Pb | 20 53 10.9 | -1.2 |
| TAPT | Tabas- Tapeh t | 2.46 | 176 | Pn | Pb | 20 53 13.8 | -1.4 |
| IGLO | Ghaloghah | 2.65 | 252 | Pn | Pb | 20 53 16.8 | -1.7 |
| IMYA | Miami | 2.71 | 111 | Pn | Pb | 20 53 17.5 | -2.0 |
| TNSJ | Nastanj | 3.39 | 185 | Pn | Pn | 20 53 26.7 | +2.7 |
| TBJM | Torbat-e-JAM | 3.42 | 126 | Pn | Pn | 20 53 28.0 | +3.5 |
| IALA | Alasht | 3.57 | 251 | Pn | Pn | 20 53 29.6 | +3.0 |
| ILAS | Lasjerd | 3.78 | 240 | Pn | Pn | 20 53 32.1 | +2.6 |
| IFIR | Firoozkooh | 3.80 | 245 | Pn | Pn | 20 53 33.2 | +3.5 |
| IPRN | Peran | 3.87 | 255 | Pn | Pn | 20 53 33.4 | +2.8 |
| AFRZ | Afriz | 4.25 | 156 | Pn | Pn | 20 53 38.8 | +2.9 |
| TPRV | Parvadeh(Tabas | 4.31 | 183 | Pn | Pn | 20 53 39.2 | +2.6 |
| MZPU | Pul - Mazandar | 4.42 | 260 | Pn | Pn | 20 53 41.1 | +2.9 |
| SHRT | Shahrakht | 4.58 | 143 | Pn | Pn | 20 53 42.8 | +2.5 |
| KLST | Kelardasht - M | 4.80 | 262 | Pn | Pn | 20 53 45.6 | +2.0 |
| ANAR | Anarak | 4.92 | 214 | Pn | Pn | 20 53 47.4 | +2.4 |
| KRSH | Karshahi | 5.18 | 231 | Pn | Pn | 20 53 50.6 | +2.0 |
| IKOO | Kooshah | 5.19 | 161 | Pn | Pn | 20 53 51.8 | +3.0 |
| IZEF | Zefreh | 5.84 | 222 | Pn | Pn | 20 54 00.4 | +2.6 |
| IBAF | Bafgh | 5.86 | 192 | Pn | Pn | 20 54 01.1 | +3.1 |
| IKLH | Kolahrood | 5.96 | 229 | Pn | Pn | 20 54 02.3 | +2.9 |
| IRAM | Ramesheh | 6.69 | 216 | Pn | Pn | 20 54 12.0 | +2.6 |
| IPIR | Pirpir | 6.81 | 229 | Pn | Pn | 20 54 14.6 | +3.3 |

*IDC **30** 21:00:39.1±6.5, 36°.20N×71°.12E, h132km±58km, mb3.3/6, mbtmp3.7/10, MS3.1/1, Error ellipse: s-maj=49.5km s-min=25.0km az=30.0*
*NNC **30** 21:00:50.7±4.4, 37°.13N×71°.00E, h186km±71km, mb2.5, mpv3.6, Error ellipse: s-maj=42.6km s-min=25.9km az=23.0*

**ISC 30 21:00:47.9±1.2, 36°.93N±0°.10×71°.1E±0°.1, h200km, n16, σ2s14/20, mb3.3/5, 2C-5D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KK31 | **Karatay Karay** 1.3nm,0.2s | 6.19 | 356 | ⇑P | Pn | 21 02 18.2 | +0.7 |
| KK31 | | | | ⇓S | Sn | 21 03 26.6 | -1.9 |
| AAK | **Ala-Archa** 18nm,0.5s | 6.26 | 23 | P | Pn | 21 02 18.7 | +0.1 |
| AAK | 2.3nm,0.3s,baz=171,slow=6.4,SNR=6.7 | | | S | Sn | 21 03 28.5 | -1.9 |
| AAK | 8.0nm,0.5s,baz=152,slow=22,SNR=10 **Ala-Archa** 2.6nm,0.6s | 6.26 | 23 | ⇑P | Pn | 21 02 18.7 | +0.1 |
| AAK | 27nm,1.1s | | | ⇓S | Sn | 21 03 29.7 | -0.8 |
| CHMS | **Chumysh** 3.0nm,0.6s | 6.67 | 23 | ⇓P | Pn | 21 02 23.3 | -0.5 |
| CHMS | 7.5nm,0.8s | | | ⇓S | Sn | 21 03 39.8 | 0.0 |
| MK31 | **Makanchi Array** 0.1nm,0.3s,baz=211,slow=8.7,SNR=5.6 | 12.88 | 37 | P | P | 21 03 48.5 | +1.3 |
| MKAR | **Makanchi Array** 1.4nm,1.0s,baz=225,slow=12,SNR=1.9 | 12.88 | 37 | P | Pn | 21 03 43.7 | 0.0 |
| AB31 | **Akbulak array** 0.4nm,0.3s,baz=150,slow=12,SNR=33 | 14.77 | 330 | ⇓P | P | 21 04 09.5 | +1.4 |
| AB31 | | | | S | S | 21 06 45.7 | -5.3 |
| | 2.0nm,0.6s,baz=148,slow=21,SNR=10 | | | | | | |
| BVAR | **Borovoye Array** 0.7nm,0.7s,baz=156,slow=11,SNR=2.2 | 16.10 | 358 | P | Pn | 21 04 25.5 | +2.2 |
| AKTO | **Aktyubinsk** 3.3nm,0.3s,baz=145,slow=10,SNR=8.9 | 16.47 | 329 | P | Pn | 21 04 29.8 | +2.2 |
| ZALV | **Zalesovo Beam** 0.6nm,0.4s,baz=221,slow=11,SNR=4.0 | 19.48 | 25 | P | Pn | 21 05 03.7 | +0.6 |
| AKASG | **Malin Array Be** comp=Z,29nm,19.6s,baz=299,slow=40 | 32.77 | 308 | LR | LR | 21 22 41.4 | |
| FINES | **FINESS Array B** 1.3nm,0.8s,baz=116,slow=8.7,SNR=3.8 1.3nm,0.8s | 37.19 | 326 | P | P | 21 07 42.0 | +2.5 |
| HFS | **Hagfors** 1.7nm,0.8s,baz=83,slow=12,SNR=2.9 1.7nm,0.8s | 42.80 | 322 | P | P | 21 08 27.8 | +2.2 |
| NOA | **NORSAR Array B** 1.0nm,1.0s,baz=101,slow=6.9,SNR=1.1 1.0nm,1.0s | 44.11 | 323 | P | P | 21 08 38.1 | +2.0 |
| TORD | **Torodi Ar. Bea** 0.3nm,0.5s,baz=38,slow=6.4,SNR=2.7 0.3nm,0.5s | 65.84 | 269 | P | P | 21 11 10.8 | -1.5 |
| WRA | **Warramunga Arr** 0.6nm,0.9s,baz=323,slow=4.8,SNR=5.7 0.6nm,0.9s | 82.12 | 122 | P | P | 21 12 43.2 | -3.1 |

*IDC **30** 21:13:39.7±0.6, 28°.21S×62°.91E, h0km, mb4.2/17, mbtmp4.2/18, ML4.1/1, MS3.4/22, Error ellipse: s-maj=20.4km s-min=15.8km az=48.0*
*NEIC **30** 21:13:41.6±1.3, 28°.15S±0°.08×62°.9E±0°.1, h10km±1km, mb4.7/35, Error ellipse: s-maj=17.2km s-min=13.2km az=254.0*

**ISC 30 21:13:41.1±0.4, 28°.14S±0°.08×62°.90E±0°.08, h10km, n80, σ0s85/63, mb4.6/42, MS3.4/23, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ROCAM | **Rodrigues Isla** | 8.36 | 3 | Pn | Pn | 21 15 41.8 | -0.5 |
| VOI | **Vohitsoka** | 15.86 | 289 | Pn | Pn | 21 17 22.8 | -1.8 |
| ABPO | **Animpanom** | 16.98 | 299 | Pn | Pn | 21 17 38.5 | -0.5 |
| OPO | **Ambohidratompo** 0.1nm,0.3s,baz=120,slow=17,SNR=8.0 4.3nm,0.8s | 17.27 | 300 | P | P | 21 17 44.0 | -0.1 |
| BOSA | **Boshof** | 33.03 | 260 | P | P | 21 20 16.3 | -0.6 |
| BOSA | comp=Z,17nm,1.4s | | | IAmb | IAmb | 21 20 20.1 | |
| BOSA | **Boshof** comp=Z,3.1nm,0.9s,baz=84,slow=7.6,SNR=4.8 | 33.03 | 260 | P | P | 21 20 15.9 | -1.0 |
| BOSA | comp=Z,34nm,18.3s,baz=159,slow=33 comp=Z,3.1nm,0.9s | | | LR | LR | 21 32 02.3 | |
| LBTB | **Lobatse** comp=Z,29nm,18.7s,baz=155,slow=33 | 33.42 | 267 | LR | LR | 21 32 05.2 | |
| LSZ | **Lusaka** | 34.57 | 284 | P | P | 21 20 31.2 | +0.8 |
| KMBO | **Kilima Mbogo** comp=Z,40nm,22.0s,baz=100,slow=30 | 36.38 | 313 | LR | LR | 21 32 02.5 | |
| SUR | **Sutherland** comp=Z,21nm,20.7s,baz=100,slow=32 | 36.43 | 253 | LR | LR | 21 33 25.1 | |
| MAW | **Mawson** comp=Z,5.2nm,0.7s,baz=292,slow=6.1,SNR=4.4 | 39.49 | 180 | P | P | 21 21 11.6 | +0.2 |
| MAW | comp=Z,84nm,19.4s,baz=56,slow=32 comp=Z,5.2nm,0.7s | | | LR | LR | 21 34 39.3 | |
| MBAR | **Mbarara** | 41.20 | 306 | P | P | 21 21 25.6 | -0.8 |
| FURI | **Furi** comp=Z,52nm,19.1s,baz=136,slow=32 | 43.64 | 324 | LR | LR | 21 36 37.5 | |
| CASY | **Casey** | 47.95 | 156 | P | P | 21 22 18.4 | -1.1 |
| CASY | comp=Z,4.7nm,1.0s | | | IAmb | IAmb | 21 22 21.9 | |
| KULM | **Kulim** | 49.28 | 54 | P | P | 21 22 31.0 | +0.6 |
| WSAR | **Wadi Sarin** comp=Z,65nm,18.1s,baz=218,slow=33 | 51.25 | 355 | LR | LR | 21 41 44.8 | |
| SNAA | **Sanae** | 55.95 | 200 | P | P | 21 23 19.9 | +0.8 |
| SNAA | comp=Z,7.6nm,1.5s | | | IAmb | IAmb | 21 23 43.4 | |
| SNAA | **Sanae** comp=Z,31nm,20.0s,baz=334,slow=30 | 55.95 | 200 | LR | LR | 21 41 59.3 | |
| CMAR | **Chiang Mai Arr** comp=Z,2.5nm,0.5s,baz=230,slow=7.5,SNR=16 | 57.99 | 41 | P | P | 21 23 34.9 | +0.8 |
| CMAR | comp=Z,25nm,18.5s,baz=285,slow=34 comp=Z,2.5nm,0.5s | | | LR | LR | 21 46 04.2 | |
| FITZ | **Fitzroy Crossi** | 58.02 | 95 | P | P | 21 23 35.2 | +0.7 |
| CRAI | **Chiangrai** | 60.21 | 41 | P | P | 21 23 49.0 | -0.5 |
| KNRA | **Kununurra** | 61.72 | 93 | P | P | 21 23 59.5 | -0.5 |
| QSPA | **South Pole Qui** | 62.01 | 180 | P | P | 21 24 01.1 | -0.3 |
| QSPA | comp=Z,8.9nm,1.1s | | | IAmb | IAmb | 21 24 02.5 | |
| QSPA | **South Pole Qui** comp=Z,2.7nm,0.8s,baz=194,slow=1.3,SNR=12 | 62.01 | 180 | P | P | 21 24 01.2 | -0.1 |
| QSPA | comp=Z,82nm,21.8s,baz=266,slow=32 comp=Z,2.7nm,0.8s | | | LR | LR | 21 46 41.8 | |
| ASAR | **Alice Springs** comp=Z,8.5nm,0.8s,baz=247,slow=6.2,SNR=80 comp=Z,8.5nm,0.8s | 63.20 | 104 | P | P | 21 24 10.1 | +0.1 |
| AS31 | **Alice Springs** comp=Z,2.7nm,0.6s | 63.20 | 104 | P | P | 21 24 10.3 | +0.4 |
| AS31 | | | | IAmb | IAmb | 21 24 10.7 | |
| EIL | **Elat** comp=Z,16nm,20.9s,baz=250,slow=32 | 63.39 | 333 | LR | LR | 21 47 20.3 | |
| WRA | **Warramunga Arr** comp=Z,5.5nm,0.9s,baz=248,slow=5.9,SNR=20 comp=Z,5.5nm,0.9s | 64.94 | 100 | P | P | 21 24 21.5 | +0.2 |
| WB2 | **Warramunga Arr** | 64.95 | 100 | P | P | 21 24 21.7 | +0.2 |
| WRAB | **Tennant Creek** | 64.96 | 100 | P | P | 21 24 21.7 | +0.2 |
| WRAB | comp=Z,8.9nm,1.0s | | | IAmb | IAmb | 21 24 23.2 | |
| WB0 | **Warramunga Arr** | 65.06 | 100 | P | P | 21 24 22.1 | 0.0 |
| WB0 | comp=Z,14nm,1.5s | | | IAmb | IAmb | 21 24 32.6 | |
| WR0 | **Warramunga Arr** comp=Z,12nm,1.3s | 65.11 | 100 | P | P | 21 24 22.9 | +0.4 |
| WR0 | | | | IAmb | IAmb | 21 24 23.5 | |
| MMAI | **Mount Meron Ar** comp=Z,0.6nm,0.5s,baz=144,slow=7.2,SNR=4.0 | 66.19 | 335 | P | P | 21 24 30.6 | +1.6 |
| MMAI | comp=Z,14nm,19.4s,baz=103,slow=31 comp=Z,0.6nm,0.5s | | | LR | LR | 21 48 16.7 | |
| STKA | **Stephens Creek** | 66.81 | 115 | P | P | 21 24 33.1 | -0.1 |
| STKA | **Stephens Creek** comp=Z,3.7nm,0.7s,baz=261,slow=2.7,SNR=7.3 comp=Z,3.7nm,0.7s | 66.81 | 115 | P | P | 21 24 32.8 | -0.4 |
| GURO | **Guroymak-BITLI** | 69.16 | 343 | P | P | 21 24 48.0 | +0.3 |
| GURO | comp=Z,4.3nm,1.2s | | | IAmb | IAmb | 21 24 51.3 | |
| GNI | **Garni** comp=Z,35nm,20.7s,baz=162,slow=34 | 70.01 | 345 | LR | LR | 21 53 13.7 | |
| HKPS | **Hong Kong Po S** | 70.41 | 50 | P | P | 21 24 54.4 | -1.2 |
| FAKI | **Fak Fak** | 70.44 | 83 | P | P | 21 24 55.7 | -0.5 |
| ARPR | **Arapgir-MALATY** | 70.71 | 340 | P | P | 21 24 57.3 | 0.0 |
| ARPR | comp=Z,3.3nm,0.9s | | | IAmb | IAmb | 21 25 02.2 | |
| AAK | **Ala-Archa** comp=Z,23nm,20.6s,baz=194,slow=32 | 71.23 | 9 | LR | LR | 21 52 20.5 | |
| KKAR | **Karatay Array** | 71.24 | 6 | P | P | 21 24 59.3 | -0.9 |
| KKAR | comp=Z,7.3nm,1.5s | | | IAmb | IAmb | 21 25 02.1 | |
| TORD | **Torodi Ar. Bea** comp=Z,1.1nm,0.8s,baz=105,slow=4.8,SNR=5.7 comp=Z,1.1nm,0.8s | 72.04 | 296 | P | P | 21 25 06.0 | +0.3 |
| BRTR | **Keskin Array B** comp=Z,1.1nm,0.8s,baz=153,slow=8.3,SNR=7.4 | 72.81 | 337 | P | P | 21 25 10.7 | +0.7 |
| BRTR | comp=Z,19nm,19.8s,baz=112,slow=33 comp=Z,1.1nm,0.8s | | | LR | LR | 21 53 47.0 | |
| KBZ | **Khabaz** comp=Z,42nm,20.1s,baz=157,slow=34 | 73.83 | 345 | LR | LR | 21 56 11.0 | |
| KVAR | **Kislovodsk Arr** comp=Z,33nm,21.3s,baz=55,slow=34 | 74.10 | 345 | LR | LR | 21 55 43.0 | |
| COEN | **Coen** | 75.09 | 98 | P | P | 21 25 23.2 | -0.5 |
| COEN | comp=Z,9.2nm,1.1s | | | IAmb | IAmb | 21 25 49.7 | |
| MKAR | **Makanchi Array** comp=Z,22nm,18.3s,baz=262,slow=35 | 76.62 | 14 | LR | LR | 21 57 55.3 | |
| ABKAR | **Akbulak array** | 77.09 | 358 | P | P | 21 25 34.6 | +0.4 |
| ABKAR | comp=Z,2.3nm,0.6s | | | IAmb | IAmb | 21 25 36.6 | |
| SMAI | **San Martin Ant** comp=Z,4.8nm,0.7s | 77.16 | 197 | P | P | 21 25 35.2 | +0.7 |
| SMAI | | | | IAmb | IAmb | 21 25 44.8 | |
| KURBB | **Kurchatov Arra** comp=Z,0.8nm,0.7s,baz=208,slow=6.3,SNR=7.3 comp=Z,0.8nm,0.7s | 79.63 | 10 | P | P | 21 25 48.5 | +0.2 |
| PUK | **Puka** | 80.33 | 329 | P | P | 21 25 53.5 | +1.1 |
| MLR | **Muntele Rosu** | 80.62 | 335 | P | P | 21 25 54.7 | +0.7 |
| BVAR | **Borovoye Array** comp=Z,1.2nm,0.6s,baz=175,slow=5.5,SNR=5.8 comp=Z,1.2nm,0.6s | 81.08 | 5 | P | P | 21 25 56.5 | +0.4 |
| BELG | **Belogornoye** comp=Z,19nm,18.8s,baz=146,slow=37 | 81.30 | 351 | LR | LR | 22 03 52.6 | |
| VSL | **Villasalto** | 83.74 | 321 | P | P | 21 26 10.8 | +0.6 |
| VSL | comp=Z,10nm,1.1s | | | IAmb | IAmb | 21 26 54.1 | |
| ZALV | **Zalesovo Beam** comp=Z,1.5nm,0.6s,baz=212,slow=4.5,SNR=11 comp=Z,1.5nm,0.6s | 83.92 | 13 | P | P | 21 26 11.1 | +0.3 |
| KIEV | **Kiev** | 83.96 | 339 | P | P | 21 26 10.7 | -0.3 |
| KIEV | comp=Z,4.7nm,0.8s | | | IAmb | IAmb | 21 26 13.5 | |
| AKASG | **Malin Array Be** comp=Z,1.7nm,0.6s,baz=157,slow=4.4,SNR=10 comp=Z,1.7nm,0.6s | 83.96 | 339 | P | P | 21 26 10.8 | -0.3 |
| AKBB | **Malin Array Si** comp=Z,5.2nm,0.8s | 83.96 | 339 | P | P | 21 26 11.0 | -0.1 |
| AKBB | | | | IAmb | IAmb | 21 26 13.5 | |
| GUMA | **Gualdo di Mace** | 84.23 | 326 | P | P | 21 26 12.4 | -0.4 |
| SONM | **Songino Array** comp=Z,0.9nm,0.9s,baz=222,slow=0.5,SNR=4.6 | 85.13 | 28 | P | P | 21 26 18.0 | +0.7 |
| SONM | comp=Z,25nm,21.0s,baz=220,slow=34 comp=Z,0.9nm,0.9s | | | LR | LR | 22 01 38.1 | |
| KWP | **Kalwaria Pacla** comp=Z,9.2nm,1.2s | 85.29 | 335 | P | P | 21 26 18.6 | +0.7 |
| KWP | | | | IAmb | IAmb | 21 26 20.8 | |
| ZCCA | **Zocca** | 86.34 | 326 | P | P | 21 26 23.2 | -0.1 |
| ABTA | **Abfaltersbach** comp=Z,2.4nm,1.2s | 87.33 | 328 | eP | P | 21 26 29.3 | +1.2 |
| LESA | **Schwarzleotal** comp=Z,2.4nm,0.9s | 87.75 | 329 | eP | P | 21 26 30.6 | +0.5 |
| WTTA | **Wattenberg** comp=Z,3.2nm,0.9s | 88.12 | 328 | eP | P | 21 26 33.1 | +1.1 |
| WATA | **Walderalm** comp=Z,2.6nm,0.5s | 88.20 | 328 | eP | P | 21 26 33.5 | +1.2 |
| SQTA | **Sankt Quirin** comp=Z,3.5nm,0.9s | 88.29 | 328 | eP | P | 21 26 34.5 | +1.8 |
| GERES | **GERESS Array B** comp=Z,0.2nm,0.3s,baz=147,slow=3.2,SNR=3.9 comp=Z,0.2nm,0.3s | 88.34 | 330 | P | P | 21 26 35.1 | +2.3 |
| FETA | **Feichten** comp=Z,5.8nm,0.9s | 88.37 | 327 | eP | P | 21 26 34.8 | +1.6 |
| MOTA | **Moosalm** comp=Z,4.9nm,1.1s | 88.43 | 328 | eP | P | 21 26 34.5 | +1.1 |
| RETA | **Reutte** comp=Z,3.3nm,0.8s | 88.69 | 328 | eP | P | 21 26 36.1 | +1.6 |
| DAVA | **Damuels** comp=Z,5.3nm,1.2s | 88.97 | 327 | eP | P | 21 26 37.3 | +1.4 |
| ESDC | **Sonseca Array** comp=Z,1.2nm,0.9s,baz=93,slow=3.8,SNR=5.7 comp=Z,1.2nm,0.8s | 91.75 | 315 | P | P | 21 26 49.9 | +0.9 |
| FINES | **FINESS Array B** comp=Z,12nm,19.2s,baz=263,slow=36 | 94.12 | 343 | LR | LR | 22 10 37.3 | |
| NOA | **NORSAR Array B** comp=Z,0.7nm,0.8s,baz=314,slow=2.6,SNR=3.7 | 98.24 | 337 | PKKPbc | PKKPbc | 21 43 48.9 | -3.1 |
| NOA | comp=Z,8.4nm,18.2s,baz=320,slow=36 | | | LR | LR | 22 12 52.6 | |
| NC303 | **NORSAR Array S** | 98.32 | 337 | P | Pdif | 21 27 19.2 | +0.8 |
| RAO | **Raoul Island** comp=Z,870nm,20.4s,baz=320,slow=30 | 98.52 | 130 | LR | LR | 22 03 13.5 | |
| YKA | **Yellowknife Ar** comp=Z,1.0nm,0.7s,baz=352,slow=3.8,SNR=5.2 | 145.61 | 358 | PKPbc | PKPdf | 21 33 18.9 | -0.1 |

**NAM 30 21:24:06.6±4.5, 19°.67S×14°.46E, h26km±22km, ML0.1, 7C-3D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ST3N | **ST3** | 0.09 | 153 | ⇓*i*P | Pb | 21 24 13.1 | +1.7 |
| ST3N | | | | *i* S | Sb | 21 24 14.5 | -0.2 |
| ST3N | | | | IAML | | 21 24 14.6 | |
| ST3N | **ST3** comp=Z,1.5nm,0.1s | 0.09 | 153 | ⇓*i*P | Pb | 21 24 13.1 | +1.6 |
| ST3N | | | | *i* S | Sb | 21 24 14.5 | -0.2 |
| ST3N | | | | IAML | | 21 24 14.6 | |
| ST8N | **ST8** comp=Z,1.4nm,0.0s | 0.13 | 259 | ⇑*i*P | Pn | 21 24 14.8 | +1.7 |
| ST8N | | | | *i* S | Sb | 21 24 19.8 | +4.5 |
| ST8N | | | | IAML | | 21 24 20.1 | |
| ST6N | **ST6** comp=Z,0.3nm,0.1s | 0.15 | 202 | ⇑*i*P | Pn | 21 24 14.4 | +1.0 |
| ST6N | | | | *i* S | Sb | 21 24 16.7 | +1.2 |
| ST6N | | | | IAML | | 21 24 16.8 | |
| ST6N | comp=Z,1.5nm,0.0s | | | *i* S | | 21 24 16.9 | |
| ST6N | **ST6** | 0.15 | 202 | ⇑*i*P | Pn | 21 24 14.4 | +1.0 |
| ST6N | comp=Z,1.5nm,0.0s | | | IAML | | 21 24 16.8 | |
| ST6N | | | | *i* S | Sb | 21 24 16.9 | +1.4 |
| ST1N | **ST1** | 0.16 | 116 | ⇑*i*P | Pb | 21 24 12.8 | +0.7 |
| ST1N | | | | *i* S | Sb | 21 24 13.0 | -1.9 |
| ST1N | | | | *i* S | | 21 24 14.0 | |
| ST1N | | | | IAML | | 21 24 14.0 | |
| ST1N | **ST1** comp=Z,7.6nm,0.1s | 0.16 | 116 | ⇓*i*P | Pb | 21 24 12.8 | +0.7 |
| ST1N | | | | *i* S | Sb | 21 24 13.9 | -1.9 |
| ST1N | | | | *i* S | | 21 24 14.0 | |
| ST1N | | | | IAML | | 21 24 14.0 | |
| ST2N | **ST2** comp=Z,7.7nm,0.1s | 0.29 | 153 | ⇑*i*P | Pb | 21 24 13.8 | 0.0 |
| ST2N | | | | IAML | | 21 24 15.6 | |
| ST2N | comp=Z,1.5nm,0.0s | | | *i* S | Sb | 21 24 15.7 | -2.9 |
| ST2N | **ST2** | 0.29 | 153 | ⇑*i*P | Pb | 21 24 13.7 | 0.0 |
| ST2N | | | | *i* S | Sb | 21 24 15.6 | -2.9 |
| ST2N | | | | IAML | | 21 24 16.6 | |
| ST10N | **ST10** comp=Z,1.3nm,0.1s | 0.34 | 191 | ⇑*i*P | Pn | 21 24 16.1 | +0.2 |
| ST10N | | | | *i* S | Sb | 21 24 19.8 | +0.2 |
| ST10N | | | | IAML | | 21 24 20.4 | |
| ST10N | **ST10** comp=Z,0.9nm,0.1s | 0.34 | 191 | *i* P | Pn | 21 24

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BKLT | Bekalta | 1.34 | 126 | *i* P | | Pg | 21 30 25.1 | -0.8 | |
| BERT | Berda | 2.23 | 194 | *i* P | | Pn | 21 30 38.4 | +1.2 | |
| MEDT | Meda | 2.31 | 175 | *i* P | | Pb | 21 30 41.3 | -0.6 | |
| SGNT | Sidi Gnaou | 2.75 | 176 | *i* P | | Pn | 21 30 44.5 | +0.1 | |
| VAE | Valguarnera | 3.95 | 73 | Pn | | Pn | 21 31 01.5 | +0.7 | |
| | 1.4nm,0.3s,baz=326,slow=3.6,SNR=3.7 | | | | | | | | |
| | 4.0nm,0.4s | | | | | | | | |
| PGF | Pioggiola | 6.14 | 355 | *e*Pn | | Pn | 21 31 32.7 | +1.7 | |
| PGF | | | | *e*Sn | | Sn | 21 32 35.7 | -5.7 | |
| | 7.3nm,0.4s | | | | | | | | |
| LMR | La Mourre | 7.32 | 342 | *e*Pn | | Pn | 21 31 46.9 | -0.2 | |
| LMR | | | | *e*Sn | | Sn | 21 33 03.3 | -6.9 | |
| | 3.4nm,0.3s | | | | | | | | |
| SBF | Sospel | 7.63 | 348 | *e*Pn | | Pn | 21 31 51.4 | 0.0 | |
| SMRF | Simiane la Rot | 8.17 | 339 | *e*Pn | | Pn | 21 32 00.0 | +1.2 | |
| SMRF | | | | *e*Sn | | Sn | 21 33 24.4 | -6.8 | |
| | 7.8nm,0.6s | | | | | | | | |
| MBDF | Montbardon | 8.59 | 346 | *e*Pn | | Pn | 21 32 08.0 | +3.4 | |
| ORIF | Oris-en-Rattie | 8.96 | 342 | *e*Pn | | Pn | 21 32 11.4 | +1.7 | |
| MTLF | Montolieu | 8.97 | 323 | *e*Pn | | Pn | 21 32 08.8 | -0.9 | |
| MTLF | | | | *e*Sn | | Sn | 21 33 43.7 | -7.1 | |
| | 7.0nm,0.5s | | | | | | | | |
| VIVF | Saint-Julien-l | 9.24 | 337 | *e*Pn | | Pn | 21 32 14.0 | +0.6 | |
| LPG | La Plagne | 9.34 | 347 | *e*Pn | | Pn | 21 32 18.5 | +3.6 | |
| LPL | La Plagne | 9.36 | 347 | *e*Pn | | Pn | 21 32 18.4 | +3.2 | |
| EPF | Esparros | 9.75 | 315 | *e*Pn | | Pn | 21 32 22.6 | +2.1 | |
| EPF | | | | *e*Sn | | Sn | 21 34 04.6 | -5.4 | |
| | 2.3nm,0.5s | | | | | | | | |
| ETSF | Etsaut | 10.19 | 313 | *e*Pn | | Pn | 21 32 28.0 | +1.5 | |
| ETSF | | | | *e*Sn | | Sn | 21 34 18.5 | -2.4 | |
| | 4.4nm,0.5s | | | | | | | | |
| CAF | Calviac | 10.27 | 328 | *e*Pn | | Pn | 21 32 28.3 | +0.8 | |
| CAF | | | | *e*Sn | | Sn | 21 34 14.2 | -8.5 | |
| | 2.6nm,0.5s | | | | | | | | |
| DAVOX | Davos/Dischmat | 10.36 | 1 | Pn | | Pn | 21 32 33.5 | +4.6 | |
| | 0.4nm,0.3s,baz=151,slow=14,SNR=23 | | | | | | | | |
| DAVOX | | | | LR | | LR | 21 36 49.0 | | |
| | comp=Z,32nm,20.7s,baz=158,slow=40 | | | | | | | | |
| ABTA | Abfaltersbach | 10.54 | 11 | *e*Pn | | Pn | 21 32 35.3 | +4.1 | |
| | 4.8nm,1.1s | | | | | | | | |
| FETA | Feichten | 10.63 | 4 | *e*Pn | | Pn | 21 32 38.0 | +5.5 | |
| | 5.2nm,0.9s | | | | | | | | |
| SJPF | Ste Jean | 10.71 | 312 | *e*Pn | | Pn | 21 32 35.4 | +1.8 | |
| SJPF | | | | *e*Sn | | Sn | 21 34 25.4 | -8.2 | |
| | 2.8nm,0.4s | | | | | | | | |
| RJF | Les Rejaudoux | 10.80 | 328 | *e*Pn | | Pn | 21 32 34.3 | -0.5 | |
| RJF | | | | *e*Sn | | Sn | 21 34 25.8 | -10 | |
| SQTA | Sankt Quirin | 10.86 | 6 | *e*Pn | | Pn | 21 32 41.0 | +5.3 | |
| | 2.7nm,0.6s | | | | | | | | |
| DAVA | Damuels | 10.86 | 1 | *e*Pn | | Pn | 21 32 41.2 | +5.4 | |
| | 6.4nm,0.7s | | | | | | | | |
| MOTA | Moosalm | 10.97 | 5 | *e*P | | Pn | 21 32 42.6 | +5.3 | |
| | 9.5nm,1.1s | | | | | | | | |
| WATA | Walderalm | 11.00 | 7 | *e*Pn | | Pn | 21 32 42.8 | +5.1 | |
| | 3.0nm,0.6s | | | | | | | | |
| RETA | Reutte | 11.09 | 4 | *e*Pn | | Pn | 21 32 44.9 | +6.0 | |
| | 4.6nm,0.8s | | | | | | | | |
| SMF | Signal de Mont | 11.11 | 339 | *e*Pn | | Pn | 21 32 40.6 | +1.6 | |
| ESDC | Sonseca Array | 11.22 | 291 | Pn | | Pn | 21 32 43.4 | +2.7 | |
| | 0.2nm,0.3s,baz=98,slow=14,SNR=31 | | | | | | | | |
| TCF | Toulx Ste Croi | 11.34 | 333 | *e*Pn | | Pn | 21 32 42.6 | +0.5 | |
| BGF | Bois d'Agland | 11.34 | 335 | *e*Pn | | Pn | 21 32 43.9 | +1.7 | |
| AVF | Avril sur Loir | 11.38 | 338 | *e*Pn | | Pn | 21 32 44.5 | +1.8 | |
| BIOA | Bad Ischl, Aus | 11.64 | 13 | *e*Pn | | Pn | 21 32 50.8 | +4.5 | |
| | 2.2nm,0.9s | | | | | | | | |
| MOA | Mollin | 11.92 | 15 | *e*Pn | | Pn | 21 32 55.3 | +5.2 | |
| | 3.3nm,0.9s | | | | | | | | |
| MDT | Midelt | 12.29 | 257 | Pn | | Pn | 21 32 52.5 | -2.8 | |
| | 0.1nm,0.3s,baz=96,slow=21,SNR=2.4 | | | | | | | | |
| | 2.6nm,1.0s | | | | | | | | |
| CONA | Conrad Observa | 12.38 | 20 | *e*Pn | | Pn | 21 32 59.8 | +3.4 | |
| | 3.9nm,1.2s | | | | | | | | |
| IDI | Anoyia | 12.41 | 91 | Pn | | Pn | 21 32 58.8 | +1.9 | |
| | 0.3nm,0.3s,baz=303,slow=8.0,SNR=1.7 | | | | | | | | |
| | 6.8nm,0.9s | | | | | | | | |
| GERES | GERESS Array B | 12.77 | 12 | Pn | | Pn | 21 33 04.5 | +2.8 | |
| | 0.2nm,0.3s,baz=193,slow=10,SNR=5.0 | | | | | | | | |
| MLR | Muntele Rosu | 15.26 | 49 | Pn | | P | 21 33 40.3 | -0.3 | |
| | 0.1nm,0.3s,baz=228,slow=4.7,SNR=12 | | | | | | | | |
| BRTR | Keskin Array B | 19.15 | 73 | P | | Pn | 21 34 25.4 | +0.9 | |
| | 1.6nm,0.9s,baz=257,slow=11,SNR=8.0 | | | | | | | | |
| AKASG | Malin Array Be | 20.03 | 38 | P | | Pn | 21 34 34.9 | +0.1 | |
| | 1.1nm,0.7s,baz=236,slow=9.0,SNR=3.6 | | | | | | | | |
| | 1.1nm,0.7s | | | | | | | | |
| EKA | Eskdalemuir Ar | 20.86 | 339 | P | | Pn | 21 34 47.3 | +2.9 | |
| | 1.5nm,1.0s,baz=149,slow=9.8,SNR=5.0 | | | | | | | | |
| MMAI | Mount Meron Ar | 21.41 | 92 | P | | P | 21 34 51.7 | +3.5 | |
| | 2.7nm,0.7s,baz=290,slow=8.7,SNR=5.0 | | | | | | | | |
| | 2.7nm,0.7s | | | | | | | | |
| HFS | Hagfors | 23.88 | 5 | P | | P | 21 35 13.7 | +0.1 | |
| | 2.4nm,0.6s,baz=193,slow=6.1,SNR=12 | | | | | | | | |
| | 2.4nm,0.6s | | | | | | | | |
| TORD | Torodi Ar. Bea | 24.25 | 199 | P | | P | 21 35 17.1 | -0.3 | |
| | 1.5nm,0.9s,baz=5.2,slow=9.6,SNR=11 | | | | | | | | |
| | 1.5nm,0.9s | | | | | | | | |
| NOA | NORSAR Array B | 24.66 | 2 | LR | | LR | 21 45 09.0 | | |
| | comp=Z,2.6nm,18.6s,baz=30,slow=37 | | | | | | | | |
| FINES | FINESS Array B | 27.11 | 17 | P | | P | 21 35 42.0 | -0.9 | |
| | 2.4nm,0.8s,baz=198,slow=7.7,SNR=9.4 | | | | | | | | |
| | 2.4nm,0.8s | | | | | | | | |
| MKAR | Makanchi Array | 53.49 | 55 | P | | P | 21 39 19.7 | -0.9 | |
| | 0.8nm,0.6s,baz=282,slow=6.4,SNR=5.5 | | | | | | | | |
| | 0.8nm,0.6s | | | | | | | | |
| OPO | Ambohidratompo | 65.18 | 140 | LR | | LR | 22 08 42.0 | | |
| | comp=Z,40nm,21.7s,baz=16,slow=36 | | | | | | | | |
| SONM | Songino Array | 68.10 | 46 | P | | P | 21 41 00.3 | +0.2 | |
| | 0.6nm,0.8s,baz=300,slow=6.5,SNR=2.8 | | | | | | | | |
| | 0.6nm,0.8s | | | | | | | | |

*TEH **30** 21:36:00.1,30.87N×51.57E,h6km×33km,ML3.3*
*SGS **30** 21:36:00.8,31.17N×51.59E,h6km,Ml4.0*
*IDC **30** 21:36:03.1±3.5,31.18N×51.33E,h0km,mb3.8/8,*
*mbtmp3.8/10,ML3.5/2,Error ellipse: s-maj=70.1km*
*s-min=21.5km az=166.0*
*DSN **30** 21:36:08.1±1.9,30.13N×51.35E,h15km,ML3.3/7,Error*
*ellipse: s-maj=26.3km s-min=10.0km az=13.0*
**ISC 30 21:36:01.0**±0.6,**30.86N**±0.03×**51.60E**±0.04,**h10km**,**n55**,
**σ2$00/57**,**mb3.9/8**,**Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KLNJ | Kolanjah | 0.15 | 359 | Pg | Pg | 21 36 04.5 | -0.1 |
| IBRJ | Brojen | 1.09 | 345 | Pg | Pn | 21 36 21.4 | -1.2 |
| IRAM | Ramesheh | 1.16 | 35 | Pg | Pn | 21 36 23.7 | +0.1 |
| IRAM | | | | Sg | Sn | 21 36 40.6 | +1.0 |
| ABEH | Behbahan | 1.18 | 258 | Pg | Pn | 21 36 23.5 | -0.2 |
| KAZ2 | Kazeron-Fars-I | 1.24 | 177 | Pg | Pg | 21 36 24.9 | 0.0 |
| ZNGN | Zangian | 1.41 | 333 | Pg | Pg | 21 36 27.8 | -0.3 |
| SHI | Shiraz | 1.45 | 147 | Pg | Pg | 21 36 28.4 | -0.5 |
| JHBN | Jahan bin | 1.58 | 330 | Pg | Pg | 21 36 31.0 | -0.5 |
| IGAR | Gharneh | 1.59 | 14 | Pg | Pg | 21 36 31.5 | -0.1 |
| IPIR | Pirpir | 1.92 | 342 | Pn | Pg | 21 36 36.7 | -1.1 |
| AHBU | AHRAM | 2.00 | 188 | Pn | Pb | 21 36 37.5 | -0.1 |
| ISAD | Sadrabad | 2.07 | 59 | Pn | Pg | 21 36 39.6 | -1.3 |
| IKLH | Kolahrood | 2.45 | 360 | Pn | Pb | 21 36 44.4 | -1.1 |
| DSBU | Dashti - Bushe | 2.50 | 187 | Pn | Pb | 21 36 44.2 | -2.0 |
| IMEH | Mehriz | 2.64 | 78 | Pn | Pb | 21 36 47.3 | -1.3 |
| ICHK | Chekchek | 2.77 | 59 | Pn | Pb | 21 36 49.1 | -1.7 |
| QAMS | Qamsar | 2.88 | 357 | Pn | Pb | 21 36 49.4 | -3.2 |
| ANAR | Anarak | 2.95 | 37 | Pn | Pb | 21 36 50.4 | -3.3 |
| KRSH | Karshahi | 3.14 | 8 | Pn | Pn | 21 36 52.8 | +2.1 |
| ISFB | Sefidab | 3.53 | 9 | Pn | Pb | 21 36 59.2 | -4.4 |
| KFJS2 | Khafji | 3.74 | 229 | P | Pn | 21 37 00.4 | +1.5 |
| IQOM | Qom | 4.00 | 354 | Pn | Pn | 21 37 04.6 | +2.0 |
| IVRN | Varamin | 4.13 | 2 | Pn | Pn | 21 37 07.5 | +3.2 |
| IKFM | Kafar-mosalman | 4.14 | 311 | Pn | Pn | 21 37 06.6 | +2.2 |
| HSAM | Samen | 4.19 | 324 | Pn | Pn | 21 37 06.7 | +1.4 |
| HAGD | Aghdareh | 4.46 | 333 | Pn | Pn | 21 37 11.2 | +2.2 |
| IDMV | Damavand | 4.72 | 4 | Pn | Pn | 21 37 15.1 | +2.5 |
| IBZA | Bozab | 4.78 | 320 | Pn | Pn | 21 37 15.7 | +2.3 |
| IFIR | Firoozkooh | 4.87 | 11 | Pn | Pn | 21 37 17.7 | +3.1 |
| BQGSS | | 5.34 | 202 | P | Pn | 21 37 23.4 | +2.6 |
| TKDS | Koohdasht(Taba | 5.43 | 58 | Pn | Pn | 21 37 26.0 | +3.9 |
| HOFOF | Al Hofuf | 5.64 | 196 | P | Pn | 21 37 26.8 | +1.8 |
| KLST | Kelardasht - M | 5.66 | 356 | Pn | Pn | 21 37 27.8 | +2.2 |
| RQBS | RQBS | 6.05 | 236 | P | Pn | 21 37 30.8 | +0.2 |
| TAPT | Tabas- Tapeh t | 6.17 | 48 | Pn | Pn | 21 37 35.8 | +3.5 |
| NHRD | Haradh | 6.53 | 201 | P | Pn | 21 37 38.8 | +1.7 |
| NAZ | Nazwa, Dubai | 6.86 | 147 | P | Pn | 21 37 42.7 | +0.9 |
| MDH | Madha | 6.92 | 142 | P | Pn | 21 37 42.3 | -0.3 |
| ASUD | Al Ashush, Dub | 7.03 | 151 | P | Pn | 21 37 45.2 | +1.0 |
| UOSS | Minazif | 7.16 | 144 | P | Pn | 21 37 46.0 | +0.1 |
| HATD | Hatta, Dubai | 7.23 | 145 | P | Pn | 21 37 48.0 | +1.2 |
| ASHO | Ashiyiah | 7.31 | 146 | P | Pn | 21 37 48.4 | +0.4 |
| ASHO | | | | S | Sn | 21 39 06.8 | -4.3 |
| ALNE | Al Ain | 7.71 | 150 | P | Pn | 21 37 53.5 | 0.0 |
| SOHO | SOHO | 8.00 | 146 | P | Pn | 21 37 56.3 | -1.2 |
| RAYN | Ar Rayn | 9.10 | 218 | P | Pn | 21 38 09.3 | -3.2 |
| ASF | Jabal al Asfar | 12.61 | 280 | Pn | Pn | 21 38 58.9 | -1.7 |
| | 0.4nm,0.3s,baz=56,slow=0.6,SNR=2.8 | | | | | | |
| | 1.4nm,0.4s | | | | | | |
| AKTO | Aktyubinsk | 20.14 | 12 | P | P | 21 40 34.6 | -0.6 |
| | 0.1nm,0.3s,baz=201,slow=13,SNR=4.8 | | | | | | |
| | 1.7nm,0.8s | | | | | | |
| BELG | Belogornoye | 21.71 | 353 | P | P | 21 40 52.1 | 0.0 |
| | 7.6nm,1.0s,baz=180,slow=1.0,SNR=3.7 | | | | | | |
| | 7.6nm,1.0s | | | | | | |
| IDI | Anoyia | 22.78 | 288 | P | P | 21 41 05.0 | +1.2 |
| | 3.8nm,0.9s,baz=19,slow=19,SNR=1.2 | | | | | | |
| | 3.8nm,0.9s | | | | | | |
| MLR | Muntele Rosu | 24.76 | 313 | P | P | 21 41 24.3 | +1.3 |
| | 2.6nm,0.8s,baz=112,slow=3.5,SNR=7.5 | | | | | | |
| | 2.6nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 25.90 | 326 | P | P | 21 41 32.4 | -0.6 |
| | 1.1nm,0.5s,baz=135,slow=9.0,SNR=12 | | | | | | |
| | 1.1nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 26.04 | 26 | P | P | 21 41 36.7 | +2.4 |
| | 1.4nm,0.5s,baz=222,slow=7.2,SNR=8.6 | | | | | | |
| | 1.4nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 28.49 | 47 | P | P | 21 41 59.4 | +3.0 |
| | 1.1nm,0.9s,baz=246,slow=9.1,SNR=2.1 | | | | | | |
| | 1.1nm,0.9s | | | | | | |
| ZALV | Zalesovo Beam | 33.19 | 36 | P | P | 21 42 40.2 | +2.5 |
| | 0.5nm,0.4s,baz=260,slow=10,SNR=3.6 | | | | | | |
| | 0.5nm,0.4s | | | | | | |
| ESDC | Sonseca Array | 45.58 | 297 | P | P | 21 44 21.2 | -0.1 |
| | 0.2nm,0.5s,baz=82,slow=8.7,SNR=4.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

*IDC **30** 21:43:32.0±0.6,32.39S×71.14W,h0km,mb4.6/10,*
*mbtmp4.5/15,ML4.5/5,MS3.6/22,Error ellipse:*
*s-maj=23.4km s-min=15.6km az=90.0*
*VAO **30** 21:43:35.9±1.1,32.64S×71.28W,h41km±3km,mb4.8*
*SJA **30** 21:43:36.2±1.0,32.39S×71.41W,h21km±2km,ML4.8,*
*MW4.7*
*NEIC **30** 21:43:38.9,32.39S×71.24W,h44km*
*GUC **30** 21:43:39.1±0.7,32.40S×71.23W,h55km±2km,ML4.9*
*NEIC **30** 21:43:39.3±1.3,32.39S±0.03×71.23W±0.05,h48km±4km,*
*mb4.7/157,Mwr4.6/44,Mwr4.8(GUC),Error ellipse:*
*s-maj=6.3km s-min=4.0km az=76.0,Moment Tensor*
*Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=0.10;*
*$M_{\theta\theta}$=0.61; $M_{r\theta}$=-0.51; $M_{r\phi}$=-0.08; $M_{\theta\phi}$=-0.37; $M_{\phi r}$=0.78; Fault*
*plane solution: $M_0$=1.03000×$10^{16}$ NP1:$\phi_s$=331.32000°,*
*δ=78.45000°,λ=-39.81000°. NP2:$\phi_s$=70.79000°,δ=51.15000°,*
*λ=-165.10000°. Principal axes: T 0.7690, Plg=18.0000°,*
*Azm=27.0000°; N 0.4062, Plg=49.0000°, Azm=138.0000°; P*
*=-1.1752, Plg=36.0000°, Azm=283.0000°;*
**ISC 30 21:43:38.0**±0.6,**32.41S**±0.02×**71.31W**±0.04,**h42**km±5km,
**n378**,**σ1$62/405**,**mb4.7/78**,**MS3.7/19**,**14C-19D**,**Near**
**coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VA06 | Catapilco | 0.15 | 175 | | Pn | 21 43 47.3 | +2.2 |
| VA06 | | | | | Sn | 21 43 53.0 | +3.0 |
| VA06 | Catapilco | 0.15 | 175 | ⇓*i*P | Pn | 21 43 47.4 | +2.3 |
| VA06 | | | | *i* S | Sn | 21 43 53.4 | +3.3 |
| VA06 | | | | IAML | | 21 43 54.1 | |
| | comp=E,162μm,0.5s | | | | | | |
| CO04 | Los Peladeros | 0.47 | 38 | ⇓*i*P | Pn | 21 43 50.2 | +1.6 |
| CO04 | | | | *i* S | Sn | 21 43 58.0 | +1.9 |
| ROCH | El Roble | 0.61 | 156 | ⇓*i*P | Pn | 21 43 52.0 | +1.5 |
| ROCH | | | | eS | Sn | 21 44 01.4 | +2.0 |
| VA03 | San Esteban | 0.73 | 119 | | Pn | 21 43 53.0 | +1.0 |
| VA03 | | | | Sn | Sn | 21 44 03.1 | +1.1 |
| VA03 | San Esteban | 0.73 | 119 | *e*P | Pn | 21 43 53.0 | +1.0 |
| VA03 | | | | *e*S | Sn | 21 44 03.4 | +1.3 |
| VA03 | | | | IAML | | 21 44 04.5 | |
| | comp=Z,42μm,1.1s | | | | | | |
| VA03 | San Esteban | 0.73 | 119 | ⇑*i*P | Pn | 21 43 52.8 | +0.8 |
| VA03 | | | | *i* S | Sn | 21 44 03.0 | +0.9 |
| MT02 | Curacav | 0.86 | 170 | | Pn | 21 43 54.9 | +1.2 |
| MT02 | | | | Sn | Sn | 21 44 06.5 | +1.5 |
| MT02 | Curacav | 0.86 | 170 | *e*P | Pn | 21 43 54.8 | +1.2 |
| MT02 | Curacav | 0.86 | 170 | ⇓*e*P | Pn | 21 43 54.8 | +1.2 |
| MT02 | | | | eS | Sn | 21 44 07.0 | +2.1 |
| PEL | Peldehue | 0.90 | 144 | | Pn | 21 43 55.0 | +0.7 |
| PEL | | | | Sn | Sn | 21 44 07.4 | +1.3 |
| PEL | Peldehue | 0.90 | 144 | *e*P | Pn | 21 43 55.5 | +1.2 |
| PEL | | | | *e*S | Sn | 21 44 08.5 | +2.4 |
| PEL | Peldehue | 0.90 | 144 | ⇓*e*P | Pn | 21 43 55.6 | +1.4 |
| PEL | | | | *i* S | Sn | 21 44 07.6 | +1.5 |
| PEL | | | | IAML | | 21 44 08.8 | |
| | comp=E,51μm,0.4s | | | | | | |
| MT10 | Hacienda Santa | 1.08 | 143 | ⇓*i*P | Pn | 21 43 58.1 | +1.4 |
| MT10 | | | | *e*S | Sn | 21 44 12.3 | +1.8 |
| MT10 | | | | IAML | | 21 44 13.3 | |
| | comp=N,89μm,0.6s | | | | | | |
| MT05 | Renca | 1.09 | 154 | | Pn | 21 43 59.7 | +2.9 |
| MT05 | | | | Sn | Sn | 21 44 14.5 | +3.7 |
| MT05 | Renca | 1.09 | 154 | *e*P | Pn | 21 43 59.8 | +2.9 |
| MT05 | | | | IAML | | 21 44 21.2 | |
| | comp=Z,13μm,1.4s | | | | | | |
| MT05 | Renca | 1.09 | 154 | *e*P | Pn | 21 43 60.0 | +3.1 |
| MT05 | | | | *i* S | Sn | 21 44 14.2 | +3.5 |
| MT05 | | | | IAML | | 21 44 15.3 | |
| | comp=E,90μm,0.4s | | | | | | |
| MT14 | Cerro Cal¡n | 1.18 | 147 | ⇓*i*P | Pn | 21 43 59.5 | +1.5 |
| MT14 | | | | *e*S | Sn | 21 44 14.9 | +1.9 |
| MT14 | | | | IAML | | 21 44 21.4 | |
| | comp=E,45μm,0.4s | | | | | | |
| MT16 | CCHEN | 1.21 | 147 | | Pn | 21 43 59.6 | +1.1 |
| MT16 | | | | Sn | Sn | 21 44 15.3 | +1.6 |
| MT16 | CCHEN | 1.21 | 147 | ⇓*i*P | Pn | 21 43 59.9 | +1.4 |
| MT16 | | | | *e*S | Sn | 21 44 15.4 | +1.7 |
| MT16 | | | | IAML | | 21 44 16.6 | |
| | comp=N,19μm,0.4s | | | | | | |
| CO02 | Combarbal | 1.23 | 12 | | Pn | 21 43 60.0 | +1.1 |
| CO02 | | | | Sn | Sn | 21 44 16.6 | +2.2 |
| CO02 | Combarbal | 1.23 | 12 | *e*P | Pn | 21 43 59.9 | +1.1 |
| CO02 | | | | *e*S | Sn | 21 44 17.0 | +2.6 |
| CO02 | | | | IAML | | 21 44 19.6 | |
| | comp=Z,23μm,0.2s | | | | | | |
| CO02 | Combarbal | 1.23 | 12 | ⇑*e*P | Pn | 21 43 60.0 | +1.1 |
| CO02 | | | | *i* S | Sn | 21 44 15.7 | +1.3 |
| CO02 | | | | IAML | | 21 44 21.2 | |
| | comp=E,93μm,0.4s | | | | | | |
| FCH | Farellones | 1.25 | 137 | ⇓*e*P | Pn | 21 44 00.5 | +1.2 |
| FCH | | | | *e*S | Sn | 21 44 17.1 | +1.9 |
| MT03 | Universidad Ad | 1.27 | 148 | | Pn | 21 44 00.6 | +1.3 |
| MT03 | | | | Sn | Sn | 21 44 17.2 | +1.9 |
| MT03 | Universidad Ad | 1.27 | 148 | *e*P | Pn | 21 44 00.9 | +1.5 |
| MT03 | | | | *e*S | Sn | 21 44 17.4 | +2.1 |
| MT03 | | | | IAML | | 21 44 20.8 | |
| | comp=Z,26μm,0.6s | | | | | | |
| MT03 | Universidad Ad | 1.27 | 148 | ⇓*i*P | Pn | 21 44 00.9 | +1.5 |
| MT03 | | | | *e*S | Sn | 21 44 17.1 | +1.9 |
| MT03 | | | | IAML | | 21 44 21.3 | |
| | comp=E,46μm,0.4s | | | | | | |
| MT15 | Las Vizcachas | 1.36 | 150 | ⇓*e*P | Pn | 21 44 02.0 | +1.4 |
| MT15 | | | | *i* S | Sn | 21 44 19.3 | +1.8 |
| MT15 | | | | IAML | | 21 44 24.6 | |
| | comp=E,32μm,0.2s | | | | | | |
| MT09 | Talagante | 1.39 | 169 | | Pn | 21 44 02.6 | +1.7 |
| MT09 | | | | Sn | Sn | 21 44 21.2 | +3.0 |
| MT09 | Talagante | 1.39 | 169 | *e*P | Pn | 21 44 02.7 | +1.7 |
| MT09 | | | | *i* S | Sn | 21 44 20.9 | +2.7 |
| MT09 | | | | IAML | | 21 44 23.9 | |
| | comp=E,34μm,0.4s | | | | | | |
| MT04 | Ro Olivares | 1.40 | 135 | *e*P | Pn | 21 44 02.8 | +1.5 |
| MT04 | | | | IAML | | 21 44 25.7 | |
| | comp=Z,10μm,0.4s | | | | | | |
| MT04 | Ro Olivares | 1.40 | 135 | ⇓*i*P | Pn | 21 44 02.7 | +1.5 |
| MT04 | | | | *i* S | Sn | 21 44 20.6 | +2.0 |
| MT01 | Popeta | 1.45 | 178 | Pn | Pn | 21 44 03.7 | +2.0 |
| MT01 | | | | Sn | Sn | 21 44 21.3 | +1.8 |
| MT01 | Popeta | 1.45 | 178 | *e*P | Pn | 21 44 03.8 | +2.1 |
| MT01 | | | | *e*S | Sn | 21 44 24.2 | +4.7 |
| MT01 | | | | IAML | | 21 44 26.9 | |
| | comp=Z,12μm,0.1s | | | | | | |
| MT01 | Popeta | 1.45 | 178 | ⇑*e*P | Pn | 21 44 03.5 | +1.8 |
| MT01 | | | | *e*S | Sn | 21 44 22.3 | +2.8 |
| MT01 | | | | IAML | | 21 44 27.4 | |
| | comp=E,31μm,0.4s | | | | | | |
| MT08 | Bocatoma Ro | 1.50 | 134 | | Pn | 21 44 04.0 | +1.4 |
| MT08 | | | | Sn | Sn | 21 44 21.5 | +0.4 |
| MT08 | Bocatoma Ro | 1.50 | 134 | *e*P | Pn | 21 44 04.7 | +2.0 |
| MT08 | | | | IAML | | 21 44 29.6 | |
| | comp=Z,7μm,0.3s | | | | | | |
| MT08 | Bocatoma Ro | 1.50 | 134 | ⇓*i*P | Pn | 21 44 04.5 | +1.9 |
| MT08 | | | | *i* S | Sn | 21 44 23.7 | +2.6 |
| MT08 | | | | IAML | | 21 44 30.8 | |
| | comp=E,20μm,0.9s | | | | | | |
| MT13 | San Alfonso | 1.58 | 147 | | Pn | 21 44 04.9 | +1.2 |
| MT13 | | | | Sn | Sn | 21 44 24.6 | +1.6 |
| MT13 | San Alfonso | 1.58 | 147 | *e*P | Pn | 21 44 04.8 | +1.2 |
| MT13 | | | | IAML | | 21 44 34.6 | |
| | comp=Z,9μm,0.5s | | | | | | |
| MT13 | San Alfonso | 1.58 | 147 | ⇓*e*P | Pn | 21 44 05.1 | +1.5 |
| MT13 | | | | *i* S | Sn | 21 44 25.1 | +2.1 |
| MT13 | | | | IAML | | 21 44 29.3 | |
| | comp=N,53μm,0.1s | | | | | | |
| CO03 | El Pedregal | 1.66 | 19 | | Pn | 21 44 05.8 | +1.1 |
| CO03 | | | | Sn | Sn | 21 44 26.5 | +1.7 |
| CO03 | El Pedregal | 1.66 | 19 | *e*P | Pn | 21 44 06.4 | +1.7 |
| CO03 | | | | *e*S | Sn | 21 44 28.1 | +3.3 |
| CO03 | | | | IAML | | 21 44 29.4 | |
| | comp=Z,15μm,0.2s | | | | | | |
| CO03 | El Pedregal | 1.66 | 19 | ⇑*e*P | Pn | 21 44 06.1 | +1.5 |
| CO03 | | | | *i* S | Sn | 21 44 26.5 | +1.7 |
| BO04 | La Punta | 1.68 | 160 | | Pn | 21 44 06.4 | +1.5 |
| BO04 | | | | Sn | Sn | 21 44 27.7 | +2.5 |
| BO04 | La Punta | 1.68 | 160 | ⇓*e*P | Pn | 21 44 06.4 | +1.5 |
| BO04 | | | | *i* S | Sn | 21 44 27.4 | +2.1 |
| LMEL | Las Melosas | 1.71 | 147 | | Pn | 21 44 06.8 | +1.4 |
| LMEL | | | | Sn | Sn | 21 44 26.9 | +0.9 |
| LMEL | Las Melosas | 1.71 | 147 | *e*P | Pn | 21 44 07.4 | +2.0 |
| LMEL | Las Melosas | 1.71 | 147 | ⇓*e*P | Pn | 21 44 07.1 | +1.7 |
| LMEL | | | | *i* S | Sn | 21 44 28.1 | +2.1 |
| LMEL | | | | IAML | | 21 44 35.1 | |
| | comp=N,26μm,0.1s | | | | | | |
| CO06 | Fray Jorge | 1.76 | 351 | | Pn | 21 44 07.6 | +1.7 |
| CO06 | Fray Jorge | 1.76 | 351 | ⇓*e*P | Pn | 21 44 07.6 | +1.7 |
| CO06 | | | | *e*S | Sn | 21 44 29.4 | +2.3 |
| CO06 | | | | IAML | | 21 44 37.1 | |
| | comp=N,15μm,0.3s | | | | | | |
| RTLS | Leoncito | 1.82 | 71 | *e*P | Pn | 21 44 10.2 | +3.2 |
| RTLS | | | | *e*S | Sn | 21 44 34.5 | +5.5 |
| RTLS | | | | IAML | | 21 44 40.4 | |
| | comp=Z,25μm,0.6s | | | | | | |
| BO01 | Tunca | 1.98 | 175 | Pn | Pn | 21 44 11.7 | +2.7 |
| BO01 | | | | Sn | Sn | 21 44 34.5 | +1.9 |
| BO01 | Tunca | 1.98 | 175 | *e*P | Pn | 21 44 11.3 | +2.3 |
| BO01 | | | | *e*S | Sn | 21 44 36.6 | +4.0 |
| BO01 | | | | IAML | | 21 44 40.5 | |
| | comp=Z,6μm,1.0s | | | | | | |
| BO01 | Tunca | 1.98 | 175 | ⇓*e*P | Pn | 21 44 11.0 | +2.0 |
| BO01 | | | | *i* S | Sn | 21 44 35.0 | +2.4 |
| ARCO | CERRO ARCO | 2.05 | 103 | *e*P | Pn | 21 44 14.3 | +4.1 |
| ARCO | | | | IAML | | 21 44 47.3 | |
| | comp=Z,3μm,0.8s | | | | | | |
| ASAL | Salagasta | 2.10 | 96 | *e*P | Pn | 21 44 14.9 | +4.2 |
| BO03 | Pichilemu | 2.15 | 194 | *e*P | Pn | 21 44 12.4 | +1.1 |
| AAGR | Agrelo | 2.20 | 108 | *e*P | Pn | 21 44 16.2 | +4.1 |
| GO04 | Tololo Observa | 2.28 | 11 | | Pn | 21 44 14.6 | +1.3 |
| GO04 | Tololo Observa | 2.28 | 11 | *e*P | Pn | 21 44 15.1 | +1.8 |
| GO04 | | | | *e*S | Sn | 21 44 43.9 | +3.7 |
| GO04 | Tololo Observa | 2.28 | 11 | ⇑*i*P | Pn | 21 44 14.8 | +1.5 |
| DOCA | Reserva Natura | 2.40 | 53 | *e*P | Pn | 21 44 18.4 | +3.4 |
| DOCA | | | | *e*S | Sn | 21 44 49.7 | +6.3 |
| ZON | Zonda | 2.40 | 70 | Pn | Pn | 21 44 17.8 | +3.0 |
| ZON | Zonda | 2.40 | 70 | *e*P | Pn | 21 44 18.0 | +3.2 |
| ZON | | | | *e*S | Sn | 21 44 53.2 | +10 |
| ZON | | | | IAML | | 21 44 55.4 | |
| | comp=Z,3μm,0.5s | | | | | | |
| RTCV | Cerro Valdivia | 2.41 | 78 | *e*P | Pn | 21 44 18.8 | +3.7 |
| CO05 | La Serena | 2.49 | 1 | | Pn | 21 44 17.3 | +1.3 |
| CO05 | La Serena | 2.49 | 1 | *e*P | Pn | 21 44 17.7 | +1.7 |
| AVIZ | Vizcacheras | 2.58 | 115 | *e*P | Pn | 21 44 20.6 | +3.4 |
| GO05 | Huala | 2.64 | 191 | | Pn | 21 44 19.3 | +1.2 |
| GO05 | Huala | 2.64 | 191 | *e*P | Pn | 21 44 19.3 | +1.2 |
| GO05 | | | | *e*S | Sn | 21 45 04.0 | +15 |
| GO05 | Huala | 2.64 | 191 | *e*P | Pn | 21 44 19.2 | +1.2 |
| GO05 | | | | IAML | | 21 45 05.2 | |
| | comp=E,5μm,0.6s | | | | | | |
| CO01 | Juntas del Tor | 2.64 | 24 | | Pn | 21 44 19.9 | +1.6 |
| CO01 | Juntas del Tor | 2.64 | 24 | *e*P | Pn | 21 44 20.7 | +2.4 |
| CO01 | | | | *e*S | Sn | 21 44 53.5 | +4.2 |
| CO01 | | | | IAML | | 21 45 07.6 | |
| | comp=Z,3μm,0.6s | | | | | | |
| CO01 | Juntas del Tor | 2.64 | 24 | ⇑*e*

PB14 IPOC Station P 7.80 6 Pn Pn 21 45 28.7 -0.5
LR05 Currie 7.82 184 Pn Pn 21 45 29.6 +0.4
PLCA Paso Flores 8.33 176 Pn 21 45 37.2 +1.1
PLCA Paso Flores 8.33 176 Pn Pn 21 45 35.4 -0.8
comp=Z,1.3nm,0.3s,baz=343,slow=12,SNR=16
PLCA Sn Sn 21 47 28.4 +20
comp=Z,0.5nm,0.3s,baz=326,slow=16,SNR=1.7
PLCA LR LR 21 48 49.2
comp=Z,233nm,19.1s,baz=356,slow=38
comp=Z,4.0nm,0.4s
LL04 Puerto Octay 8.53 186 Pn Pn 21 45 38.2 -0.6
LL03 Petrohue 8.75 185 Pn Pn 21 45 42.8 +0.9
LL05 Los Muermos 9.14 190 Pn Pn 21 45 47.3 +0.1
TRQA Tornquist 9.48 129 Pn 21 45 51.9 -0.1
AF01 San Pedro de A 9.82 17 Pn Pn 21 45 55.6 -1.4
LL06 Loncomilla 9.96 190 Pn Pn 21 45 58.6 +0.2
LL01 San Ignacio de 9.99 185 Pn 21 45 59.1 +0.3
LVC Limon Verde 9.99 13 Pn Pn 21 45 56.5 -2.8
LVC Limon Verde 9.99 13 Pn Pn 21 45 55.9 -3.4
comp=Z,2.3nm,0.3s,baz=164,slow=8.0,SNR=13
LVC Sn Sn 21 47 57.6 +7.2
comp=Z,6.5nm,0.3s,baz=225,slow=19,SNR=2.0
comp=Z,5.3nm,0.3s
PB04 IPOC Station P 10.09 6 Pn Pn 21 45 57.6 -2.9
PB09 IPOC Station P 10.73 10 Pn 21 46 07.1 -2.2
GO07 Milladeo Hill, 10.84 189 Pn Pn 21 46 08.9 -1.6
PATCX Punta Patache 11.59 5 Pn Pn 21 46 21.3 +0.3
PSAL Palomas, Salto 11.74 87 eP Pn 21 46 21.2 -1.7
TA01 Diego Aracena 11.84 5 Pn Pn 21 46 24.2 -0.1
TA02 Huaiquique 12.14 5 Pn Pn 21 46 28.3 -0.1
GO01 Chusmiza 12.83 9 Pn Pn 21 46 37.5 -0.7
ITQB Itaqui 12.89 82 Pn Pn 21 46 36.8 -1.7
ITQB Itaqui 12.89 82 eP Pn 21 46 35.8 -2.8
COYC Coyhaique 13.15 182 Pn Pn 21 46 41.5 -0.6
CPUP Villa Florida 13.61 67 Pn Pn 21 46 47.1 -1.3
CPUP Villa Florida 13.61 67 Pn Pn 21 46 45.9 -2.5
comp=Z,1.6nm,0.3s,baz=240,slow=12,SNR=11
CPUP Sn Sn 21 49 19.1 +0.8
comp=Z,1.1nm,0.3s,baz=217,slow=13,SNR=3.8
CPUP LR LR 21 52 20.8
comp=Z,349nm,20.4s,baz=246,slow=39
comp=Z,4.4nm,0.4s
RODS Rosario do Sul 13.92 86 eP Pn 21 46 50.0 -2.7
UNIS Unistalda (Bra 14.36 81 eP Pn 21 46 55.5 -3.1
PB18 Visviri 14.85 7 Pn 21 47 05.6 -0.1
AY03 Cochrane 14.85 183 Pn Pn 21 47 05.2 +0.1
PLTB Pedras Altas 15.03 92 Pn Pn 21 47 05.8 -1.7
PLTB Pedras Altas 15.03 92 eP Pn 21 47 04.2 -3.3
SJPY San Joaquin 15.24 65 eP Pn 21 47 10.1 -0.2
CPSB Cacapava Do Su 15.39 87 eP Pn 21 47 08.3 -3.9
CRSM Crissiumal (Br 15.75 76 eP Pn 21 47 15.6 -1.2
ALGR Alto Alegre (B 16.15 82 eP Pn 21 47 19.9 -2.1
MURT Porto Murtinho 16.22 52 eP Pn 21 47 22.2 -0.7
LPAZ La Paz 16.31 11 Pn Pn 21 47 22.5 -2.2
comp=Z,0.7nm,0.3s,baz=186,slow=4.3,SNR=18
comp=Z,5.0nm,0.7s
AMBA Amambai (Brazi 17.25 61 eP Pn 21 47 36.5 +0.6
ITAB Concordia 17.42 78 P Pn 21 47 37.4 -0.5
ITAB IAmb IAmb 21 47 51.8
comp=Z,43nm,0.8s
ITAB Concordia 17.42 78 eP P 21 47 38.7 -0.1
AQDB Aquidauana 18.32 53 P P 21 47 48.3 -0.4
AQDB Aquidauana 18.32 53 eP P 21 47 47.5 -1.3
PTGB Pitanga 18.55 70 eP P 21 47 50.3 -1.0
PANT Pantanal (Braz 18.79 48 eP P 21 47 53.2 -0.7
SIV San Ignacio 18.81 32 P P 21 47 52.5 -1.7
comp=Z,0.1nm,0.3s,baz=220,slow=10,SNR=4.8
SIV LR LR 21 55 56.7
comp=Z,208nm,19.4s,baz=291,slow=40
comp=Z,6.1nm,0.5s
GO09 Cerro Castillo 18.86 182 Pn 21 47 56.3 +1.1
GO09 IAmb IAmb 21 48 16.0
comp=Z,43nm,1.3s
TER01 Tubaro-SC 19.50 84 eP P 21 48 01.1 -0.5
RPRD Ribas do Rio P 19.71 57 eP P 21 48 03.9 -0.1
RVDE Rio Verde (Bra 19.84 52 eP P 21 48 05.0 -0.4
LDASE Londrina, Braz 19.96 68 eP P 21 48 05.5 -1.1
PTLB Pontes e Lacer 20.20 36 P P 21 48 08.6 -0.6
POCN Pocone 20.53 43 eP P 21 48 12.7 -0.1
VBST Vila Bela da S 20.57 33 eP P 21 48 13.3 0.0
PCMB Pacaembu 20.82 64 eP P 21 48 14.9 -1.2
PP1B Ponte de Pedra 20.92 49 eP P 21 48 16.2 -0.9
FRTB Fartura 21.21 70 eP P 21 48 18.8 -1.5
PTET Porto Estrela 21.29 41 eP P 21 48 20.3 -0.7
EFI East Falkland 21.55 157 P P 21 48 23.9 +0.3
SALV Santo Antonio 21.71 44 eP P 21 48 24.1 -1.5
VILB Vilhena 21.89 30 P P 21 48 26.6 -0.9
VILB IAmb IAmb 21 48 45.0
comp=Z,27nm,0.6s
VILB Vilhena 21.89 30 eP P 21 48 26.8 -0.7
PET01 Itanhaem-SP 22.61 75 eP P 21 48 33.7 -1.6
ITRB Iturama 22.63 61 eP P 21 48 33.6 -1.8
SPB Sao Paulo 22.80 73 P P 21 48 36.3 -0.9
SPB IAmb IAmb 21 48 54.3
comp=Z,25nm,1.0s
SPB Sao Paulo 22.80 73 eP P 21 48 35.6 -1.6
NBRS Nobres 22.92 42 eP P 21 48 38.0 -0.5
ETMB Extrema 22.98 13 P P 21 48 38.7 -0.3
ETMB IAmb IAmb 21 48 42.5
comp=Z,22nm,0.9s
ETMB Extrema 22.98 13 eP P 21 48 39.4 +0.4
BB19B Bebedouro 23.23 67 eP P 21 48 40.3 -1.3
RCLB Rio Claro- Sao 23.29 71 eP P 21 48 41.4 -0.9
VAO Valinhos 23.46 73 P P 21 48 42.4 -1.6
VAO IAmb IAmb 21 48 43.8
comp=Z,21nm,0.9s
VAO Valinhos 23.46 73 eP P 21 48 42.3 -1.6
ARAG Araguaiana, MT 24.30 51 eP P 21 48 49.5 -2.1
ARAG epP pP 21 49 01.5 -1.6
SAML Samuel 24.54 20 P P 21 48 53.1 -0.6
SAML Samuel 24.54 20 eP P 21 48 53.2 -0.6
CZSB Cruzeiro do Su 24.59 357 P P 21 48 54.6 +0.3
CZSB IAmb IAmb 21 49 01.2
comp=Z,26nm,1.0s
CZSB Cruzeiro do Su 24.59 357 eP P 21 48 54.9 +0.6
CZSB epP pP 21 49 05.6 -0.2
PDRB Porto dos Gac 24.67 36 eP P 21 48 54.2 -0.8
IPMB Ipameri, GO 25.29 61 eP P 21 48 58.5 -2.1
CLDB Colider 25.77 37 eP P 21 49 05.0 0.0
ATAH Atahualpa 26.00 344 LR LR 21 57 38.3
comp=Z,68nm,21.8s,baz=182,slow=32
BSCB Bom Sucesso 26.22 71 eP P 21 49 07.4 -1.7
PMNB Patos De Minas 26.28 64 eP P 21 49 08.2 -1.6
BDFB Brasilia 26.95 57 P P 21 49 14.4 -1.4
BDFB IAmb IAmb 21 49 29.4
comp=Z,18nm,0.8s
BDFB Brasilia 26.95 57 P P 21 49 14.2 -1.6
comp=Z,19nm,0.9s,baz=231,slow=9.1,SNR=14
BDFB LR LR 22 00 47.0
comp=Z,290nm,19.1s,baz=173,slow=39
comp=Z,19nm,0.9s
BDFB Brasilia 26.95 57 eP P 21 49 14.5 -1.4
SNDB Serra Nova Dou 27.42 47 eP P 21 49 18.5 -1.4
NPGB Novo Progresso 29.29 34 eP P 21 49 35.6 -0.9
BSFB Barra de Sao F 30.50 71 eP P 21 49 45.2 -2.0
PMSA Palmer Station 32.70 174 LR LR 22 04 13.8
comp=Z,35nm,19.1s,baz=354,slow=38
OTAV Otavalo 33.17 347 P P 21 50 11.5 +0.3
RPN Rapa Nui 33.30 269 LR LR 22 00 03.6
comp=Z,145nm,18.1s,baz=55,slow=30
MAL2 Monte Alegre, 34.26 32 P P 21 50 18.4 -1.7
MAL2 IAmb IAmb 21 50 37.7
comp=Z,10nm,0.9s
BOAV Boa Vista 36.10 19 P P 21 50 35.7 -0.2
BOAV IAmb IAmb 21 50 50.3
comp=Z,8.2nm,0.8s
BOAV Boa Vista 36.10 19 eP P 21 50 36.7 +0.7
MCPB Macapa, AP 36.70 33 P 21 50 40.5 -0.6
MCPB IAmb IAmb 21 50 59.7
comp=Z,9.9nm,1.0s
MCPB Macapa, AP 36.70 33 eP P 21 50 39.6 -1.4
ROSC El Rosal 37.16 355 LR LR 22 07 22.7
comp=Z,46nm,19.0s,baz=211,slow=38
NBTA Tacaratu-PE 38.51 60 eP P 21 50 54.7 -1.7
SDV Santo Domingo 41.07 1 LR LR 22 09 15.7
comp=Z,39nm,20.3s,baz=230,slow=38
BAUV El Baul 41.24 5 P P 21 51 19.2 +0.2
BAUV IAmb IAmb 21 51 33.0
comp=Z,19nm,1.2s
MDP Montagnes des 41.32 29 LR LR 22 09 32.8
comp=Z,69nm,20.6s,baz=92,slow=38
RCBR Riachuelo 42.30 59 P P 21 51 26.9 -1.0
RCBR IAmb IAmb 21 51 28.4
comp=Z,25nm,1.4s
RCBR Riachuelo 42.30 59 LR LR 22 10 08.8
comp=Z,89nm,18.8s,baz=316,slow=38
BELA Belgrano 2 48.33 170 P P 21 52 16.1 +1.3
BELA IAmb IAmb 21 52 31.5
comp=Z,5.0nm,0.6s
VNA3 Neumayer Olymp 50.60 158 ⇑P P 21 52 32.6 +0.4
comp=Z,3.8nm,0.6s
VNA1 Neumayer--Stat 50.90 157 ⇑P P 21 52 35.2 +0.8
comp=Z,4.1nm,1.2s
VNA2 Neumayer--Watz 51.24 158 ⇑P P 21 52 37.7 +0.7
comp=Z,3.9nm,0.5s,baz=283,slow=7.8
SNAA Sanae 52.83 158 P P 21 52 49.4 +0.5
SNAA Sanae 52.83 158 ⇑P P 21 52 49.4 +0.5
comp=Z,124nm,0.7s
SNAA Sanae 52.83 158 P P 21 52 48.8 -0.1
comp=Z,5.6nm,0.8s,baz=284,slow=5.9,SNR=24
SNAA LR LR 22 13 24.3
comp=Z,55nm,20.7s,baz=312,slow=34
comp=Z,5.6nm,0.8s
CMIG Matias Romero 54.15 332 LR LR 22 12 02.7
comp=Z,28nm,19.6s,baz=186,slow=32
TROLL Troll, Antarti 54.54 159 ⇑P P 21 53 02.2 +0.7
comp=Z,96nm,0.3s
RKT Rikitea 56.38 262 eLR LR 22 09 46.4
comp=Z,362nm,25.5s
QSPA South Pole Qui 57.82 180 P P 21 53 26.6 +1.6
QSPA IAmb IAmb 21 53 31.0
comp=Z,6.7nm,1.0s
QSPA South Pole Qui 57.82 180 P P 21 53 25.6 +0.6
comp=Z,3.3nm,0.5s,baz=186,slow=0.8,SNR=34
comp=Z,3.3nm,0.5s
Y52A Lilburn 67.01 348 IAmb IAmb 21 54 27.1
comp=Z,6.6nm,0.7s
DRIO Del Rio 67.50 332 P P 21 54 30.1 +0.4
X51A Calhoun 67.83 348 P P 21 54 31.3 -0.3
BG3 Lake Jacassee 67.94 350 P P 21 54 32.0 -0.3
X48A Hartselle 68.14 346 P P 21 54 33.3 -0.3
X48A IAmb IAmb 21 54 34.6
comp=Z,8.8nm,0.9s
TBI Tubuai 68.29 255 eLR LR 22 15 11.1
comp=Z,863nm,37.5s
TBI eLR LR 22 15 15.9
comp=Z,1μm,28.8s
V55A Taylorsville 68.54 351 P P 21 54 35.5 -0.6
SAND Sanderson 68.57 331 P P 21 54 37.0 +0.6
CPCT Cooper Cave 68.64 348 P P 21 54 36.5 -0.2
CPCT IAmb IAmb 21 54 37.4
comp=Z,6.2nm,0.8s
WHTX Lake Whitney, 68.66 336 P P 21 54 37.1 +0.2
WHTX IAmb IAmb 21 54 39.3
comp=Z,13nm,1.1s
SWET Sewanee 68.66 347 P P 21 54 36.8 -0.1
SWET IAmb IAmb 21 54 37.8
comp=Z,8.0nm,0.7s
TXAR Lajitas Array 68.66 330 P P 21 54 37.8 +0.7
comp=Z,1.8nm,0.5s,baz=161,slow=8.7,SNR=15
comp=Z,1.8nm,0.5s
OXF Oxford 68.71 344 P P 21 54 36.9 -0.3
PLAL Pickwick Lake 68.87 345 P P 21 54 37.5 -0.5
PLAL IAmb IAmb 21 54 38.3
comp=Z,5.3nm,0.8s
WLAR White Oak Lake 68.88 341 P P 21 54 38.2 0.0
OZNA Ozona 69.03 333 P P 21 54 40.0 +0.7
OZNA IAmb IAmb 21 54 41.8
comp=Z,17nm,1.4s
T59A Double "B" Far 69.27 355 P P 21 54 41.0 +0.4
T59A IAmb IAmb 21 54 42.7
comp=Z,15nm,1.2s
U54A Nelsons Funny 69.28 351 P P 21 54 40.6 -0.1
U54A IAmb IAmb 21 54 41.4
comp=Z,8.3nm,0.7s
V48A Smith Brothers 69.34 347 P P 21 54 41.0 0.0
ALPN Alpine 69.56 330 P P 21 54 43.0 +0.3
CLTN Cedars of Leba 69.58 347 P P 21 54 42.7 +0.1
PLPT Palo Pinto 69.70 336 P P 21 54 43.5 +0.1
MIAR Mount Ida 69.82 341 P P 21 54 44.0 0.0
MIAR IAmb IAmb 21 54 45.1
comp=Z,12nm,1.5s
SGCY Sterling City 69.91 333 P P 21 54 44.5 -0.3
SGCY IAmb IAmb 21 54 46.2
comp=Z,13nm,1.3s
WVT Waverly 69.92 346 P P 21 54 44.9 +0.3
ABTX Abilene, Hawle 70.00 335 P P 21 54 46.0 +0.8
ABTX IAmb IAmb 21 54 47.6
comp=Z,17nm,1.4s
MNHN Monahans 70.04 332 P P 21 54 45.9 +0.3
BBTS Babate 70.25 57 LR LR 22 24 07.8
comp=Z,45nm,20.5s,baz=136,slow=35
APMT Aspermont 70.80 335 P P 21 54 50.4 +0.3
SN07 Snyder 07 70.88 334 P P 21 54 50.6 0.0
SN07 IAmb IAmb 21 54 51.8
comp=Z,13nm,1.4s
PPT2 Papeete2 71.08 261 eLR LR 22 16 26.1
comp=Z,115nm,24.8s
PPT2 eLR LR 22 16 30.7
comp=Z,100nm,26.5s
HHAR Hobbs 71.55 341 P P 21 54 54.8 +0.3
HHAR IAmb IAmb 21 54 55.4
comp=Z,8.1nm,1.0s
P57A Homestead Farm 71.80 355 P P 21 54 56.8 +0.8
P57A IAmb IAmb 21 54 57.8
comp=Z,9.3nm,0.9s
FVM French Village 72.27 344 P P 21 54 58.4 -0.4
FVM IAmb IAmb 21 54 59.8
comp=Z,11nm,1.1s
MSTX Muleshoe 72.37 333 P P 21 54 59.4 -0.2
MSTX IAmb IAmb 21 55 00.9
comp=Z,9.0nm,0.8s
SMWD Samnorwood 72.45 335 P P 21 55 00.4 +0.4
CCM Cathedral Cave 72.53 344 P P 21 54 59.8 -0.5
OK048 Pawnee Station 72.55 339 P P 21 55 00.6 0.0
OK048 IAmb IAmb 21 55 01.3
comp=Z,11nm,0.8s
P48A Milroy 72.70 349 P P 21 55 00.6 -0.7
S39A Bolivar 72.70 342 P P 21 55 01.6 +0.2
S39A IAmb IAmb 21 55 02.6
comp=Z,16nm,1.4s
AMTX Amarillo 72.77 334 P P 21 55 02.5 +0.6
O52A Adamsville 72.82 352 P P 21 55 01.9 -0.1
O52A IAmb IAmb 21 55 17.9
comp=Z,5.3nm,0.8s
319A Douglas 72.91 327 P P 21 55 03.9 +1.0
319A IAmb IAmb 21 55 05.5
comp=Z,12nm,1.0s
CROK Carrier 72.96 338 P P 21 55 03.4 +0.4
CROK IAmb IAmb 21 55 04.0
comp=Z,15nm,1.1s
R40A Maddies Statio 73.00 343 P P 21 55 02.8 -0.3
ACSO Alum Creek Sta 73.08 351 P P 21 55 03.0 -0.6
ODNJ Ogdensburg 73.19 357 P P 21 55 03.8 -0.4
ODNJ IAmb IAmb 21 55 21.1
comp=Z,8.3nm,1.2s
121A Cookes Peak, D 73.20 328 P P 21 55 04.9 +0.2
121A IAmb IAmb 21 55 07.3
comp=Z,11nm,0.8s
DBIC Dimbokro 74.09 71 P P 21 55 09.4 -0.7
comp=Z,11nm,0.9s,baz=236,slow=5.3,SNR=7.2
DBIC LR LR 22 27 53.1
comp=Z,34nm,18.1s,baz=208,slow=36
comp=Z,11nm,0.9s
P40A Paris 74.12 343 P P 21 55 09.2 -0.5
MAW Mawson 74.52 163 P P 21 55 12.4 +0.6
comp=Z,2.8nm,0.8s,baz=170,slow=9.5,SNR=3.5
comp=Z,2.8nm,0.8s
ANMO Albuquerque 74.69 331 P P 21 55 14.6 +1.2
ANMO IAmb IAmb 21 55 15.8
comp=Z,13nm,1.5s
SUR Sutherland 75.06 119 LR LR 22 27 04.6
comp=Z,33nm,18.1s,baz=220,slow=35
214A Organ Pipe Nat 75.08 324 P P 21 55 16.5 +1.0
214A IAmb IAmb 21 55 18.1
comp=Z,12nm,1.2s
T25A Trinidad 75.79 333 P P 21 55 20.2 +0.6
X18A Snowflake 75.85 328 P P 21 55 19.4 -0.6
L42A Oliver, Polo 75.95 346 P P 21 55 20.9 +0.7
L40A Anamosa 76.34 345 IAmb IAmb 21 55 23.5
comp=Z,16nm,1.2s
X16A Lo Mia Camp, P 76.44 327 P P 21 55 24.8 +1.4
X16A IAmb IAmb 21 55 26.0
comp=Z,9.3nm,1.0s
H62A Milan 76.62 0 P P 21 55 24.8 +0.9
H62A IAmb IAmb 21 55 32.1
comp=Z,10nm,1.2s
SDCO Great Sand Dun 76.74 333 P P 21 55 25.3 +0.1
SDCO IAmb IAmb 21 55 27.1
comp=Z,4.4nm,0.7s
Y14A Wickenburg 76.78 325 P P 21 55 25.2 0.0
Y14A IAmb IAmb 21 55 27.5
comp=Z,7.8nm,1.1s
KSCO Kaye Shedlock' 76.79 335 P P 21 55 25.8 +0.6
JFWS Jewell Farm 76.95 346 P P 21 55 25.7 -0.1
JFWS IAmb IAmb 21 55 45.5
comp=Z,5.2nm,0.7s
WBO Williamsburg 77.13 357 P P 21 55 26.6 -0.1
S22A 4UR Ranch, Cre 77.26 332 P P 21 55 28.3 +0.3
WUAZ Wupatki 77.32 327 P P 21 55 28.7 +0.4
WUAZ IAmb IAmb 21 55 30.9
comp=Z,7.7nm,1.1s
BLYC Blythe 77.37 324 P P 21 55 29.2 +0.8
BLYC IAmb IAmb 21 55 31.0
comp=Z,6.0nm,0.7s
MVCO Mesa Verde 77.48 330 P P 21 55 29.5 +0.3
MVCO IAmb IAmb 21 55 31.4
comp=Z,7.4nm,1.0s
Q24A Divide 77.67 334 P P 21 55 31.0 +0.7
W13A Hualapai Mount 78.15 325 P P 21 55 34.3 +1.3
W13A IAmb IAmb 21 55 35.5
comp=Z,5.7nm,1.0s
PFO Pinyon Flats O 78.23 323 P P 21 55 33.9 +0.5
PFO IAmb IAmb 21 55 36.2
comp=Z,10nm,1.1s
U15A North Rim 78.49 327 P P 21 55 35.7 +0.8
SMCO Snowmass 78.55 332 P P 21 55 36.2 +0.9
SMCO IAmb IAmb 21 55 37.9
comp=Z,7.9nm,0.7s
TSUM Tsumeb 79.06 106 P P 21 55 38.8 +0.4
TSUM IAmb IAmb 21 55 39.4
comp=Z,7.3nm,0.9s
TSUM Tsumeb 79.06 106 LR LR 22 25 34.4
comp=Z,47nm,21.9s,baz=190,slow=32
KNB Kanab 79.21 327 P P 21 55 40.5 +1.7
KNB IAmb IAmb 21 55 41.5
comp=Z,12nm,1.2s
ECSD EROS Data Cent 79.23 342 P P 21 55 38.0 -0.5
ECSD IAmb IAmb 21 55 39.0
comp=Z,5.7nm,0.8s
MTPU Mount Pierson 79.77 328 P P 21 55 43.2 +1.2
PHWY Pilot Hill 79.83 335 P P 21 55 42.6 +0.4
PHWY IAmb IAmb 21 55 43.8
comp=Z,8.7nm,1.2s
O20A White River Ci 79.87 332 P P 21 55 42.7 +0.4
O20A IAmb IAmb 21 55 44.3
comp=Z,4.9nm,0.8s
SHPR Sheep Range 79.89 325 P P 21 55 42.4 0.0
CCUT Cedar City 79.90 327 P P 21 55 42.9 +0.3
SRU San Rafael Swe 79.94 330 P P 21 55 43.1 +0.4
Q16A Castle Valley 80.05 329 P P 21 55 42.5 -0.8
MSU Marysvale 80.15 329 P P 21 55 44.7 +0.8
MVU Marysvale 80.16 329 P P 21 55 44.3 +0.4
P18A Preston Nutter 80.26 330 P P 21 55 44.8 +0.3
P18A IAmb IAmb 21 55 46.6
comp=Z,8.6nm,1.0s
BOSA Boshof 80.27 118 P P 21 55 44.8 0.0
BOSA IAmb IAmb 21 55 58.6
comp=Z,10nm,1.1s
BOSA Boshof 80.27 118 P P 21 55 44.2 -0.6
comp=Z,5.0nm,0.5s,baz=239,slow=4.1,SNR=13
BOSA LR LR 22 27 52.8
comp=Z,42nm,19.1s,baz=182,slow=33
comp=Z,5.0nm,0.5s
P17A Butcher Ranch, 80.33 330 P P 21 55 45.8 +1.1
GWY Greenwater Val 80.37 324 P P 21 55 45.6 +0.6
PRN Pahroc Range 80.56 326 P P 21 55 47.0 +0.9
PRN IAmb IAmb 21 55 48.9
comp=Z,8.8nm,1.1s
TPNV Topopah Spring 80.77 325 P P 21 55 47.7 +0.5
BCW Bitter Crk WRg 80.80 322 P P 21 55 47.7 +0.4
ISA Isabella, Lake 80.87 323 P P 21 55 48.7 +1.1
PSUT Pine Spring 80.92 328 P P 21 55 48.3 +0.3
BSUT Blindstream Ca 81.23 331 P P 21 55 50.0 +0.2
K22A Casper 81.39 335 P P 21 55 50.4 +0.1
SPR3 Spring Creek 3 81.52 327 P P 21 55 51.3 0.0
SPR3 IAmb IAmb 21 55 53.8
comp=Z,7.0nm,1.2s
GMN Gold Mountain 81.54 325 P P 21 55 52.1 +0.8
R11B Troy Canyon, C 81.57 326 P P 21 55 51.4 0.0
JLU Jordanelle 81.58 330 P P 21 55 51.0 -0.4
JLU IAmb IAmb 21 55 53.2
comp=Z,7.4nm,1.1s
RSSD Black Hills 81.81 337 P P 21 55 53.0 +0.4
DUG Dugway, Tooele 81.82 329 P P 21 55 53.1 +0.5
DUG IAmb IAmb 21 55 54.8
comp=Z,8.5nm,1.4s
TPH Tonopah 82.14 325 P P 21 55 55.4 +1.0
LBTB Lobatse 82.41 115 LR LR 22 27 57.8
comp=Z,47nm,19.0s,baz=176,slow=32
HWUT Hardware Ranch 82.46 331 P P 21 55 55.8 -0.2
HWUT IAmb IAmb 21 55 57.3
comp=Z,3.8nm,0.7s
BGU Big Grassy Mou 82.51 329 P P 21 55 57.7 +1.4
SPUT South Promonto 82.58 330 P P 21 55 57.0 +0.4
PDAR Pinedale Array 82.63 333 P P 21 55 57.7 +0.8
comp=Z,0.4nm,0.3s,baz=149,slow=6.6,SNR=4.1
comp=Z,0.4nm,0.3s
OMMB Old Mammoth Mi 82.65 324 P P 21 55 56.7 -0.5
LHV Little Huntoon 82.90 324 P P 21 55 59.3 +1.2
LHV IAmb IAmb 21 56 00.3
comp=Z,4.6nm,0.8s
NVAR Mina Array Bea 82.94 325 P P 21 55 59.7 +1.1
comp=Z,2.7nm,0.9s,baz=146,slow=5.7,SNR=13
comp=Z,2.7nm,0.9s
TORD Torodi Ar. Bea 83.09 70 P P 21 55 58.7 -1.0
comp=Z,7.3nm,0.8s,baz=284,slow=6.7,SNR=46
TORD LR LR 22 29 51.0
comp=Z,62nm,22.0s,baz=200,slow=34
comp=Z,7.3nm,0.8s
HVU Hansel Valley 83.11 330 P P 21 55 59.0 -0.4
HVU IAmb IAmb 21 56 00.5
comp=Z,4.6nm,0.8s
RYN Ryan 83.20 325 P P 21 56 00.2 +0.3
KVN Kaiserville 83.33 325 P P 21 56 01.1 +0.6
ELK Elko 83.34 328 P P 21 56 01.1 +0.4
PAHR Pah Rah Range 84.46 325 P P 21 56 06.5 +0.2
PAHR IAmb IAmb 21 56 08.6
comp=Z,9.1nm,1.4s
RLMT Red Lodge 84.53 334 P P 21 56 06.8 +0.2
HLID Hailey 85.26 330 P P 21 56 10.6 +0.3
ORV Oroville 85.39 323 P P 21 56 11.3 +0.5
ORV IAmb IAmb 21 56 13.3
comp=Z,8.0nm,1.4s
J08A Circle Bar Ran 86.88 328 P P 21 56 18.8 +0.6
KMRM Mail Ridge 87.02 323 P P 21 56 17.1 -1.7
BMO Blue Mountains 87.54 329 P P 21 56 21.6 +0.4
OVMT Ovando 87.56 333 P P 21 56 21.5 +0.1
I07A Izee 87.91 327 P P 21 56 23.8 +0.7
I07A IAmb IAmb 21 56 25.1
comp=Z,4.2nm,1.0s
PINE Pine Mountain 88.35 326 P P 21 56 26.0 +0.7
MDT Midelt 90.35 51 LR LR 22 35 39.5
comp=Z,41nm,20.4s,baz=152,slow=35
ESDC Sonseca Array 95.04 46 LR LR 22 39 13.6
comp=Z,22nm,19.4s,baz=226,slow=35
DZM Mont Dzumac 102.67 234 eLR LR 22 31 12.9
comp=Z,140nm,29.1s
WRA Warramunga Arr 122.44 209 PKP PKPdf 22 02 28.1 -1.2
comp=Z,0.6nm,0.5s,baz=161,slow=1.7,SNR=19
H11S2 WAKE ISLAND Hyl 26.39 270 T T 00 21 43.7
baz=118,slow=75,SNR=693
H11S1 WAKE ISLAND Hyl 26.41 270 T T 00 21 45.4
baz=118,slow=75,SNR=830
H11S3 WAKE ISLAND Hyl 26.41 270 T T 00 21 45.7
baz=118,slow=75,SNR=880
H11N3 WAKE ISLAND Hyl 26.77 271 T T 00 22 11.8
baz=117,slow=76,SNR=95
H11N1 WAKE ISLAND Hyl 26.78 271 T T 00 22 14.6
baz=117,slow=76,SNR=42
H11N2 WAKE ISLAND Hyl 26.78 271 T T 00 22 15.9
baz=117,slow=76,SNR=166
BVAR Borovoye Array 145.70 42 PKPbc PKPab 22 03 12.2 +0.1
comp=Z,3.2nm,0.5s,baz=306,slow=3.0,SNR=17
SIMJ Simiganj 147.30 68 PKPbc 22 03 16.4 -0.7
KKAR Karatay Array 148.23 59 PKPbc 22 03 20.0 +0.7
KURBB Kurchatov Arra 151.29 42 PKPbc PKPbc 22 03 26.5 0.0
comp=Z,3.3nm,0.5s,baz=304,slow=2.8,SNR=50
ZALV Zalesovo Beam 152.56 31 PKPbc PKPbc 22 03 29.2 -0.1
comp=Z,3.8nm,0.4s,baz=327,slow=3.1,SNR=27
KSH Kashi 152.69 66 PKPbc PKPbc 22 03 28.8 -1.5
KSH pPKP pPKPdf 22 03 38.0 +1.6
MKAR Makanchi Array 155.25 47 PKPbc PKPdf 22 03 37.5 +11
comp=Z,0.6nm,0.8s,baz=270,slow=3.3,SNR=4.7

MKAR PKPab **PKPab** **22 03 51.1 -0.5**
comp=Z,1.1nm,0.5s,baz=298,slow=2.9,SNR=17
**GTA Gaotai 169.98 43** PKP **PKPdf** **22 03 42.0 +0.8**
GTA pPKP pPKPdf 22 03 56.5 +2.0
**HHC Hu-ho-hao-te 171.27 345** *eP* **PKPdf** **22 03 42.5 +0.7**
**NJ2 Nanjing 171.38 270** *eP* **PKPdf** **22 03 43.3 +1.3**
NJ2 pmax pmax
comp=Z,5.0nm,0.5s
**PZH PanZhiHua 171.56 132** PKP **PKPdf** **22 03 42.0 -0.4**

*IDC **30** 21:54:47.1±2.4,21°.87S×170°.11E,h0km,mb3.8/3, mbtmp3.8/4,ML3.8/1,MS3.4/1,Error ellipse: s-maj=74.4km s-min=28.8km az=154.0*
**ISC 30 21:54:50.2±2.0,22°.1S±0°.5×170°.2E±0°.2,h25km,n7, σ0s74/7,mb3.7/3,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.49** | **269** | Pn | | **Pn** | | **21 55 43.1** | **+0.1** |
| DZM | 9.6nm,0.3s,baz=90,slow=6.1,SNR=16 | | | Sn | | **Sn** | | **21 56 24.0** | **+0.5** |
| **ASAR** | 17nm,0.3s,baz=81,slow=22,SNR=6.9 24nm,0.4s **Alice Springs** | **33.43** | **260** | P | | **P** | | **22 01 27.1** | **-0.3** |
| **WRA** | 0.7nm,0.8s,baz=95,slow=9.0,SNR=5.6 0.7nm,0.8s **Warramunga Arr** | **33.50** | **267** | P | | **P** | | **22 01 26.9** | **-1.1** |
| **DAV** | 0.5nm,0.5s,baz=98,slow=8.3,SNR=12 0.5nm,0.5s **Davao City (W)** | **52.43** | **298** | LR | | LR | | 22 26 37.3 | |
| **MJAR** | comp=Z,36nm,19.2s,baz=136,slow=36 **Matsushiro Arr** | **65.65** | **332** | P | | **P** | | **22 05 32.1** | **-0.3** |
| **EKA** | 0.9nm,0.5s,baz=146,slow=5.8,SNR=4.1 0.9nm,0.5s **Eskdalemuir Ar** | **146.40** | **353** | PKPbc | | **PKPdf** | | **22 14 28.0** | **+0.7** |
| **GERES** | 1.1nm,0.4s,baz=354,slow=2.3,SNR=21 **GERESS Array B** | **147.38** | **331** | PKPbc | | **PKPbc** | | **22 14 32.3** | **+0.5** |
| | 0.8nm,0.8s,baz=38,slow=8.1,SNR=3.2 | | | | | | | | |

*IDC **30** 21:56:03.7±0.9,22°.2S×170°.36E,h0km,mb4.2/10, mbtmp4.2/12,ML4.7/2,MS3.9/10,Error ellipse: s-maj=26.2km s-min=21.9km az=129.0*
*GCMT **30** 21:56:14.0±0.3,22°.42S±0°.02×170°.15E±0°.03,h29km, MW5.0/72,Moment Tensor Solution. s31,c34; s72,c99; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr3.41±.21; Mθθ-2.64±.13; Mφφ-0.77±.13; Mrθ1.48±.17; Mrφ1.22±.06; Mθφ-0.31±.17; Best double couple: Mo3.65200×10^16 NP1:φs302.00000°,δ33.00000°,λ99.00000°. NP2: φs111.00000°,δ57.00000°,λ84.00000°. Principal axes: T 3.7530, Plg77.0000°, Azm1.0000°; N -0.2010, Plg5.0000°, Azm114.0000°; P -3.5510, Plg12.0000°, Azm205.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*
**ISC 30 21:56:08.6±0.7,22°.2S±0°.2×170°.33E±0°.09,h35km,n26, σ1s24/19,mb4.3/13,MS4.0/10,4C,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.61** | **271** | Pn | | **Pn** | | **21 57 01.1** | **-1.0** |
| DZM | 20nm,0.3s,baz=109,slow=12,SNR=11 | | | Sn | | **Sn** | | **21 57 41.4** | **-2.1** |
| **MSVF** | 36nm,0.3s,baz=112,slow=19,SNR=6.1 54nm,0.3s **Nonsavu** | **8.50** | **60** | Pn | | **Pn** | | **21 58 07.0** | **-2.3** |
| **URZ** | 0.5nm,0.3s,baz=251,slow=17,SNR=1.9 1.9nm,0.3s **Urewera** | **17.05** | **162** | LR | | LR | | 22 05 31.5 | |
| **RPZ** | comp=Z,907nm,18.3s,baz=58,slow=34 **Rata Peaks** | **21.49** | **179** | LR | | LR | | 22 08 37.4 | |
| **CTA** | comp=Z,568nm,18.9s,baz=348,slow=35 **Charters Tower** | **22.55** | **271** | LR | | LR | | 22 09 37.9 | |
| **PMG** | comp=Z,22nm,18.1s,baz=90,slow=36 **Port Moresby** | **25.61** | **296** | LR | | LR | | 22 10 23.0 | |
| **STKA** | comp=Z,437nm,19.4s,baz=109,slow=34 **Stephens Creek** | **27.29** | **243** | P | | **P** | | **22 01 49.1** | **-0.8** |
| **ASAR** | 2.8nm,0.7s,baz=101,slow=13,SNR=4.3 2.8nm,0.7s **Alice Springs** | **33.53** | **260** | P | | **P** | | **22 02 46.0** | **+0.9** |
| ASAR | 2.0nm,1.1s,baz=84,slow=8.6,SNR=6.5 | | | LR | | LR | | 22 16 32.6 | |
| **WRA** | comp=Z,250nm,18.8s,baz=100,slow=37 2.0nm,1.1s **Warramunga Arr** | **33.62** | **267** | P | | **P** | | **22 02 45.0** | **-1.0** |
| **GUMO** | 1.2nm,0.7s,baz=133,slow=1.5,SNR=5.8 1.2nm,0.7s **Guam** | **43.44** | **323** | LR | | LR | | 22 20 39.9 | |
| **MJAR** | comp=Z,134nm,19.4s,baz=226,slow=34 **Matsushiro Ar** | **65.81** | **332** | P | | **P** | | **22 06 50.5** | **+0.2** |
| MJAR | 2.3nm,0.5s,baz=159,slow=6.5,SNR=7.3 | | | LR | | LR | | 22 33 09.9 | |
| **QSPA** | comp=Z,38nm,21.8s,baz=127,slow=34 2.3nm,0.5s **South Pole Qui** | **67.89** | **180** | P | | **P** | | **22 07 03.8** | **+0.4** |
| **KSRS** | 1.9nm,0.9s,baz=299,slow=3.2,SNR=6.1 1.9nm,0.9s **Korea Array** | **71.50** | **326** | P | | **P** | | **22 07 26.8** | **+1.1** |
| **SHEM** | 1.9nm,0.8s,baz=150,slow=5.9,SNR=6.4 1.9nm,0.8s **Shemya Is, Ala** | **74.66** | **2** | LR | | LR | | 22 35 33.4 | |
| **PETK** | comp=Z,107nm,18.9s,baz=263,slow=32 **Petropavlovsk-** | **75.77** | **352** | P | | **P** | | **22 07 52.0** | **+1.5** |
| **CMAR** | 2.9nm,0.8s,baz=163,slow=5.4,SNR=4.9 2.9nm,0.8s **Chiang Mai Arr** | **80.64** | **294** | P | | **P** | | **22 08 20.7** | **+2.5** |
| **SNAA** | 1.3nm,0.8s,baz=136,slow=3.9,SNR=6.3 1.3nm,0.8s **Sanae** | **86.28** | **182** | ⇑P | | **P** | | **22 08 46.3** | **-0.1** |
| **SNAA** | comp=Z,20nm,0.8s **Sanae** | **86.28** | **182** | P | | **P** | | **22 08 46.0** | **-0.4** |
| **VNA3** | comp=Z,2.0nm,1.1s,baz=170,slow=3.6,SNR=3.4 comp=Z,2.0nm,1.1s **Neumayer Olymp** | **86.83** | **180** | ⇑P | | **P** | | **22 08 48.8** | **-0.2** |
| **VNA2** | comp=Z,3.3nm,0.8s **Neumayer--Watz** | **87.14** | **181** | ⇑P | | **P** | | **22 08 50.7** | **+0.2** |
| **VNA1** | comp=Z,2.5nm,0.6s,baz=174,slow=4.3 **Neumayer--Stat** | **87.42** | **180** | ⇑P | | **P** | | **22 08 52.1** | **+0.2** |
| **YAK** | comp=Z,1.9nm,1.0s **Yakutsk** | **89.97** | **342** | LR | | LR | | 22 43 08.3 | |
| **SONM** | comp=Z,65nm,21.7s,baz=132,slow=31 **Songino Array** | **90.17** | **323** | P | | **P** | | **22 09 06.0** | **+0.8** |
| SONM | comp=Z,1.8nm,0.9s,baz=142,slow=4.6,SNR=6.3 | | | LR | | LR | | 22 50 59.9 | |
| **INK** | comp=Z,28nm,18.7s,baz=104,slow=36 comp=Z,1.8nm,0.9s **Inuvik** | **99.00** | **18** | LR | | LR | | 22 48 53.3 | |
| **EKA** | comp=Z,53nm,20.9s,baz=271,slow=32 **Eskdalemuir Ar** | **146.53** | **353** | PKPbc | | **PKPab** | | **22 15 46.0** | **-0.9** |
| **GERES** | comp=Z,2.3nm,0.6s,baz=357,slow=2.1,SNR=13 **GERESS Array B** | **147.55** | **331** | PKPbc | | **PKiKP** | | **22 15 50.8** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=12,slow=7.0,SNR=4.2 | | | | | | | | |

*NEIC **30** 22:08:08.6±0.8,39°.230N±0°.010×120°.08W±0°.01, h7km±1km,Error ellipse: s-maj=1.5km s-min=1.4km az=176.0*
*IDC **30** 22:08:08.5±1.1,39°.30N×120°.10W,h0km,mbtmp3.3/4, ML3.7/4,Error ellipse: s-maj=15.2km s-min=6.7km az=37.0*
*REN **30** 22:08:08.5±0.7,39°.23N±0°.01×120°.11W±0°.01,h8km±5km, Error ellipse: s-maj=1.6km s-min=1.4km az=216.0*
*NEIC **30** 22:08:09.6,39°.23N×120°.11W,h8km,Moment Tensor Solution. Moment tensor: Scale 10^14Nm; Mrr-1.19; Mθθ-2.98; Mφφ4.17; Mrθ1.13; Mθφ3.30; Mφr-1.48; Fault plane solution: Mo5.31000×10^14 NP1:φ244.55000°, δ67.43000°,λ-11.02000°. NP2:φs338.82000°,δ79.83000°, λ-157.05000°. Principal axes: T 5.6046, Plg8.0000°, Azm110.0000°; N -0.6462, Plg65.0000°, Azm1.0000°; P -4.9584, Plg23.0000°, Azm204.0000°;*
*NEIC **30** 22:08:09.6,39°.23N×120°.11W,h1km*
*NCEDC **30** 22:08:09.7±1.0,39°.237N±0°.010×120°.11W±0°.01, h2km±2km,Mwr3.8/3,ML3.7/68(NEIC),Mwr3.7(REN),Error ellipse: s-maj=1.4km s-min=1.3km az=209.0*
**ISC 30 22:08:08.9±0.8,39°.28N±0°.02×120°.11W±0°.02,h9km±6km, n230,σ1s21/235,Northern California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MPK** | **Martis Peak** | **0.06** | **73** | | | **Pg** | | **22 08 11.4** | **+0.2** |
| MPK | | | | Sg | | **Sg** | | **22 08 12.7** | **0.0** |
| MPK | comp=E,66μm,0.3s | | | | IAML | | | 22 08 13.3 | |
| **DONR** | **Donner Summit** | **0.18** | **294** | | | **Pg** | | **22 08 11.0** | **-1.7** |
| DONR | | | | | | **Sg** | | **22 08 16.7** | **+1.2** |
| **EMB** | **Emerald Bay** | **0.30** | **179** | | | **Pg** | | **22 08 14.1** | **-0.8** |
| EMB | | | | Sg | | **Sg** | | **22 08 17.9** | **-1.1** |
| **BABR** | **Babbit Peak** | **0.33** | **0** | | | **Pb** | | **22 08 16.3** | **-0.8** |
| BABR | | | | | | **Sb** | | **22 08 21.7** | **-0.9** |
| **REN** | **Reno** | **0.35** | **41** | | | **Pb** | | **22 08 16.5** | **-0.9** |
| REN | | | | | | **Sb** | | **22 08 22.3** | **-0.8** |
| **PEAR** | **Peavine Mounta** | **0.35** | **19** | | | **Pg** | | **22 08 14.4** | **-1.5** |
| PEAR | | | | | | **Sb** | | **22 08 22.5** | **-0.7** |
| **PNTR** | **Pine Nut** | **0.44** | **115** | | | **Pg** | | **22 08 17.1** | **-0.3** |
| PNTR | | | | Sg | | **Sg** | | **22 08 23.2** | **+0.1** |
| PNTR | comp=N,9μm,0.5s | | | | IAML | | | 22 08 23.5 | |
| PNTR | comp=E,8μm,0.6s | | | | IAML | | | 22 08 23.8 | |
| **BEKR** | **Beckworth** | **0.62** | **342** | | | **Pb** | | **22 08 21.4** | **-0.6** |
| BEKR | | | | | | **Sb** | | **22 08 30.3** | **-0.6** |
| **PAHR** | **Pah Rah Range** | **0.70** | **52** | | | **Pg** | | **22 08 20.4** | **-2.0** |
| **PAHR** | **Pah Rah Range** | **0.70** | **52** | Sg | | **Sb** | | **22 08 32.6** | **-0.7** |
| PAHR | comp=N,4μm,0.6s | | | | IAML | | | 22 08 33.6 | |
| PAHR | comp=E,3μm,0.6s | | | | IAML | | | 22 08 33.6 | |
| **YERR** | **Yerington** | **0.73** | **113** | | | **Pg** | | **22 08 22.4** | **-0.6** |
| YERR | | | | Sg | | **Sg** | | **22 08 32.0** | **-0.6** |
| YERR | comp=N,4μm,0.4s | | | | IAML | | | 22 08 33.4 | |
| YERR | comp=E,5μm,0.6s | | | | IAML | | | 22 08 37.8 | |
| **AFDM** | **Forest Hills D** | **0.75** | **244** | | | **Pg** | | **22 08 22.8** | **-0.5** |
| **AFDM** | **Forest Hills D** | **0.75** | **244** | Sg | | **Sg** | | **22 08 32.2** | **-0.8** |
| AFDM | comp=N,5μm,0.4s | | | | IAML | | | 22 08 35.7 | |
| **WAKR** | **Walker** | **0.93** | **146** | | | **Pg** | | **22 08 25.7** | **-1.1** |
| WAKR | | | | | | **Sg** | | **22 08 38.0** | **-0.9** |
| **WAKR** | **Walker** | **0.93** | **146** | | IAML | | | 22 08 44.5 | |
| **KPK** | comp=E,2μm,0.6s **Kanaka Peak** | **0.98** | **289** | | | **Pg** | | **22 08 27.3** | **-0.3** |
| KPK | | | | | | **Sg** | | **22 08 40.3** | **-0.1** |
| **OHCM** | **Honcut** | **1.07** | **274** | | | **Pg** | | **22 08 28.8** | **-0.6** |
| **OWYM** | **Wyandotte** | **1.08** | **280** | | | **Pg** | | **22 08 29.1** | **-0.6** |
| **PAM** | **Palermo** | **1.11** | **279** | | | **Pg** | | **22 08 28.9** | **-1.2** |
| **ORV** | **Oroville** | **1.11** | **285** | | | **Pg** | | **22 08 29.5** | **-0.7** |
| ORV | | | | | | **Sg** | | **22 08 44.1** | **-0.6** |
| **ORV** | **Oroville** | **1.11** | **285** | | IAML | | | 22 08 49.8 | |
| ORV | comp=N,1μm,0.4s | | | | IAML | | | 22 08 50.3 | |
| CMB | comp=E,2μm,0.5s | | | | IAML | | | 22 08 53.9 | |
| CMB | comp=N,1μm,0.7s | | | | | | | | |
| **SUTB** | **Sutter Butte** | **1.30** | **268** | | | **Pg** | | **22 08 32.8** | **-1.1** |
| **TVH1** | **TV Hill, Hawth** | **1.33** | **128** | | | **Pg** | | **22 08 33.2** | **-1.2** |
| TVH1 | | | | | | **Sg** | | **22 08 50.5** | **-1.2** |
| **OSUM** | **Sutter Buttes** | **1.35** | **270** | | | **Pn** | | **22 08 34.0** | **0.0** |
| **RYN** | **Ryan** | **1.39** | **117** | | | **Pn** | | **22 08 34.0** | **-0.7** |
| RYN | | | | | | **Sb** | | **22 08 53.6** | **+0.5** |
| **RYN** | **Ryan** | **1.39** | **117** | | IAML | | | 22 08 56.6 | |
| RYN | comp=E,919nm,0.3s | | | | IAML | | | 22 08 59.4 | |
| **LCMM** | comp=N,1μm,0.5s **Colby Mountain** | **1.40** | **309** | | | **Pb** | | **22 08 35.1** | **-0.1** |
| **KVN** | **Kaiserville** | **1.58** | **98** | | | **Pn** | | **22 08 36.4** | **-0.8** |
| **KVN** | **Kaiserville** | **1.58** | **98** | | | **Sg** | | **22 08 58.8** | **-0.8** |
| **LRDM** | **Redding Peak** | **1.58** | **319** | | | **Pg** | | **22 08 38.8** | **-0.4** |
| **LHV** | **Little Huntoon** | **1.62** | **129** | | | **Pn** | | **22 08 37.8** | **+0.2** |
| LHV | comp=E,1μm,0.4s | | | | IAML | | | 22 08 46.6 | |
| LHV | comp=N,1μm,0.4s | | | | IAML | | | 22 08 47.0 | |
| **LHV** | **Little Huntoon** | **1.62** | **129** | | | **Sb** | | **22 09 00.0** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **1.64** | **120** | Pg | | **Pn** | | **22 08 38.6** | **+0.4** |
| NVAR | comp=N,468nm,0.3s,baz=297,slow=15,SNR=2829 | | | Lg | | Lg | | 22 09 02.3 | |
| **O03E** | comp=N,148nm,0.3s,baz=302,slow=31,SNR=1.5 **Paynes Creek** | **1.66** | **308** | | | **Pb** | | **22 08 39.5** | **-0.1** |
| **NADM** | **Allendale** | **1.67** | **241** | | | **Pb** | | **22 08 40.1** | **+0.4** |
| **LMEM** | **Manzanita Entr** | **1.69** | **319** | | | **Pg** | | **22 08 41.4** | **+0.1** |
| **GFC** | **Funks Creek** | **1.69** | **272** | | | **Pb** | | **22 08 40.2** | **0.0** |
| **LDBM** | **Digger Butte** | **1.73** | **312** | | | **Pb** | | **22 08 40.7** | **-0.3** |
| **HMR** | **Hamilton Ranch** | **1.74** | **230** | | | **Pn** | | **22 08 40.7** | **+1.4** |
| **MDCM** | **Deadman Creek** | **1.77** | **152** | | | **Pn** | | **22 08 40.4** | **+0.4** |
| **LTCM** | **Tuscan Springs** | **1.81** | **302** | | | **Pg** | | **22 08 42.5** | **-1.1** |
| **MINS** | **Minaret Summit** | **1.82** | **153** | | | **Pn** | | **22 08 41.1** | **+0.4** |
| **GCK** | **Clark Valley** | **1.82** | **279** | | | **Pb** | | **22 08 42.2** | **-0.2** |
| **LBCM** | **Butte Creek Ri** | **1.83** | **329** | | | **Pg** | | **22 08 44.1** | **+0.2** |
| **MDPB** | **Devils Postpil** | **1.83** | **154** | | | **Pn** | | **22 08 41.2** | **+0.4** |
| **MDYM** | **Dry Creek** | **1.83** | **152** | | | **Pb** | | **22 08 42.3** | **-0.4** |
| **MGNR** | **McGee Canyon** | **1.83** | **142** | | | **Pb** | | **22 08 42.2** | **-0.6** |
| **MMLB** | **Mammoth Lakes** | **1.84** | **151** | | | **Pb** | | **22 08 42.6** | **-0.3** |
| **MLIM** | **Lincoln Peak** | **1.85** | **152** | | | **Pb** | | **22 08 42.9** | **-0.1** |
| **MMSM** | **Mammoth Summit** | **1.85** | **153** | | | **Pn** | | **22 08 42.6** | **+1.4** |
| **MEMM** | **East Mammoth H** | **1.85** | **150** | | | **Pb** | | **22 08 42.7** | **-0.3** |
| **HATC** | **Hat Creek Radi** | **1.86** | **326** | | | **Pg** | | **22 08 44.1** | **-0.4** |
| **HATC** | **Hat Creek Radi** | **1.86** | **326** | | IAML | | | 22 09 18.4 | |
| HATC | comp=N,670nm,0.8s | | | | IAML | | | 22 09 21.7 | |
| **MNRC** | comp=E,1μm,0.9s **McLaughlin Min** | **1.86** | **258** | | | **Pn** | | **22 08 42.1** | **+1.1** |
| **MMPM** | **Mammoth Pass** | **1.87** | **153** | | | **Pn** | | **22 08 42.6** | **+1.3** |
| **MRDM** | **Red Cones** | **1.87** | **154** | | | **Pn** | | **22 08 41.9** | **+0.5** |
| **NAPC** | **Atlas Peak** | **1.87** | **244** | | | **Pn** | | **22 08 42.4** | **+1.2** |
| **MCSM** | **Casa Diablo Ho** | **1.87** | **149** | | | **Pb** | | **22 08 43.2** | **-0.2** |
| **OMMB** | **Old Mammoth Mi** | **1.88** | **152** | | | **Pn** | | **22 08 41.9** | **+0.5** |
| **NMTM** | **Middletown** | **1.88** | **256** | | | **Pn** | | **22 08 42.5** | **+1.2** |
| **MCBM** | **Casa Benchmark** | **1.89** | **149** | | | **Pb** | | **22 08 43.7** | **0.0** |
| **CBSNC** | **Byron Hot Spri** | **1.89** | **220** | | | **Pn** | | **22 08 42.0** | **+0.7** |
| **MLHM** | **Little Hot Cre** | **1.89** | **147** | | | **Pb** | | **22 08 43.3** | **-0.4** |
| **MGPM** | **Gravel Pit** | **1.90** | **150** | | | **Pb** | | **22 08 44.4** | **+0.5** |
| **MLCM** | **Laurel Creek C** | **1.91** | **150** | | | **Pb** | | **22 08 43.7** | **-0.4** |
| **MYLM** | **Yosemite Lake** | **1.91** | **188** | | | **Pn** | | **22 08 42.2** | **+0.6** |
| **MDRNC** | **Doe Ridge** | **1.92** | **148** | | | **Pb** | | **22 08 44.0** | **-0.1** |
| **MLAC** | **Mammoth, Mammo** | **1.92** | **148** | | | **Pb** | | **22 08 44.3** | **+0.1** |
| **MCVM** | **Convict Lake** | **1.96** | **149** | | | **Pb** | | **22 08 44.7** | **-0.2** |
| **CRPB** | **Russellman Par** | **1.96** | **227** | | | **Pn** | | **22 08 43.8** | **+1.4** |
| **CSTL** | **Corral Hollow** | **1.97** | **214** | | | **Pn** | | **22 08 42.8** | **+0.4** |
| **CSTL** | **Corral Hollow** | **1.97** | **214** | | | **Pn** | | **22 08 42.9** | **+0.5** |
| **BENR** | **Benton** | **1.97** | **142** | | | **Pn** | | **22 08 43.0** | **+0.3** |
| **CMOB** | **Morgan Territo** | **1.98** | **223** | | | **Pn** | | **22 08 43.1** | **+0.4** |
| **MTOS** | **Mt Oso, Westle** | **2.01** | **209** | | | **Pn** | | **22 08 43.6** | **+0.6** |
| **GRTM** | **Round Top Moun** | **2.02** | **261** | | | **Pn** | | **22 08 44.5** | **+1.2** |
| **CBZL** | **Buffer Zone** | **2.02** | **219** | | | **Pn** | | **22 08 43.4** | **+0.2** |
| **CSAM** | **Sandia** | **2.03** | **219** | | | **Pn** | | **22 08 43.5** | **+0.2** |
| **MRCM** | **Red Rock Canyo** | **2.03** | **141** | | | **Pn** | | **22 08 43.8** | **+0.3** |
| **KCC** | **Kaiser Creek** | **2.05** | **162** | | | **Pn** | | **22 08 44.8** | **+1.2** |
| **CRHM** | **Round Hill Res** | **2.05** | **227** | | | **Pn** | | **22 08 45.2** | **+1.7** |
| **GVV** | **Valley View** | **2.05** | **285** | | | **Pn** | | **22 08 44.7** | **+1.0** |
| **NHSM** | **Mount Saint He** | **2.05** | **253** | | | **Pn** | | **22 08 44.3** | **+0.6** |
| **CDOM** | **Doolan Road** | **2.06** | **222** | | | **Pn** | | **22 08 44.0** | **+0.4** |
| **GBGM** | **Boggs Mountain** | **2.06** | **258** | | | **Pn** | | **22 08 45.1** | **+1.4** |
| **CVS** | **Carmenet Viney** | **2.06** | **244** | | | **Pn** | | **22 08 44.3** | **+0.6** |
| **GSGM** | **Seigler Mounta** | **2.07** | **259** | | | **Pn** | | **22 08 45.2** | **+1.4** |
| **GROM** | **Round Mountain** | **2.08** | **289** | | | **Pn** | | **22 08 45.2** | **+1.0** |
| **CPIM** | **Pinole Ridge** | **2.09** | **233** | | | **Pn** | | **22 08 44.8** | **+0.7** |
| **WENL** | **Wente Vineyard** | **2.10** | **219** | | | **Pn** | | **22 08 44.9** | **+0.7** |
| **BGC** | **Bolinger Road** | **2.12** | **227** | | | **Pn** | | **22 08 44.8** | **+0.3** |
| **CMMM** | **Mount Mocho** | **2.12** | **211** | | | **Pn** | | **22 08 44.8** | **+0.2** |
| **LSHM** | **Sage Hen Hill** | **2.12** | **316** | | | **Pb** | | **22 08 46.0** | **-1.5** |
| **SMCB** | **Saint Mary's C** | **2.13** | **228** | | | **Pn** | | **22 08 45.4** | **+0.7** |
| **CVLM** | **Vallecito** | **2.14** | **220** | | | **Pn** | | **22 08 45.4** | **+0.7** |
| **SNT** | **Sears Point** | **2.14** | **240** | | | **Pn** | | **22 08 44.9** | **+0.2** |
| **GAXM** | **Alexander Vall** | **2.14** | **256** | | | **Pn** | | **22 08 45.3** | **+0.5** |
| **MCDM** | **Chidago Canyon** | **2.17** | **142** | | | **Pn** | | **22 08 45.9** | **+0.7** |
| **CMLM** | **Mount Lewis** | **2.17** | **215** | | | **Pn** | | **22 08 45.4** | **+0.1** |
| **LTIM** | **Timbered Crate** | **2.17** | **331** | | | **Pg** | | **22 08 49.8** | **-0.7** |
| **CLCB** | **Lake Chabot** | **2.17** | **226** | | | **Pn** | | **22 08 46.5** | **+1.3** |
| **MLNR** | **Milner Canyon** | **2.18** | **140** | | | **Pn** | | **22 08 45.9** | **+0.4** |
| **BKS** | **Berkeley--Byer** | **2.18** | **231** | | | **Pn** | | **22 08 45.7** | **+0.4** |
| **VAK** | **Adit at Lawren** | **2.19** | **231** | | | **Pn** | | **22 08 46.1** | **+0.7** |
| **BL67** | **Building 67, L** | **2.19** | **231** | | | **Pn** | | **22 08 46.3** | **+0.7** |
| **GGPM** | **Geyser Peak** | **2.19** | **257** | | | **Pn** | | **22 08 47.4** | **+1.8** |
| **BRK** | **Berkeley--Havi** | **2.19** | **231** | | | **Pn** | | **22 08 46.3** | **+0.8** |
| **CSLM** | **San Leandro Hi** | **2.21** | **226** | | | **Pn** | | **22 08 46.2** | **+0.4** |
| **CNIC** | **Niles Canyon** | **2.21** | **222** | | | **Pn** | | **22 08 46.4** | **+0.5** |
| **SCKWR** | **San Luis Creek** | **2.22** | **200** | | | **Pn** | | **22 08 47.5** | **+1.6** |
| **ARN** | **Arnold Ranch** | **2.23** | **211** | | | **Pn** | | **22 08 46.6** | **+0.6** |
| **CPMM** | **Point Molate** | **2.24** | **234** | | | **Pn** | | **22 08 46.9** | **+0.7** |
| **GPMM** | **Pine Mountain** | **2.25** | **260** | | | **Pn** | | **22 08 48.4** | **+2.0** |
| **O02D** | **Mt. Diablo Mer** | **2.25** | **294** | | | **Pn** | | **22 08 47.5** | **+1.0** |
| **O02D** | **Mt. Diablo Mer** | **2.25** | **294** | | IAML | | | 22 09 31.9 | |
| **CALM** | comp=E,315nm,0.7s **Calaveras Res.** | **2.26** | **217** | | | **Pn** | | **22 08 46.6** | **+0.2** |
| **MTUM** | **Tungsten Hills** | **2.27** | **147** | | | **Pn** | | **22 08 47.4** | **+0.6** |
| **MHC** | **Mount Hamilton** | **2.28** | **213** | | | **Pn** | | **22 08 47.5** | **+0.6** |
| **CYBM** | **Yerba Buena Is** | **2.29** | **231** | | | **Pn** | | **22 08 46.6** | **+1.7** |
| **FRI** | **Friant** | **2.30** | **172** | | | **Pn** | | **22 08 48.4** | **+1.4** |
| **Q09A** | **Carvers** | **2.32** | **100** | | | **Pn** | | **22 08 48.0** | **+0.5** |
| **HOPS** | **Hopland Field** | **2.32** | **264** | | | **Pn** | | **22 08 48.5** | **+1.1** |
| **HOPS** | **Hopland Field** | **2.32** | **264** | | IAML | | | 22 09 19.8 | |
| **BHPR** | comp=N,297nm,0.8s **Bishop** | **2.35** | **147** | | | **Pn** | | **22 08 47.7** | **-0.2** |
| **CCOB** | **Coe Ranch Numb** | **2.36** | **212** | | | **Pn** | | **22 08 49.3** | **+1.5** |
| **JPRM** | **Presidio of Sa** | **2.37** | **232** | | | **Pn** | | **22 08 49.2** | **+1.2** |
| **LBPM** | **Beegum Peak** | **2.38** | **297** | | | **Pn** | | **22 08 49.6** | **+1.4** |
| **HPCM** | **Pacheco Lake** | **2.40** | **203** | | | **Pn** | | **22 08 49.0** | **+0.6** |
| **JSBM** | **San Bruno Moun** | **2.40** | **229** | | | **Pn** | | **22 08 48.7** | **+0.3** |
| **GHS** | **Gilroy Hot Spr** | **2.42** | **206** | | | **Pn** | | **22 08 49.7** | **+0.9** |
| **JCPM** | **Coyote Point** | **2.42** | **227** | | | **Pn** | | **22 08 49.1** | **+0.4** |
| **CADM** | **Anderson Res.** | **2.43** | **210** | | | **Pn** | | **22 08 49.8** | **+1.1** |
| **NOLM** | **Olema** | **2.44** | **240** | | | **Pn** | | **22 08 49.7** | **+0.8** |
| **MCCM** | **Marconi Confer** | **2.45** | **243** | | | **Pn** | | **22 08 49.4** | **+0.5** |
| **MCCM** | **Marconi Confer** | **2.45** | **243** | | IAML | | | 22 09 23.2 | |
| **PACP** | comp=N,523nm,1.1s **Pacheco Peak** | **2.45** | **203** | | | **Pn** | | **22 08 50.1** | **+1.0** |
| **KBNM** | **Bluenose Ridge** | **2.46** | **285** | | | **Pn** | | **22 08 51.4** | **+2.1** |
| **JLAB** | **Laurel Hill** | **2.48** | **212** | | | **Pn** | | **22 08 49.9** | **+0.5** |
| **JMGM** | **Milagra Ridge** | **2.48** | **229** | | | **Pn** | | **22 08 49.6** | **+0.2** |
| **LBFM** | **Black Fox Moun** | **2.48** | **327** | | | **Pb** | | **22 08 52.0** | **-1.8** |
| **JSFB** | **Stanford Teles** | **2.48** | **222** | | | **Pn** | | **22 08 50.0** | **+0.5** |
| **GWRM** | **Wonder Ranch** | **2.48** | **269** | | | **Pn** | | **22 08 50.9** | **+1.4** |
| **SAC** | **San Andreas** | **2.48** | **228** | | | **Pn** | | **22 08 49.7** | **+0.3** |
| **JSJM** | **St Joseph** | **2.49** | **219** | | | **Pn** | | **22 08 50.5** | **+0.9** |
| **BMN** | **Battle Mountai** | **2.50** | **62** | | | **Pn** | | **22 08 49.2** | **-0.8** |
| **GHCM** | **House Creek** | **2.50** | **255** | | | **Pn** | | **22 08 50.8** | **+0.9** |
| **JCHM** | **Cahill Ridge** | **2.50** | **226** | | | **Pn** | | **22 08 50.4** | **+0.6** |
| **HFEM** | **San Felipe** | **2.51** | **204** | | | **Pn** | | **22 08 51.1** | **+1.2** |
| **DCMP** | **DeCamp, Califo** | **2.51** | **275** | | | **Pn** | | **22 08 51.6** | **+1.7** |
| **JRSC** | **Jasper Ridge** | **2.51** | **223** | | | **Pn** | | **22 08 50.3** | **+0.4** |
| **JFP** | **Foothills Park** | **2.52** | **221** | | | **Pn** | | **22 08 50.6** | **+0.6** |
| **M03C** | **McCloud** | **2.52** | **323** | | | **Pb** | | **22 08 55.0** | **+0.6** |
| **JBMM** | **Black Mountain** | **2.53** | **220** | | | **Pn** | | **22 08 50.6** | **+0.3** |
| **HLPM** | **Lions Peak** | **2.54** | **209** | | | **Pn** | | **22 08 50.9** | **+0.7** |
| **DSP** | **Deep Springs** | **2.54** | **138** | | | **Pn** | | **22 08 50.7** | **+0.4** |
| **JJOM** | **Saint Joseph's** | **2.54** | **216** | | | **Pn** | | **22 08 50.6** | **+0.3** |
| **TPH** | **Tonopah** | **2.56** | **117** | | | **Pn** | | **22 08 50.7** | **0.0** |
| **LASM** | **Arnica Sink** | **2.58** | **335** | | | **Pb** | | **22 08 55.6** | **+0.2** |
| **LMHM** | **Little Mount H** | **2.59** | **333** | | | **Pg** | | **22 08 56.3** | **-2.2** |
| **BGH** | **Bear Gulch** | **2.61** | **223** | | | **Pn** | | **22 08 52.0** | **+0.7** |
| **LGBM** | **Gray Butte** | **2.61** | **323** | | | **Pg** | | **22 08 57.4** | **-1.6** |
| **N02D** | **Trinity Center** | **2.62** | **311** | | | **Pn** | | **22 08 53.3** | **+1.9** |
| **HCBM** | **Chamberlain** | **2.64** | **208** | | | **Pn** | | **22 08 52.5** | **+0.8** |
| **LGPM** | **Granite Peak** | **2.65** | **309** | | | **Pn** | | **22 08 53.4** | **+1.4** |
| **MZP** | **Montezuma Peak** | **2.65** | **126** | | | **Pn** | | **22 08 51.4** | **-0.7** |
| **ANZ** | **Anzar Road** | **2.66** | **207** | | | **Pn** | | **22 08 52.8** | **+0.9** |
| **KIPM** | **Iron Peak** | **2.66** | **283** | | | **Pb** | | **22 08 54.7** | **-2.1** |
| **LBKM** | **Bonanza King** | **2.67** | **313** | | | **Pb** | | **22 08 54.9** | **-2.0** |
| **GGUM** | **Gualala** | **2.67** | **262** | | | **Pn** | | **22 08 53.6** | **+1.4** |
| **GTC** | **Three Chop Rid** | **2.68** | **274** | | | **Pn** | | **22 08 53.7** | **+1.5** |
| **HSFM** | **Saint Francis** | **2.69** | **205** | | | **Pn** | | **22 08 53.8** | **+1.3** |
| **HCOM** | **Corn Cob Canyo** | **2.70** | **208** | | | **Pn** | | **22 08 53.1** | **+0.6** |
| **KCPM** | **Cahto Peak** | **2.72** | **280** | | | **Pn** | | **22 08 54.5** | **+1.6** |
| **SAO** | **San Andreas Ge** | **2.72** | **203** | | | **Pn** | | **22 08 53.9** | **+1.1** |
| **JPSM** | | **2.72** | **221** | | | **Pn** | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KDAK | | | | IAML | | 22 28 27.1 | | | |
| | 37nm,0.9s | | | | | | | | |
| KDAK | | | | IAML | | 22 28 33.7 | | | |
| | 39nm,0.6s | | | | | | | | |
| **OHAK** | **Old Harbor** | **2.63** | **293** | | Pn | 22 27 52.2 | 0.0 | | |
| OHAK | | | | | Sn | 22 28 21.2 | -2.2 | | |
| **SII** | **Sitkinak Islan** | **2.99** | **277** | Pn | Pn | 22 27 57.9 | +0.6 | | |
| SII | | | | IAML | | 22 28 34.5 | | | |
| | comp=E,134nm,1.0s | | | | | | | | |
| SII | | | | IAML | | 22 28 37.3 | | | |
| | comp=N,127nm,1.1s | | | | | | | | |
| **SYI** | **Shuyak Island** | **3.02** | **322** | | Pn | 22 27 57.8 | +0.2 | | |
| SYI | | | | | Sn | 22 28 32.0 | -1.0 | | |
| **R18K** | **Karluk** | **3.34** | **295** | | Pn | 22 28 02.7 | +0.7 | | |
| R18K | | | | | Sn | 22 28 39.5 | -1.4 | | |
| **R18K** | **Karluk** | **3.34** | **295** | IAML | | 22 28 43.3 | | | |
| | comp=N,101nm,0.5s | | | | | | | | |
| R18K | | | | IAML | | 22 28 49.3 | | | |
| | comp=E,129nm,0.4s | | | | | | | | |
| **Q23K** | **Middleton Isla** | **3.41** | **22** | | Pn | 22 28 02.6 | -0.3 | | |
| **Q23K** | **Middleton Isla** | **3.41** | **22** | IAML | | 22 28 58.0 | | | |
| | comp=N,98nm,1.0s | | | | | | | | |
| Q23K | | | | IAML | | 22 29 15.1 | | | |
| | comp=E,76nm,0.9s | | | | | | | | |
| **CNPM** | **China Poot** | **3.49** | **339** | | Pn | 22 28 04.0 | 0.0 | | |
| **CNPM** | **China Poot** | **3.49** | **339** | | Sn | 22 28 43.7 | -0.9 | | |
| **HOM** | **Homer** | **3.69** | **337** | Pn | Pn | 22 28 06.5 | -0.3 | | |
| **Q19K** | **Cape Douglas,** | **3.70** | **317** | | Pn | 22 28 07.3 | +0.3 | | |
| **P23K** | **Montague Islan** | **3.79** | **11** | | Pn | 22 28 07.2 | -1.0 | | |
| P23K | | | | | Sn | 22 28 49.6 | -2.4 | | |
| **SEW** | **Seward** | **3.83** | **355** | | Pn | 22 28 07.9 | -0.9 | | |
| SEW | | | | | Sn | 22 28 51.2 | -1.9 | | |
| **CHIR** | **Chirikof Islan** | **3.84** | **266** | Pn | Pn | 22 28 09.1 | +0.2 | | |
| CHIR | | | | IAML | | 22 28 56.6 | | | |
| | comp=N,62nm,0.9s | | | | | | | | |
| CHIR | | | | IAML | | 22 28 56.8 | | | |
| | comp=E,80nm,1.1s | | | | | | | | |
| **KAKN** | **Katmai Knife C** | **3.94** | **303** | | Pn | 22 28 11.5 | +1.2 | | |
| **KAHC** | **Katmai Hardscr** | **4.09** | **308** | | Pn | 22 28 12.8 | +0.3 | | |
| **P19K** | **Oil Pt** | **4.10** | **327** | Pn | Pn | 22 28 12.9 | +0.4 | | |
| P19K | | | | IAML | | 22 29 01.7 | | | |
| | comp=N,69nm,0.8s | | | | | | | | |
| **HIN** | **Hinchinbrook I** | **4.29** | **16** | | Pn | 22 28 14.5 | -0.6 | | |
| **HIN** | **Hinchinbrook I** | **4.29** | **16** | IAML | | 22 29 12.5 | | | |
| | comp=E,43nm,1.1s | | | | | | | | |
| **KAIM** | **Kayak Island** | **4.32** | **31** | | Pn | 22 28 15.0 | -0.5 | | |
| **KAIM** | **Kayak Island** | **4.32** | **31** | IAML | | 22 29 05.3 | | | |
| | comp=E,52nm,1.2s | | | | | | | | |
| KAIM | | | | IAML | | 22 29 08.9 | | | |
| | comp=N,71nm,0.7s | | | | | | | | |
| **PLK4** | **Peulik 4** | **4.34** | **291** | Pn | Pn | 22 28 16.0 | +0.2 | | |
| PLK4 | | | | IAML | | 22 29 10.9 | | | |
| | comp=N,62nm,0.9s | | | | | | | | |
| PLK4 | | | | IAML | | 22 29 20.9 | | | |
| | comp=E,51nm,1.1s | | | | | | | | |
| **ILSW** | **Iliamna Southw** | **4.35** | **330** | Pn | Pn | 22 28 15.4 | -0.7 | | |
| ILSW | | | | IAML | | 22 29 13.5 | | | |
| | comp=E,28nm,1.0s | | | | | | | | |
| ILSW | | | | IAML | | 22 29 14.7 | | | |
| | comp=N,34nm,1.0s | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **4.56** | **19** | | Pn | 22 28 18.3 | -0.5 | | |
| **PWL** | **Port Wells** | **4.58** | **3** | | Pn | 22 28 18.3 | -0.8 | | |
| **PWL** | **Port Wells** | **4.58** | **3** | IAML | | 22 29 10.9 | | | |
| | comp=E,28nm,0.7s | | | | | | | | |
| PWL | | | | IAML | | 22 29 16.0 | | | |
| | comp=N,31nm,0.5s | | | | | | | | |
| **P18K** | **Big Mountain,** | **4.62** | **315** | Pn | Pn | 22 28 19.1 | -0.6 | | |
| **FID** | **Port Fidalgo** | **4.63** | **14** | | Pn | 22 28 19.3 | -0.5 | | |
| **FID** | **Port Fidalgo** | **4.63** | **14** | IAML | | 22 29 11.5 | | | |
| | comp=E,24nm,0.4s | | | | | | | | |
| **SUCK** | **Suckling Hills** | **4.63** | **33** | | Pn | 22 28 19.3 | -0.5 | | |
| **SUCK** | **Suckling Hills** | **4.63** | **33** | IAML | | 22 29 12.8 | | | |
| | comp=E,39nm,1.2s | | | | | | | | |
| SUCK | | | | IAML | | 22 29 14.6 | | | |
| | comp=N,45nm,1.1s | | | | | | | | |
| **RAGM** | **Ragged Mountai** | **4.65** | **26** | Pn | Pn | 22 28 19.9 | -0.2 | | |
| **GLI** | **Glacier Island** | **4.68** | **10** | Pn | Pn | 22 28 19.3 | -1.2 | | |
| GLI | | | | IAML | | 22 29 06.2 | | | |
| | comp=N,24nm,1.1s | | | | | | | | |
| GLI | | | | IAML | | 22 29 14.8 | | | |
| | comp=E,33nm,0.5s | | | | | | | | |
| **RDT** | **Redoubt** | **4.69** | **338** | | Pn | 22 28 19.5 | -1.0 | | |
| **RDWB** | **Redoubt West** | **4.71** | **335** | | Pn | 22 28 20.5 | -0.5 | | |
| **HMT** | **Hamilton** | **4.71** | **29** | | Pn | 22 28 20.8 | -0.1 | | |
| **RC01** | **Rabbit Creek A** | **4.83** | **355** | Pn | Pn | 22 28 22.2 | -0.3 | | |
| RC01 | | | | IAML | | 22 29 16.0 | | | |
| | comp=N,26nm,0.4s | | | | | | | | |
| RC01 | | | | IAML | | 22 29 16.1 | | | |
| | comp=E,39nm,0.4s | | | | | | | | |
| **O18K** | **Koktuh Hills** | **4.92** | **319** | Pn | Pn | 22 28 23.2 | -0.6 | | |
| **KNK** | **Knik Glacier** | **5.14** | **2** | Pn | Pn | 22 28 25.5 | -1.2 | | |
| KNK | | | | IAML | | 22 29 27.4 | | | |
| | comp=E,19nm,1.0s | | | | | | | | |
| **SPU** | **Mount Spurr** | **5.18** | **342** | Pn | Pn | 22 28 27.3 | -0.1 | | |
| SPU | | | | IAML | | 22 29 28.9 | | | |
| | comp=E,14nm,0.6s | | | | | | | | |
| **WAX** | **Waxell Ridge** | **5.21** | **35** | | Pn | 22 28 26.8 | -1.1 | | |
| WAX | | | | IAML | | 22 29 29.7 | | | |
| | comp=E,34nm,0.4s | | | | | | | | |
| **SUA** | **Susitna One** | **5.28** | **350** | Pn | Pn | 22 28 28.1 | -0.6 | | |
| SUA | | | | IAML | | 22 29 36.3 | | | |
| | comp=E,24nm,0.9s | | | | | | | | |
| SUA | | | | IAML | | 22 29 50.9 | | | |
| | comp=N,23nm,0.9s | | | | | | | | |
| **MESA** | **MESA** | **5.32** | **40** | Pn | Pn | 22 28 29.9 | +0.5 | | |
| **CHGN** | **Chignik** | **5.34** | **274** | Pn | Pn | 22 28 30.8 | +1.3 | | |
| **CRQM** | **Cirque** | **5.37** | **31** | | Pn | 22 28 29.9 | -0.2 | | |
| CRQM | | | | IAML | | 22 29 30.5 | | | |
| | comp=N,26nm,0.6s | | | | | | | | |
| CRQM | | | | IAML | | 22 30 57.3 | | | |
| | comp=E,26nm,0.1s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **5.41** | **329** | Pn | Pn | 22 28 30.0 | -0.6 | | |
| **KLU** | **Klutina** | **5.42** | **15** | | Pn | 22 28 30.7 | 0.0 | | |
| **STLK** | **Strandline Lak** | **5.45** | **345** | | Pn | 22 28 30.9 | -0.1 | | |
| **TGL** | **Tana Glacier** | **5.46** | **33** | Pn | Pn | 22 28 31.3 | +0.1 | | |
| **GHO** | **Glory Hole Cre** | **5.49** | **359** | | Pn | 22 28 32.6 | +0.9 | | |
| **ISLE** | **Juniper Island** | **5.50** | **36** | Pn | Pn | 22 28 32.8 | +1.0 | | |
| **SML** | **Sawmill** | **5.53** | **2** | Pn | Pn | 22 28 32.5 | +0.3 | | |
| **SCM** | **Sheep Creek Mo** | **5.61** | **7** | Pn | Pn | 22 28 31.9 | -1.3 | | |
| **VRDI** | **Verde Repeater** | **5.68** | **27** | | Pn | 22 28 32.0 | -2.3 | | |
| **KIAG** | **Kiagna River** | **5.74** | **33** | | Pn | 22 28 34.8 | -0.4 | | |
| **N18K** | **Kilae Creek** | **5.75** | **323** | Pn | Pn | 22 28 34.7 | -0.4 | | |
| **N25K** | **Chitina, Valde** | **5.75** | **21** | | Pn | 22 28 36.1 | +0.8 | | |
| **GLB** | **Gilahina Butte** | **5.78** | **25** | | Pn | 22 28 35.5 | 0.0 | | |
| **GRNC** | **Granite Creek** | **5.79** | **37** | Pn | Pn | 22 28 35.7 | -0.1 | | |
| **TABL** | **Table Mountain** | **5.79** | **41** | Pn | Pn | 22 28 35.8 | -0.1 | | |
| **SKT** | **Skwentna** | **5.87** | **347** | Pn | Pn | 22 28 37.5 | +0.7 | | |
| **MCARA** | **McCarthy VSAT** | **5.92** | **28** | Pn | Pn | 22 28 38.2 | +0.8 | | |
| **O16K** | **Kokwok River B** | **5.94** | **308** | Pn | Pn | 22 28 38.3 | +0.6 | | |
| **M24K** | **Tolsona, Glenn** | **5.98** | **12** | | Pn | 22 28 38.4 | 0.0 | | |
| **M20K** | **Styx River** | **6.03** | **340** | Pn | Pn | 22 28 38.7 | -0.3 | | |
| **BCPM** | **Bancas Point** | **6.09** | **49** | Pn | Pn | 22 28 39.3 | -0.5 | | |
| **CTGM** | **Chitina Glacie** | **6.10** | **37** | Pn | Pn | 22 28 39.2 | -0.9 | | |
| **N17K** | **Nushagak Hills** | **6.11** | **317** | Pn | Pn | 22 28 40.0 | 0.0 | | |
| **LOGN** | **Logan Glacier** | **6.11** | **39** | | Pn | 22 28 39.8 | -0.4 | | |
| **CNBA** | **Chernabura Isl** | **6.29** | **261** | Pn | Pn | 22 28 41.6 | -0.9 | | |
| **M19K** | **Big River Lodg** | **6.31** | **335** | Pn | Pn | 22 28 42.2 | -0.6 | | |
| **L19K** | **White Mountain** | **6.66** | **335** | Pn | Pn | 22 28 47.3 | -0.4 | | |
| **O29M** | **Mount Kennedy** | **6.73** | **49** | | Pn | 22 28 49.3 | +0.6 | | |
| **P29M** | **Windy Craggy** | **6.78** | **56** | | Pn | 22 28 49.2 | 0.0 | | |
| **M17K** | **Holitna River** | **6.79** | **322** | Pn | Pn | 22 28 49.3 | -0.1 | | |
| **DHY** | **Denali Highway** | **6.84** | **6** | | Pn | 22 28 50.3 | +0.1 | | |
| **M27K** | **Edge Creek, AK** | **7.04** | **27** | Pn | Pn | 22 28 53.8 | +0.9 | | |
| **S31K** | **Pelican** | **7.05** | **71** | | Pn | 22 28 51.3 | -1.7 | | |
| **M16K** | **Timber Creek** | **7.10** | **316** | Pn | Pn | 22 28 53.6 | 0.0 | | |
| **N15K** | **Kwethluk River** | **7.10** | **308** | Pn | Pn | 22 28 55.5 | +1.8 | | |
| **RND** | **Reindeer** | **7.13** | **360** | Pn | Pn | 22 28 54.8 | +0.7 | | |
| **L18K** | **Granite Mounta** | **7.18** | **329** | Pn | Pn | 22 28 54.9 | +0.2 | | |
| **O14K** | **Tigyukauivet M** | **7.28** | **299** | Pn | Pn | 22 28 57.2 | +1.1 | | |
| **S12K** | **Black Hills** | **7.45** | **271** | Pn | Pn | 22 28 58.0 | -0.4 | | |
| **L27K** | **Beaver Creek,** | **7.65** | **25** | Pn | Pn | 22 29 01.8 | +0.6 | | |
| **L16K** | **Owhat River** | **7.72** | **319** | Pn | Pn | 22 29 02.1 | -0.1 | | |
| **RIDG** | **Independent Ri** | **7.73** | **13** | Pn | Pn | 22 29 03.0 | +0.8 | | |
| **S32K** | **Killisnoo** | **7.89** | **76** | Pn | Pn | 22 29 03.6 | -0.8 | | |
| **N30M** | **Aishikik Lake** | **7.98** | **45** | Pn | Pn | 22 29 06.2 | +0.5 | | |
| **O30N** | **Mendenhall** | **8.02** | **51** | Pn | Pn | 22 29 07.3 | +0.9 | | |
| **K17K** | **Iditarod** | **8.04** | **327** | Pn | Pn | 22 29 05.6 | -0.9 | | |
| **M29M** | **Somme Creek** | **8.11** | **36** | | Pn | 22 29 07.8 | +0.2 | | |
| **HDA** | **Harding Lake** | **8.19** | **6** | Pn | Pn | 22 29 08.5 | -0.1 | | |
| **J20K** | **Nowinta River** | **8.34** | **344** | Pn | Pn | 22 29 10.3 | -0.2 | | |
| **CCB** | **Clear Creek Bu** | **8.39** | **3** | Pn | Pn | 22 29 11.7 | +0.4 | | |
| **J19K** | **Poorman** | **8.43** | **339** | Pn | Pn | 22 29 10.9 | -0.9 | | |
| **K27K** | **Chicken** | **8.45** | **21** | Pn | Pn | 22 29 12.2 | +0.1 | | |
| **WHY** | **Whitehorse** | **8.51** | **53** | Pn | Pn | 22 29 13.0 | -0.1 | | |
| **J25K** | **Salcha River,** | **8.52** | **10** | Pn | Pn | 22 29 13.5 | +0.4 | | |
| **N31M** | **Braeburn, Yuko** | **8.52** | **47** | Pn | Pn | 22 29 13.0 | -0.1 | | |
| **IL31** | | **8.56** | **6** | Pn | Pn | 22 29 13.3 | -0.2 | | |
| **P32M** | **Atlin** | **8.68** | **61** | Pn | Pn | 22 29 14.5 | -0.9 | | |
| **L29M** | **L29M** | **8.70** | **34** | Pn | Pn | 22 29 16.5 | +0.9 | | |
| **U33K** | **Whale Pass** | **8.76** | **85** | Pn | Pn | 22 29 14.5 | -1.8 | | |
| **M30M** | **Minto, Yukon** | **8.78** | **39** | Pn | Pn | 22 29 17.5 | +0.8 | | |
| **J17K** | **VABM Dome** | **8.79** | **328** | Pn | Pn | 22 29 15.6 | -1.1 | | |
| **MLY** | **Manley** | **8.81** | **355** | Pn | Pn | 22 29 16.7 | -0.4 | | |
| **K15K** | **Wolf Creek Mou** | **8.85** | **318** | Pn | Pn | 22 29 17.3 | -0.2 | | |
| **I23K** | **Minto, Yukon-K** | **8.89** | **359** | Pn | Pn | 22 29 19.1 | +1.0 | | |
| **J16K** | **Anvik River** | **9.17** | **325** | Pn | Pn | 22 29 21.1 | -0.9 | | |
| **Q32M** | **Nakina River** | **9.27** | **66** | Pn | Pn | 22 29 23.8 | +0.3 | | |
| **P33M** | **Teslin, Yukon** | **9.30** | **58** | Pn | Pn | 22 29 23.8 | 0.0 | | |
| **K29M** | **Barlow Dome** | **9.43** | **32** | Pn | Pn | 22 29 26.4 | +0.8 | | |
| **I26K** | **Coal Creek Min** | **9.45** | **15** | Pn | Pn | 22 29 27.3 | +1.5 | | |
| **M31M** | **Drury Creek, Y** | **9.46** | **45** | Pn | Pn | 22 29 26.9 | +1.0 | | |
| **H23K** | **Yukon River** | **9.57** | **358** | Pn | Pn | 22 29 27.0 | -0.5 | | |
| **H24K** | **Noodor Dome** | **9.59** | **2** | Pn | Pn | 22 29 29.6 | +1.8 | | |
| **H21K** | **Melozitna Rive** | **9.59** | **350** | Pn | Pn | 22 29 27.6 | -0.2 | | |
| **R33M** | **Jennings River** | **10.00** | **65** | Pn | Pn | 22 29 34.2 | +0.7 | | |
| **H18K** | **Honhosa River** | **10.02** | **336** | Pn | Pn | 22 29 31.4 | -2.3 | | |
| **I28M** | **Miner Creek** | **10.14** | **22** | Pn | Pn | 22 29 35.5 | +0.2 | | |
| **H17K** | **Granite Mounta** | **10.22** | **332** | Pn | Pn | 22 29 35.8 | -0.6 | | |
| **G24K** | **Hadweenzic Riv** | **10.46** | **3** | Pn | Pn | 22 29 40.1 | +0.4 | | |
| **G21K** | **Allakaket** | **10.49** | **350** | Pn | Pn | 22 29 39.7 | -0.4 | | |
| **F21K** | **Alatna River** | **11.18** | **351** | Pn | Pn | 22 29 49.8 | +0.3 | | |
| **F20K** | **Avaraart Lake** | **11.27** | **346** | Pn | Pn | 22 29 50.0 | -0.7 | | |

*IDC **30** 22:36:23.1±2.4, 1°43S×101°34E, h0km, mb3.6/7, mbtmp3.6/7, MS3.1/2, Error ellipse: s-maj=91.2km s-min=21.5km az=57.0*
*DJA **30** 22:36:47.1±0.5, 1°S±6'×10°2E±°, h196km±7km, M4.8/12, mb4.9/5, mB5.3/2, MLv4.7/12, Mw(mB)4.7/2*

**ISC 30 22:36:46.4±0.9, 1°3S±0'1×101°7E±0'1, h200km, n22, σ0s75/18, mb3.2/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDSI** | **Padang** | **1.27** | **285** | P | **Pn** | **22 37 18.8** | **+0.6** |
| PDSI | | | | S | **Sn** | **22 37 41.7** | **-1.0** |
| **PPSI** | **Pulau Pagai** | **2.25** | **228** | P | **Pn** | **22 37 28.0** | **+0.4** |
| **SISI** | **Saibi** | **2.59** | **268** | P | **Pn** | **22 37 32.1** | **+0.7** |
| **PBSI** | **Pulau Batu** | **3.60** | **289** | P | **Pn** | **22 37 44.1** | **+0.8** |
| **GSI** | **Gunungsitoli** | **4.83** | **302** | P | **Pn** | **22 37 59.1** | **+0.4** |
| **KASI** | **Kota Agung** | **5.09** | **147** | P | **Pn** | **22 38 01.9** | **-0.1** |
| **KCSI** | **Kotacane, Aceh** 79nm,0.5s,0.6nm | **6.14** | **320** | P | **Pn** | **22 38 14.7** | **-0.9** |
| **SNSI** | **Sinabang, Aceh** 232nm,0.7s,4µm1.0nm | **6.47** | **304** | P | **Pn** | **22 38 19.8** | **0.0** |
| **MLSI** | **Meulaboh, Aceh** | **7.61** | **316** | P | **Pn** | **22 38 33.9** | **-0.7** |
| **LHMI** | **Lhok Sumawe** | **7.99** | **324** | P | **Pn** | **22 38 39.0** | **-0.5** |
| **WRA** | **Warramunga Arr** 0.4nm,0.9s,baz=306,slow=8.5,SNR=6.0 0.4nm,0.9s | **36.95** | **122** | P | **P** | **22 43 35.9** | **-0.7** |
| **ASAR** | **Alice Springs** 0.4nm,0.6s,baz=302,slow=8.1,SNR=5.3 0.4nm,0.6s | **38.36** | **128** | P | **P** | **22 43 47.5** | **-0.9** |
| **KSRS** | **Korea Array** comp=Z,9.9nm,18.7s,baz=180,slow=37 | **45.53** | **30** | LR | LR | 23 04 19.5 | |
| **SONM** | **Songino Array** 0.6nm,0.4s,baz=151,slow=4.6,SNR=3.9 0.6nm,0.4s | **49.06** | **4** | P | **P** | **22 45 14.0** | **+0.7** |
| **MKAR** | **Makanchi Array** 0.2nm,0.3s,baz=168,slow=9.5,SNR=1.9 0.2nm,0.3s | **50.79** | **343** | P | **P** | **22 45 26.1** | **-0.1** |
| **USRK** | **Ussuriysk Ar.** 1.4nm,0.6s,baz=143,slow=1.9,SNR=5.7 1.4nm,0.6s | **52.72** | **27** | P | **P** | **22 45 41.8** | **+1.2** |
| **KURBB** | **Kurchatov Arra** 0.3nm,0.7s,baz=158,slow=7.5,SNR=2.8 0.3nm,0.7s | **55.33** | **342** | P | **P** | **22 45 59.1** | **-0.2** |
| **ZALV** | **Zalesovo Beam** 0.5nm,0.3s,baz=163,slow=11,SNR=4.6 0.5nm,0.3s | **56.76** | **348** | P | **P** | **22 46 08.8** | **-0.6** |
| **H04N2** | **CROZET ISLANDS** baz=59,slow=75,SNR=8.3 | **62.40** | **217** | T | T | 23 52 57.5 | |
| **H04N1** | **CROZET ISLANDS** baz=59,slow=75,SNR=8.8 | **62.41** | **217** | T | T | 23 52 59.4 | |
| **H04N3** | **CROZET ISLANDS** baz=59,slow=75,SNR=7.9 | **62.42** | **217** | T | T | 23 53 02.6 | |
| **BRTR** | **Kerguelen Array B** comp=Z,21nm,18.4s,baz=98,slow=40 | **74.07** | **312** | LR | LR | 23 25 17.6 | |

*AEIC **30** 22:49:50.6±1.5, 69°51N±0°05×144°2W±0°1, h15km±5km, Error ellipse: s-maj=7.8km s-min=4.8km az=198.0*
*NEIC **30** 22:49:50.2, 69°46N×144°26W, h7km*
*NEIC **30** 22:49:51.6±1.9, 69°55N±0°03×144°26W±0°04, h4km±2km, ML4.1/116, Mwr3.9/33, ML4.0(AEIC), Error ellipse: s-maj=5.3km s-min=3.5km az=356.0, Moment Tensor Solution. Moment tensor: Scale 10^14^Nm; Mrr=1.18; Mθθ=5.88; Mφφ7.06; Mrθ4.70; Mrφ-5.87; Mθφ-0.21; Fault plane solution: M0 9.98000×10^14^ NP1:φ±201.17000°, δ63.78000°, λ-11.29000°. NP2:φ±296.21000°, δ79.88000°, λ-153.34000°. Principal axes: T 9.6893, Plg11.0000°, Azm66.0000°; N 0.5508, Plg62.0000°, Azm315.0000°; P -10.2401, Plg26.0000°, Azm162.0000°;*
*IDC **30** 22:49:51.4±0.7, 69°70N×144°07W, h0km, mb3.8/14, mbtmp3.8/18, ML4.0/4, MS3.2/6 Error ellipse: s-maj=21.0km s-min=12.6km az=52.0*

**ISC 30 22:49:50.8±1.2, 69°53N±0°03×144°23W±0°02, h1km±8km, n138, σ1s09/146, mb3.8/14, MS3.2/4, Northern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **C27K** | **Jago River** | **0.21** | **61** | Pg | **Pg** | **22 49 55.3** | **+0.6** |
| C27K | | | | | **Sg** | **22 49 58.6** | **+1.2** |
| **C26K** | **Camden Bay** | **0.46** | **329** | | **Sb** | **22 50 07.9** | **-1.0** |
| **D25K** | **Kavik River** | **0.79** | **256** | Pg | **Pg** | **22 50 04.9** | **-0.9** |
| D25K | | | | | **Sg** | **22 50 16.5** | **+0.4** |
| **D27M** | **Malcolm River** | **1.19** | **102** | Pg | **Pb** | **22 50 12.3** | **-1.8** |
| D27M | | | | IAML | | 22 50 35.5 | |
| | comp=N,4µm,0.4s | | | | | | |
| **C24K** | **Franklin Bluff** | **1.58** | **279** | | **Pb** | **22 50 20.0** | **-0.7** |
| C24K | | | | | **Sg** | **22 50 42.7** | **+1.3** |
| C24K | | | | IAML | | 22 50 43.6 | |
| | comp=N,3µm,0.4s | | | | | | |
| C24K | | | | IAML | | 22 50 43.6 | |
| | comp=E,2µm,0.6s | | | | | | |
| **E27K** | **Coleen River** | **1.65** | **143** | | **Pb** | **22 50 20.8** | **-1.2** |
| E27K | | | | | **Sb** | **22 50 42.8** | **-0.5** |
| E27K | | | | IAML | | 22 50 46.7 | |
| | comp=E,2µm,0.5s | | | | | | |
| E27K | | | | IAML | | 22 50 49.3 | |
| | comp=N,1µm,0.8s | | | | | | |
| **D24K** | **Happy Valley** | **1.67** | **259** | | **Pb** | **22 50 21.7** | **-0.7** |
| D24K | | | | | **Sg** | **22 50 45.6** | **+1.1** |
| D24K | | | | IAML | | 22 50 46.8 | |
| | comp=N,2µm,0.6s | | | | | | |
| **F26K** | **Sheenjek River** | **1.84** | **179** | | **Pb** | **22 50 24.5** | **-0.8** |
| F26K | | | | | **Sb** | **22 50 48.2** | **-0.6** |
| **E28M** | **Babbage River** | **1.92** | **117** | | **Pb** | **22 50 25.5** | **-1.1** |
| E28M | | | | | **Sb** | **22 50 51.1** | **+0.1** |
| E28M | | | | IAML | | 22 50 57.0 | |
| | comp=E,1µm,0.9s | | | | | | |
| **D28M** | **Stokes Point** | **1.95** | **93** | | **Pb** | **22 50 26.5** | **-0.6** |
| D28M | | | | | **Sg** | **22 50 54.5** | **+1.1** |
| **F25K** | **Christian River** | **2.01** | **196** | | **Pb** | **22 50 27.1** | **-1.1** |
| F25K | | | | | **Sb** | **22 50 53.2** | **-0.4** |
| **TOLK** | **Toolik Lake Re** | **2.12** | **248** | | **Pn** | **22 50 27.6** | **+0.3** |
| TOLK | | | | IAML | | 22 51 09.3 | |
| | comp=N,940nm,0.7s | | | | | | |
| **E24K** | **Your Creek** | **2.13** | **229** | | **Pb** | **22 50 28.5** | **-1.6** |
| E24K | | | | | **Sb** | **22 50 57.6** | **+0.6** |
| **C23K** | **Itkillik River** | **2.25** | **281** | | **Pn** | **22 50 29.4** | **+0.3** |
| C23K | | | | IAML | | 22 51 05.9 | |
| | comp=E,1µm,0.9s | | | | | | |
| **D23K** | **Nanushuk River** | **2.37** | **259** | | **Pn** | **22 50 31.5** | **+0.8** |
| **F24K** | **Squaw Lake** | **2.43** | **215** | | **Pn** | **22 50 32.0** | **+0.4** |
| F24K | | | | IAML | | 22 51 15.5 | |
| | comp=E,676nm,0.9s | | | | | | |
| **E23K** | **Chandalar** | **2.45** | **236** | | **Pn** | **22 50 32.5** | **+0.6** |
| E23K | | | | IAML | | 22 51 13.2 | |
| | comp=N,918nm,1.0s | | | | | | |
| **F28M** | **Old Crow** | **2.50** | **138** | | **Pn** | **22 50 32.6** | **+0.1** |
| F28M | | | | IAML | | 22 51 13.9 | |
| | comp=N,738nm,0.5s | | | | | | |
| F28M | | | | IAML | | 22 51 14.4 | |
| | comp=E,794nm,0.8s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **E29M** | **Blow River** | **2.56** | **114** | | Pn | 22 50 34.4 | **+1.1** | | |
| E29M | | | | IAML | | 22 51 17.2 | | | |
| | comp=N,976nm,0.7s | | | | | | | | |
| E29M | | | | IAML | | 22 51 19.0 | | | |
| | comp=E,1µm,0.7s | | | | | | | | |
| **G26K** | **Porcupine Rive** | **2.60** | **176** | | Pn | 22 50 34.1 | **+0.3** | | |
| **G25K** | **Bearman Lake** | **2.86** | **195** | | Pn | 22 50 38.5 | **+1.0** | | |
| **G27K** | **Doyon Strip** | **2.90** | **159** | | Pn | 22 50 37.9 | **-0.1** | | |
| **D22K** | **Ayikyak River** | **3.09** | **262** | Pn | Pn | 22 50 40.9 | **+0.3** | | |
| D22K | | | | IAML | | 22 51 45.3 | | | |
| | comp=N,597nm,0.8s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **3.09** | **247** | | Pn | 22 50 40.7 | **+0.1** | | |
| **COLD** | **Coldfoot** | **3.20** | **227** | | Pn | 22 50 42.6 | **+0.5** | | |
| **B22K** | **Teshekpuk Lake** | **3.27** | **289** | | Pn | 22 50 43.8 | **+0.8** | | |
| **H25L** | **Birch Creek** | **3.33** | **191** | | Pn | 22 50 44.9 | **+0.9** | | |
| **H27K** | **Steamboat Moun** | **3.47** | **162** | | Pn | 22 50 46.3 | **+0.5** | | |
| **G29M** | **Pine Creek** | **3.50** | **136** | | Pn | 22 50 47.0 | **+0.7** | | |
| **F22K** | **John River** | **3.56** | **239** | | Pn | 22 50 47.3 | **+0.2** | | |
| **G23K** | **Bananza Creek** | **3.57** | **220** | | Pn | 22 50 47.0 | **-0.2** | | |
| G23K | | | | IAML | | 22 51 48.9 | | | |
| | comp=N,291nm,1.0s | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **3.64** | **276** | Pn | Pn | 22 50 48.9 | **+0.8** | | |
| B21K | | | | IAML | | 22 50 00.9 | | | |
| | comp=E,320nm,0.8s | | | | | | | | |
| B21K | | | | IAML | | 22 52 06.6 | | | |
| | comp=N,390nm,0.8s | | | | | | | | |
| **F30M** | **Barrier River** | **3.65** | **118** | | Pn | 22 50 48.9 | **+0.6** | | |
| **E21K** | **Killik River** | **3.68** | **257** | | Pn | 22 50 48.5 | **-0.2** | | |
| E21K | | | | IAML | | 22 51 57.8 | | | |
| | comp=N,310nm,0.7s | | | | | | | | |
| E21K | | | | IAML | | 22 52 00.5 | | | |
| | comp=E,310nm,0.8s | | | | | | | | |
| **C21K** | **Knifeblade Rid** | **3.76** | **269** | | Pn | 22 50 50.5 | **+0.7** | | |
| **G22K** | **Bettles** | **3.77** | **229** | | Pn | 22 50 50.5 | **+0.5** | | |
| **G30M** | **tAoh Zraii Nji** | **3.92** | **127** | | Pn | 22 50 52.8 | **+0.7** | | |
| G30M | | | | IAML | | 22 52 02.4 | | | |
| | comp=E,195nm,0.8s | | | | | | | | |
| G30M | | | | IAML | | 22 52 09.3 | | | |
| | comp=N,264nm,1.1s | | | | | | | | |
| **A22K** | **Sinclair Lake** | **3.93** | **297** | | Pn | 22 50 52.5 | **+0.3** | | |
| **H24K** | **Noodor Dome** | **3.96** | **202** | | Pn | 22 50 52.9 | **+0.3** | | |
| H24K | | | | IAML | | 22 52 03.0 | | | |
| | comp=E,260nm,0.8s | | | | | | | | |
| H24K | | | | IAML | | 22 52 05.0 | | | |
| | comp=N,191nm,0.9s | | | | | | | | |
| **H29M** | **Whitestone** | **3.99** | **144** | | Pn | 22 50 53.9 | **+0.8** | | |
| H29M | | | | IAML | | 22 51 43.0 | | | |
| | comp=N,312nm,0.6s | | | | | | | | |
| H29M | | | | IAML | | 22 52 14.3 | | | |
| | comp=E,300nm,0.9s | | | | | | | | |
| **INK** | **Inuvik** | **4.05** | **103** | | Pn | 22 50 55.0 | **+1.1** | | |
| **INK** | **Inuvik** | **4.05** | **103** | Pn | Pn | 22 50 52.4 | **-1.5** | | |
| | comp=E,6.9nm,0.3s,baz=338,slow=4.7,SNR=38 | | | | | | | | |
| INK | | | | | Sn | **Sn** | 22 51 38.4 | **-3.5** | |
| | comp=E,7.0nm,0.3s,baz=318,slow=25,SNR=5.0 | | | | | | | | |
| INK | | | | | Lg | Lg | 22 51 45.0 | | |
| | comp=E,7.1nm,0.3s,baz=60,slow=20,SNR=5.1 comp=E,5.1nm,0.4s | | | | | | | | |
| **PRP** | **Porcupine Dome** | **4.06** | **188** | | Pn | 22 50 54.4 | **+0.3** | | |
| PRP | | | | IAML | | 22 52 02.2 | | | |
| | comp=N,259nm,1.0s | | | | | | | | |
| PRP | | | | IAML | | 22 52 05.4 | | | |
| | comp=E,202nm,1.0s | | | | | | | | |
| **I27K** | **Kandik River** | **4.07** | **165** | | Pn | 22 50 54.8 | **+0.7** | | |
| **F21K** | **Alatna River** | **4.13** | **240** | | Pn | 22 50 55.3 | **+0.3** | | |
| F21K | | | | IAML | | 22 52 07.9 | | | |
| | comp=E,184nm,0.6s | | | | | | | | |
| **H23K** | **Yukon River** | **4.24** | **211** | Pn | Pn | 22 50 56.6 | **+0.3** | | |
| H23K | | | | IAML | | 22 52 09.9 | | | |
| | comp=N,244nm,0.7s | | | | | | | | |
| **EPYK** | **Eagle Plains** | **4.25** | **135** | | Pn | 22 50 57.2 | **+0.6** | | |
| **I26K** | **Coal Creek Min** | **4.26** | **174** | Pn | Pn | 22 50 57.1 | **+0.4** | | |
| **I28M** | **Miner Creek** | **4.42** | **156** | | Pn | 22 50 59.6 | **+0.7** | | |
| I28M | | | | IAML | | 22 51 58.7 | | | |
| | comp=N,152nm,0.6s | | | | | | | | |
| I28M | | | | IAML | | 22 52 27.5 | | | |
| | comp=E,160nm,1.0s | | | | | | | | |
| **D20K** | **Etivluk River** | **4.51** | **265** | | Pn | 22 51 01.3 | **+1.2** | | |
| **E20K** | **Nigu River** | **4.51** | **259** | | Pn | 22 51 01.1 | **+0.9** | | |
| **B20K** | **Meade River** | **4.52** | **282** | Pn | Pn | 22 51 00.8 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **K27K** | **Chicken** | **5.59** | **170** | Pn | | **Pn** | **22 51 15.9** | **+1.0** |
| **F19K** | **Shaleruckik Mo** | **5.73** | **248** | Pn | | **Pn** | **22 51 16.3** | **-0.5** |
| **BWN** | **Browne** | **5.76** | **203** | Pn | | **Pn** | **22 51 17.7** | **+0.4** |
| **K24K** | **Donnelly Dome** | **5.78** | **187** | | | **Pn** | **22 51 19.4** | **+1.8** |
| **DAWY** | **Dawson** | **5.81** | **159** | Pn | | **Pn** | **22 51 18.8** | **+0.9** |
| **RIDG** | **Independent Ri** | **5.82** | **183** | | | **Pn** | **22 51 19.1** | **+0.9** |
| **J30M** | **Hart River** | **5.85** | **144** | | | **Pn** | **22 51 19.0** | **+0.4** |
| **A19K** | **Wainwright** | **5.85** | **285** | | | **Pn** | **22 51 19.2** | **+0.7** |
| **DOT** | **Dot Lake** | **5.91** | **179** | | | **Pn** | **22 51 20.6** | **+1.2** |
| **G19K** | **Purcell Mounta** | **5.93** | **241** | | | **Pn** | **22 51 18.5** | **-1.1** |
| **MCK** | **McKinley** | **6.11** | **200** | | | **Pn** | **22 51 23.5** | **+1.3** |
| **C18K** | **Utukok River** | **6.14** | **270** | | | **Pn** | **22 51 22.2** | **-0.3** |
| **H19K** | **Roundabout Mou** | **6.16** | **235** | | | **Pn** | **22 51 22.9** | **+0.1** |
| **B18K** | **Kokolik River** | **6.19** | **277** | | | **Pn** | **22 51 22.4** | **-0.7** |
| **K29M** | **Barlow Dome** | **6.29** | **152** | | | **Pn** | **22 51 25.0** | **+0.3** |
| **E18K** | **Tukpahlearik C** | **6.38** | **258** | | | **Pn** | **22 51 25.9** | **+0.2** |
| **RND** | **Reindeer** | **6.42** | **199** | | | **Pn** | **22 51 27.6** | **+1.2** |
| **F18K** | **Selawik** | **6.48** | **250** | | | **Pn** | **22 51 27.5** | **+0.5** |
| **L27K** | **Beaver Creek,** | **6.57** | **170** | | | **Pn** | **22 51 29.3** | **+0.9** |
| **G18K** | **Tagagawik** | **6.58** | **243** | | | **Pn** | **22 51 28.2** | **-0.3** |
| **DHY** | **Denali Highway** | **6.60** | **193** | Pn | | **Pn** | **22 51 31.4** | **+2.4** |
| **PAX** | **Paxson** | **6.61** | **185** | | | **Pn** | **22 51 30.8** | **+1.8** |
| **J20K** | **Nowinta River** | **6.64** | **221** | | | **Pn** | **22 51 29.3** | **0.0** |
| **A36M** | **Sachs Harbour** | **6.72** | **60** | | | **Pn** | **22 51 29.9** | **-0.5** |
| **C17K** | **DeLong Mountai** | **6.88** | **270** | | | **Pn** | **22 51 31.5** | **-1.2** |
| **L29M** | **L29M** | **6.89** | **156** | | | **Pn** | **22 51 33.5** | **+0.6** |
| **E17K** | **Hotham Inlet** | **6.96** | **258** | | | **Pn** | **22 51 33.3** | **-0.4** |
| **H18K** | **Honhosa River** | **7.00** | **238** | | | **Pn** | **22 51 34.2** | **0.0** |
| **C36M** | **Paulatuk** | **7.09** | **82** | | | **Pn** | **22 51 34.5** | **-1.0** |
| **F17K** | **Baldwin Pennin** | **7.10** | **252** | | | **Pn** | **22 51 35.1** | **-0.4** |
| **D17K** | **Noatak River** | **7.12** | **264** | | | **Pn** | **22 51 34.7** | **-1.3** |
| **J19K** | **Poorman** | **7.14** | **224** | | | **Pn** | **22 51 36.1** | **-0.1** |
| **HARP** | **HAARP** | **7.17** | **183** | | | **Pn** | **22 51 38.6** | **+1.9** |
| **G17K** | **Kiwalik Mounta** | **7.47** | **245** | | | **Pn** | **22 51 40.6** | **-0.1** |
| **WACK** | **Wrangell Chich** | **7.58** | **180** | | | **Pn** | **22 51 44.2** | **+1.8** |
| **YUK2** | **White River** | **7.90** | **168** | | | **Pn** | **22 51 48.5** | **+1.8** |
| **PTPK** | **Patty Peak** | **8.41** | **174** | | | **Pn** | **22 51 56.5** | **+2.7** |
| **SPNN** | **North Nagishla** | **8.91** | **207** | | | **Pn** | **22 52 02.7** | **+2.2** |
| **YUK6** | **Outpost Mounta** | **8.96** | **161** | | | **Pn** | **22 52 03.3** | **+2.0** |
| **DLBC** | **Dease Lake** | **12.70** | **144** | Pn | | **Pn** | **22 52 51.4** | **-1.0** |
| | comp=E,0.5nm,0.3s,baz=336,slow=12,SNR=8.8 | | | | | | | |
| DLBC | | | | LR | | LR | 22 58 06.8 | |
| | comp=E,124nm,19.2s,baz=245,slow=39 | | | | | | | |
| | comp=E,3.4nm,0.6s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **13.82** | **106** | Pn | | **Pn** | **22 53 03.4** | **-4.0** |
| | comp=E,0.7nm,0.3s,baz=302,slow=18,SNR=11 | | | | | | | |
| YKA | | | | Sn | | Sn | 22 55 27.8 | -13 |
| | comp=E,0.9nm,0.3s,baz=352,slow=17,SNR=7.3 | | | | | | | |
| | comp=E,1.4nm,0.5s | | | | | | | |
| **RES** | **Resolute Bay** | **15.56** | **49** | Sn | | Sn | 22 56 09.7 | -14 |
| | comp=E,1.0nm,0.3s,baz=1.0,slow=22,SNR=2.4 | | | | | | | |
| **NEW** | **Newport** | **25.08** | **134** | LR | | LR | 23 05 49.5 | |
| | comp=E,64nm,19.8s,baz=20,slow=38 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.87** | **268** | P | | **P** | **22 56 09.9** | **+2.4** |
| | comp=E,0.8nm,0.4s,baz=317,slow=9.2,SNR=3.5 | | | | | | | |
| | comp=E,0.8nm,0.4s | | | | | | | |
| **PDAR** | **Pinedale Array** | **32.18** | **128** | P | | **P** | **22 56 22.0** | **+2.0** |
| | comp=E,0.4nm,0.4s,baz=345,slow=5.0,SNR=5.3 | | | | | | | |
| | comp=E,0.4nm,0.4s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.11** | **142** | P | | **P** | **22 56 39.3** | **+2.4** |
| | comp=E,1.0nm,0.7s,baz=353,slow=5.9,SNR=7.5 | | | | | | | |
| NVAR | | | | LR | | LR | 23 10 43.0 | |
| | comp=E,30nm,18.7s,baz=298,slow=36 | | | | | | | |
| | comp=E,1.0nm,0.7s | | | | | | | |
| **PFO** | **Pinyon Flats O** | **39.15** | **142** | LR | | LR | 23 15 17.4 | |
| | comp=E,41nm,20.1s,baz=148,slow=39 | | | | | | | |
| **ANMO** | **Albuquerque** | **40.34** | **129** | LR | | LR | 23 14 38.3 | |
| | comp=E,30nm,18.0s,baz=262,slow=37 | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.40** | **128** | P | | **P** | **22 58 19.5** | **+0.9** |
| | comp=E,0.4nm,0.5s,baz=317,slow=5.3,SNR=5.6 | | | | | | | |
| | comp=E,0.4nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.33** | **283** | P | | **P** | **22 58 26.5** | **+0.9** |
| | comp=E,0.9nm,0.6s,baz=54,slow=10,SNR=3.3 | | | | | | | |
| | comp=E,0.9nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **49.13** | **6** | P | | **P** | **22 58 38.1** | **-1.2** |
| | comp=E,1.0nm,0.8s,baz=355,slow=7.7,SNR=1.5 | | | | | | | |
| | comp=E,1.0nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **49.67** | **14** | P | | **P** | **22 58 42.5** | **-0.9** |
| | comp=E,1.5nm,0.8s,baz=348,slow=7.5,SNR=1.6 | | | | | | | |
| | comp=E,1.5nm,0.8s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.78** | **325** | P | | **P** | **22 58 58.6** | **-0.7** |
| | comp=E,0.6nm,0.5s,baz=22,slow=8.1,SNR=2.9 | | | | | | | |
| | comp=E,0.6nm,0.5s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **52.28** | **27** | P | | **P** | **22 59 03.6** | **+0.6** |
| | comp=E,1.0nm,0.7s,baz=310,slow=6.4,SNR=3.9 | | | | | | | |
| | comp=E,1.0nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.15** | **329** | P | | **P** | **22 59 30.4** | **-0.8** |
| | comp=E,0.7nm,0.7s,baz=15,slow=7.9,SNR=5.5 | | | | | | | |
| | comp=E,0.7nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.08** | **324** | P | | **P** | **22 59 51.0** | **-1.0** |
| | comp=E,0.3nm,0.5s,baz=34,slow=8.8,SNR=5.1 | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.99** | **5** | P | | **P** | **22 59 57.8** | **-0.4** |
| | comp=E,1.0nm,0.5s,baz=358,slow=6.5,SNR=5.8 | | | | | | | |
| | comp=E,1.0nm,0.5s | | | | | | | |
| **CMIG** | **Matias Romero** | **60.48** | **124** | P | | **P** | **23 00 03.0** | **+1.0** |
| | comp=E,2.2nm,0.7s,baz=332,slow=9.6,SNR=2.7 | | | | | | | |
| | comp=E,2.2nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **71.05** | **2** | P | | **P** | **23 01 11.2** | **+1.1** |
| | comp=E,0.3nm,0.5s,baz=352,slow=3.7,SNR=2.1 | | | | | | | |
| | comp=E,0.3nm,0.5s | | | | | | | |

*IDC **30** 22:59:17.2±1.7,5°94S×131°32E, h0km, mb4.0/6, mbtmp4.0/8, ML4.1/2, Error ellipse: s-maj=196.8km s-min=20.4km az=70.0*
*DJA **30** 22:59:31.1±0.5,6°S±3°×13°1E±°, h153km±12km, M4.5/13, mb4.5/8, mB5.0/6, MLv4.5/13, Mw(mB)4.4/6*
**ISC 30 22:59:32.7±0.7,6°27S±0°06×131°05E±0°09, h150km, n39, σ2ᵉ65/40, mb3.6/6, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SAUI** | **Saumlaki** | **1.72** | **172** | P | **Pn** | **23 00 03.3** | **-1.4** |
| **SAUI** | **Saumlaki** | **1.72** | **172** | P | **Pn** | **23 00 03.7** | **-1.0** |
| **BNDI** | **Bandanaira** | **2.07** | **327** | P | **Pn** | **23 00 05.8** | **-2.9** |
| **BNDI** | **Bandanaira** | **2.07** | **327** | P | **Pn** | **23 00 06.7** | **-2.0** |
| **FAKI** | **Fak Fak** | **3.54** | **20** | P | **Pn** | **23 00 25.1** | **-1.9** |
| **FAKI** | **Fak Fak** | **3.54** | **20** | P | **Pn** | **23 00 25.2** | **-1.8** |
| **MSAI** | **Masohi** | **3.59** | **324** | P | **Pn** | **23 00 25.5** | **-2.1** |
| **KMPI** | **Kaimana, Papua** | **3.71** | **46** | P | **Pn** | **23 00 28.2** | **-0.9** |
| **NLAI** | **Namlea** | **4.95** | **307** | P | **Pn** | **23 00 43.6** | **-1.9** |
| **SWI** | **Sorong** | **5.37** | **2** | P | **Pn** | **23 00 48.1** | **-3.0** |
| | 33nm,0.6s | | | | | | |
| **DRS** | **Darwin Rock St** | **6.13** | **181** | P | **Pn** | **23 01 00.6** | **-0.5** |
| **KDU** | **Kakadu** | **6.53** | **168** | P | **Pn** | **23 01 05.7** | **-0.8** |
| **MTN** | **Manton Dam** | **6.53** | **179** | P | **Pn** | **23 01 06.0** | **-0.5** |
| **SANI** | **Sanana** | **6.56** | **310** | P | **Pn** | **23 01 05.1** | **-1.8** |
| | 21nm,1.0s,0.1nm | | | | | | |
| **SOEI** | **Soe** | **7.55** | **242** | P | **Pn** | **23 01 19.1** | **-1.2** |
| **SOEI** | **Soe** | **7.55** | **242** | P | **Pn** | **23 01 18.6** | **-1.7** |
| | 55nm,0.6s,0.2nm | | | | | | |
| **BATI** | **Baumata** | **8.29** | **241** | P | **Pn** | **23 01 27.9** | **-2.1** |
| | 64nm,0.5s | | | | | | |
| **EDFI** | **Ende, Flores** | **9.60** | **255** | P | **Pn** | **23 01 46.3** | **-1.2** |
| **WRA** | **Warramunga Arr** | **13.96** | **167** | Pn | **Pn** | **23 02 40.7** | **-3.6** |
| | 0.7nm,0.3s,baz=332,slow=14,SNR=29 | | | | | | |
| WRA | | | | Sn | Sn | 23 05 07.9 | -11 |
| | 2.2nm,0.3s,baz=352,slow=22,SNR=11 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **COEN** | **Coen** | **14.17** | **124** | P | **P** | **23 02 48.2** | **-1.6** |
| **QIS** | **Mount Isa** | **16.45** | **150** | P | **Pn** | **23 03 17.6** | **+2.5** |
| **ASAR** | **Alice Springs** | **17.52** | **171** | P | **Pn** | **23 03 26.9** | **-0.9** |
| | 1.6nm,0.3s,baz=347,slow=9.5,SNR=80 | | | | | | |
| ASAR | | | | S | **S** | **23 06 31.1** | **-10** |
| | 2.2nm,0.7s,baz=355,slow=27,SNR=7.4 | | | | | | |
| | 8.2nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **17.52** | **171** | P | **Pn** | **23 03 29.4** | **+1.5** |
| **MBWA** | **Marble Bar** | **18.42** | **215** | P | **Pn** | **23 03 37.8** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **18.68** | **214** | P | **Pn** | **23 03 41.6** | **+0.1** |
| **WRKA** | **Warakurna** | **18.85** | **188** | P | **Pn** | **23 03 43.4** | **-0.1** |
| **OOD** | **Oodnadatta** | **21.86** | **169** | P | **P** | **23 04 16.4** | **+2.9** |
| **MEEK** | **Meekatharra** | **23.47** | **209** | P | **P** | **23 04 31.1** | **+2.3** |
| **MULG** | **Mulgathing** | **24.05** | **174** | P | **P** | **23 04 37.0** | **+2.9** |
| **FORT** | **Forrest** | **24.54** | **186** | P | **P** | **23 04 40.9** | **+2.4** |
| **LCRK** | **Leigh Creek** | **24.98** | **165** | P | **P** | **23 04 45.8** | **+3.3** |
| **KMBL** | **Kambalda** | **26.40** | **198** | P | **P** | **23 04 57.6** | **+2.3** |
| **STKA** | **Stephens Creek** | **27.32** | **160** | P | **P** | **23 05 05.7** | **+2.2** |
| | 1.6nm,0.4s,baz=346,slow=11,SNR=5.4 | | | | | | |
| | 1.6nm,0.4s | | | | | | |
| **BLDU** | **Ballidu** | **27.71** | **207** | P | **P** | **23 05 09.7** | **+2.7** |
| **SONM** | **Songino Array** | **58.09** | **341** | P | **P** | **23 09 11.6** | **+1.2** |
| | 0.3nm,0.4s,baz=182,slow=11,SNR=2.7 | | | | | | |
| | 0.3nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.19** | **326** | P | **P** | **23 10 19.5** | **+2.6** |
| | 0.9nm,0.4s,baz=117,slow=6.9,SNR=11 | | | | | | |
| | 0.9nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.40** | **333** | P | **P** | **23 10 37.9** | **+1.6** |
| | 0.4nm,0.3s,baz=137,slow=6.7,SNR=2.7 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.44** | **328** | P | **P** | **23 10 44.6** | **+2.1** |
| | 0.5nm,0.5s,baz=128,slow=4.7,SNR=5.2 | | | | | | |
| | 0.5nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **78.00** | **327** | P | **P** | **23 11 15.7** | **+1.3** |
| | 0.7nm,0.5s,baz=127,slow=5.4,SNR=4.8 | | | | | | |
| | 0.7nm,0.5s | | | | | | |

*IDC **30** 23:06:49.5±1.4, 82°29N×17°62W, h0km, mb3.6/8, mbtmp3.6/9, ML4.0/1, MS3.3/6, Error ellipse: s-maj=35.5km s-min=25.4km az=164.0*
*DNK **30** 23:06:50.4±2.0, 82°58N×15°84W, h26km±12km, ML3.2*
**ISC 30 23:06:50.4±0.9, 82°33N±0°08×18°24W±0°07, h10km, n23, σ1ᵉ63/21, mb3.6/8, MS3.1/5, Near north coast of Kalaallit Nunaat**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NOR** | **Nord** | **0.77** | **163** | *i* P | **Pn** | **23 07 09.3** | **+2.1** |
| NOR | | | | *i* S | **Sn** | **23 07 22.9** | **+4.2** |
| NOR | | | | IAML | | 23 07 31.6 | |
| | comp=Z,472nm,0.7s | | | | | | |
| **DAG** | **Danmarks Havn** | **5.60** | **181** | *i* P | **Pn** | **23 08 14.1** | **+0.6** |
| DAG | | | | *i* S | **Sn** | **23 09 16.3** | **-1.3** |
| DAG | | | | IAML | | 23 09 42.5 | |
| | comp=Z,56nm,0.6s | | | | | | |
| **KBS** | **Kingsbay** | **5.91** | **109** | *e*P | **Pn** | **23 08 16.1** | **-1.6** |
| **SPITS** | **Spitsbergen Ar** | **7.05** | **107** | Pn | **Pn** | **23 08 31.1** | **-2.3** |
| | baz=347,slow=7.1 | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **NEEM** | **North Greenlan** | **7.42** | **247** | *i* P | **Pn** | **23 08 39.1** | **+0.3** |
| NEEM | | | | *i* S | **Sn** | **23 10 02.2** | **-0.8** |
| NEEM | | | | IAML | | 23 10 44.4 | |
| | comp=Z,95nm,1.2s | | | | | | |
| **DBG** | **Daneborg** | **8.08** | **184** | *i* P | **Pn** | **23 08 47.8** | **+0.3** |
| DBG | | | | *i* S | **Sn** | **23 10 15.8** | **-3.0** |
| **TULEG** | **Thule** | **10.47** | **265** | *i* P | **Pn** | **23 09 20.3** | **+0.1** |
| **SUMG** | **Summit** | **10.62** | **214** | *i* P | **Pn** | **23 09 21.7** | **-0.9** |
| **KULLO** | **Kullorsuaq** | **10.66** | **246** | *i* P | **Pn** | **23 09 23.1** | **+0.3** |
| **SFJD** | **Kangerlussuaq** | **17.10** | **226** | LR | LR | 23 17 39.1 | |
| | comp=Z,255nm,18.8s,baz=28,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **29.46** | **290** | LR | LR | 23 25 04.4 | |
| | comp=Z,38nm,18.2s,baz=106,slow=37 | | | | | | |
| **SCHQ** | **Schefferville** | **30.72** | **238** | LR | LR | 23 25 19.2 | |
| | comp=Z,38nm,18.3s,baz=174,slow=36 | | | | | | |
| **KDAK** | **Kodiak Island** | **38.14** | **322** | LR | LR | 23 33 18.1 | |
| | comp=Z,25nm,18.3s,baz=261,slow=42 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.62** | **67** | P | **P** | **23 14 12.3** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=35,slow=5.4,SNR=3.7 | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.08** | **74** | P | **P** | **23 14 33.5** | **-0.1** |
| | comp=Z,0.6nm,0.4s,baz=353,slow=7.5,SNR=7.7 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **BBB** | **Bella Bella** | **41.17** | **298** | LR | LR | 23 32 46.4 | |
| | comp=Z,51nm,18.5s,baz=316,slow=38 | | | | | | |
| **ESDC** | **Sonseca Array** | **43.06** | **164** | P | **P** | **23 14 49.9** | **0.0** |
| | comp=Z,0.4nm,0.6s,baz=0.0,slow=8.7,SNR=2.3 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **43.15** | **112** | P | **P** | **23 14 51.8** | **+1.3** |
| | comp=Z,2.6nm,0.8s,baz=341,slow=2.4,SNR=6.4 | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | |
| **NEW** | **Newport** | **43.66** | **287** | LR | LR | 23 33 27.5 | |
| | comp=Z,38nm,19.3s,baz=53,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.32** | **72** | P | **P** | **23 15 08.3** | **+0.4** |
| | comp=Z,0.7nm,0.8s,baz=352,slow=7.5,SNR=2.5 | | | | | | |
| | comp=Z,0.7nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **45.99** | **122** | P | **P** | **23 15 13.6** | **+0.1** |
| | comp=Z,0.5nm,0.8s,baz=344,slow=6.8,SNR=3.6 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **60.51** | **270** | P | **P** | **23 17 01.6** | **+1.4** |
| | comp=Z,0.3nm,0.7s,baz=42,slow=5.8,SNR=2.2 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |
| **TORD** | **Tordi Ar. Bea** | **69.70** | **159** | P | **P** | **23 17 59.3** | **-0.6** |
| | comp=Z,0.2nm,0.7s,baz=334,slow=6.6,SNR=1.3 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |

*IDC **30** 23:07:07.4±5.0,6°94S×124°47E, h535km±73km, mb2.9/1, mbtmp3.9/4, Error ellipse: s-maj=253.9km s-min=20.5km az=55.0*
*DJA **30** 23:07:07.7±0.5,7°S±3°×12°4E±°, h542km±7km, M3.9/18, mb4.1/10, mB4.4/5, MLv4.0/18, Mw(mB)3.6/5*
*NEIC **30** 23:07:08.5±1.7,7°4S±0°1×123°9E±0°1, h538km±13km, mb4.4/9, Error ellipse: s-maj=22.5km s-min=16.7km az=52.0*
**ISC 30 23:07:07.9±0.7,7°39S±0°09×123°91E±0°10, h550km, n42, σ1ᵉ21/43, mb4.5/3, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **2.07** | **233** | P | **P** | **23 08 17.1** | **-0.8** |
| **MMRI** | **Maumere** | **2.07** | **233** | P | **P** | **23 08 16.4** | **-1.5** |
| **BBSI** | **Bau Bau** | **2.31** | **325** | P | **P** | **23 08 16.3** | **-2.8** |
| **SOEI** | **Soe** | **2.38** | **171** | P | **P** | **23 08 19.2** | **-0.3** |
| SOEI | | | | S | **S** | **23 09 14.7** | **-3.1** |
| **SOEI** | **Soe** | **2.38** | **171** | P | **P** | **23 08 19.4** | **-0.2** |
| **EDFI** | **Ende, Flores** | **2.58** | **238** | P | **P** | **23 08 18.6** | **-2.0** |
| **BATI** | **Baumata** | **2.81** | **185** | P | **P** | **23 08 21.1** | **-0.8** |
| **BSSI** | **Bau Bau, Buton** | **3.61** | **290** | P | **P** | **23 08 26.5** | **-0.5** |
| **BKSI** | **Bulukumba** | **4.29** | **298** | P | **P** | **23 08 31.1** | **-0.9** |
| **BASI** | **Baing, Sumba** | **4.33** | **229** | P | **P** | **23 08 32.7** | **+0.4** |
| **KAPI** | **Kappang** | **4.76** | **299** | P | **P** | **23 08 36.5** | **+0.7** |
| **KAPI** | **Kappang** | **4.76** | **299** | P | **P** | **23 08 36.9** | **+1.1** |
| | 26nm,0.6s,baz=108,slow=3.2,SNR=14 | | | | | | |
| **BNSI** | **Bone** | **4.81** | **308** | P | **P** | **23 08 37.5** | **+1.3** |
| **WBSI** | **Waikabubak, Su** | **5.00** | **243** | P | **P** | **23 08 36.3** | **-1.5** |
| **NLAI** | **Namlea** | **5.20** | **38** | P | **P** | **23 08 39.5** | **0.0** |
| | 42nm,0.7s,889nm0.3nm | | | | | | |
| **SANI** | **Sanana** | **5.69** | **21** | P | **P** | **23 08 43.5** | **-0.3** |
| | 98nm,0.8s,844nm0.4nm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **7.09** | **259** | P | **P** | **23 08 55.7** | **-1.1** |
| | 22nm,1.8s,0.1nm | | | | | | |
| **KMSI** | **Cibinong** | **7.91** | **1** | P | **P** | **23 09 04.8** | **0.0** |
| **GTOI** | **Gorontalo** | **8.02** | **354** | P | **P** | **23 09 07.3** | **+1.4** |
| | 20nm,1.2s,0.1nm | | | | | | |
| **MRSI** | **Marisa** | **8.05** | **346** | P | **P** | **23 09 06.1** | **-0.1** |
| | 72nm,0.8s,966nm | | | | | | |
| **MPSI** | **Mapaga** | **8.65** | **332** | P | **P** | **23 09 12.6** | **+0.4** |
| | 16nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **8.94** | **128** | P | **P** | **23 09 15.5** | **+0.4** |
| **TOLI2** | **Tolitoli** | **9.00** | **340** | P | **P** | **23 09 15.7** | **-0.1** |
| **FAKI** | **Fak Fak** | **9.41** | **62** | P | **P** | **23 09 19.3** | **-0.7** |
| **KNRA** | **Kununurra** | **9.51** | **150** | P | **P** | **23 09 21.6** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **9.72** | **263** | P | **P** | **23 09 21.6** | **-1.4** |
| **JAGI** | **Jajag, Banyuwa** | **9.72** | **263** | P | **P** | **23 09 21.7** | **-1.4** |
| **FITZ** | **Fitzroy Crossi** | **10.78** | **171** | P | **P** | **23 09 34.5** | **+0.7** |
| **MBWA** | **Marble Bar** | **14.28** | **196** | P | **P** | **23 10 10.3** | **+0.4** |
| **PSA00** | **Pilbara Seismi** | **14.64** | **195** | P | **P** | **23 10 14.0** | **+0.3** |
| **KKM** | **Kota Kinabalu** | **15.39** | **330** | P | **P** | **23 10 20.8** | **-0.8** |
| KKM | | | | IAmb | IAmb | 23 10 22.0 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **15.97** | **141** | P | **P** | **23 10 26.4** | **-0.8** |
| **WRA** | **Warramunga Arr** | **16.07** | **142** | P | **P** | **23 10 27.8** | **-0.3** |
| | comp=Z,1.6nm,0.5s,baz=322,slow=9.7,SNR=12 | | | | | | |
| **WB2** | **Warramunga Arr** | **16.07** | **142** | P | **P** | **23 10 28.4** | **+0.2** |
| WB2 | | | | IAmb | IAmb | 23 10 28.9 | |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **KSM** | **Kuching** | **16.17** | **302** | P | **P** | **23 10 30.4** | **+1.2** |
| KSM | | | | IAmb | IAmb | 23 10 31.1 | |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **WR0** | **Warramunga Arr** | **16.20** | **142** | P | **P** | **23 10 30.1** | **+0.7** |
| **ASAR** | **Alice Springs** | **18.82** | **150** | P | **P** | **23 10 54.8** | **+1.4** |
| | comp=Z,1.0nm,0.5s,baz=328,slow=9.3,SNR=13 | | | | | | |
| **QRZ** | **Quartz Range** | **54.50** | **136** | P | **P** | **23 15 47.0** | **+2.8** |
| **RPZ** | **Rata Peaks** | **54.75** | **139** | P | **P** | **23 15 47.8** | **+1.8** |
| RPZ | | | | IAmb | IAmb | 23 16 01.3 | |
| | comp=Z,36nm,1.3s | | | | | | |
| **KHZ** | **Kahutara** | **55.84** | **137** | P | **P** | **23 15 53.0** | **-0.6** |
| KHZ | | | | IAmb | IAmb | 23 15 60.0 | |
| | comp=Z,31nm,1.2s | | | | | | |
| **AFI** | **Afiamalu** | **63.39** | **102** | P | **P** | **23 16 44.5** | **+0.1** |
| **MKAR** | **Makanchi Array** | **65.38** | **330** | P | **P** | **23 16 56.4** | **+0.1** |
| | comp=Z,0.5nm,0.5s,baz=123,slow=8.0,SNR=7.0 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |

*IDC **30** 23:09:01.1±1.0, 67°82N×20°73E, h0km, mbtmp3.1/4, ML2.3/4, Error ellipse: s-maj=16.4km s-min=6.2km az=122.0*

*HEL **30** 23:09:01.0±0.2, 67°83N×20°14E, h0km, ML2.0, Explosion*
**ISC 30 23:09:01.2±0.9, 67°84N±0°03×20°22E±0°04, h0km, n28, σ1ᵉ23/45, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LANU** | **Lannavaara** | **0.70** | **72** | PG | **Pg** | **23 09 14.1** | **-0.5** |
| LANU | | | | SG | **Sg** | **23 09 23.8** | **0.0** |
| **KIF** | **Kilpisjarvi** | **1.19** | **10** | *e*P | **Pg** | **23 09 23.9** | **0.0** |
| **PAJU** | **Pajala** | **1.39** | **125** | PG | **Pn** | **23 09 26.3** | **-1.5** |
| | baz=304 | | | | | | |
| PAJU | | | | SB | **Sg** | **23 09 45.0** | **-0.6** |
| **HEF** | **Hetta** | **1.41** | **65** | *e*P | **Pn** | **23 09 26.5** | **-1.5** |
| **HEF** | **Hetta** | **1.41** | **65** | PG | **Pn** | **23 09 26.8** | **-1.2** |
| | baz=248 | | | | | | |
| HEF | | | | MSG | | 23 09 44.5 | |
| | comp=Z,14nm,0.2s | | | | | | |
| HEF | | | | SB | **Sg** | **23 09 45.2** | **-1.2** |
| **KLF** | **Kolari** | **1.56** | **111** | PG | **Pn** | **23 09 29.4** | **-0.8** |
| KLF | | | | MSG | | 23 09 48.4 | |
| | comp=Z,12nm,0.2s | | | | | | |
| KLF | | | | SN | **Sg** | **23 09 52.6** | **+1.3** |
| **KTK1** | **Kautokeino** | **1.62** | **42** | PG | **Pn** | **23 09 30.6** | **-0.4** |
| KTK1 | | | | SN | **Sg** | **23 09 54.5** | **+1.3** |
| **TRO** | **Tromso** | **1.86** | **346** | PG | **Pn** | **23 09 34.5** | **+0.3** |
| TRO | | | | SG | **Sb** | **23 09 59.7** | **-0.1** |
| **KALU** | **Kalix** | **2.34** | **147** | PB | **Pn** | **23 09 41.7** | **+0.8** |
| | baz=325 | | | | | | |
| KALU | | | | SG | **Sb** | **23 10 13.6** | **-0.1** |
| **TOF** | **Tornio** | **2.40** | **136** | PB | **Pn** | **23 09 42.7** | **+1.1** |
| TOF | | | | MSG | | 23 10 12.3 | |
| | comp=Z,6.4nm,0.2s | | | | | | |
| TOF | | | | SG | **Sb** | **23 10 15.4** | **+0.3** |
| **SGF** | **Sodankyl** | **2.45** | **96** | PN | **Pn** | **23 09 40.7** | **-1.6** |
| SGF | | | | SN | **Sn** | **23 10 12.3** | **-0.5** |
| **RNF** | **Rovaniemi** | **2.57** | **116** | PB | **Pn** | **23 09 45.4** | **+1.4** |
| | baz=304 | | | | | | |
| RNF | | | | SG | **Sb** | **23 10 19.2** | **-1.0** |
| **ARCES** | **ARCESS Array B** | **2.58** | **46** | Pn | **Pn** | **23 09 43.8** | **-0.2** |
| | comp=Z,1.9nm,0.3s,baz=225,slow=16,SNR=82 | | | | | | |
| ARCES | | | | Lg | Lg | 23 10 17.0 | |
| | comp=Z,1.9nm,0.3s,baz=225,slow=26,SNR=13 | | | | | | |
| | comp=Z,3.6nm,0.3s | | | | | | |
| **RAJF** | **Raja-Jooseppi** | **3.09** | **74** | PN | **Pn** | **23 09 51.1** | **0.0** |
| RAJF | | | | SB | **Sb** | **23 10 34.5** | **-0.7** |
| **KEV** | **Kevo** | **3.13** | **49** | PN | **Pn** | **23 09 51.8** | **+0.2** |
| KEV | | | | SN | **Sn** | **23 10 30.7** | **+1.1** |
| **RANF** | **Ranua** | **3.17** | **122** | PN | **Pn** | **23 09 53.2** | **+0.9** |
| | baz=311 | | | | | | |
| RANF | | | | SG | **Sb** | **23 10 38.8** | **+1.4** |
| **VRF** | **Varrio** | **3.57** | **87** | PN | **Pn** | **23 09 58.0** | **+0.4** |
| **OUL** | **Oulu** | **3.58** | **138** | PN | **Pn** | **23 09 59.3** | **+1.5** |
| | baz=323 | | | | | | |
| OUL | | | | SG | **Sb** | **23 10 50.4** | **+1.1** |
| **OBF4** | **Vikkela, Lumij** | **3.62** | **145** | PN | **Pn** | **23 10 00.0** | **+1.6** |
| **OBF0** | **Syolatti, Pyha** | **3.73** | **152** | PG | **Pb** | **23 10 09.8** | **+2.0** |
| **OLKF** | **Oulanka, Finla** | **3.90** | **109** | PN | **Pn** | **23 10 02.8** | **+0.5** |
| **OUF** | **Merijarvi** | **3.94** | **150** | PN | **Pn** | **23 10 04.0** | **+1.2** |
| **UMAU** | **Umeaa** | **3.98** | **177** | PN | **Pn** | **23 10 04.7** | **+1.4** |
| **MSF** | **Maaselka** | **3.98** | **115** | PN | **Pn** | **23 10 04.3** | **+0.9** |
| **KU6** | **Ri

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,20nm,0.7s | | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.08** | **316** | | | **Pb** | 23 34 56.8 | -0.9 |
| **TUL3** | **Leonard** | **2.20** | **130** | Pn | | **Pb** | 23 34 58.4 | -1.2 |
| **RLO** | **Rose Lookout** | **2.57** | **116** | Pn | | **Pb** | 23 35 04.4 | -1.6 |
| **WMOK** | **Wichita Mounta** | **2.69** | **196** | | | **Pb** | 23 35 08.6 | +0.6 |
| **X34A** | **Smith Ranch, M** | **2.73** | **179** | | | **Pg** | 23 35 10.4 | -1.3 |
| **SMWD** | **Samnorwood** | **2.93** | **221** | IAmb_Lg | | | 23 36 00.6 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **U38A** | **Gravette** | **2.94** | **107** | IAmb_Lg | | | 23 35 54.0 | |
| | comp=Z,16nm,0.7s | | | | | | | |
| **HHAR** | **Hobbs** | **3.33** | **107** | | | **Pn** | 23 35 14.5 | +2.3 |
| HHAR | | | | IAmb_Lg | | | 23 36 08.8 | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **LOOK** | **Love County** | **3.38** | **170** | Pg | | **Pg** | 23 35 22.9 | -1.3 |
| **X37A** | **Clayton** | **3.41** | **143** | Pn | | **Pn** | 23 35 14.9 | +1.7 |
| X37A | | | | IAmb_Lg | | | 23 36 14.5 | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **AMTX** | **Amarillo** | **3.93** | **233** | | | **Pb** | 23 35 25.2 | -4.0 |
| AMTX | | | | IAmb_Lg | | | 23 36 34.0 | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **RTBA** | **Rita Blanca** | **4.00** | **259** | Pn | | **Pn** | 23 35 22.9 | +1.5 |
| **P38A** | **Dawn** | **4.11** | **55** | | | **Pb** | 23 35 34.3 | +2.1 |
| **DKNS** | **Dickens** | **4.42** | **215** | IAmb_Lg | | | 23 36 45.5 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.46** | **127** | IAmb_Lg | | | 23 36 44.1 | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.48** | **91** | | | **Pn** | 23 35 29.8 | +1.8 |
| MGMO | | | | IAmb_Lg | | | 23 36 43.6 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **76** | IAmb_Lg | | | 23 36 46.0 | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.70** | **149** | IAmb_Lg | | | 23 36 53.1 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.85** | **106** | IAmb_Lg | | | 23 36 58.8 | |
| | comp=Z,6.9nm,0.7s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **4.92** | **198** | IAmb_Lg | | | 23 36 53.2 | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.98** | **123** | IAmb_Lg | | | 23 37 00.2 | |
| | comp=Z,9.1nm,0.7s | | | | | | | |
| **P40A** | **Paris** | **5.08** | **63** | IAmb_Lg | | | 23 37 08.1 | |
| | comp=Z,7.5nm,0.8s | | | | | | | |
| **POST** | **Post** | **5.19** | **216** | IAmb_Lg | | | 23 37 17.9 | |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| **T25A** | **Trinidad** | **5.21** | **270** | IAmb_Lg | | | 23 37 09.7 | |
| | comp=Z,9.2nm,0.7s | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.31** | **80** | IAmb_Lg | | | 23 37 18.4 | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **WLAR** | **White Oak Lake** | **5.32** | **132** | IAmb_Lg | | | 23 37 16.9 | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **T42A** | **Van Buren** | **5.43** | **91** | IAmb_Lg | | | 23 37 20.2 | |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.98** | **93** | IAmb_Lg | | | 23 37 41.6 | |
| | comp=Z,7.5nm,0.7s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.07** | **276** | Pg | | **Pg** | 23 36 11.2 | -4.5 |
| SDCO | | | | IAmb_Lg | | | 23 37 39.7 | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **S44A** | **Carbondale** | **6.87** | **84** | IAmb_Lg | | | 23 37 56.0 | |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **PHWY** | **Pilot Hill** | **7.09** | **306** | Pn | | **Pn** | 23 36 10.9 | +6.9 |
| PHWY | | | | Pg | | **Pg** | 23 36 40.8 | +5.6 |
| **PLAL** | **Pickwick Lake** | **8.27** | **104** | IAmb_Lg | | | 23 38 45.0 | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **11.40** | **296** | Pn | | **Pn** | 23 37 00.5 | -2.6 |

**HEL 30 23:35:40.0±0.5, 67.78N×20.29E, h0km, ML1.2, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LANU** | **Lannavaara** | **0.70** | **66** | PG | Pg | 23 35 52.6 | -0.8 |
| LANU | | | | SG | Sg | 23 36 02.4 | 0.0 |
| **PAJU** | **Pajala** baz=302 | **1.33** | **123** | PG | Pg | 23 36 04.4 | -1.0 |
| PAJU | | | | SN | Sg | 23 36 22.8 | +0.2 |
| **HEF** | **Hetta** baz=244 | **1.42** | **62** | PG | Pn | 23 36 05.3 | -1.7 |
| HEF | | | | MSG | | 23 36 22.5 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| HEF | | | | SG | Sg | 23 36 24.6 | -0.8 |
| **KLF** | **Kolari** | **1.52** | **109** | PG | Pn | 23 36 07.5 | -0.8 |
| KLF | | | | MSG | | 23 36 25.4 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| KLF | | | | SN | Sn | 23 36 28.8 | +0.1 |
| **KTK1** | **Kautokeino** | **1.65** | **40** | *e*P | Pn | 23 36 08.4 | -1.8 |
| **KTK1** | **Kautokeino** | **1.65** | **40** | PN | Pn | 23 36 10.3 | 0.0 |
| KTK1 | | | | SN | Sn | 23 36 32.1 | 0.0 |
| **STEI** | **Steigen** | **1.92** | **277** | *e*P | Pn | 23 36 13.1 | -0.8 |
| **TRO** | **Tromso** | **1.93** | **346** | SG | Sn | 23 36 38.2 | -0.7 |
| **KALU** | **Kalix** | **2.28** | **146** | PG | Pn | 23 36 19.8 | +1.0 |
| KALU | | | | SG | Sb | 23 36 50.0 | -0.5 |
| **TOF** | **Tornio** baz=315 | **2.33** | **135** | PB | Pn | 23 36 20.8 | +1.3 |
| TOF | | | | MSG | | 23 36 48.9 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| TOF | | | | SG | Sb | 23 36 52.2 | +0.1 |
| **SGF** | **Sodankyl** baz=276 | **2.41** | **95** | PN | Pn | 23 36 20.4 | -0.3 |
| SGF | | | | SG | Sn | 23 36 52.6 | +1.8 |
| **RNF** | **Rovaniemi** | **2.52** | **115** | PB | Pn | 23 36 23.9 | +1.8 |
| RNF | | | | SG | Sb | 23 36 57.2 | -0.4 |
| **ARA0** | **ARCESS Array S** baz=233 | **2.60** | **45** | PB | Pn | 23 36 24.2 | +0.9 |
| ARA0 | | | | SB | Sn | 23 36 56.8 | +1.3 |
| **RAJF** | **Raja-Jooseppi** | **3.08** | **73** | SG | Sb | 23 37 13.2 | -0.6 |
| **RANF** | **Ranua** | **3.12** | **122** | SG | Sg | 23 37 18.3 | -1.7 |
| **KEV** | **Kevo** | **3.15** | **48** | SN | Sn | 23 37 09.0 | 0.0 |
| **VRF** | **Varrio** | **3.54** | **86** | PB | Pn | 23 36 38.3 | +2.1 |

**UPP 30 23:36:36.8±0.1, 67.83N×20.18E, h0km, ML1.6, Unknown, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOVU** | **Salmi** | **0.40** | **359** | P | Pg | 23 36 44.5 | +0.1 |
| KOVU | | | | S | Sg | 23 36 49.8 | +0.3 |
| **LANU** | **Lannavaara** | **0.72** | **71** | P | Pg | 23 36 50.3 | -0.3 |
| **DUNU** | **Dundret** | **0.72** | **168** | P | Pg | 23 36 50.4 | -0.2 |
| **MASU** | **Masugnsbyn** | **0.79** | **117** | P | Pg | 23 36 51.8 | -0.1 |
| **PAJU** | **Pajala** | **1.39** | **124** | P | Pg | 23 37 02.1 | -1.2 |

*NEIC **30** 23:38:18.2±3.1, 44.81N±0.04×122.20W±0.05, h10km±2km, Error ellipse: s-maj=7.1km s-min=6.5km az=180.0*

**SEA 30 23:38:18.2±1.5, 44.82N±0.02×122.22W±0.03, h4km±7km, ML2.6/2, ML2.5/16(NEIC), Error ellipse: s-maj=3.8km s-min=1.3km az=217.0, Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MPOR** | **Mary's Peak** | **1.00** | **252** | | Pg | 23 38 36.7 | -0.6 |
| **HEBO** | **Mount Hebo** | **1.16** | **290** | Pg | Pg | 23 38 39.0 | -1.3 |
| **ASBU** | **Astronaut Butt** | **1.17** | **148** | | Pg | 23 38 39.5 | -1.2 |
| **F05D** | **White Salmon** | **1.19** | **27** | | Pg | 23 38 37.7 | -3.3 |
| **KWBU** | **Kawak Butte, N** | **1.25** | **148** | | Pg | 23 38 41.1 | -1.0 |
| **SVIC** | **Surveyors Ice** | **1.37** | **149** | | Pn | 23 38 43.4 | -0.8 |
| **PINE** | **Pine Mountain** | **1.38** | **138** | | Pb | 23 38 45.4 | +0.8 |
| PINE | | | | IAML | | 23 38 56.0 | |
| | comp=N,42nm,0.5s | | | | | | |
| PINE | | | | IAML | | 23 38 58.6 | |
| | comp=E,80nm,0.6s | | | | | | |
| **J05D** | **Fort Rock, OR** | **1.69** | **155** | | Pb | 23 38 49.8 | -0.1 |
| **H2OWA** | **Water** | **2.52** | **50** | | Pb | 23 39 02.2 | -1.7 |
| **WISH** | **Wishkah** | **2.54** | **335** | Pn | Pn | 23 38 59.6 | -0.5 |
| WISH | | | | IAML | | 23 39 17.7 | |
| | comp=E,31nm,4.8s | | | | | | |
| **E08A** | **Dider Farm, El** | **2.78** | **52** | Pn | Pn | 23 39 04.1 | +0.7 |
| E08A | | | | IAML | | 23 40 43.2 | |
| | comp=E,13nm,0.3s | | | | | | |
| E08A | | | | IAML | | 23 40 50.8 | |
| | comp=N,18nm,0.1s | | | | | | |
| **KBO** | **Bosley Butte** | **2.99** | **210** | Pn | Pn | 23 39 04.6 | -1.8 |
| KBO | | | | IAML | | 23 40 11.6 | |
| | comp=E,25nm,3.2s | | | | | | |
| **F10A** | **Beach Ranch, E** | **3.70** | **70** | Pn | Pn | 23 39 16.2 | 0.0 |
| F10A | | | | IAML | | 23 39 48.7 | |
| | comp=E,12nm,4.7s | | | | | | |
| F10A | | | | IAML | | 23 41 05.7 | |
| | comp=N,9.1nm,3.4s | | | | | | |

*NEIC **30** 23:55:06.3±1.0, 20.5S±0.1×177.5W±0.1, h504km±6km, mb4.4/24, Error ellipse: s-maj=19.3km s-min=16.9km az=184.0*

*IDC **30** 23:55:07.1±3.0, 20.54S×177.69W, h514km±33km, mb3.5/11, mbtmp4.4/12, Error ellipse: s-maj=21.1km s-min=19.5km az=13.0*

**ISC 30 23:55:05.9±0.5, 20.49S±0.09×177.58W±0.08, h500km, n55, σ0.93/52, mb4.3/23, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.96** | **303** | P | **P** | **23 56 33.7** | **+1.0** |
| **NIUE** | **Niue** | **7.34** | **80** | P | **P** | **23 56 55.0** | **-0.6** |
| **RAO** | **Raoul Island** | **8.73** | **182** | P | **P** | **23 57 11.4** | **+1.6** |
| **RAO** | **Raoul Island** 921nm,0.4s,baz=90,slow=20,SNR=2.3 | **8.73** | **182** | P | **P** | **23 57 11.0** | **+1.2** |
| **RAR** | **Rarotonga** | **16.66** | **96** | P | **P** | **23 58 33.1** | **-0.5** |
| **KOUNC** | **Koumac, New Ca** | **16.99** | **267** | P | **P** | **23 58 38.6** | **+1.7** |
| **URZ** | **Urewera** 3.2nm,0.4s,baz=90,slow=1.0,SNR=1.7 | **18.30** | **193** | P | **P** | **23 58 47.4** | **-1.4** |
| **TCW** | **Tory Channel** | **21.79** | **197** | P | **P** | **23 59 20.4** | **-0.1** |
| **NNZ** | **Nelson** | **22.05** | **198** | P | **P** | **23 59 22.4** | **-0.4** |
| NNZ | | | | IAmb | IAmb | 23 59 28.7 | |
| | comp=Z,7.1nm,0.7s | | | | | | |
| **RPZ** | **Rata Peaks** | **25.03** | **200** | P | **P** | **23 59 50.6** | **+1.1** |
| RPZ | | | | IAmb | IAmb | 23 59 54.9 | |
| | comp=Z,26nm,1.2s | | | | | | |
| **EIDS** | **Eidsvold** | **29.23** | **254** | P | **P** | **00 00 26.4** | **-0.3** |
| **ARMA** | **Armidale** | **29.43** | **244** | P | **P** | **00 00 28.3** | **-0.2** |
| ARMA | | | | IAmb | IAmb | 00 00 29.9 | |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **CTAO** | **Charters Tower** | **33.88** | **264** | | **P** | **00 01 06.7** | **0.0** |
| CTAO | | | | IAmb | IAmb | 00 01 07.2 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **COEN** | **Coen** | **37.98** | **273** | P | **P** | **00 01 40.2** | **-0.5** |
| COEN | | | | IAmb | IAmb | 00 01 40.9 | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **38.15** | **244** | P | **P** | **00 01 41.6** | **-0.3** |
| **STKA** | **Stephens Creek** comp=Z,2.1nm,0.6s,baz=86,slow=10,SNR=3.8 | **38.15** | **244** | P | **P** | **00 01 40.9** | **-1.0** |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **MCQ** | **Macquarie Isla** | **38.35** | **202** | P | **P** | **00 01 41.6** | **-1.5** |
| **BBOO** | **Buckleboo** | **42.91** | **244** | P | **P** | **00 02 18.6** | **-1.4** |
| **WR0** | **Warramunga Arr** | **44.80** | **262** | P | **P** | **00 02 34.0** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 00 02 35.3 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **44.91** | **257** | P | **P** | **00 02 35.5** | **-0.2** |
| **ASAR** | **Alice Springs** comp=Z,14nm,0.8s,baz=97,slow=8.0,SNR=97 | **44.91** | **257** | P | **P** | **00 02 35.1** | **-0.6** |
| | comp=Z,14nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **44.97** | **262** | P | **P** | **00 02 35.5** | **-0.7** |
| **WB2** | **Warramunga Arr** | **44.98** | **262** | P | **P** | **00 02 35.4** | **-1.0** |
| WB2 | | | | IAmb | IAmb | 00 02 36.0 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.99** | **262** | P | **P** | **00 02 34.5** | **-1.8** |
| WRAB | | | | IAmb | IAmb | 00 02 35.9 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** comp=Z,9.8nm,0.6s,baz=97,slow=7.9,SNR=213 | **44.99** | **262** | P | **P** | **00 02 35.1** | **-1.3** |
| | comp=Z,9.8nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **49.56** | **270** | P | **P** | **00 03 10.1** | **-0.7** |
| MTN | | | | IAmb | IAmb | 00 03 10.8 | |
| | comp=Z,21nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **51.05** | **266** | P | **P** | **00 03 21.2** | **-0.6** |
| KNRA | | | | IAmb | IAmb | 00 03 22.2 | |
| | comp=Z,8.2nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.42** | **262** | P | **P** | **00 03 38.7** | **-0.1** |
| **SOEI** | **Soe** | **56.90** | **272** | P | **P** | **00 04 04.3** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **58.06** | **257** | P | **P** | **00 04 10.6** | **-0.5** |
| **MBWA** | **Marble Bar** | **58.24** | **257** | P | **P** | **00 04 11.9** | **-0.4** |
| MBWA | | | | IAmb | IAmb | 00 04 20.5 | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CASY** | **Casey** | **64.14** | **205** | P | **P** | **00 04 50.5** | **+0.3** |
| **QSPA** | **South Pole Qui** | **69.58** | **180** | P | **P** | **00 05 24.8** | **+0.8** |
| **QSPA** | **South Pole Qui** comp=Z,0.6nm,0.9s,baz=100,slow=5.3,SNR=5.5 | **69.58** | **180** | P | **P** | **00 05 24.5** | **+0.4** |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **KKM** | **Kota Kinabalu** | **70.14** | **285** | P | **P** | **00 05 28.2** | **-0.1** |
| KKM | | | | IAmb | IAmb | 00 05 40.0 | |
| | comp=Z,15nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** comp=Z,7.0nm,0.5s,baz=156,slow=5.9,SNR=11 | **70.44** | **323** | P | **P** | **00 05 28.9** | **-0.5** |
| | comp=Z,7.0nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** comp=Z,3.9nm,1.0s,baz=126,slow=7.7,SNR=4.2 | **76.36** | **345** | P | **P** | **00 06 02.4** | **-0.6** |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** comp=Z,1.4nm,0.6s,baz=124,slow=5.8,SNR=5.1 | **77.14** | **318** | P | **P** | **00 06 08.2** | **+0.7** |
| | comp=Z,1.4nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** comp=Z,5.7nm,0.8s,baz=116,slow=3.6,SNR=14 | **79.18** | **326** | P | **P** | **00 06 18.5** | **+0.1** |
| | comp=Z,5.7nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** comp=Z,0.6nm,0.8s,baz=206,slow=8.0,SNR=2.2 | **80.75** | **43** | P | **P** | **00 06 27.9** | **+0.8** |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **TLIG** | **Tlapa** | **86.21** | **70** | | pP | 00 08 43.7 | -0.7 |
| **TXAR** | **Lajitas Array** comp=Z,0.8nm,0.8s,baz=212,slow=7.5,SNR=9.2 | **86.72** | **57** | P | **P** | **00 06 57.7** | **+0.9** |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **BPMT** | **Black Pine Rid** | **88.19** | **39** | P | **P** | **00 07 03.8** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** comp=Z,1.0nm,0.4s,baz=132,slow=3.1,SNR=8.3 | **90.48** | **289** | P | **P** | **00 07 15.5** | **+1.0** |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** comp=Z,0.3nm,0.4s,baz=31,slow=6.7,SNR=2.2 | **110.73** | **321** | PKiKP | **PKiKP** | **00 12 39.7** | **-1.5** |
| **MKAR** | **Makanchi Array** comp=Z,0.5nm,0.6s,baz=48,slow=4.2,SNR=4.2 | **111.48** | **313** | PKiKP | **PKiKP** | **00 12 41.5** | **-1.4** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.4nm,0.7s,baz=78,slow=1.8,SNR=4.9 | **114.31** | **317** | PKiKP | PKPdf | 00 12 46.4 | -1.8 |
| **BVAR** | **Borovoye Array** comp=Z,1.3nm,0.5s,baz=168,slow=1.3,SNR=5.2 | **119.33** | **320** | PKP | **PKPdf** | **00 12 56.6** | **-1.2** |
| **FINES** | **FINESS Array B** comp=Z,1.9nm,1.0s,baz=4.8,slow=1.7,SNR=3.9 | **135.87** | **344** | PKP | **PKPdf** | **00 13 29.7** | **+0.7** |
| FINES | | | | PP | **PP** | **00 16 14.2** | **-0.2** |
| | comp=Z,0.5nm,0.5s,baz=45,slow=3.0,SNR=7.1 | | | | | | |
| **HFS** | **Hagfors** comp=Z,2.5nm,1.0s,baz=17,slow=1.5,SNR=4.7 | **139.59** | **351** | PKhKP | PKPpre | 00 13 27.5 | |
| **AKASG** | **Malin Array Be** comp=Z,1.0nm,0.4s,baz=42,slow=4.6,SNR=13 | **143.20** | **331** | PKP | PKPab | 00 13 39.4 | -0.8 |
| **EKA** | **Eskdalemuir Ar** comp=Z,0.8nm,0.6s,baz=305,slow=3.7,SNR=3.9 | **144.96** | **6** | PKPbc | **PKPdf** | **00 13 45.0** | **-0.4** |
| **BRTR** | **Keskin Array B** comp=Z,0.8nm,0.6s,baz=131,slow=4.3,SNR=6.5 | **147.13** | **313** | PKPbc | **PKPdf** | **00 13 51.9** | **+2.0** |
| **MMAI** | **Mount Meron Ar** comp=Z,1.7nm,0.6s,baz=81,slow=6.3,SNR=8.8 | **148.15** | **300** | PKPbc | **PKPbc** | **00 13 55.5** | **-0.1** |
| **GERES** | **GERESS Array B** comp=Z,0.4nm,0.5s,baz=15,slow=6.1,SNR=4.6 | **150.30** | **345** | PKPbc | **PKPbc** | **00 13 59.9** | **-0.4** |

*NNC **30** 23:58:58.9±1.0, 42.58N×79.88E, h0km, mb4.0, mpv4.0, Error ellipse: s-maj=6.2km s-min=4.1km az=151.0*
*SOME **30** 23:58:59.5, 42.60N×79.88E, h10km*
*KRNET **30** 23:58:60.0±0.1, 42.45N×79.89E, mb2.8*

**ISC 30 23:58:58.2±1.6, 42.58N±0.04×79.86E±0.05, h2km±11km, n32, σ0.93/63, 18C-1D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHLS** | **Shalkode** 125nm,0.1s | **0.65** | **333** | *e*P | **Pg** | **23 59 09.9** | **-0.7** |
| SHLS | | | | *e*S | **Sg** | **23 59 18.0** | **-1.0** |
| | 669nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** 159nm,0.3s | **0.65** | **333** | P | **Pg** | **23 59 09.9** | **-0.7** |
| SHLS | | | | S | **Sg** | **23 59 18.7** | **-0.4** |
| | 678nm,0.1s | | | | | | |
| **UZB** | **Uzunbulak** 45nm,0.2s | **0.84** | **313** | *e*P | **Pg** | **23 59 14.8** | **+0.6** |
| UZB | | | | *e*S | **Sg** | **23 59 26.2** | **+1.1** |
| | 96nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** 51nm,0.0s | **0.84** | **313** | P | **Pg** | **23 59 15.1** | **+0.9** |
| UZB | | | | S | **Sb** | **23 59 27.4** | **0.0** |
| | 99nm,0.2s | | | | | | |
| **PRZ** | **Przheval'sk** baz=73 | **1.09** | **265** | ⇑*i*P | **Pn** | **23 59 21.2** | **+0.6** |
| PRZ | | | | ⇑*i*S | **Sn** | **23 59 36.4** | **0.0** |
| | baz=73 | | | | | | |
| **SATY** | **Saty** 26nm,0.1s | **1.17** | **294** | *e*P | **Pb** | **23 59 21.3** | **0.0** |
| SATY | | | | *e*S | **Sb** | **23 59 37.0** | **0.0** |
| | 62nm,0.1s | | | | | | |
| **ZHN** | **Zhinishke** 19nm,0.1s | **1.20** | **300** | *e*P | **Pn** | **23 59 21.8** | **-0.4** |
| ZHN | | | | *e*S | **Sb** | **23 59 37.7** | **-0.2** |
| | 80nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** 13nm,0.2s | **1.20** | **300** | P | **Pn** | **23 59 21.8** | **-0.4** |
| ZHN | | | | S | **Sn** | **23 59 39.0** | **-0.2** |
| | 164nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** 85nm,0.1s | **1.24** | **316** | *e*P | **Pn** | **23 59 22.2** | **-0.5** |
| KPKS | | | | *e*S | **Sb** | **23 59 38.7** | **-0.1** |
| | 198nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** 42nm,0.4s | **1.24** | **316** | P | **Pn** | **23 59 22.1** | **-0.5** |
| KPKS | | | | S | **Sn** | **23 59 39.5** | **-0.5** |
| | 82nm,0.4s | | | | | | |
| **KURS** | **Kuram** 14nm,0.3s | **1.54** | **307** | *e*P | **Pg** | **23 59 28.2** | **+0.6** |
| KURS | | | | *e*S | **Sg** | **23 59 49.2** | **+1.6** |
| | 41nm,0.4s | | | | | | |
| **DJR** | **Jarkent** 17nm,0.2s | **1.75** | **358** | *e*P | **Pb** | **23 59 31.2** | **+0.1** |
| DJR | | | | *e*S | **Sg** | **23 59 54.2** | **-0.3** |
| | 88nm,0.3s | | | | | | |
| **TARG** | **Taragay, Kyrgy** baz=46 | **1.75** | **242** | ⇑*i*P | **Pg** | **23 59 32.0** | **+0.2** |
| TARG | | | | ⇑*i*S | **Sg** | **23 59 55.9** | **+1.4** |
| | baz=46 | | | | | | |
| **KNOS** | **Konyrlen** 34nm,0.3s | **1.84** | **345** | P | **Pb** | **23 59 32.4** | **-0.4** |
| KNOS | | | | S | **Sg** | **23 59 57.1** | **-0.4** |
| | 28nm,0.0s | | | | | | |
| **KDJ** | **Kajisay** baz=62 | **2.04** | **258** | ⇑*i*P | **Pg** | **23 59 37.7** | **+0.4** |
| KDJ | | | | ⇑*i*S | **Sg** | **00 00 05.1** | **+1.4** |
| | baz=62 | | | | | | |
| **KOTS** | **Kotyrbulak** 79nm,0.2s | **2.12** | **289** | *e*S | **Sg** | **00 00 08.7** | **+2.3** |
| KOTS | | | | *e*P | **Pg** | **23 59 39.6** | **+0.7** |
| | 28nm,0.2s | | | | | | |
| **TNSS** | **Tian-Shan** 21nm,0.2s | **2.19** | **283** | *e*S | **Sg** | **00 00 09.9** | **+1.2** |
| TNSS | | | | *e*P | **Pg** | **23 59 40.5** | **+0.3** |
| | 17nm,0.2s | | | | | | |
| **ARXS** | **Arharly** 34nm,0.2s | **2.21** | **318** | *e*S | **Sb** | **00 00 08.3** | **+1.6** |
| ARXS | | | | *e*P | **Pb** | **23 59 39.5** | **+0.7** |
| | 14nm,0.2s | | | | | | |
| **ARXS** | **Arharly** 28nm,0.3s | **2.21** | **318** | P | **Pb** | **23 59 38.8** | **-0.1** |
| **CHKK** | **Chushkaly** 63nm,0.2s | **2.46** | **302** | *e*S | **Sg** | **00 00 16.8** | **-0.3** |
| CHKK | | | | *e*P | **Pb** | **23 59 44.5** | **+1.4** |
| | 22nm,0.2s | | | | | | |
| **MTBS** | **Maitube** 49nm,0.4s | **2.58** | **283** | *e*S | **Sg** | **00 00 21.3** | **+0.1** |
| MTBS | | | | *e*P | **Pg** | **23 59 47.1** | **-0.6** |
| | 25nm,0.3s | | | | | | |
| **KTBS** | **Karatobe** 85nm,0.3s | **2.59** | **297** | *e*S | **Sg** | **00 00 20.8** | **-0.6** |
| KTBS | | | | *e*P | **Pb** | **23 59 46.6** | **+1.3** |
| | 17nm,0.2s | | | | | | |
| **ULHL** | **Ulahol** baz=67 | **2.70** | **264** | ⇑*e*P | **Pb** | **23 59 47.1** | **-0.3** |
| ULHL | | | | ⇑*i*S | **Sb** | **00 00 21.5** | **+0.4** |
| | baz=67 | | | | | | |
| **KAPS** | **Kapalarasan** 61nm,0.1s | **2.73** | **352** | *e*S | **Sg** | **00 00 25.1** | **-0.7** |
| KAPS | | | | *e*P | **Pg** | **23 59 49.4** | **-1.0** |
| | 4.4nm,0.1s | | | | | | |
| **BOOM** | **Boomskoye usch** baz=72 | **2.90** | **270** | ⇑*i*P | **Pb** | **23 59 49.9** | **-0.9** |
| BOOM | | | | ⇑*i*S | **Sb** | **00 00 26.5** | **-0.3** |
| | baz=72 | | | | | | |
| **KST** | **Kastek** 26nm,0.3s | **2.91** | **280** | *e*S | **Sg** | **00 00 32.0** | **+0.4** |
| KST | | | | *e*P | **Pg** | **23 59 53.4** | **-0.5** |
| | 8.3nm,0.2s | | | | | | |
| **DGS** | **Degeres** 16nm,0.3s | **3.08** | **284** | *e*S | **Sg** | **00 00 36.8** | **-0.3** |
| DGS | | | | *e*P | **Pg** | **23 59 56.1** | **-1.0** |
| | 13nm,0.3s | | | | | | |
| **NRN** | **Naryn** baz=52 | **3.10** | **250** | ⇑*i*P | **Pb** | **23 59 52.4** | **-1.8** |
| NRN | | | | ⇑*i*S | **Sb** | **00 00 30.6** | **-2.0** |
| | baz=52 | | | | | | |
| **TKM2** | **Tokmak 2** baz=80 | **3.16** | **278** | ⇑*i*P | **Pb** | **23 59 54.0** | **-1.2** |
| TKM2 | | | | ⇑*i*S | **Sb** | **00 00 33.3** | **-1.0** |
| | baz=80 | | | | | | |
| **KRBS** | **Karabastau** 17nm,0.3s | **3.26** | **291** | *e*S | **Sg** | **00 00 42.0** | **-0.9** |
| KRBS | | | | *e*P | **Pg** | **23 59 59.3** | **-1.4** |
| | 3.8nm,0.2s | | | | | | |
| **MAKZ** | **Makanchi** 1.8nm,0.7s | **4.49** | **19** | ⇑Pn | **Pn** | **00 00 08.8** | **+1.6** |
| MAKZ | | | | ⇓Sn | **Sn** | **00 01 00.8** | **+0.9** |
| | 1.2nm,0.3s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 00 01 15.9 | |
| | 2.3nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** 0.7nm,0.3s,baz=203,slow=13,SNR=55 | **4.55** | **22** | Pn | **Pn** | **00 00 09.7** | **+1.6** |
| MK31 | | | | ⇑Sn | **Sn** | **00 01 00.9** | **-0.7** |
| | 0.9nm,0.2s,baz=205,slow=25,SNR=4.1 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 00 01 19.1 | |
| | 1.3nm,0.3s,baz=209,slow=28,SNR=5.8 | | | | | | |

*IDC **31** 00:21:40.2±0.7, 52.64N×169.44W, h0km, mb4.0/19, mbtmp4.0/21, ML3.5/2, MS3.7/57, Error ellipse: s-maj=23.4km s-min=14.2km az=1.0*
*MOS **31** 00:21:41.4±1.0, 52.91N×169.64W, h12km, mb4.8/34, Error ellipse: s-maj=10.0km s-min=7.4km az=52.4*
*AEIC **31** 00:21:41.2±2.2, 52.74N±0.08×169.46W±0.09, h7km±4km, Error ellipse: s-maj=12.8km s-min=4.5km az=147.0*
*GCMT **31** 00:21:42.2±0.4, 52.71N±0.02×169.52W±0.03, h16km±1km, MW4.7/90, Moment Tensor Solution. s13,c14; s90,c120; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~0.56±.10; Mθθ 0.18±.09; Mϕϕ 0.37±.08; Mrθ -0.14±.21; Mϕϕ -1.55±.06; Mϕr~0.14±.20; Best double couple: M0 1.58000×10^16 NP1:ϕs 1.00000°, δ 80.00000°, λ -11.00000°. NP2: ϕs 93.00000°, δ 80.00000°, λ -170.00000°. Principal axes: T 1.8310, Plg 0.0000°, Azm 47.0000°; N -0.5020, Plg 75.0000°, Azm 137.0000°; P -1.3290, Plg 15.0000°, Azm 317.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*NEIC **31** 00:21:43.2±2.0, 52.87N±0.09×169.55W±0.08, h7km±5km, mb4.7/436, ML4.7/6, ML4.3(AEIC) Error ellipse: s-maj=14.7km s-min=5.0km az=157.0*

**ISC 31 00:21:43.5±0.4, 52.97N±0.06×169.56W±0.03, h10km, n890, σ1.5/20/832, mb4.7/197, MS3.7/60, 1D, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|

KIWB Kanaga Island 4.78 259 Pn Pn 00 22 53.2 -2.2
KIMD Kanaga Island 4.86 259 Pn 00 22 54.5 -2.0
S12K Black Hills 5.17 55 Pn Pn 00 23 03.0 +2.1
S12K IAML 00 24 37.8
comp=E,202nm,1.3s
S12K Black Hills 5.17 55 P Pn 00 23 01.9 +1.0
baz=241
SDPT Sand Point 5.84 62 Pn 00 23 12.2 +2.1
SDPT Sand Point 5.84 62 P Pn 00 23 11.9 +1.8
baz=250
CNBA Chernabura Isl 6.18 69 Pn Pn 00 23 14.7 0.0
CHNA Chernabura Isl 6.18 68 P Pn 00 23 14.4 -0.3
baz=256
CEPE Semis' Perret 6.67 266 Pn 00 23 21.6 +0.2
S14K Fog Glacier 6.69 56 P Pn 00 23 24.0 +2.2
baz=245
AMKA Amchitka 7.03 261 Pn Pn 00 23 24.2 -2.2
CHGN Chignik 7.28 58 Pn 00 23 31.3 +1.5
CHGN Chignik 7.28 58 P Pn 00 23 31.2 +1.5
baz=248
M11K Mekoryuk 7.66 13 P Pn 00 23 35.9 +1.0
baz=196
O14K Tigyukauivet M 7.81 33 Pn Pn 00 23 39.5 +2.4
O14K Tigyukauivet M 7.81 33 P Pn 00 23 38.5 +1.5
baz=220
M13K Dall Lake 8.20 22 Pn Pn 00 23 45.0 +2.6
M13K Dall Lake 8.20 22 P Pn 00 23 43.8 +1.4
baz=208
N14K Kuskokwak Cree 8.22 29 P Pn 00 23 43.5 +0.9
baz=216
O15K Ungalikthiuk R 8.26 37 P Pn 00 23 45.1 +1.9
baz=226
CHIR Chirikof Islan 8.62 65 Pn Pn 00 23 50.6 +2.5
CHIR Chirikof Islan 8.62 65 P Pn 00 23 49.5 +1.4
baz=256
M14K Bethel 8.84 25 Pn Pn 00 23 53.1 +2.1
M14K Bethel 8.84 25 P Pn 00 23 51.8 +0.8
baz=212
R17L Mt. Peulik Vol 8.86 53 P Pn 00 23 52.4 +1.0
baz=244
PLK4 Peulik 4 8.86 53 Pn Pn 00 23 54.1 +2.6
P16K Nushagak River 8.88 42 P Pn 00 23 52.6 +1.0
baz=232
N15K Kwethluk River 8.90 32 Pn Pn 00 23 54.2 +2.2
N15K Kwethluk River 8.90 32 P Pn 00 23 53.4 +1.4
baz=220,SNR=5.8
M15K Kasigluk River 9.13 29 P Pn 00 23 56.9 +1.8
baz=216
L14K Kuka Creek 9.18 21 Pn Pn 00 23 57.8 +2.0
L14K Kuka Creek 9.18 21 P Pn 00 23 57.2 +1.4
baz=208
O16K Kokwok River B 9.20 39 Pn Pn 00 23 57.7 +1.7
O16K Kokwok River B 9.20 39 P Pn 00 23 57.9 +1.9
baz=229,SNR=14
K13K Kusilvak Mount 9.36 14 Pn Pn 00 24 00.6 +2.3
K13K Kusilvak Mount 9.36 14 P Pn 00 23 59.4 +1.1
baz=199
Q17K Contact Creek 9.37 50 P Pn 00 23 59.5 +1.0
baz=242
N16K Nishlik Lake 9.57 34 Pn 00 24 03.1 +2.0
N16K Nishlik Lake 9.57 34 P Pn 00 24 02.6 +1.5
baz=223,SNR=9.6
SII Sitkinak Islan 9.58 62 Pn Pn 00 24 03.8 +2.4
SII Sitkinak Islan 9.58 62 P Pn 00 24 03.1 +1.8
baz=254
ACHA Angle Creek He 9.61 51 Pn Pn 00 24 03.6 +1.9
P17K Kvichak River 9.62 44 P Pn 00 24 03.4 +1.7
baz=236
O17K Koliganek Bris 9.70 40 P Pn 00 24 05.2 +2.4
baz=231
L15K Ungalak Mounta 9.75 23 P Pn 00 24 05.3 +1.7
baz=210
R18K Karluk 9.77 56 P Pn 00 24 05.4 +1.6
baz=248
M16K Timber Creek 9.92 31 Pn Pn 00 24 08.0 +2.1
M16K Timber Creek 9.92 31 P Pn 00 24 07.8 +1.9
baz=221
Q18K Katmai Hardscr 9.96 49 P Pn 00 24 07.7 +1.1
baz=242
N17K Nushagak Hills 10.16 37 Pn Pn 00 24 10.9 +1.7
N17K Nushagak Hills 10.16 37 P Pn 00 24 10.7 +1.5
baz=228
P18K Big Mountain, 10.24 45 Pn Pn 00 24 12.8 +2.4
P18K Big Mountain, 10.24 45 P Pn 00 24 11.5 +1.1
baz=238
OHAK Old Harbor 10.24 59 Pn Pn 00 24 10.6 +0.2
OHAK Old Harbor 10.24 59 P Pn 00 24 11.4 +1.0
baz=252
K15K Wolf Creek Mou 10.28 21 Pn 00 24 13.0 +2.1
K15K Wolf Creek Mou 10.28 21 P Pn 00 24 12.3 +1.4
baz=209
L16K Owhat River 10.30 28 Pn 00 24 13.3 +2.1
L16K Owhat River 10.30 28 P Pn 00 24 12.7 +1.6
baz=217
J14K Nanvaranak Lak 10.31 16 Pn Pn 00 24 12.7 +1.5
J14K Nanvaranak Lak 10.31 16 P Pn 00 24 12.2 +1.0
baz=201
O18K Koktuh Hills 10.51 43 Pn 00 24 17.2 +3.2
O18K Koktuh Hills 10.51 43 P Pn 00 24 16.2 +2.2
baz=236
M17K Holitna River 10.69 33 Pn 00 24 18.7 +2.2
M17K Holitna River 10.69 33 P Pn 00 24 18.0 +1.5
baz=224
Q19K Cape Douglas, 10.72 50 Pn Pn 00 24 19.0 +2.1
Q19K Cape Douglas, 10.72 50 P Pn 00 24 18.2 +1.2
baz=243
N18K Kilae Creek 10.74 39 Pn 00 24 19.8 +2.6
N18K Kilae Creek 10.74 39 P Pn 00 24 17.6 +0.4
baz=230
KDAK Kodiak Island 10.78 57 Pn Pn 00 24 17.9 +0.1
KDAK Kodiak Island 10.78 57 Pn Pn 00 24 16.4 -1.4
comp=E,0.9nm,0.3s,baz=260,slow=5.7,SNR=12
KDAK Sn Sn 00 26 15.8 -2.5
baz=55,slow=24
KDAK Kodiak Island 10.78 57 P Pn 00 24 18.3 +0.5
baz=251
KDAK Kodiak Island 10.78 57 P Pn 00 24 17.9 +0.1
GAMB Gambell 10.89 355 P Pn 00 24 19.5 +0.3
baz=174
L17K Donlin 10.98 29 P Pn 00 24 22.1 +1.6
baz=219
SVW2 Sparrevohn 11.13 37 Pn Pn 00 24 24.9 +2.5
Q20K Shuyak Island 11.18 53 P Pn 00 24 24.4 +1.3
baz=247
SYI Shuyak Island 11.18 53 Pn Pn 00 24 24.9 +1.7
P19K Oil Pt 11.25 47 P Pn 00 24 25.3 +1.1
baz=241
M18K Stony River 11.30 36 P Pn 00 24 26.5 +1.6
baz=227
J16K Anvik River 11.36 21 Pn Pn 00 24 27.1 +1.6
J16K Anvik River 11.36 21 P Pn 00 24 26.6 +1.0
baz=209
N19K Bonanza Creek 11.37 40 Pn 00 24 28.1 +2.3
N19K Bonanza Creek 11.37 40 P Pn 00 24 27.5 +1.7
baz=233
K17K Iditarod 11.44 27 Pn 00 24 28.3 +1.6
K17K Iditarod 11.44 27 P Pn 00 24 28.5 +1.8
baz=217
ILSW Iliamna Southw 11.46 46 Pn 00 24 29.4 +2.4
L18K Granite Mounta 11.53 31 Pn Pn 00 24 30.0 +2.0
L18K Granite Mounta 11.53 31 P Pn 00 24 29.6 +1.6
baz=223
J17K VABM Dome 11.80 24 Pn 00 24 33.5 +1.8
J17K VABM Dome 11.80 24 P Pn 00 24 33.5 +1.8
baz=213
ANM Nome 11.83 9 P Pn 00 24 32.2 +0.2
baz=193
RSO Redoubt South 11.87 44 Pn Pn 00 24 32.0 -0.8
I17K Unalakleet 11.87 19 Pn Pn 00 24 34.6 +2.0
I17K Unalakleet 11.87 19 P Pn 00 24 33.2 +0.6
baz=207
HOM Homer 11.97 49 P Pn 00 24 34.6 +0.7
baz=244
M19K Big River Lodg 12.09 36 Pn 00 24 37.8 +2.2
M19K Big River Lodg 12.09 36 P Pn 00 24 36.6 +1.0
baz=229,SNR=6.0
CNPM China Poot 12.10 50 Pn Pn 00 24 36.3 +0.6
L19K White Mountain 12.11 35 Pn Pn 00 24 37.3 +1.3
L19K White Mountain 12.11 35 P Pn 00 24 37.6 +1.7
baz=227,SNR=8.4
H16K Elim 12.29 15 P Pn 00 24 38.8 +0.5
baz=202
G15K Niukluk 12.38 11 P Pn 00 24 40.2 +0.6
baz=196
J18K Innoko River 12.48 28 Pn 00 24 42.6 +1.7
J18K Innoko River 12.48 28 P Pn 00 24 42.2 +1.3
baz=219
N20K Mount Spurr 12.49 42 P Pn 00 24 42.6 +1.4
baz=237
M20K Styx River 12.54 38 P Pn 00 24 43.3 +1.6
baz=232
L20K Farewell, AK 12.65 35 P Pn 00 24 44.9 +1.6
baz=228
TNA Tin City 12.66 3 P Pn 00 24 43.9 +0.6
baz=185
CAPN Captain Cook N 12.71 45 P Pn 00 24 46.0 +2.1
baz=240
H17K Granite Mounta 12.97 19 Pn 00 24 49.1 +1.4
H17K Granite Mounta 12.97 19 P Pn 00 24 49.0 +1.4
baz=207
G16K Koyuk River 12.98 14 Pn Pn 00 24 49.2 +1.5
G16K Koyuk River 12.98 14 P Pn 00 24 49.2 +1.5
baz=200
F15K North Star Dit 13.01 9 Pn Pn 00 24 50.1 +1.9
F15K North Star Dit 13.01 9 P Pn 00 24 49.1 +0.9
baz=194
SEW Seward 13.16 49 P Pn 00 24 50.6 +0.5
baz=246
K20K Telida 13.19 32 Pn 00 24 53.3 +2.7
K20K Telida 13.19 32 P Pn 00 24 50.6 0.0
baz=225
J19K Poorman 13.20 28 Pn 00 24 53.4 +2.7
J19K Poorman 13.20 28 P Pn 00 24 51.3 +0.6
baz=220
SKT Skwentna 13.20 40 Pn 00 24 53.0 +2.2
SKT Skwentna 13.20 40 P Pn 00 24 51.9 +1.1
baz=235,SNR=11
SUA Susitna One 13.23 43 Pn Pn 00 24 53.4 +2.2
SUA Susitna One 13.23 43 P Pn 00 24 52.7 +1.4
baz=239
G17K Kiwalik Mounta 13.35 16 P Pn 00 24 54.4 +1.7
baz=204
RC01 Rabbit Creek A 13.47 45 Pn Pn 00 24 53.9 -0.5
RC01 Rabbit Creek A 13.47 45 P Pn 00 24 55.7 +1.4
baz=242
GCSA Galena City Sc 13.47 24 P Pn 00 24 56.5 +2.2
baz=215
H18K Honhosa River 13.47 21 Pn 00 24 55.7 +1.3
H18K Honhosa River 13.47 21 P Pn 00 24 56.2 +1.7
baz=211
PPLA Purkeypile 13.51 36 P Pn 00 24 56.4 +1.3
baz=231
J20K Nowinta River 13.76 29 Pn 00 25 00.5 +2.1
J20K Nowinta River 13.76 29 P Pn 00 25 00.1 +1.7
baz=223,SNR=9.6
PWL Port Wells 13.97 47 Pn 00 25 00.9 -0.5
PWL Port Wells 13.97 47 P Pn 00 25 01.6 +0.3
baz=245
G18K Tagagawik 14.06 19 Pn 00 25 06.1 +3.5
G18K Tagagawik 14.06 19 P Pn 00 25 03.0 +0.4
baz=208
P23K Montague Islan 14.07 51 P Pn 00 25 04.1 +1.4
baz=250
CHUM Lake Minchumin 14.12 33 P Pn 00 25 04.8 +1.5
baz=228
F17K Baldwin Pennin 14.13 14 P Pn 00 25 04.1 +0.7
baz=201
I20K Naaghedeneel 14.13 27 Pn Pn 00 25 05.1 +1.7
I20K Naaghedeneel 14.13 27 P Pn 00 25 05.2 +1.8
baz=220
GHO Glory Hole Cre 14.14 43 Pn 00 25 04.2 +0.5
KNK Knik Glacier 14.16 45 Pn Pn 00 25 06.8 +2.9
KNK Knik Glacier 14.16 45 P Pn 00 25 05.5 +1.5
baz=243
H19K Roundabout Mou 14.22 23 Pn 00 25 07.3 +2.7
H19K Roundabout Mou 14.22 23 P Pn 00 25 06.1 +1.5
baz=214
Q23K Middleton Isla 14.40 54 P Pn 00 25 08.7 +1.7
baz=254
SML Sawmill 14.40 44 Pn 00 25 09.6 +2.4
SML Sawmill 14.40 44 P Pn 00 25 09.0 +1.8
baz=242
GLI Glacier Island 14.54 48 P Pn 00 25 09.1 +0.1
baz=247
H20K Anotleneega Mo 14.57 25 P Pn 00 25 10.6 +1.1
baz=218,SNR=6.0
G19K Purcell Mounta 14.60 20 Pn 00 25 11.1 +1.3
G19K Purcell Mounta 14.60 20 P Pn 00 25 10.5 +0.7
baz=212
HIN Hinchinbrook I 14.63 50 Pn 00 25 09.1 -1.2
M23K Glacier View 14.65 44 P Pn 00 25 11.6 +1.0
baz=243
E17K Hotham Inlet 14.65 12 P Pn 00 25 10.7 +0.2
baz=199
BPAW Bear Paw Mtn. 14.71 33 Pn 00 25 13.3 +2.0
BPAW Bear Paw Mtn. 14.71 33 P Pn 00 25 12.6 +1.3
baz=230,SNR=7.6
FID Port Fidalgo 14.77 49 Pn 00 25 14.3 +2.1
SCM Sheep Creek Mo 14.84 45 Pn 00 25 13.7 +0.5
SCM Sheep Creek Mo 14.84 45 P Pn 00 25 14.6 +1.4
baz=244
SCM Sheep Creek Mo 14.84 45 P Pn 00 25 13.7 +0.5
EYAK Cordova Ski Ar 15.03 50 P Pn 00 25 17.4 +1.7
baz=250
RND Reindeer 15.03 38 Pn 00 25 17.0 +1.2
RND IAmb IAmb 00 25 35.7
comp=Z,46nm,1.2s
RND Reindeer 15.03 38 P Pn 00 25 17.0 +1.2
RND pmax pmax
comp=Z,46nm,1.2s
F19K Shaleruckik Mo 15.06 18 Pn 00 25 18.3 +2.2
F19K IAmb IAmb 00 25 25.5
comp=Z,20nm,1.1s
F19K Shaleruckik Mo 15.06 18 P Pn 00 25 16.8 +0.7
baz=209,SNR=7.1
D17K Noatak River 15.11 10 P Pn 00 25 18.3 +1.7
baz=196,SNR=5.9
E18K Tukpahlearik C 15.14 13 Pn 00 25 18.4 +1.3
E18K IAmb IAmb 00 25 31.6
comp=Z,22nm,0.8s
E18K Tukpahlearik C 15.14 13 P Pn 00 25 18.3 +1.3
baz=202,SNR=5.8
MCK McKinley 15.19 37 P Pn 00 25 18.9 +1.0
baz=235
H21K Melozitna Rive 15.25 27 Pn 00 25 20.0 +1.4
H21K IAmb IAmb 00 25 36.3
comp=Z,23nm,1.0s
H21K Melozitna Rive 15.25 27 P Pn 00 25 19.6 +1.0
baz=222
BWN Browne 15.27 35 Pn P 00 25 22.5 -1.2
KLU Klutina 15.30 47 Pn Pn 00 25 19.6 +0.3
KLU IAmb IAmb 00 25 32.9
comp=Z,23nm,0.9s
KLU Klutina 15.30 47 P Pn 00 25 18.1 -1.2
baz=247
MLY Manley 15.41 31 Pn 00 25 22.8 +2.1
MLY IAmb IAmb 00 25 30.8
comp=Z,52nm,0.8s
MLY Manley 15.41 31 P Pn 00 25 22.2 +1.5
baz=228,SNR=40
DHY Denali Highway 15.42 40 Pn Pn 00 25 21.8 +0.9
DHY Denali Highway 15.42 40 P Pn 00 25 22.0 +1.1
baz=239
M24K Tolsona, Glenn 15.45 44 Pn 00 25 22.4 +1.2
M24K IAmb IAmb 00 25 38.4
comp=Z,39nm,0.8s
M24K Tolsona, Glenn 15.45 44 P Pn 00 25 21.6 +0.3
baz=244
RDOG Red Dog Mine 15.47 9 Pn Pn 00 25 23.0 +1.6
KAIM Kayak Island 15.48 53 Pn 00 25 23.0 +1.5
KAIM IAmb IAmb 00 25 31.8
comp=Z,30nm,0.7s
KAIM Kayak Island 15.48 53 P Pn 00 25 21.8 +0.2
baz=254
RAGM Ragged Mountai 15.48 52 Pn 00 25 23.0 +1.2
RAGM IAmb IAmb 00 25 33.0
comp=Z,28nm,0.8s
C16K Lisburne Hills 15.49 6 P Pn 00 25 21.7 0.0
baz=190
F20K Avaart Lake 15.66 20 P Pn 00 25 25.6 +1.7
baz=213
NEA2 Nenana 15.66 34 Pn Pn 00 25 26.1 +2.1
NEA2 Nenana 15.66 34 P Pn 00 25 25.7 +1.7
baz=232
HMT Hamilton 15.67 52 Pn 00 25 23.7 -0.3
HMT IAmb IAmb 00 25 35.6
comp=Z,39nm,1.1s
BMRM Bremner River 15.70 50 P Pn 00 25 23.2 -1.4
baz=251
E19K Redstone River 15.72 18 Pn 00 25 26.4 +1.7
E19K Redstone River 15.72 18 P Pn 00 25 25.9 +1.3
baz=209
G21K Allakaket 15.73 24 Pn 00 25 25.8 +1.0
G21K Allakaket 15.73 24 P Pn 00 25 24.9 +0.1
baz=218
H22K Ishtalitna Cre 15.82 28 P Pn 00 25 27.4 +1.4
baz=224
SUCK Suckling Hills 15.83 53 Pn Pn 00 25 28.1 +2.0
SUCK IAmb IAmb 00 25 31.0
comp=Z,38nm,1.1s
C17K DeLong Mountai 15.85 9 P Pn 00 25 26.7 +0.3
baz=195
I23K Minto, Yukon-K 15.92 32 Pn 00 25 28.6 +1.3
I23K IAmb IAmb 00 25 36.1
comp=Z,77nm,1.1s
I23K Minto, Yukon-K 15.92 32 P Pn 00 25 29.3 +2.0
baz=230,SNR=46
N25K Chitina, Valde 15.93 47 Pn Pn 00 25 27.4 -0.1
N25K Chitina, Valde 15.93 47 P Pn 00 25 26.4 -1.2
baz=248
HARP HAARP 16.00 44 P Pn 00 25 28.9 +0.5
baz=245
PAX Paxson 16.13 42 P Pn 00 25 31.0 +1.0
baz=243
CCB Clear Creek Bu 16.13 35 Pn Pn 00 25 30.7 +0.7
MDM Murphy Dome 16.17 34 Pn 00 25 31.0 +0.4
C18K Utukok River 16.22 11 P Pn 00 25 32.5 +1.3
C18K Utukok River 16.22 11 P Pn 00 25 31.7 +0.5
baz=199
GLB Gilahina Butte 16.23 48 Pn Pn 00 25 30.9 -0.5
COLA College 16.25 34 P P 00 25 34.3 -0.3
baz=233
COLA College 16.25 34 i P Pn 00 25 31.0 -0.5
HDA Harding Lake 16.30 37 P Pn 00 25 34.0 +1.9
HDA Harding Lake 16.30 37 P Pn 00 25 32.5 +0.4
baz=236
F21K Alatna River 16.30 23 P Pn 00 25 33.8 +1.6
F21K Alatna River 16.30 23 P P 00 25 34.6 -0.6
baz=217,SNR=21
SNH Sunshine Point 16.31 53 Pn 00 25 33.1 +0.7
SNH IAmb IAmb 00 25 40.8
comp=Z,88nm,1.0s
H23K Yukon River 16.32 30 Pn 00 25 34.5 +2.1
H23K IAmb IAmb 00 25 40.3
comp=Z,44nm,1.1s
H23K Yukon River 16.32 30 P Pn 00 25 34.5 +2.1
baz=228
VRDI Verde Repeater 16.32 49 Pn Pn 00 25 31.5 -1.1
CRQM Cirque 16.32 51 Pn 00 25 31.3 -1.3
CRQE Cirque 16.34 51 P Pn 00 25 30.9 -1.9
baz=254
WAX Waxell Ridge 16.37 52 Pn Pn 00 25 32.8 -0.4
K24K Donnelly Dome 16.41 39 P Pn 00 25 34.7 +1.1
baz=240
TGL Tana Glacier 16.46 51 Pn Pn 00 25 34.2 -0.2
TGL IAmb IAmb 00 25 42.0
comp=Z,27nm,0.7s
D19K Kuna River 16.50 15 Pn 00 25 34.2 -0.5
D19K Kuna River 16.50 15 P Pn 00 25 36.2 +1.5
baz=205
ILAR Eielson Array 16.52 36 Pn Pn 00 25 34.3 -0.8
comp=Z,0.3nm,0.3s,baz=224,slow=10,SNR=17
ILAR LR LR 00 33 04.8
comp=Z,434nm,18.4s,baz=208,slow=41
comp=Z,2.5nm,0.8s
POKR Poker Plat Res 16.54 34 P Pn 00 25 35.9 +0.7
baz=233
G22K Bettles 16.55 25 P Pn 00 25 37.4 +2.1
baz=221
MCARA McCarthy VSAT 16.56 49 Pn 00 25 33.6 -1.9
MCARA IAmb IAmb 00 25 41.3
comp=Z,47nm,1.1s
MCARA McCarthy VSAT 16.56 49 P Pn 00 25 32.8 -2.7
baz=252,SNR=6.1
E20K Nigu River 16.61 18 P Pn 00 25 33.4 -2.7
baz=210
ISLE Juniper Island 16.66 52 Pn 00 25 35.4 -1.5
ISLE IAmb IAmb 00 25 40.8
comp=Z,62nm,1.2s
RIDG Independent Ri 16.74 40 Pn 00 25 38.5 +0.7
RIDG Independent Ri 16.74 40 P Pn 00 25 38.0 +0.2
baz=242,SNR=5.7
MESA MESA 16.74 54 Pn 00 25 39.2 +1.3
MESA IAmb IAmb 00 25 45.4
comp=Z,77nm,0.8s
MESA MESA 16.74 54 P Pn 00 25 38.5 +0.5
baz=257
G23K Bananza Creek 16.79 27 Pn 00 25 38.5 +0.1
G23K Bananza Creek 16.79 27 P Pn 00 25 40.2 +1.7
baz=225,SNR=15
F22K John River 16.83 23 P Pn 00 25 37.7 -1.3
baz=219
H24K Noodor Dome 16.84 32 P Pn 00 25 38.3 -0.7
baz=231
B18K Kokolik River 16.84 10 P Pn 00 25 38.2 -0.8
baz=197
C19K Lookout Ridge 16.85 12 Pn 00 25 39.0 -0.1
C19K Lookout Ridge 16.85 12 P Pn 00 25 37.5 -1.7
baz=202
M26K Nabesna, AK 16.93 46 Pn Pn 00 25 40.3 0.0
M26K IAmb IAmb 00 25 45.6
comp=Z,34nm,1.1s
M26K Nabesna, AK 16.93 46 P Pn 00 25 39.8 -0.4
baz=248,SNR=24
D20K Etivluk River 16.94 16 P Pn 00 25 39.5 -0.8
baz=208,SNR=6.2
GRNC Granite Creek 16.97 52 Pn Pn 00 25 40.6 -0.2
GRNC IAmb IAmb 00 25 47.2
comp=Z,33nm,1.0s
J25K Salcha River, 16.98 37 Pn Pn 00 25 40.7 -0.2
J25K IAmb IAmb 00 25 58.3
comp=Z,33nm,1.0s
J25K Salcha River, 16.98 37 P Pn 00 25 39.6 -1.3
baz=238,SNR=28
L26K Log Cabin Wild 17.02 43 Pn Pn 00 25 41.7 +0.3
L26K Log Cabin Wild 17.02 43 P Pn 00 25 41.3 -0.1
baz=246
COLD Coldfoot 17.12 26 P P 00 25 44.5 +0.2
baz=223,SNR=8.6
SCRK Sand Creek 17.18 40 Pn 00 25 44.1 +0.6
SCRK Sand Creek 17.18 40 P Pn 00 25 44.8 +1.3
baz=242
TABL Table Mountain 17.19 53 Pn 00 25 43.7 0.0
TABL IAmb IAmb 00 25 50.3
comp=Z,66nm,0.8s
E21K Killik River 17.20 20 P Pn 00 25 43.3 -0.2
baz=214
CTG Chitna Glacier 17.22 51 P Pn 00 25 44.5 +0.5
baz=255
CTGM Chitina Glacie 17.23 51 Pn 00 25 44.0 0.0
CTGM IAmb IAmb 00 25 49.9
comp=Z,26nm,0.7s
LOGN Logan Glacier 17.35 52 Pn 00 25 45.5 0.0
M27K Edge Creek, AK 17.40 46 Pn Pn 00 25 45.9 -0.3
M27K Edge Creek, AK 17.40 46 P Pn 00 25 44.5 -1.7
baz=250,SNR=19
E22K Anaktuvuk Pass 17.41 22 Pn 00 25 45.1 -1.1
E22K Anaktuvuk Pass 17.41 22 P Pn 00 25 45.7 -0.5
baz=218
G24K Hadweenzic Riv 17.52 30 Pn Pn 00 25 48.0 +0.5
G24K IAmb IAmb 00 25 51.7
comp=Z,36nm,1.1s
G24K Hadweenzic Riv 17.52 30 P Pn 00 25 48.6 +1.0
baz=229,SNR=50
J26L Joseph Creek 17.60 39 Pn 00 25 48.9 +0.3
J26L IAmb IAmb 00 25 57.2
comp=Z,32nm,1.0s
J26L Joseph Creek 17.60 39 P Pn 00 25 48.6 0.0
baz=241
C21K Knifeblade Rid 17.65 18 P Pn 00 25 49.6 +0.5
baz=211
L27K Beaver Creek, 17.67 44 Pn Pn 00 25 49.4 -0.1
L27K Beaver Creek, 17.67 44 P Pn 00 25 49.5 0.0
baz=248
O28M Mount Upton 17.72 52 P Pn 00 25 49.9 -0.5
baz=257,SNR=8.2
H25L Birch Creek 17.77 32 P Pn 00 25 50.8 +0.2
baz=233
D22K Ayikyak River 17.83 20 P Pn 00 25 52.4 +1.1
D22K Ayikyak River 17.83 20 P P 00 25 53.1 +1.1
baz=215,SNR=9.5
BCPM Bancas Point 17.83 55 P Pn 00 25 51.7 +0.3
YUK3 Moose Creek 17.85 49 P P 00 25 53.6 +1.0
baz=254,SNR=9.3
E23K Chandalar 17.89 25 Pn 00 25 52.4 +0.3
E23K Chandalar 17.89 25 P Pn 00 25 53.0 +0.8
baz=222
PNL Peninsula 17.90 56 P Pn 00 25 50.9 -1.5

baz=261
F24K Squaw Lake 17.96 27 P Pn 00 25 53.7 +0.7
F24K Squaw Lake 17.96 27 P P 00 25 54.4 +0.8
baz=227,SNR=20
K27K Chicken 17.96 41 P P 00 25 54.1 +0.6
K27K Chicken 17.96 41 P Pn 00 25 53.8 +0.8
baz=245
G25K Bearman Lake 17.98 31 P Pn 00 25 54.2 +1.0
baz=231,SNR=15
B20K Meade River 18.02 14 P Pn 00 25 54.0 +0.3
baz=205
YUK8 Steele Glacier 18.04 51 P Pn 00 25 54.5 +0.2
baz=256
B21K Ikpikpuk River 18.08 17 P Pn 00 25 54.8 +0.4
baz=210
FYU Fort Yukon 18.14 32 P P 00 25 56.8 +1.4
FYU IAmb IAmb 00 26 06.3
comp=Z,52nm,1.1s
I26K Coal Creek Min 18.15 37 P Pn 00 25 53.7 -1.6
I26K IAmb IAmb 00 25 59.9
comp=Z,37nm,0.8s
I26K Coal Creek Min 18.15 37 P Pn 00 25 54.7 -0.6
baz=240
E24K Your Creek 18.19 26 P P 00 25 58.0 +1.9
baz=224
D23K Nanushuk River 18.33 22 P Pn 00 25 58.7 +1.2
D23K Nanushuk River 18.33 22 P Pn 00 25 58.7 +1.2
baz=219
TOLK Toolik Lake Re 18.34 23 P Pn 00 25 58.9 +1.3
TOLK IAmb IAmb 00 26 05.7
comp=Z,31nm,1.1s
TOLK Toolik Lake Re 18.34 23 P P 00 25 58.3 +0.6
baz=221,SNR=17
O29M Mount Kennedy 18.41 54 P P 00 25 58.6 -0.1
O29M Mount Kennedy 18.41 54 P P 00 25 57.5 -1.2
baz=260
YUK4 Talbot Arm 18.58 51 P P 00 26 00.1 -0.6
baz=257
YUK6 Outpost Mounta 18.63 52 P Pn 00 26 02.2 +0.7
baz=259
EGAK Eagle 18.64 40 P P 00 26 01.4 +0.3
EGAK Eagle 18.64 40 P P 00 26 01.0 -0.1
baz=244
F25K Christian Rive 18.65 29 P P 00 26 01.4 +0.3
F25K Christian Rive 18.65 29 P P 00 26 01.0 -0.1
baz=230,SNR=22
P29M Windy Craggy 18.73 57 P P 00 26 01.6 -0.4
P29M IAmb IAmb 00 26 15.1
comp=Z,32nm,1.0s
P29M Windy Craggy 18.73 57 P P 00 26 01.3 -0.8
baz=263
G26K Porcupine Rive 18.83 32 P P 00 26 03.4 +0.4
baz=235,SNR=9.1
I27K Kandik River 18.85 37 P P 00 26 02.9 -0.5
baz=241,SNR=24
D24K Happy Valley 18.90 23 P P 00 26 02.9 -0.9
baz=222
B22K Teshekpuk Lake 18.91 17 P P 00 26 04.0 +0.1
baz=212
M29M Somme Creek 18.94 48 P P 00 26 03.7 -0.7
M29M IAmb IAmb 00 26 12.1
comp=Z,34nm,1.1s
M29M Somme Creek 18.94 48 P P 00 26 04.7 +0.3
baz=254,SNR=20
BILL Bilibino 19.01 332 i P P 00 26 04.7 -0.3
BILL pmax pmax
comp=Z,45nm,1.3s
BILL MLR MLR
comp=Z,316nm,19.0s
C23K Itkillik River 19.04 20 P P 00 26 06.4 +1.1
C23K IAmb IAmb 00 26 18.0
comp=Z,40nm,1.1s
C23K Itkillik River 19.04 20 P P 00 26 05.6 +0.3
baz=217
PET Petropavlovsk 19.05 283 i P Pn 00 26 08.4 +2.1
DAWY Dawson 19.06 43 P Pn 00 26 06.7 +0.3
DAWY Dawson 19.06 43 P Pn 00 26 07.1 +0.7
baz=249,SNR=7.8
F26K Sheenjek River 19.16 30 P Pn 00 26 08.0 +0.4
F26K Sheenjek River 19.16 30 P P 00 26 07.3 +0.6
baz=232,SNR=18
P30M Million Dollar 19.18 55 P P 00 26 07.6 +0.6
baz=263
H27K Steamboat Moun 19.20 35 P P 00 26 06.6 -0.5
baz=240,SNR=15
L29M L29M 19.28 46 P P 00 26 07.5 -0.5
baz=253,SNR=10.0
N30M Aishikik Lake 19.34 51 P P 00 26 08.4 -0.4
N30M IAmb IAmb 00 26 15.8
comp=Z,24nm,0.8s
N30M Aishikik Lake 19.34 51 P P 00 26 08.9 +0.2
baz=259,SNR=17
C24K Franklin Bluff 19.36 22 IAmb IAmb 00 26 17.2
comp=Z,30nm,1.1s
C24K Franklin Bluff 19.36 22 P P 00 26 09.3 +0.5
baz=221
I28M Miner Creek 19.40 38 P P 00 26 08.4 -1.1
I28M IAmb IAmb 00 26 16.2
comp=Z,40nm,1.1s
I28M Miner Creek 19.40 38 P P 00 26 09.1 -0.3
baz=244,SNR=28
S31K Pelican 19.41 62 P Pn 00 26 12.1 +1.5
S31K IAmb IAmb 00 26 14.2
comp=Z,23nm,0.8s
S31K Pelican 19.41 62 P P 00 26 09.3 -0.2
baz=270
PLBC Pleasant Camp 19.41 57 P P 00 26 09.7 +0.3
baz=265,SNR=12
G27K Doyon Strip 19.45 34 P P 00 26 09.2 -0.7
G27K Doyon Strip 19.45 34 P P 00 26 08.6 -1.3
baz=238,SNR=9.4
PEA0B Petropavlovsk- 19.60 284 i P P 00 26 11.2 -0.4
PETK Petropavlovsk- 19.60 284 P P 00 26 10.5 -1.1
comp=Z,0.3nm,0.3s,baz=84,slow=13,SNR=6.2
comp=Z,2.8nm,0.6s
D25K Kavik River 19.62 25 P P 00 26 11.0 -0.7
baz=225
O30N Mendenhall 19.70 53 P P 00 26 13.2 +0.5
O30N IAmb IAmb 00 26 22.0
comp=Z,26nm,0.8s
O30N Mendenhall 19.70 53 P P 00 26 12.0 -0.7
baz=262,SNR=20
M30M Minto, Yukon 19.72 48 P Pn 00 26 14.2 -0.2
M30M Minto, Yukon 19.72 48 P P 00 26 11.6 -1.3
baz=256
K29M Barlow Dome 19.76 44 P P 00 26 11.8 -1.6
K29M Barlow Dome 19.76 44 P P 00 26 11.9 -1.5
baz=252
SIT Sitka 19.92 64 P P 00 26 15.6 +0.6
SIT IAmb IAmb 00 26 19.6
comp=Z,23nm,1.0s
SIT Sitka 19.92 64 P P 00 26 15.6 +0.6
SIT pmax pmax
comp=Z,23nm,1.0s
SKAG Skagway 19.94 57 P P 00 26 16.0 +0.8
SKAG IAmb IAmb 00 26 20.4
comp=Z,73nm,0.9s
SKAG Skagway 19.94 57 P P 00 26 15.4 +0.2
baz=266,SNR=5.7
N31M Braeburn, Yuko 19.96 51 P P 00 26 16.2 +0.7
baz=260
I29M Ogilvie Camp, 19.99 40 P P 00 26 17.1 +1.3
I29M IAmb IAmb 00 26 23.6
comp=Z,27nm,1.1s
I29M Ogilvie Camp, 19.99 40 P P 00 26 16.4 +0.6
baz=247
E27K Coleen River 20.23 30 Pn 00 26 20.4 +0.1
E27K IAmb IAmb 00 26 27.0
comp=Z,21nm,1.0s
E27K Coleen River 20.23 30 P P 00 26 19.4 +1.1
baz=235,SNR=15
WHY Whitehorse 20.27 54 P P 00 26 19.6 +0.6
WHY IAmb IAmb 00 26 26.2
comp=Z,25nm,0.8s
WHY Whitehorse 20.27 54 P P 00 26 19.6 +0.6
baz=263,SNR=18
S32K Killisnoo 20.30 63 P 00 26 19.6 +0.4
S32K IAmb IAmb 00 26 27.2
comp=Z,40nm,1.1s
S32K Killisnoo 20.30 63 P P 00 26 18.8 -0.4
baz=272
R32K Eaglecrest 20.32 61 P P 00 26 20.5 +1.1
R32K IAmb IAmb 00 26 23.3
comp=Z,16nm,0.8s
R32K Eaglecrest 20.32 61 P P 00 26 17.7 -1.7
baz=270
H29M Whitestone 20.32 37 P P 00 26 18.2 -1.2
H29M IAmb IAmb 00 26 33.4
comp=Z,40nm,0.8s
H29M Whitestone 20.32 37 P P 00 26 17.9 -1.5
baz=245,SNR=13
F28M Old Crow 20.46 33 P P 00 26 21.0 +0.1
F28M IAmb IAmb 00 26 27.3
comp=Z,21nm,1.1s
F28M Old Crow 20.46 33 P P 00 26 20.0 -0.9
baz=239,SNR=11
J30M Hart River 20.49 43 P P 00 26 20.8 -0.5
J30M Hart River 20.49 43 P P 00 26 20.7 -0.6
baz=251
C27K Jago River 20.52 26 P P 00 26 22.1 +0.7
C27K Jago River 20.52 26 P P 00 26 22.2 +0.8
baz=229
I30M Mount Dempster 20.69 41 P P 00 26 22.2 -1.3
I30M Mount Dempster 20.69 41 P P 00 26 21.4 -2.0
baz=250
M31M Drury Creek, Y 20.74 50 P Pn 00 26 25.8 -0.5
M31M IAmb IAmb 00 26 32.0
comp=Z,20nm,0.9s
M31M Drury Creek, Y 20.74 50 P P 00 26 23.4 -0.6
baz=260,SNR=8.1
G29M Pine Creek 20.75 36 P P 00 26 24.1 0.0
G29M Pine Creek 20.75 36 P P 00 26 22.1 -1.9
baz=243,SNR=54
P32M Atlin 20.77 57 Pn 00 26 26.5 -0.2
P32M IAmb IAmb 00 26 34.8
comp=Z,23nm,1.0s
P32M Atlin 20.77 57 P P 00 26 22.8 -1.5
baz=267
EPYK Eagle Plains 20.99 38 P P 00 26 25.3 -1.3
EPYK IAmb IAmb 00 26 30.1
comp=Z,67nm,0.9s
EPYK Eagle Plains 20.99 38 P P 00 26 24.7 -2.0
baz=246,SNR=37
D27M Malcolm River 21.04 28 P P 00 26 26.9 -0.2
baz=234
E28M Babbage River 21.10 31 P P 00 26 27.0 -0.8
baz=237
N32M Quiet Lake 21.20 53 P P 00 26 29.8 +0.8
baz=264
U33K Whale Pass 21.21 67 P P 00 26 30.6 +1.6
U33K IAmb IAmb 00 26 36.6
comp=Z,28nm,1.1s
U33K Whale Pass 21.21 67 P P 00 26 28.8 -0.2
baz=277
FARO Faro, Yukon 21.22 50 P P 00 26 30.9 +1.7
FARO Faro, Yukon 21.22 50 P P 00 26 29.1 -0.1
baz=261
P33M Teslin, Yukon 21.25 55 P P 00 26 29.0 -0.6
P33M IAmb IAmb 00 26 38.2
comp=Z,56nm,1.1s
P33M Teslin, Yukon 21.25 55 P P 00 26 28.7 -0.8
baz=267,SNR=20
G30M tAoh Zraii Nji 21.42 36 P P 00 26 30.3 -1.0
G30M IAmb IAmb 00 26 35.1
comp=Z,29nm,1.0s
G30M tAoh Zraii Nji 21.42 36 P P 00 26 30.4 -0.8
baz=246,SNR=12
Q32M Nakina River 21.50 59 P P 00 26 34.4 +2.1
Q32M IAmb IAmb 00 26 42.8
comp=Z,36nm,1.1s
Q32M Nakina River 21.50 59 P P 00 26 32.5 +0.2
baz=270,SNR=9.9
E29M Blow River 21.50 32 P P 00 26 33.6 +1.5
E29M Blow River 21.50 32 P P 00 26 32.9 +0.9
baz=240
H31M Peel River 21.68 40 P P 00 26 31.9 -2.1
H31M IAmb IAmb 00 26 43.0
comp=Z,28nm,1.1s
H31M Peel River 21.68 40 P P 00 26 31.0 -3.1
baz=251,SNR=5.9
F30M Barrier River 21.84 35 P P 00 26 34.7 -1.0
baz=245,SNR=6.4
G31M Satah River 22.11 37 P P 00 26 37.8 -0.7
G31M IAmb IAmb 00 26 53.1
comp=Z,23nm,0.8s
G31M Satah River 22.11 37 P P 00 26 38.2 -0.3
baz=248,SNR=12
S34M Telegraph Cree 22.13 62 P P 00 26 40.5 +1.6
S34M IAmb IAmb 00 26 50.4
comp=Z,18nm,0.8s
S34M Telegraph Cree 22.13 62 P P 00 26 38.8 -0.1
baz=274,SNR=7.4
R33M Jennings River 22.16 58 P P 00 26 40.1 +0.7
R33M IAmb IAmb 00 26 50.2
comp=Z,33nm,1.1s
R33M Jennings River 22.16 58 P P 00 26 38.9 -0.5
baz=270,SNR=23
V35K Ketchikan 22.17 69 P P 00 26 37.7 -1.5
baz=280
SEY Seymchan 22.18 312 i P P 00 26 36.9 -2.4
SEY pmax pmax
comp=Z,15nm,1.4s
DLBC Dease Lake 22.68 60 P P 00 26 46.3 +1.5
DLBC IAmb IAmb 00 26 53.8
comp=Z,31nm,1.0s
DLBC Dease Lake 22.68 60 LR LR 00 35 49.1
comp=Z,205nm,19.9s,baz=274,slow=37
DLBC Dease Lake 22.68 60 P P 00 26 45.4 +0.6
baz=273,SNR=33
T35M Bob Quinn 22.69 64 P P 00 26 43.6 -1.3
baz=277
MA2 Magadan 22.71 303 LR LR 00 37 03.3
comp=Z,198nm,18.9s,baz=104,slow=40
MA2 Magadan 22.71 303 i P P 00 26 47.0 +1.9
MA2 pmax pmax
comp=Z,27nm,1.0s
INK Inuvik 22.91 34 P P 00 26 47.8 +0.8
INK Inuvik 22.91 34 LR LR 00 36 34.9
comp=Z,286nm,20.4s,baz=252,slow=39
INK Inuvik 22.91 34 P P 00 26 45.3 -1.7
baz=246,SNR=7.1
INK Inuvik 22.91 34 P P 00 26 47.8 +0.8
INK pmax pmax
comp=Z,12nm,1.1s
RUBB Prince Rupert 23.14 71 P P 00 26 51.6 +2.1
RUBB IAmb IAmb 00 26 54.4
comp=Z,12nm,0.8s
GRNB Grenville Isla 23.42 72 P P 00 26 53.9 +1.5
GRNB IAmb IAmb 00 27 01.5
comp=Z,19nm,1.1s
TGTN Hyland Airport 23.54 52 P P 00 26 52.9 -0.7
baz=268
BBB Bella Bella 24.95 75 P P 00 27 04.0 -2.7
BBB Bella Bella 24.95 75 LR LR 00 34 51.8
comp=Z,84nm,20.8s,baz=298,slow=32
TOAD Toad River Com 25.15 59 P P 00 27 08.3 -0.1
baz=276,SNR=16
KOTAN Kotaneelee Air 25.63 56 P P 00 27 13.0 +0.2
baz=274
YKA Yellowknife Ar 29.94 50 P P 00 27 50.9 -0.4
comp=Z,2.2nm,0.9s,baz=287,slow=11,SNR=7.9
YKA LR LR 00 41 12.5
comp=Z,454nm,18.7s,baz=268,slow=39
comp=Z,2.2nm,0.9s
B08A Colville Reser 31.63 78 IAmb IAmb 00 28 09.7
comp=Z,4.8nm,0.8s
H04A Detroit Lake 31.76 86 P P 00 28 09.5 +1.9
H04A IAmb IAmb 00 28 11.9
comp=Z,20nm,1.1s
KBO Bosley Butte 31.90 91 P P 00 28 11.0 +2.1
I04A Tendick Farm, 32.11 87 IAmb IAmb 00 28 20.1
comp=Z,11nm,1.1s
TIXI Tiksi 32.16 328 LR LR 00 41 39.4
comp=Z,112nm,19.8s,baz=200,slow=37
ASAJ Asahikawa 32.35 274 LR LR 00 40 38.4
comp=Z,151nm,20.5s,baz=150,slow=35
HAWA Hanford 32.47 81 P P 00 28 15.6 +1.8
HAWA IAmb IAmb 00 28 17.2
comp=Z,11nm,1.1s
KRMB Red Mountain 32.50 92 P P 00 28 16.8 +2.6
KRMB IAmb IAmb 00 28 19.6
comp=Z,8.1nm,1.2s
YAK Yakutsk 32.69 310 LR LR 00 43 33.2
comp=Z,187nm,19.5s,baz=97,slow=40
NEW Newport 32.98 77 P P 00 28 17.5 -0.8
NEW IAmb IAmb 00 28 25.6
comp=Z,5.3nm,0.8s
NEW Newport 32.98 77 LR LR 00 41 00.2
comp=Z,97nm,19.2s,baz=320,slow=35
NEW Newport 32.98 77 P P 00 28 17.5 -0.8
NEW pmax pmax
comp=Z,5.0nm,0.9s
YBH Yreka Blue Hor 33.10 91 P P 00 28 20.2 +0.8
YBH Yreka Blue Hor 33.10 91 LR LR 00 39 59.7
comp=Z,142nm,18.1s,baz=302,slow=33
YBH Yreka Blue Hor 33.10 91 P P 00 28 20.2 +0.8
YBH pmax pmax
comp=Z,3.0nm,0.9s
I07A Izee 33.70 85 P P 00 28 27.0 +2.3
I07A IAmb IAmb 00 28 28.9
comp=Z,8.6nm,1.0s
BMO Blue Mountains 34.60 82 P P 00 28 31.8 -0.6
BMO Blue Mountains 34.60 82 P P 00 28 31.8 -0.6
BMO pmax pmax
comp=Z,3.0nm,1.2s
WVOR Wild Horse Val 35.15 87 IAmb IAmb 00 28 40.9
comp=Z,12nm,1.1s
MSO Missoula 35.56 77 P P 00 28 41.4 +0.7
MSO IAmb IAmb 00 28 44.2
comp=Z,8.9nm,1.1s
KLR Kul'dur 36.15 288 LR LR 00 43 15.3
comp=Z,106nm,21.7s,baz=70,slow=36
PAHR Pah Rah Range 36.34 91 P P 00 28 49.2 +1.7
PAHR IAmb IAmb 00 28 51.8
comp=Z,8.7nm,0.9s
HLID Hailey 37.05 82 P P 00 28 55.9 +2.3
WAKR Walker 37.06 92 P P 00 28 56.7 +3.0
EGMT Eagleton 37.40 73 P P 00 28 55.1 -1.2
KVN Kaiserville 37.52 91 P P 00 29 00.2 +2.6
KVN Kaiserville 37.52 91 P P 00 29 00.2 +2.6
KVN pmax pmax
comp=Z,6.0nm,1.0s
RYN Ryan 37.53 92 P P 00 28 59.6 +1.9
BOZ Bozeman (W) 37.58 77 P P 00 28 56.5 -1.5
BOZ Bozeman (W) 37.58 77 P P 00 28 56.5 -1.5
BOZ pmax pmax
comp=Z,5.0nm,0.9s
NVAR Mina Array Bea 37.79 92 P P 00 28 58.3 -1.6
comp=Z,1.5nm,0.7s,baz=292,slow=7.9,SNR=11
NVAR PcP PcP 00 31 15.9 -0.5
comp=Z,0.6nm,0.6s,baz=278,slow=2.9,SNR=3.7
NVAR LR LR 00 41 18.1
comp=Z,39nm,18.9s,baz=302,slow=31
comp=Z,1.5nm,0.7s
H11N2 WAKE ISLAND Hy 37.85 218 T T 01 09 16.3
baz=24
H11N3 WAKE ISLAND Hy 37.86 218 T T 01 09 21.6
baz=24,slow=74
H11N1 WAKE ISLAND Hy 37.87 218 T T 01 09 21.7
baz=24,slow=74
ELK Elko 38.21 86 P P 00 29 02.5 -0.9
ELK Elko 38.21 86 P P 00 29 02.5 -0.9
ELK pmax pmax
comp=Z,6.0nm,1.0s
YHL Hebgen Lake 38.25 78 P P 00 29 03.1 -0.7
YHL IAmb IAmb 00 29 06.7
comp=Z,7.4nm,0.8s
YHH Holmes Hill 38.48 78 P P 00 29 04.1 -1.7
FFC Flin Flon 38.51 59 P P 00 29 05.9 +0.4
FFC IAmb IAmb 00 29 08.4
comp=Z,12nm,0.9s
FFC Flin Flon 38.51 59 P P 00 29 05.9 +0.4
FFC pmax pmax
comp=Z,12nm,1.0s
USRK Ussuriysk Ar. 38.66 281 LR LR 00 44 19.3
comp=Z,102nm,21.0s,baz=60,slow=35
TPH Tonopah 38.67 91 P P 00 29 07.5 +0.2
TPH IAmb IAmb 00 29 11.6
comp=Z,34nm,1.1s
TPH Tonopah 38.67 91 P P 00 29 07.6 +0.2
TPH pmax pmax
comp=Z,34nm,1.1s
DSP Deep Springs 38.68 93 P P 00 29 07.4 +0.3
YFT Old Faithful 38.68 78 P P 00 29 08.3 +0.9
YPP Pitchstone Pla 38.80 79 P P 00 29 07.8 -0.7
MZP Montezuma Peak 38.82 92 P P 00 29 08.4 -0.2
H17A Grant Village 38.86 78 P P 00 29 07.8 -1.2
H17A IAmb IAmb 00 29 14.9
comp=Z,12nm,1.0s
H17A Grant Village 38.86 78 P P 00 29 08.3 -0.7
baz=304
YMP Mirror Lake Pl 38.92 78 P P 00 29 09.2 -0.2
IMW Indian Meadow 38.93 79 P P 00 29 08.3 -1.2
FLWY Flagg Ranch 38.97 79 P P 00 29 08.0 -1.8
FXWY Fox Creek 39.03 80 P P 00 29 09.2 -1.2
H11S1 WAKE ISLAND Hy 39.05 217 T T 01 10 23.7
baz=23,slow=76,SNR=3073
H11S2 WAKE ISLAND Hy 39.06 217 T T 01 10 09.3
baz=23,slow=76,SNR=2892
H11S3 WAKE ISLAND Hy 39.06 217 T T 01 10 31.2
baz=23,slow=76,SNR=2326
HVU Hansel Valley 39.07 83 P P 00 29 10.0 -0.6
HVU Hansel Valley 39.07 83 P P 00 29 10.0 -0.6
HVU pmax pmax
comp=Z,7.0nm,1.1s
GMN Gold Mountain 39.15 92 P P 00 29 11.2 -0.2
TPAW Teton Pass 39.16 80 P P 00 29 10.1 -1.4
RLMT Red Lodge 39.23 76 P P 00 29 11.4 -0.5
RLMT IAmb IAmb 00 29 15.2
comp=Z,16nm,1.1s
GRAC Grapevine Rang 39.29 93 P P 00 29 11.9 -0.4
REDW Red Top Meadow 39.29 80 P P 00 29 11.5 -1.0
BGU Big Grassy Mou 39.43 84 P P 00 29 14.4 +0.8
AHID Auburn Hatcher 39.49 81 P P 00 29 13.6 -0.6
R11B Troy Canyon, C 39.49 90 P P 00 29 12.7 -1.5
R11B Troy Canyon, C 39.49 90 P P 00 29 12.5 -1.6
baz=310,SNR=8.0
ISA Isabella, Lake 39.50 95 P P 00 29 13.4 -0.7
ISA Isabella, Lake 39.50 95 P P 00 29 13.4 -0.7
ISA pmax pmax
comp=Z,3.0nm,1.0s
Q12A Willow Creek R 39.51 88 P P 00 29 15.2 +0.9
MJAR Matsushiro Arr 39.61 267 LR LR 00 44 40.7
comp=Z,106nm,20.1s,baz=61,slow=35
SPR3 Spring Creek 3 39.84 88 P P 00 29 18.1 +0.9
MDJ Mudanjiang 39.84 283 P P 00 29 16.0 -0.8
MDJ pmax pmax
comp=Z,6.0nm,0.5s
MDJ pmax pmax
comp=Z,94nm,7.2s
S11A Rachel 39.84 90 P P 00 29 16.8 -0.2
WCT Wildcat Mounta 39.87 92 P P 00 29 17.0 -0.2
HWUT Hardware Ranch 39.90 83 P P 00 29 17.3 -0.2
TPNV Topopah Spring 39.99 92 P P 00 29 17.9 -0.4
TPNV IAmb IAmb 00 29 22.6
comp=Z,8.1nm,0.8s
TPNV Topopah Spring 39.99 92 P P 00 29 17.9 -0.4
TPNV pmax pmax
comp=Z,8.0nm,0.9s
DUG Dugway, Tooele 40.01 85 P P 00 29 16.3 -2.1
DUG IAmb IAmb 00 29 21.6
comp=Z,11nm,1.1s
DUG Dugway, Tooele 40.01 85 P P 00 29 16.3 -2.1
DUG pmax pmax
comp=Z,11nm,1.2s
LAO LASA Array 40.14 73 P P 00 29 19.9 +0.5
LAO IAmb IAmb 00 29 22.6
comp=Z,19nm,1.1s
GWY Greenwater Val 40.24 93 P P 00 29 20.0 -0.4
CTU Camp Tracy 40.34 84 P P 00 29 20.2 -1.0
DGMT Dagmar 40.34 69 P P 00 29 20.9 -0.1
DGMT IAmb IAmb 00 29 23.7
comp=Z,13nm,0.8s
PD31 Pinedale Array 40.41 80 P P 00 29 19.5 -2.3
PDAR Pinedale Array 40.41 80 P P 00 29 19.4 -2.4
comp=Z,4.4nm,0.7s,baz=307,slow=5.2,SNR=12
PDAR LR LR 00 45 40.6
comp=Z,42nm,18.0s,baz=307,slow=36
comp=Z,4.4nm,0.7s
PSUT Pine Spring 40.42 88 P P 00 29 20.9 -1.0
PRN Pahroc Range 40.42 90 P P 00 29 21.6 -0.3
PRN IAmb IAmb 00 29 26.0
comp=Z,13nm,1.1s
JLU Jordanelle 40.58 84 P P 00 29 22.7 -0.5
NLU North Lily Min 40.60 85 P P 00 29 23.4 0.0
FCC Fort Churchill 40.65 51 P P 00 29 24.3 +1.0
FCC IAmb IAmb 00 29 27.1
comp=Z,18nm,1.0s
FCC Fort Churchill 40.65 51 P P 00 29 24.3 +1.0
FCC pmax pmax
comp=Z,18nm,1.0s
GSC Goldstone, Bar 40.75 94 P P 00 29 24.5 0.0
GSC IAmb IAmb 00 29 29.3
comp=Z,7.4nm,0.9s
GSC Goldstone, Bar 40.75 94 P P 00 29 24.5 0.0
GSC pmax pmax
comp=Z,7.0nm,0.9s
MPU Maple Canyon 40.83 85 P P 00 29 24.8 -0.5
SHPR Sheep Range 40.94 91 P P 00 29 26.5 +0.3

**BSUT Blindstream Ca** 41.03 83 P P 00 29 26.3 -0.8
**INU Inuyama** 41.12 267 P P 00 29 27.5 0.0
INU IAmb IAmb 00 29 40.5
comp=Z,8.4nm,1.0s
**CCUT Cedar City** 41.35 89 P P 00 29 30.0 +0.4
**MVU Marysvale** 41.43 87 P P 00 29 30.7 +0.4
MVU IAmb IAmb 00 29 37.5
comp=Z,23nm,1.2s
**MSU Marysvale** 41.45 87 P P 00 29 31.4 +1.0
**MSU Marysvale** 41.45 87 P P 00 29 31.4 +1.0
**TMUT Trail Mountain** 41.53 85 P P 00 29 32.9 +1.7
TMUT IAmb IAmb 00 29 35.0
comp=Z,8.5nm,0.9s
**V12A Nelson** 41.65 92 P P 00 29 31.3 -0.6
**P17A Butcher Ranch,** 41.70 84 P P 00 29 32.8 +0.4
**RDMU Red Mountain** 41.72 82 P P 00 29 33.0 +0.3
RDMU IAmb IAmb 00 29 35.6
comp=Z,14nm,1.1s
**MTPU Mount Pierson** 41.74 87 P P 00 29 32.8 -0.2
**LCMT Little Creek M** 41.77 89 P P 00 29 32.6 -0.3
**Q16A Castle Valley** 41.79 85 P P 00 29 32.7 -0.5
Q16A IAmb IAmb 00 29 36.6
comp=Z,9.8nm,1.1s
**P18A Preston Nutter** 41.90 84 P P 00 29 34.0 -0.2
**KNB Kanab** 42.02 89 P P 00 29 36.1 +1.0
**KNB Kanab** 42.02 89 P P 00 29 36.1 +1.0
KNB pmax pmax
comp=Z,8.0nm,1.0s
**PKCU Pink Cliffs** 42.05 88 P P 00 29 33.8 -1.7
**SRU San Rafael Swe** 42.06 85 P P 00 29 34.9 -0.5
SRU IAmb IAmb 00 29 39.2
comp=Z,8.2nm,1.0s
**SRU San Rafael Swe** 42.06 85 P P 00 29 34.9 -0.5
SRU pmax pmax
comp=Z,8.0nm,1.0s
**PFO Pinyon Flats O** 42.11 96 LR LR 00 45 58.0
comp=Z,56nm,18.8s,baz=293,slow=35
**TPFO Pinon Flats** 42.12 96 P P 00 29 34.4 -1.4
baz=314
**K22A Casper** 42.28 78 P P 00 29 36.7 -0.3
K22A IAmb IAmb 00 29 39.1
comp=Z,6.9nm,0.8s
**W13A Hualapai Mount** 42.65 92 P P 00 29 39.4 -0.9
**HMU Henry Mountain** 42.68 86 P P 00 29 40.3 -0.2
HMU IAmb IAmb 00 29 43.6
comp=Z,13nm,0.9s
**U15A North Rim** 42.73 89 P P 00 29 40.8 -0.1
U15A IAmb IAmb 00 29 45.8
comp=Z,14nm,1.2s
**CN2 Changchun** 42.74 285 *e*P P 00 29 37.3 -3.3
CN2 *e*pP pP 00 29 41.8 -1.9
CN2 pmax pmax
comp=Z,10.0nm,1.4s
**O20A White River Ci** 42.79 82 P P 00 29 40.3 -1.0
O20A IAmb IAmb 00 29 44.3
comp=Z,20nm,0.8s
**RSSD Black Hills** 42.87 74 P P 00 29 41.9 0.0
RSSD IAmb IAmb 00 29 44.8
comp=Z,6.9nm,0.9s
**RSSD Black Hills** 42.87 74 P P 00 29 41.9 0.0
RSSD pmax pmax
comp=Z,7.0nm,0.9s
**BLYC Blythe** 43.19 94 P P 00 29 44.1 -0.2
BLYC IAmb IAmb 00 29 48.9
comp=Z,10nm,1.0s
**MDND Maddock** 43.26 67 P P 00 29 45.8 +1.0
**E28A Huff** 43.37 70 P P 00 29 45.5 -0.2
E28A IAmb IAmb 00 29 48.5
comp=Z,26nm,0.9s
**GLA Glamis** 43.48 95 P P 00 29 48.0 +1.2
GLA IAmb IAmb 00 29 51.4
comp=Z,8.5nm,0.9s
**GLA Glamis** 43.48 95 P P 00 29 48.0 +1.2
GLA pmax pmax
comp=Z,8.0nm,1.0s
**N23A Red Feather La** 43.69 79 P P 00 29 49.4 +0.7
**N23A Red Feather La** 43.69 79 P P 00 29 46.8 -1.8
baz=308
**WUAZ Wupatki** 43.89 89 P P 00 29 51.1 +0.9
WUAZ IAmb IAmb 00 29 55.5
comp=Z,8.8nm,0.9s
**JCJ Chichijima** 43.96 253 LR LR 00 43 52.8
comp=Z,84nm,21.2s,baz=98,slow=30
**ULM Lac du Bonnet** 43.97 63 P P 00 29 49.5 -1.0
ULM IAmb IAmb 00 29 53.3
comp=Z,11nm,0.9s
**ULM Lac du Bonnet** 43.97 63 P P 00 29 48.5 -2.0
comp=Z,8.4nm,0.9s,baz=311,slow=10.0,SNR=5.5
ULM LR LR 00 48 53.6
comp=Z,116nm,20.0s,baz=341,slow=37
comp=Z,8.4nm,0.9s
**ULM Lac du Bonnet** 43.97 63 *i*P P 00 29 50.1 -0.4
**113A Mohawk Valley,** 44.32 94 P P 00 29 53.6 +0.2
**MVCO Mesa Verde** 44.51 85 P P 00 29 56.3 +1.1
**X16A Lo Mia Camp, P** 44.59 91 P P 00 29 56.4 +0.5
**BRIGG Briggsdale** 44.85 79 P P 00 29 58.0 +0.2
BRIGG IAmb IAmb 00 30 06.2
comp=Z,8.4nm,0.8s
**AGMN Agassiz Nation** 45.08 65 P P 00 29 58.5 -0.8
**S22A 4UR Ranch, Cre** 45.16 84 P P 00 29 59.3 -1.2
baz=311
**KSRS Korea Array** 45.22 276 LR LR 00 48 49.5
comp=Z,81nm,19.6s,baz=55,slow=36
**Q24A Divide** 45.38 81 P P 00 30 02.9 +0.7
**X18A Snowflake** 45.42 89 P P 00 30 03.1 +0.7
X18A IAmb IAmb 00 30 07.4
comp=Z,7.0nm,1.0s
**214A Organ Pipe Nat** 45.47 94 P P 00 30 02.2 -0.4
214A IAmb IAmb 00 30 07.1
comp=Z,11nm,1.0s
**214A Organ Pipe Nat** 45.47 94 P P 00 30 01.8 -0.9
baz=315
**SUSD Miller** 45.61 71 P P 00 30 03.2 -0.4
**SDCO Great Sand Dun** 45.96 83 P P 00 30 05.7 -1.1
SDCO IAmb IAmb 00 30 10.2
comp=Z,6.7nm,0.9s
**OGNE Ogallala** 45.97 77 P P 00 30 04.9 -1.7
**F33A 5 Mile Ranch,** 46.28 68 P P 00 30 08.8 0.0
F33A IAmb IAmb 00 30 10.4
comp=Z,11nm,0.9s
**K30B Basset** 46.31 73 P P 00 30 09.3 +0.1
**JNU Nakatsue** 46.35 269 LR LR 00 48 40.7
comp=Z,91nm,20.5s,baz=48,slow=35
**TUC Tucson** 46.44 92 P P 00 30 10.7 +0.3
TUC IAmb IAmb 00 30 15.1
comp=Z,8.2nm,1.1s
**TUC Tucson** 46.44 92 P P 00 30 10.7 +0.3
TUC pmax pmax
comp=Z,8.0nm,1.1s
**KSCO Kaye Shedlock'** 46.85 79 P P 00 30 13.9 +0.3
**T25A Trinidad** 47.01 82 P P 00 30 15.2 +0.3
**T25A Trinidad** 47.01 82 P P 00 30 13.4 -1.6
baz=312,SNR=10
**ANMO Albuquerque** 47.24 86 P P 00 30 16.3 -0.5
**ANMO Albuquerque** 47.24 86 LR LR 00 47 07.5
comp=Z,46nm,19.1s,baz=320,slow=32
**ANMO Albuquerque** 47.24 86 *i*P P 00 30 14.6 -2.2
ANMO pmax pmax
comp=Z,3.0nm,1.3s
**DUN6 Lazy B Ranch** 47.30 91 P P 00 30 16.5 -0.6
DUN6 IAmb IAmb 00 30 25.7
comp=Z,11nm,0.9s
**ECSD EROS Data Cent** 47.38 70 P P 00 30 17.3 -0.2
ECSD IAmb IAmb 00 30 19.4
comp=Z,12nm,0.9s
**EYMN Ely** 47.65 63 P P 00 30 19.9 +0.4
**BGNE Belgrade** 47.95 74 P P 00 30 22.4 +0.4
**319A Douglas** 48.01 92 P P 00 30 23.3 +0.6
319A IAmb IAmb 00 30 31.3
comp=Z,4.7nm,0.9s
**121A Cookes Peak, D** 48.10 90 P P 00 30 23.4 0.0
121A IAmb IAmb 00 30 27.2
comp=Z,5.3nm,0.8s
**121A Cookes Peak, D** 48.10 90 P P 00 30 22.3 -1.1
baz=314
**E38A The Farm, Brul** 48.43 64 P P 00 30 26.0 +0.4
**RTBA Rita Blanca** 48.48 82 P P 00 30 26.2 0.0
RTBA IAmb IAmb 00 30 29.1
comp=Z,10.0nm,0.9s
**FRB Frobisher Bay** 48.55 36 LR LR 00 52 18.5
comp=Z,288nm,20.1s,baz=298,slow=38
**SPMN Marine on St.** 48.60 67 P P 00 30 26.5 -0.4
**L34A Svendsen Farm,** 48.62 72 P P 00 30 27.7 +0.6
**CBKS Cedar Bluff** 48.69 77 P P 00 30 28.2 +0.4
**CBKS Cedar Bluff** 48.69 77 P P 00 30 28.2 +0.4
CBKS pmax pmax
comp=Z,18nm,0.8s
**I37A Lemond, Waseca** 49.02 68 P P 00 30 30.8 +0.6
**SPITS Spitsbergen Ar** 49.06 358 PcP PcP 00 31 52.5 -1.0
comp=Z,20nm,1.1s,baz=0.0,slow=1.4,SNR=2.4
SPITS LR LR 00 51 51.4
comp=Z,102nm,18.7s,baz=330,slow=37
**R32A Long Quarter,** 49.56 77 P P 00 30 34.1 -0.2
R32A IAmb IAmb 00 30 36.4
comp=Z,12nm,0.8s
**N35A Tabor** 49.75 73 P P 00 30 35.8 0.0
**G40A Rib Lake** 50.01 65 P P 00 30 38.5 +0.9
G40A IAmb IAmb 00 30 39.9
comp=Z,16nm,0.9s
**COWI Conover** 50.06 63 P P 00 30 38.5 +0.5
COWI IAmb IAmb 00 30 39.7
comp=Z,8.2nm,0.8s
**MSTX Muleshoe** 50.13 84 P P 00 30 38.0 -0.9
MSTX IAmb IAmb 00 30 41.3
comp=Z,9.1nm,0.9s
**AMTX Amarillo** 50.16 83 P P 00 30 37.4 -1.7
AMTX IAmb IAmb 00 30 42.0
comp=Z,7.7nm,0.9s
**KSU1 Kansas State U** 50.34 75 P P 00 30 39.7 -0.6
KSU1 IAmb IAmb 00 30 41.7
comp=Z,9.2nm,0.8s
**ULN Ulaanbaatar** 50.53 300 *i*P P 00 30 41.3 -0.5
ULN pmax pmax
comp=Z,2.0nm,1.1s
**I40A Norwalk** 50.65 67 P P 00 30 42.8 +0.3
I40A IAmb IAmb 00 30 44.3
comp=Z,12nm,0.7s
**F42A Maple Grove Fa** 50.82 63 P P 00 30 44.0 +0.2
**SMWD Samnorwood** 50.87 81 P P 00 30 44.9 +0.5
SMWD IAmb IAmb 00 30 47.3
comp=Z,13nm,0.8s
**SONM Songino Array** 50.89 300 P P 00 30 45.4 +0.9
comp=Z,0.2nm,0.4s,baz=91,slow=6.2,SNR=2.2
SONM PcP PcP 00 31 59.7 -1.2
comp=Z,1.9nm,0.7s,baz=54,slow=2.5,SNR=7.2
SONM ScP ScP 00 35 58.8 +1.9
comp=Z,0.6nm,0.7s,baz=68,slow=2.3,SNR=3.0
SONM LR LR 00 55 09.0
comp=Z,187nm,18.4s,baz=60,slow=39
comp=Z,0.2nm,0.4s
**VHRN Van Horn** 51.02 89 P P 00 30 45.5 -0.2
VHRN IAmb IAmb 00 30 49.5
comp=Z,8.4nm,0.9s
**N38A Joes South For** 51.18 71 P P 00 30 46.5 -0.1
**CROK Carrier** 51.27 79 P P 00 30 46.9 -0.4
CROK IAmb IAmb 00 30 49.4
comp=Z,10nm,0.5s
**DKNS Dickens** 51.45 83 P P 00 30 48.7 -0.1
DKNS IAmb IAmb 00 30 51.5
comp=Z,7.9nm,0.8s
**JFWS Jewell Farm** 51.49 67 P P 00 30 48.8 0.0
**JFWS Jewell Farm** 51.49 67 P P 00 30 48.8 0.0
JFWS pmax pmax
comp=Z,18nm,0.9s
**L40A Anamosa** 51.49 69 P P 00 30 48.5 -0.4
L40A IAmb IAmb 00 30 50.2
comp=Z,11nm,0.9s
**POST Post** 51.52 84 P P 00 30 48.9 -0.4
POST IAmb IAmb 00 30 52.1
comp=Z,14nm,0.9s
**I42A Draeger Farm,** 51.59 66 P P 00 30 49.4 -0.2
**P38A Dawn** 51.78 73 P P 00 30 51.0 -0.1
**H43A Windswept, Lux** 51.84 64 P P 00 30 52.2 +0.7
**T35A Sooner Cattle** 51.86 77 P P 00 30 51.3 -0.5
T35A IAmb IAmb 00 30 53.2
comp=Z,6.7nm,0.8s
**SN07 Snyder 07** 51.87 84 P P 00 30 51.3 -0.6
SN07 IAmb IAmb 00 30 54.2
comp=Z,6.9nm,0.9s
**SFJD Kangerlussuaq** 51.88 26 LR LR 00 56 07.2
comp=Z,104nm,18.1s,baz=313,slow=40
**OK048 Pawnee Station** 51.94 78 P P 00 30 52.3 0.0
OK048 IAmb IAmb 00 30 54.4
comp=Z,13nm,0.8s
**MNHN Monahans** 51.97 87 P P 00 30 52.8 +0.1
MNHN IAmb IAmb 00 30 56.7
comp=Z,7.2nm,0.8s
**WMOK Wichita Mounta** 52.00 81 P P 00 30 52.7 -0.1
WMOK IAmb IAmb 00 30 55.5
comp=Z,13nm,0.8s
**WMOK Wichita Mounta** 52.00 81 P P 00 30 52.7 -0.1
WMOK pmax pmax
comp=Z,13nm,0.8s
**SN05 Snyder 5** 52.02 84 P P 00 30 52.8 -0.2
SN05 IAmb IAmb 00 30 56.1
comp=Z,6.9nm,0.9s
**OK029 Liberty Lake** 52.06 79 P P 00 30 53.2 -0.1
**ALPN Alpine** 52.13 88 P P 00 30 54.1 +0.2
ALPN IAmb IAmb 00 30 57.7
comp=Z,6.5nm,0.9s
**APMT Aspermont** 52.17 83 P P 00 30 53.5 -0.6
APMT IAmb IAmb 00 30 56.1
comp=Z,8.4nm,1.0s
**OK052 Battle Ridge R** 52.31 78 P P 00 30 54.1 -1.0
OK052 IAmb IAmb 00 30 56.8
comp=Z,12nm,0.8s
**OK031 S. Brethren Rd** 52.32 78 P P 00 30 55.2 +0.1
**OKCSW OKLAHOMA CITY** 52.34 79 P P 00 30 54.8 -0.5
**L42A Oliver, Polo** 52.41 68 P P 00 30 55.2 -0.5
L42A IAmb IAmb 00 30 57.1
comp=Z,19nm,1.1s
**JOW Kunigami** 52.42 266 LR LR 00 51 37.9
comp=Z,39nm,21.8s,baz=20,slow=34
**FNO Franklin** 52.46 79 P P 00 30 56.6 +0.3
FNO IAmb IAmb 00 30 58.7
comp=Z,9.5nm,0.8s
**E46A Sault Ste Mari** 52.47 60 P P 00 30 56.0 -0.1
E46A IAmb IAmb 00 30 58.3
comp=Z,14nm,0.8s
**SGCY Sterling City** 52.55 85 P P 00 30 56.8 -0.3
SGCY IAmb IAmb 00 30 59.6
comp=Z,14nm,1.0s
**N41A Harden Midland** 52.60 70 P P 00 30 56.0 -1.1
**DEOK Depew** 52.60 78 P P 00 30 57.2 0.0
DEOK IAmb IAmb 00 30 58.8
comp=Z,8.2nm,0.8s
**HHC Hu-ho-hao-te** 52.60 290 *e*P P 00 30 57.5 +0.2
HHC pP sP 00 31 01.8 +0.1
HHC sP pP 00 31 05.0 +4.6
HHC PP PP 00 32 59.0 +3.0
HHC *e*S S 00 38 21.5 -2.8
HHC pmax pmax
comp=Z,8.0nm,0.5s
HHC pmax pmax
comp=Z,75nm,4.5s
HHC LR LR
comp=N,200nm,15.7s
HHC LR LR
comp=E,140nm,15.9s
HHC LR LR
comp=Z,160nm,15.7s
**K43A Burlington** 52.69 66 P P 00 30 58.1 +0.3
**P40A Paris** 52.70 72 P P 00 30 57.9 0.0
**LPIG La Paz** 52.70 99 LR LR 00 50 40.6
comp=Z,12nm,18.8s,baz=326,slow=33
**W35A Tecumseh** 52.85 79 P P 00 30 58.0 -1.0
W35A IAmb IAmb 00 31 01.1
comp=Z,17nm,1.0s
**TX31 Lajitas Ar. Si** 52.85 89 P P 00 30 57.0 -2.3
TX31 IAmb IAmb 00 31 02.6
comp=Z,6.4nm,0.8s
**TXAR Lajitas Array** 52.85 89 P P 00 30 56.2 -3.1
comp=Z,3.0nm,0.7s,baz=298,slow=5.2,SNR=31
comp=Z,3.0nm,0.7s
**WTFS Witchita Falls** 52.86 81 P P 00 30 57.8 -1.4
WTFS IAmb IAmb 00 31 06.5
comp=Z,8.9nm,0.9s
**ABTX Abilene, Hawle** 52.95 83 P P 00 30 59.4 -0.5
ABTX IAmb IAmb 00 31 03.4
comp=Z,14nm,0.9s
**I45A Fountain** 52.96 64 P P 00 30 58.9 -0.9
**TUL3 Leonard** 52.97 78 P P 00 30 59.6 -0.3
TUL3 IAmb IAmb 00 31 01.6
comp=Z,8.0nm,0.7s
**S39A Bolivar** 53.20 74 P P 00 31 01.2 -0.5
S39A IAmb IAmb 00 31 01.6
comp=Z,4.1nm,0.8s
**RLO Rose Lookout** 53.25 77 P P 00 31 01.5 -0.5
RLO IAmb IAmb 00 31 02.9
comp=Z,8.1nm,0.9s
**OZNA Ozona** 53.26 86 P P 00 31 02.8 +0.6
OZNA IAmb IAmb 00 31 05.7
comp=Z,4.6nm,0.7s
**L44A Lake County Fo** 53.27 67 P P 00 31 01.4 -0.6
**L44A Lake County Fo** 53.27 67 P P 00 31 01.7 -0.4
baz=312
**GUMO Guam** 53.30 240 LR LR 00 50 10.6
comp=Z,51nm,22.0s,baz=151,slow=32
**GLMI Grayling** 53.31 62 P P 00 31 02.0 -0.4
**HPIG** 53.39 93 P P 00 31 03.8 +0.4
HPIG IAmb IAmb 00 31 07.3
comp=Z,7.0nm,1.1s
**R40A Maddies Statio** 53.41 73 P P 00 31 02.8 -0.3
R40A IAmb IAmb 00 31 03.3
comp=Z,5.5nm,0.7s
**U38A Gravette** 53.43 76 P P 00 31 02.3 -1.1
U38A IAmb IAmb 00 31 05.6
comp=Z,8.6nm,1.1s
**LOOK Love County** 53.47 80 P P 00 31 03.8 +0.2
**HDIL Hopedale** 53.58 69 P P 00 31 03.7 -0.7
**FW03 Perrin-Whitt E** 53.60 82 P P 00 31 05.1 +0.4
**PLPT Palo Pinto** 53.61 82 P P 00 31 05.3 +0.6
**HHAR Hobbs** 53.80 76 P P 00 31 04.7 -1.4
HHAR IAmb IAmb 00 31 08.2
comp=Z,5.2nm,1.1s
**FW06 Azle** 53.95 81 P P 00 31 08.1 +0.9
FW06 IAmb IAmb 00 31 11.0
comp=Z,13nm,0.8s
**FW07 Weatherford** 54.01 82 P P 00 31 08.9 +1.3
**P43A Skaggs, Pawnee** 54.07 70 P P 00 31 07.7 -0.3
**X37A Clayton** 54.13 78 P P 00 31 09.2 +0.8
**MGMO Mountain Grove** 54.18 74 P P 00 31 08.8 -0.1
MGMO IAmb IAmb 00 31 10.7
comp=Z,9.1nm,1.0s
**J47A Sunmer** 54.26 64 P P 00 31 08.8 -0.5
**L46A Eue Claire** 54.28 66 P P 00 31 09.9 +0.5
**BRDY Brady** 54.28 84 P P 00 31 10.2 +0.6
BRDY IAmb IAmb 00 31 12.1
comp=Z,8.6nm,1.0s
**NJ2 Nanjing** 54.35 277 *e*P P 00 31 09.0 -1.1
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**JCT Junction City** 54.37 85 P P 00 31 10.6 +0.3
JCT IAmb IAmb 00 31 13.5
comp=Z,8.2nm,0.7s
**JCT Junction City** 54.37 85 P P 00 31 10.6 +0.3
JCT pmax pmax
comp=Z,8.0nm,0.7s
**FW13 Cleburne** 54.47 82 P P 00 31 12.2 +1.2
**FW14 Alvarado** 54.58 82 P P 00 31 12.7 +0.9
**DRIO Del Rio** 54.63 87 P P 00 31 12.1 -0.2
DRIO IAmb IAmb 00 31 14.2
comp=Z,5.8nm,0.8s
**FVM French Village** 54.68 72 P P 00 31 11.9 -0.5
FVM IAmb IAmb 00 31 14.1
comp=Z,12nm,0.8s
**FVM French Village** 54.68 72 P P 00 31 11.9 -0.5
FVM pmax pmax
comp=Z,12nm,0.8s
**WHTX Lake Whitney,** 54.70 82 P P 00 31 13.1 +0.4
**VLDQ Val d'Or** 54.82 55 P P 00 31 12.4 -0.9
VLDQ IAmb IAmb 00 31 14.3
comp=Z,11nm,0.9s
**Q44A Meyer Farm, Va** 54.86 70 P P 00 31 14.2 +0.5
**I49A Point Hope** 54.86 62 P P 00 31 13.7 0.0
**SFIN Lafayette** 54.94 68 P P 00 31 14.7 +0.4
**T42A Van Buren** 54.95 73 P P 00 31 14.4 0.0
**SCHQ Schefferville** 55.08 43 LR LR 00 56 15.7
comp=Z,98nm,18.3s,baz=63,slow=38
**FCAR Ozark Folk Cen** 55.14 75 P P 00 31 15.5 -0.3
FCAR IAmb IAmb 00 31 16.2
comp=Z,9.1nm,0.8s
**MIAR Mount Ida** 55.22 77 P P 00 31 17.4 +1.0
MIAR IAmb IAmb 00 31 18.2
comp=Z,9.1nm,0.9s
**MIAR Mount Ida** 55.22 77 P P 00 31 17.4 +1.0
MIAR pmax pmax
comp=Z,9.0nm,0.9s
**Z38A Mt. Pleasant** 55.29 79 P P 00 31 16.2 -0.7
**L48A N Adams** 55.34 65 P P 00 31 17.6 +0.3
L48A IAmb IAmb 00 31 18.8
comp=Z,14nm,0.8s
**N47A Urbana** 55.38 66 P P 00 31 17.4 0.0
**P46A Rosedale** 55.39 68 P P 00 31 18.9 +1.3
**WHAR Wooly Hollow** 55.46 76 P P 00 31 19.1 +1.0
**435B Jarrell** 55.49 83 P P 00 31 19.1 +0.8
435B IAmb IAmb 00 31 23.2
comp=Z,13nm,0.8s
**435B Jarrell** 55.49 83 P P 00 31 17.5 -0.9
baz=316
**OLIL Olney** 55.49 70 P P 00 31 18.7 +0.4
**PBMO Poplar Bluff** 55.51 73 P P 00 31 18.0 -0.4
PBMO IAmb IAmb 00 31 20.4
comp=Z,8.9nm,1.1s
**S44A Carbondale** 55.55 71 P P 00 31 18.2 -0.5
S44A IAmb IAmb 00 31 20.3
comp=Z,12nm,1.0s
**SIUC Southern Illin** 55.56 71 P P 00 31 18.4 -0.4
SIUC IAmb IAmb 00 31 20.3
comp=Z,10nm,0.8s
**X40A Basin Creek Fa** 55.70 77 P P 00 31 19.5 -0.3
**PARMO Parma** 55.98 73 P P 00 31 21.1 -0.7
**BLO Bloomington** 56.08 68 P P 00 31 22.8 +0.3
**BLO Bloomington** 56.08 68 P P 00 31 22.8 +0.3
BLO pmax pmax
comp=Z,15nm,0.7s
**WLAR White Oak Lake** 56.09 78 P P 00 31 23.7 +1.0
**833A Chaparral WMA,** 56.17 87 P P 00 31 23.8 +0.6
833A IAmb IAmb 00 31 26.4
comp=Z,8.8nm,0.8s
**833A Chaparral WMA,** 56.17 87 P P 00 31 22.1 -1.1
baz=317
**N49A Columbus Grove** 56.18 65 P P 00 31 21.7 -1.5
N49A IAmb IAmb 00 31 24.5
comp=Z,9.1nm,0.8s
**HBAR Harrisburg** 56.23 74 P P 00 31 23.1 -0.4
**SADO Sadowa** 56.23 59 P P 00 31 24.6 +1.1
SADO IAmb IAmb 00 31 25.6
comp=Z,9.1nm,0.8s
**SADO Sadowa** 56.23 59 LR LR 00 57 11.5
comp=Z,103nm,18.3s,baz=61,slow=38
**USIN University of** 56.27 70 P P 00 31 23.4 -0.5
**P48A Milroy** 56.50 67 P P 00 31 25.3 -0.2
**Z41A Richland Creek** 56.58 78 P P 00 31 25.2 -0.9
Z41A IAmb IAmb 00 31 28.9
comp=Z,7.8nm,0.7s
**O49A Covington** 56.60 66 P P 00 31 22.7 -3.5
O49A IAmb IAmb 00 31 27.2
comp=Z,8.7nm,0.9s
**HNVL Huntsville, TX** 56.77 82 P P 00 31 27.5 0.0
**P49A Miami Univ. Ec** 56.84 67 P P 00 31 28.3 +0.4
baz=314,SNR=8.6
**WCI Wyandotte Cave** 56.87 69 P P 00 31 27.6 -0.5
WCI IAmb IAmb 00 31 30.0
comp=Z,14nm,0.9s
**WCI Wyandotte Cave** 56.87 69 P P 00 31 27.6 -0.5
WCI pmax pmax
comp=Z,14nm,0.9s
**ZALV Zalesovo Beam** 56.90 317 LR LR 00 58 32.5
comp=Z,71nm,18.9s,baz=61,slow=39
**HKT Hockley** 57.13 83 *i*P P 00 31 31.1 +1.1
HKT pmax pmax
comp=Z,8.0nm,1.4s
**N51A Ashland** 57.17 64 P P 00 31 30.7 +0.4
**DELO Deloro Mine** 57.19 58 P P 00 31 31.2 +0.9
**T47A Sharon Grove** 57.27 71 P P 00 31 31.3 +0.3
**M52A Chesterland** 57.29 63 P P 00 31 29.5 -1.6
**ARCES ARCESS Array B** 57.31 354 LR LR 00 58 02.4
comp=Z,59nm,18.0s,baz=336,slow=38
**ACSO Alum Creek Sta** 57.32 65 P P 00 31 31.1 -0.1
ACSO IAmb IAmb 00 31 32.8
comp=Z,7.9nm,0.9s
**WVT Waverly** 57.46 72 P P 00 31 32.6 +0.3
WVT IAmb IAmb 00 31 34.5
comp=Z,11nm,1.0s
**WVT Waverly** 57.46 72 P P 00 31 32.6 +0.3
WVT pmax pmax
comp=Z,11nm,1.0s
**TRQ Mont Tremblant** 57.55 55 P P 00 31 33.2 +0.3
TRQ IAmb IAmb 00 31 36.6
comp=Z,14nm,1.2s
**ERPA Erie** 57.62 62 P P 00 31 33.9 +0.5
**OXF Oxford** 57.69 74 P P 00 31 33.8 -0.1
**OXF Oxford** 57.69 74 P P 00 31 33.8 -0.1

OXF pmax pmax
comp=Z,26nm,0.9s
**MEDO Medina 57.70 60 P P 00 31 34.5 +0.5**
MEDO lAmb lAmb 00 31 36.9
comp=Z,5.9nm,0.8s
**M53A WI Miller and 57.73 63 P P 00 31 34.4 +0.2**
**M53A WI Miller and 57.73 63 P P 00 31 33.5 -0.7**
baz=314
**P51A Williamsport 57.80 66 P P 00 31 33.3 -1.4**
P51A lAmb lAmb 00 31 35.9
comp=Z,7.3nm,0.8s
**ALLY Alegheny Colle 57.87 62 P P 00 31 35.1 -0.1**
**PECO Prince Edward 57.92 58 P P 00 31 36.5 +1.0**
**R50A Paris 57.94 68 P P 00 31 36.4 +0.7**
**Q51A Peebles 57.96 66 P P 00 31 36.6 +0.7**
**J55A Hilton 57.97 59 P P 00 31 35.9 +0.1**
**O52A Adamsville 58.03 65 P P 00 31 36.3 0.0**
**N53A Lisbon 58.09 63 P P 00 31 37.4 +0.7**
N53A lAmb lAmb 00 31 38.8
comp=Z,14nm,0.9s
**PLAL Pickwick Lake 58.13 73 P P 00 31 36.9 -0.2**
PLAL lAmb lAmb 00 31 38.3
comp=Z,8.1nm,0.8s
**WVNY West Valley, N 58.16 61 P P 00 31 37.6 +0.5**
**P52A Corning 58.20 65 P P 00 31 36.8 -0.7**
baz=315
**O53A New Philadelph 58.27 64 P P 00 31 36.8 -1.2**
baz=315
**SSFO Shawnee State 58.27 67 P P 00 31 38.4 +0.4**
**CLTN Cedars of Leba 58.34 71 P P 00 31 38.1 -0.4**
**U49A Red Boiling Sp 58.36 70 P P 00 31 39.3 +0.7**
U49A lAmb lAmb 00 31 40.6
comp=Z,13nm,1.1s
**T50A Nancy 58.54 69 P P 00 31 39.5 -0.4**
T50A lAmb lAmb 00 31 41.5
comp=Z,10.0nm,0.8s
**ICQ Pointe Anglais 58.66 48 P P 00 31 41.3 +0.8**
**LONY Lake Ozonia 58.67 56 P P 00 31 41.0 +0.3**
LONY lAmb lAmb 00 31 44.8
comp=Z,8.8nm,1.0s
**P53A Whipple 58.71 65 P P 00 31 40.7 -0.4**
P53A lAmb lAmb 00 31 42.7
comp=Z,11nm,0.8s
**O54A Avella 58.77 64 P P 00 31 41.2 -0.3**
**S51A Beattyville 58.80 68 P P 00 31 41.6 -0.1**
S51A lAmb lAmb 00 31 43.6
comp=Z,10.0nm,1.1s
**J57A Williamstown 58.81 58 P P 00 31 42.6 +1.0**
**XAN Xi'an 58.81 286 eP P 00 31 44.0 +2.1**
XAN LR LR
comp=N,250nm,16.5s
XAN LR LR
comp=E,220nm,17.2s
XAN LR LR
comp=Z,310nm,17.9s
**L56A Greenwood 58.90 60 P P 00 31 43.4 +1.0**
**K57A Scipio Center 59.02 59 P P 00 31 44.3 +1.1**
K57A lAmb lAmb 00 31 46.0
comp=Z,9.9nm,0.8s
**SSLB Suanglung 59.10 269 P P 00 31 43.2 -0.8**
**X48A Hartselle 59.10 73 P P 00 31 42.8 -1.0**
X48A lAmb lAmb 00 31 44.6
comp=Z,7.9nm,0.9s
**NCB Newcomb 59.31 57 P P 00 31 46.0 +0.8**
NCB lAmb lAmb 00 31 48.3
comp=Z,7.0nm,0.8s
**Q54A Coxs Mills 59.37 65 P P 00 31 46.4 +0.7**
**Z47A Carrollton 59.40 74 P P 00 31 46.7 +0.8**
**J59A Piesco 59.53 57 P P 00 31 47.5 +0.8**
J59A lAmb lAmb 00 31 52.0
comp=Z,5.3nm,0.9s
**TZTN Tazewell 59.60 69 P P 00 31 47.9 +0.6**
TZTN lAmb lAmb 00 31 49.1
comp=Z,10nm,0.9s
**D62A Allapoint, All 59.60 51 P P 00 31 49.0 +1.9**
D62A lAmb lAmb 00 31 51.1
comp=Z,7.9nm,1.1s
**BINY Binghamton 59.67 59 P P 00 31 47.9 +0.2**
**M57A Sunshine Farm, 59.69 61 P P 00 31 47.9 +0.1**
M57A lAmb lAmb 00 31 50.1
comp=Z,12nm,0.9s
**SSPA Standing Stone 59.79 62 P P 00 31 49.2 +0.7**
**CPCT Cooper Cave 59.83 70 P P 00 31 48.5 -0.4**
CPCT lAmb lAmb 00 31 50.0
comp=Z,8.4nm,1.2s
**FPAL Fort Paine 59.86 72 P P 00 31 48.5 -0.6**
**346A Big Creek Wild 59.89 77 P P 00 31 50.6 +1.3**
**Y49A Blount Mountai 59.89 73 P P 00 31 48.7 -0.6**
Y49A lAmb lAmb 00 31 59.8
comp=Z,4.9nm,1.1s
**S54A Dingess, Beckl 59.95 66 P P 00 31 49.8 0.0**
**TKL Tuckaleechee C 60.11 70 P P 00 31 50.5 -0.3**
TKL lAmb lAmb 00 31 52.6
comp=Z,5.1nm,0.9s
**TKL Tuckaleechee C 60.11 70 LR LR 00 56 24.7**
comp=Z,59nm,21.6s,baz=330,slow=35
**TKL Tuckaleechee C 60.11 70 P P 00 31 50.5 -0.3**
TKL pmax pmax
comp=Z,5.0nm,0.9s
**LRAL Lakeview Retre 60.14 74 P P 00 31 50.0 -1.1**
LRAL lAmb lAmb 00 31 51.8
comp=Z,5.0nm,0.8s
**KNMB Chin-men Tao 60.15 272 P P 00 31 48.6 -2.5**
**L59A Walton 60.17 59 P P 00 31 52.6 +1.5**
**Q56A Snyder Ridge, 60.23 64 P P 00 31 52.5 +0.9**
Q56A lAmb lAmb 00 31 53.6
comp=Z,9.6nm,0.9s
**KSPA Keystone Colle 60.25 60 P P 00 31 53.0 +1.4**
KSPA lAmb lAmb 00 31 54.1
comp=Z,7.6nm,0.9s
**R55A Marlinton 60.27 65 P P 00 31 53.0 +1.1**
R55A lAmb lAmb 00 31 54.0
comp=Z,12nm,1.1s
**X51A Calhoun 60.27 71 P P 00 31 51.0 -0.9**
X51A lAmb lAmb 00 32 10.0
comp=Z,5.7nm,1.0s
**H62A Milan 60.41 54 P P 00 31 53.9 +1.2**
H62A lAmb lAmb 00 31 56.7
comp=Z,14nm,1.1s
**F64A Sherman 60.82 52 P P 00 31 55.4 -0.1**
F64A lAmb lAmb 00 32 11.5
comp=Z,5.7nm,1.1s
**BATG Bathurst New B 60.85 49 P P 00 31 57.5 +1.8**
BATG lAmb lAmb 00 31 58.7
comp=Z,8.7nm,0.8s
**BLA Blacksburg 60.87 66 P P 00 31 57.4 +1.4**
**BLA Blacksburg 60.87 66 P P 00 31 57.4 +1.4**
BLA pmax pmax
comp=Z,29nm,0.9s
**MVL Millersville 61.06 61 P P 00 31 58.8 +1.6**
MVL lAmb lAmb 00 31 59.7
comp=Z,9.1nm,0.8s
**ODNJ Ogdensburg 61.19 59 P P 00 31 59.5 +1.4**
ODNJ lAmb lAmb 00 32 00.8
comp=Z,9.1nm,1.0s
**S57A Dark Hollow, R 61.28 65 P P 00 32 00.1 +1.4**
S57A lAmb lAmb 00 32 01.1
comp=Z,10nm,0.8s
**250A Grady 61.33 74 P P 00 31 60.0 +0.8**
**V55A Taylorsville 61.41 68 P P 00 31 59.4 -0.2**
**KURK Kurchatov 61.85 318 iP P 00 32 02.4 +0.1**
KURK pmax pmax
comp=Z,2.0nm,0.9s
**GOGA Godfrey 61.91 71 P P 00 32 03.5 +0.5**
GOGA lAmb lAmb 00 32 04.4
comp=Z,6.9nm,0.9s
**GOGA Godfrey 61.91 71 P P 00 32 03.5 +0.5**
GOGA pmax pmax
comp=Z,7.0nm,1.0s
**KURBB Kurchatov Arra 61.95 318 P P 00 32 03.0 -0.1**
comp=Z,1.0nm,0.8s,baz=47,slow=7.5,SNR=8.7
KURBB LR LR 01 01 25.4
comp=Z,88nm,19.6s,baz=175,slow=38
comp=Z,1.0nm,0.8s
**HODGE Hodges 62.00 70 P P 00 32 04.5 +0.9**
HODGE lAmb lAmb 00 32 05.0
comp=Z,8.7nm,0.9s
**LMN Caledonia Moun 62.49 50 P P 00 32 07.7 +1.0**
**JSC Jenkinsville 62.52 69 P P 00 32 07.9 +0.8**
**JSC Jenkinsville 62.52 69 P P 00 32 07.9 +0.8**
JSC pmax pmax
comp=Z,15nm,1.0s
**W57A Gilead 62.60 67 P P 00 32 08.4 +0.7**
W57A lAmb lAmb 00 32 09.3
comp=Z,7.4nm,0.9s

**T59A Double "B" Far 62.62 64 P P 00 32 09.1 +1.4**
**V58A Windy Hill, Pi 62.62 66 P P 00 32 08.5 +0.7**
**BIRD Birdtown, Kers 62.71 68 P P 00 32 09.0 +0.7**
**WMQ Urumqi 63.07 308 eP P 00 32 13.0 +2.3**
WMQ LR LR
comp=N,220nm,19.5s
WMQ LR LR
comp=Z,98nm,24.0s
**BVAR Borovoye Array 63.15 324 P P 00 32 11.6 +0.6**
comp=Z,2.2nm,0.8s,baz=48,slow=6.6,SNR=8.9
comp=Z,2.2nm,0.8s
**MKAR Makanchi Array 63.31 313 P P 00 32 12.3 0.0**
comp=Z,0.3nm,0.7s,baz=43,slow=6.5,SNR=2.5
MKAR LR LR 01 02 27.8
comp=Z,70nm,20.1s,baz=38,slow=38
comp=Z,0.3nm,0.7s
**NHSC New Hope 64.00 69 P P 00 32 18.1 +1.1**
**ARU Arti 64.03 333 LR LR 01 03 53.4**
comp=Z,61nm,18.2s,baz=28,slow=39
**ARU Arti 64.03 333 iP P 00 32 18.2 +1.4**
ARU pmax pmax
comp=Z,2.0nm,0.9s
**KIRV Kirov 64.40 339 LR LR 01 02 16.6**
comp=Z,51nm,21.5s,baz=9.9,slow=38
**FINES FINESS Array B 65.26 352 P P 00 32 24.8 +0.1**
comp=Z,0.9nm,0.7s,baz=18,slow=6.6,SNR=1.7
FINES LR LR 01 02 44.2
comp=Z,60nm,19.4s,baz=12,slow=38
comp=Z,0.9nm,0.7s
**NOA NORSAR Array B 66.34 360 P P 00 32 31.9 +0.2**
comp=Z,0.5nm,0.7s,baz=59,slow=5.9,SNR=1.9
comp=Z,0.5nm,0.7s
**HFS Hagfors 67.22 358 P P 00 32 38.2 +0.9**
comp=Z,1.9nm,0.8s,baz=64,slow=6.9,SNR=4.8
comp=Z,1.9nm,0.8s
**CMIG Matias Romero 67.33 92 LR LR 00 59 58.7**
comp=Z,19nm,20.2s,baz=306,slow=34
**PZH PanZhiHua 68.54 286 P P 00 32 47.0 +0.7**
PZH pmax pmax
comp=Z,7.0nm,1.0s
PZH pmax pmax
comp=Z,110nm,4.7s
**DAV Davao City (W) 69.37 254 LR LR 00 57 46.2**
comp=Z,90nm,21.9s,baz=5.0,slow=31
**AKTO Aktyubinsk 69.43 330 LR LR 01 07 44.3**
comp=Z,80nm,19.1s,baz=133,slow=40
**AAK Ala-Archa 69.99 315 LR LR 01 06 11.7**
comp=Z,95nm,19.0s,baz=45,slow=38
**BELG Belogornoye 70.48 337 LR LR 01 08 03.1**
comp=Z,42nm,18.2s,baz=83,slow=39
**EKA Eskdalemuir Ar 71.48 8 P P 00 33 04.6 +0.9**
comp=Z,0.6nm,0.7s,baz=353,slow=5.0,SNR=4.2
comp=Z,0.6nm,0.7s
**PPT2 Papeete2 72.37 160 eLR LR 00 54 44.1**
comp=Z,126nm,32.0s
PPT2 eLR LR 00 54 50.0
comp=Z,102nm,26.0s
**AKASG Malin Array Be 75.49 348 P P 00 33 26.6 -0.8**
comp=Z,1.2nm,0.6s,baz=16,slow=5.9,SNR=4.2
AKASG LR LR 01 08 45.2
comp=Z,47nm,21.4s,baz=2.0,slow=37
comp=Z,1.2nm,0.6s
**CLL Collm 76.07 358 eP P 00 33 31.0 +0.3**
**CLL Collm 76.07 358 eP P 00 33 31.0 +0.3**
**CMAR Chiang Mai Arr 76.37 282 P P 00 33 32.9 0.0**
comp=Z,0.5nm,0.3s,baz=32,slow=5.3,SNR=4.0
CMAR LR LR 01 10 11.8
comp=Z,59nm,18.9s,baz=305,slow=38
comp=Z,0.5nm,0.3s
**DZM Mont Dzumac 77.58 203 eLR LR 00 57 21.5**
comp=Z,74nm,22.1s
**VRAC Vranov 77.96 356 LR LR 01 10 26.3**
comp=Z,23nm,18.4s,baz=53,slow=37
**KOLS Kolonicke sedl 77.97 352 eP P 00 33 40.6 -0.9**
**KOLS Kolonicke sedl 77.97 352 eP P 00 33 40.6 -0.9**
**GERES GERESS Array B 78.52 358 P P 00 33 45.0 +0.3**
comp=Z,0.5nm,0.7s,baz=14,slow=9.1,SNR=3.1
comp=Z,0.5nm,0.7s
**GERES GERESS Array B 78.52 358 P P 00 33 45.0 +0.3**
**VYHS Vyhne 78.66 354 eP P 00 33 50.2 +4.9**
**VYHS Vyhne 78.66 354 eP P 00 33 50.2 +4.9**
**KIV Kislovodsk 79.55 337 eP P 00 33 51.4 +1.0**
KIV pmax pmax
comp=Z,4.0nm,1.1s
KIV MLR MLR
comp=Z,43nm,19.0s
**KBZ Khabaz 79.71 337 LR LR 01 13 26.3**
comp=Z,58nm,19.6s,baz=8.0,slow=39
**MLR Muntele Rosu 81.02 349 LR LR 01 13 36.1**
comp=Z,46nm,19.4s,baz=12,slow=38
**KAPI Kappang 82.52 251 LR LR 01 08 16.8**
comp=Z,30nm,19.4s,baz=354,slow=34
**GNI Garni 82.61 334 LR LR 01 16 59.7**
comp=Z,47nm,18.8s,baz=16,slow=40
**BRTR Keskin Array B 85.51 342 LR LR 01 16 24.6**
comp=Z,42nm,20.9s,baz=347,slow=38
**ESDC Sonseca Array 86.89 11 P P 00 34 27.8 -0.4**
comp=Z,0.2nm,0.4s,baz=352,slow=5.4,SNR=2.6
ESDC LR LR 01 13 30.6
comp=Z,44nm,21.9s,baz=342,slow=36
comp=Z,0.2nm,0.4s
**WRA Warramunga Arr 87.29 231 P P 00 34 27.9 -2.3**
comp=Z,1.0nm,0.7s,baz=34,slow=5.7,SNR=5.2
comp=Z,1.0nm,0.7s
**SDV Santo Domingo 88.31 78 LR LR 01 14 07.5**
comp=Z,24nm,21.1s,baz=32,slow=36
**BAUV El Baul 89.79 75 P P 00 34 44.0 +1.7**
**ASAR Alice Springs 90.69 230 P P 00 34 43.0 -3.2**
comp=Z,1.8nm,0.7s,baz=36,slow=4.9,SNR=3.8
comp=Z,1.8nm,0.7s
**MMAI Mount Meron Ar 91.65 339 LR LR 01 20 19.6**
comp=Z,26nm,18.2s,baz=318,slow=38
**EIL Elat 94.97 339 LR LR 01 24 17.9**
comp=Z,43nm,18.0s,baz=252,slow=39
**PALK Pallekele 95.88 290 LR LR 01 23 42.3**
comp=Z,16nm,20.6s,baz=42,slow=39
**H03N2 Juan Fernandez 116.25 111 T T 02 47 08.7**
baz=323,slow=78,SNR=100
**H03N1 Juan Fernandez 116.27 111 T T 02 47 07.1**
baz=323,slow=78,SNR=110
**H03N3 Juan Fernandez 116.27 111 T T 02 47 09.1**
baz=323,slow=78,SNR=155
**QSPA South Pole Qui 142.74 180 PKhKP PKPpre 00 41 05.8**
comp=Z,1.0nm,0.9s,baz=336,slow=2.4,SNR=2.4
**BOSA Boshof 153.31 330 PKPbc PKPbc 00 41 40.6 -1.0**
comp=Z,3.8nm,0.9s,baz=5.5,slow=0.4,SNR=9.8

**IDC 31 00:25:47.6±2.6, 11°.15S×123°.70E, h0km, mb3.5/1, mbtmp3.6/3, ML3.5/2, Error ellipse: s-maj=224.7km s-min=34.4km az=52.0, South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.46** | **132** | Pn | | Pn | Pn | 00 28 59.2 | -0.9 |
| | 0.2nm,0.3s,baz=307,slow=15,SNR=12 | | | | | | | | |
| WRA | | | | Sn | | Sn | Sn | 00 31 23.4 | -7.2 |
| | 0.5nm,0.3s,baz=297,slow=23,SNR=8.2 | | | | | | | | |
| | 1.1nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **15.79** | **143** | Pn | | Pn | Pn | 00 29 32.6 | +1.1 |
| | 0.3nm,0.3s,baz=320,slow=12,SNR=19 | | | | | | | | |
| ASAR | | | | Sn | | Sn | Sn | 00 32 21.4 | -6.1 |
| | 0.1nm,0.3s,baz=200,slow=22,SNR=5.0 | | | | | | | | |
| | 1.0nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.52** | **331** | P | | P | P | 00 36 52.0 | 0.0 |
| | 0.4nm,0.7s,baz=136,slow=6.0,SNR=2.5 | | | | | | | | |
| | 0.4nm,0.7s | | | | | | | | |

*IDC 31 00:48:03.4±1.9, 5°.89S×149°.29E, h175km±21km, mb3.8/4, mbtmp4.4/5, Error ellipse: s-maj=83.7km s-min=14.1km az=125.0*
*NEIC 31 00:48:03.3±1.6, 5°.9S±0°.1×149°.3E±0°.1, h168km±11km, mb4.6/17, Error ellipse: s-maj=22.5km s-min=4.7km az=133.0*

**ISC 31 00:48:01.2±0.7, 5°.8S±0°.1×149°.2E±0°.1, h150km, n26, σ1s49/28, mb4.4/8, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **3.35** | **61** | Pn | | Pn | **Pn** | **00 48 55.6** | **+2.6** |
| **PMG** | **Port Moresby** | **4.11** | **210** | | | | **Pn** | **00 49 04.7** | **+1.9** |
| **PMG** | **Port Moresby** | **4.11** | **210** | P | | | **Pn** | **00 49 05.0** | **+2.2** |
| | 131nm,0.5s,baz=29,slow=8.3,SNR=44 | | | | | | | | |
| PMG | | | | S | | | **Sn** | **00 49 54.6** | **+3.8** |
| | 197nm,0.5s,baz=324,slow=20,SNR=8.5 | | | | | | | | |
| **COEN** | **Coen** | **10.04** | **216** | Pn | | Pn | **Pn** | **00 50 22.7** | **+0.9** |

**FAKI Fak Fak 17.17 279 P P 00 51 51.0 -0.4**
**MTN Manton Dam 19.16 247 P P 00 52 11.8 -1.3**
MTN lAmb lAmb 00 52 12.2
comp=Z,30nm,1.1s
**WB0 Warramunga Arr 20.00 225 P P 00 52 22.8 +0.4**
WB0 lAmb lAmb 00 52 26.1
comp=Z,18nm,0.8s
**WR0 Warramunga Arr 20.03 224 P P 00 52 22.7 +0.2**
**WRAB Tennant Creek 20.14 225 P P 00 52 23.9 +0.1**
WRAB lAmb lAmb 00 52 24.6
comp=Z,12nm,0.8s
**WB2 Warramunga Arr 20.15 224 P P 00 52 24.1 +0.2**
WB2 lAmb lAmb 00 52 27.5
comp=Z,15nm,0.5s
**WRA Warramunga Arr 20.16 225 P P 00 52 23.7 -0.3**
comp=Z,11nm,0.6s,baz=48,slow=9.9,SNR=106
WRA S S **00 56 01.9 -0.3**
comp=Z,0.6nm,0.8s,baz=50,slow=21,SNR=3.3
comp=Z,11nm,0.6s
**KOUNC Koumac, New Ca 20.69 136 P P 00 52 27.1 -2.5**
**KNRA Kununurra 22.34 242 P P 00 52 45.0 -1.8**
KNRA lAmb lAmb 00 52 49.1
comp=Z,11nm,0.7s
**AS31 Alice Springs 23.07 218 P P 00 52 54.2 +0.5**
**ASAR Alice Springs 23.07 218 P P 00 52 54.4 +0.6**
comp=Z,3.3nm,0.3s,baz=49,slow=8.3,SNR=45
comp=Z,3.3nm,0.3s
**FITZ Fitzroy Crossi 26.05 240 P P 00 53 19.7 -1.1**
**FORT Forrest 31.81 216 P P 00 54 11.4 -0.2**
**MBWA Marble Bar 32.38 239 P P 00 54 15.6 -1.2**
MBWA lAmb lAmb 00 54 16.2
comp=Z,6.4nm,0.7s
**PSA00 Pilbara Seismi 32.45 238 P P 00 54 15.9 -1.5**
PSA00 lAmb lAmb 00 54 17.1
comp=Z,15nm,1.1s
**GIRL Giralia 37.66 240 P P 00 55 01.6 -0.5**
**MORW Morawa 38.95 230 P P 00 55 11.7 -1.1**
MORW lAmb lAmb 00 55 12.4
comp=Z,9.9nm,1.0s
**KHZ Kahutara 42.34 153 P P 00 55 38.7 -1.7**
KHZ lAmb lAmb 00 55 44.6
comp=Z,17nm,1.0s
**PETK Petropavlovsk- 59.15 6 P P 00 57 46.8 +0.9**
comp=Z,1.5nm,0.5s,baz=159,slow=5.9,SNR=5.5
comp=Z,1.5nm,0.5s
**DHY Denali Highway 83.51 24 P P 01 00 13.0 +0.9**
**ILAR Eielson Array 84.46 23 P P 01 00 15.6 -1.1**
comp=Z,1.1nm,0.7s,baz=250,slow=4.9,SNR=11
comp=Z,1.1nm,0.7s
**TORD Torodi Ar. Bea 147.18 285 PKPbc PKPdf 01 07 26.2 +0.8**
comp=Z,0.3nm,0.8s,baz=66,slow=2.9,SNR=2.3

*SDD 31 01:03:42.9±1.8, 17°.50N×70°.93W, h23km±999km, MD3.5, ML3.1, MW3.4*
*OSPL 31 01:03:43.5±1.4, 17°.54N×70°.99W, h11km±11km, ML2.8*

**ISC 31 01:03:40.9±2.0, 17°.51N±0°.09×70°.88W±0°.05, h15km±11km, n18, σ0s93/25, 8C-2D, Dominican Republic region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LOBA2** | **Hotel Casa Bon** | **0.60** | **340** | ⇓ | | ePg | **Pb** | **01 03 53.5** | **+0.3** |
| LOBA2 | | | | ⇓ | | eSg | **Sb** | **01 04 01.1** | **-0.5** |
| **BRH1** | **Barahona** | **0.72** | **344** | ⇑ | | ePg | **Pb** | **01 03 55.6** | **+0.3** |
| BRH1 | | | | ⇑ | | eSg | **Sb** | **01 04 05.0** | **0.0** |
| **PODR** | **Polo** | **0.76** | **330** | | | ePg | **Pg** | **01 03 55.5** | **-0.2** |
| PODR | | | | | | IAML | | 01 04 06.3 | |
| | comp=N,2μm,0.5s | | | | | | | | |
| PODR | | | | | | IAML | | 01 04 06.3 | |
| | comp=N,2μm,0.5s | | | | | | | | |
| PODR | | | | | | IAML | | 01 04 07.7 | |
| | comp=E,3μm,0.2s | | | | | | | | |
| **PODR** | **Polo** | **0.76** | **330** | *i* | P | | **Pg** | **01 03 55.5** | **-0.2** |
| PODR | | | | | eS | | **Sg** | **01 04 05.0** | **-0.8** |
| PODR | | | | | | IAML | | 01 04 06.8 | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| **BANI** | **BANI** | **1.01** | **29** | ⇑ | | ePg | **Pn** | **01 04 02.5** | **+1.8** |
| BANI | | | | | | IAML | | 01 04 17.9 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| BANI | | | | | | IAML | | 01 04 18.0 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| BANI | | | | | | IAML | | 01 04 18.1 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| **NEDR** | **Neiba UASD** | **1.10** | **332** | ⇑ | | ePg | **Pb** | **01 04 01.4** | **-0.2** |
| NEDR | | | | | | IAML | | 01 04 18.6 | |
| | comp=E,234nm,0.3s | | | | | | | | |
| NEDR | | | | | | IAML | | 01 04 19.0 | |
| | comp=N,187nm,0.5s | | | | | | | | |
| NEDR | | | | | | IAML | | 01 04 19.0 | |
| | comp=N,187nm,0.5s | | | | | | | | |
| **ABDR** | **Alto Bandera** | **1.32** | **10** | ⇑ | | ePg | **Pg** | **01 04 06.2** | **-0.2** |
| ABDR | | | | | | IAML | | 01 04 24.0 | |
| | comp=N,1μm,0.2s | | | | | | | | |
| ABDR | | | | | | IAML | | 01 04 24.0 | |
| | comp=N,958nm,0.2s | | | | | | | | |
| ABDR | | | | | | IAML | | 01 04 24.6 | |
| | comp=E,2μm,0.2s | | | | | | | | |
| **JIDR** | **Jimani** | **1.35** | **317** | ⇑ | | ePg | **Pn** | **01 04 04.8** | **-0.4** |
| JIDR | | | | | | IAML | | 01 04 29.7 | |
| | comp=E,207nm,0.3s | | | | | | | | |
| JIDR | | | | | | IAML | | 01 04 31.2 | |
| | comp=N,108nm,0.6s | | | | | | | | |
| JIDR | | | | | | IAML | | 01 04 31.2 | |
| | comp=N,108nm,0.6s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **1.52** | **345** | | | ePg | **Pn** | **01 04 07.7** | **+0.1** |
| SDDR | | | | | | eSg | **Sb** | **01 04 27.7** | **-0.2** |
| SDDR | | | | | | IAML | | 01 04 30.8 | |
| | comp=N,95nm,0.2s | | | | | | | | |
| SDDR | | | | | | IAML | | 01 04 30.9 | |
| | comp=N,95nm,0.2s | | | | | | | | |
| SDDR | | | | | | IAML | | 01 04 31.5 | |
| | comp=E,64nm,0.4s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **1.52** | **345** | *i* | P | | **Pn** | **01 04 07.7** | **+0.1** |
| SDDR | | | | | eS | | **Sn** | **01 04 26.4** | **-0.7** |
| SDDR | | | | | | IAML | | 01 04 31.0 | |
| | comp=Z,53nm,0.3s | | | | | | | | |
| **PAPH** | **Port-au-Prince** | **1.69** | **307** | | | ePg | **Pn** | **01 04 11.3** | **+1.4** |
| PAPH | | | | | | IAML | | 01 04 33.1 | |
| | comp=N,189nm,1.7s | | | | | | | | |
| **PAPH** | **Port-au-Prince** | **1.69** | **307** | *i* | P | | **Pn** | **01 04 10.0** | **+0.2** |
| PAPH | | | | | | IAML | | 01 04 41.5 | |
| | comp=Z,47nm,0.6s | | | | | | | | |
| **REDR** | **Restauracion** | **1.72** | **344** | | | ePg | **Pg** | **01 04 14.1** | **+0.1** |
| REDR | | | | | ⇑ | eSg | **Sg** | **01 04 38.0** | **+1.7** |
| REDR | | | | | | IAML | | 01 04 38.6 | |
| | comp=E,220nm,0.2s | | | | | | | | |
| REDR | | | | | | IAML | | 01 04 39.5 | |
| | comp=N,165nm,0.1s | | | | | | | | |
| REDR | | | | | | IAML | | 01 04 39.5 | |
| | comp=N,165nm,0.1s | | | | | | | | |
| **SC01** | **Santiago de lo** | **1.91** | **4** | *e* | S | | **Sn** | **01 04 36.5** | **-0.4** |
| SC01 | | | | | | IAML | | 01 04 45.4 | |
| | comp=Z,77nm,1.1s | | | | | | | | |
| **SADR** | **Isla Saona** | **2.11** | **71** | | | ePg | **Pb** | **01 04 18.2** | **-0.7** |
| SADR | | | | | | eSg | **Sb** | **01 04 43.9** | **-1.0** |
| SADR | | | | | | IAML | | 01 05 03.4 | |
| | comp=N,142nm,2.9s | | | | | | | | |
| **MIDR** | **Miches** | **2.27** | **50** | ⇑ | | ePg | **Pb** | **01 04 20.2** | **-1.4** |
| MIDR | | | | | | IAML | | 01 04 47.7 | |
| | comp=N,28nm,0.4s | | | | | | | | |
| MIDR | | | | | | IAML | | 01 04 47.9 | |
| | comp=E,91nm,0.5s | | | | | | | | |
| MIDR | | | | | | IAML | | 01 05 15.2 | |
| | comp=N,28nm,1.7s | | | | | | | | |
| **PCDR** | **Punta Cana, DR** | **2.58** | **67** | *i* | P | | **Pb** | **01 04 26.1** | **-0.8** |
| **CRPR** | **Cabo Rojo, PR** | **3.62** | **82** | *i* | P | | **Pn** | **01 04 38.5** | **+1.9** |
| CRPR | | | | | | IAML | | 01 05 27.6 | |
| | comp=Z,34nm,1.6s | | | | | | | | |

**NEIC 31 01:08:59.1±0.6, 37°.35N±0°.01×97°.883W±0°.009, h4km±2km, mb_Lg2.2/21, ML2.7/36, Error ellipse: s-maj=2.1km s-min=1.1km az=176.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.11** | **240** | | | Pg | Pg | 01 09 02.0 | +0.8 |
| KAN12 | | | | | | Sg | Sg | 01 09 03.9 | +1.2 |
| KAN12 | | | | | | IAML | | 01 09 04.1 | |
| | comp=N,5μm,0.3s | | | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.14** | **210** | | | | Pg | 01 09 02.6 | +0.7 |
| KAN08 | | | | | | Sg | Sg | 01 09 04.8 | +1.0 |
| KAN08 | | | | | | IAML | | 01 09 05.2 | |
| | comp=N,2μm,0.2s | | | | | | | | |
| KAN08 | | | | | | IAML | | 01 09 05.0 | |
| | comp=E,3μm,0.3s | | | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **KS21** | **Milan North St** | **0.19 110** | | Pg | | 01 09 03.2 +0.5 |
| KS21 | | | Sg | Sg | | 01 09 05.9 +0.8 |
| **KS21** | **Milan North St** | **0.19 110** | IAML | | | 01 09 07.5 |
| | comp=E,2μm,0.1s | | | | | |
| KS21 | | | IAML | | | 01 09 08.3 |
| | comp=E,1μm,0.2s | | | | | |
| **KAN01** | **Argonia South** | **0.22 153** | | Pg | | 01 09 03.9 +0.6 |
| **KAN05** | **Bluff City Nor** | **0.24 178** | Pg | Pg | | 01 09 04.3 +0.6 |
| KAN05 | | | IAML | | | 01 09 09.6 |
| | comp=E,936nm,0.3s | | | | | |
| **KAN09** | **Caldwell North** | **0.30 135** | | Pg | | 01 09 05.3 +0.5 |
| **KAN17** | **Caldwell West** | **0.32 163** | Pg | Pg | | 01 09 05.8 +0.6 |
| KAN17 | | | IAML | | | 01 09 15.1 |
| | comp=E,683nm,0.3s | | | | | |
| **KAN14** | **Manchester OK** | **0.40 189** | | Pg | | 01 09 07.1 +0.4 |
| KAN14 | | | Sg | Sg | | 01 09 12.9 +0.9 |
| KAN14 | | | IAML | | | 01 09 13.0 |
| | comp=E,556nm,0.2s | | | | | |
| **KAN13** | **South Haven SW** | **0.47 136** | | Pg | | 01 09 08.4 +0.4 |
| KAN13 | | | Sg | Sg | | 01 09 15.3 +1.2 |
| KAN13 | | | IAML | | | 01 09 20.2 |
| | comp=E,715nm,0.3s | | | | | |
| KAN13 | | | IAML | | | 01 09 23.5 |
| | comp=N,710nm,0.3s | | | | | |
| **OK032** | **Salt Plains WL** | **0.60 206** | Pg | Pg | | 01 09 11.1 +0.4 |
| OK032 | | | Sg | Sg | | 01 09 19.4 +0.9 |
| OK032 | | | IAML | | | 01 09 19.6 |
| | comp=N,274nm,0.3s | | | | | |
| **BLOK** | **Blackwell** | **0.80 138** | | Pg | | 01 09 14.5 +0.2 |
| BLOK | | | Sg | Sg | | 01 09 24.6 0.0 |
| **CROK** | **Carrier** | **0.85 185** | | Pg | | 01 09 15.4 +0.1 |
| CROK | | | IAML | | | 01 09 30.9 |
| | comp=E,349nm,0.3s | | | | | |
| CROK | | | IAML | | | 01 09 33.6 |
| | comp=N,210nm,0.4s | | | | | |
| **OK038** | **West end E0370** | **1.11 219** | | Pb | | 01 09 20.9 0.0 |
| OK038 | | | IAML | | | 01 09 45.4 |
| | comp=N,217nm,0.3s | | | | | |
| **T35A** | **Sooner Cattle** | **1.18 111** | Pg | Pg | | 01 09 21.3 -0.4 |
| T35A | | | IAML | | | 01 09 41.6 |
| | comp=N,198nm,0.3s | | | | | |
| **OK051** | **E0350 and S346** | **1.19 135** | | Pg | | 01 09 21.5 -0.4 |
| OK051 | | | IAmb_Lg | | | 01 09 36.2 |
| | comp=E,15nm,1.2s | | | | | |
| OK051 | | | IAML | | | 01 09 50.5 |
| | comp=E,206nm,0.2s | | | | | |
| **OK048** | **Pawnee Station** | **1.20 141** | Pg | Pg | | 01 09 21.7 -0.4 |
| OK048 | | | IAML | | | 01 09 42.3 |
| | comp=Z,98nm,0.3s | | | | | |
| **R32A** | **Long Quarter,** | **1.25 329** | | Pg | | 01 09 22.7 -0.4 |
| **QUOK** | **Quay** | **1.51 141** | | Pn | | 01 09 27.1 +0.3 |
| **OK052** | **Battle Ridge R** | **1.61 147** | | Pn | | 01 09 28.6 +0.4 |
| **OK031** | **S. Brethren Rd** | **1.63 149** | | Pn | | 01 09 28.8 +0.3 |
| **DEOK** | **Depew** | **1.87 143** | Pn | Pn | | 01 09 32.3 +0.4 |
| **FNO** | **Franklin** | **2.12 169** | Pn | Pb | | 01 09 37.1 -1.1 |
| **TUL3** | **Leonard** | **2.21 130** | | Pn | | 01 09 37.1 +0.5 |
| **W35A** | **Tecumseh** | **2.34 159** | Pn | Pn | | 01 09 39.1 +0.8 |
| **U38A** | **Gravette** | **2.95 107** | IAmb_Lg | | | 01 10 33.2 |
| | comp=Z,6.0nm,0.8s | | | | | |
| **X37A** | **Clayton** | **3.43 143** | | Pn | | 01 09 54.5 +1.3 |
| X37A | | | IAmb_Lg | | | 01 10 52.8 |
| | comp=Z,7.6nm,0.9s | | | | | |
| **S39A** | **Bolivar** | **3.64 83** | | Pn | | 01 09 57.2 +1.0 |
| **RTBA** | **Rita Blanca** | **4.00 258** | Pn | Pn | | 01 10 02.4 +1.2 |
| **KSCO** | **Kaye Shedlock'** | **4.09 295** | IAmb_Lg | | | 01 11 08.7 |
| | comp=Z,4.6nm,0.7s | | | | | |
| **DKNS** | **Dickens** | **4.43 215** | IAmb_Lg | | | 01 11 25.4 |
| | comp=Z,7.8nm,0.9s | | | | | |
| **MIAR** | **Mount Ida** | **4.48 127** | IAmb_Lg | | | 01 11 24.0 |
| | comp=Z,5.0nm,0.8s | | | | | |
| **MGMO** | **Mountain Grove** | **4.48 91** | Pn | Pn | | 01 10 06.0 -1.8 |
| MGMO | | | IAmb_Lg | | | 01 11 22.8 |
| | comp=Z,7.5nm,0.8s | | | | | |
| **R40A** | **Maddies Statio** | **4.54 76** | Pn | Pn | | 01 10 09.2 +0.6 |
| **SN07** | **Snyder 07** | **4.91 211** | IAmb_Lg | | | 01 11 47.7 |
| | comp=Z,3.9nm,0.9s | | | | | |
| **X40A** | **Basin Creek Fa** | **4.99 123** | IAmb_Lg | | | 01 11 42.6 |
| | comp=Z,5.5nm,1.0s | | | | | |
| **PBMO** | **Poplar Bluff** | **5.99 93** | IAmb_Lg | | | 01 12 07.4 |
| | comp=Z,5.1nm,0.7s | | | | | |

*IDC **31** 01:12:00.8±1.5, 14°.55S×171°.29E, h623$^{km}$±17$^{km}$, mb3.4/8, mbtmp4.2/10, Error ellipse: s-maj=27.6km s-min=14.6km az=156.0*
*NEIC **31** 01:12:03.1±1.2, 14°.7S±0°.1×171°.3E±0°.1, h648$^{km}$±9$^{km}$, mb4.4/28, Error ellipse: s-maj=24.7km s-min=11.5km az=135.0*

**ISC 31 01:11:59.2**±0.7, **14°.4S**±0°.1×**171°.32E**±0°.09, **h600**$^{km}$, **n41,** σ1§**43**/43, **mb4.3**/**22, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **7.26 118** | | P | **P** | **01 13 54.9** | **+3.2** |
| | 1.9nm,0.4s,baz=281,slow=12,SNR=5.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **8.90 211** | | P | **P** | **01 14 09.8** | **+2.6** |
| **DZM** | **Mont Dzumac** | **8.90 211** | | P | **P** | **01 14 09.1** | **+1.8** |
| | 4.5nm,0.5s,baz=329,slow=17,SNR=11 | | | | | | |
| **PINNC** | **Pines Island,** | **8.93 204** | | P | **P** | **01 14 09.3** | **+1.9** |
| **EIDS** | **Eidsvold** | **21.89 237** | | P | **P** | **01 16 09.6** | **-0.3** |
| EIDS | | | | IAmb | IAmb | 01 16 10.1 | |
| | comp=Z,5.1nm,0.7s | | | | | | |
| **ARMA** | **Armidale** | **24.11 225** | | P | **P** | **01 16 30.5** | **+0.8** |
| ARMA | | | | IAmb | IAmb | 01 16 33.7 | |
| | comp=Z,19nm,1.2s | | | | | | |
| **CTAO** | **Charters Tower** | **24.57 253** | | P | **P** | **01 16 34.1** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 01 16 34.6 | |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **BKZ** | **Black Stump Fm** | **25.06 170** | | P | **P** | **01 16 36.2** | **-1.7** |
| **QRZ** | **Quartz Range** | **26.32 178** | | P | **P** | **01 16 48.7** | **-0.2** |
| **MRZ** | **Mangatainoka R** | **26.40 173** | | P | **P** | **01 16 47.7** | **-1.9** |
| **NNZ** | **Nelson** | **26.75 177** | | P | **P** | **01 16 51.6** | **-1.0** |
| NNZ | | | | IAmb | IAmb | 01 16 51.8 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **COEN** | **Coen** | **27.28 267** | | P | **P** | **01 16 58.5** | **+0.9** |
| COEN | | | | IAmb | IAmb | 01 17 02.2 | |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **LTZ** | **Lake Taylor** | **28.27 179** | | P | **P** | **01 17 03.4** | **-2.5** |
| **LBZ** | **Lake Benmore** | **29.88 182** | | P | **P** | **01 17 17.9** | **-1.8** |
| LBZ | | | | IAmb | IAmb | 01 17 24.8 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **DCZ** | **Deep Cove** | **31.14 186** | | P | **P** | **01 17 29.4** | **-1.0** |
| DCZ | | | | IAmb | IAmb | 01 17 38.9 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **STKA** | **Stephens Creek** | **32.22 232** | | P | **P** | **01 17 39.9** | **+0.1** |
| **STKA** | **Stephens Creek** | **32.22 232** | | P | **P** | **01 17 40.0** | **+0.2** |
| | comp=Z,5.2nm,0.4s,baz=59,slow=9.1,SNR=20 | | | | | | |
| | comp=Z,5.2nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **35.51 256** | | P | **P** | **01 18 06.7** | **-0.8** |
| WR0 | | | | IAmb | IAmb | 01 18 07.5 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **35.64 256** | | P | **P** | **01 18 07.8** | **-0.8** |
| WB0 | | | | IAmb | IAmb | 01 18 08.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **35.69 256** | | P | **P** | **01 18 08.3** | **-0.6** |
| WB2 | | | | IAmb | IAmb | 01 18 09.0 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.70 256** | | P | **P** | **01 18 08.3** | **-0.8** |
| | comp=Z,6.6nm,0.5s,baz=86,slow=8.7,SNR=97 | | | | | | |
| WRA | | | | ScP | **S** | **01 23 08.9** | **+4.3** |
| | comp=Z,0.9nm,0.7s,baz=77,slow=3.7,SNR=3.4 | | | | | | |
| | comp=Z,6.6nm,0.5s | | | | | | |
| **AS31** | **Alice Springs** | **36.44 250** | | P | **P** | **01 18 14.8** | **-0.4** |
| **ASAR** | **Alice Springs** | **36.45 250** | | P | **P** | **01 18 14.7** | **-0.5** |
| | comp=Z,16nm,0.6s,baz=75,slow=9.6,SNR=203 | | | | | | |
| ASAR | | | | ScP | **ScP** | **01 23 10.7** | **-2.2** |
| | comp=Z,1.3nm,1.0s,baz=88,slow=4.4,SNR=4.7 | | | | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **36.89 234** | | P | **P** | **01 18 18.5** | **-0.2** |
| **KNRA** | **Kununurra** | **41.06 263** | | P | **P** | **01 18 52.2** | **-0.1** |
| KNRA | | | | IAmb | IAmb | 01 18 57.9 | |
| | comp=Z,32nm,1.5s | | | | | | |
| **FORT** | **Forrest** | **42.83 240** | | P | **P** | **01 19 05.3** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **43.92 259** | | P | **P** | **01 19 14.5** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **49.29 254** | | P | **P** | **01 19 54.2** | **-0.7** |
| **PSA00** | **Pilbara Seismi** | **49.29 254** | | P | **P** | **01 19 54.9** | **0.0** |
| PSA00 | | | | IAmb | IAmb | 01 20 03.0 | |
| | comp=Z,25nm,1.2s | | | | | | |
| **MBWA** | **Marble Bar** | **49.40 254** | | P | **P** | **01 19 55.7** | **0.0** |
| **NWAO** | **Narrogin (SRO)** | **52.27 239** | | P | **P** | **01 20 15.4** | **-0.9** |
| NWAO | | | | IAmb | IAmb | 01 20 24.4 | |
| | comp=Z,29nm,1.3s | | | | | | |
| **CASY** | **Casey** | **65.31 203** | | P | **P** | **01 21 41.7** | **-1.1** |
| CASY | | | | IAmb | IAmb | 01 21 42.3 | |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.60 180** | | P | **P** | **01 22 42.0** | **-1.5** |
| **QSPA** | **South Pole Qui** | **75.60 180** | | P | **P** | **01 22 41.7** | **-1.9** |
| | comp=Z,1.1nm,0.6s,baz=16,slow=0.1,SNR=13 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **DSP** | **Deep Springs** | **83.95 49** | | P | **P** | **01 23 28.5** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **84.13 48** | | P | **P** | **01 23 29.4** | **+0.7** |
| | comp=Z,1.1nm,0.7s,baz=231,slow=7.7,SNR=11 | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **KVN** | **Kaiserville** | **84.52 48** | | P | **P** | **01 23 31.2** | **+0.8** |
| **ILAR** | **Eielson Array** | **85.07 17** | | P | **P** | **01 23 31.1** | **-1.2** |
| | comp=Z,0.8nm,0.6s,baz=238,slow=4.8,SNR=7.4 | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **PDAR** | **Pinedale Array** | **91.89 46** | | P | **P** | **01 24 04.8** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=238,slow=6.2,SNR=2.4 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **TXAR** | **Lajitas Array** | **92.70 61** | | P | **P** | **01 24 09.2** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=220,slow=5.7,SNR=6.4 | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.84 264** | | PKPab | **PKPab** | **01 32 18.7** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=93,slow=4.6,SNR=4.4 | | | | | | |

*IDC **31** 01:13:59.0±1.2, 14°.47S×179°.39W, h0$^{km}$, mb3.9/8, mbtmp3.9/9, ML6.1/1, MS4.0/38, Error ellipse: s-maj=54.0km s-min=22.3km az=142.0*
*GCMT **31** 01:14:03.0±0.2, 14°.35S±0°.01×179°.37W±0°.01, h17$^{km}$±1$^{km}$, MW4.9/107, Moment Tensor Solution. s38,c49; s107,c149; Duration: 0 Moment tensor: Scale 10$^{16}$Nm; $M_{rr}$-0.72±.09; $M_{\theta\theta}$0.20±.08; $M_{\phi\phi}$0.52±.08; $M_{r\theta}$0.85±.20; $M_{\theta\phi}$2.64±.07; $M_{\phi r}$-0.70±.21; Best double couple: $M_o$2.93000×10$^{16}$ NP1:$\phi_b$265.00000°, δ72.00000°, λ-21.00000°. NP2:$\phi_b$2.00000°, δ70.00000°, λ-161.00000°. Principal axes: T 3.0080, Plg1.0000°, Azm313.0000°; N -0.1550, Plg63.0000°, Azm46.0000°; P -2.8530, Plg27.0000°, Azm223.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Surface-wave location Triangular moment-rate function*

**ISC 31 01:14:05.0**±0.8, **14°.4S**±0°.2×**179°.6W**±0°.2, **h35**$^{km}$, **n52,** σ1§**67**/22, **mb3.9**/**9, MS4.1**/35, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.00 215** | | Pn | **Pn** | **01 15 02.1** | **-1.8** |
| | 49nm,0.3s,baz=80,slow=3.8,SNR=151 | | | | | | |
| MSVF | | | | LR | LR | 01 16 29.1 | |
| | comp=Z,4μm,20.7s,baz=12,slow=37 | | | | | | |
| | 81nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.30 238** | | LR | LR | 01 22 29.7 | |
| | comp=Z,1μm,20.1s,baz=47,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **20.00 113** | | LR | LR | 01 24 28.4 | |
| | comp=Z,432nm,21.1s,baz=260,slow=32 | | | | | | |
| **PPT** | **Papeete** | **28.98 100** | | LR | LR | 01 29 22.8 | |
| | comp=Z,108nm,18.3s,baz=258,slow=32 | | | | | | |
| **STKA** | **Sthens Creek** | **39.45 237** | | LR | LR | 01 36 43.4 | |
| | comp=Z,244nm,18.2s,baz=60,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.27 256** | | P | **P** | **01 22 12.1** | **+0.5** |
| | 0.9nm,1.1s,baz=87,slow=7.4,SNR=2.6 | | | | | | |
| WRA | | | | LR | LR | 01 41 06.0 | |
| | comp=Z,181nm,18.4s,baz=97,slow=37 | | | | | | |
| | 0.9nm,1.1s | | | | | | |
| **ASAR** | **Alice Springs** | **44.77 251** | | P | **P** | **01 22 15.7** | **+0.1** |
| | 0.7nm,0.6s,baz=80,slow=8.3,SNR=5.4 | | | | | | |
| | 0.7nm,0.6s | | | | | | |
| **JCJ** | **Chichijima** | **55.53 318** | | LR | LR | 01 43 59.6 | |
| | comp=Z,210nm,20.1s,baz=114,slow=32 | | | | | | |
| **DAV** | **Davao City (W)** | **58.45 288** | | LR | LR | 01 46 54.1 | |
| | comp=Z,66nm,20.6s,baz=116,slow=34 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.91 240** | | LR | LR | 01 48 03.2 | |
| | comp=Z,371nm,21.1s,baz=100,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **64.48 323** | | LR | LR | 01 47 43.9 | |
| | comp=Z,121nm,21.7s,baz=43,slow=31 | | | | | | |
| **JOW** | **Kunigami** | **65.18 309** | | LR | LR | 01 52 04.1 | |
| | comp=Z,36nm,18.3s,baz=92,slow=35 | | | | | | |
| **RPN** | **Rapa Nui** | **66.14 114** | | LR | LR | 01 46 00.5 | |
| | comp=Z,110nm,21.7s,baz=280,slow=29 | | | | | | |
| **JNU** | **Nakatsue** | **66.88 316** | | LR | LR | 01 48 33.6 | |
| | comp=Z,82nm,19.6s,baz=122,slow=31 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **67.11 356** | | LR | LR | 01 49 13.8 | |
| | comp=Z,110nm,20.3s,baz=98,slow=32 | | | | | | |
| **ASAJ** | **Asahikawa** | **67.72 331** | | LR | LR | 01 49 18.1 | |
| | comp=Z,209nm,21.8s,baz=157,slow=31 | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.06 346** | | P | **P** | **01 25 12.9** | **-0.4** |
| | 2.0nm,0.8s,baz=102,slow=6.2,SNR=4.3 | | | | | | |
| PETK | | | | LR | LR | 01 49 36.0 | |
| | comp=Z,123nm,21.9s,baz=155,slow=30 | | | | | | |
| | 2.0nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **71.39 318** | | LR | LR | 01 51 11.9 | |
| | comp=Z,118nm,21.6s,baz=125,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **75.60 180** | | P | **P** | **01 25 48.2** | **+2.0** |
| | 2.8nm,1.0s,baz=35,slow=2.7,SNR=4.8 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **76.57 40** | | LR | LR | 01 52 25.1 | |
| | comp=Z,120nm,19.9s,baz=247,slow=30 | | | | | | |
| **KLR** | **Kul'dur** | **76.57 330** | | LR | LR | 01 55 18.1 | |
| | comp=Z,48nm,21.4s,baz=111,slow=32 | | | | | | |
| **PFO** | **Pinyon Flats O** | **76.75 50** | | LR | LR | 01 51 06.9 | |
| | comp=Z,109nm,21.3s,baz=248,slow=29 | | | | | | |
| **LPIG** | **La Paz** | **77.70 61** | | LR | LR | 01 52 33.3 | |
| | comp=Z,130nm,18.4s,baz=210,slow=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.73 45** | | P | **P** | **01 25 57.4** | **-1.4** |
| | 0.9nm,0.9s,baz=233,slow=10,SNR=5.0 | | | | | | |
| NVAR | | | | LR | LR | 01 52 12.1 | |
| | comp=Z,162nm,22.0s,baz=268,slow=30 | | | | | | |
| | 0.9nm,0.9s | | | | | | |
| **BBB** | **Bella Bella** | **79.83 29** | | LR | LR | 01 52 32.3 | |
| | comp=Z,97nm,20.7s,baz=204,slow=29 | | | | | | |
| **ILAR** | **Eielson Array** | **82.78 18** | | P | **P** | **01 26 24.1** | **-1.0** |
| | 1.2nm,1.1s,baz=236,slow=6.4,SNR=3.1 | | | | | | |
| | 1.2nm,1.1s | | | | | | |
| **DLBC** | **Dease Lake** | **83.11 24** | | LR | LR | 01 56 58.9 | |
| | comp=Z,58nm,19.2s,baz=211,slow=31 | | | | | | |
| **NEW** | **Newport** | **83.38 37** | | LR | LR | 02 00 15.1 | |
| | comp=Z,44nm,18.2s,baz=220,slow=33 | | | | | | |
| **ANMO** | **Albuquerque** | **84.83 52** | | LR | LR | 01 56 12.6 | |
| | comp=Z,80nm,20.9s,baz=246,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.10 58** | | P | **P** | **01 26 37.3** | **-0.6** |
| | 0.6nm,1.0s,baz=259,slow=9.1,SNR=3.2 | | | | | | |
| TXAR | | | | LR | LR | 02 00 02.4 | |
| | comp=Z,73nm,18.1s,baz=236,slow=32 | | | | | | |
| | 0.6nm,1.0s | | | | | | |
| **PDAR** | **Pinedale Array** | **85.62 44** | | P | **P** | **01 26 39.6** | **-0.7** |
| | 0.2nm,0.3s,baz=197,slow=1.5,SNR=3.7 | | | | | | |
| PDAR | | | | LR | LR | 01 57 33.0 | |
| | comp=Z,71nm,20.2s,baz=252,slow=31 | | | | | | |
| | 0.2nm,0.3s | | | | | | |
| **YAK** | **Yakutsk** | **85.96 339** | | LR | LR | 02 01 05.7 | |
| | comp=Z,36nm,19.6s,baz=132,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **86.67 290** | | LR | LR | 02 02 25.0 | |
| | comp=Z,72nm,20.1s,baz=125,slow=34 | | | | | | |
| **CMIG** | **Matias Romero** | **89.22 72** | | LR | LR | 01 59 49.5 | |
| | comp=Z,68nm,18.0s,baz=246,slow=31 | | | | | | |
| **SONM** | **Songino Array** | **90.21 320** | | P | **P** | **01 27 02.6** | **+0.5** |
| | 1.0nm,0.8s,baz=123,slow=5.5,SNR=5.4 | | | | | | |
| SONM | | | | LR | LR | 02 06 18.5 | |
| | comp=Z,59nm,18.5s,baz=106,slow=35 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.66 25** | | LR | LR | 02 01 27.9 | |
| | comp=Z,74nm,19.0s,baz=281,slow=31 | | | | | | |
| **TIXI** | **Tiksi** | **92.54 346** | | LR | LR | 02 05 22.9 | |
| | comp=Z,90nm,19.9s,baz=163,slow=33 | | | | | | |
| **PLCA** | **Paso Flores** | **94.52 134** | | LR | LR | 02 00 46.4 | |
| | comp=Z,55nm,21.4s,baz=228,slow=30 | | | | | | |
| **JTS** | **Las Juntas de** | **96.93 81** | | LR | LR | 01 59 45.8 | |
| | comp=Z,36nm,21.6s,baz=282,slow=28 | | | | | | |
| **ULM** | **Lac du Bonnet** | **96.98 40** | | LR | LR | 02 06 48.5 | |
| | comp=Z,57nm,18.6s,baz=98,slow=33 | | | | | | |
| **ATAH** | **Atahualpa** | **98.95 100** | | LR | LR | 02 03 14.0 | |
| | comp=Z,77nm,20.0s,baz=235,slow=30 | | | | | | |
| **RONA** | **Rosalia, Austr** | **144.31 342** | | *e*PKP | **PKiKP** | **01 33 42.1** | **+0.9** |
| | 3.4nm,1.2s | | | | | | |
| **ARSA** | **Arzyg** | **144.95 342** | | *e*PKP | **PKiKP** | **01 33 44.5** | **+2.1** |
| | 3.7nm,1.2s | | | | | | |
| **SOKA** | **Soboth** | **145.61 342** | | *e*PKP | **PKiKP** | **01 33 44.3** | **+0.4** |
| | 4.2nm,1.1s | | | | | | |
| **KBA** | **Koelnbreinsper** | **145.72 344** | | *e*PKiKP | **PKiKP** | **01 33 46.2** | **+2.0** |
| | 4.8nm,1.1s | | | | | | |
| **RETA** | **Reutte** | **145.94 347** | | *e*PKP | **PKiKP** | **01 33 46.4** | **+1.8** |
| | 6.3nm,1.1s | | | | | | |
| **WTTA** | **Wattenberg** | **145.96 346** | | *e*PKP | **PKPab** | **01 33 41.4** | **-0.4** |
| | 3.3nm,1.0s | | | | | | |
| WTTA | | | | *e*PKP | **PKiKP** | **01 33 45.6** | **+0.9** |
| | 3.8nm,1.0s | | | | | | |
| **MOTA** | **Moosalm** | **146.01 347** | | *e*PKiKP | **PKiKP** | **01 33 48.4** | **+3.6** |
| | 8.7nm,1.4s | | | | | | |
| **MYKA** | **Terra Mystica** | **146.05 344** | | *e*PKP | **PKiKP** | **01 33 45.6** | **+0.8** |
| | 5.3nm,0.8s | | | | | | |
| **SQTA** | **Sankt Quirin** | **146.10 347** | | *e*PKiKP | **PKiKP** | **01 33 47.9** | **+3.0** |
| | 5.6nm,1.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **146.24 345** | | *e*PKP | **PKiKP** | **01 33 45.5** | **+0.3** |
| | 4.2nm,1.1s | | | | | | |
| **DAVA** | **Damuels** | **146.31 348** | | *e*PKP | **PKiKP** | **01 33 47.6** | **+2.2** |
| | 5.8nm,1.0s | | | | | | |

*KRNET **31** 01:16:24.8±0.1, 40°.00N×71°.94E, h19$^{km}$, mb3.3*
*ISU **31** 01:16:26.8, 40°.04N×71°.92E, h8$^{km}$*
*NNC **31** 01:16:28.9±1.8, 40°.20N×71°.98E, h0$^{km}$, mb3.8, mpv3.5, Error ellipse: s-maj=15.0km s-min=8.5km az=178.0*
*SOME **31** 01:16:32.3, 40°.37N×72°.15E, h5$^{km}$*

**ISC 31 01:16:24.5**±0.8, **40°.01N**±0°.03×**72°.01E**±0°.02, **h10**$^{km}$, **n56,** σ1§**90**/98, **24C-27D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FRG** | **Fergana** | **0.40 335** | | P | **Pb** | **01 16 34.3** | **+0.5** |
| FRG | | | | S | **Sb** | **01 16 39.8** | **-0.2** |
| **DRK** | **Karamyk** | **0.55 197** | ⇓ | *e*P | **Pg** | **01 16 35.2** | **-0.1** |
| | baz=91 | | | | | | |
| DRK | | | ⇓ | *e*S | **Sg** | **01 16 42.8** | **+0.2** |
| | baz=91 | | | | | | |
| **OHH** | **Osh** | **0.79 49** | ⇑ | *e*P | **Pb** | **01 16 40.6** | **+0.3** |
| | baz=51 | | | | | | |
| OHH | | | ⇑ | *e*S | **Sb** | **01 16 51.7** | **+0.6** |
| | baz=51 | | | | | | |
| **BTK** | **Batken** | **0.92 273** | ⇑ | *e*P | **Pg** | **01 16 40.9** | **-1.2** |
| | baz=74 | | | | | | |
| BTK | | | ⇑ | *e*S | **Sg** | **01 16 52.8** | **-1.2** |
| | baz=74 | | | | | | |
| **NAM** | **Namangan** | **1.02 345** | | P | **Pn** | **01 16 46.1** | **+1.2** |
| NAM | | | | S | **Sn** | **01 17 00.5** | **+1.3** |
| **SFK** | **Sufi-Kurgan** | **1.15 89** | ⇑ | *e*P | **Pn** | **01 16 47.1** | **+0.2** |
| | baz=89 | | | | | | |
| SFK | | | ⇑ | *i*S | **Sn** | **01 17 03.1** | **+0.3** |
| | baz=89 | | | | | | |
| **GAR** | **Garm** | **1.65 233** | ⇓ | *e*P | **Pn** | **01 16 54.1** | **+0.4** |
| | baz=32 | | | | | | |
| GAR | | | ⇓ | *e*S | **Sn** | **01 17 15.4** | **+0.4** |
| | baz=32 | | | | | | |
| **TRKS** | **Terek-Say** | **1.66 337** | ⇓ | *e*P | **Pn** | **01 16 53.7** | **-0.1** |
| | baz=39 | | | | | | |
| TRKS | | | ⇓ | *e*S | **Sn** | **01 17 14.6** | **-0.6** |
| | baz=39 | | | | | | |
| **ARK** | **Arkit** | **1.79 359** | ⇓ | *e*P | **Pb** | **01 16 57.4** | **0.0** |
| | baz=1.0 | | | | | | |
| ARK | | | ⇓ | *i*S | **Sg** | **01 17 21.1** | **-0.9** |
| | baz=1.0 | | | | | | |
| **TGS** | **TashGRES** | **2.36 308** | | P | **Pg** | **01 17 09.0** | **-0.7** |
| TGS | | | | S | **Sg** | **01 17 41.8** | **+1.5** |
| **KUMR** | **Kumaryk** | **2.42 301** | | P | **Pb** | **01 17 08.7** | **+0.5** |
| KUMR | | | | S | **Sg** | **01 17 41.2** | **-1.2** |
| **TAS** | **Tashkent** | **2.45 303** | | P | **Pb** | **01 17 09.1** | **+0.5** |
| TAS | | | | S | **Sg** | **01 17 42.0** | **-1.1** |
| **AML** | **Almayashu** | **2.47 30** | ⇓ | *e*P | **Pb** | **01 17 07.5** | **-1.8** |
| | baz=31 | | | | | | |
| AML | | | ⇓ | *e*S | **Sb** | **01 17 38.6** | **-1.4** |
| | baz=31 | | | | | | |
| **MNAS** | **Manas** | **2.50 8** | ⇓ | *e*P | **Pb** | **01 17 07.5** | **-2.1** |
| | baz=10.0 | | | | | | |
| MNAS | | | ⇓ | *e*S | **Sb** | **01 17 38.6** | **-2.0** |
| | baz=10.0 | | | | | | |
| **YNGY** | **Yangiyul** | **2.52 297** | | P | **Pb** | **01 17 10.0** | **+0.2** |
| YNGY | | | | S | **Sg** | **01 17 43.9** | **-1.4** |
| **ARLS** | **Aral** | **2.55 43** | ⇑ | *e*P | **Pb** | **01 17 08.5** | **-1.9** |
| | baz=44 | | | | | | |
| ARLS | | | ⇑ | *e*S | **Sb** | **01 17 40.2** | **-1.7** |
| | baz=44 | | | | | | |
| **CHGR** | **Chuyangaron** | **2.59 239** | ⇑ | *e*P | **Pn** | **01 17 07.7** | **+1.2** |
| | baz=39 | | | | | | |
| CHGR | | | ⇑ | *e*S | **Sn** | **01 17 38.9** | **+0.8** |
| | baz=39 | | | | | | |
| **MRKS** | **Merke** | **2.88 18** | | *e*P | **Pg** | **01 17 21.4** | **+1.7** |
| | 14nm,0.4s | | | | | | |
| MRKS | | | | *e*S | **Sg** | **01 17 55.8** | **-1.3** |
| | 52nm,0.3s | | | | | | |
| **MRKS** | **Merke** | **2.88 18** | | Pg | **Pg** | **01 17 21.8** | **+2.1** |
| | 14nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 01 17 56.6 | |
| | 52nm,0.3s | | | | | | |
| **EKS2** | **Erkin-Say** | **2.97 26** | ⇓ | *e*P | **Pn** | **01 17 14.1** | **+2.3** |
| | baz=27 | | | | | | |
| EKS2 | | | ⇓ | *e*S | **Sn** | **01 17 50.0** | **+2.5** |
| | baz=27 | | | | | | |
| **AAK** | **Ala-Archa** | **3.23 35** | ⇑ | Pn | **Pn** | **01 17 17.8** | **+2.5** |
| | 1.7nm,0.3s | | | | | | |
| AAK | | | ⇑ | Pg | **Pg** | **01 17 24.7** | **-1.6** |
| | 14nm,0.8s | | | | | | |
| AAK | | | ⇑ | Lg | Lg | 01 18 06.7 | |
| | 39nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **3.23 35** | | *e*P | **Pn** | **01 17 17.8** | **+2.5** |
| | baz=35 | | | | | | |
| AAK | | | | *i* S | **Sn** | **01 17 56.3** | **+2.4** |
| | baz=35 | | | | | | |
| **KK31** | **Karatay Array** | **3.29 341** | ⇑ | Pn | **Pn** | **01 17 17.3** | **+1.2** |
| | 0.7nm,0.3s,baz=144,slow=14,SNR=94 | | | | | | |
| KK31 | | | ⇑ | Pg | **Pb** | **01 17 24.9** | **+1.9** |
| | 3.6nm,0.3s,baz=151,slow=12,SNR=48 | | | | | | |
| KK31 | | | ⇓ | Lg | Lg | 01 18 07.2 | |
| | 7.3nm,0.3s,baz=162,slow=29,SNR=5.2 | | | | | | |
| **KKAR** | **Karatay Array** | **3.29 341** | ⇑ | *e*P | **Pn** | **01 17 18.0** | **+1.9** |
| | baz=41 | | | | | | |
| KKAR | | | ⇑ | *e

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DGS | | | | | *e*S | | **Sb** | **01 18 36.4** | **+4.5** |
| | 18nm,0.5s | | | | | | | | | |
| **DGS** | **Degeres** | **4.29** | **40** | Pg | | **Pg** | | **01 17 46.9** | **+0.3** |
| | 8.3nm,0.4s | | | | | | | | | |
| DGS | | | | | Lg | Lg | | 01 18 39.9 | | |
| | 19nm,0.7s | | | | | | | | | |
| **MTBS** | **Maitube** | **4.55** | **45** | *e*P | | **Pg** | | **01 17 51.7** | **0.0** |
| | 3.8nm,0.4s | | | | | | | | | |
| MTBS | | | | | *e*S | | **Sg** | **01 18 47.8** | **-2.8** |
| | 10.0nm,0.4s | | | | | | | | | |
| **MTBS** | **Maitube** | **4.55** | **45** | Pg | | **Pg** | | **01 17 51.7** | **0.0** |
| | 3.8nm,0.4s | | | | | | | | | |
| MTBS | | | | | Lg | Lg | | 01 18 47.8 | | |
| | 10.0nm,0.4s | | | | | | | | | |
| **KRBS** | **Karabastau** | **4.59** | **35** | *e*P | | **Pg** | | **01 17 51.8** | **-0.7** |
| | 3.6nm,0.3s | | | | | | | | | |
| KRBS | | | | | *e*S | | **Sg** | **01 18 47.9** | **-3.9** |
| | 8.8nm,0.6s | | | | | | | | | |
| **KRBS** | **Karabastau** | **4.59** | **35** | Pg | | **Pg** | | **01 17 52.2** | **-0.2** |
| | 4.4nm,0.5s | | | | | | | | | |
| KRBS | | | | | Lg | Lg | | 01 18 48.7 | | |
| | 8.8nm,0.6s | | | | | | | | | |
| **MDOK** | **Medeo** | **4.92** | **49** | *e*P | | **Pg** | | **01 17 58.3** | **-0.4** |
| | 4.6nm,0.5s | | | | | | | | | |
| MDOK | | | | | *e*S | | **Sg** | **01 18 59.2** | **-3.3** |
| | 9.2nm,0.9s | | | | | | | | | |
| **MDOK** | **Medeo** | **4.92** | **49** | Pg | | **Pg** | | **01 17 56.3** | **-2.4** |
| | 8.3nm,0.9s | | | | | | | | | |
| MDOK | | | | | Pg | Pb | | 01 17 58.3 | +7.5 | |
| | 4.6nm,0.5s | | | | | | | | | |
| MDOK | | | | | Lg | Lg | | 01 18 59.2 | | |
| | 9.2nm,0.9s | | | | | | | | | |
| MDOK | | | | | Lg | Lg | | 01 18 59.9 | | |
| | 14nm,0.7s | | | | | | | | | |
| **KTBS** | **Karatobe** | **5.09** | **42** | *e*P | | **Pg** | | **01 18 01.4** | **-0.5** |
| | 2.9nm,0.4s | | | | | | | | | |
| KTBS | | | | | *e*S | | **Sg** | **01 19 04.8** | **-2.9** |
| | 13nm,0.6s | | | | | | | | | |
| **KTBS** | **Karatobe** | **5.09** | **42** | Pg | | **Pg** | | **01 18 01.3** | **-0.5** |
| | 2.9nm,0.4s | | | | | | | | | |
| KTBS | | | | | Lg | Lg | | 01 19 04.8 | | |
| | 13nm,0.6s | | | | | | | | | |
| **BTLS** | **Baital** | **5.25** | **16** | *e*P | | **Pg** | | **01 18 03.7** | **-1.3** |
| | 3.1nm,0.6s | | | | | | | | | |
| BTLS | | | | | *e*S | | **Sg** | **01 19 08.8** | **-4.2** |
| | 4.9nm,0.5s | | | | | | | | | |
| **BTLS** | **Baital** | **5.25** | **16** | Pg | | **Pg** | | **01 18 03.7** | **-1.3** |
| | 3.1nm,0.6s | | | | | | | | | |
| BTLS | | | | | Lg | Lg | | 01 19 08.8 | | |
| | 4.9nm,0.5s | | | | | | | | | |
| **CHKK** | **Chushkaly** | **5.34** | **42** | *e*P | | **Pg** | | **01 18 05.8** | **-1.0** |
| | 37nm,0.7s | | | | | | | | | |
| CHKK | | | | | *e*S | | **Sg** | **01 19 12.3** | **-3.7** |
| | 9.2nm,0.4s | | | | | | | | | |
| **CHKK** | **Chushkaly** | **5.34** | **42** | Pg | | **Pg** | | **01 18 05.8** | **-1.0** |
| | 37nm,0.7s | | | | | | | | | |
| CHKK | | | | | Lg | Lg | | 01 19 12.3 | | |
| | 9.2nm,0.4s | | | | | | | | | |
| **ARXS** | **Arharly** | **6.03** | **44** | *e*P | | **Pg** | | **01 18 20.3** | **+0.3** |
| | 3.9nm,0.4s | | | | | | | | | |
| ARXS | | | | | *e*S | | **Sg** | **01 19 36.9** | **-1.1** |
| | 4.5nm,0.5s | | | | | | | | | |
| **ARXS** | **Arharly** | **6.03** | **44** | Pg | | **Pg** | | **01 18 18.0** | **-2.0** |
| | 4.0nm,0.6s | | | | | | | | | |
| ARXS | | | | | Lg | Lg | | 01 19 33.8 | | |
| | 7.3nm,0.4s | | | | | | | | | |
| **BLB** | **Baldybastay** | **6.31** | **48** | Pg | | **Pg** | | **01 18 22.8** | **-2.5** |
| | 8.4nm,0.5s | | | | | | | | | |
| BLB | | | | | Lg | Lg | | 01 19 42.1 | | |
| | 5.2nm,0.6s | | | | | | | | | |

*IDC **31** 01:25:56.3±0.9,22°.21S×170°.29E, h0km,mb4.1/9, mbtmp4.2/10,ML4.3/1,MS3.8/27, Error ellipse: s-maj=27.8km s-min=25.6km az=171.0*
*NEIC **31** 01:25:57.9±1.5,22°.2S±0°.1×170°.3E±0°.1, h8km±5km, mb4.6/13, Error ellipse: s-maj=16.5km s-min=15.6km az=90.0*
*NOU **31** 01:26:02.9,22°.08S×169°.81E, h0km, MLv4.1/8, Southeast of Loyalty Islands*
**ISC 31 01:26:01.4**±0.6,**22°.26S**±0°.08×**170°.19E**±0°.08,**h35**km,**n70,** σ1§**06**/47,**mb4.5**/16,**MS3.9**/24,**5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | **2.15** | **291** | P | **Pn** | **01 26 34.4** | **-0.4** |
| PINNC | **Pines Island,** | **2.56** | **262** | P | **Pn** | **01 26 40.8** | **+0.4** |
| PINNC | **Pines Island,** | **2.56** | **262** | | **Pn** | **01 26 40.8** | **+0.4** |
| YATNC | **Mamie plateau,** | **3.07** | **273** | P | **Pn** | **01 26 46.9** | **-0.5** |
| LIFNC | **LIFOU** | **3.12** | **298** | P | **Pn** | **01 26 47.4** | **-0.7** |
| LIFNC | **LIFOU** | **3.12** | **298** | | **Pn** | **01 26 47.5** | **-0.7** |
| ONTNC | **Ouen Toro** | **3.46** | **269** | P | **Pn** | **01 26 54.1** | **+1.3** |
| ONTNC | **Ouen Toro** | **3.46** | **269** | | **Pn** | **01 26 53.7** | **+0.9** |
| **DZM** | **Mont Dzumac** | **3.48** | **272** | | **Pn** | **01 26 53.6** | **+0.5** |
| **DZM** | **Mont Dzumac** | **3.48** | **272** | Pn | **Pn** | **01 26 53.8** | **+0.7** |
| | 27nm,0.3s,baz=130,slow=12,SNR=21.1 | | | | | | |
| DZM | | | | Sn | **Sn** | **01 27 33.9** | **+0.8** |
| | 29nm,0.3s,baz=317,slow=19,SNR=13 | | | | | | |
| | 54nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.61** | **272** | P | **Pn** | **01 26 55.6** | **+0.8** |
| **RTV** | **Rentapao** | **4.75** | **339** | P | **Pn** | **01 27 12.2** | **+1.7** |
| **DVP** | **Devils Point** | **4.89** | **337** | P | **Pn** | **01 27 13.1** | **+0.6** |
| KOUNC | **Koumac, New Ca** | **5.76** | **286** | | **Pn** | **01 27 25.6** | **+1.2** |
| **MSVF** | **Nonsavu** | **8.65** | **60** | LR | LR | 01 30 47.0 | |
| | comp=Z,1μm,18.1s,baz=219,slow=34 | | | | | | |
| **HNR** | **Honiara** | **16.11** | **321** | LR | LR | 01 34 57.0 | |
| | comp=Z,0μm,22.0s,baz=138,slow=34 | | | | | | |
| **URZ** | **Urewera** | **17.02** | **161** | LR | LR | 01 35 24.5 | |
| | comp=Z,604nm,18.5s,baz=62,slow=33 | | | | | | |
| **EIDS** | **Eidsvold** | **17.76** | **256** | Pn | **Pn** | **01 30 03.6** | **-2.3** |
| **LTZ** | **Lake Taylor** | **20.53** | **176** | P | **P** | **01 30 36.3** | **-0.4** |
| LTZ | | | | IAmb | IAmb | 01 30 38.6 | |
| | comp=Z,40nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **22.42** | **271** | P | **P** | **01 30 56.0** | **-1.2** |
| **PMG** | **Port Moresby** | **25.53** | **296** | LR | LR | 01 40 04.7 | |
| | comp=Z,263nm,19.8s,baz=110,slow=33 | | | | | | |
| **COEN** | **Coen** | **26.94** | **283** | P | **P** | **01 31 38.8** | **-0.9** |
| **STKA** | **Stephens Creek** | **27.14** | **243** | P | **P** | **01 31 42.2** | **+0.9** |
| | comp=Z,1.9nm,0.7s,baz=102,slow=9.3,SNR=1.6 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **RAR** | **Rarotonga** | **27.90** | **94** | LR | LR | 01 40 17.6 | |
| | comp=Z,51nm,19.6s,baz=54,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **33.39** | **260** | P | **P** | **01 32 37.6** | **+0.9** |
| | comp=Z,3.4nm,1.0s,baz=83,slow=8.9,SNR=11 | | | | | | |
| ASAR | | | | LR | LR | 01 46 33.8 | |
| | comp=Z,210nm,18.2s,baz=94,slow=37 | | | | | | |
| | comp=Z,3.4nm,1.0s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.46** | **268** | P | **P** | **01 32 38.4** | **+1.0** |
| WB0 | | | | IAmb | IAmb | 01 32 43.0 | |
| | comp=Z,7.4nm,1.1s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.47** | **267** | P | **P** | **01 32 38.1** | **+0.7** |
| WB2 | | | | IAmb | IAmb | 01 32 54.2 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.48** | **267** | P | **P** | **01 32 37.9** | **+0.3** |
| | comp=Z,2.2nm,0.9s,baz=100,slow=8.1,SNR=11 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |
| **PPT** | **Papeete** | **38.03** | **90** | LR | LR | 01 48 15.7 | |
| | comp=Z,77nm,18.2s,baz=322,slow=35 | | | | | | |
| **MTN** | **Manton Dam** | **38.30** | **277** | P | **P** | **01 33 19.6** | **+0.7** |
| MTN | | | | IAmb | IAmb | 01 33 25.2 | |
| | comp=Z,9.9nm,1.2s | | | | | | |
| **GUMO** | **Guam** | **43.43** | **323** | LR | LR | 01 50 46.4 | |
| | comp=Z,92nm,19.5s,baz=240,slow=34 | | | | | | |
| **MBWA** | **Marble Bar** | **46.72** | **261** | P | **P** | **01 34 27.9** | **+0.6** |
| **CASY** | **Casey** | **57.74** | **204** | P | **P** | **01 35 48.7** | **+0.3** |
| CASY | | | | IAmb | IAmb | 01 36 00.5 | |
| | comp=Z,3.3nm,0.9s | | | | | | |
| **JOW** | **Kunigami** | **63.46** | **318** | LR | LR | 02 03 55.3 | |
| | comp=Z,57nm,18.0s,baz=20,slow=36 | | | | | | |
| **JNU** | **Nakatsue** | **66.64** | **325** | LR | LR | 02 05 42.0 | |
| | comp=Z,27nm,18.7s,baz=112,slow=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **67.81** | **180** | P | **P** | **01 36 56.8** | **+1.1** |
| QSPA | | | | IAmb | IAmb | 01 37 01.1 | |
| | comp=Z,7.4nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.81** | **180** | P | **P** | **01 36 56.9** | **+1.3** |
| | comp=Z,4.7nm,1.0s,baz=14,slow=2.0,SNR=6.8 | | | | | | |
| | comp=Z,4.7nm,1.0s | | | | | | |
| **ASAJ** | **Asahikawa** | **70.73** | **339** | LR | LR | 02 03 36.5 | |
| | comp=Z,67nm,22.0s,baz=149,slow=32 | | | | | | |
| **KSRS** | **Korea Array** | **71.50** | **326** | P | **P** | **01 37 19.6** | **+1.1** |
| | comp=Z,1.4nm,0.9s,baz=158,slow=3.9,SNR=4.3 | | | | | | |
| | comp=Z,1.4nm,0.9s | | | | | | |
| **RPN** | **Rapa Nui** | **72.09** | **113** | LR | LR | 02 01 46.6 | |
| | comp=Z,59nm,18.7s,baz=0.5,slow=30 | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **74.75** | **2** | LR | LR | 02 06 15.8 | |
| | comp=Z,45nm,18.9s,baz=7.0,slow=32 | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.84** | **352** | LR | LR | 02 05 22.8 | |
| | comp=Z,104nm,21.1s,baz=165,slow=31 | | | | | | |
| **MAW** | **Mawson** | **75.98** | **202** | LR | LR | 02 06 55.4 | |
| | comp=Z,58nm,19.4s,baz=89,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.56** | **294** | P | **P** | **01 38 11.4** | **+0.8** |
| | comp=Z,1.4nm,0.3s,baz=77,slow=33,SNR=1.3 | | | | | | |
| | comp=Z,1.4nm,0.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **85.58** | **19** | LR | LR | 02 09 56.8 | |
| | comp=Z,75nm,21.6s,baz=241,slow=31 | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.59** | **184** | ⇑P | **P** | **01 38 33.6** | **-2.3** |
| | comp=Z,148nm,0.3s | | | | | | |
| **SNAA** | **Sanae** | **86.19** | **182** | P | **P** | **01 38 39.3** | **+0.5** |
| SNAA | | | | IAmb | IAmb | 01 38 52.5 | |
| | comp=Z,4.9nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **86.19** | **182** | ⇑P | **P** | **01 38 39.2** | **+0.5** |
| | comp=Z,45nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **86.19** | **182** | P | **P** | **01 38 38.9** | **+0.1** |
| | comp=Z,1.7nm,0.9s,baz=155,slow=4.3,SNR=6.6 | | | | | | |
| SNAA | | | | LR | LR | 02 14 02.5 | |
| | comp=Z,56nm,20.0s,baz=264,slow=34 | | | | | | |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.75** | **180** | ⇑P | **P** | **01 38 42.1** | **+0.6** |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.05** | **181** | ⇑P | **P** | **01 38 43.9** | **+0.9** |
| | comp=Z,3.7nm,0.6s,baz=161,slow=4.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.33** | **181** | ⇑P | **P** | **01 38 43.1** | **-1.2** |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **J17K** | **VABM Dome** | **88.73** | **13** | P | **P** | **01 38 51.2** | **+0.4** |
| **ESJX** | **Sierra Juarez** | **88.85** | **55** | P | **P** | **01 38 52.1** | **-0.3** |
| **YBH** | **Yreka Blue Hor** | **88.85** | **44** | LR | LR | 02 13 48.9 | |
| | comp=Z,32nm,18.1s,baz=268,slow=32 | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.20** | **53** | LR | LR | 02 10 53.0 | |
| | comp=Z,62nm,20.0s,baz=246,slow=30 | | | | | | |
| **LPIG** | **La Paz** | **89.93** | **64** | LR | LR | 02 13 05.2 | |
| | comp=Z,50nm,18.4s,baz=196,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.14** | **48** | P | **P** | **01 38 58.4** | **+0.1** |
| | comp=Z,0.1nm,0.5s,baz=225,slow=10,SNR=1.3 | | | | | | |
| NVAR | | | | LR | LR | 02 14 03.8 | |
| | comp=Z,58nm,18.2s,baz=269,slow=32 | | | | | | |
| | comp=Z,0.1nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **90.16** | **323** | P | **P** | **01 38 57.6** | **-0.5** |
| | comp=Z,1.2nm,0.9s,baz=126,slow=2.6,SNR=5.1 | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | |
| **BBB** | **Bella Bella** | **91.51** | **33** | LR | LR | 02 14 35.4 | |
| | comp=Z,39nm,19.0s,baz=234,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **92.84** | **17** | LR | LR | 02 19 14.8 | |
| | comp=Z,56nm,18.1s,baz=238,slow=34 | | | | | | |
| **NEW** | **Newport** | **95.51** | **40** | LR | LR | 02 19 11.0 | |
| | comp=Z,48nm,18.0s,baz=244,slow=34 | | | | | | |
| **ANMO** | **Albuquerque** | **97.28** | **55** | LR | LR | 02 14 57.2 | |
| | comp=Z,46nm,20.6s,baz=266,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **97.42** | **61** | LR | LR | 02 14 44.6 | |
| | comp=Z,40nm,20.7s,baz=241,slow=30 | | | | | | |
| **PDAR** | **Pinedale Array** | **98.01** | **47** | LR | LR | 02 20 29.8 | |
| | comp=Z,12nm,18.1s,baz=280,slow=33 | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.29** | **330** | *e*PKP | **PKPdf** | **01 45 36.0** | **+0.7** |
| **EKA** | **Eskdalemuir Ar** | **146.60** | **353** | PKPbc | **PKPab** | **01 45 38.5** | **-1.5** |
| | comp=Z,0.8nm,0.5s,baz=1.1,slow=2.6,SNR=8.7 | | | | | | |
| **KHC** | **Kasperske Hory** | **147.41** | **331** | *e*PKP | **PKPdf** | **01 45 37.4** | **-1.5** |
| **GERES** | **GERESS Array B** | **147.56** | **331** | PKPbc | **PKiKP** | **01 45 42.5** | **-1.6** |
| | comp=Z,0.7nm,0.7s,baz=52,slow=5.1,SNR=2.5 | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **150.77** | **331** | | **PKPbc** | **01 45 47.8** | **-2.5** |

*IDC **31** 01:31:36.6±1.1,14°.81S×167°.37E, h0km,mb4.0/6, mbtmp3.9/6, Error ellipse: s-maj=39.4km s-min=32.9km az=119.0*
*NOU **31** 01:32:08.8,16°.42S×167°.51E, h0km, mb3.6/9, Vanuatu Islands*
**ISC 31 01:31:52.4**±1.1,**15°.0S**±0°.1×**167°.4E**±0°.2,**h129**km,**n14,** σ1§**15**/13,**mb3.6**/5,**Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DVP** | **Devils Point** | **2.87** | **164** | P | **Pn** | **01 32 36.7** | **-0.6** |
| **RTV** | **Rentapao** | **3.00** | **161** | P | **Pn** | **01 32 37.9** | **-1.2** |
| LIFNC | **LIFOU** | **5.80** | **181** | P | **Pn** | **01 33 16.0** | **-0.3** |
| MARNC | **Mare, Loyalty** | **6.53** | **175** | P | **Pn** | **01 33 24.9** | **-1.2** |
| YATNC | **Mamie plateau,** | **7.09** | **184** | P | **Pn** | **01 33 33.5** | **-0.1** |
| NOUC | **Port Laguerre** | **7.19** | **188** | P | **Pn** | **01 33 36.0** | **+1.0** |
| ONTNC | **Ouen Toro** | **7.37** | **187** | P | **Pn** | **01 33 38.3** | **+0.9** |
| **WRA** | **Warramunga Arr** | **31.88** | **256** | P | **P** | **01 38 03.6** | **-2.1** |
| | 0.2nm,0.7s,baz=86,slow=9.0,SNR=1.4 | | | | | | |
| | 0.2nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **32.70** | **249** | P | **P** | **01 38 11.8** | **-1.0** |
| | 1.0nm,0.8s,baz=78,slow=10.0,SNR=5.8 | | | | | | |
| | 1.0nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **75.08** | **180** | P | **P** | **01 43 21.4** | **+1.4** |
| | 3.7nm,0.9s,baz=22,slow=4.2,SNR=16 | | | | | | |
| | 3.7nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **86.70** | **18** | P | **P** | **01 44 21.6** | **+0.2** |
| | 0.6nm,0.8s,baz=235,slow=6.4,SNR=5.2 | | | | | | |
| | 0.6nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **93.34** | **183** | P | **P** | **01 44 53.0** | **+0.4** |
| | 0.9nm,0.7s,baz=199,slow=4.2,SNR=4.2 | | | | | | |
| | 0.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **97.43** | **316** | P | Pdif | 01 45 11.8 | +0.2 |
| | 0.7nm,0.8s,baz=101,slow=6.3,SNR=3.7 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.49** | **345** | PKP | **PKiKP** | **01 50 28.9** | **+0.7** |
| | 1.6nm,0.8s,baz=29,slow=2.8,SNR=3.8 | | | | | | |

*IDC **31** 01:55:20.7±4.5,36°.28N×70°.84E, h157km±42km, mb3.7/11, mbtmp4.1/16, MS2.6/1, Error ellipse: s-maj=31.6km s-min=12.9km az=34.0*
*NEIC **31** 01:55:24.9±0.9,36°.53N±0°.07×70°.81E±0°.09, h194km±6km, mb4.2/9, Error ellipse: s-maj=11.2km s-min=9.6km az=58.0*
*NNC **31** 01:55:26.8±2.5,37°.02N×70°.91E, h0km, mb4.6, mpv4.2, Error ellipse: s-maj=21.7km s-min=18.3km az=122.0*
**ISC 31 01:55:24.5**±0.7,**36°.57N**±0°.07×**70°.89E**±0°.07,**h188**km,**n47,** σ1§**21**/52,**mb4.0**/15,**4C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GAR** | **Garm** | **2.47** | **350** | | **Pn** | **01 56 08.4** | **+1.1** |
| **CHGR** | **Chuyangaron** | **2.50** | **327** | | **Pn** | **01 56 08.3** | **+0.7** |
| **KBL** | **Kabul** | **2.52** | **217** | Pn | **Pn** | **01 56 08.3** | **+0.1** |
| **SIMJ** | **Simiganj** | **2.56** | **325** | | **Pn** | **01 56 09.2** | **+0.7** |
| **DRK** | **Karamyk** | **3.00** | **14** | | **Pn** | **01 56 15.3** | **+1.5** |
| **BTK** | **Batken** | **3.48** | **359** | | **Pn** | **01 56 21.3** | **+1.8** |
| **NIL** | **Nilore** | **3.50** | **146** | | **Pn** | **01 56 20.5** | **+0.8** |
| **AML** | **Almayashu** | **5.97** | **21** | P | **Pn** | **01 56 52.0** | **+0.6** |
| | SNR=69 | | | | | | |
| **NRN** | **Naryn** | **6.28** | **38** | Pn | **Pn** | **01 56 55.9** | **+0.4** |
| **EKS2** | **Erkin-Say** | **6.48** | **19** | P | **Pn** | **01 56 59.4** | **+1.5** |
| | SNR=22 | | | | | | |
| **KK31** | **Karatay Array** | **6.53** | **358** | ⇑P | **Pn** | **01 56 58.8** | **+0.4** |
| | 16nm,0.5s,baz=176,slow=11,SNR=423 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **01 58 09.0** | **-3.9** |
| | 46nm,0.5s,baz=188,slow=24,SNR=7.3 | | | | | | |
| **KKAR** | **Karatay Array** | **6.53** | **358** | | **Pn** | **01 56 58.9** | **+0.5** |
| **AAK** | **Ala-Archa** | **6.67** | **24** | P | **Pn** | **01 57 01.4** | **+1.0** |
| | SNR=13 | | | | | | |
| **AAK** | **Ala-Archa** | **6.67** | **24** | P | **Pn** | **01 57 01.3** | **+1.0** |
| | 13nm,0.3s,baz=181,slow=5.4,SNR=30 | | | | | | |
| AAK | | | | S | **Sn** | **01 58 15.5** | **-0.7** |
| | 14nm,0.5s,baz=338,slow=21,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **6.67** | **24** | P | **Pn** | **01 56 59.9** | **-0.5** |
| | 6.1nm,0.3s | | | | | | |
| AAK | | | | S | **Sn** | **01 58 14.5** | **-1.7** |
| | 24nm,0.6s | | | | | | |
| **CHMS** | **Chumysh** | **7.08** | **24** | P | **Pn** | **01 57 06.5** | **+0.9** |
| | SNR=7.8 | | | | | | |
| **CHMS** | **Chumysh** | **7.08** | **24** | ⇑P | **Pn** | **01 57 06.0** | **+0.4** |
| | 5.7nm,0.4s | | | | | | |
| CHMS | | | | ⇑S | **Sn** | **01 58 24.2** | **-1.5** |
| | 18nm,0.8s | | | | | | |
| **USP** | **Ospenovka** | **7.24** | **21** | P | **Pn** | **01 57 08.7** | **+0.9** |
| | SNR=9.7 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.31** | **28** | P | **Pn** | **01 57 09.6** | **+0.8** |
| | SNR=9.4 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.31** | **28** | ⇑P | **Pn** | **01 57 08.9** | **+0.1** |
| | 14nm,0.5s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **01 58 29.2** | **-2.2** |
| | 13nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **13.29** | **36** | Pn | **Pn** | **01 58 26.6** | **+0.7** |
| **MKAR** | **Makanchi Array** | **13.29** | **36** | P | **Pn** | **01 58 27.2** | **+1.3** |
| | 0.8nm,0.8s,baz=232,slow=7.1,SNR=3.5 | | | | | | |
| ABKAR | **Akbulak array** | **14.98** | **331** | P | **Pn** | **01 58 46.3** | **-0.5** |
| KURBB | **Kurchatov Arra** | **15.09** | **19** | P | **P** | **01 58 50.0** | **+1.1** |
| | 1.1nm,0.7s,baz=211,slow=10,SNR=8.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.46** | **359** | P | **Pn** | **01 59 05.5** | **+0.9** |
| | 2.3nm,0.5s,baz=162,slow=8.9,SNR=8.4 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.68** | **330** | P | **P** | **01 59 07.7** | **+1.3** |
| | 13nm,0.4s,baz=140,slow=8.9,SNR=50 | | | | | | |
| AKTO | | | | S | **S** | **02 02 10.0** | **-0.7** |
| | 1.1nm,0.4s,baz=341,slow=5.4,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.89** | **25** | P | **P** | **01 59 42.4** | **+1.1** |
| | 2.5nm,0.5s,baz=224,slow=11,SNR=13 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **ARU** | **Arti** | **21.54** | **341** | P | **P** | **01 59 60.0** | **+1.3** |
| | 1.6nm,0.3s,baz=140,slow=6.4,SNR=5.3 | | | | | | |
| | 1.6nm,0.3s | | | | | | |
| **KBZ** | **Khabaz** | **22.49** | **297** | LR | LR | 02 11 54.7 | |
| | comp=Z,16nm,19.5s,baz=144,slow=44 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.57** | **119** | P | **P** | **02 01 20.1** | **-0.5** |
| | 1.0nm,0.3s,baz=298,slow=6.9,SNR=4.2 | | | | | | |
| | 1.0nm,0.3s | | | | | | |
| AKASG | **Malin Array Be** | **32.83** | **309** | P | **P** | **02 01 40.7** | **+0.7** |
| | 1.2nm,0.5s,baz=82,slow=7.2,SNR=11 | | | | | | |
| | 1.2nm,0.5s | | | | | | |
| **AKBB** | **Malin Array Si** | **32.83** | **309** | P | **P** | **02 01 38.9** | **-1.1** |
| AKBB | | | | IAmb | IAmb | 02 01 41.6 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **KIEV** | **Kiev** | **32.84** | **309** | P | **P** | **02 01 38.9** | **-1.2** |
| **FINES** | **FINESS Array B** | **37.38** | **326** | P | **P** | **02 02 19.6** | **+0.9** |
| | comp=Z,1.2nm,0.4s,baz=119,slow=8.8,SNR=17 | | | | | | |
| | comp=Z,1.2nm,0.4s | | | | | | |
| **PUK** | **Puka** | **39.35** | **294** | P | **P** | **02 02 36.3** | **+0.7** |
| ARCES | **ARCESS Array B** | **41.05** | **338** | P | **P** | **02 02 50.6** | **+1.6** |
| | comp=Z,2.1nm,0.5s,baz=115,slow=8.5,SNR=15 | | | | | | |
| | comp=Z,2.1nm,0.5s | | | | | | |
| **HFS** | **Hagfors** | **42.96** | **322** | P | **P** | **02 03 05.7** | **+1.1** |
| | comp=Z,3.3nm,0.5s,baz=98,slow=11,SNR=18 | | | | | | |
| | comp=Z,3.3nm,0.5s | | | | | | |
| **NB201** | **NORSAR Array S** | **44.23** | **323** | P | **P** | **02 03 15.8** | **+1.0** |
| NB201 | | | | IAmb | IAmb | 02 03 43.2 | |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **44.27** | **323** | P | **P** | **02 03 15.6** | **+0.5** |
| | comp=Z,1.7nm,0.6s,baz=97,slow=7.8,SNR=15 | | | | | | |
| | comp=Z,1.7nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.63** | **269** | P | **P** | **02 05 47.1** | **-1.5** |
| | comp=Z,0.6nm,0.4s,baz=49,slow=6.2,SNR=18 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **75.34** | **123** | P | **P** | **02 06 46.6** | **-0.7** |
| **WB0** | **Warramunga Arr** | **82.02** | **122** | P | **P** | **02 07 22.8** | **-1.0** |
| WB0 | | | | IAmb | IAmb | 02 07 31.7 | |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.11** | **122** | P | **P** | **02 07 22.8** | **-1.4** |
| | comp=Z,1.1nm,0.5s,baz=323,slow=5.0,SNR=42 | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **82.11** | **122** | P | **P** | **02 07 23.2** | **-1.0** |
| WRAB | | | | IAmb | IAmb | 02 07 31.1 | |
| | comp=Z,8.6nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **82.11** | **122** | P | **P** | **02 07 23.1** | **-1.1** |
| **WR0** | **Warramunga Arr** | **82.25** | **122** | P | **P** | **02 07 23.9** | **-1.1** |
| WR0 | | | | IAmb | IAmb | 02 07 39.6 | |
| | comp=Z,5.6nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **84.37** | **125** | P | **P** | **02 07 34.5** | **-1.2** |
| | comp=Z,1.3nm,0.6s,baz=311,slow=5.0,SNR=15 | | | | | | |
| | comp=Z,1.3nm,0.6s | | | | | | |

*IDC **31** 02:03:27.9±3.5,36°.52N×71°.02E, h163km±33km, mb3.2/6, mbtmp3.8/13, Error ellipse: s-maj=24.8km s-min=21.7km az=1.0*
*NNC **31** 02:03:29.0±3.9,37°.01N×70°.87E, h0km, mb4.4, mpv4.1, Error ellipse: s-maj=31.4km s-min=25.1km az=156.0*
**ISC 31 02:03:27.1**±0.9,**36°.59N**±0°.07×**70°.87E**±0°.09,**h150**km,**n24,** σ1§**63**/31,**mb3.4**/6,**4C-2D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **5.95** | **21** | P | **Pn** | **02 04 54.6** | **+1.2** |
| | SNR=70 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.47** | **19** | P | **Pn** | **02 05 01.6** | **+1.6** |
| | SNR=7.9 | | | | | | |
| **KK31** | **Karatay Array** | **6.51** | **358** | ⇓P | **Pn** | **02 05 02.1** | **+1.6** |
| | 21nm,0.4s,baz=182,slow=13,SNR=345 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **02 06 13.2** | **-0.6** |
| | 6.1nm,0.5s,baz=183,slow=22,SNR=6.4 | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **24** | P | **Pn** | **02 05 03.9** | **+1.3** |
| | SNR=8.3 | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **24** | P | **Pn** | **02 05 04.1** | **+1.5** |
| | 7.2nm,0.3s,baz=174,slow=5.8,SNR=14 | | | | | | |
| AAK | | | | S | **Sn** | **02 06 16.6** | **-0.9** |
| | 25nm,0.6s,baz=30,slow=21,SNR=13 | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **24** | P | **Pn** | **02 05 03.8** | **+1.2** |
| | 4.1nm,0.4s | | | | | | |
| AAK | | | | S | **Sn** | **02 06 16.1** | **-1.

baz=242,slow=72,SNR=3.4
**H03N2 Juan Fernandez 81.36 123** T T 03 48 00.9
baz=242,slow=72,SNR=3.5
**H03N1 Juan Fernandez 81.37 123** T T 03 48 06.1
baz=242,slow=72,SNR=3.7
**FINES FINESS Array B 143.70 341** PKP **PKPdf 02 25 45.2 -0.6**
0.5nm,0.5s,baz=29,slow=3.2,SNR=5.0
**NOA NORSAR Array B 147.18 352** PKPbc **PKPab 02 25 55.8 -0.1**
1.0nm,0.7s,baz=16,slow=4.6,SNR=3.9
**HFS Hagfors 147.70 349** PKPbc **PKiKP 02 25 57.1 -0.4**
1.2nm,0.6s,baz=35,slow=3.5,SNR=2.2

*DJA **31** 02:21:49.0±0.5,8°S±6°×11°6E±°, h13km±4km, M4.4/11, mb4.8/4, mbB5.2/1, MLv4.1/11, Mw(mB)4.6/1*
*NEIC **31** 02:21:54.9±0.7,9.0S±0.1×115.87E±0.0, h62km±15km, mb4.1/10, Error ellipse: s-maj=18.3km s-min=10.8km az=170.0*
*IDC **31** 02:22:10.9±6.4,8.30S×116.74E, h225km±54km, mb3.3/5, mbtmp3.9/6, MS2.8/2, Error ellipse: s-maj=75.1km s-min=13.8km az=66.0*

**ISC 31 02:21:48.3±0.6,8.31S±0.06×116.27E±0.03, h10km, n35, σ1§74/33, mb4.1/7, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.74** | **125** | P | **Pb** | **02 22 05.1** | **+1.8** |
| TWSI | | | | S | **Sb** | **02 22 15.7** | **+2.2** |
| **SRBI** | **Singaraja** | **1.07** | **282** | P | **Pg** | **02 22 08.3** | **-0.6** |
| SRBI | | | | S | **Sg** | **02 22 22.0** | **-0.9** |
| **DNP** | **Denpasar** | **1.11** | **251** | P | **Pn** | **02 22 11.2** | **+1.3** |
| DNP | | | | S | **Sn** | **02 22 27.0** | **+1.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **266** | Pn | **Pn** | **02 22 23.4** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **2.10** | **266** | P | **Pn** | **02 22 23.1** | **-0.5** |
| JAGI | | | | S | **Sn** | **02 22 49.0** | **-0.8** |
| **WBSI** | **Waikabubak, Su** | **3.35** | **113** | P | **Pn** | **02 22 39.2** | **-1.7** |
| **PWJI** | **Pagerwojo** | **4.43** | **273** | P | **Pn** | **02 22 56.5** | **+0.9** |
| **BSSI** | **Bau Bau, Buton** | **4.71** | **63** | P | **Pn** | **02 22 59.1** | **-0.4** |
| **KAPI** | **Kappang** | **4.77** | **47** | | **Pb** | **02 23 14.4** | **+2.4** |
| **KAPI** | **Kappang** | **4.77** | **47** | P | **Pg** | **02 23 19.0** | **-0.7** |
| | 7.2nm,0.3s,baz=63,slow=9.6,SNR=1.4 | | | | | | |
| KAPI | | | | S | **Sb** | **02 24 13.3** | **+3.8** |
| | 52nm,0.8s,baz=246,slow=20,SNR=7.1 | | | | | | |
| KAPI | | | | LR | LR | 02 25 43.5 | |
| | comp=Z,75nm,20.0s,baz=230,slow=48 | | | | | | |
| **EDFI** | **Ende, Flores** | **5.38** | **95** | P | **Pn** | **02 23 09.4** | **+0.6** |
| | 35nm,0.8s,2µm0.1nm | | | | | | |
| **UGM** | **Wanagama** | **5.70** | **274** | Pn | **Pn** | **02 23 17.1** | **+3.8** |
| **UGM** | **Wanagama** | **5.70** | **274** | P | **Pn** | **02 23 15.0** | **+1.8** |
| | 251nm,1.9s | | | | | | |
| **MMRI** | **Maumere** | **5.91** | **94** | Pn | Pn | 02 23 24.7 | +8.6 |
| **MBWA** | **Marble Bar** | **13.20** | **166** | Pn | Pn | 02 24 48.1 | -7.9 |
| **FITZ** | **Fitzroy Crossi** | **13.33** | **138** | Pn | **Pn** | **02 24 57.5** | **-0.3** |
| **PSA00** | **Pilbara Seismi** | **13.63** | **166** | Pn | Pn | 02 24 57.0 | -4.8 |
| **KNRA** | **Kununurra** | **14.24** | **122** | Pn | **Pn** | **02 25 10.8** | **+0.6** |
| **GIRL** | **Giralia** | **14.38** | **188** | Pn | Pn | 02 25 03.5 | -8.7 |
| **MTN** | **Manton Dam** | **15.29** | **108** | Pn | **P** | **02 25 28.5** | **-0.8** |
| **DAV** | **Davao City (W)** | **17.88** | **32** | LR | LR | 02 34 05.7 | |
| | comp=Z,52nm,18.9s,baz=258,slow=40 | | | | | | |
| **WB0** | **Warramunga Arr** | **20.92** | **125** | P | **P** | **02 26 31.9** | **+0.5** |
| WB0 | | | | IAmb | IAmb | 02 26 32.8 | |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.97** | **125** | P | **P** | **02 26 32.4** | **+0.5** |
| | comp=Z,4.6nm,0.6s,baz=301,slow=12,SNR=62 | | | | | | |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.97** | **125** | P | **P** | **02 26 32.9** | **+1.0** |
| WRAB | | | | IAmb | IAmb | 02 26 33.7 | |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **20.98** | **125** | P | **P** | **02 26 31.7** | **-0.3** |
| WB2 | | | | IAmb | IAmb | 02 26 39.8 | |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.14** | **125** | P | **P** | **02 26 33.9** | **+0.3** |
| WR0 | | | | IAmb | IAmb | 02 26 35.2 | |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **AS31** | **Alice Springs** | **22.77** | **134** | P | **P** | **02 26 50.7** | **-0.5** |
| **ASAR** | **Alice Springs** | **22.77** | **134** | P | **P** | **02 26 52.1** | **+1.0** |
| | comp=Z,3.0nm,0.6s,baz=310,slow=9.0,SNR=26 | | | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **FORT** | **Forrest** | **24.92** | **155** | P | **P** | **02 27 07.2** | **-4.6** |
| **COEN** | **Coen** | **26.98** | **104** | P | **P** | **02 27 31.9** | **+1.3** |
| COEN | | | | IAmb | IAmb | 02 27 32.5 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **33.23** | **138** | P | P | 02 28 21.3 | -4.4 |
| STKA | | | | IAmb | IAmb | 02 28 26.1 | |
| | comp=Z,3.4nm,1.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.17** | **14** | P | **P** | **02 31 11.5** | **-2.4** |
| | comp=Z,1.0nm,0.7s,baz=188,slow=8.7,SNR=3.0 | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **56.58** | **352** | P | **P** | **02 31 31.4** | **0.0** |
| | comp=Z,1.2nm,0.7s,baz=166,slow=7.4,SNR=8.5 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **CASY** | **Casey** | **58.01** | **183** | P | P | 02 31 35.9 | -5.2 |
| **MKAR** | **Makanchi Array** | **62.65** | **334** | P | **P** | **02 32 11.7** | **-1.4** |
| | comp=Z,0.5nm,0.8s,baz=134,slow=8.4,SNR=3.0 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |

**IDC 31 02:26:12.7±3.3,28°25N×141°64E, h0km, mb3.7/5, mbtmp3.7/5, MS4.5/1, Error ellipse: s-maj=135.8km s-min=33.2km az=74.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **48.42** | **189** | P | P | 02 34 56.7 | -0.1 |
| | 0.2nm,0.4s,baz=5.8,slow=8.0,SNR=1.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **49.37** | **309** | P | P | 02 35 03.9 | -0.1 |
| | 0.1nm,0.3s,baz=89,slow=10,SNR=1.2 | | | | | | |
| | 0.1nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.89** | **314** | P | P | 02 35 23.1 | +0.2 |
| | 0.6nm,0.5s,baz=92,slow=8.1,SNR=12 | | | | | | |
| | 0.6nm,0.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **53.74** | **37** | LR | LR | 02 55 47.9 | |
| | comp=Z,474nm,21.9s,baz=256,slow=33 | | | | | | |
| **BVAR** | **Borovoye Array** | **56.87** | **317** | P | P | 02 35 59.1 | 0.0 |
| | 1.2nm,0.4s,baz=92,slow=7.0,SNR=5.4 | | | | | | |
| | 1.2nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **76.70** | **334** | P | P | 02 38 04.9 | -0.5 |
| | 0.9nm,0.9s,baz=57,slow=5.1,SNR=1.5 | | | | | | |
| | 0.9nm,0.9s | | | | | | |

*IDC **31** 02:37:11.1±0.5,8.32S×115.93E, h0km, mb4.4/21, mbtmp4.4/22, ML4.7/1, MS3.9/14, Error ellipse: s-maj=19.4km s-min=12.3km az=82.0*
*NEIC **31** 02:37:13.7±1.8,8.43S±0.05×116.07E±0.04, h10km±1km, mb4.8/27, Error ellipse: s-maj=11.1km s-min=4.2km az=142.0*
*GCMT **31** 02:37:15.7±0.4,8.42S±0.02×115.95E±0.03, h24km±1km, MW4.8/67, Moment Tensor Solution. s26,c31; s67,c91; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.27±.14; $M_{\theta\theta}$-1.78±.09; $M_{\phi\phi}$0.50±.09; $M_{r\theta}$-0.79±.11; $M_{r\phi}$0.31±.06; $M_{\theta\phi}$-0.95±.16; Best double couple: M◎2.03200×$10^{16}$ NP1:$\phi_s$247.00000°, δ65.00000°, λ.54.00000°. NP2: $\phi_s$127.00000°, δ42.00000°, λ141.00000°. Principal axes: T 2.0900, Plg55.0000°, Azm111.0000°; N -0.1170, Plg32.0000°, Azm264.0000°; P -1.9740, Plg13.0000°, Azm2.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*DJA **31** 02:37:15.1±0.2,8°S±3°×11°6E±°, h14km±2km, M5.0/24, mb5.2/18, mB5.4/8, MLv5.1/24, Mw(mB)4.8/8, MwMwp4.4/1, Mwp4.8/1*

**ISC 31 02:37:13.0±0.3,8.37S±0.04×116.11E±0.03, h10km, n160, σ1§39/148, mb4.7/43, MS3.8/14, 4C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **0.85** | **116** | P | **Pg** | **02 37 30.9** | **+1.5** |
| TWSI | | | | S | **Sb** | **02 37 43.0** | **+1.7** |
| **SRBI** | **Singaraja** | **0.93** | **287** | P | **Pg** | **02 37 31.8** | **+0.8** |
| SRBI | | | | S | **Sg** | **02 37 44.4** | **+1.2** |
| **DNP** | **Denpasar** | **0.94** | **251** | P | **Pb** | **02 37 33.0** | **+1.5** |
| DNP | | | | S | **Sn** | **02 37 46.8** | **+0.9** |
| **PLAI** | **Plampang** | **1.71** | **106** | P | **Pn** | **02 37 45.4** | **+2.5** |
| **JAGI** | **Jajag, Banyuwa** | **1.94** | **267** | P | **Pn** | **02 37 47.9** | **+1.8** |
| **JAGI** | **Jajag, Banyuwa** | **1.94** | **267** | | **Pn** | **02 37 46.1** | **-0.1** |
| **JAGI** | **Jajag, Banyuwa** | **1.94** | **267** | P | **Pn** | **02 37 46.3** | **+0.2** |
| **WBSI** | **Waikabubak, Su** | **3.48** | **112** | P | **Pn** | **02 38 08.6** | **+1.3** |
| **GRJI** | **Gresik** | **3.88** | **292** | P | **Pn** | **02 38 13.6** | **+0.8** |
| **PWJI** | **Pagerwojo** | **4.28** | **274** | P | **Pn** | **02 38 20.2** | **+1.9** |
| **NGJI** | **Ngawi** | **4.71** | **282** | P | **Pn** | **02 38 27.4** | **+3.1** |
| **BASI** | **Baing, Sumba** | **4.78** | **113** | P | **Pn** | **02 38 28.2** | **+3.1** |
| **BSSI** | **Bau Bau, Buton** | **4.87** | **63** | P | **Pn** | **02 38 27.5** | **+1.1** |
| **KAPI** | **Kappang** | **4.91** | **48** | P | **Pn** | **02 38 28.3** | **+1.3** |
| **KAPI** | **Kappang** | **4.91** | **48** | Pn | **Pn** | **02 38 27.9** | **+0.9** |
| **KAPI** | **Kappang** | **4.91** | **48** | Pn | **Pn** | **02 38 28.1** | **+1.1** |
| | 28nm,0.3s,baz=212,slow=4.3,SNR=57 | | | | | | |
| KAPI | | | | Sn | **Sn** | **02 39 22.9** | **-1.1** |
| | 48nm,0.3s,baz=217,slow=20,SNR=21 | | | | | | |
| | 64nm,0.3s | | | | | | |
| **BKSI** | **Bukukumba** | **5.00** | **53** | P | **Pn** | **02 38 29.2** | **+1.0** |
| | 234nm,0.9s,4µm2µm1.3nm | | | | | | |
| **EDFI** | **Ende, Flores** | **5.53** | **94** | P | **Pn** | **02 38 36.9** | **+1.3** |
| **UGM** | **Wanagama** | **5.55** | **274** | P | **Pn** | **02 38 39.5** | **+3.7** |
| **UGM** | **Wanagama** | **5.55** | **274** | Pn | **Pn** | **02 38 37.2** | **+1.4** |
| **UGM** | **Wanagama** | **5.55** | **274** | P | **Pn** | **02 38 37.3** | **+1.5** |
| | 367nm,1.2s | | | | | | |
| **BNSI** | **Bone** | **5.59** | **45** | P | **Pn** | **02 38 40.0** | **+3.7** |
| | 113nm,0.6s,2µm1.5nm | | | | | | |
| **SMRI** | **Semarang** | **5.77** | **283** | Pn | **Pn** | **02 38 39.8** | **+1.0** |
| **SMRI** | **Semarang** | **5.77** | **283** | P | **Pn** | **02 38 40.8** | **+2.0** |
| | 204nm,0.8s,1.4nm | | | | | | |
| **MMRI** | **Maumere** | **6.06** | **93** | Pn | **Pn** | **02 38 44.0** | **+1.2** |
| **MMRI** | **Maumere** | **6.06** | **93** | P | **Pn** | **02 38 44.0** | **+1.2** |
| **BBSI** | **Bau Bau** | **7.02** | **66** | P | **Pn** | **02 38 58.9** | **+2.9** |
| | 82nm,0.7s,0.3nm | | | | | | |
| **CMJI** | **Cimerak** | **7.61** | **274** | P | **Pn** | **02 39 06.2** | **+2.1** |
| | 159nm,0.9s,0.7nm | | | | | | |
| **BATI** | **Baumata** | **7.67** | **104** | P | **Pn** | **02 39 05.7** | **+0.7** |
| | 148nm,0.7s,0.5nm | | | | | | |
| **SOEI** | **Soe** | **8.17** | **100** | Pn | **Pn** | **02 39 13.1** | **+1.2** |
| **SOEI** | **Soe** | **8.17** | **100** | P | **Pn** | **02 39 14.5** | **+2.6** |
| | 154nm,0.8s,2µm | | | | | | |
| **BBJI** | **Bungbulang** | **8.43** | **276** | P | **Pn** | **02 39 17.7** | **+2.3** |
| **CNJI** | **Cibinong** | **8.96** | **276** | P | **Pn** | **02 39 25.0** | **+2.4** |
| | 100nm,1.1s,2µm | | | | | | |
| **XMI** | **Christmas Isla** | **10.49** | **258** | P | **Pn** | **02 39 44.9** | **+1.3** |
| **TOLI2** | **Tolitoli** | **10.50** | **27** | Pn | **Pn** | **02 39 45.6** | **+1.8** |
| **KSM** | **Kuching** | **11.36** | **329** | Pn | **Pn** | **02 39 57.0** | **+1.5** |
| **SBUM** | **Sibu** | **11.42** | **340** | Pn | **Pn** | **02 39 59.4** | **+3.0** |
| **MBWA** | **Marble Bar** | **13.19** | **165** | Pn | **Pn** | **02 40 17.4** | **-3.1** |
| **MBWA** | **Marble Bar** | **13.19** | **165** | P | **Pn** | **02 40 17.4** | **-3.1** |
| | comp=Z,55nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.39** | **137** | Pn | **Pn** | **02 40 22.5** | **-0.8** |
| **FITZ** | **Fitzroy Crossi** | **13.39** | **137** | P | **Pn** | **02 40 22.8** | **-0.5** |
| **PSAD1** | **Pilbara Seismi** | **13.50** | **165** | P | **Pn** | **02 40 23.6** | **-1.2** |
| | comp=Z,30nm,1.4s | | | | | | |
| **PSAB2** | **Pilbara Seismi** | **13.60** | **165** | P | **Pn** | **02 40 24.0** | **-2.2** |
| | comp=Z,45nm,1.3s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **13.62** | **165** | Pn | **Pn** | **02 40 24.4** | **-1.9** |
| **PSA00** | **Pilbara Seismi** | **13.62** | **165** | P | **Pn** | **02 40 24.0** | **-2.3** |
| | comp=Z,50nm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **14.31** | **187** | Pn | **Pn** | **02 40 34.1** | **-1.8** |
| **GIRL** | **Giralia** | **14.31** | **187** | P | **Pn** | **02 40 32.9** | **-2.9** |
| | comp=Z,135nm,1.0s | | | | | | |
| **KKM** | **Kota Kinabalu** | **14.31** | **0** | | **Pn** | **02 40 35.4** | **-0.6** |
| **KNRA** | **Kununurra** | **14.34** | **122** | Pn | **Pn** | **02 40 34.9** | **-1.4** |
| **KNRA** | **Kununurra** | **14.34** | **122** | P | **Pn** | **02 40 35.9** | **-0.4** |
| | comp=Z,55nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **15.42** | **108** | Pn | **Pn** | **02 40 50.8** | **0.0** |
| MTN | | | | IAmb | IAmb | 02 40 57.1 | |
| | comp=Z,70nm,1.6s | | | | | | |
| **MTN** | **Manton Dam** | **15.42** | **108** | P | **Pn** | **02 40 49.8** | **-1.0** |
| | comp=Z,39nm,0.7s | | | | | | |
| **KDU** | **Kakadu** | **16.64** | **106** | P | **Pn** | **02 41 05.5** | **-1.1** |
| | comp=Z,25nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **16.94** | **72** | Pn | **Pn** | **02 41 08.9** | **-1.5** |
| FAKI | | | | IAmb | IAmb | 02 41 13.0 | |
| | comp=Z,60nm,0.8s | | | | | | |
| **FAKI** | **Fak Fak** | **16.94** | **72** | P | **Pn** | **02 41 12.1** | **+1.7** |
| **BKNI** | **Bangkinang** | **17.33** | **299** | Pn | **Pn** | **02 41 15.1** | **-0.2** |
| **DAV** | **Davao City (W)** | **18.00** | **32** | LR | LR | 02 49 59.3 | |
| | comp=Z,260nm,18.6s,baz=238,slow=42 | | | | | | |
| **MEEK** | **Meekatharra** | **18.33** | **173** | P | **Pn** | **02 41 28.1** | **+0.6** |
| **MEEK** | **Meekatharra** | **18.33** | **173** | P | **Pn** | **02 41 27.6** | **0.0** |
| | comp=Z,47nm,0.9s | | | | | | |
| **IPM** | **Ipoh** | **19.73** | **310** | P | **P** | **02 41 42.8** | **-0.3** |
| **WRKA** | **Warakurna** | **20.25** | **146** | P | **P** | **02 41 50.3** | **+1.6** |
| **WRKA** | **Warakurna** | **20.25** | **146** | P | **P** | **02 41 50.0** | **+1.3** |
| | comp=Z,90nm,0.7s | | | | | | |
| **RPSI** | **Rantau Prapat** | **20.36** | **302** | P | **P** | **02 41 48.8** | **-1.2** |
| RPSI | | | | IAmb | IAmb | 02 41 59.2 | |
| | comp=Z,42nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **20.59** | **180** | P | **P** | **02 41 54.5** | **+2.1** |
| **MORW** | **Morawa** | **20.59** | **180** | P | **P** | **02 41 52.7** | **+0.4** |
| MORW | | | | IAmb | IAmb | 02 42 05.3 | |
| | comp=Z,89nm,1.6s | | | | | | |
| **MORW** | **Morawa** | **20.59** | **180** | P | **P** | **02 41 52.7** | **+0.4** |
| | comp=Z,31nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.06** | **125** | P | **P** | **02 41 58.0** | **+0.4** |
| | comp=Z,24nm,0.8s,baz=299,slow=12,SNR=219 | | | | | | |
| WRA | | | | S | **S** | **02 45 49.5** | **-2.7** |
| | comp=Z,3.4nm,0.7s,baz=295,slow=21,SNR=4.7 | | | | | | |
| WRA | | | | LR | LR | 02 50 16.7 | |
| | comp=Z,265nm,19.4s,baz=309,slow=37 | | | | | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.07** | **125** | P | **P** | **02 41 57.5** | **-0.1** |
| WRAB | | | | IAmb | IAmb | 02 41 58.9 | |
| | comp=Z,36nm,0.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.07** | **125** | P | **P** | **02 41 57.5** | **-0.2** |
| **BLDU** | **Ballidu** | **22.14** | **179** | P | **P** | **02 42 10.1** | **+1.1** |
| **BLDU** | **Ballidu** | **22.14** | **179** | P | **P** | **02 42 09.9** | **+0.9** |
| | comp=Z,37nm,1.1s | | | | | | |
| **AS31** | **Alice Springs** | **22.84** | **134** | P | **P** | **02 42 15.5** | **-1.1** |
| | comp=Z,11nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **22.84** | **134** | P | **P** | **02 42 16.9** | **+0.2** |
| | comp=Z,33nm,1.1s,baz=311,slow=9.1,SNR=136 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 46 06.9** | **-1.0** |
| | comp=Z,1.4nm,0.7s,baz=317,slow=2.2,SNR=4.4 | | | | | | |
| ASAR | | | | S | Sn | 02 46 37.4 | -3.8 |
| | comp=Z,2.2nm,0.6s,baz=302,slow=24,SNR=5.7 | | | | | | |
| ASAR | | | | LR | LR | 02 51 40.8 | |
| | comp=Z,193nm,18.1s,baz=308,slow=38 | | | | | | |
| | comp=Z,33nm,1.1s | | | | | | |
| **AS01** | **Alice Springs** | **22.88** | **134** | P | **P** | **02 42 16.7** | **-0.3** |
| | comp=Z,47nm,0.9s | | | | | | |
| **KLBR** | **Kellerberrin** | **23.16** | **176** | P | **P** | **02 42 20.4** | **+0.6** |
| **KLBR** | **Kellerberrin** | **23.16** | **176** | P | **P** | **02 42 21.0** | **+1.3** |
| | comp=Z,46nm,0.5s | | | | | | |
| **MUN** | **Mundaring** | **23.50** | **180** | P | **P** | **02 42 24.0** | **+0.9** |
| **KMBL** | **Kambalda** | **23.51** | **168** | P | **P** | **02 42 23.5** | **+0.2** |
| **KMBL** | **Kambalda** | **23.51** | **168** | P | **P** | **02 42 22.9** | **-0.4** |
| | comp=Z,31nm,1.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.46** | **178** | P | **P** | **02 42 32.3** | **0.0** |
| | comp=Z,27nm,0.7s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.46** | **178** | P | **P** | **02 42 31.9** | **-0.4** |
| **NWAO** | **Narrogin (SRO)** | **24.46** | **178** | P | **P** | **02 42 30.3** | **-2.0** |
| | comp=Z,112nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.46** | **178** | LR | LR | 02 52 50.9 | |
| | comp=Z,239nm,19.6s,baz=244,slow=38 | | | | | | |
| **FORT** | **Forrest** | **24.94** | **155** | P | **P** | **02 42 38.0** | **+1.4** |
| **FORT** | **Forrest** | **24.94** | **155** | P | **P** | **02 42 36.6** | **+0.1** |
| **FORT** | **Forrest** | **24.94** | **155** | P | **P** | **02 42 36.4** | **-0.2** |
| **QIS** | **Mount Isa** | **25.73** | **121** | P | **P** | **02 42 44.0** | **+0.1** |
| **QIS** | **Mount Isa** | **25.73** | **121** | P | **P** | **02 42 43.8** | **-0.1** |
| | comp=Z,21nm,1.3s | | | | | | |
| **OOD** | **Oodnadatta** | **26.75** | **139** | P | **P** | **02 42 54.2** | **+1.2** |
| **COEN** | **Coen** | **27.11** | **104** | P | **P** | **02 42 56.6** | **+0.1** |
| **COEN** | **Coen** | **27.11** | **104** | P | **P** | **02 42 56.9** | **+0.4** |
| COEN | | | | IAmb | IAmb | 02 43 05.5 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **MULG** | **Mulgathing** | **27.52** | **145** | P | **P** | **02 43 01.0** | **+1.0** |
| **LCRK** | **Leigh Creek** | **30.16** | **140** | P | **P** | **02 43 24.9** | **+1.4** |
| **BBOO** | **Buckleboo** | **30.54** | **146** | P | **P** | **02 43 27.7** | **+0.9** |
| **BBOO** | **Buckleboo** | **30.54** | **146** | P | **P** | **02 43 27.1** | **+0.2** |
| **BBOO** | **Buckleboo** | **30.54** | **146** | P | **P** | **02 43 26.8** | **0.0** |
| | comp=Z,38nm,1.3s | | | | | | |
| **PMG** | **Port Moresby** | **30.69** | **94** | LR | LR | 02 57 04.4 | |
| | comp=Z,174nm,21.8s,baz=271,slow=39 | | | | | | |
| **CTA** | **Charters Tower** | **31.39** | **115** | LR | LR | 02 59 15.7 | |
| | comp=Z,12nm,18.9s,baz=269,slow=42 | | | | | | |
| **CTAO** | **Charters Tower** | **31.39** | **115** | P | **P** | **02 43 34.8** | **+0.3** |
| CTAO | | | | IAmb | IAmb | 02 43 41.8 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.58** | **328** | P | **P** | **02 43 34.7** | **-1.4** |
| | comp=Z,1.1nm,0.3s,baz=150,slow=7.3,SNR=2.0 | | | | | | |
| CMAR | | | | LR | LR | 02 57 30.3 | |
| | comp=Z,260nm,19.5s,baz=140,slow=39 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **HTT** | **Hallett** | **32.65** | **143** | P | **P** | **02 43 46.4** | **+1.0** |
| **HTT** | **Hallett** | **32.65** | **143** | P | **P** | **02 43 45.8** | **+0.4** |
| | comp=Z,18nm,2.7s | | | | | | |
| **STKA** | **Stephens Creek** | **33.29** | **138** | P | **P** | **02 43 52.5** | **+1.5** |
| | comp=Z,2.0nm,0.4s,baz=316,slow=8.4,SNR=4.9 | | | | | | |
| STKA | | | | PcP | **PcP** | **02 46 32.5** | **-0.7** |
| | comp=Z,3.1nm,0.6s,baz=312,slow=5.9,SNR=3.0 | | | | | | |
| STKA | | | | LR | LR | 02 57 43.1 | |
| | comp=Z,277nm,21.7s,baz=317,slow=37 | | | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **ARPS** | **Mount Arapiles** | **36.69** | **144** | P | **P** | **02 44 21.3** | **+1.1** |
| **ARPS** | **Mount Arapiles** | **36.69** | **144** | P | **P** | **02 44 20.3** | **+0.1** |
| | comp=Z,24nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **37.33** | **121** | P | **P** | **02 44 26.2** | **+0.3** |
| EIDS | | | | IAmb | IAmb | 02 44 47.1 | |
| | comp=Z,43nm,1.8s | | | | | | |
| **EIDS** | **Eidsvold** | **37.33** | **121** | P | **P** | **02 44 26.5** | **+0.7** |
| | comp=Z,9.3nm,2.0s | | | | | | |
| **TOO** | **Toolangi** | **39.39** | **142** | P | **P** | **02 44 42.9** | **-0.2** |
| TOO | | | | IAmb | IAmb | 02 44 51.0 | |
| | comp=Z,25nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **39.78** | **128** | P | **P** | **02 44 48.0** | **+1.5** |
| ARMA | | | | IAmb | IAmb | 02 44 49.3 | |
| | comp=Z,76nm,1.9s | | | | | | |
| **SHL** | **Shillong** | **41.15** | **326** | P | **P** | **02 44 58.5** | **+0.6** |
| **H08S2** | **Diego Garcia H** | **43.19** | **268** | T | T | 03 30 51.4 | |
| | baz=95,slow=76,SNR=6.7 | | | | | | |
| **H08S3** | **Diego Garcia H** | **43.20** | **268** | T | T | 03 30 50.8 | |
| | baz=95,slow=76,SNR=3.2 | | | | | | |
| **H08S1** | **Diego Carcia H** | **43.20** | **268** | T | T | 03 31 04.9 | |
| | baz=95,slow=76,SNR=3.2 | | | | | | |
| **HNR** | **Honiara** | **43.30** | **95** | LR | LR | 03 03 37.7 | |
| | comp=Z,693nm,21.5s,baz=64,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **46.90** | **13** | P | **P** | **02 45 44.6** | **+0.9** |
| | comp=Z,4.9nm,0.9s,baz=194,slow=7.8,SNR=16 | | | | | | |
| | comp=Z,4.9nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.26** | **24** | P | **P** | **02 46 01.9** | **-0.1** |
| | comp=Z,10nm,0.9s,baz=198,slow=7.6,SNR=15 | | | | | | |
| | comp=Z,10nm,0.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **50.22** | **112** | LR | LR | 03 08 37.4 | |
| | comp=Z,122nm,18.5s,baz=200,slow=37 | | | | | | |
| **JMM** | **Marumori** | **51.45** | **25** | P | **P** | **02 46 18.9** | **+0.3** |
| **MDJ** | **Mudanjiang** | **54.12** | **12** | P | **P** | **02 46 38.5** | **+0.3** |
| **USRK** | **Ussuriysk Ar.** | **54.26** | **14** | P | **P** | **02 46 39.8** | **+0.6** |
| | comp=Z,7.7nm,1.0s,baz=195,slow=6.5,SNR=15 | | | | | | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.56** | **353** | P | **P** | **02 46 54.7** | **-1.2** |
| **SONM** | **Songino Array** | **56.61** | **352** | P | **P** | **02 46 56.6** | **+0.3** |
| | comp=Z,5.7nm,0.7s,baz=172,slow=9.0,SNR=35 | | | | | | |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **CASY** | **Casey** | **57.95** | **183** | P | **P** | **02 47 04.1** | **-1.3** |
| CASY | | | | IAmb | IAmb | 02 47 06.3 | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **KLR** | **Kul'dur** | **58.97** | **12** | P | **P** | **02 47 11.8** | **-0.8** |
| | comp=Z,1.9nm,0.9s,baz=218,slow=19,SNR=4.0 | | | | | | |
| | comp=Z,1.9nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **62.17** | **129** | LR | LR | 03 14 41.8 | |
| | comp=Z,163nm,19.6s,baz=16,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.63** | **334** | P | **P** | **02 47 36.0** | **-1.6** |
| | comp=Z,0.5nm,0.4s,baz=149,slow=7.9,SNR=7.0 | | | | | | |
| MKAR | | | | LR | LR | 03 18 41.9 | |
| | comp=Z,56nm,18.1s,baz=150,slow=40 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **63.37** | **327** | LR | LR | 03 17 40.3 | |
| | comp=Z,48nm,19.2s,baz=126,slow=38 | | | | | | |
| **GAR** | **Garm** | **63.45** | **321** | P | **P** | **02 47 43.2** | **-0.2** |
| GAR | | | | IAmb | IAmb | 02 48 20.4 | |
| | comp=Z,11nm,1.1s | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **66.29** | **223** | T | T | 03 59 47.1 | |
| | baz=75,slow=75,SNR=6.0 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **66.31** | **223** | T | T | 03 59 47.4 | |
| | baz=75,slow=75,SNR=5.9 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **66.31** | **223** | T | T | 03 59 42.6 | |
| | baz=75,slow=75,SNR=6.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.17** | **335** | P | **P** | **02 48 05.0** | **-2.1** |
| | comp=Z,0.8nm,0.9s,baz=146,slow=5.8,SNR=4.4 | | | | | | |
| | comp=Z,0.8nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **67.20** | **335** | P | **P** | **02 48 07.6** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **67.47** | **341** | P | P | 02 48 06.4 | -2.5 |
| | comp=Z,2.2nm,0.7s,baz=150,slow=4.4,SNR=7.4 | | | | | | |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **68.87** | **199** | P | **P** | **02 48 18.7** | **+1.1** |
| | comp=Z,3.5nm,1.0s | | | | | | |
| **MAW** | **Mawson** | **68.87** | **199** | P | **P** | **02 48 18.0** | **+0.4** |
| |

OKWE Okmok W'ng Wal 1.09 42 Pb 02 47 44.5 -1.3
OKNC Okmok New Cone 1.13 45 Pb 02 47 45.2 -1.2
OKFG Magazine Ridge 1.20 51 Sb 02 48 02.2 -0.5
MAPS Pakushin South 1.90 52 Pn 02 47 56.5 -0.5
MAPS Sn 02 48 22.6 +2.1
MGOD Makushin Gods 1.92 53 Pn 02 47 57.0 -0.3
MGOD Sn 02 48 23.1 +1.8
MSW Makushin Switc 2.04 51 Pn 02 47 58.5 -0.3
MSW Sb 02 48 26.5 -0.4
UNV Unalaska Valle 2.13 55 Sn 02 48 27.0 +0.7
UNV Unalaska Valle 2.13 55 Pn Pn 02 47 59.2 -0.9
UNV Unalaska Valle 2.13 55 P Pn 02 47 59.4 -0.7
baz=238,SNR=136
AKRB Akutan Reef Bi 2.50 53 Pn 02 48 05.3 0.0
ZRO Akutan Zero 2.53 54 Pn 02 48 06.3 +0.7
LVA Lava Point 2.54 53 Pn Pn 02 48 06.3 +0.5
AKSA Akutan Strait 2.69 55 Pn 02 48 08.6 +0.8
KOFP Korovin Flat P 2.86 264 Pn 02 48 10.3 +0.1
KOWE Korovin West 2.94 266 Pn 02 48 11.8 +0.6
WEBT Westdahl Beart 3.40 54 Pn 02 48 19.0 +1.4
WESE West Dahl East 3.42 56 Pn 02 48 19.4 +1.4
P08K Saint George I 3.94 359 Pn 02 48 25.9 +1.0
ISNN Isanotski Nort 4.01 55 Pn 02 48 26.7 +0.7
GSTR Great Sitkin T 4.08 264 Pn Pn 02 48 26.8 -0.2
GSCK Great Sitkin C 4.16 264 Pn 02 48 28.0 0.0
FALS False Pass 4.20 56 Pn 02 48 28.4 -0.1
FALS False Pass 4.20 56 P Pn 02 48 28.8 +0.2
baz=241
SPIA Saint Paul Isl 4.54 355 Pn 02 48 33.9 +0.7
SPIA Saint Paul Isl 4.54 355 P Pn 02 48 34.3 +1.2
baz=174
KIMD Kanaga Island 4.86 262 Pn 02 48 38.6 +0.9
S12K Black Hills 5.30 52 P Pn 02 48 43.5 -0.2
baz=238
SDPT Sand Point 5.94 60 Pn Pn 02 48 53.5 +1.1
SDPT Sand Point 5.94 60 P Pn 02 48 52.4 0.0
baz=247
CHNA Chernabura Isl 6.25 66 P Pn 02 48 57.3 +0.7
baz=254
S14K Fog Glacier 6.81 54 P Pn 02 49 05.3 +0.8
baz=242,SNR=9.3
AMKA Amchitka 7.05 264 Pn Pn 02 49 08.0 +0.3
CHGN Chignik 7.39 56 Pn Pn 02 49 10.7 -1.6
CHGN Chignik 7.39 56 P Pn 02 49 12.8 +0.5
baz=245
LSNW Little Sitkin 7.40 269 Pn 02 49 13.8 +1.3
M11K Mekoryuk 7.94 12 P Pn 02 49 20.4 +0.6
baz=195
O14K Tigyukauivet M 8.04 32 Pn Pn 02 49 19.4 -1.8
O14K Tigyukauivet M 8.04 32 P Pn 02 49 22.3 +1.1
baz=218
N14K Kuskokwak Cree 8.45 28 P Pn 02 49 27.2 +0.4
baz=214
M13K Dall Lake 8.46 21 P Pn 02 49 27.2 +0.3
baz=206
O15K Ungalikthiuk R 8.47 36 P Pn 02 49 27.9 +0.8
baz=224
R17L Mt. Peulik Vol 8.99 51 P Pn 02 49 34.6 +0.3
baz=242
M14K Bethel 9.08 24 Pn Pn 02 49 35.9 +0.4
M14K Bethel 9.08 24 P Pn 02 49 36.7 +1.2
baz=210
N15K Kwethluk River 9.13 31 Pn Pn 02 49 37.3 +1.1
N15K Kwethluk River 9.13 31 P Pn 02 49 37.0 +0.9
baz=219
M15K Kasigluk River 9.37 27 P Pn 02 49 40.5 +1.0
baz=215
O16K Kokwok River B 9.39 38 Pn Pn 02 49 40.6 +0.8
O16K Kokwok River B 9.39 38 P Pn 02 49 40.9 +1.1
baz=227,SNR=9.1
Q16K King Salmon 9.40 45 P Pn 02 49 40.0 +0.1
baz=236
L14K Kuka Creek 9.44 20 Pn Pn 02 49 41.0 +0.6
L14K Kuka Creek 9.44 20 P Pn 02 49 41.2 +0.8
baz=206
Q17K Contact Creek 9.52 49 P Pn 02 49 42.7 +1.1
baz=240
K13K Kusilvak Mount 9.64 14 Pn Pn 02 49 44.1 +1.0
SII Sitkinak Islan 9.68 60 P Pn 02 49 45.0 +1.3
baz=253
N16K Nishlik Lake 9.79 33 P Pn 02 49 46.3 +1.2
baz=222
P17K Kvichak River 9.79 43 P Pn 02 49 46.9 +1.7
baz=234
O17K Koliganek Bris 9.89 39 P Pn 02 49 48.0 +1.5
baz=229
L15K Ungalak Mounta 10.01 22 P Pn 02 49 49.6 +1.4
baz=209
Q18K Katmai Hardscr 10.12 48 P Pn 02 49 49.9 +0.1
baz=240
M16K Timber Creek 10.14 30 P Pn 02 49 52.2 +2.1
baz=219
OHAK Old Harbor 10.35 57 P Pn 02 49 54.4 +1.5
baz=251
N17K Nushagak Hills 10.37 36 Pn Pn 02 49 51.7 -1.4
N17K Nushagak Hills 10.37 36 P Pn 02 49 54.3 +1.2
baz=226
K15K Wolf Creek Mou 10.54 21 Pn Pn 02 49 55.0 -0.4
K15K Wolf Creek Mou 10.54 21 P Pn 02 49 56.9 +1.4
baz=207
L16K Owhat River 10.54 27 Pn Pn 02 49 54.7 -0.8
L16K Owhat River 10.54 27 P Pn 02 49 56.5 +1.0
baz=215
J14K Nanvaranak Lak 10.58 15 P Pn 02 49 58.2 +2.2
baz=200
O18K Koktuh Hills 10.69 42 Pn Pn 02 49 58.6 +1.1
O18K Koktuh Hills 10.69 42 P Pn 02 49 59.4 +1.8
baz=234
Q19K Cape Douglas, 10.87 49 P Pn 02 50 01.3 +1.3
baz=242
KDAK Kodiak Island 10.90 55 Pn Pn 02 50 00.1 -0.3
0.6nm,0.3s,baz=208,slow=4.0,SNR=13
KDAK Sn 02 51 56.2 -5.8
0.1nm,0.3s,baz=238,slow=17,SNR=1.7
KDAK Kodiak Island 10.90 55 P Pn 02 50 00.7 +0.3
baz=249
KDAK Kodiak Island 10.90 55 *i* P Pn 02 49 57.7 -2.7
M17K Holitna River 10.91 32 P Pn 02 50 01.9 +1.4
baz=222
N18K Kilae Creek 10.94 37 P Pn 02 50 01.2 +0.2
baz=229
L17K Donlin 11.22 28 P Pn 02 50 06.3 +1.6
baz=217
Q20K Shuyak Island 11.31 52 P Pn 02 50 07.4 +1.4
baz=246
SYI Shuyak Island 11.32 52 Pn Pn 02 50 06.0 0.0
M18K Stony River 11.52 35 P Pn 02 50 08.5 -0.2
baz=226
N19K Bonanza Creek 11.56 39 P Pn 02 50 10.0 +0.6
baz=232
J16K Anvik River 11.62 20 P Pn 02 50 11.1 +0.9
baz=208
K17K Iditarod 11.69 26 P Pn 02 50 13.4 +2.3
baz=216
L18K Granite Mounta 11.76 31 P Pn 02 50 13.6 +1.5
baz=221
J17K VABM Dome 12.06 23 Pn Pn 02 50 16.4 +0.3
J17K VABM Dome 12.06 23 P Pn 02 50 17.1 +0.9
baz=212
I17K Unalakleet 12.14 19 P Pn 02 50 19.6 +2.3
baz=206
M19K Big River Lodg 12.30 35 P Pn 02 50 21.3 +1.8
baz=228,SNR=5.4
L19K White Mountain 12.33 34 P Pn 02 50 21.5 +1.5
baz=226,SNR=5.9
N20K Mount Spurr 12.68 41 P Pn 02 50 28.2 +3.5
baz=235
SPCR Spurr Chakacha 12.68 41 P Pn 02 50 27.4 +2.6
baz=235
J18K Innoko River 12.72 27 Pn Pn 02 50 24.4 -0.8
J18K Innoko River 12.72 27 P Pn 02 50 28.1 +2.8
baz=218
M20K Styx River 12.74 37 P Pn 02 50 27.7 +2.1
baz=231
H17K Granite Mounta 13.24 18 P Pn 02 50 34.5 +2.2
baz=206
G16K Koyuk River 13.26 13 P Pn 02 50 32.5 -0.1
baz=199
F15K North Star Dit 13.30 9 P Pn 02 50 34.9 +1.7
baz=193
SEW Seward 13.31 48 P Pn 02 50 34.3 +1.1
baz=245
SKT Skwentna 13.40 39 P Pn 02 50 37.6 +3.1
baz=234,SNR=7.4
SUA Susitna One 13.41 42 P Pn 02 50 38.1 +3.2
baz=237
K20K Telida 13.42 31 P Pn 02 50 36.0 +1.3
baz=224
J19K Poorman 13.44 27 P Pn 02 50 36.3 +1.3
baz=219
G17K Kiwalik Mounta 13.62 16 P Pn 02 50 38.5 +1.1
baz=203
H18K Honhosa River 13.73 20 P Pn 02 50 40.8 +1.7
baz=210
J20K Nowinta River 14.00 29 Pn Pn 02 50 43.5 +0.9
J20K Nowinta River 14.00 29 P Pn 02 50 43.2 +0.6
baz=222,SNR=6.6
CUT Chulitna 14.13 39 Pn Pn 02 50 45.4 +1.0
CUT Chulitna 14.13 39 P Pn 02 50 46.2 +1.8
baz=235
PWL Port Wells 14.14 46 P Pn 02 50 44.6 0.0
baz=244
PMR Palmer 14.14 43 P Pn 02 50 45.9 +1.3
baz=240
P23K Montague Islan 14.21 50 P Pn 02 50 44.3 -1.3
baz=249
G18K Tagagawik 14.33 18 P Pn 02 50 49.8 +2.6
baz=208
KNK Knik Glacier 14.34 44 P Pn 02 50 47.8 +0.5
baz=242
H19K Roundabout Mou 14.47 22 P Pn 02 50 50.2 +1.0
baz=213
SML Sawmill 14.58 43 P Pn 02 50 50.9 +0.2
baz=241
HIN Hinchinbrook I 14.78 49 Pn Pn 02 50 51.9 -1.5
F18K Selawik 14.79 15 P Pn 02 50 53.1 -0.4
baz=204
H20K Anotleneega Mo 14.82 24 P Pn 02 50 55.3 +1.4
baz=217
M23K Glacier View 14.83 43 P Pn 02 50 53.8 -0.2
baz=242
G19K Purcell Mounta 14.86 20 P Pn 02 50 57.9 +3.5
baz=211
BPAW Bear Paw Mtn. 14.93 33 P P 02 50 60.0 -0.9
baz=229
SCM Sheep Creek Mo 15.01 44 P Pn 02 50 57.2 +0.6
baz=242
WAT6 Susitna Watana 15.21 41 P Pn 02 50 58.7 -0.6
baz=239
RND Reindeer 15.24 37 IAmb IAmb 02 51 19.2
comp=Z,27nm,1.1s
F19K Shaleruckik Mo 15.33 18 P Pn 02 51 01.7 +1.0
baz=208
D17K Noatak River 15.39 9 P P 02 51 04.7 -1.3
baz=195
MCK McKinley 15.40 36 P Pn 02 51 04.2 +2.7
baz=234
E18K Tukpahlearik C 15.42 13 P P 02 51 05.8 -0.5
baz=201
KLU Klutina 15.47 46 Pn Pn 02 51 00.8 -1.8
KLU IAmb IAmb 02 51 05.4
comp=Z,14nm,0.8s
KLU Klutina 15.47 46 P Pn 02 51 02.0 -0.5
baz=246
H21K Melozitna River 15.49 26 Pn Pn 02 51 00.3 -2.5
H21K IAmb IAmb 02 51 10.3
comp=Z,17nm,1.1s
H21K Melozitna Rive 15.49 26 P Pn 02 51 04.4 +1.7
baz=221,SNR=7.2
DHY Denali Highway 15.61 40 P Pn 02 51 05.0 +0.6
baz=238
M24K Tolsona, Glenn 15.62 44 Pn Pn 02 51 05.0 +0.5
M24K IAmb IAmb 02 51 32.3
comp=Z,33nm,0.9s
M24K Tolsona, Glenn 15.62 44 P Pn 02 51 05.6 +1.1
baz=243
MLY Manley 15.63 30 P Pn 02 51 06.5 +1.8
baz=226,SNR=16
BMRM Bremner River 15.86 49 P Pn 02 51 07.0 -0.6
baz=250
NEA2 Nenana 15.88 33 P Pn 02 51 08.4 +0.6
baz=231
F20K Avaraart Lake 15.92 20 P Pn 02 51 09.5 +1.2
baz=212
G21K Allakaket 15.98 24 P Pn 02 51 10.7 +1.7
baz=218
E19K Redstone River 15.98 17 P Pn 02 51 09.2 +0.1
baz=208
H22K Ishtalitna Cre 16.06 27 P Pn 02 51 12.5 +2.3
baz=223,SNR=7.2
N25K Chitina, Valde 16.09 46 P Pn 02 51 09.4 -1.2
baz=248
I23K Minto, Yukon-K 16.15 31 P Pn 02 51 12.9 +1.7
baz=229,SNR=23
PAX Paxson 16.31 41 P Pn 02 51 13.5 +0.1
baz=242
SNH Sunshine Point 16.44 52 P 02 51 18.7 +0.9
CRQM Cirque 16.46 50 Pn Pn 02 51 15.5 +0.1
CRQM IAmb IAmb 02 51 18.8
comp=Z,41nm,1.4s
COLA College 16.47 34 P Pn 02 51 17.2 +2.0
baz=232
COLA College 16.47 34 *i* P Pn 02 51 14.3 -0.9
CRQE Cirque 16.48 50 P Pn 02 51 16.5 +0.8
baz=252
HDA Harding Lake 16.50 36 P Pn 02 51 14.6 -1.1
baz=235
C18K Utukok River 16.51 11 P Pn 02 51 17.2 +1.4
baz=198
H23K Yukon River 16.55 30 P P 02 51 19.5 +0.7
baz=227,SNR=14
F21K Alatna River 16.55 22 P P 02 51 19.0 +0.1
baz=216,SNR=20
K24K Donnelly Dome 16.60 39 P Pn 02 51 18.3 +1.2
baz=239
MCARA McCarthy VSAT 16.72 48 P Pn 02 51 17.3 -1.2
baz=250
ILAR Eielson Array 16.74 35 Pn Pn 02 51 17.6 -1.1
comp=Z,0.2nm,0.3s,baz=223,slow=10.0,SNR=10.0
ILAR LR LR 02 58 39.6
comp=Z,261nm,20.4s,baz=212,slow=40
comp=Z,1.3nm,0.6s
POKR Poker Flat Res 16.76 33 P Pn 02 51 19.7 +0.7
baz=232
D19K Kuna River 16.77 15 P Pn 02 51 17.3 -1.9
baz=205
G22K Bettles 16.80 25 P Pn 02 51 20.0 +0.5
baz=221,SNR=7.2
MESA MESA 16.87 53 P Pn 02 51 20.6 0.0
baz=256
E20K Nigu River 16.88 17 P Pn 02 51 21.2 +0.7
baz=209
RIDG Independent Ri 16.93 40 Pn 02 51 21.9 +0.7
RIDG Independent Ri 16.93 40 P Pn 02 51 22.3 +1.1
baz=241
G23K Bananza Creek 17.04 27 P Pn 02 51 21.8 -0.7
baz=224,SNR=8.9
H24K Nodor Dome 17.07 31 P Pn 02 51 23.3 +0.4
baz=230
F22K John River 17.09 23 P Pn 02 51 22.9 -0.2
baz=218
M26K Nabesna, AK 17.10 45 P Pn 02 51 23.9 +0.6
baz=247,SNR=5.9
GRNC Granite Creek 17.11 51 Pn Pn 02 51 23.4 -0.2
GRNC IAmb IAmb 02 51 31.7
comp=Z,18nm,0.8s
B18K Kokolik River 17.13 9 P P 02 51 25.3 0.0
baz=196
C19K Lookout Ridge 17.13 12 P Pn 02 51 22.3 -1.4
baz=201
J25K Salcha River, 17.19 37 IAmb IAmb 02 51 42.5
comp=Z,52nm,1.2s
J25K Salcha River, 17.19 37 P Pn 02 51 23.9 -0.6
baz=237,SNR=16
L26K Log Cabin Wild 17.20 43 P Pn 02 51 25.0 +0.4
baz=245
D20K Ettuvuk River 17.21 16 P Pn 02 51 24.2 -0.5
baz=207
COLD Coldfoot 17.37 25 P Pn 02 51 27.5 +0.9
baz=222
CTG Chitna Glacier 17.37 50 P Pn 02 51 27.0 +0.3
baz=254
SCRK Sand Creek 17.38 39 P Pn 02 51 26.0 -0.9
baz=241
E21K Killik River 17.46 19 P P 02 51 29.7 +0.8
baz=213
M27K Edge Creek, AK 17.57 46 IAmb IAmb 02 51 35.0
comp=Z,21nm,0.9s
M27K Edge Creek, AK 17.57 46 P Pn 02 51 27.9 -1.4
baz=249,SNR=13
PRP Porcupine Dome 17.64 34 P Pn 02 51 30.2 0.0
baz=235
E22K Anaktuvuk Pass 17.67 22 P Pn 02 51 31.5 +1.1
baz=218
G24K Hadweenzic Riv 17.76 29 IAmb IAmb 02 51 37.9
comp=Z,68nm,1.4s
G24K Hadweenzic Riv 17.76 29 P Pn 02 51 31.0 -0.5
baz=228,SNR=29
J26L Joseph Creek 17.80 38 IAmb IAmb 02 51 47.2
comp=Z,20nm,0.7s
J26L Joseph Creek 17.80 38 P Pn 02 51 30.0 -2.1
baz=240
L27K Beaver Creek, 17.85 44 Pn Pn 02 51 31.7 -1.0
L27K Beaver Creek, 17.85 44 P Pn 02 51 32.4 -0.3
baz=247
O28M Mount Upton 17.86 51 P Pn 02 51 33.6 +0.6
baz=256,SNR=8.4
C21K Knifeblade Rid 17.92 17 P Pn 02 51 33.6 +0.2
baz=210
H25L Birch Creek 17.99 32 P Pn 02 51 35.2 +0.9
baz=232
PNL Peninsula 18.02 55 P Pn 02 51 33.0 -1.8
baz=260
D22K Ayikyak River 18.09 20 P P 02 51 37.3 +1.5
baz=214,SNR=11
E23K Chandalar 18.14 24 P Pn 02 51 35.8 -0.3
baz=222,SNR=5.9
K27K Chicken 18.15 41 P Pn 02 51 35.8 -0.5
baz=244
F24K Squaw Lake 18.20 27 P P 02 51 38.9 +1.8
baz=226,SNR=14
G25K Bearman Lake 18.21 30 P Pn 02 51 37.7 +0.7
baz=231,SNR=9.7
B20K Meade River 18.30 14 P Pn 02 51 37.9 -0.1
baz=204
B21K Ikpikpuk River 18.35 17 P Pn 02 51 38.7 0.0
baz=210
I26K Coal Creek Min 18.35 36 P Pn 02 51 37.1 -1.7
baz=239
FYU Fort Yukon 18.36 31 P P 02 51 39.1 +0.3
FYU IAmb IAmb 02 51 46.4
comp=Z,28nm,1.1s
E24K Your Creek 18.44 25 P Pn 02 51 42.4 +2.5
baz=224
O29M Mount Kennedy 18.54 53 IAmb IAmb 02 51 50.4
comp=Z,41nm,1.5s
O29M Mount Kennedy 18.54 53 P P 02 51 41.5 +0.5
baz=259
TOLK Toolik Lake Re 18.59 23 P P 02 51 41.9 +0.5
TOLK IAmb IAmb 02 51 49.7
comp=Z,22nm,1.1s
TOLK Toolik Lake Re 18.59 23 P Pn 02 51 42.7 +1.1
baz=221
YUK4 Talbot Arm 18.73 50 P P 02 51 43.7 +0.5
baz=256
EGAK Eagle 18.84 39 P P 02 51 44.1 0.0
EGAK Eagle 18.84 39 P P 02 51 43.6 -0.5
baz=243
P29M Windy Craggy 18.85 56 P P 02 51 45.1 +0.8
baz=262
F25K Christian Rive 18.89 29 IAmb IAmb 02 51 49.3
comp=Z,20nm,0.9s
F25K Christian Rive 18.89 29 P Pn 02 51 46.9 +1.6
baz=230,SNR=13
G26K Porcupine Rive 19.05 32 P Pn 02 51 48.0 +0.8
baz=234,SNR=7.6
I27K Kandik River 19.06 36 P P 02 51 46.3 -0.3
baz=241,SNR=8.2
M29M Somme Creek 19.10 47 IAmb IAmb 02 51 56.0
comp=Z,18nm,0.9s
M29M Somme Creek 19.10 47 P P 02 51 46.7 -0.4
baz=254,SNR=12
D24K Happy Valley 19.16 23 P P 02 51 45.9 -1.6
baz=221
DAWY Dawson 19.24 42 P P 02 51 48.0 -0.6
baz=248
C23K Itkillik River 19.30 20 P P 02 51 50.1 +1.0
C23K IAmb IAmb 02 51 56.8
comp=Z,48nm,1.5s
C23K Itkillik River 19.30 20 P Pn 02 51 50.3 +0.2
baz=217
BILL Bilibino 19.31 332 *i* P P 02 51 48.0 -1.2
BILL pmax pmax
comp=Z,20nm,1.3s
BILL MLR MLR
comp=Z,181nm,19.0s
P30M Million Dollar 19.31 54 P Pn 02 51 51.2 +0.8
baz=255,SNR=18
F26K Sheenjek River 19.39 29 P Pn 02 51 52.4 +1.1
baz=232,SNR=13
H27K Steamboat Moun 19.41 35 P P 02 51 50.7 +0.4
baz=239
L29M L29M 19.45 45 P P 02 51 51.6 +0.8
baz=252,SNR=5.6
N30M Aishikik Lake 19.48 50 IAmb IAmb 02 51 59.7
comp=Z,25nm,0.8s
N30M Aishikik Lake 19.48 50 P P 02 51 52.4 +1.1
baz=258,SNR=16
S31K Pelican 19.50 61 P P 02 51 52.2 +0.9
baz=269
A22K Sinclair Lake 19.52 14 P Pn 02 51 53.8 +1.1
baz=207
PLBC Pleasant Camp 19.53 57 P P 02 51 52.7 +1.1
baz=264,SNR=8.2
I28M Miner Creek 19.61 38 IAmb IAmb 02 51 59.6
comp=Z,18nm,0.9s
I28M Miner Creek 19.61 38 P P 02 51 52.0 -0.6
baz=244,SNR=14
C24K Franklin Bluff 19.62 22 P P 02 51 52.3 -0.2
baz=220
G27K Doyon Strip 19.67 33 P P 02 51 52.5 -0.7
G27K Doyon Strip 19.67 33 P P 02 51 52.4 -0.7
baz=238
PEA0B Petropavlovsk- 19.73 284 *i* P Pn 02 51 56.3 +0.9
PETK Petropavlovsk- 19.73 284 P P 02 51 51.9 -2.0
comp=Z,0.2nm,0.3s,baz=89,slow=13,SNR=2.0
comp=Z,0.8nm,0.5s
O30N Mendenhall 19.83 53 IAmb IAmb 02 52 02.5
comp=Z,19nm,0.8s
O30N Mendenhall 19.83 53 P P 02 51 56.5 +1.5
baz=261,SNR=16
D25K Kavik River 19.87 24 P P 02 51 57.0 +1.5
baz=225
M30M Minto, Yukon 19.88 47 P P 02 51 55.3 -0.3
M30M Minto, Yukon 19.88 47 P P 02 51 56.4 +0.8
baz=255,SNR=5.2
K29M Barlow Dome 19.94 43 P P 02 51 56.1 -0.2
K29M Barlow Dome 19.94 43 P P 02 51 55.1 -1.1
baz=251
SIT Sitka 20.00 64 P P 02 51 56.7 -0.1
baz=272
SKAG Skagway 20.05 57 P P 02 51 57.4 0.0
SKAG IAmb IAmb 02 51 59.6
comp=Z,36nm,1.0s
SKAG Skagway 20.05 57 P P 02 51 56.6 -0.8
baz=265
N31M Braeburn, Yuko 20.11 51 P P 02 51 57.3 -0.7
N31M IAmb IAmb 02 52 06.3
comp=Z,24nm,0.8s
N31M Braeburn, Yuko 20.11 51 P P 02 51 58.5 +0.5
baz=259,SNR=6.0
I29M Ogilvie Camp, 20.18 39 IAmb IAmb 02 52 07.0
comp=Z,16nm,1.0s
I29M Ogilvie Camp, 20.18 39 P P 02 51 57.5 -1.3
baz=246,SNR=8.5
S32K Kilisnoo 20.39 63 P P 02 52 01.2 +0.1
baz=271
WHY Whitehorse 20.41 53 P P 02 52 01.7 +0.3
WHY IAmb IAmb 02 52 09.7
comp=Z,21nm,0.8s
WHY Whitehorse 20.41 53 P P 02 52 01.1 -0.3
baz=262,SNR=12
R32K Eaglecrest 20.42 60 P P 02 52 02.5 +1.1
baz=269
E27K Coleen River 20.46 30 P P 02 52 02.9 +1.1
baz=235,SNR=6.0
H29M Whitestone 20.53 37 P P 02 52 01.0 -1.5
H29M Whitestone 20.53 37 P P 02 52 01.9 -0.6
baz=244,SNR=27
J30M Hart River 20.67 42 P P 02 52 03.8 -0.5
baz=251
F28M Old Crow 20.69 32 IAmb IAmb 02 52 11.6
comp=Z,14nm,0.9s
F28M Old Crow 20.69 32 P P 02 52 03.4 -0.8
baz=238,SNR=6.3
C27K Jago River 20.76 25 P P 02 52 05.9 +0.8
baz=228
I30M Mount Dempster 20.88 40 P P 02 52 04.8 -1.6
baz=249,SNR=6.0
P32M Atlin 20.88 56 P P 02 52 05.7 -0.7
baz=266
M31M Drury Creek, Y 20.89 49 P P 02 52 06.8 +0.3

baz=259,SNR=11
**G29M Pine Creek 20.96 35 P P 02 52 05.9 -1.3**
baz=243,SNR=38
**EPYK Eagle Plains 21.19 37 P P 02 52 08.7 -1.1**
baz=246,SNR=17
**D27M Malcolm River 21.27 28 P P 02 52 10.9 +0.3**
baz=233
**E28M Babbage River 21.33 30 IAmb IAmb** 02 52 17.9
comp=Z,16nm,1.1s
**E28M Babbage River 21.33 30 P P 02 52 11.5 +0.4**
baz=237,SNR=7.1
**N32M Quiet Lake 21.34 52 P P 02 52 13.8 +2.5**
baz=263
**FARO Faro, Yukon 21.37 49 P P 02 52 12.4 +0.7**
baz=260
**P33M Teslin, Yukon 21.38 55 P P 02 52 12.8 +1.0**
**P33M Teslin, Yukon 21.38 55 P P 02 52 12.5 +0.7**
baz=266,SNR=16
**Q32M Nakina River 21.60 58 P P 02 52 14.7 +0.3**
baz=269,SNR=9.8
**G30M tAoh Zraii Nji 21.63 36 IAmb IAmb** 02 52 17.4
comp=Z,29nm,1.1s
**G30M tAoh Zraii Nji 21.63 36 P P 02 52 13.6 -0.9**
baz=245,SNR=9.4
**E29M Blow River 21.73 32 P P 02 52 17.1 +1.7**
baz=240
**H31M Peel River 21.88 40 P P 02 52 14.7 -2.4**
H31M IAmb IAmb 02 52 20.7
comp=Z,20nm,0.9s
**H31M Peel River 21.88 40 P P 02 52 14.8 -2.2**
baz=250,SNR=6.6
**F30M Barrier River 22.06 34 P P 02 52 19.5 +0.6**
baz=244
**S34M Telegraph Cree 22.22 61 IAmb IAmb** 02 52 32.0
comp=Z,14nm,0.8s
**S34M Telegraph Cree 22.22 61 P P 02 52 24.0 +3.3**
baz=273
**R33M Jennings River 22.28 57 P P 02 52 20.3 -1.2**
**R33M Jennings River 22.28 57 P P 02 52 24.9 +3.4**
baz=270,SNR=22
**G31M Satah River 22.31 37 P P 02 52 22.9 +1.3**
**G31M Satah River 22.31 37 P P 02 52 23.4 +1.7**
baz=248,SNR=11
**SEY Seymchan 22.42 312 P P 02 52 22.8 -0.1**
comp=Z,2.9nm,0.6s,baz=102,slow=12,SNR=5.1
comp=Z,2.9nm,0.6s
**SEY Seymchan 22.42 312** *e*P **P 02 52 22.6 -0.3**
SEY pmax pmax
comp=Z,7.0nm,1.2s
**T35M Bob Quinn 22.77 63 P P 02 52 30.1 +3.4**
baz=276
**DLBC Dease Lake 22.78 60 IAmb IAmb** 02 52 31.2
comp=Z,23nm,1.1s
**DLBC Dease Lake 22.78 60 P P 02 52 30.0 +3.2**
baz=273,SNR=11
**MA2 Magadan 22.93 303 LR LR** 03 02 47.0
comp=Z,112nm,19.3s,baz=120,slow=40
**INK Inuvik 23.13 34 LR LR** 03 02 18.3
comp=Z,175nm,19.7s,baz=257,slow=38
**INK Inuvik 23.13 34 P P 02 52 28.0 -2.1**
baz=246
**TGTN Hyland Airport 23.68 52 P P 02 52 36.0 +0.1**
baz=267
**LIRD Liard River Hi 24.77 57 P P 02 52 47.3 +1.4**
baz=274
**TOAD Toad River Com 25.25 58 P P 02 52 51.2 +0.9**
baz=275,SNR=14
**WRGLY Wrigley 26.01 48 P P 02 52 59.7 +2.7**
baz=268
**C36M Paulatuk 26.71 34 P P 02 53 03.0 -0.2**
C36M IAmb IAmb 02 53 40.1
comp=Z,18nm,1.3s
**C36M Paulatuk 26.71 34 P P 02 53 05.5 +2.2**
baz=255
**YKA Yellowknife Ar 30.09 49 P P 02 53 32.6 -0.9**
comp=Z,1.0nm,0.9s,baz=294,slow=7.9,SNR=9.2
comp=Z,1.0nm,0.9s
**B08A Colville Reser 31.64 77 P P 02 53 48.1 +0.7**
B08A IAmb IAmb 02 53 54.6
comp=Z,5.8nm,0.9s
**ASAJ Asahikawa 32.43 274 LR LR** 03 07 01.4
comp=Z,68nm,20.3s,baz=146,slow=36
**TIXI Tiksi 32.45 329 LR LR** 03 07 31.7
comp=Z,62nm,19.7s,baz=132,slow=37
**YAK Yakutsk 32.93 311 LR LR** 03 09 16.3
comp=Z,115nm,19.7s,baz=105,slow=40
**NEW Newport 32.99 76 IAmb IAmb** 02 54 06.0
comp=Z,6.1nm,0.8s
**J05D Fort Rock, OR 33.06 87 P P 02 54 01.1 +1.1**
**BMO Blue Mountains 34.59 82 P P 02 54 13.1 -0.1**
BMO IAmb IAmb 02 54 19.2
comp=Z,7.9nm,1.4s
**BMO Blue Mountains 34.59 82 P P 02 54 13.1 -0.1**
BMO pmax pmax
comp=Z,8.0nm,1.4s
**BPMT Black Pine Rid 36.07 77 P P 02 54 26.0 -0.1**
**KLR Kul'dur 36.30 289 LR LR** 03 08 48.1
comp=Z,79nm,22.0s,baz=61,slow=36
**PNTR Pine Nut 36.53 91 P P 02 54 30.1 0.0**
PNTR IAmb IAmb 02 54 38.5
comp=Z,14nm,1.2s
**HLID Hailey 37.03 82 P P 02 54 34.6 +0.4**
**BOZ Bozeman (W) 37.59 77 P P 02 54 38.9 0.0**
**BOZ Bozeman (W) 37.59 77 P P 02 54 38.9 0.0**
BOZ pmax pmax
comp=Z,4.0nm,0.9s
**H11N2 WAKE ISLAND Hy 37.65 218 T T** 03 35 01.3
baz=24,slow=76,SNR=53
**H11N3 WAKE ISLAND Hy 37.66 218 T T** 03 34 44.4
baz=24,slow=76,SNR=63
**H11N1 WAKE ISLAND Hy 37.67 218 T T** 03 35 12.3
baz=24,slow=76,SNR=64
**NVAR Mina Array Bea 37.73 91 P P 02 54 41.8 +1.5**
comp=Z,1.4nm,0.8s,baz=289,slow=8.5,SNR=9.4
comp=Z,1.4nm,0.8s
**ELK Elko 38.17 86 P P 02 54 44.1 +0.1**
**ELK Elko 38.17 86 P P 02 54 44.1 +0.1**
ELK pmax pmax
comp=Z,4.0nm,0.9s
**YHL Hebgen Lake 38.26 78 IAmb IAmb** 02 54 51.5
comp=Z,6.0nm,0.8s
**YNR Norris Junctio 38.63 78 P P 02 54 47.9 +0.1**
YNR IAmb IAmb 02 54 55.6
comp=Z,5.5nm,0.7s
**H11S1 WAKE ISLAND Hy 38.84 218 T T** 03 36 08.3
baz=23,slow=76,SNR=2430
**H11S2 WAKE ISLAND Hy 38.86 218 T T** 03 36 06.5
baz=23,slow=76,SNR=622
**H11S3 WAKE ISLAND Hy 38.86 218 T T** 03 36 06.7
baz=23,slow=76,SNR=347
**H17A Grant Village 38.87 78 P P 02 54 51.0 +1.2**
baz=304
**RLMT Red Lodge 39.24 76 IAmb IAmb** 02 54 59.2
comp=Z,13nm,1.4s
**LOHW Long Hollow 39.29 79 P P 02 54 53.7 +0.4**
**R11B Troy Canyon, C 39.43 89 P P 02 54 55.9 +1.4**
**R11B Troy Canyon, C 39.43 89 P P 02 54 56.0 +1.4**
baz=309,SNR=6.4
**Q12A Willow Creek R 39.46 88 P P 02 54 55.5 +0.8**
Q12A IAmb IAmb 02 55 06.7
comp=Z,13nm,1.3s
**MJAR Matsushiro Arr 39.65 267 LR LR** 03 10 24.2
comp=Z,66nm,19.8s,baz=76,slow=35
**TPNV Topopah Spring 39.93 91 IAmb IAmb** 02 55 06.0
comp=Z,7.0nm,0.8s
**DUG Dugway, Tooele 39.97 85 IAmb IAmb** 02 55 05.6
comp=Z,9.9nm,1.1s
**PSUT Pine Spring 40.37 88 P P 02 55 02.2 -0.1**
**PDAR Pinedale Array 40.40 79 P P 02 55 02.9 +0.3**
comp=Z,2.1nm,0.7s,baz=310,slow=4.8,SNR=12
comp=Z,2.1nm,0.7s
**GSC Goldstone, Bar 40.67 94 P P 02 55 04.6 -0.1**
GSC IAmb IAmb 02 55 12.7
comp=Z,6.5nm,0.9s
**GSC Goldstone, Bar 40.67 94 P P 02 55 04.6 -0.1**
GSC pmax pmax
comp=Z,7.0nm,0.9s
**BSUT Blindstream Ca 41.01 83 P P 02 55 07.6 -0.2**
**TMUT Trail Mountain 41.50 85 IAmb IAmb** 02 55 17.9
comp=Z,12nm,1.2s
**PKCU Pink Cliffs 42.00 88 P P 02 55 15.6 -0.4**
PKCU IAmb IAmb 02 55 24.2
comp=Z,6.2nm,0.9s
**PFO Pinyon Flats O 42.03 95 LR LR** 03 12 06.3
comp=Z,43nm,18.2s,baz=241,slow=35
**SRU San Rafael Swe 42.03 84 P P 02 55 15.1 -0.9**
**SRU San Rafael Swe 42.03 84 P P 02 55 15.1 -0.9**
SRU pmax pmax
comp=Z,4.0nm,0.9s
**TPFO Pinon Flats 42.03 95 P P 02 55 16.8 +0.9**
baz=314
**U15A North Rim 42.68 89 IAmb IAmb** 02 55 29.1
comp=Z,4.3nm,0.7s
**RSSD Black Hills 42.89 74 P P 02 55 22.5 -0.4**
RSSD IAmb IAmb 02 55 28.2
comp=Z,5.6nm,0.9s
**RSSD Black Hills 42.89 74 P P 02 55 22.5 -0.4**
RSSD pmax pmax
comp=Z,6.0nm,0.9s
**MDND Maddock 43.32 67 P P 02 55 26.2 0.0**
**N23A Red Feather La 43.69 79 P P 02 55 28.9 -0.6**
N23A IAmb IAmb 02 55 37.4
comp=Z,6.0nm,1.0s
**N23A Red Feather La 43.69 79 P P 02 55 29.0 -0.5**
baz=308
**WUAZ Wupatki 43.84 89 IAmb IAmb** 02 55 38.9
comp=Z,7.2nm,1.2s
**JCJ Chichijima 43.93 254 LR LR** 03 11 10.7
comp=Z,30nm,21.2s,baz=112,slow=33
**ULM Lac du Bonnet 44.06 62 P P 02 55 33.4 +1.3**
comp=Z,5.2nm,0.8s,baz=307,slow=9.7,SNR=3.7
ULM LR LR 03 14 36.4
comp=Z,76nm,18.6s,baz=273,slow=37
comp=Z,5.2nm,0.8s
**S22A 4UR Ranch, Cre 45.14 83 P P 02 55 41.0 -0.1**
S22A IAmb IAmb 02 56 16.0
comp=Z,5.0nm,1.4s
**S22A 4UR Ranch, Cre 45.14 83 P P 02 55 40.9 -0.3**
baz=310
**214A Organ Pipe Nat 45.38 94 P P 02 55 41.1 -1.8**
214A IAmb IAmb 02 55 50.4
comp=Z,7.6nm,1.2s
**214A Organ Pipe Nat 45.38 94 P P 02 55 41.5 -1.3**
baz=314
**SUSD Miller 45.65 71 P P 02 55 44.4 -0.4**
**SDCO Great Sand Dun 45.94 82 IAmb IAmb** 02 55 53.6
comp=Z,3.9nm,0.8s
**TUC Tucson 46.37 92 P P 02 55 50.5 -0.2**
TUC IAmb IAmb 02 55 58.4
comp=Z,3.6nm,0.9s
**TUC Tucson 46.37 92 P P 02 55 50.5 -0.2**
TUC pmax pmax
comp=Z,4.0nm,1.0s
**JNU Nakatsue 46.41 270 LR LR** 03 12 00.5
comp=Z,60nm,21.7s,baz=60,slow=32
**T25A Trinidad 46.99 82 P P 02 55 56.3 +0.6**
**T25A Trinidad 46.99 82 P P 02 55 57.3 +1.7**
baz=311,SNR=5.8
**ANMO Albuquerque 47.21 86 LR LR** 03 14 51.5
comp=Z,55nm,18.2s,baz=326,slow=35
**ANMO Albuquerque 47.21 86** *i* P **P 02 55 55.5 -1.8**
ANMO pmax pmax
comp=Z,2.0nm,1.4s
**121A Cookes Peak, D 48.04 89 P P 02 56 04.5 +0.7**
baz=314
**RTBA Rita Blanca 48.46 82 P P 02 56 06.5 -0.5**
RTBA IAmb IAmb 02 56 12.5
comp=Z,6.3nm,0.8s
**L34A Svendsen Farm, 48.66 72 P P 02 56 09.3 +1.1**
**FRB Frobisher Bay 48.77 35 LR LR** 03 18 01.1
comp=Z,178nm,18.9s,baz=295,slow=38
**KSU1 Kansas State U 50.36 75 P P 02 56 20.7 -0.6**
KSU1 IAmb IAmb 02 56 26.3
comp=Z,7.2nm,0.8s
**VHRN Van Horn 50.97 89 IAmb IAmb** 02 56 33.5
comp=Z,10nm,1.1s
**SONM Songino Array 51.09 301 P P 02 56 26.2 -0.6**
comp=Z,0.3nm,0.5s,baz=46,slow=6.2,SNR=1.6
SONM PcP **PcP 02 57 41.4 -1.0**
comp=Z,1.4nm,0.6s,baz=7.6,slow=4.4,SNR=5.3
comp=Z,0.3nm,0.5s
**N38A Joes South For 51.22 71 P P 02 56 26.9 -0.8**
**P38A Dawn 51.82 72 P P 02 56 31.3 -0.9**
**WMOK Wichita Mounta 51.99 81 P P 02 56 33.3 -0.3**
WMOK IAmb IAmb 02 56 38.9
comp=Z,7.6nm,0.8s
**WMOK Wichita Mounta 51.99 81 P P 02 56 33.3 -0.3**
WMOK pmax pmax
comp=Z,8.0nm,0.8s
**SFJD Kangerlussuaq 52.13 26 LR LR** 03 21 51.5
comp=Z,59nm,18.4s,baz=316,slow=40
**JOW Kunigami 52.45 266 LR LR** 03 21 25.8
comp=Z,26nm,18.3s,baz=98,slow=39
**HHC Hu-ho-hao-te 52.76 291** *e*P **P 02 56 43.5 +4.2**
HHC sP sP 02 56 51.0 +5.0
HHC pmax pmax
comp=Z,10.0nm,0.6s
HHC pmax pmax
comp=Z,95nm,5.1s
HHC LR LR
comp=N,140nm,15.2s
HHC LR LR
comp=E,130nm,15.2s
HHC LR LR
comp=Z,130nm,17.1s
**TXAR Lajitas Array 52.80 89 P P 02 56 39.7 0.0**
comp=Z,1.9nm,0.6s,baz=297,slow=5.2,SNR=32
comp=Z,1.9nm,0.6s
**GUMO Guam 53.20 240 LR LR** 03 15 21.3
comp=Z,48nm,21.2s,baz=238,slow=32
**S39A Bolivar 53.23 74 IAmb IAmb** 02 56 46.3
comp=Z,4.0nm,0.8s
**L44A Lake County Fo 53.34 66 P P 02 56 43.5 +0.1**
baz=311
**R40A Maddies Statio 53.44 73 P P 02 56 42.0 -2.3**
R40A IAmb IAmb 02 56 48.3
comp=Z,5.8nm,0.8s
**MGMO Mountain Grove 54.21 74 P P 02 56 50.8 +0.9**
**BRDY Brady 54.25 84 IAmb IAmb** 02 56 56.6
comp=Z,6.7nm,1.0s
**JCT Junction City 54.34 85 P P 02 56 51.1 +0.2**
**JCT Junction City 54.34 85 P P 02 56 51.2 +0.2**
JCT pmax pmax
comp=Z,10.0nm,1.1s
**NJ2 Nanjing 54.45 278** *e*P **P 02 56 51.8 +0.2**
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**FVM French Village 54.72 72 P P 02 56 54.1 +0.5**
FVM IAmb IAmb 02 56 58.0
comp=Z,6.4nm,0.8s
**FVM French Village 54.72 72 P P 02 56 54.1 +0.5**
FVM pmax pmax
comp=Z,6.0nm,0.9s
**FCAR Ozark Folk Cen 55.16 75 P P 02 56 57.8 +1.0**
**WLAR White Oak Lake 56.10 77 P P 02 57 02.6 -0.9**
**833A Chaparral WMA, 56.13 87 P P 02 57 05.7 +1.9**
baz=317
**LYN LuoYang 56.51 284** ⇑P **P 02 57 05.5 -1.0**
LYN pmax pmax
comp=Z,28nm,0.5s
LYN pmax pmax
comp=Z,140nm,4.3s
**CCAR Cane Creek 56.74 76 P P 02 57 08.1 0.0**
**P49A Miami Univ. Ec 56.91 67 P P 02 57 11.1 +1.9**
baz=314
**HKT Hockley 57.12 83 P P 02 57 08.7 -2.0**
**HKT Hockley 57.12 83 P P 02 57 08.7 -2.0**
HKT pmax pmax
comp=Z,12nm,1.3s
**T47A Sharon Grove 57.32 71 P P 02 57 10.6 -1.6**
**M53A WI Miller and 57.82 63 P P 02 57 17.8 +2.1**
baz=314
**O53A New Philadelph 58.35 64 P P 02 57 20.6 +1.2**
baz=314
**L56A Greenwood 58.99 60 P P 02 57 23.3 -0.6**
**TKL Tuckaleechee C 60.16 69 LR LR** 03 23 29.2
comp=Z,36nm,18.8s,baz=330,slow=36
**BATG Bathurst New B 61.00 49 P P 02 57 37.0 -0.6**
**KURK Kurchatov 62.11 318 P P 02 57 46.2 +1.3**
**KURBB Kurchatov Arra 62.22 318 P P 02 57 46.2 +0.5**
comp=Z,0.8nm,0.8s,baz=42,slow=6.8,SNR=6.4
comp=Z,0.8nm,0.8s
**LMN Caledonia Moun 62.64 50 P P 02 57 46.8 -1.8**
**WMQ Urumqi 63.30 308** *e*P **P 02 57 55.5 +2.4**
WMQ LR LR
comp=Z,91nm,18.5s
**BVAR Borovoye Array 63.42 324 P P 02 57 53.3 -0.4**
comp=Z,1.6nm,0.6s,baz=46,slow=6.2,SNR=1.9
comp=Z,1.6nm,0.6s
**MK31 Makanchi Array 63.55 313 P P 02 57 52.9 -1.8**
MK31 IAmb IAmb 02 58 05.3
comp=Z,4.3nm,1.4s
**MK31 Makanchi Array 63.55 313** *i* P **P 02 57 55.1 +0.4**
**FINES FINESS Array B 65.56 352 P P 02 58 07.1 -0.4**
comp=Z,2.1nm,1.0s,baz=19,slow=8.8,SNR=2.2
comp=Z,2.1nm,1.0s
**TAOE Nuku Hiva Isla 66.21 148** *e*LR LR 03 17 51.7
comp=Z,102nm,24.2s
**NOA NORSAR Array B 66.64 360 P P 02 58 14.4 -0.1**
comp=Z,0.5nm,0.7s,baz=0.5,slow=6.3,SNR=2.3
comp=Z,0.5nm,0.7s
**HFS Hagfors 67.52 358 P P 02 58 19.3 -0.7**
comp=Z,0.5nm,0.3s,baz=7.8,slow=3.3,SNR=6.3
comp=Z,0.5nm,0.3s
**PZH PanZhiHua 68.68 286 P P 02 58 28.8 +0.8**
PZH pmax pmax
comp=Z,6.0nm,1.0s
PZH pmax pmax
comp=Z,90nm,4.3s
**DAV Davao City (W) 69.34 254 LR LR** 03 23 41.4
comp=Z,56nm,21.2s,baz=32,slow=32
**ABKAR Akbulak array 70.15 328 P P 02 58 35.8 -0.8**
ABKAR IAmb IAmb 02 59 01.3
comp=Z,3.1nm,1.2s
**PPT2 Papeete2 72.06 160** *e*LR LR 03 20 42.9
comp=Z,97nm,25.8s
PPT2 *e*LR LR 03 20 44.5
comp=Z,72nm,28.8s
**BTK Batken 73.93 316 P P 02 58 58.8 -0.7**
**BTK Batken 73.93 316 P P 02 58 58.8 -0.7**
BTK pmax pmax
comp=Z,13nm,0.4s
**CMAR Chiang Mai Arr 76.49 283 LR LR** 03 35 55.5
comp=Z,39nm,18.8s,baz=210,slow=38
**WRA Warramunga Arr 87.15 232 P P 03 00 08.4 -2.0**
comp=Z,0.6nm,0.8s,baz=35,slow=5.6,SNR=2.8
comp=Z,0.6nm,0.8s
**ESDC Sonseca Array 87.17 11 P P 03 00 11.0 +0.6**
comp=Z,0.4nm,0.7s,baz=345,slow=4.8,SNR=4.7
comp=Z,0.4nm,0.7s
**ASAR Alice Springs 90.54 230 P P 03 00 25.5 -0.8**
comp=Z,0.8nm,0.7s,baz=29,slow=4.6,SNR=7.2
comp=Z,0.8nm,0.7s

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*MOS* ***31*** *02:56:24.9±0.9, 44.°11N×149.°95E, h31km, mb4.5/5, Error ellipse: s-maj=21.0km s-min=11.4km az=18.0*
*NEIC* ***31*** *02:56:25.2±1.4, 43.°8N±0.°1×149.°9E±0.°1, h10km±1km, mb4.5/19, Error ellipse: s-maj=20.6km s-min=17.9km az=161.0*
*JMA* ***31*** *02:56:28.9±0.8, 44.°N±3.°×15.°0E±.°, h30km, MV4.1/12, SE OFF ETOROFU*
*SKHL* ***31*** *02:56:29.3±0.2, 44.°20N×149.°70E, h55km±3km, mb4.6/3*
*IDC* ***31*** *02:56:33.1±2.5, 45.°61N×148.°95E, h0km, mb3.8/7, mbtmp3.8/9,ML3.3/2, Error ellipse: s-maj=65.7km s-min=26.7km az=166.0*

**ISC 31 02:56:27.9±0.7, 44.00N±0.°07×149.°73E±0.°07, h35km, n59, σ1.2 59/62, mb4.4/19, 1C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.81** | **313** | *i* P | | **Pn** | | **02 56 55.2** | **-1.4** |
| KUR | | | | | AMB | AMB | | 02 56 57.1 | |
| | 320nm,0.5s | | | | | | | | |
| KUR | | | | *i* S | | **Sn** | | **02 57 14.8** | **-3.6** |
| KUR | | | | | A | A | | 02 57 19.1 | |
| | 840nm,0.5s | | | | | | | | |
| KUR | | | | | A | A | | 02 57 19.1 | |
| | 560nm,0.5s | | | | | | | | |
| **KUR** | **Kuril'sk** | **1.81** | **313** | *c i* PN | | **Pn** | | **02 56 54.9** | **-1.7** |
| KUR | | | | *i* S | | **Sn** | | **02 57 15.7** | **-2.7** |
| KUR | | | | | pmax | pmax | | | |
| | comp=Z,319nm,0.5s | | | | | | | | |
| KUR | | | | | pmax | pmax | | | |
| | comp=N,143nm,0.3s | | | | | | | | |
| KUR | | | | | pmax | pmax | | | |
| | comp=E,82nm,0.2s | | | | | | | | |
| KUR | | | | | smax | smax | | | |
| | comp=N,782nm,0.3s | | | | | | | | |
| KUR | | | | | smax | smax | | | |
| | comp=E,654nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **267** | *e*P | | **Pn** | | **02 57 00.7** | **+0.1** |
| SHO | | | | | AMB | AMB | | 02 57 02.2 | |
| | comp=E,60nm,0.3s | | | | | | | | |
| SHO | | | | *i* S | | **Sn** | | **02 57 24.1** | **-1.4** |
| SHO | | | | | A | A | | 02 57 28.7 | |
| | comp=E,80nm,0.3s | | | | | | | | |
| SHO | | | | | A | A | | 02 57 28.7 | |
| | comp=E,230nm,0.3s | | | | | | | | |
| **SHO** | **Shikotan** | **2.10** | **267** | *e*PN | | **Pn** | | **02 57 00.6** | **0.0** |
| SHO | | | | | pmax | pmax | | | |
| | comp=Z,60nm,0.2s | | | | | | | | |
| SHO | | | | | pmax | pmax | | | |
| | comp=N,11nm,0.1s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.79** | **272** | *e*P | | **Pn** | | **02 57 11.1** | **+1.0** |
| YUK | | | | | AMB | AMB | | 02 57 13.8 | |
| | comp=N,70nm,0.2s | | | | | | | | |
| YUK | | | | *e*S | | **Sn** | | **02 57 42.0** | **-0.5** |
| YUK | | | | | A | A | | 02 57 46.6 | |
| | comp=N,250nm,0.3s | | | | | | | | |
| YUK | | | | | A | A | | 02 57 46.6 | |
| | comp=N,130nm,0.3s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.79** | **272** | PN | | **Pn** | | **02 57 11.6** | **+1.5** |
| YUK | | | | | pmax | pmax | | | |
| | comp=Z,99nm,0.2s | | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.96** | **259** | *e*P | | **Pn** | | **02 57 12.4** | **0.0** |
| NEM2 | | | | *e*S | | **Sn** | | **02 57 44.5** | **-2.2** |
| **JRA** | **Rausu** | **3.33** | **270** | *e*P | | **Pn** | | **02 57 18.8** | **+1.4** |
| **JNK** | **Nakash** | **3.66** | **265** | *e*P | | **Pn** | | **02 57 23.1** | **+1.1** |
| **JAK** | **Akkeshi** | **3.80** | **256** | *e*P | | **Pn** | | **02 57 24.3** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **4.20** | **272** | *e*P | | **Pn** | | **02 57 30.9** | **+1.4** |
| **JAR** | **Ashorobuto** | **4.38** | **263** | *e*P | | **Pn** | | **02 57 33.7** | **+1.7** |
| **JOB** | **Onbets** | **4.43** | **258** | *e*P | | **Pn** | | **02 57 33.8** | **+1.1** |
| **JCH** | **Churui** | **4.85** | **256** | *e*P | | **Pn** | | **02 57 39.9** | **+1.5** |
| **JKA** | **Kamikawa-asahi** | **5.14** | **274** | Pn | | **Pn** | | **02 57 44.5** | **+2.1** |
| **JKA** | **Kamikawa-asahi** | **5.14** | **274** | *e*P | | **Pn** | | **02 57 45.9** | **+3.5** |
| **ASAJ** | **Asahikawa** | **5.14** | **274** | Pn | | **Pn** | | **02 57 45.9** | **+3.5** |
| | comp=Z,9.9nm,0.3s,baz=80,slow=24,SNR=5.1 | | | | | | | | |
| | comp=Z,3.2nm,0.4s | | | | | | | | |
| **ERM** | **Erimo** | **5.21** | **250** | | | **Pn** | | **02 57 44.8** | **+1.5** |
| **ERM** | **Erimo** | **5.21** | **250** | PN | | **Pn** | | **02 57 44.8** | **+1.5** |
| **JNBK** | **Urakawa-nobuka** | **5.39** | **254** | *e*P | | **Pn** | | **02 57 46.4** | **+0.6** |
| **JANG** | **Nango** | **7.10** | **242** | *e*P | | **Pn** | | **02 58 09.0** | **-0.2** |
| JANG | | | | *e*S | | **Sn** | | **02 59 24.1** | **-4.5** |
| **JTM** | **Tenmabayashi** | **7.17** | **246** | | | **Pn** | | **02 58 10.7** | **+0.4** |
| **TEY** | **Ternei** | **9.44** | **281** | *e*PN | | Pn | | 02 58 33.3 | -8.0 |
| **USA0B** | **Ussuriysk Arra** | **12.76** | **277** | Pn | | **Pn** | | **02 59 28.7** | **+2.0** |
| **USA0B** | **Ussuriysk Arra** | **12.76** | **277** | PN | | **Pn** | | **02 59 28.7** | **+2.0** |
| **USRK** | **Ussuriysk Ar.** | **12.76** | **277** | Pn | | **Pn** | | **02 59 26.7** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=83,slow=13,SNR=7.7 | | | | | | | | |
| | comp=Z,1.3nm,0.5s | | | | | | | | |
| **SONM** | **Songino Array** | **30.10** | **293** | P | | **P** | | **03 02 34.3** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=98,slow=8.9,SNR=1.5 | | | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | | | |
| **CNBA** | **Chernabura Isl** | **33.98** | **53** | P | | **P** | | **03 03 06.1** | **-1.8** |
| **G18K** | **Tagagawik** | **35.39** | **34** | P | | **P** | | **03 03 21.4** | **+1.5** |
| G18K | | | | | IAmb | IAmb | | 03 03 47.7 | |
| | comp=Z,3.8nm,1.2s | | | | | | | | |
| **C19K** | **Lookout Ridge** | **35.88** | **28** | P | | **P** | | **03 03 26.1** | **+2.0** |
| C19K | | | | | IAmb | IAmb | | 03 03 47.3 | |
| | comp=Z,6.7nm,1.4s | | | | | | | | |
| **D19K** | **Kuna River** | **36.22** | **30** | P | | **P** | | **03 03 28.5** | **+1.5** |
| D19K | | | | | IAmb | IAmb | | 03 03 48.6 | |
| | comp=Z,7.8nm,1.5s | | | | | | | | |
| **E19K** | **Redstone River** | **36.29** | **31** | P | | **P** | | **03 03 29.2** | **+1.7** |
| E19K | | | | | IAmb | IAmb | | 03 03 44.7 | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| **J19K** | **Poorman** | **36.35** | **37** | P | | **P** | | **03 03 29.3** | **+1.2** |
| J19K | | | | | IAmb | IAmb | | 03 03 47.0 | |
| | comp=Z,9.8nm,1.4s | | | | | | | | |
| **D22K** | **Ayikyak River** | **38.24** | **30** | P | | **P** | | **03 03 45.6** | **+1.4** |
| D22K | | | | | IAmb | IAmb | | 03 04 03.3 | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **38.44** | **31** | P | | **P** | | **03 03 47.7** | **+1.9** |
| **E24K** | **Your Creek** | **39.67** | **31** | P | | **P** | | **03 03 58.5** | **+2.3** |
| **RAGM** | **Ragged Mountai** | **41.50** | **43** | P | | **P** | | **03 04 13.1** | **+1.7** |
| RAGM | | | | | IAmb | IAmb | | 03 04 38.0 | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **MK31** | **Makanchi Array** | **46.12** | **298** | P | | **P** | | **03 04 48.9** | **+0.3** |
| **MK31** | **Makanchi Array** | **46.12** | **298** | P | | **P** | | **03 04 48.9** | **+0.3** |
| MK31 | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.12** | **298** | P | | **P** | | **03 04 49.1** | **+0.5** |
| | comp=Z,1.1nm,0.7s,baz=72,slow=7.4,SNR=7.4 | | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| **MAKZ** | **Makanchi** | **46.31** | **298** | P | | **P** | | **03 04 49.7** | **-0.4** |
| MAKZ | | | | | IAmb | IAmb | | 03 05 02.3 | |
| | comp=Z,5.6nm,1.2s | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAKZ** | **Makanchi** | **46.31** | **298** | P | **P** | **03 04 49.7** | **-0.4** |
| MAKZ | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| **KURK** | **Kurchatov** | **46.93** | **305** | *e*P | **P** | **03 04 55.0** | **+0.2** |
| **KURK** | **Kurchatov** | **46.93** | **305** | P | **P** | **03 04 55.0** | **+0.2** |
| **KURBB** | **Kurchatov Arra** | **47.02** | **304** | P | **P** | **03 04 55.0** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=71,slow=8.1,SNR=4.5 | | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | | |
| **HATHI** | **Halema'uma'u T** | **51.73** | **100** | P | **P** | **03 05 30.9** | **-1.1** |
| **ABKAR** | **Akbulak array** | **58.35** | **310** | P | **P** | **03 06 20.2** | **+0.9** |
| **WB2** | **Warramunga Arr** | **65.17** | **196** | P | P | 03 07 03.0 | -2.4 |
| WB2 | | | | IAmb | IAmb | 03 07 10.2 | | |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| **FIA1** | **FINESS Array S** | **65.48** | **334** | P | **P** | **03 07 09.3** | **+2.3** |
| **FINES** | **FINESS Array B** | **65.48** | **334** | P | **P** | **03 07 06.7** | **-0.3** |
| | comp=Z,1.4nm,0.6s,baz=51,slow=7.6,SNR=7.9 | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.48** | **334** | *i* P | **P** | **03 07 07.1** | **+0.1** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **NC405** | **NORSAR Array S** | **69.84** | **340** | P | **P** | **03 07 35.5** | **+1.0** |
| NC405 | | | | IAmb | IAmb | 03 07 43.6 | | |
| | comp=Z,20nm,1.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.03** | **340** | P | **P** | **03 07 35.9** | **+0.2** |
| | comp=Z,1.3nm,0.6s,baz=30,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.03** | **340** | P | **P** | **03 07 35.7** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=31,slow=6.6,SNR=5.2 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **70.16** | **338** | P | **P** | **03 07 36.0** | **-0.4** |
| | comp=Z,1.1nm,0.6s,baz=18,slow=6.1,SNR=5.8 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **70.77** | **209** | P | **P** | **03 07 40.0** | **-0.6** |
| **CAN** | **Canberra** | **78.95** | **181** | P | **P** | **03 08 27.6** | **0.0** |
| CAN | | | | IAmb | IAmb | 03 08 45.2 | | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **CAN** | **Canberra** | **78.95** | **181** | P | **P** | **03 08 27.6** | **0.0** |
| CAN | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.2s | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.94** | **58** | P | P | 03 08 47.6 | +8.6 |
| | comp=Z,0.3nm,0.7s,baz=321,slow=3.6,SNR=4.6 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |

*IDC* ***31*** *02:58:16.6±0.6,52.°19S×14.°00E,h0km,mb4.5/14, mbtmp4.5/14,MS4.0/33,Error ellipse: s-maj=20.0km s-min=16.2km az=83.0*

*NEIC* ***31*** *02:58:18.7±1.6,52.°2S±0.°1×14.°0E±0.°2,h10km±1km, mb4.9/21,Error ellipse: s-maj=25.1km s-min=12.0km az=124.0*

*GCMT* ***31*** *02:58:21.7±0.3,52.°17S±0.°02×14.°03E±0.°04,h21km±1km, MW5.0/90,Moment Tensor Solution. s27,c30; s90,c133; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-2.86±.21; Mθθ2.98±.14; Mϕϕ -0.12±.14; Mrθ2.23±.20; Mϕθ-0.97±.08; Mϕr1.63±.29; Best double couple: M₀4.09900×10¹⁶ NP1:ϕs257.00000°,δ66.00000°,λ-117.00000°. NP2: ϕs129.00000°,δ35.00000°,λ-44.00000°. Principal axes: T 3.7790, Plg17.0000°, Azm7.0000°; N 0.6320, Plg24.0000°, Azm269.0000°; P -4.4190, Plg60.0000°, Azm128.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 31 02:58:18.2±0.4,52.°20S±0.°07×13.°98E±0.°10,h10km,n112, σ0s74/76,mb4.8/32,MS4.0/33,5C,Southwest of Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CER** | **Ceres** | **19.21** | **14** | *e*P | **Pn** | **03 02 43.2** | **0.0** |
| **PRTV** | **Porterville,We** | **19.48** | **13** | *e*P | **Pn** | **03 02 47.0** | **+0.6** |
| **MERW** | **Merweville** | **20.27** | **19** | *e*P | **P** | **03 02 53.8** | **-0.1** |
| MERW | | | | IAmb | IAmb | 03 02 57.9 | | |
| | comp=Z,105nm,0.9s | | | | | | | |
| **SUR** | **Sutherland** | **20.42** | **17** | P | **P** | **03 02 55.7** | **+0.1** |
| **SUR** | **Sutherland** | **20.42** | **17** | *e*P | **P** | **03 02 55.3** | **-0.3** |
| SUR | | | | IAmb | IAmb | 03 03 04.3 | | |
| | comp=Z,90nm,0.8s | | | | | | | |
| **SUR** | **Sutherland** | **20.42** | **17** | P | **P** | **03 02 55.8** | **+0.2** |
| | comp=Z,41nm,0.9s,baz=183,slow=13,SNR=16 | | | | | | | |
| SUR | | | | LR | LR | 03 08 56.7 | | |
| | comp=Z,628nm,21.4s,baz=178,slow=31 | | | | | | | |
| | comp=Z,41nm,0.9s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **20.52** | **190** | ⇑P | Pn | 03 02 58.6 | +0.1 |
| | comp=Z,3μm,0.9s | | | | | | | |
| **GRAN** | **Grantham** | **20.76** | **20** | *e*P | **P** | **03 02 58.9** | **-0.3** |
| GRAN | | | | IAmb | IAmb | 03 03 10.1 | | |
| | comp=Z,92nm,1.0s | | | | | | | |
| **ROOI** | **Rooidraai Farm** | **20.89** | **23** | *e*P | **P** | **03 03 00.5** | **0.0** |
| ROOI | | | | IAmb | IAmb | 03 03 09.4 | | |
| | comp=Z,482nm,2.4s | | | | | | | |
| **SNAA** | **Sanae** | **20.92** | **195** | P | **P** | **03 03 00.5** | **-0.1** |
| SNAA | | | | IAmb | IAmb | 03 03 08.3 | | |
| | comp=Z,97nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **20.92** | **195** | *e*P | **P** | **03 03 00.5** | **-0.1** |
| SNAA | | | | IAmb | IAmb | 03 03 04.7 | | |
| | comp=Z,4μm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **20.92** | **195** | ⇑P | **P** | **03 03 00.8** | **+0.1** |
| | comp=Z,1μm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **20.92** | **195** | P | **P** | **03 03 00.7** | **+0.1** |
| | comp=Z,58nm,0.9s,baz=31,slow=9.2,SNR=66 | | | | | | | |
| SNAA | | | | LR | LR | 03 09 07.6 | | |
| | comp=Z,418nm,20.6s,baz=51,slow=31 | | | | | | | |
| | comp=Z,58nm,0.9s | | | | | | | |
| **GRHM** | **Grahamstown, E** | **20.93** | **30** | P | **P** | **03 03 01.9** | **+0.9** |
| GRHM | | | | IAmb | IAmb | 03 03 13.9 | | |
| | comp=Z,49nm,0.7s | | | | | | | |
| **GRHM** | **Grahamstown, E** | **20.93** | **30** | *e*P | **P** | **03 03 00.9** | **-0.1** |
| GRHM | | | | IAmb | IAmb | 03 03 14.0 | | |
| | comp=Z,76nm,1.1s | | | | | | | |
| **FRAZ** | **Fraserburg** | **20.97** | **18** | *e*P | **P** | **03 03 01.9** | **+0.4** |
| **VNA1** | **Neumayer--Stat** | **21.10** | **201** | ⇑P | **P** | **03 03 04.4** | **+2.0** |
| | comp=Z,50nm,1.0s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **21.13** | **199** | ⇑P | **P** | **03 03 02.4** | **-0.4** |
| | comp=Z,35nm,0.8s,baz=29,slow=11 | | | | | | | |
| **GRAF** | **Camdeboo Natio** | **21.33** | **25** | *e*P | **P** | **03 03 05.1** | **-0.2** |
| GRAF | | | | IAmb | IAmb | 03 03 15.7 | | |
| | comp=Z,50nm,0.8s | | | | | | | |
| **BRAK** | **Brakfontein** | **21.42** | **21** | *e*P | **P** | **03 03 05.8** | **-0.5** |
| BRAK | | | | IAmb | IAmb | 03 03 11.0 | | |
| | comp=Z,67nm,0.8s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **21.85** | **200** | ⇑P | **P** | **03 03 10.0** | **-0.5** |
| | comp=Z,83nm,0.9s | | | | | | | |
| **KOMG** | **Komaggas** | **22.53** | **8** | *e*P | **P** | **03 03 18.0** | **-0.1** |
| KOMG | | | | IAmb | IAmb | 03 03 24.6 | | |
| | comp=Z,69nm,1.2s | | | | | | | |
| **HVD** | **Gariep Dam** | **23.18** | **26** | *e*P | **P** | **03 03 27.8** | **+2.7** |
| HVD | | | | IAmb | IAmb | 03 03 32.4 | | |
| | comp=Z,99nm,1.5s | | | | | | | |
| **KEIM** | **Keimoes** | **24.04** | **15** | *e*P | **P** | **03 03 33.3** | **-0.1** |
| KEIM | | | | IAmb | IAmb | 03 03 34.1 | | |
| | comp=Z,31nm,0.9s | | | | | | | |
| **AUGR** | **Augrabies** | **24.05** | **14** | *e*P | **P** | **03 03 32.8** | **-0.7** |
| AUGR | | | | IAmb | IAmb | 03 03 34.1 | | |
| | comp=Z,28nm,1.0s | | | | | | | |
| **UPI** | **Upington** | **24.42** | **16** | *e*P | **P** | **03 03 36.7** | **-0.2** |
| UPI | | | | IAmb | IAmb | 03 04 00.4 | | |
| | comp=Z,294nm,2.8s | | | | | | | |
| **ARMS** | **Ukamas** | **24.51** | **12** | *e*P | **P** | **03 03 37.1** | **-0.6** |
| ARMS | | | | IAmb | IAmb | 03 03 49.2 | | |
| | comp=Z,28nm,1.1s | | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **24.98** | **93** | T | T | 03 30 19.7 | | |
| | baz=245,slow=75,SNR=123 | | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **24.98** | **93** | T | T | 03 30 20.1 | | |
| | baz=245,slow=75,SNR=117 | | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.00** | **93** | T | T | 03 30 37.1 | | |
| | baz=245,slow=75,SNR=137 | | | | | | | |
| **BOSA** | **Boshof** | **25.02** | **24** | P | **P** | **03 03 48.2** | **+0.4** |
| BOSA | | | | IAmb | IAmb | 03 03 48.2 | | |
| | comp=Z,45nm,1.8s | | | | | | | |
| **BOSA** | **Boshof** | **25.02** | **24** | P | **P** | **03 03 42.0** | **-0.3** |
| | comp=Z,6.0nm,0.9s,baz=201,slow=11,SNR=7.2 | | | | | | | |
| BOSA | | | | LR | LR | 03 11 43.0 | | |
| | comp=Z,614nm,21.6s,baz=198,slow=32 | | | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **AUSN** | **Aus** | **25.55** | **5** | *e*P | **P** | **03 03 47.6** | **+0.4** |
| AUSN | | | | IAmb | IAmb | 03 03 56.8 | | |
| | comp=Z,571nm,3.7s | | | | | | | |
| **SWZ** | **Schweizer** | **26.40** | **23** | *e*P | **P** | **03 03 55.0** | **+0.1** |
| SWZ | | | | IAmb | IAmb | 03 04 33.4 | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **MAW** | **Mawson** | **27.99** | **142** | P | **P** | **03 04 08.6** | **0.0** |
| | comp=Z,2.6nm,0.9s,baz=298,slow=16,SNR=4.3 | | | | | | | |
| | comp=Z,2.6nm,0.9s | | | | | | | |
| **LBTB** | **Lobatse** | **28.55** | **22** | P | **P** | **03 04 14.2** | **+0.1** |
| LBTB | | | | IAmb | IAmb | 03 04 26.4 | | |
| | comp=Z,26nm,1.9s | | | | | | | |
| **LBTB** | **Lobatse** | **28.55** | **22** | LR | LR | 03 13 59.5 | | |
| | comp=Z,387nm,20.3s,baz=184,slow=33 | | | | | | | |
| **LEPH** | **Lephalale, Lim** | **30.21** | **26** | *e*P | **P** | **03 04 29.2** | **+0.3** |
| **CRAIL** | **Swartwater, Li** | **31.33** | **26** | *e*P | **P** | **03 04 38.1** | **-0.7** |
| CRAIL | | | | IAmb | IAmb | 03 04 38.9 | | |
| | comp=Z,3μm,2.6s | | | | | | | |
| **TSUM** | **Tsumeb** | **33.05** | **6** | LR | LR | 03 17 01.4 | | |
| | comp=Z,340nm,18.1s,baz=187,slow=34 | | | | | | | |
| **MATP** | **Matopo** | **33.67** | **25** | LR | LR | 03 17 26.3 | | |
| | comp=Z,316nm,20.5s,baz=239,slow=34 | | | | | | | |
| **BLWY** | **Bulawayo** | **33.97** | **25** | *e*P | **P** | **03 05 01.0** | **-0.9** |
| BLWY | | | | IAmb | IAmb | 03 05 01.6 | | |
| | comp=Z,34nm,1.1s | | | | | | | |
| **KRI** | **Karoi** | **37.40** | **25** | *e*P | **P** | **03 05 32.6** | **+1.2** |
| **QSPA** | **South Pole Qui** | **38.04** | **180** | P | **P** | **03 05 35.9** | **-0.5** |
| QSPA | | | | IAmb | IAmb | 03 05 44.9 | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **QSPA** | **South Pole Qui** | **38.04** | **180** | P | **P** | **03 05 36.3** | **-0.1** |
| | comp=Z,8.5nm,0.9s,baz=250,slow=6.9,SNR=17 | | | | | | | |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| **PMSA** | **Palmer Station** | **39.93** | **221** | P | **P** | **03 05 51.6** | **-0.4** |
| **PMSA** | **Palmer Station** | **39.93** | **221** | LR | LR | 03 18 39.7 | | |
| | comp=Z,246nm,18.9s,baz=115,slow=31 | | | | | | | |
| **SMAI** | **San Martin Ant** | **39.96** | **215** | P | **P** | **03 05 51.9** | **-0.3** |
| **ABPO** | **Ambohimpanom** | **42.08** | **51** | P | **P** | **03 06 10.2** | **-0.1** |
| ABPO | | | | IAmb | IAmb | 03 06 11.5 | | |
| | comp=Z,32nm,1.6s | | | | | | | |
| **CASY** | **Casey** | **46.19** | **146** | P | **P** | **03 06 41.9** | **-0.7** |
| **SBA** | **Scott Base** | **49.13** | **173** | P | **P** | **03 07 07.0** | **+1.7** |
| SBA | | | | IAmb | IAmb | 03 07 15.1 | | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **PLTB** | **Pedras Altas** | **52.20** | **265** | P | **P** | **03 07 29.3** | **+0.2** |
| **TRQA** | **Tornquist** | **53.01** | **253** | P | **P** | **03 07 34.8** | **-0.2** |
| TRQA | | | | IAmb | IAmb | 03 07 51.8 | | |
| | comp=Z,14nm,1.3s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **54.50** | **29** | LR | LR | 03 30 03.6 | | |
| | comp=Z,203nm,18.6s,baz=204,slow=35 | | | | | | | |
| **PLCA** | **Paso Flores** | **56.16** | **246** | P | **P** | **03 07 57.0** | **-0.9** |
| | comp=Z,3.3nm,1.0s,baz=162,slow=6.4,SNR=4.1 | | | | | | | |
| | comp=Z,3.3nm,1.0s | | | | | | | |
| **CPUP** | **Villa Florida** | **58.35** | **267** | P | **P** | **03 08 13.5** | **+0.1** |
| **CPUP** | **Villa Florida** | **58.35** | **267** | P | **P** | **03 08 12.9** | **-0.5** |
| | comp=Z,4.7nm,0.8s,baz=110,slow=5.3,SNR=7.9 | | | | | | | |
| CPUP | | | | LR | LR | 03 28 43.3 | | |
| | comp=Z,86nm,21.9s,baz=174,slow=31 | | | | | | | |
| | comp=Z,4.7nm,0.8s | | | | | | | |
| **BI05** | **Punta Hualpn** | **60.40** | **247** | P | **P** | **03 08 27.4** | **0.0** |
| **BDFB** | **Brasilia** | **60.68** | **283** | P | **P** | **03 08 30.2** | **+0.5** |
| | comp=Z,3.5nm,0.8s,baz=140,slow=14,SNR=5.8 | | | | | | | |
| BDFB | | | | LR | LR | 03 29 02.4 | | |
| | comp=Z,61nm,19.8s,baz=136,slow=30 | | | | | | | |
| | comp=Z,3.5nm,0.8s | | | | | | | |
| **DBIC** | **Dimbokro** | **60.81** | **338** | P | **P** | **03 08 30.5** | **+0.1** |
| | comp=Z,5.4nm,0.9s,baz=200,slow=6.5,SNR=3.1 | | | | | | | |
| DBIC | | | | LR | LR | 03 31 38.5 | | |
| | comp=Z,81nm,18.0s,baz=162,slow=33 | | | | | | | |
| | comp=Z,5.4nm,0.9s | | | | | | | |
| **CO02** | **Combarbal** | **63.10** | **253** | P | **P** | **03 08 45.0** | **-1.0** |
| CO02 | | | | IAmb | IAmb | 03 09 00.2 | | |
| | comp=Z,22nm,1.6s | | | | | | | |
| **CO01** | **Juntas del Tor** | **63.45** | **255** | P | **P** | **03 08 49.4** | **+0.9** |
| **CO06** | **Fray Jorge** | **63.85** | **253** | P | **P** | **03 08 50.1** | **-0.7** |
| CO06 | | | | IAmb | IAmb | 03 09 07.0 | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **FURI** | **Furi** | **64.44** | **27** | LR | LR | 03 35 32.6 | | |
| | comp=Z,230nm,20.5s,baz=194,slow=35 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.94** | **347** | P | **P** | **03 09 03.3** | **-1.0** |
| | comp=Z,0.9nm,0.8s,baz=177,slow=6.7,SNR=4.5 | | | | | | | |
| TORD | | | | LR | LR | 03 33 26.7 | | |
| | comp=Z,36nm,18.3s,baz=174,slow=32 | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | |
| **LVC** | **Limon Verde** | **68.18** | **261** | LR | LR | 03 35 59.4 | | |
| | comp=Z,34nm,20.9s,baz=152,slow=33 | | | | | | | |
| **SIV** | **San Ignacio** | **68.38** | **272** | LR | LR | 03 34 54.8 | | |
| | comp=Z,138nm,20.0s,baz=115,slow=32 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **68.92** | **120** | T | T | 04 25 25.8 | | |
| | baz=220,slow=75,SNR=7.5 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **68.94** | **120** | T | T | 04 25 26.4 | | |
| | baz=220,slow=75,SNR=6.7 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **68.94** | **120** | T | T | 04 25 28.9 | | |
| | baz=220,slow=75,SNR=18 | | | | | | | |
| **BBTS** | **Babate** | **71.64** | **329** | LR | LR | 03 36 22.8 | | |
| | comp=Z,164nm,18.2s,baz=8.0,slow=32 | | | | | | | |
| **LPAZ** | **La Paz** | **72.49** | **266** | P | **P** | **03 09 46.8** | **+0.9** |
| LPAZ | | | | IAmb | IAmb | 03 09 50.5 | | |
| | comp=Z,8.6nm,0.9s | | | | | | | |
| **LPAZ** | **La Paz** | **72.49** | **266** | P | **P** | **03 09 46.6** | **+0.7** |
| | comp=Z,10nm,1.1s,baz=126,slow=5.8,SNR=14 | | | | | | | |
| LPAZ | | | | LR | LR | 03 38 54.0 | | |
| | comp=Z,53nm,19.7s,baz=89,slow=34 | | | | | | | |
| | comp=Z,10nm,1.1s | | | | | | | |
| **SAML** | **Samuel** | **75.11** | **275** | P | **P** | **03 10 00.6** | **+0.1** |
| **ETMB** | **Extrema** | **76.30** | **272** | P | **P** | **03 10 07.3** | **0.0** |
| **MDP** | **Montagnes des** | **80.00** | **292** | LR | LR | 03 41 43.7 | | |
| | comp=Z,161nm,18.7s,baz=110,slow=33 | | | | | | | |
| **PALK** | **Pallekele** | **81.83** | **67** | LR | | 03 39 46.3 | | |
| | comp=Z,57nm,18.3s,baz=226,slow=30 | | | | | | | |
| **STKA** | **Stephens Creek** | **84.58** | **137** | P | **P** | **03 10 51.6** | **0.0** |
| | comp=Z,7.8nm,1.0s,baz=146,slow=8.6,SNR=4.2 | | | | | | | |
| | comp=Z,7.8nm,1.0s | | | | | | | |
| **ATAH** | **Atahualpa** | **85.87** | **264** | LR | LR | 03 47 44.1 | | |
| | comp=Z,44nm,20.1s,baz=141,slow=35 | | | | | | | |
| **MDT** | **Midelt** | **86.20** | **344** | LR | LR | 03 48 26.0 | | |
| | comp=Z,56nm,18.1s,baz=159,slow=35 | | | | | | | |
| **RPN** | **Rapa Nui** | **86.72** | **229** | LR | LR | 03 41 58.7 | | |
| | comp=Z,40nm,20.4s,baz=48,slow=30 | | | | | | | |
| **ASAR** | **Alice Springs** | **88.11** | **127** | P | **P** | **03 11 09.6** | **+0.5** |
| | comp=Z,6.7nm,0.8s,baz=206,slow=5.2,SNR=34 | | | | | | | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **URZ** | **Urewera** | **88.72** | **167** | LR | LR | 03 51 18.8 | | |
| | comp=Z,96nm,18.1s,baz=233,slow=36 | | | | | | | |
| **VAE** | **Valguarnera** | **89.30** | **0** | LR | LR | 03 51 26.7 | | |
| | comp=Z,102nm,18.2s,baz=145,slow=36 | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **91.07** | **285** | LR | LR | 03 48 08.4 | | |
| | comp=Z,65nm,18.6s,slow=33 | | | | | | | |
| **WRA** | **Warramunga Arr** | **91.46** | **126** | P | **P** | **03 11 24.5** | **-0.3** |
| | comp=Z,0.7nm,0.7s,baz=203,slow=3.3,SNR=6.1 | | | | | | | |
| | comp=Z,0.7nm,0.7s | | | | | | | |
| **ROSC** | **El Rosal** | **92.74** | **274** | LR | LR | 03 48 59.7 | | |
| | comp=Z,68nm,21.1s,baz=87,slow=33 | | | | | | | |
| **ESDC** | **Sonseca Array** | **92.82** | **346** | LR | LR | 03 51 17.0 | | |
| | comp=Z,41nm,18.6s,baz=194,slow=34 | | | | | | | |
| **BRTR** | **Keskin Array B** | **93.13** | **15** | LR | LR | 03 54 11.0 | | |
| | comp=Z,43nm,21.1s,baz=196,slow=36 | | | | | | | |
| **SDV** | **Santo Domingo** | **93.66** | **280** | LR | LR | 03 50 41.2 | | |
| | comp=Z,97nm,19.1s,baz=96,slow=34 | | | | | | | |
| **GNI** | **Garni** | **95.78** | **23** | LR | LR | 03 54 42.1 | | |
| | comp=Z,110nm,20.2s,baz=218,slow=35 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **98.66** | **357** | LR | LR | 03 58 35.2 | | |
| | comp=Z,26nm,18.2s,baz=156,slow=37 | | | | | | | |
| **KBZ** | **Khabaz** | **98.76** | **21** | LR | LR | 03 56 32.7 | | |
| | comp=Z,108nm,20.5s,baz=199,slow=35 | | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **98.93** | **21** | LR | LR | 03 55 40.4 | | |
| | comp=Z,61nm,21.3s,baz=90,slow=35 | | | | | | | |
| **CLL** | **Collm** | **103.13** | **359** | *e*Pdif | **Pdif** | **03 12 19.0** | **+2.4** |
| **BVAR** | **Borovoye Array** | **114.99** | **34** | PKP | **PKPdf** | **03 16 57.9** | **-0.3** |
| | comp=Z,1.4nm,0.7s,baz=221,slow=3.3,SNR=6.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **121.08** | **41** | PKP | **PKPdf** | **03 17 08.0** | **-1.9** |
| | comp=Z,1.0nm,0.7s,baz=241,slow=5.9,SNR=1.9 | | | | | | | |
| **SONM** | **Songino Array** | **126.86** | **57** | PKP | **PKPdf** | **03 17 21.0** | **-0.4** |
| | comp=Z,0.3nm,0.4s,baz=248,slow=0.8,SNR=3.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **129.31** | **269** | PKP | **PKiKP** | **03 17 27.2** | **-0.1** |
| | comp=Z,1.1nm,1.0s,baz=145,slow=4.6,SNR=7.3 | | | | | | | |
| **PDAR** | **Pinedale Array** | **141.59** | **279** | PKhKP | PKPpre | 03 17 42.8 | | |
| | comp=Z,1.3nm,1.0s,baz=128,slow=2.4,SNR=6.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **144.40** | **267** | PKP | PKPbc | 03 17 53.0 | +0.2 |
| | comp=Z,1.5nm,0.8s,baz=142,slow=3.8,SNR=9.1 | | | | | | | |
| **EGMT** | **Eagleton** | **144.45** | **286** | | PKPbc | 03 17 52.6 | +0.1 |
| **HLID** | **Hailey** | **144.99** | **277** | | PKPbc | 03 17 54.2 | -0.3 |
| **WAKR** | **Walker** | **145.14** | **266** | | **PKPdf** | **03 17 56.1** | **+0.6** |
| **CMB** | **Columbia Colle** | **145.43** | **264** | | **PKPab** | **03 17 56.3** | **+0.2** |
| **BPMT** | **Black Pine Rid** | **145.89** | **282** | | **PKPab** | **03 17 57.8** | **0.0** |
| **OVMT** | **Ovando** | **145.92** | **283** | | **PKPab** | **03 17 57.5** | **-0.3** |
| **BMO** | **Blue Mountains** | **147.44** | **277** | PKPdf | **PKPdf** | **03 17 59.9** | **+0.8** |
| **KMPM** | **Mount Pierce** | **149.18** | **264** | | **PKiKP** | **03 18 07.4** | **-0.1** |
| **B08A** | **Colville Reser** | **150.32** | **281** | | **PKPbc** | **03 18 08.4** | **-0.3** |
| **YKA** | **Yellowknife Ar** | **151.19** | **311** | PKPbc | **PKPbc** | **03 18 10.2** | **-0.1** |
| | comp=Z,5.6nm,0.9s,baz=85,slow=2.3,SNR=23 | | | | | | | |
| **ILAR** | **Eielson Array** | **164.01** | **329** | PKPab | **PKPab** | **03 19 14.2** | **+0.7** |
| | comp=Z,1.3nm,1.0s,baz=28,slow=2.7,SNR=8.0 | | | | | | | |

**ASRS 31 03:02:35.5±0.5,51.°N±4.°×9.°7E±.°,h5km,MLh3.8/7,1C, Error ellipse: s-maj=8.6km s-min=3.7km az=12.1, confirmed,Tuva-Buryatia-Mongolia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNGR** | **Kungurtug, Tuv** | **0.29** | **83** | ⇑Pg | Pg | 03 02 41.5 | +0.3 |
| KNGR | | | | Sg | Sg | 03 02 43.5 | -1.5 |
| **TDJR** | **Todzha** | **1.93** | **342** | Pg | Pg | 03 03 15.8 | +3.4 |
| TDJR | | | | Sg | Sg | 03 03 41.3 | +3.8 |
| **KZLR** | **Kyzyl** | **2.00** | **306** | Pg | Pg | 03 03 15.6 | +1.9 |
| KZLR | | | | Sg | Sg | 03 03 43.1 | +3.4 |
| **ARDR** | **Aradan** | **3.03** | **313** | Pg | Pg | 03 03 32.0 | -1.6 |
| ARDR | | | | Sg | Sg | 03 04 13.5 | +0.7 |
| **CERR** | **Cheremushki** | **4.19** | **305** | Sg | Sg | 03 04 51.7 | +1.7 |
| **TEL** | **Teeli** | **4.38** | **279** | Pg | Pg | 03 04 00.6 | +1.3 |
| TEL | | | | Sg | Sg | 03 04 59.4 | +3.4 |
| **MINR** | **Mina** | **4.67** | **339** | Pg | Pg | 03 04 07.5 | +2.6 |
| MINR | | | | Sg | Sg | 03 05 06.2 | +0.7 |
| **VEH** | **Verkhnyaya Baz** | **4.96** | **305** | Pg | Pg | 03 04 08.7 | -1.8 |
| VEH | | | | Sg | Sg | 03 05 13.0 | -1.8 |
| **CUR** | **Chagan-Uzun** | **5.60** | **269** | Pg | Pg | 03 04 19.9 | -2.8 |
| CUR | | | | Sg | Sg | 03 05 36.4 | +1.1 |
| **ULGR** | **Ulagan, Altay** | **5.80** | **274** | Sg | Sg | 03 05 41.3 | -0.2 |
| **LUZB** | **Luzhba, Kemero** | **5.91** | **305** | Sg | Sg | 03 05 40.9 | -4.0 |
| **AKAR** | **Aktash** | **6.04** | **271** | Sg | Sg | 03 05 48.8 | -0.4 |
| **ULN** | **Ulaanbaatar** | **7.08** | **109** | Sg | Sg | 03 06 18.1 | -4.6 |

**DJA 31 03:10:21.4±0.4,1.°N±3.°×10.°0E±.°,h186km±7km,M4.3/13, mb4.7/3,mB5.6/1,MLv4.1/13,Mw(mB)5.0/1,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBSI** | **Pulau Batu** | **2.05** | **225** | P | Pn | 03 11 01.2 | +1.8 |
| PBSI | | | | S | Sn | 03 11 29.6 | +0.6 |
| **GSI** | **Gunungsitoli** | **2.15** | **267** | P | Pn | 03 11 01.2 | +0.7 |
| **PDSI** | **Padang** | **2.42** | **162** | P | Pn | 03 11 01.5 | -2.1 |
| **SISI** | **Saibi** | **2.79** | **193** | P | Pn | 03 11 07.1 | -0.8 |
| SISI | | | | S | Sn | 03 11 45.4 | +1.2 |
| **KCSI** | **Kotacane, Aceh** | **2.86** | **317** | P | Pn | 03 11 08.8 | +0.1 |
| **SNSI** | **Sinabang, Aceh** | **3.53** | **286** | P | Pn | 03 11 16.8 | -0.1 |
| **MLSI** | **Meulaboh, Aceh** | **4.36** | **311** | P | Pn | 03 11 27.3 | 0.0 |
| **LHMI** | **Lhok Sumawe** | **4.70** | **324** | P | Pn | 03 11 31.1 | -0.5 |
| **MNAI** | **Manna** | **6.58** | **151** | P | Pn | 03 11 54.3 | -1.8 |
| | 548nm,1.4s | | | | | | |
| **KASI** | **Kota Agung** | **8.38** | **145** | P | Pn | 03 12 18.7 | -1.0 |

**RSNC 31 03:32:28.1±0.0,7.°N±1.°×7.°3W±.°,h143km±3km,M3.0,mb3.5, ML2.7,Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.23** | **186** | P | Pn | 03 32 46.8 | -1.1 |
| BARC | | | | S | Sn | 03 33 01.6 | -1.4 |
| **PAMC** | **Pamplona, Colo** | **0.69** | **41** | P | Pn | 03 32 49.6 | -0.8 |
| PAMC | | | | S | Sn | 03 33 07.0 | -0.3 |
| **RUSC** | **La Rusia** | **0.93** | **175** | P | Pn | 03 32 50.6 | -1.6 |
| RUSC | | | | S | Sn | 03 33 09.4 | -1.0 |
| **PTBC** | **PUERTO BERRIO,** | **1.32** | **258** | P | Pn | 03 32 53.3 | -1.9 |
| PTBC | | | | S | Sn | 03 33 14.5 | -1.4 |
| **TAMC** | **Tame, Arauca** | **1.41** | **106** | P | Pn | 03 32 55.0 | -1.3 |
| TAMC | | | | S | Sn | 03 33 17.5 | -0.2 |
| **OCAC** | **Ocana** | **1.42** | **354** | P | Pn | 03 32 54.9 | -1.6 |
| OCAC | | | | S | Sn | 03 33 17.1 | -1.0 |
| **SPBC** | **San Pablo de B** | **1.47** | **218** | P | Pn | 03 32 55.5 | -1.5 |
| SPBC | | | | S | Sn | 03 33 17.5 | -1.5 |
| **ZARC** | **Zaragoza, Cauc** | **1.81** | **292** | P | Pn | 03 32 59.2 | -1.4 |
| ZARC | | | | S | Sn | 03 33 24.5 | -1.1 |
| **NORC** | **Norcasia** | **2.11** | **234** | P | Pn | 03 33 02.5 | -1.7 |
| NORC | | | | S | Sn | 03 33 30.9 | -1.0 |
| **CHIC** | **Chingaza** | **2.25** | **195** | P | Pn | 03 33 04.9 | -1.4 |
| CHIC | | | | S | Sn | 03 33 35.1 | -0.4 |
| **ROSC** | **El Rosal** | **2.28** | **210** | P | Pn | 03 33 06.3 | -0.3 |
| ROSC | | | | S | Sn | 03 33 37.8 | +1.7 |
| **HELC** | **Santa Helena** | **2.44** | **255** | P | Pn | 03 33 07.8 | -0.6 |
| HELC | | | | S | Sn | 03 33 39.4 | 0.0 |
| **UREC** | **San Jos de Ur** | **2.53** | **292** | P | Pn | 03 33 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DAT | | | | *i* AML | AML | 04 01 05.0 | | |
| | comp=E,3μm,0.4s | | | | | | | |
| **DAT** | **Datca** | **0.29** | **210** | P | **Pg** | **04 00 59.0** | **-0.1** | |
| DAT | | | | S | **Sg** | **04 01 03.7** | **+0.7** | |
| **MLSB** | **Milas** | **0.31** | **3** | Pg | **Pg** | **04 00 59.8** | **+0.4** | |
| **BODT** | **Bodrum** | **0.37** | **283** | Pg | **Pg** | **04 01 00.8** | **+0.4** | |
| BODT | | | | Sg | **Sb** | **04 01 06.4** | **-1.0** | |
| **BODT** | **Bodrum** | **0.37** | **283** | P | **Pg** | **04 01 00.7** | **+0.4** | |
| BODT | | | | S | **Sb** | **04 01 06.7** | **-0.7** | |
| **YAZI** | **Mula-Dat§a-** | **0.39** | **219** | P | **Pg** | **04 01 00.6** | **-0.2** | |
| YAZI | | | | S | **Sg** | **04 01 05.7** | **-0.2** | |
| YAZI | | | | *i* AML | AML | 04 01 07.0 | | |
| | comp=N,1μm,0.9s | | | | | | | |
| YAZI | | | | *i* AML | AML | 04 01 07.0 | | |
| | comp=E,1μm,0.4s | | | | | | | |
| **YKAV** | **Yalikavak-Bodr** | **0.41** | **290** | Pg | **Pg** | **04 01 01.0** | **-0.1** | |
| YKAV | | | | Sg | **Sb** | **04 01 07.6** | **-1.0** | |
| **MRSB** | **Marmaris-Mugla** | **0.44** | **127** | Pg | **Pg** | **04 01 01.5** | **-0.3** | |
| MRSB | | | | Sg | **Sb** | **04 01 08.4** | **-1.2** | |
| **TURN** | **Turunc** | **0.44** | **118** | Pg | **Pg** | **04 01 01.3** | **-0.5** | |
| TURN | | | | Sg | **Sg** | **04 01 08.2** | **+0.6** | |
| **TURN** | **Turunc** | **0.44** | **118** | P | **Pg** | **04 01 01.3** | **-0.5** | |
| TURN | | | | S | **Sg** | **04 01 06.6** | **-1.0** | |
| TURN | | | | *i* AML | AML | 04 01 08.0 | | |
| | comp=N,4μm,0.3s | | | | | | | |
| TURN | | | | *i* AML | AML | 04 01 09.0 | | |
| | comp=Z,3μm,0.2s | | | | | | | |
| TURN | | | | *i* AML | AML | 04 01 12.0 | | |
| | comp=E,3μm,0.3s | | | | | | | |
| **YER** | **Yerkesik** | **0.45** | **70** | Pg | **Pg** | **04 01 02.1** | **+0.2** | |
| YER | | | | Sg | **Sg** | **04 01 08.5** | **+0.7** | |
| **YER** | **Yerkesik** | **0.45** | **70** | P | **Pg** | **04 01 02.0** | **+0.2** | |
| YER | | | | S | **Sg** | **04 01 08.6** | **+0.7** | |
| **MULA** | **Mugla, Merkez-** | **0.53** | **59** | P | **Pg** | **04 01 03.5** | **+0.1** | |
| MULA | | | | S | **Sg** | **04 01 10.3** | **-0.1** | |
| MULA | | | | *i* AML | AML | 04 01 12.0 | | |
| | comp=N,1μm,0.4s | | | | | | | |
| MULA | | | | *i* AML | AML | 04 01 13.0 | | |
| | comp=Z,980nm,0.3s | | | | | | | |
| MULA | | | | *i* AML | AML | 04 01 13.0 | | |
| | comp=E,1μm,0.3s | | | | | | | |
| **DIDI** | **Didim-Aydin** | **0.57** | **314** | Pg | **Pg** | **04 01 04.2** | **0.0** | |
| **NISR** | **Nisiros** | **0.63** | **234** | P | **Pg** | **04 01 05.4** | **+0.2** | |
| NISR | | | | S | **Sb** | **04 01 14.5** | **-0.3** | |
| | 5μm,0.4s | | | | | | | |
| **NISR** | **Nisiros** | **0.63** | **234** | P | **Pb** | **04 01 05.7** | **-0.4** | |
| NISR | | | | S | **Sb** | **04 01 15.5** | **+0.7** | |
| NISR | | | | AML | AML | 04 01 18.4 | | |
| | comp=E,12416μm,0.3s | | | | | | | |
| NISR | | | | AML | AML | 04 01 20.7 | | |
| | comp=N,6632μm,0.4s | | | | | | | |
| **DDIM** | **Aydin, Didim** | **0.63** | **319** | P | **Pg** | **04 01 04.8** | **-0.4** | |
| DDIM | | | | S | **Sb** | **04 01 14.9** | **0.0** | |
| DDIM | | | | *i* AML | AML | 04 01 20.0 | | |
| | comp=N,6μm,0.7s | | | | | | | |
| DDIM | | | | *i* AML | AML | 04 01 24.0 | | |
| | comp=N,3μm,0.7s | | | | | | | |
| DDIM | | | | *i* AML | AML | 04 01 26.0 | | |
| | comp=N,2μm,0.6s | | | | | | | |
| **KLNA** | **Kalymnos** | **0.63** | **268** | P | **Pb** | **04 01 06.1** | **0.0** | |
| KLNA | | | | S | **Sb** | **04 01 15.6** | **+0.7** | |
| KLNA | | | | AML | AML | 04 01 18.7 | | |
| | comp=N,9746μm,0.3s | | | | | | | |
| KLNA | | | | AML | AML | 04 01 18.9 | | |
| | comp=E,15334μm,0.4s | | | | | | | |
| **DALY** | **Dalyan (Mula)** | **0.74** | **103** | Pg | **Pg** | **04 01 07.3** | **0.0** | |
| **GCAM** | **G?zelcaml?** | **0.83** | **330** | Pg | **Pg** | **04 01 08.9** | **-0.2** | |
| **GCAM** | **G?zelcaml?** | **0.83** | **330** | P | **Pg** | **04 01 09.3** | **+0.3** | |
| GCAM | | | | S | **Sb** | **04 01 21.0** | **+0.3** | |
| GCAM | | | | *i* AML | AML | 04 01 24.0 | | |
| | comp=E,2μm,0.5s | | | | | | | |
| GCAM | | | | *i* AML | AML | 04 01 24.0 | | |
| | comp=E,2μm,0.8s | | | | | | | |
| GCAM | | | | *i* AML | AML | 04 01 26.0 | | |
| | comp=E,634nm,0.5s | | | | | | | |
| **ESEN** | **Aydn-Nazilli** | **0.94** | **30** | P | **Pg** | **04 01 10.8** | **-0.4** | |
| ESEN | | | | S | **Sg** | **04 01 21.9** | **-1.6** | |
| ESEN | | | | *i* AML | AML | 04 01 27.0 | | |
| | comp=E,531nm,0.6s | | | | | | | |
| ESEN | | | | *i* AML | AML | 04 01 29.0 | | |
| | comp=E,454nm,0.2s | | | | | | | |
| ESEN | | | | *i* AML | AML | 04 01 30.0 | | |
| | comp=E,617nm,0.5s | | | | | | | |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **6** | Pg | **Pg** | **04 01 11.5** | **-0.3** | |
| **SABU** | **Mula-Dalaman** | **0.98** | **99** | P | **Pg** | **04 01 11.3** | **-0.7** | |
| SABU | | | | S | **Sg** | **04 01 23.9** | **-0.9** | |
| SABU | | | | *i* AML | AML | 04 01 33.0 | | |
| | comp=E,407nm,0.7s | | | | | | | |
| SABU | | | | *i* AML | AML | 04 01 34.0 | | |
| | comp=E,229nm,0.5s | | | | | | | |
| **TAVA** | **DENIZLI_Tavas** | **1.04** | **62** | P | **Pb** | **04 01 12.8** | **-0.3** | |
| TAVA | | | | S | **Sg** | **04 01 25.4** | **-1.3** | |
| TAVA | | | | *i* AML | AML | 04 01 31.0 | | |
| | comp=E,411nm,0.6s | | | | | | | |
| TAVA | | | | *i* AML | AML | 04 01 33.0 | | |
| | comp=E,328nm,0.4s | | | | | | | |
| TAVA | | | | *i* AML | AML | 04 01 34.0 | | |
| | comp=E,413nm,0.7s | | | | | | | |
| **DNZT** | **Denizli-Tavas-** | **1.05** | **73** | P | **Pg** | **04 01 13.6** | **+0.2** | |
| DNZT | | | | S | **Sn** | **04 01 28.4** | **-0.3** | |
| DNZT | | | | *i* AML | AML | 04 01 32.0 | | |
| | comp=E,166nm,0.5s | | | | | | | |
| DNZT | | | | *i* AML | AML | 04 01 34.0 | | |
| | comp=E,212nm,0.7s | | | | | | | |
| DNZT | | | | *i* AML | AML | 04 01 34.0 | | |
| | comp=E,186nm,0.4s | | | | | | | |
| **NAZL** | **Nazilli-Aydin** | **1.07** | **23** | Pg | **Pb** | **04 01 13.4** | **-0.2** | |
| **FETY** | **Fethiye** | **1.12** | **108** | Pn | **Pn** | **04 01 14.5** | **-0.3** | |
| **FETY** | **Fethiye** | **1.12** | **108** | P | **Pg** | **04 01 16.4** | **+1.8** | |
| FETY | | | | S | **Sn** | **04 01 32.6** | **+2.4** | |
| **IZMR** | **zmir-demi** | **1.16** | **8** | P | **Pb** | **04 01 14.3** | **-0.9** | |
| IZMR | | | | P | **Pn** | **04 01 14.8** | **-0.5** | |
| IZMR | | | | S | **Sb** | **04 01 30.0** | **-0.3** | |
| IZMR | | | | *i* AML | AML | 04 01 37.0 | | |
| | comp=E,409nm,0.6s | | | | | | | |
| IZMR | | | | *i* AML | AML | 04 01 37.0 | | |
| | comp=E,414nm,0.6s | | | | | | | |
| IZMR | | | | *i* AML | AML | 04 01 39.0 | | |
| | comp=E,455nm,0.7s | | | | | | | |
| IZMR | | | | *i* AML | AML | 04 01 39.0 | | |
| | comp=E,633nm,0.6s | | | | | | | |
| IZMR | | | | *i* AML | AML | 04 01 39.0 | | |
| | comp=E,452nm,0.7s | | | | | | | |
| IZMR | | | | *i* AML | AML | 04 01 39.0 | | |
| | comp=E,637nm,0.6s | | | | | | | |
| **CAME** | **Cameli-Denizli** | **1.24** | **91** | Pn | **Pg** | **04 01 16.7** | **-0.2** | |
| **DGB** | **zmir** | **1.27** | **327** | P | **Pn** | **04 01 16.4** | **-0.5** | |
| DGB | | | | S | **Sb** | **04 01 32.7** | **-0.8** | |
| DGB | | | | *i* AML | AML | 04 01 39.0 | | |
| | comp=E,245nm,1.0s | | | | | | | |
| DGB | | | | *i* AML | AML | 04 01 43.0 | | |
| | comp=E,263nm,0.6s | | | | | | | |
| DGB | | | | *i* AML | AML | 04 01 44.0 | | |
| | comp=E,159nm,0.5s | | | | | | | |
| **GMLD** | **Gumuldur** | **1.28** | **329** | Pn | **Pg** | **04 01 18.0** | **+0.3** | |
| **KIRA** | **zmir-Kiraz** | **1.31** | **23** | P | **Pn** | **04 01 17.4** | **-0.1** | |
| KIRA | | | | S | **Sb** | **04 01 34.4** | **-0.4** | |
| KIRA | | | | *i* AML | AML | 04 01 41.0 | | |
| | comp=E,231nm,0.6s | | | | | | | |
| KIRA | | | | *i* AML | AML | 04 01 42.0 | | |
| | comp=E,487nm,0.5s | | | | | | | |
| KIRA | | | | *i* AML | AML | 04 01 43.0 | | |
| | comp=E,428nm,0.5s | | | | | | | |
| **ODEM** | **Odemis-Izmir** | **1.31** | **11** | Pn | **Pn** | **04 01 17.6** | **+0.1** | |
| **APMY** | **Acipayam-Deniz** | **1.33** | **68** | Pn | **Pb** | **04 01 18.2** | **+0.1** | |
| **KARP** | **Karpathos** | **1.51** | **199** | Pn | **Pb** | **04 01 21.3** | **+0.1** | |
| **KARP** | **Karpathos** | **1.51** | **199** | P | **Pn** | **04 01 20.1** | **-0.1** | |
| KARP | | | | S | **Sb** | **04 01 39.8** | **-0.6** | |
| | comp=E,1μm,0.5s | | | | | | | |
| **KARP** | **Karpathos** | **1.51** | **199** | P | **Pn** | **04 01 20.2** | **0.0** | |
| **KARP** | **Karpathos** | **1.51** | **199** | P | **Pn** | **04 01 20.0** | **-0.2** | |
| KARP | | | | S | **Sn** | **04 01 39.7** | **-0.2** | |
| KARP | | | | AML | AML | 04 01 45.3 | | |
| | comp=E,2275μm,0.4s | | | | | | | |
| KARP | | | | AML | AML | 04 01 50.2 | | |
| | comp=N,1994μm,0.5s | | | | | | | |
| **AKAS** | **Kas** | **1.67** | **116** | Pn | **Pb** | **04 01 23.3** | **-0.6** | |
| **KULA** | **Kula-Manisa** | **1.69** | **25** | Pn | **Pn** | **04 01 23.1** | **+0.5** | |
| **KULA** | **Kula-Manisa** | **1.69** | **25** | P | **Pn** | **04 01 22.9** | **+0.3** | |
| KULA | | | | S | **Sn** | **04 01 44.0** | **-0.3** | |
| **GOMA** | **Golmarmara-Man** | **1.73** | **4** | Pn | **Pb** | **04 01 24.1** | **-0.7** | |
| **ELL** | **Elmali** | **1.74** | **97** | Pn | **Pb** | **04 01 24.3** | **-0.8** | |
| **DEMR** | **Demre-Antalya** | **1.88** | **113** | Pn | **Pb** | **04 01 26.4** | **-1.1** | |
| **AKS** | **Akhisar** | **1.89** | **1** | Pn | **Pn** | **04 01 26.5** | **+1.1** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FOCM** | **Foa** | **1.91** | **335** | Pn | **Pb** | **04 01 26.8** | **-1.1** | |
| **THR8** | **Santorini-Mono** | **1.92** | **253** | P | **Pn** | **04 01 25.9** | **+0.2** | |
| **CHOS** | **Chios island** | **1.95** | **317** | Pn | **Pb** | **04 01 27.5** | **-1.1** | |
| **CHOS** | **Chios island** | **1.95** | **317** | P | **Pn** | **04 01 26.5** | **+0.3** | |
| CHOS | | | | S | **Sn** | **04 01 50.8** | **+0.1** | |
| | comp=N,385nm,0.6s | | | | | | | |
| **CHOS** | **Chios island** | **1.95** | **317** | P | **Pn** | **04 01 26.5** | **+0.3** | |
| CHOS | | | | AML | AML | 04 02 04.2 | | |
| | comp=E,841μm,0.6s | | | | | | | |
| CHOS | | | | AML | AML | 04 02 05.0 | | |
| | comp=N,712μm,0.6s | | | | | | | |
| **GORD** | **Gordes-Manisa** | **1.95** | **10** | Pn | **Pn** | **04 01 26.5** | **+0.3** | |
| **THR3** | **Thira Island,** | **1.98** | **254** | P | **Pb** | **04 01 27.7** | **-1.4** | |
| **THR6** | **Thira Island,** | **2.00** | **252** | P | **Pn** | **04 01 27.1** | **+0.3** | |
| **SOMA** | **Soma-Manisa** | **2.18** | **355** | Pn | **Pn** | **04 01 30.5** | **+1.2** | |
| **DKL** | **Dikili** | **2.19** | **342** | Pn | **Pn** | **04 01 30.9** | **+1.5** | |
| **ZKR** | **Zakros** | **2.24** | **214** | Pn | **Pb** | **04 01 31.7** | **-1.9** | |
| **ZKR** | **Zakros** | **2.24** | **214** | P | **Pn** | **04 01 30.6** | **+0.4** | |
| **PRK** | **Paraskevi** | **2.54** | **333** | P | **Pn** | **04 01 34.7** | **+0.4** | |
| **SIGR** | **SIGRI** | **2.68** | **327** | P | **Pn** | **04 01 36.2** | **0.0** | |
| SIGR | | | | S | **Sn** | **04 02 09.7** | **+1.0** | |
| | comp=N,168nm,0.8s | | | | | | | |
| **SIGR** | **SIGRI** | **2.68** | **327** | P | **Pn** | **04 01 36.3** | **0.0** | |
| **IDI** | **Anoyia** | **2.87** | **235** | P | **Pn** | **04 01 39.7** | **+0.8** | |
| IDI | | | | AML | AML | 04 02 18.8 | | |
| | comp=E,66μm,0.6s | | | | | | | |
| IDI | | | | AML | AML | 04 02 35.8 | | |
| | comp=N,134μm,0.6s | | | | | | | |
| **CSS** | **Mathiatis** | **4.95** | **112** | P | Pn | 04 01 54.9 | -13 | |
| **BRTR** | **Keskin Array B** | **5.37** | **58** | Pn | **Pn** | **04 02 15.4** | **+2.1** | |
| | comp=N,0.8nm,0.3s,baz=241,slow=15,SNR=22 | | | | | | | |
| BRTR | | | | Sn | **Sn** | **04 03 17.4** | **+2.1** | |
| | comp=N,0.2nm,0.3s,baz=237,slow=27,SNR=2.8 | | | | | | | |
| | comp=N,1.8nm,0.4s | | | | | | | |
| **HNTI** | **Hanita** | **7.22** | **120** | P | **Pn** | **04 02 36.9** | **-1.7** | |
| **MMA0** | **Mount Meron ar** | **7.42** | **120** | P | **Pn** | **04 02 40.0** | **-1.4** | |
| **MMAI** | **Mount Meron Ar** | **7.42** | **120** | Pn | **Pn** | **04 02 41.2** | **-0.2** | |
| | comp=N,6.2nm,0.3s,baz=307,slow=14,SNR=14 | | | | | | | |
| | comp=N,4.1nm,0.3s | | | | | | | |
| **GEM** | **Giv'at Ha'Em** | **7.49** | **118** | P | **Pn** | **04 02 40.4** | **-1.9** | |
| **NATI** | **Neve Ativ** | **7.52** | **117** | P | **Pn** | **04 02 41.4** | **-1.2** | |
| **SHMJ** | **Saham** | **7.83** | **120** | P | **Pn** | **04 02 45.8** | **-1.2** | |
| **HMDT** | **Nahal Hemdat** | **7.95** | **124** | P | **Pn** | **04 02 48.2** | **-0.4** | |
| **KZIT** | **Kziot** | **8.19** | **136** | P | **Pn** | **04 02 53.0** | **+1.0** | |
| **YTIR** | **Yattir** | **8.28** | **130** | P | **Pn** | **04 02 52.9** | **-0.3** | |
| **DSI** | **Dead Sea** | **8.30** | **128** | P | **Pn** | **04 02 53.4** | **0.0** | |
| **MSBI** | **Mazada** | **8.46** | **130** | P | **Pn** | **04 02 55.8** | **+0.2** | |
| **LISJ** | **El Lisan** | **8.59** | **130** | P | **Pn** | **04 02 57.5** | **+0.2** | |
| **GHAJ** | **Ghor Haditha** | **8.60** | **129** | P | **Pn** | **04 02 57.0** | **-0.5** | |
| **ZFRI** | **Zfri** | **8.90** | **134** | P | **Pn** | **04 03 01.4** | **-0.2** | |
| **PRNI** | **Paran** | **8.95** | **136** | P | **Pn** | **04 03 03.2** | **+0.8** | |
| **KRMI** | **Paran Flat** | **8.98** | **138** | P | **Pn** | **04 03 03.1** | **+0.3** | |
| **HRFI** | **Mount Harif** | **9.21** | **137** | P | **Pn** | **04 03 06.5** | **+0.5** | |
| **MBRI** | **Mt Berech** | **9.34** | **138** | P | **Pn** | **04 03 08.4** | **+0.7** | |
| **EIL** | **Elat** | **9.45** | **138** | P | **Pn** | **04 03 10.3** | **+1.1** | |
| **ESDC** | **Sonseca Array** | **24.96** | **286** | P | **P** | **04 06 16.4** | **-0.2** | |
| | comp=N,0.8nm,0.9s,baz=82,slow=10.0,SNR=6.2 | | | | | | | |
| | comp=N,0.8nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.27** | **231** | P | **P** | **04 07 29.0** | **-1.7** | |
| | comp=N,0.4nm,0.4s,baz=34,slow=8.0,SNR=4.6 | | | | | | | |
| | comp=N,0.4nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.34** | **53** | P | **P** | **04 08 13.6** | **-0.2** | |
| | comp=N,0.1nm,0.4s,baz=278,slow=8.7,SNR=1.6 | | | | | | | |
| | comp=N,0.1nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.02** | **58** | P | **P** | **04 08 36.5** | **+0.2** | |
| | comp=N,0.4nm,0.7s,baz=288,slow=8.1,SNR=2.4 | | | | | | | |
| | comp=N,0.4nm,0.7s | | | | | | | |
| **USRK** | **Usuriysk Ar.** | **74.06** | **46** | P | **P** | **04 12 31.1** | **+2.0** | |
| | comp=N,0.5nm,0.4s,baz=290,slow=5.9,SNR=2.5 | | | | | | | |
| | comp=N,0.5nm,0.4s | | | | | | | |

*ISN* ***31*** *04:16:48.2±1.1,34°.60N×46°.16E,h6km±11km, ML2.9*
*TEH* ***31*** *04:16:49.4,34°.60N×46°.17E,h8km±61km, ML2.8*

**ISC 31 04:16:49.6±1.4,34°.61N±0°.05×46°.18E±0°.04,h2km±13km, n11,σ0§44/15, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.20** | **63** | Pg | **Pg** | **04 16 53.9** | **+0.4** |
| **IGHG** | **Ghaleghazi** | **0.43** | **131** | Pg | **Pg** | **04 16 58.3** | **+0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.49** | **258** | Pg | **Pg** | **04 16 59.4** | **+0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **204** | Pg | **Pg** | **04 16 59.7** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.22** | **78** | Pg | **Pg** | **04 17 12.7** | **-0.4** |
| **IBZA** | **Bozab** | **1.40** | **95** | Pg | **Pn** | **04 17 16.0** | **-0.4** |
| **IBDR** | **Badra** | **1.51** | **188** | *e*Pn | **Pn** | **04 17 17.0** | **-0.6** |
| IBDR | | | | *e*Sn | **Sg** | **04 17 38.0** | **-0.1** |
| IBDR | | | | AML | AML | 04 17 43.0 | |
| | comp=E,184nm,0.7s | | | | | | |
| IBDR | | | | AML | AML | 04 17 50.0 | |
| | comp=N,119nm,0.4s | | | | | | |
| **IKRK** | **Kirkuk** | **1.70** | **298** | *e*Pn | **Pn** | **04 17 20.0** | **-0.3** |
| IKRK | | | | *e*Sn | **Sb** | **04 17 43.5** | **+0.1** |
| IKRK | | | | AML | AML | 04 17 47.2 | |
| | comp=N,241nm,0.5s | | | | | | |
| IKRK | | | | AML | AML | 04 17 48.5 | |
| | comp=E,273nm,0.5s | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.76** | **127** | Pg | **Pb** | **04 17 22.5** | **0.0** |
| **BHD** | **Baghdad** | **2.00** | **229** | *e*Pn | **Pn** | **04 17 24.0** | **-0.4** |
| BHD | | | | *e*Sn | **Sn** | **04 17 50.5** | **+0.5** |
| **RAFI** | **Al-Rafai** | **2.88** | **181** | *e*Pn | **Pn** | **04 17 37.0** | **+0.5** |
| RAFI | | | | *e*Sn | **Sn** | **04 18 12.0** | **+0.3** |

*DJA* ***31*** *04:22:24.4±0.2,0°.S±2°.×12°.7E±°,h10km,M4.4/15,mb4.8/7, mB4.9/4,MLv4.3/15,Mw(mB)4.1/4*
*NEIC* ***31*** *04:22:26.6±1.0,0°.04S±0°.07×126°.71E±0°.07,h50km±7km, mb4.9/28, Error ellipse: s-maj=9.7km s-min=9.4km az=158.0*
*IDC* ***31*** *04:22:27.6±3.4,0°.06S×126°.60E,h72km±31km,mb3.9/16, mbtmp4.2/17,ML4.8/1, Error ellipse: s-maj=23.9km s-min=12.3km az=71.0*

**ISC 31 04:22:27.8±0.4,0°.06S±0°.04×126°.69E±0°.05,h73km,n70, σ1§45/79,mb4.7/28,Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LBMI** | **Labuha** | **0.99** | **125** | P | **Pn** | **04 22 44.4** | **-1.9** |
| LBMI | | | | S | **Sn** | **04 22 58.4** | **-1.7** |
| **TNTI** | **Ternate** | **1.07** | **39** | P | **Pn** | **04 22 45.0** | **-2.3** |
| **TNTI** | **Ternate** | **1.07** | **39** | P | **Pn** | **04 22 44.4** | **-2.9** |
| TNTI | | | | S | **Sn** | **04 22 59.3** | **-2.6** |
| **SANI** | **Sanana** | **2.10** | **200** | P | **Pn** | **04 22 59.2** | **-1.6** |
| SANI | | | | S | **Sn** | **04 23 22.5** | **-3.5** |
| **KMSI** | **Cibinong** | **2.79** | **283** | P | **Pn** | **04 23 08.9** | **-1.3** |
| KMSI | | | | S | **Sn** | **04 23 40.6** | **-2.1** |
| **NLAI** | **Namlea** | **3.18** | **173** | P | **Pn** | **04 23 15.2** | **-0.3** |
| NLAI | | | | S | **Sn** | **04 23 49.3** | **-3.0** |
| **MSAI** | **Masohi** | **3.95** | **146** | P | **Pn** | **04 23 27.3** | **+1.2** |
| **LUWI** | **Luwuk** | **4.04** | **256** | P | **Pn** | **04 23 26.4** | **-0.8** |
| LUWI | | | | S | **Sn** | **04 24 15.3** | **+1.9** |
| **TOLI2** | **Tolitoli** | **6.03** | **281** | Pn | **Pn** | **04 23 53.4** | **-1.0** |
| **FAKI** | **Fak Fak** | **6.24** | **117** | | **Pn** | **04 23 56.9** | **-0.5** |
| **FAKI** | **Fak Fak** | **6.24** | **117** | P | **Pn** | **04 23 56.8** | **-0.5** |
| | 17nm,0.5s,486nm0.1nm | | | | | | |
| **BNSI** | **Bone** | **7.87** | **237** | P | **Pn** | **04 24 19.6** | **+0.1** |
| | 70nm,0.6s,1μm | | | | | | |
| **BKSI** | **Bulukumba** | **8.39** | **231** | P | **Pn** | **04 24 27.7** | **+1.0** |
| | 55nm,0.5s,747nm | | | | | | |
| **KAPI** | **Kappang** | **8.50** | **235** | Pn | **Pn** | **04 24 28.3** | **+0.1** |
| **KAPI** | **Kappang** | **8.50** | **235** | P | **Pn** | **04 24 29.0** | **+0.8** |
| | 11nm,0.3s,baz=59,slow=12,SNR=18 | | | | | | |
| KAPI | | | | S | **Sn** | **04 25 58.8** | **-3.8** |
| | 16nm,0.3s,baz=90,slow=20,SNR=13 | | | | | | |
| | 25nm,0.3s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **8.65** | **226** | P | **Pn** | **04 24 32.1** | **+1.8** |
| **MYLDM** | **Lahad Datu** | **9.70** | **303** | Pn | **Pn** | **04 24 42.5** | **-2.2** |
| **EDFI** | **Ende, Flores** | **9.96** | **210** | P | **Pn** | **04 24 47.5** | **-0.8** |
| **MTN** | **Manton Dam** | **13.44** | **161** | Pn | **Pn** | **04 25 34.0** | **-1.4** |
| **KNRA** | **Kununurra** | **15.65** | **173** | Pn | **Pn** | **04 26 03.4** | **-0.7** |
| **FITZ** | **Fitzroy Crossi** | **17.95** | **183** | | **Pn** | **04 26 32.9** | **+0.3** |
| FITZ | | | | IAmb | IAmb | 04 26 33.5 | |
| | comp=Z,131nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **20.98** | **159** | P | **P** | **04 27 04.7** | **-0.6** |
| WB0 | | | | IAmb | IAmb | 04 27 08.4 | |
| | comp=Z,23nm,0.3s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.12** | **160** | | **P** | **04 27 06.3** | **-0.5** |
| WRAB | | | | IAmb | IAmb | 04 27 09.8 | |
| | comp=Z,18nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.13** | **160** | P | **P** | **04 27 06.3** | **-0.6** |
| | comp=Z,9.7nm,0.4s,baz=338,slow=11,SNR=298 | | | | | | |
| WRA | | | | PcP | **PcP** | **04 31 09.7** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=325,slow=2.2,SNR=2.7 | | | | | | |
| | comp=Z,9.7nm,0.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **21.13** | **160** | P | **P** | **04 27 06.3** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 04 27 10.6 | |
| | comp=Z,15nm,0.4s | | | | | | |
| **WR0** | **Warramunga Arr** | **21.21** | **159** | P | **P** | **04 27 07.2** | **-0.6** |
| WR0 | | | | IAmb | IAmb | 04 27 08.4 | |
| | comp=Z,13nm,0.4s | | | | | | |
| **COEN** | **Coen** | **21.37** | **131** | P | **P** | **04 27 09.2** | **-0.3** |
| **MBWA** | **Marble Bar** | **22.04** | **198** | P | **P** | **04 27 15.7** | **-0.9** |
| MBWA | | | | IAmb | IAmb | 04 27 38.5 | |
| | comp=Z,52nm,1.8s | | | | | | |
| **PSA00** | **Pilbara Seismi** | **22.40** | **197** | P | **P** | **04 27 20.8** | **+0.3** |
| PSA00 | | | | IAmb | IAmb | 04 27 22.8 | |
| | comp=Z,52nm,1.4s | | | | | | |
| **AS31** | **Alice Springs** | **24.48** | **164** | P | **P** | **04 27 40.7** | **+0.4** |
| **ASAR** | **Alice Springs** | **24.48** | **164** | P | **P** | **04 27 40.2** | **-0.1** |
| | comp=Z,18nm,0.6s,baz=343,slow=10,SNR=142 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 31 17.4** | **0.0** |
| | comp=Z,1.0nm,0.6s,baz=356,slow=2.0,SNR=8.1 | | | | | | |
| | comp=Z,18nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **26.55** | **282** | P | **P** | **04 28 00.2** | **+1.1** |
| KULM | | | | IAmb | IAmb | 04 28 06.5 | |
| | comp=Z,20nm,1.4s | | | | | | |
| **FORT** | **Forrest** | **30.57** | **178** | P | **P** | **04 28 34.7** | **0.0** |
| FORT | | | | IAmb | IAmb | 04 28 48.7 | |
| | comp=Z,54nm,1.2s | | | | | | |
| **BBOO** | **Buckleboo** | **33.75** | **166** | P | **P** | **04 29 02.7** | **+0.2** |
| **STKA** | **Stephens Creek** | **34.64** | **157** | P | **P** | **04 29 10.8** | **+0.6** |
| **STKA** | **Stephens Creek** | **34.64** | **157** | P | **P** | **04 29 10.8** | **+0.6** |
| | comp=Z,4.3nm,0.3s,baz=334,slow=10,SNR=15 | | | | | | |
| | comp=Z,4.3nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **37.35** | **2** | P | **P** | **04 29 33.4** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=181,slow=11,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **37.96** | **15** | P | **P** | **04 29 37.4** | **-1.1** |
| | comp=Z,0.5nm,0.3s,baz=185,slow=13,SNR=1.0 | | | | | | |
| | comp=Z,0.5nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **44.32** | **5** | P | **P** | **04 30 30.1** | **-0.5** |
| | comp=Z,1.2nm,0.5s,baz=183,slow=6.3,SNR=5.5 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **50.87** | **342** | P | **P** | **04 31 22.2** | **+0.8** |
| | comp=Z,0.8nm,0.8s,baz=134,slow=6.2,SNR=4.1 | | | | | | |
| | comp=Z,0.8nm,0.8s | | | | | | |
| **MSVF** | **Nonsavu** | **53.45** | **112** | P | **P** | **04 31 42.5** | **+1.5** |
| | comp=Z,7.0nm,0.9s,baz=287,slow=19,SNR=1.8 | | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **MSVF** | **Nonsavu** | **53.45** | **112** | P | **P** | **04 31 43.5** | **+2.5** |
| **WMQ** | **Urumqi** | **55.82** | **327** | P | **P** | **04 31 58.1** | **+0.4** |
| **SNZO** | **South Karori** | **59.69** | **140** | P | **P** | **04 32 29.1** | **+4.4** |
| **BKZ** | **Black Stump Fm** | **59.84** | **137** | P | **P** | **04 32 26.4** | **+0.5** |
| **MK31** | **Makanchi Array** | **60.66** | **327** | P | **P** | **04 32 32.3** | **+0.9** |
| **MKAR** | **Makanchi Array** | **60.66** | **327** | P | **P** | **04 32 32.3** | **+0.9** |
| | comp=Z,1.2nm,0.5s,baz=124,slow=8.4,SNR=12 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **MA2** | **Magadan** | **62.37** | **14** | P | **P** | **04 32 43.3** | **+0.7** |
| **MA2** | **Magadan** | **62.37** | **14** | P | **P** | **04 32 44.1** | **+1.5** |
| **ZALV** | **Zalesovo Beam** | **63.94** | **334** | P | **P** | **04 32 52.4** | **-0.7** |
| | comp=Z,0.7nm,0.4s,baz=114,slow=7.0,SNR=3.0 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.91** | **328** | P | **P** | **04 32 58.9** | **-0.6** |
| | comp=Z,1.2nm,0.5s,baz=127,slow=6.1,SNR=14 | | | | | | |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **64.92** | **329** | P | **P** | **04 33 00.1** | **+0.5** |
| **KURK** | **Kurchatov** | **64.92** | **329** | P | **P** | **04 32 59.9** | **+0.4** |
| **BVAR** | **Borovoye Array** | **70.47** | **328** | P | **P** | **04 33 34.7** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=123,slow=7.1,SNR=2.5 | | | | | | |
| | comp=Z,0.5nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **75.06** | **321** | P | **P** | **04 34 02.0** | **+0.3** |
| **H17K** | **Granite Mounta** | **83.07** | **24** | P | **P** | **04 34 46.2** | **+1.0** |
| H17K | | | | IAmb | IAmb | 04 34 49.7 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **K17K** | **Iditarod** | **83.21** | **27** | P | **P** | **04 34 47.9** | **+2.0** |
| **E18K** | **Tukpahlearik C** | **83.47** | **22** | P | **P** | **04 34 48.8** | **+1.6** |
| E18K | | | | IAmb | IAmb | 04 34 55.2 | |
| | comp=Z,29nm,1.8s | | | | | | |
| **C18K** | **Utukok River** | **83.60** | **21** | P | **P** | **04 34 49.0** | **+1.1** |
| C18K | | | | IAmb | I

comp=Z,10µm,18.5s,baz=140,slow=30
336nm,0.3s
ONTNC **Ouen Toro** **2.20 241** P **Pn** **04 27 07.8 +0.6**
ONTNC **Ouen Toro** **2.20 241** **Pn** **04 27 06.8 -0.4**
NOUC **Port Laguerre** **2.24 247** P **Pn** **04 27 08.5 +0.8**
KOUNC **Koumac, New Ca** **4.03 279** P **Pn** **04 27 32.8 +0.4**
KOUNC **Koumac, New Ca** **4.03 279** Pn **Pn** **04 27 31.3 -1.1**
MSVF **Nonsavu** **9.63 70** P **Pn** **04 28 51.3 +1.9**
MSVF **Nonsavu** **9.63 70** Pn **Pn** **04 28 52.2 +2.9**
MSVF **Nonsavu** **9.63 70** Pn **Pn** **04 28 51.0 +1.6**
0.4nm,0.3s,baz=245,slow=13,SNR=17
MSVF LR LR 04 32 17.0
comp=Z,7µm,18.9s,baz=251,slow=37
MSVF **Nonsavu** **9.63 70** *c i* P **Pn** **04 28 51.7 +2.3**
HNR **Honiara** **14.37 324** LR LR 04 34 55.6
comp=Z,13µm,18.6s,baz=160,slow=35
RAO **Raoul Island** **14.61 126** LR LR 04 33 49.0
comp=Z,611nm,21.2s,baz=289,slow=30
AUWSH **Wavell State H** **15.39 244** P **P** **04 30 10.2 -2.3**
GD1S **Gladstone Soft** **16.25 258** P **Pn** **04 30 20.0 +1.0**
EIDS **Eidsvold** **16.55 252** P **P** **04 30 25.4 0.0**
EIDS **Eidsvold** **16.55 252** **Pn** **04 30 22.1 -0.7**
EIDS **Eidsvold** **16.55 252** P **P** **04 30 25.2 -0.2**
comp=Z,0.0nmcomp=Z,50nm,1.9s
RK1H **Rockhampton Ha** **16.83 259** P **P** **04 30 28.7 +0.2**
TOZ **Tahuroa Road** **17.50 161** **P** **04 30 36.9 +1.1**
ARMA **Armidale** **17.73 236** P **P** **04 30 40.1 +1.5**
ARMA **Armidale** **17.73 236** **Pn** **04 30 37.6 -0.2**
ARMA **Armidale** **17.73 236** P **P** **04 30 41.2 +2.6**
comp=Z,48nm,2.2s
URZ **Urewera** **18.50 158** P **Pn** **04 30 51.7 +4.7**
URZ **Urewera** **18.50 158** P **P** **04 30 45.7 -1.1**
comp=Z,0.9nm,0.3s,baz=297,slow=2.3,SNR=1.4
URZ LR LR 04 36 38.4
comp=Z,2µm,19.7s,baz=64,slow=33
comp=Z,2.2nm,0.3s
RTZ **Ruatahuna** **18.77 159** P **Pn** **04 30 53.0 +2.6**
BKZ **Black Stump Fm** **19.12 161** P **Pn** **04 30 56.8 +2.2**
BKZ **Black Stump Fm** **19.12 161** P **Pn** **04 30 56.4 +1.8**
MGCD **Mangrove Creek** **19.51 229** P **Pn** **04 31 01.9 +2.6**
comp=Z,37nm,0.9s
RIV **Riverview** **19.82 227** P **Pn** **04 31 04.5 +1.5**
comp=Z,170nm,1.1s
SYDH **Sydney Hard Ro** **20.07 228** P Pn 04 31 07.5 +1.6
MRZ **Mangatainoka R** **20.26 164** P Pn 04 31 07.5 -0.6
NIUE **Niue** **20.33 88** P Pn 04 31 16.5 +7.4
TV1H **Townsville Har** **20.49 272** P Pn 04 31 11.2 +0.2
CTA **Charters Tower** **20.88 269** P Pn 04 31 15.7 +0.1
CTA **Charters Tower** **20.88 269** LR LR 04 39 03.5
comp=Z,237nm,18.7s,baz=92,slow=36
CTAO **Charters Tower** **20.88 269** P Pn 04 31 15.1 -0.5
CTAO **Charters Tower** **20.88 269** **P** **04 31 12.3 -0.8**
CTAO **Charters Tower** **20.88 269** P **P** **04 31 12.3 -0.8**
CTAO pmax pmax
comp=Z,65nm,1.1s
CNB **Canberra Magne** **21.89 226** P **P** **04 31 27.5 +3.7**
CNB **Canberra Magne** **21.89 226** P **P** **04 31 27.4 +3.5**
comp=Z,60nm,1.1s
YNG **Young** **22.00 230** P **P** **04 31 28.3 +3.2**
YNG **Young** **22.00 230** P **P** **04 31 27.8 +2.8**
comp=Z,247nm,2.3s
CAN **Canberra** **22.14 227** P **P** **04 31 28.5 +2.0**
CAN **Canberra** **22.14 227** P **P** **04 31 23.8 -2.7**
CAN IAmb IAmb 04 31 31.3
comp=Z,79nm,1.3s
CAN **Canberra** **22.14 227** P **P** **04 31 24.7 -1.8**
CAN **Canberra** **22.14 227** P **P** **04 31 23.8 -2.7**
CAN pmax pmax
comp=Z,79nm,1.3s
RPZ **Rata Peaks** **22.50 175** LR LR 04 39 22.0
comp=Z,425nm,18.4s,baz=332,slow=34
JCZ **Jackson Bay** **22.76 180** P **P** **04 31 36.3 +3.2**
QLP **Quilpie** **22.82 252** P **P** **04 31 34.9 +1.0**
QLP **Quilpie** **22.82 252** P **P** **04 31 35.4 +1.5**
comp=Z,318nm,1.2s
CMSA **Cobar Meteorol** **22.84 239** P **P** **04 31 35.6 +1.6**
CMSA **Cobar Meteorol** **22.84 239** P **P** **04 31 35.4 +1.4**
comp=Z,70nm,1.5s
MTSU **Mount Surprise** **23.01 274** P **P** **04 31 36.7 +0.8**
MTSU **Mount Surprise** **23.01 274** P **P** **04 31 36.7 +0.8**
comp=Z,102nm,0.9s
MILA **Mila** **23.05 223** P **P** **04 31 37.9 +1.7**
comp=Z,62nm,1.8s
PMG **Port Moresby** **23.70 297** P **P** **04 31 43.7 +0.9**
PMG **Port Moresby** **23.70 297** P **P** **04 31 43.8 +0.9**
PMG **Port Moresby** **23.70 297** P **P** **04 31 40.9 -2.0**
PMG IAmb IAmb 04 31 54.7
comp=Z,78nm,1.0s
PMG **Port Moresby** **23.70 297** P **P** **04 31 41.8 -1.1**
comp=Z,24nm,0.8s,baz=117,slow=10,SNR=7.3
PMG LR LR 04 39 01.8
comp=Z,675nm,19.3s,baz=146,slow=32
comp=Z,24nm,0.8s
PMG **Port Moresby** **23.70 297** *d i* P **P** **04 31 42.2 -0.6**
PMG pmax pmax
comp=Z,138nm,2.9s
COEN **Coen** **25.21 283** P **P** **04 31 57.9 +1.1**
COEN **Coen** **25.21 283** P **P** **04 31 56.1 -0.6**
COEN IAmb IAmb 04 32 08.6
comp=Z,48nm,0.9s
COEN **Coen** **25.21 283** P **P** **04 31 57.6 +0.8**
comp=Z,80nm,2.0s
SYZ **Scrubby Hill** **25.23 179** P **P** **04 31 59.1 +2.6**
TOO **Toolangi** **25.73 226** P **P** **04 32 03.2 +1.9**
TOO **Toolangi** **25.73 226** P **P** **04 32 01.5 +0.2**
TOO IAmb IAmb 04 32 04.5
comp=Z,44nm,1.1s
TOO **Toolangi** **25.73 226** P **P** **04 32 03.0 +1.7**
comp=Z,49nm,1.4s
TOO **Toolangi** **25.73 226** P **P** **04 32 01.5 +0.2**
TOO pmax pmax
comp=Z,45nm,1.1s
INKA **Innaminka** **26.07 250** P **P** **04 32 05.7 +1.3**
STKA **Stephens Creek** **26.25 241** P **P** **04 32 07.4 +1.3**
STKA **Stephens Creek** **26.25 241** P **P** **04 32 07.4 +1.3**
comp=Z,10nm,1.6s
STKA **Stephens Creek** **26.25 241** P **P** **04 32 06.9 +0.8**
comp=Z,11nm,0.9s,baz=76,slow=4.2,SNR=9.8
STKA LR LR 04 42 10.5
comp=Z,1µm,18.2s,baz=84,slow=36
comp=Z,11nm,0.9s
STKA **Stephens Creek** **26.25 241** *i* P **P** **04 32 05.2 -0.8**
BRAT **Ballarat** **26.78 227** P **P** **04 32 12.9 +2.2**
QIS **Mount Isa** **27.02 266** P **P** **04 32 13.3 +0.2**
QIS **Mount Isa** **27.02 266** P **P** **04 32 13.0 -0.1**
comp=Z,44nm,1.4s
MOO **Moorlands** **27.70 215** P **P** **04 32 20.6 +1.6**
comp=Z,87nm,2.6s
ARPS **Mount Arapiles** **27.88 230** P **P** **04 32 22.4 +1.8**
ARPS **Mount Arapiles** **27.88 230** P **P** **04 32 21.9 +1.3**
comp=Z,49nm,1.0s
MANU **Manus Island** **28.10 310** P **P** **04 32 21.5 -1.3**
MANU IAmb IAmb 04 32 34.9
comp=Z,63nm,1.4s
LCRK **Leigh Creek** **28.71 245** P **P** **04 32 29.4 +1.3**
HTT **Hallett** **28.86 239** P **P** **04 32 30.6 +1.1**
HTT **Hallett** **28.86 239** P **P** **04 32 29.7 +0.2**
comp=Z,0.0nmcomp=Z,28nm,1.0s
RAR **Rarotonga** **29.52 96** LR LR 04 42 19.8
comp=Z,284nm,21.8s,baz=262,slow=32
OOD **Oodnadatta** **30.52 251** P **P** **04 32 45.4 +1.2**
BBOO **Buckleboo** **31.02 241** P **P** **04 32 47.2 -1.3**
WRAB **Tennant Creek** **31.99 266** P **P** **04 32 55.1 -2.2**
WRAB IAmb IAmb 04 33 09.4
comp=Z,29nm,0.9s
WRAB **Tennant Creek** **31.99 266** *d i* P **P** **04 32 54.6 -2.7**
WRAB pmax pmax
comp=Z,31nm,1.1s
WRA **Warramunga Arr** **32.00 266** P **P** **04 32 56.4 -1.0**
comp=Z,22nm,1.0s,baz=93,slow=9.2,SNR=70
WRA PcP **PcP** **04 35 47.1 -0.3**
comp=Z,1.2nm,1.0s,baz=102,slow=2.8,SNR=1.8
WRA LR LR 04 45 33.0
comp=Z,3µm,19.9s,baz=98,slow=36
comp=Z,22nm,1.0s
AS01 **Alice Springs** **32.01 259** P **P** **04 32 57.9 +0.5**
AS31 **Alice Springs** **32.05 259** P **P** **04 32 57.6 -0.1**
comp=Z,24nm,0.9s
ASAR **Alice Springs** **32.05 259** P **P** **04 32 57.5 -0.3**
comp=Z,55nm,0.9s,baz=83,slow=9.2,SNR=247
ASAR PcP **PcP** **04 35 45.9 -1.6**
comp=Z,2.6nm,0.9s,baz=100,slow=4.8,SNR=3.2
ASAR LR LR 04 45 42.4
comp=Z,2µm,19.5s,baz=97,slow=36
comp=Z,55nm,0.9s

MULG **Mulgathing** **32.22 247** P **P** **04 33 00.6 +1.4**
JAY **Jayapura** **32.88 301** P **P** **04 33 04.9 -0.2**
comp=Z,43nm,1.2s,comp=Z,675nm
KDU **Kakadu** **35.46 278** P **P** **04 33 27.4 0.0**
KDU **Kakadu** **35.46 278** P **P** **04 33 26.9 -0.5**
comp=Z,27nm,1.2s
MTN **Manton Dam** **36.65 277** P **P** **04 33 37.7 +0.1**
MTN **Manton Dam** **36.65 277** P **P** **04 33 36.0 -1.6**
MTN IAmb IAmb 04 33 47.8
comp=Z,31nm,0.8s
MTN **Manton Dam** **36.65 277** P **P** **04 33 34.4 -3.3**
DRS **Darwin Rock St** **36.99 278** P **P** **04 33 43.0 +2.4**
WRKA **Warakurna** **37.10 256** P **P** **04 33 41.6 +0.1**
WRKA **Warakurna** **37.10 256** P **P** **04 33 41.2 -0.3**
comp=Z,59nm,1.1s
FORT **Forrest** **37.42 247** P **P** **04 33 43.6 -0.5**
FORT IAmb IAmb 04 33 45.4
comp=Z,73nm,0.9s
FORT **Forrest** **37.42 247** P **P** **04 33 44.5 +0.4**
comp=Z,66nm,0.7s
KNRA **Kununurra** **38.06 272** P **P** **04 33 47.8 -1.8**
KNRA IAmb IAmb 04 33 59.9
comp=Z,64nm,0.8s
KNRA **Kununurra** **38.06 272** P **P** **04 33 48.8 -0.8**
comp=Z,92nm,0.8s
TBI **Tubuai** **38.82 101** *e* S **S** **04 39 50.2 -3.8**
comp=Z,828nm,28.5s
TBI *e* SS **SS** **04 42 45.3 +0.3**
comp=Z,7µm,29.2s
TBI *e* LR LR 04 44 33.1
comp=Z,4µm,31.5s
PPT2 **Papeete2** **39.59 92** *e* P P 04 33 55.5 -7.1
comp=Z,69nm,30.0s
PPT2 *e* S **S** **04 40 03.3 -2.5**
comp=Z,287nm,25.0s
PPT2 *e* SS **SS** **04 42 57.4 -3.4**
comp=Z,2µm,28.2s
PPT2 *e* LR LR 04 44 54.8
comp=Z,2µm,28.2s
PPT2 *e* LR LR 04 44 55.1
comp=Z,1µm,30.5s
PPT **Papeete** **39.60 92** LR LR 04 46 57.7
comp=Z,304nm,20.7s,baz=256,slow=31
FAKI **Fak Fak** **39.72 292** P **P** **04 34 01.8 -1.8**
FAKI IAmb IAmb 04 34 03.1
comp=Z,56nm,1.5s
FITZ **Fitzroy Crossi** **40.42 267** P **P** **04 34 09.0 -0.4**
FITZ **Fitzroy Crossi** **40.42 267** P **P** **04 34 09.6 +0.3**
GUMO **Guam** **41.70 324** LR LR 04 49 35.1
comp=Z,228nm,18.5s,baz=116,slow=33
KMBL **Kambalda** **42.75 246** P **P** **04 34 28.9 +0.6**
KMBL **Kambalda** **42.75 246** P **P** **04 34 28.3 0.0**
comp=Z,98nm,1.0s
SOEI **Soe** **44.02 278** P **P** **04 34 39.5 +0.6**
PSAD2 **Pilbara Seismi** **45.06 260** P **P** **04 34 45.8 -1.3**
comp=Z,141nm,1.2s
PSA00 **Pilbara Seismi** **45.18 260** P **P** **04 34 48.3 +0.3**
PSA00 **Pilbara Seismi** **45.18 260** P **P** **04 34 47.3 -0.7**
PSA00 **Pilbara Seismi** **45.18 260** P **P** **04 34 47.1 -0.9**
PSA00 IAmb IAmb 04 34 59.6
comp=Z,54nm,1.4s
PSA00 **Pilbara Seismi** **45.18 260** P **P** **04 34 48.7 +0.8**
comp=Z,124nm,1.0s
PSAC1 **Pilbara Seismi** **45.22 260** P **P** **04 34 49.1 +0.8**
comp=Z,133nm,1.0s
MBWA **Marble Bar** **45.35 261** P **P** **04 34 50.0 +0.7**
MBWA **Marble Bar** **45.35 261** P **P** **04 34 48.9 -0.5**
MBWA **Marble Bar** **45.35 261** P **P** **04 34 49.5 +0.2**
comp=Z,204nm,0.9s
SANI **Sanana** **45.60 289** P **P** **04 34 51.3 -0.1**
MEEK **Meekatharra** **45.71 253** P **P** **04 34 52.2 0.0**
MEEK **Meekatharra** **45.71 253** P **P** **04 34 51.8 -0.4**
comp=Z,92nm,0.8s
KLBR **Kellerberrin** **46.28 246** P **P** **04 34 56.4 -0.1**
KLBR **Kellerberrin** **46.28 246** P **P** **04 34 56.1 -0.5**
comp=Z,149nm,0.9s
NWAO **Narrogin (SRO)** **46.73 244** P **P** **04 35 00.1 0.0**
NWAO **Narrogin (SRO)** **46.73 244** P **P** **04 34 59.3 -0.8**
NWAO **Narrogin (SRO)** **46.73 244** LR LR 04 54 41.6
comp=Z,885nm,20.2s,baz=77,slow=36
NWAO **Narrogin (SRO)** **46.73 244** P **P** **04 34 59.3 -0.8**
NWAO pmax pmax
comp=Z,68nm,0.9s
BLDU **Ballidu** **47.19 248** P **P** **04 35 03.7 0.0**
BLDU **Ballidu** **47.19 248** P **P** **04 35 03.3 -0.4**
comp=Z,49nm,1.9s
MUN **Mundaring** **47.59 246** P **P** **04 35 06.6 -0.2**
MUN **Mundaring** **47.59 246** P **P** **04 35 05.7 -1.1**
comp=Z,62nm,1.2s
MORW **Morawa** **47.83 250** P **P** **04 35 08.8 +0.1**
MORW **Morawa** **47.83 250** P **P** **04 35 08.4 -0.3**
MORW **Morawa** **47.83 250** P **P** **04 35 08.5 -0.2**
comp=Z,54nm,1.2s
LUWI **Luwuk** **48.92 288** P **P** **04 35 15.5 -1.7**
BNSI **Bone** **49.86 283** P **P** **04 35 25.9 +1.4**
comp=Z,38nm,1.2s,comp=Z,926nm
KAPI **Kappang** **49.94 282** P **P** **04 35 25.8 +0.8**
KAPI **Kappang** **49.94 282** P **P** **04 35 23.6 -1.4**
KAPI IAmb IAmb 04 35 26.8
comp=Z,45nm,1.1s
KAPI **Kappang** **49.94 282** P **P** **04 35 24.3 -0.7**
comp=Z,31nm,1.1s,baz=112,slow=5.4,SNR=8.0
KAPI LR LR 04 56 16.2
comp=Z,191nm,21.3s,baz=116,slow=36
comp=Z,31nm,1.1s
KAPI **Kappang** **49.94 282** *i* P **P** **04 35 23.1 -1.9**
KAPI pmax pmax
comp=Z,37nm,1.1s
DAV **Davao City (W)** **50.69 299** LR LR 04 56 47.3
comp=Z,178nm,19.8s,baz=134,slow=36
TAOE **Nuku Hiva Isla** **50.86 84** *e* S **S** **04 42 50.5 +1.6**
comp=Z,391nm,26.9s
TAOE *e* SS **SS** **04 46 29.3 +5.6**
comp=Z,100nm,24.6s
TAOE *e* LR LR 04 50 09.3
comp=Z,2µm,28.2s
TOLI2 **Tolitoli** **51.68 289** P **P** **04 35 38.1 0.0**
TOLI2 **Tolitoli** **51.68 289** IAmb IAmb 04 35 38.8
comp=Z,82nm,1.3s
RKT **Rikitea** **52.06 103** *e* LR LR 04 50 31.6
comp=Z,3µm,30.8s
MYLDM **Lahad Datu** **55.64 292** P **P** **04 36 06.1 -1.0**
MYLDM IAmb IAmb 04 36 32.1
comp=Z,40nm,1.2s
SBA **Scott Base** **56.66 180** P **P** **04 36 14.4 +0.9**
SBA IAmb IAmb 04 36 26.4
comp=Z,47nm,1.1s
SBA **Scott Base** **56.66 180** P **P** **04 36 14.4 +0.9**
SBA pmax pmax
comp=Z,47nm,1.1s
CASY **Casey** **58.03 204** P **P** **04 36 22.8 -0.6**
CASY IAmb IAmb 04 36 24.4
comp=Z,41nm,0.9s
KKM **Kota Kinabalu** **58.04 292** P **P** **04 36 24.8 +0.4**
KKM **Kota Kinabalu** **58.04 292** P **P** **04 36 23.4 -0.9**
STKI **Sintang** **59.55 283** P **P** **04 36 36.2 +1.4**
comp=Z,25nm,0.4s
SBUM **Sibu** **59.89 286** P **P** **04 36 36.7 -0.4**
SBUM IAmb IAmb 04 36 39.0
comp=Z,17nm,1.5s
KSM **Kuching** **61.20 284** P **P** **04 36 46.2 +0.1**
KSM **Kuching** **61.20 284** P **P** **04 36 45.0 -1.0**
JOW **Kunigami** **61.69 319** P **P** **04 36 49.1 0.0**
JOW IAmb IAmb 04 36 50.5
comp=Z,49nm,1.5s
SBJI **Serang** **62.11 274** P **P** **04 36 50.5 -1.7**
MJAR **Matsushiro Arr** **64.23 333** P **P** **04 37 03.9 -1.9**
comp=Z,5.9nm,0.9s,baz=154,slow=6.8,SNR=8.8
MJAR LR LR 05 02 17.4
comp=Z,113nm,21.7s,baz=154,slow=34
comp=Z,5.9nm,0.9s
MAJO **Matsushiro** **64.23 333** *i* P **P** **04 37 03.7 -2.1**
MAJO pmax pmax
comp=Z,24nm,1.7s
TPUB **Ta-pu** **64.33 311** P **P** **04 37 05.8 -1.0**
TPUB **Ta-pu** **64.33 311** P **P** **04 37 05.0 -1.8**
SSLB **Suanglung** **64.41 311** P **P** **04 37 06.5 -0.8**
SSLB **Suanglung** **64.41 311** P **P** **04 37 05.5 -1.8**
YHNB **Yeheng** **64.69 312** P **P** **04 37 09.2 0.0**
YHNB **Yeheng** **64.69 312** P **P** **04 37 08.3 -0.8**
JNU **Nakatsue** **64.93 326** LR LR 05 05 38.3
comp=Z,68nm,18.1s,baz=114,slow=36
MYKOM **Kota Tinggi** **67.20 281** P **P** **04 37 24.2 -1.3**
MYKOM IAmb IAmb 04 37 36.6
comp=Z,32nm,1.1s

QSPA **South Pole Qui** **68.81 180** P **P** **04 37 34.4 -0.6**
QSPA IAmb IAmb 04 37 36.2
comp=Z,32nm,0.9s
QSPA **South Pole Qui** **68.81 180** P **P** **04 37 34.5 -0.4**
comp=Z,25nm,0.9s,baz=15,slow=2.0,SNR=49
QSPA LR LR 05 05 31.3
comp=Z,330nm,18.4s,baz=36,slow=34
comp=Z,25nm,0.9s
ASAJ **Asahikawa** **69.25 340** LR LR 05 04 45.4
comp=Z,315nm,20.8s,baz=171,slow=33
TJN **Taejon** **69.27 325** *ce* P **P** **04 37 36.2 -1.8**
KSRS **Korea Array** **69.80 326** P **P** **04 37 39.9 -1.3**
comp=Z,1.6nm,0.8s,baz=153,slow=6.4,SNR=7.4
KSRS LR LR 05 08 54.7
comp=Z,78nm,18.2s,baz=145,slow=36
comp=Z,1.6nm,0.8s
QIZ **Qiongzhong** **70.01 301** P **P** **04 37 44.5 +1.6**
QIZ S **S** **04 46 57.8 +3.8**
QIZ pmax pmax
comp=Z,370nm,5.0s
QIZ LR LR
comp=Z,190nm,16.0s
QIZ LR LR
comp=Z,230nm,22.7s
QIZ LR LR
comp=Z,180nm,20.2s
IPM **Ipoh** **70.86 283** P **P** **04 37 48.4 +0.1**
IPM **Ipoh** **70.86 283** IAmb IAmb 04 37 49.1
comp=Z,38nm,1.2s
NJ2 **Nanjing** **71.20 317** *e* P **P** **04 37 52.3 +2.4**
NJ2 pmax pmax
comp=Z,11nm,0.5s
KULM **Kulim** **71.54 283** IAmb IAmb 04 37 53.1
comp=Z,23nm,1.1s
YSS **Yuzh-Sakhalins** **71.77 342** *e* P **P** **04 37 53.5 +0.6**
YSS *e** SP **sP** **04 37 56.7 +1.7**
YSS *e* 04 38 01.2
YSS *e* PPP PPP 04 42 09.8
YSS *e* S **S** **04 47 12.2 -1.0**
YSS *e* SS **SS** **04 51 56.2 +6.5**
YSS pmax pmax
comp=Z,300nm,4.0s
YSS pmax pmax
comp=N,200nm,3.8s
YSS pmax pmax
comp=Z,40nm,1.1s
YSS MLR MLR
comp=Z,300nm,16.0s
RPSI **Rantau Prapat** **72.07 280** P **P** **04 37 54.4 -1.2**
RPSI IAmb IAmb 04 37 55.8
comp=Z,29nm,1.1s
TEY **Ternei** **72.11 337** *e* P P 04 37 43.9 -11
PSI **Prapat** **72.11 280** P **P** **04 37 55.1 -0.9**
PSI **Prapat** **72.11 280** P **P** **04 37 54.4 -1.6**
PSI pmax pmax
comp=Z,29nm,1.1s
GSI **Gunungsitoli** **72.78 278** P **P** **04 38 00.2 +0.4**
GSI **Gunungsitoli** **72.78 278** P **P** **04 37 59.1 -0.7**
GSI **Gunungsitoli** **72.78 278** P **P** **04 38 00.2 +0.4**
comp=Z,56nm,1.1s
WHN **Wuhan** **73.22 313** P **P** **04 38 02.5 +0.5**
WHN sP **pwP** **04 38 07.0 -2.1**
WHN pmax pmax
comp=Z,32nm,0.7s
WHN LR LR
comp=Z,470nm,12.8s
USA0B **Ussuriysk Arra** **73.22 333** *i* P **P** **04 38 01.6 -0.1**
USRK **Ussuriysk Ar.** **73.22 333** P **P** **04 38 01.6 -0.1**
comp=Z,23nm,1.1s,baz=152,slow=4.6,SNR=25
USRK LR LR 05 07 08.3
comp=Z,121nm,20.6s,baz=157,slow=33
comp=Z,23nm,1.1s
SHEM **Shemya Is, Ala** **73.82 4** LR LR 05 04 38.5
comp=Z,134nm,21.2s,baz=143,slow=31
RPN **Rapa Nui** **73.90 113** LR LR 05 03 47.5
comp=Z,94nm,18.4s,baz=252,slow=30
SURA **Surathani** **74.07 287** P **P** **04 38 08.4 +1.0**
MDJ **Mudanjiang** **74.58 332** P **P** **04 38 10.1 +0.4**
MDJ **Mudanjiang** **74.58 332** P **P** **04 38 10.0 +0.4**
MDJ PP **PP** **04 40 56.8 +0.1**
MDJ S **S** **04 47 52.8 +7.5**
MDJ pmax pmax
comp=Z,23nm,1.1s
MDJ pmax pmax
comp=Z,250nm,6.2s
MDJ LR LR
comp=Z,270nm,20.9s
MDJ **Mudanjiang** **74.58 332** P **P** **04 38 09.6 0.0**
MDJ IAmb IAmb 04 38 10.7
comp=Z,22nm,1.1s
PEA0B **Petropavlovsk-** **74.64 353** *ce* P **P** **04 38 11.0 +1.2**
PETK **Petropavlovsk-** **74.64 353** P **P** **04 38 10.0 +0.2**
comp=Z,14nm,1.1s,baz=139,slow=5.3,SNR=18
PETK LR LR 05 05 48.1
comp=Z,208nm,20.8s,baz=166,slow=32
comp=Z,14nm,1.1s
TIA **Tai'an** **75.01 319** P **P** **04 38 12.5 +0.1**
TIA pmax pmax
comp=Z,14nm,1.3s
SNY **Shenyang** **75.29 327** ⇓ P **P** **04 38 13.8 0.0**
SNY S **S** **04 48 01.5 +8.2**
SNY pmax pmax
comp=Z,170nm,8.4s
SNY LR LR
comp=Z,160nm,14.2s
SNY LR LR
comp=Z,100nm,19.9s
SNY LR LR
comp=Z,130nm,13.7s
TYV **Tymovskoe** **75.34 343** *e* P P 04 38 26.3 +12
TYV pmax pmax
comp=Z,9.0nm,1.4s
TYV pmax pmax
comp=Z,200nm,2.9s
CN2 **Changchun** **75.83 329** *e* P **P** **04 38 16.5 -0.4**
CN2 *e* pP pwP 04 38 23.5 -0.5
CN2 *e* S **S** **04 47 59.5 +0.2**
CN2 *e* SS **SS** **04 52 54.5 +2.5**
CN2 pmax pmax
comp=Z,10.0nm,1.2s
MAW **Mawson** **76.33 202** P **P** **04 38 19.8 +0.3**
comp=Z,9.5nm,0.9s,baz=114,slow=13,SNR=10
MAW LR LR 05 08 35.0
comp=Z,169nm,19.3s,baz=104,slow=33
comp=Z,9.5nm,0.9s
BNX **BinXian** **76.42 332** ⇓ P **P** **04 38 19.5 -0.7**
BNX pP **pwP** **04 38 28.0 +0.7**
BNX S **S** **04 48 04.5 -1.1**
BNX pmax pmax
comp=Z,12nm,1.0s
BNX pmax pmax
comp=Z,160nm,8.5s
BNX LR LR
comp=Z,110nm,16.1s
BNX LR LR
comp=Z,130nm,15.0s
BNX LR LR
comp=Z,160nm,21.1s
GYA **Guiyang** **76.43 306** P **P** **04 38 21.0 +0.1**
GYA pmax pmax
comp=Z,16nm,0.6s
ENH **Enshi** **76.45 310** P **P** **04 38 20.9 +0.1**
ENH **Enshi** **76.45 310** IAmb IAmb 04 38 21.6
comp=Z,47nm,1.3s
LYN **LuoYang** **76.92 315** ⇑ P **P** **04 38 24.0 +0.7**
LYN pmax pmax
comp=Z,23nm,0.9s
LYN pmax pmax
comp=Z,400nm,5.6s
GRNR **Gornyy** **77.09 340** ⇓ *i* P P 04 38 35.0 +11
GRNR pmax pmax
comp=Z,20nm,1.2s
HNS **HongShan** **77.26 319** ⇓ P **P** **04 38 25.3 +0.2**
HNS S **S** **04 48 21.8 +6.7**
HNS pmax pmax
comp=Z,16nm,1.3s
HNS pmax pmax
comp=Z,220nm,8.6s
HNS LR LR
comp=Z,200nm,15.7s
HNS LR LR
comp=Z,130nm,16.7s
HNS LR LR
comp=Z,160nm,15.9s
KLR **Kul'dur** **77.43 336** *ce* P **P** **04 38 26.6 +0.8**
KLR pmax pmax

comp=Z,33nm,1.7s
**PHRA Phrae 77.67 296** P **P** **04 38 27.9 +0.1**
**BJI Beijing 78.09 322** P **P** **04 38 29.5 -0.2**
BJI S **S** **04 48 26.0 +2.0**
BJI pmax pmax
comp=Z,5.0nm,2.1s
BJI pmax pmax
comp=Z,110nm,4.4s
**CRAI Chiangrai 78.35 297** P **P** **04 38 31.4 -0.2**
CRAI IAmb IAmb 04 38 44.6
comp=Z,34nm,1.1s
**CMAR Chiang Mai Arr 78.73 295** P **P** **04 38 34.5 +0.7**
comp=Z,14nm,1.0s,baz=132,slow=4.2,SNR=38
CMAR LR LR 05 16 23.1
comp=Z,51nm,18.9s,baz=140,slow=38
comp=Z,14nm,1.0s
**KMI Kunming 78.78 303** ⇑P **P** **04 38 35.5 +1.3**
KMI PcP **PcP** **04 38 45.5 +2.5**
KMI pmax pmax
comp=Z,27nm,1.0s
KMI pmax pmax
comp=Z,270nm,4.3s
**TIY Taiyuan 78.86 318** *e*P **P** **04 38 34.0 -0.2**
TIY pmax pmax
comp=Z,260nm,5.2s
**XAN Xi'an 78.99 313** P **P** **04 38 34.8 -0.1**
XAN S **S** **04 48 35.0 +0.9**
XAN ScS **ScS** **04 48 57.5 +0.1**
XAN pmax pmax
comp=Z,19nm,1.9s
XAN pmax pmax
comp=Z,400nm,5.9s
XAN LR LR
comp=Z,170nm,16.2s
XAN LR LR
comp=Z,260nm,18.9s
XAN LR LR
comp=Z,220nm,22.0s
**HEH HeiHe 79.93 335** *e*P **P** **04 38 39.3 -0.3**
HEH pmax pmax
comp=Z,17nm,1.2s
**BELA Belgrano 2 80.16 175** P **P** **04 38 39.3 -1.3**
BELA IAmb IAmb 04 38 51.3
comp=Z,41nm,1.2s
**PZH PanZhiHua 80.24 303** P **P** **04 38 43.5 +1.5**
PZH pmax pmax
comp=Z,7.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,4.2s
**CD2 Chengdu 80.94 308** P **P** **04 38 46.3 +0.8**
CD2 pmax pmax
comp=Z,20nm,0.9s
CD2 pmax pmax
comp=Z,220nm,5.2s
**HHC Hu-ho-hao-te 81.32 320** *e*P **P** **04 38 47.3 -0.1**
HHC sP pwP 04 38 54.0 -0.5
HHC PP **PP** **04 41 56.5 +3.0**
HHC S **S** **04 48 58.5 0.0**
HHC sS SKSac 04 49 06.0 -1.1
HHC pmax pmax
comp=Z,15nm,0.7s
HHC pmax pmax
comp=Z,140nm,5.6s
HHC LR LR
comp=Z,94nm,14.1s
HHC LR LR
comp=Z,170nm,16.5s
HHC LR LR
comp=Z,200nm,16.5s
**MA2 Magadan 81.84 351** LR LR 05 12 14.7
comp=Z,109nm,19.6s,baz=152,slow=34
**TNCH TengChong 82.09 301** ⇓*i*P **P** **04 38 52.5 +0.6**
TNCH pP pwP 04 39 00.0 +0.9
TNCH pmax pmax
comp=Z,150nm,3.9s
**BTO Baotou 82.11 319** *e*P **P** **04 38 53.0 +1.4**
BTO pP **PcP** **04 38 57.0 0.0**
BTO sP **pwP** **04 39 01.5 +2.8**
BTO S **SKSac** **04 49 09.8 -2.6**
BTO SS **SS** **04 54 22.3 -4.3**
BTO pmax pmax
comp=Z,15nm,0.6s
BTO pmax pmax
comp=Z,140nm,5.7s
BTO LR LR
comp=Z,310nm,16.2s
BTO LR LR
comp=Z,140nm,10.4s
**SMAI San Martin Ant 82.14 162** P **P** **04 38 50.8 -0.4**
SMAI IAmb IAmb 04 39 03.1
comp=Z,26nm,1.0s
**LZH Lanzhou 83.59 313** ⇓P **P** **04 39 00.5 +1.1**
LZH sP pwP 04 39 11.8 +5.2
LZH S **SKSac** **04 49 24.5 +1.9**
LZH pmax pmax
comp=Z,23nm,1.3s
LZH pmax pmax
comp=Z,300nm,5.5s
LZH LR LR
comp=Z,130nm,16.5s
LZH LR LR
comp=Z,170nm,16.2s
LZH LR LR
comp=Z,200nm,16.8s
**ELIB Princess Elisa 84.06 190** *d*P **P** **04 39 00.6 -0.7**
comp=Z,7.1nm,1.2s
**SEY Seymchan 84.87 353** *ce*P **P** **04 39 05.6 +0.5**
SEY pmax pmax
comp=Z,8.0nm,1.3s
**KDAK Kodiak Island 85.14 20** LR LR 05 16 41.4
comp=Z,231nm,18.2s,baz=224,slow=35
**PMSA Palmer Station 85.26 160** P **P** **04 39 06.6 -0.7**
PMSA IAmb IAmb 04 39 18.7
comp=Z,37nm,1.3s
**PMSA Palmer Station 85.26 160** LR LR 05 09 37.8
comp=Z,223nm,21.2s,baz=218,slow=30
**TROLL Troll, Antarti 86.49 184** ⇓P **P** **04 39 12.3 -1.2**
comp=Z,758nm,0.6s
**NVL N'lazarevskaya 86.79 188** *e*P **P** **04 39 13.5 -1.2**
NVL pmax pmax
comp=Z,12nm,0.8s
**SNAA Sanae 87.13 183** P **P** **04 39 15.4 -1.1**
SNAA IAmb IAmb 04 39 27.2
comp=Z,23nm,1.1s
**SNAA Sanae 87.13 183** ⇓P **P** **04 39 15.4 -1.1**
comp=Z,201nm,1.0s
**SNAA Sanae 87.13 183** P **P** **04 39 15.6 -0.9**
comp=Z,8.3nm,0.9s,baz=187,slow=5.2,SNR=23
SNAA LR LR 05 17 51.4
comp=Z,96nm,18.5s,baz=166,slow=35
comp=Z,8.3nm,0.9s
**SNAA Sanae 87.13 183** *ce*P **P** **04 39 15.9 -0.6**
SNAA pmax pmax
comp=Z,17nm,1.0s
**VNA3 Neumayer Olymp 87.75 181** ⇓P **P** **04 39 18.2 -1.2**
comp=Z,15nm,0.8s
**GTA Gaotai 88.03 314** P **P** **04 39 21.3 -0.1**
GTA sP pwP 04 39 33.8 +5.3
GTA S **SKSac** **04 49 52.8 +2.5**
GTA pmax pmax
comp=Z,5.0nm,1.1s
GTA pmax pmax
comp=Z,130nm,7.6s
GTA LR LR
comp=Z,110nm,18.7s
GTA LR LR
comp=Z,88nm,16.3s
GTA LR LR
comp=Z,110nm,16.7s
**VNA2 Neumayer--Watz 88.03 181** ⇓P **P** **04 39 19.8 -0.9**
comp=Z,11nm,0.7s,baz=169,slow=4.1
**ULN Ulaanbaatar 88.08 324** P **P** **04 39 21.4 0.0**
ULN IAmb IAmb 04 39 23.1
comp=Z,29nm,1.2s
**ULN Ulaanbaatar 88.08 324** *ce*P **P** **04 39 21.9 +0.5**
ULN pmax pmax
comp=Z,62nm,2.5s
**VNA1 Neumayer--Stat 88.32 181** ⇓P **P** **04 39 21.1 -1.0**
comp=Z,10nm,1.0s
**O02D Mt. Diablo Mer 88.38 46** IAmb IAmb 04 39 55.4
comp=Z,16nm,1.4s
**SONM Songino Array 88.43 323** P **P** **04 39 22.3 -0.8**
comp=Z,8.2nm,1.1s,baz=145,slow=4.4,SNR=34
SONM LR LR 05 19 06.2
comp=Z,67nm,19.5s,baz=104,slow=36
comp=Z,8.2nm,1.1s

**YAK Yakutsk 88.58 343** *i*P **P** **04 39 22.1 -1.1**
YAK pmax pmax
comp=Z,14nm,0.8s
**CMB Columbia Colle 88.98 48** P **P** **04 39 24.5 -1.3**
**CMB Columbia Colle 88.98 48** P **P** **04 39 24.5 -1.3**
CMB pmax pmax
comp=Z,6.0nm,1.2s
**AFDM Forest Hills D 89.01 47** P **P** **04 39 25.0 -0.9**
**BILL Bilibino 89.04 359**‖ *e*P **P** **04 39 24.7 -0.6**
BILL *e* 04 42 53.2
BILL *e*S **SKSac** **04 50 00.7 +6.0**
BILL *e*SS **SS** **04 56 06.3 -1.0**
BILL pmax pmax
comp=Z,6.0nm,1.3s
**YBH Yreka Blue Hor 89.19 44** P **P** **04 39 26.3 -0.4**
**YBH Yreka Blue Hor 89.19 44** LR LR 05 11 13.7
comp=Z,344nm,20.9s,baz=250,slow=30
**YBH Yreka Blue Hor 89.19 44** P **P** **04 39 26.3 -0.4**
YBH pmax pmax
comp=Z,9.0nm,1.5s
**HUMO Hull Mountain 89.47 43** P **P** **04 39 27.5 -0.4**
**HATC Hat Creek Radi 89.57 45** P **P** **04 39 28.2 -0.3**
HATC IAmb IAmb 04 40 31.9
comp=Z,20nm,1.2s
**PFO Pinyon Flats O 89.84 54** LR LR 05 11 02.0
comp=Z,118nm,20.5s,baz=245,slow=30
**GO09 Cerro Castillo 90.28 147** P **P** **04 39 31.1 -0.6**
**DSP Deep Springs 90.38 50** P **P** **04 39 31.8 -0.5**
DSP IAmb IAmb 04 40 11.7
comp=Z,10nm,1.3s
**LHV Little Huntoon 90.40 49** P **P** **04 39 32.8 +0.4**
**PALK Pallekele 90.59 278** LR LR 05 20 30.7
comp=Z,155nm,21.1s,baz=116,slow=36
**NVAR Mina Array Bea 90.62 49** P **P** **04 39 31.0 -2.7**
comp=Z,0.7nm,0.7s,baz=229,slow=8.2,SNR=5.0
NVAR LR LR 05 12 54.5
comp=Z,378nm,20.2s,baz=272,slow=31
comp=Z,0.7nm,0.7s
**LPIG La Paz 90.88 65** LR LR 05 11 06.4
comp=Z,378nm,21.1s,baz=228,slow=30
**BBB Bella Bella 91.51 33** LR LR 05 13 14.5
comp=Z,210nm,20.6s,baz=241,slow=31
**ZAK Zakamensk 91.54 324** *e*P **P** **04 39 36.7 -0.8**
ZAK pmax pmax
comp=Z,15nm,1.4s
**COLA College 92.15 17** *i*P **P** **04 39 41.1 +1.3**
COLA pmax pmax
comp=Z,12nm,1.8s
**ILAR Eielson Array 92.34 18** P **P** **04 39 38.0 -2.7**
comp=Z,0.5nm,0.6s,baz=231,slow=5.2,SNR=9.4
ILAR LR LR 05 16 54.4
comp=Z,216nm,19.5s,baz=231,slow=33
comp=Z,0.5nm,0.6s
**I07A Izee 92.39 43** P **P** **04 39 41.1 -0.5**
I07A IAmb IAmb 04 39 46.8
comp=Z,15nm,1.9s
**DLBC Dease Lake 94.12 28** LR LR 05 13 10.7
comp=Z,380nm,21.9s,baz=264,slow=30
**KNGR Kungurtug, Tuv 94.84 323** *i*P **P** **04 39 52.6 -0.1**
KNGR pmax pmax
comp=Z,9.0nm,1.1s
**NEW Newport 95.73 40** LR LR 05 14 60.0
comp=Z,141nm,21.8s,baz=256,slow=30
**TIXI Tiksi 96.56 348** LR LR 05 19 43.9
comp=Z,57nm,19.4s,baz=34,slow=33
**PLCA Paso Flores 97.47 139** LR LR 05 16 00.5
comp=Z,45nm,20.5s,baz=233,slow=30
**ANMO Albuquerque 97.98 56** LR LR 05 17 07.2
comp=Z,224nm,20.3s,baz=250,slow=31
**WMQ Urumqi 98.11 314** *e*P Pdif 04 40 09.5 +1.8
WMQ LR LR
comp=Z,72nm,24.3s
**TXAR Lajitas Array 98.30 62** P **P** **04 40 06.3 -2.6**
comp=Z,0.2nm,0.8s,baz=243,slow=5.9,SNR=1.8
TXAR LR LR 05 17 27.1
comp=Z,171nm,19.4s,baz=240,slow=31
comp=Z,0.2nm,0.8s
**PDAR Pinedale Array 98.46 47** LR LR 05 17 43.5
comp=Z,89nm,21.1s,baz=240,slow=31
**INK Inuvik 98.65 19** LR LR 05 25 34.4
comp=Z,127nm,18.0s,baz=251,slow=36
**MKAR Makanchi Array 102.70 315** PKKPbc PKKPbc 04 56 26.4 -2.0
comp=Z,1.9nm,0.9s,baz=294,slow=4.7,SNR=4.9
**KSH Kashi 105.11 307** Pdif **Pdif** **04 40 44.5 +5.5**
**KURBB Kurchatov Arra 106.13 318** PKiKP **PKiKP** **04 44 53.6 -1.3**
comp=Z,0.8nm,0.7s,baz=82,slow=1.2,SNR=4.2
KURBB PP **PP** **04 45 04.4 -2.8**
comp=Z,0.3nm,0.3s,baz=106,slow=5.9,SNR=4.7
**BVAR Borovoye Array 111.53 320** PKiKP **PKiKP** **04 45 03.2 -1.8**
comp=Z,1.6nm,0.7s,baz=67,slow=4.8,SNR=6.8
**ARU Arti 118.47 324** PKPdf **PKPdf** **04 45 17.3 -0.9**
**ARU Arti 118.47 324** *c* *i*PKiKP **PKiKP** **04 45 18.0 -0.2**
ARU pmax pmax
comp=Z,25nm,2.5s
**U56A King 118.92 59** **PKPdf** **04 45 17.8 -1.9**
**KIRV Kirov 123.00 327** *ce*PKiKP **PKiKP** **04 45 27.0 0.0**
**ARCES ARCESS Array B 126.83 345** PKP **PKPdf** **04 45 32.7 -1.2**
comp=Z,8.5nm,0.8s,baz=30,slow=2.5,SNR=20
**BDFB Brasilia 128.71 133** PKP **PKPdf** **04 45 38.8 -0.4**
comp=Z,7.0nm,0.9s,baz=207,slow=2.3,SNR=9.3
**VRH Novokhopyorsk 129.18 319** *e*PKiKP **PKPdf** **04 45 38.3 -0.6**
VRH pmax pmax
comp=Z,23nm,1.5s
**KIV Kislovodsk 130.07 310** *i*PKiKP **PKPdf** **04 45 39.6 -1.4**
KIV pmax pmax
comp=Z,4.0nm,1.0s
**SHA1 Shidzhatmaz 130.13 310** *ce*PKiKP **PKiKP** **04 45 42.8 +0.7**
**VORR Voronezh 130.55 321** *e*PKiKP **PKiKP** **04 45 42.2 -0.1**
VORR pmax pmax
comp=Z,24nm,1.3s
**OBN Obninsk 130.79 326**‖⇓ *e*PKiKP **PKiKP** **04 45 42.4 -0.3**
OBN *e* 04 47 56.6
OBN *e*PPP PPP 04 50 43.3
OBN pmax pmax
comp=Z,10.0nm,0.5s
**FINES FINESS Array B 132.18 337** PKP **PKPdf** **04 45 44.1 -0.1**
comp=Z,4.7nm,0.8s,baz=62,slow=3.6,SNR=10
**FINES FINESS Array B 132.18 337** *ce*PKiKP **PKPdf** **04 45 43.0 -1.2**
FINES pmax pmax
comp=Z,5.0nm,0.9s
**SIM Simferopol' 135.83 313** *i* PKHKP PKPpre 04 45 24.7
SIM pmax pmax
comp=Z,19nm,0.8s
SIM pmax pmax
comp=Z,60nm,7.2s
**AKASG Malin Array Be 136.71 323** PKP **PKPdf** **04 45 51.3 -1.8**
comp=Z,4.3nm,1.0s,baz=59,slow=2.3,SNR=9.9
**AKASG Malin Array Be 136.71 323** *ce*PKiKP **PKPdf** **04 45 52.2 -0.9**
AKASG pmax pmax
comp=Z,4.0nm,1.0s
**AKBB Malin Array Si 136.71 323** *ce*PKiKP **PKPdf** **04 45 52.8 -0.3**
**KIEV Kiev 136.72 323** PKPdf **PKPdf** **04 45 52.4 -0.7**
**KIEV Kiev 136.72 323** PKiKP **PKPdf** **04 45 52.4 -0.7**
**PABE Paberze 136.78 331** PKPdf **PKPdf** **04 45 53.1 0.0**
**NB2 NORSAR Subarra 137.19 344** PKPdf **PKiKP** **04 45 55.0 -0.6**
comp=Z,9.6nm,1.7s,baz=31,slow=1.9
**NB2 NORSAR Subarra 137.19 344** PKPdf **PKiKP** **04 45 55.0 -0.6**
baz=31,slow=1.9
**NOA NORSAR Array B 137.19 344** PKP **PKPdf** **04 45 52.6 -1.1**
comp=Z,2.9nm,1.1s,baz=38,slow=2.3,SNR=5.8
**HFS Hagfors 137.27 342** PKP **PKPdf** **04 45 53.3 -0.6**
comp=Z,3.2nm,0.9s,baz=321,slow=3.7,SNR=3.1
**KOLS Kolonicke sedl 141.48 324** *e*PKiKP **PKPdf** **04 46 02.4 +0.5**
**KOLS Kolonicke sedl 141.48 324** *e*PKP **PKPdf** **04 46 02.4 +0.5**
**MORC Moravsky Berou 143.44 326** *e*PKP PKPbc 04 46 03.6 +1.0
**VYHS Vyhne 143.59 326** *e*PKiKP PKPbc 04 46 03.1 +0.1
**VYHS Vyhne 143.59 326** *e*PKP PKPbc 04 46 03.1 +0.1
**JAVC Velka Javorina 143.97 327** *e*PKP **PKPdf** **04 46 06.0 -0.4**
**FLTG Flechtingen 144.35 336** *e*PKPbc PKPbc 04 46 05.0 -0.2
baz=39,slow=3.0
**BRG Berggiesshubel 144.35 332** *i*PKP PKPbc 04 46 05.3 +0.1
BRG Amp 04 46 07.1
comp=Z,57nm,1.3s
**BRG Berggiesshubel 144.35 332** P **PKiKP** **04 46 14.8 +4.3**
BRG Amp 04 46 15.7
comp=Z,13nm,0.9s
**BRG Berggiesshubel 144.35 332** *i*PKiKP PKPbc 04 46 05.3 +0.1
BRG pmax pmax
comp=Z,57nm,1.3s
BRG MLR MLR
comp=Z,110nm,19.7s
**BRG Berggiesshubel 144.35 332** *e*PKPbc PKPbc 04 46 05.3 +0.1
baz=39,slow=3.0
**CLL Collm 144.43 333** *i*PKiKP **sPKPdf** **04 46 09.7 +0.6**
comp=Z,54nm,1.3s
CLL *i*x x 04 46 15.0
**CLL Collm 144.43 333** *i*PKiKP **PKPab** **04 46 05.1 -0.1**
CLL *i* 04 46 09.7
CLL pmax pmax
comp=Z,54nm,1.3s
**CLL Collm 144.43 333** *e*PKPbc PKPbc 04 46 05.4 0.0
baz=39,slow=3.0
**KRUC Moravsky 144.47 328** *e*PKP PKPbc 04 46 05.8 +0.1
**NRDL Niedersach Rie 144.64 337** *e*PKPbc PKPbc 04 46 06.3 +0.4
baz=39,slow=3.0
**RETH Rethem/Aller, 144.71 338** *e*PKPbc PKPbc 04 46 06.4 +0.2
baz=39,slow=3.0
**VAY Valandovo 145.01 313** *i*P **PKPbc** **04 46 07.0 -0.7**
**NEUB Neuenburg 145.01 334** *e*PKPbc **PKPdf** **04 46 07.7 -0.3**
baz=39,slow=3.0
**CLZ Clausthal 145.06 336** *e*PKPbc **PKPdf** **04 46 08.0 -0.1**
baz=39,slow=3.0
**ZVC Zvikov 145.27 330** *e*PKP **PKPdf** **04 46 08.3 -0.2**
ZVC *ex* x 04 46 18.2
**TANN Tannenbergstha 145.33 333** *e*PKPbc **PKPdf** **04 46 08.8 +0.1**
baz=39,slow=3.0
**EKA Eskdalemuir Ar 145.40 352** PKPbc **PKPbc** **04 46 07.1 -1.3**
comp=Z,4.0nm,0.5s,baz=5.6,slow=2.9,SNR=24
**PLN Plauen 145.41 333** *e*PKPbc **PKPab** **04 46 09.0 +0.2**
baz=39,slow=3.0
**RONA Rosalia, Austr 145.41 326** *i*PKP **PKPab** **04 46 09.3 +0.3**
comp=Z,63nm,1.3s,SNR=24
**ESK Eskdalemuir 145.42 352** **PKPbc** **04 46 07.4 -1.1**
**ESK Eskdalemuir 145.42 352** PKiKP **PKPbc** **04 46 07.4 -1.1**
**TEKS Tekeris 145.45 320** *e*P **PKPbc** **04 46 08.1 -0.9**
**GTTG Gottingen 145.46 336** *e*PKPbc **PKPab** **04 46 09.4 +0.4**
baz=39,slow=3.0
**CONA Conrad Observa 145.49 327** *i*PKP **PKPab** **04 46 09.5 +0.2**
comp=Z,68nm,1.3s,SNR=42
**MOX Moxa 145.51 334** *e*PKPbc **PKPab** **04 46 09.2 0.0**
baz=39,slow=3.0
MOX *e*L L 06 08 14.9
comp=Z,80nm,18.7s
**IBBN Ibbenburen 145.61 339** *e*PKPbc **PKPab** **04 46 09.6 +0.1**
baz=39,slow=3.0
**CKRC Cesky Krumlov 145.65 329** *e*PKP **PKPbc** **04 46 09.3 -0.2**
CKRC *ex* x 04 46 19.2
**CKRC Cesky Krumlov 145.65 329** *e*PKiKP **PKPbc** **04 46 09.3 -0.2**
**KHC Kasperske Hory 145.77 330** *e*PKP **PKPab** **04 46 10.1 -0.2**
KHC *ex* x 04 46 20.9
**KHC Kasperske Hory 145.77 330** *e*PKiKP **PKPab** **04 46 10.1 -0.2**
**MANZ Manzenberg 145.80 333** *e*PKPbc **PKPab** **04 46 10.5 +0.2**
baz=39,slow=3.0
**SJES Sjenica 145.84 317** *e*P **PKPdf** **04 46 09.7 -0.2**
**BBLS Lazi&#263i 145.89 319** *e*P **PKPdf** **04 46 09.5 -0.4**
**GEC2 GERESS Array S 145.92 330** *e*PKPbc **PKPab** **04 46 10.7 -0.2**
baz=39,slow=3.0
**GERES GERESS Array B 145.92 330** PKPbc **PKPdf** **04 46 09.3 -0.4**
comp=Z,28nm,1.0s,baz=35,slow=3.6,SNR=75
**ROTZ Rotzenmuhle 145.92 332** *e*PKPbc **PKPab** **04 46 11.0 +0.2**
baz=39,slow=3.0
**UBBA Unterbreizbach 146.02 335** *e*PKPbc **PKPab** **04 46 10.8 -0.1**
baz=39,slow=3.0
**RUDO Rudo 146.04 318** *e*P **PKPdf** **04 46 09.4 -0.6**
**HAPS Han Pijesak,Bl 146.05 319** *e*P **PKPdf** **04 46 09.8 -0.4**
**WET Wettzell 146.08 331** *e*PKPbc **PKPab** **04 46 11.5 0.0**
baz=39,slow=3.0
**ARSA Arzberg 146.10 326** *i*pPKP **PKPab** **04 46 11.9 +0.4**
comp=Z,33nm,1.7s,SNR=12
**KASTN Kahler Asten 146.30 337** *e*PKPbc **PKPab** **04 46 11.7 -0.5**
baz=39,slow=3.0
**OHR Ohrid 146.31 313** *i*P **PKPdf** **04 46 10.7 0.0**
**MOA Molln 146.34 328** *i*PKP **PKPab** **04 46 12.1 -0.3**
comp=Z,35nm,1.7s,SNR=14
**GRF Grafenberg Arr 146.40 333** *e*PKPbc **PKPab** **04 46 12.3 -0.3**
baz=39,slow=3.0
GRF *e*L L 06 03 00.1
comp=Z,85nm,18.8s
**GRFO Grafenberg 146.40 333** **PKPdf** **04 46 10.8 +0.3**
**GRFO Grafenberg 146.40 333** PKP2 **PKPdf** **04 46 10.8 +0.3**
**BUG Bochum--Univer 146.50 339** *e*PKPbc **PKPab** **04 46 12.3 -0.6**
baz=39,slow=3.0
**PDG Podgorica 146.71 316** *e*P **PKPdf** **04 46 10.6 -0.6**
**SOKA Soboth 146.73 326** *e*PKP **PKPdf** **04 46 10.2 -1.0**
comp=Z,1.6nm,0.8s
SOKA *i*pPKP **pPKPdf** **04 46 12.9 +0.2**
comp=Z,17nm,1.1s,SNR=12
**BLY Banja Luka 146.73 321** *e*P **PKPbc** **04 46 12.2 -0.7**
**A051A Mrakovica 146.74 322** *e*P **PKPdf** **04 46 10.8 -0.5**
**BIOA Bad Ischl, Aus 146.76 328** *e*pPKP **PKPbc** **04 46 13.2 +0.3**
comp=Z,15nm,1.3s
**DRME Dracevica, Mon 146.88 316** *e*P **PKPdf** **04 46 10.8 -0.7**
**BRY Bratogost 146.93 318** *e*P **PKPdf** **04 46 10.4 -1.3**
**CRES Cresnjev 147.05 324** *e*P **PKPbc** **04 46 12.6 -1.2**
**TNS Taunus Mts 147.09 336** *e*PKPbc **PKPbc** **04 46 14.1 +0.3**
baz=39,slow=3.0
**OBKA Obir 147.10 326** *e*P **PKPdf** **04 46 11.1 -0.8**
**RJOB Jochberg 147.13 329** *e*PKPbc **PKPbc** **04 46 14.1 +0.1**
baz=39,slow=3.0
**A050A Klekovaca 147.27 322** *e*P **PKPbc** **04 46 13.3 -1.2**
**KBA Koelnbreinsper 147.32 328** *e*PKP **PKPdf** **04 46 12.0 -0.3**
comp=Z,2.8nm,0.9s
KBA *i*PKP **pPKPdf** **04 46 14.1 +0.2**
comp=Z,30nm,1.2s,SNR=14
**AHRW Bad Neuenahr-A 147.33 338** *e*PKPbc **PKPbc** **04 46 14.7 +0.4**
baz=39,slow=3.0
**BOJS Bojanci 147.37 324** *i*PKPbc **PKPbc** **04 46 14.6 0.0**
**BOJS Bojanci 147.37 324** *e*P **PKPdf** **04 46 12.2 0.0**
**LESA Schwarzleotal 147.41 329** *e*PKP **PKPdf** **04 46 12.0 -0.4**
comp=Z,6.1nm,1.0s
LESA *e*PKP **sPKPdf** **04 46 14.5 +0.1**
comp=Z,31nm,1.3s
**LJU Ljubljana 147.41 325** *i*PKPdf **PKPdf** **04 46 11.7 -0.6**
LJU *i*PKPbc **PKPbc** **04 46 14.5 -0.2**
**STON Ston 147.47 318** *e*P **PKPdf** **04 46 12.6 +0.2**
**MYKA Terra Mystica 147.48 327** *e*pPKP pPKPdf 04 46 14.0 0.0
comp=Z,20nm,1.3s
**FUR Furstenfeldbru 147.52 331** *e*PKPbc **PKPbc** **04 46 15.5 +0.5**
baz=39,slow=3.0
**BEBN Eben Emael 147.58 340** *d*PKP **PKPbc** **04 46 15.6 +0.6**
**BTNL Ternell 147.61 339** *d*PKP **PKPbc** **04 46 14.7 -0.5**
**MEM Membach 147.63 339** *d*PKP **PKPbc** **04 46 14.8 -0.4**
**CEY Cerknica 147.66 325** *i*PKPdf **PKPdf** **04 46 11.8 -0.9**
CEY *i*PKPbc **sPKPdf** **04 46 15.0 +0.2**
**CEY Cerknica 147.66 325** *e*P **PKPbc** **04 46 14.3 -1.2**
**BSTI Sart Tilman 147.80 339** *d*PKP **PKPbc** **04 46 15.5 -0.1**
**BHOU Houvegnez 147.85 339** *d*PKP **PKPbc** **04 46 15.8 0.0**
**STU Stuttgart 147.96 334** *e*PKPbc **PKPbc** **04 46 16.6 +0.5**
baz=39,slow=3.0
**ABTA Abfaltersbach 147.97 328** *e*PKP **PKPdf** **04 46 12.4 -0.9**
comp=Z,11nm,1.0s
ABTA *i*PKP **sPKPdf** **04 46 15.7 +0.4**
comp=Z,28nm,1.1s,SNR=6.1
**WATA Walderalm 148.00 330** *e*PKP **PKPdf** **04 46 13.3 -0.1**
comp=Z,7.6nm,0.9s
WATA *i*PKP **PKPbc** **04 46 16.1 -0.4**
comp=Z,27nm,1.2s,SNR=6.4
**SKDS Skadanscina 148.01 325** *e*P **PKPdf** **04 46 12.1 -1.2**
**WTTA Wattenberg 148.02 330** *i*PKP **PKPdf** **04 46 13.1 -0.4**
comp=Z,13nm,1.3s,SNR=19
WTTA *e*PKP **PKPbc** **04 46 16.7 +0.1**
comp=Z,53nm,1.1s
**BCLA Clavier 148.03 340** *d*PKP **PKPbc** **04 46 15.7 -0.5**
**BGES Gesves 148.13 340** *d*PKP **PKPbc** **04 46 15.8 -0.8**
**MOTA Moosalm 148.21 330** *e*PKP **PKPdf** **04 46 13.6 -0.2**
comp=Z,9.8nm,1.2s
MOTA *e*PKP **PKPbc** **04 46 16.9 -0.1**
comp=Z,50nm,1.0s
**SQTA Sankt Quirin 148.25 330** *i*PKP **PKPdf** **04 46 13.3 -0.4**
comp=Z,9.5nm,1.1s
SQTA *i*PKP **PKPbc** **04 46 17.1 0.0**
comp=Z,46nm,1.3s,SNR=11
**RETA Reutte 148.26 331** *i*PKP **PKPbc** **04 46 16.8 -0.2**
comp=Z,23nm,1.2s,SNR=9.5
**RCHB Rochefort 148.28 339** *d*PKP **PKPbc** **04 46 16.5 -0.4**
**BMRD Maredsous 148.30 340** *d*PKP **PKPbc** **04 46 16.6 -0.3**
**SCTE Santa Cesarea 148.36 313** **PKPdf** **04 46 13.9 -0.1**
**WLF Walferdange 148.39 338** *d*PKP **PKPbc** **04 46 17.6 +0.4**
**WLF Walferdange 148.39 338** *e*PKPbc **PKiKP** **04 46 18.1 -0.7**
baz=39,slow=3.0
**UBR Ueberruh 148.41 332** *e*PKPbc **PKPbc** **04 46 17.4 0.0**
baz=39,slow=3.0
**DOU Dourbes 148.54 340** *d*PKP **PKPbc** **04 46 17.4 -0.2**
**FETA Feichten 148.62 330** *i*PKP **PKPdf** **04 46 13.9 -0.5**
comp=Z,12nm,1.2s,SNR=27
FETA *e*PKP **PKPbc** **04 46 18.3 +0.2**
comp=Z,53nm,1.0s
**BFO Black Forest 148.66 334** PKPdf **PKPdf** **04 46 13.9 -0.4**
**BFO Black Forest 148.66 334** PKiKP **PKPdf** **04 46 13.9 -0.4**
**BFO Black Forest 148.66 334** *e*PKPbc **PKPbc** **04 46 18.1 0.0**

baz=39,slow=3.0
**DAVA Damuels 148.81 331** *e*PKP **PKPdf 04 46 14.4 -0.4**
comp=Z,6.2nm,1.4s
DAVA *i* PKP **PKPbc 04 46 18.3 -0.3**
comp=Z,39nm,1.3s,SNR=11
**CTI Castel Tesino 148.88 328** PKPdf **PKPdf 04 46 14.4 -0.4**
**CTI Castel Tesino 148.88 328** PKIKP **PKPdf 04 46 14.4 -0.4**
**TIP Timpagrande 149.95 313** PKPdf **PKPdf 04 46 16.3 -0.4**
**INTR Introdacqua 150.27 320** PKPdf **PKPdf 04 46 16.4 -0.7**
**BNI Bardonecchia 151.95 332** **PKPdf 04 46 18.9 -0.8**
**BNI Bardonecchia 151.95 332** PKIKP **PKPdf 04 46 18.9 -0.8**
**ESDC Sonseca Array 160.55 342** PKP **PKPdf 04 46 30.5 -0.5**
comp=Z,0.4nm,0.7s,baz=347,slow=5.3,SNR=2.2
ESDC PKPab **PKPab 04 47 11.5 -0.7**
comp=Z,2.4nm,1.0s,baz=32,slow=2.6,SNR=8.9
**TAM Tamanrasset 164.17 279** PKPab **PKPab 04 47 26.8 -2.1**
**TAM Tamanrasset 164.17 279** PKP2 **PKPab 04 47 26.8 -2.1**
**TORD Torodi Ar. Bea 165.07 239** PKP **PKPdf 04 46 35.3 -0.7**
comp=Z,2.7nm,1.0s,baz=105,slow=1.7,SNR=9.7
TORD PKPab **PKPab 04 47 31.1 -1.7**
comp=Z,3.2nm,0.9s,baz=112,slow=1.6,SNR=9.2

*IDC* ***31*** *04:30:44.4±1.8, 43°.63N×127°.48W, h0km, mb3.1/4, mbtmp3.4/10, ML3.3/6, MS3.2/13, Error ellipse: s-maj=29.7km s-min=12.9km az=52.0*
*NEIC* ***31*** *04:30:46.5±1.9, 43°.60N±0°.07×127°.5W±0°.1, h10km±2km, ML3.2/80, Error ellipse: s-maj=16.8km s-min=10.1km az=239.0*
**ISC 31 04:30:45.9**±1.1, **43°.63N**±0°.07×**127°.7W**±0°.1, **h15**km, **n79,** σ1§**25**/69, **mb3.1**/3, **MS3.2**/5, **Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **J01E** | **Myrtle Point** | **2.76** | **98** | | **Pn** | **04 31 26.8** | **-2.8** |
| J01E | | | | IAML | | 04 32 03.4 | |
| | comp=N,166nm,0.4s | | | | | | |
| J01E | | | | IAML | | 04 32 05.9 | |
| | comp=E,148nm,0.6s | | | | | | |
| **KBO** | **Bosley Butte** | **2.89** | **118** | Pn | **Pn** | **04 31 28.4** | **-3.2** |
| **K02D** | **Willamette Mer** | **3.07** | **106** | | **Pn** | **04 31 31.2** | **-2.7** |
| K02D | | | | IAML | | 04 32 11.5 | |
| | comp=E,114nm,0.3s | | | | | | |
| K02D | | | | IAML | | 04 32 11.5 | |
| | comp=N,94nm,0.3s | | | | | | |
| **HEBO** | **Mount Hebo** | **3.22** | **59** | | **Pn** | **04 31 34.8** | **-1.2** |
| HEBO | | | | IAML | | 04 32 17.1 | |
| | comp=E,121nm,0.6s | | | | | | |
| **DBO** | **Dodson Butte** | **3.26** | **97** | | **Pn** | **04 31 34.4** | **-2.2** |
| DBO | | | | IAML | | 04 32 18.2 | |
| | comp=E,68nm,1.1s | | | | | | |
| DBO | | | | IAML | | 04 32 20.5 | |
| | comp=N,54nm,0.5s | | | | | | |
| **COR** | **Corvallis** | **3.28** | **72** | | **Pn** | **04 31 36.0** | **-0.7** |
| COR | | | | IAML | | 04 32 23.2 | |
| | comp=N,46nm,1.5s | | | | | | |
| **KSXB** | **Camp Six Broad** | **3.32** | **122** | | **Pn** | **04 31 35.0** | **-2.3** |
| **L02F** | **Cave Junction** | **3.36** | **115** | | **Pn** | **04 31 35.5** | **-2.4** |
| **BUCK** | **Buck Mountain** | **3.43** | **79** | | **Pn** | **04 31 37.7** | **-1.1** |
| BUCK | | | | IAML | | 04 32 21.3 | |
| | comp=E,45nm,0.5s | | | | | | |
| BUCK | | | | IAML | | 04 32 26.2 | |
| | comp=N,37nm,1.0s | | | | | | |
| **KRMB** | **Red Mountain** | **3.48** | **126** | Pn | **Pn** | **04 31 37.3** | **-2.3** |
| **G03D** | **McMinnville, O** | **3.52** | **62** | | **Pn** | **04 31 39.5** | **-0.7** |
| G03D | | | | IAML | | 04 32 30.2 | |
| | comp=E,83nm,0.8s | | | | | | |
| **HUMO** | **Hull Mountain** | **3.59** | **105** | | **Pn** | **04 31 38.8** | **-2.3** |
| HUMO | | | | IAML | | 04 32 26.4 | |
| | comp=N,67nm,0.4s | | | | | | |
| HUMO | | | | IAML | | 04 32 27.7 | |
| | comp=E,41nm,0.5s | | | | | | |
| **H04D** | **Lebanon** | **3.66** | **74** | | **Pn** | **04 31 41.4** | **-0.5** |
| H04D | | | | IAML | | 04 32 30.6 | |
| | comp=N,36nm,0.6s | | | | | | |
| H04D | | | | IAML | | 04 32 33.2 | |
| | comp=E,58nm,0.4s | | | | | | |
| **F03A** | **Seaside** | **3.72** | **50** | | **Pn** | **04 31 42.1** | **-0.7** |
| **I04A** | **Tendick Farm,** | **3.81** | **86** | | **Pn** | **04 31 43.4** | **-0.7** |
| I04A | | | | IAML | | 04 32 34.0 | |
| | comp=E,48nm,0.7s | | | | | | |
| I04A | | | | IAML | | 04 32 34.8 | |
| | comp=N,49nm,0.4s | | | | | | |
| **JCC** | **Jacoby Creek,** | **3.89** | **135** | Pn | **Pn** | **04 31 45.0** | **-0.2** |
| **RADR** | **Rader Ridge** | **3.91** | **43** | | **Pn** | **04 31 44.7** | **-0.8** |
| RADR | | | | IAML | | 04 32 33.0 | |
| | comp=N,72nm,0.7s | | | | | | |
| RADR | | | | IAML | | 04 32 34.5 | |
| | comp=E,42nm,1.8s | | | | | | |
| **H04A** | **Detroit Lake** | **4.08** | **73** | | **Pn** | **04 31 47.2** | **-0.5** |
| H04A | | | | IAML | | 04 32 44.7 | |
| | comp=E,28nm,0.4s | | | | | | |
| H04A | | | | IAML | | 04 32 45.0 | |
| | comp=N,33nm,0.4s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **4.11** | **116** | | **Pn** | **04 31 48.0** | **-0.3** |
| **YBH** | **Yreka Blue Hor** | **4.11** | **116** | Pn | **Pn** | **04 31 47.9** | **-0.3** |
| | comp=N,0.6nm,0.3s,baz=306,slow=14,SNR=13 | | | | | | |
| YBH | | | | Sn | **Sn** | **04 32 36.6** | **+0.5** |
| | comp=N,0.8nm,0.3s,baz=240,slow=20,SNR=8.8 | | | | | | |
| YBH | | | | LR | LR | 04 33 22.8 | |
| | comp=N,228nm,19.5s,baz=302,slow=39 | | | | | | |
| | comp=N,1.8nm,0.3s | | | | | | |
| **E03A** | **Lebam** | **4.12** | **43** | | **Pn** | **04 31 47.0** | **-1.2** |
| **F04D** | **Rainier, OR** | **4.12** | **52** | | **Pn** | **04 31 47.9** | **-0.3** |
| **F04A** | **Amboy** | **4.38** | **56** | | **Pn** | **04 31 52.0** | **+0.1** |
| **WISH** | **Wishkah** | **4.44** | **37** | | **Pn** | **04 31 51.9** | **-0.7** |
| WISH | | | | IAML | | 04 32 47.5 | |
| | comp=E,42nm,1.0s | | | | | | |
| **K04D** | **Chiloquin, OR** | **4.44** | **101** | | **Pn** | **04 31 52.8** | **0.0** |
| **KMRM** | **Mail Ridge** | **4.50** | **138** | Pn | **Pn** | **04 31 53.7** | **+0.1** |
| KMRM | | | | IAML | | 04 32 28.1 | |
| | comp=E,16nm,4.1s | | | | | | |
| **NLWA** | **Neilton Lookou** | **4.61** | **34** | | **Pn** | **04 31 54.2** | **-0.9** |
| **I05D** | **Terrebonne, OR** | **4.62** | **79** | | **Pn** | **04 31 54.5** | **-0.6** |
| I05D | | | | IAML | | 04 32 57.9 | |
| | comp=E,25nm,4.0s | | | | | | |
| I05D | | | | IAML | | 04 33 07.8 | |
| | comp=N,18nm,1.4s | | | | | | |
| **HOOD** | **Mount Hood Mea** | **4.62** | **66** | | **Pn** | **04 31 55.8** | **+0.5** |
| HOOD | | | | IAML | | 04 32 53.2 | |
| | comp=E,36nm,0.8s | | | | | | |
| HOOD | | | | IAML | | 04 33 01.5 | |
| | comp=N,37nm,1.1s | | | | | | |
| **J05D** | **Fort Rock, OR** | **4.69** | **92** | | **Pn** | **04 31 56.0** | **-0.3** |
| J05D | | | | IAML | | 04 33 08.6 | |
| | comp=N,17nm,4.7s | | | | | | |
| J05D | | | | IAML | | 04 33 08.8 | |
| | comp=E,16nm,4.3s | | | | | | |
| **G05A** | **Wamic** | **4.82** | **68** | | **Pn** | **04 31 58.5** | **+0.5** |
| G05A | | | | IAML | | 04 32 52.1 | |
| | comp=E,30nm,4.1s | | | | | | |
| G05A | | | | IAML | | 04 33 47.9 | |
| | comp=N,26nm,4.2s | | | | | | |
| **C03A** | **Quillayute Air** | **4.83** | **26** | Pn | **Pn** | **04 31 57.4** | **-0.6** |
| C03A | | | | IAML | | 04 35 07.1 | |
| | comp=N,37nm,3.7s | | | | | | |
| **PINE** | **Pine Mountain** | **4.88** | **86** | Pn | **Pn** | **04 31 58.2** | **-0.6** |
| PINE | | | | IAML | | 04 32 33.8 | |
| | comp=N,14nm,4.9s | | | | | | |
| **O02D** | **Mt. Diablo Mer** | **5.01** | **132** | Pn | **Pn** | **04 32 01.1** | **+0.5** |
| **LON** | **Longmire** | **5.18** | **51** | | **Pn** | **04 32 03.0** | **+0.1** |
| LON | | | | IAML | | 04 33 06.3 | |
| | comp=N,23nm,0.3s | | | | | | |
| LON | | | | IAML | | 04 33 08.4 | |
| | comp=E,20nm,0.6s | | | | | | |
| **GNW** | **Green Mountain** | **5.20** | **39** | Pn | **Pn** | **04 32 02.4** | **-0.7** |
| **G06A** | **Carlson Farm,** | **5.28** | **70** | Pn | **Pn** | **04 32 04.1** | **-0.2** |
| G06A | | | | IAML | | 04 32 43.1 | |
| | comp=N,9.8nm,4.6s | | | | | | |
| G06A | | | | IAML | | 04 32 45.6 | |
| | comp=E,11nm,3.2s | | | | | | |
| **D05A** | **Enumclaw** | **5.35** | **46** | | **Pn** | **04 32 05.6** | **+0.4** |
| **OZB** | **Mount Ozzard** | **5.54** | **15** | Pn | **Pn** | **04 32 08.8** | **+0.9** |
| **CLRS** | **Cowichan Lake** | **5.74** | **24** | Pn | **Pn** | **04 32 11.1** | **+0.6** |
| **HOPS** | **Hopland Field** | **5.78** | **142** | | **Pn** | **04 32 10.8** | **-0.2** |
| **PGC** | **Sidney** | **5.81** | **29** | Pn | **Pn** | **04 32 10.8** | **-0.7** |
| **I07A** | **Izee** | **5.92** | **83** | Pn | **Pn** | **04 32 13.0** | **-0.1** |
| **MXC** | **Moxie City** | **5.99** | **58** | | **Pn** | **04 32 14.5** | **+0.5** |
| **LTY** | **Liberty** | **6.11** | **51** | | **Pn** | **04 32 16.2** | **+0.5** |
| **ORV** | **Oroville** | **6.16** | **129** | Pn | **Pn** | **04 32 17.7** | **+1.4** |
| **E07A** | **Sunnyside** | **6.25** | **59** | Pn | **Pn** | **04 32 18.1** | **+0.4** |
| **HAWA** | **Hanford** | **6.39** | **62** | Pn | **Pn** | **04 32 18.9** | **-0.5** |
| **G08A** | **Pilot Rock** | **6.45** | **72** | Pn | **Pn** | **04 32 20.0** | **-0.4** |
| **CBB** | **Campbell River** | **6.60** | **13** | | **Pn** | **04 32 23.2** | **+0.9** |
| **AFDM** | **Forest Hills D** | **6.87** | **131** | Pn | **Pn** | **04 32 27.5** | **+1.4** |
| **D08A** | **Wollman Farm,** | **7.05** | **58** | Pn | **Pn** | **04 32 29.2** | **+0.7** |
| **B08A** | **Colville Reser** | **7.48** | **48** | Pn | **Pn** | **04 32 32.4** | **-2.1** |
| **BMO** | **Blue Mountains** | **7.54** | **77** | Pn | **Pn** | **04 32 34.4** | **-0.9** |
| **C09A** | **Chrisman Ranch** | **7.78** | **54** | | **Pn** | **04 32 38.8** | **+0.2** |
| **CMB** | **Columbia Colle** | **7.85** | **133** | Pn | **Pn** | **04 32 38.5** | **-1.0** |
| **BBB** | **Bella Bella** | **8.57** | **358** | Pn | **Pn** | **04 32 49.9** | **+0.6** |
| **BBB** | **Bella Bella** | **8.57** | **358** | Pn | **Pn** | **04 32 49.6** | **+0.3** |
| | comp=E,0.2nm,0.3s,baz=194,slow=13,SNR=4.6 | | | | | | |
| BBB | | | | Sn | **Sn** | **04 34 22.8** | **-2.8** |
| | comp=E,0.1nm,0.3s,baz=196,slow=10.0,SNR=1.9 | | | | | | |
| BBB | | | | LR | LR | 04 35 30.3 | |
| | comp=E,103nm,18.6s,baz=167,slow=34 | | | | | | |
| | comp=E,3.8nm,0.8s | | | | | | |
| **NEW** | **Newport** | **8.68** | **54** | Pn | **Pn** | **04 32 50.8** | **-0.1** |
| | comp=E,1.1nm,0.3s,baz=258,slow=13,SNR=11 | | | | | | |
| NEW | | | | LR | LR | 04 36 10.8 | |
| | comp=E,163nm,19.7s,baz=250,slow=38 | | | | | | |
| | comp=E,3.1nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **8.77** | **123** | Pn | **Pn** | **04 32 54.6** | **+2.2** |
| | baz=303,slow=12,SNR=7.6 | | | | | | |
| NVAR | | | | LR | LR | 04 36 16.1 | |
| | comp=E,140nm,19.8s,baz=289,slow=38 | | | | | | |
| | comp=E,1.9nm,0.9s | | | | | | |
| **ELK** | **Elko** | **9.66** | **103** | Pn | **Pn** | **04 33 06.2** | **+1.6** |
| | baz=290,slow=13,SNR=2.0 | | | | | | |
| ELK | | | | LR | LR | 04 36 01.5 | |
| | comp=E,52nm,18.2s,baz=248,slow=33 | | | | | | |
| | comp=E,0.3nm,0.3s | | | | | | |
| **WRAK** | **Wrangell Islan** | **13.15** | **348** | Pn | **Pn** | **04 33 54.0** | **+2.1** |
| **PDAR** | **Pinedale Array** | **13.24** | **87** | Pn | **Pn** | **04 33 55.2** | **+1.7** |
| | comp=E,0.1nm,0.3s,baz=277,slow=14,SNR=8.4 | | | | | | |
| PDAR | | | | LR | LR | 04 39 18.5 | |
| | comp=E,70nm,20.0s,baz=272,slow=39 | | | | | | |
| | comp=E,1.5nm,0.9s | | | | | | |
| **PFO** | **Pinyon Flats O** | **13.28** | **135** | LR | LR | 04 38 51.3 | |
| | comp=E,97nm,19.4s,baz=258,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **18.52** | **111** | LR | LR | 04 42 35.7 | |
| | comp=E,79nm,18.0s,baz=296,slow=39 | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.39** | **18** | P | **P** | **04 35 21.0** | **-0.8** |
| | comp=E,0.3nm,0.6s,baz=208,slow=11,SNR=3.1 | | | | | | |
| | comp=E,0.3nm,0.6s | | | | | | |
| **ULM** | **Lac du Bonnet** | **22.57** | **62** | LR | LR | 04 44 53.4 | |
| | comp=E,84nm,18.3s,baz=128,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **23.79** | **340** | P | **P** | **04 35 56.4** | **-1.2** |
| | comp=E,0.4nm,0.8s,baz=138,slow=11,SNR=4.4 | | | | | | |
| ILAR | | | | LR | LR | 04 43 38.1 | |
| | comp=E,43nm,20.7s,baz=202,slow=33 | | | | | | |
| | comp=E,0.4nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **23.88** | **119** | P | **P** | **04 35 59.8** | **+0.8** |
| | comp=E,0.5nm,0.8s,baz=325,slow=7.7,SNR=5.9 | | | | | | |
| | comp=E,0.5nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **24.93** | **355** | LR | LR | 04 45 25.8 | |
| | comp=E,51nm,18.6s,baz=316,slow=36 | | | | | | |
| **TKL** | **Tuckaleechee C** | **34.39** | **88** | LR | LR | 04 52 15.8 | |
| | comp=E,89nm,18.3s,baz=306,slow=38 | | | | | | |
| **SCHQ** | **Schefferville** | **40.04** | **52** | LR | LR | 04 55 19.7 | |
| | comp=E,47nm,20.4s,baz=244,slow=37 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **59.00** | **268** | T | T | 05 44 33.8 | |
| | baz=50,slow=75,SNR=46 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **59.00** | **268** | T | T | 05 44 33.0 | |
| | baz=50,slow=75,SNR=31 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **59.02** | **268** | T | T | 05 44 34.0 | |
| | baz=50,slow=75,SNR=28 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **59.92** | **267** | T | T | 05 45 47.1 | |
| | baz=50,slow=75,SNR=76 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **59.93** | **267** | T | T | 05 45 48.1 | |
| | baz=50,slow=75,SNR=53 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **59.94** | **267** | T | T | 05 45 49.8 | |
| | baz=50,slow=75,SNR=61 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **83.40** | **344** | P | **P** | **04 43 12.8** | **+0.5** |
| | comp=E,0.3nm,0.4s,baz=15,slow=4.8,SNR=1.2 | | | | | | |
| | comp=E,0.3nm,0.4s | | | | | | |

*AFAD* ***31*** *04:35:38.4±0.0, 36°.63N×29°.36E, h7km±6km, ML1.2*
**ISK 31 04:35:33.3, 36°.44N×28°.72E, h13**km**, ML1.4/8,**
**Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FETY** | **Fethiye** | **0.35** | **55** | Pg | Pg | 04 35 40.7 | +0.3 |
| FETY | | | | Sg | Sb | 04 35 46.6 | -0.4 |
| **FETY** | **Fethiye** | **0.35** | **55** | P | Pb | 04 35 42.8 | +1.3 |
| FETY | | | | S | Sb | 04 35 46.8 | -0.1 |
| **DALY** | **Dalyan (Mula)** | **0.38** | **352** | Pg | Pg | 04 35 41.1 | +0.1 |
| DALY | | | | Sg | Sb | 04 35 47.2 | -0.7 |
| **IZZE** | **Mula-Seydike** | **0.41** | **90** | P | Pg | 04 35 41.4 | 0.0 |
| IZZE | | | | S | Sb | 04 35 47.9 | -0.6 |
| IZZE | | | | *i* AML | AML | 04 35 49.0 | |
| | comp=Z,55nm,0.3s | | | | | | |
| IZZE | | | | *i* AML | AML | 04 35 49.0 | |
| | comp=N,50nm,0.5s | | | | | | |
| IZZE | | | | *i* AML | AML | 04 35 51.0 | |
| | comp=E,48nm,0.2s | | | | | | |
| **SABU** | **Mula-Dalaman** | **0.43** | **27** | P | Pb | 04 35 43.0 | +0.1 |
| SABU | | | | S | Sb | 04 35 49.0 | -0.4 |
| **TURN** | **Turunc** | **0.51** | **311** | Pg | Pb | 04 35 43.9 | -0.3 |
| **CAME** | **Cameli-Denizli** | **0.69** | **42** | Pg | Pg | 04 35 46.9 | +0.2 |
| **AKAS** | **Kas** | **0.74** | **106** | Pg | Pg | 04 35 47.7 | 0.0 |
| **AKAS** | **Kas** | **0.74** | **106** | P | Pg | 04 35 47.8 | +0.2 |
| AKAS | | | | S | Sn | 04 35 59.9 | -1.0 |
| AKAS | | | | *i* AML | AML | 04 36 03.0 | |
| | comp=N,18nm,0.6s | | | | | | |
| **YER** | **Yerkesik** | **0.78** | **333** | Pg | Pb | 04 35 48.9 | +0.1 |
| **DNZT** | **Denizli-Tavas-** | **0.88** | **16** | P | Pn | 04 35 52.4 | +0.9 |
| DNZT | | | | S | Sb | 04 36 02.3 | +0.2 |
| **DAT** | **Datca** | **0.97** | **288** | Pg | Pn | 04 35 52.6 | -0.1 |
| **APMY** | **Acipayam-Deniz** | **1.13** | **24** | Pn | Pg | 04 35 55.3 | +0.2 |

*NEIC* ***31*** *04:44:29.9±0.8, 37°.39N±0°.03×97°.95W±0°.02, h5km±2km, mb_Lg3.0/121, ML3.4/38, Error ellipse: s-maj=5.2km s-min=3.0km az=339.0*
*IDC* ***31*** *04:44:31.9±1.7, 37°.51N×98°.32W, h0km, mbtmp3.3/4, ML3.6/3, Error ellipse: s-maj=25.8km s-min=10.5km az=99.0*
**ISC 31 04:44:30.5**±0.9, **37°.35N**±0°.04×**98°.00W**±0°.03, **h11**km±6km, **n104,** σ1§**04**/62, **Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.05** | **182** | | **Pg** | **04 44 32.5** | **-0.2** |
| KAN12 | | | | Sg | **Sg** | **04 44 33.7** | **-0.5** |
| **KAN08** | **Anthony NE Sta** | **0.12** | **171** | | **Pg** | **04 44 33.8** | **+0.2** |
| KAN08 | | | | Sg | **Sg** | **04 44 35.9** | **+0.1** |
| KAN08 | | | | IAML | | 04 44 37.5 | |
| | comp=E,10µm,0.2s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.26** | **158** | Pg | **Pg** | **04 44 36.3** | **+0.4** |
| **KAN01** | **Argonia South** | **0.27** | **136** | | **Pg** | **04 44 36.4** | **+0.3** |
| **KS21** | **Milan North St** | **0.27** | **103** | IAML | | 04 44 42.0 | |
| | comp=E,6µm,0.3s | | | | | | |
| **KS21** | **Milan North St** | **0.27** | **103** | | **Pg** | **04 44 36.2** | **+0.1** |
| KS21 | | | | Sg | **Sg** | **04 44 39.9** | **+0.1** |
| **KAN17** | **Caldwell West** | **0.35** | **149** | | **Pg** | **04 44 37.9** | **+0.3** |
| KAN17 | | | | IAML | | 04 44 45.1 | |
| | comp=N,3µm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 04 44 50.2 | |
| | comp=E,3µm,0.3s | | | | | | |
| **KAN09** | **Caldwell North** | **0.37** | **125** | | **Pg** | **04 44 38.1** | **+0.2** |
| KAN09 | | | | IAML | | 04 44 47.9 | |
| | comp=E,4µm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 04 44 49.5 | |
| | comp=N,4µm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.39** | **176** | | **Pg** | **04 44 38.8** | **+0.5** |
| **GC02** | **Grant County #** | **0.51** | **168** | Pg | **Pg** | **04 44 40.8** | **+0.4** |
| **KAN13** | **South Haven SW** | **0.53** | **129** | | **Pg** | **04 44 41.1** | **+0.2** |
| KAN13 | | | | IAML | | 04 44 48.6 | |
| | comp=E,3µm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 04 44 49.1 | |
| | comp=N,2µm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **0.57** | **198** | Pg | **Pg** | **04 44 42.0** | **+0.4** |
| **CROK** | **Carrier** | **0.84** | **179** | Pg | **Pg** | **04 44 46.8** | **+0.1** |
| CROK | | | | IAML | | 04 45 04.2 | |
| | comp=E,1µm,0.5s | | | | | | |
| CROK | | | | IAML | | 04 45 12.2 | |
| | comp=N,1µm,0.3s | | | | | | |
| **BLOK** | **Blackwell** | **0.86** | **133** | Pg | **Pg** | **04 44 46.6** | **-0.4** |
| BLOK | | | | IAML | | 04 44 59.1 | |
| | comp=E,2µm,0.2s | | | | | | |
| BLOK | | | | IAML | | 04 45 00.3 | |
| | comp=N,2µm,0.2s | | | | | | |
| **NOKA** | **Waynoka** | **1.03** | **227** | Pg | **Pg** | **04 44 49.6** | **-0.8** |
| NOKA | | | | IAML | | 04 45 12.4 | |
| | comp=E,960nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 04 45 14.7 | |
| | comp=N,912nm,0.5s | | | | | | |
| **OK038** | **West end E0370** | **1.05** | **215** | | **Pb** | **04 44 50.7** | **0.0** |
| **R32A** | **Long Quarter,** | **1.21** | **332** | | **Pb** | **04 44 53.0** | **-0.5** |
| R32A | | | | IAML | | 04 45 14.6 | |
| | comp=E,626nm,0.2s | | | | | | |
| R32A | | | | IAML | | 04 45 14.8 | |
| | comp=N,761nm,0.3s | | | | | | |
| **OK051** | **E0350 and S346** | **1.25** | **132** | | **Pn** | **04 44 54.0** | **+0.1** |
| **OK048** | **Pawnee Station** | **1.25** | **137** | Pg | **Pn** | **04 44 54.1** | **+0.1** |
| OK048 | | | | IAML | | 04 45 14.8 | |
| | comp=N,580nm,0.4s | | | | | | |
| OK048 | | | | IAML | | 04 45 18.7 | |
| | comp=N,508nm,0.3s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.26** | **110** | | **Pn** | **04 44 54.2** | **+0.1** |
| **QUOK** | **Quay** | **1.56** | **138** | | **Pn** | **04 44 59.3** | **+1.1** |
| **OK029** | **Liberty Lake** | **1.61** | **164** | Pg | **Pn** | **04 45 00.0** | **+1.2** |
| **OK052** | **Battle Ridge R** | **1.66** | **144** | | **Pn** | **04 45 00.7** | **+1.1** |
| **OK031** | **S. Brethren Rd** | **1.67** | **146** | | **Pn** | **04 45 00.9** | **+1.2** |
| **ELIS** | **Ellis County** | **1.72** | **222** | Pn | **Pb** | **04 45 02.1** | **0.0** |
| **ADOK** | **Arcadia Dam** | **1.77** | **163** | | **Pn** | **04 45 02.4** | **+1.4** |
| **CSTR** | **Hydro, Custer** | **1.79** | **198** | | **Pb** | **04 45 02.9** | **-0.4** |
| **DEOK** | **Depew** | **1.93** | **141** | Pn | **Pn** | **04 45 04.2** | **+1.0** |
| OKCSW | **OKLAHOMA CITY** | **1.99** | **167** | | **Pn** | **04 45 06.0** | **+1.9** |
| **CBKS** | **Cedar Bluff** | **2.01** | **317** | | **Pn** | **04 45 05.7** | **+1.3** |
| **KSU1** | **Kansas State U** | **2.06** | **32** | Pn | **Pn** | **04 45 05.8** | **+0.7** |
| **FNO** | **Franklin** | **2.14** | **167** | | **Pn** | **04 45 07.8** | **+1.6** |
| **TUL3** | **Leonard** | **2.28** | **128** | | **Pn** | **04 45 09.3** | **+1.2** |
| **W35A** | **Tecumseh** | **2.37** | **157** | | **Pn** | **04 45 09.6** | **+0.3** |
| **RLO** | **Rose Lookout** | **2.66** | **115** | | **Pn** | **04 45 14.8** | **+1.4** |
| **WMOK** | **Wichita Mounta** | **2.68** | **194** | Pn | **Pn** | **04 45 15.3** | **+1.7** |
| **X34A** | **Smith Ranch, M** | **2.74** | **177** | | **Pn** | **04 45 16.0** | **+1.5** |
| **SMWD** | **Samnorwood** | **2.88** | **220** | | **Pn** | **04 45 18.7** | **+2.3** |
| SMWD | | | | IAmb_Lg | | 04 46 09.2 | |
| | comp=Z,38nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **3.03** | **106** | | **Pn** | **04 45 19.8** | **+1.3** |
| **LOOK** | **Love County** | **3.41** | **169** | | **Pn** | **04 45 25.1** | **+1.4** |
| **HHAR** | **Hobbs** | **3.42** | **107** | | **Pn** | **04 45 25.4** | **+1.6** |
| HHAR | | | | IAmb_Lg | | 04 46 25.9 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **X37A** | **Clayton** | **3.48** | **142** | | **Pn** | **04 45 26.3** | **+1.7** |
| **S39A** | **Bolivar** | **3.73** | **83** | | **Pn** | **04 45 28.9** | **+0.8** |
| S39A | | | | IAmb_Lg | | 04 46 34.7 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.87** | **232** | | **Pn** | **04 45 32.1** | **+2.1** |
| **RTBA** | **Rita Blanca** | **3.91** | **258** | | **Pn** | **04 45 32.4** | **+1.8** |
| **N35A** | **Tabor** | **3.96** | **27** | | **Pn** | **04 45 32.3** | **+1.1** |
| **KSCO** | **Kaye Shedlock'** | **4.04** | **296** | | **Pn** | **04 45 33.7** | **+1.7** |
| **Z35A** | **Perchaven, San** | **4.05** | **171** | Pn | **Pn** | **04 45 32.9** | **+0.4** |
| Z35A | | | | IAmb_Lg | | 04 46 50.1 | |
| | comp=Z,37nm,1.1s | | | | | | |
| **P38A** | **Dawn** | **4.17** | **56** | | **Pn** | **04 45 34.9** | **+0.8** |
| P38A | | | | IAmb_Lg | | 04 46 48.6 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **FW03** | **Perrin-Whitt E** | **4.30** | **181** | | **Pn** | **04 45 35.8** | **-0.1** |
| **DKNS** | **Dickens** | **4.38** | **214** | IAmb_Lg | | 04 46 54.9 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **4.55** | **127** | IAmb_Lg | | 04 47 02.8 | |
| | comp=Z,40nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.57** | **91** | | **Pn** | **04 45 40.4** | **+0.8** |
| MGMO | | | | IAmb_Lg | | 04 47 02.9 | |
| | comp=Z,47nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **4.63** | **77** | Pn | **Pn** | **04 45 41.2** | **+0.8** |
| R40A | | | | IAmb_Lg | | 04 46 58.2 | |
| | comp=Z,34nm,1.0s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.76** | **148** | IAmb_Lg | | 04 47 11.5 | |
| | comp=Z,29nm,0.7s | | | | | | |
| **OGNE** | **Ogallala** | **4.77** | **320** | IAmb_Lg | | 04 47 11.1 | |
| | comp=Z,30nm,0.7s | | | | | | |
| **L34A** | **Svendsen Farm,** | **4.78** | **15** | Pn | **Pn** | **04 45 42.5** | **0.0** |
| **SN07** | **Snyder 07** | **4.86** | **210** | IAmb_Lg | | 04 47 07.4 | |
| | comp=Z,41nm,1.0s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.94** | **105** | IAmb_Lg | | 04 47 14.6 | |
| | comp=Z,33nm,0.7s | | | | | | |
| **WHAR** | **Wooly Hollow** | **5.04** | **112** | IAmb_Lg | | 04 47 11.4 | |
| | comp=Z,41nm,0.7s | | | | | | |
| **SN05** | **Snyder 5** | **5.05** | **209** | IAmb_Lg | | 04 47 20.4 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **5.07** | **123** | Pn | **Pn** | **04 45 46.5** | **+0.1** |
| X40A | | | | IAmb_Lg | | 04 47 17.9 | |
| | comp=Z,32nm,0.9s | | | | | | |
| **MSTX** | **Muleshoe** | **5.15** | **230** | IAmb_Lg | | 04 47 28.3 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **POST** | **Post** | **5.15** | **215** | IAmb_Lg | | 04 47 24.1 | |
| | comp=Z,24nm,1.0s | | | | | | |
| **P40A** | **Paris** | **5.15** | **63** | IAmb_Lg | | 04 47 19.5 | |
| | comp=Z,31nm,0.8s | | | | | | |
| **UALR** | **University of** | **5.25** | **118** | IAmb_Lg | | 04 47 27.9 | |
| | comp=Z,25nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.40** | **80** | IAmb_Lg | | 04 47 21.4 | |
| | comp=Z,23nm,0.9s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.40** | **131** | IAmb_Lg | | 04 47 22.4 | |
| | comp=Z,21nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.52** | **91** | IAmb_Lg | | 04 47 27.9 | |
| | comp=Z,26nm,0.8s | | | | | | |
| **237A** | **Washetta, Mont** | **5.63** | **161** | IAmb_Lg | | 04 47 41.0 | |
| | comp=Z,29nm,1.1s | | | | | | |
| **Q24A** | **Divide** | **5.86** | **288** | IAmb_Lg | | 04 47 41.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **Z41A** | **Richland Creek** | **5.89** | **132** | IAmb_Lg | | 04 47 53.8 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **5.89** | **305** | IAmb_Lg | | 04 47 47.5 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **PBMO** | **Poplar Bluff** | **6.08** | **93** | IAmb_Lg | | 04 47 56.2 | |
| | comp=Z,34nm,

PDAR Lg Lg 04 49 47.9
comp=Z,0.2nm,0.3s,baz=116,slow=32,SNR=2.0
comp=Z,0.3nm,0.5s
**ULM Lac du Bonnet 12.99 6** Pn Pn 04 47 31.4 -3.5
comp=Z,4.3nm,1.1s,baz=194,slow=12,SNR=2.3
ULM Sn Sn 04 49 48.4 -11
comp=Z,0.3nm,0.3s,baz=174,slow=9.2,SNR=1.9
**NVAR Mina Array Bea 16.07 280** Pn **Pn 04 48 15.1 -1.5**
baz=80,slow=15,SNR=1.8
comp=Z,0.2nm,0.6s

**IDC 31 04:46:18.4±1.4,1°23S×135°13E,h0km,mb3.8/4, mbtmp3.8/5,ML3.5/1,Error ellipse: s-maj=84.8km s-min=25.6km az=86.0,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.61** | **182** | P | Pn | 04 50 38.0 | +0.2 |
| | 0.2nm,0.3s,baz=4.9,slow=12,SNR=5.7 | | | | | | |
| | 1.3nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **22.34** | **183** | P | P | 04 51 16.4 | -1.6 |
| | 1.7nm,0.9s,baz=4.8,slow=11,SNR=10 | | | | | | |
| | 1.7nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.48** | **326** | P | P | 04 57 34.4 | -0.5 |
| | 0.5nm,0.3s,baz=119,slow=5.7,SNR=4.7 | | | | | | |
| | 0.5nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **85.99** | **25** | P | P | 04 59 00.6 | +0.1 |
| | 0.2nm,0.5s,baz=248,slow=4.8,SNR=2.0 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **QSPA** | **South Pole Qui** | **88.71** | **180** | P | P | 04 59 15.4 | +1.6 |
| | 1.5nm,0.9s,baz=333,slow=18,SNR=3.9 | | | | | | |
| | 1.5nm,0.9s | | | | | | |

**NEIC 31 04:52:32.6±1.1,37°32N±0°03×97°88W±0°03,h14km±6km, mb_Lg2.4/34,ML2.9/38,Error ellipse: s-maj=4.3km s-min=3.1km az=169.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.10** | **256** | Pg | Pg | 04 52 35.2 | -0.6 |
| KAN12 | | | | Sg | Sg | 04 52 37.1 | -0.9 |
| **KAN08** | **Anthony NE Sta** | **0.12** | **218** | | Pg | 04 52 35.8 | -0.3 |
| KAN08 | | | | Sg | Sg | 04 52 38.0 | -0.4 |
| KAN08 | | | | IAML | | 04 52 38.4 | |
| | comp=N,4μm,0.1s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **102** | | Pg | 04 52 36.4 | -0.4 |
| KS21 | | | | Sg | Sg | 04 52 39.0 | -0.6 |
| **KS21** | **Milan North St** | **0.17** | **102** | IAML | | 04 52 40.8 | |
| | comp=N,3μm,0.1s | | | | | | |
| KS21 | | | | IAML | | 04 52 41.6 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **0.19** | **151** | | Pg | 04 52 37.1 | 0.0 |
| **KAN05** | **Bluff City Nor** | **0.21** | **179** | Pg | Pg | 04 52 37.6 | +0.2 |
| **KAN09** | **Caldwell North** | **0.28** | **132** | | Pg | 04 52 38.5 | 0.0 |
| KAN09 | | | | Sg | Sg | 04 52 42.4 | -0.1 |
| KAN09 | | | | IAML | | 04 52 48.2 | |
| | comp=N,2μm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.29** | **162** | | Pg | 04 52 39.0 | +0.2 |
| KAN17 | | | | IAML | | 04 52 48.3 | |
| | comp=E,997nm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.37** | **191** | | Pg | 04 52 40.4 | +0.3 |
| KAN14 | | | | Sg | Sg | 04 52 45.8 | +0.5 |
| KAN14 | | | | IAML | | 04 52 46.2 | |
| | comp=E,901nm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **0.44** | **134** | | Pg | 04 52 41.5 | +0.1 |
| KAN13 | | | | Sg | Sb | 04 52 48.2 | -0.5 |
| KAN13 | | | | IAML | | 04 52 53.5 | |
| | comp=E,1μm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 04 52 56.7 | |
| | comp=N,1μm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.47** | **178** | Pg | Pg | 04 52 42.2 | +0.3 |
| **OK032** | **Salt Plains WL** | **0.58** | **207** | Pg | Pg | 04 52 44.2 | +0.2 |
| **BLOK** | **Blackwell** | **0.77** | **136** | Pg | Pg | 04 52 47.5 | -0.1 |
| BLOK | | | | IAML | | 04 53 00.9 | |
| | comp=N,674nm,0.3s | | | | | | |
| **CROK** | **Carrier** | **0.82** | **186** | Pg | Pb | 04 52 48.6 | -0.1 |
| CROK | | | | IAML | | 04 53 04.1 | |
| | comp=E,495nm,0.3s | | | | | | |
| CROK | | | | IAML | | 04 53 06.8 | |
| | comp=N,328nm,0.4s | | | | | | |
| **NOKA** | **Waynoka** | **1.09** | **231** | Pg | Pb | 04 52 53.1 | -0.2 |
| NOKA | | | | IAML | | 04 53 16.4 | |
| | comp=E,252nm,0.5s | | | | | | |
| NOKA | | | | IAML | | 04 53 16.5 | |
| | comp=N,305nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.09** | **220** | Pg | Pb | 04 52 53.2 | -0.1 |
| OK038 | | | | IAML | | 04 53 18.4 | |
| | comp=N,359nm,0.3s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.16** | **110** | | Pn | 04 52 54.4 | -0.1 |
| T35A | | | | IAML | | 04 53 14.7 | |
| | comp=E,294nm,0.3s | | | | | | |
| T35A | | | | IAML | | 04 53 14.8 | |
| | comp=N,324nm,0.3s | | | | | | |
| **OK051** | **E0350 and S346** | **1.17** | **134** | | Pb | 04 52 54.7 | +0.1 |
| OK051 | | | | IAML | | 04 53 23.7 | |
| | comp=N,352nm,0.2s | | | | | | |
| **OK048** | **Pawnee Station** | **1.17** | **140** | | Pb | 04 52 54.8 | +0.1 |
| OK048 | | | | IAML | | 04 53 18.6 | |
| | comp=N,152nm,0.3s | | | | | | |
| **R32A** | **Long Quarter,** | **1.28** | **329** | Pn | Pn | 04 52 55.9 | -0.2 |
| **QUOK** | **Quay** | **1.48** | **140** | | Pb | 04 53 00.1 | +0.2 |
| **OK029** | **Liberty Lake** | **1.56** | **167** | | Pb | 04 53 01.5 | +0.2 |
| **OK052** | **Battle Ridge R** | **1.58** | **147** | | Pb | 04 53 01.8 | +0.1 |
| **OK031** | **S. Brethren Rd** | **1.60** | **148** | | Pb | 04 53 02.1 | +0.1 |
| **CSTR** | **Hydro, Custer** | **1.80** | **202** | Pn | Pb | 04 53 04.8 | -0.5 |
| **DEOK** | **Depew** | **1.85** | **143** | | Pb | 04 53 05.4 | -0.8 |
| **KSU1** | **Kansas State U** | **2.04** | **29** | Pn | Pb | 04 53 08.6 | -0.9 |
| **CBKS** | **Cedar Bluff** | **2.09** | **316** | Pn | Pn | 04 53 08.4 | +1.1 |
| **TUL3** | **Leonard** | **2.19** | **129** | | Pn | 04 53 10.2 | +1.6 |
| TUL3 | | | | IAmb_Lg | | 04 53 46.5 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **W35A** | **Tecumseh** | **2.31** | **159** | | Pn | 04 53 11.2 | +0.9 |
| **RLO** | **Rose Lookout** | **2.57** | **116** | Pn | Pn | 04 53 15.4 | +1.6 |
| **WMOK** | **Wichita Mounta** | **2.68** | **196** | | Pn | 04 53 16.6 | +1.2 |
| **X34A** | **Smith Ranch, M** | **2.72** | **179** | | Pn | 04 53 18.0 | +2.1 |
| X34A | | | | IAmb_Lg | | 04 54 00.5 | |
| | comp=Z,7.8nm,0.9s | | | | | | |
| **SMWD** | **Samnorwood** | **2.93** | **222** | | Pn | 04 53 20.9 | +2.1 |
| **U38A** | **Gravette** | **2.93** | **106** | | Pn | 04 53 20.9 | +2.0 |
| U38A | | | | IAmb_Lg | | 04 54 05.5 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.33** | **107** | | Pn | 04 53 26.3 | +2.0 |
| **X37A** | **Clayton** | **3.40** | **143** | Pn | Pn | 04 53 26.7 | +1.4 |
| X37A | | | | IAmb_Lg | | 04 54 27.2 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.64** | **83** | | Pn | 04 53 30.1 | +1.5 |
| **AMTX** | **Amarillo** | **3.93** | **233** | Pn | Pn | 04 53 33.8 | +1.2 |
| **RTBA** | **Rita Blanca** | **4.00** | **259** | | Pn | 04 53 35.2 | +1.7 |
| **KSCO** | **Kaye Shedlock'** | **4.11** | **296** | IAmb_Lg | | 04 54 42.6 | |
| | comp=Z,5.9nm,0.9s | | | | | | |
| **P38A** | **Dawn** | **4.11** | **55** | Pn | Pn | 04 53 37.0 | +2.0 |
| **APMT** | **Aspermont** | **4.39** | **205** | Pn | Pn | 04 53 41.1 | +2.3 |
| **DKNS** | **Dickens** | **4.41** | **215** | IAmb_Lg | | 04 54 56.2 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.46** | **127** | IAmb_Lg | | 04 54 59.3 | |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.48** | **90** | IAmb_Lg | | 04 54 54.0 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **PLPT** | **Palo Pinto** | **4.51** | **185** | Pn | Pn | 04 53 42.0 | +1.5 |
| **R40A** | **Maddies Statio** | **4.54** | **76** | Pn | Pn | 04 53 42.6 | +1.7 |
| R40A | | | | IAmb_Lg | | 04 55 02.7 | |
| | comp=Z,9.7nm,1.1s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.84** | **105** | IAmb_Lg | | 04 55 15.6 | |
| | comp=Z,6.1nm,1.0s | | | | | | |
| **OGNE** | **Ogallala** | **4.85** | **320** | Pn | Pn | 04 53 46.4 | +1.1 |
| **SN07** | **Snyder 07** | **4.89** | **211** | IAmb_Lg | | 04 55 12.4 | |
| | comp=Z,8.7nm,1.3s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.97** | **123** | IAmb_Lg | | 04 55 12.2 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.08** | **63** | IAmb_Lg | | 04 55 14.2 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.22** | **270** | IAmb_Lg | | 04 55 18.5 | |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.31** | **80** | IAmb_Lg | | 04 55 33.1 | |
| | comp=Z,4.4nm,0.7s | | | | | | |
| **BRDY** | **Brady** | **6.09** | **189** | IAmb_Lg | | 04 55 58.2 | |
| | comp=Z,3.2nm,1.1s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.09** | **306** | IAmb_Lg | | 04 56 30.8 | |
| | comp=Z,6.1nm,1.3s | | | | | | |

**NEIC 31 04:55:21.6±0.7,37°35N±0°03×97°86W±0°02,h6km±4km, mb_Lg2.2/15,ML2.6/37,Error ellipse: s-maj=4.9km s-min=2.4km az=166.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.12** | **246** | Pg | Pg | 04 55 24.5 | +0.4 |
| KAN12 | | | | Sg | Sg | 04 55 26.5 | +0.7 |
| KAN12 | | | | IAML | | 04 55 26.7 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.15** | **216** | Pg | Pg | 04 55 25.1 | +0.5 |
| KAN08 | | | | Sg | Sg | 04 55 27.3 | +0.7 |
| **KS21** | **Milan North St** | **0.17** | **110** | Pg | Pg | 04 55 25.5 | +0.5 |
| KS21 | | | | Sg | Sg | 04 55 28.0 | +0.7 |
| **KAN01** | **Argonia South** | **0.21** | **157** | | Pg | 04 55 26.3 | +0.6 |
| KAN01 | | | | IAML | | 04 55 29.6 | |
| | comp=N,1μm,0.2s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.24** | **182** | Pg | Pg | 04 55 26.8 | +0.6 |
| KAN05 | | | | Sg | Sg | 04 55 30.3 | +1.0 |
| KAN05 | | | | IAML | | 04 55 32.6 | |
| | comp=N,1μm,0.2s | | | | | | |
| KAN05 | | | | IAML | | 04 55 34.7 | |
| | comp=E,880nm,0.2s | | | | | | |
| **KAN09** | **Caldwell North** | **0.28** | **137** | | Pg | 04 55 27.6 | +0.5 |
| KAN09 | | | | Sg | Sg | 04 55 31.9 | +1.0 |
| **KAN17** | **Caldwell West** | **0.31** | **165** | | Pg | 04 55 28.2 | +0.6 |
| KAN17 | | | | IAML | | 04 55 33.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 04 55 38.6 | |
| | comp=E,957nm,0.2s | | | | | | |
| **KAN14** | **Manchester OK** | **0.40** | **192** | | Pg | 04 55 29.7 | +0.4 |
| KAN14 | | | | IAML | | 04 55 35.5 | |
| | comp=N,499nm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **0.45** | **137** | | Pg | 04 55 30.6 | +0.3 |
| KAN13 | | | | IAML | | 04 55 41.1 | |
| | comp=N,592nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 04 55 41.3 | |
| | comp=E,551nm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.49** | **180** | | Pg | 04 55 31.5 | +0.5 |
| **OK032** | **Salt Plains WL** | **0.61** | **207** | Pg | Pg | 04 55 33.5 | +0.3 |
| OK032 | | | | IAML | | 04 55 45.6 | |
| | comp=E,258nm,0.1s | | | | | | |
| **BLOK** | **Blackwell** | **0.78** | **138** | Pg | Pg | 04 55 36.8 | +0.3 |
| **CROK** | **Carrier** | **0.84** | **187** | | Pg | 04 55 37.2 | -0.6 |
| CROK | | | | IAML | | 04 55 54.9 | |
| | comp=N,271nm,0.4s | | | | | | |
| **NOKA** | **Waynoka** | **1.11** | **231** | Pg | Pg | 04 55 43.0 | +0.1 |
| NOKA | | | | IAML | | 04 56 06.5 | |
| | comp=N,159nm,0.4s | | | | | | |
| NOKA | | | | IAML | | 04 56 06.9 | |
| | comp=E,149nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.12** | **219** | Pg | Pg | 04 55 43.1 | +0.1 |
| OK038 | | | | IAML | | 04 56 03.9 | |
| | comp=E,181nm,0.2s | | | | | | |
| OK038 | | | | IAML | | 04 56 16.6 | |
| | comp=E,170nm,0.3s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.16** | **111** | | Pg | 04 55 43.5 | -0.3 |
| T35A | | | | IAML | | 04 56 03.9 | |
| | comp=N,112nm,0.2s | | | | | | |
| **OK051** | **E0350 and S346** | **1.17** | **135** | Pg | Pg | 04 55 43.9 | -0.1 |
| **OK048** | **Pawnee Station** | **1.18** | **141** | Pg | Pg | 04 55 43.9 | -0.4 |
| OK048 | | | | IAML | | 04 56 04.7 | |
| | comp=N,157nm,0.3s | | | | | | |
| **R32A** | **Long Quarter,** | **1.27** | **328** | | Pn | 04 55 45.1 | -0.7 |
| **QUOK** | **Quay** | **1.49** | **141** | Pg | Pb | 04 55 49.5 | -0.1 |
| **OK029** | **Liberty Lake** | **1.58** | **168** | | Pb | 04 55 50.8 | -0.4 |
| **OK052** | **Battle Ridge R** | **1.59** | **147** | | Pb | 04 55 51.3 | -0.1 |
| **OK031** | **S. Brethren Rd** | **1.61** | **149** | | Pb | 04 55 51.7 | 0.0 |
| **DEOK** | **Depew** | **1.86** | **143** | Pn | Pn | 04 55 54.6 | +0.7 |
| DEOK | | | | IAmb_Lg | | 04 56 21.2 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **1.96** | **170** | Pn | Pb | 04 55 56.8 | -0.9 |
| **KSU1** | **Kansas State U** | **2.01** | **29** | Pn | Pb | 04 55 57.4 | -1.2 |
| KSU1 | | | | IAmb_Lg | | 04 56 25.7 | |
| | comp=Z,17nm,1.1s | | | | | | |
| **CBKS** | **Cedar Bluff** | **2.08** | **315** | Pn | Pn | 04 55 58.1 | +1.1 |
| **TUL3** | **Leonard** | **2.20** | **130** | Pn | Pn | 04 55 59.6 | +1.1 |
| **RLO** | **Rose Lookout** | **2.57** | **116** | Pn | Pn | 04 56 05.0 | +1.3 |
| **WMOK** | **Wichita Mounta** | **2.71** | **196** | Pn | Pn | 04 56 06.3 | +0.8 |
| **X34A** | **Smith Ranch, M** | **2.74** | **179** | Pn | Pn | 04 56 06.8 | +0.8 |
| **SMWD** | **Samnorwood** | **2.95** | **221** | IAmb_Lg | | 04 57 02.9 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **HHAR** | **Hobbs** | **3.32** | **107** | Pn | Pn | 04 56 14.9 | +0.9 |
| HHAR | | | | IAmb_Lg | | 04 57 08.0 | |
| | comp=Z,3.9nm,0.9s | | | | | | |
| **X37A** | **Clayton** | **3.41** | **143** | Pn | Pn | 04 56 16.0 | +0.8 |
| **S39A** | **Bolivar** | **3.63** | **83** | Pn | Pn | 04 56 19.0 | +0.8 |
| **AMTX** | **Amarillo** | **3.95** | **233** | IAmb_Lg | | 04 57 32.9 | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **DKNS** | **Dickens** | **4.44** | **215** | IAmb_Lg | | 04 57 47.0 | |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.06** | **63** | IAmb_Lg | | 04 58 09.2 | |
| | comp=Z,4.7nm,0.9s | | | | | | |

*IDC* ***31*** *04:56:21.0±1.0,44°.51N×149°.33E,h0km,mb3.8/13, mbtmp3.8/16,ML3.4/3,Error ellipse: s-maj=24.6km s-min=21.4km az=142.0*
*SKHL* ***31*** *04:56:23.3±0.4,44°.30N×149°.70E,h39km±4km,mb4.8/3*
*MOS* ***31*** *04:56:26.6±0.8,44°.44N×149°.19E,h52km,mb4.1/5,Error ellipse: s-maj=11.1km s-min=10.4km az=32.6*

**ISC 31 04:56:26.1±0.8,44°41N±0°07×149°45E±0°07,h36km,n47, σ1§47/46,mb3.8/16,4C-1D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.40** | **307** | *i* P | **Pn** | **04 56 48.9** | **-0.1** |
| KUR | | | | AMB | AMB | 04 56 51.6 | |
| | 530nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **04 57 08.7** | **+2.6** |
| KUR | | | | A | A | 04 57 12.6 | |
| | 1μm,0.5s | | | | | | |
| KUR | | | | A | A | 04 57 12.6 | |
| | 960nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **1.40** | **307** | *c i* PN | **Pn** | **04 56 48.8** | **-0.2** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,517nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,96nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,136nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **255** | *e*P | **Pn** | **04 56 55.5** | **-1.3** |
| SHO | | | | AMB | AMB | 04 56 58.1 | |
| | comp=N,110nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **04 57 19.3** | **-0.9** |
| SHO | | | | A | A | 04 57 22.7 | |
| | comp=N,370nm,0.4s | | | | | | |
| SHO | | | | A | A | 04 57 22.7 | |
| | comp=N,460nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **1.96** | **255** | *e*PN | **Pn** | **04 56 55.5** | **-1.3** |
| SHO | | | | *i* S | **Sn** | **04 57 19.3** | **-0.9** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,109nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,37nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,54nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,302nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,452nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.61** | **263** | *e*P | **Pn** | **04 57 05.7** | **+0.1** |
| YUK | | | | AMB | AMB | 04 57 06.2 | |
| | comp=E,120nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **04 57 37.6** | **+1.5** |
| YUK | | | | A | A | 04 57 43.9 | |
| | comp=E,410nm,0.4s | | | | | | |
| YUK | | | | A | A | 04 57 43.9 | |
| | comp=E,220nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.61** | **263** | PN | **Pn** | **04 57 06.1** | **+0.5** |
| YUK | | | | *e*S | **Sn** | **04 57 37.8** | **+1.7** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,167nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,455nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,282nm,0.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **4.93** | **269** | Pn | **Pn** | **04 57 37.2** | **-0.4** |
| | comp=E,1.6nm,0.3s,baz=90,slow=15,SNR=2.6 | | | | | | |
| | comp=E,2.9nm,0.4s | | | | | | |
| **ERM** | **Erimo** | **5.19** | **245** | *e*PN | **Pn** | **04 57 41.6** | **+0.5** |
| **YSS** | **Yuzh-Sakhalins** | **5.34** | **301** | *e*S | **Sn** | **04 58 44.2** | **+0.9** |
| YSS | | | | A | A | 04 58 53.3 | |
| | comp=E,20nm,0.4s | | | | | | |
| YSS | | | | A | A | 04 58 53.3 | |
| | comp=E,20nm,0.4s | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **10.26** | **29** | *e*PN | Pn | 04 58 54.8 | +4.2 |
| **PETK** | **Petropavlovsk-** | **10.26** | **29** | Pn | **Pn** | **04 58 49.6** | **-1.0** |
| | comp=E,0.4nm,0.3s,baz=217,slow=13,SNR=2.6 | | | | | | |
| | comp=E,0.7nm,0.4s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **12.52** | **275** | ⇑*i* PN | **Pn** | **04 59 22.8** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **12.52** | **275** | Pn | **Pn** | **04 59 20.4** | **-1.0** |
| | comp=E,0.4nm,0.3s,baz=82,slow=13,SNR=5.7 | | | | | | |
| | comp=E,1.9nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **13.04** | **298** | *e*P | **Pn** | **04 59 27.3** | **-1.3** |
| **KLR** | **Kul'dur** | **13.04** | **298** | *e*PN | **Pn** | **04 59 27.3** | **-1.3** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **BILL** | **Bilibino** | **25.28** | **15** | *e*P | **P** | **05 01 50.3** | **+1.7** |
| **BILL** | **Bilibino** | **25.28** | **15** | ⇓*e*P | **P** | **05 01 50.3** | **+1.7** |
| BILL | | | | *e* | | 05 02 30.2 | |
| BILL | | | | *e*S | **S** | **05 06 05.7** | **-6.0** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.3s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,97nm,19.0s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.58** | **144** | T | T | 05 33 22.9 | |
| | baz=334,slow=76,SNR=50 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.60** | **144** | T | T | 05 33 21.2 | |
| | baz=334,slow=76,SNR=43 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.60** | **144** | T | T | 05 33 18.2 | |
| | baz=334,slow=76,SNR=41 | | | | | | |
| **TIXI** | **Tiksi** | **29.07** | **347** | *e*P | **P** | **05 02 23.7** | **+1.2** |
| **TIXI** | **Tiksi** | **29.07** | **347** | ⇑*i* P | **P** | **05 02 23.7** | **+1.2** |
| TIXI | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **29.31** | **292** | ⇑*i* P | **P** | **05 02 23.7** | **-1.5** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.59** | **145** | T | T | 05 34 36.0 | |
| | baz=335,slow=76,SNR=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.60** | **145** | T | T | 05 34 36.8 | |
| | baz=335,slow=76,SNR=13 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.61** | **145** | T | T | 05 34 37.4 | |
| | baz=335,slow=76,SNR=18 | | | | | | |
| **SONM** | **Songino Array** | **29.75** | **292** | P | **P** | **05 02 28.8** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=82,slow=10,SNR=3.9 | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **39.97** | **37** | P | **P** | **05 03 57.6** | **+1.0** |
| | comp=Z,0.4nm,0.8s,baz=277,slow=8.1,SNR=2.1 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.75** | **298** | P | **P** | **05 04 41.5** | **-2.2** |
| | comp=Z,1.9nm,0.7s,baz=69,slow=8.3,SNR=8.6 | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.75** | **298** | *e*P | **P** | **05 04 44.9** | **+1.2** |
| **MKAR** | **Makanchi Array** | **45.75** | **298** | *e*P | **P** | **05 04 44.9** | **+1.2** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **46.53** | **304** | *e*P | **P** | **05 04 49.7** | **0.0** |
| **KURK** | **Kurchatov** | **46.53** | **304** | P | **P** | **05 04 49.7** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **46.62** | **304** | P | **P** | **05 04 49.6** | **-0.8** |
| | comp=Z,0.5nm,0.5s,baz=73,slow=8.2,SNR=1.9 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **65.03** | **334** | P | **P** | **05 07 00.9** | **-1.1** |
| | comp=Z,1.9nm,0.6s,baz=46,slow=8.0,SNR=8.8 | | | | | | |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **65.03** | **334** | *e*P | **P** | **05 07 02.1** | **+0.1** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **65.52** | **196** | P | **P** | **05 07 05.8** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=18,slow=7.1,SNR=2.1 | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **69.23** | **195** | P | **P** | **05 07 30.7** | **+1.6** |
| | comp=Z,0.4nm,0.8s,baz=12,slow=5.0,SNR=2.4 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **69.57** | **340** | P | **P** | **05 07 28.8** | **-2.1** |
| | comp=Z,2.1nm,0.6s,baz=30,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **69.57** | **340** | P | **P** | **05 07 30.2** | **-0.7** |
| | comp=Z,1.6nm,0.8s,baz=30,slow=6.2,SNR=7.2 | | | | | | |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **NOA** | **NORSAR Array B** | **69.57** | **340** | *e*P | **P** | **05 07 30.7** | **-0.2** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **69.71** | **338** | P | **P** | **05 07 31.7** | **+0.1** |
| | comp=Z,2.4nm,0.6s,baz=46,slow=4.2,SNR=6.0 | | | | | | |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.01** | **325** | P | **P** | **05 07 44.9** | **-0.9** |
| | comp=Z,0.5nm,0.5s,baz=40,slow=6.4,SNR=5.5 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **72.01** | **325** | *e*P | **P** | **05 07 46.6** | **+0.8** |
| **EKA** | **Eskdalemuir Ar** | **77.95** | **344** | P | **P** | **05 08 21.0** | **+1.0** |
| | comp=Z,0.5nm,0.5s,baz=30,slow=4.4,SNR=2.3 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **78.27** | **315** | P | **P** | **05 08 22.2** | **-0.1** |
| | comp=Z,0.7nm,0.9s,baz=27,slow=9.7,SNR=1.9 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.90** | **58** | P | **P** | **05 08 36.9** | **+0.3** |
| | comp=Z,0.2nm,0.5s,baz=300,slow=3.6,SNR=4.7 | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | |

*IDC* ***31*** *05:01:30.1±3.2,22°.47S×170°.43E,h0km,mb3.9/4, mbtmp4.0/5,ML4.0/1,MS3.9/3,Error ellipse: s-maj=122.6km s-min=38.4km az=159.0*
*NOU* ***31*** *05:01:37.3,22°.03S×169°.88E,h0km,MLv4.4/6,Southeast of Loyalty Islands*

**ISC 31 05:01:36.7±1.5,22°3S±0°.1×170°2E±0°.1,h35km,n19, σ0§75/17,mb3.8/4,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YATNC** | **Mamie plateau,** | **3.10** | **273** | P | **Pn** | **05 02 22.1** | **-1.0** |
| **ONTNC** | **Ouen Toro** | **3.49** | **269** | P | **Pn** | **05 02 29.1** | **+0.6** |
| **DZM** | **Mont Dzumac** | **3.51** | **273** | P | **Pn** | **05 02 29.1** | **+0.3** |
| **DZM** | **Mont Dzumac** | **3.51** | **273** | P | **Pn** | **05 02 28.9** | **0.0** |
| **DZM** | **Mont Dzumac** | **3.51** | **273** | Pn | **Pn** | **05 02 28.8** | **0.0** |
| | 12nm,0.3s,baz=123,slow=13,SNR=28 | | | | | | |
| DZM | | | | Sn | **Sn** | **05 03 09.0** | **-0.2** |
| | 10.0nm,0.3s,baz=142,slow=12,SNR=10 | | | | | | |
| | 26nm,0.3s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.64** | **272** | P | **Pn** | **05 02 30.5** | **0.0** |
| **NOUC** | **Port Laguerre** | **3.64** | **272** | P | **Pn** | **05 02 30.8** | **+0.3** |
| **RTV** | **Rentapao** | **4.76** | **339** | P | **Pn** | **05 02 46.0** | **0.0** |
| **DVP** | **Devils Point** | **4.91** | **337** | P | **Pn** | **05 02 47.9** | **-0.1** |
| **KOUNC** | **Koumac, New Ca** | **5.79** | **286** | P | **Pn** | **05 03 00.5** | **+0.4** |
| **HNR** | **Honiara** | **16.13** | **321** | LR | LR | 05 11 15.0 | |
| | comp=Z,2μm,18.2s,baz=202,slow=36 | | | | | | |
| **URZ** | **Urewera** | **17.00** | **161** | LR | LR | 05 10 25.3 | |
| | comp=Z,185n

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1.2nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.38** | **353** | P | **P** | **05 26 59.7** | **+0.9** |
| | 2.5nm,1.0s,baz=164,slow=5.9,SNR=3.8 | | | | | | |
| | 2.5nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.31** | **48** | P | **P** | **05 28 16.8** | **0.0** |
| | 0.5nm,0.7s,baz=224,slow=6.3,SNR=4.7 | | | | | | |
| | 0.5nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **92.65** | **17** | P | **P** | **05 28 25.9** | **-0.8** |
| | 0.3nm,0.5s,baz=242,slow=5.1,SNR=4.8 | | | | | | |
| | 0.3nm,0.5s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.15** | **353** | PKPbc | **PKPbc** | **05 34 55.2** | **-0.2** |
| | 1.5nm,0.6s,baz=338,slow=2.6,SNR=6.5 | | | | | | |
| **GERES** | **GERESS Array B** | **146.94** | **330** | PKPbc | **PKPbc** | **05 34 58.1** | **+0.1** |
| | 1.5nm,0.2s,baz=8.7,slow=9.0,SNR=1.9 | | | | | | |

**IDC 31 05:20:10.8±3.9, 54°23N×87°47E, h0km, mbtmp3.1/2, ML2.5/2, Error ellipse: s-maj=34.9km s-min=21.3km az=43.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.58** | **261** | I | I | 05 29 20.0 | |
| | baz=79,slow=315,SNR=1.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.58** | **261** | Pg | Pn | 05 20 40.1 | -0.1 |
| | 0.8nm,0.3s,baz=80,slow=15,SNR=7.3 | | | | | | |
| ZALV | | | | Lg | Lg | 05 21 01.6 | |
| | 1.0nm,0.3s,baz=79,slow=25,SNR=2.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.55** | **240** | Pn | Pn | 05 21 47.5 | -0.8 |
| | 0.1nm,0.3s,baz=55,slow=13,SNR=2.4 | | | | | | |
| | 1.9nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.14** | **206** | Pn | Pn | 05 22 12.3 | +2.0 |
| | 0.1nm,0.3s,baz=26,slow=14,SNR=1.1 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

**IDC 31 05:21:58.1±7.2, 55°07N×88°55E, h0km, mbtmp2.6/2, ML2.1/3, Error ellipse: s-maj=74.5km s-min=33.5km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **2.45** | **244** | I | I | 05 37 10.0 | |
| | 0.1nm,0.9s,baz=61,slow=323,SNR=8.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.45** | **244** | Pn | Pn | 05 22 38.6 | -0.7 |
| | 0.4nm,0.3s,baz=64,slow=16,SNR=3.7 | | | | | | |
| ZALV | | | | Sn | Sn | 05 23 10.2 | +0.4 |
| | 2.3nm,0.3s,baz=59,slow=26,SNR=16 | | | | | | |
| | 0.9nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.52** | **238** | Pn | Pn | 05 23 49.3 | +0.3 |
| | 0.1nm,0.3s,baz=53,slow=13,SNR=1.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **9.18** | **208** | Pn | Pn | 05 24 12.0 | +0.3 |
| | 0.1nm,0.3s,baz=28,slow=14,SNR=1.6 | | | | | | |
| | 0.2nm,0.5s | | | | | | |

**IDC 31 05:40:13.0±3.2, 53°63N×87°15E, h0km, mbtmp2.8/2, ML2.3/2, Error ellipse: s-maj=31.7km s-min=18.6km az=65.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.42** | **284** | I | I | 05 49 35.0 | |
| | baz=102,slow=313,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.42** | **284** | Pg | Pn | 05 40 38.5 | -1.4 |
| | 0.7nm,0.3s,baz=99,slow=6.3,SNR=10 | | | | | | |
| ZALV | | | | Lg | Lg | 05 40 58.2 | |
| | 0.4nm,0.3s,baz=104,slow=27,SNR=2.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.10** | **244** | Pn | Pn | 05 41 45.2 | +0.9 |
| | 0.1nm,0.3s,baz=60,slow=14,SNR=1.5 | | | | | | |
| | 0.8nm,0.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.52** | **206** | Pn | Pn | 05 42 05.1 | +1.2 |
| | 0.1nm,0.3s,baz=23,slow=14,SNR=1.0 | | | | | | |
| | 0.2nm,0.6s | | | | | | |

*IDC* ***31*** *05:46:52.9±1.3, 43°.15N×82°.43E, h0km, mb3.6/8, mbtmp3.6/15, ML3.3/6, MS2.4/1, Error ellipse: s-maj=21.5km s-min=15.5km az=115.0*
*BJI* ***31*** *05:46:59.9±0.0, 43°.51N×82°.33E, h10km, ML3.7/10*
*SOME* ***31*** *05:46:59.0, 43°.55N×82°.05E, h5km*
*MOS* ***31*** *05:46:59.5±1.5, 43°.62N×82°.13E, h10km, mb4.0/4, Error ellipse: s-maj=11.1km s-min=7.4km az=101.3*
*NNC* ***31*** *05:47:00.8±1.1, 43°.54N×82°.01E, h0km, mb4.3, mpv4.1, Error ellipse: s-maj=9.6km s-min=4.2km az=141.0*

**ISC 31 05:46:58.0±1.1, 43°48N±0°.04×82°11E±0°.03, h6km±7km, n92, σ2s59/125, mb3.7/12, 13C-12D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **1.28** | **269** | *eP* | **Pn** | **05 47 20.9** | **-1.8** |
| | 75nm,0.1s | | | | | | |
| KTMS | | | | *eS* | **Sb** | **05 47 37.7** | **-1.8** |
| | 693nm,0.3s | | | | | | |
| **KTMS** | **Ketmen** | **1.28** | **269** | P | **Pn** | **05 47 20.9** | **-1.8** |
| | 82nm,0.2s | | | | | | |
| KTMS | | | | S | **Sb** | **05 47 38.4** | **-1.1** |
| | 693nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.88** | **298** | *eP* | **Pg** | **05 47 34.8** | **+0.7** |
| | 53nm,0.2s | | | | | | |
| DJR | | | | *eS* | **Sg** | **05 48 00.8** | **+2.3** |
| | 792nm,0.3s | | | | | | |
| **DJR** | **Jarkent** | **1.88** | **298** | Pg | **Pg** | **05 47 34.8** | **+0.7** |
| | 53nm,0.2s | | | | | | |
| DJR | | | | Lg | Lg | 05 48 00.8 | |
| | 792nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **1.96** | **261** | *eP* | **Pn** | **05 47 31.0** | **-1.0** |
| | 256nm,0.2s | | | | | | |
| SHLS | | | | *eS* | **Sn** | **05 47 54.7** | **-2.4** |
| | 2μm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **1.96** | **261** | P | **Pn** | **05 47 31.0** | **-1.0** |
| | 256nm,0.2s | | | | | | |
| SHLS | | | | S | **Sn** | **05 47 54.7** | **-2.4** |
| | 2μm,0.2s | | | | | | |
| **UZB** | **Uzynbulak** | **2.28** | **263** | *eP* | **Pb** | **05 47 41.1** | **+1.4** |
| | 54nm,0.3s | | | | | | |
| UZB | | | | *eS* | **Sg** | **05 48 11.8** | **+0.5** |
| | 656nm,0.3s | | | | | | |
| **UZB** | **Uzynbulak** | **2.28** | **263** | Pg | **Pb** | **05 47 41.1** | **+1.4** |
| | 54nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 05 48 11.8 | |
| | 656nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **2.29** | **293** | Pg | **Pg** | **05 47 42.1** | **+0.1** |
| | 74nm,0.3s | | | | | | |
| KNOS | | | | Lg | Lg | 05 48 13.3 | |
| | 365nm,0.5s | | | | | | |
| **KPKS** | **Kokpek** | **2.50** | **271** | *eP* | **Pb** | **05 47 44.9** | **+1.5** |
| | 53nm,0.2s | | | | | | |
| KPKS | | | | *eS* | **Sg** | **05 48 18.1** | **-0.1** |
| | 677nm,0.4s | | | | | | |
| **KPKS** | **Kokpek** | **2.50** | **271** | Pg | **Pb** | **05 47 44.9** | **+1.5** |
| | 53nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 05 48 18.1 | |
| | 677nm,0.4s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.67** | **313** | *eP* | **Pg** | **05 47 49.4** | **+0.1** |
| | 30nm,0.2s | | | | | | |
| KAPS | | | | *eS* | **Sg** | **05 48 25.7** | **+1.8** |
| | 644nm,0.1s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.67** | **313** | Pg | **Pg** | **05 47 49.3** | **+0.1** |
| | 30nm,0.2s | | | | | | |
| KAPS | | | | Lg | Lg | 05 48 25.7 | |
| | 644nm,0.1s | | | | | | |
| **ZHN** | **Zhinishke** | **2.70** | **265** | *eP* | **Pb** | **05 47 49.0** | **+2.1** |
| | 42nm,0.2s | | | | | | |
| ZHN | | | | *eS* | **Sg** | **05 48 25.2** | **+0.4** |
| | 980nm,0.2s | | | | | | |
| **ZHN** | **Zhinishke** | **2.70** | **265** | Pg | **Pb** | **05 47 49.0** | **+2.1** |
| | 42nm,0.2s | | | | | | |
| ZHN | | | | Lg | Lg | 05 48 25.2 | |
| | 980nm,0.2s | | | | | | |
| **BLB** | **Baldybastay** | **2.70** | **284** | Pg | **Pb** | **05 47 48.6** | **+1.7** |
| | 202nm,0.2s | | | | | | |
| BLB | | | | Lg | Lg | 05 48 24.6 | |
| | 534nm,0.4s | | | | | | |
| **SATY** | **Saty** | **2.74** | **262** | *eP* | **Pb** | **05 47 49.1** | **+1.6** |
| | 30nm,0.1s | | | | | | |
| SATY | | | | *eS* | **Sb** | **05 48 25.2** | **+3.7** |
| | 874nm,0.3s | | | | | | |
| **SATY** | **Saty** | **2.74** | **262** | Pg | **Pb** | **05 47 49.1** | **+1.6** |
| | 30nm,0.2s | | | | | | |
| SATY | | | | Lg | Lg | 05 48 25.2 | |
| | 874nm,0.3s | | | | | | |
| **KURS** | **Kuram** | **2.87** | **271** | *eP* | **Pb** | **05 47 51.2** | **+1.5** |
| | 16nm,0.5s | | | | | | |
| KURS | | | | *eS* | **Sg** | **05 48 28.9** | **-1.3** |
| | 148nm,0.4s | | | | | | |
| **KURS** | **Kuram** | **2.87** | **271** | Pg | **Pb** | **05 47 51.2** | **+1.5** |
| | 16nm,0.5s | | | | | | |
| KURS | | | | Lg | Lg | 05 48 28.9 | |
| | 144nm,0.6s | | | | | | |
| **TDK** | **Taldyqorghan** | **3.07** | **301** | *eP* | **Pg** | **05 47 55.4** | **-1.4** |
| | 77nm,0.2s | | | | | | |
| TDK | | | | *eS* | **Sg** | **05 48 35.9** | **-0.6** |
| | 508nm,0.6s | | | | | | |
| **TDK** | **Taldyqorghan** | **3.07** | **301** | Pg | **Pg** | **05 47 55.4** | **-1.4** |
| | 77nm,0.2s | | | | | | |
| TDK | | | | Lg | Lg | 05 48 35.9 | |
| | 508nm,0.6s | | | | | | |
| **ARXS** | **Arharly** | **3.19** | **285** | *eP* | **Pb** | **05 47 56.4** | **+1.3** |
| | 46nm,0.4s | | | | | | |
| ARXS | | | | *eS* | **Sg** | **05 48 38.0** | **-2.3** |
| | 210nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **3.19** | **285** | Pg | **Pb** | **05 47 56.4** | **+1.3** |
| | 46nm,0.4s | | | | | | |
| ARXS | | | | Lg | Lg | 05 48 38.0 | |
| | 210nm,0.4s | | | | | | |
| **ARXS** | **Arharly** | **3.19** | **285** | *eP*N | **Pn** | **05 47 52.2** | **+3.4** |
| **MK31** | **Makanchi Array** | **3.31** | **2** | ⇑Pn | **Pn** | **05 47 53.1** | **+2.6** |
| | 2.1nm,0.2s,baz=185,slow=12,SNR=709 | | | | | | |
| MK31 | | | | ⇑Pg | **Pg** | **05 48 00.6** | **-0.9** |
| | 21nm,0.3s,baz=189,slow=13,SNR=75 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 05 48 44.0 | |
| | 222nm,0.7s,baz=181,slow=27,SNR=6.9 | | | | | | |
| **MK31** | **Makanchi Array** | **3.31** | **2** | *d*/*e*PN | **Pn** | **05 47 53.2** | **+2.6** |
| **MKAR** | **Makanchi Array** | **3.31** | **2** | Pn | **Pn** | **05 47 53.2** | **+2.7** |
| | 4.2nm,0.3s,baz=188,slow=12,SNR=96 | | | | | | |
| MKAR | | | | Pg | **Pg** | **05 47 60.0** | **-1.6** |
| | 27nm,0.3s,baz=180,slow=16,SNR=57 | | | | | | |
| MKAR | | | | Sn | **Sb** | **05 48 34.0** | **-3.8** |
| | 8.7nm,0.3s,baz=182,slow=21,SNR=1.5 | | | | | | |
| MKAR | | | | Lg | Lg | 05 48 42.9 | |
| | 40nm,0.3s,baz=186,slow=30,SNR=16 | | | | | | |
| MKAR | | | | LR | LR | 05 49 30.5 | |
| | comp=Z,57nm,20.6s,baz=86,slow=43 | | | | | | |
| | 4.2nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **3.33** | **358** | ⇓Pn | **Pn** | **05 47 53.4** | **+2.7** |
| | 7.0nm,0.3s | | | | | | |
| MAKZ | | | | ⇓Pg | **Pg** | **05 48 01.8** | **0.0** |
| | 17nm,0.5s | | | | | | |
| MAKZ | | | | ⇑Lg | Lg | 05 48 44.9 | |
| | 87nm,0.8s | | | | | | |
| **MAKZ** | **Makanchi** | **3.33** | **358** | PN | **Pn** | **05 47 53.4** | **+2.7** |
| MAKZ | | | | P | **Pg** | **05 48 01.8** | **0.0** |
| **MDOK** | **Medeo** | **3.71** | **267** | *eP* | **Pg** | **05 48 08.1** | **-1.0** |
| | 22nm,0.4s | | | | | | |
| MDOK | | | | *eS* | **Sg** | **05 48 57.9** | **+0.7** |
| | 96nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.71** | **267** | ⇑Pg | **Pb** | **05 48 07.9** | **+3.8** |
| | 12nm,0.4s | | | | | | |
| MDOK | | | | Pg | **Pg** | **05 48 08.1** | **-1.0** |
| | 22nm,0.4s | | | | | | |
| MDOK | | | | ⇓Lg | Lg | 05 48 57.7 | |
| | 123nm,0.7s | | | | | | |
| MDOK | | | | Lg | Lg | 05 48 57.8 | |
| | 96nm,0.5s | | | | | | |
| **MDOK** | **Medeo** | **3.71** | **267** | PN | **Pb** | **05 48 07.9** | **+3.8** |
| **CHKK** | **Chushkaly** | **3.74** | **277** | *eP* | **Pb** | **05 48 07.0** | **+2.6** |
| | 12nm,0.3s | | | | | | |
| CHKK | | | | *eS* | **Sg** | **05 48 56.2** | **-1.8** |
| | 109nm,0.2s | | | | | | |
| **CHKK** | **Chushkaly** | **3.74** | **277** | Pg | **Pb** | **05 48 07.0** | **+2.6** |
| | 12nm,0.3s | | | | | | |
| CHKK | | | | Lg | Lg | 05 48 56.2 | |
| | 109nm,0.3s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.80** | **265** | *eP* | **Pb** | **05 48 08.5** | **+2.8** |
| | 14nm,0.3s | | | | | | |
| TNSS | | | | *eS* | **Sg** | **05 48 58.9** | **-1.1** |
| | 28nm,0.5s | | | | | | |
| **TNSS** | **Tian-Shan** | **3.80** | **265** | Pg | **Pb** | **05 48 08.5** | **+2.8** |
| | 14nm,0.3s | | | | | | |
| TNSS | | | | Lg | Lg | 05 48 58.9 | |
| | 28nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.95** | **275** | *eP* | **Pb** | **05 48 11.5** | **+3.4** |
| | 17nm,0.4s | | | | | | |
| KTBS | | | | *eS* | **Sg** | **05 49 03.7** | **-1.2** |
| | 155nm,0.5s | | | | | | |
| **KTBS** | **Karatobe** | **3.95** | **275** | Pg | **Pb** | **05 48 11.5** | **+3.4** |
| | 17nm,0.4s | | | | | | |
| KTBS | | | | Lg | Lg | 05 49 03.7 | |
| | 155nm,0.5s | | | | | | |
| **WMQ** | **Urumqi** | **4.07** | **83** | Pn | **Pn** | **05 48 04.0** | **+3.1** |
| WMQ | | | | Sn | **Sn** | **05 48 49.8** | **+1.0** |
| WMQ | | | | smax | smax | | |
| | comp=N,87nm,0.7s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,76nm,0.9s | | | | | | |
| **MTBS** | **Maitube** | **4.16** | **267** | *eP* | **Pb** | **05 48 15.4** | **+3.6** |
| | 20nm,0.4s | | | | | | |
| MTBS | | | | *eS* | **Sg** | **05 49 10.2** | **-1.5** |
| | 103nm,0.3s | | | | | | |
| **MTBS** | **Maitube** | **4.16** | **267** | Pg | **Pb** | **05 48 15.4** | **+3.6** |
| | 20nm,0.4s | | | | | | |
| MTBS | | | | Lg | Lg | 05 49 10.2 | |
| | 103nm,0.3s | | | | | | |
| **ZSN** | **Zaisan** | **4.42** | **25** | *eP* | **Pg** | **05 48 19.2** | **-3.4** |
| | 33nm,0.6s | | | | | | |
| ZSN | | | | *eS* | **Sg** | **05 49 16.9** | **-2.9** |
| | 113nm,0.7s | | | | | | |
| **ZSN** | **Zaisan** | **4.42** | **25** | Pg | **Pg** | **05 48 19.9** | **-2.7** |
| | 33nm,0.6s | | | | | | |
| ZSN | | | | Lg | Lg | 05 49 18.1 | |
| | 113nm,0.6s | | | | | | |
| **KST** | **Kastek** | **4.51** | **267** | *eP* | **Pg** | **05 48 22.8** | **-1.7** |
| | 14nm,0.7s | | | | | | |
| KST | | | | *eS* | **Sg** | **05 49 23.0** | **+0.1** |
| | 98nm,0.6s | | | | | | |
| **KST** | **Kastek** | **4.51** | **267** | Pg | **Pg** | **05 48 22.8** | **-1.7** |
| | 14nm,0.7s | | | | | | |
| KST | | | | Lg | Lg | 05 49 23.0 | |
| | 98nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.63** | **269** | *eP* | **Pb** | **05 48 22.8** | **+3.0** |
| | 17nm,0.5s | | | | | | |
| DGS | | | | *eS* | **Sg** | **05 49 23.0** | **-3.6** |
| | 139nm,0.6s | | | | | | |
| **DGS** | **Degeres** | **4.63** | **269** | Pg | **Pb** | **05 48 22.8** | **+3.0** |
| | 17nm,0.5s | | | | | | |
| DGS | | | | Lg | Lg | 05 49 23.0 | |
| | 139nm,0.6s | | | | | | |
| **KRBS** | **Karabastau** | **4.68** | **275** | *eP* | **Pb** | **05 48 25.0** | **+4.4** |
| | 8.6nm,0.3s | | | | | | |
| KRBS | | | | *eS* | **Sg** | **05 49 26.8** | **-1.6** |
| | 40nm,0.5s | | | | | | |
| **KRBS** | **Karabastau** | **4.68** | **275** | Pg | **Pb** | **05 48 25.0** | **+4.4** |
| | 8.6nm,0.5s | | | | | | |
| KRBS | | | | Lg | Lg | 05 49 26.8 | |
| | 41nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.80** | **266** | ⇓Pn | **Pn** | **05 48 15.3** | **+4.2** |
| | 10nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 05 49 30.2 | |
| | 41nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.80** | **266** | PN | **Pn** | **05 48 15.0** | **+4.0** |
| **CHMS** | **Chumysh** | **5.40** | **267** | ⇑Pg | **Pg** | **05 48 38.5** | **-2.9** |
| | 8.4nm,0.7s | | | | | | |
| CHMS | | | | ⇑Lg | Lg | 05 49 48.1 | |
| | 40nm,0.7s | | | | | | |
| **CHMS** | **Chumysh** | **5.40** | **267** | PN | **Pg** | **05 48 38.5** | **-2.9** |
| **AAK** | **Ala-Archa** | **5.64** | **264** | Pn | **Pn** | **05 48 23.7** | **+1.1** |
| | 0.7nm,0.3s,baz=124,slow=4.5,SNR=2.7 | | | | | | |
| AAK | | | | Pg | **Pb** | **05 48 39.8** | **+2.7** |
| | 0.7nm,0.3s,baz=17,slow=12,SNR=3.7 | | | | | | |
| AAK | | | | Lg | Lg | 05 49 54.7 | |
| | 2.8nm,0.3s,baz=12,slow=19,SNR=3.8 | | | | | | |
| | 1.2nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **5.64** | **264** | *i* PN | **Pn** | **05 48 25.8** | **+3.1** |
| **BTLS** | **Baital** | **6.00** | **288** | *eP* | Pb | 05 48 48.0 | +5.0 |
| | 4.6nm,0.3s | | | | | | |
| BTLS | | | | *eS* | **Sg** | **05 50 06.4** | **-4.2** |
| | 5.8nm,0.9s | | | | | | |
| **BTLS** | **Baital** | **6.00** | **288** | Pg | Pb | 05 48 48.0 | +5.0 |
| | 4.6nm,0.3s | | | | | | |
| BTLS | | | | Lg | Lg | 05 50 06.4 | |
| | 5.8nm,0.9s | | | | | | |
| **MRKS** | **Merke** | **6.55** | **267** | *eP* | Pb | 05 48 58.1 | +5.7 |
| | 1.9nm,0.4s | | | | | | |
| MRKS | | | | *eS* | **Sg** | **05 50 23.6** | **-4.6** |
| | 17nm,0.6s | | | | | | |
| **MRKS** | **Merke** | **6.55** | **267** | Pg | Pb | 05 48 58.1 | +5.7 |
| | 1.9nm,0.4s | | | | | | |
| MRKS | | | | Lg | Lg | 05 50 23.6 | |
| | 17nm,0.6s | | | | | | |
| **SEM** | **Semipalatinsk** | **7.04** | **350** | *eP* | **Pg** | **05 49 08.9** | **-4.0** |
| | 5.2nm,0.2s | | | | | | |
| SEM | | | | *eS* | **Sg** | **05 50 41.9** | **-2.2** |
| | 31nm,0.4s | | | | | | |
| **SEM** | **Semipalatinsk** | **7.04** | **350** | Pg | Pg | 05 49 06.6 | -6.3 |
| | 8.2nm,0.2s | | | | | | |
| SEM | | | | Lg | Lg | 05 50 38.0 | |
| | 16nm,0.3s | | | | | | |
| **DGZ** | **Jazzator, Alta** | **7.22** | **29** | *d*/*e*PN | **Pn** | **05 48 46.0** | **+1.8** |
| **KURBB** | **Kurchatov Arra** | **7.55** | **342** | Pn | **Pn** | **05 48 49.7** | **+1.2** |
| | 1.0nm,0.3s,baz=162,slow=12,SNR=25 | | | | | | |
| KURBB | | | | Sn | **Sn** | **05 50 14.7** | **+0.2** |
| | 0.5nm,0.3s,baz=167,slow=20,SNR=8.5 | | | | | | |
| KURBB | | | | Lg | Lg | 05 50 59.5 | |
| | 1.2nm,0.3s,baz=182,slow=32,SNR=7.5 | | | | | | |
| | 10nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.55** | **342** | ⇓Pn | **Pn** | **05 48 49.8** | **+1.2** |
| | 12nm,0.5s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **05 50 14.2** | **-0.3** |
| | 28nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 05 50 55.8 | |
| | 116nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.55** | **342** | P | **Pn** | **05 48 49.8** | **+1.2** |
| KURBB | | | | S | **Sn** | **05 50 14.2** | **-0.3** |
| **KURK** | **Kurchatov** | **7.62** | **343** | ⇑Pn | **Pn** | **05 48 50.0** | **+0.5** |
| | 6.5nm,0.4s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **05 50 16.4** | **+0.2** |
| | 34nm,0.7s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 05 50 55.8 | |
| | 74nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **7.62** | **343** | *d*/*i*P | **Pn** | **05 48 50.8** | **+1.3** |
| **KK31** | **Karatay Array** | **8.47** | **271** | ⇓Pg | Pb | 05 49 33.6 | +8.5 |
| | 0.7nm,0.3s,baz=92,slow=17,SNR=4.5 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 05 51 27.8 | |
| | 4.2nm,0.5s,baz=74,slow=28,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **10.62** | **9** | Pn | **Pn** | **05 49 30.6** | **-0.1** |
| | 0.6nm,0.3s,baz=186,slow=13,SNR=6.9 | | | | | | |
| ZALV | | | | Lg | Lg | 05 52 33.9 | |
| | 0.3nm,0.3s,baz=183,slow=25,SNR=6.2 | | | | | | |
| | 1.3nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **10.62** | **9** | *eP* | **Pn** | **05 49 31.3** | **+0.6** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **12.32** | **325** | Pn | **Pn** | **05 49 54.5** | **+0.6** |
| | baz=141,slow=9.3,SNR=1.4 | | | | | | |
| BVAR | | | | Lg | Lg | 05 53 29.5 | |
| | comp=Z,0.1nm,0.3s,baz=118,slow=25,SNR=5.0 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **BRVK** | **Borovoye** | **12.39** | **325** | ⇑*i*P | **Pn** | **05 49 56.4** | **+1.5** |
| **SONM** | **Songino Array** | **17.50** | **67** | P | **Pn** | **05 50 57.2** | **-5.5** |
| | comp=Z,0.3nm,0.5s,baz=270,slow=12,SNR=1.7 | | | | | | |
| **SONM** | **Songino Array** | **17.50** | **67** | *eP* | **P** | **05 51 03.7** | **-0.2** |
| **AKTO** | **Aktyubinsk** | **17.81** | **301** | P | **P** | **05 51 07.3** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=102,slow=8.7,SNR=1.8 | | | | | | |
| | comp=Z,0.7nm,0.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **17.94** | **67** | ⇑*i*P | **P** | **05 51 10.0** | **+1.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **ARU** | **Arti** | **19.81** | **319** | P | **Pn** | **05 51 31.7** | **+1.1** |
| ARU | | | | S | **Sn** | **05 55 13.6** | **+0.4** |
| **TNCH** | **TengChong** | **22.79** | **139** | P | **P** | **05 52 05.5** | **+3.9** |
| TNCH | | | | S | **S** | **05 56 02.3** | **-8.9** |
| TNCH | | | | SS | **SnSn** | **05 56 49.5** | **+8.2** |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| TNCH | | | | pmax | pmax | | |
| | comp=Z,67nm,4.6s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=N,150nm,4.1s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=E,110nm,5.4s | | | | | | |
| TNCH | | | | LR | LR | | |
| | comp=Z,75nm,5.3s | | | | | | |
| **BELG** | **Belogornoye** | **24.56** | **303** | *eP* | **P** | **05 52 22.8** | **+4.3** |
| BELG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **GNI** | **Garni** | **27.90** | **276** | *eP* | **P** | **05 52 51.9** | **+3.0** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **28.22** | **284** | *eP* | **P** | **05 52 54.1** | **+2.6** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **KLR** | **Kul'dur** | **34.23** | **63** | *eP* | **P** | **05 53 47.8** | **+3.4** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.7s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **35.53** | **71** | *eP* | **P** | **05 53 57.3** | **+1.6** |
| **BRTR** | **Keskin Array B** | **36.04** | **281** | P | **P** | **05 53 56.9** | **-3.3** |
| | comp=Z,0.3nm,0.3s,baz=93,slow=6.1,SNR=1.5 | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **AKASG** | **Malin Array Be** | **36.05** | **300** | P | **P** | **05 54 00.4** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=70,slow=8.7,SNR=1.3 | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **37.18** | **319** | P | **P** | **05 54 07.4** | **-2.1** |
| | comp=Z,1.3nm,0.9s,baz=46,slow=12,SNR=1.7 | | | | | | |
| | comp=Z,1.3nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.48** | **332** | P | **P** | **05 54 20.0** | **-0.5** |
| | comp=Z,4.3nm,1.1s,baz=90,slow=8.1,SNR=1.6 | | | | | | |
| | comp=Z,4.3nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **44.36** | **319** | P | **P** | **05 55 05.9** | **-3.0** |
| | comp=Z,0.1nm,0.4s,baz=80,slow=8.1,SNR=1.3 | | | | | | |
| | comp=Z,0.1nm,0.4s | | | | | | |
| **ESDC** | **Sonseca Array** | **61.68** | **299** | P | **P** | **05 57 14.4** | **-2.5** |
| | comp=Z,0.2nm,0.4s,baz=44,slow=8.0,SNR=1.2 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.16** | **273** | P | **P** | **05 58 34.6** | **-1.1** |
| | comp=Z,0.4nm,0.5s,baz=28,slow=4.9,SNR=4.9 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **82.00** | **133** | P | P | 05 59 12.8 | -6.2 |
| | comp=Z,0.3nm,0.8s,baz=330,slow=3.5,SNR=1.9 | | | | | | |
| | comp=Z,0.3nm,0.8s | | | | | | |

*IDC* ***31*** *05:47:51.7±7.7, 9°.87N×125°.84E, h0km, mb3.8/3, mbtmp3.8/3, MS3.1/4, Error ellipse: s-maj=269.9km s-min=30.7km az=48.0*

**ISC 31 05:47:51.4±2.2, 10°28N±0°.07×126°27E±0°.07, h11km±11km, n23, σ1s29/23, mb3.6/3, 8C-2D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSLP** | **Maasin** | **1.39** | **264** | ⇑*eP* | **Pg** | **05 48 17.9** | **-0.4** |
| MSLP | | | | *i* S | **Sn** | **05 48 35.1** | **-0.2** |
| **TASP** | **Talacogon, Agu** | **1.88** | **194** | ⇑*eP* | **Pg** | **05 48 26.9** | **-0.5** |
| TASP | | | | *i* S | **Sg** | **05 48 52.5** | **+0.6** |
| **TABP** | **Talibon, Bohol** | **1.91** | **264** | ⇑*iP* | **Pb** | **05 48 25.5** | **-0.9** |
| TABP | | | | *i* S | **Sn** | **05 48 48.0** | **-0.1** |
| **GHBP** | **Garcia Hernand** | **2.02** | **251** | ⇑*iP* | **Pb** | **05 48 27.8** | **-0.5** |
| GHBP | | | | *i* S | **Sn** | **05 48 48.9** | **-2.0** |
| **BIPH** | **Bislig** | **2.09** | **177** | ⇓*iP* | **Pn** | **05 48 27.8** | **+1.3** |
| BIPH | | | | *i* S | **Sb** | **05 48 54.9** | **-0.5** |
| **LLP** | **Lapu-Lapu** | **2.26** | **271** | ⇑*eP* | **Pb** | **05 48 30.9** | **-1.5** |
| LLP | | | | *eS* | **Sb** | **05 49 00.7** | **+0.2** |
| **CDOP** | **Cateel, Davao** | **2.49** | **176** | ⇑*eP* | **Pb** | **05 48 36.2** | **0.0** |
| CDOP | | | | *eS* | **Sb** | **05 49 07.5** | **+0.6** |
| **BUKP** | **Musuan** | **2.67** | **207** | ⇓*iP* | **Pb** | **05 48 38.3** | **-1.1** |
| BUKP | | | | *i* S | **Sb** | **05 49 12.2** | **0

*SJA **31** 05:57:32.1±0.7,29.°27S×71.°39W,h43km±9km,ML3.3, MW3.5*

**ISC 31 05:57:33.3±5.4,29°24S±0.°03×71°44W±0.°05,h39km±12km, n39,σ1°55/71,6C-1D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LCO** | **Las Campanas** | **0.68** | **71** | *eP* | **Pn** | **05 57 46.3** | **-0.4** |
| LCO | | | | *eS* | **Sn** | **05 57 56.0** | **-0.3** |
| **LCO** | **Las Campanas** | **0.68** | **71** | *iP* | **Pn** | **05 57 46.2** | **-0.6** |
| LCO | | | | *iS* | **Sn** | **05 57 55.7** | **-0.6** |
| **CO05** | **La Serena** | **0.70** | **166** | ⇑*iP* | **Pn** | **05 57 46.7** | **0.0** |
| CO05 | | | | *iS* | **Sn** | **05 57 56.1** | **-0.3** |
| CO05 | | | | IAML | | 05 57 58.9 | |
| | comp=E,2μm,0.7s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.07** | **17** | *eP* | **Pn** | **05 57 52.2** | **+0.4** |
| AC04 | | | | *eS* | **Sn** | **05 58 07.0** | **+1.4** |
| AC04 | | | | IAML | | 05 58 09.4 | |
| | comp=Z,922nm,0.3s | | | | | | |
| **AC04** | **Llanos de Chal** | **1.07** | **17** | ⇑*iP* | **Pn** | **05 57 52.4** | **+0.5** |
| AC04 | | | | *iS* | **Sn** | **05 58 06.2** | **+0.6** |
| AC04 | | | | IAML | | 05 58 09.2 | |
| | comp=N,3μm,0.2s | | | | | | |
| **GO04** | **Tololo Observa** | **1.09** | **149** | *eP* | **Pn** | **05 57 51.8** | **-0.5** |
| GO04 | | | | *eS* | **Sn** | **05 58 05.5** | **-0.6** |
| **GO04** | **Tololo Observa** | **1.09** | **149** | *iP* | **Pn** | **05 57 51.7** | **-0.5** |
| GO04 | | | | *iS* | **Sn** | **05 58 05.4** | **-0.8** |
| **AC05** | **El Transito** | **1.09** | **69** | *eP* | **Pn** | **05 57 51.5** | **-0.8** |
| AC05 | | | | *eS* | **Sn** | **05 58 06.8** | **+0.6** |
| AC05 | | | | IAML | | 05 58 06.8 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **AC05** | **El Transito** | **1.09** | **69** | ⇑*iP* | **Pn** | **05 57 52.2** | **0.0** |
| AC05 | | | | *iS* | **Sn** | **05 58 05.9** | **-0.3** |
| AC05 | | | | IAML | | 05 58 06.5 | |
| | comp=N,3μm,0.3s | | | | | | |
| **CO01** | **Juntas del Tor** | **1.38** | **123** | *eP* | **Pn** | **05 57 56.2** | **-0.1** |
| CO01 | | | | *eS* | **Sn** | **05 58 13.5** | **0.0** |
| CO01 | | | | IAML | | 05 58 16.1 | |
| | comp=Z,425nm,0.4s | | | | | | |
| **CO01** | **Juntas del Tor** | **1.38** | **123** | ⇓*iP* | **Pn** | **05 57 56.3** | **0.0** |
| CO01 | | | | *iS* | **Sn** | **05 58 12.8** | **-0.7** |
| CO01 | | | | IAML | | 05 58 14.3 | |
| | comp=N,1μm,0.4s | | | | | | |
| **CO06** | **Fray Jorge** | **1.44** | **187** | ⇑*iP* | **Pn** | **05 57 56.5** | **-0.4** |
| CO06 | | | | *iS* | **Sn** | **05 58 14.0** | **-0.6** |
| **CO03** | **El Pedregal** | **1.72** | **158** | *eP* | **Pn** | **05 58 00.8** | **-0.1** |
| CO03 | | | | *eS* | **Sn** | **05 58 21.7** | **0.0** |
| CO03 | | | | IAML | | 05 58 22.6 | |
| | comp=Z,270nm,0.4s | | | | | | |
| **CO03** | **El Pedregal** | **1.72** | **158** | *iP* | **Pn** | **05 58 00.3** | **-0.6** |
| CO03 | | | | *iS* | **Sn** | **05 58 21.2** | **-0.5** |
| CO03 | | | | IAML | | 05 58 22.3 | |
| | comp=E,558nm,0.4s | | | | | | |
| **AROD** | **Rodeo** | **1.94** | **119** | *eP* | **Pn** | **05 58 05.3** | **+1.2** |
| AROD | | | | *eS* | **Sn** | **05 58 24.7** | **-2.8** |
| **GO03** | **Copiap** | **1.95** | **33** | *eP* | **Pn** | **05 58 04.0** | **+0.1** |
| GO03 | | | | *eS* | **Sn** | **05 58 29.0** | **+1.8** |
| **GO03** | **Copiap** | **1.95** | **33** | *iP* | **Pn** | **05 58 03.9** | **+0.1** |
| GO03 | | | | *iS* | **Sn** | **05 58 26.8** | **-0.4** |
| GO03 | | | | IAML | | 05 58 32.4 | |
| | comp=N,367nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **2.00** | **169** | *eP* | **Pn** | **05 58 04.3** | **-0.3** |
| CO02 | | | | *eS* | **Sn** | **05 58 28.7** | **+0.2** |
| CO02 | | | | IAML | | 05 58 33.2 | |
| | comp=Z,193nm,0.3s | | | | | | |
| **CO02** | **Combarbal** | **2.00** | **169** | ⇑*iP* | **Pn** | **05 58 04.4** | **-0.3** |
| CO02 | | | | *iS* | **Sn** | **05 58 27.7** | **-0.8** |
| CO02 | | | | IAML | | 05 58 32.9 | |
| | comp=E,756nm,0.3s | | | | | | |
| **AC06** | **Mina Casimiro** | **2.10** | **27** | *iP* | **Pn** | **05 58 06.3** | **+0.3** |
| AC06 | | | | *iS* | **Sn** | **05 58 31.3** | **+0.4** |
| **ACDV** | **Cuesta del Vie** | **2.22** | **115** | *eP* | Pn | 05 58 02.7 | -5.1 |
| ACDV | | | | *eS* | **Sn** | **05 58 36.4** | **+2.3** |
| ACDV | | | | IAML | | 05 58 41.3 | |
| | comp=Z,173nm,0.5s | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.46** | **124** | *eP* | **Pn** | **05 58 13.0** | **+1.8** |
| ACCO | | | | *eS* | **Sn** | **05 58 41.0** | **+0.8** |
| ACCO | | | | IAML | | 05 58 46.4 | |
| | comp=Z,120nm,0.4s | | | | | | |
| **DOCA** | **Reserva Natura** | **2.66** | **131** | *eP* | **Pn** | **05 58 16.4** | **+2.5** |
| DOCA | | | | *eS* | **Sn** | **05 58 44.0** | **-1.1** |
| DOCA | | | | IAML | | 05 58 51.5 | |
| | comp=Z,353nm,0.9s | | | | | | |
| **CO04** | **Los Peladeros** | **2.83** | **172** | ⇑*iP* | **Pn** | **05 58 16.3** | **+0.1** |
| CO04 | | | | *iS* | **Sn** | **05 58 48.8** | **-0.4** |
| CO04 | | | | IAML | | 05 58 52.1 | |
| | comp=N,180nm,0.3s | | | | | | |
| **VCA** | **Vinchina** | **2.87** | **81** | *eP* | **Pn** | **05 58 15.0** | **-1.7** |
| VCA | | | | IAML | | 05 59 04.0 | |
| | comp=Z,107nm,0.3s | | | | | | |
| **RTLS** | **Leoncito** | **3.15** | **145** | *eP* | **Pn** | **05 58 23.3** | **+2.6** |
| RTLS | | | | *eS* | **Sn** | **05 58 52.7** | **-4.5** |
| RTLS | | | | IAML | | 05 59 11.7 | |
| | comp=Z,134nm,0.9s | | | | | | |
| **AC01** | **Pan de Azucar** | **3.16** | **14** | *eP* | **Pn** | **05 58 19.3** | **-1.3** |
| AC01 | | | | IAML | | 05 59 16.4 | |
| | comp=Z,89nm,0.3s | | | | | | |
| **RTLL** | **Cerro Villicun** | **3.30** | **130** | *eP* | Pn | 05 58 36.4 | +14 |
| **ZON** | **Zonda** | **3.31** | **135** | *eP* | **Pn** | **05 58 24.1** | **+1.4** |
| ZON | | | | *eS* | Sn | 05 59 09.2 | +8.4 |
| ZON | | | | IAML | | 05 59 24.9 | |
| | comp=Z,38nm,0.9s | | | | | | |
| **VA03** | **San Esteban** | **3.60** | **168** | *eP* | **Pn** | **05 58 27.3** | **+0.7** |
| VA03 | | | | *eS* | **Sn** | **05 59 14.4** | **+6.5** |
| VA03 | | | | IAML | | 05 59 28.4 | |
| | comp=Z,57nm,0.7s | | | | | | |
| **AVFE** | **Valle Fertil** | **3.73** | **113** | *eP* | **Pn** | **05 58 29.5** | **+1.0** |
| AVFE | | | | *eS* | **Sn** | **05 59 12.8** | **+1.5** |
| AVFE | | | | IAML | | 05 59 15.8 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **3.92** | **94** | *eP* | **Pn** | **05 58 32.3** | **+1.2** |
| ACLC | | | | IAML | | 05 59 39.7 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **MT02** | **Curacav** | **4.02** | **176** | *eP* | **Pn** | **05 58 31.4** | **-0.9** |
| MT02 | | | | *eS* | **Sn** | **05 59 17.3** | **-0.9** |
| MT02 | | | | IAML | | 05 59 41.0 | |
| | comp=Z,28nm,2.0s | | | | | | |
| **ASAL** | **Salagasta** | **4.02** | **147** | *eP* | **Pn** | **05 58 35.1** | **+2.7** |
| ASAL | | | | *eS* | **Sn** | **05 59 17.9** | **-0.4** |
| ASAL | | | | IAML | | 05 59 51.3 | |
| | comp=Z,30nm,0.6s | | | | | | |
| **MT04** | **Ro Olivares** | **4.30** | **165** | *eP* | **Pn** | **05 58 38.6** | **+2.2** |
| MT04 | | | | *eS* | **Sn** | **05 59 28.5** | **+3.0** |
| MT04 | | | | IAML | | 05 59 52.5 | |
| | comp=Z,23nm,0.5s | | | | | | |
| **MT03** | **Universidad Ad** | **4.32** | **170** | *eP* | **Pn** | **05 58 37.6** | **+1.0** |
| MT03 | | | | *eS* | **Sn** | **05 59 26.0** | **+0.3** |
| MT03 | | | | IAML | | 05 59 37.9 | |
| | comp=Z,40nm,0.4s | | | | | | |
| **MT01** | **Popeta** | **4.62** | **178** | *eP* | **Pn** | **05 58 39.6** | **-0.9** |
| MT01 | | | | *eS* | **Sn** | **05 59 32.0** | **-0.9** |
| MT01 | | | | IAML | | 05 59 47.1 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **CYA** | **Choya** | **5.01** | **82** | *eP* | **Pn** | **05 58 42.3** | **-3.6** |
| CYA | | | | *eP* | | 05 58 47.1 | |
| CYA | | | | *eS* | **Sn** | **05 59 42.3** | **-0.3** |
| CYA | | | | IAML | | 05 59 49.3 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **BO01** | **Tunca** | **5.15** | **177** | *eP* | **Pn** | **05 58 47.3** | **-0.5** |
| BO01 | | | | *eS* | **Sn** | **05 59 44.5** | **-1.5** |

**IDC 31 06:01:23.6±2.6,54°14N×86°37E,h0km,mbtmp3.1/2, ML2.8/2,Error ellipse: s-maj=19.6km s-min=12.9km az=58.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.94** | **259** | I | I | 06 07 30.0 | |
| | baz=80,slow=318,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.94** | **259** | Pg | Pg | 06 01 40.6 | -0.9 |
| | 0.9nm,0.3s,baz=74,slow=17,SNR=4.3 | | | | | | |
| ZALV | | | | Lg | Lg | 06 01 55.4 | |
| | 1.6nm,0.3s,baz=77,slow=30,SNR=8.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.95** | **237** | Pn | Pn | 06 02 53.9 | +1.0 |
| | 0.1nm,0.3s,baz=54,slow=13,SNR=4.9 | | | | | | |
| KURBB | | | | Sn | Sn | 06 04 00.5 | -1.2 |
| | baz=46,slow=44 | | | | | | |
| KURBB | | | | Lg | Lg | 06 04 30.9 | |
| | baz=53,slow=29,SNR=1.6 | | | | | | |
| | 1.1nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.80** | **201** | Pn | Pn | 06 03 19.2 | +0.9 |
| | 0.3nm,0.3s,baz=20,slow=14,SNR=6.9 | | | | | | |
| | 0.3nm,0.3s | | | | | | |

*IDC **31** 06:02:24.9±0.8,36.°96N×144.°61E,h0km,mb3.9/9, mbtmp3.9/14,ML3.7/5,MS2.5/3,Error ellipse: s-maj=21.9km s-min=17.5km az=104.0*

*NIED **31** 06:02:30.3,37.°18N×144.°35E,h56km,MW3.8,Moment Tensor Solution. s3 Moment tensor: Scale 10¹⁴Nm; Mrr=4.71; Mθθ=0.79; Mφφ=3.92; Mrθ=1.38; Mθφ=1.28; Mφr=1.72; Fault plane solution: M₀5.05000×10¹⁴ NP1: φs=207.00000°,δ58.00000°,λ-82.00000°. NP2:φs=13.00000°, δ33.00000°,λ-102.00000°.*

*NEIC **31** 06:02:30.9±2.7,36.°98N±0.°09×144.°5E±0.°1,h35km±7km, mb4.5/14 Error ellipse: s-maj=16.9km s-min=11.8km az=109.0*

*JMA **31** 06:02:30.3±0.4,37°N±1.°×14.°4E±.°,h56km,MV4.2/25,FAR E OFF NORTH HONSHU*

**ISC 31 06:02:28.9±0.7,37.°07N±0.°06×144.°48E±0.°07,h26km,n61, σ1°73/62,mb4.3/17,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKH** | **Ishinomakikobu** | **2.70** | **298** | P | **Pn** | **06 03 10.3** | **-0.3** |
| **JIO** | **Ouri** | **2.84** | **300** | P | **Pn** | **06 03 12.4** | **-0.3** |
| JIO | | | | *eS* | **Sn** | **06 03 44.6** | **-1.5** |
| **JFK** | **Kawauchi** | **2.90** | **277** | P | **Pn** | **06 03 13.2** | **-0.2** |
| **JKMT** | **Kesennumamotoy** | **2.95** | **307** | P | **Pn** | **06 03 13.5** | **-0.6** |
| JKMT | | | | *eS* | **Sn** | **06 03 46.2** | **-2.4** |
| **JMM** | **Marumori** | **3.04** | **286** | P | **Pn** | **06 03 15.3** | **-0.1** |
| **JMM** | **Marumori** | **3.04** | **286** | | **Pn** | **06 03 14.8** | **-0.6** |
| **JMK** | **Ichinoseki** | **3.19** | **307** | P | **Pn** | **06 03 17.1** | **-0.3** |
| JMK | | | | *eS* | **Sn** | **06 03 52.5** | **-2.1** |
| **JOTO** | **OTAMA OYAMA** | **3.34** | **280** | P | **Pn** | **06 03 20.6** | **+1.0** |
| **BSO1** | **Boso 1** | **3.73** | **231** | *eP* | **Pn** | **06 03 23.9** | **-0.4** |
| BSO1 | | | | *eS* | **Sn** | **06 04 07.3** | **+0.2** |
| **JTM** | **Tenmabayashi** | **4.57** | **325** | P | **Pn** | **06 03 35.8** | **-0.6** |
| **JTM** | **Tenmabayashi** | **4.57** | **325** | Pn | **Pn** | **06 03 36.2** | **-0.1** |
| **JRY** | **Ryogami san** | **4.61** | **259** | P | **Pn** | **06 03 37.0** | **0.0** |
| JRY | | | | *eS* | **Sn** | **06 04 27.7** | **-2.0** |
| **JOD2** | **Odawara 2** | **4.72** | **249** | *eP* | **Pn** | **06 03 39.4** | **+0.9** |
| JOD2 | | | | *eS* | **Sn** | **06 04 30.0** | **-2.4** |
| **JSD** | **Sado** | **5.04** | **283** | P | **Pn** | **06 03 43.7** | **+0.9** |
| **JSD** | **Sado** | **5.04** | **283** | Pn | **Pn** | **06 03 42.6** | **-0.2** |
| **ERM** | **Erimo** | **5.05** | **349** | Pn | **Pn** | **06 03 40.1** | **-2.8** |
| **MJAR** | **Matsushiro Arr** | **5.06** | **266** | Pn | **Pn** | **06 03 44.2** | **+1.0** |
| | 1.0nm,0.3s,baz=76,slow=10,SNR=21 | | | | | | |
| MJAR | | | | | **Sn** | **06 04 39.6** | **-1.2** |
| | 0.6nm,0.3s,baz=78,slow=28,SNR=6.4 | | | | | | |
| MJAR | | | | LR | LR | 06 05 22.5 | |
| | comp=Z,33nm,20.3s,baz=82,slow=34 | | | | | | |
| | 4.5nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **5.06** | **266** | P | **Pn** | **06 03 44.7** | **+1.5** |
| **MAJO** | **Matsushiro** | **5.06** | **266** | | **Pn** | **06 03 44.7** | **+1.5** |
| **MJB9** | **Matsu-Tunnel** | **5.07** | **266** | Pn | **Pn** | **06 03 44.6** | **+1.4** |
| **JHJ2** | **Mitsune** | **5.50** | **225** | P | **Pn** | **06 03 49.6** | **+0.5** |
| **JHJ** | **Hachijo jima 2** | **5.51** | **226** | Pn | **Pn** | **06 03 48.1** | **-1.1** |
| | 18nm,0.3s,baz=90,slow=20,SNR=7.7 | | | | | | |
| JHJ | | | | | **Sn** | **06 04 46.9** | **-4.9** |
| | 84nm,0.3s,baz=67,slow=23,SNR=11 | | | | | | |
| | 42nm,0.3s | | | | | | |
| **JCH** | **Churui** | **5.61** | **352** | P | **Pn** | **06 03 48.9** | **-1.7** |
| **JGF** | **Kuroka** | **5.94** | **258** | P | **Pn** | **06 03 56.5** | **+1.3** |
| **JGF** | **Kuroka** | **5.94** | **258** | | **Pn** | **06 03 57.3** | **+2.1** |
| **JTKR** | **Abashiri--Toko** | **6.91** | **357** | *eP* | **Pn** | **06 04 05.8** | **-2.6** |
| **ASAJ** | **Asahikawa** | **7.19** | **349** | Pn | **Pn** | **06 04 11.0** | **-1.3** |
| | 2.0nm,0.3s,baz=184,slow=8.6,SNR=4.0 | | | | | | |
| ASAJ | | | | | **Sn** | **06 05 26.8** | **-6.2** |
| | 1.1nm,0.3s,baz=107,slow=21,SNR=4.3 | | | | | | |
| | 4.1nm,0.3s | | | | | | |
| **JCJ** | **Chichijima** | **10.13** | **192** | Pn | Pn | 06 04 45.6 | -7.1 |
| | 1.3nm,0.3s,baz=306,slow=23,SNR=1.4 | | | | | | |
| JCJ | | | | | Sn | 06 06 28.0 | -17 |
| | 3.1nm,0.3s,baz=98,slow=23,SNR=1.2 | | | | | | |
| **JNU** | **Nakatsue** | **11.82** | **255** | Pn | **Pn** | **06 05 12.4** | **-3.4** |
| | 0.1nm,0.3s,baz=116,slow=16,SNR=1.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **11.86** | **311** | Pn | **Pn** | **06 05 15.3** | **-1.0** |
| | 0.3nm,0.3s,baz=111,slow=12,SNR=5.4 | | | | | | |
| | 1.6nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **13.20** | **277** | Pn | **Pn** | **06 05 37.3** | **+2.6** |
| | 0.2nm,0.3s,baz=90,slow=14,SNR=7.3 | | | | | | |
| KSRS | | | | LR | LR | 06 11 00.2 | |
| | comp=Z,26nm,18.0s,baz=80,slow=39 | | | | | | |
| | 1.9nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **15.27** | **327** | LR | LR | 06 11 39.6 | |
| | comp=Z,26nm,18.2s,baz=305,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **26.11** | **125** | T | T | 06 35 00.8 | |
| | baz=317,slow=75,SNR=281 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.11** | **125** | T | T | 06 35 01.5 | |
| | baz=317,slow=75,SNR=89 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.12** | **125** | T | T | 06 35 02.3 | |
| | baz=317,slow=75,SNR=136 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.87** | **127** | T | T | 06 35 47.6 | |
| | baz=319,slow=76,SNR=30 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.87** | **127** | T | T | 06 35 54.1 | |
| | baz=319,slow=76,SNR=22 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.89** | **127** | T | T | 06 35 48.0 | |
| | baz=319,slow=76,SNR=26 | | | | | | |
| **C19K** | **Lookout Ridge** | **43.87** | **25** | P | **P** | **06 10 34.0** | **+1.3** |
| C19K | | | | IAmb | IAmb | 06 10 55.3 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **O18K** | **Koktuh Hills** | **44.10** | **39** | P | **P** | **06 10 36.7** | **+2.0** |
| **E19K** | **Redstone River** | **44.28** | **28** | P | **P** | **06 10 37.1** | **+1.1** |
| **MKAR** | **Makanchi Array** | **46.18** | **303** | P | **P** | **06 10 52.8** | **+1.4** |
| | comp=Z,0.6nm,0.8s,baz=82,slow=10,SNR=2.4 | | | | | | |
| | comp=Z,0.6nm,0.8s | | | | | | |
| **D22K** | **Ayikyak River** | **46.23** | **27** | P | **P** | **06 10 52.3** | **+0.8** |
| D22K | | | | IAmb | IAmb | 06 10 57.3 | |
| | comp=Z,11nm,1.4s | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **46.43** | **28** | P | **P** | **06 10 53.8** | **+0.7** |
| E22K | | | | IAmb | IAmb | 06 11 13.7 | |
| | comp=Z,9.1nm,1.5s | | | | | | |
| **C23K** | **Itkillik River** | **47.11** | **25** | P | **P** | **06 10 58.9** | **+0.6** |
| **KURBB** | **Kurchatov Arra** | **47.91** | **308** | P | **P** | **06 11 05.0** | **+0.2** |
| | comp=Z,0.4nm,0.5s,baz=82,slow=8.2,SNR=4.5 | | | | | | |
| | comp=Z,0.4nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **48.15** | **32** | P | **P** | **06 11 06.5** | **+0.1** |
| | comp=Z,0.9nm,0.9s,baz=255,slow=6.7,SNR=7.9 | | | | | | |
| | comp=Z,0.9nm,0.9s | | | | | | |
| **F26K** | **Sheenjek River** | **49.29** | **29** | P | **P** | **06 11 17.5** | **+2.3** |
| F26K | | | | IAmb | IAmb | 06 11 18.7 | |
| | comp=Z,9.1nm,1.5s | | | | | | |
| **G29M** | **Pine Creek** | **51.70** | **29** | P | **P** | **06 11 34.5** | **+1.1** |
| G29M | | | | IAmb | IAmb | 06 11 43.3 | |
| | comp=Z,5.2nm,1.2s | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **52.39** | **29** | P | **P** | **06 11 39.6** | **+1.0** |
| G30M | | | | IAmb | IAmb | 06 12 18.9 | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **H31M** | **Peel River** | **53.32** | **31** | P | **P** | **06 11 47.0** | **+1.6** |
| H31M | | | | IAmb | IAmb | 06 11 47.8 | |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **57.32** | **191** | P | **P** | **06 12 13.8** | **-0.8** |
| **WB2** | **Warramunga Arr** | **57.50** | **191** | P | **P** | **06 12 14.3** | **-1.6** |
| WB2 | | | | IAmb | IAmb | 06 12 35.9 | |
| | comp=Z,6.8nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **57.50** | **191** | P | **P** | **06 12 14.9** | **-1.1** |
| | comp=Z,2.2nm,0.5s,baz=8.8,slow=7.1,SNR=58 | | | | | | |
| | comp=Z,2.2nm,0.5s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **57.67** | **201** | P | **P** | **06 12 16.6** | **-0.6** |
| **ABKAR** | **Akbulak array** | **59.78** | **311** | P | **P** | **06 12 33.1** | **+1.5** |
| **SPITS** | **Spitsbergen Ar** | **60.96** | **349** | P | **P** | **06 12 41.0** | **+1.8** |
| | comp=Z,8.3nm,0.8s,baz=320,slow=7.6,SNR=6.7 | | | | | | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **61.23** | **191** | P | **P** | **06 12 40.9** | **-0.8** |
| | comp=Z,1.0nm,0.5s,baz=8.8,slow=7.6,SNR=16 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **72.99** | **55** | P | **P** | **06 13 57.5** | **+0.9** |
| | comp=Z,0.5nm,0.6s,baz=280,slow=4.4,SNR=4.4 | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **75.75** | **324** | P | **P** | **06 14 12.6** | **+0.5** |
| | comp=Z,0.3nm,0.4s,baz=44,slow=6.6,SNR=2.3 | | | | | | |
| | comp=Z,0.3nm,0.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **88.13** | **54** | P | **P** | **06 15 17.2** | **-0.5** |
| | comp=Z,0.3nm,0.7s,baz=321,slow=3.7,SNR=5.5 | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | |

**NEIC 31 06:20:03.9±0.5,37.°34N±0.°02×97.°87W±0.°01,h6km±2km, mb_Lg2.5/50,ML2.9/36,Error ellipse: s-maj=2.7km s-min=1.5km az=199.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.11** | **246** | | Pg | 06 20 06.7 | +0.3 |
| KAN12 | | | | Sg | Sg | 06 20 08.6 | +0.6 |
| KAN12 | | | | IAML | | 06 20 09.0 | |
| | comp=E,8μm,0.3s | | | | | | |
| KAN12 | | | | IAML | | 06 20 09.4 | |
| | comp=N,5μm,0.3s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.14** | **215** | | Pg | 06 20 07.4 | +0.5 |
| KAN08 | | | | Sg | Sg | 06 20 09.7 | +0.9 |
| KAN08 | | | | IAML | | 06 20 09.9 | |
| | comp=E,4μm,0.4s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **109** | IAML | | 06 20 12.5 | |
| | comp=E,3μm,0.2s | | | | | | |
| KS21 | | | | IAML | | 06 20 12.5 | |
| | comp=E,3μm,0.1s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **109** | | Pg | 06 20 08.2 | +0.8 |
| KS21 | | | | Sg | Sg | 06 20 10.8 | +1.1 |
| **KAN01** | **Argonia South** | **0.21** | **155** | | Pg | 06 20 08.6 | +0.5 |
| **KAN05** | **Bluff City Nor** | **0.23** | **181** | Pg | Pg | 06 20 09.2 | +0.7 |
| **KAN09** | **Caldwell North** | **0.29** | **136** | | Pg | 06 20 10.2 | +0.6 |
| KAN09 | | | | Sg | Sg | 06 20 14.4 | +1.0 |
| KAN09 | | | | IAML | | 06 20 19.9 | |
| | comp=N,2μm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.31** | **164** | | Pg | 06 20 10.5 | +0.5 |
| KAN17 | | | | IAML | | 06 20 15.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.39** | **191** | | Pg | 06 20 12.1 | +0.6 |
| KAN14 | | | | IAML | | 06 20 17.9 | |
| | comp=E,966nm,0.3s | | | | | | |
| **KAN13** | **South Haven SW** | **0.46** | **136** | | Pg | 06 20 13.2 | +0.5 |
| KAN13 | | | | IAML | | 06 20 25.3 | |
| | comp=E,974nm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 06 20 28.5 | |
| | comp=N,924nm,0.4s | | | | | | |
| **GC02** | **Grant County #** | **0.49** | **179** | Pg | Pg | 06 20 13.6 | +0.2 |
| **OK032** | **Salt Plains WL** | **0.60** | **207** | Pg | Pg | 06 20 16.0 | +0.4 |
| **BLOK** | **Blackwell** | **0.78** | **138** | | Pg | 06 20 19.1 | +0.2 |
| BLOK | | | | IAML | | 06 20 32.1 | |
| | comp=E,704nm,0.2s | | | | | | |
| BLOK | | | | IAML | | 06 20 32.5 | |
| | comp=N,686nm,0.3s | | | | | | |
| **CROK** | **Carrier** | **0.84** | **186** | Pg | Pb | 06 20 20.6 | -0.4 |
| CROK | | | | IAML | | 06 20 38.0 | |
| | comp=N,392nm,0.4s | | | | | | |
| **NOKA** | **Waynoka** | **1.11** | **231** | Pg | Pg | 06 20 24.8 | -0.4 |
| NOKA | | | | IAML | | 06 20 48.2 | |
| | comp=N,328nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 06 20 48.2 | |
| | comp=E,238nm,0.4s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.17** | **111** | | Pg | 06 20 26.1 | -0.2 |
| **OK051** | **E0350 and S346** | **1.18** | **135** | | Pg | 06 20 26.4 | -0.1 |
| **OK048** | **Pawnee Station** | **1.19** | **141** | | Pg | 06 20 26.6 | -0.1 |
| OK048 | | | | IAML | | 06 20 47.1 | |
| | comp=E,198nm,0.3s | | | | | | |
| OK048 | | | | IAML | | 06 20 47.0 | |
| | comp=E,228nm,0.4s | | | | | | |
| **R32A** | **Long Quarter,** | **1.27** | **329** | | Pn | 06 20 27.7 | -0.5 |
| **QUOK** | **Quay** | **1.50** | **141** | Pg | Pb | 06 20 31.9 | -0.2 |
| **OK029** | **Liberty Lake** | **1.58** | **168** | | Pb | 06 20 33.3 | -0.3 |
| **OK052** | **Battle Ridge R** | **1.60** | **147** | | Pb | 06 20 33.5 | -0.3 |
| **OK031** | **S. Brethren Rd** | **1.62** | **149** | | Pb | 06 20 33.8 | -0.4 |
| **DEOK** | **Depew** | **1.86** | **143** | Pn | Pn | 06 20 37.0 | +0.7 |
| **KSU1** | **Kansas State U** | **2.02** | **29** | IAmb_Lg | | 06 21 07.6 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **TUL3** | **Leonard** | **2.20** | **130** | IAmb_Lg | | 06 21 18.2 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **U38A** | **Gravette** | **2.94** | **107** | IAmb_Lg | | 06 21 43.5 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **X37A** | **Clayton** | **3.42** | **143** | IAmb_Lg | | 06 22 01.6 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **AMTX** | **Amarillo** | **3.94** | **233** | IAmb_Lg | | 06 22 17.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **BGNE** | **Belgrade** | **4.07** | **357** | IAmb_Lg | | 06 22 23.9 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.10** | **295** | IAmb_Lg | | 06 22 20.7 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **4.43** | **215** | IAmb_Lg | | 06 22 29.9 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.46** | **127** | IAmb_Lg | | 06 22 26.3 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.47** | **91** | IAmb_Lg | | 06 22 29.7 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **76** | IAmb_Lg | | 06 22 27.7 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.71** | **149** | IAmb_Lg | | 06 22 43.5 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.84** | **106** | IAmb_Lg | | 06 22 44.8 | |
| | comp=Z,7.5nm,0.7s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.98** | **123** | IAmb_Lg | | 06 22 50.6 | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **N38A** | **Joes South For** | **4.99** | **45** | IAmb_Lg | | 06 22 44.2 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.07** | **63** | IAmb_Lg | | 06 22 52.8 | |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **5.22** | **231** | IAmb_Lg | | 06 23 03.5 | |
| | comp=Z,5.2nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **5.22** | **270** | IAmb_Lg | | 06 22 50.9 | |
| | comp=Z,9.7nm,0.9s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.30** | **80** | IAmb_Lg | | 06 23 03.0 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.42** | **91** | IAmb_Lg | | 06 23 04.1 | |
| | comp=Z,7.3nm,1.0s | | | | | | |
| **FVM** | **French Village** | **5.94** | **82** | IAmb_Lg | | 06 23 16.2 | |
| | comp=Z,6.5nm,0.8s | | | | | | |
| **Q24A** | **Divide** | **5.96** | **288** | IAmb_Lg | | 06 23 26.6 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.98**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **QUBA** | **Quba, Azerbaij** | **1.69** | **354** | Pn | **Pn** | **06 25 16.6** | **+0.7** |
| QUBA | | | | Sn | **Sn** | **06 25 35.7** | **-1.7** |
| **QSAR** | **Qusar** | **1.87** | **349** | Pn | **Pn** | **06 25 17.4** | **-0.9** |
| QSAR | | | | Sn | **Sn** | **06 25 40.6** | **-1.3** |
| **IHRS** | **Heris** | **1.89** | **225** | Pn | **Pb** | **06 25 19.9** | **-1.2** |
| **SEKA** | **Sheki** | **1.93** | **323** | Pn | **Pn** | **06 25 18.6** | **-0.6** |
| SEKA | | | | Sn | **Sn** | **06 25 42.6** | **-0.8** |
| **AKT** | **Akhty** | **1.96** | **337** | *e*Pg | **Pn** | **06 25 20.2** | **+0.6** |
| AKT | | | | *e*Sg | **Sn** | **06 25 43.1** | **-1.0** |
| **KSMR** | **Kasumkent** | **1.98** | **347** | *e*Pg | **Pn** | **06 25 20.4** | **+0.5** |
| KSMR | | | | *e*Sg | **Sn** | **06 25 43.4** | **-1.2** |
| **ISRB** | **Sarab** | **2.03** | **205** | Pn | **Pb** | **06 25 23.2** | **-0.2** |
| **GANJ** | **Ganja** | **2.08** | **298** | Pn | **Pn** | **06 25 20.3** | **-1.0** |
| GANJ | | | | Sn | **Sn** | **06 25 46.4** | **-0.7** |
| **ORD** | **Ordubad** | **2.25** | **251** | Pn | **Pb** | **06 25 25.1** | **-2.0** |
| ORD | | | | Sn | **Sn** | **06 25 51.9** | **+0.6** |
| **DRN** | **Derbent** | **2.37** | **353** | *e*Pg | **Pn** | **06 25 25.0** | **-0.2** |
| DRN | | | | *e*Sg | **Sn** | **06 25 50.6** | **-3.5** |
| **SBZ** | **Shahbuz** | **2.47** | **265** | Pg | **Pg** | **06 25 32.7** | **-1.2** |
| SBZ | | | | Sn | **Sb** | **06 25 59.3** | **-2.1** |
| **ITBZ** | **Tabriz** | **2.48** | **235** | Pn | **Pn** | **06 25 27.8** | **+1.0** |
| **GDB** | **GEDABAY** | **2.51** | **296** | Pn | **Pn** | **06 25 26.6** | **-0.6** |
| GDB | | | | Sn | **Sn** | **06 25 56.6** | **-1.2** |
| **IMRD** | **Marand** | **2.54** | **249** | Pn | **Pn** | **06 25 29.1** | **+1.4** |
| **URKR** | **Urkarakh** | **2.62** | **342** | *e*Pn | **Pn** | **06 25 30.0** | **+1.2** |
| URKR | | | | *e*Sn | **Sn** | **06 25 59.7** | **-0.8** |
| **KMKR** | **Kumukh** | **2.75** | **334** | *e*Pn | **Pn** | **06 25 31.4** | **+0.9** |
| KMKR | | | | *e*Sn | **Sn** | **06 26 02.8** | **-0.9** |
| **QZX** | **Qazax, Azerbai** | **2.91** | **299** | Pg | **Pb** | **06 25 39.7** | **+1.2** |
| QZX | | | | Sg | **Sg** | **06 26 22.6** | **+2.5** |
| **IAZR** | **Azarshahr** | **2.94** | **228** | Pn | **Pn** | **06 25 34.9** | **+1.7** |
| **GNIR** | **Gunib** | **3.02** | **334** | *e*Pn | **Pb** | **06 25 38.6** | **-1.6** |
| GNIR | | | | *e*Sn | **Sn** | **06 26 08.7** | **-1.6** |
| **GNI** | **Garni** | **3.10** | **280** | *e*Pn | **Pb** | **06 25 38.4** | **-3.4** |
| GNI | | | | *e*Sn | **Sn** | **06 26 10.1** | **-2.4** |
| **ARKR** | **Arakani** | **3.20** | **336** | *e*Pn | **Pn** | **06 25 37.1** | **+0.4** |
| ARKR | | | | *e*Sn | **Sn** | **06 26 11.7** | **-3.1** |
| **UNCR** | **Uncukul** | **3.37** | **335** | *e*Pn | **Pg** | **06 25 50.3** | **-0.8** |
| UNCR | | | | *e*Sn | **Sn** | **06 26 16.8** | **-2.0** |
| **KRNR** | **Karanay** | **3.44** | **337** | *e*Pn | **Pn** | **06 25 42.9** | **+2.9** |
| KRNR | | | | *e*Sn | **Sn** | **06 26 17.9** | **-2.7** |
| **KLST** | **Kelardasht - M** | **3.65** | **149** | Pn | **Pn** | **06 25 41.3** | **-1.7** |

**IDC 31 06:26:21.0±3.5, 54°53N×86°21E, h0km, mbtmp2.9/2, ML2.4/2, Error ellipse: s-maj=25.6km s-min=14.6km az=47.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.00** | **235** | I | I | 06 33 30.0 | |
| | baz=53,slow=317,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.00** | **235** | Pg | Pg | 06 26 38.7 | -1.5 |
| | 0.6nm,0.3s,baz=52,slow=16,SNR=4.0 | | | | | | |
| ZALV | | | | Lg | Lg | 06 26 54.5 | |
| | 4.0nm,0.3s,baz=56,slow=27,SNR=13 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.10** | **233** | Pn | Pn | 06 27 53.8 | +1.5 |
| | 0.1nm,0.3s,baz=49,slow=13,SNR=2.9 | | | | | | |
| | 0.7nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **8.13** | **199** | Pn | Pn | 06 28 20.9 | +0.6 |
| | 0.1nm,0.3s,baz=23,slow=14,SNR=2.3 | | | | | | |
| | 0.1nm,0.3s | | | | | | |

*KRSC **31** 06:29:15.3±1.2, 56°19N×160°90E, h165km±8km, Ml3.7*
*IDC **31** 06:29:16.6±2.6, 56°22N×160°66E, h172km±24km, mb3.0/7, mbtmp3.4/8, Error ellipse: s-maj=24.2km s-min=21.9km az=111.0*

**ISC 31 06:29:16.0±0.7, 56°16N±0°05×160°89E±0°06, h168km±5km, n43, σ0°87/54, mb3.2/7, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CIRR** | **Tsirk** | **0.09** | **239** | *e*P | **Pn** | **06 29 38.4** | **-0.2** |
| **LGNR** | **Loginova** | **0.14** | **234** | *e*P | **Pn** | **06 29 39.0** | **+0.2** |
| **ZLN** | **Zelenaya** | **0.15** | **198** | *e*P | **Pn** | **06 29 38.8** | **+0.2** |
| **KRSR** | **Krestovskiy** | **0.19** | **287** | *e*P | **Pn** | **06 29 38.1** | **-0.5** |
| KRSR | | | | *e*S | **Sn** | **06 29 55.3** | **-0.6** |
| **KLY** | **Klyuchi** | **0.20** | **319** | *e*P | **Pn** | **06 29 38.1** | **-0.3** |
| KLY | | | | *e*S | **Sn** | **06 29 55.4** | **-0.4** |
| **BZGR** | **Bezymyannyi-Gr** | **0.25** | **206** | *e*P | **Pn** | **06 29 38.8** | **0.0** |
| BZGR | | | | *e*S | **Sn** | **06 29 56.9** | **+0.8** |
| **BZWR** | **Bezymyannyi-We** | **0.29** | **228** | *e*P | **Pn** | **06 29 38.7** | **-0.3** |
| **BZP** | **Bezymyannyi-Pe** | **0.32** | **218** | *e*P | **Pn** | **06 29 38.7** | **-0.3** |
| **BZMR** | **Bezymyannaya** | **0.32** | **224** | *e*P | **Pn** | **06 29 38.8** | **-0.2** |
| **KIRR** | **Kirishev** | **0.37** | **236** | *e*P | **Pn** | **06 29 38.8** | **-0.4** |
| **KPT** | **Kopyto** | **0.42** | **242** | *e*P | **Pn** | **06 29 38.9** | **-0.3** |
| **SRKR** | **Sorokina** | **0.52** | **18** | *e*P | **Pn** | **06 29 40.1** | **+0.5** |
| SRKR | | | | *e*S | **Sn** | **06 29 58.9** | **+1.1** |
| **SMKR** | **Semkarok** | **0.53** | **37** | *e*S | **Sn** | **06 29 59.1** | **+1.2** |
| **KMNR** | **Kamenistaya** | **0.55** | **222** | *e*P | **Pn** | **06 29 39.7** | **-0.1** |
| **KOZ** | **Kozyrevsk** | **0.58** | **260** | *e*P | **Pn** | **06 29 39.5** | **-0.4** |
| KOZ | | | | *e*S | **Sn** | **06 29 58.1** | **0.0** |
| **SRDR** | **Sredinnyy** | **0.67** | **284** | *e*P | **Pn** | **06 29 39.7** | **-0.7** |
| SRDR | | | | *e*S | **Sn** | **06 29 58.2** | **-0.9** |
| **TUMR** | **Tumrok** | **0.97** | **206** | *e*P | **Pn** | **06 29 43.1** | **+0.6** |
| TUMR | | | | *e*S | **Sn** | **06 30 04.0** | **+1.2** |
| **TUMD** | **Tumrok D** | **1.00** | **196** | *e*P | **Pn** | **06 29 42.4** | **-0.2** |
| TUMD | | | | *e*S | **Sn** | **06 30 03.2** | **+0.2** |
| **KBG** | **Krutoberegovo** | **1.02** | **84** | *e*P | **Pn** | **06 29 42.4** | **-0.2** |
| KBG | | | | *e*S | **Sn** | **06 30 03.1** | **-0.1** |
| **KBTR** | **Krutoberegovo** | **1.08** | **87** | *e*P | **Pn** | **06 29 42.5** | **-0.7** |
| KBTR | | | | *e*S | **Sn** | **06 30 03.2** | **-0.9** |
| **ESO** | **Esso** | **1.25** | **260** | *e*P | **Pn** | **06 29 44.3** | **-0.4** |
| **KII** | **Karymskiy** | **2.29** | **202** | *e*P | **Pn** | **06 29 55.8** | **+0.2** |
| **GNL** | **Ganaly** | **3.00** | **216** | *e*P | **Pn** | **06 30 04.7** | **+0.5** |
| **BKI** | **Bering** | **3.04** | **106** | *e*S | **Sn** | **06 30 40.8** | **-1.4** |
| **KRX** | **Arik** | **3.09** | **206** | *e*P | **Pn** | **06 30 06.5** | **+1.1** |
| **SPN** | **Mys Shipunski** | **3.11** | **190** | *e*S | **Sn** | **06 30 41.3** | **-2.6** |
| **SDLR** | **Sedlovina** | **3.11** | **203** | *e*P | **Pn** | **06 30 06.6** | **+0.9** |
| **NLC** | **Nalytchevo** | **3.13** | **197** | *e*S | **Sn** | **06 30 44.1** | **-0.1** |
| **SMAR** | **Somma** | **3.15** | **203** | *e*P | **Pn** | **06 30 07.8** | **+1.7** |
| **KOK** | **Koryaka** | **3.16** | **205** | *e*P | **Pn** | **06 30 08.1** | **+1.9** |
| **AVH** | **Avacha** | **3.16** | **204** | *e*P | **Pn** | **06 30 07.2** | **+1.1** |
| **UGLR** | **Uglovaya** | **3.19** | **203** | *e*P | **Pn** | **06 30 07.4** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **3.58** | **212** | P | **Pn** | **06 30 11.9** | **+0.5** |
| | 3.1nm,0.8s,baz=57,slow=14,SNR=8.8 | | | | | | |
| **ASAK** | **Asacha** | **4.17** | **206** | *e*P | **Pn** | **06 30 19.0** | **0.0** |
| **KDTR** | **Khodutka, Kamc** | **4.67** | **202** | *e*P | **Pn** | **06 30 25.3** | **-0.1** |
| KDTR | | | | *e*S | **Sn** | **06 31 17.4** | **-2.1** |
| **ILAR** | **Eielson Array** | **26.39** | **50** | P | **P** | **06 34 36.7** | **+0.3** |
| | 0.2nm,0.5s,baz=270,slow=8.4,SNR=2.0 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.66** | **300** | P | **P** | **06 37 26.4** | **-0.8** |
| | 0.4nm,0.4s,baz=56,slow=8.0,SNR=4.6 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **47.29** | **294** | P | **P** | **06 37 31.2** | **-1.0** |
| | 0.3nm,0.6s,baz=50,slow=6.2,SNR=2.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **57.49** | **336** | P | **P** | **06 38 46.3** | **-0.5** |
| | 0.8nm,0.5s,baz=31,slow=8.9,SNR=6.4 | | | | | | |
| | 0.8nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **69.05** | **69** | P | **P** | **06 40 04.9** | **+1.4** |
| | 0.2nm,0.5s,baz=315,slow=5.3,SNR=2.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.06** | **205** | P | **P** | **06 41 01.2** | **-0.1** |
| | 0.3nm,0.6s,baz=17,slow=6.3,SNR=2.1 | | | | | | |
| | 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **82.75** | **205** | P | **P** | **06 41 21.1** | **+0.3** |
| | 0.2nm,0.4s,baz=10,slow=5.7,SNR=1.8 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **145.91** | **180** | PKPbc | **PKPdf** | **06 48 33.6** | **+0.5** |
| | 1.1nm,0.8s,baz=287,slow=0.8,SNR=9.5 | | | | | | |

**IDC 31 06:35:38.8±2.2, 7°45S×128°30E, h0km, mb3.5/1, mbtmp3.2/3, ML3.0/2, Error ellipse: s-maj=138.7km s-min=34.1km az=65.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.73** | **155** | Pn | Pn | 06 38 55.5 | +0.6 |
| | 0.2nm,0.3s,baz=334,slow=10,SNR=14 | | | | | | |
| WRA | | | | Sn | Sn | 06 41 19.0 | -9.3 |
| | 0.4nm,0.3s,baz=337,slow=22,SNR=7.8 | | | | | | |
| | 0.2nm,0.2s | | | | | | |
| **ASAR** | **Alice Springs** | **17.00** | **162** | Pn | Pn | 06 39 37.6 | -0.6 |
| | baz=337,slow=9.1,SNR=1.2 | | | | | | |
| ASAR | | | | Sn | Sn | 06 42 41.5 | -6.4 |
| | 0.1nm,0.3s,baz=318,slow=16,SNR=1.4 | | | | | | |
| | 0.2nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.69** | **328** | P | P | 06 46 37.9 | 0.0 |
| | 0.2nm,0.4s,baz=116,slow=7.4,SNR=1.9 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

**IDC 31 06:50:25.6±2.0, 18°47S×178°25W, h565km±21km, mb2.8/4, mbtmp3.7/5, Error ellipse: s-maj=37.1km s-min=28.3km az=162.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.60** | **281** | P | P | 06 51 45.8 | 0.0 |
| | 24nm,0.6s,baz=104,slow=3.2,SNR=29 | | | | | | |
| **URZ** | **Urewera** | **20.13** | **191** | P | P | 06 54 21.7 | -0.1 |
| | 7.1nm,0.7s,baz=22,slow=5.4,SNR=1.6 | | | | | | |
| | 7.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.68** | **260** | P | P | 06 57 48.3 | -0.9 |
| | 0.2nm,0.4s,baz=97,slow=7.0,SNR=9.4 | | | | | | |
| | 0.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.79** | **255** | P | P | 06 57 50.4 | +0.4 |
| | 0.8nm,0.6s,baz=87,slow=8.7,SNR=16 | | | | | | |
| | 0.8nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.17** | **58** | P | P | 07 02 07.8 | -0.1 |
| | 0.3nm,0.7s,baz=230,slow=5.6,SNR=4.4 | | | | | | |
| | 0.3nm,0.7s | | | | | | |

**IDC 31 06:55:14.3±4.7, 53°59N×88°01E, h0km, mbtmp2.7/2, ML2.3/2, Error ellipse: s-maj=51.3km s-min=25.4km az=75.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.93** | **282** | I | I | 07 07 10.0 | |
| | baz=98,slow=323,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.93** | **282** | Pn | Pn | 06 55 48.5 | +0.1 |
| | 0.8nm,0.3s,baz=98,slow=13,SNR=7.0 | | | | | | |
| ZALV | | | | Sn | Sn | 06 56 13.7 | +0.4 |
| | 2.0nm,0.3s,baz=103,slow=24,SNR=9.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.55** | **247** | Pn | Pn | 06 56 52.4 | +0.5 |
| | 0.1nm,0.3s,baz=62,slow=14,SNR=4.4 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **7.73** | **211** | Pn | Pn | 06 57 09.2 | +1.1 |
| | baz=29,slow=13,SNR=1.5 | | | | | | |
| | 0.2nm,0.4s | | | | | | |

*BJI **31** 07:12:21.2±0.0, 39°37N×21°66E, h8km, mb4.9/73, mB5.4/56, Ms5.2/64, Ms7 4.9/62*
*TIR **31** 07:12:23.0, 39°26N×21°63E, h7km±3km, Ml5.7*
*IDC **31** 07:12:22.7±0.3, 39°33N×21°74E, h0km, mb4.9/34, mbtmp4.8/48, ML4.8/13, MS4.7/83, Error ellipse: s-maj=7.9km s-min=7.0km az=89.0*
*PDG **31** 07:12:22.9±0.6, 39°26N×21°69E, h9km±1km, MD5.4/12, ML5.3/12, Error ellipse: s-maj=1.4km s-min=1.1km az=90.0*
*MOS **31** 07:12:23.2±0.9, 39°33N×21°69E, h12km, mb5.4/57, MS4.8/44, Error ellipse: s-maj=4.2km s-min=2.5km az=85.3*
*SKO **31** 07:12:23.7, 39°22N×21°79E, h0km, ML5.4*
*THE **31** 07:12:24.8, 39°28N×21°62E, h12km, ML5.2/16, Error ellipse: s-maj=0.9km s-min=0.3km az=151.0*
*ATH **31** 07:12:24.5, 39°29N×21°63E, h10km±1km, ML5.0/26, Error ellipse: s-maj=1.4km s-min=0.7km az=173.0*
*MED_RC **31** 07:12:24.0±0.3, 39°21N×21°53E, h18km±1km, MW5.2/35, Moment Tensor Solution. Body waves: s5,c6;Mantle waves: s35,c51; Duration: 1ᵗˢ4 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-4.28±.22; $M_{\theta\theta}$1.86±.15; $M_{\phi\phi}$2.43±.14; $M_{r\theta}$-5.68±.51; $M_{\theta\phi}$-2.68±.10; $M_{\phi r}$3.37±.30; Best double couple: $M_0$8.04000×$10^{16}$ NP1:$\phi_s$124.00000°, δ73.00000°, λ-100.00000°. NP2:$\phi_s$334.00000°, δ19.00000°, λ-61.00000°. Principal axes: T 8.1500, Plg28.0000°, Azm221.0000°; N -0.2200, Plg9.0000°, Azm126.0000°; P -7.9200, Plg61.0000°, Azm20.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=40s.*
*BGR **31** 07:12:24.7±0.7, 38°79N×21°02E, h10km Error ellipse: s-maj=32.2km s-min=10.0km az=58.0*
*BEO **31** 07:12:24.1±0.6, 39°28N×21°81E, h0km, ML5.4/5*
*NEIC **31** 07:12:25.3±1.9, 39°33N±0°05×21°68E±0°06, h10km±3km, mb5.4/94, Mwr5.2/20, Mww5.1/35, Error ellipse: s-maj=6.8km s-min=6.3km az=154.0, Moment Tensor Solution. Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.35; $M_{\theta\theta}$1.06; $M_{\phi\phi}$2.30; $M_{r\theta}$-6.24; $M_{\theta\phi}$-2.76; $M_{\phi r}$3.73; Fault plane solution: $M_0$8.33000×$10^{16}$ NP1:$\phi_s$345.47000°, δ17.77000°, λ-48.48000°. NP2:$\phi_s$122.56000°, δ76.79000°, λ-102.00000°. Principal axes: T 8.6155, Plg31.0000°, Azm222.0000°; N -0.6090, Plg12.0000°, Azm125.0000°; P -8.0065, Plg57.0000°, Azm17.0000°;*
*NEIC **31** 07:12:25.3, 39°33N×21°69E, h14km*
*NEIC **31** 07:12:25.3, 39°33N×21°56E, h14km, Moment Tensor Solution. Duration: 1ᵗˢ9 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.09; $M_{\theta\theta}$1.51; $M_{\phi\phi}$1.58; $M_{r\theta}$-4.65; $M_{\theta\phi}$-1.98; $M_{\phi r}$3.20; Fault plane solution: $M_0$6.55000×$10^{16}$ NP1: $\phi_s$125.74000°, δ75.05000°, λ-95.88000°. NP2: $\phi_s$327.51000°, δ16.05000°, λ-69.00000°. Principal axes: T 6.7137, Plg30.0000°, Azm221.0000°; N -0.3328, Plg6.0000°, Azm127.0000°; P -6.3809, Plg60.0000°, Azm28.0000°;*
*NEIC **31** 07:12:25.1, 39°33N×21°67E, h8km*
*GCMT **31** 07:12:26.3±0.2, 39°13N±0°01×21°50E±0°01, h24km, MW5.2/115, Moment Tensor Solution. s88,c124; s115,c187; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-5.13±.15; $M_{\theta\theta}$2.38±.11; $M_{\phi\phi}$2.75±.09; $M_{r\theta}$-4.78±.18; $M_{\theta\phi}$-2.22±.07; $M_{\phi r}$2.32±.13; Best double couple: $M_0$7.25300×$10^{16}$ NP1:$\phi_s$122.00000°, δ69.00000°, λ-100.00000°. NP2:$\phi_s$328.00000°, δ23.00000°, λ-66.00000°. Principal axes: T 6.9220, Plg23.0000°, Azm220.0000°; N 0.6610, Plg9.0000°, Azm126.0000°; P -7.5830, Plg65.0000°, Azm16.0000°; nsta1 refers to body waves, cutoff=50s. Triangular moment-rate function*
*MCSM **31** 07:12:27.8±0.3, 39°N±2°×2°E±°, h19km±2km, mb5.2, mB5.6, MLv5.7, Mw(mB)5.1*
*GII **31** 07:12:27.7±0.6, 38°258N±0°004×21°278E±0°001, h10km, mB5.2, Md5.3/3, confirmed*
*NAO **31** 07:12:41.0, 40°64N×20°81E, h33km, mb5.1*

**ISC 31 07:12:24.3±0.4, 39°28N±0°01×21°66E±0°01, h10km±2km, h9km:pP-P, n1552, σ1ˢ56/1744, mb5.3/201, MS4.9/122, 89C-124D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EVR** | **Evrytania** | **0.38** | **162** | P | **Pb** | **07 12 33.1** | **-0.1** |
| EVR | | | | S | **Sb** | **07 12 38.7** | **-0.5** |
| | 233μm,0.5s | | | | | | |
| **EVR** | **Evrytania** | **0.38** | **162** | P | **Pb** | **07 12 33.0** | **-0.2** |
| EVR | | | | S | **Sb** | **07 12 38.4** | **-0.7** |
| EVR | | | | AML | AML | 07 12 40.3 | |
| EVR | | | | AML | AML | 07 12 54.5 | |
| **MAKR** | **Makrakomi, Fth** | **0.45** | **126** | P | **Pb** | **07 12 34.4** | **0.0** |
| MAKR | | | | S | **Sb** | **07 12 41.7** | **+0.5** |
| | 326μm,0.9s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **0.45** | **126** | P | **Pb** | **07 12 34.1** | **-0.3** |
| MAKR | | | | S | **Sb** | **07 12 40.5** | **-0.7** |
| MAKR | | | | AML | AML | 07 12 57.7 | |
| MAKR | | | | AML | AML | 07 13 02.7 | |
| **TYRN** | **Tyrnavos** | **0.62** | **46** | P | **Pg** | **07 12 36.7** | **+0.4** |
| TYRN | | | | S | **Sb** | **07 12 46.6** | **+0.6** |
| | 136μm,0.7s | | | | | | |
| **TYRN** | **Tyrnavos** | **0.62** | **46** | P | **Pg** | **07 12 36.7** | **+0.4** |
| TYRN | | | | S | **Sg** | **07 12 44.9** | **+0.6** |
| TYRN | | | | AML | AML | 07 12 47.6 | |
| TYRN | | | | AML | AML | 07 12 59.4 | |
| **PVO** | **Paravola** | **0.67** | **189** | P | **Pg** | **07 12 37.1** | **-0.1** |
| PVO | | | | S | **Sb** | **07 12 47.5** | **+0.1** |
| | 454μm,0.3s | | | | | | |
| **PVO** | **Paravola** | **0.67** | **189** | P | **Pg** | **07 12 36.8** | **-0.4** |
| PVO | | | | S | **Sb** | **07 12 47.3** | **-0.1** |
| **LRSO** | **Larissa Observ** | **0.69** | **55** | P | **Pb** | **07 12 38.2** | **-0.2** |
| LRSO | | | | S | **Sb** | **07 12 49.3** | **+1.3** |
| | 468μm,0.7s | | | | | | |
| **LRSO** | **Larissa Observ** | **0.69** | **55** | P | **Pg** | **07 12 37.5** | **0.0** |
| LRSO | | | | S | **Sg** | **07 12 47.6** | **+1.0** |
| **ANX** | **Ano Chora** | **0.71** | **163** | P | **Pg** | **07 12 38.1** | **0.0** |
| ANX | | | | S | **Sb** | **07 12 48.6** | **-0.2** |
| | 167μm,0.5s | | | | | | |
| **ANX** | **Ano Chora** | **0.71** | **163** | P | **Pg** | **07 12 37.7** | **-0.3** |
| ANX | | | | S | **Sg** | **07 12 47.9** | **+0.5** |
| ANX | | | | AML | AML | 07 12 53.0 | |
| ANX | | | | AML | AML | 07 13 00.1 | |
| **EFP** | **Efpalio** | **0.87** | **167** | P | **Pg** | **07 12 40.7** | **-0.3** |
| EFP | | | | S | **Sb** | **07 12 53.8** | **+0.6** |
| | 151μm,0.6s | | | | | | |
| **EFP** | **Efpalio** | **0.87** | **167** | P | **Pg** | **07 12 40.4** | **-0.6** |
| EFP | | | | S | **Sb** | **07 12 53.0** | **-0.2** |
| EFP | | | | AML | AML | 07 12 56.0 | |
| EFP | | | | AML | AML | 07 12 57.5 | |
| **TSLK** | **Tsoukalades, L** | **0.90** | **240** | P | **Pb** | **07 12 41.7** | **-0.4** |
| **TSLK** | **Tsoukalades, L** | **0.90** | **240** | P | **Pb** | **07 12 41.7** | **-0.4** |
| TSLK | | | | AML | AML | 07 12 58.4 | |
| TSLK | | | | AML | AML | 07 13 00.5 | |
| **LKD2** | **Lefkada island** | **0.92** | **238** | P | **Pg** | **07 12 41.0** | **-1.0** |
| LKD2 | baz=239 | | | S | **Sg** | **07 12 53.4** | **-0.6** |
| | baz=239 | | | | | | |
| LKD2 | | | | AMP | | | |
| | comp=N,642nm,0.6s,baz=239 | | | | | | |
| **LKD2** | **Lefkada island** | **0.92** | **238** | P | **Pb** | **07 12 41.9** | **-0.5** |
| LKD2 | | | | S | **Sb** | **07 12 55.0** | **+0.3** |
| | comp=N,241μm,0.9s | | | | | | |
| **LKD2** | **Lefkada island** | **0.92** | **238** | P | **Pg** | **07 12 41.7** | **-0.3** |
| LKD2 | | | | S | **Sg** | **07 12 53.4** | **-0.6** |
| LKD2 | | | | AML | AML | 07 12 59.9 | |
| LKD2 | | | | AML | AML | 07 13 03.5 | |
| **AXAR** | **Agios Charalam** | **0.93** | **123** | P | **Pb** | **07 12 42.8** | **+0.3** |
| AXAR | | | | S | **Sn** | **07 12 56.7** | **-0.2** |
| | comp=N,161μm,0.5s | | | | | | |
| **AXAR** | **Agios Charalam** | **0.93** | **123** | P | **Pg** | **07 12 42.2** | **+0.1** |
| AXAR | | | | S | **Sb** | **07 12 55.6** | **+0.6** |
| AXAR | | | | AML | AML | 07 13 02.1 | |
| AXAR | | | | AML | AML | 07 13 02.9 | |
| **NYDR** | **Nydri-Lefkada** | **0.94** | **233** | P | **Pg** | **07 12 41.8** | **-0.5** |
| NYDR | | | | S | **Sb** | **07 12 55.1** | **0.0** |
| | comp=N,130μm,0.7s | | | | | | |
| **NYDR** | **Nydri-Lefkada** | **0.94** | **233** | P | **Pg** | **07 12 41.9** | **-0.4** |
| NYDR | | | | S | **Sb** | **07 12 54.6** | **-0.5** |
| **UPR** | **University Cam** | **1.00** | **174** | P | **Pb** | **07 12 43.5** | **-0.2** |
| **PENT** | **Pentalofos** | **1.00** | **336** | P | **Pg** | **07 12 42.7** | **-0.8** |
| PENT | | | | S | **Sn** | **07 12 58.0** | **-0.8** |
| | comp=N,63μm,0.6s | | | | | | |
| **PENT** | **Pentalofos** | **1.00** | **336** | P | **Pg** | **07 12 42.7** | **-0.8** |
| PENT | | | | S | **Sb** | **07 12 56.9** | **-0.2** |
| PENT | | | | AML | AML | 07 12 59.9 | |
| | comp=N,51358μm,0.8s | | | | | | |
| PENT | | | | AML | AML | 07 13 00.9 | |
| **EVGI** | **Lefkada island** | **1.02** | **230** | P | **Pg** | **07 12 43.4** | **-0.5** |
| EVGI | | | | S | **Sn** | **07 12 58.1** | **-1.0** |
| | comp=N,187μm,0.4s | | | | | | |
| **EVGI** | **Lefkada island** | **1.02** | **230** | P | **Pg** | **07 12 43.1** | **-0.8** |
| **DLFA** | **Delphi** | **1.03** | **141** | P | **Pg** | **07 12 43.3** | **-0.8** |
| DLFA | | | | S | **Sb** | **07 12 58.7** | **+0.9** |
| **IGT** | **Igoumenitsa** | **1.06** | **284** | P | **Pg** | **07 12 44.0** | **-0.6** |
| | baz=286 | | | | | | |
| IGT | | | | S | **Sb** | **07 12 58.2** | **-0.5** |
| | baz=286 | | | | | | |
| IGT | | | | AMP | | | |
| | comp=N,1μm,0.5s,baz=286 | | | | | | |
| **IGT** | **Igoumenitsa** | **1.06** | **284** | P | **Pg** | **07 12 44.1** | **-0.6** |
| IGT | | | | S | **Sn** | **07 12 58.8** | **-1.3** |
| | comp=N,222μm,0.4s | | | | | | |
| **IGT** | **Igoumenitsa** | **1.06** | **284** | *i* Pg | **Pn** | **07 12 44.7** | **-0.6** |
| IGT | | | | *i* Sg | **Sn** | **07 13 00.4** | **+0.3** |
| **IGT** | **Igoumenitsa** | **1.06** | **284** | P | **Pb** | **07 12 44.2** | **-0.5** |
| IGT | | | | S | **Sb** | **07 12 58.3** | **-0.4** |
| IGT | | | | AML | AML | 07 13 02.6 | |
| IGT | | | | AML | AML | 07 13 05.5 | |
| **KTI** | **Kastanea** | **1.17** | **17** | P | **Pb** | **07 12 46.1** | **-0.5** |
| **FSK** | **Fiskardo** | **1.19** | **227** | P | **Pb** | **07 12 46.1** | **-0.7** |
| **FSK** | **Fiskardo** | **1.19** | **227** | P | **Pb** | **07 12 45.5** | **-1.3** |
| FSK | | | | AML | AML | 07 13 09.4 | |
| FSK | | | | AML | AML | 07 13 09.8 | |
| **NEST** | **Nestorio** | **1.23** | **338** | P | **Pn** | **07 12 47.1** | **-0.6** |
| NEST | | | | S | **Sn** | **07 13 04.1** | **-0.3** |
| | comp=N,162μm,1.2s | | | | | | |
| **NEST** | **Nestorio** | **1.23** | **338** | P | **Pn** | **07 12 47.0** | **-0.6** |
| NEST | | | | AML | AML | 07 13 09.4 | |
| NEST | | | | AML | AML | 07 13 09.7 | |
| **KLV** | **Kalavryta, Ach** | **1.29** | **163** | P | **Pn** | **07 12 48.2** | **-0.3** |
| **KLV** | **Kalavryta, Ach** | **1.29** | **163** | P | **Pn** | **07 12 47.8** | **-0.7** |
| **SMHA** | **Samh** | **1.30** | **218** | P | **Pn** | **07 12 47.2** | **-1.3** |
| **DRO** | **Drossia** | **1.32** | **178** | P | **Pn** | **07 12 48.8** | **-0.1** |
| **DRO** | **Drossia** | **1.32** | **178** | P | **Pn** | **07 12 48.9** | **-0.1** |
| DRO | | | | AML | AML | 07 13 20.4 | |
| DRO | | | | AML | AML | 07 13 21.1 | |
| **SRN** | **Sarande** | **1.42** | **296** | P | **Pb** | **07 12 50.5** | **-0.2** |
| | baz=297 | | | | | | |
| SRN | | | | S | **Sg** | **07 13 10.6** | **+0.8** |
| | baz=297 | | | | | | |
| SRN | | | | AMP | | | |
| | comp=E,309nm,0.7s,baz=297 | | | | | | |
| **PSDA** | **Pessada-Kefalo** | **1.44** | **216** | P | **Pn** | **07 12 49.8** | **-0.6** |
| **PSDA** | **Pessada-Kefalo** | **1.44** | **216** | P | **Pn** | **07 12 49.8** | **-0.6** |
| **LXRA** | **Lixouri, Kepha** | **1.44** | **222** | P | **Pn** | **07 12 50.2** | **-0.2** |
| **GUR** | **Goura** | **1.44** | **158** | P | **Pn** | **07 12 50.6** | **0.0** |
| **GUR** | **Goura** | **1.44** | **158** | P | **Pn** | **07 12 50.6** | **0.0** |
| GUR | | | | AML | AML | 07 13 19.5 | |
| GUR | | | | AML | AML | 07 13 20.3 | |
| | comp=E,99418μm,0.5s | | | | | | |
| **DMLN** | **Damoulianata-K** | **1.45** | **224** | P | **Pn** | **07 12 50.1** | **-0.4** |
| **DMLN** | **Damoulianata-K** | **1.45** | **224** | P | **Pn** | **07 12 49.7** | **-0.8

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KYMI** | **Kymi, Euboea I** | **2.01** | **108** | P | **Pn** | 07 12 58.5 | +0.2 |
| KYMI | | | | AML | AML | 07 13 48.8 | |
| | comp=E,18582µm,1.3s | | | | | | |
| KYMI | | | | AML | AML | 07 13 52.7 | |
| | comp=N,18747µm,1.3s | | | | | | |
| **SOH** | **Sokhos** | **2.02** | **40** | P | **Pn** | 07 12 58.3 | -0.1 |
| SOH | | | | S | **Sn** | 07 13 24.0 | +0.3 |
| | comp=N,21µm,0.6s | | | | | | |
| **SOH** | **Sokhos** | **2.02** | **40** | *i* Pn | **Pn** | 07 12 58.5 | +0.1 |
| **SOH** | **Sokhos** | **2.02** | **40** | P | **Pn** | 07 12 58.3 | -0.1 |
| SOH | | | | AML | AML | 07 13 37.3 | |
| | comp=N,51164µm,0.6s | | | | | | |
| SOH | | | | AML | AML | 07 13 39.6 | |
| | comp=E,54633µm,0.6s | | | | | | |
| **EPID** | **Epidavros** | **2.02** | **145** | P | **Pn** | 07 12 59.1 | +0.7 |
| **VLO** | **Vlora** | **2.05** | **306** | | **Pb** | 07 13 01.7 | +0.2 |
| **VLO** | **Vlora** | **2.05** | **306** | P | **Pb** | 07 13 02.0 | +0.5 |
| | baz=307 | | | | | | |
| VLO | | | | S | **Sg** | 07 13 30.1 | +0.1 |
| | baz=307 | | | | | | |
| VLO | | | | AMP | | | |
| | comp=N,439nm,0.5s,baz=307 | | | | | | |
| **VLO** | **Vlora** | **2.05** | **306** | P | **Pb** | 07 13 01.7 | +0.2 |
| **OUR** | **Ouranopolis** | **2.08** | **59** | P | **Pn** | 07 12 59.3 | +0.1 |
| OUR | | | | S | **Sn** | 07 13 26.2 | +1.1 |
| | comp=N,18µm,1.1s | | | | | | |
| **OUR** | **Ouranopolis** | **2.08** | **59** | P | **Pn** | 07 12 58.8 | -0.4 |
| OUR | | | | AML | AML | 07 13 47.8 | |
| | comp=N,39970µm,1.1s | | | | | | |
| OUR | | | | AML | AML | 07 13 49.2 | |
| | comp=E,31526µm,1.2s | | | | | | |
| **KNT** | **Kendrikon** | **2.11** | **26** | P | **Pn** | 07 12 59.8 | +0.2 |
| **KNT** | **Kendrikon** | **2.11** | **26** | *i* Pn | **Pn** | 07 12 59.9 | +0.3 |
| **ATHU** | **Athens Univers** | **2.12** | **128** | P | **Pn** | 07 13 00.4 | +0.6 |
| ATHU | | | | AML | AML | 07 13 38.1 | |
| | comp=N,16662µm,0.7s | | | | | | |
| ATHU | | | | AML | AML | 07 13 55.6 | |
| | comp=E,8475µm,1.0s | | | | | | |
| **DION** | **Dionisos Attik** | **2.15** | **123** | P | **Pn** | 07 13 00.8 | +0.7 |
| DION | | | | AML | AML | 07 13 38.6 | |
| | comp=N,36135µm,0.7s | | | | | | |
| DION | | | | AML | AML | 07 13 42.5 | |
| | comp=E,30949µm,0.6s | | | | | | |
| **VAY** | **Valandovo** | **2.15** | **19** | *e*Pn | **Pn** | 07 13 00.7 | +0.4 |
| **VAY** | **Valandovo** | **2.15** | **19** | *i* Pn | **Pn** | 07 13 00.6 | +0.3 |
| VAY | | | | *i* Sg | **Sg** | 07 13 32.9 | -0.6 |
| VAY | | | | *i* Lg | Lg | 07 13 34.2 | |
| | comp=E,11µm,1.2s | | | | | | |
| VAY | | | | *i* Lg | Lg | 07 13 36.8 | |
| | comp=N,10µm,0.9s | | | | | | |
| **SKY** | **Skiros Island** | **2.28** | **99** | P | **Pn** | 07 13 02.4 | +0.3 |
| **SRS** | **Serrai** | **2.36** | **38** | *e*Pn | **Pn** | 07 13 02.9 | -0.2 |
| **SRS** | **Serrai** | **2.36** | **38** | *i* Pn | **Pn** | 07 13 03.4 | +0.3 |
| **SRS** | **Serrai** | **2.36** | **38** | P | **Pn** | 07 13 02.8 | -0.3 |
| **KOKK** | **Kokkinochori,** | **2.36** | **49** | P | **Pn** | 07 13 02.9 | -0.2 |
| **TIR** | **Tirane** | **2.48** | **327** | | **Pb** | 07 13 06.9 | -2.1 |
| **TIR** | **Tirane** | **2.48** | **327** | P | **Pb** | 07 13 08.1 | -0.9 |
| | baz=328 | | | | | | |
| TIR | | | | S | **Sg** | 07 13 41.8 | -2.1 |
| | baz=328 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,86nm,1.1s,baz=328 | | | | | | |
| **TIR** | **Tirane** | **2.48** | **327** | *e*Pn | **Pb** | 07 13 08.1 | -0.9 |
| **TIR** | **Tirane** | **2.48** | **327** | ⇓P | **Pb** | 07 13 08.0 | -0.9 |
| **TIR** | **Tirane** | **2.48** | **327** | P | **Pb** | 07 13 06.9 | -2.1 |
| **SCTE** | **Santa Cesarea** | **2.59** | **289** | | **Pn** | 07 13 07.3 | +1.1 |
| **SCTE** | **Santa Cesarea** | **2.59** | **289** | P | **Pn** | 07 13 07.9 | +1.7 |
| | baz=290 | | | | | | |
| **EFSA** | **Agios Efstrati** | **2.59** | **83** | P | **Pn** | 07 13 06.4 | +0.1 |
| **KVLA** | **Kavala** | **2.67** | **51** | P | **Pn** | 07 13 06.7 | -0.6 |
| **NVR** | **Nevrokopi** | **2.67** | **38** | P | **Pn** | 07 13 08.1 | +0.7 |
| NVR | | | | AML | AML | 07 13 55.5 | |
| | comp=N,10483µm,0.9s | | | | | | |
| NVR | | | | AML | AML | 07 14 01.5 | |
| | comp=E,5838µm,0.9s | | | | | | |
| **THAS** | **Thassos island** | **2.70** | **60** | P | **Pn** | 07 13 07.1 | -0.6 |
| **VLI** | **Veliai** | **2.75** | **158** | P | **Pn** | 07 13 09.2 | +0.8 |
| **MMB** | **Musomishta** | **2.77** | **34** | *i* Pn | **Pn** | 07 13 09.3 | +0.5 |
| **KAVA** | **Kavala** | **2.78** | **51** | P | **Pn** | 07 13 08.2 | -0.7 |
| **LIA** | **Limnos Island** | **2.79** | **76** | P | **Pn** | 07 13 08.7 | -0.3 |
| LIA | | | | AML | AML | 07 13 44.7 | |
| | comp=E,17588µm,1.1s | | | | | | |
| LIA | | | | AML | AML | 07 14 16.8 | |
| | comp=N,16659µm,1.4s | | | | | | |
| **KKB** | **Krupnik** | **2.79** | **23** | *i* Pn | **Pn** | 07 13 09.4 | +0.3 |
| **PUK** | **Puka** | **3.07** | **335** | | **Pn** | 07 13 14.9 | +2.0 |
| **PUK** | **Puka** | **3.07** | **335** | P | **Pb** | 07 13 15.9 | -3.1 |
| | baz=336 | | | | | | |
| PUK | | | | S | **Sb** | 07 13 55.5 | -1.2 |
| | baz=336 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,51nm,0.9s,baz=336 | | | | | | |
| **PSRA** | **Psara** | **3.13** | **102** | P | **Pn** | 07 13 14.0 | +0.3 |
| **SMTH** | **Samothraki Isl** | **3.21** | **67** | P | **Pn** | 07 13 14.1 | -0.7 |
| **ULC** | **Ulcinj** | **3.25** | **326** | *i* Pn | **Pn** | 07 13 17.7 | +2.3 |
| **ULC** | **Ulcinj** | **3.25** | **326** | ⇓*i* Pn | **Pn** | 07 13 17.2 | +1.8 |
| ULC | | | | *i* Sn | **Sb** | 07 13 58.3 | -3.5 |
| **BCI** | **Bajram Curri** | **3.31** | **339** | P | **Pn** | 07 13 18.9 | +2.6 |
| | baz=340 | | | | | | |
| **DRME** | **Dracevica, Mon** | **3.46** | **328** | ⇓*i* Pn | **Pn** | 07 13 20.2 | +2.0 |
| **DRME** | **Dracevica, Mon** | **3.46** | **328** | ⇓*i* Pn | **Pn** | 07 13 20.1 | +1.9 |
| DRME | | | | *i* Sn | **Sn** | 07 13 58.3 | +3.7 |
| **BARS** | **Barje** | **3.54** | **2** | *e*Pn | **Pn** | 07 13 19.8 | +0.5 |
| **BARS** | **Barje** | **3.54** | **2** | *i* Pn | **Pn** | 07 13 20.2 | +0.9 |
| **VTS** | **Vitosha** | **3.54** | **19** | *e*Pn | **Pn** | 07 13 19.7 | +0.2 |
| VTS | | | | *e*Sn | **Sn** | 07 14 01.3 | -0.2 |
| **CHOS** | **Chios island** | **3.55** | **103** | P | **Pn** | 07 13 20.4 | +0.9 |
| **PVY** | **Plav** | **3.55** | **339** | ⇑*i* Pn | **Pn** | 07 13 20.6 | +1.0 |
| PVY | | | | *i* Sn | **Sn** | 07 14 04.7 | +2.9 |
| **PRK** | **Paraskevi** | **3.58** | **89** | P | **Pn** | 07 13 20.8 | +0.9 |
| **PDG** | **Podgorica** | **3.64** | **331** | | **Pn** | 07 13 21.6 | +1.0 |
| **PDG** | **Podgorica** | **3.64** | **331** | *e*Pn | **Pn** | 07 13 22.8 | +2.1 |
| PDG | | | | *e*Sn | **Sn** | 07 14 05.1 | +1.5 |
| **PDG** | **Podgorica** | **3.64** | **331** | ⇑P | **Pn** | 07 13 22.6 | +1.9 |
| **PDG** | **Podgorica** | **3.64** | **331** | ⇓*i* Pn | **Pn** | 07 13 22.6 | +1.9 |
| **PDG** | **Podgorica** | **3.64** | **331** | ⇓P | **Pn** | 07 13 22.8 | +2.1 |
| **PDG** | **Podgorica** | **3.64** | **331** | *i* Pn | **Pn** | 07 13 23.1 | +2.4 |
| **PDG** | **Podgorica** | **3.64** | **331** | ⇓*i* Pn | **Pn** | 07 13 21.9 | +1.2 |
| PDG | | | | *i* Sn | **Sn** | 07 13 57.9 | +3.4 |
| **EZN** | **Ezine** | **3.65** | **80** | P | **Pn** | 07 13 21.3 | +0.5 |
| **BUM** | **Brajici-Budva** | **3.68** | **326** | ⇑*i* Pn | **Pn** | 07 13 22.4 | +1.1 |
| BUM | | | | *i* Sn | **Sn** | 07 14 07.8 | +3.1 |
| **PLD** | **Plovdiv** | **3.70** | **38** | *e*Pn | **Pn** | 07 13 22.0 | +0.5 |
| **PLD** | **Plovdiv** | **3.70** | **38** | *i* Pn | **Pn** | 07 13 22.1 | +0.5 |
| **ALN** | **Alexandroupoli** | **3.73** | **63** | | **Pn** | 07 13 21.4 | -0.6 |
| **ALN** | **Alexandroupoli** | **3.73** | **63** | ⇓P | **Pn** | 07 13 21.7 | -0.2 |
| **ALN** | **Alexandroupoli** | **3.73** | **63** | P | **Pn** | 07 13 21.4 | -0.6 |
| **CAVK** | **Edirne/Enez-Ca** | **3.74** | **66** | ⇓P | **Pn** | 07 13 22.0 | 0.0 |
| **APE** | **Apeiranthos** | **3.76** | **125** | *e*P | **Pn** | 07 13 25.4 | +2.9 |
| **TIP** | **Timpagrande** | **3.81** | **270** | | **Pn** | 07 13 23.7 | +0.6 |
| **TIP** | **Timpagrande** | **3.81** | **270** | ⇑P | **Pn** | 07 13 22.9 | -0.2 |
| **TIP** | **Timpagrande** | **3.81** | **270** | ⇓P | **Pn** | 07 13 24.6 | +1.5 |
| TIP | | | | ⇓S | **Sn** | 07 14 08.1 | +0.1 |
| **BEY** | **Berane** | **3.83** | **340** | *i* Pn | **Pn** | 07 13 25.5 | +2.1 |
| **IVA** | **Berane** | **3.83** | **340** | ⇓*i* Pn | **Pn** | 07 13 24.5 | +1.1 |
| IVA | | | | *i* Sn | **Sn** | 07 14 11.3 | +2.8 |
| **NOCI** | **Noci** | **3.84** | **295** | P | **Pn** | 07 13 24.7 | +1.3 |
| | baz=295 | | | | | | |
| **CEME** | **Cevo** | **3.87** | **328** | ⇑*i* Pn | **Pn** | 07 13 25.0 | +1.1 |
| CEME | | | | *i* Sn | **Sn** | 07 14 12.4 | +2.9 |
| **KOME** | **Kolasin** | **3.92** | **336** | ⇓*i* Pn | **Pn** | 07 13 27.2 | +2.6 |
| KOME | | | | *i* Sn | **Sn** | 07 14 13.4 | +2.7 |
| **SELS** | **Selova** | **3.96** | **354** | *e*Pn | **Pn** | 07 13 25.6 | +0.5 |
| **NKME** | **Niksic** | **4.04** | **330** | ⇓*i* Pn | **Pn** | 07 13 27.3 | +1.0 |
| NKME | | | | *i* Sn | **Sn** | 07 14 16.4 | +2.7 |
| **MATE** | **Matera** | **4.05** | **291** | ⇑P | **Pn** | 07 13 27.2 | +1.0 |
| **MATE** | **Matera** | **4.05** | **291** | ⇑P | **Pn** | 07 13 27.3 | +1.0 |
| **ZAPS** | **Zavoj** | **4.06** | **10** | *e*Pn | **Pn** | 07 13 27.3 | +0.8 |
| **DKL** | **Dikili** | **4.08** | **91** | ⇓P | **Pn** | 07 13 28.2 | +1.4 |
| **SJES** | **Sjenica** | **4.18** | **343** | *e*Pn | **Pn** | 07 13 29.2 | +1.0 |
| **SJES** | **Sjenica** | **4.18** | **343** | ⇓*i* Pn | **Pn** | 07 13 29.5 | +1.3 |
| **IMMV** | **Iera Moni Meta** | **4.24** | **153** | P | **Pn** | 07 13 28.9 | 0.0 |
| **TREB** | **Trebinje** | **4.25** | **325** | *e*Pn | **Pn** | 07 13 30.0 | +1.0 |
| TREB | | | | *e*Sn | **Sn** | 07 14 20.3 | +1.5 |
| **TREB** | **Trebinje** | **4.25** | **325** | *e*Pn | **Pn** | 07 13 30.1 | +1.0 |
| **BRY** | **Bratogost** | **4.32** | **328** | ⇓*i* Pn | **Pn** | 07 13 31.3 | +1.1 |
| **BRY** | **Bratogost** | **4.32** | **328** | ⇓*i* Pn | **Pn** | 07 13 31.3 | +1.1 |
| BRY | | | | *i* Sn | **Sn** | 07 14 23.4 | +2.7 |
| **BOVS** | **Bovan** | **4.35** | **0** | *e*Pn | **Pn** | 07 13 30.4 | -0.1 |
| **BOVS** | **Bovan** | **4.35** | **0** | ⇓P | **Pn** | 07 13 30.5 | 0.0 |
| **PLE** | **Pljevlja** | **4.39** | **338** | ⇑*i* Pn | **Pn** | 07 13 32.2 | +1.0 |
| PLE | | | | *i* Sn | **Sn** | 07 14 24.8 | +2.3 |
| **UPM** | **Unac-Piva** | **4.44** | **333** | ⇓*i* Pn | **Pn** | 07 13 33.9 | +2.1 |
| **UPM** | **Unac-Piva** | **4.44** | **333** | ⇑*i* Pn | **Pn** | 07 13 32.8 | +1.0 |
| UPM | | | | *i* Sn | **Sn** | 07 14 25.8 | +2.2 |
| **ZAGS** | **Zajecar** | **4.55** | **5** | *e*Pn | **Pn** | 07 13 33.3 | +0.1 |
| **CUC** | **Castrocucco** | **4.57** | **281** | | **Pn** | 07 13 36.0 | +2.5 |
| **CUC** | **Castrocucco** | **4.57** | **281** | ⇑P | **Pn** | 07 13 35.4 | +1.9 |
| **CEL** | **Celeste** | **4.62** | **259** | | **Pn** | 07 13 34.5 | +0.2 |
| **CEL** | **Celeste** | **4.62** | **259** | ⇑P | **Pn** | 07 13 34.8 | +0.6 |
| **GRUS** | **Gruza** | **4.66** | **352** | *e*Pn | **Pn** | 07 13 35.4 | +0.7 |
| **RUDO** | **Rudo** | **4.66** | **339** | *e*Pn | **Pn** | 07 13 35.6 | +0.8 |
| **STON** | **Ston** | **4.67** | **321** | *e*Pn | **Pn** | 07 13 35.2 | +0.3 |
| STON | | | | *e*Sn | **Sn** | 07 14 28.1 | -1.0 |
| **STON** | **Ston** | **4.67** | **321** | ⇓*i* Pn | **Pn** | 07 13 35.2 | +0.3 |
| **IDI** | **Anoyia** | **4.74** | **146** | Pn | **Pn** | 07 13 38.0 | +2.0 |
| **IDI** | **Anoyia** | **4.74** | **146** | P | **Pn** | 07 13 36.0 | +0.1 |
| **IDI** | **Anoyia** | **4.74** | **146** | Pn | **Pn** | 07 13 37.4 | +1.5 |
| | comp=N,54nm,0.5s,baz=346,slow=12,SNR=42 | | | | | | |
| IDI | | | | Sn | **Sn** | 07 14 34.2 | +3.1 |
| | comp=N,56nm,0.3s,baz=91,slow=20,SNR=5.9 | | | | | | |
| IDI | | | | Lg | Lg | 07 14 54.0 | |
| | comp=N,64nm,0.3s,baz=284,slow=20,SNR=4.0 | | | | | | |
| **ELND** | **Elena** | **4.84** | **40** | ⇑P | **Pn** | 07 13 37.8 | +0.6 |
| **BBLS** | **Lazi&#263i** | **4.88** | **340** | *e*Pn | **Pn** | 07 13 38.9 | +1.0 |
| **BBLS** | **Lazi&#263i** | **4.88** | **340** | ⇓*i* Pn | **Pn** | 07 13 38.9 | +1.0 |
| **DIVS** | **Divibare** | **4.97** | **346** | *e*Pn | **Pn** | 07 13 39.0 | -0.1 |
| DIVS | | | | *e*Sn | **Sn** | 07 14 37.4 | +0.6 |
| **SVIS** | **Svilajnac** | **4.99** | **356** | *e*Pn | **Pn** | 07 13 40.7 | +1.4 |
| **TRUS** | **Trudelj** | **5.03** | **350** | *e*Pn | **Pn** | 07 13 40.1 | +0.3 |
| **BAND** | **Balkesir-Ban** | **5.07** | **76** | ⇑P | **Pn** | 07 13 41.3 | +0.9 |
| **SGRT** | **San Giovanni R** | **5.14** | **301** | | **Pn** | 07 13 43.0 | +1.5 |
| **SGRT** | **San Giovanni R** | **5.14** | **301** | P | **Pn** | 07 13 42.7 | +1.3 |
| | baz=301 | | | | | | |
| **HAPS** | **Han Pijesak,BI** | **5.21** | **338** | *e*Pn | **Pn** | 07 13 43.5 | +1.0 |
| HAPS | | | | *e*Sn | **Sn** | 07 14 44.2 | +1.5 |
| **HAPS** | **Han Pijesak,BI** | **5.21** | **338** | ⇓*i* Pn | **Pn** | 07 13 43.4 | +1.0 |
| **DJES** | **Djerdap** | **5.42** | **7** | *e*Pn | **Pn** | 07 13 45.7 | +0.5 |
| DJES | | | | *e*Sn | **Sn** | 07 14 45.2 | -2.4 |
| **DJES** | **Djerdap** | **5.42** | **7** | ⇑P | **Pn** | 07 13 46.0 | +0.8 |
| **RMGR** | **Halanga-Turnu** | **5.43** | **8** | ⇑P | **Pn** | 07 13 46.2 | +0.8 |
| **MANT** | **Manisa** | **5.44** | **96** | Pn | **Pn** | 07 13 47.5 | +1.9 |
| **AVAS** | **Avala Beograd** | **5.48** | **351** | *e*Pn | **Pn** | 07 13 46.0 | 0.0 |
| **MDVR** | **Moldovita** | **5.50** | **0** | *e*Pn | **Pn** | 07 13 45.8 | -0.5 |
| **MDVR** | **Moldovita** | **5.50** | **0** | ⇑P | **Pn** | 07 13 46.3 | 0.0 |
| **SRE** | **Strehaia** | **5.50** | **12** | ⇑P | **Pn** | 07 13 46.6 | +0.3 |
| **SRE** | **Strehaia** | **5.50** | **12** | P | **Pn** | 07 13 46.5 | +0.3 |
| **TEKS** | **Tekeris** | **5.50** | **344** | *e*Pn | **Pn** | 07 13 46.8 | +0.5 |
| TEKS | | | | *e*Sn | **Sn** | 07 14 49.2 | -0.4 |
| **TEKS** | **Tekeris** | **5.50** | **344** | *e*Pn | **Pn** | 07 13 46.7 | +0.5 |
| **COPA** | **Copaceanca** | **5.53** | **28** | ⇑P | **Pn** | 07 13 47.9 | +1.2 |
| **HERR** | **Herculane** | **5.63** | **5** | ⇓P | **Pn** | 07 13 48.2 | +0.2 |
| **PAOL** | **Paolisi** | **5.71** | **290** | | **Pn** | 07 13 50.8 | +1.6 |
| **KARP** | **Karpathos** | **5.75** | **129** | Pn | **Pn** | 07 13 51.0 | +1.3 |
| **KARP** | **Karpathos** | **5.75** | **129** | ⇑P | **Pn** | 07 13 52.3 | +2.6 |
| **HUMR** | **Humele** | **5.80** | **24** | ⇑P | **Pn** | 07 13 50.8 | +0.4 |
| **VRSS** | **Vrsac** | **5.84** | **358** | *e*Pn | **Pn** | 07 13 50.3 | -0.7 |
| **SGRR** | **Singureni** | **5.90** | **32** | ⇑P | **Pn** | 07 13 53.0 | +1.2 |
| **VAE** | **Valguarnera** | **5.97** | **255** | Pn | **Pn** | 07 13 54.3 | +1.5 |
| | comp=N,93nm,0.8s,baz=134,slow=3.1,SNR=27 | | | | | | |
| VAE | | | | Sn | **Sn** | 07 15 05.7 | +4.4 |
| | comp=N,35nm,0.3s,baz=68,slow=14,SNR=4.2 | | | | | | |
| **KLYT** | **Kilyos** | **5.98** | **68** | P | **Pn** | 07 13 55.9 | +3.1 |
| **YLV** | **Yalova** | **6.07** | **75** | P | **Pn** | 07 13 56.2 | +2.1 |
| | comp=N,240nm,0.9s,comp=N,3µmcomp=N,1.4nm | | | | | | |
| **STFAR** | **Stefanesti-Arg** | **6.10** | **23** | ⇓P | **Pn** | 07 13 56.1 | +1.7 |
| **RAFF** | **Raffo Rosso** | **6.10** | **253** | Pn | **Pn** | 07 13 53.6 | -0.9 |
| **GZR** | **Gura Zlata** | **6.17** | **7** | ⇑P | **Pn** | 07 13 55.6 | +0.1 |
| **GZR** | **Gura Zlata** | **6.17** | **7** | P | **Pn** | 07 13 55.6 | +0.1 |
| **BZS** | **Buzias** | **6.33** | **360** | *e*Pn | **Pn** | 07 13 56.8 | -0.9 |
| **BZS** | **Buzias** | **6.33** | **360** | ⇓P | **Pn** | 07 13 56.7 | -0.9 |
| **BZS** | **Buzias** | **6.33** | **360** | ⇑P | **Pn** | 07 13 56.9 | -0.8 |
| **BZS** | **Buzias** | **6.33** | **360** | P | **Pn** | 07 13 56.9 | -0.8 |
| **LOT** | **Lotru** | **6.36** | **14** | ⇓P | **Pn** | 07 13 57.2 | +0.1 |
| **SULR** | | **6.39** | **31** | ⇓P | **Pn** | 07 14 00.0 | +1.6 |
| **BLY** | **Banja Luka** | **6.40** | **330** | *e*Pn | **Pn** | 07 13 59.7 | +1.0 |
| BLY | | | | *e*Sn | **Sn** | 07 15 13.2 | +1.5 |
| **BLY** | **Banja Luka** | **6.40** | **330** | ⇓P | **Pn** | 07 13 59.6 | +1.0 |
| **BLY** | **Banja Luka** | **6.40** | **330** | ⇓*i* Pn | **Pn** | 07 13 59.6 | +1.0 |
| **A050A** | **Klekovaca** | **6.46** | **325** | ⇓*i* Pn | **Pn** | 07 14 00.7 | +1.3 |
| **MTUR** | **Matau** | **6.46** | **22** | ⇓P | **Pn** | 07 14 00.4 | +0.9 |
| **MTUR** | **Matau** | **6.46** | **22** | P | **Pn** | 07 14 00.4 | +0.9 |
| **ARR** | **Arges** | **6.47** | **19** | ⇑P | **Pn** | 07 14 00.1 | +0.5 |
| **SURR** | **Surduc** | **6.48** | **3** | ⇑P | **Pn** | 07 14 00.6 | +0.9 |
| **INTR** | **Introdacqua** | **6.50** | **297** | Pn | **Pn** | 07 14 02.2 | +2.1 |
| **WDD** | **Wied Dalam** | **6.63** | **241** | Pn | **Pn** | 07 14 01.3 | -0.5 |
| **WDD** | **Wied Dalam** | **6.63** | **241** | ⇑P | **Pn** | 07 14 01.1 | -0.6 |
| **TNR** | **Turnu Rosu** | **6.66** | **16** | ⇓P | **Pn** | 07 14 03.5 | +1.4 |
| **TNR** | **Turnu Rosu** | **6.66** | **16** | P | **Pn** | 07 14 03.5 | +1.4 |
| **DEV** | **Deva** | **6.66** | **8** | ⇑P | **Pn** | 07 14 03.7 | +1.5 |
| **DEV** | **Deva** | **6.66** | **8** | P | **Pn** | 07 14 03.7 | +1.5 |
| **A051A** | **Mrakovica** | **6.73** | **330** | ⇓*i* Pn | **Pn** | 07 14 03.9 | +0.7 |
| **PRIJ** | **Prijedor** | **6.78** | **329** | *e*Pn | Pn | 07 13 53.9 | -10 |
| **CLTB** | **Caltabellotta** | **6.84** | **258** | | **Pn** | 07 14 05.4 | +0.6 |
| **CLTB** | **Caltabellotta** | **6.84** | **258** | ⇑P | **Pn** | 07 14 05.9 | +1.1 |
| **ISR** | **Istrita** | **6.87** | **30** | ⇓P | **Pn** | 07 14 07.2 | +2.1 |
| **ISR** | **Istrita** | **6.87** | **30** | P | **Pn** | 07 14 07.0 | +1.9 |
| **ISR** | **Istrita** | **6.87** | **30** | P | **Pn** | 07 14 07.4 | +2.3 |
| | comp=N,1µm,1.5s,comp=N,11µmcomp=N,4.0nm | | | | | | |
| **MLR** | **Muntele Rosu** | **6.97** | **26** | | **Pn** | 07 14 08.0 | +1.4 |
| **MLR** | **Muntele Rosu** | **6.97** | **26** | Pn | **Pn** | 07 14 08.0 | +1.4 |
| | comp=N,28nm,0.3s,baz=211,slow=2.4,SNR=108 | | | | | | |
| MLR | | | | Sn | **Sn** | 07 15 24.9 | -1.1 |
| | baz=91,slow=16 | | | | | | |
| MLR | | | | LR | LR | 07 17 26.2 | |
| | comp=N,14µm,19.8s,baz=182,slow=44 | | | | | | |
| **MLR** | **Muntele Rosu** | **6.97** | **26** | ⇓P | **Pn** | 07 14 08.5 | +2.0 |
| **MLR** | **Muntele Rosu** | **6.97** | **26** | P | **Pn** | 07 14 08.4 | +1.8 |
| | comp=N,800nm,1.0s,comp=N,7µmcomp=N,2.8nm | | | | | | |
| **ELL** | **Elmali** | **6.98** | **109** | Pn | Pn | 07 14 13.3 | +6.6 |
| **ELL** | **Elmali** | **6.98** | **109** | ⇓P | **Pn** | 07 14 11.5 | +4.8 |
| **ELL** | **Elmali** | **6.98** | **109** | P | Pn | 07 14 13.3 | +6.5 |
| **SIRR** | **Siria** | **6.99** | **360** | ⇓P | **Pn** | 07 14 07.0 | +0.4 |
| **AKAS** | **Kas** | **6.99** | **113** | Pn | **Pn** | 07 14 11.3 | +4.5 |
| **MFTR** | **Murfatlar** | **7.04** | **44** | ⇑P | **Pn** | 07 14 08.2 | +0.9 |
| **NEHR** | **Nehoiu** | **7.04** | **28** | ⇑P | **Pn** | 07 14 09.4 | +2.0 |
| **CAMP** | **Campotosto** | **7.04** | **308** | | **Pn** | 07 14 09.0 | +1.4 |
| **TLBP** | **Topalu** | **7.09** | **40** | ⇓P | **Pn** | 07 14 09.9 | +1.8 |
| **HARR** | **Harsova** | **7.14** | **39** | ⇑P | **Pn** | 07 14 10.0 | +1.2 |
| **HARR** | **Harsova** | **7.14** | **39** | P | **Pn** | 07 14 09.9 | +1.2 |
| **TIRR** | **Tirgusor** | **7.22** | **42** | P | **Pn** | 07 14 12.1 | +2.2 |
| | comp=N,3.6nm,1.0s,comp=N,0.0nm | | | | | | |
| **DOPR** | **Dopca** | **7.23** | **21** | ⇑P | **Pn** | 07 14 10.9 | +1.0 |
| **MORH** | **Mrgy, Hungar** | **7.28** | **343** | ⇓P | **Pn** | 07 14 11.4 | +0.8 |
| **KOVH** | **Kovagotottos** | **7.29** | **340** | ⇓P | **Pn** | 07 14 09.9 | -0.9 |
| **GUMA** | **Gualdo di Mace** | **7.33** | **304** | | **Pn** | 07 14 12.4 | +1.0 |
| **COVR** | **Voineasa-Covas** | **7.37** | **26** | ⇑P | **Pn** | 07 14 14.0 | +2.1 |
| **NRCA** | **Norcia** | **7.37** | **302** | | **Pn** | 07 14 13.5 | +1.5 |
| **BOSR** | **Bodos** | **7.40** | **22** | ⇑P | **Pn** | 07 14 13.8 | +1.4 |
| **MDUB** | **Mudurnu** | **7.43** | **78** | Pn | **Pn** | 07 14 13.6 | +0.7 |
| **MDUB** | **Mudurnu** | **7.43** | **78** | ⇓P | **Pn** | 07 14 14.4 | +1.5 |
| **OZUR** | | **7.46** | **23** | ⇑P | **Pn** | 07 14 15.0 | +1.8 |
| **MARM** | **Marisel-Cluj** | **7.47** | **8** | ⇑P | **Pn** | 07 14 14.5 | +1.1 |
| **FDMO** | **Fiordimonte** | **7.48** | **303** | | **Pn** | 07 14 14.3 | +0.8 |
| **SPBR** | **Spulber** | **7.48** | **29** | ⇑P | **Pn** | 07 14 15.6 | +2.1 |
| **TURR** | **Turia** | **7.49** | **24** | ⇓P | **Pn** | 07 14 15.8 | +2.2 |
| **TPGR** | **Topolog** | **7.50** | **40** | ⇑P | **Pn** | 07 14 15.3 | +1.6 |
| **PLOR** | **Plostina** | **7.53** | **28** | ⇓P | **Pn** | 07 14 15.8 | +1.7 |
| **PLOR** | **Plostina** | **7.53** | **28** | P | **Pn** | 07 14 15.8 | +1.7 |
| **PLOR5** | **Plostina Array** | **7.53** | **28** | P | **Pn** | 07 14 16.6 | +2.5 |
| | comp=N,863nm,0.8s,comp=N,8µmcomp=N,2.9nm | | | | | | |
| **PLOR3** | **Plostina Array** | **7.53** | **28** | P | **Pn** | 07 14 16.4 | +2.3 |
| | comp=N,915nm,1.0s,comp=N,10µmcomp=N,2.8nm | | | | | | |
| **DRGR** | | **7.55** | **6** | ⇑P | **Pn** | 07 14 14.7 | +0.3 |
| **DRGR** | | **7.55** | **6** | P | **Pn** | 07 14 14.7 | +0.3 |
| **VRI** | **Vrincioaia** | **7.57** | **28** | ⇑P | **Pn** | 07 14 16.9 | +2.2 |
| **VRI** | **Vrincioaia** | **7.57** | **28** | P | **Pn** | 07 14 16.4 | +1.7 |
| **VRI** | **Vrincioaia** | **7.57** | **28** | P | **Pn** | 07 14 17.0 | +2.3 |
| | comp=N,617nm,0.9s,comp=N,5µmcomp=N,1.7nm | | | | | | |
| **CFR** | **Carcaliu** | **7.60** | **37** | ⇑P | **Pn** | 07 14 16.1 | +1.0 |
| **CFR** | **Carcaliu** | **7.60** | **37** | P | **Pn** | 07 14 16.1 | +1.0 |
| **PANC** | **Panciu** | **7.73** | **30** | ⇓P | **Pn** | 07 14 18.5 | +1.7 |
| **BOJS** | **Bojanci** | **7.82** | **325** | *i* Pn | **Pn** | 07 14 18.3 | +0.2 |
| BOJS | | | | *e*Sn | **Sn** | 07 15 44.9 | -1.8 |
| BOJS | | | | IAML | | 07 17 10.0 | |
| | comp=Z,7µm,2.5s | | | | | | |
| **BOJS** | **Bojanci** | **7.82** | **325** | ⇓*i* Pn | **Pn** | 07 14 18.3 | +0.2 |
| **ONER** | **Baraj Valea Uz** | **7.86** | **25** | ⇑P | **Pn** | 07 14 20.6 | +1.9 |
| **SCTR** | **Scanteiesti** | **7.92** | **34** | ⇑P | **Pn** | 07 14 21.6 | +2.2 |
| **TLCR** | | **7.94** | **40** | ⇑P | **Pn** | 07 14 21.6 | +2.0 |
| **TLCR** | | **7.94** | **40** | P | **Pn** | 07 14 21.6 | +2.0 |
| **CRES** | **Cresnjev** | **7.98** | **327** | ⇓*i* Pn | **Pn** | 07 14 20.1 | -0.2 |
| **GHRR** | | **7.99** | **30** | P | **Pn** | 07 14 22.3 | +1.9 |
| **ARCR** | **ARCALIA** | **8.05** | **13** | ⇑P | **Pn** | 07 14 22.1 | +0.9 |
| **VLDR** | **Vladesti** | **8.09** | **34** | ⇑P | **Pn** | 07 14 23.6 | +1.9 |
| **TESR** | **Tescani** | **8.10** | **25** | ⇑P | **Pn** | 07 14 24.0 | +2.1 |
| **TESR** | **Tescani** | **8.10** | **25** | P | **Pn** | 07 14 24.4 | +2.4 |
| | comp=Z,227nm,1.6s,comp=Z,3µm | | | | | | |
| **BIZ** | **Bicaz** | **8.32** | **22** | ⇑P | **Pn** | 07 14 26.4 | +1.5 |
| **CEY** | **Cerknica** | **8.38** | **323** | ⇓*i* Pn | **Pn** | 07 14 25.7 | -0.1 |
| **SKDS** | **Skadanscina** | **8.44** | **320** | ⇓*i* Pn | **Pn** | 07 14 25.8 | -0.8 |
| **ANTO** | **Ankara** | **8.62** | **83** | | **Pn** | 07 14 30.7 | +1.5 |
| **ANTO** | **Ankara** | **8.62** | **83** | P | **Pn** | 07 14 30.7 | +1.5 |
| **BURAR** | **Bucovina Array** | **8.72** | **16** | ⇑P | **Pn** | 07 14 31.9 | +1.3 |
| **BURAR** | **Bucovina Array** | **8.72** | **16** | P | **Pn** | 07 14 31.9 | +1.3 |
| **PSZ** | **Piszkesteto** | **8.73** | **352** | | **Pn** | 07 14 30.9 | +0.3 |
| **PSZ** | **Piszkesteto** | **8.73** | **352** | ⇓P | **Pn** | 07 14 30.3 | -0.3 |
| **PSZ** | **Piszkesteto** | **8.73** | **352** | ⇓P | **Pn** | 07 14 31.2 | +0.6 |
| **PSZ** | **Piszkesteto** | **8.73** | **352** | P | **Pn** | 07 14 31.2 | +0.6 |
| **SOKA** | **Soboth** | **8.84** | **329** | *i* Pn | **Pn** | 07 14 32.7 | +0.5 |
| | comp=Z,35nm,0.4s,SNR=64 | | | | | | |
| SOKA | | | | *e*Sn | **

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| NDNU | Novodnistrovsk | 10.18 | 22 | P | | Pn | 07 14 52.1 | +1.7 |
| NIE | Niedzica | 10.18 | 355 | *e*P | | Pn | 07 14 51.8 | +1.3 |
| NIE | | | | *e*S | | Sn | 07 16 50.7 | +6.0 |
| NIE | Niedzica | 10.18 | 355 | P | | Pn | 07 14 53.4 | +2.9 |
| | comp=Z,111nm,1.4s,comp=Z,1µm | | | | | | | |
| BIOA | Bad Ischl, Aus | 10.22 | 328 | *i* Pn | | Pn | 07 14 52.6 | +1.5 |
| | comp=Z,39nm,0.5s,SNR=42 | | | | | | | |
| BIOA | | | | *e*Sn | | Sn | 07 16 47.4 | +1.6 |
| | comp=Z,220nm,0.7s | | | | | | | |
| BALD | Monte Baldo | 10.25 | 312 | P | | Pn | 07 14 51.4 | -0.2 |
| CSS | Mathiatis | 10.26 | 111 | Pn | | Pn | 07 14 53.3 | +1.6 |
| CSS | Mathiatis | 10.26 | 111 | ⇓P | | Pn | 07 14 53.1 | +1.5 |
| CSS | Mathiatis | 10.26 | 111 | P | | Pn | 07 14 56.3 | +4.6 |
| CSS | Mathiatis | 10.26 | 111 | P | | Pn | 07 14 56.7 | +5.0 |
| | comp=Z,78nm,1.1s,comp=Z,1µm | | | | | | | |
| CSS | Mathiatis | 10.26 | 111 | P | | Pn | 07 14 54.4 | +2.8 |
| KWP | Kalwaria Pacla | 10.38 | 4 | *e*P | | Pn | 07 14 55.9 | +2.8 |
| KWP | | | | *e*S | | Sn | 07 17 02.0 | +13 |
| KWP | Kalwaria Pacla | 10.38 | 4 | | | Pn | 07 14 55.7 | +2.6 |
| KWP | Kalwaria Pacla | 10.38 | 4 | ⇓P | | Pn | 07 14 56.4 | +3.2 |
| KWP | Kalwaria Pacla | 10.38 | 4 | P | | Pn | 07 14 55.7 | +2.6 |
| GAGG | Gaggia | 10.40 | 314 | P | | Pn | 07 14 52.7 | -0.9 |
| KEST | Kesra | 10.40 | 254 | Pn | | Pn | 07 14 55.5 | +1.8 |
| | comp=Z,6.5nm,0.3s,baz=18,slow=5.5,SNR=250 | | | | | | | |
| KEST | | | | LR | | LR | 07 20 17.1 | |
| | comp=Z,6µm,18.9s,baz=25,slow=45 | | | | | | | |
| LESA | Schwarzleotal | 10.44 | 324 | *i* Pn | | Pn | 07 14 56.0 | +2.0 |
| | comp=Z,52nm,0.7s | | | | | | | |
| LESA | | | | *e*Sn | | Sn | 07 16 48.0 | -3.0 |
| | comp=Z,297nm,0.6s | | | | | | | |
| MAUC | Maruska | 10.45 | 346 | *e*PN | | Pn | 07 14 56.0 | +1.9 |
| KRUC | Moravsky | 10.48 | 341 | *e*PN | | Pn | 07 14 52.0 | -2.6 |
| HORU | Horodok | 10.50 | 17 | P | | Pn | 07 14 56.4 | +1.6 |
| RJOB | Jochberg | 10.62 | 326 | *e*Pn | | Pn | 07 14 58.1 | +1.5 |
| RJOB | | | | *e*Sn | | Sn | 07 16 53.2 | -2.3 |
| DIKM | Dikmen | 10.63 | 73 | ⇑P | | Pn | 07 14 57.7 | +1.1 |
| DIKM | Dikmen | 10.63 | 73 | P | | Pn | 07 15 01.0 | +4.4 |
| | comp=Z,98nm,1.2s,comp=Z,2µm | | | | | | | |
| VRAC | Vranov | 10.66 | 342 | *e*PN | | Pn | 07 14 56.4 | -0.6 |
| VRAC | Vranov | 10.66 | 342 | Pn | | Pn | 07 14 57.4 | +0.4 |
| | comp=Z,2.0nm,0.3s,baz=169,slow=14,SNR=61 | | | | | | | |
| VRAC | | | | Sn | | Sn | 07 16 54.2 | -2.3 |
| | comp=Z,0.7nm,0.3s,baz=304,slow=19,SNR=1.7 | | | | | | | |
| VRAC | | | | Lg | Lg | | 07 17 57.0 | |
| | comp=Z,0.2nm,0.3s,baz=153,slow=17,SNR=1.7 | | | | | | | |
| | comp=Z,72nm,0.9s | | | | | | | |
| VRAC | Vranov | 10.66 | 342 | P | | Pn | 07 14 58.6 | +1.6 |
| LVV | L'vov | 10.67 | 8 | *e*P | | Pn | 07 15 01.6 | +4.4 |
| LVV | | | | *e*S | | Sn | 07 17 02.5 | +5.8 |
| LVV | | | | pmax | pmax | | | |
| | comp=Z,600nm,1.4s | | | | | | | |
| LVV | | | | MLR | MLR | | | |
| | comp=E,1µm,11.0s | | | | | | | |
| LVV | | | | MLR | MLR | | | |
| | comp=N,5µm,10.0s | | | | | | | |
| LVV | | | | MLR | MLR | | | |
| | comp=Z,6µm,11.0s | | | | | | | |
| LVV | L'vov | 10.67 | 8 | P | | Pn | 07 14 58.7 | +1.5 |
| WTTA | Wattenberg | 10.81 | 321 | *i* Pn | | Pn | 07 14 59.8 | +0.5 |
| | comp=Z,15nm,0.6s,SNR=52 | | | | | | | |
| WTTA | | | | *i* Sn | | Sn | 07 16 56.9 | -3.5 |
| | comp=Z,1µm,1.3s | | | | | | | |
| WTTA | Wattenberg | 10.81 | 321 | *e*Pn | | Pn | 07 15 00.4 | +1.1 |
| WTTA | | | | *e*Sn | | Sn | 07 16 55.3 | -5.1 |
| SIM | Simferopol' | 10.84 | 54 | *e*P | | Pn | 07 14 59.5 | 0.0 |
| SIM | | | | *e*S | | Sn | 07 17 01.0 | +0.1 |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,33nm,0.7s | | | | | | | |
| SIM | | | | MLR | MLR | | | |
| | comp=Z,2µm,15.0s | | | | | | | |
| OKC | Ostrava-Krasne | 10.85 | 348 | *e*SN | | Sn | 07 17 02.3 | +1.3 |
| OKC | | | | AMS | AMS | | 07 19 40.0 | |
| | comp=Z,6µm,9.6s | | | | | | | |
| WATA | Walderalm | 10.89 | 321 | *i* Pn | | Pn | 07 15 01.9 | +1.6 |
| | comp=Z,103nm,0.7s,SNR=35 | | | | | | | |
| WATA | | | | *i* Sn | | Sn | 07 17 00.6 | -1.7 |
| | comp=Z,913nm,0.8s | | | | | | | |
| MORC | Moravsky Berou | 10.90 | 346 | | | Pn | 07 15 00.1 | -0.2 |
| MORC | Moravsky Berou | 10.90 | 346 | *e*PN | | Pn | 07 14 59.5 | -0.8 |
| MORC | Moravsky Berou | 10.90 | 346 | ⇓P | | Pn | 07 15 00.2 | 0.0 |
| MORC | Moravsky Berou | 10.90 | 346 | ⇓P | | Pn | 07 15 01.6 | +1.3 |
| MORC | Moravsky Berou | 10.90 | 346 | P | | Pn | 07 15 02.6 | +2.3 |
| CKRC | Cesky Krumlov | 10.90 | 333 | *e*PN | | Pn | 07 15 01.9 | +1.6 |
| CKRC | | | | AMS | AMS | | 07 19 40.0 | |
| | comp=Z,17µm,13.1s | | | | | | | |
| CKRC | Cesky Krumlov | 10.90 | 333 | *e*P | | Pn | 07 15 01.9 | +1.6 |
| CKRC | | | | MLR | MLR | | | |
| | comp=Z,17µm,13.1s | | | | | | | |
| TREC | Trest | 10.94 | 338 | *e*PN | | Pn | 07 15 01.7 | +0.8 |
| TREC | | | | AMS | AMS | | 07 19 40.0 | |
| | comp=Z,16µm,10.8s | | | | | | | |
| TREC | Trest | 10.94 | 338 | *e*P | | Pn | 07 15 01.7 | +0.8 |
| TREC | | | | MLR | MLR | | | |
| | comp=Z,16µm,10.8s | | | | | | | |
| SQTA | Sankt Quirin | 11.00 | 320 | *i* Pn | | Pn | 07 15 02.8 | +1.1 |
| | comp=Z,25nm,0.4s,SNR=55 | | | | | | | |
| SQTA | | | | *e*Sn | | Sn | 07 17 04.5 | -0.4 |
| | comp=Z,614nm,0.7s | | | | | | | |
| OJC | Ojcow | 11.02 | 354 | *e*P | | Pn | 07 15 02.1 | +0.2 |
| OJC | | | | *e*S | | Sn | 07 17 13.3 | +8.2 |
| OJC | Ojcow | 11.02 | 354 | | | Pn | 07 15 01.8 | -0.1 |
| OJC | Ojcow | 11.02 | 354 | ⇓P | | Pn | 07 15 03.3 | +1.4 |
| OJC | Ojcow | 11.02 | 354 | P | | Pn | 07 15 01.8 | -0.1 |
| FUORN | Ofenpass-Fuorn | 11.11 | 315 | | | Pn | 07 15 03.7 | +0.3 |
| FETA | Feichten | 11.11 | 318 | *e*Pn | | Pn | 07 15 03.9 | +0.6 |
| | comp=Z,25nm,0.7s,SNR=45 | | | | | | | |
| FETA | | | | *e*Sn | | Sn | 07 17 08.3 | +0.6 |
| | comp=Z,196nm,0.7s | | | | | | | |
| MOTA | Moosalm | 11.13 | 320 | *i* Pn | | Pn | 07 15 03.8 | +0.2 |
| | comp=Z,53nm,0.5s | | | | | | | |
| MOTA | | | | *e*Sn | | Sn | 07 17 08.3 | +0.1 |
| | comp=Z,506nm,0.7s | | | | | | | |
| GEC2 | GERESS Array S | 11.14 | 332 | *e*Pn | | Pn | 07 15 04.1 | +0.4 |
| GEC2 | | | | *e*Sn | | Sn | 07 17 08.1 | -0.1 |
| GERES | GERESS Array B | 11.14 | 332 | Pn | | Pn | 07 15 03.6 | 0.0 |
| | comp=Z,1.9nm,0.3s,baz=152,slow=9.1,SNR=25 | | | | | | | |
| GERES | | | | Sn | | Sn | 07 17 05.9 | -2.3 |
| | comp=Z,7.7nm,0.3s,baz=150,slow=24,SNR=7.3 | | | | | | | |
| GERES | | | | Lg | Lg | | 07 18 17.6 | |
| | baz=148,slow=30 | | | | | | | |
| GERES | | | | LR | LR | | 07 20 40.5 | |
| | comp=Z,3µm,21.1s,baz=144,slow=45 | | | | | | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| TATN | Tataouine | 11.22 | 237 | | | Pn | 07 15 01.7 | -3.1 |
| KRLC | Kraliky | 11.34 | 344 | AMS | AMS | | 07 20 20.0 | |
| | comp=Z,6µm,9.2s | | | | | | | |
| RETA | Reutte | 11.40 | 320 | *i* Pn | | Pn | 07 15 08.3 | +1.1 |
| | comp=Z,10nm,0.4s,SNR=30 | | | | | | | |
| RETA | | | | *e*Sn | | Sn | 07 17 11.6 | -3.0 |
| | comp=Z,395nm,0.9s | | | | | | | |
| DAVOX | Davos/Dischmat | 11.42 | 315 | Pn | | Pn | 07 15 08.4 | +0.8 |
| | comp=Z,3.5nm,0.3s,baz=130,slow=14,SNR=50 | | | | | | | |
| DAVOX | | | | Sn | | Sn | 07 17 09.7 | -5.5 |
| | comp=Z,7.8nm,0.3s,baz=283,slow=19,SNR=5.2 | | | | | | | |
| DAVOX | | | | Lg | Lg | | 07 18 26.7 | |
| | baz=8.7,slow=17 | | | | | | | |
| | comp=Z,94nm,0.9s | | | | | | | |
| KHC | Kasperske Hory | 11.42 | 332 | | | Pn | 07 15 06.7 | -0.7 |
| KHC | Kasperske Hory | 11.42 | 332 | *e*PN | | Pn | 07 15 08.6 | +1.1 |
| KHC | | | | *ex* | | x | 07 15 12.5 | |
| KHC | | | | *e*SN | | Sn | 07 17 11.8 | -3.3 |
| KHC | | | | AMS | AMS | | 07 19 50.0 | |
| | comp=Z,19µm,11.9s | | | | | | | |
| KHC | Kasperske Hory | 11.42 | 332 | *d* iP | | Pn | 07 15 06.9 | -0.6 |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,321nm,1.3s | | | | | | | |
| KHC | | | | MLR | MLR | | | |
| | comp=Z,18µm,15.0s | | | | | | | |
| KHC | Kasperske Hory | 11.42 | 332 | P | | Pn | 07 15 07.6 | +0.1 |
| | comp=Z,185nm,1.4s,comp=Z,2µm | | | | | | | |
| ZVC | Zvikov | 11.47 | 335 | *e*PN | | Pn | 07 15 10.0 | +1.9 |
| LUBAR | Lubar, Ukraine | 11.49 | 20 | P | | Pn | 07 15 10.0 | +1.7 |
| CMAH | Djebel Manchou | 11.55 | 261 | P | | Pn | 07 15 10.8 | +1.5 |
| ABSA | Djebel Ababsia | 11.62 | 259 | P | | Pn | 07 15 12.7 | +2.4 |
| FUR | Furstenfeldbru | 11.62 | 323 | *e*Pn | | Pn | 07 15 12.6 | +2.4 |
| FUR | | | | *e*Sn | | Sn | 07 17 15.5 | -4.6 |
| WET | Wettzell | 11.69 | 330 | *e*PN | | Pn | 07 15 10.7 | -0.4 |
| DPC | Dobruska-Polom | 11.70 | 343 | *e*PN | | Pn | 07 15 13.0 | +1.8 |
| DPC | | | | AMS | AMS | | 07 20 10.0 | |
| | comp=Z,7µm,9.9s | | | | | | | |
| DPC | Dobruska-Polom | 11.70 | 343 | *e*P | | Pn | 07 15 13.0 | +1.8 |
| DPC | | | | MLR | MLR | | | |
| | comp=Z,7µm,9.9s | | | | | | | |
| DPC | Dobruska-Polom | 11.70 | 343 | P | | Pn | 07 15 13.3 | +2.1 |
| | comp=Z,63nm,1.2s,comp=Z,985nm | | | | | | | |
| GOPC | GO Pecny, Ondr | 11.70 | 338 | *e*PN | | Pn | 07 15 11.9 | +0.7 |
| GOPC | GO Pecny, Ondr | 11.70 | 338 | *e*P | | Pn | 07 15 11.9 | +0.7 |
| DAVA | Damuels | 11.73 | 317 | *i* Pn | | Pn | 07 15 13.7 | +1.9 |
| | comp=Z,25nm,0.4s,SNR=27 | | | | | | | |
| DAVA | | | | *e*Sn | | Sn | 07 17 19.4 | -3.3 |
| | comp=Z,297nm,0.7s | | | | | | | |
| PRU | Pruhonice | 11.84 | 337 | *e*PN | | Pn | 07 15 12.9 | -0.2 |
| PRU | | | | AMS | AMS | | 07 20 10.0 | |
| | comp=Z,16µm,10.8s | | | | | | | |
| PRU | Pruhonice | 11.84 | 337 | *e*P | | Pn | 07 15 12.9 | -0.2 |
| PRU | | | | MLR | MLR | | | |
| | comp=Z,16µm,10.8s | | | | | | | |
| UBR | Ueberruh | 11.86 | 319 | *e*Pn | | Pn | 07 15 13.8 | +0.3 |
| UBR | | | | *e*Sn | | Sn | 07 17 20.6 | -5.3 |
| OSTC | Ostas | 11.91 | 343 | *e*PN | | Pn | 07 15 18.3 | +4.1 |
| OSTC | | | | AMS | AMS | | 07 20 50.0 | |
| | comp=Z,8µm,10.6s | | | | | | | |
| OSTC | Ostas | 11.91 | 343 | *e*P | | Pn | 07 15 18.3 | +4.1 |
| OSTC | | | | MLR | MLR | | | |
| | comp=Z,8µm,10.6s | | | | | | | |
| UPC | Upice | 11.91 | 342 | *e*PN | | Pn | 07 15 15.5 | +1.3 |
| UPC | | | | AMS | AMS | | 07 20 50.0 | |
| | comp=Z,6µm,13.7s | | | | | | | |
| UPC | Upice | 11.91 | 342 | *e*P | | Pn | 07 15 15.5 | +1.3 |
| CAEH | 'Ain El Ouahch | 11.94 | 263 | P | | Pn | 07 15 17.0 | +2.4 |
| PRA | Prague | 11.95 | 337 | AMS | AMS | | 07 20 20.0 | |
| | comp=Z,15µm,11.0s | | | | | | | |
| MI29 | MI29, Kamyanyy | 11.97 | 19 | P | | Pn | 07 15 16.5 | +1.7 |
| CHVC | Chvalec | 11.98 | 343 | *e*PN | | Pn | 07 15 18.4 | +3.3 |
| CHVC | | | | AMS | AMS | | 07 20 50.0 | |
| | comp=Z,6µm,11.5s | | | | | | | |
| CHVC | Chvalec | 11.98 | 343 | *e*P | | Pn | 07 15 18.4 | +3.3 |
| CHVC | | | | MLR | MLR | | | |
| | comp=Z,6µm,11.5s | | | | | | | |
| CKFL | Kef-Lekhel | 12.16 | 261 | P | | Pn | 07 15 16.0 | -1.6 |
| KSP | Ksiaz | 12.16 | 344 | *e*P | | Pn | 07 15 16.0 | -1.6 |
| KSP | | | | *e*S | | Sn | 07 17 47.2 | +14 |
| KSP | Ksiaz | 12.16 | 344 | ⇓P | | Pn | 07 15 18.2 | +0.7 |
| KSP | Ksiaz | 12.16 | 344 | P | | Pn | 07 15 20.4 | +2.8 |
| | comp=Z,75nm,1.0s,comp=Z,922nm | | | | | | | |
| PVCC | Panska Ves | 12.31 | 338 | AMS | AMS | | 07 20 30.0 | |
| | comp=Z,14µm,10.2s | | | | | | | |
| RNPP5 | Staryi Chortor | 12.31 | 13 | P | | Pn | 07 15 21.1 | +1.5 |
| MI30 | MI30,Zelenitsa | 12.36 | 20 | P | | Pn | 07 15 21.8 | +1.7 |
| CASM | Ain Smara | 12.38 | 261 | P | | Pn | 07 15 22.8 | +2.2 |
| MI28 | MI28,Pidlybu | 12.39 | 18 | P | | Pn | 07 15 22.3 | +1.6 |
| RNPP2 | Kostyukhnivka | 12.41 | 12 | P | | Pn | 07 15 22.4 | +1.5 |
| RNPP1 | Kostyukhnivka | 12.41 | 12 | P | | Pn | 07 15 22.4 | +1.5 |
| RNPP8 | Varash | 12.41 | 12 | P | | Pn | 07 15 22.5 | +1.6 |
| GAZ | Gaziantep | 12.41 | 95 | Pn | | Pn | 07 15 25.3 | +4.2 |
| ROTZ | Rotzenmuhle | 12.46 | 330 | *e*Pn | | Pn | 07 15 23.2 | +1.6 |
| AK07 | Malin Array Si | 12.46 | 23 | P | | Pn | 07 15 23.4 | +1.8 |
| AK13 | Malin Array Si | 12.48 | 22 | P | | Pn | 07 15 23.5 | +1.7 |
| RNPP9 | Sopachiv | 12.49 | 12 | P | | Pn | 07 15 23.5 | +1.5 |
| AK14 | Malin Array Si | 12.51 | 22 | P | | Pn | 07 15 24.0 | +1.8 |
| BNI | Bardonecchia | 12.52 | 302 | | | Pn | 07 15 22.9 | +0.4 |
| BNI | Bardonecchia | 12.52 | 302 | ⇑P | | Pn | 07 15 25.2 | +2.6 |
| BNI | Bardonecchia | 12.52 | 302 | P | | Pn | 07 15 22.9 | +0.4 |
| AK10 | Malin Array Si | 12.52 | 23 | P | | Pn | 07 15 24.2 | +1.8 |
| AK05 | Malin Array Si | 12.53 | 23 | P | | Pn | 07 15 24.2 | +1.7 |
| AK12 | Malin Array Si | 12.53 | 22 | P | | Pn | 07 15 24.3 | +1.7 |
| HNTI | Hanita | 12.54 | 115 | P | | Pn | 07 15 24.9 | +2.1 |
| HNTI | Hanita | 12.54 | 115 | P | | Pn | 07 15 24.1 | +1.3 |
| AK09 | Malin Array Si | 12.55 | 23 | P | | Pn | 07 15 24.5 | +1.7 |
| AK08 | Malin Array Si | 12.55 | 23 | P | | Pn | 07 15 24.6 | +1.8 |
| AK02 | Malin Array Si | 12.56 | 23 | P | | Pn | 07 15 24.7 | +1.8 |
| AK19 | Malin Array Si | 12.56 | 22 | P | | Pn | 07 15 24.7 | +1.8 |
| AK11 | Malin Array Si | 12.57 | 22 | P | | Pn | 07 15 24.8 | +1.8 |
| AK15 | Malin Array Si | 12.57 | 22 | P | | Pn | 07 15 24.8 | +1.7 |
| AK18 | Malin Array Si | 12.58 | 22 | P | | Pn | 07 15 24.9 | +1.7 |
| AK20 | Malin Array Si | 12.58 | 22 | P | | Pn | 07 15 24.9 | +1.7 |
| AK01 | Malin Array Si | 12.59 | 23 | P | | Pn | 07 15 25.1 | +1.7 |
| KIEV | Kiev | 12.59 | 23 | | | Pn | 07 15 23.6 | +0.2 |
| KIEV | Kiev | 12.59 | 23 | *i* P | | Pn | 07 15 24.0 | +0.7 |
| | SNR=24 | | | | | | | |
| KIEV | Kiev | 12.59 | 23 | ⇑P | | Pn | 07 15 23.5 | +0.2 |
| KIEV | Kiev | 12.59 | 23 | P | | Pn | 07 15 23.6 | +0.2 |
| KIEV | Kiev | 12.59 | 23 | P | | Pn | 07 15 24.1 | +0.7 |
| | comp=Z,303nm,1.4s,comp=Z,6µm | | | | | | | |
| AKASG | Malin Array Be | 12.60 | 23 | Pn | | Pn | 07 15 21.4 | -2.1 |
| | comp=Z,2.9nm,0.3s,baz=210,slow=13,SNR=32 | | | | | | | |
| AKASG | | | | Lg | Lg | | 07 19 01.4 | |
| | baz=191,slow=28 | | | | | | | |
| AKASG | | | | LR | LR | | 07 20 39.8 | |
| | comp=Z,6µm,18.5s,baz=211,slow=40 | | | | | | | |
| AKASG | | | | ScP | | ScP | 07 24 33.5 | -1.0 |
| | comp=Z,1.4nm,0.5s,baz=207,slow=1.5,SNR=6.9 | | | | | | | |
| | comp=Z,2.8nm,0.5s | | | | | | | |
| AKBB | Malin Array Si | 12.60 | 23 | *d* iP | | Pn | 07 15 23.5 | 0.0 |
| AKBB | | | | MLR | MLR | | | |
| | comp=Z,18µm,15.0s | | | | | | | |
| AKBB | Malin Array Si | 12.60 | 23 | P | | Pn | 07 15 25.3 | +1.8 |
| AK04 | Malin Array Si | 12.61 | 22 | P | | Pn | 07 15 25.3 | +1.7 |
| AK22 | Malin Array Si | 12.61 | 22 | P | | Pn | 07 15 25.4 | +1.8 |
| AK21 | Malin Array Si | 12.62 | 22 | P | | Pn | 07 15 25.4 | +1.7 |
| AK03 | Malin Array Si | 12.63 | 22 | P | | Pn | 07 15 25.6 | +1.8 |
| AK23 | Malin Array Si | 12.63 | 22 | P | | Pn | 07 15 25.6 | +1.7 |
| MANZ | Manzenberg | 12.67 | 331 | *e*Pn | | Pn | 07 15 26.0 | +1.5 |
| MANZ | | | | *e*Sn | | Sn | 07 17 43.9 | -1.7 |
| SENIN | Lac Senin/Sane | 12.69 | 309 | | | Pn | 07 15 24.5 | -0.4 |
| HSKC | Hora Svate Kat | 12.73 | 336 | *e*PN | | Pn | 07 15 25.9 | +0.6 |
| HSKC | | | | AMS | AMS | | 07 20 40.0 | |
| | comp=Z,16µm,11.1s | | | | | | | |
| MMA0B | Mount Meron ar | 12.74 | 115 | P | | Pn | 07 15 26.0 | +0.5 |
| MMAI | Mount Meron Ar | 12.74 | 115 | Pn | | Pn | 07 15 25.9 | +0.3 |
| | comp=Z,3.8nm,0.3s,baz=295,slow=14,SNR=30 | | | | | | | |
| MMAI | | | | Sn | | Sn | 07 17 47.8 | +0.3 |
| | comp=Z,2.2nm,0.3s,baz=284,slow=18,SNR=2.0 | | | | | | | |
| MMAI | | | | LR | LR | | 07 21 23.8 | |
| | comp=Z,2µm,18.5s,baz=269,slow=43 | | | | | | | |
| | comp=Z,13nm,0.5s | | | | | | | |
| MMA0 | Mount Meron ar | 12.74 | 115 | P | | Pn | 07 15 26.9 | +1.3 |
| GRA1 | Grafenberg Arr | 12.79 | 328 | | | Pn | 07 15 26.1 | 0.0 |
| GRF | Grafenberg Arr | 12.79 | 328 | P | | Pn | 07 15 26.1 | 0.0 |
| GRF | Grafenberg Arr | 12.79 | 328 | *e*Pn | | Pn | 07 15 26.9 | +0.8 |
| GRF | | | | *e*Sn | | Sn | 07 17 43.9 | -4.6 |
| GRFO | Grafenberg | 12.79 | 328 | | | Pn | 07 15 26.4 | +0.3 |
| GRFO | Grafenberg | 12.79 | 328 | P | | Pn | 07 15 26.4 | +0.3 |
| BRG | Berggiesshubel | 12.80 | 337 | *i* P | | Pn | 07 15 26.5 | +0.2 |
| BRG | | | | Amp | | | 07 15 28.0 | |
| | comp=Z,45nm,1.3s | | | | | | | |
| BRG | Berggiesshubel | 12.80 | 337 | P | | Pn | 07 15 31.5 | +5.2 |
| BRG | | | | Amp | | | 07 15 33.3 | |
| | comp=Z,102nm,1.4s | | | | | | | |
| BRG | Berggiesshubel | 12.80 | 337 | *i* P | | Pn | 07 15 26.5 | +0.2 |
| BRG | | | | S | | Sn | 07 17 49.0 | +0.2 |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,45nm,1.3s | | | | | | | |
| BRG | | | | smax | smax | | | |
| | comp=N,7µm,11.1s | | | | | | | |
| BRG | | | | MLR | MLR | | | |
| | comp=Z,14µm,10.8s | | | | | | | |
| BRG | | | | MLR | MLR | | | |
| | comp=E,7µm,11.6s | | | | | | | |
| BRG | Berggiesshubel | 12.80 | 337 | *e*Pn | | Pn | 07 15 26.8 | +0.6 |
| GEM | Giv'at Ha'Em | 12.82 | 114 | ⇓P | | Pn | 07 15 26.7 | +0.2 |
| GEM | Giv'at Ha'Em | 12.82 | 114 | P | | Pn | 07 15 28.1 | +1.5 |
| GEM | Giv'at Ha'Em | 12.82 | 114 | P | | Pn | 07 15 28.4 | +1.9 |
| NATI | Neve Ativ | 12.84 | 114 | P | | Pn | 07 15 30.5 | +3.6 |
| TANN | Tannenbergstha | 12.89 | 333 | *e*Pn | | Pn | 07 15 28.5 | +0.9 |
| TANN | | | | *e*Sn | | Sn | 07 17 49.1 | -2.0 |
| SLTI | Sal'it | 12.93 | 119 | P | | Pn | 07 15 28.4 | +0.3 |
| SLTI | Sal'it | 12.93 | 119 | S | | Sn | 07 17 51.8 | -0.3 |
| ARPR | Arapgir-MALATY | 12.94 | 86 | Pn | | Pn | 07 15 32.7 | +4.3 |
| ANN | Anapa | 12.95 | 60 | *e*P | | Pn | 07 15 26.9 | -1.4 |
| ANN | | | | *e*S | | Sn | 07 17 49.0 | -3.4 |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,37nm,0.9s | | | | | | | |
| STU | Stuttgart | 13.04 | 321 | | | Pn | 07 15 28.2 | -1.3 |
| STU | Stuttgart | 13.04 | 321 | ⇑P | | Pn | 07 15 29.1 | -0.5 |
| STU | Stuttgart | 13.04 | 321 | P | | Pn | 07 15 28.2 | -1.3 |
| STU | Stuttgart | 13.04 | 321 | *e*Pn | | Pn | 07 15 29.0 | -0.5 |
| STU | | | | *e*Sn | | Sn | 07 17 47.4 | -7.2 |
| KSHT | Keshet | 13.04 | 114 | P | | Pn | 07 15 30.6 | +0.9 |
| MMLI | Mount Malkishu | 13.08 | 117 | P | | Pn | 07 15 31.3 | +1.2 |
| MMLI | Mount Malkishu | 13.08 | 117 | S | | Sn | 07 17 55.5 | -0.2 |
| SALP | Salfit | 13.13 | 119 | ⇑P | | Pn | 07 15 32.9 | +2.0 |
| SALP | Salfit | 13.13 | 119 | P | | Pn | 07 15 34.1 | +3.2 |
| SHMJ | Saham | 13.15 | 115 | P | | Pn | 07 15 32.2 | +1.1 |
| BFO | Black Forest | 13.20 | 318 | | | Pn | 07 15 30.4 | -1.2 |
| BFO | Black Forest | 13.20 | 318 | ⇓P | | Pn | 07 15 29.6 | -2.1 |
| BFO | Black Forest | 13.20 | 318 | P | | Pn | 07 15 30.5 | -1.2 |
| BFO | Black Forest | 13.20 | 318 | *e*Pn | | Pn | 07 15 30.0 | -1.6 |
| SET | Setif | 13.23 | 262 | P | | P | 07 15 38.0 | -4.3 |
| QRNJ | Al-Qirein | 13.24 | 117 | P | | Pn | 07 15 34.2 | +1.9 |
| HMDT | Nahal Hemdat | 13.26 | 118 | P | | Pn | 07 15 34.8 | +2.3 |
| HMDT | Nahal Hemdat | 13.26 | 118 | P | | Pn | 07 15 34.5 | +2.0 |
| HMDT | Nahal Hemdat | 13.26 | 118 | S | | Sn | 07 18 00.2 | +0.2 |
| KZIT | Kziot | 13.35 | 125 | P | | Pn | 07 15 33.2 | -0.7 |
| KZIT | Kziot | 13.35 | 125 | P | | Pn | 07 15 33.4 | -0.4 |
| KZIT | Kziot | 13.35 | 125 | S | | Sn | 07 17 57.9 | -4.5 |
| MOX | Moxa | 13.39 | 331 | *e*Pn | | Pn | 07 15 35.8 | +1.5 |
| UJAP | Al Uja | 13.39 | 119 | P | | Pn | 07 15 36.6 | +2.3 |
| CLL | Collm | 13.47 | 336 | | | Pn | 07 15 35.2 | -0.1 |
| CLL | Collm | 13.47 | 336 | *i* P | | Pn | 07 15 35.4 | 0.0 |
| | comp=Z,42nm,1.3s | | | | | | | |
| CLL | | | | *i* sP | | P | 07 15 40.2 | -4.6 |
| CLL | | | | *i* PP | | PnPn | 07 15 45.5 | +2.3 |
| | comp=Z,132nm,1.0s | | | | | | | |
| CLL | | | | *i* sPP | | | 07 15 48.9 | |
| CLL | | | | *e*S | | Sn | 07 18 06.0 | +0.9 |
| CLL | | | | *e*SS | | S | 07 18 24.0 | -4.9 |
| CLL | | | | *ex* | | x | 07 18 39.0 | |
| CLL | | | | AMS | AMS | | 07 21 00.0 | |
| CLL | Collm | 13.47 | 336 | *i* P | | Pn | 07 15 35.4 | 0.0 |
| CLL | | | | *e*S | | Sn | 07 18 06.0 | +0.9 |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,42nm,1.3s | | | | | | | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,132nm,1.0s | | | | | | | |
| CLL | Collm | 13.47 | 336 | P | | Pn | 07 15 35.9 | +0.5 |
| | comp=Z,126nm,1.0s,comp=Z,2µm | | | | | | | |
| YTIR | Yattir | 13.52 | 122 | P | | Pn | 07 15 37.4 | +1.2 |
| DSI | Dead Sea | 13.57 | 120 | P | | Pn | 07 15 41.1 | +4.3 |
| DSI | Dead Sea | 13.57 | 120 | P | | Pn | 07 15 38.1 | +1.4 |
| MSBI | Mazada | 13.71 | 121 | ⇑P | | Pn | 07 15 39.3 | +0.5 |
| MSBI | Mazada | 13.71 | 121 | P | | Pn | 07 15 42.3 | +3.6 |
| MSBI | Mazada | 13.71 | 121 | P | | Pn | 07 15 39.9 | +1.2 |
| ECH | Echery | 13.75 | 315 | | | Pn | 07 15 38.8 | -0.5 |
| ECH | Echery | 13.75 | 315 | P | | Pn | 07 15 38.8 | -0.5 |
| PLTM | Poltava | 13.81 | 37 | P | | Pn | 07 15 42.1 | +2.1 |
| LISJ | El Lisan | 13.84 | 121 | P | | Pn | 07 15 44.6 | +4.1 |
| GHAJ | Ghor Haditha | 13.86 | 121 | | | Pn | 07 15 42.7 | +2.0 |
| GHAJ | Ghor Haditha | 13.86 | 121 | P | | Pn | 07 15 43.5 | +2.8 |
| GHAJ | Ghor Haditha | 13.86 | 121 | P | | Pn | 07 15 39.9 | -0.8 |
| SSB | Saint Sauveur | 14.01 | 301 | | | Pn | 07 15 44.1 | +1.3 |
| SSB | Saint Sauveur | 14.01 | 301 | ⇑P | | Pn | 07 15 44.5 | +1.6 |
| SSB | Saint Sauveur | 14.01 | 301 | P | | Pn | 07 15 44.2 | +1.3 |
| ZFRI | Zfri | 14.09 | 124 | P | | Pn | 07 15 44.5 | +0.6 |
| ZFRI | Zfri | 14.09 | 124 | S | | Sn | 07 18 15.3 | -5.0 |
| ZFRI | Zfri | 14.09 | 124 | P | | Pn | 07 15 43.8 | 0.0 |
| PRNI | Paran | 14.11 | 125 | P | | Pn | 07 15 45.6 | +1.3 |
| PRNI | Paran | 14.11 | 125 | S | | Sn | 07 18 16.9 | -4.0 |
| PRNI | Paran | 14.11 | 125 | P | | Pn | 07 15 43.0 | -1.3 |
| SOC | Sochi | 14.21 | 67 | *e*P | | Pn | 07 15 43.7 | -1.8 |
| SOC | | | | *e* | | | 07 18 21.1 | |
| ASF | Jabal al Asfar | 14.25 | 115 | Pn | | Pn | 07 15 46.2 | 0.0 |
| | comp=Z,5.9nm,1.0s,baz=33,slow=0.1,SNR=8.6 | | | | | | | |
| RUE | Ruedersdorf | 14.29 | 340 | *e*P | | P | 07 15 54.5 | +0.8 |
| HRFI | Mount Harif | 14.35 | 126 | P | | Pn | 07 15 46.9 | -0.6 |
| TNS | Taunus Mts | 14.39 | 324 | *e*Pn | | Pn | 07 15 47.5 | -0.6 |
| TNS | | | | *e*Sn | | Sn | 07 18 18.0 | -10 |
| MBRI | Mt Berech | 14.44 | 127 | P | | Pn | 07 15 48.0 | -0.8 |
| MBRI | Mt Berech | 14.44 | 127 | P | | Pn | 07 15 47.9 | -0.8 |
| EIL | Elat | 14.55 | 127 | ⇑P | | Pn | 07 15 50.0 | -0.3 |
| EIL | Elat | 14.55 | 127 | Pn | | Pn | 07 15 49.5 | -0.8 |
| | comp=Z,1.3nm,0.3s,baz=281,slow=4.4,SNR=9.4 | | | | | | | |
| EIL | | | | Sn | | Sn | 07 18 25.8 | -5.7 |
| | comp=Z,3.4nm,0.3s,baz=344,slow=14,SNR=5.4 | | | | | | | |
| EIL | | | | LR | LR | | 07 23 19.9 | |
| | comp=Z,588nm,21.9s,baz=272,slow=45 | | | | | | | |
| | comp=Z,6.5nm,0.5s | | | | | | | |
| EIL | Elat | 14.55 | 127 | P | | Pn | 07 15 51.8 | +1.6 |
| EI

comp=Z,701nm,1.7s
**PABE Paberze** 16.31 5 *e*P Pn 07 16 13.9 +0.7
**SHA1 Shidzhatmaz** 16.34 67*c* *i*P P 07 16 15.9 -1.0
**KIV Kislovodsk** 16.39 67 P P 07 16 16.3 -1.1
**KIV Kislovodsk** 16.39 67 *i* P P 07 16 16.9 -0.4
SNR=16
**KIV Kislovodsk** 16.39 67 *e*P Pn 07 16 14.8 +0.3
KIV *e*S Sn 07 19 17.1 +0.7
KIV pmax pmax
comp=Z,51nm,1.1s
KIV MLR MLR
comp=Z,402nm,14.0s
**BSD Bornholm Skovb** 16.48 346 ⇑P P 07 16 16.9 -1.2
**BSD Bornholm Skovb** 16.48 346 *e*P P 07 16 18.4 +0.3
**BSD Bornholm Skovb** 16.48 346 *i* P P 07 16 16.9 -1.2
BSD IAmb IAmb 07 16 23.1
comp=Z,105nm,1.0s
**KARS Kars** 16.48 78 P P 07 16 19.0 +0.6
**KARS Kars** 16.48 78 P P 07 16 19.0 +0.6
KARS pmax pmax
comp=Z,173nm,1.2s
**KBZ Khabaz** 16.51 68 Pn Pn 07 16 16.6 +0.8
comp=Z,0.6nm,0.3s,baz=273,slow=9.3,SNR=24
comp=Z,6.7nm,0.8s
**KBZ Khabaz** 16.51 68*d* *i*P P 07 16 17.4 -1.1
KBZ MLR MLR
comp=Z,1μm,16.0s
**GOF Gofitskoye** 16.85 63*ce*P P 07 16 23.9 +1.6
**VSR Storozhevoye** 17.11 40 *e*P P 07 16 24.7 -0.4
VSR pmax pmax
comp=Z,260nm,1.6s
VSR MLR MLR
comp=Z,14μm,11.0s
**LUNU Lund** 17.26 344 *i*P Pn 07 16 24.9 -0.3
**VORR Voronezh** 17.41 39 *e*P Pn 07 16 26.8 -0.3
VORR pmax pmax
comp=Z,252nm,1.2s
VORR MLR MLR
comp=Z,4μm,13.0s
**ECHE Chera** 17.48 278 P Pn 07 16 27.9 -0.3
**MFF Saint Martin d** 17.53 302 ⇓P P 07 16 30.9 +1.1
**BJUU Bjuv** 17.76 344 *i* P P 07 16 32.1 -0.1
**GNI Garni** 17.77 80 P P 07 16 34.7 +2.0
**GNI Garni** 17.77 80 P P 07 16 36.3 +3.5
**GNI Garni** 17.77 80 P Pn 07 16 32.1 +0.1
comp=Z,2.6nm,0.3s,baz=286,slow=4.5,SNR=13
GNI LR LR 07 23 31.9
comp=Z,2μm,21.4s,baz=274,slow=38
comp=Z,21nm,0.6s
**GNI Garni** 17.77 80*d* *i*P P 07 16 34.7 +2.0
GNI pmax pmax
comp=Z,174nm,2.9s
GNI MLR MLR
comp=Z,2μm,15.0s
**CART Cartagena** 17.83 272 P Pn 07 16 30.6 -1.8
**LPSR Galich'ya Gora** 17.87 36 *e*P Pn 07 16 31.3 -1.6
LPSR pmax pmax
comp=Z,280nm,1.5s
LPSR MLR MLR
comp=Z,7μm,12.0s
**DEL Delary** 17.96 346 *i* P Pn 07 16 32.5 -1.4
**EMUR La Murta** 17.96 273 P Pn 07 16 32.3 -1.8
**ETOB Tobarra** 18.06 275 P P 07 16 35.9 +0.1
**SSRD Sdr. Stenderup** 18.09 338 *i* P Pn 07 16 34.1 -1.4
SSRD IAmb IAmb 07 16 40.1
comp=Z,120nm,1.1s
**SLIT Slitere, Latvi** 18.37 1 *e*P P 07 16 39.3 +0.4
**VRH Novokhopyorsk** 18.41 43 *e*P P 07 16 39.2 -0.3
VRH pmax pmax
comp=Z,363nm,1.5s
VRH MLR MLR
comp=Z,4μm,16.0s
**FABU Falkenberg** 18.68 345 *i* P P 07 16 41.2 -1.1
**OBN Obninsk** 18.74 27 P P 07 16 42.1 -0.8
**OBN Obninsk** 18.74 27 P Pn 07 16 43.6 +0.3
comp=Z,10.0nm,0.3s,baz=216,slow=5.8,SNR=7.3
OBN LR LR 07 25 12.5
comp=Z,3μm,18.4s,baz=206,slow=41
comp=Z,40nm,0.5s
**OBN Obninsk** 18.74 27*d* *i*P P 07 16 40.4 -2.6
OBN *i* S Sn 07 20 08.0 -4.8
OBN pmax pmax
comp=Z,217nm,1.4s
OBN MLR MLR
comp=Z,4μm,14.0s
**OBN Obninsk** 18.74 27 P Pn 07 16 45.5 +2.1
comp=Z,129nm,1.1s,comp=Z,4μm
**ENIJ Nijar** 18.91 271 P P 07 16 44.0 -1.1
**MUD Monsted U'grnd** 19.06 338 *i* P P 07 16 46.3 -0.2
MUD IAmb IAmb 07 16 54.2
comp=Z,610nm,2.0s
**ONAU Onsala** 19.22 344 *i* P P 07 16 47.9 -0.3
**ELMS Elmsett, Ipswi** 19.22 319 *e*P Pn 07 16 48.8 -0.5
**BORU Boraas** 19.26 345 *i* P P 07 16 48.2 -0.5
**EBER Berja** 19.46 271 P Pn 07 16 51.9 -0.5
**VSU Vasula** 19.48 8 ⇑P P 07 16 50.2 -0.9
**VSU Vasula** 19.48 8*ce*P P 07 16 50.6 -0.5
VSU pmax pmax
comp=Z,89nm,0.9s
VSU MLR MLR
comp=Z,7μm,17.0s
**MTSE Matsula** 19.50 3 *e*P P 07 16 50.6 -0.7
**CHAS Isla Isabel II** 19.60 266 P Pn 07 16 53.5 -0.4
**MOS Moscow** 19.60 28 *e*P P 07 16 50.6 -1.9
MOS *e*S S 07 20 28.2 -5.4
MOS pmax pmax
comp=Z,177nm,1.2s
MOS pmax pmax
comp=N,105nm,1.0s
MOS MLR MLR
comp=Z,7μm,11.0s
MOS MLR MLR
comp=N,5μm,12.0s
**JLP Les Platons** 19.64 308 *e*P P 07 16 53.0 0.0
**JSA Saint Aubin** 19.67 308 *e*P P 07 16 52.8 -0.4
JSA IAmb IAmb 07 16 54.5
comp=Z,218nm,1.0s
**JSA Saint Aubin** 19.67 308 ⇓P Pn 07 16 53.5 -1.1
**WACR West Acre** 19.76 320 *e*P P 07 16 54.2 0.0
WACR IAmb IAmb 07 16 55.8
comp=Z,189nm,1.0s
**ESDC Sonseca Array** 19.77 279 P Pn 07 16 55.8 -0.3
comp=Z,1.0nm,0.3s,baz=73,slow=11,SNR=137
ESDC LR LR 07 24 28.1
comp=Z,2μm,18.9s,baz=76,slow=37
comp=Z,87nm,1.1s
**MAK Makhachkala** 19.79 71*c* *i*P P 07 16 54.5 -0.1
MAK *e*S Sn 07 20 38.5 +0.1
MAK pmax pmax
comp=Z,412nm,1.0s
MAK MLR MLR
comp=Z,3μm,13.0s
**EQTA Presa de Quent** 19.81 272 P Pn 07 16 57.5 +0.9
**EALB Alboran** 19.83 268 P Pn 07 16 56.9 +0.2
**TJOU Tjoern** 19.86 344 *i* P P 07 16 54.7 -0.6
**AKT Akhty** 19.96 75 *e*P P 07 16 57.4 +0.7
AKT *e*S Sn 07 20 45.6 +2.8
AKT pmax pmax
comp=Z,207nm,1.0s
AKT MLR MLR
comp=Z,2μm,20.0s
**ELGU Los Guajares,** 20.04 271 P P 07 16 57.6 +0.1
**ROSF Rostrenen** 20.07 305 *e*P Pn 07 16 58.4 -1.0
**ROSF Rostrenen** 20.07 305 ⇓P Pn 07 16 58.2 -1.3
**PAB San Pablo** 20.08 279 P Pn 07 16 59.0 -0.7
**PAB San Pablo** 20.08 279 ⇑P Pn 07 16 59.2 -0.5
**PAB San Pablo** 20.08 279 P Pn 07 16 59.1 -0.6
PAB pmax pmax
comp=Z,382nm,1.3s
**EGOR Sierra Gorda,** 20.35 272 P P 07 16 59.9 -1.1
**ARBE Arbavere** 20.36 6 *e*P P 07 17 00.5 -0.3
**EADA Adamuz** 20.48 275 P Pn 07 17 03.1 -1.3
**EMAL Malaga-Limoner** 20.69 271 P P 07 17 03.3 -1.2
**STRD Stroud** 20.74 315 *e*P P 07 17 04.5 -0.3
**HOMB Homborsund** 20.82 340 IAmb IAmb 07 17 14.9
comp=Z,2μm,2.8s
HOMB *e*S S 07 20 57.6 -0.1
HOMB IAMs_20 IAMs_20 07 26 48.3
comp=Z,10μm,11.1s
**MEF Metsahovi** 21.03 4 *e*P P 07 17 07.0 -0.9
**MONM Monmouth** 21.12 315 *e*P P 07 17 08.9 -0.1
MONM IAmb IAmb 07 17 15.0
comp=Z,170nm,1.0s
**DYA Yadsworthy** 21.19 310 *e*P P 07 17 09.8 0.0
**SNART Snartemo** 21.23 339 *e*P P 07 17 14.0 +3.9

SNART *e*S Sn 07 21 09.2 -3.6
SNART *e*ScP ScP 07 24 58.3 +6.6
SNART IAMs_20 IAMs_20 07 27 01.1
comp=Z,37μm,59.9s
SNART ⇑*e*ScS ScS 07 28 31.3 -3.9
**PUL Pulkovo** 21.23 12*d* *i*P P 07 17 08.9 -1.2
PUL pmax pmax
comp=Z,103nm,0.9s
PUL MLR MLR
comp=Z,3μm,16.0s
**MCH1 Michaelchurch** 21.30 315 *e*P P 07 17 11.1 +0.1
MCH1 IAmb IAmb 07 17 18.1
comp=Z,460nm,1.4s
**MCH1 Michaelchurch** 21.30 315 ⇓P P 07 17 10.6 -0.3
**LBWR Ladybower, Pea** 21.32 319 *e*P P 07 17 11.1 0.0
LBWR IAmb IAmb 07 17 15.6
comp=Z,169nm,1.1s
**STNC Stoke** 21.40 318 *e*P P 07 17 12.5 +0.5
STNC IAmb IAmb 07 17 19.1
comp=Z,304nm,0.9s
**HFS Hagfors** 21.47 349 P P 07 17 11.7 -1.0
comp=Z,28nm,0.5s,baz=165,slow=12,SNR=50
HFS LR LR 07 26 01.1
comp=Z,2μm,21.5s,baz=164,slow=38
comp=Z,28nm,0.5s
**HLM1 Long Mynd** 21.48 316 *e*P P 07 17 12.7 -0.1
**HPK Haverah Park** 21.57 321 *e*P P 07 17 13.4 -0.4
**SBD Saint Breward** 21.68 310 *e*P P 07 17 15.0 0.0
**PBRG Braganca** 21.69 286 *i* P P 07 17 18.2 +2.9
comp=Z,522nm,1.5s
**HTL Hartland** 21.72 311 *e*P P 07 17 16.3 +0.8
**RAF Rauma** 21.77 0 *e*P P 07 17 14.2 -1.7
**KONO Kongsberg** 21.78 343 P P 07 17 14.6 -1.3
**KONO Kongsberg** 21.78 343 *e*P P 07 17 14.7 -1.3
KONO IAmb IAmb 07 17 20.2
comp=Z,110nm,1.1s
KONO *e*S S 07 21 14.9 -1.7
KONO IAMs_20 IAMs_20 07 27 53.0
comp=Z,3μm,10.3s
**KONO Kongsberg** 21.78 343 ⇑P P 07 17 14.7 -1.3
**KONO Kongsberg** 21.78 343 P P 07 17 14.6 -1.3
KONO pmax pmax
comp=Z,96nm,1.1s
**OSL Oslo** 21.80 345 *e*P P 07 17 16.4 +0.2
**FOEL Foel Wylfa** 21.83 317 *e*P P 07 17 16.8 +0.2
FOEL IAmb IAmb 07 17 19.8
comp=Z,139nm,0.9s
**CCA1 Carnmenellis** 21.88 309 *e*P P 07 17 16.5 -0.7
**MVO Moncorvo** 21.95 284 *e*P P 07 17 18.5 +0.4
comp=Z,220nm,1.6s
MVO *e*S S 07 21 19.5 -1.0
MVO *e*LR LR 07 25 10.2
**LLW Llanuwchllyn** 22.05 316 *e*P P 07 17 18.1 -0.9
**MDT Midelt** 22.15 261 LR LR 07 25 58.9
comp=Z,1μm,21.9s,baz=68,slow=37
**BELG Belogornoye** 22.20 45 LR LR 07 26 22.7
comp=Z,2μm,21.3s,baz=238,slow=38
**BELG Belogornoye** 22.20 45*d* *i*P P 07 17 20.5 0.0
BELG pmax pmax
comp=Z,38nm,1.0s
BELG MLR MLR
comp=Z,536nm,16.0s
**EDMD Edmundbyers** 22.22 322 *e*P P 07 17 20.0 -0.8
**RSBS Rosebush, Pemb** 22.25 313 *e*P P 07 17 20.9 -0.3
RSBS IAmb IAmb 07 17 27.4
comp=Z,355nm,1.5s
**BLS5 Blasjo** 22.36 339 *e*P P 07 17 22.3 +0.1
BLS5 IAmb IAmb 07 17 29.0
comp=Z,56nm,0.9s
BLS5 *e*S S 07 21 30.1 +2.2
BLS5 *e*ScP ScP 07 24 50.8 -3.8
BLS5 IAMs_20 IAMs_20 07 27 45.1
comp=Z,6μm,11.0s
**FINES FINESS Array B** 22.36 6 P P 07 17 20.0 -2.2
comp=Z,15nm,0.5s,baz=165,slow=11,SNR=86
FINES PcP PcP 07 21 16.8 -0.3
comp=Z,2.4nm,0.5s,baz=184,slow=2.2,SNR=3.5
FINES ScP ScP 07 24 53.4 -1.1
comp=Z,1.4nm,0.5s,baz=187,slow=2.7,SNR=4.9
FINES LR LR 07 26 59.9
comp=Z,5μm,19.4s,baz=186,slow=39
comp=Z,15nm,0.5s
**PBAR Barrancos** 22.38 276 *e*P P 07 17 23.8 +1.1
comp=Z,218nm,1.3s
**NC602 NORSAR Array S** 22.39 347 *e*P P 07 17 22.1 -0.5
NC602 *e*S S 07 21 30.6 +2.3
**MTE Manteigas** 22.41 282 P P 07 17 22.4 -0.7
MTE IAmb IAmb 07 17 29.9
comp=Z,138nm,1.1s
**MTE Manteigas** 22.41 282 *e*P P 07 17 23.3 +0.2
comp=Z,190nm,1.3s
MTE *e*S S 07 21 27.4 -1.9
MTE *e*LR LR 07 25 02.2
**MTE Manteigas** 22.41 282 ⇑P P 07 17 24.1 +1.0
**PMRV Marv??o** 22.43 280 *e*P P 07 17 23.3 +0.1
comp=Z,186nm,1.7s
**PCBR Castelo Branco** 22.43 281 *e*P P 07 17 23.2 0.0
comp=Z,120nm,1.2s
**PVRL Vila Real** 22.46 285 *e*P P 07 17 25.7 +2.2
comp=Z,100nm,1.4s
**YLL Llanberis** 22.46 317 *e*P P 07 17 22.1 -1.3
**POLO Lamas de Olo** 22.51 285 *e*P P 07 17 26.4 +2.3
comp=Z,65nm,1.5s
**KMY Karmoy** 22.53 338 *e*P P 07 17 24.4 +0.4
KMY *e*S S 07 21 33.8 +3.0
KMY *e*ScP ScP 07 24 59.3 +4.3
**KESW Keswick, Cumbr** 22.64 321 *e*P P 07 17 24.8 -0.5
KESW IAmb IAmb 07 17 32.3
comp=Z,203nm,1.0s
**PVIS Viseu** 22.64 283 *e*P P 07 17 27.8 +2.3
comp=Z,199nm,1.4s
**WLF1 Llynfaes** 22.65 317 *e*P P 07 17 24.7 -0.7
WLF1 IAmb IAmb 07 17 31.1
comp=Z,248nm,1.3s
**PCAB Cabril** 22.66 286 *i* P P 07 17 27.9 +2.2
comp=Z,201nm,1.0s
**PESTR Estremoz** 22.67 278 P P 07 17 26.9 +1.1
PESTR IAmb IAmb 07 17 36.7
comp=Z,100nm,1.0s
**PESTR Estremoz** 22.67 278 *e*P P 07 17 26.4 +0.6
comp=Z,139nm,1.7s
**PESTR Estremoz** 22.67 278 ⇓P P 07 17 26.2 +0.4
**ODD1 Odda** 22.73 340 *e*P P 07 17 26.9 +0.7
**NB2 NORSAR Subarra** 22.73 347 P P 07 17 24.1 -2.2
comp=Z,129nm,1.1s,baz=160,slow=11
**NB2 NORSAR Subarra** 22.73 347 P P 07 17 24.1 -2.2
baz=160,slow=11
**NOA NORSAR Array B** 22.73 347 P P 07 17 23.9 -2.3
comp=Z,14nm,0.9s,baz=158,slow=11,SNR=40
NOA PcP PcP 07 21 17.5 -0.4
comp=Z,0.9nm,0.8s,baz=160,slow=2.2,SNR=1.9
NOA ScP ScP 07 24 56.3 +0.7
comp=Z,0.3nm,0.5s,baz=148,slow=3.4,SNR=1.7
NOA LR LR 07 26 47.0
comp=Z,1μm,19.4s,baz=165,slow=38
comp=Z,14nm,0.9s
**WPS Cemaes, Angles** 22.76 317 *e*P P 07 17 25.7 -0.8
WPS IAmb IAmb 07 17 33.6
comp=Z,187nm,1.1s
**PGAV Gavieira, Arco** 22.82 286 *e*P P 07 17 27.6 +0.1
comp=Z,251nm,1.6s
**VALR Valaam** 22.83 11*d* *i*P P 07 17 25.0 -2.2
VALR pmax pmax
comp=Z,57nm,0.9s
VALR MLR MLR
comp=Z,2μm,15.0s
**SKAR Skarslia** 22.99 343 *e*P P 07 17 28.8 -0.2
SKAR *e*S S 07 21 37.3 -2.1
SKAR *e*ScP ScP 07 25 00.6 +4.2
**KEF** 23.00 4 *e*P P 07 17 27.9 -1.1
**PBEJ Beja** 23.05 276 *e*P P 07 17 29.1 -0.7
comp=Z,124nm,1.4s
**EKA Eskdalemuir Ar** 23.07 322 P P 07 17 29.4 -0.4
comp=Z,48nm,0.6s,baz=118,slow=9.8,SNR=102
EKA PcP PcP 07 21 18.4 -0.2
comp=Z,1.2nm,0.6s,baz=117,slow=1.3,SNR=2.0
comp=Z,48nm,0.6s
**PVAQ Vaqueiros** 23.08 275 P P 07 17 29.5 -0.5
PVAQ IAmb IAmb 07 17 37.1
comp=Z,140nm,1.0s
**PVAQ Vaqueiros** 23.08 275 *e*P P 07 17 29.8 -0.2
comp=Z,284nm,1.3s
**PVAQ Vaqueiros** 23.08 275 ⇓P P 07 17 29.4 -0.7
**ESK Eskdalemuir** 23.09 322 P P 07 17 28.6 -1.3
**ESK Eskdalemuir** 23.09 322 *e*P P 07 17 29.3 -0.6

**ESK Eskdalemuir** 23.09 322 ⇓P P 07 17 28.9 -1.1
**ESK Eskdalemuir** 23.09 322 P P 07 17 28.6 -1.3
ESK pmax pmax
comp=Z,405nm,1.1s
**COI Coimbra** 23.09 282 P P 07 17 31.0 +0.8
COI IAmb IAmb 07 17 40.7
comp=Z,145nm,1.0s
**COI Coimbra** 23.09 282 P P 07 17 31.0 +0.8
COI pmax pmax
comp=Z,145nm,1.0s
**PMTG Montargil** 23.12 279 *e*P P 07 17 29.7 -0.8
comp=Z,177nm,1.4s
**PCAS Casmilo, Conde** 23.18 282 *e*P P 07 17 32.6 +1.5
comp=Z,132nm,1.5s
**IOMK Kirk Michael** 23.20 319 *e*P P 07 17 30.6 -0.5
**WIM Isle of Man** 23.20 319 *e*P P 07 17 30.7 -0.4
**PCVE Castro Verde** 23.27 275 *e*P P 07 17 31.8 -0.2
comp=Z,112nm,1.3s
**PBDV Barranco-do-Ve** 23.28 274 *e*P P 07 17 32.4 +0.3
comp=Z,406nm,1.1s
**MESJ Messejana** 23.36 276 P P 07 17 32.2 -0.7
**MESJ Messejana** 23.36 276 *e*P P 07 17 32.9 0.0
**MESJ Messejana** 23.36 276 *e*P P 07 17 32.5 -0.4
MESJ IAmb IAmb 07 17 37.3
comp=Z,150nm,1.4s
MESJ *e*S S 07 21 45.0 -0.8
**MESJ Messejana** 23.36 276 ⇓P P 07 17 32.8 -0.2
**MESJ Messejana** 23.36 276 *e*P P 07 17 32.5 -0.4
MESJ *e*S S 07 21 45.0 -0.8
**EDI Edinburgh** 23.42 323 *e*P P 07 17 32.6 -0.7
**NEWG New Galloway** 23.47 321 *e*P P 07 17 33.0 -0.8
**BER Bergen** 23.48 339 *e*P P 07 17 34.6 +0.8
BER *e*S S 07 21 49.1 +2.0
BER *e*ScP ScP 07 25 01.7 +4.3
**PSBE So Bento** 23.49 280 *e*P P 07 17 35.6 +1.4
comp=Z,188nm,1.7s
**PNCL Nicolau / Gran** 23.54 277 *e*P P 07 17 35.0 +0.3
comp=Z,155nm,1.3s
**IWEX Carrickbyrne,** 23.57 313 P P 07 17 32.1 -2.7
**GAL1 Galloway** 23.58 320 *e*P P 07 17 34.2 -0.7
GAL1 IAmb IAmb 07 17 35.8
comp=Z,142nm,1.2s
**ASK Askoy** 23.60 339 *e*P P 07 17 34.4 -0.6
ASK *e*S S 07 21 52.4 +3.3
**KBD Kabd** 23.69 107 P P 07 17 36.0 -0.3
**DSB Dublin** 23.70 315 P P 07 17 34.4 -1.7
**DSB Dublin** 23.70 315 P P 07 17 35.4 -0.7
**DSB Dublin** 23.70 315 ⇓P P 07 17 35.4 -0.7
**VAF Ylistaro** 23.80 1 *e*P P 07 17 36.6 -0.4
**PTEO Sao Teotonio** 23.82 275 *e*P P 07 17 37.5 +0.1
comp=Z,297nm,1.0s
**MORF Marmelete** 23.82 275 P P 07 17 38.5 +1.0
MORF IAmb IAmb 07 17 42.5
comp=Z,114nm,1.3s
**MORF Marmelete** 23.82 275 *e*P P 07 17 38.8 +1.3
**MORF Marmelete** 23.82 275 *e*P P 07 17 37.2 -0.3
MORF IAmb IAmb 07 17 42.8
comp=Z,48nm,0.8s
MORF *e*S S 07 21 52.2 -1.1
**MORF Marmelete** 23.82 275 ⇓P P 07 17 39.9 +2.4
**MORF Marmelete** 23.82 275 *e*P P 07 17 37.2 -0.3
MORF *e*S S 07 21 52.2 -1.1
**LIS Lisbon** 23.90 278 *e*P P 07 17 37.7 -0.4
LIS IAmb IAmb 07 17 47.4
comp=Z,268nm,1.1s
LIS *e*S S 07 21 53.6 -0.8
**LIS Lisbon** 23.90 278 *e*P P 07 17 37.7 -0.4
LIS *e*S S 07 21 53.6 -0.8
**HYA Hoyanger** 23.92 341 *e*P P 07 17 38.8 +0.7
HYA *e*S S 07 21 58.6 +4.4
HYA *e*ScP ScP 07 25 02.9 +4.2
**PFVI Vila Bisbo** 24.00 275 *e*P P 07 17 40.2 +1.1
comp=Z,256nm,2.3s
**DOMB Dombas** 24.06 345 *e*P P 07 17 39.3 -0.2
DOMB IAmb IAmb 07 17 45.7
comp=Z,209nm,1.3s
DOMB *e*S S 07 21 58.7 +2.1
DOMB *e*ScP ScP 07 24 59.5 +0.4
DOMB IAMs_20 IAMs_20 07 28 49.4
comp=Z,4μm,9.9s
**INVG Invergeldie, C** 24.10 324 *e*P P 07 17 39.3 -0.6
INVG IAmb IAmb 07 17 46.1
comp=Z,182nm,1.5s
**AVE Averroes** 24.12 265 P P 07 17 41.3 +1.0
**AVE Averroes** 24.12 265 ⇑P P 07 17 44.0 +3.7
**SUE Sulen** 24.19 340 *e*P P 07 17 41.0 +0.3
SUE IAmb IAmb 07 17 46.0
comp=Z,1μm,3.0s
SUE *e*S S 07 22 01.7 +3.0
SUE *e*ScP ScP 07 24 59.5 0.0
SUE IAMs_20 IAMs_20 07 28 50.4
comp=Z,7μm,11.5s
**JOF Joensuu** 24.38 11 *e*P P 07 17 41.7 -0.7
**CLGH Cloghs, Cushen** 24.39 320 *e*P P 07 17 42.3 -0.2
**MCD Coleburn Disti** 24.44 327 *e*P P 07 17 41.6 -1.3
MCD IAmb IAmb 07 17 48.4
comp=Z,280nm,1.5s
**FOO Floro** 24.58 341 *e*P P 07 17 44.0 -0.2
FOO IAmb IAmb 07 17 47.1
comp=Z,11nm,0.8s
FOO *e*S S 07 22 09.3 +4.5
FOO *e*ScP ScP 07 25 03.6 +3.1
FOO IAMs_20 IAMs_20 07 29 46.1
comp=Z,4μm,8.8s
**MOL Molde** 24.84 344 *e*P P 07 17 45.8 -0.8
MOL *e*S S 07 22 09.8 +0.6
**TBLU Trondheim** 24.96 348 *e*P P 07 17 50.4 +2.7
TBLU *e*S S 07 22 20.6 +10
TBLU *e*ScS ScS 07 28 54.0 +4.6
TBLU IAMs_20 IAMs_20 07 29 16.0
comp=Z,5μm,13.3s
**IDGL Inch Island, C** 25.10 319 P P 07 17 44.9 -4.0
**LRW Lerwick** 25.33 333 *e*P P 07 17 50.0 -1.0
LRW IAmb IAmb 07 17 51.5
comp=Z,62nm,0.6s
**LRW Lerwick** 25.33 333 ⇓P P 07 17 49.7 -1.2
**KPL Plockton** 25.35 324 *e*P P 07 17 50.5 -0.6
KPL IAmb IAmb 07 17 58.2
comp=Z,130nm,1.2s
**IGLA Glengowla, Co** 25.42 314 P P 07 17 44.7 -7.1
**RAYN Ar Rayn** 25.60 121 P P 07 17 53.6 -0.2
**RAYN Ar Rayn** 25.60 121 *i* P P 07 17 54.1 +0.3
SNR=29
**RAYN Ar Rayn** 25.60 121 ⇓P P 07 17 53.0 -0.8
**RAYN Ar Rayn** 25.60 121 P P 07 17 54.8 +1.0
**RAYN Ar Rayn** 25.60 121 P P 07 17 53.6 -0.2
RAYN pmax pmax
comp=Z,37nm,0.9s
**LINV Loch Inver, As** 25.61 326 *e*P P 07 17 52.5 -1.0
**NSS Namsos** 25.93 350 *e*P P 07 17 55.6 -0.7
**KIRV Kirov** 26.25 33 LR LR 07 28 52.8
comp=Z,2μm,20.4s,baz=235,slow=38
**KIRV Kirov** 26.25 33*d* *i*P P 07 17 58.2 -1.1
**LEWI Lewis, Hebride** 26.34 325 *e*P P 07 17 59.8 -0.4
LEWI IAmb IAmb 07 18 00.5
comp=Z,211nm,1.6s
**MOR8 Moi Rana** 27.25 354 *e*P P 07 18 08.1 -0.2
**STOK Stokkvaagen** 27.55 352 *e*P P 07 18 11.4 +0.5
STOK *e*S S 07 22 56.2 +4.5
STOK IAmb IAmb 07 30 18.1
comp=Z,6μm,11.9s
**SAKB Bahrain** 27.57 110 P P 07 18 11.5 0.0
**AKTO Aktyubinsk** 27.81 54 LR LR 07 31 21.1
comp=Z,2μm,18.4s,baz=274,slow=41
**SHMA Al-Shehemyia** 27.95 110 P P 07 18 14.9 0.0
**FAUS Fauske** 28.38 355 *e*P P 07 18 18.5 +0.1
FAUS IAmb IAmb 07 18 36.6
comp=Z,23nm,4.5s
FAUS *e*S S 07 23 07.4 +2.6
FAUS IAMs_20 IAMs_20 07 30 43.1
comp=Z,7μm,14.9s
**SMRA Abu-Samra** 28.51 112 P P 07 18 19.4 -0.6
**TRNA Turayna** 28.80 111 P P 07 18 22.1 -0.4
**AB31 Akbulak array** 28.89 57 P P 07 18 22.0 -1.1
**ABKAR Akbulak array** 28.89 57 P P 07 18 22.7 -0.5
**ABKAR Akbulak array** 28.89 57 ⇓P P 07 18 22.6 -0.5
**STEI Steigen** 28.92 355 *e*P P 07 18 22.8 -0.4
STEI IAmb IAmb 07 18 28.3
comp=Z,119nm,1.5s
**APA Apatity** 29.09 9 ⇓*i*P P 07 18 28.0 +3.4
APA *i* 07 19 23.5
APA *i* S S 07 23 18.0 +2.0
APA *i* SS SnSn 07 24 43.0 +3.4

APA pmax pmax
comp=Z,13nm,0.8s
APA MLR MLR
comp=Z,4μm,10.0s
**LVZ Lovozero 29.56 10** P **P 07 18 30.2 +1.3**
comp=Z,30nm,2.4s
**ARU Arti 29.65 42** P **P 07 18 28.6 -1.1**
ARU IAmb IAmb 07 18 36.9
comp=Z,148nm,1.8s
**ARU Arti 29.65 42** ⇓P **P 07 18 28.9 -0.9**
**ARU Arti 29.65 42** LR LR 07 30 41.5
comp=Z,1μm,19.9s,baz=240,slow=37
**ARU Arti 29.65 42***d* *i*P **P 07 18 28.8 -0.9**
ARU pmax pmax
comp=Z,36nm,1.5s
ARU MLR MLR
comp=Z,3μm,13.0s
**KTK1 Kautokeino 29.80 1** *e*P **P 07 18 29.6 -1.4**
KTK1 IAmb IAmb 07 18 33.7
comp=Z,39nm,1.1s
KTK1 *e*S **S 07 23 30.2 +2.9**
KTK1 *e*ScP **ScP 07 25 15.3 -0.8**
**JRN Qarnain Island 29.86 109** P **P 07 18 31.9 0.0**
**ARA0 ARCESS Array S 30.39 3** *e*P **P 07 18 34.0 -2.2**
ARA0 *e*S **S 07 23 40.3 +3.8**
**ARCES ARCESS Array B 30.39 3** P **P 07 18 34.9 -1.3**
comp=Z,4.0nm,0.4s,baz=191,slow=9.8,SNR=41
ARCES PcP **PcP 07 21 35.3 -0.4**
comp=Z,6.0nm,0.9s,baz=180,slow=2.1,SNR=1.4
ARCES LR LR 07 32 46.6
comp=Z,392nm,20.3s,baz=185,slow=40
comp=Z,4.0nm,0.4s
**TRO Tromso 30.45 358** *e*P **P 07 18 35.7 -1.0**
TRO IAmb IAmb 07 18 40.4
comp=Z,135nm,1.5s
TRO *e*S **S 07 23 36.2 -1.1**
TRO *e*ScP **ScP 07 25 12.6 -5.6**
**KEV Kevo 30.67 4** P **P 07 18 37.3 -1.3**
KEV IAmb IAmb 07 19 43.8
comp=Z,113nm,1.6s
**KEV Kevo 30.67 4** P **P 07 18 37.3 -1.3**
KEV pmax pmax
comp=Z,113nm,1.6s
**SVE Sverdlovsk 30.86 42** *e*P **P 07 18 40.6 +0.1**
SVE *e*S **S 07 23 46.5 +2.4**
SVE pmax pmax
comp=Z,108nm,1.3s
SVE MLR MLR
comp=Z,6μm,12.0s
**VADS Vadso 31.17 5** *e*P **P 07 18 43.5 +0.5**
**MZWR Madinat Zayed 31.32 110** P **P 07 18 44.8 0.0**
MZWR P **P 07 18 44.8 0.0**
**TORD Torodi Ar. Bea 31.45 220** P **P 07 18 46.3 +0.3**
comp=Z,42nm,0.7s,baz=36,slow=8.7,SNR=123
TORD PcP **PcP 07 21 39.3 0.0**
comp=Z,4.0nm,0.7s,baz=18,slow=1.7,SNR=3.7
TORD ScP **ScP 07 25 22.7 +0.3**
comp=Z,4.0nm,1.2s,baz=28,slow=3.4,SNR=6.3
TORD LR LR 07 34 25.2
comp=Z,938nm,18.6s,baz=33,slow=42
comp=Z,42nm,0.7s
**HAMF Hammerfest 31.45 1** *e*P **P 07 18 44.7 -0.7**
HAMF IAmb IAmb 07 18 49.2
comp=Z,32nm,0.8s
HAMF *e*S **S 07 23 56.5 +3.6**
HAMF *e*ScS **ScS 07 29 20.1 +1.4**
HAMF IAMs_20 IAMs_20 07 32 00.1
comp=Z,5μm,13.4s
**MZR Muzera 31.50 112** *i* P **P 07 18 45.8 -0.6**
SNR=10
**MZR Muzera 31.50 112** P **P 07 18 45.9 -0.6**
**SHME Shamm 31.68 104** *i* P **P 07 18 47.0 -1.1**
SNR=6.9
**SHME Shamm 31.68 104** P **P 07 18 46.9 -1.1**
**ASUD Al Ashush, Dub 31.88 107** P **P 07 18 49.5 -0.3**
**ASUD Al Ashush, Dub 31.88 107** P **P 07 18 49.4 -0.3**
ASUD P **P 07 18 49.4 -0.3**
**PMOZ Porto Moniz, M 31.89 271** *e*S **S 07 24 08.3 +7.4**
**NAZ Nazwa, Dubai 31.92 106** *i* P **P 07 18 49.8 -0.3**
SNR=13
**NAZ Nazwa, Dubai 31.92 106** P **P 07 18 49.6 -0.5**
NAZ P **P 07 18 49.6 -0.5**
**FAQ Al Faqa, Dubai 32.01 107** P **P 07 18 50.5 -0.4**
**MASF Masafi 32.07 105** P **P 07 18 50.9 -0.6**
**MSFE Esma-Masafi 32.08 105** *i* P **P 07 18 50.9 -0.7**
SNR=6.2
**MDH Madha 32.22 105** P **P 07 18 51.8 -1.0**
**MDH Madha 32.22 105** P **P 07 18 51.9 -0.8**
MDH P **P 07 18 51.9 -0.8**
**UOSS Minazif 32.35 106** P **P 07 18 52.4 -1.5**
**UOSS Minazif 32.35 106** *i* P **P 07 18 52.9 -1.0**
SNR=7.8
**UOSS Minazif 32.35 106** ⇓P **P 07 18 52.4 -1.5**
**UOSS Minazif 32.35 106** P **P 07 18 52.7 -1.2**
**HATD Hatta, Dubai 32.36 106** *i* P **P 07 18 52.7 -1.3**
SNR=10
**HATD Hatta, Dubai 32.36 106** P **P 07 18 53.2 -0.8**
SNR=10
**ASHO Ashiyiah 32.39 106** *i* P **P 07 18 52.9 -1.3**
SNR=8.7
**ASHO Ashiyiah 32.39 106** P **P 07 18 53.3 -1.0**
SNR=8.6
**ALNE Al Ain 32.52 108** *i* P **P 07 18 54.5 -0.9**
SNR=23
**ALNE Al Ain 32.52 108** P **P 07 18 54.9 -0.5**
**UMZA Um Al Zommool 32.89 110** P **P 07 18 58.1 -0.6**
**SOHO SOHO 33.06 107** *i* P **P 07 18 58.9 -1.2**
SNR=49
**SOHO SOHO 33.06 107** P **P 07 18 59.4 -0.7**
**ARQ Araqi 33.52 108** P **P 07 19 03.4 -0.7**
**FURI Furi 33.88 149** LR LR 07 35 08.9
comp=Z,2μm,19.7s,baz=328,slow=40
**HOQ Hoqain 33.95 107** P **P 07 19 07.2 -0.7**
HOQ P **P 07 19 07.2 -0.7**
**BSY Bisya 34.37 108** P **P 07 19 10.6 -0.9**
BSY P **P 07 19 10.6 -0.9**
**DOK Doka 34.81 117** P **P 07 19 14.8 -0.5**
**SMDO Samad 34.81 107** P **P 07 19 14.1 -1.4**
SMDO P **P 07 19 14.1 -1.4**
**WHFO Wadi Hawf 35.04 118** P **P 07 19 17.2 -0.2**
SNR=7.8
**ABTO Aybut 35.11 119** P **P 07 19 17.9 -0.2**
**WSAR Wadi Sarin 35.14 106** LR LR 07 35 22.8
comp=Z,484nm,19.8s,baz=332,slow=39
**JMDO Jabal Madar 35.26 108** P **P 07 19 18.0 -1.2**
**JMIC Jan Mayen 35.35 343** *e*P **P 07 19 20.2 +0.8**
**JMIC Jan Mayen 35.35 343** LR LR 07 34 33.5
comp=Z,313nm,18.3s,baz=82,slow=38
**BORG Borgarnes 35.60 330** LR LR 07 34 58.0
comp=Z,1μm,20.0s,baz=117,slow=38
**RBK Rabkut 35.62 118** P **P 07 19 22.1 -0.3**
**BRVK Borovoye 35.67 51** P **P 07 19 22.6 +0.1**
BRVK IAmb IAmb 07 19 29.8
comp=Z,52nm,1.1s
**BRVK Borovoye 35.67 51** ⇓P **P 07 19 22.6 +0.1**
**BRVK Borovoye 35.67 51** P **P 07 19 22.8 +0.4**
**BRVK Borovoye 35.67 51***d* *i*P **P 07 19 22.4 0.0**
BRVK *i* *PP **sP 07 19 27.7 +0.7**
BRVK pmax pmax
comp=Z,27nm,1.0s
BRVK MLR MLR
comp=Z,768nm,14.0s
**BVAR Borovoye Array 35.73 51** P **P 07 19 22.9 0.0**
comp=Z,8.3nm,0.7s,baz=260,slow=4.4,SNR=31
BVAR PcP **PcP 07 21 50.5 -0.3**
comp=Z,1.4nm,0.5s,baz=280,slow=3.7,SNR=1.7
BVAR ScP **ScP 07 25 37.7 +0.8**
comp=Z,0.8nm,0.5s,baz=261,slow=5.7,SNR=2.1
comp=Z,8.3nm,0.7s
**WBK Wadi Bani Khal 35.76 107** P **P 07 19 23.2 -0.3**
**DMTO DMTO 35.99 117** P **P 07 19 24.7 -0.8**
**MHTO MHTO 36.00 110** P **P 07 19 25.0 -0.6**
**CHM Chimkent 36.04 69** *e*P **P 07 19 25.6 -0.2**
comp=Z,18nm,0.9s,baz=70
CHM LR LR 07 35 38.1
comp=Z,475nm,14.1s,baz=70
**CHM Chimkent 36.04 69** *e*P **P 07 19 25.6 -0.2**
CHM pmax pmax
comp=Z,18nm,0.9s
CHM MLR MLR
comp=Z,475nm,14.0s
**BRLS Borolday 36.07 68** *e*P **P 07 19 25.8 -0.2**
comp=Z,10nm,0.9s,baz=69
**BRLS Borolday 36.07 68** *e*P **P 07 19 25.8 -0.2**
BRLS pmax pmax
comp=Z,10.0nm,0.9s
**BART Pico Bartolome 36.35 283** *e*P **P 07 19 30.3 +1.8**
comp=Z,171nm,1.2s
**DQM DQM 36.36 112** P **P 07 19 27.5 -1.1**
**JLN Jalan Bani Buh 36.36 107** P **P 07 19 27.6 -1.0**
**SIMJ Simiganj 36.49 76** P **P 07 19 29.7 -0.1**
SIMJ IAmb IAmb 07 19 38.1
comp=Z,72nm,1.1s
**PSMN Pico do Norte, 36.51 282** *e*P **P 07 19 31.7 +1.9**
comp=Z,242nm,1.5s
**KK31 Karatay Array 36.55 68** *i* P **P 07 19 30.0 -0.1**
**KKAR Karatay Array 36.55 68** P **P 07 19 29.9 -0.2**
KKAR IAmb IAmb 07 19 31.5
comp=Z,38nm,0.6s
**KKAR Karatay Array 36.55 68** ⇓P **P 07 19 30.1 0.0**
**KKAR Karatay Array 36.55 68** P **P 07 19 29.9 -0.2**
KKAR pmax pmax
comp=Z,38nm,0.6s
**PSMA Santa Maria 36.56 282** *e*P **P 07 19 32.4 +2.2**
comp=Z,232nm,2.0s
**PCALD Caldeiras da R 36.58 283** *e*P **P 07 19 34.2 +3.8**
comp=Z,179nm,1.1s
**CHGR Chuyangaron 36.60 75** P **P 07 19 30.8 +0.1**
**CHGR Chuyangaron 36.60 75** P **P 07 19 30.8 +0.1**
CHGR pmax pmax
comp=Z,124nm,0.9s
**CMLA Cha da Macela 36.62 283** *e*P P 07 19 35.7 +4.9
comp=Z,167nm,1.5s
**PDA Ponta Delgada 36.73 283** *e*P **P 07 19 34.6 +2.9**
comp=Z,304nm,1.3s
**PSET Sete Cidades 36.75 283** *e*P **P 07 19 35.3 +3.4**
comp=Z,136nm,1.1s
**HOPEN Hopen 37.36 1** *e*P **P 07 19 37.8 +1.2**
HOPEN IAmb IAmb 07 19 37.9
comp=Z,91nm,1.1s
HOPEN *e*S **S 07 25 27.7 +3.7**
**GAR Garm 37.37 75** P **P 07 19 37.5 +0.2**
**BTK Batken 37.46 73** P **P 07 19 37.9 -0.1**
BTK IAmb IAmb 07 19 46.1
comp=Z,108nm,1.1s
**BTK Batken 37.46 73** P **P 07 19 37.9 -0.1**
BTK pmax pmax
comp=Z,108nm,1.1s
**PAGU Agualva, Azore 37.58 285** *e*P **P 07 19 41.0 +2.1**
comp=Z,258nm,1.1s
**LODK Lodwar 37.80 157** P **P 07 19 41.0 -0.1**
**LODK Lodwar 37.80 157** P **P 07 19 42.6 +1.6**
**SCO Scoresbysund 38.49 338** P **P 07 19 47.2 +1.1**
SCO IAmb IAmb 07 19 49.4
comp=Z,78nm,1.1s
**SCO Scoresbysund 38.49 338** P **P 07 19 47.2 +1.1**
SCO pmax pmax
comp=Z,78nm,1.1s
**SCO Scoresbysund 38.49 338** *i* P **P 07 19 47.0 +0.9**
SCO IAmb IAmb 07 19 49.6
comp=Z,100nm,1.3s
**BTLS Baital 38.69 64** *e*P **P 07 19 48.0 -0.2**
comp=Z,24nm,1.2s,baz=64
BTLS *e*S **S 07 25 44.5 -0.4**
baz=64
**BTLS Baital 38.69 64** *e*P **P 07 19 48.0 -0.2**
BTLS *e*S **S 07 25 44.5 -0.4**
BTLS pmax pmax
comp=Z,24nm,1.2s
**EKS2 Erkin-Say 38.99 68** P **P 07 19 51.4 +0.6**
SNR=34
**AML Almayashu 39.05 69** P **P 07 19 51.6 -0.1**
SNR=15
**SPA0 Spitsbergen Ar 39.07 358** *e*P **P 07 19 51.5 +0.5**
**SPITS Spitsbergen Ar 39.07 358** P **P 07 19 50.8 -0.2**
comp=Z,12nm,0.6s,baz=166,slow=8.2,SNR=11
SPITS PcP **PcP 07 22 00.1 -0.5**
comp=Z,16nm,0.9s,baz=135,slow=2.3,SNR=1.8
SPITS LR LR 07 37 38.1
comp=Z,2μm,19.0s,baz=144,slow=39
comp=Z,12nm,0.6s
**USP Ospenovka 39.37 67** P **P 07 19 53.9 0.0**
SNR=7.2
**SGDS Sogindy 39.42 66** *e*P **P 07 19 54.0 -0.4**
comp=Z,20nm,1.1s,baz=66
**SGDS Sogindy 39.42 66** *e*P **P 07 19 54.0 -0.4**
SGDS pmax pmax
comp=Z,20nm,1.1s
**AAK Ala-Archa 39.51 68** P **P 07 19 55.8 +0.6**
SNR=14
**AAK Ala-Archa 39.51 68** P **P 07 19 55.1 -0.1**
**AAK Ala-Archa 39.51 68** *i* P **P 07 19 55.9 +0.7**
SNR=15
**AAK Ala-Archa 39.51 68** ⇓P **P 07 19 55.6 +0.4**
**AAK Ala-Archa 39.51 68** LR LR 07 39 24.4
comp=Z,612nm,20.2s,baz=277,slow=41
**AAK Ala-Archa 39.51 68** P **P 07 19 56.0 +0.7**
**AAK Ala-Archa 39.51 68***d* *i*P **P 07 19 55.6 +0.4**
AAK pmax pmax
comp=Z,76nm,1.9s
AAK MLR MLR
comp=Z,597nm,15.0s
**FRU1 Bishkek 39.56 67** P **P 07 19 55.7 +0.1**
**FRU1 Bishkek 39.56 67** P **P 07 19 55.7 +0.1**
FRU1 pmax pmax
comp=Z,160nm,1.1s
**KBK Karagaybulak 39.83 67** P **P 07 19 58.4 +0.5**
SNR=6.4
**KBS Kingsbay 39.95 357** *e*P **P 07 19 59.0 +0.7**
**DBIC Dimbokro 40.30 223** P **P 07 20 02.2 +0.3**
comp=Z,16nm,0.4s,baz=22,slow=7.8,SNR=48
DBIC PcP **PcP 07 22 05.7 +0.2**
comp=Z,9.8nm,0.6s,baz=357,slow=9.1,SNR=1.7
DBIC LR LR 07 38 00.2
comp=Z,2μm,18.5s,baz=15,slow=38
comp=Z,16nm,0.4s
**MBAR Mbarara 40.55 166***d* *i*P P 07 20 09.1 +5.0
MBAR pmax pmax
comp=Z,16nm,1.3s
**KURBB Kurchatov Arra 40.86 55** P **P 07 20 05.6 -0.6**
comp=Z,17nm,0.8s,baz=284,slow=8.8,SNR=143
KURBB PcP **PcP 07 22 06.5 -0.3**
comp=Z,3.6nm,0.8s,baz=282,slow=3.3,SNR=2.4
KURBB ScP **ScP 07 25 55.9 -0.5**
comp=Z,0.3nm,0.3s,baz=277,slow=3.7,SNR=2.3
KURBB LR LR 07 39 52.6
comp=Z,712nm,19.8s,baz=306,slow=40
comp=Z,17nm,0.8s
**KURBB Kurchatov Arra 40.86 55** P **P 07 20 05.0 -1.2**
**KURK Kurchatov 40.91 54** P **P 07 20 06.0 -0.5**
KURK IAmb IAmb 07 20 13.1
comp=Z,165nm,2.0s
**KURK Kurchatov 40.91 54** ⇑P **P 07 20 05.2 -1.4**
**KURK Kurchatov 40.91 54** P **P 07 20 06.2 -0.3**
**KURK Kurchatov 40.91 54***d* *i*P **P 07 20 05.7 -0.8**
KURK pmax pmax
comp=Z,25nm,1.0s
KURK MLR MLR
comp=Z,691nm,20.0s
**CHKK Chushkaly 41.00 65** *e*P **P 07 20 07.1 -0.3**
baz=65
**CHKK Chushkaly 41.00 65** *e*P **P 07 20 07.1 -0.3**
**AAA Alma-Ata 41.10 66** *e*P **P 07 20 08.1 -0.3**
comp=Z,23nm,0.8s,baz=66
AAA LR LR 07 39 07.1
baz=66
**AAA Alma-Ata 41.10 66** *e*P **P 07 20 08.0 -0.3**
AAA pmax pmax
comp=Z,23nm,0.8s
**TNSS Tian-Shan 41.16 66** *e*P **P 07 20 08.8 -0.5**
baz=66
**TNSS Tian-Shan 41.16 66** *e*P **P 07 20 08.7 -0.5**
**MDOK Medeo 41.20 66** *e*P **P 07 20 08.9 -0.4**
baz=66
MDOK LR LR 07 39 10.8
comp=Z,483nm,13.1s,baz=66
**MDOK Medeo 41.20 66** *e*P **P 07 20 08.8 -0.4**
MDOK MLR MLR
comp=Z,483nm,13.0s
**NIL Nilore 41.41 81** P **P 07 20 11.4 +0.5**
NIL IAmb IAmb 07 20 19.6
comp=Z,95nm,1.1s
**NIL Nilore 41.41 81** P **P 07 20 11.4 +0.5**
NIL pmax pmax
comp=Z,95nm,1.1s
**KSH Kashi 41.42 72** P **P 07 20 07.8 -3.3**
KSH sP sP 07 20 17.0 +1.3
KSH PP **PP 07 21 44.5 -2.1**
KSH pmax pmax
comp=Z,41nm,0.7s
KSH LR LR
comp=Z,1μm,14.8s
KSH LR LR
comp=Z,1μm,14.4s
KSH LR LR
comp=Z,1μm,14.1s
**BBTS Babate 41.50 245** LR LR 07 39 44.6
comp=Z,2μm,19.4s,baz=304,slow=40
**ARXS Arharly 41.50 64** *e*P **P 07 20 10.8 -0.8**
**TDK Taldyqorghan 41.73 63** *e*P **P 07 20 13.1 -0.4**
comp=Z,41nm,1.1s,baz=63
TDK LR LR 07 39 28.5
comp=Z,569nm,12.6s,baz=63
**TDK Taldyqorghan 41.73 63** *e*P **P 07 20 13.0 -0.4**
TDK pmax pmax
comp=Z,41nm,1.1s
TDK MLR MLR
comp=Z,569nm,13.0s
**SEM Semipalatinsk 41.98 55** *e*P **P 07 20 15.1 -0.6**
baz=55
SEM LR LR 07 39 35.9
comp=Z,234nm,14.2s,baz=55
**SEM Semipalatinsk 41.98 55** *e*P **P 07 20 15.0 -0.6**
SEM MLR MLR
comp=Z,234nm,14.0s
**TARG Taragay, Kyrgy 42.12 68** P **P 07 20 17.9 +0.8**
TARG IAmb IAmb 07 20 26.5
comp=Z,88nm,1.2s
**TARG Taragay, Kyrgy 42.12 68** P **P 07 20 17.9 +0.8**
TARG pmax pmax
comp=Z,88nm,1.2s
**ZHN Zhinishke 42.18 66** *e*P **P 07 20 17.0 -0.3**
comp=Z,19nm,1.0s,baz=66
**ZHN Zhinishke 42.18 66** *e*P **P 07 20 17.0 -0.3**
ZHN pmax pmax
comp=Z,19nm,1.0s
**SATY Saty 42.19 66** *e*P **P 07 20 17.1 -0.2**
comp=Z,32nm,1.1s,baz=66
**SATY Saty 42.19 66** *e*P **P 07 20 17.1 -0.2**
SATY pmax pmax
comp=Z,32nm,1.1s
**KPKS Kokpek 42.28 65** *e*P **P 07 20 17.8 -0.2**
comp=Z,18nm,1.1s,baz=65
**KPKS Kokpek 42.28 65** *e*P **P 07 20 17.8 -0.2**
KPKS pmax pmax
comp=Z,18nm,1.1s
**UZB Uzynbulak 42.60 66** *e*P **P 07 20 20.3 -0.5**
baz=66
**UZB Uzynbulak 42.60 66** *e*P **P 07 20 20.2 -0.5**
**KMBO Kilima Mbogo 42.68 157** P **P 07 20 23.2 +1.5**
**KMBO Kilima Mbogo 42.68 157** P **P 07 20 21.5 -0.1**
comp=Z,3.3nm,0.7s,baz=353,slow=10,SNR=6.1
KMBO LR LR 07 39 51.3
comp=Z,730nm,21.8s,baz=338,slow=39
comp=Z,3.3nm,0.7s
**KMBO Kilima Mbogo 42.68 157***ce* P **P 07 20 23.3 +1.7**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**SHLS Shalkode 42.91 65** *e*P **P 07 20 25.4 +2.1**
comp=Z,24nm,0.9s,baz=66
**SHLS Shalkode 42.91 65** *e*P **P 07 20 25.3 +2.1**
SHLS pmax pmax
comp=Z,23nm,0.9s
**ICESG Greenland Ices 43.76 333** ⇑P **P 07 20 30.5 +0.6**
**ICESG Greenland Ices 43.76 333** *i* P **P 07 20 29.1 -0.8**
ICESG IAmb IAmb 07 20 31.7
comp=Z,80nm,1.1s
**MAKZ Makanchi 43.76 60** P **P 07 20 29.1 -0.8**
**MAKZ Makanchi 43.76 60** P **P 07 20 29.1 -0.8**
MAKZ pmax pmax
comp=Z,32nm,0.9s
**MK31 Makanchi Array 43.97 60***ce* P **P 07 20 31.0 -0.6**
**MKAR Makanchi Array 43.97 60** P **P 07 20 31.1 -0.5**
comp=Z,20nm,0.5s,baz=282,slow=7.6,SNR=196
MKAR ScP **ScP 07 26 08.5 -0.5**
comp=Z,0.9nm,0.8s,baz=274,slow=2.6,SNR=2.3
MKAR LR LR 07 41 43.4
comp=Z,1μm,19.8s,baz=340,slow=40
comp=Z,20nm,0.5s
**KIBK Kibwezi 44.07 156** P **P 07 20 33.2 +0.5**
**SUMG Summit 44.13 338** P **P 07 20 33.1 +0.3**
SUMG IAmb IAmb 07 20 41.9
comp=Z,93nm,1.3s
**SUMG Summit 44.13 338** ⇓P **P 07 20 33.2 +0.3**
**SUMG Summit 44.13 338** P **P 07 20 33.2 +0.3**
SUMG pmax pmax
comp=Z,93nm,1.3s
**SUMG Summit 44.13 338** *i* P **P 07 20 32.0 -1.0**
SUMG IAmb IAmb 07 20 42.5
comp=Z,170nm,1.5s
**ZALV Zalesovo Beam 44.30 49** P **P 07 20 33.4 -0.6**
comp=Z,71nm,0.5s,baz=275,slow=8.5,SNR=233
ZALV LR LR 07 41 32.0
comp=Z,1μm,19.5s,baz=277,slow=40
comp=Z,71nm,0.5s
**NOR Nord 44.50 353** *i* P **P 07 20 34.0 -1.3**
NOR IAmb IAmb 07 20 51.0
comp=Z,52nm,1.2s
**ZSN Zaisan 45.53 58** *e*P **P 07 20 43.7 -0.3**
comp=Z,16nm,0.9s,baz=58
ZSN *e*S **S 07 27 25.1 -0.8**
baz=58
**ZSN Zaisan 45.53 58** *e*P **P 07 20 43.6 -0.3**
ZSN *e*S **S 07 27 25.0 -0.8**
ZSN pmax pmax
comp=Z,17nm,0.9s
**DY2G Dye2 46.00 329** ⇑P **P 07 20 48.5 +0.8**
**DY2G Dye2 46.00 329** *i* P **P 07 20 47.1 -0.6**
DY2G IAmb IAmb 07 20 55.9
comp=Z,505nm,1.8s
**DGZ Jazzator, Alta 46.66 55***d* *i*P **P 07 20 52.7 -0.3**
DGZ pmax pmax
comp=Z,26nm,0.8s
DGZ MLR MLR
comp=Z,645nm,15.0s
**SFJD Kangerlussuaq 47.73 330** P **P 07 21 01.1 +0.2**
**SFJD Kangerlussuaq 47.73 330** LR LR 07 43 55.9
comp=Z,1μm,18.2s,baz=86,slow=40
**SFJD Kangerlussuaq 47.73 330** P **P 07 21 01.1 +0.2**
SFJD pmax pmax
comp=Z,100nm,1.4s
**NEEM North Greenlan 48.26 344** *i* P **P 07 21 04.2 -1.1**
NEEM IAmb IAmb 07 21 11.9
comp=Z,98nm,1.3s
**WMQ Urumqi 48.45 62** ⇓P **P 07 21 07.0 +0.1**
WMQ pP sP 07 21 11.8 +0.2
WMQ PP **PP 07 22 58.8 -0.6**
WMQ S **S 07 28 06.8 -1.0**
WMQ pmax pmax
comp=Z,42nm,1.3s
WMQ pmax pmax
comp=Z,410nm,3.7s
WMQ LR LR
comp=Z,1μm,12.1s
WMQ LR LR
comp=Z,1μm,10.1s
WMQ LR LR
comp=Z,520nm,18.1s
**KNGR Kungurtug, Tuv 52.64 51** ⇓*i*P **P 07 21 38.5 0.0**
KNGR pmax pmax
comp=Z,35nm,1.7s
KNGR MLR MLR
comp=Z,364nm,13.0s
**MOY Mondy 54.35 49** *e*P **P 07 21 51.2 +0.1**
MOY pmax pmax
comp=Z,73nm,2.1s
**LSZ Lusaka 54.61 172** P **P 07 21 54.7 +1.5**
**LSZ Lusaka 54.61 172** P **P 07 21 54.7 +1.5**
LSZ pmax pmax
comp=Z,29nm,1.2s
**FRB Frobisher Bay 55.70 327** LR LR 07 46 17.5
comp=Z,1μm,20.0s,baz=84,slow=36
**IRK Irkutsk 56.04 47** *e*P **P 07 22 00.6 -2.5**
IRK pmax pmax
comp=Z,94nm,2.3s
**ZAK Zakamensk 56.16 50** *e*P **P 07 22 03.8 -0.4**
ZAK pmax pmax
comp=Z,29nm,1.6s
**GOMU GeErMu 56.45 68** P **P 07 22 07.3 +0.6**
GOMU pP sP 07 22 14.0 +2.6
GOMU sP pP 07 22 17.8 +7.7
GOMU S **S 07 30 00.5 +2.4**
GOMU LR LR
comp=Z,1μm,16.7s
GOMU LR LR
comp=Z,620nm,16.7s
GOMU LR LR

comp=Z,1µm,17.8s
**LSA Lhasa 56.81 77** P **P** **07 22 08.6 -0.9**
LSA IAmb IAmb 07 22 17.1
comp=Z,32nm,0.7s
**LSA Lhasa 56.81 77** P **P** **07 22 08.3 -1.2**
**LSA Lhasa 56.81 77** P **P** **07 22 08.6 -0.9**
LSA pmax pmax
comp=Z,32nm,0.7s
**SCHQ Schefferville 58.26 317** P **P** **07 22 18.6 -0.2**
comp=Z,39nm,0.7s,baz=61,slow=5.3,SNR=72
SCHQ LR LR 07 47 46.8
comp=Z,349nm,18.1s,baz=65,slow=36
comp=Z,39nm,0.7s
**TSUM Tsumeb 58.30 185** LR LR 07 50 14.2
comp=Z,1µm,18.9s,baz=332,slow=39
**TIXI Tiksi 58.31 21** LR LR 07 51 01.3
comp=Z,6µm,18.1s,baz=326,slow=40
**TIXI Tiksi 58.31 21** ⇓*i*P **P** **07 22 18.1 -0.7**
TIXI pmax pmax
comp=Z,12nm,0.9s
TIXI MLR MLR
comp=Z,6µm,17.0s
**GTA Gaotai 58.52 63** P **P** **07 22 20.8 -0.2**
GTA sP sP 07 22 27.0 +1.3
GTA PP **PP** **07 24 31.8 +1.6**
GTA S **S** **07 30 18.5 -6.3**
GTA sS pS 07 30 29.8 +1.1
GTA pmax pmax
comp=Z,15nm,0.8s
GTA pmax pmax
comp=Z,250nm,8.4s
GTA LR LR
comp=Z,380nm,23.1s
GTA LR LR
comp=Z,630nm,21.1s
GTA LR LR
comp=Z,960nm,22.7s
**BOD Bodaibo 58.96 39** *e*P **P** **07 22 21.7 -1.8**
BOD pmax pmax
comp=Z,31nm,0.9s
**SONM Songino Array 59.07 51** P **P** **07 22 24.1 -0.6**
comp=Z,33nm,1.1s,baz=284,slow=8.7,SNR=25
SONM ScP **ScP** **07 27 15.3 +1.2**
comp=Z,0.3nm,0.4s,baz=300,slow=4.0,SNR=1.1
SONM LR LR 07 50 19.2
comp=Z,973nm,19.0s,baz=306,slow=39
comp=Z,33nm,1.1s
**GBN Guysborough 59.17 305** P **P** **07 22 25.3 +0.1**
**ULN Ulaanbaatar 59.46 51** P **P** **07 22 26.8 -0.6**
ULN IAmb IAmb 07 22 34.2
comp=Z,28nm,0.9s
**ULN Ulaanbaatar 59.46 51** P **P** **07 22 26.9 -0.5**
ULN P **P** **07 22 26.9 -0.5**
**ULN Ulaanbaatar 59.46 51** *ce*P **P** **07 22 26.8 -0.6**
ULN pmax pmax
comp=Z,32nm,2.0s
ULN MLR MLR
comp=Z,1µm,16.0s
**SHL Shillong 59.48 81** P **P** **07 22 25.3 -2.6**
SHL IAmb IAmb 07 22 34.8
comp=Z,45nm,1.0s
**SHL Shillong 59.48 81** P **P** **07 22 25.3 -2.6**
SHL pmax pmax
comp=Z,45nm,1.0s
**MATP Matopo 59.73 173** LR LR 07 51 09.4
comp=Z,556nm,18.6s,baz=36,slow=39
**CIT Chita 61.32 45** *e*P **P** **07 22 38.7 -1.2**
CIT *e* 07 23 26.8
CIT pmax pmax
comp=Z,104nm,2.7s
**PALK Pallekele 61.62 105** LR LR 07 52 47.0
comp=Z,276nm,19.3s,baz=316,slow=39
**ABPO Ambohimpanom 62.73 153** P **P** **07 22 50.9 +1.1**
**ABPO Ambohimpanom 62.73 153** P **P** **07 22 50.9 +1.1**
**LZH Lanzhou 62.92 64** ⇑P **P** **07 22 51.8 +0.8**
LZH pP pP 07 22 55.0 +0.5
LZH sS sS 07 31 27.5 +0.6
LZH pmax pmax
comp=Z,32nm,1.3s
LZH pmax pmax
comp=Z,300nm,5.5s
LZH LR LR
comp=Z,540nm,17.5s
LZH LR LR
comp=Z,590nm,17.9s
LZH LR LR
comp=Z,830nm,17.2s
**YAK Yakutsk 63.71 30** LR LR 07 53 19.4
comp=Z,1µm,18.2s,baz=310,slow=39
**YAK Yakutsk 63.71 30** *e*P **P** **07 22 59.5 +3.9**
YAK *e*S **S** **07 31 34.5 +4.7**
YAK *e* 07 32 49.5
YAK *e*SS **SS** **07 35 41.6 +4.9**
YAK pmax pmax
comp=Z,26nm,0.9s
YAK smax smax
comp=E,24nm,1.5s
YAK MLR MLR
comp=Z,940nm,20.0s
YAK MLR MLR
comp=N,1µm,16.0s
YAK MLR MLR
comp=E,533nm,13.0s
**LBTB Lobatse 64.06 176** LR LR 07 53 04.9
comp=E,1µm,20.1s,baz=356,slow=38
**BTO Baotou 64.81 57** *e*P **P** **07 23 02.0 -1.3**
BTO pP **pP** **07 23 06.3 -0.4**
BTO sP **sP** **07 23 09.0 +1.0**
BTO S **S** **07 31 43.0 -1.3**
BTO pmax pmax
comp=E,29nm,0.8s
BTO pmax pmax
comp=E,220nm,4.3s
BTO LR LR
comp=E,530nm,14.5s
BTO LR LR
comp=E,730nm,12.4s
BTO LR LR
comp=E,690nm,16.9s
**TNCH TengChong 64.83 77** ⇓P **P** **07 23 02.8 -1.0**
TNCH pmax pmax
comp=E,250nm,3.9s
**VOI Vohitsoka 65.25 154** P **P** **07 23 07.3 +1.0**
VOI IAmb IAmb 07 23 16.5
comp=Z,24nm,0.8s
**VOI Vohitsoka 65.25 154** P **P** **07 23 07.6 +1.4**
**I63A Otisfield 65.48 308** P **P** **07 23 08.7 +1.1**
**CD2 Chengdu 65.54 69** P **P** **07 23 07.3 -0.9**
CD2 pP pP 07 23 11.8 +0.2
CD2 sP sP 07 23 14.3 +1.4
CD2 PP **PP** **07 25 30.8 -1.3**
CD2 S **S** **07 31 53.0 -0.5**
CD2 pmax pmax
comp=Z,30nm,0.6s
CD2 pmax pmax
comp=Z,170nm,3.6s
CD2 LR LR
comp=Z,310nm,12.4s
CD2 LR LR
comp=Z,330nm,12.6s
CD2 LR LR
comp=Z,330nm,13.5s
**HHC Hu-ho-hao-te 65.68 56** *e*P **P** **07 23 09.5 +0.5**
HHC pP sP 07 23 14.5 +0.8
HHC S **S** **07 31 54.0 -1.0**
HHC sS pS 07 31 58.5 -0.9
HHC SS **SS** **07 36 06.0 -2.5**
HHC pmax pmax
comp=Z,26nm,0.6s
HHC pmax pmax
comp=Z,270nm,4.1s
HHC LR LR
comp=Z,520nm,17.7s
HHC LR LR
comp=Z,900nm,14.9s
HHC LR LR
comp=Z,1µm,15.2s
**I62A Tamworth 66.04 308** P **P** **07 23 12.1 +1.0**
I62A IAmb IAmb 07 23 18.9
comp=Z,44nm,1.1s
**PZH PanZhiHua 66.44 74** P **P** **07 23 16.3 +2.2**
PZH pmax pmax
comp=Z,10.0nm,0.8s
PZH pmax pmax
comp=Z,100nm,4.8s
**A36M Sachs Harbour 66.61 349** P **P** **07 23 14.9 +0.7**
baz=28
**A36M Sachs Harbour 66.61 349** P **P** **07 23 14.4 +0.1**
baz=28
**TRQ Mont Tremblant 66.70 311** P **P** **07 23 16.0 +0.5**
TRQ IAmb IAmb 07 23 23.2
comp=Z,46nm,1.1s
**M65A Busby, Falmout 66.84 305** P **P** **07 23 16.6 +0.4**
baz=57
**XLT XiLinHaoTe 66.89 52** *e*P **P** **07 23 15.8 -0.9**
XLT pP sP 07 23 22.0 +0.6
XLT S **S** **07 32 03.3 -6.3**
XLT pmax pmax
comp=Z,26nm,0.9s
XLT pmax pmax
comp=Z,210nm,4.0s
XLT LR LR
comp=Z,930nm,12.1s
XLT LR LR
comp=Z,2µm,13.5s
**ZEA Zeya 67.46 38** *e*P **P** **07 23 21.7 +1.7**
ZEA *e* 07 27 29.3
ZEA pmax pmax
comp=Z,10.0nm,1.1s
ZEA MLR MLR
comp=E,700nm,15.0s
ZEA MLR MLR
comp=N,700nm,14.0s
ZEA MLR MLR
comp=Z,1µm,14.0s
**XAN Xi'an 67.53 64** P **P** **07 23 19.5 -1.4**
XAN PP **PP** **07 25 50.5 +1.1**
XAN S **S** **07 32 15.8 -1.8**
XAN pmax pmax
comp=Z,51nm,1.3s
XAN pmax pmax
comp=Z,360nm,4.0s
XAN LR LR
comp=Z,810nm,13.1s
XAN LR LR
comp=Z,630nm,11.0s
XAN LR LR
comp=Z,940nm,15.1s
**BOSA Boshof 67.63 177** P **P** **07 23 22.3 +1.0**
comp=Z,18nm,0.8s,baz=354,slow=7.1,SNR=41
BOSA LR LR 07 55 12.9
comp=Z,2µm,20.5s,baz=8.0,slow=38
comp=Z,18nm,0.8s
**L61B Northampton 67.63 307** P **P** **07 23 21.0 -0.3**
baz=57
**TIY Taiyuan 67.93 59** *e*P **P** **07 23 25.3 +2.0**
TIY PP **PP** **07 25 58.5 +5.7**
TIY S **S** **07 32 21.0 -1.2**
TIY pmax pmax
comp=Z,200nm,4.1s
TIY LR LR
comp=Z,400nm,21.3s
TIY LR LR
comp=Z,330nm,17.2s
TIY LR LR
comp=Z,420nm,15.8s
**KMI Kunming 67.95 75** ⇓P **P** **07 23 21.5 -2.4**
KMI PP **PP** **07 25 49.3 -4.2**
KMI S **S** **07 32 22.5 -0.7**
KMI pmax pmax
comp=Z,14nm,0.8s
KMI pmax pmax
comp=Z,190nm,3.9s
KMI LR LR
comp=Z,240nm,14.7s
KMI LR LR
comp=Z,200nm,11.4s
**C36M Paulatuk 68.78 348** P **P** **07 23 27.6 -0.3**
baz=28
**CMAR Chiang Mai Arr 68.86 83** P **P** **07 23 27.8 -1.6**
comp=Z,6.8nm,0.7s,baz=305,slow=7.6,SNR=26
CMAR LR LR 08 01 13.2
comp=Z,186nm,18.5s,baz=305,slow=43
comp=Z,6.8nm,0.7s
**CMAR Chiang Mai Arr 68.86 83** *ce*P **P** **07 23 27.7 -1.6**
CMAR pmax pmax
comp=Z,8.0nm,0.7s
**BJI Beijing 69.08 55** P **P** **07 23 30.0 -0.3**
BJI S **S** **07 32 39.5 +3.9**
BJI pmax pmax
comp=Z,8.0nm,1.0s
BJI pmax pmax
comp=Z,79nm,6.9s
BJI LR LR
comp=Z,480nm,12.8s
BJI LR LR
comp=Z,290nm,14.5s
BJI LR LR
comp=Z,760nm,14.0s
**NBPV Pedro Velho 69.47 243** *e*P **P** **07 23 35.3 +2.2**
**RCBR Riachuelo 69.48 244** P **P** **07 23 34.2 +1.0**
comp=Z,14nm,0.9s,baz=63,slow=15,SNR=7.7
RCBR LR LR 07 54 59.5
comp=Z,323nm,18.2s,baz=352,slow=37
comp=Z,14nm,0.9s
**RCBR Riachuelo 69.48 244** *e*P **P** **07 23 35.5 +2.3**
**HNS HongShan 69.61 58** ⇓P **P** **07 23 33.5 -0.2**
HNS S **S** **07 32 43.8 +1.9**
HNS pmax pmax
comp=Z,18nm,1.6s
HNS LR LR
comp=Z,660nm,15.7s
HNS LR LR
comp=Z,500nm,16.7s
**HEH HeiHe 69.62 41** *e*P **P** **07 23 33.3 -0.3**
HEH pP **pP** **07 23 37.0 0.0**
HEH S **S** **07 32 42.5 +0.8**
HEH pmax pmax
comp=Z,13nm,0.8s
HEH pmax pmax
comp=Z,310nm,3.8s
HEH LR LR
comp=Z,980nm,12.8s
HEH LR LR
comp=Z,2µm,12.8s
HEH LR LR
comp=Z,3µm,13.0s
**A21K Barrow 69.70 359** P **P** **07 23 33.5 -0.2**
baz=1.4
**LYN LuoYang 69.70 62** P **P** **07 23 34.5 +0.2**
LYN pmax pmax
comp=Z,15nm,0.7s
LYN pmax pmax
comp=Z,330nm,5.3s
LYN LR LR
comp=Z,560nm,11.3s
LYN LR LR
comp=Z,520nm,16.8s
LYN LR LR
comp=Z,710nm,18.2s
**BILL Bilibino 69.74 13** *ce*P **P** **07 23 33.2 -0.8**
BILL *e* 07 23 56.7
BILL *e* 07 26 06.7
BILL *e*PPP PPP 07 27 47.2
BILL pmax pmax
comp=Z,27nm,1.3s
BILL MLR MLR
comp=Z,774nm,17.0s
**A22K Sinclair Lake 70.00 359** P **P** **07 23 35.1 -0.4**
baz=2.8
**NBCL Cascavel-CE 70.03 247** *e*P **P** **07 23 39.2 +2.6**
**GYA Guiyang 70.12 72** P **P** **07 23 37.0 -0.2**
GYA pmax pmax
comp=Z,28nm,1.5s
GYA LR LR
comp=Z,540nm,20.4s
**SADO Sadowa 70.19 312** LR LR 07 55 41.4
comp=Z,317nm,19.0s,baz=48,slow=37
**NBPA Parau_RN 70.27 245** *e*P **P** **07 23 40.2 +2.2**
**B22K Teshekpuk Lake 70.63 358** P **P** **07 23 39.0 -0.4**
baz=4.0
**NBMO Morrinhos-CE 70.66 249** *e*P **P** **07 23 42.4 +2.0**
**C26K Camden Bay 70.67 355** P **P** **07 23 40.2 +0.6**
baz=11
**D28M Stokes Point 70.74 353** P **P** **07 23 39.5 -0.6**
baz=16
**SEY Seymchan 70.79 22** ⇓*i*P **P** **07 23 40.3 -0.2**
SEY pmax pmax
comp=Z,22nm,2.3s
SEY MLR MLR
comp=Z,2µm,19.0s
**A19K Wainwright 70.81 1** P **P** **07 23 40.9 +0.4**
baz=358
**C27K Jago River 70.88 355** P **P** **07 23 41.3 +0.3**
baz=12,SNR=6.5
**M57A Sunshine Farm, 71.00 308** P **P** **07 23 43.1 +0.9**
**B20K Meade River 71.02 360** P **P** **07 23 42.5 +0.7**
baz=1.0
**D27M Malcolm River 71.03 354** P **P** **07 23 42.9 +0.9**
baz=14
**C23K Itkillik River 71.05 357** P **P** **07 23 43.4 +1.4**
C23K IAmb IAmb 07 23 53.4
comp=Z,29nm,0.8s
**C23K Itkillik River 71.05 357** P **P** **07 23 43.0 +1.0**
baz=6.3,SNR=10
**C24K Franklin Bluff 71.08 356** P **P** **07 23 42.7 +0.5**
baz=7.9
**INK Inuvik 71.13 351** LR LR 07 57 30.1
comp=Z,232nm,20.6s,baz=57,slow=38
**INK Inuvik 71.13 351** P **P** **07 23 41.8 -0.6**
baz=20
**WVNY West Valley, N 71.26 310** P **P** **07 23 44.3 +0.5**
WVNY IAmb IAmb 07 23 52.7
comp=Z,60nm,1.2s
**NBCA Caruaru-PE 71.26 242** *e*P **P** **07 23 46.2 +2.1**
**SUR Sutherland 71.30 181** P **P** **07 23 45.7 +1.6**
**SUR Sutherland 71.30 181** LR LR 07 57 38.6
comp=Z,2µm,19.1s,baz=360,slow=38
**SUR Sutherland 71.30 181** P **P** **07 23 45.9 +1.9**
**D25K Kavik River 71.35 356** P **P** **07 23 44.2 +0.3**
baz=9.8,SNR=9.9
**B21K Ikpikpuk River 71.38 359** P **P** **07 23 44.5 +0.6**
baz=3.0
**E28M Babbage River 71.52 353** P **P** **07 23 45.6 +0.8**
baz=15,SNR=7.7
**E29M Blow River 71.56 352** P **P** **07 23 45.2 +0.1**
baz=17,SNR=18
**B18K Kokolik River 71.64 1** P **P** **07 23 46.8 +1.3**
baz=357
**D24K Happy Valley 71.65 356** P **P** **07 23 46.0 +0.3**
baz=7.8
**C21K Knifeblade Rid 71.85 359** P **P** **07 23 47.8 +1.0**
baz=2.9,SNR=10
**NBPB Pedra_Branca-C 71.87 247** *e*P **P** **07 23 49.8 +2.0**
**D23K Nanushuk River 71.92 357** P **P** **07 23 48.3 +1.0**
baz=6.2
**C19K Lookout Ridge 71.93 0** P **P** **07 23 48.6 +1.3**
baz=359,SNR=12
**F31M Tsiigehtchic 71.97 350** P **P** **07 23 47.8 +0.3**
baz=20
**F30M Barrier River 72.07 351** P **P** **07 23 47.5 -0.7**
baz=18
**D22K Ayikyak River 72.08 358** P **P** **07 23 48.8 +0.6**
baz=4.6
**E27K Coleen River 72.12 354** P **P** **07 23 49.1 +0.6**
baz=14,SNR=6.7
**TOLK Toolik Lake Re 72.20 357** P **P** **07 23 48.7 -0.3**
baz=7.1
**D20K Etivluk River 72.32 359** P **P** **07 23 50.3 +0.6**
baz=1.4,SNR=14
**C18K Utukok River 72.37 1** P **P** **07 23 50.4 +0.4**
**C18K Utukok River 72.37 1** P **P** **07 23 50.8 +0.8**
baz=358,SNR=13
**BNX BinXian 72.39 45** ⇓P **P** **07 23 48.8 -1.6**
BNX pP **pP** **07 23 52.5 -1.4**
BNX S **S** **07 33 07.5 -6.5**
BNX pmax pmax
comp=Z,14nm,2.1s
BNX pmax pmax
comp=Z,240nm,7.2s
BNX LR LR
comp=Z,2µm,12.8s
BNX LR LR
comp=Z,2µm,13.1s
BNX LR LR
comp=Z,3µm,13.4s
**NBPS Pedro II - PI 72.42 249** *e*P **P** **07 23 52.7 +1.5**
**KLR Kul'dur 72.46 40** LR LR 07 57 03.7
comp=Z,397nm,21.9s,baz=312,slow=37
**KLR Kul'dur 72.46 40** *ce*P **P** **07 23 49.3 -1.5**
KLR pmax pmax
comp=Z,13nm,1.4s
KLR MLR MLR
comp=Z,843nm,14.0s
**CN2 Changchun 72.48 48** *e*P **P** **07 23 49.5 -1.6**
CN2 *e*pP pP 07 23 54.3 -0.2
CN2 *e*S **S** **07 33 12.0 -3.2**
CN2 *e*SS **SS** **07 37 51.0 -1.9**
CN2 pmax pmax
comp=Z,10.0nm,1.2s
CN2 pmax pmax
comp=Z,430nm,3.0s
CN2 LR LR
comp=Z,520nm,13.0s
CN2 LR LR
comp=Z,750nm,13.0s
CN2 LR LR
comp=Z,790nm,13.0s
**C17K DeLong Mountai 72.50 2** P **P** **07 23 51.5 +0.7**
baz=356,SNR=13
**F28M Old Crow 72.51 353** P **P** **07 23 50.7 -0.2**
baz=15,SNR=7.5
**G31M Satah River 72.53 350** P **P** **07 23 50.7 -0.2**
baz=19,SNR=7.2
**D19K Kuna River 72.55 360** P **P** **07 23 51.8 +0.7**
baz=0.2
**E21K Killik River 72.55 358** P **P** **07 23 51.3 +0.2**
baz=3.5
**NBMA Muriti-CE 72.56 245** *e*P **P** **07 23 54.1 +2.2**
**C16K Lisburne Hills 72.64 3** P **P** **07 23 50.5 -1.0**
baz=354
**YKA Yellowknife Ar 72.66 340** P **P** **07 23 51.6 -0.1**
comp=Z,36nm,1.3s,baz=33,slow=6.1,SNR=45
YKA LR LR 07 58 07.9
comp=Z,780nm,18.5s,baz=44,slow=38
comp=Z,36nm,1.3s
**E24K Your Creek 72.71 356** P **P** **07 23 52.9 +0.8**
E24K IAmb IAmb 07 24 14.8
comp=Z,55nm,1.6s
**E24K Your Creek 72.71 356** P **P** **07 23 52.0 0.0**
baz=8.0,SNR=9.5
**G30M tAoh Zraii Nji 72.72 351** P **P** **07 23 51.7 -0.5**
baz=18,SNR=12
**E20K Nigu River 72.77 359** P **P** **07 23 53.0 +0.5**
baz=1.7,SNR=12
**E23K Chandalar 72.78 357** P **P** **07 23 52.6 0.0**
baz=7.1,SNR=8.9
**E22K Anaktuvuk Pass 72.80 357** P **P** **07 23 52.2 -0.4**
baz=5.3
**F26K Sheenjek River 72.81 354** P **P** **07 23 52.9 +0.2**
baz=12,SNR=12
**MA2 Magadan 72.93 24** P **P** **07 23 53.9 +0.5**
MA2 IAmb IAmb 07 24 24.8
comp=Z,70nm,1.4s
**MA2 Magadan 72.93 24** LR LR 08 00 00.2
comp=Z,855nm,18.1s,baz=318,slow=39
**MA2 Magadan 72.93 24** *di*P **P** **07 23 53.1 -0.3**
MA2 pmax pmax
comp=Z,28nm,1.7s
MA2 MLR MLR
comp=Z,833nm,15.0s
**RDOG Red Dog Mine 72.93 2** P **P** **07 23 53.5 +0.2**
baz=356
**G29M Pine Creek 73.00 352** P **P** **07 23 53.8 0.0**
baz=16,SNR=13
**F25K Christian Rive 73.02 355** P **P** **07 23 55.1 +1.2**
F25K IAmb IAmb 07 24 02.4
comp=Z,55nm,1.6s
**F25K Christian Rive 73.02 355** P **P** **07 23 54.7 +0.8**
baz=10,SNR=9.1
**M53A WI Miller and 73.08 310** P **P** **07 23 54.9 +0.3**
baz=52
**DL2 Dalian 73.17 53** P **P** **07 23 59.3 +4.1**
DL2 pmax pmax
comp=Z,190nm,5.9s
DL2 LR LR
comp=Z,750nm,13.7s
DL2 LR LR
comp=Z,790nm,13.9s
DL2 LR LR
comp=Z,990nm,15.5s
**F24K Squaw Lake 73.23 356** P **P** **07 23 56.4 +1.3**
baz=8.4,SNR=14
**D17K Noatak River 73.29 2** P **P** **07 23 55.7 +0.3**
baz=356,SNR=8.7
**WHN Wuhan 73.30 64** P **P** **07 23 56.8 +0.7**
WHN S **S** **07 33 23.5 -1.3**
WHN LR LR
comp=Z,1µm,16.9s
**EPYK Eagle Plains 73.37 351** P **P** **07 23 55.8 -0.1**
baz=17,SNR=8.6

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **F22K** | **John River** | | **73.44** | **358** | P | **P** | **07 23 57.3 +1.0** |
| | baz=5.0 | | | | | | |
| **R58B** | **Mineral** | | **73.47** | **306** | P | **P** | **07 23 57.8 +0.8** |
| R58B | | | | | IAmb | IAmb | 07 24 05.7 |
| | comp=Z,67nm,1.5s | | | | | | |
| **G27K** | **Doyon Strip** | | **73.47** | **353** | P | **P** | **07 23 57.1 +0.5** |
| | baz=13,SNR=20 | | | | | | |
| **G26K** | **Porcupine Rive** | | **73.51** | **354** | P | **P** | **07 23 57.9 +1.2** |
| | baz=12,SNR=21 | | | | | | |
| **E19K** | **Redstone River** | | **73.59** | **360** | P | **P** | **07 23 57.0 -0.2** |
| | baz=0.9 | | | | | | |
| **H31M** | **Peel River** | | **73.60** | **350** | P | **P** | **07 23 56.3 -1.0** |
| | baz=19,SNR=6.2 | | | | | | |
| **E18K** | **Tukpahlearik C** | | **73.61** | **1** | P | **P** | **07 23 57.9 +0.6** |
| E18K | | | | | IAmb | IAmb | 07 24 08.7 |
| | comp=Z,35nm,0.8s | | | | | | |
| **E18K** | **Tukpahlearik C** | | **73.61** | **1** | P | **P** | **07 23 57.3 -0.1** |
| | baz=358,SNR=14 | | | | | | |
| **COLD** | **Coldfoot** | | **73.64** | **357** | P | **P** | **07 23 57.9 +0.4** |
| | baz=6.5,SNR=8.4 | | | | | | |
| **H29M** | **Whitestone** | | **73.71** | **352** | P | **P** | **07 23 57.7 -0.2** |
| | baz=16,SNR=16 | | | | | | |
| **F21K** | **Alatna River** | | **73.76** | **358** | P | **P** | **07 23 58.9 +0.7** |
| F21K | | | | | IAmb | IAmb | 07 24 30.7 |
| | comp=Z,36nm,1.1s | | | | | | |
| **F21K** | **Alatna River** | | **73.76** | **358** | P | **P** | **07 23 58.8 +0.6** |
| | baz=3.9,SNR=17 | | | | | | |
| **G25K** | **Bearman Lake** | | **73.87** | **355** | P | **P** | **07 23 59.9 +1.1** |
| | baz=9.8,SNR=9.1 | | | | | | |
| **E17K** | **Hotham Inlet** | | **73.93** | **1** | P | **P** | **07 23 58.6 -0.6** |
| | baz=357 | | | | | | |
| **F20K** | **Avaraart Lake** | | **73.98** | **359** | P | **P** | **07 23 59.5 +0.1** |
| | baz=2.1,SNR=20 | | | | | | |
| **G22K** | **Bettles** | | **74.00** | **357** | P | **P** | **07 24 00.3 +0.8** |
| | baz=5.5 | | | | | | |
| **G24K** | **Hadweenzic Riv** | | **74.02** | **356** | P | **P** | **07 24 00.4 +0.7** |
| G24K | | | | | IAmb | IAmb | 07 24 02.5 |
| | comp=Z,50nm,1.6s | | | | | | |
| **G24K** | **Hadweenzic Riv** | | **74.02** | **356** | P | **P** | **07 24 00.7 +0.9** |
| | baz=8.7,SNR=8.5 | | | | | | |
| **H27K** | **Steamboat Moun** | | **74.02** | **353** | P | **P** | **07 24 00.4 +0.6** |
| | baz=14,SNR=15 | | | | | | |
| **WRGLY** | **Wrigley** | | **74.11** | **344** | P | **P** | **07 24 01.0 +0.8** |
| | baz=27,SNR=11 | | | | | | |
| **O53A** | **New Philadelph** | | **74.13** | **309** | P | **P** | **07 24 02.0 +1.2** |
| | baz=52 | | | | | | |
| **G23K** | **Bananza Creek** | | **74.15** | **357** | P | **P** | **07 24 01.0 +0.5** |
| G23K | | | | | IAmb | IAmb | 07 24 08.8 |
| | comp=Z,47nm,1.5s | | | | | | |
| **G23K** | **Bananza Creek** | | **74.15** | **357** | P | **P** | **07 24 01.0 +0.5** |
| | baz=6.7,SNR=20 | | | | | | |
| **F19K** | **Shaleruckik Mo** | | **74.22** | **360** | P | **P** | **07 24 00.7 -0.2** |
| | baz=0.5,SNR=23 | | | | | | |
| **MDJ** | **Mudanjiang** | | **74.29** | **45** | P | **P** | **07 24 01.5 -0.2** |
| MDJ | | | | | PP | **PP** | **07 26 52.0 +4.9** |
| MDJ | | | | | pmax | pmax | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| MDJ | | | | | pmax | pmax | |
| | comp=Z,160nm,8.9s | | | | | | |
| MDJ | | | | | LR | LR | |
| | comp=Z,2µm,15.8s | | | | | | |
| MDJ | | | | | LR | LR | |
| | comp=Z,1µm,12.4s | | | | | | |
| MDJ | | | | | LR | LR | |
| | comp=Z,3µm,13.7s | | | | | | |
| **H25L** | **Birch Creek** | | **74.34** | **355** | P | **P** | **07 24 02.1 +0.5** |
| | baz=10.0,SNR=12 | | | | | | |
| **I30M** | **Mount Dempster** | | **74.43** | **351** | P | **P** | **07 24 02.5 +0.3** |
| **I30M** | **Mount Dempster** | | **74.43** | **351** | P | **P** | **07 24 02.3 0.0** |
| | baz=18,SNR=47 | | | | | | |
| **F18K** | **Selawik** | | **74.44** | **1** | P | **P** | **07 24 02.2 +0.1** |
| | baz=359,SNR=14 | | | | | | |
| **NBLA** | **Lagarto - SE** | | **74.46** | **241** | *e*P | **P** | **07 24 04.1 +1.1** |
| **G21K** | **Allakaket** | | **74.47** | **358** | P | **P** | **07 24 02.9 +0.6** |
| | baz=3.9,SNR=20 | | | | | | |
| **I29M** | **Ogilvie Camp,** | | **74.53** | **351** | P | **P** | **07 24 02.8 +0.1** |
| | baz=16,SNR=17 | | | | | | |
| **I28M** | **Miner Creek** | | **74.62** | **352** | P | **P** | **07 24 03.3 -0.1** |
| | baz=15,SNR=13 | | | | | | |
| **MDP** | **Montagnes des** | | **74.64** | **264** | P | **P** | **07 24 05.1 +1.0** |
| | comp=Z,22nm,1.1s,baz=36,slow=8.9,SNR=11 | | | | | | |
| MDP | | | | | LR | LR | 07 56 12.4 |
| | comp=Z,131nm,19.7s,baz=70,slow=35 | | | | | | |
| | comp=Z,22nm,1.1s | | | | | | |
| **I27K** | **Kandik River** | | **74.64** | **353** | P | **P** | **07 24 04.3 +0.8** |
| | baz=13,SNR=15 | | | | | | |
| **FFC** | **Flin Flon** | | **74.68** | **330** | P | **P** | **07 24 04.9 +1.1** |
| **FFC** | **Flin Flon** | | **74.68** | **330** | P | **P** | **07 24 04.9 +1.1** |
| FFC | | | | | pmax | pmax | |
| | comp=Z,28nm,1.2s | | | | | | |
| **H24K** | **Noodor Dome** | | **74.90** | **356** | P | **P** | **07 24 04.9 0.0** |
| | baz=8.4 | | | | | | |
| **G19K** | **Purcell Mounta** | | **74.90** | **359** | P | **P** | **07 24 05.4 +0.6** |
| | baz=1.0,SNR=14 | | | | | | |
| **H23K** | **Yukon River** | | **75.01** | **356** | P | **P** | **07 24 05.5 -0.1** |
| | baz=7.0,SNR=16 | | | | | | |
| **H22K** | **Ishtalitna Cre** | | **75.02** | **357** | P | **P** | **07 24 06.2 +0.6** |
| | baz=5.6,SNR=20 | | | | | | |
| **J30M** | **Hart River** | | **75.04** | **350** | P | **P** | **07 24 06.7 +0.8** |
| | baz=18,SNR=53 | | | | | | |
| **PRP** | **Porcupine Dome** | | **75.06** | **355** | P | **P** | **07 24 06.5 +0.6** |
| | baz=10 | | | | | | |
| **P52A** | **Corning** | | **75.07** | **309** | P | **P** | **07 24 06.5 +0.3** |
| | baz=51 | | | | | | |
| **I26K** | **Coal Creek Min** | | **75.08** | **353** | P | **P** | **07 24 06.3 +0.4** |
| | baz=12 | | | | | | |
| **G18K** | **Tagagawik** | | **75.16** | **0** | P | **P** | **07 24 07.0 +0.7** |
| G18K | | | | | IAmb | IAmb | 07 24 18.2 |
| | comp=Z,46nm,1.0s | | | | | | |
| **G18K** | **Tagagawik** | | **75.16** | **0** | P | **P** | **07 24 06.9 +0.5** |
| | baz=360,SNR=22 | | | | | | |
| **TNA** | **Tin City** | | **75.23** | **4** | P | **P** | **07 24 06.7 0.0** |
| | baz=352 | | | | | | |
| **F15K** | **North Star Dit** | | **75.23** | **3** | P | **P** | **07 24 06.8 0.0** |
| | baz=355 | | | | | | |
| **H21K** | **Melozitna Rive** | | **75.31** | **358** | P | **P** | **07 24 08.3 +1.1** |
| **H21K** | **Melozitna Rive** | | **75.31** | **358** | P | **P** | **07 24 08.3 +1.1** |
| | baz=4.4,SNR=33 | | | | | | |
| **ULM** | **Lac du Bonnet** | | **75.34** | **324** | P | **P** | **07 24 07.6 -0.1** |
| | comp=Z,9.9nm,0.5s,baz=45,slow=5.5,SNR=21 | | | | | | |
| ULM | | | | | LR | LR | 07 59 08.6 |
| | comp=Z,895nm,18.1s,baz=42,slow=37 | | | | | | |
| | comp=Z,9.9nm,0.5s | | | | | | |
| **ULM** | **Lac du Bonnet** | | **75.34** | **324** | *d i* P | **P** | **07 24 07.3 -0.4** |
| **J29N** | **Klondike Camp** | | **75.39** | **351** | P | **P** | **07 24 08.6 +0.8** |
| | baz=16 | | | | | | |
| **F14K** | **Arctic Creek** | | **75.39** | **3** | P | **P** | **07 24 07.9 +0.2** |
| | baz=354 | | | | | | |
| **EGAK** | **Eagle** | | **75.40** | **352** | P | **P** | **07 24 08.0 +0.2** |
| | baz=14 | | | | | | |
| **NJ2** | **Nanjing** | | **75.49** | **60** | *e*P | **P** | **07 24 10.0 +1.1** |
| NJ2 | | | | | pmax | pmax | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **H19K** | **Roundabout Mou** | | **75.52** | **359** | P | **P** | **07 24 09.2 +0.9** |
| H19K | | | | | IAmb | IAmb | 07 24 20.0 |
| | comp=Z,34nm,0.9s | | | | | | |
| **H19K** | **Roundabout Mou** | | **75.52** | **359** | P | **P** | **07 24 08.1 -0.3** |
| | baz=1.5,SNR=10 | | | | | | |
| **H20K** | **Anotleneega Mo** | | **75.53** | **359** | P | **P** | **07 24 09.1 +0.6** |
| | baz=2.8,SNR=11 | | | | | | |
| **G17K** | **Kiwalik Mounta** | | **75.54** | **1** | P | **P** | **07 24 08.6 +0.1** |
| | baz=358 | | | | | | |
| **POKR** | **Poker Plat Res** | | **75.59** | **355** | P | **P** | **07 24 09.5 +0.6** |
| | baz=8.7 | | | | | | |
| **G16K** | **Koyuk River** | | **75.61** | **2** | P | **P** | **07 24 09.2 +0.3** |
| | baz=357 | | | | | | |
| **I23K** | **Minto, Yukon-K** | | **75.67** | **356** | P | **P** | **07 24 10.1 +0.9** |
| **I23K** | **Minto, Yukon-K** | | **75.67** | **356** | P | **P** | **07 24 09.7 +0.5** |
| | baz=7.2,SNR=12 | | | | | | |
| **MLY** | **Manley** | | **75.86** | **357** | P | **P** | **07 24 10.8 +0.4** |
| | baz=6.0,SNR=13 | | | | | | |
| **COLA** | **College** | | **75.86** | **355** | P | **P** | **07 24 10.4 +0.1** |
| | baz=8.3 | | | | | | |
| **COLA** | **College** | | **75.86** | **355** | *e*P | **P** | **07 24 09.9 -0.4** |
| COLA | | | | | pmax | pmax | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | | **75.87** | **44** | *e*P | **P** | **07 24 10.2 -0.6** |
| **USRK** | **Ussuriysk Ar.** | | **75.87** | **44** | P | **P** | **07 24 09.3 -1.5** |
| USRK | | | | | LR | LR | 08 02 22.1 |
| | comp=Z,5.5nm,0.8s,baz=306,slow=4.8,SNR=9.5 | | | | | | |
| | comp=Z,884nm,18.7s,baz=318,slow=40 | | | | | | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | | **75.90** | **355** | P | **P** | **07 24 10.9 +0.4** |
| | comp=Z,1.9nm,0.8s,baz=10,slow=5.1,SNR=17 | | | | | | |
| ILAR | | | | | LR | LR | 07 59 04.8 |
| | comp=Z,235nm,19.6s,baz=350,slow=37 | | | | | | |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | | **75.90** | **355** | P | **P** | **07 24 11.0 +0.4** |
| **K29M** | **Barlow Dome** | | **75.90** | **351** | P | **P** | **07 24 11.5 +0.7** |
| | baz=16,SNR=17 | | | | | | |
| **J26L** | **Joseph Creek** | | **75.90** | **353** | P | **P** | **07 24 11.0 +0.3** |
| | baz=12,SNR=14 | | | | | | |
| **H18K** | **Honhosa River** | | **75.90** | **0** | P | **P** | **07 24 11.7 +1.1** |
| H18K | | | | | IAmb | IAmb | 07 24 21.7 |
| | comp=Z,27nm,1.0s | | | | | | |
| **H18K** | **Honhosa River** | | **75.90** | **0** | P | **P** | **07 24 11.5 +0.9** |
| | baz=360 | | | | | | |
| **DAWY** | **Dawson** | | **75.91** | **352** | P | **P** | **07 24 11.0 +0.2** |
| | baz=15,SNR=29 | | | | | | |
| **J25K** | **Salcha River,** | | **75.94** | **354** | P | **P** | **07 24 11.1 +0.2** |
| | baz=10 | | | | | | |
| **G15K** | **Niukluk** | | **75.97** | **2** | P | **P** | **07 24 11.1 +0.2** |
| | baz=355 | | | | | | |
| **TMAB** | **Tom-Au,PA,Br** | | **75.97** | **255** | *e*P | **P** | **07 24 13.5 +1.7** |
| **NBBC** | **Barra do Corda** | | **75.98** | **251** | *e*P | **P** | **07 24 13.4 +1.6** |
| **NBPN** | **Ponto Novo - B** | | **76.01** | **243** | *e*P | **P** | **07 24 13.3 +1.3** |
| **H17K** | **Granite Mounta** | | **76.11** | **1** | P | **P** | **07 24 11.6 -0.3** |
| | baz=359 | | | | | | |
| **NEA2** | **Nenana** | | **76.21** | **356** | P | **P** | **07 24 12.4 +0.1** |
| | baz=7.4,SNR=13 | | | | | | |
| **I20K** | **Naaghedeneel** | | **76.22** | **358** | P | **P** | **07 24 13.4 +1.0** |
| | baz=3.1,SNR=8.7 | | | | | | |
| **K27K** | **Chicken** | | **76.23** | **353** | P | **P** | **07 24 13.6 +1.1** |
| | baz=13 | | | | | | |
| **HDA** | **Harding Lake** | | **76.26** | **355** | P | **P** | **07 24 12.5 -0.2** |
| | baz=9.1,SNR=18 | | | | | | |
| **GCSA** | **Galena City Sc** | | **76.31** | **359** | P | **P** | **07 24 13.4 +0.6** |
| | baz=1.2 | | | | | | |
| **ANM** | **Nome** | | **76.35** | **3** | P | **P** | **07 24 14.5 +1.3** |
| | baz=354 | | | | | | |
| **H16K** | **Elim** | | **76.38** | **2** | P | **P** | **07 24 13.7 +0.4** |
| | baz=357 | | | | | | |
| **SCRK** | **Sand Creek** | | **76.46** | **354** | P | **P** | **07 24 14.4 +0.5** |
| | baz=11 | | | | | | |
| **TGTN** | **Hyland Airport** | | **76.61** | **346** | P | **P** | **07 24 16.4 +1.6** |
| | baz=24,SNR=9.1 | | | | | | |
| **P49A** | **Miami Univ. Ec** | | **76.67** | **310** | P | **P** | **07 24 15.3 -0.2** |
| | baz=50 | | | | | | |
| **L29M** | **L29M** | | **76.68** | **351** | P | **P** | **07 24 15.1 0.0** |
| | baz=16,SNR=10 | | | | | | |
| **GAMB** | **Gambell** | | **76.74** | **6** | P | **P** | **07 24 16.7 +1.4** |
| | baz=349 | | | | | | |
| **RIDG** | **Independent Ri** | | **76.76** | **354** | P | **P** | **07 24 16.0 +0.4** |
| | baz=11,SNR=8.5 | | | | | | |
| **K24K** | **Donnelly Dome** | | **76.77** | **354** | P | **P** | **07 24 15.1 -0.6** |
| | baz=10.0 | | | | | | |
| **L44A** | **Lake County Fo** | | **76.79** | **314** | P | **P** | **07 24 16.0 0.0** |
| | baz=48 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | | **76.80** | **357** | P | **P** | **07 24 15.9 +0.1** |
| BPAW | | | | | IAmb | IAmb | 07 24 26.2 |
| | comp=Z,32nm,1.2s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | | **76.80** | **357** | P | **P** | **07 24 15.8 +0.1** |
| | baz=5.8,SNR=11 | | | | | | |
| **J20K** | **Nowinta River** | | **76.83** | **358** | P | **P** | **07 24 16.2 +0.3** |
| | baz=3.3,SNR=7.8 | | | | | | |
| **QIZ** | **Qiongzhong** | | **76.84** | **76** | P | **P** | **07 24 16.5 -0.2** |
| QIZ | | | | | S | **S** | **07 34 06.8 +2.2** |
| QIZ | | | | | SS | **SS** | **07 39 02.0 +1.5** |
| QIZ | | | | | pmax | pmax | |
| | comp=Z,24nm,1.1s | | | | | | |
| QIZ | | | | | LR | LR | |
| | comp=Z,270nm,18.5s | | | | | | |
| QIZ | | | | | LR | LR | |
| | comp=Z,240nm,23.6s | | | | | | |
| QIZ | | | | | LR | LR | |
| | comp=Z,280nm,16.8s | | | | | | |
| **FARO** | **Faro, Yukon** | | **76.84** | **348** | P | **P** | **07 24 17.1 +1.0** |
| | baz=20,SNR=27 | | | | | | |
| **HUMP** | **Col San Antoni** | | **76.87** | **283** | P | **P** | **07 24 18.2 +1.3** |
| **KOTAN** | **Kotaneelee Air** | | **77.00** | **343** | P | **P** | **07 24 17.0 +0.1** |
| | baz=27,SNR=7.4 | | | | | | |
| **M30M** | **Minto, Yukon** | | **77.02** | **350** | P | **P** | **07 24 17.4 +0.4** |
| | baz=17 | | | | | | |
| **M31M** | **Drury Creek, Y** | | **77.03** | **349** | P | **P** | **07 24 18.2 +1.0** |
| | baz=8.0,SNR=20 | | | | | | |
| **J19K** | **Poorman** | | **77.05** | **359** | P | **P** | **07 24 18.0 +0.8** |
| | baz=2.1,SNR=21 | | | | | | |
| **MCK** | **McKinley** | | **77.06** | **356** | P | **P** | **07 24 16.8 -0.4** |
| | baz=7.5,SNR=11 | | | | | | |
| **PDPR** | **Patillas Dam,** | | **77.07** | **283** | P | **P** | **07 24 19.1 +1.1** |
| PDPR | | | | | IAmb | IAmb | 07 24 24.5 |
| | comp=Z,31nm,0.9s | | | | | | |
| **L27K** | **Beaver Creek,** | | **77.15** | **352** | P | **P** | **07 24 18.1 +0.3** |
| | baz=13,SNR=19 | | | | | | |
| **I17K** | **Unalakleet** | | **77.16** | **1** | P | **P** | **07 24 18.5 +0.8** |
| | baz=358 | | | | | | |
| **L26K** | **Log Cabin Wild** | | **77.33** | **353** | P | **P** | **07 24 19.4 +0.6** |
| | baz=12,SNR=12 | | | | | | |
| **M29M** | **Somme Creek** | | **77.36** | **351** | P | **P** | **07 24 20.1 +1.0** |
| | baz=16,SNR=25 | | | | | | |
| **PAX** | **Paxson** | | **77.57** | **354** | P | **P** | **07 24 19.3 -0.9** |
| | baz=10 | | | | | | |
| **J18K** | **Innoko River** | | **77.59** | **359** | P | **P** | **07 24 20.7 +0.5** |
| | baz=1.3,SNR=11 | | | | | | |
| **DHY** | **Denali Highway** | | **77.61** | **355** | P | **P** | **07 24 20.8 +0.3** |
| **DHY** | **Denali Highway** | | **77.61** | **355** | P | **P** | **07 24 20.8 +0.3** |
| | baz=8.7,SNR=16 | | | | | | |
| **GDU01** | **Guandu, BA** | | **77.62** | **241** | *e*P | **P** | **07 24 22.4 +1.4** |
| **K20K** | **Telida** | | **77.65** | **358** | P | **P** | **07 24 20.6 0.0** |
| | baz=3.4,SNR=12 | | | | | | |
| **MCPB** | **Macapa, AP** | | **77.66** | **259** | *e*P | **P** | **07 24 22.7 +1.4** |
| **J17K** | **VABM Dome** | | **77.67** | **0** | P | **P** | **07 24 21.2 +0.6** |
| J17K | | | | | IAmb | IAmb | 07 24 32.1 |
| | comp=Z,40nm,1.1s | | | | | | |
| **J17K** | **VABM Dome** | | **77.67** | **0** | P | **P** | **07 24 20.3 -0.3** |
| | baz=359 | | | | | | |
| **J16K** | **Anvik River** | | **77.76** | **1** | P | **P** | **07 24 21.4 +0.3** |
| | baz=358 | | | | | | |
| **N32M** | **Quiet Lake** | | **77.82** | **348** | P | **P** | **07 24 22.3 +0.7** |
| | baz=20 | | | | | | |
| **M27K** | **Edge Creek, AK** | | **77.84** | **352** | P | **P** | **07 24 22.7 +0.9** |
| | baz=13,SNR=9.3 | | | | | | |
| **M26K** | **Nabesna, AK** | | **77.91** | **353** | P | **P** | **07 24 22.4 +0.3** |
| | baz=12,SNR=14 | | | | | | |
| **N31M** | **Braeburn, Yuko** | | **77.92** | **349** | P | **P** | **07 24 22.3 +0.2** |
| | baz=18,SNR=13 | | | | | | |
| **WAT1** | **Susitna Watana** | | **77.93** | **355** | P | **P** | **07 24 21.0 -1.2** |
| | baz=7.7 | | | | | | |
| **KSRS** | **Korea Array** | | **77.94** | **51** | P | **P** | **07 24 21.2 -1.3** |
| | comp=Z,3.9nm,0.5s,baz=315,slow=4.8,SNR=9.8 | | | | | | |
| KSRS | | | | | LR | LR | 08 03 02.0 |
| | comp=Z,598nm,18.7s,baz=325,slow=39 | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **WTLY** | **Watson Lake, Y** | | **78.02** | **345** | P | **P** | **07 24 23.6 +0.9** |
| | baz=23 | | | | | | |
| **LIRD** | **Liard River Hi** | | **78.11** | **344** | P | **P** | **07 24 24.0 +0.8** |
| | baz=25,SNR=9.3 | | | | | | |
| **HARP** | **HAARP** | | **78.11** | **354** | P | **P** | **07 24 23.6 +0.5** |
| | baz=10 | | | | | | |
| **WAT6** | **Susitna Watana** | | **78.13** | **355** | P | **P** | **07 24 23.7 +0.3** |
| | baz=8.4 | | | | | | |
| **N30M** | **Aishikik Lake** | | **78.13** | **350** | P | **P** | **07 24 23.7 +0.4** |
| | baz=17,SNR=6.7 | | | | | | |
| **J14K** | **Nanvaranak Lak** | | **78.23** | **2** | P | **P** | **07 24 25.0 +1.3** |
| | baz=356 | | | | | | |
| **YUK3** | **Moose Creek** | | **78.25** | **351** | P | **P** | **07 24 24.7 +0.5** |
| | baz=14,SNR=12 | | | | | | |
| **K17K** | **Iditarod** | | **78.35** | **360** | P | **P** | **07 24 24.7 +0.3** |
| K17K | | | | | IAmb | IAmb | 07 24 31.8 |
| | comp=Z,58nm,1.1s | | | | | | |
| **K17K** | **Iditarod** | | **78.35** | **360** | P | **P** | **07 24 24.5 +0.1** |
| | baz=0.0,SNR=13 | | | | | | |
| **TOAD** | **Toad River Com** | | **78.42** | **343** | P | **P** | **07 24 25.7 +0.8** |
| | baz=26,SNR=20 | | | | | | |
| **YUK4** | **Talbot Arm** | | **78.45** | **350** | P | **P** | **07 24 24.9 -0.4** |
| | baz=16 | | | | | | |
| **CUT** | **Chulitna** | | **78.45** | **356** | P | **P** | **07 24 24.6 -0.4** |
| | baz=6.4 | | | | | | |
| **M24K** | **Tolsona, Glenn** | | **78.48** | **354** | P | **P** | **07 24 25.7 +0.4** |
| | baz=9.6 | | | | | | |
| **L20K** | **Farwell, AK** | | **78.53** | **358** | P | **P** | **07 24 26.1 +0.7** |
| | baz=3.5 | | | | | | |
| **WHY** | **Whitehorse** | | **78.57** | **348** | P | **P** | **07 24 25.7 -0.1** |
| | baz=18 | | | | | | |
| **TKL** | **Tuckaleechee C** | | **78.60** | **307** | LR | LR | 07 59 14.6 |
| | comp=Z,343nm,19.2s,baz=54,slow=36 | | | | | | |
| **YUK8** | **Steele Glacier** | | **78.65** | **351** | P | **P** | **07 24 26.6 +0.2** |
| | baz=15 | | | | | | |
| **O30N** | **Mendenhall** | | **78.65** | **349** | P | **P** | **07 24 26.1 -0.1** |
| | baz=17,SNR=7.1 | | | | | | |
| **P33M** | **Teslin, Yukon** | | **78.66** | **347** | P | **P** | **07 24 26.4 +0.1** |
| | baz=20,SNR=16 | | | | | | |
| **K15K** | **Wolf Creek Mou** | | **78.74** | **2** | P | **P** | **07 24 27.7 +1.1** |
| | baz=358 | | | | | | |
| **CMC01** | **Camacan, BA** | | **78.76** | **240** | *e*P | **P** | **07 24 29.1 +1.8** |
| **YUK6** | **Outpost Mounta** | | **78.80** | **350** | P | **P** | **07 24 28.0 +0.7** |
| | baz=16,SNR=11 | | | | | | |
| **L18K** | **Granite Mounta** | | **78.84** | **359** | P | **P** | **07 24 27.9 +0.7** |
| L18K | | | | | IAmb | IAmb | 07 24 40.0 |
| | comp=Z,54nm,1.4s | | | | | | |
| **L18K** | **Granite Mounta** | | **78.84** | **359** | P | **P** | **07 24 27.9 +0.7** |
| | baz=1.3 | | | | | | |
| **SCM** | **Sheep Creek Mo** | | **78.84** | **355** | P | **P** | **07 24 28.0 +0.7** |
| | baz=8.7 | | | | | | |
| **N25K** | **Chitina, Valde** | | **78.84** | **353** | P | **P** | **07 24 27.2 -0.1** |
| | baz=11 | | | | | | |
| **L19K** | **White Mountain** | | **78.85** | **358** | P | **P** | **07 24 28.0 +0.8** |
| | baz=2.7,SNR=16 | | | | | | |
| **M23K** | **Glacier View** | | **78.91** | **355** | P | **P** | **07 24 28.2 +0.6** |
| | baz=8.3,SNR=8.1 | | | | | | |
| **MCARA** | **McCarthy VSAT** | | **78.91** | **353** | P | **P** | **07 24 28.1 +0.5** |
| | baz=12 | | | | | | |
| **L17K** | **Donlin** | | **78.93** | **360** | P | **P** | **07 24 27.8 +0.2** |
| | baz=0.0 | | | | | | |
| **SML** | **Sawmill** | | **78.94** | **355** | P | **P** | **07 24 28.2 +0.5** |
| **SML** | **Sawmill** | | **78.94** | **355** | P | **P** | **07 24 27.7 0.0** |
| | baz=7.9 | | | | | | |
| **SKT** | **Skwentna** | | **78.94** | **357** | P | **P** | **07 24 27.0 -0.7** |
| | baz=5.4,SNR=11 | | | | | | |
| **K13K** | **Kusilvak Mount** | | **79.01** | **3** | P | **P** | **07 24 29.0 +1.0** |
| | baz=355 | | | | | | |
| **KLU** | **Klutina** | | **79.07** | **354** | P | **P** | **07 24 28.3 -0.2** |
| | baz=9.8 | | | | | | |
| **M22K** | **Willow** | | **79.10** | **356** | P | **P** | **07 24 28.8 +0.3** |
| | baz=6.5 | | | | | | |
| **M20K** | **Styx River** | | **79.10** | **357** | P | **P** | **07 24 28.6 -0.1** |
| | baz=4.1,SNR=12 | | | | | | |
| **R33M** | **Jennings River** | | **79.10** | **346** | P | **P** | **07 24 30.2 +1.4** |
| | baz=21,SNR=26 | | | | | | |
| **M19K** | **Big River Lodg** | | **79.11** | **358** | P | **P** | **07 24 29.4 +0.8** |
| | baz=3.1 | | | | | | |
| **CTG** | **Chitna Glacier** | | **79.14** | **352** | P | **P** | **07 24 29.5 +0.5** |
| | baz=13 | | | | | | |
| **CPCT** | **Cooper Cave** | | **79.19** | **307** | P | **P** | **07 24 29.8 +0.2** |
| CPCT | | | | | IAmb | IAmb | 07 24 37.8 |
| | comp=Z,53nm,1.3s | | | | | | |
| **O28M** | **Mount Upton** | | **79.20** | **351** | P | **P** | **07 24 30.1 +0.6** |
| | baz=14 | | | | | | |
| **PMR** | **Palmer** | | **79.20** | **356** | P | **P** | **07 24 28.6 -0.4** |
| | baz=7.2 | | | | | | |
| **KNK** | **Knik Glacier** | | **79.34** | **355** | P | **P** | **07 24 30.0 +0.1** |
| | baz=7.8 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | | **79.35** | **37** | *e*P | **P** | **07 24 29.9 -0.3** |
| YSS | | | | | *e**SP | **pP** | **07 24 34.4 +0.8** |
| YSS | | | | | *e* | | 07 24 40.9 |
| YSS | | | | | *e*PPP | PPP | 07 29 20.3 |
| YSS | | | | | *e*S | **S** | **07 34 29.1 -1.7** |
| YSS | | | | | pmax | pmax | |
| | comp=Z,300nm,3.1s | | | | | | |
| YSS | | | | | pmax | pmax | |
| | comp=Z,20nm,0.8s | | | | | | |
| YSS | | | | | MLR | MLR | |
| | comp=Z,2µm,16.0s | | | | | | |
| YSS | | | | | MLR | MLR | |
| | comp=N,900nm,15.0s | | | | | | |
| YSS | | | | | MLR | MLR | |
| | comp=E,1µm,15.0s | | | | | | |
| **L16K** | **Owhat River** | | **79.36** | **1** | P | **P** | **07 24 30.7 +0.8** |
| | baz=359 | | | | | | |
| **L15K** | **Ungalak Mounta** | | **79.36** | **2** | P | **P** | **07 24 29.2 -0.8** |
| | baz=358 | | | | | | |
| **P30M** | **Million Dollar** | | **79.40** | **349** | P | **P** | **07 24 31.1 +0.8** |
| | baz=17 | | | | | | |
| **P32M** | **Atlin** | | **79.40** | **348** | P | **P** | **07 24 30.3 0.0** |
| | baz=19 | | | | | | |
| **SUA** | **Susitna One** | | **79.42** | **356** | P | **P** | **07 24 30.5 +0.1** |
| | baz=6.0 | | | | | | |
| **GRNC** | **Granite Creek** | | **79.42** | **352** | P | **P** | **07 24 32.1 +1.5** |
| GRNC | | | | | IAmb | IAmb | 07 24 38.5 |
| | comp=Z,84nm,1.5s | | | | | | |
| **O29M** | **Mount Kennedy** | | **79.45** | **350** | P | **P** | **07 24 30.7 0.0** |
| | baz=15 | | | | | | |
| **BMRM** | **Bremner River** | | **79.47** | **353** | P | **P** | **07 24 30.9 +0.2** |
| | baz=11 | | | | | | |
| **CRQE** | **Cirque** | | **79.54** | **352** | P | **P** | **07 24 31.6 +0.5** |
| | baz=12 | | | | | | |
| **M18K** | **Stony River** | | **79.56** | **359** | P | **P** | **07 24 31.8 +0.7** |
| | baz=2.0 | | | | | | |
| **L14K** | **Kuka Creek** | | **79.67** | **2** | P | **P** | **07 24 31.8 +0.2** |
| | baz=357 | | | | | | |
| **M17K** | **Holitna River** | | **79.67** | **360** | P | **P** | **07 24 32.8 +1.2** |
| | baz=0.7 | | | | | | |
| **RC01** | **Rabbit Creek A** | | **79.74** | **356** | P | **P** | **07 24 32.1 +0.1** |
| | baz=6.8 | | | | | | |
| **Q32M** | **Nakina River** | | **79.75** | **347** | P | **P** | **07 24 33.5 +1.1** |
| | baz=20,SNR=8.4 | | | | | | |
| **N20K** | **Mount Spurr** | | **79.75** | **357** | P | **P** | **07 24 31.8 -0.4** |
| | baz=4.8 | | | | | | |
| **SPCR** | **Spurr Chakacha** | | **79.75** | **357** | P | **P** | **07 24 31.6 -0.6** |
| | baz=4.8 | | | | | | |
| **PRPB** | **Paranapebas** | | **79.76** | **253** | *e*P | **P** | **07 24 34.5 +1.7** |
| **GLI** | **Glacier Island** | | **79.77** | **354** | P | **P** | **07 24 31.8 -0.4** |
| | baz=8.8 | | | | | | |
| **SKAG** | **Skagway** | | **79.79** | **348** | P | **P** | **07 24 32.4 +0.1** |
| | baz=18 | | | | | | |
| **DLBC** | **Dease Lake** | | **79.81** | **345** | LR | LR | 08 02 23.7 |
| | comp=Z,458nm,18.9s,baz=18,slow=38 | | | | | | |
| **DLBC** | **Dease Lake** | | **79.81** | **345** | P | **P** | **07 24 33.8 +1.2** |
| | baz=22 | | | | | | |
| **GUA01** | **Guaratinga, BA** | | **79.82** | **239** | *e*P | **P** | **07 24 34.7 +1.6** |
| **GOGA** | **Godfrey** | | **79.85** | **305** | P | **P** | **07 24 33.4 +0.2** |
| GOGA | | | | | IAmb | IAmb | 07 24 42.7 |
| | comp=Z,51nm,1.4s | | | | | | |
| **GOGA** | **Godfrey** | | **79.85** | **305** | P | **P** | **07 24 33.4 +0.2** |
| GOGA | | | | | pmax | pmax | |
| | comp=Z,51nm,1.5s | | | | | | |
| **PWL** | **Port Wells** | | **79.88** | **355** | P | **P** | **07 24 33.2 +0.4** |
| | baz=7.8 | | | | | | |
| **SMTB** | **Santa Maria do** | | **79.91** | **250** | *e*P | **P** | **07 24 35.1 +1.5** |
| **PLBC** | **Pleasant Camp** | | **79.95** | **349** | P | **P** | **07 24 34.1 +0.9** |
| | baz=17 | | | | | | |
| **MESA** | **MESA** | | **79.98** | **352** | P | **P** | **07 24 34.5 +0.8** |
| | baz=13 | | | | | | |
| **P29M** | **Windy Craggy** | | **79.98** | **350** | P | **P** | **07 24 33.7 +0.3** |
| | baz=16 | | | | | | |
| **EYAK** | **Cordova Ski Ar** | | **79.99** | **354** | P | **P** | **07 24 33.3 -0.1** |
| | baz=9.9 | | | | | | |
| **M16K** | **Timber Creek** | | **80.05** | **0** | P | **P** | **07 24 34.2 +0.5** |
| | baz=360 | | | | | | |
| **CAPN** | **Captain Cook N** | | **80.13** | **356** | P | **P** | **07 24 34.2 +0.1** |
| | baz=5.6 | | | | | | |
| **PNL** | **Peninsula** | | **80.17

PET pmax pmax
comp=Z,100nm,14.8s
PET pmax pmax
comp=Z,100nm,11.4s
**PET Petropavlovsk 80.81 25** P **P** 07 24 39.7 +1.8
comp=Z,29nm,1.4s
**O19K Port Alsworth 80.83 358** P **P** 07 24 37.1 -0.8
baz=3.1
**R31K City Hall, Gus 80.85 348** P **P** 07 24 38.2 +0.1
baz=18
**O20K Slope Mountain 80.88 357** P **P** 07 24 37.0 -1.3
baz=4.5
**N15K Kwethluk River 80.90 1** P **P** 07 24 38.8 +0.5
baz=359
**NAN01 Guarapari, ES 80.94 238** *e*P **P** 07 24 39.6 +0.5
**N14K Kuskokwak Cree 81.11 2** P **P** 07 24 40.1 +0.7
baz=357
**Q23K Middleton Isla 81.15 354** P **P** 07 24 40.1 +0.5
baz=9.4
**O18K Koktuh Hills 81.19 358** P **P** 07 24 39.7 -0.2
baz=2.4
**T35M Bob Quinn 81.21 345** P **P** 07 24 40.3 +0.2
baz=22
**HOM Homer 81.26 357** P **P** 07 24 39.6 -0.6
baz=5.2
**O17K Koliganek Bris 81.30 359** P **P** 07 24 40.9 +0.5
baz=1.0
**P19K Oil Pt 81.33 357** P **P** 07 24 41.2 +0.6
baz=4.0
**S31K Pelican 81.36 348** P **P** 07 24 41.7 +0.9
baz=17
**ASAJ Asahikawa 81.37 39** LR LR 08 03 06.0
comp=Z,361nm,19.0s,baz=342,slow=37
**CCM Cathedral Cave 81.45 313** P **P** 07 24 41.9 +0.2
CCM IAmb IAmb 07 24 43.3
comp=Z,73nm,1.6s
**CCM Cathedral Cave 81.45 313** P **P** 07 24 41.9 +0.2
CCM pmax pmax
comp=Z,73nm,1.6s
**O16K Kokwok River B 81.48 360** P **P** 07 24 41.8 +0.4
baz=0.2
**S32K Killisnoo 81.56 347** P **P** 07 24 42.7 +0.8
baz=18
**P18K Big Mountain, 81.65 358** P **P** 07 24 41.9 -0.5
baz=2.4
**O14K Tigyukauivet M 81.80 2** P **P** 07 24 41.8 -1.3
baz=358
**JANB Januaria 81.81 243** *e*P **P** 07 24 44.9 +1.1
**P17K Kvichak River 81.87 359** P **P** 07 24 42.7 -0.7
baz=1.5
**O15K Ungalikthiuk R 81.89 1** P **P** 07 24 44.0 +0.4
baz=359
**P16K Nushagak River 82.05 360** P **P** 07 24 44.8 +0.4
baz=0.3
**Q19K Cape Douglas, 82.07 358** P **P** 07 24 44.9 +0.3
baz=3.7
**SIT Sitka 82.08 348** P **P** 07 24 44.7 +0.2
baz=18
**BSFB Barra de Sao F 82.12 238** *e*P **P** 07 24 46.5 +1.2
**WRAK Wrangell Islan 82.15 346** P **P** 07 24 45.1 +0.2
baz=20
**U35K Hyder 82.16 344** P **P** 07 24 45.8 +0.8
baz=22
**RIB01 Linhares ES 82.17 237** *e*P **P** 07 24 47.2 +1.6
**SJMB Sao Joao De Ma 82.25 238** *e*P **P** 07 24 47.3 +1.3
**Q20K Shuyak Island 82.34 357** P **P** 07 24 46.1 +0.2
baz=4.6
**Q16K King Salmon 82.39 359** P **P** 07 24 46.5 +0.3
baz=1.3
**Q18K Katmai Hardscr 82.39 358** P **P** 07 24 46.6 +0.2
baz=2.6
**BOAV Boa Vista 82.44 267** P **P** 07 24 48.7 +1.5
**BOAV Boa Vista 82.44 267** *e*P **P** 07 24 48.8 +1.6
**U33K Whale Pass 82.58 346** P **P** 07 24 46.5 -0.7
baz=19
**JNU Nakatsue 82.62 53** LR LR 08 06 54.9
comp=Z,732nm,18.1s,baz=321,slow=40
**Q17K Contact Creek 82.80 359** P **P** 07 24 48.3 -0.1
baz=1.9
**V35K Ketchikan 83.03 345** P **P** 07 24 49.1 -0.5
baz=20
**ITTB Itaituba 83.04 259** *e*P **P** 07 24 51.5 +1.2
**KDAK Kodiak Island 83.18 357** LR LR 08 05 18.7
comp=Z,167nm,19.5s,baz=14,slow=38
**KDAK Kodiak Island 83.18 357** P **P** 07 24 50.8 +0.5
baz=4.5
**KDAK Kodiak Island 83.18 357** *d i*P **P** 07 24 50.1 -0.2
KDAK pmax pmax
comp=Z,48nm,1.5s
KDAK MLR MLR
comp=Z,338nm,19.0s
**CRAG Craig 83.20 346** P **P** 07 24 49.9 -0.5
baz=19
**SPIA Saint Paul Isl 83.38 6** P **P** 07 24 51.3 -0.1
baz=351
**R17L Mt. Peulik Vol 83.44 359** P **P** 07 24 51.4 -0.3
baz=1.5
**R18K Karluk 83.46 358** P **P** 07 24 51.8 0.0
baz=3.0
**R16K Pilot Point 83.52 360** P **P** 07 24 50.9 -1.1
baz=0.6
**DIAM Diamantina, MG 83.63 240** *e*P **P** 07 24 55.1 +1.8
**OHAK Old Harbor 83.77 357** P **P** 07 24 54.0 +0.7
baz=3.9
**P08K Saint George I 84.01 6** P **P** 07 24 54.4 -0.2
baz=351
**SII Sitkinak Islan 84.46 358** P **P** 07 24 55.6 -1.3
baz=3.2
**NPGB Novo Progresso 84.48 256** *e*P **P** 07 24 58.3 +0.6
**MJAR Matsushiro Arr 84.58 46** P **P** 07 24 57.1 -0.8
comp=Z,7.2nm,0.9s,baz=318,slow=3.9,SNR=7.7
MJAR LR LR 08 06 20.9
comp=Z,425nm,18.7s,baz=334,slow=38
comp=Z,7.2nm,0.9s
**SNDB Serra Nova Dou 84.68 250** *e*P **P** 07 25 00.3 +1.6
**CHGN Chignik 84.79 0** P **P** 07 24 57.8 -0.7
baz=360
**BDFB Brasilia 84.79 245** P **P** 07 25 00.5 +1.2
comp=Z,9.0nm,0.6s,baz=61,slow=4.7,SNR=19
BDFB LR LR 08 04 27.0
comp=Z,835nm,18.7s,baz=24,slow=37
comp=Z,9.0nm,0.6s
**BDFB Brasilia 84.79 245** *e*P **P** 07 25 01.1 +1.8
**S14K Fog Glacier 84.80 1** P **P** 07 24 57.3 -1.4
baz=359
**RLMT Red Lodge 85.11 328** P **P** 07 25 00.6 -0.1
**JOW Kunigami 85.14 59** P **P** 07 25 00.4 -0.5
comp=Z,30nm,1.1s,baz=8.6,slow=4.6,SNR=5.9
JOW LR LR 08 08 31.9
comp=Z,218nm,21.1s,baz=304,slow=40
comp=Z,30nm,1.1s
**BBB Bella Bella 85.18 342** LR LR 08 05 51.1
comp=Z,474nm,18.1s,baz=35,slow=38
**CHIR Chirikof Islan 85.24 358** P **P** 07 25 00.3 -0.5
baz=2.1
**SHEM Shemya Is, Ala 85.29 16** LR LR 08 08 51.9
comp=Z,322nm,18.2s,baz=328,slow=40
**S12K Black Hills 85.33 2** P **P** 07 24 59.9 -1.4
baz=357
**NEW Newport 85.47 334** LR LR 08 04 35.2
comp=Z,488nm,19.2s,baz=32,slow=37
**PMNB Patos De Minas 85.67 242** *e*P **P** 07 25 05.3 +1.7
**SDPT Sand Point 85.72 1** P **P** 07 25 01.8 -1.4
baz=358
**MACA Manacapuru-AM 86.06 263** *e*P **P** 07 25 07.2 +1.6
**FALS False Pass 86.13 3** P **P** 07 25 03.9 -1.4
baz=356
**SDV Santo Domingo 86.21 278** P **P** 07 25 07.0 +0.4
**SDV Santo Domingo 86.21 278** LR LR 07 58 32.4
comp=Z,93nm,20.9s,baz=68,slow=32
**SDV Santo Domingo 86.21 278** *e*P **P** 07 25 07.8 +1.2
**H17A Grant Village 86.24 328** P **P** 07 25 08.0 +1.6
baz=35
**BSCB Bom Sucesso 86.25 239** *e*P **P** 07 25 07.6 +1.2
**CHNA Chernabura Isl 86.25 1** P **P** 07 25 05.8 0.0
baz=359
**VAS01 Vassouras-RJ 86.28 237** *e*P **P** 07 25 07.9 +1.5
**IPMB Ipameri, GO 86.52 244** *e*P **P** 07 25 08.3 +0.5
**UNV Unalaska Valle 86.98 5** P **P** 07 25 09.1 -0.4
baz=354
**N23A Red Feather La 87.01 323** P **P** 07 25 10.1 -0.2
baz=38
**PDAR Pinedale Array 87.14 326** P **P** 07 25 10.4 -0.4
comp=Z,0.7nm,0.4s,baz=70,slow=5.4,SNR=11
PDAR LR LR 08 06 07.7
comp=Z,535nm,18.4s,baz=14,slow=37
comp=Z,0.7nm,0.4s

**CLDB Colider 87.28 254** *e*P **P** 07 25 12.5 +0.9
**ARAG Araguaiana, MT 87.53 248** *e*P **P** 07 25 14.4 +1.8
**NIKH Nikolski High 87.67 6** P **P** 07 25 12.1 -0.8
baz=352
**Q24A Divide 88.15 321** P **P** 07 25 15.8 0.0
baz=38
**DVLD Doverlandia 88.40 247** *e*P **P** 07 25 19.0 +2.2
**PDRB Porto dos Gac 88.46 254** *e*P **P** 07 25 18.6 +1.5
**BB19B Bebedouro 88.83 242** *e*P **P** 07 25 20.8 +2.1
**ITRB Iturama 89.17 244** *e*P **P** 07 25 22.7 +2.3
**T25A Trinidad 89.20 320** P **P** 07 25 20.8 +0.1
baz=39
**TEFE Tefe 89.33 265** *e*P **P** 07 25 22.1 +0.8
**NBRS Nobres 89.51 251** *e*P **P** 07 25 23.6 +1.6
**S22A 4UR Ranch, Cre 89.92 322** P **P** 07 25 23.2 -0.9
baz=37
**435B Jarrell 90.30 311** P **P** 07 25 26.9 +1.2
baz=42
**SALV Santo Antonio 90.47 250** *e*P **P** 07 25 27.1 +0.6
**PP1B Ponte de Pedra 90.98 248** *e*P **P** 07 25 30.8 +1.9
**PCMB Pacaembu 91.07 243** *e*P **P** 07 25 31.3 +2.1
**FRTB Fartura 91.08 240** *e*P **P** 07 25 30.9 +1.6
**PTET Porto Estrela 91.20 251** *e*P **P** 07 25 31.4 +1.5
**ROSC El Rosal 91.59 278** P **P** 07 25 32.6 +0.3
comp=Z,9.9nm,0.8s,baz=157,slow=20,SNR=6.5
ROSC LR LR 08 05 00.8
comp=Z,194nm,19.6s,baz=66,slow=34
comp=Z,9.9nm,0.8s
**SAML Samuel 91.64 260** *e*P **P** 07 25 32.1 +0.1
**POCN Pocone 91.69 250** *e*P **P** 07 25 34.4 +2.2
**VILB Vilhena 91.91 255** *e*P **P** 07 25 34.9 +1.7
**ANMO Albuquerque 91.95 320** LR LR 08 06 02.9
comp=Z,279nm,20.5s,baz=38,slow=35
**LDASE Londrina, Braz 92.17 241** *e*P **P** 07 25 36.3 +2.0
**PTLB Pontes e Lacer 92.71 252** *e*P **P** 07 25 37.6 +0.8
**VBST Vila Bela da S 92.78 254** *e*P **P** 07 25 38.5 +1.3
**Y22D IRIS PASSCAL I 92.87 319** P **P** 07 25 38.1 +0.4
baz=37
**YBH Yreka Blue Hor 93.10 334** LR LR 08 09 31.8
comp=Z,486nm,20.3s,baz=26,slow=37
**833A Chaparral WMA, 93.17 311** P **P** 07 25 40.0 +1.0
baz=42
**R11B Troy Canyon, C 93.35 328** P **P** 07 25 39.7 -0.2
baz=32
**W18A Petrified Fore 93.42 322** P **P** 07 25 39.9 -0.3
baz=36
**PTGB Pitanga 93.69 241** *e*P **P** 07 25 43.7 +2.4
**JCJ Chichijima 93.77 50** LR LR 08 11 40.2
comp=Z,194nm,18.2s,baz=85,slow=38
**TBTG Tabatinga, AM 93.84 268** *e*P **P** 07 25 42.4 +0.2
**NVAR Mina Array Bea 94.38 330** P **P** 07 25 44.7 0.0
comp=Z,0.6nm,0.8s,baz=36,slow=4.6,SNR=2.7
NVAR PP PP 07 29 28.8 -2.1
comp=Z,1.0nm,1.0s,baz=29,slow=7.7,SNR=2.5
NVAR PKKPbc **PKKPbc** 07 42 43.0 -0.3
comp=Z,0.5nm,0.6s,baz=164,slow=3.9,SNR=5.0
NVAR LR LR 08 10 17.5
comp=Z,754nm,19.6s,baz=36,slow=37
comp=Z,0.6nm,0.8s
**SIV San Ignacio 94.48 253** P **P** 07 25 45.6 +0.5
comp=Z,2.0nm,1.0s,baz=40,slow=5.6,SNR=6.2
SIV PP **PP** 07 29 33.4 +0.4
comp=Z,2.3nm,1.1s,baz=56,slow=12,SNR=4.5
SIV LR LR 08 11 34.5
comp=Z,555nm,18.3s,baz=108,slow=38
comp=Z,2.0nm,1.0s
**ETMB Extrema 94.50 261** *e*P **P** 07 25 45.0 -0.2
**121A Cookes Peak, D 94.53 319** P **P** 07 25 44.5 -0.9
baz=37
**TXAR Lajitas Array 94.85 314** P **P** 07 25 47.3 +0.5
comp=Z,2.8nm,0.7s,baz=70,slow=4.1,SNR=37
TXAR PP **PP** 07 29 34.1 -0.7
comp=Z,0.8nm,0.9s,baz=59,slow=3.7,SNR=2.7
TXAR LR LR 08 08 11.3
comp=Z,186nm,19.9s,baz=34,slow=35
comp=Z,2.8nm,0.7s
**JTS Las Juntas de 96.11 288** LR LR 08 08 53.6
comp=Z,238nm,18.2s,baz=42,slow=35
**DAV Davao City (W) 96.21 76** LR LR 08 16 06.2
comp=Z,124nm,18.9s,baz=342,slow=40
**214A Organ Pipe Nat 97.47 322** P **P** 07 25 57.7 -0.9
baz=34
**PFO Pinyon Flats O 97.75 326** LR LR 08 10 48.6
comp=Z,518nm,21.9s,baz=40,slow=36
**PFO Pinyon Flats O 97.75 326** *‖ i*P **P** 07 25 59.5 -0.4
PFO pmax pmax
comp=Z,13nm,1.5s
PFO MLR MLR
comp=Z,923nm,21.0s
**TPFO Pinon Flats 97.75 326** P Pdif 07 25 59.9 -0.1
baz=31
**CPUP Villa Florida 98.35 243** P Pdif 07 26 03.8 +1.4
comp=Z,0.7nm,0.6s,baz=46,slow=19,SNR=0.9
CPUP LR LR 08 12 39.4
comp=Z,1μm,18.0s,baz=52,slow=37
comp=Z,0.7nm,0.6s
**CMIG Matias Romero 98.48 300** LR LR 08 09 53.6
comp=Z,207nm,20.5s,baz=38,slow=35
**KAPI Kappang 99.41 89** LR LR 08 17 14.9
comp=Z,89nm,19.6s,baz=304,slow=39
**LPAZ La Paz 99.96 257** P **Pdif** 07 26 09.5 -1.1
comp=Z,0.5nm,0.5s,baz=280,slow=4.0,SNR=2.3
**SNAA Sanae 112.01 188** PP **PP** 07 31 43.7 +0.5
comp=Z,5.1nm,1.2s,baz=338,slow=15,SNR=4.1
**PLCA Paso Flores 115.63 237** PKP **PKiKP** 07 31 06.6 +0.1
comp=Z,2.9nm,1.0s,baz=53,slow=3.0,SNR=9.4
**WRA Warramunga Arr 119.69 92** PKP **PKPdf** 07 31 13.3 -1.5
comp=Z,1.3nm,0.5s,baz=318,slow=1.4,SNR=16
WRA PP **PP** 07 32 33.2 -4.8
comp=Z,1.3nm,0.7s,baz=315,slow=5.9,SNR=5.5
WRA PKKPbc **PKKPab** 07 41 25.3 -1.3
comp=Z,0.7nm,0.8s,baz=125,slow=2.9,SNR=9.2
WRA PKKP **PKKPdf** 07 41 56.2 +0.5
comp=Z,0.3nm,0.6s,baz=118,slow=2.3,SNR=7.4
**ASAR Alice Springs 121.40 96** PKP **PKPdf** 07 31 16.8 -1.4
comp=Z,3.4nm,0.5s,baz=307,slow=1.4,SNR=25
ASAR PKKPbc **PKKPab** 07 41 18.1 -0.8
comp=Z,0.4nm,0.7s,baz=115,slow=3.6,SNR=4.9
**QIS Mount Isa 124.12 90** P **PKPdf** 07 31 23.2 -0.2
**QSPA South Pole Qui 129.13 180** PKP **PKPdf** 07 31 31.1 -0.5
comp=Z,6.2nm,1.1s,baz=314,slow=1.4,SNR=11
**STKA Stephens Creek 131.37 101** PKP **PKPdf** 07 31 35.5 -1.3
comp=Z,3.4nm,0.7s,baz=232,slow=18,SNR=3.2
**DZM Mont Dzumac 145.46 71** *e*LR LR 08 19 47.8
comp=Z,259nm,22.6s
**TAOE Nuku Hiva Isla 145.60 327** *e*LR LR 08 19 52.7
comp=Z,298nm,29.6s
**PPT2 Papeete2 157.08 338** *e*LR LR 08 25 09.0
comp=Z,216nm,25.2s
PPT2 *e*LR LR 08 25 14.1
comp=Z,290nm,24.0s
**URZ Urewera 160.84 95** PKPab **PKPab** 07 33 05.5 -1.4
comp=Z,6.6nm,0.8s,baz=292,slow=11,SNR=1.5
**TBI Tubuai 162.42 332** *e*LR LR 08 27 43.1
comp=Z,1μm,23.8s

**IDC 31 07:12:46.4±11.0, 19°68S×168°03E, h0km, mb3.9/3, mbtmp3.9/3, ML1.7/1, Error ellipse: s-maj=200.6km s-min=44.1km az=92.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **2.80** | **212** | Pn | Pn | 07 13 30.8 | -1.8 |
| | 0.1nm,0.3s,baz=195,slow=22,SNR=1.3 | | | | | | |
| DZM | | | | Sn | Sn | 07 14 09.0 | +1.9 |
| | 0.1nm,0.3s,baz=67,slow=15,SNR=2.2 | | | | | | |
| **STKA** | **Stephens Creek** | **26.64** | **238** | P | P | 07 18 28.4 | +1.4 |
| | 3.2nm,0.7s,baz=11,slow=16,SNR=4.1 | | | | | | |
| | 3.2nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.67** | **264** | P | P | 07 19 10.4 | -1.3 |
| | 0.7nm,0.7s,baz=95,slow=8.9,SNR=13 | | | | | | |
| | 0.7nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **31.91** | **257** | P | P | 07 19 14.6 | +0.7 |
| | 1.1nm,0.7s,baz=83,slow=9.4,SNR=13 | | | | | | |
| | 1.1nm,0.7s | | | | | | |

**NOU 31 07:13:43.9, 18°16S×168°84E, h21km, MLv4.2/9, Vanuatu Islands, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTV** | **Rentapao** | **0.54** | **313** | P | Pn | 07 13 56.6 | +0.3 |
| **DVP** | **Devils Point** | **0.76** | **305** | P | Pb | 07 13 57.2 | -1.2 |
| **LIFNC** | **LIFOU** | **3.01** | **210** | P | Pn | 07 14 31.7 | +1.3 |
| **YATNC** | **Mamie plateau,** | **4.29** | **205** | P | Pn | 07 14 48.8 | +0.8 |

**DZM Mont Dzumac 4.50 210** P Pn 07 14 50.8 -0.1
**KOUNC Koumac, New Ca 4.91 240** P Pn 07 14 55.8 -0.7

*NEIC **31** 07:15:27.5±0.9, 37°358N±0°010×97°86W±0°01, h5km±1km, mb_Lg2.2/19, ML2.6/37, ML2.3/11, Error ellipse: s-maj=2.4km s-min=1.8km az=163.0*
**NEIC 31 07:15:28.0±0.6, 37°34N±0°01×97°87W±0°01, h3km±1km, Error ellipse: s-maj=2.6km s-min=2.2km az=175.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAN12** | **Harper NE Stat** | **0.11** | **247** | | Pg | 07 15 30.5 | +0.4 |
| KAN12 | | | | Sg | Sg | 07 15 32.5 | +0.9 |
| KAN12 | | | | IAML | | 07 15 32.8 | |
| | comp=E,2μm,0.5s | | | | | | |
| KAN12 | | | | IAML | | 07 15 35.0 | |
| | comp=N,3μm,0.4s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.14** | **214** | | Pg | 07 15 30.9 | +0.3 |
| KAN08 | | | | IAML | | 07 15 34.1 | |
| | comp=N,2μm,0.1s | | | | | | |
| **KS21** | **Milan North St** | **0.18** | **108** | | Pg | 07 15 31.6 | +0.2 |
| KS21 | | | | Sg | Sg | 07 15 34.2 | +0.5 |
| **KAN01** | **Argonia South** | **0.21** | **154** | | Pg | 07 15 32.4 | +0.4 |
| **KAN05** | **Bluff City Nor** | **0.23** | **180** | | Pg | 07 15 32.8 | +0.4 |
| KAN05 | | | | IAML | | 07 15 39.1 | |
| | comp=N,1μm,0.2s | | | | | | |
| **KAN09** | **Caldwell North** | **0.29** | **135** | | Pg | 07 15 33.8 | +0.3 |
| KAN09 | | | | IAML | | 07 15 39.6 | |
| | comp=N,1μm,0.3s | | | | | | |
| KAN09 | | | | IAML | | 07 15 43.7 | |
| | comp=E,1μm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.31** | **164** | | Pg | 07 15 34.1 | +0.2 |
| KAN17 | | | | Sg | Sg | 07 15 38.7 | +0.8 |
| KAN17 | | | | IAML | | 07 15 39.5 | |
| | comp=N,1μm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 07 15 40.9 | |
| | comp=E,606nm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.39** | **191** | | Pg | 07 15 35.7 | +0.2 |
| **KAN13** | **South Haven SW** | **0.46** | **136** | | Pg | 07 15 37.0 | +0.3 |
| KAN13 | | | | IAML | | 07 15 47.3 | |
| | comp=E,476nm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.49** | **179** | Pg | Pg | 07 15 37.4 | +0.1 |
| **OK032** | **Salt Plains WL** | **0.60** | **207** | Pg | Pg | 07 15 39.4 | 0.0 |
| OK032 | | | | | Sg | 07 15 47.9 | +0.7 |
| OK032 | | | | IAML | | 07 15 50.3 | |
| | comp=E,259nm,0.2s | | | | | | |
| **BLOK** | **Blackwell** | **0.78** | **137** | Pg | Pg | 07 15 43.5 | +0.6 |
| BLOK | | | | | Sg | 07 15 53.8 | +0.7 |
| **CROK** | **Carrier** | **0.84** | **186** | Pg | Pg | 07 15 44.0 | 0.0 |
| CROK | | | | IAML | | 07 16 02.9 | |
| | comp=E,239nm,0.3s | | | | | | |
| CROK | | | | IAML | | 07 16 04.7 | |
| | comp=N,250nm,0.3s | | | | | | |
| **NOKA** | **Waynoka** | **1.10** | **231** | Pg | Pg | 07 15 49.0 | -0.1 |
| NOKA | | | | IAML | | 07 16 14.0 | |
| | comp=N,130nm,0.2s | | | | | | |
| NOKA | | | | IAML | | 07 16 14.6 | |
| | comp=E,107nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.11** | **219** | Pg | Pb | 07 15 49.7 | -0.1 |
| OK038 | | | | IAML | | 07 16 18.8 | |
| | comp=E,186nm,0.3s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.17** | **111** | | Pg | 07 15 49.7 | -0.6 |
| T35A | | | | IAML | | 07 16 10.5 | |
| | comp=N,117nm,0.2s | | | | | | |
| **OK051** | **E0350 and S346** | **1.18** | **135** | | Pg | 07 15 50.3 | -0.3 |
| **OK048** | **Pawnee Station** | **1.19** | **141** | | Pg | 07 15 50.4 | -0.3 |
| OK048 | | | | IAML | | 07 16 11.0 | |
| | comp=N,138nm,0.2s | | | | | | |
| **R32A** | **Long Quarter,** | **1.27** | **329** | | Pg | 07 15 50.9 | -1.4 |
| **QUOK** | **Quay** | **1.50** | **141** | | Pn | 07 15 55.4 | -0.3 |
| **OK052** | **Battle Ridge R** | **1.60** | **147** | | Pn | 07 15 57.4 | +0.3 |
| **OK031** | **S. Brethren Rd** | **1.61** | **149** | | Pn | 07 15 57.6 | +0.2 |
| OK031 | | | | IAmb_Lg | | 07 16 19.3 | |
| | comp=Z,8.3nm,0.7s | | | | | | |
| **DEOK** | **Depew** | **1.86** | **143** | | Pn | 07 16 00.9 | +0.1 |
| **RLO** | **Rose Lookout** | **2.57** | **116** | IAmb_Lg | | 07 16 47.9 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **X37A** | **Clayton** | **3.41** | **143** | IAmb_Lg | | 07 17 20.0 | |
| | comp=Z,8.3nm,0.9s | | | | | | |
| **N35A** | **Tabor** | **3.92** | **26** | IAmb_Lg | | 07 17 29.2 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **AMTX** | **Amarillo** | **3.94** | **233** | IAmb_Lg | | 07 17 36.0 | |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **DKNS** | **Dickens** | **4.43** | **215** | IAmb_Lg | | 07 17 53.7 | |
| | comp=Z,5.6nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.48** | **91** | IAmb_Lg | | 07 17 50.4 | |
| | comp=Z,5.4nm,1.1s | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **76** | IAmb_Lg | | 07 17 50.7 | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **N38A** | **Joes South For** | **4.99** | **45** | IAmb_Lg | | 07 18 18.2 | |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.98** | **93** | IAmb_Lg | | 07 18 49.5 | |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **OZNA** | **Ozona** | **6.95** | **204** | IAmb_Lg | | 07 19 03.3 | |
| | comp=Z,1.6nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **7.21** | **302** | IAmb_Lg | | 07 19 21.2 | |
| | comp=Z,3.1nm,0.8s | | | | | | |

*IDC **31** 07:36:32.2±24.0, 52°95N×170°40W, h0km, mb3.5/2, mbtmp3.3/3, ML2.8/1, Error ellipse: s-maj=456.8km s-min=56.5km az=89.0*
*AEIC **31** 07:36:34.8±2.1, 52°8N±0°1×169°5W±0°1, h5km±6km, Error ellipse: s-maj=23.2km s-min=5.2km az=150.0*
*NEIC **31** 07:36:35.9±2.3, 52°8N±0°1×169°5W±0°1, h12km±7km, mb3.7/13, ML3.3(AEIC), Error ellipse: s-maj=23.2km s-min=6.0km az=152.0*
**ISC 31 07:36:35.7±1.3, 52°91N±0°10×169°55W±0°06, h5km±10km, n58, σ1°07/53, mb3.5/3, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLCO** | **Concord Point,** | **0.16** | **221** | | **Pg** | **07 36 38.9** | **0.0** |
| **CLES** | **Cleveland East** | **0.23** | **248** | | **Pg** | **07 36 40.4** | **+0.3** |
| **NIKH** | **Nikolski High** | **0.42** | **81** | | **Pg** | **07 36 43.9** | **+0.1** |
| NIKH | | | | | **Sb** | **07 36 51.3** | **-1.0** |
| **OKWE** | **Okmok W'ng Wal** | **0.97** | **54** | | **Pg** | **07 36 54.2** | **0.0** |
| **OKCE** | **Okmok Cone E** | **0.98** | **58** | | **Pg** | **07 36 54.1** | **-0.4** |
| **OKNC** | **Okmok New Cone** | **1.02** | **57** | | **Pg** | **07 36 55.3** | **+0.2** |
| **OKFG** | **Magazine Ridge** | **1.10** | **62** | | **Pg** | **07 36 55.6** | **-1.2** |
| OKFG | | | | | **Sg** | **07 37 11.9** | **+0.7** |
| **MAPS** | **Pakushin South** | **1.80** | **59** | | **Pn** | **07 37 06.5** | **-0.8** |
| MAPS | | | | | **Sn** | **07 37 30.2** | **-0.3** |
| **MGOD** | **Makushin Gods** | **1.83** | **60** | | **Pn** | **07 37 06.9** | **-0.9** |
| MGOD | | | | | **Sn** | **07 37 32.0** | **+0.6** |
| **MSW** | **Makushin Switc** | **1.94** | **58** | | **Pn** | **07 37 08.5** | **-0.7** |
| **MTBL** | **Makushin Table** | **2.02** | **57** | | **Pn** | **07 37 10.6** | **+0.3** |
| **UNV** | **Unalaska Valle** | **2.05** | **62** | | **Pn** | **07 37 09.6** | **-1.1** |
| **AKRB** | **Akutan Reef Bi** | **2.41** | **58** | | **Pn** | **07 37 16.1** | **+0.5** |
| **AKMO** | **Akutan Morgan** | **2.42** | **59** | | **Pn** | **07 37 15.8** | **0.0** |
| **LVA** | **Lava Point** | **2.44** | **58** | | **Pn** | **07 37 16.6** | **+0.4** |
| **AKBBA** | **Akutan Broad B** | **2.46** | **60** | | **Pn** | **07 37 16.5** | **0.0** |
| **AHB** | **Akutan Harbor** | **2.53** | **60** | | **Pn** | **07 37 17.4** | **0.0** |
| **AKSA** | **Akutan Strait** | **2.61** | **60** | | **Pn** | **07 37 18.7** | **+0.4** |
| **GSTR** | **Great Sitkin T** | **4.06** | **261** | Pn | **Pn** | **07 37 36.1** | **-2.4** |
| **KIWB** | **Kanaga Island** | **4.78** | **260** | Pn | **Pn** | **07 37 45.7** | **-2.5** |
| **SDPT** | **Sand Point** | **5.87** | **62** | Pn | **Pn** | **07 38 03.1** | **0.0** |
| **AMKA** | **Amchitka** | **7.03** | **262** | Pn | **Pn** | **07 38 18.9** | **-0.2** |
| **CHGN** | **Chignik** | **7.30** | **58** | Pn | **Pn** | **07 38 23.6** | **+0.8** |
| **O14K** | **Tigyukauivet M** | **7.86** | **33** | Pn | **Pn** | **07 38 31.7** | **+1.2** |
| **M14K** | **Bethel** | **8.89** | **25** | Pn | **Pn** | **07 38 45.5** | **+1.0** |
| **N15K** | **Kwethluk River** | **8.95** | **32** | Pn | **Pn** | **07 38 46.6** | **+1.2** |
| **O16K** | **Kokwok River B** | **9.24** | **39** | Pn | **Pn** | **07 38 50.0** | **+0.6** |
| **N17K** | **Nushagak Hills** | **10.20** | **37** | Pn | **Pn** | **07 39 03.5** | **+0.9** |
| **K15K** | **Wolf Creek Mou** | **10.34** | **21** | Pn | **Pn** | **07 39 06.1** | **+1.7** |
| **L16K** | **Owhat River** | **10.35** | **28** | Pn | **Pn** | **07 39 04.8** | **+0.2** |
| **K17K** | **Iditarod** | **11.49** | **27** | Pn | **Pn** | **07 39 21.9** | **+1.7** |
| **M19K** | **Big River Lodg** | **12.13** | **36** | Pn | **Pn** | **07 39 30.7** | **+1.8** |
| **L19K** | **White Mountain** | **12.16** | **34** | Pn | **Pn** | **07 39 31.5** | **+2.2** |
| **KLU** | **Klutina** | **15.34** | **47** | Pn | **Pn** | **07 40 12.1** | **-0.4** |
| **SUCK** | **Suckling Hills** | **15.86** | **53** | Pn | **Pn** | **07 40 19.9** | **+0.6** |
| **I23K** | **Minto, Yukon-K** | **15.97** | **32** | Pn | **Pn** | **07 40 21.9** | **+1.2** |
| I23K | | | | IAmb | IAmb | 07 40 31.4 | |
| | comp=Z,4.8nm,1.4s | | | | | | |
| **CCB** | **Clear Creek Bu** | **16.18** | **35** | Pn | **Pn** | **07 40 22.4** | **-1.0** |
| CCB | | | | IAmb | IAmb | 07 40 27.7 | |
| | comp=Z,5.8nm,1.4s | | | | | | |
| **ILAR** | **Eielson Array** | **16.57** | **35** | Pn | **Pn** | **07 40 26.1** | **-2.3** |
| | baz=235,slow=12,SNR=1.5 | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | |
| **J25K** | **Salcha River,** | **17.02** | **37** | Pn | **Pn** | **07 40 34.2** | **0.0** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| J25K | | | | | IAmb | IAmb | 07 40 35.5 | |
| | comp=Z,8.6nm,1.5s | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **17.57** | **30** | P | **P** | | **07 40 41.6** | **-0.5** |
| G24K | | | | | IAmb | IAmb | 07 40 45.6 | |
| | comp=Z,11nm,1.4s | | | | | | | |
| **M29M** | **Somme Creek** | **18.97** | **48** | P | **P** | | **07 40 57.5** | **-0.1** |
| **I28M** | **Miner Creek** | **19.45** | **38** | P | **P** | | **07 41 01.8** | **-1.0** |
| **G27K** | **Doyon Strip** | **19.50** | **34** | P | **P** | | **07 41 02.3** | **-1.0** |
| **O30N** | **Mendenhall** | **19.73** | **53** | P | **Pn** | | **07 41 06.5** | **-0.8** |
| O30N | | | | | IAmb | IAmb | 07 41 12.2 | |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| **H29M** | **Whitestone** | **20.36** | **37** | P | **P** | | **07 41 11.6** | **-1.1** |
| H29M | | | | | IAmb | IAmb | 07 41 17.5 | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **G29M** | **Pine Creek** | **20.80** | **36** | P | **P** | | **07 41 16.5** | **-0.9** |
| **EPYK** | **Eagle Plains** | **21.03** | **38** | P | **P** | | **07 41 19.1** | **-0.8** |
| EPYK | | | | | IAmb | IAmb | 07 41 21.8 | |
| | comp=Z,4.7nm,0.9s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **37.81** | **218** | T | T | | 08 23 46.1 | |
| | baz=24,slow=76 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.82** | **218** | T | T | | 08 23 52.3 | |
| | baz=24,slow=76 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.83** | **218** | T | T | | 08 23 50.4 | |
| | baz=24,slow=76 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.00** | **217** | T | T | | 08 25 13.6 | |
| | baz=23,slow=76,SNR=343 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.02** | **217** | T | T | | 08 25 13.3 | |
| | baz=23,slow=76,SNR=273 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.02** | **217** | T | T | | 08 25 29.8 | |
| | baz=23,slow=76,SNR=180 | | | | | | | |
| **PDAR** | **Pinedale Array** | **40.41** | **80** | P | **P** | | **07 44 16.4** | **+1.7** |
| | comp=Z,0.4nm,0.7s,baz=312,slow=4.7,SNR=5.7 | | | | | | | |
| | comp=Z,0.4nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **52.85** | **89** | P | **P** | | **07 45 53.0** | **+0.8** |
| | comp=Z,0.4nm,0.6s,baz=294,slow=5.3,SNR=6.0 | | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | | |
| **H03N2** | **Juan Fernandez** | **116.22** | **111** | T | T | | 10 01 55.1 | |
| | baz=323,slow=77,SNR=16 | | | | | | | |
| **H03N1** | **Juan Fernandez** | **116.24** | **111** | T | T | | 10 01 56.1 | |
| | baz=323,slow=77,SNR=22 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **116.24** | **111** | T | T | | 10 01 55.3 | |
| | baz=323,slow=77,SNR=20 | | | | | | | |

**IDC 31 07:46:26.1±3.3, 53.70N×88.12E, h0km, mbtmp2.7/2, ML2.1/2, Error ellipse: s-maj=27.9km s-min=16.9km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.97** | **279** | I | | I | 07 59 20.0 | |
| | 0.1nm,1.0s,baz=94,slow=322,SNR=20 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.97** | **279** | Pg | | Pb | 07 47 02.1 | -0.8 |
| | 0.7nm,0.3s,baz=99,slow=18,SNR=12 | | | | | | | |
| ZALV | | | | Lg | | Lg | 07 47 29.2 | |
| | 1.5nm,0.3s,baz=95,slow=23,SNR=8.5 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.66** | **246** | Pn | | Pn | 07 48 05.3 | +0.3 |
| | baz=61,slow=14,SNR=6.5 | | | | | | | |
| KURBB | | | | Lg | | Lg | 07 49 56.4 | |
| | baz=58,slow=29,SNR=2.1 | | | | | | | |
| | 0.9nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.86** | **211** | Pn | | Pn | 07 48 23.1 | +1.5 |
| | baz=31,slow=15,SNR=1.7 | | | | | | | |
| MKAR | | | | Sn | | Sn | 07 49 50.5 | -0.7 |
| | baz=26,slow=25,SNR=3.0 | | | | | | | |
| MKAR | | | | Lg | | Lg | 07 50 35.5 | |
| | baz=26,slow=33,SNR=1.9 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |

**BER 31 07:51:04.8±1.4, 72.56N×3.81E, h7km±23km, mb(Pn)3.9, Confirmed Earthquake, Norwegian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TRO** | **Tromso** | **5.71** | **114** | *e*P | | Pn | 07 52 27.2 | -2.7 |
| TRO | | | | *e*S | | Sn | 07 53 28.6 | -6.9 |
| TRO | | | | IAML | | | 07 53 30.1 | |
| | comp=Z,3.5nm,0.6s | | | | | | | |
| **STEI** | **Steigen** | **6.04** | **135** | *e*P | | Pn | 07 52 31.7 | -2.6 |
| STEI | | | | *e*S | | Sn | 07 53 36.5 | -7.1 |
| STEI | | | | IAML | | | 07 53 56.8 | |
| | comp=Z,2.7nm,0.9s | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **6.46** | **23** | *e*P | | Pn | 07 52 37.8 | -2.4 |
| **FAUS** | **Fauske** | **6.51** | **137** | *e*P | | Pn | 07 52 38.1 | -2.7 |
| FAUS | | | | *e*S | | Sn | 07 53 47.5 | -7.6 |
| FAUS | | | | IAML | | | 07 53 54.9 | |
| | comp=Z,1.7nm,0.6s | | | | | | | |
| **HAMF** | **Hammerfest** | **6.56** | **97** | *e*P | | Pn | 07 52 37.8 | -3.7 |
| **KIF** | **Kilpisjarvi** | **6.63** | **114** | *e*P | | Pn | 07 52 39.6 | -2.8 |
| **KONS** | **Konsvik** | **6.89** | **147** | *e*P | | Pn | 07 52 43.3 | -2.8 |
| **DBG** | **Daneborg** | **7.06** | **296** | *e*P | | Pn | 07 52 45.5 | -2.9 |
| **KTK1** | **Kautokeino** | **7.31** | **110** | *e*P | | Pn | 07 52 49.3 | -2.4 |
| **HEF** | **Hetta** | **7.81** | **112** | *e*P | | Pn | 07 52 56.6 | -2.1 |

*LDG **31** 07:55:32.7±0.1, 44.61N×6.69E, h2km, Md1.5/1, Ml2.9/1, Error ellipse: s-maj=1.3km s-min=1.0km az=82.0*

**STR 31 07:55:32.8±0.4, 45°N±2°×°±°, h5km, MLv1.2/11, Error ellipse: s-maj=0.0km s-min=0.0km az=69.0, preliminary, France**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CREF** | **Crivoux** | **0.08** | **218** | Pg | | Pg | 07 55 34.5 | -0.1 |
| CREF | | | | Sg | | Sg | 07 55 35.8 | -0.1 |
| **MBDF** | **Montbardon** | **0.13** | **27** | *e*Pg | | Pg | 07 55 35.3 | -0.2 |
| MBDF | | | | *e*Sg | | Sg | 07 55 37.2 | -0.2 |
| **JAUF** | **Jausiers** | **0.18** | **166** | Pg | | Pg | 07 55 36.4 | 0.0 |
| JAUF | | | | Sg | | Sg | 07 55 39.7 | +0.7 |
| **OGAG** | **Argentiere** | **0.19** | **214** | Pg | | Pg | 07 55 36.8 | +0.3 |
| OGAG | | | | Sg | | Sg | 07 55 40.3 | +1.4 |
| **RRL** | **Rocca Remolon** | **0.32** | **13** | Pg | | Pg | 07 55 39.0 | -0.1 |
| **RRL** | **Rocca Remolon** | **0.32** | **13** | Sg | | Sg | 07 55 43.8 | +0.5 |
| **PZZ** | **Stroppo** | **0.32** | **108** | Pg | | Pg | 07 55 39.2 | +0.2 |
| **PZZ** | **Stroppo** | **0.32** | **108** | Sg | | Sg | 07 55 43.8 | +0.5 |
| **BHB** | **Bricherasio** | **0.47** | **60** | Pg | | Pg | 07 55 41.5 | -0.4 |
| **BHB** | **Bricherasio** | **0.47** | **60** | Sg | | Sg | 07 55 47.7 | -0.4 |
| **ISO** | **Isola** | **0.50** | **149** | Sg | | Sg | 07 55 49.0 | +0.1 |
| **ENAUX** | **Enaux** | **0.50** | **173** | Pg | | Pg | 07 55 42.3 | -0.1 |
| **ORIF** | **Oris-en-Rattie** | **0.65** | **299** | *e*Pg | | Pg | 07 55 45.5 | +0.2 |
| ORIF | | | | *e*Sg | | Sg | 07 55 53.9 | +0.1 |
| **ORIF** | **Oris-en-Rattie** | **0.65** | **299** | Pg | | Pg | 07 55 45.3 | 0.0 |
| **RSP** | **Reno Superiore** | **0.68** | **37** | Pg | | Pg | 07 55 45.8 | -0.1 |
| **RSP** | **Reno Superiore** | **0.68** | **37** | Sg | | Sg | 07 55 54.9 | +0.3 |
| **SBF** | **Sospel** | **0.92** | **144** | *e*Sg | | Sg | 07 56 02.5 | +0.2 |
| | 39nm,0.3s | | | | | | | |

**STR 31 07:56:00.7±0.5, 44°N±3°×°±°, h5km, MLv1.3/13, Error ellipse: s-maj=0.0km s-min=0.0km az=172.0, preliminary, Near south coast of France**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SPIF** | **crte de Spivo** | **0.14** | **12** | Pg | | Pg | 07 56 03.0 | -0.6 |
| SPIF | | | | Sg | | Sg | 07 56 05.9 | +0.3 |
| **ESCA** | **l'Escarene** | **0.15** | **123** | Pg | | Pg | 07 56 03.9 | +0.1 |
| **TURF** | **col de Turini** | **0.15** | **67** | Pg | | Pg | 07 56 03.6 | -0.2 |
| **TURF** | **col de Turini** | **0.15** | **67** | Pg | | Pg | 07 56 03.5 | -0.4 |
| TURF | | | | Sg | | Sg | 07 56 06.1 | +0.2 |
| **SAOF** | **Saorge** | **0.27** | **75** | Pg | | Pg | 07 56 06.2 | +0.2 |
| SAOF | | | | Sg | | Sg | 07 56 10.0 | +0.4 |
| **ISO** | **Isola** | **0.29** | **339** | Pg | | Pg | 07 56 05.9 | -0.4 |
| ISO | | | | Sg | | Sg | 07 56 10.5 | +0.4 |
| **STV** | **Sant Anna di V** | **0.34** | **16** | Pg | | Pg | 07 56 07.5 | +0.1 |
| **STV** | **Sant Anna di V** | **0.34** | **16** | Sg | | Sg | 07 56 12.1 | +0.1 |
| **ENR** | **Entracque** | **0.35** | **28** | Pg | | Pg | 07 56 07.3 | -0.2 |
| **ENR** | **Entracque** | **0.35** | **28** | Sg | | Sg | 07 56 12.5 | +0.3 |
| **ENAUX** | **Enaux** | **0.36** | **303** | Pg | | Pg | 07 56 07.4 | -0.2 |
| ENAUX | | | | Sg | | Sg | 07 56 13.0 | +0.6 |
| **GBOS** | **Grotte di Boss** | **0.57** | **55** | Pg | | Pg | 07 56 11.2 | -0.4 |
| **GBOS** | **Grotte di Boss** | **0.57** | **55** | Sg | | Sg | 07 56 19.3 | +0.2 |
| **TRIGF** | **Trigance** | **0.59** | **254** | Pg | | Pg | 07 56 12.6 | +0.6 |
| **PZZ** | **Stroppo** | **0.59** | **355** | Pg | | Pg | 07 56 12.2 | +0.1 |
| **PZZ** | **Stroppo** | **0.59** | **355** | Sg | | Sg | 07 56 20.1 | +0.2 |
| **JAUF** | **Jausiers** | **0.60** | **328** | Pg | | Pg | 07 56 11.7 | -0.6 |
| JAUF | | | | Sg | | Sg | 07 56 20.7 | +0.5 |
| **ARTF** | **Artigues** | **1.06** | **252** | Pg | | Pg | 07 56 20.9 | 0.0 |
| **BSTF** | **la Bastide-des** | **1.12** | **269** | Pg | | Pg | 07 56 21.8 | -0.3 |
| BSTF | | | | Sn | | Sn | 07 56 39.1 | +0.2 |
| **PCP** | **Piancastagn** | **1.16** | **57** | Pg | | Pb | 07 56 23.2 | 0.0 |
| PCP | | | | Sg | | Sb | 07 56 38.5 | -0.1 |

**ROM 31 07:58:36.5±0.1, 42.619N±0.003×13.283E±0.004, h13km, ML1.7/32, 4C-2D, Error ellipse: s-maj=0.3km s-min=0.1km az=204.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SMA1** | **SAN MARTINO** | **0.04** | **73** | ⇓P | | Pg | 07 58 39.3 | +0.3 |
| SMA1 | | | | S | | Sg | 07 58 41.0 | +0.3 |
| SMA1 | | | | AML | | AML | | |
| | comp=N,954μm,0.2s | | | | | | | |
| SMA1 | | | | AML | | AML | | |
| | comp=E,1555μm,0.3s | | | | | | | |
| **RM33** | **Pellescritta (** | **0.12** | **205** | P | | Pg | 07 58 40.2 | +0.4 |
| RM33 | | | | S | | Sg | 07 58 42.5 | +0.4 |
| RM33 | | | | AML | | AML | | |
| | comp=E,813μm,0.8s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,1062μm,0.3s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,838μm,0.8s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,1050μm,0.3s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,813μm,0.8s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,813μm,1.2s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,838μm,1.2s | | | | | | | |
| **CAMP** | **Campotosto** | **0.12** | **132** | P | | Pg | 07 58 40.2 | +0.4 |
| CAMP | | | | S | | Sg | 07 58 42.6 | +0.4 |
| CAMP | | | | AML | | AML | | |
| | comp=E,328μm,0.3s | | | | | | | |
| CAMP | | | | AML | | AML | | |
| | comp=N,296μm,0.4s | | | | | | | |
| **MTRA** | **Matera** | **0.16** | **31** | ⇑P | | Pg | 07 58 40.7 | +0.4 |
| MTRA | | | | S | | Sg | 07 58 43.5 | +0.4 |
| MTRA | | | | AML | | AML | | |
| | comp=N,903μm,0.4s | | | | | | | |
| MTRA | | | | AML | | AML | | |
| | comp=E,896μm,0.2s | | | | | | | |
| MTRA | | | | AML | | AML | | |
| | comp=N,929μm,0.4s | | | | | | | |
| MTRA | | | | AML | | AML | | |
| | comp=E,908μm,0.2s | | | | | | | |
| MTRA | | | | AML | | AML | | |
| | comp=E,897μm,0.2s | | | | | | | |
| MTRA | | | | AML | | AML | | |
| | comp=N,902μm,0.4s | | | | | | | |
| **LNSS** | **Leonessa** | **0.18** | **265** | P | | Pg | 07 58 41.0 | +0.4 |
| LNSS | | | | S | | Sg | 07 58 44.2 | +0.7 |
| LNSS | | | | AML | | AML | | |
| | comp=N,184μm,1.2s | | | | | | | |
| LNSS | | | | AML | | AML | | |
| | comp=E,194μm,0.6s | | | | | | | |
| **TERO** | **Teramo** | **0.24** | **89** | P | | Pg | 07 58 42.0 | +0.4 |
| TERO | | | | S | | Sg | 07 58 45.7 | +0.7 |
| TERO | | | | AML | | AML | | |
| | comp=E,335μm,1.2s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=N,280μm,0.5s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=E,335μm,0.8s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=N,280μm,1.5s | | | | | | | |
| **NRCA** | **Norcia** | **0.25** | **330** | ⇑P | | Pg | 07 58 42.1 | +0.3 |
| NRCA | | | | S | | Sg | 07 58 46.0 | +0.6 |
| NRCA | | | | AML | | AML | | |
| | comp=N,329μm,1.1s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=E,656μm,0.1s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,329μm,0.9s | | | | | | | |
| **GIGS** | **Gran Sasso** | **0.27** | **128** | ⇓P | | Pg | 07 58 42.5 | +0.3 |
| GIGS | | | | S | | Sg | 07 58 46.6 | +0.7 |
| GIGS | | | | AML | | AML | | |
| | comp=N,55μm,0.6s | | | | | | | |
| GIGS | | | | AML | | AML | | |
| | comp=E,120μm,0.3s | | | | | | | |
| GIGS | | | | AML | | AML | | |
| | comp=E,120μm,1.7s | | | | | | | |
| **MMO1** | **Montemonaco** | **0.28** | **7** | ⇑P | | Pg | 07 58 42.8 | +0.4 |
| MMO1 | | | | S | | Sb | 07 58 47.3 | -0.9 |
| **GAVE** | **Gavelli** | **0.30** | **285** | ⇑P | | Pg | 07 58 42.9 | +0.3 |
| GAVE | | | | S | | Sg | 07 58 47.5 | +0.8 |
| **MC2** | **Monte Cornacci** | **0.30** | **347** | P | | Pg | 07 58 43.1 | +0.3 |
| **MF5** | **Montefalcone A** | **0.39** | **19** | P | | Pb | 07 58 45.1 | -0.2 |
| MF5 | | | | AML | | AML | | |
| | comp=N,150μm,0.6s | | | | | | | |
| MF5 | | | | AML | | AML | | |
| | comp=E,146μm,0.5s | | | | | | | |
| **FDMO** | **Fiordimonte** | **0.44** | **341** | P | | Pg | 07 58 45.4 | +0.2 |
| FDMO | | | | AML | | AML | | |
| | comp=N,48μm,1.1s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=E,51μm,0.2s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=N,48μm,0.9s | | | | | | | |

**ROM 31 07:59:20.5±0.1, 42.612N±0.004×13.282E±0.005, h12km, ML2.1/48, 2D, Error ellipse: s-maj=0.5km s-min=0.1km az=247.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SMA1** | **SAN MARTINO** | **0.04** | **65** | ⇓P | | Pg | 07 59 23.2 | +0.3 |
| SMA1 | | | | S | | Sg | 07 59 24.9 | +0.3 |
| SMA1 | | | | AML | | AML | | |
| | comp=N,2995μm,0.2s | | | | | | | |
| SMA1 | | | | AML | | AML | | |
| | comp=E,5600μm,0.4s | | | | | | | |
| **RM33** | **Pellescritta (** | **0.11** | **206** | P | | Pg | 07 59 24.1 | +0.5 |
| RM33 | | | | S | | Sg | 07 59 26.5 | +0.7 |
| RM33 | | | | AML | | AML | | |
| | comp=E,3325μm,1.2s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,4200μm,0.3s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,3320μm,1.2s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,4195μm,0.3s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,3495μm,1.2s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=N,4080μm,0.3s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,3495μm,0.8s | | | | | | | |
| RM33 | | | | AML | | AML | | |
| | comp=E,3320μm,0.8s | | | | | | | |
| **CAMP** | **Campotosto** | **0.12** | **129** | P | | Pg | 07 59 24.1 | +0.4 |
| CAMP | | | | S | | Sg | 07 59 26.5 | +0.5 |
| **MTRA** | **Matera** | **0.17** | **30** | ⇓P | | Pg | 07 59 24.7 | +0.3 |
| MTRA | | | | S | | Sg | 07 59 27.4 | +0.3 |
| MTRA | | | | AML | | AML | | |
| | comp=N,3365μm,0.3s | | | | | | | |
| MTRA | | | | AML | | AML | | |
| | comp=E,3035μm,0.2s | | | | | | | |
| **LNSS** | **Leonessa** | **0.18** | **267** | P | | Pg | 07 59 24.9 | +0.3 |
| LNSS | | | | S | | Sg | 07 59 28.2 | +0.8 |
| LNSS | | | | AML | | AML | | |
| | comp=N,672μm,0.9s | | | | | | | |
| LNSS | | | | AML | | AML | | |
| | comp=E,707μm,0.6s | | | | | | | |
| LNSS | | | | AML | | AML | | |
| | comp=N,672μm,1.1s | | | | | | | |
| LNSS | | | | AML | | AML | | |
| | comp=E,707μm,1.4s | | | | | | | |
| **TERO** | **Teramo** | **0.24** | **87** | P | | Pg | 07 59 25.8 | +0.3 |
| TERO | | | | S | | Sg | 07 59 29.6 | +0.7 |
| TERO | | | | AML | | AML | | |
| | comp=E,628μm,1.2s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=N,484μm,0.4s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=N,908μm,0.5s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=E,627μm,1.2s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=N,484μm,0.4s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=E,1174μm,1.2s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=E,627μm,0.8s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=N,484μm,1.6s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=E,1174μm,0.8s | | | | | | | |
| TERO | | | | AML | | AML | | |
| | comp=N,908μm,1.5s | | | | | | | |
| **NRCA** | **Norcia** | **0.25** | **331** | P | | Pg | 07 59 26.0 | +0.1 |
| NRCA | | | | S | | Sg | 07 59 30.0 | +0.5 |
| NRCA | | | | AML | | AML | | |
| | comp=E,2250μm,0.2s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,1074μm,1.1s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,1075μm,1.1s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=E,2325μm,0.2s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,1180μm,1.0s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=N,1075μm,0.9s | | | | | | | |
| NRCA | | | | AML | | AML | | |
| | comp=E,2250μm,0.2s | | | | | | | |
| **GIGS** | **Gran Sasso** | **0.27** | **127** | P | | Pg | 07 59 26.3 | +0.3 |
| GIGS | | | | S | | Sg | 07 59 30.7 | +0.9 |
| GIGS | | | | AML | | AML | | |
| | comp=E,427μm,0.3s | | | | | | | |
| GIGS | | | | AML | | AML | | |
| | comp=N,186μm,0.4s | | | | | | | |
| GIGS | | | | AML | | AML | | |
| | comp=N,186μm,1.6s | | | | | | | |
| **MMO1** | **Montemonaco** | **0.29** | **7** | P | | Pg | 07 59 26.7 | +0.2 |
| MMO1 | | | | S | | Sg | 07 59 31.3 | +0.8 |
| **GAVE** | **Gavelli** | **0.30** | **286** | AML | | AML | | |
| | comp=E,694μm,0.2s | | | | | | | |
| GAVE | | | | AML | | AML | | |
| | comp=E,694μm,0.2s | | | | | | | |
| GAVE | | | | AML | | AML | | |
| | comp=N,256μm,0.2s | | | | | | | |
| GAVE | | | | AML | | AML | | |
| | comp=E,722μm,0.2s | | | | | | | |
| GAVE | | | | AML | | AML | | |
| | comp=N,898μm,0.2s | | | | | | | |
| **MC2** | **Monte Cornacci** | **0.31** | **347** | P | | Pg | 07 59 27.0 | +0.1 |
| MC2 | | | | S | | Sb | 07 59 33.0 | -0.2 |
| **FIAM** | **Fiamignano** | **0.36** | **200** | P | | Pg | 07 59 28.1 | +0.2 |
| FIAM | | | | S | | Sb | 07 59 34.0 | -0.7 |
| FIAM | | | | AML | | AML | | |
| | comp=N,205μm,0.3s | | | | | | | |
| FIAM | | | | AML | | AML | | |
| | comp=E,225μm,0.4s | | | | | | | |
| **ARRO** | **Arrone** | **0.38** | **265** | P | | Pg | 07 59 28.6 | +0.5 |
| ARRO | | | | S | | Sb | 07 59 34.2 | -0.9 |
| ARRO | | | | AML | | AML | | |
| | comp=E,126μm,1.3s | | | | | | | |
| ARRO | | | | AML | | AML | | |
| | comp=N,190μm,0.2s | | | | | | | |
| ARRO | | | | AML | | AML | | |
| | comp=E,126μm,0.7s | | | | | | | |
| **MF5** | **Montefalcone A** | **0.40** | **19** | P | | Pg | 07 59 29.0 | +0.5 |
| MF5 | | | | S | | Sb | 07 59 35.6 | -0.1 |
| MF5 | | | | AML | | AML | | |
| | comp=E,446μm,0.5s | | | | | | | |
| MF5 | | | | AML | | AML | | |
| | comp=N,518μm,0.6s | | | | | | | |
| **FDMO** | **Fiordimonte** | **0.45** | **341** | P | | Pg | 07 59 29.3 | -0.1 |
| FDMO | | | | S | | Sb | 07 59 36.4 | -0.7 |
| FDMO | | | | AML | | AML | | |
| | comp=N,174μm,1.1s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=E,160μm,0.2s | | | | | | | |
| FDMO | | | | AML | | AML | | |
| | comp=N,174μm,0.9s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.47** | **118** | P | | Pg | 07 59 30.0 | +0.3 |
| VCEL | | | | S | | Sb | 07 59 38.4 | +0.7 |
| VCEL | | | | AML | | AML | | |
| | comp=N,478μm,1.6s | | | | | | | |
| VCEL | | | | AML | | AML | | |
| | comp=N,478μm,0.4s | | | | | | | |
| VCEL | | | | AML | | AML | | |
| | comp=E,376μm,0.9s | | | | | | | |
| **CESI** | **CESI - Serrava** | **0.48** | **325** | P | | Pg | 07 59 29.9 | -0.1 |
| CESI | | | | S | | Sb | 07 59 38.0 | 0.0 |
| CESI | | | | AML | | AML | | |
| | comp=E,168μm,0.3s | | | | | | | |
| CESI | | | | AML | | AML | | |
| | comp=N,382μm,0.2s | | | | | | | |
| **CSP1** | **Cessapalombo** | **0.48** | **353** | P | | Pg | 07 59 30.2 | +0.1 |
| CSP1 | | | | AML | | AML | | |
| | comp=N,20200μm,1.6s | | | | | | | |
| CSP1 | | | | AML | | AML | | |
| | comp=E,139μm,0.6s | | | | | | | |
| **T0110** | **Collepietro** | **0.53** | **136** | P | | Pg | 07 59 31.0 | 0.0 |
| T0110 | | | | AML | | AML | | |
| | comp=E,202μm,0.8s | | | | | | | |
| T0110 | | | | AML | | AML | | |
| | comp=N,287μm,1.1s | | | | | | | |
| T0110 | | | | AML | | AML | | |
| | comp=N,287μm,0.9s | | | | | | | |
| **PTQR** | **Pietraquaria** | **0.60** | **171** | AML | | AML | | |
| | comp=E,34μm,1.4s | | | | | | | |
| PTQR | | | | AML | | AML | | |
| | comp=E,34μm,0.6s | | | | | | | |
| PTQR | | | | AML | | AML | | |
| | comp=N,31μm,0.8s | | | | | | | |
| **ASSB** | **Assisi San Ben** | **0.63** | **313** | AML | | AML | | |
| | comp=E,168μm,0.4s | | | | | | | |
| ASSB | | | | AML | | AML | | |
| | comp=N,142μm,0.5s | | | | | | | |
| **CERT** | **Cerreto** | **0.70** | **199** | P | | Pg | 07 59 33.6 | -0.5 |
| CERT | | | | AML | | AML | | |
| | comp=E,106μm,1.4s | | | | | | | |
| CERT | | | | AML | | AML | | |
| | comp=N,73μm,0.4s | | | | | | | |
| CERT | | | | AML | | AML | | |
| | comp=E,106μm,0.6s | | | | | | | |
| **EL6** | **Elcito** | **0.73** | **350** | P | | Pg | 07 59 34.2 | -0.5 |
| **ATCC** | **AVT- Casa Cast** | **0.74** | **321** | P | | Pg | 07 59 34.7 | -0.2 |
| ATCC | | | | AML | | AML | | |
| | comp=E,117μm,0.4s | | | | | | | |
| ATCC | | | | AML | | AML | | |
| | comp=E,117μm,1.6s | | | | | | | |
| ATCC | | | | AML | | AML | | |
| | comp=N,96μm,0.4s | | | | | | | |
| **INTR** | **Introdacqua** | **0.76** | **142** | P | | Pg | 07 59 34.5 | -0.7 |
| INTR | | | | AML | | AML | | |
| | comp=E,45μm,0.6s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=N,79μm,0.9s | | | | | | | |
| INTR | | | | AML | | AML | | |
| | comp=N,79μm,1.1s | | | | | | | |
| **LPEL** | **Lama dei Pelig** | **0.88** | **130** | AML | | AML | | |
| | comp=N,58μm,1.3s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=E,74μm,0.3s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=E,74μm,1.7s | | | | | | | |
| LPEL | | | | AML | | AML | | |
| | comp=N,58μm,0.7s | | | | | | | |

**IDC 31 07:59:20.1±3.1, 54.35N×87.26E, h0km, mbtmp3.0/2, ML2.5/2, Error ellipse: s-maj=26.1km s-min=17.4km az=62.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.49** | **255** | I | | I | 08 07 55.0 | |
| | baz=73,slow=320,SNR=8.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.49** | **255** | Pg | | Pn | 07 59 46.0 | -2.0 |
| | 2.2nm,0.3s,baz=74,slow=17,SNR=13 | | | | | | | |
| ZALV | | | | Lg | | Lg | 08 00 07.5 | |
| | 2.9nm,0.3s,baz=72,slow=28,SNR=8.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.51** | **239** | Pn | | Pn | 08 00 58.2 | +1.2 |
| | 0.1nm,0.3s,baz=53,slow=14,SNR=9.5 | | | | | | | |
| KURBB | | | | Lg | | Lg | 08 02 47.0 | |
| | 0.1nm,0.3s,baz=54,slow=31,SNR=3.3 | | | | | | | |
| | 1.2nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.20** | **205** | Pn | | Pn | 08 01 20.9 | +0.7 |
| | 0.1nm,0.3s,baz=21,slow=15,SNR=2.0 | | | | | | | |
| MKAR | | | | Sn | | Sn | 08 02 53.1 | -0.5 |
| | 0.1nm,0.3s,baz=20,slow=25,SNR=2.3 | | | | | | | |
| MKAR | | | | Lg | | Lg | 08 03 39.4 | |
| | 0.1nm,0.3s,baz=23,slow=31,SNR=2.0 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |

*NNC **31** 08:13:24.0±2.8, 53.77N×90.57E, h0km, mb3.8, mpv3.5, Error ellipse: s-maj=21.1km s-min=16.6km az=49.0, Suspected Mining explosion.*

*IDC **31** 08:13:26.2±3.1,53.58N×90.58E,h0km,mbtmp3.5/3, ML3.1/3,Error ellipse: s-maj=26.7km s-min=21.8km az=51.0*

**ISC 31 08:13:26.2±4.0,53.7N±0.1×90.5E±0.2,h0km,n8,σ1s28/12, 5C-5D,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.35** | **277** | I | I | 08 36 55.0 | |
| | baz=90,slow=324,SNR=29 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **3.35** | **277** | ⇓Pg | **Pb** | **08 14 24.9** | **-1.5** |
| | 5.2nm,1.2s | | | | | | |
| ZAA0 | | | | ⇓Lg | Lg | 08 15 14.7 | |
| | 23nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.35** | **277** | Pn | **Pn** | **08 14 21.4** | **+1.6** |
| | 3.2nm,0.3s,baz=96,slow=14,SNR=17 | | | | | | |
| ZALV | | | | Lg | Lg | 08 15 15.1 | |
| | 4.5nm,0.3s,baz=97,slow=35,SNR=9.8 | | | | | | |
| | 4.4nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **7.85** | **253** | ⇓Pn | **Pn** | **08 15 21.0** | **-0.4** |
| | 2.9nm,0.6s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **08 16 52.6** | **+1.7** |
| | 14nm,0.8s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 08 17 39.6 | |
| | 45nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.94** | **252** | Pn | **Pn** | **08 15 23.3** | **+0.6** |
| | 0.3nm,0.3s,baz=66,slow=16,SNR=24 | | | | | | |
| KURBB | | | | Sn | **Sn** | **08 16 52.5** | **-0.7** |
| | 0.1nm,0.3s,baz=67,slow=23,SNR=7.9 | | | | | | |
| KURBB | | | | Lg | Lg | 08 17 41.2 | |
| | 0.1nm,0.3s,baz=65,slow=31,SNR=2.0 | | | | | | |
| | 2.5nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.94** | **252** | ⇑Pn | **Pn** | **08 15 23.0** | **+0.3** |
| | 3.7nm,0.5s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **08 16 53.8** | **+0.6** |
| | 69nm,1.1s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 17 39.2 | |
| | 101nm,1.1s | | | | | | |
| **MK31** | **Makanchi Array** | **8.64** | **220** | Pn | **Pn** | **08 15 32.7** | **+0.4** |
| | 0.8nm,0.5s,baz=32,slow=11,SNR=19 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **08 17 12.2** | **+1.8** |
| | 8.1nm,1.1s,baz=43,slow=24,SNR=5.3 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 17 59.0 | |
| | 24nm,0.9s,baz=34,slow=28,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.64** | **220** | Pn | **Pn** | **08 15 33.0** | **+0.6** |
| | 0.5nm,0.3s,baz=36,slow=13,SNR=18 | | | | | | |
| MKAR | | | | Sn | **Sn** | **08 17 09.1** | **-1.3** |
| | 0.3nm,0.3s,baz=35,slow=25,SNR=2.0 | | | | | | |
| MKAR | | | | Lg | Lg | 08 17 59.1 | |
| | 0.1nm,0.3s,baz=34,slow=32,SNR=5.6 | | | | | | |
| | 1.0nm,0.4s | | | | | | |

**TRN 31 08:15:15.2,17.51N×61.44W,h20km,MD3.6,South-east of Barbuda.,Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANWB** | **Willy Bob** | **0.36** | **295** | *eP* | Pn | 08 15 24.4 | -0.8 |
| ANWB | | | | *eS* | Sn | 08 15 31.6 | -0.2 |
| **ANBD** | **Bethesda, Anti** | **0.56** | **214** | *eP* | Pn | 08 15 28.0 | +0.1 |
| ANBD | | | | *eS* | Sn | 08 15 38.1 | +1.5 |
| **MBWH** | | **1.05** | **223** | *eP* | Pn | 08 15 36.1 | +1.3 |
| MBWH | | | | *eS* | Sn | 08 15 51.7 | +2.9 |
| **MBFL** | **Flemmings, Mon** | **1.06** | **224** | *eP* | Pn | 08 15 36.2 | +1.4 |
| MBFL | | | | *eS* | Sn | 08 15 52.1 | +3.1 |
| **SKI** | **Saint Kitts** | **1.25** | **262** | *eP* | Pb | 08 15 39.2 | +1.1 |
| SKI | | | | *eS* | Sb | 08 15 56.9 | +3.1 |
| **TBG** | **Guadaloupe-3** | **1.66** | **187** | *eP* | Pb | 08 15 45.6 | +0.5 |

**NEIC 31 08:16:51.2±0.7,37.34N±0.03×97.88W±0.03,h9km±8km, mb_Lg2.6/72,ML3.1/36,Error ellipse: s-maj=3.9km s-min=3.8km az=48.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.10** | **246** | | Pg | 08 16 54.1 | +0.3 |
| KAN12 | | | | | IAML | 08 16 56.1 | |
| | comp=N,10μm,0.3s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.14** | **213** | | Pg | 08 16 54.4 | +0.2 |
| KAN08 | | | | | IAML | 08 16 57.0 | |
| | comp=E,6μm,0.1s | | | | | | |
| KAN08 | | | | | IAML | 08 16 57.1 | |
| | comp=N,6μm,0.1s | | | | | | |
| **KS21** | **Milan North St** | **0.18** | **108** | | Pg | 08 16 55.0 | 0.0 |
| **KS21** | **Milan North St** | **0.18** | **108** | IAML | | 08 16 59.5 | |
| | comp=N,5μm,0.1s | | | | | | |
| KS21 | | | | | IAML | 08 16 59.6 | |
| | comp=N,5μm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **0.21** | **153** | | Pg | 08 16 55.9 | +0.4 |
| **KAN05** | **Bluff City Nor** | **0.23** | **179** | Pg | Pg | 08 16 56.3 | +0.3 |
| **KAN09** | **Caldwell North** | **0.29** | **135** | | Pg | 08 16 57.3 | +0.3 |
| KAN09 | | | | | IAML | 08 17 06.0 | |
| | comp=N,3μm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.31** | **163** | | Pg | 08 16 57.8 | +0.4 |
| **KAN14** | **Manchester OK** | **0.39** | **190** | | Pg | 08 16 59.0 | +0.2 |
| KAN14 | | | | | IAML | 08 17 05.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **0.46** | **136** | | Pg | 08 17 00.4 | +0.3 |
| KAN13 | | | | | IAML | 08 17 10.2 | |
| | comp=N,1μm,0.3s | | | | | | |
| KAN13 | | | | | IAML | 08 17 14.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| **GC02** | **Grant County #** | **0.49** | **178** | Pg | Pg | 08 17 00.9 | +0.2 |
| **OK032** | **Salt Plains WL** | **0.60** | **206** | Pg | Pg | 08 17 03.0 | +0.2 |
| **BLOK** | **Blackwell** | **0.79** | **137** | Pg | Pg | 08 17 06.1 | -0.2 |
| BLOK | | | | | IAML | 08 17 19.2 | |
| | comp=E,986nm,0.3s | | | | | | |
| BLOK | | | | | IAML | 08 17 19.6 | |
| | comp=N,975nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.84** | **186** | Pg | Pg | 08 17 07.5 | +0.2 |
| CROK | | | | | IAML | 08 17 25.1 | |
| | comp=N,561nm,0.4s | | | | | | |
| **OK038** | **West end E0370** | **1.10** | **219** | | Pg | 08 17 12.3 | -0.2 |
| OK038 | | | | | IAML | 08 17 37.2 | |
| | comp=N,622nm,0.3s | | | | | | |
| **T35A** | **Sooner Cattle** | **1.17** | **111** | | Pb | 08 17 13.1 | -0.5 |
| T35A | | | | | IAML | 08 17 33.5 | |
| | comp=E,434nm,0.3s | | | | | | |
| **OK051** | **E0350 and S346** | **1.18** | **135** | | Pb | 08 17 13.4 | -0.3 |
| **OK048** | **Pawnee Station** | **1.19** | **141** | | Pb | 08 17 13.6 | -0.3 |
| OK048 | | | | | IAML | 08 17 34.1 | |
| | comp=E,345nm,0.4s | | | | | | |
| OK048 | | | | | IAML | 08 17 34.8 | |
| | comp=E,308nm,0.2s | | | | | | |
| **R32A** | **Long Quarter,** | **1.27** | **329** | | Pn | 08 17 14.6 | -0.5 |
| R32A | | | | | IAML | 08 17 36.1 | |
| | comp=E,497nm,0.3s | | | | | | |
| **QUOK** | **Quay** | **1.50** | **141** | Pn | Pb | 08 17 18.9 | -0.3 |
| **OK029** | **Liberty Lake** | **1.58** | **167** | | Pb | 08 17 20.3 | -0.3 |
| **OK052** | **Battle Ridge R** | **1.60** | **147** | Pn | Pb | 08 17 20.5 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.62** | **149** | Pn | Pb | 08 17 20.9 | -0.4 |
| **ADOK** | **Arcadia Dam** | **1.73** | **166** | | Pb | 08 17 22.9 | -0.3 |
| **ELIS** | **Ellis County** | **1.78** | **225** | | Pb | 08 17 24.0 | +0.1 |
| **CSTR** | **Hydro, Custer** | **1.81** | **201** | | Pb | 08 17 24.5 | -0.1 |
| **DEOK** | **Depew** | **1.86** | **143** | | Pn | 08 17 24.1 | +0.8 |
| **OKCSW** | **OKLAHOMA CITY** | **1.96** | **169** | | Pn | 08 17 25.8 | +1.1 |
| **KSU1** | **Kansas State U** | **2.02** | **29** | | Pn | 08 17 26.7 | +1.2 |
| **CBKS** | **Cedar Bluff** | **2.08** | **316** | | Pn | 08 17 27.4 | +1.1 |
| **TUL3** | **Leonard** | **2.20** | **130** | | Pb | 08 17 29.8 | -1.4 |
| TUL3 | | | | IAmb_Lg | | 08 18 03.5 | |
| | comp=Z,39nm,0.9s | | | | | | |
| **RLO** | **Rose Lookout** | **2.58** | **116** | | Pn | 08 17 34.8 | +1.7 |
| **SMWD** | **Samnorwood** | **2.94** | **221** | | Pn | 08 17 39.8 | +1.7 |
| **U38A** | **Gravette** | **2.94** | **107** | IAmb_Lg | | 08 18 31.2 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.33** | **107** | | Pn | 08 17 45.4 | +1.9 |
| **LOOK** | **Love County** | **3.39** | **170** | | Pn | 08 17 45.8 | +1.5 |
| **X37A** | **Clayton** | **3.42** | **143** | IAmb_Lg | | 08 18 44.2 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.64** | **83** | | Pn | 08 17 49.3 | +1.6 |
| **AMTX** | **Amarillo** | **3.94** | **233** | IAmb_Lg | | 08 19 06.5 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.00** | **258** | | Pn | 08 17 54.5 | +1.7 |
| **Z35A** | **Perchaven, San** | **4.03** | **173** | IAmb_Lg | | 08 19 08.3 | |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.10** | **295** | IAmb_Lg | | 08 19 03.2 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **APMT** | **Aspermont** | **4.41** | **205** | IAmb_Lg | | 08 19 14.3 | |
| | comp=Z,8.6nm,1.3s | | | | | | |
| **DKNS** | **Dickens** | **4.43** | **215** | IAmb_Lg | | 08 19 16.6 | |
| | comp=Z,15nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.47** | **127** | IAmb_Lg | | 08 19 13.4 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.48** | **91** | IAmb_Lg | | 08 19 16.3 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **76** | IAmb_Lg | | 08 19 20.5 | |
| | comp=Z,13nm,1.0s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.85** | **106** | IAmb_Lg | | 08 19 32.3 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **SN07** | **Snyder 07** | **4.91** | **211** | IAmb_Lg | | 08 19 27.8 | |
| | comp=Z,7.4nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.99** | **123** | IAmb_Lg | | 08 19 33.5 | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.07** | **63** | IAmb_Lg | | 08 19 33.9 | |
| | comp=Z,9.5nm,0.7s | | | | | | |
| **UALR** | **University of** | **5.16** | **118** | IAmb_Lg | | 08 19 43.2 | |
| | comp=Z,7.8nm,0.8s | | | | | | |
| **T25A** | **Trinidad** | **5.22** | **270** | IAmb_Lg | | 08 19 38.7 | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.31** | **80** | IAmb_Lg | | 08 19 44.4 | |
| | comp=Z,10nm,1.1s | | | | | | |
| **WLAR** | **White Oak Lake** | **5.33** | **132** | IAmb_Lg | | 08 19 42.6 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **T42A** | **Van Buren** | **5.43** | **91** | IAmb_Lg | | 08 19 51.2 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **FVM** | **French Village** | **5.95** | **82** | IAmb_Lg | | 08 20 01.6 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **Q24A** | **Divide** | **5.96** | **288** | IAmb_Lg | | 08 20 05.4 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **BRIGG** | **Briggsdale** | **5.97** | **305** | IAmb_Lg | | 08 20 05.1 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.98** | **93** | IAmb_Lg | | 08 20 15.6 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **435B** | **Jarrell** | **6.55** | **178** | IAmb_Lg | | 08 20 23.4 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.55** | **88** | IAmb_Lg | | 08 20 24.8 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **S44A** | **Carbondale** | **6.86** | **84** | IAmb_Lg | | 08 20 31.7 | |
| | comp=Z,10nm,0.8s | | | | | | |
| **OZNA** | **Ozona** | **6.95** | **204** | IAmb_Lg | | 08 20 36.1 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **7.03** | **194** | IAmb_Lg | | 08 20 48.7 | |
| | comp=Z,7.2nm,0.9s | | | | | | |
| **PHWY** | **Pilot Hill** | **7.08** | **306** | IAmb_Lg | | 08 20 49.6 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **N23A** | **Red Feather La** | **7.21** | **302** | IAmb_Lg | | 08 20 43.5 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **DRIO** | **Del Rio** | **8.22** | **197** | IAmb_Lg | | 08 21 29.9 | |
| | comp=Z,4.3nm,0.7s | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.27** | **104** | IAmb_Lg | | 08 21 33.7 | |
| | comp=Z,7.6nm,1.2s | | | | | | |
| **RWWY** | **Rawlins** | **8.42** | **304** | IAmb_Lg | | 08 21 24.1 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **VHRN** | **Van Horn** | **8.80** | **224** | IAmb_Lg | | 08 21 38.9 | |
| | comp=Z,5.5nm,1.2s | | | | | | |

*NNC **31** 08:18:06.5±1.3,44.61N×82.02E,h0km,mb3.9,mpv3.6, Error ellipse: s-maj=13.9km s-min=4.4km az=124.0, Suspected Mining explosion.*
*SOME **31** 08:18:07.1,44.62N×82.00E,h20km*

**ISC 31 08:18:04.2±1.5,44.61N±0.06×82.19E±0.08,h0km,n19, σ0s70/31,3C-1D,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DJR** | **Jarkent** | **1.74** | **262** | *eP* | **Pg** | **08 18 37.7** | **+0.2** |
| DJR | 11nm,0.2s | | | | | | |
| | 18nm,0.5s | | | *eS* | **Sg** | **08 18 59.8** | **-0.3** |
| **DJR** | **Jarkent** | **1.74** | **262** | P | **Pg** | **08 18 37.7** | **+0.2** |
| DJR | 11nm,0.2s | | | | | | |
| | 18nm,0.5s | | | S | **Sg** | **08 18 59.8** | **-0.3** |
| **KTMS** | **Ketmen** | **1.76** | **229** | *eP* | **Pn** | **08 18 36.4** | **+0.3** |
| KTMS | 3.7nm,0.1s | | | | | | |
| | 4.3nm,0.2s | | | *eS* | **Sn** | **08 18 57.3** | **-2.0** |
| **KTMS** | **Ketmen** | **1.76** | **229** | P | **Pn** | **08 18 36.4** | **+0.3** |
| KTMS | 3.7nm,0.1s | | | | | | |
| | 4.3nm,0.2s | | | S | **Sn** | **08 18 57.3** | **-2.0** |
| **KAPS** | **Kapalarasan** | **2.12** | **290** | *eP* | **Pb** | **08 18 43.8** | **+0.3** |
| KAPS | 4.5nm,0.1s | | | | | | |
| | 57nm,0.1s | | | *eS* | **Sb** | **08 19 10.3** | **-0.2** |
| **KAPS** | **Kapalarasan** | **2.12** | **290** | Pg | **Pb** | **08 18 43.8** | **+0.3** |
| KAPS | 4.5nm,0.1s | | | | | | |
| | 57nm,0.1s | | | Lg | Lg | 08 19 10.3 | |
| **KNOS** | **Konyrlen** | **2.17** | **265** | Pg | **Pb** | **08 18 44.9** | **+0.5** |
| KNOS | 18nm,0.2s | | | | | | |
| | 29nm,0.2s | | | Lg | Lg | 08 19 12.4 | |
| **MK31** | **Makanchi Array** | **2.19** | **2** | ⇓Pn | **Pb** | **08 18 44.9** | **+0.3** |
| MK31 | 7.1nm,0.4s,baz=184,slow=15,SNR=220 | | | ⇑Sn | **Sb** | **08 19 12.6** | **+0.3** |
| | 4.0nm,0.2s | | | | | | |
| **MAKZ** | **Makanchi** | **2.21** | **356** | ⇑Pn | **Pb** | **08 18 44.6** | **-0.4** |
| MAKZ | 2.6nm,0.2s | | | | | | |
| | 9.0nm,0.3s | | | ⇑Sn | **Sb** | **08 19 12.6** | **-0.2** |
| **SHLS** | **Shalkode** | **2.45** | **235** | *eP* | **Pn** | **08 18 46.8** | **+1.3** |
| SHLS | 23nm,0.2s | | | | | | |
| | 33nm,0.3s | | | *eS* | **Sn** | **08 19 15.2** | **-1.0** |
| **SHLS** | **Shalkode** | **2.45** | **235** | Pg | **Pn** | **08 18 46.8** | **+1.3** |
| SHLS | 23nm,0.2s | | | | | | |
| | 33nm,0.3s | | | Lg | Lg | 08 19 15.2 | |
| **BLB** | **Baldybastay** | **2.71** | **260** | Pg | **Pb** | **08 18 53.6** | **0.0** |
| BLB | 25nm,0.2s | | | | | | |
| | 19nm,0.2s | | | Lg | Lg | 08 19 27.2 | |
| **UZB** | **Uzynbulak** | **2.71** | **239** | *eP* | **Pb** | **08 18 54.0** | **+0.3** |
| UZB | 6.1nm,0.2s | | | | | | |
| | 2.6nm,0.2s | | | *eS* | **Sb** | **08 19 27.6** | **+0.1** |
| **KPKS** | **Kokpek** | **2.77** | **247** | *eP* | **Pb** | **08 18 54.9** | **+0.3** |
| KPKS | 14nm,0.2s | | | | | | |
| | 14nm,0.3s | | | *eS* | **Sb** | **08 19 29.2** | **0.0** |
| **KPKS** | **Kokpek** | **2.77** | **247** | Pg | **Pb** | **08 18 54.9** | **+0.3** |
| KPKS | 13nm,0.2s | | | | | | |
| | 14nm,0.3s | | | Lg | Lg | 08 19 29.2 | |
| **ARXS** | **Arharly** | **3.15** | **264** | *eP* | **Pb** | **08 19 01.2** | **+0.1** |
| ARXS | 3.9nm,0.2s | | | | | | |
| | 12nm,0.6s | | | *eS* | **Sb** | **08 19 40.4** | **+0.3** |
| **ARXS** | **Arharly** | **3.15** | **264** | Pg | **Pb** | **08 19 01.2** | **+0.1** |
| ARXS | 3.7nm,0.3s | | | | | | |
| | 12nm,0.6s | | | Lg | Lg | 08 19 40.4 | |
| **CHKK** | **Chushkaly** | **3.81** | **260** | *eP* | **Pb** | **08 19 12.5** | **+0.1** |
| CHKK | 18nm,0.6s | | | | | | |
| | 6.7nm,0.2s | | | *eS* | **Sb** | **08 19 59.4** | **+0.3** |
| **CHKK** | **Chushkaly** | **3.81** | **260** | Pg | **Pb** | **08 19 12.5** | **+0.1** |
| CHKK | 18nm,0.6s | | | | | | |
| | 6.7nm,0.2s | | | Lg | Lg | 08 19 59.4 | |

**NEIC 31 08:22:48.9±0.7,37.34N±0.03×97.87W±0.02,h10km±7km, mb_Lg2.6/67,ML2.9/38,Error ellipse: s-maj=4.0km s-min=1.8km az=175.0,Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.11** | **249** | Pg | Pg | 08 22 51.8 | +0.2 |
| KAN12 | | | | | IAML | 08 22 54.0 | |
| | comp=E,4μm,0.2s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.14** | **216** | | Pg | 08 22 52.3 | +0.3 |
| KAN08 | | | | | IAML | 08 22 54.9 | |
| | comp=N,3μm,0.4s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **107** | | Pg | 08 22 52.5 | -0.1 |
| **KS21** | **Milan North St** | **0.17** | **107** | IAML | | 08 22 56.6 | |
| | comp=N,3μm,0.3s | | | | | | |
| KS21 | | | | | IAML | 08 22 58.0 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KAN01** | **Argonia South** | **0.20** | **154** | | Pg | 08 22 53.4 | +0.2 |
| KAN01 | | | | | IAML | 08 22 59.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.23** | **180** | Pg | Pg | 08 22 53.9 | +0.3 |
| KAN05 | | | | | IAML | 08 23 00.5 | |
| | comp=E,2μm,0.2s | | | | | | |
| KAN05 | | | | | IAML | 08 23 01.9 | |
| | comp=N,2μm,0.5s | | | | | | |
| **KAN09** | **Caldwell North** | **0.28** | **135** | | Pg | 08 22 54.8 | +0.2 |
| KAN09 | | | | | IAML | 08 22 59.2 | |
| | comp=E,2μm,0.4s | | | | | | |
| KAN09 | | | | | IAML | 08 23 05.7 | |
| | comp=N,2μm,0.3s | | | | | | |
| **KAN17** | **Caldwell West** | **0.30** | **164** | | Pg | 08 22 55.3 | +0.3 |
| KAN17 | | | | | IAML | 08 23 04.9 | |
| | comp=N,2μm,0.6s | | | | | | |
| **KAN14** | **Manchester OK** | **0.39** | **191** | | Pg | 08 22 56.9 | +0.4 |
| **KAN13** | **South Haven SW** | **0.45** | **136** | | Pg | 08 22 57.8 | +0.1 |
| KAN13 | | | | | IAML | 08 23 06.4 | |
| | comp=E,891nm,0.4s | | | | | | |
| KAN13 | | | | | IAML | 08 23 10.5 | |
| | comp=N,763nm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.48** | **179** | Pg | Pg | 08 22 58.6 | +0.3 |
| **OK032** | **Salt Plains WL** | **0.60** | **207** | Pg | Pg | 08 23 00.8 | +0.3 |
| **BLOK** | **Blackwell** | **0.78** | **137** | Pg | Pg | 08 23 03.6 | -0.3 |
| BLOK | | | | | IAML | 08 23 17.1 | |
| | comp=N,509nm,0.3s | | | | | | |
| **CROK** | **Carrier** | **0.84** | **186** | Pg | Pg | 08 23 05.1 | +0.1 |
| CROK | | | | | IAML | 08 23 23.9 | |
| | comp=E,437nm,0.5s | | | | | | |
| **NOKA** | **Waynoka** | **1.10** | **231** | Pg | Pg | 08 23 09.8 | -0.2 |
| NOKA | | | | | IAML | 08 23 32.5 | |
| | comp=N,330nm,0.2s | | | | | | |
| NOKA | | | | | IAML | 08 23 32.6 | |
| | comp=E,209nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.11** | **219** | | Pg | 08 23 10.2 | 0.0 |
| **T35A** | **Sooner Cattle** | **1.16** | **111** | | Pb | 08 23 10.5 | -0.7 |
| **OK051** | **E0350 and S346** | **1.17** | **135** | | Pb | 08 23 10.9 | -0.4 |
| **OK048** | **Pawnee Station** | **1.18** | **141** | | Pb | 08 23 11.2 | -0.3 |
| OK048 | | | | | IAML | 08 23 31.6 | |
| | comp=E,254nm,0.2s | | | | | | |
| OK048 | | | | | IAML | 08 23 31.6 | |
| | comp=E,284nm,0.3s | | | | | | |
| **R32A** | **Long Quarter,** | **1.27** | **329** | | Pn | 08 23 12.5 | -0.3 |
| R32A | | | | | IAML | 08 23 33.7 | |
| | comp=E,290nm,0.3s | | | | | | |
| **QUOK** | **Quay** | **1.49** | **141** | | Pb | 08 23 16.6 | -0.2 |
| **OK029** | **Liberty Lake** | **1.57** | **168** | | Pb | 08 23 17.9 | -0.2 |
| **OK031** | **S. Brethren Rd** | **1.61** | **149** | | Pb | 08 23 18.4 | -0.3 |
| **ADOK** | **Arcadia Dam** | **1.73** | **166** | | Pn | 08 23 19.8 | +0.7 |
| **DEOK** | **Depew** | **1.86** | **143** | | Pn | 08 23 21.8 | +0.9 |
| **OKCSW** | **OKLAHOMA CITY** | **1.96** | **170** | | Pb | 08 23 23.5 | -1.2 |
| **KSU1** | **Kansas State U** | **2.02** | **29** | | Pn | 08 23 24.2 | +1.1 |
| **TUL3** | **Leonard** | **2.20** | **130** | | Pn | 08 23 27.1 | +1.6 |
| **U38A** | **Gravette** | **2.93** | **107** | IAmb_Lg | | 08 24 21.6 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **HHAR** | **Hobbs** | **3.33** | **107** | | Pn | 08 23 42.8 | +1.8 |
| **X37A** | **Clayton** | **3.41** | **143** | Pn | Pn | 08 23 43.7 | +1.5 |
| X37A | | | | IAmb_Lg | | 08 24 42.1 | |
| | comp=Z,20nm,0.9s | | | | | | |
| **S39A** | **Bolivar** | **3.63** | **83** | IAmb_Lg | | 08 24 49.0 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.94** | **233** | IAmb_Lg | | 08 24 57.7 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **Z35A** | **Perchaven, San** | **4.03** | **173** | IAmb_Lg | | 08 25 02.7 | |
| | comp=Z,14nm,1.1s | | | | | | |
| **BGNE** | **Belgrade** | **4.07** | **357** | IAmb_Lg | | 08 24 57.5 | |
| | comp=Z,16nm,1.1s | | | | | | |
| **DKNS** | **Dickens** | **4.43** | **215** | IAmb_Lg | | 08 25 12.9 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **4.46** | **127** | IAmb_Lg | | 08 25 10.7 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.47** | **91** | IAmb_Lg | | 08 25 08.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **R40A** | **Maddies Statio** | **4.54** | **76** | IAmb_Lg | | 08 25 20.4 | |
| | comp=Z,19nm,1.3s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **4.70** | **149** | IAmb_Lg | | 08 25 20.8 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.84** | **106** | IAmb_Lg | | 08 25 21.5 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.95** | **113** | IAmb_Lg | | 08 25 33.0 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.98** | **123** | IAmb_Lg | | 08 25 32.5 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **P40A** | **Paris** | **5.07** | **63** | IAmb_Lg | | 08 25 37.0 | |
| | comp=Z,9.1nm,0.7s | | | | | | |
| **UALR** | **University of** | **5.16** | **118** | IAmb_Lg | | 08 25 46.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **T25A** | **Trinidad** | **5.22** | **270** | IAmb_Lg | | 08 25 39.0 | |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **CCM** | **Cathedral Cave** | **5.30** | **80** | IAmb_Lg | | 08 25 52.4 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **T42A** | **Van Buren** | **5.42** | **91** | IAmb_Lg | | 08 25 52.0 | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **SCIA** | **State Center** | **5.81** | **37** | IAmb_Lg | | 08 25 57.6 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **FVM** | **French Village** | **5.94** | **82** | IAmb_Lg | | 08 25 54.0 | |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.98** | **93** | IAmb_Lg | | 08 25 59.9 | |
| | comp=Z,11nm,0.7s | | | | | | |
| **SDCO** | **Great Sand Dun** | **6.08** | **276** | IAmb_Lg | | 08 26 09.3 | |
| | comp=Z,6.4nm,1.1s | | | | | | |
| **N41A** | **Harden Midland** | **6.42** | **56** | IAmb_Lg | | 08 26 11.4 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **ECSD** | **EROS Data Cent** | **6.46** | **8** | IAmb_Lg | | 08 26 14.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **435B** | **Jarrell** | **6.54** | **178** | IAmb_Lg | | 08 26 34.6 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.54** | **88** | IAmb_Lg | | 08 26 20.1 | |
| | comp=Z,7.1nm,0.9s | | | | | | |
| **S44A** | **Carbondale** | **6.86** | **84** | IAmb_Lg | | 08 26 26.4 | |
| | comp=Z,8.5nm,0.7s | | | | | | |
| **SIUC** | **Southern Illin** | **6.89** | **84** | IAmb_Lg | | 08 26 28.8 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **JCT** | **Junction City** | **7.03** | **194** | IAmb_Lg | | 08 26 49.8 | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **N23A** | **Red Feather La** | **7.21** | **302** | IAmb_Lg | | 08 26 42.6 | |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **PECS** | **Pecos** | **7.75** | **222** | IAmb_Lg | | 08 26 59.5 | |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **RSSD** | **Black Hills** | **8.23** | **327** | IAmb_Lg | | 08 27 31.6 | |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **K22A** | **Caspar** | **8.50** | **311** | IAmb_Lg | | 08 27 23.7 | |
| | comp=Z,4.7nm,0.7s | | | | | | |

*MOS **31** 08:26:20.6±1.1,39.31N×21.68E,h8km,mb4.5/17,Error ellipse: s-maj=6.2km s-min=3.8km az=79.5*
*IDC **31** 08:26:20.8±0.5,39.32N×21.69E,h0km,mb4.2/20, mbtmp4.1/33,ML4.0/11,MS3.5/31,Error ellipse: s-maj=9.7km s-min=9.0km az=102.0*
*TIR **31** 08:26:21.4,39.39N×21.62E,h3km±2km,Ml4.5*
*MED_RC **31** 08:26:22.0±0.5,39.35N×21.61E,h22km±1km,MW4.3/14, Moment Tensor Solution.Mantle waves: s14,c17; Duration: 1s0 Moment tensor: Scale 10^15Nm; Mrr-2.71±.42; Mθθ0.54±.28; Mϕϕ2.17±.25; Mrθ-1.39±.25; Mθϕ-1.70±.25; Mϕr0.86±.15; Best double couple: Ms3.41000×10^15 NP1:ϕs134.00000°,δ60.00000°, λ-106.00000°. NP2:ϕs343.00000°,δ34.00000°, λ-65.00000°. Principal axes: T 3.5900, Plg13.0000°, Azm235.0000°; N -0.3600, Plg14.0000°, Azm142.0000°; P -3.2300, Plg71.0000°, Azm8.0000°; nsta1 refers to body waves. nsta2 refers to surface waves, cutoff=35s.*
*THE **31** 08:26:22.8,39.36N×21.60E

comp=E,29632µm,0.2s
**MAKR Makrakomi, Fth 0.49 131** P **Pb** 08 26 33.1 -0.7
MAKR S **Sb** 08 26 41.3 +0.7
comp=E,46µm,0.5s
**MAKR Makrakomi, Fth 0.49 131** P **Pb** 08 26 33.3 -0.5
MAKR S **Sb** 08 26 40.6 +0.1
MAKR AML AML 08 26 48.0
comp=N,53302µm,0.3s
MAKR AML AML 08 26 49.4
**TYRN Tyrnavos 0.58 50** P **Pb** 08 26 34.5 -1.0
**TYRN Tyrnavos 0.58 50** P **Pb** 08 26 34.5 -1.0
TYRN S **Sb** 08 26 42.8 -0.5
TYRN AML AML 08 26 43.5
comp=N,37508µm,0.5s
TYRN AML AML 08 26 47.1
comp=E,65108µm,0.7s
**LRSO Larissa Observ 0.66 59** P **Pb** 08 26 35.7 -1.1
LRSO S **Sn** 08 26 47.1 -0.8
**LRSO Larissa Observ 0.66 59** P **Pb** 08 26 36.4 -0.4
LRSO S **Sb** 08 26 46.0 +0.5
LRSO AML AML 08 26 48.4
LRSO AML AML 08 26 51.1
**PVO Paravola 0.72 188** P **Pb** 08 26 36.2 -1.7
PVO S **Sb** 08 26 47.0 -0.3
comp=E,40µm,0.6s
**PVO Paravola 0.72 188** P **Pb** 08 26 36.2 -1.7
PVO S **Sb** 08 26 47.8 +0.5
**ANX Ano Chora 0.77 164** P **Pb** 08 26 37.5 -1.2
ANX S **Sn** 08 26 50.0 -0.7
comp=E,16µm,0.6s
**ANX Ano Chora 0.77 164** P **Pb** 08 26 37.4 -1.2
ANX S **Sb** 08 26 49.2 +0.5
ANX AML AML 08 26 52.9
comp=N,35140µm,0.6s
ANX AML AML 08 26 52.9
comp=E,30178µm,0.5s
**EFP Efpalio 0.93 168** P **Pb** 08 26 40.4 -0.9
EFP S **Sn** 08 26 54.4 0.0
comp=E,21µm,0.6s
**EFP Efpalio 0.93 168** P **Pb** 08 26 40.4 -0.9
EFP S **Sb** 08 26 53.6 +0.5
EFP AML AML 08 26 56.7
comp=N,39152µm,0.6s
EFP AML AML 08 26 58.7
comp=E,40342µm,0.7s
**TSLK Tsoukalades, L 0.93 237** P **Pb** 08 26 40.2 -1.1
TSLK S **Sb** 08 26 53.5 +0.2
comp=E,21µm,0.7s
**TSLK Tsoukalades, L 0.93 237** P **Pb** 08 26 40.4 -1.0
**PENT Pentalofos 0.95 335** P **Pb** 08 26 40.0 -1.7
**PENT Pentalofos 0.95 335** P **Pb** 08 26 40.1 -1.7
PENT S **Sn** 08 26 55.3 +0.1
PENT AML AML 08 26 58.7
comp=E,16954µm,0.6s
PENT AML AML 08 26 59.2
comp=N,4748µm,0.4s
**LKD2 Lefkada island 0.95 235** P **Pb** 08 26 40.4 -1.3
baz=232
LKD2 S **Sn** 08 26 54.9 -0.1
baz=232
LKD2 AMP
comp=E,60nm,0.6s,baz=232
**LKD2 Lefkada island 0.95 235** P **Pb** 08 26 40.3 -1.3
LKD2 S **Sb** 08 26 53.6 -0.2
comp=E,23µm,0.6s
**LKD2 Lefkada island 0.95 235** P **Pb** 08 26 40.3 -1.3
**AXAR Agios Charalam 0.96 126** P **Pb** 08 26 41.9 0.0
AXAR S **Sn** 08 26 56.7 +1.3
comp=E,15µm,0.5s
**AXAR Agios Charalam 0.96 126** P **Pn** 08 26 42.2 -0.2
AXAR S **Sn** 08 26 55.8 +0.4
AXAR AML AML 08 26 59.2
comp=E,26826µm,0.3s
AXAR AML AML 08 27 05.7
comp=N,25476µm,0.4s
**NYDR Nydri-Lefkada 0.97 231** P **Pb** 08 26 40.5 -1.5
NYDR S **Sb** 08 26 54.8 +0.4
comp=N,10µm,0.8s
**NYDR Nydri-Lefkada 0.97 231** P **Pb** 08 26 40.6 -1.4
**IGT Igoumenitsa 1.04 281** P **Pb** 08 26 41.9 -1.4
baz=279
IGT S **Sb** 08 26 56.4 -0.1
baz=279
IGT AMP
comp=E,51nm,0.5s,baz=279
**IGT Igoumenitsa 1.04 281** P **Pb** 08 26 41.8 -1.4
IGT S **Sb** 08 26 56.5 -0.1
comp=E,12µm,0.6s
**IGT Igoumenitsa 1.04 281** P **Pb** 08 26 42.0 -1.3
IGT AML AML 08 26 59.4
comp=N,10393µm,0.7s
IGT AML AML 08 27 03.3
comp=E,27852µm,0.7s
**UPR University Cam 1.05 174** P **Pn** 08 26 44.0 +0.5
**EVGI Lefkada island 1.06 228** P **Pb** 08 26 42.1 -1.4
EVGI S **Sn** 08 26 57.4 -0.3
comp=E,17µm,0.4s
**EVGI Lefkada island 1.06 228** P **Pb** 08 26 42.4 -1.1
**DRAG Dragano-Lefkad 1.06 233** P **Pb** 08 26 42.1 -1.5
**DRAG Dragano-Lefkad 1.06 233** P **Pb** 08 26 42.2 -1.4
**DLFA Delphi 1.08 142** P **Pb** 08 26 43.5 -0.4
DLFA S **Sn** 08 26 59.5 +1.2
DLFA AML AML 08 27 02.9
comp=N,8369µm,0.7s
DLFA AML AML 08 27 05.2
comp=E,9980µm,0.8s
**KTI Kastanea 1.11 18** P **Pn** 08 26 43.3 -1.2
**NEST Nestorio 1.18 337** P **Pn** 08 26 44.4 -0.9
**NEST Nestorio 1.18 337** P **Pn** 08 26 44.9 -0.3
**FSK Fiskardo 1.22 225** P **Pn** 08 26 44.3 -1.5
**FSK Fiskardo 1.22 225** P **Pn** 08 26 45.1 -0.7
**KLV Kalavryta, Ach 1.35 163** P **Pn** 08 26 47.7 +0.1
KLV S **Sb** 08 27 10.1 +4.8
comp=E,5µm,1.0s
**KLV Kalavryta, Ach 1.35 163** P **Pn** 08 26 47.8 +0.2
**SRN Sarande 1.39 294** P **Pn** 08 26 48.2 0.0
baz=293
SRN S **Sb** 08 27 08.3 +1.8
baz=293
**KASA Kassiopi 1.39 288** P **Pn** 08 26 48.4 +0.3
**KBN Korca 1.45 333** **Pb** 08 26 50.3 +0.1
**KBN Korca 1.45 333** P **Pn** 08 26 48.4 -0.7
baz=333
KBN S **Sb** 08 27 08.9 +0.6
baz=333
KBN AMP
comp=N,22nm,0.5s,baz=333
**KBN Korca 1.45 333** P **Pb** 08 26 50.3 +0.1
**FNA Florina 1.46 352** **Pn** 08 26 49.4 +0.2
**FNA Florina 1.46 352** P **Pn** 08 26 49.2 0.0
baz=353
FNA S **Sb** 08 27 10.1 +1.4
baz=353
FNA AMP
comp=E,11nm,0.4s,baz=353
**FNA Florina 1.46 352** P **Pn** 08 26 48.8 -0.4
FNA S **Sn** 08 27 08.2 +0.4
comp=E,8µm,0.8s
**FNA Florina 1.46 352** *e*Pg **Pn** 08 26 49.3 +0.2
FNA *e*Sg **Sb** 08 27 10.5 +1.9
**FNA Florina 1.46 352** P **Pn** 08 26 49.4 +0.2
**FNA Florina 1.46 352** P **Pn** 08 26 49.4 +0.2
**PSDA Pessada-Kefalo 1.48 215** P **Pn** 08 26 49.0 -0.3
**KEK Kerkira 1.49 285** **Pb** 08 26 50.2 -0.6
**KEK Kerkira 1.49 285** P **Pn** 08 26 49.8 +0.4
**GUR Goura 1.50 159** P **Pn** 08 26 50.2 +0.5
**THE Thessaloniki 1.64 37** P **Pn** 08 26 51.1 -0.4
**THE Thessaloniki 1.64 37** P **Pn** 08 26 51.2 -0.4
**PAIG Paliouri 1.67 69** P **Pn** 08 26 51.2 -0.8
**HORT Hortiatis 1.68 41** P **Pn** 08 26 51.5 -0.7
**VIL2 Platees 1.69 131** P **Pb** 08 26 54.1 -0.2
**LOUT Loutraki 1.69 142** P **Pn** 08 26 53.3 +0.9
**LTHK Lithakia 1.75 202** P **Pb** 08 26 54.2 -1.0
**OHR Ohrid 1.89 340** *e*Pn **Pb** 08 26 57.1 -0.7
**OHR Ohrid 1.89 340** *i* Pn **Pb** 08 26 56.9 -0.8
**SOH Sokhos 1.98 41** P **Pn** 08 26 56.3 +0.1
SOH S **Sn** 08 27 21.3 +0.9
comp=E,3µm,0.9s
**VLO Vlora 2.01 305** **Pb** 08 26 59.8 0.0
**VLO Vlora 2.01 305** P **Pb** 08 26 58.3 -1.5
baz=305
**VLO Vlora 2.01 305** P **Pb** 08 26 59.8 0.0
**KYMI Kymi, Euboea I 2.03 109** P **Pn** 08 26 57.0 +0.1
**KYMI Kymi, Euboea I 2.03 109** P **Pn** 08 26 57.0 +0.1

**OUR Ouranopolis 2.05 60** P **Pn** 08 26 56.9 -0.3
**EPID Epidavros 2.07 146** P **Pn** 08 26 58.5 +1.0
**VAY Valandovo 2.10 19** *e*Pn **Pn** 08 26 58.0 +0.1
VAY *e*Sn **Sn** 08 27 23.9 +0.4
**VAY Valandovo 2.10 19** *i* Pn **Pn** 08 26 58.0 +0.1
**ATH Athens Observa 2.11 130** P **Pn** 08 26 58.8 +0.8
**ATHU Athens Univers 2.15 129** P **Pn** 08 26 59.4 +0.8
**SRS Serrai 2.32 39** P **Pn** 08 27 00.5 -0.4
**SRS Serrai 2.32 39** *e*Pn **Pn** 08 27 00.8 -0.1
**KOKK Kokkinochori, 2.33 50** P **Pn** 08 27 00.9 -0.1
**TIR Tirane 2.43 326** **Pb** 08 27 05.1 -1.9
**TIR Tirane 2.43 326** P **Pb** 08 27 05.5 -1.4
baz=327
**TIR Tirane 2.43 326** *e*Pn **Pb** 08 27 05.6 -1.4
**TIR Tirane 2.43 326** P **Pb** 08 27 05.1 -1.9
**TIR Tirane 2.43 326** P **Pb** 08 27 05.3 -1.6
**SCTE Santa Cesarea 2.57 288** Pn **Pn** 08 27 05.3 +1.0
**SCTE Santa Cesarea 2.57 288** P **Pn** 08 27 03.7 -0.7
baz=287
**MMB Musomishta 2.73 35** P **Pn** 08 27 06.9 +0.3
MMB S **Sn** 08 27 38.3 -0.6
**KKB Krupnik 2.74 24** P **Pn** 08 27 07.1 +0.3
KKB S **Sn** 08 27 39.6 +0.3
**PUK Puka 3.02 334** **Pn** 08 27 12.9 +2.3
**PUK Puka 3.02 334** P **Pn** 08 27 13.0 +2.4
baz=335
PUK S **Sb** 08 27 53.0 -0.4
baz=335
**ULC Ulcinj 3.20 326** *i* Pn **Pn** 08 27 14.7 +1.6
ULC *i* Sn **Sn** 08 27 53.4 +2.7
**BCI Bajram Curri 3.26 339** P **Pn** 08 27 17.3 +3.4
baz=339
BCI S **Sb** 08 27 59.0 -1.3
baz=339
**RZN Rozhen 3.33 44** P **Pn** 08 27 15.3 +0.4
RZN S **Sn** 08 27 53.2 -0.8
**DRME Dracevica, Mon 3.41 327** ⇓ *i* Pn **Pn** 08 27 17.7 +1.8
**DRME Dracevica, Mon 3.41 327** ⇑ *i* Pn **Pn** 08 27 16.7 +0.8
DRME *i* Sn **Sn** 08 27 58.2 +2.4
**PLNA Plana 3.41 23** P **Pn** 08 27 17.5 +1.4
PLNA S **Sn** 08 27 56.9 +0.9
**BARS Barje 3.48 2** *e*Pn **Pn** 08 27 17.4 +0.5
BARS *e*Sn **Sn** 08 27 57.4 -0.1
**VTS Vitosha 3.49 20** P **Pn** 08 27 17.5 +0.3
VTS S **Sn** 08 27 58.1 +0.2
**VTS Vitosha 3.49 20** *e*Pn **Pn** 08 27 17.4 +0.3
VTS *e*Sn **Sn** 08 27 57.8 -0.1
**PVY Plav 3.50 339** ⇑ *i* Pn **Pn** 08 27 17.9 +0.6
PVY *i* Sn **Sn** 08 28 00.2 +2.0
**PDG Podgorica 3.59 330** Pn **Pn** 08 27 20.2 +1.9
**PDG Podgorica 3.59 330** *e*Pn **Pn** 08 27 20.3 +1.9
PDG *e*Sn **Sn** 08 28 04.0 +3.9
**PDG Podgorica 3.59 330** ⇓ *i* Pn **Pn** 08 27 20.0 +1.7
**PDG Podgorica 3.59 330** ⇓P **Pn** 08 27 20.1 +1.8
PDG ⇓S **Sn** 08 28 00.9 +0.8
**PDG Podgorica 3.59 330** ⇓ *i* Pn **Pn** 08 27 20.4 +2.1
PDG *i* Sn **Sn** 08 28 02.7 +2.6
**BUM Brajici-Budva 3.63 326** ⇑ *i* Pn **Pn** 08 27 19.7 +0.7
BUM *i* Sn **Sn** 08 28 03.5 +2.3
**ALN Alexandroupoli 3.71 64** Pn **Pn** 08 27 19.7 -0.3
**ALN Alexandroupoli 3.71 64** P **Pn** 08 27 19.7 -0.3
**IVA Berane 3.78 340** ⇑ *i* Pn **Pn** 08 27 21.7 +0.7
IVA *i* Sn **Sn** 08 28 06.8 +1.9
**APE Apeiranthos 3.80 125** *i* P **Pn** 08 27 21.2 -0.1
**TIP Timpagrande 3.81 269** Pn **Pn** 08 27 21.6 +0.1
**TIP Timpagrande 3.81 269** ⇑P **Pn** 08 27 22.2 +0.8
**TIP Timpagrande 3.81 269** P **Pn** 08 27 22.3 +0.9
**CEME Cevo 3.82 328** ⇑ *i* Pn **Pn** 08 27 22.3 +0.7
CEME *i* Sn **Sn** 08 28 08.4 +2.5
**KOME Kolasin 3.87 336** ⇑ *i* Pn **Pn** 08 27 24.5 +2.2
KOME *i* Sn **Sn** 08 28 09.0 +1.9
**SELS Selova 3.90 354** *e*Pn **Pn** 08 27 23.2 +0.5
SELS *e*Sn **Sn** 08 28 08.1 +0.2
**NKME Niksic 3.99 330** ⇑ *i* Pn **Pn** 08 27 24.7 +0.8
NKME *i* Sn **Sn** 08 28 11.7 +1.6
**ZAPS Zavoj 4.00 10** *e*Pn **Pn** 08 27 24.8 +0.7
**SJES Sjenica 4.12 343** *e*Pn **Pn** 08 27 27.4 +1.6
**SJES Sjenica 4.12 343** ⇓ *i* Pn **Pn** 08 27 26.1 +0.3
**TREB Trebinje 4.20 325** *e*Pn **Pn** 08 27 27.5 +0.7
TREB *e*Sn **Sn** 08 28 15.5 +0.2
**TREB Trebinje 4.20 325** *e*Pn **Pn** 08 27 27.6 +0.7
**BRY Bratogost 4.27 328** *e*Pn **Pn** 08 27 28.7 +0.8
**BRY Bratogost 4.27 328** ⇑ *i* Pn **Pn** 08 27 28.9 +1.0
BRY *i* Sn **Sn** 08 28 19.0 +1.8
**BOVS Bovan 4.30 0** *e*Pn **Pn** 08 27 27.6 -0.5
BOVS *e*Sn **Sn** 08 28 16.1 -1.5
**BOVS Bovan 4.30 0** ⇓P **Pn** 08 27 27.9 -0.1
**MPEP Malo Peshtene 4.31 21** P **Pn** 08 27 29.4 +1.1
MPEP S **Sn** 08 28 17.9 -0.1
**PLE Pljevlja 4.34 338** ⇓ *i* Pn **Pn** 08 27 31.1 +2.3
PLE *i* Sn **Sn** 08 28 03.3 +1.4
**UPM Unac-Piva 4.38 333** *e*Pn **Pn** 08 27 32.1 +2.6
**UPM Unac-Piva 4.38 333** ⇓ *i* Pn **Pn** 08 27 30.1 +0.6
UPM *i* Sn **Sn** 08 28 21.7 +1.7
**ZAGS Zajecar 4.49 5** *e*Pn **Pn** 08 27 30.8 0.0
ZAGS *e*Sn **Sn** 08 28 22.1 -0.3
**VALD Valchedram 4.55 16** P **Pn** 08 27 31.3 -0.3
**CUC Castrocucco 4.56 280** **Pn** 08 27 32.2 +0.5
**GRUS Gruza 4.60 351** *e*Pn **Pn** 08 27 32.7 +0.4
**RUDO Rudo 4.61 339** *e*Pn **Pn** 08 27 34.2 +1.8
**STON Ston 4.63 321** *e*Pn **Pn** 08 27 34.2 +1.6
STON *e*Sn **Sn** 08 28 24.7 -1.0
**STON Ston 4.63 321** ⇓ *i* Pn **Pn** 08 27 32.5 -0.1
**CEL Celeste 4.63 258** **Pn** 08 27 32.8 +0.1
**CEL Celeste 4.63 258** P **Pn** 08 27 33.4 +0.7
**IDI Anoyia 4.79 146** Pn **Pn** 08 27 34.1 -0.8
comp=E,9.2nm,0.9s,baz=12,slow=10,SNR=2.0
IDI Sn **Sn** 08 28 31.2 +1.3
comp=E,4.4nm,0.3s,baz=331,slow=22,SNR=2.6
IDI Lg Lg 08 28 50.7
comp=E,4.5nm,0.3s,baz=324,slow=13,SNR=4.2
**BBLS Lazi&#263i 4.83 340** *e*Pn **Pn** 08 27 38.1 +2.6
**BBLS Lazi&#263i 4.83 340** *e*Pn **Pn** 08 27 36.5 +1.0
**DIVS Divibare 4.92 346** *e*Pn **Pn** 08 27 37.6 +0.9
DIVS *e*Sn **Sn** 08 28 35.0 +1.9
**TRUS Trudelj 4.97 350** *e*Pn **Pn** 08 27 37.8 +0.4
**SGRT San Giovanni R 5.11 300** Pn **Pn** 08 27 39.9 +0.5
**HAPS Han Pijesak,BI 5.16 338** *e*Pn **Pn** 08 27 41.9 +1.8
HAPS *e*Sn **Sn** 08 28 41.2 +2.2
**HAPS Han Pijesak,BI 5.16 338** *e*Pn **Pn** 08 27 41.8 +1.7
**AVAS Avala Beograd 5.42 351** *e*Pn **Pn** 08 27 43.6 0.0
**TEKS Tekeris 5.45 344** *e*Pn **Pn** 08 27 45.4 +1.5
**TEKS Tekeris 5.45 344** *e*Pn **Pn** 08 27 45.3 +1.4
**HERR Herculane 5.57 6** ⇑P **Pn** 08 27 45.9 +0.3
**PAOL Paolisi 5.69 290** **Pn** 08 27 48.6 +1.3
**VAE Valguarnera 5.98 254** Pn **Pn** 08 27 52.1 +0.8
comp=E,15nm,0.6s,baz=357,slow=15,SNR=4.4
VAE Sn **Sn** 08 29 01.9 +2.6
comp=E,8.5nm,0.3s,baz=209,slow=21,SNR=4.0
**GZR Gura Zlata 6.11 7** ⇑P **Pn** 08 27 53.1 0.0
**GZR Gura Zlata 6.11 7** P **Pn** 08 27 53.1 0.0
**RAFF Raffo Rosso 6.11 252** Pn **Pn** 08 27 51.8 -1.3
**BZS Buzias 6.28 360** ⇓P **Pn** 08 27 56.8 +1.5
**BZS Buzias 6.28 360** P **Pn** 08 27 56.8 +1.5
**BLY Banja Luka 6.35 330** *e*Pn **Pn** 08 27 57.7 +1.4
BLY *e*Sn **Sn** 08 29 08.5 +0.3
**BLY Banja Luka 6.35 330** ⇓ *i* Pn **Pn** 08 27 57.0 +0.7
**MTUR Matau 6.41 22** ⇑P **Pn** 08 27 57.6 +0.5
**MTUR Matau 6.41 22** P **Pn** 08 27 57.6 +0.5
**A050A Klekovaca 6.41 325** *e*Pn **Pn** 08 27 58.5 +1.4
**ARR Arges 6.42 19** ⇓P **Pn** 08 27 57.8 +0.5
**SURR Surduc 6.42 3** ⇓P **Pn** 08 27 58.3 +1.0
**INTR Introdacqua 6.47 297** Pn **Pn** 08 27 59.7 +1.6
**WDD Wied Dalam 6.65 241** Pn **Pn** 08 28 00.1 -0.3
**A051A Mrakovica 6.68 330** ⇓ *i* Pn **Pn** 08 28 01.2 +0.3
**ISR Istrita 6.82 31** ⇑P **Pn** 08 28 05.0 +2.1
**ISR Istrita 6.82 31** P **Pn** 08 28 04.9 +2.1
**ISR Istrita 6.82 31** P **Pn** 08 28 05.0 +2.1
comp=E,113nm,1.0s,comp=E,0.4nm
**CLTB Caltabellotta 6.85 258** **Pn** 08 28 04.3 +1.0
**MLR Muntele Rosu 6.92 26** Pn **Pn** 08 28 05.0 +0.8
**MLR Muntele Rosu 6.92 26** Pn **Pn** 08 28 06.0 +1.8
comp=E,5.4nm,0.3s,baz=204,slow=6.9,SNR=18
MLR Sn **Sn** 08 29 22.7 +0.3
comp=E,2.1nm,0.3s,baz=338,slow=19,SNR=3.8
MLR Lg Lg 08 30 01.4
baz=127,slow=22
MLR LR LR 08 31 22.1
comp=E,548nm,19.0s,baz=186,slow=44
comp=E,27nm,0.5s
**MLR Muntele Rosu 6.92 26** ⇓P **Pn** 08 28 06.4 +2.2

**MLR Muntele Rosu 6.92 26** P **Pn** 08 28 06.1 +1.8
comp=E,56nm,0.7s,comp=E,625nmcomp=E,0.2nm
**NEHR Nehoiu 6.99 28** ⇓P **Pn** 08 28 06.8 +1.7
**CAMP Campotosto 7.01 300** **Pn** 08 28 06.5 +0.9
**HARR Harsova 7.10 39** ⇓P **Pn** 08 28 07.6 +1.0
**HARR Harsova 7.10 39** P **Pn** 08 28 07.6 +1.0
**MORH Mrgy, Hungar 7.22 343** ⇓P **Pn** 08 28 08.5 +0.2
**GUMA Gualdo di Mace 7.30 303** **Pn** 08 28 09.5 +0.2
**COVR Voineasa-Covas 7.32 26** ⇑P **Pn** 08 28 11.6 +1.9
**NRCA Norcia 7.34 301** **Pn** 08 28 10.8 +0.8
**MDUB Mudurnu 7.42 78** **Pn** 08 28 12.6 +1.5
**TURR Turia 7.44 24** ⇑P **Pn** 08 28 13.6 +2.3
**FDMO Fiordimonte 7.45 303** Pn **Pn** 08 28 11.6 +0.2
**PLOR Plostina 7.48 28** ⇓P **Pn** 08 28 13.9 +2.0
**PLOR Plostina 7.48 28** P **Pn** 08 28 13.8 +2.0
**PLOR5 Plostina Array 7.48 28** P **Pn** 08 28 13.6 +1.8
comp=E,80nm,0.7s,comp=E,799nmcomp=E,0.3nm
**VRI Vrincioaia 7.52 28** ⇑P **Pn** 08 28 14.5 +2.2
**VRI Vrincioaia 7.52 28** P **Pn** 08 28 14.5 +2.2
**VRI Vrincioaia 7.52 28** P **Pn** 08 28 14.2 +1.8
comp=E,53nm,0.8s,comp=E,404nmcomp=E,0.2nm
**CFR Carcaliu 7.56 37** ⇑P **Pn** 08 28 14.3 +1.5
**CFR Carcaliu 7.56 37** P **Pn** 08 28 14.3 +1.5
**BOJS Bojanci 7.77 325** *e*Pn **Pn** 08 28 16.0 +0.2
**ONER Baraj Valea Uz 7.81 25** ⇓P **Pn** 08 28 18.1 +1.8
**CRES Cresnjev 7.94 327** ⇓ *i* Pn **Pn** 08 28 17.2 -0.8
**TESR Tescani 8.05 25** ⇓P **Pn** 08 28 21.8 +2.2
**CEY Cerknica 8.33 323** *e*Pn **Pn** 08 28 23.4 -0.1
**MPLH Magyarpolny 8.39 340** P **Pn** 08 28 25.9 +1.7
comp=E,112nm,1.1s,comp=E,891nm
**SKDS Skadanscina 8.39 320** *e*Pn **Pn** 08 28 23.0 -1.3
**BURAR Bucovina Array 8.67 16** ⇑P **Pn** 08 28 29.9 +1.6
**BURAR Bucovina Array 8.67 16** P **Pn** 08 28 29.8 +1.6
**PSZ Piszkesteto 8.67 352** Pn **Pn** 08 28 28.4 +0.1
**PSZ Piszkesteto 8.67 352** ⇑P **Pn** 08 28 28.8 +0.6
**PSZ Piszkesteto 8.67 352** P **Pn** 08 28 28.8 +0.6
**SOKA Soboth 8.79 329** *e*Pn **Pn** 08 28 30.7 +0.8
comp=E,5.9nm,0.4s
SOKA *e*Sn **Sn** 08 30 07.8 -0.6
comp=E,18nm,1.1s
**OBKA Obir 8.86 326** *e*Pn **Pn** 08 28 33.9 +3.0
comp=E,9.4nm,0.6s
OBKA *e*Sn **Sn** 08 30 10.9 +0.8
comp=E,20nm,0.4s
**OBKA Obir 8.86 326** *e*Pn **Pn** 08 28 30.8 0.0
**SABO M.te Sabotino 8.90 321** Pn **Pn** 08 28 31.9 +0.5
**ARSA Arzberg 9.09 333** Pn **Pn** 08 28 34.2 +0.3
comp=E,4.4nm,0.3s,SNR=5.5
ARSA *e*Sn **Sn** 08 30 14.8 -0.6
comp=E,14nm,1.2s
**KECS Kecovo 9.18 355** *e*P **Pn** 08 28 39.4 +4.3
**KECS Kecovo 9.18 355** *e*PN **Pn** 08 28 39.4 +4.3
**MILM Milestii Mici 9.21 32** *e*P **Pn** 08 28 37.0 +1.6
MILM MLR MLR
comp=Z,600nm,11.5s
**RONA Rosalia, Austr 9.22 337** *e*Pn **Pn** 08 28 37.0 +1.4
comp=Z,3.9nm,0.4s
**BR105 Keskin Array S 9.25 84** P **Pn** 08 28 38.7 +2.5
comp=Z,5.2nm,0.8s,comp=Z,46nm
**BR106 Keskin Array S 9.25 84** P **Pn** 08 28 38.8 +2.6
comp=Z,3.5nm,1.2s,comp=Z,37nm
**PRED Cave del Predi 9.25 323** **Pn** 08 28 36.6 +0.4
**BR131 Keskin Array S 9.27 84** *e*P **Pn** 08 28 36.7 +0.2
**BRTR Keskin Array B 9.27 84** Pn **Pn** 08 28 38.0 +1.6
comp=Z,0.5nm,0.3s,baz=264,slow=12,SNR=11
BRTR Lg Lg 08 31 16.3
comp=Z,0.1nm,0.3s,baz=280,slow=34,SNR=1.7
BRTR LR LR 08 33 00.1
comp=Z,242nm,19.1s,baz=272,slow=43
comp=Z,1.1nm,0.4s
**BRTR Keskin Array B 9.27 84** *i* P **Pn** 08 28 38.5 +2.0
BRTR pmax pmax
comp=Z,2.0nm,0.4s
**BR104 Keskin Array S 9.27 84** P **Pn** 08 28 38.1 +1.6
comp=Z,4.4nm,1.0s,comp=Z,42nm
**KIS Kishinev 9.27 32** *e*P **Pn** 08 28 37.0 +0.7
KIS *e*L L 08 32 04.0
KIS LRM MLR 08 32 37.0
comp=Z,600nm,11.5s
**KSV Kosov 9.31 14** P **Pn** 08 28 38.8 +1.9
**MYKA Terra Mystica 9.36 324** *e*Pn Pn 08 28 42.5 +4.9
comp=Z,1.0nm,0.1s
**VYHS Vyhne 9.38 348** *e*P **Pn** 08 28 40.0 +2.2
VYHS *e* 08 30 26.4
**VYHS Vyhne 9.38 348** *e*PN **Pn** 08 28 40.0 +2.2
VYHS *e*SN **Sn** 08 30 26.4 +3.8
**TEOL Teolo 9.53 312** **Pn** 08 28 40.4 +0.5
**STAL STALIGIAL 9.54 319** **Pn** 08 28 41.4 +1.3
**KBA Koelnbreinsper 9.83 325** *e*Pn **Pn** 08 28 47.0 +2.9
comp=Z,0.8nm,0.2s
KBA *e*Sn **Sn** 08 30 31.3 -2.6
comp=Z,16nm,0.8s
**KMPD K-Podol'skiy 9.85 19** P **Pn** 08 28 47.2 +2.9
KMPD P **Pn** 08 28 46.6 +2.3
**JAVC Velka Javorina 9.94 345** *e*PN **Pn** 08 28 49.2 +3.6
**CTI Castel Tesino 9.96 316** Pn **Pn** 08 28 45.1 -0.8
**CTI Castel Tesino 9.96 316** P **Pn** 08 28 45.1 -0.8
**ABTA Abfaltersbach 9.98 321** *i* Sn **Sn** 08 30 34.2 -3.2
comp=Z,21nm,0.6s
**MOA Molln 10.05 330** *e*Pn **Pn** 08 28 49.1 +2.0
comp=Z,3.4nm,0.3s
MOA *e*Sn **Sn** 08 30 39.0 -0.2
comp=Z,5.4nm,0.6s
**MOA Molln 10.05 330** *e*Pn **Pn** 08 28 48.9 +1.8
**NDNU Novodnistrovsk 10.13 22** P **Pn** 08 28 49.9 +1.9
**BIOA Bad Ischl, Aus 10.18 328** *e*Sn **Sn** 08 30 44.2 +2.0
comp=Z,11nm,0.5s
**KWP Kalwaria Pacla 10.32 4** P **Pn** 08 28 53.5 +2.8
comp=Z,13nm,1.6s
**LESA Schwarzleotal 10.39 324** *e*Pn **Pn** 08 28 53.1 +1.4
comp=Z,9.2nm,0.9s
LESA *i* Sn **Sn** 08 30 46.5 -1.1
comp=Z,8.7nm,0.6s
**KEST Kesra 10.42 254** Pn **Pn** 08 28 53.8 +1.6
comp=Z,2.7nm,0.3s,baz=34,slow=3.9,SNR=76
KEST LR LR 08 34 15.5
comp=Z,230nm,19.3s,baz=180,slow=46
comp=Z,60nm,0.8s
**KRUC Moravsky 10.43 341** *e*PN **Pn** 08 28 52.7 +0.5
**VRAC Vranov 10.61 342** *e*PN **Pn** 08 28 53.2 -1.4
**VRAC Vranov 10.61 342** Pn **Pn** 08 28 55.3 +0.6
comp=Z,0.3nm,0.3s,baz=175,slow=13,SNR=4.6
VRAC Sn **Sn** 08 30 52.3 -0.5
comp=Z,0.5nm,0.3s,baz=20,slow=18,SNR=1.5
comp=Z,5.4nm,0.7s
**WTTA Wattenberg 10.77 321** *e*Pn **Pn** 08 28 58.5 +1.4
comp=Z,6.0nm,0.3s
WTTA *i* Sn **Sn** 08 30 54.8 -2.2
comp=Z,48nm,0.7s
**OKC Ostrava-Krasne 10.79 348** AMS AMS 08 33 30.0
comp=Z,300nm,7.3s
**MORC Moravsky Berou 10.84 346** *e*PN **Pn** 08 28 55.4 -2.5
**WATA Walderalm 10.85 321** *e*Pn **Pn** 08 29 00.3 +2.2
comp=Z,9.4nm,0.5s
WATA *i* Sn **Sn** 08 30 57.0 -1.8
comp=Z,18nm,0.4s
**CKRC Cesky Krumlov 10.85 333** *e*PN **Pn** 08 28 58.5 +0.5
CKRC AMS AMS 08 33 30.0
comp=Z,500nm,12.4s
**CKRC Cesky Krumlov 10.85 333** *e*P **Pn** 08 28 58.5 +0.5
CKRC MLR MLR
comp=Z,500nm,12.4s
**TREC Trest 10.89 338** AMS AMS 08 33 40.0
comp=Z,400nm,9.8s
**OJC Ojcow 10.96 354** P **Pn** 08 29 02.5 +3.0
comp=Z,7.6nm,0.7s
**FETA Feichten 11.07 317** *e*Pn **Pn** 08 29 02.9 +1.8
comp=Z,2.9nm,0.4s
FETA *e*Sn **Sn** 08 31 05.4 +1.1
comp=Z,8.6nm,0.5s
**FUORN Ofenpass-Fuorn 11.07 315** Pn **Pn** 08 29 02.5 +1.3
**GERES GERESS Array B 11.09 332** Pn **Pn** 08 29 01.9 +0.6
comp=Z,0.4nm,0.3s,baz=153,slow=12,SNR=5.1
comp=Z,1.1nm,0.4s
**MOTA Moosalm 11.09 320** *e*Pn **Pn** 08 29 03.0 +1.6
comp=Z,6.4nm,0.5s
MOTA *i* Sn **Sn** 08 31 02.6 -2.1
comp=Z,20nm,0.8s
**RETA Reutte 11.36 319** *e*Sn **Sn** 08 31 08.8 -2.4
comp=Z,8.5nm,0.4s
**KHC Kasperske Hory 11.37 332** **Pn** 08 29 06.2 +1.1
**KHC Kasperske Hory 11.37 332** *e*PN **Pn** 08 29 07.9 +2.8
KHC *e*SN Sn 08 30 54.2 -17
KHC AMS AMS 08 33 50.0
comp=Z,500nm,12.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KHC** | **Kasperske Hory** | **11.37** | **332** | *ce*P | | **Pn** | **08 29 06.2** | **+1.1** |
| KHC | | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.7s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **11.37** | **332** | P | | **Pn** | **08 29 06.3** | **+1.1** |
| | comp=Z,8.2nm,0.8s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **11.38** | **315** | Pn | | **Pn** | **08 29 05.3** | **0.0** |
| | comp=Z,0.8nm,0.3s,baz=136,slow=14,SNR=7.4 | | | | | | | | |
| DAVOX | | | | Sn | | **Sn** | **08 31 06.1** | **-5.8** |
| | comp=Z,0.9nm,0.3s,baz=286,slow=20,SNR=2.5 | | | | | | | | |
| | comp=Z,3.9nm,0.5s | | | | | | | | |
| **LUBAR** | **Lubar, Ukraine** | **11.44** | **20** | P | | **Pn** | **08 29 08.3** | **+2.3** |
| **DPC** | **Dobruska-Polom** | **11.64** | **343** | AMS | | AMS | 08 34 10.0 | | |
| | comp=Z,200nm,9.7s | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **11.65** | **337** | AMS | | AMS | 08 34 00.0 | | |
| | comp=Z,500nm,8.8s | | | | | | | | |
| **PRU** | **Pruhonice** | **11.79** | **337** | AMS | | AMS | 08 34 00.0 | | |
| | comp=Z,500nm,11.0s | | | | | | | | |
| **PRA** | **Prague** | **11.89** | **337** | AMS | | AMS | 08 34 10.0 | | |
| | comp=Z,400nm,11.1s | | | | | | | | |
| **PVCC** | **Panska Ves** | **12.26** | **338** | AMS | | AMS | 08 34 20.0 | | |
| | comp=Z,400nm,11.6s | | | | | | | | |
| **AK07** | **Malin Array Si** | **12.41** | **23** | P | | **Pn** | **08 29 21.6** | **+2.3** |
| **AK13** | **Malin Array Si** | **12.43** | **22** | P | | **Pn** | **08 29 22.9** | **+3.4** |
| **AK09** | **Malin Array Si** | **12.50** | **23** | P | | **Pn** | **08 29 23.9** | **+3.5** |
| **AK19** | **Malin Array Si** | **12.51** | **22** | P | | **Pn** | **08 29 23.9** | **+3.3** |
| **KIEV** | **Kiev** | **12.54** | **23** | Pn | | **Pn** | **08 29 21.5** | **+0.5** |
| **KIEV** | **Kiev** | **12.54** | **23** | P | | **Pn** | **08 29 21.5** | **+0.5** |
| **AKASG** | **Malin Array Be** | **12.55** | **23** | Pn | | **Pn** | **08 29 20.5** | **-0.7** |
| | comp=Z,0.5nm,0.3s,baz=208,slow=14,SNR=2.6 | | | | | | | | |
| AKASG | | | | LR | | LR | 08 34 36.0 | | |
| | comp=Z,224nm,18.3s,baz=214,slow=39 | | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | | |
| **AKBB** | **Malin Array Si** | **12.55** | **23**⇑ | *e*P | | **Pn** | **08 29 21.4** | **+0.2** |
| **SENIN** | **Lac Senin/Sane** | **12.65** | **308** | Pn | | **Pn** | **08 29 23.0** | **+0.2** |
| **HSKC** | **Hora Svate Kat** | **12.68** | **335** | AMS | | AMS | 08 34 40.0 | | |
| | comp=Z,400nm,13.0s | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **12.77** | **115** | Pn | | **Pn** | **08 29 24.1** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=303,slow=14,SNR=6.9 | | | | | | | | |
| MMAI | | | | LR | | LR | 08 35 23.1 | | |
| | comp=Z,80nm,19.4s,baz=281,slow=43 | | | | | | | | |
| | comp=Z,6.1nm,0.8s | | | | | | | | |
| **ANN** | **Anapa** | **12.93** | **60** | *e*P | | **Pn** | **08 29 24.1** | **-2.2** |
| ANN | | | | *e*S | | **Sn** | **08 31 48.0** | **-1.4** |
| ANN | | | | | pmax | pmax | | | |
| | comp=Z,38nm,0.8s | | | | | | | | |
| **BFO** | **Black Forest** | **13.15** | **317** | | | **Pn** | **08 29 28.8** | **-0.7** |
| **BFO** | **Black Forest** | **13.15** | **317** | P | | **Pn** | **08 29 28.8** | **-0.7** |
| **CLL** | **Collm** | **13.42** | **336** | *i* PP | | **P** | **08 29 43.0** | **+0.7** |
| | comp=Z,19nm,1.4s | | | | | | | | |
| CLL | | | | *i* sPP | | | 08 29 47.5 | | |
| **ECH** | **Echery** | **13.71** | **315** | | | **Pn** | **08 29 38.0** | **+1.0** |
| **ECH** | **Echery** | **13.71** | **315** | P | | **Pn** | **08 29 38.1** | **+1.0** |
| **PRNI** | **Paran** | **14.14** | **125** | P | | **P** | **08 29 51.0** | **+0.5** |
| **SOC** | **Sochi** | **14.19** | **67** | *e*P | | **Pn** | **08 29 42.8** | **-0.8** |
| SOC | | | | *e* | | | 08 32 22.2 | | |
| SOC | | | | | MLR | MLR | | | |
| | comp=Z,52nm,17.0s | | | | | | | | |
| **EIL** | **Elat** | **14.58** | **127** | Pn | | **Pn** | **08 29 48.0** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=69,slow=21,SNR=1.5 | | | | | | | | |
| EIL | | | | Sn | | **Sn** | **08 32 24.3** | **-5.8** |
| | comp=Z,0.3nm,0.3s,baz=8.6,slow=15,SNR=1.7 | | | | | | | | |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **MNK** | **Minsk** | **15.75** | **13** | *i* P | | **Pn** | **08 30 01.3** | **-3.0** |
| | comp=E,16nm,0.9s | | | | | | | | |
| MNK | | | | *i* P | | **Pn** | **08 30 01.3** | **-3.0** |
| | comp=N,13nm,0.9s | | | | | | | | |
| MNK | | | | *i* P | | **Pn** | **08 30 01.3** | **-3.0** |
| | comp=Z,6.0nm,0.8s,baz=198 | | | | | | | | |
| MNK | | | | *i* PP | | **P** | **08 30 10.0** | **+1.8** |
| MNK | | | | *i* S | | **Sn** | **08 32 55.2** | **-2.9** |
| MNK | | | | *i* SS | | **SnSn** | **08 33 09.6** | **-1.4** |
| MNK | | | | *i* LQ | | LQ | 08 34 42.8 | | |
| MNK | | | | *i* LR | | LR | 08 35 54.5 | | |
| MNK | | | | *i* LRM | | MLR | 08 36 45.2 | | |
| | comp=N,249nm,20.2s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 08 36 49.0 | | |
| | comp=Z,207nm,18.2s | | | | | | | | |
| MNK | | | | *i* LRM | | MLR | 08 37 08.3 | | |
| | comp=E,257nm,18.3s | | | | | | | | |
| **MNK** | **Minsk** | **15.75** | **13** | *i* P | | **Pn** | **08 30 01.3** | **-3.0** |
| MNK | | | | *i* S | | **Sn** | **08 32 55.2** | **-2.9** |
| MNK | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| MNK | | | | | pmax | pmax | | | |
| | comp=E,16nm,0.9s | | | | | | | | |
| MNK | | | | | pmax | pmax | | | |
| | comp=N,13nm,0.9s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=N,249nm,20.0s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=Z,207nm,18.0s | | | | | | | | |
| MNK | | | | | MLR | MLR | | | |
| | comp=E,257nm,18.0s | | | | | | | | |
| **NACGM** | **Naroch** | **15.95** | **11** | *e*P | | **P** | **08 30 11.2** | **+0.8** |
| | comp=Z,19nm,0.8s,baz=195 | | | | | | | | |
| **KIV** | **Kislovodsk** | **16.37** | **67** | *e*P | | **P** | **08 30 14.2** | **-1.1** |
| KIV | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **CLF** | **Chambon-Foret** | **16.47** | **308** | Pn | | **Pn** | **08 30 14.7** | **+1.1** |
| CLF | | | | IAmb | | IAmb | 08 30 24.3 | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **16.49** | **68** | Pn | | **P** | **08 30 15.3** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=322,slow=2.7,SNR=2.1 | | | | | | | | |
| | comp=Z,1.8nm,0.7s | | | | | | | | |
| **KBZ** | **Khabaz** | **16.49** | **68**⇑ | *e*P | | **Pn** | **08 30 14.0** | **+0.1** |
| **VSR** | **Storozhevoye** | **17.06** | **40** | *e*P | | **Pn** | **08 30 16.7** | **-4.4** |
| VSR | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **VORR** | **Voronezh** | **17.36** | **39** | P | | **P** | **08 30 26.2** | **+0.1** |
| VORR | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.3s | | | | | | | | |
| **GNI** | **Garni** | **17.77** | **80** | LR | | LR | 08 37 29.3 | | |
| | comp=Z,100nm,20.8s,baz=270,slow=38 | | | | | | | | |
| **GNI** | **Garni** | **17.77** | **80** | *i* P | | **Pn** | **08 30 30.3** | **+0.2** |
| GNI | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **17.83** | **36** | *e*P | | **Pn** | **08 30 28.3** | **-2.3** |
| LPSR | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **18.38** | **43** | P | | **Pn** | **08 30 37.6** | **+0.3** |
| VRH | | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **19.76** | **279** | P | | **Pn** | **08 30 53.4** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=74,slow=10,SNR=19 | | | | | | | | |
| ESDC | | | | LR | | LR | 08 38 43.7 | | |
| | comp=Z,131nm,18.2s,baz=92,slow=38 | | | | | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **HFS** | **Hagfors** | **21.41** | **349** | P | | **P** | **08 31 11.1** | **+0.9** |
| | comp=Z,5.2nm,0.7s,baz=156,slow=11,SNR=11 | | | | | | | | |
| HFS | | | | LR | | LR | 08 40 24.4 | | |
| | comp=Z,23nm,20.3s,baz=154,slow=39 | | | | | | | | |
| | comp=Z,5.2nm,0.7s | | | | | | | | |
| **BELG** | **Belogornoye** | **22.16** | **45** | LR | | LR | 08 40 28.0 | | |
| | comp=Z,87nm,18.9s,baz=272,slow=38 | | | | | | | | |
| **BELG** | **Belogornoye** | **22.16** | **45** | *c i*P | | **P** | **08 31 20.4** | **+2.2** |
| BELG | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **MDT** | **Midelt** | **22.16** | **261** | P | | **P** | **08 31 18.9** | **+0.4** |
| | comp=Z,1.4nm,0.6s,baz=44,slow=14,SNR=2.0 | | | | | | | | |
| | comp=Z,1.4nm,0.6s | | | | | | | | |
| **FINES** | **FINESS Array B** | **22.30** | **6** | P | | **P** | **08 31 16.9** | **-2.8** |
| | comp=Z,1.9nm,0.5s,baz=169,slow=11,SNR=13 | | | | | | | | |
| FINES | | | | LR | | LR | 08 41 17.7 | | |
| | comp=Z,97nm,18.6s,baz=191,slow=40 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **22.68** | **347** | P | | **P** | **08 31 23.5** | **-0.3** |
| | comp=Z,1.7nm,0.5s,baz=155,slow=11 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **22.68** | **347** | P | | **P** | **08 31 23.5** | **-0.3** |
| | comp=Z,0.8nm,0.5s,baz=159,slow=11,SNR=9.8 | | | | | | | | |
| NOA | | | | LR | | LR | 08 40 42.7 | | |
| | comp=Z,41nm,18.4s,baz=180,slow=38 | | | | | | | | |
| | comp=Z,0.8nm,0.5s | | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.03** | **322** | P | | **P** | **08 31 27.1** | **-0.3** |
| | comp=Z,5.6nm,0.6s,baz=120,slow=11,SNR=16 | | | | | | | | |
| | comp=Z,5.6nm,0.6s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **25.63** | **121** | P | | **P** | **08 31 52.8** | **+0.7** |
| **RAYN** | **Ar Rayn** | **25.63** | **121** | P | | **P** | **08 31 52.8** | **+0.7** |
| RAYN | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **KIRV** | **Kirov** | **26.20** | **34** | LR | | LR | 08 42 25.8 | | |
| | comp=Z,112nm,18.1s,baz=302,slow=37 | | | | | | | | |
| **KIRV** | **Kirov** | **26.20** | **34**⇑ | *i*P | | **P** | **08 31 56.4** | **-0.5** |
| **AKTO** | **Aktyubinsk** | **27.78** | **54** | LR | | LR | 08 44 53.0 | | |
| | comp=Z,155nm,20.7s,baz=306,slow=40 | | | | | | | | |
| **ARU** | **Arti** | **29.61** | **42** | LR | | LR | 08 46 12.6 | | |
| | comp=Z,92nm,18.9s,baz=118,slow=40 | | | | | | | | |
| **ARU** | **Arti** | **29.61** | **42**⇑ | *i*P | | **P** | **08 32 27.1** | **-0.3** |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **30.33** | **3** | P | | **P** | **08 32 32.1** | **-1.5** |
| | comp=Z,1.3nm,0.7s,baz=182,slow=9.3,SNR=1.6 | | | | | | | | |
| | comp=Z,1.3nm,0.7s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.49** | **220** | P | | **P** | **08 32 44.6** | **+0.2** |
| | comp=Z,6.9nm,0.7s,baz=29,slow=10,SNR=41 | | | | | | | | |
| TORD | | | | LR | | LR | 08 47 54.7 | | |
| | comp=Z,43nm,19.1s,baz=302,slow=41 | | | | | | | | |
| | comp=Z,6.9nm,0.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **35.63** | **51** | *c i*P | | **P** | **08 33 20.9** | **+0.8** |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **35.70** | **51** | P | | **P** | **08 33 20.8** | **+0.1** |
| | comp=Z,2.0nm,0.6s,baz=260,slow=6.9,SNR=7.5 | | | | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **SIMJ** | **Simiganj** | **36.48** | **76** | P | | **P** | **08 33 28.3** | **+0.6** |
| SIMJ | | | | IAmb | | IAmb | 08 33 29.7 | | |
| | comp=Z,6.8nm,1.1s | | | | | | | | |
| **KKAR** | **Karatay Array** | **36.53** | **68** | P | | **P** | **08 33 28.0** | **0.0** |
| KKAR | | | | IAmb | | IAmb | 08 33 29.8 | | |
| | comp=Z,5.7nm,0.7s | | | | | | | | |
| **KKAR** | **Karatay Array** | **36.53** | **68** | P | | **P** | **08 33 28.0** | **0.0** |
| KKAR | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **GAR** | **Garm** | **37.36** | **75** | P | | **P** | **08 33 36.1** | **+0.9** |
| **BTK** | **Batken** | **37.45** | **73** | P | | **P** | **08 33 36.2** | **+0.3** |
| BTK | | | | IAmb | | IAmb | 08 33 37.1 | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **BTK** | **Batken** | **37.45** | **73** | P | | **P** | **08 33 36.2** | **+0.3** |
| BTK | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **DRK** | **Karamyk** | **38.33** | **73** | P | | **P** | **08 33 44.6** | **+1.0** |
| DRK | | | | IAmb | | IAmb | 08 33 46.0 | | |
| | comp=Z,8.8nm,0.9s | | | | | | | | |
| **DRK** | **Karamyk** | **38.33** | **73** | P | | **P** | **08 33 44.6** | **+1.0** |
| DRK | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| **AAK** | **Ala-Archa** | **39.49** | **68** | P | | **P** | **08 33 53.5** | **+0.4** |
| AAK | | | | IAmb | | IAmb | 08 34 01.1 | | |
| | comp=Z,11nm,1.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **39.49** | **68** | *ce*P | | **P** | **08 33 53.5** | **+0.4** |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.4s | | | | | | | | |
| **DBIC** | **Dimbokro** | **40.34** | **223** | P | | **P** | **08 34 00.5** | **+0.3** |
| | comp=Z,8.6nm,0.8s,baz=19,slow=8.1,SNR=8.1 | | | | | | | | |
| DBIC | | | | LR | | LR | 08 51 50.7 | | |
| | comp=Z,122nm,18.4s,baz=48,slow=38 | | | | | | | | |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **40.83** | **55** | P | | **P** | **08 34 03.5** | **-0.4** |
| | comp=Z,3.8nm,0.8s,baz=282,slow=8.8,SNR=28 | | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | |
| **NRN** | **Naryn** | **40.88** | **69** | P | | **P** | **08 34 05.4** | **+0.6** |
| **NRN** | **Naryn** | **40.88** | **69** | P | | **P** | **08 34 05.4** | **+0.6** |
| NRN | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| **KURK** | **Kurchatov** | **40.88** | **55** | P | | **P** | **08 34 03.6** | **-0.7** |
| **KURK** | **Kurchatov** | **40.88** | **55** | *ce*P | | **P** | **08 34 04.1** | **-0.2** |
| KURK | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **NIL** | **Nilore** | **41.40** | **81** | P | | **P** | **08 34 09.8** | **+0.9** |
| NIL | | | | IAmb | | IAmb | 08 34 14.9 | | |
| | comp=Z,6.3nm,0.7s | | | | | | | | |
| **NIL** | **Nilore** | **41.40** | **81** | P | | **P** | **08 34 09.8** | **+0.9** |
| NIL | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **KSH** | **Kashi** | **41.41** | **72** | P | | **P** | **08 34 08.5** | **-0.5** |
| KSH | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **42.10** | **68** | P | | **P** | **08 34 16.1** | **+1.2** |
| TARG | | | | IAmb | | IAmb | 08 34 17.4 | | |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **TARG** | **Taragay, Kyrgy** | **42.10** | **68** | P | | **P** | **08 34 16.1** | **+1.2** |
| TARG | | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.4s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **42.73** | **157** | LR | | LR | 08 53 25.7 | | |
| | comp=Z,58nm,18.6s,baz=243,slow=38 | | | | | | | | |
| **MK31** | **Makanchi Array** | **43.95** | **60** | *d i*P | | **P** | **08 34 28.9** | **-0.4** |
| **MKAR** | **Makanchi Array** | **43.95** | **60** | P | | **P** | **08 34 29.1** | **-0.3** |
| | comp=Z,9.6nm,0.6s,baz=280,slow=6.9,SNR=74 | | | | | | | | |
| MKAR | | | | LR | | LR | 08 55 06.2 | | |
| | comp=Z,57nm,20.8s,baz=283,slow=39 | | | | | | | | |
| | comp=Z,9.6nm,0.6s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.26** | **49** | P | | **P** | **08 34 31.3** | **-0.4** |
| | comp=Z,20nm,0.5s,baz=276,slow=8.6,SNR=60 | | | | | | | | |
| ZALV | | | | LR | | LR | 08 55 47.3 | | |
| | comp=Z,66nm,18.1s,baz=334,slow=40 | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **46.63** | **55** | *d i*P | | **P** | **08 34 50.5** | **-0.2** |
| DGZ | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **47.68** | **330** | LR | | LR | 08 58 39.9 | | |
| | comp=Z,62nm,18.5s,baz=79,slow=41 | | | | | | | | |
| **WMQ** | **Urumqi** | **48.43** | **62** | *e*P | | **P** | **08 35 05.5** | **+0.8** |
| WMQ | | | | | pP | pP | 08 35 10.0 | -1.3 |
| WMQ | | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **KNGR** | **Kungurtug, Tuv** | **52.61** | **51**⇑ | *e*P | | **P** | **08 35 36.0** | **-0.2** |
| KNGR | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **EUNU** | **Eureka** | **54.56** | **348** | P | | **P** | **08 35 52.1** | **+2.1** |
| **FRB** | **Frobisher Bay** | **55.65** | **327** | LR | | LR | 09 00 43.3 | | |
| | comp=Z,70nm,18.0s,baz=92,slow=37 | | | | | | | | |
| **ZAK** | **Zakamensk** | **56.13** | **50** | *e*P | | **P** | **08 36 01.6** | **-0.2** |
| ZAK | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **SCHQ** | **Schefferville** | **58.22** | **317** | P | | **P** | **08 36 16.1** | **-0.3** |
| | comp=Z,3.6nm,0.6s,baz=33,slow=6.0,SNR=7.4 | | | | | | | | |
| | comp=Z,3.6nm,0.6s | | | | | | | | |
| **TIXI** | **Tiksi** | **58.26** | **21** | LR | | LR | 09 04 57.5 | | |
| | comp=Z,207nm,18.4s,baz=30,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **59.04** | **51** | P | | **P** | **08 36 22.2** | **-0.2** |
| | comp=Z,2.5nm,0.9s,baz=291,slow=9.4,SNR=14 | | | | | | | | |
| | comp=Z,2.5nm,0.9s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **59.43** | **51**⇓ | *i*P | | **P** | **08 36 23.3** | **-1.8** |
| ULN | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **LZH** | **Lanzhou** | **62.90** | **64** | *e*P | | **P** | **08 36 45.5** | **-3.3** |
| LZH | | | | | pP | pP | 08 36 51.5 | -4.1 |
| LZH | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **YAK** | **Yakutsk** | **63.66** | **30** | LR | | LR | 09 06 34.3 | | |
| | comp=Z,51nm,20.2s,baz=323,slow=38 | | | | | | | | |
| **LBTB** | **Lobatse** | **64.12** | **176** | LR | | LR | 09 06 43.5 | | |
| | comp=Z,68nm,18.4s,baz=86,slow=38 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **65.65** | **56** | *e*P | | **P** | **08 37 03.8** | **-2.9** |
| HHC | | | | | pP | pP | 08 37 09.5 | -4.0 |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,78nm,5.0s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.6s | | | | | | | | |
| HHC | | | | | pmax | pmax | | | |
| | comp=Z,60nm,6.0s | | | | | | | | |
| **BOSA** | **Boshof** | **67.68** | **177** | P | | **P** | **08 37 20.2** | **+0.6** |
| | comp=Z,3.2nm,0.6s,baz=3.4,slow=5.6,SNR=8.7 | | | | | | | | |
| BOSA | | | | LR | | LR | 09 09 23.6 | | |
| | comp=Z,90nm,18.9s,baz=24,slow=38 | | | | | | | | |
| | comp=Z,3.2nm,0.6s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **68.86** | **83** | P | | **P** | **08 37 26.8** | **-0.4** |
| | comp=Z,1.1nm,0.3s,baz=306,slow=6.0,SNR=5.0 | | | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | | | |
| **SEY** | **Seymchan** | **70.74** | **22**⇓ | *e*P | | **P** | **08 37 38.8** | **+0.7** |
| SEY | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | | |
| **KLR** | **Kul'dur** | **72.42** | **40** | LR | | LR | 09 10 58.5 | | |
| | comp=Z,28nm,19.1s,baz=174,slow=37 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.60** | **340** | P | | **P** | **08 37 49.8** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=29,slow=5.6,SNR=6.9 | | | | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **MA2** | **Magadan** | **72.88** | **24** | LR | | LR | 09 12 52.1 | | |
| | comp=Z,46nm,18.9s,baz=328,slow=38 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **75.29** | **324** | P | | **P** | **08 38 05.2** | **-0.1** |
| | comp=Z,3.8nm,0.8s,baz=38,slow=6.9,SNR=5.1 | | | | | | | | |
| ULM | | | | LR | | LR | 09 12 45.0 | | |
| | comp=Z,32nm,18.0s,baz=34,slow=37 | | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **75.84** | **355** | P | | **P** | **08 38 08.6** | **+0.4** |
| | comp=Z,0.6nm,0.9s,baz=12,slow=5.8,SNR=6.4 | | | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | | | |
| **KSRS** | **Korea Array** | **77.91** | **51** | P | | **P** | **08 38 19.6** | **-0.7** |
| | comp=Z,0.8nm,0.6s,baz=313,slow=5.0,SNR=2.6 | | | | | | | | |
| KSRS | | | | LR | | LR | 09 16 58.9 | | |
| | comp=Z,21nm,18.8s,baz=125,slow=39 | | | | | | | | |
| | comp=Z,0.8nm,0.6s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **80.38** | **25** | LR | | LR | 09 18 39.3 | | |
| | comp=Z,41nm,19.3s,baz=108,slow=39 | | | | | | | | |
| **PDAR** | **Pinedale Array** | **87.09** | **326** | P | | **P** | **08 39 08.3** | **-0.2** |
| | comp=Z,0.5nm,0.8s,baz=41,slow=4.9,SNR=2.9 | | | | | | | | |
| PDAR | | | | LR | | LR | 09 20 03.1 | | |
| | comp=Z,32nm,18.5s,baz=208,slow=37 | | | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **94.81** | **314** | P | | **P** | **08 39 44.7** | **+0.2** |
| | comp=Z,0.9nm,0.8s,baz=48,slow=3.8,SNR=10 | | | | | | | | |
| | comp=Z,0.9nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **119.70** | **92** | PKP | | **PKiKP** | **08 45 13.2** | **+0.5** |
| | comp=Z,0.4nm,0.7s,baz=311,slow=1.6,SNR=5.2 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **119.70** | **92** | *c i*PKIKP | | **PKiKP** | **08 45 14.8** | **+2.0** |
| **ASAR** | **Alice Springs** | **121.41** | **96** | PKP | | **PKPdf** | **08 45 15.5** | **-0.4** |
| | comp=Z,0.5nm,0.8s,baz=322,slow=1.5,SNR=4.8 | | | | | | | | |

*NNC* ***31*** *08:27:07.4±1.8, 44.57N×82.07E, h0km, mb3.8, mpv3.5, Error ellipse: s-maj=18.6km s-min=5.7km az=123.0, Suspected Mining explosion.*

*SOME* ***31*** *08:27:10.3, 44.53N×81.80E, h10km*

**ISC 31 08:27:05.3±1.6, 44.42N±0.05×82.22E±0.08, h0km, n21, σ0s95/34, 1C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTMS** | **Ketmen** | **1.66** | **235** | *e*P | **Pg** | **08 27 37.6** | **+0.4** |
| | 3.8nm,0.1s | | | | | | |
| KTMS | | | | *e*S | **Sn** | **08 27 57.0** | **-1.0** |
| | 18nm,0.4s | | | | | | |
| **KTMS** | **Ketmen** | **1.66** | **235** | P | **Pg** | **08 27 37.6** | **+0.4** |
| | 3.8nm,0.1s | | | | | | |
| KTMS | | | | S | **Sn** | **08 27 57.0** | **-1.0** |
| | 18nm,0.4s | | | | | | |
| **DJR** | **Jarkent** | **1.74** | **268** | *e*P | **Pg** | **08 27 40.1** | **+1.4** |
| | 6.8nm,0.2s | | | | | | |
| DJR | | | | *e*S | **Sg** | **08 28 01.2** | **0.0** |
| | 5.5nm,0.2s | | | | | | |
| **DJR** | **Jarkent** | **1.74** | **268** | P | **Pg** | **08 27 40.1** | **+1.4** |
| | 6.8nm,0.2s | | | | | | |
| DJR | | | | S | **Sg** | **08 28 01.2** | **0.0** |
| | 15nm,0.3s | | | | | | |
| **KNOS** | **Konyrlen** | **2.18** | **269** | Pg | **Pg** | **08 27 46.5** | **-0.5** |
| | 10nm,0.2s | | | | | | |
| KNOS | | | | Lg | Lg | 08 28 12.4 | |
| | 19nm,0.3s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.21** | **294** | *e*P | **Pg** | **08 27 47.2** | **-0.5** |
| | 6.5nm,0.1s | | | | | | |
| KAPS | | | | *e*S | **Sb** | **08 28 13.3** | **-0.8** |
| | 36nm,0.2s | | | | | | |
| **KAPS** | **Kapalarasan** | **2.21** | **294** | Pg | **Pg** | **08 27 47.2** | **-0.5** |
| | 6.5nm,0.1s | | | | | | |
| KAPS | | | | Lg | Lg | 08 28 13.3 | |
| | 36nm,0.2s | | | | | | |
| **SHLS** | **Shalkode** | **2.36** | **239** | *e*P | **Pb** | **08 27 48.8** | **0.0** |
| | 16nm,0.2s | | | | | | |
| SHLS | | | | *e*S | **Sn** | **08 28 16.3** | **+1.1** |
| | 22nm,0.3s | | | | | | |
| **SHLS** | **Shalkode** | **2.36** | **239** | Pg | **Pb** | **08 27 48.7** | **-0.1** |
| | 16nm,0.2s | | | | | | |
| SHLS | | | | Lg | Lg | 08 28 16.0 | |
| | 27nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **2.38** | **1** | Pn | **Pn** | **08 27 46.6** | **+1.1** |
| | 5.2nm,0.3s,baz=184,slow=15,SNR=222 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **08 28 14.2** | **-1.2** |
| | 1.4nm,0.2s,baz=193,slow=23,SNR=9.4 | | | | | | |
| **MAKZ** | **Makanchi** | **2.40** | **356** | ⇓Pn | **Pn** | **08 27 46.3** | **+0.6** |
| | 3.2nm,0.3s | | | | | | |
| MAKZ | | | | ⇓Sn | **Sn** | **08 28 14.3** | **-1.5** |
| | 12nm,0.8s | | | | | | |
| **UZB** | **Uzynbulak** | **2.64** | **242** | *e*P | **Pb** | **08 27 54.0** | **+0.5** |
| | 6.4nm,0.3s | | | | | | |
| UZB | | | | *e*S | **Sb** | **08 28 25.1** | **-1.5** |
| | 5.4nm,0.5s | | | | | | |
| **UZB** | **Uzynbulak** | **2.64** | **242** | Pg | **Pb** | **08 27 53.9** | **+0.3** |
| | 6.4nm,0.3s | | | | | | |
| UZB | | | | Lg | Lg | 08 28 24.9 | |
| | 5.4nm,0.5s | | | | | | |
| **BLB** | **Baldybastay** | **2.71** | **264** | Pg | **Pg** | **08 27 56.8** | **-0.4** |
| | 33nm,0.3s | | | | | | |
| BLB | | | | Lg | Lg | 08 28 29.9 | |
| | 16nm,0.2s | | | | | | |
| **KPKS** | **Kokpek** | **2.73** | **251** | *e*P | **Pg** | **08 27 57.0** | **-0.5** |
| | 12nm,0.2s | | | | | | |
| KPKS | | | | *e*S | **Sg** | **08 28 32.0** | **-0.8** |
| | 13nm,0.3s | | | | | | |
| **KPKS** | **Kokpek** | **2.73** | **251** | Pg | **Pg** | **08 27 57.0** | **-0.5** |
| | 12nm,0.2s | | | | | | |
| KPKS | | | | Lg | Lg | 08 28 32.0 | |
| | 13nm,0.3s | | | | | | |
| **SATY** | **Saty** | **3.08** | **245** | *e*P | **Pg** | **08 28 04.0** | **-0.3** |
| | 2.1nm,0.1s | | | | | | |
| SATY | | | | *e*S | **Sg** | **08 28 42.3** | **-1.9** |
| | 19nm,0.3s | | | | | | |
| **SATY** | **Saty** | **3.08** | **245** | Pg | **Pg** | **08 28 04.0** | **-0.3** |
| | 2.1nm,0.1s | | | | | | |
| SATY | | | | Lg

WRA S **S** 08 37 44.5 -3.5
0.7nm,0.7s,baz=331,slow=16,SNR=5.7
WRA ScP **ScP** 08 41 03.1 -0.8
0.6nm,1.0s,baz=330,slow=2.4,SNR=4.8
2.0nm,0.5s
**WB1 Warramunga Ar. 22.55 152** P **P** 08 33 52.5 -0.2
**IPM Ipoh 22.77 282** P **P** 08 33 54.9 0.0
IPM IAmb IAmb 08 33 56.7
comp=Z,18nm,0.7s
**KULM Kulim 23.30 283** P **P** 08 34 00.7 +0.9
**TPUB Ta-pu 23.32 354** P **P** 08 34 00.2 +0.4
TPUB IAmb IAmb 08 34 01.9
comp=Z,25nm,0.7s
**COEN Coen 24.00 126** P **P** 08 34 08.0 +1.9
**COEN Coen 24.00 126** P **P** 08 34 05.0 -1.1
**WRKA Warakurna 25.33 170** P **P** 08 34 18.9 +0.8
**ASAR Alice Springs 25.64 157** P **P** 08 34 21.3 +0.4
comp=Z,1.1nm,0.8s,baz=337,slow=8.9,SNR=8.4
ASAR PcP **PcP** 08 37 47.2 -0.4
comp=Z,1.4nm,0.6s,baz=344,slow=2.1,SNR=9.9
ASAR ScP **ScP** 08 41 12.0 -0.5
comp=Z,0.2nm,0.4s,baz=343,slow=2.9,SNR=4.4
comp=Z,1.1nm,0.8s
**AS01 Alice Springs 25.66 157** P **P** 08 34 22.0 +1.0
**QIS Mount Isa 25.86 143** P **P** 08 34 24.2 +1.3
**JOW Kunigami 27.10 10** P **P** 08 34 35.9 +2.0
JOW IAmb IAmb 08 35 12.7
comp=Z,19nm,1.2s
**CMAR Chiang Mai Arr 30.22 309** P **P** 08 35 01.7 0.0
comp=Z,3.4nm,0.7s,baz=122,slow=9.1,SNR=12
comp=Z,3.4nm,0.7s
**FORT Forrest 30.92 172** P **P** 08 35 10.3 +2.7
**NJ2 Nanjing 32.17 353** *e*P **P** 08 35 20.3 +1.7
NJ2 pmax pmax
comp=Z,8.0nm,0.5s
**PZH PanZhiHua 33.60 323** P **P** 08 35 33.5 +2.2
PZH pmax pmax
comp=Z,7.0nm,0.9s
PZH pmax pmax
comp=Z,100nm,5.7s
**JNU Nakatsue 33.70 11** P **P** 08 35 33.0 +1.0
JNU IAmb IAmb 08 35 45.8
comp=Z,21nm,1.3s
**JMN Monobe 34.98 15** P **P** 08 35 41.9 -1.1
**PATS Pohnpei 35.50 78** P **P** 08 35 48.3 +0.6
**STKA Stephens Creek 36.08 153** P **P** 08 35 53.0 +0.7
comp=Z,1.1nm,0.3s,baz=337,slow=10,SNR=4.2
comp=Z,1.1nm,0.3s
**XAN Xi'an 36.49 340** P **P** 08 35 56.0 +0.2
XAN pmax pmax
comp=Z,11nm,0.8s
**KSRS Korea Array 37.51 6** P **P** 08 36 03.3 -1.0
comp=Z,1.5nm,0.6s,baz=186,slow=9.6,SNR=7.8
comp=Z,1.5nm,0.6s
**JGF Kuroka 37.75 19** P **P** 08 36 05.3 -1.1
JGF IAmb IAmb 08 36 07.5
comp=Z,10nm,0.8s
**MJAR Matsushiro Arr 38.88 19** P **P** 08 36 14.4 -1.5
comp=Z,6.3nm,0.7s,baz=194,slow=9.1,SNR=15
comp=Z,6.3nm,0.7s
**ARMA Armidale 40.44 141** P **P** 08 36 30.4 +1.4
ARMA IAmb IAmb 08 36 47.0
comp=Z,26nm,1.2s
**JMM Marumori 40.97 21** P **P** 08 36 32.5 -0.5
**HHC Hu-ho-hao-te 42.06 347** *e*P **P** 08 36 45.5 +3.5
**CAN Canberra 42.48 148** P **P** 08 36 46.7 +1.2
**CN2 Changchun 43.66 2** *e*P **P** 08 36 46.3 -8.3
**JTM Tenmabayashi 43.67 20** P **P** 08 36 54.6 -0.2
**USRK Ussuriysk Ar. 44.68 9** P **P** 08 37 02.3 -0.4
comp=Z,5.6nm,1.0s,baz=189,slow=5.3,SNR=5.3
comp=Z,5.6nm,1.0s
**MDJ Mudanjiang 44.78 6** P **P** 08 37 03.0 -0.5
MDJ pmax pmax
comp=Z,8.0nm,0.7s
MDJ pmax pmax
comp=Z,110nm,7.1s
**ASAJ Asahikawa 47.16 19** P **P** 08 37 22.0 -0.2
comp=Z,9.5nm,0.7s,baz=265,slow=6.4,SNR=8.1
comp=Z,9.5nm,0.7s
**JKA Kamikawa-asahi 47.16 19** P **P** 08 37 21.6 -0.6
JKA IAmb IAmb 08 37 22.8
comp=Z,13nm,0.8s
**KLR Kul'dur 49.58 7** P **P** 08 37 38.2 -2.4
comp=Z,1.0nm,0.7s,baz=207,slow=9.3,SNR=2.6
comp=Z,1.0nm,0.7s
**SONM Songino Array 49.89 345** P **P** 08 37 42.8 -0.4
SONM PcP **PcP** 08 38 59.6 -1.7
comp=Z,0.9nm,0.7s,baz=132,slow=2.7,SNR=3.1
comp=Z,3.5nm,0.7s
**HEH HeiHe 50.19 3** *e*P **P** 08 37 44.3 -0.9
HEH pmax pmax
comp=Z,11nm,0.9s
**MKAR Makanchi Array 58.82 328** P **P** 08 38 46.2 -1.4
comp=Z,1.1nm,0.5s,baz=120,slow=8.1,SNR=11
MKAR PcP **PcP** 08 39 33.3 -2.1
comp=Z,1.2nm,0.6s,baz=125,slow=4.5,SNR=5.3
comp=Z,1.1nm,0.5s
**PETK Petropavlovsk- 60.15 23** P **P** 08 38 56.2 -0.3
comp=Z,2.8nm,0.7s,baz=172,slow=4.5,SNR=8.0
comp=Z,2.8nm,0.7s
**BKZ Black Stump Fm 62.18 135** P **P** 08 39 10.8 +0.3
BKZ IAmb IAmb 08 39 11.7
comp=Z,9.8nm,1.0s
**MA2 Magadan 63.14 15** P **P** 08 39 16.2 -0.2
comp=Z,9.5nm,0.8s,baz=183,slow=11,SNR=3.9
comp=Z,9.5nm,0.8s
**KURBB Kurchatov Arra 63.16 330** P **P** 08 39 15.4 -1.3
comp=Z,1.1nm,0.7s,baz=132,slow=6.6,SNR=14
comp=Z,1.1nm,0.7s
**KURK Kurchatov 63.18 330** P **P** 08 39 15.9 -1.0
KURK IAmb IAmb 08 39 16.4
comp=Z,2.9nm,0.6s
**SEY Seymchan 66.42 14** P **P** 08 39 37.1 -0.5
comp=Z,4.3nm,0.9s,baz=210,slow=11,SNR=8.0
comp=Z,4.3nm,0.9s
**BVAR Borovoye Array 68.69 329** P **P** 08 39 50.1 -1.9
comp=Z,0.7nm,0.6s,baz=117,slow=6.3,SNR=2.5
comp=Z,0.7nm,0.6s
**M14K Bethel 82.54 29** P **P** 08 41 11.0 +0.4
M14K IAmb IAmb 08 41 45.4
comp=Z,17nm,1.1s
**L16K Owhat River 83.92 28** P **P** 08 41 18.0 +0.3
L16K IAmb IAmb 08 41 47.7
comp=Z,16nm,1.4s
**M16K Timber Creek 84.03 29** P **P** 08 41 18.7 +0.4
**O16K Kokwok River B 84.20 30** P **P** 08 41 19.2 +0.1
O16K IAmb IAmb 08 41 46.9
comp=Z,22nm,1.4s
**E18K Tukpahlearik C 84.66 22** P **P** 08 41 22.1 +0.8
E18K IAmb IAmb 08 42 04.4
comp=Z,14nm,1.4s
**L18K Granite Mounta 85.31 28** P **P** 08 41 25.2 +0.5
L18K IAmb IAmb 08 41 40.3
comp=Z,13nm,1.4s
**G19K Purcell Mounta 85.77 24** P **P** 08 41 27.1 +0.2
**J19K Poorman 86.05 26** P **P** 08 41 27.9 -0.4
**J20K Nowinta River 86.72 26** P **P** 08 41 31.5 -0.1
**ILAR Eielson Array 89.89 25** P **P** 08 41 45.1 -1.5
comp=Z,0.3nm,0.5s,baz=270,slow=4.6,SNR=8.5
comp=Z,0.3nm,0.5s
**QSPA South Pole Qui 89.92 180** P **P** 08 41 47.0 +0.2
comp=Z,2.7nm,1.0s,baz=305,slow=19,SNR=7.1
comp=Z,2.7nm,1.0s
**I28M Miner Creek 92.80 25** P **P** 08 41 60.0 -0.1
I28M IAmb IAmb 08 42 00.9
comp=Z,4.2nm,0.9s
**FARO Faro, Yukon 96.18 27** P **P** 08 42 15.7 +0.1
FARO IAmb IAmb 08 42 16.5
comp=Z,3.2nm,0.7s
**PDAR Pinedale Array 116.35 41** PKP **PKPdf** 08 47 30.3 -0.9
comp=Z,0.2nm,0.5s,baz=297,slow=1.6,SNR=2.1
**TORD Torodi Ar. Bea 120.78 285** PKP **PKPdf** 08 47 38.6 -1.5
comp=Z,0.5nm,0.6s,baz=53,slow=1.8,SNR=3.5
**TXAR Lajitas Array 126.52 53** PKP **PKPdf** 08 47 51.1 +0.2
comp=Z,0.4nm,0.8s,baz=192,slow=1.8,SNR=5.6

**NOU 31 08:47:24.5, 22.74S×172.06E, h0km, mb4.3/8, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MARNC | **Mare, Loyalty** | **3.94** | **288** | P | Pn | 08 48 26.0 | -0.3 |
| PINNC | **Pines Island,** | **4.26** | **271** | P | Pn | 08 48 30.6 | -0.1 |
| YATNC | **Mamie plateau,** | **4.83** | **277** | P | Pn | 08 48 37.8 | -0.7 |
| LIFNC | **LIFOU** | **4.89** | **293** | P | Pn | 08 48 38.9 | -0.4 |
| DZM | **Mont Dzumac** | **5.24** | **276** | P | Pn | 08 48 43.9 | -0.3 |
| NOUC | **Port Laguerre** | **5.36** | **276** | P | Pn | 08 48 45.9 | +0.1 |
| KOUNC | **Koumac, New Ca** | **7.55** | **285** | P | Pn | 08 49 16.0 | +0.1 |

**IDC 31 08:54:55.9±2.6, 54.26N×86.21E, h0km, mbtmp2.8/2, ML2.8/2, Error ellipse: s-maj=21.0km s-min=12.4km az=53.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | **ZALESOVO INFRA** | **0.88** | **250** | I | I | 09 00 20.0 | |
| | baz=67,slow=320,SNR=6.2 | | | | | | |
| ZALV | **Zalesovo Beam** | **0.88** | **249** | Pg | Pg | 08 55 11.2 | -1.5 |
| | 1.4nm,0.3s,baz=68,slow=16,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 08 55 25.7 | |
| | 6.9nm,0.3s,baz=72,slow=29,SNR=6.8 | | | | | | |
| KURBB | **Kurchatov Arra** | **5.94** | **235** | Pn | Pn | 08 56 26.1 | +1.1 |
| | 0.1nm,0.3s,baz=53,slow=13,SNR=7.5 | | | | | | |
| | 0.4nm,0.4s | | | | | | |
| MKAR | **Makanchi Array** | **7.88** | **200** | Pn | Pn | 08 56 52.7 | +0.9 |
| | 0.2nm,0.3s,baz=20,slow=14,SNR=12 | | | | | | |
| | 0.2nm,0.3s | | | | | | |

**IDC 31 09:10:45.8±3.2, 53.48N×87.23E, h0km, mbtmp2.9/2, ML2.2/2, Error ellipse: s-maj=32.8km s-min=16.8km az=61.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| I46RU | **ZALESOVO INFRA** | **1.51** | **289** | I | I | 09 20 45.0 | |
| | baz=107,slow=320,SNR=10.0 | | | | | | |
| ZALV | **Zalesovo Beam** | **1.51** | **289** | Pg | Pn | 09 11 13.4 | -0.7 |
| | 0.3nm,0.3s,baz=110,slow=17,SNR=10.0 | | | | | | |
| ZALV | | | | Lg | Lg | 09 11 33.0 | |
| | 0.8nm,0.3s,baz=105,slow=27,SNR=6.6 | | | | | | |
| KURBB | **Kurchatov Arra** | **6.08** | **245** | Pn | Pn | 09 12 17.8 | +0.9 |
| | baz=62,slow=14,SNR=7.8 | | | | | | |
| | 0.8nm,0.4s | | | | | | |
| MKAR | **Makanchi Array** | **7.40** | **207** | Pn | Pn | 09 12 35.9 | +0.8 |
| | 0.1nm,0.3s,baz=20,slow=12,SNR=4.5 | | | | | | |
| | 0.6nm,0.7s | | | | | | |

**IDC 31 09:23:45.9±1.4, 5.51S×147.32E, h0km, mb3.5/2, mbtmp3.6/4, ML3.2/2, Error ellipse: s-maj=72.4km s-min=27.2km az=112.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PMG | **Port Moresby** | **3.88** | **182** | Pn | Pn | 09 24 48.7 | +1.9 |
| | 21nm,0.3s,baz=18,slow=4.8,SNR=28 | | | | | | |
| PMG | | | | Sn | Sn | 09 25 26.7 | -6.4 |
| | 20nm,0.3s,baz=189,slow=18,SNR=2.5 | | | | | | |
| | 53nm,0.4s | | | | | | |
| WRA | **Warramunga Arr** | **19.12** | **220** | P | P | 09 28 09.2 | -1.4 |
| | 0.2nm,0.3s,baz=47,slow=11,SNR=2.8 | | | | | | |
| WRA | | | | PcP | PcP | 09 32 36.2 | +0.9 |
| | 0.5nm,0.6s,baz=31,slow=1.8,SNR=6.3 | | | | | | |
| | 0.4nm,0.3s | | | | | | |
| ASAR | **Alice Springs** | **22.21** | **214** | P | P | 09 28 42.9 | -1.2 |
| | 0.7nm,0.5s,baz=50,slow=8.6,SNR=16 | | | | | | |
| | 0.7nm,0.5s | | | | | | |
| ILAR | **Eielson Array** | **84.90** | **23** | P | P | 09 36 21.6 | -0.8 |
| | 0.3nm,0.7s,baz=231,slow=4.3,SNR=4.3 | | | | | | |
| | 0.3nm,0.7s | | | | | | |
| TORD | **Torodi Ar. Bea** | **145.28** | **285** | PKPbc | PKPbc | 09 43 26.2 | -0.3 |
| | 0.4nm,0.6s,baz=74,slow=5.2,SNR=3.5 | | | | | | |

**IDC 31 09:32:11.8±2.1, 8.43N×103.09W, h0km, mb3.5/4, mbtmp3.6/5, ML3.0/1, MS3.4/22, Error ellipse: s-maj=66.1km s-min=26.2km az=56.0, Northern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMIG | **Matias Romero** | **11.75** | **42** | LR | LR | 09 38 25.2 | |
| | comp=Z,408nm,21.6s,baz=197,slow=32 | | | | | | |
| APG | **El Apazote** | **13.98** | **61** | Pn | Pn | 09 35 29.7 | -1.9 |
| | 0.1nm,0.3s,baz=295,slow=7.5,SNR=16 | | | | | | |
| APG | | | | Sn | Sn | 09 37 50.1 | -18 |
| | baz=298,slow=12,SNR=5.9 | | | | | | |
| APG | | | | LR | LR | 09 39 41.4 | |
| | comp=Z,21nm,21.9s,baz=214,slow=32 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| LPIG | **La Paz** | **17.05** | **337** | LR | LR | 09 41 16.0 | |
| | comp=Z,150nm,19.5s,baz=160,slow=32 | | | | | | |
| JTS | **Las Juntas de** | **17.99** | **83** | LR | LR | 09 41 20.3 | |
| | comp=Z,104nm,20.6s,baz=262,slow=30 | | | | | | |
| TXAR | **Lajitas Array** | **20.81** | **359** | P | P | 09 36 56.0 | +1.0 |
| | 1.2nm,0.9s,baz=180,slow=12,SNR=12 | | | | | | |
| TXAR | | | | LR | LR | 09 44 27.7 | |
| | comp=Z,111nm,19.0s,baz=169,slow=35 | | | | | | |
| | 1.2nm,0.9s | | | | | | |
| ANMO | **Albuquerque** | **26.57** | **354** | LR | LR | 09 48 09.6 | |
| | comp=Z,98nm,18.7s,baz=172,slow=36 | | | | | | |
| PFO | **Pinon Flats O** | **27.94** | **336** | LR | LR | 09 47 06.9 | |
| | comp=Z,113nm,20.0s,baz=168,slow=32 | | | | | | |
| ROSC | **El Rosal** | **28.79** | **95** | LR | LR | 09 46 55.3 | |
| | comp=Z,87nm,21.9s,baz=18,slow=31 | | | | | | |
| ATAH | **Atahualpa** | **29.07** | **121** | LR | LR | 09 47 27.3 | |
| | comp=Z,203nm,20.3s,baz=285,slow=32 | | | | | | |
| SDV | **Santo Domingo** | **32.09** | **87** | LR | LR | 09 50 10.5 | |
| | comp=Z,66nm,19.4s,baz=277,slow=34 | | | | | | |
| TKL | **Tuckaleechee C** | **32.35** | **30** | LR | LR | 09 53 02.9 | |
| | comp=Z,44nm,19.2s,baz=192,slow=39 | | | | | | |
| PDAR | **Pinedale Array** | **34.67** | **352** | P | P | 09 39 04.4 | +0.9 |
| | 0.2nm,0.5s,baz=178,slow=6.3,SNR=2.5 | | | | | | |
| | 0.2nm,0.5s | | | | | | |
| RPN | **Rapa Nui** | **35.86** | **190** | LR | LR | 09 49 27.9 | |
| | comp=Z,30nm,19.5s,baz=54,slow=29 | | | | | | |
| ULM | **Lac du Bonnet** | **42.12** | **7** | LR | LR | 09 56 37.3 | |
| | comp=Z,54nm,20.8s,baz=220,slow=35 | | | | | | |
| LPAZ | **La Paz** | **42.43** | **125** | P | P | 09 40 09.7 | +0.2 |
| | 1.7nm,0.7s,baz=300,slow=6.4,SNR=7.6 | | | | | | |
| LPAZ | | | | LR | LR | 09 53 54.4 | |
| | comp=Z,14nm,20.7s,baz=296,slow=31 | | | | | | |
| | 1.7nm,0.7s | | | | | | |
| LVC | **Limon Verde** | **45.52** | **133** | LR | LR | 09 55 07.5 | |
| | comp=Z,63nm,20.1s,baz=302,slow=30 | | | | | | |
| SIV | **San Ignacio** | **48.16** | **120** | LR | LR | 09 59 11.8 | |
| | comp=Z,108nm,21.5s,baz=295,slow=34 | | | | | | |
| MDP | **Montagnes des** | **50.18** | **90** | LR | LR | 09 59 36.1 | |
| | comp=Z,41nm,19.9s,baz=292,slow=33 | | | | | | |
| SCHQ | **Schefferville** | **54.53** | **25** | LR | LR | 10 05 39.8 | |
| | comp=Z,50nm,19.8s,baz=210,slow=37 | | | | | | |
| YKA | **Yellowknife Ar** | **54.62** | **353** | LR | LR | 10 05 20.4 | |
| | comp=Z,72nm,18.1s,baz=102,slow=36 | | | | | | |
| PLCA | **Paso Flores** | **57.37** | **151** | LR | LR | 10 01 53.8 | |
| | comp=Z,39nm,18.8s,baz=198,slow=31 | | | | | | |
| ILAR | **Eielson Array** | **64.05** | **341** | P | P | 09 42 46.4 | -0.9 |
| | 0.4nm,0.6s,baz=151,slow=4.8,SNR=9.2 | | | | | | |
| | 0.4nm,0.6s | | | | | | |
| SFJD | **Kangerlussuaq** | **68.24** | **20** | LR | LR | 10 12 34.8 | |
| | comp=Z,60nm,18.7s,baz=266,slow=36 | | | | | | |
| NOA | **NORSAR Array B** | **94.07** | **26** | LR | LR | 10 27 53.0 | |
| | comp=Z,16nm,20.3s,baz=340,slow=36 | | | | | | |

**TAP 31 09:35:32.4, 21.05N×120.00E, h72km±1km, ML3.3, D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SNW | **Nanwan** | **1.14** | **37** | *e*P | Pn | 09 35 53.2 | +0.5 |
| | baz=37 | | | | | | |
| SNW | | | | *e*S | Sn | 09 36 09.2 | +1.3 |
| | baz=37 | | | | | | |
| HEN | **Hengchun** | **1.17** | **36** | *e*P | Pn | 09 35 54.0 | +0.9 |
| | baz=43 | | | | | | |
| HEN | | | | *e*S | Sn | 09 36 10.2 | +1.6 |
| | baz=43 | | | | | | |
| TSEB | **Hengchuen, Pin** | **1.19** | **45** | *e*P | Pn | 09 35 53.0 | -0.3 |
| | baz=43 | | | | | | |
| TSEB | | | | *e*S | Sn | 09 36 09.8 | +0.8 |
| | baz=43 | | | | | | |
| SLIU | **Shizi** | **1.37** | **32** | *e*P | Pn | 09 35 56.7 | +0.9 |
| | baz=33 | | | | | | |
| SLIU | | | | *e*S | Sn | 09 36 14.1 | +0.7 |
| | baz=33 | | | | | | |
| SCZT | **Fangliau** | **1.43** | **23** | P | Pn | 09 35 57.4 | +0.8 |
| | baz=33 | | | | | | |
| SCZT | | | | S | Sn | 09 36 16.1 | +1.4 |
| | baz=33 | | | | | | |
| TAWH | **Dawu Township** | **1.52** | **33** | *e*P | Pn | 09 35 58.6 | +0.9 |
| | baz=33 | | | | | | |
| TAWH | | | | *e*S | Sn | 09 36 17.9 | +1.1 |
| | baz=33 | | | | | | |
| EAST | **Anshuo** | **1.54** | **31** | *i* P | Pn | 09 35 59.1 | +1.1 |
| | baz=39 | | | | | | |
| EAST | | | | S | Sn | 09 36 18.6 | +1.4 |
| | baz=39 | | | | | | |
| TAW | **Tawu** | **1.54** | **32** | P | Pn | 09 35 59.2 | +1.3 |
| | baz=33 | | | | | | |
| TAW | | | | S | Sn | 09 36 17.6 | +0.4 |
| | baz=33 | | | | | | |
| MASBT | **Mashibuluo** | **1.66** | **21** | P | Pn | 09 36 00.7 | +1.1 |
| | baz=29 | | | | | | |
| MASBT | | | | S | Sn | 09 36 20.8 | +0.8 |
| | baz=29 | | | | | | |
| LAY | **Lan-yu** | **1.74** | **55** | *e*P | Pn | 09 36 03.3 | +2.6 |
| | baz=56 | | | | | | |
| LAY | | | | *e*S | Sn | 09 36 21.6 | -0.5 |
| | baz=56 | | | | | | |
| LYUB | **Lan-yu** | **1.75** | **57** | *e*P | Pn | 09 36 03.3 | +2.6 |
| | baz=57 | | | | | | |
| TSMG | **Majia** | **1.75** | **20** | *e*P | Pn | 09 36 01.6 | +0.9 |
| | baz=20 | | | | | | |
| TSMG | | | | *e*S | Sn | 09 36 23.4 | +1.1 |
| | baz=20 | | | | | | |
| ECL | **Taimali** | **1.77** | **30** | *e*P | Pn | 09 36 01.9 | +0.8 |
| | baz=23 | | | | | | |
| SSD | **Sandimen** | **1.78** | **19** | *e*P | Pn | 09 36 02.0 | +0.8 |
| | baz=19 | | | | | | |
| SSD | | | | *e*S | Sn | 09 36 24.5 | +1.5 |
| | baz=19 | | | | | | |
| TWM1 | **Shoushan** | **1.80** | **12** | *e*P | Pn | 09 36 02.6 | +1.1 |
| | baz=3.0 | | | | | | |
| SCST | **Cishan** | **1.88** | **14** | *e*P | Pn | 09 36 03.3 | +0.8 |
| | baz=14 | | | | | | |
| TWG | **Pinlang** | **2.02** | **29** | *e*P | Pn | 09 36 05.5 | +1.2 |
| | baz=39 | | | | | | |
| TWG | | | | *e*S | Sn | 09 36 29.5 | +0.8 |
| | baz=39 | | | | | | |
| TWGBT | **Beinan** | **2.02** | **29** | *e*P | Pn | 09 36 05.5 | +1.1 |
| | baz=30 | | | | | | |
| TWGBT | | | | *e*S | Sn | 09 36 28.8 | 0.0 |
| | baz=30 | | | | | | |
| SLGT | **Liugui** | **2.02** | **17** | *e*P | Pn | 09 36 02.6 | -1.8 |
| | baz=17 | | | | | | |
| SLGT | | | | *e*S | Sn | 09 36 30.2 | +1.5 |
| | baz=17 | | | | | | |
| SGST | **Jiashian** | **2.09** | **15** | *e*P | Pn | 09 36 05.9 | +0.6 |
| | baz=15 | | | | | | |
| SGST | | | | *e*S | Sn | 09 36 31.7 | +1.3 |
| | baz=15 | | | | | | |
| LDUT | **Ludao** | **2.11** | **40** | *e*P | Pn | 09 36 06.1 | +0.5 |
| | baz=40 | | | | | | |
| LDUT | | | | *e*S | Sn | 09 36 31.8 | +0.9 |
| | baz=40 | | | | | | |
| LONT | **Longtian** | **2.12** | **29** | *e*P | Pn | 09 36 06.9 | +1.2 |
| | baz=29 | | | | | | |
| LONT | | | | *e*S | Sn | 09 36 31.9 | +0.8 |
| | baz=29 | | | | | | |
| CHN1 | **Nanshi** | **2.18** | **13** | *e*P | Pn | 09 36 08.3 | +1.8 |
| | baz=13 | | | | | | |
| CHN1 | | | | *e*S | Sn | 09 36 34.5 | +2.0 |
| | baz=13 | | | | | | |
| VCHM | **Qimei** | **2.21** | **346** | *e*P | Pn | 09 36 07.2 | +0.3 |
| | baz=346 | | | | | | |
| VCHM | | | | *e*S | Sn | 09 36 34.1 | +0.8 |
| | baz=346 | | | | | | |
| WDGT | **Dungji** | **2.22** | **352** | *e*P | Pn | 09 36 09.3 | +2.2 |
| | baz=352 | | | | | | |
| TWK | **Hsinying** | **2.25** | **11** | *e*P | Pn | 09 36 09.2 | +1.7 |
| | baz=12 | | | | | | |
| TWK | | | | *e*S | Sn | 09 36 36.1 | +1.8 |
| | baz=12 | | | | | | |
| WTP | **Ta-pu** | **2.25** | **14** | *e*P | Pn | 09 36 08.8 | +1.2 |
| | baz=15 | | | | | | |
| WTP | | | | *e*S | Sn | 09 36 35.5 | +1.1 |
| | baz=15 | | | | | | |
| EDH | **Donghe** | **2.26** | **32** | *e*P | Pn | 09 36 08.8 | +1.2 |
| | baz=32 | | | | | | |
| EDH | | | | *e*S | Sn | 09 36 36.0 | +1.5 |
| | baz=32 | | | | | | |
| TPUB | **Ta-pu** | **2.31** | **14** | *e*P | Pn | 09 36 09.5 | +1.2 |
| | baz=15 | | | | | | |
| TPUB | | | | *e*S | Sn | 09 36 37.0 | +1.2 |
| | baz=15 | | | | | | |
| ECS | **Chishang** | **2.32** | **29** | *e*P | Pn | 09 36 09.4 | +1.0 |
| | baz=37 | | | | | | |
| ELDTW | **Lidau** | **2.32** | **24** | *e*P | Pn | 09 36 10.6 | +2.0 |
| | baz=15 | | | | | | |
| EHD | **Haiduan** | **2.36** | **28** | *e*P | Pn | 09 36 09.8 | +0.8 |
| | baz=36 | | | | | | |
| CHKT | **Chengkung** | **2.40** | **32** | *e*P | Pn | 09 36 10.2 | +0.7 |
| | baz=32 | | | | | | |
| CHKT | | | | *e*S | Sn | 09 36 38.9 | +1.1 |
| | baz=32 | | | | | | |
| FULB | **Fuli** | **2.45** | **29** | *e*P | Pn | 09 36 11.8 | +1.6 |
| | baz=40 | | | | | | |
| FULB | | | | *e*S | Sn | 09 36 42.3 | +3.2 |
| | baz=40 | | | | | | |
| PHUB | **P'eng-hu** | **2.48** | **351** | *e*P | Pn | 09 36 11.2 | +0.6 |
| | baz=351 | | | | | | |
| CHKH | **Chenggong** | **2.49** | **31** | *e*P | Pn | 09 36 11.7 | +1.0 |
| | baz=41 | | | | | | |
| CHKH | | | | *e*S | Sn | 09 36 41.1 | +1.1 |
| | baz=41 | | | | | | |
| PNG | **Penghu** | **2.54** | **351** | *e*P | Pn | 09 36 12.5 | +1.1 |
| | baz=351 | | | | | | |
| YUS | **Yu-Shan** | **2.58** | **20** | *e*P | Pn | 09 36 13.5 | +1.1 |
| | baz=11 | | | | | | |
| TWF1 | **Yuli** | **2.58** | **27** | *e*P | Pn | 09 36 14.1 | +2.1 |
| | baz=40 | | | | | | |
| TWF1 | | | | *e*S | Sn | 09 36 44.4 | +2.1 |
| | baz=40 | | | | | | |
| CHN5 | **Tsauling** | **2.61** | **14** | *e*P | Pn | 09 36 14.0 | +1.6 |
| | baz=14 | | | | | | |
| CHN5 | | | | *e*S | Sn | 09 36 44.1 | +1.0 |
| | baz=14 | | | | | | |
| YULB | **Yu-li** | **2.62** | **27** | *e*P | Pn | 09 36 14.1 | +1.6 |
| | baz=27 | | | | | | |
| YULB | | | | *e*S | Sn | 09 36 43.6 | +0.4 |
| | baz=27 | | | | | | |
| EHY | **Hungye** | **2.73** | **26** | *e*P | Pn | 09 36 15.3 | +1.4 |
| | baz=27 | | | | | | |
| EHY | | | | *e*S | Sn | 09 36 48.6 | +2.7 |
| | baz=27 | | | | | | |
| WHYT | **Xinyi Township** | **2.74** | **16** | *e*P | Pn | 09 36 15.7 | +1.5 |
| | baz=17 | | | | | | |
| HGSD | **Ruisui** | **2.76** | **28** | *e*P | Pn | 09 36 17.2 | +2.8 |
| | baz=39 | | | | | | |
| HGSD | | | | *e*S | Sn | 09 36 48.7 | +2.0 |
| | baz=39 | | | | | | |
| SSLB | **Suanglung** | **2.86** | **18** | *e*P | Pn | 09 36 16.5 | +0.7 |
| | baz=11 | | | | | | |
| SSLB | | | | *e*S | Sn | 09 36 49.2 | +0.1 |
| | baz=11 | | | | | | |
| VWDT | **VWDT** | **2.89** | **21** | *e*P | Pn | 09 36 17.7 | +1.7 |
| | baz=12 | | | | | | |
| SMLT | **Sun Moon Lake** | **2.94** | **16** | *e*P | Pn | 09 36 17.0 | +0.1 |
| | baz=17 | | | | | | |
| TYC | **Yuchr** | **2.94** | **15** | *e*P | Pn | 09 36 18.8 | +1.9 |
| | baz=16 | | | | | | |
| TYC | | | | *e*S | Sn | 09 36 52.5 | +1.3 |
| | baz=16 | | | | | | |
| WARBT | **Fenglin Townsh** | **2.94** | **26** | *e*P | Pn | 09 36 18.2 | +1.3 |
| | baz=37 | | | | | | |
| WARBT | | | | *e*S | Sn | 09 36 51.5 | +0.4 |
| | baz=37 | | | | | | |
| SHUL | **Shoufeng** | **3.08** | **28** | *e*P | Pn | 09 36 20.7 | +2.0 |
| | baz=28 | | | | | | |
| SHUL | | | | *e*S | Sn | 09 36 55.4 | +1.0 |
| | baz=28 | | | | | | |
| VDOS | **Pratas Island** | **3.08** | **264** | *e*P | Pn | 09 36 19.1 | +0.4 |
| | baz=263 | | | | | | |
| VDOS | | | | *e*S | Sn | 09 36 53.0 | -1.5 |
| | baz=263 | | | | | | |
| OWD | **Renai** | **3.08** | **20** | *e*P | Pn | 09 36 20.7 | +1.8 |
| | baz=33 | | | | | | |
| WUSB | **Renai** | **3.10** | **19** | *e*P | Pn | 09 36 21.0 | +1.8 |
| | baz=10.0 | | | | | | |
| WUSB | | | | *e*S | Sn | 09 36 56.2 | +1.1 |
| | baz=10.0 | | | | | | |
| WCS | **Beigang Elemen** | **3.10** | **16** | *e*P | Pn | 09 36 20.9 | +1.9 |
| | baz=16 | | | | | | |
| CHGB | **Renai** | **3.18** | **20** | *e*P | Pn | 09 36 21.6 | +1.2 |
| | baz=10.0 | | | | | | |
| LXIB | **Xiulin Townshi** | **3.23** | **24** | *e*P | Pn | 09 36 22.6 | +1.7 |
| | baz=35 | | | | | | |
| LXIB | | | | *e*S | Sn | 09 37 00.0 | +1.8 |
| | baz=35 | | | | | | |
| WHF | **Hehuan Shan** | **3.29** | **21** | *e*P | Pn | 09 36 24.6 | +2.6 |
| | baz=21 | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| WHF | | | | | *e*S | | Sn | 09 37 02.8 | +2.6 |
| | baz=21 | | | | | | | | | |
| **WHP** | **Taichung City** | **3.32** | **15** | *e*P | | | Pn | 09 36 24.1 | +2.0 |
| | baz=22 | | | | | | | | | |
| WHP | | | | | *e*S | | Sn | 09 37 02.9 | +2.3 |
| | baz=22 | | | | | | | | | |
| **TWD** | **Chiawan** | **3.35** | **26** | *e*P | | | Pn | 09 36 23.9 | +1.4 |
| | baz=35 | | | | | | | | | |
| **TDCB** | **Techi** | **3.36** | **18** | *e*P | | | Pn | 09 36 24.4 | +1.8 |
| | baz=19 | | | | | | | | | |
| TDCB | | | | | *e*S | | Sn | 09 37 02.7 | +1.3 |
| | baz=19 | | | | | | | | | |
| **FUSS** | **Fushou** | **3.38** | **20** | *e*P | | | Pn | 09 36 25.2 | +2.2 |
| | baz=11 | | | | | | | | | |
| **ETLH** | **Xiulin Townshi** | **3.42** | **23** | *e*P | | | Pn | 09 36 24.7 | +1.2 |
| | baz=34 | | | | | | | | | |
| **NACB** | **Ninganchiao** | **3.44** | **25** | *e*P | | | Pn | 09 36 24.1 | +0.5 |
| | baz=34 | | | | | | | | | |
| NACB | | | | | *e*S | | Sn | 09 37 03.2 | 0.0 |
| | baz=34 | | | | | | | | | |
| **ZPLA** | **Ao Xicun** | **3.54** | **324** | *e*P | | | Pn | 09 36 26.2 | +1.3 |
| | baz=324 | | | | | | | | | |
| **NNSB** | **Datong** | **3.59** | **20** | *e*P | | | Pn | 09 36 28.4 | +2.6 |
| | baz=12 | | | | | | | | | |
| **NNSH** | **Datong** | **3.59** | **20** | *e*P | | | Pn | 09 36 28.0 | +2.2 |
| | baz=11 | | | | | | | | | |
| **NNS** | **Nan Shan** | **3.60** | **20** | *e*P | | | Pn | 09 36 28.6 | +2.7 |
| | baz=12 | | | | | | | | | |
| **LIOB** | **Emei** | **3.69** | **14** | *e*P | | | Pn | 09 36 29.0 | +1.9 |
| | baz=15 | | | | | | | | | |
| **NFF** | **Wufeng Townshi** | **3.71** | **16** | *e*P | | | Pn | 09 36 27.8 | +0.5 |
| | baz=5.0 | | | | | | | | | |
| **KNMB** | **Chin-men Tao** | **3.71** | **337** | *e*P | | | Pn | 09 36 28.4 | +1.2 |
| | baz=337 | | | | | | | | | |
| KNMB | | | | | *e*S | | Sn | 09 37 09.9 | +0.2 |
| | baz=337 | | | | | | | | | |
| **EOS4** | **EOS4** | **3.73** | **35** | *e*P | | | Pn | 09 36 28.6 | +1.4 |
| | baz=26 | | | | | | | | | |
| **LATG** | **Datong** | **3.74** | **22** | *e*P | | | Pn | 09 36 29.7 | +1.8 |
| | baz=22 | | | | | | | | | |
| **NDT** | **Datong Townshi** | **3.80** | **21** | *e*P | | | Pn | 09 36 31.2 | +2.7 |
| | baz=11 | | | | | | | | | |
| **NSK** | **Sanguang** | **3.81** | **19** | *e*P | | | Pn | 09 36 31.4 | +2.5 |
| | baz=19 | | | | | | | | | |
| **YHNB** | **Yeheng** | **3.81** | **19** | *e*P | | | Pn | 09 36 30.9 | +2.1 |
| | baz=19 | | | | | | | | | |
| **EOS3** | **EOS3** | **3.86** | **33** | *e*P | | | Pn | 09 36 30.3 | +1.1 |
| | baz=22 | | | | | | | | | |
| **FUSB** | **Fushanzhiwuyua** | **3.97** | **21** | *e*P | | | Pn | 09 36 33.1 | +2.2 |
| | baz=9.0 | | | | | | | | | |
| **PTMZ** | **Houxiangcun** | **4.05** | **349** | *e*P | | | Pn | 09 36 33.7 | +1.8 |
| | baz=349 | | | | | | | | | |
| **MATB** | **Ma-tsu** | **5.08** | **359** | *e*P | | | Pn | 09 36 47.4 | +1.5 |
| | baz=360 | | | | | | | | | |

**NEIC 31 09:35:33.6±1.3, 37°37N±0°03×97°840W±0°009, h5km±1km, mb_Lg2.4/34, ML2.9/38, Error ellipse: s-maj=4.6km s-min=2.5km az=354.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.15** | **239** | | | Pg | 09 35 36.7 | +0.1 |
| KAN12 | | | | Sg | | Sg | 09 35 39.4 | +0.9 |
| **KS21** | **Milan North St** | **0.17** | **122** | Pg | | Pg | 09 35 37.4 | +0.5 |
| KS21 | | | | Sg | | Sg | 09 35 39.2 | +0.1 |
| **KAN08** | **Anthony NE Sta** | **0.18** | **215** | | | Pg | 09 35 38.0 | +0.8 |
| KAN08 | | | | Sg | | Sg | 09 35 39.6 | 0.0 |
| KAN08 | | | | IAML | | | 09 35 40.5 | |
| | comp=N,4μm,0.1s | | | | | | | |
| **KAN01** | **Argonia South** | **0.23** | **164** | | | Pg | 09 35 39.0 | +0.9 |
| KAN01 | | | | Sg | | Sg | 09 35 42.2 | +1.1 |
| KAN01 | | | | IAML | | | 09 35 42.3 | |
| | comp=E,2μm,0.1s | | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.27** | **186** | Pg | | Pg | 09 35 39.6 | +0.8 |
| KAN05 | | | | Sg | | Sg | 09 35 43.2 | +0.9 |
| KAN05 | | | | IAML | | | 09 35 47.9 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **KAN09** | **Caldwell North** | **0.30** | **143** | Pg | | Pg | 09 35 40.4 | +1.0 |
| KAN09 | | | | Sg | | Sg | 09 35 43.8 | +0.5 |
| KAN09 | | | | IAML | | | 09 35 44.8 | |
| | comp=E,2μm,0.3s | | | | | | | |
| KAN09 | | | | IAML | | | 09 35 46.8 | |
| | comp=N,1μm,0.2s | | | | | | | |
| **KAN17** | **Caldwell West** | **0.34** | **170** | | | Pg | 09 35 40.9 | +0.8 |
| KAN17 | | | | Sg | | Sg | 09 35 45.6 | +1.1 |
| KAN17 | | | | IAML | | | 09 35 50.2 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **KAN14** | **Manchester OK** | **0.43** | **193** | | | Pg | 09 35 42.5 | +0.7 |
| KAN14 | | | | Sg | | Sg | 09 35 48.0 | +0.5 |
| KAN14 | | | | IAML | | | 09 35 48.3 | |
| | comp=N,924nm,0.2s | | | | | | | |
| **KAN13** | **South Haven SW** | **0.46** | **141** | Pg | | Pb | 09 35 43.4 | -0.8 |
| KAN13 | | | | Sg | | Sg | 09 35 49.4 | +0.8 |
| **GC02** | **Grant County #** | **0.52** | **182** | Pg | | Pg | 09 35 44.3 | +0.6 |
| GC02 | | | | Sg | | Sg | 09 35 50.9 | +0.4 |
| **OK032** | **Salt Plains WL** | **0.64** | **208** | Pg | | Pg | 09 35 46.2 | +0.2 |
| OK032 | | | | Sg | | Sg | 09 35 54.5 | +0.3 |
| OK032 | | | | IAML | | | 09 35 55.0 | |
| | comp=N,564nm,0.2s | | | | | | | |
| OK032 | | | | IAML | | | 09 35 55.1 | |
| | comp=N,537nm,0.2s | | | | | | | |
| **BLOK** | **Blackwell** | **0.79** | **141** | Pg | | Pg | 09 35 49.2 | +0.4 |
| BLOK | | | | Sg | | Sg | 09 35 59.9 | +0.8 |
| BLOK | | | | IAML | | | 09 36 00.4 | |
| | comp=E,562nm,0.2s | | | | | | | |
| BLOK | | | | IAML | | | 09 36 01.9 | |
| | comp=N,455nm,0.2s | | | | | | | |
| **CROK** | **Carrier** | **0.88** | **188** | Pg | | Pg | 09 35 50.3 | -0.1 |
| CROK | | | | Sg | | Sg | 09 36 02.3 | +0.5 |
| CROK | | | | IAML | | | 09 36 06.2 | |
| | comp=N,428nm,0.3s | | | | | | | |
| CROK | | | | IAML | | | 09 36 10.0 | |
| | comp=E,386nm,0.3s | | | | | | | |
| **NOKA** | **Waynoka** | **1.14** | **230** | Pg | | Pg | 09 35 55.5 | -0.1 |
| NOKA | | | | Sg | | Sg | 09 36 10.6 | +0.2 |
| NOKA | | | | IAML | | | 09 36 17.5 | |
| | comp=E,235nm,0.2s | | | | | | | |
| NOKA | | | | IAML | | | 09 36 17.9 | |
| | comp=N,269nm,0.2s | | | | | | | |
| **OK038** | **West end E0370** | **1.15** | **219** | | | Pg | 09 35 55.2 | -0.4 |
| **T35A** | **Sooner Cattle** | **1.16** | **113** | Pg | | Pb | 09 35 56.2 | +0.1 |
| T35A | | | | Sg | | Sg | 09 36 10.1 | -0.6 |
| T35A | | | | IAML | | | 09 36 16.3 | |
| | comp=E,277nm,0.3s | | | | | | | |
| T35A | | | | IAML | | | 09 36 16.4 | |
| | comp=N,186nm,0.3s | | | | | | | |
| **OK051** | **E0350 and S346** | **1.18** | **137** | Pg | | Pb | 09 35 56.4 | -0.1 |
| **OK048** | **Pawnee Station** | **1.20** | **143** | | | Pb | 09 35 56.7 | 0.0 |
| OK048 | | | | IAML | | | 09 36 17.2 | |
| | comp=N,300nm,0.3s | | | | | | | |
| **R32A** | **Long Quarter,** | **1.25** | **327** | Pg | | Pg | 09 35 57.6 | -0.1 |
| **QUOK** | **Quay** | **1.51** | **143** | | | Pn | 09 36 01.1 | -0.2 |
| **OK029** | **Liberty Lake** | **1.60** | **169** | | | Pb | 09 36 03.6 | -0.2 |
| **OK052** | **Battle Ridge R** | **1.61** | **149** | | | Pb | 09 36 03.4 | -0.4 |
| **OK031** | **S. Brethren Rd** | **1.63** | **150** | | | Pb | 09 36 03.8 | -0.4 |
| **ADOK** | **Arcadia Dam** | **1.76** | **167** | Pn | | Pn | 09 36 04.1 | -0.7 |
| **ELIS** | **Ellis County** | **1.82** | **225** | | | Pn | 09 36 05.8 | +0.2 |
| **CSTR** | **Hydro, Custer** | **1.86** | **202** | Pn | | Pn | 09 36 06.2 | +0.1 |
| **DEOK** | **Depew** | **1.87** | **144** | Pn | | Pn | 09 36 05.8 | -0.5 |
| **KSU1** | **Kansas State U** | **1.98** | **29** | Pn | | Pn | 09 36 07.0 | -0.7 |
| **OKCSW** | **OKLAHOMA CITY** | **1.99** | **170** | Pn | | Pn | 09 36 07.3 | -0.7 |
| **CBKS** | **Cedar Bluff** | **2.08** | **314** | Pn | | Pn | 09 36 08.2 | -1.0 |
| **FNO** | **Franklin** | **2.14** | **170** | Pn | | Pn | 09 36 10.0 | -0.1 |
| **TUL3** | **Leonard** | **2.20** | **131** | | | Pn | 09 36 10.3 | -0.5 |
| TUL3 | | | | IAmb_Lg | | | 09 36 48.4 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **RLO** | **Rose Lookout** | **2.56** | **117** | Pn | | Pn | 09 36 14.9 | -1.0 |
| **WMOK** | **Wichita Mounta** | **2.74** | **196** | Pn | | Pn | 09 36 17.8 | -0.4 |
| **X34A** | **Smith Ranch, M** | **2.77** | **180** | Pn | | Pn | 09 36 17.8 | -0.8 |
| X34A | | | | IAmb_Lg | | | 09 37 08.3 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **U38A** | **Gravette** | **2.92** | **108** | Pn | | Pn | 09 36 21.4 | +0.6 |
| **SMWD** | **Samnorwood** | **2.98** | **221** | Pn | | Pn | 09 36 21.9 | +0.3 |
| **HHAR** | **Hobbs** | **3.31** | **108** | Pn | | Pn | 09 36 25.6 | -0.6 |
| **LOOK** | **Love County** | **3.42** | **171** | Pn | | Pn | 09 36 27.0 | -0.5 |
| **X37A** | **Clayton** | **3.42** | **143** | Pn | | Pn | 09 36 26.2 | -1.5 |
| X37A | | | | IAmb_Lg | | | 09 37 28.0 | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **S39A** | **Bolivar** | **3.60** | **84** | Pn | | Pn | 09 36 31.6 | +1.4 |
| **AMTX** | **Amarillo** | **3.98** | **233** | Pn | | Pn | 09 36 34.5 | -0.8 |
| AMTX | | | | IAmb_Lg | | | 09 37 40.0 | |
| | comp=Z,9.5nm,0.9s | | | | | | | |
| **RTBA** | **Rita Blanca** | **4.03** | **258** | | | Pn | 09 36 37.4 | +1.3 |
| **P38A** | **Dawn** | **4.06** | **55** | IAmb_Lg | | | 09 37 53.4 | |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| **Z35A** | **Perchaven, San** | **4.06** | **173** | IAmb_Lg | | | 09 37 48.3 | |
| | comp=Z,13nm,1.1s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.11** | **295** | Pn | | Pn | 09 36 37.1 | -0.1 |
| **MGMO** | **Mountain Grove** | **4.45** | **91** | Pn | | Pn | 09 36 39.8 | -2.0 |
| MGMO | | | | IAmb_Lg | | | 09 37 56.9 | |
| | comp=Z,8.6nm,0.8s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.46** | **128** | IAmb_Lg | | | 09 38 07.5 | |
| | comp=Z,7.3nm,1.0s | | | | | | | |
| **DKNS** | **Dickens** | **4.47** | **215** | IAmb_Lg | | | 09 37 58.0 | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **R40A** | **Maddies Statio** | **4.50** | **77** | IAmb_Lg | | | 09 37 58.2 | |
| | comp=Z,6.2nm,0.7s | | | | | | | |
| **PLPT** | **Palo Pinto** | **4.57** | **185** | IAmb_Lg | | | 09 38 03.7 | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.98** | **124** | IAmb_Lg | | | 09 38 12.0 | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **K30B** | **Basset** | **5.47** | **346** | IAmb_Lg | | | 09 38 24.8 | |
| | comp=Z,8.7nm,0.8s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.96** | **93** | IAmb_Lg | | | 09 38 42.4 | |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **OZNA** | **Ozona** | **6.99** | **204** | IAmb_Lg | | | 09 39 35.9 | |
| | comp=Z,3.6nm,1.0s | | | | | | | |
| **PHWY** | **Pilot Hill** | **7.09** | **306** | IAmb_Lg | | | 09 39 37.1 | |
| | comp=Z,4.0nm,1.1s | | | | | | | |

**IDC 31 09:50:13.6±3.6, 54°26N×87°32E, h0km, mbtmp2.6/2, ML2.3/2, Error ellipse: s-maj=32.5km s-min=20.6km az=47.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **1.50** | **259** | I | | I | 09 59 40.0 | |
| | baz=79,slow=321,SNR=1.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.50** | **259** | Pg | | Pn | 09 50 40.4 | -1.4 |
| | 1.2nm,0.3s,baz=76,slow=16,SNR=15 | | | | | | | |
| ZALV | | | | Lg | | Lg | 09 51 02.0 | |
| | 1.4nm,0.3s,baz=79,slow=24,SNR=7.2 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.49** | **239** | Pn | | Pn | 09 51 49.9 | -0.4 |
| | baz=55,slow=13,SNR=2.6 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.13** | **205** | Pn | | Pn | 09 52 14.9 | +2.1 |
| | 0.1nm,0.3s,baz=26,slow=15,SNR=1.5 | | | | | | | |
| | 0.1nm,0.3s | | | | | | | |

**IDC 31 09:55:53.0±2.1, 54°27N×86°08E, h0km, mbtmp3.3/3, ML2.9/3, Error ellipse: s-maj=17.3km s-min=10.9km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.81** | **247** | I | | I | 10 01 10.0 | |
| | baz=65,slow=321,SNR=0.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.81** | **247** | Pg | | Pg | 09 56 06.5 | -1.9 |
| | 2.7nm,0.3s,baz=64,slow=16,SNR=19 | | | | | | | |
| ZALV | | | | Lg | | Lg | 09 56 20.0 | |
| | 7.3nm,0.3s,baz=65,slow=29,SNR=20 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.88** | **235** | Pn | | Pn | 09 57 22.2 | +0.9 |
| | 0.3nm,0.3s,baz=51,slow=13,SNR=16 | | | | | | | |
| KURBB | | | | Lg | | Lg | 09 59 03.8 | |
| | 0.1nm,0.3s,baz=52,slow=31,SNR=5.4 | | | | | | | |
| | 0.8nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **7.86** | **199** | Pn | | Pn | 09 57 48.9 | +0.4 |
| | 0.9nm,0.3s,baz=23,slow=13,SNR=29 | | | | | | | |
| MKAR | | | | Lg | | Lg | 10 00 01.0 | |
| | baz=19,slow=32,SNR=3.5 | | | | | | | |
| | 0.8nm,0.3s | | | | | | | |
| **BVAR** | **Borovoye Array** | **9.41** | **269** | Pn | | Pn | 09 58 10.7 | +1.0 |
| | baz=58,slow=14,SNR=2.1 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |

*IDC 31 09:59:19.1±6.0, 37°49N×72°51E, h145km±73km, mb3.3/5, mbtmp3.8/8, Error ellipse: s-maj=109.1km s-min=48.8km az=96.0*

**ISC 31 09:59:19.8±3.1, 37°6N±0°3×72°5E±0°3, h150km, n10, σ1s03/11, mb3.5/5, 5C, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **5.28** | **16** | P | | **Pn** | **10 00 38.2** | **+1.2** |
| | 3.2nm,0.3s,baz=162,slow=6.3,SNR=8.3 | | | | | | | |
| AAK | | | | S | | **Sn** | **10 01 38.1** | **+0.7** |
| | 4.5nm,0.6s,baz=152,slow=16,SNR=3.8 | | | | | | | |
| **KK31** | **Karatay Array** | **5.74** | **345** | ⇑Pn | | Pn | 10 00 37.9 | -5.0 |
| | 1.3nm,0.2s,baz=185,slow=16,SNR=64 | | | | | | | |
| KK31 | | | | Sn | | Sn | 10 01 38.0 | -10 |
| | 4.4nm,0.3s,baz=156,slow=17,SNR=12 | | | | | | | |
| KK31 | | | | ⇑Lg | | Lg | 10 02 03.9 | |
| | 12nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.84** | **23** | ⇑Pn | | **Pn** | **10 00 44.8** | **+0.3** |
| | 2.1nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sn** | **10 01 48.7** | **-2.0** |
| | 1.8nm,0.6s | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 10 02 13.9 | |
| | 1.8nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **15.53** | **355** | P | | **P** | **10 02 51.4** | **-0.2** |
| | 1.1nm,0.6s,baz=165,slow=12,SNR=5.1 | | | | | | | |
| **AKTO** | **Aktubinsk** | **16.52** | **326** | P | | **P** | **10 03 01.4** | **-1.2** |
| | 3.1nm,0.4s,baz=131,slow=9.1,SNR=16 | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.24** | **307** | P | | **P** | **10 05 42.5** | **+0.1** |
| | 0.2nm,0.3s,baz=111,slow=8.1,SNR=2.4 | | | | | | | |
| | 0.2nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **37.29** | **325** | P | | **P** | **10 06 17.6** | **+0.8** |
| | 1.0nm,0.6s,baz=125,slow=12,SNR=3.8 | | | | | | | |
| | 1.0nm,0.6s | | | | | | | |
| **HFS** | **Hagfors** | **42.99** | **321** | P | | **P** | **10 07 04.0** | **+0.2** |
| | 2.0nm,0.8s,baz=82,slow=12,SNR=1.9 | | | | | | | |
| | 2.0nm,0.8s | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.27** | **322** | P | | **P** | **10 07 14.4** | **+0.3** |
| | 0.5nm,0.6s,baz=96,slow=7.7,SNR=2.2 | | | | | | | |
| | 0.5nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.95** | **269** | P | | **P** | **10 09 56.0** | **-0.5** |
| | 0.4nm,0.5s,baz=56,slow=5.5,SNR=5.6 | | | | | | | |
| | 0.4nm,0.5s | | | | | | | |

*NOU 31 10:01:38.9, 22°62S×171°51E, h0km, MLv5.0/8, Southeast of Loyalty Islands*

*NEIC 31 10:02:02.0±1.2, 22°3S±0°1×169°9E±0°1, h22km±8km, mb4.8/15, Error ellipse: s-maj=16.4km s-min=14.6km az=186.0*

*IDC 31 10:02:05.3±0.8, 22°40S×169°89E, h38km±5km, mb3.7/7, mbtmp3.9/8, ML4.1/1, MS3.6/19, Error ellipse: s-maj=26.9km s-min=18.5km az=165.0*

**ISC 31 10:02:02.5±0.6, 22°36S±0°10×169°86E±0°08, h21km, n62, σ1s33/50, mb4.5/19, MS3.6/17, 5C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.91** | **297** | P | | **Pn** | **10 02 33.0** | **-0.8** |
| **PINNC** | **Pines Island,** | **2.25** | **263** | P | | **Pn** | **10 02 37.8** | **-0.6** |
| **PINNC** | **Pines Island,** | **2.25** | **263** | | | **Pn** | **10 02 37.7** | **-0.7** |
| PINNC | | | | | Sn | **Sn** | **10 03 05.5** | **0.0** |
| **YATNC** | **Mamie plateau,** | **2.77** | **276** | P | | **Pn** | **10 02 45.5** | **-0.1** |
| **LIFNC** | **LIFOU** | **2.90** | **302** | P | | **Pn** | **10 02 46.7** | **-0.7** |
| **LIFNC** | **LIFOU** | **2.90** | **302** | | | **Pn** | **10 02 46.5** | **-0.9** |
| **ONTNC** | **Ouen Toro** | **3.15** | **270** | P | | **Pn** | **10 02 50.8** | **-0.1** |
| **ONTNC** | **Ouen Toro** | **3.15** | **270** | | | **Pn** | **10 02 50.7** | **-0.1** |
| **DZM** | **Mont Dzumac** | **3.18** | **275** | P | | **Pn** | **10 02 51.5** | **+0.2** |
| **DZM** | **Mont Dzumac** | **3.18** | **275** | | | **Pn** | **10 02 50.9** | **-0.4** |
| **DZM** | **Mont Dzumac** | **3.18** | **275** | Pn | | **Pn** | **10 02 51.2** | **-0.2** |
| | 20nm,0.3s,baz=129,slow=18,SNR=571 | | | | | | | |
| DZM | | | | | Sn | **Sn** | **10 03 27.5** | **-1.2** |
| | 22nm,0.3s,baz=53,slow=17,SNR=7.3 | | | | | | | |
| | 35nm,0.3s | | | | | | | |
| **NOUC** | **Port Laguerre** | **3.31** | **274** | P | | **Pn** | **10 02 53.3** | **+0.3** |
| **KOUNC** | **Koumac, New Ca** | **5.50** | **288** | | | **Pn** | **10 03 23.8** | **+0.7** |
| **MSVF** | **Nonsavu** | **8.97** | **61** | Pn | | Pn | 10 04 15.6 | +4.7 |
| | 0.2nm,0.3s,baz=199,slow=18,SNR=2.4 | | | | | | | |
| MSVF | | | | LR | | LR | 10 07 05.9 | |
| | comp=Z,392nm,19.7s,baz=240,slow=34 | | | | | | | |
| **RAO** | **Raoul Island** | **12.97** | **124** | LR | | LR | 10 08 47.8 | |
| | comp=Z,251nm,21.3s,baz=270,slow=31 | | | | | | | |
| **LHI** | **Lord Howe Isla** | **13.26** | **224** | Pn | | **Pn** | **10 05 09.9** | **+0.5** |
| **URZ** | **Urewera** | **17.03** | **160** | LR | | LR | 10 11 04.0 | |
| | comp=Z,110nm,19.9s,baz=62,slow=32 | | | | | | | |
| **CTA** | **Charters Tower** | **22.12** | **271** | LR | | LR | 10 15 10.7 | |
| | comp=Z,8.1nm,18.5s,baz=92,slow=36 | | | | | | | |
| **STKA** | **Stephens Creek** | **26.82** | **243** | P | | **P** | **10 07 42.8** | **+1.4** |
| | 2.1nm,0.7s,baz=102,slow=17,SNR=3.4 | | | | | | | |
| STKA | | | | LR | | LR | 10 17 50.6 | |
| | comp=Z,99nm,18.4s,baz=47,slow=35 | | | | | | | |
| | 2.1nm,0.7s | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **BBOO** | **Buckleboo** | **31.60** | **243** | P | | **P** | **10 08 23.9** | **+0.1** |
| **WR0** | **Warramunga Arr** | **32.98** | **267** | P | | **P** | **10 08 36.2** | **0.0** |
| **AS31** | **Alice Springs** | **33.07** | **261** | P | | **P** | **10 08 35.6** | **-1.3** |
| **ASAR** | **Alice Springs** | **33.07** | **261** | P | | **P** | **10 08 37.5** | **+0.6** |
| | 2.1nm,0.8s,baz=78,slow=8.8,SNR=17 | | | | | | | |
| ASAR | | | | pP | | **pwP** | **10 08 49.0** | **+0.2** |
| | 4.3nm,0.7s,baz=86,slow=9.6,SNR=15 | | | | | | | |
| ASAR | | | | LR | | LR | 10 21 25.2 | |
| | comp=Z,156nm,19.4s,baz=98,slow=35 | | | | | | | |
| | 2.1nm,0.8s | | | | | | | |
| **WB0** | **Warramunga Arr** | **33.15** | **268** | P | | **P** | **10 08 35.8** | **-1.9** |
| WB0 | | | | IAmb | | IAmb | 10 08 52.2 | |
| | comp=Z,8.3nm,0.9s | | | | | | | |
| **WB2** | **Warramunga Arr** | **33.16** | **267** | P | | **P** | **10 08 37.4** | **-0.3** |
| WB2 | | | | IAmb | | IAmb | 10 08 51.9 | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **33.16** | **267** | P | | **P** | **10 08 35.7** | **-2.0** |
| **WRA** | **Warramunga Arr** | **33.17** | **267** | P | | **P** | **10 08 37.7** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=100,slow=8.1,SNR=10 | | | | | | | |
| WRA | | | | pP | | **pwP** | **10 08 50.2** | **+0.7** |
| | comp=Z,3.8nm,0.7s,baz=100,slow=8.1,SNR=15 | | | | | | | |
| WRA | | | | LR | | LR | 10 22 37.8 | |
| | comp=Z,171nm,18.3s,baz=340,slow=37 | | | | | | | |
| | comp=Z,1.2nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **39.33** | **272** | P | | **P** | **10 09 29.1** | **-1.4** |
| KNRA | | | | IAmb | | IAmb | 10 09 44.9 | |
| | comp=Z,10nm,0.8s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.60** | **268** | P | | **P** | **10 09 47.4** | **-1.9** |
| **MBWA** | **Marble Bar** | **46.40** | **262** | P | | **P** | **10 10 27.9** | **+0.1** |
| MBWA | | | | IAmb | | IAmb | 10 10 43.2 | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.37** | **245** | P | | **P** | **10 10 35.7** | **+0.5** |
| **NWAO** | **Narrogin (SRO)** | **47.37** | **245** | LR | | LR | 10 30 46.1 | |
| | comp=Z,122nm,18.7s,baz=212,slow=36 | | | | | | | |
| **KAPI** | **Kappang** | **51.37** | **282** | LR | | LR | 10 34 01.4 | |
| | comp=Z,44nm,18.3s,baz=118,slow=37 | | | | | | | |
| **DAV** | **Davao City (W)** | **52.30** | **299** | LR | | LR | 10 34 24.6 | |
| | comp=Z,46nm,18.3s,baz=140,slow=37 | | | | | | | |
| **SBA** | **Scott Base** | **55.57** | **181** | P | | **P** | **10 11 35.5** | **-0.3** |
| SBA | | | | IAmb | | IAmb | 10 11 49.5 | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.71** | **180** | P | | **P** | **10 12 58.3** | **+0.1** |
| QSPA | | | | IAmb | | IAmb | 10 13 10.6 | |
| | comp=Z,8.7nm,1.0s | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.71** | **180** | P | | **P** | **10 12 58.9** | **+0.8** |
| | comp=Z,1.0nm,0.8s,baz=64,slow=2.1,SNR=7.5 | | | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **MAW** | **Mawson** | **75.78** | **202** | LR | | LR | 10 44 27.6 | |
| | comp=Z,79nm,18.3s,baz=6.5,slow=34 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.89** | **352** | pP | | **pP** | **10 13 58.7** | **+6.8** |
| | comp=Z,2.5nm,0.6s,baz=133,slow=5.8,SNR=5.5 | | | | | | | |
| PETK | | | | LR | | LR | 10 42 30.1 | |
| | comp=Z,28nm,19.1s,baz=207,slow=32 | | | | | | | |
| **KLR** | **Kul'dur** | **78.94** | **336** | LR | | LR | 10 44 34.3 | |
| | comp=Z,27nm,20.6s,baz=152,slow=32 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **80.31** | **294** | pP | | pP | 10 14 23.8 | +5.9 |
| | comp=Z,3.0nm,1.1s,baz=143,slow=6.2,SNR=2.4 | | | | | | | |
| **MA2** | **Magadan** | **83.13** | **350** | LR | | LR | 10 45 50.4 | |
| | comp=Z,23nm,19.1s,baz=202,slow=32 | | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.48** | **184** | ⇑P | | **P** | **10 14 38.2** | **-0.3** |
| | comp=Z,103nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **86.08** | **182** | P | | **P** | **10 14 41.6** | **+0.2** |
| SNAA | | | | IAmb | | IAmb | 10 14 53.1 | |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **86.08** | **182** | ⇑P | | **P** | **10 14 41.5** | **+0.1** |
| | comp=Z,18nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **86.08** | **182** | P | | **P** | **10 14 41.4** | **+0.1** |
| | comp=Z,1.0nm,0.9s,baz=210,slow=8.1,SNR=7.1 | | | | | | | |
| SNAA | | | | pP | | **pwP** | **10 14 52.0** | **-2.6** |
| | comp=Z,3.8nm,1.0s,baz=190,slow=11,SNR=6.5 | | | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.65** | **180** | ⇑P | | **P** | **10 14 44.5** | **+0.4** |
| | comp=Z,3.8nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.95** | **181** | ⇑P | | **P** | **10 14 46.0** | **+0.4** |
| | comp=Z,3.1nm,0.6s,baz=168,slow=4.1 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.24** | **181** | ⇑P | | **P** | **10 14 47.0** | **+0.1** |
| | comp=Z,3.2nm,1.0s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **89.13** | **44** | LR | | LR | 10 48 23.2 | |
| | comp=Z,13nm,19.2s,baz=298,slow=31 | | | | | | | |
| **PFO** | **Pinyon Flats O** | **89.50** | **53** | LR | | LR | 10 48 35.5 | |
| | comp=Z,29nm,18.7s,baz=215,slow=31 | | | | | | | |
| **YAK** | **Yakutsk** | **90.01** | **342** | LR | | LR | 10 56 21.8 | |
| | comp=Z,27nm,18.0s,baz=180,slow=36 | | | | | | | |
| **SONM** | **Songino Array** | **90.05** | **323** | pP | | pP | 10 15 13.1 | +7.4 |
| | comp=Z,0.4nm,0.3s,baz=128,slow=4.0,SNR=1.8 | | | | | | | |
| **LPIG** | **La Paz** | **90.24** | **64** | LR | | LR | 10 48 25.9 | |
| | comp=Z,17nm,19.1s,baz=206,slow=31 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.43** | **48** | P | | **P** | **10 15 02.4** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=210,slow=3.1,SNR=1.5 | | | | | | | |
| NVAR | | | | pP | | **pwP** | **10 15 14.9** | **-1.1** |
| | comp=Z,0.9nm,0.9s,baz=224,slow=6.8,SNR=4.3 | | | | | | | |
| | comp=Z,0.1nm,0.3s | | | | | | | |
| **BBB** | **Bella Bella** | **91.76** | **33** | LR | | LR | 10 50 28.1 | |
| | comp=Z,16nm,18.

0.5nm,0.6s,baz=218,slow=9.7,SNR=1.9
**SONM Songino Array 27.11 305** P **P** **10 10 12.2 +1.1**
0.4nm,0.4s,baz=99,slow=9.1,SNR=1.6
0.4nm,0.4s
**MKAR Makanchi Array 43.39 302** P **P** **10 12 29.5 -0.6**
0.2nm,0.5s,baz=80,slow=12,SNR=3.0
0.2nm,0.5s
**KURBB Kurchatov Arra 45.40 308** P **P** **10 12 45.0 -1.0**
0.3nm,0.4s,baz=80,slow=7.1,SNR=5.8
0.3nm,0.4s
**ILAR Eielson Array 50.63 32** P **P** **10 13 25.6 -0.6**
0.4nm,0.7s,baz=273,slow=5.5,SNR=5.8
0.4nm,0.7s
**WRA Warramunga Arr 56.34 186** P **P** **10 14 08.0 -0.3**
0.4nm,0.3s,baz=360,slow=7.6,SNR=10
0.4nm,0.3s
**ASAR Alice Springs 60.06 186** P **P** **10 14 35.1 +0.9**
0.3nm,0.7s,baz=347,slow=4.6,SNR=6.4
0.3nm,0.7s

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*IDC **31** 10:26:41.8±4.0, 31°.69S × 70°.58W, h69km ± 33km, mb3.9/5, mbtmp4.2/8, ML4.1/3, MS2.6/2, Error ellipse: s-maj=44.7km s-min=21.2km az=101.0*
*SJA **31** 10:26:42.6±0.6, 31°.79S × 70°.71W, h113km ± 3km, ML4.0, MW4.0*
*GUC **31** 10:26:44.9±0.8, 31°.81S × 70°.65W, h97km ± 4km, ML4.0*
*NEIC **31** 10:26:44.3±1.3, 31°.80S ± 0°.02 × 70°.74W ± 0°.07, h104km ± 7km, mb4.4/12, ML4.0(GUC), Error ellipse: s-maj=8.6km s-min=2.9km az=92.0*
**ISC 31 10:26:43.8**±0.6, **31°.79S**±0°.03 × **70°.72W**±0°.03, **h101**km±5km, **n123**, σ1°.37/155, **mb4.3**/11, **10C-2D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CO04** | **Los Peladeros** | **0.33** | **220** | ⇑*i* P | | **Pn** | **10 26 59.4** | **+0.5** |
| CO04 | | | | *e*S | | **Sn** | **10 27 10.7** | **+0.4** |
| **CO02** | **Combarbal** | **0.63** | **338** | Pn | | **Pn** | **10 27 01.7** | **+0.9** |
| CO02 | | | | Sn | | **Sn** | **10 27 14.9** | **+1.5** |
| **CO02** | **Combarbal** | **0.63** | **338** | *e*P | | **Pn** | **10 27 01.6** | **+0.7** |
| CO02 | | | | *e*S | | **Sn** | **10 27 15.5** | **+2.0** |
| CO02 | | | | IAML | | | 10 27 16.8 | |
| | comp=Z,6μm,0.1s | | | | | | | |
| **CO02** | **Combarbal** | **0.63** | **338** | ⇑*i* P | | **Pn** | **10 27 01.8** | **+1.0** |
| CO02 | | | | *e*S | | **Sn** | **10 27 15.0** | **+1.5** |
| **VA06** | **Catapilco** | **0.91** | **212** | | | **Pn** | **10 27 04.1** | **+0.8** |
| VA06 | | | | Sn | | **Sn** | **10 27 18.4** | **+0.4** |
| **CO03** | **El Pedregal** | **0.94** | **2** | Pn | | **Pn** | **10 27 04.6** | **+0.8** |
| CO03 | | | | Sn | | **Sn** | **10 27 19.8** | **+1.0** |
| **CO03** | **El Pedregal** | **0.94** | **2** | *e*P | | **Pn** | **10 27 04.4** | **+0.6** |
| CO03 | | | | *e*S | | **Sn** | **10 27 20.4** | **+1.6** |
| CO03 | | | | IAML | | | 10 27 23.3 | |
| | comp=Z,5μm,0.5s | | | | | | | |
| **CO03** | **El Pedregal** | **0.94** | **2** | ⇑*i* P | | **Pn** | **10 27 04.8** | **+1.0** |
| CO03 | | | | *e*S | | **Sn** | **10 27 19.7** | **+1.0** |
| CO03 | | | | IAML | | | 10 27 20.5 | |
| | comp=E,14μm,0.3s | | | | | | | |
| **VA03** | **San Esteban** | **0.98** | **172** | Pn | | **Pn** | **10 27 04.9** | **+0.7** |
| VA03 | | | | Sn | | **Sn** | **10 27 20.4** | **+0.9** |
| **VA03** | **San Esteban** | **0.98** | **172** | *e*P | | **Pn** | **10 27 04.9** | **+0.7** |
| VA03 | | | | *e*S | | **Sn** | **10 27 21.0** | **+1.4** |
| VA03 | | | | IAML | | | 10 27 22.4 | |
| | comp=Z,4μm,0.4s | | | | | | | |
| **VA03** | **San Esteban** | **0.98** | **172** | *i* P | | **Pn** | **10 27 05.0** | **+0.8** |
| VA03 | | | | *e*S | | **Sn** | **10 27 20.4** | **+0.9** |
| **ROCH** | **El Roble** | **1.21** | **192** | *i* P | | **Pn** | **10 27 07.3** | **+0.5** |
| ROCH | | | | *e*S | | **Sn** | **10 27 25.1** | **+0.9** |
| ROCH | | | | IAML | | | 10 27 28.4 | |
| | comp=N,2μm,0.8s | | | | | | | |
| **ROC1** | **El Roble** | **1.21** | **192** | *e*P | | Pn | 10 27 00.5 | -6.4 |
| ROC1 | | | | *e*S | | **Sn** | **10 27 24.6** | **+0.3** |
| **RTLS** | **Leoncito** | **1.21** | **91** | *e*P | | **Pn** | **10 27 07.4** | **+0.4** |
| RTLS | | | | *e*S | | **Sn** | **10 27 26.6** | **+2.1** |
| RTLS | | | | IAML | | | 10 27 28.1 | |
| | comp=Z,3μm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **1.35** | **179** | Pn | | **Pn** | **10 27 08.9** | **+0.6** |
| **PEL** | **Peldehue** | **1.35** | **179** | *e*P | | Pn | 10 26 55.2 | -13 |
| PEL | | | | *e*S | | **Sn** | **10 27 28.1** | **+1.2** |
| **CO06** | **Fray Jorge** | **1.36** | **325** | | | **Pn** | **10 27 09.7** | **+1.4** |
| **CO06** | **Fray Jorge** | **1.36** | **325** | ⇑*i* P | | **Pn** | **10 27 09.8** | **+1.4** |
| CO06 | | | | *e*S | | **Sn** | **10 27 28.7** | **+1.8** |
| CO06 | | | | IAML | | | 10 27 33.5 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **VA01** | **Torpederas** | **1.46** | **212** | Pn | | **Pn** | **10 27 10.2** | **+0.6** |
| **MT02** | **Curacav** | **1.51** | **193** | | | **Pn** | **10 27 10.8** | **+0.6** |
| **MT02** | **Curacav** | **1.51** | **193** | *e*P | | **Pn** | **10 27 10.8** | **+0.6** |
| MT02 | | | | *e*S | | **Sn** | **10 27 31.4** | **+1.1** |
| MT02 | | | | IAML | | | 10 27 31.4 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| **MT02** | **Curacav** | **1.51** | **193** | ⇓*i* P | | **Pn** | **10 27 10.8** | **+0.6** |
| MT02 | | | | *e*S | | **Sn** | **10 27 30.6** | **+0.4** |
| MT02 | | | | IAML | | | 10 27 31.6 | |
| | comp=N,3μm,0.4s | | | | | | | |
| **FCH** | **Farellones** | **1.58** | **167** | ⇓*i* P | | **Pn** | **10 27 12.8** | **+1.4** |
| FCH | | | | *e*S | | **Sn** | **10 27 33.9** | **+1.6** |
| FCH | | | | IAML | | | 10 27 34.8 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **MT05** | **Renca** | **1.60** | **180** | | | **Pn** | **10 27 11.6** | **+0.2** |
| **MT05** | **Renca** | **1.60** | **180** | *e*P | | **Pn** | **10 27 13.6** | **+2.2** |
| MT05 | | | | IAML | | | 10 27 41.7 | |
| | comp=Z,942nm,0.3s | | | | | | | |
| **GO04** | **Tololo Observa** | **1.61** | **358** | | | **Pn** | **10 27 12.3** | **+0.6** |
| **GO04** | **Tololo Observa** | **1.61** | **358** | *e*P | | **Pn** | **10 27 12.3** | **+0.6** |
| GO04 | | | | *e*S | | **Sn** | **10 27 34.1** | **+1.3** |
| **GO04** | **Tololo Observa** | **1.61** | **358** | ⇑*e*P | | **Pn** | **10 27 12.3** | **+0.6** |
| **DOCA** | **Reserva Natura** | **1.63** | **60** | *e*P | | **Pn** | **10 27 12.8** | **+0.8** |
| DOCA | | | | *e*S | | **Sn** | **10 27 34.5** | **+1.0** |
| DOCA | | | | IAML | | | 10 27 38.2 | |
| | comp=Z,2μm,1.0s | | | | | | | |
| **MT16** | **CCHEN** | **1.65** | **174** | Pn | | **Pn** | **10 27 12.8** | **+0.8** |
| **MT04** | **Ro Olivares** | **1.69** | **163** | *e*P | | **Pn** | **10 27 14.2** | **+1.6** |
| MT04 | | | | *e*S | | **Sn** | **10 27 36.7** | **+2.1** |
| MT04 | | | | IAML | | | 10 27 39.6 | |
| | comp=Z,975nm,0.2s | | | | | | | |
| **MT03** | **Universidad Ad** | **1.71** | **174** | | | **Pn** | **10 27 13.6** | **+0.8** |
| **MT03** | **Universidad Ad** | **1.71** | **174** | *e*P | | **Pn** | **10 27 14.2** | **+1.3** |
| MT03 | | | | *e*S | | **Sn** | **10 27 35.6** | **+0.8** |
| MT03 | | | | IAML | | | 10 27 40.8 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.76** | **160** | Pn | | **Pn** | **10 27 15.5** | **+2.0** |
| **MT08** | **Bocatoma Ro** | **1.76** | **160** | *e*P | | **Pn** | **10 27 15.1** | **+1.6** |
| MT08 | | | | IAML | | | 10 27 44.1 | |
| | comp=Z,537nm,0.6s | | | | | | | |
| **ZON** | **Zonda** | **1.76** | **83** | Pn | | **Pn** | **10 27 13.8** | **+0.4** |
| **ZON** | **Zonda** | **1.76** | **83** | *e*P | | **Pn** | **10 27 13.8** | **+0.4** |
| ZON | | | | *e*S | | **Sn** | **10 27 37.2** | **+1.3** |
| ZON | | | | IAML | | | 10 27 37.7 | |
| | comp=Z,1μm,0.3s | | | | | | | |
| **ASAL** | **Salagasta** | **1.79** | **117** | *e*P | | **Pn** | **10 27 15.2** | **+1.5** |
| ASAL | | | | *e*S | | **Sn** | **10 27 38.4** | **+1.8** |
| ASAL | | | | IAML | | | 10 27 41.4 | |
| | comp=Z,1μm,1.2s | | | | | | | |
| **ARCO** | **CERRO ARCO** | **1.84** | **125** | *e*P | | **Pn** | **10 27 16.5** | **+2.0** |
| ARCO | | | | *e*S | | **Sn** | **10 27 40.2** | **+2.3** |
| ARCO | | | | IAML | | | 10 27 41.4 | |
| | comp=Z,2μm,0.6s | | | | | | | |
| **ACCO** | **Cerro Coronel** | **1.86** | **50** | *e*P | | **Pn** | **10 27 16.0** | **+1.1** |
| ACCO | | | | *e*S | | **Sn** | **10 27 40.6** | **+2.1** |
| ACCO | | | | IAML | | | 10 27 45.3 | |
| | comp=Z,578nm,0.3s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **1.86** | **93** | *e*P | | **Pn** | **10 27 15.0** | **+0.4** |
| RTCV | | | | *e*S | | **Sn** | **10 27 38.6** | **+0.5** |
| RTCV | | | | IAML | | | 10 27 40.8 | |
| | comp=Z,427nm,4.0s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.88** | **17** | | | **Pn** | **10 27 16.6** | **+1.4** |
| **CO01** | **Juntas del Tor** | **1.88** | **17** | *e*P | | **Pn** | **10 27 16.6** | **+1.4** |
| CO01 | | | | *e*S | | **Sn** | **10 27 39.8** | **+0.8** |
| CO01 | | | | IAML | | | 10 27 40.7 | |
| | comp=Z,427nm,0.8s | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.88** | **17** | *i* P | | **Pn** | **10 27 16.6** | **+1.4** |
| CO01 | | | | *e*S | | **Sn** | **10 27 39.9** | **+0.9** |
| **CO05** | **La Serena** | **1.91** | **346** | | | **Pn** | **10 27 16.1** | **+0.8** |
| **CO05** | **La Serena** | **1.91** | **346** | *e*P | | **Pn** | **10 27 16.2** | **+0.9** |
| **AROD** | **Rodeo** | **1.94** | **34** | *e*P | | **Pn** | **10 27 17.7** | **+1.7** |
| AROD | | | | *e*S | | **Sn** | **10 27 43.1** | **+2.7** |
| **RTLL** | **Cerro Villicun** | **1.97** | **77** | *e*S | | **Sn** | **10 27 41.3** | **+0.5** |
| **MT13** | **San Alfonso** | **1.99** | **169** | | | **Pn** | **10 27 17.8** | **+1.5** |
| **MT13** | **San Alfonso** | **1.99** | **169** | *e*P | | **Pn** | **10 27 17.2** | **+0.9** |
| MT13 | | | | IAML | | | 10 27 45.1 | |
| | comp=Z,810nm,0.5s | | | | | | | |
| **MT09** | **Talagante** | **2.00** | **186** | | | **Pn** | **10 27 16.9** | **+0.4** |
| **AAGR** | **Agrelo** | **2.06** | **129** | *e*P | | **Pn** | **10 27 19.2** | **+2.0** |
| AAGR | | | | *e*S | | **Sn** | **10 27 45.1** | **+2.3** |
| AAGR | | | | IAML | | | 10 27 48.4 | |
| | comp=Z,722nm,0.3s | | | | | | | |
| **LMEL** | **Las Melosas** | **2.10** | **168** | | | **Pn** | **10 27 18.1** | **+0.3** |
| **LMEL** | **Las Melosas** | **2.10** | **168** | *e*P | | **Pn** | **10 27 18.8** | **+0.9** |
| **ACDV** | **Cuesta del Vie** | **2.12** | **41** | *e*P | | Pn | 10 27 06.4 | -12 |
| ACDV | | | | IAML | | | 10 27 48.9 | |
| | comp=Z,308nm,0.4s | | | | | | | |
| **MT01** | **Popeta** | **2.12** | **192** | | | **Pn** | **10 27 18.6** | **+0.6** |
| **MT01** | **Popeta** | **2.12** | **192** | *e*P | | **Pn** | **10 27 17.8** | **-0.1** |
| MT01 | | | | *e*S | | **Sn** | **10 27 44.6** | **+0.5** |
| MT01 | | | | IAML | | | 10 27 45.5 | |
| | comp=Z,757nm,0.3s | | | | | | | |
| **MT01** | **Popeta** | **2.12** | **192** | *i* P | | **Pn** | **10 27 18.5** | **+0.6** |
| MT01 | | | | *e*S | | **Sn** | **10 27 44.3** | **+0.3** |
| MT01 | | | | IAML | | | 10 27 46.0 | |
| | comp=E,986nm,0.2s | | | | | | | |
| **BO04** | **La Punta** | **2.20** | **178** | | | **Pn** | **10 27 19.5** | **+0.5** |
| **BO01** | **Tunca** | **2.62** | **187** | Pn | | **Pn** | **10 27 24.8** | **+0.3** |
| **BO01** | **Tunca** | **2.62** | **187** | *e*P | | **Pn** | **10 27 24.8** | **+0.3** |
| BO01 | | | | IAML | | | 10 28 00.4 | |
| | comp=Z,270nm,0.3s | | | | | | | |
| **LCO** | **Las Campanas** | **2.77** | **0** | | | **Pn** | **10 27 27.2** | **+0.5** |
| **LCO** | **Las Campanas** | **2.77** | **0** | *e*P | | **Pn** | **10 27 27.0** | **+0.2** |
| LCO | | | | IAML | | | 10 28 02.7 | |
| | comp=Z,780nm,0.4s | | | | | | | |
| **AC05** | **El Transito** | **2.97** | **8** | Pn | | **Pn** | **10 27 30.4** | **+1.1** |
| **GO05** | **Huala** | **3.37** | **197** | Pn | | **Pn** | **10 27 33.8** | **-0.7** |
| **GO05** | **Huala** | **3.37** | **197** | *e*S | | **Sn** | **10 28 13.3** | **-0.4** |
| **ACHE** | **Chepes** | **3.52** | **81** | *e*S | | **Sn** | **10 28 15.8** | **-1.8** |
| ACHE | | | | *e*S | | **Sn** | **10 28 15.8** | **-1.8** |
| **AC04** | **Llanos de Chal** | **3.58** | **355** | Pn | | **Pn** | **10 27 38.2** | **+0.8** |
| **AC04** | **Llanos de Chal** | **3.58** | **355** | *e*P | | **Pn** | **10 27 38.2** | **+0.8** |
| **ACLC** | **CERRO LA CRUZ** | **4.01** | **55** | *e*P | | **Pn** | **10 27 43.1** | **-0.2** |
| **GO03** | **Copiap** | **4.20** | **6** | | | **Pn** | **10 27 45.9** | **+0.1** |
| **AC06** | **Mina Casimiro** | **4.43** | **4** | Pn | | **Pn** | **10 27 48.9** | **+0.1** |
| **BI02** | **San Fabin de** | **4.89** | **185** | | | **Pn** | **10 27 55.2** | **+0.2** |
| **BI05** | **Punta Hualpn** | **5.39** | **202** | Pn | | **Pn** | **10 28 03.3** | **-1.7** |
| **AC01** | **Pan de Azucar** | **5.62** | **1** | Pn | | **Pn** | **10 28 03.3** | **-1.6** |
| **GO02** | **Mina Guanaco** | **6.67** | **9** | Pn | | **Pn** | **10 28 18.0** | **-1.6** |
| **VA04** | **Juan Fernndez** | **7.08** | **253** | Pn | | **Pn** | **10 28 24.6** | **-0.1** |
| **PB14** | **IPOC Station P** | **7.14** | **2** | Pn | | **Pn** | **10 28 25.8** | **-0.1** |
| **GO06** | **Curarrehue** | **7.80** | **184** | Pn | | **Pn** | **10 28 34.9** | **+0.3** |
| **LR05** | **Currie** | **8.49** | **187** | Pn | | **Pn** | **10 28 43.5** | **-0.4** |
| **AF01** | **San Pedro de A** | **9.09** | **15** | Pn | | **Pn** | **10 28 49.3** | **-3.1** |
| **LL04** | **Puerto Octay** | **9.21** | **188** | Pn | | **Pn** | **10 28 50.9** | **-2.7** |
| **LVC** | **Limon Verde** | **9.28** | **10** | P | | **Pn** | **10 28 51.1** | **-3.9** |
| | comp=Z,0.9nm,0.3s,baz=98,slow=16,SNR=3.3 | | | | | | | |
| LVC | | | | LR | | LR | 10 32 25.8 | |
| | comp=Z,37nm,19.3s,baz=192,slow=38 | | | | | | | |
| | comp=Z,2.3nm,0.3s | | | | | | | |
| **PB04** | **IPOC Station P** | **9.43** | **3** | Pn | | **Pn** | **10 28 53.8** | **-3.1** |
| **TRQA** | **Tornquist** | **9.52** | **133** | Pn | | **Pn** | **10 28 56.1** | **-1.8** |
| **LL05** | **Los Muermos** | **9.85** | **192** | Pn | | **Pn** | **10 29 01.2** | **-1.1** |
| **PB09** | **IPOC Station P** | **10.04** | **8** | Pn | | **Pn** | **10 29 05.2** | **0.0** |
| **LL01** | **San Ignacio de** | **10.66** | **187** | Pn | | **Pn** | **10 29 10.8** | **-2.5** |
| **HMBC** | **Humberstone** | **11.49** | **4** | Pn | | **Pn** | **10 29 24.0** | **-0.7** |
| **GO07** | **Milladeo Hill,** | **11.54** | **191** | Pn | | **Pn** | **10 29 22.6** | **-2.7** |
| **GO01** | **Chusmiza** | **12.15** | **7** | Pn | | **Pn** | **10 29 33.7** | **-0.2** |
| **ITQB** | **Itaqui** | **12.31** | **84** | Pn | | **Pn** | **10 29 34.9** | **-0.7** |
| **CPUP** | **Villa Florida** | **12.91** | **68** | Pn | | **Pn** | **10 29 40.1** | **-3.4** |
| **CPUP** | **Villa Florida** | **12.91** | **68** | P | | **Pn** | **10 29 39.4** | **-4.1** |
| | comp=Z,0.3nm,0.3s,baz=18,slow=3.2,SNR=2.6 | | | | | | | |
| CPUP | | | | LR | | LR | 10 34 33.0 | |
| | comp=Z,27nm,20.1s,baz=258,slow=37 | | | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **PLTB** | **Pedras Altas** | **14.56** | **94** | Pn | | **Pn** | **10 30 03.7** | **-1.2** |
| **LPAZ** | **La Paz** | **15.61** | **9** | P | | **Pn** | **10 30 20.0** | **+1.2** |
| | comp=Z,2.2nm,0.5s,baz=197,slow=8.1,SNR=17 | | | | | | | |
| **ITAB** | **Concordia** | **16.80** | **79** | Pn | | **Pn** | **10 30 30.0** | **-3.0** |
| ITAB | | | | IAmb | | IAmb | 10 30 33.2 | |
| | comp=Z,28nm,1.5s | | | | | | | |
| **SIV** | **San Ignacio** | **18.01** | **31** | P | | **P** | **10 30 46.6** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=224,slow=12,SNR=12 | | | | | | | |
| | comp=Z,2.6nm,0.4s | | | | | | | |
| **PTLB** | **Pontes e Lacer** | **19.40** | **36** | P | | **P** | **10 31 01.6** | **-0.4** |
| **MG04** | **Isla Riesco** | **21.07** | **181** | P | | **P** | **10 31 18.0** | **-1.6** |
| MG04 | | | | IAmb | | IAmb | 10 31 24.9 | |
| | comp=Z,102nm,1.4s | | | | | | | |
| **VILB** | **Vilhena** | **21.09** | **30** | P | | **P** | **10 31 20.6** | **+0.4** |
| VILB | | | | IAmb | | IAmb | 10 31 21.0 | |
| | comp=Z,9.7nm,0.7s | | | | | | | |
| **EFI** | **East Falkland** | **21.94** | **159** | P | | **P** | **10 31 28.7** | **-0.2** |
| **ETMB** | **Extrema** | **22.26** | **12** | P | | **P** | **10 31 33.2** | **+0.6** |
| **SAML** | **Samuel** | **23.78** | **19** | P | | **P** | **10 31 45.9** | **-1.3** |
| **HOPE** | **Hope Point** | **33.15** | **143** | P | | **P** | **10 33 09.5** | **-0.9** |
| **VA02** | **Isla de Pascua** | **33.89** | **268** | P | | **P** | **10 33 17.0** | **-0.1** |
| **BOAV** | **Boa Vista** | **35.35** | **18** | P | | **P** | **10 33 29.4** | **-0.2** |
| BOAV | | | | IAmb | | IAmb | 10 33 35.7 | |
| | comp=Z,3.2nm,1.1s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **51.00** | **159** | ⇑P | | **P** | **10 35 36.4** | **+1.5** |
| | comp=Z,4.1nm,0.6s | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **51.28** | **158** | ⇑P | | **P** | **10 35 37.5** | **+0.6** |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **51.63** | **158** | ⇑P | | **P** | **10 35 41.4** | **+1.8** |
| | comp=Z,6.3nm,0.5s,baz=287,slow=7.8 | | | | | | | |
| **SNAA** | **Sanae** | **53.22** | **159** | P | | **P** | **10 35 53.0** | **+1.5** |
| SNAA | | | | IAmb | | IAmb | 10 35 53.9 | |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **53.22** | **159** | ⇑P | | **P** | **10 35 53.0** | **+1.5** |
| | comp=Z,142nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **53.22** | **159** | P | | **P** | **10 35 53.1** | **+1.7** |
| | comp=Z,5.3nm,0.7s,baz=274,slow=7.8,SNR=46 | | | | | | | |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| **TROLL** | **Troll, Antarti** | **54.94** | **159** | ⇑P | | **P** | **10 36 05.7** | **+1.7** |
| | comp=Z,167nm,0.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **58.44** | **180** | P | | **P** | **10 36 29.0** | **+0.1** |
| QSPA | | | | IAmb | | IAmb | 10 36 56.6 | |
| | comp=Z,4.3nm,1.4s | | | | | | | |
| **QSPA** | **South Pole Qui** | **58.44** | **180** | P | | **P** | **10 36 31.2** | **+2.3** |
| | comp=Z,0.6nm,0.5s,baz=251,slow=1.5,SNR=10 | | | | | | | |
| | comp=Z,0.6nm,0.5s | | | | | | | |
| **DBIC** | **Dimbokro** | **73.42** | **71** | P | | **P** | **10 38 06.2** | **+0.8** |
| | comp=Z,2.8nm,0.6s,baz=211,slow=8.0,SNR=2.1 | | | | | | | |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **BOSA** | **Boshof** | **80.11** | **117** | P | | **P** | **10 38 44.2** | **+1.2** |
| | comp=Z,1.6nm,0.6s,baz=276,slow=8.9,SNR=3.3 | | | | | | | |
| | comp=Z,1.6nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.41** | **70** | P | | **P** | **10 38 55.6** | **+0.4** |
| | comp=Z,1.1nm,0.6s,baz=284,slow=7.2,SNR=12 | | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.23** | **208** | PKP | | **PKiKP** | **10 45 30.4** | **+0.7** |
| | comp=Z,0.4nm,0.5s,baz=160,slow=1.8,SNR=9.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.49** | **41** | PKPbc | | **PKiKP** | **10 46 23.9** | **0.0** |
| | comp=Z,0.9nm,0.6s,baz=300,slow=3.0,SNR=5.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.77** | **31** | PKPbc | | **PKiKP** | **10 46 28.0** | **+1.5** |
| | comp=Z,3.2nm,0.4s,baz=309,slow=2.5,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **154.46** | **46** | PKPab | | **PKPab** | **10 46 48.0** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=301,slow=3.7,SNR=4.0 | | | | | | | |

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**IDC 31 10:38:48.5**±4.8, **53°.75N** × **90°.75E, h0**km, **mbtmp3.0**/2, **ML2.7**/2, **Error ellipse: s-maj=49.0km s-min=26.8km az=39.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.52** | **276** | I | | I | 11 02 35.0 | |
| | baz=91,slow=327,SNR=23 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.52** | **276** | Pg | | Pb | 10 39 50.7 | -0.9 |
| | 0.6nm,0.3s,baz=91,slow=15,SNR=3.5 | | | | | | | |
| ZALV | | | | Lg | | Lg | 10 40 40.3 | |
| | 1.0nm,0.3s,baz=93,slow=28,SNR=6.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.14** | **252** | Pn | | Pn | 10 40 48.0 | +0.2 |
| | 0.1nm,0.3s,baz=65,slow=15,SNR=5.9 | | | | | | | |
| KURBB | | | | Lg | | Lg | 10 43 07.3 | |
| | baz=65,slow=32,SNR=2.3 | | | | | | | |
| | 0.7nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.82** | **221** | Pn | | Pn | 10 40 57.8 | +0.6 |
| | 0.1nm,0.3s,baz=34,slow=16,SNR=5.5 | | | | | | | |
| | 0.3nm,0.5s | | | | | | | |

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*MOS **31** 10:45:25.3±1.1, 48°.63N × 102°.64E, h7km, mb4.0/4, Error ellipse: s-maj=10.5km s-min=8.6km az=95.9*
*BYKL **31** 10:45:26.2±0.5, 48°.62N × 102°.58E, FELT I=III-IV MSK at Ulan-Ude.*
*IDC **31** 10:45:27.4±1.1, 48°.77N × 102°.74E, h0km, mb3.6/5, mbtmp3.6/8, ML3.2/3, MS2.7/6, Error ellipse: s-maj=44.0km s-min=11.4km az=17.0*
**ISC 31 10:45:28.5**±0.6, **48°.57N**±0°.04 × **102°.55E**±0°.04, **h10**km, **n67**, σ2°.23/94, **mb3.9/5, MS2.7**/4, **1C-3D, Mongolia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ZAK** | **Zakamensk** | **1.88** | **14** | *e*Pg | | **Pn** | **10 45 59.0** | **-1.7** |
| ZAK | | | | Pmax | | | 10 46 02.7 | |
| | 177nm,0.3s | | | | | | | |
| ZAK | | | | *e*Sg | | **Sn** | **10 46 22.8** | **-1.8** |
| ZAK | | | | Smax | | | 10 46 27.1 | |
| | 2μm,0.4s | | | | | | | |
| **ZAK** | **Zakamensk** | **1.88** | **14** | *e*PN | | **Pn** | **10 45 58.6** | **-2.1** |
| ZAK | | | | *e* | | | 10 46 22.4 | |
| ZAK | | | | pmax | | pmax | | |
| | comp=Z,150nm,0.1s | | | | | | | |
| ZAK | | | | smax | | smax | | |
| | comp=N,2μm,0.2s | | | | | | | |
| **SONM** | **Songino Array** | **2.67** | **104** | Pn | | **Pn** | **10 46 10.3** | **-1.4** |
| | comp=N,18nm,0.3s,baz=290,slow=15,SNR=234 | | | | | | | |
| SONM | | | | Pg | | **Pb** | **10 46 14.0** | **-2.5** |
| | comp=N,49nm,0.3s,baz=291,slow=18,SNR=62 | | | | | | | |
| SONM | | | | Lg | | Lg | 10 46 48.9 | |
| | comp=N,216nm,0.3s,baz=288,slow=32,SNR=6.7 | | | | | | | |
| SONM | | | | LR | | LR | 10 47 29.9 | |
| | comp=N,111nm,19.8s,baz=311,slow=47 | | | | | | | |
| | comp=N,100nm,0.6s | | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **2.69** | **105** | Pn | | **Pn** | **10 46 11.3** | **-0.6** |
| | baz=303,slow=19 | | | | | | | |
| I34MN | | | | Pg | | **Pb** | **10 46 15.3** | **-1.5** |
| | baz=305,slow=19 | | | | | | | |
| I34MN | | | | Lg | | Lg | 10 46 50.0 | |
| | baz=311,slow=26 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **3.09** | **101** | ⇓*i* Pn | | **Pn** | **10 46 15.8** | **-1.6** |
| ULN | | | | *e*Pg | | **Pb** | **10 46 21.1** | **-2.5** |
| ULN | | | | *e*Sg | | **Sb** | **10 47 01.0** | **-0.4** |
| **ULN** | **Ulaanbaatar** | **3.09** | **101** | *d* iPN | | **Pn** | **10 46 15.8** | **-1.6** |
| ULN | | | | *i* S | | **Sn** | **10 46 52.3** | **-2.2** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,122nm,0.3s | | | | | | | |
| ULN | | | | smax | | smax | | |
| | comp=Z,1μm,0.4s | | | | | | | |
| **TLY** | **Talaya** | **3.20** | **12** | *e*Pn | | **Pn** | **10 46 17.6** | **-1.2** |
| TLY | | | | *e*Pg | | Pb | 10 46 22.3 | -3.0 |
| TLY | | | | Pmax | | | 10 46 45.8 | |
| | comp=Z,106nm,0.6s | | | | | | | |
| TLY | | | | *e*Sg | | **Sb** | **10 47 03.4** | **-0.9** |
| TLY | | | | Smax | | | 10 47 03.8 | |
| | comp=Z,1μm,0.8s | | | | | | | |
| **TLY** | **Talaya** | **3.20** | **12** | *e*PN | | **Pn** | **10 46 22.4** | **+3.6** |
| TLY | | | | *e* | | | 10 47 03.3 | |
| TLY | | | | pmax | | pmax | | |
| | comp=Z,84nm,0.4s | | | | | | | |
| TLY | | | | smax | | smax | | |
| | comp=E,1μm,0.8s | | | | | | | |
| **MOY** | **Mondy** | **3.26** | **343** | *e*Pn | | **Pn** | **10 46 18.8** | **-1.0** |
| MOY | | | | *e*Pg | | Pb | 10 46 23.6 | -2.9 |
| MOY | | | | Pmax | | | 10 46 24.9 | |
| | comp=E,457nm,0.7s | | | | | | | |
| MOY | | | | *e*Sg | | **Sb** | **10 47 07.2** | **+0.9** |
| MOY | | | | Smax | | | 10 47 19.7 | |
| | comp=E,841nm,1.0s | | | | | | | |
| **MOY** | **Mondy** | **3.26** | **343** | *e*PN | | Pn | 10 46 16.9 | -2.9 |
| MOY | | | | *e* | | | 10 46 23.9 | |
| MOY | | | | *e* | | | 10 47 06.8 | |
| MOY | | | | pmax | | pmax | | |
| | comp=Z,458nm,0.7s | | | | | | | |
| MOY | | | | smax | | smax | | |
| | comp=E,857nm,1.0s | | | | | | | |
| **ARS** | **Arshan** | **3.36** | **359** | *e*Pn | | **Pn** | **10 46 19.8** | **-1.3** |
| ARS | | | | *e*Pg | | **Pb** | **10 46 26.4** | **-1.7** |
| ARS | | | | *e*PgPg | | **PnPn** | **10 46 30.1** | **+1.6** |
| ARS | | | | max | | | 10 46 35.1 | |
| | comp=E,136nm,0.5s | | | | | | | |
| ARS | | | | *e*Sg | | **Sb** | **10 47 09.1** | **0.0** |
| ARS | | | | *e* | | | 10 47 17.5 | |
| ARS | | | | max | | | 10 47 20.2 | |
| | comp=E,2μm,0.8s | | | | | | | |
| **ARS** | **Arshan** | **3.36** | **359** | *e*PN | | **Pn** | **10 46 20.1** | **-1.0** |
| ARS | | | | *e* | | | 10 46 26.5 | |
| ARS | | | | *e* | | | 10 47 08.9 | |
| ARS | | | | pmax | | pmax | | |
| | comp=Z,136nm,0.5s | | | | | | | |
| ARS | | | | smax | | smax | | |
| | comp=E,2μm,0.8s | | | | | | | |
| **IVK** | **Ivanovka** | **3.45** | **20** | *e*Pn | | **Pn** | **10 46 21.2** | **-1.1** |
| IVK | | | | *e*Pg | | **Pb** | **10 46 27.6** | **-2.1** |
| IVK | | | | Pmax | | | 10 46 56.6 | |
| | comp=E,108nm,0.5s | | | | | | | |
| IVK | | | | *e*Sg | | **Sb** | **10 47 11.4** | **-0.3** |
| IVK | | | | *e*SgSg | | **Sg** | **10 47 19.2** | **-0.1** |
| IVK | | | | max | | | 10 47 20.2 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KELR | | | | | *e*Sg | | **Sb** | **10 48 13.2** | **+3.4** |
| **GORB** | **Goryachinsk** | **5.73** | **37** | | *e*Pn | | **Pn** | **10 46 51.7** | **-1.8** |
| GORB | | | | | *e* | | | 10 46 57.4 | |
| GORB | | | | | *e*Pg | | **Pb** | **10 47 08.5** | **+0.1** |
| GORB | | | | | *e* | | | 10 48 20.5 | |
| GORB | | | | | *e*Sg | | **Sb** | **10 48 22.0** | **+5.0** |
| **UZR** | **Uzur** | **5.78** | **33** | | *e*Pn | | **Pn** | **10 46 52.3** | **-1.9** |
| UZR | | | | | *e*Pg | | **Pb** | **10 47 08.8** | **-0.5** |
| UZR | | | | | Pmax | | | 10 47 19.8 | |
| | comp=E,29nm,0.5s | | | | | | | | |
| UZR | | | | | *e*Sg | | **Sb** | **10 48 24.6** | **+6.0** |
| UZR | | | | | Smax | | | 10 48 31.8 | |
| | comp=E,189nm,0.8s | | | | | | | | |
| **OGRR** | **Ongureny** | **5.99** | **30** | | *e*Pn | | **Pn** | **10 46 55.8** | **-1.4** |
| OGRR | | | | | *e*Pg | | **Pb** | **10 47 13.2** | **+0.3** |
| OGRR | | | | | Pmax | | | 10 47 19.2 | |
| | comp=E,17nm,0.8s | | | | | | | | |
| OGRR | | | | | *e*Sg | | **Sb** | **10 48 29.9** | **+5.2** |
| OGRR | | | | | Smax | | | 10 48 40.5 | |
| | comp=E,153nm,1.0s | | | | | | | | |
| **OGRR** | **Ongureny** | **5.99** | **30** | | *e*PN | | **Pn** | **10 46 55.7** | **-1.4** |
| OGRR | | | | | *e* | | | 10 47 13.6 | |
| OGRR | | | | | *e* | | | 10 48 29.7 | |
| OGRR | | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| OGRR | | | | | smax | smax | | | |
| | comp=E,157nm,1.1s | | | | | | | | |
| **MXMB** | **Maximikha** | **6.12** | **37** | | *e*Pn | | **Pn** | **10 46 57.5** | **-1.4** |
| MXMB | | | | | *e*Pg | | **Pb** | **10 47 14.4** | **-0.7** |
| MXMB | | | | | *e*Sg | | **Sb** | **10 48 33.5** | **+5.2** |
| **KPC** | **Khapcheranga** | **6.55** | **76** | | *e*Pn | | **Pn** | **10 47 02.0** | **-2.8** |
| KPC | | | | | *e*Pg | | **Pb** | **10 47 23.8** | **+1.4** |
| KPC | | | | | Pmax | | | 10 47 27.6 | |
| | comp=E,23nm,0.5s | | | | | | | | |
| KPC | | | | | *e*Sg | | **Sb** | **10 48 47.7** | **+7.0** |
| KPC | | | | | Smax | | | 10 48 52.9 | |
| | comp=E,574nm,1.4s | | | | | | | | |
| **KPC** | **Khapcheranga** | **6.55** | **76** | | *e*PN | | Pn | 10 47 01.4 | -3.4 |
| KPC | | | | | *e* | | | 10 47 22.5 | |
| KPC | | | | | *e* | | | 10 48 46.0 | |
| KPC | | | | | pmax | pmax | | | |
| | comp=Z,23nm,0.5s | | | | | | | | |
| KPC | | | | | smax | smax | | | |
| | comp=N,575nm,1.3s | | | | | | | | |
| **CIT** | **Chita** | **7.85** | **60** | | *e*Sg | | Sb | 10 49 28.1 | +10 |
| CIT | | | | | Smax | | | 10 49 33.8 | |
| | comp=N,223nm,0.6s | | | | | | | | |
| **CIT** | **Chita** | **7.85** | **60** | | *e*PG | | **Pb** | **10 47 44.7** | **+0.2** |
| CIT | | | | | pmax | pmax | | | |
| | comp=Z,103nm,0.2s | | | | | | | | |
| **YLYR** | **Ulyunkhan** | **8.27** | **37** | | *e*Pn | | **Pn** | **10 47 26.7** | **-1.7** |
| YLYR | | | | | *e*Pg | | **Pb** | **10 47 54.9** | **+3.2** |
| YLYR | | | | | Pmax | | | 10 48 00.7 | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| YLYR | | | | | *e*Sg | | Sb | 10 49 41.1 | +11 |
| YLYR | | | | | Smax | | | 10 49 52.5 | |
| | comp=Z,110nm,1.4s | | | | | | | | |
| **NIZB** | **Nizh Angarsk** | **8.39** | **28** | | *e*Sg | | Sb | 10 49 42.8 | +9.2 |
| NIZB | | | | | Smax | | | 10 49 46.5 | |
| | comp=Z,147nm,1.4s | | | | | | | | |
| **KMO** | **Kumora** | **9.04** | **33** | | *e*Pg | | | 10 48 09.2 | |
| KMO | | | | | Pmax | | | 10 48 21.3 | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| KMO | | | | | *e*Sg | | | 10 50 05.0 | |
| KMO | | | | | Smax | | | 10 50 28.1 | |
| | comp=Z,130nm,1.3s | | | | | | | | |
| **YOAB** | **Uoyan, Buryati** | **9.43** | **33** | | *e*Sg | | Sn | 10 50 15.9 | +46 |
| YOAB | | | | | Smax | | | 10 51 16.1 | |
| | comp=Z,466nm,1.7s | | | | | | | | |
| **UKT** | **Uakit** | **9.72** | **40** | | *e*Pn | | **Pn** | **10 47 46.4** | **-1.9** |
| UKT | | | | | *e*Pg | | | 10 48 20.7 | |
| UKT | | | | | Pmax | | | 10 48 22.0 | |
| | comp=Z,8.0nm,1.3s | | | | | | | | |
| UKT | | | | | *e*Sg | | Sn | 10 50 25.6 | +48 |
| UKT | | | | | Smax | | | 10 50 43.3 | |
| | comp=Z,95nm,1.9s | | | | | | | | |
| **DGZ** | **Jazzator, Alta** | **9.98** | **282** | | *i* P | | **Pn** | **10 47 52.9** | **+0.9** |
| **SVKR** | **Severomuysk** | **10.12** | **38** | | *e*Sg | | Sn | 10 50 38.1 | +51 |
| SVKR | | | | | Smax | | | 10 51 10.6 | |
| | comp=Z,161nm,1.4s | | | | | | | | |
| **NLYR** | **Nelyaty** | **11.26** | **40** | | *e*Pn | | **Pn** | **10 48 06.5** | **-2.8** |
| NLYR | | | | | *e*Pg | | | 10 48 49.4 | |
| NLYR | | | | | Pmax | | | 10 48 56.9 | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| NLYR | | | | | *e*Sg | | Sn | 10 51 13.4 | +58 |
| NLYR | | | | | Smax | | | 10 51 35.1 | |
| | comp=Z,185nm,1.1s | | | | | | | | |
| **BOD** | **Bodaibo** | **11.52** | **32** | | *e*Sg | | Sn | 10 51 20.6 | +59 |
| BOD | | | | | Smax | | | 10 51 52.1 | |
| | comp=Z,47nm,1.6s | | | | | | | | |
| **TUP** | **Tupik** | **12.31** | **55** | | *e*Sg | | | 10 51 45.6 | |
| TUP | | | | | Smax | | | 10 52 02.7 | |
| | comp=Z,140nm,1.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **12.33** | **303** | | LR | | LR | 10 53 21.7 | |
| | comp=Z,20nm,21.4s,baz=64,slow=38 | | | | | | | | |
| **CRS** | **Chara** | **12.64** | **43** | | *e*Sg | | | 10 51 55.5 | |
| CRS | | | | | Smax | | | 10 52 12.2 | |
| | comp=Z,91nm,1.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.77** | **270** | | Pn | | **Pn** | **10 48 44.4** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=78,slow=13,SNR=2.5 | | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | | |
| **KURK** | **Kurchatov** | **15.64** | **287** | | *i* P | | **Pn** | **10 49 09.6** | **+0.9** |
| **KURBB** | **Kurchatov Arra** | **15.70** | **287** | | Pn | | **Pn** | **10 49 10.1** | **+0.6** |
| | baz=93,slow=12,SNR=10 | | | | | | | | |
| | comp=Z,1.1nm,0.7s | | | | | | | | |
| **ZEA** | **Zeya** | **16.30** | **62** | | *e*P | | **Pn** | **10 49 15.7** | **-1.5** |
| **AAK** | **Ala-Archa** | **20.44** | **264** | | P | | **P** | **10 50 08.0** | **+2.0** |
| | comp=Z,1.4nm,0.4s,baz=198,slow=6.7,SNR=5.3 | | | | | | | | |
| | comp=Z,1.4nm,0.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **20.44** | **264** | | *e*P | | **P** | **10 50 07.7** | **+1.7** |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **20.70** | **91** | | *e*P | | **P** | **10 50 07.5** | **-1.1** |
| **BVAR** | **Borovoye Array** | **20.71** | **295** | | P | | **P** | **10 50 07.9** | **-0.8** |
| | comp=Z,2.7nm,0.6s,baz=70,slow=12,SNR=6.1 | | | | | | | | |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| **BRVK** | **Borovoye** | **20.77** | **295** | ⇑ | *i* P | | **P** | **10 50 09.0** | **-0.3** |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **KSRS** | **Korea Array** | **21.52** | **112** | | P | | **P** | **10 50 18.6** | **+1.1** |
| | comp=Z,1.3nm,0.8s,baz=317,slow=8.7,SNR=4.3 | | | | | | | | |
| KSRS | | | | | LR | | LR | 10 59 25.7 | |
| | comp=Z,24nm,19.2s,baz=150,slow=39 | | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | | |
| **ARU** | **Arti** | **27.50** | **303** | *d* | *i* P | | **P** | **10 51 14.3** | **-0.4** |
| ARU | | | | | | | | 10 51 59.2 | |
| ARU | | | | | S | | **S** | **10 55 57.5** | **+2.3** |
| ARU | | | | | SS | | **SnSn** | **10 57 05.3** | **+0.4** |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.5s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.18** | **187** | | LR | | LR | 11 05 36.1 | |
| | comp=Z,11nm,19.0s,baz=165,slow=40 | | | | | | | | |
| **SEY** | **Seymchan** | **30.60** | **43** | | *e*P | | **P** | **10 51 39.9** | **-2.3** |
| SEY | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.23** | **329** | | LR | | LR | 11 12 10.9 | |
| | comp=Z,22nm,18.5s,baz=274,slow=39 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **48.69** | **287** | | P | | **P** | **10 54 12.9** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=64,slow=9.8,SNR=4.6 | | | | | | | | |
| | comp=Z,1.1nm,0.8s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **48.69** | **287** | | *i* P | | **P** | **10 54 13.3** | **+0.4** |
| BRTR | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **49.80** | **320** | | LR | | LR | 11 15 53.3 | |
| | comp=Z,9.2nm,21.4s,baz=20,slow=37 | | | | | | | | |
| **BORG** | **Borgarnes** | **58.91** | **335** | | *i* P | | **P** | **10 55 26.1** | **-1.0** |
| **ASAR** | **Alice Springs** | **77.19** | **151** | | P | | **P** | **10 57 25.4** | **+3.1** |
| | comp=Z,0.2nm,0.5s,baz=353,slow=6.5,SNR=1.7 | | | | | | | | |
| | comp=Z,0.2nm,0.5s | | | | | | | | |

*NEIC **31** 10:53:55.9±1.9,20°.43N±0°.08×145°.0E±0°.2, h207km±9km, mb4.2/18, Error ellipse: s-maj=23.5km s-min=11.7km az=81.0*

*IDC **31** 10:53:58.1±6.2,20°.37N×145°.01E, h222km±59km, mb3.4/10, mbtmp3.9/11, Error ellipse: s-maj=38.5km s-min=22.5km az=85.0*

**ISC 31 10:53:54.7±0.7, 20°.37N±0°.09×145°.0E±0°.2, h200km, n31, σ1§07/31, mb4.0/17, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JCJ** | **Chichijima** | **7.19** | **339** | Pn | **Pn** | **10 55 37.5** | **+0.1** |
| **JHJ2** | **Mitsune** | **13.52** | **341** | Pn | **Pn** | **10 56 58.6** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **17.18** | **341** | P | **Pn** | **10 57 42.9** | **-0.3** |
| | 2.0nm,0.9s,baz=176,slow=10.0,SNR=4.8 | | | | | | |
| **MAJO** | **Matsushiro** | **17.19** | **341** | P | **P** | **10 57 41.8** | **+0.1** |
| MAJO | | | | IAmb | IAmb | 10 57 48.1 | |
| | comp=Z,16nm,1.5s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **17.19** | **341** | P | **P** | **10 57 41.8** | **+0.1** |
| MJB9 | | | | IAmb | IAmb | 10 58 26.6 | |
| | comp=Z,14nm,1.4s | | | | | | |
| **JMM** | **Marumori** | **17.82** | **349** | P | **P** | **10 57 46.7** | **-1.8** |
| JMM | | | | IAmb | IAmb | 10 57 51.1 | |
| | comp=Z,35nm,1.5s | | | | | | |
| **JNU** | **Nakatsue** | **17.90** | **318** | P | **P** | **10 57 47.7** | **-1.8** |
| **KSRS** | **Korea Array** | **22.61** | **322** | P | **P** | **10 58 40.2** | **+1.7** |
| | comp=Z,4.0nm,0.7s,baz=148,slow=9.1,SNR=22 | | | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **KLR** | **Kul'dur** | **30.70** | **343** | P | **P** | **10 59 52.1** | **+1.5** |
| | comp=Z,1.7nm,0.3s,baz=157,slow=9.0,SNR=9.9 | | | | | | |
| | comp=Z,1.7nm,0.3s | | | | | | |
| **SBUM** | **Sibu** | **36.63** | **245** | P | **P** | **11 00 41.3** | **-1.0** |
| SBUM | | | | IAmb | IAmb | 11 00 47.0 | |
| | comp=Z,4.8nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **41.23** | **195** | P | **P** | **11 01 19.6** | **-0.7** |
| WB0 | | | | IAmb | IAmb | 11 01 51.1 | |
| | comp=Z,9.9nm,1.5s | | | | | | |
| **WR0** | **Warramunga Arr** | **41.38** | **195** | P | **P** | **11 01 20.4** | **-1.0** |
| WR0 | | | | IAmb | IAmb | 11 01 29.9 | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **41.40** | **195** | P | **P** | **11 01 21.3** | **-0.3** |
| WRAB | | | | IAmb | IAmb | 11 01 25.8 | |
| | comp=Z,7.8nm,1.4s | | | | | | |
| **WB2** | **Warramunga Arr** | **41.41** | **195** | P | **P** | **11 01 21.2** | **-0.5** |
| WB2 | | | | IAmb | IAmb | 11 01 28.7 | |
| | comp=Z,8.1nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **41.41** | **195** | P | **P** | **11 01 22.9** | **+1.1** |
| | comp=Z,0.3nm,0.5s,baz=11,slow=8.6,SNR=3.2 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **41.46** | **321** | P | **P** | **11 01 22.8** | **+0.8** |
| | comp=Z,0.6nm,0.4s,baz=129,slow=6.2,SNR=4.2 | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **42.70** | **208** | P | **P** | **11 01 33.0** | **+0.8** |
| **ONTNC** | **Ouen Toro** | **47.29** | **153** | P | **P** | **11 02 09.4** | **+1.1** |
| **PSA00** | **Pilbara Seismi** | **48.41** | **212** | P | **P** | **11 02 16.4** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **56.32** | **322** | P | **P** | **11 03 15.4** | **+0.9** |
| | comp=Z,1.1nm,0.4s,baz=90,slow=8.9,SNR=4.1 | | | | | | |
| | comp=Z,1.1nm,0.4s | | | | | | |
| **MK31** | **Makanchi Array** | **56.87** | **313** | P | **P** | **11 03 18.6** | **0.0** |
| **MKAR** | **Makanchi Array** | **56.87** | **313** | P | **P** | **11 03 20.1** | **+1.5** |
| | comp=Z,1.0nm,0.5s,baz=95,slow=9.2,SNR=10 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.67** | **317** | P | **P** | **11 03 39.2** | **+1.3** |
| | comp=Z,0.7nm,0.4s,baz=93,slow=7.7,SNR=8.1 | | | | | | |
| | comp=Z,0.7nm,0.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **60.55** | **27** | P | **P** | **11 03 42.4** | **-1.3** |
| BPAW | | | | IAmb | IAmb | 11 04 10.0 | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **62.43** | **27** | P | **P** | **11 03 58.0** | **+1.7** |
| | comp=Z,0.2nm,0.7s,baz=280,slow=5.4,SNR=1.9 | | | | | | |
| | comp=Z,0.2nm,0.7s | | | | | | |
| **BVAR** | **Bovoye Array** | **64.80** | **320** | P | **P** | **11 04 12.6** | **+0.7** |
| | comp=Z,1.1nm,0.3s,baz=92,slow=8.5,SNR=5.2 | | | | | | |
| | comp=Z,1.1nm,0.3s | | | | | | |
| **KK31** | **Karatay Array** | **65.23** | **309** | P | **P** | **11 04 14.8** | **-0.2** |
| **FINES** | **FINESS Array B** | **85.11** | **335** | P | **P** | **11 06 08.2** | **+0.3** |
| | comp=Z,1.0nm,0.5s,baz=58,slow=4.0,SNR=8.9 | | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **SUMG** | **Summit** | **87.26** | **1** | P | **P** | **11 06 17.1** | **-1.7** |
| SUMG | | | | IAmb | IAmb | 11 06 44.2 | |
| | comp=Z,8.8nm,1.1s | | | | | | |
| **EPT** | **El Paso** | **94.11** | **54** | P | **P** | **11 06 50.0** | **-1.1** |
| **MORC** | **Moravsky Berou** | **96.13** | **329** | P | **P** | **11 06 59.4** | **-0.4** |

**DJA 31 10:54:46.4±0.4, 0°.5N±3°.3×12°.4E±°, h99km±7km, M3.8/11, mb3.8/2, mB5.1/1, MLv3.8/11, Mw(mB)4.4/1, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **0.74** | **355** | P | Pn | 10 55 05.2 | +1.1 |
| KMSI | | | | S | Sn | 10 55 19.9 | +2.5 |
| **LUWI** | **Luwuk** | **1.54** | **236** | P | Pn | 10 55 13.4 | +0.3 |
| LUWI | | | | S | Sn | 10 55 34.0 | +0.7 |
| **SANI** | **Sanana** | **2.70** | **134** | P | Pn | 10 55 27.3 | -0.8 |
| SANI | | | | S | Sn | 10 55 58.3 | -1.9 |
| **TNTI** | **Ternate** | **3.46** | **74** | P | Pn | 10 55 37.0 | -1.3 |
| **NLAI** | **Namlea** | **4.32** | **135** | P | Pn | 10 55 50.6 | +0.7 |
| **BNSI** | **Bone** | **5.75** | **223** | P | Pn | 10 56 11.5 | +2.1 |

**IDC 31 11:25:00.5±311.0, 54°.43N×42°.64E, h0km, Error ellipse: s-maj=142.0km s-min=83.4km az=145.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **3.84** | **309** | I | I | 11 48 20.0 | |
| | 0.1nm,0.6s,baz=126,slow=321,SNR=8.8 | | | | | | |
| **I37NO** | **I37NO** | **18.36** | **332** | I | I | 13 17 50.0 | |
| | baz=132,slow=327,SNR=1.4 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **18.72** | **265** | I | I | 13 20 00.0 | |
| | baz=54,slow=338,SNR=0.5 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **24.42** | **74** | I | I | 13 53 00.0 | |
| | baz=287,slow=323,SNR=1.3 | | | | | | |

*IDC **31** 11:32:54.5±1.8,52°.19N×165°.66W, h0km, mb3.8/7, mbtmp3.8/9, ML3.1/2, MS2.6/1, Error ellipse: s-maj=42.5km s-min=25.2km az=21.0*

*AEIC **31** 11:32:55.5±3.4,52°.00N±0°.07×165°.88W±0°.10, h32km±6km, Error ellipse: s-maj=11.3km s-min=7.9km az=157.0*

*NEIC **31** 11:32:55.2±2.7,52°.13N±0°.03×165°.94W±0°.10, h10km±2km, mb3.8/56, ML3.6/10, ML2.9(AEIC), Error ellipse: s-maj=9.9km s-min=5.3km az=264.0*

**ISC 31 11:32:57.7±0.9, 52°.03N±0°.08×165°.94W±0°.07, h35km, n144, σ1§65/147, mb4.0/8, South of Aleutian Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKFG** | **Magazine Ridge** | **1.83** | **320** | | **Pn** | **11 33 26.1** | **-0.6** |
| OKFG | | | | | **Sn** | **11 33 49.7** | **+1.0** |
| **UNV** | **Unalaska Valle** | **1.85** | **350** | | **Pn** | **11 33 25.5** | **-1.5** |
| **UNV** | **Unalaska Valle** | **1.85** | **350** | | **Sn** | **11 33 50.0** | **+0.9** |
| **OKTU** | **Okmok Mt. Tuli** | **1.87** | **318** | | **Pn** | **11 33 26.8** | **-0.4** |
| **MAPS** | **Pakushin South** | **1.89** | **342** | | **Pn** | **11 33 26.7** | **-0.7** |
| MAPS | | | | | **Sn** | **11 33 50.7** | **+0.8** |
| **OKER** | **Okmok East Rim** | **1.92** | **319** | | **Pn** | **11 33 27.7** | **-0.3** |
| **MSW** | **Makushin Switc** | **1.96** | **345** | | **Pn** | **11 33 27.8** | **-0.6** |
| MSW | | | | | **Sn** | **11 33 52.8** | **+1.0** |
| **MTBL** | **Makushin Table** | **2.00** | **347** | | **Pn** | **11 33 29.1** | **+0.1** |
| **NIKH** | **Nikolski High** | **2.02** | **299** | | **Pn** | **11 33 28.4** | **-0.9** |
| **AKMO** | **Akutan Morgan** | **2.07** | **359** | | **Pn** | **11 33 29.2** | **-0.8** |
| AKMO | | | | | **Sn** | **11 33 55.5** | **+1.0** |
| **ZRO** | **Akutan Zero** | **2.07** | **359** | | **Pn** | **11 33 29.1** | **-0.9** |
| ZRO | | | | | **Sn** | **11 33 55.2** | **+0.7** |
| **AKBBA** | **Akutan Broad B** | **2.08** | **0** | | **Pn** | **11 33 29.2** | **-0.8** |
| AKBBA | | | | | **Sn** | **11 33 55.4** | **+0.7** |
| **AHB** | **Akutan Harbor** | **2.10** | **2** | | **Pn** | **11 33 29.5** | **-0.8** |
| AHB | | | | | **Sn** | **11 33 56.0** | **+0.8** |
| **AKV** | **Akutan Volcano** | **2.10** | **360** | | **Pn** | **11 33 29.7** | **-0.8** |
| **AKRB** | **Akutan Reef Bi** | **2.11** | **358** | | **Pn** | **11 33 29.6** | **-0.9** |
| AKRB | | | | | **Sn** | **11 33 55.5** | **+0.1** |
| **AKSA** | **Akutan Strait** | **2.12** | **4** | | **Pn** | **11 33 29.9** | **-0.8** |
| AKSA | | | | | **Sn** | **11 33 56.1** | **+0.4** |
| **LVA** | **Lava Point** | **2.14** | **359** | | **Pn** | **11 33 30.4** | **-0.5** |
| LVA | | | | IAML | | 11 34 08.6 | |
| | comp=N,353nm,0.6s | | | | | | |
| **CLCO** | **Concord Point,** | **2.44** | **290** | | **Pn** | **11 33 34.0** | **-0.9** |
| **CLES** | **Cleveland East** | **2.55** | **290** | Pn | **Pn** | **11 33 36.4** | **-0.1** |
| **S12K** | **Black Hills** | **4.34** | **30** | Pn | **Pn** | **11 34 01.1** | **-0.1** |
| S12K | | | | IAML | | 11 35 50.8 | |
| | comp=N,52nm,3.4s | | | | | | |
| S12K | | | | IAML | | 11 36 32.9 | |
| | comp=E,51nm,1.6s | | | | | | |
| **SDPT** | **Sand Point** | **4.65** | **42** | | **Pn** | **11 34 04.8** | **-0.6** |
| SDPT | | | | IAML | | 11 34 57.8 | |
| | comp=N,76nm,1.2s | | | | | | |
| SDPT | | | | IAML | | 11 35 01.0 | |
| | comp=E,69nm,0.9s | | | | | | |
| **CNBA** | **Chernabura Isl** | **4.72** | **51** | Pn | **Pn** | **11 34 05.2** | **-1.1** |
| CNBA | | | | IAML | | 11 34 57.4 | |
| | comp=E,36nm,2.9s | | | | | | |
| **CHGN** | **Chignik** | **6.15** | **43** | Pn | **Pn** | **11 34 26.3** | **+0.3** |
| **GSTR** | **Great Sitkin T** | **6.24** | **275** | Pn | **Pn** | **11 34 28.4** | **+1.1** |
| **O14K** | **Tigyukauivet M** | **7.71** | **18** | Pn | **Pn** | **11 34 48.9** | **+1.6** |
| **PLK4** | **Peulik 4** | **7.88** | **41** | Pn | **Pn** | **11 34 51.4** | **+1.6** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ACHA** | **Angle Creek He** | **8.68** | **40** | | Pn | | **Pn** | **11 35 00.8** | **+0.1** |
| **Q16K** | **Kokwok River B** | **8.77** | **27** | | Pn | | **Pn** | **11 35 03.6** | **+1.7** |
| **N15K** | **Kwethluk River** | **8.79** | **19** | | Pn | | **Pn** | **11 35 03.8** | **+1.6** |
| **OHAK** | **Old Harbor** | **8.99** | **50** | | Pn | | **Pn** | **11 35 05.8** | **+0.9** |
| **AMKA** | **Amchitka** | **9.19** | **272** | | Pn | | **Pn** | **11 35 06.8** | **-0.8** |
| **KDAK** | **Kodiak Island** | **9.61** | **48** | | Pn | | **Pn** | **11 35 15.2** | **+1.9** |
| **KDAK** | **Kodiak Island** | **9.61** | **48** | | Pn | | **Pn** | **11 35 12.1** | **-1.2** |
| | comp=E,0.4nm,0.3s,baz=225,slow=6.6,SNR=8.3 | | | | | | | | |
| KDAK | | | | | Sn | | Sn | 11 36 51.7 | -8.1 |
| | comp=E,0.1nm,0.3s,baz=96,slow=19,SNR=2.1 | | | | | | | | |
| KDAK | | | | | LR | | LR | 11 39 02.2 | |
| | comp=E,37nm,20.3s,baz=222,slow=39 | | | | | | | | |
| | comp=E,4.4nm,0.7s | | | | | | | | |
| **M16K** | **Timber Creek** | **9.80** | **20** | | Pn | | **Pn** | **11 35 13.9** | **-2.1** |
| **N17K** | **Nushagak Hills** | **9.80** | **26** | | Pn | | **Pn** | **11 35 16.2** | **+0.2** |
| **Q19K** | **Cape Douglas,** | **9.81** | **40** | | Pn | | **Pn** | **11 35 15.8** | **-0.4** |
| **O18K** | **Koktuh Hills** | **9.88** | **33** | | Pn | | **Pn** | **11 35 19.2** | **+2.2** |
| **K13K** | **Kusilvak Mount** | **9.96** | **4** | | Pn | | **Pn** | **11 35 18.1** | **-0.1** |
| **SYI** | **Shuyak Island** | **10.14** | **44** | | Pn | | **Pn** | **11 35 20.9** | **+0.3** |
| **N18K** | **Kilae Creek** | **10.30** | **29** | | Pn | | **Pn** | **11 35 23.8** | **+0.9** |
| **L16K** | **Owhat River** | **10.33** | **17** | | Pn | | **Pn** | **11 35 22.9** | **-0.3** |
| **P19K** | **Oil Pt** | **10.45** | **38** | | Pn | | **Pn** | **11 35 25.4** | **+0.5** |
| **M17K** | **Holitna River** | **10.48** | **23** | | Pn | | **Pn** | **11 35 26.5** | **+1.2** |
| **N19K** | **Bonanza Creek** | **10.84** | **31** | | Pn | | **Pn** | **11 35 30.2** | **0.0** |
| **L18K** | **Granite Mounta** | **11.37** | **22** | | Pn | | **Pn** | **11 35 37.5** | **0.0** |
| **K17K** | **Iditarod** | **11.47** | **18** | | Pn | | **Pn** | **11 35 38.9** | **0.0** |
| **M19K** | **Big River Lodg** | **11.71** | **28** | | Pn | | **Pn** | **11 35 40.5** | **-1.7** |
| **L19K** | **White Mountain** | **11.81** | **26** | | Pn | | **Pn** | **11 35 41.7** | **-1.7** |
| **J17K** | **VABM Dome** | **11.97** | **15** | | Pn | | **Pn** | **11 35 45.5** | **-0.1** |
| **M20K** | **Styx River** | **12.07** | **30** | | Pn | | **Pn** | **11 35 49.0** | **+1.9** |
| **J18K** | **Innoko River** | **12.46** | **19** | | Pn | | **Pn** | **11 35 51.5** | **-0.9** |
| **SUA** | **Susitna One** | **12.57** | **35** | | Pn | | **Pn** | **11 35 52.0** | **-2.0** |
| **SKT** | **Skwentna** | **12.66** | **32** | | Pn | | **Pn** | **11 35 55.6** | **+0.5** |
| **RC01** | **Rabbit Creek A** | **12.70** | **38** | | Pn | | **Pn** | **11 35 55.6** | **0.0** |
| **K20K** | **Telida** | **12.98** | **24** | | Pn | | **Pn** | **11 35 56.8** | **-2.7** |
| **PWL** | **Port Wells** | **13.12** | **41** | | | | **Pn** | **11 35 59.6** | **-1.7** |
| **J19K** | **Poorman** | **13.16** | **20** | | Pn | | **Pn** | **11 35 59.5** | **-2.4** |
| **PMR** | **Palmer** | **13.25** | **37** | | Pn | | **Pn** | **11 36 03.2** | **+0.2** |
| **H17K** | **Granite Mounta** | **13.32** | **11** | | Pn | | **Pn** | **11 36 01.5** | **-2.5** |
| **J20K** | **Nowinta River** | **13.65** | **22** | | Pn | | **Pn** | **11 36 08.7** | **+0.1** |
| **H18K** | **Honhosa River** | **13.73** | **14** | | Pn | | **Pn** | **11 36 07.1** | **-2.5** |
| **FID** | **Port Fidalgo** | **13.82** | **43** | | Pn | | **Pn** | **11 36 07.7** | **-3.2** |
| **SCM** | **Sheep Creek Mo** | **14.08** | **39** | | Pn | | **Pn** | **11 36 12.3** | **-2.1** |
| **BPAW** | **Bear Paw Mtn.** | **14.41** | **27** | | Pn | | **Pn** | **11 36 15.8** | **-3.1** |
| **RAGM** | **Ragged Mountai** | **14.44** | **46** | | Pn | | **Pn** | **11 36 16.8** | **-2.5** |
| **KLU** | **Klutina** | **14.44** | **41** | | Pn | | **Pn** | **11 36 16.5** | **-3.0** |
| **RND** | **Reindeer** | **14.54** | **32** | | Pn | | **Pn** | **11 36 19.2** | **-1.6** |
| **HMT** | **Hamilton** | **14.60** | **47** | | Pn | | **Pn** | **11 36 19.6** | **-1.9** |
| **F17K** | **Baldwin Pennin** | **14.65** | **7** | | Pn | | **Pn** | **11 36 21.4** | **-0.8** |
| **M24K** | **Tolsona, Glenn** | **14.68** | **39** | | Pn | | **Pn** | **11 36 19.9** | **-2.7** |
| **SUCK** | **Suckling Hills** | **14.71** | **48** | | Pn | | **Pn** | **11 36 21.9** | **-1.2** |
| **DHY** | **Denali Highway** | **14.82** | **35** | | Pn | | **Pn** | **11 36 21.6** | **-3.0** |
| **BWN** | **Browne** | **14.90** | **29** | | Pn | | **Pn** | **11 36 24.4** | **-1.1** |
| **MLY** | **Manley** | **15.20** | **25** | | Pn | | **Pn** | **11 36 29.3** | **-0.2** |
| MLY | | | | | IAmb | | IAmb | 11 36 31.0 | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **H21K** | **Melozitna Rive** | **15.21** | **21** | | Pn | | **Pn** | **11 36 31.2** | **+1.6** |
| H21K | | | | | IAmb | | IAmb | 11 36 35.5 | |
| | comp=Z,3.9nm,1.1s | | | | | | | | |
| **CRQM** | **Cirque** | **15.28** | **46** | | Pn | | **Pn** | **11 36 29.3** | **-1.5** |
| **GLB** | **Gilahina Butte** | **15.29** | **43** | | Pn | | **Pn** | **11 36 28.3** | **-2.5** |
| GLB | | | | | IAmb | | IAmb | 11 36 38.7 | |
| | comp=Z,5.1nm,1.1s | | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **15.40** | **12** | | Pn | | **Pn** | **11 36 30.0** | **-2.0** |
| F19K | | | | | IAmb | | IAmb | 11 36 40.4 | |
| | comp=Z,2.3nm,0.8s | | | | | | | | |
| **TGL** | **Tana Glacier** | **15.42** | **46** | | Pn | | **Pn** | **11 36 28.9** | **-3.5** |
| **PAX** | **Paxson** | **15.45** | **37** | | Pn | | **Pn** | **11 36 30.8** | **-2.0** |
| PAX | | | | | IAmb | | IAmb | 11 36 54.0 | |
| | comp=Z,9.6nm,1.4s | | | | | | | | |
| **ISLE** | **Juniper Island** | **15.58** | **47** | | Pn | | **Pn** | **11 36 30.5** | **-4.1** |
| **MCARA** | **McCarthy VSAT** | **15.60** | **44**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **INK** | **Inuvik** | **22.51** | **31** | P | **P** | **11 37 53.9** | **0.0** |
| INK | | | | IAmb | IAmb | 11 38 09.0 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **BBB** | **Bella Bella** | **23.07** | **75** | P | **P** | **11 37 59.8** | **0.0** |
| **O02D** | **Mt. Diablo Mer** | **31.72** | **95** | P | **P** | **11 39 18.1** | **0.0** |
| **PDAR** | **Pinedale Array** | **38.38** | **81** | P | **P** | **11 40 16.2** | **+0.5** |
| | comp=Z,0.2nm,0.4s,baz=310,slow=7.0,SNR=2.3 comp=Z,0.2nm,0.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **38.58** | **224** | T | T | 12 23 23.5 | |
| | baz=24,slow=76,SNR=6.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **38.59** | **224** | T | T | 12 23 21.6 | |
| | baz=24,slow=76,SNR=7.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **38.60** | **224** | T | T | 12 23 20.0 | |
| | baz=24,slow=76,SNR=4.4 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.75** | **223** | T | T | 12 24 46.5 | |
| | baz=23,slow=76,SNR=15 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.77** | **223** | T | T | 12 24 40.8 | |
| | baz=23,slow=76,SNR=14 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.77** | **223** | T | T | 12 24 42.5 | |
| | baz=23,slow=76,SNR=9.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **50.64** | **91** | P | **P** | **11 41 53.9** | **+0.5** |
| | comp=Z,1.0nm,0.6s,baz=300,slow=5.9,SNR=16 comp=Z,1.0nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.46** | **355** | P | **P** | **11 42 52.3** | **+2.9** |
| | comp=Z,1.9nm,0.9s,baz=359,slow=6.1,SNR=4.7 comp=Z,1.9nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **65.55** | **315** | P | **P** | **11 43 38.0** | **+0.6** |
| | comp=Z,0.4nm,0.6s,baz=4.6,slow=6.1,SNR=4.5 comp=Z,0.4nm,0.6s | | | | | | |
| **FIA1** | **FINESS Array S** | **66.47** | **354** | P | **P** | **11 43 43.8** | **+0.8** |
| **FINES** | **FINESS Array B** | **66.47** | **354** | P | **P** | **11 43 44.2** | **+1.2** |
| | comp=Z,0.9nm,0.5s,baz=28,slow=8.6,SNR=6.7 comp=Z,0.9nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **67.26** | **2** | P | **P** | **11 43 49.9** | **+1.7** |
| | comp=Z,0.9nm,0.8s,baz=2.0,slow=6.4,SNR=2.7 comp=Z,0.9nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **68.19** | **0** | P | **P** | **11 43 55.3** | **+1.3** |
| | comp=Z,1.2nm,0.4s,baz=32,slow=3.9,SNR=11 comp=Z,1.2nm,0.4s | | | | | | |

*IDC **31** 11:39:35.9±1.4,28°.98S×74°.53E, h0km, mb4.0/4, mbtmp4.0/4, Error ellipse: s-maj=58.4km s-min=29.6km az=175.0*
*NEIC **31** 11:39:36.8±0.8,28°.9S±0°.2×74°.53E±0°.06, h10km±1km, mb4.5/10, Error ellipse: s-maj=28.0km s-min=9.2km az=187.0*

**ISC 31 11:39:36.4**±0.8,**28°.9S**±0°.2×**74°.6E**±0°.2,**h10**km,**n23, σ1§02/14, mb4.4/9, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **21.22** | **354** | T | T | 12 06 15.2 | |
| | baz=175,slow=76,SNR=22 | | | | | | |
| **H08S1** | **Diego Carcia H** | **21.22** | **354** | T | T | 12 06 15.7 | |
| | baz=175,slow=76,SNR=12 | | | | | | |
| **H08S3** | **Diego Garcia H** | **21.24** | **354** | T | T | 12 06 18.7 | |
| | baz=175,slow=76,SNR=42 | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **24.88** | **220** | T | T | 12 10 46.8 | |
| | baz=54,slow=74,SNR=65 | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **24.89** | **220** | T | T | 12 10 47.7 | |
| | baz=54,slow=74,SNR=49 | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **24.89** | **220** | T | T | 12 10 43.6 | |
| | baz=54,slow=74,SNR=68 | | | | | | |
| **H04S1** | **CROZET ISLANDS** | **25.22** | **218** | T | T | 12 11 10.5 | |
| | baz=52,slow=76,SNR=16 | | | | | | |
| **H04S3** | **CROZET ISLANDS** | **25.23** | **219** | T | T | 12 11 09.7 | |
| | baz=52,slow=76,SNR=19 | | | | | | |
| **H04S2** | **CROZET ISLANDS** | **25.24** | **218** | T | T | 12 11 13.7 | |
| | baz=52,slow=76,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **52.93** | **99** | P | **P** | **11 48 54.8** | **+1.6** |
| | 1.8nm,0.8s,baz=252,slow=6.4,SNR=22 1.8nm,0.8s | | | | | | |
| **AS31** | **Alice Springs** | **52.94** | **99** | P | **P** | **11 48 52.2** | **-1.0** |
| **WRA** | **Warramunga Arr** | **54.61** | **95** | P | **P** | **11 49 07.2** | **+1.8** |
| | 2.8nm,0.8s,baz=252,slow=7.3,SNR=14 2.8nm,0.8s | | | | | | |
| **WB2** | **Warramunga Arr** | **54.62** | **95** | P | **P** | **11 49 05.7** | **+0.1** |
| **WRAB** | **Tennant Creek** | **54.62** | **95** | P | **P** | **11 49 06.2** | **+0.7** |
| WRAB | | | | IAmb | IAmb | 11 49 07.9 | |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **54.72** | **95** | P | **P** | **11 49 06.4** | **+0.1** |
| WB0 | | | | IAmb | IAmb | 11 49 09.4 | |
| | comp=Z,7.1nm,1.1s | | | | | | |
| **WR0** | **Warramunga Arr** | **54.78** | **95** | P | **P** | **11 49 06.4** | **-0.2** |
| WR0 | | | | IAmb | IAmb | 11 49 10.1 | |
| | comp=Z,9.4nm,1.3s | | | | | | |
| **SNAA** | **Sanae** | **58.94** | **201** | P | **P** | **11 49 34.3** | **-1.2** |
| SNAA | | | | IAmb | IAmb | 11 49 38.0 | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **58.94** | **201** | P | **P** | **11 49 35.4** | **-0.1** |
| | comp=Z,1.2nm,0.9s,baz=96,slow=2.3,SNR=3.8 comp=Z,1.2nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **61.26** | **180** | P | **P** | **11 49 51.6** | **0.0** |
| QSPA | | | | IAmb | IAmb | 11 49 56.2 | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| **PMG** | **Port Moresby** | **70.25** | **90** | P | **P** | **11 50 50.2** | **0.0** |
| **TARG** | **Taragay, Kyrgy** | **70.32** | **3** | P | **P** | **11 50 49.3** | **-1.1** |
| TARG | | | | IAmb | IAmb | 11 51 00.4 | |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **CSS** | **Mathiatis** | **74.52** | **326** | P | **P** | **11 51 15.2** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** | **81.84** | **290** | P | **P** | **11 51 57.4** | **+1.2** |
| | comp=Z,1.0nm,1.0s,baz=108,slow=4.8,SNR=3.8 comp=Z,1.0nm,1.0s | | | | | | |

**IDC 31 11:41:35.7**±312.0,**54°.72N×41°.28E, h0km, Error ellipse: s-maj=147.7km s-min=65.9km az=141.0, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **3.05** | **313** | I | I | 11 58 00.2 | |
| | 0.1nm,0.8s,baz=129,slow=320,SNR=2.8 | | | | | | |
| **I37NO** | **I37NO** | **17.74** | **333** | I | I | 13 33 00.0 | |
| | baz=135,slow=326,SNR=0.9 | | | | | | |
| **I26DE** | **FREYUNG INFRAS** | **17.96** | **262** | I | I | 13 33 05.3 | |
| | baz=64,slow=318 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **25.10** | **74** | I | I | 14 14 55.0 | |
| | baz=288,slow=322,SNR=1.0 | | | | | | |

*IDC **31** 11:50:21.7±1.3,30°.51N×50°.31E, h0km, mb3.9/9, mbtmp3.9/11, ML3.7/2, MS2.4/1, Error ellipse: s-maj=30.3km s-min=19.4km az=173.0*
*TEH **31** 11:50:23.5,30°.42N×50°.54E, h9km±43km, ML3.7*
*OMAN **31** 11:50:25.0±0.6,30°.31N×50°.66E, h10km, mb4.9/11, ms2.7/1, Error ellipse: s-maj=5.8km s-min=3.7km az=6.0*

**ISC 31 11:50:22.8**±0.6,**30°.41N**±0°.04×**50°.54E**±0°.04,**h10**km,**n82, σ1§90/94, mb3.7/9, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABEH** | **Behbahan** | **0.31** | **307** | Pg | **Pb** | **11 50 30.5** | **+0.1** |
| **KLNJ** | **Kolanjah** | **1.08** | **57** | Pg | **Pg** | **11 50 43.6** | **-0.1** |
| **KAZ2** | **Kazeron-Fars-I** | **1.26** | **129** | Pg | **Pg** | **11 50 48.3** | **+1.3** |
| **IBRJ** | **Brojen** | **1.61** | **22** | Pg | **Pb** | **11 50 53.9** | **+1.0** |
| **AHBU** | **AHRAM** | **1.68** | **157** | Pg | **Pg** | **11 50 55.3** | **+0.2** |
| **ZNGN** | **Zangian** | **1.72** | **9** | Pg | **Pb** | **11 50 55.3** | **+0.7** |
| **JHBN** | **Jahan bin** | **1.81** | **3** | Pn | **Pb** | **11 50 56.3** | **0.0** |
| **SHI** | **Shiraz** | **1.88** | **114** | Pn | **Pg** | **11 50 59.0** | **+0.1** |
| **IRAM** | **Rameshеh** | **2.11** | **48** | Pn | **Pb** | **11 51 01.5** | **+0.3** |
| **DSBU** | **Dashti - Bushe** | **2.14** | **163** | Pn | **Pn** | **11 51 00.8** | **+2.2** |
| **IPIR** | **Pirpir** | **2.28** | **8** | Pn | **Pb** | **11 51 03.6** | **-0.7** |
| **IGAR** | **Gharneh** | **2.36** | **33** | Pn | **Pb** | **11 51 04.8** | **-0.9** |
| **KBD** | **Kabd** | **2.76** | **244** | P | **Pn** | **11 51 10.1** | **+3.0** |
| KBD | | | | S | **Sb** | **11 51 44.3** | **-1.9** |
| **IZEF** | **Zefreh** | **2.91** | **31** | Pn | **Pn** | **11 51 12.4** | **+3.1** |
| **IKLH** | **Kolahrood** | **3.03** | **17** | Pn | **Pn** | **11 51 13.5** | **+2.4** |
| **ISAD** | **Sadrabad** | **3.08** | **60** | Pn | **Pn** | **11 51 14.8** | **+3.0** |
| **QAMS** | **Qamsar** | **3.39** | **12** | Pn | **Pn** | **11 51 18.4** | **+2.4** |
| **IMEH** | **Mehriz** | **3.64** | **73** | Pn | **Pn** | **11 51 22.5** | **+3.1** |
| **ICHK** | **Chekchek** | **3.78** | **60** | Pn | **Pn** | **11 51 24.0** | **+2.6** |
| **KRSH** | **Karshahi** | **3.79** | **21** | Pn | **Pn** | **11 51 24.7** | **+3.2** |
| **BDRS** | **Dareh Seyedi** | **3.80** | **339** | Pn | **Pn** | **11 51 24.4** | **+2.7** |
| **IKFM** | **Kafar-mosalman** | **3.85** | **324** | Pn | **Pn** | **11 51 24.8** | **+2.7** |
| **ANAR** | **Anarak** | **3.88** | **44** | Pn | **Pn** | **11 51 25.2** | **+2.5** |
| **HSAM** | **Samen** | **4.12** | **337** | Pn | **Pn** | **11 51 28.4** | **+2.3** |
| **ISFB** | **Sefidab** | **4.18** | **20** | Pn | **Pn** | **11 51 28.8** | **+2.1** |
| **SAKB** | **Bahrain** | **4.42** | **180** | P | **Pn** | **11 51 32.4** | **+2.5** |
| SAKB | | | | S | **Sn** | **11 52 22.8** | **+1.4** |
| **IQOM** | **Qom** | **4.44** | **6** | Pn | **Pn** | **11 51 32.3** | **+1.9** |
| **IBAF** | **Bafgh** | **4.47** | **74** | Pn | **Pn** | **11 51 33.6** | **+2.8** |
| **SHMA** | **Al-Shehemyia** | **4.56** | **175** | P | **Pn** | **11 51 34.4** | **+2.6** |
| | SNR=33 | | | | | | |
| SHMA | | | | S | **Sn** | **11 52 25.9** | **+1.1** |
| **IVRN** | **Varamin** | **4.68** | **12** | Pn | **Pn** | **11 51 35.8** | **+2.3** |
| **IDMV** | **Damavand** | **5.30** | **13** | Pn | **Pn** | **11 51 44.6** | **+2.3** |
| **QABG** | **Abgarm-Qazvin** | **5.34** | **352** | Pn | **Pn** | **11 51 45.1** | **+2.3** |
| **ILAS** | **Lasjerd** | **5.36** | **22** | Pn | **Pn** | **11 51 45.4** | **+2.4** |
| **IFIR** | **Firoozkooh** | **5.54** | **19** | Pn | **Pn** | **11 51 47.6** | **+2.1** |
| **SMRA** | **Abu-Samra** | **5.65** | **177** | P | **Pn** | **11 51 49.0** | **+2.2** |
| SMRA | | | | S | **Sn** | **11 52 53.3** | **+1.4** |
| **TRNA** | **Turayna** | **5.69** | **174** | P | **Pn** | **11 51 49.7** | **+2.3** |
| | SNR=6.6 | | | | | | |
| TRNA | | | | S | **Sn** | **11 52 53.8** | **+1.0** |
| **JRN** | **Qarnain Island** | **5.82** | **159** | P | **Pn** | **11 51 50.9** | **+1.7** |
| | SNR=11 | | | | | | |
| JRN | | | | S | **Sn** | **11 52 56.6** | **+0.5** |
| **IPRN** | **Peran** | **6.00** | **14** | Pn | **Pn** | **11 51 53.9** | **+2.1** |
| **MZPU** | **Pul - Mazandar** | **6.07** | **8** | Pn | **Pn** | **11 51 55.8** | **+2.9** |
| **KLST** | **Kelardasht - M** | **6.10** | **4** | Pn | **Pn** | **11 51 55.8** | **+2.4** |
| **SLWR** | **Sila** | **6.40** | **170** | P | **Pn** | **11 51 58.3** | **+1.1** |
| SLWR | | | | S | **Sn** | **11 53 10.9** | **+0.6** |
| **SHME** | **Shamm** | **6.58** | **130** | Pn | **Pn** | **11 51 57.5** | **-2.2** |
| **SHME** | **Shamm** | **6.58** | **130** | P | **Pn** | **11 51 59.8** | **+0.1** |
| SHME | | | | S | **Sn** | **11 53 14.4** | **-0.4** |
| **IGLO** | **Ghaloghah** | **6.67** | **24** | Pn | **Pn** | **11 52 03.5** | **+2.5** |
| **AJN** | **Ajban** | **7.04** | **145** | P | **Pn** | **11 52 06.4** | **+0.4** |
| | SNR=5.5 | | | | | | |
| AJN | | | | S | **Sn** | **11 53 27.1** | **+1.0** |
| **MASF** | **Masafi** | **7.07** | **134** | P | **Pn** | **11 52 06.8** | **+0.4** |
| **MSFE** | **Esma-Masafi** | **7.08** | **134** | Pn | **Pn** | **11 52 06.5** | **0.0** |
| **ASUD** | **Al Ashush, Dub** | **7.17** | **142** | P | **Pn** | **11 52 09.4** | **+1.8** |
| ASUD | | | | S | **Sn** | **11 53 28.7** | **-0.4** |
| **MDH** | **Madha** | **7.21** | **134** | Pn | **Pn** | **11 52 08.4** | **+0.2** |
| **MDH** | **Madha** | **7.21** | **134** | P | **Pn** | **11 52 08.6** | **+0.3** |
| MDH | | | | S | **Sn** | **11 53 27.8** | **-2.5** |
| **UOSS** | **Minazif** | **7.41** | **136** | Pn | **Pn** | **11 52 10.1** | **-0.9** |
| **UOSS** | **Minazif** | **7.41** | **136** | Pn | **Pn** | **11 52 13.2** | **+2.2** |
| **UOSS** | **Minazif** | **7.41** | **136** | P | **Pn** | **11 52 11.6** | **+0.5** |
| **HATD** | **Hatta, Dubai** | **7.46** | **137** | Pn | **Pn** | **11 52 12.8** | **+1.0** |
| **HATD** | **Hatta, Dubai** | **7.46** | **137** | P | **Pn** | **11 52 12.7** | **+1.0** |
| **ASHO** | **Ashiyiah** | **7.52** | **138** | Pn | **Pn** | **11 52 12.2** | **-0.4** |
| ASHO | | | | S | **Sn** | **11 53 34.7** | **-3.4** |
| **ASHO** | **Ashiyiah** | **7.52** | **138** | P | **Pn** | **11 52 13.5** | **+0.9** |
| | SNR=9.7 | | | | | | |
| **MZR** | **Muzera** | **7.84** | **160** | P | **Pn** | **11 52 18.2** | **+1.3** |
| | SNR=11 | | | | | | |
| **ALNE** | **Al Ain** | **7.85** | **143** | Pn | **Pn** | **11 52 16.3** | **-0.8** |
| **ALNE** | **Al Ain** | **7.85** | **143** | P | **Pn** | **11 52 17.9** | **+0.8** |
| **RAYN** | **Ar Rayn** | **8.20** | **214** | Pn | **Pn** | **11 52 20.1** | **-1.8** |
| **BSY** | **Bisya** | **9.69** | **140** | P | **Pn** | **11 52 42.7** | **+0.4** |
| **SMDO** | **Samad** | **9.93** | **136** | P | **Pn** | **11 52 46.4** | **+0.6** |
| **WSAR** | **Wadi Sarin** | **10.16** | **133** | Pn | **Pn** | **11 52 50.0** | **+1.2** |
| | 0.6nm,0.3s,baz=334,slow=11,SNR=1.9 | | | | | | |
| WSAR | | | | Sn | **Sn** | **11 54 35.8** | **-7.0** |
| | 0.2nm,0.3s,baz=131,slow=20,SNR=1.0 3.1nm,0.5s | | | | | | |
| **JMDO** | **Jabal Madar** | **10.49** | **138** | P | **Pn** | **11 52 53.7** | **+0.3** |
| **GNI** | **Garni** | **10.80** | **336** | LR | LR | 11 56 46.6 | |
| | comp=Z,19nm,20.5s,baz=186,slow=36 | | | | | | |
| **MHTO** | **MHTO** | **11.53** | **143** | P | **Pn** | **11 53 08.3** | **+0.8** |
| **ASF** | **Jabal al Asfar** | **11.80** | **282** | Pn | **Pn** | **11 53 08.8** | **-2.5** |
| | 0.5nm,0.3s,baz=242,slow=0.3,SNR=7.7 1.2nm,0.4s | | | | | | |
| **DOK** | **Doka** | **12.19** | **164** | P | **Pn** | **11 53 17.0** | **+0.5** |
| | SNR=9.3 | | | | | | |
| **WHFO** | **Wadi Hawf** | **12.78** | **166** | P | **Pn** | **11 53 24.5** | **-0.2** |
| **ABTO** | **Aybut** | **13.24** | **168** | P | **Pn** | **11 53 32.3** | **+1.3** |
| **DMTO** | **DMTO** | **13.27** | **161** | P | **Pn** | **11 53 30.1** | **-1.1** |
| **RBK** | **Rabkut** | **13.28** | **165** | P | **Pn** | **11 53 32.5** | **+1.0** |
| **AKASG** | **Malin Array Be** | **25.77** | **328** | P | **P** | **11 55 52.1** | **-1.5** |
| | 0.3nm,0.4s,baz=138,slow=9.2,SNR=1.9 0.3nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **26.84** | **27** | P | **P** | **11 56 05.5** | **+2.2** |
| | 0.6nm,0.4s,baz=224,slow=5.2,SNR=2.7 0.6nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.05** | **38** | P | **P** | **11 56 23.9** | **+0.8** |
| | 0.4nm,0.3s,baz=246,slow=9.0,SNR=1.5 0.4nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **29.46** | **47** | P | **P** | **11 56 27.8** | **+1.0** |
| | 0.7nm,0.6s,baz=236,slow=6.3,SNR=9.1 0.7nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.08** | **36** | P | **P** | **11 57 07.5** | **+0.2** |
| | 0.5nm,0.4s,baz=259,slow=6.9,SNR=3.5 0.5nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **34.95** | **340** | P | **P** | **11 57 12.7** | **-2.0** |
| | 0.5nm,0.4s,baz=134,slow=12,SNR=5.7 0.5nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **38.55** | **331** | P | **P** | **11 57 44.0** | **-1.3** |
| | 3.2nm,0.9s,baz=108,slow=9.3,SNR=6.8 3.2nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.11** | **260** | P | **P** | **11 59 02.6** | **-0.5** |
| | 1.7nm,0.5s,baz=55,slow=8.7,SNR=14 1.7nm,0.5s | | | | | | |
| **KSRS** | **Korea Array** | **62.92** | **61** | P | **P** | **12 00 51.0** | **+1.5** |
| | 1.3nm,0.6s,baz=277,slow=7.0,SNR=9.1 1.3nm,0.6s | | | | | | |

**LVSN 31 11:51:09.9**±4.2,**55°.65N×23°.58E, h0km**±999km,**ML2.6, Baltic States-Belarus-Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLIT** | **Slitere, Latvi** | **2.11** | **341** | *e*P | Pn | 11 51 42.9 | -3.5 |
| SLIT | | | | *e*S | Sn | 11 52 09.6 | -3.7 |
| SLIT | | | | AML | AML | 11 52 11.8 | |
| | comp=Z,55nm,1.0s | | | | | | |
| SLIT | | | | AML | AML | 11 52 12.1 | |
| | comp=E,96nm,0.5s | | | | | | |
| SLIT | | | | AML | AML | 11 52 12.4 | |
| | comp=N,115nm,0.8s | | | | | | |
| **MTSE** | **Matsula** | **3.07** | **2** | *e*P | Pn | 11 51 57.6 | -2.1 |
| MTSE | | | | *e*S | Sn | 11 52 31.8 | -5.3 |
| **ARBE** | **Arbavere** | **4.01** | **18** | AML | AML | 11 53 08.7 | |
| | comp=Z,19nm,0.5s | | | | | | |
| ARBE | | | | AML | AML | 11 53 12.2 | |
| | comp=N,31nm,0.2s | | | | | | |
| ARBE | | | | AML | AML | 11 53 23.2 | |
| | comp=E,27nm,0.4s | | | | | | |
| **RAF** | **Rauma** | **5.47** | **351** | *e*S | Sn | 11 53 26.8 | -9.3 |

**ISC 31 11:53:00.4**±1.0,**67°.79N**±0°.03×**135°.45W**±0°.03,**h16**km±7km, **n22, σ0§50/36, Northwest Territories**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **F30M** | **Barrier River** | **0.22** | **216** | P | **Pg** | **11 53 05.3** | **-0.2** |
| | baz=34,SNR=837 | | | | | | |
| F30M | | | | S | **Sg** | **11 53 09.1** | **+0.2** |
| | baz=34 | | | | | | |
| **F31M** | **Tsiigehtchic** | **0.74** | **117** | P | **Pg** | **11 53 15.1** | **+0.2** |
| | baz=299,SNR=61 | | | | | | |
| F31M | | | | S | **Sg** | **11 53 24.9** | **+0.2** |
| | baz=299 | | | | | | |
| **G30M** | **tAoh Zraii Nji** | **0.86** | **201** | P | **Pb** | **11 53 16.2** | **-0.9** |
| | baz=19,SNR=29 | | | | | | |
| G30M | | | | S | **Sb** | **11 53 28.2** | **-0.2** |
| | baz=19 | | | | | | |
| **INK** | **Inuvik** | **0.89** | **53** | P | **Pb** | **11 53 16.6** | **-0.8** |
| | baz=236,SNR=195 | | | | | | |
| INK | | | | S | **Sg** | **11 53 29.8** | **+0.4** |
| | baz=236 | | | | | | |
| **G31M** | **Satah River** | **0.98** | **152** | P | **Pb** | **11 53 19.1** | **0.0** |
| | baz=333,SNR=138 | | | | | | |
| G31M | | | | S | **Sb** | **11 53 31.9** | **+0.2** |
| | baz=333 | | | | | | |
| **E29M** | **Blow River** | **1.10** | **304** | P | **Pb** | **11 53 20.7** | **-0.4** |
| | baz=122,SNR=22 | | | | | | |
| E29M | | | | S | **Sn** | **11 53 35.2** | **-0.7** |
| | baz=122 | | | | | | |
| **G29M** | **Pine Creek** | **1.33** | **230** | P | **Pn** | **11 53 24.0** | **-0.4** |
| | baz=47,SNR=93 | | | | | | |
| G29M | | | | S | **Sb** | **11 53 42.2** | **+0.5** |
| | baz=47 | | | | | | |
| **EPYK** | **Eagle Plains** | **1.51** | **200** | P | **Pn** | **11 53 26.3** | **-0.5** |
| | baz=18,SNR=5.8 | | | | | | |
| EPYK | | | | Sb | **Sb** | **11 53 47.7** | **+0.8** |
| | baz=18 | | | | | | |
| **F28M** | **Old Crow** | **1.70** | **266** | Pb | **Pb** | **11 53 30.7** | **-0.5** |
| | baz=82 | | | | | | |
| F28M | | | | S | **Sn** | **11 53 51.1** | **+0.4** |
| | baz=82 | | | | | | |
| **E28M** | **Babbage River** | **1.73** | **300** | Pb | **Pb** | **11 53 31.7** | **-0.1** |
| | baz=116 | | | | | | |
| E28M | | | | Sb | **Sb** | **11 53 54.2** | **+0.9** |
| | baz=116 | | | | | | |
| **H29M** | **Whitestone** | **1.95** | **217** | P | **Pn** | **11 53 32.8** | **0.0** |
| | baz=34,SNR=45 | | | | | | |
| H29M | | | | S | **Sn** | **11 53 57.7** | **+0.8** |
| | baz=34 | | | | | | |
| **H31M** | **Peel River** | **2.04** | **167** | P | Pn | 11 53 34.5 | +0.4 |
| | baz=348,SNR=32 | | | | | | |
| H31M | | | | S | **Sn** | **11 53 58.8** | **-0.4** |
| | baz=348 | | | | | | |
| **E27K** | **Coleen River** | **2.35** | **283** | S | **Sn** | **11 54 06.7** | **-0.1** |
| | baz=97 | | | | | | |
| **G27K** | **Doyon Strip** | **2.60** | **251** | S | **Sn** | **11 54 13.5** | **+0.5** |
| | baz=65 | | | | | | |
| **I30M** | **Mount Dempster** | **2.60** | **189** | P | **Pn** | **11 53 41.9** | **0.0** |
| | baz=7.6 | | | | | | |
| I30M | | | | S | **Sn** | **11 54 13.5** | **+0.3** |
| | baz=7.6 | | | | | | |
| **I29M** | **Ogilvie Camp,** | **2.69** | **206** | S | **Sn** | **11 54 15.9** | **+0.6** |
| | baz=24 | | | | | | |
| **H27K** | **Steamboat Moun** | **2.85** | **240** | S | **Sn** | **11 54 19.7** | **+0.4** |
| | baz=54 | | | | | | |
| **I28M** | **Miner Creek** | **2.95** | **219** | S | **Sn** | **11 54 21.1** | **-0.7** |
| | baz=35 | | | | | | |
| **J30M** | **Hart River** | **3.25** | **187** | P | **Pn** | **11 53 50.8** | **+0.1** |
| | baz=5.8,SNR=9.7 | | | | | | |
| J30M | | | | S | **Sn** | **11 54 28.5** | **-0.6** |
| | baz=5.8 | | | | | | |
| **I27K** | **Kandik River** | **3.29** | **231** | S | **Sn** | **11 54 29.9** | **-0.2** |
| | baz=45 | | | | | | |
| **F26K** | **Sheenjek River** | **3.31** | **272** | S | **Sn** | **11 54 30.6** | **+0.1** |
| | baz=84 | | | | | | |
| **EGAK** | **Eagle** | **3.80** | **220** | S | **Sn** | **11 54 42.2** | **-0.4** |
| | baz=35 | | | | | | |

*IDC **31** 12:17:24.9±1.8,21°.99S×170°.39E, h20km±6km, mb3.6/4, mbtmp3.7/5, ML3.3/1, MS4.2/1, Error ellipse: s-maj=45.9km s-min=26.9km az=22.0*
*NOU **31** 12:17:55.3,21°.67S×167°.82E, h0km, MLv2.1/7, Loyalty Islands*

**ISC 31 12:17:27.0**±1.2,**22°.1S**±0°.2×**170°.3E**±0°.1,**h35**km,**n22, σ1§32/25, mb4.0/6, 4C, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MARNC** | **Mare, Loyalty** | **2.19** | **287** | P | **Pn** | **12 18 00.4** | **-0.6** |
| **MARNC** | **Mare, Loyalty** | **2.19** | **287** | P | **Pn** | **12 18 00.6** | **-0.4** |
| **LIFNC** | **LIFOU** | **3.14** | **295** | P | **Pn** | **12 18 15.0** | **+1.0** |
| **LIFNC** | **LIFOU** | **3.14** | **295** | P | **Pn** | **12 18 15.2** | **+1.2** |
| **YATNC** | **Mamie plateau,** | **3.15** | **271** | P | **Pn** | **12 18 13.2** | **-1.0** |
| **YATNC** | **Mamie plateau,** | **3.15** | **271** | P | **Pn** | **12 18 13.1** | **-1.1** |
| **ONTNC** | **Ouen Toro** | **3.56** | **266** | P | **Pn** | **12 18 22.6** | **+2.8** |
| **ONTNC** | **Ouen Toro** | **3.56** | **266** | P | **Pn** | **12 18 21.9** | **+2.1** |
| **DZM** | **Mont Dzumac** | **3.56** | **270** | P | **Pn** | **12 18 20.2** | **+0.2** |
| **DZM** | **Mont Dzumac** | **3.56** | **270** | Pn | **Pn** | **12 18 19.8** | **-0.1** |
| | 2.7nm,0.3s,baz=296,slow=20,SNR=61 | | | | | | |
| DZM | | | | Sn | **Sn** | **12 19 00.2** | **-0.7** |
| | 1.3nm,0.3s,baz=345,slow=20,SNR=2.0 11nm,0.4s | | | | | | |
| **NOUC** | **Port Laguerre** | **3.70** | **270** | P | **Pn** | **12 18 21.7** | **0.0** |
| **NOUC** | **Port Laguerre** | **3.70** | **270** | P | **Pn** | **12 18 21.6** | **-0.1** |
| **HNR** | **Honiara** | **16.06** | **320** | LR | LR | 12 25 28.9 | |
| | comp=Z,766nm,18.8s,baz=282,slow=30 | | | | | | |
| **STKA** | **Stephens Creek** | **27.28** | **243** | P | **P** | **12 23 11.1** | **+2.8** |
| | 2.2nm,1.0s,baz=54,slow=14,SNR=2.8 2.2nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **33.50** | **260** | P | **P** | **12 24 04.2** | **+0.8** |
| | 0.3nm,0.6s,baz=85,slow=9.2,SNR=7.0 | | | | | | |
| ASAR | | | | pP | **pP** | **12 24 10.7** | **-1.2** |
| | 0.4nm,0.6s,baz=92,slow=9.4,SNR=3.3 0.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.58** | **267** | P | **P** | **12 24 03.7** | **-0.4** |
| | 0.4nm,0.7s,baz=101,slow=8.3,SNR=5.6 | | | | | | |
| WRA | | | | pP | **pP** | **12 24 10.7** | **-1.9** |
| | 0.5nm,0.6s,baz=98,slow=8.2,SNR=3.0 0.4nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.94** | **180** | P | **P** | **12 28 22.7** | **+0.5** |
| | 1.2nm,0.8s,baz=57,slow=2.1,SNR=5.3 | | | | | | |
| QSPA | | | | pP | **pP** | **12 28 29.4** | **-2.1** |
| | 2.6nm,1.1s,baz=71,slow=2.5,SNR=3.9 1.2nm,0.8s | | | | | | |
| **TROLL** | **Troll, Antarti** | **85.74** | **184** | ⇑P | **P** | **12 30 02.2** | **-0.1** |
| | comp=Z,99nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **86.33** | **182** | ⇑P | **P** | **12 30 04.4** | **-0.8** |
| | comp=Z,23nm,0.7s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.89** | **180** | ⇑P | **P** | **12 30 07.3** | **-0.6** |
| | comp=Z,2.9nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **87.19** | **181** | ⇑P | **P** | **12 30 09.1** | **-0.2** |
| | comp=Z,2.4nm,0.7s,baz=158,slow=4.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **146.48** | **353** | PKPbc | **PKPdf** | **12 37 03.7** | **+0.9** |
| | comp=Z,1.3nm,0.5s,baz=356,slow=2.5,SNR=6.3 | | | | | | |

*IDC **31** 12:21:24.5±0.7,42°.93N×77°.58E, h0km, mb4.2/16, mbtmp4.3/23, ML3.9/7, MS3.6/45, Error ellipse: s-maj=12.4km s-min=8.3km az=149.0*
*MOS **31** 12:21:25.6±1.1,43°.07N×77°.56E, h10km, mb4.4/14, Error ellipse: s-maj=4.7km s-min=4.2km az=142.0*
*MOS Felt (IV) at Almaty, (III-IV) at Talgar, Kotyrbulak, (II-III) at Kastek, (II) at Saty.*
*NNC **31** 12:21:26.9±0.7,42°.99N×77°.50E, h0km, mb4.8, mpv4.6, Error ellipse: s-maj=5.2km s-min=3.3km az=14.0*
*BJI **31** 12:21:26.0±0.0,43°.13N×77°.66E, h10km, mb4.3/22, mB4.7/10, ML4.3/10, Ms4.0/14, Ms7 3.6/14*
*SOME **31** 12:21:27.6,43°.02

PRZ **Przheval'sk** 0.81 127 PG Pb 12 21 43.8 +0.9
MTBS **Maitube** 0.82 281 *e*P Pg 12 21 42.1 -0.3
825nm,0.2s
MTBS *e*S Sg 12 21 52.2 -0.9
11µm,0.2s
KDJ **Kajisay** 0.89 197⇓*e*P Pg 12 21 43.9 +0.2
baz=93
KDJ ⇓*i*S Sg 12 21 54.9 -0.3
baz=93
KDJ **Kajisay** 0.89 197 *i* PG Pg 12 21 43.4 -0.3
KDJ *i* S Sg 12 21 54.4 -0.8
KTBS **Karatobe** 0.96 320 *e*P Pg 12 21 44.8 -0.3
1µm,0.3s
KTBS *e*S Sg 12 21 57.2 -0.4
15µm,0.4s
CHKK **Chushkaly** 0.96 336 *e*P Pg 12 21 44.8 -0.2
baz=333
CHKK *e*S Sg 12 21 57.1 -0.5
baz=333
CHKK **Chushkaly** 0.96 336 *e*P Pg 12 21 44.9 -0.2
2µm,0.4s
CHKK *e*S Sb 12 21 57.6 -0.6
10µm,0.4s
CHKK **Chushkaly** 0.96 336 *e*PG Pg 12 21 44.8 -0.2
CHKK *e*S Sg 12 21 57.1 -0.5
KPKS **Kokpek** 0.98 60 *e*P Pb 12 21 45.3 -0.4
baz=66
KPKS *e*S Sb 12 21 58.0 -0.8
baz=66
KPKS **Kokpek** 0.98 60 *e*P Pb 12 21 45.4 -0.3
264nm,0.1s
KPKS *e*S Sb 12 21 58.3 -0.4
11µm,0.2s
KPKS **Kokpek** 0.98 60 *e*PG Pb 12 21 45.3 -0.4
KPKS *e*S Sb 12 21 57.9 -0.8
UZB **Uzynbulak** 1.11 81 *e*P Pg 12 21 47.5 -0.5
baz=86
UZB *e*S Sb 12 22 02.3 -0.3
baz=86
UZB **Uzynbulak** 1.11 81 *e*P Pg 12 21 47.6 -0.3
840nm,0.2s
UZB *e*S Sb 12 22 02.3 -0.3
4µm,0.1s
UZB **Uzynbulak** 1.11 81 *e*PG Pg 12 21 47.4 -0.5
UZB *e*S Sb 12 22 02.2 -0.3
KST **Kastek** 1.15 274 *e*P Pb 12 21 48.0 -0.7
587nm,0.2s
KST *e*S Sb 12 22 02.4 -1.3
7µm,0.2s
ULHL **Ulahol** 1.20 233 P Pn 12 21 48.8 -0.8
773nm,0.2s,SNR=838
ULHL ⇑S Sb 12 22 04.0 -1.2
6µm,0.2s
ULHL **Ulahol** 1.20 233⇑*i*P Pn 12 21 48.9 -0.8
baz=32
ULHL ⇑*i*S Sb 12 22 03.8 -1.3
baz=32
ULHL **Ulahol** 1.20 233 *i* PG Pn 12 21 48.7 -0.9
ULHL *i* S Sb 12 22 04.6 -0.5
ARXS **Arharly** 1.25 10 *e*P Pg 12 21 50.3 -0.5
2µm,0.3s
ARXS *e*S Sn 12 22 06.8 -0.4
12µm,0.2s
ARXS **Arharly** 1.25 10 *e*PG Pg 12 21 50.2 -0.5
TARG **Taragay, Kyrgy** 1.26 171 Pn 12 21 50.1 -0.7
TARG **Taragay, Kyrgy** 1.26 171⇓*i*P Pn 12 21 50.8 +0.1
baz=67
TARG ⇓*i*S Sb 12 22 07.3 0.0
baz=67
TARG **Taragay, Kyrgy** 1.26 171 *i* PG Pn 12 21 50.4 -0.3
TARG *i* S Sb 12 22 06.8 -0.5
BOOM **Boomskoye usch** 1.27 248 Pn 12 21 49.9 -0.6
BOOM **Boomskoye usch** 1.27 248⇑*e*P Pn 12 21 49.9 -0.6
baz=49
BOOM ⇑*i*S Sb 12 22 06.0 -1.1
baz=49
BOOM **Boomskoye usch** 1.27 248 PG Pn 12 21 49.9 -0.6
DGS **Degeres** 1.31 282 *e*P Pn 12 21 50.9 -0.2
566nm,0.3s
DGS *e*S Sb 12 22 07.5 -0.9
10µm,0.3s
TKM2 **Tokmak 2** 1.42 268 P Pn 12 21 52.6 -0.1
SNR=609
TKM2 **Tokmak 2** 1.42 268 ⇑P Pn 12 21 52.5 -0.1
172nm,0.3s
TKM2 ⇑S Sn 12 22 11.3 -0.3
5µm,0.5s
TKM2 **Tokmak 2** 1.42 268⇑*i*P Pn 12 21 52.8 +0.1
baz=70
TKM2 ⇑*i*S Sn 12 22 11.1 -0.4
baz=70
TKM2 **Tokmak 2** 1.42 268 PG Pn 12 21 52.6 -0.1
TKM2 S Sn 12 22 11.2 -0.3
SHLS **Shalkode** 1.43 82 *e*P Pg 12 21 58.1 +4.0
baz=87
SHLS **Shalkode** 1.43 82 *e*P Pg 12 21 58.8 +4.8
331nm,0.2s
SHLS *e*S Sg 12 22 21.5 +8.9
2µm,4.9s
SHLS **Shalkode** 1.43 82 *e*PN Pg 12 21 58.0 +4.0
KRBS **Karabastau** 1.53 299 *e*P Pn 12 21 54.4 +0.3
1µm,0.3s
KRBS *e*S Sn 12 22 14.0 -0.1
13µm,0.3s
NRN **Naryn** 1.92 217 Pn 12 22 01.6 +2.0
NRN **Naryn** 1.92 217⇓*e*P Pn 12 22 01.4 +1.8
baz=16
NRN ⇓*i*S Sn 12 22 25.8 +1.9
baz=16
NRN **Naryn** 1.92 217 PN Pn 12 22 01.6 +2.0
KBK **Karagaybulak** 1.92 261 P Pb 12 22 01.8 -0.1
1µm,0.3s,SNR=193
KBK ⇓S Sb 12 22 27.5 +1.5
28µm,0.4s
KBK **Karagaybulak** 1.92 261⇑*i*P Pn 12 22 01.3 +1.7
baz=62
KBK ⇑*i*S Sn 12 22 25.5 +1.6
baz=62
KBK **Karagaybulak** 1.92 261 *i* PN Pn 12 22 01.3 +1.7
KBK *i* S Sn 12 22 25.6 +1.6
CHMS **Chumysh** 2.04 272 ⇓P Pn 12 22 02.9 +2.0
241nm,0.2s,SNR=303
CHMS ⇓S Sb 12 22 29.3 +0.2
9µm,0.3s
CHMS **Chumysh** 2.04 272 ⇓Pn Pn 12 22 02.9 +2.0
557nm,0.7s
CHMS ⇓Sn Sb 12 22 29.7 +0.6
4µm,0.4s
CHMS **Chumysh** 2.04 272⇑*i*P Pn 12 22 03.0 +2.0
baz=73
CHMS ⇑*i*S Sn 12 22 28.2 +1.7
baz=73
CHMS **Chumysh** 2.04 272 *i* PN Pn 12 22 03.0 +2.0
CHMS *i* S Sn 12 22 28.3 +1.7
KTMS **Ketmen** 2.12 76 *e*P Pb 12 22 04.0 -1.2
125nm,0.2s
KTMS *e*S Sb 12 22 30.3 -1.2
931nm,0.2s
TDK **Taldyqorghan** 2.12 17 *e*P Pb 12 22 04.9 -0.3
1µm,0.4s
TDK *e*S Sb 12 22 31.8 +0.3
19µm,0.5s
DJR **Jarkent** 2.13 50 *e*P Pb 12 22 05.2 -0.2
450nm,0.6s
DJR *e*S Sb 12 22 31.7 -0.1
4µm,0.5s
FRU1 **Bishkek** 2.13 266 Pb 12 22 05.5 +0.1
FRU1 **Bishkek** 2.13 266⇓*i*P Pn 12 22 04.3 +1.9
baz=68
FRU1 ⇓*i*S Sn 12 22 30.7 +1.7
baz=68
FRU1 **Bishkek** 2.13 266 PN Pb 12 22 05.5 +0.1
SGDS **Sogindy** 2.17 284 *e*P Pn 12 22 03.7 +0.8
baz=281
SGDS **Sogindy** 2.17 284 *e*PN Pn 12 22 03.6 +0.8
USP **Ospenovka** 2.23 278 ⇓P Pn 12 22 05.2 +1.5
415nm,0.3s,SNR=712
USP ⇑S Sb 12 22 35.1 +0.2
5µm,0.2s
USP **Ospenovka** 2.23 278⇓*e*P Pn 12 22 05.3 +1.5
baz=80
USP ⇓*i*S Sn 12 22 33.1 +1.7
baz=80
USP **Ospenovka** 2.23 278 *e*PN Pn 12 22 05.2 +1.5
USP *i* S Sn 12 22 33.2 +1.8
AAK **Ala-Archa** 2.26 262 Pn Pb 12 22 07.4 -0.2
AAK **Ala-Archa** 2.26 262 Pn Pb 12 22 07.2 -0.4
284nm,0.3s,baz=104,slow=11,SNR=2089
AAK Lg Lg 12 22 37.0
499nm,0.3s,baz=322,slow=19,SNR=36
AAK LR LR 12 22 49.9
comp=Z,89nm,19.9s,baz=118,slow=37
1µm,0.5s
ARLS **Aral** 2.62 246⇓*i*P Pn 12 22 10.7 +1.5
baz=46
ARLS ⇓*i*S Sn 12 22 41.9 +0.8
baz=46
ARLS **Aral** 2.62 246 *i* PN Pn 12 22 10.7 +1.5
ARLS *i* S Sn 12 22 41.9 +0.8
KAPS **Kapalarasan** 2.66 29 *e*P Pb 12 22 14.2 -0.1
661nm,0.3s
KAPS *e*S Sb 12 22 48.2 +1.2
5µm,0.4s
EKS2 **Erkin-Say** 2.78 265⇓*i*P Pn 12 22 13.1 +1.8
baz=65
EKS2 ⇓*i*S Sn 12 22 46.1 +1.2
baz=65
AML **Almayashu** 2.96 255⇓*i*P Pn 12 22 15.8 +1.8
baz=55
AML ⇓*i*S Sn 12 22 50.4 +0.7
baz=55
MRKS **Merke** 3.17 267 *e*P Pb 12 22 22.5 -0.6
62nm,0.3s
MRKS *e*S Sb 12 23 01.7 -0.1
2µm,0.4s
BTLS **Baital** 3.25 311 *e*Pn Pn 12 22 18.4 +0.7
baz=309
BTLS *e*Pg Pb 12 22 26.5 +2.1
baz=309
BTLS **Baital** 3.25 311 *e*P Pb 12 22 24.3 0.0
32nm,0.5s
BTLS *e*S Sb 12 23 04.7 +0.8
746nm,0.3s
BTLS **Baital** 3.25 311 *e*PN Pn 12 22 18.3 +0.7
BTLS *e* 12 22 26.4
KSH **Kashi** 3.65 199 Pn Pb 12 22 33.0 +1.7
KSH Sn Sg 12 23 25.3 +1.5
KSH smax smax
comp=N,3µm,0.8s
KSH smax smax
comp=E,2µm,0.7s
MNAS **Manas** 3.73 264⇓*e*P Pn 12 22 26.4 +2.0
baz=65
MNAS ⇓*i*S Sn 12 23 08.8 +0.3
baz=65
MNAS **Manas** 3.73 264 *i* PN Pn 12 22 26.4 +2.0
MNAS *i* S Sn 12 23 08.8 +0.3
SFK **Sufi-Kurgan** 4.23 227⇑*i*P Pn 12 22 33.3 +2.0
baz=27
SFK ⇑*i*S Sn 12 23 20.8 -0.1
baz=27
SFK **Sufi-Kurgan** 4.23 227 *i* PN Pn 12 22 33.3 +2.0
SFK *i* S Sn 12 23 20.5 -0.4
ARK **Arkit** 4.29 256⇓*i*P Pn 12 22 34.0 +2.0
baz=56
ARK ⇓*i*S Sn 12 23 22.1 0.0
baz=56
ARK **Arkit** 4.29 256 *i* PN Pn 12 22 33.7 +1.7
ARK *i* S Sn 12 23 21.8 -0.3
OHH **Osh** 4.31 237⇓*i*P Pn 12 22 34.1 +1.8
baz=37
OHH ⇓*i*S Sn 12 23 22.5 -0.2
baz=37
OHH **Osh** 4.31 237 *i* PN Pn 12 22 34.1 +1.8
OHH *i* S Sn 12 23 22.5 -0.2
TRKS **Terek-Say** 4.96 255⇑*e*P Pn 12 22 43.3 +2.1
baz=55
TRKS ⇑*i*S Sn 12 23 38.0 -0.7
baz=55
TRKS **Terek-Say** 4.96 255 *e*PN Pn 12 22 43.3 +2.1
TRKS *i* S Sn 12 23 38.0 -0.7
MAKZ **Makanchi** 4.97 38 Pn Pn 12 22 42.7 +1.5
MAKZ **Makanchi** 4.97 38 ⇓Pn Pn 12 22 42.4 +1.2
25nm,0.4s
MAKZ ⇑Pg Pb 12 22 56.7 +3.0
59nm,0.8s
MAKZ ⇓Lg Lg 12 24 03.3
252nm,0.8s
MAKZ **Makanchi** 4.97 38 PN Pn 12 22 42.7 +1.5
MK31 **Makanchi Array** 5.10 40 Pn Pn 12 22 44.8 +1.7
MK31 **Makanchi Array** 5.10 40 ⇓Pn Pn 12 22 44.5 +1.4
8.3nm,0.2s,baz=216,slow=14,SNR=345
MK31 ⇑Pg Pg 12 23 01.3 -2.9
47nm,0.6s,baz=218,slow=15,SNR=5.6
MK31 ⇑Sn Sn 12 23 43.1 +1.1
27nm,0.4s,baz=221,slow=24,SNR=4.1
MK31 ⇑Lg Lg 12 24 07.2
102nm,0.5s,baz=222,slow=28,SNR=7.6
MK31 **Makanchi Array** 5.10 40 *c* PN Pn 12 22 44.8 +1.7
MKAR **Makanchi Array** 5.10 40 Pn Pn 12 22 44.8 +1.7
11nm,0.3s,baz=219,slow=16,SNR=370
MKAR Sn Sn 12 23 42.8 +0.8
28nm,0.3s,baz=231,slow=14,SNR=4.6
MKAR Lg Lg 12 24 00.1
68nm,0.3s,baz=225,slow=25,SNR=12
MKAR LR LR 12 25 02.1
comp=Z,650nm,19.7s,baz=206,slow=42
20nm,0.4s
KK31 **Karatay Array** 5.14 274 Pn Pn 12 22 45.0 +1.3
KK31 **Karatay Array** 5.14 274 ⇓Pg Pb 12 22 57.8 +1.2
52nm,0.6s,baz=87,slow=15,SNR=68
KK31 ⇑Lg Lg 12 24 07.9
264nm,0.5s,baz=91,slow=30,SNR=19
KK31 **Karatay Array** 5.14 274 PN Pn 12 22 45.0 +1.3
KKAR **Karatay Array** 5.14 274 Pn Pn 12 22 45.0 +1.3
KKAR **Karatay Array** 5.14 274⇑*e*P Pn 12 22 45.9 +2.2
baz=74
KKAR ⇑*i*S Sn 12 23 42.6 -0.5
baz=74
KKAR **Karatay Array** 5.14 274 *e*PN Pn 12 22 45.9 +2.2
KKAR *i* S Sn 12 23 42.6 -0.5
DRK **Karamyk** 5.55 233⇓*i*P Pn 12 22 51.5 +1.9
baz=33
DRK ⇓*e*S Sn 12 23 52.3 -1.3
baz=33
DRK **Karamyk** 5.55 233 *i* PN Pn 12 22 51.3 +1.7
BRLS **Boroldaу** 5.64 273 *e*Pn Pn 12 22 53.8 +3.2
baz=270
BRLS *e*Pg Pg 12 23 13.7 -0.9
baz=270
BRLS **Boroldaу** 5.64 273 *e*PN Pn 12 22 53.7 +3.2
BTK **Batken** 5.82 242⇑*i*P Pn 12 22 54.9 +1.9
baz=42
BTK ⇑*i*S Sn 12 23 58.2 -1.6
baz=42
BTK **Batken** 5.82 242 *i* PN Pn 12 22 54.8 +1.8
GAR **Garm** 6.75 236 Pn Pn 12 23 08.4 +2.6
GAR **Garm** 6.75 236⇑*e*P Pn 12 23 07.7 +1.9
baz=36
GAR ⇑*e*S Sn 12 24 20.4 -2.4
baz=36
ZSN **Zaisan** 6.84 47 *e*Pn Pn 12 23 07.6 +0.6
baz=47
ZSN *e*Pg Pg 12 23 31.5 -6.1
baz=47
ZSN **Zaisan** 6.84 47 *e*P Pb 12 23 29.4 +3.8
19nm,0.3s
ZSN *e*S Sg 12 24 56.4 -10
ZSN **Zaisan** 6.84 47 *e*PN Pn 12 23 07.6 +0.6
ZSN *e* 12 23 31.4
WMQ **Urumqi** 7.46 80 Pn Pn 12 23 18.0 +2.5
WMQ Sn Sn 12 24 42.3 +2.2
WMQ smax smax
comp=N,86nm,1.1s
WMQ smax smax
comp=E,110nm,0.9s
WMQ LR LR
comp=E,280nm,9.5s
SEM **Semipalatinsk** 7.67 13 *e*Pn Pn 12 23 18.4 -0.1
baz=13
SEM **Semipalatinsk** 7.67 13 *e*P Pn 12 23 18.3 -0.1
CHGR **Chuyangaron** 7.67 239 Pn Pn 12 23 20.9 +2.4
CHGR **Chuyangaron** 7.67 239⇑*e*P Pn 12 23 20.4 +1.9
baz=39
CHGR ⇑*e*S Sn 12 24 42.3 -3.2
baz=39
CHGR **Chuyangaron** 7.67 239 P Pn 12 23 20.9 +2.4
KURBB **Kurchatov Arra** 7.68 5 Pn Pn 12 23 18.3 -0.1
3.3nm,0.3s,baz=190,slow=12,SNR=126
KURBB Pg Pg 12 23 50.1 -3.5
2.0nm,0.3s,baz=188,slow=18,SNR=9.4
KURBB Sn Sn 12 24 44.6 -0.8
1.6nm,0.3s,baz=189,slow=11,SNR=4.8
KURBB Lg Lg 12 25 24.9
3.7nm,0.3s,baz=193,slow=28,SNR=7.3
KURBB LR LR 12 26 31.7
comp=Z,657nm,18.8s,baz=162,slow=40
15nm,0.4s
KURBB **Kurchatov Arra** 7.68 5 ⇑Pn Pn 12 23 17.7 -0.7
31nm,0.4s
KURBB ⇓Lg Lg 12 25 31.6
797nm,0.8s
KURBB **Kurchatov Arra** 7.68 5 P Pn 12 23 17.7 -0.7
SIMJ **Simiganj** 7.77 239 Pn Pn 12 23 20.2 +0.4
KURK **Kurchatov** 7.78 5 Pn Pn 12 23 19.5 -0.2
KURK **Kurchatov** 7.78 5 ⇑Pn Pn 12 23 20.1 +0.3
16nm,0.5s
KURK ⇑Lg Lg 12 25 31.3
978nm,1.0s
KURK **Kurchatov** 7.78 5 *d* iP Pn 12 23 19.1 -0.7
KURK pmax pmax
comp=Z,24nm,0.7s
DGZ **Jazzator, Alta** 9.59 42 *e*P Pn 12 23 44.4 -0.4
NIL **Nilore** 9.90 201 Pn 12 23 48.6 -0.4
NIL **Nilore** 9.90 201 P Pn 12 23 48.6 -0.4
KBL **Kabul** 10.71 221 Pn Pn 12 24 00.3 +0.1
KBL **Kabul** 10.71 221 P Pn 12 24 00.3 +0.1
BVAR **Borovoye Array** 11.13 337 Pn Pn 12 24 04.0 -1.7
comp=Z,0.5nm,0.3s,baz=152,slow=13,SNR=53
BVAR Sn Sn 12 26 12.1 +2.1
comp=Z,0.3nm,0.3s,baz=148,slow=32,SNR=2.6
BVAR Lg Lg 12 27 17.7
comp=Z,1.5nm,0.3s,baz=146,slow=32,SNR=8.5
comp=Z,23nm,0.7s
BVAR **Borovoye Array** 11.13 337 P Pn 12 24 04.0 -1.7
BRVK **Borovoye** 11.19 337 Pn Pn 12 24 05.1 -1.3
BRVK **Borovoye** 11.19 337 ⇑Pn Pn 12 24 06.5 0.0
comp=Z,26nm,0.6s
BRVK ⇓Sn Sn 12 26 13.8 +2.4
comp=Z,43nm,1.1s
BRVK ⇓Lg Lg 12 27 23.6
comp=Z,364nm,1.0s
BRVK **Borovoye** 11.19 337 *d* iP Pn 12 24 04.7 -1.7
ZAA0 **Zalesovo Array** 11.99 21 Pn Pn 12 24 17.1 -0.3
ZAA0 **Zalesovo Array** 11.99 21 ⇓Pn Pn 12 24 17.0 -0.5
comp=Z,1.0nm,0.5s
ZAA0 ⇑Lg Lg 12 27 46.3
comp=Z,12nm,0.9s
ZALV **Zalesovo Beam** 11.99 21 Pn Pn 12 24 16.3 -1.1
comp=Z,4.8nm,0.3s,baz=212,slow=14,SNR=35
ZALV Sn Sn 12 26 30.3 -0.8
comp=Z,1.3nm,0.3s,baz=221,slow=17,SNR=2.2
ZALV Lg Lg 12 27 42.6
comp=Z,0.5nm,0.3s,baz=228,slow=21,SNR=2.4
ZALV LR LR 12 29 10.8
comp=Z,390nm,19.6s,baz=212,slow=39
comp=Z,11nm,0.4s
ZALV **Zalesovo Beam** 11.99 21 *i* P Pn 12 24 16.5 -0.9
ZALV pmax pmax
comp=Z,12nm,0.3s
AB31 **Akbulak array** 13.70 303 ⇑Pn Pn 12 24 40.3 -0.5
comp=Z,4.7nm,0.7s,baz=110,slow=12,SNR=30
AB31 ⇑Sn Sn 12 27 16.8 +3.8
comp=Z,1.9nm,0.3s
AB31 ⇓Lg Lg 12 28 39.9
comp=Z,65nm,1.3s,baz=106,slow=27,SNR=3.6
AB31 **Akbulak array** 13.70 303 P Pn 12 24 40.3 -0.5
AB31 S Sn 12 27 16.8 +3.8
ABKAR **Akbulak array** 13.70 303 Pn Pn 12 24 38.8 -2.1
GOMU **GeErMu** 14.94 111 P Pn 12 24 56.3 -1.8
GOMU pP P 12 25 02.5 -1.3
GOMU sP 12 25 08.0
GOMU LR LR
comp=Z,300nm,6.2s
GOMU LR LR
comp=Z,180nm,6.1s
GOMU LR LR
comp=Z,120nm,9.8s
AKTO **Aktyubinsk** 15.29 306 Pn Pn 12 25 01.4 -1.0
comp=Z,0.4nm,0.3s,baz=95,slow=11,SNR=8.4
AKTO Sn S 12 28 01.7 -6.7
comp=Z,0.3nm,0.3s,baz=131,slow=16,SNR=1.4
AKTO Lg Lg 12 29 30.9
comp=Z,0.5nm,0.3s,baz=12,slow=21,SNR=3.9
AKTO LR LR 12 31 13.8
comp=Z,302nm,20.3s,baz=121,slow=38
comp=Z,5.2nm,0.7s
KNGR **Kungurtug, Tuv** 15.64 54 *e*P Pn 12 25 08.5 +1.4
GTA **Gaotai** 17.14 94 P P 12 25 30.3 +2.3
GTA pP sP 12 25 37.5 +4.0
GTA pmax pmax
comp=Z,4.0nm,1.2s
GTA LR LR
comp=Z,150nm,13.1s
GTA LR LR
comp=Z,250nm,14.3s
GTA LR LR
comp=Z,170nm,13.5s
SVE **Sverdlovsk** 17.55 328 *e*P Pn 12 25 30.0 -1.1
ARU **Arti** 18.13 325 P P 12 25 39.2 +0.7
ARU **Arti** 18.13 325 P Pn 12 25 37.4 -0.8
baz=197,slow=2.9,SNR=11
ARU S Sn 12 28 57.3 -3.0
comp=Z,2.3nm,0.4s,baz=90,slow=20,SNR=1.7
ARU Lg Lg 12 30 54.6
baz=206,slow=21,SNR=5.6
ARU LR LR 12 33 01.6
comp=Z,282nm,19.6s,baz=135,slow=38
comp=Z,7.0nm,0.5s
ARU **Arti** 18.13 325 *d* iP P 12 25 38.8 +0.2
ARU pmax pmax
comp=Z,9.0nm,0.7s
SONM **Songino Array** 20.78 66 P P 12 26 08.0 +0.2
comp=Z,1.6nm,0.7s,baz=272,slow=10,SNR=4.3
SONM LR LR 12 34 30.6
comp=Z,150nm,18.6s,baz=271,slow=38
comp=Z,1.6nm,0.7s
ULN **Ulaanbaatar** 21.22 66 P P 12 26 11.8 -0.8
ULN **Ulaanbaatar** 21.22 66 P P 12 26 11.8 -0.8
ULN pmax pmax
comp=Z,10.0nm,1.4s
BELG **Belogornoye** 22.08 306 P P 12 26 21.5 -0.1
comp=Z,56nm,1.0s,baz=0.0,slow=6.1,SNR=3.3
BELG LR LR 12 35 20.3
comp=Z,160nm,18.8s,baz=85,slow=38
comp=Z,56nm,1.0s
BELG **Belogornoye** 22.08 306 *d* iP P 12 26 21.2 -0.4
BELG pmax pmax
comp=Z,3.0nm,0.6s
KIRV **Kirov** 23.41 322 LR LR 12 36 18.4
comp=Z,199nm,18.9s,baz=127,slow=38
KIRV **Kirov** 23.41 322 *e*P P 12 26 35.8 +0.4
GNI **Garni** 24.61 275⇑*i*P P 12 26 45.8 -1.3
GNI pmax pmax
comp=Z,20nm,1.4s
KBZ **Khabaz** 25.09 284 *e*P P 12 26 52.6 +1.4
KBZ pmax pmax
comp=Z,3.0nm,1.0s
WSAR **Wadi Sarin** 25.15 224 LR LR 12 39 17.9
comp=Z,53nm,19.6s,baz=44,slow=43
KIV **Kislovodsk** 25.20 284 *e*P P 12 26 53.0 +0.7
KIV pmax pmax
comp=Z,9.0nm,1.1s
KIV MLR MLR
comp=Z,23nm,15.0s
SHA1 **Shidzhatmaz** 25.26 284⇑*i*P P 12 26 53.3 +0.3
HHC **Hu-ho-hao-te** 25.32 83 *e*P P 12 26 54.5 +1.0
HHC sP sP 12 27 08.0 +8.7
HHC pmax pmax
comp=Z,13nm,0.5s
HHC pmax pmax
comp=Z,76nm,4.5s
HHC LR LR
comp=Z,110nm,10.2s
HHC LR LR
comp=Z,120nm,10.2s
HHC LR LR
comp=Z,200nm,10.4s
PZH **PanZhiHua** 25.68 122 P P 12 26 57.8 +1.0
PZH pmax pmax
comp=Z,80nm,1.2s
PZH pmax pmax
comp=Z,100nm,5.7s
SOC **Sochi** 27.38 284 *e*P P 12 27 10.8 -1.1
SOC *e* 12 27 53.9
SOC *e*PPP PPP 12 28 06.5
SOC *e*S S 12 31 51.1 -0.8
SOC *e*SS SnSn 12 33 01.0 +0.4
ANN **Anapa** 28.75 288 *e*P P 12 27 22.7 -1.5

ANN e*PP **pP** **12 27 27.1 -1.2**
ANN eS **S** **12 32 11.9 -1.5**
ANN pmax pmax
comp=Z,52nm,0.8s
**OBN Obninsk** **29.03 309**⇓ *eP* **P** **12 27 24.9 -1.6**
OBN *e* 12 28 15.5
OBN pmax pmax
comp=Z,4.0nm,0.8s
OBN MLR MLR
comp=Z,121nm,17.0s
**CMAR Chiang Mai Arr** **30.43 137** LR LR 12 41 58.9
comp=Z,109nm,18.1s,baz=315,slow=41
**PHRA Phrae** **31.05 135** P **P** **12 27 43.2 -1.5**
**RAYN Ar Rayn** **32.79 244** P **P** **12 28 00.8 +0.7**
RAYN IAmb IAmb 12 28 01.1
comp=Z,9.8nm,1.0s
**RAYN Ar Rayn** **32.79 244** P **P** **12 28 00.8 +0.7**
RAYN pmax pmax
comp=Z,10.0nm,1.0s
**BR131 Keskin Array S** **32.83 280**⇑ *iP* **P** **12 28 01.3 +0.9**
**BRTR Keskin Array B** **32.83 280** P **P** **12 27 60.0 -0.4**
comp=Z,0.7nm,0.7s,baz=104,slow=9.8,SNR=4.9
comp=Z,0.7nm,0.7s
**BRTR Keskin Array B** **32.83 280** *ceP* **P** **12 28 01.6 +1.2**
BRTR pmax pmax
comp=Z,1.0nm,0.7s
**AKASG Malin Array Be** **33.42 300** P **P** **12 28 04.6 -0.6**
comp=Z,1.1nm,0.7s,baz=74,slow=8.6,SNR=5.2
AKASG LR LR 12 44 31.4
comp=Z,100nm,19.9s,baz=70,slow=41
comp=Z,1.1nm,0.7s
**AKASG Malin Array Be** **33.42 300** *ceP* **P** **12 28 05.6 +0.4**
AKASG pmax pmax
comp=Z,2.0nm,0.7s
**AKBB Malin Array Si** **33.42 300** P **P** **12 28 06.7 +1.5**
**AKBB Malin Array Si** **33.42 300** *ceP* **P** **12 28 05.6 +0.4**
AKBB pmax pmax
comp=Z,5.0nm,0.9s
**KIEV Kiev** **33.43 300** P **P** **12 28 06.7 +1.4**
**KIEV Kiev** **33.43 300** P **P** **12 28 06.7 +1.4**
KIEV pmax pmax
comp=Z,4.0nm,1.0s
**MNK Minsk** **34.01 307** *iP* **P** **12 28 10.2 -0.1**
comp=E,21nm,0.9s
MNK *iP* **P** **12 28 10.2 -0.1**
comp=N,28nm,0.9s
MNK *iP* **P** **12 28 10.2 -0.1**
comp=Z,18nm,0.8s,baz=89
MNK *i* PP **PP** **12 29 25.8 -1.3**
MNK *i* PPP PPP 12 29 39.0
MNK *i* S **S** **12 33 36.4 +1.0**
MNK *i* SS **SnSn** **12 35 46.7 +5.1**
MNK *i* SSS SSS 12 36 02.5
MNK *i* LQ LQ 12 39 23.9
MNK *i* LR LR 12 41 11.1
MNK *i* LRM MLR 12 42 38.3
comp=Z,99nm,17.3s
MNK *i* LRM MLR 12 44 43.3
comp=N,565nm,19.8s
MNK *i* LRM MLR 12 45 21.8
comp=E,476nm,18.0s
**MNK Minsk** **34.01 307** *iP* **P** **12 28 10.2 -0.1**
MNK *i* 12 29 25.8
MNK *i* PPP PPP 12 29 38.9
MNK *i* S **S** **12 33 36.3 +1.0**
MNK *i* SS **SnSn** **12 35 46.7 +5.1**
MNK *i* SSS SSS 12 36 02.4
MNK pmax pmax
comp=Z,18nm,0.8s
MNK pmax pmax
comp=E,21nm,0.9s
MNK pmax pmax
comp=N,28nm,0.9s
MNK MLR MLR
comp=Z,99nm,17.0s
MNK MLR MLR
comp=N,565nm,20.0s
MNK MLR MLR
comp=E,476nm,18.0s
**NJ2 Nanjing** **34.24 95** *eP* **P** **12 28 11.3 -1.2**
NJ2 pmax pmax
comp=E,11nm,0.5s
**HEH HeiHe** **34.48 60** *eP* **P** **12 28 17.0 +2.6**
HEH LR LR
comp=E,130nm,13.6s
HEH LR LR
comp=E,170nm,12.0s
HEH LR LR
comp=E,180nm,14.2s
**NACGM Naroch** **34.64 308** *eP* **P** **12 28 17.6 +1.8**
comp=Z,19nm,1.0s,baz=88
**FIA1 FINESS Array S** **35.37 320** P **P** **12 28 23.2 +1.3**
**FINES FINESS Array B** **35.37 320** P **P** **12 28 22.6 +0.6**
comp=Z,3.4nm,0.6s,baz=95,slow=9.1,SNR=16
FINES LR LR 12 43 21.3
comp=Z,162nm,19.3s,baz=107,slow=37
comp=Z,3.4nm,0.6s
**FINES FINESS Array B** **35.37 320** *iP* **P** **12 28 22.7 +0.8**
FINES pmax pmax
comp=Z,3.0nm,0.6s
**PALK Pallekele** **35.67 175** LR LR 12 43 51.3
comp=Z,222nm,20.6s,baz=354,slow=38
**YAK Yakutsk** **35.78 40** LR LR 12 43 48.3
comp=Z,144nm,20.4s,baz=254,slow=38
**EIL Elat** **36.40 263** LR LR 12 44 30.6
comp=Z,35nm,20.3s,baz=252,slow=38
**UBPT Khong Chiam** **36.52 131** P **P** **12 28 31.7 -0.7**
**MLR Muntele Rosu** **36.53 292** LR LR 12 46 02.2
comp=Z,61nm,18.1s,baz=198,slow=40
**ARCES ARCESS Array B** **37.37 333** P **P** **12 28 39.1 +0.1**
comp=Z,3.6nm,0.9s,baz=57,slow=4.5,SNR=4.4
ARCES LR LR 12 44 58.7
comp=Z,115nm,19.6s,baz=73,slow=38
comp=Z,3.6nm,0.9s
**KLR Kul'dur** **37.42 61** LR LR 12 45 33.6
comp=Z,34nm,18.8s,baz=354,slow=39
**KLR Kul'dur** **37.42 61**⇑ *iP* **P** **12 28 40.6 +0.9**
KLR pmax pmax
comp=Z,6.0nm,3.7s
**TIXI Tiksi** **37.86 24** P **P** **12 28 44.3 +1.2**
TIXI IAmb IAmb 12 28 45.0
comp=Z,20nm,1.1s
**TIXI Tiksi** **37.86 24** LR LR 12 45 11.4
comp=Z,366nm,18.5s,baz=205,slow=38
**TIXI Tiksi** **37.86 24**⇑ *iP* **P** **12 28 42.4 -0.7**
TIXI pmax pmax
comp=Z,21nm,1.2s
**KSRS Korea Array** **38.41 81** LR LR 12 47 37.6
comp=Z,18nm,18.7s,baz=275,slow=41
**USA0B Ussuriysk Arra** **38.86 69** *eP* **P** **12 28 51.1 -0.7**
**USRK Ussuriysk Ar.** **38.86 69** LR LR 12 46 00.6
comp=Z,92nm,19.1s,baz=253,slow=38
**MORC Moravsky Berou** **40.96 301** P **P** **12 29 10.2 +0.9**
**MORC Moravsky Berou** **40.96 301** P **P** **12 29 10.2 +0.9**
MORC pmax pmax
comp=Z,3.0nm,0.8s
**IDI Anoyia** **40.98 277** LR LR 12 47 58.3
comp=Z,53nm,21.4s,baz=312,slow=39
**HFS Hagfors** **41.41 317** P **P** **12 29 13.3 +0.5**
comp=Z,7.2nm,0.7s,baz=98,slow=11,SNR=9.7
HFS LR LR 12 47 08.1
comp=Z,157nm,18.7s,baz=90,slow=37
comp=Z,7.2nm,0.7s
**VRAC Vranov** **41.68 301** LR LR 12 47 08.1
comp=Z,52nm,18.0s,baz=87,slow=37
**NC405 NORSAR Array S** **42.28 319** P **P** **12 29 20.9 +0.9**
NC405 IAmb IAmb 12 29 21.4
comp=Z,28nm,1.2s
**NC602 NORSAR Array S** **42.41 318** P **P** **12 29 21.4 +0.5**
NC602 IAmb IAmb 12 29 21.5
comp=Z,7.5nm,0.7s
**NC303 NORSAR Array S** **42.44 319** P **P** **12 29 22.4 +1.2**
**SPITS Spitsbergen Ar** **42.47 344** LR LR 12 50 24.8
comp=Z,171nm,18.7s,baz=90,slow=41
**NOA NORSAR Array B** **42.53 319** P **P** **12 29 22.3 +0.2**
comp=Z,4.2nm,0.6s,baz=84,slow=8.0,SNR=21
NOA LR LR 12 47 33.5
comp=Z,143nm,19.3s,baz=85,slow=37
comp=Z,4.2nm,0.6s
**NAO01 NORSAR Array S** **42.72 318** P **P** **12 29 23.9 +0.4**
**NC204 NORSAR Array S** **42.73 319** P **P** **12 29 24.2 +0.6**
**CLL Collm** **43.37 304** *eP* **P** **12 29 30.0 +1.1**
CLL *ex* x 12 29 37.0
**CLL Collm** **43.37 304** *eP* **P** **12 29 30.0 +1.1**
**KHC Kasperske Hory** **43.62 301** *iP* **P** **12 29 30.5 -0.5**
KHC pmax pmax
comp=Z,3.0nm,1.1s
**GERES GERESS Array B** **43.63 301** P **P** **12 29 31.8 +0.6**
comp=Z,0.7nm,0.6s,baz=68,slow=6.5,SNR=2.6
GERES LR LR 12 51 33.1
comp=Z,77nm,18.2s,baz=84,slow=41
comp=Z,0.7nm,0.6s
**ASAJ Asahikawa** **46.05 65** LR LR 12 51 39.6
comp=Z,32nm,19.7s,baz=106,slow=39
**MA2 Magadan** **46.18 42** LR LR 12 49 47.3
comp=Z,156nm,18.5s,baz=278,slow=37
**FUORN Ofenpass-Fuorn** **46.56 299** P **P** **12 29 54.5 -0.2**
**DAVOX Davos/Dischmat** **46.74 299** LR LR 12 52 52.4
comp=Z,81nm,18.1s,baz=78,slow=40
**FURI Furi** **48.00 237** LR LR 12 53 27.0
comp=Z,51nm,18.8s,baz=23,slow=40
**EKA Eskdalemuir Ar** **51.29 314** P **P** **12 30 30.7 +0.2**
comp=Z,1.7nm,0.6s,baz=75,slow=8.2,SNR=7.0
comp=Z,1.7nm,0.6s
**PETK Petropavlovsk-** **51.87 49** LR LR 12 53 23.4
comp=Z,83nm,19.8s,baz=295,slow=37
**DAV Davao City (W)** **55.25 116** LR LR 12 56 14.2
comp=Z,17nm,20.3s,baz=311,slow=38
**BORG Borgarnes** **55.59 329** LR LR 12 53 56.9
comp=Z,34nm,18.7s,baz=25,slow=35
**SHEM Shemya Is, Ala** **60.78 44** LR LR 12 59 33.8
comp=Z,41nm,18.6s,baz=319,slow=38
**E18K Tukpahlearik C** **61.52 22** P **P** **12 31 43.9 +0.7**
E18K IAmb IAmb 12 31 44.4
comp=Z,5.9nm,0.7s
**F15K North Star Dit** **61.53 25** P **P** **12 31 44.7 +1.4**
**SFJD Kangerlussuaq** **63.48 340** LR LR 13 03 47.1
comp=Z,44nm,18.6s,baz=43,slow=40
**F21K Alatna River** **63.52 20** P **P** **12 31 57.2 +0.6**
F21K IAmb IAmb 12 31 57.4
comp=Z,3.0nm,0.6s
**C27K Jago River** **63.71 15** P **P** **12 31 59.5 +1.7**
**E24K Your Creek** **64.02 17** P **P** **12 32 00.6 +0.7**
E24K IAmb IAmb 12 32 01.0
comp=Z,3.2nm,0.6s
**H19K Roundabout Mou** **64.04 22** P **P** **12 32 00.8 +0.8**
**F24K Squaw Lake** **64.60 18** P **P** **12 32 04.5 +0.8**
F24K IAmb IAmb 12 32 36.3
comp=Z,5.8nm,1.2s
**ILAR Eielson Array** **67.11 19** P **P** **12 32 19.4 -0.4**
comp=Z,2.6nm,0.7s,baz=322,slow=5.3,SNR=26
ILAR LR LR 13 06 17.9
comp=Z,44nm,19.0s,baz=291,slow=40
comp=Z,2.6nm,0.7s
**I26K Coal Creek Min** **67.50 17** P **P** **12 32 22.9 +0.6**
I26K IAmb IAmb 12 32 23.5
comp=Z,3.9nm,0.8s
**N17K Nushagak Hills** **67.62 26** P **P** **12 32 23.5 +0.3**
**H29M Whitestone** **67.68 15** P **P** **12 32 24.4 +0.9**
H29M IAmb IAmb 12 32 24.6
comp=Z,6.8nm,0.7s
**RND Reindeer** **67.75 21** P **P** **12 32 24.1 +0.1**
RND IAmb IAmb 12 32 28.5
comp=Z,11nm,1.5s
**RND Reindeer** **67.75 21** P **P** **12 32 24.1 +0.1**
RND pmax pmax
comp=Z,11nm,1.5s
**G31M Satah River** **67.77 13** P **P** **12 32 24.2 +0.2**
G31M IAmb IAmb 12 33 07.1
comp=Z,10nm,1.4s
**O16K Kokwok River B** **68.04 27** P **P** **12 32 26.5 +0.8**
**I28M Miner Creek** **68.06 16** P **P** **12 32 26.2 +0.3**
I28M IAmb IAmb 12 32 26.9
comp=Z,5.2nm,0.7s
**J26L Joseph Creek** **68.11 18** P **P** **12 32 26.8 +0.6**
J26L IAmb IAmb 12 32 27.0
comp=Z,4.3nm,0.7s
**SKT Skwentna** **68.18 23** P **P** **12 32 26.7 0.0**
**EGAK Eagle** **68.39 17** P **P** **12 32 28.8 +0.8**
EGAK IAmb IAmb 12 32 29.2
comp=Z,6.6nm,1.4s
**DHY Denali Highway** **68.40 20** P **P** **12 32 28.6 +0.3**
DHY IAmb IAmb 12 33 00.3
comp=Z,12nm,1.5s
**I29M Ogilvie Camp,** **68.45 15** P **P** **12 32 28.5 +0.2**
I29M IAmb IAmb 12 32 28.8
comp=Z,3.3nm,0.7s
**SCRK Sand Creek** **68.46 18** P **P** **12 32 29.2 +0.6**
SCRK IAmb IAmb 12 32 29.2
comp=Z,3.7nm,0.6s
**RIDG Independent Ri** **68.46 19** P **P** **12 32 28.4 0.0**
**O18K Koktuh Hills** **68.77 26** P **P** **12 32 31.7 +1.3**
**H31M Peel River** **68.78 13** P **P** **12 32 30.3 0.0**
H31M IAmb IAmb 12 33 07.6
comp=Z,12nm,1.4s
**SUA Susitna One** **68.82 23** P **P** **12 32 30.9 +0.1**
**I30M Mount Dempster** **68.94 15** P **P** **12 32 32.0 +0.5**
I30M IAmb IAmb 12 32 32.2
comp=Z,4.7nm,0.8s
**SML Sawmill** **69.20 21** P **P** **12 32 32.9 -0.2**
SML IAmb IAmb 12 32 33.7
comp=Z,7.1nm,0.8s
**DAWY Dawson** **69.39 16** P **P** **12 32 34.5 +0.3**
**RC01 Rabbit Creek A** **69.41 22** P **P** **12 32 34.0 -0.3**
**SCM Sheep Creek Mo** **69.45 21** P **P** **12 32 34.7 +0.1**
**SCM Sheep Creek Mo** **69.45 21** P **P** **12 32 34.7 +0.1**
SCM pmax pmax
comp=Z,7.0nm,0.5s
**KNK Knik Glacier** **69.50 22** P **P** **12 32 34.0 -0.8**
KNK IAmb IAmb 12 32 36.5
comp=Z,8.3nm,0.9s
**M24K Tolsona, Glenn** **69.52 20** P **P** **12 32 35.3 +0.3**
**J30M Hart River** **69.54 15** P **P** **12 32 35.8 +0.5**
J30M IAmb IAmb 12 33 14.0
comp=Z,7.0nm,1.5s
**L27K Beaver Creek,** **69.74 18** P **P** **12 32 37.4 +1.0**
L27K IAmb IAmb 12 32 44.5
comp=Z,5.3nm,1.2s
**KLU Klutina** **70.10 21** P **P** **12 32 39.5 +0.8**
KLU IAmb IAmb 12 33 18.2
comp=Z,9.0nm,1.3s
**FRB Frobisher Bay** **70.27 345** LR LR 13 06 53.6
comp=Z,40nm,20.6s,baz=42,slow=39
**N25K Chitina, Valde** **70.34 20** P **P** **12 32 41.3 +1.2**
N25K IAmb IAmb 12 33 20.8
comp=Z,7.5nm,1.1s
**M27K Edge Creek, AK** **70.34 18** P **P** **12 32 40.3 0.0**
**VOI Vohitsoka** **70.50 210** P **P** **12 32 41.4 -0.2**
VOI IAmb IAmb 12 33 11.4
comp=Z,8.8nm,1.0s
**FID Port Fidalgo** **70.58 21** P **P** **12 32 42.0 +0.4**
FID IAmb IAmb 12 32 55.0
comp=Z,12nm,1.0s
**TORD Torodi Ar. Bea** **70.82 270** P **P** **12 32 42.7 -1.0**
comp=Z,2.9nm,0.8s,baz=33,slow=6.7,SNR=19
comp=Z,2.9nm,0.8s
**M29M Somme Creek** **71.03 17** P **P** **12 32 45.3 +0.9**
M29M IAmb IAmb 12 32 55.4
comp=Z,6.2nm,1.3s
**KDAK Kodiak Island** **71.25 26** P **P** **12 32 46.1 +0.5**
**KDAK Kodiak Island** **71.25 26** P **P** **12 32 46.1 +0.5**
KDAK pmax pmax
comp=Z,31nm,1.2s
**M30M Minto, Yukon** **71.25 16** P **P** **12 32 45.9 +0.2**
**OHAK Old Harbor** **71.47 26** P **P** **12 32 47.5 +0.5**
**FARO Faro, Yukon** **72.24 15** P **P** **12 32 51.6 +0.1**
FARO IAmb IAmb 12 32 51.9
comp=Z,7.8nm,1.3s
**O29M Mount Kennedy** **72.92 18** P **P** **12 32 54.7 -1.1**
O29M IAmb IAmb 12 33 33.3
comp=Z,4.9nm,0.8s
**O30N Mendenhall** **73.03 17** P **P** **12 32 57.0 +0.7**
**YKA Yellowknife Ar** **74.43 6** P **P** **12 33 04.1 -0.2**
comp=Z,1.9nm,0.8s,baz=349,slow=6.1,SNR=7.2
comp=Z,1.9nm,0.8s
**KNRA Kununurra** **74.92 129** P **P** **12 33 07.9 +0.1**
KNRA IAmb IAmb 12 33 41.0
comp=Z,12nm,1.4s
**PSA00 Pilbara Seismi** **75.12 140** P **P** **12 33 08.5 -0.4**
PSA00 IAmb IAmb 12 33 08.7
comp=Z,7.5nm,0.8s
**FITZ Fitzroy Crossi** **75.15 133** P **P** **12 33 08.1 -1.0**
**R33M Jennings River** **75.31 15** P **P** **12 33 10.5 +0.8**
**WRAB Tennant Creek** **81.51 127**⇓ *eP* **P** **12 33 44.0 -0.3**
WRAB pmax pmax
comp=Z,4.0nm,1.4s
**WRA Warramunga Arr** **81.51 127** P **P** **12 33 43.7 -0.6**
comp=Z,1.4nm,0.7s,baz=325,slow=5.1,SNR=17
comp=Z,1.4nm,0.7s
**PMG Port Moresby** **81.85 111**⇓ *eP* **P** **12 33 43.2 -3.0**
PMG pmax pmax
comp=Z,24nm,1.0s
**ASAR Alice Springs** **84.18 130** P **P** **12 33 57.2 -0.9**
comp=Z,1.1nm,0.9s,baz=319,slow=4.9,SNR=9.7
comp=Z,1.1nm,0.9s
**BOSA Boshof** **85.92 224** LR LR 13 16 41.3
comp=Z,47nm,18.3s,baz=44,slow=39
**ULM Lac du Bonnet** **86.97 356** LR LR 13 16 29.8
comp=Z,54nm,19.1s,baz=3.0,slow=38
**NEW Newport** **88.23 10** LR LR 13 17 00.3
comp=Z,14nm,18.8s,baz=246,slow=38
**SADO Sadowa** **90.19 344** LR LR 13 19 04.2
comp=Z,61nm,18.9s,baz=47,slow=38
**YBH Yreka Blue Hor** **93.72 15** LR LR 13 22 23.9
comp=Z,27nm,18.1s,baz=0.5,slow=39
**PDAR Pinedale Array** **94.40 5** P **P** **12 34 46.1 -0.8**
comp=Z,0.2nm,0.5s,baz=45,slow=4.0,SNR=1.7
PDAR LR LR 13 21 11.7
comp=Z,17nm,19.4s,baz=357,slow=38
comp=Z,0.2nm,0.5s
**STKA Stephens Creek** **94.81 130** LR LR 13 27 14.6
comp=Z,37nm,18.8s,baz=205,slow=42

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*NIED* ***31*** *12:24:44.1, 33.62N×132.39E, h45km, MW3.7, Moment Tensor Solution. s3 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-4.69; $M_{\theta\theta}$1.14; $M_{\phi\phi}$3.55; $M_{r\theta}$0.86; $M_{\theta\phi}$1.04; $M_{\phi r}$1.16; Fault plane solution: $M_{0}$4.54000×$10^{14}$ NP1: $\phi_s$205.00000°, $\delta$54.00000°, $\lambda$-85.00000°. NP2:$\phi_s$17.00000°, $\delta$36.00000°, $\lambda$-96.00000°.*
*JMA* ***31*** *12:24:44.1±0.0, 33.62N±0.0°09×132.4E±0.1, h45km, MV3.9/39, IYONADA SETONAIKAI*
*JMA Felt II J1 at IYONADA SETONAIKAI .*
*IDC* ***31*** *12:24:45.3±1.9, 33.65N×132.26E, h65km±19km, mb3.6/2, mbtmp3.7/4, MS3.0/2, Error ellipse: s-maj=21.3km s-min=14.8km az=102.0*

**ISC 31 12:24:44.0±0.9, 33.60N±0.04×132.38E±0.05, h44km±8km, n14, σ0.974/22, 4D, Shikoku**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNA** | **Nagahama** | **0.10** | **114** | ⇓P | **Pn** | **12 24 51.2** | **0.0** |
| JNA | | | | ⇓S | **Sn** | **12 24 56.2** | **+0.1** |
| **UWA2** | **Uwa jima 2** | **0.43** | **151** | *i* P | **Pn** | **12 24 54.2** | **0.0** |
| UWA2 | | | | S | **Sn** | **12 25 01.4** | **+0.1** |
| **JHM** | **Kurahashi** | **0.56** | **13** | ⇓*i* P | **Pn** | **12 24 55.4** | **-0.2** |
| JHM | | | | ⇓S | **Sn** | **12 25 03.9** | **-0.1** |
| **JET** | **Tanbara** | **0.59** | **72** | *i* P | **Pn** | **12 24 56.1** | **0.0** |
| JET | | | | S | **Sn** | **12 25 04.8** | **0.0** |
| **JKU** | **Kubokawa** | **0.64** | **116** | *i* P | **Pn** | **12 24 56.8** | **0.0** |
| JKU | | | | S | **Sn** | **12 25 06.3** | **+0.4** |
| **JTO** | **Tosashimizu** | **0.82** | **154** | *i* P | **Pn** | **12 24 59.4** | **+0.2** |
| JTO | | | | S | **Sn** | **12 25 10.2** | **+0.1** |
| **JHT** | **Toyohira** | **1.06** | **2** | *i* P | **Pn** | **12 25 02.7** | **+0.2** |
| JHT | | | | S | **Sn** | **12 25 16.4** | **+0.2** |
| **JNU** | **Nakatsue** | **1.34** | **250** | P | **Pn** | **12 25 07.3** | **+1.0** |
| | 253nm,0.3s,baz=51,slow=4.9,SNR=1270 | | | | | | |
| JNU | | | | S | **Sn** | **12 25 23.4** | **+0.5** |
| | 264nm,0.4s,baz=45,slow=19,SNR=8.3 | | | | | | |
| **KSRS** | **Korea Array** | **5.29** | **318** | P | **Pn** | **12 26 00.9** | **+0.5** |
| | 1.0nm,0.4s,baz=142,slow=14,SNR=5.6 | | | | | | |
| KSRS | | | | S | **Sn** | **12 26 59.4** | **-0.7** |
| | 4.1nm,0.4s,baz=136,slow=24,SNR=8.2 | | | | | | |
| KSRS | | | | LR | LR | 12 28 21.9 | |
| | comp=Z,45nm,20.0s,baz=135,slow=42 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **5.61** | **57** | P | **Pn** | **12 26 06.8** | **+1.9** |
| | 3.3nm,0.4s,baz=241,slow=14,SNR=13 | | | | | | |
| **KLR** | **Kul'dur** | **15.63** | **358** | P | **P** | **12 28 25.9** | **+1.4** |
| | 0.9nm,0.6s,baz=171,slow=9.8,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **56.96** | **178** | P | **P** | **12 34 24.1** | **-0.9** |
| | 0.7nm,0.8s,baz=11,slow=12,SNR=6.8 | | | | | | |
| | 0.7nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **68.26** | **330** | P | **P** | **12 35 38.7** | **-1.1** |
| | 1.2nm,0.7s,baz=60,slow=11,SNR=3.8 | | | | | | |
| | 1.2nm,0.7s | | | | | | |
| **YKA** | **Yellowknife Ar** | **70.35** | **27** | LR | LR | 13 08 02.0 | |
| | comp=Z,36nm,19.2s,baz=322,slow=37 | | | | | | |

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**NOU 31 12:37:45.2, 22.53S×170.66E, h0km, mb4.3/8, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.65** | **293** | P | Pn | 12 38 29.0 | -0.3 |
| **PINNC** | **Pines Island,** | **2.97** | **268** | P | Pn | 12 38 33.7 | +0.1 |
| **YATNC** | **Mamie plateau,** | **3.52** | **277** | P | Pn | 12 38 40.3 | -0.9 |
| **LIFNC** | **LIFOU** | **3.63** | **298** | P | Pn | 12 38 42.3 | -0.4 |
| **ONTNC** | **Ouen Toro** | **3.90** | **272** | P | Pn | 12 38 46.0 | -0.4 |
| **DZM** | **Mont Dzumac** | **3.93** | **276** | P | Pn | 12 38 46.7 | -0.2 |
| **NOUC** | **Port Laguerre** | **4.06** | **275** | P | Pn | 12 38 48.3 | -0.3 |
| **KOUNC** | **Koumac, New Ca** | **6.25** | **287** | P | Pn | 12 39 19.3 | +0.6 |

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*NEIC* ***31*** *12:48:43.5±1.5, 37.36N±0.03×97.87W±0.02, h6km±2km, Error ellipse: s-maj=3.9km s-min=2.1km az=173.0*

**NEIC 31 12:48:43.9±1.5, 37.35N±0.03×97.87W±0.02, h6km±2km, mb_Lg2.8/85, ML2.8/11, ML3.2/34, Error ellipse: s-maj=4.0km s-min=2.0km az=173.0, Kansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAN12** | **Harper NE Stat** | **0.12** | **244** | Pg | Pg | 12 48 46.8 | +0.3 |
| KAN12 | | | | Sg | Sg | 12 48 48.8 | +0.6 |
| KAN12 | | | | IAML | | 12 48 48.9 | |
| | comp=N,10μm,0.3s | | | | | | |
| **KAN08** | **Anthony NE Sta** | **0.15** | **214** | | Pg | 12 48 47.3 | +0.3 |
| KAN08 | | | | Sg | Sg | 12 48 49.6 | +0.6 |
| KAN08 | | | | IAML | | 12 48 49.7 | |
| | comp=E,5μm,0.3s | | | | | | |
| KAN08 | | | | IAML | | 12 48 49.7 | |
| | comp=N,6μm,0.3s | | | | | | |
| **KS21** | **Milan North St** | **0.17** | **111** | | Pg | 12 48 47.7 | +0.3 |
| KS21 | | | | Sg | Sg | 12 48 50.3 | +0.5 |
| **KAN01** | **Argonia South** | **0.21** | **156** | | Pg | 12 48 48.5 | +0.3 |
| KAN01 | | | | Sg | Sg | 12 48 50.9 | -0.1 |
| KAN01 | | | | IAML | | 12 48 54.6 | |
| | comp=N,4μm,0.4s | | | | | | |
| **KAN05** | **Bluff City Nor** | **0.24** | **181** | Pg | Pg | 12 48 49.0 | +0.3 |
| KAN05 | | | | Sg | Sg | 12 48 52.5 | +0.6 |
| KAN05 | | | | IAML | | 12 48 54.6 | |
| | comp=N,3μm,0.2s | | | | | | |
| **KAN09** | **Caldwell North** | **0.29** | **137** | | Pg | 12 48 49.9 | +0.2 |
| KAN09 | | | | Sg | Sg | 12 48 54.1 | +0.7 |
| **KAN17** | **Caldwell West** | **0.32** | **165** | | Pg | 12 48 50.3 | +0.2 |
| KAN17 | | | | Sg | Sg | 12 48 54.9 | +0.7 |
| KAN17 | | | | IAML | | 12 48 55.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| KAN17 | | | | IAML | | 12 48 59.6 | |
| | comp=N,4μm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **0.40** | **191** | | Pg | 12 48 51.9 | +0.2 |
| KAN14 | | | | | Sg | 12 48 57.4 | +0.5 |
| KAN14 | | | | IAML | | 12 48 57.5 | |
| | comp=N,2μm,0.2s | | | | | | |
| **KAN13** | **South Haven SW** | **0.46** | **137** | | Pg | 12 48 52.4 | -0.3 |
| KAN13 | | | | | Sg | 12 48 59.3 | +0.6 |
| KAN13 | | | | IAML | | 12 49 02.7 | |
| | comp=N,2μm,0.3s | | | | | | |
| KAN13 | | | | IAML | | 12 49 02.9 | |
| | comp=E,2μm,0.3s | | | | | | |
| **GC02** | **Grant County #** | **0.50** | **179** | Pg | Pg | 12 48 53.6 | +0.1 |
| **OK032** | **Salt Plains WL** | **0.61** | **207** | Pg | Pg | 12 48 55.8 | +0.1 |
| OK032 | | | | | Sg | 12 49 03.8 | +0.2 |
| **BLOK** | **Blackwell** | **0.79** | **138** | Pg | Pg | 12 48 58.8 | -0.2 |
| BLOK | | | | | Sg | 12 49 09.4 | +0.2 |
| **CROK** | **Carrier** | **0.85** | **186** | Pg | Pg | 12 49 00.1 | -0.1 |
| CROK | | | | IAML | | 12 49 17.6 | |
| | comp=N,951nm,0.4s | | | | | | |
| CROK | | | | IAML | | 12 49 18.4 | |
| | comp=E,772nm,0.3s | | | | | | |
| **NOKA** | **Waynoka** | **1.11** | **230** | Pg | Pg | 12 49 04.8 | -0.5 |
| NOKA | | | | IAML | | 12 49 27.4 | |
| | comp=N,506nm,0.3s | | | | | | |
| NOKA | | | | IAML | | 12 49 33.0 | |
| | comp=E,372nm,0.3s | | | | | | |
| **OK038** | **West end E0370** | **1.12** | **219** | | Pg | 12 49 05.2 | -0.2 |
| OK038 | | | | IAML | | 12 49 29.1 | |
| | comp=E,599nm,0.4s | | | | | | |
| OK038 | | | | IAML | | 12 49 34.6 | |
| | comp=E,677nm,0.3s | | | | | | |
| **OK051** | **E0350 and S346** | **1.18** | **135** | | Pg | 12 49 06.1 | -0.4 |
| **OK048** | **Pawnee Station** | **1.19** | **141** | | Pg | 12 49 06.2 | -0.5 |
| OK048 | | | | IAML | | 12 49 25.9 | |
| | comp=E,492nm,0.2s | | | | | | |
| **QUOK** | **Quay** | **1.50** | **141** | | Pn | 12 49 11.5 | +0.2 |
| **OK029** | **Liberty Lake** | **1.58** | **168** | | Pn | 12 49 11.9 | -0.6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OK052** | **Battle Ridge R** | **1.60** | **147** | Pg | Pn | 12 49 12.1 | -0.6 | |
| **OK031** | **S. Brethren Rd** | **1.62** | **149** | Pg | Pn | 12 49 12.5 | -0.4 | |
| **ADOK** | **Arcadia Dam** | **1.74** | **167** | Pn | Pn | 12 49 14.2 | -0.5 | |
| **CSTR** | **Hydro, Custer** | **1.82** | **202** | | Pn | 12 49 15.4 | -0.5 | |
| **DEOK** | **Depew** | **1.86** | **143** | Pn | Pn | 12 49 16.0 | -0.3 | |
| **OKCSW** | **OKLAHOMA CITY** | **1.97** | **170** | Pn | Pn | 12 49 16.9 | -0.9 | |
| **KSU1** | **Kansas State U** | **2.01** | **29** | Pn | Pn | 12 49 17.7 | -0.6 | |
| **CBKS** | **Cedar Bluff** | **2.08** | **315** | | Pn | 12 49 19.0 | -0.3 | |
| **FNO** | **Franklin** | **2.12** | **170** | | Pn | 12 49 20.2 | +0.3 | |
| **TUL3** | **Leonard** | **2.20** | **130** | Pn | Pn | 12 49 20.2 | -0.8 | |
| **W35A** | **Tecumseh** | **2.33** | **160** | Pn | Pn | 12 49 22.1 | -0.7 | |
| **RLO** | **Rose Lookout** | **2.57** | **117** | Pn | Pn | 12 49 26.0 | 0.0 | |
| **WMOK** | **Wichita Mounta** | **2.71** | **196** | Pn | Pn | 12 49 27.6 | -0.4 | |
| **X34A** | **Smith Ranch, M** | **2.74** | **179** | Pn | Pn | 12 49 28.4 | 0.0 | |
| **U38A** | **Gravette** | **2.93** | **107** | | Pn | 12 49 30.8 | -0.3 | |
| **SMWD** | **Samnorwood** | **2.95** | **221** | | Pn | 12 49 31.3 | -0.1 | |
| SMWD | | | | IAmb_Lg | | 12 50 25.4 | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| **HHAR** | **Hobbs** | **3.33** | **108** | Pn | Pn | 12 49 36.0 | -0.5 | |
| HHAR | | | | IAmb_Lg | | 12 50 28.2 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **LOOK** | **Love County** | **3.40** | **170** | Pn | Pn | 12 49 37.9 | +0.5 | |
| **X37A** | **Clayton** | **3.42** | **143** | Pn | Pn | 12 49 38.6 | +0.9 | |
| **WTFS** | **Witchita Falls** | **3.61** | **188** | Pn | Pn | 12 49 38.0 | -2.3 | |
| **S39A** | **Bolivar** | **3.63** | **83** | | Pn | 12 49 41.0 | +0.4 | |
| **AMTX** | **Amarillo** | **3.95** | **233** | | Pn | 12 49 44.1 | -1.0 | |
| AMTX | | | | IAmb_Lg | | 12 50 52.5 | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **RTBA** | **Rita Blanca** | **4.01** | **258** | | Pn | 12 49 47.0 | +1.0 | |
| **Z35A** | **Perchaven, San** | **4.04** | **173** | Pn | Pn | 12 49 46.7 | +0.4 | |
| Z35A | | | | IAmb_Lg | | 12 50 56.9 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **BGNE** | **Belgrade** | **4.06** | **357** | Pn | Pn | 12 49 47.1 | +0.5 | |
| **P38A** | **Dawn** | **4.09** | **55** | Pn | Pn | 12 49 47.6 | +0.6 | |
| P38A | | | | IAmb_Lg | | 12 50 58.9 | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **4.10** | **295** | Pn | Pn | 12 49 47.7 | +0.4 | |
| KSCO | | | | IAmb_Lg | | 12 51 02.0 | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **APMT** | **Aspermont** | **4.42** | **205** | Pn | Pn | 12 49 53.2 | +1.7 | |
| **DKNS** | **Dickens** | **4.44** | **215** | IAmb_Lg | | 12 51 07.4 | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| **MIAR** | **Mount Ida** | **4.46** | **128** | Pn | Pn | 12 49 53.5 | +1.4 | |
| MIAR | | | | IAmb_Lg | | 12 51 05.8 | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| **MGMO** | **Mountain Grove** | **4.47** | **91** | | Pn | 12 49 53.3 | +1.1 | |
| MGMO | | | | IAmb_Lg | | 12 51 08.0 | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **R40A** | **Maddies Statio** | **4.53** | **76** | | Pn | 12 49 53.0 | 0.0 | |
| R40A | | | | IAmb_Lg | | 12 51 09.7 | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| **PLPT** | **Palo Pinto** | **4.54** | **185** | Pn | Pn | 12 49 53.2 | 0.0 | |
| **Z38A** | **Mt. Pleasant** | **4.71** | **149** | IAmb_Lg | | 12 51 23.9 | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **OGNE** | **Ogallala** | **4.83** | **319** | Pn | Pn | 12 49 56.3 | -1.0 | |
| **FCAR** | **Ozark Folk Cen** | **4.84** | **106** | Pn | Pn | 12 49 57.1 | -0.2 | |
| FCAR | | | | IAmb_Lg | | 12 51 16.2 | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| **SN07** | **Snyder 07** | **4.92** | **211** | IAmb_Lg | | 12 51 21.4 | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.95** | **113** | IAmb_Lg | | 12 51 28.9 | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **N38A** | **Joes South For** | **4.98** | **45** | IAmb_Lg | | 12 51 31.4 | | |
| | comp=Z,24nm,0.8s | | | | | | | |
| **X40A** | **Basin Creek Fa** | **4.98** | **123** | IAmb_Lg | | 12 51 26.4 | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **P40A** | **Paris** | **5.06** | **63** | IAmb_Lg | | 12 51 32.1 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **SN05** | **Snyder 5** | **5.10** | **210** | IAmb_Lg | | 12 51 25.2 | | |
| | comp=Z,9.6nm,0.8s | | | | | | | |
| **UALR** | **University of** | **5.16** | **118** | IAmb_Lg | | 12 51 31.5 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **T25A** | **Trinidad** | **5.23** | **270** | IAmb_Lg | | 12 51 37.0 | | |
| | comp=Z,16nm,0.9s | | | | | | | |
| **CCM** | **Cathedral Cave** | **5.30** | **80** | IAmb_Lg | | 12 51 31.2 | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **WLAR** | **White Oak Lake** | **5.33** | **132** | IAmb_Lg | | 12 51 35.0 | | |
| | comp=Z,20nm,0.7s | | | | | | | |
| **T42A** | **Van Buren** | **5.42** | **91** | IAmb_Lg | | 12 51 38.0 | | |
| | comp=Z,10nm,0.7s | | | | | | | |
| **FVM** | **French Village** | **5.94** | **82** | IAmb_Lg | | 12 52 02.5 | | |
| | comp=Z,10nm,1.0s | | | | | | | |
| **Q24A** | **Divide** | **5.96** | **288** | IAmb_Lg | | 12 51 56.1 | | |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **PBMO** | **Poplar Bluff** | **5.97** | **93** | IAmb_Lg | | 12 51 58.8 | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **BRIGG** | **Briggsdale** | **5.97** | **305** | IAmb_Lg | | 12 51 58.3 | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **CGM3** | **Cape Girardeau** | **6.54** | **88** | IAmb_Lg | | 12 52 19.0 | | |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **S44A** | **Carbondale** | **6.85** | **85** | IAmb_Lg | | 12 52 19.8 | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **SIUC** | **Southern Illin** | **6.88** | **84** | IAmb_Lg | | 12 52 29.3 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **P43A** | **Skaggs, Pawnee** | **6.93** | **68** | IAmb_Lg | | 12 52 20.4 | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **JCT** | **Junction City** | **7.04** | **194** | IAmb_Lg | | 12 52 39.4 | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **Q44A** | **Meyer Farm, Va** | **7.15** | **75** | IAmb_Lg | | 12 52 43.5 | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **N23A** | **Red Feather La** | **7.21** | **302** | IAmb_Lg | | 12 52 37.5 | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **HDIL** | **Hopedale** | **7.41** | **62** | IAmb_Lg | | 12 52 48.8 | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **OXF** | **Oxford** | **7.42** | **110** | IAmb_Lg | | 12 52 52.0 | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **I37A** | **Lemond, Waseca** | **7.47** | **26** | IAmb_Lg | | 12 52 51.5 | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| **RSSD** | **Black Hills** | **8.22** | **327** | IAmb_Lg | | 12 53 23.6 | | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **DRIO** | **Del Rio** | **8.23** | **197** | IAmb_Lg | | 12 53 11.1 | | |
| | comp=Z,5.2nm,0.9s | | | | | | | |
| **PLAL** | **Pickwick Lake** | **8.26** | **104** | IAmb_Lg | | 12 53 08.6 | | |
| | comp=Z,5.8nm,0.8s | | | | | | | |
| **K22A** | **Casper** | **8.49** | **311** | IAmb_Lg | | 12 53 30.9 | | |
| | comp=Z,8.3nm,1.0s | | | | | | | |

*STR* ***31*** *13:03:17.1±1.6, 44°N±7°×1°3E±1°2, h10km, MLv3.7/35, Error ellipse: s-maj=0.0km s-min=0.0km az=113.6, preliminary*

*TIR* ***31*** *13:03:17.6, 43°.39N×13°.57E, h10km±21km, Ml4.1*

*ROM* ***31*** *13:03:17.7±0.1, 43°.988N±0°.004×12°.889E±0°.005, h33km, ML3.7/406, Mw3.5, Error ellipse: s-maj=0.4km s-min=0.2km az=224.0, Moment Tensor Solution. Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=0.10; $M_{\theta\theta}$=1.72; $M_{\phi\phi}$1.82; $M_{r\theta}$0.02; $M_{\theta\phi}$-0.61; $M_{\phi r}$0.55; Fault plane solution: $M_0$1.94365×$10^{14}$ NP1:$\phi_s$305.00000°, $\delta$78.00000°, $\lambda$173.00000°. NP2:$\phi_{ss}$36.00000°, $\delta$83.00000°, $\lambda$13.00000°.*

*LDG* ***31*** *13:03:18.8, 43°.98N×12°.86E, h34km*

*BGR* ***31*** *13:03:18.1±0.6, 44°.03N×12°.92E, h10km, ML3.8/10, Error ellipse: s-maj=13.3km s-min=7.8km az=158.0*

*BEO* ***31*** *13:03:19.6±1.0, 43°.97N×12°.94E, h40km±6km, ML3.8/4*

*PRU* ***31*** *13:03:19.9, 44°.08N×13°.03E, h33km*

*IDC* ***31*** *13:03:22.2±2.4, 44°.54N×12°.84E, h0km, mb3.4/1, mbtmp3.5/4, ML3.7/3, Error ellipse: s-maj=28.9km s-min=23.8km az=106.0*

**ISC 31 13:03:13.9**±0.6, **43°.99N**±0°.02×**12°.88E**±0°.02, **h14**km, **n300, $\sigma$2.61**/446, **6C-13D, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RSM** | **Repubblica di** | **0.32** | **260** | P | **Pn** | **13 03 26.1** | **+1.9** |
| RSM | | | | S | **Sn** | **13 03 32.7** | **+2.1** |
| RSM | | | | AML | AML | | |
| | comp=E,7570μm,1.2s | | | | | | |
| RSM | | | | AML | AML | | |
| | comp=N,9555μm,0.5s | | | | | | |
| RSM | | | | AML | AML | | |
| | comp=N,9555μm,1.5s | | | | | | |
| **BLLA** | **Bellaria** | **0.34** | **298** | P | **Pn** | **13 03 26.6** | **+2.2** |
| BLLA | | | | S | **Sn** | **13 03 34.6** | **+3.6** |
| BLLA | | | | AML | AML | | |
| | comp=E,7290μm,1.3s | | | | | | |
| BLLA | | | | AML | AML | | |
| | comp=N,16800μm,0.7s | | | | | | |
| BLLA | | | | AML | AML | | |
| | comp=N,16800μm,1.3s | | | | | | |
| BLLA | | | | AML | AML | | |
| | comp=E,7290μm,0.7s | | | | | | |
| **COR1** | **Corinaldo** | **0.37** | **167** | ⇓P | **Pn** | **13 03 26.6** | **+1.8** |
| COR1 | | | | S | **Sn** | **13 03 34.1** | **+2.3** |
| COR1 | | | | AML | AML | | |
| | comp=E,11370μm,1.0s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,26050μm,0.9s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,21000μm,1.0s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,26700μm,0.9s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,11360μm,1.0s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,26000μm,0.9s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,20950μm,1.0s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,26750μm,0.9s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,11350μm,1.0s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,26000μm,1.1s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,11350μm,1.0s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,20956μm,0.5s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=N,26750μm,1.1s | | | | | | |
| COR1 | | | | AML | AML | | |
| | comp=E,20950μm,1.0s | | | | | | |
| **MPAG** | **Monte Paganucc** | **0.37** | **194** | ⇑P | **Pn** | **13 03 26.1** | **+1.1** |
| MPAG | | | | S | **Sn** | **13 03 32.7** | **+0.7** |
| MPAG | | | | AML | AML | | |
| | comp=N,23550μm,0.5s | | | | | | |
| MPAG | | | | AML | AML | | |
| | comp=N,23700μm,0.5s | | | | | | |
| MPAG | | | | AML | AML | | |
| | comp=E,21600μm,0.4s | | | | | | |
| MPAG | | | | AML | AML | | |
| | comp=N,23550μm,1.5s | | | | | | |
| MPAG | | | | AML | AML | | |
| | comp=N,23700μm,1.5s | | | | | | |
| MPAG | | | | AML | AML | | |
| | comp=E,21850μm,0.4s | | | | | | |
| **SENI** | **Senigallia** | **0.38** | **138** | P | **Pn** | **13 03 26.9** | **+1.9** |
| SENI | | | | AML | AML | | |
| | comp=E,9955μm,1.6s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=E,51050μm,1.2s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=N,60550μm,0.2s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=E,9970μm,1.6s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=N,8550μm,0.2s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=E,9960μm,1.6s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=N,60550μm,0.2s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=E,51050μm,0.8s | | | | | | |
| SENI | | | | AML | AML | | |
| | comp=E,9960μm,0.4s | | | | | | |
| **PE3** | **Peglio** | **0.40** | **224** | ⇑P | **Pn** | **13 03 26.9** | **+1.6** |
| PE3 | | | | S | **Sn** | **13 03 34.4** | **+1.7** |
| PE3 | | | | AML | AML | | |
| | comp=E,67500μm,0.9s | | | | | | |
| PE3 | | | | AML | AML | | |
| PE3 | | | | AML | AML | | |
| PE3 | | | | AML | AML | | |
| | comp=E,67500μm,1.1s | | | | | | |
| **NARO** | **Abbazia di Nar** | **0.44** | **210** | ⇓P | **Pn** | **13 03 27.1** | **+1.4** |
| NARO | | | | S | **Sn** | **13 03 34.6** | **+1.1** |
| NARO | | | | AML | AML | | |
| | comp=E,37300μm,0.2s | | | | | | |
| NARO | | | | AML | AML | | |
| | comp=N,42200μm,0.3s | | | | | | |
| NARO | | | | AML | AML | | |
| | comp=N,42200μm,1.7s | | | | | | |
| **CPGN** | **Carpegna, Ital** | **0.45** | **246** | ⇑P | **Pn** | **13 03 28.0** | **+2.0** |
| CPGN | | | | AML | AML | | |
| | comp=N,6965μm,1.5s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=E,6740μm,0.3s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=E,6735μm,0.3s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=N,6265μm,1.6s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=N,6965μm,1.5s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=E,6740μm,1.7s | | | | | | |
| CPGN | | | | AML | AML | | |
| | comp=E,8135μm,0.5s | | | | | | |
| **FRON** | **Frontone** | **0.48** | **194** | ⇓P | **Pn** | **13 03 27.8** | **+1.4** |
| FRON | | | | S | **Sn** | **13 03 36.0** | **+1.3** |
| FRON | | | | AML | AML | | |
| | comp=N,13350μm,0.6s | | | | | | |
| FRON | | | | AML | AML | | |
| | comp=E,8440μm,0.3s | | | | | | |
| **ARVD** | **Arcevia** | **0.49** | **175** | ⇓P | **Pn** | **13 03 27.8** | **+1.3** |
| ARVD | | | | S | **Sn** | **13 03 36.4** | **+1.5** |
| ARVD | | | | AML | AML | | |
| | comp=E,5255μm,0.5s | | | | | | |
| ARVD | | | | AML | AML | | |
| | comp=N,6335μm,1.4s | | | | | | |
| ARVD | | | | AML | AML | | |
| | comp=N,6335μm,0.6s | | | | | | |
| ARVD | | | | AML | AML | | |
| | comp=E,5255μm,1.5s | | | | | | |
| **A309A** | **Martorano (FC)** | **0.49** | **292** | P | **Pn** | **13 03 29.0** | **+2.5** |
| A309A | | | | S | **Sn** | **13 03 38.2** | **+3.3** |
| **PIEI** | **Pieia** | **0.52** | **209** | ⇓P | **Pn** | **13 03 28.2** | **+1.3** |
| PIEI | | | | S | **Sn** | **13 03 36.7** | **+1.1** |
| PIEI | | | | AML | AML | | |
| | comp=E,47150μm,0.2s | | | | | | |
| PIEI | | | | AML | AML | | |
| | comp=N,16900μm,0.5s | | | | | | |
| **APEC** | **Apecchio** | **0.55** | **218** | P | **Pn** | **13 03 28.8** | **+1.5** |
| APEC | | | | S | **Sn** | **13 03 38.1** | **+1.9** |
| APEC | | | | AML | AML | | |
| | comp=N,23600μm,0.8s | | | | | | |
| APEC | | | | AML | AML | | |
| | comp=N,27050μm,0.2s | | | | | | |
| APEC | | | | AML | AML | | |
| | comp=E,16400μm,0.2s | | | | | | |
| APEC | | | | AML | AML | | |
| | comp=N,23600μm,1.2s | | | | | | |
| APEC | | | | AML | AML | | |
| | comp=E,22500μm,0.2s | | | | | | |
| **MMUR** | **Monte Murano** | **0.55** | **171** | P | **Pn** | **13 03 29.0** | **+1.5** |
| MMUR | | | | S | **Sn** | **13 03 38.8** | **+2.3** |
| **SSFR** | **Montelago di S** | **0.56** | **188** | P | **Pn** | **13 03 28.9** | **+1.4** |
| SSFR | | | | S | **Sn** | **13 03 38.5** | **+2.0** |
| SSFR | | | | AML | AML | | |
| | comp=E,36100μm,0.7s | | | | | | |
| SSFR | | | | AML | AML | | |
| | comp=N,37700μm,0.2s | | | | | | |
| SSFR | | | | AML | AML | | |
| | comp=E,32550μm,0.7s | | | | | | |
| SSFR | | | | AML | AML | | |
| | comp=N,34700μm,0.2s | | | | | | |
| **PARC** | **Parchiule** | **0.58** | **234** | ⇑P | **Pn** | **13 03 29.2** | **+1.5** |
| PARC | | | | S | **Sn** | **13 03 38.7** | **+1.7** |
| PARC | | | | AML | AML | | |
| | comp=N,6740μm,0.6s | | | | | | |
| PARC | | | | AML | AML | | |
| | comp=E,5405μm,0.7s | | | | | | |
| **ATSC** | **Scheggia e Pas** | **0.58** | **194** | P | **Pn** | **13 03 29.2** | **+1.4** |
| ATSC | | | | S | **Sn** | **13 03 39.5** | **+2.4** |
| **ATPC** | **Poggio Castell** | **0.59** | **211** | P | **Pn** | **13 03 29.6** | **+1.7** |
| ATPC | | | | S | **Sn** | **13 03 39.3** | **+1.8** |
| **PCRO** | **Pietralacroce** | **0.60** | **129** | P | **Pn** | **13 03 30.4** | **+2.4** |
| PCRO | | | | S | **Sn** | **13 03 39.8** | **+2.1** |
| **ATPI** | **Pietralunga -** | **0.64** | **213** | ⇓P | **Pn** | **13 03 30.4** | **+1.7** |
| ATPI | | | | S | **Sn** | **13 03 40.5** | **+1.9** |
| ATPI | | | | AML | AML | | |
| | comp=E,10495μm,1.5s | | | | | | |
| ATPI | | | | AML | AML | | |
| | comp=N,11550μm,0.4s | | | | | | |
| ATPI | | | | AML | AML | | |
| | comp=E,10495μm,0.5s | | | | | | |
| **ATFO** | **Monte Foce - G** | **0.66** | **200** | ⇓P | **Pn** | **13 03 30.5** | **+1.6** |
| ATFO | | | | S | **Sn** | **13 03 41.6** | **+2.4** |
| ATFO | | | | AML | AML | | |
| | comp=N,31250μm,0.3s | | | | | | |
| ATFO | | | | AML | AML | | |
| | comp=E,25450μm,0.4s | | | | | | |
| **EL6** | **Elcito** | **0.68** | **166** | ⇓P | **Pn** | **13 03 31.1** | **+1.9** |
| EL6 | | | | S | **Sn** | **13 03 42.0** | **+2.4** |
| EL6 | | | | AML | AML | | |
| | comp=N,15700μm,0.7s | | | | | | |
| EL6 | | | | AML | AML | | |
| | comp=N,15750μm,0.7s | | | | | | |
| EL6 | | | | AML | AML | | |
| | comp=E,22650μm,0.6s | | | | | | |
| EL6 | | | | AML | AML | | |
| | comp=N,15750μm,1.3s | | | | | | |
| **AOI** | **Ancona** | **0.68** | **130** | P | **Pn** | **13 03 31.2** | **+2.0** |
| AOI | | | | S | **Sn** | **13 03 41.8** | **+2.2** |
| AOI | | | | AML | AML | | |
| | comp=N,20150μm,0.3s | | | | | | |
| AOI | | | | AML | AML | | |
| | comp=E,15150μm,0.2s | | | | | | |
| **SSP9** | **Sansepolcro** | **0.68** | **233** | P | **Pn** | **13 03 31.0** | **+1.8** |
| SSP9 | | | | S | **Sn** | **13 03 42.1** | **+2.5** |
| SSP9 | | | | AML | AML | | |
| | comp=E,4070μm,0.6s | | | | | | |
| SSP9 | | | | AML | AML | | |
| | comp=N,5450μm,0.6s | | | | | | |
| SSP9 | | | | AML | AML | | |
| | comp=N,5445μm,0.6s | | | | | | |
| **ATVO** | **AVT- Monte Val** | **0.70** | **210** | ⇓P | **Pn** | **13 03 31.1** | **+1.7** |
| ATVO | | | | S | **Sn** | **13 03 42.0** | **+2.0** |
| ATVO | | | | AML | AML | | |
| | comp=N,14950μm,0.6s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=E,11095μm,0.9s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=E,11095μm,1.1s | | | | | | |
| ATVO | | | | AML | AML | | |
| | comp=N,14950μm,1.4s | | | | | | |
| **FOSV** | **Fossato di Vic** | **0.70** | **187** | ⇓P | **Pn** | **13 03 31.0** | **+1.6** |
| FOSV | | | | S | **Sn** | **13 03 42.4** | **+2.4** |
| FOSV | | | | AML | AML | | |
| | comp=N,8340μm,0.2s | | | | | | |
| FOSV | | | | AML | AML | | |
| | comp=E,5905μm,0.3s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.73** | **177** | ⇓P | **Pn** | **13 03 31.8** | **+1.9** |
| SNTG | | | | S | **Sn** | **13 03 43.5** | **+2.5** |
| SNTG | | | | AML | AML | | |
| | comp=E,10040μm,0.8s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=E,5940μm,0.4s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,14850μm,0.3s | | | | | | |
| SNTG | | | | AML | AML | | |
| | comp=N,14800μm,0.3s | | | | | | |
| **ATMC** | **Monte Cedrone** | **0.74** | **223** | P | **Pn** | **13 03 31.8** | **+1.8** |
| ATMC | | | | S | **Sn** | **13 03 42.8** | **+1.8** |
| **MTL1** | **Matelica** | **0.74** | **173** | P | **Pn** | **13 03 32.0** | **+2.1** |
| **TRE1** | **Treia** | **0.74** | **155** | P | **Pn** | **13 03 32.2** | **+2.2** |
| TRE1 | | | | AML | AML | | |
| | comp=E,25450μm,0.4s | | | | | | |
| TRE1 | | | | AML | AML | | |
| | comp=N,15800μm,0.5s | | | | | | |
| TRE1 | | | | AML | AML | | |
| | comp=N,15800μm,0.5s | | | | | | |
| TRE1 | | | | AML | AML | | |
| | comp=N,15800μm,1.5s | | | | | | |
| **ATLO** | **AVT- Montelove** | **0.76** | **207** | ⇓P | **Pn** | **13 03 32.1** | **+1.9** |
| ATLO | | | | S | **Sn** | **13 03 44.1** | **+2.6** |
| **GAG1** | **Gagliole** | **0.76** | **170** | P | **Pn** | **13 03 32.3** | **+2.1** |
| **CRE** | **Caprese Michel** | **0.77** | **242** | P | **Pn** | **13 03 32.4** | **+2.0** |
| CRE | | | | AML | AML | | |
| | comp=E,3975μm,0.9s | | | | | | |
| CRE | | | | AML | AML | | |
| | comp=N,6905μm,0.3s | | | | | | |
| CRE | | | | AML | AML | | |
| | comp=E,3975μm,1.1s | | | | | | |
| **MURB** | **Monte Urbino** | **0.77** | **200** | P | **Pn** | **13 03 32.5** | **+2.0** |
| MURB | | | | AML | AML | | |
| | comp=E,29550μm,0.4s | | | | | | |
| MURB | | | | AML | AML | | |
| | comp=E,35400μm,0.3s | | | | | | |
| MURB | | | | AML | AML | | |
| | comp=N,42650μm,0.3s | | | | | | |
| MURB | | | | AML | AML | | |
| | comp=N,38350μm,0.3s | | | | | | |
| **FAEN** | **Faenza** | **0.78** | **293** | P | **Pn** | **13 03 32.8** | **+2.3** |
| **SSM1** | **San Severino M** | **0.79** | **164** | P | **Pn** | **13 03 32.9** | **+2.2** |
| **ATMI** | **Monte Miggiano** | **0.79** | **215** | P | **Pn** | **13 03 32.9** | **+2.2** |
| ATMI | | | | AML | AML | | |
| | comp=E,9550μm,0.4s | | | | | | |
| ATMI | | | | AML | AML | | |
| | comp=N,12550μm,0.5s | | | | | | |
| **FIU1** | **Fiuminata** | **0.80** | **177** | P | **Pn** | **13 03 32.6** | **+1.8** |
| FIU1 | | | | S | **Sn** | **13 03 45.2** | **+2.7** |
| **PP3** | **Marolino** | **0.81** | **139** | P | **Pn** | **13 03 33.6** | **+2.8** |
| PP3 | | | | S | **Sn** | **13 03 46.0** | **+3.4** |
| **ASQU** | **Asqua** | **0.81** | **257** | ⇑P | **Pn** | **13 03 33.4** | **+2.3** |
| ASQU | | | | AML | AML | | |
| | comp=N,2500μm,0.5s | | | | | | |
| ASQU | | | | AML | AML | | |
| | comp=E,2960μm,0.5s | | | | | | |
| ASQU | | | | AML | AML | | |
| | comp=E,2960μm,1.5s | | | | | | |
| ASQU | | | | AML | AML | | |
| | comp=N,2500μm,1.5s | | | | | | |
| **ASQU** | **Asqua** | **0.81** | **257** | P | **Pn** | **13 03 33.4** | **+2.3** |
| **PIO1** | **Pioraco** | **0.81** | **175** | P | **Pn** | **13 03 33.1** | **+2.1** |
| PIO1 | | | | S | **Sn** | **13 03 45.6** | **+2.8** |
| **MDAR** | **Monte D'Aria** | **0.82** | **167** | P | **Pn** | **13 03 33.2** | **+2.1** |
| **ATCC** | **AVT- Casa Cast** | **0.82** | **192** | P | **Pn** | **13 03 33.3** | **+2.2** |
| ATCC | | | | S | **Sn** | **13 03 46.1** | **+3.0** |
| ATCC | | | | AML | AML | | |
| | comp=N,18900μm,0.4s | | | | | | |
| ATCC | | | | AML | AML | | |
| | comp=E,16900μm,0.2s | | | | | | |
| **ATVA** | **AVT- Monte Val** | **0.83** | **212** | P | **Pn** | **13 03 33.7** | **+2.4** |
| ATVA | | | | S | **Sn** | **13 03 46.2** | **+2.9** |
| **SEF1** | **Sefro** | **0.84** | **177** | P | **Pn** | **13 03 33.4** | **+2.0** |
| SEF1 | | | | AML | AML | | |
| | comp=E,26600μm,0.3s | | | | | | |
| SEF1 | | | | AML | AML | | |
| | comp=N,18050μm,0.2s | | | | | | |
| SEF1 | | | | AML | AML | | |
| | comp=E,26600μm,0.3s | | | | | | |
| SEF1 | | | | AML | AML | | |
| | comp=N,18050μm,0.2s | | | | | | |
| **LMD** | **Lutirano** | **0.85** | **276** | P | **Pn** | **13 03 34.0** | **+2.4** |
| LMD | | | | S | **Sn** | **13 03 48.2** | **+4.3** |
| LMD | | | | AML | AML | | |
| | comp=N,7000μm,1.1s | | | | | | |
| LMD | | | | AML | AML | | |
| | comp=E,9440μm,0.4s | | | | | | |
| **LMD** | **Lutirano** | **0.85** | **276** | P | **Pn** | **13 03 34.1** | **+2.6** |
| **A308A** | **Longastrino (F** | **0.87** | **314** | P | **Pn** | **13 03 35.9** | **+4.2** |
| **PF6** | **Pievefavera** | **0.87** | **165** | P | **Pn** | **13 03 34.1** | **+2.4** |
| PF6 | | | | S | **Sn** | **13 03 47.3** | **+3.1** |
| **MML1** | **Montelago di S** | **0.88** | **176** | ⇓P | **Pn** | **13 03 34.0** | **+2.1** |
| MML1 | | | | S | **Sn** | **13 03 47.6** | **+3.2** |
| **ATTE** | **AVT- Monte Tez** | **0.88** | **206** | P | **Pn** | **13 03 34.0** | **+2.1** |
| ATTE | | | | AML | AML | | |
| | comp=E,8220μm,0.8s | | | | | | |
| ATTE | | | | AML | AML | | |
| | comp=N,9450μm,0.5s | | | | | | |
| **CIMA** | **Civitanova Mar** | **0.89** | **140** | P | **Pn** | **13 03 35.0** | **+3.0** |
| **IMOL** | **Imola, Italy** | **0.90** | **295** | P | **Pn** | **13 03 35.7** | **+3.6** |
| IMOL | | | | AML | AML | | |
| | comp=E,7590μm,0.5s | | | | | | |
| IMOL | | | | AML | AML | | |
| | comp=N,5610μm,1.5s | | | | | | |
| IMOL | | | | AML | AML | | |
| | comp=E,7595μm,0.5s | | | | | | |
| IMOL | | | | AML | AML | | |
| | comp=N,5610μm,0.5s | | | | | | |
| **IMOL** | **Imola, Italy** | **0.90** | **295** | P | **Pn** | **13 03 36.0** | **+3.9** |
| **CSP1** | **Cessapalombo** | **0.93** | **165** | P | **Pn** | **13 03 35.0** | **+2.4** |
| CSP1 | | | | AML | AML | | |
| | comp=E,9475μm,0.4s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=N,11150μm,1.1s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=E,9480μm,0.4s | | | | | | |
| CSP1 | | | | AML | AML | | |
| | comp=N,11150μm,0.9s | | | | | | |
| **CAFI** | **Castiglion Fio** | **0.94** | **226** | P | **Pn** | **13 03 35.3** | **+2.6** |
| CAFI | | | | AML | AML | | |
| | comp=E,10315μm,0.8s | | | | | | |
| CAFI | | | | AML | AML | | |
| | comp=N,6060μm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CAFI | | | | AML | AML | | |
| | comp=N,6230µm,0.8s | | | | | | |
| CAFI | | | | AML | AML | | |
| | comp=N,6230µm,1.2s | | | | | | |
| CAFI | | | | AML | AML | | |
| | comp=E,10820µm,0.8s | | | | | | |
| CAFI | | | | AML | AML | | |
| | comp=N,6060µm,1.2s | | | | | | |
| **MNTP** | **Montappone** | **0.95** | **153** | P | **Pn** | **13 03 35.5** | **+2.7** |
| **ASSB** | **Assisi San Ben** | **0.96** | **190** | P | **Pn** | **13 03 35.3** | **+2.3** |
| ASSB | | | | AML | AML | | |
| | comp=E,9075µm,1.6s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=E,9075µm,0.4s | | | | | | |
| ASSB | | | | AML | AML | | |
| | comp=N,8010µm,0.3s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.96** | **171** | P | **Pn** | **13 03 35.3** | **+2.3** |
| FDMO | | | | AML | AML | | |
| | comp=N,4680µm,0.2s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=E,5160µm,0.8s | | | | | | |
| FDMO | | | | AML | AML | | |
| | comp=N,4680µm,1.8s | | | | | | |
| **CMPO** | **Campotto Po** | **0.97** | **308** | P | **Pn** | **13 03 36.9** | **+3.7** |
| **GUMA** | **Gualdo di Mace** | **0.98** | **160** | P | **Pn** | **13 03 35.8** | **+2.5** |
| GUMA | | | | AML | AML | | |
| | comp=E,16700µm,0.4s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=E,19850µm,0.4s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=N,14450µm,0.2s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=E,16700µm,1.6s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=E,19850µm,1.6s | | | | | | |
| GUMA | | | | AML | AML | | |
| | comp=N,12300µm,0.4s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.98** | **179** | P | **Pn** | **13 03 35.6** | **+2.3** |
| CESI | | | | AML | AML | | |
| | comp=E,6935µm,1.5s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=N,4705µm,1.5s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=E,6935µm,0.5s | | | | | | |
| CESI | | | | AML | AML | | |
| | comp=N,4705µm,0.5s | | | | | | |
| **BRIS** | **BRISIGHELLA** | **1.00** | **280** | P | **Pn** | **13 03 34.4** | **+0.8** |
| BRIS | | | | AML | AML | | |
| | comp=E,8405µm,0.5s | | | | | | |
| BRIS | | | | AML | AML | | |
| | comp=N,9060µm,0.4s | | | | | | |
| BRIS | | | | AML | AML | | |
| | comp=N,9265µm,0.5s | | | | | | |
| BRIS | | | | AML | AML | | |
| | comp=E,8980µm,0.4s | | | | | | |
| BRIS | | | | AML | AML | | |
| | comp=N,9055µm,0.4s | | | | | | |
| BRIS | | | | AML | AML | | |
| | comp=E,8400µm,0.4s | | | | | | |
| **RUFI** | **Rufina** | **1.00** | **262** | P | **Pn** | **13 03 36.4** | **+2.8** |
| RUFI | | | | AML | AML | | |
| | comp=N,1202µm,1.5s | | | | | | |
| RUFI | | | | AML | AML | | |
| | comp=E,1895µm,0.6s | | | | | | |
| **RUFI** | **Rufina** | **1.00** | **262** | P | **Pn** | **13 03 36.7** | **+3.1** |
| **A305A** | **Porto Tolle (R** | **1.02** | **342** | P | **Pn** | **13 03 36.4** | **+2.6** |
| **FEMA** | **Monte Fema** | **1.03** | **173** | P | **Pn** | **13 03 36.4** | **+2.3** |
| FEMA | | | | AML | AML | | |
| | comp=E,11950µm,0.2s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,7800µm,0.6s | | | | | | |
| FEMA | | | | AML | AML | | |
| | comp=N,7800µm,1.4s | | | | | | |
| **MTRZ** | **Monterenzio** | **1.09** | **291** | P | **Pg** | **13 03 39.1** | **+4.1** |
| **SEI** | **Scarperia** | **1.10** | **274** | P | **Pg** | **13 03 38.5** | **+3.3** |
| **MOCL** | **Monte Cuccoli** | **1.23** | **271** | AML | AML | | |
| MOCL | | | | AML | AML | | |
| **MTCR** | **Monte La Croce** | **1.36** | **272** | P | **Pg** | **13 03 41.7** | **+1.6** |
| **SMRN** | **Sveta Marina** | **1.39** | **41** | *e*Pg | **Pg** | **13 03 40.9** | **+0.3** |
| SMRN | | | | Sg | **Sb** | **13 03 58.2** | **+1.0** |
| **ZCCA** | **Zocca** | **1.42** | **285** | P | **Pg** | **13 03 43.6** | **+2.4** |
| **SERM** | **Sermide** | **1.53** | **313** | P | **Pg** | **13 03 47.7** | **+4.4** |
| **POPM** | **Popiglio** | **1.54** | **273** | P | **Pg** | **13 03 43.6** | **+0.2** |
| **NVLJ** | **Novalja** | **1.54** | **67** | *i* Pg | **Pb** | **13 03 43.3** | **+1.1** |
| NVLJ | | | | Sg | **Sb** | **13 04 02.1** | **+0.5** |
| **RABC** | **Rab** | **1.56** | **60** | *i* Pg | **Pg** | **13 03 43.9** | **-0.1** |
| RABC | | | | Sg | **Sb** | **13 04 03.4** | **+1.2** |
| **DUGI** | **Dugi Otok** | **1.57** | **89** | *i* Pn | **Pb** | **13 03 43.4** | **+0.7** |
| DUGI | | | | Sg | **Sn** | **13 04 02.4** | **+0.9** |
| **VIRC** | **Vir** | **1.59** | **78** | *i* Pn | **Pb** | **13 03 43.9** | **+0.8** |
| VIRC | | | | Sg | **Sb** | **13 04 03.7** | **+0.6** |
| **BDI** | **Bagni Di Lucca** | **1.65** | **273** | P | **Pb** | **13 03 44.9** | **+0.8** |
| **MAIM** | **Mastiano** | **1.73** | **268** | P | **Pb** | **13 03 45.9** | **+0.5** |
| **CARD** | **Cardoso** | **1.73** | **272** | P | **Pb** | **13 03 45.9** | **+0.4** |
| **SKDS** | **Skadanscina** | **1.75** | **27** | *e*Pn | **Pn** | **13 03 45.3** | **+1.4** |
| **RIY** | **Rijeka** | **1.76** | **40** | *i* Pn | **Pb** | **13 03 46.4** | **+0.5** |
| RIY | | | | Sn | **Sb** | **13 04 08.2** | **+0.4** |
| **SARO** | **Sassorosso** | **1.80** | **277** | P | **Pb** | **13 03 47.2** | **+0.5** |
| **VLC** | **Villacollemand** | **1.81** | **276** | P | **Pb** | **13 03 47.2** | **+0.4** |
| **EQUI** | **Equi** | **1.98** | **276** | P | **Pb** | **13 03 49.4** | **-0.3** |
| **ZIRJ** | **Zirje** | **2.03** | **99** | *i* Pn | **Pb** | **13 03 50.0** | **-0.5** |
| ZIRJ | | | | Sn | **Sb** | **13 04 13.0** | **+0.3** |
| **MORI** | **Morici** | **2.04** | **92** | *i* Pn | **Pb** | **13 03 50.9** | **0.0** |
| MORI | | | | Sn | **Sn** | **13 04 14.9** | **+1.7** |
| **CEY** | **Cerknica** | **2.07** | **32** | *e*Pn | **Pn** | **13 03 49.8** | **+1.6** |
| **GRAM** | **Graiana** | **2.09** | **285** | P | **Pb** | **13 03 52.4** | **+0.8** |
| **UDBI** | **Udbina** | **2.14** | **74** | *e*Pn | **Pb** | **13 03 52.5** | **+0.1** |
| UDBI | | | | Sn | **Sb** | **13 04 18.4** | **-0.5** |
| **PLIT** | **Plitvice** | **2.16** | **65** | *e*Pn | **Pb** | **13 03 52.5** | **-0.2** |
| PLIT | | | | Sn | **Sb** | **13 04 18.6** | **-0.8** |
| **BOJS** | **Bojanci** | **2.27** | **47** | *e*Pn | **Pb** | **13 03 53.6** | **-1.1** |
| **PANI** | **Panarotta** | **2.34** | **333**⇑ | *e*Pn | **Pb** | **13 03 54.9** | **-1.0** |
| **OZLJ** | **Ozalj** | **2.46** | **48** | *e*Pn | **Pb** | **13 03 56.8** | **-1.0** |
| **KIJV** | **Kijevo** | **2.54** | **88** | *e*Pn | **Pb** | **13 03 58.1** | **-1.2** |
| KIJV | | | | Sn | **Sn** | **13 04 26.9** | **+1.4** |
| **CRES** | **Cresnjev** | **2.59** | **44** | *e*Pn | **Pn** | **13 03 58.0** | **+2.5** |
| **GORR** | **Gorreto** | **2.65** | **285** | P | **Pb** | **13 04 00.0** | **-1.2** |
| **A050A** | **Klekovaca** | **2.67** | **78** | *e*Pn | **Pn** | **13 03 59.3** | **+2.7** |
| **MYKA** | **Terra Mystica** | **2.70** | **11** | *i* Pn | **Pn** | **13 03 59.5** | **+2.6** |
| | comp=N,3.8nm,0.2s,SNR=7.8 | | | | | | |
| MYKA | | | | *e*Pg | **Pg** | **13 04 08.5** | **+2.9** |
| | comp=N,19nm,0.2s | | | | | | |
| MYKA | | | | *e*Sn | **Sn** | **13 04 31.6** | **+2.2** |
| | comp=N,31nm,0.2s | | | | | | |
| MYKA | | | | *e*Sg | **Sg** | **13 04 44.6** | **+4.1** |
| | comp=N,173nm,0.5s | | | | | | |
| **HVAR** | **Hvar** | **2.71** | **106** | *e*Pn | **Pn** | **13 03 59.3** | **+2.2** |
| HVAR | | | | Sn | **Sn** | **13 04 28.7** | **-1.0** |
| **MORSI** | **Morsiglia** | **2.76** | **249** | P | **Pn** | **13 03 59.6** | **+1.9** |
| MORSI | | | | S | **Sn** | **13 04 33.5** | **+2.6** |
| **ABTA** | **Abfaltersbach** | **2.77** | **355** | *e*Pn | **Pn** | **13 04 00.9** | **+2.9** |
| | comp=N,13nm,0.1s,SNR=26 | | | | | | |
| ABTA | | | | *e*Pg | **Pg** | **13 04 09.9** | **+2.8** |
| | comp=N,96nm,0.5s | | | | | | |
| **OBKA** | **Obir** | **2.78** | **24** | *i* Pn | **Pg** | **13 04 09.0** | **+1.8** |
| | comp=N,18nm,0.2s | | | | | | |
| OBKA | | | | Sg | **Sg** | **13 04 46.3** | **+3.0** |
| | comp=N,851nm,0.6s | | | | | | |
| **OBKA** | **Obir** | **2.78** | **24** | *e*Pn | **Pg** | **13 04 08.6** | **+1.4** |
| **OBKA** | **Obir** | **2.78** | **24** | *e*Pg | **Pg** | **13 04 09.0** | **+1.8** |
| OBKA | | | | *e*Sg | **Sg** | **13 04 46.6** | **+3.3** |
| **RNCA** | **Ronca, Sant'Ol** | **2.87** | **281** | P | **Pn** | **13 04 01.5** | **+2.3** |
| **PTJ** | **Puntijarka** | **2.91** | **48** | *i* Pn | **Pb** | **13 04 03.5** | **-2.2** |
| **A051A** | **Mrakovica** | **3.06** | **69** | *e*Pn | **Pn** | **13 04 04.1** | **+2.2** |
| **SGRT** | **San Giovanni R** | **3.07** | **136** | P | **Pn** | **13 03 59.4** | **-2.6** |
| | baz=134 | | | | | | |
| **MAKA** | **Makarska** | **3.08** | **102** | *i* Pn | **Pn** | **13 04 04.9** | **+2.8** |
| MAKA | | | | Sn | **Sn** | **13 04 39.9** | **+1.1** |
| **SOKA** | **Soboth** | **3.09** | **29** | *i* Pn | **Pn** | **13 04 04.6** | **+2.3** |
| | comp=N,4.9nm,0.2s | | | | | | |
| SOKA | | | | *e*Sg | **Sg** | **13 04 53.4** | **+0.3** |
| | comp=N,103nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **3.11** | **6** | *i* Pn | **Pn** | **13 04 05.8** | **+3.1** |
| | comp=N,19nm,0.4s,SNR=14 | | | | | | |
| KBA | | | | *e*Sn | **Sn** | **13 04 41.8** | **+2.1** |
| | comp=N,30nm,0.2s | | | | | | |
| **KBA** | **Koelnbreinsper** | **3.11** | **6** | *e*Pn | **Pn** | **13 04 05.8** | **+3.1** |
| KBA | | | | *e*Pg | **Pg** | **13 04 17.2** | **+3.8** |
| KBA | | | | *e*Sn | **Sn** | **13 04 41.6** | **+1.9** |
| **RICI** | **Ricice** | **3.12** | **98** | *i* Pn | **Pn** | **13 04 05.6** | **+2.9** |
| RICI | | | | Sn | **Sn** | **13 04 41.4** | **+1.7** |
| **LOBO** | **Lobor** | **3.13** | **45** | *e*Pn | **Pn** | **13 04 04.9** | **+2.1** |
| LOBO | | | | Sn | **Sn** | **13 04 40.4** | **+0.4** |
| **PCP** | **Piancastagn** | **3.17** | **282** | P | **Pn** | **13 04 05.7** | **+2.4** |
| **LSTV** | **Lastovo** | **3.17** | **111** | *i* Pn | **Pn** | **13 04 04.8** | **+1.5** |
| LSTV | | | | Sn | **Sn** | **13 04 39.2** | **-1.7** |
| **BLY** | **Banja Luka** | **3.18** | **75** | *e*Pn | **Pn** | **13 04 06.5** | **+3.0** |
| **BLY** | **Banja Luka** | **3.18** | **75** | *e*Pn | **Pn** | **13 04 06.3** | **+2.8** |
| **PGF** | **Pioggiola** | **3.18** | **244** | *e*P | **Pn** | **13 04 05.5** | **+1.9** |
| PGF | | | | *e*Sn | **Sn** | **13 04 38.8** | **-2.6** |
| | comp=N,15nm,0.3s | | | | | | |
| **PGF** | **Pioggiola** | **3.18** | **244** | P | **Pn** | **13 04 06.1** | **+2.5** |
| **MOSL** | **Moslavina** | **3.20** | **58** | *e*Pn | **Pn** | **13 04 05.8** | **+2.0** |
| **SMPL** | **Sampolo** | **3.25** | **236** | P | **Pn** | **13 04 07.5** | **+3.1** |
| SMPL | | | | S | **Sn** | **13 04 46.3** | **+3.5** |
| **CANO** | **Canova, Maglio** | **3.35** | **275** | P | **Pn** | **13 04 07.5** | **+1.6** |
| **CANO** | **Canova, Maglio** | **3.35** | **275** | S | **Sn** | **13 04 45.0** | **-0.6** |
| **FETA** | **Feichten** | **3.39** | **334** | *i* Pn | **Pb** | **13 04 10.5** | **-3.4** |
| | comp=N,4.5nm,0.4s,SNR=20 | | | | | | |
| FETA | | | | *e*Sg | **Sg** | **13 05 03.4** | **+0.6** |
| | comp=N,25nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **3.39** | **345** | *i* Pn | **Pn** | **13 04 10.5** | **+3.9** |
| | comp=N,10.0nm,0.2s,SNR=12 | | | | | | |
| WTTA | | | | *e*Sn | **Sn** | **13 04 49.4** | **+2.7** |
| | comp=N,49nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **3.39** | **345** | *e*Pn | **Pn** | **13 04 10.5** | **+3.9** |
| **LESA** | **Schwarzleotal** | **3.44** | **358** | *e*Pn | **Pn** | **13 04 10.4** | **+3.2** |
| | comp=N,30nm,0.2s | | | | | | |
| LESA | | | | *i* Sn | **Sn** | **13 04 51.0** | **+3.3** |
| | comp=N,109nm,0.4s | | | | | | |
| **SQTA** | **Sankt Quirin** | **3.44** | **341** | *i* Pn | **Pn** | **13 04 11.2** | **+4.0** |
| | comp=N,61nm,0.2s,SNR=20 | | | | | | |
| SQTA | | | | *e*Sn | **Sn** | **13 04 51.4** | **+3.6** |
| | comp=N,56nm,0.3s | | | | | | |
| SQTA | | | | *e*Sg | **Sg** | **13 05 05.8** | **+1.4** |
| | comp=N,86nm,0.3s | | | | | | |
| **WATA** | **Walderalm** | **3.47** | **345** | *i* Pn | **Pb** | **13 04 11.8** | **-3.4** |
| | comp=N,28nm,0.3s,SNR=15 | | | | | | |
| WATA | | | | *e*Sn | **Sn** | **13 04 52.0** | **+3.4** |
| | comp=N,62nm,0.3s | | | | | | |
| **RORO** | **Rocca Rossa** | **3.48** | **274** | P | **Pn** | **13 04 09.5** | **+2.0** |
| **DAVOX** | **Davos/Dischmat** | **3.50** | **324** | Pn | **Pb** | **13 04 12.3** | **-3.5** |
| | comp=N,3.1nm,0.3s,baz=171,slow=8.7,SNR=15 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **13 04 50.7** | **+1.2** |
| | comp=N,8.9nm,0.3s,baz=279,slow=21,SNR=5.5 | | | | | | |
| | comp=N,9.2nm,0.4s | | | | | | |
| **MOTA** | **Moosalm** | **3.58** | **340** | *i* Pn | **Pn** | **13 04 13.0** | **+3.9** |
| | comp=N,12nm,0.2s | | | | | | |
| MOTA | | | | *i* Sn | **Sn** | **13 04 54.5** | **+3.2** |
| | comp=N,11nm,0.2s | | | | | | |
| **GBOS** | **Grotte di Boss** | **3.64** | **276** | P | **Pn** | **13 04 12.2** | **+2.3** |
| **STON** | **Ston** | **3.68** | **106** | *e*Pn | **Pn** | **13 04 12.4** | **+2.0** |
| STON | | | | *e*Sn | **Sn** | **13 04 53.2** | **-0.3** |
| **STON** | **Ston** | **3.68** | **106** | *i* Pn | **Pn** | **13 04 12.7** | **+2.3** |
| STON | | | | Sn | **Sn** | **13 04 52.8** | **-0.7** |
| **STON** | **Ston** | **3.68** | **106** | *e*Pn | **Pn** | **13 04 11.9** | **+1.5** |
| **BIOA** | **Bad Ischl, Aus** | **3.74** | **8** | *i* Pn | **Pn** | **13 04 14.7** | **+3.5** |
| | comp=N,28nm,0.3s,SNR=25 | | | | | | |
| BIOA | | | | *i* Sn | **Sn** | **13 04 57.5** | **+2.3** |
| | comp=N,51nm,0.3s | | | | | | |
| **RJOB** | **Jochberg** | **3.75** | **359** | *e*Pn | **Pn** | **13 04 14.7** | **+3.3** |
| RJOB | | | | *e*Sn | **Sn** | **13 04 57.5** | **+2.1** |
| **ARSA** | **Arzberg** | **3.75** | **29** | *i* Pn | **Pn** | **13 04 13.3** | **+1.9** |
| | comp=N,8.7nm,0.2s,SNR=6.1 | | | | | | |
| ARSA | | | | *e*Sn | **Sn** | **13 04 54.1** | **-1.3** |
| | comp=N,18nm,0.3s | | | | | | |
| **ARSA** | **Arzberg** | **3.75** | **29** | *e*Pn | **Pn** | **13 04 13.3** | **+1.9** |
| ARSA | | | | *e*Sn | **Sn** | **13 04 54.1** | **-1.3** |
| ARSA | | | | *e*Sg | **Sg** | **13 05 12.8** | **-1.6** |
| **MRLC** | **Muro Lucano** | **3.76** | **148** | AML | AML | | |
| | comp=E,94µm,0.4s | | | | | | |
| MRLC | | | | AML | AML | | |
| | comp=N,91µm,0.7s | | | | | | |
| **PIAF** | **les Granges de** | **3.80** | **274** | P | **Pn** | **13 04 14.5** | **+2.5** |
| **RETA** | **Reutte** | **3.80** | **338** | *i* Pn | **Pn** | **13 04 16.1** | **+3.9** |
| | comp=N,5.8nm,0.3s,SNR=8.8 | | | | | | |
| RETA | | | | *e*Sn | **Sn** | **13 05 01.0** | **+4.4** |
| | comp=N,22nm,0.2s | | | | | | |
| **SAOF** | **Saorge** | **3.84** | **272** | P | **Pn** | **13 04 15.1** | **+2.4** |
| SAOF | | | | S | **Sn** | **13 04 57.5** | **-0.2** |
| **OBER** | **Oberstdorf** | **3.87** | **333** | *e*Pn | **Pn** | **13 04 17.1** | **+4.0** |
| OBER | | | | *e*Sn | **Sn** | **13 05 00.5** | **+2.1** |
| **DAVA** | **Damuels** | **3.91** | **329** | *i* Pn | **Pn** | **13 04 17.7** | **+3.9** |
| | comp=N,7.8nm,0.2s,SNR=6.3 | | | | | | |
| DAVA | | | | *e*Sn | **Sn** | **13 05 02.3** | **+2.7** |
| | comp=N,50nm,0.3s | | | | | | |
| **DAVA** | **Damuels** | **3.91** | **329** | *e*Pn | **Pn** | **13 04 18.2** | **+4.5** |
| **PLONS** | **Plons/SG** | **3.93** | **322** | *e*Pn | **Pb** | **13 04 18.7** | **-4.3** |
| PLONS | | | | *e*Sn | **Sn** | **13 05 01.9** | **+2.1** |
| **SBF** | **Sospel** | **3.94** | **270** | *e*P | **Pn** | **13 04 15.8** | **+1.8** |
| SBF | | | | *e*Sn | **Sn** | **13 04 57.2** | **-2.8** |
| | comp=N,36nm,0.3s | | | | | | |
| **ENR** | **Entracque** | **3.94** | **275** | P | **Pn** | **13 04 16.3** | **+2.2** |
| **ENR** | **Entracque** | **3.94** | **275** | S | **Sn** | **13 05 00.4** | **+0.3** |
| **TRAV** | **Traversella** | **3.96** | **294** | P | **Pn** | **13 04 14.7** | **+0.4** |
| **TURF** | **col de Turini** | **3.96** | **272** | P | **Pn** | **13 04 16.8** | **+2.4** |
| TURF | | | | S | **Sn** | **13 04 59.9** | **-0.9** |
| **MOA** | **Molln** | **3.98** | **14** | *i* Pn | **Pn** | **13 04 17.6** | **+3.1** |
| | comp=N,12nm,0.2s,SNR=9.6 | | | | | | |
| MOA | | | | *i* Sn | **Sn** | **13 05 02.2** | **+1.2** |
| | comp=N,35nm,0.3s | | | | | | |
| **MOA** | **Molln** | **3.98** | **14** | *e*Pn | **Pn** | **13 04 17.7** | **+3.2** |
| MOA | | | | *e*Sn | **Sn** | **13 05 02.1** | **+1.1** |
| **MOA** | **Molln** | **3.98** | **14** | *e*Pn | **Pn** | **13 04 18.0** | **+3.5** |
| **ESCA** | **l'Escarene** | **3.98** | **270** | P | **Pn** | **13 04 17.3** | **+2.7** |
| **STV** | **Sant Anna di V** | **4.01** | **276** | P | **Pn** | **13 04 17.1** | **+2.1** |
| **DBRK** | **Dubrovnik** | **4.06** | **107** | *e*Pn | **Pn** | **13 04 18.4** | **+2.8** |
| DBRK | | | | Sn | **Sn** | **13 05 02.6** | **-0.3** |
| **SPIF** | **crte de Spivo** | **4.07** | **273** | P | **Pn** | **13 04 18.7** | **+2.8** |
| **BHB** | **Bricherasio** | **4.12** | **284** | P | **Pn** | **13 04 16.9** | **+0.5** |
| **MVIF** | **Mont Vial** | **4.14** | **271** | P | **Pn** | **13 04 19.8** | **+2.9** |
| **UBR** | **Ueberruh** | **4.17** | **333** | *e*Pn | **Pn** | **13 04 20.6** | **+3.4** |
| UBR | | | | *e*Sn | **Sn** | **13 05 07.4** | **+1.6** |
| **PZZ** | **Stroppo** | **4.18** | **279** | P | **Pn** | **13 04 18.6** | **+1.3** |
| **RSP** | **Reno Superiore** | **4.18** | **288** | P | **Pn** | **13 04 16.3** | **-1.0** |
| **TREB** | **Trebinje** | **4.18** | **106** | *e*Pn | **Pn** | **13 04 19.6** | **+2.3** |
| TREB | | | | *e*Sn | **Sn** | **13 05 05.6** | **-0.4** |
| **TREB** | **Trebinje** | **4.18** | **106** | *e*Pn | **Pn** | **13 04 19.2** | **+1.9** |
| **ISO** | **Isola** | **4.21** | **275** | P | **Pn** | **13 04 19.9** | **+2.2** |
| **EMBD** | **Embd, Matterta** | **4.21** | **304** | P | **Pn** | **13 04 18.7** | **+0.9** |
| **BRY** | **Bratogost** | **4.26** | **103** | *e*Pn | **Pn** | **13 04 21.1** | **+2.6** |
| **CALF** | **Calern** | **4.32** | **269** | P | **Pn** | **13 04 21.2** | **+2.0** |
| **FUR** | **Furstenfeldbru** | **4.33** | **346** | *e*Pn | **Pn** | **13 04 22.1** | **+2.9** |
| **LSD** | **Lago del Serru** | **4.35** | **292** | P | **Pn** | **13 04 19.5** | **-0.4** |
| **HAPS** | **Han Pijesak,Bl** | **4.38** | **87** | *e*Pn | **Pn** | **13 04 19.9** | **-0.2** |
| **ENAUX** | **Enaux** | **4.40** | **274** | P | **Pn** | **13 04 23.6** | **+3.2** |
| ENAUX | | | | S | **Sn** | **13 05 13.9** | **+2.3** |
| **DIX** | **Grande Dixence** | **4.41** | **300** | P | **Pn** | **13 04 22.2** | **+1.5** |
| **RONA** | **Rosalia, Austr** | **4.41** | **32** | *i* Pn | **Pn** | **13 04 22.5** | **+2.0** |
| | comp=N,4.3nm,0.2s | | | | | | |
| RONA | | | | *e*Sn | **Sn** | **13 05 11.3** | **-0.4** |
| | comp=N,11nm,0.2s | | | | | | |
| **WILA** | **Wila** | **4.42** | **322** | *e*Pn | **Pn** | **13 04 23.9** | **+3.3** |
| **JAUF** | **Jausiers** | **4.43** | **278** | P | **Pn** | **13 04 23.5** | **+2.7** |
| **UPM** | **Unac-Piva** | **4.44** | **98** | *e*Pn | **Pn** | **13 04 23.6** | **+2.5** |
| **MBDF** | **Montbardon** | **4.45** | **282** | *e*Pn | **Pn** | **13 04 21.9** | **+0.9** |
| MBDF | | | | *e*Sn | **Sn** | **13 05 09.3** | **-3.3** |
| | comp=N,7.8nm,0.2s | | | | | | |
| **NOCI** | **Noci** | **4.45** | **134** | P | **Pn** | **13 04 19.9** | **-1.0** |
| | baz=133 | | | | | | |
| NOCI | | | | S | **Sn** | **13 05 06.4** | **-6.2** |
| | baz=133 | | | | | | |
| **CONA** | **Conrad Observa** | **4.46** | **27** | *i* Pn | **Pn** | **13 04 23.2** | **+2.1** |
| | comp=N,5.5nm,0.3s,SNR=5.8 | | | | | | |
| CONA | | | | *e*Sn | **Sn** | **13 05 12.6** | **-0.1** |
| | comp=N,39nm,0.4s | | | | | | |
| **RRL** | **Rocca Remolon** | **4.46** | **284** | P | **Pn** | **13 04 22.4** | **+1.0** |
| **REMY** | **Saint-Rhmy-en** | **4.47** | **296** | P | **Pn** | **13 04 22.7** | **+1.3** |
| **SALSA** | **La sagne** | **4.47** | **271** | P | **Pn** | **13 04 24.3** | **+2.9** |
| **LPG** | **La Plagne** | **4.62** | **291** | *e*Pn | **Pn** | **13 04 24.4** | **+0.8** |
| **LPG** | **La Plagne** | **4.62** | **291** | *e*P | **Pn** | **13 04 26.8** | **+3.2** |
| LPG | | | | *e*Sn | **Sn** | **13 05 15.3** | **-1.9** |
| | comp=N,14nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **4.64** | **291** | *e*Pn | **Pn** | **13 04 24.7** | **+0.9** |
| **LPL** | **La Plagne** | **4.64** | **291** | *e*P | **Pn** | **13 04 28.0** | **+4.2** |
| LPL | | | | *e*Sn | **Sn** | **13 05 15.5** | **-2.0** |
| | comp=N,16nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **4.67** | **264** | *e*Pn | **Pn** | **13 04 26.1** | **+2.1** |
| LMR | | | | *e*Sn | **Sn** | **13 05 14.1** | **-3.8** |
| | comp=N,3.9nm,0.2s | | | | | | |
| **RUDO** | **Rudo** | **4.71** | **92** | *e*Pn | **Pn** | **13 04 25.9** | **+1.4** |
| **BBLS** | **Lazi&#263i** | **4.71** | **89** | *e*Pn | **Pn** | **13 04 27.1** | **+2.5** |
| BBLS | | | | *e*Sn | **Sn** | **13 05 19.2** | **+0.1** |
| **BBLS** | **Lazi&#263i** | **4.71** | **89** | *e*Pn | **Pn** | **13 04 26.7** | **+2.1** |
| **TEKS** | **Tekeris** | **4.81** | **81** | *e*Pn | **Pn** | **13 04 27.8** | **+1.9** |
| **TEKS** | **Tekeris** | **4.81** | **81** | *e*Pn | **Pn** | **13 04 27.1** | **+1.2** |
| **SLE** | **Schleitheim** | **4.86** | **322** | P | **Pn** | **13 04 29.2** | **+2.6** |
| **SULZ** | **Cheisacher** | **4.87** | **318** | P | **Pn** | **13 04 29.5** | **+2.8** |
| **SULZ** | **Cheisacher** | **4.87** | **318** | S | **Sn** | **13 05 19.9** | **-2.9** |
| **GEC2** | **GERESS Array S** | **4.89** | **6** | *e*Pn | **Pn** | **13 04 29.2** | **+2.1** |
| GEC2 | | | | *e*Sn | **Sn** | **13 05 22.7** | **-0.8** |
| **GERES** | **GERESS Array B** | **4.89** | **6** | Pn | **Pn** | **13 04 29.0** | **+1.9** |
| | comp=N,4.4nm,0.3s,baz=178,slow=12,SNR=51 | | | | | | |
| GERES | | | | Sn | **Sn** | **13 05 22.6** | **-1.0** |
| | comp=N,8.0nm,0.3s,baz=161,slow=22,SNR=8.4 | | | | | | |
| | comp=N,6.1nm,0.3s | | | | | | |
| **PDG** | **Podgorica** | **4.91** | **106** | *e*Pn | **Pn** | **13 04 30.5** | **+3.2** |
| **CKRC** | **Cesky Krumlov** | **4.93** | **11** | *e*PN | **Pn** | **13 04 29.8** | **+2.2** |
| CKRC | | | | *e*SN | **Sn** | **13 05 23.5** | **-1.0** |
| **BALST** | **Balsthal** | **4.94** | **314** | P | **Pn** | **13 04 29.1** | **+1.3** |
| **BALST** | **Balsthal** | **4.94** | **314** | S | **Sn** | **13 05 21.0** | **-3.8** |
| **DRME** | **Dracevica, Mon** | **4.95** | **109** | *e*Pn | **Pn** | **13 04 30.1** | **+2.2** |
| **TORNY** | **Torny/Romont** | **5.02** | **306** | S | **Sn** | **13 05 24.3** | **-2.2** |
| **ORIF** | **Oris-en-Rattie** | **5.10** | **283** | *e*P | **Pn** | **13 04 32.5** | **+2.5** |
| ORIF | | | | *e*Sn | **Sn** | **13 05 25.2** | **-3.5** |
| | comp=N,26nm,0.4s | | | | | | |
| **ZST** | **Bratislava** | **5.13** | **33** | *e*SN | **Sn** | **13 05 26.8** | **-2.5** |
| **WET** | **Wettzell** | **5.16** | **360** | *e*Pn | **Pn** | **13 04 32.3** | **+1.6** |
| WET | | | | *e*Sn | **Sn** | **13 05 26.9** | **-3.1** |
| **KHC** | **Kasperske Hory** | **5.17** | **5** | *e*PN | **Pn** | **13 04 32.6** | **+1.8** |
| KHC | | | | *e*SN | **Sn** | **13 05 28.7** | **-1.6** |
| **ENDD** | **Endenburg** | **5.18** | **318** | P | **Pn** | **13 04 32.8** | **+1.9** |
| **ENDD** | **Endenburg** | **5.18** | **318** | S | **Sn** | **13 05 25.7** | **-4.8** |
| **SJES** | **Sjenica** | **5.20** | **96** | *e*Pn | **Pn** | **13 04 34.6** | **+3.3** |
| SJES | | | | *e*Sn | **Sn** | **13 05 30.8** | **-0.3** |
| **SJES** | **Sjenica** | **5.20** | **96** | *e*Pn | **Pn** | **13 04 34.1** | **+2.8** |
| **BOURR** | **Bourrignon** | **5.22** | **313** | P | **Pn** | **13 04 33.2** | **+1.6** |
| **KIZ** | **Kirchzarten** | **5.26** | **321** | P | **Pn** | **13 04 34.3** | **+2.1** |
| **SMRF** | **Simiane la Rot** | **5.27** | **272** | *e*Pn | **Pn** | **13 04 32.9** | **+0.6** |
| SMRF | | | | *e*Sn | **Sn** | **13 05 28.3** | **-4.6** |
| | comp=N,5.7nm,0.4s | | | | | | |
| **IVAS** | **Ivanjica** | **5.28** | **92** | *e*Pn | **Pn** | **13 04 34.3** | **+1.9** |
| IVAS | | | | *e*Sn | **Sn** | **13 05 31.2** | **-1.9** |
| **GIMEL** | **St. Georges /** | **5.32** | **301** | P | **Pn** | **13 04 34.7** | **+1.7** |
| **GIMEL** | **St. Georges /** | **5.32** | **301** | S | **Sn** | **13 05 32.5** | **-1.6** |
| **BFO** | **Black Forest** | **5.37** | **326** | *e*Pn | **Pn** | **13 04 35.9** | **+2.2** |
| BFO | | | | *e*Sn | **Sn** | **13 05 31.7** | **-3.6** |
| **BRANT** | **Les Verrieres** | **5.39** | **305** | P | **Pn** | **13 04 35.7** | **+1.8** |
| **BRANT** | **Les Verrieres** | **5.39** | **305** | S | **Sn** | **13 05 32.0** | **-3.8** |
| **TRUS** | **Trudelj** | **5.42** | **85** | *e*Pn | **Pn** | **13 04 36.2** | **+1.9** |
| **CHMF** | **Charmoille** | **5.45** | **309** | P | **Pn** | **13 04 36.5** | **+1.7** |
| CHMF | | | | S | **Sn** | **13 05 32.7** | **-4.6** |
| **CABF** | **La Chapelle** | **5.46** | **301** | *e*Pn | **Pn** | **13 04 36.3** | **+1.3** |
| CABF | | | | *e*Sn | **Sn** | **13 05 34.1** | **-3.5** |
| | comp=N,8.8nm,0.3s | | | | | | |
| **PUK** | **Puka** | **5.50** | **108** | P | **Pn** | **13 04 37.3** | **+1.9** |
| | baz=103 | | | | | | |
| PUK | | | | S | **Sn** | **13 05 36.5** | **-1.9** |
| | baz=103 | | | | | | |
| PUK | | | | AMP | | | |
| | comp=N,0.4nm,0.2s,baz=103 | | | | | | |
| **BCI** | **Bajram Curri** | **5.50** | **105** | P | **Pn** | **13 04 36.9** | **+1.5** |
| | baz=99 | | | | | | |
| BCI | | | | S | **Sn** | **13 05 37.3** | **-1.1** |
| | baz=99 | | | | | | |
| BCI | | | | AMP | | | |
| | comp=N,0.6nm,0.3s,baz=99 | | | | | | |
| **ZVC** | **Zvikov** | **5.53** | **9** | *e*PN | **Pn** | **13 04 37.9** | **+2.2** |
| **MOF** | **Molkenrain** | **5.57** | **316** | P | **Pn** | **13 04 38.4** | **+2.0** |
| **WALT** | **Westhalten** | **5.58** | **317** | P | **Pn** | **13 04 38.7** | **+2.3** |
| **KRUC** | **Moravsky** | **5.62** | **24** | *e*PN | **Pn** | **13 04 39.1** | **+2.0** |
| KRUC | | | | *e*SN | **Sn** | **13 05 38.5** | **-2.9** |
| **GRUS** | **Gruza** | **5.66** | **88** | *e*Pn | **Pn** | **13 04 39.6** | **+2.1** |
| **BOUC** | **Bouclans** | **5.68** | **307** | P | **Pn** | **13 04 39.3** | **+1.5** |
| BOUC | | | | S | **Sn** | **13 05 38.1** | **-4.7** |
| **HINF** | **Hinteralfeld** | **5.69** | **314** | *e*Pn | **Pn** | **13 04 39.5** | **+1.5** |
| **HINF** | **Hinteralfeld** | **5.69** | **314** | *e*P | **Pn** | **13 04 42.2** | **+4.2** |
| HINF | | | | *e*Sn | **Sn** | **13 05 37.8** | **-5.3** |
| | comp=N,47nm,0.3s | | | | | | |
| **SCTE** | **Santa Cesarea** | **5.71** | **131** | S | **Sn** | **13 05 38.1** | **-5.5** |
| | baz=130 | | | | | | |
| **RONF** | **Ronchamp** | **5.73** | **313** | P | **Pn** | **13 04 39.3** | **+0.8** |
| **TIR** | **Tirane** | **5.78** | **115** | P | Pn | 13 04 34.2 | -5.0 |
| | baz=111 | | | | | | |
| TIR | | | | S | **Sn** | **13 05 43.3** | **-2.1** |
| | baz=111 | | | | | | |
| TIR | | | | AMP | | | |
| | comp=E,0.2nm,0.3s,baz=111 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **5.80** | **356** | *e*Pn | **Pn** | **13 04 40.6** | **+1.1** |
| **ECH** | **Echery** | **5.81** | **319** | *e*Pn | **Pn** | **13 04 42.3** | **+2.7** |
| ECH | | | | *e*Sn | **Sn** | **13 05 42.2** | **-3.8** |
| **GRF** | **Grafenberg Arr** | **5.82** | **349** | *e*Sn | **Sn** | **13 05 43.8** | **-2.5** |
| **JAVC** | **Velka Javorina** | **5.89** | **32** | *e*PN | **Pn** | **13 04 42.9** | **+2.1** |
| **CDF** | **Champ du Feu** | **5.89** | **321** | *e*Pn | **Pn** | **13 04 42.9** | **+2.1** |
| CDF | | | | *e*Sn | **Sn** | **13 05 45.0** | **-3.2** |
| | comp=E,11nm,0.2s | | | | | | |
| **VRAC** | **Vranov** | **5.90** | **24** | *e*PN | **Pn** | **13 04 42.3** | **+1.4** |
| VRAC | | | | *e*SN | **Sn** | **13 05 46.0** | **-2.3** |
| **VIVF** | **Saint-Julien-l** | **5.94** | **281** | *e*Pn | **Pn** | **13 04 42.6** | **+1.1** |
| VIVF | | | | *e*Sn | **Sn** | **13 05 45.1** | **-4.3** |
| | comp=E,4.1nm,0.2s | | | | | | |
| **SELS** | **Selova** | **6.03** | **94** | *e*Pn | **Pn** | **13 04 45.0** | **+2.3** |
| SELS | | | | *e*Sn | **Sn** | **13 05 49.1** | **-2.4** |
| **GOPC** | **GO Pecny, Ondr** | **6.07** | **12** | *e*PN | **Pn** | **13 04 44.9** | **+1.7** |
| **HAU** | **Haudompre** | **6.07** | **314** | *e*Pn | **Pn** | **13 04 44.9** | **+1.7** |
| HAU | | | | *e*Sn | **Sn** | **13 05 48.8** | **-3.7** |
| | comp=E,51nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **6.11** | **10** | *e*PN | **Pn** | **13 04 45.1** | **+1.4** |
| **VYHS** | **Vyhne** | **6.11** | **40** | *e*PN | **Pn** | **13 04 45.7** | **+1.9** |
| VYHS | | | | *e*SN | **Sn** | **13 05 50.9** | **-2.6** |
| **KUBS** | **Kucevo** | **6.33** | **83** | *e*Pn | **Pn** | **13 04 47.8** | **+0.9** |
| **OHR** | **Ohrid** | **6.51** | **113** | *e*Pn | **Pn** | **13 04 52.6** | **+3.2** |
| OHR | | | | *e*Sn | **Sn** | **13 06 00.9** | **-2.6** |
| **BARS** | **Barje** | **6.61** | **97** | *e*Pn | **Pn** | **13 04 52.8** | **+2.1** |
| BARS | | | | *e*Sn | **Sn** | **13 06 02.8** | **-3.0** |
| **MORC** | **Moravsky Berou** | **6.61** | **27** | *e*PN | **Pn** | **13 04 52.2** | **+1.5** |
| MORC | | | | *e*SN | **Sn** | **13 06 02.6** | **-3.2** |
| **KRLC** | **Kraliky** | **6.65** | **22** | *e*PN | **Pn** | **13 04 53.5** | **+2.3** |
| **MOX** | **Moxa** | **6.72** | **353** | *e*Pn | **Pn** | **13 04 52.7** | **+0.7** |
| MOX | | | | *e*Sn | **Sn** | **13 06 03.6** | **-4.7** |
| **PAGF** | **Fort de Pagny** | **6.74** | **315** | *e*Pn | **Pn** | **13 04 54.4** | **+2.0** |
| | baz=131 | | | | | | |
| PAGF | | | | *e*Sn | **Sn** | **13 06 03.9** | **-5.1** |
| | comp=E,12nm,0.3s | | | | | | |
| **KBN** | **Korca** | **6.75** | **117** | S | **Sn** | **13 06 07.2** | **-2.2** |
| | baz=114 | | | | | | |
| **ZAGS** | **Zajecar** | **6.76** | **88** | *e*Pn | **Pn** | **13 04 54.5** | **+1.9** |
| **SFTF** | **Sexfontaines** | **6.89** | **310** | *e*Pn | **Pn** | **13 04 56.4** | **+1.9** |
| | baz=127 | | | | | | |
| SFTF | | | | *e*Sn | **Sn** | **13 06 08.0** | **-4.7** |
| | comp=E,15nm,0.3s | | | | | | |
| **SMF** | **Signal de Mont** | **6.91** | **296** | *e*Pn | **Pn** | **13 04 55.4** | **+0.7** |
| **SMF** | **Signal de Mont** | **6.91** | **296** | *e*P | Pn | 13 04 59.7 | +5.0 |
| SMF | | | | *e*Sn | **Sn** | **13 06 07.2** | **-5.8** |
| | comp=E,8.2nm,0.1s | | | | | | |
| **BRG** | **Berggiesshubel** | **6.93** | **6** | Pn | **Pn** | **13 04 55.7** | **+0.8** |
| BRG | | | | Amp | | 13 04 58.2 | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **6.93** | **6** | Sn | **Sn** | **13 06 09.8** | **-3.7** |
| BRG | | | | Amp | | 13 06 19.5 | |
| | comp=Z,6.7nm,0.7s | | | | | | |
| BRG | | | | r | | 13 06 59.2 | |
| BRG | | | | Amp | | 13 07 08.4 | |
| | comp=Z,9.4nm,0.6s | | | | | | |
| **TNS** | **Taunus Mts** | **6.93** | **336** | *e*Pn | **Pn** | **13 04 57.4** | **+2.4** |
| TNS | | | | *e*Sn | **Sn** | **13 06 11.4** | **-2.3** |
| **CHVC** | **Chvalec** | **6.95** | **17** | *e*PN | **Pn** | **13 04 56.1** | **+0.9** |
| **FNA** | **Florina** | **7.05** | **114** | P | **Pn** | **13 04 58.6** | **+1.8** |
| | baz=111 | | | | | | |
| FNA | | | | S | **Sn** | **13 06 15.4** | **-1.4** |
| | baz=111 | | | | | | |
| FNA | | | | AMP | | | |
| | comp=E,0.2nm,0.4s,baz=111 | | | | | | |
| **FNA** | **Florina** | **7.05** | **114** | *e*Pn | **Pn** | **13 04 59.7** | **+2.9** |
| FNA | | | | *e*Sn | **Sn** | **13 06 11.9** | **-4.9** |
| **MEZF** | **Maizieres J'vi** | **7.06** | **312** | *e*Pn | **Pn** | **13 04 57.3** | **+0.5** |
| MEZF | | | | *e*Sn | **Sn** | **13 06 11.6** | **-5.2** |
| | comp=E,11nm,0.4s | | | | | | |
| **SAVF** | **Savonnieres en** | **7.09** | **313** | *e*P | **Pn** | **13 05 01.2** | **+4.0** |
| SAVF | | | | *e*Sn | **Sn** | **13 06 12.5** | **-5.0** |
| | comp=E,9.3nm,0.3s | | | | | | |
| **ZAPS** | **Zavoj** | **7.11** | **92** | *e*Pn | **Pn** | **13 05 00.4** | **+2.8** |
| ZAPS | | | | *e*Sn | **Sn** | **13 06 13.6** | **-4.6** |
| **LOR** | **Lormes** | **7.13** | **301** | *e*Pn | **Pn** | **13 04 59.2** | **+1.5** |
| | baz=118 | | | | | | |
| LOR | | | | *e*Sn | **Sn** | **13 06 12.9** | **-5.5** |
| | comp=E,31nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **7.27** | **298** | *e*Pn | **Pn** | **13 05 01.0** | **+1.4** |
| SSF | | | | *e*Sn | **Sn** | **13 06 16.9** | **-5.0** |
| | comp=E,10nm,0.3s | | | | | | |
| **AVF** | **Avril sur Loir** | **7.27** | **296** | *e*Pn | **Pn** | **13 05 00.0** | **+0.3** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AVF | | | | *e*Sn | | **Sn** | **13 06 16.4** | **-5.6** |
| | comp=E,2.4nm,0.3s | | | | | | | | |
| **CLL** | **Collm** | **7.33** | **1** | *e*Pn | | **Pn** | **13 05 02.0** | **+1.6** |
| CLL | | | | *i* x | | x | 13 05 11.5 | | |
| CLL | | | | *e*Sn | | **Sn** | **13 06 20.0** | **-3.3** |
| CLL | | | | *e*x | | x | 13 07 08.0 | | |
| CLL | | | | *e*Sg | | **Sg** | **13 07 10.0** | **+1.2** |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **BGF** | **Bois d'Agland** | **7.53** | **293** | *e*Pn | | **Pn** | **13 05 04.1** | **+0.8** |
| BGF | | | | *e*Sn | | **Sn** | **13 06 23.2** | **-5.2** |
| | comp=Z,17nm,0.3s | | | | | | | | |
| **MTLF** | **Montolieu** | **7.76** | **269** | *e*Pn | | **Pn** | **13 05 06.9** | **+0.5** |
| MTLF | | | | *e*Sn | | **Sn** | **13 06 27.9** | **-6.2** |
| | comp=Z,2.1nm,0.4s | | | | | | | | |
| **CAF** | **Calviac** | **7.80** | **281** | *e*Pn | | **Pn** | **13 05 07.3** | **+0.3** |
| CAF | | | | *e*Sn | | **Sn** | **13 06 29.3** | **-5.7** |
| | comp=Z,1.1nm,0.2s | | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **7.89** | **291** | *e*Pg | | **Pn** | **13 05 09.2** | **+1.0** |
| TCF | | | | *e*Sg | | **Sn** | **13 06 32.2** | **-5.0** |
| | comp=Z,4.6nm,0.2s | | | | | | | | |
| **HYF** | **Humbligny** | **7.89** | **298** | *e*Pn | | **Pn** | **13 05 09.8** | **+1.6** |
| HYF | | | | *e*Sg | | **Sn** | **13 06 32.1** | **-5.2** |
| **RJF** | **Les Rejaudoux** | **8.21** | **283** | *e*Pn | | **Pn** | **13 05 13.3** | **+0.7** |
| **GIVF** | **Givet** | **8.22** | **321** | *e*Pn | | **Pn** | **13 05 15.0** | **+2.3** |
| **EPF** | **Esparros** | **9.17** | **268** | *e*P | | **Pn** | **13 05 30.5** | **+4.8** |
| EPF | | | | *e*Sn | | **Sn** | **13 07 02.2** | **-6.5** |
| | comp=Z,1.0nm,0.2s | | | | | | | | |
| **MFF** | **Saint Martin d** | **9.55** | **290** | *e*Pn | | **Pn** | **13 05 31.0** | **+0.1** |
| **MFF** | **Saint Martin d** | **9.55** | **290** | *e*P | | Pn | 13 05 37.4 | +6.5 |
| **LDF** | **La Druitiere** | **10.11** | **302** | *e*Pn | | **Pn** | **13 05 37.5** | **-1.1** |
| LDF | | | | *e*Sn | | **Sn** | **13 07 25.1** | **-6.6** |
| | comp=Z,3.1nm,0.3s | | | | | | | | |
| **FLN** | **La Foliniere** | **10.39** | **302** | *e*Pn | | **Pn** | **13 05 42.7** | **+0.2** |
| FLN | | | | *e*Sn | | **Sn** | **13 07 30.5** | **-8.1** |
| | comp=Z,2.6nm,0.3s | | | | | | | | |
| **GRR** | **Gorron** | **10.49** | **300** | *e*Pn | | **Pn** | **13 05 44.0** | **+0.2** |
| GRR | | | | *e*Sn | | **Sn** | **13 07 34.7** | **-6.4** |
| | comp=Z,3.3nm,0.2s | | | | | | | | |
| **SGMF** | **Saint Gilles** | **11.53** | **297** | *e*Pn | | **Pn** | **13 05 58.7** | **+0.7** |
| SGMF | | | | *e*Sn | | Sn | 13 07 56.8 | -10 | |
| | comp=Z,1.8nm,0.4s | | | | | | | | |
| **QUIF** | **Quistinic** | **11.84** | **295** | *e*Pn | | **Pn** | **13 06 03.0** | **+0.8** |
| QUIF | | | | *e*Sn | | **Sn** | **13 08 06.6** | **-7.4** |
| | comp=Z,2.6nm,0.3s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **13.28** | **257** | Pn | | **P** | **13 06 33.7** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=67,slow=12,SNR=5.8 | | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.37** | **61** | P | | P | 13 11 57.1 | +10 | |
| | comp=Z,0.3nm,0.6s,baz=287,slow=8.7,SNR=3.7 | | | | | | | | |
| | comp=Z,0.3nm,0.6s | | | | | | | | |
| **SONM** | **Songino Array** | **61.21** | **50** | P | | P | 13 13 40.7 | +12 | |
| | comp=Z,0.4nm,0.6s,baz=297,slow=6.3,SNR=1.8 | | | | | | | | |

*VAO* ***31*** *13:24:55.3±1.1,32°.43S×70°.48W,h68km±6km,mb5.1*
*SJA* ***31*** *13:24:59.4±0.8,32°.21S×70°.40W,h124km±4km,ML5.1, MW4.9*
*MOS* ***31*** *13:25:00.7±1.1,32°.22S×70°.32W,h106km,mb5.3/13, Error ellipse: s-maj=15.7km s-min=7.3km az=96.8*
*GUC* ***31*** *13:25:00.7±0.9,32°.23S×70°.49W,h106km±3km,ML5.2*
*NEIC* ***31*** *13:25:01.4,32°.22S×70°.44W,h94km*
*BJI* ***31*** *13:25:01.0±0.0,31°.90S×70°.40W,h106km,mB5.1/3*
*NEIC* ***31*** *13:25:01.7,32°.22S×70°.10W,h100km,Moment Tensor Solution. Duration: 1s6 Moment tensor: Scale 10¹⁶Nm; Mrr-2.60; Mθθ-0.80; Mϕϕ3.40; Mrθ-1.25; Mθϕ2.78; Mϕr1.13; Fault plane solution: M0 4.43000×10¹⁶ NP1: ϕs173.50000°,δ60.86000°,λ-138.57000°. NP2: ϕs60.24000°,δ54.69000°,λ-36.63000°. Principal axes: T 4.8132, Plg4.0000°, Azm296.0000°; N -0.7756, Plg41.0000°, Azm202.0000°; P -4.0376, Plg49.0000°, Azm30.0000°;*
*NEIC* ***31*** *13:25:01.7,32°.22S×70°.46W,h100km*
*NEIC* ***31*** *13:25:01.4±2.2,32°.21S±0°.04×70°.48W±0°.07,h96km±3km, mb5.3/93,Mwr4.9/88,Mww5.0/20,Mwr5.1(GUC),Error ellipse: s-maj=8.1km s-min=6.0km az=94.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr-1.71; Mθθ-0.71; Mϕϕ2.42; Mrθ-1.33; Mθϕ0.36; Mϕr-1.15; Fault plane solution: M0 2.81000×10¹⁶ NP1:ϕs33.72000°, δ67.31000°,λ-60.37000°. NP2:ϕs157.87000°,δ36.69000°, λ-139.78000°. Principal axes: T 2.8625, Plg17.0000°, Azm102.0000°; N -0.1175, Plg27.0000°, Azm201.0000°; P -2.7450, Plg57.0000°, Azm344.0000°;*
*IDC* ***31*** *13:25:02.3±0.4,32°.26S×70°.33W,h113km±3km,mb4.6/14, mbtmp5.0/17,MS3.5/17 Error ellipse: s-maj=16.0km s-min=11.4km az=62.0*
*GCMT* ***31*** *13:25:03.4±0.2,32°.26S±0°.02×70°.21W±0°.02,h115km±2km, MW5.0/102,Moment Tensor Solution. s44,c53; s102,c136; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-2.86±.11; Mθθ-0.85±.14; Mϕϕ3.71±.15; Mrθ-1.86±.07; Mθϕ1.72±.12; Mϕr0.65±.11; Best double couple: M0 4.26200×10¹⁶ NP1:ϕs169.00000°,δ55.00000°, λ-135.00000°. NP2:ϕs48.00000°,δ54.00000°, λ-45.00000°. Principal axes: T 4.2860, Plg0.0000°, Azm288.0000°; N -0.0480, Plg35.0000°, Azm198.0000°; P -4.2380, Plg55.0000°, Azm19.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 31 13:25:01.3±0.3,32°.19S±0°.02×70°.40W±0°.03,h108km±2km, h108km:pP-P,n616,σ1§21/709,mb5.2/68,23C-26D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CO04** | **Los Peladeros** | **0.51** | **287** | *i*P | | **Pn** | **13 25 18.3** | **-0.1** |
| CO04 | | | | *e*S | | **Sn** | **13 25 31.6** | **+0.4** |
| **VA03** | **San Esteban** | **0.58** | **192** | | | **Pn** | **13 25 18.5** | **-0.3** |
| **VA03** | **San Esteban** | **0.58** | **192** | *e*P | | **Pn** | **13 25 18.5** | **-0.3** |
| VA03 | | | | *e*S | | **Sn** | **13 25 32.8** | **+1.0** |
| VA03 | | | | IAML | | | 13 25 33.1 | |
| | comp=Z,132μm,1.6s | | | | | | | |
| **VA03** | **San Esteban** | **0.58** | **192** | *i*P | | **Pn** | **13 25 18.6** | **-0.1** |
| VA03 | | | | *e*S | | **Sn** | **13 25 32.0** | **+0.1** |
| **VA06** | **Catapilco** | **0.84** | **244** | Pn | | **Pn** | **13 25 20.2** | **-0.6** |
| **VA06** | **Catapilco** | **0.84** | **244** | *e*P | | **Pn** | **13 25 20.4** | **-0.4** |
| VA06 | | | | *e*S | | **Sn** | **13 25 34.6** | **-0.8** |
| VA06 | | | | IAML | | | 13 25 36.1 | |
| | comp=E,159μm,0.3s | | | | | | | |
| VA06 | | | | IAML | | | 13 25 36.1 | |
| | comp=N,139μm,0.5s | | | | | | | |
| **ROCH** | **El Roble** | **0.93** | **213** | *i*P | | **Pn** | **13 25 21.6** | **-0.3** |
| ROCH | | | | *e*S | | **Sn** | **13 25 37.3** | **-0.2** |
| **PEL** | **Peldehue** | **0.98** | **194** | | | **Pn** | **13 25 20.9** | **-1.3** |
| **PEL** | **Peldehue** | **0.98** | **194** | *e*P | | **Pn** | **13 25 21.8** | **-0.5** |
| PEL | | | | *e*S | | **Sn** | **13 25 38.2** | **+0.2** |
| **PEL** | **Peldehue** | **0.98** | **194** | *e*P | | **Pn** | **13 25 21.7** | **-0.5** |
| PEL | | | | *e*S | | **Sn** | **13 25 37.6** | **-0.4** |
| PEL | | | | IAML | | | 13 25 38.9 | |
| | comp=E,70μm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **0.98** | **194** | P | | **Pn** | **13 25 21.0** | **-1.3** |
| **RTLS** | **Leoncito** | **1.02** | **68** | *e*P | | **Pn** | **13 25 23.4** | **+0.4** |
| RTLS | | | | *e*S | | **Sn** | **13 25 40.0** | **+0.8** |
| **MT10** | **Hacienda Santa** | **1.08** | **186** | *i*P | | **Pn** | **13 25 23.5** | **0.0** |
| MT10 | | | | *e*S | | **Sn** | **13 25 40.1** | **-0.1** |
| MT10 | | | | IAML | | | 13 25 45.6 | |
| | comp=N,139μm,0.6s | | | | | | | |
| **CO02** | **Combarbal** | **1.11** | **333** | | | **Pn** | **13 25 24.4** | **+0.6** |
| **CO02** | **Combarbal** | **1.11** | **333** | *e*P | | **Pn** | **13 25 24.3** | **+0.6** |
| CO02 | | | | *e*S | | **Sn** | **13 25 42.1** | **+1.5** |
| **CO02** | **Combarbal** | **1.11** | **333** | *i*P | | **Pn** | **13 25 24.4** | **+0.6** |
| CO02 | | | | *e*S | | **Sn** | **13 25 41.7** | **+1.1** |
| **FCH** | **Farellones** | **1.14** | **175** | *i*P | | **Pn** | **13 25 24.4** | **+0.2** |
| FCH | | | | *e*S | | **Sn** | **13 25 42.2** | **+0.7** |
| FCH | | | | IAML | | | 13 25 44.5 | |
| | comp=E,50μm,0.3s | | | | | | | |
| **MT14** | **Cerro Calan** | **1.20** | **185** | *e*P | | **Pn** | **13 25 24.5** | **-0.2** |
| MT14 | | | | *e*S | | **Sn** | **13 25 42.7** | **+0.3** |
| MT14 | | | | IAML | | | 13 25 44.0 | |
| | comp=E,122μm,0.6s | | | | | | | |
| **MT04** | **Ro Olivares** | **1.23** | **170** | *e*P | | **Pn** | **13 25 25.2** | **+0.1** |
| MT04 | | | | *e*S | | **Sn** | **13 25 44.2** | **+1.1** |
| MT04 | | | | IAML | | | 13 25 48.6 | |
| | comp=Z,16μm,0.6s | | | | | | | |
| **MT04** | **Ro Olivares** | **1.23** | **170** | *i*P | | **Pn** | **13 25 25.3** | **+0.1** |
| MT04 | | | | *e*S | | **Sn** | **13 25 43.7** | **+0.6** |
| **MT05** | **Renca** | **1.23** | **193** | | | **Pn** | **13 25 26.2** | **+1.2** |
| **MT05** | **Renca** | **1.23** | **193** | *e*P | | **Pn** | **13 25 26.5** | **+1.5** |
| MT05 | | | | *e*S | | **Sn** | **13 25 45.0** | **+2.2** |
| MT05 | | | | IAML | | | 13 25 46.6 | |
| | comp=Z,24μm,0.4s | | | | | | | |
| **MT05** | **Renca** | **1.23** | **193** | *i*P | | **Pn** | **13 25 26.4** | **+1.4** |
| MT05 | | | | *e*S | | **Sn** | **13 25 44.2** | **+1.3** |
| MT05 | | | | IAML | | | 13 25 46.9 | |
| | comp=E,81μm,0.2s | | | | | | | |
| **MT02** | **Curacav** | **1.23** | **210** | | | **Pn** | **13 25 24.0** | **-0.9** |
| **MT02** | **Curacav** | **1.23** | **210** | *e*P | | **Pn** | **13 25 23.9** | **-0.9** |
| MT02 | | | | *e*S | | **Sn** | **13 25 43.2** | **+0.5** |
| MT02 | | | | IAML | | | 13 25 46.6 | |
| | comp=Z,18μm,0.4s | | | | | | | |
| **MT02** | **Curacav** | **1.23** | **210** | *i*P | | **Pn** | **13 25 24.0** | **-0.9** |
| MT02 | | | | *e*S | | **Sn** | **13 25 42.0** | **-0.8** |
| **MT16** | **CCHEN** | **1.23** | **185** | Pn | | **Pn** | **13 25 24.9** | **-0.1** |
| **MT16** | **CCHEN** | **1.23** | **185** | *i*P | | **Pn** | **13 25 25.0** | **-0.1** |
| MT16 | | | | *e*S | | **Sn** | **13 25 43.0** | **0.0** |
| MT16 | | | | IAML | | | 13 25 44.5 | |
| | comp=N,28μm,0.5s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.29** | **165** | Pn | | **Pn** | **13 25 26.3** | **+0.4** |
| **MT08** | **Bocatoma Ro** | **1.29** | **165** | *e*P | | **Pn** | **13 25 25.7** | **-0.1** |
| MT08 | | | | IAML | | | 13 25 49.0 | |
| | comp=Z,16μm,0.7s | | | | | | | |
| **MT08** | **Bocatoma Ro** | **1.29** | **165** | *i*P | | **Pn** | **13 25 26.4** | **+0.5** |
| MT08 | | | | *e*S | | **Sn** | **13 25 45.2** | **+0.9** |
| **MT03** | **Universidad Ad** | **1.30** | **184** | | | **Pn** | **13 25 25.8** | **0.0** |
| **MT03** | **Universidad Ad** | **1.30** | **184** | *e*P | | **Pn** | **13 25 25.9** | **0.0** |
| MT03 | | | | *e*S | | **Sn** | **13 25 45.1** | **+0.8** |
| MT03 | | | | IAML | | | 13 25 46.9 | |
| | comp=Z,34μm,0.4s | | | | | | | |
| **MT03** | **Universidad Ad** | **1.30** | **184** | *i*P | | **Pn** | **13 25 25.9** | **0.0** |
| MT03 | | | | *e*S | | **Sn** | **13 25 44.5** | **+0.2** |
| MT03 | | | | IAML | | | 13 25 46.2 | |
| | comp=E,96μm,0.3s | | | | | | | |
| **VA01** | **Torpederas** | **1.34** | **231** | | | **Pn** | **13 25 25.5** | **-0.6** |
| **CO03** | **El Pedregal** | **1.37** | **350** | | | **Pn** | **13 25 27.3** | **+0.6** |
| **CO03** | **El Pedregal** | **1.37** | **350** | *e*P | | **Pn** | **13 25 27.4** | **+0.7** |
| CO03 | | | | *e*S | | **Sn** | **13 25 47.5** | **+1.6** |
| CO03 | | | | IAML | | | 13 25 51.1 | |
| | comp=Z,27μm,0.6s | | | | | | | |
| **CO03** | **El Pedregal** | **1.37** | **350** | *i*P | | **Pn** | **13 25 27.4** | **+0.7** |
| CO03 | | | | *e*S | | **Sn** | **13 25 47.1** | **+1.2** |
| **ASAL** | **Salagasta** | **1.39** | **107** | *e*P | | **Pn** | **13 25 27.2** | **+0.4** |
| **ARCO** | **CERRO ARCO** | **1.40** | **118** | *e*P | | **Pn** | **13 25 27.5** | **+0.5** |
| ARCO | | | | *e*S | | **Sn** | **13 25 48.1** | **+1.6** |
| ARCO | | | | IAML | | | 13 25 49.9 | |
| | comp=Z,37μm,0.5s | | | | | | | |
| **MT15** | **Las Vizcachas** | **1.40** | **184** | *i*P | | **Pn** | **13 25 26.9** | **-0.1** |
| MT15 | | | | IAML | | | 13 25 48.8 | |
| | comp=N,78μm,0.4s | | | | | | | |
| **MT12** | **Pirque** | **1.54** | **185** | *i*P | | **Pn** | **13 25 28.4** | **-0.2** |
| MT12 | | | | *e*S | | **Sn** | **13 25 49.1** | **-0.2** |
| MT12 | | | | IAML | | | 13 25 51.2 | |
| | comp=E,45μm,0.3s | | | | | | | |
| **MT13** | **San Alfonso** | **1.55** | **176** | *e*P | | **Pn** | **13 25 28.4** | **-0.4** |
| MT13 | | | | IAML | | | 13 25 56.0 | |
| | comp=Z,16μm,0.4s | | | | | | | |
| **MT13** | **San Alfonso** | **1.55** | **176** | *i*P | | **Pn** | **13 25 28.9** | **+0.1** |
| MT13 | | | | *e*S | | **Sn** | **13 25 50.0** | **+0.4** |
| MT13 | | | | IAML | | | 13 25 53.4 | |
| | comp=E,34μm,0.3s | | | | | | | |
| **AAGR** | **Agrelo** | **1.60** | **124** | *e*P | | **Pn** | **13 25 29.9** | **+0.5** |
| **ZON** | **Zonda** | **1.60** | **67** | Pn | | **Pn** | **13 25 29.6** | **+0.2** |
| **ZON** | **Zonda** | **1.60** | **67** | *e*P | | **Pn** | **13 25 29.3** | **-0.1** |
| ZON | | | | *e*S | | **Sn** | **13 25 50.9** | **+0.2** |
| ZON | | | | IAML | | | 13 25 52.2 | |
| | comp=Z,14μm,1.2s | | | | | | | |
| **ZON** | **Zonda** | **1.60** | **67** | P | | **Pn** | **13 25 29.6** | **+0.2** |
| **RTCV** | **Cerro Valdivia** | **1.62** | **79** | *e*P | | **Pn** | **13 25 29.4** | **-0.2** |
| **MT09** | **Talagante** | **1.65** | **197** | | | **Pn** | **13 25 29.2** | **-0.9** |
| **MT09** | **Talagante** | **1.65** | **197** | *i*P | | **Pn** | **13 25 29.2** | **-0.9** |
| MT09 | | | | *e*S | | **Sn** | **13 25 50.5** | **-1.4** |
| MT09 | | | | IAML | | | 13 25 53.2 | |
| | comp=E,30μm,0.2s | | | | | | | |
| **LMEL** | **Las Melosas** | **1.66** | **174** | | | **Pn** | **13 25 30.3** | **+0.1** |
| **LMEL** | **Las Melosas** | **1.66** | **174** | *e*P | | **Pn** | **13 25 29.6** | **-0.6** |
| **LMEL** | **Las Melosas** | **1.66** | **174** | *i*P | | **Pn** | **13 25 30.3** | **+0.1** |
| LMEL | | | | *e*S | | **Sn** | **13 25 52.8** | **+0.7** |
| LMEL | | | | IAML | | | 13 25 56.5 | |
| | comp=N,21μm,0.5s | | | | | | | |
| **DOCA** | **Reserva Natura** | **1.68** | **43** | *e*P | | **Pn** | **13 25 30.8** | **+0.2** |
| DOCA | | | | *e*S | | **Sn** | **13 25 54.0** | **+1.3** |
| DOCA | | | | IAML | | | 13 25 55.2 | |
| | comp=Z,17μm,0.4s | | | | | | | |
| **VA05** | **Santo Domingo** | **1.78** | **215** | | | **Pn** | **13 25 30.7** | **-0.8** |
| **BO04** | **La Punta** | **1.80** | **185** | | | **Pn** | **13 25 31.3** | **-0.5** |
| **BO04** | **La Punta** | **1.80** | **185** | *i*P | | **Pn** | **13 25 31.3** | **-0.5** |
| BO04 | | | | *e*S | | **Sn** | **13 25 54.7** | **-0.2** |
| BO04 | | | | IAML | | | 13 25 57.1 | |
| | comp=N,19μm,0.6s | | | | | | | |
| **MT01** | **Popeta** | **1.81** | **203** | | | **Pn** | **13 25 31.0** | **-0.9** |
| **MT01** | **Popeta** | **1.81** | **203** | *e*P | | **Pn** | **13 25 31.1** | **-0.9** |
| MT01 | | | | *e*S | | **Sn** | **13 25 53.9** | **-1.3** |
| MT01 | | | | IAML | | | 13 25 57.2 | |
| | comp=Z,9μm,0.6s | | | | | | | |
| **MT01** | **Popeta** | **1.81** | **203** | *i*P | | **Pn** | **13 25 30.9** | **-0.9** |
| MT01 | | | | *e*S | | **Sn** | **13 25 53.8** | **-1.4** |
| MT01 | | | | IAML | | | 13 25 55.2 | |
| | comp=E,26μm,0.3s | | | | | | | |
| **CO06** | **Fray Jorge** | **1.84** | **325** | Pn | | **Pn** | **13 25 32.6** | **+0.3** |
| **CO06** | **Fray Jorge** | **1.84** | **325** | *i*P | | **Pn** | **13 25 32.7** | **+0.3** |
| CO06 | | | | *e*S | | **Sn** | **13 25 56.1** | **+0.2** |
| CO06 | | | | IAML | | | 13 26 01.6 | |
| | comp=E,32μm,0.4s | | | | | | | |
| **RTLL** | **Cerro Villicun** | **1.85** | **63** | *e*P | | **Pn** | **13 25 32.4** | **-0.1** |
| RTLL | | | | *e*S | | **Sn** | **13 25 56.4** | **+0.1** |
| **ACCO** | **Cerro Coronel** | **1.97** | **36** | *e*P | | **Pn** | **13 25 34.6** | **+0.4** |
| ACCO | | | | *e*P | | | 13 25 34.9 | |
| **AVIZ** | **Vizcacheras** | **2.04** | **129** | *e*P | | **Pn** | **13 25 34.9** | **0.0** |
| **GO04** | **Tololo Observa** | **2.04** | **350** | | | **Pn** | **13 25 35.4** | **+0.3** |
| **GO04** | **Tololo Observa** | **2.04** | **350** | *e*P | | **Pn** | **13 25 35.4** | **+0.3** |
| GO04 | | | | *e*S | | **Sn** | **13 26 01.2** | **+0.4** |
| **GO04** | **Tololo Observa** | **2.04** | **350** | *i*P | | **Pn** | **13 25 35.2** | **+0.2** |
| **AROD** | **Rodeo** | **2.17** | **22** | *e*P | | **Pn** | **13 25 38.2** | **+1.4** |
| **CO01** | **Juntas del Tor** | **2.23** | **7** | | | **Pn** | **13 25 38.7** | **+1.2** |
| **CO01** | **Juntas del Tor** | **2.23** | **7** | *e*P | | **Pn** | **13 25 38.6** | **+1.2** |
| CO01 | | | | *e*S | | **Sn** | **13 26 05.3** | **+0.4** |
| CO01 | | | | IAML | | | 13 26 07.6 | |
| | comp=Z,5μm,0.8s | | | | | | | |
| **CO01** | **Juntas del Tor** | **2.23** | **7** | *i*P | | **Pn** | **13 25 38.8** | **+1.4** |
| **BO01** | **Tunca** | **2.27** | **194** | Pn | | **Pn** | **13 25 36.5** | **-1.2** |
| **BO01** | **Tunca** | **2.27** | **194** | *e*P | | **Pn** | **13 25 36.4** | **-1.2** |
| BO01 | | | | *e*S | | **Sn** | **13 26 04.3** | **-1.2** |
| BO01 | | | | IAML | | | 13 26 05.7 | |
| | comp=Z,4μm,0.7s | | | | | | | |
| **BO01** | **Tunca** | **2.27** | **194** | *i*P | | **Pn** | **13 25 36.6** | **-1.0** |
| BO01 | | | | *e*S | | **Sn** | **13 26 03.9** | **-1.6** |
| BO01 | | | | IAML | | | 13 26 05.1 | |
| | comp=E,7μm,0.3s | | | | | | | |
| **ACDV** | **Cuesta del Vie** | **2.30** | **29** | *e*P | | **Pn** | **13 25 39.2** | **+0.9** |
| ACDV | | | | *e*S | | **Sn** | **13 26 08.0** | **+1.5** |
| ACDV | | | | IAML | | | 13 26 09.5 | |
| | comp=Z,6μm,0.6s | | | | | | | |
| **CO05** | **La Serena** | **2.38** | **342** | | | **Pn** | **13 25 38.9** | **-0.3** |
| **CO05** | **La Serena** | **2.38** | **342** | *e*P | | **Pn** | **13 25 38.9** | **-0.3** |
| CO05 | | | | *e*S | | **Sn** | **13 26 07.0** | **-1.1** |
| **BO03** | **Pichilemu** | **2.64** | **209** | *e*P | | **Pn** | **13 25 40.4** | **-2.1** |
| **AVFE** | **Valle Fertil** | **2.95** | **60** | *e*S | | **Sn** | **13 26 20.7** | **-1.0** |
| AVFE | | | | IAML | | | 13 26 24.6 | |
| | comp=Z,2μm,0.3s | | | | | | | |
| **GO05** | **Huala** | **3.08** | **204** | Pn | | **Pn** | **13 25 46.2** | **-2.2** |
| **GO05** | **Huala** | **3.08** | **204** | *e*S | | **Sn** | **13 26 25.7** | **+0.9** |
| **GO05** | **Huala** | **3.08** | **204** | *e*P | | **Pn** | **13 25 46.2** | **-2.2** |
| **LCO** | **Las Campanas** | **3.18** | **355** | | | **Pn** | **13 25 49.9** | **-0.1** |
| **LCO** | **Las Campanas** | **3.18** | **355** | *e*P | | **Pn** | **13 25 49.7** | **-0.3** |
| LCO | | | | IAML | | | 13 26 36.6 | |
| | comp=Z,8μm,0.8s | | | | | | | |
| **LCO** | **Las Campanas** | **3.18** | **355** | *i*P | | **Pn** | **13 25 49.7** | **-0.3** |
| **LCO** | **Las Campanas** | **3.18** | **355** | P | | **Pn** | **13 25 49.9** | **-0.1** |
| **AC05** | **El Transito** | **3.35** | **2** | Pn | | **Pn** | **13 25 52.5** | **+0.4** |
| **AC05** | **El Transito** | **3.35** | **2** | *e*S | | **Sn** | **13 26 32.1** | **+0.8** |
| AC05 | | | | *e*S | | **Sn** | **13 26 32.1** | **+0.8** |
| AC05 | | | | IAML | | | 13 26 33.6 | |
| | comp=Z,5μm,0.7s | | | | | | | |
| **ACHE** | **Chepes** | **3.35** | **73** | *e*P | | **Pn** | **13 25 50.5** | **-1.6** |
| **VCA** | **Vinchina** | **3.93** | **29** | *e*S | | **Sn** | **13 26 51.7** | **+6.4** |
| **AC04** | **Llanos de Chal** | **4.02** | **352** | *e*S | | **Sn** | **13 26 47.0** | **-0.2** |
| AC04 | | | | IAML | | | 13 26 59.4 | |
| | comp=Z,3μm,0.7s | | | | | | | |
| **BI02** | **San Fabin de** | **4.52** | **189** | Pn | | **Pn** | **13 26 06.3** | **-1.4** |
| **GO03** | **Copiap** | **4.59** | **2** | | | **Pn** | **13 26 07.9** | **-0.8** |
| **GO03** | **Copiap** | **4.59** | **2** | *e*P | | **Pn** | **13 26 07.7** | **-1.0** |
| **AC06** | **Mina Casimiro** | **4.82** | **1** | | | **Pn** | **13 26 10.8** | **-1.0** |
| **BI05** | **Punta Hualpn** | **5.09** | **206** | | | **Pn** | **13 26 11.9** | **-3.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GO02** | **Mina Guanaco** | **7.04** | **6** | | | **Pn** | **13 26 39.5** | **-2.6** |
| **VA04** | **Juan Fernndez** | **7.23** | **256** | Pn | | **Pn** | **13 26 44.2** | **-0.2** |
| **H03N1** | **Juan Fernandez** | **7.27** | **258** | P | | **Pn** | **13 26 45.4** | **+0.8** |
| | baz=124,slow=22,SNR=528 | | | | | | | |
| H03N1 | | | | S | | **Sn** | **13 28 03.2** | **-2.2** |
| H03N1 | | | | T | | T | 13 33 37.1 | |
| | baz=86,slow=73,SNR=522 | | | | | | | |
| **H03N3** | **Juan Fernandez** | **7.28** | **258** | P | | **Pn** | **13 26 45.5** | **+0.7** |
| | baz=124,slow=22,SNR=511 | | | | | | | |
| H03N3 | | | | S | | **Sn** | **13 28 03.3** | **-2.5** |
| H03N3 | | | | T | | T | 13 33 36.7 | |
| | baz=86,slow=73,SNR=418 | | | | | | | |
| **H03N2** | **Juan Fernandez** | **7.29** | **258** | P | | **Pn** | **13 26 45.8** | **+0.9** |
| | baz=124,slow=22,SNR=350 | | | | | | | |
| H03N2 | | | | S | | **Sn** | **13 28 04.0** | **-1.8** |
| H03N2 | | | | T | | T | 13 33 34.4 | |
| | baz=86,slow=73,SNR=483 | | | | | | | |
| **H03S1** | **Juan Fernandez** | **7.33** | **255** | P | | **Pn** | **13 26 44.8** | **-0.6** |
| | baz=50,slow=18,SNR=137 | | | | | | | |
| H03S1 | | | | S | | **Sn** | **13 28 01.6** | **-5.2** |
| H03S1 | | | | T | | T | 13 33 23.7 | |
| | baz=83,slow=75,SNR=193 | | | | | | | |
| **H03S3** | **Juan Fernandez** | **7.33** | **255** | P | | **Pn** | **13 26 45.0** | **-0.4** |
| | baz=50,slow=18,SNR=155 | | | | | | | |
| H03S3 | | | | S | | **Sn** | **13 28 01.3** | **-5.6** |
| H03S3 | | | | T | | T | 13 33 21.6 | |
| | baz=83,slow=75,SNR=134 | | | | | | | |
| **H03S2** | **Juan Fernandez** | **7.34** | **255** | P | | **Pn** | **13 26 45.0** | **-0.6** |
| | baz=50,slow=18,SNR=196 | | | | | | | |
| H03S2 | | | | S | | **Sn** | **13 28 02.1** | **-5.1** |
| H03S2 | | | | T | | T | 13 33 21.0 | |
| | baz=83,slow=75,SNR=220 | | | | | | | |
| **GO06** | **Curarrehue** | **7.42** | **186** | Pn | | **Pn** | **13 26 44.5** | **-2.6** |
| **LR04** | **Corral** | **8.05** | **197** | Pn | | **Pn** | **13 26 50.9** | **-4.5** |
| **LR05** | **Currie** | **8.12** | **189** | Pn | | **Pn** | **13 26 54.2** | **-2.2** |
| **PLCA** | **Paso Flores** | **8.52** | **181** | Pn | | **Pn** | **13 26 59.7** | **-2.2** |
| **PLCA** | **Paso Flores** | **8.52** | **181** | P | | **Pn** | **13 27 00.7** | **-1.2** |
| | comp=Z,8.7nm,0.6s,baz=357,slow=12,SNR=28 | | | | | | | |
| **LL04** | **Puerto Octay** | **8.85** | **190** | | | **Pn** | **13 27 03.4** | **-2.9** |
| **TRQA** | **Tornquist** | **9.04** | **133** | Pn | | **Pn** | **13 27 06.2** | **-2.7** |
| **TRQA** | **Tornquist** | **9.04** | **133** | P | | **Pn** | **13 27 06.2** | **-2.7** |
| **LVC** | **Limon Verde** | **9.64** | **8** | P | | Pn | 13 27 12.8 | -4.7 |
| | comp=Z,9.7nm,0.4s,baz=175,slow=12,SNR=7.5 | | | | | | | |
| LVC | | | | S | | **Sn** | **13 28 58.0** | **-6.0** |
| | comp=Z,71nm,0.8s,baz=342,slow=16,SNR=3.4 | | | | | | | |
| **LVC** | **Limon Verde** | **9.64** | **8** | *e*P | | **Pn** | **13 27 14.0** | **-3.5** |
| **LL01** | **San Ignacio de** | **10.29** | **188** | Pn | | **Pn** | **13 27 22.3** | **-3.5** |
| **PB09** | **IPOC Station P** | **10.41** | **6** | Pn | | **Pn** | **13 27 24.1** | **-3.6** |
| **PSAL** | **Palomas, Salto** | **10.96** | **88** | *e*P | | **Pn** | **13 27 30.8** | **-4.1** |
| **PATCX** | **Punta Patache** | **11.33** | **1** | | | **Pn** | **13 27 39.8** | **-0.2** |
| **TA01** | **Diego Aracena** | **11.58** | **1** | Pn | | **Pn** | **13 27 41.4** | **-1.9** |
| **HMBC** | **Humberstone** | **11.88** | **2** | | | **Pn** | **13 27 44.9** | **-2.5** |
| **ITQB** | **Itaqui** | **12.10** | **82** | Pn | | Pn | 13 27 44.9 | -5.1 |
| **ITQB** | **Itaqui** | **12.10** | **82** | *e*P | | **Pn** | **13 27 45.7** | **-4.3** |
| ITQB | | | | *e*S | | **Sn** | **13 29 59.6** | **-3.4** |
| **CPUP** | **Villa Florida** | **12.82** | **66** | P | | **Pn** | **13 27 54.9** | **-4.6** |
| | comp=Z,18nm,0.8s,baz=241,slow=13,SNR=12 | | | | | | | |
| CPUP | | | | | LR | LR | 13 32 45.0 | |
| | comp=Z,90nm,21.6s,baz=248,slow=36 | | | | | | | |
| **RODS** | **Rosario do Sul** | **13.14** | **86** | *e*P | | Pn | 13 27 58.8 | -4.9 |
| **PAPY** | **Pozo Azul** | **13.43** | **56** | *e*P | | **Pn** | **13 28 06.3** | **-1.2** |
| **UNIS** | **Unistalda (Bra** | **13.56** | **81** | *e*P | | **Pn** | **13 28 05.5** | **-3.8** |
| **PLTB** | **Pedras Altas** | **14.27** | **93** | Pn | | Pn | 13 28 12.7 | -5.7 |
| **PLTB** | **Pedras Altas** | **14.27** | **93** | *e*P | | **Pn** | **13 28 14.2** | **-4.2** |
| **SJPY** | **San Joaquin** | **14.46** | **64** | *e*P | | **Pn** | **13 28 19.1** | **-1.7** |
| **CPSB** | **Cacapava Do Su** | **14.62** | **87** | *e*P | | Pn | 13 28 17.5 | -5.3 |
| **CRSM** | **Crissiumal (Br** | **14.95** | **76** | *e*P | | **Pn** | **13 28 23.7** | **-3

PRPB Parauapebas 32.24 41 eP P 13 31 18.5 -1.1
CMC01 Camacan, BA 32.70 66 eP P 13 31 22.8 -0.8
PMSA Palmer Station 32.84 175 P P 13 31 24.1 -0.1
PMSA IAmb IAmb 13 32 29.7
comp=Z,43nm,0.7s
OTAV Otavalo 33.14 345 P P 13 31 30.6 +2.7
OTAV PcP PcP 13 34 10.1 +1.4
GDU01 Guandu, BA 33.64 64 eP P 13 31 30.6 -1.2
MAL2 Monte Alegre, 33.68 30 P P 13 31 31.5 -0.6
RPN Rapa Nui 34.08 268 LR LR 13 42 37.6
comp=Z,82nm,18.2s,baz=107,slow=31
NBPN Ponto Novo - B 35.02 59 eP P 13 31 42.6 -1.1
NBBC Barra do Corda 35.43 47 eP P 13 31 46.8 -0.3
BOAV Boa Vista 35.65 17 P P 13 31 48.5 -0.6
BOAV IAmb IAmb 13 31 49.6
comp=Z,26nm,0.8s
BOAV PcP PcP 13 34 16.5 +1.2
BOAV Boa Vista 35.65 17 eP P 13 31 48.7 -0.3
MCPB Macapa, AP 36.09 32 P P 13 31 52.0 -0.8
MCPB PcP PcP 13 34 17.4 +0.7
MCPB Macapa, AP 36.09 32 eP P 13 31 51.9 -1.0
TMAB Tom-Au,PA,Br 36.34 40 eP P 13 31 55.0 +0.1
ROSC El Rosal 37.02 354 P P 13 32 03.7 +2.6
comp=Z,38nm,0.8s,baz=190,slow=6.7,SNR=11
comp=Z,38nm,0.8s
NBTA Tacaratu-PE 37.73 60 eP P 13 32 05.6 -1.1
NBMA Muriti-CE 38.42 57 eP P 13 32 11.5 -1.0
NBPS Pedro II - PI 38.73 50 eP P 13 32 14.0 -1.3
NBPB Pedra_Branca-C 39.14 54 eP P 13 32 17.7 -0.8
NBPA Parau_RN 40.71 57 eP P 13 32 30.5 -1.0
MDP Montagnes des 40.76 28 LR LR 13 50 03.8
comp=Z,80nm,21.1s,baz=176,slow=37
MPGF Montagnes des 40.77 28 P P 13 32 31.1 -0.9
MPGF pP pP 13 32 58.9 +1.1
MPGF sP sP 13 33 11.0 +0.5
MPGF PcP PcP 13 34 32.0 +0.7
SDV Santo Domingo 40.85 360 eP P 13 32 32.6 -0.2
BAUV El Baul 40.97 4 P P 13 32 32.8 -0.8
NBCL Cascavel-CE 40.97 54 eP P 13 32 33.2 -0.5
NBPV Pedro Velho 41.57 59 eP P 13 32 38.2 -0.4
LCR2 La Lucha 2 43.68 340 P P 13 32 55.2 -0.6
LCR2 IAmb IAmb 13 32 59.1
comp=Z,56nm,1.3s
JTS Las Juntas de 44.48 339 d iP P 13 33 03.9 +2.0
JTS pmax pmax
comp=Z,58nm,1.8s
JTS Las Juntas de 44.48 339 P P 13 33 04.1 +2.2
BELA Belgrano 2 48.42 170 P P 13 33 32.8 +0.8
MTO3 Montecristo 49.76 336 P P 13 33 44.7 +1.6
MTO3 IAmb IAmb 13 33 45.6
comp=Z,29nm,0.9s
MLPR Magueyes Islan 49.98 4 P P 13 33 44.3 -0.2
IGPR InterUniversit 50.04 5 P P 13 33 44.6 -0.3
OBIP Obispado Ponce 50.08 5 P P 13 33 44.3 -1.0
CELP Cerrillos 50.12 5 P P 13 33 45.3 -0.2
VNA3 Neumayer Olymp 50.52 159 ⇑P P 13 33 48.6 +0.6
comp=Z,5.7nm,0.6s
VNA2 Neumayer--Watz 51.15 158 ⇑P P 13 33 52.5 -0.3
comp=Z,9.1nm,0.4s,baz=283,slow=7.9
GTBY Guantanamo Bay 52.02 354 P P 13 34 00.1 +0.3
SNAA Sanae 52.74 158 P P 13 34 04.9 +0.3
SNAA IAmb IAmb 13 34 33.1
comp=Z,41nm,1.2s
SNAA Sanae 52.74 158 ⇑P P 13 34 05.1 +0.5
comp=Z,170nm,0.8s
SNAA Sanae 52.74 158 P P 13 34 05.1 +0.5
comp=Z,5.6nm,0.7s,baz=284,slow=8.6,SNR=42
SNAA LR LR 13 54 44.2
comp=Z,56nm,19.7s,baz=286,slow=34
comp=Z,5.6nm,0.7s
GRTK Grand Turk 53.41 359 P P 13 34 10.1 +0.1
TROLL Troll, Antarti 54.46 159 ⇑P P 13 34 17.8 +0.6
comp=Z,306nm,0.6s
CAMR Camarioca 55.93 348 P P 13 34 28.9 +0.7
CAMR IAmb IAmb 13 35 12.5
comp=Z,52nm,1.0s
SOR Soroa 55.99 346 P P 13 34 28.4 -0.2
SOR IAmb IAmb 13 34 29.8
comp=Z,39nm,0.9s
SOR Soroa 55.99 346 P P 13 34 28.4 -0.2
SOR pmax pmax
comp=Z,39nm,0.9s
NVL N'lazarevskaya 57.44 157 eP P 13 34 42.0 +3.7
NVL eS S 13 42 40.8 +14
NVL pmax pmax
comp=Z,20nm,0.9s
QSPA South Pole Qui 58.04 180 P P 13 34 42.4 -0.4
QSPA South Pole Qui 58.04 180 LR LR 14 00 31.2
comp=Z,44nm,18.9s,baz=191,slow=37
QSPA South Pole Qui 58.04 180 P P 13 34 42.7 0.0
QSPA pP pP 13 35 11.2 +1.2
QSPA sP sP 13 35 23.9 +1.5
656A Willston 62.30 348 P P 13 35 11.9 0.0
553A Crawfordville 63.45 346 P P 13 35 20.2 +0.7
BBSR BB Station 64.44 5 P P 13 35 26.6 +0.6
BBSR IAmb IAmb 13 35 27.4
comp=Z,38nm,0.8s
BBSR BB Station 64.44 5 P P 13 35 26.3 +0.3
HBVL Hebbronville 64.79 332 P P 13 35 30.6 +2.2
HBVL IAmb IAmb 13 35 31.4
comp=Z,43nm,0.8s
SBA Scott Base 65.11 191 P P 13 35 31.0 +1.1
SBA Scott Base 65.11 191 P P 13 35 31.0 +1.1
SBA pmax pmax
comp=Z,22nm,1.8s
833A Chaparral WMA, 66.20 332 P P 13 35 38.9 +1.4
833A Chaparral WMA, 66.20 332 P P 13 35 39.2 +1.7
baz=154
HKT Hockley 66.35 336 d iP P 13 35 39.5 +1.2
HKT pmax pmax
comp=Z,47nm,1.5s
HKT Hockley 66.35 336 P P 13 35 39.6 +1.4
GOGA Godfrey 66.41 348 P P 13 35 38.6 0.0
GOGA Godfrey 66.41 348 P P 13 35 38.6 0.0
GOGA pmax pmax
comp=Z,25nm,0.8s
JSC Jenkinsville 66.91 350 P P 13 35 42.2 +0.4
JSC IAmb IAmb 13 35 43.0
comp=Z,31nm,0.9s
JSC Jenkinsville 66.91 350 P P 13 35 42.2 +0.4
JSC pmax pmax
comp=Z,31nm,0.9s
SLBS Sierra La Lagu 67.19 321 P P 13 35 45.9 +1.9
SLBS pP PcP 13 36 14.5 +3.3
SLBS sP sP 13 36 25.1 +1.7
HNDO Hondo 67.23 333 P P 13 35 45.2 +1.2
Y49A Blount Mountai 67.41 346 P P 13 35 45.1 +0.1
Y49A IAmb IAmb 13 35 46.2
comp=Z,36nm,1.1s
DRIO Del Rio 67.66 332 P P 13 35 47.3 +0.5
435B Jarrell 67.72 335 P P 13 35 48.5 +1.4
baz=155
KMSC Kings Mountain 67.76 350 P P 13 35 47.5 +0.3
KMSC IAmb IAmb 13 35 48.4
comp=Z,37nm,0.8s
BG3 Lake Jocassee 67.86 349 P P 13 35 48.3 +0.5
BG3 IAmb IAmb 13 35 49.3
comp=Z,43nm,0.8s
FPAL Fort Paine 67.91 346 P P 13 35 48.5 +0.4
X48A Hartselle 68.12 345 P P 13 35 49.9 +0.5
V58A Windy Hill, Pi 68.12 352 P P 13 35 49.8 +0.3
V58A IAmb IAmb 13 35 50.6
comp=Z,33nm,0.8s
JCT Junction City 68.28 333 P P 13 35 51.9 +1.3
JCT IAmb IAmb 13 35 52.9
comp=Z,58nm,0.9s
JCT Junction City 68.28 333 P P 13 35 51.9 +1.3
JCT pmax pmax
comp=Z,58nm,0.9s
V55A Taylorsville 68.44 351 P P 13 35 52.0 +0.5
V55A IAmb IAmb 13 35 52.8
comp=Z,48nm,0.8s
TKL Tuckaleechee C 68.65 348 LR LR 14 09 28.5
comp=Z,18nm,18.3s,baz=176,slow=39
TXAR Lajitas Array 68.86 329 P P 13 35 55.5 +1.2
comp=Z,10.0nm,0.6s,baz=153,slow=8.5,SNR=124
TXAR sP sP 13 36 34.7 +0.6
comp=Z,9.3nm,0.6s,baz=151,slow=8.2,SNR=9.7
comp=Z,10.0nm,0.6s
TBI Tubuai 69.09 255 eLR LR 13 56 54.8
comp=Z,1μm,35.0s
T59A Double "B" Far 69.13 354 P P 13 35 56.5 +0.8
T59A IAmb IAmb 13 35 57.6
comp=Z,72nm,1.1s

U54A Nelsons Funny 69.19 350 P P 13 35 56.2 +0.1
OZNA Ozona 69.19 332 P P 13 35 57.4 +1.1
OZNA IAmb IAmb 13 35 58.3
comp=Z,44nm,0.7s
WVT Waverly 69.90 345 ⇓P P 13 36 00.7 +0.2
WVT pP pP 13 36 29.8 +1.3
WVT sP sP 13 36 40.6 +0.1
S57A Dark Hollow, R 70.05 353 P P 13 36 02.1 +0.7
S57A IAmb IAmb 13 36 03.0
comp=Z,44nm,0.8s
ABTX Abilene, Hawle 70.13 334 P P 13 36 02.8 +0.8
ABTX IAmb IAmb 13 36 04.0
comp=Z,60nm,0.8s
WHAR Wooly Hollow 70.20 341 P P 13 36 02.5 +0.2
SN07 Snyder 07 71.02 333 P P 13 36 07.7 +0.3
PBMO Poplar Bluff 71.13 343 P P 13 36 08.6 +0.7
WCI Wyandotte Cave 71.61 347 P P 13 36 10.1 -0.6
PPT2 Papeete2 71.87 260 eS S 13 45 27.8 +2.3
comp=Z,61nm,25.8s
PPT2 Papeete2 71.87 260 eLR LR 13 58 11.0
comp=Z,103nm,35.2s
PPT2 eLR LR 13 58 18.6
comp=Z,90nm,31.2s
P53A Whipple 72.04 351 P P 13 36 13.6 +0.3
P53A IAmb IAmb 13 36 14.6
comp=Z,61nm,1.2s
OK031 S. Brethren Rd 72.18 338 P P 13 36 14.6 +0.4
OK031 IAmb IAmb 13 36 15.6
comp=Z,67nm,0.8s
P52A Corning 72.29 351 P P 13 36 14.8 0.0
baz=170,SNR=11
P49A Miami Univ. Ec 72.59 348 P P 13 36 16.2 -0.4
baz=167,SNR=9.0
O53A New Philadelph 72.77 351 P P 13 36 17.8 +0.2
baz=170
ACSO Alum Creek Sta 73.00 350 P P 13 36 18.7 -0.3
R40A Maddies Statio 73.02 342 P P 13 36 19.9 +0.7
DBIC Dimbokro 73.30 71 P P 13 36 21.2 -0.1
comp=Z,20nm,0.7s,baz=216,slow=5.3,SNR=20
DBIC pP pP 13 36 50.3 +0.1
comp=Z,19nm,0.8s,baz=225,slow=6.1,SNR=7.1
DBIC LR LR 14 06 31.2
comp=Z,33nm,18.1s,baz=188,slow=34
comp=Z,20nm,0.7s
121A Cookes Peak, D 73.42 328 P P 13 36 23.9 +2.1
baz=148,SNR=46
M53A WI Miller and 73.88 352 P P 13 36 24.5 +0.4
baz=171,SNR=6.1
N47A Urbana 74.07 348 P P 13 36 24.9 -0.3
P40A Paris 74.14 343 P P 13 36 26.1 +0.5
L59A Walton 74.14 356 P P 13 36 26.4 +0.8
L59A IAmb IAmb 13 36 27.7
comp=Z,46nm,0.9s
L61B Northampton 74.31 358 P P 13 36 27.5 +1.0
baz=178
SUR Sutherland 74.49 119 LR LR 14 08 39.8
comp=Z,50nm,18.4s,baz=156,slow=35
MAW Mawson 74.51 163 P P 13 36 28.1 +0.6
comp=Z,2.0nm,0.4s,baz=176,slow=5.3,SNR=6.7
MAW LR LR 14 11 31.3
comp=Z,51nm,18.1s,baz=228,slow=38
comp=Z,2.0nm,0.4s
ANMO Albuquerque 74.89 330 LR LR 14 05 12.7
comp=Z,31nm,19.7s,baz=132,slow=32
ANMO Albuquerque 74.89 330 d iP P 13 36 31.9 +1.6
ANMO pmax pmax
comp=Z,11nm,1.0s
J56A Wolcott 75.34 355 P P 13 36 32.7 +0.2
J56A IAmb IAmb 13 36 33.6
comp=Z,37nm,0.8s
214A Organ Pipe Nat 75.35 324 P P 13 36 34.8 +1.9
214A IAmb IAmb 13 36 36.1
comp=Z,49nm,1.2s
214A Organ Pipe Nat 75.35 324 P P 13 36 35.0 +2.1
baz=144,SNR=16
T25A Trinidad 75.94 333 P P 13 36 38.4 +2.0
baz=151,SNR=31
PECO Prince Edward 76.00 355 P P 13 36 36.5 +0.2
PECO IAmb IAmb 13 36 37.6
comp=Z,34nm,0.8s
W18A Petrified Fore 76.47 328 P P 13 36 41.2 +1.8
baz=167,SNR=10.0
ESJX Sierra Juarez 77.01 322 P P 13 36 44.1 +1.6
SADO Sadowa 77.01 354 P P 13 36 42.1 +0.2
SADO Sadowa 77.01 354 LR LR 14 14 55.7
comp=Z,8.4nm,18.1s,baz=310,slow=39
GGN Saint George 77.02 3 P P 13 36 43.7 +1.8
GGN IAmb IAmb 13 36 44.3
comp=Z,42nm,0.8s
G62A West of Eustis 77.05 360 P P 13 36 43.6 +1.5
G62A IAmb IAmb 13 36 44.5
comp=Z,55nm,0.8s
S22A 4UR Ranch, Cre 77.43 331 P P 13 36 46.6 +1.7
baz=149,SNR=30
Q24A Divide 77.82 333 P P 13 36 48.6 +1.7
baz=150,SNR=23
TRQ Mont Tremblant 78.14 357 P P 13 36 48.4 +0.2
TRQ IAmb IAmb 13 36 49.6
comp=Z,35nm,0.9s
TPFO Pinon Flats 78.52 322 P P 13 36 52.6 +1.9
baz=142
PFO Pinyon Flats O 78.53 322 ⇑ iP P 13 36 52.6 +1.8
PFO pmax pmax
comp=Z,54nm,1.1s
E46A Sault Ste Mari 79.20 350 P P 13 36 53.9 -0.1
E46A IAmb IAmb 13 36 55.0
comp=Z,44nm,1.0s
BATG Bathurst New B 79.20 3 P P 13 36 54.9 +0.9
BOSA Boshof 79.68 117 P P 13 36 57.5 +0.1
comp=Z,6.6nm,0.7s,baz=259,slow=4.7,SNR=11
BOSA pP pP 13 37 26.2 -0.1
comp=Z,21nm,0.9s,baz=237,slow=5.1,SNR=7.5
BOSA LR LR 14 09 32.9
comp=Z,53nm,18.8s,baz=207,slow=34
comp=Z,6.6nm,0.7s
N23A Red Feather La 79.79 333 P P 13 36 59.2 +1.5
baz=150,SNR=15
O20A White River Ci 80.04 331 P P 13 36 59.9 +0.9
O20A IAmb IAmb 13 37 01.4
comp=Z,64nm,1.6s
CCUT Cedar City 80.13 327 P P 13 37 01.7 +2.2
TPNV Topopah Spring 81.04 324 P P 13 37 06.1 +1.8
TPNV Topopah Spring 81.04 324 P P 13 37 06.1 +1.8
TPNV pmax pmax
comp=Z,20nm,1.1s
PSUT Pine Spring 81.16 327 P P 13 37 06.7 +1.7
LBTB Lobatse 81.80 114 LR LR 14 12 24.9
comp=Z,57nm,18.1s,baz=196,slow=35
R11B Troy Canyon, C 81.82 326 P P 13 37 10.2 +1.8
baz=143
DUG Dugway, Tooele 82.03 329 P P 13 37 10.7 +1.3
DUG IAmb IAmb 13 37 11.9
comp=Z,76nm,1.9s
DUG Dugway, Tooele 82.03 329 P P 13 37 10.7 +1.3
DUG pmax pmax
comp=Z,76nm,1.9s
MZP Montezuma Peak 82.19 324 P P 13 37 11.9 +1.4
DSP Deep Springs 82.22 324 P P 13 37 11.4 +1.1
TORD Torodi Ar. Bea 82.30 69 P P 13 37 11.1 -0.1
comp=Z,15nm,0.7s,baz=277,slow=4.7,SNR=82
TORD pP pP 13 37 41.3 +0.9
comp=Z,17nm,0.7s,baz=283,slow=6.3,SNR=9.9
TORD sP sP 13 37 53.5 +1.1
comp=Z,5.9nm,0.6s,baz=285,slow=7.0,SNR=2.6
comp=Z,15nm,0.7s
PDAR Pinedale Array 82.79 332 P P 13 37 13.7 +0.2
comp=Z,5.0nm,0.7s,baz=134,slow=4.3,SNR=18
comp=Z,5.0nm,0.7s
E28A Huff 83.04 339 P P 13 37 15.1 +0.8
E28A IAmb IAmb 13 37 16.1
comp=Z,50nm,0.9s
LHV Little Huntoon 83.17 324 P P 13 37 17.3 +2.2
NVAR Mina Array Bea 83.21 324 P P 13 37 17.2 +1.5
comp=Z,11nm,0.8s,baz=155,slow=6.0,SNR=62
NVAR pP pP 13 37 45.7 +1.4
comp=Z,3.4nm,0.8s,baz=162,slow=5.4,SNR=3.1
NVAR sP sP 13 37 57.5 +1.5
comp=Z,4.8nm,0.8s,baz=149,slow=5.8,SNR=4.3
comp=Z,11nm,0.8s
YERR Yerington 84.11 324 P P 13 37 21.4 +1.2
FXWY Fox Creek 84.11 332 P P 13 37 20.8 +0.6
H17A Grant Village 84.56 332 P P 13 37 24.2 +1.7
baz=147
ULM Lac du Bonnet 85.13 344 P P 13 37 24.9 +0.1
comp=Z,22nm,0.9s,baz=152,slow=3.2,SNR=23
ULM pP pP 13 37 55.4 +1.8
comp=Z,6.4nm,0.9s,baz=307,slow=2.4,SNR=2.9
comp=Z,22nm,0.9s
ULM Lac du Bonnet 85.13 344 d iP P 13 37 24.5 -0.3
YHL Hebgen Lake 85.18 332 P P 13 37 26.9 +1.3
YHL IAmb IAmb 13 37 28.1
comp=Z,68nm,1.9s
HLID Hailey 85.46 330 P P 13 37 28.1 +1.3
DLMT Dillon 86.17 332 P P 13 37 31.5 +1.2
DLMT IAmb IAmb 13 37 32.6
comp=Z,38nm,1.3s
HATC Hat Creek Radi 86.61 324 P P 13 37 33.0 +0.6
HATC IAmb IAmb 13 37 34.7
comp=Z,28nm,0.9s
SCHQ Schefferville 86.73 2 P P 13 37 32.8 +0.2
comp=Z,24nm,1.1s,baz=165,slow=5.3,SNR=10
comp=Z,24nm,1.1s
DSZ Denniston Nort 86.80 222 P P 13 37 34.4 +0.8
O02D Mt. Diablo Mer 86.80 323 P P 13 37 34.8 +1.4
KRP Karapiro 87.07 226 P P 13 37 41.7 +6.8
KRP pmax pmax
comp=Z,29nm,1.0s
J08A Circle Bar Ran 87.11 327 P P 13 37 36.5 +1.7
KMRM Mail Ridge 87.31 322 P P 13 37 37.4 +1.5
KMRM IAmb IAmb 13 37 39.1
comp=Z,38nm,1.0s
LYMT Lyon Mountain 87.37 333 P P 13 37 37.5 +1.3
BPMT Black Pine Rid 87.39 332 P P 13 37 37.5 +1.2
YBH Yreka Blue Hor 87.91 324 LR LR 14 12 31.3
comp=Z,14nm,21.8s,baz=134,slow=32
I07A Izee 88.14 327 P P 13 37 41.2 +1.4
I07A IAmb IAmb 13 37 42.3
comp=Z,24nm,0.9s
KRPM Rodgers 88.16 323 P P 13 37 41.7 +1.8
KRPM IAmb IAmb 13 37 44.6
comp=Z,29nm,1.0s
K02D Willamette Mer 89.10 324 P P 13 37 45.4 +1.1
K02D IAmb IAmb 13 37 47.1
comp=Z,38nm,1.5s
I05D Terrebonne, OR 89.19 326 P P 13 37 45.8 +1.2
I05D IAmb IAmb 13 37 47.3
comp=Z,25nm,1.0s
DBO Dodson Butte 89.20 324 P P 13 37 45.6 +0.9
DBO IAmb IAmb 13 37 47.6
comp=Z,74nm,2.0s
NEW Newport 90.35 331 LR LR 14 15 58.5
comp=Z,27nm,19.2s,baz=116,slow=34
PMTG Montargil 91.42 44 eP P 13 37 54.9 -0.2
comp=Z,28nm,1.9s
PMRV Marv??o 92.14 44 eP P 13 37 58.3 -0.1
comp=Z,16nm,1.5s
MVO Moncorvo 93.48 43 eP P 13 38 04.5 -0.2
comp=Z,18nm,1.0s
PBRG Braganca 94.06 42 eP P 13 38 06.6 -0.7
comp=Z,15nm,1.6s
ESDC Sonseca Array 94.34 45 P P 13 38 08.7 +0.1
comp=Z,1.7nm,0.8s,baz=244,slow=4.9,SNR=11
comp=Z,1.7nm,0.8s
TOAD Toad River Com 101.48 334 P Pdif 13 38 40.2 0.0
baz=135
R33M Jennings River 104.03 333 P Pdif 13 38 52.1 +0.5
baz=130
YUK6 Outpost Mounta 107.90 332 P PKiKP 13 43 15.7 +0.1
baz=124
DAWY Dawson 110.03 334 P PKiKP 13 43 19.6 +0.4
baz=123
EPYK Eagle Plains 110.36 337 P PKiKP 13 43 20.2 +0.4
baz=124
L27K Beaver Creek, 110.43 333 P PKiKP 13 43 20.5 +0.5
baz=121
INK Inuvik 110.47 339 P PKiKP 13 43 20.5 +0.7
baz=126
EGAK Eagle 111.06 334 P PKiKP 13 43 21.5 +0.4
baz=121
KLU Klutina 111.32 330 P PKiKP 13 43 22.5 +0.6
baz=118
E29M Blow River 111.86 338 P PKiKP 13 43 23.7 +1.1
baz=122
H27K Steamboat Moun 111.93 336 P PKiKP 13 43 23.8 +1.0
baz=120
I26K Coal Creek Min 112.06 334 P PKiKP 13 43 23.7 +0.7
baz=119
PWL Port Wells 112.06 329 P PKiKP 13 43 23.5 +0.3
baz=117
F28M Old Crow 112.08 337 P PKiKP 13 43 23.8 +0.8
baz=121
K24K Donnelly Dome 112.34 332 P PKiKP 13 43 24.4 +0.7
baz=118
KNK Knik Glcier 112.36 329 P PKiKP 13 43 24.3 +0.6
baz=116
J25K Salcha River, 112.56 333 P PKiKP 13 43 24.9 +0.8
baz=118
D28M Stokes Point 112.61 339 P PKiKP 13 43 24.9 +1.0
baz=122
RC01 Rabbit Creek A 112.78 329 P PKiKP 13 43 25.3 +0.8
baz=115
OHAK Old Harbor 112.82 324 P PKiKP 13 43 25.1 +0.5
baz=114
E27K Coleen River 112.93 337 P PKiKP 13 43 25.4 +0.7
baz=119
SII Sitkinak Islan 113.00 323 P PKiKP 13 43 25.7 +0.6
baz=114
ILAR Eielson Array 113.21 333 PKiKP PKiKP 13 43 25.3 +0.1
comp=Z,1.1nm,0.8s,baz=178,slow=1.6,SNR=9.9
M22K Willow 113.23 329 P PKiKP 13 43 26.2 +0.9
baz=115
SUA Susitna One 113.38 329 P PKiKP 13 43 26.4 +0.6
baz=114
COLA College 113.63 333 i PKiKP PKiKP 13 43 26.0 0.0
COLA pmax pmax
comp=Z,1.0nm,0.6s
NOA NORSAR Array B 113.77 32 PKiKP PKiKP 13 43 26.2 -0.2
comp=Z,0.9nm,0.7s,baz=248,slow=2.0,SNR=4.1
P19K Oil Pt 113.77 327 P PKiKP 13 43 26.5 0.0
baz=113
G25K Bearman Lake 113.80 335 P PKiKP 13 43 26.9 +0.7
baz=116
SKT Skwentna 113.93 329 P PKiKP 13 43 27.5 +0.8
baz=114
F25K Christian Rive 114.01 336 P PKiKP 13 43 27.4 +0.7
baz=116
Q18K Katmai Hardscr 114.22 325 P PKiKP 13 43 28.1 +0.6
baz=112
G24K Hadweenzic Riv 114.27 335 P PKiKP 13 43 28.0 +0.8
baz=115
C27K Jago River 114.29 338 P PKiKP 13 43 27.8 +0.6
baz=117
I23K Minto, Yukon-K 114.33 333 P PKiKP 13 43 28.1 +0.8
baz=114
Q17K Contact Creek 114.51 325 P PKiKP 13 43 28.2 +0.1
baz=112
BPAW Bear Paw Mtn. 114.55 332 P PKiKP 13 43 28.4 +0.6
baz=113
M20K Styx River 114.59 329 P PKiKP 13 43 29.0 +0.9
baz=112
F24K Squaw Lake 114.76 336 P PKiKP 13 43 29.0 +0.8
baz=114
D25K Kavik River 115.00 338 P PKPdf 13 43 29.4 +0.8
baz=115
Q16K King Salmon 115.03 325 P PKiKP 13 43 29.4 +0.6
baz=111
E24K Your Creek 115.19 336 P PKPdf 13 43 29.5 +0.5
baz=114
G23K Bananza Creek 115.20 334 P PKPdf 13 43 29.5 +0.4
baz=113
I21K Tanana 115.36 332 P PKiKP 13 43 30.1 +0.8
baz=112
H22K Ishtalitna Cre 115.39 333 P PKiKP 13 43 29.9 +0.5
baz=112
COLD Coldfoot 115.46 335 P PKiKP 13 43 30.1 +0.6
baz=112
K20K Telida 115.54 330 P PKiKP 13 43 30.0 +0.3
baz=111
E23K Chandalar 115.58 336 P PKiKP 13 43 30.0 +0.2
baz=113
O17K Koliganek Bris 115.63 326 P PKiKP 13 43 30.3 +0.3
baz=110
M18K Stony River 115.64 328 P PKiKP 13 43 30.2 +0.3
baz=110
TOLK Toolik Lake Re 115.78 336 P PKiKP 13 43 30.7 +0.5
baz=112
P16K Nushagak River 115.81 325 P PKiKP 13 43 30.7 +0.4
baz=110
G22K Bettles 115.82 334 P PKiKP 13 43 30.8 +0.6
baz=112
SDPT Sand Point 115.84 321 P PKiKP 13 43 30.6 +0.1
baz=110
H21K Melozitna Rive 115.85 333 P PKiKP 13 43 30.7 +0.4
baz=111

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **J20K** | **Nowinta River** | **115.86** | **331** | P | | **PKiKP** | **13 43 30.6** | **+0.2** |
| | baz=111 | | | | | | | | |
| **N17K** | **Nushagak Hills** | **115.93** | **327** | P | | **PKiKP** | **13 43 30.8** | **+0.2** |
| | baz=110 | | | | | | | | |
| **O16K** | **Kokwok River B** | **116.05** | **326** | P | | **PKiKP** | **13 43 31.0** | **+0.2** |
| | baz=110 | | | | | | | | |
| **L18K** | **Granite Mounta** | **116.28** | **329** | P | | **PKiKP** | **13 43 31.5** | **+0.3** |
| | baz=109 | | | | | | | | |
| **F22K** | **John River** | **116.28** | **335** | P | | **PKiKP** | **13 43 31.4** | **+0.3** |
| | baz=111 | | | | | | | | |
| **J19K** | **Poorman** | **116.41** | **331** | P | | **PKiKP** | **13 43 31.8** | **+0.4** |
| | baz=109 | | | | | | | | |
| **G21K** | **Allakaket** | **116.42** | **334** | P | | **PKiKP** | **13 43 32.2** | **+0.8** |
| | baz=110 | | | | | | | | |
| **C23K** | **Itkillik River** | **116.57** | **338** | P | | **PKiKP** | **13 43 31.9** | **+0.4** |
| | baz=111 | | | | | | | | |
| **H20K** | **Anotleneega Mo** | **116.61** | **332** | P | | **PKiKP** | **13 43 32.0** | **+0.2** |
| | baz=109 | | | | | | | | |
| **F21K** | **Alatna River** | **116.65** | **334** | P | | **PKPdf** | **13 43 31.5** | **-0.3** |
| | baz=110 | | | | | | | | |
| **J18K** | **Innoko River** | **116.69** | **330** | P | | **PKPdf** | **13 43 31.8** | **-0.2** |
| | baz=109 | | | | | | | | |
| **D22K** | **Ayikyak River** | **116.93** | **336** | P | | **PKPdf** | **13 43 31.8** | **-0.5** |
| | baz=110 | | | | | | | | |
| **L17K** | **Donlin** | **116.96** | **328** | P | | **PKPdf** | **13 43 31.7** | **-0.8** |
| | baz=108 | | | | | | | | |
| **K17K** | **Iditarod** | **117.14** | **329** | P | | **PKPdf** | **13 43 32.2** | **-0.6** |
| | baz=108 | | | | | | | | |
| **N15K** | **Kwethluk River** | **117.19** | **326** | P | | **PKPdf** | **13 43 32.6** | **-0.4** |
| | baz=108 | | | | | | | | |
| **E21K** | **Killik River** | **117.23** | **336** | P | | **PKiKP** | **13 43 33.3** | **+0.4** |
| | baz=109 | | | | | | | | |
| **H19K** | **Roundabout Mou** | **117.24** | **332** | P | | **PKiKP** | **13 43 32.9** | **0.0** |
| | baz=108 | | | | | | | | |
| **FALS** | **False Pass** | **117.28** | **319** | P | | **PKiKP** | **13 43 33.3** | **0.0** |
| | baz=108 | | | | | | | | |
| **L16K** | **Owhat River** | **117.36** | **328** | P | | **PKiKP** | **13 43 33.6** | **+0.3** |
| | baz=107 | | | | | | | | |
| **G19K** | **Purcell Mounta** | **117.67** | **333** | P | | **PKPdf** | **13 43 32.8** | **-1.0** |
| | baz=107 | | | | | | | | |
| **J17K** | **VABM Dome** | **117.69** | **329** | P | | **PKPdf** | **13 43 33.5** | **-0.3** |
| | baz=107 | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **117.82** | **337** | P | | **PKiKP** | **13 43 33.9** | **0.0** |
| | baz=108 | | | | | | | | |
| **N14K** | **Kuskokwak Cree** | **117.88** | **325** | P | | **PKPdf** | **13 43 33.5** | **-0.7** |
| | baz=106 | | | | | | | | |
| **H18K** | **Honhosa River** | **117.89** | **331** | P | | **PKPdf** | **13 43 33.4** | **-0.9** |
| | baz=107 | | | | | | | | |
| **E20K** | **Nigu River** | **117.96** | **335** | P | | **PKPdf** | **13 43 33.5** | **-0.8** |
| | baz=107 | | | | | | | | |
| **L15K** | **Ungalak Mounta** | **118.27** | **327** | P | | **PKPdf** | **13 43 34.9** | **-0.1** |
| | baz=106 | | | | | | | | |
| **K15K** | **Wolf Creek Mou** | **118.46** | **328** | P | | **PKiKP** | **13 43 35.8** | **+0.4** |
| | baz=108 | | | | | | | | |
| **H17K** | **Granite Mounta** | **118.47** | **331** | P | | **PKPdf** | **13 43 34.6** | **-0.8** |
| | baz=105 | | | | | | | | |
| **D19K** | **Kuna River** | **118.71** | **335** | P | | **PKiKP** | **13 43 36.1** | **+0.3** |
| | baz=105 | | | | | | | | |
| **UNV** | **Unalaska Valle** | **118.72** | **318** | P | | **PKPdf** | **13 43 35.6** | **-0.5** |
| | baz=106 | | | | | | | | |
| **L14K** | **Kuka Creek** | **118.74** | **327** | P | | **PKiKP** | **13 43 35.9** | **0.0** |
| | baz=105 | | | | | | | | |
| **F18K** | **Selawik** | **118.79** | **333** | P | | **PKPdf** | **13 43 35.5** | **-0.4** |
| | baz=105 | | | | | | | | |
| **M13K** | **Dall Lake** | **118.81** | **326** | P | | **PKiKP** | **13 43 36.4** | **+0.3** |
| | baz=105 | | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **118.91** | **332** | P | | **PKPdf** | **13 43 35.7** | **-0.5** |
| | baz=104 | | | | | | | | |
| **E18K** | **Tukpahlearik C** | **119.36** | **334** | P | | **PKiKP** | **13 43 37.1** | **+0.1** |
| | baz=104 | | | | | | | | |
| **C19K** | **Lookout Ridge** | **119.38** | **336** | P | | **PKiKP** | **13 43 37.3** | **+0.2** |
| | baz=104 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **119.75** | **60** | PKP | | **PKPdf** | **13 43 38.2** | **-0.6** |
| | comp=Z,2.5nm,0.8s,baz=181,slow=3.5,SNR=13 | | | | | | | | |
| BRTR | | | | pPKP | | **pPKPdf** | **13 44 09.1** | **-0.5** |
| | comp=Z,1.0nm,0.7s,baz=155,slow=2.2,SNR=3.7 | | | | | | | | |
| **BR131** | **Keskin Array S** | **119.75** | **60** | *i* PKIKP | | **PKPdf** | **13 43 38.0** | **-0.8** |
| **ASAR** | **Alice Springs** | **119.79** | **206** | PKP | | **PKPdf** | **13 43 38.1** | **-1.2** |
| | comp=Z,2.1nm,0.7s,baz=139,slow=2.3,SNR=21 | | | | | | | | |
| ASAR | | | | pPKP | | **pPKPdf** | **13 44 07.7** | **-2.3** |
| | comp=Z,1.3nm,0.8s,baz=141,slow=2.2,SNR=5.3 | | | | | | | | |
| ASAR | | | | PKKPbc | | **PKKPbc** | **13 53 49.1** | **+0.3** |
| | comp=Z,1.9nm,0.7s,baz=332,slow=2.9,SNR=23 | | | | | | | | |
| **NIKH** | **Nikolski High** | **119.84** | **316** | P | | **PKiKP** | **13 43 38.4** | **0.0** |
| | baz=105 | | | | | | | | |
| **C18K** | **Utukok River** | **119.85** | **335** | P | | **PKiKP** | **13 43 38.1** | **+0.1** |
| | baz=102 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **119.96** | **46** | PKP | | **PKPdf** | **13 43 37.1** | **-1.4** |
| | comp=Z,4.9nm,0.8s,baz=264,slow=2.7,SNR=18 | | | | | | | | |
| AKASG | | | | pPKP | | **pPKPdf** | **13 44 08.4** | **-1.0** |
| | comp=Z,1.7nm,0.7s,baz=264,slow=2.7,SNR=2.8 | | | | | | | | |
| **AKBB** | **Malin Array Si** | **119.96** | **46***c* | *i* PKIKP | | **PKPdf** | **13 43 37.5** | **-1.1** |
| AKBB | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **A19K** | **Wainwright** | **120.12** | **337** | P | | **PKiKP** | **13 43 39.0** | **+0.6** |
| | baz=102 | | | | | | | | |
| **M11K** | **Mekoryuk** | **120.18** | **325** | P | | **PKPdf** | **13 43 38.2** | **-0.5** |
| | baz=103 | | | | | | | | |
| **B18K** | **Kokolik River** | **120.21** | **336** | P | | **PKPdf** | **13 43 38.4** | **-0.2** |
| | baz=101 | | | | | | | | |
| **D17K** | **Noatak River** | **120.35** | **334** | P | | **PKPdf** | **13 43 37.8** | **-1.1** |
| | baz=101 | | | | | | | | |
| **RDOG** | **Red Dog Mine** | **120.35** | **334** | P | | **PKiKP** | **13 43 39.1** | **+0.1** |
| | baz=101 | | | | | | | | |
| **VSU** | **Vasula** | **120.43** | **37***c* | *i* PKIKP | | **PKPdf** | **13 43 39.1** | **-0.1** |
| VSU | | | | pmax | | pmax | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **C17K** | **DeLong Mountai** | **120.53** | **335** | P | | **PKPdf** | **13 43 38.6** | **-0.6** |
| | baz=101 | | | | | | | | |
| **F15K** | **North Star Dit** | **120.58** | **331** | P | | **PKPdf** | **13 43 38.5** | **-0.9** |
| | baz=101 | | | | | | | | |
| **FINES** | **FINESS Array B** | **120.73** | **34** | PKP | | **PKPdf** | **13 43 39.5** | **-0.3** |
| | comp=Z,1.7nm,0.5s,baz=8.7,slow=2.5,SNR=5.9 | | | | | | | | |
| **P08K** | **Saint George I** | **121.08** | **320** | P | | **PKPdf** | **13 43 39.7** | **-0.8** |
| | baz=102 | | | | | | | | |
| **F14K** | **Arctic Creek** | **121.22** | **331** | P | | **PKPdf** | **13 43 40.2** | **-0.4** |
| | baz=100 | | | | | | | | |
| **C16K** | **Lisburne Hills** | **121.28** | **334** | P | | **PKPdf** | **13 43 40.0** | **-0.6** |
| | baz=99 | | | | | | | | |
| **SPIA** | **Saint Paul Isl** | **121.58** | **321** | P | | **PKPdf** | **13 43 40.3** | **-1.2** |
| | baz=101 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **121.81** | **24** | PKP | | **PKPdf** | **13 43 40.4** | **-1.2** |
| | comp=Z,2.1nm,0.7s,baz=262,slow=3.7,SNR=5.0 | | | | | | | | |
| ARCES | | | | PKKPbc | | **PKKPbc** | **13 53 41.5** | **-0.7** |
| | comp=Z,0.9nm,0.6s,baz=72,slow=3.9,SNR=4.8 | | | | | | | | |
| **TNA** | **Tin City** | **121.89** | **331** | P | | **PKPdf** | **13 43 41.8** | **0.0** |
| | baz=98 | | | | | | | | |
| **WR0** | **Warramunga Arr** | **122.90** | **208** | PKPdf | | **PKPdf** | **13 43 44.6** | **-0.7** |
| **WB2** | **Warramunga Arr** | **123.00** | **208** | PKPdf | | **PKPdf** | **13 43 44.8** | **-0.7** |
| **WRA** | **Warramunga Arr** | **123.00** | **208** | PKP | | **PKPdf** | **13 43 45.1** | **-0.5** |
| | comp=Z,5.3nm,0.7s,baz=165,slow=1.6,SNR=71 | | | | | | | | |
| WRA | | | | pPKP | | **pPKPdf** | **13 44 13.7** | **-2.5** |
| | comp=Z,3.0nm,0.9s,baz=156,slow=1.6,SNR=4.4 | | | | | | | | |
| WRA | | | | PKKPbc | | **PKKPbc** | **13 53 37.0** | **+0.2** |
| | comp=Z,1.1nm,0.6s,baz=344,slow=4.4,SNR=14 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **123.00** | **208** | PKPdf | | **PKPdf** | **13 43 45.2** | **-0.3** |
| **WRAB** | **Tennant Creek** | **123.00** | **208** | ⇑ *i* PKIKP | | **PKPdf** | **13 43 45.2** | **-0.3** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **WB0** | **Warramunga Arr** | **123.14** | **208** | PKPdf | | **PKPdf** | **13 43 44.9** | **-0.9** |
| **COEN** | **Coen** | **123.97** | **220** | PKPdf | | **PKiKP** | **13 43 48.0** | **+0.2** |
| **OBN** | **Obninsk** | **125.18** | **42** | ⇑ *i* PKIKP | | **PKPdf** | **13 43 47.7** | **-0.7** |
| OBN | | | | *e* | | | 13 44 17.6 | |
| OBN | | | | *e* | | | 13 45 39.3 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **127.16** | **270** | T | | T | 16 03 31.0 | | |
| | baz=118,slow=75,SNR=214 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **127.18** | **270** | T | | T | 16 03 30.0 | | |
| | baz=118,slow=75,SNR=283 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **127.18** | **270** | T | | T | 16 03 27.5 | | |
| | baz=118,slow=75,SNR=175 | | | | | | | | |
| **SHA1** | **Shidzhatmaz** | **127.30** | **57** | ⇑ *i* PKIKP | | **PKiKP** | **13 43 53.8** | **0.0** |
| **KIV** | **Kislovodsk** | **127.36** | **57** | *e* PKIKP | | **PKiKP** | **13 43 53.6** | **-0.1** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **KBZ** | **Khabaz** | **127.47** | **57** | PKP | | **PKiKP** | **13 43 53.9** | **+0.1** |
| | comp=Z,3.7nm,0.9s,baz=360,slow=1.9,SNR=5.6 | | | | | | | | |
| **KBZ** | **Khabaz** | **127.47** | **57***c* | *i* PKIKP | | **PKPdf** | **13 43 53.2** | **0.0** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **127.68** | **199** | PKPdf | | **PKPdf** | **13 43 54.5** | **+0.1** |
| **BELG** | **Belogornoye** | **131.54** | **46***c* | *i* PKIKP | | **PKiKP** | **13 44 01.2** | **-0.4** |
| BELG | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **BILL** | **Bilibino** | **131.80** | **335** | ⇓ *i* PKIKP | | **PKPdf** | **13 44 01.1** | **+0.4** |
| BILL | | | | *e* | | | 13 46 25.7 | | |
| BILL | | | | *e* | | | 13 51 05.3 | | |
| BILL | | | | *e* SSS | | SSS | 14 08 45.9 | | |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **KIRV** | **Kirov** | **132.26** | **38***c* | *i* PKIKP | | **PKiKP** | **13 44 03.2** | **+0.3** |
| **ARU** | **Arti** | **137.48** | **40** | PKPdf | | **PKPdf** | **13 44 12.5** | **+0.8** |
| **ARU** | **Arti** | **137.48** | **40** | *i* PKIKP | | **PKiKP** | **13 44 12.9** | **-0.7** |
| **SEY** | **Seymchan** | **139.12** | **332** | *i* PKIKP | | **PKPdf** | **13 44 14.1** | **-0.4** |
| SEY | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **139.48** | **50** | | | **PKPdf** | **13 44 16.3** | **+0.8** |
| **PEA0B** | **Petropavlovsk-** | **139.85** | **316***c* | *i* PKIKP | | **PKPdf** | **13 44 14.9** | **-1.2** |
| **PETK** | **Petropavlovsk-** | **139.85** | **316** | PKhKP | | PKPpre | 13 44 08.7 | | |
| | comp=Z,3.3nm,0.7s,baz=107,slow=5.0,SNR=4.6 | | | | | | | | |
| PETK | | | | PKP | | **PKPdf** | **13 44 17.2** | **+1.0** |
| | comp=Z,9.4nm,0.9s,baz=106,slow=3.7,SNR=9.4 | | | | | | | | |
| **LUWI** | **Luwuk** | **144.67** | **203** | PKPdf | | **PKPdf** | **13 44 25.3** | **-0.6** |
| **BRVK** | **Borovoye** | **144.95** | **42** | | | **PKPdf** | **13 44 25.7** | **+0.5** |
| **BRVK** | **Borovoye** | **144.95** | **42** | PKIKP | | **PKPdf** | **13 44 25.7** | **+0.5** |
| **BVAR** | **Borovoye Array** | **145.03** | **42** | PKPbc | | **PKPdf** | **13 44 26.1** | **+0.8** |
| | comp=Z,46nm,0.7s,baz=295,slow=3.2,SNR=188 | | | | | | | | |
| BVAR | | | | pPKPbc | | **pPKPdf** | **13 44 56.7** | **+0.5** |
| | comp=Z,10nm,0.6s,baz=283,slow=2.8,SNR=3.6 | | | | | | | | |
| **KBL** | **Kabul** | **146.21** | **75** | PKPdf | | **PKPdf** | **13 44 28.4** | **+0.2** |
| **KBL** | **Kabul** | **146.21** | **75** | PKIKP | | **PKPdf** | **13 44 28.4** | **+0.2** |
| **SIMJ** | **Simiganj** | **146.51** | **67** | PKPdf | | **PKPbc** | **13 44 29.4** | **-0.8** |
| **CHGR** | **Chuyangaron** | **146.62** | **67** | PKPdf | | **PKPbc** | **13 44 29.8** | **-0.6** |
| **CHGR** | **Chuyangaron** | **146.62** | **67** | PKP2 | | **PKPbc** | **13 44 29.8** | **-0.6** |
| **TOLI2** | **Tolitoli** | **147.33** | **201** | | | **PKPbc** | **13 44 31.7** | **-1.2** |
| **KK31** | **Karatay Array** | **147.46** | **59** | PKPdf | | **PKPdf** | **13 44 30.1** | **+0.3** |
| **KK31** | **Karatay Array** | **147.46** | **59** | *i* PKIKP | | **PKPdf** | **13 44 30.8** | **+1.0** |
| **KKAR** | **Karatay Array** | **147.46** | **59** | PKPdf | | **PKPdf** | **13 44 30.3** | **+0.5** |
| **KKAR** | **Karatay Array** | **147.46** | **59** | PKIKP | | **PKPdf** | **13 44 30.3** | **+0.5** |
| **YAK** | **Yakutsk** | **147.46** | **342** | PKPdf | | **PKPdf** | **13 44 30.0** | **+0.9** |
| **YAK** | **Yakutsk** | **147.46** | **342** | *e* PKP2 | | **PKPbc** | **13 44 31.5** | **-0.3** |
| YAK | | | | *e* | | | 13 48 01.6 | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,112nm,0.8s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=N,9.0nm,0.9s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=E,7.0nm,0.9s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,41nm,2.8s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=N,27nm,2.6s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=E,29nm,2.7s | | | | | | | | |
| **GAR** | **Garm** | **147.53** | **67** | PKPdf | | **PKPdf** | **13 44 31.3** | **+1.1** |
| **BTK** | **Batken** | **147.91** | **65** | PKPdf | | **PKPdf** | **13 44 31.3** | **+0.5** |
| **BTK** | **Batken** | **147.91** | **65** | PKIKP | | **PKPdf** | **13 44 31.3** | **+0.5** |
| **HYB** | **Hyderabad** | **148.35** | **110** | *e* PKPdf | | **PKPdf** | **13 44 32.0** | **-0.1** |
| HYB | | | | *e* PKPbc | | **PKPbc** | **13 44 35.6** | **0.0** |
| **NIL** | **Nilore** | **149.55** | **77** | PKPdf | | **PKPdf** | **13 44 32.9** | **-0.7** |
| NIL | | | | PKPbc | | **PKPbc** | **13 44 38.2** | **0.0** |
| NIL | | | | PKPab | | **PKPab** | **13 44 43.5** | **-0.1** |
| **NIL** | **Nilore** | **149.55** | **77** | PKP2 | | **PKPab** | **13 44 43.5** | **-0.1** |
| **BTLS** | **Baital** | **149.65** | **55** | *e* PKPbc | | **PKiKP** | **13 44 38.7** | **-0.3** |
| | baz=55 | | | | | | | | |
| **BTLS** | **Baital** | **149.65** | **55** | *e* PKP2 | | **PKiKP** | **13 44 38.7** | **-0.3** |
| **EKS2** | **Erkin-Say** | **149.90** | **59** | P | | **PKiKP** | **13 44 39.9** | **+0.1** |
| | SNR=14 | | | | | | | | |
| **AML** | **Almayashu** | **149.91** | **60** | P | | **PKiKP** | **13 44 40.4** | **+0.3** |
| | SNR=7.8 | | | | | | | | |
| **SBUM** | **Sibu** | **150.31** | **185** | PKPdf | | **PKPdf** | **13 44 34.6** | **-0.7** |
| SBUM | | | | | | **PKPbc** | **13 44 40.6** | **0.0** |
| SBUM | | | | PKPab | | **PKPab** | **13 44 48.3** | **+1.3** |
| **USP** | **Ospenovka** | **150.32** | **58** | P | | **PKiKP** | **13 44 40.6** | **+0.1** |
| | SNR=20 | | | | | | | | |
| **SGDS** | **Sogindy** | **150.38** | **58** | *e* PKPbc | | **PKiKP** | **13 44 40.4** | **-0.3** |
| | baz=58 | | | | | | | | |
| **SGDS** | **Sogindy** | **150.38** | **58** | *e* PKIKP | | **PKiKP** | **13 44 40.4** | **-0.3** |
| **AAK** | **Ala-Archa** | **150.42** | **59** | P | | **PKiKP** | **13 44 41.3** | **+0.4** |
| | SNR=29 | | | | | | | | |
| **AAK** | **Ala-Archa** | **150.42** | **59** | PKPdf | | **PKPdf** | **13 44 35.5** | **+0.7** |
| AAK | | | | PKPbc | | **PKiKP** | **13 44 41.3** | **+0.4** |
| **AAK** | **Ala-Archa** | **150.42** | **59** | PKIKP | | **PKPdf** | **13 44 35.5** | **+0.7** |
| **UCH** | **Uchtor** | **150.50** | **60** | P | | **PKiKP** | **13 44 42.1** | **+0.7** |
| | SNR=7.7 | | | | | | | | |
| **CHMS** | **Chumysh** | **150.55** | **58** | P | | **PKiKP** | **13 44 41.2** | **+0.3** |
| | SNR=10 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.62** | **42** | PKP | | **PKPdf** | **13 44 35.4** | **+0.8** |
| | comp=E,47nm,0.7s,baz=300,slow=2.9,SNR=36 | | | | | | | | |
| KURBB | | | | PKPbc | | **PKiKP** | **13 44 40.9** | **+0.1** |
| | comp=E,44nm,0.7s,baz=296,slow=2.9,SNR=174 | | | | | | | | |
| KURBB | | | | pPKPbc | | **pPKPbc** | **13 45 11.4** | **+0.6** |
| | comp=E,9.4nm,0.6s,baz=300,slow=3.0,SNR=3.5 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **150.62** | **42** | PKIKP | | **PKPbc** | **13 44 39.4** | **-0.7** |
| **KURK** | **Kurchatov** | **150.62** | **42** | PKPdf | | **PKPdf** | **13 44 35.3** | **+0.8** |
| KURK | | | | PKPbc | | **PKiKP** | **13 44 40.7** | **-0.1** |
| KURK | | | | PKPab | | **PKPab** | **13 44 48.9** | **+1.5** |
| **KURK** | **Kurchatov** | **150.62** | **42** | PKIKP | | **PKPdf** | **13 44 35.4** | **+0.8** |
| KURK | | | | | | | 13 45 11.4 | | |
| **KBK** | **Karagaybulak** | **150.75** | **59** | P | | **PKiKP** | **13 44 41.9** | **+0.3** |
| | SNR=9.2 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **150.75** | **310** | *e* PKIKP | | **PKPbc** | **13 44 40.8** | **+0.2** |
| YSS | | | | *e* | | | 13 44 48.2 | | |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,40nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **151.18** | **58** | P | | **PKPdf** | **13 44 36.2** | **+0.2** |
| | SNR=6.1 | | | | | | | | |
| **ERM** | **Erimo** | **151.65** | **300***c* | *i* PKIKP | | **PKPdf** | **13 44 34.5** | **-1.9** |
| ERM | | | | pmax | | pmax | | | |
| | comp=Z,50nm,2.5s | | | | | | | | |
| **SEM** | **Semipalatinsk** | **151.69** | **41** | *e* PKPbc | | **PKiKP** | **13 44 43.1** | **-0.2** |
| | baz=41 | | | | | | | | |
| **SEM** | **Semipalatinsk** | **151.69** | **41** | *e* PKIKP | | **PKiKP** | **13 44 43.1** | **-0.2** |
| **NRN** | **Naryn** | **151.71** | **61** | PKPdf | | **PKPdf** | **13 44 37.7** | **+0.7** |
| NRN | | | | PKPbc | | **PKiKP** | **13 44 44.1** | **+0.3** |
| NRN | | | | PKPab | | **PKPab** | **13 44 53.4** | **+0.7** |
| **ULHL** | **Ulahol** | **151.76** | **60** | P | | **PKiKP** | **13 44 44.4** | **+0.6** |
| | SNR=13 | | | | | | | | |
| **KSH** | **Kashi** | **151.90** | **65** | PKPbc | | **PKPdf** | **13 44 38.3** | **+1.2** |
| KSH | | | | sPKP | | | 13 45 14.3 | | |
| **ZAA0** | **Zalesovo Array** | **151.97** | **32** | PKPdf | | **PKPdf** | **13 44 36.8** | **+0.2** |
| ZAA0 | | | | PKPbc | | **PKiKP** | **13 44 43.6** | **+0.1** |
| ZAA0 | | | | PKPab | | **PKPab** | **13 44 53.5** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **151.97** | **32** | PKP | | **PKPdf** | **13 44 36.6** | **+0.1** |
| | comp=Z,3.7nm,0.7s,baz=249,slow=2.3,SNR=14 | | | | | | | | |
| ZALV | | | | PKPbc | | **PKiKP** | **13 44 43.3** | **-0.1** |
| | comp=Z,86nm,0.6s,baz=305,slow=3.1,SNR=190 | | | | | | | | |
| ZALV | | | | pPKPbc | | **pPKPbc** | **13 45 14.7** | **+0.8** |
| | comp=Z,32nm,0.7s,baz=297,slow=3.0,SNR=4.9 | | | | | | | | |
| **CHKK** | **Chushkaly** | **151.97** | **56** | *e* PKPbc | | **PKiKP** | **13 44 44.0** | **+0.1** |
| | baz=56 | | | | | | | | |
| CHKK | | | | *e* PKPab | | **PKPab** | **13 44 53.2** | **-0.1** |
| | baz=56 | | | | | | | | |
| **CHKK** | **Chushkaly** | **151.97** | **56** | *e* PKIKP | | **PKiKP** | **13 44 43.9** | **+0.1** |
| **TNSS** | **Tian-Shan** | **152.13** | **58** | *e* PKPbc | | **PKiKP** | **13 44 45.0** | **+0.2** |
| | baz=58 | | | | | | | | |
| **TNSS** | **Tian-Shan** | **152.13** | **58** | *e* PKIKP | | **PKiKP** | **13 44 44.9** | **+0.2** |
| **MDOK** | **Medeo** | **152.17** | **57** | *e* PKPbc | | **PKiKP** | **13 44 44.7** | **+0.2** |
| | baz=58 | | | | | | | | |
| **MDOK** | **Medeo** | **152.17** | **57** | *e* PKIKP | | **PKiKP** | **13 44 44.6** | **+0.2** |
| **TARG** | **Taragay, Kyrgy** | **153.00** | **60** | PKPdf | | **PKPdf** | **13 44 38.5** | **-0.5** |
| TARG | | | | | | **PKiKP** | **13 44 46.5** | **-0.1** |
| TARG | | | | PKPab | | **PKPab** | **13 44 58.2** | **0.0** |
| **TARG** | **Taragay, Kyrgy** | **153.00** | **60** | PKIKP | | **PKiKP** | **13 44 46.5** | **-0.1** |
| TARG | | | | | | | 13 44 58.2 | | |
| **SATY** | **Saty** | **153.16** | **57** | *e* PKPab | | **PKPab** | **13 44 58.4** | **-0.1** |
| | baz=57 | | | | | | | | |
| **KPKS** | **Kokpek** | **153.26** | **56** | *e* PKPab | | **PKPab** | **13 44 59.0** | **+0.1** |
| | baz=56 | | | | | | | | |
| **PRZ** | **Przheval'sk** | **153.29** | **58** | PKPdf | | **PKPdf** | **13 44 39.8** | **+0.7** |
| PRZ | | | | | | **PKiKP** | **13 44 47.8** | **+0.9** |
| PRZ | | | | PKPab | | **PKPab** | **13 44 59.9** | **+0.8** |
| **PRZ** | **Przheval'sk** | **153.29** | **58** | PKIKP | | **PKiKP** | **13 44 47.8** | **+0.9** |
| PRZ | | | | | | | 13 44 59.9 | | |
| **UZB** | **Uzynbulak** | **153.58** | **57** | *e* PKPab | | **PKPab** | **13 44 59.9** | **-0.4** |
| | baz=57 | | | | | | | | |
| **SHLS** | **Shalkode** | **153.89** | **57** | *e* PKPab | | **PKPab** | **13 45 03.4** | **+1.8** |
| | baz=56 | | | | | | | | |
| **SHLS** | **Shalkode** | **153.89** | **57** | *e* PKP2 | | **PKPab** | **13 45 03.3** | **+1.8** |
| **MAKZ** | **Makanchi** | **154.34** | **47** | PKPdf | | **PKPdf** | **13 44 39.9** | **-0.3** |
| MAKZ | | | | PKPbc | | **PKiKP** | **13 44 48.9** | **+0.3** |
| MAKZ | | | | PKPab | | **PKPab** | **13 45 02.9** | **-0.3** |
| **MAKZ** | **Makanchi** | **154.34** | **47** | PKIKP | | **PKPdf** | **13 44 39.9** | **-0.3** |
| MAKZ | | | | | | | 13 45 02.9 | | |
| **MK31** | **Makanchi Array** | **154.54** | **47** | PKPdf | | **PKPdf** | **13 44 39.6** | **-1.0** |
| MK31 | | | | PKPbc | | **PKiKP** | **13 44 49.1** | **0.0** |
| MK31 | | | | PKPab | | **PKPab** | **13 45 03.9** | **-0.2** |
| **MK31** | **Makanchi Array** | **154.54** | **47***c* | *i* PKIKP | | **PKPdf** | **13 44 38.5** | **-2.0** |
| **MKAR** | **Makanchi Array** | **154.54** | **47** | PKP | | **PKPdf** | **13 44 41.3** | **+0.8** |
| | comp=Z,2.2nm,0.8s,baz=298,slow=2.6,SNR=10 | | | | | | | | |
| MKAR | | | | PKPbc | | **PKiKP** | **13 44 49.3** | **+0.2** |
| | comp=Z,5.6nm,0.8s,baz=8.7,slow=1.6,SNR=3.7 | | | | | | | | |
| MKAR | | | | PKPab | | **PKPab** | **13 45 04.2** | **+0.1** |
| | comp=Z,10nm,0.7s,baz=305,slow=4.3,SNR=20 | | | | | | | | |
| **ZEA** | **Zeya** | **155.02** | **335** | *e* PKIKP | | **PKPdf** | **13 44 40.8** | **-0.1** |
| ZEA | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **ZSN** | **Zaisan** | **155.79** | **44** | *e* PKPab | | **PKPab** | **13 45 10.4** | **+1.0** |
| | baz=44 | | | | | | | | |
| **ZSN** | **Zaisan** | **155.79** | **44** | *e* PKP2 | | **PKPab** | **13 45 10.4** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **156.03** | **288** | PKP | | **PKPdf** | **13 44 42.6** | **-0.3** |
| | comp=Z,1.8nm,0.8s,baz=132,slow=1.8,SNR=4.4 | | | | | | | | |
| MJAR | | | | PKPab | | **pPKPdf** | **13 45 12.4** | **-1.0** |
| | comp=Z,10.0nm,0.9s,baz=105,slow=2.8,SNR=13 | | | | | | | | |
| **KLR** | **Kul'dur** | **156.23** | **322** | *e* PKIKP | | **PKPdf** | **13 44 41.5** | **-1.2** |
| KLR | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.6s | | | | | | | | |
| **HEH** | **HeiHe** | **157.63** | **329** | PKP | | **PKPdf** | **13 44 46.3** | **+1.9** |
| HEH | | | | pPKP | | **PKPab** | **13 45 16.5** | **-0.6** |
| HEH | | | | PP | | **PP** | **13 48 57.0** | **+0.4** |
| HEH | | | | AMB | | AMB | | | |
| | comp=Z,110nm,5.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **158.78** | **311** | PKPab | | **PKPab** | **13 45 20.6** | **-1.7** |
| | comp=Z,7.1nm,0.9s,baz=64,slow=9.8,SNR=6.5 | | | | | | | | |
| **WMQ** | **Urumqi** | **159.27** | **50** | *e* PKP | | **PKPdf** | **13 44 46.3** | **-0.4** |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,2μm,16.3s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,1μm,12.7s | | | | | | | | |
| WMQ | | | | LR | | LR | | | |
| | comp=Z,800nm,17.3s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **160.08** | **314** | PKP | | **PKPdf** | **13 44 48.0** | **+0.5** |
| MDJ | | | | AMB | | AMB | | | |
| | comp=Z,110nm,3.7s | | | | | | | | |
| **BNX** | **BinXian** | **160.70** | **320** | ⇑ P | | **PKPab** | **13 45 32.0** | **+1.4** |
| BNX | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **ZAK** | **Zakamensk** | **161.23** | **13** | *e* PKP2 | | **PKPab** | **13 45 32.8** | **-0.1** |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.4s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **163.29** | **142** | PKP | | **PKPdf** | **13 44 51.2** | **-0.4** |
| | comp=Z,1.5nm,0.8s,baz=229,slow=2.9,SNR=8.7 | | | | | | | | |
| CMAR | | | | pPKP | | **pPKPdf** | **13 45 20.9** | **-1.6** |
| | comp=Z,1.8nm,0.9s,baz=249,slow=2.5,SNR=2.3 | | | | | | | | |
| CMAR | | | | PKPab | | **PKPab** | **13 45 42.6** | **0.0** |
| | comp=Z,1.7nm,0.7s,baz=236,slow=4.3,SNR=4.6 | | | | | | | | |
| **KSRS** | **Korea Array** | **164.07** | **294** | PKP | | **PKPdf** | **13 44 51.5** | **-0.3** |
| | comp=Z,2.1nm,0.8s,baz=162,slow=0.5,SNR=8.9 | | | | | | | | |
| KSRS | | | | PKPab | | **PKPab**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WRA | | | PcP | PcP | 14 24 16.2 | +0.1 |
| | 0.2nm,0.5s,baz=39,slow=2.0,SNR=4.9 | | | | | |
| | 0.5nm,0.4s | | | | | |
| **ASAR** | **Alice Springs** | **24.16 221** | P | P | 14 20 41.8 | -0.1 |
| | 0.6nm,0.7s,baz=58,slow=9.1,SNR=10 | | | | | |
| | 0.6nm,0.7s | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.84 286** | PKPbc | PKPbc | 14 35 12.6 | -0.6 |
| | 1.2nm,0.5s,baz=56,slow=2.4,SNR=9.3 | | | | | |

*IDC* ***31*** *14:33:59.1±2.2,11˚.17S×123˚.75E,h0km,mb3.8/2, mbtmp3.9/5,ML3.7/3,MS3.4/2,Error ellipse: s-maj=186.8km s-min=28.6km az=52.0*

*DJA* ***31*** *14:34:03.5±0.9,11˚.5±.5˚×12˚.4E±˚,h12km±6km,M4.0/8, mb4.5/2,MLv3.9/8*

**ISC 31 14:34:03.7±0.9,11˚.03S±0˚.08×124˚.3E±0˚.1,h35km,n12, σ1§73/14,South of Timor**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **BATI** | **Baumata** | **1.02** | **323** | P | | **Pn** | **14 34 19.3** | **-2.2** |
| BATI | | | | S | | Sn | 14 34 19.4 | -15 |
| **SOEI** | **Soe** | **1.27** | **359** | P | | **Pn** | **14 34 28.8** | **-1.2** |
| SOEI | | | | S | | **Sn** | **14 34 42.9** | **+2.0** |
| **MMRI** | **Maumere** | **3.12** | **320** | P | | **Pn** | **14 34 51.3** | **+0.9** |
| **EDFI** | **Ende, Flores** | **3.42** | **311** | P | | **Pn** | **14 34 53.3** | **-1.3** |
| **WBSI** | **Waikabubak, Su** | **5.01** | **286** | P | | **Pn** | **14 35 16.3** | **-0.1** |
| **BKSI** | **Bulukumba** | **7.01** | **324** | P | | **Pn** | **14 35 43.7** | **-0.2** |
| | 23nm,0.8s,0.1nm | | | | | | | |
| **KAPI** | **Kappang** | **7.47** | **323** | Pn | | **Pn** | **14 35 47.4** | **-2.9** |
| | 2.0nm,0.3s,baz=144,slow=18,SNR=1.8 | | | | | | | |
| KAPI | | | | LR | | LR | 14 39 02.6 | |
| | comp=Z,110nm,20.3s,baz=138,slow=42 | | | | | | | |
| | 4.8nm,0.3s | | | | | | | |
| **WRA** | **Warrannunga Arr** | **13.12** | **134** | Pn | | **Pn** | **14 37 09.7** | **+2.0** |
| | 0.3nm,0.3s,baz=302,slow=14,SNR=45 | | | | | | | |
| WRA | | | | Sn | | **Sn** | **14 39 30.0** | **-2.5** |
| | 0.2nm,0.3s,baz=304,slow=21,SNR=2.9 | | | | | | | |
| | 1.4nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **15.55** | **145** | Pn | | **P** | **14 37 44.0** | **-0.5** |
| | 0.3nm,0.3s,baz=320,slow=12,SNR=31 | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **14 40 31.6** | **-0.1** |
| | 0.2nm,0.3s,baz=317,slow=21,SNR=6.8 | | | | | | | |
| | 2.9nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.70** | **330** | P | | **P** | **14 45 03.3** | **-0.4** |
| | 0.4nm,0.7s,baz=148,slow=7.0,SNR=4.6 | | | | | | | |
| | 0.4nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.86** | **337** | P | | **P** | **14 45 29.6** | **+0.8** |
| | 1.4nm,0.9s,baz=120,slow=5.7,SNR=3.8 | | | | | | | |
| | 1.4nm,0.9s | | | | | | | |
| **GNI** | **Garni** | **89.17** | **311** | LR | | LR | 15 30 49.3 | |
| | comp=Z,47nm,21.4s,baz=80,slow=38 | | | | | | | |

*BGR* ***31*** *14:40:19.1,14˚.27N×120˚.77E,h33km,mb5.4,mB_BB5.7, Ms4.5*

*MOS* ***31*** *14:40:26.9±1.0,13˚.57N×120˚.85E,h141km,mb5.2/63, MS4.6/12,Error ellipse: s-maj=7.6km s-min=3.8km az=116.2*

*MAN* ***31*** *14:40:27.3,13˚.58N×120˚.72E,h110km,mb5.9,ML5.0, MS5.5*

*MAN INTENSITY IV - ABRA DE ILOG OCCIDENTAL MINDORO; PUERTO GALERA ORIENTAL MINDORO; INTENSITY III - LOOC LUBANG MAMBURAO SABLAYAN AND SANTA CRUZ OCCIDENTAL MINDORO; BACO AND SAN TEODORO ORIENTAL MINDORO;; INTENSITY II - PASIG CITY; QUEZON CITY; CALAPAN CITY; GLORIA NAUJAN POLA ROXAS AND SOCORRO ORIENTAL MINDORO; INTENSITY I - MANILA CITY; MUNTINLUPA CITY; PASAY CITY; TAGAYTAY CITY.*

*NEIC* ***31*** *14:40:27.5±1.9,13˚.56N±0˚.06×120˚.84E±0˚.09, h116km±3km,mb5.5/112,Mww5.5/63,Error ellipse: s-maj=11.9km s-min=9.4km az=88.0*

*BJI* ***31*** *14:40:27.4±0.0,13˚.61N×120˚.98E,h148km,mb5.3/80, mB5.6/66*

*NEIC* ***31*** *14:40:27.3,13˚.56N×120˚.80E,h120km*

*NEIC* ***31*** *14:40:27.3,13˚.66N×121˚.00E,h120km,Moment Tensor Solution. Duration: ≥1.0 Moment tensor: Scale 10¹⁷ Nm; Mrr1.91; Mθθ-1.19; Mϕϕ-0.72; Mrθ1.20; Mθϕ0.74; Mϕr-0.16; Fault plane solution: Mo2.18000×10¹⁷ NP1: ϕs112.04000°,δ61.52000°,λ77.61000°. NP2: ϕs316.77000°,δ30.85000°,λ111.58000°. Principal axes: T 2.3250, Plg71.0000°, Azm355.0000°; N -0.2921, Plg11.0000°, Azm118.0000°; P -2.0329, Plg16.0000°, Azm211.0000°;*

*GCMT* ***31*** *14:40:28.5±0.1,13˚.61N±0˚.01×120˚.74E±0˚.01, h131km,MW5.5/156,Moment Tensor Solution. s139,c235; s156,c316; Duration: 1§4 Moment tensor: Scale 10¹⁷Nm; Mrr1.79±.02; Mθθ-1.07±.03; Mϕϕ-0.71±.03; Mrθ1.51±.02; Mθϕ1.23±.03; Mϕr0.05±.02; Best double couple: Mo2.49400×10¹⁷ NP1:ϕs107.00000°,δ64.00000°, λ65.00000°. NP2:ϕs334.00000°,δ35.00000°,λ131.00000°. Principal axes: T 2.5350, Plg62.0000°, Azm338.0000°; N -0.0770, Plg22.0000°, Azm118.0000°; P -2.4530, Plg16.0000°, Azm215.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

*DJA* ***31*** *14:40:29.1±0.5,14˚N±.3˚×12˚.1E±˚,h114km±8km,M5.0/27, mB5.5/25,mb5.3/27,Mw(mB)5.0/25,MwMwp5.2/15, Mwp5.4/15*

*IPGP* ***31*** *14:40:29.0,13˚.56N×120˚.90E,h122km,Mw5.6,Fault plane solution: NP1:ϕs105.00000°,δ65.00000°, λ60.00000°. NP2:ϕs339.00000°,δ38.00000°,λ137.00000°.*

*IDC* ***31*** *14:40:30.5±1.5,13˚.51N×120˚.91E,h160km±13km, mb4.5/32,mbtmp4.9/34,MS4.2/37,Error ellipse: s-maj=11.0km s-min=6.3km az=70.0*

**ISC 31 14:40:27.1±0.2,13˚.57N±0˚.02×120˚.76E±0˚.03,h124km±1km, h124km:pP-P,n1159,σ1§45/1282,mb5.2/244,80C-65D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **PGP** | **Puerto Galera** | **0.19** | **109** | *e*P | | **Pn** | **14 40 41.9** | **-2.3** |
| PGP | | | | *i* S | | **Sn** | **14 40 54.2** | **-2.9** |
| **TGY** | **Tagaytay City** | **0.56** | **17** | *e*P | | **Pn** | **14 40 46.3** | **+0.3** |
| TGY | | | | eS | | **Sn** | **14 41 01.2** | **+1.1** |
| **MACP** | **Maragondon, Ca** | **0.69** | **356** | *e*P | | **Pn** | **14 40 46.4** | **-0.5** |
| MACP | | | | eS | | **Sn** | **14 41 01.3** | **-0.4** |
| **LBLP** | **Los Banos, Lag** | **0.74** | **36** | *i*P | | **Pn** | **14 40 47.4** | **+0.2** |
| LBLP | | | | eS | | **Sn** | **14 41 02.8** | **+0.5** |
| **LQP** | **Lukban** | **0.93** | **54** | *e*P | | **Pn** | **14 40 49.4** | **+0.4** |
| LQP | | | | *i* S | | **Sn** | **14 41 07.0** | **+1.4** |
| **QVP** | **Quezon City--P** | **1.08** | **12** | *e*P | | **Pn** | **14 40 51.0** | **+0.8** |
| QVP | | | | eS | | **Sn** | **14 41 09.6** | **+1.9** |
| **SJMP** | **San Jose** | **1.15** | **162** | *i*P | | **Pn** | **14 40 50.6** | **-0.4** |
| SJMP | | | | eS | | **Sn** | **14 41 09.2** | **+0.1** |
| **ABPP** | **Abucay Bataan** | **1.21** | **345** | *e*P | | **Pn** | **14 40 51.4** | **-0.3** |
| ABPP | | | | eS | | **Sn** | **14 41 09.3** | **-0.9** |
| **RTBP** | **Dona Remedios** | **1.43** | **12** | *i*P | | **Pn** | **14 40 53.7** | **-0.3** |
| RTBP | | | | eS | | **Sn** | **14 41 14.1** | **-0.4** |
| **GQP** | **Guinayangan** | **1.67** | **78** | *e*P | | **Pn** | **14 40 57.7** | **+0.9** |
| GQP | | | | eS | | **Sn** | **14 41 21.4** | **+2.0** |
| **OTRP** | **Odiongan** | **1.71** | **134** | *e*P | | **Pn** | **14 40 57.0** | **-0.3** |
| **IBZP** | **Iba, Zambales** | **1.96** | **339** | *e*P | | **Pn** | **14 40 59.4** | **-0.9** |
| IBZP | | | | eS | | **Sn** | **14 41 25.1** | **-0.6** |
| **JCNP** | **Jose Panganiba** | **2.01** | **69** | *e*P | | **Pn** | **14 41 01.6** | **+0.8** |
| JCNP | | | | eS | | **Sn** | **14 41 27.1** | **+0.4** |
| **BALP** | **Baler** | **2.30** | **20** | *e*P | | **Pn** | **14 41 05.7** | **+1.2** |
| BALP | | | | eS | | **Sn** | **14 41 37.4** | **+4.1** |
| **SMPP** | **San Manuel, Pa** | **2.57** | **358** | *e*P | | **Pn** | **14 41 08.2** | **+0.2** |
| SMPP | | | | eS | | **Sn** | **14 41 40.1** | **+0.7** |
| **SCSP** | **San Jose Seism** | **2.68** | **88** | *e*P | | **Pn** | **14 41 10.1** | **+0.7** |
| SCSP | | | | eS | | **Sn** | **14 41 44.6** | **+2.7** |
| **ENPP** | **El Nido** | **2.69** | **209** | *e*P | | **Pn** | **14 41 09.5** | **0.0** |
| ENPP | | | | eS | | **Sn** | **14 41 38.9** | **-3.2** |
| **RCP** | **Roxas** | **2.78** | **136** | *e*P | | **Pn** | **14 41 11.4** | **+0.7** |
| RCP | | | | *i* S | | **Sn** | **14 41 46.7** | **+2.5** |
| **CAAP** | **Casiguran, Aur** | **2.90** | **25** | *e*P | | **Pn** | **14 41 12.7** | **+0.4** |
| CAAP | | | | eS | | **Sn** | **14 41 47.6** | **+0.5** |
| **MMPH** | **Masbate** | **3.04** | **113** | *e*P | | **Pn** | **14 41 14.7** | **+0.7** |
| MMPH | | | | eS | | **Sn** | **14 41 49.0** | **-1.1** |
| **PVCP** | **Virac** | **3.30** | **89** | *e*P | | **Pn** | **14 41 18.8** | **+1.3** |
| PVCP | | | | eS | | **Sn** | **14 41 58.9** | **+2.6** |
| **SAMP** | **Sagada Mountai** | **3.50** | **2** | *e*P | | **Pn** | **14 41 20.8** | **+0.7** |
| SAMP | | | | eS | | **Sn** | **14 41 59.6** | **-1.5** |
| **CAUP** | **Cauayan** | **3.51** | **17** | *e*P | | **Pn** | **14 41 21.5** | **+1.2** |
| CAUP | | | | eS | | Sn | 14 42 27.0 | +26 |
| **CADP** | **Cadiz City** | **3.61** | **136** | *e*P | | **Pn** | **14 41 23.0** | **+1.4** |
| CADP | | | | eS | | **Sn** | **14 41 58.7** | **-5.0** |
| **MECP** | **Medelin, Cebu** | **3.94** | **127** | *e*P | | **Pn** | **14 41 28.3** | **+2.3** |
| MECP | | | | eS | | **Sn** | **14 42 16.6** | **+4.9** |
| **CNP** | **Catarman** | **3.94** | **105** | *e*P | | **Pn** | **14 41 28.0** | **+2.0** |
| CNP | | | | eS | | **Sn** | **14 42 10.3** | **-1.3** |
| **SZP** | **Santa** | **3.97** | **356** | P | | Pn | 14 41 30.1 | +3.7 |
| **GNOP** | **Guihulngan Cit** | **4.12** | **143** | *e*P | | **Pn** | **14 41 30.5** | **+2.0** |
| GNOP | | | | eS | | **Sn** | **14 42 19.8** | **+3.8** |
| **PPR** | **Puerto Princes** | **4.26** | **208** | *i*P | | **Pn** | **14 41 29.9** | **-0.4** |
| PPR | | | | *i* S | | **Sn** | **14 42 21.0** | **+1.8** |
| **SIPP** | **Brgy, Tapao** | **4.34** | **356** | *e*P | | **Pn** | **14 41 33.6** | **+2.3** |
| SIPP | | | | eS | | **Sn** | **14 42 24.9** | **+3.7** |
| **LLP** | **Lapu-Lapu** | **4.50** | **136** | *e*P | | **Pn** | **14 41 36.2** | **+2.7** |
| LLP | | | | eS | | **Sn** | **14 42 29.7** | **+4.7** |
| **OCLP** | **Ormoc** | **4.51** | **123** | *e*P | | **Pn** | **14 41 35.5** | **+1.8** |
| OCLP | | | | eS | | **Sn** | **14 42 26.9** | **+1.6** |
| **SFCP** | **San Francisco,** | **4.56** | **129** | *e*P | | **Pn** | **14 41 35.9** | **+1.5** |
| SFCP | | | | eS | | Sn | 14 42 36.2 | +10 |
| **DACP** | **Dalaguete, Ceb** | **4.64** | **144** | *e*P | | **Pn** | **14 41 37.8** | **+2.4** |
| DACP | | | | eS | | **Sn** | **14 42 33.4** | **+5.0** |
| **PIP** | **Pasuquin** | **4.73** | **358** | *e*P | | **Pn** | **14 41 38.2** | **+1.6** |
| PIP | | | | eS | | **Sn** | **14 42 30.4** | **-0.2** |
| **SGCP** | **Gonzaga** | **4.81** | **15** | *e*P | | **Pn** | **14 41 38.4** | **+0.8** |
| **PACPP** | **Pamplona Cagay** | **4.90** | **7** | *e*P | | **Pn** | **14 41 39.0** | **+0.2** |
| PACPP | | | | eS | | **Sn** | **14 42 35.6** | **+1.1** |
| **TABP** | **Talibon, Bohol** | **4.91** | **134** | *e*P | | **Pn** | **14 41 40.2** | **+1.2** |
| TABP | | | | eS | | Sn | 14 42 26.6 | -8.2 |
| **BESP** | **Borongan** | **4.96** | **113** | *e*P | | **Pn** | **14 41 41.5** | **+1.8** |
| BESP | | | | eS | | **Sn** | **14 42 35.5** | **-0.6** |
| **LSIP** | **Lazi, Siquijor** | **5.23** | **147** | *e*P | | **Pn** | **14 41 43.3** | **0.0** |
| LSIP | | | | eS | | **Sn** | **14 42 43.9** | **+1.4** |
| **GHBP** | **Garcia Hernand** | **5.24** | **138** | *e*P | | **Pn** | **14 41 45.5** | **+2.1** |
| GHBP | | | | eS | | **Sn** | **14 42 45.3** | **+2.5** |
| **MSLP** | **Maasin** | **5.26** | **130** | *e*P | | **Pn** | **14 41 45.9** | **+2.1** |
| MSLP | | | | eS | | **Sn** | **14 42 45.9** | **+2.5** |
| **BATP** | **Bataraza** | **5.56** | **212** | *e*P | | **Pn** | **14 41 48.6** | **+0.8** |
| BATP | | | | eS | | **Sn** | **14 42 49.7** | **-0.8** |
| **LDIP** | **Loreto** | **5.70** | **123** | *e*P | | **Pn** | **14 41 51.5** | **+2.0** |
| **CICP** | **Calayan Island** | **5.71** | **7** | *e*P | | **Pn** | **14 41 50.1** | **+0.4** |
| CICP | | | | eS | | **Sn** | **14 42 53.2** | **-0.8** |
| **IPIL** | **Ipil** | **6.01** | **163** | *e*P | | **Pn** | **14 41 55.6** | **+1.8** |
| IPIL | | | | eS | | **Sn** | **14 43 03.0** | **+1.6** |
| **PAGZ** | **Pagadian** | **6.24** | **155** | *e*P | | **Pn** | **14 41 59.1** | **+2.3** |
| PAGZ | | | | eS | | **Sn** | **14 43 11.0** | **+4.1** |
| **BLNP** | **Bacolod Lanao** | **6.26** | **149** | *e*P | | **Pn** | **14 41 59.3** | **+2.1** |
| BLNP | | | | eS | | **Sn** | **14 43 07.8** | **+0.2** |
| **GLSP** | **General Luna,** | **6.46** | **125** | *e*P | | **Pn** | **14 42 02.4** | **+2.6** |
| GLSP | | | | eS | | Sn | 14 43 21.8 | +10 |
| **MARW** | **Marawi** | **6.51** | **148** | *e*P | | Pn | 14 42 05.3 | +4.7 |
| **BUTP** | **Butuan** | **6.60** | **133** | *e*P | | Pn | 14 42 05.2 | +3.4 |
| BUTP | | | | eS | | Sn | 14 43 37.5 | +22 |
| **BBPB** | **Basco Batanes** | **6.93** | **9** | *e*P | | **Pn** | **14 42 06.3** | **+0.2** |
| BBPB | | | | eS | | **Sn** | **14 43 21.7** | **-1.9** |
| **BBP** | **Basco** | **6.93** | **9** | *e*P | | **Pn** | **14 42 06.1** | **-0.1** |
| **BUKP** | **Musuan** | **7.05** | **143** | *e*P | | **Pn** | **14 42 10.9** | **+2.9** |
| BUKP | | | | eS | | **Sn** | **14 43 19.6** | **-7.1** |
| **TASP** | **Talacogon, Agu** | **7.09** | **135** | *e*P | | Pn | 14 42 13.0 | +4.5 |
| TASP | | | | eS | | Sn | 14 43 44.5 | +17 |
| **PICP** | **Pikit** | **7.52** | **149** | *e*P | | **Pn** | **14 42 16.8** | **+2.5** |
| PICP | | | | eS | | Sn | 14 43 30.0 | -8.1 |
| **SKMP** | **Bagumbayan, Su** | **7.93** | **152** | *e*P | | **Pn** | **14 42 21.7** | **+2.0** |
| SKMP | | | | eS | | Sn | 14 44 00.3 | +12 |
| **CDOP** | **Cateel, Davao** | **8.01** | **135** | *e*P | | **Pn** | **14 42 23.9** | **+3.1** |
| **DAV** | **Davao City (W)** | **8.01** | **143** | P | | Pn | 14 42 25.2 | +4.5 |
| | 137nm,0.4s,baz=350,slow=2.7,SNR=8.5 | | | | | | | |
| **MATI** | **Mati** | **8.51** | **140** | *e*P | | **Pn** | **14 42 30.6** | **+3.0** |
| **BTTP** | **Bongao, Tawi-T** | **8.54** | **187** | *i*P | | **Pn** | **14 42 29.5** | **+1.5** |
| BTTP | | | | eS | | **Sn** | **14 44 07.7** | **+4.9** |
| **MYLDM** | **Lahad Datu** | **8.63** | **195** | Pn | | Pn | 14 42 32.7 | +3.5 |
| **KKM** | **Kota Kinabalu** | **8.71** | **211** | P | | **Pn** | **14 42 32.1** | **+1.7** |
| **KKM** | **Kota Kinabalu** | **8.71** | **211** | Pn | | **Pn** | **14 42 30.8** | **+0.4** |
| **DDMP** | **Don Marcelino,** | **8.87** | **146** | *e*P | | **Pn** | **14 42 35.4** | **+3.0** |
| DDMP | | | | eS | | **Sn** | **14 44 18.0** | **+7.2** |
| **TWGBT** | **Beinan** | **9.21** | **2** | P | | Pn | 14 42 40.7 | +3.8 |
| **TWG** | **Pinlang** | **9.21** | **2** | | | **Pn** | **14 42 36.9** | **-0.1** |
| **TPUB** | **Ta-pu** | **9.68** | **359** | P | | **Pn** | **14 42 46.7** | **+3.4** |
| **TPUB** | **Ta-pu** | **9.68** | **359** | Pn | | **Pn** | **14 42 46.2** | **+2.9** |
| **YULB** | **Yu-li** | **9.79** | **3** | P | | **Pn** | **14 42 47.5** | **+2.8** |
| **YULB** | **Yu-li** | **9.79** | **3** | | | **Pn** | **14 42 44.3** | **-0.4** |
| **SSLB** | **Suanglung** | **10.17** | **1** | P | | Pn | 14 42 54.2 | +4.3 |
| **SSLB** | **Suanglung** | **10.17** | **1** | Pn | | **Pn** | **14 42 52.6** | **+2.7** |
| **NACB** | **Ninganchiao** | **10.58** | **4** | Pn | | **Pn** | **14 42 56.0** | **+0.6** |
| **HKPS** | **Hong Kong Po S** | **10.71** | **325** | | | **Pn** | **14 42 57.7** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **11.04** | **11** | | | **Pn** | **14 43 01.9** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **11.04** | **11** | P | | **Pn** | **14 43 01.9** | **+0.3** |
| **YHNB** | **Yeheng** | **11.06** | **3** | P | | Pn | 14 43 05.8 | +3.9 |
| **YHNB** | **Yeheng** | **11.06** | **3** | Pn | | **Pn** | **14 43 03.3** | **+1.4** |
| **KNMB** | **Chin-men Tao** | **11.07** | **349** | Pn | | **Pn** | **14 43 02.2** | **+0.3** |
| **QZH** | **Quanzhou** | **11.50** | **350** | P | | **Pn** | **14 43 07.8** | **+0.1** |
| QZH | | | | S | | **Sn** | **14 45 11.5** | **-2.8** |
| QZH | | | | pmax | pmax | | | |
| | comp=Z,530nm,4.9s | | | | | | | |
| QZH | | | | LR | LR | | | |
| | comp=N,2μm,11.0s | | | | | | | |
| QZH | | | | LR | LR | | | |
| | comp=E,1μm,11.7s | | | | | | | |
| QZH | | | | LR | LR | | | |
| | comp=Z,2μm,13.3s | | | | | | | |
| **QIZ** | **Qiongzhong** | **11.81** | **299** | P | | **Pn** | **14 43 14.1** | **+2.4** |
| **QIZ** | **Qiongzhong** | **11.81** | **299** | P | | **Pn** | **14 43 13.3** | **+1.6** |
| QIZ | | | | S | | **Sn** | **14 45 26.3** | **+4.5** |
| QIZ | | | | pmax | pmax | | | |
| | comp=Z,88nm,1.0s | | | | | | | |
| QIZ | | | | pmax | pmax | | | |
| | comp=Z,400nm,6.1s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=N,1μm,12.6s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=E,640nm,13.5s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,1μm,38.7s | | | | | | | |
| **QIZ** | **Qiongzhong** | **11.81** | **299** | Pn | | **Pn** | **14 43 14.2** | **+2.4** |
| **DLV** | **T Lat** | **12.09** | **264** | Pn | | Pn | 14 43 19.1 | +3.5 |
| **TOLI2** | **Tolitoli** | **12.38** | **180** | P | | **Pn** | **14 43 20.7** | **+1.5** |
| **TOLI2** | **Tolitoli** | **12.38** | **180** | Pn | | **Pn** | **14 43 20.9** | **+1.7** |
| **GTOI** | **Gorontalo** | **13.04** | **170** | P | | **Pn** | **14 43 28.1** | **+0.3** |
| | 78nm,7.7s,1μm | | | | | | | |
| **KMSI** | **Cibinong** | **13.29** | **166** | P | | **P** | **14 43 36.8** | **+0.4** |
| **SBUM** | **Sibu** | **13.90** | **218** | | | **Pn** | **14 43 40.8** | **+1.7** |
| **TNTI** | **Ternate** | **14.29** | **152** | Pn | | **Pn** | **14 43 43.2** | **-0.8** |
| **TNTI** | **Ternate** | **14.29** | **152** | P | | **P** | **14 43 48.8** | **+1.3** |
| | 58nm,0.4s | | | | | | | |
| **SMKI** | **Samarinda** | **14.36** | **194** | P | | **P** | **14 43 50.7** | **+2.5** |
| | 405nm,1.6s,7μm | | | | | | | |
| **LUWI** | **Luwuk** | **14.65** | **172** | | | **P** | **14 43 53.5** | **+2.1** |
| **LUWI** | **Luwuk** | **14.65** | **172** | P | | **P** | **14 43 53.7** | **+2.3** |
| | 344nm,1.3s,4μm4μm | | | | | | | |
| **UBPT** | **Khong Chiam** | **14.91** | **278** | P | | **P** | **14 43 55.0** | **+0.7** |
| **JOW** | **Kunigami** | **14.96** | **27** | | | **P** | **14 43 54.5** | **-0.2** |
| **JOW** | **Kunigami** | **14.96** | **27** | P | | **P** | **14 43 54.7** | **-0.1** |
| | 104nm,1.1s,baz=212,slow=10,SNR=23 | | | | | | | |
| JOW | | | | LR | LR | | 14 48 46.4 | |
| | comp=Z,2μm,20.6s,baz=199,slow=33 | | | | | | | |
| JOW | | | | PcP | | **PcP** | **14 48 53.9** | **+0.7** |
| | 3.8nm,0.4s,baz=180,slow=5.1,SNR=4.2 | | | | | | | |
| **KSM** | **Kuching** | **15.86** | **222** | P | | **P** | **14 44 07.1** | **+2.3** |
| **STKI** | **Sintang** | **16.27** | **215** | P | | **P** | **14 44 11.7** | **+2.4** |
| | 131nm,1.3s | | | | | | | |
| **CNSH** | **ChangSha** | **16.27** | **335** | P | | **Pn** | **14 44 09.5** | **+0.9** |
| CNSH | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| **SANI** | **Sanana** | **16.36** | **161** | P | | **Pn** | **14 44 08.4** | **-1.3** |
| **SANI** | **Sanana** | **16.36** | **161** | P | | **Pn** | **14 44 08.2** | **-1.5** |
| | 134nm,0.7s,1μm | | | | | | | |
| **SSE** | **Sheshan** | **17.45** | **1** | P | | **Pn** | **14 44 24.0** | **+1.1** |
| SSE | | | | pmax | pmax | | | |
| | comp=Z,500nm,11.0s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=N,150nm,12.5s | | | | | | | |
| SSE | | | | LR | LR | | | |
| | comp=E,250nm,12.7s | | | | | | | |
| **SWI** | **Sorong** | **17.71** | **143** | P | | **Pn** | **14 44 30.7** | **+4.5** |
| **SLVN** | **Son La** | **17.83** | **298** | P | | **P** | **14 44 27.0** | **+0.4** |
| **NLAI** | **Namlea** | **17.84** | **159** | P | | **Pn** | **14 44 31.7** | **+4.0** |
| | 62nm,0.7s | | | | | | | |
| **BNSI** | **Bone** | **17.86** | **182** | P | | **Pn** | **14 44 30.9** | **+3.0** |
| | 91nm,0.8s,2μm | | | | | | | |
| **WHN** | **Wuhan** | **17.90** | **342** | P | | **Pn** | **14 44 29.3** | **+1.0** |
| WHN | | | | sP | | **sP** | **14 45 06.3** | **+1.2** |
| WHN | | | | S | | **S** | **14 47 46.8** | **+0.1** |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,320nm,1.2s | | | | | | | |
| WHN | | | | pmax | pmax | | | |
| | comp=Z,6μm,5.9s | | | | | | | |
| **GYA** | **Guiyang** | **18.42** | **316** | P | | **Pn** | **14 44 35.3** | **+0.7** |
| GYA | | | | S | | **S** | **14 47 49.8** | **-7.4** |
| GYA | | | | pmax | pmax | | | |
| | comp=Z,170nm,1.4s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=N,1μm,12.8s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=E,870nm,13.7s | | | | | | | |
| GYA | | | | LR | LR | | | |
| | comp=Z,1μm,15.3s | | | | | | | |
| **NJ2** | **Nanjing** | **18.48** | **355** | *i*P | | **P** | **14 44 34.5** | **+0.9** |
| NJ2 | | | | sP | | sP | 14 45 15.5 | +4.0 |
| NJ2 | | | | S | | **S** | **14 47 58.0** | **-0.2** |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.5s | | | | | | | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,2μm,4.9s | | | | | | | |
| **KAPI** | **Kappang** | **18.49** | **183** | P | | **P** | **14 44 35.7** | **+1.9** |
| | 159nm,0.6s,baz=322,slow=4.3,SNR=61 | | | | | | | |
| **KAPI** | **Kappang** | **18.49** | **183** | P | | **Pn** | **14 44 36.7** | **+1.3** |
| **KAPI** | **Kappang** | **18.49** | **183** | *de*P | | **P** | **14 44 34.9** | **+1.2** |
| **MSAI** | **Masohi** | **18.65** | **154** | P | | **P** | **14 44 37.8** | **+2.2** |
| | 182nm,0.8s,2μm | | | | | | | |
| **BKSI** | **Bulukumba** | **18.78** | **182** | P | | **Pn** | **14 44 39.4** | **+0.6** |
| | 151nm,0.6s,1μm2μm | | | | | | | |
| **NAYO** | **Nakonayok** | **18.89** | **275** | P | | **Pn** | **14 44 40.2** | **+0.1** |
| **BBSI** | **Bau Bau** | **19.01** | **174** | P | | **Pn** | **14 44 42.9** | **+1.3** |
| | 196nm,0.9s,2μm | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **19.58** | **181** | P | | **P** | **14 44 46.5** | **+0.8** |
| | 281nm,0.9s,3μm | | | | | | | |
| **ENH** | **Enshi** | **19.62** | **330** | P | | **P** | **14 44 47.7** | **+1.7** |
| **ENH** | **Enshi** | **19.62** | **330** | P | | **P** | **14 44 46.8** | **+0.8** |
| **FAKI** | **Fak Fak** | **19.95** | **144** | P | | **P** | **14 44 49.8** | **+0.1** |
| **FAKI** | **Fak Fak** | **19.95** | **144** | P | | **P** | **14 44 50.0** | **+0.3** |
| **FAKI** | **Fak Fak** | **19.95** | **144** | P | | **P** | **14 44 50.6** | **+0.9** |
| **BNDI** | **Bandanaira** | **20.13** | **153** | P | | Pn | 14 44 58.5 | +3.9 |
| **PHRA** | **Phrae** | **20.33** | **287** | P | | Pn | 14 44 56.1 | -0.9 |
| **MYKOM** | **Kota Tinggi** | **20.42** | **236** | P | | **P** | **14 44 56.8** | **+2.1** |
| **KMI** | **Kunming** | **20.50** | **307** | P | | Pn | 14 44 58.0 | -1.1 |
| KMI | | | | S | | **S** | **14 48 38.0** | **-0.7** |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,98nm,1.4s | | | | | | | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,1μm,3.4s | | | | | | | |
| **CRAI** | **Chiangrai** | **20.59** | **292** | P | | **P** | **14 44 58.5** | **+1.9** |
| **SURA** | **Surathani** | **21.17** | **260** | P | | **P** | **14 45 05.5** | **+2.7** |
| **KULM** | **Kulim** | **21.46** | **249** | P | | **P** | **14 45 06.0** | **+0.1** |
| **IPM** | **Ipoh** | **21.46** | **247** | P | | **P** | **14 45 07.8** | **+1.8** |
| **CM31** | **Chiang Mai Arr** | **21.52** | **286** | P | | **P** | **14 45 08.2** | **+1.6** |
| **CMAR** | **Chiang Mai Arr** | **21.52** | **286** | P | | **P** | **14 45 07.5** | **+0.9** |
| | 98nm,1.1s,baz=108,slow=4.0,SNR=6.5 | | | | | | | |
| CMAR | | | | S | | **S** | **14 48 58.9** | **+0.8** |
| | 6.4nm,1.2s,baz=87,slow=13,SNR=5.0 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **14 49 05.6** | **+1.2** |
| | 4.1nm,0.6s,baz=116,slow=0.2,SNR=8.4 | | | | | | | |
| CMAR | | | | ScP | | **ScP** | **14 52 28.2** | **-2.0** |
| | 2.7nm,0.9s,baz=54,slow=1.1,SNR=12 | | | | | | | |
| | 98nm,1.1s | | | | | | | |
| **JNU** | **Nakatsue** | **21.54** | **24** | P | | **P** | **14 45 07.6** | **+1.0** |
| **JNU** | **Nakatsue** | **21.54** | **24** | P | | **P** | **14 45 07.3** | **+0.6** |
| | 41nm,0.9s,baz=173,slow=6.0,SNR=16 | | | | | | | |
| | 41nm,0.9s | | | | | | | |
| **PZH** | **PanZhiHua** | **21.98** | **309** | P | | **P** | **14 45 12.3** | **+0.8** |
| PZH | | | | S | | **S** | **14 49 02.0** | **-4.3** |
| PZH | | | | PcP | | **PcP** | **14 49 07.3** | **+1.9** |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,210nm,1.5s | | | | | | | |
| PZH | | | | pmax | pmax | | | |
| | comp=Z,2μm,4.1s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=N,660nm,13.7s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=E,810nm,14.7s | | | | | | | |
| PZH | | | | LR | LR | | | |
| | comp=Z,560nm,13.1s | | | | | | | |
| **MMRI** | **Maumere** | **22.11** | **176** | P | | **P** | **14 45 12.7** | **0.0** |
| **LYN** | **LuoYang** | **22.20** | **342** | P | | **P** | **14 45 14.0** | **+0.5** |
| LYN | | | | pP | | sP | 14 45 45.5 | -6.6 |
| LYN | | | | PP | | **PnPn** | **14 45 51.0** | **+7.6** |
| LYN | | | | sP | | pP | 14 46 03.0 | +26 |
| LYN | | | | S | | **S** | **14 49 07.5** | **-2.0** |
| LYN | | | | SS | | **SnSn** | **14 49 56.0** | **+5.6** |
| LYN | | | | pmax | p

HNS pmax pmax
comp=Z,31nm,1.4s
HNS pmax pmax
comp=Z,940nm,7.7s
HNS LR LR
comp=N,930nm,16.7s
HNS LR LR
comp=Z,950nm,19.1s
**INCN Inchon 24.39 11 P P 14 45 35.2 +1.3**
**BBJI Bungbulang 24.62 213 P P 14 45 37.1 +0.8**
**KSRS Korea Array 24.63 14 P P 14 45 36.0 -0.1**
12nm,1.0s,baz=192,slow=10,SNR=23
KSRS PcP **PcP 14 49 10.4 -0.1**
0.2nm,0.3s,baz=197,slow=2.8,SNR=4.4
12nm,1.0s
**GENI Genyem 25.07 128 P P 14 45 40.9 +0.6**
**TIY Taiyuan 25.17 344** *eP* **P 14 45 41.3 +0.2**
TIY PP **sP 14 46 24.5 +2.5**
TIY S **S 14 49 56.0 -1.1**
TIY pmax pmax
comp=Z,630nm,4.5s
TIY LR LR
comp=N,650nm,14.4s
TIY LR LR
comp=E,410nm,18.9s
TIY LR LR
comp=Z,620nm,17.9s
**DL2 Dalian 25.25 2 P P 14 45 41.3 -0.4**
DL2 sP **sP 14 46 26.0 +3.5**
DL2 S **S 14 49 56.5 -1.7**
DL2 pmax pmax
comp=Z,410nm,10.2s
**GSI Gunungsitoli 25.98 244 P P 14 45 48.8 +0.2**
**GSI Gunungsitoli 25.98 244 P P 14 45 48.2 -0.4**
GSI PcP **PcP 14 49 14.7 +0.6**
**JHJ Hachijo jima 2 26.07 38** LR LR 14 53 59.5
comp=Z,1µm,21.4s,baz=159,slow=31
**JGF Kuroka 26.55 31 P P 14 45 56.1 +2.6**
**BJT Baijiatuau 26.66 352 P P 14 45 54.9 +0.5**
**BJI Beijing 26.68 352 P P 14 45 53.8 -0.8**
BJI S **S 14 50 17.0 -3.7**
BJI pmax pmax
comp=Z,330nm,6.4s
BJI LR LR
comp=N,600nm,16.4s
BJI LR LR
comp=E,300nm,14.3s
BJI LR LR
comp=Z,290nm,12.7s
**LZH Lanzhou 27.09 329** ⇑P **P 14 45 59.5 +1.0**
LZH PcP **PcP 14 49 18.0 +1.5**
LZH S **S 14 50 26.3 -1.4**
LZH sS sS 14 51 17.8 +3.4
LZH pmax pmax
comp=Z,400nm,1.3s
LZH pmax pmax
comp=Z,1µm,5.8s
LZH LR LR
comp=N,3µm,14.4s
LZH LR LR
comp=E,2µm,14.8s
LZH LR LR
comp=Z,2µm,14.4s
**TABU Tabubil 27.62 131 P P 14 46 04.0 +0.7**
**MAJO Matsushiro 27.71 31 P P 14 46 02.7 -1.2**
**MAJO Matsushiro 27.71 31 P P 14 46 03.2 -0.7**
**MAJO Matsushiro 27.71 31** *c i*P **P 14 46 02.2 -1.7**
MAJO pmax pmax
comp=Z,51nm,3.8s
**MJAR Matsushiro Arr 27.71 31 P P 14 46 02.0 -1.9**
comp=Z,3.1nm,0.6s,baz=214,slow=8.0,SNR=10
MJAR PcP **PcP 14 49 16.2 -1.6**
comp=Z,2.4nm,0.7s,baz=194,slow=2.9,SNR=5.1
MJAR LR LR 14 58 42.3
comp=Z,236nm,18.4s,baz=219,slow=39
comp=Z,3.1nm,0.6s
**DRS Darwin Rock St 27.71 158 P P 14 46 02.9 -1.1**
**MTN Manton Dam 28.18 158 P P 14 46 07.2 -1.0**
**MTN Manton Dam 28.18 158 P P 14 46 06.6 -1.6**
MTN IAmb IAmb 14 46 36.3
comp=Z,25nm,0.3s
**MTN Manton Dam 28.18 158 P P 14 46 06.3 -1.8**
comp=Z,31nm,0.5s
**SNY Shenyang 28.26 4** ⇓P **P 14 46 08.5 -0.2**
SNY S **S 14 50 41.8 -3.9**
SNY pmax pmax
comp=Z,26nm,1.3s
SNY pmax pmax
comp=Z,300nm,4.6s
SNY LR LR
comp=Z,320nm,13.7s
SNY LR LR
comp=Z,910nm,18.5s
SNY LR LR
comp=Z,770nm,27.9s
**HHC Hu-ho-hao-te 28.35 345** *eP* **P 14 46 10.5 +0.9**
HHC S **S 14 50 49.0 +1.7**
HHC SS **SnSn 14 52 18.5 -1.0**
HHC pmax pmax
comp=Z,22nm,0.7s
HHC pmax pmax
comp=Z,150nm,4.1s
**BTO Baotou 28.54 343** *eP* **P 14 46 12.5 +1.3**
BTO pP **pP 14 46 38.5 +0.5**
BTO sP sP 14 46 57.8 +5.5
BTO S **S 14 50 52.0 +1.8**
BTO pmax pmax
comp=Z,44nm,1.1s
BTO LR LR
comp=Z,2µm,14.3s
BTO LR LR
comp=Z,2µm,18.2s
BTO LR LR
comp=Z,850nm,14.2s
**KDU Kakadu 28.55 156 P P 14 46 09.7 -1.7**
**KDU Kakadu 28.55 156 P P 14 46 09.4 -2.1**
comp=Z,30nm,0.6s
**SHL Shillong 29.64 298 P P 14 46 21.9 +0.5**
**SHL Shillong 29.64 298 P P 14 46 22.0 +0.6**
SNR=92
**SHL Shillong 29.64 298 P P 14 46 21.9 +0.5**
SHL pmax pmax
comp=Z,687nm,1.5s
**KNRA Kununurra 30.11 165 P P 14 46 23.8 -1.4**
**KNRA Kununurra 30.11 165 P P 14 46 24.1 -1.2**
comp=Z,22nm,0.6s
**GTA Gaotai 31.68 328** ⇑P **P 14 46 40.0 +0.9**
GTA pP sP 14 47 11.5 -8.4
GTA sP pP 14 47 27.3 +22
GTA PP **PP 14 47 52.5 -0.6**
GTA PcP **PcP 14 49 28.0 -0.1**
GTA S **S 14 51 40.0 +0.3**
GTA ScP **ScP 14 52 58.8 -1.4**
GTA pmax pmax
comp=Z,130nm,1.7s
GTA pmax pmax
comp=Z,300nm,8.4s
GTA LR LR
comp=Z,1µm,19.1s
GTA LR LR
comp=Z,1µm,18.3s
GTA LR LR
comp=Z,2µm,15.1s
**LSA Lhasa 31.74 305 P P 14 46 42.0 +1.9**
**LSA Lhasa 31.74 305 P P 14 46 41.3 +1.2**
**LSA Lhasa 31.74 305 P P 14 46 41.5 +1.4**
**LSA Lhasa 31.74 305 P P 14 46 41.3 +1.2**
LSA pmax pmax
comp=Z,92nm,0.5s
**LSA Lhasa 31.74 305 P P 14 46 41.4 +1.4**
**FITZ Fitzroy Crossi 31.83 171 P P 14 46 39.8 -0.5**
**FITZ Fitzroy Crossi 31.83 171 P P 14 46 39.4 -0.9**
**MDJ Mudanjiang 31.85 12 P P 14 46 40.0 -0.3**
MDJ sP sP 14 47 26.8 +5.2
MDJ S **S 14 51 43.0 +1.2**
MDJ ScS **ScS 14 56 56.0 -2.8**
MDJ pmax pmax
comp=Z,16nm,1.5s
MDJ pmax pmax
comp=Z,190nm,6.9s
MDJ LR LR
comp=Z,860nm,17.9s
MDJ LR LR
comp=Z,710nm,16.5s
MDJ LR LR
comp=Z,1µm,17.9s
**USA0B Ussuriysk Arra 32.01 15** *c i*P **P 14 46 41.9 +0.2**
**USRK Ussuriysk Ar. 32.01 15** P **P 14 46 42.3 +0.6**
comp=Z,4.4nm,0.7s,baz=195,slow=5.9,SNR=13
USRK LR LR 15 00 40.0
comp=Z,182nm,20.8s,baz=198,slow=38
comp=Z,4.4nm,0.7s
**GOMU GeErMu 32.40 319 P P 14 46 48.0 +2.3**
GOMU S **S 14 51 56.3 +5.0**
GOMU SS **SnSn 14 53 54.0 -4.1**
GOMU LR LR
comp=Z,1µm,13.4s
GOMU LR LR
comp=Z,910nm,15.1s
GOMU LR LR
comp=Z,2µm,13.7s
**BNX BinXian 32.56 9** ⇑P **P 14 46 45.8 -0.7**
BNX sP sP 14 47 31.8 +4.0
BNX S **S 14 51 48.3 -4.5**
BNX pmax pmax
comp=Z,36nm,1.5s
BNX pmax pmax
comp=Z,490nm,3.8s
**TEY Ternei 34.14 20** *eP* **P 14 46 59.4 -0.8**
**MBWA Marble Bar 34.52 182 P P 14 47 03.0 -0.8**
**MBWA Marble Bar 34.52 182 P P 14 47 03.0 -0.8**
MBWA IAmb IAmb 14 47 04.5
comp=Z,89nm,0.9s
**MBWA Marble Bar 34.52 182 P P 14 47 02.6 -1.2**
comp=Z,108nm,0.7s
**MBWA Marble Bar 34.52 182 P P 14 47 02.8 -1.0**
**PMG Port Moresby 34.75 130** *eP* **P 14 47 04.0 -1.8**
PMG pmax pmax
comp=Z,9.0nm,0.4s
**PSAC1 Pilbara Seismi 34.89 182 P P 14 47 05.9 -1.0**
comp=Z,85nm,0.9s
**PSA00 Pilbara Seismi 34.93 181 P P 14 47 06.8 -0.5**
**PSA00 Pilbara Seismi 34.93 181 P P 14 47 06.6 -0.7**
**PSA00 Pilbara Seismi 34.93 181 P P 14 47 06.4 -0.9**
PSA00 IAmb IAmb 14 47 07.5
comp=Z,45nm,1.2s
**PSA00 Pilbara Seismi 34.93 181 P P 14 47 06.9 -0.3**
comp=Z,97nm,0.8s
**COEN Coen 35.22 140 P P 14 47 08.0 -1.9**
**COEN Coen 35.22 140 P P 14 47 07.2 -2.7**
comp=Z,11nm,0.6s
**ASAJ Asahikawa 35.72 27 P P 14 47 13.9 +0.1**
comp=Z,9.0nm,0.4s,baz=235,slow=10.0,SNR=34
ASAJ LR LR 15 00 08.0
comp=Z,454nm,21.7s,baz=207,slow=33
comp=Z,9.0nm,0.4s
**ASAJ Asahikawa 35.72 27 P P 14 47 14.1 +0.3**
ASAJ 14 49 40.7
ASAJ pmax pmax
comp=Z,196nm,1.8s
**JKA Kamikawa-asahi 35.72 27 P P 14 47 14.1 +0.3**
JKA PcP **PcP 14 49 40.7 +1.4**
**WB0 Warramunga Arr 35.74 158 P P 14 47 12.7 -1.5**
WB0 IAmb IAmb 14 47 14.5
comp=Z,41nm,0.6s
**WRAB Tennant Creek 35.87 158 P P 14 47 13.9 -1.4**
WRAB IAmb IAmb 14 47 15.8
comp=Z,46nm,0.5s
**WRAB Tennant Creek 35.87 158** *c i*P **P 14 47 13.4 -2.0**
WRAB pmax pmax
comp=Z,14nm,0.6s
**WRA Warramunga Arr 35.88 158 P P 14 47 13.3 -2.1**
comp=Z,27nm,0.4s,baz=340,slow=8.5,SNR=405
WRA S S 14 52 36.7 -7.7
comp=Z,5.7nm,0.9s,baz=338,slow=15,SNR=13
comp=Z,27nm,0.4s
**WB2 Warramunga Arr 35.88 158 P P 14 47 14.2 -1.3**
**WB2 Warramunga Arr 35.88 158 P P 14 47 13.4 -2.0**
comp=Z,85nm,0.5s
**WB1 Warramunga Ar. 35.90 158 P P 14 47 13.6 -2.0**
**WR0 Warramunga Arr 35.97 158 P P 14 47 14.5 -1.7**
WR0 IAmb IAmb 14 47 16.6
comp=Z,31nm,0.5s
**ULN Ulaanbaatar 36.05 344 P P 14 47 17.4 +0.6**
ULN IAmb IAmb 14 47 18.6
comp=Z,146nm,1.9s
**ULN Ulaanbaatar 36.05 344 P P 14 47 17.7 +0.9**
ULN P **P 14 47 17.7 +0.9**
**ULN Ulaanbaatar 36.05 344** *c i*P **P 14 47 16.7 -0.1**
ULN pmax pmax
comp=Z,63nm,1.5s
**ULN Ulaanbaatar 36.05 344 P P 14 47 16.9 +0.1**
ULN PcP **PcP 14 49 40.6 +0.2**
**SONM Songino Array 36.20 344 P P 14 47 17.7 -0.3**
comp=Z,8.8nm,0.5s,baz=163,slow=8.9,SNR=42
SONM PcP **PcP 14 49 40.5 -0.4**
comp=Z,1.8nm,0.4s,baz=166,slow=4.3,SNR=5.2
SONM LR LR 15 03 57.3
comp=Z,578nm,19.7s,baz=158,slow=39
comp=Z,8.8nm,0.5s
**GIRL Giralia 36.55 190 P P 14 47 20.4 -0.6**
GIRL PcP **PcP 14 49 42.3 +0.2**
**KLR Kul'dur 36.70 12** LR LR 15 03 16.6
comp=Z,433nm,21.5s,baz=206,slow=37
**KLR Kul'dur 36.70 12** *c i*P **P 14 47 21.8 -0.2**
KLR pmax pmax
comp=Z,67nm,1.7s
**HEH HeiHe 36.99 7** *eP* **P 14 47 24.0 -0.5**
HEH PP **PnPn 14 48 57.8 +4.7**
HEH PcP **PcP 14 49 42.3 -0.7**
HEH S **S 14 52 59.5 -1.1**
HEH pmax pmax
comp=Z,61nm,1.5s
HEH pmax pmax
comp=Z,670nm,6.0s
**PATS Pohnpei 37.52 96 P P 14 47 30.4 +0.9**
**PATS Pohnpei 37.52 96 P P 14 47 29.6 +0.1**
comp=Z,89nm,1.9s
**YSS Yuzh-Sakhalins 38.05 25 P P 14 47 33.0 -0.5**
YSS IAmb IAmb 14 47 35.2
comp=Z,108nm,1.8s
**YSS Yuzh-Sakhalins 38.05 25** *eP* **P 14 47 32.1 -1.3**
YSS *e**SP **sP 14 48 17.1 +2.0**
YSS *e* 14 49 41.9
YSS *e*S **S 14 53 13.0 -3.8**
YSS pmax pmax
comp=Z,600nm,5.4s
YSS pmax pmax
comp=Z,20nm,0.9s
YSS smax smax
comp=N,500nm,3.9s
YSS smax smax
comp=E,200nm,3.4s
YSS MLR MLR
comp=E,600nm,13.0s
YSS MLR MLR
comp=Z,700nm,13.0s
**QIS Mount Isa 38.64 151 P P 14 47 37.7 -1.0**
**QIS Mount Isa 38.64 151 P P 14 47 37.2 -1.5**
comp=Z,22nm,0.6s
**CIT Chita 38.79 353** *eP* **P 14 47 39.1 -0.6**
CIT *e* 14 48 09.0
CIT *e* 14 49 21.9
CIT *e* 14 49 48.5
CIT pmax pmax
comp=Z,150nm,1.9s
**WRKA Warakurna 39.06 169 P P 14 47 41.2 -1.1**
**WRKA Warakurna 39.06 169 P P 14 47 40.9 -1.4**
comp=Z,64nm,0.5s
**MTSU Mount Surprise 39.14 143 P P 14 47 42.5 -0.5**
**MTSU Mount Surprise 39.14 143 P P 14 47 41.5 -1.5**
comp=Z,5.7nm,0.5s
**AS31 Alice Springs 39.17 161 P P 14 47 41.9 -1.2**
AS31 IAmb IAmb 14 47 47.5
comp=Z,22nm,0.3s
**AS31 Alice Springs 39.17 161 P P 14 47 41.3 -1.8**
comp=Z,17nm,0.4s
**ASAR Alice Springs 39.17 161 P P 14 47 41.6 -1.5**
comp=Z,20nm,0.4s,baz=336,slow=6.8,SNR=388
ASAR PcP **PcP 14 49 49.7 -0.5**
comp=Z,2.8nm,0.3s,baz=358,slow=3.9,SNR=4.1
ASAR S **S 14 53 29.1 -5.2**
comp=Z,2.4nm,0.7s,baz=342,slow=14,SNR=9.7
comp=Z,20nm,0.4s
**AS01 Alice Springs 39.19 161 P P 14 47 41.8 -1.5**
**GRNR Gornyy 39.23 16** ⇑*i*P **P 14 47 43.5 +0.2**
GRNR pmax pmax
comp=N,6.0nm,1.1s
GRNR pmax pmax
comp=Z,10.0nm,0.9s
**ZAK Zakamensk 39.39 342** *eP* **P 14 47 44.2 -0.5**
ZAK *e* 14 49 49.4
ZAK pmax pmax
comp=Z,15nm,1.5s
ZAK pmax pmax
comp=Z,9.0nm,1.5s
**PALK Pallekele 39.85 265** LR LR 15 03 28.6
comp=Z,301nm,21.1s,baz=79,slow=34
**MEEK Meekatharra 40.02 183** P **P 14 47 49.4 -0.7**
**MEEK Meekatharra 40.02 183** P **P 14 47 49.0 -1.1**
comp=Z,318nm,0.5s
**ZEA Zeya 40.40 6** *eP* **P 14 47 52.6 -0.3**
ZEA *e**PP **pP 14 48 24.1 +3.4**
ZEA *e**SP **sP 14 48 36.3 +1.5**
ZEA *e* 14 49 29.7
ZEA *e* 14 50 08.0
ZEA *e*S **S 14 53 51.5 -0.4**
ZEA pmax pmax
comp=N,10.0nm,1.5s
ZEA pmax pmax
comp=Z,10.0nm,1.3s
ZEA pmax pmax
comp=Z,100nm,7.3s
ZEA pmax pmax
comp=Z,100nm,8.1s
ZEA smax smax
comp=N,200nm,11.5s
**IRK Irkutsk 40.79 345** *eP* **P 14 47 54.9 -1.2**
IRK *e* 14 49 36.2
IRK pmax pmax
comp=Z,82nm,1.5s
**HYB Hyderabad 40.80 281** *eP* **P 14 47 57.6 +0.9**
HYB IVmB_BB 14 47 58.2
comp=Z,1µm,1.9s
**MOY Mondy 41.21 341** *eP* **P 14 47 59.8 0.0**
MOY pmax pmax
comp=Z,79nm,1.8s
**TYV Tymovskoe 41.23 21** *eP* **P 14 47 59.6 -0.1**
TYV *e*S **S 14 54 05.0 +0.9**
TYV pmax pmax
comp=Z,600nm,3.3s
TYV pmax pmax
comp=Z,13nm,1.2s
TYV smax smax
comp=N,200nm,5.3s
TYV smax smax
comp=E,200nm,5.3s
**WMQ Urumqi 41.35 323** ⇑P **P 14 48 02.3 +1.3**
WMQ PP **PP 14 49 41.0 +2.1**
WMQ S **S 14 54 06.8 +0.4**
WMQ SS **SS 14 57 13.0 -2.0**
WMQ pmax pmax
comp=E,60nm,1.3s
WMQ pmax pmax
comp=E,1µm,4.3s
WMQ LR LR
comp=E,2µm,14.3s
WMQ LR LR
comp=E,1µm,12.5s
WMQ LR LR
comp=E,760nm,15.9s
**KNGR Kungurtug, Tuv 41.50 338** ⇓*i*P **P 14 48 02.8 +0.7**
KNGR pmax pmax
comp=Z,53nm,1.5s
**CTAO Charters Tower 41.80 143** P **P 14 48 04.7 -0.1**
**CTAO Charters Tower 41.80 143** P **P 14 48 03.8 -1.0**
**CTAO Charters Tower 41.80 143** P **P 14 48 03.8 -1.0**
CTAO pmax pmax
comp=Z,10.0nm,0.8s
**MORW Morawa 42.63 186** P **P 14 48 10.4 -1.0**
**MORW Morawa 42.63 186** P **P 14 48 10.6 -0.8**
MORW IAmb IAmb 14 48 12.2
comp=Z,60nm,0.6s
**MORW Morawa 42.63 186** P **P 14 48 10.3 -1.0**
comp=Z,101nm,0.9s
**BLDU Ballidu 44.10 185** P **P 14 48 22.7 -0.4**
**BLDU Ballidu 44.10 185** P **P 14 48 21.6 -1.5**
comp=Z,32nm,1.0s
**FORT Forrest 44.64 171** P **P 14 48 27.1 -0.4**
**FORT Forrest 44.64 171** P **P 14 48 26.3 -1.2**
FORT IAmb IAmb 14 48 28.2
comp=Z,60nm,0.6s
FORT PcP **PcP 14 50 08.2 +0.1**
**FORT Forrest 44.64 171** P **P 14 48 26.2 -1.3**
comp=Z,81nm,0.7s
**KMBL Kambalda 44.69 179** P **P 14 48 26.6 -1.2**
**KMBL Kambalda 44.69 179** P **P 14 48 26.4 -1.5**
comp=Z,335nm,0.5s
**KLBR Kellerberrin 44.99 184** P **P 14 48 29.1 -1.1**
**KLBR Kellerberrin 44.99 184** P **P 14 48 28.9 -1.3**
comp=Z,304nm,0.7s
**ZSN Zaisan 45.10 326** *eP* **P 14 48 31.1 +0.1**
comp=Z,37nm,1.0s,baz=326
**ZSN Zaisan 45.10 326** *eP* **P 14 48 31.1 +0.1**
ZSN pmax pmax
comp=Z,37nm,1.0s
**DGZ Jazzator, Alta 45.19 330** *c i*P **P 14 48 32.4 +0.6**
DGZ pmax pmax
comp=Z,9.0nm,0.3s
**WUS Wushi 45.40 315** P **P 14 48 34.7 +1.0**
**INKA Innaminka 45.40 155** P **P 14 48 33.7 +0.2**
**MUN Mundaring 45.49 185** P **P 14 48 34.0 -0.2**
**MUN Mundaring 45.49 185** P **P 14 48 33.0 -1.2**
comp=Z,44nm,1.0s
**QLP Quilpie 45.97 150** P **P 14 48 36.9 -1.1**
**QLP Quilpie 45.97 150** P **P 14 48 36.4 -1.7**
comp=Z,31nm,0.7s
**SHLS Shalkode 46.10 318** *eP* **P 14 48 36.9 -2.1**
comp=Z,94nm,1.2s,baz=318
**SHLS Shalkode 46.10 318** *eP* **P 14 48 36.9 -2.1**
SHLS pmax pmax
comp=Z,94nm,1.2s
**MK31 Makanchi Array 46.18 324** P **P 14 48 40.1 +0.6**
MK31 IAmb IAmb 14 48 41.8
comp=Z,201nm,1.9s
**MK31 Makanchi Array 46.18 324** *c i*P **P 14 48 39.8 +0.3**
**MKAR Makanchi Array 46.18 324** P **P 14 48 39.9 +0.4**
comp=Z,11nm,0.3s,baz=121,slow=8.0,SNR=260
MKAR PcP **PcP 14 50 12.3 -1.0**
comp=Z,2.7nm,0.6s,baz=126,slow=2.0,SNR=1.8
comp=Z,11nm,0.3s
**MKAR Makanchi Array 46.18 324** *i*P **P 14 48 40.0 +0.5**
MKAR pmax pmax
comp=Z,11nm,0.3s
**NWAO Narrogin (SRO) 46.35 184** P **P 14 48 40.3 -0.6**
**NWAO Narrogin (SRO) 46.35 184** P **P 14 48 40.0 -0.9**
NWAO IAmb IAmb 14 48 41.3
comp=Z,145nm,1.4s
**NWAO Narrogin (SRO) 46.35 184** P **P 14 48 40.0 -0.9**
comp=Z,49nm,0.6s,baz=358,slow=6.6,SNR=47
comp=Z,49nm,0.6s
**MAKZ Makanchi 46.37 324** P **P 14 48 41.7 +0.7**
MAKZ IAmb IAmb 14 48 43.2
comp=Z,194nm,1.6s
**MAKZ Makanchi 46.37 324** P **P 14 48 41.7 +0.7**
MAKZ pmax pmax
comp=Z,194nm,1.6s
**MAKZ Makanchi 46.37 324** P **P 14 48 41.4 +0.4**
MAKZ sP **sP 14 49 19.8 -3.4**
**UZB Uzynbulak 46.38 318** *eP* **P 14 48 41.1 -0.2**
comp=Z,58nm,1.0s,baz=318
**UZB Uzynbulak 46.38 318** *eP* **P 14 48 41.1 -0.2**
UZB pmax pmax
comp=Z,58nm,1.0s
**PRZ Przheval'sk 46.50 317** P **P 14 48 44.2 +1.9**
**PRZ Przheval'sk 46.50 317** P **P 14 48 44.2 +1.9**
PRZ pmax pmax
comp=Z,402nm,1.7s
**TARG Taragay, Kyrgy 46.59 315** P **P 14 48 44.9 +1.7**
TARG IAmb IAmb 14 48 46.3
comp=Z,144nm,1.5s
**TARG Taragay, Kyrgy 46.59 315** P **P 14 48 44.9 +1.7**
TARG pmax pmax
comp=Z,144nm,1.5s
**KPKS Kokpek 46.74 318** *eP* **P 14 48 43.8 -0.3**
comp=Z,68nm,1.2s,baz=318
**KPKS Kokpek 46.74 318** *eP* **P 14 48 43.7 -0.3**
KPKS pmax pmax
comp=Z,68nm,1.2s
**SATY Saty 46.74 317** *eP* **P 14 48 44.0 -0.1**
comp=Z,65nm,1.2s,baz=317
**SATY Saty 46.74 317** *eP* **P 14 48 44.0 -0.1**
SATY pmax pmax
comp=Z,65nm,1.2s
**ZHN Zhinishke 46.77 317** *eP* **P 14 48 44.4 0.0**
comp=Z,71nm,1.2s,baz=317

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZHN** | **Zhinishke** | **46.77** | **317** | *e*P | | **P** | **14 48 44.3** | **0.0** |
| ZHN | | | | pmax | | pmax | | |
| | comp=Z,71nm,1.2s | | | | | | | |
| **RK1H** | **Rockhampton Ha** | **46.85** | **141** | P | | **P** | **14 48 44.2** | **-0.7** |
| **KSH** | **Kashi** | **47.03** | **312** | P | | **P** | **14 48 48.8** | **+2.4** |
| KSH | | | | PP | | **PP** | **14 50 43.3** | **+5.1** |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,79nm,1.5s | | | | | | | |
| KSH | | | | pmax | | pmax | | |
| | comp=Z,660nm,3.9s | | | | | | | |
| KSH | | | | LR | | LR | | |
| | comp=Z,740nm,16.8s | | | | | | | |
| KSH | | | | LR | | LR | | |
| | comp=Z,370nm,15.1s | | | | | | | |
| KSH | | | | LR | | LR | | |
| | comp=Z,600nm,16.2s | | | | | | | |
| **NIL** | **Nilore** | **47.43** | **303** | P | | **P** | **14 48 49.7** | **+0.2** |
| **NIL** | **Nilore** | **47.43** | **303** | P | | **P** | **14 48 49.8** | **+0.3** |
| **NIL** | **Nilore** | **47.43** | **303** | P | | **P** | **14 48 49.7** | **+0.2** |
| NIL | | | | pmax | | pmax | | |
| | comp=Z,499nm,1.5s | | | | | | | |
| **NIL** | **Nilore** | **47.43** | **303** | P | | **P** | **14 48 49.7** | **+0.2** |
| **TDK** | **Taldyqorghan** | **47.62** | **320** | *e*P | | **P** | **14 48 50.7** | **0.0** |
| | comp=Z,100nm,1.3s,baz=320 | | | | | | | |
| **TDK** | **Taldyqorghan** | **47.62** | **320** | *e*P | | **P** | **14 48 50.7** | **0.0** |
| TDK | | | | pmax | | pmax | | |
| | comp=Z,100nm,1.3s | | | | | | | |
| **ARXS** | **Arharly** | **47.63** | **318** | *e*P | | **P** | **14 48 49.9** | **-1.0** |
| **MDOK** | **Medeo** | **47.69** | **317** | *e*P | | **P** | **14 48 51.3** | **-0.2** |
| | baz=317 | | | | | | | |
| **MDOK** | **Medeo** | **47.69** | **317** | P | | **P** | **14 48 52.1** | **+0.6** |
| **NRN** | **Naryn** | **47.71** | **314** | P | | **P** | **14 48 52.7** | **+0.8** |
| NRN | | | | lAmb | | lAmb | 14 48 55.1 | |
| | comp=Z,149nm,1.4s | | | | | | | |
| **NRN** | **Naryn** | **47.71** | **314** | P | | **P** | **14 48 52.7** | **+0.8** |
| NRN | | | | pmax | | pmax | | |
| | comp=Z,149nm,1.4s | | | | | | | |
| **AAA** | **Alma-Ata** | **47.80** | **317** | *e*P | | **P** | **14 48 52.1** | **-0.2** |
| | comp=Z,49nm,1.0s,baz=317 | | | | | | | |
| **AAA** | **Alma-Ata** | **47.80** | **317** | *e*P | | **P** | **14 48 52.0** | **-0.2** |
| AAA | | | | pmax | | pmax | | |
| | comp=Z,49nm,1.0s | | | | | | | |
| **ULHL** | **Ulahol** | **47.86** | **315** | P | | **P** | **14 48 54.1** | **+1.2** |
| | SNR=56 | | | | | | | |
| **CHKK** | **Chushkaly** | **48.02** | **318** | *e*P | | **P** | **14 48 53.9** | **0.0** |
| | baz=318 | | | | | | | |
| **CHKK** | **Chushkaly** | **48.02** | **318** | *e*P | | **P** | **14 48 53.8** | **0.0** |
| **RKGY** | **Rocky Gully** | **48.04** | **184** | P | | **P** | **14 48 53.3** | **-0.7** |
| | comp=Z,78nm,1.2s | | | | | | | |
| **BBOO** | **Buckleboo** | **48.38** | **163** | P | | **P** | **14 48 55.4** | **-1.2** |
| **BBOO** | **Buckleboo** | **48.38** | **163** | P | | **P** | **14 48 54.5** | **-2.1** |
| | comp=Z,36nm,0.4s | | | | | | | |
| **TKM2** | **Tokmak 2** | **48.56** | **316** | P | | **P** | **14 48 59.1** | **+0.8** |
| | SNR=60 | | | | | | | |
| **TKM2** | **Tokmak 2** | **48.56** | **316** | P | | **P** | **14 48 58.7** | **+0.4** |
| **EIDS** | **Eidsvold** | **48.69** | **143** | P | | **P** | **14 48 58.0** | **-1.1** |
| **EIDS** | **Eidsvold** | **48.69** | **143** | P | | **P** | **14 48 57.6** | **-1.5** |
| | comp=Z,19nm,0.9s | | | | | | | |
| **YAK** | **Yakutsk** | **48.82** | **6***c* | *i*P | | **P** | **14 48 58.6** | **-0.9** |
| YAK | | | | *e**PP | | **pP** | **14 49 30.9** | **+2.6** |
| YAK | | | | *e* | | | 14 50 52.7 | |
| YAK | | | | *e*S | | **S** | **14 55 50.2** | **-2.9** |
| YAK | | | | *e**SS | | sS | 14 56 50.4 | +7.8 |
| YAK | | | | *e*SS | | **SS** | **14 59 23.5** | **-1.7** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,72nm,1.0s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,38nm,1.1s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,11nm,1.0s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,89nm,2.7s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,50nm,2.7s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,40nm,2.3s | | | | | | | |
| YAK | | | | smax | | smax | | |
| | comp=E,38nm,2.3s | | | | | | | |
| YAK | | | | smax | | smax | | |
| | comp=N,32nm,2.0s | | | | | | | |
| **KBK** | **Karagaybulak** | **48.90** | **315** | P | | **P** | **14 49 02.8** | **+1.9** |
| | SNR=40 | | | | | | | |
| **KAAM** | **Kaadhehdhoo** | **49.04** | **259** | P | | **P** | **14 49 02.8** | **+0.7** |
| KAAM | | | | lAmb | | lAmb | 14 50 56.5 | |
| | comp=Z,114nm,1.5s | | | | | | | |
| **UCH** | **Uchtor** | **49.04** | **315** | P | | **P** | **14 49 04.3** | **+2.0** |
| | SNR=10 | | | | | | | |
| **PEA0B** | **Petropavlovsk-** | **49.11** | **29** | P | | **P** | **14 49 03.5** | **+1.5** |
| **PEA0B** | **Petropavlovsk-** | **49.11** | **29***c* | *i*P | | **P** | **14 49 02.2** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **49.11** | **29** | P | | **P** | **14 49 02.1** | **+0.1** |
| | comp=Z,4.2nm,0.7s,baz=212,slow=0.6,SNR=21 | | | | | | | |
| PETK | | | | LR | | LR | 15 08 28.1 | |
| | comp=Z,165nm,20.9s,baz=224,slow=34 | | | | | | | |
| | comp=Z,4.2nm,0.7s | | | | | | | |
| **CHMS** | **Chumysh** | **49.17** | **316** | P | | **P** | **14 49 03.8** | **+1.2** |
| | SNR=16 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **49.20** | **333** | P | | **P** | **14 49 02.1** | **-0.6** |
| ZAA0 | | | | lAmb | | lAmb | 14 49 03.9 | |
| | comp=Z,82nm,1.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.20** | **333** | P | | **P** | **14 49 01.9** | **-0.7** |
| | comp=Z,11nm,0.3s,baz=124,slow=6.4,SNR=64 | | | | | | | |
| ZALV | | | | S | | **S** | **14 55 54.8** | **-4.1** |
| | comp=Z,1.3nm,0.7s,baz=116,slow=16,SNR=4.8 | | | | | | | |
| ZALV | | | | LR | | LR | 15 11 17.4 | |
| | comp=Z,292nm,18.3s,baz=116,slow=38 | | | | | | | |
| | comp=Z,11nm,0.3s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **49.20** | **333** | *i*P | | **P** | **14 49 02.0** | **-0.7** |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **49.20** | **315** | P | | **P** | **14 49 04.8** | **+1.7** |
| | SNR=5.1 | | | | | | | |
| **AAK** | **Ala-Archa** | **49.20** | **315** | P | | **P** | **14 49 04.0** | **+0.9** |
| AAK | | | | lAmb | | lAmb | 14 49 05.9 | |
| | comp=Z,128nm,1.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **49.20** | **315** | P | | **P** | **14 49 04.0** | **+0.9** |
| **AAK** | **Ala-Archa** | **49.20** | **315** | LR | | LR | 15 11 55.0 | |
| | comp=Z,355nm,18.9s,baz=98,slow=38 | | | | | | | |
| **AAK** | **Ala-Archa** | **49.20** | **315** | P | | **P** | **14 49 04.2** | **+1.1** |
| AAK | | | | P | | **P** | **14 49 04.2** | **+1.1** |
| **AAK** | **Ala-Archa** | **49.20** | **315***c* | *i*P | | **P** | **14 49 04.0** | **+0.9** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,95nm,1.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **49.20** | **315** | P | | **P** | **14 49 04.1** | **+1.1** |
| **SEM** | **Semipalatinsk** | **49.30** | **327** | *e*P | | **P** | **14 49 03.4** | **-0.3** |
| | comp=Z,81nm,1.3s,baz=327 | | | | | | | |
| **SEM** | **Semipalatinsk** | **49.30** | **327** | *e*P | | **P** | **14 49 03.4** | **-0.3** |
| SEM | | | | pmax | | pmax | | |
| | comp=Z,81nm,1.3s | | | | | | | |
| **STKA** | **Stephens Creek** | **49.40** | **157** | P | | **P** | **14 49 02.9** | **-1.6** |
| **STKA** | **Stephens Creek** | **49.40** | **157** | P | | **P** | **14 49 02.1** | **-2.4** |
| | comp=Z,4.2nm,1.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **49.40** | **157** | P | | **P** | **14 49 02.8** | **-1.6** |
| | comp=Z,7.4nm,0.4s,baz=341,slow=7.8,SNR=56 | | | | | | | |
| | comp=Z,7.4nm,0.4s | | | | | | | |
| **STKA** | **Stephens Creek** | **49.40** | **157**⇑ | *i*P | | **P** | **14 49 03.4** | **-1.0** |
| **SGDS** | **Sogindy** | **49.42** | **316** | *e*P | | **P** | **14 49 04.4** | **-0.2** |
| | baz=316 | | | | | | | |
| **SGDS** | **Sogindy** | **49.42** | **316** | *e*P | | **P** | **14 49 04.4** | **-0.2** |
| **USP** | **Ospenovka** | **49.44** | **316** | P | | **P** | **14 49 06.0** | **+1.3** |
| | SNR=10 | | | | | | | |
| **PET** | **Petropavlovsk** | **49.51** | **29** | P | | **P** | **14 49 06.5** | **+1.6** |
| PET | | | | lAmb | | lAmb | 14 49 07.2 | |
| | comp=Z,140nm,1.8s | | | | | | | |
| **PET** | **Petropavlovsk** | **49.51** | **29** | *e*P | | **P** | **14 49 04.3** | **-0.7** |
| PET | | | | *e*S | | **S** | **14 56 00.1** | **-3.0** |
| PET | | | | *e**SS | | **sS** | **14 56 54.6** | **+2.0** |
| PET | | | | pmax | | pmax | | |
| | comp=Z,400nm,10.3s | | | | | | | |
| PET | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| PET | | | | pmax | | pmax | | |
| | comp=Z,100nm,11.2s | | | | | | | |
| **PET** | **Petropavlovsk** | **49.51** | **29** | P | | **P** | **14 49 04.9** | **-0.1** |
| | comp=Z,29nm,1.2s,comp=Z,1μm | | | | | | | |
| **AML** | **Almayashu** | **49.57** | **314** | P | | **P** | **14 49 07.6** | **+1.4** |
| | SNR=7.5 | | | | | | | |
| **EKS2** | **Erkin-Say** | **49.71** | **315** | P | | **P** | **14 49 08.6** | **+1.7** |
| | SNR=10 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.33** | **326** | P | | **P** | **14 49 11.5** | **+0.3** |
| | comp=Z,55nm,0.8s,baz=122,slow=8.0,SNR=188 | | | | | | | |
| KURBB | | | | S | | **S** | **14 56 15.7** | **+1.0** |
| | comp=Z,0.4nm,0.4s,baz=112,slow=17,SNR=4.6 | | | | | | | |
| KURBB | | | | LR | | LR | 15 11 48.5 | |
| | comp=Z,245nm,18.5s,baz=158,slow=37 | | | | | | | |
| | comp=Z,55nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **50.34** | **326** | P | | **P** | **14 49 11.6** | **+0.3** |
| **KURK** | **Kurchatov** | **50.34** | **326** | P | | **P** | **14 49 12.1** | **+0.8** |
| KURK | | | | P | | **P** | **14 49 12.1** | **+0.8** |
| **KURK** | **Kurchatov** | **50.34** | **326***c* | *i*P | | **P** | **14 49 11.8** | **+0.5** |
| KURK | | | | *i* | *PP | **pP** | **14 49 41.4** | **+1.4** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,340nm,1.3s | | | | | | | |
| **KURK** | **Kurchatov** | **50.34** | **326** | P | | **P** | **14 49 11.6** | **+0.3** |
| KURK | | | | sP | | **sP** | **14 49 51.3** | **-2.5** |
| KURK | | | | PcP | | **PcP** | **14 50 29.1** | **+0.9** |
| **BTLS** | **Baital** | **50.43** | **318** | *e*P | | **P** | **14 49 12.2** | **0.0** |
| | baz=318 | | | | | | | |
| **BTLS** | **Baital** | **50.43** | **318** | *e*P | | **P** | **14 49 12.1** | **0.0** |
| **CMSA** | **Cobar Meteorol** | **50.83** | **152** | P | | **P** | **14 49 14.1** | **-1.1** |
| **BTK** | **Batken** | **50.97** | **311** | P | | **P** | **14 49 17.3** | **+0.9** |
| **BTK** | **Batken** | **50.97** | **311** | P | | **P** | **14 49 17.3** | **+0.9** |
| BTK | | | | pmax | | pmax | | |
| | comp=Z,179nm,1.4s | | | | | | | |
| **MA2** | **Magadan** | **51.01** | **19** | P | | **P** | **14 49 17.3** | **+1.1** |
| **MA2** | **Magadan** | **51.01** | **19** | LR | | LR | 15 13 15.9 | |
| | comp=Z,124nm,18.4s,baz=228,slow=38 | | | | | | | |
| **MA2** | **Magadan** | **51.01** | **19***c* | *i*P | | **P** | **14 49 16.4** | **+0.2** |
| MA2 | | | | pmax | | pmax | | |
| | comp=Z,92nm,1.5s | | | | | | | |
| **MA2** | **Magadan** | **51.01** | **19** | P | | **P** | **14 49 17.0** | **+0.8** |
| | comp=Z,60nm,1.7s,comp=Z,1μm | | | | | | | |
| **KBL** | **Kabul** | **51.03** | **304** | P | | **P** | **14 49 18.0** | **+0.9** |
| **KBL** | **Kabul** | **51.03** | **304** | P | | **P** | **14 49 18.0** | **+0.9** |
| KBL | | | | pmax | | pmax | | |
| | comp=Z,371nm,1.7s | | | | | | | |
| **GAR** | **Garm** | **51.05** | **309** | P | | **P** | **14 49 17.7** | **+0.6** |
| **CHGR** | **Chuyangaron** | **51.84** | **309** | P | | **P** | **14 49 23.2** | **+0.3** |
| **CHGR** | **Chuyangaron** | **51.84** | **309** | P | | **P** | **14 49 23.2** | **+0.3** |
| CHGR | | | | pmax | | pmax | | |
| | comp=Z,363nm,1.4s | | | | | | | |
| **SIMJ** | **Simiganj** | **51.95** | **309** | P | | **P** | **14 49 23.9** | **+0.2** |
| **SIMJ** | **Simiganj** | **51.95** | **309** | P | | **P** | **14 49 23.8** | **0.0** |
| SIMJ | | | | pP | | **pP** | **14 49 50.9** | **-1.8** |
| **KK31** | **Karatay Array** | **52.11** | **314** | P | | **P** | **14 49 25.3** | **+0.6** |
| KK31 | | | | lAmb | | lAmb | 14 49 27.3 | |
| | comp=Z,75nm,1.2s | | | | | | | |
| **KK31** | **Karatay Array** | **52.11** | **314** | *i*P | | **P** | **14 49 24.7** | **0.0** |
| **KKAR** | **Karatay Array** | **52.11** | **314** | P | | **P** | **14 49 25.3** | **+0.6** |
| KKAR | | | | lAmb | | lAmb | 14 49 27.3 | |
| | comp=Z,75nm,1.2s | | | | | | | |
| **KKAR** | **Karatay Array** | **52.11** | **314** | P | | **P** | **14 49 25.3** | **+0.6** |
| KKAR | | | | pmax | | pmax | | |
| | comp=Z,75nm,1.2s | | | | | | | |
| **BRLS** | **Boroldav** | **52.56** | **314** | *e*P | | **P** | **14 49 28.2** | **+0.2** |
| | comp=Z,16nm,0.6s,baz=314 | | | | | | | |
| **BRLS** | **Boroldav** | **52.56** | **314** | *e*P | | **P** | **14 49 28.2** | **+0.2** |
| BRLS | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.6s | | | | | | | |
| **ARMA** | **Armidale** | **52.87** | **146** | P | | **P** | **14 49 30.7** | **+0.2** |
| **ARPS** | **Mount Arapiles** | **53.86** | **159** | P | | **P** | **14 49 35.9** | **-1.7** |
| | comp=Z,31nm,0.6s | | | | | | | |
| **SEY** | **Seymchan** | **54.12** | **17***c* | *i*P | | **P** | **14 49 39.8** | **+0.8** |
| SEY | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| **CAN** | **Canberra** | **55.50** | **152** | P | | **P** | **14 49 48.4** | **-1.0** |
| CAN | | | | lAmb | | lAmb | 14 49 50.6 | |
| | comp=Z,88nm,1.6s | | | | | | | |
| **CAN** | **Canberra** | **55.50** | **152** | P | | **P** | **14 49 48.4** | **-1.0** |
| CAN | | | | pmax | | pmax | | |
| | comp=Z,88nm,1.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **55.92** | **326** | P | | **P** | **14 49 52.0** | **-0.1** |
| | comp=Z,8.7nm,0.3s,baz=117,slow=5.2,SNR=54 | | | | | | | |
| | comp=Z,8.7nm,0.3s | | | | | | | |
| **TOO** | **Toolangi** | **55.92** | **156** | P | | **P** | **14 49 51.7** | **-0.7** |
| **TOO** | **Toolangi** | **55.92** | **156** | P | | **P** | **14 49 51.7** | **-0.7** |
| TOO | | | | pmax | | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| **BRVK** | **Borovoye** | **55.99** | **326** | P | | **P** | **14 49 53.2** | **+0.6** |
| **BRVK** | **Borovoye** | **55.99** | **326** | P | | **P** | **14 49 53.5** | **+0.8** |
| **BRVK** | **Borovoye** | **55.99** | **326***c* | *i*P | | **P** | **14 49 52.6** | **-0.1** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,131nm,1.6s | | | | | | | |
| **BRVK** | **Borovoye** | **55.99** | **326** | P | | **P** | **14 49 52.6** | **-0.1** |
| BRVK | | | | sP | | **sP** | **14 50 32.2** | **-3.4** |
| **NGCH** | **Negor - Chabah** | **57.03** | **292** | P | | **P** | **14 50 00.6** | **0.0** |
| **DZM** | **Mont Dzumac** | **57.10** | **128** | P | | **P** | **14 50 01.1** | **0.0** |
| **DZM** | **Mont Dzumac** | **57.10** | **128** | *e*P | | P | 14 49 55.6 | -5.5 |
| | comp=Z,127nm,24.4s | | | | | | | |
| DZM | | | | *e*S | | **S** | **14 57 41.4** | **-5.5** |
| | comp=Z,122nm,25.2s | | | | | | | |
| DZM | | | | *e*SS | | **SS** | **15 01 31.8** | **-6.1** |
| | comp=Z,142nm,27.2s | | | | | | | |
| DZM | | | | *e*LR | | LR | 15 06 57.5 | |
| | comp=Z,657nm,34.8s | | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **57.44** | **35** | LR | | LR | 15 10 33.1 | |
| | comp=Z,164nm,21.5s,baz=260,slow=31 | | | | | | | |
| **TIXI** | **Tiksi** | **58.26** | **3** | P | | **P** | **14 50 07.9** | **-0.4** |
| **TIXI** | **Tiksi** | **58.26** | **3** | LR | | LR | 15 16 42.7 | |
| | comp=Z,481nm,19.3s,baz=204,slow=37 | | | | | | | |
| **TIXI** | **Tiksi** | **58.26** | **3***c* | *i*P | | **P** | **14 50 07.1** | **-1.2** |
| TIXI | | | | pmax | | pmax | | |
| | comp=Z,103nm,1.1s | | | | | | | |
| **JLN** | **Jalan Bani Buh** | **58.70** | **288** | P | | **P** | **14 50 12.1** | **-0.1** |
| **WBK** | **Wadi Bani Khal** | **59.08** | **288** | P | | **P** | **14 50 14.9** | **0.0** |
| **JMDO** | **Jabal Madar** | **59.89** | **288** | P | | **P** | **14 50 20.2** | **-0.3** |
| **SMDO** | **Samad** | **59.91** | **289** | P | | **P** | **14 50 20.6** | **-0.1** |
| | SNR=5.1 | | | | | | | |
| **JASK** | **Jask - Hormozg** | **59.98** | **292** | P | | **P** | **14 50 21.1** | **+0.1** |
| **MHTO** | **MHTO** | **60.10** | **287** | P | | **P** | **14 50 21.3** | **-0.6** |
| | SNR=7.8 | | | | | | | |
| **HOQ** | **Hoqain** | **60.56** | **290** | P | | **P** | **14 50 25.0** | **0.0** |
| | SNR=13 | | | | | | | |
| **DQM** | **DQM** | **60.58** | **285** | P | | **P** | **14 50 25.2** | **0.0** |
| **BSY** | **Bisya** | **60.71** | **289** | P | | **P** | **14 50 26.0** | **-0.1** |
| | SNR=6.5 | | | | | | | |
| **AB31** | **Akbulak array** | **60.88** | **319** | *i*P | | **P** | **14 50 25.9** | **-0.7** |
| **ABKAR** | **Akbulak array** | **60.88** | **319** | P | | **P** | **14 50 26.4** | **-0.3** |
| ABKAR | | | | lAmb | | lAmb | 14 50 28.7 | |
| | comp=Z,64nm,1.2s | | | | | | | |
| **SOHO** | **SOHO** | **61.25** | **290** | P | | **P** | **14 50 28.5** | **-1.1** |
| **SOHO** | **SOHO** | **61.25** | **290** | P | | **P** | **14 50 29.7** | **+0.1** |
| SOHO | | | | P | | **P** | **14 50 29.7** | **+0.1** |
| **ARQ** | **Araqi** | **61.30** | **289** | P | | **P** | **14 50 30.0** | **0.0** |
| | SNR=6.5 | | | | | | | |
| **MDH** | **Madha** | **61.41** | **292** | P | | **P** | **14 50 29.7** | **-1.0** |
| **UOSS** | **Minazif** | **61.51** | **291** | P | | **P** | **14 50 31.2** | **-0.2** |
| UOSS | | | | lAmb | | lAmb | 14 50 41.9 | |
| | comp=Z,50nm,1.6s | | | | | | | |
| **UOSS** | **Minazif** | **61.51** | **291** | P | | **P** | **14 50 30.2** | **-1.2** |
| **UOSS** | **Minazif** | **61.51** | **291** | P | | **P** | **14 50 31.4** | **0.0** |
| **SHME** | **Shamm** | **61.53** | **292** | P | | **P** | **14 50 31.2** | **-0.2** |
| **SHME** | **Shamm** | **61.53** | **292** | P | | **P** | **14 50 32.4** | **+0.9** |
| | SNR=5.8 | | | | | | | |
| **MASF** | **Masafi** | **61.54** | **292** | P | | **P** | **14 50 32.5** | **+0.9** |
| **MSFE** | **Esma-Masafi** | **61.54** | **292** | P | | **P** | **14 50 31.0** | **-0.6** |
| **HATD** | **Hatta, Dubai** | **61.58** | **291** | P | | **P** | **14 50 31.5** | **-0.4** |
| **HATD** | **Hatta, Dubai** | **61.58** | **291** | P | | **P** | **14 50 31.9** | **0.0** |
| | SNR=7.8 | | | | | | | |
| **ASHO** | **Ashiyiah** | **61.66** | **291** | P | | **P** | **14 50 32.0** | **-0.4** |
| **ASHO** | **Ashiyiah** | **61.66** | **291** | P | | **P** | **14 50 32.4** | **0.0** |
| | SNR=9.6 | | | | | | | |
| **BILL** | **Bilibino** | **61.82** | **18***c* | *i*P | | **P** | **14 50 32.5** | **-0.1** |
| BILL | | | | *e**PP | | **pP** | **14 51 06.2** | **+3.6** |
| BILL | | | | *e* | | | 14 52 56.3 | |
| BILL | | | | *e*S | | S | 14 59 01.8 | +16 |
| BILL | | | | *e*SS | | **SS** | **15 02 57.3** | **+7.5** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,81nm,1.5s | | | | | | | |
| **ALNE** | **Al Ain** | **61.97** | **290** | P | | **P** | **14 50 34.0** | **-0.5** |
| **ALNE** | **Al Ain** | **61.97** | **290** | P | | **P** | **14 50 34.4** | **-0.1** |
| | SNR=19 | | | | | | | |
| **UMQ** | **Umm Al-Quwin** | **61.98** | **292** | *i*P | | **P** | **14 50 34.6** | **+0.2** |
| | SNR=5.0 | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **62.00** | **291** | P | | **P** | **14 50 34.7** | **0.0** |
| | SNR=6.1 | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **62.08** | **291** | P | | **P** | **14 50 34.4** | **-0.8** |
| **ASUD** | **Al Ashush, Dub** | **62.32** | **291** | *i*P | | **P** | **14 50 36.6** | **-0.2** |
| | SNR=6.8 | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **62.32** | **291** | P | | **P** | **14 50 36.8** | **0.0** |
| | SNR=5.3 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **62.36** | **320** | LR | | LR | 15 17 19.0 | |
| | comp=Z,293nm,22.0s,baz=38,slow=35 | | | | | | | |
| **SVE** | **Sverdlovsk** | **62.55** | **328***de* | P | | **P** | **14 50 37.5** | **-0.2** |
| SVE | | | | pmax | | pmax | | |
| | comp=Z,79nm,1.5s | | | | | | | |
| **SHAO** | **Shalim** | **62.57** | **283** | *i*P | | **P** | **14 50 37.9** | **-0.6** |
| | SNR=32 | | | | | | | |
| **SHAO** | **Shalim** | **62.57** | **283** | P | | **P** | **14 50 38.5** | **-0.1** |
| **UMZA** | **Um Al Zommool** | **62.59** | **289** | P | | **P** | **14 50 37.7** | **-0.9** |
| **AJN** | **Ajban** | **62.64** | **291** | P | | **P** | **14 50 38.8** | **-0.1** |
| | SNR=5.4 | | | | | | | |
| **DMTO** | **DMTO** | **63.24** | **283** | P | | **P** | **14 50 42.8** | **-0.2** |
| **ARU** | **Arti** | **63.53** | **327** | P | | **P** | **14 50 43.2** | **-1.0** |
| ARU | | | | lAmb | | lAmb | 14 50 44.8 | |
| | comp=Z,135nm,1.8s | | | | | | | |
| **ARU** | **Arti** | **63.53** | **327** | LR | | LR | 15 20 45.5 | |
| | comp=Z,194nm,18.7s,baz=102,slow=38 | | | | | | | |
| **ARU** | **Arti** | **63.53** | **327***c* | *i*P | | **P** | **14 50 43.2** | **-1.0** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **ARU** | **Arti** | **63.53** | **327** | P | | **P** | **14 50 43.4** | **-0.9** |
| ARU | | | | PcP | | **PcP** | **14 51 18.9** | **-0.8** |
| **MZWR** | **Madinat Zayed** | **63.69** | **290** | P | | **P** | **14 50 45.9** | **0.0** |
| **DOK** | **Doka** | **63.92** | **284** | P | | **P** | **14 50 47.4** | **0.0** |
| **RBK** | **Rabkut** | **63.97** | **283** | P | | **P** | **14 50 47.7** | **-0.2** |
| **MZR** | **Muzera** | **64.11** | **289** | *i*P | | **P** | **14 50 48.1** | **-0.6** |
| | SNR=7.7 | | | | | | | |
| **MZR** | **Muzera** | **64.11** | **289** | P | | **P** | **14 50 48.6** | **-0.1** |
| | SNR=17 | | | | | | | |
| **WHFO** | **Wadi Hawf** | **64.33** | **284** | P | | **P** | **14 50 49.8** | **-0.5** |
| **MSVF** | **Nonsavu** | **64.51** | **117** | P | | **P** | **14 50 52.2** | **+0.8** |
| MSVF | | | | lAmb | | lAmb | 14 52 46.8 | |
| | comp=Z,100nm,1.9s | | | | | | | |
| **MSVF** | **Nonsavu** | **64.51** | **117** | LR | | LR | 15 16 28.5 | |
| | comp=Z,78nm,21.2s,baz=280,slow=34 | | | | | | | |
| **MSVF** | **Nonsavu** | **64.51** | **117** | P | | **P** | **14 50 52.2** | **+0.8** |
| MSVF | | | | pmax | | pmax | | |
| | comp=Z,100nm,2.0s | | | | | | | |
| **JRN** | **Qarnain Island** | **64.55** | **291** | P | | **P** | **14 50 51.4** | **0.0** |
| **ABTO** | **Aybut** | **64.85** | **283** | P | | **P** | **14 50 53.4** | **-0.2** |
| **SLWR** | **Sila** | **65.67** | **290** | P | | **P** | **14 50 58.6** | **0.0** |
| **TRNA** | **Turayna** | **66.05** | **291** | P | | **P** | **14 51 01.1** | **0.0** |
| | SNR=11 | | | | | | | |
| **SHMA** | **Al-Shehemyia** | **66.19** | **292** | P | | **P** | **14 51 02.0** | **0.0** |
| | SNR=15 | | | | | | | |
| **SMRA** | **Abu-Samra** | **66.40** | **291** | P | | **P** | **14 51 03.5** | **+0.2** |
| | SNR=23 | | | | | | | |
| **SAKB** | **Bahrain** | **66.57** | **293** | P | | **P** | **14 51 04.5** | **+0.1** |
| **MSEY** | **Mahe Island** | **67.27** | **259** | P | | **P** | **14 51 09.9** | **+0.7** |
| **SPIA** | **Saint Paul Isl** | **67.33** | **33** | P | | **P** | **14 51 08.6** | **0.0** |
| | baz=260 | | | | | | | |
| **NIKH** | **Nikolski High** | **67.47** | **38** | P | | **P** | **14 51 09.2** | **-0.4** |
| | baz=262 | | | | | | | |
| **P08K** | **Saint George I** | **67.61** | **34** | P | | **P** | **14 51 10.6** | **+0.2** |
| | baz=260 | | | | | | | |
| **GAMB** | **Gambell** | **68.04** | **26** | P | | **P** | **14 51 13.9** | **+0.9** |
| | baz=256 | | | | | | | |
| **AKT** | **Akhty** | **68.47** | **309***c* | *i*P | | **P** | **14 51 16.0** | **-0.3** |
| AKT | | | | *e**PP | | sP | 14 51 51.7 | -8.3 |
| AKT | | | | *e* | | | 14 53 50.8 | |
| AKT | | | | pmax | | pmax | | |
| | comp=Z,67nm,1.1s | | | | | | | |
| **MAK** | **Makhachkala** | **68.66** | **311***d* | *i*P | | **P** | **14 51 15.5** | **-1.7** |
| MAK | | | | *e**PP | | **pP** | **14 51 47.7** | **+0.1** |
| MAK | | | | *e*SP | | **sP** | **14 52 01.3** | **+0.3** |
| MAK | | | | *e* | | | 14 53 47.8 | |
| MAK | | | | *e*S | | **S** | **15 00 08.8** | **-1.6** |
| MAK | | | | *e**SS | | **SKiKP** | **15 01 03.5** | **+5.9** |
| MAK | | | | *e*SS | | **SS** | **15 04 37.6** | **+0.5** |
| MAK | | | | pmax | | pmax | | |
| | comp=Z,436nm,1.3s | | | | | | | |
| MAK | | | | MLR | | MLR | | |
| | comp=Z,171nm,13.0s | | | | | | | |
| **KIRV** | **Kirov** | **68.81** | **328** | LR | | LR | 15 22 33.8 | |
| | comp=Z,244nm,18.2s,baz=97,slow=37 | | | | | | | |
| **KIRV** | **Kirov** | **68.81** | **328***c* | *e*P | | **P** | **14 51 16.7** | **-1.1** |
| **KBD** | **Kabd** | **68.86** | **296** | P | | **P** | **14 51 18.6** | **-0.2** |
| **UNV** | **Unalaska Valle** | **68.97** | **37** | P | | **P** | **14 51 19.0** | **+0.1** |
| | baz=264 | | | | | | | |
| **BELG** | **Belogornoye** | **69.08** | **321** | LR | | LR | 15 24 41.4 | |
| | comp=Z,163nm,19.0s,baz=104,slow=38 | | | | | | | |
| **BELG** | **Belogornoye** | **69.08** | **321***c* | *i*P | | **P** | **14 51 18.6** | **-1.0** |
| BELG | | | | pmax | | pmax | | |
| | comp=Z,28nm,1.4s | | | | | | | |
| **M11K** | **Mekoryuk** | **69.93** | **30** | P | | **P** | **14 51 25.1** | **+0.4** |
| | baz=262 | | | | | | | |
| **TNA** | **Tin City** | **70.03** | **25** | P | | **P** | **14 51 25.5** | **+0.3** |
| | baz=258 | | | | | | | |
| **F14K** | **Arctic Creek** | **70.66** | **25** | P | | **P** | **14 51 29.5** | **+0.4** |
| | baz=260 | | | | | | | |
| **GNI** | **Garni** | **70.75** | **308** | P | | **P** | **14 51 30.9** | **+0.6** |
| **GNI** | **Garni** | **70.75** | **308***c* | *i*P | | **P** | **14 51 31.2** | **+0.8** |
| GNI | | | | *i* | *PP | **pP** | **14 52 01.2** | **+0.3** |
| GNI | | | | pmax | | pmax | | |
| | comp=Z,115nm,1.4s | | | | | | | |
| **GNI** | **Garni** | **70.75** | **308** | P | | **P** | **14 51 30.6** | **+0.2** |
| | comp=Z,74nm,1.6s,comp=Z,1μm | | | | | | | |
| **FALS** | **False Pass** | **70.86** | **36** | P | | **P** | **14 51 30.4** | **-0.1** |
| | baz=266 | | | | | | | |
| **K13K** | **Kusilvak Mount** | **70.87** | **29** | P | | **P** | **14 51 30.1** | **-0.3** |
| | baz=263 | | | | | | | |
| **ANM** | **Nome** | **70.92** | **26** | P | | **P** | **14 51 30.8** | **+0.1** |
| | baz=261 | | | | | | | |
| **M13K** | **Dall Lake** | **71.33** | **31** | P | | **P** | **14 51 33.0** | **-0.2** |
| | baz=264 | | | | | | | |
| **RAYN** | **Ar Rayn** | **71.36** | **290** | P | | **P** | **14 51 34.5** | **+0.3** |
| **RAYN** | **Ar

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **M15K** | **Kasigluk River** | **72.67** | **30** | P | | **P** | **14 51 41.2** | **0.0** |
| | baz=267 | | | | | | | | |
| **E17K** | **Hotham Inlet** | **72.69** | **24** | P | | **P** | **14 51 41.8** | **+0.6** |
| | baz=264 | | | | | | | | |
| **J16K** | **Anvik River** | **72.87** | **28** | P | | **P** | **14 51 43.2** | **+0.8** |
| | baz=266 | | | | | | | | |
| **I17K** | **Unalakleet** | **72.87** | **27** | P | | **P** | **14 51 43.8** | **+1.5** |
| I17K | | | | IAmb | | IAmb | 14 51 45.0 | | |
| | comp=Z,140nm,1.8s | | | | | | | | |
| **I17K** | **Unalakleet** | **72.87** | **27** | P | | **P** | **14 51 43.3** | **+1.0** |
| | baz=266 | | | | | | | | |
| **N15K** | **Kwethluk River** | **72.94** | **31** | P | | **P** | **14 51 43.3** | **+0.5** |
| | baz=267,SNR=6.5 | | | | | | | | |
| **B18K** | **Kokolik River** | **72.97** | **21** | P | | **P** | **14 51 43.0** | **+0.2** |
| | baz=263 | | | | | | | | |
| **G17K** | **Kiwalik Mounta** | **73.02** | **25** | P | | **P** | **14 51 43.8** | **+0.6** |
| | baz=265,SNR=13 | | | | | | | | |
| **O15K** | **Ungalikthiuk R** | **73.03** | **32** | P | | **P** | **14 51 41.9** | **-1.5** |
| | baz=268 | | | | | | | | |
| **CHNA** | **Chernabura Isl** | **73.07** | **37** | P | | **P** | **14 51 42.5** | **-1.2** |
| | baz=269 | | | | | | | | |
| **C18K** | **Utukok River** | **73.10** | **22** | P | | **P** | **14 51 44.1** | **+0.3** |
| | baz=264 | | | | | | | | |
| **S14K** | **Fog Glacier** | **73.11** | **35** | P | | **P** | **14 51 43.0** | **-1.0** |
| | baz=269 | | | | | | | | |
| **E18K** | **Tukpahlearik C** | **73.20** | **23** | P | | **P** | **14 51 45.2** | **+0.9** |
| **E18K** | **Tukpahlearik C** | **73.20** | **23** | P | | **P** | **14 51 44.9** | **+0.7** |
| | baz=265,SNR=5.5 | | | | | | | | |
| **H17K** | **Granite Mounta** | **73.28** | **26** | P | | **P** | **14 51 46.1** | **+1.3** |
| H17K | | | | IAmb | | IAmb | 14 51 47.3 | | |
| | comp=Z,106nm,1.6s | | | | | | | | |
| **H17K** | **Granite Mounta** | **73.28** | **26** | P | | **P** | **14 51 45.8** | **+1.0** |
| | baz=266,SNR=11 | | | | | | | | |
| **L16K** | **Owhat River** | **73.31** | **29** | P | | **P** | **14 51 46.1** | **+1.2** |
| **L16K** | **Owhat River** | **73.31** | **29** | P | | **P** | **14 51 45.3** | **+0.4** |
| | baz=267,SNR=9.5 | | | | | | | | |
| **A19K** | **Wainwright** | **73.32** | **20** | P | | **P** | **14 51 45.6** | **+0.8** |
| | baz=263 | | | | | | | | |
| **F18K** | **Selawik** | **73.51** | **24** | P | | **P** | **14 51 46.5** | **+0.5** |
| | baz=266,SNR=10 | | | | | | | | |
| **M16K** | **Timber Creek** | **73.53** | **30** | P | | **P** | **14 51 47.1** | **+0.8** |
| M16K | | | | IAmb | | IAmb | 14 51 48.5 | | |
| | comp=Z,123nm,1.6s | | | | | | | | |
| **M16K** | **Timber Creek** | **73.53** | **30** | P | | **P** | **14 51 47.0** | **+0.7** |
| | baz=268,SNR=10 | | | | | | | | |
| **J17K** | **VABM Dome** | **73.56** | **28** | P | | **P** | **14 51 47.9** | **+1.5** |
| J17K | | | | IAmb | | IAmb | 14 51 49.1 | | |
| | comp=Z,141nm,1.6s | | | | | | | | |
| **J17K** | **VABM Dome** | **73.56** | **28** | P | | **P** | **14 51 47.1** | **+0.7** |
| | baz=267,SNR=12 | | | | | | | | |
| **N16K** | **Nishlik Lake** | **73.61** | **31** | P | | **P** | **14 51 47.5** | **+0.8** |
| | baz=268,SNR=6.6 | | | | | | | | |
| **URZ** | **Urewera** | **73.71** | **137** | LR | | LR | 15 23 34.3 | | |
| | comp=Z,92nm,21.9s,baz=28,slow=35 | | | | | | | | |
| **C19K** | **Lookout Ridge** | **73.72** | **22** | P | | **P** | **14 51 47.9** | **+0.5** |
| | baz=265 | | | | | | | | |
| **CHGN** | **Chignik** | **73.74** | **35** | P | | **P** | **14 51 46.6** | **-1.0** |
| | baz=270 | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **73.79** | **138** | P | | **P** | **14 51 48.1** | **-0.1** |
| BKZ | | | | IAmb | | IAmb | 14 51 51.9 | | |
| | comp=Z,153nm,1.6s | | | | | | | | |
| **G18K** | **Tagagawik** | **73.87** | **25** | P | | **P** | **14 51 48.4** | **+0.2** |
| **G18K** | **Tagagawik** | **73.87** | **25** | P | | **P** | **14 51 48.2** | **0.0** |
| | baz=267,SNR=8.5 | | | | | | | | |
| **L17K** | **Donlin** | **73.88** | **29** | P | | **P** | **14 51 49.0** | **+0.7** |
| | baz=268,SNR=10 | | | | | | | | |
| **K17K** | **Iditarod** | **73.89** | **28** | P | | **P** | **14 51 49.8** | **+1.4** |
| **K17K** | **Iditarod** | **73.89** | **28** | P | | **P** | **14 51 49.1** | **+0.7** |
| | baz=268,SNR=15 | | | | | | | | |
| **O16K** | **Kokwok River B** | **73.93** | **32** | P | | **P** | **14 51 48.8** | **+0.2** |
| | baz=269,SNR=6.3 | | | | | | | | |
| **H18K** | **Honhosa River** | **73.95** | **26** | P | | **P** | **14 51 49.6** | **+0.9** |
| **H18K** | **Honhosa River** | **73.95** | **26** | P | | **P** | **14 51 49.0** | **+0.3** |
| | baz=267,SNR=7.6 | | | | | | | | |
| **P16K** | **Nushagak River** | **73.98** | **32** | P | | **P** | **14 51 49.1** | **+0.2** |
| | baz=270 | | | | | | | | |
| **VSLR** | **Vesyoloye** | **74.11** | **312** | *d* | *i*P | | **P** | **14 51 50.0** | **0.0** |
| VSLR | | | | | pmax | | pmax | | |
| | comp=Z,120nm,1.2s | | | | | | | | |
| **R16K** | **Pilot Point** | **74.20** | **34** | P | | **P** | **14 51 50.5** | **+0.3** |
| | baz=270 | | | | | | | | |
| **D19K** | **Kuna River** | **74.22** | **22** | P | | **P** | **14 51 51.0** | **+0.8** |
| D19K | | | | IAmb | | IAmb | 14 51 52.3 | | |
| | comp=Z,87nm,1.5s | | | | | | | | |
| **D19K** | **Kuna River** | **74.22** | **22** | P | | **P** | **14 51 50.6** | **+0.4** |
| | baz=267 | | | | | | | | |
| **VORR** | **Voronezh** | **74.26** | **320** | *e* | P | | **P** | **14 51 50.3** | **-0.4** |
| VORR | | | | | pmax | | pmax | | |
| | comp=Z,86nm,1.6s | | | | | | | | |
| **F19K** | **Shaleruckik Mo** | **74.27** | **24** | P | | | **P** | **14 51 50.8** | **+0.3** |
| **F19K** | **Shaleruckik Mo** | **74.27** | **24** | P | | | **P** | **14 51 50.8** | **+0.3** |
| | baz=268 | | | | | | | | |
| **M17K** | **Holitna River** | **74.27** | **30** | P | | | **P** | **14 51 51.6** | **+1.0** |
| | baz=269,SNR=8.1 | | | | | | | | |
| **VSR** | **Storozhevoye** | **74.30** | **320** | *e* | P | | P | 14 51 47.2 | -3.7 |
| VSR | | | | | pmax | | pmax | | |
| | comp=Z,60nm,1.4s | | | | | | | | |
| **SOC** | **Sochi** | **74.33** | **312** | *c* | *i*P | | **P** | **14 51 49.8** | **-1.5** |
| SOC | | | | | *e**PP | | **pP** | **14 52 23.9** | **+1.8** |
| SOC | | | | | *e**SP | | **sP** | **14 52 37.8** | **+2.4** |
| SOC | | | | | *e* | | | 14 54 35.3 | |
| SOC | | | | | *e*PPP | | PPP | 14 56 25.8 | |
| SOC | | | | | *e*S | | **S** | **15 01 13.7** | **-1.9** |
| SOC | | | | | *e*SS | | **SS** | **15 06 01.0** | **-2.8** |
| SOC | | | | | *e*SSS | | SSS | 15 09 21.8 | |
| SOC | | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.5s | | | | | | | | |
| **N17K** | **Nushagak Hills** | **74.39** | **31** | P | | | **P** | **14 51 52.4** | **+1.1** |
| | baz=270,SNR=12 | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **74.40** | **321** | *e* | P | | **P** | **14 51 49.2** | **-2.3** |
| LPSR | | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | | | |
| **O17K** | **Koliganek Bris** | **74.44** | **31** | P | | | **P** | **14 51 51.6** | **+0.1** |
| | baz=270 | | | | | | | | |
| **E19K** | **Redstone River** | **74.50** | **23** | P | | | **P** | **14 51 52.2** | **+0.4** |
| | baz=268 | | | | | | | | |
| **G19K** | **Purcell Mounta** | **74.52** | **25** | P | | | **P** | **14 51 52.1** | **+0.2** |
| | baz=268,SNR=11 | | | | | | | | |
| **GCSA** | **Galena City Sc** | **74.57** | **26** | P | | | **P** | **14 51 52.3** | **+0.1** |
| | baz=269,SNR=5.6 | | | | | | | | |
| **ADZR** | **Andozero** | **74.61** | **333** | *e* | P | | **P** | **14 51 52.9** | **+0.4** |
| ADZR | | | | | *PP | | **pP** | **14 52 22.9** | **-0.4** |
| ADZR | | | | | pmax | | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **J18K** | **Innoko River** | **74.63** | **28** | P | | | **P** | **14 51 52.8** | **+0.1** |
| | baz=269,SNR=12 | | | | | | | | |
| **L18K** | **Granite Mounta** | **74.63** | **29** | P | | | **P** | **14 51 53.1** | **+0.5** |
| | baz=270,SNR=8.4 | | | | | | | | |
| **B20K** | **Meade River** | **74.64** | **21** | P | | | **P** | **14 51 53.0** | **+0.5** |
| | baz=267 | | | | | | | | |
| **H19K** | **Roundabout Mou** | **74.77** | **25** | P | | | **P** | **14 51 54.2** | **+0.8** |
| | baz=269,SNR=20 | | | | | | | | |
| **P17K** | **Kvichak River** | **74.78** | **32** | P | | | **P** | **14 51 54.0** | **+0.5** |
| | baz=271 | | | | | | | | |
| **D20K** | **Etivluk River** | **74.78** | **22** | P | | | **P** | **14 51 54.1** | **+0.6** |
| | baz=268 | | | | | | | | |
| **R17L** | **Mt. Peulik Vol** | **74.85** | **34** | P | | | **P** | **14 51 53.4** | **-0.7** |
| | baz=271 | | | | | | | | |
| **E20K** | **Nigu River** | **74.92** | **23** | P | | | **P** | **14 51 54.0** | **-0.3** |
| | baz=268,SNR=5.8 | | | | | | | | |
| **N18K** | **Kilae Creek** | **75.03** | **30** | P | | | **P** | **14 51 56.0** | **+1.0** |
| **N18K** | **Kilae Creek** | **75.03** | **30** | P | | | **P** | **14 51 54.8** | **-0.2** |
| | baz=271,SNR=6.6 | | | | | | | | |
| **M18K** | **Stony River** | **75.05** | **30** | P | | | **P** | **14 51 54.7** | **-0.3** |
| | baz=271,SNR=10 | | | | | | | | |
| **MOS** | **Moscow** | **75.05** | **324** | *e* | P | | **P** | **14 51 53.4** | **-1.8** |
| MOS | | | | | *e**PP | | **sP** | **14 52 32.5** | **-6.7** |
| MOS | | | | | *e* | | | 14 54 44.9 | |
| MOS | | | | | pmax | | pmax | | |
| | comp=Z,56nm,1.0s | | | | | | | | |
| **F20K** | **Avaraart Lake** | **75.08** | **24** | P | | | **P** | **14 51 56.0** | **+0.9** |
| **F20K** | **Avaraart Lake** | **75.08** | **24** | P | | | **P** | **14 51 55.2** | **+0.1** |
| | baz=269,SNR=12 | | | | | | | | |
| **Q17K** | **Contact Creek** | **75.08** | **33** | P | | | **P** | **14 51 54.6** | **-0.9** |
| | baz=272 | | | | | | | | |
| **J19K** | **Poorman** | **75.11** | **27** | P | | | **P** | **14 51 55.9** | **+0.5** |
| | baz=270,SNR=16 | | | | | | | | |
| **CHIR** | **Chirikof Islan** | **75.32** | **35** | P | | | **P** | **14 51 56.8** | **+0.1** |
| | baz=272 | | | | | | | | |
| **O18K** | **Koktuh Hills** | **75.39** | **31** | P | | | **P** | **14 51 57.3** | **+0.2** |
| | baz=272,SNR=12 | | | | | | | | |
| **P18K** | **Big Mountain,** | **75.39** | **32** | P | | | **P** | **14 51 56.4** | **-0.7** |
| | baz=272 | | | | | | | | |
| **A22K** | **Sinclair Lake** | **75.40** | **20** | P | | | **P** | **14 51 56.9** | **0.0** |
| | baz=269 | | | | | | | | |
| **H20K** | **Anotleneega Mo** | **75.42** | **25** | P | | | **P** | **14 51 57.7** | **+0.5** |
| | baz=270,SNR=17 | | | | | | | | |
| **C21K** | **Knifeblade Rid** | **75.45** | **22** | P | | | **P** | **14 51 57.9** | **+0.7** |
| | baz=270 | | | | | | | | |
| **L19K** | **White Mountain** | **75.49** | **29** | P | | | **P** | **14 51 58.2** | **+0.5** |
| | baz=271,SNR=14 | | | | | | | | |
| **B21K** | **Ikpikpuk River** | **75.51** | **21** | P | | | **P** | **14 51 58.1** | **+0.6** |
| | baz=270 | | | | | | | | |
| **Q18K** | **Katmai Hardscr** | **75.53** | **32** | P | | | **P** | **14 51 57.1** | **-1.0** |
| | baz=272 | | | | | | | | |
| **I20K** | **Naagheedeneel** | **75.60** | **26** | P | | | **P** | **14 51 58.8** | **+0.6** |
| | baz=271,SNR=9.5 | | | | | | | | |
| **OBN** | **Obninsk** | **75.68** | **324** | *de* | P | | **P** | **14 51 58.2** | **-0.5** |
| OBN | | | | | *e**PP | | **pP** | **14 52 30.0** | **+0.4** |
| OBN | | | | | *e* | | | 14 54 50.2 | |
| OBN | | | | | *e*S | | **S** | **15 01 25.7** | **-4.4** |
| OBN | | | | | pmax | | pmax | | |
| | comp=Z,33nm,1.4s | | | | | | | | |
| **OBN** | **Obninsk** | **75.68** | **324** | P | | | **P** | **14 51 58.3** | **-0.5** |
| | comp=Z,38nm,0.5s | | | | | | | | |
| **N19K** | **Bonanza Creek** | **75.71** | **30** | P | | | **P** | **14 51 59.5** | **+0.4** |
| | baz=272,SNR=8.4 | | | | | | | | |
| **M19K** | **Big River Lodg** | **75.72** | **29** | P | | | **P** | **14 51 59.3** | **+0.3** |
| | baz=272,SNR=7.2 | | | | | | | | |
| **E21K** | **Killik River** | **75.74** | **22** | P | | | **P** | **14 51 59.0** | **0.0** |
| | baz=271,SNR=5.1 | | | | | | | | |
| **J20K** | **Nowinta River** | **75.76** | **27** | P | | | **P** | **14 51 59.9** | **+0.8** |
| | baz=272,SNR=16 | | | | | | | | |
| **K20K** | **Telida** | **75.82** | **28** | P | | | **P** | **14 52 00.0** | **+0.6** |
| | baz=272,SNR=17 | | | | | | | | |
| **O19K** | **Port Alsworth** | **75.82** | **31** | P | | | **P** | **14 51 59.5** | **0.0** |
| | baz=272 | | | | | | | | |
| **ANN** | **Anapa** | **75.87** | **313** | *e* | P | | P | 14 51 56.3 | -3.8 |
| ANN | | | | *e* | *PP | | pP | 14 52 29.8 | -1.2 |
| ANN | | | | *e* | | | | 14 54 49.7 | |
| ANN | | | | *e* | S | | **S** | **15 01 26.7** | **-5.9** |
| ANN | | | | | pmax | | pmax | | |
| | comp=Z,72nm,1.0s | | | | | | | | |
| **R18K** | **Karluk** | **75.88** | **34** | P | | | **P** | **14 51 59.1** | **-0.8** |
| | baz=273 | | | | | | | | |
| **B22K** | **Teshekpuk Lake** | **75.92** | **20** | P | | | **P** | **14 52 00.0** | **+0.2** |
| | baz=271 | | | | | | | | |
| **L20K** | **Farewell, AK** | **75.94** | **29** | P | | | **P** | **14 52 00.9** | **+0.8** |
| | baz=272,SNR=9.1 | | | | | | | | |
| **F21K** | **Alatna River** | **75.95** | **24** | P | | | **P** | **14 52 00.4** | **+0.2** |
| | baz=271 | | | | | | | | |
| **G21K** | **Allakaket** | **75.96** | **24** | P | | | **P** | **14 52 00.8** | **+0.6** |
| | baz=272 | | | | | | | | |
| **SII** | **Sitkinak Islan** | **76.08** | **35** | P | | | **P** | **14 52 00.9** | **-0.2** |
| | baz=273 | | | | | | | | |
| **D22K** | **Ayikyak River** | **76.21** | **22** | P | | | **P** | **14 52 02.1** | **+0.5** |
| **D22K** | **Ayikyak River** | **76.21** | **22** | P | | | **P** | **14 52 01.9** | **+0.4** |
| | baz=272 | | | | | | | | |
| **Q19K** | **Cape Douglas,** | **76.23** | **32** | P | | | **P** | **14 52 02.2** | **+0.3** |
| | baz=273 | | | | | | | | |
| **H21K** | **Melozitna River** | **76.28** | **25** | P | | | **P** | **14 52 03.2** | **+1.2** |
| H21K | | | | IAmb | | | IAmb | 14 52 04.5 | |
| | comp=Z,86nm,1.5s | | | | | | | | |
| **H21K** | **Melozitna River** | **76.28** | **25** | P | | | **P** | **14 52 02.9** | **+0.8** |
| | baz=272,SNR=22 | | | | | | | | |
| **M20K** | **Styx River** | **76.32** | **29** | P | | | **P** | **14 52 03.4** | **+1.0** |
| M20K | | | | IAmb | | | IAmb | 14 52 04.8 | |
| | comp=Z,88nm,1.6s | | | | | | | | |
| **M20K** | **Styx River** | **76.32** | **29** | P | | | **P** | **14 52 02.9** | **+0.5** |
| | baz=273 | | | | | | | | |
| **P19K** | **Oil Pt** | **76.40** | **31** | P | | | **P** | **14 52 02.2** | **-0.6** |
| | baz=273 | | | | | | | | |
| **F22K** | **John River** | **76.45** | **23** | P | | | **P** | **14 52 03.1** | **+0.1** |
| | baz=272,SNR=5.5 | | | | | | | | |
| **OHAK** | **Old Harbor** | **76.53** | **34** | P | | | **P** | **14 52 03.1** | **-0.4** |
| | baz=274 | | | | | | | | |
| **E22K** | **Anaktuvuk Pass** | **76.56** | **23** | P | | | **P** | **14 52 03.7** | **+0.1** |
| | baz=273,SNR=5.2 | | | | | | | | |
| **APA** | **Apatity** | **76.56** | **337** | ⇓ | *i*P | | **P** | **14 52 00.8** | **-2.7** |
| APA | | | | | *i* | *PP | **PcP** | **14 52 20.9** | **+6.3** |
| APA | | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| APA | | | | | MLR | | MLR | | |
| | comp=Z,800nm,19.0s | | | | | | | | |
| **I21K** | **Tanana** | **76.65** | **26** | P | | | **P** | **14 52 04.6** | **+0.5** |
| | baz=273 | | | | | | | | |
| **O20K** | **Slope Mountain** | **76.67** | **31** | P | | | **P** | **14 52 03.9** | **-0.5** |
| | baz=274 | | | | | | | | |
| **G22K** | **Bettles** | **76.74** | **24** | P | | | **P** | **14 52 04.5** | **-0.1** |
| | baz=273,SNR=11 | | | | | | | | |
| **N20K** | **Mount Spurr** | **76.80** | **30** | P | | | **P** | **14 52 04.6** | **-0.6** |
| | baz=274 | | | | | | | | |
| **SPCR** | **Spurr Chakacha** | **76.80** | **30** | P | | | **P** | **14 52 04.6** | **-0.6** |
| | baz=274 | | | | | | | | |
| **H22K** | **Ishlatina Cre** | **76.85** | **25** | P | | | **P** | **14 52 05.8** | **+0.5** |
| | baz=274 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **76.87** | **33** | P | | | **P** | **14 52 05.3** | **-0.2** |
| | baz=274 | | | | | | | | |
| **C23K** | **Itkillik River** | **76.90** | **21** | P | | | **P** | **14 52 05.2** | **-0.2** |
| | baz=273,SNR=6.2 | | | | | | | | |
| **Q20K** | **Shuyak Island** | **76.90** | **32** | P | | | **P** | **14 52 05.1** | **-0.5** |
| | baz=274 | | | | | | | | |
| **D23K** | **Nanushuk River** | **76.93** | **22** | P | | | **P** | **14 52 06.1** | **+0.5** |
| | baz=274,SNR=7.2 | | | | | | | | |
| **SKT** | **Skwentna** | **77.06** | **29** | P | | | **P** | **14 52 06.5** | **-0.1** |
| SKT | | | | IAmb | | | IAmb | 14 52 07.4 | |
| | comp=Z,84nm,1.6s | | | | | | | | |
| **SKT** | **Skwentna** | **77.06** | **29** | P | | | **P** | **14 52 05.9** | **-0.6** |
| | baz=274,SNR=8.6 | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **77.15** | **27** | P | | | **P** | **14 52 07.7** | **+0.7** |
| BPAW | | | | IAmb | | | IAmb | 14 52 09.7 | |
| | comp=Z,94nm,1.3s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **77.15** | **27** | P | | | **P** | **14 52 07.1** | **+0.2** |
| | baz=274,SNR=36 | | | | | | | | |
| **MLY** | **Manley** | **77.18** | **26** | P | | | **P** | **14 52 08.0** | **+0.8** |
| MLY | | | | IAmb | | | IAmb | 14 52 09.2 | |
| | comp=Z,119nm,1.8s | | | | | | | | |
| **MLY** | **Manley** | **77.18** | **26** | P | | | **P** | **14 52 07.6** | **+0.4** |
| | baz=274,SNR=27 | | | | | | | | |
| **HOM** | **Homer** | **77.20** | **31** | P | | | **P** | **14 52 06.2** | **-1.1** |
| | baz=275 | | | | | | | | |
| **COLD** | **Coldfoot** | **77.23** | **24** | P | | | **P** | **14 52 07.7** | **+0.3** |
| | baz=274,SNR=5.8 | | | | | | | | |
| **G23K** | **Bananza Creek** | **77.34** | **24** | P | | | **P** | **14 52 08.2** | **+0.2** |
| | baz=275,SNR=14 | | | | | | | | |
| **TOLK** | **Toolik Lake Re** | **77.35** | **22** | P | | | **P** | **14 52 08.0** | **-0.1** |
| | baz=275 | | | | | | | | |
| **E23K** | **Chandalar** | **77.38** | **23** | P | | | **P** | **14 52 08.2** | **-0.1** |
| | baz=275,SNR=8.3 | | | | | | | | |
| **SUA** | **Susitna One** | **77.48** | **29** | P | | | **P** | **14 52 08.2** | **-0.8** |
| | baz=275 | | | | | | | | |
| **C24K** | **Franklin Bluff** | **77.57** | **21** | P | | | **P** | **14 52 09.0** | **-0.1** |
| | baz=275 | | | | | | | | |
| **D24K** | **Happy Valley** | **77.58** | **22** | P | | | **P** | **14 52 09.4** | **+0.2** |
| | baz=275 | | | | | | | | |
| **H23K** | **Yukon River** | **77.61** | **25** | P | | | **P** | **14 52 10.1** | **+0.6** |
| | baz=275 | | | | | | | | |
| **CUT** | **Chulitna** | **77.62** | **28** | P | | | **P** | **14 52 09.1** | **-0.4** |
| | baz=275 | | | | | | | | |
| **M22K** | **Willow** | **77.75** | **29** | P | | | **P** | **14 52 09.6** | **-0.7** |
| | baz=276 | | | | | | | | |
| **I23K** | **Mio, Yukon-K** | **77.75** | **26** | P | | | **P** | **14 52 10.6** | **+0.3** |
| | baz=276,SNR=12 | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **77.78** | **300** | P | | | **P** | **14 52 12.2** | **+1.0** |
| | comp=Z,45nm,1.1s,baz=249,slow=0.0,SNR=42 | | | | | | | | |
| | comp=Z,45nm,1.1s | | | | | | | | |
| **JOF** | **Joensuu** | **77.79** | **332** | *e* | P | | **P** | **14 52 09.8** | **-0.7** |
| **DIKM** | **Dikmen** | **77.80** | **310** | P | | | **P** | **14 52 10.1** | **-0.9** |
| | comp=Z,31nm,1.5s | | | | | | | | |
| **E24K** | **Your Creek** | **77.81** | **23** | P | | | **P** | **14 52 10.2** | **-0.4** |
| | baz=276,SNR=9.2 | | | | | | | | |
| **VADS** | **Vadso** | **77.83** | **340** | *e* | P | | **P** | **14 52 11.9** | **+1.3** |
| VADS | | | | | IAmb | | IAmb | 14 52 19.2 | |
| | comp=Z,47nm,1.2s | | | | | | | | |
| VADS | | | | | *e*S | | **S** | **15 01 55.7** | **+2.8** |
| **NEA2** | **Nenana** | **77.93** | **26** | P | | | **P** | **14 52 10.9** | **-0.4** |
| | baz=276,SNR=7.3 | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **78.00** | **30** | P | | | **P** | **14 52 11.9** | **+0.2** |
| **RC01** | **Rabbit Creek A** | **78.00** | **30** | P | | | **P** | **14 52 10.7** | **-1.1** |
| | baz=276 | | | | | | | | |
| **O22K** | **Cooper Landing** | **78.08** | **30** | P | | | **P** | **14 52 11.7** | **-0.5** |
| | baz=276 | | | | | | | | |
| **MCK** | **McKinley** | **78.08** | **27** | P | | | **P** | **14 52 11.7** | **-0.4** |
| | baz=276,SNR=16 | | | | | | | | |
| **F24K** | **Squaw Lake** | **78.09** | **23** | P | | | **P** | **14 52 13.1** | **+0.9** |
| **F24K** | **Squaw Lake** | **78.09** | **23** | P | | | **P** | **14 52 12.0** | **-0.2** |
| | baz=276,SNR=9.8 | | | | | | | | |
| **SIM** | **Simferopol'** | **78.20** | **314** | *e* | P | | **P** | **14 52 15.5** | **+2.4** |
| SIM | | | | | pmax | | pmax | | |
| | comp=Z,80nm,5.5s | | | | | | | | |
| SIM | | | | | pmax | | pmax | | |
| | comp=Z,76nm,1.1s | | | | | | | | |
| **PMR** | **Palmer** | **78.24** | **29** | P | | | **P** | **14 52 12.8** | **-0.2** |
| **PMR** | **Palmer** | **78.24** | **29** | P | | | **P** | **14 52 12.0** | **-1.0** |
| | baz=276 | | | | | | | | |
| **MDM** | **Murphy Dome** | **78.25** | **26** | P | | | **P** | **14 52 14.2** | **+1.1** |
| **SEW** | **Seward** | **78.25** | **31** | P | | | **P** | **14 52 12.4** | **-0.7** |
| | baz=277 | | | | | | | | |
| **HWQ** | **Hawqa** | **78.26** | **303** | *e* | P | | **P** | **14 52 14.1** | **+0.3** |
| **H24K** | **Noodor Dome** | **78.29** | **25** | P | | | **P** | **14 52 13.8** | **+0.5** |
| | baz=277 | | | | | | | | |
| **G24K** | **Hadweenzic Riv** | **78.35** | **24** | P | | | **P** | **14 52 14.2** | **+0.6** |
| | baz=277,SNR=18 | | | | | | | | |
| **WAT1** | **Susitna Watana** | **78.36** | **28** | P | | | **P** | **14 52 13.2** | **-0.6** |
| | baz=277 | | | | | | | | |
| **COLA** | **College** | **78.42** | **26** | P | | | **P** | **14 52 13.7** | **-0.2** |
| **COLA** | **College** | **78.42** | **26** | P | | | **P** | **14 52 13.3** | **-0.6** |
| | baz=277 | | | | | | | | |
| **COLA** | **College** | **78.42** | **26** | P | | | **P** | **14 52 14.2** | **+0.3** |
| **D25K** | **Kavik River** | **78.43** | **21** | P | | | **P** | **14 52 13.9** | **0.0** |
| | baz=277 | | | | | | | | |
| **BHL** | **Bhannes** | **78.56** | **302** | *e* | P | | **P** | **14 52 15.1** | **-0.3** |
| **POKR** | **Poker Plat Res** | **78.57** | **26** | P | | | **P** | **14 52 14.3** | **-0.5** |
| | baz=277 | | | | | | | | |
| **KNK** | **Knik Glacier** | **78.58** | **29** | P | | | **P** | **14 52 14.6** | **-0.3** |
| | baz=277,SNR=6.7 | | | | | | | | |
| **SML** | **Sawmill** | **78.59** | **29** | P | | | **P** | **14 52 14.4** | **-0.6** |
| | baz=277,SNR=6.7 | | | | | | | | |
| **BZK** | **Bozkurt** | **78.68** | **311** | ⇑ | P | | **P** | **14 52 15.9** | **+0.1** |
| **PWL** | **Port Wells** | **78.71** | **30** | P | | | **P** | **14 52 14.7** | **-1.0** |
| | baz=277 | | | | | | | | |
| **WAT6** | **Susitna Watana** | **78.76** | **28** | P | | | **P** | **14 52 15.5** | **-0.6** |
| | baz=278,SNR=8.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **78.84** | **26** | P | | | **P** | **14 52 15.3** | **-1.0** |
| | comp=Z,2.6nm,0.8s,baz=264,slow=4.1,SNR=18 | | | | | | | | |
| ILAR | | | | | PKKPbc | | **PKKPbc** | **15 11 08.1** | **-3.4** |
| | comp=Z,0.2nm,0.5s,baz=153,slow=3.3,SNR=4.8 | | | | | | | | |
| ILAR | | | | | LR | | LR | 15 30 05.2 | |
| | comp=Z,65nm,19.6s,baz=262,slow=38 | | | | | | | | |
| | comp=Z,2.6nm,0.8s | | | | | | | | |
| **C26K** | **Camden Bay** | **78.85** | **21** | P | | | **P** | **14 52 16.9** | **+0.7** |
| | baz=279 | | | | | | | | |
| **DHY** | **Denali Highway** | **78.86** | **28** | P | | | **P** | **14 52 16.2** | **-0.4** |
| | baz=278 | | | | | | | | |
| **HDA** | **Harding Lake** | **78.87** | **26** | P | | | **P** | **14 52 15.0** | **-1.4** |
| | baz=278,SNR=8.9 | | | | | | | | |
| **M23K** | **Glacier View** | **78.88** | **29** | P | | | **P** | **14 52 15.9** | **-0.6** |
| | baz=278 | | | | | | | | |
| **G25K** | **Bearman Lake** | **78.88** | **24** | P | | | **P** | **14 52 16.5** | **+0.1** |
| | baz=278,SNR=13 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **78.90** | **301** | P | | | **P** | **14 52 18.0** | **+0.7** |
| | comp=Z,4.0nm,0.4s,baz=84,slow=8.6,SNR=23 | | | | | | | | |
| MMAI | | | | | LR | | LR | 15 30 25.9 | |
| | comp=Z,102nm,21.4s,baz=24,slow=38 | | | | | | | | |
| | comp=Z,4.0nm,0.4s | | | | | | | | |
| **F25K** | **Christian River** | **78.94** | **23** | P | | | **P** | **14 52 17.3** | **+0.4** |
| | baz=278,SNR=10 | | | | | | | | |
| **GHAJ** | **Ghor Haditha** | **79.04** | **300** | P | | | **P** | **14 52 18.3** | **+0.4** |
| **SCM** | **Sheep Creek Mo** | **79.06** | **29** | P | | | **P** | **14 52 17.8** | **+0.2** |
| SCM | | | | IAmb | | | IAmb | 14 52 19.1 | |
| | comp=Z,123nm,1.7s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **79.06** | **29** | P | | | **P** | **14 52 17.2** | **-0.4** |
| | baz=278,SNR=5.5 | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **79.06** | **29** | P | | | **P** | **14 52 17.8** | **+0.2** |
| SCM | | | | | pmax | | pmax | | |
| | comp=Z,123nm,1.7s | | | | | | | | |
| **H25L** | **Birch Creek** | **79.07** | **24** | P | | | **P** | **14 52 18.3** | **+0.9** |
| | baz=278 | | | | | | | | |
| **KIRS** | **Kirsehir-Merke** | **79.16** | **308** | ⇑ | P | | **P** | **14 52 18.1** | **-0.5** |
| **ARA0** | **ARCESS Array S** | **79.23** | **339** | *e* | P | | **P** | **14 52 18.4** | **0.0** |
| **ARCES** | **ARCESS Array B** | **79.23** | **339** | P | | | **P** | **14 52 17.5** | **-0.8** |
| | comp=Z,3.2nm,0.4s,baz=84,slow=6.8,SNR=30 | | | | | | | | |
| | comp=Z,3.2nm,0.4s | | | | | | | | |
| **BR131** | **Keskin Array S** | **79.28** | **308** | *c* | *i*P | | **P** | **14 52 18.2** | **-1.2** |
| **BRTR** | **Keskin Array B** | **79.28** | **308** | P | | | **P** | **14 52 18.2** | **-1.2** |
| | comp=Z,1.9nm,0.5s,baz=130,slow=5.0,SNR=20 | | | | | | | | |
| | comp=Z,1.9nm,0.5s | | | | | | | | |
| **BR104** | **Keskin Array S** | **79.28** | **308** | P | | | **P** | **14 52 18.4** | **-1.0** |
| | comp=Z,8.4nm,1.3s,comp=Z,120nm | | | | | | | | |
| **P23K** | **Montague Islan** | **79.29** | **31** | P | | | **P** | **14 52 18.1** | **-0.6** |
| | baz=278 | | | | | | | | |
| **BR106** | **Keskin Array S** | **79.30** | **308** | P | | | **P** | **14 52 18.5** | **-0.9** |
| | comp=Z,6.8nm,1.2s,comp=Z,111nm | | | | | | | | |
| **BR105** | **Keskin Array S** | **79.30** | **308** | P | | | **P** | **14 52 18.4** | **-1.1** |
| | comp=Z,9.9nm,1.3s,comp=Z,130nm | | | | | | | | |
| **PRP** | **Porcupine Dome** | **79.30** | **25** | P | | | **P** | **14 52 17.7** | **-1.3** |
| | baz=279,SNR=7.3 | | | | | | | | |
| **C27K** | **Jago River** | **79.31** | **21** | P | | | **P** | **14 52 19.0** | **+0.2** |
| | baz=280,SNR=5.8 | | | | | | | | |
| **GLI** | **Glacier Island** | **79.31** | **30** | P | | | **P** | **14 52 18.6** | **-0.3** |
| | baz=278 | | | | | | | | |
| **K24K** | **Donnelly Dome** | **79.47** | **27** | P | | | **P** | **14 52 18.5** | **-1.3** |
| | baz=279 | | | | | | | | |
| **F26K** | **Sheenjek River** | **79.48** | **23** | P | | | **P** | **14 52 20.6** | **+0.8** |
| | baz=280,SNR=10 | | | | | | | | |
| **J25K** | **Salcha River,** | **79.51** | **26** | P | | | **P** | **

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KIEV | Kiev | 80.61 | 320 | | P | | P | | 14 52 24.8 | -1.3 |
| KIEV | Kiev | 80.61 | 320 | ⇑ | P | | P | | 14 52 25.3 | -0.8 |
| KIEV | Kiev | 80.61 | 320 | | P | | P | | 14 52 25.3 | -0.8 |
| KIEV | Kiev | 80.61 | 320 | | P | | P | | 14 52 23.9 | -2.2 |
| | comp=Z,66nm,2.4s,comp=Z,2µm | | | | | | | | | |
| VOI | Vohitsoka | 80.62 | 245 | | P | | P | | 14 52 27.7 | +0.9 |
| VSU | Vasula | 80.66 | 328 | *c* | *i* P | | P | | 14 52 24.6 | -1.5 |
| VSU | | | | | | pmax | pmax | | | |
| | comp=Z,56nm,1.9s | | | | | | | | | |
| L26K | Log Cabin Wild | 80.68 | 27 | | P | | P | | 14 52 26.8 | +0.6 |
| | baz=281 | | | | | | | | | |
| MNK | Minsk | 80.75 | 324 | *i* | LRM | | MLR | | 15 30 13.7 | |
| | comp=N,321nm,19.7s | | | | | | | | | |
| MNK | Minsk | 80.75 | 324 | *i* | P | | P | | 14 52 24.1 | -2.6 |
| MNK | | | | | *PP | | pP | | 14 52 58.3 | +0.4 |
| MNK | | | | | *i* | | | | 14 55 28.3 | |
| MNK | | | | | *i* S | | S | | 15 02 21.6 | -2.7 |
| MNK | | | | | *i* *SS | | sS | | 15 03 22.5 | +5.1 |
| MNK | | | | | *i* SS | | SS | | 15 07 40.2 | +0.5 |
| MNK | | | | | *i* SSS | | SSS | | 15 11 04.9 | |
| MNK | | | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| MNK | | | | | | pmax | pmax | | | |
| | comp=E,20nm,0.8s | | | | | | | | | |
| MNK | | | | | | pmax | pmax | | | |
| | comp=N,20nm,0.9s | | | | | | | | | |
| MNK | | | | | | MLR | MLR | | | |
| | comp=E,570nm,23.0s | | | | | | | | | |
| MNK | | | | | | MLR | MLR | | | |
| | comp=Z,130nm,16.0s | | | | | | | | | |
| MNK | | | | | | MLR | MLR | | | |
| | comp=N,321nm,20.0s | | | | | | | | | |
| MNK | Minsk | 80.75 | 324 | *i* | P | | P | | 14 52 24.1 | -2.6 |
| | comp=E,20nm,0.8s | | | | | | | | | |
| MNK | Minsk | 80.75 | 324 | *i* | P | | P | | 14 52 24.1 | -2.6 |
| | comp=N,20nm,0.9s | | | | | | | | | |
| MNK | Minsk | 80.75 | 324 | *i* | P | | P | | 14 52 24.1 | -2.6 |
| | comp=Z,18nm,0.9s,baz=80 | | | | | | | | | |
| MNK | Minsk | 80.75 | 324 | *i* | pP | | pP | | 14 52 58.3 | +0.4 |
| MNK | Minsk | 80.75 | 324 | *i* | PP | | PP | | 14 55 28.4 | -3.7 |
| MNK | Minsk | 80.75 | 324 | *i* | PPP | | PPP | | 14 57 17.6 | |
| MNK | Minsk | 80.75 | 324 | *i* | S | | S | | 15 02 21.6 | -2.7 |
| MNK | Minsk | 80.75 | 324 | *i* | sS | | sS | | 15 03 22.6 | +5.2 |
| MNK | Minsk | 80.75 | 324 | *i* | SS | | SS | | 15 07 40.3 | +0.6 |
| MNK | Minsk | 80.75 | 324 | *i* | SSS | | SSS | | 15 11 04.9 | |
| MNK | Minsk | 80.75 | 324 | *i* | LRM | | MLR | | 15 29 19.9 | |
| | comp=E,570nm,23.0s | | | | | | | | | |
| MNK | Minsk | 80.75 | 324 | *i* | LRM | | MLR | | 15 29 49.0 | |
| | comp=Z,130nm,16.4s | | | | | | | | | |
| KAIM | Kayak Island | 80.78 | 31 | | P | | P | | 14 52 27.4 | +0.6 |
| | baz=281 | | | | | | | | | |
| H27K | Steamboat Moun | 80.78 | 24 | | P | | P | | 14 52 27.1 | +0.3 |
| | baz=282,SNR=14 | | | | | | | | | |
| KEF | Keuruu | 80.85 | 332 | *e* | P | | P | | 14 52 25.9 | -1.3 |
| ARBE | Arbavere | 80.86 | 329 | *e* | P | | P | | 14 52 26.3 | -0.8 |
| I27K | Kandik River | 80.88 | 25 | | P | | P | | 14 52 27.6 | +0.3 |
| | baz=282,SNR=22 | | | | | | | | | |
| M26K | Nabesna, AK | 80.97 | 28 | | P | | P | | 14 52 27.7 | -0.1 |
| | baz=282,SNR=12 | | | | | | | | | |
| E28M | Babbage River | 80.98 | 21 | | P | | P | | 14 52 27.8 | 0.0 |
| | baz=284 | | | | | | | | | |
| K27K | Chicken | 81.03 | 26 | | P | | P | | 14 52 30.5 | +2.5 |
| K27K | | | | | | IAmb | IAmb | | 14 52 30.6 | |
| | comp=Z,99nm,1.6s | | | | | | | | | |
| K27K | Chicken | 81.03 | 26 | | P | | P | | 14 52 28.9 | +0.8 |
| | baz=282 | | | | | | | | | |
| D28M | Stokes Point | 81.08 | 21 | | P | | P | | 14 52 28.9 | +0.7 |
| | baz=284 | | | | | | | | | |
| F28M | Old Crow | 81.10 | 22 | | P | | P | | 14 52 29.4 | +0.9 |
| F28M | | | | | | IAmb | IAmb | | 14 52 30.3 | |
| | comp=Z,106nm,1.8s | | | | | | | | | |
| F28M | Old Crow | 81.10 | 22 | | P | | P | | 14 52 28.5 | +0.1 |
| | baz=284,SNR=10 | | | | | | | | | |
| MCARA | McCarthy VSAT | 81.16 | 29 | | P | | P | | 14 52 29.2 | +0.4 |
| | baz=282 | | | | | | | | | |
| MI30 | MI30,Zelenitsa | 81.24 | 320 | | P | | P | | 14 52 27.5 | -1.9 |
| EGAK | Eagle | 81.25 | 25 | | P | | P | | 14 52 29.6 | +0.3 |
| EGAK | Eagle | 81.25 | 25 | | P | | P | | 14 52 29.1 | -0.1 |
| | baz=283,SNR=9.9 | | | | | | | | | |
| CRQE | Cirque | 81.26 | 30 | | P | | P | | 14 52 29.2 | -0.3 |
| | baz=282 | | | | | | | | | |
| NACGM | Naroch | 81.30 | 324 | | LR | | LR | | 15 27 29.7 | |
| NACGM | Naroch | 81.30 | 324 | *e* | P | | P | | 14 52 29.8 | +0.1 |
| | comp=Z,13nm,0.9s,baz=79 | | | | | | | | | |
| NACGM | Naroch | 81.30 | 324 | *e* | PcP | | PcP | | 14 52 35.0 | -0.4 |
| NACGM | Naroch | 81.30 | 324 | *e* | pP | | pP | | 14 53 03.9 | +3.0 |
| NACGM | Naroch | 81.30 | 324 | *e* | sP | | sP | | 14 53 18.6 | +4.5 |
| NACGM | Naroch | 81.30 | 324 | *e* | PP | | PP | | 14 55 37.7 | +1.1 |
| NACGM | Naroch | 81.30 | 324 | | PPP | | PPP | | 14 57 25.4 | |
| NACGM | Naroch | 81.30 | 324 | | S | | S | | 15 02 30.7 | +0.7 |
| NACGM | Naroch | 81.30 | 324 | | sS | | sS | | 15 03 26.6 | +3.6 |
| NACGM | Naroch | 81.30 | 324 | | SS | | SS | | 15 07 48.5 | +0.6 |
| NACGM | Naroch | 81.30 | 324 | | SSS | | SSS | | 15 11 16.1 | |
| NACGM | Naroch | 81.30 | 324 | | LQ | | LQ | | 15 22 20.9 | |
| BGLC | Bering Glacier | 81.30 | 30 | | P | | P | | 14 52 29.9 | +0.4 |
| | baz=282 | | | | | | | | | |
| L27K | Beaver Creek, | 81.35 | 27 | | P | | P | | 14 52 30.0 | +0.2 |
| | baz=283,SNR=18 | | | | | | | | | |
| TRO | Tromso | 81.46 | 340 | *e* | P | | P | | 14 52 30.4 | +0.2 |
| MEF | Metsahovi | 81.48 | 330 | *e* | P | | P | | 14 52 29.6 | -0.9 |
| M27K | Edge Creek, AK | 81.48 | 28 | | P | | P | | 14 52 31.0 | +0.3 |
| | baz=283,SNR=5.7 | | | | | | | | | |
| MI29 | MI29, Kamyanyy | 81.52 | 320 | | P | | P | | 14 52 29.6 | -1.3 |
| KIS | Kishinev | 81.53 | 316 | ⇑ | *i* P | | P | | 14 52 30.0 | -1.0 |
| | comp=Z,200nm,2.9s | | | | | | | | | |
| MILM | Milestii Mici | 81.55 | 316 | | *i* P | | P | | 14 52 30.0 | -1.1 |
| MILM | | | | | *i* | | | | 14 55 39.0 | |
| MILM | | | | | | pmax | pmax | | | |
| | comp=Z,200nm,2.9s | | | | | | | | | |
| I28M | Miner Creek | 81.60 | 25 | | P | | P | | 14 52 31.7 | +0.5 |
| | baz=284,SNR=26 | | | | | | | | | |
| E29M | Blow River | 81.62 | 22 | | P | | P | | 14 52 31.1 | 0.0 |
| | baz=285 | | | | | | | | | |
| SORM | Soroca | 81.63 | 317 | ⇑ | P | | P | | 14 52 30.5 | -1.1 |
| SORM | Soroca | 81.63 | 317 | | P | | P | | 14 52 30.4 | -1.1 |
| SORM | Soroca | 81.63 | 317 | | P | | P | | 14 52 30.1 | -1.4 |
| | comp=Z,33nm,1.4s,comp=Z,746nm | | | | | | | | | |
| VAF | Ylistaro | 81.66 | 333 | *e* | P | | P | | 14 52 32.1 | +0.7 |
| LUBAR | Lubar, Ukraine | 81.67 | 319 | | P | | P | | 14 52 29.9 | -1.8 |
| JURR | Jurilovca | 81.91 | 314 | ⇓ | P | | P | | 14 52 33.3 | +0.3 |
| MESA | MESA | 81.94 | 30 | | P | | P | | 14 52 33.7 | +0.5 |
| | baz=283 | | | | | | | | | |
| G29M | Pine Creek | 81.97 | 23 | | P | | P | | 14 52 33.0 | -0.1 |
| | baz=285,SNR=15 | | | | | | | | | |
| H29M | Whitestone | 82.03 | 24 | | P | | P | | 14 52 33.9 | +0.6 |
| H29M | Whitestone | 82.03 | 24 | | P | | P | | 14 52 33.5 | +0.2 |
| | baz=285,SNR=18 | | | | | | | | | |
| CTG | Chitna Glacier | 82.05 | 29 | | P | | P | | 14 52 34.1 | +0.5 |
| | baz=283,SNR=9.4 | | | | | | | | | |
| CTGM | Chitina Glacie | 82.05 | 29 | | P | | P | | 14 52 34.9 | +1.2 |
| CTGM | | | | | | IAmb | IAmb | | 14 52 36.0 | |
| | comp=Z,79nm,1.4s | | | | | | | | | |
| MTSE | Matsula | 82.10 | 328 | *e* | P | | P | | 14 52 33.3 | -0.4 |
| DAWY | Dawson | 82.17 | 26 | | P | | P | | 14 52 34.2 | +0.1 |
| | baz=285,SNR=8.8 | | | | | | | | | |
| NDNU | Novodnistrovsk | 82.18 | 318 | | P | | P | | 14 52 32.6 | -1.8 |
| TPGR | Topolog | 82.21 | 314 | ⇑ | P | | P | | 14 52 34.0 | -0.7 |
| YUK3 | Moose Creek | 82.27 | 28 | | P | | P | | 14 52 35.4 | +0.5 |
| | baz=284 | | | | | | | | | |
| I29M | Ogilvie Camp, | 82.28 | 25 | | P | | P | | 14 52 34.8 | +0.2 |
| | baz=285,SNR=9.2 | | | | | | | | | |
| CFR | Carcaliu | 82.34 | 315 | ⇑ | P | | P | | 14 52 34.5 | -0.9 |
| CFR | Carcaliu | 82.34 | 315 | | P | | P | | 14 52 34.4 | -0.9 |
| RAF | Rauma | 82.56 | 336 | *e* | P | | P | | 14 52 35.5 | -0.6 |
| J29N | Klondike Camp | 82.56 | 25 | | P | | P | | 14 52 36.4 | +0.2 |
| | baz=286 | | | | | | | | | |
| F30M | Barrier River | 82.61 | 22 | | P | | P | | 14 52 36.0 | -0.3 |
| | baz=287,SNR=10.0 | | | | | | | | | |
| EPYK | Eagle Plains | 82.63 | 23 | | P | | P | | 14 52 36.3 | -0.2 |
| | baz=287 | | | | | | | | | |
| G30M | tAoh Zraii Nji | 82.64 | 23 | | P | | P | | 14 52 35.9 | -0.6 |
| | baz=287,SNR=16 | | | | | | | | | |
| O28M | Mount Upton | 82.64 | 29 | | P | | P | | 14 52 37.4 | +0.4 |
| | baz=284 | | | | | | | | | |
| YUK8 | Steele Glacier | 82.72 | 29 | | P | | P | | 14 52 37.6 | +0.3 |
| | baz=285,SNR=5.2 | | | | | | | | | |
| KMPD | K-Podol'skiy | 82.78 | 318 | | P | | PcP | | 14 52 36.1 | -6.0 |
| KMPD | | | | | P | | P | | 14 52 35.4 | -2.1 |
| L29M | L29M | 82.97 | 27 | | P | | P | | 14 52 39.3 | +1.0 |
| | baz=286,SNR=18 | | | | | | | | | |
| CTYL | Yalikoy Yolu | 82.98 | 311 | | P | | P | | 14 52 38.0 | -0.7 |
| | comp=Z,47nm,0.8s | | | | | | | | | |
| M29M | Somme Creek | 83.00 | 27 | | P | | P | | 14 52 39.1 | +0.6 |
| | baz=286,SNR=9.5 | | | | | | | | | |
| K29M | Barlow Dome | 83.03 | 26 | | P | | P | | 14 52 39.6 | +0.9 |
| | baz=286 | | | | | | | | | |
| TESR | Tescani | 83.09 | 316 | ⇓ | P | | P | | 14 52 38.6 | -0.6 |
| TESR | Tescani | 83.09 | 316 | | P | | P | | 14 52 37.9 | -1.3 |
| | comp=Z,59nm,1.7s,comp=Z,887nm | | | | | | | | | |
| I30M | Mount Dempster | 83.10 | 24 | | P | | P | | 14 52 39.5 | +0.5 |
| I30M | Mount Dempster | 83.10 | 24 | | P | | P | | 14 52 39.2 | +0.2 |
| | baz=287,SNR=9.7 | | | | | | | | | |
| VRI | Vrincioaia | 83.17 | 315 | ⇑ | P | | P | | 14 52 39.6 | -0.1 |
| VRI | Vrincioaia | 83.17 | 315 | | P | | P | | 14 52 40.6 | +1.0 |
| VRI | Vrincioaia | 83.17 | 315 | | P | | P | | 14 52 39.3 | -0.3 |
| | comp=Z,28nm,1.2s,comp=Z,350nm | | | | | | | | | |
| INK | Inuvik | 83.20 | 21 | | LR | | LR | | 15 30 34.4 | |
| | comp=Z,98nm,21.9s,baz=262,slow=36 | | | | | | | | | |
| INK | Inuvik | 83.20 | 21 | | P | | P | | 14 52 38.8 | -0.5 |
| | baz=289,SNR=9.2 | | | | | | | | | |
| PLOR5 | Plostina Array | 83.22 | 315 | | P | | P | | 14 52 39.4 | -0.5 |
| | comp=Z,41nm,2.3s,comp=Z,1µm | | | | | | | | | |
| YUK4 | Talbot Arm | 83.22 | 28 | | P | | P | | 14 52 40.4 | +0.6 |
| | baz=286 | | | | | | | | | |
| PLOR | Plostina | 83.23 | 315 | ⇓ | P | | P | | 14 52 39.7 | -0.3 |
| PLOR | Plostina | 83.23 | 315 | | P | | P | | 14 52 39.6 | -0.3 |
| PLOR3 | Plostina Array | 83.23 | 315 | | P | | P | | 14 52 40.0 | 0.0 |
| | comp=Z,31nm,2.3s,comp=Z,952nm | | | | | | | | | |
| STEI | Steigen | 83.25 | 338 | *e* | P | | P | | 14 52 38.4 | -1.2 |
| PNL | Peninsula | 83.31 | 30 | | P | | P | | 14 52 40.3 | +0.2 |
| | baz=285 | | | | | | | | | |
| J30M | Hart River | 83.31 | 25 | | P | | P | | 14 52 40.1 | 0.0 |
| | baz=287,SNR=9.1 | | | | | | | | | |
| BAND | Balkesir-Ban | 83.35 | 310 | ⇓ | P | | P | | 14 52 39.7 | -1.0 |
| G31M | Satah River | 83.38 | 23 | | P | | P | | 14 52 39.4 | -0.8 |
| | baz=289,SNR=6.4 | | | | | | | | | |
| F31M | Tsiigehtchic | 83.41 | 22 | | P | | P | | 14 52 39.7 | -0.6 |
| | baz=289 | | | | | | | | | |
| FAUS | Fauske | 83.42 | 338 | *e* | P | | P | | 14 52 39.4 | -1.0 |
| FAUS | | | | | | IAmb | IAmb | | 14 52 40.1 | |
| | comp=Z,106nm,1.6s | | | | | | | | | |
| YUK6 | Outpost Mounta | 83.46 | 29 | | P | | P | | 14 52 41.4 | +0.3 |
| | baz=286,SNR=5.6 | | | | | | | | | |
| KIBK | Kibwezi | 83.47 | 266 | | P | | P | | 14 52 42.6 | +0.8 |
| | SNR=10 | | | | | | | | | |
| COVR | Voineasa-Covas | 83.53 | 315 | ⇑ | P | | P | | 14 52 41.5 | 0.0 |
| O29M | Mount Kennedy | 83.54 | 30 | | P | | P | | 14 52 42.3 | +0.9 |
| | baz=286 | | | | | | | | | |
| SUW | Suwalki | 83.55 | 324 | *e* | P | | P | | 14 52 39.8 | -1.5 |
| TURR | Turia | 83.61 | 316 | ⇓ | P | | P | | 14 52 41.8 | -0.1 |
| M30M | Minto, Yukon | 83.71 | 27 | | P | | P | | 14 52 43.0 | +0.9 |
| | baz=287,SNR=25 | | | | | | | | | |
| H31M | Peel River | 83.72 | 24 | | P | | P | | 14 52 41.7 | -0.4 |
| | baz=289,SNR=9.6 | | | | | | | | | |
| LOF | Lofoten | 83.79 | 339 | *e* | P | | P | | 14 52 42.3 | +0.1 |
| MLR | Muntele Rosu | 83.79 | 315 | | LR | | LR | | 15 33 24.6 | |
| | comp=Z,245nm,21.4s,baz=50,slow=38 | | | | | | | | | |
| MLR | Muntele Rosu | 83.79 | 315 | ⇑ | P | | P | | 14 52 43.3 | +0.4 |
| MLR | Muntele Rosu | 83.79 | 315 | | P | | P | | 14 52 43.0 | 0.0 |
| MLR | Muntele Rosu | 83.79 | 315 | | P | | P | | 14 52 42.3 | -0.7 |
| | comp=Z,47nm,1.9s,comp=Z,1µm | | | | | | | | | |
| BUR01 | Bucovina Ar. S | 83.80 | 317 | ⇑ | P | | P | | 14 52 42.5 | -0.4 |
| N30M | Aishikik Lake | 83.91 | 28 | | P | | P | | 14 52 44.1 | +1.0 |
| | baz=287,SNR=18 | | | | | | | | | |
| KMBO | Kilima Mbogo | 83.95 | 267 | | P | | P | | 14 52 45.1 | +0.6 |
| KMBO | Kilima Mbogo | 83.95 | 267 | *i* | P | | P | | 14 52 46.0 | +1.4 |
| | SNR=26 | | | | | | | | | |
| KMBO | Kilima Mbogo | 83.95 | 267 | | P | | P | | 14 52 46.1 | +1.6 |
| | comp=Z,19nm,0.9s,baz=58,slow=6.7,SNR=37 | | | | | | | | | |
| KMBO | | | | | | LR | LR | | 15 27 20.1 | |
| | comp=Z,126nm,20.4s,baz=88,slow=33 | | | | | | | | | |
| | comp=Z,19nm,0.9s | | | | | | | | | |
| KMBO | Kilima Mbogo | 83.95 | 267 | | P | | P | | 14 52 46.1 | +1.6 |
| KMBO | Kilima Mbogo | 83.95 | 267 | ⇑ | *i* P | | P | | 14 52 45.5 | +1.0 |
| STNU | Starunia | 84.01 | 319 | | P | | P | | 14 52 42.8 | -1.0 |
| JMB | Yambol | 84.05 | 312 | | P | | P | | 14 52 43.8 | -0.3 |
| LVV | L'vov | 84.05 | 320 | *e* | P | | P | | 14 52 43.0 | -1.0 |
| P29M | Windy Craggy | 84.13 | 30 | | P | | P | | 14 52 44.9 | +0.6 |
| | baz=287,SNR=6.6 | | | | | | | | | |
| MOR8 | Moi Rana | 84.15 | 337 | *e* | P | | P | | 14 52 42.0 | -2.2 |
| MOR8 | | | | | | IAmb | IAmb | | 14 52 42.3 | |
| | comp=Z,43nm,1.4s | | | | | | | | | |
| MORS | Morshin | 84.30 | 319 | | P | | P | | 14 52 44.3 | -1.0 |
| A36M | Sachs Harbour | 84.35 | 17 | | P | | P | | 14 52 44.1 | -0.9 |
| | baz=297 | | | | | | | | | |
| P30M | Million Dollar | 84.36 | 29 | | P | | P | | 14 52 46.2 | +0.8 |
| | baz=287 | | | | | | | | | |
| ELND | Elena | 84.42 | 313 | ⇑ | P | | P | | 14 52 45.8 | -0.3 |
| N31M | Braeburn, Yuko | 84.50 | 28 | | P | | P | | 14 52 47.5 | +1.5 |
| N31M | | | | | | IAmb | IAmb | | 14 52 48.6 | |
| | comp=Z,100nm,1.6s | | | | | | | | | |
| N31M | Braeburn, Yuko | 84.50 | 28 | | P | | P | | 14 52 46.4 | +0.3 |
| | baz=288,SNR=9.4 | | | | | | | | | |
| KONS | Konsvik | 84.53 | 337 | *e* | P | | P | | 14 52 45.2 | -0.8 |
| O30N | Mendenhall | 84.58 | 29 | | P | | P | | 14 52 47.7 | +1.2 |
| O30N | | | | | | IAmb | IAmb | | 14 52 49.0 | |
| | comp=Z,68nm,1.6s | | | | | | | | | |
| O30N | Mendenhall | 84.58 | 29 | | P | | P | | 14 52 47.0 | +0.5 |
| | baz=288,SNR=13 | | | | | | | | | |
| SHIU | Shidnytsya | 84.61 | 319 | | P | | P | | 14 52 46.7 | -0.2 |
| MEZ | Mezhgor'ye | 84.69 | 319 | | P | | P | | 14 52 46.9 | -0.4 |
| ARR | Arges | 84.72 | 315 | ⇑ | P | | P | | 14 52 46.8 | -0.8 |
| LODK | Lodwar | 84.74 | 272 | | P | | P | | 14 52 49.2 | +0.9 |
| | SNR=22 | | | | | | | | | |
| EZN | Ezine | 84.80 | 310 | | P | | P | | 14 52 46.7 | -1.2 |
| | comp=Z,35nm,1.6s,comp=Z,898nm | | | | | | | | | |
| PLBC | Pleasant Camp | 84.85 | 30 | | P | | P | | 14 52 47.8 | 0.0 |
| | baz=288 | | | | | | | | | |
| M31M | Drury Creek, Y | 84.89 | 27 | | P | | P | | 14 52 48.5 | +0.5 |
| | baz=289,SNR=7.9 | | | | | | | | | |
| BMR | Baia Mare | 84.91 | 318 | ⇑ | P | | P | | 14 52 47.5 | -0.9 |
| BMR | Baia Mare | 84.91 | 318 | | P | | P | | 14 52 47.5 | -0.9 |
| KWP | Kalwaria Pacla | 84.92 | 320 | *e* | P | | P | | 14 52 47.7 | -0.8 |
| KWP | Kalwaria Pacla | 84.92 | 320 | | P | | P | | 14 52 47.5 | -0.9 |
| | comp=Z,59nm,1.8s | | | | | | | | | |
| BRIU | Brid | 85.06 | 318 | | P | | P | | 14 52 48.6 | -0.5 |
| KARP | Karpathos | 85.12 | 305 | | P | | P | | 14 52 49.2 | -0.5 |
| KARP | Karpathos | 85.12 | 305 | | P | | P | | 14 52 49.1 | -0.6 |
| | comp=Z,205nm,1.2s,comp=Z,3µm | | | | | | | | | |
| WHY | Whitehorse | 85.17 | 29 | | P | | P | | 14 52 50.5 | +0.9 |
| WHY | | | | | | IAmb | IAmb | | 14 52 52.0 | |
| | comp=Z,142nm,1.7s | | | | | | | | | |
| WHY | Whitehorse | 85.17 | 29 | | P | | P | | 14 52 50.2 | +0.6 |
| | baz=289,SNR=15 | | | | | | | | | |
| MUKU | Mukachevo | 85.24 | 319 | | P | | P | | 14 52 49.9 | -0.1 |
| RAR | Rarotonga | 85.29 | 113 | | LR | | LR | | 15 24 34.2 | |
| | comp=Z,59nm,19.8s,baz=1.0,slow=31 | | | | | | | | | |
| BERU | Beregovo | 85.32 | 318 | | P | | P | | 14 52 49.6 | -0.8 |
| FARO | Faro, Yukon | 85.34 | 27 | | P | | P | | 14 52 50.4 | +0.1 |
| | baz=290,SNR=32 | | | | | | | | | |
| SKAG | Skagway | 85.35 | 30 | | P | | P | | 14 52 51.3 | +1.0 |
| | baz=289 | | | | | | | | | |
| S31K | Pelican | 85.38 | 31 | | P | | P | | 14 52 51.0 | +0.6 |
| | baz=288 | | | | | | | | | |
| KOLS | Kolonicke sedl | 85.38 | 319 | *e* | P | | P | | 14 52 50.6 | -0.1 |
| KOLS | Kolonicke sedl | 85.38 | 319 | *e* | P | | P | | 14 52 50.6 | -0.1 |
| PLD | Plovdiv | 85.41 | 312 | | P | | P | | 14 52 50.4 | -0.6 |
| MARR | Marisel-Cluj | 85.42 | 317 | ⇑ | P | | P | | 14 52 50.6 | -0.5 |
| HOLU | Holmets | 85.42 | 319 | | P | | P | | 14 52 50.4 | -0.5 |
| R31K | City Hall, Gus | 85.48 | 31 | | P | | P | | 14 52 51.2 | +0.3 |
| | baz=288 | | | | | | | | | |
| NSS | Namsos | 85.72 | 336 | *e* | P | | P | | 14 52 50.6 | -1.4 |
| NSS | | | | | | IAmb | IAmb | | 14 52 52.2 | |
| | comp=Z,4µm,5.5s | | | | | | | | | |
| MPEP | Malo Peshtene | 85.83 | 313 | | P | | P | | 14 52 52.8 | -0.3 |
| N32M | Quiet Lake | 85.84 | 28 | | P | | P | | 14 52 53.3 | +0.5 |
| | baz=290 | | | | | | | | | |
| C36M | Paulatuk | 85.92 | 19 | | P | | P | | 14 52 52.5 | -0.4 |
| | baz=298 | | | | | | | | | |
| P32M | Atlin | 86.08 | 29 | | P | | P | | 14 52 54.2 | +0.2 |
| | baz=290 | | | | | | | | | |
| SIT | Sitka | 86.13 | 32 | | P | | P | | 14 52 54.5 | +0.4 |
| | baz=289 | | | | | | | | | |
| R32K | Eaglecrest | 86.14 | 31 | | P | | P | | 14 52 55.0 | +0.7 |
| | baz=289 | | | | | | | | | |
| PLNA | Plana | 86.28 | 313 | | P | | P | | 14 52 54.9 | -0.5 |
| MMB | Musomishta | 86.28 | 312 | | P | | P | | 14 52 53.9 | -1.5 |
| P33M | Teslin, Yukon | 86.29 | 29 | | P | | P | | 14 52 55.5 | +0.4 |
| | baz=291,SNR=6.6 | | | | | | | | | |
| SURR | Surduc | 86.32 | 316 | ⇓ | P | | P | | 14 52 54.6 | -0.9 |
| VTS | Vitosha | 86.38 | 313 | | P | | P | | 14 52 55.4 | -0.6 |
| S32K | Killisnoo | 86.38 | 32 | | P | | P | | 14 52 56.1 | +0.7 |
| | baz=289 | | | | | | | | | |
| SIRR | Siria | 86.50 | 317 | ⇓ | P | | P | | 14 52 55.5 | -0.8 |
| OJC | Ojcow | 86.57 | 321 | | P | | P | | 14 52 55.8 | -0.8 |
| OJC | | | | | | IAmb | IAmb | | 14 52 57.6 | |
| | comp=Z,90nm,1.7s | | | | | | | | | |
| OJC | Ojcow | 86.57 | 321 | | P | | P | | 14 52 55.8 | -0.8 |
| OJC | | | | | | pmax | pmax | | | |
| | comp=Z,90nm,1.7s | | | | | | | | | |
| HFS | Hagfors | 86.62 | 331 | | P | | P | | 14 52 55.2 | -1.4 |
| | comp=Z,6.8nm,0.4s,baz=103,slow=5.2,SNR=64 | | | | | | | | | |
| | comp=Z,6.8nm,0.4s | | | | | | | | | |
| KKB | Krupnik | 86.66 | 312 | | P | | P | | 14 52 56.2 | -1.0 |
| BZS | Buzias | 86.70 | 316 | ⇓ | P | | P | | 14 52 56.0 | -1.4 |
| BZS | Buzias | 86.70 | 316 | | P | | P | | 14 52 55.9 | -1.4 |
| TBLU | Trondheim | 86.92 | 335 | *e* | P | | P | | 14 52 57.2 | -0.7 |
| IDI | Anoyia | 86.98 | 305 | | P | | P | | 14 52 58.8 | -0.2 |
| Q32M | Nakina River | 87.00 | 30 | | P | | P | | 14 52 59.3 | +0.6 |
| | baz=291 | | | | | | | | | |
| LANS | Liptovska Anna | 87.09 | 320 | *e* | P | | P | | 14 52 59.2 | 0.0 |
| LANS | Liptovska Anna | 87.09 | 320 | *e* | P | | P | | 14 52 59.2 | 0.0 |
| BOVS | Bovan | 87.19 | 314 | ⇑ | P | | P | | 14 52 58.2 | -1.4 |
| NC303 | NORSAR Array S | 87.27 | 333 | | P | | P | | 14 52 58.7 | -0.9 |
| NC303 | | | | | | IAmb | IAmb | | 14 52 59.7 | |
| | comp=Z,106nm,1.9s | | | | | | | | | |
| NC602 | NORSAR Array S | 87.38 | 332 | *e* | P | | P | | 14 52 59.1 | -1.1 |
| NB2 | NORSAR Subarra | 87.41 | 333 | | P | | P | | 14 52 58.5 | -1.9 |
| | comp=Z,117nm,2.0s,baz=67,slow=5.1 | | | | | | | | | |
| NB2 | NORSAR Subarra | 87.41 | 333 | | P | | P | | 14 52 58.5 | -1.9 |
| | baz=67,slow=5.1 | | | | | | | | | |
| NOA | NORSAR Array B | 87.41 | 333 | | P | | P | | 14 52 58.5 | -1.9 |
| | comp=Z,4.0nm,0.5s,baz=69,slow=4.7,SNR=25 | | | | | | | | | |
| NOA | | | | | | LR | LR | | 15 35 18.3 | |
| | comp=Z,241nm,18.2s,baz=50,slow=38 | | | | | | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | | |
| T33K | Petersburg | 87.44 | 32 | | P | | P | | 14 53 01.1 | +0.6 |
| | baz=291 | | | | | | | | | |
| R33M | Jennings River | 87.46 | 29 | | P | | P | | 14 53 01.4 | +0.6 |
| | baz=292 | | | | | | | | | |
| NC204 | NORSAR Array S | 87.51 | 333 | | P | | P | | 14 52 59.9 | -1.0 |
| NC204 | | | | | | IAmb | IAmb | | 14 53 00.9 | |
| | comp=Z,101nm,1.9s | | | | | | | | | |
| U33K | Whale Pass | 87.60 | 33 | | P | | P | | 14 53 02.1 | +0.8 |
| | baz=291 | | | | | | | | | |
| VYHS | Vyhne | 87.69 | 319 | *e* | P | | P | | 14 53 01.5 | -0.5 |
| VYHS | Vyhne | 87.69 | 319 | *e* | P | | P | | 14 53 01.5 | -0.5 |
| CRAG | Craig | 87.83 | 33 | | P | | P | | 14 53 03.6 | +1.2 |
| | baz=291 | | | | | | | | | |
| TGTN | Hyland Airport | 87.83 | 27 | | P | | P | | 14 53 02.6 | +0.1 |
| | baz=295 | | | | | | | | | |
| DOMB | Dombas | 87.93 | 334 | *e* | P | | P | | 14 53 02.2 | -0.6 |
| DOMB | | | | | | IAmb | IAmb | | 14 53 05.0 | |
| | comp=Z,12nm,1.1s | | | | | | | | | |
| S34M | Telegraph Cree | 87.95 | 31 | | P | | P | | 14 53 03.8 | +0.8 |
| | baz=292 | | | | | | | | | |
| OSL | Oslo | 88.08 | 332 | *e* | P | | P | | 14 53 02.8 | -0.7 |
| MORC | Moravsky Berou | 88.09 | 321 | *e* | P | | P | | 14 53 03.0 | -0.9 |
| MORC | Moravsky Berou | 88.09 | 321 | ⇑ | P | | P | | 14 53 03.1 | -0.9 |
| MORC | Moravsky Berou | 88.09 | 321 | | P | | P | | 14 53 03.0 | -0.9 |
| WTLY | Watson Lake, Y | 88.19 | 28 | | P | | P | | 14 53 04.3 | +0.2 |
| | baz=294 | | | | | | | | | |
| DLBC | Dease Lake | 88.28 | 30 | | LR | | LR | | 15 34 14.7 | |
| | comp=Z,80nm,20.5s,baz=282,slow=36 | | | | | | | | | |
| DLBC | Dease Lake | 88.28 | 30 | | P | | P | | 14 53 05.1 | +0.4 |
| | baz=293 | | | | | | | | | |
| JAVC | Velka Javorina | 88.31 | 320 | *e* | P | | P | | 14 53 05.3 | +0.3 |
| KRLC | Kraliky | 88.46 | 321 | *e* | P | | P | | 14 53 04.9 | -0.7 |
| KRLC | | | | | | AMS | AMS | | 15 53 10.0 | |
| | comp=Z,200nm,14.2s | | | | | | | | | |
| KRLC | Kraliky | 88.46 | 321 | *e* | P | | P | | 14 53 04.9 | -0.7 |
| KRLC | | | | | | MLR | MLR | | | |
| | comp=Z,200nm,14.2s | | | | | | | | | |
| KSP | Ksiaz | 88.50 | 322 | *e* | P | | P | | 14 53 04.5 | -1.3 |
| KSP | | | | *e* | PP | | PP | | 14 56 35.2 | +0.1 |
| KSP | Ksiaz | 88.50 | 322 | | P | | P | | 14 53 04.8 | -0.9 |
| | comp=Z,16nm,1.1s,comp=Z,477nm | | | | | | | | | |
| MORH | Mrgy, Hungar | 88.51 | 317 | ⇓ | P | | P | | 14 53 04.8 | -1.1 |
| MORH | Mrgy, Hungar | 88.51 | 317 | | P | | P | | 14 53 04.4 | -1.5 |
| | comp=Z,10nm,2.3s,comp=Z,386nm | | | | | | | | | |
| OSTC | Ostas | 88.64 | 322 | *e* | P | | P | | 14 53 06.1 | -0.4 |
| OSTC | | | | | | AMS | AMS | | 15 52 40.0 | |
| | comp=Z,300nm,19.1s | | | | | | | | | |
| OSTC | Ostas | 88.64 | 322 | *e* | P | | P | | 14 53 06.1 | -0.4 |
| OSTC | | | | | | MLR | MLR | | | |
| | comp=Z,300nm,19.1s | | | | | | | | | |
| DPC | Dobruska-Polom | 88.65 | 322 | | AMS | | AMS | | 15 53 20.0 | |
| | comp=Z,200nm,17.2s | | | | | | | | | |
| DPC | Dobruska-Polom | 88.65 | 322 | | P | | P | | 14 53 06.2 | -0.3 |
| | comp=Z,8.9nm,2.4s,comp=Z,260nm | | | | | | | | | |
| V35K | Ketchikan | 88.68 | 33 | | P | | P | | 14 53 06.1 | -0.3 |
| | baz=292 | | | | | | | | | |
| T35M | Bob Quinn | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ZVC | Zvikov | 90.26 | 321 | eP | | P | 14 53 12.8 | -1.2 |
| ZVC | | | | | AMS | AMS | 15 54 10.0 | |
| | comp=Z,300nm,20.1s | | | | | | | |
| CLL | Collm | 90.27 | 323 | eP | | P | 14 53 13.0 | -1.0 |
| CLL | | | | e*PP | | sP | 14 53 52.0 | -6.8 |
| CLL | | | | eS | | S | 15 03 54.0 | -3.8 |
| CLL | | | | | pmax | pmax | | |
| | comp=Z,40nm,1.9s | | | | | | | |
| CLL | Collm | 90.27 | 323 | P | | P | 14 53 13.0 | -1.0 |
| | comp=Z,11nm,2.1s | | | | | | | |
| CLL | Collm | 90.27 | 323 | eP | | P | 14 53 13.3 | -0.7 |
| | comp=Z,33nm,1.7s,baz=66,slow=4.6 | | | | | | | |
| CLL | | | | ePP | | PP | 14 56 46.7 | -2.5 |
| HSKC | Hora Svate Kat | 90.28 | 323 | eP | | P | 14 53 13.4 | -0.7 |
| HSKC | | | | | AMS | AMS | 15 53 10.0 | |
| | comp=Z,200nm,16.6s | | | | | | | |
| KOTAN | Kotaneelee Air | 90.31 | 27 | P | | P | 14 53 13.9 | -0.1 |
| | baz=298 | | | | | | | |
| TOAD | Toad River Com | 90.37 | 28 | P | | P | 14 53 13.7 | -0.7 |
| | baz=297 | | | | | | | |
| CKRC | Cesky Krumlov | 90.41 | 321 | eP | | P | 14 53 14.4 | -0.4 |
| CKRC | | | | ex | | PP | 14 56 47.7 | -2.7 |
| CKRC | | | | | AMS | AMS | 15 54 30.0 | |
| | comp=Z,200nm,15.2s | | | | | | | |
| CKRC | Cesky Krumlov | 90.41 | 321 | eP | | P | 14 53 14.4 | -0.4 |
| CKRC | | | | e | | | 14 56 47.7 | |
| CKRC | | | | | MLR | MLR | | |
| | comp=Z,200nm,15.2s | | | | | | | |
| SOKA | Soboth | 90.72 | 318 | i P | | P | 14 53 15.8 | -0.5 |
| | comp=Z,6.8nm,1.7s | | | | | | | |
| SOKA | | | | ePP | | PP | 14 56 55.6 | +2.6 |
| | comp=Z,17nm,1.6s | | | | | | | |
| BSEG | Bad Segeberg | 90.74 | 326 | eP | | P | 14 53 15.7 | -0.4 |
| | comp=Z,18nm,1.3s,baz=66,slow=4.6 | | | | | | | |
| KHC | Kasperske Hory | 90.74 | 321 | eP | | P | 14 53 13.9 | -2.4 |
| KHC | | | | ePP | | PP | 14 56 52.4 | -0.6 |
| KHC | | | | ex | | SKKSac | 15 03 55.4 | +3.7 |
| KHC | | | | | AMS | AMS | 15 52 50.0 | |
| | comp=Z,200nm,16.9s | | | | | | | |
| KHC | Kasperske Hory | 90.74 | 321 | ceP | | P | 14 53 15.6 | -0.7 |
| KHC | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | | |
| KHC | Kasperske Hory | 90.74 | 321 | P | | P | 14 53 15.0 | -1.3 |
| | comp=Z,9.8nm,2.3s | | | | | | | |
| GEC2 | GERESS Array S | 90.77 | 321 | eP | | P | 14 53 16.4 | -0.1 |
| | comp=Z,34nm,1.6s,baz=66,slow=4.6 | | | | | | | |
| GERES | GERESS Array B | 90.77 | 321 | P | | P | 14 53 16.5 | -0.1 |
| | comp=Z,1.7nm,0.7s,baz=29,slow=3.0,SNR=6.4 | | | | | | | |
| | comp=Z,1.7nm,0.7s | | | | | | | |
| MOA | Molln | 90.79 | 320 | i P | | P | 14 53 16.3 | -0.2 |
| | comp=Z,11nm,1.0s,SNR=7.3 | | | | | | | |
| TANN | Tannenbergstha | 90.93 | 323 | eP | | P | 14 53 16.9 | -0.3 |
| | comp=Z,22nm,1.7s,baz=66,slow=4.6 | | | | | | | |
| MAW | Mawson | 90.99 | 199 | P | | P | 14 53 16.5 | -0.3 |
| | comp=Z,2.3nm,0.5s,baz=57,slow=2.0,SNR=9.3 | | | | | | | |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| PLN | Plauen | 91.08 | 323 | eP | | P | 14 53 17.5 | -0.3 |
| | comp=Z,25nm,1.6s,baz=66,slow=4.6 | | | | | | | |
| OBKA | Obir | 91.09 | 318 | ePP | | PP | 14 56 57.7 | +1.8 |
| | comp=Z,14nm,1.6s | | | | | | | |
| WET | Wettzell | 91.17 | 321 | eP | | P | 14 53 18.3 | 0.0 |
| | comp=Z,68nm,2.3s,baz=66,slow=4.6 | | | | | | | |
| BIOA | Bad Ischl, Aus | 91.24 | 320 | i P | | P | 14 53 17.9 | -0.7 |
| | comp=Z,3.7nm,1.1s | | | | | | | |
| BIOA | | | | ePP | | PP | 14 56 59.0 | +2.0 |
| | comp=Z,6.3nm,1.0s | | | | | | | |
| MANZ | Manzenberg | 91.31 | 322 | eP | | P | 14 53 18.9 | 0.0 |
| | comp=Z,31nm,2.8s,baz=66,slow=4.6 | | | | | | | |
| MANZ | | | | ePP | | PP | 14 56 57.1 | -0.3 |
| ROTZ | Rotzenmuhle | 91.33 | 322 | eP | | P | 14 53 19.2 | +0.2 |
| | comp=Z,12nm,1.9s,baz=66,slow=4.6 | | | | | | | |
| MOX | Moxa | 91.34 | 323 | eP | | P | 14 53 18.8 | -0.2 |
| | comp=Z,54nm,2.1s,baz=66,slow=4.6 | | | | | | | |
| MOX | | | | ePP | | PP | 14 56 57.0 | -0.6 |
| MOX | | | | eS | | S | 15 04 39.6 | +32 |
| MOX | | | | eL | | L | 15 40 46.6 | |
| | comp=Z,209nm,19.2s | | | | | | | |
| NRDL | Niedersach Rie | 91.45 | 325 | eP | | P | 14 53 19.5 | +0.2 |
| | comp=Z,100nm,2.7s,baz=66,slow=4.6 | | | | | | | |
| NRDL | | | | ePP | | PP | 14 57 01.5 | +3.2 |
| CLZ | Clausthal | 91.57 | 324 | eP | | P | 14 53 20.2 | +0.1 |
| | comp=Z,63nm,1.9s,baz=66,slow=4.6 | | | | | | | |
| KBA | Koelnbreinsper | 91.65 | 319 | i P | | P | 14 53 19.5 | -1.2 |
| | comp=Z,7.6nm,1.4s | | | | | | | |
| RJOB | Jochberg | 91.75 | 320 | eP | | P | 14 53 20.7 | -0.3 |
| | comp=Z,14nm,1.4s,baz=66,slow=4.6 | | | | | | | |
| BBB | Bella Bella | 91.84 | 35 | LR | | LR | 15 27 43.3 | |
| | comp=Z,54nm,21.5s,baz=296,slow=31 | | | | | | | |
| GTTG | Gottingen | 91.92 | 324 | eP | | P | 14 53 21.6 | -0.1 |
| | comp=Z,48nm,1.7s,baz=66,slow=4.6 | | | | | | | |
| LESA | Schwarzleotal | 91.94 | 320 | eP | | P | 14 53 21.2 | -0.8 |
| | comp=Z,18nm,1.7s | | | | | | | |
| LESA | | | | ePP | | PP | 14 57 04.7 | +2.1 |
| | comp=Z,8.2nm,1.1s | | | | | | | |
| GRF | Grafenberg Arr | 91.95 | 322 | eS | | S | 15 04 42.3 | +29 |
| GRF | | | | eL | | L | 15 39 36.6 | |
| | comp=Z,190nm,22.0s | | | | | | | |
| TIP | Timpagrande | 92.08 | 311 | P | | P | 14 53 21.3 | -1.5 |
| | comp=Z,15nm,2.2s,comp=Z,394nm | | | | | | | |
| UBBA | Unterbreizbach | 92.21 | 324 | eP | | P | 14 53 22.5 | -0.3 |
| | comp=Z,29nm,1.7s,baz=66,slow=4.6 | | | | | | | |
| ABTA | Abfaltersbach | 92.31 | 319 | eP | | P | 14 53 22.1 | -1.5 |
| | comp=Z,13nm,1.5s | | | | | | | |
| ABTA | | | | ePP | | PP | 14 57 08.3 | +2.8 |
| | comp=Z,6.1nm,1.2s | | | | | | | |
| WTTA | Wattenberg | 92.66 | 320 | i P | | P | 14 53 24.7 | -0.7 |
| | comp=Z,18nm,1.4s,SNR=7.8 | | | | | | | |
| WTTA | | | | ePP | | PP | 14 57 10.4 | +2.1 |
| | comp=Z,15nm,1.4s | | | | | | | |
| WATA | Walderalm | 92.67 | 320 | eP | | P | 14 53 24.4 | -1.0 |
| | comp=Z,19nm,1.5s,SNR=5.5 | | | | | | | |
| WATA | | | | ePP | | PP | 14 57 09.4 | +1.1 |
| | comp=Z,9.3nm,1.4s | | | | | | | |
| YKA | Yellowknife Ar | 92.88 | 22 | P | | P | 14 53 25.3 | -0.5 |
| | comp=Z,6.7nm,1.0s,baz=315,slow=4.9,SNR=16 | | | | | | | |
| | comp=Z,6.7nm,1.0s | | | | | | | |
| SQTA | Sankt Quirin | 92.94 | 320 | i P | | P | 14 53 25.9 | -0.7 |
| | comp=Z,16nm,1.4s,SNR=5.4 | | | | | | | |
| SQTA | | | | ePP | | PP | 14 57 10.4 | 0.0 |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| KASTN | Kahler Asten | 92.95 | 324 | eP | | P | 14 53 26.3 | -0.2 |
| | comp=Z,147nm,3.1s,baz=66,slow=4.6 | | | | | | | |
| MOTA | Moosalm | 92.96 | 320 | eP | | P | 14 53 25.8 | -1.0 |
| | comp=Z,14nm,1.6s | | | | | | | |
| MOTA | | | | ePP | | PP | 14 57 13.0 | +2.3 |
| | comp=Z,7.7nm,1.8s | | | | | | | |
| CEL | Celeste | 93.02 | 310 | P | | P | 14 53 26.2 | -0.9 |
| | comp=Z,27nm,1.7s,comp=Z,512nm | | | | | | | |
| RETA | Reutte | 93.11 | 320 | eP | | P | 14 53 26.5 | -0.9 |
| | comp=Z,6.3nm,1.4s | | | | | | | |
| RETA | | | | ePP | | PP | 14 57 14.1 | +2.4 |
| | comp=Z,11nm,1.6s | | | | | | | |
| FETA | Feichten | 93.32 | 320 | i P | | P | 14 53 28.0 | -0.5 |
| | comp=Z,13nm,1.3s,SNR=5.3 | | | | | | | |
| FETA | | | | ePP | | PP | 14 57 15.3 | +1.8 |
| | comp=Z,17nm,1.7s | | | | | | | |
| TNS | Taunus Mts | 93.36 | 323 | eP | | P | 14 53 28.4 | 0.0 |
| | comp=Z,29nm,1.8s,baz=66,slow=4.6 | | | | | | | |
| UBR | Ueberruh | 93.44 | 321 | eP | | P | 14 53 28.3 | -0.5 |
| | comp=Z,38nm,1.7s,baz=66,slow=4.6 | | | | | | | |
| BUG | Bochum--Univer | 93.49 | 325 | eP | | P | 14 53 28.1 | -0.7 |
| | comp=Z,84nm,2.4s,baz=66,slow=4.6 | | | | | | | |
| PPT | Papeete | 93.69 | 107 | LR | | LR | 15 28 24.2 | |
| | comp=Z,70nm,21.5s,baz=297,slow=31 | | | | | | | |
| PPT2 | Papeete2 | 93.70 | 107 | ePKP2 | | P | 14 53 19.4 | -11 |
| | comp=Z,89nm,26.5s | | | | | | | |
| PPT2 | Papeete2 | 93.70 | 107 | eS | | S | 15 04 21.9 | -7.8 |
| | comp=Z,173nm,26.2s | | | | | | | |
| PPT2 | | | | eSS | | SS | 15 10 42.0 | -9.1 |
| | comp=Z,231nm,26.8s | | | | | | | |
| PPT2 | Papeete2 | 93.70 | 107 | eLR | | LR | 15 23 43.2 | |
| | comp=Z,327nm,37.0s | | | | | | | |
| PPT2 | | | | eLR | | LR | 15 23 49.8 | |
| | comp=Z,593nm,33.8s | | | | | | | |
| DAVA | Damuels | 93.74 | 320 | eP | | P | 14 53 29.5 | -0.9 |
| | comp=Z,10nm,1.4s | | | | | | | |
| DAVOX | Davos/Dischmat | 93.95 | 320 | LR | | LR | 15 39 49.4 | |
| | comp=Z,180nm,19.6s,baz=66,slow=38 | | | | | | | |
| AHRW | Bad Neuenahr-A | 94.00 | 324 | eP | | P | 14 53 31.2 | -0.1 |
| | baz=66,slow=4.6 | | | | | | | |
| BFO | Black Forest | 94.25 | 322 | eP | | P | 14 53 32.0 | -0.5 |
| | baz=66,slow=4.6 | | | | | | | |
| MEM | Membach | 94.58 | 325 | dP | | P | 14 53 33.5 | -0.4 |
| WLF | Walferdange | 94.93 | 324 | dP | | P | 14 53 35.8 | +0.2 |
| WLF | Walferdange | 94.93 | 324 | eP | | P | 14 53 35.8 | +0.2 |
| | comp=Z,46nm,1.7s,baz=66,slow=4.6 | | | | | | | |
| BCLA | Clavier | 95.06 | 325 | dP | | P | 14 53 36.7 | +0.5 |
| TBI | Tubuai | 95.07 | 113 | eS | | S | 15 04 30.2 | -11 |
| | comp=Z,2μm,28.8s | | | | | | | |
| TBI | | | | eSS | | SS | 15 10 57.4 | -13 |
| | comp=Z,1μm,34.5s | | | | | | | |
| TBI | Tubuai | 95.07 | 113 | eLR | | LR | 15 24 28.2 | |
| | comp=Z,2μm,37.0s | | | | | | | |
| RCHB | Rochefort | 95.23 | 324 | dP | | P | 14 53 36.2 | -0.7 |
| BMRD | Maredsous | 95.42 | 325 | dP | | P | 14 53 36.7 | -1.1 |
| LSZ | Lusaka | 95.92 | 256 | P | | P | 14 53 41.1 | +0.3 |
| BORG | Borgarnes | 96.81 | 345 | ceP | | P | 14 53 44.7 | +1.0 |
| EKA | Eskdalemuir Ar | 96.82 | 331 | P | | P | 14 53 43.1 | -0.9 |
| | comp=Z,0.3nm,0.3s,baz=52,slow=3.2,SNR=4.7 | | | | | | | |
| | comp=Z,0.3nm,0.3s | | | | | | | |
| YBH | Yreka Blue Hor | 99.82 | 43 | LR | | LR | 15 30 12.5 | |
| | comp=Z,134nm,21.7s,baz=304,slow=30 | | | | | | | |
| BOSA | Boshof | 101.13 | 243 | P | | Pdif | 14 54 03.4 | -0.6 |
| | comp=Z,3.6nm,0.9s,baz=80,slow=9.0,SNR=3.3 | | | | | | | |
| QSPA | South Pole Qui | 103.41 | 180 | Pdiff | | Pdif | 14 54 12.6 | -0.6 |
| | comp=Z,0.8nm,0.5s,baz=226,slow=0.7,SNR=20 | | | | | | | |
| NVAR | Mina Array Bea | 104.38 | 44 | PKKPbc | | PKKPbc | 15 10 04.2 | -1.4 |
| | comp=Z,0.5nm,0.5s,baz=159,slow=3.1,SNR=4.7 | | | | | | | |
| ELIB | Princess Elisa | 105.11 | 199 | dPKPdf | | PKiKP | 14 58 35.0 | +0.6 |
| R11B | Troy Canyon, C | 106.24 | 43 | P | | PKiKP | 14 58 36.8 | -0.9 |
| | baz=302 | | | | | | | |
| PDAR | Pinedale Array | 107.43 | 36 | PKiKP | | PKiKP | 14 58 39.5 | -0.4 |
| | comp=Z,0.4nm,0.4s,baz=63,slow=1.2,SNR=6.1 | | | | | | | |
| PDAR | | | | PKKPbc | | PKKPbc | 15 09 53.4 | -3.1 |
| | comp=Z,0.6nm,0.6s,baz=84,slow=4.6,SNR=7.0 | | | | | | | |
| PDAR | | | | PKKPab | | PKKPdf | 15 10 08.3 | -0.3 |
| | comp=Z,0.5nm,0.5s,baz=134,slow=6.4,SNR=7.6 | | | | | | | |
| TPFO | Pinon Flats | 108.12 | 48 | P | | PKiKP | 14 58 40.1 | -1.1 |
| | baz=301 | | | | | | | |
| MESJ | Messejana | 110.00 | 319 | ePP | | PP | 14 59 19.6 | +1.0 |
| MORF | Marmelete | 110.59 | 319 | ePP | | PP | 14 59 23.8 | +0.8 |
| N23A | Red Feather La | 110.70 | 36 | P | | PKiKP | 14 58 44.9 | -1.2 |
| | baz=311 | | | | | | | |
| 214A | Organ Pipe Nat | 111.60 | 47 | P | | PKiKP | 14 58 46.7 | -1.0 |
| | baz=303 | | | | | | | |
| SNAA | Sanae | 113.04 | 197 | PKiKP | | PKiKP | 14 58 48.2 | -1.0 |
| | comp=Z,0.4nm,0.5s,baz=250,slow=6.0,SNR=6.5 | | | | | | | |
| SNAA | | | | PKKPbc | | PKKPbc | 15 09 34.7 | -4.3 |
| | comp=Z,1.1nm,1.1s,baz=302,slow=10,SNR=5.9 | | | | | | | |
| TORD | Torodi Ar. Bea | 114.05 | 291 | PKP | | PKPdf | 14 58 51.5 | -1.2 |
| | comp=Z,2.1nm,0.4s,baz=57,slow=2.3,SNR=33 | | | | | | | |
| TORD | | | | PKKPbc | | PKKPbc | 15 09 33.0 | -0.8 |
| | comp=Z,0.5nm,0.6s,baz=274,slow=1.5,SNR=5.9 | | | | | | | |
| T25A | Trinidad | 114.06 | 38 | P | | PKPdf | 14 58 51.3 | -1.2 |
| | baz=311 | | | | | | | |
| VHRN | Van Horn | 117.73 | 44 | PKPdf | | PKPdf | 14 58 59.6 | 0.0 |
| SMWD | Samnorwood | 117.92 | 38 | | | PKPdf | 14 58 59.3 | -0.5 |
| L44A | Lake County Fo | 118.57 | 24 | P | | PKPdf | 14 58 60.0 | -0.7 |
| | baz=328 | | | | | | | |
| ALPN | Alpine | 118.89 | 44 | PKPdf | | PKPdf | 14 59 01.7 | -0.2 |
| P40A | Paris | 118.97 | 29 | PKPdf | | PKPdf | 14 59 00.6 | -1.0 |
| WMOK | Wichita Mounta | 119.04 | 37 | PKPdf | | PKPdf | 14 59 00.9 | -1.0 |
| WMOK | Wichita Mounta | 119.04 | 37 | PKIKP | | PKPdf | 14 59 00.9 | -1.0 |
| TXAR | Lajitas Array | 119.52 | 45 | PKP | | PKPdf | 14 59 03.0 | -0.1 |
| | comp=Z,2.3nm,0.4s,baz=142,slow=0.6,SNR=52 | | | | | | | |
| TXAR | | | | PKKPab | | PKKPbc | 15 09 14.5 | -0.7 |
| | comp=Z,0.1nm,0.4s,baz=132,slow=5.6,SNR=4.9 | | | | | | | |
| R40A | Maddies Statio | 119.85 | 30 | PKPdf | | PKPdf | 14 59 02.4 | -0.9 |
| SAND | Sanderson | 120.17 | 43 | PKPdf | | PKPdf | 14 59 04.1 | -0.1 |
| F64A | Sherman | 120.28 | 7 | PKPdf | | PKPdf | 14 59 03.4 | -0.5 |
| CCM | Cathedral Cave | 120.52 | 29 | | | PKPdf | 14 59 03.9 | -0.7 |
| CCM | Cathedral Cave | 120.52 | 29 | PKIKP | | PKPdf | 14 59 03.9 | -0.7 |
| GBN | Guysborough | 121.27 | 2 | PKPdf | | PKPdf | 14 59 05.7 | -0.1 |
| BRDY | Brady | 121.30 | 40 | PKPdf | | PKPdf | 14 59 06.2 | -0.1 |
| JCT | Junction City | 121.34 | 41 | | | PKPdf | 14 59 06.4 | 0.0 |
| JCT | Junction City | 121.34 | 41 | PKIKP | | PKPdf | 14 59 06.4 | 0.0 |
| T42A | Van Buren | 121.42 | 30 | | | PKPdf | 14 59 05.7 | -0.6 |
| DRIO | Del Rio | 121.51 | 43 | PKPdf | | PKPdf | 14 59 06.3 | -0.5 |
| M53A | WI Miller and | 121.80 | 19 | P | | PKPdf | 14 59 06.6 | -0.4 |
| | baz=335 | | | | | | | |
| P49A | Miami Univ. Ec | 122.08 | 23 | P | | PKPdf | 14 59 07.2 | -0.4 |
| | baz=330 | | | | | | | |
| MIAR | Mount Ida | 122.09 | 33 | PKPdf | | PKPdf | 14 59 08.2 | +0.5 |
| MIAR | Mount Ida | 122.09 | 33 | PKIKP | | PKPdf | 14 59 08.2 | +0.5 |
| DBIC | Dimbokro | 122.39 | 287 | PKP | | PKPdf | 14 59 06.9 | -1.9 |
| | comp=Z,4.8nm,0.7s,baz=72,slow=4.6,SNR=7.7 | | | | | | | |
| 435B | Jarrell | 122.52 | 39 | P | | PKPdf | 14 59 07.5 | -1.2 |
| | baz=314 | | | | | | | |
| L61B | Northampton | 122.91 | 12 | P | | PKPdf | 14 59 08.4 | -0.7 |
| | baz=344 | | | | | | | |
| P52A | Corning | 122.94 | 21 | P | | PKPdf | 14 59 09.1 | -0.1 |
| | baz=333 | | | | | | | |
| 833A | Chaparral WMA, | 123.04 | 43 | P | | PKPdf | 14 59 09.4 | -0.3 |
| | baz=312 | | | | | | | |
| SSPA | Standing Stone | 123.37 | 17 | PKPdf | | PKPdf | 14 59 09.3 | -0.7 |
| M65A | Busby, Falmout | 124.15 | 10 | P | | PKPdf | 14 59 11.6 | +0.1 |
| | baz=346 | | | | | | | |
| U49A | Red Boiling Sp | 124.25 | 26 | | | PKPdf | 14 59 11.6 | -0.3 |
| PLAL | Pickwick Lake | 124.50 | 29 | | | PKPdf | 14 59 11.6 | -0.7 |
| JTS | Las Juntas de | 145.17 | 48 | | | PKPbc | 14 59 50.6 | -0.4 |
| JTS | Las Juntas de | 145.17 | 48 | PKIKP | | PKPbc | 14 59 50.6 | -0.4 |
| SDDR | Presa de Saban | 145.55 | 20 | | | PKPdf | 14 59 51.8 | +0.1 |
| LL02 | Futaleuf | 148.54 | 162 | PKPdf | | PKPdf | 14 59 54.9 | -1.1 |
| LL02 | | | | PKPbc | | PKPbc | 15 00 00.2 | +0.4 |
| PLCA | Paso Flores | 151.18 | 162 | PKPbc | | PKPbc | 15 00 06.9 | +0.6 |
| | comp=Z,30nm,1.3s,baz=197,slow=3.4,SNR=26 | | | | | | | |
| BAUV | El Baul | 155.99 | 22 | PKPdf | | PKPdf | 15 00 06.7 | -1.2 |
| BAUV | | | | PKPab | | PKPab | 15 00 34.5 | -0.8 |
| CPUP | Villa Florida | 167.18 | 188 | PKPab | | PKPab | 15 01 23.0 | -0.8 |
| | comp=Z,3.3nm,0.5s,baz=146,slow=4.5,SNR=8.0 | | | | | | | |
| CPUP | Villa Florida | 167.18 | 188 | PKP2 | | PKPab | 15 01 23.0 | -0.8 |
| BDFB | Brasilia | 168.94 | 258 | PKP | | PKPdf | 15 00 19.7 | -1.0 |
| | comp=Z,1.2nm,0.3s,baz=61,slow=3.5,SNR=3.9 | | | | | | | |
| BDFB | | | | PKPab | | PKPab | 15 01 32.2 | -0.2 |
| | comp=Z,6.5nm,0.5s,baz=113,slow=5.7,SNR=9.6 | | | | | | | |
| LPAZ | La Paz | 170.99 | 109 | PKP | | PKPdf | 15 00 21.9 | -0.6 |
| | comp=Z,3.3nm,0.9s,baz=332,slow=2.8,SNR=10 | | | | | | | |

*JMA **31** 14:44:05.8±0.1,24˚N±3˚×122˚7E±0˚6,h50km±2km,*
*MV2.7/17,NW OFF ISHIGAKIJIMA IS*
*TAP **31** 14:44:05.8,24˚32N×122˚69E,h50km±1km,ML3.0,C*
**ISC 31 14:44:06.2±1.2,24°31N±0°04×122°68E±0°02,h46km±8km,**
**n81,σ0°69/95,1D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| JYNG | Yonagunijimaku | 0.28 | 60 | i P | | Pn | 14 44 14.6 | -0.1 |
| JYNG | | | | | S | Sn | 14 44 20.9 | 0.0 |
| EOS3 | EOS3 | 0.33 | 266 | eP | | Pn | 14 44 15.6 | +0.5 |
| | baz=263 | | | | | | | |
| YOJ | Yonaguni jima | 0.34 | 63 | i P | | Pn | 14 44 15.2 | -0.2 |
| | baz=62 | | | | | | | |
| YOJ | | | | | S | Sn | 14 44 21.8 | -0.1 |
| | baz=62 | | | | | | | |
| YOJ | Yonaguni jima | 0.34 | 63 | P | | Pn | 14 44 15.1 | -0.2 |
| YOJ | | | | | S | Sn | 14 44 21.7 | -0.1 |
| EOS4 | EOS4 | 0.38 | 240 | eP | | Pn | 14 44 16.3 | +0.9 |
| | baz=239 | | | | | | | |
| EOS2 | EOS2 | 0.42 | 285 | i P | | Pn | 14 44 16.2 | +0.1 |
| | baz=283 | | | | | | | |
| ESAO | Su ao | 0.81 | 289 | eP | | Pn | 14 44 20.8 | -0.4 |
| | baz=288 | | | | | | | |
| TWC | Suao | 0.81 | 292 | eP | | Pn | 14 44 20.4 | -0.9 |
| | baz=290 | | | | | | | |
| EWUT | Wuta | 0.83 | 280 | eP | | Pn | 14 44 21.7 | +0.2 |
| | baz=278 | | | | | | | |
| EAHA | Aohua | 0.86 | 272 | eP | | Pn | 14 44 22.2 | +0.3 |
| | baz=270 | | | | | | | |
| ENA | Nanau | 0.86 | 278 | P | | Pn | 14 44 22.1 | +0.1 |
| | baz=276 | | | | | | | |
| NDS | Dongshan | 0.94 | 290 | eP | | Pn | 14 44 23.0 | +0.1 |
| | baz=289 | | | | | | | |
| TWB1 | Santiao Chiao | 0.94 | 318 | eP | | Pn | 14 44 22.5 | -0.5 |
| | baz=317 | | | | | | | |
| IRIF | Iriomote-Funau | 0.96 | 88 | i P | | Pn | 14 44 22.9 | -0.4 |
| IRIF | | | | | S | Sn | 14 44 35.6 | -0.2 |
| NACB | Ninganchiao | 1.00 | 262 | eP | | Pn | 14 44 23.1 | -0.7 |
| | baz=261 | | | | | | | |
| TWE | Neicheng | 1.01 | 294 | eP | | Pn | 14 44 23.9 | 0.0 |
| | baz=293 | | | | | | | |
| TWE | | | | | S | Sn | 14 44 36.9 | -0.1 |
| | baz=293 | | | | | | | |
| TWD | Chiawan | 1.01 | 257 | eP | | Pn | 14 44 23.9 | -0.1 |
| | baz=256 | | | | | | | |
| TIPB | Shuangxi | 1.02 | 311 | eP | | Pn | 14 44 23.7 | -0.4 |
| | baz=309 | | | | | | | |
| TIPB | | | | | eS | Sn | 14 44 35.6 | -1.7 |
| | baz=309 | | | | | | | |
| HATJ | Hateruma jima | 1.06 | 103 | P | | Pn | 14 44 24.7 | +0.1 |
| ENTT | Nioudou | 1.07 | 288 | i P | | Pn | 14 44 25.1 | +0.4 |
| | baz=287 | | | | | | | |
| SXI1 | Grass Mountain | 1.07 | 317 | eP | | Pn | 14 44 24.1 | -0.7 |
| | baz=316 | | | | | | | |
| LATG | Datong | 1.07 | 282 | eP | | Pn | 14 44 25.4 | +0.4 |
| | baz=281 | | | | | | | |
| FUSB | Fushanzhiwuyua | 1.09 | 295 | eP | | Pn | 14 44 25.3 | +0.2 |
| | baz=293 | | | | | | | |
| ETLH | Xiulin Townshi | 1.10 | 265 | eP | | Pn | 14 44 25.4 | +0.2 |
| | baz=264 | | | | | | | |
| NDT | Datong Townshi | 1.10 | 286 | eP | | Pn | 14 44 25.7 | +0.5 |
| | baz=284 | | | | | | | |
| ETM | Tongmen | 1.14 | 253 | eP | | Pn | 14 44 25.2 | -0.5 |
| | baz=251 | | | | | | | |
| SHUL | Shoufeng | 1.15 | 243 | eP | | Pn | 14 44 25.6 | -0.2 |
| | baz=242 | | | | | | | |
| SHUL | | | | | eS | Sn | 14 44 40.2 | -0.1 |
| | baz=242 | | | | | | | |
| NWLT | Wulai | 1.17 | 294 | eP | | Pn | 14 44 26.9 | +0.8 |
| | baz=292 | | | | | | | |
| NWLT | | | | | eS | Sn | 14 44 40.4 | -0.6 |
| | baz=292 | | | | | | | |
| NNSB | Datong | 1.19 | 276 | eP | | Pn | 14 44 26.4 | 0.0 |
| | baz=275 | | | | | | | |
| LXIB | Xiulin Townshi | 1.19 | 256 | eP | | Pn | 14 44 25.9 | -0.6 |
| | baz=255 | | | | | | | |
| NNS | Nan Shan | 1.20 | 277 | eP | | Pn | 14 44 26.8 | +0.2 |
| | baz=275 | | | | | | | |
| TWA | Mucha | 1.20 | 304 | eP | | Pn | 14 44 26.8 | +0.2 |
| | baz=303 | | | | | | | |
| JKRS | Kuro-shima | 1.22 | 93 | i P | | Pn | 14 44 27.0 | +0.3 |
| JKRS | | | | | S | Sn | 14 44 42.8 | +0.8 |
| YHNB | Yeheng | 1.24 | 287 | eP | | Pn | 14 44 27.5 | +0.4 |
| | baz=286 | | | | | | | |
| ESL | Shilin | 1.24 | 247 | eP | | Pn | 14 44 26.6 | -0.5 |
| | baz=245 | | | | | | | |
| NSK | Sanguang | 1.26 | 287 | eP | | Pn | 14 44 27.8 | +0.4 |
| | baz=286 | | | | | | | |
| WHF | Hehuan Shan | 1.30 | 263 | eP | | Pn | 14 44 28.7 | +0.4 |
| | baz=262 | | | | | | | |
| YM01 | YM01 | 1.31 | 310 | eP | | Pn | 14 44 28.3 | +0.3 |
| | baz=308 | | | | | | | |
| FUSS | Fushou | 1.31 | 268 | eP | | Pn | 14 44 28.4 | +0.1 |
| | baz=266 | | | | | | | |
| WARBT | Fenglin Townsh | 1.32 | 244 | eP | | Pn | 14 44 27.4 | -0.8 |
| | baz=243 | | | | | | | |
| YM08 | YM08 | 1.32 | 312 | eP | | Pn | 14 44 28.6 | +0.3 |
| | baz=310 | | | | | | | |
| JIJ | Ishigaki jima | 1.34 | 87 | P | | Pn | 14 44 28.0 | -0.4 |
| JIJ | | | | | S | Sn | 14 44 44.7 | -0.3 |
| TWT | Tachien | 1.37 | 268 | eP | | Pn | 14 44 29.6 | +0.6 |
| | baz=267 | | | | | | | |
| TWY | Chenhua | 1.37 | 315 | eP | | Pn | 14 44 29.2 | +0.3 |
| | baz=313 | | | | | | | |
| TDCB | Techi | 1.39 | 268 | eP | | Pn | 14 44 29.8 | +0.5 |
| | baz=267 | | | | | | | |
| TWS1 | Kuangyinshan | 1.39 | 305 | eP | | Pn | 14 44 29.6 | +0.4 |
| | baz=303 | | | | | | | |
| CHGB | Renai | 1.40 | 260 | eP | | Pn | 14 44 29.5 | +0.1 |
| | baz=259 | | | | | | | |
| HGSD | Ruisui | 1.41 | 235 | eP | | Pn | 14 44 30.4 | +1.1 |
| | baz=234 | | | | | | | |
| OWD | Renai | 1.42 | 256 | eP | | Pn | 14 44 29.4 | -0.2 |
| | baz=255 | | | | | | | |
| PCYT | Pengchaiyu | 1.43 | 337 | eP | | Pn | 14 44 29.6 | -0.1 |
| | baz=336 | | | | | | | |
| NFF | Wufeng Townshi | 1.46 | 283 | eP | | Pn | 14 44 30.6 | +0.5 |
| | baz=282 | | | | | | | |
| WUSB | Renai | 1.46 | 258 | eP | | Pn | 14 44 30.5 | +0.3 |
| | baz=257 | | | | | | | |
| EHY | Hungye | 1.48 | 238 | eP | | Pn | 14 44 29.4 | -0.9 |
| | baz=236 | | | | | | | |
| ECBN | Changbin | 1.50 | 229 | eS | | Sn | 14 44 47.5 | -1.4 |
| | baz=228 | | | | | | | |
| VWDT | VWDT | 1.51 | 249 | eP | | Pn | 14 44 30.9 | +0.2 |
| | baz=248 | | | | | | | |
| JISG | Ishigakijimahi | 1.51 | 79 | i P | | Pn | 14 44 30.1 | -0.6 |
| JISG | | | | | eS | Sn | 14 44 48.5 | -0.8 |
| LIOB | Emei | 1.55 | 283 | eP | | Pn | 14 44 32.2 | +0.9 |
| | baz=281 | | | | | | | |
| YULB | Yu-li | 1.56 | 234 | eP | | Pn | 14 44 30.8 | -0.6 |
| | baz=233 | | | | | | | |
| NSTT | Nanjuang | 1.56 | 282 | eP | | Pn | 14 44 32.1 | +0.7 |
| | baz=281 | | | | | | | |
| EYUL | Yuli | 1.57 | 233 | eP | | Pn | 14 44 31.4 | -0.2 |
| | baz=232 | | | | | | | |
| WHP | Taichung City | 1.58 | 269 | eP | | Pn | 14 44 33.1 | +1.2 |
| | baz=268 | | | | | | | |
| TWF1 | Yuli | 1.58 | 233 | eP | | Pn | 14 44 31.2 | -0.6 |
| | baz=232 | | | | | | | |
| CHKH | Chenggong | 1.62 | 227 | eS | | Sn | 14 44 49.6 | -2.3 |
| | baz=226 | | | | | | | |
| SSLB | Suanglung | 1.66 | 252 | eP | | Pn | 14 44 33.8 | +0.9 |
| | baz=251 | | | | | | | |
| FULB | Fuli | 1.68 | 229 | eP | | Pn | 14 44 32.7 | -0.4 |
| | baz=228 | | | | | | | |
| CHKT | Chengkung | 1.70 | 225 | eP | | Pn | 14 44 32.5 | -0.9 |
| | baz=224 | | | | | | | |
| TYC | Yuchr | 1.71 | 257 | eP | | Pn | 14 44 34.4 | +0.9 |
| | baz=255 | | | | | | | |
| WHYT | Xinyi Township | 1.78 | 250 | eP | | Pn | 14 44 35.2 | +0.7 |
| | baz=249 | | | | | | | |
| EDH | Donghe | 1.83 | 224 | eP | | Pn | 14 44 34.4 | -0.8 |
| | baz=223 | | | | | | | |
| JTJ | Tarama | 1.87 | 79 | P | | Pn | 14 44 35.8 | 0.0 |
| JTJ | | | | | eS | Sn | 14 44 58.5 | +0.3 |
| WNT | Mingjian | 1.87 | 257 | eP | | Pn | 14 44 36.7 | +1.0 |
| | baz=256 | | | | | | | |
| EL

*ML3.1/7, Error ellipse: s-maj=6.1km s-min=4.7km az=98.8*
*IDC **31** 15:04:57.4±3.8, 26.29S×132.86E, h0km, mbtmp3.1/3,*
*ML2.9/3, Error ellipse: s-maj=38.9km s-min=22.8km*
*az=79.0.*

**ISC 31 15:04:55.3±1.0, 26.49S±0.05×132.72E±0.06, h10km, n27,**
**σ2.3/13/29, South Australia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OOD** | **Oodnadatta** | **2.95** | **117** | P | **Pn** | **15 05 45.1** | **+2.9** |
| **OOD** | **Oodnadatta** | **2.95** | **117** | P | **Pn** | **15 05 45.0** | **+2.9** |
| **OOD** | **Oodnadatta** | **2.95** | **117** | S | **Sb** | **15 06 22.2** | **-1.7** |
| **ASAR** | **Alice Springs** | **3.01** | **21** | Pn | **Pn** | **15 05 45.2** | **+2.2** |
| | 0.5nm,0.3s,baz=196,slow=13,SNR=35 | | | | | | |
| ASAR | | | | Lg | Lg | 15 06 23.9 | |
| | 1.0nm,0.3s,baz=201,slow=26,SNR=3.9 | | | | | | |
| | 1.0nm,0.3s | | | | | | |
| **AS31** | **Alice Springs** | **3.01** | **21** | P | **Pn** | **15 05 45.9** | **+2.8** |
| **AS31** | **Alice Springs** | **3.01** | **21** | S | **Sb** | **15 06 23.9** | **-1.9** |
| **AS01** | **Alice Springs** | **3.02** | **22** | P | **Pn** | **15 05 45.9** | **+2.6** |
| **MULG** | **Mulgathing** | **3.96** | **163** | P | **Pn** | **15 05 57.3** | **+1.2** |
| **MULG** | **Mulgathing** | **3.96** | **163** | P | **Pn** | **15 05 56.9** | **+0.9** |
| **MULG** | **Mulgathing** | **3.96** | **163** | S | **Sn** | **15 06 44.4** | **+1.8** |
| **WRKA** | **Warakurna** | **4.24** | **289** | P | **Pn** | **15 06 02.7** | **+2.6** |
| **WRKA** | **Warakurna** | **4.24** | **289** | P | **Pn** | **15 06 01.8** | **+1.7** |
| **FORT** | **Forrest** | **5.92** | **223** | P | **Pn** | **15 06 24.7** | **+1.7** |
| **FORT** | **Forrest** | **5.92** | **223** | P | **Pn** | **15 06 23.2** | **+0.2** |
| **FORT** | **Forrest** | **5.92** | **223** | S | **Sn** | **15 07 28.2** | **-2.7** |
| **LCRK** | **Leigh Creek** | **6.24** | **130** | P | **Pn** | **15 06 30.0** | **+2.6** |
| **LCRK** | **Leigh Creek** | **6.24** | **130** | P | **Pn** | **15 06 29.0** | **+1.6** |
| | comp=Z,29nm,1.3s,comp=Z,0.1nm | | | | | | |
| **WB1** | **Warramunga Ar.** | **6.67** | **13** | P | **Pn** | **15 06 34.7** | **+1.3** |
| **WRA** | **Warramunga Arr** | **6.68** | **13** | Pn | **Pn** | **15 06 34.6** | **+1.1** |
| | comp=Z,0.3nm,0.3s,baz=193,slow=13,SNR=22 | | | | | | |
| WRA | | | | Sn | **Sn** | **15 07 49.2** | **-0.6** |
| | comp=Z,0.7nm,0.3s,baz=200,slow=24,SNR=12 | | | | | | |
| WRA | | | | Lg | Lg | 15 08 21.8 | |
| | comp=Z,0.2nm,0.3s,baz=195,slow=28,SNR=2.0 | | | | | | |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **WB2** | **Warramunga Arr** | **6.69** | **13** | P | **Pn** | **15 06 34.9** | **+1.3** |
| | comp=Z,6.2nm,2.9s | | | | | | |
| **WB2** | **Warramunga Arr** | **6.69** | **13** | S | **Sn** | **15 07 50.1** | **+0.2** |
| **WB10** | **Warramunga Arr** | **6.86** | **13** | P | **Pn** | **15 06 37.7** | **+1.6** |
| **YAPP** | **Yappala Statio** | **7.25** | **139** | P | **Pn** | **15 06 42.2** | **+0.9** |
| **INKA** | **Innaminka** | **7.26** | **102** | P | **Pn** | **15 06 44.0** | **+2.6** |
| **QIS** | **Mount Isa** | **8.64** | **48** | P | **Pn** | **15 07 03.1** | **+2.6** |
| **QIS** | **Mount Isa** | **8.64** | **48** | S | **Sn** | **15 08 36.5** | **-1.6** |
| **STKA** | **Stephens Creek** | **9.43** | **127** | Pn | **Pn** | **15 07 12.8** | **+1.6** |
| | comp=Z,0.1nm,0.3s,baz=312,slow=16,SNR=2.0 | | | | | | |
| STKA | | | | Sn | **Sn** | **15 08 53.7** | **-3.6** |
| | comp=Z,0.2nm,0.3s,baz=227,slow=18,SNR=1.4 | | | | | | |
| | comp=Z,1.5nm,0.5s | | | | | | |

*DSN **31** 15:23:38.9±1.2, 26.75N×58.99E, h15km, ML2.7/3, Error*
*ellipse: s-maj=19.2km s-min=10.5km az=133.0*

**TEH 31 15:23:46.1, 27.30N×54.44E, h5km±85km, ML3.2,**
**Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAR1** | **LAR** | **0.37** | **352** | Pg | Pg | 15 23 53.7 | +0.4 |
| LAR1 | | | | Sg | Sg | 15 23 59.2 | +1.1 |
| **LMD1** | **Lamerd** | **1.13** | **272** | Pg | Pn | 15 24 09.5 | +0.8 |
| **JHRM** | **Jahrom** | **1.42** | **328** | Pg | Pg | 15 24 15.9 | +2.6 |
| **GENO** | **Geno** | **1.55** | **86** | Pg | Pg | 15 24 15.8 | 0.0 |
| **QIR1** | **Qir** | **1.70** | **314** | Pg | Pg | 15 24 21.6 | +2.9 |
| **SHME** | **Shamm** | **1.97** | **129** | P | Pn | 15 24 20.8 | +0.7 |
| **UOSS** | **Minazif** | **2.84** | **146** | P | Pn | 15 24 27.0 | -5.0 |
| **UOSS** | **Minazif** | **2.84** | **146** | Pn | Pn | 15 24 58.9 | +1.8 |
| **ASHO** | **Ashiyiah** | **2.99** | **150** | P | Pn | 15 24 31.7 | -2.5 |
| ASHO | | | | S | Sn | 15 25 11.3 | +0.7 |
| **KBAM** | **BAM** | **3.99** | **62** | Pn | Pn | 15 24 50.6 | +2.7 |

**ISC 31 15:25:34.7±1.2, 61.33N±0.03×140.16W±0.04, h6km±11km,**
**n11, σ1.1/02/19, Southern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YUK8** | **Steele Glacier** | **0.20** | **105** | P | **Pg** | **15 25 39.2** | **+0.5** |
| | baz=286,SNR=41 | | | | | | |
| YUK8 | | | | S | **Sg** | **15 25 42.1** | **+0.7** |
| | baz=286 | | | | | | |
| **YUK3** | **Moose Creek** | **0.47** | **342** | P | **Pg** | **15 25 44.2** | **+0.4** |
| | baz=163,SNR=65 | | | | | | |
| YUK3 | | | | S | **Sg** | **15 25 50.4** | **+0.5** |
| | baz=163 | | | | | | |
| **O28M** | **Mount Upton** | **0.56** | **182** | P | **Pb** | **15 25 46.6** | **-0.5** |
| | baz=0.0,SNR=42 | | | | | | |
| O28M | | | | S | **Sb** | **15 25 54.7** | **-0.9** |
| | baz=0.0 | | | | | | |
| **CTG** | **Chitna Glacier** | **0.68** | **238** | P | **Pb** | **15 25 49.0** | **-0.1** |
| | baz=55,SNR=10 | | | | | | |
| CTG | | | | S | **Sb** | **15 25 59.0** | **+0.2** |
| | baz=55 | | | | | | |
| **YUK4** | **Talbot Arm** | **0.73** | **89** | P | **Pg** | **15 25 49.1** | **+0.4** |
| | baz=264,SNR=22 | | | | | | |
| YUK4 | | | | S | **Sg** | **15 25 59.2** | **+1.0** |
| | baz=264 | | | | | | |
| **O29M** | **Mount Kennedy** | **1.29** | **142** | S | **Sg** | **15 26 15.7** | **-0.6** |
| | baz=324 | | | | | | |
| **M27K** | **Edge Creek, AK** | **1.31** | **322** | S | **Sb** | **15 26 16.7** | **-0.3** |
| | baz=141 | | | | | | |
| **M29M** | **Somme Creek** | **1.37** | **35** | Pg | **Pg** | **15 25 60.0** | **-1.0** |
| | baz=217 | | | | | | |
| M29M | | | | S | **Sg** | **15 26 16.7** | **-2.1** |
| | baz=217 | | | | | | |
| **N30M** | **Aishikik Lake** | **1.48** | **84** | Sb | **Sg** | **15 26 20.6** | **-1.7** |
| | baz=267 | | | | | | |
| **L29M** | **L29M** | **2.02** | **27** | Pg | **Pb** | **15 26 12.0** | **+0.2** |
| | baz=209 | | | | | | |
| L29M | | | | Sb | **Sb** | **15 26 37.2** | **0.0** |
| | baz=209 | | | | | | |
| **M30M** | **Minto, Yukon** | **2.02** | **50** | Pg | **Pb** | **15 26 11.7** | **-0.2** |
| | baz=234 | | | | | | |
| M30M | | | | Sb | **Sn** | **15 26 36.7** | **+1.8** |
| | baz=234 | | | | | | |

*UPA **31** 15:26:57.9±0.7, 8.63N×83.13W, h15km±2km, MD3.2,*
*MW3.5*
*CATAC **31** 15:26:57.2±1.2, 8.60N±0.04×83.12W±0.03, h16km±11km,*
**n14, σ1.5/36/23, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PTJ1** | **Puerto Jimnez** | **0.20** | **245** | *i* P | **Pg** | **15 27 02.3** | **+0.2** |
| PTJ1 | | | | IAML | | 15 27 02.7 | |
| | comp=Z,6μm,1.0s | | | | | | |
| PTJ1 | | | | *i* S | **Sb** | **15 27 06.7** | **+0.4** |
| **PTJ1** | **Puerto Jimnez** | **0.20** | **245** | *i* P | **Pb** | **15 27 02.5** | **-0.2** |
| **CDITO** | **Canoas** | **0.25** | **101** | *i* P | **Pb** | **15 27 04.1** | **+0.6** |
| CDITO | | | | *i* S | **Sb** | **15 27 09.4** | **+1.8** |
| CDITO | | | | IAML | | 15 27 13.2 | |
| | comp=Z,480nm,1.0s | | | | | | |
| **MLIR3** | **Monte Lirio, C** | **0.34** | **59** | *e*P | **Pg** | **15 27 03.6** | **-0.8** |
| **BRU2** | **Volcan** | **0.46** | **68** | *i* P | **Pb** | **15 27 08.2** | **+1.0** |
| BRU2 | | | | *i* S | **Sb** | **15 27 15.0** | **+1.2** |
| BRU2 | | | | IAML | | 15 27 19.4 | |
| | comp=Z,290nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **0.46** | **68** | *i* P | **Pb** | **15 27 08.3** | **+1.2** |
| BRU2 | | | | *i* S | **Sb** | **15 27 15.8** | **+2.0** |
| **PTPM** | **Petroterminale** | **0.48** | **150** | *e*P | **Pb** | **15 27 08.1** | **+0.6** |
| PTPM | | | | *i* S | **Sn** | **15 27 16.4** | **-1.3** |
| **BCO2** | **Palmira** | **0.59** | **80** | *i* P | **Pb** | **15 27 10.4** | **+0.9** |
| BCO2 | | | | *i* S | **Sb** | **15 27 19.5** | **+1.8** |
| **DRK0** | **Durika** | **0.65** | **349** | *i* P | **Pb** | **15 27 10.7** | **+0.2** |
| DRK0 | | | | *i* S | **Sb** | **15 27 20.8** | **+1.3** |
| DRK0 | | | | IAML | | 15 27 21.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **0.65** | **349** | *i* P | **Pb** | **15 27 11.0** | **+0.4** |
| DRK0 | | | | *e*S | **Sb** | **15 27 20.4** | **+0.9** |
| **DVD** | **David** | **0.68** | **106** | *e*P | **Pg** | **15 27 11.2** | **+0.5** |
| **LNBQ3** | **Los Naranjos,** | **0.69** | **76** | *e*P | **Pg** | **15 27 07.7** | **-3.2** |
| **PEDE3** | **Pedregal, Chir** | **0.73** | **109** | *e*P | **Pg** | **15 27 09.8** | **-1.8** |
| **CHGR2** | **Aguacate** | **1.01** | **72** | *e*P | **Pb** | **15 27 16.2** | **-0.4** |
| CHGR2 | | | | *e*S | **Sb** | **15 27 29.9** | **+0.2** |

**AUST 31 15:27:48.0±0.3, 20.3S×113.4E±, h10km, mb3.5/2,**
**ML3.0/5, Error ellipse: s-maj=7.3km s-min=4.6km**
**az=24.4, Northern Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WB10** | **Warramunga Arr** | **0.33** | **91** | P | Pb | 15 27 56.0 | 0.0 |
| **WRAB** | **Tennant Creek** | **0.34** | **120** | S | Sb | 15 28 01.2 | -0.4 |
| **WB2** | **Warramunga Arr** | **0.34** | **122** | P | Pg | 15 27 55.3 | +0.4 |
| **WB2** | **Warramunga Arr** | **0.34** | **122** | S | Sg | 15 28 00.3 | +0.9 |
| **AS31** | **Alice Springs** | **3.88** | **182** | P | Pn | 15 28 49.5 | +1.6 |
| **AS31** | **Alice Springs** | **3.88** | **182** | S | Sn | 15 29 34.5 | +0.9 |
| **QIS** | **Mount Isa** | **5.29** | **100** | S | Sn | 15 30 08.5 | +0.3 |
| **QIS** | **Mount Isa** | **5.29** | **100** | P | Pn | 15 29 09.9 | +2.8 |
| **KNRA** | **Kununurra** | **6.47** | **308** | P | Pn | 15 29 22.7 | -0.6 |
| | comp=Z,6.8nm,2.5s,comp=Z,0.0nm | | | | | | |
| KNRA | | | | S | Sn | 15 30 31.9 | -5.3 |
| **KDU** | **Kakadu** | **7.20** | **348** | P | Pn | 15 29 34.8 | +1.5 |
| **WRKA** | **Warakurna** | **7.47** | **224** | P | Pn | 15 29 35.6 | -1.5 |
| **WRKA** | **Warakurna** | **7.47** | **224** | S | Sn | 15 30 55.5 | -6.4 |
| **FITZ** | **Fitzroy Crossi** | **8.12** | **280** | P | Pn | 15 29 44.4 | -1.6 |
| **OOD** | **Oodnadatta** | **8.14** | **170** | P | Pn | 15 29 48.0 | +1.8 |
| | comp=Z,9.6nm,2.0s,comp=Z,0.1nm | | | | | | |

*GCMT **31** 15:37:51.7±0.4, 70.25N±0.06×15.16W±0.07, h15km±1km,*
*MW4.7/66, Moment Tensor Solution. s12,c13; s66,c93;*
*Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr-1.28±.15;*
*Mθθ-0.00±.09; Mφφ 1.28±.10; Mrθ-0.16±.44; Mrφ-0.10±.06;*
*Mθφ-0.66±.27; Best double couple: Mo1.45100×10^16*
*NP1:φs4.00000°, δ59.00000°, λ-81.00000°. NP2:*
*φs168.00000°, δ32.00000°, λ-104.00000°. Principal axes:*
*T 1.4410, Plg13.0000°, Azm88.0000°; N 0.0150,*
*Plg7.0000°, Azm179.0000°; P -1.4610, Plg75.0000°,*
*Azm297.0000°; nsta1 refers to body waves, cutoff=40s.*
*nsta2 refers to surface waves, cutoff=50s. Triangular*
*moment-rate function*
*IDC **31** 15:37:52.8±0.5, 70.27N×15.22W, h0km, mb4.1/21,*
*mbtmp4.1/28, ML3.2/6, MS3.9/45 Error ellipse:*
*s-maj=15.6km s-min=10.6km az=14.0*
*NEIC **31** 15:37:53.7±2.0, 70.1N±0.1×15.27W±0.08, h10km±1km,*
*mb4.5/91, Error ellipse: s-maj=19.3km s-min=3.5km*
*az=11.0*
*REY **31** 15:37:53.5, 70.15N×15.28W, h10km*

**ISC 31 15:37:53.2±0.4, 70.30N±0.04×15.23W±0.04, h10km, n317,**
**σ1.38/282, mb4.5/67, MS3.9/41, Jan Mayen Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SCO** | **Scoresbysund** | **2.27** | **278** | Pn | **Pn** | **15 38 30.4** | **-0.3** |
| **SCO** | **Scoresbysund** | **2.27** | **278** | *e*P | **Pg** | **15 38 35.6** | **-1.1** |
| **JMIC** | **Jan Mayen** | **2.35** | **70** | Pn | **Pn** | **15 38 30.2** | **-1.5** |
| | 12nm,0.3s,baz=203,slow=7.7,SNR=3.5 | | | | | | |
| **IGRI** | **Grimsey** | **3.91** | **197** | P | **Pn** | **15 38 52.6** | **-0.6** |
| | baz=197 | | | | | | |
| IGRI | | | | S | **Sn** | **15 39 38.4** | **-0.7** |
| | baz=197 | | | | | | |
| **IGIL** | **Gilhagi** | **4.26** | **186** | P | **Pn** | **15 38 55.9** | **-2.1** |
| | baz=186 | | | | | | |
| **DBG** | **Daneborg** | **4.31** | **342** | *e*P | **Pn** | **15 38 54.8** | **-3.8** |
| **IHED** | **Heoinshofoi** | **4.31** | **191** | P | **Pn** | **15 38 56.8** | **-1.8** |
| | baz=191 | | | | | | |
| IHED | | | | S | **Sn** | **15 39 46.2** | **-2.5** |
| | baz=191 | | | | | | |
| **IBRE** | **Brettingsstaoi** | **4.31** | **195** | P | **Pn** | **15 38 58.0** | **-0.6** |
| | baz=195 | | | | | | |
| IBRE | | | | S | **Sn** | **15 39 47.4** | **-1.5** |
| | baz=195 | | | | | | |
| **IDIM** | **Dimmadalss** | **4.40** | **189** | P | **Pn** | **15 38 58.2** | **-1.7** |
| | baz=189 | | | | | | |
| IDIM | | | | S | **Sn** | **15 39 49.7** | **-1.5** |
| | baz=189 | | | | | | |
| **ISIG** | **Siglufjorour** | **4.40** | **200** | P | **Pn** | **15 38 59.5** | **-0.5** |
| | baz=200 | | | | | | |
| **ISKI** | **Skildingahlsh** | **4.50** | **189** | P | **Pn** | **15 38 59.7** | **-1.5** |
| | baz=189 | | | | | | |
| ISKI | | | | S | **Sn** | **15 39 51.1** | **-2.4** |
| | baz=189 | | | | | | |
| **IGHA** | **Grjothals** | **4.51** | **188** | P | **Pn** | **15 38 59.4** | **-2.0** |
| | baz=187 | | | | | | |
| IGHA | | | | S | **Sn** | **15 39 52.3** | **-1.5** |
| | baz=187 | | | | | | |
| **IHLA** | **Hella** | **4.53** | **197** | P | **Pn** | **15 39 01.2** | **-0.4** |
| | baz=197 | | | | | | |
| IHLA | | | | S | **Sn** | **15 39 52.9** | **-1.4** |
| | baz=197 | | | | | | |
| **IHRN** | **Hraun** | **4.58** | **206** | P | **Pn** | **15 39 03.1** | **+0.7** |
| | baz=206 | | | | | | |
| **IKVO** | **Krokottuvotn** | **4.65** | **188** | P | **Pn** | **15 39 01.7** | **-1.6** |
| | baz=188 | | | | | | |
| **IGRS** | **Grimsstaoir** | **4.69** | **185** | P | **Pn** | **15 39 01.9** | **-2.0** |
| | baz=184 | | | | | | |
| **IREN** | **Reynihlio** | **4.71** | **188** | P | **Pn** | **15 39 03.8** | **-0.5** |
| | baz=188 | | | | | | |
| **IMEL** | **Melhnausar** | **4.78** | **187** | P | **Pn** | **15 39 03.2** | **-1.9** |
| | baz=187 | | | | | | |
| **ISVA** | **Svartarkot** | **5.04** | **190** | P | **Pn** | **15 39 07.7** | **-1.0** |
| | baz=190 | | | | | | |
| **IMKO** | **Mokollar** | **5.36** | **185** | P | **Pn** | **15 39 12.2** | **-0.9** |
| | baz=185 | | | | | | |
| **IVSH** | **V-Sauoahnukur** | **5.52** | **182** | P | **Pn** | **15 39 13.3** | **-2.0** |
| | baz=182 | | | | | | |
| **BORG** | **Borgarnes** | **6.04** | **206** | Pn | **Pn** | **15 39 21.2** | **-1.2** |
| **BORG** | **Borgarnes** | **6.04** | **206** | Pn | **Pn** | **15 39 24.2** | **+1.8** |
| | 1.6nm,0.3s,baz=14,slow=5.8,SNR=7.8 | | | | | | |
| | 38nm,0.9s | | | | | | |
| **DAG** | **Danmarks Havn** | **6.58** | **353** | *e*P | **Pn** | **15 39 27.0** | **-2.7** |
| DAG | | | | *e*S | **Sn** | **15 40 36.8** | **-7.9** |
| DAG | | | | IAML | | 15 40 43.3 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **SUMG** | **Summit** | **7.73** | **298** | Pn | **Pn** | **15 39 46.4** | **+0.5** |
| **SPITS** | **Spitsbergen Ar** | **11.46** | **33** | Pn | **Pn** | **15 40 37.3** | **+0.8** |
| | comp=Z,5.9nm,0.4s,baz=233,slow=14,SNR=22 | | | | | | |
| **ARCES** | **ARCESS Array B** | **13.83** | **74** | Pn | **Pn** | **15 41 08.7** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=344,slow=16,SNR=2.2 | | | | | | |
| ARCES | | | | LR | LR | 15 45 18.3 | |
| | comp=Z,719nm,21.4s,baz=276,slow=32 | | | | | | |
| | comp=Z,5.7nm,1.0s | | | | | | |
| **NC204** | **NORSAR Array S** | **13.85** | **118** | Pn | **Pn** | **15 41 09.3** | **+0.1** |
| **NBO00** | **NORSAR Array S** | **14.04** | **118** | Pn | **Pn** | **15 41 10.1** | **-1.8** |
| **NOA** | **NORSAR Array B** | **14.17** | **118** | Pn | **Pn** | **15 41 14.1** | **+0.5** |
| | baz=321,slow=12,SNR=4.7 | | | | | | |
| NOA | | | | LR | LR | 15 46 06.0 | |
| | comp=Z,227nm,20.9s,baz=325,slow=35 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **NC405** | **NORSAR Array S** | **14.26** | **117** | Pn | **Pn** | **15 41 13.4** | **-1.4** |
| **HFS** | **Hagfors** | **15.63** | **116** | Pn | **Pn** | **15 41 30.7** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=325,slow=7.0,SNR=3.5 | | | | | | |
| HFS | | | | LR | LR | 15 46 50.9 | |
| | comp=Z,367nm,21.7s,baz=328,slow=34 | | | | | | |
| | comp=Z,7.9nm,1.0s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **15.94** | **154** | Pn | **P** | **15 41 38.0** | **-2.8** |
| | baz=336,slow=10 | | | | | | |
| | comp=Z,2.1nm,0.8s | | | | | | |
| **VAF** | **Ylistaro** | **16.40** | **97** | *e*P | **P** | **15 41 46.8** | **+0.9** |
| **KEF** | **Keuruu** | **17.74** | **97** | *e*P | **P** | **15 42 02.4** | **+1.7** |
| **FIA1** | **FINESS Array S** | **18.66** | **98** | P | **Pn** | **15 42 11.7** | **+0.6** |
| FIA1 | | | | IAmb | IAmb | 15 42 13.5 | |
| | comp=Z,41nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | **18.66** | **98** | P | **Pn** | **15 42 11.8** | **+0.7** |
| | comp=Z,0.5nm,0.3s,baz=325,slow=12,SNR=30 | | | | | | |
| FINES | | | | LR | LR | 15 48 33.1 | |
| | comp=Z,556nm,19.3s,baz=328,slow=34 | | | | | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MEF** | **Metsahovi** | **19.00** | **102** | *e*P | **Pn** | **15 42 16.0** | **+0.8** |
| **JOF** | **Joensuu** | **19.41** | **89** | *e*P | **Pn** | **15 42 20.4** | **+0.3** |
| **MTSE** | **Matsula** | **19.96** | **106** | *e*P | **Pn** | **15 42 26.2** | **-0.5** |
| **ARBE** | **Arbavere** | **20.12** | **102** | *e*P | Pn | 15 42 25.9 | -2.6 |
| **FRB** | **Frobisher Bay** | **21.14** | **279** | LR | LR | 15 50 28.9 | |
| | comp=Z,315nm,18.6s,baz=88,slow=36 | | | | | | |
| **VSVD** | **Vaisvydziai** | **22.20** | **110** | *e*P | **P** | **15 42 49.1** | **0.0** |
| **PABE** | **Paberze** | **22.60** | **111** | P | **P** | **15 42 52.6** | **-0.9** |
| **PABE** | **Paberze** | **22.60** | **111** | *e*P | **P** | **15 42 54.6** | **+1.1** |
| **CLL** | **Collm** | **23.09** | **131** | *e*Px | Px | 15 43 01.0 | |
| **NACGM** | **Naroch** | **24.00** | **108** | *e*P | **P** | **15 43 08.5** | **+0.9** |
| | comp=E,1μm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **25.54** | **132** | P | **P** | **15 43 23.9** | **+2.2** |
| | comp=E,1.9nm,0.4s,baz=348,slow=22,SNR=6.8 | | | | | | |
| GERES | | | | LR | LR | 15 53 35.2 | |
| | comp=E,173nm,19.4s,baz=337,slow=37 | | | | | | |
| | comp=E,1.9nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **25.86** | **128** | LR | LR | 15 53 32.8 | |
| | comp=E,235nm,18.8s,baz=342,slow=36 | | | | | | |
| **OJC** | **Ojcow** | **25.93** | **123** | P | **P** | **15 43 26.6** | **+1.5** |
| | comp=E,80nm,0.9s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **26.57** | **139** | LR | LR | 15 54 12.4 | |
| | comp=E,178nm,20.4s,baz=348,slow=37 | | | | | | |
| **OBN** | **Obninsk** | **27.07** | **97** | LR | LR | 15 53 44.8 | |
| | comp=E,360nm,18.3s,baz=354,slow=35 | | | | | | |
| **SCHQ** | **Schefferville** | **27.23** | **262** | P | **P** | **15 43 37.4** | **+0.6** |
| | comp=E,5.9nm,0.8s,baz=21,slow=11,SNR=4.9 | | | | | | |
| SCHQ | | | | LR | LR | 15 53 49.1 | |
| | comp=E,377nm,18.9s,baz=43,slow=35 | | | | | | |
| | comp=E,5.9nm,0.8s | | | | | | |
| **CTI** | **Castel Tesino** | **27.66** | **137** | P | **P** | **15 43 37.3** | **-3.5** |
| CTI | | | | IAmb | IAmb | 15 43 45.0 | |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **MI28** | **Mi28,Pidlybu** | **27.67** | **112** | P | **P** | **15 43 40.8** | **0.0** |
| **SHIU** | **Shidnytsya** | **27.86** | **119** | P | **P** | **15 43 42.2** | **-0.3** |
| **MI30** | **MI30,Zelenitsa** | **28.00** | **112** | P | **P** | **15 43 44.0** | **+0.3** |
| **HOLU** | **Holmets** | **28.19** | **121** | P | **P** | **15 43 46.0** | **+0.6** |
| **AK21** | **Malin Array Si** | **28.24** | **110** | P | **P** | **15 43 45.7** | **-0.1** |
| **AK20** | **Malin Array Si** | **28.26** | **111** | P | **P** | **15 43 45.8** | **-0.2** |
| **AK22** | **Malin Array Si** | **28.26** | **110** | P | **P** | **15 43 45.9** | **-0.1** |
| **AK19** | **Malin Array Si** | **28.28** | **111** | P | **P** | **15 43 45.6** | **-0.6** |
| **AK18** | **Malin Array Si** | **28.29** | **111** | P | **P** | **15 43 45.8** | **-0.5** |
| **AK04** | **Malin Array Si** | **28.32** | **110** | P | **P** | **15 43 46.1** | **-0.5** |
| **AK15** | **Malin Array Si** | **28.34** | **110** | P | **P** | **15 43 46.2** | **-0.5** |
| **AK03** | **Malin Array Si** | **28.34** | **110** | P | **P** | **15 43 45.9** | **-0.8** |
| **MUKU** | **Mukachevo** | **28.35** | **120** | P | **P** | **15 43 46.1** | **-0.7** |
| **AKASG** | **Malin Array Be** | **28.36** | **110** | P | **P** | **15 43 46.9** | **0.0** |
| | comp=Z,2.3nm,0.8s,baz=337,slow=9.4,SNR=7.9 | | | | | | |
| AKASG | | | | LR | LR | 15 54 48.0 | |
| | comp=E,222nm,19.4s,baz=316,slow=36 | | | | | | |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **AKBB** | **Malin Array Si** | **28.36** | **110** | P | **P** | **15 43 46.6** | **-0.3** |
| AKBB | | | | IAmb | IAmb | 15 43 52.5 | |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **AKBB** | **Malin Array Si** | **28.36** | **110** | P | **P** | **15 43 45.7** | **-1.2** |
| **KIEV** | **Kiev** | **28.36** | **110** | P | **P** | **15 43 45.9** | **-1.0** |
| KIEV | | | | IAmb | IAmb | 15 43 52.5 | |
| | comp=Z,7.5nm,1.1s | | | | | | |
| **KIEV** | **Kiev** | **28.36** | **110** | P | **P** | **15 43 45.7** | **-1.2** |
| | comp=Z,29nm,1.1s | | | | | | |
| **AK01** | **Malin Array Si** | **28.37** | **110** | P | **P** | **15 43 47.0** | **0.0** |
| **AK14** | **Malin Array Si** | **28.39** | **111** | P | **P** | **15 43 46.9** | **-0.2** |
| **AK12** | **Malin Array Si** | **28.39** | **111** | P | **P** | **15 43 46.2** | **-1.0** |
| **AK02** | **Malin Array Si** | **28.39** | **110** | P | **P** | **15 43 46.2** | **-1.0** |
| **AK05** | **Malin Array Si** | **28.43** | **110** | P | **P** | **15 43 46.9** | **-0.6** |
| **AK08** | **Malin Array Si** | **28.43** | **110** | P | **P** | **15 43 47.3** | **-0.2** |
| **AK09** | **Malin Array Si** | **28.45** | **110** | P | **P** | **15 43 47.5** | **-0.3** |
| **AK10** | **Malin Array Si** | **28.46** | **110** | P | **P** | **15 43 47.1** | **-0.7** |
| **BRIU** | **Brid** | **28.55** | **120** | P | **P** | **15 43 48.6** | **0.0** |
| **LUBAR** | **Lubar, Ukraine** | **28.58** | **113** | P | **P** | **15 43 48.8** | **-0.1** |
| **STNU** | **Starunia** | **28.65** | **118** | P | **P** | **15 43 49.5** | **-0.1** |
| **KIRV** | **Kirov** | **28.67** | **81** | P | **P** | **15 43 50.1** | **+0.6** |
| | comp=Z,6.4nm,0.7s,baz=27,slow=6.8,SNR=2.0 | | | | | | |
| | comp=Z,6.4nm,0.7s | | | | | | |
| **KSV** | **Kosov** | **29.18** | **118** | P | **P** | **15 43 53.1** | **-1.1** |
| **KMPD** | **K-Podol'skiy** | **29.38** | **116** | P | **P** | **15 43 56.1** | **+0.1** |
| KMPD | | | | P | **P** | **15 43 56.1** | **+0.1** |
| **NDNU** | **Novodnistrovsk** | **29.63** | **115** | P | **P** | **15 43 57.8** | **-0.4** |
| **SORM** | **Soroca** | **30.34** | **114** | P | **P** | **15 44 04.7** | **+0.2** |
| | comp=Z,11nm,1.0s | | | | | | |
| **ESDC** | **Sonseca Array** | **31.25** | **163** | P | **P** | **15 44 13.4** | **+0.8** |
| | comp=Z,1.4nm,1.1s,baz=356,slow=3.1,SNR=8.0 | | | | | | |
| ESDC | | | | LR | LR | 15 56 23.9 | |
| | comp=Z,115nm,18.0s,baz=352,slow=36 | | | | | | |
| | comp=Z,1.4nm,1.1s | | | | | | |
| **TESR** | **Tescani** | **31.27** | **117** | P | **P** | **15 44 13.3** | **+0.6** |
| | comp=Z,1.6nm,0.4s | | | | | | |
| **MLR** | **Muntele Rosu** | **31.98** | **119** | LR | LR | 15 57 40.3 | |
| | comp=Z,238nm,19.8s,baz=344,slow=37 | | | | | | |
| **BELG** | **Belogornoye** | **33.05** | **89** | P | **P** | **15 44 28.8** | **+0.6** |
| | comp=Z,8.4nm,0.5s,baz=303,slow=4.8,SNR=3.7 | | | | | | |
| BELG | | | | LR | LR | 15 57 05.7 | |
| | comp=Z,284nm,18.8s,baz=302,slow=35 | | | | | | |
| | comp=Z,8.4nm,0.5s | | | | | | |
| **ARU** | **Arti** | **33.41** | **76** | P | **P** | **15 44 31.6** | **+0.3** |
| | comp=Z,11nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **35.56** | **326** | LR | LR | 15 59 36.9 | |
| | comp=Z,112nm,18.5s,baz=55,slow=37 | | | | | | |
| **D27M** | **Malcolm River** | **36.07** | **331** | P | **P** | **15 44 55.5** | **+1.2** |
| | baz=27 | | | | | | |
| **YKA** | **Yellowknife Ar** | **36.14** | **309** | P | **P** | **15 44 56.1** | **+1.2** |
| | comp=Z,5.8nm,0.9s,baz=36,slow=8.5,SNR=13 | | | | | | |
| YKA | | | | PcP | **PcP** | **15 47 20.4** | **+0.3** |
| | comp=Z,1.7nm,0.8s,baz=42,slow=3.7,SNR=3.9 | | | | | | |
| YKA | | | | LR | LR | 15 59 31.1 | |
| | comp=Z,206nm,18.4s,baz=58,slow=36 | | | | | | |
| | comp=Z,5.8nm,0.9s | | | | | | |
| **E29M** | **Blow River** | **36.29** | **328** | P | **P** | **15 44 57.5** | **+1.4** |
| | baz=28 | | | | | | |
| **E28M** | **Babbage River** | **36.39** | **329** | P | **P** | **15 44 58.0** | **+1.0** |
| | baz=27 | | | | | | |
| **VAE** | **Valguarnera** | **36.44** | **139** | LR | LR | 16 00 59.0 | |
| | comp=Z,106nm,18.4s,baz=336,slow=38 | | | | | | |
| **A22K** | **Sinclair Lake** | **36.48** | **339** | P | **P** | **15 44 57.7** | **+0.1** |
| | baz=20 | | | | | | |
| **F30M** | **Barrier River** | **36.59** | **326** | P | **P** | **15 44 59.9** | **+1.2** |
| | baz=28 | | | |

baz=20
**J30M Hart River** 39.38 324 P **P** 15 45 23.0 +0.6
baz=26
**C18K Utukok River** 39.42 341 P **P** 15 45 21.9 -0.7
baz=16
**G24K Hadweenzic Riv** 39.43 332 P **P** 15 45 22.6 0.0
baz=22,SNR=5.7
**I27K Kandik River** 39.45 328 P **P** 15 45 24.0 +1.1
baz=24
**H25L Birch Creek** 39.56 331 P **P** 15 45 24.4 +0.7
baz=23
**BRTR Keskin Array B** 39.57 114 P **P** 15 45 25.2 +1.0
comp=Z,0.9nm,0.8s,baz=16,slow=5.6,SNR=4.5
BRTR PP **PnPn** 15 46 57.0 -0.8
comp=Z,1.1nm,0.9s,baz=348,slow=6.1,SNR=3.7
BRTR LR LR 16 02 07.7
comp=Z,100nm,21.0s,baz=340,slow=37
comp=Z,0.9nm,0.8s
**C17K DeLong Mountai** 39.80 342 P **P** 15 45 25.2 -0.6
baz=15
**G23K Bananza Creek** 39.81 334 P **P** 15 45 26.9 +1.1
baz=21
**F21K Alatna River** 39.83 336 P **P** 15 45 27.1 +1.2
baz=19
**G22K Bettles** 39.83 335 P **P** 15 45 25.8 -0.1
baz=20
**L61B Northampton** 39.85 257 P **P** 15 45 22.7 -3.7
baz=29
**SADO Sadowa** 39.96 265 LR LR 16 01 34.1
comp=Z,482nm,18.4s,baz=58,slow=36
**I26K Coal Creek Min** 39.99 329 P **P** 15 45 29.7 +2.4
I26K IAmb IAmb 15 45 34.3
comp=Z,17nm,1.3s
**I26K Coal Creek Min** 39.99 329 P **P** 15 45 28.4 +1.1
baz=24
**BVAR Borovoye Array** 40.06 69 P **P** 15 45 29.8 +1.8
comp=Z,3.3nm,1.0s,baz=335,slow=6.4,SNR=7.2
BVAR PP **PP** 15 47 00.2 +0.4
comp=Z,2.4nm,0.8s,baz=334,slow=9.9,SNR=4.2
comp=Z,3.3nm,1.0s
**E19K Redstone River** 40.10 338 P **P** 15 45 29.0 +0.9
baz=17
**EGAK Eagle** 40.12 327 P **P** 15 45 29.9 +1.6
**EGAK Eagle** 40.12 327 P **P** 15 45 30.0 +1.6
baz=24
**RDOG Red Dog Mine** 40.18 342 P **P** 15 45 29.4 +0.6
RDOG IAmb IAmb 15 45 31.7
comp=Z,18nm,1.1s
**RDOG Red Dog Mine** 40.18 342 P **P** 15 45 28.6 -0.2
baz=15
**PRP Porcupine Dome** 40.20 331 P **P** 15 45 30.5 +1.3
PRP IAmb IAmb 15 45 33.4
comp=Z,8.7nm,1.0s
**PRP Porcupine Dome** 40.20 331 P **P** 15 45 30.5 +1.3
baz=22,SNR=7.4
**K29M Barlow Dome** 40.27 325 P **P** 15 45 32.0 +2.2
K29M IAmb IAmb 15 45 36.5
comp=Z,16nm,1.2s
**K29M Barlow Dome** 40.27 325 P **P** 15 45 31.8 +2.0
baz=26
**H24K Noodor Dome** 40.29 332 P **P** 15 45 31.4 +1.6
**H24K Noodor Dome** 40.29 332 P **P** 15 45 30.4 +0.5
baz=22
**F20K Avaraart Lake** 40.29 337 P **P** 15 45 30.5 +0.8
F20K IAmb IAmb 15 45 33.0
comp=Z,12nm,1.1s
**F20K Avaraart Lake** 40.29 337 P **P** 15 45 30.2 +0.5
baz=18,SNR=5.7
**DAWY Dawson** 40.43 326 P **P** 15 45 31.5 +0.4
baz=25
**G21K Allakaket** 40.50 336 P **P** 15 45 33.5 +2.0
**G21K Allakaket** 40.50 336 P **P** 15 45 32.5 +1.0
baz=19
**E18K Tukpahlearik C** 40.54 340 P **P** 15 45 33.9 +2.1
**E18K Tukpahlearik C** 40.54 340 P **P** 15 45 31.4 -0.3
baz=16
**D17K Noatak River** 40.54 342 P **P** 15 45 32.0 +0.2
baz=14
**H23K Yukon River** 40.56 333 P **P** 15 45 34.8 +2.7
H23K IAmb IAmb 15 45 39.0
comp=Z,13nm,1.4s
**H23K Yukon River** 40.56 333 P **P** 15 45 33.3 +1.2
baz=21
**F19K Shaleruckik Mo** 40.76 338 P **P** 15 45 34.5 +0.9
baz=17
**H22K Ishtalitna Cre** 40.78 334 P **P** 15 45 34.1 +0.3
baz=20
**J26L Joseph Creek** 40.80 329 P **P** 15 45 36.5 +2.4
**J26L Joseph Creek** 40.80 329 P **P** 15 45 34.5 +0.4
baz=23,SNR=5.3
**ULM Lac du Bonnet** 40.83 284 P **P** 15 45 36.0 +1.6
comp=Z,8.7nm,0.9s,baz=16,slow=11,SNR=6.5
ULM LR LR 16 02 31.2
comp=Z,269nm,18.2s,baz=22,slow=36
comp=Z,8.7nm,0.9s
**FARO Faro, Yukon** 40.86 321 P **P** 15 45 36.8 +2.2
baz=27
**POKR Poker Plat Res** 40.89 331 P **P** 15 45 34.9 +0.2
baz=21
**K27K Chicken** 40.97 327 P **P** 15 45 37.9 +2.6
**K27K Chicken** 40.97 327 P **P** 15 45 35.4 0.0
baz=24
**E17K Hotham Inlet** 41.00 341 P **P** 15 45 35.3 -0.2
baz=15
**J25K Salcha River,** 41.01 330 P **P** 15 45 38.1 +2.3
J25K IAmb IAmb 15 45 42.7
comp=Z,13nm,1.2s
**J25K Salcha River,** 41.01 330 P **P** 15 45 35.8 -0.1
baz=22,SNR=7.1
**L29M L29M** 41.05 324 P **P** 15 45 38.0 +1.8
**L29M L29M** 41.05 324 P **P** 15 45 36.8 +0.7
baz=25
**M31M Drury Creek, Y** 41.11 321 P **P** 15 45 38.9 +2.3
**M31M Drury Creek, Y** 41.11 321 P **P** 15 45 39.1 +2.5
baz=26
**ILAR Eielson Array** 41.12 331 P **P** 15 45 38.9 +2.3
comp=Z,2.2nm,1.0s,baz=16,slow=7.1,SNR=20
ILAR PcP **PcP** 15 47 36.3 +0.6
comp=Z,1.4nm,0.9s,baz=332,slow=3.3,SNR=7.9
ILAR LR LR 16 06 57.6
comp=Z,57nm,18.8s,baz=68,slow=42
comp=Z,2.2nm,1.0s
**MDM Murphy Dome** 41.16 332 P **P** 15 45 39.6 +2.6
MDM IAmb IAmb 15 45 43.4
comp=Z,13nm,1.4s
**I23K Minto, Yukon-K** 41.17 333 P **P** 15 45 40.1 +3.2
I23K IAmb IAmb 15 45 44.2
comp=Z,13nm,1.3s
**I23K Minto, Yukon-K** 41.17 333 P **P** 15 45 37.3 +0.3
baz=20
**H21K Melozitna Rive** 41.21 335 P **P** 15 45 39.9 +2.6
H21K IAmb IAmb 15 45 44.0
comp=Z,11nm,1.2s
**H21K Melozitna Rive** 41.21 335 P **P** 15 45 37.7 +0.3
baz=19
**M30M Minto, Yukon** 41.27 323 P **P** 15 45 39.9 +1.9
M30M IAmb IAmb 15 45 52.7
comp=Z,12nm,1.4s
**M30M Minto, Yukon** 41.27 323 P **P** 15 45 39.0 +1.1
baz=25
**G19K Purcell Mounta** 41.33 338 P **P** 15 45 37.4 -0.9
baz=17
**SCRK Sand Creek** 41.36 329 P **P** 15 45 40.1 +1.3
baz=23
**HDA Harding Lake** 41.47 331 P **P** 15 45 40.8 +1.4
baz=21
**MLY Manley** 41.49 333 P **P** 15 45 39.8 +0.1
baz=20
**NEA2 Nenana** 41.64 332 P **P** 15 45 41.4 +0.5
baz=20,SNR=5.4
**H20K Anotleneega Mo** 41.65 336 P **P** 15 45 42.0 +0.9
baz=18
**LIRD Liard River Hi** 41.70 314 P **P** 15 45 44.1 +2.7
baz=28
**M29M Somme Creek** 41.72 324 IAmb IAmb 15 45 45.3
comp=Z,8.3nm,1.1s
**M29M Somme Creek** 41.72 324 P **P** 15 45 43.6 +1.9
baz=24,SNR=5.7
**RIDG Independent Ri** 41.73 329 P **P** 15 45 43.4 +1.8
baz=22
**G18K Tagagawik** 41.77 338 P **P** 15 45 42.5 +0.6
baz=16
**L27K Beaver Creek,** 41.81 327 IAmb IAmb 15 45 48.9
comp=Z,12nm,1.1s
**L27K Beaver Creek,** 41.81 327 P **P** 15 45 43.7 +1.4
baz=23,SNR=7.8
**H19K Roundabout Mou** 41.83 337 P **P** 15 45 42.4 -0.1
baz=17

**TOAD Toad River Com** 41.98 313 P **P** 15 45 45.6 +1.8
baz=28
**N31M Braeburn, Yuko** 42.04 322 P **P** 15 45 45.3 +1.1
baz=25
**L26K Log Cabin Wild** 42.12 328 P **P** 15 45 46.7 +1.9
baz=22
**I20K Naaghedeneel** 42.26 335 P **P** 15 45 45.9 0.0
baz=18
**N30M Aishikik Lake** 42.34 323 P **P** 15 45 48.3 +1.6
baz=25
**BPAW Bear Paw Mtn.** 42.40 333 P **P** 15 45 48.3 +1.2
baz=19
**H18K Honhosa River** 42.44 338 P **P** 15 45 47.8 +0.4
baz=16
**M27K Edge Creek, AK** 42.46 326 P **P** 15 45 48.7 +0.9
baz=23
**PAX Paxson** 42.55 329 P **P** 15 45 49.8 +1.4
baz=22
**P33M Teslin, Yukon** 42.55 319 P **P** 15 45 50.9 +2.5
baz=26
**WHY Whitehorse** 42.60 321 P **P** 15 45 50.2 +1.3
baz=25
**M26K Nabesna, AK** 42.63 327 P **P** 15 45 50.5 +1.5
baz=22
**F15K North Star Dit** 42.64 342 P **P** 15 45 48.2 -0.8
baz=13
**GNI Garni** 42.75 102 LR LR 16 03 35.2
comp=Z,225nm,22.0s,baz=327,slow=36
**O30N Mendenhall** 42.76 322 P **P** 15 45 51.3 +1.2
baz=25
**DHY Denali Highway** 42.78 330 P **P** 15 45 50.8 +0.5
baz=21
**J20K Nowinta River** 42.80 335 P **P** 15 45 50.4 +0.1
baz=18
**R33M Jennings River** 42.87 317 P **P** 15 45 52.6 +1.5
baz=26
**HARP HAARP** 43.02 328 P **P** 15 45 52.5 +0.3
baz=21
**WAT6 Susitna Watana** 43.30 330 P **P** 15 45 55.3 +0.7
baz=20
**P32M Atlin** 43.31 319 P **P** 15 45 55.4 +0.8
baz=25
**DLBC Dease Lake** 43.51 316 LR LR 16 05 16.0
comp=Z,100nm,18.3s,baz=69,slow=38
**Q32M Nakina River** 43.56 318 P **P** 15 45 57.7 +1.0
baz=26
**K20K Telida** 43.57 334 P **P** 15 45 56.2 -0.4
baz=18
**MCARA McCarthy VSAT** 43.57 327 P **P** 15 45 57.5 +0.9
baz=22
**O28M Mount Upton** 43.59 324 P **P** 15 45 58.1 +0.9
baz=23
**ZALV Zalesovo Beam** 43.63 58 P **P** 15 45 58.2 +1.1
comp=Z,0.5nm,0.5s,baz=338,slow=11,SNR=2.1
ZALV PP **PP** 15 47 38.6 +0.3
comp=Z,0.7nm,0.8s,baz=325,slow=12,SNR=2.2
ZALV LR LR 16 06 20.4
comp=Z,144nm,19.9s,baz=325,slow=39
comp=Z,0.5nm,0.5s
**CTG Chitna Glacier** 43.64 325 P **P** 15 45 58.0 +0.7
baz=23
**N25K Chitina, Valde** 43.66 328 P **P** 15 45 58.0 +0.6
baz=21
**J18K Innoko River** 43.84 336 P **P** 15 45 58.3 -0.4
baz=16
**SCM Sheep Creek Mo** 43.93 330 P **P** 15 46 01.0 +1.4
baz=20
**S34M Telegraph Cree** 44.24 317 P **P** 15 46 04.3 +2.4
baz=26
**BMRM Bremner River** 44.25 327 P **P** 15 46 02.5 +0.3
baz=21
**L20K Farewell, AK** 44.37 334 P **P** 15 46 03.6 +0.6
baz=18
**J16K Anvik River** 44.52 339 P **P** 15 46 04.9 +0.7
baz=15
**KURBB Kurchatov Arra** 44.68 65 P **P** 15 46 07.0 +1.4
comp=Z,3.9nm,1.0s,baz=331,slow=7.2,SNR=18
KURBB PP **PP** 15 47 50.2 +0.6
comp=Z,2.0nm,0.9s,baz=334,slow=8.5,SNR=6.0
comp=Z,3.9nm,1.0s
**F33A 5 Mile Ranch,** 44.80 281 P **P** 15 46 08.2 +1.5
F33A IAmb IAmb 15 46 12.5
comp=Z,8.1nm,0.9s
**O22K Cooper Landing** 45.61 330 P **P** 15 46 13.0 +0.2
baz=19
**P23K Montague Islan** 45.66 329 P **P** 15 46 13.8 +0.5
baz=20
**MMAI Mount Meron Ar** 46.30 116 LR LR 16 06 35.8
comp=Z,52nm,20.0s,baz=156,slow=37
**N17K Nushagak Hills** 46.72 335 P **P** 15 46 22.8 +1.2
baz=16
**KDAK Kodiak Island** 48.64 331 LR LR 16 11 29.4
comp=Z,63nm,18.2s,baz=38,slow=41
**BBB Bella Bella** 48.69 311 LR LR 16 07 41.9
comp=Z,143nm,18.9s,baz=27,slow=37
**OVMT Ovando** 49.06 296 P **P** 15 46 40.3 +0.2
**NEW Newport** 49.22 300 LR LR 16 07 37.4
comp=Z,132nm,18.2s,baz=26,slow=36
**MKAR Makanchi Array** 49.23 64 P **P** 15 46 42.4 +1.2
comp=Z,3.2nm,1.0s,baz=347,slow=5.9,SNR=13
MKAR PP **PP** 15 48 36.5 +1.8
comp=Z,2.3nm,1.1s,baz=354,slow=8.7,SNR=5.0
comp=Z,3.2nm,1.0s
**EIL Elat** 49.28 118 LR LR 16 08 06.8
comp=Z,41nm,18.9s,baz=252,slow=37
**TKL Tuckaleechee C** 49.69 264 LR LR 16 07 10.8
comp=Z,243nm,19.4s,baz=30,slow=35
**CCM Cathedral Cave** 50.05 272 P **P** 15 46 48.2 +0.7
CCM IAmb IAmb 15 46 52.6
comp=Z,8.3nm,1.1s
**R40A Maddies Statio** 50.18 273 IAmb IAmb 15 46 53.6
comp=Z,7.1nm,0.9s
**YMP Mirror Lake Pl** 50.27 293 IAmb IAmb 15 46 55.9
comp=Z,8.7nm,1.0s
**H17A Grant Village** 50.71 293 IAmb IAmb 15 47 00.2
comp=Z,6.4nm,0.9s
**YPP Pitchstone Pla** 50.90 293 IAmb IAmb 15 47 02.6
comp=Z,7.6nm,1.4s
**T42A Van Buren** 50.92 271 IAmb IAmb 15 46 59.3
comp=Z,6.6nm,1.0s
**CHGN Chignik** 50.97 335 P **P** 15 46 52.8 -1.4
baz=14
**K22A Casper** 50.99 288 IAmb IAmb 15 46 59.8
comp=Z,8.0nm,0.9s
**CHIR Chirikof Islan** 51.01 332 P **P** 15 46 53.7 -0.9
baz=15
**S39A Bolivar** 51.08 274 P **P** 15 46 56.2 +0.9
S39A IAmb IAmb 15 47 01.6
comp=Z,9.7nm,1.1s
**PDAR Pinedale Array** 51.86 291 P **P** 15 47 02.4 +1.0
comp=Z,2.4nm,0.9s,baz=46,slow=6.4,SNR=10.0
PDAR LR LR 16 09 11.0
comp=Z,163nm,18.3s,baz=20,slow=36
comp=Z,2.4nm,0.9s
**FCAR Ozark Folk Cen** 52.30 272 IAmb IAmb 15 47 08.1
comp=Z,10nm,1.2s
**N23A Red Feather La** 52.39 287 P **P** 15 47 05.3 -0.1
baz=26
**G08A Pilot Rock** 52.45 300 IAmb IAmb 15 47 12.3
comp=Z,5.8nm,1.1s
**U38A Gravette** 52.57 274 P **P** 15 47 06.3 -0.2
U38A IAmb IAmb 15 47 11.0
comp=Z,8.4nm,0.9s
**FALS False Pass** 53.07 338 P **P** 15 47 08.6 -1.2
baz=12
**I07A Izee** 53.71 300 IAmb IAmb 15 47 20.3
comp=Z,5.0nm,1.1s
**KSH Kashi** 53.79 73 P P 15 47 20.3 +4.7
KSH pmax pmax
comp=Z,3.0nm,1.1s
**H04A Detroit Lake** 53.94 302 P **P** 15 47 16.6 +0.2
H04A IAmb IAmb 15 47 22.2
comp=Z,7.9nm,1.1s
**UNV Unalaska Valle** 54.44 340 P **P** 15 47 17.6 -2.3
baz=10
**BGU Big Grassy Mou** 54.62 293 P **P** 15 47 21.6 -0.1
BGU IAmb IAmb 15 47 30.1
comp=Z,6.5nm,1.3s
**SONM Songino Array** 54.88 45 P **P** 15 47 25.1 +1.8
comp=Z,1.2nm,0.8s,baz=331,slow=7.5,SNR=5.8
SONM LR LR 16 13 27.6
comp=Z,92nm,20.4s,baz=336,slow=39
comp=Z,1.2nm,0.8s
**J05D Fort Rock, OR** 54.94 301 P **P** 15 47 26.5 +2.6
**DUG Dugway, Tooele** 55.22 292 IAmb IAmb 15 47 30.6
comp=Z,7.3nm,1.1s
**SRU San Rafael Swe** 55.48 290 IAmb IAmb 15 47 33.7
comp=Z,6.3nm,1.0s

**S22A 4UR Ranch, Cre** 55.53 286 P **P** 15 47 27.8 -0.6
baz=25
**NIKH Nikolski High** 55.57 341 P **P** 15 47 25.5 -2.5
baz=9.3
**WMOK Wichita Mounta** 55.60 277 P **P** 15 47 27.9 -0.7
WMOK IAmb IAmb 15 47 30.5
comp=Z,7.2nm,1.4s
**HEH HeiHe** 56.75 28 *e*P P 15 47 27.3 -9.3
**PETK Petropavlovsk-** 56.80 5 LR LR 16 11 22.6
comp=Z,24nm,19.7s,baz=351,slow=35
**YBH Yreka Blue Hor** 56.80 301 LR LR 16 12 41.2
comp=Z,110nm,18.0s,baz=26,slow=37
**MTPU Mount Pierson** 56.98 291 IAmb IAmb 15 47 45.8
comp=Z,7.2nm,1.2s
**KSXB Camp Six Broad** 57.04 302 IAmb IAmb 15 47 45.6
comp=Z,8.4nm,1.1s
**LRDM Redding Peak** 57.60 300 IAmb IAmb 15 47 51.5
comp=Z,5.8nm,0.9s
**R11B Troy Canyon, C** 57.77 294 IAmb IAmb 15 47 50.3
comp=Z,5.5nm,1.0s
**R11B Troy Canyon, C** 57.77 294 P **P** 15 47 43.7 -0.5
baz=24
**ANMO Albuquerque** 57.96 284 LR LR 16 12 53.2
comp=Z,165nm,18.0s,baz=56,slow=36
**TORD Torodi Ar. Bea** 58.08 160 P **P** 15 47 47.2 +0.8
comp=Z,1.6nm,0.9s,baz=316,slow=4.0,SNR=7.7
comp=Z,1.6nm,0.9s
**KNB Kanab** 58.12 291 IAmb IAmb 15 47 52.9
comp=Z,5.7nm,1.1s
**LCMT Little Creek M** 58.26 291 IAmb IAmb 15 47 53.4
comp=Z,3.3nm,0.9s
**PRN Pahroc Range** 58.47 293 IAmb IAmb 15 47 57.0
comp=Z,9.4nm,1.4s
**NVAR Mina Array Bea** 58.53 296 P **P** 15 47 50.9 +1.3
comp=Z,1.2nm,0.9s,baz=46,slow=3.9,SNR=4.9
NVAR LR LR 16 13 46.5
comp=Z,239nm,18.6s,baz=48,slow=37
comp=Z,1.2nm,0.9s
**BRDY Brady** 58.83 276 P **P** 15 47 47.7 -3.7
**WUAZ Wupatki** 59.04 289 P **P** 15 47 52.8 -0.3
**SHPR Sheep Range** 59.33 293 P **P** 15 47 56.1 +1.0
**GWY Greenwater Val** 60.09 294 P **P** 15 48 02.0 +1.6
**121A Cookes Peak, D** 60.61 284 P **P** 15 48 03.2 -0.8
baz=24
**TXAR Lajitas Array** 62.19 279 P **P** 15 48 15.6 +1.1
comp=Z,1.1nm,0.8s,baz=50,slow=4.2,SNR=10
TXAR LR LR 16 15 28.8
comp=Z,178nm,18.6s,baz=20,slow=36
comp=Z,1.1nm,0.8s
**PFO Pinyon Flats O** 62.41 293 LR LR 16 16 11.3
comp=Z,114nm,18.1s,baz=60,slow=37
**WSAR Wadi Sarin** 62.88 97 LR LR 16 18 30.4
comp=Z,69nm,19.2s,baz=340,slow=39
**LPIG La Paz** 69.23 283 LR LR 16 19 52.0
comp=Z,201nm,18.4s,baz=27,slow=36
**CMIG Matias Romero** 70.55 266 LR LR 16 22 11.8
comp=Z,107nm,19.8s,baz=44,slow=38
**MJAR Matsushiro Arr** 71.74 22 P **P** 15 49 16.4 +1.4
comp=Z,2.6nm,0.8s,baz=340,slow=5.5,SNR=4.9
comp=Z,2.6nm,0.8s
**JOW Kunigami** 79.70 33 LR LR 16 28 05.2
comp=Z,32nm,18.3s,baz=30,slow=38
**CMAR Chiang Mai Arr** 80.55 61 P **P** 15 50 06.9 +1.5
comp=Z,0.8nm,0.7s,baz=325,slow=6.0,SNR=4.9
comp=Z,0.8nm,0.7s
**ASAR Alice Springs** 129.97 38 PKP **PKiKP** 15 57 03.2 0.0
comp=Z,0.3nm,0.8s,baz=2.9,slow=3.7,SNR=1.6

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*DNK **31** 15:42:00.9±2.4,51°.46N×15°.91E,h0km,227km,ML2.9*
*IPEC **31** 15:42:02.0±0.3,51°.53N×16°.24E,h1km,ML2.8/4,Error ellipse: s-maj=2.6km s-min=1.5km az=57.0*
*IDC **31** 15:42:03.4±0.7,51°.48N×15°.99E,h0km,mb3.9/1,mbtmp3.3/8,ML2.8/7,Error ellipse: s-maj=11.3km s-min=6.9km az=102.0*
*BGR **31** 15:42:03.8±0.4,51°.46N×16°.13E,h1km,ML3.0/15,Error ellipse: s-maj=5.6km s-min=2.2km az=21.0*
*PRU **31** 15:42:05.2,51°.42N×16°.10E,h0km*
*VIE **31** 15:42:06.3±0.7,51°.28N×15°.81E,h0km,mb2.7/16,ml2.7/14,ms3.2/1,Error ellipse: s-maj=5.5km s-min=2.9km az=22.0,Suspected Mining induced.*

**ISC 31 15:42:01.1±0.6,51°.53N±0°.03×16°.13E±0°.02,h0km,n72,** σ1§60/144,**Poland**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.69** | **171** | *e*Pg | | **Pg** | | **15 42 15.8** | **+1.4** |
| KSP | | | | *e*Sg | | **Sg** | | **15 42 24.3** | **+1.0** |
| **KSP** | **Ksiaz** | **0.69** | **171** | *e*Pg | | **Pg** | | **15 42 15.8** | **+1.4** |
| KSP | | | | *e*Sg | | **Sg** | | **15 42 24.4** | **+1.0** |
| **CHVC** | **Chvalec** | **0.94** | **183** | *e*PG | | **Pb** | | **15 42 20.6** | **+0.3** |
| CHVC | | | | *e*SG | | **Sg** | | **15 42 32.6** | **+1.3** |
| **OSTC** | **Ostas** | **0.98** | **177** | *e*PG | | **Pb** | | **15 42 21.4** | **+0.6** |
| OSTC | | | | *e*SG | | **Sg** | | **15 42 32.6** | **+0.2** |
| **UPC** | **Upice** | **1.03** | **184** | *e*PG | | **Pb** | | **15 42 22.2** | **+0.5** |
| UPC | | | | *e*SG | | **Sb** | | **15 42 35.9** | **+0.2** |
| **DPC** | **Dobruska-Polom** | **1.19** | **174** | *e*PG | | **Pg** | | **15 42 24.6** | **+0.9** |
| DPC | | | | *e*SG | | **Sg** | | **15 42 39.7** | **+0.6** |
| **DPC** | **Dobruska-Polom** | **1.19** | **174** | *e*Pg | | **Pg** | | **15 42 24.7** | **+0.9** |
| DPC | | | | *e*Sg | | **Sg** | | **15 42 39.9** | **+0.8** |
| **PVCC** | **Panska Ves** | **1.41** | **225** | *e*PG | | **Pb** | | **15 42 29.4** | **+1.2** |
| PVCC | | | | *e*SG | | **Sb** | | **15 42 47.9** | **+1.3** |
| | comp=Z,251nm,0.3s | | | | | | | | |
| **KRLC** | **Kraliky** | **1.51** | **164** | *e*PG | | **Pg** | | **15 42 30.7** | **+0.7** |
| KRLC | | | | *e*SG | | **Sg** | | **15 42 49.6** | **0.0** |
| **BRG** | **Berggiesshubel** | **1.52** | **245** | Pn | | **Pn** | | **15 42 30.4** | **+0.8** |
| BRG | | | | Pg | | **Pg** | | **15 42 31.7** | **+1.4** |
| BRG | | | | Sg | | **Sb** | | **15 42 51.8** | **+1.8** |
| BRG | | | | Amp | | | | 15 42 53.5 | |
| | comp=Z,88nm,0.5s | | | | | | | | |
| BRG | | | | Amp | | | | 15 52 13.0 | |
| | comp=Z,0.3nm,16.9s | | | | | | | | |
| BRG | | | | Amp | | | | 15 52 14.0 | |
| | comp=E,0.1nm,17.1s | | | | | | | | |
| BRG | | | | Amp | | | | 15 52 17.0 | |
| | comp=N,0.1nm,17.7s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **245** | *e*Pn | | **Pn** | | **15 42 30.1** | **+0.6** |
| BRG | | | | *e*Pg | | **Pg** | | **15 42 31.5** | **+1.3** |
| BRG | | | | *e*Sg | | **Sb** | | **15 42 51.9** | **+1.8** |
| **RICC** | **Richard** | **1.62** | **233** | *e*PG | | **Pn** | | **15 42 32.1** | **+1.3** |
| **PRA** | **Prague** | **1.81** | **217** | *e*PN | | **Pn** | | **15 42 34.3** | **+0.8** |
| **GOPC** | **GO Pecny, Ondr** | **1.83** | **208** | *e*PG | | **Pb** | | **15 42 36.5** | **+1.1** |
| **PRU** | **Pruhonice** | **1.84** | **214** | *e*PN | | **Pn** | | **15 42 34.6** | **+0.7** |
| PRU | | | | *e*PG | | **Pb** | | **15 42 36.5** | **+0.9** |
| PRU | | | | *e*SG | | **Sb** | | **15 43 00.2** | **+1.0** |
| | comp=N,69nm,0.8s | | | | | | | | |
| **FBE** | **Freiberg** | **1.85** | **252** | *e*Pn | | **Pb** | | **15 42 36.0** | **+0.4** |
| FBE | | | | *e*Pg | | **Pg** | | **15 42 37.7** | **+1.2** |
| FBE | | | | *e*Sg | | **Sb** | | **15 43 01.2** | **+1.9** |
| **HSKC** | **Hora Svate Kat** | **1.94** | **243** | *e*PG | | **Pb** | | **15 42 38.7** | **+1.5** |
| HSKC | | | | *e*SG | | **Sb** | | **15 43 03.2** | **+1.3** |
| | comp=N,94nm,0.8s | | | | | | | | |
| **CLL** | **Collm** | **1.97** | **265** | *e*Pn | | **Pn** | | **15 42 37.0** | **+1.3** |
| CLL | | | | *e*Pg | | **Pb** | | **15 42 39.0** | **+1.3** |
| CLL | | | | *ex* | | x | | 15 42 43.0 | |
| CLL | | | | *e*Sg | | **Sb** | | **15 43 05.0** | **+2.1** |
| | comp=Z,41nm,0.5s | | | | | | | | |
| **CLL** | **Collm** | **1.97** | **265** | *e*Pn | | **Pn** | | **15 42 36.7** | **+1.0** |
| CLL | | | | *e*Pg | | **Pb** | | **15 42 39.1** | **+1.3** |
| CLL | | | | *e*Sg | | **Sg** | | **15 43 06.0** | **+1.7** |
| **MORC** | **Moravsky Berou** | **1.97** | **152** | *e*Pn | | **Pn** | | **15 42 36.2** | **+0.5** |
| MORC | baz=335 | | | *e*Sg | | **Sb** | | **15 43 02.7** | **-0.3** |
| | comp=Z,64nm,0.5s,baz=335 | | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.97** | **152** | *e*Pn | | **Pn** | | **15 42 36.7** | **+0.9** |
| MORC | | | | *e*Pg | | **Pb** | | **15 42 38.6** | **+0.8** |
| MORC | | | | *e*Sg | | **Sb** | | **15 43 02.9** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **2.12** | **142** | *e*Pn | | **Pn** | | **15 42 38.9** | **+1.1** |
| OKC | | | | *e*Pg | | **Pb** | | **15 42 41.7** | **+1.3** |
| OKC | | | | *e*Sg | | **Sg** | | **15 43 09.5** | **+0.3** |
| **VRAC** | **Vranov** | **2.24** | **172** | *e*Pn | | **Pn** | | **15 42 40.3** | **+0.8** |
| | baz=354 | | | | | | | | |
| VRAC | | | | *e*Sg | | **Sb** | | **15 43 12.4** | **+1.7** |
| | comp=Z,54nm,0.6s,baz=354 | | | | | | | | |
| **VRAC** | **Vranov** | **2.24** | **172** | Pn | | **Pn** | | **15 42 40.7** | **+1.3** |
| | comp=Z,2.4nm,0.3s,baz=344,slow=16,SNR=12 | | | | | | | | |
| VRAC | | | | Lg | | Lg | | 15 43 12.4 | |
| | comp=Z,3.0nm,0.3s,baz=255,slow=20,SNR=4.3 | | | | | | | | |
| | comp=Z,6.4nm,0.3s | | | | | | | | |
| **KRUC** | **Moravsky** | **2.48** | **176** | *e*Pn | | **Pn** | | **15 42 43.6** | **+1.0** |
| | baz=358 | | | | | | | | |
| KRUC | | | | *e*Sg | | **Sg** | | **15 43 19.7** | **-0.8** |
| | comp=Z,58nm,0.8s,baz=358 | | | | | | | | |
| **KRUC** | **Moravsky** | **2.48** | **176** | *e*PN | | **Pn** | | **15 42 43.7** | **+1.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KRUC | | | *e*SG | **Sg** | **15 43 19.8** | **-0.8** |
| **TANN** | **Tannenbergstha** | **2.57 246** | *e*Pn | **Pn** | **15 42 45.5** | **+1.5** |
| TANN | | | *e*Pg | **Pg** | **15 42 51.4** | **+1.1** |
| TANN | | | *e*Sg | **Sg** | **15 43 24.8** | **+1.2** |
| **WERD** | **Werda** | **2.65 247** | *e*Pn | **Pn** | **15 42 46.5** | **+1.5** |
| WERD | | | *e*Pg | **Pg** | **15 42 52.4** | **+0.6** |
| WERD | | | *e*Sg | **Sg** | **15 43 26.2** | **+0.1** |
| **OJC** | **Ojcow** | **2.67 118** | *e*Pn | **Pn** | **15 42 46.4** | **+1.1** |
| OJC | | | *e*Pg | **Pg** | **15 42 54.8** | **+2.6** |
| OJC | | | *e*Sg | **Sg** | **15 43 29.2** | **+2.5** |
| **JAVC** | **Velka Javorina** baz=342 | **2.85 159** | *e*Pn | **Pn** | **15 42 48.4** | **+0.6** |
| **KHC** | **Kasperske Hory** | **2.91 215** | *e*PN | **Pn** | **15 42 49.8** | **+1.2** |
| KHC | | | *e*PG | **Pb** | **15 42 55.5** | **+1.8** |
| KHC | | | *e*SN | **Sn** | **15 43 24.4** | **+0.2** |
| KHC | comp=Z,23nm,0.6s | | *e*SG | **Sg** | **15 43 34.4** | **+0.1** |
| **CKRC** | **Cesky Krumlov** | **2.95 204** | *e*PN | **Pn** | **15 42 51.1** | **+1.9** |
| CKRC | | | *e*PG | **Pb** | **15 42 56.4** | **+1.8** |
| CKRC | | | *e*SG | **Sg** | **15 43 35.3** | **-0.6** |
| **MOX** | **Moxa** | **2.98 254** | *e*Pn | **Pn** | **15 42 51.1** | **+1.6** |
| MOX | | | *e*Pg | **Pg** | **15 42 59.1** | **+1.0** |
| MOX | | | *e*Sg | **Sg** | **15 43 38.1** | **+1.3** |
| **MANZ** | **Manzenberg** | **2.98 240** | *e*Pn | **Pn** | **15 42 51.1** | **+1.5** |
| MANZ | | | *e*Pg | **Pg** | **15 42 59.7** | **+1.5** |
| MANZ | | | *e*Sg | **Sg** | **15 43 38.6** | **+1.7** |
| **ROTZ** | **Rotzenmuhle** | **3.06 236** | *e*Pn | **Pn** | **15 42 52.1** | **+1.5** |
| ROTZ | | | *e*Sg | **Sg** | **15 43 39.0** | **-0.2** |
| **GEC2** | **GERESS Array S** | **3.11 211** | *e*Pn | **Pn** | **15 42 53.3** | **+1.9** |
| GEC2 | | | *e*Sg | **Sg** | **15 43 39.4** | **-1.4** |
| **GERES** | **GERESS Array B** comp=Z,1.3nm,0.3s,baz=26,slow=12,SNR=18 | **3.11 211** | Pn | **Pn** | **15 42 53.3** | **+1.9** |
| GERES | comp=Z,3.7nm,0.3s,baz=42,slow=30,SNR=5.0 comp=Z,2.3nm,0.4s | | Lg | Lg | 15 43 38.2 | |
| **WET** | **Wettzell** | **3.17 222** | *e*Pn | **Pn** | **15 42 53.7** | **+1.5** |
| **LANS** | **Liptovska Anna** | **3.20 137** | *e*PG | **Pg** | **15 43 03.0** | **+0.6** |
| LANS | | | *e*SG | **Sg** | **15 43 44.4** | **+0.6** |
| **NIE** | **Niedzica** | **3.40 127** | P | **Pg** | **15 43 07.1** | **+0.9** |
| NIE | | | S | **Sg** | **15 43 51.0** | **+0.7** |
| **VYHS** | **Vyhne** | **3.50 149** | *e*PN | **Pn** | **15 42 57.6** | **+0.8** |
| VYHS | | | *e*PG | **Pg** | **15 43 08.2** | **0.0** |
| VYHS | | | *e*SG | **Sg** | **15 43 58.7** | **+5.1** |
| **CONA** | **Conrad Observa** comp=Z,3.1nm,0.4s,SNR=9.0 | **3.61 183** | *i* Pn | **Pn** | **15 42 60.0** | **+1.7** |
| CONA | comp=Z,4.7nm,0.2s | | *e*Pg | **Pg** | **15 43 09.4** | **-0.8** |
| CONA | comp=Z,14nm,0.3s | | *e*Sg | **Sg** | **15 43 56.8** | **-0.2** |
| **GRF** | **Grafenberg Arr** | **3.63 241** | *e*Pn | **Pn** | **15 43 00.9** | **+2.5** |
| GRF | | | *e*Sg | **Sg** | **15 43 57.9** | **+0.4** |
| **BSD** | **Bornholm Skovb** | **3.66 349** | *i* P | **Pn** | **15 43 00.1** | **+1.2** |
| BSD | | | *i* S | **Sn** | **15 43 41.4** | **-1.4** |
| BSD | comp=Z,19nm,0.9s | | IAML | | 15 43 47.3 | |
| **RONA** | **Rosalia, Austr** comp=Z,1.3nm,0.3s | **3.83 178** | *i* Pn | **Pn** | **15 43 03.3** | **+2.0** |
| RONA | comp=Z,4.9nm,0.2s | | *e*Sg | **Sg** | **15 44 02.5** | **-1.7** |
| **MOA** | **Molln** comp=Z,2.9nm,0.3s,SNR=5.8 | **3.88 199** | *i* Pn | **Pn** | **15 43 03.5** | **+1.5** |
| MOA | comp=Z,18nm,0.5s | | *e*Sg | **Sg** | **15 44 05.5** | **0.0** |
| **BIOA** | **Bad Ischl, Aus** comp=Z,5.8nm,0.4s | **4.17 204** | *e*Pn | **Pn** | **15 43 07.3** | **+1.4** |
| BIOA | comp=Z,55nm,0.8s | | Sg | **Sg** | **15 44 12.8** | **-2.1** |
| **ARSA** | **Arzberg** comp=Z,1.8nm,0.2s | **4.30 186** | *e*Pn | **Pn** | **15 43 10.7** | **+2.9** |
| ARSA | comp=Z,22nm,0.7s | | Sg | **Sg** | **15 44 19.4** | **+0.2** |
| **LUNU** | **Lund** | **4.41 340** | *i* P | **Pn** | **15 43 08.7** | **-0.5** |
| **LESA** | **Schwarzleotal** comp=Z,1.1nm,0.2s | **4.69 210** | *i* Pn | **Pn** | **15 43 14.9** | **+1.9** |
| **KOLS** | **Kolonicke sedl** | **4.72 121** | *e*PN | **Pn** | **15 43 16.0** | **+2.5** |
| KOLS | | | *e*PG | **Pg** | **15 43 34.1** | **+2.6** |
| **KBA** | **Koelnbreinsper** comp=Z,1.2nm,0.3s | **4.81 203** | *i* Pn | **Pn** | **15 43 17.2** | **+2.3** |
| KBA | comp=Z,25nm,0.9s | | Sg | **Sg** | **15 44 34.0** | **-1.6** |
| **SOKA** | **Soboth** comp=Z,1.0nm,0.3s | **4.91 189** | *i* Pn | **Pn** | **15 43 17.4** | **+1.2** |
| SOKA | comp=Z,1.6nm,0.3s | | Pg | **Pg** | **15 43 34.3** | **-0.8** |
| SOKA | comp=Z,3.8nm,0.5s | | Sg | **Sg** | **15 44 36.1** | **-2.6** |
| **BJUU** | **Bjuv** | **4.91 339** | *i* P | **Pn** | **15 43 16.4** | **+0.4** |
| BJUU | | | *e*S | **Sn** | **15 44 12.3** | **-1.2** |
| **DEL** | **Delary** | **5.13 346** | *i* P | **Pn** | **15 43 19.1** | **+0.1** |
| **WATA** | **Walderalm** comp=Z,0.4nm,0.2s | **5.14 217** | *e*Pn | **Pn** | **15 43 19.9** | **+0.5** |
| WATA | comp=Z,9.3nm,0.5s | | *e*Sg | **Sg** | **15 44 44.6** | **-1.5** |
| **WTTA** | **Wattenberg** comp=Z,13nm,0.7s | **5.18 216** | *e*Sg | **Sg** | **15 44 46.7** | **-0.7** |
| **MOTA** | **Moosalm** comp=Z,1.2nm,0.3s | **5.32 220** | *e*Pn | **Pn** | **15 43 24.5** | **+2.6** |
| MOTA | comp=Z,1.4nm,0.2s | | *e*Sn | **Sn** | **15 44 22.1** | **-1.7** |
| **ABTA** | **Abfaltersbach** comp=Z,9.4nm,0.5s | **5.34 208** | Sg | **Sg** | **15 44 53.2** | **+0.7** |
| **RETA** | **Reutte** comp=Z,1.3nm,0.3s | **5.35 223** | *i* Pn | **Pn** | **15 43 23.0** | **+0.8** |
| RETA | comp=Z,11nm,0.7s | | Sg | **Sg** | **15 44 52.2** | **-0.5** |
| **SQTA** | **Sankt Quirin** comp=Z,3.4nm,0.3s | **5.38 219** | *i* Pn | **Pn** | **15 43 25.0** | **+2.4** |
| **FETA** | **Feichten** comp=Z,0.6nm,0.4s | **5.73 220** | Pn | **Pn** | **15 43 30.2** | **+2.7** |
| FETA | comp=Z,7.0nm,0.9s | | *e*Sg | **Sg** | **15 45 01.2** | **-3.9** |
| **DAVA** | **Damuels** comp=Z,1.2nm,0.2s | **5.89 226** | *e*Pn | **Pn** | **15 43 30.2** | **+0.6** |
| **DAVOX** | **Davos/Dischmat** comp=Z,0.3nm,0.3s,baz=336,slow=17,SNR=4.5 | **6.28 223** | Pn | **Pn** | **15 43 35.7** | **+0.7** |
| DAVOX | comp=Z,0.2nm,0.3s,baz=19,slow=16,SNR=1.0 | | Sn | **Sn** | **15 44 47.5** | **+0.1** |
| DAVOX | comp=Z,0.3nm,0.3s,baz=72,slow=13,SNR=1.4 comp=Z,0.8nm,0.3s | | Lg | Lg | 15 45 19.7 | |
| **BORU** | **Boraas** | **6.42 344** | *i* P | **Pn** | **15 43 38.8** | **+2.0** |
| **AKASG** | **Malin Array Be** comp=Z,0.9nm,0.3s,baz=282,slow=12,SNR=5.7 | **8.28 91** | Pn | **Pn** | **15 44 02.8** | **+0.5** |
| AKASG | comp=Z,0.5nm,0.3s,baz=281,slow=22,SNR=1.2 | | Sn | **Sn** | **15 45 33.1** | **-3.5** |
| AKASG | comp=Z,0.5nm,0.3s,baz=284,slow=28,SNR=1.8 comp=Z,0.3nm,0.3s | | Lg | Lg | 15 46 29.7 | |
| **HFS** | **Hagfors** comp=Z,0.2nm,0.3s,baz=165,slow=14,SNR=8.9 | **8.73 352** | Pn | **Pn** | **15 44 08.7** | **+0.3** |
| HFS | comp=Z,0.1nm,0.3s,baz=174,slow=33,SNR=1.6 comp=Z,1.7nm,0.6s | | Sn | **Sn** | **15 45 44.3** | **-3.2** |
| **NOA** | **NORSAR Array B** baz=165,slow=12,SNR=4.3 comp=Z,0.2nm,0.5s | **9.91 346** | Pn | **Pn** | **15 44 24.1** | **-0.6** |
| **FINES** | **FINESS Array B** comp=Z,0.2nm,0.3s,baz=211,slow=11,SNR=10.0 | **11.34 25** | Pn | **Pn** | **15 44 44.0** | **-0.1** |
| FINES | comp=Z,0.1nm,0.3s,baz=198,slow=13,SNR=1.7 comp=Z,0.8nm,0.4s | | Sn | **Sn** | **15 46 44.1** | **-7.3** |
| **EKA** | **Eskdalemuir Ar** baz=100,slow=14 | **12.11 296** | Pn | **Pn** | **15 44 52.6** | **-2.1** |
| **ARCES** | **ARCESS Array B** comp=Z,1.0nm,0.5s,baz=194,slow=11,SNR=7.0 | **18.60 10** | P | **P** | **15 46 17.7** | **-1.9** |
| **KURBB** | **Kurchatov Arra** comp=Z,0.4nm,0.2s,baz=302,slow=5.3,SNR=1.6 comp=Z,0.4nm,0.2s | **38.16 66** | P | **P** | **15 49 23.2** | **+1.5** |

*ISN **31** 15:46:25.4±0.4,34.°66N×46.°21E,h2km±13km, ML3.0*
*TEH **31** 15:46:26.6,34.°65N×46.°21E,h7km±74km, ML2.9*
**ISC 31 15:46:26.8±1.1,34.°66N±0.°04×46.°21E±0.°03,h8km±10km, n15,σ1°05/22,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDHR** | **Dehrash** | **0.15** | **75** | Pg | **Pg** | **15 46 30.3** | **+0.2** |
| IDHR | | | | Sg | **Sg** | **15 46 33.1** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **0.45** | **138** | Pg | **Pg** | **15 46 35.5** | **-0.1** |
| IGHG | | | | Sg | **Sb** | **15 46 43.1** | **-0.9** |
| **KGS1** | **Ghasr-e-Shirin** | **0.53** | **253** | Pg | **Pb** | **15 46 37.4** | **-1.1** |
| **GLG1** | **Gilan-e-Gharb** | **0.60** | **204** | Pg | **Pb** | **15 46 38.3** | **-1.3** |
| GLG1 | | | | Sg | **Sb** | **15 46 46.8** | **-1.4** |
| **KCHF** | **Cheshme Sefid,** | **0.79** | **119** | Pg | **Pg** | **15 46 41.6** | **-0.5** |
| KCHF | | | | Sg | **Sb** | **15 46 52.9** | **-0.9** |
| **ILBA** | **Ilam Banvizeh** | **1.03** | **180** | Pg | **Pb** | **15 46 46.2** | **-0.8** |
| **SNQR** | **Sonqor, Kerman** | **1.19** | **80** | Pg | **Pb** | **15 46 49.0** | **-0.7** |
| **IBZA** | **Bozab** | **1.38** | **97** | Pg | **Pn** | **15 46 52.3** | **-0.4** |
| **IBDR** | **Badra** | **1.56** | **189** | *e*Pn | **Pg** | **15 46 56.4** | **-0.4** |
| IBDR | | | | *e*Sn | **Sg** | **15 47 18.5** | **+1.4** |
| IBDR | comp=E,181nm,0.8s | | | AML | AML | 15 47 22.4 | |
| IBDR | comp=N,231nm,0.5s | | | AML | AML | 15 47 29.0 | |
| **IKRK** | **Kirkuk** | **1.70** | **296** | *e*Pn | **Pb** | **15 46 58.0** | **-0.4** |
| IKRK | | | | *e*Sn | **Sg** | **15 47 22.0** | **+0.5** |
| IKRK | comp=N,285nm,0.5s | | | AML | AML | 15 47 29.5 | |
| IKRK | comp=E,249nm,0.3s | | | AML | AML | 15 47 34.3 | |
| **IKFM** | **Kafar-mosalman** | **1.77** | **129** | Pg | **Pg** | **15 46 59.8** | **-0.9** |
| **IDOB** | **Doab** | **1.85** | **118** | Pn | **Pg** | **15 47 02.2** | **-0.2** |
| **HSAM** | **Samen** | **2.03** | **102** | Pn | **Pb** | **15 47 04.0** | **-0.1** |
| **BDRS** | **Dareh Seyedi** | **2.32** | **107** | Pn | **Pb** | **15 47 08.5** | **-0.6** |
| **RAFI** | **Al-Rafai** | **2.93** | **182** | *e*Pn | **Pn** | **15 47 15.0** | **+1.3** |
| RAFI | | | | *e*Sn | **Sn** | **15 47 51.5** | **+2.4** |

*SOF **31** 16:01:38.8,41.°82N±0.°01×23.°76E±0.°01,h2km±2km, MD2.7/6*
*BEO **31** 16:01:39.3±0.7,41.°76N×23.°67E,h0km,ML2.5/3*
*ATH **31** 16:01:40.6,41.°73N×23.°76E,h17km±1km,ML2.3/8,Error ellipse: s-maj=3.0km s-min=2.0km az=202.0*
*THE **31** 16:01:41.4,41.°69N×23.°81E,h18km,ML2.0/5,Error ellipse: s-maj=1.5km s-min=1.0km az=176.0*
**ISC 31 16:01:38.8±1.0,41.°78N±0.°02×23.°80E±0.°03,h11km±8km, n36,σ0°63/61,1C-1D,Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MMB** | **Musomishta** | **0.24** | **189** | *i*Pg | **Pg** | **16 01 44.3** | **+0.5** |
| MMB | | | | Sg | **Sg** | **16 01 48.0** | **+0.9** |
| **NVR** | **Nevrokopi** | **0.43** | **173** | P | **Pb** | **16 01 48.4** | **-0.1** |
| NVR | 510nm,0.1s | | | S | **Sb** | **16 01 54.5** | **-0.5** |
| **NVR** | **Nevrokopi** | **0.43** | **173** | P | **Pb** | **16 01 48.5** | **-0.1** |
| NVR | | | | S | **Sb** | **16 01 54.6** | **-0.5** |
| NVR | comp=E,1218μm,0.1s | | | AML | AML | 16 01 55.8 | |
| NVR | comp=N,787μm,0.1s | | | AML | AML | 16 01 56.0 | |
| **KKB** | **Krupnik** | **0.50** | **277** | *i*Pg | **Pg** | **16 01 48.3** | **-0.4** |
| KKB | | | | Sg | **Sg** | **16 01 54.7** | **-0.6** |
| **RZN** | **Rozhen** | **0.71** | **97** | P | **Pb** | **16 01 53.4** | **+0.1** |
| **PLNA** | **Plana** | **0.75** | **338** | P | **Pg** | **16 01 53.1** | **-0.2** |
| PLNA | | | | S | **Sg** | **16 02 03.0** | **-0.1** |
| **PGB** | **Panagyurishte** | **0.78** | **21** | P | **Pb** | **16 01 54.3** | **-0.2** |
| **PLD** | **Plovdiv** | **0.80** | **62** | *e*Pg | **Pn** | **16 01 55.6** | **-0.4** |
| PLD | | | | *e*Sg | **Sb** | **16 02 05.5** | **0.0** |
| **VTS** | **Vitosha** | **0.93** | **334** | Pg | **Pg** | **16 01 56.0** | **-0.9** |
| VTS | | | | Sg | **Sg** | **16 02 07.6** | **-1.5** |
| **VTS** | **Vitosha** | **0.93** | **334** | *e*Pg | **Pg** | **16 01 56.0** | **-0.9** |
| VTS | | | | *e*Sg | **Sg** | **16 02 07.7** | **-1.4** |
| **KAVA** | **Kavala** | **0.95** | **145** | P | **Pb** | **16 01 57.4** | **+0.1** |
| KAVA | | | | S | **Sb** | **16 02 10.4** | **+0.5** |
| **KAVA** | **Kavala** | **0.95** | **145** | P | **Pg** | **16 01 57.2** | **+0.1** |
| KAVA | | | | S | **Sb** | **16 02 10.2** | **+0.3** |
| **KVLA** | **Kavala** | **0.95** | **152** | P | **Pn** | **16 01 58.1** | **-0.1** |
| KVLA | | | | S | **Sb** | **16 02 10.4** | **+0.4** |
| KVLA | comp=N,542μm,0.2s | | | AML | AML | 16 02 13.7 | |
| KVLA | comp=E,595μm,0.4s | | | AML | AML | 16 02 13.7 | |
| **KOKK** | **Kokkinochori,** | **0.97** | **171** | P | **Pg** | **16 01 57.4** | **-0.2** |
| KOKK | | | | S | **Sg** | **16 02 10.1** | **-0.1** |
| KOKK | comp=E,78nm,0.2s | | | | | | |
| **KOKK** | **Kokkinochori,** | **0.97** | **171** | P | **Pg** | **16 01 56.8** | **-0.8** |
| KOKK | | | | S | **Sg** | **16 02 10.2** | **-0.1** |
| KOKK | comp=E,400μm,0.2s | | | AML | AML | 16 02 13.7 | |
| KOKK | comp=N,454μm,0.2s | | | AML | AML | 16 02 13.8 | |
| **SOH** | **Sokhos** | **1.01** | **199** | P | **Pg** | **16 01 57.9** | **-0.4** |
| SOH | | | | S | **Sg** | **16 02 11.6** | **0.0** |
| SOH | comp=N,95nm,0.3s | | | | | | |
| **SOH** | **Sokhos** | **1.01** | **199** | P | **Pg** | **16 01 58.0** | **-0.4** |
| SOH | | | | S | **Sg** | **16 02 11.3** | **-0.3** |
| SOH | comp=N,315μm,0.4s | | | AML | AML | 16 02 15.4 | |
| SOH | comp=E,167μm,0.3s | | | AML | AML | 16 02 15.6 | |
| **HORT** | **Hortiatis** | **1.29** | **204** | P | **Pn** | **16 02 02.9** | **0.0** |
| HORT | | | | S | **Sb** | **16 02 19.8** | **-0.1** |
| HORT | comp=E,40nm,0.2s | | | | | | |
| **HORT** | **Hortiatis** | **1.29** | **204** | P | **Pn** | **16 02 03.0** | **+0.1** |
| HORT | | | | AML | AML | 16 02 21.8 | |
| HORT | comp=N,71μm,0.5s | | | AML | AML | 16 02 23.7 | |
| HORT | comp=E,93μm,0.5s | | | | | | |
| **THE** | **Thessaloniki** | **1.31** | **209** | P | **Pb** | **16 02 03.5** | **+0.1** |
| THE | | | | S | **Sb** | **16 02 20.2** | **0.0** |
| THE | comp=E,52nm,0.3s | | | | | | |
| **THE** | **Thessaloniki** | **1.31** | **209** | P | **Pn** | **16 02 03.0** | **0.0** |
| THE | | | | AML | AML | 16 02 21.8 | |
| THE | comp=N,111μm,0.3s | | | AML | AML | 16 02 22.9 | |
| THE | comp=E,114μm,0.4s | | | | | | |
| **THAS** | **Thassos island** | **1.36** | **149** | P | **Pn** | **16 02 03.6** | **-0.2** |
| THAS | | | | S | **Sb** | **16 02 20.7** | **-1.1** |
| **THAS** | **Thassos island** | **1.36** | **149** | P | **Pn** | **16 02 03.6** | **-0.2** |
| THAS | | | | S | **Sb** | **16 02 20.9** | **-0.9** |
| THAS | | | | AML | AML | 16 02 25.6 | |
| THAS | comp=E,390μm,0.3s | | | AML | AML | 16 02 25.7 | |
| THAS | comp=N,154μm,0.4s | | | | | | |
| **OUR** | **Ouranopolis** | **1.45** | **174** | P | **Pn** | **16 02 05.0** | **0.0** |
| OUR | | | | S | **Sn** | **16 02 23.6** | **-0.4** |
| **OUR** | **Ouranopolis** | **1.45** | **174** | P | **Pn** | **16 02 04.7** | **-0.3** |
| OUR | | | | AML | AML | 16 02 27.0 | |
| OUR | comp=N,573μm,0.3s | | | AML | AML | 16 02 27.1 | |
| OUR | comp=E,322μm,0.3s | | | | | | |
| **MPEP** | **Malo Peshtene** | **1.57** | **358** | P | **Pg** | **16 02 08.8** | **-0.2** |
| MPEP | | | | S | **Sg** | **16 02 31.0** | **+1.5** |
| **ZAPS** | **Zavoj** | **1.72** | **330** | *e*Pn | **Pb** | **16 02 10.1** | **-0.4** |
| ZAPS | | | | *e*Sn | **Sg** | **16 02 33.5** | **-0.7** |
| **BARS** | **Barje** | **1.80** | **306** | *e*Pn | **Pn** | **16 02 10.4** | **+0.6** |
| BARS | | | | *e*Sn | **Sb** | **16 02 35.0** | **+0.7** |
| **SMTH** | **Samothraki Isl** | **1.85** | **134** | P | **Pn** | **16 02 10.9** | **+0.4** |
| **SMTH** | **Samothraki Isl** | **1.85** | **134** | P | **Pn** | **16 02 11.4** | **+0.9** |
| **PAIG** | **Paliouri** | **1.85** | **183** | P | **Pn** | **16 02 10.7** | **+0.2** |
| **ALN** | **Alexandroupoli** | **1.91** | **117** | P | **Pn** | **16 02 12.3** | **+1.0** |
| **LIA** | **Limnos Island** | **2.16** | **150** | P | **Pn** | **16 02 15.0** | **+0.3** |
| **LIA** | **Limnos Island** | **2.16** | **150** | P | **Pn** | **16 02 15.2** | **+0.5** |
| **BOVS** | **Bovan** | **2.41** | **321** | *e*Pn | **Pn** | **16 02 19.4** | **+1.2** |
| **SELS** | **Selova** | **2.45** | **307** | *e*Pn | **Pn** | **16 02 18.9** | **+0.2** |
| SELS | | | | *e*Sn | **Sn** | **16 02 49.5** | **+0.9** |
| SELS | | | | *e*Sg | **Sb** | **16 02 54.6** | **+1.6** |

*IDC **31** 16:04:27.6±1.4,24.°30S×69.°42E,h0km,mb3.7/10, mbtmp3.7/10,MS3.6/22,Error ellipse: s-maj=48.0km s-min=23.9km az=32.0*
**ISC 31 16:04:29.2±1.5,24.°3S±0.°3×69.°4E±0.°2,h10km,n39, σ0°42/10,mb3.8/10,MS3.7/22,Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S1** | **Diego Carcia H** baz=190,slow=76,SNR=38 | **16.84** | **10** | T | T | 16 25 20.6 | |
| **H08S2** | **Diego Garcia H** baz=190,slow=76,SNR=57 | **16.84** | **11** | T | T | 16 25 19.7 | |
| **H08S3** | **Diego Garcia H** baz=190,slow=76,SNR=85 | **16.86** | **11** | T | T | 16 25 27.2 | |
| **H04N2** | **CROZET ISLANDS** baz=40,slow=74,SNR=108 | **26.00** | **209** | T | T | 16 37 32.0 | |
| **H04N1** | **CROZET ISLANDS** baz=40,slow=74,SNR=125 | **26.01** | **209** | T | T | 16 37 32.5 | |
| **H04N3** | **CROZET ISLANDS** baz=40,slow=74,SNR=119 | **26.02** | **209** | T | T | 16 37 32.6 | |
| **PALK** | **Pallekele** | **33.27** | **21** | LR | LR | 16 21 50.1 | |
| **BOSA** | **Boshof** comp=Z,190nm,18.8s,baz=108,slow=32 | **39.61** | **254** | LR | LR | 16 25 53.2 | |
| **LBTB** | **Lobatse** comp=Z,153nm,20.2s,baz=124,slow=32 | **39.70** | **260** | LR | LR | 16 25 20.0 | |
| **H01W2** | **Cape Leeuwin H** baz=273 | **39.99** | **116** | T | T | 16 54 33.8 | |
| **H01W3** | **Cape Leeuwin H** baz=273 | **39.99** | **116** | T | T | 16 54 27.7 | |
| **H01W1** | **Cape Leeuwin H** baz=273 | **40.00** | **116** | T | T | 16 54 33.1 | |
| **SUR** | **Sutherland** comp=Z,194nm,19.7s,baz=77,slow=32 | **43.23** | **248** | LR | LR | 16 27 23.7 | |
| **MAW** | **Mawson** comp=Z,93nm,18.1s,baz=48,slow=31 | **43.48** | **184** | LR | LR | 16 27 06.3 | |
| **FURI** | **Furi** comp=Z,51nm,18.1s,baz=155,slow=34 | **44.62** | **314** | LR | LR | 16 29 58.9 | |
| **CMAR** | **Chiang Mai Arr** 0.7nm,0.3s,baz=224,slow=3.8,SNR=1.7 0.7nm,0.3s | **51.34** | **37** | P | **P** | **16 13 34.3** | **+0.3** |
| **ASAR** | **Alice Springs** 0.4nm,0.6s,baz=250,slow=6.3,SNR=13 0.4nm,0.6s | **58.41** | **104** | P | **P** | **16 14 25.8** | **+0.4** |
| **WRA** | **Warramunga Arr** 0.5nm,0.7s,baz=254,slow=7.2,SNR=9.7 0.5nm,0.7s | **59.82** | **100** | P | **P** | **16 14 34.6** | **-0.6** |
| **STKA** | **Stephens Creek** comp=Z,86nm,20.3s,baz=211,slow=32 | **63.07** | **115** | LR | LR | 16 38 27.6 | |
| **EIL** | **Elat** comp=Z,22nm,21.6s,baz=251,slow=31 | **63.08** | **326** | LR | LR | 16 37 27.9 | |
| **AAK** | **Ala-Archa** comp=Z,41nm,18.2s,baz=224,slow=34 | **66.79** | **4** | LR | LR | 16 42 03.2 | |
| **GNI** | **Garni** comp=Z,24nm,21.6s,baz=186,slow=34 | **68.14** | **340** | LR | LR | 16 42 36.6 | |
| **CTA** | **Charters Tower** comp=Z,9.7nm,19.4s,baz=254,slow=34 | **70.41** | **104** | LR | LR | 16 44 20.4 | |
| **MKAR** | **Makanchi Array** 0.7nm,0.8s,baz=202,slow=6.0,SNR=6.0 0.7nm,0.8s | **71.73** | **9** | P | **P** | **16 15 50.8** | **-0.6** |
| **BRTR** | **Keskin Array B** 0.3nm,0.5s,baz=134,slow=6.2,SNR=2.0 0.3nm,0.5s | **71.94** | **332** | P | **P** | **16 15 53.0** | **0.0** |
| **KURBB** | **Kurchatov Arra** 0.5nm,0.9s,baz=203,slow=6.3,SNR=4.7 0.5nm,0.9s | **75.05** | **6** | P | **P** | **16 16 10.5** | **-0.2** |
| **PMG** | **Port Moresby** comp=Z,61nm,18.0s,baz=221,slow=35 | **75.06** | **94** | LR | LR | 16 48 35.2 | |
| **TORD** | **Torodi Ar. Bea** 2.0nm,1.2s,baz=102,slow=6.1,SNR=4.3 | **75.87** | **292** | P | **P** | **16 16 16.4** | **+0.1** |
| TORD | comp=Z,50nm,18.6s,baz=152,slow=35 2.0nm,1.2s | | | LR | LR | 16 48 49.2 | |
| **DBIC** | **Dimbokro** comp=Z,71nm,18.8s,baz=94,slow=34 | **78.57** | **283** | LR | LR | 16 49 14.8 | |
| **ZALV** | **Zalesovo Beam** 0.8nm,0.7s,baz=183,slow=2.9,SNR=4.5 0.8nm,0.7s | **79.07** | **9** | P | **P** | **16 16 33.2** | **-0.2** |
| **SONM** | **Songino Array** 0.4nm,0.4s,baz=214,slow=4.7,SNR=1.9 | **79.14** | **24** | P | **P** | **16 16 34.5** | **+0.4** |
| SONM | comp=Z,48nm,21.9s,baz=223,slow=34 0.4nm,0.4s | | | LR | LR | 16 49 59.8 | |
| **JNU** | **Nakatsue** comp=Z,27nm,18.0s,baz=188,slow=36 | **81.77** | **48** | LR | LR | 16 53 09.3 | |
| **KEST** | **Kesra** comp=Z,43nm,19.8s,baz=298,slow=35 | **82.41** | **315** | LR | LR | 16 52 24.2 | |
| **KSRS** | **Korea Array** comp=Z,15nm,18.8s,baz=15,slow=35 | **82.45** | **43** | LR | LR | 16 52 46.2 | |
| **AKASG** | **Malin Array Be** 0.1nm,0.3s,baz=152,slow=4.2,SNR=1.1 0.1nm,0.3s | **82.70** | **336** | P | **P** | **16 16 52.7** | **-0.1** |
| **MJAR** | **Matsushiro Arr** comp=Z,25nm,18.9s,baz=210,slow=36 | **88.68** | **49** | LR | LR | 16 57 27.5 | |
| **DAVOX** | **Davos/Dischmat** comp=Z,18nm,19.8s,baz=265,slow=35 | **88.84** | **324** | LR | LR | 16 56 33.7 | |
| **KLR** | **Kul'dur** comp=Z,33nm,19.5s,baz=274,slow=35 | **91.81** | **36** | LR | LR | 16 58 41.3 | |
| **YAK** | **Yakutsk** comp=Z,23nm,21.3s,baz=209,slow=35 | **98.50** | **24** | LR | LR | 17 01 13.8 | |

**GUC 31 16:16:13.9±0.7,36.°14S×70.°95W,h111km±4km,ML3.7, 10C-1D,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BI02** | **San Fabin de** | **0.58** | **207** | *e*P | Pn | 16 16 30.9 | -0.6 |
| BI02 | | | | *e*S | Sn | 16 16 44.6 | -0.3 |
| **GO05** | **Huala** | **1.39** | **324** | *e*P | Pn | 16 16 39.4 | -0.1 |
| GO05 | | | | *e*S | Sn | 16 16 58.8 | -0.1 |
| GO05 | comp=E,729nm,0.2s | | | IAML | | 16 17 02.4 | |
| **BO01** | **Tunca** | **1.75** | **356** | *e*P | Pn | 16 16 44.1 | +0.2 |
| BO01 | | | | *e*S | Sn | 16 17 06.2 | -0.4 |
| BO01 | comp=N,478nm,0.2s | | | IAML | | 16 17 08.8 | |
| **BO03** | **Pichilemu** | **1.84** | **333** | *e*P | Pn | 16 16 44.9 | -0.1 |
| BO03 | | | | *e*S | Sn | 16 17 07.8 | -0.8 |
| BO03 | comp=E,401nm,0.1s | | | IAML | | 16 17 10.1 | |
| **BI05** | **Punta Hualpn** | **1.91** | **251** | *e*P | Pn | 16 16 42.9 | -2.8 |
| BI05 | | | | *e*S | Sn | 16 17 06.0 | -4.1 |
| BI05 | comp=E,247nm,0.2s | | | IAML | | 16 17 07.5 | |
| **BO04** | **La Punta** | **2.17** | **7** | *e*P | Pn | 16 16 50.1 | +0.9 |
| BO04 | | | | *e*S | Sn | 16 17 15.7 | -0.4 |
| BO04 | comp=E,195nm,0.2s | | | IAML | | 16 17 21.2 | |
| **MT01** | **Popeta** | **2.29** | **354** | *e*P | Pn | 16 16 50.5 | -0.1 |
| MT01 | | | | *e*S | Sn | 16 17 18.2 | -0.6 |
| MT01 | comp=E,861nm,0.1s | | | IAML | | 16 17 21.3 | |
| **MT09** | **Talagante** | **2.36** | **359** | *e*P | Pn | 16 16 51.8 | +0.1 |
| MT09 | | | | *e*S | Sn | 16 17 20.6 | 0.0 |
| MT09 | comp=N,1μm,0.2s | | | IAML | | 16 17 25.3 | |
| **LMEL** | **Las Melosas** | **2.37** | **15** | *e*P | Pn | 16 16 53.4 | +1.5 |
| LMEL | | | | *e*S | Sn | 16 17 20.1 | -0.8 |
| LMEL | comp=N,437nm,0.2s | | | IAML | | 16 17 29.1 | |
| LMEL | comp=E,290nm,0.2s | | | IAML | | 16 17 30.4 | |
| **MT12** | **Pirque** | **2.43** | **8** | *e*S | Sn | 16 17 21.9 | -0.2 |
| MT12 | comp=E,374nm,0.4s | | | IAML | | 16 17 28.6 | |
| **MT13** | **San Alfonso** | **2.45** | **13** | *e*P | Pn | 16 16 54.5 | +1.6 |
| MT13 | | | | *e*S | Sn | 16 17 22.7 | -0.1 |
| MT13 | comp=E,201nm,0.6s | | | IAML | | 16 17 28.2 | |
| **VA05** | **Santo Domingo** | **2.54** | **347** | *e*P | Pn | 16 16 53.2 | -0.7 |
| VA05 | | | | *e*S | Sn | 16 17 23.4 | -1.2 |
| VA05 | comp=N,576nm,0.4s | | | IAML | | 16 17 27.8 | |
| **MT15** | **Las Vizcachas** | **2.56** | **8** | *e*P | Pn | 16 16 55.2 | +0.9 |
| MT15 | | | | *e*S | Sn | 16 17 24.9 | -0.3 |
| MT15 | comp=E,594nm,0.3s | | | IAML | | 16 17 29.0 | |
| **MT03** | **Universidad Ad** | **2.67** | **8** | *e*P | Pn | 16 16 55.3 | -0.4 |
| MT03 | | | | *e*S | Sn | 16 17 26.9 | -0.9 |
| MT03 | comp=N,377nm,0.1s | | | IAML | | 16 17 33.7 | |
| **MT16** | **CCHEN** | **2.73** | **7** | *e*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VA03 | | | | | IAML | | 16 17 49.8 | |
| | comp=E,305nm,0.1s | | | | | | | |
| **VA06** | **Catapilco** | **3.58** | **355** | *e*P | Pn | 16 17 07.0 | -0.7 | |
| VA06 | | | | *e*S | Sn | 16 17 48.0 | -1.3 | |
| VA06 | | | | IAML | | 16 17 54.2 | | |
| | comp=E,238nm,0.4s | | | | | | | |

**RSNC 31 16:24:31.3±0.0,13°N±8°×8°1W±°, *h*17km±11km, M3.2, mb4.1, mB4.9, ML3.2, Mw(mB)4.2, Caribbean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRVC** | **Isla de Provid** | **0.25** | **293** | P | Pg | 16 24 37.1 | +0.2 |
| PRVC | | | | S | Sb | 16 24 41.3 | -0.1 |
| **ACON** | **Acoyapa** | **4.16** | **252** | P | Pb | 16 25 44.7 | +0.6 |
| ACON | | | | S | Sb | 16 26 34.8 | +0.8 |
| **BCIP** | **Isla Barro Col** | **4.28** | **163** | P | Pn | 16 25 36.1 | +0.4 |
| BCIP | | | | S | Sn | 16 26 21.1 | -4.2 |
| **JTS** | **Las Juntas de** | **4.78** | **232** | P | Pn | 16 25 42.8 | +0.2 |
| JTS | | | | S | Sn | 16 26 35.0 | -2.6 |
| **GMAL** | **Guarumal, Vera** | **5.48** | **181** | P | Pn | 16 25 52.2 | -0.1 |
| | 16nm,0.7s,2µm | | | | | | |
| GMAL | | | | S | Sn | 16 26 49.4 | -5.6 |
| | 16nm,0.7s,2µm | | | | | | |
| **AZU** | **Azuero** | **5.52** | **171** | P | Pn | 16 25 52.3 | -0.5 |
| | 22nm,1.4s | | | | | | |
| AZU | | | | S | Sn | 16 26 51.8 | -4.1 |
| | 22nm,1.4s | | | | | | |
| **LCBC** | **Los crdobas,** | **6.42** | **133** | P | Pn | 16 26 04.3 | -0.8 |
| | 38nm,1.0s | | | | | | |
| LCBC | | | | S | Sn | 16 27 18.4 | +0.4 |
| | 38nm,1.0s | | | | | | |
| **SJCC** | **San Jacinto, C** | **6.73** | **119** | P | Pn | 16 26 07.4 | -2.1 |
| | 11nm,0.9s | | | | | | |
| SJCC | | | | S | Sn | 16 27 21.3 | -4.5 |
| | 11nm,0.9s | | | | | | |
| **UREC** | **San Jos de Ur** | **7.78** | **134** | P | Pn | 16 26 22.9 | -0.9 |
| UREC | | | | S | Sn | 16 27 46.7 | -4.8 |

**NAM 31 16:35:08.1±2.8,19°80S×14°56E, *h*15km±10km, ML0.4, 13C-4D, Namibia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ST9N** | **ST9** | **0.02** | **257** | ⇑*i*P | Pg | 16 35 11.1 | +0.2 |
| ST9N | | | | *i* S | Sg | 16 35 12.0 | -0.7 |
| ST9N | | | | IAML | | 16 35 12.4 | |
| | comp=Z,57nm,0.0s | | | | | | |
| **ST9N** | **ST9** | **0.02** | **257** | ⇓*i*P | Pg | 16 35 11.1 | +0.2 |
| ST9N | | | | *i* S | Sg | 16 35 12.0 | -0.7 |
| ST9N | | | | *i* S | | 16 35 12.0 | |
| ST9N | | | | IAML | | 16 35 12.4 | |
| | comp=Z,57nm,0.0s | | | | | | |
| **ST1N** | **ST1** | **0.07** | **39** | ⇑*i*P | Pg | 16 35 11.8 | +0.5 |
| ST1N | | | | *i* S | Sg | 16 35 13.2 | -0.1 |
| ST1N | | | | IAML | | 16 35 13.4 | |
| | comp=Z,8.5nm,0.1s | | | | | | |
| **ST1N** | **ST1** | **0.07** | **39** | ⇓*i*P | Pg | 16 35 11.7 | +0.5 |
| ST1N | | | | *i* S | Sg | 16 35 13.1 | -0.2 |
| ST1N | | | | *i* S | | 16 35 13.2 | |
| ST1N | | | | IAML | | 16 35 13.4 | |
| | comp=Z,8.4nm,0.0s | | | | | | |
| **ST3N** | **ST3** | **0.08** | **311** | ⇑*i*P | Pg | 16 35 12.1 | +0.8 |
| ST3N | | | | *i* S | Sg | 16 35 13.8 | +0.4 |
| ST3N | | | | IAML | | 16 35 14.0 | |
| | comp=Z,3.2nm,0.1s | | | | | | |
| **ST3N** | **ST3** | **0.08** | **311** | ⇓*i*P | Pg | 16 35 12.1 | +0.8 |
| ST3N | | | | *i* S | Sg | 16 35 13.8 | +0.4 |
| ST3N | | | | IAML | | 16 35 14.0 | |
| | comp=Z,3.3nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.14** | **166** | ⇑*i*P | Pg | 16 35 11.9 | 0.0 |
| ST2N | | | | *i* S | Sg | 16 35 13.5 | -0.9 |
| ST2N | | | | *i* S | Sb | 16 35 13.6 | -1.8 |
| ST2N | | | | IAML | | 16 35 14.8 | |
| | comp=Z,17nm,0.1s | | | | | | |
| **ST2N** | **ST2** | **0.14** | **166** | ⇑*i*P | Pg | 16 35 11.9 | -0.1 |
| ST2N | | | | *i* S | Sg | 16 35 13.6 | -0.9 |
| ST2N | | | | *i* S | Sb | 16 35 13.7 | -1.8 |
| ST2N | | | | IAML | | 16 35 14.8 | |
| | comp=Z,17nm,0.1s | | | | | | |
| **ST6N** | **ST6** | **0.15** | **268** | *i* S | Sb | 16 35 15.5 | -0.4 |
| ST6N | | | | *i* S | Sg | 16 35 15.7 | +0.9 |
| **ST6N** | **ST6** | **0.15** | **268** | ⇑*i*P | Pb | 16 35 13.2 | +0.4 |
| ST6N | | | | IAML | S | 16 35 15.7 | +0.8 |
| | comp=Z,4.1nm,0.1s | | | | | | |
| ST6N | | | | *i* S | S | 16 35 15.7 | +0.8 |
| **ST5N** | **ST5** | **0.18** | **89** | ⇑*i*P | Pb | 16 35 13.0 | -0.3 |
| ST5N | | | | IAML | | 16 35 15.4 | |
| | comp=Z,18nm,0.0s | | | | | | |
| **ST5N** | **ST5** | **0.18** | **89** | ⇑*i*P | Pb | 16 35 13.0 | -0.3 |
| ST5N | | | | *i* S | Sg | 16 35 15.2 | -0.3 |
| ST5N | | | | IAML | | 16 35 15.4 | |
| | comp=Z,18nm,0.0s | | | | | | |
| ST5N | | | | *i* S | Sb | 16 35 15.4 | -1.3 |
| **ST8N** | **ST8** | **0.25** | **294** | ⇑*i*P | Pb | 16 35 15.1 | +0.6 |
| ST8N | | | | IAML | | 16 35 20.4 | |
| | comp=Z,0.8nm,0.1s | | | | | | |
| **ST8N** | **ST8** | **0.25** | **294** | ⇑*i*P | Pb | 16 35 15.2 | +0.7 |
| ST8N | | | | IAML | | 16 35 20.4 | |
| | comp=Z,0.8nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **219** | ⇑*i*P | Pb | 16 35 14.5 | -0.1 |
| ST10N | | | | ⇑*i*P | Pg | 16 35 14.6 | +0.8 |
| ST10N | | | | *i* S | Sb | 16 35 18.3 | -0.6 |
| ST10N | | | | IAML | | 16 35 19.3 | |
| | comp=Z,5.0nm,0.0s | | | | | | |
| ST10N | | | | IAML | | 16 35 19.3 | |
| | comp=N,5.0nm,0.1s | | | | | | |
| **ST10N** | **ST10** | **0.26** | **219** | ⇓*i*P | Pb | 16 35 14.4 | -0.1 |
| ST10N | | | | ⇑*i*P | Pg | 16 35 14.6 | +0.8 |
| ST10N | | | | *i* S | Sb | 16 35 18.3 | -0.6 |
| ST10N | | | | IAML | | 16 35 19.1 | |
| | comp=N,5.1nm,0.1s | | | | | | |
| ST10N | | | | IAML | | 16 35 19.3 | |
| | comp=Z,5.0nm,0.0s | | | | | | |
| **ST11N** | **ST11** | **0.30** | **62** | *i* S | Sb | 16 35 20.0 | -0.1 |

**NOU 31 16:41:14.1,22.01S×169.70E, *h*0km, ML3.5/9, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **1.64** | **288** | P | Pn | 16 41 43.3 | -0.9 |
| **PINNC** | **Pines Island,** | **2.17** | **254** | P | Pn | 16 41 51.2 | -0.3 |
| **LIFNC** | **LIFOU** | **2.60** | **298** | P | Pn | 16 41 57.5 | +0.1 |
| **YATNC** | **Mamie plateau,** | **2.61** | **268** | P | Pn | 16 41 56.5 | -1.0 |
| **DZM** | **Mont Dzumac** | **3.02** | **268** | P | Pn | 16 42 03.6 | +0.3 |
| **ONTNC** | **Ouen Toro** | **3.02** | **264** | P | Pn | 16 42 03.6 | +0.3 |
| **NOUC** | **Port Laguerre** | **3.15** | **268** | P | Pn | 16 42 05.0 | 0.0 |
| **KOUNC** | **Koumac, New Ca** | **5.25** | **285** | P | Pn | 16 42 35.0 | +1.1 |

*HEL **31** 16:46:16.8±0.3,61°.11N×29°.87E, h0km, ML1.7, Explosion*
*IDC **31** 16:46:21.0±3.2,61°.24N×29°.52E, h0km, mbtmp3.4/1, ML2.5/1, Error ellipse: s-maj=27.8km s-min=13.2km az=159.0*

**ISC 31 16:46:16.8±1.1,61°.20N±0°.04×29°.75E±0°.04, h0km, n26, σ0=98/36, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RUF** | **Ruokolahti** | **0.44** | **300** | PG | **Pb** | **16 46 27.0** | **-0.5** |
| RUF | | | | SG | **Sb** | **16 46 33.6** | **-1.0** |
| **VJF** | **Virojoki** | **1.26** | **239** | PG | **Pg** | **16 46 39.9** | **-1.0** |
| | baz=59 | | | | | | |
| VJF | | | | MSG | | 16 46 55.2 | |
| | comp=Z,16nm,0.2s | | | | | | |
| VJF | | | | SN | **Sn** | **16 47 00.7** | **+1.5** |
| **FIA0** | **FINESS Array S** | **1.79** | **279** | PG | **Pb** | **16 46 49.8** | **-0.5** |
| FIA0 | | | | MSG | | 16 47 12.3 | |
| | comp=Z,4.2nm,0.2s | | | | | | |
| FIA0 | | | | SG | **Sg** | **16 47 13.8** | **-0.3** |
| **FINES** | **FINESS Array B** | **1.79** | **279** | Pg | **Pb** | **16 46 50.0** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=93,slow=16,SNR=25 | | | | | | |
| FINES | | | | Lg | | 16 47 13.8 | |
| | comp=Z,2.0nm,0.3s,baz=92,slow=28,SNR=48 | | | | | | |
| **JOF** | **Joensuu** | **1.87** | **23** | *e*P | **Pb** | **16 46 50.8** | **-1.0** |
| **JOF** | **Joensuu** | **1.87** | **23** | PG | **Pg** | **16 46 51.6** | **-1.0** |
| JOF | | | | SG | **Sg** | **16 47 16.7** | **-0.2** |
| **KAF** | **Kangasniemi** | **1.88** | **301** | PG | **Pg** | **16 46 53.0** | **+0.3** |
| | baz=117 | | | | | | |
| KAF | | | | MSG | | 16 47 15.6 | |
| | comp=Z,3.5nm,0.2s | | | | | | |
| KAF | | | | SG | **Sg** | **16 47 17.5** | **+0.5** |
| **PVF** | **Pernaja** | **2.01** | **253** | PG | **Pb** | **16 46 53.0** | **-1.2** |
| | baz=71 | | | | | | |
| PVF | | | | MSG | | 16 47 17.4 | |
| | comp=Z,10nm,0.2s | | | | | | |
| PVF | | | | SG | **Sg** | **16 47 21.5** | **+0.2** |
| **SUF** | **Sumiainen** | **2.28** | **313** | PG | **Pg** | **16 46 59.4** | **-1.0** |
| | baz=133 | | | | | | |
| SUF | | | | MSG | | 16 47 27.5 | |
| | comp=Z,1.4nm,0.2s | | | | | | |
| SUF | | | | SG | **Sg** | **16 47 30.4** | **+0.4** |
| **NIF** | **Nilsia** | **2.37** | **338** | PG | **Pb** | **16 47 00.3** | **0.0** |
| NIF | | | | SG | **Sg** | **16 47 32.0** | **-1.0** |
| **KEF** | **Keuruu** | **2.52** | **295** | *e*P | **Pb** | **16 47 02.2** | **-0.6** |
| **KEF** | **Keuruu** | **2.52** | **295** | PG | **Pb** | **16 47 02.0** | **-0.7** |
| KEF | | | | MSG | | 16 47 33.8 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| KEF | | | | SB | **Sb** | **16 47 34.4** | **+0.2** |
| **ARBE** | **Arbavere** | **2.58** | **228** | PG | **Pb** | **16 47 03.6** | **-0.1** |
| ARBE | | | | SG | **Sg** | **16 47 38.3** | **-1.2** |
| **NUR** | **Nurmijrvi** | **2.59** | **257** | PG | **Pb** | **16 47 03.4** | **-0.6** |
| | baz=72 | | | | | | |
| NUR | | | | MSG | | 16 47 34.3 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| **HEL1** | **Helsinki** | **2.60** | **249** | SG | **Sg** | **16 47 39.5** | **-0.8** |
| **MEF** | **Metsahovi** | **2.81** | **252** | *e*P | **Pn** | **16 47 03.7** | **+0.8** |
| **MEF** | **Metsahovi** | **2.81** | **252** | PG | **Pb** | **16 47 07.1** | **-0.7** |
| MEF | | | | MSG | | 16 47 40.5 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| MEF | | | | SB | **Sb** | **16 47 41.6** | **-1.0** |
| **RMF** | **Romuvaara** | **3.03** | **2** | PB | **Pb** | **16 47 09.6** | **-1.8** |
| RMF | | | | MSG | | 16 47 48.5 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **VAF** | **Ylistaro** | **3.80** | **302** | *e*P | **Pn** | **16 47 17.1** | **+0.6** |
| **VAF** | **Ylistaro** | **3.80** | **302** | SG | **Sg** | **16 48 18.8** | **+0.1** |
| **RAF** | **Rauma** | **3.88** | **271** | *e*P | **Pn** | **16 47 15.0** | **-2.5** |
| **MTSE** | **Matsula** | **3.89** | **233** | SG | **Sb** | **16 48 14.2** | **+0.5** |
| **OUF** | **Merijarvi** | **3.92** | **326** | SG | **Sg** | **16 48 22.6** | **-0.1** |
| **OUL** | **Oulu** | **4.27** | **338** | SG | **Sg** | **16 48 32.3** | **-1.4** |
| **I43RU** | **DUBNA INFRASON** | **5.93** | **136** | I | I | 17 21 30.0 | |
| | baz=323,slow=308,SNR=1.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **8.55** | **350** | Pn | **Pn** | **16 48 23.5** | **+1.9** |
| | comp=Z,0.1nm,0.3s,baz=162,slow=12,SNR=1.6 | | | | | | |
| | comp=Z,2.2nm,0.9s | | | | | | |

**NOU 31 16:48:01.4,22.80S×172.78E, *h*0km, MLv4.4/8, Southeast of Loyalty Islands, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **4.59** | **286** | P | Pn | 16 49 11.4 | -0.8 |
| **PINNC** | **Pines Island,** | **4.93** | **271** | P | Pn | 16 49 16.2 | -0.5 |
| **YATNC** | **Mamie plateau,** | **5.50** | **277** | P | Pn | 16 49 23.8 | -0.8 |
| **LIFNC** | **LIFOU** | **5.53** | **290** | P | Pn | 16 49 25.0 | 0.0 |
| **ONTNC** | **Ouen Toro** | **5.87** | **274** | P | Pn | 16 49 29.8 | +0.1 |
| **DZM** | **Mont Dzumac** | **5.91** | **276** | P | Pn | 16 49 30.8 | +0.5 |
| **NOUC** | **Port Laguerre** | **6.03** | **275** | P | Pn | 16 49 32.0 | +0.1 |

*CATAC **31** 16:54:02.5±0.6, 13°.71N×91°.31W, h28km±9km, mb4.6, ML4.1*
*GCG **31** 16:54:02.7±1.1, 13°.69N×91°.33W, h43km, MD3.8*
*SNET **31** 16:54:03.6±0.9, 13°.90N×91°.16W, h20km±17km, ML3.8*

**ISC 31 16:54:02.1±1.8, 13.70N±0°.06×91.34W±0°.06, *h*27km±14km, n63, σ0=58/92, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SULM** | **Suchitepequez,** | **0.64** | **340** | *i* P | **Pn** | **16 54 16.8** | **+1.4** |
| **FUG** | **Fuego 3** | **0.89** | **33** | *e*P | **Pn** | **16 54 18.9** | **-0.1** |
| **RTAL** | **Retalhuleu** | **0.89** | **337** | *e*P | **Pn** | **16 54 18.2** | **-0.6** |
| RTAL | | | | *e*S | **Sb** | **16 54 29.7** | **-0.8** |
| **RTAL** | **Retalhuleu** | **0.89** | **337** | *i* P | **Pn** | **16 54 18.3** | **-0.6** |
| RTAL | | | | *i* S | **Sb** | **16 54 30.6** | **0.0** |
| RTAL | | | | IAML | | 16 54 40.3 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **PCG** | **Pacaya** | **0.99** | **46** | *i* P | **Pb** | **16 54 20.9** | **+0.2** |
| **STG3** | **Santiaguito 3,** | **1.03** | **347** | *e*P | **Pn** | **16 54 20.6** | **-0.4** |
| **CHTG** | **Tecpan** | **1.11** | **18** | *i* P | **Pn** | **16 54 21.6** | **-0.5** |
| CHTG | | | | *i* S | **Sn** | **16 54 36.1** | **-0.6** |
| CHTG | | | | IAML | | 16 54 38.0 | |
| | comp=Z,10µm,1.0s | | | | | | |
| **SOKI** | **Kika Raxquin** | **1.12** | **357** | *i* P | **Pn** | **16 54 21.6** | **-0.8** |
| SOKI | | | | *i* S | **Sn** | **16 54 36.2** | **-0.9** |
| SOKI | | | | IAML | | 16 54 38.1 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **GUMI** | **Mixco** | **1.16** | **37** | *i* P | **Pn** | **16 54 22.6** | **-0.2** |
| GUMI | | | | IAML | | 16 54 22.8 | |
| | comp=Z,5µm,1.0s | | | | | | |
| GUMI | | | | *i* S | **Sb** | **16 54 38.3** | **-0.2** |
| **GCG4** | **OSOP** | **1.18** | **41** | *i* P | **Pn** | **16 54 23.2** | **+0.2** |
| GCG4 | | | | *i* S | **Sn** | **16 54 38.1** | **-0.1** |
| GCG4 | | | | IAML | | 16 54 49.2 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **QUEO** | **Labor Ovalle** | **1.18** | **352** | *i* P | **Pn** | **16 54 22.8** | **-0.3** |
| QUEO | | | | IAML | | 16 54 44.0 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **NBG** | **Las Nubes** | **1.30** | **47** | *e*P | **Pb** | **16 54 26.0** | **-0.1** |
| NBG | | | | *e*S | **Sb** | **16 54 43.1** | **+0.5** |
| **NUBE** | **Las Nubes** | **1.52** | **82** | *e*P | **Pn** | **16 54 27.2** | **-0.5** |
| NUBE | | | | *e*S | **Sn** | **16 54 44.8** | **-2.0** |
| NUBE | | | | IAML | | 16 54 48.2 | |
| | comp=Z,1µm,0.2s | | | | | | |
| **NUBE** | **Las Nubes** | **1.52** | **82** | *i* P | **Pn** | **16 54 28.1** | **+0.4** |
| NUBE | | | | *i* S | **Sn** | **16 54 45.5** | **-1.2** |
| NUBE | | | | IAML | | 16 54 48.0 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **LOAL** | **Lomas de Alarc** | **1.54** | **79** | *e*P | **Pn** | **16 54 27.8** | **0.0** |
| LOAL | | | | *e*S | **Sn** | **16 54 45.5** | **-1.5** |
| **LOAL** | **Lomas de Alarc** | **1.54** | **79** | *i* P | **Pn** | **16 54 28.0** | **+0.2** |
| LOAL | | | | *i* S | **Sn** | **16 54 47.0** | **0.0** |
| LOAL | | | | IAML | | 16 54 51.1 | |
| | comp=Z,4µm,1.0s | | | | | | |
| **SLOZ** | **Alcaldia de Sa** | **1.54** | **78** | *e*P | **Pn** | **16 54 27.8** | **-0.1** |
| **QUIS** | **Sacapulas** | **1.60** | **8** | *i* P | **Pn** | **16 54 29.3** | **+0.5** |
| QUIS | | | | IAML | | 16 54 29.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| QUIS | | | | *i* S | **Sn** | **16 54 49.9** | **+1.3** |
| **HUEH** | **Huehuetenango** | **1.62** | **354** | *e*P | **Pn** | **16 54 29.7** | **+0.6** |
| **HUEH** | **Huehuetenango** | **1.62** | **354** | *i* P | **Pn** | **16 54 29.6** | **+0.5** |
| HUEH | | | | *i* S | **Sn** | **16 54 49.6** | **+0.4** |
| HUEH | | | | IAML | | 16 55 00.5 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **RTR** | **El Retiro** | **1.65** | **83** | *e*P | **Pn** | **16 54 29.7** | **+0.2** |
| **CEVE** | **Cerro Verde** | **1.67** | **85** | *e*P | **Pn** | **16 54 29.7** | **-0.1** |
| CEVE | | | | IAML | | 16 54 58.9 | |
| | comp=Z,3µm,0.4s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.67** | **85** | *i* P | **Pn** | **16 54 29.6** | **-0.2** |
| CEVE | | | | *i* S | **Sn** | **16 54 50.2** | **-0.2** |
| CEVE | | | | IAML | | 16 54 51.4 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **SBLS** | **San Blas** | **1.67** | **85** | *e*P | **Pn** | **16 54 29.6** | **-0.2** |
| SBLS | | | | *e*S | **Sn** | **16 54 50.7** | **+0.2** |
| **SNJE** | **San Jose** | **1.69** | **84** | *e*P | **Pn** | **16 54 29.9** | **-0.1** |
| SNJE | | | | IAML | | 16 54 56.9 | |
| | comp=Z,252nm,0.4s | | | | | | |
| **UNIC** | **Universidad Ca** | **1.76** | **81** | *i* P | **Pn** | **16 54 30.6** | **-0.2** |
| UNIC | | | | *i* S | **Sn** | **16 54 52.4** | **0.0** |
| UNIC | | | | IAML | | 16 54 56.2 | |
| | comp=Z,350nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.83** | **91** | *e*P | **Pn** | **16 54 31.5** | **-0.5** |
| JAYA | | | | IAML | | 16 54 56.6 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.83** | **91** | *i* P | **Pn** | **16 54 31.9** | **-0.1** |
| JAYA | | | | *i* S | **Sn** | **16 54 53.9** | **-0.5** |
| JAYA | | | | IAML | | 16 54 56.3 | |
| | comp=Z,5µm,1.0s | | | | | | |
| **CEDA** | **San Andres** | **1.89** | **87** | *i* S | **Sn** | **16 54 55.8** | **+0.2** |
| **PMON** | **Piamonte** | **1.96** | **89** | *e*P | **Pn** | **16 54 33.7** | **0.0** |
| **PMON** | **Piamonte** | **1.96** | **89** | *i* P | **Pn** | **16 54 33.7** | **0.0** |
| PMON | | | | *i* S | **Sn** | **16 54 57.6** | **+0.1** |
| PMON | | | | IAML | | 16 55 02.8 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **LALI** | **Alcalda de L** | **1.97** | **96** | *e*P | **Pn** | **16 54 33.7** | **0.0** |
| **LALI** | **Alcalda de L** | **1.97** | **96** | *i* P | **Pn** | **16 54 32.8** | **-0.9** |
| LALI | | | | *i* S | **Sn** | **16 54 56.8** | **-0.7** |
| LALI | | | | IAML | | 16 55 04.8 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **BOQS** | **Boqueron** | **2.00** | **89** | *e*P | **Pn** | **16 54 34.4** | **+0.1** |
| BOQS | | | | *e*S | **Sn** | **16 54 58.8** | **+0.3** |
| **ITCA** | **Escuela Especi** | **2.00** | **90** | *i* P | **Pn** | **16 54 34.0** | **-0.2** |
| ITCA | | | | *i* S | **Sn** | **16 54 58.4** | **+0.4** |
| ITCA | | | | IAML | | 16 54 59.6 | |
| | comp=Z,2µm,1.0s | | | | | | |
| **QUEZ** | **Alcaldia de Qu** | **2.01** | **86** | *i* P | **Pn** | **16 54 34.9** | **+0.6** |
| QUEZ | | | | *i* S | **Sn** | **16 54 59.7** | **+1.2** |
| QUEZ | | | | IAML | | 16 55 05.1 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **UEES** | **Universidad Ev** | **2.04** | **89** | *i* S | **Sn** | **16 54 59.0** | **-0.3** |
| **MTO3** | **Montecristo** | **2.04** | **70** | *e*P | **Pn** | **16 54 34.3** | **-0.6** |
| **MTO3** | **Montecristo** | **2.04** | **70** | *i* P | **Pn** | **16 54 34.9** | **0.0** |
| MTO3 | | | | *i* S | **Sn** | **16 55 00.3** | **+0.7** |
| MTO3 | | | | IAML | | 16 55 03.0 | |
| | comp=Z,590nm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **2.04** | **90** | *i* S | **Sn** | **16 54 59.4** | **-0.1** |
| **PANCS** | **Alcalda de** | **2.10** | **92** | *i* P | **Pn** | **16 54 35.6** | **+0.1** |
| PANCS | | | | IAML | | 16 54 41.7 | |
| | comp=Z,3µm,1.0s | | | | | | |
| PANCS | | | | *i* S | **Sn** | **16 55 00.6** | **-0.2** |
| **LOMA** | **Loma Larga** | **2.10** | **91** | *e*P | **Pn** | **16 54 36.0** | **+0.4** |
| **LOMA** | **Loma Larga** | **2.10** | **91** | *i* P | **Pn** | **16 54 35.8** | **+0.1** |
| LOMA | | | | *i* S | **Sn** | **16 55 00.6** | **-0.4** |
| LOMA | | | | IAML | | 16 55 04.3 | |
| | comp=Z,710nm,1.0s | | | | | | |
| **MRL** | **Marmol** | **2.11** | **49** | *e*P | **Pn** | **16 54 36.5** | **+0.7** |
| **LFRS** | **El Faro** | **2.21** | **92** | *e*P | **Pn** | **16 54 37.4** | **+0.3** |
| **COEG** | **Centro de Oper** | **2.39** | **92** | *e*P | **Pn** | **16 54 39.6** | **+0.1** |
| COEG | | | | *e*S | **Sn** | **16 55 06.9** | **-1.0** |
| **COEG** | **Centro de Oper** | **2.39** | **92** | *i* P | **Pn** | **16 54 40.4** | **+0.9** |
| COEG | | | | IAML | | 16 54 41.3 | |
| | comp=Z,370nm,1.0s | | | | | | |
| COEG | | | | *i* S | **Sn** | **16 55 08.5** | **+0.5** |
| **TECO** | **Alcaldia de Te** | **2.49** | **93** | *e*P | **Pn** | **16 54 41.0** | **+0.2** |
| **TECO** | **Alcaldia de Te** | **2.49** | **93** | *i* P | **Pn** | **16 54 40.9** | **0.0** |
| TECO | | | | *i* S | **Sn** | **16 55 10.2** | **-0.2** |
| TECO | | | | IAML | | 16 55 22.1 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **2.53** | **90** | *e*P | **Pn** | **16 54 41.9** | **+0.4** |
| **SCLA** | **Alcaldia de Sa** | **2.53** | **90** | *i* P | **Pn** | **16 54 41.6** | **+0.1** |
| SCLA | | | | *i* S | **Sn** | **16 55 11.3** | **-0.2** |
| SCLA | | | | IAML | | 16 56 43.1 | |
| | comp=Z,140nm,1.0s | | | | | | |
| **TECA** | **Tecapa** | **2.76** | **94** | *e*P | **Pn** | **16 54 44.9** | **+0.1** |
| **PACA** | **Pacayal** | **2.94** | **94** | *e*P | **Pn** | **16 54 48.3** | **+1.2** |
| **PACA** | **Pacayal** | **2.94** | **94** | *i* P | **Pn** | **16 54 47.7** | **+0.6** |
| PACA | | | | IAML | | 16 55 34.4 | |
| | comp=Z,1µm,1.0s | | | | | | |
| **RANC** | **El Ranchito** | **2.97** | **95** | *e*P | **Pn** | **16 54 48.1** | **+0.4** |
| **LCND** | **La Caada** | **3.37** | **96** | *e*P | **Pn** | **16 54 53.3** | **+0.3** |
| **CNCH** | **Conchagua** | **3.43** | **97** | *e*P | **Pn** | **16 54 53.8** | **-0.1** |
| **CNCH** | **Conchagua** | **3.43** | **97** | *i* P | **Pn** | **16 54 53.9** | **-0.1** |
| CNCH | | | | IAML | | 16 55 40.9 | |
| | comp=Z,430nm,1.0s | | | | | | |
| **CSGN** | **Cosiguina Volc** | **3.75** | **101** | *i* P | **Pn** | **16 54 58.1** | **-0.1** |
| CSGN | | | | IAML | | 16 55 02.3 | |
| | comp=Z,39nm,1.0s | | | | | | |
| **PKGN** | **Cerro Pekin** | **4.37** | **103** | *i* P | **Pn** | **16 55 06.5** | **-0.2** |
| PKGN | | | | IAML | | 16 55 11.0 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **4.67** | **104** | *e*P | **Pn** | **16 55 11.7** | **+0.8** |
| **COPN** | **Copaltepe** | **4.86** | **108** | *i* P | **Pn** | **16 55 13.0** | **-0.5** |
| COPN | | | | IAML | | 16 55 14.5 | |
| | comp=Z,48nm,1.0s | | | | | | |
| **INDI** | **Punta indio, G** | **6.86** | **123** | *i* P | **Pn** | **16 55 41.9** | **+0.9** |
| INDI | | | | IAML | | 16 55 43.1 | |
| | comp=Z,63nm,1.0s | | | | | | |
| INDI | | | | IAmb | IAmb | 16 55 43.1 | |
| | comp=Z,53nm,1.1s | | | | | | |

*NEIC **31** 17:19:02.3, 22°.25S×170°.03E, h26km*
*NEIC **31** 17:19:02.2±2.7, 22°.26S±0°.08×170°.04E±0°.07, h10km±1km, mb5.1/105, Mww5.3/25, Error ellipse: s-maj=13.7km s-min=10.8km az=171.0*
*NOU **31** 17:19:02.7, 21°.88S×170°.05E, h0km, mb5.1/72, Southeast of Loyalty Islands*
*NEIC **31** 17:19:02.3, 22°.15S×170°.14E, h26km, Moment Tensor Solution. Duration: 2s1 Moment tensor: Scale 10^16Nm; Mrr8.76; Mθθ-6.94; Mφφ-1.82; Mrθ4.38; Mθφ3.50; Mφr-0.83; Fault plane solution: M0 9.81000×10^16 NP1: φs109.75000°, δ58.44000°, λ82.49000°. NP2: φs303.88000°, δ32.35000°, λ102.01000°. Principal axes: T 9.9012, Plg75.0000°, Azm358.0000°; N -0.1803, Plg6.0000°, Azm114.0000°; P -9.7209, Plg13.0000°, Azm205.0000°;*
*IDC **31** 17:19:04.4±1.9, 22°.25S×170°.19E, h37km±13km, mb4.5/14, mbtmp4.7/15, ML4.6/1, MS4.5/49 Error ellipse: s-maj=16.2km s-min=13.0km az=125.0*
*MOS **31** 17:19:05.8±1.2, 22°.09S×169°.93E, h48km, mb5.2/24, MS4.8/7, Error ellipse: s-maj=10.7km s-min=8.7km az=124.2*
*GCMT **31** 17:19:07.2±0.1, 22°.24S±0°.01×170°.12E±0°.01, h23km, MW5.3/125, Moment Tensor Solution. s113,c187; s125,c217; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr0.80±.01; Mθθ-0.61±.01; Mφφ-0.19±.01; Mrθ0.53±.02; Mθφ0.39±.01; Mφr-0.14±.02; Best double couple: M0 0.99000×10^17 NP1: φ112.00000°, δ62.00000°, λ81.00000°. NP2: φ311.00000°, δ29.00000°, λ106.00000°. Principal axes: T 0.9780, Plg72.0000°, Azm2.0000°; N 0.0230, Plg8.0000°, Azm116.0000°; P -1.0020, Plg17.0000°, Azm209.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 31 17:19:02.3±0.6, 22.19S±0°.04×170.13E±0°.04, h17km±3km, h17km:pP-P, n435, σ1=66/422, mb5.1/94, MS4.6/70, 36C-30D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MARNC** | **Mare, Loyalty** | **2.08** | **289** | P | **Pn** | **17 19 36.6** | **+0.3** |
| **PINNC** | **Pines Island,** | **2.52** | **260** | P | **Pn** | **17 19 43.2** | **+0.7** |
| **PINNC** | **Pines Island,** | **2.52** | **260** | Pn | **Pn** | **17 19 42.8** | **+0.4** |
| **YATNC** | **Mamie plateau,** | **3.01** | **272** | P | **Pn** | **17 19 49.5** | **+0.3** |
| **LIFNC** | **LIFOU** | **3.04** | **297** | P | **Pn** | **17 19 50.1** | **+0.5** |
| **LIFNC** | **LIFOU** | **3.04** | **297** | Pn | **Pn** | **17 19 49.6** | **+0.1** |
| **ONTNC** | **Ouen Toro** | **3.41** | **267** | P | **Pn** | **17 19 56.8** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **QRZ** | **Quartz Range** | **18.69** | **174** | P | **Pn** | **17 23 21.0** | **+0.9** |
| QRZ | | | | IAmb | IAmb | 17 23 23.2 | |
| | comp=Z,160nm,1.8s | | | | | | |
| **MRZ** | **Mangatainoka R** | **18.98** | **167** | P | **P** | **17 23 22.6** | **-0.4** |
| MRZ | | | | IAmb | IAmb | 17 23 32.8 | |
| | comp=Z,102nm,1.4s | | | | | | |
| **AFI** | **Afiamalu** | **19.06** | **67** | P | **P** | **17 23 24.7** | **+0.7** |
| **AFI** | **Afiamalu** | **19.06** | **67** | P | **P** | **17 23 24.7** | **+0.7** |
| AFI | | | | pmax | pmax | | |
| | comp=Z,53nm,1.2s | | | | | | |
| **NNZ** | **Nelson** | **19.17** | **173** | P | **P** | **17 23 24.9** | **0.0** |
| NNZ | | | | IAmb | IAmb | 17 23 30.4 | |
| | comp=Z,164nm,1.4s | | | | | | |
| **TCW** | **Tory Channel** | **19.29** | **170** | P | **P** | **17 23 25.6** | **-0.6** |
| **BHW** | **Baring Head** | **19.57** | **169** | P | **P** | **17 23 29.8** | **+0.5** |
| BHW | | | | IAmb | IAmb | 17 23 34.8 | |
| | comp=Z,100nm,1.2s | | | | | | |
| **MSWZ** | **Moikau Station** | **19.65** | **168** | P | **Pn** | **17 23 31.9** | **+0.2** |
| **THZ** | **Tophouse** | **19.66** | **174** | P | **Pn** | **17 23 32.1** | **+0.3** |
| THZ | | | | IAmb | IAmb | 17 23 35.7 | |
| | comp=Z,86nm,1.2s | | | | | | |
| **MGCD** | **Mangrove Creek** | **20.07** | **233** | P | **Pn** | **17 23 38.5** | **+1.8** |
| **RIV** | **Riverview** | **20.34** | **231** | P | Pn | 17 23 44.6 | +4.8 |
| **KHZ** | **Kahutara** | **20.37** | **173** | P | Pn | 17 23 39.8 | -0.3 |
| KHZ | | | | IAmb | IAmb | 17 23 49.2 | |
| | comp=Z,78nm,1.1s | | | | | | |
| **INZ** | **Inchbonnie** | **20.51** | **177** | P | **P** | **17 23 40.3** | **+0.8** |
| **SYDH** | **Sydney Hard Ro** | **20.61** | **232** | P | Pn | 17 23 47.0 | +4.0 |
| **LTZ** | **Lake Taylor** | **20.61** | **176** | P | **P** | **17 23 42.0** | **+1.3** |
| LTZ | | | | IAmb | IAmb | 17 23 45.3 | |
| | comp=Z,196nm,2.0s | | | | | | |
| **GVZ** | **Greta Valley S** | **20.86** | **174** | P | **P** | **17 23 43.6** | **+0.3** |
| GVZ | | | | IAmb | IAmb | 17 23 49.0 | |
| | comp=Z,135nm,1.3s | | | | | | |
| **AMCZ** | **Amberley** | **21.04** | **175** | P | **P** | **17 23 45.5** | **+0.3** |
| **OXZ** | **Oxford** | **21.14** | **176** | P | **P** | **17 23 46.9** | **+0.6** |
| OXZ | | | | IAmb | IAmb | 17 23 55.5 | |
| | comp=Z,54nm,1.0s | | | | | | |
| **AULRC** | **Lightning Ridg** | **21.19** | **246** | P | **P** | **17 23 50.5** | **+3.5** |
| **FOZ** | **Fox Glacier** | **21.29** | **181** | P | **P** | **17 23 48.8** | **+0.9** |
| FOZ | | | | IAmb | IAmb | 17 23 54.0 | |
| | comp=Z,120nm,1.4s | | | | | | |
| **RPZ** | **Rata Peaks** | **21.48** | **178** | P | **P** | **17 23 50.4** | **+0.4** |
| **RPZ** | **Rata Peaks** | **21.48** | **178** | LR | LR | 17 31 44.1 | |
| | comp=Z,2µm,18.4s,baz=344,slow=36 | | | | | | |
| **AUDCS** | **Dubbo College** | **21.55** | **238** | P | **P** | **17 23 55.5** | **+4.7** |
| **MQZ** | **McQueen's Vall** | **21.56** | **175** | P | **P** | **17 23 51.8** | **+0.9** |
| MQZ | | | | IAmb | IAmb | 17 23 53.4 | |
| | comp=Z,112nm,1.3s | | | | | | |
| **JCZ** | **Jackson Bay** | **21.86** | **183** | P | **P** | **17 24 01.1** | **+7.0** |
| **TV1H** | **Townsville Har** | **22.02** | **273** | P | **P** | **17 23 59.0** | **+3.0** |
| **LBZ** | **Lake Benmore** | **22.14** | **180** | P | **P** | **17 23 58.6** | **+1.5** |
| LBZ | | | | IAmb | IAmb | 17 24 11.6 | |
| | comp=Z,108nm,1.5s | | | | | | |
| **CNB** | **Canberra Magne** | **22.36** | **230** | P | **P** | **17 24 04.0** | **+4.3** |
| **CTA** | **Charters Tower** | **22.37** | **271** | LR | LR | 17 32 31.1 | |
| | comp=Z,97nm,18.4s,baz=92,slow=36 | | | | | | |
| **CTAO** | **Charters Tower** | **22.37** | **271** | P | **P** | **17 24 02.6** | **+2.8** |
| **CTAO** | **Charters Tower** | **22.37** | **271** | P | **P** | **17 23 58.9** | **-0.9** |
| **CTAO** | **Charters Tower** | **22.37** | **271** | P | **P** | **17 23 58.9** | **-0.9** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,35nm,1.1s | | | | | | |
| **YNG** | **Young** | **22.58** | **233** | P | **P** | **17 24 05.4** | **+3.5** |
| **CAN** | **Canberra** | **22.62** | **230** | P | **P** | **17 24 03.1** | **+0.7** |
| CAN | | | | IAmb | IAmb | 17 24 06.2 | |
| | comp=Z,59nm,1.3s | | | | | | |
| **CAN** | **Canberra** | **22.62** | **230** | P | **P** | **17 24 03.1** | **+0.7** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,59nm,1.3s | | | | | | |
| **DCZ** | **Deep Cove** | **23.35** | **185** | P | **P** | **17 24 10.9** | **+1.2** |
| DCZ | | | | IAmb | IAmb | 17 24 19.6 | |
| | comp=Z,61nm,1.3s | | | | | | |
| **AUSMG** | **Snowy Mountain** | **23.45** | **228** | P | **P** | **17 24 14.9** | **+3.9** |
| **CMSA** | **Cobar Meteorol** | **23.66** | **242** | P | **P** | **17 24 14.6** | **+1.6** |
| **QLP** | **Quilpie** | **23.97** | **254** | P | **P** | **17 24 18.1** | **+2.1** |
| **MTSU** | **Mount Surprise** | **24.55** | **275** | P | **P** | **17 24 23.9** | **+2.5** |
| **RABL** | **Rabaul** | **24.97** | **313** | P | **P** | **17 24 25.1** | **0.0** |
| RABL | | | | IAmb | IAmb | 17 24 57.3 | |
| | comp=Z,62nm,1.4s | | | | | | |
| **PMG** | **Port Moresby** | **25.45** | **296** | P | **P** | **17 24 29.4** | **-0.1** |
| PMG | | | | IAmb | IAmb | 17 25 00.4 | |
| | comp=Z,28nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **25.45** | **296** | LR | LR | 17 33 15.8 | |
| | comp=Z,2µm,19.9s,baz=134,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **25.45** | **296** | *i* P | **P** | **17 24 29.2** | **-0.3** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,41nm,1.7s | | | | | | |
| **TOO** | **Toolangi** | **26.19** | **229** | P | **P** | **17 24 36.0** | **-0.1** |
| TOO | | | | IAmb | IAmb | 17 25 02.7 | |
| | comp=Z,70nm,1.9s | | | | | | |
| **TOO** | **Toolangi** | **26.19** | **229** | P | **P** | **17 24 36.0** | **-0.1** |
| TOO | | | | pmax | pmax | | |
| | comp=Z,70nm,1.9s | | | | | | |
| **COEN** | **Coen** | **26.87** | **283** | P | **P** | **17 24 41.7** | **-0.7** |
| **STKA** | **Stephens Creek** | **27.12** | **243** | P | **P** | **17 24 46.4** | **+1.9** |
| **STKA** | **Stephens Creek** | **27.12** | **243** | P | **P** | **17 24 44.8** | **+0.3** |
| **STKA** | **Stephens Creek** | **27.12** | **243** | P | **P** | **17 24 45.1** | **+0.6** |
| | comp=Z,6.2nm,0.7s,baz=83,slow=14,SNR=13 | | | | | | |
| STKA | | | | S | **S** | **17 29 19.1** | **-3.2** |
| | comp=Z,1.8nm,0.8s,baz=183,slow=20,SNR=1.3 | | | | | | |
| STKA | | | | LR | LR | 17 34 55.8 | |
| | comp=Z,2µm,19.4s,baz=73,slow=35 | | | | | | |
| | comp=Z,6.2nm,0.7s | | | | | | |
| **INKA** | **Innaminka** | **27.17** | **252** | P | **P** | **17 24 46.7** | **+1.7** |
| **RAR** | **Rarotonga** | **27.96** | **94** | LR | LR | 17 35 39.9 | |
| | comp=Z,465nm,18.0s,baz=254,slow=36 | | | | | | |
| **QIS** | **Mount Isa** | **28.45** | **268** | P | **P** | **17 25 00.1** | **+3.5** |
| **OOD** | **Oodnadatta** | **31.65** | **253** | P | **P** | **17 25 27.4** | **+2.7** |
| **BBOO** | **Buckleboo** | **31.90** | **243** | P | **P** | **17 25 26.4** | **-0.5** |
| **WR0** | **Warramunga Arr** | **33.24** | **267** | P | **P** | **17 25 38.1** | **-0.7** |
| **AS01** | **Alice Springs** | **33.30** | **260** | P | **P** | **17 25 43.2** | **+3.8** |
| **AS31** | **Alice Springs** | **33.34** | **260** | P | **P** | **17 25 39.5** | **-0.3** |
| **ASAR** | **Alice Springs** | **33.34** | **260** | P | **P** | **17 25 39.2** | **-0.5** |
| **ASAR** | **Alice Springs** | **33.34** | **260** | P | **P** | **17 25 39.4** | **-0.4** |
| | comp=Z,6.6nm,0.9s,baz=86,slow=9.1,SNR=56 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 28 21.0** | **-0.5** |
| | comp=Z,2.7nm,0.9s,baz=94,slow=3.7,SNR=5.6 | | | | | | |
| ASAR | | | | S | **S** | **17 30 59.2** | **-0.8** |
| | comp=Z,0.3nm,0.9s,baz=118,slow=39,SNR=1.8 | | | | | | |
| ASAR | | | | LR | LR | 17 39 36.4 | |
| | comp=Z,1µm,18.1s,baz=99,slow=37 | | | | | | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **33.41** | **267** | P | **P** | **17 25 39.8** | **-0.5** |
| WB0 | | | | IAmb | IAmb | 17 25 45.7 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **WB2** | **Warramunga Arr** | **33.42** | **267** | P | **P** | **17 25 39.3** | **-1.1** |
| WB2 | | | | IAmb | IAmb | 17 25 45.9 | |
| | comp=Z,21nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.43** | **267** | P | **P** | **17 25 39.7** | **-0.7** |
| **WRA** | **Warramunga Arr** | **33.43** | **267** | P | **P** | **17 25 39.8** | **-0.7** |
| | comp=Z,3.1nm,0.5s,baz=99,slow=8.4,SNR=67 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 28 21.1** | **-0.7** |
| | comp=Z,2.2nm,0.9s,baz=103,slow=2.3,SNR=5.7 | | | | | | |
| WRA | | | | LR | LR | 17 39 36.6 | |
| | comp=Z,1µm,19.0s,baz=90,slow=37 | | | | | | |
| | comp=Z,3.1nm,0.5s | | | | | | |
| **GENI** | **Genyem** | **35.01** | **300** | P | **P** | **17 25 56.1** | **+1.9** |
| **KDU** | **Kakadu** | **37.06** | **278** | P | **P** | **17 26 12.6** | **+0.8** |
| **TBI** | **Tubuai** | **37.19** | **100** | *e*P | **P** | **17 26 11.8** | **-1.0** |
| | comp=Z,704nm,44.0s | | | | | | |
| TBI | | | | *e*S | S | 17 31 49.6 | -9.5 |
| | comp=Z,1µm,36.8s | | | | | | |
| TBI | | | | *e*SS | **SnSn** | **17 34 36.8** | **+2.4** |
| | comp=Z,2µm,39.2s | | | | | | |
| TBI | | | | *e*LR | LR | 17 36 18.1 | |
| | comp=Z,2µm,24.8s | | | | | | |
| TBI | | | | *e*LR | LR | 17 36 19.6 | |
| | comp=Z,931nm,26.0s | | | | | | |
| **PPT2** | **Papeete2** | **38.09** | **90** | *e*P | P | 17 26 09.5 | -11 |
| | comp=Z,84nm,28.8s | | | | | | |
| PPT2 | | | | *e*S | S | 17 32 05.9 | -7.0 |
| | comp=Z,119nm,25.0s | | | | | | |
| PPT2 | | | | *e*SS | **SS** | **17 35 07.6** | **+7.1** |
| | comp=Z,1µm,28.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 17 36 41.3 | |
| | comp=Z,280nm,26.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 17 36 48.0 | |
| | comp=Z,404nm,25.5s | | | | | | |
| **PPT** | **Papeete** | **38.09** | **90** | LR | LR | 17 39 39.8 | |
| | comp=Z,162nm,19.1s,baz=262,slow=32 | | | | | | |
| **MTN** | **Manton Dam** | **38.24** | **277** | P | **P** | **17 26 22.4** | **+0.7** |
| **MTN** | **Manton Dam** | **38.24** | **277** | P | **P** | **17 26 21.1** | **-0.6** |
| **WRKA** | **Warakurna** | **38.33** | **257** | P | **P** | **17 26 23.6** | **+1.1** |
| **FORT** | **Forrest** | **38.44** | **248** | P | **P** | **17 26 23.5** | **+0.3** |
| FORT | | | | IAmb | IAmb | 17 26 55.4 | |
| | comp=Z,43nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **39.57** | **272** | P | **P** | **17 26 32.7** | **-0.2** |
| **WAKE** | **Wake Island** | **41.36** | **355** | P | **P** | **17 26 47.1** | **-0.4** |
| **FAKI** | **Fak Fak** | **41.45** | **292** | P | **P** | **17 26 49.9** | **+1.5** |
| **FAKI** | **Fak Fak** | **41.45** | **292** | P | **P** | **17 26 47.4** | **-1.0** |
| FAKI | | | | IAmb | IAmb | 17 26 50.8 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.86** | **267** | P | **P** | **17 26 53.5** | **+1.7** |
| | comp=Z,58nm,1.0s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.86** | **267** | P | **P** | **17 26 51.0** | **-0.8** |
| **GUMO** | **Guam** | **43.34** | **323** | LR | LR | 17 44 14.7 | |
| | comp=Z,422nm,18.7s,baz=127,slow=35 | | | | | | |
| **SOEI** | **Soe** | **45.62** | **278** | P | **P** | **17 27 24.7** | **+2.4** |
| **PSA00** | **Pilbara Seismi** | **46.49** | **261** | P | **P** | **17 27 28.6** | **-0.3** |
| PSA00 | | | | IAmb | IAmb | 17 27 48.2 | |
| | comp=Z,19nm,1.1s | | | | | | |
| **MBWA** | **Marble Bar** | **46.67** | **261** | P | **P** | **17 27 30.8** | **+0.4** |
| MBWA | | | | IAmb | IAmb | 17 27 57.0 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **KLBR** | **Kellerberrin** | **47.27** | **247** | P | **P** | **17 27 35.2** | **+0.3** |
| **SANI** | **Sanana** | **47.31** | **289** | P | **P** | **17 27 36.8** | **+1.4** |
| **NWAO** | **Narrogin (SRO)** | **47.67** | **245** | P | **P** | **17 27 38.0** | **0.0** |
| **NWAO** | **Narrogin (SRO)** | **47.67** | **245** | LR | LR | 17 47 03.6 | |
| | comp=Z,1µm,20.0s,baz=100,slow=35 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.67** | **245** | P | **P** | **17 27 38.0** | **0.0** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,38nm,1.1s | | | | | | |
| **MMRI** | **Maumere** | **47.90** | **279** | P | **P** | **17 27 40.3** | **+0.4** |
| **TAOE** | **Nuku Hiva Isla** | **49.49** | **83** | *e*S | **S** | **17 34 56.6** | **-2.9** |
| | comp=Z,230nm,27.0s | | | | | | |
| TAOE | | | | *e*LR | LR | 17 41 56.7 | |
| | comp=Z,440nm,23.8s | | | | | | |
| **RKT** | **Rikitea** | **50.41** | **102** | *e*LR | LR | 17 42 25.3 | |
| | comp=Z,3µm,28.8s | | | | | | |
| **LUWI** | **Luwuk** | **50.62** | **288** | P | **P** | **17 28 00.6** | **-0.1** |
| LUWI | | | | IAmb | IAmb | 17 28 47.7 | |
| | comp=Z,40nm,1.0s | | | | | | |
| **MIDW** | **Midway** | **51.54** | **14** | P | **P** | **17 28 08.4** | **+1.1** |
| **KAPI** | **Kappang** | **51.58** | **282** | P | **P** | **17 28 10.2** | **+2.2** |
| **KAPI** | **Kappang** | **51.58** | **282** | P | **P** | **17 28 08.4** | **+0.4** |
| KAPI | | | | IAmb | IAmb | 17 28 26.5 | |
| | comp=Z,28nm,1.1s | | | | | | |
| **KAPI** | **Kappang** | **51.58** | **282** | LR | LR | 17 49 34.4 | |
| | comp=Z,284nm,21.9s,baz=120,slow=35 | | | | | | |
| **KAPI** | **Kappang** | **51.58** | **282** | P | **P** | **17 28 08.4** | **+0.4** |
| KAPI | | | | pmax | pmax | | |
| | comp=Z,28nm,1.1s | | | | | | |
| **DAV** | **Davao City (W)** | **52.44** | **299** | LR | LR | 17 51 00.4 | |
| | comp=Z,213nm,20.0s,baz=114,slow=36 | | | | | | |
| **HPO** | **Honuapo** | **52.99** | **42** | P | **P** | **17 28 20.3** | **+2.0** |
| **TOLI2** | **Tolitoli** | **53.39** | **289** | P | **P** | **17 28 22.2** | **+0.8** |
| **TOLI2** | **Tolitoli** | **53.39** | **289** | P | **P** | **17 28 21.2** | **-0.2** |
| TOLI2 | | | | IAmb | IAmb | 17 28 23.0 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **55.40** | **275** | P | **P** | **17 28 34.9** | **-1.2** |
| **SBA** | **Scott Base** | **55.74** | **181** | P | **P** | **17 28 37.6** | **0.0** |
| SBA | | | | IAmb | IAmb | 17 28 49.7 | |
| | comp=Z,15nm,1.3s | | | | | | |
| **SBA** | **Scott Base** | **55.74** | **181** | P | **P** | **17 28 37.6** | **0.0** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **CASY** | **Casey** | **57.78** | **204** | P | **P** | **17 28 51.3** | **-0.9** |
| **KKM** | **Kota Kinabalu** | **59.76** | **292** | P | **P** | **17 29 06.1** | **-0.8** |
| KKM | | | | IAmb | IAmb | 17 29 09.3 | |
| | comp=Z,14nm,0.9s | | | | | | |
| **KSM** | **Kuching** | **62.86** | **284** | P | **P** | **17 29 27.4** | **-0.4** |
| KSM | | | | IAmb | IAmb | 17 29 29.9 | |
| | comp=Z,13nm,0.8s | | | | | | |
| **JOW** | **Kunigami** | **63.37** | **318** | P | **P** | **17 29 32.2** | **+1.3** |
| **JOW** | **Kunigami** | **63.37** | **318** | P | **P** | **17 29 30.6** | **-0.3** |
| JOW | | | | IAmb | IAmb | 17 29 33.2 | |
| | comp=Z,19nm,0.9s | | | | | | |
| **JOW** | **Kunigami** | **63.37** | **318** | LR | LR | 17 57 14.2 | |
| | comp=Z,233nm,18.0s,baz=125,slow=36 | | | | | | |
| **YOJ** | **Yonaguni jima** | **65.16** | **313** | P | **P** | **17 29 43.3** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **65.16** | **313** | P | **P** | **17 29 42.3** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **65.16** | **313** | P | **P** | **17 29 42.3** | **-0.3** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,45nm,1.0s | | | | | | |
| **JGF** | **Kuroka** | **65.33** | **331** | P | **P** | **17 29 42.6** | **-1.0** |
| JGF | | | | IAmb | IAmb | 17 29 44.4 | |
| | comp=Z,17nm,0.8s | | | | | | |
| **TWGBT** | **Beinan** | **65.44** | **310** | P | **P** | **17 29 44.6** | **+0.1** |
| **TWG** | **Pinlang** | **65.45** | **310** | P | **P** | **17 29 43.3** | **-1.2** |
| TWG | | | | IAmb | IAmb | 17 29 52.7 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **JMN** | **Monobe** | **65.46** | **327** | P | **P** | **17 29 43.9** | **-0.6** |
| **YULB** | **Yu-li** | **65.65** | **311** | P | **P** | **17 29 45.9** | **0.0** |
| **YULB** | **Yu-li** | **65.65** | **311** | P | **P** | **17 29 44.3** | **-1.6** |
| YULB | | | | IAmb | IAmb | 17 29 48.6 | |
| | comp=Z,10nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.74** | **332** | P | **P** | **17 29 44.8** | **-1.4** |
| | comp=Z,15nm,0.9s,baz=163,slow=6.1,SNR=28 | | | | | | |
| MJAR | | | | LR | LR | 17 55 51.0 | |
| | comp=Z,175nm,21.9s,baz=128,slow=34 | | | | | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MAJO** | **Matsushiro** | **65.74** | **332** | P | **P** | **17 29 45.7** | **-0.5** |
| **MAJO** | **Matsushiro** | **65.74** | **332** | P | **P** | **17 29 44.9** | **-1.3** |
| **MAJO** | **Matsushiro** | **65.74** | **332** | *c* P | **P** | **17 29 45.4** | **-0.8** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **65.74** | **332** | P | **P** | **17 29 45.3** | **-0.9** |
| **NACB** | **Ninganchiao** | **65.95** | **311** | P | **P** | **17 29 48.5** | **+0.8** |
| **NACB** | **Ninganchiao** | **65.95** | **311** | P | **P** | **17 29 46.2** | **-1.5** |
| **TPUB** | **Ta-pu** | **66.06** | **310** | P | **P** | **17 29 48.2** | **-0.4** |
| **TPUB** | **Ta-pu** | **66.06** | **310** | P | **P** | **17 29 47.0** | **-1.6** |
| **SSLB** | **Suanglung** | **66.15** | **311** | P | **P** | **17 29 48.6** | **-0.5** |
| **YHNB** | **Yeheng** | **66.42** | **312** | P | **P** | **17 29 51.7** | **+0.8** |
| **YHNB** | **Yeheng** | **66.42** | **312** | P | **P** | **17 29 50.4** | **-0.5** |
| **TATO** | **Taipei** | **66.54** | **312** | P | **P** | **17 29 52.6** | **+1.1** |
| **TATO** | **Taipei** | **66.54** | **312** | P | **P** | **17 29 50.7** | **-0.8** |
| **JNU** | **Nakatsue** | **66.54** | **325** | P | **P** | **17 29 51.3** | **-0.1** |
| JNU | | | | IAmb | IAmb | 17 29 53.0 | |
| | comp=Z,22nm,0.9s | | | | | | |
| **JNU** | **Nakatsue** | **66.54** | **325** | LR | LR | 17 59 21.0 | |
| | comp=Z,158nm,18.3s,baz=125,slow=36 | | | | | | |
| **JSD** | **Sado** | **66.98** | **333** | P | **P** | **17 29 54.5** | **+0.5** |
| **JSD** | **Sado** | **66.98** | **333** | P | **P** | **17 29 53.6** | **-0.5** |
| **QSPA** | **South Pole Qui** | **67.88** | **180** | P | **P** | **17 29 59.1** | **-0.6** |
| QSPA | | | | IAmb | IAmb | 17 30 35.8 | |
| | comp=Z,13nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.88** | **180** | P | **P** | **17 29 58.7** | **-1.0** |
| | comp=Z,5.8nm,1.0s,baz=25,slow=2.4,SNR=12 | | | | | | |
| QSPA | | | | S | **S** | **17 38 52.5** | **-4.8** |
| | comp=Z,0.5nm,0.9s,baz=333,slow=14,SNR=0.9 | | | | | | |
| QSPA | | | | LR | LR | 17 56 28.8 | |
| | comp=Z,432nm,19.3s,baz=32,slow=33 | | | | | | |
| | comp=Z,5.8nm,1.0s | | | | | | |
| **DLV** | **T Lat** | **69.29** | **293** | P | **P** | **17 30 08.7** | **-0.6** |
| **PPSI** | **Pulau Pagai** | **70.56** | **275** | P | P | 17 30 23.0 | +6.0 |
| **ASAJ** | **Asahikawa** | **70.64** | **339** | LR | LR | 17 56 26.4 | |
| | comp=Z,524nm,21.9s,baz=165,slow=32 | | | | | | |
| **TJN** | **Taejon** | **70.89** | **325** | P | **P** | **17 30 19.5** | **+1.1** |
| **TJN** | **Taejon** | **70.89** | **325** | ⇑*i* P | **P** | **17 30 19.0** | **+0.6** |
| **KSRS** | **Korea Array** | **71.40** | **326** | P | **P** | **17 30 20.8** | **-0.7** |
| | comp=Z,12nm,0.8s,baz=144,slow=5.7,SNR=46 | | | | | | |
| KSRS | | | | LR | LR | 17 59 00.9 | |
| | comp=Z,155nm,20.8s,baz=145,slow=34 | | | | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **71.41** | **326** | P | **P** | **17 30 21.8** | **+0.2** |
| **KSAR** | **Wonju Array Be** | **71.41** | **326** | P | **P** | **17 30 21.8** | **+0.2** |
| **QIZ** | **Qiongzhong** | **71.77** | **300** | P | **P** | **17 30 25.0** | **+0.9** |
| QIZ | | | | sP | **PcP** | **17 30 41.5** | **-1.6** |
| QIZ | | | | S | **S** | **17 39 41.5** | **-2.5** |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,230nm,5.3s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,150nm,16.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,150nm,16.8s | | | | | | |
| QIZ | | | | LR | LR | | |
| | comp=Z,190nm,21.9s | | | | | | |
| **INCN** | **Inchon** | **72.10** | **325** | P | **P** | **17 30 27.0** | **+1.2** |
| **INCN** | **Inchon** | **72.10** | **325** | P | **P** | **17 30 26.1** | **+0.3** |
| **INCN** | **Inchon** | **72.10** | **325** | P | **P** | **17 30 26.1** | **+0.3** |
| INCN | | | | pmax | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | |
| **RPN** | **Rapa Nui** | **72.17** | **113** | LR | LR | 17 54 06.5 | |
| | comp=Z,216nm,19.5s,baz=312,slow=29 | | | | | | |
| **IPM** | **Ipoh** | **72.52** | **282** | P | **P** | **17 30 29.5** | **+0.7** |
| **IPM** | **Ipoh** | **72.52** | **282** | P | **P** | **17 30 26.8** | **-2.0** |
| IPM | | | | IAmb | IAmb | 17 30 30.6 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **NJ2** | **Nanjing** | **72.90** | **316** | *e*P | **P** | **17 30 32.5** | **+1.9** |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **73.13** | **341** | *e*P | **P** | **17 30 31.7** | **+0.1** |
| YSS | | | | *e*S | **S** | **17 39 54.3** | **-4.1** |
| YSS | | | | *e*SS | **SS** | **17 44 41.2** | **+0.8** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,500nm,3.8s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,300nm,3.4s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,200nm,4.4s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,700nm,18.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,500nm,20.0s | | | | | | |
| **KULM** | **Kulim** | **73.20** | **283** | P | **P** | **17 30 32.2** | **-0.6** |
| KULM | | | | IAmb | IAmb | 17 30 34.7 | |
| | comp=Z,22nm,1.2s | | | | | | |
| **UBPT** | **Khong Chiam** | **73.47** | **295** | P | **P** | **17 30 35.9** | **+1.6** |
| **PSI** | **Prapat** | **73.74** | **280** | P | **P** | **17 30 37.5** | **+1.3** |
| | comp=Z,14nm,1.4s | | | | | | |
| **VLA** | **Vladivostok** | **73.91** | **332** | *i* P | **P** | **17 30 35.9** | **-0.4** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,113nm,2.3s | | | | | | |
| **PSTR** | **Posyet** | **74.01** | **331** | ⇑*i* P | **P** | **17 30 37.6** | **+0.7** |
| **GSI** | **Gunungsitoli** | **74.38** | **278** | P | **P** | **17 30 41.7** | **+1.9** |
| **GSI** | **Gunungsitoli** | **74.38** | **278** | P | **P** | **17 30 38.1** | **-1.6** |
| GSI | | | | IAmb | IAmb | 17 30 42.2 | |
| | comp=Z,32nm,1.1s | | | | | | |
| **SHEM** | **Shemya Is, Ala** | **74.68** | **2** | LR | LR | 17 58 37.4 | |
| | comp=Z,363nm,21.0s,baz=174,slow=32 | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **74.73** | **333** | IAmb | IAmb | 17 30 42.8 | |
| | comp=Z,21nm,1.1s | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **74.73** | **333** | ⇑*i* P | **P** | **17 30 41.7** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** | **74.73** | **333** | P | **P** | **17 30 40.9** | **-0.2** |
| | comp=Z,7.9nm,0.9s,baz=101,slow=4.6,SNR=12 | | | | | | |
| USRK | | | | LR | LR | 18 02 13.0 | |
| | comp=Z,174nm,19.5s,baz=157,slow=35 | | | | | | |
| | comp=Z,7.9nm,0.9s | | | | | | |
| **WHN** | **Wuhan** | **74.94** | **312** | P | **P** | **17 30 44.5** | **+1.9** |
| **PET** | **Petropavlovsk** | **75.56** | **353** | *e*P | **P** | **17 30 46.7** | **+1.1** |
| PET | | | | *e*S | **S** | **17 40 26.4** | **+1.0** |
| PET | | | | MLR | MLR | | |
| | comp=Z,300nm,14.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.75** | **352** | P | **P** | **17 30 46.3** | **-0.4** |
| | comp=Z,11nm,0.9s,baz=163,slow=5.4,SNR=12 | | | | | | |
| PETK | | | | LR | LR | 17 58 13.0 | |
| | comp=Z,512nm,21.7s,baz=153,slow=31 | | | | | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **DL2** | **Dalian** | **75.86** | **323** | P | **P** | **17 30 48.5** | **+0.8** |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,57nm,1.0s | | | | | | |
| **MAW** | **Mawson** | **76.03** | **202** | P | **P** | **17 30 48.6** | **+0.4** |
| | comp=Z,4.9nm,1.0s,baz=115,slow=13,SNR=7.2 | | | | | | |
| MAW | | | | LR | LR | 18 01 09.6 | |
| | comp=Z,223nm,19.0s,baz=100,slow=33 | | | | | | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **76.10** | **331** | P | **P** | **17 30 49.4** | **+0.5** |
| **MDJ** | **Mudanjiang** | **76.10** | **331** | P | **P** | **17 30 50.3** | **+1.4** |
| MDJ | | | | PP | **PP** | **17 33 41.0** | **+0.8** |
| MDJ | | | | S | **S** | **17 40 34.0** | **+2.2** |
| MDJ | | | | SS | **SS** | **17 45 26.3** | **+0.5** |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| MDJ | | | | pmax | pmax | | |
| | comp=Z,200nm,7.6s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,270nm,13.7s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,180nm,13.1s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,320nm,15.1s | | | | | | |
| **MDJ** | **Mudanjiang** | **76.10** | **331** | IAmb | IAmb | 17 30 51.2 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **TIA** | **Tai'an** | **76.69** | **318** | P | **P** | **17 30 52.5** | **0.0** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,54nm,0.9s | | | | | | |
| **CN2** | **Changchun** | **77.40** | **329** | *e*P | **P** | **17 30 56.0** | **-0.3** |
| CN2 | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **BNX** | **BinXian** | **77.95** | **331** | ⇓P | **P** | **17 30 58.5** | **-0.8** |
| BNX | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| **ENH** | **Enshi** | **78.19** | **310** | P | **P** | **17 31 01.2** | **+0.1** |
| **ENH** | **Enshi** | **78.19** | **310** | IAmb | IAmb | 17 31 02.8 | |
| | comp=Z,30nm,0.9s | | | | | | |
| **GYA** | **Guiyang** | **78.19** | **305** | ⇓P | **P** | **17 31 02.8** | **+1.6** |
| GYA | | | | S | **S** | **17 40 56.5** | **+1.0** |
| GYA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| GYA | | | | pmax | pmax | | |
| | comp=Z,200nm,6.8s | | | | | | |
| **LYN** | **LuoYang** | **78.63** | **315** | ⇓P | **P** | **17 31 05.0** | **+1.7** |
| LYN | | | | pmax | pmax | | |
| | comp=Z,39nm,1.1s | | | | | | |
| LYN | | | | pmax | pmax | | |
| | comp=

HEH LR LR
comp=Z,360nm,23.5s
**PZH PanZhiHua 82.00 303** P **P** **17 31 23.3 +1.5**
PZH S **S** **17 41 34.5 -1.2**
PZH pmax pmax
comp=Z,30nm,1.2s
PZH pmax pmax
comp=Z,130nm,6.2s
PZH LR LR
comp=Z,120nm,17.9s
PZH LR LR
comp=Z,140nm,17.9s
PZH LR LR
comp=Z,180nm,17.0s
**XLT XiLinHaoTe 82.31 324** *e*P **P** **17 31 23.3 +0.3**
XLT pmax pmax
comp=Z,14nm,0.7s
XLT pmax pmax
comp=Z,170nm,5.6s
XLT LR LR
comp=Z,170nm,20.2s
XLT LR LR
comp=Z,190nm,22.2s
**CD2 Chengdu 82.69 307** P **P** **17 31 26.8 +1.5**
CD2 pP pwP 17 31 36.0 -0.2
CD2 S **S** **17 41 43.0 +0.6**
CD2 pmax pmax
comp=Z,10.0nm,0.9s
CD2 pmax pmax
comp=Z,160nm,7.1s
CD2 LR LR
comp=Z,180nm,13.7s
CD2 LR LR
comp=Z,190nm,15.5s
CD2 LR LR
comp=Z,180nm,17.5s
**HHC Hu-ho-hao-te 82.99 319** *e*P **P** **17 31 28.0 +1.3**
HHC S **S** **17 41 45.3 0.0**
HHC sS SKKSac 17 41 57.5 +5.6
HHC pmax pmax
comp=Z,20nm,0.7s
HHC pmax pmax
comp=Z,190nm,5.9s
HHC LR LR
comp=Z,180nm,18.6s
HHC LR LR
comp=Z,160nm,16.2s
HHC LR LR
comp=Z,190nm,16.5s
**MA2 Magadan 83.00 350** LR LR 18 03 21.8
comp=Z,516nm,21.4s,baz=156,slow=32
**MA2 Magadan 83.00 350**⇓ *i*P **P** **17 31 24.9 -1.2**
MA2 pmax pmax
comp=Z,7.0nm,0.9s
**ELIB Princess Elisa 83.40 190** *d*P **P** **17 31 27.5 -0.9**
comp=Z,5.6nm,1.2s
**TNCH TengChong 83.84 300** P **P** **17 31 32.5 +1.0**
TNCH S **SKSac** **17 41 55.3 +1.0**
TNCH pmax pmax
comp=Z,11nm,1.1s
TNCH pmax pmax
comp=Z,170nm,4.7s
**PMSA Palmer Station 83.87 160** LR LR 18 02 24.5
comp=Z,240nm,20.7s,baz=236,slow=31
**ZEA Zeya 84.18 336** *e*P **P** **17 31 32.1 -0.2**
ZEA *e**SP pwP 17 31 49.4 +6.2
ZEA *e*S **SKSac** **17 41 54.1 -0.6**
ZEA *e*SS **SS** **17 47 18.1 -8.2**
ZEA pmax pmax
comp=N,10.0nm,1.1s
ZEA pmax pmax
comp=Z,10.0nm,1.2s
ZEA smax smax
comp=E,100nm,15.4s
ZEA MLR MLR
comp=Z,100nm,18.0s
**LZH Lanzhou 85.31 312** *e*P **P** **17 31 40.8 +2.1**
LZH S **S** **17 42 13.8 +4.9**
LZH pmax pmax
comp=Z,27nm,1.2s
LZH pmax pmax
comp=Z,150nm,5.5s
LZH LR LR
comp=Z,120nm,17.2s
LZH LR LR
comp=Z,190nm,17.9s
LZH LR LR
comp=Z,220nm,17.9s
**KDAK Kodiak Island 85.53 19** LR LR 18 03 19.3
comp=Z,385nm,20.9s,baz=228,slow=31
**TROLL Troll, Antarti 85.67 184**⇑P **P** **17 31 39.6 -0.3**
comp=Z,572nm,0.8s
**SEY Seymchan 85.99 352**⇓ *i*P **P** **17 31 40.3 -0.9**
SEY pmax pmax
comp=Z,9.0nm,1.0s
**SNAA Sanae 86.26 182** P **P** **17 31 41.4 -1.3**
SNAA IAmb IAmb 17 31 48.1
comp=Z,13nm,1.1s
**SNAA Sanae 86.26 182**⇑P **P** **17 31 41.5 -1.2**
comp=Z,123nm,0.8s
**SNAA Sanae 86.26 182** P **P** **17 31 41.4 -1.3**
comp=Z,6.8nm,0.9s,baz=216,slow=7.1,SNR=21
SNAA LR LR 18 08 58.6
comp=Z,433nm,18.1s,baz=146,slow=35
comp=Z,6.8nm,0.9s
**SNAA Sanae 86.26 182**⇑ *i*P **P** **17 31 41.7 -1.1**
SNAA pmax pmax
comp=Z,10.0nm,1.0s
**VNA3 Neumayer Olymp 86.82 180**⇑P **P** **17 31 44.1 -1.3**
comp=Z,13nm,0.8s
**VNA2 Neumayer--Watz 87.12 181**⇑P **P** **17 31 45.9 -1.0**
comp=Z,13nm,0.7s,baz=176,slow=4.5
**VNA1 Neumayer--Stat 87.41 181**⇑P **P** **17 31 47.1 -1.1**
comp=Z,10nm,0.9s
**O02D Mt. Diablo Mer 87.98 45** P **P** **17 31 50.6 -0.9**
O02D IAmb IAmb 17 32 26.6
comp=Z,15nm,1.6s
**YBH Yreka Blue Hor 88.84 44** LR LR 18 06 50.1
comp=Z,189nm,18.1s,baz=245,slow=32
**HUMO Hull Mountain 89.14 43** P **P** **17 31 55.9 -1.0**
**PFO Pinyon Flats O 89.20 53** LR LR 18 04 04.4
comp=Z,414nm,20.1s,baz=238,slow=30
**SHL Shillong 89.47 298** P **P** **17 31 58.0 -1.0**
SHL IAmb IAmb 17 32 01.0
comp=Z,22nm,1.0s
**SHL Shillong 89.47 298** P **P** **17 31 58.0 -1.0**
SHL pmax pmax
comp=Z,22nm,1.0s
**ULN Ulaanbaatar 89.72 323***c i*P **P** **17 31 59.4 -0.2**
ULN pmax pmax
comp=Z,19nm,1.2s
**GTA Gaotai 89.75 313** P **P** **17 32 00.5 +0.6**
GTA pP pwP 17 32 12.5 +1.6
GTA pmax pmax
comp=Z,7.0nm,0.9s
GTA LR LR
comp=Z,82nm,18.7s
GTA LR LR
comp=Z,180nm,19.5s
GTA LR LR
comp=Z,190nm,21.1s
**YAK Yakutsk 89.92 342** LR LR 18 11 01.6
comp=Z,184nm,19.3s,baz=136,slow=35
**YAK Yakutsk 89.92 342** *e*P **P** **17 31 58.4 -1.6**
YAK pmax pmax
comp=Z,13nm,0.9s
**LPIG La Paz 89.94 64** LR LR 18 06 07.5
comp=Z,362nm,18.2s,baz=228,slow=31
**BILL Bilibino 90.00 359**⇑ *e*P **P** **17 31 58.7 -1.6**
BILL *e* 17 35 41.3
BILL *e*PPP PPP 17 37 28.9
BILL pmax pmax
comp=Z,12nm,1.0s
**SONM Songino Array 90.07 323** P **P** **17 32 00.9 -0.3**
SONM IAmb IAmb 17 32 03.3
comp=Z,12nm,0.9s
**SONM Songino Array 90.07 323** P **P** **17 32 00.9 -0.3**
comp=Z,11nm,0.9s,baz=142,slow=4.6,SNR=40
SONM S **SKSac** **17 42 28.8 -2.7**
comp=Z,0.2nm,0.5s,baz=71,slow=33,SNR=1.6
SONM LR LR 18 14 49.8
comp=Z,162nm,18.1s,baz=123,slow=37
comp=Z,11nm,0.9s
**NVAR Mina Array Bea 90.13 48** P **P** **17 32 00.6 -1.3**
comp=Z,1.7nm,0.8s,baz=224,slow=6.3,SNR=6.3
NVAR LR LR 18 07 14.9
comp=Z,388nm,18.4s,baz=271,slow=32
comp=Z,1.7nm,0.8s
**J05D Fort Rock, OR 90.57 43** P **P** **17 32 02.5 -1.2**
**BBB Bella Bella 91.48 33** LR LR 18 07 36.9
comp=Z,235nm,18.8s,baz=231,slow=32
**PALK Pallekele 92.18 277** LR LR 18 16 22.5
comp=Z,277nm,18.9s,baz=121,slow=37
**E19K Redstone River 92.61 12** P **P** **17 32 12.2 -0.2**
E19K IAmb IAmb 17 32 35.2
comp=Z,16nm,1.4s
**COLA College 92.61 17** *i* P **P** **17 32 12.0 -0.4**
COLA pmax pmax
comp=Z,4.0nm,0.9s
**ILAR Eielson Array 92.79 17** P **P** **17 32 10.7 -2.6**
comp=Z,1.5nm,0.7s,baz=240,slow=5.2,SNR=12
ILAR LR LR 18 12 06.9
comp=Z,386nm,18.2s,baz=228,slow=34
comp=Z,1.5nm,0.7s
**G08A Pilot Rock 92.98 42** P **P** **17 32 13.4 -1.4**
G08A IAmb IAmb 17 34 58.7
comp=Z,2.4nm,0.4s
**SCRK Sand Creek 93.00 18** P **P** **17 32 13.0 -1.5**
**ZAK Zakamensk 93.16 324** *e*P **P** **17 32 13.8 -1.7**
ZAK pmax pmax
comp=Z,6.0nm,1.2s
**ELK Elko 93.30 47** LR LR 18 10 05.7
comp=Z,225nm,18.1s,baz=269,slow=33
**H03S2 Juan Fernandez 93.88 129** T T 19 16 21.8
baz=239
**H03S1 Juan Fernandez 93.89 129** T T 19 16 22.1
baz=239
**H03S3 Juan Fernandez 93.89 129** T T 19 16 17.5
baz=239
**I26K Coal Creek Min 94.23 18** IAmb IAmb 17 32 51.3
comp=Z,9.5nm,1.3s
**DLBC Dease Lake 94.27 27** LR LR 18 08 07.0
comp=Z,244nm,20.2s,baz=278,slow=31
**EGAK Eagle 94.43 19** P **P** **17 32 18.8 -2.0**
**NEW Newport 95.49 40** LR LR 18 12 12.4
comp=Z,288nm,18.1s,baz=236,slow=33
**ANMO Albuquerque 97.28 55** LR LR 18 11 01.9
comp=Z,335nm,18.0s,baz=246,slow=32
**TXAR Lajitas Array 97.43 61** LR LR 18 10 27.7
comp=Z,282nm,18.0s,baz=248,slow=32
**TIXI Tiksi 97.79 348** LR LR 18 18 22.2
comp=Z,154nm,18.1s,baz=182,slow=36
**PDAR Pinedale Array 98.00 47** LR LR 18 09 25.9
comp=Z,91nm,21.1s,baz=236,slow=31
**INK Inuvik 99.07 18** LR LR 18 11 57.0
comp=Z,301nm,20.9s,baz=250,slow=32
**WMQ Urumqi 99.83 313** *e*P **Pdif** **17 32 48.0 +2.1**
WMQ LR LR
comp=Z,150nm,16.1s
WMQ LR LR
comp=Z,110nm,23.9s
**MKAR Makanchi Array 104.41 315** Pdiff **Pdif** **17 33 06.1 0.0**
comp=Z,0.9nm,0.8s,baz=104,slow=6.2,SNR=6.1
MKAR PKiKP **PKiKP** **17 37 23.6 +1.2**
comp=Z,1.2nm,1.0s,baz=108,slow=4.7,SNR=5.2
MKAR PKKPbc **PKKPbc** **17 48 52.1 -1.7**
comp=Z,0.4nm,0.6s,baz=285,slow=5.5,SNR=4.9
**ZALV Zalesovo Beam 104.96 322** Pdiff **Pdif** **17 33 07.2 -1.1**
comp=Z,0.7nm,0.7s,baz=129,slow=3.9,SNR=2.7
**ARU Arti 120.10 323** *i* PKiKP **PKiKP** **17 37 53.3 +1.4**
ARU 17 39 17.4
ARU 17 45 01.8
ARU SS SS 17 55 33.6 -9.4
**D62A Allapoint, All 126.77 47** **PKPdf** **17 38 02.5 -2.3**
**BELG Belogornoye 127.01 320***c i*PKiKP **PKPdf** **17 38 05.4 +0.3**
BELG pmax pmax
comp=Z,2.0nm,0.9s
**HUMP Col San Antoni 127.54 84** **PKPdf** **17 38 04.5 -2.7**
**ARCES ARCESS Array B 128.12 345** PKP **PKPdf** **17 38 06.0 -0.8**
comp=Z,4.7nm,1.0s,baz=29,slow=2.1,SNR=8.6
**ARCES ARCESS Array B 128.12 345** PKiKP **PKPdf** **17 38 06.0 -0.8**
**BATG Bathurst New B 128.77 47** PKPdf **PKPdf** **17 38 06.8 -1.9**
**LMN Caledonia Moun 129.84 48** **PKPdf** **17 38 08.7 -2.1**
**KBZ Khabaz 131.70 309** *i* PKiKP **PKiKP** **17 38 16.2 +0.9**
KBZ pmax pmax
comp=Z,2.0nm,1.0s
**KIV Kislovodsk 131.81 310** *i* PKiKP **PKPdf** **17 38 15.3 +0.6**
KIV pmax pmax
comp=Z,4.0nm,1.0s
**OBN Obninsk 132.40 326**⇑ *e*PKiKP **PKPdf** **17 38 15.1 -0.2**
OBN *e* 17 40 36.1
OBN *e*PPP PPP 17 43 30.1
OBN *e*SS SS 17 58 14.3 -2.2
OBN pmax pmax
comp=Z,8.0nm,0.5s
OBN pmax pmax
comp=Z,3.0nm,0.7s
**MCPB Macapa, AP 133.19 113** PKPdf **PKPdf** **17 38 17.4 -0.8**
**FINES FINESS Array B 133.62 337** PKP **PKPdf** **17 38 15.2 -2.2**
comp=Z,1.6nm,0.8s,baz=341,slow=2.9,SNR=4.2
FINES SKPbc **SKPbc** **17 41 43.1 -2.2**
comp=Z,2.1nm,0.8s,baz=24,slow=11,SNR=3.7
**AKASG Malin Array Be 138.35 323** PKP **PKPdf** **17 38 25.6 -0.9**
comp=Z,0.4nm,0.5s,baz=64,slow=1.6,SNR=2.1
**AKBB Malin Array Si 138.35 323** *e*PKiKP **PKPdf** **17 38 27.1 +0.6**
**NOA NORSAR Array B 138.50 345** PKhKP PKPpre 17 38 22.1
comp=Z,0.3nm,0.8s,baz=64,slow=1.2,SNR=1.5
**BR131 Keskin Array S 139.24 306** *i* PKiKP **PKPdf** **17 38 28.3 -0.5**
**BRTR Keskin Array B 139.24 306** PKP **PKPdf** **17 38 27.7 -1.1**
comp=Z,0.9nm,0.9s,baz=357,slow=3.0,SNR=3.0
**TNR Turnu Rosu 143.68 318**⇓P PKPbc 17 38 35.9 +2.1
**TNR Turnu Rosu 143.68 318**⇓PKiKP PKPbc 17 38 35.9 +2.1
**MARR Marisel-Cluj 143.86 321**⇓P PKPab 17 38 34.6 +0.7
**NIE Niedzica 143.87 326** *e*PKPdf **PKPdf** **17 38 37.3 +0.7**
NIE *e*pPKPdf PKiKP 17 38 54.2 +14
**DRGR 144.04 321**⇓P **PKPab** **17 38 34.9 +0.4**
**DRGR 144.04 321**⇓PKiKP **PKPab** **17 38 34.9 +0.4**
**LANS Liptovska Anna 144.46 326** *e*PKiKP **PKPdf** **17 38 38.4 +0.8**
**LANS Liptovska Anna 144.46 326** *e*PKP **PKPdf** **17 38 38.4 +0.8**
**GZR Gura Zlata 144.72 319**⇓P **PKPab** **17 38 36.8 -0.3**
**GZR Gura Zlata 144.72 319**⇓PKHKP PKPpre 17 38 36.8
**BSEG Bad Segeberg 144.80 339** *e*PKPab **PKPab** **17 38 37.8 +0.9**
baz=38,slow=4.0
**KSP Ksiaz 144.86 331** *e*PKPdf **PKPab** **17 38 37.0 -0.2**
KSP *ep*PKPdf **PKiKP** **17 38 48.8 +6.8**
**SURR Surduc 144.93 320**⇑P **PKPab** **17 38 37.4 -0.3**
**SIRR Siria 144.93 321**⇓P **PKPab** **17 38 38.2 +0.5**
**PSZ Piszkesteto 144.99 324**⇓P **PKPab** **17 38 37.9 0.0**
**PSZ Piszkesteto 144.99 324**⇓PKiKP **PKPab** **17 38 37.9 0.0**
**MORC Moravsky Berou 145.01 329** *e*PKP **PKPbc** **17 38 37.3 -0.6**
**MORC Moravsky Berou 145.01 329**⇑P **PKPbc** **17 38 37.6 -0.3**
**MORC Moravsky Berou 145.01 329**⇑PKiKP **PKPbc** **17 38 37.6 -0.3**
**OSTC Ostas 145.10 331**⇑ *e*PKP **PKPbc** **17 38 38.1 0.0**
OSTC AMS AMS 18 40 00.0
comp=Z,300nm,25.1s
**OSTC Ostas 145.10 331** *e*PKiKP **PKPbc** **17 38 38.1 0.0**
OSTC MLR MLR
comp=Z,300nm,25.1s
**KRLC Kraliky 145.17 330**⇑ *e*PKP **PKPbc** **17 38 38.3 -0.1**
**KRLC Kraliky 145.17 330** *e*PKiKP **PKPbc** **17 38 38.3 -0.1**
**DPC Dobruska-Polom 145.20 330**⇑ *e*PKP **PKPbc** **17 38 38.5 0.0**
DPC AMS AMS 18 39 50.0
comp=Z,300nm,25.7s
**DPC Dobruska-Polom 145.20 330** *e*PKiKP **PKPbc** **17 38 38.5 0.0**
DPC MLR MLR
comp=Z,300nm,25.7s
**HERR Herculane 145.20 318**⇓P **PKPbc** **17 38 38.3 -0.3**
**VYHS Vyhne 145.20 326** *e*PKiKP **PKPbc** **17 38 38.4 -0.1**
**VYHS Vyhne 145.20 326** *e*PKP **PKPbc** **17 38 38.4 -0.1**
**UPC Upice 145.23 331**⇑ *e*PKP **PKPbc** **17 38 38.4 -0.1**
**UPC Upice 145.23 331** *e*PKiKP **PKPbc** **17 38 38.4 -0.1**
**GORT1 Trebel 145.24 337** *e*PKPab **PKPbc** **17 38 39.6 +1.3**
baz=38,slow=4.0
**BZS Buzias 145.31 320**⇑P **PKPbc** **17 38 38.1 -0.8**
**BZS Buzias 145.31 320**⇑PKiKP **PKPbc** **17 38 38.1 -0.8**
**JAVC Velka Javorina 145.56 327** *e*PKP **PKPdf** **17 38 40.3 +0.7**
**MDVR Moldovita 145.68 319**⇑P **PKPdf** **17 38 40.4 +0.5**
**VRAC Vranov 145.79 329** *e*PKP **PKPdf** **17 38 40.1 +0.2**
**VRAC Vranov 145.79 329**⇑P **PKPdf** **17 38 40.0 +0.1**
**VRAC Vranov 145.79 329**⇑PKP2 **PKPdf** **17 38 40.0 +0.1**
**FLTG Flechtingen 145.80 337** *e*PKPab **PKPdf** **17 38 40.9 +1.2**
baz=38,slow=4.0
**PVCC Panska Ves 145.85 332**⇑ *e*PKP **PKPbc** **17 38 41.8 +1.3**
PVCC *ex* x 17 38 45.9
**PVCC Panska Ves 145.85 332** *e*PKP2 **PKPbc** **17 38 41.8 +1.3**
**BRG Berggiesshubel 145.87 333** *i* PKP **PKPdf** **17 38 40.3 +0.4**
BRG Amp 17 38 42.5
comp=Z,40nm,1.0s
**BRG Berggiesshubel 145.87 333** P **PKiKP** **17 38 51.8 +7.7**
BRG Amp 17 38 53.0
comp=Z,20nm,0.9s
**BRG Berggiesshubel 145.87 333** *i* PKP2 **PKPdf** **17 38 40.3 +0.4**
BRG pmax pmax
comp=Z,40nm,1.0s
BRG MLR MLR
comp=N,141nm,19.9s
BRG MLR MLR
comp=E,70nm,17.3s
BRG MLR MLR
comp=Z,214nm,23.1s
**BRG Berggiesshubel 145.87 333** *e*PKPab **PKPbc** **17 38 41.6 +1.0**
baz=38,slow=4.0
**CLL Collm 145.93 334** *i* PKP2 **PKPdf** **17 38 41.0 +1.0**
CLL *e* 17 42 11.0
CLL pmax pmax
comp=Z,45nm,1.0s
**CLL Collm 145.93 334** *e*PKPab **PKPbc** **17 38 41.6 +0.9**
baz=38,slow=4.0
**KRUC Moravsky 146.05 329** *e*PKP **PKPdf** **17 38 40.6 +0.3**
**NRDL Niedersach Rie 146.07 338** *e*PKPab **PKPbc** **17 38 42.1 +1.1**
baz=38,slow=4.0
**GOPC GO Pecny, Ondr 146.20 331** AMS AMS 18 40 50.0
comp=Z,300nm,23.2s
**PRA Prague 146.25 331** AMS AMS 18 43 10.0
comp=Z,300nm,25.6s
**BOVS Bovan 146.25 317**⇓P **PKPdf** **17 38 41.1 +0.2**
**PRU Pruhonice 146.26 331**⇑ *e*PKP **PKPdf** **17 38 41.8 +1.2**
PRU AMS AMS 18 40 20.0
comp=Z,200nm,21.1s
**PRU Pruhonice 146.26 331** *e*PKP2 **PKPdf** **17 38 41.8 +1.2**
PRU MLR MLR
comp=Z,200nm,21.1s
**HSKC Hora Svate Kat 146.28 333**⇑ *e*PKP **PKPdf** **17 38 40.8 +0.1**
**TREC Trest 146.32 330** AMS AMS 18 46 00.0
comp=Z,300nm,23.6s
**NEUB Neuenburg 146.49 335** *e*PKPab **PKPbc** **17 38 43.4 +1.0**
baz=38,slow=4.0
**CLZ Clausthal 146.51 337** *e*PKPab **PKPbc** **17 38 43.6 +1.1**
baz=38,slow=4.0
**EKA Eskdalemuir Ar 146.52 353** PKPbc **PKPdf** **17 38 40.5 -0.4**
comp=Z,12nm,0.7s,baz=343,slow=2.6,SNR=34
**ESK Eskdalemuir 146.54 353** PKPdf **PKPdf** **17 38 40.4 -0.6**
**ESK Eskdalemuir 146.54 353** PKIKP **PKPdf** **17 38 40.4 -0.6**
**MORH Mrgy, Hungar 146.69 323**⇓P **PKPdf** **17 38 42.7 +1.2**
**TANN Tannenbergstha 146.83 334** *e*PKPab **PKPbc** **17 38 44.6 +1.1**
baz=38,slow=4.0
**GTTG Gottingen 146.90 337** *e*PKPab **PKPab** **17 38 45.7 +0.8**
baz=38,slow=4.0
**PLN Plauen 146.90 334** *e*PKPab **PKPab** **17 38 45.8 +0.8**
baz=38,slow=4.0
**MOX Moxa 147.00 335** *e*PKPab **PKPab** **17 38 46.0 +0.7**
baz=38,slow=4.0
**IBBN Ibbenburen 147.01 340** *e*PKPab **PKPab** **17 38 45.9 +0.6**
baz=38,slow=4.0
**RONA Rosalia, Austr 147.01 327** *i* PKP **PKPdf** **17 38 44.1 +2.1**
comp=Z,7.7nm,0.8s,SNR=6.0
**CONA Conrad Observa 147.08 328** *i* PKP **PKPdf** **17 38 41.9 -0.3**
comp=Z,0.2nm,0.2s
CONA *i* PKP **pPKPdf** **17 38 44.1 -2.2**
comp=Z,6.6nm,1.0s,SNR=8.9
**CKRC Cesky Krumlov 147.21 330**⇑ *e*PKP **PKPdf** **17 38 43.9 +1.6**
CKRC AMS AMS 18 39 50.0
comp=Z,200nm,22.5s
**CKRC Cesky Krumlov 147.21 330** *e*PKP2 **PKPdf** **17 38 43.9 +1.6**
CKRC MLR MLR
comp=Z,200nm,22.5s
**KHC Kasperske Hory 147.31 331**⇑ *e*PKP **PKPdf** **17 38 44.5 +2.0**
KHC AMS AMS 18 43 10.0
comp=Z,200nm,18.8s
**KHC Kasperske Hory 147.31 331** *c i*PKiKP **PKPdf** **17 38 41.8 -0.7**
KHC *i* 17 38 44.5
KHC pmax pmax
comp=Z,30nm,1.0s
**ROTZ Rotzenmuhle 147.43 333** *e*PKPab **PKPab** **17 38 47.4 +0.3**
baz=38,slow=4.0
**GERES GERESS Array B 147.47 331** **PKPdf** **17 38 43.3 +0.5**
**GERES GERESS Array B 147.47 331** PKPbc **PKPdf** **17 38 44.6 +1.8**
comp=Z,3.8nm,0.7s,baz=22,slow=4.3,SNR=17
**GERES GERESS Array B 147.47 331** PKIKP **PKPdf** **17 38 43.3 +0.5**
**ARSA Arzberg 147.70 327** *e*PKP **PKPbc** **17 38 47.0 +1.0**
comp=Z,6.2nm,1.0s
**FNA Florina 147.78 312** **PKPbc** **17 38 46.6 +0.1**
**FNA Florina 147.78 312** PKP2 **PKPbc** **17 38 46.6 +0.1**
**GRF Grafenberg Arr 147.90 334** *e*PKPab **PKPab** **17 38 50.1 +1.1**
baz=38,slow=4.0
**GRFO Grafenberg 147.90 334** PKPdf **PKPdf** **17 38 41.4 -2.0**
GRFO **PKPbc** **17 38 47.2 +0.8**
**GRFO Grafenberg 147.90 334** PKP2 **PKPbc** **17 38 47.2 +0.8**
**PERS Pernice 148.32 326** *i* PKPbc **PKPdf** **17 38 47.0 +2.8**
**BIOA Bad Ischl, Aus 148.32 329** *e*PKP **PKPab** **17 38 51.3 +0.5**
comp=Z,5.3nm,0.9s
**SOKA Soboth 148.34 326** *e*PKP **PKPdf** **17 38 47.1 +2.8**
comp=Z,3.6nm,0.8s
**TNS Taunus Mts 148.53 337** *e*PKPab **PKPab** **17 38 53.1 +1.6**
baz=38,slow=4.0
**RJOB Jochberg 148.69 330** *e*PKPab **PKPab** **17 38 52.8 +0.6**
baz=38,slow=4.0
**OBKA Obir 148.70 327** *e*PKP **PKPdf** **17 38 47.2 +2.3**
comp=Z,2.1nm,0.8s
**KBA Koelnbreinsper 148.90 329** *e*PKP **PKPdf** **17 38 47.8 +2.4**
comp=Z,4.6nm,0.9s
KBA *e*PKiKP **pPKPbc** **17 38 52.1 -1.3**
comp=Z,11nm,0.8s
**LESA Schwarzleotal 148.97 330** *e*PKP **PKPdf** **17 38 48.1 +2.8**
comp=Z,4.9nm,0.7s
**BTNL Ternell 149.01 340** *d*PKP **PKPbc** **17 38 49.2 -0.1**
**LJU Ljubljana 149.02 326** *i* PKPbc **PKPbc** **17 38 49.2 -0.2**
**MEM Membach 149.03 340** *d*PKP **PKPdf** **17 38 48.0 +2.8**
**MYKA Terra Mystica 149.07 328** *e*PKP **PKPbc** **17 38 48.8 -0.9**
comp=Z,5.1nm,0.8s
MYKA *e*PKP **sPKPbc** **17 38 53.6 -1.5**
comp=Z,8.0nm,0.7s
**BSTI Sart Tilman 149.19 341** *d*PcP **PKPbc** **17 38 49.1 -0.5**
**BHOU Houvegnez 149.25 340** *d*PKP **PKPbc** **17 38 50.8 +0.9**
**CEY Cerknica 149.28 326** *i* PKPbc **PKPbc** **17 38 49.6 -0.5**
**BCLA Clavier 149.41 341** *d*PKP **PKiKP** **17 38 53.7 +2.3**
**STU Stuttgart 149.44 335** *e*PKPab **PKPab** **17 38 55.3 +0.1**
baz=38,slow=4.0
**BGES Gesves 149.51 341** *d*PKPdf **PKPdf** **17 38 46.1 +0.1**
**ABTA Abfaltersbach 149.54 329** *e*PKP **PKPdf** **17 38 49.6 +3.3**
comp=Z,5.5nm,0.7s
**WATA Walderalm 149.54 331** *e*PKP **PKPdf** **17 38 49.7 +3.3**
comp=Z,5.3nm,0.9s
**WTTA Wattenberg 149.57 330** *e*PKP **PKPdf** **17 38 46.9 +0.5**
comp=Z,1.2nm,0.4s
WTTA *e*PKP **PKPbc** **17 38 51.1 +0.1**
comp=Z,12nm,1.0s
**RCHB Rochefort 149.66 341** *d*PKP **PKPbc** **17 38 51.3 +0.4**
**BMRD Maredsous 149.68 341** *d*PKP **PKPbc** **17 38 50.8 -0.1**
**MOTA Moosalm 149.75 331** *e*PKP **PKPbc** **17 38 50.6 -0.8**
comp=Z,14nm,1.1s
**RETA Reutte 149.79 332** *i* PKP **PKPbc** **17 38 51.0 -0.4**
comp=Z,4.5nm,0.9s
**SQTA Sankt Quirin 149.79 331** *i* PKP **PKPdf** **17 38 49.1 +2.4**
comp=Z,1.5nm,0.6s
SQTA *i* PKP **sPKPdf** **17 38 51.1 -1.1**
comp=Z,8.8nm,0.8s,SNR=5.1
**WLF Walferdange 149.80 339** *d*PKP **PKPbc** **17 38 51.3 +0.1**
**DOU Dourbes 149.91 341** *d*PKP **PKPbc** **17 38 50.4 -1.0**
**BFO Black Forest 150.14 335** PKPdf **PKPdf** **17 38 45.8 -1.3**
BFO **sPKPdf** **17 38 51.3 -1.3**
**BFO Black Forest 150.14 335** PKIKP **PKPdf** **17 38 45.8 -1.3**
**BFO Black Forest 150.14 335** *e*PKPab **PKPab** **17 38 57.9 -0.2**
baz=38,slow=4.0
**FETA Feichten 150.16 331** *i* PKP **PKPbc** **17 38 52.1 -0.3**
comp=Z,13nm,1.0s,SNR=6.4
**DAVA Damuels 150.33 332** *e*PKP **PKPdf** **17 38 50.9 +3.3**
comp=Z,11nm,1.3s
**TIP Timpagrande 151.67 313** PKPdf **PKPdf** **17 38 48.0 -1.8**
TIP PKPbc **PKPbc** **17 38 55.5 -0.6**
TIP PKPab **PKPab** **17 39 04.4 -0.4**
**TIP Timpagrande 151.67 313**⇑P **PKPab** **17 39 05.9 +1.1**
**SSB Saint Sauveur 154.12 336** PKPdf **PKPdf** **17 38 52.1 -1.0**
SSB PKPab **PKPab** **17 39 14.4 -0.4**
**SSB Saint Sauveur 154.12 336** PKP2 **PKPab** **17 39 14.4 -0.4**
SSB 18 38 52.1
**KEST Kesra 158.50 313** PKPab **PKPab** **17 39 34.4 +0.3**
comp=Z,3.0nm,1.0s,baz=66,slow=10.0,SNR=5.0
**ESDC Sonseca Array 161.86 345** PKPdf **PKPdf** **17 39 01.7 -1.1**
ESDC **PKPbc** **17 39 46.5 -1.9**
**ESDC Sonseca Array 161.86 345** PKPab **PKPab** **17 39 46.7 -1.7**
comp=Z,1.8nm,0.8s,baz=360,slow=3.6,SNR=12
**TORD Torodi Ar. Bea 165.79 233** PKP **PKPdf** **17 39 05.4 -1.7**
comp=Z,2.9nm,0.9s,baz=26,slow=1.7,SNR=12

**IDC 31 17:31:41.6±9.6, 5.71S×151.32E, h75km±67km, mb3.3/2, mbtmp3.6/3, ML1.5/1, Error ellipse: s-maj=120.6km s-min=58.7km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.52** | **228** | P | Pn | 17 33 01.6 | +0.3 |
| | 1.0nm,0.3s,baz=83,slow=15,SNR=2.2 | | | | | | |
| PMG | | | | S | Sn | 17 34 03.5 | 0.0 |
| | 12nm,0.9s,baz=129,slow=21,SNR=1.5 | | | | | | |
| | 5.5nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.75** | **228** | P | P | 17 36 27.3 | +0.3 |
| | 1.2nm,0.6s,baz=53,slow=10.0,SNR=23 | | | | | | |
| | 1.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **24.49** | **221** | P | P | 17 36 54.5 | +0.6 |
| | 1.3nm,0.8s,baz=60,slow=8.8,SNR=19 | | | | | | |
| | 1.3nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.16** | **286** | PKPbc | PKPbc | 17 51 21.3 | -1.2 |
| | 0.6nm,0.8s,baz=62,slow=3.0,SNR=4.8 | | | | | | |

*CATAC **31** 17:36:53.6±0.7, 13.16N×80.69W, h26km±11km, MB5.3, mb4.9, ML4.8*
*RSNC **31** 17:36:55.6±0.0, 13°N±3°×8.1W±°, h18km±5km, M3.5, mb4.3, mB5.2, ML3.5*
*UCR **31** 17:36:55.4±1.0, 13.13N×80.99W, h20km±41km, MW4.5*
*IDC **31** 17:36:56.4±1.4, 12.99N×81.23W, h0km, mb3.7/7, mbtmp3.7/9, ML3.1/2, MS3.5/7, Error ellipse: s-maj=33.1km s-min=23.9km az=138.0*

**ISC 31 17:36:56.9±0.6, 13.09N±0.05×81.02W±0.04, h10km, n72, σ2s32/104, mb3.7/7, MS3.6/4, Caribbean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRVC** | **Isla de Provid** | **0.44** | **311** | P | **Pg** | **17 37 02.3** | **-3.3** |
| PRVC | | | | S | **Sg** | **17 37 06.6** | **-4.8** |
| **BLUN** | **Bluefields** | **2.90** | **249** | *i* P | **Pn** | **17 37 41.1** | **-2.0** |
| BLUN | | | | IAML | | 17 38 30.5 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **3.32** | **255** | *i* P | **Pn** | **17 37 47.3** | **-1.7** |
| ESPN | | | | *i* S | **Sb** | **17 38 32.8** | **-3.7** |
| ESPN | | | | IAML | | 17 38 49.1 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **3.32** | **255** | *e*P | **Pn** | **17 37 46.4** | **-2.5** |
| **RGM0** | **Gandoca** | **3.81** | **204** | *i* P | **Pn** | **17 37 53.0** | **-2.7** |
| RGM0 | | | | *i* S | **Sn** | **17 38 40.4** | **-0.1** |
| RGM0 | | | | IAML | | 17 38 42.6 | |
| | comp=Z,880nm,1.0s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **4.06** | **235** | *i* P | **Pn** | **17 37 58.6** | **-0.5** |
| COVE | | | | *i* S | **Sn** | **17 38 50.0** | **+3.2** |
| COVE | | | | IAML | | 17 39 21.4 | |
| | comp=Z,690nm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **4.07** | **163** | P | **Pn** | **17 37 57.3** | **-1.9** |
| BCIP | | | | S | **Sn** | **17 38 46.8** | **-0.1** |
| **BCIP** | **Isla Barro Col** | **4.07** | **163** | *i* P | Pn | 17 37 54.4 | -4.8 |
| BCIP | | | | *i* S | **Sn** | **17 38 41.9** | **-5.0** |
| BCIP | | | | IAML | | 17 38 56.7 | |
| | comp=Z,230nm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **4.07** | **163** | *e*P | **Pn** | **17 37 57.3** | **-1.9** |
| **ACON** | **Acoyapa** | **4.21** | **255** | P | Pb | 17 38 06.1 | -4.9 |
| ACON | | | | S | **Sb** | **17 38 57.2** | **-4.7** |
| **ACON** | **Acoyapa** | **4.21** | **255** | *i* P | **Pn** | **17 37 59.2** | **-1.9** |
| ACON | | | | *i* S | **Sn** | **17 38 54.1** | **+3.7** |
| ACON | | | | IAML | | 17 39 18.6 | |
| | comp=Z,560nm,1.0s | | | | | | |
| **ACON** | **Acoyapa** | **4.21** | **255** | *e*P | **Pn** | **17 37 59.2** | **-1.9** |
| **HDC** | **Heredia** | **4.31** | **225** | *i* P | **Pn** | **17 38 02.4** | **-0.3** |
| HDC | | | | *i* S | **Sn** | **17 38 52.4** | **-0.8** |
| HDC | | | | IAML | | 17 39 22.0 | |
| | comp=Z,340nm,1.0s | | | | | | |
| **DRK0** | **Durika** | **4.38** | **210** | *i* P | **Pn** | **17 38 01.8** | **-1.9** |
| DRK0 | | | | *i* S | **Sn** | **17 38 53.7** | **-1.3** |
| DRK0 | | | | IAML | | 17 38 55.8 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **DRK0** | **Durika** | **4.38** | **210** | *e*P | **Pn** | **17 38 02.6** | **-1.1** |
| DRK0 | | | | *e*S | **Sn** | **17 38 54.1** | **-0.8** |
| **LCR2** | **La Lucha 2** | **4.43** | **222** | *i* P | **Pn** | **17 38 03.3** | **-1.1** |
| LCR2 | | | | *i* S | **Sn** | **17 38 57.0** | **+0.8** |
| LCR2 | | | | IAML | | 17 39 25.2 | |
| | comp=Z,160nm,1.0s | | | | | | |
| **LCR2** | **La Lucha 2** | **4.43** | **222** | *e*P | **Pn** | **17 38 03.1** | **-1.3** |
| **SOCE** | **Pocosol** | **4.43** | **233** | *i* P | **Pn** | **17 38 03.5** | **-0.8** |
| SOCE | | | | *i* S | **Sn** | **17 38 58.7** | **+2.7** |
| SOCE | | | | IAML | | 17 39 27.2 | |
| | comp=Z,220nm,1.0s | | | | | | |
| **BRU2** | **Volcan** | **4.57** | **201** | *i* P | **Pn** | **17 38 03.1** | **-3.2** |
| BRU2 | | | | *i* S | **Sn** | **17 38 58.7** | **-0.9** |
| BRU2 | | | | IAML | | 17 39 04.7 | |
| | comp=Z,390nm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **4.58** | **263** | *i* P | **Pn** | **17 38 04.5** | **-1.7** |
| BOAB | | | | *i* S | **Sn** | **17 39 03.1** | **+3.6** |
| BOAB | | | | IAML | | 17 39 30.9 | |
| | comp=Z,470nm,1.0s | | | | | | |
| **OCHAL** | **Ojochal** | **4.73** | **213** | *i* P | **Pn** | **17 38 08.3** | **0.0** |
| OCHAL | | | | *i* S | **Sn** | **17 39 03.5** | **+0.2** |
| OCHAL | | | | IAML | | 17 39 14.4 | |
| | comp=Z,210nm,1.0s | | | | | | |
| **CONN** | **Concepcion** | **4.75** | **252** | *i* P | **Pn** | **17 38 11.5** | **+2.9** |
| CONN | | | | IVmB_BB | | 17 38 33.7 | |
| | comp=Z,22μm,1.0s | | | | | | |
| CONN | | | | IAmb | IAmb | 17 38 34.1 | |
| | comp=Z,2μm,0.7s | | | | | | |
| CONN | | | | *i* S | **Sn** | **17 39 07.2** | **+3.4** |
| CONN | | | | IAML | | 17 39 39.0 | |
| | comp=Z,4μm,1.0s | | | | | | |
| **JTS** | **Las Juntas de** | **4.75** | **235** | Pn | **Pn** | **17 38 07.4** | **-1.2** |
| | comp=Z,7.7nm,0.3s,baz=83,slow=16,SNR=15 | | | | | | |
| JTS | | | | Sn | **Sn** | **17 39 00.1** | **-3.7** |
| | comp=Z,5.5nm,0.3s,baz=231,slow=20,SNR=7.9 | | | | | | |
| JTS | | | | LR | LR | 17 40 05.6 | |
| | comp=Z,221nm,19.7s,baz=116,slow=42 | | | | | | |
| | comp=Z,22nm,0.4s | | | | | | |
| **JTS** | **Las Juntas de** | **4.75** | **235** | P | **Pn** | **17 38 07.4** | **-1.2** |
| JTS | | | | S | **Sn** | **17 39 00.2** | **-3.6** |
| **JTS** | **Las Juntas de** | **4.75** | **235** | *e*P | **Pn** | **17 38 07.2** | **-1.5** |
| **OMEN** | **Al SSO del Vol** | **4.77** | **251** | *i* P | **Pn** | **17 38 11.0** | **+2.1** |
| OMEN | | | | IVmB_BB | | 17 38 12.5 | |
| | comp=Z,3μm,1.0s | | | | | | |
| OMEN | | | | *i* S | **Sn** | **17 39 05.9** | **+1.7** |
| OMEN | | | | IAML | | 17 39 25.6 | |
| | comp=Z,300nm,1.0s | | | | | | |
| **CDITO** | **Canoas** | **4.84** | **202** | *i* P | **Pn** | **17 38 09.4** | **-0.5** |
| CDITO | | | | IAmb | IAmb | 17 38 17.3 | |
| | comp=Z,120nm,0.7s | | | | | | |
| CDITO | | | | IVmB_BB | | 17 38 54.8 | |
| | comp=Z,3μm,1.0s | | | | | | |
| CDITO | | | | *i* S | **Sn** | **17 39 05.6** | **-0.4** |
| CDITO | | | | IAML | | 17 39 14.5 | |
| | comp=Z,540nm,1.0s | | | | | | |
| **WILN** | **Americas 2** | **5.13** | **260** | *i* P | **Pn** | **17 38 14.9** | **+1.1** |
| WILN | | | | IAmb | IAmb | 17 38 41.8 | |
| | comp=Z,140nm,0.8s | | | | | | |
| WILN | | | | IAML | | 17 39 48.2 | |
| | comp=Z,290nm,1.0s | | | | | | |
| **R4DEC** | **Barrio San Lui** | **5.19** | **260** | *i* P | **Pn** | **17 38 12.5** | **-2.1** |
| R4DEC | | | | IVmB_BB | | 17 38 38.0 | |
| | comp=Z,28μm,1.0s | | | | | | |
| R4DEC | | | | IAmb | IAmb | 17 38 41.9 | |
| | comp=Z,180nm,0.8s | | | | | | |
| R4DEC | | | | *i* S | **Sn** | **17 39 19.2** | **+4.6** |
| R4DEC | | | | IAML | | 17 39 40.5 | |
| | comp=Z,690nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **5.21** | **270** | *i* P | **Pn** | **17 38 14.2** | **-0.8** |
| LIMN | | | | IAmb | IAmb | 17 38 35.5 | |
| | comp=Z,94nm,0.8s | | | | | | |
| LIMN | | | | IVmB_BB | | 17 39 00.2 | |
| | comp=Z,1μm,1.0s | | | | | | |
| LIMN | | | | IAML | | 17 40 05.4 | |
| | comp=Z,280nm,1.0s | | | | | | |
| **AZU** | **Azuero** | **5.31** | **172** | P | **Pn** | **17 38 15.3** | **-1.1** |
| | comp=Z,36nm,1.2s | | | | | | |
| AZU | | | | S | **Sn** | **17 39 16.1** | **-1.6** |
| | comp=Z,36nm,1.2s | | | | | | |
| **INDI** | **Punta indio, G** | **5.43** | **234** | *i* P | **Pn** | **17 38 17.6** | **-0.4** |
| INDI | | | | IAmb | IAmb | 17 38 19.9 | |
| | comp=Z,72nm,0.8s | | | | | | |
| INDI | | | | IAML | | 17 39 56.4 | |
| | comp=Z,110nm,1.0s | | | | | | |
| **SOMN** | **Somoto** | **5.46** | **274** | *i* P | **Pn** | **17 38 15.6** | **-2.9** |
| SOMN | | | | IVmB_BB | | 17 38 17.6 | |
| | comp=Z,830nm,1.0s | | | | | | |
| SOMN | | | | IAmb | IAmb | 17 38 44.3 | |
| | comp=Z,35nm,0.6s | | | | | | |
| SOMN | | | | IAML | | 17 39 18.5 | |
| | comp=Z,72nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **5.57** | **265** | P | **Pg** | **17 38 40.8** | **-2.9** |
| CNGN | | | | S | **Sb** | **17 39 45.5** | **+4.3** |
| **CACAO** | **El Cacao, Vera** | **5.71** | **178** | P | **Pn** | **17 38 23.8** | **+2.0** |
| | comp=Z,51nm,0.5s | | | | | | |
| CACAO | | | | S | **Sn** | **17 39 28.2** | **+0.8** |
| | comp=Z,51nm,0.5s | | | | | | |
| **YUSH** | **Yuscaran** | **5.73** | **279** | *i* P | **Pn** | **17 38 19.4** | **-2.8** |
| YUSH | | | | *i* S | **Sn** | **17 39 31.7** | **+3.6** |
| **MTDJ** | **Mount Denham** | **6.11** | **33** | P | Pn | 17 38 22.1 | -5.4 |
| | comp=Z,37nm,1.8s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **6.16** | **280** | P | Pn | 17 38 35.2 | +7.1 |
| TGUH | | | | S | **Sb** | **17 40 01.2** | **+3.0** |
| **TGUH** | **Tegucigalpa,Un** | **6.16** | **280** | *i* P | **Pn** | **17 38 27.0** | **-1.1** |
| TGUH | | | | IAmb | IAmb | 17 38 45.4 | |
| | comp=Z,130nm,0.7s | | | | | | |
| TGUH | | | | IVmB_BB | | 17 39 03.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| TGUH | | | | *i* S | **Sn** | **17 39 40.7** | **+2.0** |
| TGUH | | | | IAML | | 17 40 24.3 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **LCBC** | **Los crdobas,** | **6.21** | **132** | P | **Pn** | **17 38 29.7** | **+1.0** |
| | comp=Z,89nm,1.1s | | | | | | |
| LCBC | | | | S | **Sn** | **17 39 42.1** | **+2.3** |
| | comp=Z,89nm,1.1s | | | | | | |
| **COMHN** | **El Horno** | **6.49** | **283** | *i* P | **Pn** | **17 38 31.3** | **-1.5** |
| **SJCC** | **San Jacinto, C** | **6.54** | **118** | P | **Pn** | **17 38 32.4** | **-1.0** |
| | comp=Z,25nm,0.8s | | | | | | |
| SJCC | | | | S | **Sn** | **17 39 47.1** | **-1.1** |
| | comp=Z,25nm,0.8s | | | | | | |
| **APAC** | **Apartado, Choc** | **6.75** | **139** | P | **Pn** | **17 38 40.0** | **+3.8** |
| | comp=Z,19nm,0.6s | | | | | | |
| APAC | | | | S | **Sn** | **17 39 54.4** | **+1.1** |
| | comp=Z,19nm,0.6s | | | | | | |
| **SMRC** | **Santa Marta, M** | **6.92** | **105** | P | **Pn** | **17 38 35.0** | **-3.4** |
| | comp=Z,13nm,0.7s | | | | | | |
| SMRC | | | | S | **Sn** | **17 39 53.2** | **-4.0** |
| | comp=Z,13nm,0.7s | | | | | | |
| **UREC** | **San Jos de Ur** | **7.56** | **134** | P | **Pn** | **17 38 47.8** | **+0.4** |
| | comp=Z,17nm,0.8s,comp=Z,441nm | | | | | | |
| UREC | | | | S | **Sn** | **17 40 11.6** | **-1.7** |
| | comp=Z,17nm,0.8s,comp=Z,441nm | | | | | | |
| **DBBC** | **Dabeiba** | **7.67** | **141** | P | **Pn** | **17 38 50.5** | **+1.7** |
| DBBC | | | | S | **Sn** | **17 40 16.0** | **+0.1** |
| **MTO3** | **Montecristo** | **8.21** | **280** | *i* P | **Pn** | **17 38 54.3** | **-2.1** |
| MTO3 | | | | IAmb | IAmb | 17 38 59.7 | |
| | comp=Z,18nm,0.8s | | | | | | |
| **ZARC** | **Zaragoza, Cauc** | **8.22** | **132** | P | **Pn** | **17 38 57.3** | **+0.9** |
| | comp=Z,25nm,0.5s,comp=Z,446nm | | | | | | |
| ZARC | | | | S | **Sn** | **17 40 28.0** | **-1.5** |
| | comp=Z,25nm,0.5s,comp=Z,446nm | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **8.71** | **145** | P | **Pn** | **17 39 04.4** | **+1.2** |
| | comp=Z,5.9nm,1.1s | | | | | | |
| CBOC | | | | S | **Sn** | **17 40 41.9** | **+0.2** |
| | comp=Z,5.9nm,1.1s | | | | | | |
| **URIC** | **Uribia, Colomb** | **8.93** | **98** | P | **Pn** | **17 39 06.4** | **+0.4** |
| | comp=Z,14nm,1.2s | | | | | | |
| URIC | | | | S | **Sn** | **17 40 42.9** | **-3.8** |
| | comp=Z,14nm,1.2s | | | | | | |
| **OCAC** | **Ocana** | **8.97** | **122** | P | **Pn** | **17 39 09.0** | **+2.2** |
| | comp=Z,35nm,0.6s,comp=Z,7μm | | | | | | |
| OCAC | | | | S | **Sn** | **17 40 44.6** | **-3.4** |
| | comp=Z,35nm,0.6s,comp=Z,7μm | | | | | | |
| **PTBC** | **PUERTO BERRIO,** | **9.17** | **135** | P | **Pn** | **17 39 09.4** | **0.0** |
| | comp=Z,5.0nm,1.1s | | | | | | |
| PTBC | | | | S | **Sn** | **17 40 49.1** | **-3.7** |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **APG** | **El Apazote** | **9.36** | **283** | Pn | **Pn** | **17 39 11.0** | **-1.2** |
| | baz=102,slow=13,SNR=2.6 | | | | | | |
| APG | | | | Lg | Lg | 17 41 45.5 | |
| | baz=356,slow=21,SNR=2.3 | | | | | | |
| | comp=Z,0.7nm,0.8s | | | | | | |
| **NORC** | **Norcasia** | **9.63** | **140** | P | **Pn** | **17 39 17.4** | **+1.7** |
| | comp=Z,3.3nm,0.8s | | | | | | |
| NORC | | | | S | **Sn** | **17 40 58.3** | **-5.8** |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **PAMC** | **Pamplona, Colo** | **9.98** | **124** | P | **Pn** | **17 39 23.1** | **+2.2** |
| PAMC | | | | S | **Sn** | **17 41 12.7** | **-0.7** |
| **BARC** | **Barichara** | **10.06** | **129** | P | **Pn** | **17 39 22.7** | **+0.9** |
| BARC | | | | S | **Sn** | **17 41 14.2** | **-0.8** |
| **RUSC** | **La Rusia** | **10.60** | **132** | P | **Pn** | **17 39 29.0** | **-0.4** |
| **SDV** | **Santo Domingo** | **11.02** | **111** | LR | LR | 17 45 02.6 | |
| | comp=Z,97nm,18.2s,baz=266,slow=44 | | | | | | |
| **CMIG** | **Matias Romero** | **13.96** | **288** | LR | LR | 17 45 23.6 | |
| | comp=Z,144nm,20.1s,baz=119,slow=37 | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.61** | **354** | P | **P** | **17 42 00.5** | **+2.6** |
| | comp=Z,2.4nm,0.8s,baz=180,slow=12,SNR=2.5 | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **26.51** | **311** | P | **P** | **17 42 34.8** | **-0.1** |
| | comp=Z,0.5nm,0.5s,baz=132,slow=9.1,SNR=7.2 | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **MDP** | **Montagnes des** | **29.10** | **103** | LR | LR | 17 56 29.3 | |
| | comp=Z,50nm,18.5s,baz=317,slow=40 | | | | | | |
| **LPAZ** | **La Paz** | **31.85** | **156** | LR | LR | 17 57 45.3 | |
| | comp=Z,55nm,18.4s,baz=244,slow=39 | | | | | | |
| **PDAR** | **Pinedale Array** | **38.51** | **326** | P | **P** | **17 44 20.0** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=137,slow=7.0,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.57** | **314** | P | **P** | **17 44 44.7** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=134,slow=13,SNR=2.0 | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **54.82** | **342** | LR | LR | 18 12 17.4 | |
| | comp=Z,239nm,20.8s,baz=269,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **68.04** | **335** | P | **P** | **17 47 58.1** | **+1.7** |
| | comp=Z,0.4nm,0.6s,baz=111,slow=4.4,SNR=1.9 | | | | | | |
| | comp=Z,0.4nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **71.85** | **52** | P | **P** | **17 48 22.6** | **+2.2** |
| | comp=Z,0.5nm,0.8s,baz=279,slow=7.0,SNR=3.1 | | | | | | |
| | comp=Z,0.5nm,0.8s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **78.80** | **12** | LR | LR | 18 27 51.6 | |
| | comp=Z,54nm,18.9s,baz=2.5,slow=39 | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.50** | **20** | P | **P** | **17 49 26.9** | **+2.2** |
| | comp=Z,3.1nm,1.0s,baz=283,slow=8.1,SNR=3.5 | | | | | | |
| | comp=Z,3.1nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **145.31** | **247** | PKPbc | **PKPbc** | **17 56 35.0** | **-0.7** |
| | comp=Z,1.2nm,0.9s,baz=113,slow=4.0,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **145.47** | **254** | PKPbc | **PKPdf** | **17 56 35.8** | **-0.5** |
| | comp=Z,0.9nm,1.0s,baz=92,slow=3.6,SNR=6.9 | | | | | | |

*IDC **31** 18:21:55.6±1.2, 6.70N×72.96W, h155km±16km, mbtmp4.0/2, Error ellipse: s-maj=163.5km s-min=7.9km az=132.0*
*RSNC **31** 18:21:59.2±0.0, 7°N±1°×7°3W±°, h140km±2km, M4.0, mb4.0, mB4.8, ML3.8, Mw(mB)4.1*

**ISC 31 18:21:56.0±1.1, 6.83N±0.03×73.11W±0.04, h154km±7km, n45, σ1s42/84, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARC** | **Barichara** | **0.24** | **198** | P | **Pn** | **18 22 17.5** | **+0.3** |
| BARC | | | | S | **Sn** | **18 22 32.3** | **-1.1** |
| **BRJC** | **Barrancabermej** | **0.65** | **283** | P | **Pn** | **18 22 19.2** | **+0.6** |
| BRJC | | | | S | **Sn** | **18 22 36.0** | **+0.1** |
| **PAMC** | **Pamplona, Colo** | **0.65** | **38** | P | **Pn** | **18 22 20.4** | **+1.2** |
| PAMC | | | | S | **Sn** | **18 22 37.6** | **+0.6** |
| **RUSC** | **La Rusia** | **0.93** | **178** | P | **Pn** | **18 22 21.5** | **+0.3** |
| RUSC | | | | S | **Sn** | **18 22 40.2** | **-0.2** |
| **TAMC** | **Tame, Arauca** | **1.36** | **106** | P | **Pn** | **18 22 25.9** | **+1.4** |
| TAMC | | | | S | **Sn** | **18 22 47.9** | **+1.5** |
| **PTBC** | **PUERTO BERRIO,** | **1.37** | **258** | P | **Pn** | **18 22 23.8** | **-0.8** |
| PTBC | | | | S | **Sn** | **18 22 45.3** | **-1.1** |
| **OCAC** | **Ocana** | **1.42** | **352** | P | **Pn** | **18 22 25.7** | **+0.5** |
| OCAC | | | | S | **Sn** | **18 22 47.9** | **+0.2** |
| **SPBC** | **San Pablo de B** | **1.51** | **219** | P | **Pn** | **18 22 26.2** | **+0.1** |
| SPBC | | | | S | **Sn** | **18 22 48.8** | **-0.4** |
| **ZARC** | **Zaragoza, Cauc** | **1.86** | **291** | P | **Pn** | **18 22 30.0** | **+0.2** |
| ZARC | | | | S | **Sn** | **18 22 55.5** | **-0.2** |
| **NORC** | **Norcasia** | **2.15** | **234** | P | **Pn** | **18 22 33.4** | **+0.2** |
| NORC | | | | S | **Sn** | **18 23 01.2** | **-0.7** |
| **CHIC** | **Chingaza** | **2.27** | **196** | P | **Pn** | **18 22 35.4** | **+0.4** |
| CHIC | | | | S | **Sn** | **18 23 04.8** | **-0.2** |
| **ROSC** | **El Rosal** | **2.31** | **211** | P | **Pn** | **18 22 36.1** | **+0.7** |
| | 138nm,0.3s,baz=284,slow=19,SNR=58 | | | | | | |
| ROSC | | | | S | **Sn** | **18 23 05.2** | **-0.6** |
| | 418nm,0.3s,baz=194,slow=23,SNR=8.1 | | | | | | |
| **ROSC** | **El Rosal** | **2.31** | **211** | P | **Pn** | **18 22 37.2** | **+1.7** |
| ROSC | | | | S | **Sn** | **18 23 08.0** | **+2.1** |
| **HELC** | **Santa Helena** | **2.49** | **255** | P | **Pn** | **18 22 39.7** | **+2.2** |
| HELC | | | | S | **Sn** | **18 23 08.8** | **-0.7** |
| **UREC** | **San Jos de Ur** | **2.58** | **291** | P | **Pn** | **18 22 37.3** | **-1.0** |
| UREC | | | | S | **Sn** | **18 23 08.6** | **-2.3** |
| **UREC** | **San Jos de Ur** | **2.58** | **291** | *e*P | **Pn** | **18 22 37.2** | **-1.0** |
| UREC | | | | *e*S | **Sn** | **18 23 15.5** | **+4.6** |
| **VILC** | **Villavicencio,** | **2.76** | **192** | P | **Pn** | **18 22 41.0** | **+0.3** |
| VILC | | | | S | **Sn** | **18 23 14.9** | **-0.3** |
| **PTGC** | **Puerto Gaitan,** | **2.78** | **160** | P | **Pn** | **18 22 40.8** | **0.0** |
| PTGC | | | | S | **Sn** | **18 23 13.8** | **-1.8** |
| **CBOC** | **Ciudad Bolivar** | **3.04** | **252** | P | **Pn** | **18 22 46.0** | **+1.8** |
| CBOC | | | | S | **Sn** | **18 23 21.8** | **+0.3** |
| **DBBC** | **Dabeiba** | **3.08** | **274** | P | **Pn** | **18 22 44.9** | **+0.2** |
| DBBC | | | | S | **Sn** | **18 23 19.6** | **-2.8** |
| **SDV** | **Santo Domingo** | **3.19** | **50** | P | **Pn** | **18 22 45.5** | **-0.6** |
| | 14nm,0.3s,baz=226,slow=13,SNR=4.7 | | | | | | |
| SDV | | | | S | **Sn** | **18 23 24.5** | **-0.5** |
| | 51nm,0.5s,baz=62,slow=23,SNR=25 | | | | | | |
| **SDV** | **Santo Domingo** | **3.19** | **50** | P | **Pn** | **18 22 48.6** | **+2.5** |
| SDV | | | | S | **Sn** | **18 23 25.2** | **+0.2** |
| **ARGC** | **Ariguani, Magd** | **3.22** | **340** | P | **Pn** | **18 22 47.1** | **+0.8** |
| ARGC | | | | S | **Sn** | **18 23 28.1** | **+2.8** |
| **PRAC** | **Prado** | **3.56** | **210** | P | **Pn** | **18 22 51.4** | **+0.6** |
| PRAC | | | | S | **Sn** | **18 23 33.0** | **-0.3** |
| **ORTC** | **Ortega, Tolima** | **3.60** | **216** | P | **Pn** | **18 22 51.8** | **+0.6** |
| ORTC | | | | S | **Sn** | **18 23 34.7** | **+0.6** |
| **APAC** | **Apartado, Choc** | **3.60** | **287** | P | **Pn** | **18 22 51.2** | **0.0** |
| APAC | | | | S | **Sn** | **18 23 33.2** | **-0.9** |
| **SJCC** | **San Jacinto, C** | **3.67** | **326** | P | **Pn** | **18 22 51.0** | **-1.2** |
| SJCC | | | | S | **Sn** | **18 23 34.4** | **-1.5** |
| **PLMC** | **San Jos del P** | **3.69** | **239** | P | **Pn** | **18 22 53.3** | **+0.9** |
| PLMC | | | | S | **Sn** | **18 23 36.5** | **+0.3** |
| **URMC** | **La Uribe, Meta** | **3.77** | **200** | P | **Pn** | **18 22 54.7** | **+1.2** |
| URMC | | | | S | **Sn** | **18 23 37.6** | **-0.7** |
| **LCBC** | **Los crdobas,** | **3.81** | **302** | P | **Pn** | **18 22 53.7** | **-0.2** |
| LCBC | | | | S | **Sn** | **18 23 40.7** | **+1.8** |
| **CRJC** | **Cerrejon, Guaj** | **4.17** | **3** | P | **Pn** | **18 22 58.0** | **-0.7** |
| CRJC | | | | S | **Sn** | **18 23 45.5** | **-2.1** |
| **GUVC** | **San Jose del G** | **4.28** | **174** | P | **Pn** | **18 23 00.7** | **+0.6** |
| GUVC | | | | S | **Sn** | **18 23 48.9** | **-1.1** |
| **YOTC** | **Yotoco, Valle** | **4.29** | **229** | P | **Pn** | **18 23 01.6** | **+1.4** |
| **SMRC** | **Santa Marta, M** | **4.45** | **346** | P | **Pn** | **18 23 02.7** | **+0.5** |
| SMRC | | | | S | **Sn** | **18 23 50.8** | **-3.1** |
| **PIZC** | **Pizarro, Choco** | **4.62** | **247** | P | **Pn** | **18 23 06.7** | **+2.3** |
| PIZC | | | | S | **Sn** | **18 23 59.8** | **+2.0** |
| **MACC** | **Macarena, Meta** | **4.71** | **189** | P | **Pn** | **18 23 04.8** | **-0.9** |
| MACC | | | | S | **Sn** | **18 23 56.0** | **-4.1** |
| **URIC** | **Uribia, Colomb** | **4.97** | **13** | P | **Pn** | **18 23 08.3** | **-0.8** |
| URIC | | | | S | **Sn** | **18 24 05.2** | **-0.9** |
| **JAMC** | **Jamundi, Valle** | **5.05** | **225** | P | **Pn** | **18 23 10.8** | **+0.5** |
| **MALC** | **Bahia Malaga** | **5.05** | **237** | P | **Pn** | **18 23 12.4** | **+2.2** |
| **GARC** | **Garzon, Huila** | **5.19** | **207** | P | **Pn** | **18 23 12.0** | **-0.2** |
| GARC | | | | S | **Sn** | **18 24 09.9** | **-1.8** |
| **POPC** | **Popayan, Colom** | **5.55** | **220** | P | **Pn** | **18 23 18.0** | **+1.0** |
| | 8.6nm,0.7s | | | | | | |
| POPC | | | | S | **Sn** | **18 24 22.6** | **+2.3** |
| | 8.6nm,0.7s | | | | | | |
| **FLOC** | **Florencia** | **5.79** | **206** | P | **Pn** | **18 23 20.8** | **+0.7** |
| | 13nm,1.0s | | | | | | |
| **BBAC** | **Balboa, Cauca** | **6.31** | **221** | P | **Pn** | **18 23 28.7** | **+1.6** |
| | 8.5nm,0.4s | | | | | | |
| BBAC | | | | S | **Sn** | **18 24 38.2** | **-0.2** |
| | 8.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **149.12** | **234** | PKPbc | **PKPbc** | **18 41 26.2** | **-0.7** |
| | 0.4nm,0.8s,baz=116,slow=3.4,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.35** | **241** | PKPbc | **PKPbc** | **18 41 29.3** | **-0.7** |
| | 0.3nm,0.5s,baz=108,slow=2.7,SNR=12 | | | | | | |

*IDC **31** 18:22:36.4±1.5, 13.01N×80.98W, h0km, mb3.7/4, mbtmp3.7/6, ML2.3/1, MS3.2/8, Error ellipse: s-maj=34.5km s-min=27.5km az=146.0*
*CATAC **31** 18:22:38.0±0.5, 13.15N×80.91W, h39km±24km, MB5.1, mb4.9, ML4.9*
*RSNC **31** 18:22:38.0±0.0, 13°N±8°×8°1W±°, h5km±10km, M3.7, mb4.9, mB5.1, ML3.7, Mw(mB)4.4*
*UCR **31** 18:22:39.3±1.0, 13.05N×81.00W, h34km±49km, MW4.4*

**ISC 31 18:22:37.4±0.6, 13.10N±0.04×81.13W±0.04, h10km, n83, σ2s10/115, mb3.6/4, MS3.3/4, Caribbean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRVC** | **Isla de Provid** | **0.35** | **321** | P | **Pg** | **18 22 44.4** | **0.0** |
| PRVC | | | | S | **Sg** | **18 22 48.7** | **-0.4** |
| **BLUN** | **Bluefields** | **2.80** | **247** | *i* P | **Pn** | **18 23 21.5** | **-0.7** |
| BLUN | | | | IAML | | 18 24 11.9 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **3.22** | **254** | *i* P | **Pn** | **18 23 28.2** | **+0.2** |
| ESPN | | | | *i* S | **Sn** | **18 24 07.4** | **+0.9** |
| ESPN | | | | IAML | | 18 24 30.1 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **ESPN** | **Las Esperanzas** | **3.22** | **254** | *e*P | **Pn** | **18 23 28.8** | **+0.8** |
| **RGM0** | **Gandoca** | **3.78** | **203** | *i* P | **Pn** | **18 23 35.4** | **-0.3** |
| RGM0 | | | | *i* S | **Sn** | **18 24 20.2** | **0.0** |
| RGM0 | | | | IAML | | 18 24 39.9 | |
| | comp=Z,830nm,1.0s | | | | | | |
| **COVE** | **Coope Vega, Sa** | **3.98** | **234** | *i* P | **Pn** | **18 23 39.1** | **+0.6** |
| COVE | | | | *i* S | **Sn** | **18 24 28.1** | **+2.9** |
| COVE | | | | IAML | | 18 25 08.3 | |
| | comp=Z,970nm,1.0s | | | | | | |
| **VTCV** | **VTCV, Calle Va** | **4.01** | **220** | *e*P | **Pn** | **18 23 39.8** | **+0.8** |
| **RAFA** | **San Farael, Vo** | **4.08** | **220** | *i* P | **Pn** | **18 23 40.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OCHAL | | | | IAML | | 18 26 03.3 | |
| | comp=Z,370nm,1.0s | | | | | | |
| **JAPN** | **Al SSO del Vol** | **4.71 251** | *i* P | **Pn** | | **18 23 50.8** | **+2.3** |
| JAPN | | | | IAML | | 18 24 16.6 | |
| | comp=Z,240nm,1.0s | | | | | | |
| **CDITO** | **Canoas** | **4.81 201** | *i* P | **Pn** | | **18 23 50.9** | **+0.9** |
| CDITO | | | *i* S | **Sn** | | **18 24 47.4** | **+1.6** |
| CDITO | | | | IAML | | 18 24 56.2 | |
| | comp=Z,470nm,1.0s | | | | | | |
| **ARIN** | **Rivas** | **4.88 251** | *i* P | **Pn** | | **18 23 52.0** | **+1.2** |
| ARIN | | | | IAML | | 18 24 33.0 | |
| | comp=Z,5µm,1.0s | | | | | | |
| **PTJ1** | **Puerto Jimnez** | **5.01 205** | *i* S | **Sn** | | **18 24 51.6** | **+0.9** |
| **LIMN** | **Finca el Limon** | **5.10 270** | *i* P | **Pn** | | **18 23 54.8** | **+0.8** |
| LIMN | | | | IVmB_BB | | 18 24 19.4 | |
| | comp=Z,2µm,1.0s | | | | | | |
| LIMN | | | | IAmb | IAmb | 18 24 19.9 | |
| | comp=Z,150nm,0.7s | | | | | | |
| LIMN | | | | IAML | | 18 25 34.1 | |
| | comp=Z,380nm,1.0s | | | | | | |
| **UNAN** | **Cigeo UNAN** | **5.11 259** | *i* S | **Sn** | | **18 24 56.9** | **+3.7** |
| **SAPS** | **Ciudad Sandino** | **5.23 260** | *i* P | **Pn** | | **18 23 57.1** | **+1.4** |
| SAPS | | | | IVmB_BB | | 18 24 05.8 | |
| | comp=Z,6µm,1.0s | | | | | | |
| SAPS | | | | IAmb | IAmb | 18 24 24.2 | |
| | comp=Z,140nm,0.6s | | | | | | |
| SAPS | | | *i* S | **Sn** | | **18 24 59.0** | **+2.9** |
| SAPS | | | | IAML | | 18 25 45.8 | |
| | comp=Z,340nm,1.0s | | | | | | |
| **AMTN** | **Mateare** | **5.24 261** | *i* P | **Pn** | | **18 23 56.7** | **+0.9** |
| AMTN | | | | IAML | | 18 24 56.8 | |
| | comp=Z,7µm,1.0s | | | | | | |
| AMTN | | | *i* S | **Sn** | | **18 24 59.1** | **+2.7** |
| **MOM2** | **El Cardon** | **5.26 263** | *i* S | **Sn** | | **18 24 59.9** | **+3.0** |
| **AZU** | **Azuero** | **5.34 171** | P | **Pn** | | **18 23 57.2** | **0.0** |
| AZU | | | S | **Sn** | | **18 24 58.0** | **-0.9** |
| **AZU** | **Azuero** | **5.34 171** | P | **Pn** | | **18 23 57.2** | **0.0** |
| | comp=Z,29nm,0.6s | | | | | | |
| AZU | | | S | **Sn** | | **18 24 58.4** | **-0.5** |
| | comp=Z,29nm,0.6s | | | | | | |
| **AZU** | **Azuero** | **5.34 171** | *e*S | **Sn** | | **18 24 59.6** | **+0.7** |
| **AZU** | **Azuero** | **5.34 171** | *e*P | **Pb** | | **18 24 14.7** | **+3.8** |
| **SOMN** | **Somoto** | **5.35 274** | *i* P | **Pn** | | **18 23 57.0** | **-0.4** |
| SOMN | | | | IVmB_BB | | 18 24 02.8 | |
| | comp=Z,990nm,1.0s | | | | | | |
| SOMN | | | | IAML | | 18 24 02.9 | |
| | comp=Z,110nm,1.0s | | | | | | |
| SOMN | | | | IAmb | IAmb | 18 24 03.0 | |
| | comp=Z,56nm,0.4s | | | | | | |
| **INDI** | **Punta indio, G** | **5.35 234** | *i* P | **Pn** | | **18 23 58.7** | **+1.3** |
| INDI | | | | IAmb | IAmb | 18 24 01.7 | |
| | comp=Z,84nm,0.7s | | | | | | |
| INDI | | | | IVmB_BB | | 18 24 29.4 | |
| | comp=Z,1µm,1.0s | | | | | | |
| INDI | | | *i* S | **Sn** | | **18 25 01.1** | **+1.9** |
| INDI | | | | IAML | | 18 25 49.2 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **LEVN** | **Ruinas Leon Vi** | **5.39 263** | *i* P | **Pn** | | **18 23 59.8** | **+1.9** |
| LEVN | | | | IAmb | IAmb | 18 24 29.2 | |
| | comp=Z,190nm,0.8s | | | | | | |
| LEVN | | | | IAML | | 18 25 37.7 | |
| | comp=Z,370nm,1.0s | | | | | | |
| **CNGN** | **Cerro Negro** | **5.46 264** | P | **Pb** | | **18 24 08.6** | **-4.3** |
| CNGN | | | S | **Sg** | | **18 25 26.6** | **-6.3** |
| **CNGN** | **Cerro Negro** | **5.46 264** | *i* P | **Pn** | | **18 24 00.2** | **+1.3** |
| CNGN | | | | IAmb | IAmb | 18 24 24.0 | |
| | comp=Z,86nm,0.8s | | | | | | |
| CNGN | | | | IVmB_BB | | 18 24 34.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| CNGN | | | *i* S | **Sn** | | **18 25 04.8** | **+2.9** |
| CNGN | | | | IAML | | 18 25 40.4 | |
| | comp=Z,330nm,1.0s | | | | | | |
| **YUSH** | **Yuscaran** | **5.62 279** | *i* P | **Pn** | | **18 24 01.8** | **+0.7** |
| YUSH | | | *i* S | **Sn** | | **18 25 08.7** | **+2.9** |
| **CACAO** | **El Cacao, Vera** | **5.73 177** | P | **Pn** | | **18 24 04.8** | **+2.3** |
| | comp=Z,71nm,0.8s,comp=Z,1µm | | | | | | |
| CACAO | | | S | **Sn** | | **18 25 10.4** | **+2.1** |
| | comp=Z,71nm,0.8s,comp=Z,1µm | | | | | | |
| **CAPC** | **Capurgana** | **5.79 140** | P | Pn | | 18 23 53.5 | -10 |
| CAPC | | | S | **Sn** | | **18 25 05.6** | **-4.2** |
| **TGUH** | **Tegucigalpa,Un** | **6.05 280** | P | **Pn** | | **18 24 08.0** | **+1.0** |
| | comp=Z,176nm,0.8s,comp=Z,2µm | | | | | | |
| TGUH | | | S | **Sn** | | **18 25 14.0** | **-2.4** |
| | comp=Z,176nm,0.8s,comp=Z,2µm | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **6.05 280** | *i* P | **Pn** | | **18 24 07.2** | **+0.2** |
| TGUH | | | | IVmB_BB | | 18 24 30.7 | |
| | comp=Z,2µm,1.0s | | | | | | |
| TGUH | | | | IAmb | IAmb | 18 24 31.1 | |
| | comp=Z,180nm,0.8s | | | | | | |
| TGUH | | | *i* S | **Sn** | | **18 25 19.4** | **+3.0** |
| TGUH | | | | IAML | | 18 26 05.9 | |
| | comp=Z,410nm,1.0s | | | | | | |
| **MTDJ** | **Mount Denham** | **6.16 34** | P | **Pn** | | **18 24 09.4** | **+0.8** |
| MTDJ | | | S | **Sn** | | **18 25 21.8** | **+2.6** |
| **LCBC** | **Los crdobas,** | **6.30 132** | P | **Pn** | | **18 24 13.0** | **+2.6** |
| **COMHN** | **El Horno** | **6.38 283** | *i* P | **Pn** | | **18 24 11.1** | **-0.6** |
| COMHN | | | *i* S | **Sn** | | **18 25 26.4** | **+1.6** |
| **SJCC** | **San Jacinto, C** | **6.65 118** | P | **Pn** | | **18 24 15.9** | **+0.7** |
| | comp=Z,43nm,0.7s | | | | | | |
| SJCC | | | S | **Sn** | | **18 25 27.5** | **-3.6** |
| | comp=Z,43nm,0.7s | | | | | | |
| **APAC** | **Apartado, Choc** | **6.84 139** | P | **Pn** | | **18 24 18.6** | **+0.8** |
| APAC | | | S | **Sn** | | **18 25 36.8** | **+1.1** |
| **CNRM** | **Centro Naciona** | **6.86 274** | *i* P | **Pn** | | **18 24 18.8** | **+0.7** |
| CNRM | | | | IAML | | 18 26 11.7 | |
| | comp=Z,3µm,1.0s | | | | | | |
| **SMRC** | **Santa Marta, M** | **7.03 105** | P | **Pn** | | **18 24 17.9** | **-2.5** |
| SMRC | | | S | **Sn** | | **18 25 34.3** | **-6.1** |
| **MTO3** | **Montecristo** | **8.10 280** | *i* P | **Pn** | | **18 24 35.7** | **+0.4** |
| MTO3 | | | | IAmb | IAmb | 18 24 41.7 | |
| | comp=Z,20nm,0.7s | | | | | | |
| **CRJC** | **Cerrejon, Guaj** | **8.33 103** | P | Pn | | 18 24 46.0 | +7.6 |
| CRJC | | | S | **Sn** | | **18 26 07.7** | **-5.0** |
| **NUBE** | **Las Nubes** | **8.45 276** | *i* P | **Pn** | | **18 24 40.5** | **+0.4** |
| NUBE | | | | IAmb | IAmb | 18 24 54.3 | |
| | comp=Z,31nm,1.7s | | | | | | |
| NUBE | | | | IVmB_BB | | 18 24 59.9 | |
| | comp=Z,8µm,1.0s | | | | | | |
| **CBOC** | **Ciudad Bolivar** | **8.79 144** | P | Pn | | 18 24 52.4 | +7.7 |
| CBOC | | | S | **Sn** | | **18 26 21.1** | **-2.9** |
| **APG** | **El Apazote** | **9.25 283** | Pn | **Pn** | | **18 24 53.4** | **+2.3** |
| | baz=62,slow=9.0,SNR=5.5 | | | | | | |
| APG | | | Lg | Lg | | 18 27 23.1 | |
| | baz=18,slow=21,SNR=1.5 comp=Z,0.8nm,0.8s | | | | | | |
| **ROSC** | **El Rosal** | **10.61 140** | LR | LR | | 18 29 30.5 | |
| | comp=Z,197nm,20.9s,baz=252,slow=40 | | | | | | |
| **SDV** | **Santo Domingo** | **11.12 111** | Sn | **Sn** | | **18 27 18.0** | **-3.5** |
| | comp=Z,4.0nm,0.3s,baz=179,slow=22,SNR=2.6 | | | | | | |
| SDV | | | LR | LR | | 18 30 10.1 | |
| | comp=Z,84nm,19.7s,baz=287,slow=41 | | | | | | |
| **CMIG** | **Matias Romero** | **13.86 288** | LR | LR | | 18 31 06.4 | |
| | comp=Z,135nm,19.4s,baz=103,slow=36 | | | | | | |
| **ATAH** | **Atahualpa** | **20.29 172** | LR | LR | | 18 35 54.9 | |
| | comp=Z,43nm,20.4s,baz=353,slow=40 | | | | | | |
| **TXAR** | **Lajitas Array** | **26.42 311** | P | **P** | | **18 28 16.6** | **+2.1** |
| | comp=Z,1.6nm,0.8s,baz=129,slow=9.8,SNR=10 comp=Z,1.6nm,0.8s | | | | | | |
| **LPIG** | **La Paz** | **29.67 296** | LR | LR | | 18 41 12.3 | |
| | comp=Z,82nm,18.9s,baz=86,slow=37 | | | | | | |
| **ANMO** | **Albuquerque** | **31.58 318** | LR | LR | | 18 43 37.0 | |
| | comp=Z,47nm,19.4s,baz=167,slow=40 | | | | | | |
| **PDAR** | **Pinedale Array** | **38.43 326** | P | **P** | | **18 30 01.4** | **+1.8** |
| | comp=Z,0.5nm,0.4s,baz=134,slow=12,SNR=7.0 comp=Z,0.5nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.48 314** | P | **P** | | **18 30 26.6** | **+1.7** |
| | comp=Z,0.4nm,0.6s,baz=120,slow=8.7,SNR=3.1 | | | | | | |
| NVAR | | | LR | LR | | 18 50 14.4 | |
| | comp=Z,58nm,19.6s,baz=98,slow=40 comp=Z,0.4nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **71.93 52** | P | **P** | | **18 34 01.1** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=294,slow=6.8,SNR=2.7 comp=Z,0.5nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **145.22 247** | PKPbc | **PKPbc** | | **18 42 15.8** | **-0.1** |
| | comp=Z,0.6nm,0.6s,baz=116,slow=3.7,SNR=9.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **145.37 254** | PKPbc | **PKPab** | | **18 42 17.4** | **+0.9** |
| | comp=Z,1.0nm,0.8s,baz=94,slow=3.3,SNR=8.9 | | | | | | |

*NEIC **31** 18:29:04.6±1.3, 1.°92N±0.°08×127.°54E±0.°08, h120km±5km, mb4.4/41, Error ellipse: s-maj=13.2km s-min=9.7km az=51.0*
*DJA **31** 18:29:05.9±0.4, 2.°N±3.°×12.°7E±.°, h91km±6km, M4.2/13, mB4.7/2, mb4.2/7, MLv4.1/13, Mw(mB)3.9/2*
*IDC **31** 18:29:10.7±3.6, 1.°85N×127.°61E, h185km±35km, mb3.7/12,*

*mbtmp4.2/12, Error ellipse: s-maj=32.4km s-min=9.7km az=72.0*

**ISC 31 18:29:03.2**±0.4, **1.°87N**±0.°04×**127.°57E**±0.°06, **h112**km, **n91**, σ1**s32**/96, **mb4.4**/32, **Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.11 190** | | P | **Pn** | **18 29 28.4** | **+2.6** |
| **TNTI** | **Ternate** | **1.11 190** | | Pn | **Pn** | **18 29 28.2** | **+2.4** |
| TNTI | | | | Sn | **Sn** | **18 29 45.4** | **+2.5** |
| **TNTI** | **Ternate** | **1.11 190** | | P | **Pn** | **18 29 28.4** | **+2.6** |
| **KMSI** | **Cibinong** | **3.81 250** | | P | **Pn** | **18 30 00.7** | **+0.6** |
| KMSI | | | | S | **Sn** | **18 30 43.7** | **-0.4** |
| **SANI** | **Sanana** | **4.21 202** | | P | **Pn** | **18 30 05.6** | **+0.2** |
| **SANI** | **Sanana** | **4.21 202** | | P | **Pn** | **18 30 05.6** | **+0.2** |
| SANI | | | | S | **Sn** | **18 30 49.6** | **-4.0** |
| **SWI** | **Sorong** | **4.59 126** | | P | Pn | 18 30 15.4 | +4.9 |
| **GTOI** | **Gorontalo** | **4.72 255** | | P | **Pn** | **18 30 13.5** | **+1.2** |
| **NLAI** | **Namlea** | **5.10 185** | | P | **Pn** | **18 30 19.4** | **+1.9** |
| NLAI | | | | S | **Sn** | **18 31 15.0** | **-0.3** |
| **DAV** | **Davao City (W)** | **5.53 339** | | S | **Sn** | **18 31 27.3** | **+1.7** |
| | 100nm,0.3s,baz=31,slow=5.5,SNR=1.5 | | | | | | |
| **LUWI** | **Luwuk** | **5.60 239** | | P | **Pn** | **18 30 25.2** | **+1.0** |
| **LUWI** | **Luwuk** | **5.60 239** | | Pn | **Pn** | **18 30 24.9** | **+0.7** |
| LUWI | | | | | **Sn** | **18 31 26.6** | **-0.7** |
| **LUWI** | **Luwuk** | **5.60 239** | | P | **Pn** | **18 30 26.2** | **+2.0** |
| | 22nm,0.6s,771nm0.6nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.68 135** | | Pn | **Pn** | **18 30 40.9** | **+2.0** |
| **FAKI** | **Fak Fak** | **6.68 135** | | P | Pn | 18 30 44.1 | +5.3 |
| | 18nm,1.0s,0.1nm | | | | | | |
| **TOLI2** | **Tolitoli** | **6.82 264** | | P | **Pn** | **18 30 40.9** | **+0.1** |
| **TOLI2** | **Tolitoli** | **6.82 264** | | Pn | **Pn** | **18 30 40.7** | **-0.1** |
| **MYLDM** | **Lahad Datu** | **9.62 290** | | Pn | **Pn** | **18 31 20.7** | **+1.9** |
| **BKSI** | **Bulukumba** | **10.31 226** | | P | **Pn** | **18 31 30.0** | **+1.8** |
| **KAPI** | **Kappang** | **10.38 229** | | Pn | **Pn** | **18 31 30.9** | **+1.8** |
| **KKM** | **Kota Kinabalu** | **12.06 290** | | Pn | **Pn** | **18 31 49.4** | **-2.1** |
| **DRS** | **Darwin Rock St** | **14.59 167** | | P | **P** | **18 32 27.0** | **-0.7** |
| **MTN** | **Manton Dam** | **15.04 166** | | P | **P** | **18 32 30.9** | **-1.8** |
| **MTN** | **Manton Dam** | **15.04 166** | | P | **Pn** | **18 32 30.4** | **+0.3** |
| MTN | | | | IAmb | IAmb | 18 32 37.7 | |
| | comp=Z,18nm,1.4s | | | | | | |
| **KDU** | **Kakadu** | **15.27 162** | | P | **P** | **18 32 35.8** | **+0.7** |
| **SBUM** | **Sibu** | **15.35 272** | | | **Pn** | **18 32 34.7** | **+0.8** |
| **KNRA** | **Kununurra** | **17.48 176** | | P | **Pn** | **18 33 00.4** | **+0.3** |
| KNRA | | | | IAmb | IAmb | 18 33 09.3 | |
| | comp=Z,15nm,1.4s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.94 185** | | P | **P** | **18 33 27.2** | **+0.8** |
| **FITZ** | **Fitzroy Crossi** | **19.94 185** | | P | **P** | **18 33 26.7** | **+0.3** |
| **YULB** | **Yu-li** | **22.24 345** | | P | **P** | **18 33 52.3** | **+1.3** |
| **YULB** | **Yu-li** | **22.24 345** | | P | **P** | **18 33 48.9** | **-2.1** |
| **TPUB** | **Ta-pu** | **22.34 343** | | P | **P** | **18 33 50.2** | **-1.7** |
| TPUB | | | | IAmb | IAmb | 18 33 54.1 | |
| | comp=Z,15nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **22.51 120** | | P | **P** | **18 33 53.1** | **-0.7** |
| PMG | | | | IAmb | IAmb | 18 34 03.1 | |
| | comp=Z,18nm,0.9s | | | | | | |
| **WB0** | **Warramunga Arr** | **22.53 163** | | P | **P** | **18 33 54.4** | **+0.5** |
| **WRAB** | **Tennant Creek** | **22.67 163** | | P | **P** | **18 33 55.6** | **+0.2** |
| WRAB | | | | IAmb | IAmb | 18 33 56.6 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.68 163** | | P | **P** | **18 33 54.8** | **-0.6** |
| **WRA** | **Warramunga Arr** | **22.68 163** | | P | **P** | **18 33 55.9** | **+0.5** |
| | comp=Z,12nm,0.6s,baz=344,slow=11,SNR=178 | | | | | | |
| WRA | | | | S | **S** | **18 37 49.8** | **-5.7** |
| | comp=Z,0.3nm,0.7s,baz=345,slow=18,SNR=2.1 comp=Z,12nm,0.6s | | | | | | |
| **WB2** | **Warramunga Arr** | **22.68 163** | | P | **P** | **18 33 55.9** | **+0.4** |
| WB2 | | | | IAmb | IAmb | 18 33 56.7 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **22.71 344** | | P | **P** | **18 33 55.3** | **-0.4** |
| SSLB | | | | IAmb | IAmb | 18 33 57.2 | |
| | comp=Z,18nm,1.3s | | | | | | |
| **WR0** | **Warramunga Arr** | **22.75 163** | | P | **P** | **18 33 56.9** | **+0.7** |
| WR0 | | | | IAmb | IAmb | 18 33 57.4 | |
| | comp=Z,13nm,0.6s | | | | | | |
| **YOJ** | **Yonaguni jima** | **22.88 349** | | P | **P** | **18 33 58.6** | **+1.2** |
| **YOJ** | **Yonaguni jima** | **22.88 349** | | P | **P** | **18 33 58.2** | **+0.8** |
| YOJ | | | | IAmb | IAmb | 18 33 59.9 | |
| | comp=Z,13nm,0.7s | | | | | | |
| **YHNB** | **Yeheng** | **23.44 346** | | P | **P** | **18 34 03.4** | **+0.7** |
| YHNB | | | | IAmb | IAmb | 18 34 11.6 | |
| | comp=Z,15nm,1.2s | | | | | | |
| **QIS** | **Mount Isa** | **25.22 153** | | P | **P** | **18 34 21.4** | **+2.5** |
| **UBPT** | **Khong Chiam** | **25.54 303** | | P | **P** | **18 34 21.6** | **-0.2** |
| UBPT | | | | IAmb | IAmb | 18 34 23.5 | |
| | comp=Z,4.9nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **26.12 167** | | P | **P** | **18 34 27.6** | **+0.6** |
| **ASAR** | **Alice Springs** | **26.13 167** | | P | **P** | **18 34 27.1** | **+0.1** |
| **ASAR** | **Alice Springs** | **26.13 167** | | P | **P** | **18 34 27.7** | **+0.7** |
| | comp=Z,3.1nm,0.5s,baz=345,slow=7.1,SNR=132 comp=Z,3.1nm,0.5s | | | | | | |
| **AS01** | **Alice Springs** | **26.14 167** | | P | **P** | **18 34 27.7** | **+0.6** |
| **WRKA** | **Warakurna** | **26.76 179** | | P | **P** | **18 34 34.0** | **+1.3** |
| **MEEK** | **Meekatharra** | **29.63 196** | | P | **P** | **18 34 59.0** | **+0.8** |
| **OOD** | **Oodnadatta** | **30.52 166** | | P | **P** | **18 35 06.6** | **+0.7** |
| **PHRA** | **Phrae** | **31.48 303** | | P | **P** | **18 35 14.7** | **+0.1** |
| **FORT** | **Forrest** | **32.48 179** | | P | **P** | **18 35 22.2** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **32.54 302** | | P | **P** | **18 35 23.3** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=110,slow=5.2,SNR=1.5 comp=Z,0.4nm,0.4s | | | | | | |
| **MORW** | **Morawa** | **32.69 199** | | P | **P** | **18 35 24.6** | **-0.4** |
| **ENH** | **Enshi** | **33.04 331** | | P | **P** | **18 35 28.2** | **+0.1** |
| ENH | | | | IAmb | IAmb | 18 35 30.2 | |
| | comp=Z,8.7nm,1.1s | | | | | | |
| **PZH** | **PanZhiHua** | **34.85 317** | | P | **P** | **18 35 45.5** | **+1.5** |
| PZH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| PZH | | | | pmax | pmax | | |
| | comp=Z,100nm,4.7s | | | | | | |
| **KSRS** | **Korea Array** | **35.41 0** | | P | **P** | **18 35 48.5** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=171,slow=8.5,SNR=4.2 comp=Z,1.1nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **35.42 168** | | P | **P** | **18 35 49.0** | **+0.4** |
| **MAJO** | **Matsushiro** | **35.87 15** | | P | **P** | **18 35 51.6** | **-0.8** |
| MAJO | | | | IAmb | IAmb | 18 36 35.0 | |
| | comp=Z,8.4nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.87 15** | | P | **P** | **18 35 52.1** | **-0.4** |
| | comp=Z,1.6nm,0.6s,baz=194,slow=8.2,SNR=7.0 comp=Z,1.6nm,0.6s | | | | | | |
| **MJB9** | **Matsu-Tunnel** | **35.88 15** | | P | **P** | **18 35 51.6** | **-0.9** |
| MJB9 | | | | IAmb | IAmb | 18 36 34.9 | |
| | comp=Z,8.5nm,1.1s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **35.97 195** | | P | **P** | **18 35 53.7** | **+0.5** |
| **STKA** | **Stephens Creek** | **36.11 160** | | P | **P** | **18 35 55.6** | **+1.1** |
| **STKA** | **Stephens Creek** | **36.11 160** | | P | **P** | **18 35 54.9** | **+0.4** |
| | comp=Z,3.8nm,0.7s,baz=330,slow=20,SNR=7.9 comp=Z,3.8nm,0.7s | | | | | | |
| **JSD** | **Sado** | **37.30 14** | | P | **P** | **18 36 02.9** | **-1.6** |
| **HHC** | **Hu-ho-hao-te** | **41.41 342** | *e*P | | **P** | **18 36 40.3** | **+1.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,79nm,5.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **42.33 5** | | P | **P** | **18 36 46.8** | **+0.8** |
| | comp=Z,2.8nm,0.8s,baz=187,slow=7.3,SNR=4.7 comp=Z,2.8nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **49.13 342** | | P | **P** | **18 37 39.6** | **-0.1** |
| ULN | | | | IAmb | IAmb | 18 37 41.9 | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **49.31 341** | | P | **P** | **18 37 41.0** | **0.0** |
| **SONM** | **Songino Array** | **49.31 341** | | P | **P** | **18 37 41.5** | **+0.5** |
| | comp=Z,1.0nm,0.6s,baz=157,slow=11,SNR=5.0 | | | | | | |
| SONM | | | | PcP | **PcP** | **18 39 02.2** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=155,slow=4.8,SNR=2.1 comp=Z,1.0nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **59.55 326** | | P | **P** | **18 38 55.8** | **+0.8** |
| MK31 | | | | IAmb | IAmb | 18 38 56.3 | |
| | comp=Z,2.7nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.55 326** | | P | **P** | **18 38 55.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **59.55 326** | | P | **P** | **18 38 55.4** | **+0.3** |
| | comp=Z,4.8nm,0.7s,baz=116,slow=8.0,SNR=42 comp=Z,4.8nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **59.73 325** | | P | **P** | **18 38 56.8** | **+0.5** |
| MAKZ | | | | IAmb | IAmb | 18 38 58.0 | |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **KSH** | **Kashi** | **59.94 316** | | P | **P** | **18 39 00.3** | **+2.3** |
| **YAK** | **Yakutsk** | **60.03 1** | | P | **P** | **18 38 57.5** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **62.61 333** | | P | **P** | **18 39 14.8** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=90,slow=7.2,SNR=2.0 comp=Z,0.2nm,0.3s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.74 328** | | P | **P** | **18 39 23.0** | **-0.1** |
| | comp=Z,4.1nm,0.8s,baz=127,slow=6.0,SNR=37 comp=Z,4.1nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **63.74 328** | | P | **P** | **18 39 22.8** | **-0.2** |
| KURK | | | | IAmb | IAmb | 18 39 24.4 | |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **GAR** | **Garm** | **63.79 313** | | P | **P** | **18 39 22.9** | **-0.9** |
| GAR | | | | IAmb | IAmb | 18 39 28.7 | |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **NIUE** | **Niue** | **64.80 112** | | P | **P** | **18 39 29.8** | **-0.7** |
| **KK31** | **Karatay Array** | **65.15 317** | | P | **P** | **18 39 32.8** | **+0.3** |
| KK31 | | | | IAmb | IAmb | 18 39 35.8 | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **65.15 317** | | P | **P** | **18 39 32.1** | **-0.3** |
| **KKAR** | **Karatay Array** | **65.15 317** | | P | **P** | **18 39 32.3** | **-0.2** |
| **GSTR** | **Great Sitkin T** | **68.47 34** | | P | **P** | **18 39 52.8** | **-0.5** |
| **BVAR** | **Borovoye Array** | **69.32 327** | | P | **P** | **18 39 58.1** | **-0.4** |
| | comp=Z,1.9nm,0.8s,baz=123,slow=5.3,SNR=7.8 comp=Z,1.9nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **69.39 327** | | P | **P** | **18 39 58.7** | **-0.2** |
| **ABKAR** | **Akbulak array** | **74.11 321** | | P | **P** | **18 40 26.6** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **124.28 287** | | PKP | **PKiKP** | **18 47 49.4** | **-0.9** |
| | comp=Z,0.4nm,0.7s,baz=29,slow=3.3,SNR=2.3 | | | | | | |

*IDC **31** 19:15:01.6±2.9, 15.°99S×174.°18W, h273km±27km, mb3.7/6, mbtmp4.3/8, Error ellipse: s-maj=25.9km s-min=21.2km az=126.0*
*NEIC **31** 19:15:09.0±1.6, 17.°18S±0.°08×175.°10W±0.°08, h245km±11km, mb4.4/23, Error ellipse: s-maj=14.5km s-min=7.4km az=142.0*

**ISC 31 19:15:08.7**±0.6, **17.°04S**±0.°09×**175.°11W**±0.°07, **h250**km, **n35**, σ1**s09**/34, **mb4.3**/18, **Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.47 46** | | | **Pn** | **19 16 19.3** | **+1.1** |
| AFI | | | | Sn | **S** | **19 17 11.4** | **-2.1** |
| **NIUE** | **Niue** | **5.33 113** | | Pn | **Pn** | **19 16 27.7** | **-0.8** |
| NIUE | | | | Sn | **S** | **19 17 33.5** | **+1.3** |
| **MSVF** | **Nonsavu** | **6.57 263** | | Pn | Pn | 19 16 52.5 | +8.4 |
| **MSVF** | **Nonsavu** | **6.57 263** | | P | Pn | 19 16 51.2 | +7.1 |
| | 15nm,0.7s,baz=121,slow=15,SNR=8.8 | | | | | | |
| **PINNC** | **Pines Island,** | **17.32 249** | | P | **P** | **19 18 54.2** | **+0.2** |
| **DZM** | **Mont Dzumac** | **18.09 251** | | P | **P** | **19 19 01.7** | **-0.8** |
| DZM | | | | IAmb | IAmb | 19 19 32.4 | |
| | comp=Z,9.3nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.09 251** | | P | **Pn** | **19 19 05.4** | **-0.1** |
| | comp=Z,5.5nm,0.9s,baz=106,slow=18,SNR=4.1 | | | | | | |
| **TOZ** | **Tahuroa Road** | **22.21 200** | | P | **P** | **19 19 45.3** | **+0.8** |
| TOZ | | | | IAmb | IAmb | 19 19 45.9 | |
| | comp=Z,14nm,1.3s | | | | | | |
| **URZ** | **Urewera** | **22.22 196** | | P | **P** | **19 19 46.7** | **+2.1** |
| | comp=Z,7.6nm,0.5s,baz=108,slow=4.9,SNR=12 | | | | | | |
| URZ | | | | S | | 19 23 40.0 | +10 |
| | comp=Z,10nm,0.7s,baz=325,slow=23,SNR=6.9 comp=Z,7.6nm,0.5s | | | | | | |
| **BKZ** | **Black Stump Fm** | **23.23 197** | | P | **P** | **19 19 52.7** | **-1.2** |
| BKZ | | | | IAmb | IAmb | 19 20 06.5 | |
| | comp=Z,20nm,1.3s | | | | | | |
| **INZ** | **Inchbonnie** | **28.05 201** | | P | **P** | **19 20 34.5** | **-2.5** |
| **WHZ** | **Wether Hill Ro** | **32.05 203** | | P | **P** | **19 21 12.4** | **+0.3** |
| WHZ | | | | IAmb | IAmb | 19 21 43.4 | |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **33.10 240** | | P | **P** | **19 21 22.0** | **+0.4** |
| ARMA | | | | IAmb | IAmb | 19 21 45.5 | |
| | comp=Z,23nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **36.70 259** | | P | **P** | **19 21 52.4** | **+0.1** |
| CTAO | | | | IAmb | IAmb | 19 21 53.2 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **STKA** | **Stephens Creek** | **41.81 241** | | P | **P** | **19 22 34.1** | **-0.1** |
| **STKA** | **Stephens Creek** | **41.81 241** | | P | **P** | **19 22 34.3** | **0.0** |
| | comp=Z,3.1nm,0.5s,baz=72,slow=9.3,SNR=9.7 comp=Z,3.1nm,0.5s | | | | | | |
| **BBOO** | **Buckleboo** | **46.58 241** | | P | **P** | **19 23 11.2** | **-0.8** |
| BBOO | | | | IAmb | IAmb | 19 23 51.0 | |
| | comp=Z,42nm,1.4s | | | | | | |
| **WB0** | **Warramunga Arr** | **47.85 259** | | P | **P** | **19 23 21.4** | **-0.7** |
| **WRA** | **Warramunga Arr** | **47.89 258** | | P | **P** | **19 23 21.6** | **-0.7** |
| **WRA** | **Warramunga Arr** | **47.89 258** | | P | **P** | **19 23 21.8** | **-0.5** |
| | comp=Z,1.9nm,0.7s,baz=96,slow=7.3,SNR=35 comp=Z,1.9nm,0.7s | | | | | | |
| **AS31** | **Alice Springs** | **48.06 253** | | | **Pn** | **19 23 22.7** | **-0.9** |
| AS31 | | | | IAmb | IAmb | 19 23 24.5 | |
| | comp=Z,6.4nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **48.06 253** | | | **Pn** | **19 23 23.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **48.06 253** | P | | **P** | **19 23 23.4** | **-0.2** |
| | comp=Z,21nm,0.7s,baz=88,slow=8.5,SNR=359 comp=Z,21nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **51.98 267** | | P | **P** | **19 23 52.6** | **-0.4** |
| MTN | | | | IAmb | IAmb | 19 24 30.3 | |
| | comp=Z,12nm,1.2s | | | | | | |
| **FORT** | **Forrest** | **53.22 244** | | P | **P** | **19 24 00.8** | **-1.1** |
| FORT | | | | IAmb | IAmb | 19 24 15.2 | |
| | comp=Z,17nm,0.9s | | | | | | |
| **FAKI** | **Fak Fak** | **53.53 279** | | P | **P** | **19 24 05.1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| VA03 | | | | | IAML | | | 19 18 23.7 | |
| | comp=E,2µm,0.2s | | | | | | | | |
| MT02 | **Curacav** | **1.96** | **165** | *eP* | | **Pn** | | **19 18 05.3** | **-0.2** |
| MT02 | | | | *eS* | | **Sn** | | **19 18 29.6** | **+0.6** |
| MT02 | | | | IAML | | | | 19 18 30.3 | |
| | comp=Z,294nm,0.3s | | | | | | | | |
| **MT02** | **Curacav** | **1.96** | **165** | *eP* | | **Pn** | | **19 18 05.2** | **-0.2** |
| MT02 | | | | IAML | | | | 19 18 29.8 | |
| | comp=E,270nm,0.3s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.98** | **46** | *eP* | | **Pn** | | **19 18 05.8** | **-0.1** |
| CO01 | | | | *eS* | | **Sn** | | **19 18 28.4** | **-1.5** |
| CO01 | | | | IAML | | | | 19 18 29.3 | |
| | comp=Z,364nm,0.1s | | | | | | | | |
| **CO01** | **Juntas del Tor** | **1.98** | **46** | *i* P | | **Pn** | | **19 18 05.9** | **-0.1** |
| CO01 | | | | *eS* | | **Sn** | | **19 18 28.3** | **-1.6** |
| CO01 | | | | IAML | | | | 19 18 29.4 | |
| | comp=N,497nm,0.2s | | | | | | | | |
| **PEL** | **Peldehue** | **1.99** | **153** | *eP* | | **Pn** | | **19 18 05.4** | **-0.5** |
| PEL | | | | *eS* | | **Sn** | | **19 18 27.8** | **-2.0** |
| **RTLS** | **Leoncito** | **2.13** | **102** | *eP* | | **Pn** | | **19 18 08.2** | **+0.2** |
| RTLS | | | | *eS* | | **Sn** | | **19 18 33.1** | **-0.6** |
| RTLS | | | | IAML | | | | 19 18 38.8 | |
| | comp=Z,156nm,0.3s | | | | | | | | |
| **MT10** | **Hacienda Santa** | **2.16** | **152** | ⇓*i* P | | **Pn** | | **19 18 08.4** | **+0.1** |
| MT10 | | | | *eS* | | **Sn** | | **19 18 32.5** | **-1.6** |
| MT10 | | | | IAML | | | | 19 18 35.9 | |
| | comp=N,931nm,0.3s | | | | | | | | |
| **MT05** | **Renca** | **2.19** | **157** | *eP* | | **Pn** | | **19 18 10.0** | **+1.3** |
| MT05 | | | | *eP* | | | | 19 18 10.7 | |
| MT05 | | | | *eS* | | **Sn** | | **19 18 35.2** | **+0.4** |
| MT05 | | | | IAML | | | | 19 18 40.5 | |
| | comp=Z,211nm,0.2s | | | | | | | | |
| **MT05** | **Renca** | **2.19** | **157** | *eP* | | **Pn** | | **19 18 10.4** | **+1.7** |
| MT05 | | | | *eS* | | **Sn** | | **19 18 34.7** | **-0.1** |
| MT05 | | | | IAML | | | | 19 18 36.5 | |
| | comp=E,486nm,0.3s | | | | | | | | |
| **MT14** | **Cerro Cal¡n** | **2.27** | **154** | *eP* | | **Pn** | | **19 18 10.0** | **+0.3** |
| MT14 | | | | IAML | | | | 19 18 36.7 | |
| | comp=N,327nm,0.4s | | | | | | | | |
| **VA05** | **Santo Domingo** | **2.29** | **177** | *i* P | | **Pn** | | **19 18 10.2** | **+0.4** |
| VA05 | | | | IAML | | | | 19 18 40.4 | |
| | comp=E,210nm,0.4s | | | | | | | | |
| **AROD** | **Rodeo** | **2.29** | **59** | *eP* | | **Pn** | | **19 18 11.1** | **+0.9** |
| AROD | | | | *eS* | | **Sn** | | **19 18 38.3** | **+0.8** |
| **MT16** | **CCHEN** | **2.30** | **154** | *eP* | | **Pn** | | **19 18 10.2** | **0.0** |
| MT16 | | | | IAML | | | | 19 18 38.2 | |
| | comp=N,132nm,0.1s | | | | | | | | |
| **FCH** | **Farellones** | **2.31** | **148** | *eP* | | **Pn** | | **19 18 10.5** | **-0.1** |
| FCH | | | | IAML | | | | 19 18 38.8 | |
| | comp=E,397nm,0.2s | | | | | | | | |
| **DOCA** | **Reserva Natura** | **2.32** | **80** | *eP* | | **Pn** | | **19 18 10.0** | **-0.7** |
| DOCA | | | | *eP* | | | | 19 18 10.7 | |
| DOCA | | | | *eS* | | **Sn** | | **19 18 38.8** | **+0.5** |
| **MT03** | **Universidad Ad** | **2.37** | **154** | *eP* | | **Pn** | | **19 18 10.8** | **-0.3** |
| MT03 | | | | *eS* | | **Sn** | | **19 18 39.1** | **+0.1** |
| MT03 | | | | IAML | | | | 19 18 42.6 | |
| | comp=Z,368nm,0.2s | | | | | | | | |
| **MT03** | **Universidad Ad** | **2.37** | **154** | *eP* | | **Pn** | | **19 18 11.1** | **+0.1** |
| MT03 | | | | IAML | | | | 19 18 40.5 | |
| | comp=E,704nm,0.2s | | | | | | | | |
| **ACCO** | **Cerro Coronel** | **2.43** | **72** | *eP* | | **Pn** | | **19 18 12.7** | **+0.5** |
| ACCO | | | | *eS* | | **Sn** | | **19 18 41.7** | **+0.8** |
| **MT04** | **Ro Olivares** | **2.45** | **147** | *eP* | | **Pn** | | **19 18 12.2** | **0.0** |
| MT04 | | | | *eS* | | **Sn** | | **19 18 41.6** | **+0.3** |
| MT04 | | | | IAML | | | | 19 18 43.2 | |
| | comp=Z,126nm,0.2s | | | | | | | | |
| **MT04** | **Ro Olivares** | **2.45** | **147** | *eP* | | **Pn** | | **19 18 12.7** | **+0.5** |
| MT04 | | | | *eS* | | **Sn** | | **19 18 40.5** | **-0.7** |
| MT04 | | | | IAML | | | | 19 18 44.2 | |
| | comp=E,296nm,0.2s | | | | | | | | |
| **MT15** | **Las Vizcachas** | **2.46** | **155** | *eP* | | **Pn** | | **19 18 12.3** | **0.0** |
| MT15 | | | | IAML | | | | 19 18 42.8 | |
| | comp=E,647nm,0.3s | | | | | | | | |
| **MT09** | **Talagante** | **2.49** | **165** | *eP* | | **Pn** | | **19 18 13.2** | **+0.5** |
| MT09 | | | | IAML | | | | 19 18 45.3 | |
| | comp=N,284nm,0.2s | | | | | | | | |
| **LCO** | **Las Campanas** | **2.51** | **21** | *eP* | | **Pn** | | **19 18 13.2** | **0.0** |
| LCO | | | | *eS* | | **Sn** | | **19 18 43.5** | **+0.6** |
| LCO | | | | IAML | | | | 19 18 44.4 | |
| | comp=Z,245nm,0.4s | | | | | | | | |
| **LCO** | **Las Campanas** | **2.51** | **21** | *eP* | | **Pn** | | **19 18 13.5** | **+0.3** |
| **MT01** | **Popeta** | **2.53** | **171** | *eP* | | **Pn** | | **19 18 13.5** | **+0.3** |
| MT01 | | | | *eS* | | **Sn** | | **19 18 43.4** | **+0.6** |
| MT01 | | | | IAML | | | | 19 18 47.0 | |
| | comp=Z,135nm,0.1s | | | | | | | | |
| **MT01** | **Popeta** | **2.53** | **171** | *eP* | | **Pn** | | **19 18 13.4** | **+0.3** |
| MT01 | | | | IAML | | | | 19 18 43.8 | |
| | comp=E,218nm,0.2s | | | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.54** | **145** | *eP* | | **Pn** | | **19 18 14.3** | **+0.8** |
| MT08 | | | | *eS* | | **Sn** | | **19 18 44.3** | **+0.9** |
| MT08 | | | | IAML | | | | 19 18 45.4 | |
| | comp=Z,130nm,0.8s | | | | | | | | |
| **MT08** | **Bocatoma Ro** | **2.54** | **145** | *eP* | | **Pn** | | **19 18 14.8** | **+1.3** |
| MT08 | | | | *eS* | | **Sn** | | **19 18 43.6** | **+0.2** |
| MT08 | | | | IAML | | | | 19 18 45.6 | |
| | comp=E,381nm,0.5s | | | | | | | | |
| **MT12** | **Pirque** | **2.57** | **157** | *e* | | Pn | | 19 18 41.5 | +28 |
| **MT13** | **San Alfonso** | **2.67** | **153** | *eP* | | Pn | | 19 18 05.3 | -10 |
| MT13 | | | | *eS* | | **Sn** | | **19 18 46.9** | **+0.3** |
| MT13 | | | | IAML | | | | 19 18 52.3 | |
| | comp=Z,132nm,0.5s | | | | | | | | |
| **MT13** | **San Alfonso** | **2.67** | **153** | *i* P | | **Pn** | | **19 18 15.8** | **+0.5** |
| MT13 | | | | IAML | | | | 19 18 47.2 | |
| | comp=E,265nm,0.3s | | | | | | | | |
| **ASAL** | **Salagasta** | **2.76** | **117** | *eP* | | **Pn** | | **19 18 17.4** | **+1.0** |
| ASAL | | | | *eS* | | **Sn** | | **19 18 49.8** | **+1.2** |
| ASAL | | | | *eS* | | | | 19 18 50.8 | |
| **RTCV** | **Cerro Valdivia** | **2.78** | **101** | *eP* | | **Pn** | | **19 18 17.4** | **+0.8** |
| RTCV | | | | *eS* | | **Sn** | | **19 18 50.8** | **+1.8** |
| **BO04** | **La Punta** | **2.79** | **160** | *eP* | | **Pn** | | **19 18 16.8** | **+0.1** |
| **LMEL** | **Las Melosas** | **2.80** | **153** | *eP* | | **Pn** | | **19 18 17.1** | **+0.1** |
| LMEL | | | | *eS* | | **Sn** | | **19 18 49.2** | **-0.4** |
| LMEL | | | | *eS* | | | | 19 18 49.5 | |
| LMEL | | | | IAML | | | | 19 18 51.0 | |
| | comp=Z,167nm,0.1s | | | | | | | | |
| **LMEL** | **Las Melosas** | **2.80** | **153** | ⇑*i* P | | **Pn** | | **19 18 17.7** | **+0.8** |
| LMEL | | | | IAML | | | | 19 18 52.7 | |
| | comp=N,495nm,0.1s | | | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.81** | **122** | *eP* | | **Pn** | | **19 18 19.0** | **+1.9** |
| **AC05** | **El Transito** | **2.82** | **27** | *eS* | | **Sn** | | **19 18 50.6** | **+0.4** |
| **AC05** | **El Transito** | **2.82** | **27** | *eP* | | **Pn** | | **19 18 17.8** | **+0.5** |
| **AAGR** | **Agrelo** | **3.01** | **126** | *eS* | | **Sn** | | **19 18 57.9** | **+3.2** |
| **BO01** | **Tunca** | **3.07** | **170** | *eS* | | **Sn** | | **19 18 53.5** | **-2.6** |
| **BO01** | **Tunca** | **3.07** | **170** | *eP* | | **Pn** | | **19 18 20.6** | **0.0** |
| BO01 | | | | IAML | | | | 19 18 56.9 | |
| | comp=E,90nm,0.2s | | | | | | | | |
| **AC04** | **Llanos de Chal** | **3.20** | **11** | *eP* | | **Pn** | | **19 18 22.0** | **-0.4** |
| **AC04** | **Llanos de Chal** | **3.20** | **11** | *eP* | | **Pn** | | **19 18 22.6** | **+0.3** |
| **GO05** | **Huala** | **3.64** | **182** | *eP* | | **Pn** | | **19 18 28.4** | **0.0** |
| **GO05** | **Huala** | **3.64** | **182** | *eP* | | **Pn** | | **19 18 28.1** | **-0.3** |
| **GO03** | **Copiap** | **3.98** | **20** | IAML | | | | 19 19 26.0 | |
| | comp=Z,27nm,0.3s | | | | | | | | |
| **GO03** | **Copiap** | **3.98** | **20** | *eP* | | **Pn** | | **19 18 32.9** | **-0.2** |
| **VCA** | **Vinchina** | **4.03** | **50** | *eP* | | **Pn** | | **19 18 34.8** | **+0.9** |
| VCA | | | | IAML | | | | 19 19 23.5 | |
| | comp=Z,64nm,0.7s | | | | | | | | |
| **AC06** | **Mina Casimiro** | **4.17** | **17** | *eP* | | **Pn** | | **19 18 35.0** | **-0.6** |
| **AC01** | **Pan de Azucar** | **5.29** | **11** | *eP* | | **Pn** | | **19 18 49.2** | **-1.8** |
| AC01 | | | | *eP* | | **Pn** | | **19 18 49.2** | **-1.8** |

*IDC **31** 19:17:38.3±1.2,10°.27N×92°.16E,h0km,mb3.4/5, mbtmp3.6/6,ML3.3/1,MS3.7/2,Error ellipse: s-maj=42.0km s-min=25.2km az=49.0*

**ISC 31 19:17:43.4±1.1,10°.2N±0°.2×92°.1E±0°.2,h35km,n11, σ1§39/6,mb3.4/5,Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALK** | **Pallekele** | **11.62** | **256** | Pn | **Pn** | **19 20 26.7** | **-0.3** |
| | 0.2nm,0.3s,baz=59,slow=5.9,SNR=1.7 8.4nm,1.0s | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.38** | **228** | T | T | 19 50 17.4 | |
| | baz=47,slow=75,SNR=114 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.38** | **228** | T | T | 19 50 17.8 | |
| | baz=47,slow=75,SNR=85 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.39** | **228** | T | T | 19 50 20.6 | |
| | baz=47,slow=75,SNR=93 | | | | | | |
| **MKAR** | **Makanchi Array** | **37.37** | **349** | P | **P** | **19 24 51.1** | **-1.6** |
| | 0.3nm,0.6s,baz=144,slow=5.2,SNR=2.2 0.3nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.98** | **354** | P | **P** | **19 25 48.4** | **+1.3** |
| | 0.3nm,0.3s,baz=151,slow=7.1,SNR=2.0 0.3nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.29** | **126** | P | **P** | **19 26 43.6** | **-0.8** |
| | 0.3nm,0.6s,baz=306,slow=8.5,SNR=6.1 0.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **52.99** | **130** | P | **P** | **19 26 57.4** | **+0.3** |
| | 0.4nm,0.9s,baz=323,slow=7.5,SNR=3.3 0.4nm,0.9s | | | | | | |
| **EIL** | **Elat** | **56.50** | **299** | LR | LR | 19 54 15.7 | |
| | comp=Z,13nm,18.1s,baz=249,slow=39 | | | | | | |
| **SEY** | **Seymchan** | **67.66** | **25** | LR | LR | 20 01 43.5 | |
| | comp=Z,265nm,21.8s,baz=149,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **88.08** | **283** | P | **P** | **19 30 31.9** | **+0.8** |
| | 0.2nm,0.4s,baz=69,slow=5.6,SNR=2.1 0.2nm,0.4s | | | | | | |

**RSNC 31 19:50:37.3±0.0,6°N±1°×7°4W±°,h101km±3km,mb4.0, mB4.8,ML3.0,Mw(mB)4.1,Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPBC** | **San Pablo de B** | **0.09** | **251** | P | Pn | 19 50 50.4 | -1.1 |
| SPBC | | | | S | Sn | 19 51 01.7 | -0.4 |
| **NORC** | **Norcasia** | **0.88** | **263** | P | Pn | 19 50 54.9 | -1.7 |
| NORC | | | | S | Sn | 19 51 09.6 | -1.6 |
| **ROSC** | **El Rosal** | **0.90** | **202** | P | Pn | 19 50 57.0 | -0.2 |
| ROSC | | | | S | Sn | 19 51 12.5 | +0.5 |
| **RUSC** | **La Rusia** | **0.93** | **77** | P | Pn | 19 50 56.6 | -0.9 |
| RUSC | | | | S | Sn | 19 51 12.2 | -0.5 |
| **PTBC** | **PUERTO BERRIO,** | **0.97** | **332** | P | Pn | 19 50 55.2 | -2.4 |
| PTBC | | | | S | Sn | 19 51 10.3 | -2.5 |
| **CHIC** | **Chingaza** | **1.07** | **166** | P | Pn | 19 50 58.1 | -1.0 |
| CHIC | | | | S | Sn | 19 51 15.2 | -0.2 |
| **BARC** | **Barichara** | **1.21** | **42** | P | Pn | 19 50 59.4 | -1.0 |
| BARC | | | | S | Sn | 19 51 17.2 | -0.7 |
| **BRJC** | **Barrancabermej** | **1.31** | **11** | P | Pn | 19 51 00.4 | -0.9 |
| BRJC | | | | S | Sn | 19 51 18.4 | -1.1 |
| **VILC** | **Villavicencio,** | **1.58** | **169** | P | Pn | 19 51 02.3 | -2.5 |
| VILC | | | | S | Sn | 19 51 25.7 | 0.0 |
| **NIZA** | **Niza - Manizal** | **1.60** | **247** | P | Pn | 19 51 04.1 | -1.0 |
| NIZA | | | | S | Sn | 19 51 28.0 | +1.8 |
| **HELC** | **Santa Helena** | **1.61** | **288** | P | Pn | 19 51 04.0 | -1.4 |
| HELC | | | | S | Sn | 19 51 25.9 | -0.7 |
| **ZARC** | **Zaragoza, Cauc** | **2.00** | **334** | P | Pn | 19 51 07.3 | -2.6 |
| ZARC | | | | S | Sn | 19 51 32.7 | -2.1 |
| **CBOC** | **Ciudad Bolivar** | **2.02** | **275** | P | Pn | 19 51 09.2 | -1.1 |
| CBOC | | | | S | Sn | 19 51 35.5 | -0.1 |
| **PAMC** | **Pamplona, Colo** | **2.09** | **38** | P | Pn | 19 51 10.2 | -1.3 |
| PAMC | | | | S | Sn | 19 51 35.7 | -1.9 |
| **PRAC** | **Prado** | **2.15** | **205** | P | Pn | 19 51 10.4 | -1.5 |
| PRAC | | | | S | Sn | 19 51 37.6 | -0.8 |
| **ORTC** | **Ortega, Tolima** | **2.16** | **215** | P | Pn | 19 51 11.1 | -1.0 |
| ORTC | | | | S | Sn | 19 51 37.9 | -0.7 |
| **TAMC** | **Tame, Arauca** | **2.31** | **71** | P | Pn | 19 51 12.7 | -1.3 |
| TAMC | | | | S | Sn | 19 51 40.9 | -1.3 |
| **PTGC** | **Puerto Gaitan,** | **2.36** | **128** | P | Pn | 19 51 12.9 | -1.8 |
| PTGC | | | | S | Sn | 19 51 41.1 | -2.2 |
| **URMC** | **La Uribe, Meta** | **2.45** | **189** | P | Pn | 19 51 15.3 | -0.6 |
| URMC | | | | S | Sn | 19 51 44.8 | -0.6 |
| **UREC** | **San Jos de Ur** | **2.57** | **323** | P | Pn | 19 51 14.0 | -3.4 |
| UREC | | | | S | Sn | 19 51 45.0 | -3.1 |
| **DBBC** | **Dabeiba** | **2.58** | **301** | P | Pn | 19 51 16.3 | -1.2 |
| **OCAC** | **Ocana** | **2.63** | **15** | P | Pn | 19 51 17.9 | -0.4 |
| OCAC | | | | S | Sn | 19 51 49.4 | -0.4 |
| **YOTC** | **Yotoco, Valle** | **2.89** | **234** | P | Pn | 19 51 20.2 | -1.5 |
| **APAC** | **Apartado, Choc** | **3.39** | **311** | P | Pn | 19 51 27.0 | -1.3 |
| APAC | | | | S | Sn | 19 52 04.9 | -2.8 |
| **MACC** | **Macarena, Meta** | **3.51** | **178** | P | Pn | 19 51 26.9 | -3.1 |
| MACC | | | | S | Sn | 19 52 06.6 | -4.2 |
| **SJCC** | **San Jacinto, C** | **4.35** | **344** | P | Pn | 19 51 37.5 | -3.9 |
| SJCC | | | | S | Sn | 19 52 24.6 | -6.5 |
| **CRJC** | **Cerrejon, Guaj** | **5.42** | **12** | P | Pn | 19 51 55.0 | -0.8 |
| CRJC | | | | S | Sn | 19 52 50.1 | -6.9 |

*BJI **31** 19:56:45.8±0.0,36°.40N×70°.81E,h116km,mb4.0/15, mB4.5/5*
*IDC **31** 19:56:46.6±3.8,36°.29N×70°.96E,h109km±35km,mb3.7/15, mbtmp4.1/19,Error ellipse: s-maj=24.4km s-min=12.0km az=19.0*
*MOS **31** 19:56:46.2±1.1,36°.40N×70°.94E,h114km,mb4.2/16,Error ellipse: s-maj=8.0km s-min=4.3km az=84.5*
*NEIC **31** 19:56:47.7±1.8,36°.44N±0°.05×70°.77E±0°.05,h116km±7km, mb4.3/30,Error ellipse: s-maj=7.5km s-min=5.3km az=160.0*
*NNC **31** 19:56:49.3±3.3,37°.02N×70°.74E,h0km,mb4.5,mpv4.2, Error ellipse: s-maj=26.5km s-min=23.0km az=156.0*

**ISC 31 19:56:45.7±0.4,36°.37N±0°.04×70°.88E±0°.04,h100km,n154, σ1§82/172,mb4.2/31,7C-11D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBL** | **Kabul** | **2.36** | **220** | Pn | **Pn** | **19 57 25.6** | **+2.3** |
| KBL | | | | Sn | **Sn** | **19 57 54.5** | **+2.6** |
| **KBL** | **Kabul** | **2.36** | **220** | PN | **Pn** | **19 57 25.6** | **+2.3** |
| KBL | | | | | | 19 57 54.5 | |
| **CHGR** | **Chuyangaron** | **2.66** | **330** | Pn | **Pn** | **19 57 27.9** | **+0.8** |
| CHGR | | | | Sn | **Sn** | **19 57 57.2** | **-1.6** |
| **GAR** | **Garm** | **2.66** | **350** | Pn | **Pn** | **19 57 28.9** | **+1.8** |
| **SIMJ** | **Simiganj** | **2.73** | **327** | Pn | **Pn** | **19 57 28.6** | **+0.7** |
| **DRK** | **Karamyk** | **3.19** | **13** | | **Pn** | **19 57 36.2** | **+2.0** |
| **DRK** | **Karamyk** | **3.19** | **13** | PN | **Pn** | **19 57 36.2** | **+2.0** |
| **NIL** | **Nilore** | **3.34** | **144** | Pn | **Pn** | **19 57 39.1** | **+3.1** |
| **NIL** | **Nilore** | **3.34** | **144** | PN | **Pn** | **19 57 39.1** | **+3.1** |
| **BTK** | **Batken** | **3.68** | **359** | Pn | **Pn** | **19 57 43.1** | **+2.4** |
| **BTK** | **Batken** | **3.68** | **359** | PN | **Pn** | **19 57 43.1** | **+2.4** |
| **OHH** | **Osh** | **4.41** | **19** | PN | **Pn** | **19 57 53.3** | **+2.8** |
| **JMU** | **Jammu** | **4.93** | **137** | *eP* | **Pn** | **19 57 58.7** | **+1.3** |
| JMU | | | | *eS* | **Sn** | **19 58 52.9** | **-0.3** |
| JMU | | | | IAML | | 19 58 55.9 | |
| | comp=E,1µm,0.2s | | | | | | |
| JMU | | | | IAML | | 19 58 56.6 | |
| | comp=N,953nm,0.3s | | | | | | |
| **KSH** | **Kashi** | **5.10** | **50** | P | **Pn** | **19 57 58.8** | **-1.1** |
| KSH | | | | S | Sn | 19 58 49.3 | -8.4 |
| KSH | | | | smax | smax | | |
| | comp=N,490nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=N,470nm,0.6s | | | | | | |
| **TRKS** | **Terek-Say** | **5.16** | **2** | PN | **Pn** | **19 58 00.9** | **+0.2** |
| **ARK** | **Arkit** | **5.49** | **8** | PN | **Pn** | **19 58 05.7** | **+0.6** |
| **THN** | **Thein Dam** | **5.60** | **133** | *eP* | **Pn** | **19 58 08.1** | **+1.6** |
| THN | | | | *eS* | **Sn** | **19 59 09.9** | **+0.3** |
| THN | | | | IAML | | 19 59 13.2 | |
| | comp=N,742nm,0.3s | | | | | | |
| THN | | | | IAML | | 19 59 13.8 | |
| | comp=E,912nm,0.2s | | | | | | |
| **ARLS** | **Aral** | **6.10** | **25** | PN | **Pn** | **19 58 14.2** | **+0.7** |
| **AML** | **Almayashu** | **6.15** | **20** | P | **Pn** | **19 58 15.8** | **+1.4** |
| | SNR=136 | | | | | | |
| **NRN** | **Naryn** | **6.44** | **37** | Pn | **Pn** | **19 58 18.2** | **0.0** |
| **NRN** | **Naryn** | **6.44** | **37** | PN | **Pn** | **19 58 18.2** | **0.0** |
| **EKS2** | **Erkin-Say** | **6.67** | **19** | P | **Pn** | **19 58 23.5** | **+2.3** |
| | SNR=20 | | | | | | |
| **KK31** | **Karatay Array** | **6.73** | **358** | Pn | **Pn** | **19 58 22.2** | **+0.3** |
| **KK31** | **Karatay Array** | **6.73** | **358** | P | **Pn** | **19 58 22.1** | **+0.3** |
| | comp=E,11nm,0.5s,baz=195,slow=20,SNR=126 | | | | | | |
| KK31 | | | | S | **Sn** | **19 59 32.7** | **-4.4** |
| | comp=E,7.7nm,0.5s,baz=201,slow=25,SNR=7.2 | | | | | | |
| **KK31** | **Karatay Array** | **6.73** | **358** | PN | **Pn** | **19 58 22.2** | **+0.3** |
| **KKAR** | **Karatay Array** | **6.73** | **358** | Pn | **Pn** | **19 58 22.3** | **+0.5** |
| **KKAR** | **Karatay Array** | **6.73** | **358** | Pn | **Pn** | **19 58 22.4** | **+0.5** |
| **KKAR** | **Karatay Array** | **6.73** | **358** | PN | **Pn** | **19 58 22.4** | **+0.5** |
| **BHK** | **Bhakra** | **6.75** | **135** | *eP* | **Pn** | **19 58 22.3** | **+0.1** |
| BHK | | | | *eS* | **Sn** | **19 59 35.4** | **-2.2** |
| BHK | | | | IAML | | 19 59 39.7 | |
| | comp=E,359nm,0.2s | | | | | | |
| **AAK** | **Ala-Archa** | **6.85** | **23** | P | **Pn** | **19 58 25.1** | **+1.4** |
| | SNR=21 | | | | | | |
| **AAK** | **Ala-Archa** | **6.85** | **23** | P | **Pn** | **19 58 24.6** | **+0.9** |
| | comp=E,18nm,0.6s,baz=207,slow=7.9,SNR=49 | | | | | | |
| AAK | | | | S | **Sn** | **19 59 38.3** | **-1.9** |
| | comp=E,25nm,0.6s,baz=46,slow=19,SNR=8.3 | | | | | | |
| **AAK** | **Ala-Archa** | **6.85** | **23** | ⇓P | **Pn** | **19 58 24.7** | **+1.0** |
| | comp=E,10nm,0.4s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **19 59 37.7** | **-2.5** |
| | comp=E,48nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **6.85** | **23** | *d* PN | **Pn** | **19 58 25.0** | **+1.4** |
| **SRGN** | **SRI GANGA NAGA** | **6.91** | **158** | *eP* | **Pn** | **19 58 24.8** | **+0.5** |
| SRGN | | | | *eS* | **Sn** | **19 59 37.7** | **-3.6** |
| SRGN | | | | IAML | | 19 59 42.5 | |
| | comp=N,647nm,0.2s | | | | | | |
| SRGN | | | | IAML | | 19 59 42.9 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,760nm,0.4s | | | | | | | | |
| **FRU1** | **Bishkek** | **7.05** | **23** | Pn | | **Pn** | | **19 58 28.0** | **+1.7** |
| **FRU1** | **Bishkek** | **7.05** | **23** | PN | | **Pn** | | **19 58 28.0** | **+1.7** |
| **BOOM** | **Boomskoye usch** | **7.26** | **31** | | | **Pn** | | **19 58 30.1** | **+0.9** |
| **BOOM** | **Boomskoye usch** | **7.26** | **31** | PN | | **Pn** | | **19 58 30.1** | **+0.9** |
| **CHMS** | **Chumysh** | **7.26** | **23** | P | | **Pn** | | **19 58 29.9** | **+0.8** |
| | SNR=20 | | | | | | | | |
| **CHMS** | **Chumysh** | **7.26** | **23** | ⇓P | | **Pn** | | **19 58 29.8** | **+0.8** |
| | comp=E,20nm,0.6s | | | | | | | | |
| CHMS | | | | ⇓S | | **Sn** | | **19 59 47.4** | **-2.5** |
| | comp=E,22nm,0.8s | | | | | | | | |
| **CHMS** | **Chumysh** | **7.26** | **23** | PN | | **Pn** | | **19 58 29.8** | **+0.7** |
| **HRA** | **Herat** | **7.33** | **257** | Pn | | **Pn** | | **19 58 31.0** | **+0.7** |
| **USP** | **Ospenovka** | **7.43** | **21** | P | | **Pn** | | **19 58 33.0** | **+1.6** |
| | SNR=7.6 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.48** | **28** | P | | **Pn** | | **19 58 32.5** | **+0.2** |
| | SNR=16 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.48** | **28** | ⇑P | | **Pn** | | **19 58 32.6** | **+0.2** |
| | comp=E,8.8nm,0.7s | | | | | | | | |
| TKM2 | | | | ⇓S | | **Sn** | | **19 59 53.1** | **-2.6** |
| | comp=E,11nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.48** | **28** | *i* PN | | **Pn** | | **19 58 32.5** | **+0.2** |
| TKM2 | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **HNLY** | **HANLEY** | **7.57** | **116** | *eP* | | **Pn** | | **19 58 33.9** | **+0.1** |
| **TARG** | **Taragay, Kyrgy** | **7.59** | **43** | | | **Pn** | | **19 58 33.3** | **-0.6** |
| **TARG** | **Taragay, Kyrgy** | **7.59** | **43** | PN | | **Pn** | | **19 58 33.3** | **-0.6** |
| **KLP** | **Kalpa** | **7.79** | **126** | *eP* | | **Pn** | | **19 58 37.0** | **+0.4** |
| KLP | | | | *eS* | | Sn | | 19 59 57.5 | -5.9 |
| KLP | | | | IAML | | | | 20 00 03.7 | |
| | comp=E,224nm,0.2s | | | | | | | | |
| KLP | | | | IAML | | | | 20 00 04.2 | |
| | comp=N,225nm,0.3s | | | | | | | | |
| **MDOK** | **Medeo** | **8.28** | **33** | ⇑P | | **Pn** | | **19 58 43.4** | **+0.4** |
| | comp=N,6.4nm,0.7s | | | | | | | | |
| **MDOK** | **Medeo** | **8.28** | **33** | PN | | **Pn** | | **19 58 43.4** | **+0.4** |
| **PRZ** | **Przheval'sk** | **8.43** | **41** | Pn | | **Pn** | | **19 58 46.1** | **+0.9** |
| **PRZ** | **Przheval'sk** | **8.43** | **41** | PN | | **Pn** | | **19 58 46.1** | **+0.9** |
| **BKNR** | **BIKANER** | **8.57** | **166** | *eP* | | **Pn** | | **19 58 46.1** | **-0.9** |
| BKNR | | | | *eS* | | Sn | | 20 00 15.5 | -6.4 |
| BKNR | | | | IAML | | | | 20 00 22.2 | |
| | comp=E,232nm,0.6s | | | | | | | | |
| **JOSI** | **Joshimath** | **9.28** | **126** | *eP* | | **Pn** | | **19 58 57.5** | **+0.7** |
| JOSI | | | | *eS* | | **Sn** | | **20 00 35.2** | **-4.2** |
| JOSI | | | | IAML | | | | 20 00 38.6 | |
| | comp=N,189nm,0.3s | | | | | | | | |
| JOSI | | | | IAML | | | | 20 00 40.6 | |
| | comp=E,158nm,0.3s | | | | | | | | |
| **NDI** | **New Delhi** | **9.34** | **143** | *eP* | | **Pn** | | **19 58 57.7** | **+0.2** |
| NDI | | | | *eS* | | Sn | | 20 00 34.0 | -6.8 |
| NDI | | | | IAML | | | | 20 00 35.0 | |
| | comp=N,38nm,0.6s | | | | | | | | |
| NDI | | | | IAML | | | | 20 00 36.7 | |
| | comp=E,60nm,0.4s | | | | | | | | |
| **KUDL** | **Kundal** | **9.47** | **148** | *eP* | | **Pn** | | **19 58 58.0** | **-1.3** |
| KUDL | | | | *eS* | | Sn | | 20 00 36.6 | -7.3 |
| KUDL | | | | IAML | | | | 20 00 39.3 | |
| | comp=E,120nm,0.4s | | | | | | | | |
| KUDL | | | | IAML | | | | 20 00 41.3 | |
| | comp=N,94nm,0.3s | | | | | | | | |
| **SONA** | **Sohna** | **9.64** | **145** | *eP* | | **Pn** | | **19 59 00.6** | **-0.9** |
| **AJM** | **Ajmer** | **10.37** | **161** | *eP* | | **Pn** | | **19 59 11.3** | **-0.1** |
| **LGTI** | **Lohaghat** | **10.46** | **129** | *eP* | | Pn | | 19 59 10.4 | -2.3 |
| LGTI | | | | *eS* | | Sn | | 20 00 59.5 | -8.4 |
| **JHNI** | **Jhansi** | **12.70** | **147** | *eP* | | Pn | | 19 59 41.0 | -1.6 |
| **MAKZ** | **Makanchi** | **13.31** | **35** | Pn | | **Pn** | | **19 59 51.1** | **+0.5** |
| **MAKZ** | **Makanchi** | **13.31** | **35** | P | | **Pn** | | **19 59 51.1** | **+0.5** |
| **MK31** | **Makanchi Array** | **13.45** | **36** | | | **Pn** | | **19 59 53.8** | **+1.4** |
| **MK31** | **Makanchi Array** | **13.45** | **36** | *d* iP | | **Pn** | | **19 59 54.8** | **+2.4** |
| **MKAR** | **Makanchi Array** | **13.45** | **36** | Pn | | **Pn** | | **19 59 53.9** | **+1.5** |
| **MKAR** | **Makanchi Array** | **13.45** | **36** | P | | **Pn** | | **19 59 52.0** | **-0.4** |
| | comp=N,0.6nm,0.8s,baz=220,slow=14,SNR=5.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.45** | **36** | P | | **Pn** | | **19 59 53.9** | **+1.5** |
| **WMQ** | **Urumqi** | **14.85** | **55** | *eP* | | **Pn** | | **20 00 13.8** | **+3.3** |
| **AB31** | **Akbulak array** | **15.15** | **332** | ⇑P | | **Pn** | | **20 00 12.5** | **-1.7** |
| | comp=N,4.2nm,0.6s,baz=154,slow=11,SNR=98 | | | | | | | | |
| AB31 | | | | ⇑S | | **Sn** | | **20 02 56.5** | **-4.8** |
| | comp=N,3.7nm,0.7s,baz=150,slow=24,SNR=7.4 | | | | | | | | |
| **AB31** | **Akbulak array** | **15.15** | **332** | P | | **Pn** | | **20 00 12.5** | **-1.7** |
| AB31 | | | | S | | **Sn** | | **20 02 56.5** | **-4.8** |
| **ABKA

RAYN pmax pmax
comp=Z,5.0nm,1.3s
**KIRV Kirov 26.32 334** ⇓ *i*P **P 20 02 13.4 +1.7**
**ANN Anapa 26.61 299** *e*P **P** 20 02 13.1 -1.5
ANN *e**PP **pP** 20 02 39.8 +2.5
ANN *e*S **S** 20 06 38.2 -3.8
ANN pmax pmax
comp=Z,28nm,0.9s
**PZH PanZhiHua 28.00 102** P **P 20 02 29.8 +2.4**
PZH pmax pmax
comp=Z,7.0nm,0.8s
PZH pmax pmax
comp=Z,110nm,4.3s
**SONM Songino Array 28.49 55** P **P 20 02 33.2 +1.7**
comp=Z,0.4nm,0.7s,baz=233,slow=8.9,SNR=2.6
comp=Z,0.4nm,0.7s
**BR131 Keskin Array S 29.38 288** P **P 20 02 40.9 +1.4**
**BR131 Keskin Array S 29.38 288** ⇑ *i*P **P 20 02 42.0 +2.5**
**BRTR Keskin Array B 29.38 288** P **P 20 02 40.7 +1.1**
**BRTR Keskin Array B 29.38 288** P **P 20 02 41.6 +2.1**
comp=Z,1.4nm,0.7s,baz=98,slow=9.6,SNR=10
comp=Z,1.4nm,0.7s
**BRTR Keskin Array B 29.38 288** *e*P **P 20 02 42.2 +2.7**
BRTR pmax pmax
comp=Z,1.0nm,0.6s
**GHAJ Ghor Haditha 29.66 271** P **P 20 02 42.0 +0.1**
GHAJ IAmb IAmb 20 03 23.1
comp=Z,11nm,0.9s
**OBN Obninsk 29.98 320** ⇓ *e*P **P 20 02 46.0 +1.7**
OBN *e**PP **sP** 20 03 15.8 -3.4
OBN *e* 20 03 49.0
OBN pmax pmax
comp=Z,5.0nm,1.0s
**CMAR Chiang Mai Arr 30.48 118** P **P 20 02 50.1 +0.9**
comp=Z,1.1nm,0.7s,baz=296,slow=8.7,SNR=8.2
comp=Z,1.1nm,0.7s
**CMAR Chiang Mai Arr 30.48 118** *e*P **P 20 02 51.2 +2.0**
CMAR pmax pmax
comp=Z,1.0nm,0.6s
**HHC Hu-ho-hao-te 31.90 69** *e*P **P 20 03 01.3 -0.3**
HHC pmax pmax
comp=Z,14nm,0.5s
HHC pmax pmax
comp=Z,69nm,7.5s
**AKASG Malin Array Be 32.95 309** P **P 20 03 11.0 +0.4**
comp=Z,0.6nm,0.5s,baz=84,slow=7.1,SNR=9.4
comp=Z,0.6nm,0.5s
**AKASG Malin Array Be 32.95 309** *e*P **P 20 03 11.6 +1.0**
AKASG pmax pmax
comp=Z,1.0nm,0.6s
**AKBB Malin Array Si 32.95 309** P **P 20 03 10.3 -0.3**
AKBB IAmb IAmb 20 03 12.4
comp=Z,2.9nm,0.7s
**AKBB Malin Array Si 32.95 309** ⇑ *i*P **P 20 03 11.7 +1.1**
AKBB pmax pmax
comp=Z,3.0nm,0.6s
**KIEV Kiev 32.96 309** P **P 20 03 10.7 +0.1**
KIEV IAmb IAmb 20 03 12.4
comp=Z,2.7nm,0.6s
**KIEV Kiev 32.96 309** P **P 20 03 10.7 +0.1**
KIEV pmax pmax
comp=Z,3.0nm,0.6s
**MLR Muntele Rosu 34.76 299** P **P 20 03 27.0 +0.5**
MLR IAmb IAmb 20 03 31.2
comp=Z,6.7nm,1.1s
**MLR Muntele Rosu 34.76 299** P **P 20 03 27.0 +0.5**
MLR pmax pmax
comp=Z,7.0nm,1.1s
**KARP Karpathos 35.18 282** P **P 20 03 29.9 -0.2**
**BURAR Bucovina Array 35.28 303** P **P 20 03 30.7 -0.2**
**FINES FINESS Array B 37.54 326** P **P 20 03 48.6 -1.1**
**FINES FINESS Array B 37.54 326** P **P 20 03 51.0 +1.3**
comp=Z,2.3nm,0.7s,baz=132,slow=8.5,SNR=7.9
comp=Z,2.3nm,0.7s
**ARCES ARCESS Array B 41.23 338** P **P 20 04 21.9 +1.6**
comp=Z,4.3nm,0.8s,baz=102,slow=8.4,SNR=12
comp=Z,4.3nm,0.8s
**ARCES ARCESS Array B 41.23 338** *e*P **P 20 04 22.3 +2.0**
ARCES pmax pmax
comp=Z,3.0nm,0.6s
**GSI Gunungsitoli 42.76 139** P **P 20 04 33.0 -0.4**
**HFS Hagfors 43.11 322** P **P 20 04 36.3 +0.7**
comp=Z,2.9nm,0.6s,baz=112,slow=11,SNR=12
comp=Z,2.9nm,0.6s
**CLL Collm 43.20 309** *e*P **P 20 04 35.0 -1.5**
CLL *e*PP **PP 20 06 14.0 -4.6**
**CLL Collm 43.20 309** *e*P **P 20 04 35.0 -1.5**
**NC405 NORSAR Array S 44.19 323** P **P 20 04 43.5 -0.9**
**NC303 NORSAR Array S 44.37 323** **P 20 04 44.8 -1.0**
NC303 IAmb IAmb 20 05 21.5
comp=Z,8.9nm,1.1s
**NB201 NORSAR Array S 44.39 323** P **P 20 04 45.3 -0.7**
NB201 IAmb IAmb 20 05 08.0
comp=Z,10nm,1.1s
**NB2 NORSAR Subarra 44.43 323** P **P 20 04 46.6 +0.3**
comp=Z,1.8nm,0.6s,baz=95,slow=7.9
**NOA NORSAR Array B 44.43 323** P **P 20 04 46.4 +0.1**
comp=Z,1.5nm,0.6s,baz=97,slow=7.9,SNR=12
comp=Z,1.5nm,0.6s
**NOA NORSAR Array B 44.43 323** *e*P **P 20 04 47.3 +1.0**
NOA pmax pmax
comp=Z,2.0nm,0.6s
**NBO00 NORSAR Array S 44.64 323** P **P 20 04 47.4 -0.6**
NBO00 IAmb IAmb 20 05 20.1
comp=Z,15nm,1.4s
**NC204 NORSAR Array S 44.67 323** **P 20 04 48.0 -0.2**
**RAFF Raffo Rosso 44.68 289** P **P 20 04 48.1 -0.5**
**KSRS Korea Array 45.01 71** P **P 20 04 49.8 -1.3**
comp=Z,0.6nm,0.5s,baz=274,slow=8.0,SNR=1.6
comp=Z,0.6nm,0.5s
**KONO Kongsberg 45.13 321** P **P 20 04 52.1 +0.3**
**KONO Kongsberg 45.13 321** P **P 20 04 52.1 +0.3**
KONO pmax pmax
comp=Z,20nm,1.5s
**TORD Torodi Ar. Bea 65.62 269** P **P 20 07 19.2 -0.1**
comp=Z,1.7nm,0.6s,baz=44,slow=5.8,SNR=12
comp=Z,1.7nm,0.6s
**WRA Warramunga Arr 82.00 122** P **P 20 08 53.2 -1.6**
comp=Z,0.7nm,0.8s,baz=327,slow=4.9,SNR=11
comp=Z,0.7nm,0.8s
**WRA Warramunga Arr 82.00 122** *e*P **P 20 08 53.8 -1.0**
WRA pmax pmax
comp=Z,1.0nm,0.6s
**ASAR Alice Springs 84.26 125** P **P 20 09 05.0 -1.4**
comp=Z,0.6nm,0.8s,baz=315,slow=4.8,SNR=7.5
comp=Z,0.6nm,0.8s

*SNET **31** 20:10:10.8±1.7, 13°.27N×88°.03W, h2km, ML3.2*
*CATAC **31** 20:10:11.7±0.1, 13°.28N×88°.04W, h4km±1km, ML3.2*
**ISC 31 20:10:11.0±0.8, 13°.25N±0°.03×88°.04W±0°.02, h16km±5km, n59, σ0°.54/95, 1C-1D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **INTP** | **Intipuca** | **0.06** | **194** ⇓ | *e*P | **Pg** | **20 10 13.9** | **-0.1** |
| INTP | | | | *e*S | **Sg** | **20 10 15.6** | **-0.4** |
| **LCND** | **La Caada** | **0.15** | **69** ⇑ | *e*P | **Pg** | **20 10 15.3** | **+0.2** |
| LCND | | | | *e*P | | 20 10 15.3 | |
| **LCND** | **La Caada** | **0.15** | **69** | *i* P | **Pg** | **20 10 15.0** | **-0.1** |
| LCND | | | | IAML | | 20 10 15.6 | |
| | comp=Z,6μm,1.0s | | | | | | |
| **CNCH** | **Conchagua** | **0.20** | **84** | *e*P | **Pg** | **20 10 16.3** | **+0.4** |
| **CNCH** | **Conchagua** | **0.20** | **84** | *i* P | **Pg** | **20 10 16.3** | **+0.4** |
| CNCH | | | | IAML | | 20 10 16.4 | |
| | comp=Z,8μm,1.0s | | | | | | |
| **CNRM** | **Centro Naciona** | **0.25** | **330** | *i* P | **Pg** | **20 10 16.5** | **-0.1** |
| CNRM | | | | *i* S | **Sg** | **20 10 20.5** | **+0.1** |
| CNRM | | | | IAML | | 20 10 23.2 | |
| | comp=Z,12μm,1.0s | | | | | | |
| **BLLM** | **Bellamira** | **0.27** | **314** | *e*P | **Pb** | **20 10 17.4** | **-0.1** |
| **RANC** | **El Ranchito** | **0.30** | **306** | *e*P | **Pb** | **20 10 18.1** | **-0.1** |
| **RANC** | **El Ranchito** | **0.30** | **306** | *i* P | **Pg** | **20 10 17.9** | **+0.4** |
| RANC | | | | *i* S | **Sb** | **20 10 22.8** | **-0.2** |
| RANC | | | | IAML | | 20 10 28.6 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **PACA** | **Pacayal** | **0.35** | **308** | *e*P | **Pg** | **20 10 18.8** | **+0.4** |
| PACA | | | | *e*S | **Sg** | **20 10 24.1** | **+0.8** |
| **PACA** | **Pacayal** | **0.35** | **308** | *i* P | **Pg** | **20 10 18.7** | **+0.4** |
| PACA | | | | *i* S | **Sg** | **20 10 23.7** | **+0.4** |
| PACA | | | | IAML | | 20 10 29.6 | |
| | comp=Z,14μm,1.0s | | | | | | |
| **AMPH** | **Amapala** | **0.37** | **85** | *e*P | **Pb** | **20 10 19.2** | **-0.1** |
| AMPH | | | | *e*S | **Sb** | **20 10 25.0** | **+0.1** |
| **AMPH** | **Amapala** | **0.37** | **85** | *i* P | **Pb** | **20 10 19.0** | **-0.3** |
| AMPH | | | | *i* S | **Sb** | **20 10 24.7** | **-0.2** |
| **FAGO** | **Alcalda de S** | **0.44** | **352** | *e*P | **Pg** | **20 10 19.7** | **-0.2** |
| FAGO | | | | *e*S | **Sg** | **20 10 26.0** | **0.0** |
| **TECA** | **Tecapa** | **0.51** | **298** | *e*P | **Pb** | **20 10 21.7** | **-0.1** |
| **COEB** | **Comit de Eme** | **0.54** | **297** | *e*P | **Pg** | **20 10 21.9** | **+0.1** |
| **COEB** | **Comit de Eme** | **0.54** | **297** | *i* P | **Pg** | **20 10 21.8** | **+0.1** |
| COEB | | | | *i* S | **Sg** | **20 10 29.3** | **+0.4** |
| COEB | | | | IAML | | 20 10 30.6 | |
| | comp=Z,1μm,1.0s | | | | | | |
| **CAHU** | **Cacauatique** | **0.54** | **342** | *e*P | **Pg** | **20 10 22.0** | **+0.2** |
| **CSGN** | **Cosiguina Volc** | **0.54** | **120** | *i* P | **Pb** | **20 10 21.9** | **-0.4** |
| CSGN | | | | *i* S | **Sb** | **20 10 30.1** | **+0.2** |
| CSGN | | | | IAML | | 20 10 30.9 | |
| | comp=Z,260nm,1.0s | | | | | | |
| **PQSS** | **Presa 15 de Se** | **0.63** | **306** | *i* P | **Pg** | **20 10 23.9** | **+0.6** |
| PQSS | | | | IAML | | 20 10 24.9 | |
| | comp=Z,640nm,1.0s | | | | | | |
| PQSS | | | | *i* S | **Sg** | **20 10 33.0** | **+1.3** |
| **TECO** | **Alcaldia de Te** | **0.77** | **291** | *e*P | **Pb** | **20 10 25.8** | **-0.4** |
| **TECO** | **Alcaldia de Te** | **0.77** | **291** | *i* P | **Pb** | **20 10 25.7** | **-0.4** |
| TECO | | | | *i* S | **Sg** | **20 10 36.9** | **+0.5** |
| TECO | | | | IAML | | 20 10 39.3 | |
| | comp=Z,590nm,1.0s | | | | | | |
| **SCLA** | **Alcaldia de Sa** | **0.80** | **304** | *e*P | **Pg** | **20 10 26.9** | **+0.2** |
| **SCLA** | **Alcaldia de Sa** | **0.80** | **304** | *i* P | **Pg** | **20 10 26.9** | **+0.2** |
| SCLA | | | | *i* S | **Sn** | **20 10 38.6** | **-0.9** |
| SCLA | | | | IAML | | 20 10 49.0 | |
| | comp=Z,130nm,1.0s | | | | | | |
| **UESV** | **Universidad de** | **0.82** | **298** | *i* P | **Pb** | **20 10 26.9** | **-0.1** |
| UESV | | | | *i* S | **Sg** | **20 10 38.2** | **+0.3** |
| UESV | | | | IAML | | 20 10 43.4 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **COEG** | **Centro de Oper** | **0.90** | **294** | *e*P | **Pb** | **20 10 28.1** | **-0.2** |
| **COEG** | **Centro de Oper** | **0.90** | **294** | *i* P | **Pb** | **20 10 28.2** | **-0.1** |
| COEG | | | | *i* S | **Sg** | **20 10 40.6** | **+0.4** |
| COEG | | | | IAML | | 20 10 41.5 | |
| | comp=Z,620nm,1.0s | | | | | | |
| **MARCA** | **Marcala la Paz** | **0.90** | **0** | *i* P | **Pb** | **20 10 28.4** | **0.0** |
| MARCA | | | | *i* S | **Sg** | **20 10 40.7** | **+0.3** |
| **PAVA** | **Las Pavas** | **0.98** | **298** | *e*P | **Pn** | **20 10 30.0** | **-0.3** |
| **LFRS** | **El Faro** | **1.06** | **290** | *e*P | **Pb** | **20 10 31.1** | **0.0** |
| **TGUH** | **Tegucigalpa,Un** | **1.09** | **43** | *i* P | **Pn** | **20 10 31.6** | **-0.2** |
| TGUH | | | | *i* S | **Sg** | **20 10 46.7** | **+0.2** |
| TGUH | | | | IAML | | 20 10 47.7 | |
| | comp=Z,820nm,1.0s | | | | | | |
| **CRIN** | **San Cristobal** | **1.11** | **120** | *i* P | **Pg** | **20 10 32.8** | **+0.3** |
| CRIN | | | | IAML | | 20 10 33.2 | |
| | comp=Z,2μm,1.0s | | | | | | |
| CRIN | | | | *i* S | **Sg** | **20 10 48.6** | **+1.5** |
| **PANCS** | **Alcalda de** | **1.17** | **288** | *i* P | **Pb** | **20 10 32.9** | **+0.1** |
| PANCS | | | | *i* S | **Sn** | **20 10 48.2** | **-0.2** |
| PANCS | | | | IAML | | 20 11 28.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **LOMA** | **Loma Larga** | **1.17** | **290** | *e*P | **Pb** | **20 10 33.0** | **+0.1** |
| **LOMA** | **Loma Larga** | **1.17** | **290** | *i* P | **Pb** | **20 10 32.8** | **-0.1** |
| LOMA | | | | *i* S | **Sg** | **20 10 49.2** | **+0.3** |
| LOMA | | | | IAML | | 20 10 50.1 | |
| | comp=Z,350nm,1.0s | | | | | | |
| **UDBS** | **Universidad Do** | **1.18** | **293** | *i* P | **Pg** | **20 10 33.6** | **-0.2** |
| UDBS | | | | *i* S | **Sg** | **20 10 49.9** | **+0.7** |
| UDBS | | | | IAML | | 20 11 19.0 | |
| | comp=Z,540nm,1.0s | | | | | | |
| **PKGN** | **Cerro Pekin** | **1.19** | **119** | *i* P | **Pb** | **20 10 33.0** | **-0.2** |
| PKGN | | | | *i* S | **Sg** | **20 10 50.1** | **+0.6** |
| PKGN | | | | IAML | | 20 10 51.0 | |
| | comp=Z,2μm,1.0s | | | | | | |
| **SNET** | **Serv Nac Est T** | **1.24** | **290** | *i* P | **Pb** | **20 10 34.5** | **+0.4** |
| SNET | | | | *i* S | **Sg** | **20 10 51.6** | **+0.5** |
| SNET | | | | IAML | | 20 11 31.3 | |
| | comp=Z,860nm,1.0s | | | | | | |
| **LLGN** | **La Laguna** | **1.26** | **316** | *i* S | **Sg** | **20 10 51.5** | **-0.3** |
| **LALI** | **Alcalda de L** | **1.27** | **281** | *i* S | **Sg** | **20 10 53.2** | **+1.1** |
| **COMHN** | **El Horno** | **1.27** | **22** | *i* P | **Pg** | **20 10 36.4** | **+0.8** |
| COMHN | | | | *i* S | **Sn** | **20 10 51.0** | **-0.2** |
| **PMON** | **Piamonte** | **1.32** | **290** | *i* P | **Pb** | **20 10 35.7** | **+0.2** |
| PMON | | | | *i* S | **Sg** | **20 10 54.4** | **+0.6** |
| PMON | | | | IAML | | 20 10 56.9 | |
| | comp=Z,490nm,1.0s | | | | | | |
| **HERN** | **Volcan Telica** | **1.34** | **118** | *i* P | **Pb** | **20 10 36.0** | **+0.1** |
| HERN | | | | *i* S | **Sg** | **20 10 55.8** | **+1.4** |
| HERN | | | | IAML | | 20 10 56.6 | |
| | comp=Z,360nm,1.0s | | | | | | |
| **TELN** | **Telica** | **1.34** | **119** | *i* P | **Pb** | **20 10 35.7** | **-0.2** |
| TELN | | | | *i* S | **Sg** | **20 10 56.3** | **+1.8** |
| TELN | | | | IAML | | 20 10 59.4 | |
| | comp=Z,23nm,1.0s | | | | | | |
| **YUSH** | **Yuscaran** | **1.36** | **59** | *i* P | **Pb** | **20 10 36.0** | **-0.1** |
| YUSH | | | | *i* S | **Sg** | **20 10 54.9** | **0.0** |
| **SOMN** | **Somoto** | **1.40** | **83** | *i* P | **Pg** | **20 10 38.0** | **0.0** |
| SOMN | | | | IAML | | 20 11 00.2 | |
| | comp=Z,290nm,1.0s | | | | | | |
| **JAYA** | **Jayaque - finc** | **1.43** | **286** | *i* P | **Pb** | **20 10 37.4** | **0.0** |
| JAYA | | | | IAML | | 20 10 38.2 | |
| | comp=Z,720nm,1.0s | | | | | | |
| JAYA | | | | *i* S | **Sg** | **20 10 56.9** | **-0.3** |
| **CNGA** | **Al SSO del Vol** | **1.51** | **120** | *i* S | **Sg** | **20 10 59.4** | **-0.3** |
| **CNGN** | **Cerro Negro** | **1.51** | **120** | *i* S | **Sg** | **20 10 59.4** | **-0.3** |
| **OCON** | **Estacion meteo** | **1.56** | **76** | *i* P | **Pn** | **20 10 38.6** | **+0.3** |
| OCON | | | | *i* S | **Sb** | **20 10 59.5** | **+0.2** |
| OCON | | | | IAML | | 20 11 00.4 | |
| | comp=Z,420nm,1.0s | | | | | | |
| **LIMN** | **Finca el Limon** | **1.64** | **96** | *i* P | **Pb** | **20 10 40.3** | **-0.7** |
| LIMN | | | | IAML | | 20 11 06.8 | |
| | comp=Z,180nm,1.0s | | | | | | |
| **CEVE** | **Cerro Verde** | **1.64** | **290** | *i* P | **Pb** | **20 10 41.1** | **0.0** |
| CEVE | | | | *i* S | **Sg** | **20 11 04.0** | **-0.1** |
| CEVE | | | | IAML | | 20 11 11.5 | |
| | comp=Z,190nm,1.0s | | | | | | |
| **SARH** | **Santa Rosa de** | **1.67** | **335** | *i* P | **Pb** | **20 10 41.6** | **+0.2** |
| SARH | | | | *i* S | **Sg** | **20 11 04.2** | **-0.6** |
| **MOMN** | **Momotombo** | **1.69** | **120** | *i* P | **Pn** | **20 10 40.2** | **+0.3** |
| MOMN | | | | *i* S | **Sg** | **20 11 04.2** | **-1.2** |
| MOMN | | | | IAML | | 20 11 08.2 | |
| | comp=Z,6.5nm,1.0s | | | | | | |
| **MTO3** | **Montecristo** | **1.71** | **312** | *i* P | **Pb** | **20 10 42.0** | **-0.3** |
| MTO3 | | | | *i* S | **Sg** | **20 11 05.4** | **-1.0** |
| MTO3 | | | | IAML | | 20 11 06.0 | |
| | comp=Z,200nm,1.0s | | | | | | |
| **MOM2** | **El Cardon** | **1.72** | **118** | *i* S | **Sg** | **20 11 06.2** | **-0.3** |
| **COPN** | **Copaltepe** | **1.77** | **127** | *i* P | **Pb** | **20 10 42.4** | **-0.8** |
| COPN | | | | IAML | | 20 11 37.9 | |
| | comp=Z,64nm,1.0s | | | | | | |
| **NUBE** | **Las Nubes** | **1.81** | **291** | *i* P | **Pb** | **20 10 43.8** | **-0.1** |
| NUBE | | | | *i* S | **Sg** | **20 11 08.5** | **-0.9** |
| NUBE | | | | IAML | | 20 11 11.1 | |
| | comp=Z,180nm,1.0s | | | | | | |
| **BOAB** | **BOACO BROADBAN** | **2.45** | **109** | *i* P | **Pb** | **20 10 53.4** | **-1.3** |
| BOAB | | | | *i* S | **Sb** | **20 11 25.4** | **+0.7** |
| BOAB | | | | IAML | | 20 11 35.2 | |
| | comp=Z,35nm,1.0s | | | | | | |

*NEIC **31** 20:18:40.7±0.3, 35°.796N±0°.009×97°.20W±0°.01, h5km±2km, mb_Lg2.5/59, ML2.9, ML2.9/54, Error ellipse: s-maj=1.5km s-min=1.1km az=119.0*
**NEIC 31 20:18:40.3±0.3, 35°.796N±0°.008×97°.20W±0°.01, h4km±1km, Error ellipse: s-maj=1.3km s-min=1.2km az=128.0, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ADOK** | **Arcadia Dam** | **0.20** | **224** | Pg | Pg | 20 18 45.0 | +0.7 |
| ADOK | | | | Sg | Sg | 20 18 48.1 | +1.2 |
| **OK029** | **Liberty Lake** | **0.21** | **270** | Pg | Pg | 20 18 45.0 | +0.6 |
| OK029 | | | | Sg | Sg | 20 18 48.2 | +1.1 |
| OK029 | | | | IAML | | 20 18 48.5 | |
| | 3μm,0.5s | | | | | | |
| **OK031** | **S. Brethren Rd** | **0.33** | **62** | Pg | Pg | 20 18 47.6 | +0.9 |
| OK031 | | | | Sg | Sg | 20 18 52.4 | +1.3 |
| OK031 | | | | IAML | | 20 18 52.6 | |
| | 1μm,0.2s | | | | | | |
| OK031 | | | | IAML | | 20 18 52.6 | |
| | 2μm,0.2s | | | | | | |
| **OK052** | **Battle Ridge R** | **0.38** | **58** | | Pg | 20 18 48.5 | +0.8 |
| OK052 | | | | Sg | Sg | 20 18 53.8 | +1.3 |
| OK052 | | | | IAML | | 20 18 54.1 | |
| | 1μm,0.2s | | | | | | |
| OK052 | | | | IAML | | 20 18 54.1 | |
| | 1μm,0.2s | | | | | | |
| **OKCSW** | **OKLAHOMA CITY** | **0.43** | **207** | Pg | Pg | 20 18 49.3 | +0.6 |
| OKCSW | | | | Sg | Sg | 20 18 55.7 | +1.3 |
| OKCSW | | | | IAML | | 20 18 55.9 | |
| | comp=N,1μm,0.3s | | | | | | |
| OKCSW | | | | IAML | | 20 18 56.0 | |
| | comp=E,1μm,0.4s | | | | | | |
| **QUOK** | **Quay** | **0.55** | **47** | Pg | Pg | 20 18 51.5 | +0.7 |
| QUOK | | | | Sg | Sg | 20 18 59.0 | +1.1 |
| QUOK | | | | IAML | | 20 18 59.4 | |
| | comp=E,513nm,0.3s | | | | | | |
| QUOK | | | | IAML | | 20 18 59.9 | |
| | comp=N,493nm,0.2s | | | | | | |
| **FNO** | **Franklin** | **0.56** | **197** | Pg | Pg | 20 18 51.7 | +0.6 |
| FNO | | | | Sg | Sg | 20 18 59.6 | +1.2 |
| FNO | | | | IAML | | 20 19 00.2 | |
| | comp=N,505nm,0.3s | | | | | | |
| **DEOK** | **Depew** | **0.57** | **85** | Pg | Pg | 20 18 52.0 | +0.6 |
| DEOK | | | | Sg | Sg | 20 18 59.8 | +1.0 |
| DEOK | | | | IAML | | 20 19 00.6 | |
| | comp=N,654nm,0.2s | | | | | | |
| **OK048** | **Pawnee Station** | **0.65** | **18** | | Pg | 20 18 53.4 | +0.6 |
| OK048 | | | | Sg | Sg | 20 19 02.2 | +0.8 |
| OK048 | | | | IAML | | 20 19 04.5 | |
| | comp=N,392nm,0.4s | | | | | | |
| **OK051** | **E0350 and S346** | **0.77** | **22** | Pg | Pg | 20 18 55.4 | +0.3 |
| OK051 | | | | Sg | Sg | 20 19 05.8 | +0.8 |
| OK051 | | | | IAML | | 20 19 08.8 | |
| | comp=N,469nm,0.2s | | | | | | |
| **CROK** | **Carrier** | **0.95** | **318** | Pg | Pg | 20 18 58.7 | +0.1 |
| CROK | | | | IAML | | 20 19 15.5 | |
| | comp=E,362nm,0.3s | | | | | | |
| CROK | | | | IAML | | 20 19 19.6 | |
| | comp=N,488nm,0.2s | | | | | | |
| **BLOK** | **Blackwell** | **0.96** | **359** | Pg | Pg | 20 18 59.0 | +0.2 |
| **TUL3** | **Leonard** | **1.15** | **84** | Pg | Pg | 20 19 01.6 | -0.8 |
| **GC02** | **Grant County #** | **1.18** | **333** | Pg | Pg | 20 19 02.8 | -0.2 |
| **CSTR** | **Hydro, Custer** | **1.22** | **263** | | Pg | 20 19 03.7 | -0.1 |
| **KAN13** | **South Haven SW** | **1.23** | **350** | Pg | Pg | 20 19 03.9 | -0.2 |
| **T35A** | **Sooner Cattle** | **1.25** | **26** | Pg | Pg | 20 19 03.9 | -0.4 |
| T35A | | | | IAML | | 20 19 21.6 | |
| | comp=N,330nm,0.3s | | | | | | |
| **OK032** | **Salt Plains WL** | **1.30** | **321** | | Pg | 20 19 04.8 | -0.4 |
| OK032 | | | | IAML | | 20 19 25.5 | |
| | comp=N,339nm,0.2s | | | | | | |
| **X34A** | **Smith Ranch, M** | **1.30** | **204** | | Pg | 20 19 05.2 | -0.1 |
| X34A | | | | IAML | | 20 19 24.6 | |
| | comp=E,207nm,0.6s | | | | | | |
| X34A | | | | IAML | | 20 19 24.8 | |
| | comp=N,240nm,0.3s | | | | | | |
| **KAN14** | **Manchester OK** | **1.31** | **332** | | Pg | 20 19 05.2 | -0.4 |
| **KAN17** | **Caldwell West** | **1.33** | **340** | | Pn | 20 19 05.4 | -0.3 |
| **KAN09** | **Caldwell North** | **1.38** | **346** | | Pn | 20 19 06.3 | -0.2 |
| **OK038** | **West end E0370** | **1.42** | **299** | | Pn | 20 19 06.9 | -0.1 |
| **KAN01** | **Argonia South** | **1.43** | **342** | | Pn | 20 19 07.2 | +0.1 |
| **KS21** | **Milan North St** | **1.53** | **346** | | Pb | 20 19 09.1 | -0.3 |
| **KAN08** | **Anthony NE Sta** | **1.56** | **337** | | Pb | 20 19 09.4 | -0.4 |
| **KAN12** | **Harper NE Stat** | **1.63** | **337** | | Pb | 20 19 10.6 | -0.4 |
| KAN12 | | | | IAmb_Lg | | 20 19 31.8 | |
| | comp=Z,35nm,0.8s | | | | | | |
| **NOKA** | **Waynoka** | **1.63** | **301** | | Pn | 20 19 10.2 | +0.3 |
| **WMOK** | **Wichita Mounta** | **1.67** | **231** | Pg | Pn | 20 19 10.6 | +0.2 |
| **LOOK** | **Love County** | **1.80** | **179** | | Pn | 20 19 12.5 | +0.3 |
| **RLO** | **Rose Lookout** | **1.80** | **78** | | Pn | 20 19 12.6 | +0.3 |
| **ELIS** | **Ellis County** | **1.82** | **279** | Pn | Pn | 20 19 13.3 | +0.7 |
| **X37A** | **Clayton** | **1.92** | **128** | Pn | Pn | 20 19 14.6 | +0.8 |
| X37A | | | | IAmb_Lg | | 20 19 44.3 | |
| | comp=Z,27nm,0.8s | | | | | | |
| **WTFS** | **Witchita Falls** | **2.28** | **208** | Pn | Pn | 20 19 19.7 | +0.9 |
| **U38A** | **Gravette** | **2.37** | **73** | | Pn | 20 19 21.0 | +1.0 |
| **Z35A** | **Perchaven, San** | **2.46** | **181** | Pn | Pn | 20 19 22.0 | +0.7 |
| **SMWD** | **Samnorwood** | **2.58** | **255** | | Pn | 20 19 23.6 | +0.6 |
| **HHAR** | **Hobbs** | **2.69** | **79** | | Pn | 20 19 26.1 | +1.7 |
| **FW06** | **Azle** | **2.83** | **186** | Pn | Pn | 20 19 26.8 | +0.4 |
| **R32A** | **Long Quarter,** | **2.89** | **336** | | Pn | 20 19 28.3 | +1.1 |
| **PLPT** | **Palo Pinto** | **3.12** | **198** | | Pn | 20 19 31.2 | +0.9 |
| **MIAR** | **Mount Ida** | **3.22** | **112** | Pn | Pn | 20 19 29.7 | -2.0 |
| **KSU1** | **Kansas State U** | **3.33** | **8** | | Pn | 20 19 31.8 | -1.5 |
| KSU1 | | | | IAmb_Lg | | 20 20 30.1 | |
| | comp=Z,16nm,0.7s | | | | | | |
| **APMT** | **Aspermont** | **3.45** | **225** | | Pn | 20 19 35.5 | +0.6 |
| **CBKS** | **Cedar Bluff** | **3.63** | **327** | IAmb_Lg | | 20 20 34.6 | |
| | comp=Z,9.7nm,0.8s | | | | | | |
| **S39A** | **Bolivar** | **3.64** | **58** | Pn | Pn | 20 19 38.5 | +0.9 |
| **DKNS** | **Dickens** | **3.73** | **236** | Pn | Pn | 20 19 39.1 | +0.2 |
| **ABTX** | **Abilene, Hawle** | **3.76** | **213** | Pn | Pn | 20 19 39.0 | -0.2 |
| ABTX | | | | IAmb_Lg | | 20 20 47.1 | |
| | comp=Z,9.9nm,0.7s | | | | | | |
| **AMTX** | **Amarillo** | **3.77** | **257** | | Pn | 20 19 39.9 | +0.4 |
| AMTX | | | | IAmb_Lg | | 20 20 47.9 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **X40A** | **Basin Creek Fa** | **3.81** | **109** | Pn | Pn | 20 19 41.9 | +2.1 |
| **WLAR** | **White Oak Lake** | **3.97** | **121** | IAmb_Lg | | 20 20 46.7 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **WHAR** | **Wooly Hollow** | **4.04** | **96** | Pn | Pn | 20 19 42.9 | -0.1 |
| WHAR | | | | IAmb_Lg | | 20 20 50.6 | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **SN07** | **Snyder 07** | **4.07** | **230** | | Pn | 20 19 43.6 | +0.1 |
| SN07 | | | | IAmb_Lg | | 20 20 53.9 | |
| | comp=Z,9.6nm,0.9s | | | | | | |
| **UALR** | **University of** | **4.10** | **103** | | Pn | 20 19 42.5 | -1.3 |
| UALR | | | | IAmb_Lg | | 20 21 01.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| **FCAR** | **Ozark Folk Cen** | **4.12** | **87** | | Pn | 20 19 43.8 | -0.3 |
| FCAR | | | | IAmb_Lg | | 20 20 55.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MGMO** | **Mountain Grove** | **4.20** | **70** | Pn | Pn | 20 19 44.3 | -1.0 |
| MGMO | | | | IAmb_Lg | | 20 20 57.5 | |
| | comp=Z,7.8nm,0.7s | | | | | | |
| **SN05** | **Snyder 5** | **4.21** | **227** | IAmb_Lg | | 20 20 55.4 | |
| | comp=Z,13nm,0.9s | | | | | | |
| **POST** | **Post** | **4.48** | **234** | IAmb_Lg | | 20 21 07.9 | |
| | comp=Z,9.8nm,0.8s | | | | | | |
| **RTBA** | **Rita Blanca** | **4.53** | **280** | | Pn | 20 19 48.5 | -1.4 |
| RTBA | | | | IAmb_Lg | | 20 21 14.4 | |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **R40A** | **Maddies Statio** | **4.67** | **56** | Pn | Pn | 20 19 50.7 | -0.9 |
| R40A | | | | IAmb_Lg | | 20 21 17.8 | |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **BRDY** | **Brady** | **4.74** | **199** | Pn | Pn | 20 19 51.5 | -1.2 |
| BRDY | | | | IAmb_Lg | | 20 21 12.6 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **P38A** | **Dawn** | **4.80** | **36** | | Pn | 20 19 52.2 | -1.3 |
| P38A | | | | IAmb_Lg | | 20 21 21.7 | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **4.93** | **250** | | Pn | 20 19 53.4 | -2.0 |
| **SGCY** | **Sterling City** | **5.07** | **221** | | Pn | 20 19 56.8 | -0.4 |
| SGCY | | | | IAmb_Lg | | 20 21 23.6 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **T42A** | **Van Buren** | **5.08** | **74** | Pn | Pn | 20 19 56.5 | -0.8 |
| T42A | | | | IAmb_Lg | | 20 21 32.1 | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **N35A** | **Tabor** | **5.20** | **13** | Pn | Pn | 20 19 57.2 | -1.8 |
| **CCM** | **Cathedral Cave** | **5.28** | **63** | Pn | Pn | 20 19 58.1 | -1.9 |
| CCM | | | | IAmb_Lg | | 20 21 43.1 | |
| | comp=Z,5.8nm,0.8s | | | | | | |
| **P40A** | **Paris** | **5.53** | **46** | Pn | Pn | 20 20 01.6 | -1.9 |
| **PBMO** | **Poplar Bluff** | **5.56** | **78** | Pn | Pn | 20 20 03.0 | -0.8 |
| PBMO | | | | IAmb_Lg | | 20 21 35.0 | |
| | comp=Z,11nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **5.73** | **203** | Pn | Pn | 20 20 05.

*s-min=17.9km az=78.0*
*JMA **31** 20:27:58.2±0.2,35°.1N±0°.5×140°.6E±0°.9,h59km±1km, MV2.9/37,SE OFF BOSO PENINSULA*
**ISC 31 20:27:59.6**±1.0,**34°.99N**±0°.05×**140°.57E**±0°.06,**h54**km±6km, **n25,σ1§64/27,mb3.4**/3,**Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BSO3** | **Boso 3** | **0.19** | **195** | *i* P | | **Pn** | **20 28 08.0** | **0.0** |
| BSO3 | | | | *eX* | | **Sn** | **20 28 15.1** | **+1.2** |
| **BSO4** | **Boso 4** | **0.19** | **272** | *i* P | | **Pn** | **20 28 07.9** | **-0.2** |
| BSO4 | | | | *eX* | | **Sn** | **20 28 15.2** | **+0.9** |
| **KTR** | **Katsuura** | **0.26** | **308** | P | | **Pn** | **20 28 07.8** | **-1.0** |
| KTR | | | | S | | **Sn** | **20 28 14.7** | **-0.6** |
| **JKUC** | **kamogawauchiur** | **0.35** | **300** | *i* P | | **Pn** | **20 28 08.7** | **-0.8** |
| JKUC | | | | S | | **Sn** | **20 28 15.9** | **-0.7** |
| **BSO1** | **Boso 1** | **0.47** | **134** | *i* P | | **Pn** | **20 28 10.1** | **-0.1** |
| **JCN** | **Nagara** | **0.53** | **325** | P | | **Pn** | **20 28 10.5** | **-0.9** |
| JCN | | | | S | | **Sn** | **20 28 19.9** | **+0.1** |
| **JSMT** | **Sammumatsuo** | **0.66** | **351** | P | | **Pn** | **20 28 11.5** | **-1.6** |
| **JIM2** | **Oshima 3** | **0.97** | **254** | P | | **Pn** | **20 28 16.3** | **-0.8** |
| JIM2 | | | | S | | **Sn** | **20 28 29.3** | **-0.7** |
| **JOD2** | **Odawara 2** | **1.25** | **283** | *i* P | | **Pn** | **20 28 19.6** | **-1.1** |
| JOD2 | | | | S | | **Sn** | **20 28 35.5** | **-1.0** |
| **JMYK** | **Miyake Tsubota** | **1.25** | **223** | P | | **Pn** | **20 28 21.1** | **+0.4** |
| **JIZS** | **Izushimoda** | **1.42** | **260** | P | | **Pn** | **20 28 22.4** | **-0.6** |
| JIZS | | | | *e*S | | **Sn** | **20 28 40.1** | **-0.5** |
| **JHJ** | **Hachijo jima 2** | **1.97** | **200** | Pn | | **Pn** | **20 28 26.9** | **-3.7** |
| | 27nm,0.3s,baz=306,slow=19,SNR=24 | | | | | | | |
| JHJ | | | | Sn | | **Sn** | **20 28 54.8** | **+0.6** |
| | 35nm,0.3s,baz=77,slow=23,SNR=6.9 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.47** | **310** | Pn | | **Pn** | **20 28 36.7** | **-0.6** |
| | 3.3nm,0.3s,baz=159,slow=13,SNR=38 | | | | | | | |
| MJAR | | | | Sn | | **Sn** | **20 29 09.6** | **+3.2** |
| | 0.6nm,0.3s,baz=116,slow=26,SNR=7.1 | | | | | | | |
| **JCJ** | **Chichijima** | **7.99** | **170** | Pn | | Pn | 20 29 46.0 | -7.0 |
| | 6.0nm,0.3s,baz=82,slow=22,SNR=1.5 | | | | | | | |
| | 35nm,0.5s | | | | | | | |
| **ASAJ** | **Asahikawa** | **9.25** | **9** | Pn | | **Pn** | **20 30 06.5** | **-3.7** |
| | 0.6nm,0.3s,baz=228,slow=13,SNR=6.3 | | | | | | | |
| | 1.3nm,0.3s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **21.80** | **29** | LR | | LR | 20 42 07.5 | |
| | comp=Z,19nm,20.0s,baz=183,slow=39 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 27.77** | **116** | | T | | T | 21 03 05.4 | |
| | baz=309,slow=75,SNR=6.6 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 27.78** | **116** | | T | | T | 21 03 04.2 | |
| | baz=309,slow=75,SNR=9.1 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 27.79** | **116** | | T | | T | 21 03 01.8 | |
| | baz=309,slow=75,SNR=8.9 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 28.40** | **119** | | T | | T | 21 03 43.0 | |
| | baz=312,slow=75,SNR=14 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 28.40** | **119** | | T | | T | 21 03 43.6 | |
| | baz=312,slow=75,SNR=14 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 28.42** | **119** | | T | | T | 21 03 44.0 | |
| | baz=312,slow=75,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.66** | **304** | P | | **P** | **20 36 09.8** | **+3.0** |
| | 0.2nm,0.7s,baz=86,slow=8.1,SNR=2.0 | | | | | | | |
| | 0.2nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.75** | **309** | P | | **P** | **20 36 24.8** | **+1.6** |
| | 0.3nm,0.6s,baz=84,slow=8.9,SNR=2.9 | | | | | | | |
| | 0.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.94** | **187** | P | | **P** | **20 37 24.8** | **-0.4** |
| | 0.2nm,0.4s,baz=0.7,slow=7.6,SNR=8.6 | | | | | | | |
| | 0.2nm,0.4s | | | | | | | |

*IDC **31** 20:29:55.7±1.6,5°.32N×126°.25E,h0km,mb3.5/5, mbtmp3.5/5,MS3.3/1,Error ellipse: s-maj=146.8km s-min=21.4km az=66.0*
**ISC 31 20:30:07.2**±1.2,**5°.4N**±0°.1×**126°.6E**±0°.5,**h100**km,**n7, σ0§51/7,mb3.7/5,1D,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **2.78** | **355** | ⇓*i* P | | **Pn** | **20 30 50.5** | **+0.5** |
| BIPH | | | | *i* S | | **Sn** | **20 31 22.5** | **-0.5** |
| **WRA** | **Warramunga Arr** | **26.31** | **163** | P | | **P** | **20 35 33.4** | **-0.4** |
| | 0.2nm,0.8s,baz=343,slow=11,SNR=5.6 | | | | | | | |
| | 0.2nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **29.75** | **166** | P | | **P** | **20 36 04.6** | **+0.1** |
| | 0.1nm,0.7s,baz=344,slow=7.6,SNR=1.7 | | | | | | | |
| | 0.1nm,0.7s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **30.19** | **22** | LR | | LR | 20 47 38.0 | |
| | comp=Z,62nm,20.9s,baz=84,slow=35 | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.12** | **325** | P | | **P** | **20 39 36.7** | **+0.3** |
| | 0.4nm,0.4s,baz=114,slow=8.0,SNR=8.7 | | | | | | | |
| | 0.4nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.27** | **327** | P | | **P** | **20 40 04.7** | **-0.5** |
| | 0.5nm,0.5s,baz=127,slow=6.8,SNR=9.6 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.86** | **327** | P | | **P** | **20 40 41.9** | **-0.2** |
| | 0.5nm,0.5s,baz=145,slow=5.3,SNR=3.5 | | | | | | | |
| | 0.5nm,0.5s | | | | | | | |

*PDG **31** 21:05:24.9,34°.51N×46°.17E,h10km,mb4.9/3*
*NAO **31** 21:05:32.2,33°.39N×47°.34E,h33km,mb4.5*
*ISN **31** 21:05:42.1±0.7,34°.61N×46°.02E,h5km±30km,ML5.0*
*MOS **31** 21:05:42.5±1.1,34°.59N×45°.99E,h11km,mb5.0/69,Error ellipse: s-maj=4.2km s-min=2.9km az=111.8*
*TEH **31** 21:05:43.1,34°.61N×46°.13E,h8km±21km,ML4.9*
*NEIC **31** 21:05:44.4±1.4,34°.65N±0°.04×46°.07E±0°.07,h10km±1km, mb4.9/212,Mwr5.3/13,Error ellipse: s-maj=10.6km s-min=6.0km az=240.0,Moment Tensor Solution. Moment tensor: Scale 10¹⁶Nm; Mrr=0.75; Mθθ=1.83; Mφφ=-1.08; Mrθ=5.87; Mrφ=0.22; Mθφ=-7.40; Fault plane solution: M₀9.59000×10¹⁶ NP1:φs57.10000°,δ8.46000°, λ-173.10000°. NP2:φs320.27000°,δ88.99000°, λ-81.60000°. Principal axes: T 9.1139, Plg43.0000°, Azm42.0000°; N 0.8828, Plg8.0000°, Azm140.0000°; P -9.9966, Plg45.0000°, Azm239.0000°;*
*NEIC **31** 21:05:44.7,34°.73N×46°.10E,h9km*
*GCMT **31** 21:05:45.4±0.2,34°.54N±0°.01×45°.95E±0°.01,h24km±1km, MW4.9/100,Moment Tensor Solution. s34,c40; s100,c152; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.17±.09; Mθθ=-1.13±.07; Mφφ=0.96±.07; Mrθ=0.98±.12; Mrφ=2.01±.06; Mθφ=0.11±.10; Best double couple: M₀2.47000×10¹⁶ NP1:φs77.00000°,δ90.00000°, λ23.00000°. NP2:φs347.00000°,δ67.00000°,λ180.00000°. Principal axes: T 2.3600, Plg16.0000°, Azm304.0000°; N 0.2190, Plg67.0000°, Azm77.0000°; P -2.5790, Plg16.0000°, Azm209.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*
*GII **31** 21:05:45.8±0.5,34°.51N×46°.17E,h10km,confirmed*
*AFAD **31** 21:05:46.0±0.0,34°.60N×45°.89E,h15km,MW4.9*
*IDC **31** 21:05:48.0±1.5,34°.73N×46°.01E,h35km±12km,mb4.5/30, mbtmp4.7/40,ML4.0/9,MS4.0/62,Error ellipse: s-maj=9.4km s-min=8.9km az=135.0*
*SGS **31** 21:05:51.5,34°.07N×45°.77E,h9km,Ml5.3*
*BGR **31** 21:06:10.8,35°.61N×42°.88E,h33km,mb4.7,Ms3.6*
**ISC 31 21:05:43.7**±0.2,**34°.58N**±0°.02×**46°.09E**±0°.02,**h10**km,**n1324, σ1§73/1346,mb4.9**/262,**MS4.1**/86,**82C-50D,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.27** | **65** | Pg | | **Pg** | **21 05 48.3** | **-1.0** |
| **KGS1** | **Ghasr-e-Shirin** | **0.42** | **259** | Pg | | **Pg** | **21 05 52.4** | **+0.5** |
| **IGHG** | **Ghaleghazi** | **0.47** | **123** | Pg | | **Pg** | **21 05 52.6** | **-0.3** |
| **GLG1** | **Gilan-e-Gharb** | **0.49** | **197** | Pg | | **Pg** | **21 05 53.7** | **+0.4** |
| **KCHF** | **Cheshme Sefid,** | **0.85** | **111** | Pg | | **Pg** | **21 05 58.9** | **-1.1** |
| KCHF | | | | Sg | | **Sn** | **21 06 12.2** | **-2.2** |
| **ILBA** | **Ilam Banvizeh** | **0.96** | **174** | Pg | | **Pg** | **21 06 02.0** | **-0.2** |
| **SNQR** | **Sonqor, Kerman** | **1.30** | **77** | Pg | | **Pb** | **21 06 07.2** | **-1.1** |
| **IBZA** | **Bozab** | **1.47** | **94** | Pg | | **Pg** | **21 06 10.4** | **-1.4** |
| **IBDR** | **Badra** | **1.48** | **185** | *e*Pn | | **Pg** | **21 06 12.0** | **0.0** |
| IBDR | | | | *e*Sn | | **Sg** | **21 06 33.6** | **+2.4** |
| IBDR | | | | AML | AML | | 21 06 39.0 | |
| | comp=E,14μm,0.5s | | | | | | | |
| IBDR | | | | AML | AML | | 21 06 49.1 | |
| | comp=N,14μm,0.8s | | | | | | | |
| **SDS1** | **Sardasht. Az.** | **1.64** | **343** | Pg | | **Pb** | **21 06 13.2** | **-0.8** |
| **IKRK** | **Kirkuk** | **1.65** | **300** | *e*Pn | | **Pb** | **21 06 13.2** | **-1.0** |
| IKRK | | | | *e*Sn | | **Sg** | **21 06 36.5** | **-0.2** |
| IKRK | | | | AML | AML | | 21 06 44.5 | |
| | comp=E,34μm,0.7s | | | | | | | |
| IKRK | | | | AML | AML | | 21 06 45.2 | |
| | comp=N,54μm,0.5s | | | | | | | |
| **IKFM** | **Kafar-mosalman** | **1.80** | **125** | Pg | | **Pg** | **21 06 17.2** | **-1.1** |

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDOB** | **Doab** | **1.91** | **114** | Pn | | **Pb** | **21 06 18.0** | **-0.7** |
| **HSAM** | **Samen** | **2.11** | **99** | Pn | | **Pb** | **21 06 20.7** | **-1.5** |
| **MAHB** | **Mahabad** | **2.20** | **352** | Pn | | **Pb** | **21 06 21.9** | **-1.7** |
| **BDRS** | **Dareh Seyedi** | **2.40** | **104** | Pn | | **Pb** | **21 06 24.9** | **-2.2** |
| **NGD1** | **Naghade .Az. G** | **2.42** | **347** | Pn | | **Pb** | **21 06 25.0** | **-2.3** |
| **HAGD** | **Aghdareh** | **2.52** | **84** | Pn | | **Pb** | **21 06 27.1** | **-2.2** |
| **RAFI** | **Al-Rafai** | **2.85** | **180** | *e*Pn | | **Pn** | **21 06 31.5** | **+2.3** |
| RAFI | | | | *e*Sn | | **Sb** | **21 07 07.5** | **-2.2** |
| **IHSH** | **Hashtrud** | **2.88** | **19** | Pn | | **Pn** | **21 06 31.4** | **+1.5** |
| **QABG** | **Abgarm-Qazvin** | **3.08** | **68** | Pn | | **Pn** | **21 06 33.5** | **+1.0** |
| **IAZR** | **Azarshahr** | **3.09** | **358** | Pn | | **Pn** | **21 06 34.6** | **+1.9** |
| **YOVA** | **Hakkari_Yksek** | **3.33** | **335** | P | | **Pn** | **21 06 37.5** | **+1.4** |
| YOVA | | | | S | | **Sn** | **21 07 16.9** | **+1.1** |
| **CUKT** | **Cukurca** | **3.33** | **324** | P | | **Pn** | **21 06 36.9** | **+0.9** |
| CUKT | | | | S | | **Sn** | **21 07 16.4** | **+0.7** |
| **ISRB** | **Sarab** | **3.48** | **21** | Pn | | **Pn** | **21 06 39.6** | **+1.5** |
| **HAKT** | **HAKKARI** | **3.54** | **328** | P | | **Pn** | **21 06 39.7** | **+0.8** |
| HAKT | | | | S | | **Sn** | **21 07 20.9** | **-0.1** |
| **ITBZ** | **Tabriz** | **3.64** | **1** | Pn | | **Pn** | **21 06 41.8** | **+1.5** |
| **ISHB** | **Shabestar** | **3.71** | **354** | Pn | | **Pn** | **21 06 42.0** | **+0.7** |
| **IHRS** | **Heris** | **3.81** | **11** | Pn | | **Pn** | **21 06 44.3** | **+1.8** |
| **IGZV** | **Ghazvin** | **3.82** | **61** | Pn | | **Pn** | **21 06 43.8** | **+1.0** |
| **AHWZ** | **Ahwaz** | **3.89** | **146** | Pn | | **Pn** | **21 06 45.6** | **+2.1** |
| **IQOM** | **Qom** | **4.11** | **85** | Pn | | **Pn** | **21 06 48.2** | **+1.4** |
| **IMRD** | **Marand** | **4.13** | **356** | Pn | | **Pn** | **21 06 49.1** | **+2.1** |
| **SIRT** | **Sirnak** | **4.15** | **316** | | | **Pn** | **21 06 47.5** | **+0.3** |
| **SIRN** | **Sirnak** | **4.16** | **315** | P | | **Pn** | **21 06 47.8** | **+0.5** |
| **GAS1** | **Astara - Iran** | **4.39** | **30** | Pn | | **Pn** | **21 06 52.0** | **+1.6** |
| **OZAP** | **Van, Ozalp-Mer** | **4.40** | **338** | P | | **Pn** | **21 06 53.1** | **+2.4** |
| OZAP | | | | S | | **Sb** | **21 07 57.5** | **+3.0** |
| **PERV** | **Siirt/Pervari-** | **4.41** | **321** | P | | **Pn** | **21 06 50.3** | **-0.5** |
| PERV | | | | S | | **Sn** | **21 07 44.4** | **+2.0** |
| **IPIR** | **Pirpir** | **4.43** | **114** | Pn | | **Pn** | **21 06 52.5** | **+1.3** |
| **GEVA** | **Gevas** | **4.45** | **328** | Pn | | **Pn** | **21 06 51.6** | **+0.2** |
| **GEVA** | **Gevas** | **4.45** | **328** | P | | **Pn** | **21 06 53.4** | **+2.0** |
| GEVA | | | | S | | **Sn** | **21 07 39.3** | **-4.0** |
| **GRMI** | **Germi** | **4.46** | **18** | Pn | | **Pn** | **21 06 53.1** | **+1.7** |
| **QAMS** | **Qamsar** | **4.48** | **99** | Pn | | **Pn** | **21 06 53.4** | **+1.5** |
| **KLST** | **Kelardasht - M** | **4.49** | **63** | Pn | | **Pn** | **21 06 53.8** | **+1.8** |
| **TVAN** | **Van** | **4.49** | **332** | P | | **Pn** | **21 06 54.3** | **+2.3** |
| TVAN | | | | S | | **Sb** | **21 07 56.4** | **-0.6** |
| **JHBN** | **Jahan bin** | **4.49** | **120** | Pn | | **Pn** | **21 06 53.5** | **+1.5** |
| **NAX** | **Nakhchivan** | **4.61** | **354** | P | | **Pn** | **21 06 54.7** | **+1.3** |
| **LKRN** | **Lenkeran, Azer** | **4.65** | **27** | P | | **Pn** | **21 06 55.7** | **+1.8** |
| **IVRN** | **Varamin** | **4.66** | **83** | Pn | | **Pn** | **21 06 55.9** | **+1.7** |
| **ZNGN** | **Zangian** | **4.69** | **120** | Pn | | **Pn** | **21 06 56.3** | **+1.5** |
| **MIDY** | **Mardin/Midyat-** | **4.73** | **308** | P | | **Pn** | **21 06 55.4** | **+0.2** |
| **IKLH** | **Kolahrood** | **4.74** | **104** | Pn | | **Pn** | **21 06 57.4** | **+2.0** |
| **SRTM** | **Siirt_Merkez** | **4.78** | **317** | P | | **Pn** | **21 06 56.2** | **+0.3** |
| **VMUR** | **Van-Muradiye** | **4.84** | **336** | P | | **Pn** | **21 06 59.0** | **+2.3** |
| VMUR | | | | S | | **Sb** | **21 08 10.1** | **+3.2** |
| **CLDR** | **Caldiran** | **4.87** | **340** | P | | **Pn** | **21 06 53.1** | **-4.1** |
| CLDR | | | | S | | **Sn** | **21 07 58.9** | **+5.1** |
| **MAKU** | **Maku** | **4.89** | **347** | Pn | | **Pn** | **21 06 59.0** | **+1.6** |
| **IDMV** | **Damavand** | **4.97** | **77** | Pn | | **Pn** | **21 07 00.1** | **+1.4** |
| **BLIS** | **Bitlis-Merkez** | **4.99** | **321** | P | | **Pn** | **21 06 59.6** | **+0.9** |
| **ADCV** | **BITLIS_Adilcev** | **5.01** | **328** | P | | **Pn** | **21 07 01.0** | **+1.9** |
| **KRSH** | **Karshahi** | **5.04** | **95** | Pn | | **Pn** | **21 07 01.0** | **+1.4** |
| **ISFB** | **Sefidab** | **5.09** | **91** | Pn | | **Pn** | **21 07 01.3** | **+1.3** |
| **IBRJ** | **Brojen** | **5.09** | **120** | Pn | | **Pn** | **21 07 01.2** | **+1.0** |
| **MARD** | **Mardin** | **5.09** | **304** | Pn | | **Pn** | **21 07 00.2** | **0.0** |
| **MARD** | **Mardin** | **5.09** | **304** | P | | **Pn** | **21 06 59.9** | **-0.3** |
| **BTMN** | **Batman** | **5.10** | **312** | P | | **Pn** | **21 07 00.1** | **-0.1** |
| **GURO** | **Guroymak-BITLI** | **5.13** | **322** | | | **Pn** | **21 07 01.3** | **+0.6** |
| **ABEH** | **Behbahan** | **5.30** | **137** | Pn | | **Pn** | **21 07 04.7** | **+1.7** |
| **SVAN** | **Silvan-Diyarba** | **5.31** | **313** | P | | **Pn** | **21 07 02.4** | **-0.7** |
| SVAN | | | | S | | **Sb** | **21 07 17.9** | **-2.5** |
| **IGAR** | **Gharneh** | **5.43** | **112** | Pn | | **Pn** | **21 07 06.1** | **+1.2** |
| **IZEF** | **Zefreh** | **5.47** | **106** | Pn | | **Pn** | **21 07 06.5** | **+1.1** |
| **DORK** | **Agr/Tutak/Do** | **5.48** | **332** | P | | **Pn** | **21 07 07.1** | **+1.7** |
| **IGDI** | **IGDIR** | **5.51** | **344** | P | | **Pn** | **21 07 08.8** | **+2.9** |
| IGDI | | | | S | | **Sb** | **21 08 19.9** | **-6.3** |
| **MUSM** | **Mu-Merkez** | **5.53** | **320** | P | | **Pn** | **21 07 06.0** | **-0.2** |
| **KBD** | **Kabd** | **5.56** | **165** | P | | **Pn** | **21 07 08.2** | **+1.7** |
| KBD | | | | S | | **Sn** | **21 08 09.4** | **-1.1** |
| **IFIR** | **Firoozkooh** | **5.56** | **77** | Pn | | **Pn** | **21 07 08.4** | **+1.6** |
| **GNI** | **Garni** | **5.56** | **349** | Pn | | **Pn** | **21 07 06.8** | **-1.2** |
| **GNI** | **Garni** | **5.66** | **349** | Pn | | **Pn** | **21 07 11.1** | **+3.1** |
| | comp=N,4.6nm,0.3s,baz=170,slow=12,SNR=20 | | | | | | | |
| GNI | | | | Lg | Lg | | 21 08 44.7 | |
| | comp=N,4.8nm,0.3s,baz=286,slow=18,SNR=6.5 | | | | | | | |
| | comp=N,33nm,0.6s | | | | | | | |
| **GNI** | **Garni** | **5.66** | **349** | P | | Pn | 21 07 13.5 | +5.6 |
| **GNI** | **Garni** | **5.66** | **349** | *d* iP | | **Pn** | **21 07 05.7** | **-2.3** |
| **SRFHA** | **Rafha** | **5.68** | **193** | S | | Sn | 21 08 02.9 | -10 |
| **SRFHA** | **Rafha** | **5.68** | **193** | P | | **Pn** | **21 07 10.1** | **+2.0** |
| **KOTA** | **Agri, Merkez-K** | **5.69** | **337** | P | | **Pn** | **21 07 11.6** | **+3.1** |
| KOTA | | | | S | | **Sb** | **21 08 30.3** | **-1.3** |
| **ILAS** | **Lasjerd** | **5.70** | **80** | Pn | | **Pn** | **21 07 09.8** | **+1.3** |
| **KLNJ** | **Kolanjah** | **5.85** | **126** | Pn | | **Pn** | **21 07 11.7** | **+0.9** |
| **VRTB** | **Varto-Mus** | **5.88** | **322** | P | | **Pn** | **21 07 13.0** | **+1.9** |
| **IRAM** | **Rameshеh** | **5.96** | **116** | Pn | | **Pn** | **21 07 13.2** | **+1.0** |
| **SLHN** | **Bingol, Solhan** | **5.96** | **319** | P | | **Pn** | **21 07 09.9** | **-2.2** |
| **HANI** | **Diyarbakir_Han** | **5.97** | **311** | P | | **Pn** | **21 07 11.6** | **-0.5** |
| **EATA** | **Eleskirt** | **6.00** | **332** | P | | **Pn** | **21 07 15.8** | **+3.0** |
| **GANJ** | **Ganja** | **6.05** | **2** | P | | **Pn** | **21 07 14.8** | **+1.5** |
| **MNGR** | **Mingechevir, A** | **6.23** | **7** | P | | **Pn** | **21 07 17.2** | **+1.6** |
| **EAK** | **Akyaka** | **6.40** | **343** | P | | Pn | 21 07 23.4 | +5.2 |
| **ECAT** | **Car-ERZURUM** | **6.47** | **322** | P | | **Pn** | **21 07 21.1** | **+2.0** |
| **BOZK** | **Kars-Merkez-Bo** | **6.48** | **339** | P | | **Pn** | **21 07 22.8** | **+3.5** |
| **KARS** | **Kars** | **6.49** | **339** | Pn | | **Pn** | **21 07 18.8** | **-0.5** |
| **KARS** | **Kars** | **6.49** | **339** | P | | **Pn** | **21 07 18.8** | **-0.5** |
| **ANAR** | **Anarak** | **6.50** | **100** | Pn | | **Pn** | **21 07 21.4** | **+1.8** |
| **KOVA** | **Elazig, Kovanc** | **6.51** | **311** | P | | **Pn** | **21 07 19.2** | **-0.4** |
| **ERZM** | **Erzurum** | **6.51** | **326** | P | | **Pn** | **21 07 23.6** | **+3.9** |
| **KFJS2** | **Khafji** | **6.52** | **162** | S | | **Sn** | **21 08 27.6** | **-6.5** |
| KFJS2 | | | | P | | **Pn** | **21 07 21.3** | **+1.7** |
| **ETEKE** | **Tekederesi - E** | **6.53** | **324** | P | | **Pn** | **21 07 22.5** | **+2.5** |
| **TRAF** | **Turaif** | **6.56** | **241** | P | | **Pn** | **21 07 20.6** | **+0.3** |
| **TRAF** | **Turaif** | **6.56** | **241** | S | | Sn | 21 08 26.4 | -8.8 |
| **IGLO** | **Ghaloghah** | **6.59** | **71** | Pn | | **Pn** | **21 07 22.8** | **+1.9** |
| **WELAS** | **Turaif** | **6.63** | **247** | P | | **Pn** | **21 07 22.3** | **+1.0** |
| **WELAS** | **Turaif** | **6.63** | **247** | S | | **Sn** | **21 08 29.4** | **-7.7** |
| **VSHL** | **Vashlovani** | **6.64** | **2** | P | | Pn | 21 07 28.2 | +6.9 |
| VSHL | | | | S | | **Sg** | **21 09 17.7** | **+0.9** |
| **SEKA** | **Sheki** | **6.67** | **7** | P | | **Pn** | **21 07 23.5** | **+1.7** |
| **QYSM** | **Um Kedad** | **6.74** | **174** | P | | **Pn** | **21 07 24.2** | **+1.5** |
| **KAZ2** | **Kazeron-Fars-I** | **6.85** | **135** | Pn | | **Pn** | **21 07 25.3** | **+1.0** |
| **DGRG** | **David-gareji** | **6.88** | **356** | P | | Pn | 21 07 30.8 | +6.2 |
| **DGRG** | **David-gareji** | **6.88** | **356** | P | | Pn | 21 07 30.8 | +6.2 |
| **ISAD** | **Sadrabad** | **6.90** | **111** | Pn | | **Pn** | **21 07 26.4** | **+1.2** |
| **AKT** | **Akhty** | **7.00** | **10** | *e*P | | **Pn** | **21 07 22.8** | **-3.6** |
| AKT | | | | *e*S | | **Sn** | **21 08 41.0** | **-5.2** |
| AKT | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.6s | | | | | | | |
| AKT | | | | smax | smax | | | |
| | comp=E,45nm,1.0s | | | | | | | |
| AKT | | | | smax | smax | | | |
| | comp=N,66nm,0.8s | | | | | | | |
| AKT | | | | smax | smax | | | |
| | comp=N,52nm,0.8s | | | | | | | |
| AKT | | | | MLR | MLR | | | |
| | comp=Z,3μm,14.0s | | | | | | | |
| **KOPT** | **Kop Dagi** | **7.02** | **322** | Pn | | **Pn** | **21 07 25.9** | **-0.8** |
| **ASYS** | | **7.21** | **192** | P | | **Pn** | **21 07 29.4** | **+0.1** |
| **RQBS** | **RQBS** | **7.22** | **181** | P | | **Pn** | **21 07 30.4** | **+1.1** |
| **AHBU** | **AHRAM** | **7.22** | **141** | Pn | | **Pn** | **21 07 30.9** | **+1.6** |
| **BRNG** | **Burnasheti** | **7.25** | **346** | P | | Pn | 21 07 35.0 | +5.2 |
| BRNG | | | | S | | **Sg** | **21 09 37.1** | **+0.8** |
| **BRNG** | **Burnasheti** | **7.25** | **346** | P | | Pn | 21 07 35.0 | +5.2 |
| **HANG** | **Al Hamad** | **7.25** | **246** | P | | **Pn** | **21 07 30.2** | **+0.4** |
| **WSKAK** | **WSKAK** | **7.28** | **236** | P | | **Pn** | **21 07 30.4** | **+0.3** |
| **ICHK** | **Chekchek** | **7.34** | **106** | Pn | | **Pn** | **21 07 32.4** | **+1.3** |
| **HIL04** | **Ash Shaalaniya** | **7.38** | **204** | P | | **Pn** | **21 07 31.5** | **0.0** |
| **DSBU** | **Dashti - Bushe** | **7.61** | **143** | Pn | | **Pn** | **21 07 35.7** | **+0.9** |
| **GAZ** | **Gaziantep** | **7.65** | **292** | Pn | | **Pn** | **21 07 35.3** | **0.0** |
| **ARPR** | **Arapgir-MALATY** | **7.67** | **308** | | | **Pn** | **21 07 35.3** | **-0.3** |
| **CHRG** | **Chargali** | **7.79** | **354** | P | | **Pn** | **21 07 41.0** | **+3.9** |
| **WANAN** | **Al Wanan** | **7.93** | **164** | P | | **Pn** | **21 07 40.1** | **+1.0** |
| **ASF** | **Jabal al Asfar** | **8.05** | **255** | Pn | | **Pn** | **21 07 41.5** | **+0.6** |
| | comp=Z,4.7nm,0.3s,baz=97,slow=0.0,SNR=37 | | | | | | | |
| ASF | | | | Lg | Lg | | 21 10 06.3 | |
| | comp=Z,13nm,0.3s,baz=54,slow=0.0,SNR=2.6 | | | | | | | |
| | comp=Z,28nm,0.7s | | | | | | | |
| **ASF** | **Jabal al Asfar** | **8.05** | **255** | P | | **Pn** | **21 07 41.7** | **+0.9** |
| **SHTL** | **Shatili** | **8.09** | **355** | P | | Pn | 21 07 45.4 | +4.1 |
| **SHTL** | **Shatili** | **8.09** | **355** | P | | Pn | 21 07 45.4 | +4.0 |
| **TKB** | **Tkibuli** | **8.12** | **344** | P | | Pn | 21 07 46.2 | +4.5 |
| **TKB** | **Tkibuli** | **8.12** | **344** | P | | Pn | 21 07 46.2 | +4.5 |
| **HTM03** | **HTM03** | **8.14** | **204** | P | | **Pn** | **21 07 42.1** | **+0.1** |

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MTEO** | **Meteo** | **8.17** | **352** | P | | Pn | 21 07 47.5 | +4.7 |
| **MTEO** | **Meteo** | **8.17** | **352** | P | | Pn | 21 07 47.4 | +4.7 |
| **HTM02** | **HTM02** | **8.24** | **202** | P | | **Pn** | **21 07 42.4** | **-1.0** |
| **HWQ** | **Hawqa** | **8.38** | **271** | *e*P | | **Pn** | **21 07 46.2** | **+0.9** |
| **QSMS** | **Sumairaa** | **8.41** | **201** | P | | **Pn** | **21 07 45.6** | **-0.2** |
| **HTM01** | **HTM01** | **8.44** | **202** | P | | **Pn** | **21 07 44.9** | **-1.2** |
| **MAK** | **Makhachkala** | **8.44** | **7** | *e*P | | Pn | 21 07 40.1 | -5.8 |
| MAK | | | | pmax | pmax | | | |
| | comp=Z,271nm,1.3s | | | | | | | |
| MAK | | | | MLR | MLR | | | |
| | comp=Z,3μm,16.0s | | | | | | | |
| **HIL03** | **Ash Shuqayq** | **8.60** | **213** | P | | **Pn** | **21 07 47.7** | **-0.6** |
| **HSUJ** | **Al Zarqa** | **8.64** | **256** | P | | Pn | 21 07 55.6 | +6.8 |
| **BHL** | **Bhannes** | **8.67** | **268** | *e*P | | **Pn** | **21 07 50.5** | **+1.3** |
| **KSHT** | **Keshet** | **8.70** | **262** | P | | **Pn** | **21 07 51.4** | **+1.8** |
| **NATI** | **Neve Ativ** | **8.70** | **264** | P | | **Pn** | **21 07 51.1** | **+1.5** |
| **NATI** | **Neve Ativ** | **8.70** | **264** | P | | **Pn** | **21 07 51.4** | **+1.8** |
| **GEM** | **Giv'at Ha'Em** | **8.77** | **264** | P | | **Pn** | **21 07 53.4** | **+2.8** |
| **SHMJ** | **Saham** | **8.80** | **261** | P | | **Pn** | **21 07 55.6** | **+4.6** |
| **BCHG** | **Becho** | **8.87** | **343** | P | | Pn | 21 07 56.2 | +4.2 |
| BCHG | | | | S | | **Sg** | **21 10 30.8** | **+2.6** |
| **NTAIM** | **NTAIM** | **8.88** | **226** | P | | **Pn** | **21 07 51.3** | **-0.8** |
| **MMA0** | **Mount Meron ar** | **9.03** | **263** | P | | **Pn** | **21 07 58.6** | **+4.4** |
| **MMA0B** | **Mount Meron ar** | **9.03** | **263** | P | | **Pn** | **21 07 56.6** | **+2.5** |
| **MMAI** | **Mount Meron Ar** | **9.03** | **263** | Pn | | **Pn** | **21 07 54.1** | **0.0** |
| | comp=Z,5.3nm,0.3s,baz=85,slow=18,SNR=33 | | | | | | | |
| MMAI | | | | Lg | | Lg | 21 10 24.7 | |
| | comp=Z,12nm,0.3s,baz=82,slow=29,SNR=2.5 | | | | | | | |
| MMAI | | | | LR | | LR | 21 12 12.2 | |
| | comp=Z,865nm,19.7s,baz=20,slow=43 | | | | | | | |
| | comp=Z,16nm,0.6s | | | | | | | |
| **SWQJ** | **Swaqa** | **9.06** | **251** | P | | **Pn** | **21 07 59.3** | **+4.6** |
| **QRNJ** | **Al-Qirein** | **9.06** | **259** | P | | Pn | 21 07 59.4 | +4.9 |
| **TAPT** | **Tabas- Tapeh t** | **9.12** | **85** | Pn | | **Pn** | **21 07 57.5** | **+2.0** |
| **HMDT** | **Nahal Hemdat** | **9.13** | **258** | P | | **Pn** | **21 07 57.3** | **+1.8** |
| **BOQSS** | | **9.14** | **161** | P | | **Pn** | **21 07 56.6** | **+1.0** |
| **MMLI** | **Mount Malkishu** | **9.16** | **259** | P | | **Pn** | **21 07 59.0** | **+3.1** |
| **HNTI** | **Hanita** | **9.20** | **264** | P | | Pn | 21 08 

ERBR eS Sn 21 10 45.9 -0.5
ERBR pmax pmax
comp=Z,8.0nm,0.5s
ERBR MLR MLR
comp=N,2µm,10.0s
ERBR MLR MLR
comp=E,808nm,9.0s
ERBR MLR MLR
comp=Z,867nm,16.0s
**BZK Bozkurt** 12.01 311 Pn **Pn** 21 08 33.0 -1.9
**GHWR Ruwais** 12.12 149 P **Pn** 21 08 36.2 -0.3
GHWR S **Sn** 21 10 45.9 -5.8
**SHME Shamm** 12.15 132 *i* Pn **Pn** 21 08 35.6 -1.2
SNR=14
**SHME Shamm** 12.15 132 P **Pn** 21 08 35.8 -1.1
SNR=7.0
SHME S **Sn** 21 10 47.1 -5.3
**ANN Anapa** 12.18 329 *e*P **Pn** 21 08 34.7 -2.4
ANN *e*S **Sn** 21 10 49.9 -3.0
ANN pmax pmax
comp=Z,17nm,0.8s
ANN MLR MLR
comp=Z,1µm,17.0s
ANN MLR MLR
comp=N,672nm,10.0s
ANN MLR MLR
comp=E,249nm,10.0s
**UMQ Umm Al-Quwin** 12.25 135 *i* Pn **Pn** 21 08 37.6 -0.6
SNR=6.9
**UMQ Umm Al-Quwin** 12.25 135 P **Pn** 21 08 39.1 +0.8
SNR=7.3
UMQ S **Sn** 21 10 52.9 -2.0
**BANOM Banah** 12.34 132 P **Pn** 21 08 38.7 -0.7
BANOM S **Sn** 21 10 52.2 -4.9
**AJN Ajban** 12.63 140 *i* Pn **Pn** 21 08 43.4 0.0
SNR=7.8
**AJN Ajban** 12.63 140 P **Pn** 21 08 43.8 +0.4
SNR=12
AJN S **Sn** 21 10 57.2 -7.0
**CIDE Kastamonu/Cide** 12.63 309 ⇑P Pn 21 08 47.8 +4.4
**MASF Masafi** 12.66 134 P **Pn** 21 08 43.0 -0.9
SNR=17
MASF S **Sn** 21 10 60.0 -5.0
**NAZ Nazwa, Dubai** 12.66 136 *i* Pn **Pn** 21 08 43.5 -0.4
SNR=43
**NAZ Nazwa, Dubai** 12.66 136 P **Pn** 21 08 43.9 0.0
SNR=63
NAZ S **Sn** 21 10 59.7 -5.3
**MSFE Esma-Masafi** 12.67 134 *i* Pn **Pn** 21 08 42.5 -1.5
SNR=8.3
**MZWR Madinat Zayed** 12.75 146 P **Pn** 21 08 44.6 -0.4
MZWR S **Sn** 21 11 02.9 -4.1
**ASUD Al Ashush, Dub** 12.76 139 *i* Pn **Pn** 21 08 44.2 -1.1
SNR=15
**ASUD Al Ashush, Dub** 12.76 139 P **Pn** 21 08 45.3 0.0
SNR=15
ASUD S **Sn** 21 11 02.6 -4.8
**MDH Madha** 12.80 134 *i* Pn **Pn** 21 08 44.0 -1.7
SNR=20
**MDH Madha** 12.80 134 P **Pn** 21 08 44.5 -1.2
SNR=20
MDH S **Sn** 21 11 04.5 -3.8
**FAQ Al Faqa, Dubai** 12.81 137 *i* Pn **Pn** 21 08 45.3 -0.7
SNR=40
**FAQ Al Faqa, Dubai** 12.81 137 P **Pn** 21 08 45.8 -0.1
SNR=40
FAQ S **Sn** 21 11 01.3 -7.4
**UOSS Minazif** 13.01 135 Pn **Pn** 21 08 47.3 -1.3
**UOSS Minazif** 13.01 135 *i* Pn **Pn** 21 08 46.3 -2.4
SNR=14
**UOSS Minazif** 13.01 135 P **Pn** 21 08 47.4 -1.3
UOSS S **Sn** 21 11 05.6 -7.8
**HATD Hatta, Dubai** 13.06 135 *i* Pn **Pn** 21 08 47.9 -1.4
SNR=16
**HATD Hatta, Dubai** 13.06 135 P **Pn** 21 08 48.5 -0.8
SNR=67
HATD S **Sn** 21 11 07.3 -7.4
**ASHO Ashiyiah** 13.13 136 *i* Pn **Pn** 21 08 48.7 -1.5
SNR=37
ASHO Sn Sn 21 11 06.1 -10
**ASHO Ashiyiah** 13.13 136 P **Pn** 21 08 49.0 -1.3
SNR=168
ASHO S **Sn** 21 11 08.8 -7.5
**MDUB Mudurnu** 13.19 301 Pn **Pn** 21 08 50.9 -0.2
**MZR Muzera** 13.23 149 *i* Pn **Pn** 21 08 50.2 -1.4
SNR=19
**MZR Muzera** 13.23 149 P **Pn** 21 08 51.0 -0.6
SNR=18
MZR S **Sn** 21 11 12.0 -6.8
**HRA Herat** 13.33 86 Pn **Pn** 21 08 53.5 +0.3
**ELL Elmali** 13.33 284 Pn **Pn** 21 08 53.0 -0.1
**ELL Elmali** 13.33 284 P **Pn** 21 08 53.0 -0.1
**JASK Jask - Hormozg** 13.38 127 P **Pn** 21 08 51.9 -1.7
JASK S **Sn** 21 11 16.7 -5.7
**ALNE Al Ain** 13.45 139 *i* Pn **Pn** 21 08 53.3 -1.3
SNR=48
**ALNE Al Ain** 13.45 139 P **Pn** 21 08 53.9 -0.7
SNR=48
ALNE S **Sn** 21 11 16.5 -7.7
**BORA Eskisehir** 13.53 298 Pn **Pn** 21 08 54.8 -0.9
**SOHO SOHO** 13.82 136 *i* Pn **Pn** 21 08 57.0 -2.7
SNR=14
**SOHO SOHO** 13.82 136 P **Pn** 21 08 57.6 -2.1
SOHO P **Pn** 21 08 57.6 -2.1
SOHO S **Sn** 21 11 26.4 -7.0
SOHO S **Sn** 21 11 26.4 -7.0
**SIM Simferopol'** 13.84 322 *e*P **Pn** 21 09 01.8 +2.0
SIM *e*S **Sn** 21 11 32.0 -1.5
SIM pmax pmax
comp=Z,33nm,1.2s
SIM pmax pmax
comp=Z,30nm,4.4s
SIM MLR MLR
comp=Z,290nm,14.0s
**UMZA Um Al Zommool** 14.25 144 P **Pn** 21 09 04.6 -0.9
UMZA S **Sn** 21 11 35.7 -8.0
**ARQ Araqi** 14.45 138 P **Pn** 21 09 06.9 -1.4
SNR=15
ARQ P **Pn** 21 09 06.9 -1.4
SNR=15
ARQ S **Sn** 21 11 41.3 -7.2
ARQ S **Sn** 21 11 41.3 -7.2
**KULA Kula-Manisa** 14.55 291 P **Pn** 21 09 11.2 +1.6
**YER Yerkesik** 14.66 285 P **P** 21 09 14.2 -3.3
**HOQ Hoqain** 14.70 135 P **Pn** 21 09 10.3 -1.4
SNR=10
HOQ P **Pn** 21 09 10.3 -1.4
SNR=10
HOQ S **Sn** 21 11 50.1 -4.6
HOQ S **Sn** 21 11 50.1 -4.6
**BSY Bisya** 15.29 138 P **Pn** 21 09 18.7 -1.0
SNR=10
BSY S **Sn** 21 12 03.6 -5.5
**KARP Karpathos** 15.53 279 **Pn** 21 09 22.7 -0.1
**KARP Karpathos** 15.53 279 P **P** 21 09 26.8 -0.4
**KARP Karpathos** 15.53 279 P **P** 21 09 27.6 +0.4
**SMDO Samad** 15.53 135 P **Pn** 21 09 22.3 -0.6
SNR=16
SMDO S **Sn** 21 12 12.5 -2.7
**WSAR Wadi Sarin** 15.74 133 Pn **Pn** 21 09 23.1 -2.5
comp=Z,8.0nm,0.3s,baz=324,slow=9.9,SNR=38
WSAR Sn Sn 21 12 05.2 -15
comp=Z,0.6nm,0.3s,baz=190,slow=23,SNR=2.4
WSAR LR LR 21 16 39.9
comp=Z,808nm,19.9s,baz=335,slow=41
**NGCH Negor - Chabah** 15.94 121 P **Pn** 21 09 28.0 -0.1
**JMDO Jabal Madar** 16.10 136 P **Pn** 21 09 29.7 -0.4
SNR=12
JMDO P **Pn** 21 09 29.7 -0.4
SNR=12
JMDO S **Sn** 21 12 25.7 -3.0
JMDO S **Sn** 21 12 25.7 -3.0
**WBK Wadi Bani Khal** 16.42 133 P **Pn** 21 09 33.9 -0.4
SNR=6.0
WBK S **Sn** 21 12 29.6 -7.1
**EZN Ezine** 16.58 294 P **P** 21 09 40.0 +1.3
**MFTR Murfatlar** 16.65 310 ⇑P **P** 21 09 39.0 -0.5
**JURR Jurilovca** 16.67 313 ⇑P **P** 21 09 40.2 +0.5
**EDRB Edirne** 16.82 301 P **Pn** 21 09 36.9 -2.4
**PRD Provadia** 16.85 306 P **P** 21 09 42.9 +1.2
**VRH Novokhopyorsk** 16.91 351 *e*P **P** 21 09 42.3 0.0
VRH S **Sn** 21 12 49.3 +1.2
VRH pmax pmax
comp=Z,54nm,0.6s
**TLCR** 16.93 314 ⇑P **Pn** 21 09 40.4 -0.2

**TLCR** 16.93 314 ⇑P **Pn** 21 09 40.4 -0.2
**NEF NEVSHA** 16.98 306 P **P** 21 09 43.9 +0.7
**TPGR Topolog** 17.00 312 ⇑P **Pn** 21 09 41.7 +0.2
**JLN Jalan Bani Buh** 17.03 133 P **Pn** 21 09 40.8 -1.2
SNR=5.2
JLN P **Pn** 21 09 40.8 -1.2
SNR=5.2
**ALN Alexandroupoli** 17.04 298 **Pn** 21 09 41.2 -0.8
**ALN Alexandroupoli** 17.04 298 P **Pn** 21 09 40.7 -1.3
**ALN Alexandroupoli** 17.04 298 P **Pn** 21 09 41.2 -0.8
ALN pmax pmax
comp=Z,33nm,1.1s
**TLBR Topalu** 17.07 311 ⇑P **P** 21 09 45.6 +1.5
**PURM Purcari** 17.11 319 ⇓P **P** 21 09 44.9 +0.4
**MHTO MHTO** 17.12 139 P **Pn** 21 09 42.6 -0.6
SNR=20
MHTO S **Sn** 21 12 48.5 -5.1
**HARR Harsova** 17.21 311 ⇑P **P** 21 09 46.7 +1.0
**HARR Harsova** 17.21 311 ⇑P **P** 21 09 46.7 +1.0
**CFR Carcaliu** 17.33 313 ⇓P **Pn** 21 09 44.8 -0.8
**CFR Carcaliu** 17.33 313 P **P** 21 09 47.1 +0.1
**VSR Storozhevoye** 17.36 345 *e*P **Pn** 21 09 44.7 -1.3
VSR pmax pmax
comp=Z,60nm,0.5s
VSR MLR MLR
comp=Z,250nm,10.0s
**IDI Anoyia** 17.40 278 P **Pn** 21 09 46.7 +0.1
IDI IAmb IAmb 21 09 55.2
comp=Z,83nm,0.7s
**IDI Anoyia** 17.40 278 P **Pn** 21 09 44.9 -1.7
**IDI Anoyia** 17.40 278 P **P** 21 09 48.4 +0.6
comp=Z,4.0nm,0.3s,baz=59,slow=14,SNR=20
comp=Z,88nm,0.9s
**DOK Doka** 17.44 154 P **Pn** 21 09 44.9 -2.2
SNR=11
DOK S **Sn** 21 12 60.0 -1.4
**DIM Dimitrovgrad** 17.71 301 P **P** 21 09 54.6 +3.4
**DQM DQM** 17.77 142 P **Pn** 21 09 50.1 -1.1
SNR=6.1
DQM S **Sn** 21 13 04.2 -5.3
**VORR Voronezh** 17.79 346 *e*P **Pn** 21 09 50.6 -0.6
VORR S **Sn** 21 13 11.0 +1.7
VORR pmax pmax
comp=Z,112nm,0.6s
**ELND Elena** 17.80 304 ⇑P **P** 21 09 53.3 +1.0
**TUDR** 17.83 314 ⇓P **P** 21 09 52.8 +0.3
**BELG Belogornoye** 17.84 3 P **Pn** 21 09 50.0 -1.8
comp=Z,2.2nm,0.3s,baz=356,slow=11,SNR=36
BELG S **Sn** 21 13 12.2 +1.8
comp=Z,14nm,1.1s,baz=307,slow=18,SNR=1.4
BELG LR LR 21 18 29.7
comp=Z,400nm,18.8s,baz=143,slow=43
comp=Z,105nm,1.0s
**BELG Belogornoye** 17.84 3*d* *i*P **Pn** 21 09 50.3 -1.5
BELG pmax pmax
comp=Z,19nm,0.9s
**SZH Strazhitsa** 17.86 305 P **P** 21 09 54.7 +1.9
**ABKAR Akbulak array** 17.88 31 **Pn** 21 09 50.0 -2.3
**ABKAR Akbulak array** 17.88 31 Pn **Pn** 21 09 50.8 -1.6
**VARL Varlezi** 17.89 315 ⇓P **P** 21 09 52.6 -0.5
**MILM Milestii Mici** 17.93 319 *i* P **Pn** 21 09 52.0 -1.0
comp=Z,80nm,1.0s
MILM *e*S **Sn** 21 13 13.0 +0.2
MILM LRM MLR 21 19 07.0
comp=Z,600nm,14.3s
**MILM Milestii Mici** 17.93 319 ⇑P **Pn** 21 09 52.2 -0.7
**MILM Milestii Mici** 17.93 319 ⇑P **Pn** 21 09 52.2 -0.7
**THAS Thassos island** 17.95 296 P **P** 21 09 53.5 -0.4
**WHFO Wadi Hawf** 17.96 156 P **Pn** 21 09 52.3 -1.3
SNR=18
WHFO S **Sn** 21 13 10.5 -3.5
**AKTO Aktyubinsk** 18.08 25 P **Pn** 21 09 54.0 -0.8
comp=Z,1.9nm,0.3s,baz=212,slow=8.9,SNR=44
AKTO LR LR 21 19 13.8
comp=Z,510nm,19.0s,baz=231,slow=45
comp=Z,34nm,0.8s
**IMMV Iera Moni Meta** 18.13 279 P **Pn** 21 09 54.7 -0.8
**KAVA Kavala** 18.19 297 P **Pn** 21 09 50.3 -6.0
**RZN Rozhen** 18.21 299 P **P** 21 09 58.0 +1.1
**SGRR Singureni** 18.24 308 ⇓P **P** 21 09 58.0 +1.0
**ISR Istrita** 18.28 311 ⇓P **P** 21 09 59.5 +1.9
**ISR Istrita** 18.28 311 ⇓P **P** 21 09 59.5 +1.9
**ODBI Odobesti** 18.29 313 ⇑P **P** 21 09 59.5 +2.0
**PLD Plovdiv** 18.33 301 P **P** 21 10 00.0 +2.0
**ABTO Aybut** 18.33 158 P **Pn** 21 09 57.2 -0.9
SNR=7.2
ABTO P **Pn** 21 09 57.3 -0.9
**RBK Rabkut** 18.49 155 P **Pn** 21 09 59.8 -0.4
SNR=12
**KOKK Kokkinochori,** 18.53 296 P **P** 21 09 59.2 -1.1
**VRI Vrincioaia** 18.54 313 ⇑P **Pn** 21 10 01.2 +0.7
**VRI Vrincioaia** 18.54 313 ⇑P **Pn** 21 10 01.2 +0.7
**SHAO Shalim** 18.56 150 *i* P **P** 21 09 60.0 -0.7
SNR=7.0
**SHAO Shalim** 18.56 150 P **Pn** 21 10 01.9 +1.0
SNR=7.8
SHAO S **Sn** 21 13 23.3 -5.1
**DMTO DMTO** 18.57 153 P **Pn** 21 10 01.0 0.0
**PLOR Plostina** 18.58 313 ⇑P **Pn** 21 10 02.2 +1.2
**PLOR Plostina** 18.58 313 ⇑P **Pn** 21 10 02.2 +1.2
**NEHR Nehoiu** 18.58 312 ⇑P **Pn** 21 10 02.6 +1.6
**ANKY Antikythira Is** 18.66 280 P **P** 21 09 59.0 -2.7
**VILL Villia** 18.68 288 P **P** 21 09 59.4 -2.5
**LPSR Galich'ya Gora** 18.72 346 *e*P **P** 21 10 01.2 -1.1
LPSR pmax pmax
comp=Z,200nm,0.8s
LPSR MLR MLR
comp=Z,250nm,12.0s
**NVR Nevrokopi** 18.75 298 P **Pn** 21 10 04.2 +1.0
**IAS Iasi** 18.78 318 ⇑P **Pn** 21 10 03.3 -0.2
**IAS Iasi** 18.78 318 ⇑P **Pn** 21 10 03.3 -0.2
**MLR Muntele Rosu** 18.83 311 P **P** 21 10 03.3 -0.4
**MLR Muntele Rosu** 18.83 311 P **Pn** 21 10 04.7 +0.5
comp=Z,9.9nm,0.7s,baz=109,slow=10.0
**MLR Muntele Rosu** 18.83 311 ⇑P **Pn** 21 10 05.9 +1.8
**MLR Muntele Rosu** 18.83 311 ⇑P **Pn** 21 10 05.9 +1.8
**SIMJ Simiganj** 18.83 71 P **Pn** 21 10 03.6 -0.6
**KTHA Kythira Island** 18.84 282 P **P** 21 10 00.3 -3.4
**CONR Voineasa-Covas** 18.84 313 ⇑P **Pn** 21 10 04.9 +0.7
**MMB Musomishta** 18.88 298 P **Pn** 21 10 05.2 +0.4
**KBL Kabul** 18.90 84 P **Pn** 21 10 05.4 +0.2
**KBL Kabul** 18.90 84 P **Pn** 21 10 04.6 -0.6
SNR=16
**KBL Kabul** 18.90 84 P **Pn** 21 10 05.4 +0.2
KBL pmax pmax
comp=Z,56nm,1.7s
**TESR Tescani** 18.92 315 ⇑P **P** 21 10 04.2 -0.3
**SORM Soroca** 18.93 321 ⇑P **P** 21 10 03.8 -0.7
**SORM Soroca** 18.93 321 P **Pn** 21 10 05.2 +0.1
**VLI Veliai** 18.93 283 P **P** 21 10 01.2 -3.5
**CHGR Chuyangaron** 18.95 71 P **Pn** 21 10 05.7 +0.1
**CHGR Chuyangaron** 18.95 71 P **Pn** 21 10 05.7 +0.1
CHGR pmax pmax
comp=Z,13nm,0.7s
**ONER Baraj Valea Uz** 18.98 314 ⇓P **Pn** 21 10 06.5 +0.7
**HUMR Humele** 19.02 308 ⇑P **Pn** 21 10 07.3 +1.0
**TURR Turia** 19.06 313 ⇑P **Pn** 21 10 07.8 +1.0
**OZUR** 19.22 313 ⇑P **Pn** 21 10 08.6 -0.2
**AXAR Agios Charalam** 19.24 289 P **Pn** 21 10 08.4 -0.6
**BOSR Bodos** 19.29 313 ⇓P **Pn** 21 10 09.7 +0.1
**DOPR Dopca** 19.40 312 ⇓P **Pn** 21 10 11.5 +0.6
**KKB Krupnik** 19.41 299 P **Pn** 21 10 11.1 +0.1
**MPEP Malo Peshtene** 19.41 303 P **Pn** 21 10 11.3 +0.2
**KNT Kendrikon** 19.42 297 P **P** 21 10 09.2 -0.8
**GUR Goura** 19.43 287 P **P** 21 10 10.1 -0.1
**VTS Vitosha** 19.54 301 P **Pn** 21 10 12.9 +0.1
**ARR Arges** 19.59 310 P **Pn** 21 10 13.5 +0.2
**PRAR RASCA** 19.62 317 ⇑P **Pn** 21 10 12.7 -0.9
**MAKR Makrakomi, Fth** 19.67 290 P **P** 21 10 10.6 -2.2
**ANX Ano Chora** 19.80 289 P **P** 21 10 13.8 -0.5
**EFP Efpalio** 19.80 288 P **P** 21 10 14.5 +0.3
**GAR Garm** 19.88 70 P **Pn** 21 10 16.4 -0.4
**EVR Evrytania** 19.91 290 P **Pn** 21 10 16.1 -1.1
**TNR Turnu Rosu** 19.95 310 ⇓P **Pn** 21 10 17.8 +0.4
**TNR Turnu Rosu** 19.95 310 ⇓P **Pn** 21 10 17.8 +0.4
**MDB Medias** 20.10 312 ⇑P **Pn** 21 10 20.2 +1.0
**MDB Medias** 20.10 312 ⇑P **Pn** 21 10 20.2 +1.0
**PVO Paravola** 20.11 289 P **P** 21 10 16.9 -0.6
**LOT Lotru** 20.18 309 ⇓P **P** 21 10 18.2 -0.2
**SRE Strehaia** 20.24 307 ⇑P **Pn** 21 10 20.7 -0.1
**SRE Strehaia** 20.24 307 ⇑P **Pn** 21 10 20.7 -0.1
**AKASG Malin Array Be** 20.25 328 P **P** 21 10 17.8 -1.2
AKASG IAmb IAmb 21 10 19.2
comp=Z,78nm,1.0s
**AKASG Malin Array Be** 20.25 328 P **P** 21 10 17.9 -1.1
comp=Z,38nm,0.7s,baz=140,slow=8.7,SNR=55
AKASG S **S** 21 14 04.2 -1.8
comp=Z,1.6nm,0.7s,baz=139,slow=21,SNR=3.0
AKASG LR LR 21 19 49.7
comp=Z,641nm,18.8s,baz=122,slow=42
comp=Z,38nm,0.7s
**AKBB Malin Array Si** 20.25 328 P **P** 21 10 17.6 -1.3
**AKBB Malin Array Si** 20.25 328*c* *i*P **P** 21 10 18.1 -0.9
AKBB pmax pmax
comp=Z,59nm,0.6s
**KIEV Kiev** 20.25 328 P **P** 21 10 17.9 -1.1
**KIEV Kiev** 20.25 328 ⇓P **P** 21 10 18.6 -0.4
**KIEV Kiev** 20.25 328 ⇓P **P** 21 10 18.6 -0.4
**PUNG Punghina** 20.28 305 ⇓P Pn 21 10 20.6 -0.8
**BRLS Boroldav** 20.29 58 *e*P **P** 21 10 18.6 -0.9
baz=60
**BRLS Boroldav** 20.29 58 *e*P **P** 21 10 18.6 -0.9
**BUR01 Bucovina Ar. S** 20.34 316 ⇓P **P** 21 10 20.4 +0.3
**BURAR Bucovina Array** 20.34 316 P **P** 21 10 19.6 -0.4
BURAR IAmb IAmb 21 10 26.6
comp=Z,45nm,0.7s
**BURAR Bucovina Array** 20.34 316 P Pn 21 10 21.0 -1.1
**BUR08 Bucovina Ar. S** 20.36 316 P **P** 21 10 20.4 0.0
BUR08 IAmb IAmb 21 10 27.0
comp=Z,35nm,0.8s
**BTK Batken** 20.38 67 P Pn 21 10 21.6 -1.1
BTK IAmb IAmb 21 10 28.9
comp=Z,48nm,1.2s
**BTK Batken** 20.38 67 P Pn 21 10 21.6 -1.1
BTK pmax pmax
comp=Z,48nm,1.2s
**FNA Florina** 20.48 295 P **P** 21 10 21.8 +0.1
FNA IAmb IAmb 21 10 26.1
comp=Z,50nm,0.8s
**FNA Florina** 20.48 295 P **P** 21 10 21.5 -0.1
**FNA Florina** 20.48 295 P **P** 21 10 21.8 +0.1
FNA pmax pmax
comp=Z,50nm,0.8s
**ARCR ARCALIA** 20.57 314 ⇑P Pn 21 10 23.8 -0.9
**RMGR Halanga-Turnu** 20.58 306 ⇑P Pn 21 10 24.7 -0.1
**LTHK Lithakia** 20.61 286 P **P** 21 10 16.3 -6.7
**DJES Djerdap** 20.69 306 ⇑P Pn 21 10 25.4 -0.8
**KK31 Karatay Array** 20.78 59 P Pn 21 10 25.6 -1.7
**KK31 Karatay Array** 20.78 59 P Pn 21 10 25.6 -1.7
KK31 pmax pmax
comp=Z,30nm,1.1s
**KKAR Karatay Array** 20.78 59 P Pn 21 10 25.6 -1.7
**KKAR Karatay Array** 20.78 59 P Pn 21 10 26.6 -0.7
KKAR IAmb IAmb 21 10 32.7
comp=Z,29nm,1.1s
**KKAR Karatay Array** 20.78 59 P Pn 21 10 26.6 -0.7
KKAR pmax pmax
comp=Z,29nm,1.1s
**GZR Gura Zlata** 20.80 308 ⇑P Pn 21 10 26.8 -0.7
**LKD2 Lefkada island** 20.80 289 P **P** 21 10 23.6 -1.5
**HERR Herculane** 20.84 307 ⇑P Pn 21 10 26.4 -1.5
**CJR Cluj-Napoca** 20.84 312 ⇑P Pn 21 10 26.6 -1.4
**CJR Cluj-Napoca** 20.84 312 ⇑P Pn 21 10 26.6 -1.4
**KBN Korca** 20.90 294 P **P** 21 10 25.9 -0.3
KBN IAmb IAmb 21 10 42.9
comp=Z,36nm,0.9s
**KBN Korca** 20.90 294 P **P** 21 10 25.9 -0.3
KBN pmax pmax
comp=Z,36nm,0.9s
**CBBR Cluj-Babes-Bol** 20.90 312 ⇑P Pn 21 10 27.2 -1.4
**BOVS Bovan** 20.91 303 ⇑P **P** 21 10 26.4 +0.2
**DEV Deva** 20.91 310 ⇓P Pn 21 10 28.4 -0.4
**DEV Deva** 20.91 310 ⇓P Pn 21 10 28.4 -0.4
**OHR Ohrid** 20.97 296 *i* P Pn 21 10 29.8 +0.3
**DMLN Damoulianata-K** 20.99 287 P **P** 21 10 25.0 -2.2
**DRK Karamyk** 21.07 69 P **P** 21 10 31.2 +2.9
**DRK Karamyk** 21.07 69 P **P** 21 10 31.2 +2.9
DRK pmax pmax
comp=Z,18nm,0.7s
**IGT Igoumenitsa** 21.11 291 P **P** 21 10 25.5 -2.9
**MARR Marisel-Cluj** 21.12 312 ⇑P **P** 21 10 29.3 +0.8
**MDVR Moldovita** 21.27 306 ⇓P **P** 21 10 31.1 +1.0
**SURR Surduc** 21.36 309 ⇑P **P** 21 10 30.5 -0.6
**BMR Baia Mare** 21.36 315 ⇑P **P** 21 10 31.8 +0.7
**BMR Baia Mare** 21.36 315 ⇑P **P** 21 10 31.8 +0.7
**DRGR** 21.42 312 ⇓P **P** 21 10 32.3 +0.5
**DRGR** 21.42 312 ⇓P **P** 21 10 32.3 +0.5
**MESR Meseseni** 21.44 313 ⇑P **P** 21 10 32.8 +0.9
**KEK Kerkira** 21.54 291 P **P** 21 10 30.5 -2.4
KEK IAmb IAmb 21 10 50.4
comp=Z,39nm,0.8s
**OBN Obninsk** 21.57 345 P **P** 21 10 30.9 -2.3
OBN IAmb IAmb 21 10 39.1
comp=Z,57nm,0.8s
**OBN Obninsk** 21.57 345 P **P** 21 10 31.8 -1.4
comp=Z,31nm,0.6s,baz=170,slow=8.8,SNR=9.3
OBN S **S** 21 14 27.1 -4.9
comp=Z,49nm,1.2s,baz=80,slow=21,SNR=6.7
OBN LR LR 21 20 43.9
comp=Z,229nm,19.8s,baz=162,slow=42
comp=Z,31nm,0.6s
**OBN Obninsk** 21.57 345 ⇑P **P** 21 10 36.6 +3.5
**OBN Obninsk** 21.57 345*d* *i*P **P** 21 10 32.2 -0.9
OBN *i* S **S** 21 14 27.3 -4.7
OBN pmax pmax
comp=Z,37nm,0.9s
OBN MLR MLR
comp=Z,283nm,16.0s
**BZS Buzias** 21.64 308 ⇓P **P** 21 10 32.6 -1.4
**BZS Buzias** 21.64 308 ⇓P **P** 21 10 32.6 -1.4
**TIR Tirane** 21.70 296 P **P** 21 10 35.5 +0.7
TIR IAmb IAmb 21 10 50.8
comp=Z,34nm,1.0s
**TIR Tirane** 21.70 296 ⇑P **P** 21 10 35.6 +0.9
**TIR Tirane** 21.70 296 ⇑P **P** 21 10 35.6 +0.9
**PUK Puka** 21.81 298 P **P** 21 10 35.7 -0.3
**VLO Vlora** 21.85 293 P **P** 21 10 36.2 -0.1
VLO IAmb IAmb 21 10 54.7
comp=Z,72nm,1.0s
**VLO Vlora** 21.85 293 P **P** 21 10 36.2 -0.1
VLO pmax pmax
comp=Z,72nm,1.0s
**SIRR Siria** 21.86 310 ⇓P **P** 21 10 37.2 +0.8
**MOS Moscow** 21.95 347 *e*P **P** 21 10 35.8 -1.4
MOS *e* 21 10 57.0
MOS *e*S **S** 21 14 38.0 -1.3
MOS pmax pmax
comp=Z,93nm,0.9s
**IVA Berane** 21.98 300 ⇓*i*P **P** 21 10 40.9 +3.0
**SJES Sjenica** 22.02 301 *e*P **P** 21 10 38.0 -0.3
**LVV L'vov** 22.21 320 *e*P **P** 21 10 40.0 -0.2
LVV *e*S **S** 21 14 36.3 -8.3
LVV pmax pmax
comp=Z,170nm,1.4s
LVV MLR MLR
comp=E,100nm,16.0s
LVV MLR MLR
comp=N,200nm,15.0s
LVV MLR MLR
comp=Z,200nm,14.0s
**KOME Kolasin** 22.25 300 ⇑*i*P **P** 21 10 42.3 +1.6
**ULC Ulcinj** 22.27 297 ⇓*i*P **P** 21 10 42.6 +1.8
**PDG Podgorica** 22.35 298 P **P** 21 10 40.4 -1.2
**PDG Podgorica** 22.35 298 *e*P **P** 21 10 41.0 -0.6
**PDG Podgorica** 22.35 298 ⇓P **P** 21 10 41.3 -0.4
**PDG Podgorica** 22.35 298 ⇑*i*P **P** 21 10 41.8 +0.2
**DRME Dracevica, Mon** 22.35 298 *e*P **P** 21 10 43.4 +1.7
**DRME Dracevica, Mon** 22.35 298 ⇓*i*P **P** 21 10 43.5 +1.7
**NIL Nilore** 22.49 85 P **P** 21 10 44.5 +1.2
NIL IAmb IAmb 21 10 49.8
comp=Z,37nm,0.8s
**NIL Nilore** 22.49 85 P **P** 21 10 43.8 +0.5
**NIL Nilore** 22.49 85 P **P** 21 10 44.5 +1.2
NIL pmax pmax
comp=Z,37nm,0.8s
**RUDO Rudo** 22.53 302 *e*P **P** 21 10 42.9 -0.8
**BBLS Lazi&#263i** 22.57 302 *e*P **P** 21 10 43.3 -0.9
**BUM Brajici-Budva** 22.58 298 ⇓*i*P **P** 21 10 44.7 +0.4
**SCTE Santa Cesarea** 22.59 292 P **P** 21 10 42.7 -1.6
SCTE IAmb IAmb 21 11 00.4
comp=Z,22nm,0.9s
**CEME Cevo** 22.61 299 ⇑*i*P **P** 21 10 45.4 +0.8
**NKME Niksic** 22.64 299 ⇓*i*P **P** 21 10 44.7 -0.1
**TEKS Tekeris** 22.68 304 *e*P **P** 21 10 44.1 -1.1
**KOLS Kolonicke sedl** 22.70 316 *e*P **P** 21 10 46.5 +1.1
KOLS pmax pmax

comp=Z,84nm,0.9s
**KOLS Kolonicke sedl 22.70 316** *e*P **P 21 10 46.5 +1.1**
**KWP Kalwaria Pacla 22.82 318** *e*P **P 21 10 46.2 -0.5**
**KWP Kalwaria Pacla 22.82 318** P **P 21 10 45.5 -1.2**
**KWP Kalwaria Pacla 22.82 318** P **P 21 10 45.5 -1.2**
KWP pmax pmax
comp=Z,80nm,0.7s
**HAPS Han Pijesak,BI 22.95 303** *e*P **P 21 10 47.2 -0.9**
**BRY Bratogost 22.96 299** *e*P **P 21 10 47.6 -0.7**
**BRY Bratogost 22.96 299**⇓*i*P **P 21 10 48.0 -0.3**
**TREB Trebinje 23.06 299** *e*P **P 21 10 48.6 -0.6**
**ATD Arta Tunnel 23.14 188** P **P 21 10 51.0 +0.8**
**ATD Arta Tunnel 23.14 188** P **P 21 10 53.0 +2.8**
comp=Z,0.5nm,0.8s,baz=131,slow=19,SNR=3.1
ATD LR LR 21 19 19.8
comp=Z,11nm,20.5s,baz=0.0,slow=35
**ARU Arti 23.46 18** P **P 21 10 52.8 -0.3**
ARU IAmb IAmb 21 11 17.7
comp=Z,29nm,1.0s
**ARU Arti 23.46 18** P **P 21 10 54.0 +0.9**
comp=Z,14nm,0.7s,baz=208,slow=7.2,SNR=28
ARU LR LR 21 22 58.0
comp=Z,476nm,18.4s,baz=208,slow=44
comp=Z,14nm,0.7s
**ARU Arti 23.46 18***c i*P **P 21 10 54.4 +1.4**
ARU 21 11 21.4
ARU PPP PPP 21 11 28.6
ARU S **S 21 15 10.4 +4.1**
ARU SS **SnSn 21 15 46.5 +4.7**
ARU SSS SSS 21 16 06.9
ARU pmax pmax
comp=Z,24nm,0.9s
ARU MLR MLR
comp=Z,493nm,17.0s
**KECS Kecovo 23.53 314** *e*P **P 21 10 55.8 +2.0**
KECS pmax pmax
comp=Z,35nm,1.0s
**KECS Kecovo 23.53 314** *e*P **P 21 10 55.8 +2.0**
**AAK Ala-Archa 23.53 62** P **P 21 10 52.9 -1.2**
AAK IAmb IAmb 21 11 03.8
comp=Z,48nm,1.8s
**AAK Ala-Archa 23.53 62** P **P 21 10 55.2 +1.1**
**AAK Ala-Archa 23.53 62** LR LR 21 21 59.4
comp=Z,372nm,19.3s,baz=262,slow=41
**AAK Ala-Archa 23.53 62** P **P 21 10 55.5 +1.4**
**AAK Ala-Archa 23.53 62** *e*P **P 21 10 55.6 +1.4**
AAK pmax pmax
comp=Z,17nm,2.1s
**STON Ston 23.56 299** *e*P **P 21 10 52.3 -1.9**
**MNK Minsk 23.64 333** *i*P **P 21 10 51.6 -3.2**
comp=E,37nm,1.1s
MNK *i*P **P 21 10 51.6 -3.2**
comp=N,38nm,1.1s
MNK *i*P **P 21 10 51.6 -3.2**
comp=Z,53nm,1.0s,baz=140
MNK *i*PP **PnPn 21 11 17.0 -4.9**
MNK *i*PPP PPP 21 11 26.4
MNK *i*S **S 21 15 05.3 -4.0**
MNK *i*SS **SnSn 21 15 40.9 -5.3**
MNK *i*SSS SSS 21 15 54.1
MNK *i*LQ LQ 21 18 04.2
MNK *i*LR LR 21 19 39.4
MNK *i*LRM MLR 21 20 41.8
comp=N,240nm,16.8s
MNK *i*LRM MLR 21 20 58.3
comp=Z,197nm,17.1s
**MNK Minsk 23.64 333** *i*P **P 21 10 51.6 -3.2**
MNK *i*PPP PPP 21 11 26.4
MNK *i*S **S 21 15 05.2 -4.0**
MNK *i*SSS SSS 21 15 54.0
MNK pmax pmax
comp=Z,53nm,1.0s
MNK pmax pmax
comp=E,37nm,1.1s
MNK pmax pmax
comp=N,38nm,1.1s
MNK MLR MLR
comp=N,240nm,17.0s
MNK MLR MLR
comp=Z,197nm,17.0s
**PSZ Piszkesteto 23.64 312** P **P 21 10 54.3 -0.7**
**PSZ Piszkesteto 23.64 312**⇓P **P 21 10 55.4 +0.4**
**PSZ Piszkesteto 23.64 312**⇓P **P 21 10 55.4 +0.4**
**FRU1 Bishkek 23.66 61** P **P 21 10 56.6 +1.3**
**FRU1 Bishkek 23.66 61** P **P 21 10 56.6 +1.3**
FRU1 pmax pmax
comp=Z,17nm,1.1s
**BTLS Baital 23.77 56** *e*P **P 21 10 57.3 +1.0**
baz=56
BTLS *e*S **S 21 15 13.7 +2.1**
baz=56
**BTLS Baital 23.77 56** *e*P **P 21 10 57.2 +1.0**
BTLS *e*S **S 21 15 13.7 +2.1**
**SGDS Sogindy 23.79 60** *e*P **P 21 10 57.6 +1.0**
baz=60
**SGDS Sogindy 23.79 60** *e*P **P 21 10 57.5 +1.0**
**MORH Mrgy, Hungar 23.79 307**⇑P **P 21 10 56.3 -0.1**
**TIP Timpagrande 23.85 290** P **P 21 10 56.2 -1.0**
**TIP Timpagrande 23.85 290**⇑P **P 21 10 56.9 -0.3**
**MATE Matera 23.98 293**⇑P **P 21 10 55.7 -2.6**
**NIE Niedzica 24.07 316** *e*P **P 21 10 57.0 -2.1**
NIE *e*S **S 21 15 17.7 +1.3**
**KIRV Kirov 24.11 4** P **P 21 11 00.4 +1.1**
comp=Z,19nm,0.5s,baz=189,slow=8.1,SNR=6.2
KIRV S **S 21 15 12.2 -4.5**
comp=Z,5.3nm,0.8s,baz=357,slow=23,SNR=1.0
KIRV LR LR 21 22 12.7
comp=Z,424nm,18.6s,baz=186,slow=41
comp=Z,19nm,0.5s
**KIRV Kirov 24.11 4**⇑*i*P **P 21 10 58.5 -0.8**
**KSH Kashi 24.29 70** P **P 21 11 01.8 +0.4**
KSH sP sP 21 11 08.5 +2.2
KSH pmax pmax
comp=Z,12nm,1.1s
KSH pmax pmax
comp=Z,140nm,2.8s
KSH LR LR
comp=Z,1μm,12.0s
KSH LR LR
comp=Z,460nm,12.4s
KSH LR LR
comp=Z,800nm,15.8s
**BLY Banja Luka 24.34 303** *e*P **P 21 11 00.8 -0.8**
**SVE Sverdlovsk 24.35 20** *e*P **P 21 11 03.9 +2.3**
SVE *e*S **S 21 15 27.3 +6.6**
SVE pmax pmax
comp=Z,34nm,0.9s
SVE MLR MLR
comp=Z,409nm,17.0s
**NACGM Naroch 24.36 332** *e*P **P 21 11 01.2 -0.4**
comp=E,2μm,0.9s
**TKM2 Tokmak 2 24.38 61** *i*P **P 21 11 03.5 +1.3**
TKM2 pmax pmax
comp=Z,17nm,0.7s
**LANS Liptovska Anna 24.43 315** *e*P **P 21 11 03.8 +1.4**
LANS pmax pmax
comp=Z,17nm,0.9s
**LANS Liptovska Anna 24.43 315** *e*P **P 21 11 03.8 +1.4**
**NRN Naryn 24.46 65** P **P 21 11 03.2 +0.1**
NRN IAmb IAmb 21 11 09.0
comp=Z,78nm,2.0s
**NRN Naryn 24.46 65** P **P 21 11 03.2 +0.1**
NRN pmax pmax
comp=Z,78nm,2.0s
**CEL Celeste 24.52 287** P **P 21 11 03.3 0.0**
CEL IAmb IAmb 21 11 13.3
comp=Z,39nm,1.1s
**VYHS Vyhne 24.52 313** *e*P **P 21 11 03.5 +0.3**
VYHS pmax pmax
comp=Z,20nm,0.9s
**VYHS Vyhne 24.52 313** *e*P **P 21 11 03.5 +0.3**
**BOOM Boomskoye usch 24.56 62** P **P 21 11 03.7 -0.1**
BOOM IAmb IAmb 21 11 11.6
comp=Z,17nm,0.6s
**BOOM Boomskoye usch 24.56 62** P **P 21 11 03.7 -0.1**
BOOM pmax pmax
comp=Z,17nm,0.6s
**SRO Srobarova 24.57 311** *e*P **P 21 11 04.6 +1.0**
SRO pmax pmax
comp=Z,24nm,1.1s
**SRO Srobarova 24.57 311** *e*P **P 21 11 04.6 +1.0**
**A051A Mrakovica 24.60 304** *e*P **P 21 11 03.4 -0.6**
**CUC Castrocucco 24.61 292** P **P 21 11 04.1 -0.1**
**A050A Klekovaca 24.73 302** *e*P **P 21 11 04.5 -0.7**
**OJC Ojcow 24.74 317** *e*P **P 21 11 05.4 +0.3**
OJC *e*S **S 21 15 35.4 +8.3**
**OJC Ojcow 24.74 317** P **P 21 11 04.7 -0.5**
**OJC Ojcow 24.74 317** P **P 21 11 04.7 -0.5**
OJC pmax pmax
comp=Z,64nm,0.8s
**SGRT San Giovanni R 24.82 296** P **P 21 11 05.9 -0.2**
SGRT IAmb IAmb 21 11 11.9
comp=Z,41nm,1.2s
**BEL Belsk 25.05 321** *e*P **P 21 11 08.0 +0.1**
**BRVK Borovoye 25.21 36** P **P 21 11 09.6 +0.2**
**BRVK Borovoye 25.21 36** P **P 21 11 11.8 +2.4**
**BRVK Borovoye 25.21 36***d i*P **P 21 11 11.3 +1.9**
BRVK pmax pmax
comp=Z,72nm,0.9s
**SUW Suwalki 25.22 327** *e*P **P 21 11 08.8 -0.7**
**SUW Suwalki 25.22 327** P **P 21 11 08.7 -0.7**
**SUW Suwalki 25.22 327** *e*P **P 21 11 09.4 0.0**
**SUW Suwalki 25.22 327** P **P 21 11 08.7 -0.7**
SUW pmax pmax
comp=Z,225nm,0.8s
**BVAR Borovoye Array 25.24 36** P **P 21 11 10.1 +0.5**
comp=Z,56nm,0.7s,baz=235,slow=8.3,SNR=111
comp=Z,56nm,0.7s
**TNSS Tian-Shan 25.37 61** *e*P **P 21 11 12.2 +0.7**
baz=62
**TNSS Tian-Shan 25.37 61** *e*P **P 21 11 12.1 +0.7**
**JAVC Velka Javorina 25.38 313** *e*P **P 21 11 12.1 +1.1**
**AAA Alma-Ata 25.38 61** *e*P **P 21 11 12.4 +1.3**
comp=Z,16nm,0.6s,baz=62
**AAA Alma-Ata 25.38 61** *e*P **P**
AAA pmax pmax
**AAA Alma-Ata 25.38 61** *e*P **P 21 11 12.4 +1.3**
comp=Z,16nm,0.6s
**SMOL Smolenice 25.39 312** *e*P **P 21 11 12.4 +1.4**
SMOL pmax pmax
comp=Z,24nm,0.9s
**KOGS Kog 25.44 307** *i*P **P 21 11 12.0 +0.5**
**MDOK Medeo 25.47 61** *e*P **P 21 11 13.3 +1.3**
baz=62
MDOK *e*S **S 21 15 41.4 +2.2**
baz=62
**MDOK Medeo 25.47 61** *e*P **P 21 11 13.3 +1.3**
MDOK *e*S **S 21 15 41.3 +2.2**
**ZST Bratislava 25.47 311** *e*P **P 21 11 12.2 +0.4**
**ZST Bratislava 25.47 311** *e*P **P 21 11 12.2 +0.4**
**MAUC Maruska 25.49 314** *e*P **P 21 11 12.9 +0.9**
**OKC Ostrava-Krasne 25.50 315** *e*P **P 21 11 12.1 0.0**
OKC pmax pmax
comp=Z,300nm,12.2s
**OKC Ostrava-Krasne 25.50 315** *e*P **P 21 11 12.1 0.0**
OKC MLR MLR
comp=Z,300nm,12.2s
**CHKK Chushkaly 25.54 59** *e*P **P 21 11 13.7 +1.2**
baz=60
**CHKK Chushkaly 25.54 59** *e*P **P 21 11 13.7 +1.2**
**PAOL Paolisi 25.63 294** P **P 21 11 12.8 -0.6**
**VAE Valguarnera 25.72 286** P **P 21 11 16.5 +2.3**
comp=Z,20nm,0.8s,baz=22,slow=8.0,SNR=13
VAE LR LR 21 22 35.7
comp=Z,231nm,18.2s,baz=102,slow=39
comp=Z,20nm,0.8s
**WDD Wied Dalam 25.77 282** P **P 21 11 15.2 +0.7**
**RAFF Raffo Rosso 25.77 285** P **P 21 11 15.6 +1.0**
**CRES Cresnjev 25.80 305** *e*P **P 21 11 14.4 -0.4**
**RONA Rosalía, Austr 25.80 310** *i*P **P 21 11 15.2 +0.3**
comp=Z,11nm,0.5s,SNR=20
**MORC Moravsky Berou 25.83 315** P **P 21 11 14.7 -0.4**
MORC IAmb IAmb 21 11 16.4
comp=Z,24nm,1.0s
**MORC Moravsky Berou 25.83 315** *e*P **P 21 11 15.1 0.0**
**MORC Moravsky Berou 25.83 315**⇑P **P 21 11 15.4 +0.3**
**MORC Moravsky Berou 25.83 315**⇑P **P 21 11 15.4 +0.3**
**TARG Taragay, Kyrgy 25.84 65** P **P 21 11 16.2 +0.5**
**TARG Taragay, Kyrgy 25.84 65** P **P 21 11 16.2 +0.5**
TARG pmax pmax
comp=Z,10.0nm,0.8s
**BOJS Bojanci 25.85 304** *i*P **P 21 11 15.5 +0.2**
**BOJS Bojanci 25.85 304** *e*P **P 21 11 15.3 0.0**
**PABE Paberze 25.90 331** P **P 21 11 15.2 -0.4**
**PABE Paberze 25.90 331** *e*P **P 21 11 15.7 +0.1**
**GROS Grobnik 25.94 306** *i*P **P 21 11 16.1 -0.1**
**ARSA Arzberg 26.15 308** *i*P **P 21 11 18.9 +0.9**
comp=Z,6.4nm,0.7s,SNR=8.0
**CONA Conrad Observa 26.15 310** *i*P **P 21 11 18.3 +0.2**
comp=Z,15nm,0.9s,SNR=16
**VRAC Vranov 26.20 313** *e*P **P 21 11 18.7 +0.3**
**VRAC Vranov 26.20 313** P **P 21 11 18.8 +0.3**
comp=Z,21nm,0.9s,baz=113,slow=9.4,SNR=19
VRAC LR LR 21 23 50.9
comp=Z,228nm,18.1s,baz=98,slow=42
comp=Z,21nm,0.9s
**VRAC Vranov 26.20 313**⇑P **P 21 11 19.1 +0.6**
**VRAC Vranov 26.20 313**⇑P **P 21 11 19.1 +0.6**
**ARXS Arharly 26.20 59** *e*P **P 21 11 18.9 +0.3**
**INTR Introdacqua 26.21 296** P **P 21 11 18.1 -0.6**
INTR IAmb IAmb 21 11 47.5
comp=Z,60nm,1.8s
**KRUC Moravsky 26.23 313** *e*P **P 21 11 18.9 +0.2**
**SOKA Soboth 26.31 307** *e*P **P 21 11 19.9 +0.4**
comp=Z,2.4nm,0.6s
**PRZ Przheval'sk 26.36 63** P **P 21 11 20.2 +0.1**
**PRZ Przheval'sk 26.36 63** P **P 21 11 20.2 +0.1**
PRZ pmax pmax
comp=Z,14nm,0.9s
**KRLC Kraliky 26.40 315** *e*P **P 21 11 20.4 +0.1**
KRLC AMS AMS 21 24 30.0
comp=Z,400nm,14.3s
**KRLC Kraliky 26.40 315** *e*P **P 21 11 20.4 +0.1**
KRLC MLR MLR
comp=Z,400nm,14.3s
**SATY Saty 26.43 62** *e*P **P 21 11 22.2 +1.4**
comp=Z,11nm,0.7s,baz=62
**SATY Saty 26.43 62** *e*P **P 21 11 22.1 +1.4**
SATY pmax pmax
comp=Z,11nm,0.7s
**FURI Furi 26.46 197** LR LR 21 22 16.9
comp=Z,518nm,19.1s,baz=12,slow=37
**CEY Cerknica 26.47 304** *e*P **P 21 11 18.2 -2.7**
**OBKA Obir 26.58 306** *e*P **P 21 11 23.0 +1.0**
comp=Z,4.8nm,0.5s
**OBKA Obir 26.58 306** *e*P **P 21 11 21.4 -0.6**
**CAMP Campotosto 26.63 297** P **P 21 11 22.4 -0.1**
CAMP IAmb IAmb 21 11 34.1
comp=Z,42nm,1.2s
**CLTB Caltabellotta 26.66 286** P **P 21 11 23.0 +0.2**
**KPKS Kokpek 26.69 61** *e*P **P 21 11 24.2 +1.1**
baz=61
**KPKS Kokpek 26.69 61** *e*P **P 21 11 24.1 +1.1**
**TDK Taldyqorghan 26.76 57** *e*P **P 21 11 24.7 +1.1**
comp=Z,11nm,0.7s,baz=58
**TDK Taldyqorghan 26.76 57** *e*P **P 21 11 24.7 +1.1**
TDK pmax pmax
comp=Z,11nm,0.7s
**DPC Dobruska-Polom 26.79 315** *e*P **P 21 11 23.9 +0.2**
DPC AMS AMS 21 24 00.0
comp=Z,400nm,12.8s
**DPC Dobruska-Polom 26.79 315** *e*P **P 21 11 23.9 +0.2**
DPC MLR MLR
comp=Z,400nm,12.8s
**TREC Trest 26.87 312** AMS AMS 21 23 50.0
comp=Z,500nm,15.6s
**NRCA Norcia 26.88 298** P **P 21 11 24.9 +0.2**
NRCA IAmb IAmb 21 11 28.2
comp=Z,19nm,0.9s
**UZB Uzynbulak 26.89 62** *e*P **P 21 11 26.3 +1.3**
baz=62
UZB *e*S **S 21 16 03.8 +2.1**
baz=62
**UZB Uzynbulak 26.89 62** *e*P **P 21 11 26.2 +1.3**
UZB *e*S **S 21 16 03.8 +2.1**
**FDMO Fiordimonte 26.93 298** P **P 21 11 22.8 -2.3**
FDMO IAmb IAmb 21 11 31.4
comp=Z,25nm,1.1s
**OSTC Ostas 26.93 315** *e*P **P 21 11 25.1 0.0**
OSTC AMS AMS 21 24 00.0
comp=Z,400nm,14.8s
**OSTC Ostas 26.93 315** *e*P **P 21 11 25.1 0.0**
OSTC MLR MLR
comp=Z,400nm,14.8s
**KSP Ksiaz 27.01 316** *e*P **P 21 11 25.6 -0.2**
**UPC Upice 27.03 315** *e*P **P 21 11 25.9 0.0**
UPC *e*S S 21 16 18.3 +15
UPC AMS AMS 21 24 10.0
comp=Z,400nm,15.3s
**UPC Upice 27.03 315** *e*P **P 21 11 25.9 0.0**
UPC MLR MLR
comp=Z,400nm,15.3s
**PBUR Paburge 27.10 330** *e*P **P 21 11 25.4 -0.9**
**VSU Vasula 27.14 338***ce*P **P 21 11 25.9 -0.9**
VSU pmax pmax
comp=Z,24nm,0.9s
**MOA Molln 27.15 309** *i*P **P 21 11 27.3 +0.3**
comp=Z,5.7nm,0.6s,SNR=11
**SHLS Shalkode 27.21 62** *e*P **P 21 11 31.1 +3.3**
baz=62
**SHLS Shalkode 27.21 62** *e*P **P 21 11 31.9 +4.1**
**PRED Cave del Predi 27.22 306** P **P 21 11 27.0 -0.8**
**CKRC Cesky Krumlov 27.43 311** *e*P **P 21 11 29.6 +0.1**
CKRC AMS AMS 21 25 40.0
comp=Z,300nm,14.9s
**CKRC Cesky Krumlov 27.43 311** *e*P **P 21 11 29.6 +0.1**
CKRC MLR MLR
comp=Z,300nm,14.9s
CKRC smax smax
comp=N,4.0nm,0.9s
CKRC smax smax
comp=N,25nm,0.5s
**BIOA Bad Ischl, Aus 27.51 308** *i*P **P 21 11 30.4 +0.2**
comp=N,9.2nm,0.6s,SNR=10
**GOPC GO Pecny, Ondr 27.52 313** *e*P **P 21 11 30.6 +0.3**
**GOPC GO Pecny, Ondr 27.52 313** *e*P **P 21 11 30.6 +0.3**
**KBA Koelnbreinsper 27.53 307** *i*P **P 21 11 30.8 +0.2**
comp=N,8.2nm,0.7s,SNR=12
**GKP Gorka Klasztor 27.65 321** *e*P **P 21 11 32.2 +0.9**
**PRU Pruhonice 27.70 313** *e*S S 21 16 28.4 +14
PRU AMS AMS 21 24 30.0
comp=N,300nm,14.5s
**ZVC Zvikov 27.71 312** *e*P **P 21 11 32.2 +0.2**
**PRA Prague 27.79 314** AMS AMS 21 24 30.0
comp=N,300nm,13.0s
**GEC2 GERESS Array S 27.82 311** P **P 21 11 32.6 -0.5**
**GEC2 GERESS Array S 27.82 311** *e*P **P 21 11 33.0 -0.1**
comp=N,2.2nm,0.7s,baz=110,slow=9.0
**GERES GERESS Array B 27.82 311** P **P 21 11 32.1 -0.9**
**GERES GERESS Array B 27.82 311** P **P 21 11 31.9 -1.2**
comp=N,1.5nm,0.4s,baz=102,slow=9.1,SNR=9.2
GERES LR LR 21 25 17.9
comp=N,237nm,18.2s,baz=106,slow=42
comp=N,1.5nm,0.4s
**GERES GERESS Array B 27.82 311** P **P 21 11 32.2 -0.9**
**PVCC Panska Ves 27.89 314** AMS AMS 21 25 10.0
comp=N,300nm,16.7s
**KHC Kasperske Hory 27.98 311** P **P 21 11 34.1 -0.4**
**KHC Kasperske Hory 27.98 311** *e*P **P 21 11 35.1 +0.6**
KHC *e*S S 21 16 39.4 +21
KHC AMS AMS 21 25 50.0
comp=N,300nm,19.8s
**KHC Kasperske Hory 27.98 311***ce*P **P 21 11 34.1 -0.4**
KHC pmax pmax
comp=Z,30nm,1.6s
**ABTA Abfaltersbach 28.00 306** *i*P **P 21 11 35.3 +0.6**
comp=Z,4.3nm,0.8s
**LESA Schwarzleotal 28.06 307** *i*P **P 21 11 34.9 -0.3**
comp=Z,3.4nm,0.5s
**SLIT Slitere, Latvi 28.06 333** *e*P **P 21 11 34.1 -0.8**
**ARBE Arbavere 28.16 338** *e*P **P 21 11 36.0 +0.2**
**TEOL Teolo 28.29 303** P **P 21 11 35.2 -2.0**
**BRG Berggiesshubel 28.39 315** *e*P **P 21 11 37.6 -0.5**
BRG Amp 21 11 39.6
comp=Z,7.0nm,1.0s
**BRG Berggiesshubel 28.39 315** *e*P **P 21 11 37.5 -0.5**
BRG pmax pmax
comp=Z,7.0nm,1.0s
BRG MLR MLR
comp=Z,285nm,17.3s
BRG MLR MLR
comp=E,136nm,13.1s
**BRG Berggiesshubel 28.39 315** *e*P **P 21 11 38.0 0.0**
comp=E,21nm,1.5s,baz=110,slow=9.0
**WET Wettzell 28.43 311** *e*P **P 21 11 38.0 -0.4**
comp=E,8.3nm,1.1s,baz=110,slow=9.0
**CTI Castel Tesino 28.43 304** P **P 21 11 37.9 -0.7**
CTI IAmb IAmb 21 11 55.2
comp=Z,12nm,0.9s
**CTI Castel Tesino 28.43 304** P **P 21 11 37.9 -0.7**
CTI pmax pmax
comp=Z,12nm,0.9s
**KURBB Kurchatov Arra 28.47 46** P **P 21 11 39.9 +1.2**
comp=Z,12nm,0.7s,baz=252,slow=9.0,SNR=63
KURBB ScP **ScP 21 18 31.2 -0.5**
comp=Z,0.3nm,0.4s,baz=248,slow=3.9,SNR=2.0
KURBB LR LR 21 24 27.6
comp=Z,212nm,18.6s,baz=182,slow=39
comp=Z,12nm,0.7s
**VALR Valaam 28.51 345***c i*P **P 21 11 37.8 -1.1**
VALR pmax pmax
comp=Z,21nm,0.8s
**KURK Kurchatov 28.55 46** P **P 21 11 39.0 -0.5**
KURK IAmb IAmb 21 11 43.7
comp=Z,16nm,0.9s
**KURK Kurchatov 28.55 46** P **P 21 11 41.0 +1.6**
KURK P **P 21 11 41.0 +1.6**
**KURK Kurchatov 28.55 46***ce*P **P 21 11 42.6 +3.1**
KURK pmax pmax
comp=Z,20nm,1.0s
**HSKC Hora Svate Kat 28.59 314** AMS AMS 21 25 30.0
comp=Z,200nm,15.1s
**ZCCA Zocca 28.62 301** P **P 21 11 40.9 +0.7**
**WTTA Wattenberg 28.70 307** *i*P **P 21 11 40.6 -0.5**
comp=Z,6.5nm,0.6s,SNR=8.6
WTTA *e*S **S 21 16 29.4 -0.8**
comp=Z,7.9nm,0.9s
**WATA Walderalm 28.76 307** *i*P **P 21 11 41.0 -0.6**
comp=Z,4.1nm,0.5s,SNR=10.0
**SQTA Sankt Quirin 28.98 306** *i*P **P 21 11 43.0 -0.4**
comp=Z,7.5nm,0.4s,SNR=8.2
**ROTZ Rotzenmuhle 29.04 312** *e*P **P 21 11 44.2 +0.3**
comp=Z,2.3nm,0.8s,baz=110,slow=9.0
**MOTA Moosalm 29.08 307** *i*P **P 21 11 43.7 -0.7**
comp=Z,4.2nm,0.3s
MOTA *e*S **S 21 16 35.7 -0.4**
comp=Z,3.6nm,0.7s
**CLL Collm 29.10 315** P **P 21 11 43.4 -1.0**
CLL IAmb IAmb 21 11 45.2
comp=Z,22nm,1.4s
**CLL Collm 29.10 315** *i*P **P 21 11 43.9 -0.4**
comp=Z,19nm,1.3s
CLL *i*x x 21 11 51.9
CLL *e*PPP PPP 21 12 47.0
CLL *e*S **S 21 16 33.0 -2.9**
CLL *ex* x 21 18 42.0
CLL AMS AMS 21 26 00.0
comp=Z,200nm,19.7s
**CLL Collm 29.10 315** *i*P **P 21 11 43.9 -0.4**
CLL *i* *PP **sP 21 11 51.9 +2.7**
CLL *e*S **S 21 16 33.0 -2.9**
CLL pmax pmax
comp=Z,19nm,1.3s
**CLL Collm 29.10 315** *e*P **P 21 11 44.4 +0.1**
comp=Z,21nm,1.4s,baz=110,slow=9.0
**RUE Ruedersdorf 29.13 318** *e*P **P 21 11 44.9 +0.4**
comp=Z,48nm,1.1s,baz=110,slow=9.0
**FUR Furstenfeldbru 29.16 308** *e*P **P 21 11 45.0 +0.1**
comp=Z,33nm,0.8s,baz=110,slow=9.0
**MANZ Manzenberg 29.17 312** *e*P **P 21 11 45.2 +0.1**
comp=Z,1.7nm,1.1s,baz=110,slow=9.0
**FETA Feichten 29.25 306** *i*P **P 21 11 45.7 -0.2**
comp=Z,7.7nm,0.7s,SNR=8.0
FETA *e*S **S 21 16 38.2 -0.6**
comp=Z,1.9nm,0.6s
**MEF Metsahovi 29.27 338** *e*P **P 21 11 45.0 -0.7**
**RETA Reutte 29.34 307** *i*P **P 21 11 45.8 -0.7**
comp=Z,3.0nm,0.3s,SNR=6.4
RETA *e*S **S 21 16 38.3 -1.6**
comp=Z,3.5nm,0.7s
**SEM Semipalatinsk 29.42 47** *e*P **P 21 11 48.0 +0.5**
comp=Z,12nm,0.8s,baz=47
**SEM Semipalatinsk 29.42 47** *e*P **P 21 11 47.9 +0.5**
SEM pmax pmax
comp=Z,12nm,0.8s
**FUORN Ofenpass-Fuorn 29.49 305** P **P 21 11 48.7 +0.6**
**MAKZ Makanchi 29.57 55** P **P 21 11 49.6 +1.0**
MAKZ IAmb IAmb 21 11 54.7
comp=Z,28nm,1.9s
**MAKZ Makanchi 29.57 55**⇑P **P 21 11 49.4 +0.8**
**VSL Villasalto 29.57 290** P **P 21 11 48.0 -0.7**
VSL IAmb IAmb 21 12 28.5
comp=Z,12nm,0.8s
**GRA1 Grafenberg Arr 29.62 311** P **P 21 11 47.9 -1.1**
**GRF Grafenberg Arr 29.62 311** P **P 21 11 47.9 -1.1**
GRF pmax pmax
comp=Z,51nm,1.4s

**GRF Grafenberg Arr 29.62 311** *e*P P **21 11 49.4 +0.4**
comp=Z,50nm,1.4s,baz=110,slow=9.0
GRF eL L 21 27 25.8
comp=Z,169nm,19.1s
**GRFO Grafenberg 29.62 311** P P **21 11 48.8 -0.2**
**GRFO Grafenberg 29.62 311** P P **21 11 48.8 -0.2**
GRFO pmax pmax
comp=Z,47nm,1.4s
**MSSA Maissana 29.65 300** P P **21 11 49.2 -0.2**
**MOX Moxa 29.68 313** *e*L L 21 24 27.3
comp=Z,176nm,20.5s
**BSD Bornholm Skovb 29.77 323** *e*P P **21 11 49.4 -0.8**
**BSD Bornholm Skovb 29.77 323** *i*P P **21 11 47.0 -3.2**
**FIA1 FINESS Array S 29.77 341** P P **21 11 48.0 -2.1**
**FINES FINESS Array B 29.77 341** P P **21 11 49.4 -0.7**
**FINES FINESS Array B 29.77 341** P P **21 11 48.9 -1.2**
comp=Z,2.7nm,0.4s,baz=145,slow=10,SNR=38
FINES PP **PnPn** **21 12 44.4 -1.1**
comp=Z,7.2nm,0.7s,baz=134,slow=14,SNR=6.3
FINES LR LR 21 24 30.8
comp=Z,402nm,21.0s,baz=144,slow=38
comp=Z,2.7nm,0.4s
**FINES FINESS Array B 29.77 341***ce*P P **21 11 49.4 -0.7**
FINES pmax pmax
comp=Z,3.0nm,0.4s
**MK31 Makanchi Array 29.77 55** P P **21 11 51.1 +0.7**
MK31 IAmb IAmb 21 11 54.3
comp=Z,8.9nm,0.7s
**MK31 Makanchi Array 29.77 55***d*iP P **21 11 51.1 +0.7**
**MKAR Makanchi Array 29.77 55** P P **21 11 51.1 +0.7**
**MKAR Makanchi Array 29.77 55** P P **21 11 51.0 +0.6**
comp=Z,9.4nm,0.6s,baz=250,slow=7.6,SNR=70
MKAR LR LR 21 25 05.0
comp=Z,423nm,20.4s,baz=256,slow=39
comp=Z,9.4nm,0.6s
**DAVOX Davos/Dischmat 29.78 305** P P **21 11 50.5 -0.2**
comp=Z,3.9nm,0.4s,baz=128,slow=12,SNR=16
DAVOX S **S** **21 16 43.9 -3.2**
comp=Z,0.9nm,0.6s,baz=168,slow=19,SNR=1.6
DAVOX LR LR 21 25 42.7
comp=Z,270nm,21.9s,baz=89,slow=40
comp=Z,3.9nm,0.4s
**UBR Ueberruh 29.81 307** *e*P P **21 11 50.4 -0.4**
comp=Z,31nm,1.3s,baz=110,slow=9.0
**JOF Joensuu 29.83 346** *e*P P **21 11 49.9 -0.7**
**DAVA Damuels 29.88 306** *e*P P **21 11 50.9 -0.6**
comp=Z,10.0nm,0.4s,SNR=12
**KEST Kesra 29.95 283** P P **21 11 53.0 +0.9**
KEST IAmb IAmb 21 12 02.6
comp=Z,20nm,1.3s
**KEST Kesra 29.95 283** P P **21 11 53.0 +0.9**
comp=Z,6.4nm,0.8s,baz=84,slow=1.7,SNR=9.9
KEST PcP **PcP** **21 14 56.6 +2.0**
comp=Z,3.7nm,0.9s,baz=278,slow=5.8,SNR=3.6
comp=Z,6.4nm,0.8s
**FLTG Flechtingen 30.50 316** *e*P P **21 11 58.3 +1.6**
comp=Z,17nm,0.9s,baz=110,slow=9.0
**KEF Keuruu 30.69 341** *e*P P **21 11 57.5 -0.7**
**GORT1 Trebel 30.71 318** *e*P P **21 11 59.7 +1.2**
comp=Z,61nm,1.0s,baz=110,slow=9.0
**AAL Aland 30.71 335** *e*P P **21 11 57.5 -0.9**
**RAF Rauma 30.73 337** *e*P P **21 11 57.8 -0.7**
**LUNU Lund 30.75 323** *i*P P **21 11 57.7 -1.2**
**CLZ Clausthal 30.82 315** *e*P P **21 12 00.0 +0.4**
comp=Z,11nm,0.7s,baz=110,slow=9.0
**DEL Delary 30.97 325** *i*P P **21 11 59.5 -1.3**
**BFO Black Forest 31.12 308** P P **21 12 01.5 -0.8**
**BFO Black Forest 31.12 308** P P **21 12 01.5 -0.8**
BFO pmax pmax
comp=Z,4.0nm,0.8s
**BFO Black Forest 31.12 308** *e*P P **21 12 03.1 +0.8**
comp=Z,5.6nm,1.1s,baz=110,slow=9.0
**BJUU Bjuv 31.18 324** *i*P P **21 12 01.8 -0.8**
**NRDL Niedersach Rhe 31.20 316** *e*P P **21 12 04.1 +1.2**
comp=Z,37nm,1.5s,baz=110,slow=9.0
**COP Copenhagen 31.28 323** *i*P P **21 12 03.5 -0.1**
COP IAmb IAmb 21 12 04.6
comp=Z,73nm,0.7s
**SENIN Lac Senin/Sane 31.46 304** P P **21 12 05.2 -0.4**
**ZSN Zaisan 31.62 54** *e*P P **21 12 08.2 +1.4**
comp=Z,5.4nm,0.8s,baz=54
**ZSN Zaisan 31.62 54** P P **21 12 08.1 +1.4**
ZSN pmax pmax
comp=Z,5.0nm,0.8s
**BSEG Bad Segeberg 31.62 319** *e*P P **21 12 07.4 +0.8**
comp=Z,36nm,1.1s,baz=110,slow=9.0
**RETH Rethem/Aller, 31.71 316** *e*P P **21 12 08.9 +1.5**
comp=Z,71nm,1.3s,baz=110,slow=9.0
**KASTN Kahler Asten 31.78 313** *e*P P **21 12 08.8 +0.7**
comp=Z,8.6nm,0.9s,baz=110,slow=9.0
**FABU Falkenberg 31.79 325** *i*P P **21 12 07.2 -0.8**
**ECH Echery 31.86 307** P P **21 12 07.5 -1.3**
ECH IAmb IAmb 21 12 08.8
comp=Z,16nm,1.3s
**ECH Echery 31.86 307** P P **21 12 07.5 -1.3**
ECH pmax pmax
comp=Z,16nm,1.3s
**VAF Ylistaro 32.01 340** *e*P P **21 12 09.4 -0.4**
**BORU Boraas 32.09 326** *i*P P **21 12 09.7 -0.9**
**ONAU Onsala 32.37 325** *i*P P **21 12 12.3 -0.8**
**AHRW Bad Neuenahr-A 32.42 311** *e*P P **21 12 14.5 +0.9**
comp=Z,13nm,1.0s,baz=110,slow=9.0
**IBBN Ibbenburen 32.50 315** *e*P P **21 12 15.6 +1.3**
comp=Z,107nm,1.6s,baz=110,slow=9.0
**BUG Bochum-Univer 32.54 313** *e*P P **21 12 15.5 +0.9**
comp=Z,14nm,1.1s,baz=110,slow=9.0
**LODK Lodwar 32.57 200** P P **21 12 14.7 -0.6**
**LODK Lodwar 32.57 200** P P **21 12 18.3 +3.0**
**SSRD Sdr. Stenderup 32.62 321** *i*P P **21 12 16.0 +0.7**
**WLF Walferdange 32.80 310** P P **21 12 15.7 -1.3**
WLF IAmb IAmb 21 12 17.3
comp=Z,17nm,1.0s
**WLF Walferdange 32.80 310** *d*P P **21 12 16.3 -0.6**
**WLF Walferdange 32.80 310** P P **21 12 15.7 -1.3**
WLF pmax pmax
comp=Z,17nm,1.0s
**WLF Walferdange 32.80 310** *e*P P **21 12 16.5 -0.4**
comp=Z,21nm,1.1s,baz=110,slow=9.0
**BHOU Houvegnez 33.04 311** *d*P P **21 12 19.4 +0.3**
**HFS Hagfors 33.09 331** P P **21 12 18.6 -0.8**
comp=Z,26nm,0.6s,baz=120,slow=8.8,SNR=114
HFS LR LR 21 27 41.1
comp=Z,323nm,18.7s,baz=120,slow=40
comp=Z,26nm,0.6s
**WMQ Urumqi 33.24 61** *e*P P **21 12 24.3 +3.3**
WMQ pmax pmax
comp=Z,21nm,0.9s
WMQ pmax pmax
comp=Z,59nm,3.7s
WMQ LR LR
comp=Z,330nm,14.3s
WMQ LR LR
comp=Z,390nm,14.3s
WMQ LR LR
comp=Z,240nm,19.3s
**ZAA0 Zalesovo Array 33.26 42** P P **21 12 21.0 +0.1**
ZAA0 IAmb IAmb 21 12 24.2
comp=Z,14nm,0.8s
**ZALV Zalesovo Beam 33.26 42** P P **21 12 20.9 0.0**
**ZALV Zalesovo Beam 33.26 42** P P **21 12 21.1 +0.1**
comp=Z,11nm,0.7s,baz=254,slow=8.9,SNR=47
ZALV LR LR 21 28 32.8
comp=Z,332nm,19.6s,baz=247,slow=41
comp=Z,11nm,0.7s
**MUD Monsted U'grnd 33.26 323** *i*P P **21 12 20.9 0.0**
MUD IAmb IAmb 21 12 22.4
comp=Z,36nm,0.8s
**SSB Saint Sauveur 33.27 301** P P **21 12 19.5 -1.7**
SSB IAmb IAmb 21 12 21.3
comp=Z,15nm,1.2s
**SSB Saint Sauveur 33.27 301** P P **21 12 19.5 -1.7**
SSB pmax pmax
comp=Z,15nm,1.2s
**RCHB Rochefort 33.49 310** *d*P P **21 12 22.4 -0.5**
**BCLA Clavier 33.49 311** *d*P P **21 12 23.2 +0.2**
**STRU Stroemstad 33.54 328** *i*P P **21 12 22.0 -1.3**
**BGES Gesves 33.62 311** *d*P P **21 12 24.3 +0.1**
**DGZ Jazzator, Alta 33.70 51***c*iP P **21 12 26.5 +1.4**
DGZ pmax pmax
comp=Z,8.0nm,0.9s
**BMRD Maredsous 33.81 310** *d*P P **21 12 26.1 +0.3**
**DOU Dourbes 33.87 310** *d*P P **21 12 26.1 -0.2**
**OSL Oslo 34.21 329** *e*P P **21 12 28.9 -0.2**
OSL IAmb IAmb 21 12 29.2
comp=Z,52nm,0.9s
**NC602 NORSAR Array S 34.31 330** P P **21 12 29.2 -0.8**
**NC602 NORSAR Array S 34.31 330** *e*P P **21 12 29.9 0.0**
NC602 IAmb IAmb 21 12 31.2
comp=Z,7.2nm,0.8s
**HOMB Homborsund 34.39 325** *e*P P **21 12 30.2 -0.5**
HOMB IAmb IAmb 21 12 30.7
comp=Z,111nm,1.8s
**HOMB Homborsund 34.39 325** *i*P P **21 12 29.2 -1.5**
**NC405 NORSAR Array S 34.45 331** P P **21 12 29.8 -1.4**
**KONO Kongsberg 34.55 328** P P **21 12 30.6 -1.4**
KONO IAmb IAmb 21 12 32.5
comp=Z,22nm,1.2s
**KONO Kongsberg 34.55 328** *e*P P **21 12 31.2 -1.0**
KONO IAmb IAmb 21 12 31.8
comp=Z,10nm,0.8s
**KONO Kongsberg 34.55 328** ⇑P P **21 12 31.1 -1.0**
**NB201 NORSAR Array S 34.58 331** P P **21 12 30.6 -1.8**
NB201 IAmb IAmb 21 12 36.9
comp=Z,36nm,1.5s
**NB2 NORSAR Subarra 34.61 331** P P **21 12 31.0 -1.6**
comp=Z,4.9nm,0.6s,baz=123,slow=8.6
**NOA NORSAR Array B 34.61 331** P P **21 12 31.1 -1.6**
comp=Z,4.2nm,0.6s,baz=125,slow=8.7,SNR=28
NOA PP **PnPn** **21 13 47.8 -0.2**
comp=Z,1.7nm,0.7s,baz=131,slow=11,SNR=3.7
NOA LR LR 21 28 28.4
comp=Z,234nm,19.6s,baz=135,slow=40
comp=Z,4.2nm,0.6s
**NAO01 NORSAR Array S 34.63 330** P P **21 12 32.0 -0.8**
**NBO00 NORSAR Array S 34.78 330** P P **21 12 33.3 -0.8**
NBO00 IAmb IAmb 21 12 36.9
comp=Z,41nm,1.6s
**NC204 NORSAR Array S 34.92 331** P P **21 12 34.5 -0.9**
**SNART Snartemo 35.03 325** *e*P P **21 12 36.0 -0.2**
SNART IAmb IAmb 21 12 42.4
comp=Z,96nm,1.8s
**SNART Snartemo 35.03 325** *i*P P **21 12 38.0 +1.8**
**CLF Chambon-Foret 35.08 306** P P **21 12 35.0 -1.8**
CLF IAmb IAmb 21 12 37.4
comp=Z,21nm,1.2s
**CEST Esterri de Car 35.60 297** P P **21 12 40.6 -0.9**
CEST IAmb IAmb 21 12 46.0
comp=Z,11nm,1.1s
**SKAR Skarslia 35.63 329** *e*P P **21 12 41.7 +0.2**
SKAR IAmb IAmb 21 12 42.1
comp=Z,12nm,1.1s
**BLS5 Blasjo 35.86 326** *e*P P **21 12 43.7 +0.3**
BLS5 IAmb IAmb 21 12 49.9
comp=Z,46nm,1.3s
**ODD1 Odda 36.00 327** *e*P P **21 12 45.2 +0.6**
ODD1 IAmb IAmb 21 12 45.9
comp=Z,28nm,1.0s
**DOMB Dombas 36.02 331** *e*P P **21 12 45.1 +0.4**
DOMB IAmb IAmb 21 12 48.9
comp=Z,37nm,1.6s
**TBLU Trondheim 36.24 333** IAmb IAmb 21 12 46.5
comp=Z,26nm,1.2s
TBLU *e*P P **21 12 46.6 0.0**
**KMY Karmoy 36.33 325** *e*P P **21 12 47.9 +0.5**
KMY IAmb IAmb 21 12 49.7
comp=Z,11nm,0.8s
**NSS Namsos 36.41 336** *e*P P **21 12 47.3 -0.6**
NSS IAmb IAmb 21 12 48.2
comp=Z,22nm,1.0s
**KMBO Kilima Mbogo 36.48 195** P P **21 12 49.7 +0.3**
**KMBO Kilima Mbogo 36.48 195** P P **21 12 54.4 +5.1**
comp=Z,1.1nm,0.6s,baz=55,slow=8.9,SNR=2.9
KMBO LR LR 21 27 34.5
comp=Z,365nm,18.0s,baz=72,slow=36
**KMBO Kilima Mbogo 36.48 195** P P **21 12 49.7 +0.3**
KMBO pmax pmax
comp=Z,10.0nm,1.6s
**MOR8 Moi Rana 36.71 339** *e*P P **21 12 49.7 -0.9**
MOR8 IAmb IAmb 21 12 50.5
comp=Z,10nm,0.8s
**VADS Vadso 36.75 351** *e*P P **21 12 50.6 -0.2**
VADS IAmb IAmb 21 12 53.2
comp=Z,44nm,1.1s
**HYA Hoyanger 36.77 329** *e*P P **21 12 51.7 +0.6**
HYA IAmb IAmb 21 13 08.3
comp=Z,468nm,3.6s
**KTK1 Kautokeino 36.77 346** *e*P P **21 12 50.7 -0.4**
KTK1 IAmb IAmb 21 12 51.9
comp=Z,15nm,1.1s
**BER Bergen 36.79 327** *e*P P **21 12 51.5 +0.2**
BER IAmb IAmb 21 12 52.0
comp=Z,25nm,0.8s
**ARA0 ARCESS Array S 36.81 348** *e*P P **21 12 51.1 -0.3**
**ARCES ARCESS Array B 36.81 348** P P **21 12 50.5 -0.9**
comp=Z,1.3nm,0.4s,baz=161,slow=9.5,SNR=22
ARCES PP **PP** **21 14 15.0 -0.1**
comp=Z,3.1nm,0.6s,baz=142,slow=9.0,SNR=5.4
ARCES LR LR 21 29 04.2
comp=Z,336nm,19.5s,baz=146,slow=38
comp=Z,1.3nm,0.4s
**ASK Askoy 36.89 327** *e*P P **21 12 52.1 0.0**
ASK IAmb IAmb 21 12 52.6
comp=Z,21nm,0.8s
**MOL Molde 36.90 331** *e*P P **21 12 51.3 -0.9**
MOL IAmb IAmb 21 13 06.7
comp=Z,242nm,2.8s
**STOK Stokkvaagen 37.24 339** *e*P P **21 12 54.2 -0.9**
STOK IAmb IAmb 21 12 55.3
comp=Z,29nm,0.7s
**TAM Tamanrasset 37.24 263** P P **21 12 56.2 +0.4**
**TAM Tamanrasset 37.24 263** P P **21 12 56.2 +0.4**
TAM pmax pmax
comp=Z,14nm,1.1s
**KONS Konsvik 37.33 339** *e*P P **21 12 54.6 -1.1**
**FAUS Fauske 37.33 341** *e*P P **21 12 55.2 -0.5**
FAUS IAmb IAmb 21 13 37.5
comp=Z,800nm,3.9s
**SUE Sulen 37.34 328** *e*P P **21 12 56.2 +0.3**
SUE IAmb IAmb 21 12 57.6
comp=Z,101nm,1.8s
**FOO Floro 37.46 329** *e*P P **21 12 56.7 -0.3**
FOO IAmb IAmb 21 12 57.3
comp=Z,83nm,1.9s
**WOL Wolverton 37.72 311** *e*P P **21 12 59.1 -0.2**
**STEI Steigen 37.74 342** *e*P P **21 12 58.6 -0.6**
**MBAR Mbarara 37.84 206** P P **21 13 01.5 +0.6**
**MBAR Mbarara 37.84 206** P P **21 13 01.5 +0.6**
MBAR pmax pmax
comp=Z,6.0nm,1.3s
**GDLE Glaisdale, N Y 38.01 316** *e*P P **21 13 01.4 -0.3**
GDLE IAmb IAmb 21 13 02.1
comp=Z,57nm,0.8s
**HAMF Hammerfest 38.09 348** *e*P P **21 13 02.4 +0.2**
HAMF IAmb IAmb 21 13 08.0
comp=Z,85nm,1.5s
**TRO Tromso 38.16 345** *e*P P **21 13 02.1 -0.6**
TRO IAmb IAmb 21 13 29.4
comp=Z,80nm,1.6s
**LSA Lhasa 38.23 84** P P **21 13 08.0 +3.6**
LSA pmax pmax
comp=Z,13nm,0.9s
**LSA Lhasa 38.23 84** P P **21 13 04.6 +0.2**
LSA IAmb IAmb 21 13 08.9
comp=Z,16nm,1.1s
**LSA Lhasa 38.23 84** P P **21 13 04.6 +0.2**
LSA pmax pmax
comp=Z,16nm,1.1s
**LOF Lofoten 38.33 341** *e*P P **21 13 03.4 -0.8**
LOF IAmb IAmb 21 13 05.7
comp=Z,390nm,2.6s
**HPK Haverah Park 38.38 315** *e*P P **21 13 04.4 -0.4**
HPK IAmb IAmb 21 13 05.2
comp=Z,109nm,1.5s
**EDMD Edmundbyers 38.74 317** *e*P P **21 13 07.5 -0.4**
EDMD IAmb IAmb 21 13 08.3
comp=Z,33nm,0.7s
**MONM Monmouth 38.77 312** *e*P P **21 13 07.3 -0.8**
MONM IAmb IAmb 21 13 08.1
comp=Z,18nm,1.1s
**HLM1 Long Mynd 38.90 313** *e*P P **21 13 08.5 -0.8**
HLM1 IAmb IAmb 21 13 09.5
comp=Z,32nm,1.0s
**MCH1 Michaelchurch 38.91 312** *e*P P **21 13 08.3 -0.9**
MCH1 IAmb IAmb 21 13 09.1
comp=Z,27nm,1.2s
**FOEL Foel Wylfa 39.14 313** *e*P P **21 13 11.2 -0.1**
FOEL IAmb IAmb 21 13 11.9
comp=Z,40nm,0.9s
**KESW Keswick, Cumbr 39.35 316** *e*P P **21 13 12.8 -0.1**
KESW IAmb IAmb 21 13 13.5
comp=Z,44nm,0.7s
**LLW Llanuwchllyn 39.42 313** *e*P P **21 13 13.1 -0.4**
**EKA Eskdalemuir Ar 39.51 317** P P **21 13 13.3 -1.0**
comp=Z,21nm,0.4s,baz=104,slow=8.9,SNR=130
comp=Z,21nm,0.4s
**EKB Eskdalemuir 39.53 317** P P **21 13 13.4 -1.1**
EKB IAmb IAmb 21 13 14.8
comp=Z,29nm,0.7s
**ESK Eskdalemuir 39.54 317** P P **21 13 12.9 -1.6**
ESK IAmb IAmb 21 13 14.8
comp=Z,25nm,0.8s
**ESK Eskdalemuir 39.54 317** *e*P P **21 13 13.9 -0.6**
ESK IAmb IAmb 21 13 14.6
comp=Z,24nm,0.7s
**ESK Eskdalemuir 39.54 317** P P **21 13 12.9 -1.6**
ESK pmax pmax
comp=Z,25nm,0.8s
**EDI Edinburgh 39.64 318** *e*P P **21 13 14.9 -0.4**
**ESBB Sonseca Array 39.81 292** P P **21 13 16.2 -0.8**
**ESDC Sonseca Array 39.81 292** P P **21 13 16.3 -0.8**
**ESDC Sonseca Array 39.81 292** P P **21 13 16.3 -0.8**
comp=Z,5.5nm,1.0s,baz=66,slow=8.6,SNR=28
ESDC PcP **PcP** **21 15 23.3 +0.2**
comp=Z,2.3nm,0.8s,baz=49,slow=3.3,SNR=7.9
ESDC LR LR 21 31 40.2
comp=Z,80nm,19.6s,baz=73,slow=39
comp=Z,5.5nm,1.0s
**SBD Saint Breward 39.83 310** *e*P P **21 13 16.2 -0.8**
**RSBS Rosebush, Pemb 39.98 312** *e*P P **21 13 17.4 -0.8**
RSBS IAmb IAmb 21 13 17.9
comp=Z,25nm,1.1s
**MCD Coleburn Disti 40.04 321** *e*P P **21 13 18.1 -0.5**
**MSEY Mahe Island 40.04 165** P P **21 13 19.3 +0.2**
MSEY IAmb IAmb 21 13 31.6
comp=Z,43nm,1.2s
**MSEY Mahe Island 40.04 165** P P **21 13 19.3 +0.2**
MSEY pmax pmax
comp=Z,43nm,1.2s
**PAB San Pablo 40.12 292** P P **21 13 19.3 -0.4**
**PAB San Pablo 40.12 292** P P **21 13 19.3 -0.4**
PAB pmax pmax
comp=Z,17nm,1.3s
**IOMK Kirk Michael 40.14 315** *e*P P **21 13 19.1 -0.4**
IOMK IAmb IAmb 21 13 20.1
comp=Z,63nm,0.9s
**INVG Invergeldie, C 40.21 319** *e*P P **21 13 19.5 -0.6**
INVG IAmb IAmb 21 13 20.3
comp=Z,21nm,1.0s
**KNGR Kungurtug, Tuv 40.25 50** *e*P P **21 13 23.2 +2.6**
KNGR pmax pmax
comp=Z,29nm,0.9s
**PGBU Glenifferbraes 40.34 318** *e*P P **21 13 21.1 -0.1**
PGBU IAmb IAmb 21 13 21.4
comp=Z,30nm,0.7s
**LAWE Loch Awe, Argy 40.92 318** *e*P P **21 13 25.3 -0.7**
LAWE IAmb IAmb 21 13 26.2
comp=Z,53nm,1.3s
**DSB Dublin 41.09 314** P P **21 13 27.0 -0.4**
**DSB Dublin 41.09 314** P P **21 13 26.3 -1.1**
DSB IAmb IAmb 21 13 28.2
comp=Z,23nm,1.0s
**ILTH Belurgan, Co L 41.14 315** P P **21 13 29.6 +1.8**
**IWEX Carrickbyrne, 41.26 312** P P **21 13 30.0 +1.2**
**PBRG Braganca 41.59 296** *e*P P **21 13 31.9 +0.2**
**PALK Pallekele 41.87 122** LR LR 21 32 23.4
comp=Z,311nm,20.2s,baz=316,slow=38
**MVO Moncorvo 41.89 295** *e*P P **21 13 33.8 -0.5**
**IDGL Inch Island, C 41.94 316** P P **21 13 34.4 +0.1**
**PVRL Vila Real 42.39 296** *e*P P **21 13 38.6 +0.3**
**MTE Manteigas 42.40 294** P P **21 13 37.6 -0.8**
MTE IAmb IAmb 21 13 39.8
comp=Z,42nm,1.3s
**MTE Manteigas 42.40 294** *e*P P **21 13 39.0 +0.6**
comp=Z,39nm,1.3s
**PBAR Barrancos 42.44 291** *e*P P **21 13 38.6 -0.1**
comp=Z,31nm,1.3s
**PCBR Castelo Branco 42.45 293** *e*P P **21 13 38.9 +0.2**
comp=Z,43nm,1.3s
**PMRV Marv??o 42.46 293** *e*P P **21 13 38.8 -0.1**
**MOY Mondy 42.48 49** *e*P P **21 13 43.0 +4.0**
MOY pmax pmax
comp=Z,28nm,1.8s
**PVIS Viseu 42.61 295** *e*P P **21 13 40.2 +0.1**
**GTA Gaotai 42.66 67** P P **21 13 44.3 +3.7**
GTA pmax pmax
comp=Z,7.0nm,1.2s
GTA LR LR
comp=Z,170nm,17.1s
GTA LR LR
comp=Z,190nm,17.9s
GTA LR LR
comp=Z,200nm,16.3s
**PGAV Gavieira, Arco 42.69 297** *e*P P **21 13 41.1 +0.3**
**PESTR Estremoz 42.72 292** P P **21 13 39.6 -1.4**
**PESTR Estremoz 42.72 292** *e*P P **21 13 42.5 +1.5**
**IGLA Glengowla, Co 42.89 314** P P **21 13 41.0 -1.1**
**COI Coimbra 43.09 294** P P **21 13 43.2 -0.7**
COI IAmb IAmb 21 13 45.3
comp=Z,35nm,1.2s
**COI Coimbra 43.09 294** P P **21 13 43.2 -0.7**
COI pmax pmax
comp=Z,35nm,1.2s
**PBEJ Beja 43.11 291** *e*P P **21 13 44.5 +0.4**
**PVAQ Vaqueiros 43.13 290** P P **21 13 43.7 -0.6**
**PVAQ Vaqueiros 43.13 290** *e*P P **21 13 43.8 -0.5**
**PMTG Montargil 43.17 292** *e*P P **21 13 46.4 +1.8**
**PCAS Casmilo, Conde 43.19 294** *e*P P **21 13 47.0 +2.3**
**PCVE Castro Verde 43.33 290** *e*P P **21 13 46.4 +0.5**
**VAL Valentia 43.37 311** P P **21 13 45.9 -0.1**
**PSBE So Bento 43.51 293** *e*P P **21 13 48.9 +1.5**
**MORF Marmelete 43.88 290** P P **21 13 49.7 -0.7**
**MORF Marmelete 43.88 290** P P **21 13 49.7 -0.7**
MORF pmax pmax
comp=Z,146nm,1.9s
**ZAK Zakamensk 43.92 51** *e*P P **21 13 53.0 +2.4**
ZAK pmax pmax
comp=Z,8.0nm,1.7s
**AVE Averroes 43.97 284** P P **21 13 50.7 -0.3**
AVE IAmb IAmb 21 13 57.9
comp=Z,23nm,1.0s
**IRK Irkutsk 44.52 48** *e*P P **21 13 57.1 +1.9**
IRK pmax pmax
comp=Z,45nm,1.6s
**TORD Torodi Ar. Bea 45.41 253** P P **21 14 02.4 -0.4**
**TORD Torodi Ar. Bea 45.41 253** P P **21 14 02.6 -0.2**
comp=Z,4.8nm,0.7s,baz=43,slow=8.4,SNR=34
TORD PcP **PcP** **21 15 43.9 +1.8**
comp=Z,1.8nm,0.7s,baz=50,slow=3.5,SNR=4.8
TORD LR LR 21 36 32.3
comp=Z,94nm,20.6s,baz=57,slow=41
comp=Z,4.8nm,0.7s
**SPB2 Spitsbergen Ar 45.52 352** P P **21 14 01.2 -1.7**
**SPA0 Spitsbergen Ar 45.52 352** *e*P P **21 14 03.1 +0.2**
**SPITS Spitsbergen Ar 45.52 352** P P **21 14 02.8 -0.1**
comp=Z,2.9nm,0.4s,baz=119,slow=12,SNR=14
SPITS LR LR 21 36 21.0
comp=Z,109nm,19.5s,baz=127,slow=40
comp=Z,2.9nm,0.4s
**TNCH TengChong 46.05 87** *e*P P **21 14 08.8 +0.9**
TNCH pP sP 21 14 11.8 -1.1
TNCH pmax pmax
comp=Z,7.0nm,1.0s
**SONM Songino Array 46.14 54** P P **21 14 08.3 -0.1**
**SONM Songino Array 46.14 54** PcP **PcP** **21 15 44.3 +0.1**
comp=Z,0.4nm,0.6s,baz=295,slow=3.6,SNR=2.4
SONM LR LR 21 37 21.7
comp=Z,234nm,18.6s,baz=272,slow=41
**SONM Songino Array 46.14 54** P P **21 14 08.3 -0.1**
SONM pmax pmax
comp=Z,10.0nm,1.8s
**JMIC Jan Mayen 46.33 338** LR LR 21 34 24.9
comp=Z,135nm,21.1s,baz=68,slow=37
**LZH Lanzhou 46.53 71** *e*P P **21 14 14.0 +2.4**
LZH pmax pmax
comp=Z,19nm,1.4s
LZH LR LR
comp=Z,470nm,20.1s
LZH LR LR
comp=Z,230nm,21.3s
LZH LR LR
comp=Z,390nm,21.8s
**ULN Ulaanbaatar 46.58 54** P P **21 14 12.5 +0.7**
ULN IAmb IAmb 21 14 15.9
comp=Z,19nm,1.4s
**ULN Ulaanbaatar 46.58 54** P P **21 14 13.9 +2.1**
**ULN Ulaanbaatar 46.58 54***ce*P P **21 14 14.2 +2.4**

ULN pmax pmax
comp=Z,15nm,1.4s
**KBS Kingsbay 46.66 351** P **P** **21 14 12.3 +0.5**
**KBS Kingsbay 46.66 351** P **P** **21 14 12.3 +0.5**
KBS pmax pmax
comp=Z,76nm,1.4s
**CD2 Chengdu 48.08 77** P **P** **21 14 26.0 +2.4**
CD2 pP sP 21 14 29.0 +0.4
CD2 S **S** **21 21 20.8 -1.5**
CD2 pmax pmax
comp=Z,30nm,0.7s
CD2 pmax pmax
comp=Z,70nm,8.1s
CD2 LR LR
comp=Z,290nm,12.5s
CD2 LR LR
comp=Z,340nm,20.8s
CD2 LR LR
comp=Z,230nm,16.9s
**PZH PanZhiHua 48.09 84** P **P** **21 14 26.5 +2.6**
PZH pmax pmax
comp=Z,10.0nm,0.7s
PZH pmax pmax
comp=Z,100nm,4.8s
**DGAR Diego Garcia 48.64 144** P **P** **21 14 27.9 0.0**
**DGAR Diego Garcia 48.64 144** P **P** **21 14 27.9 0.0**
DGAR pmax pmax
comp=Z,350nm,1.6s
**CM31 Chiang Mai Arr 49.41 95** P **P** **21 14 34.9 +1.1**
CM31 IAmb IAmb 21 14 50.3
comp=Z,9.8nm,0.9s
**CMAR Chiang Mai Arr 49.41 95** P **P** **21 14 34.0 +0.1**
**CMAR Chiang Mai Arr 49.41 95** P **P** **21 14 32.5 -1.4**
comp=Z,5.8nm,0.8s,baz=295,slow=8.1,SNR=30
CMAR LR LR 21 39 27.3
comp=Z,162nm,20.1s,baz=290,slow=41
**CMAR Chiang Mai Arr 49.41 95***ce*P **P** **21 14 35.5 +1.6**
CMAR pmax pmax
comp=Z,6.0nm,0.8s
**CRAI Chiangrai 49.72 92** P **P** **21 14 37.6 +1.4**
**BORG Borgarnes 49.73 329** LR LR 21 35 42.8
comp=Z,129nm,21.5s,baz=89,slow=36
**PHRA Phrae 50.44 94** P **P** **21 14 41.6 -0.1**
**DBG Daneborg 50.66 341** *i* P **P** **21 14 43.8 +1.2**
DBG IAmb IAmb 21 14 48.6
comp=Z,20nm,1.1s
**DAG Danmarks Havn 50.88 344** *i* P **P** **21 14 45.5 +1.2**
**HHC Hu-ho-hao-te 51.10 62** *e*P **P** **21 14 49.5 +2.9**
HHC sP sP 21 14 56.0 +4.3
HHC pmax pmax
comp=Z,15nm,0.8s
HHC pmax pmax
comp=Z,71nm,3.8s
HHC LR LR
comp=Z,220nm,15.2s
HHC LR LR
comp=Z,160nm,14.7s
HHC LR LR
comp=Z,190nm,15.9s
**XAN Xi'an 51.12 72** P **P** **21 14 49.5 +2.7**
XAN pP sP 21 14 54.0 +2.2
XAN pmax pmax
comp=Z,39nm,0.9s
XAN LR LR
comp=Z,880nm,19.1s
XAN LR LR
comp=Z,490nm,17.6s
XAN LR LR
comp=Z,410nm,20.6s
**SLVN Son La 52.12 89** P **P** **21 14 54.7 +0.3**
SLVN IAmb IAmb 21 15 34.8
comp=Z,18nm,1.4s
**GYA Guiyang 52.14 81** P **P** **21 14 57.0 +2.4**
GYA pmax pmax
comp=Z,6.0nm,0.6s
**ENH Enshi 52.91 76** P **P** **21 15 01.4 +1.3**
ENH IAmb IAmb 21 15 16.2
comp=Z,16nm,1.1s
**DBIC Dimbokro 54.44 251** P **P** **21 15 11.0 -0.4**
**DBIC Dimbokro 54.44 251** P **P** **21 15 09.9 -1.5**
comp=Z,7.0nm,0.6s,baz=40,slow=8.0,SNR=13
DBIC LR LR 21 39 15.2
comp=Z,285nm,18.7s,baz=30,slow=37
comp=Z,7.0nm,0.6s
**DBIC Dimbokro 54.44 251** P **P** **21 15 11.0 -0.4**
DBIC pmax pmax
comp=Z,70nm,2.0s
**HNS HongShan 54.46 66** ⇓P **P** **21 15 14.3 +3.0**
HNS *e*S **S** **21 22 51.8 +1.7**
HNS LR LR
comp=Z,330nm,16.5s
HNS LR LR
comp=Z,220nm,18.3s
**HIA Hailar 54.62 50** P **P** **21 15 12.8 +0.4**
HIA IAmb IAmb 21 16 39.6
comp=Z,9.6nm,0.9s
**HIA Hailar 54.62 50** P **P** **21 15 12.8 +0.4**
HIA pmax pmax
comp=Z,10.0nm,0.9s
**BJI Beijing 54.70 62** P **P** **21 15 15.8 +2.8**
BJI pmax pmax
comp=Z,4.0nm,0.6s
**TIXI Tiksi 55.33 22** LR LR 21 44 23.6
comp=Z,165nm,18.1s,baz=205,slow=42
**SUMG Summit 55.78 339** P **P** **21 15 20.9 +0.1**
SUMG IAmb IAmb 21 15 23.5
comp=Z,17nm,0.9s
**SUMG Summit 55.78 339** P **P** **21 15 20.9 +0.1**
SUMG pmax pmax
comp=Z,17nm,0.9s
**SUMG Summit 55.78 339** *i* P **P** **21 15 20.9 +0.1**
SUMG IAmb IAmb 21 15 23.8
comp=Z,18nm,0.9s
**RER Riviere de l'E 56.19 169** P **P** **21 15 24.3 +0.4**
**ICESG Greenland Ices 56.67 335** *i* P **P** **21 15 26.8 -0.4**
**YAK Yakutsk 57.20 34** LR LR 21 44 06.4
comp=Z,353nm,18.6s,baz=277,slow=40
**YAK Yakutsk 57.20 34** *e*P **P** **21 15 32.1 +1.5**
YAK pmax pmax
comp=Z,11nm,0.8s
**ZEA Zeya 58.01 44** *e*P **P** **21 15 39.8 +3.4**
ZEA MLR MLR
comp=E,200nm,17.0s
ZEA MLR MLR
comp=Z,200nm,18.0s
**QIZ Qiongzhong 58.11 88** P **P** **21 15 38.5 +0.9**
QIZ S **S** **21 23 38.3 -0.7**
QIZ SS **SS** **21 27 31.5 +1.2**
QIZ LR LR
comp=Z,210nm,17.7s
QIZ LR LR
comp=Z,200nm,16.0s
QIZ LR LR
comp=Z,180nm,16.0s
**KULM Kulim 58.12 107** P **P** **21 15 37.7 0.0**
**HEH HeiHe 59.13 48** *e*P **P** **21 15 46.5 +2.2**
HEH pmax pmax
comp=Z,18nm,1.0s
HEH LR LR
comp=Z,240nm,13.3s
HEH LR LR
comp=Z,400nm,13.3s
HEH LR LR
comp=Z,460nm,15.2s
**NJ2 Nanjing 59.60 70** *e*P **P** **21 15 48.5 +0.7**
NJ2 pmax pmax
comp=Z,4.0nm,0.5s
**DY2G Dye2 59.74 332** *i* P **P** **21 15 47.2 -1.3**
**TSUM Tsumeb 59.97 211** P **P** **21 15 51.2 +0.7**
TSUM IAmb IAmb 21 15 57.7
comp=Z,10nm,1.1s
**TSUM Tsumeb 59.97 211** LR LR 21 42 59.9
comp=Z,182nm,19.0s,baz=14,slow=37
**CN2 Changchun 60.00 55** *e*P **P** **21 15 46.0 -4.4**
**SFJD Kangerlussuaq 61.20 334** P **P** **21 15 57.9 -0.3**
**SFJD Kangerlussuaq 61.20 334** LR LR 21 42 10.0
comp=Z,198nm,21.7s,baz=66,slow=36
**SFJD Kangerlussuaq 61.20 334** P **P** **21 15 57.9 -0.3**
SFJD pmax pmax
comp=Z,92nm,1.8s
**KLR Kul'dur 62.12 48** LR LR 21 46 44.9
comp=Z,239nm,18.0s,baz=304,slow=40
**KLR Kul'dur 62.12 48**⇑ *e*P **P** **21 16 05.3 +0.6**
KLR pmax pmax
comp=Z,9.0nm,1.8s
**IVI Ivigtut 62.31 327** P **P** **21 16 05.2 -0.5**

**LBTB Lobatse 62.38 201** P **P** **21 16 07.5 +0.8**
**LBTB Lobatse 62.38 201** LR LR 21 43 46.3
comp=Z,284nm,18.1s,baz=26,slow=36
**LBTB Lobatse 62.38 201** P **P** **21 16 07.5 +0.8**
LBTB pmax pmax
comp=Z,58nm,2.0s
**KS19 Wonju Array Si 64.13 61** P **P** **21 16 19.5 +1.2**
**KSAR Wonju Array Be 64.17 61** P **P** **21 16 18.2 -0.3**
**KSAR Wonju Array Be 64.17 61** P **P** **21 16 18.2 -0.3**
**KSRS Korea Array 64.19 61** P **P** **21 16 17.8 -0.8**
comp=Z,3.6nm,0.6s,baz=283,slow=7.0,SNR=13
KSRS LR LR 21 47 53.5
comp=Z,99nm,18.0s,baz=305,slow=39
comp=Z,3.6nm,0.6s
**USA0B Ussuriysk Arra 64.22 53** P **P** **21 16 18.8 +0.1**
**USA0B Ussuriysk Arra 64.22 53** P **P** **21 16 18.8 +0.1**
USA0B pmax pmax
comp=Z,32nm,1.8s
**USRK Ussuriysk Ar. 64.22 53** P **P** **21 16 18.6 -0.1**
**USRK Ussuriysk Ar. 64.22 53** P **P** **21 16 19.5 +0.8**
comp=Z,3.2nm,0.6s,baz=336,slow=5.4,SNR=11
USRK LR LR 21 46 51.7
comp=Z,209nm,20.5s,baz=292,slow=38
comp=Z,3.2nm,0.6s
**YHNB Yeheng 64.84 76** P **P** **21 16 22.4 -0.8**
**TPUB Ta-pu 64.89 78** P **P** **21 16 24.1 +0.7**
**BOSA Boshof 65.87 200** P **P** **21 16 30.4 +0.8**
comp=Z,1.7nm,0.5s,baz=23,slow=8.1,SNR=2.2
BOSA LR LR 21 47 28.0
comp=Z,153nm,19.3s,baz=28,slow=38
comp=Z,1.7nm,0.5s
**SEY Seymchan 66.64 29***ce*P **P** **21 16 34.7 +0.7**
SEY pmax pmax
comp=Z,26nm,1.6s
**MA2 Magadan 67.67 32** LR LR 21 50 05.9
comp=Z,93nm,18.2s,baz=297,slow=39
**JNU Nakatsue 68.28 64** LR LR 21 49 05.2
comp=Z,120nm,19.4s,baz=302,slow=38
**BILL Bilibino 68.44 20**⇑ *e*P **P** **21 16 45.2 -0.1**
BILL *e* 21 19 20.5
BILL ePPP PPP 21 20 54.1
BILL *e*S **SKSac** **21 26 43.4 -0.6**
BILL pmax pmax
comp=Z,6.0nm,0.9s
BILL MLR MLR
comp=Z,126nm,17.0s
**FRB Frobisher Bay 69.32 334** LR LR 21 47 52.2
comp=Z,138nm,20.3s,baz=68,slow=36
**SUR Sutherland 70.72 203** LR LR 21 47 55.9
comp=Z,170nm,19.1s,baz=28,slow=36
**ASAJ Asahikawa 71.06 49** LR LR 21 50 43.3
comp=Z,135nm,18.1s,baz=316,slow=38
**MJAR Matsushiro Arr 71.92 58** P **P** **21 17 07.5 +0.2**
comp=Z,1.1nm,0.5s,baz=332,slow=9.7,SNR=1.3
MJAR LR LR 21 51 47.3
comp=Z,89nm,19.8s,baz=313,slow=38
comp=Z,1.1nm,0.5s
**A21K Barrow 73.16 7** P **P** **21 17 14.3 +0.4**
baz=341
**A36M Sachs Harbour 73.55 357** P **P** **21 17 15.7 -0.6**
baz=7.4
**A22K Sinclair Lake 73.64 7** P **P** **21 17 15.5 -1.2**
baz=342
**A19K Wainwright 73.67 9** P **P** **21 17 16.8 -0.2**
baz=337
**SCHQ Schefferville 74.04 326** P **P** **21 17 18.4 -1.1**
SCHQ IAmb IAmb 21 17 24.5
comp=Z,11nm,0.7s
**SCHQ Schefferville 74.04 326** P **P** **21 17 18.8 -0.8**
comp=Z,7.3nm,0.7s,baz=60,slow=7.1,SNR=9.9
SCHQ LR LR 21 50 51.7
comp=Z,64nm,19.6s,baz=17,slow=37
comp=Z,7.3nm,0.7s
**B20K Meade River 74.34 8** P **P** **21 17 20.9 0.0**
baz=340
**B18K Kokolik River 74.35 10** P **P** **21 17 21.5 +0.5**
baz=336
**B22K Teshekpuk Lake 74.43 7** P **P** **21 17 21.5 +0.1**
baz=343
**PETK Petropavlovsk- 74.48 36** LR LR 21 53 20.6
comp=Z,100nm,18.5s,baz=303,slow=38
**C16K Lisburne Hills 74.79 12** P **P** **21 17 22.9 -0.7**
baz=334
**C19K Lookout Ridge 74.89 9** P **P** **21 17 24.7 +0.4**
baz=338
**C17K DeLong Mountai 74.96 11** P **P** **21 17 24.7 +0.1**
baz=335
**B21K Ikpikpuk River 75.00 7** P **P** **21 17 25.2 +0.4**
baz=342
**C18K Utukok River 75.09 10** P **P** **21 17 25.6 +0.2**
baz=337
**C23K Itkillik River 75.17 6** P **P** **21 17 27.6 +1.8**
baz=346
**RDOG Red Dog Mine 75.38 11** P **P** **21 17 27.8 +0.7**
baz=336
**C21K Knifebilde Rid 75.42 8** P **P** **21 17 28.3 +1.1**
baz=342
**C24K Franklin Bluff 75.44 5** P **P** **21 17 28.2 +0.9**
baz=347
**C26K Camden Bay 75.49 4** P **P** **21 17 28.4 +0.8**
baz=351
**D20K Etivluk River 75.64 8** P **P** **21 17 29.3 +0.8**
baz=341
**D19K Kuna River 75.66 9** P **P** **21 17 28.1 -0.6**
baz=340
**D17K Noatak River 75.68 11** P **P** **21 17 28.9 +0.2**
baz=336
**C27K Jago River 75.85 4** P **P** **21 17 29.7 +0.1**
baz=352
**D22K Ayikyak River 75.91 7** P **P** **21 17 29.5 -0.5**
baz=344
**D24K Happy Valley 75.98 5** P **P** **21 17 30.2 -0.3**
baz=347
**D23K Nanushuk River 76.01 6** P **P** **21 17 31.0 +0.4**
baz=346
**E20K Nigu River 76.12 8** P **P** **21 17 31.1 -0.3**
baz=341
**C36M Paulatuk 76.12 356** P **P** **21 17 32.3 +1.1**
baz=8.3
**E18K Tukpahlearik C 76.32 10** P **P** **21 17 32.6 +0.3**
baz=338
**D28M Stokes Point 76.33 2** P **P** **21 17 33.1 +0.7**
baz=356
**D27M Malcolm River 76.35 3** P **P** **21 17 33.7 +1.1**
baz=354
**TOLK Toolik Lake Re 76.42 6** P **P** **21 17 35.0 +2.0**
TOLK IAmb IAmb 21 17 39.0
comp=Z,11nm,0.7s
**TOLK Toolik Lake Re 76.42 6** P **P** **21 17 34.3 +1.3**
baz=347
**E17K Hotham Inlet 76.44 11** P **P** **21 17 34.5 +1.4**
baz=337
**E22K Anaktuvuk Pass 76.72 7** P **P** **21 17 35.5 +0.8**
E22K IAmb IAmb 21 17 40.5
comp=Z,6.5nm,0.7s
**E22K Anaktuvuk Pass 76.72 7** P **P** **21 17 35.8 +1.2**
baz=345
**TNA Tin City 76.75 14** P **P** **21 17 35.3 +0.5**
baz=332
**E19K Redstone River 76.75 9** P **P** **21 17 35.0 +0.1**
E19K IAmb IAmb 21 17 46.6
comp=Z,9.1nm,0.9s
**E19K Redstone River 76.75 9** P **P** **21 17 35.6 +0.7**
baz=340
**TOLI2 Tolitoli 76.78 98** P **P** **21 17 36.0 +0.1**
TOLI2 IAmb IAmb 21 19 44.6
comp=Z,4.9nm,0.8s
**E23K Chandalar 76.99 6** P **P** **21 17 36.6 +0.3**
E23K IAmb IAmb 21 17 39.3
comp=Z,6.5nm,0.8s
**E23K Chandalar 76.99 6** P **P** **21 17 37.3 +1.0**
baz=347
**E28M Babbage River 77.04 2** P **P** **21 17 36.6 +0.1**
**E28M Babbage River 77.04 2** P **P** **21 17 37.6 +1.2**
baz=355
**E24K Your Creek 77.07 6** P **P** **21 17 38.0 +1.3**
E24K IAmb IAmb 21 17 41.0
comp=Z,11nm,1.1s
**E24K Your Creek 77.07 6** P **P** **21 17 35.7 -0.9**
baz=348
**F17K Baldwin Pennin 77.13 11** P **P** **21 17 36.1 -0.8**
baz=337
**F14K Arctic Creek 77.13 13** P **P** **21 17 35.6 -1.4**
baz=333
**F18K Selawik 77.22 10** P **P** **21 17 37.3 -0.1**
baz=338
**F15K North Star Dit 77.23 13** P **P** **21 17 36.9 -0.6**
baz=334
**F19K Shaleruckik Mo 77.27 9** P **P** **21 17 37.8 +0.1**
baz=340
**F22K John River 77.29 7** P **P** **21 17 37.8 -0.1**
baz=345
**E29M Blow River 77.30 2** P **P** **21 17 38.2 +0.3**
E29M IAmb IAmb 21 17 41.2
comp=Z,10nm,0.7s
**E29M Blow River 77.30 2** P **P** **21 17 38.1 +0.2**
baz=357
**F20K Avaraart Lake 77.33 9** P **P** **21 17 39.6 +1.6**
F20K IAmb IAmb 21 19 09.5
comp=Z,30nm,1.8s
**F20K Avaraart Lake 77.33 9** P **P** **21 17 38.2 +0.2**
baz=342
**E27K Coleen River 77.38 3** P **P** **21 17 39.1 +0.7**
**E27K Coleen River 77.38 3** P **P** **21 17 38.6 +0.2**
baz=354
**INK Inuvik 77.42 360** LR LR 21 56 38.7
comp=Z,72nm,20.2s,baz=304,slow=40
**INK Inuvik 77.42 360** P **P** **21 17 39.0 +0.5**
baz=0.3
**F21K Alatna River 77.42 8** P **P** **21 17 39.7 +1.1**
F21K IAmb IAmb 21 17 42.1
comp=Z,14nm,1.1s
**F21K Alatna River 77.42 8** P **P** **21 17 39.3 +0.7**
baz=344,SNR=5.1
**GAMB Gambell 77.49 16** P **P** **21 17 39.6 +0.6**
baz=329
**F24K Squaw Lake 77.66 5** P **P** **21 17 40.8 +0.8**
**F24K Squaw Lake 77.66 5** P **P** **21 17 40.1 +0.1**
baz=348
**F26K Sheenjek River 77.74 4** P **P** **21 17 40.3 -0.1**
baz=351
**COLD Coldfoot 77.75 6** P **P** **21 17 40.4 -0.1**
baz=346
**F25K Christian Rive 77.75 5** P **P** **21 17 41.3 +0.8**
**F25K Christian Rive 77.75 5** P **P** **21 17 40.8 +0.3**
baz=350
**G16K Koyuk River 77.92 12** P **P** **21 17 40.9 -0.5**
baz=336
**G22K Bettles 77.92 7** P **P** **21 17 42.2 +0.9**
baz=345
**BMAR Burnt Mountain 77.98 4** P **P** **21 17 43.2 +1.5**
**G15K Niukluk 77.99 13** P **P** **21 17 41.8 +0.1**
baz=335
**G19K Purcell Mounta 78.01 9** P **P** **21 17 41.5 -0.4**
G19K IAmb IAmb 21 17 45.0
comp=Z,6.9nm,0.6s
**G19K Purcell Mounta 78.01 9** P **P** **21 17 42.1 +0.1**
baz=341
**F28M Old Crow 78.02 2** P **P** **21 17 42.6 +0.7**
F28M IAmb IAmb 21 17 45.0
comp=Z,6.2nm,0.9s
**F28M Old Crow 78.02 2** P **P** **21 17 42.3 +0.4**
baz=355
**G18K Tagagawik 78.03 10** P **P** **21 17 41.9 -0.1**
G18K IAmb IAmb 21 17 45.8
comp=Z,8.9nm,1.1s
**G18K Tagagawik 78.03 10** P **P** **21 17 42.2 +0.1**
baz=339
**G17K Kiwalik Mounta 78.09 11** P **P** **21 17 42.4 0.0**
baz=338
**G21K Allakaket 78.10 8** P **P** **21 17 43.9 +1.5**
G21K IAmb IAmb 21 17 45.1
comp=Z,8.6nm,0.9s
**G21K Allakaket 78.10 8** P **P** **21 17 42.6 +0.1**
baz=344,SNR=5.3
**F30M Barrier River 78.11 1** P **P** **21 17 42.9 +0.4**
baz=358,SNR=6.6
**ANM Nome 78.13 13** P **P** **21 17 43.1 +0.5**
baz=334
**G23K Bananza Creek 78.27 6** P **P** **21 17 44.6 +1.2**
baz=346
**F31M Tsiigehtchic 78.29 360** P **P** **21 17 43.4 0.0**
**F31M Tsiigehtchic 78.29 360** P **P** **21 17 44.1 +0.7**
baz=0.1
**BATG Bathurst New B 78.34 320** P **P** **21 17 45.6 +1.5**
BATG IAmb IAmb 21 17 51.4
comp=Z,14nm,1.0s
**G24K Hadweenzic Riv 78.50 5** P **P** **21 17 45.1 +0.4**
G24K IAmb IAmb 21 17 58.4
comp=Z,13nm,1.4s
**G24K Hadweenzic Riv 78.50 5** P **P** **21 17 45.0 +0.4**
baz=349
**G26K Porcupine Rive 78.50 4** P **P** **21 17 45.3 +0.7**
baz=352,SNR=7.9
**G25K Bearman Lake 78.54 5** P **P** **21 17 45.5 +0.7**
baz=350
**IMAR Indian Mountai 78.59 8** P **P** **21 17 46.1 +1.0**
**H16K Elim 78.63 12** P **P** **21 17 46.0 +0.6**
baz=336
**H19K Roundabout Mou 78.68 9** P **P** **21 17 46.1 +0.5**
baz=341
**H17K Granite Mounta 78.73 11** P **P** **21 17 46.0 0.0**
baz=338
**G30M tAoh Zraii Nji 78.74 1** P **P** **21 17 46.0 +0.1**
G30M IAmb IAmb 21 17 48.6
comp=Z,15nm,0.8s
**G30M tAoh Zraii Nji 78.74 1** P **P** **21 17 45.9 -0.1**
baz=358
**G27K Doyon Strip 78.75 3** P **P** **21 17 46.9 +0.8**
**G27K Doyon Strip 78.75 3** P **P** **21 17 46.5 +0.4**
baz=354,SNR=5.7
**H18K Honhosa River 78.77 10** P **P** **21 17 46.8 +0.7**
**H18K Honhosa River 78.77 10** P **P** **21 17 46.1 0.0**
baz=340
**G29M Pine Creek 78.77 2** P **P** **21 17 45.7 -0.4**
G29M IAmb IAmb 21 17 49.1
comp=Z,11nm,0.9s
**G29M Pine Creek 78.77 2** P **P** **21 17 46.7 +0.5**
baz=356
**G31M Satah River 78.81 0** P **P** **21 17 46.1 -0.2**
**G31M Satah River 78.81 0** P **P** **21 17 46.6 +0.3**
baz=360,SNR=9.6
**H20K Anoteneega Mo 78.92 9** P **P** **21 17 48.1 +1.1**
baz=342,SNR=14
**H22K Ishtalitna Cre 78.94 7** P **P** **21 17 48.0 +0.9**
baz=345,SNR=6.1
**H21K Melozitna Rive 79.01 8** P **P** **21 17 48.1 +0.7**
H21K IAmb IAmb 21 17 51.2
comp=Z,8.9nm,0.9s
**H21K Melozitna Rive 79.01 8** P **P** **21 17 48.1 +0.7**
baz=344,SNR=9.1
**H25L Birch Creek 79.05 5** P **P** **21 17 48.4 +0.8**
baz=350
**H23K Yukon River 79.18 6** P **P** **21 17 49.2 +0.8**
H23K IAmb IAmb 21 17 52.6
comp=Z,11nm,1.1s
**H23K Yukon River 79.18 6** P **P** **21 17 49.1 +0.7**
baz=347
**H24K Noodor Dome 79.32 6** P **P** **21 17 49.9 +0.8**
baz=348
**H27K Steamboat Moun 79.33 3** P **P** **21 17 50.5 +1.3**
baz=354,SNR=6.1
**EPYK Eagle Plains 79.34 1** P **P** **21 17 50.0 +0.7**
EPYK IAmb IAmb 21 17 53.2
comp=Z,9.4nm,0.7s
**EPYK Eagle Plains 79.34 1** P **P** **21 17 50.3 +1.0**
baz=358
**GCSA Galena City Sc 79.37 10** P **P** **21 17 50.3 +1.0**
baz=341
**H29M Whitestone 79.46 2** P **P** **21 17 50.0 +0.2**
H29M IAmb IAmb 21 17 52.9
comp=Z,9.7nm,0.8s
**H29M Whitestone 79.46 2** P **P** **21 17 50.9 +1.0**
baz=356,SNR=5.5
**I17K Unalakleet 79.59 12** P **P** **21 17 52.5 +1.9**
baz=338
**I20K Naaghedeneel 79.64 9** P **P** **21 17 52.4 +1.6**
baz=343
**PRP Porcupine Dome 79.81 5** P **P** **21 17 52.0 0.0**
PRP IAmb IAmb 21 18 51.5
comp=Z,25nm,2.0s
**PRP Porcupine Dome 79.81 5** P **P** **21 17 53.0 +1.0**
baz=350
**MLY Manley 79.84 7** P **P** **21 17 52.4 +0.4**
**MLY Manley 79.84 7** P **P** **21 17 52.8 +0.7**
baz=346,SNR=6.2
**I23K Minto, Yukon-K 79.86 7** P **P** **21 17 53.1 +1.1**
**I23K Minto, Yukon-K 79.86 7** P **P** **21 17 53.5 +1.5**
baz=347
**H31M Peel River 79.93 0** P **P** **21 17 53.3 +0.8**
H31M IAmb IAmb 21 17 55.4
comp=Z,34nm,1.8s
**H31M Peel River 79.93 0** P **P** **21 17 52.8 +0.3**
baz=360

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I27K | **Kandik River** baz=354 | 79.96 | 3 | P | | P | 21 17 53.4 +0.8 |
| D62A | **Allapoint, All** | 80.04 | 321 | P | | P | 21 17 53.7 +0.4 |
| POKR | **Poker Plat Res** | 80.06 | 6 | P | | P | 21 17 53.7 +0.5 |
| POKR | comp=Z,13nm,1.1s | | | IAmb | | IAmb | 21 17 57.0 |
| POKR | **Poker Plat Res** baz=349 | 80.06 | 6 | P | | P | 21 17 53.4 +0.2 |
| J14K | **Nanvaranak Lak** baz=336 | 80.12 | 13 | P | | P | 21 17 54.1 +0.6 |
| MDM | **Murphy Dome** | 80.15 | 6 | P | | P | 21 17 54.2 +0.5 |
| MDM | comp=Z,13nm,1.0s | | | IAmb | | IAmb | 21 17 57.2 |
| J16K | **Anvik River** baz=338 | 80.16 | 12 | P | | P | 21 17 54.8 +1.1 |
| I26K | **Coal Creek Min** | 80.17 | 4 | P | | P | 21 17 54.3 +0.5 |
| I26K | comp=Z,9.3nm,0.8s | | | IAmb | | IAmb | 21 17 57.0 |
| I26K | **Coal Creek Min** baz=352 | 80.17 | 4 | P | | P | 21 17 54.0 +0.3 |
| I28M | **Miner Creek** | 80.18 | 3 | P | | P | 21 17 54.2 +0.3 |
| I28M | comp=Z,12nm,0.8s | | | IAmb | | IAmb | 21 18 02.0 |
| I28M | **Miner Creek** baz=355,SNR=13 | 80.18 | 3 | P | | P | 21 17 54.7 +0.8 |
| J19K | **Poorman** | 80.26 | 10 | P | | P | 21 17 55.1 +0.8 |
| J19K | **Poorman** baz=342 | 80.26 | 10 | P | | P | 21 17 54.6 +0.4 |
| COLA | **College** | 80.27 | 6 | *c i*P | | P | 21 17 55.5 +1.3 |
| COLA | comp=Z,13nm,0.9s | | | pmax | | pmax | |
| J20K | **Nowinta River** | 80.28 | 9 | P | | P | 21 17 55.5 +1.1 |
| J20K | comp=Z,9.2nm,0.8s | | | IAmb | | IAmb | 21 17 58.9 |
| J20K | **Nowinta River** baz=343,SNR=5.4 | 80.28 | 9 | P | | P | 21 17 54.2 -0.1 |
| J17K | **VABM Dome** baz=339 | 80.31 | 11 | P | | P | 21 17 55.3 +0.8 |
| I29M | **Ogilvie Camp,** | 80.32 | 2 | P | | P | 21 17 54.5 -0.1 |
| I29M | comp=Z,6.0nm,0.7s | | | IAmb | | IAmb | 21 17 57.2 |
| I29M | **Ogilvie Camp,** baz=356 | 80.32 | 2 | P | | P | 21 17 55.5 +0.9 |
| NEA2 | **Nenana** baz=347 | 80.43 | 7 | P | | P | 21 17 56.0 +0.8 |
| IL31 | | 80.45 | 6 | P | | P | 21 17 55.4 +0.2 |
| ILAR | **Eielson Array** comp=Z,2.8nm,0.8s,baz=328,slow=3.6,SNR=24 | 80.45 | 6 | P | | P | 21 17 55.0 -0.2 |
| ILAR | comp=Z,49nm,20.4s,baz=67,slow=39 | | | LR | | LR | 21 57 31.3 |
| | comp=Z,2.8nm,0.8s | | | | | | |
| CCB | **Clear Creek Bu** | 80.50 | 6 | P | | P | 21 17 55.3 -0.2 |
| I30M | **Mount Dempster** | 80.50 | 1 | P | | P | 21 17 55.4 -0.3 |
| I30M | comp=Z,11nm,0.8s | | | IAmb | | IAmb | 21 17 58.5 |
| I30M | **Mount Dempster** baz=358,SNR=13 | 80.50 | 1 | P | | P | 21 17 56.2 +0.5 |
| J18K | **Innoko River** | 80.61 | 10 | P | | P | 21 17 57.5 +1.4 |
| J18K | **Innoko River** baz=341 | 80.61 | 10 | P | | P | 21 17 57.2 +1.0 |
| K13K | **Kusilvak Mount** baz=335 | 80.65 | 14 | P | | P | 21 17 57.3 +1.0 |
| J25K | **Salcha River,** | 80.72 | 5 | P | | P | 21 17 57.4 +0.6 |
| J25K | **Salcha River,** baz=350 | 80.72 | 5 | P | | P | 21 17 57.3 +0.5 |
| BPAW | **Bear Paw Mtn.** | 80.72 | 8 | P | | P | 21 17 57.2 +0.4 |
| BPAW | comp=Z,11nm,1.0s | | | IAmb | | IAmb | 21 17 59.9 |
| BPAW | **Bear Paw Mtn.** baz=346,SNR=7.0 | 80.72 | 8 | P | | P | 21 17 58.3 +1.5 |
| CHUM | **Lake Minchumin** baz=345 | 80.78 | 8 | P | | P | 21 17 57.5 +0.5 |
| HDA | **Harding Lake** | 80.80 | 6 | P | | P | 21 17 57.0 -0.1 |
| HDA | **Harding Lake** baz=349 | 80.80 | 6 | P | | P | 21 17 57.5 +0.3 |
| EGAK | **Eagle** | 80.80 | 3 | P | | P | 21 17 57.0 -0.1 |
| EGAK | comp=Z,11nm,1.0s | | | IAmb | | IAmb | 21 18 00.2 |
| EGAK | **Eagle** baz=354 | 80.80 | 3 | P | | P | 21 17 58.2 +1.0 |
| K15K | **Wolf Creek Mou** baz=337 | 80.92 | 13 | P | | P | 21 18 00.2 +2.4 |
| J26L | **Joseph Creek** | 80.95 | 4 | P | | P | 21 17 58.4 +0.4 |
| J26L | **Joseph Creek** baz=352,SNR=7.6 | 80.95 | 4 | P | | P | 21 17 59.9 +1.8 |
| K17K | **Iditarod** baz=340 | 81.07 | 11 | P | | P | 21 18 00.8 +2.1 |
| K20K | **Telida** | 81.07 | 9 | P | | P | 21 18 00.4 +1.7 |
| K20K | **Telida** baz=343 | 81.07 | 9 | P | | P | 21 18 01.2 +2.5 |
| J30M | **Hart River** | 81.15 | 1 | P | | P | 21 17 59.8 +0.7 |
| J30M | comp=Z,7.2nm,0.8s | | | IAmb | | IAmb | 21 18 08.8 |
| J30M | **Hart River** baz=358 | 81.15 | 1 | P | | P | 21 18 00.5 +1.3 |
| KTH | **Kantishna Hill** | 81.26 | 8 | P | | P | 21 17 59.9 +0.2 |
| KTH | comp=Z,7.5nm,1.0s | | | IAmb | | IAmb | 21 18 10.3 |
| MCK | **McKinley** baz=348 | 81.29 | 7 | P | | P | 21 18 01.3 +1.5 |
| TRF | **Thorofare Moun** baz=346 | 81.43 | 7 | P | | P | 21 18 00.3 -0.4 |
| SCRK | **Sand Creek** | 81.44 | 4 | P | | P | 21 18 01.6 +0.8 |
| SCRK | comp=Z,11nm,0.8s | | | IAmb | | IAmb | 21 18 04.3 |
| SCRK | **Sand Creek** baz=352,SNR=10 | 81.44 | 4 | P | | P | 21 18 02.2 +1.5 |
| K24K | **Donnelly Dome** baz=350,SNR=5.4 | 81.49 | 5 | P | | P | 21 18 02.0 +1.1 |
| L15K | **Ungalak Mounta** baz=337 | 81.50 | 13 | P | | P | 21 18 02.8 +1.9 |
| K27K | **Chicken** | 81.50 | 4 | P | | P | 21 18 01.1 +0.2 |
| K27K | comp=Z,6.6nm,0.8s | | | IAmb | | IAmb | 21 18 04.4 |
| K27K | **Chicken** baz=353 | 81.50 | 4 | P | | P | 21 18 01.6 +0.7 |
| L14K | **Kuka Creek** baz=336 | 81.58 | 14 | P | | P | 21 18 02.4 +1.1 |
| DAWY | **Dawson** | 81.58 | 2 | P | | P | 21 18 01.6 +0.2 |
| DAWY | comp=Z,7.5nm,1.0s | | | IAmb | | IAmb | 21 18 04.5 |
| DAWY | **Dawson** baz=355,SNR=5.3 | 81.58 | 2 | P | | P | 21 18 02.2 +0.9 |
| RND | **Reindeer** | 81.62 | 7 | P | | P | 21 18 02.2 +0.6 |
| RND | comp=Z,29nm,2.0s | | | IAmb | | IAmb | 21 18 54.1 |
| RND | **Reindeer** | 81.62 | 7 | P | | P | 21 18 02.2 +0.6 |
| RND | comp=Z,29nm,2.0s | | | pmax | | pmax | |
| L17K | **Donlin** baz=340 | 81.62 | 11 | P | | P | 21 18 01.9 +0.4 |
| RIDG | **Independent Ri** | 81.62 | 5 | P | | P | 21 18 02.2 +0.6 |
| RIDG | comp=Z,14nm,1.2s | | | IAmb | | IAmb | 21 18 11.4 |
| RIDG | **Independent Ri** baz=351 | 81.62 | 5 | P | | P | 21 18 02.7 +1.1 |
| M11K | **Mekoryuk** baz=334 | 81.72 | 16 | P | | P | 21 18 02.9 +0.9 |
| PPLA | **Purkeypile** baz=345 | 81.75 | 8 | P | | P | 21 18 03.1 +0.7 |
| L18K | **Granite Mounta** baz=341 | 81.79 | 11 | P | | P | 21 18 03.6 +1.1 |
| L16K | **Owhat River** baz=339 | 81.82 | 12 | P | | P | 21 18 03.9 +1.3 |
| K29M | **Barlow Dome** | 81.86 | 2 | P | | P | 21 18 03.1 +0.1 |
| K29M | comp=Z,6.6nm,0.8s | | | IAmb | | IAmb | 21 18 06.2 |
| K29M | **Barlow Dome** baz=357,SNR=5.2 | 81.86 | 2 | P | | P | 21 18 04.2 +1.3 |
| L20K | **Farewell, AK** baz=344,SNR=5.7 | 81.94 | 9 | P | | P | 21 18 04.3 +1.0 |
| SHEM | **Shemya Is, Ala** comp=Z,72nm,18.1s,baz=294,slow=40 | 81.98 | 29 | LR | | LR | 22 00 30.2 |
| YKA | **Yellowknife Ar** | 82.02 | 351 | P | | P | 21 18 03.6 0.0 |
| YKA | **Yellowknife Ar** comp=Z,3.9nm,0.8s,baz=18,slow=5.3,SNR=5.4 | 82.02 | 351 | P | | P | 21 18 01.5 -2.1 |
| YKA | comp=Z,70nm,21.9s,baz=318,slow=36 | | | LR | | LR | 21 55 34.4 |
| | comp=Z,3.9nm,0.8s | | | | | | |
| YKA | **Yellowknife Ar** | 82.02 | 351 | *ce*P | | P | 21 18 07.0 +3.4 |
| YKA | comp=Z,1.0nm,0.6s | | | pmax | | pmax | |
| DHY | **Denali Highway** | 82.08 | 6 | P | | P | 21 18 05.3 +1.2 |
| DHY | comp=Z,6.0nm,0.8s | | | IAmb | | IAmb | 21 18 09.1 |
| DHY | **Denali Highway** baz=349 | 82.08 | 6 | P | | P | 21 18 04.8 +0.7 |
| L19K | **White Mountain** baz=343 | 82.10 | 10 | P | | P | 21 18 05.8 +1.7 |
| WRGLY | **Wrigley** baz=8.7 | 82.16 | 355 | P | | P | 21 18 05.6 +1.2 |
| WAT1 | **Susitna Watana** baz=348 | 82.21 | 7 | P | | P | 21 18 05.4 +0.7 |
| M13K | **Dall Lake** baz=336 | 82.30 | 14 | P | | P | 21 18 06.6 +1.5 |
| PAX | **Paxson** baz=350 | 82.34 | 5 | P | | P | 21 18 07.1 +1.7 |
| M19K | **Big River Lodg** baz=343 | 82.43 | 10 | P | | P | 21 18 07.2 +1.4 |
| L26K | **Log Cabin Wild** | 82.43 | 4 | P | | P | 21 18 06.0 +0.1 |
| L26K | **Log Cabin Wild** baz=352 | 82.43 | 4 | P | | P | 21 18 07.8 +1.9 |
| M17K | **Holitna River** baz=341 | 82.45 | 11 | P | | P | 21 18 07.3 +1.4 |
| BCAR | **Beaver Creek A** | 82.48 | 4 | P | | P | 21 18 06.9 +0.8 |
| L27K | **Beaver Creek,** | 82.48 | 4 | P | | P | 21 18 06.6 +0.5 |
| L27K | comp=Z,6.8nm,0.9s | | | IAmb | | IAmb | 21 18 09.8 |
| L27K | **Beaver Creek,** baz=353,SNR=6.9 | 82.48 | 4 | P | | P | 21 18 07.3 +1.2 |
| WAT6 | **Susitna Watana** baz=349 | 82.53 | 6 | P | | P | 21 18 07.9 +1.4 |
| M15K | **Kasigluk River** baz=338 | 82.56 | 13 | P | | P | 21 18 07.7 +1.3 |
| M16K | **Timber Creek** baz=339 | 82.56 | 12 | P | | P | 21 18 07.8 +1.4 |
| L29M | **L29M** baz=356 | 82.58 | 2 | P | | P | 21 18 07.8 +1.2 |
| M20K | **Styx River** baz=344 | 82.62 | 9 | P | | P | 21 18 07.8 +0.9 |
| M18K | **Stony River** baz=342 | 82.62 | 10 | P | | P | 21 18 08.1 +1.3 |
| SKT | **Skwentna** | 82.72 | 8 | P | | P | 21 18 08.0 +0.7 |
| SKT | **Skwentna** baz=345 | 82.72 | 8 | P | | P | 21 18 09.3 +1.9 |
| M26K | **Nabesna, AK** | 83.07 | 4 | P | | P | 21 18 10.9 +1.7 |
| M26K | comp=Z,22nm,1.8s | | | IAmb | | IAmb | 21 18 13.2 |
| M26K | **Nabesna, AK** baz=352 | 83.07 | 4 | P | | P | 21 18 11.2 +1.9 |
| N14K | **Kuskokwak Cree** baz=337 | 83.08 | 14 | P | | P | 21 18 08.7 -0.5 |
| M22K | **Willow** baz=347 | 83.10 | 8 | P | | P | 21 18 10.8 +1.5 |
| N16K | **Nishlik Lake** baz=340 | 83.11 | 12 | P | | P | 21 18 11.5 +2.1 |
| M24K | **Tolsona, Glenn** baz=350 | 83.14 | 6 | P | | P | 21 18 11.0 +1.4 |
| M27K | **Edge Creek, AK** | 83.18 | 4 | P | | P | 21 18 09.1 -0.8 |
| M27K | comp=Z,6.7nm,0.9s | | | IAmb | | IAmb | 21 18 20.0 |
| M27K | **Edge Creek, AK** baz=353 | 83.18 | 4 | P | | P | 21 18 11.3 +1.4 |
| SML | **Sawmill** | 83.24 | 7 | P | | P | 21 18 09.6 -0.5 |
| SML | **Sawmill** baz=348 | 83.24 | 7 | P | | P | 21 18 11.5 +1.4 |
| M29M | **Somme Creek** | 83.24 | 2 | P | | P | 21 18 10.7 +0.6 |
| M29M | comp=Z,18nm,1.9s | | | IAmb | | IAmb | 21 18 14.5 |
| M29M | **Somme Creek** baz=356 | 83.24 | 2 | P | | P | 21 18 11.8 +1.7 |
| SCM | **Sheep Creek Mo** | 83.31 | 6 | P | | P | 21 18 11.5 +1.1 |
| SCM | comp=Z,9.5nm,0.8s | | | IAmb | | IAmb | 21 18 15.0 |
| SCM | **Sheep Creek Mo** baz=349 | 83.31 | 6 | P | | P | 21 18 12.1 +1.7 |
| SCM | **Sheep Creek Mo** | 83.31 | 6 | P | | P | 21 18 11.5 +1.1 |
| SCM | comp=Z,10.0nm,0.8s | | | pmax | | pmax | |
| M23K | **Glacier View** baz=349 | 83.31 | 7 | P | | P | 21 18 12.0 +1.6 |
| SUA | **Susitna One** | 83.31 | 8 | P | | P | 21 18 11.6 +1.1 |
| SUA | **Susitna One** baz=346 | 83.31 | 8 | P | | P | 21 18 12.1 +1.5 |
| N17K | **Nushagak Hills** baz=341 | 83.32 | 11 | P | | P | 21 18 12.2 +1.8 |
| N18K | **Kilae Creek** baz=342 | 83.38 | 11 | P | | P | 21 18 11.0 +0.2 |
| N20K | **Mount Spurr** baz=345 | 83.39 | 9 | P | | P | 21 18 11.8 +0.8 |
| SPCR | **Spurr Chakacha** baz=345 | 83.39 | 9 | P | | P | 21 18 10.6 -0.3 |
| N19K | **Bonanza Creek** | 83.46 | 10 | P | | P | 21 18 12.5 +1.2 |
| N19K | comp=Z,8.3nm,0.8s | | | IAmb | | IAmb | 21 18 16.4 |
| N19K | **Bonanza Creek** baz=343 | 83.46 | 10 | P | | P | 21 18 11.9 +0.6 |
| FARO | **Faro, Yukon** | 83.52 | 360 | P | | P | 21 18 12.7 +1.2 |
| FARO | comp=Z,6.8nm,1.0s | | | IAmb | | IAmb | 21 18 16.4 |
| FARO | **Faro, Yukon** baz=0.5 | 83.52 | 360 | P | | P | 21 18 12.7 +1.2 |
| M31M | **Drury Creek, Y** baz=360 | 83.55 | 0 | P | | P | 21 18 12.1 +0.4 |
| KNK | **Knik Glacier** | 83.61 | 7 | P | | P | 21 18 12.4 +0.4 |
| KNK | comp=Z,8.5nm,0.8s | | | IAmb | | IAmb | 21 18 16.8 |
| KNK | **Knik Glacier** baz=348 | 83.61 | 7 | P | | P | 21 18 12.6 +0.7 |
| N25K | **Chitina, Valde** baz=351 | 83.76 | 5 | P | | P | 21 18 12.9 +0.1 |
| KLU | **Klutina** | 83.77 | 6 | P | | P | 21 18 13.1 +0.3 |
| KLU | **Klutina** baz=350 | 83.77 | 6 | P | | P | 21 18 13.2 +0.3 |
| O14K | **Tigyukauivet M** baz=338 | 83.79 | 14 | P | | P | 21 18 14.5 +1.7 |
| RC01 | **Rabbit Creek A** baz=347 | 83.79 | 8 | P | | P | 21 18 15.1 +2.2 |
| YUK3 | **Moose Creek** baz=355 | 83.83 | 3 | P | | P | 21 18 15.2 +1.8 |
| O17K | **Koliganek Bris** baz=341 | 84.05 | 12 | P | | P | 21 18 16.7 +2.5 |
| TGTN | **Hyland Airport** baz=4.7 | 84.12 | 357 | P | | P | 21 18 16.3 +1.7 |
| O15K | **Ungalikthiuk R** baz=339 | 84.13 | 13 | P | | P | 21 18 17.0 +2.4 |
| PWL | **Port Wells** baz=348 | 84.17 | 7 | P | | P | 21 18 17.3 +2.5 |
| N31M | **Braeburn, Yuko** baz=358 | 84.26 | 1 | P | | P | 21 18 15.0 -0.3 |
| N30M | **Aishikik Lake** baz=357 | 84.26 | 2 | P | | P | 21 18 15.5 +0.1 |
| P08K | **Saint George I** baz=331 | 84.27 | 19 | P | | P | 21 18 15.2 -0.1 |
| O18K | **Koktuh Hills** baz=342 | 84.27 | 11 | P | | P | 21 18 15.0 -0.4 |
| BMRM | **Bremner River** baz=351 | 84.39 | 5 | P | | P | 21 18 15.3 -0.7 |
| O20K | **Slope Mountain** baz=345 | 84.42 | 9 | P | | P | 21 18 15.8 -0.3 |
| CTG | **Chitna Glacier** baz=354 | 84.60 | 4 | P | | P | 21 18 16.6 -0.5 |
| P16K | **Nushagak River** baz=340 | 84.60 | 12 | P | | P | 21 18 15.3 -1.7 |
| P17K | **Kvichak River** baz=342 | 84.71 | 11 | P | | P | 21 18 17.6 +0.1 |
| CRQE | **Cirque** baz=352 | 84.71 | 5 | P | | P | 21 18 16.9 -0.8 |
| P18K | **Big Mountain,** baz=342 | 84.71 | 11 | P | | P | 21 18 16.5 -1.1 |
| EYAK | **Cordova Ski Ar** baz=350 | 84.71 | 6 | P | | P | 21 18 16.6 -0.9 |
| YUK6 | **Outpost Mounta** baz=356 | 84.75 | 2 | P | | P | 21 18 16.3 -1.7 |
| P19K | **Oil Pt** baz=344 | 84.75 | 10 | P | | P | 21 18 16.6 -1.2 |
| SEW | **Seward** baz=347 | 84.79 | 8 | P | | P | 21 18 16.9 -1.0 |
| O28M | **Mount Upton** baz=355 | 84.85 | 3 | P | | P | 21 18 17.2 -1.4 |
| O30N | **Mendenhall** baz=358 | 84.97 | 1 | P | | P | 21 18 17.5 -1.5 |
| L61B | **Northampton** baz=46 | 85.06 | 319 | P | | P | 21 18 19.3 -0.3 |
| KOTAN | **Kotaneelee Air** baz=8.1 | 85.28 | 355 | P | | P | 21 18 18.7 -1.7 |
| MESA | **MESA** baz=353 | 85.35 | 4 | P | | P | 21 18 19.6 -1.4 |
| O29M | **Mount Kennedy** baz=356 | 85.38 | 2 | P | | P | 21 18 20.9 -0.2 |
| Q19K | **Cape Douglas,** baz=344 | 85.39 | 10 | P | | P | 21 18 19.1 -1.9 |
| KAIM | **Kayak Island** baz=351 | 85.44 | 5 | P | | P | 21 18 20.4 -0.8 |
| Q18K | **Katmai Hardscr** | 85.46 | 11 | P | | P | 21 18 21.2 -0.3 |
| P33M | **Teslin, Yukon** baz=0.9 | 85.55 | 359 | P | | P | 21 18 21.5 -0.4 |
| Q17K | **Contact Creek** baz=342 | 85.69 | 11 | P | | P | 21 18 22.5 0.0 |
| Q23K | **Middleton Isla** baz=350 | 85.77 | 6 | P | | P | 21 18 23.0 +0.3 |
| R16K | **Pilot Point** baz=341 | 86.06 | 13 | P | | P | 21 18 23.9 -0.3 |
| P29M | **Windy Craggy** baz=357 | 86.08 | 2 | P | | P | 21 18 25.0 +0.6 |
| R17L | **Mt. Peulik Vol** baz=342 | 86.21 | 12 | P | | P | 21 18 25.8 +0.7 |
| PLBC | **Pleasant Camp** baz=358 | 86.28 | 1 | P | | P | 21 18 25.9 +0.6 |
| R33M | **Jennings River** baz=2.4 | 86.34 | 358 | P | | P | 21 18 25.4 -0.4 |
| TOAD | **Toad River Com** baz=7.1 | 86.63 | 355 | P | | P | 21 18 26.4 -0.8 |
| KDAK | **Kodiak Island** comp=Z,65nm,19.8s,baz=11,slow=40 | 86.65 | 10 | LR | | LR | 22 03 21.9 |
| KDAK | **Kodiak Island** baz=345 | 86.65 | 10 | P | | P | 21 18 27.0 -0.2 |
| KDAK | **Kodiak Island** | 86.65 | 10 | *i* P | | P | 21 18 28.9 +1.7 |
| KDAK | comp=Z,43nm,1.4s | | | pmax | | pmax | |
| SADO | **Sadowa** comp=Z,75nm,18.2s,baz=81,slow=38 | 86.70 | 324 | LR | | LR | 21 59 55.6 |
| Q32M | **Nakina River** baz=1.3 | 86.80 | 359 | P | | P | 21 18 27.0 -1.2 |
| S14K | **Fog Glacier** baz=339 | 86.89 | 14 | P | | P | 21 18 27.4 -1.2 |
| S12K | **Black Hills** baz=337 | 86.91 | 16 | P | | P | 21 18 27.8 -0.7 |
| OHAK | **Old Harbor** baz=344 | 87.09 | 10 | P | | P | 21 18 29.1 -0.2 |
| DLBC | **Dease Lake** baz=3.2 | 87.27 | 358 | P | | P | 21 18 29.8 -0.6 |
| UNV | **Unalaska Valle** baz=334 | 87.52 | 19 | P | | P | 21 18 32.0 +0.5 |
| NIKH | **Nikolski High** baz=332 | 87.65 | 20 | P | | P | 21 18 32.1 -0.1 |
| S31K | **Pelican** baz=358 | 87.79 | 1 | P | | P | 21 18 32.5 -0.2 |
| S34M | **Telegraph Cree** baz=2.3 | 87.83 | 359 | P | | P | 21 18 33.7 +0.8 |
| S32K | **Killisnoo** baz=359 | 88.30 | 0 | P | | P | 21 18 35.3 +0.1 |
| SIT | **Sitka** baz=359 | 88.71 | 1 | P | | P | 21 18 37.3 +0.3 |
| T35M | **Bob Quinn** baz=3.0 | 88.74 | 358 | P | | P | 21 18 37.5 +0.2 |
| ULM | **Lac du Bonnet** comp=Z,62nm,18.2s,baz=32,slow=38 | 89.08 | 337 | LR | | LR | 22 01 28.5 |
| U33K | **Whale Pass** baz=0.6 | 89.66 | 360 | P | | P | 21 18 40.2 -1.4 |
| M53A | **WI Miller and** baz=41 | 89.93 | 323 | P | | P | 21 18 42.2 -1.0 |
| P52A | **Corning** baz=40 | 92.02 | 323 | P | | P | 21 18 51.9 -1.0 |
| BBB | **Bella Bella** comp=Z,32nm,19.5s,baz=33,slow=39 | 93.45 | 356 | LR | | LR | 22 06 47.9 |
| MDP | **Montagnes des** comp=Z,58nm,20.2s,baz=74,slow=35 | 94.29 | 279 | LR | | LR | 22 01 22.5 |
| TKL | **Tuckaleechee C** comp=Z,39nm,19.2s,baz=48,slow=36 | 95.90 | 321 | LR | | LR | 22 03 48.5 |
| NEW | **Newport** comp=Z,72nm,21.3s,baz=3.5,slow=36 | 96.17 | 349 | LR | | LR | 22 02 57.5 |
| WRA | **Warramunga Arr** comp=Z,0.3nm,0.5s,baz=317,slow=4.2,SNR=8.6 | 99.67 | 107 | P | | Pdif | 21 19 28.7 +0.8 |
| WRA | | | | PP | | PP | 21 23 33.4 +1.1 |
| | comp=Z,0.4nm,1.0s,baz=309,slow=7.6,SNR=4.5 | | | | | | |
| | comp=Z,0.3nm,0.5s | | | | | | |
| WRA | **Warramunga Arr** | 99.67 | 107 | *i* P | | Pdif | 21 19 29.2 +1.3 |
| PDAR | **Pinedale Array** comp=Z,40nm,19.9s,baz=12,slow=37 | 99.86 | 342 | LR | | LR | 22 06 37.8 |
| ASAR | **Alice Springs** comp=Z,0.5nm,1.0s,baz=293,slow=4.7,SNR=2.6 | 101.34 | 111 | P | | Pdif | 21 19 35.0 -0.3 |
| ASAR | **Alice Springs** | 101.34 | 111 | P | | Pdif | 21 19 35.0 -0.3 |
| LPAZ | **La Paz** comp=Z,0.6nm,0.5s,baz=327,slow=7.2,SNR=2.3 | 118.85 | 270 | PKP | | PKiKP | 21 24 33.5 -0.2 |
| QSPA | **South Pole Qui** comp=Z,0.9nm,0.7s,baz=288,slow=1.8,SNR=3.0 | 124.42 | 180 | PKP | | PKiKP | 21 24 42.6 +0.2 |

*SOME* **31** *21:18:05.6,41.67N×83.52E,h15km*
*NNC* **31** *21:18:08.0±1.5,41.70N×83.38E,h0km,mb3.9,mpv3.6,*
*Error ellipse: s-maj=11.7km s-min=7.0km az=154.0*
**ISC 31 21:18:11.6±1.6,41.95N±0.07×83.31E±0.05,h10km,n38,**
**σ2878/52,7C-2D,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| KTMS | **Ketmen** 20nm,0.3s | 2.64 | 305 | *e*P | | Pb | 21 18 58.5 | -0.6 |
| KTMS | 32nm,0.3s | | | *e*S | | Sb | 21 19 37.0 | +5.4 |
| KTMS | **Ketmen** 20nm,0.3s | 2.64 | 305 | Pg | | Pb | 21 18 58.4 | -0.6 |
| KTMS | 32nm,0.3s | | | Lg | | Lg | 21 19 37.0 | |
| SHLS | **Shalkode** | 3.08 | 294 | *e*P | | Pn | 21 19 00.9 | +0.4 |
| SHLS | | | | *e*S | | Sn | 21 19 41.7 | +4.3 |
| SHLS | **Shalkode** | 3.08 | 294 | Pg | | Pn | 21 19 00.9 | +0.4 |
| SHLS | | | | Lg | | Lg | 21 19 41.7 | |
| UZB | **Uzynbulak** | 3.38 | 292 | *e*P | | Pg | 21 19 13.2 | -3.2 |
| UZB | | | | *e*S | | Sg | 21 20 02.1 | +1.9 |
| UZB | **Uzynbulak** | 3.38 | 292 | Pg | | Pg | 21 19 13.2 | -3.2 |
| UZB | | | | Lg | | Lg | 21 20 02.1 | |
| KPKS | **Kokpek** 26nm,0.5s | 3.73 | 296 | *e*P | | Pg | 21 19 19.6 | -3.3 |
| KPKS | 43nm,0.3s | | | *e*S | | Sg | 21 20 12.4 | +1.2 |
| KPKS | **Kokpek** 26nm,0.5s | 3.73 | 296 | Pg | | Pg | 21 19 19.6 | -3.3 |
| KPKS | 43nm,0.3s | | | Lg | | Lg | 21 20 12.4 | |
| SATY | **Saty** 11nm,0.2s | 3.79 | 289 | *e*P | | Pb | 21 19 18.6 | +0.1 |
| SATY | 36nm,0.3s | | | *e*S | | Sg | 21 20 10.7 | -2.5 |
| ZHN | **Zhinishke** 6.9nm,0.1s | 3.80 | 290 | *e*P | | Pg | 21 19 20.9 | -3.4 |
| ZHN | 39nm,0.2s | | | *e*S | | Sg | 21 20 15.2 | +1.7 |
| ZHN | **Zhinishke** | 3.80 | 290 | Pg | | Pg | 21 19 21.0 | -3.4 |
| ZHN | | | | Lg | | Lg | 21 20 15.5 | |
| KNOS | **Konyrlen** 6.2nm,0.3s | 3.86 | 310 | Pg | | Pg | 21 19 24.1 | -1.4 |
| KNOS | 9.1nm,0.5s | | | Lg | | Lg | 21 20 20.7 | |
| KURS | **Kuram** 11nm,0.5s | 4.08 | 294 | *e*P | | Pb | 21 19 24.0 | +0.4 |
| KURS | 13nm,0.7s | | | *e*S | | Sb | 21 20 19.8 | +6.8 |
| BLB | **Baldybastay** 41nm,0.4s | 4.14 | 303 | Pg | | Pg | 21 19 27.4 | -3.5 |
| BLB | 11nm,0.7s | | | Lg | | Lg | 21 20 26.6 | |
| KAPS | **Kapalarasan** 12nm,0.5s | 4.40 | 321 | *e*P | | Pb | 21 19 31.3 | +2.4 |
| KAPS | 9.8nm,0.3s | | | *e*S | | Sg | 21 20 32.1 | -0.6 |
| KAPS | **Kapalarasan** 12nm,0.5s | 4.40 | 321 | Pg | | Pb | 21 19 31.3 | +2.4 |
| KAPS | 9.8nm,0.3s | | | Lg | | Lg | 21 20 32.1 | |
| ARXS | **Arharly** 4.3nm,0.3s | 4.61 | 301 | *e*P | | Pg | 21 19 36.6 | -3.2 |
| ARXS | 20nm,0.5s | | | *e*S | | Sg | 21 20 41.6 | +2.2 |
| KOTS | **Kotyrbulak** 5.0nm,0.3s | 4.75 | 288 | *e*P | | Pb | 21 19 35.7 | +0.7 |
| KOTS | 26nm,0.6s | | | *e*S | | Sg | 21 20 40.6 | -3.4 |
| KOTS | **Kotyrbulak** 5.0nm,0.3s | 4.75 | 288 | Pg | | Pb | 21 19 35.7 | +0.7 |
| KOTS | 26nm,0.6s | | | Lg | | Lg | 21 20 40.6 | |
| MDOK | **Medeo** | 4.78 | 287 | *e*P | | Pb | 21 19 36.9 | +1.4 |
| MDOK | | | | *e*S | | Sg | 21 20 42.6 | -2.4 |
| MDOK | **Medeo** | 4.78 | 287 | Pg | | Pb | 21 19 36.9 | +1.4 |
| MDOK | | | | Lg | | Lg | 21 20 42.6 | |
| TNSS | **Tian-Shan** | 4.83 | 285 | *e*P | | Pb | 21 19 37.3 | +0.9 |
| TNSS | | | | *e*S | | Sg | 21 20 43.5 | -3.0 |
| TNSS | **Tian-Shan** | 4.83 | 285 | Pg | | Pb | 21 19 37.3 | +0.9 |
| TNSS | | | | Lg | | Lg | 21 20 43.5 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **4.90** | **352** | ⇑Pn | | **Pn** | **21** | **19** | **25.9** **+0.6** |
| | 0.3nm,0.3s,baz=168,slow=15,SNR=22 | | | | | | | | |
| MK31 | | | | ⇑Pg | | **Pg** | **21** | **19** | **41.2** **-4.1** |
| | 1.1nm,0.4s,baz=169,slow=17,SNR=6.9 | | | | | | | | |
| MK31 | | | | ⇓Lg | | Lg | 21 | 20 | 51.4 |
| | 14nm,0.6s,baz=162,slow=30,SNR=4.5 | | | | | | | | |
| **MAKZ** | **Makanchi** | **4.95** | **349** | ⇓Pn | | **Pn** | **21** | **19** | **28.1** **+2.2** |
| | 2.0nm,1.0s | | | | | | | | |
| MAKZ | | | | ⇑Pg | | **Pg** | **21** | **19** | **42.5** **-3.8** |
| | 3.4nm,0.9s | | | | | | | | |
| MAKZ | | | | ⇑Sn | | **Sn** | **21** | **20** | **30.0** **+6.7** |
| | 4.2nm,0.6s | | | | | | | | |
| MAKZ | | | | ⇑Lg | | Lg | 21 | 20 | 56.2 |
| | 21nm,1.2s | | | | | | | | |
| **CHKK** | **Chushkaly** | **5.02** | **294** | *e*P | | **Pb** | **21** | **19** | **42.3** **+2.9** |
| | 1.5nm,0.1s | | | | | | | | |
| CHKK | | | | *e*S | | **Sg** | **21** | **20** | **51.6** **-0.9** |
| | 15nm,0.5s | | | | | | | | |
| **CHKK** | **Chushkaly** | **5.02** | **294** | Pg | | **Pb** | **21** | **19** | **42.3** **+2.9** |
| | 1.5nm,0.1s | | | | | | | | |
| CHKK | | | | Lg | | Lg | 21 | 20 | 51.6 |
| | 15nm,0.5s | | | | | | | | |
| **KTBS** | **Karatobe** | **5.18** | **292** | *e*P | | Pg | 21 | 19 | 45.6 -5.2 |
| KTBS | | | | *e*S | | **Sg** | **21** | **20** | **56.9** **-0.9** |
| **KTBS** | **Karatobe** | **5.18** | **292** | Pg | | **Pb** | **21** | **19** | **43.8** **+1.5** |
| KTBS | | | | Lg | | Lg | 21 | 20 | 54.4 |
| **KST** | **Kastek** | **5.54** | **284** | *e*P | | Pg | 21 | 19 | 52.2 -5.3 |
| | 4.1nm,0.3s | | | | | | | | |
| KST | | | | *e*S | | **Sg** | **21** | **21** | **08.8** **-0.5** |
| | 15nm,0.9s | | | | | | | | |
| **KST** | **Kastek** | **5.54** | **284** | Pg | | Pg | 21 | 19 | 52.2 -5.3 |
| | 4.1nm,0.3s | | | | | | | | |
| KST | | | | Lg | | Lg | 21 | 21 | 08.8 |
| | 15nm,0.9s | | | | | | | | |
| **ZSN** | **Zaisan** | **5.61** | **11** | *e*P | | Pg | 21 | 19 | 53.9 -5.1 |
| | 2.0nm,0.4s | | | | | | | | |
| ZSN | | | | *e*S | | **Sg** | **21** | **21** | **11.8** **+0.2** |
| | 23nm,0.7s | | | | | | | | |
| **ZSN** | **Zaisan** | **5.61** | **11** | Pg | | Pg | 21 | 19 | 53.9 -5.1 |
| | 2.0nm,0.4s | | | | | | | | |
| ZSN | | | | Lg | | Lg | 21 | 21 | 11.8 |
| | 23nm,0.7s | | | | | | | | |
| **DGS** | **Degeres** | **5.71** | **286** | *e*P | | **Pg** | **21** | **19** | **58.4** **-2.5** |
| | 5.0nm,0.7s | | | | | | | | |
| DGS | | | | *e*S | | **Sg** | **21** | **21** | **18.9** **+4.1** |
| | 19nm,0.6s | | | | | | | | |
| **DGS** | **Degeres** | **5.71** | **286** | Pg | | **Pg** | **21** | **19** | **58.4** **-2.5** |
| | 5.0nm,0.7s | | | | | | | | |
| DGS | | | | Lg | | Lg | 21 | 21 | 18.9 |
| | 19nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.79** | **282** | ⇑Pn | | **Pn** | **21** | **19** | **37.1** **-0.5** |
| | 2.6nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇑Lg | | Lg | 21 | 21 | 17.8 |
| | 16nm,1.0s | | | | | | | | |
| **KRBS** | **Karabastau** | **5.88** | **290** | *e*P | | Pg | 21 | 19 | 59.3 -4.8 |
| | 2.2nm,0.5s | | | | | | | | |
| KRBS | | | | *e*S | | **Sg** | **21** | **21** | **20.1** **0.0** |
| | 5.0nm,0.5s | | | | | | | | |
| **KRBS** | **Karabastau** | **5.88** | **290** | Pg | | Pg | 21 | 19 | 59.3 -4.8 |
| | 2.2nm,0.5s | | | | | | | | |
| KRBS | | | | Lg | | Lg | 21 | 21 | 20.1 |
| | 5.0nm,0.5s | | | | | | | | |

*NEIC **31** 21:21:37.6±0.9, 17.°9S±0.°1×177.°6W±0.°1, h554km±9km, mb4.2/22, Error ellipse: s-maj=22.3km s-min=15.7km az=126.0*

*IDC **31** 21:21:42.4±4.3, 18.°08S×178.°36W, h557km±27km, mb3.2/4, mbtmp4.2/5, Error ellipse: s-maj=118.1km s-min=38.9km az=27.0*

**ISC 31 21:21:37.1**±0.7, **17.°8S**±0.°1×**177.°7W**±0.°1, **h550km, n32, σ1§18/32, mb4.1/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.07** | **270** | P | | **P** | **21 23 00.8** | **+1.2** |
| **MSVF** | **Nonsavu** | **4.07** | **270** | P | | **P** | **21 23 00.9** | **+1.3** |
| | 33nm,0.7s,baz=116,slow=7.5,SNR=23 | | | | | | | |
| **NIUE** | **Niue** | **7.47** | **101** | P | | **P** | **21 23 28.6** | **-1.0** |
| **THZ** | **Tophouse** | **25.22** | **197** | P | | **P** | **21 26 18.8** | **-0.8** |
| **LTZ** | **Lake Taylor** | **26.34** | **197** | P | | **P** | **21 26 28.2** | **-1.3** |
| LTZ | | | | IAmb | IAmb | IAmb | 21 26 29.3 | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.76** | **200** | P | | **P** | **21 26 40.9** | **-0.9** |
| **LBZ** | **Lake Benmore** | **28.41** | **198** | P | | **P** | **21 26 45.0** | **-2.6** |
| LBZ | | | | IAmb | IAmb | IAmb | 21 26 56.5 | |
| | comp=Z,4.4nm,0.9s | | | | | | | |
| **MLZ** | **Mavora Lakes** | **29.94** | **200** | P | | **P** | **21 27 00.5** | **-0.3** |
| MLZ | | | | IAmb | IAmb | IAmb | 21 27 13.5 | |
| | comp=Z,18nm,1.2s | | | | | | | |
| **ARMA** | **Armidale** | **30.60** | **240** | P | | **P** | **21 27 06.2** | **-0.7** |
| ARMA | | | | IAmb | IAmb | IAmb | 21 27 25.6 | |
| | comp=Z,5.8nm,1.1s | | | | | | | |
| **TOO** | **Toolangi** | **37.78** | **231** | P | | **P** | **21 28 06.2** | **-0.6** |
| TOO | | | | IAmb | IAmb | IAmb | 21 28 13.4 | |
| | comp=Z,8.8nm,1.0s | | | | | | | |
| **COEN** | **Coen** | **37.80** | **270** | P | | **P** | **21 28 07.2** | **0.0** |
| COEN | | | | IAmb | IAmb | IAmb | 21 28 15.6 | |
| | comp=Z,6.1nm,1.1s | | | | | | | |
| **STKA** | **Stephens Creek** | **39.30** | **241** | P | | **P** | **21 28 18.9** | **-0.1** |
| **STKA** | **Stephens Creek** | **39.30** | **241** | P | | **P** | **21 28 18.5** | **-0.6** |
| | comp=Z,3.8nm,0.8s,baz=89,slow=8.5,SNR=9.2 | | | | | | | |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **BBOO** | **Buckleboo** | **44.07** | **241** | P | | **P** | **21 28 56.1** | **-0.7** |
| BBOO | | | | IAmb | IAmb | IAmb | 21 29 04.3 | |
| | comp=Z,9.5nm,1.1s | | | | | | | |
| **WR0** | **Warramunga Arr** | **45.15** | **259** | P | | **P** | **21 29 05.0** | **-0.2** |
| WR0 | | | | IAmb | IAmb | IAmb | 21 29 14.3 | |
| | comp=Z,3.7nm,1.1s | | | | | | | |
| **WB0** | **Warramunga Arr** | **45.30** | **260** | P | | **P** | **21 29 05.9** | **-0.5** |
| **WB2** | **Warramunga Arr** | **45.33** | **259** | P | | **P** | **21 29 06.0** | **-0.6** |
| **WRA** | **Warramunga Arr** | **45.34** | **259** | P | | **P** | **21 29 05.9** | **-0.8** |
| **WRA** | **Warramunga Arr** | **45.34** | **259** | P | | **P** | **21 29 05.6** | **-1.1** |
| | comp=Z,0.6nm,0.3s,baz=97,slow=6.8,SNR=46 | | | | | | | |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **AS31** | **Alice Springs** | **45.49** | **254** | P | | **P** | **21 29 07.5** | **-0.4** |
| AS31 | | | | IAmb | IAmb | IAmb | 21 29 08.4 | |
| | comp=Z,3.1nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **45.49** | **254** | P | | **P** | **21 29 07.0** | **-0.8** |
| **ASAR** | **Alice Springs** | **45.49** | **254** | P | | **P** | **21 29 07.3** | **-0.6** |
| | comp=Z,8.9nm,0.6s,baz=89,slow=8.3,SNR=194 | | | | | | | |
| | comp=Z,8.9nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **50.69** | **245** | P | | **P** | **21 29 44.9** | **-1.5** |
| FORT | | | | IAmb | IAmb | IAmb | 21 30 04.3 | |
| | comp=Z,15nm,0.9s | | | | | | | |
| **KNRA** | **Kununurra** | **51.19** | **264** | P | | **P** | **21 29 50.0** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** | **53.73** | **260** | P | | **P** | **21 30 08.4** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **58.61** | **255** | P | | **P** | **21 30 41.9** | **-0.1** |
| PSA00 | | | | IAmb | IAmb | IAmb | 21 30 44.9 | |
| | comp=Z,8.5nm,1.0s | | | | | | | |
| **JCJ** | **Chichijima** | **59.22** | **318** | P | | **P** | **21 30 46.1** | **+0.2** |
| **GIRL** | **Giralia** | **63.59** | **253** | P | | **P** | **21 31 15.7** | **+1.1** |
| **QSPA** | **South Pole Qui** | **72.26** | **180** | P | | **P** | **21 32 09.8** | **+3.1** |
| | comp=Z,0.5nm,0.6s,baz=11,slow=16,SNR=1.5 | | | | | | | |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **TCUT** | **Toone Canyon** | **84.79** | **44** | P | | **P** | **21 33 15.7** | **+1.6** |
| **O30N** | **Mendenhall** | **85.11** | **19** | P | | **P** | **21 33 12.6** | **-2.3** |
| O30N | | | | IAmb | IAmb | IAmb | 21 33 16.1 | |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| **SNAA** | **Sanae** | **90.69** | **178** | P | | **P** | **21 33 41.9** | **+0.8** |

*ISN **31** 21:25:45.2±1.1, 34.°62N×46.°10E, h8km±37km, ML2.5*
*TEH **31** 21:25:46.9, 34.°61N×46.°14E, h8km±72km, ML2.8*

**ISC 31 21:25:47.1**±1.0, **34.°62N**±0.°04×**46.°13E**±0.°04, **h10km, n9, σ1§27/13, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IDHR** | **Dehrash** | **0.23** | **70** | Pg | | **Pg** | **21 25 51.6** | **-0.3** |
| IDHR | | | | Sg | | **Sg** | **21 25 55.5** | **+0.4** |
| **KGS1** | **Ghasr-e-Shirin** | **0.46** | **256** | Pg | | **Pg** | **21 25 56.3** | **+0.2** |
| **IGHG** | **Ghaleghazi** | **0.47** | **129** | Pg | | **Pg** | **21 25 56.5** | **+0.2** |
| **GLG1** | **Gilan-e-Gharb** | **0.54** | **200** | Pg | | **Pg** | **21 25 57.2** | **-0.3** |
| **SNQR** | **Sonqor, Kerman** | **1.26** | **79** | Pg | | **Pg** | **21 26 11.5** | **+0.3** |
| **IBZA** | **Bozab** | **1.44** | **96** | Pg | | **Pg** | **21 26 14.2** | **-0.5** |
| **IBDR** | **Badra** | **1.52** | **186** | *e*Pn | | **Pb** | **21 26 15.0** | **-0.3** |
| IBDR | | | | *e*Sn | | **Sg** | **21 26 37.0** | **+1.1** |
| IBDR | | | | AML | AML | AML | 21 26 42.3 | |
| | comp=E,118nm,0.7s | | | | | | | |
| IBDR | | | | AML | | AML | 21 26 52.0 | |
| | comp=N,57nm,0.2s | | | | | | | |
| **IKRK** | **Kirkuk** | **1.66** | **298** | *e*Pn | | **Pb** | **21 26 17.0** | **-0.8** |
| IKRK | | | | *e*Sn | | **Sg** | **21 26 41.0** | **+0.5** |
| **RAFI** | **Al-Rafai** | **2.89** | **180** | *e*Pn | | **Pn** | **21 26 35.0** | **+1.8** |
| RAFI | | | | *e*Sn | | **Sb** | **21 27 11.0** | **-3.1** |

*IDC **31** 21:45:20.1±1.9, 17.°98S×178.°13W, h586km±20km, mb3.1/7, mbtmp4.1/8, Error ellipse: s-maj=24.7km s-min=22.0km az=119.0*

*NEIC **31** 21:45:21.0±0.9, 18.°2S±0.°1×178.°09W±0.°03, h592km±9km, mb4.2/23, Error ellipse: s-maj=20.1km s-min=3.5km az=185.0*

**ISC 31 21:45:20.4**±0.6, **18.°1S**±0.°1×**178.°09W**±0.°10, **h590km, n43, σ0§80/43, mb4.1/22, 4C, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **3.69** | **275** | P | | **P** | **21 46 43.1** | **0.0** |
| **MSVF** | **Nonsavu** | **3.69** | **275** | P | | **P** | **21 46 42.7** | **-0.5** |
| | 92nm,0.7s,baz=117,slow=4.8,SNR=58 | | | | | | | |
| **NIUE** | **Niue** | **7.81** | **99** | P | | **P** | **21 47 17.9** | **+0.3** |
| **LIFNC** | **LIFOU** | **14.10** | **257** | P | | **P** | **21 48 20.8** | **+0.4** |
| **BFZ** | **Birch Farm** | **23.06** | **191** | P | | **P** | **21 49 40.7** | **-1.1** |
| **MSWZ** | **Moikau Station** | **23.96** | **192** | P | | **P** | **21 49 51.5** | **+1.7** |
| **QRZ** | **Quartz Range** | **24.08** | **198** | P | | **P** | **21 49 49.8** | **-1.0** |
| QRZ | | | | IAmb | IAmb | IAmb | 21 49 59.4 | |
| | comp=Z,6.4nm,0.7s | | | | | | | |
| **TKNZ** | **Takaka Hill** | **24.15** | **197** | P | | **P** | **21 49 49.7** | **-1.7** |
| **THZ** | **Tophouse** | **24.84** | **196** | P | | **P** | **21 49 56.6** | **-1.0** |
| THZ | | | | IAmb | IAmb | IAmb | 21 50 00.2 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **DSZ** | **Denniston Nort** | **25.14** | **198** | P | | **P** | **21 49 59.7** | **-0.5** |
| **GVZ** | **Greta Valley S** | **25.94** | **195** | P | | **P** | **21 50 06.3** | **-0.9** |
| **INZ** | **Inchbonnie** | **26.14** | **198** | P | | **P** | **21 50 07.3** | **-1.6** |
| INZ | | | | IAmb | IAmb | IAmb | 21 50 16.7 | |
| | comp=Z,24nm,1.1s | | | | | | | |
| **FOZ** | **Fox Glacier** | **27.37** | **199** | P | | **P** | **21 50 19.3** | **-0.4** |
| **MLZ** | **Mavora Lakes** | **29.55** | **200** | P | | **P** | **21 50 38.4** | **-0.3** |
| MLZ | | | | IAmb | IAmb | IAmb | 21 50 39.4 | |
| | comp=Z,9.6nm,0.9s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **30.08** | **200** | P | | **P** | **21 50 43.8** | **+0.7** |
| WHZ | | | | IAmb | IAmb | IAmb | 21 50 57.6 | |
| | comp=Z,7.2nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.72** | **261** | P | | **P** | **21 51 14.3** | **-0.1** |
| CTAO | | | | IAmb | IAmb | IAmb | 21 51 31.2 | |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| **COEN** | **Coen** | **37.41** | **271** | P | | **P** | **21 51 45.5** | **+0.6** |
| COEN | | | | IAmb | IAmb | IAmb | 21 51 46.8 | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **STKA** | **Stephens Creek** | **38.82** | **241** | P | | **P** | **21 51 57.1** | **+1.1** |
| **STKA** | **Stephens Creek** | **38.82** | **241** | P | | **P** | **21 51 56.5** | **+0.4** |
| | comp=Z,0.9nm,0.5s,baz=104,slow=17,SNR=3.1 | | | | | | | |
| | comp=Z,0.9nm,0.5s | | | | | | | |
| **WR0** | **Warramunga Arr** | **44.71** | **260** | P | | **P** | **21 52 42.5** | **0.0** |
| **WB0** | **Warramunga Arr** | **44.87** | **260** | P | | **P** | **21 52 43.3** | **-0.5** |
| WB0 | | | | IAmb | IAmb | IAmb | 21 52 43.7 | |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| **WB2** | **Warramunga Arr** | **44.89** | **260** | P | | **P** | **21 52 43.4** | **-0.5** |
| WB2 | | | | IAmb | IAmb | IAmb | 21 52 43.9 | |
| | comp=Z,1.8nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.89** | **260** | P | | **P** | **21 52 43.9** | **0.0** |
| WRAB | | | | IAmb | IAmb | IAmb | 21 52 49.9 | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.90** | **260** | P | | **P** | **21 52 43.6** | **-0.4** |
| **WRA** | **Warramunga Arr** | **44.90** | **260** | P | | **P** | **21 52 43.0** | **-1.0** |
| | comp=Z,1.6nm,0.7s,baz=96,slow=7.2,SNR=40 | | | | | | | |
| | comp=Z,1.6nm,0.7s | | | | | | | |
| **AS31** | **Alice Springs** | **45.04** | **254** | P | | **P** | **21 52 44.4** | **-0.6** |
| **ASAR** | **Alice Springs** | **45.04** | **254** | P | | **P** | **21 52 44.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **45.04** | **254** | P | | **P** | **21 52 44.8** | **-0.3** |
| | comp=Z,5.2nm,0.8s,baz=87,slow=8.6,SNR=54 | | | | | | | |
| | comp=Z,5.2nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.21** | **323** | P | | **P** | **21 55 22.5** | **-0.7** |
| | comp=Z,1.1nm,0.5s,baz=158,slow=5.8,SNR=3.7 | | | | | | | |
| | comp=Z,1.1nm,0.5s | | | | | | | |
| **CLES** | **Cleveland East** | **70.95** | **5** | P | | **P** | **21 55 40.0** | **+1.1** |
| **YOJ** | **Yonaguni jima** | **71.28** | **305** | P | | **P** | **21 55 40.8** | **-0.8** |
| YOJ | | | | IAmb | IAmb | IAmb | 21 55 42.9 | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **JKA** | **Kamikawa-asahi** | **71.56** | **331** | P | | **P** | **21 55 43.9** | **+1.2** |
| JKA | | | | IAmb | IAmb | IAmb | 21 55 47.5 | |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.99** | **180** | P | | **P** | **21 55 45.7** | **+0.5** |
| QSPA | | | | IAmb | IAmb | IAmb | 21 55 46.5 | |
| | comp=Z,4.2nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.99** | **180** | P | | **P** | **21 55 45.7** | **+0.5** |
| | comp=Z,3.4nm,0.7s,baz=346,slow=0.4,SNR=22 | | | | | | | |
| | comp=Z,3.4nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.82** | **57** | P | | **P** | **21 56 58.8** | **-0.1** |
| | comp=Z,0.4nm,0.8s,baz=230,slow=4.2,SNR=3.4 | | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.97** | **13** | P | | **P** | **21 56 56.9** | **-1.7** |
| | comp=Z,0.2nm,0.4s,baz=218,slow=5.7,SNR=3.1 | | | | | | | |
| | comp=Z,0.2nm,0.4s | | | | | | | |
| **SNAA** | **Sanae** | **90.44** | **178** | P | | **P** | **21 57 19.4** | **-0.1** |
| **SNAA** | **Sanae** | **90.44** | **178** | ⇑P | | **P** | **21 57 18.7** | **-0.9** |
| | comp=Z,17nm,0.6s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **90.56** | **176** | ⇑P | | **P** | **21 57 19.7** | **-0.4** |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.01** | **177** | ⇑P | | **P** | **21 57 22.5** | **+0.4** |
| | comp=Z,2.3nm,0.6s,baz=187,slow=4.8 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **91.23** | **177** | ⇑P | | **P** | **21 57 22.9** | **-0.2** |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.11** | **315** | PKPbc | | **PKPdf** | **22 03 52.4** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=146,slow=3.3,SNR=5.5 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.48** | **303** | PKPbc | | **PKPbc** | **22 03 57.1** | **+0.3** |
| | comp=Z,0.9nm,0.5s,baz=65,slow=5.9,SNR=4.9 | | | | | | | |

*BJI **31** 21:53:30.9±0.0, 11.°10S×124.°30E, h10km, mb4.6/55, mB5.0/24, Ms4.6/47, Ms7 4.5/45*

*IDC **31** 21:53:34.4±0.6, 10.°71S×123.°99E, h0km, mb4.4/17, mbtmp4.4/17, MS4.4/57, Error ellipse: s-maj=31.1km s-min=11.8km az=90.0*

*MOS **31** 21:53:34.3±1.0, 10.°69S×124.°44E, h19km, mb4.8/18, Error ellipse: s-maj=16.3km s-min=6.7km az=119.0*

*NEIC **31** 21:53:35.3, 10.°75S×124.°31E, h18km*

*NEIC **31** 21:53:35.3, 10.°95S×124.°21E, h18km, Moment Tensor Solution. Duration: 1§9 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=5.17; $M_{\theta\theta}$=-4.60; $M_{\phi\phi}$-0.57; $M_{r\theta}$-1.47; $M_{\theta\phi}$-1.19; $M_{\phi r}$-2.47; Fault plane solution: $M_0$=5.76000×$10^{16}$ NP1: $\phi_s$=236.81000°, $\delta$58.75000°, $\lambda$71.54000°. NP2:$\phi_s$89.57000°, $\delta$35.81000°, $\lambda$117.55000°. Principal axes: T 6.1697, Plg70.0000°, Azm106.0000°; N -0.8109, Plg16.0000°, Azm247.0000°; P -5.3588, Plg12.0000°, Azm340.0000°;*

*NEIC **31** 21:53:35.1±1.6, 10.°82S±0.°04×124.°28E±0.°07, h10km±1km, mb4.9/40, Mww5.1/24 Error ellipse: s-maj=11.1km s-min=6.1km az=278.0*

*DJA **31** 21:53:38.6±0.2, 11.°5±3.°×12.°4E±.°, h10km, M4.9/14, mb5.0/14, mB5.3/5, MLv4.9/13, Mw(mB)4.7/5, MwMwp4.9/3, Mwp5.2/3*

*GCMT **31** 21:53:39.1±0.1, 10.°84S±0.°01×124.°32E±0.°01, h12km, MW5.0/113, Moment Tensor Solution. s78,c109; s113,c192; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.87±.07; $M_{\theta\theta}$-3.48±.06; $M_{\phi\phi}$-0.38±.07; $M_{r\theta}$0.89±.19; $M_{\theta\phi}$-1.33±.06; $M_{\phi r}$-1.06±.23; Best double couple: $M_0$4.15200×$10^{16}$ NP1:$\phi_s$86.00000°, $\delta$51.00000°, $\lambda$112.00000°. NP2:$\phi_s$233.00000°, $\delta$44.00000°, $\lambda$65.00000°. Principal axes: T 4.3010, Plg72.0000°, Azm59.000°; N -0.2950, Plg17.0000°, Azm252.0000°; P -4.0020, Plg4.0000°, Azm161.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Triangular moment-rate function*

**ISC 31 21:53:35.8**±0.3, **10.°81S**±0.°04×**124.°27E**±0.°05, **h10km, n282, σ1§96/250, mb4.8/73, MS4.4/73, 16C-3D, Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **0.84** | **315** | P | | **Pb** | **21 53 52.7** | **+0.1** |
| **SOEI** | **Soe** | **1.05** | **360** | P | | **Pn** | **21 53 57.4** | **+0.7** |
| **SOEI** | **Soe** | **1.05** | **360** | Pg | | **Pn** | **21 53 56.1** | **-0.5** |
| **SOEI** | **Soe** | **1.05** | **360** | P | | **Pn** | **21 53 57.2** | **+0.5** |
| **MMRI** | **Maumere** | **2.94** | **317** | P | | **Pn** | **21 54 24.1** | **+1.4** |
| **MMRI** | **Maumere** | **2.94** | **317** | Pn | | **Pn** | **21 54 23.1** | **+0.5** |
| **MMRI** | **Maumere** | **2.94** | **317** | P | | **Pn** | **21 54 23.8** | **+1.1** |
| **EDFI** | **Ende, Flores** | **3.26** | **309** | P | | **Pn** | **21 54 27.2** | **+0.1** |
| **BASI** | **Baing, Sumba** | **3.67** | **279** | P | | **Pn** | **21 54 33.3** | **+0.6** |
| **WBSI** | **Waikabubak, Su** | **4.94** | **283** | P | | **Pn** | **21 54 50.0** | **-0.1** |
| **BBSI** | **Bau Bau** | **5.55** | **342** | P | | **Pn** | **21 55 01.0** | **+2.5** |
| | 200nm,1.0s,3µm9µm0.8nm | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.95** | **321** | P | | **Pn** | **21 55 05.9** | **+1.8** |
| | 202nm,1.0s,5µm0.9nm | | | | | | | |
| **KNRA** | **Kununurra** | **6.52** | **138** | Pn | | **Pn** | **21 55 11.9** | **0.0** |
| **KNRA** | **Kununurra** | **6.52** | **138** | P | | **Pn** | **21 55 12.9** | **+1.0** |
| | comp=Z,0.0nmcomp=Z,140nm,0.7s | | | | | | | |
| **DRS** | **Darwin Rock St** | **6.70** | **105** | P | | **Pn** | **21 55 15.1** | **+0.9** |
| **BKSI** | **Bulukumba** | **6.82** | **323** | P | | **Pn** | **21 55 17.1** | **+1.1** |
| **MTN** | **Manton Dam** | **7.02** | **107** | P | | **Pn** | **21 55 19.9** | **+1.2** |
| **MTN** | **Manton Dam** | **7.02** | **107** | Pn | | **Pn** | **21 55 18.9** | **+0.2** |
| **MTN** | **Manton Dam** | **7.02** | **107** | P | | **Pn** | **21 55 19.2** | **+0.5** |
| **KAPI** | **Kappang** | **7.29** | **322** | Pn | | **Pn** | **21 55 21.8** | **-0.6** |
| **KAPI** | **Kappang** | **7.29** | **322** | Pn | | **Pn** | **21 55 23.9** | **+1.5** |
| | comp=Z,6.3nm,0.3s,baz=149,slow=9.7,SNR=23 | | | | | | | |
| KAPI | | | | LR | | LR | 21 58 37.6 | |
| | comp=Z,11µm,19.6s,baz=151,slow=43 | | | | | | | |
| **KAPI** | **Kappang** | **7.29** | **322** | P | | **Pn** | **21 55 21.8** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** | **7.37** | **170** | P | | **Pn** | **21 55 24.6** | **+1.1** |
| **FITZ** | **Fitzroy Crossi** | **7.37** | **170** | Pn | | **Pn** | **21 55 24.1** | **+0.5** |
| **FITZ** | **Fitzroy Crossi** | **7.37** | **170** | P | | **Pn** | **21 55 24.0** | **+0.5** |
| | comp=Z,2µm,1.0s | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **7.56** | **285** | P | | **Pn** | **21 55 26.3** | **+0.1** |
| | comp=Z,141nm,0.9s | | | | | | | |
| **BNSI** | **Bone** | **7.58** | **327** | P | | Pn | 21 55 31.7 | +5.2 |
| **KDU** | **Kakadu** | **8.25** | **104** | P | | **Pn** | **21 55 37.0** | **+1.4** |
| **KDU** | **Kakadu** | **8.25** | **104** | P | | **Pn** | **21 55 36.4** | **+0.8** |
| | comp=Z,0.0nmcomp=Z,32nm,0.5s | | | | | | | |
| **LUWI** | **Luwuk** | **9.82** | **351** | Pn | | **Pn** | **21 55 57.8** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **10.24** | **282** | P | | **Pn** | **21 56 03.8** | **+0.9** |
| **FAKI** | **Fak Fak** | **11.14** | **46** | P | | **Pn** | **21 56 17.7** | **+2.4** |
| **MBWA** | **Marble Bar** | **11.18** | **202** | P | | **Pn** | **21 56 16.1** | **+0.4** |
| **MBWA** | **Marble Bar** | **11.18** | **202** | P | | **Pn** | **21 56 15.9** | **+0.1** |
| | comp=Z,27nm,1.1s | | | | | | | |
| **PSAC1** | **Pilbara Seismi** | **11.49** | **201** | P | | **Pn** | **21 56 19.9** | **-0.1** |
| | comp=Z,34nm,1.1s | | | | | | | |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | P | | **Pn** | **21 56 20.4** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | Pn | | **Pn** | **21 56 20.4** | **0.0** |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | | | **Pn** | **21 56 18.8** | **-1.6** |
| **PSA00** | **Pilbara Seismi** | **11.51** | **201** | P | | **Pn** | **21 56 19.8** | **-0.6** |
| | comp=Z,34nm,0.9s | | | | | | | |
| **TOLI2** | **Tolitoli** | **12.34** | **343** | P | | **Pn** | **21 56 35.2** | **+3.5** |
| **TOLI2** | **Tolitoli** | **12.34** | **343** | Pn | | **Pn** | **21 56 29.9** | **-1.7** |
| **WB0** | **Warramunga Arr** | **13.21** | **134** | Pn | | **Pn** | **21 56 41.1** | **-2.5** |
| **WRA** | **Warramunga Arr** | **13.29** | **134** | | | **Pn** | **21 56 43.3** | **-1.4** |
| **WRA** | **Warramunga Arr** | **13.29** | **134** | Pn | | **Pn** | **21 56 42.7** | **-2.0** |
| | comp=Z,2.0nm,0.3s,baz=307,slow=13,SNR=97 | | | | | | | |
| WRA | | | | Sn | | **Sn** | **21 59 05.6** | **-7.1** |
| | comp=Z,1.8nm,0.3s,baz=302,slow=24,SNR=7.9 | | | | | | | |
| WRA | | | | LR | | LR | 22 02 27.4 | |
| | comp=Z,6µm,21.9s,baz=334,slow=39 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.29** | **134** | P | | **Pn** | **21 56 43.3** | **-1.4** |
| **WRAB** | **Tennant Creek** | **13.29** | **134** | Pn | | **Pn** | **21 56 43.3** | **-1.3** |
| **WRAB** | **Tennant Creek** | **13.29** | **134** | *i* P | | **Pn** | **21 56 43.4** | **-1.3** |
| **WB2** | **Warramunga Arr** | **13.30** | **134** | Pn | | **Pn** | **21 56 43.2** | **-1.6** |
| **WB2** | **Warramunga Arr** | **13.30** | **134** | P | | **Pn** | **21 56 42.6** | **-2.1** |
| **WR0** | **Warramunga Arr** | **13.44** | **134** | | | **Pn** | **21 56 45.2** | **-1.6** |
| **UGM** | **Wanagama** | **13.86** | **281** | P | | **Pn** | **21 56 54.2** | **+1.7** |
| **WRKA** | **Warakurna** | **14.66** | **165** | P | | **Pn** | **21 57 02.1** | **-1.3** |
| **WRKA** | **Warakurna** | **14.66** | **165** | P | | **Pn** | **21 57 01.5** | **-1.9** |
| **GIRL** | **Giralia** | **15.18** | **218** | P | | **Pn** | **21 57 12.1** | **+1.7** |
| **GIRL** | **Giralia** | **15.18** | **218** | P | | **Pn** | **21 57 11.1** | **+0.7** |
| | comp=Z,134nm,1.5s | | | | | | | |
| **AS31** | **Alice Springs** | **15.74** | **146** | | | **Pn** | **21 57 16.9** | **-0.9** |
| **AS31** | **Alice Springs** | **15.74** | **146** | P | | **Pn** | **21 57 16.8** | **-1.0** |
| | comp=Z,15nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **15.74** | **146** | | | **Pn** | **21 57 16.5** | **-1.3** |
| **ASAR** | **Alice Springs** | **15.74** | **146** | Pn | | **Pn** | **21 57 16.9** | **-0.9** |
| | comp=Z,2.3nm,0.3s,baz=318,slow=12,SNR=279 | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **22 00 06.3** | **-6.1** |
| | comp=Z,1.0nm,0.3s

TOO **Toolangi** 32.77 148 P **P** 22 00 11.8 +2.6
comp=Z,24nm,1.4s
QIZ **Qiongzhong** 32.88 334 P **P** 22 00 11.5 +1.3
QIZ S **S** 22 05 31.3 +3.2
QIZ LR LR
comp=Z,400nm,16.0s
QIZ LR LR
comp=Z,420nm,23.6s
QIZ LR LR
comp=Z,950nm,21.9s
CNB **Canberra Magne** 33.40 141 P **P** 22 00 17.4 +2.7
YULB **Yu-li** 34.12 355 P **P** 22 00 23.9 +3.0
HNR **Honiara** 35.14 91 LR LR 22 15 53.1
comp=Z,7µm,18.0s,baz=264,slow=38
JOW **Kunigami** 37.62 6 LR LR 22 15 26.4
comp=Z,457nm,21.7s,baz=171,slow=35
CMAR **Chiang Mai Arr** 38.34 319 P **P** 22 00 55.7 -1.5
CMAR **Chiang Mai Arr** 38.34 319 P **P** 22 00 55.8 -1.4
comp=Z,2.4nm,0.3s,baz=143,slow=6.6,SNR=10
CMAR LR LR 22 18 13.3
comp=Z,556nm,21.1s,baz=140,slow=39
comp=Z,2.4nm,0.3s
CMAR **Chiang Mai Arr** 38.34 319 *ce*P **P** 22 00 56.2 -1.0
CMAR pmax pmax
comp=Z,3.0nm,0.3s
GYA **Guiyang** 40.80 335 P **P** 22 01 16.8 -1.0
GYA PP **PP** 22 02 56.0 +4.1
GYA S **S** 22 07 31.5 +2.6
GYA pmax pmax
comp=Z,9.0nm,0.8s
GYA LR LR
comp=Z,370nm,18.4s
GYA LR LR
comp=Z,500nm,20.9s
GYA LR LR
comp=Z,600nm,21.5s
KMI **Kunming** 41.42 330 ⇑P **P** 22 01 22.8 -0.2
KMI S **S** 22 07 38.0 -0.4
KMI pmax pmax
comp=Z,11nm,1.1s
KMI LR LR
comp=Z,300nm,19.0s
KMI LR LR
comp=Z,440nm,22.8s
KMI LR LR
comp=Z,770nm,25.0s
JCJ **Chichijima** 41.50 24 LR LR 22 17 08.9
comp=Z,272nm,21.5s,baz=132,slow=34
DZM **Mont Dzumac** 41.84 111 *e*S S 22 08 03.4 +19
comp=Z,287nm,29.3s
DZM **Mont Dzumac** 41.84 111 LR LR 22 19 09.6
comp=Z,1µm,18.2s,baz=284,slow=36
NJ2 **Nanjing** 42.93 353 *e*P **P** 22 01 36.0 +1.1
NJ2 pmax pmax
comp=Z,7.0nm,0.6s
PZH **PanZhiHua** 43.07 330 P **P** 22 01 39.0 +2.7
PZH S **S** 22 08 00.5 -1.9
PZH pmax pmax
comp=Z,20nm,1.3s
PZH pmax pmax
comp=Z,100nm,5.9s
PZH LR LR
comp=Z,300nm,18.8s
PZH LR LR
comp=Z,360nm,18.4s
PZH LR LR
comp=Z,550nm,21.6s
TNCH **TengChong** 43.58 325 P **P** 22 01 40.0 -0.5
TNCH pP pP 22 01 43.0 0.0
TNCH S **S** 22 08 10.0 -0.1
TNCH SS **SS** 22 11 17.5 -7.7
TNCH pmax pmax
comp=Z,16nm,1.4s
TNCH pmax pmax
comp=Z,100nm,3.3s
TNCH LR LR
comp=Z,310nm,18.0s
TNCH LR LR
comp=Z,330nm,16.0s
TNCH LR LR
comp=Z,800nm,19.9s
JNU **Nakatsue** 44.14 8 LR LR 22 19 51.0
comp=Z,332nm,21.1s,baz=174,slow=36
CD2 **Chengdu** 45.92 335 P **P** 22 01 57.8 -1.1
CD2 pP sP 22 02 02.5 -0.1
CD2 S **S** 22 08 39.8 -3.8
CD2 sS sS 22 08 52.5 +4.8
CD2 pmax pmax
comp=Z,20nm,0.8s
CD2 pmax pmax
comp=Z,90nm,7.8s
CD2 LR LR
comp=Z,490nm,16.1s
CD2 LR LR
comp=Z,460nm,19.6s
CD2 LR LR
comp=Z,540nm,19.4s
LYN **LuoYang** 46.48 347 P **P** 22 02 05.0 +1.8
LYN pmax pmax
comp=Z,14nm,1.0s
XAN **Xi'an** 46.93 342 P **P** 22 02 04.8 -2.0
XAN S **S** 22 08 58.0 0.0
XAN pmax pmax
comp=Z,14nm,1.0s
XAN LR LR
comp=Z,560nm,20.4s
XAN LR LR
comp=Z,290nm,19.8s
XAN LR LR
comp=Z,940nm,22.5s
PALK **Pallekele** 46.94 291 LR LR 22 22 35.0
comp=Z,749nm,19.9s,baz=114,slow=37
KSAR **Wonju Array Be** 48.12 4 P **P** 22 02 14.2 -1.7
KSAR **Wonju Array Be** 48.12 4 P **P** 22 02 14.2 -1.7
KSRS **Korea Array** 48.13 4 P **P** 22 02 15.2 -0.8
comp=Z,1.8nm,0.8s,baz=187,slow=8.6,SNR=4.5
KSRS LR LR 22 22 38.3
comp=Z,252nm,21.6s,baz=190,slow=36
comp=Z,1.8nm,0.8s
HNS **HongShan** 48.78 350 ⇑P **P** 22 02 23.0 +2.0
HNS PP **PP** 22 04 17.5 +3.1
HNS S **S** 22 09 20.0 -4.1
HNS LR LR
comp=Z,500nm,18.8s
HNS LR LR
comp=Z,540nm,19.1s
MJAR **Matsushiro Arr** 48.89 15 P **P** 22 02 19.9 -2.1
comp=Z,6.1nm,1.0s,baz=189,slow=8.4,SNR=5.8
MJAR LR LR 22 21 36.1
comp=Z,379nm,21.1s,baz=212,slow=34
comp=Z,6.1nm,1.0s
LZH **Lanzhou** 50.47 339 *e*P **P** 22 02 33.0 -1.1
LZH pP sP 22 02 37.5 -0.4
LZH sP pwP 22 02 40.8 +2.0
LZH S **S** 22 09 43.5 -4.6
LZH pmax pmax
comp=Z,13nm,1.2s
LZH LR LR
comp=Z,310nm,15.8s
LZH LR LR
comp=Z,370nm,16.8s
LZH LR LR
comp=Z,750nm,15.8s
H08S2 **Diego Garcia H** 51.16 269 T T 22 57 51.3
baz=98,slow=75,SNR=71
H08S3 **Diego Garcia H** 51.17 269 T T 22 57 49.7
baz=98,slow=75,SNR=112
H08S1 **Diego Carcia H** 51.17 269 T T 22 57 50.2
baz=98,slow=75,SNR=34
LSA **Lhasa** 51.38 323 P **P** 22 02 41.0 -0.5
LSA pmax pmax
comp=Z,8.0nm,1.2s
LSA **Lhasa** 51.38 323 P **P** 22 02 40.1 -1.4
LSA IAmb IAmb 22 02 59.8
comp=Z,12nm,0.8s
LSA **Lhasa** 51.38 323 P **P** 22 02 40.1 -1.4
LSA pmax pmax
comp=Z,12nm,0.8s
RPZ **Rata Peaks** 51.97 138 LR LR 22 24 37.4
comp=Z,1µm,19.7s,baz=309,slow=36
SNY **Shenyang** 52.38 359 ⇓P **P** 22 02 49.3 +1.2
SNY S **S** 22 10 10.5 -3.4
SNY pmax pmax
comp=Z,13nm,0.8s
SNY pmax pmax
comp=Z,91nm,10.4s
SNY LR LR
comp=Z,200nm,19.4s
SNY LR LR
comp=Z,160nm,19.9s
SNY LR LR
comp=Z,280nm,18.5s
MSVF **Nonsavu** 52.44 104 LR LR 22 23 36.8
comp=Z,468nm,21.1s,baz=290,slow=34
HHC **Hu-ho-hao-te** 52.72 348 *e*P **P** 22 02 52.3 +1.4
HHC pP pwP 22 02 56.5 +0.9
HHC pmax pmax
comp=Z,7.0nm,0.5s
HHC pmax pmax
comp=Z,63nm,4.5s
HHC LR LR
comp=Z,160nm,18.0s
HHC LR LR
comp=Z,120nm,17.5s
HHC LR LR
comp=Z,250nm,17.5s
BTO **Baotou** 52.83 346 *e*P **P** 22 02 54.8 +3.2
BTO PP **PP** 22 04 56.0 +4.7
BTO S **S** 22 10 25.0 +4.7
BTO pmax pmax
comp=Z,19nm,0.6s
BTO pmax pmax
comp=Z,150nm,3.8s
BTO LR LR
comp=Z,520nm,14.9s
BTO LR LR
comp=Z,350nm,11.7s
BTO LR LR
comp=Z,1µm,19.2s
URZ **Urewera** 54.41 130 LR LR 22 26 16.6
comp=Z,1µm,20.1s,baz=32,slow=36
GTA **Gaotai** 54.90 337 P **P** 22 03 05.8 -1.0
GTA pP sP 22 03 10.3 -0.3
GTA S **S** 22 10 46.0 -2.5
GTA sS sS 22 10 58.8 +6.1
GTA SS **SS** 22 14 26.5 -5.8
GTA pmax pmax
comp=Z,5.0nm,1.3s
GTA LR LR
comp=Z,180nm,20.3s
GTA LR LR
comp=Z,120nm,21.9s
GTA LR LR
comp=Z,280nm,24.3s
USRK **Ussuriysk Ar.** 55.19 7 P **P** 22 03 09.1 +0.4
comp=Z,2.1nm,0.5s,baz=189,slow=6.3,SNR=7.7
USRK LR LR 22 25 28.2
comp=Z,163nm,21.8s,baz=189,slow=35
comp=Z,2.1nm,0.5s
MDJ **Mudanjiang** 55.37 5 P **P** 22 03 10.8 +0.8
MDJ PP **PP** 22 05 16.5 +2.5
MDJ S **S** 22 10 52.8 -1.6
MDJ pmax pmax
comp=Z,11nm,0.8s
MDJ pmax pmax
comp=Z,240nm,4.1s
MDJ LR LR
comp=Z,280nm,17.2s
MDJ LR LR
comp=Z,450nm,20.9s
RAO **Raoul Island** 56.78 118 LR LR 22 28 02.4
comp=Z,2µm,18.3s,baz=224,slow=36
ASAJ **Asahikawa** 57.15 16 LR LR 22 26 48.4
comp=Z,284nm,21.9s,baz=186,slow=35
KLR **Kul'dur** 60.14 6 LR LR 22 29 27.2
comp=Z,153nm,21.8s,baz=186,slow=36
ULN **Ulaanbaatar** 60.38 347 *ce*P **P** 22 03 43.3 -2.1
ULN pmax pmax
comp=Z,3.0nm,1.0s
SONM **Songino Array** 60.51 346 P **P** 22 03 44.8 -1.4
SONM **Songino Array** 60.51 346 P **P** 22 03 44.3 -1.9
comp=Z,1.2nm,0.5s,baz=168,slow=5.0,SNR=10
SONM LR LR 22 31 49.5
comp=Z,289nm,20.0s,baz=174,slow=38
comp=Z,1.2nm,0.5s
SONM **Songino Array** 60.51 346 P **P** 22 03 44.8 -1.4
SONM pmax pmax
comp=Z,5.0nm,1.1s
HEH **HeiHe** 60.86 2 *e*P **P** 22 03 47.5 -0.9
HEH pP **sP** 22 03 51.0 -1.1
HEH S **S** 22 12 08.5 +2.5
HEH pmax pmax
comp=Z,7.0nm,1.0s
HEH LR LR
comp=Z,340nm,21.5s
HEH LR LR
comp=Z,170nm,21.8s
HEH LR LR
comp=Z,450nm,21.4s
ZAK **Zakamensk** 63.63 345 *e*P **P** 22 04 05.0 -2.1
ZAK pmax pmax
comp=Z,5.0nm,1.2s
WMQ **Urumqi** 63.73 331 *e*P **P** 22 04 08.0 +0.2
WMQ pP sP 22 04 11.3 -0.3
WMQ S **S** 22 12 41.0 -1.6
WMQ pmax pmax
comp=Z,15nm,0.9s
WMQ pmax pmax
comp=Z,100nm,4.1s
WMQ LR LR
comp=Z,230nm,19.5s
WMQ LR LR
comp=Z,260nm,21.5s
WMQ LR LR
comp=Z,260nm,24.2s
ZEA **Zeya** 64.34 2 *e*P **P** 22 04 11.4 -0.1
ZEA *e*S **S** 22 12 52.3 +2.7
ZEA smax smax
comp=N,100nm,7.4s
MOY **Mondy** 65.40 344 *e*P **P** 22 04 17.8 -0.8
MOY pmax pmax
comp=Z,20nm,1.6s
NIL **Nilore** 65.62 315 P **P** 22 04 19.1 -1.2
NIL **Nilore** 65.62 315 P **P** 22 04 19.2 -1.2
NIL pmax pmax
comp=Z,13nm,1.1s
KSH **Kashi** 67.20 321 P **P** 22 04 30.0 -0.5
KSH pP sP 22 04 33.5 -0.6
KSH pmax pmax
comp=Z,4.0nm,1.0s
KSH LR LR
comp=Z,380nm,18.9s
KSH LR LR
comp=Z,310nm,22.0s
KSH LR LR
comp=Z,630nm,24.0s
DGZ **Jazzator, Alta** 68.35 335 *c i*P **P** 22 04 36.6 -0.9
DGZ pmax pmax
comp=Z,8.0nm,1.0s
MK31 **Makanchi Array** 68.50 330 P **P** 22 04 36.6 -1.8
MK31 IAmb IAmb 22 05 11.3
comp=Z,12nm,1.2s
MK31 **Makanchi Array** 68.50 330 ⇑ *i*P **P** 22 04 36.5 -1.9
MKAR **Makanchi Array** 68.50 330 P **P** 22 04 37.2 -1.2
MKAR **Makanchi Array** 68.50 330 P **P** 22 04 37.4 -1.0
comp=Z,3.2nm,0.5s,baz=138,slow=4.9,SNR=51
MKAR LR LR 22 39 13.3
comp=Z,158nm,19.2s,baz=183,slow=40
comp=Z,3.2nm,0.5s
MAKZ **Makanchi** 68.67 330 P **P** 22 04 37.9 -1.5
MAKZ IAmb IAmb 22 05 11.6
comp=Z,7.7nm,1.1s
MAKZ **Makanchi** 68.67 330 P **P** 22 04 37.9 -1.5
MAKZ pmax pmax
comp=Z,8.0nm,1.1s
BOOM **Boomskoye usch** 69.04 324 P **P** 22 04 40.7 -1.3
BOOM IAmb IAmb 22 05 14.7
comp=Z,6.4nm,1.1s
BOOM **Boomskoye usch** 69.04 324 P **P** 22 04 40.7 -1.3
BOOM pmax pmax
comp=Z,6.0nm,1.1s
KBL **Kabul** 69.06 313 P **P** 22 04 41.0 -1.3
KBL IAmb IAmb 22 05 15.1
comp=Z,11nm,0.8s
KBL **Kabul** 69.06 313 P **P** 22 04 41.0 -1.3
KBL pmax pmax
comp=Z,11nm,0.9s
MAW **Mawson** 69.37 201 P **P** 22 04 45.0 +1.6
comp=Z,1.6nm,0.6s,baz=69,slow=5.8,SNR=3.8
MAW LR LR 22 30 42.7
comp=Z,632nm,21.8s,baz=58,slow=32
comp=Z,1.6nm,0.6s
PETK **Petropavlovsk-** 69.78 21 P **P** 22 04 47.8 +1.7
comp=Z,2.9nm,0.6s,baz=218,slow=11,SNR=1.9
PETK LR LR 22 34 29.9
comp=Z,64nm,21.3s,baz=216,slow=35
comp=Z,2.9nm,0.6s
DRK **Karamyk** 69.80 319 P **P** 22 04 45.5 -1.5
DRK IAmb IAmb 22 05 17.7
comp=Z,6.9nm,0.9s
DRK **Karamyk** 69.80 319 P **P** 22 04 45.5 -1.5
DRK pmax pmax
comp=Z,7.0nm,0.9s
AAK **Ala-Archa** 69.97 323 P **P** 22 04 45.9 -1.9
AAK **Ala-Archa** 69.97 323 LR LR 22 41 01.3
comp=Z,165nm,20.5s,baz=124,slow=41
AAK **Ala-Archa** 69.97 323 *e*P **P** 22 04 46.6 -1.2
AAK pmax pmax
comp=Z,3.0nm,1.0s
H04N2 **CROZET ISLANDS** 70.14 225 T T 23 21 47.5
baz=83,slow=75,SNR=155
H04N3 **CROZET ISLANDS** 70.16 225 T T 23 21 46.3
baz=83,slow=75,SNR=171
H04N1 **CROZET ISLANDS** 70.16 225 T T 23 21 47.4
baz=83,slow=75,SNR=190
SBA **Scott Base** 70.39 171 P **P** 22 04 50.3 +0.7
SBA **Scott Base** 70.39 171 P **P** 22 04 50.3 +0.7
SBA pmax pmax
comp=Z,43nm,2.0s
GAR **Garm** 70.50 318 P **P** 22 04 50.2 -0.9
BTK **Batken** 70.75 319 P **P** 22 04 51.0 -1.5
BTK IAmb IAmb 22 05 24.6
comp=Z,16nm,1.6s
BTK **Batken** 70.75 319 P **P** 22 04 51.0 -1.5
BTK pmax pmax
comp=Z,16nm,1.6s
CHGR **Chuyangaron** 71.09 317 P **P** 22 04 53.3 -1.3
CHGR **Chuyangaron** 71.09 317 P **P** 22 04 53.3 -1.3
CHGR pmax pmax
comp=Z,57nm,1.5s
SIMJ **Simiganj** 71.19 317 P **P** 22 04 53.4 -1.9
SIMJ IAmb IAmb 22 05 27.4
comp=Z,10nm,1.1s
WSAR **Wadi Sarin** 72.56 299 LR LR 22 38 25.2
comp=Z,311nm,19.1s,baz=126,slow=37
KK31 **Karatay Array** 72.63 322 P **P** 22 05 02.0 -1.7
KK31 **Karatay Array** 72.63 322 P **P** 22 05 02.0 -1.7
KK31 pmax pmax
comp=Z,3.0nm,1.1s
KKAR **Karatay Array** 72.63 322 P **P** 22 05 02.5 -1.1
KKAR **Karatay Array** 72.63 322 P **P** 22 05 02.3 -1.4
KKAR IAmb IAmb 22 05 54.3
comp=Z,2.5nm,1.1s
KKAR **Karatay Array** 72.63 322 P **P** 22 05 02.5 -1.1
ZAA0 **Zalesovo Array** 72.65 337 P **P** 22 05 01.8 -1.7
ZAA0 IAmb IAmb 22 05 33.8
comp=Z,9.4nm,0.9s
ZALV **Zalesovo Beam** 72.65 337 P **P** 22 05 01.5 -2.0
ZALV **Zalesovo Beam** 72.65 337 P **P** 22 05 01.8 -1.7
comp=Z,4.3nm,0.6s,baz=134,slow=4.3,SNR=19
ZALV LR LR 22 38 38.6
comp=Z,136nm,20.2s,baz=140,slow=37
comp=Z,4.3nm,0.6s
ZALV **Zalesovo Beam** 72.65 337 *i* P **P** 22 05 02.0 -1.5
ZALV pmax pmax
comp=Z,4.0nm,0.6s
YAK **Yakutsk** 72.73 3 LR LR 22 40 22.5
comp=Z,118nm,19.0s,baz=200,slow=39
KURBB **Kurchatov Arra** 72.95 332 P **P** 22 05 03.6 -1.7
comp=Z,2.2nm,0.7s,baz=143,slow=4.9,SNR=15
KURBB LR LR 22 41 59.8
comp=Z,271nm,18.7s,baz=193,slow=40
comp=Z,2.2nm,0.7s
KURK **Kurchatov** 72.97 332 P **P** 22 05 04.0 -1.5
KURK IAmb IAmb 22 05 37.2
comp=Z,12nm,1.1s
KURK **Kurchatov** 72.97 332 *ce*P **P** 22 05 04.3 -1.2
KURK pmax pmax
comp=Z,8.0nm,1.2s
RAR **Rarotonga** 73.18 109 LR LR 22 36 24.0
comp=Z,118nm,19.9s,baz=268,slow=35
MA2 **Magadan** 73.31 14 LR LR 22 35 22.5
comp=Z,129nm,21.9s,baz=241,slow=34
SHEM **Shemya Is, Ala** 76.26 29 LR LR 22 34 35.7
comp=Z,75nm,21.1s,baz=57,slow=32
SEY **Seymchan** 76.66 13 *ce*P **P** 22 05 27.1 +0.6
SEY pmax pmax
comp=Z,1.0nm,0.5s
BVAR **Borovoye Array** 78.38 330 P **P** 22 05 35.6 -0.8
comp=Z,1.5nm,0.7s,baz=160,slow=9.0,SNR=6.4
comp=Z,1.5nm,0.7s
BRVK **Borovoye** 78.45 330 P **P** 22 05 35.0 -1.9
BRVK **Borovoye** 78.45 330 *i* P **P** 22 05 34.9 -1.9
BRVK pmax pmax
comp=Z,11nm,2.5s
QSPA **South Pole Qui** 79.19 180 P **P** 22 05 40.9 -0.1
QSPA IAmb IAmb 22 05 52.1
comp=Z,15nm,1.4s
QSPA **South Pole Qui** 79.19 180 P **P** 22 05 41.4 +0.5
comp=Z,4.0nm,1.1s,baz=312,slow=3.4,SNR=4.5
QSPA LR LR 22 40 28.4
comp=Z,1µm,18.2s,baz=342,slow=36
comp=Z,4.0nm,1.1s
ABKAR **Akbulak array** 82.06 323 P **P** 22 05 54.8 -1.5
ABKAR **Akbulak array** 82.06 323 P **P** 22 05 54.7 -1.6
ABKAR IAmb IAmb 22 06 16.8
comp=Z,5.4nm,1.2s
TIXI **Tiksi** 82.33 1 LR LR 22 44 25.1
comp=Z,215nm,20.3s,baz=204,slow=37
TBI **Tubuai** 82.41 112 *e*LR LR 22 32 38.8
comp=Z,1µm,26.5s
TBI *e*LR LR 22 32 42.0
comp=Z,2µm,27.8s
ELIB **Princess Elisa** 83.17 198 *dx* x 22 06 05.2
PPT2 **Papeete2** 83.18 107 *e*LR LR 22 33 09.9
comp=Z,257nm,23.5s
PPT2 *e*LR LR 22 33 11.4
comp=Z,196nm,29.0s
PPT **Papeete** 83.18 107 LR LR 22 41 19.8
comp=Z,91nm,20.3s,baz=238,slow=34
AKTO **Aktyubinsk** 83.70 324 LR LR 22 47 35.0
comp=Z,196nm,21.9s,baz=204,slow=39
BILL **Bilibino** 84.15 15 ⇑ *e*P **P** 22 06 07.6 +0.9
BILL *e*PPP PPP 22 11 14.1
BILL pmax pmax
comp=Z,4.0nm,1.4s
RAYN **Ar Rayn** 84.16 295 P **P** 22 06 07.4 -0.5
RAYN IAmb IAmb 22 06 25.1
comp=Z,7.9nm,0.8s
RAYN **Ar Rayn** 84.16 295 P **P** 22 06 07.4 -0.5
RAYN pmax pmax
comp=Z,8.0nm,0.8s
SVE **Sverdlovsk** 85.17 330 *e*P **P** 22 06 12.6 +0.5
SVE pmax pmax
comp=Z,12nm,1.1s
ARU **Arti** 86.01 329 P **P** 22 06 15.2 -1.1
ARU IAmb IAmb 22 06 48.7
comp=Z,7.6nm,1.1s
ARU **Arti** 86.01 329 P **P** 22 06 14.8 -1.4
comp=Z,1.9nm,0.7s,baz=208,slow=8.1,SNR=4.0
ARU LR LR 22 50 04.7
comp=Z,209nm,19.0s,baz=127,slow=40
comp=Z,1.9nm,0.7s
ARU **Arti** 86.01 329 *d i*P **P** 22 06 14.9 -1.4
ARU 22 09 34.9
ARU S **SKSac** 22 16 40.6 -1.5
ARU SS **SS** 22 22 28.1 -0.3
ARU pmax pmax
comp=Z,8.0nm,1.6s
ARU **Arti** 86.01 329 P **P** 22 06 15.0 -1.3
AKT **Akhty** 87.20 313 *e*P **P** 22 06 22.7 0.0
AKT *e*S **S** 22 17 07.9 +5.2
AKT pmax pmax
comp=Z,21nm,1.1s
FURI **Furi** 87.36 280 LR LR 22 40 54.0
comp=Z,173nm,21.9s,baz=133,slow=33
MAK **Makhachkala** 87.79 314 *c i*P P 22 06 11.7 -14
MAK *e*SS SS 22 22 51.8 -3.3
MAK *e*SSS SSS 22 26 23.5
MAK pmax pmax
comp=Z,284nm,1.2s
MAK MLR MLR
comp=Z,339nm,19.0s
GNI **Garni** 89.01 311 LR LR 22 54 53.0
comp=Z,57nm,18.2s,baz=118,slow=42
SIRT **Sirnak** 90.11 308 P **P** 22 06 34.9 -1.6
BELG **Belogornoye** 90.47 323 LR LR 22 52 14.1
comp=Z,122nm,19.9s,baz=108,slow=39

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **90.62** | **195** | P | **P** | **22 06 37.9** | **-0.3** |
| SNAA | | | | IAmb | IAmb | 22 06 46.6 | |
| | comp=Z,4.6nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **90.62** | **195** | ⇑P | **P** | **22 06 40.3** | **+2.0** |
| | comp=Z,32nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **90.62** | **195** | P | **P** | **22 06 39.9** | **+1.6** |
| | comp=Z,2.4nm,1.0s,baz=165,slow=3.3,SNR=6.6 | | | | | | |
| SNAA | | | | LR | LR | 22 44 00.0 | |
| | comp=Z,374nm,21.8s,baz=110,slow=33 | | | | | | |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **90.62** | **195** | *ce*P | **P** | **22 06 40.7** | **+2.5** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **GURO** | **Guroymak-BITLI** | **90.66** | **309** | P | **P** | **22 06 37.9** | **-1.3** |
| GURO | | | | IAmb | IAmb | 22 06 45.9 | |
| | comp=Z,9.4nm,1.4s | | | | | | |
| **KBZ** | **Khabaz** | **91.23** | **314** | LR | LR | 22 55 05.5 | |
| | comp=Z,53nm,21.7s,baz=88,slow=41 | | | | | | |
| **KIRV** | **Kirov** | **91.39** | **330** | LR | LR | 22 52 52.4 | |
| | comp=Z,156nm,20.1s,baz=120,slow=39 | | | | | | |
| **KVAR** | **Kislovodsk Arr** | **91.43** | **314** | LR | LR | 22 55 48.9 | |
| | comp=Z,48nm,21.6s,baz=248,slow=41 | | | | | | |
| **KIV** | **Kislovodsk** | **91.43** | **314** | *e*P | **P** | **22 06 40.2** | **-2.3** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,93nm,20.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **92.22** | **194** | ⇑P | **P** | **22 06 48.2** | **+2.6** |
| | comp=Z,1.6nm,0.6s,baz=137,slow=4.1 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **92.53** | **193** | ⇑P | **P** | **22 06 48.0** | **+0.9** |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **92.62** | **194** | ⇑P | **P** | **22 06 45.2** | **-2.2** |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **92.67** | **240** | LR | LR | 22 42 31.1 | |
| | comp=Z,156nm,20.5s,baz=101,slow=32 | | | | | | |
| **LBTB** | **Lobatse** | **93.21** | **244** | LR | LR | 22 47 28.5 | |
| | comp=Z,161nm,18.3s,baz=98,slow=35 | | | | | | |
| **EIL** | **Elat** | **94.68** | **299** | LR | LR | 22 51 19.4 | |
| | comp=Z,239nm,21.5s,baz=70,slow=37 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **94.86** | **303** | LR | LR | 22 54 22.2 | |
| | comp=Z,281nm,20.0s,baz=51,slow=39 | | | | | | |
| **SUR** | **Sutherland** | **95.40** | **236** | LR | LR | 22 46 01.2 | |
| | comp=Z,207nm,18.9s,baz=109,slow=33 | | | | | | |
| **KDAK** | **Kodiak Island** | **95.42** | **32** | LR | LR | 22 46 39.1 | |
| | comp=Z,72nm,21.2s,baz=265,slow=33 | | | | | | |
| **RKT** | **Rikitea** | **95.52** | **115** | *e*LR | LR | 22 38 52.7 | |
| | comp=Z,2µm,27.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **97.29** | **309** | LR | LR | 22 54 53.5 | |
| | comp=Z,170nm,21.9s,baz=112,slow=38 | | | | | | |
| **OBN** | **Obninsk** | **97.46** | **325** | LR | LR | 22 56 42.5 | |
| | comp=Z,120nm,20.0s,baz=154,slow=39 | | | | | | |
| **I23K** | **Minto, Yukon-K** | **98.20** | **25** | P | **P** | **22 07 10.5** | **-2.3** |
| **H23K** | **Yukon River** | **98.22** | **25** | P | **P** | **22 07 11.3** | **-1.6** |
| **ILAR** | **Eielson Array** | **99.20** | **26** | P | **Pdif** | **22 07 16.5** | **-0.8** |
| | comp=Z,0.7nm,0.9s,baz=257,slow=3.6,SNR=4.5 | | | | | | |
| ILAR | | | | LR | LR | 22 48 40.4 | |
| | comp=Z,36nm,20.7s,baz=255,slow=33 | | | | | | |
| | comp=Z,0.7nm,0.9s | | | | | | |
| **BORG** | **Borgarnes** | **121.07** | **344** | *c i*PKIKP | **PKiKP** | **22 12 32.3** | **+3.8** |
| **PDAR** | **Pinedale Array** | **123.58** | **46** | PKP | **PKiKP** | **22 12 36.1** | **+1.7** |
| | comp=Z,0.4nm,0.5s,baz=242,slow=1.9,SNR=3.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.87** | **279** | PKP | **PKiKP** | **22 12 35.5** | **0.0** |
| | comp=Z,1.4nm,0.7s,baz=44,slow=3.1,SNR=8.4 | | | | | | |
| **KAN01** | **Argonia South** | **134.04** | **48** | PKPdf | **PKPdf** | **22 12 51.2** | **-2.7** |
| **AQDB** | **Aquidauana** | **148.91** | **180** | PKPbc | **PKPbc** | **22 13 23.8** | **-1.0** |
| **LPAZ** | **La Paz** | **150.41** | **155** | PKPdf | **PKPdf** | **22 13 22.9** | **-1.3** |
| LPAZ | | | | PKPab | **sPKPbc** | **22 13 33.0** | **-0.2** |
| **LPAZ** | **La Paz** | **150.41** | **155** | PKPbc | **PKiKP** | **22 13 30.4** | **+0.2** |
| | comp=Z,4.3nm,0.8s,baz=106,slow=3.4,SNR=8.2 | | | | | | |
| **LPAZ** | **La Paz** | **150.41** | **155** | PKIKP | **PKPdf** | **22 13 22.9** | **-1.3** |
| LPAZ | | | | | | 22 13 33.0 | |

*IPEC **31** 21:54:53.3±0.2,50.˚16N× 19.˚10E, h1km, ML2.8/4, Error ellipse: s-maj=2.5km s-min=1.0km az=167.0*
*VIE **31** 21:54:53.1±0.5,50.˚24N× 19.˚05E, h0km, mb2.7/8, ml2.7/5, ms3.2/3, Error ellipse: s-maj=6.0km s-min=2.6km az=168.0, Suspected Mining induced.*
*PRU **31** 21:54:53.5,50.˚17N× 19.˚06E, h0km*
*IDC **31** 21:54:55.0±2.3,50.˚04N× 19.˚08E, h0km, mbtmp3.3/5, ML2.6/5, Error ellipse: s-maj=38.5km s-min=10.0km az=132.0*

**ISC 31 21:54:52.1**±0.7,**50.˚21N**±0.˚03×**19.˚19E**±0.˚02,**h0km**,**n51**, σ1ᵍ**39**/70,**8C-2D**,**Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **OJC** | **Ojcow** | **0.39** | **89** | *e*Pg | | **Pb** | **21 55 02.0** | **+0.1** |
| OJC | | | | *e*Sg | | **Sb** | **21 55 08.2** | **-0.3** |
| **OKC** | **Ostrava-Krasne** | **0.77** | **241** | *e*PG | | **Pg** | **21 55 07.1** | **+0.3** |
| OKC | | | | *e*SG | | **Sg** | **21 55 16.1** | **-0.6** |
| | comp=Z,84nm,0.4s | | | | | | | |
| **NIE** | **Niedzica** | **1.07** | **137** | *e*Pg | | **Pg** | **21 55 13.1** | **+0.5** |
| NIE | | | | *e*Sg | | **Sg** | **21 55 27.4** | **+0.9** |
| **LANS** | **Liptovska Anna** | **1.08** | **170** | *e*PG | | **Pg** | **21 55 12.5** | **-0.2** |
| LANS | | | | *e*SG | | **Sg** | **21 55 26.0** | **-0.6** |
| LANS | | | | *e*LG | | Lg | 21 55 26.5 | |
| **MORC** | **Moravsky Berou** | **1.15** | **248** | *e*Pg | | **Pg** | **21 55 13.9** | **-0.1** |
| | baz=68 | | | | | | | |
| MORC | | | | *e*Sg | | **Sg** | **21 55 26.9** | **-2.0** |
| | 146nm,0.5s,baz=68 | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.15** | **248** | ⇑P | | **Pg** | **21 55 14.0** | **0.0** |
| **KRLC** | **Kraliky** | **1.56** | **266** | *e*SG | | **Sg** | **21 55 40.7** | **-1.3** |
| | comp=Z,61nm,0.4s | | | | | | | |
| **JAVC** | **Velka Javorina** | **1.68** | **217** | *e*Pn | | **Pn** | **21 55 22.5** | **-0.2** |
| | baz=35 | | | | | | | |
| **VYHS** | **Vyhne** | **1.73** | **188** | *e*PN | | **Pn** | **21 55 22.5** | **-1.0** |
| VYHS | | | | *e*SN | | **Sn** | **21 55 43.6** | **-2.7** |
| **DPC** | **Dobruska-Polom** | **1.84** | **275** | *e*PG | | **Pn** | **21 55 25.6** | **+0.6** |
| DPC | | | | *e*SG | | **Sn** | **21 55 49.4** | **+0.4** |
| | comp=Z,52nm,0.4s | | | | | | | |
| **VRAC** | **Vranov** | **1.91** | **243** | *e*Pn | | **Pn** | **21 55 25.8** | **-0.1** |
| | baz=61 | | | | | | | |
| VRAC | | | | *e*Sg | | **Sb** | **21 55 51.0** | **-1.2** |
| | 68nm,0.7s,baz=61 | | | | | | | |
| **VRAC** | **Vranov** | **1.91** | **243** | Pn | | **Pn** | **21 55 26.6** | **+0.7** |
| | 4.9nm,0.3s,baz=66,slow=15,SNR=25 | | | | | | | |
| VRAC | | | | Lg | | Lg | 21 55 50.5 | |
| | 9.4nm,0.3s,baz=342,slow=21,SNR=5.5 | | | | | | | |
| **VRAC** | **Vranov** | **1.91** | **243** | ⇑P | | **Pn** | **21 55 26.6** | **+0.7** |
| **KECS** | **Kecovo** | **1.93** | **153** | *e*SG | | **Sn** | **21 55 50.8** | **-0.2** |
| **KSP** | **Ksiaz** | **1.95** | **290** | *e*Pg | | **Pn** | **21 55 27.2** | **+0.7** |
| KSP | | | | *e*Sg | | **Sb** | **21 55 53.0** | **-0.4** |
| **CHVC** | **Chvalec** | **2.04** | **282** | *e*PG | | **Pn** | **21 55 28.3** | **+0.6** |
| **KRUC** | **Moravsky** | **2.15** | **239** | *e*Pn | | **Pn** | **21 55 29.2** | **+0.1** |
| | baz=57 | | | | | | | |
| KRUC | | | | *e*Sg | | **Sb** | **21 55 58.1** | **-0.9** |
| | 60nm,0.6s,baz=57 | | | | | | | |
| **PSZ** | **Piszkesteto** | **2.34** | **168** | ⇑P | | **Pg** | **21 55 38.3** | **+1.4** |
| **KOLS** | **Kolonicke sedl** | **2.38** | **121** | *e*PN | | **Pn** | **21 55 32.5** | **+0.2** |
| KOLS | | | | *e*LG | | Lg | 21 56 16.5 | |
| **SRO** | **Srobarova** | **2.47** | **194** | *e*PG | | **Pg** | **21 55 39.3** | **0.0** |
| **PRU** | **Pruhonice** | **3.00** | **268** | *e*SG | | **Sb** | **21 56 25.3** | **+1.8** |
| | comp=Z,19nm,0.5s | | | | | | | |
| **RONA** | **Rosalia, Austr** | **3.15** | **218** | *e*Pn | | **Pn** | **21 55 42.8** | **-0.2** |
| | 2.0nm,0.4s | | | | | | | |
| RONA | | | | *e*Sn | | **Sn** | **21 56 23.8** | **+2.5** |
| | 9.0nm,0.5s | | | | | | | |
| **CONA** | **Conrad Observa** | **3.16** | **225** | *e*Pn | | **Pn** | **21 55 42.9** | **-0.3** |
| | 0.8nm,0.3s | | | | | | | |
| CONA | | | | *e*Sn | | **Sn** | **21 56 21.1** | **-0.5** |
| | 5.8nm,0.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **3.41** | **283** | Pg | | **Pg** | **21 55 56.9** | **-0.5** |
| BRG | | | | Sg | | **Sg** | **21 56 39.4** | **-2.1** |
| BRG | | | | Amp | | | 21 56 52.2 | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **CKRC** | **Cesky Krumlov** | **3.47** | **248** | *e*SG | | **Sb** | **21 56 39.3** | **+2.2** |
| | comp=Z,25nm,0.5s | | | | | | | |
| **KHC** | **Kasperske Hory** | **3.80** | **256** | *e*PN | | **Pn** | **21 55 52.0** | **+0.1** |
| KHC | | | | *e*PG | | **Pb** | **21 55 59.3** | **-0.7** |
| KHC | | | | *e*SG | | **Sg** | **21 56 52.0** | **-2.1** |
| | comp=Z,16nm,0.6s | | | | | | | |
| **GERES** | **GERESS Array B** | **3.83** | **251** | Pn | | **Pn** | **21 55 54.6** | **+2.4** |
| | comp=Z,0.2nm,0.3s,baz=70,slow=15,SNR=2.7 | | | | | | | |
| GERES | | | | Lg | | Lg | 21 56 50.9 | |
| | comp=Z,4.5nm,0.3s,baz=65,slow=33,SNR=12 | | | | | | | |
| | comp=Z,0.4nm,0.4s | | | | | | | |
| **MOA** | **Molln** | **4.01** | **236** | *i* Pn | | **Pn** | **21 55 55.7** | **+1.0** |
| | comp=Z,0.5nm,0.2s | | | | | | | |
| MOA | | | | *e*Sn | | **Sn** | **21 56 45.1** | **+2.7** |
| | comp=Z,1.2nm,0.3s | | | | | | | |
| **CLL** | **Collm** | **4.08** | **288** | *e*Pg | | **Pg** | **21 56 12.0** | **+1.8** |
| CLL | | | | *e*Sg | | **Sg** | **21 57 03.0** | **0.0** |
| | comp=Z,13nm,0.6s | | | | | | | |
| **DRGR** | | **4.15** | **144** | ⇑P | | **Pn** | **21 55 57.9** | **+1.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SIRR** | **Siria** | **4.28** | **156** | ⇓P | | **Pn** | **21 55 57.3** | **-1.1** |
| **MARR** | **Marisel-Cluj** | **4.40** | **142** | ⇓P | | **Pn** | **21 56 00.9** | **+0.7** |
| **BURAR** | **Bucovina Array** | **4.75** | **121** | ⇑P | | **Pn** | **21 56 05.7** | **+0.8** |
| **SURR** | **Surduc** | **4.88** | **155** | ⇑P | | **Pn** | **21 56 05.5** | **-1.1** |
| **KBA** | **Koelnbreinsper** | **4.98** | **233** | *e*Pn | | **Pn** | **21 56 09.7** | **+1.5** |
| | comp=Z,0.9nm,0.4s | | | | | | | |
| KBA | | | | Sg | | **Sg** | **21 57 33.6** | **+1.5** |
| | comp=Z,2.6nm,0.5s | | | | | | | |
| **LESA** | **Schwarzleotal** | **5.13** | **240** | *i* Pn | | **Pn** | **21 56 09.8** | **-0.3** |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| LESA | | | | *e*Sg | | **Sg** | **21 57 32.7** | **-4.0** |
| | comp=Z,4.6nm,0.5s | | | | | | | |
| **GZR** | **Gura Zlata** | **5.39** | **152** | ⇑P | | **Pn** | **21 56 14.3** | **+0.6** |
| **BSD** | **Bornholm Skovb** | **5.55** | **334** | *e*P | | **Pn** | **21 56 16.2** | **+0.3** |
| BSD | | | | *e*S | | **Sn** | **21 57 17.6** | **-2.8** |
| BSD | | | | IAML | | | 21 57 24.8 | |
| | comp=Z,9.8nm,0.9s | | | | | | | |
| **LOT** | **Lotru** | **5.68** | **145** | ⇑P | | **Pn** | **21 56 19.4** | **+1.7** |
| **WTTA** | **Wattenberg** | **5.80** | **242** | *e*Sg | | **Sg** | **21 57 56.3** | **-2.0** |
| | comp=Z,6.2nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **6.07** | **245** | *e*Sn | | **Sn** | **21 57 32.9** | **-0.3** |
| | comp=Z,1.9nm,0.5s | | | | | | | |
| **RETA** | **Reutte** | **6.19** | **247** | *e*Sg | | **Sg** | **21 58 11.0** | **+0.1** |
| | comp=Z,4.2nm,0.5s | | | | | | | |
| **AKASG** | **Malin Array Be** | **6.43** | **82** | Lg | | Lg | 21 58 20.3 | |
| | comp=Z,0.8nm,0.3s,baz=265,slow=26,SNR=1.9 | | | | | | | |
| **LUNU** | **Lund** | **6.44** | **330** | *i* P | | **Pn** | **21 56 29.0** | **+0.9** |
| **DAVA** | **Damuels** | **6.81** | **248** | *e*Sg | | **Sg** | **21 58 34.3** | **+3.5** |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **BJUU** | **Bjuv** | **6.94** | **330** | *e*P | | **Pn** | **21 56 37.1** | **+2.2** |
| **DEL** | **Delary** | **7.03** | **335** | *i* P | | **Pn** | **21 56 36.0** | **-0.1** |
| **HFS** | **Hagfors** | **10.42** | **345** | Pn | | **Pn** | **21 57 23.6** | **+1.0** |
| | comp=Z,0.1nm,0.3s,baz=154,slow=17,SNR=1.7 | | | | | | | |
| | comp=Z,2.7nm,1.0s | | | | | | | |
| **NOA** | **NORSAR Array B** | **11.74** | **341** | Pn | | **Pn** | **21 57 38.8** | **-1.9** |
| | baz=152,slow=13,SNR=1.5 | | | | | | | |
| | comp=Z,0.2nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **11.89** | **16** | Pn | | **Pn** | **21 57 41.5** | **-1.2** |
| | comp=Z,0.3nm,0.3s,baz=191,slow=12,SNR=12 | | | | | | | |
| FINES | | | | Sn | | Sn | 21 59 46.3 | -10 |
| | baz=206,slow=22,SNR=1.7 | | | | | | | |
| | comp=Z,0.6nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **19.62** | **7** | Pn | | **Pn** | **21 59 23.1** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=184,slow=12,SNR=2.3 | | | | | | | |
| | comp=Z,2.3nm,0.9s | | | | | | | |

*IDC **31** 22:12:55.7±1.1, 10.˚43S× 124.˚60E, h0km, mb3.9/5, mbtmp3.9/8, ML3.7/3, MS3.8/3, Error ellipse: s-maj=119.4km s-min=20.8km az=57.0*
*NEIC **31** 22:12:57.7±2.0, 10.˚69S±0.˚05× 124.˚39E±0.˚09, h10km±1km, mb4.4/6, Error ellipse: s-maj=15.3km s-min=6.0km az=66.0*
*DJA **31** 22:12:58.4±1.2, 11.˚2S±7.˚× 12.˚4E±.˚, h11km±8km, M4.2/8, mb4.7/1, MLv4.0/8*

**ISC 31 22:12:56.8**±0.6,**10.˚73S**±0.˚06×**124.˚45E**±0.˚07,**h10km**,**n44**, σ1ᵍ**72**/38,**mb4.2/8**,**Timor region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **BATI** | **Baumata** | **0.94** | **304** | P | | **Pb** | **22 13 15.1** | **0.0** |
| **SOEI** | **Soe** | **0.99** | **349** | | | **Pn** | **22 13 18.5** | **+1.6** |
| **SOEI** | **Soe** | **0.99** | **349** | P | | **Pn** | **22 13 18.6** | **+1.7** |
| **MMRI** | **Maumere** | **3.02** | **314** | | | **Pn** | **22 13 44.0** | **-0.7** |
| **MMRI** | **Maumere** | **3.02** | **314** | P | | **Pn** | **22 13 42.9** | **-1.8** |
| **EDFI** | **Ende, Flores** | **3.36** | **306** | P | | **Pn** | **22 13 48.9** | **-0.6** |
| **BASI** | **Baing, Sumba** | **3.84** | **277** | P | | **Pn** | **22 13 55.1** | **-0.9** |
| **WBSI** | **Waikabubak, Su** | **5.10** | **282** | P | | **Pn** | **22 14 12.0** | **-1.3** |
| **KNRA** | **Kununurra** | **6.46** | **140** | | | **Pn** | **22 14 34.8** | **+2.8** |
| **MTN** | **Manton Dam** | **6.87** | **108** | | | **Pn** | **22 14 40.7** | **+3.1** |
| **KAPI** | **Kappang** | **7.34** | **320** | Pn | | **Pn** | **22 14 43.2** | **-1.0** |
| | 2.2nm,0.3s,baz=146,slow=16,SNR=1.8 | | | | | | | |
| KAPI | | | | LR | | LR | 22 17 34.5 | |
| | comp=Z,250nm,20.7s,baz=140,slow=39 | | | | | | | |
| | 9.2nm,0.5s | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **7.41** | **171** | | | **Pn** | **22 14 46.5** | **+1.4** |
| **FAKI** | **Fak Fak** | **10.96** | **45** | Pn | | **Pn** | **22 15 32.8** | **-1.0** |
| **MBWA** | **Marble Bar** | **11.31** | **203** | Pn | | **Pn** | **22 15 39.6** | **+1.0** |
| **PSA00** | **Pilbara Seismi** | **11.65** | **202** | Pn | | **Pn** | **22 15 45.9** | **+2.8** |
| **WB0** | **Warramunga Arr** | **13.13** | **134** | Pn | | **Pn** | **22 16 03.4** | **-0.1** |
| WB0 | | | | Sn | | **Sn** | **22 18 27.2** | **-2.6** |
| **WRA** | **Warramunga Arr** | **13.21** | **135** | Pn | | **Pn** | **22 16 05.3** | **+0.7** |
| | 0.2nm,0.3s,baz=300,slow=13,SNR=16 | | | | | | | |
| WRA | | | | Sn | | **Sn** | **22 18 27.8** | **-4.0** |
| | 0.5nm,0.3s,baz=306,slow=24,SNR=6.7 | | | | | | | |
| | 2.2nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **13.21** | **135** | Pn | | **Pn** | **22 16 05.7** | **+1.0** |
| **WB2** | **Warramunga Arr** | **13.22** | **135** | Pn | | **Pn** | **22 16 05.0** | **+0.2** |
| **WR0** | **Warramunga Arr** | **13.37** | **135** | Pn | | **Pn** | **22 16 06.9** | **+0.2** |
| **AS31** | **Alice Springs** | **15.70** | **146** | | | **Pn** | **22 16 39.5** | **+1.2** |
| **ASAR** | **Alice Springs** | **15.70** | **146** | Pn | | **Pn** | **22 16 39.1** | **+0.8** |
| **ASAR** | **Alice Springs** | **15.70** | **146** | Pn | | **Pn** | **22 16 38.8** | **+0.5** |
| | 0.4nm,0.3s,baz=318,slow=12,SNR=37 | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **22 19 28.2** | **-4.3** |
| | 0.2nm,0.3s,baz=314,slow=19,SNR=8.1 | | | | | | | |
| | 2.5nm,0.6s | | | | | | | |
| **FORT** | **Forrest** | **20.23** | **171** | P | | Pn | 22 17 34.6 | +0.6 |
| FORT | | | | IAmb | | IAmb | 22 17 39.4 | |
| | comp=Z,15nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **23.07** | **196** | P | | **P** | **22 18 03.4** | **+0.9** |
| NWAO | | | | IAmb | | IAmb | 22 18 17.2 | |
| | comp=Z,16nm,1.1s | | | | | | | |
| **BBOO** | **Buckleboo** | **24.43** | **156** | P | | **P** | **22 18 17.0** | **+1.2** |
| BBOO | | | | IAmb | | IAmb | 22 18 24.0 | |
| | comp=Z,9.3nm,0.9s | | | | | | | |
| **STKA** | **Stephens Creek** | **26.34** | **146** | P | | **P** | **22 18 36.3** | **+3.3** |
| | comp=Z,2.4nm,0.8s,baz=339,slow=12,SNR=2.3 | | | | | | | |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **TOO** | **Toolangi** | **32.74** | **148** | P | | **P** | **22 19 30.1** | **+0.3** |
| **DZM** | **Mont Dzumac** | **41.70** | **111** | LR | | LR | 22 40 07.9 | |
| | comp=Z,461nm,18.6s,baz=114,slow=39 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **51.34** | **269** | T | | T | 23 17 09.4 | |
| | baz=97,slow=74 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **51.35** | **269** | T | | T | 23 17 16.1 | |
| | baz=97,slow=74 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **51.35** | **269** | T | | T | 23 17 20.2 | |
| | baz=97 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.10** | **7** | LR | | LR | 22 46 28.2 | |
| | comp=Z,61nm,19.8s,baz=213,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **60.48** | **346** | P | | **P** | **22 23 06.7** | **-0.2** |
| | comp=Z,0.3nm,0.7s,baz=123,slow=5.3,SNR=2.4 | | | | | | | |
| | comp=Z,0.3nm,0.7s | | | | | | | |
| **MK31** | **Makanchi Array** | **68.53** | **330** | P | | **P** | **22 23 59.7** | **+0.2** |
| MK31 | | | | IAmb | | IAmb | 22 24 01.0 | |
| | comp=Z,2.8nm,1.1s | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.53** | **330** | P | | **P** | **22 23 59.5** | **0.0** |
| **MKAR** | **Makanchi Array** | **68.53** | **330** | P | | **P** | **22 23 59.0** | **-0.6** |
| | comp=Z,1.3nm,0.8s,baz=131,slow=7.5,SNR=11 | | | | | | | |
| | comp=Z,1.3nm,0.8s | | | | | | | |
| **H04N2** | **CROZET ISLANDS** | **70.33** | **225** | T | | T | 23 41 11.9 | |
| | baz=83,slow=75,SNR=8.3 | | | | | | | |
| **H04N3** | **CROZET ISLANDS** | **70.33** | **225** | T | | T | 23 41 11.1 | |
| | baz=83,slow=75,SNR=9.3 | | | | | | | |
| **H04N1** | **CROZET ISLANDS** | **70.34** | **225** | T | | T | 23 41 14.8 | |
| | baz=83,slow=75,SNR=10 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.66** | **337** | P | | **P** | **22 24 23.8** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **72.66** | **337** | P | | **P** | **22 24 22.8** | **-1.7** |
| | comp=Z,2.0nm,0.9s,baz=140,slow=4.8,SNR=6.3 | | | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.97** | **331** | P | | **P** | **22 24 25.8** | **-0.7** |
| | comp=Z,0.5nm,0.7s,baz=144,slow=4.8,SNR=4.6 | | | | | | | |
| | comp=Z,0.5nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.04** | **279** | PKP | | **PKPdf** | **22 31 57.0** | **+0.5** |
| | comp=Z,0.5nm,0.8s,baz=48,slow=2.1,SNR=2.9 | | | | | | | |

*NEIC **31** 22:20:19.9±2.5,5.˚72N± 0.˚06× 126.˚5E±0.˚1, h103km±9km, mb4.3/18, Error ellipse: s-maj=18.8km s-min=4.1km az=68.0*
*IDC **31** 22:20:20.9±1.6,5.˚62N× 126.˚10E, h112km±11km, mb3.8/14, mbtmp4.2/14, Error ellipse: s-maj=42.8km s-min=14.8km az=76.0*
*DJA **31** 22:20:22.5±0.6,5.˚N±4.˚× 12.˚6E±.˚, h187km±13km, M4.2/9, mB4.4/5, mb4.3/6, MLv4.4/9, Mw(mB)3.6/5*

**ISC 31 22:20:19.2**±0.5,**5.˚65N**±0.˚04×**126.˚48E**±0.˚08,**h10km**,**n52**, σ2ᵍ**03**/58,**mb4.2**/21,**2C**,**Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DAV** | **Davao City (W)** | **1.67** | **328** | Pn | | **Pn** | **22 20 48.1** | **+0.5** |
| **DAV** | **Davao City (W)** | **1.67** | **328** | P | | **Pn** | **22 20 48.4** | **+0.8** |
| | 175nm,0.4s,baz=56,slow=7.3,SNR=1.3 | | | | | | | |
| DAV | | | | S | | **Sn** | **22 21 08.9** | **-0.3** |
| | 193nm,0.3s,baz=198,slow=20,SNR=1.6 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **2.52** | **357** | ⇑*i*P | | **Pn** | **22 20 58.1** | **-0.5** |
| BIPH | | | | *e*S | | **Sn** | **22 21 28.2** | **-0.6** |
| **TNTI** | **Ternate** | **4.92** | **170** | Pn | | **Pn** | **22 21 31.9** | **+1.0** |
| **TNTI** | **Ternate** | **4.92** | **170** | P | | **Pn** | **22 21 32.3** | **+1.4** |
| **GTOI** | **Gorontalo** | **6.07** | **215** | P | | **Pn** | **22 21 46.3** | **-0.1** |
| | 47nm,0.6s,488nm0.2nm | | | | | | | |
| GTOI | | | | S | | **Sn** | **22 22 52.0** | **-2.5** |
| | 47nm,0.6s,488nm0.2nm | | | | | | | |
| **MRSI** | **Marisa** | **6.85** | **222** | P | | **Pn** | **22 21 57.4** | **+0.3** |
| **RCP** | **Roxas** | **6.94** | **328** | ⇑*e*P | | **Pn** | **22 22 00.8** | **+2.5** |
| **TOLI2** | **Tolitoli** | **7.26** | **232** | | | **Pn** | **22 22 01.6** | **-1.1** |
| **LUWI** | **Luwuk** | **7.61** | **209** | Pn | | **Pn** | **22 22 09.3** | **+1.9** |
| **LUWI** | **Luwuk** | **7.61** | **209** | P | | **Pn** | **22 22 11.2** | **+3.8** |
| **SANI** | **Sanana** | **7.66** | **184** | P | | **Pn** | **22 22 05.9** | **-2.2** |
| | 27nm,0.7s,0.2nm | | | | | | | |
| **MYLDM** | **Lahad Datu** | **7.96** | **267** | | | **Pn** | **22 22 13.8** | **+1.6** |
| **NLAI** | **Namlea** | **8.85** | **176** | P | | **Pn** | **22 22 22.3** | **-2.0** |
| **FAKI** | **Fak Fak** | **10.28** | **146** | Pn | | **Pn** | **22 22 44.7** | **+0.9** |
| **SAUI** | **Saumlaki** | **14.37** | **160** | P | | **P** | **22 23 43.8** | **+1.8** |
| **SBUM** | **Sibu** | **14.58** | **258** | P | | **P** | **22 23 45.6** | **+1.3** |
| **YULB** | **Yu-li** | **18.34** | **345** | P | | **P** | **22 24 24.1** | **-1.7** |
| **JAGI** | **Jajag, Banyuwa** | **18.65** | **221** | | | **P** | **22 24 30.7** | **+1.4** |
| JAGI | | | | IAmb | | IAmb | 22 24 42.4 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **DLV** | **T Lat** | **18.84** | **291** | Pn | | **P** | **22 24 33.0** | **+1.4** |
| DLV | | | | IAmb | | IAmb | 22 24 34.0 | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **21.31** | **174** | P | | **P** | **22 24 59.0** | **+1.0** |
| KNRA | | | | IAmb | | IAmb | 22 24 59.9 | |
| | comp=Z,5.8nm,0.5s | | | | | | | |
| **WRAB** | **Tennant Creek** | **26.57** | **163** | P | | **P** | **22 25 52.5** | **+4.5** |
| WRAB | | | | IAmb | | IAmb | 22 26 00.6 | |
| | comp=Z,6.5nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.58** | **163** | P | | **P** | **22 25 42.8** | **-5.4** |
| **WRA** | **Warramunga Arr** | **26.58** | **163** | P | | **P** | **22 25 42.3** | **-5.8** |
| | comp=Z,0.3nm,0.4s,baz=340,slow=9.7,SNR=7.6 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **22 32 42.7** | **+1.3** |
| | comp=Z,0.2nm,0.7s,baz=346,slow=3.0,SNR=1.7 | | | | | | | |
| **WB2** | **Warramunga Arr** | **26.58** | **163** | P | | **P** | **22 25 42.8** | **-5.4** |
| **WR0** | **Warramunga Arr** | **26.65** | **163** | P | | **P** | **22 25 45.0** | **-3.8** |
| **PSA00** | **Pilbara Seismi** | **27.82** | **193** | P | | **P** | **22 25 59.5** | **+0.2** |
| PSA00 | | | | IAmb | | IAmb | 22 26 08.5 | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **ASAR** | **Alice Springs** | **30.02** | **166** | P | | **P** | **22 26 19.2** | **+0.4** |
| | comp=Z,0.5nm,0.5s,baz=343,slow=7.0,SNR=13 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **22 29 19.7** | **+1.0** |
| | comp=Z,0.8nm,0.7s,baz=356,slow=2.6,SNR=5.9 | | | | | | | |
| | comp=Z,0.5nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **38.70** | **6** | P | | **P** | **22 27 34.8** | **+1.6** |
| **USRK** | **Ussuriysk Ar.** | **38.70** | **6** | P | | **P** | **22 27 35.5** | **+2.2** |
| | comp=Z,0.8nm,0.4s,baz=170,slow=6.1,SNR=5.4 | | | | | | | |
| | comp=Z,0.8nm,0.4s | | | | | | | |
| **USA0B** | **Ussuriysk Arra** | **38.70** | **6** | P | | **P** | **22 27 35.1** | **+1.8** |
| USA0B | | | | IAmb | | IAmb | 22 27 41.2 | |
| | comp=Z,4.1nm,1.0s | | | | | | | |
| **BBOO** | **Buckleboo** | **39.31** | **167** | P | | **P** | **22 27 39.8** | **+1.3** |
| **NWAO** | **Narrogin (SRO)** | **39.36** | **192** | P | | **P** | **22 27 38.7** | **-0.2** |
| NWAO | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SNZO** | **South Karori** | **20.61** | **192** | P | **P** | **00 00 20.7** | **+0.4** |
| **KHZ** | **Kahutara** | **21.91** | **194** | P | **P** | **00 00 28.2** | **-3.7** |
| **LTZ** | **Lake Taylor** | **22.56** | **196** | P | **P** | **00 00 36.4** | **-1.4** |
| **HNR** | **Honiara** | **23.01** | **298** | P | **P** | **00 00 41.8** | **-0.3** |
| **EIDS** | **Eidsvold** | **27.31** | **256** | P | **P** | **00 01 19.8** | **+0.1** |
| EIDS | | | | IAmb | IAmb | 00 01 20.9 | |
| | comp=Z,3.4nm,0.6s | | | | | | |
| **ARMA** | **Armidale** | **27.49** | **245** | P | **P** | **00 01 21.7** | **+0.4** |
| ARMA | | | | IAmb | IAmb | 00 01 28.4 | |
| | comp=Z,3.9nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **32.04** | **266** | P | **P** | **00 02 00.8** | **+0.7** |
| CTAO | | | | IAmb | IAmb | 00 02 01.8 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **STKA** | **Stephens Creek** | **36.21** | **245** | P | **P** | **00 02 35.4** | **+0.8** |
| **STKA** | **Stephens Creek** | **36.21** | **245** | P | **P** | **00 02 34.5** | **-0.1** |
| | comp=Z,1.5nm,0.4s,baz=95,slow=10,SNR=5.0 | | | | | | |
| | comp=Z,1.5nm,0.4s | | | | | | |
| **COEN** | **Coen** | **36.25** | **275** | P | **P** | **00 02 36.2** | **+1.1** |
| COEN | | | | IAmb | IAmb | 00 02 37.5 | |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **BBOO** | **Buckleboo** | **40.97** | **244** | P | **P** | **00 03 12.7** | **+0.1** |
| **WR0** | **Warramunga Arr** | **42.93** | **263** | P | **P** | **00 03 28.2** | **0.0** |
| **AS31** | **Alice Springs** | **42.99** | **258** | P | **P** | **00 03 29.2** | **+0.6** |
| **ASAR** | **Alice Springs** | **42.99** | **258** | P | **P** | **00 03 28.6** | **-0.1** |
| **ASAR** | **Alice Springs** | **42.99** | **258** | P | **P** | **00 03 29.1** | **+0.4** |
| | comp=Z,8.3nm,0.8s,baz=97,slow=7.7,SNR=91 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 05 03.8** | **+0.3** |
| | comp=Z,0.3nm,0.5s,baz=105,slow=3.5,SNR=4.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **00 07 58.2** | **+4.2** |
| | comp=Z,0.6nm,0.7s,baz=100,slow=4.9,SNR=5.9 | | | | | | |
| ASAR | | | | S | **S** | **00 09 10.3** | **+0.9** |
| | comp=Z,0.6nm,0.8s,baz=89,slow=16,SNR=5.0 | | | | | | |
| | comp=Z,8.3nm,0.8s | | | | | | |
| **WB0** | **Warramunga Arr** | **43.10** | **263** | P | **P** | **00 03 29.6** | **+0.1** |
| **WB2** | **Warramunga Arr** | **43.11** | **263** | P | **P** | **00 03 29.6** | **+0.1** |
| WB2 | | | | IAmb | IAmb | 00 03 30.4 | |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.12** | **263** | P | **P** | **00 03 29.4** | **-0.3** |
| **WRA** | **Warramunga Arr** | **43.12** | **263** | P | **P** | **00 03 29.7** | **+0.1** |
| | comp=Z,2.4nm,0.3s,baz=97,slow=7.6,SNR=136 | | | | | | |
| WRA | | | | S | **S** | **00 09 10.9** | **-0.4** |
| | comp=Z,0.4nm,0.9s,baz=100,slow=14,SNR=2.7 | | | | | | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **FORT** | **Forrest** | **47.72** | **247** | P | **P** | **00 04 04.2** | **0.0** |
| FORT | | | | IAmb | IAmb | 00 04 09.6 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **47.78** | **272** | P | **P** | **00 04 05.3** | **+0.4** |
| MTN | | | | IAmb | IAmb | 00 04 05.7 | |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **49.22** | **267** | P | **P** | **00 04 16.0** | **+0.6** |
| KNRA | | | | IAmb | IAmb | 00 04 16.5 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.55** | **263** | P | **P** | **00 04 33.0** | **+0.8** |
| **PSA00** | **Pilbara Seismi** | **56.15** | **258** | P | **P** | **00 05 04.0** | **-0.3** |
| **MBWA** | **Marble Bar** | **56.33** | **258** | P | **P** | **00 05 05.6** | **0.0** |
| MBWA | | | | IAmb | IAmb | 00 05 06.9 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **MORW** | **Morawa** | **58.26** | **248** | P | **P** | **00 05 17.1** | **-1.4** |
| **QSPA** | **South Pole Qui** | **68.83** | **180** | P | **P** | **00 06 24.6** | **-0.3** |
| | comp=Z,1.1nm,0.6s,baz=282,slow=2.1,SNR=7.8 | | | | | | |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.99** | **325** | P | **P** | **00 06 32.5** | **+0.5** |
| | comp=Z,1.4nm,0.5s,baz=149,slow=6.2,SNR=4.0 | | | | | | |
| | comp=Z,1.4nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.64** | **346** | P | **P** | **00 07 10.0** | **+0.8** |
| | comp=Z,2.1nm,0.7s,baz=121,slow=14,SNR=3.6 | | | | | | |
| | comp=Z,2.1nm,0.7s | | | | | | |
| **SMAI** | **San Martin Ant** | **78.42** | **159** | P | **P** | **00 07 18.3** | **-0.3** |
| SMAI | | | | IAmb | IAmb | 00 07 19.9 | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **TKX** | **Tecate** | **80.44** | **50** | P | **P** | **00 07 29.9** | **0.0** |
| **KRPM** | **Rodgers** | **80.61** | **39** | P | **P** | **00 07 29.6** | **-1.0** |
| KRPM | | | | IAmb | IAmb | 00 07 44.4 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **PMSA** | **Palmer Station** | **81.16** | **157** | P | **P** | **00 07 35.5** | **+2.6** |
| PMSA | | | | IAmb | IAmb | 00 07 43.1 | |
| | comp=Z,12nm,0.9s | | | | | | |
| **N15K** | **Kwethluk River** | **82.64** | **10** | P | **P** | **00 07 41.5** | **+1.2** |
| N15K | | | | IAmb | IAmb | 00 07 51.7 | |
| | comp=Z,6.8nm,1.1s | | | | | | |
| **O18K** | **Koktuh Hills** | **83.21** | **12** | P | **P** | **00 07 43.1** | **-0.1** |
| O18K | | | | IAmb | IAmb | 00 07 44.0 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| **M16K** | **Timber Creek** | **83.63** | **10** | P | **P** | **00 07 46.2** | **+1.0** |
| M16K | | | | IAmb | IAmb | 00 07 51.0 | |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **K15K** | **Wolf Creek Mou** | **84.47** | **8** | P | **P** | **00 07 50.2** | **+0.9** |
| K15K | | | | IAmb | IAmb | 00 08 09.1 | |
| | comp=Z,5.8nm,1.1s | | | | | | |
| **L18K** | **Granite Mounta** | **85.14** | **11** | P | **P** | **00 07 54.1** | **+1.6** |
| **J16K** | **Anvik River** | **85.54** | **8** | P | **P** | **00 07 53.5** | **-0.9** |
| J16K | | | | IAmb | IAmb | 00 07 56.9 | |
| | comp=Z,2.8nm,0.9s | | | | | | |
| **SUA** | **Susitna One** | **85.59** | **13** | P | **P** | **00 07 55.1** | **+0.3** |
| SUA | | | | IAmb | IAmb | 00 08 13.9 | |
| | comp=Z,3.6nm,1.0s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **86.69** | **15** | P | **P** | **00 08 00.1** | **+0.2** |
| SCM | | | | IAmb | IAmb | 00 08 11.6 | |
| | comp=Z,5.1nm,1.0s | | | | | | |
| **J19K** | **Poorman** | **86.97** | **10** | P | **P** | **00 08 01.8** | **+0.6** |
| **TXAR** | **Lajitas Array** | **88.63** | **58** | P | **P** | **00 08 10.5** | **+0.7** |
| | comp=Z,0.4nm,0.8s,baz=194,slow=4.1,SNR=5.0 | | | | | | |
| | comp=Z,0.4nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.05** | **290** | P | **P** | **00 08 14.4** | **+2.5** |
| | comp=Z,1.3nm,0.3s,baz=126,slow=3.1,SNR=6.9 | | | | | | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **89.34** | **13** | P | **P** | **00 08 11.6** | **-0.6** |
| | comp=Z,0.6nm,0.9s,baz=232,slow=4.4,SNR=3.6 | | | | | | |
| | comp=Z,0.6nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **118.74** | **320** | PKP | **PKiKP** | **00 13 58.9** | **-0.5** |
| | comp=Z,0.6nm,0.3s,baz=86,slow=1.7,SNR=3.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.38** | **349** | PKP | **PKiKP** | **00 14 19.6** | **-0.5** |
| | comp=Z,1.1nm,0.7s,baz=75,slow=1.2,SNR=6.6 | | | | | | |
| **FINES** | **FINESS Array B** | **136.07** | **343** | PKP | **PKiKP** | **00 14 32.9** | **-0.9** |
| | comp=Z,0.6nm,0.7s,baz=98,slow=2.0,SNR=5.1 | | | | | | |
| **HFS** | **Hagfors** | **140.03** | **350** | PKhKP | PKPpre | 00 14 32.6 | |
| | comp=Z,3.1nm,1.0s,baz=42,slow=2.3,SNR=9.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.96** | **330** | PKP | | 00 14 42.7 | |
| | comp=Z,3.5nm,0.6s,baz=43,slow=4.3,SNR=18 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **145.84** | **4** | PKPbc | **PKPbc** | **00 14 51.1** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=329,slow=2.6,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.28** | **311** | PKPbc | **PKiKP** | **00 14 53.8** | **-1.9** |
| | comp=Z,0.8nm,0.6s,baz=154,slow=3.6,SNR=8.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.95** | **298** | PKPbc | **PKiKP** | **00 14 56.9** | **-0.3** |
| | comp=Z,0.8nm,0.4s,baz=80,slow=7.0,SNR=9.9 | | | | | | |

# ISC Computed Locations for August 2018

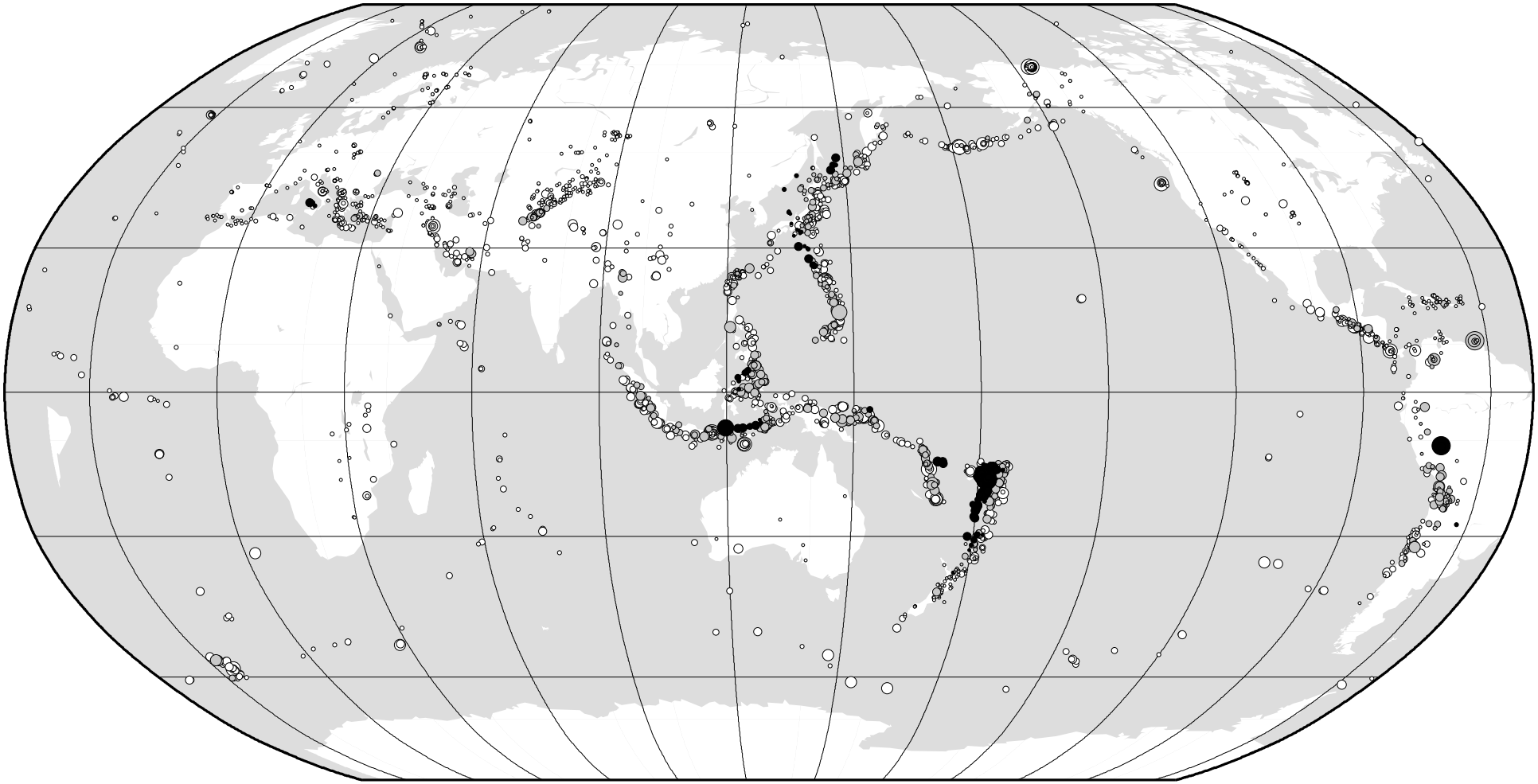

| Depth (km) | 0-70 | 70-300 | >300 |
|---|---|---|---|
| M=8 | ○ | ○ | ● |
| M=6.5 | ○ | ○ | ● |
| M=4 | ○ | ○ | ● |

Robinson Projection, centred on 0˚N,130˚E

3797 Events